City of Rolling Hills

INCORPORATED JANUARY 24, 1957

NO. 2 PORTUGUESE BEND
ROAD ROLLING HILLS, CA
90274
(310) 377-1521
FAX (310) 377-7288

REQUEST FOR PROPOSALS
CIVIL ENGINEERING SERVICES
FOR
CREST ROAD EAST FIRE PREVENTION POWER LINE UNDERGROUNDING PROJECT
FUNDED BY FEMA Hazard Mitigation Program
#DR4344-526-112R

PROPOSALS DUE 3 PM, MAY 9, 2023

SECTION 1 - BACKGROUND

The City of Rolling Hills is requesting proposals from professional civil engineering firms to prepare construction documents to underground existing overhead utilities on Crest Road East from 92 Crest Road East to the City's easterly gated border. The project is funded by FEMA's Hazard Mitigation Grant Program, using Southern California Edison's Rule 20A Tariff as local match. The grant is administered by California Office of Emergency Services or CalOES.

Per the requirements of the California Public Utilities Commission (CPUC) Rule 20 program, the project is split into two segments: Rule 20A segment, funded using the City's available credit and Rule 20C segment funded with grant monies. Southern California Edison (SCE) prepared construction documents for the Rule 20A segment on Crest Road East included as Attachment 1 and is responsible for the completion of this segment, including lateral connections to residential panels. The City of Rolling Hills is responsible for the completion of the Rule 20C segment including lateral connections to residential panels.

SCE prepared electrical plans for the Rule 20C segment included as Attachment 2. It is anticipated that one telecommunication company, Crown Castle, will utilize the City's trench for the Rule 20C segment with SCE, while other telecommunication companies Frontier, and Cox will be undergrounding their overhead infrastructure in a separate trench, outside the scope of the City's project.

The Crest Road East Fire Prevention Power Line Undergrounding project is subject to the federal procurement standards under the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.

SECTION 2 - SCOPE OF SERVICES

The desired outcome of this project will be a construction ready documents including plans, specifications, cost estimates, and bid sheets to solicit proposals from qualified contractors.

Task 1 – Project Administration and Meetings:

1) Develop project schedule to meet grant requirements.

2) Develop project approach, and dedicate resources to deliver the desired outcome of the project per the project schedule.

3) Coordinate with utility companies as needed.

4) Coordinate with residents are needed.

5) Meetings (number of meetings):
    a. Scoping/Kick-off (2)
    b. Utility Company (2)
    c. City staff (2)
    d. Stakeholders - Final Design (2)
    e. City Council (1)

Task 2 – Construction Plans

Prepare engineering plans for construction:

1) Research data, conduct surveys, and prepare necessary base map for engineering design.
2) Design Plans shall be submitted at the following stages of completion for City review and comment: 65%, 90%, 100% & 100% (Final, as needed). Allow 1 week minimum for each City of Rolling Hills review.
3) Design Plans shall be submitted at the following stages of completion to other agencies having an interest/stake/permitting for agency review and comment: 65%, 90%, 100% (Final).

Task 3 – Specifications

Project Specifications at 65%, 90%, and 100% submittal: Prepare specifications in conformance with the current Standard Specifications for Public Works Construction (Greenbook) and other applicable agency standard plans, specifications, and guidance documents in order to obtain plan approval. Provide the required permits, standards, and reference materials to be included in the City's standard contract documents. Every item of work must be fully covered including a measurement clause and a payment clause.

Task 4 – Cost Estimates

Prepare an engineer's construction estimate for the designed Project at the 65%, 90%, and 100% submittal. Cost estimates shall have quantities and unit prices with back-up calculations for all quantities. The proposer shall verify current unit prices at time of final plan approval.

Task 5 – Permitting and Regulations

Develop and manage the approval process for all required permits and environmental clearance documents. The proposer shall observe all laws, rules, and regulations concerning environmental permitting and the scope of professional services shall include all steps necessary in the project development and permitting process to move into the construction phase.

1) Document, design, and incorporate environmental requirements (i.e., CEQA documentation, etc.), mitigation measures, NPDES requirements (including adherence to MS4 LID requirements), BMPs, air/water quality, and erosion/sediment control into the Project construction documents as required.

2) Provide a signed check-off list certifying that all environmental clearances/permits have been completed and all mitigation measures have been incorporated into the PS&E prior to the advertisement of the project for construction bids.

3) Proposer shall incorporate all requirements of the City of Rolling Hills Municipal Code (RHMC) as applicable. The deliverables provided to the City shall conform to those regulations to ensure a complete and conforming project. The proposer and its subconsultants shall comply with Public Works Greenbook and RHMC in the preparation of full, complete, and accurate PS&E.

4) Proposer shall incorporate all federal, state, and local laws, rules, and regulations concerning public works as applicable. The deliverables provided to the City shall conform to those regulations to ensure a complete and conforming project. The proposer and its subconsultants shall comply with Public Contract Code Section 10120 in the preparation of full, complete, and accurate PS&E.

Task 6 – Bid Support:

Assist the City in preparation of the project Bid Package and provide responses to questions received during the bid phase. Assist the City in compiling data on bids received and assist the city in reviewing the bids for responsiveness.

Task 7 – Construction Support Services:

Provide support as follows:

1) Attend a pre-construction meeting and provide clarification of contract documents as needed.

2) Respond to Contractor's Request for Information.

3) Review Contractor's submittals for conformance with the contract documents.

4) Upon completion of construction, the proposer shall provide as-built drawings and submit to the City electronically, AutoCAD and PDF formats.

All data, documents, and other products used or developed during the project will become the property of the City.

SECTION 3 - PROPOSAL REQUIREMENTS

Understanding of the Scope of Work: Proposer shall provide a narrative to the approach to complete the Scope of Work efficiently, economically and timely.

Organization, Credentials and Experience: Provide a summary of the proposer's qualifications, credentials, and related past experience. Describe the consulting firm, including the personnel who will be assigned to the contract. Provide a list of three of the proposer's projects within the last five years of similar scope and content including federally funded grant projects.

Fees: Under separate cover, provide a rate proposal for the scope of work. The cost proposal shall be identified for each task. The proposed cost budget shall present the labor rates and proposed labor hours of proposed staff for each work task described in the proposer's proposal, as well as other direct costs.

Additional Information: Proposer is to review the sample Professional Services Agreement and provide comments and or questions as a part of the proposal. See Section 6 of this RFP.

SECTION 4 - OPTIONAL PROJECT SITE VISIT / PROPOSAL PROCEDURE

The City of Rolling Hills is a gated community. Proposer can visit the project site on Friday, April 28, 2023 at 12:00 PM by providing a business card to the gate attendant and identifying this proposal as the reason for the visit The optional site visit shall begin at or near the residential address at 92 Crest Road East and end at the closed gate at the end of Crest Road East. The optional site visit will provide proposer the opportunity to view the project area and adjacent properties requiring lateral underground connections to residential structures.

All proposals are due no later than 3 pm on May 9, 2023. The City reserves the right to extend the deadline. The City will respond to request for clarification in written RFP addendum(s) as needed. All inquiries shall be directed to Project Manager Christian Horvath at chorvath@cityofrh.net by 5 pm on Tuesday, May 2, 2023.

Please submit the proposal via email to:

Elaine Jeng, P.E.
City Manager
ejeng@cityofrh.net
cc: chorvath@cityofrh.net

Submission of a proposal indicates acceptance by the firm of the conditions contained in this request for proposal unless clearly and specifically noted in the proposal submitted and confirmed in the agreement between the City of Rolling Hills and the firm selected. The City of Rolling Hills reserves the right without prejudice to reject any or all proposals. No reimbursement will be made by the City for costs incurred in the preparation of the response to this Request for Proposal. Submitted materials will not be returned and become the property of the City of Rolling Hills.

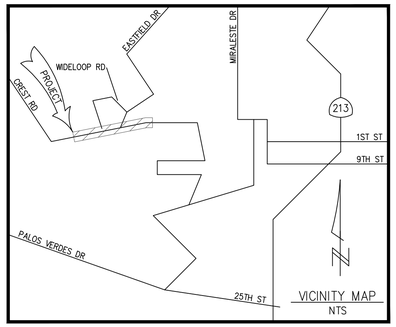
SECTION 5 - SELECTION CRITERIA

Proposals will be selected based on sound approach to meeting the scope of work, the ability to demonstrate efficiency use of resources, the relevant experience of proposed personnel, and dedication of personnel to complete the project within in time to meet the FEMA assigned grant project completion date of May 7, 2024. (Please note that all work defined in the approved scope of the grant project must be completed not less than 90 days prior approved project period of performance February 7, 2024.) Proposer may be asked to participate in an interview with the City. If necessary, interviews are tentatively scheduled between May 10-16, 2023.

SECTION 6 - ATTACHMENTS

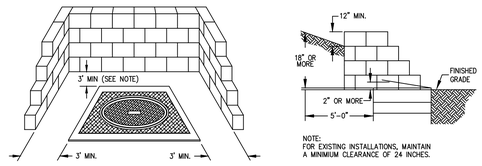
Attachment 1 – Rule 20A Final Design – Approved for Construction (TD1869862)
Attachment 2 – Rule 20C Proposed UG Install Map (TD1993916)
Attachment 3 – Sample Professional Services Agreement (Subject to Amendment by the City)
Attachment 4 – City of Rolling Hills HMGP Project SubApplication & Grant award letter from CalOES/FEMA dated September 14, 2020

Attachment 01



ATTACHMENT 1

PERIMETER WALL FOR VAULT
SEE UGS SS 599



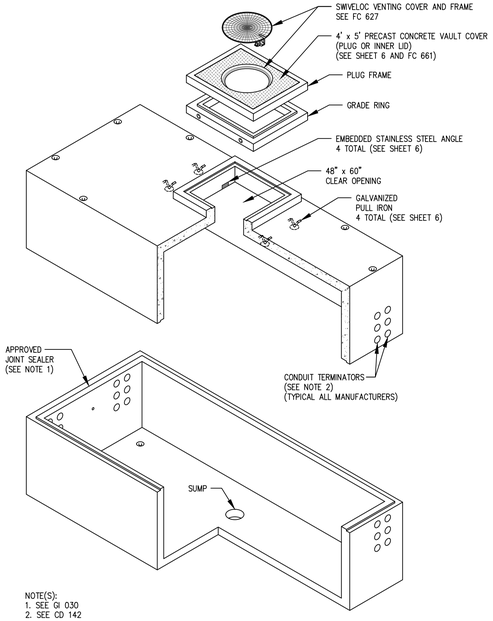
PERIMETER WALLS ARE REQUIRED WHEREVER THE GRADE RISES MORE THAN 18 INCHES ABOVE THE TOP OF A VAULT AT A DISTANCE OF 5 FEET FROM THE EDGE OF THE VAULT. PERIMETER WALLS ARE ALSO REQUIRED WHENEVER THE GRADE RISES 2 INCHES ABOVE THE TOP OF A VAULT AT ANY POINT ADJACENT TO THE VAULT. THE PERIMETER WALL SHOULD EXTEND 12 INCHES ABOVE THE HIGHEST POINT IN THE GRADE AT THE OUTSIDE SURFACE OF THE WALL.

THE BACK WALL AND SIDEWALLS MUST CLEAR THE VAULT BY A MINIMUM OF 3 FEET.

THE PERIMETER WALL SHALL CONFORM TO LOCAL BUILDING ORDINANCES.

D93: REV. 02/14/11

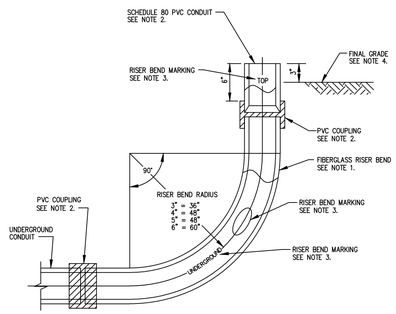
PRECAST TUB-TYPE VAULTS WITH COVER RESTRAINTS
SEE UGS VA 410



NOTE(S):
1. SEE GI 030
2. SEE CD 142

D60: Rev. 06/08/20

THREE, FOUR, FIVE, OR SIX-INCH FIBERGLASS RISER BENDS
SEE UGS CD 166



NOTE(S):
1. THE RISER BEND IS AVAILABLE IN THREE, FOUR, FIVE OR SIX-INCH SIZES. THE MAIN BODY OF THE BEND IS MANUFACTURED FROM FIBERGLASS MATERIAL AND IS MEDIUM GRAY IN COLOR.
2. THE TOP AND BOTTOM OF RISER IS FURNISHED WITH PVC COUPLINGS PERMANENTLY EPOXY BONDED TO THE FIBERGLASS BEND. A SCHEDULE 80 PVC SIX-INCH LONG STUB-OUT IS SOLVENT WELDED INTO THE TOP PVC COUPLING.
3. THE TOP SCHEDULE 80 PVC STUB OUT OF BEND IS STENCILED "TOP", AND BOTTOM OF BEND IS STENCILED "UNDERGROUND." MANUFACTURERS NAME, SIZE, AND DATE (MONTH AND YEAR) WILL BE STENCILED ON THE CENTER OF THE RISER BEND.
4. THE TOP SCHEDULE 80 PVC STUB OUT WILL BE PLACED THREE INCHES ABOVE FINAL GRADE. NO PORTION OF THE FIBERGLASS MATERIAL OF THE BEND WILL BE EXPOSED ABOVE THE FINISH GRADE.
5. THE APPROVED MANUFACTURERS AND SUPPLIERS ARE:
   A. MANUFACTURERS: FRE CONDUIT, SMITH PRODUCT COMPANY, AND CHAMPION FIBERGLASS, INC.
   B. SUPPLIERS:
      * ONE TIME UTILITY
        501 GARFIELD STREET
        SANTA ANA, CA 92701
      * CAL-DUCT, INC.
        2522 LEE AVENUE
        SOUTH EL MONTE, CA 91733
      * SAF-T-CO SUPPLY, INC.
        1300 E. NORMANDY PLACE
        SANTA ANA, CA 92705

D39: Rev. 10/26/20

CONSTRUCTION NOTES:

Unless otherwise specified on the working drawing which forms a part of the specification, the Contractor/Developer shall furnish the following items at no cost to the Edison Company.

Southern California Edison Company has attempted to correctly show all existing utilities and substructures in the vicinity of the work, but does not guarantee there are no other substructures in the area. Failure of SCE to show all substructures in their correct location will not be a basis for a claim for extra work, and the contractor shall be responsible for all damages to substructures whether shown or not.

1. FOR GENERAL SPECIFICATIONS SEE UGS GI 001.

2. CONDUIT:
   a. Minimum cover in street or parkway is 30" below gutter grade, unless noted otherwise.
   b. Minimum cover on private property is 30" below finished grade, unless noted otherwise.
   c. Contractor is to furnish and install approved conduit to Edison specifications per UGS CD 100.1, 110 AND 120.
   d. For the type of conduit for this job, See UGS CD 110.1.
   e. Install all risers per UGS CD 160, 161, 162 and 170.
   f. Cap all mainline conduits per UGS CD 148 and service conduits per UGS CD 150.
   g. Install blank conduit plugs in all conduits terminating into Vaults, Manhole's, PMH's, SOE's & all cap locations, per UGS CD 180.1 & UGS CD 180.2
   h. Install pull rope in all conduit runs. Pull rope to be at least 3/8" polypropylene rope, braided or twisted. For specifications, approved makes, and suppliers, see UGS GI 040.
   i. All conduit must be mandreled with the approved mandrel UGS CD 197.

3. CONDUIT RADIUS REQUIREMENTS:
   a: The minimum radius for bends are:
      36" for conduits 3" in diameter or smaller
      48" for conduits 4" and 5" in diameter
      60" for 6" diameter conduit
   b: The minimum radius for all sweeps of all mainline conduits is 12'-6" (unless noted otherwise).

4. EXCAVATION AND BACKFILL:
   a. Work area shall be cleared and rough graded to within four inches of final grade prior to installation of Edison conduit or structures.
   b. All excavations shall be in accordance with the California State Construction Safety Orders (when applicable), Edison specifications, and all governing local ordinances.
   c. Each trench to be a uniform depth below final grade prior to installation of Edison conduit or structures.
   d. Backfill shall be provided by the Contractor for all excavations and shall include crushed rock, concrete, and/or imported backfill, when required.
   e. Backfill with a MINIMUM of one sack per yard sand cement slurry around and over vaults and manholes per UGS GI 030, section 6.4 and around PMH's within one foot of finished grade, per UGS SS 590.1.
   f. Backfill, per Edison specifications, shall immediately follow conduit or substructure installation. At no time shall conduit be left exposed over 24 hours.
   g. No rocks are allowed within 12 inches of direct-buried cables or any conduit without concrete encasement. Native backfill capable of passing through a one-half inch mesh screen shall be considered to be "rock free". If existing backfill does not pass through a 1/2" screen, place imported sand 3" below and 12" above Edison cables. After this point, no rocks larger than 12" diameter are permitted.
   h. All backfill shall be compacted to meet or exceed local ordinances or other requirements. It shall be placed in a manner that will not damage the conduit or substructure or allow future subsidence of the trench or structures.

5. PAVING:
   Repaving, where required, shall be placed in such a manner that interference with traffic, including pedestrian traffic, will be kept to a minimum. The Contractor shall establish a program of repaving acceptable to the Municipality, County, or other authority having jurisdiction and which is acceptable to Edison.

6. STRUCTURES:
   a. All substructures shall be constructed or installed to Edison specifications.
   b. Install protection barriers per UGS MS 830 when required in areas exposed to traffic, per Edison Inspector.
   c. All conduit lines and concrete floored substructures shall be water tight.
   d. All grounding materials shall be furnished and installed by the Contractor.

7. RETAINING WALLS:
   When required, retaining walls shall be provided by the Developer. Walls are required wherever grade rises more than 18 inches above the structure or 24" above the pad surface at a distance of 5 feet from the same, or in areas subject to erosion. Design and installation must comply with local building ordinances. Refer to Edison Inspector for typical space requirements.

8. PERMITS:
   All permits necessary for excavation shall be provided by the Contractor/Developer.

9. ACCESS:
   Heavy truck access shall be maintained to equipment locations. Structures must be clear of all appurtenances that would obstruct the loading or unloading of equipment.

10. SERVICES:
    a. Meters and services shall comply with Edison Electrical Services Requirements.
    b. Wiring must be in accordance with applicable local ordinances and approved by local Inspection Authorities.

11. LOCATION:
    a. The location of excavations and structures for Edison shall be as shown on the working drawing. No deviation from the planned locations will be permitted unless approved by the Edison Inspector. See UGS GI 001, section 2.2.
    b. Actual location of obstructions, storm drains, and/or other foreign utilities to be the responsibility of the Contractor. See UGS GI 001, section 2.3.

12. Contractor is to verify location and widths of all sidewalks and driveways prior to street light installation. See UGS CD 175.1, UGS CD 175.2 and UGS CD 175.3.

13. SURVEY:
    Surveying of street improvements, property corners, lot lines, finished grade, etc., necessary for the installation of underground facilities must be completed and markers or stakes placed prior to the start of the installation. In addition, Developer shall maintain the markers during the installation and inspection by Edison. Grade and property line stakes must show any offset measurements.

14. COORDINATION AND SUPERVISION:
    The Developer shall provide supervision over and coordination among the various contractors working within the development in order to prevent damage to Edison facilities. He is responsible for the cost of repairs, replacement, relocation, or other corrections to Edison facilities made necessary by his failure to provide supervision or to otherwise comply with these specifications.

15. TELEPHONE AND OTHER UTILITY REQUIREMENTS:
    The drawing prepared for this job may also cover the facilities to be installed for the telephone company and/or other utility. Any questions concerning details of their installation should be referred to the company concerned.

16. OWNERSHIP:
    Developer is to deed to the Edison Company all structures shown hereon except those shown as customer owned.

17. WARRANTY:
    Applicants expressly represent and warrant that all work performed and all material used in meeting Applicants' obligations herein are free from defects in workmanship and are in conformity with Southern California Edison Company's requirements. This warranty shall commence upon receipt by Applicants of Company's final acceptance and shall expire one year from that date. Applicants agree to promptly correct to the Company's satisfaction and that of any governmental agency having jurisdiction and at Applicant's expense any breach of this warranty which may become apparent through inspection or operation of underground electric system by Company during this warranty period.

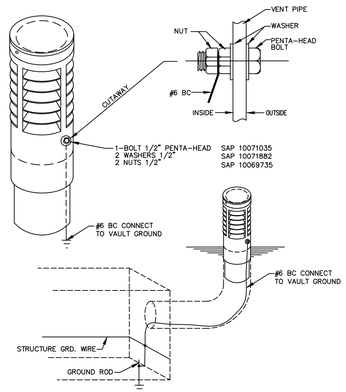
18. INSPECTION:
    Inspection is required during the construction period. A 48 hour advance notice of intent to start construction is required from the contractor to the Southern California Edison Company. Standards of Edison construction requirements are available upon request.

Duct and Structure Inspector: MARIO SAUCEDO Phone: 310-608-5217

Cabling Construction Coordinator: Phone:

D05: Rev. 07/21/16

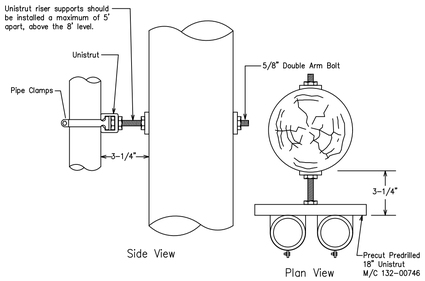
GROUND CONNECTION INSTALLATION IN A POLYETHYLENE VENT
SEE UGS AC 760.2



NOTES:
1. TO ASSIST IN UNDERGROUND STRUCTURE LOCATING FROM THE SURFACE, INSTALL A #6 BARE COPPER WIRE FROM INSIDE THE VENT PIPE TO THE STRUCTURE GROUND SYSTEM. THIS INSTALLATION WILL ALLOW A SINGLE PERSON CREW TO TIE INTO THE SYSTEM GROUND AND LOCATE THE FACILITIES UNAIDED. THE INSTALLATION SHALL BE MADE TO A MINIMUM OF ONE VENT PER VAULT DURING NEW CONSTRUCTION, ADDED TO THE APPROPRIATE STRUCTURES DURING THE ROUTINE MAINTENANCE CYCLE, OR AS THE NEED ARISES BY REQUEST FOR ASSISTANCE FROM THE CONTRACT CABLE LOCATING COMPANY.
2. DRILL A 9/16" HOLE FOR GROUNDING BOLT APPROXIMATELY ONE INCH BELOW THE LOWEST VENTILATION FIN SLOT. THE GROUND CONNECTION SHOULD BE ATTACHED ON THE SIDE OF THE VENT FACING AWAY FROM THE STREET. THIS IS DONE TO MAINTAIN A FLAT SURFACE FOR ATTACHING STRUCTURE IDENTIFICATION STICKERS.

D103: REV. 10/26/20

RISER INSTALLATION USING UNISTRUT
SEE DUG CR 110.2



CONVENTIONAL RISER INSTALLATION
NOT TO SCALE

NOTE(S):
1. All notes pertaining to Figure CR 110-1.1 (Sheet 1) construction on scope CR 110.1 also apply to risers supported by a unistrut.

1.0 APPLICATION
The unistrut shown in Figure CR 110-5 (Sheet 3) is the preferred method where multiple risers are required.

2.0 MATERIAL

TABLE CR 110-2: Unistrut Pipe Clamps

Conduit Size (in)	Material Code
1	622-04052
2	133-48248
2.5	133-48214
3	133-00025
4	133-00017
5	133-48008
6	132-00746

REF.: DUG CR 110.2
D38: REV. 02/18/11

CONNECTING TO EXISTING SCE STRUCTURES

- Per SCE requirements, customers are not allowed to enter, intercept or tie-in to existing SCE facilities; e.g. structures, equipment, multi-conduit runs/banks, or conductors. These facilities may be energized and the work will only be performed by SCE. Contact the appropriate SCE inspector to schedule an appointment. Customers may connect to an existing conduit stub without a SCE inspector present.
- Multi-conduit runs/banks are runs of conduit in close proximity to each other and other SCE facilities. A conduit stub is a single empty conduit stub that is not in close proximity to other SCE owned facilities. Refer to the work order map for details.
- Per CPUC/SCE's Rule 15 B.1.A and Rule 16 D.1.A., the customer will provide all necessary excavations (with the exception of excavation under pads and primary splice boxes), material (including conduit and structures) and encasement, to be utilized in the intercept/tie-in process.
- The customer must adhere to all applicable Cal-OSHA, local, city, state and federal regulations, (including, but not limited to, all necessary shoring and traffic control in place to perform the intercept/tie-in work by SCE's underground civil contractor(s)).
- Intercept/tie-in work must be coordinated with SCE's civil contractors through the Division Inspector/P-Spec to limit exposure of excavation(s). Customer is responsible for securing excavation(s).

D08: 11/13/18

PROJECT REQUIREMENTS (Y/N)

EDISON EASEMENT REQUIRED	Y
PWRD 88 REQUIRED	Y
UG CIVIL ONLY WORK ORDER	N
PERMIT REQUIRED	Y
PERMIT TYPE: EXCAVATION	
OUTAGE REQUIRED	Y
OUTAGE DATE: _____ TIME: _____	
TRAFFIC CONTROL REQUIRED	Y
PED. TRAFFIC CONTROL REQ'D	N
CONVEYANCE LETTER REQ'D	N
ENVIRONMENTAL REQUIREMENTS DOCUMENT (ERD) REQUIRED	Y
CSD 140 (TLM) REQ'D	Y
DIG ALERT APP	☐
VERIFIED ACTIVE AND CONFIRMED USA TICKETS	☐
UTILIQUEST NOTIFIED	☐
STANDARD ADHERENCE: 4_Q/_2022_Y	

D124: Rev. 10/12/21

CONTRACTOR _____

COST PLUS ☐ FIRM ☐ DEV. ☐

INCLUDES PERM.PAVING YES ☐ NO ☐

PERMIT NUMBER _____

DATE STARTED _____

DATE COMPLETED _____

INSPECTOR _____

PRECASTER _____ CONDUIT _____

THIS PLAN APPROVED AS TO LOCATION AND TYPE OF ELECTRIC SUBSTRUCTURES

Developer: _____
Attn: _____
Address: _____
Telephone: _____
FAX: _____

Dwg./Rev.	Developer's Signature	Date
Original		
Rev.		
Rev.		
Rev.		

CHANGES IN THESE PLANS WILL REQUIRE AN ADDITIONAL 3 TO 4 WEEKS AND CUSTOMER WILL BE CHARGED IN ADVANCE FOR REQUESTED CHANGES.

D26: Rev. 02/12/08

UNDERGROUND SERVICE ALERT
Contact USA
Dial 811 or 800-422-4133
www.digalert.org/contact
For Underground Locating
Two Working Days Before You Dig

D16: Rev. 05/28/20

LEGEND OF DRAFTING SYMBOLS

TRENCH
- EDISON CONDUIT (DIST. & SL)
- CUST. OWNED CONDUIT
- RESIDENTIAL SERVICE CABLE
- E — EXISTING CONDUIT

STRUCTURES
- VAULT
- MANHOLE
- PME 3-5
- PME 6-12
- PULL BOX
- HANDHOLE
- SOE
- PAD
- 4'x4' BURD SWITCH ENCLOSURE
- 36" BURD SWITCH ENCLOSURE
- BURD TRANSFORMER ENCLOSURE
- STREET LIGHT ELECTROLIER
- C/I METER PANEL
- FIRE HYDRANT

LEGEND OF CONDUIT SYMBOLS
(CONVENTIONAL U. G.)

EDISON
NO. CONDUIT REQ'D. → SIZE OF CONDUIT
RUN NO. → LENGTH OF CONDUIT RUN

TRENCH
TYPE OF FACILITY (CIC-DB, ETC.)
RUN NO. → LENGTH OF TRENCH

STREET LIGHT
NO. CONDUIT REQ'D. → SIZE OF CONDUIT
RUN NO. → LENGTH OF CONDUIT RUN

STREET LIGHT TRENCH
TYPE OF FACILITY
RUN NO. → LENGTH OF ADDITIONAL TRENCH REQ'D.

EDISON
NO. CONDUIT REQ'D. → SIZE OF CONDUIT
REFERENCE RUN NO. → MEMO → DENOTES CONDUIT RUN CONTINUATION FOR CONSTRUCTION INFORMATION

STREET LIGHT
NO. CONDUIT REQ'D. → SIZE OF CONDUIT
REFERENCE RUN NO. → MEMO → DENOTES CONDUIT RUN CONTINUATION FOR CONSTRUCTION INFORMATION

ANY OF THE ABOVE SYMBOLS FOLLOWED BY A →

DENOTES THE FOLLOWING:

DB CONDUIT WITHOUT ENCASEMENT IS ACCEPTABLE FOR PORTIONS OF TRENCH WITH ONLY ONE OR TWO CONDUITS

SEMI-ENCASEMENT IS REQUIRED FOR PORTIONS OF TRENCH WITH ONLY THREE OR FOUR CONDUITS

FULL ENCASEMENT IS REQUIRED FOR MORE THAN FOUR CONDUITS

D18: Rev. 5/08/2006

LIST OF MATERIALS
[EDISON CO.]

NOTES:
1. Footage quantities are approximate.
2. Where reference is to an item not detailed, see separate description list.
3.. This list provides a summary of major items.

SEE UGS SECTION INDEX FOR REFERENCE DRAWINGS

QUAN.	UNIT	DESCRIPTION	SIZE	ITEM NO.	REF DWG.	REV. DATE
1	EACH	VAULT	7'x 14'x 8'	V714		
40	FEET	VENT PIPE	10"			
2	EACH	POLYETHYLENE VENT-STAND PIPE	10"			
3	EACH	VAULT GRADE RING	6"	VX-1		
1	EACH	VAULT COVER (TRAFFIC)	4'x 5'			
1	EACH	LADDER	AS REQUIRED			
2	EACH	HANDHOLE	17"x 30"x 24"	HH-6		

D04: Rev. 07/17/07

CONCRETE PRODUCTS

Precast concrete item complete with neck. Cover and inserts may be obtained from any of the following listed and approved manufactureres:

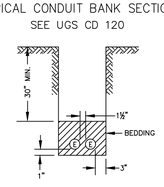
JENSEN PRECAST
14221 San Bernardino Ave., Fontana, Calif. 92335
Phone: (909) 350-4111
(800) 257-6100

OLDCASTLE PRECAST
10650 Hemlock Ave., Fontana, Calif. 92337
Phone: (909) 428-3700
(800) 626-3860

FOR HANDHOLE AND PULLBOX MANUFACTURERS, SEE UGS HP 200.

D41: Rev. 01/21/09

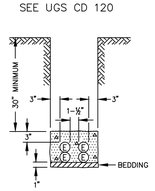
TYPICAL CONDUIT BANK SECTION
SEE UGS CD 120



DIRECT BURIAL
SIMILAR CONSTRUCTION FOR FEWER CONDUIT 2 CONDUITS MAX.

D81: Rev. 09/23/09

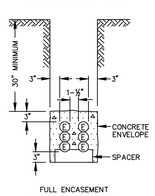
TYPICAL CONDUIT BANK SECTION
SEE UGS CD 120



SEMI-ENCASEMENT
3 OR 4 CONDUITS

D73: Rev. 09/23/09

TYPICAL CONDUIT BANK SECTION
SEE UGS CD 120



FULL ENCASEMENT
MORE THAN 4 CONDUITS
(BASE SPACER REQUIRED)

D72: Rev. 09/23/09

SURVEYED
DATE: 12/15/21

SURVEYED
DATE: 8/19/21

RUN NUMBER CALL-OUTS AS FOLLOWS:

(1) - (199) MAINLINE CONDUIT
(200) - (599) SERVICE CONDUIT
(600) - (799) STREET LIGHT CONDUIT

D84: Rev. 10/26/20

NOTE:
ALL ELECTRICAL DUCTS AND STRUCTURES WILL CONFORM TO GENERAL ORDER #128 (RULES FOR CONSTRUCTION OF UNDERGROUND ELECTRICAL SUPPLY AND COMMUNICATION PRESCRIBED BY THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA, JANUARY 2006).

WARNING
THE EXCAVATOR MUST TAKE ALL STEPS NECESSARY TO AVOID CONTACT WITH UNDERGROUND FACILITIES WHICH MAY RESULT IN INJURY TO PERSONS OR DAMAGE TO FACILITIES IN THE AREA. THE INDICATED LOCATIONS OF EDISON UNDERGROUND FACILITIES, AS PROVIDED, ARE BELIEVED TO BE ACCURATE, HOWEVER, THE FINAL DETERMINATION OF EXACT LOCATIONS AND THE COST OF REPAIR TO DAMAGED FACILITIES IS THE RESPONSIBILITY OF THE EXCAVATOR.

WHERE CONDUITS ARE PICKED UP OR INTERCEPTED, CONDUIT SHALL BE MANDRELLED AND PULL ROPE INSTALLED FROM TERMINAL TO TERMINAL.

INSTALL METHOD:
☒ EDISON
☐ APPLICANT

GRID MAP NO.S
LT-7534-B2 LT-7535-H4
LT-7634-A1 LT-7635-G3
LT-7635-G4
MAT CODE 2Q

DATE	REVISION DESCRIPTION	APPROVED	DRAWN	CHECKED
1/5/22	UPDATED SURVEY TO SHEETS 2-5		ASP	RW

FINAL DESIGN
APPROVED FOR CONSTRUCTION

DISTRICT: 44 – SOUTH BAY	PROJ. MGR. ROBERT CICCARELLI PHONE 714-430-7872	PLANNER TORREY PETERSON PHONE 310-608-5158	DESIGNER MICHELLE JACKSON	
PROJECT NO. 22275.31	SERVICE REQUEST 3121148	MSR NO.	PRODUCT-1 TD1869862 – RULE 20A – UG INSTALL	ASSOC DESGN 1415150
CIRCUIT / VOLTAGE STATLER 16KV		GPS	PRODUCT-2 TD1869860 – RULE 20A – OH REMOVAL	ASSOC DESGN 1415148
SUB / PG NO. WALTERIA SUB		CIRCUIT CODE 16946	PRODUCT-3	ASSOC DESGN
INVENTORY MAP SEE ABOVE		J.P.A. NO.	PROPOSED CONSTRUCTION (LOCATION) RULE 20A – CREST RD CREST RD ROLLING HILLS CA 90274	

TYPE	DATE	APPROVED BY	CHECKED BY	DRAWN BY	PAX #
F	10/12/22	C. WARREN	C. WARREN	C. WARREN	33704
P	04/04/22	T. PETERSON	T. PETERSON	T. PETERSON	35158
B	09/02/21		EM/ASP/SG	BM/ASP	52823

Southern California Edison Company

SHEET 1 OF 2

DESIGN\DRWG NO. 1415150_0.01

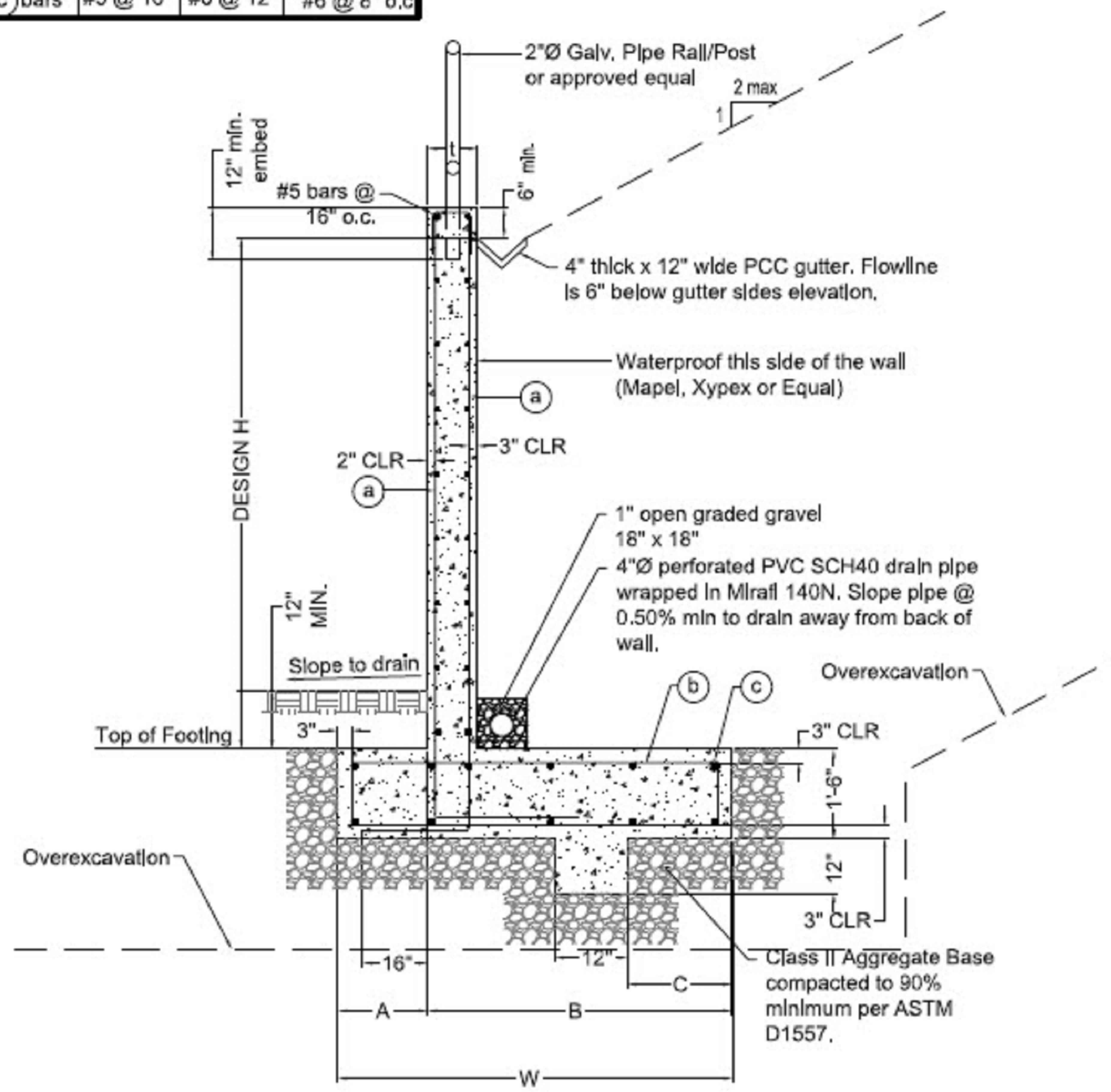
FILE NAME:1415150_SLD-DWG SAVE DATE:10/21/2022 11:36 AM SAVED BY:PETERSTL

RETAINING WALL DETAILS

Design H	4'-0"	6'-0"	8'-0"
W	4'-6"	7'-6"	11'-6"
A	1'-6"	2'-0"	8'-0"
B	3'-0"	5'-6"	8'-6"
C	2'-3"	5'-0"	8'-3"
t	8"	8"	10"
(a) bars	#5 @ 16"	#6 @ 12"	#6 @ 12" o.c
(b) bars	#5 @ 16"	#6 @ 12"	#6 @ 8" o.c
(c) bars	#5 @ 16"	#6 @ 12"	#6 @ 8" o.c

For walls more than 8 feet of retained height, contact Underground Structural Engineering for site specific design requirements.

When local agency require plan submittals on 24" x 36" format and stamped by Engineer, contact Underground Structural Engineering.



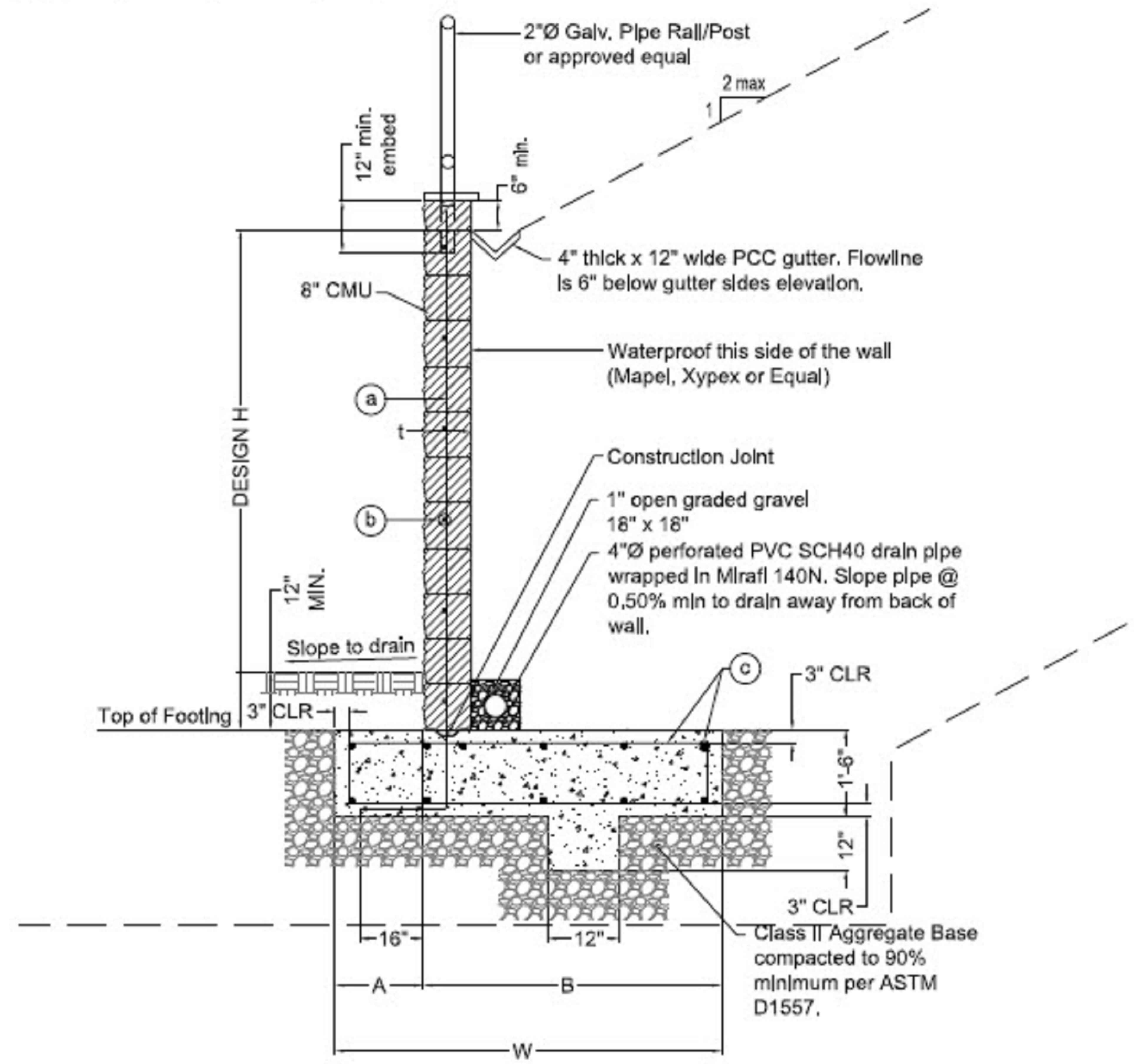
RETAINING WALL "TYPE 1"

NTS

Design H	4'-0"	6'-0"	8'-0"
W	4'-6"	7'-9"	11'-9"
A	1'-6"	2'-0"	3'-0"
B	3'-0"	5'-9"	8'-9"
C	2'-3"	5'-3"	8'-6"
t	8"	8"	8"
(a) bars	#5 @ 16"	#6 @ 12"	#8 @ 12" o.c
(b) bars	#4 @ 24"	#4 @ 24"	#4 @ 24" o.c
(c) bars	#5 @ 16"	#6 @ 12"	#6 @ 8" o.c

For walls more than 8 feet of retained height, contact Underground Structural Engineering for site specific design requirements.

When local agency require plan submittals on 24" x 36" format and stamped by Engineer, contact Underground Structural Engineering.



RETAINING WALL "TYPE 2"

NTS

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Dial 811 or 800-422-4133
www.digalert.org/contact
For Underground Locating
Two Working Days Before You Dig

DATE	REVISION DESCRIPTION	APPROVED	DRAWN	CHECKED
1/5/22	UPDATED SURVEY TO SHEETS 2-5		ASP	RW

INSTALL METHOD:
☒ EDISON
☐ APPLICANT

GRID MAP NO.S
LT-7534-B2 LT-7535-H4
LT-7634-A1 LT-7635-G3
LT-7635-G4
MAT CODE 2Q

FINAL DESIGN
APPROVED FOR CONSTRUCTION

DISTRICT: 44 – SOUTH BAY
PROJ. MGR. ROBERT CICCARELLI, PHONE 714-430-7872
PLANNER TORREY PETERSON, PHONE 310-608-5158
DESIGNER: MICHELLE JACKSON
PROJECT NO.: 2227531
SERVICE REQUEST: 3121148
MSR NO.:
PRODUCT-1: TD1869862 – RULE 20A – UG INSTALL — ASSOC DESGN 1415150
CIRCUIT / VOLTAGE: STATLER 16KV
GPS:
PRODUCT-2: TD1869860 – RULE 20A – OH REMOVAL — ASSOC DESGN 1415148
SUB / PG NO.: WALTERIA SUB
CIRCUIT CODE: 16946
PRODUCT-3: — ASSOC DESGN
INVENTORY MAP: SEE ABOVE
J.P.A. NO.:

TYPE	DATE	APPROVED BY	CHECKED BY	DRAWN BY	PAX #
F	10/12/22	C. WARREN	C. WARREN	C. WARREN	33704
P	04/04/22	T. PETERSON	T. PETERSON	T. PETERSON	35158
B	09/02/21		EM/ASP/SG	BM/ASP	52823

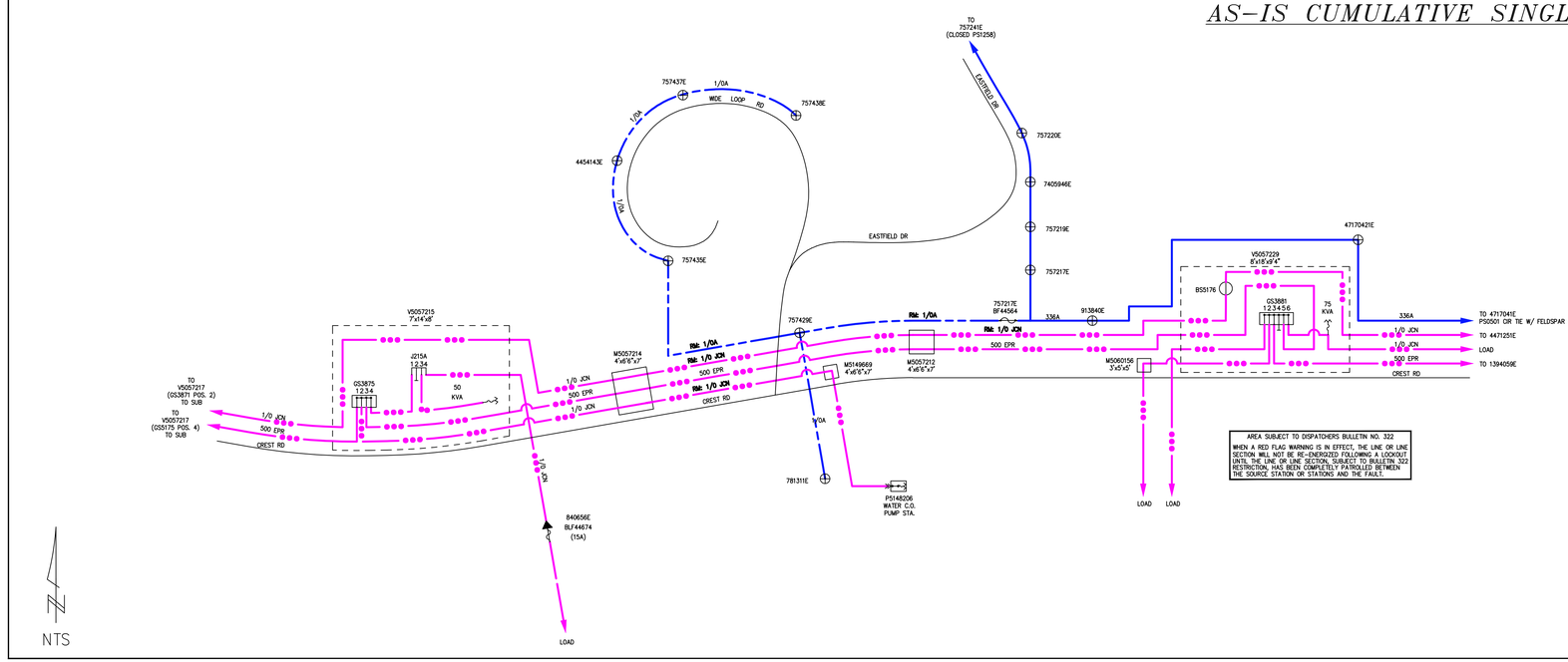
Southern California Edison Company

PROPOSED CONSTRUCTION (LOCATION)
RULE 20A – CREST RD
CREST RD
ROLLING HILLS CA 90274

SHEET 1A OF 2

DESIGN\DRWG NO. 1415150_0.01

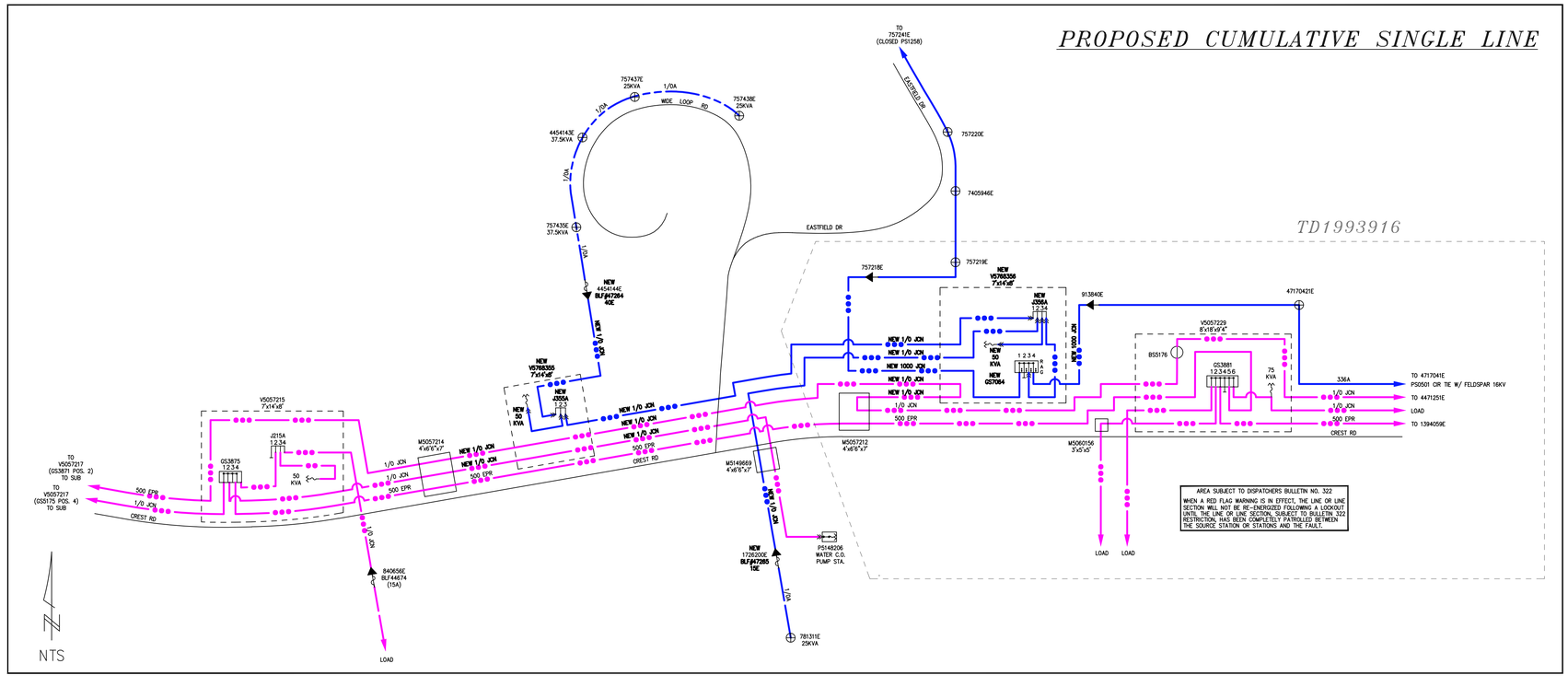
AS–IS CUMULATIVE SINGLE LINE



SINGLE LINE LEGEND

CIRCUIT 1 = STATLER 16KV o/o WALTERIA SUB
CIRCUIT 2 = FELDSPAR 16KV o/o CREST SUB

PROPOSED CUMULATIVE SINGLE LINE



FINAL DESIGN
APPROVED FOR CONSTRUCTION

GRID MAP NO.S
LT-7534-B2 LT-7535-H4
LT-7634-A1 LT-7635-G3
LT-7635-G4

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D16: Rev. 05/28/20

DATE	REVISION DESCRIPTION	APPROVED	DRAWN	CHECKED
1/5/22	UPDATED SURVEY TO SHEETS 2-5		ASP	RW

DISTRICT: 44 – SOUTH BAY		PROJ. MGR.: ROBERT CICCARELLI	PHONE: 714-430-7872	PLANNER: TORREY PETERSON	PHONE: 310-608-5158	DESIGNER: MICHELLE JACKSON
PROJECT NO.: 2227531	SERVICE REQUEST: 3121148	MSR NO.		PRODUCT-1: TD1869862 – RULE 20A – UG INSTALL		ASSOC DESGN: 1415150
CIRCUIT / VOLTAGE: STATLER 16KV		GPS		PRODUCT-2: TD1869860 – RULE 20A – OH REMOVAL		ASSOC DESGN: 1415148
SUB / PG NO.: WALTERIA SUB		CIRCUIT CODE: 16946		PRODUCT-3		ASSOC DESGN
INVENTORY MAP: SEE ABOVE		J.P.A. NO.		PROPOSED CONSTRUCTION (LOCATION): RULE 20A – CREST RD		
F	10/12/22	C. WARREN	C. WARREN	C. WARREN	33704	CREST RD
P	04/04/22	T. PETERSON	T. PETERSON	T. PETERSON	35158	ROLLING HILLS CA 90274
B	09/02/21		EM/ASP/SG	BM/ASP	52823	
TYPE	DATE	APPROVED BY	CHECKED BY	DRAWN BY	PAX #	SHEET: 1B OF 2
Southern California Edison Company						DESIGN\DRWG NO.: 1415150_0.01

FILE NAME:1415150_0.01.DWG SAVE DATE:10/21/2020 12:59 PM SAVED BY:ETERZIL

TD1869862

1 CI: V5768355 VAULT

7'x14'x8' TUB STYLE
RM: 309' – CBL 2–350 1–4/0 AL 3–1/C 600V IN DUCT
CI: 1 – S V 7'X14'X8' TUB 2 PIECE
CI: 1 – SS TAX EXCV CST FOR VLT
IN: 4 – SL CBL HOOK COMP 20"
IN: 1 – TR UG BT MC F DE 50KVA 16KV 120/240 1P
SN: _____
CI: 203' – CM DUCT 5" (RUN 1)
CI: 1008' – CM DUCT 5" (RUN 3)
CI: 2180' – CM DUCT 5" (RUN 2)
CI: 440' – CM DUCT 5" (RUN 4)
CI: 33' – CM DUCT FOR EXCAVATION (RUN 1)
CI: 507' – CM DUCT FOR EXCAVATION (RUN 3)
CI: 545' – CM DUCT FOR EXCAVATION (RUN 2)
CI: 219' – CM DUCT FOR EXCAVATION (RUN 4)
IN: 502' – CBL 1/0 AL 3–1/C 17KV CLP PJ (RUN 3)
IN: 67' – CBL 1/0 AL 3–1/C 17KV CLP PJ (RUN 1)
IN: 254' – CBL 1/0 AL 3–1/C 17KV CLP PJ (RUN 4)
MI: 88' – CBL 1/0 AL 2/C 17KV CLP 220 MIL
CI: 1 – S HH CONC 17"X30"X24"
CI: 1 – SS TAX EXCV CST FOR BD/PAD/PB/PME/SB/SOE
IN: 6 – JJ DBE SPL T–BODY 2–WY 1/0 15/25KV 600A
IN: 3 – CNN BAR INS LT DUTY #8–350 1P 6–WAY
IN: 3 – JJ LB JUNC BAR 3WY 200A 25KV
CI: 96' – CM DUCT 2 1/2" TO 4" (RUN 7)
CI: 171' – CM DUCT 2 1/2" TO 4" (RUN 8)
CI: 96' – CM DUCT FOR EXCAVATION (RUN 7)
CI: 168' – CM DUCT FOR EXCAVATION (RUN 8)
IN: 96' – CBL (2) 350 MCM, (1) 4/0 600V CLP PLEX (RUN 7)
IN: 171' – CBL (2) 350 MCM, (1) 4/0 600V CLP PLEX (RUN 8)
CI: 59' – CM DUCT 2 1/2" TO 4" (RUN 200)
CI: 96' – CM DUCT 2 1/2" TO 4" (RUN 201)
CI: 58' – CM DUCT FOR EXCAVATION (RUN 200)
CI: 93' – CM DUCT FOR EXCAVATION (RUN 201)
IN: 59' – CBL 2–1/0 1–2 AL 3–1/C 600V CLP PLEX (RUN 200)
IN: 96' – CBL 2–1/0 1–2 AL 3–1/C 600V CLP PLEX (RUN 201)

NEW V5768355 L/W

KNOCKOUT		KNOCKOUT
KNOCKOUT		KNOCKOUT
NEW 2–350 & 1–4/0 120V (4") TO HH		**NEW 2–1/0 & 1–#2 120V (3") TO METER**
NEW (5") TO M7214		NEW (5") TO M7214
NEW 1/0 JCN (FELDSPAR 16KV) (5") TO M7214		NEW (5") TO M7214
NEW 1/0 JCN (FELDSPAR 16KV) (5") TO M7214		NEW (5") TO M7214

NEW V5768355 L/E

KNOCKOUT		KNOCKOUT
NEW 2–350 & 1–4/0 120V (4") TO HH		KNOCKOUT
NEW 1/0 JCN (STATLER 16KV) (5") TO 4144E		NEW (5") TO 4144E
NEW 1/0 JCN (FELDSPAR 16KV) (5") TO M9669		NEW (5") TO M9669
NEW (5") TO V8356		NEW (5") TO V8356
NEW 1/0 JCN (FELDSPAR 16KV) (5") TO V8356		NEW (5") TO V8356

PROPOSED L/N
4454 144E
RUN = 201'
RISE = 35'
TOTAL = 236'
Q 2 5" 4 219'
V8355 TO 4144E
IN: 254' 3–1/0 JCN 16KV
TENSION 3–1/0 JCN 5" DUCT
V8355 TO 4144E – 573 LBS
4144E TO V8355 – 367 LBS

TD1869862

3 EX: 4454144E POLE

45' CLASS 4
RM: 1 – XA DBLE FB 10' STEEL PINS
RM: 4 – INS POLY DE 16KV HOT SHOE #4 & 1/0 ACSR
RM: 1 – INS POLY W/PIN 16KV CLMP #4–653 ACSR
RM: 1 – AG DOWN GUY 9/32" – 50' LESS THAN 22.5KV
RM: 1 – AG ANCHOR ROD 3/4" X 8' 2–EYE W/PLATE
IN: 1 – FE FH SMD20 17" BLF 200A 16KV 1P
IN: 2 – FE FUSE SMU20 17KV 40E
IN: 1 – PH CS 10' XA 16KV 1P 2–1/0
IN: 1 – SA HFA POLY NON XFMR 16KV
IN: 1 – SA HFA POLY 16KV
IN: 2 – RSR PVC/STRAP 5" TO 4" UNISTRUT APP
IN: 2 – INS POLY DE 16KV HOT SHOE #4 & 1/0 ACSR
IN: 2 – INS 35KV POLY POST VERT CLMP TOP LNG STD
IN: 1 – AG DOWN GUY 9/32"–50' W/2–FGSI ALL KV
IN: 1 – AG 24" CR PLT 1 1/4 " X 10" ROD 3–EYE

NOTE:
ADJOINING WORK ORDER EAST OF 15+00 IS TD1993916 FOR UG INSTALL.

TD1869862

4 EX: M5149669 MANHOLE

4'X6'–6"X7'
CI: 892' – CM DUCT 5" (RUN 6)
CI: 212' – CM DUCT 5" (RUN 5)
CI: 227' – CM DUCT FOR EXCAVATION (RUN 6)
CI: 107' – CM DUCT FOR EXCAVATION (RUN 5)
IN: 211' – CBL 1/0 AL 3–1/C 17KV CLP PJ (TO 6200E)
CI: 1 – S HH CONC 17"X30"X24"
CI: 1 – SS TAX EXCV CST FOR BD/PAD/PB/PME/SB/SOE
IN: 3 – CNN BAR INS LT DUTY #8–350 1P 4–WAY
IN: 3 – JJ DBE SPL T–BODY 2–WY 1/0 15/25KV 600A
CI: 75' – CM DUCT 2 1/2" TO 4" (RUN 9)
CI: 75' – CM DUCT FOR EXCAVATION (RUN 9)

INTERCEPT
HH H669A
17"x30"x24"
IN: 3 – 4W SEC. BAR

SEE TD1993916 MATCHLINE STA 15+00

HH H355A
17"x30"x24"
IN: 3 – 4W SEC. BAR

APN: 7567–005–015
86 CREST RD E
Q 1 3" 200 59'
V8355 TO PED
IN: 59' 1/0 1P
TENSION 1/0 1P 3" DUCT
V8355 TO PNL – 20 LBS

Q 1 3" 20 96'
H355A TO PNL
IN: 96' 1/0 1P
TENSION 1/0 1P 3" DUCT
H TO PNL – 28 LBS

Q 1 4" 8 171'
H TO V8355
IN: 171' 350 1P
TENSION 350 1P 4" DUCT
H TO V8355 – 132 LBS
V8355 TO H – 240 LBS

Q 6 5" 1 34'
V8355 TO M7214
IN: 34' 3–1/0 JCN 12KV
IN: 33' 3–1/0 JCN 12KV
TENSION 3–1/0 JCN 5" DUCT
V8355 TO M7214 – 38 LBS
M7214 TO V8355 – 26 LBS

EASEMENT REQ'D 5'x42'

88 CREST RD E
VD = 1.80%
FL = 2.57%

EX: 2–4" (163')
4142E TO CAP

ABANDON
EX: 1–4" (57')
7432E TO M7214
RM: 80' 2–350 1–4/0 600V

ABANDON
EX: 1–4" (73')
M7214 TO 5020E
RM: 73' 2–350 1–4/0 600V

EX: 6–4" (281')
M7214 TO V7215
RM: 281' 2–350 1–4/0 600V
3–1/0 16KV
3–500–16KV

85 CREST RD E
VD = 1.75%
FL = 4.23%

Q 2 5" 3 506'
V8355 TO M9669
IN: 502' 3–1/0 JCN 12KV
TENSION 3–1/0 JCN 5" DUCT
M9669 TO V8355 – 746 LBS(OVERMAX)

Q 1 4" 7 96'
V8355 TO HH
IN: 96' 350 1P
TENSION 350 1P 4" DUCT
V8355 TO H – 121 LBS
H TO V8355 – 80 LBS

EX: HH
17"x30"x15"
IN: 1 – 6W SEC. BAR

Q 4 5" 6 224'
CAP TO CAP (DUCT ONLY) PER UGS 148

Q 4 5" 2 545'
V8355 TO CAP (DUCT ONLY) PER UGS 148

76 EASTFIELD DR
VD = 1.5%
FL = 3.9%

EASTFIELD DR

ABANDON
EX: 3–4" (579')
M9669 TO CAP

ABANDON
EX: 1–3" (115')
M9669 TO CAP

ABND
EX: 1–4" (21')
M9669 TO CAP

ABANDON
EX: 1–4" (579')
M7214 TO M9669
RM: 579' 3/C 1/0–JCN 16KV

ABANDON
EX: 2–4" (746')
M7214 TO M7212
RM: 746' 3/C 1/0 JCN 16KV
3–500 16KV

Q 2 5" 5 106'
M9669 TO CAP (DUCT ONLY) PER UGS 148

Q 1 4" 9 75'
H669A TO CAP (DUCT ONLY) PER UGS 148

CO: 1–4" (110')
M9669 TO P8206

3960 CREST RD

EX: P757429E PAD
72"x94" CUST
EX: 1–75KVA 277

SPEED LIMIT 30

APN: 7567–008–007
91 E CREST RD

APN: 7567–008–016
87 CREST RD E

TD1869862

5 RM: 1726200E POLE

50' CLASS 4
RM: 1 – POLE 50' CLASS 4 WOOD FULL TREAT
RM: 1 – XA DBLE FB 10' STEEL PINS
RM: 4 – INS POLY DE 16KV HOT SHOE #4 & 1/0 ACSR
RM: 2 – INS POLY W/PIN 16KV CLMP #4–653 ACSR
RM: 1 – AG DOWN GUY 9/32" – 50' LESS THAN 22.5KV
RM: 1 – AG ANCHOR ROD 1 " X 10' 3–EYE W/PLATE

SET POLE SAME HOLE
TD1869862

6 IN: 1726200E ELEVATED POLE

45' CLASS 2
IN: 1 – POLE 45' CL 2 WD FT /W PROT BARR WF
IN: 1 – XA DBL HD DE COMP 10'
IN: 1 – FE FH SMD20 17" BLF 200A 16KV 1P
IN: 2 – FE FUSE SMU20 17KV 15E
IN: 1 – PH CS 16KV 1/0
IN: 1 – SA HFA POLY NON XFMR 16KV
IN: 1 – SA POLY PRI–N 16KV 1–EA
IN: 1 – RSR PVC/STRAP 5" TO 4" UNISTRUT APP
IN: 2 – INS POLY DE 16KV HOT SHOE #4 & 1/0 ACSR
IN: 2 – INS 35KV POLY POST VERT CLMP TOP LNG STD
IN: 1 – AG DOWN GUY 3/8"–50' W/2–FGSI ALL KV
IN: 1 – AG ANCHOR ROD 1 " X 10' 3–EYE W/PLATE

RUN = 172'
RISE = 39'
TOTAL = 211'
EX: 2–4" (172')
M9669 TO 6200E
IN: 211' 3–1/0 JCN 16KV
TENSION 3–1/0 JCN 4" DUCT
M9669 TO 6200E – 176 LBS
6200E TO M9669 – 169 LBS
1726 200E
PROPOSED L/N

TD1869862

2 EX: M5057214 MANHOLE

4'X6'–6"X5'–6"
RM: 103' – CBL (2) 350 MCM, (1) 4/0 600V CLP PLEX (TO HH)
IN: 6 – JJ DBE SPL T–BODY 2–WY 1/0 15/25KV 600A
IN: 1 – CNN BAR INS LT DUTY #8–350 1P 6–WAY (EX: HH)

SURVEYED
DATE: 12/15/21

SURVEYED
DATE: 8/19/21

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For Underground Locating
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DIG! Rev. 05/28/20

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company
SCALE: 1 IN = 30 FT
0 30 60

GRID MAP NO.S
LT–7534–B2 LT–7535–H4
LT–7634–A1 LT–7635–G3
LT–7635–G4

FINAL DESIGN
APPROVED FOR CONSTRUCTION

DATE	REVISION DESCRIPTION	APPROVED	DRAWN	CHECKED
1/5/22	UPDATED SURVEY TO SHEETS 2–5		ASP	RW

DISTRICT: 44 – SOUTH BAY
PROJ. MGR.: ROBERT CICCARELLI PHONE 714–430–7872
PLANNER: TORREY PETERSON PHONE 310–608–5158
DESIGNER: MICHELLE JACKSON
PROJECT NO.: 22227531
SERVICE REQUEST: 31211148
MSR NO.:
PRODUCT–1: TD1869862 – RULE 20A – UG INSTALL — ASSOC DESIGN 1415150
CIRCUIT / VOLTAGE: STATLER 16KV
GPS:
PRODUCT–2: TD1869860 – RULE 20A – OH REMOVAL — ASSOC DESIGN 1415148
SUB / PG NO.: WALTERIA SUB
CIRCUIT CODE: 16946
PRODUCT–3: ASSOC DESIGN
INVENTORY MAP: SEE ABOVE
J.P.A. NO.:
PROPOSED CONSTRUCTION (LOCATION): RULE 20A – CREST RD
CREST RD
ROLLING HILLS CA 90274

TYPE	DATE	APPROVED BY	CHECKED BY	DRAWN BY	PAX #
F	10/12/22	C. WARREN	C. WARREN	C. WARREN	33704
P	04/04/22	T. PETERSON	T. PETERSON	T. PETERSON	35158
B	09/02/21		EM/ASP/SG	BM/ASP	52823

Southern California Edison Company
SHEET 2 OF 2
DESIGN\DRWG NO. 1415150_0.01

FILE NAME:1415150_SLD1.DWG SAVE DATE:10/27/2022 12:50 PM SAVED BY:PETERSTL

Attachment 02

CITY OF ROLLING HILLS
2QS-RULE 20C INSTALL UG
STATLER 16KV
WALTERIA SUB

UNDERGROUND SERVICE ALERT
Contact USA
Dial 811 or 800-422-4133
www.digalert.org/contact
For Underground Locating
Two Working Days Before You Dig

D16: Rev. 05/28/20

TD1993916 UG INSTALL
WORK WITH
TD2019774-OH REMOVAL
TD1869860 -OH INSTALL
TD1869862-UG INSTALL

ATTACHMENT 2

CONSTRUCTION NOTES:

Unless otherwise specified on the working drawing which forms a part of the specification, the Contractor/Developer shall furnish the following items at no cost to the Edison Company.

Southern California Edison Company has attempted to correctly show all existing utilities and substructures in the vicinity of the work, but does not guarantee there are no other substructures in the area. Failure of SCE to show all substructures in their correct location will not be a basis for a claim for extra work, and the contractor shall be responsible for all damages to substructures whether shown or not.

1. FOR GENERAL SPECIFICATIONS SEE UGS GI 001.

2. CONDUIT:
   a. Minimum cover in street or parkway is 30" below gutter grade, unless noted otherwise.
   b. Minimum cover on private property is 30" below finished grade, unless noted otherwise.
   c. Contractor is to furnish and install approved conduit to Edison specifications per UGS CD 100.1, 110 AND 120.
   d. For the type of conduit for this job, See UGS CD 110.1.
   e. Install all risers per UGS CD 160, 161, 162 and 170.
   f. Cap all mainline conduits per UGS CD 148 and service conduits per UGS CD 150.
   g. Install blank conduit plugs in all conduits terminating into Vaults, Manhole's, PMH's, SOE's & all cap locations, per UGS CD 180.1 & UGS CD 180.2
   h. Install pull rope in all conduit runs. Pull rope to be at least 3/8" polypropylene rope, braided or twisted. For specifications, approved makes, and suppliers, see UGS GI 040.
   i. All conduit must be mandreled with the approved mandrel UGS CD 197.

3. CONDUIT RADIUS REQUIREMENTS:
   a: The minimum radius for bends are:
      36" for conduits 3" in diameter or smaller
      48" for conduits 4" and 5" in diameter
      60" for 6" diameter conduit
   b: The minimum radius for all sweeps of all mainline conduits is 12'-6" (unless noted otherwise).

4. EXCAVATION AND BACKFILL:
   a. Work area shall be cleared and rough graded to within four inches of final grade prior to installation of Edison conduit or structures.
   b. All excavations shall be in accordance with the California State Construction Safety Orders (when applicable), Edison specifications, and all governing local ordinances.
   c. Each trench to be a uniform depth below final grade prior to installation of Edison conduit or structures.
   d. Backfill shall be provided by the Contractor for all excavations and shall include crushed rock, concrete, and/or imported backfill, when required.
   e. Backfill with a MINIMUM of one sack per yard sand cement slurry around and over vaults and manholes per UGS GI 030, section 6.4 and around PMH's within one foot of finished grade, per UGS SS 590.1.
   f. Backfill, per Edison specifications, shall immediately follow conduit or substructure installation. At no time shall conduit be left exposed over 24 hours.
   g. No rocks are allowed within 12 inches of direct-buried cables or any conduit without concrete encasement. Native backfill capable of passing through a one-half inch mesh screen shall be considered to be "rock free". If existing backfill does not pass through a 1/2" screen, place imported sand 3" below and 12" above Edison cables. After this point, no rocks larger than 12" diameter are permitted.
   h. All backfill shall be compacted to meet or exceed local ordinances or other requirements. It shall be placed in a manner that will not damage the conduit or substructure or allow future subsidence of the trench or structures.

5. PAVING:
   Repaving, where required, shall be placed in such a manner that interference with traffic, including pedestrian traffic, will be kept to a minimum. The Contractor shall establish a program of repaving acceptable to the Municipality, County, or other authority having jurisdiction and which is acceptable to Edison.

6. STRUCTURES:
   a. All substructures shall be constructed or installed to Edison specifications.
   b. Install protection barriers per UGS MS 830 when required in areas exposed to traffic, per Edison Inspector.
   c. All conduit lines and concrete floored substructures shall be water tight.
   d. All grounding materials shall be furnished and installed by the Contractor.

7. RETAINING WALLS:
   When required, retaining walls shall be provided by the Developer. Walls are required wherever grade rises more than 18 inches above the structure or 24" above the pad surface at a distance of 5 feet from the same, or in areas subject to erosion. Design and installation must comply with local building ordinances. Refer to Edison Inspector for typical space requirements.

8. PERMITS:
   All permits necessary for excavation shall be provided by the Contractor/Developer.

9. ACCESS:
   Heavy truck access shall be maintained to equipment locations. Structures must be clear of all appurtenances that would obstruct the loading or unloading of equipment.

10. SERVICES:
    a. Meters and services shall comply with Edison Electrical Services Requirements.
    b. Wiring must be in accordance with applicable local ordinances and approved by local Inspection Authorities.

11. LOCATION:
    a. The location of excavations and structures for Edison shall be as shown on the working drawing. No deviation from the planned locations will be permitted unless approved by the Edison Inspector. See UGS GI 001, section 2.2.
    b. Actual location of obstructions, storm drains, and/or other foreign utilities to be the responsibility of the Contractor. See UGS GI 001, section 2.3.

12. Contractor is to verify location and widths of all sidewalks and driveways prior to street light installation. See UGS CD 175.1, UGS CD 175.2 and UGS CD 175.3.

13. SURVEY:
    Surveying of street improvements, property corners, lot lines, finished grade, etc., necessary for the installation of underground facilities must be completed and markers or stakes placed prior to the start of the installation. In addition, Developer shall maintain the markers during the installation and inspection by Edison. Grade and property line stakes must show any offset measurements.

14. COORDINATION AND SUPERVISION:
    The Developer shall provide supervision over and coordination among the various contractors working within the development in order to prevent damage to Edison facilities. He is responsible for the cost of repairs, replacement, relocation, or other corrections to Edison facilities made necessary by his failure to provide supervision or to otherwise comply with these specifications.

15. TELEPHONE AND OTHER UTILITY REQUIREMENTS:
    The drawing prepared for this job may also cover the facilities to be installed for the telephone company and/or other utility. Any questions concerning details of their installation should be referred to the company concerned.

16. OWNERSHIP:
    Developer is to deed to the Edison Company all structures shown hereon except those shown as customer owned.

17. WARRANTY:
    Applicants expressly represent and warrant that all work performed and all material used in meeting Applicants' obligations herein are free from defects in workmanship and are in conformity with Southern California Edison Company's requirements. This warranty shall commence upon receipt by Applicants of Company's final acceptance and shall expire one year from that date. Applicants agree to promptly correct to the Company's satisfaction and that of any governmental agency having jurisdiction and at Applicant's expense any breach of this warranty which may become apparent through inspection or operation of underground electric system by Company during this warranty period.

18. INSPECTION:
    Inspection is required during the construction period. A 48 hour advance notice of intent to start construction is required from the contractor to the Southern California Edison Company. Standards of Edison construction requirements are available upon request.

Duct and Structure Inspector: JESSE CARRASCO Phone: 310-779-3195
Cabling Construction Coordinator: Phone:

D05: Rev. 07/21/16

CONCRETE PRODUCTS

Precast concrete item complete with neck. Cover and inserts may be obtained from any of the following listed and approved manufacturers:

JENSEN PRECAST
14221 San Bernardino Ave., Fontana, Calif. 92335
Phone: (909) 350-4111
(800) 257-6100

OLDCASTLE PRECAST
10650 Hemlock Ave., Fontana, Calif. 92337
Phone: (909) 428-3700
(800) 626-3860

FOR HANDHOLE AND PULLBOX MANUFACTURERS, SEE UGS HP 200.

D41: Rev. 01/21/09

CONNECTING TO EXISTING SCE STRUCTURES

- Per SCE requirements, customers are not allowed to enter, intercept or tie-in to existing SCE facilities; e.g. structures, equipment, multi-conduit runs/banks, or conductors. These facilities may be energized and the work will only be performed by SCE. Contact the appropriate SCE inspector to schedule an appointment. Customers may connect to an existing conduit stub without a SCE inspector present.
- Multi-conduit runs/banks are runs of conduit in close proximity to each other and other SCE facilities. A conduit stub is a single empty conduit stub that is not in close proximity to other SCE owned facilities. Refer to the work order map for details.
- Per CPUC/SCE's Rule 15 B.1.A and Rule 16 D.1.A., the customer will provide all necessary excavation(s) (with the exception of excavation under pads and primary splice boxes), material (including conduit and structures) and encasement, to be utilized in the intercept/tie-in process.
- The customer must adhere to all applicable Cal-OSHA, local, city, state and federal regulations, (including, but not limited to, all necessary shoring and traffic control in place to perform the intercept/tie-in work by SCE's underground civil contractor(s)).
- Intercept/tie-in work must be coordinated with SCE's civil contractors through the Division Inspector/P-Spec to limit exposure of excavation(s). Customer is responsible for securing excavation(s).

D08: 11/13/18

LEGEND OF CONDUIT SYMBOLS
(CONVENTIONAL U. G.)

EDISON
NO. CONDUIT REQ'D. → SIZE OF CONDUIT
RUN NO. → LENGTH OF CONDUIT RUN

TRENCH
TYPE OF FACILITY (CIC-DB, ETC.)
RUN NO. → LENGTH OF TRENCH

STREET LIGHT
NO. CONDUIT REQ'D. → SIZE OF CONDUIT
RUN NO. → LENGTH OF CONDUIT RUN

STREET LIGHT TRENCH
TYPE OF FACILITY
RUN NO. → LENGTH OF ADDITIONAL TRENCH REQ'D.

EDISON
NO. CONDUIT REQ'D. → SIZE OF CONDUIT
REFERENCE RUN NO. → MEMO → DENOTES CONDUIT RUN CONTINUATION FOR CONSTRUCTION INFORMATION

STREET LIGHT
NO. CONDUIT REQ'D. → SIZE OF CONDUIT
REFERENCE RUN NO. → MEMO → DENOTES CONDUIT RUN CONTINUATION FOR CONSTRUCTION INFORMATION

ANY OF THE ABOVE SYMBOLS FOLLOWED BY A →

DENOTES THE FOLLOWING:

DB CONDUIT WITHOUT ENCASEMENT IS ACCEPTABLE FOR PORTIONS OF TRENCH WITH ONLY ONE OR TWO CONDUITS

SEMI-ENCASEMENT IS REQUIRED FOR PORTIONS OF TRENCH WITH ONLY THREE OR FOUR CONDUITS

FULL ENCASEMENT IS REQUIRED FOR MORE THAN FOUR CONDUITS

D18: Rev. 5/08/2006

NOTE:
ALL ELECTRICAL DUCTS AND STRUCTURES WILL CONFORM TO GENERAL ORDER #128 (RULES FOR CONSTRUCTION OF UNDERGROUND ELECTRICAL SUPPLY AND COMMUNICATION PRESCRIBED BY THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA, JANUARY 2006).

WARNING
THE EXCAVATOR MUST TAKE ALL STEPS NECESSARY TO AVOID CONTACT WITH UNDERGROUND FACILITIES WHICH MAY RESULT IN INJURY TO PERSONS OR DAMAGE TO FACILITIES IN THE AREA. THE INDICATED LOCATIONS OF EDISON UNDERGROUND FACILITIES, AS PROVIDED, ARE BELIEVED TO BE ACCURATE, HOWEVER, THE FINAL DETERMINATION OF EXACT LOCATIONS AND THE COST OF REPAIR TO DAMAGED FACILITIES IS THE RESPONSIBILITY OF THE EXCAVATOR.

TIE-IN MADE INTO A SECONDARY HANDHOLE

If PVC conduit is used, riser bend installation may be made by the customer with prior SCE approval. Customer not to remove handhole cover. If metallic conduit is used or handhole cover needs to be removed, a SCE Qualified Person must be present.

CONDUIT RADIUS REQUIREMENTS:
A: The minimum radius for bends are:
36" for conduits 3" in diameter or smaller
48" for conduits 4" and 5" in diameter
60" for 6" diameter conduit
B: The minimum radius for sweeps are:
36" for conduits 3" in diameter or smaller
12'-6" for conduits 4" in diameter and larger, unless otherwise noted.

RUN NUMBER CALL-OUTS AS FOLLOWS:

(1) – (199) MAINLINE CONDUIT
(200) – (599) SERVICE CONDUIT
(600) – (799) STREET LIGHT CONDUIT

D84: Rev. 10/26/20

LEGEND CODE DEFINITIONS

CI – CUSTOMER CONTRACTOR INSTALLED: MATERIALS FURNISHED AND INSTALLED BY APPLICANT AT EDISON'S EXPENSE AND ARE DEEDED TO EDISON. (EXCEPTION: STREET LIGHT ELECTROLIERS WILL BE INSTALLED BY EDISON'S CONTRACTOR.)

CO – CUSTOMER CONTRACTOR OWNED: MATERIALS FURNISHED. INSTALLED. OWNED. AND MAINTAINED BY APPLICANT.

CF – CUSTOMER CONTRACTOR FURNISHED: MATERIALS FURNISHED AND INSTALLED BY APPLICANT AT APPLICANT'S EXPENSE THAT MAY BE DEEDED TO EDISON.

IN – INSTALL: MATERIALS FURNISHED AND INSTALLED BY APPLICANT IF APPLICANT INSTALLED PROJECT OR BY EDISON IF EDISON INSTALLED PROJECT. (EXCEPTION: FOR AN APPLICANT INSTALLED LINE EXTENSION. STATION NOS.
HAVING AN ASTERISK ADJACENT TO AN "IN" LEGEND CODE REPRESENTS MATERIALS TO BE PROVIDED BY APPLICANT AND INSTALLED BY EDISON IN ALL CASES. REFER TO DPB 825B. PROJECT MATERIAL LIST BY ASSEMBLY WITHIN A STATION.)

MI – MEMO INSTALL: SAME AS IN–INSTALL.

MR – MEMO REMOVE: MATERIALS REMOVED BY EDISON.

RM – MEMO REMOVED: MATERIALS REMOVED BY EDISON.

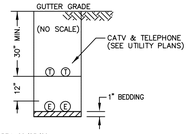
SI – SHOOFLY IN: MATERIALS FURNISHED AND INSTALLED BY EDISON FOR TEMPORARY CONSTRUCTION.

SR – SHOOFLY REMOVE: MATERIALS REMOVED BY EDISON FOR TEMPORARY CONSTRUCTION.

TR – TRANSFER: EDISON LABOR REQUIRED TO TRANSFER EXISTING FACILITIES.

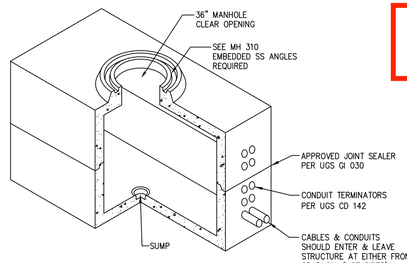
D31: Rev. 11/85

TYPICAL CONDUIT SECTION JOINT WITH CATV & TELE
SEE UGS CD 120



D81–J REV. 09/23/09

PRECAST TUB–TYPE MANHOLES
SEE UGS MH 310



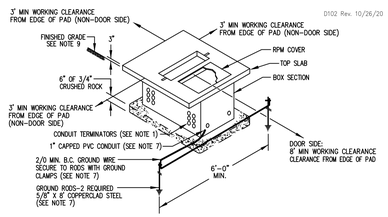
NOTE(S):
1. SEE GI 030.
2. SEE CD 142.

1.0 EXCAVATION SIZE:
CONSULT MANUFACTURER'S INSTALLATION GUIDES FOR EXACT EXCAVATION DIMENSIONS FOR EACH STRUCTURE USE.

2.0 UGS REFERENCE:
GI 030 ... GENERAL SPECIFICATION FOR PRECAST REINFORCED CONCRETE STRUCTURES
GI 035 ... ALLOWABLE TOLERANCES FOR INSTALLED PRECAST STRUCTURES
CD 142 ... CONDUIT ENTRANCE
MH 319 ... MANHOLE NECK, FRAME, COVER, AND RESTRAINT DETAIL
AC 711 ... SUMP DRAIN AND DETAIL
AC 740 ... LADDERS

D102 Rev. 10/26/20

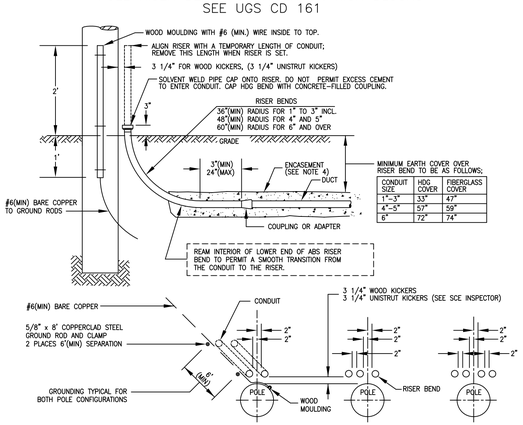
10'x12' PRECAST SLAB–BOX FOR 3Ø PAD–MOUNTED TRANSFORMERS UP TO 5,000 KVA
SEE UGS SS 535



NOTES:
1. CONDUIT TERMINATORS TO BE LOCATED AS SHOWN ON UGS SS 535–2 (SHEET 2) TO UGS SS 535–5 (SHEET 5). STANDARD CONDUIT ENTRANCE SHALL BE A FLATWALL DESIGN. SLIGHT VARIATIONS BY MANUFACTURERS MAY BE ALLOWED WITH COMPANY APPROVAL.
2. WHEN CABLE TRENCH OPENINGS ARE REQUIRED IN A SLAB BOX, THEY CAN BE SPECIAL ORDERED FROM THE CONCRETE PRECASTER.
3. FOR SLAB BOX STRUCTURAL DESIGN CRITERIA, SEE UGS SS 535–2 (SHEET 2) TO UGS SS 535–5 (SHEET 5).
4. FOR LIST OF MATERIAL REQUIREMENTS AND NOTES, SEE TABLE UGS SS 535–1 (SHEET 6).
5. CONSULT MANUFACTURERS' INSTALLATION GUIDES FOR EXCAVATION DIMENSIONS.
6. AN EIGHT-FOOT MINIMUM CLEARANCE IS REQUIRED ON DOOR SIDE OF TRANSFORMER FOR OPERATION.
7. GROUND RODS, CLAMPS, AND WIRE WILL BE FURNISHED BY CONTRACTOR. SEE UGS AC 703 FOR APPROVED GROUNDING MATERIALS. GROUND WIRE TO BE A MINIMUM OF 2/0 BARE COPPER. GROUND WIRE TO BE PLACED THROUGH CAPPED ONE–INCH PVC CONDUIT AT EITHER END OF SLAB BOX. A MINIMUM THREE–FOOT LENGTH OF GROUND WIRE SHALL BE PLACED IN SLAB BOX.
8. MASTIC SEALANT IS REQUIRED AT JOINTS.
9. TOP SURFACE OF SLAB BOX SHALL BE SET THREE INCHES ABOVE FINISHED GRADE.
10. SEE UGS SS 500 FOR APPROVED MANUFACTURERS.

D56 REV. 10/26/20

POLE RISER BEND FOR RISER ON KICK BLOCKS
SEE UGS CD 161



MINIMUM EARTH COVER OVER RISER BEND TO BE AS FOLLOWS:		
CONDUIT SIZE	HDG COVER	FIBERGLASS COVER
1"–3"	33"	47"
4"–5"	57"	59"
6"	72"	74"

1. APPROVED RISER BENDS ARE SHOWN ON FOLLOWING TABLE;

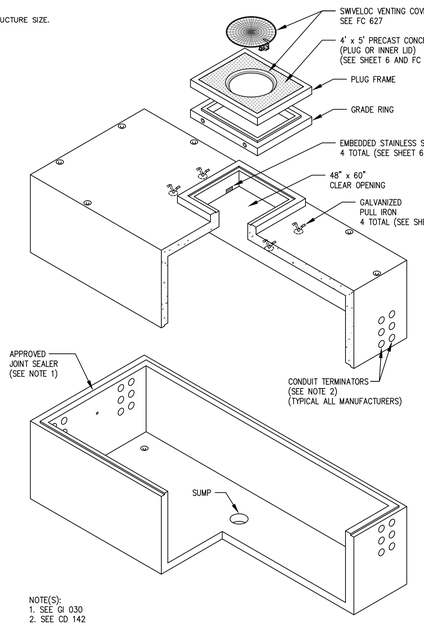
MATERIAL	SIZE							
	1"	1–1/2"	2"	2–1/2"	3"	4"	5"	6"
ABS	–	–	–	–	X	X	X	–
FIBERGLASS	–	–	–	–	X	X	X	X
HDG	X	X	X	X	X	X	X	X

NOTE: 6" HDG OR FIBERGLASS RISER BEND SHALL BE USED WHEN SPECIFIED ON THE WORKING DRAWING. SEE UGS AC 702 FOR GROUNDING HDG RISER BENDS.

2. THE TOP AND BOTTOM OF 3", 4", 5" OR 6" FIBERGLASS BENDS ARE FURNISHED WITH PERMANENTLY ATTACHED PVC COUPLINGS. ALSO INCLUDED IS A 6" LONG 3", 4", 5" OR 6" SCHEDULE 80 PVC STUB–OUT, SOLVENT WELDED INTO THE TOP COUPLING. SEE UGS CD 166 FOR FIBERGLASS RISER BEND MATERIAL INFORMATION AND SUPPLIERS.
3. TWO GROUND RODS ARE REQUIRED AT ALL PRIMARY RISER POLES. DRIVE RODS IN TRENCH BOTTOM WITH 6" MINIMUM SEPARATION IN UNDISTURBED EARTH. LEAVE THE ROD TOPS 3" ABOVE THE TRENCH BOTTOM AND ATTACH CONTINUOUS GROUND WIRE WITH CLAMPS. EXTEND WIRE TO INDICATED LOCATION ON POLE AND STUB UP 2' ABOVE GRADE IN WOOD MOULDING. ALL GROUNDING MATERIALS FURNISHED BY THE CONTRACTOR. SEE UGS AC 703 FOR APPROVED GROUNDING MATERIALS.
4. ENCASEMENT REQUIRED ONLY WHEN CALLED OUT ON WORKING DRAWING.
5. SCHEDULE 80 PVC BENDS MAY BE SUBSTITUTED FOR FIBERGLASS BENDS FOR STRAIGHT RUNS OF 150' OR LESS IN CONDUIT SIZES 4" AND UNDER.

D78A: REV. 01/09/12

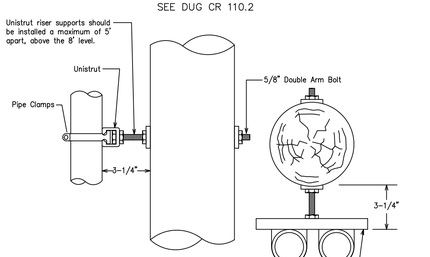
PRECAST TUB–TYPE VAULTS WITH COVER RESTRAINTS
SEE UGS VA 410



NOTE(S):
1. SEE GI 030.
2. SEE CD 142

D60: Rev. 06/08/20

RISER INSTALLATION USING UNISTRUT
SEE DUG CR 110.2



CONVENTIONAL RISER INSTALLATION
NOT TO SCALE

NOTE(S):
1. All notes pertaining to Figure CR 110–1.1 (Sheet 1) construction on scope CR 110.1 also apply to risers supported by a unistrut.

1.0 APPLICATION
The unistrut shown in Figure CR 110–5 (Sheet 3) is the preferred method where multiple risers are required.

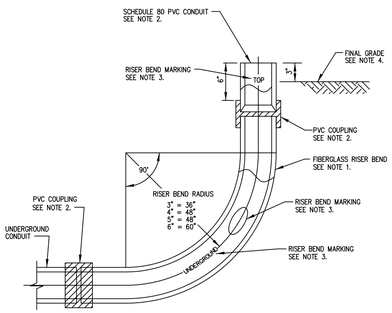
2.0 MATERIAL

TABLE CR 110–2: Unistrut Pipe Clamps

Conduit Size (in)	Material Code
1	622–04052
2	133–48248
2.5	133–48214
3	133–00025
4	133–00017
5	133–48008
6	132–00746

REF.: DUG CR 110.2
D38: REV. 02/18/11

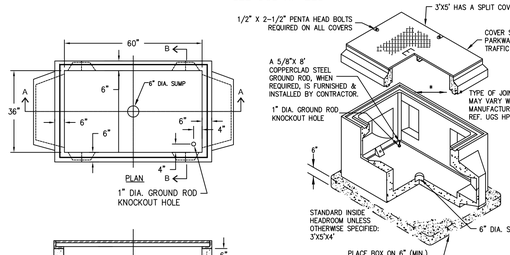
THREE, FOUR, FIVE, OR SIX–INCH FIBERGLASS RISER BENDS
SEE UGS CD 166



NOTE(S):
1. THE RISER BEND IS AVAILABLE IN THREE, FOUR, FIVE OR SIX–INCH SIZES. THE MAIN BODY OF THE BEND IS MANUFACTURED FROM FIBERGLASS MATERIAL AND IS MEDIUM GRAY IN COLOR.
2. THE TOP AND BOTTOM OF RISER IS FURNISHED WITH PVC COUPLINGS PERMANENTLY EPOXY BONDED TO THE FIBERGLASS BEND. A SCHEDULE 80 PVC SIX–INCH LONG STUB–OUT IS SOLVENT WELDED INTO THE TOP PVC COUPLING.
3. THE TOP SCHEDULE 80 PVC STUB OUT OF BEND IS STENCILED "TOP", AND BOTTOM OF BEND IS STENCILED "UNDERGROUND." " MANUFACTURER'S NAME, SIZE, AND DATE (MONTH AND YEAR) WILL BE STENCILED ON THE CENTER OF THE RISER BEND.
4. THE TOP SCHEDULE 80 PVC STUB OUT WILL BE PLACED THREE INCHES ABOVE FINAL GRADE. NO PORTION OF THE FIBERGLASS MATERIAL OF THE BEND WILL BE EXPOSED ABOVE THE FINISH GRADE.
5. THE APPROVED MANUFACTURERS AND SUPPLIERS ARE:
   A. MANUFACTURERS: FRE CONDUIT, SMITH PRODUCT COMPANY, AND CHAMPION FIBERGLASS, INC.
   B. SUPPLIERS:
      - ONE TIME UTILITY 501 GARFIELD STREET SANTA ANA, CA 92701
      - CAL–DUCT, INC. 2522 LEE AVENUE SOUTH EL MONTE, CA 91733
      - SAF–T–CO SUPPLY, INC. 1300 E. NORMANDY PLACE SANTA ANA, CA 92705

D39: Rev. 10/26/20

PULL BOX 3' X 5' PRECAST CONCRETE
SEE UGS HP 225



NOTE(S):
1. REINFORCEMENT:
   H20–S BRIDGE LOADING.
2. CONCRETE:
   CONCRETE SHALL BE CLASS "A" WITH 28–DAY COMPRESSIVE STRENGTH OF 3,000 PSI (MINIMUM). SLIGHT TAPER (3/4" IN DEPTH OF PULL BOX) AND 1" CHAMFER ON ALL INSIDE CORNERS PERMITTED FOR EASE OF FORMING.
3. INSTALLATION:
   PULL BOX SHALL BE PLACED ON 6" (MINIMUM) COMPACTED ROCK OR SAND BASE TO ENSURE UNIFORM DISTRIBUTION OF SOIL PRESSURE IN FLOOR. MINIMUM EXCAVATION FOR PULL BOX SHALL BE 52" X 97" X DEPTH TO SUIT JOB.
4. COVERS:
   SEE FC 612 AND FC 618 FOR PULL BOX COVERS.
5. GRADE RINGS:
   INSTALLING CONTRACTOR SHALL PROVIDE GRADE RINGS (6" MINIMUM) AS NECESSARY IN ORDER TO MAINTAIN COVER OVER CONDUITS PER SCE SPECIFICATIONS OR PERMIT AGENCY SPECIFICATIONS, WHICHEVER IS GREATER.
6. PULL IRONS, AND EYES:
   SEE AC 729 OR PULL IRONS AND AC 720 FOR PULL EYES.

D53C: Rev. 02/12/21

DISTRICT: 44 – SOUTH BAY	PROJ. MGR. MIGUELES, MANUEL PHONE 310–720–6086		PLANNER MIGUELES, MANUEL PHONE 310–720–6086	DESIGNER ELLIS, CASSANDRA D	
PROJECT NO. 2410847	SERVICE REQUEST 3301380	MSR NO.	PRODUCT–1 1993916–RULE 20C–UG INSTALL		ASSOC DESGN
CIRCUIT / VOLTAGE STATLER 16KV		GPS	PRODUCT–2 1993915–RULE 20C–OH REMOVAL		ASSOC DESGN
SUB / PG NO. WALTERIA		CIRCUIT CODE	PRODUCT–3		ASSOC DESGN
INVENTORY MAP LT–7634–A		J.P.A. NO.	PROPOSED CONSTRUCTION (LOCATION) RULE 20 PROJECT 92 CREST RD E ROLLING HILLS CA 90274		
F 8/3/2022	ANDREW CORTEZ	MANNY MIGUELES	C ELLIS	33308	
TYPE: F DATE: 8/3/2022	APPROVED BY: ANDREW CORTEZ	CHECKED BY: MANNY MIGUELES	DRAWN BY: C ELLIS	PAX #: 33308	
Southern California Edison Company			SHEET 2 OF 3	DESIGN\DRWG NO. 1515802_1.01	

FILE NAME:1515802_1.01.DWG SAVE DATE:9/7/2022 12:47 PM SAVED BY:ELLICD

CREW NOTE:

- REMOVE WIZZAR FROM 041E TO 840E AND REPLACE WITH #4AT
- REFEED 94 CREST RD E-METER 222011-379273 GATE PEDESTAL FROM #4AT SECONDARY
- METER 223000-011293
  3900 E CREST ROAD-CONTACT KEVIN JONES-949-433-7334 FOR OUTAGE

CREW NOTES:

- FELSPAR 16KV
- AT MH212 CONNECT 1/0 JCN COMING FROM
- V7229 TO TBODY TO FEED V8356
- ON VAULT 8356 CONNECT 1/0 JCN FOR FELSPAR TO TBODY AND FEED V8355

CITY OF ROLLING HILLS
2QS-RULE 20C INSTALL UG
STATLER 16KV
WALTERIA SUB

TD1993916 UG INSTALL
WORK WITH
TD2019774-OH REMOVAL
TD1869860 -OH INSTALL
TD1869862-UG INSTALL

T.L.M. DATA: V5768356	SIZE	KVA	CUST	% LOAD
EXIST.	N/A-	N/A	N/A	N/A-%
PROP.	50	46	3	92%

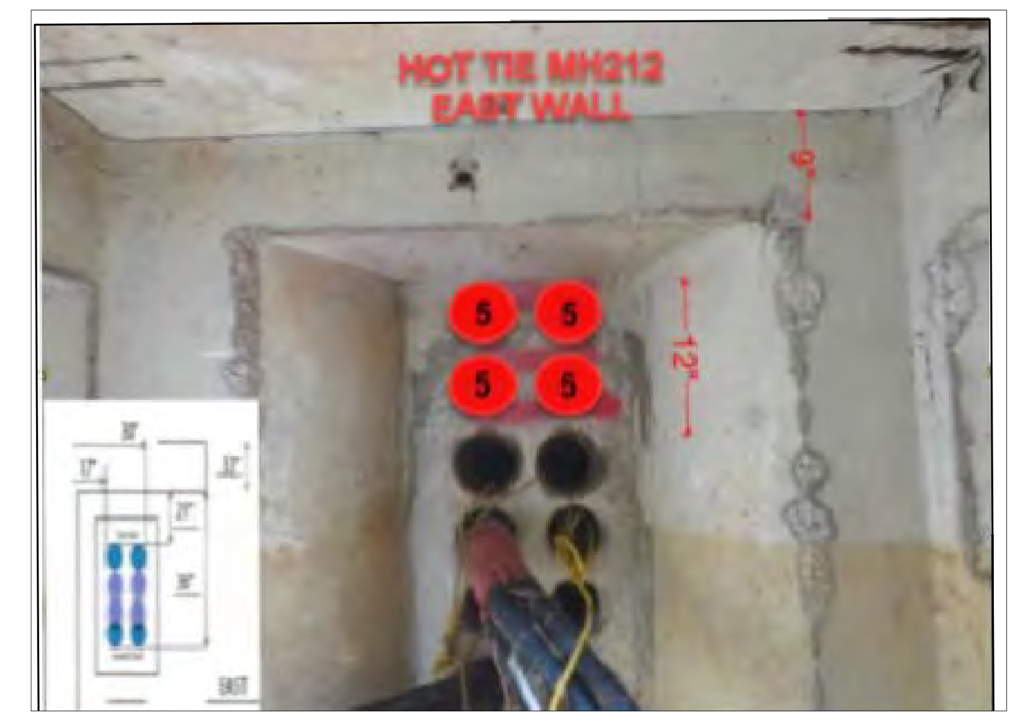
VOLTAGE DROP: 1.02
FLICKER FACTOR: 3.5
PRI. CIRCUIT: STATLER 16KV

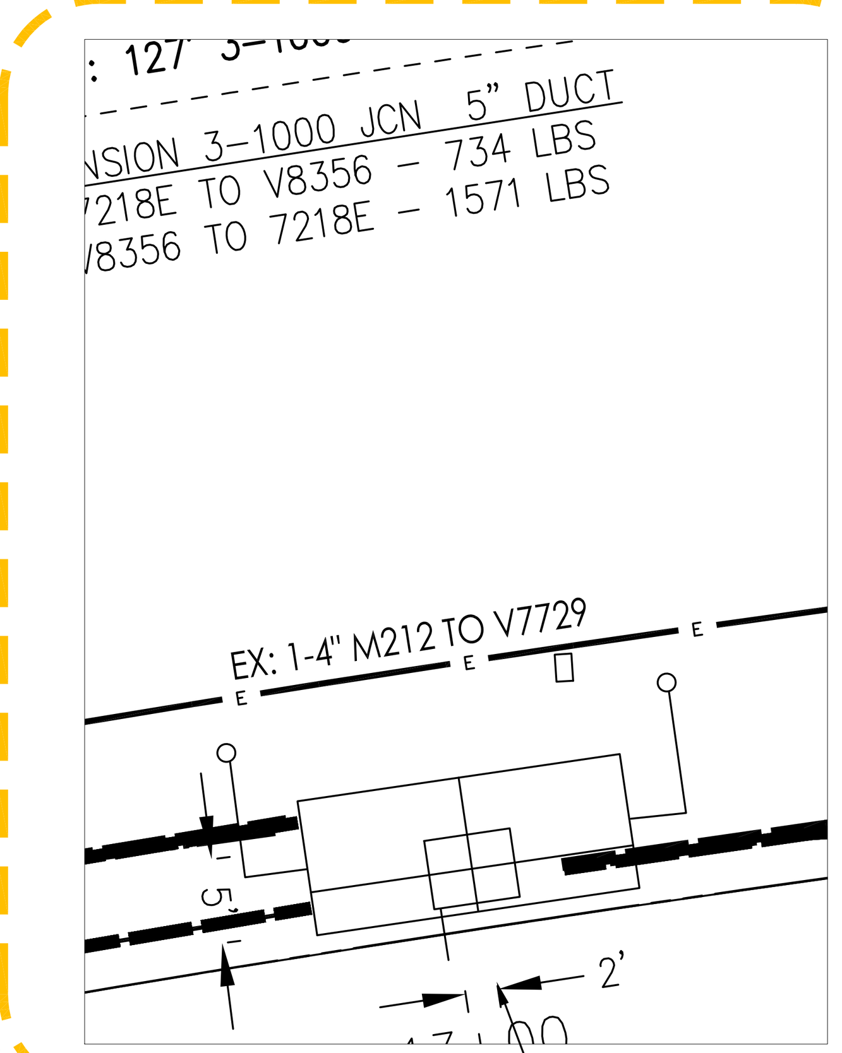
D27: REV. 12/10/21

RISER DETAIL
STRUCTURE 757218E
N
CAP AT POLE
RISER: 29'
RUN: 98'
TOTAL: 127'
INSTALL: 127' 3-1000 JCN

RISER DETAIL
STRUCTURE 913840E
N
CAP AT POLE
RISER: 30'
RUN: 39'
TOTAL: 69'
INSTALL: 146' 3-1000 JCN

HOT TIE IN
STRUCTURE M5057212





PROJECT REQUIREMENTS (Y/N)

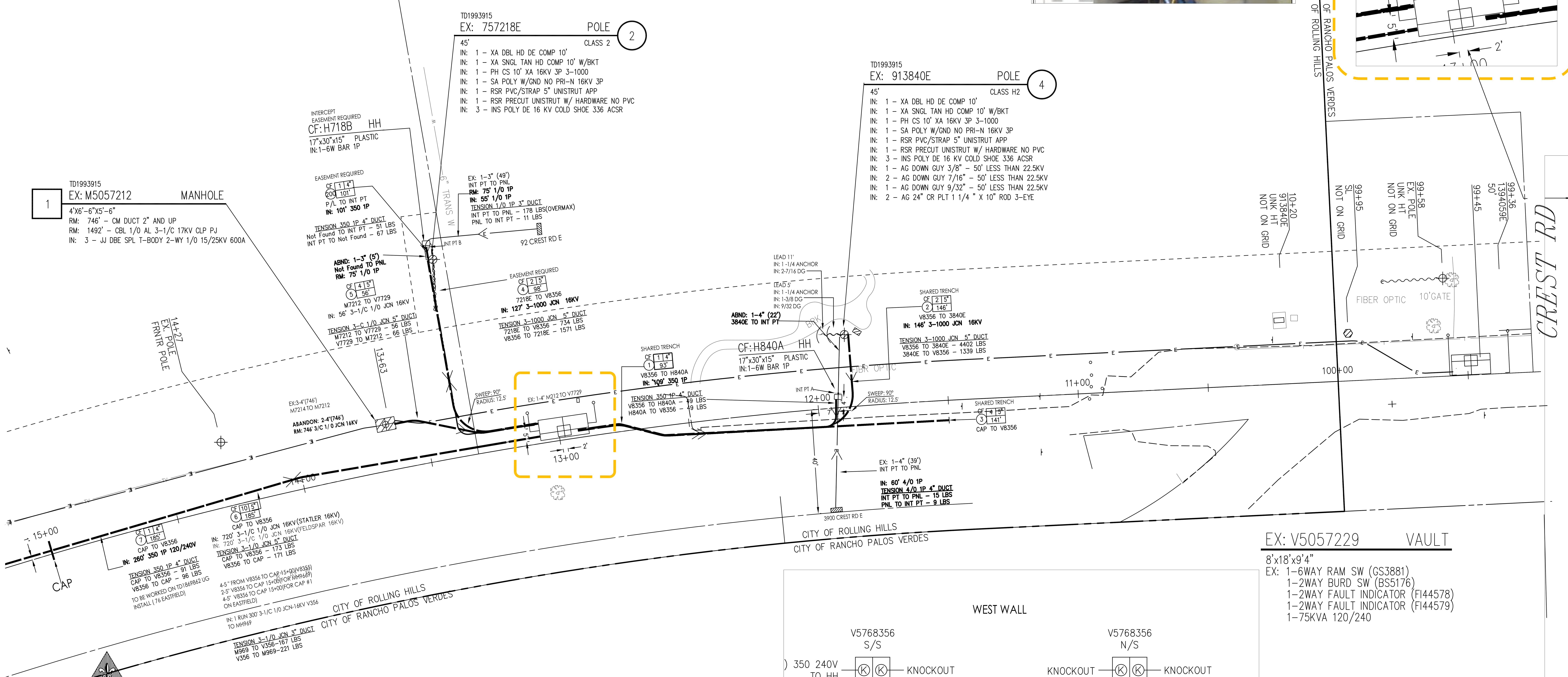
EDISON EASEMENT REQUIRED	Y
PWRD 88 REQUIRED	Y
UG CIVIL ONLY WORK ORDER	N
PERMIT REQUIRED	Y
PERMIT TYPE:	ENCROACHMENT
OUTAGE REQUIRED	Y
OUTAGE DATE: TBD	TIME: TBD
TRAFFIC CONTROL REQUIRED	Y
PED. TRAFFIC CONTROL REQ'D	N
CONVEYANCE LETTER REQ'D	N
ENVIRONMENTAL REQUIREMENTS DOCUMENT (ERD) REQUIRED	Y
CSD 140 (TLM) REQ'D	Y
DIG ALERT APP	Y
VERIFIED ACTIVE AND CONFIRMED USA TICKETS	
UTILIQUEST NOTIFIED	
STANDARD ADHERENCE:	3RDQ/ 2022 Y

D124: Rev. 10/12/21

TD1993915
EX: 757218E — POLE (2)
45' — CLASS 2
IN: 1 - XA DBL HD DE COMP 10'
IN: 1 - XA SNGL TAN HD COMP 10' W/BKT
IN: 1 - PH CS 10' XA 16KV 3P 3-1000
IN: 1 - SA POLY W/GND NO PRI-N 16KV 3P
IN: 1 - RSR PVC/STRAP 5" UNISTRUT APP
IN: 1 - RSR PRECUT UNISTRUT W/ HARDWARE NO PVC
IN: 3 - INS POLY DE 16 KV COLD SHOE 336 ACSR

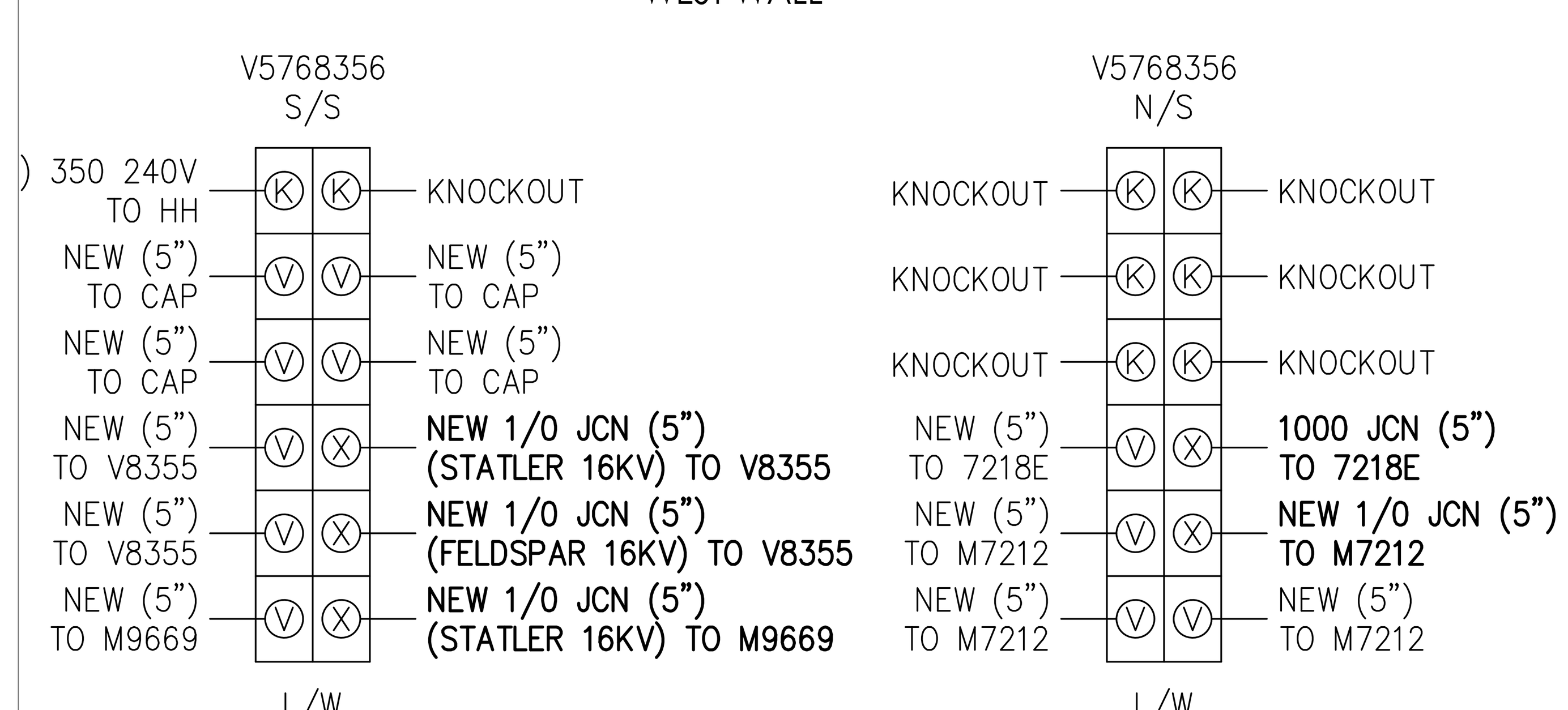
TD1993915
EX: 913840E — POLE (4)
45' — CLASS H2
IN: 1 - XA DBL HD DE COMP 10'
IN: 1 - XA SNGL TAN HD COMP 10' W/BKT
IN: 1 - PH CS 10' XA 16KV 3P 3-1000
IN: 1 - SA POLY W/GND NO PRI-N 16KV 3P
IN: 1 - RSR PVC/STRAP 5" UNISTRUT APP
IN: 1 - RSR PRECUT UNISTRUT W/ HARDWARE NO PVC
IN: 3 - INS POLY DE 16 KV COLD SHOE 336 ACSR
IN: 1 - AG DOWN GUY 3/8" - 50' LESS THAN 22.5KV
IN: 2 - AG DOWN GUY 7/16" - 50' LESS THAN 22.5KV
IN: 1 - AG DOWN GUY 9/32" - 50' LESS THAN 22.5KV
IN: 2 - AG 24" CR PLT 1 1/4 " X 10" ROD 3-EYE

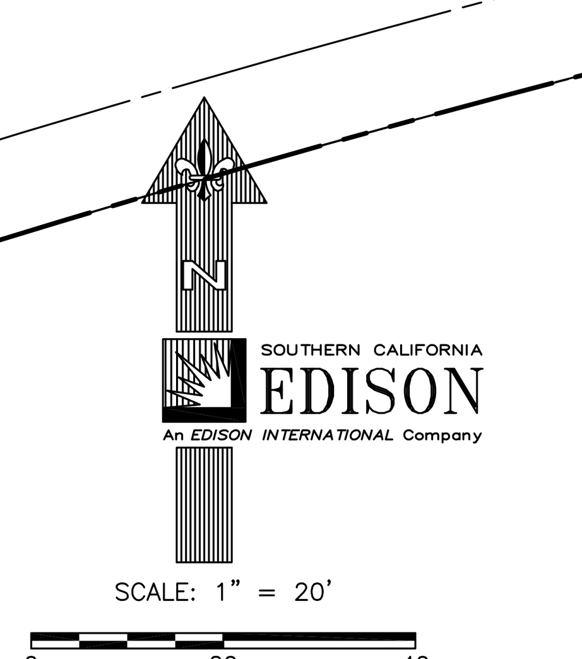
TD1993915
EX: M5057212 — MANHOLE (1)
4'X6'-6"X5'-6"
RM: 746' - CM DUCT 2" AND UP
RM: 1492' - CBL 1/0 AL 3-1/C 17KV CLP PJ
IN: 3 - JJ DBE SPL T-BODY 2-WY 1/0 15/25KV 600A



TD1993915
CF: V5768356 — VAULT (3)
7'x18'x8' — TUB STYLE
CF: 1 - S V 7'X18'X8' TUB 2 PIECE
CF: 1 - SS TAX EXCV CST FOR VLT
IN: 1 - SL CBL RACK STL 30" FOR VLT/MH
IN: 2 - JJ 3-DBE 1000 600A
IN: 1 - JJ DB EXT 1/0 600A W/LBE 1/0 200A 25KV
IN: 3 - JJ DBE 1000 600A TO DBE 1/0 200A
IN: 3 - JJ DE DB RCPT INS W/TST PNT 600A
IN: 11 - JJ LBE W/LB BUSH INS 1/0 200A 25KV
IN: 1 - SW UG SF6 LB RAG 4-WY 600A 17.5KV
SN:__________________
IN: 1 - TR UG BT MC F DE 50KVA 16KV 120/240 1P+
SN:__________________
IN: 3 - JJ DBE SPL T-BODY 2-WY 1/0 15/25KV 600A
IN: 3 - JJ LB JUNC BAR 4WY 200A 25KV
CF: 196' - CM DUCT 5" (7218E TO V8356 (CF 4))
CF: 224' - CM DUCT 5" (M7212 TO V8356 (CF 5))
CF: 564' - CM DUCT 5" (V8356 TO CAP (CF 3))
CF: 292' - CM DUCT 5" (V8356 TO 3840E (CF 2))
CF: 2405' - CM DUCT 5" (V356 TO CAP 15+00 CF 6))
CF: 185' - CM DUCT 2 1/2" TO 4" (CAP TO V8356 (CF 7))
CF: 94' - CM DUCT FOR EXCAVATION (7218E TO V8356 (CF 4))
CF: 57' - CM DUCT FOR EXCAVATION (M7212 TO V8356 (CF 5))
CF: 37' - CM DUCT FOR EXCAVATION (V8356 TO 3840E (CF 2))
CF: 193' - CM DUCT FOR EXCAVATION (CAP TO V8356 (CF 7))
IN: 438' - CBL 1000 AL 1-1/C 17KV CLP PJ (V8356 TO 3840E (CF 2))
IN: 381' - CBL 1000 AL 1-1/C 17KV CLP PJ (7218E TO V8356 (CF 4))
MI: 43' - CBL 1000 AL 1-1/C 17KV CLP PJ
IN: 720' - CBL 1/0 AL 3-1/C 17KV CLP PJ (V356 TO V355(STATLER 16KV))
IN: 300' - CBL 1/0 AL 3-1/C 17KV CLP PJ (V356 TO MH969)
IN: 720' - CBL 1/0 AL 3-1/C 17KV CLP PJ (V356 TO V355 (FELDSPAR 16KV))
IN: 30' - CBL 1/0 AL 3-1/C 17KV CLP PJ (SWITCH TO JBARS)
IN: 56' - CBL 1/0 AL 3-1/C 17KV CLP PJ (M7212 TO V8356 (CF 5))
CF: 1 - S HH PLAS 17"X30"X15" (H718B)
CF: 1 - S HH PLAS 17"X30"X15" (H840A)
CF: 1 - SS TAX EXCV CST FOR PLASTIC HH (H718B)
CF: 1 - SS TAX EXCV CST FOR PLASTIC HH (H840A)
IN: 1 - CNN BAR INS LT DUTY #8-350 1P 6-WAY (H840A)
IN: 1 - CNN BAR INS LT DUTY #8-350 1P 6-WAY
IN: 1 - CNN BAR INS LT DUTY #8-350 1P 6-WAY (H718B)
CF: 93' - CM DUCT 2 1/2" TO 4" (V8356 TO H840A)
CF: 93' - CM DUCT 2 1/2" TO 4" (V7729 TO H840A (CF 1))
CF: 96' - CM DUCT FOR EXCAVATION (V7729 TO H840A (CF 1))
CF: 15' - CM DUCT FOR EXCAVATION (V8356 TO H840A)
IN: 109' - CBL (2) 350 MCM, (1) 4/0 600V CLP PLEX (V7729 TO H840A (CF 1))
MI: 46' - CBL (2) 350 MCM, (1) 4/0 600V CLP PLEX
IN: 260' - CBL (2) 350 MCM, (1) 4/0 600V CLP PLEX (CAP TO V8356 (CF 7))
CF: 101' - CM DUCT 2 1/2" TO 4" (V356 TO INT PT B CF 200))
CF: 5' - CM DUCT FOR EXCAVATION (V356 TO INT PT (CF 200))
IN: 60' - CBL (2) 4/0, (1) 1/0 600V CLP PLEX (H840A TO 3900 CREST RD E)
IN: 55' - CBL 2-1/0 1-2 AL 3-1/C 600V CLP PLEX (H718B TO 92 CREST RD E)
IN: 101' - CBL (2) 350 MCM, (1) 4/0 600V CLP PLEX (V356 TO INT PT B CF 200))
IN: 3 - JJ DBE W/DE PLG 1/0 200A

WEST WALL





PRELIMINARY
Not For Construction

DISTRICT 44 - SOUTH BAY		PROJ. MGR. MIGUELES, MANUEL PHONE 310-720-6086		PLANNER MIGUELES, MANUEL PHONE 310-720-6086	DESIGNER ELLIS, CASSANDRA D
PROJECT NO. 2410847	SERVICE REQUEST 3301380	MSR NO.	PRODUCT-1 1993916-RULE 20C-UG INSTALL		ASSOC DESGN
CIRCUIT / VOLTAGE STATLER 16KV		GPS	PRODUCT-2 1993915-RULE 20C-OH REMOVAL		ASSOC DESGN
SUB / PG NO. WALTERIA		CIRCUIT CODE	PRODUCT-3		ASSOC DESGN

INVENTORY MAP LT-7634-A		J.P.A. NO.			
P	8/3/2022	ANDREW CORTEZ	MANNY MIGUELES	C ELLIS	33308
TYPE	DATE	APPROVED BY	CHECKED BY	DRAWN BY	PAX #

PROPOSED CONSTRUCTION (LOCATION)
RULE 20 PROJECT
92 CREST RD E
ROLLING HILLS CA 90274

SHEET 1 3
DESIGN\DRWG NO. 1515802 1.01

Southern California Edison Company

CITY OF ROLLING HILLS
2QS-RULE 20C INSTALL UG
STATLER 16KV
WALTERIA SUB

TD1993916 UG INSTALL
WORK WITH
TD2019774-OH REMOVAL
TD1869860 -OH INSTALL
TD1869862-UG INSTALL

757219E

EX: 336A

757218E

GAS SWITCH 7064

913840E

EX: 336A

47170421E

IN: V5768356
7X18X8

1 2 3 4

R
A
G

IN: 1000 JCN

J366A
1 2 3 4

IN: 1000 JCN

V057229
8x18x9'4"

BS5176

GS3881
1 2 3 4 5 6

TO
V5768355

IN: 1/0 JCN

IN: 1/0 JCN

IN: 50KVA
16KV 120/240

TO
V5768355

IN: 1/0 JCN

EX: 1000JCN

TO
V5768355

IN: 1/0 JCN

EX: 1/0 JCN

500 EPR

1394059E

1/0 JCN

1/0 JCN

X5149702

500 EPR

IN: 1/0 JCN

1/0 JCN

X5453807

X5765588

350 JCN

M5149669

M5057212

4'x6'6"x7'

M5149299

4'x6'6"x7'

DISTRICT: 44 — SOUTH BAY		PROJ. MGR. MIGUELES, MANUEL PHONE 310-720-6086		PLANNER MIGUELES, MANUEL PHONE 310-720-6086	DESIGNER: ELLIS, CASSANDRA D
PROJECT NO.: 2410847	SERVICE REQUEST: 3301380	MSR NO.		PRODUCT-1: 1993916-RULE 20C-UG INSTALL	ASSOC DESGN
CIRCUIT / VOLTAGE: STATLER 16KV		GPS		PRODUCT-2: 1993915-RULE 20C-OH REMOVAL	ASSOC DESGN
SUB / PG NO.: WALTERIA		CIRCUIT CODE		PRODUCT-3	ASSOC DESGN
INVENTORY MAP: LT-7634-A		J.P.A. NO.		PROPOSED CONSTRUCTION (LOCATION): RULE 20 PROJECT 92 CREST RD E ROLLING HILLS CA 90274	
F	8/3/2022	ANDREW CORTEZ	MANNY MIGUELES	C ELLIS	33308
TYPE	DATE	APPROVED BY	CHECKED BY	DRAWN BY	PAX #
Southern California Edison Company				SHEET: 3 OF 3	DESIGN\DRWG NO.: 1515802 1.01

Attachment 03

CITY OF ROLLING HILLS
PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT made and entered into this _____ day of _____, 20__ between the City of Rolling Hills, a municipal corporation, hereinafter referred to as "CITY" and [INSERT NAME OF CONTRACTOR] with principal offices at [INSERT ADDRESS], hereinafter referred to as "CONSULTANT."

1. RECITALS:

A. The CITY desires to contract the CONSULTANT for civil engineering services preparing construction documents to underground existing utilities on Crest Road East from 92 Crest Road East to the City's easterly gated border

B. CONSULTANT is well qualified by reason of education and experience to perform such services; and

C. CONSULTANT is willing to render such civil engineering services preparing construction documents to underground existing utilities as hereinafter defined.

Now, therefore, for and in consideration of the mutual covenants and conditions herein contained, CITY hereby engages CONSULTANT and CONSULTANT agrees to perform the services set forth in this AGREEMENT.

2. SCOPE OF WORK

CONSULTANT shall perform all work necessary to complete in a manner satisfactory to CITY the services set forth in the specifications and the scope of work described in Section 2.0 Scope of Services in the REQUEST FOR PROPOSALS CIVIL ENGINEERING SERVICES FOR RULE 20C PORTION OF City of Rolling Hills CalOES/FEMA Rule 20 Hazard Mitigation Program Crest Road East Fire Prevention Power Line Undergrounding Project Disaster / Subaward #DR4344-526-112R. Attached herein as Exhibit A (referred to as "SERVICES").

3. COST

The CITY agrees to pay CONSULTANT for all the work or any part of the work performed under this AGREEMENT at the rates and in the manner established in the attached Cost of Services, attached herein as Exhibit B.

Total contract shall not exceed the sum of [INSERT AMOUNT] . This fee includes all expenses, consisting of all local travel, attendance at meetings, printing and submission of any plans or any other documents required by the Scope of Work. It also includes any escalation or inflation factors anticipated.

Any increase in contract amount or scope shall be approved by expressed written amendment executed by the CITY and CONSULTANT.

4. METHOD OF PAYMENT

CONSULTANT shall be reimbursed within 30 (thirty) days of submitting an invoice to City for the SERVICES. CONSULTANT shall submit an invoice for the SERVICES within 10 (ten) days of completing each task or portion thereof identified in Exhibit A to this AGREEMENT. CONSULTANT shall submit invoices electronically to the City Manager of the CITY and shall also provide a courtesy copy by U.S. Mail addressed to the City Manager of the CITY.

5. SUBCONTRACTING

CONSULTANT may employ qualified independent subcontractor(s) to assist CONSULTANT in the performance of SERVICES with CITY's prior written approval.

6. COMMENCEMENT OF WORK

CONSULTANT shall commence work under this AGREEMENT upon execution of this AGREEMENT.

7. PERFORMANCE TO SATISFACTION OF CITY

CONSULTANT agrees to perform all work to the reasonable satisfaction of CITY and within the time hereinafter specified.

8. COMPLIANCE WITH LAW

All SERVICES rendered hereunder shall be provided in accordance with the requirements of relevant local, State and Federal Law.

(A). <u>Federal Requirements</u>

FEMA financial assistance will be used to fund all or a portion of this contract. The CONSULTANT shall comply with all federal requirements including, but not limited to, the following:

(i). 2 C.F.R. Part 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, which is expressly incorporated herein by reference.

(ii). Federal Contract Provisions attached hereto as Exhibit C and incorporated herein by reference.

Subcontracts, if any, shall contain a provision making them subject to all of the provisions stipulated in the contract, including but not limited to, 2 C.F.R. Part 200 and the Federal Contract Provisions.

With respect to any conflict between such federal requirements and the terms of this contract and/or the provisions of state law and except as otherwise required under federal law or regulation, the more stringent requirement shall control.

9. ACCOUNTING RECORDS

CONSULTANT must maintain accounting records and other evidence pertaining to costs incurred which records and documents shall be kept available at the CONSULTANT's office during the contract period and thereafter for five years from the date of final payment.

10. OWNERSHIP OF DATA

All data, maps, photographs, and other material collected or prepared under the contract shall become the property of the CITY.

11. TERM OF CONTRACT

The term of this Agreement shall be from [Insert start date] to [Insert end date], unless earlier terminated as provided herein. The Parties may, by mutual, written consent, extend the term of this Agreement if necessary to complete the Project. Consultant shall perform its services in a prompt and timely manner within the term of this Agreement and shall commence performance upon notice from the City.

12. TERMINATION

This contract may be terminated by either party with or without cause upon seven (7) days written notice to the other party. All work satisfactorily performed pursuant to the contract and prior to the date of termination may be claimed for reimbursement.

13. ASSIGNABILITY

CONSULTANT shall not assign or transfer interest in this contract without the prior written consent of the CITY.

14. AMENDMENT

It is mutually understood and agreed that no alteration or variation of the terms of this contract, or any subcontract requiring the approval of the CITY, shall be valid unless made in writing, signed by the parties hereto, and approved by all necessary parties.

15. NON-SOLICITATION CLAUSE

The CONSULTANT warrants that he or she has not employed or retained any company or persons, other than a bona fide employee working solely for the CONSULTANT, any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon or resulting from the award or making of this contract. For breach or violation of this warranty, the CITY shall have the right to annul this contract without liability, or, in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

16. INDEMNITY

CONSULTANT shall indemnify and save harmless CITY, its elected and appointed officers and employees from all claims, damages, suits, cost or actions of every name, kind or description, brought for, or on account of, (i) injuries to or death of any person, (ii) damage to property or (iii) arising from performance of this AGREEMENT in any manner that resulted from the fault or negligence of CONSULTANT, it officers, agents, employees and/or servants in connection with this AGREEMENT.

CITY shall indemnify and save harmless CONSULTANT, its officers, agents, employees, and servants from all claims, damages, suits, costs or actions of every name, kind, or description, brought for, or on account of, (i) injuries to or death of any person, (ii) damage to property or (iii) arising from performance of this AGREEMENT in any manner that resulted from the fault or negligence of the CONSULTANT, its officers, agents, employees, and/or servants in connection with this AGREEMENT.

If CONSULTANT should subcontract all or any portion of the SERVICES to be performed under this AGREEMENT, CONSULTANT shall require each subcontractor to indemnify, hold harmless and defend CITY and each of its officers, officials, employees, agents and volunteers in accordance with the term of the preceding paragraph. This section shall survive termination or expiration of this AGREEMENT.

17. INSURANCE

A. Without limiting CONSULTANT'S obligations arising under paragraph 16 - Indemnity, CONSULTANT shall not begin work under this AGREEMENT until it obtains policies of insurance required under this section. The insurance shall cover CONSULTANT, its agents, representatives and employees in connection with the performance of work under this AGREEMENT, and shall be maintained throughout the term of this AGREEMENT. Insurance coverage shall be as follows:

i. Automobile Liability Insurance with minimum coverage of $300,000 for property damage, $300,000 for injury to one person/single occurrence, and $300,000 for injury to more than one person/single occurrence.

ii. Public Liability and Property Damage Insurance, insuring CITY its elected and appointed officers and employees from claims for damages for personal injury, including death, as well as from claims for property damage which may arise from CONSULTANT'S actions under this AGREEMENT, whether or not done by

CONSULTANT or anyone directly or indirectly employed by CONSULTANT. Such insurance shall have a combined single limit of not less than $500,000.

iii. Worker's Compensation Insurance for all CONSULTANT'S employees to the extent required by the State of California. CONSULTANT shall require all subcontractors who are hired by CONSULTANT to perform the SERVICES and who have employees to similarly obtain Worker's Compensation Insurance for all of the subcontractor's employees.

iv. Professional Liability Insurance for CONSULTANT that at a minimum covers professional misconduct or lack of the requisite skill required for the performances of SERVICES in an amount of not less than $500,000 per occurrence.

B. Deductibility Limits for policies referred to in subparagraphs A (i) (ii) and (iii) shall not exceed $5,000 per occurrence.

C. Additional Insured. City, its elected and appointed officers and employees shall be named as additional insured on policies referred to in subparagraphs A (i) and (ii).

D. Primary Insurance. The insurance required in paragraphs A (i) and (ii) shall be primary and not excess coverage.

E. Evidence of Insurance. Consultant shall furnish CITY, prior to the execution of this AGREEMENT, satisfactory evidence of the insurance required, issued by an insurer authorized to do business in California, and an endorsement to each such policy of insurance evidencing that each carrier is required to give CITY at least 30 days prior written notice of the cancellation of any policy during the effective period of the AGREEMENT. All required insurance policies are subject to approval of the City Attorney. Failure on the part of CONSULTANT to procure or maintain said insurance in full force and effect shall constitute a material breach of this AGREEMENT or procure or renew such insurance, and pay any premiums therefore at CONSULTANT'S expense.

18. ENFORCEMENT OF AGREEMENT

In the event that legal action is commenced to enforce or declare the rights created under this AGREEMENT, the prevailing party shall be entitled to an award of costs and reasonable attorney's fees in the amount to be determined by the court.

19. CONFLICTS OF INTEREST

No member of the governing body of the CITY and no other officer, employee, or agent of the CITY who exercises any functions or responsibilities in connection with the planning and carrying out of the program, shall have any personal financial interest, direct or indirect, in this AGREEMENT; and the CONSULTANT further covenants that in the

performance of this AGREEMENT, no person having any such interest shall be employed.

20. INDEPENDENT CONTRACTOR

The CONSULTANT is and shall at all times remain as to the CITY a wholly independent contractor. Neither the CITY nor any of its agents shall have control over the conduct of the CONSULTANT or any of the CONSULTANT's employees or subcontractors, except as herein set forth. The CONSULTANT shall not at any time or in any manner represent that it or any of its agents or employees are in any manner agents or employees of the CITY.

21. ENTIRE AGREEMENT OF THE PARTIES

This AGREEMENT supersedes any and all other agreements, either oral or in writing, between the parties hereto with respect to the employment of CONSULTANT by CITY and contains all the covenants and agreements between the parties with respect such employment in any manner whatsoever. Each party to this AGREEMENT acknowledges that no representations, inducements, promises or agreements, orally or otherwise, have been made by any party, or anyone acting on behalf of any party, which are not embodied herein, and that no other agreement or amendment hereto shall be effective unless executed in writing and signed by both CITY and CONSULTANT.

22. NOTICES.

All written notices required by, or related to this AGREEMENT shall be sent by Certified Mail, Return Receipt Requested, postage prepaid and addressed as listed below. Neither party to this AGREEMENT shall refuse to accept such mail; the parties to this AGREEMENT shall promptly inform the other party of any change of address. All notices required by this AGREEMENT are effective on the day of receipt, unless otherwise indicated herein. The mailing address of each party to this AGREEMENT is as follows:

CITY: Elaine Jeng, PE, City Manager
City of Rolling Hills
No. 2 Portuguese Bend Road
Rolling Hills, CA 90274

CONSULTANT: [INSERT NAME OF CONSULTANT
Attn: [INSERT NAME]
[INSERT ADDRESS]

23. GOVERNING LAW

This AGREEMENT shall be governed by and construed in accordance with the laws of the State of California, and all applicable federal statutes and regulations as amended.

IN WITNESS WHEREOF, the parties hereto have executed this AGREEMENT on the date and year first above written.

CITY OF ROLLING HILLS CONSULTANT

CITY MANAGER

_____ _____

ELAINE JENG, PE

DATE:_____ DATE:_____

ATTEST:

_____

CITY CLERK

APPROVED AS TO FORM:

_____

MICHAEL JENKINS, CITY ATTORNEY

Exhibit A

Scope of Work

Exhibit B

Cost of Services

Exhibit C

FEDERAL CONTRACT PROVISIONS

During the performance of this contract, Consultant shall comply with all applicable federal laws and regulations including but not limited to the federal contract provisions in this Exhibit.

1. **CONTRACTING WITH SMALL AND MINORITY FIRMS, WOMEN'S BUSINESS ENTERPRISE AND LABOR SURPLUS AREA FIRMS (2 C.F.R. § 200.321)**

(A) Consultant shall be subject to 2 C.F.R. § 200.321 and will take affirmative steps to assure that minority firms, women's business enterprises, and labor surplus area firms are used when possible and will not be discriminated against on the grounds of race, color, religious creed, sex, or national origin in consideration for an award.

(B) Affirmative steps shall include:

(i) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

(ii) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

(iii) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women's business enterprises;

(iv) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women's business enterprises; and

(v) Using the services/assistance of the Small Business Administration (SBA), and the Minority Business Development Agency (MBDA) of the Department of Commerce.

Consultant shall submit evidence of compliance with the foregoing affirmative steps when requested by the City. Notwithstanding the foregoing, the affirmative steps requirements detailed above do not apply in the case of a noncompetitive procurement made under the emergency exception/exigency exception to competitive procurements.

2. **COST PRINCIPLES (2 C.F.R. PART 200, SUBPART E)**

(A) If any indirect costs will be charged to the City under this contract, such costs must conform to the cost principles set forth under the Uniform Rules at 2 C.F.R. Part 200, subpart E ("Cost Principles"). In general, costs must (i) be necessary and reasonable; (ii) allocable to the grant award; (iii) conform to any limitations or exclusions set forth in the Cost Principles; (iv) be adequately documented; and (v) be determined in accordance with generally accepted accounting principles ("GAAP"), except, for state and local governments and Indian tribes only, as otherwise provided for in 2 C.F.R. Part 200, subpart E. 2 C.F.R. § 200.403. Costs that are determined unallowable pursuant to a federal audit are subject to repayment by Consultant.

3. **ACCESS TO RECORDS & RECORD RETENTION (2 C.F.R. 200.336)**

(A) Consultant shall comply with 2 C.F.R. § 200.336 and provide the Federal Agency, Inspectors General, the Comptroller General of the United States, City, and the State of California or any of their authorized representatives access, during normal business hours, to documents, papers, books and records which are directly pertinent to this contract for the purposes of making and responding to audits, examinations, excerpts, and transcriptions. The right also includes timely and reasonable access to the Consultant's personnel for the purpose of interview and discussion related to the books and records.

(B) The Consultant agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

(C) The Consultant agrees to provide the Federal Agency or its authorized representatives access to construction or other work sites pertaining to the work being completed under the contract.

(D) In compliance with the Disaster Recovery Act of 2018, the City and Consultant acknowledge and agree that no language in this contract is intended to prohibit audits or internal review by the FEMA Administrator or the Comptroller General of the United States.

4. **REQUIRED CONTRACT PROVISIONS IN ACCORDANCE WITH APPENDIX II TO PART 200 – CONTRACT PROVISIONS FOR NON-FEDERAL ENTITY CONTRACTS UNDER FEDERAL AWARDS (2 C.F.R. § 200.326)**

(A) Appendix II to Part 200 (A); Appendix II to Part 200 (B): Remedies for Breach; Termination for Cause/Convenience. If the contract is in excess of $10,000 and the contract does not include provisions for both termination for cause and termination for convenience by the City, including the manner by which it will be effected and the basis for settlement, then the following termination clauses shall apply. If the contract is for more than the simplified acquisition threshold (see 2 C.F.R. § 200.88) and does not provide for administrative, contractual, or legal remedies in instances where Contractor violates or breaches the terms of the contract, then the following termination clauses shall apply and have precedence over the contract. Otherwise, the following termination clauses shall not be applicable to the contract.

(i) Termination for Convenience. The City may, by written notice to Consultant, terminate this contract for convenience, in whole or in part, at any time by giving written notice to Consultant of such termination, and specifying the effective date thereof ("Notice of Termination for Convenience"). If the termination is for the convenience of the City, the City shall compensate Consultant for work or materials fully and adequately provided through the effective date of termination. No amount shall be paid for unperformed work or materials not provided, including anticipated profit. Consultant shall provide documentation deemed adequate by the City to show the work actually completed or materials provided by Consultant prior to the effective date of termination. This contract shall terminate on the effective date of the Notice of Termination.

(ii) Termination for Cause. If Consultant fails to perform pursuant to the terms of this contract, the City shall provide written notice to Consultant specifying the default ("Notice of Default"). If Consultant does not cure such default within ten (10) calendar days of receipt of Notice of Default, the City may terminate this contract for cause. If Consultant fails to cure a default as set forth above, the City may, by written notice to Consultant, terminate this contract for cause, in whole or in part, and specifying the effective date thereof ("Notice of Termination for Cause"). If the termination is for cause, Consultant shall be compensated for that portion of the work or materials provided which has been fully and adequately completed and accepted by the City as of the date the City provides the Notice of Termination. In such case, the City shall have the right to take whatever steps it deems necessary to complete the project and correct Consultant's deficiencies and charge the cost thereof to Consultant, who shall be liable for the full cost of the City's corrective action, including reasonable overhead, profit and attorneys' fees.

(iii) Reimbursement; Damages. The City shall be entitled to reimbursement for any compensation paid in excess of work rendered or materials provided and shall be entitled to withhold compensation for defective work or other damages caused by Consultant's performance of the work.

(iv) Additional Termination Provisions. Upon receipt of a Notice of Termination, either for cause or for convenience, Consultant shall promptly discontinue the work unless the Notice directs to the contrary. Consultant shall deliver to the City and transfer title (if necessary) to all provided materials and completed work, and work in progress including drafts, documents, plans, forms, maps, products, graphics, computer programs and reports. Consultant acknowledges the City's right to terminate this contract with or without cause as provided in this Section, and hereby waives any and all claims for damages that might arise from the City's termination of this contract. The City shall not be liable for any costs other than the charges or portions thereof which are specified herein. Consultant shall not be entitled to payment for unperformed work or materials not provided, and shall not be entitled to damages or compensation for termination of work or supply of materials. If City terminates this contract for cause, and it is later determined that the termination for cause was wrongful, the termination shall automatically be converted to and treated as a termination for convenience. In such event, Consultant shall be entitled to receive only the amounts payable under this Section, and Consultant specifically waives any claim for any other amounts or damages, including, but

not limited to, any claim for consequential damages or lost profits. The rights and remedies of the City provided in this Section shall not be exclusive and are in addition to any other rights and remedies provided by law, equity or under this contract including, but not limited to, the right to specific performance.

(B) Appendix II to Part 200 (C) – Equal Employment Opportunity: Except as otherwise provided under 41 C.F.R. Part 60, if this contract meets the definition of a "federally assisted construction contract" in 41 C.F.R. § 60-1.3, then Consultant shall comply with the following equal opportunity clause, in accordance with Executive Order 11246 of September 24, 1965 entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967 and implementation regulations at 41 C.F.R. Chapter 60:

(i) Consultant will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. Consultant will take affirmative action to insure that applicants are employed and that employees are treated equally during employment, without regard to race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment upgrading, demotion, transfer, recruitment, or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship. Consultant agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the City setting forth the provisions of this nondiscrimination clause.

(ii) Consultant will, in all solicitations or advertisements for employees placed by or on behalf of Consultant, state that all qualified applicants will receive consideration for employment without regard to their race, color, religion, sex, or national origin.

(iii) Consultant will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with Consultant's legal duty to furnish information.

(iv) Consultant will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of

September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(v) Consultant will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(vi) Consultant will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(vii) In the event of Consultant's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No.11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No.11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(viii) Consultant will include the provisions of paragraphs (i) through (viii) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24,1965, so that such provisions will *be* binding upon each subcontractor or vendor. Consultant will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: *Provided, however,* that in the event Consultant becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, Consultant may request the United States to enter into such litigation to protect the interests of the United States.

(C) Appendix II to Part 200 (D) – Davis-Bacon Act; Copeland Act: Not applicable to this contract.

(D) Appendix II to Part 200 (E) – Contract Work Hours and Safety Standards Act:

(i) If this contract is in excess of $100,000 and involves the employment of mechanics or laborers, Consultant shall comply with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 C.F.R. Part 5). Under 40 U.S.C. 3702, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and

provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

(ii) No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(iii) In the event of any violation of the clause set forth in paragraph (ii) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (ii) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (ii) of this section.

(iv) The City shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Consultant or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (iii) of this section.

(v) The Consultant or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (ii) through (v) of this Section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (ii) through (v) of this Section.

(E) <u>Appendix II to Part 200 (F) – Rights to Inventions Made Under a Contract or Agreement:</u>

(i) If the Federal award meets the definition of “funding agreement” under 37 C.F.R. § 401.2(a) and the non-Federal entity wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution

of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the non-Federal entity must comply with the requirements of 37 C.F.R. Part 401 (Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements), and any implementing regulations issued by the City.

(ii) The regulation at 37 C.F.R. § 401.2(a) currently defines "funding agreement" as any contract, grant, or cooperative agreement entered into between any Federal agency, other than the Tennessee Valley Authority, and any contractor for the performance of experimental, developmental, or research work funded in whole or in part by the Federal government. This term also includes any assignment, substitution of parties, or subcontract of any type entered into for the performance of experimental, developmental, or research work under a funding agreement as defined in the first sentence of this paragraph.

(iii) This requirement does not apply to the Public Assistance, Hazard Mitigation Grant Program, Fire Management Assistance Grant Program, Crisis Counseling Assistance and Training Grant Program, Disaster Case Management Grant Program, and Federal Assistance to Individuals and Households – Other Needs Assistance Grant Program, as FEMA awards under these programs do not meet the definition of "funding agreement."

(F) Appendix II to Part 200 (G) – Clean Air Act and Federal Water Pollution Control Act: If this contract is in excess of $150,000, Consultant shall comply with all applicable standards, orders, or requirements issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387).

(i) Pursuant to the Clean Air Act, (1) Consultant agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq., (2) Consultant agrees to report each violation to the City and understands and agrees that the City will, in turn, report each violation as required to assure notification to the Federal awarding agency and the appropriate Environmental Protection City Regional Office, and (3) Consultant agrees to include these requirements in each subcontract exceeding $150,000.

(ii) Pursuant to the Federal Water Pollution Control Act, (1) Consultant agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq., (2) Consultant agrees to report each violation to the City and understands and agrees that the City will, in turn, report each violation as required to assure notification to the Federal awarding agency and the appropriate Environmental Protection Agency Regional Office, and (3) Consultant agrees to include these requirements in each subcontract exceeding $150,000.

(G) Appendix II to Part 200 (H) – Debarment and Suspension: A contract award (see 2 C.F.R. § 180.220) must not be made to parties listed on the government wide exclusions in the System for Award Management (SAM), in accordance with the

OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 C.F.R. part 1986 Comp., p. 189) and 12689 (3 C.F.R. part 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

(i) This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such Consultant is required to verify that none of the Consultant, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

(ii) Consultant must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

(iii) This certification is a material representation of fact relied upon by City. If it is later determined that Consultant did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the City, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

(iv) Consultant warrants that it is not debarred, suspended, or otherwise excluded from or ineligible for participation in any federal programs. Consultant also agrees to verify that all subcontractors performing work under this contract are not debarred, disqualified, or otherwise prohibited from participation in accordance with the requirements above. Consultant further agrees to notify the City in writing immediately if Consultant or its subcontractors are not in compliance during the term of this contract.

(H) Appendix II to Part 200 (I) – Byrd Anti-Lobbying Act: If this contract is in excess of $100,000, Consultant shall have submitted and filed the required certification pursuant to the Byrd Anti-Lobbying Amendment (31 U.S.C. § 1353). If at any time during the contract term funding exceeds $100,000.00, Consultant shall file with the City the Federal Standard Form LLL titled "Disclosure Form to Report Lobbying." Consultants that apply or bid for an award exceeding $100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the awarding agency.

(I) Appendix II to Part 200 (J) – Procurement of Recovered Materials:

(i) Consultant shall comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements

of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 C.F.R. part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds $10,000 or the value of the quantity acquired during the preceding fiscal year exceeded $10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement.

(ii) Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the awarding agency.

(iii) Information about this requirement, along with the list of EPA-designate items, is available at EPA's Comprehensive Procurement Guidelines web site, https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program.

5. **MISCELLANEOUS PROVISIONS**

(A) The Consultant shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA preapproval.

(B) This is an acknowledgement that FEMA financial assistance will be used to fund all or a portion of this contract. The Consultant will comply with all applicable federal law, regulations, executive orders, FEMA policies, procedures, and directives.

(C) Consultant acknowledges that 31 U.S.C. Chapter 38 (Administrative Remedies for False Claims and Statements) applies to the Consultant's actions pertaining to this contract.

(D) The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the City, Consultant, any subcontractors or any other party pertaining to any matter resulting from the contract.

(E) <u>General and Administrative Expenses And Profit For Time And Materials Contracts/Amendments</u>.

(i) General and administrative expenses shall be negotiated and must conform to the Cost Principles.

(ii) Profit shall be negotiated as a separate element of the cost. To establish a fair and reasonable profit, consideration must be given to the complexity of the work to be performed, the risk borne by the Consultant, the Consultant's investment, the amount of subcontracting, the quality of its record of past performance, and industry profit rates in the surrounding geographical area for similar work.

(iii) Any agreement, amendment or change order for work performed on a time and materials basis shall include a ceiling price that Consultant exceeds at its own risk.

Attachment 04

HAZARD MITIGATION GRANT PROGRAM
PROJECT SUBAPPLICATION

DISASTER NUMBER:	DR-4344
JURISDICTION NAME:	City of Rolling Hills
PROJECT TITLE:	Fire Prevention through Power Line Undergrounding
PROJECT NUMBER:	0526

PROJECT NUMBER IS THE CONTROL NUMBER RECEIVED AT TIME OF SUCCESSSFUL NOI SUBMITTAL

Notice of Interest (NOI) approved subapplications are due postmarked to Cal OES by:

DR-4344: July 2, 2018

DR-4344 (2nd Round NOI)/DR-4353: September 4, 2018

HAZARD MITIGATION GRANT PROGRAM (HMGP)
INTRODUCTION

INTRODUCTION

As a result of the declaration of a major federal disaster, the State of California is eligible for HMGP funding. The State has established priorities to accept project subapplications from subapplicants state-wide, state agencies, tribal governments, local governments, and Private Non-Profits.

Hazard mitigation activities are aimed at reducing or eliminating future damages. Activities include cost effective hazard mitigation projects and hazard mitigation plans approvable by the Federal Emergency Management Agency (FEMA).

HMGP is successful in meeting the FEMA requirements to qualify as an Enhanced State Hazard Mitigation Plan (ESHMP) state. ESHMP accreditation has resulted in additional millions of dollars available for local agencies' hazard mitigation plan and project funding. In order to maintain ESHMP status, further information is requested by FEMA. This information is requested as a means of assessing the pro-activity of your community or agency.

PUBLIC ASSISTANCE

HMGP does not fund repairs for damages that result after a disaster. If your project is aimed at repairing a damaged facility resulting from a federally declared disaster, contact the Public Assistance (PA) Program at disasterrecovery@caloes.ca.gov.

TIME EXTENSIONS

Time extensions may be requested, and will be approved or denied on a case-by-case basis. To request additional time to submit a subapplication, send an email to the HMGP@caloes.ca.gov mailbox. The subject line must include: "Subapplication Time Extension Request (include Disaster Number and Project Control Number)." The body of the message must include justification and specific details supporting why more time is needed and how much additional time is requested.

QUESTIONS

Submit all HMGP subapplication questions to the following mailbox: HMGP@caloes.ca.gov

HAZARD MITIGATION GRANT PROGRAM
REGULATIONS

REGULATIONS

Federal funding is provided under the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) through FEMA and the California Governor's Office of Emergency Services (Cal OES). Cal OES is responsible for identifying program priorities, reviewing subapplications and forwarding recommendations for funding to FEMA. FEMA has final approval for activity eligibility and funding.

The federal regulations governing HMGP are found in Title 44 of the Code of Federal Regulations (44CFR), Part 201 (Planning) and Part 206 (Projects) and in Title 2 of the Code of Federal Regulations (2CFR), Part 200 (Uniform Administrative Requirements).

The Council on Environmental Quality (CEQ) has developed regulations to implement the National Environmental Policy Act (NEPA). These regulations, as set forth in Title 40, Code of the Federal Regulations (CFR) Parts 1500-1508, require an investigation of the potential environmental impacts of a proposed federal action, and an evaluation of alternatives as part of the environmental assessment process. The FEMA regulations that establish the agency-specific process for implementing NEPA are set forth in 44 CFR Part 10. FEMA will lead the NEPA clearance process.

The subapplicant is responsible for complying with the regulations set forth in the California Environmental Quality Act (CEQA) (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387) and any other state/local permits or requirements.

FEMA GUIDANCE

FEMA requires that all projects adhere to the Hazard Mitigation Assistance Guidance 2015.

HAZARD MITIGATION GRANT PROGRAM
ELIGIBILITY CHECKLIST

Before completing the subapplication, review the following HMGP eligibility checklist to ensure project meets the requirements for HMGP funding.

☒ **Construction/Ground Breaking:** No construction or ground breaking activities are allowed prior to FEMA approval. HMGP does not fund projects that are in progress or projects that have already been completed.

☒ **Approved Notice of Interest:** Subapplicant must have an approved Notice of Interest (NOI) to submit a subapplication for HMGP funding. Only activities approved through the NOI process can be submitted for HMGP funding consideration.

☒ **Scope of Work:** The project scope of work (SOW) must be consistent with the SOW provided in the approved Notice of Interest (NOI).

☐ **Benefit-Cost Analysis:** Benefit-Cost Analysis (BCA) Toolkit Version 5.3.0 must be used to conduct the BCA. FEMA will only consider subapplications that use a FEMA-approved BCA methodology. Documentation to support BCA must be included in subapplication. Projects with a benefit-cost ratio (BCR) of less than 1.0 will not be considered. BCA will be verified by FEMA and Cal OES upon subapplication submittal. For 5 Percent Initiative subapplications for HMGP funding, a narrative description of the project's cost effectiveness must be provided.

☒ **Subapplicant Eligibility:** Subapplicant must be an eligible State Agency, Local Government (City, County, Special Districts), Federally Recognized Tribe or Private Nonprofit (PNP) Organization. PNP is defined as private nonprofit educational, utility, emergency, medical, or custodial care facility, facilities providing essential governmental services to the general public and such facilities on Indian reservations (see 44 CFR Sections 206.221(e) and 206.434(a)(2)).

☒ **LHMP/MJHMP:** Subapplicant must have a FEMA approved and adopted Local or Multi-Jurisdictional Hazard Mitigation Plan (LHMP or MJHMP) to be eligible for HMGP funding. If a jurisdiction has its own governing body, jurisdiction must be covered under its own plan. LHMP's/MJHMP's expire five years after FEMA approval. Failure to update plan before expiration date may cause project deobligation.

☒ **Cost Share:** Local funding match of 25% of the total project cost is required by the subapplicant. HMGP matching funds must be from a non-federal source. State does not contribute to local funding match.

☒ **Period of Performance:** Projects must be completed (including close-out) within the 36 month Period of Performance (POP). POP begins upon FEMA approval of the subapplication.

HAZARD MITIGATION GRANT PROGRAM
ELIGIBILITY CHECKLIST
(continued)

☒ **Complete Subapplication:** Failure to include all required documentation will delay the processing of your subapplication and may result in denial of project. The SOW, cost estimate, cost estimate narrative, work schedule and BCA must accurately mirror each other to be considered for funding. The budget narrative must include a detailed description of every cost estimate line-item, including the methodology used to estimate each cost.

☒ **Regulations:** Subapplications that are inconsistent with state and federal HMGP regulations, or do not meet eligibility criteria will not be considered.

☒ **Duplication of Programs:** HMGP funding cannot be used as a substitute or replacement to fund activities or programs that are available under other federal authorities, known as Duplication of Programs (DOP).

☒ **Time Extensions:** Unless a time extension has been approved before the deadline, subapplications must be postmarked by the applicable deadline to be considered for funding.

☒ **CEQA Requirement:** The subapplicant is responsible for complying with the regulations set forth in the California Environmental Quality Act (CEQA) (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387). Environmental data is required for projects. Environmental review is typically the most time consuming aspect of project funding approval.

SUBAPPLICANT MUST BE ABLE TO CHECK EVERY BOX TO QUALIFY FOR HMGP FUNDING.

SUBAPPLICATION FORMAT INSTRUCTIONS

Cal OES requires the following format to be used for all HMGP subapplications. Two complete subapplications must be submitted to Cal OES. Each subapplication must be in separate binders. The first copy is logged and retained for Cal OES records. The second copy will be forwarded to FEMA for review and final determination.

COMPLETE SUBAPPLICATION PACKAGE CONSISTS OF THE FOLLOWING:

☒ **TWO** identical printed subapplications must be provided in 3-ring binders
- Each binder section must be tabbed in the format outlined below
- Each binder must be large enough to hold all of the contents
- The use of additional binders is permitted as needed
- All printed attachments must be clearly titled

☒ **TWO** identical CD-RWs must include functional electronic versions of all documents/attachments
- Attachments must be in one of the following formats: Microsoft Word Version 2007 (or newer), Microsoft Excel or Adobe PDF
- Benefit-Cost Analysis (BCA) 5.3.0 must be included in a .zip file format
- All electronic attachments must be clearly titled

ORGANIZATION OF THE BINDER SECTIONS MUST BE TABBED IN THE FOLLOWING FORMAT:

0. Table of Contents
1. Subapplication
2. Scope of Work
3. Designs
4. Studies
5. Maps
6. Photos
7. Schedule (Additional documentation work schedule components, Gantt chart, etc.)
8. Budget (HMGP Cost Estimate Spreadsheet and cost estimate narrative)
9. Match (Local Match Commitment Letter Template)
10. BCA Report (BCA Version 5.3.0 report and BCA supporting documentation)
11. Maintenance (Project Maintenance Letter Template)
12. Environmental (FEMA's Site Information, Environmental Review and Checklist and all other environmental documentation)
13. Supporting Docs (Any extra supporting documentation)

MAIL OR DELIVER COMPLETED SUBAPPLICATIONS TO:

California Governor's Office of Emergency Services
Hazard Mitigation Grants Program Unit
Attention: HMGP
3650 Schriever Avenue
Mather, CA 95655

PROJECT SUBAPPLICATION FORM

SUBAPPLICANT INFORMATION

1. SUBAPPLICANT: City of Rolling Hills
NAME OF STATE AGENCY, TRIBAL GOVERNMENT, LOCAL GOVERNMENT, PRIVATE NON-PROFIT OR SPECIAL DISTRICT APPLYING FOR FUNDING

2. TYPE:

STATE/LOCAL GOVERNMENT	TRIBAL GOVERNMENT	PRIVATE NON-PROFIT	SPECIAL DISTRICT
☒	☐	☐	☐

3. FIPS #: 06037
IF YOU DO NOT KNOW YOUR FEDERAL IDENTIFICATION PROCESSING SYSTEM NUMBER (FIPS #), REQUEST BY EMAILING THE HMGP@CALOES.CA.GOV MAILBOX

4. DUNS #: 018945170
IF YOU DO NOT KNOW YOUR DATA UNIVERSAL NUMBERING SYSTEM (DUNS) #, CALL DUN & BRADSTREET (D&B) @ 1-866-705-5711 FOR INFORMATION

5. COUNTY: Los Angeles
THE NAME OF THE COUNTY WHERE THE PROPOSED PROJECT IS LOCATED

6. POLITICAL DISTRICT NUMBERS:

CONGRESSIONAL:	33
STATE ASSEMBLY:	26
STATE LEGISLATIVE:	66

PROVIDE ONLY THE NUMBERS OF THE POLITICAL DISTRICTS FOR THE SUBAPPLICANT

7. PRIMARY CONTACT:
POINT OF CONTACT FOR YOUR PROJECT. CAL OES WILL CONTACT THIS PERSON FOR QUESTIONS AND/OR REQUESTS FOR INFORMATION

NAME: ☐ Mr. ☒ Ms. **FIRST:** Yolanta **LAST:** Schwartz
TITLE: Interim City Manager
ORGANIZATION: City of Rolling Hills
ADDRESS: 2 Portuguese Bend Road
CITY: Rolling Hills **STATE:** CA **ZIP CODE:** 90274
TELEPHONE: 310-377-152 **FAX:** 310-377-728
EMAIL: ys@cityofrh.net

8. ALTERNATIVE CONTACT:
BACK-UP POINT OF CONTACT FOR YOUR PROJECT. CAL OES WILL CONTACT THIS PERSON IF PRIMARY CONTACT IS UNAVAILABLE

NAME: ☐ Mr. ☒ Ms. **FIRST:** Julia **LAST:** Stewart
TITLE: Acting Planning Director
ORGANIZATION: City of Rolling Hills
ADDRESS: 2 Portuguese Bend Road
CITY: Rolling Hills **STATE:** CA **ZIP CODE:** 90274
TELEPHONE: 310-377-152 **FAX:** 310-377-1521
EMAIL: jstewart@cityofrh.net

LOCAL HAZARD MITIGATION PLAN INFORMATION

9. LOCAL HAZARD MITIGATION PLAN (LHMP) REQUIREMENT:

A FEMA approved and locally adopted LHMP is required to receive federal funding for all project subapplication activities. Subapplicants for HMGP funding must have a FEMA-approved Mitigation Plan in place at the time of sub-award. Subapplication will be reviewed to ensure that the proposed activity is in conformance with subapplicant's plan.

A. NAME/TITLE OF YOUR LHMP: City of Rolling Hills Hazard Mitigation Plan

B.

LOCAL **SINGLE** JURISDICTIONAL MULTIHAZARD MITIGATION PLAN:		**OR**	LOCAL **MULTI** JURISDICTIONAL MULTIHAZARD MITIGATION PLAN:	
DATE SUBMITTED TO CAL OES:	09/30/18		DATE SUBMITTED TO CAL OES:	
DATE APPROVED BY FEMA:	Draft Complete Final approved before award		DATE APPROVED BY FEMA:	
DATE ADOPTED BY LOCAL AGENCY:	9/30/18		DATE ADOPTED BY LOCAL AGENCY:	
			LEAD AGENCY:	

C. IF YOUR PROJECT IS REFERENCED IN YOUR LHMP, INDICATE WHERE THE PROPOSED PROJECT CAN BE FOUND; USE N/A FOR NOT APPLICABLE BOXES:

CHAPTER	PART	SECTION	PAGE
	3	8	126

STOP **DO NOT INCLUDE A COPY OF YOUR PLAN WITH SUBAPPLICATION.**

D. PROVIDE A SHORT NARRATIVE DETAILING HOW YOUR PROJECT ALIGNS WITH THE RISK AND HAZARD ASSESSMENTS, STRATEGIES, GOALS AND/OR OBJECTIVES OF YOUR PLAN:

The City of Rolling Hills is requesting funding to undergrounding power lines for fire prevention. This project is consistent with state and federal HMGP regulation, and will meet local planning, zoning, building and all other applicable codes.
The project would underground 2,640 linear feet of power line on a street that is located in a "Very Hire Fire Hazard Severity Zone" at a cost of $800 per foot.

Undergrounding utility lines on Crest Road is an action item found in the City's Local Hazard Mitigation Plan (MH 26) and furthers the plan goals of:
1) Protect Life and Property;
2) Partnerships and Implementation; and
3) Emergency Services as seen in Table 9-1 and 9-2: Mitigations Action Matrix which identified the existing and future mitigation activities development by the Planning Team.

The proposed project will reduce or eliminate the need for future state or federal disaster assistance by undergrounding the utility lines on Crest Rd., that currently weave dangerously through the trees, and removing the threat of a fire hazard should the electrical power line be knocked down due to high winds, earthquake, etc.

COMMUNITY INFORMATION

10. COMMUNITY PARTICIPATION:

A. CHECK BOX(ES) IF YOUR COMMUNITY PARTICIPATES IN ANY OF THE FACTORS BELOW:
Select a column appropriate to your type of project. Acronyms include: Community Wildfire Protection Plan (CWPP), California Environmental Quality Act (CEQA), Community Rating System (CRS) Plan and Unreinforced Masonry (URM) Participation.

FIRE	FLOOD	EARTHQUAKE
☒ CWPP, FIRE WISE, FIRE SAFE	☐ CRS PLAN	☐ SHAKEOUT DRILL PARTICIPATION
☐ CURRENT CEQA ACTIVITY	☐ CURRENT CEQA ACTIVITY	☐ CURRENT CEQA ACTIVITY
☐ DEFENSIBLE SPACE	☐ HYDROLOGY STUDY	☐ URM PARTICIPATION

B. PROVIDE A NARRATIVE DESCRIPTION OF ALL OF FACTORS SELECTED FROM LIST ABOVE:

C. IS YOUR JURISDICTION REQUIRED TO PROVIDE PUBLIC NOTICE OF THIS PROJECT?
☐ Yes ☒ No If yes, provide details:

PROJECT INFORMATION

11. PROJECT TITLE: Fire Prevention through Power Line Undergrounding

MUST USE THE SAME PROJECT TITLE ORIGINALLY USED IN THE APPROVED NOTICE OF INTEREST (NOI). IF YOU NEED TO CHANGE YOUR PROJECT TITLE, CONTACT CAL OES AT HMGP@CALOES.CA.GOV

12. PROJECT LOCATION:

A. IDENTIFY THE COUNTY/COUNTIES WHERE THE ACTIVITY WILL OCCUR:
Los Angeles County

B. LATITUDE/LONGITUDE COORDINATES:
FEMA requires that all projects be geo-coded using latitude and longitude (lat/long) using NAD-83 or WGS-84 datum. The lat/long coordinates must be expressed in degrees including five or more decimal places (e.g., latitude 36.999221, longitude –109.044883).

LATITUDE	LONGITUDE
33.775837	-118.343784

IF THERE ARE MORE THAN ONE SET OF LAT/LONG COORDINATES, PROVIDE ON SEPARATE DOCUMENT AND ADD TO MAP SECTION OF BINDER.

C. STRUCTURE COORDINATES:
- For projects that protect buildings or other facilities, provide coordinates for each structure at either the front door of the structure or the intersection of the public road and driveway that is used to access the property.
- For large activity areas, such as detention basins or vegetation management projects, the location must be described by three or more coordinates that identify the boundaries of the project.
- The polygon created by connecting the coordinates must encompass the entire project area.

This project is the undergrounding of the utilities on Crest Street.

D. STAGING AREA:

Describe the project staging area. This is the area where the project equipment, materials and/or debris will be staged. Include a vicinity map with the proposed staging area(s) in the map section of the binder.

Southern California Edison is expected to complete the project. In the "Maps" section is the areas the project will be completed with the Longitude and Latitude.

AERIAL MAP(S) OF STAGING AREA(S) MUST BE INCLUDED IN SUBAPPLICATION.

E. SEA LEVEL RISE (SLR):

1. Is the risk to the project increased by SLR due to project location and project activity type? Yes ☐ No ☒
2. Was SLR considered and included in the mitigation measures implemented in this project? Yes ☐ No ☒

F. SITE PHOTOS:

☒ A minimum of three ground photos per project site are required. Include in photo section of the binder.

G. MAPPING REQUIREMENTS:

Provide the following mapping elements in the map section of the binder:

- ☐ If project area has been mapped using GIS software, include the completed Shapefiles on CD-RW.
- ☒ Include a vicinity map of the general area showing major roads. Aerial photographs may be used as vicinity maps.
- ☒ Prominently mark the project location on the vicinity map.
- ☒ Provide a detailed project map that clearly identifies the project boundaries.
- ☒ Project map must show all lat/long coordinates provided in the project description.
- ☒ Vicinity map and the project map must both have a north arrow and scale.

DO NOT SEND ROLLED MAPS – MAPS MUST BE FOLDED UNTIL 8.5” x 11” IN SIZE.

H. PUBLIC ASSISTANCE (PA) PROGRAM FUNDING:

List any Public Assistance Disaster Survey Reports (DSR) or Project Worksheets (PWs) that were completed at the project location from previous disasters. List all current engagement with PA for this current disaster and include date(s) if known:

N/A

I. DEED RESTRICTIONS THAT LIMIT FEDERAL FUNDING:

Is there a deed restriction or permanent conservation easement on the property at the project site that would prohibit federal disaster funding (e.g., a previously FEMA funded acquisition of a structure on this property)? If yes, describe in detail.

No

13. PROJECT DESCRIPTION:

A. APPLICATION TYPE:

☒ Project ☐ 5% Activity

5% activities are defined as mitigation actions that are consistent with your local hazard mitigation plan and meet all HMGP requirements, but may be difficult to conduct a standard BCA to prove cost-effectiveness. Examples: early earthquake warning system, back-up generators for critical facilities, public awareness campaign, mitigation specific community outreach activities.

B. PROJECT TYPE:

Select at least one project type; select as many as needed to accurately describe project.

☒ EARTHQUAKE	☒ FIRE	☐ FLOOD	☐ OTHER
☐ CODE ENFORCEMENT	☐ DEFENSIBLE SPACE	☐ ACQUISITION	☐ CRITICAL FACILITY GENERATOR(S)
☒ NON-STRUCTURAL	☐ FIRE RESISTANT BUILDING MATERIALS	☐ DRY FLOOD PROOFING	☐ DROUGHT ☐ TSUNAMI
☐ STRUCTURAL	☒ FIRE VEGETATION MANAGEMENT	☐ FLOOD CONTROL	☐ WIND
☐ NON-STRUCTURAL & STRUCTURAL	☐ SOIL STABILIZATION	☐ ELEVATION	☐ OTHER:

☐ CLIMATE RESILIENCY MITIGATION ACTION (CRMA): Projects that mitigate risk through restoration of the natural environment

C. DESCRIBE PROBLEM/HAZARDS/RISKS:

Describe the problem this project is attempting to solve and the expected outcome. Describe the hazards and risks to life, safety and any improvements to property in the project area for at least the last 25 years. Describe in detail how the project reduces hazard effects and risks.

In the Rolling Hills Local Hazard Mitigation Plan, the process used describes the causes and characteristics of each hazard and what part of the facilities, infrastructure, and environment may be vulnerable to each specific hazard through a Calculated Priority Risk Index (CPRI). (Source: Rolling Hills Local Hazard Mitigation Plan). The table that is in the Scope of Work indicates a generalized perspective of the community's vulnerability of the various hazards according to extent (or degree), location, and probability with four (4) as the highest probability and one (1) as the lowest probability. The probability of a wildfire in Rolling hills is the highest probability with a probability of a four (4) and next, an earthquake with the probability of a three (3).

FIRE HAZARD

With its many steep canyons and open scrub-covered hillsides, the Palos Verdes Peninsula area has always been vulnerable to the hazards associated with brush fires. The City of Rolling Hills has declared a local emergency on two occasions:

- June 25, 1973 – A brush fire disaster that occurred on June 22, 1973 destroyed ten homes within the "Flying Triangle" and "Southfield" areas.
- September 14, 2009 – A brush fire disaster that occurred on August 27, 2009 in the southeast portion of the City.

In June 1973, the Peninsula News reported a wildland fire that was the most destructive to date that burned the Palos Verdes Peninsula. It was started by two youths playing with

fireworks in Rancho Palos Verdes and spread east into the "Flying Triangle" and "Southfield" areas of Rolling Hills where it destroyed ten (10) homes and five (5) barns. The fire shifted west and burned into the Portuguese Bend area of Rancho Palos Verdes and destroyed three (3) more homes. In all, the 1973 fire consumed a total of 900 acres and raged for 28 hours before it was finally extinguished.
The most recent fire in Rolling Hills was on August 27 and 28, 2009, when a wildfire burned through approximately 230 total acres. The fire is believed to have originated from wildlife interference and was exacerbated by wind in the Portuguese Bend Nature Reserve in Rancho Palos Verdes where 165 acres were charred. The remaining 65 acres were burned in Rolling Hills. Dozens of homes were threatened and approximately 1,200 residents were forced to evacuate. (City of Rolling Hills Local Hazard Mitigation Plan, pgs. 78-79.)

The Very High Fire Hazard Severity Zone (or "Zone") was first established in the City of Los Angeles in 1999 and replaced the older "Mountain Fire District" and "Buffer Zone." The "Zone" was carefully determined according to California State Law.

Very High Fire Hazard Severity Zone
State law requires that all local jurisdictions identify very high fire hazard severity zones within their areas of responsibility. Inclusion within these zones is based on vegetation density, slope severity and other relevant factors that contribute to fire severity. The map above is the Palos Verdes Peninsula in the Los Angeles County Zone and, as seen in the map, the entire City of Rolling Hills is located in the Zone.

EARTHQUAKES
Southern California has a history of powerful and relatively frequent earthquakes, dating back to the powerful 1857 San Andreas Earthquake, which generated substantial damage to the relatively few buildings that existed at the time. According to seismic research, large magnitude (8.0+) earthquakes occur on the San Andreas Fault every 50 to 300 years with an average interval of roughly 140 years. Other lesser faults have also caused very damaging earthquakes since 1857. Notable earthquakes in regions close to Rolling Hills include the 1933 Long Beach Earthquake, the 1971 San Fernando Earthquake, the 1987 Whittier Earthquake and the 1994 Northridge Earthquake.

Los Angeles County is therefore a hotbed of seismic activity due to the presence of over 50 active and potentially active fault segments, an undetermined number of buried faults, and multiple blind-thrust faults. All of these faults are capable of producing severe earthquakes, downed transmissions lines, and (therefore) fires. As with all communities in the Palos Verdes/Long Beach area, the City of Rolling Hills is located in an especially seismically-active area, even by Los Angeles County standards.

As seen in in Figure 3 in the "Supplemental Documentation" section of this application, Rolling Hills is vulnerable to future earthquake disasters. The faults that form the source of such earthquakes are numerous in the Rolling Hills area. Earthquakes that could affect the City would most likely originate from the San Andreas, Newport-Inglewood, or Puente Hills Faults. These faults are close enough in proximity or expected to generate strong enough shaking that could affect the City.

Although Rolling Hills is too small to garner earthquake reports specific to the community, the adjacent City of Rancho Palos Verdes is not. According to EarthquakeTrack.com, Rancho Palos Verdes experienced the following earthquake activity of at least 1.5M on the Richter scale as of August 29, 2018: (Source: https://www.earthquaketrack.com/us-ca-rancho-palos-verdes/recent)

- 1 earthquake in the past 24 hours
- 17 earthquakes in the past 7 days
- 28 earthquakes in the past 30 days
- 217 earthquakes in the past 365 days

Because Rancho Palos Verdes is adjacent to Rolling Hills, and Rolling Hills is located on high ground, the aforementioned seismic activity is highly relevant.

Andreas Fault Zone

The San Andreas Fault Zone extends from the Gulf of California northward to the Cape Mendocino area where it continues northward along the ocean floor. The total length of the San Andreas Fault Zone is approximately 750 miles. The activity of the fault has been recorded during historic events, including the 1906 (M8.0) event in San Francisco and the 1857 (M7.9) event between Cholame and San Bernardino, where at least 250 miles of surface rupture occurred. These seismic events are among the most significant earthquakes in California history. Geologic evidence suggests that the San Andreas Fault has a 50 percent chance of producing a magnitude 7.5 to 8.5 quake (comparable to the great San Francisco earthquake of 1906) within the next 30 years.

A study published in 2006 in the journal Nature found that the San Andreas fault has reached a sufficient stress level for an earthquake of magnitude greater than 7.0 on the moment magnitude scale to occur. This study also found that the risk of a large earthquake may be increasing more rapidly than scientists had previously believed. Moreover, the risk is currently concentrated on the southern section of the fault, i.e. the region around Los Angeles, (Fialko, Yuri (2006)). "Interseismic strain accumulation and the earthquake potential on the southern San Andreas fault System" (PDF). Nature. 441 (7096): 968–971)

Newport-Inglewood Fault Zone

Locally, the Newport-Inglewood Fault System passes by dangerously close to Rolling Hills, as shown Figure 3 in “Supplemental Documentation.” This is the most significant seismic feature in the area and is considered seismically active. The 1933 Long Beach earthquake resulted from activity on this fault. Within the Newport-Inglewood Fault System, five faults have been identified in and in the immediate vicinity of Rolling Hills: the Cherry Hill Fault, Pickler Fault, Northeast Flank Fault, Reservoir Hill Fault, and Wardlow Fault. These faults are generally in a northwest-to-southeast alignment. The Wardlow Fault is a pre-quaternary fault that has not ruptured in at least 2 million years and is therefore considered inactive. All other faults are considered active.

The Newport-Inglewood Fault System is a nearly linear alignment of faults extending 45 miles along the southwestern side of the Los Angeles basin. It can be traced as a series of topographic hills, ridges, and mesas from the Santa Monica Mountains to Newport Beach,

where it trends offshore. Structures along the zone of deformation act as groundwater barriers and, at greater depths, as petroleum traps. Continuing seismic activity has been evidenced most prominently in recent times by the 1920 Inglewood and 1933 Long Beach earthquakes.

The Cherry Hills segment of the Newport-Inglewood fault lies near the southeastern margin of the Dominguez Hills. The Cherry Hills fault is a part or a much longer Newport-Inglewood fault system that extends from north of the Baldwin Hills to south of Newport Beach. A 2017 study by American Geophysical Union (https://bit.ly/2Pk99lK) concluded that, together, the Newport–Inglewood Fault and Rose Canyon Fault could produce an earthquake of 7.3 or 7.4 magnitude. In 1933, the fault ruptured in neighboring Long Beach and produced a magnitude-6.4 earthquake and a maximum Mercalli intensity of VIII (Severe) that killed 115 people. (This earthquake was the impetus for the California State Legislature passing the Field Act, which mandated that school buildings must be earthquake-resistant.)

Rolling Hills is located in an area of dense brush and other vegetation. The fuel in the canyons, if ignited, could threaten residences upslope with wind-carried cinders and direct ignition from uncontrolled fires. The Portuguese Bend Reserve is a natural habitat and as such, the natural vegetation (which is not fire resistant) acts as a virulent fuel for any small fire. In addition, the Reserve geography is such that firefighting is incredibly difficult with inaccessible cliffs and extreme slopes. Not only is the entire City of Rolling Hills threatened by wildfires, the county and surrounding counties could be threatened by a wildfire, that could take a devastating toll on Southern California.

Electrical power lines pose a significant fire hazard if knocked down due to high winds or an earthquake. The City of Rolling Hills faces a constant threat from fire following an earthquake. These often-spontaneous ignitions are caused by ruptured gas mains and service lines, damaged or fallen overhead transmission or distribution power lines, wooden poles, unbraced or inadequately braced gas or electric appliances, and equipment in general.

D. DESCRIBE RECENT EVENTS THAT INFLUENCED THE SELECTION OF THIS PROJECT:

Describe recent events (e.g. changes in the watershed, discovery of a new hazard, zoning requirements, inter-agency agreements, etc.) that influenced the selection of this project.

The most recent fire in Rolling Hills was on August 27 and 28, 2009, when a wildfire burned through approximately 230 total acres. The fire is believed to have originated from wildlife interference and was exacerbated by wind in the Portuguese Bend Nature Reserve in Rancho Palos Verdes where 165 acres were charred. The remaining 65 acres were burned in Rolling Hills. Dozens of homes were threatened and approximately 1,200 residents were forced to evacuate. (City of Rolling Hills Local Hazard Mitigation Plan, pgs. 78-79.)

The fall of 2003 marked one of the most destructive wildfire seasons in California history. Between October 21 and November 4, twelve (12) separate fires raged across Southern California in Los Angeles, Riverside, San Bernardino, San Diego, and Ventura counties. The massive “Cedar Fire” in San Diego County alone consumed 2,800 homes and burned over

a quarter of a million acres. Altogether over 739,597 acres burned; 3,631 homes, 36 commercial properties, and 1,169 outbuildings were destroyed; 246 people were injured; and 24 people died, including one firefighter. At the height of the siege, 15,631 personnel were assigned to fight the fires. (State of California, "Governor's Blue-Ribbon Panel Fire Commission Report to the Governor," 2004).

Just four years after the "Fire Siege of 2003" in 2007, again in late October, Southern California experienced an unusually severe fire weather event characterized by intense, dry, gusty Santa Ana winds. This weather event drove a series of destructive wildfires that took a devastating toll on people, property, natural resources, and infrastructure. Although some fires burned into early November, the heaviest damage occurred during the first three days of the siege when the winds were the strongest.

During this siege, 17 people lost their lives, ten (10) were killed by the fires outright, three (3) were killed while evacuating, four (4) died from other fire siege related causes, and 140 firefighters, and an unknown number of civilians were injured. A total of 3,069 homes and other buildings were destroyed, and hundreds more were damaged. Hundreds of thousands of people were evacuated at the height of the siege.

The fires burned over half a million (500,000) acres, including populated areas, wildlife habitat, and watershed. Portions of the electrical power distribution network, telecommunications systems, and even some community water sources were destroyed. Transportation was disrupted over a large area for several days, including numerous road and highway closures.

Both the Governor of California and the President of the United States personally toured the ongoing fires. Governor Schwarzenegger proclaimed a state of emergency in seven counties before the end of the first day. President Bush quickly declared a major disaster. While the total impact of the 2007 fire siege was less than the disastrous fires of 2003, it was unquestionably one of the most devastating wildfire events in the history of California.
(Source:http://www.fire.ca.gov/fire_protection/downloads/siege/2007/Overview_Introduction.pdf.)

Contributing factors to the severity of the fires is the weather and winds. The winds that are commonly referred to as the "Santa Ana" winds occur during the fire season which is typically from June to November. This "fire weather" that is characterized by hot dry weather and high winds, result in low fuel moisture in vegetation. The most severe fire protection problem in the area is wildland fire during Santa Ana wind conditions. Fire is at its peak of danger in the City of Rolling Hills during the late summer and fall months, especially when Santa Ana weather conditions prevail. Plant fuels pose the greatest threat during this period are those located on the south-facing slopes.

E. SCOPE OF WORK (SOW):

STATE EXACT SOW DOCUMENT TITLE:	Fire Prevention through Power Line Undergrounding

1. Describe the entire SOW of the project in clear, concise, ample detail.
2. Must provide a thorough description of **all tasks and activities** to be undertaken.
3. Must be written in sequential order from start to finish of the project.
4. Describe any land acquisition activities, and/or right-of-way or access easements that need to be obtained.
5. If structural, discuss how the structure/building/facility will be constructed or retrofitted.
6. Include building or structure dimensions, material types, depth and width of excavations, volume of materials excavated, type of equipment to be used, staging and parking areas, and any phasing of the project.
7. If any tunneling is proposed, describe the method and any temporary trenches or pits.
8. Describe any demolition activities that need to occur prior to construction or retrofitting.

☒ **INSERT THIS DOCUMENT IN THE SOW SECTION OF THE BINDER.**

F. HAS YOUR JURISDICTION PREVIOUSLY RECEIVED HMGP FUNDING?

☐ Yes ☒ No ☐ Unknown | If yes, provide disaster number(s):

G. HAS YOUR JURISDICTION RECEIVED ANY OTHER FUNDING?

Describe all other funding received for this project and all other recent projects. Identify the funding source (i.e., Federal, State, Private, etc.).

NO

H. RELATED PROJECTS:

Describe any other projects or project components (whether or not funded by FEMA), which may be related to the proposed project, or are in (or near) the proposed project area. FEMA must look at all projects to determine a cumulative effect. FEMA reviews all interrelated projects under NEPA regulations.

N/A

I. HAZARD ANALYSIS TYPE:

Select the hazard(s) below that this project will protect against. Select as many as needed.

☐ BIOLOGICAL	☒ EARTHQUAKE	☐ LAND SUBSIDENCE	☐ TERRORIST
☐ CHEMICAL	☒ FIRE	☐ MUD/LANDSLIDE	☐ TORNADO
☐ CIVIL UNREST	☐ FISHING LOSSES	☐ NUCLEAR	☐ TOXIC SUBSTANCES
☐ COASTAL STORM	☐ FLOOD	☐ SEVERE ICE STORM	☐ TSUNAMI
☒ CROP LOSSES	☐ FREEZING	☐ SEVERE STORM(S)	☐ WINDSTORM
☐ DAM/LEVEE BREAK	☒ HUMAN CAUSE	☐ SNOW	☐ OTHER (describe below):
☐ DROUGHT	☐ HURRICANE	☐ SPECIAL EVENTS	

J. DESIGN PLANS:

☒ If your project requires design plans, plans should be prepared to supplement the SOW and attached in the design section of the binder. If the project involves ground disturbance, (e.g. enlarging ditches or culverts, diversion ditches, detention basins, storm water improvements, etc.) include the following:

1. **Scale:** Plans should be drawn to scale (e.g. 1'' to 100' or 1'' to 200') depicting the entire land parcel, showing buildings, improvements, underground utilities, other physical features, dimensions and cross sections.
2. **Identification:** Indicate agency name, land owner, civil engineer, soil engineer, geologist, map preparer, and date of map preparation. Also, indicate the name of the project.
3. **Legend/Orientation:** Include a legend explaining all lines and symbols. Identify property acreage and indicate direction with a north arrow (pointing to top or right hand side of the plan).
4. **Dimensions:** Show property lines and dimensions. Also, show boundary lines of project and their dimensions if only a portion of the property is being utilized for the project.
5. **Structures:** Identify all existing and proposed buildings and structures including storm drains, driveways, sidewalks and paved areas.
6. **Utilities:** Indicate names and location of utilities on property (water, sewage, gas, electric, telephone, cable).

7. **Roads/Easements:** Indicate location, names, and centerline of streets and recorded roads. Identify any utility, drainage or right-of-way easements on the property.
8. **Drainage:** Show the location, width and direction of flow of all drainage courses on site.
9. **Grading/Topographic Information:** Show existing surface contours on-site and bordering the property.
10. **Parking:** Show all construction parking and staging areas and provide dimensions.
11. **Cross Sections:** Provide cross sections of proposed buildings, structures or other improvements, and any trenches, temporary pits or catchment basins.

☐ If applicable, provide studies and engineering documentation, including any Hydrology and Hydraulics (H&H) data.

☐ If applicable, provide drawings or blueprints that show the footprint and elevations.

DO NOT SEND PRINTED COPIES OF DESIGN PLANS, DRAWINGS OR BLUE PRINTS LARGER THAN 8.5' x 11" SIZE. DO NOT SEND ROLLED COPIES (FOLD TO OBTAIN 8.5" x 11" SIZE).

K. PROJECT ALTERNATIVES:

Identify three project alternatives:

1. ALTERNATIVE #1 – NO ACTION:

Describe the No Action alternative below. The No Action alternative evaluates the consequences of taking no action and leaving conditions as they currently exist.

It is evident from the history of fires in the City and the surrounding areas in the county that, with no action, the area could expect to suffer further damage, along with possible injury or death, in the future should there be a wildfire or an earthquake that brings down the utility pole or even a spark from a nearby tree that starts a wildfire.

Assuming a similar level of damage to homes and structures in the future and similar costs to the City for response and cleanup, and assuming that the fires occur every thirty years, the no-action alternative could result in future devastation of approximately $1 billion: property destruction and loss, structural loss, vital services loss, injury and loss of life, including residents, animals, and fire-fighting personnel. The no-action option does nothing to reduce or eliminate future risk to City residents or damage to property or the need for emergency response; and it does not offer a means to reduce or eliminate the hazard that could bring devastating destruction to the Rolling Hills, Rancho Palos Verdes, and Rolling Hills Estates communities.
In essence, the City has no viable option but to attempt to underground as much of the overhead utility lines and remove as many wooden poles as possible to reduce the risk of potential fires from the many hazards previously mentioned, as well as to avoid a wildfire disaster cutting off vital services (electricity and communications).

2. ALTERNATIVE #2 – PROPOSED ACTION:

Describe the Proposed Action alternative below. The Proposed Action alternative is the proposed project to solve the problem. Explain why the proposed action is the preferred alternative. Identify how the preferred alternative will solve the problem, why the preferred alternative is the best solution for the community, why and how the alternative is environmentally preferred and why the project is the economically preferred alternative.

Undergrounding is the most comprehensive and effective method of reducing the impact of overhead utility wires and reducing the risk of significant disasters caused by fire, earthquakes, and earthquake-related fires. In addition, should a wildfire disaster take place, the wires would be located underground, and the residents

would be far less likely to lose essential electric and communications services. The biggest challenge to undergrounding wires is the cost. Estimates for utility burial can range from $500,000 to $3 million per mile, in comparison to $120,000 per mile for the erection of overhead lines. The cost is high due to the expense of burying the utility wires in conduits, which is the best method of burying wires to ensure reliability and facilitate repairs, and due to the additional technology required to maintain the underground lines. Coordinating the burial of several utility wires, such as telephone and cable television wires that also use poles, is another expense, but necessary for the overall benefit. Due to these reasons, the City reviewed the alternatives to undergrounding the power lines, which we now discuss in turn.

3. ALTERNATIVE #3 – SECOND ACTION ALTERNATIVE:

Describe the Second Action alternative below. The Second Action alternative described must also solve the described problem. State why this alternative wasn't chosen. It must be a viable project that could be substituted in the event the proposed action is not chosen.

Reduction -- The fewer wires that contact the ground after an earthquake, the less risk of fire. One of the easiest ways to reduce wires is to consolidate lines along one side of the roadway on a single pole and wrap them. Although the City could employ this alternative, such an alternative would not reduce the risk of fire by any significant margin to justify the expense.

Relocation of Wires -- Rolling Hills could work with the local utility company to move wires and poles to areas that offer minimal fire hazards. Such an alternative has limited utility in Rolling Hills, unfortunately. The community is purely residential and there are few areas that offer lower potential fire hazards than others. In short, wherever the wires would be moved, nearby structures would always lie in the high voltage wires' path. This alternative does not reduce the risk that comes from the wooden poles that, if sparked, can cause the pole to ignite.

WORK SCHEDULE INFORMATION

14. PROJECT WORK SCHEDULE:

The intent of the work schedule is to provide a realistic appraisal of the time and components required to complete the project.

- Describe each of the major work elements and milestones in the description section below.
- Project subapplication examples are: construction, architectural, design, engineering, inspection, testing, permits, project management, mobilization and de-mobilization.
- State the total timeframe anticipated for each of the work elements.
- State the total timeframe anticipated to complete the project.
- Work schedule must mirror SOW, budget and BCA. OPTIONAL: Provide the work schedule in Gantt chart form as supplemental documentation in the work schedule section of the binder Include this information as an example.

WORK SCHEDULE EXAMPLE

#	DESCRIPTION	TIMEFRAME
1.	Kick-off, 90% design meetings	3 months
2.	Final contract drawing development	5 months
3.	Open bids and award contract	4 months
4.	Construction – Mobilization	5 months
5.	Construction – Demolition	4 months
6.	Construction – Concrete and conduit work	2 months
7.	Construction – Trenching	2 weeks
8.	Construction – Utility relocation	4 months
9.	Construction – Electrical Installation	1 month
10.	Construction – Site Restoration	1 week
11.	Construction – Complete punch list	2 months
12.	Construction – Demobilization	1 week
13.	Project Close-out and record drawings	2 months
14.	Grant Close out	3 months
	TOTAL MONTHS:	**36 months**

TOTAL PROJECT DURATION (INCLUDING CLOSE-OUT) MUST NOT EXCEED A 36 MONTH PERIOD OF PERFORMANCE (POP).

#	DESCRIPTION	TIMEFRAME
1.	Technical evaluations finalized	2
2.	Geotechnical and surveying	2
3.	Final design plans, specs, and cost estimates	7
4.	Development of CEQA documents (as applicable)	2
5.	Preparation and advertisement for bid	3
6.	Board approval of construction awards: (1) contractor award (2) construction management consultant, (3) design engineer support services amendment	3
7.	Construction begins	1
8.	Construction mobilization	1
9.	Undergrounding	10
10.	Punchlist completion	1
11.	Demobilization	1
12.		
13.		
14.		
15.		
16.		
17.		
18.	Project Close-out	
19.	**STANDARD VALUE (DO NOT CHANGE)** Grant Close-out	3 months
	TOTAL MONTHS:	36

If more lines are needed than provided, indicate the title of document in box 1 and attach a separate work schedule in the schedule section of binder.

COST ESTIMATE INFORMATION

15. HMGP COST ESTIMATE SPREADSHEET:

A. COST ESTIMATE INSTRUCTIONS:

☒ **Using the HMGP Cost Estimate Spreadsheet, provide a detailed cost estimate breakdown.**

- Cost estimate describes the anticipated costs associated with the SOW for the proposed mitigation activity. Cost estimates must include detailed estimates of cost item categories.
- Only include costs that are directly related to performing the mitigation activity. If additional work, such as remodeling, additions, or improvements are being done concurrently with the mitigation work, do not include these costs in the submitted budget.
- Documentation that supports the budget must be attached to the subapplication in the budget section of the binder.
- Total costs must be consistent with the requested federal share plus the matching funds and must be consistent with the project cost in the Benefit-Cost Analysis (BCA), SOW and work schedule.

HMGP COST ESTIMATE SPREADSHEET EXAMPLE

#	ITEM NAME	Unit Qty	UNIT	UNIT COST	COST EST TOTAL
1.	Pre-Award Costs: Develop BCA	4	HR	$150	$600
2.	Temp. Inlet Filter Rolls	4	EA	$250	$1000
3.	Temp. Fiber Roll	1850	LF	$3	$5550
4.	Hydraulic Mulch	1000	SQYD	$2	$2000
5.	Plane Asphalt Concrete Pavement	650	SQYD	$22	$14300
6.	Street Sweeping for 30 days	30	EA	$350	$10500
7.	Roadway Excavation	70	CY	$40	$2800
8.	Aggregate Base, Class 2	210	CY	$75	$15750
9.	Remove Concrete Pavement	650	SQYD	$340	$10540
10.	Asphalt Concrete, Type B	180	TON	$150	$27000
11.	Asphalt Concrete, Leveling	10	TON	$300	$3000
12.	Asphalt Concrete Dike, Type A	235	LF	$15	$3525
13.	Asphalt Concrete Dike, Type F	125	LF	$8	$120
14.	Place Asphalt Concrete	15	SQFT	$8	$120
15.	18" Corrugated Steel Pipe Riser	5	LF	$125	$625
16.	24" Reinforced Concrete Pipe	275	LF	$170	$46750
17.	84" Reinforced Concrete Pipe Install	572	LF	$400	$228800
18.	Precast Triple Concrete Box Culvert	44	LF	$1500	$66000
19.	Curb Inlet - Type B-1 (L=9')	1	EA	$6000	$6000
20.	Curb Inlet - Type B-1 (L=13')	1	EA	$6300	$6300
21.	Curb Inlet - Type B-1 (L=15')	1	EA	$6800	$6800
22.	Storm Drain Cleanout - Type A-8	3	EA	$7500	$22500
23.	8" PVC Sewer	89	LF	$100	$8900
24.	Cellular Block (Precast)	4100	SQFT	$20	$82000
25	Project Identification Sign	2	EA	$1000	$2000
				Total Project Cost Estimate:	**$573480**

B. INELIGIBLE COSTS:

The following are ineligible line items:

- Lump Sums
- Contingency Costs
- Miscellaneous Costs
- "Other" Costs
- Indirect Charges
- Overhead Costs
- Cents (must use whole dollar amounts, round unit prices up to whole dollars)

C. PRE-AWARD COSTS:

Eligible pre-award costs are costs incurred after the disaster date of declaration, but prior to grant award. Pre-award costs directly related to developing the application may be funded.

- Developing a BCA
- Preparing design specifications
- Submission of subapplication
- Gathering environmental and historic data
- Workshops or meetings related to development

Subapplicants who are not awarded funds will not receive reimbursement for pre-award costs.

D. COST ESTIMATE NARRATIVE:

FEMA requires a cost estimate narrative that explains all projected expenditures in detail. The cost estimate narrative is intended to mirror the cost estimate spreadsheet and should include a full detailed narrative to support the cost estimates listed in the HMGP Project Cost Estimate Spreadsheet. If your cost estimate includes City, County, or State employees' time (your agency), include personnel titles and salary/hourly wages plus benefits for a total hourly cost. Detailed timesheets must be retained.

☒ Title the document "Cost Estimate Narrative" and include in the budget section of the binder.

16. FEDERAL/NON-FEDERAL SHARE INFORMATION:

A. FUNDING RESTRICTIONS:

HMGP funding is restricted to a maximum of $5 million federal share for each project subapplication. FEMA will contribute up to 75 percent of the total project cost. A minimum of 25 percent of the total eligible costs must be provided from a non-federal source. State does not contribute to local cost share.

For example: For a project with a total project cost of $6,250,000, the federal requested share (75 percent) would be $4,687,500. The non-federal match share (25 percent) provided would be $1,562,500.

A jurisdiction may contribute an amount greater than the 25 percent non-federal share.

For example: for a $10,000,000 total project cost, the federal requested share cannot exceed $5,000,000. Therefore, the non-federal match provided must be $5,000,000, which exceeds 25 percent of the total cost share. The sum of the non-federal and federal shares must equal the total project cost.

B. TOTAL PROJECT COST ESTIMATE:

$1,539,276
ENTER $ IN BOX ABOVE

Enter total cost formulated on HMGP Cost Estimate Spreadsheet

VERIFY ALL AMOUNTS ENTERED ARE ACCURATE.

INCORRECT AMOUNTS WILL DELAY PROCESSING OF YOUR SUBAPPLICATION.

FEDERAL SHARE (75% MAXIMUM)	REQUESTED AMOUNT:	$1,154,457
		ENTER $ IN BOX ABOVE
	PERCENTAGE AMOUNT:	75%
		ENTER % IN BOX ABOVE
NON-FEDERAL SHARE (25% MINIMUM)	REQUESTED AMOUNT:	$384,819
		ENTER $ IN BOX ABOVE
	PERCENTAGE AMOUNT:	25%
		ENTER % IN BOX ABOVE

C. NON-FEDERAL MATCH SOURCE: MATCH COMMITMENT LETTER:

☒ Use the Local Match Commitment Letter Template to complete this section and add completed letter to the match section of the binder.

- A signed Match Commitment Letter must be provided on agency letterhead.
- The non-federal source of matching funds must be identified by name and type.
- If “other” is selected for funding type, provide a description.
- Provide the date of availability for all matching funds.
- Provide the date of the Funding Match Commitment Letter.
- The funds must be available at the time of submission unless prior approval has been received from Cal OES.
- If there is more than one non-federal funding source, provide the same information for each source on an attached document.
- Match funds must be in support of cost items listed in the cost estimate spreadsheet.
- Requirements for donated contributions can be found in 2 CFR 200.306.

BENEFIT/COST EFFECTIVENESS INFORMATION

17. BENEFIT/COST EFFECTIVENESS INFORMATION

A. BCA INSTRUCTIONS:

FEMA will only consider subapplications from subapplicants that use a FEMA-approved methodology to conduct the Benefit-Cost Analysis (BCA). BCA must be legible, complete and well-documented.

- Project BCAs must demonstrate cost-effectiveness through a Benefit-Cost Ratio (BCR) of 1.0 or greater.
- Projects with a BCR of less than 1.0 will not be considered for funding.
- Total project cost must be used in the BCA.
- Maintenance of a completed HMGP project is not an eligible reimbursement activity, but must be included in the BCA.

☒ BCA Version 5.3.0 is the only software that is allowed to conduct a BCA. Some project types may qualify for pre-calculated benefits. Additional information on the BCA Toolkit is available at: https://www.fema.gov/benefit-cost-analysis.

i The FEMA BCA Technical Assistance Helpline is available to provide assistance with FEMA's BCA software by calling 1-855-540-6744 or via email at BCHelpLine@FEMA.dhs.gov. The FEMA helpline is only to be utilized for technical assistance questions. The FEMA helpline will not verify the accuracy of your BCA.

B. BCA INFORMATION:

Once the BCA is completed, enter information requested below.

1.	**NET PRESENT VALUE OF PROJECT BENEFITS:**	$6,494,741
2.	**TOTAL PROJECT COST ESTIMATE:**	$1,569,003
3.	**BENEFIT-COST RATIO:**	4.14

C. ANALYSIS TYPE:

☐ FLOOD	☐ WILDFIRE	☐ EXEMPT (5% PROJECTS)	☐ EARTHQUAKE
☐ HURRICANE WIND	☐ DROUGHT	☐ PRE-CALCULATED	☐ LANDSLIDE
☒ DAMAGE FREQUENCY ASSESSMENT (DFA)			

D. ANALYSIS DATE (date BCA was conducted): 9/3/18

E. PROVIDE BCA HARD AND SOFT COPIES IN FORMAT DESCRIBED BELOW:

☒ Copy the exported BCA in a .zip file format and add to the CD-RW.
☒ Provide a hard copy of the report in the BCA section of the binder.

MAINTENANCE ASSURANCE INFORMATION

18. PROJECT MAINTENANCE INFORMATION:

A. MAINTENANCE ASSURANCE LETTER:

☒ Using the Project Maintenance Letter Template, identify all maintenance activities required to preserve the long-term mitigation effectiveness of the project.

- Examples of maintenance include: inspection of the project, cleaning and grubbing, trash removal, replacement of worn out parts, etc.
- Attach a maintenance schedule, estimated annual costs, and a signed maintenance commitment letter for the useful life of the project.

NATIONAL FLOOD INSURANCE PROGRAM (NFIP)

19. NFIP INFORMATION:

CONTACT YOUR COUNTY OR LOCAL FLOODPLAIN ADMINISTRATOR FOR NFIP INFORMATION.

A. NFIP PARTICIPATION:

1. Is the jurisdiction where the project is located participating in the NFIP? YES ☐ NO ☐
   a. If yes, are they in good standing? YES ☐ NO ☐
   b. If no, explain:

B. PROJECT LOCATION:

1. Is this project located in a floodplain or floodway designated on a FEMA Flood Insurance Rate Map (FIRM)? YES ☐ NO ☐

☐ a. Mark the project location on the FIRM and attach to subapplication in the maps section of the binder.

2. Provide the following information for the location of the project:
   a. FIRM panel number:
   b. FIRM zone designations:
   c. NFIP community ID number:

C. LAST COMMUNITY ASSISTANCE VISIT (CAV) DATE: N/A

ENVIRONMENTAL INFORMATION

20. ENVIRONMENTAL INFORMATION:

A. FEMA ENVIRONMENTAL CHECKLIST:

☒ Complete the FEMA Site Information, Environmental Review, and Checklist and attach to the environmental section of the binder. Provide a detailed response to each question. Attach supporting documentation in compliance with FEMA's frontloading requirements.

PRINT THIS PAGE – ORIGINAL SIGNATURE IS REQUIRED

PROJECT CONDITIONS

Indicate by checking each box below that you will adhere to these listed project conditions.

☒ If during implementation of the project, ground-disturbing activities occur and artifacts or human remains are uncovered, all work will cease and FEMA, Cal OES, and the State Historic Preservation Officer (SHPO) will be notified.

☒ If deviations from the approved scope of work result in design changes, the need for additional ground disturbance, additional removal of vegetation, or will result in any other unanticipated changes to the physical environment, FEMA will be contacted and a re-evaluation under NEPA and other applicable environmental laws will be conducted.

☒ If wetlands or waters of the U.S. are encountered during implementation of the project, not previously identified during project review, all work will cease and FEMA will be notified.

☒ Due to the Federally mandated Environmental and Historic Preservation (EHP) review; no construction will occur for this project prior to FEMA and Cal OES approval.

AUTHORIZATION

The undersigned does hereby submit this subapplication for financial assistance in accordance with the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Grant Program (HMGP) and the State Hazard Mitigation Administrative Plan and certifies that the subapplicant (e.g., organization, city, or county) will fulfill all requirements of the program as contained in the program guidelines and that all information contained herein is true and correct to the best of our knowledge.

Subapplicant Authorized Agent

NAME: Yolanta Schwartz

TITLE: Interim City Manager

ORGANIZATION: City of Rolling Hills

SIGNATURE:

DATE: 8/31/18

PRINT THIS PAGE – ORIGINAL SIGNATURE IS REQUIRED

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Subapplicant Authorized Agent

NAME: Patrick Wilson

TITLE: Mayor

ORGANIZATION: City of Rolling Hills

SIGNATURE:

DATE: 9/4/2018

SCOPE OF WORK

DR-4344-0526 Fire Prevention through Power Line Undergrounding

INTRODUCTION

The City of Rolling Hills spans three (3) square miles, with a population of 1,860 (2010 US Census). The City comprises lots developed with one-story ranch style residences along with agricultural and equestrian accessory structures and uses. Rolling Hills is completely residential, with no hospitals, commercial uses, corporations, or transportation corridors located within the City limits. One school is located on the opposing side of Crest Road West, within the City limits but outside of the residential area. The City owns the City Hall and the Rolling Hill Community Association structures and also owns several parcels of land that have no structures. Any Hazard Mitigation projects, like this Fire Prevention Through Power Line Undergrounding project, must be paid for by the residents, through the City's General Fund, if not funded through the State of California, Office of Emergency Services. The City maintains experienced staff and a relatively small budget of $2.2 million (FY 2019/2020).

The City of Rolling Hills, throughout history, has dealt with various natural hazards that include earthquakes, wildfires, droughts, and land movement. As the population of the City continues to increase, the exposure to hazards creates an even higher risk than previously experienced.

Incorporated on January 24, 1957, in Los Angeles County, the City has maintained a rural ranch-like character, with no traffic lights, large spaces between houses, and wide equestrian paths along streets. Prior to incorporation, a portion of the City known as the Flying Triangle was determined to be in a landslide area when, in 1948, the County of Los Angeles performed soil and geology studies for potential development below this area. At the time the area was vacant. However, due to lack of restrictions and building codes, and lack of technology, the County allowed this area to be developed. Since incorporation, the City has adopted the County of Los Angeles Building Codes. The City continued to allow limited construction under the Los Angeles County Codes.

SUMMARY OF HAZARDS

FIRE

In 1973, there was a large fire in the Flying Triangle which burned vegetation, a number of homes, stables and other structures. All of the homes were built back, and a signed release practice was put into place to ensure that the owners were aware that the area is a slide danger zone and indemnifying the City and County from any liability.

Combined with the several canyons cutting through the City, the entire jurisdiction falls within the “Very High Fire Hazard Severity Zone”, or VHFHSZ. (Source: Los Angeles County Fire Department). (A map outlining the VHFHSZ is shown in Figure 1 in the “Documents” section of this application). In the past, the City of Rolling Hills has experienced wildfires that originated from power lines, starting fires in nearby vegetation, that has threatened the City and caused great damage and harm. The entire length of most roadway easements in the City is lined with power lines, many of

which connect to residences; the street lines are above ground and dangerously weave throughout the trees. It is nearly impossible to keep the lines away from the tree growth.

The City has experienced several fires when the transmitters on the old wooden poles sparked and caused the pole to ignite, due to something as small as a squirrel walking onto the transmitter and causing a spark. This incident occurred in August 2018, causing a fire that was fortunately contained before it became a disaster. Wildlife interference with above ground transmitters is a regular occurrence in Rolling Hills.

The Public Utilities Commission has written:

> *"As discussed in earlier Commission decisions, the public overwhelmingly supports the undergrounding of electric facilities for a variety of reasons. Undergrounding enhances safety and reliability, provides aesthetic benefits, and increases property values. In general, undergrounding a facility may make the system more reliable (since the facility is protected by being underground)."*

EARTHQUAKE AND EARTHQUAKE-RELATED FIRE

Rolling Hills is positioned close to active earthquake faults and faces a real possibility that a future earthquake could topple the wooden poles holding up the community's electric and telephone lines. In a study by K. Fallahi for the 13th World Conference on Earthquake Engineering, a major hazard generated by earthquakes is the settlement or disruption of transmission line foundations and thereby the tilting of towers or extraction of stubs out of concrete. (http://www.iitk.ac.in/nicee/wcee/article/13_1079.pdf). The

natural result is a downed transmission line with a high chance of igniting any combustible materials in the wires' path. Because Rolling Hills is residential, the threat of fire from downed power transmission lines is substantial.

The prospect that a major earthquake will occur near Rolling Hills is high. At some point in time, an earthquake strong enough to knock down transmission wires can be easily expected. Because Rolling Hills is purely residential, the chances that downed transmission lines could spark and start any number of fires within Rolling Hills is high as well. Such fires not only threaten residents of Rolling Hills but the residents of neighboring communities as well. The proposed undergrounding project will completely eliminate this potential source of fire.

LOCATION

The City of Rolling Hills is characterized by beautifully wooded deep canyons and hilly terrain located on the San Pedro Hills of the Palos Verdes Peninsula in Southern California. However, the potential impacts of hazards associated with the terrain make the environment and population vulnerable to disasters. (See Figure 2 in the "Supplemental Documentation" section for a map illustrating the location of Rolling Hills in the Palos Verdes Peninsula.) The City of Rolling Hills is located in the northwestern quadrant of Los Angeles County. It is bordered on three sides by the City of Rancho Palos Verdes and on the north and northeast by the City of Rolling Hills Estates. Neighborhoods adjoining the City include Miraleste (southeast) and Portuguese Bend (southwest) in Rancho Palos Verdes.

Elevations in the City range from a high of 1350 feet above sea level to a low of 500 feet above sea level.

GOALS AND OBJECTIVES

The proposed project centers on the City's goal of reducing the risk of wildfire disaster and removing the threat of a fire hazard due to overhead lines catching fire or being toppled by high winds, earthquake, wildlife interference or other causes. Undergrounding the utility lines on Crest Road that currently weave dangerously through the trees and removing the old wooden poles will help to reduce the risk by removing the threat. In addition, this project will reduce the risk of loss of property, vital services (electricity and communications), and loss of life, including residents, animals, and fire-fighting personnel.

The aging population of the City of Rolling Hills and the nature of "one-way in/one-way out" streets lined with overhead wires and wooden poles also create a situation in which loss of life due to fire, or earthquake-related fires are more likely.

This project is consistent with state and federal HMGP regulation, and will meet local planning, zoning, building and all other applicable codes.

The project would underground roughly 2,000 (1,820 linear feet along the City street of Crest Road and 180 linear feet between the existing power poles and three (3) private residences) of power line. This undergrounding would take place along a street located

in a “Very High Fire Hazard Severity Zone” at an estimated cost of approximately $650 per linear foot.

Undergrounding utility lines on Crest Road is an action item found in the City’s Local Hazard Mitigation Plan (MH 26) and furthers the plan goals of:

- Protect Life and Property;
- Partnerships and Implementation; and
- Emergency Services

(Source: Local Hazard Mitigation Plan (pg. 126) - Table’s 9-1 and 9-2: Mitigations Action Matrix which identified the existing and future mitigation activities development by the Planning Team).

PROJECT SCOPE OF WORK

Southern California Edison (SCE) will be have an agreement for SCE to perform and manage the design, engineering, and construction of the project. SCE will be fully responsible for all construction management, materials and labor oversight, and will hire a construction contractor to perform the actual trenching and all other construction duties. SCE and the City will coordinate with Cox and Frontier (the cable companies who also will perform their own design in conjunction with SCE and lay their lines in the same trenches).

A total of 2,000 linear feet of overhead utilities will be placed underground. Since the old wooden poles will be removed, it necessitates undergrounding three (3) residences by

default for a total of 180 linear feet (included in the total linear feet to be undergrounded). The scope of work of construction includes the following:

1. Transformers will be placed on the ground atop a concrete pad at locations depending on electrical demand and their current overhead location. A small easement will be necessary at each location for placement of the transformer, if the unpaved portion of the right-of-way cannot be used.
2. The first step in the construction process will begin with construction equipment and materials such as conduit being placed at a “laydown” area to be determined. At each location where there will be a new ground mounted transformer, if the unpaved portion of the right-of-way cannot be used, the SCE construction contractor saw cuts the street pavement to remove it and then digs a small pit. The same is done at the location of the next transformer north or south of the first location depending on which direction the SCE construction contractor chooses to work. The HDD equipment, about the size of a small sub-compact automobile, is then brought to the site of the first pit to drill a pathway under the street pavement from one pit to the next wherein the conduit for utility lines will be run. Once the conduit is installed, the conduit is capped, and the process described continues on.
3. Upon completion of the installation of the conduit, the SCE construction contractor begins running the lines in the conduit, connecting the lines to the transformer.
4. Once the switchover to the new network is complete and the overhead facilities are no longer in use, the electric company crews are called upon to remove all

overhead lines, transformers and poles. Upon completion, the SCE construction contractor, or the chosen landscaping subcontractor, begins restoring landscaping in easements or the right-of-way to screen the transformers in an acceptable manner.

5. When the landscaping is completed, and the SCE construction contractor has met all terms and conditions of his contract, including correction of any punch list items noted in the final inspection of the work, the underground conversion will be completed. At this point, if the SCE construction contractor had to cut the road to provide service, those roads which were cut will be milled and resurfaced in accordance with City requirements. Repaving at this time is predicated upon all planned public utility upgrades being completed, if their renewal or replacement is determined to be required at this time.

SCHEDULE

The City anticipates completing the project by December 2021/January 2022. This date assumes the completion of the grant application approval process by January 2019, project start of Jan/February 2019, and construction commencement in January 2021.

The project will be completed within 36 months of the award of the grant. The schedule includes all tasks identified in the Statement of Work and the relationship of each activity to the cost estimate. The schedule identifies major milestones with target dates for meeting each milestone, including anticipated quarterly usage of Federal funds. A schedule is attached.

Table 1: Schedule for the Rolling Hills Undergrounding of Power Lines. All numerical values refer to months or number of months.

Description of Task	**Starting Point**	**Duration**	**Task Assignee**
Project Launch			
Technical evaluations finalized	1	2	City of Rolling Hills
Geotechnical and surveying	1	2	City of Rolling Hills
Final design plans, specs, and cost estimates	1	7	City of Rolling Hills
Development of CEQA documents (as applicable)	6	2	City of Rolling Hills
Preparation and advertisement for bid	8	3	SCE
Approval of construction awards: (1) contractor award, (2) construction management contractor, (3) design engineer support services amendment	11	3	SCE
Construction			
Construction begins	14	1	SCE
Construction mobilization	14	1	SCE
Undergrounding	14	21	SCE
Punchlist completion	33	1	SCE
Demobilization	35	1	SCE
Submit final invoice w/ report of expenditures and close out the project	33	3	City of Rolling Hills

COST ESTIMATE

The cost estimate of $650 per linear foot is based on the draft estimate prepared by the utility company, Southern California Edison (SCE). The estimate is based on a draft preliminary design for the project, included in this subapplication. The total estimated cost for the project is $1,539,276 with a federal request of $1,154,457 and a local match of $384,819. A detailed breakdown of the project costs is attached.

The annual maintenance budget is set at $130,000. This cost is borne fully by the utility company, SCE, and is prescribed under General Order 165. The following paragraph from the Public Utilities Commission (http://www.cpuc.ca.gov/General.aspx?id=7719) explains the current requirements for Underground Utility lines in California:

"Decisions 96-11-021 and 97-03-070 establish inspection cycles and record-keeping requirements for utility distribution equipment, which are contained in General Order 165. In general, utilities must patrol (walk, drive, or fly by) their systems once a year (in urban areas) or once every two years (in rural areas). Utilities must conduct detailed inspections every 3-5 years, depending on the type of equipment. For detailed inspections, utilities' records must specify the condition of inspected equipment, any problems found, and a scheduled date for corrective action. The utility must submit an annual report summarizing inspections made, equipment condition observed, and repairs made. Utilities are required to make intrusive inspections of power poles; no pole should go over 25 years before its first intrusive inspection, and once passed, every 20 years thereafter. Currently GO 165 is being studied for revisions to optimize the Commission's ability to identify areas on noncompliance with its safety

standards GO 95 Overhead and GO 128 Underground and its inspection, maintenance and repair standards GO 165."

Matching funds will be obtained from the City's use and purchase of Electric Tariff Rule 20A funds. Rule 20A stipulates that Utilities annually allocate funds under Rule 20 to communities, either cities or unincorporated areas of counties, to convert overhead electric and telecommunication facilities to underground electric facilities. The recipient communities may either bank (accumulate) their allotments and/or borrow (mortgage) future undergrounding project allocations for five years at most. (http://www.cpuc.ca.gov/General.aspx?id=4403). In addition:

"Rule 20 defines the policies and procedures followed by the electric utilities to convert overhead power lines and other equipment to underground facilities. Rule 20A is part of Electric Tariff Rule 20 of the California investor owned electric utilities, including Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), PacifiCorp, Bear Valley Electric Service Company (BVES), and Liberty Utilities (Liberty). Under Rule 20A, these utilities annually allocate work credits to California's communities – either cities or unincorporated areas of counties – to convert overhead electric facilities to underground. The communities accumulate their annual allocations until they have enough credits to fund an undergrounding project. After the local community work with their utility to complete the project, the utility requests authorization from the Commission to include completed projects in its rate base and recover project costs from ratepayers." (docs.cpuc.ca.gov/PublishedDocs/Published/G000/M187/K324/187324749.docx)

The Rolling Hills City Council has approved this use of their allocation of Rule 20A funds per the Matching Funds Assurance letter included in this grant application. For future undergrounding projects, the City intends to either borrow (mortgage) or purchase future undergrounding allocations.

COST-EFFECTIVE

The project is cost effective, with a BCA of 4.14. It is important to note that the same utilities are used by the surrounding small communities in addition to Rolling Hills and disaster consequences affect all equally. Justification is based on the number of customers served by SCE in the three cities of Rolling Hills, Rancho Palos Verdes, and Rolling Hills Estates.

ENVIRONMENTAL

This new project is not expected to impact any environmental or historic resources on site or in the immediate project vicinity nor is it expected to have an adverse impact on the quality of the human environment. A full environmental review will be conducted upon award of grant.

NFIP PARTICIPATION

According to the City's General Plan, the City no longer participates in FEMA's National Flood Insurance Program. Following is the language relating to flooding as stated in the General Plan:

"Flood problems are primarily limited to the City's canyon bottoms. As development is prohibited in the canyon areas, flooding does not present a significant hazard to development in the community. Minor flooding problems related to run-off and inadequate drainage systems or grading design could occur in the City, potentially channeling run-off onto an adjacent residence. Such problems can be addressed during project review."

PROJECT ALTERNATIVES

ALTERNATIVE #1 – UNDERGROUNDING (CHOSEN)

Undergrounding is the most comprehensive and effective method of reducing the impact of overhead utility wires and reducing the risk of significant disasters caused by fire, earthquakes, and earthquake-related fires. In addition, should a wildfire disaster take place, the wires would be located underground, and the residents would be far less likely to lose essential electric and communications services. The biggest challenge to undergrounding wires is the cost. Estimates for utility burial can range from $500,000 to $3 million per mile, in comparison to $120,000 per mile for the erection of overhead lines. The cost is high due to the expense of burying the utility wires in conduits, which is the best method of burying wires to ensure reliability and facilitate repairs, and due to the additional technology required to maintain the underground lines. Coordinating the burial of several utility wires, such as telephone and cable television wires that also use poles, is another expense, but necessary for the overall benefit. Due to these reasons, the City reviewed the alternatives to undergrounding the power lines, which we now discuss in turn.

ALTERNATIVE #2 - Reduction or Relocation of Utility Wires

Reduction -- The fewer wires that contact the ground after an earthquake, the less risk of fire. One of the easiest ways to reduce wires is to consolidate lines along one side of the roadway on a single pole and wrap them. Although the City could employ this alternative, such an alternative would not reduce the risk of fire by any significant margin to justify the expense.

Relocation of Wires -- Rolling Hills could work with the local utility company to move wires and poles to areas that offer minimal fire hazards. Such an alternative has limited utility in Rolling Hills, unfortunately. The community is purely residential and there are few areas that offer lower potential fire hazards than others. In short, wherever the wires would be moved, nearby structures would always lie in the high voltage wires' path. This alternative does not reduce the risk that comes from the wooden poles that, if sparked, can cause the pole to ignite.

ALTERNATIVE #3 - No Action

It is evident from the history of fires in the City and the surrounding areas in the county that, with no action, the area could expect to suffer further damage, along with possible injury or death, in the future should there be a wildfire or an earthquake that brings down the utility pole or even a spark from a nearby tree that starts a wildfire.

Assuming a similar level of damage to homes and structures in the future and similar costs to the City for response and cleanup, and assuming that the fires occur every thirty years, the no-action alternative could result in future devastation of approximately

$1 billion: property destruction and loss, structural loss, vital services loss, injury and loss of life, including residents, animals, and fire-fighting personnel.

The no-action option does nothing to reduce or eliminate future risk to City residents or damage to property or the need for emergency response; and it does not offer a means to reduce or eliminate the hazard that could bring devastating destruction to the Rolling Hills, Rancho Palos Verdes, and Rolling Hills Estates communities.

In essence, the City has no viable option but to attempt to underground as much of the overhead utility lines and remove as many wooden poles as possible to reduce the risk of potential fires from the many hazards previously mentioned, as well as to avoid a wildfire disaster cutting off vital services (electricity and communications).

PROJECT MANAGEMENT

The City has a Project Team who will manage the tasks and contractors and monitor and report on progress, including proposed accountability measures as seen in Table 2.

Table 2: Project team for the proposed undergrounding project.

Team Member	**Responsibility**	**Contact Information**
Yolanta Schwartz	Director of Planning: Oversee the project	310 377-1521
Robert Ciccarelli	Rule 20 Project Management, Southern California Edison: Oversee the design, engineering and construction of the project	714-430-7842
Julia Stewart	Senior Planner: Project Manager; administration of grant; monitor and reporting	310-377-1521

PROBLEMS ADDRESSED

In the Rolling Hills Local Hazard Mitigation Plan, the process used describes the causes and characteristics of each hazard and what part of the facilities, infrastructure, and environment may be vulnerable to each specific hazard through a Calculated Priority Risk Index (CPRI). (Source: Rolling Hills Local Hazard Mitigation Plan).

Table 3: Calculated Priority Risk Index Ranking for Rolling Hills region. (Source: Emergency Planning Consultants)

Hazard	Probability	Weighted 45% (x. 45)	Magnetic Severity	Weighted 30% (x.3)	Warning time	Weighted 15% (x.15)	Duration	Weighted 10% (x.1)	CPRI Ranking
EQ: Newport-Inglewood Fault	3	1.35	3	0.9	4	0.60	1	0.1	2.95
EQ: Palos Verdes Fault	3	1.35	3	0.9	4	0.60	1	0.1	2.95
Land Movement	2	0.90	2	0.6	4	0.60	1	0.1	2.20
Wildfire	4	1.80	3	0.9	4	0.60	2	0.2	3.50
Drought	2	0.90	2	0.6	1	0.15	4	0.4	2.05

The table above indicates a generalized perspective of the community's vulnerability of the various hazards according to extent (or degree), location, and probability with four (4) as the highest probability and one (1) as the lowest probability. The probability of a wildfire in Rolling hills is the highest probability with a probability of a four (4) and next, an earthquake with the probability of a three (3).

FIRE HAZARD

With its many steep canyons and open scrub-covered hillsides, the Palos Verdes Peninsula area has always been vulnerable to the hazards associated with brush fires.

The City of Rolling Hills has declared a local emergency on two occasions:

- June 25, 1973 – A brush fire disaster that occurred on June 22, 1973 destroyed ten homes within the “Flying Triangle” and “Southfield” areas.
- September 14, 2009 – A brush fire disaster that occurred on August 27, 2009 in the southeast portion of the City.

In June 1973, the Peninsula News reported a wildland fire that was the most destructive to date that burned the Palos Verdes Peninsula. It was started by two youths playing with fireworks in Rancho Palos Verdes and spread east into the “Flying Triangle” and “Southfield” areas of Rolling Hills where it destroyed ten (10) homes and five (5) barns. The fire shifted west and burned into the Portuguese Bend area of Rancho Palos Verdes and destroyed three (3) more homes. In all, the 1973 fire consumed a total of 900 acres and raged for 28 hours before it was finally extinguished.

The most recent fire in Rolling Hills was on August 27 and 28, 2009, when a wildfire burned through approximately 230 total acres. The fire is believed to have originated from wildlife interference and was exacerbated by wind in the Portuguese Bend Nature Reserve in Rancho Palos Verdes where 165 acres were charred. The remaining 65 acres were burned in Rolling Hills. Dozens of homes were threatened and

approximately 1,200 residents were forced to evacuate. (City of Rolling Hills Local Hazard Mitigation Plan, pgs. 78-79.)

The Very High Fire Hazard Severity Zone (or “Zone”) was first established in the City of Los Angeles in 1999 and replaced the older “Mountain Fire District” and “Buffer Zone.” The “Zone” was carefully determined according to California State Law.

Very High Fire Hazard Severity Zone

State law requires that all local jurisdictions identify very high fire hazard severity zones within their areas of responsibility. Inclusion within these zones is based on vegetation density, slope severity and other relevant factors that contribute to fire severity. The map above is the Palos Verdes Peninsula in the Los Angeles County Zone and, as seen in the map, the entire City of Rolling Hills is located in the Zone.

Table 4: Fires in Rolling Hills. (City of Rolling Hills Local Hazard Mitigation Plan)

Date	Type or Extent of Damages	Indirect Costs
10/1923	Burned 4,000 acres and killed 18 horses costing approximately $10,000 (in 1923 dollars) in damages	Evacuation of people
09/1945	Grass fire near Crest Rd. that destroyed one home and caused $50,000 (in 1945 dollars) in damages	Evacuation of people
06/1967	45 acres charred in the Portuguese Bend area	Evacuation of people
06/1973	Destroyed 13 homes and 5 barns. Consumed a total of 900 acres and raged on for 28 hours with a cost of $1.43 million	Evacuation of people
8/28-8/29, 2009	230 total acres charred	1,200 residents were forced to evacuate
Southern California Counties Fires		
10/21/2003 – 11/4/2003	Cedar Fire: Raged across SoCal burning 739,597 acres, 3631 homes, 36 commercial properties and 1,169 outbuildings were destroyed. Injured 246 people and 24 people died.	Evacuation of residents. At the height of the siege, 15,631 personnel were assigned to fight the fires.
10 – 11/2007	500,000 acres burned, 17 people died, 140 people injured, 3069 homes and other buildings destroyed. The electrical power, telecommunications systems, and water sources destroyed.	Hundreds of thousand people evacuated. Transportation disrupted for several days, and numerous road closures

Table 4 gives an overview of the most destructive fires in the Rolling Hills area. The fall of 2003 marked one of the most destructive wildfire seasons in California history. Between October 21 and November 4, twelve (12) separate fires raged across Southern California in Los Angeles, Riverside, San Bernardino, San Diego, and Ventura counties. The massive “Cedar Fire” in San Diego County alone consumed 2,800 homes and

burned over a quarter of a million acres. Altogether over 739,597 acres burned; 3,631 homes, 36 commercial properties, and 1,169 outbuildings were destroyed; 246 people were injured; and 24 people died, including one firefighter. At the height of the siege, 15,631 personnel were assigned to fight the fires. (State of California, “Governor’s Blue-Ribbon Panel Fire Commission Report to the Governor,” 2004).

Just four years after the “Fire Siege of 2003” in 2007, again in late October, Southern California experienced an unusually severe fire weather event characterized by intense, dry, gusty Santa Ana winds. This weather event drove a series of destructive wildfires that took a devastating toll on people, property, natural resources, and infrastructure. Although some fires burned into early November, the heaviest damage occurred during the first three days of the siege when the winds were the strongest.

During this siege, 17 people lost their lives, ten (10) were killed by the fires outright, three (3) were killed while evacuating, four (4) died from other fire siege related causes, and 140 firefighters, and an unknown number of civilians were injured. A total of 3,069 homes and other buildings were destroyed, and hundreds more were damaged. Hundreds of thousands of people were evacuated at the height of the siege.

The fires burned over half a million (500,000) acres, including populated areas, wildlife habitat, and watershed. Portions of the electrical power distribution network, telecommunications systems, and even some community water sources were destroyed. Transportation was disrupted over a large area for several days, including numerous road and highway closures.

Both the Governor of California and the President of the United States personally toured the ongoing fires. Governor Schwarzenegger proclaimed a state of emergency in seven counties before the end of the first day. President Bush quickly declared a major disaster. While the total impact of the 2007 fire siege was less than the disastrous fires of 2003, it was unquestionably one of the most devastating wildfire events in the history of California.
(Source:http://www.fire.ca.gov/fire_protection/downloads/siege/2007/Overview_Introduction.pdf.)

Contributing factors to the severity of the fires is the weather and winds. The winds that are commonly referred to as the “Santa Ana” winds occur during the fire season which is typically from June to November. This “fire weather” that is characterized by hot dry weather and high winds, result in low fuel moisture in vegetation. The most severe fire protection problem in the area is wildland fire during Santa Ana wind conditions. Fire is at its peak of danger in the City of Rolling Hills during the late summer and fall months, especially when Santa Ana weather conditions prevail. Plant fuels pose the greatest threat during this period are those located on the south-facing slopes.

The City of Rolling Hills is exposed to brush fire hazards from both outside and within the City’s jurisdiction. Brush fire hazards along border areas of the City consist of the following:

1. the southern boundary with Rancho Palos Verdes, within the Klondike Canyon-Flying Triangle area and eastward, downslope of the Southfield Drive area;
2. the eastern boundary with Rancho Palos Verdes in the George F. Canyon area;

3. the Portuguese Bend Reserve and canyon area; and
4. the western boundary with Rolling Hills Estates.

(Source: City of Rolling Hills General Plan Safety Element).

EARTHQUAKES

Southern California has a history of powerful and relatively frequent earthquakes, dating back to the powerful 1857 San Andreas Earthquake, which generated substantial damage to the relatively few buildings that existed at the time. According to seismic research, large magnitude (8.0+) earthquakes occur on the San Andreas Fault every 50 to 300 years with an average interval of roughly 140 years. Other lesser faults have also caused very damaging earthquakes since 1857. Notable earthquakes in regions close to Rolling Hills include the 1933 Long Beach Earthquake, the 1971 San Fernando Earthquake, the 1987 Whittier Earthquake and the 1994 Northridge Earthquake.

Los Angeles County is therefore a hotbed of seismic activity due to the presence of over 50 active and potentially active fault segments, an undetermined number of buried faults, and multiple blind-thrust faults. All of these faults are capable of producing severe earthquakes, downed transmissions lines, and (therefore) fires. As with all communities in the Palos Verdes/Long Beach area, the City of Rolling Hills is located in an especially seismically-active area, even by Los Angeles County standards.

As seen in in Figure 3 in the “Supplemental Documentation” section of this application, Rolling Hills is vulnerable to future earthquake disasters. The faults that form the source of such earthquakes are numerous in the Rolling Hills area. Earthquakes that could

affect the City would most likely originate from the San Andreas, Newport-Inglewood, or Puente Hills Faults. These faults are close enough in proximity or expected to generate strong enough shaking that could affect the City.

In 2012, LSA Associates completed an environmental impact report for the City of Rolling Hills, which largely centered on the community's vulnerability to earthquakes and landslides. The table below was printed in the report and summarizes its findings with respect to the likelihood and impact of future major earthquakes.

Table: Relative Likelihood and Impact of Selected Major Earthquakes on the City of Rolling Hills Estates

Fault Name	**Occurrence**	**Max. Credible Earthquake[1]**	**Modified Mercalli\ Intensity[2]**	**Approximate Distance from City**
San Andreas	Moderate	7.5-8.0	VII-VIII	35 mi
Whittier	Low	7.3	VII-VIII	23 mi
Newport-Inglewood	Low	6.9	VII-VIII	9 mi
Palos Verdes	Low	7.0	IX-X	Northeast portion
Malibu Coast	Low	6.9	VI-VII	20 mi
Cabrillo	Low	6.6	VII-VIII	Western portion
Santa Monica	Low	6.7	VI-VII	20 mi
Redondo Beach	Low	6.4	VI-VII	25 mi

Source: City of Rolling Hills Estates, General Plan, Public Safety Element (1992).

[1] Maximum Credible Earthquake each fault is predicted capable of generating, and the likelihood of such an earthquake occurring within the next 100 years. The probabilities were ranked as high, moderate, and low as follows: High: greater than 50 percent; Moderate: 10 to 50 percent; Low: less than 10 percent.

[2] Intensity is based on the Modified Mercalli Intensity, which is defined in Table 4.5.B.

As stated in LSA Associates' environmental impact report, the intensity of ground shaking during an earthquake depends largely on geologic foundation conditions of the materials comprising the upper several hundred feet of the earth's surface.

Peak ground motion parameters that might be generated at the project site by the maximum credible earthquake have been estimated for active faults within the 60 mi search radius for the project area. Using deterministic analysis, the “maximum” earthquake resulting in the highest peak horizontal accelerations at the site would be a magnitude 7.0 event (total size of\ the earthquake) on the Palos Verdes Fault. Ground fissuring has been documented on hillside areas within the City in recent earthquakes, and surface rupture of the onshore Palos Verdes or Cabrillo Fault segments is credible. (LSA Associates, Inc, “Draft Environmental Impact Report,” June 2012)

Although Rolling Hills is too small to garner earthquake reports specific to the community, the adjacent City of Rancho Palos Verdes is not. According to EarthquakeTrack.com, Rancho Palos Verdes experienced the following earthquake activity of at least 1.5M on the Richter scale as of August 29, 2018: (Source: https://www.earthquaketrack.com/us-ca-rancho-palos-verdes/recent)

- 1 earthquake in the past 24 hours
- 17 earthquakes in the past 7 days
- 28 earthquakes in the past 30 days
- 217 earthquakes in the past 365 days

Because Rancho Palos Verdes is adjacent to Rolling Hills, and Rolling Hills is located on high ground, the aforementioned seismic activity is highly relevant.

Andreas Fault Zone

The San Andreas Fault Zone extends from the Gulf of California northward to the Cape Mendocino area where it continues northward along the ocean floor. The total length of the San Andreas Fault Zone is approximately 750 miles. The activity of the fault has been recorded during historic events, including the 1906 (M8.0) event in San Francisco and the 1857 (M7.9) event between Cholame and San Bernardino, where at least 250 miles of surface rupture occurred. These seismic events are among the most significant earthquakes in California history. Geologic evidence suggests that the San Andreas Fault has a 50 percent chance of producing a magnitude 7.5 to 8.5 quake (comparable to the great San Francisco earthquake of 1906) within the next 30 years.

A study published in 2006 in the journal Nature found that the San Andreas fault has reached a sufficient stress level for an earthquake of magnitude greater than 7.0 on the moment magnitude scale to occur. This study also found that the risk of a large earthquake may be increasing more rapidly than scientists had previously believed. Moreover, the risk is currently concentrated on the southern section of the fault, i.e. the region around Los Angeles, (Fialko, Yuri (2006)). "Interseismic strain accumulation and the earthquake potential on the southern San Andreas fault System" (PDF). Nature. 441 (7096): 968–971)

Newport-Inglewood Fault Zone

Locally, the Newport-Inglewood Fault System passes by dangerously close to Rolling Hills, as shown Figure 3 in “Supplemental Documentation.” This is the most significant seismic feature in the area and is considered seismically active. The 1933 Long Beach

earthquake resulted from activity on this fault. Within the Newport-Inglewood Fault System, five faults have been identified in and in the immediate vicinity of Rolling Hills: the Cherry Hill Fault, Pickler Fault, Northeast Flank Fault, Reservoir Hill Fault, and Wardlow Fault. These faults are generally in a northwest-to-southeast alignment. The Wardlow Fault is a pre-quaternary fault that has not ruptured in at least 2 million years and is therefore considered inactive. All other faults are considered active.

The Newport-Inglewood Fault System is a nearly linear alignment of faults extending 45 miles along the southwestern side of the Los Angeles basin. It can be traced as a series of topographic hills, ridges, and mesas from the Santa Monica Mountains to Newport Beach, where it trends offshore. Structures along the zone of deformation act as groundwater barriers and, at greater depths, as petroleum traps. Continuing seismic activity has been evidenced most prominently in recent times by the 1920 Inglewood and 1933 Long Beach earthquakes.

The Cherry Hills segment of the Newport-Inglewood fault lies near the southeastern margin of the Dominguez Hills. The Cherry Hills fault is a part or a much longer Newport-Inglewood fault system that extends from north of the Baldwin Hills to south of Newport Beach. A 2017 study by American Geophysical Union (https://bit.ly/2Pk99lK) concluded that, together, the Newport–Inglewood Fault and Rose Canyon Fault could produce an earthquake of 7.3 or 7.4 magnitude. In 1933, the fault ruptured in neighboring Long Beach and produced a magnitude-6.4 earthquake and a maximum Mercalli intensity of VIII (Severe) that killed 115 people. (This earthquake was the

impetus for the California State Legislature passing the Field Act, which mandated that school buildings must be earthquake-resistant.)

Rolling Hills is located in an area of dense brush and other vegetation. The fuel in the canyons, if ignited, could threaten residences upslope with wind-carried cinders and direct ignition from uncontrolled fires. The Portuguese Bend Reserve is a natural habitat and as such, the natural vegetation (which is not fire resistant) acts as a virulent fuel for any small fire. In addition, the Reserve geography is such that firefighting is incredibly difficult with inaccessible cliffs and extreme slopes. Not only is the entire City of Rolling Hills threatened by wildfires, the county and surrounding counties could be threatened by a wildfire, that could take a devastating toll on Southern California.

Electrical power lines pose a significant fire hazard if knocked down due to high winds or an earthquake. The City of Rolling Hills faces a constant threat from fire following an earthquake. These often-spontaneous ignitions are caused by ruptured gas mains and service lines, damaged or fallen overhead transmission or distribution power lines, wooden poles, unbraced or inadequately braced gas or electric appliances, and equipment in general.

General Information
Table of Contents

GI 001 General Specifications for Underground Structures

Scope GI 001.1 General Specifications

1.0 General Agreement

The Master Agreement entered into between the contractor and the Company will form the basis for all work performed, and the specifications, requirements, and conditions described herein are in addition thereto and will also be a part of the basis for all work performed and will apply in the manner set forth herein unless otherwise modified or described in the working drawings or in the agreement for a specific installation.

2.0 Working Drawings

2.1 Quantity and Type of Structures and Facilities

Each working drawing will indicate the structures and facilities to be installed both by type and quantity. Charges to the Company for work performed will be subject to adjustment, as agreed upon in each instance between the contractor and an authorized representative of the Company whenever modification is made in either the type or quantity of such structures or facilities.

2.2 Location of Structures and Facilities

Each working drawing will also indicate the preferred location of structures and facilities to be installed. Deviations in such preferred locations may be made as agreed upon between the contractor and an authorized representative of the Company. Adjustments in charges to the company based upon such deviations will be limited to those for changes in type and quantity of structures and facilities as set forth in above, provided, however, that this restriction will not apply to deviations made solely for the convenience of the Company.

2.3 Obstructions in the Vicinity

Each working drawing will also indicate, to the extent known by the Company, the approximate plan of obstructions in the vicinity. It will be the contractor's responsibility solely and entirely to determine the actual location of all obstructions, whether known to the Company or not by means of test holes and otherwise as may be necessary or advisable.

3.0 Structures and Accessories

3.1 Structure Requirements and Drawings

Each structure or facility installed will be in accordance with, and will include accessories or meet other requirements as set forth in, the reference page listed below. The current revision, as of date of working drawing, of each structure drawing, accessory drawing, or other reference drawing, is the only one applicable; use of a previously-issued drawing is contingent upon such drawing still being the current revision.

3.2 Vaults

Each vault will be in conformance with requirements given in VA 400.

3.3 Manholes

Each manhole will be in conformance with requirements given in MH 300.

3.4 Pull Boxes

Each pull box will be in conformance with requirements given in HP 210.

3.5 Handholes

Each handhole will be in conformance with requirements given in HP 200.

3.6 Slab Boxes

Each slab box will be in conformance with requirements given in SS 530.

3.7 Conduit Banks

Each conduit bank and terminal will be in conformance with requirements given in CD 100.

3.8 Subsurface Structure

Each subsurface structure will be in conformance with requirements given in SS 560.

4.0 Material Furnished by the Contractor

The following materials are furnished by the contractor (without cost to the Company) for installation in accordance with Company specifications.

- Ground rods, clamps, and wire
- Ground connectors for HDG grounding

5.0 Material Furnished by the Company

The Company will only furnish copper wire for buried neutral in trenches. This material is furnished by the Company without cost to the contractor for installation in accordance with Company specifications, and will be made available at the individual Service Centers.

6.0 Referenced Specifications

The following specifications when referenced in this specification are part of this specification. Unless otherwise stated, references are to the latest revision. This specification will stand in case of conflicts unless otherwise noted in a specific section.

- Standard Specification for Public Works Construction—referenced as “Greenbook” in this specification
- American Society for Testing Materials (ASTM)

7.0 Cover Bolts

Apply silicone grease to cover bolts before installation to minimize removal difficulties.

8.0 Warning Signs and Company Identification

Warning signs indicating high voltage shall be installed on an interior surface, or barrier if present, inside the entrance of vaults, manholes, handholes, pad-mounted transformer compartments, and other above-ground enclosures containing exposed live parts above 750 V. Such warning signs shall also be

installed on an exterior surface of all such pad-mounted transformer compartments and other above-ground enclosures. Such signs shall be clearly visible to a person in position to open any such access door, other opening, or barrier.

9.0 Excavation

Prior to excavating, the California One Call Law requires any person planning to conduct any excavation shall contact Underground Service Alert, at least two working days (48 hours), but not more than 14 calendar days, prior to commencing that excavation. Dial 811 for Underground Service Alert.

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GI 010 Specifications for Joint Construction

Scope GI 010.1 Specifications for Joint Construction

1.0 General

The specifications of each party will be complied with, for their respective portions of construction jointly entered into, except as otherwise detailed on working drawings or as provided for in the agreement for the work being done.

2.0 Working Drawings

Working drawings will indicate the structures and facilities to be installed both by type and quantity. Modifications will be made only as authorized by the respective party or parties concerned.

3.0 Divisions of Cost

Costs will be proportioned as agreed upon in each instance, except as otherwise provided for; changes, adjustments, and similar matters will be in accordance with established practice between the contractor and each respective party.

4.0 Service Laterals

The contractor will mark location of all service laterals at time of installation.

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GI 020 General Specifications for Concrete and Reinforced Concrete

Scope GI 020.1 General Specifications for Concrete and Reinforced Concrete

1.0 Materials

1.1 Portland Cement

Cement used will be Portland Cement in accordance with ASTM Designation: C 150, as last adopted or revised. Type II low alkali, or Type V, low alkali Portland cement will be used unless otherwise specified by the Company.

1.2 Concrete Aggregates

A. Aggregates will conform to ASTM Designation: C 33 (as last adopted or revised) with respect to general characteristics, soundness, and freedom from deleterious material. Aggregate source will have a petrographic analysis less than one year old on file at the batch plant. Petrographic analysis will be per ASTM C295. If indicated, further tests per ASTM C289 or C586 should be performed.

B. Fine aggregates will be well graded and washed natural sand without shale, alkali, mica, coated grains, or soft or flaky particles. The fine aggregate will conform to requirements of Section 200-1.5 of the Greenbook for Portland Cement concrete.

C. Coarse aggregates will be clean, sound gravel, well graded in sizes. Coarse aggregate will conform to Section 200-1.4 of the Greenbook for the maximum size of the mix.

1.3 Water

Water used in mixing concrete will be clean, clear, potable, and free of materials likely to be harmful to the concrete.

1.4 Metal Reinforcement

A. Reinforcing bars will be a deformed type and will conform to ASTM A615 Grade 40 or Grade 60 billet steel. Steel will be accurately bent, placed, tied, and supported in accordance with the requirements of Manual of Standard Practice of the Concrete Reinforcing Steel Institute (CRSI).

B. Welded wire fabric will conform to ASTM A185 or A497.

1.5 Admixtures

Calcium chloride will not be used. Liquid admixtures meeting the requirements of ASTM C494, Type B, D, F, or G may be used in the mix in accordance with the manufacturers recommendations. Class F flyash meeting the requirements of ASTM C618 may be used in amounts of between 20% and 25% of total cementitious weight.

All concrete mixes for the utility boxes shall contain 4.0 gallons of calcium nitrite corrosion inhibitor per cubic yard of concrete, conforming to ASTM C494, Type C or Type S, Calcium Nitrite based with a solids content of 30%. The corrosion inhibitor shall be added in accordance with the manufacturer's instructions and/or recommendations.

1.6 Ready Mixed Concrete

Ready mixed concrete will conform to ASTM Designation: C94-44 as last adopted or revised. There will be furnished with each load, a legible certificate describing the mix, identifying the materials used, and stating the quantity of additional water, if any, which may be added to the mix to bring it to the specified water-cement ratio. Edison inspector is to check mix receipt prior to pour of all poured-in-place structures.

2.0 Concrete Designs

2.1 Measurements

A. Measurements are to be determined at a temperature of 70° F. When the ambient differs, the values will be corrected to 70° F.

B. Water content is the gross amount of water in the mix, including surface water contained on the aggregate.

C. See Section 2.4 (Sheet 4) for Slump Measurements.

D. Deviations in specifications require variations in the design and are limited to those detailed in Section 2.3 (Sheet 3), Variations Required for Deviations.

2.2 Mix Designs

Table GI 020–1: Concrete and Reinforced Concrete Mix Designs

Mix Designation	SCE UG 4000	SCE UG 4001	SCE UG 4002
Water/Cement Ratio	0.45 ± .05	0.45 ± .05	0.45 ± .05
Minimum Cement Content			
Sacks per Cubic Yard	5.5	6.3	6.0
Maximum Size Coarse Aggregate	1-1/2"	1-1/2"	3/4"
Aggregate Gradation Class[a/]	B	C	–
% Passing Sieve Size			
2"	100		
1-1/2"	95–100	100	
1"	80–96	95–100	100
3/8"	64–80	77–93	95–100
3/8"	40–52	50–70	70–88
No. 4	35–45	39–51	40–53
No. 8	28–38	31–41	31–43
No. 16	21–31	22–32	22–34
No. 30	10–20	12–22	14–24
No. 50	3–9	3–9	4–10
No. 100	0–3	0–3	0–3
No. 200	0–2	0–2	0–2
Allowable Slump-Inches[b/]			
Maximum	3	5	3
Minimum	2	3	2
Strength Requirements (psi at 28 days)	3,000	3,000	3,000
Compaction Method	Vibrator	Hand	Vibrator

[a/] Per Greenbook 201-1.3.2
[b/] Slump measured before addition of water reducing admixtures

2.3 Variations Required for Deviations

A. Angular Coarse Aggregate

1. Angular coarse aggregate may be used in a mixture designed for vibrator compaction provided.
   - Fine aggregate percentage of total aggregate, by absolute volume, is increased 5%.
   - Cement content is increased 0.7 sack per cubic yard and the water-cement ratio is kept within the specified.

2. Angular coarse aggregate may be used in mixtures designed for hand compaction without increase in cement content provided that the fine aggregate percentage of total aggregate, by absolute volume, is increased 5%.

B. Grading of Aggregates

1. No variation allowed in grading of fine aggregates without special authorization.

2. The “well graded” characteristics of both fine and coarse aggregates will be such as to yield a smooth, plastic, cohesive mass of wet concrete when the water content and slump are within specified limits. Cement content will be increased as necessary to obtain this result whenever the aggregate grading used does not produce such results.

C. Slump

Slump may be increased to a maximum of four inches provided that the cement content is increased at the rate of 1/3 sack of cement per cubic yard of concrete for each inch or fraction beyond the maximum slump specified and provided the required water-cement ratio is maintained. Higher slump values will be achieved by use of water reducing admixtures when required to ease placement and consolidation.

D. Water-Cement Ratio

No deviations except slabs on grade may have a water-cement ratio of 0.50 and minimum cement content of five sacks per cubic yard.

E. Hand-Compaction

Concrete will not be hand-compacted unless directed by SCE. Concrete requiring hand-compaction will utilize water reducing admixtures.

2.4 Slump Measurements

A. Slump is to be determined in accordance with ASTM Designation: C143-39 or the latest revision thereof.

B. Slump is to be determined at 70° F. When measurements are made at any other temperature the slump value used will be that measured after correcting as follows:

1. At high temperatures, add to the measurement obtained at the rate of 3/8 inch for each 10° F, but not more than 3/4 inch total correction.

2. At lower temperatures, subtract from the measurement obtained at the rate of 1/2 inch for each 10° F below 70° F. See Section 2.12 (Sheet 7) regarding extreme temperatures.

C. Edison inspector may take slump tests prior to pour.

D. Slump measurements are prior to addition of water reducing admixtures.

2.5 Application of Designs

A. For structures with wall thickness of five inches or more:

SCE UG #4000—Floors, decks, and slabs

SCE UG #4001—Floors, decks, and walls

B. For structures with wall thickness less than five inches:

SCE UG #4002

C. For conduit envelopes:

see CD 100.

2.6 Forms and Supports

A. Forms will be smooth and in accordance with Greenbook Section 303–1.3, surface (if wood forms) treated with oil, well braced, and must be tight enough to prevent any leakage of mortar. They will hold the concrete in such manner that the finished structure conforms to the shape and dimensions specified. Tape or other impervious membrane covering will be used as necessary to obtain tight form joints.

B. Earth surfaces, where used as forms, will be covered with a tough impervious membrane such as sisal kraft or a similar material. No such covering is required under floors except where the earth is porous and very dry or where ground water is present. Pours against earth surfaces will be allowed provided earth is dampened well prior to pour to avoid earth from removing moisture in concrete mix.

C. Supports resting on the earth, and to become a part of the finished structure, will be precast concrete equal to that in the structure.

D. Supports bearing on forms, and to become a part of the finished structure, will be iron or steel in appropriate shapes.

E. Duct separators will be precast concrete or a suitable inorganic material, either ceramic or pressed, to serve the purpose.

2.7 Placing Reinforcement

A. Metal surfaces will be clean and free of rust, scale, or other coatings such as might reduce bonding of the concrete.

B. Reinforcement will be securely tied and in place before any concrete is poured in the structure except under the following conditions:

1. Where cold joints are specified or allowable.

2. Roof sections having been assembled and placed may be removed as an entire section, temporarily, if this is feasible.

C. Tolerances for steel clearance and spacing:

1. Clearances of three inches or less will not be reduced but may be increased by one-half inch. Other clearances may vary one-half inch either way.

2. Location of reinforcing elements may vary up to two inches from that specified provided clearances are maintained and provided clear separation between adjacent parallel pieces, of less than two inches, is not reduced.

D. Steel spacing pieces, chairs or similar supporting devices, will be used as necessary to assure conformance of steel locations specified within the allowed tolerance.

2.8 Preparation of Cold Joints

A. The concrete surface to be joined will be clean and free of loose material.

B. Sika seal or other specified material will be applied to form a sealing membrane.

2.9 Placing Concrete

A. Concrete will be handled from mixer to place of final deposit as rapidly as practicable by methods which will prevent segregation or loss of ingredients. It will be placed in such manner as to avoid any appreciable flowing after the final depositing.

B. The placement will be continuous and at such rate that cold joints do not develop excepting where cold joints are specified or optional. Where cold joints occur, an approved bonding agent will be used.

C. Steel and forms will be kept clean and free of concrete until covered with the pour.

D. Platforms, drop chutes, sheeting and similar devices must be used as necessary to prevent segregation.

E. Unless deposited by tremie or pipe (6 inches minimum diameter) concrete for vault and manhole walls will first be deposited at roof level, then shoveled and dropped carefully straight down in such manner that segregation does not occur.

2.10 Compaction

A. Vibration compaction will be used with each design so specifying. Such compaction will be done with an approved, internal type, mechanical vibrator having a speed not less than 4,500 Revolutions-Per-Minute (RPM), operated and moved continuously by an experienced operator and augmented by rod tamping as necessary. Successive layers not more than 24 inches deep

will be placed and well compacted before placing each following layer. The vibrator will be inserted at about 18-inch intervals, will penetrate each layer completely and will penetrate a preceding layer at least 12 inches.

B. Hand compaction will be used with each design so specifying. Such compaction will be done with tamping rods being worked continuously through the wet mass as placed. Successive layers of not more than 12 inches will be placed and well compacted before placing each following layer. Tamping rods will be used at the rate of one for each two yards per hour maximum rate of pouring. At least one man-hour of tamping will be performed in each two yards of concrete poured in vaults and manholes. At least one man-hour of tamping will be performed in each four yards poured for conduit bank envelopes or pull boxes.

C. Compaction in the specified manner and at the required rate will be performed in all concrete poured. This includes floors and roofs of structures as well as walls and includes pads and conduit bank envelopes.

2.11 Surface Finishes

A. Rock pockets and other imperfections on exposed surfaces will be patched and troweled to match the surrounding surface.

B. Floors will be given a float or broom finish to provide a uniform but slightly rough surface.

C. When a finish course is poured on concrete which has set, it will be at least two inches thick and in addition to the specified floor thickness.

2.12 Protection while Pouring and Curing

A. Concrete will be placed with the temperature of the mix between 40° F and 90° F.

B. When the ambient air temperature is below 40° F the concrete will be held to a temperature between 60° F and 90° F until set. Concrete will not be placed during freezing temperatures without special authorization.

C. Protection will be provided as necessary to guard against freezing, premature drying, and any other conditions likely to be injurious to the concrete, until the specified strength is developed.

D. Concrete will be cured in accordance with Greenbook Section 303-1.10. Curing will be continued for at least seven days except that this time may be reduced as authorized by the Company when “high early strength” cement is specified.

2.13 Removal of Forms

A. Supporting forms will be left in place until the concrete has developed sufficient strength to be self-supporting without damage to itself. Outside shoring may be removed after 24 hours.

B. The following are the minimum periods during which forms will be left in place when Type II cement is used and curing conditions are favorable:

1. 100 hours for roof supports

2. 100 hours for wall supports where the soil is not self-supporting

3. 75 hours for wall supports where the soil is self-supporting

2.14 Purpose of Specification

The foregoing specifications are designed to produce a durable concrete with more than the specified minimum strength. The values and procedures specified are guides to be followed to obtain the required results and do not preclude in any manner such additional measures as may be necessary or advisable to secure such results, regardless of the results of any tests which may be made.

2.15 Rejected Installations

An installation may be rejected when:

A. Samples taken while pouring, or core samples taken within three months thereafter, fail to meet the required strength.

B. The specified concrete thickness has not been met in the structure.

C. It is found that concrete has not been properly consolidated resulting in a porous structure.

D. The water-to-cement ratio of the concrete is in excess of that specified regardless of strength or other tests made.

E. Concrete has been poured with insufficient concrete cover over the reinforcing steel.

F. Other requirements of this specification or other referenced specifications have not been met resulting in a structure which cannot take specified loads, may deteriorate, or which (for water-resistant structures) cannot keep water out.

GI 025 Steel Shape Dimensions

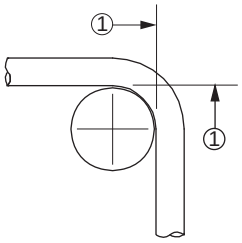
Scope GI 025.1 Steel Shape Dimensions

In general, inside and inside-to-inside dimensions will be shown. Multiple dimensions to a bend of less than 90 degrees in a piece will all be based upon one designated point on the inner surface of such bend. The diagrams illustrate the manner in which most common details will be dimensioned. These practices are applicable where this sheet is used as reference unless details are shown in some other manner.

1.0 Right Angle Bends

Show dimension to point of tangency extended as indicated by Dimension #1, Figure GI 025–1 (Sheet 1).

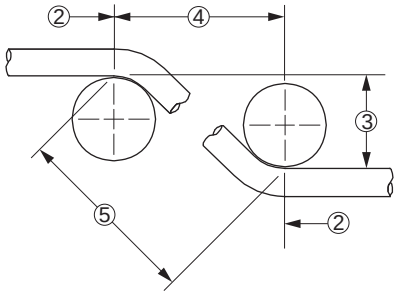
Figure GI 025–1: Steel Shape Dimensions — Right Angle Bends



2.0 Bends Less than 90°

Show dimension to point of tangency as indicated by Dimension #2, Figure GI 025–2 (Sheet 1).

Figure GI 025–2: Steel Shape Dimensions — Right Angle Bends



3.0 Offsets with Parallel Members

3.1 Show offset between points of tangency extended as indicated by Dimension #3, Figure GI 025–2 (Sheet 1).

3.2 Show run between perpendiculars to points of tangency as indicated by Dimension #4, Figure GI 025–2 (Sheet 1).

3.3 Omit Dimension #5.

4.0 Offsets with Non-parallel Members

4.1 Show run as distance between perpendiculars, to direction of dimension, which pass through the points of tangency. This dimension will be similar to #4 in Figure GI 025–2 (Sheet 1) except one perpendicular will not pass through the center of a shaping pin.

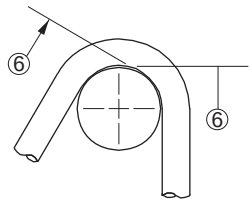
4.2 Show diagonal dimension as indicated by Dimension #5, Figure GI 025–2 (Sheet 1).

4.3 Omit Dimension #3.

5.0 Bends More than 90°

Show dimension to perpendicular tangent to far face of shaping pin as indicated by Dimension #6, Figure GI 025–3 (Sheet 2).

Figure GI 025–3: Steel Shape Dimensions — Bends Less Than 90°



GI 030 Specification for Precast Reinforced Concrete Structures

Scope GI 030.1 Specification for the Structural Design and Manufacturing of Precast Reinforced Concrete Structures

1.0 General

1.1 This specification outlines the minimum requirements for precast reinforced concrete vaults, manholes, slab boxes, pullboxes, and other wet cast precast structures. The structures will also conform to all applicable UGS standards and the requirements for the appropriate regulatory agencies.

1.2 A copy of design calculations and drawings approved by a civil engineer registered in California will be submitted for review and approval.

1.3 Exceptions to this specification will be made only with written authorization from SCE.

1.4 Vaults and manholes will be designed and constructed to be water tight.

1.5 Structure sizes, openings, recesses, and other accessories will conform to VA 400 (for vaults) and MH 300 (for manholes), HP 210 (for pullboxes) and SS 500 (for slab boxes and other subsurface structures).

1.6 All submittals for review and approval will be made to the Customer Service Engineering section of the Southern California Edison Company.

1.7 The structures will be warranted for one year against design and manufacturing defects including those resulting from poor workmanship and materials.

1.8 The structure design of precaster's vaults and manholes will be approved by Los Angeles County Department of Public Works, Design Division, Bridge Section.

1.9 All metal lifting devices cast into the internal or external surfaces of vaults or manholes by the precaster for handling or setting purposes will be hot-dipped galvanized or made from stainless steel.

2.0 Structural Design

2.1 Structural design will conform to the latest edition of the Standard Specifications for Highway Bridges as adopted by the American Association of State Highway and Transportation Officials (AASHTO) and ASTM C 857, the Standard Practice for Minimum Structural Design Loading for Underground Precast Concrete Utility Structures.

2.2 The following loading assumptions are for vaults and manholes in general use on the SCE system. Designs for specific loading conditions may be submitted on an individual basis.

A. The design vehicle loads will be HS-20; traffic can approach the structure from any direction.

B. A 30% increase of design live load will be used for impact loading.

C. There will be a minimum of 24 inches of cover measured from the flow line of the gutter. See notes in Scope GI 030.2 (Sheet 6).

D. Structures will be designed for vertical and lateral soil pressure based on the conditions found in the field and considering the rigidity of the structure. However, the minimum lateral soil pressures that may be used are 35 pounds per cubic foot (pcf) equivalent fluid pressure above the water table and 80 pcf equivalent fluid pressure below the water table.

E. The groundwater table will be assumed to be three feet below the finished surface.

2.3 The load factor method of design will be used.

2.4 Fatigue stress limits will be applied to traffic loads in accordance with section 1.5.38 of the ASSHTO specifications.

2.5 All vault and manhole walls, floors, and ceilings will have a minimum thickness of five inches.

3.0 Reinforced Concrete

3.1 Criteria for Normal Weight Concrete

A. Aggregates will meet the requirements of ASTM C 33. A certificate of compliance will be submitted by the aggregate producer. A petrographic analysis of aggregate will be submitted at least yearly, and with each change of aggregate source.

B. Concrete mix designs will be approved by a civil engineer registered in California, and will be submitted to SCE for review and approval.

C. ASTM C 150, Type II low alkali, or Type V low alkali cement will be used.

D. Class F flyash meeting the requirements of ASTM C 618 will be used. The recommended amount of flyash will not be less than 20% or more than 25% of the total cementitious weight (cement and flyash).

E. The minimum compressive strength of concrete will not be less than 4,500 pounds per square inch (psi) in 28 days as determined by the American Society for Testing Materials (ASTM) method C 39-72 Standard Method of Test for Compressive Strength of Cylindrical Concrete Specimens. Test specimens will be cured as per ASTM C 31. Slabs on grade may have 3000 psi concrete at 28 days.

F. The maximum water-cement or water-cementitious ratio will be 0.45.

G. Liquid admixtures meeting the requirement of ASTM C 494, type B, D, F, or G may be used in the mix in accordance with manufacturer's recommendations. No other admixtures will be used unless otherwise approved by SCE.

All concrete mixes for the utility boxes shall contain 4.0 gallons of calcium nitrite corrosion inhibitor per cubic yard of concrete, conforming to ASTM C494, Type C or Type S, Calcium Nitrite based with a solids content of 30%. The corrosion inhibitor shall be added in accordance with the manufacturer's instructions and/or recommendations.

H. No additives containing calcium chloride or any other material that will produce corrosive ions will be used in the concrete. All additives will be submitted to SCE for approval prior to use.

I. The concrete finish will be free of rock pockets and honeycombed areas. The interior walls and ceilings and exterior surfaces exposed to view will be smooth. The exterior surface below grade will be dense and uniform, but a slight roughness is not objectionable. Floors will have a form finish. Air holes over 3/8 inch deep will be patched.

J. The concrete will be cured per the AASHTO specifications. Other methods may be acceptable if approved by SCE in writing.

3.2 Lightweight Concrete

Lightweight concrete is not approved for use in the manufacturing of any SCE structure.

3.3 Concrete Protection for Reinforcement

A. The concrete protection (cover) for reinforcement will be 1-1/2 inches minimum for main reinforcing bars and 1 inch minimum for stirrups and ties, except at joints where there can be 1 inch minimum cover for main bars from concrete surfaces that will be treated with a waterproofing material.

B. The cover to diameter of bar ratio will be a minimum of 2.0.

C. The concrete cover will be measured from the surface of the concrete to the outside surface of the bar.

3.4 Reinforcing Steel

A. Reinforcing steel will conform to the AASHTO specifications.

B. Reinforcing steel will be accurately bent and placed and firmly tied.

C. Reinforcing steel will be adequately supported in place by use of plastic or stainless steel chairs, or concrete blocks manufactured from concrete conforming to Section 3.1 (Sheet 2) of this specification. If concrete blocks are used, the tie wires will have a minimum cover of 3/4 inch.

D. Welding of reinforcing steel will conform to the Structural Welding Code, Reinforcing Steel (AWS D1.4-79) of the American Welding Society.

4.0 Identification

All structures will be identified with manufacturer's name, date of manufacture, and nominal size or identifying number permanently attached to an interior surface of each precast concrete section.

5.0 Quality Control and In-Plant Inspection

5.1 The supplier will have a quality control program including testing and inspection to ensure the quality of the product.

5.2 Precasters will submit a quality control plan for the Company's approval. Any proposed changes to the precaster's existing quality control plan will be submitted to Edison for review and approval before implementation. This plan will include 1) controlling concrete components (cement, aggregate, and water), 2) testing of concrete, 3) controlling concrete mixing, 4) controlling concrete placement and form stripping, 5) inspecting rebar, 6) controlling bending and placing of rebar, 7) inspection of the finished product, and 8) documenting and filing of test and inspection results.

5.3 In-Plant inspection by SCE

A. Vaults and manholes will be identified through all phases of construction as one that is to be used by Edison.

B. Edison inspectors will have access and assistance in inspecting the work. Inspectors will not be required to give prior notice of inspections.

5.4 The acceptance criteria for precast concrete vaults and manholes is given in GI 031.

5.5 Variations and dimensional tolerances will be those specified in the latest ASTM C858, the Standard Specification for Underground Precast concrete Utility Structures, except that concrete cover over reinforcing steel will not be less than specified in Section 3.4 (Sheet 3) of this specification.

6.0 Installation

6.1 No precast structure will be shipped to the jobsite before the concrete has attained its full design strength.

6.2 The SCE inspector will be notified by the installing contractor 48 hours prior to the field installation of vaults and manholes.

6.3 Excavation and Rock Base

A. All excavations will be in accordance with safe construction practices.

B. Excavations for vaults and manholes will be of a depth to provide the minimum/maximum setting cover depths over the outside top of the structure roof as specified in notes in Scope GI 030.2 (Sheet 6).

C. A 6-inch minimum thickness of crushed aggregate, 3/8" x 3/4" crusher run rock, mechanically compacted will be placed below the vaults and manholes and extend to the sides of the excavation. Pullboxes will have 6 inches of compacted rock, 3/8" x 3/4", as a base to assure uniform pressure distribution.

D. The bottom of the excavation will be free of standing water.

E. There will be a minimum of 6 inches clearance from the outside perimeter of the structure walls to all side surfaces of the excavation.

6.4 Backfill around and over the structure will be with a minimum of one sack per yard sand cement slurry, 1-1/2 sacks per yard for Cal Trans jobs. The surface elevation of the backfill slurry will not vary more than one foot around the perimeter of the structure as it is being placed.

6.5 Instructions

A. If the manufacturer does not erect the structure, he will forward installation instructions and recommendations to the installing contractor.

B. The contractor will install the structures in accordance with the manufacturer's instructions and recommendations.

6.6 Joints

A. All joints will be waterproofed using methods and sealing materials that have been specified by SCE. Changes to approved methods and materials will be submitted to SCE 90 days prior to use.

B. Prime paint all joint surfaces of tunnel vaults prior to delivery to insure that approved joint sealing material will be retained in joint during structure installation.

C. For tunnel type structures use mechanical or air wrenches per precast concrete supplier instruction, retightening after backfill.

D. Joint sealing materials will be placed on each flat surface of the joint. Approved joint sealing material will be a minimum of 1-1/4-inch diameter. Approved joint sealants, General Sealant #5, RUB'R-NEK T-L-M, or equivalent.

E. Vault/Manhole necking joints will have a 1/4 inch coat of bonding adhesive applied on the outside surface of the joint, after being adjusted to grade and before backfilling. The bond adhesive will extend two inches above and below each joint. (May be applied inside the structure when adjusting grade on existing vaults and manholes.)

UBA-18	2-88-1
ASTC Polymers	Saf-T-Co Supply
3207 W. Warner Avenue	1300 E. Normandy Place
Santa Ana, CA 92704	Santa Ana, CA 92705
(714) 966-2893	(714) 547-9975

6.7 Separation and Reinstallation of Structures

A. Caution must be taken when it becomes necessary to remove a precast vault or manhole section after it has been set in place with joint sealants.

B. When attempting to separate and/or lift structure sections, the individual section weight can greatly increase due to the adhesion of the joint sealant to the adjacent section. This increased weight can exceed the design limits of the precaster's cast-in-place lifting devices.

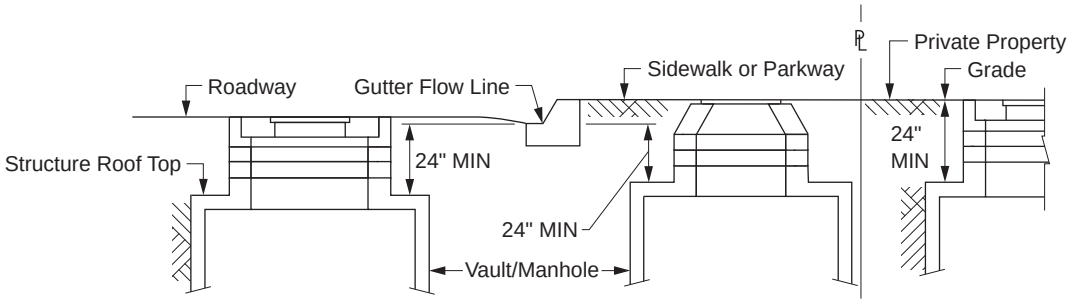
C. Contact the precast manufacturers for recommended methods of separating the individual sections.

Scope GI 030.2 Setting Cover Depths for Tunnel/Tub Style Vaults and Manholes

Note(s):

1. Minimum setting cover depths for tunnel and tub style vaults and manholes installed in roadway or sidewalk/parkway locations is 24 inches. This dimension is taken from the gutter flow line to the outside top of the structure roof. Vaults or manholes placed in private property will have a minimum setting depth of 24 inches from grade to the outside top of the structure roof.
2. Maximum place cover depth is 48 inches, measured from grade to top outside surface of structure roof. If structure cover depths over 48 inches are required, contact the Division Underground Planning Supervisor.
3. The listed structure minimum/maximum setting cover depths are to Edison's requirements. Local governmental agencies may require greater cover depths than stated.

Figure GI 030–1: Setting Cover Depths for Tunnel/Tub Style Vaults and Manholes



GI 031 Acceptance Criteria for the Installation of New Precast Vaults and Manholes

Scope GI 031.1 Acceptance Criteria for the Installation of New Precast Vaults and Manholes

1.0 Purpose

To set criteria for acceptability and repair of new precast concrete vaults and manholes from manufacture through the warranty period.

2.0 General

2.1 All repairs referred to in this criteria will be performed by the manufacturer in his yard and the supplier[1/] in the field.

2.2 Repairs will be performed in accordance with SCE's MC 860.

2.3 These procedures assume an adequate design is used per good, standard engineering practices, with sound materials and good workmanship conforming to the design. This criteria will not limit SCE's recourses if the above assumptions are not met.

2.4 Supplier will provide a one (1) year warranty on all repairs and patches.

2.5 The supplier will not be held responsible for damage that can be determined to be caused by unusual conditions outside of his control.

3.0 Actions While in Manufacturer's Yard

3.1 Neck, Covers, Roofs, Walls, and Floor Slabs.

A. Cracks .012 inch or wider will be repaired.

B. Any spalled concrete .375 inch deep or greater or exposed rebar will be repaired.

3.2 Major defects or multiple patches can be cause for rejection.

4.0 Actions from Delivery through the Warranty Period

4.1 Cover

A. The supplier will replace the cover if cracks develop, regardless of size, that run from one edge to another edge or to the manhole opening, or appears to go through the concrete or through a ladder insert.

B. The supplier will replace the cover if a crack .062 inch wide or greater develops.

C. All other cracks and concrete spalls .375 inch deep or greater will be repaired by the supplier.

[1/] The supplier is the installing contractor.

4.2 Roofs, Walls, and Floor Slabs

A. Cracks .012 inch wide or greater will be repaired.

B. Concrete spalls .375 inch deep or greater or exposed rebar will be repaired.

C. SCE's Engineering Department will determine the remedial action to be taken by the supplier for cracks .125 inch wide or greater, or extensive smaller cracking.

4.3 Water intrusion due to structure quality problems, or improper installation, can be cause for rejection.

GI 035 Maximum Allowable Tolerances for Installed Precast Vaults and Manholes (Inside Joint Surfaces)

Scope GI 035.1 Maximum Allowable Tolerances for Installed Precast Vaults and Manholes (Inside Joint Surfaces)

Figure GI 035–1: Maximum Allowable Tolerances for Installed Precast Vaults and Manholes (Inside Joint Surfaces)

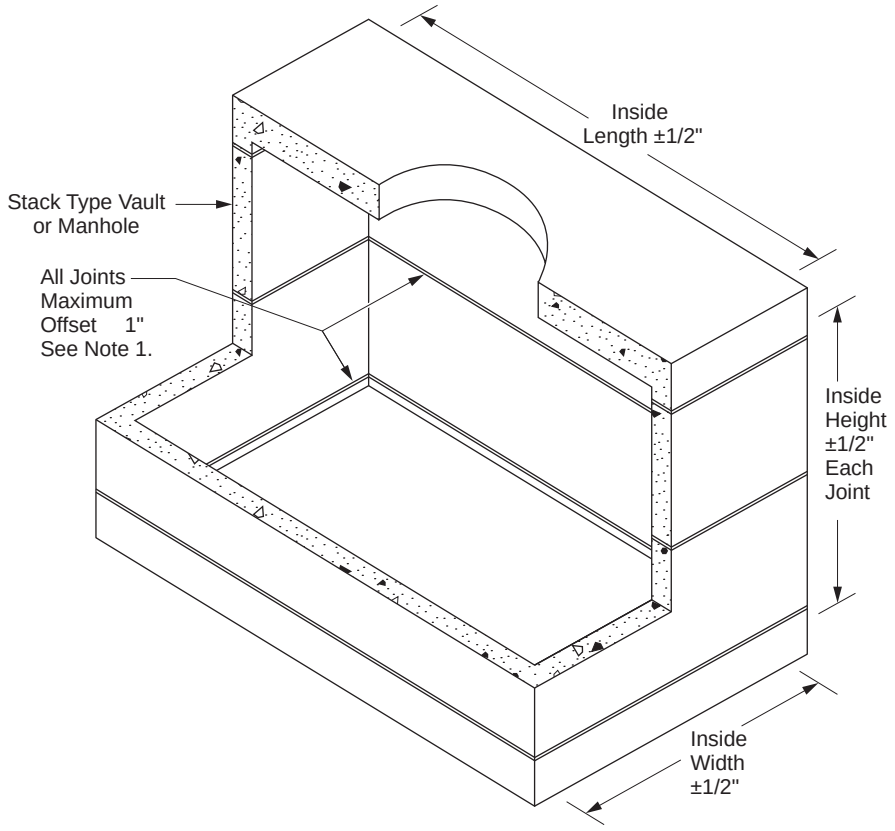


Figure GI 035–1.1

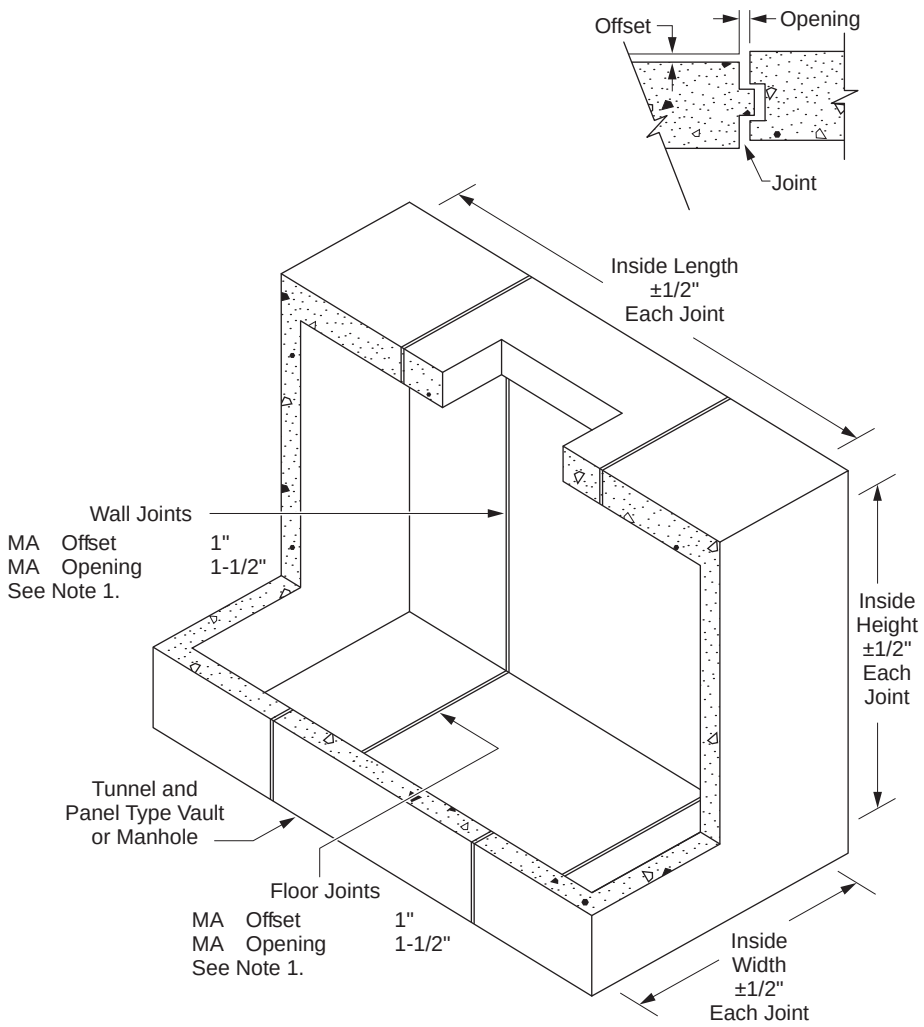


Figure GI 035–1.2

Note(s):

1. Openings between 1/2 inch and 1-1/2 inches and offsets between 1/2 inch and 1 inch will be feathered and grouted to an acceptable tolerance. Any values over these stated require the structure to be reset or replaced.
2. Due to manufacturing processes the top and bottom sections (stack type) and end sections (tunnel type) have an acceptable 1/2 inch per foot taper.
3. Corner tolerance on panel type structures is 90° ± 1°.
4. Bowing, in or out, in excess of 1/2 inch on any surface is not acceptable.
5. Tolerance on Unistrut or equal is ± 1/8 inch center to center.
6. Any grouting of joints will be done after backfill and compaction, and after the sealant has been allowed to completely compress.
7. All repair and replacement is to discretion of Company.

GI 040 General Specifications for Pull Rope and Pull Tape

Scope GI 040.1 General Specifications for Pull Rope and Pull Tape

1.0 General Description

These specifications cover the minimum requirements for pull ropes and pull tapes to be installed in the Southern California Edison Company's conduit systems. The pull rope and tape are generally provided and installed by company contractors, but may be installed by others. The rope or tape will be used by the Company to pull "bull" lines into the conduit system during the installation of electrical distribution cable.

2.0 Material

Pull ropes will be manufactured from a polypropylene material. The rope may be either braided or twisted. The pull rope may be single-strand or three-strand, but not two strand. Pull tapes will be manufactured from a woven polyester.

The rope and tape must maintain its strength and flexibility when exposed to water and corrosive conditions over extended periods of time.

3.0 Size and Strength

For conduit runs, pull ropes will have a minimum diameter of 3/8 inch and a minimum average tensile strength of 3,000 lb. A contrasting tracer color (one or more yarns in a single strand) may be included to identify the manufacturer. Use a minimum of 3/8 inch diameter pull rope regardless of conduit run lengths.

Pull tape shall be used for conduit sizes smaller than 4 inches, and will be approximately 3/4-inches wide with a 2,500 lb tensile breaking strength. The tape will include accurate sequential footage markings for measuring conduit run length. Pull rope is required in conduit sizes of 4", 5", and 6". Where the conduit is stubbed out to be picked up later, the pull tape must be secured outside the stub end of the conduit per UGS CD 148, Note 5.

4.0 Reel and Spool Marking

All reels and spools will be clearly marked to show manufacturer and size in inches. The standard Edison pull tape reel size is 1,500 feet (SAP 10148986).

5.0 Suppliers

Maydwell & Hartzell

General Electric Supply

The Shamrock Company (714) 547-4422

6.0 Pull Tape Manufacturers

Neptco

Redback

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GI 045 General Specifications for Plowing Cable

Scope GI 045.1 General Specifications for Plowing Cable

These general specifications are intended as a guide to minimum requirements for installing direct buried cable by the plow method. All specific requirements shown on working drawings, governmental permits, and all applicable city, county, and state ordinances will also be complied with.

Reference to Company in this specification will mean the Southern California Edison Company; reference to contractor will mean the organization performing the specified work.

1.0 Contractor Responsibilities

1.1 The contractor will furnish all equipment, labor, tools, and supervision necessary to place the cable.

1.2 Any damage to substructures, equipment, or plant which is caused by the contractor will be repaired by and at contractor's expense and to the satisfaction of the Company.

1.3 Any settling or washout of the trench area due to improper cable installation within one year of acceptance of work will be repaired by and at the contractor's expense and to the satisfaction of the Company.

1.4 The contractor will transport Company furnished material as referenced on the working drawing from the designated storage area to the job site. The contractor will be responsible for the safe keeping of all cable, reels, and all other material after leaving the storage area. Following completion of work, all reels and excess material not installed are to be returned to the storage area.

2.0 Construction Requirements

2.1 Installation of the cable will generally be from the higher elevation to the lower elevation when terrain is mountainous.

2.2 Cable will be installed to 36 inches minimum depth. Minimum cover at water crossings (specified on the working drawings) will be 60 inches. At those locations, sand bagging to a height of two feet above grade will extend the full width of the watercrossing.

2.3 Cable route will be pre-ripped to minimum cable depth and in the same direction as the cable is to be installed.

2.4 Cable route that cannot be ripped will be trenched prior to plowing to permit continuous cable installation.

2.5 All cable will be installed in the same trench with the initial plow pass.

2.6 Water deflection berms (dikes) consisting of sand bags will be installed at 60° to the trench on all slopes at intervals not to exceed ten feet vertical difference in elevation or as directed by the Company. Berms or dikes will extend beyond the trench area sufficiently to prevent water flowing back into the trench. Trench plugs, consisting of stabilized earth (one part cement to ten parts earth) in burlap sacks, will be installed at locations specified on the working drawings. Plugs will extend the full depth of the cable trench.

When applicable, water deflection berms will also meet or exceed all local ordinances or other requirements of local governing agencies.

2.7 Marker posts are to be installed 30 inches above grade at angle points in route, at both sides of each road crossing, and otherwise at intervals not to exceed 500 feet. Posts and signs will be furnished by the Company.

2.8 A trench will be provided at splicing points to permit make up of splices. Unless specified otherwise, an 8" x 36" x 36" deep concrete splice box will be installed at each splice point. Splice boxes will be buried 6 to 12 inches with a 3-inch diameter, 5-foot length HDG pipe marker placed 5 feet to the side and 30 inches above grade at each box. Each marker will be identified on the side facing the box with the words “Splice Box, 5 Feet” stamped into the pipe.

2.9 Excavations, not to exceed five per mile, may be required by the Company to determine depth and bedding of the cable.

2.10 Upon completion of plowing, excavation, and backfill, the ground surface will be restored to a condition as least as good as it was previous to start of work. All applicable local compaction requirements will be met. If required by permit, the route will be replanted or seeded.

3.0 Plow Requirements

3.1 Plows will have sufficient drawbar pull to install cables in one pass (after ripping). Raising and lowering the feed shoe to by-pass rock or other obstacles will not be permitted.

3.2 Plow will accommodate a minimum of two reels with maximum diameters of 78 inches, maximum widths of 54 inches and an approximate weight of 3,000 lb each. A third reel, when required, may be towed on a separate reel dolly.

3.3 Cable will not be permitted to pass over stationary guides, rollers, or sheaves which will permit a bend radius of less than 15 times the cable diameter.

3.4 Cable will be fed into the ground in a manner to prevent stress upon the cable.

3.5 Cable reels will have a tension governing device to pay out cable evenly (without tension). A reel tender operator may be substituted.

3.6 Cable will be protected from damage at all times. Guards will be provided over engine exhausts and the feed shoe fabricated such that the cable will not bear or “ride” upon rock or other obstructions.

4.0 Company Responsibilities

4.1 The Company will furnish all necessary permits.

4.2 The Company will furnish materials as specified on working drawings at the designated storage areas.

4.3 The Company will perform all cable splicing and testing.

4.4 The Company will inspect work in progress. The contractor is responsible for informing the Company 24 hours in advance of any cable installation. Final acceptance will be based on electrical tests of cable performed by the Company.

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GI 050 Specification for Abandoning Substructures

Scope GI 050.1 Specification for Abandoning Substructures

1.0 Substructures

1.1 All portions of the substructure within four feet of grade will be removed, unless otherwise specified.

1.2 Sufficient holes will be knocked through the floor to allow satisfactory drainage of the fill material.

1.3 The substructure will be filled completely with sand or other material acceptable to the inspector.

1.4 Vents will be cut off a minimum of one foot below ground level and filled. When filling is not practical, the vent will be capped.

NOTE Some abandoned materials may be reusable. Consult the Underground Construction Manager for status of covers, grates, and so on. Any plant to be abandoned will be called out on the working drawing.

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4.5 GEOLOGY AND SOILS

Introduction

This section provides a discussion of the existing geologic and soils environment and an analysis of potential impacts from implementation of the proposed project. This section also addresses the potential for structural damage to occur due to the local geology underlying the proposed project area, as well as slope stability, ground settlement, soil conditions, and regional seismic conditions. The following geology and soils information is based on publicly available documents and the following located in Appendix E:

- Geotechnical Feasibility Comments, Rolling Hills Estates, California, Pacific Soils Engineering, Inc. January 19, 2006.
- Review of Geotechnical Feasibility Report, Rolling Hills Estates Property, California. Arroyo Geotechnical. February 9, 2007.
- Preliminary Retaining Wall Design Parameters, Conventional, Reinforced Masonry Block Walls, Rolling Hills Estates, California, Pacific Soils Engineering, Inc. March 16, 2007.
- Geotechnical Review 40-Scale Conceptual Grading Plan, Rolling Hills Estates, California, Pacific Soils Engineering, Inc. April 27, 2007.
- Preliminary Geotechnical Evaluation Stability of Existing Conditions, Rolling Hills Estates, California, Pacific Soils Engineering, Inc. May 18, 2007.
- Geotechnical Review Letter, Rolling Hills Estates, California. Arroyo Geotechnical. May 30, 2007.
- Response to Review Comments, geotechnical review 40-Scale Conceptual Grading Plan, Rolling Hills Estates, California, Pacific Soils Engineering, Inc. August 9, 2007.
- Geotechnical Review (2) Letter, Response to Review Comments, Rolling Hills Estates, California, Arroyo Geotechnical. August 28, 2007.
- Review of Revised Project Grading Plan and Tentative Map for Tract No. 67553- Laing Homes Mixed Use Project, Willdan Engineering. October 13, 2008.
- Response to Review Comments, geotechnical review 40-Scale Conceptual Grading Plan, Rolling Hills Estates, California, Pacific Soils Engineering, Inc. November 25, 2008.
- Geotechnical Comments Raised by City Engineer, Rolling Hills Estates, California, Pacific Soils Engineering, Inc. December 2, 2008.
- Geotechnical Review Letter, Response to Review Comments, Willdan Geotechnical. January 12, 2009.
- Geotechnical Summary, Field Survey and Preliminary Evaluation of Observed Distress, City of Rolling Hills Estates, California, Pacific Soils Engineering, Inc. March 25, 2010.
- Geotechnical Review of Geotechnical Reports Associated with the Proposed Tie Back Anchors below Indian Peak Road for the Proposed Rolling Hills Estates Project, California, Zeiser Kling Consultants, Inc. May 7, 2010.

- Response to Review Comments from the City of Rancho Palos Verdes, Proposed Commercial and Residential Project, 655–683 Deep Valley Drive and 924–950 Indian Peak Road, City of Rolling Hills Estates, California, Petra Geotechnical, Inc. December 29, 2010.
- Geotechnical Review of Geotechnical Reports Associated with the Proposed Tie Back Anchors below Indian Peak Road for the Proposed Rolling Hills Estates Project, California, Zeiser Kling Consultants, Inc. February 22, 2011.

4.5.1 Existing Environmental Setting

Current Project Site. The site is currently developed with six office buildings, a commercial development, several retaining walls, asphalt parking lots, and roads. Office buildings and the parking lot are located on a relatively flat pad area in the eastern portion of the site. This pad is located 20–30 feet (ft) below Indian Peak Road and Crenshaw Boulevard. Manufactured slopes descend to the north and east from this pad area. These slopes are on the order of 85–105+ ft in height and are inclined at slope ratios that vary from 1.5:1 to 2:1 (horizontal to vertical). The slopes are irrigated and landscaped with ivy, shrubs, and trees. Several concrete terrace drains have been constructed on the fill slopes. A three-story office building is located on the western portion of the site. The building fronts and is accessed from Deep Valley Drive and is built into the slope that descends from Indian Peak Road.

Regional Geology. Rolling Hills Estates is located on the Palos Verdes Peninsula, which rises from the floor of the Los Angeles Basin to a 1,200 ft elevation in the Palos Verdes Hills. The Peninsula spans an area of nine miles (mi) (north to south) by 4 miles (mi) (east to west), encompassing over 22,000 acres (ac). The Palos Verdes Hills, crossing through the southeastern portion of the City, provide elevations ranging from 300 ft in the canyons and gullies located throughout the area to 1,200 ft, the highest point on the Peninsula.[1] The project site is situated in the high central portion of the Palos Verdes Hills.

Faults and Seismic History. A fault is described as a crack in the earth's crust resulting from the displacement of one side with respect to the other. An "active" fault is defined by the State of California as having had surface displacement within the Holocene time (i.e., within the last 11,000 years). The San Andreas Fault, where the western Pacific plate meets with the eastern North American plate, is the State's largest and most active fault. Seismologists have determined that the San Andreas Fault is moving at a rate of up to 2 inches per year. A "potentially active" fault is defined as showing evidence of surface displacement during the Quaternary time (i.e., during the last 1.6 million years). These terms are used by the State primarily for use in evaluating the potential for surface rupture along faults and are not intended to describe possible seismic activity associated with displacement along a fault. These definitions are not applicable to blind thrust faults that have only limited, if any, surface exposures.

[1] City of Rolling Hills Estates, General Plan, Open Space and Recreation Element, 1992.

Active or potentially active faults of seismic concern in the region include the San Andreas Fault, Newport–Inglewood Fault Zone, Whittier Fault, Palos Verdes Fault, Santa Monica–Malibu Coast Fault, Cabrillo Fault, Torrance–Wilmington Fault, and the Redondo Canyon Fault. Figure 4.5.1 shows the project site proximity to the surrounding fault systems. According to the General Plan, Public Safety Element, the Palos Verdes, Cabrillo, Redondo Canyon, Newport–Inglewood, Santa Monica–Malibu Coast, Whittier, and Torrance–Wilmington Fault systems are most likely to cause high ground accelerations in the City. The relative likelihood and impact of these fault systems is provided in Table 4.5.A. Table 4.5.B provides a description of the modified Mercalli scale of earthquake measurement. A brief discussion of each of the fault systems most likely to affect the project area is presented below.

Table 4.5.A: Relative Likelihood and Impact of Selected Major Earthquakes on the City of Rolling Hills Estates

Fault Name	Occurrence	Max. Credible Earthquake[1]	Modified Mercalli Intensity[2]	Approximate Distance from City
San Andreas	High-Moderate	7.5–8.0	VII–VIII	35 mi
Whittier	Moderate	7.3	VII–VIII	23 mi
Newport–Inglewood	Low	6.9	VII–VIII	9 mi
Palos Verdes	Low	7.0	IX–X	Northeast portion
Malibu Coast	Low	6.9	VI–VII	20 mi
Cabrillo	Low	6.6	VII–VIII	Western portion
Santa Monica	Low	6.7	VI–VII	20 mi
Redondo Canyon	Low	6.4	VI–VII	25 mi

Source: City of Rolling Hills Estates, General Plan, Public Safety Element (1992).

[1] Maximum Credible Earthquake each fault is predicted capable of generating, and the likelihood of such an earthquake occurring within the next 100 years. The probabilities were ranked as high, moderate, and low as follows: High: greater than 50 percent; Moderate: 10 to 50 percent; Low: less than 10 percent.

[2] Intensity is based on the Modified Mercalli Intensity, which is defined in Table 4.5.B.

Table 4.5.B: Modified Mercalli Intensity Scale[1]

I Tremor not felt.
II Tremor felt by persons at real or in upper floors of a building.
III Tremor felt indoors. Vibrations feel like a light truck passing by; may not be recognized as an earthquake. Hanging objects swing.
IV Hanging objects swing. Vibrations feel like a heavy truck passing by, and the jolt feels like a heavy ball striking the walls. Standing cars rock. Windows, dishes and doors rattle. Glasses clink and crockery clashes. Wooden walls and frames crack in the upper range of scale IV.
V Earth felt outdoors, and its direction can be estimated. liquids are disturbed, some spilled. Small unstable objects are displaced or upset. Doors swing, closing and opening. Shutters and pictures move. Pendulum clocks stop, start, or change rate.
VI Earthquake felt by everyone. Windows, dishes, and glassware are broken. Knick-knacks and books fall off shelves; pictures fall off walls. Furniture moves or is overturned. Weak plaster and masonry Dare cracked.
VII Steering of motor cars is affected. Partial collapse of masonry C structures. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting and falling of chimneys, factory stacks, monuments, towers, and elevated tanks. Frame structures, if not bolted to foundation, shift. Loose panel walls are thrown out; decayed pilings brake off.
VIII Damage slight in specially designed structures though considerable in unreinforced buildings.
IX Masonry D structures destroyed, masonry C heavily damaged, sometimes completely collapsed. General damage to foundations. Frame structures, if not bolted, shift off their foundations. Underground pipes are broken. Conspicuous cracks in the ground.
X Most masonry and frame structures are destroyed. Most foundations destroyed. Some well-built wooden structures and bridges are destroyed. Serious damage to dams, dikes, and embankments. Underground pipelines are seriously damaged. Large landslides.
XI Underground pipelines completely out of service. Many and widespread disturbances of the ground, including broad fissures, earth slumps and land slips in soft, wet ground. Sea-waves (tidal waves or tsunami) of significant magnitude. Severe damage to wood-frame structures, especially if near to the shock center.
XII Damage is nearly total. Lines of sight and level are distorted. Objects are thrown into the sir. Great and varied disturbance of the ground, including numerous shearing cracks, landslides, large rockfalls, and numerous and widespread slumping of river banks.
Masonry A: Good workmanship, mortar and design. Reinforced, especially laterally, and bound together with steel, concrete, etc. Designed to resist lateral forces.
Masonry B: Good workmanship and mortar. Reinforced, but not designed to resist lateral forces.
Masonry C: Ordinary workmanship and mortar. Not reinforced or designed to resist horizontal forces.
Masonry D: Weak materials, such as adobe; poor mortar. Low standards of workmanship; weak horizontally.
These masonry types are not to be confused with the conventional Class A, B, and C construction types

Source: City of Rolling Hills Estates, General Plan, Public Safety Element (1992).

[1] Modified and rewritten after Richter (1958) and Toppozada and others (1988) using Rossi-Forel's Intensity Scale.

Palos Verdes Fault. The northwest-trending Palos Verdes Fault Zone extends from Santa Monica Bay across the northeast side of Palos Verdes Peninsula to a location offshore from San Clemente, a distance of approximately 60 mi.

Cabrillo Fault. The Cabrillo Fault is a minor structure within the northwest-southeast-trending Palos Verdes Fault Zone. The Cabrillo Fault is a right normal fault with a northerly

dip and a total length of 12.5 mi. It extends offshore near the San Pedro Breakwater. The United States Geological Survey ([USGS] 2004) and the Southern California Earthquake Center (2002) indicate that the Cabrillo Fault is active.

Redondo Canyon Fault. The Redondo Canyon Fault is located offshore, extending from just north of Palos Verdes Peninsula and into Redondo Canyon.

Newport–Inglewood Fault Zone. This fault system is northwest-trending and generally right lateral. The fault consists of several near-vertical breaks traceable from the Santa Monica Mountains southeast to offshore from Newport Beach. Based on historic earthquakes and evidence of Holocene activity, the fault zone is considered active.

Santa Monica–Malibu Coast Fault. The Santa Monica–Malibu Coast Fault system is an east-west-trending fault system along the southern margin of the western Santa Monica Mountains. The Santa Monica Fault segment is considered to be potentially active.

Whittier Fault. The Whittier Fault generally runs from State Route 91 northwest along the foothills of Yorba Linda to the mouth of Tonner Canyon and on to the Whittier Narrows Recreation Area. This fault created the Puente–Chino Hills. The last major release near this fault was a magnitude 5.9 in 1987.

Torrance–Wilmington Fault. The Torrance Wilmington Fault is a newly postulated blind thrust fault and fold system occurring under Palos Verdes Peninsula. The Torrance–Wilmington Fault has been reported to be a potentially destructive, deeply buried fault that underlies the Los Angeles Basin. Little is known about this fault, and its existence is inferred from the study of deep earthquakes. Although information is still too preliminary to be able to quantify the specific characteristics of this fault system, this fault appears to be responsible for many of the small-to-moderate earthquakes within Santa Monica Bay and easterly into the Los Angeles area.

Seismic Mapping. Beginning in 1997, the California Division of Mines and Geology (CDMG) has produced "Seismic Hazard Evaluation Reports" for the areas shown on selected USGS topographic maps (7.5-minute series) within the State of California. The stated purpose of these reports/maps is to identify potential seismic hazards for use by city and county planning agencies in their permitting and land use planning processes.

The project site is not located within a currently designated Alquist–Priolo Earthquake Fault Zone, and no Special Studies Zones have been designated within the City.[1]

[1] City of Rolling Hills Estates, General Plan, Public Safety Element 1992.

Seismic Design Standards. The City of Rolling Hills Estates is located within Seismic Zone 4 as specified in the Uniform Building Code (UBC). Seismic design provisions for conventional development, such as residential and commercial development, specify that a building not collapse under seismic loading; therefore, structural and nonstructural damage cannot be precluded. It is seismically and economically infeasible to design earthquake-resistant structures for conventional development. The key is to enforce seismic design provisions with adequate review and inspection to ensure maximum quality construction and optimum design.

Seismic Hazards.

Ground Shaking and Surface Fault Rupture. As the project area is not within a designated Alquist–Priolo Earthquake Fault Zone or Special Studies Area, the primary seismic effects associated with earthquakes are ground shaking and surface fault rupture.

Ground shaking and surface fault rupture would typically be considered to have the greatest potential for damage associated with earthquakes. Ground shaking is characterized by the physical movement of the land surface during and subsequent to an earthquake. Surface fault rupture occurs when fault displacement breaks the ground surface along the historic trace of a fault. These seismic events have the potential to cause destruction and damage to buildings and property, including damage resulting from damaged or destroyed gas or electrical utility lines; disruption of surface drainage; blockage of surface seepage and groundwater flow; changes in groundwater flow; dislocation of street alignments; displacement of drainage channels and drains; and possible loss of life. In addition, ground shaking and surface fault rupture can induce several types of secondary ground failures, including liquefaction and landslides.

The intensity of ground shaking during an earthquake depends largely on geologic foundation conditions of the materials comprising the upper several hundred feet of the earth's surface. Peak ground motion parameters that might be generated at the project site by the maximum credible earthquake have been estimated for active faults within the 60 mi search radius for the project area. Using deterministic analysis, the "maximum" earthquake resulting in the highest peak horizontal accelerations at the site would be a magnitude 7.0 event (total size of the earthquake) on the Palos Verdes Fault.[1]

Ground fissuring has been documented on hillside areas within the City in recent earthquakes, and surface rupture of the onshore Palos Verdes or Cabrillo Fault segments is credible.[2]

1 City of Rolling Hills Estates, General Plan, Public Safety Element 1992.
2 Ibid.

Ground Failure. Secondary earthquake hazards such as liquefaction, lateral spreading, dynamic settlement, and landsliding are generally associated with relatively high intensities of ground shaking. Liquefaction, lateral spreading, and dynamic settlement are associated with shallow ground water conditions and loose, sandy soils or alluvium.

Liquefaction. Soil liquefaction is a phenomenon that occurs during strong ground shaking, most commonly in generally low- to medium-density, saturated, low-cohesion soils, where the soils experience a temporary loss of strength and behave essentially as a fluid. In extreme cases, the soil particles can become suspended in groundwater, resulting in the soil becoming mobile and fluid-like. Most of the City is underlain by consolidated bedrock and is not susceptible to liquefaction.[1] A review of the Seismic Hazard Mapping by the State of California Department of Conservation, Division of Mines and Geology, shows that the project site is not located within a zone of required investigation for liquefaction (see Figure 4.5.2).

According to the General Plan, areas of artificial fill are susceptible to settlement during strong ground shaking. If perched (shallow and confined) groundwater exists within fill areas, liquefaction can occur.[2] Groundwater was not encountered during the exploratory borings conducted as part of the geotechnical review of the subject site. The underlying strata are considered non-water bearing. Slight to moderate seepage was encountered in the exploratory borings and other geotechnical borings at approximately 33.5 ft and at 47.5 ft in the western portion of the site. Seepage is interpreted as perched water that has percolated from the surface along natural discontinuities and is primarily the result of rainfall and landscape irrigation. The geotechnical investigation conducted by Pacific Soils Engineering, Inc. (PSE) (April 27, 2007) concluded that perched water should be anticipated at or near the base of the underlying colluvial soils and in the lower portions of the existing landslide.

Lateral Spreading. Lateral spreading is the horizontal movement of soil masses caused by seismic waves; this movement is usually toward an open face slope or a steep slope that has been weakened by saturation. It occurs as a result of liquefaction of the subsurface soils. Because of the steep slopes in the project area and the artificial fill, there is a potential for lateral spreading as a result of seismic activity.

Slope Creep. Slope creep can be characterized by long-term settlement that can manifest itself in the form of both horizontal and vertical movements. These movements typically are produced as a result of weathering, erosion, prolonged wetting and drying periods, gravity forces, and other natural phenomenon. Slope creep/lateral movement has been attributed to steep slopes located on the proposed project site.

1 City of Rolling Hills Estates, General Plan, Public Safety Element 1992.
2 Ibid.

Subsidence. Subsidence refers to broad-scale changes in the elevation of the land. Common causes of land subsidence are pumping water, oil, and gas from underground reservoirs; dissolution of limestone aquifers (sinkholes); collapse of underground mines; drainage of organic soils; and initial wetting of dry soils (hydrocompaction). Subsidence is also caused by heavy loads generated by large earthmoving equipment.

The project site is not located within an area of known subsidence that may be associated with groundwater or petroleum withdrawal, peat oxidation, or hydrocompaction.

Landslides and Slope Instability. The majority of the City is underlain by shale and siltstone units of the Monterey Formation (Altamira Shale; the Valmonte Diatomite and Malaga Mudstone are confined to north of Palos Verdes Drive). These units are conducive to landsliding and slope instability characteristic of the Palos Verdes Peninsula. Altamira Shale is the predominant bedrock unit that underlies the project site. This unit consists primarily of diatomaceous marine claystone and siltstone, with occasional lenses of thin-bedded sandstone, hard siliceous concretions and tuff beds. This unit is well bedded to thinly laminated. Color is variable but typically ranges from yellowish gray to olive gray to white or pale brown.

The downslope movement of loose rock or soil is a potential effect of strong ground shaking. Earthquake-induced landslides are common in areas where steep slopes expose out-of-slope bedding or where the bedrock is intensely jointed or fractured. Slope instability can also occur when slope faces become unstable because of saturation of slope materials from rainfall or seepage or undercutting of cliffs and banks by natural or human activities.[1]

The natural orientation of major slopes in the City is along northeast-southwest trending canyons. Out-of-slope road cuts may pose a rockfall or landslide threat as a result of strong seismic shaking, including Crenshaw Boulevard along Agua Negra Canyon, Palos Verdes Drive between George F Canyon to the east and Silver Spur Road to the west, and some sections of Hawthorne Boulevard. Extensive bedrock folding in the peninsula can also result in localized out-of-slope cuts in other areas.

A review of the seismic hazard mapping prepared by the State of California Department of Conservation, Division of Mines and Geology, indicates a portion of the project area is located within a designated earthquake-induced landslide zone. For example, the area between Deep Valley Drive south to Crenshaw Boulevard near Indian Peak Road is within an earthquake-induced landslide zone (Silver Spur Graben). Areas just outside of the project limits, on the south side of Indian Peak Road, are located within earthquake-induced landslide zones as well.

[1] City of Rolling Hills Estates, General Plan, Public Safety Element 1992.

The project site is located on the south side of the Silver Spur Graben, which is a down dropped block that forms Deep Valley. The Graben is interpreted to be formed by steeply dipping normal faults, although there is some discussion that the Graben could be the headward expression of a very large, deep landslide feature that encompasses a large portion of the northern flank of the Palos Verdes Peninsula. The Graben is defined by a steep contact between the bedrock on the south and colluvial infill materials to the north. This contact/Graben crosses the site from the northwest to the southeast and subparallels Indian Peak Road.

An active landslide that has recently failed (1997) exists between Indian Peak Road and Deep Valley Road. It is located approximately in the center of the project site and failed toward Deep Valley Drive. The slide encompasses a large portion of the slope area between the parking lot and the three-story office building. The headward portion of the slide, which is defined by an existing 20+ ft high vertical scarp, cuts through the parking lot and the westernmost office building. Temporary fencing encircles the distressed slope areas, and the slope is covered with plastic sheeting and sandbags. Previous studies indicate that the landslide is approximately 70 ft in depth and has a rupture surface, which is oriented to the northeast, dipping at approximately 10 degrees. The landslide material includes artificial fill, colluvial soils, and minor amounts of bedrock. In general, the landslide material can be described as dark brown clay to silt, with scattered rock fragments, that are predominantly gravel-sized. This landslide owes its origin to the saturation of the fill by shallow groundwater infiltration. Therefore, multiple areas within or adjacent to the project site are considered prone to seismically induced landslides (see Figure 4.5.2).

Subsequent to the ground failure of 1997, inclinometers were installed as part of numerous studies that were conducted at the proposed project site. Inclinometers are used to measure cumulative movement over time. Additional inclinometer readings were recorded as part of a study conducted by PSE and was presented in its March 2010 report. Based on these readings, it was concluded that there was no evidence of deep-seated movement on the proposed project site. However, it is recommended that periodic surveys be conducted every 3–4 months.

4.5.2 Methodology

This section addresses the potential for structural damage to occur due to the local geology underlying the project, as well as slope instability, ground settlement, unstable soil conditions, and regional seismic conditions. Geologic/geotechnical conditions affecting the site are summarized from compiled information and analyses.

4.5.3 Thresholds of Significance

The City has adopted significant thresholds for use in evaluating the severity of impacts. These significance thresholds are consistent with Appendix G of the State CEQA Guidelines. Project implementation would result in a significant impact to geologic resources and soils if it would result in any of the following conditions:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving: rupture of a known earthquake fault, as delineated on the most recent Alquist–Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault, strong seismic ground shaking, and seismic-related ground failure, including liquefaction or landslides
- Result in substantial soil erosion or the loss of topsoil
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse
- Be located on expansive soil, as defined in Table 18-1-B of the UBC (1994), creating substantial risks to life or property.

4.5.4 Impacts and Mitigation Measures

The central and eastern portions of the site will be developed with multifamily condominiums or townhouses. The bottom floor retaining walls will be built into the slope and are therefore restrained retaining walls. An approximately 1.5:1 (horizontal to vertical) slope ascends from the upper row of these structures to Crenshaw Boulevard and Indian Peak Road, and a slope that varies in inclination from 1.5:1 to 4:1 (horizontal to vertical) descends from the structures to the existing buildings located on Deep Valley Drive. The western portion of the site will be developed with a four-story podium structure with two underground parking levels. A variable 1.5:1–2:1 design slope descends from Indian Peak Road to the back of this building, which will be built into the slope. Therefore, the backs and sides of the parking levels and the first floor of the building will be defined by a restrained retaining wall on the order of 27+ ft in height (see Figure 3.13, Project Description, for an illustration of the retaining walls).

In addition to the restrained walls at the back of the proposed structures, several unrestrained retaining walls will be constructed throughout the site. Retaining Walls A and C will be located on the west and south perimeters of the western structure. Retaining Wall A is on the order of 10 to 30 ft in height, while Retaining Wall C has a maximum height of 40+ ft. Several other lower-height walls are proposed as part of the condominium development. In addition, shoring walls with/without tie-back anchors will be required within the site for temporary slope stability during excavations for recommended removals and permanent stability after construction.

PSE's geotechnical review concluded the proposed project is considered feasible from a geotechnical standpoint, and the earthwork to create the building pads and slopes depicted on the Conceptual Grading Plan will be free from the detrimental effects of landsliding, settlement, and slippage provided that (1) the grading is conducted in accordance with City Code requirements and recommendations outlined in the geotechnical reports for the proposed development, and (2) applicable building code requirements are incorporated into the design and construction of the project.

The following impacts of the proposed project have been identified based on project characteristics, statutory requirements, and the significance thresholds defined above.

Less Than Significant Impacts.

Subsidence. The project site is not located within an area of known subsidence that may be associated with groundwater or petroleum withdrawal, peat oxidation, or hydrocompaction. Therefore, subsidence impacts are not expected with development of the project, and no mitigation is required.

Liquefaction and Lateral Spreading. Because the project area is comprised of artificial fill and there is the potential for perched groundwater, site-specific geotechnical studies are the only practical and reliable way of determining the liquefaction and lateral spreading potential of specific sites at risk.[1] The geotechnical review prepared for this project by PSE concluded that the site does not have a potential for liquefaction and lateral spreading due to (1) the lack of near-surface groundwater, (2) the planned removal of loose/soft material within the grading limits, and (3) the in-place density of the proposed compacted fill and underlying formation materials. Therefore, liquefaction and lateral spreading impacts are not expected with development of the project, and no mitigation is required.

Seismically Induced Flooding. Seismically induced flooding normally includes flooding due to a tsunami (seismic sea wave), a seiche (wave generated in an enclosed body of water), or failure of a dam/reservoir retention structure upstream of the site. Because the site is located approximately 2.5+ mi from the Pacific Ocean and separated by roughly a 1,000+ ft in elevation and there are no near enclosed bodies of water or dams/reservoirs, the potential for seismically induced flooding is considered low. Therefore, flooding due to seismic activity is not expected with development of the project, and no mitigation is required.

Potentially Significant Impacts.

Ground Shaking. As with all of Southern California, the project area is subject to strong ground motion resulting from earthquakes on nearby faults, including the Palos Verdes and Cabrillo Faults. However, no evidence of active faulting was observed during the field investigations conducted for the geotechnical review by PSE, and no active faults are known to exist along or across the site. The distance from the nearest seismic source to the project site is approximately 3 mi. Ground shaking generated by nearby active fault movement has the potential to damage building foundations and structures. Site-specific geotechnical studies (design-level) are necessary to determine appropriate seismic design provisions for the proposed project. The seismic design provisions presented in the geotechnical review conducted on the subject site would be incorporated into the final design plans. The City Engineer must review and approve final design plans for structural engineering compliance. Ground shaking impacts are mitigated through proper site preparation and design, including

[1] City of Rolling Hills Estates, General Plan, Public Safety Element 1992.

on-site geotechnical investigations and implementation of site-specific geotechnical recommendations and seismic design criteria. Therefore, potential seismic ground-shaking impacts would be reduced to less than significant levels with implementation of Mitigation Measures 4.5-1 (design-level investigation) and 4.5-2 (City review and approval of structural engineering design).

Surface Fault Rupture. As previously described, bedrock faults have been mapped on site as part of the Silver Spur Graben. These faults are interpreted to be inferred traces of onshore extension of the Cabrillo Fault. This fault is not considered active, and as such, the potential for surface rupture on this site is considered very low. However, the proposed project will be required to demonstrate compliance with the UBC with regard to seismic design to prevent adverse surface fault rupture impacts. Seismic design requirements would be fulfilled through incorporation of structural engineering requirements into the design. Therefore, compliance with Mitigation Measures 4.5-1 (design-level investigation) and 4.5-2 (City review and approval of structural engineering design) would reduce potential surface fault rupture impacts to a less than significant level.

Landslides. As described above, landslides have been documented within and adjacent to the project site; therefore, there is the potential for additional landslides to occur. Landslides are attributed to excessive rainfall, introduction of artificial water in the slope (landscaping irrigation/broken water or sewage lines), or improper site design or grading practices. Heavy rainfall often triggers surficial sliding (debris flows and mudflows) along the sides of canyons and on steep slopes.[1] Potential landslide impacts are addressed through proper site preparation and design, including on-site geotechnical investigations and implementation of site-specific grading recommendations and structural engineering design criteria (see Mitigation Measures 4.5-3 and 4.5-5). With implementation of Mitigation Measures 4.5-3 and 4.5-5, project impacts relating to landslides would be less than significant.

Site Soils. PSE's geotechnical review concluded that materials anticipated to be encountered on site during construction include: artificial fill, colluvial soils, landslide debris, and bedrock. These materials lend themselves in varying degrees to debris and mudflows, landsliding, and/or susceptibility to erosion. Therefore, these materials are considered unsuitable for project construction. During grading, all artificial fill, soil, terrace deposits, landslide debris, weathered bedrock, and compressible near-surface colluvium would be removed across the site. Removal guidelines are presented in PSE's geotechnical review. According to the grading application, approximately 103,600 cubic yards will be removed; however, the exact extent of the removals must be determined in the field during grading when observation and evaluation can be undertaken by the soils engineer and/or engineering geologist. Excavations for removal and recompaction of unsuitable fill materials will be required adjacent to Indian Peak Road and Crenshaw Boulevard and adjacent to off-site

[1] City of Rancho Palos Verdes and the City of Rolling Hills Estates, Joint Natural Hazards Mitigation Program. 2004.

structures along the eastern and northern property boundaries. PSE's geotechnical review concluded that fill slopes, when properly constructed, are considered to be grossly stable. Provided that fill slopes steeper than 2:1 be constructed utilizing a geosynthetic reinforcement material as an additional aid to promote surficial stability (Mitigation Measure 4.5-5), impacts related to surficial stability would be reduced to less than significant levels. PSE's geotechnical review provided a number of additional recommendations regarding the proper design of the fill slopes. In addition, it is imperative that proper planting, irrigation, and maintenance be continually performed on all completed graded slopes in an effort to maintain surficial stability (Mitigation Measure 4.5-7).

Subsurface Drainage. In order to further reduce slope instability, subsurface drainage will be required to intercept and control seepage along bedrock discontinuities and/or percolation of surface waters through the fill section. These drains, also called hydrauger holes, would consist of slotted polyvinyl chloride (PVC) pipe surrounded by gravel pack, would be drilled and placed at or near the bottom of Retaining Wall C and the toe of the northerly facing removal backcut below Indian Peak Road and Crenshaw Boulevard. Preliminarily, it is estimated that 10–12 150 ft long drains would be installed at approximately 100 ft spacing from the east to the west side of the project. The drains should direct flow to the lowest outlet elevation.

Several tiers of backdrains are also required along the bedrock/fill interface of the temporary backcuts below Crenshaw Boulevard. These drains, which would be placed at approximately 30 ft vertical height intervals, would consist of perforated PVC pipe surrounded by crushed aggregate rock wrapped in a geotextile filter fabric. These backdrain systems would outlet to the slope face or into the project's storm drain facilities. The location and spacing of the backdrains would ultimately be based upon conditions encountered during grading activities. These drainage features will help minimize the impact of slope instability associated with groundwater seepage.

PSE's geotechnical review report has given a number of recommendations regarding slope stability, soil excavation, subsurface drainage, soil compaction, and recommended material properties. In addition, a number of restrained and unrestrained retaining walls will be constructed throughout the site for site stabilization. In addition to the recommendations for factors listed above, PSE prepared Preliminary Retaining Wall Design Parameters, providing recommendations for use in the final design of conventional reinforced masonry block walls proposed for construction within the site. Provided that these recommendations and applicable building code requirements (Mitigation Measures 4.5-3 and 4.5-4) are incorporated into the final design and construction of the project, impacts related to landslides would be reduced to less than significant levels. Therefore, compliance with Mitigation Measures 4.5-3 (City review and approval of structural engineering design) and 4.5-4 (Grading Requirements) would reduce potential landslide, site soil stability, and subsurface drainage impacts to a less than significant level.

Slope Creep. Slope creep attributed to steep slopes located on the proposed project site is generally not considered a gross stability issue; therefore, the impact to the slope below

Indian Peak Road will likely be limited to the minor observed distress. It is proposed to reconstruct the Indian Peak Road slope area at a 2:1 (horizontal to vertical) slope gradient, which is expected to greatly reduce the effects of slope creep at the top of the slope. Additionally, the gross stability of the slope is expected to be increased by the construction of the tieback wall. Therefore, the postconstruction condition is expected to result in an increase in the overall stability and performance of Indian Peak Road to its intersection with Crenshaw Boulevard (Petra Geotechnical, Inc., December 29, 2010).

Erosion Potential. During project construction, there is the potential for soil erosion to occur where bare soil is exposed to wind and water. Best Management Practices (BMPs) are required under State and City regulations to prevent erosion of soil and water quality impacts (refer to Mitigation Measure 4.7-1). In addition, measures are required to be implemented to control fugitive dust during construction activities under SCAQMD regulations (refer to South Coast Air Quality Management District [SCAQMD] Regulations 402 and 403). After construction of buildings and parking lots and establishment of the landscaped areas, erosion potential would be minimal. With implementation of these mitigation measures outlined in Section 4.7 (Hydrology and Water Quality), potential impacts associated with soil erosion during construction activities would be reduced to less than significant levels. A final drainage plan and BMP maintenance plan, as further described in Mitigation Measures 4.7-3 and 4.7-4 (Hydrology and Water Quality Section), address water runoff during operation on the project site, and no further mitigation is required.

Expansive Soils. PSE's geotechnical review concluded that the site may possess expansion potential in the medium-to-high ranges. As stated above, the artificial fill, soil, terrace deposits, landslide debris, weathered bedrock, and compressible near surface colluvium would be removed across the site. Specific testing for expansion potential would be undertaken on the compacted fill materials being placed during grading and the as-graded near-surface materials at the completion of grading. Proper site preparation and foundation design would mitigate potential impacts related to expansive soils on site. Therefore, compliance with Mitigation Measures 4.5-3 (City review and approval of structural engineering design) and 4.5-4 (Grading Requirements) would reduce potential expansive soils impacts to a less than significant level.

Mitigation Measures. The following mitigation measures are incorporated to offset potentially significant adverse impacts of the proposed project.

4.5-1 Prior to issuance of any grading permits for the project, site-specific final geotechnical review and evaluation and grading plan review shall be conducted by the project geotechnical consultant prior to the start of grading and submitted to the City Engineer for review/approval. The report shall verify that recommendations developed during the geotechnical design process are appropriately incorporated into the project plan. Design and grading construction shall be undertaken in accordance with the requirements of the California Building Code applicable at the time of grading, appropriate local grading

regulations, and the recommendations of the project geotechnical consultant as summarized in the final report. Construction and design of the proposed project shall comply with the recommended measures listed in Sections 6.0 through 9.0 in the geotechnical review Report (Pacific Soils Engineering, Inc., April 27, 2007).

4.5-2 Prior to the issuance of building permits, the City of Rolling Hills Estates Building Official (or designee) and the City of Rolling Hills Estates Engineer (or designee) shall review and approve final design plans to ensure that earthquake-resistant design has been incorporated into final site drawings in accordance with the most current California Building Code and the recommended seismic design parameters of the Structural Engineers Association of California for the proposed project. Ultimate site seismic design acceleration shall be determined by the project structural engineer during the project design phase.

4.5-3 Prior to the issuance of grading permits, the City of Rolling Hills Estates Building Official (or designee) and the City of Rolling Hills Estates Engineer (or designee) shall review and approve final design plans to ensure that landslide-resistant design has been incorporated into final site drawings in accordance with the most current California Building Code, current Grading Ordinance of the City of Rolling Hills Estates, and the Earthwork Specifications presented in the Final geotechnical review prepared for the proposed project.

4.5-4 Prior to the issuance of grading permits, the City of Rolling Hills Estates Building Official (or designee) and the City of Rolling Hills Estates Engineer (or designee) shall ensure that all grading shall be accomplished under the observation and testing of the project soils engineer and engineering geologist or their authorized representative in accordance with the current Grading Ordinance of the City of Rolling Hills Estates and the Earthworks specifications provided in the Final geotechnical review. After approval of site clearing and prior to fill placement, all existing artificial fill, soil, landslide debris, terrace deposits, weathered bedrock and compressible near surface colluvium shall be removed across the site. The exact extent of the removals must be determined in the field during grading, when observation and evaluation can be performed by the soils engineer and/or engineering geologist. The bottoms of all removal areas shall be observed and approved by the engineering geologist/soils engineer or an authorized representative prior to the fill placement.

4.5-5 Prior to the issuance of grading permits, the City of Rolling Hills Estates Building Official (or designee) and the City of Rolling Hills Estates Engineer (or designee) shall review final construction plans to ensure that fill slopes steeper than 2:1 are constructed utilizing a geosynthetic reinforcement material as an additional aid to promote surficial stability.

4.5-6 Prior to the issuance of grading permits, the City of Rolling Hills Estates Building Official (or designee) and the City of Rolling Hills Estates Engineer (or designee) shall ensure that shoring walls, both with and without tie-back anchors,

be required within the proposed project site for temporary slope stability during excavations for recommended removals and for permanent stability after construction.

4.5-7 Prior to the issuance of an occupancy permit, the applicant shall provide to the City of Rolling Hills Estates Public Works Department Director (or designee) evidence that prior to operation, proper planting, irrigation and maintenance shall be continually performed on all completed, graded slopes in an effort to maintain surficial stability.

4.5.5 Cumulative Impacts

For the analysis of geology and soils, the study area considered for the cumulative impact of other projects consisted of (1) the area that could be affected by the proposed project activities; and (2) the areas affected by other projects whose activities could directly or indirectly affect the geology and soils of the proposed project site. In general, only projects occurring adjacent to or very close to the project site were considered. Currently there are two projects approved near the project: the 627 Deep Valley Drive Project and the 827 Deep Valley Drive Project.

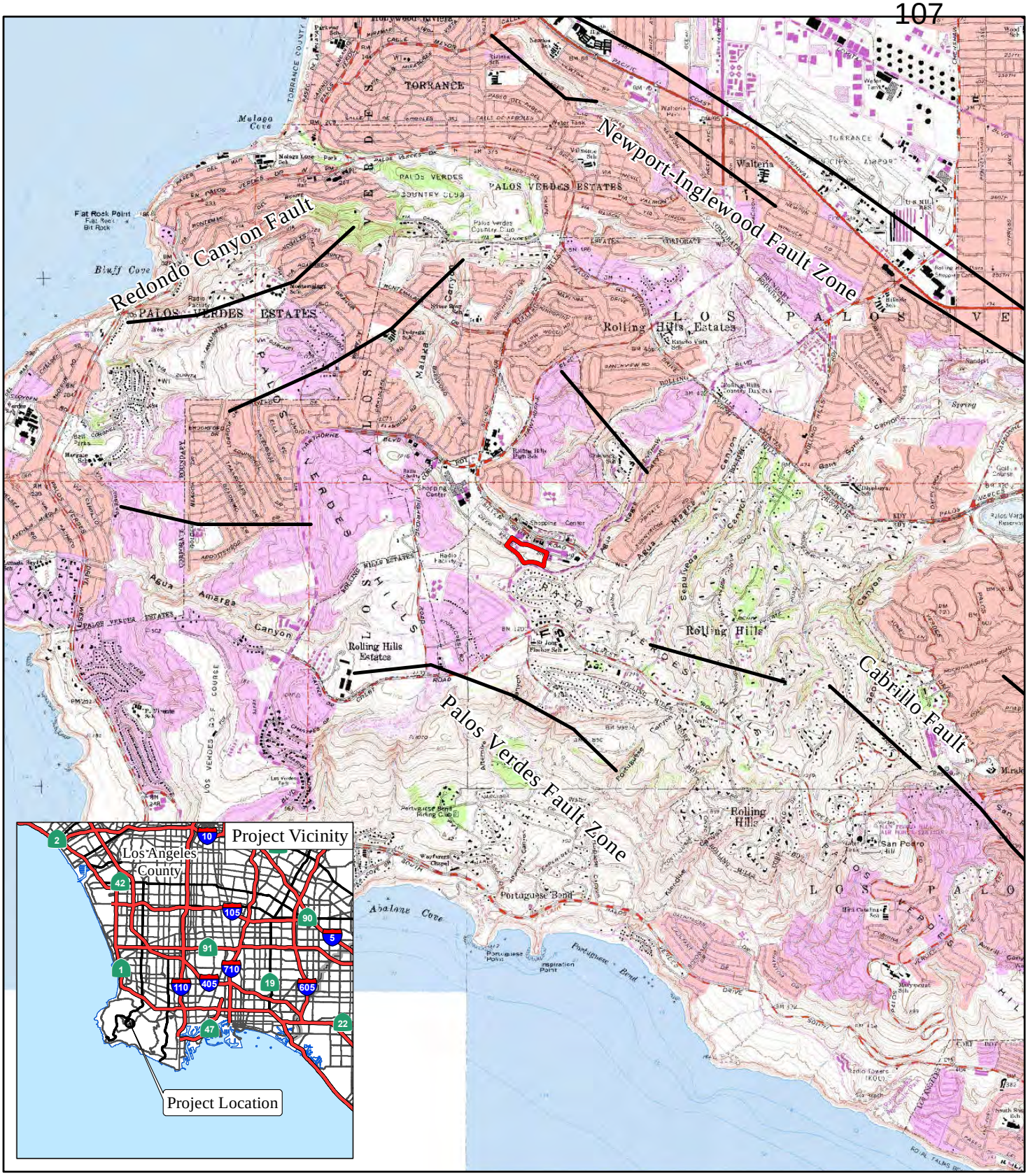
Planned development and redevelopment within this area would have the potential to generate geologic seismic and soil impacts. The proposed project will increase the intensity of residential development within and adjacent to landslide areas. Therefore, the project has the potential for cumulative impacts to landsliding. However, the project has identified appropriate mitigation to minimize impacts, and the proposed project in conjunction with other projects in the area would not have the potential to cause cumulatively considerable adverse effects on human beings when considered together.

The Mitigation Measures (4.5-1 through 4.5-7) specified in the impact categories discussed above are expected to minimize or avoid potential hazards due to on-site and off-site geologic and seismic factors. While the entire Los Angeles region is susceptible to seismic hazards, it is also notable that many of the hazards are highly localized, such as those areas in the vicinity of known seismic rupture areas. Appropriate use of engineering technologies, when coupled with siting considerations, would substantially reduce the potential geology and soil impacts of cumulative development.

Therefore, the analysis indicates that the proposed project's contribution to geology/soils cumulative impacts of the project related to geology and soils is considered less than significant with mitigation incorporated.

4.5.6 Significant Unavoidable Adverse Impacts

The mitigation measures described above will reduce the project's potential geologic, seismic, and soils-related impacts and contribution to cumulative geology, seismic, and soils impacts to below a level of significance. Therefore, there are no significant unavoidable adverse impacts of the proposed project related to geology and soils.



LEGEND

Project Area

Fault Lines

FIGURE 4.5.1

655-683 Deep Valley Drive
and 924-950 Indian Peak Road
Mixed-Use Residential Project

Earthquake Fault Lines

0 2000 4000
FEET

SOURCE: California Geological Survey, Seismic Hazard Mapping Program (2010).

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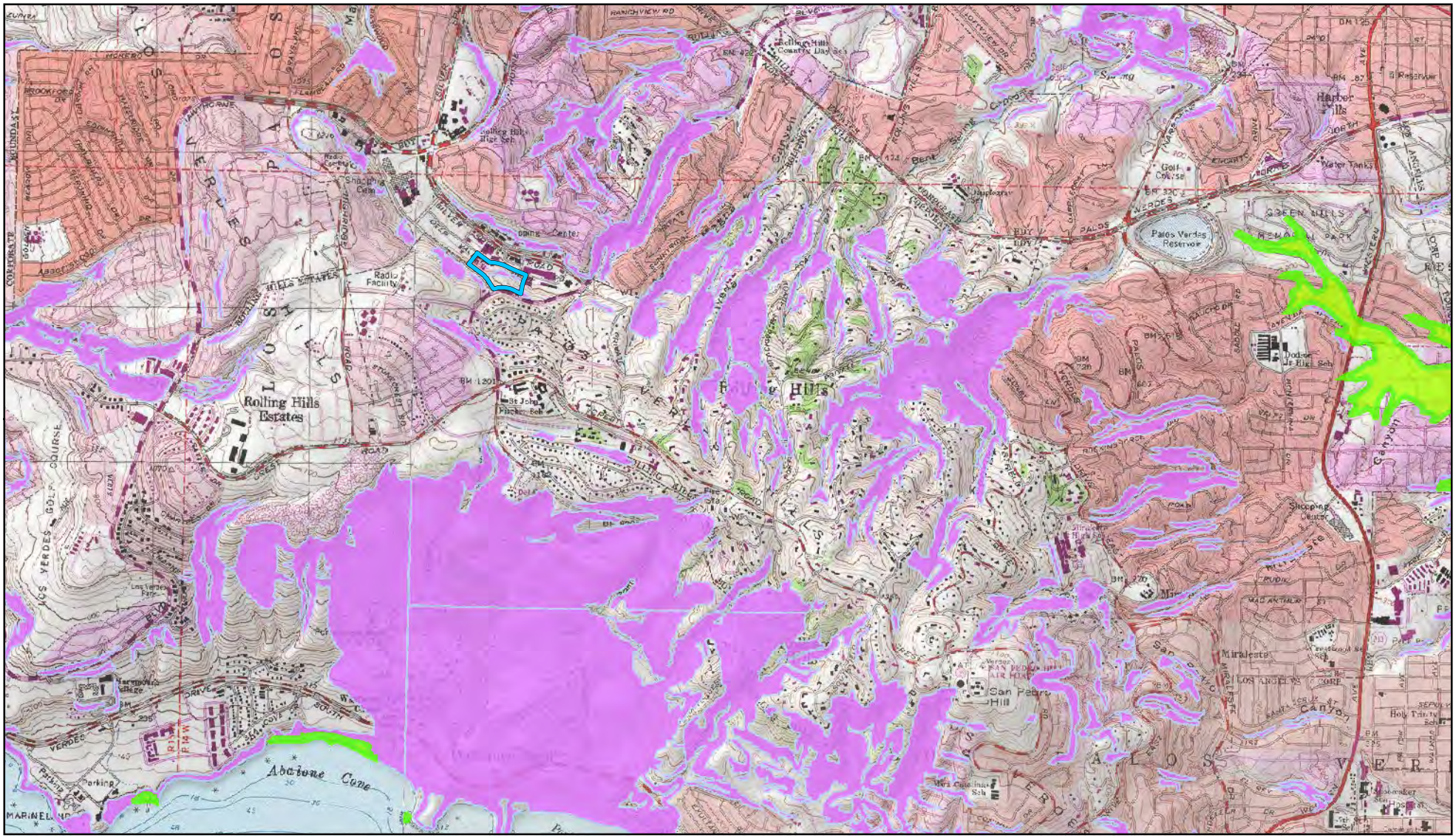

LSA

FIGURE 4.5.2

LEGEND

- Project Area
- Earthquake-Induced Landslides
- Liquefaction

Areas where previous occurence of landslide movement, or local topographic, geologcial, geotechnical and subsurface water conditions indicate a potential permanent ground displacements such that mitigation as defined in Public Resource Section 2693(c) would be required.

655-683 Deep Valley Drive
and 924-950 Indian Peak Road
Mixed-Use Residential Project

Liquefaction and Earthquake-Induced Landslides

SOURCE: California Geological Survey, Seismic Hazard Mapping Program (2002).

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Maps

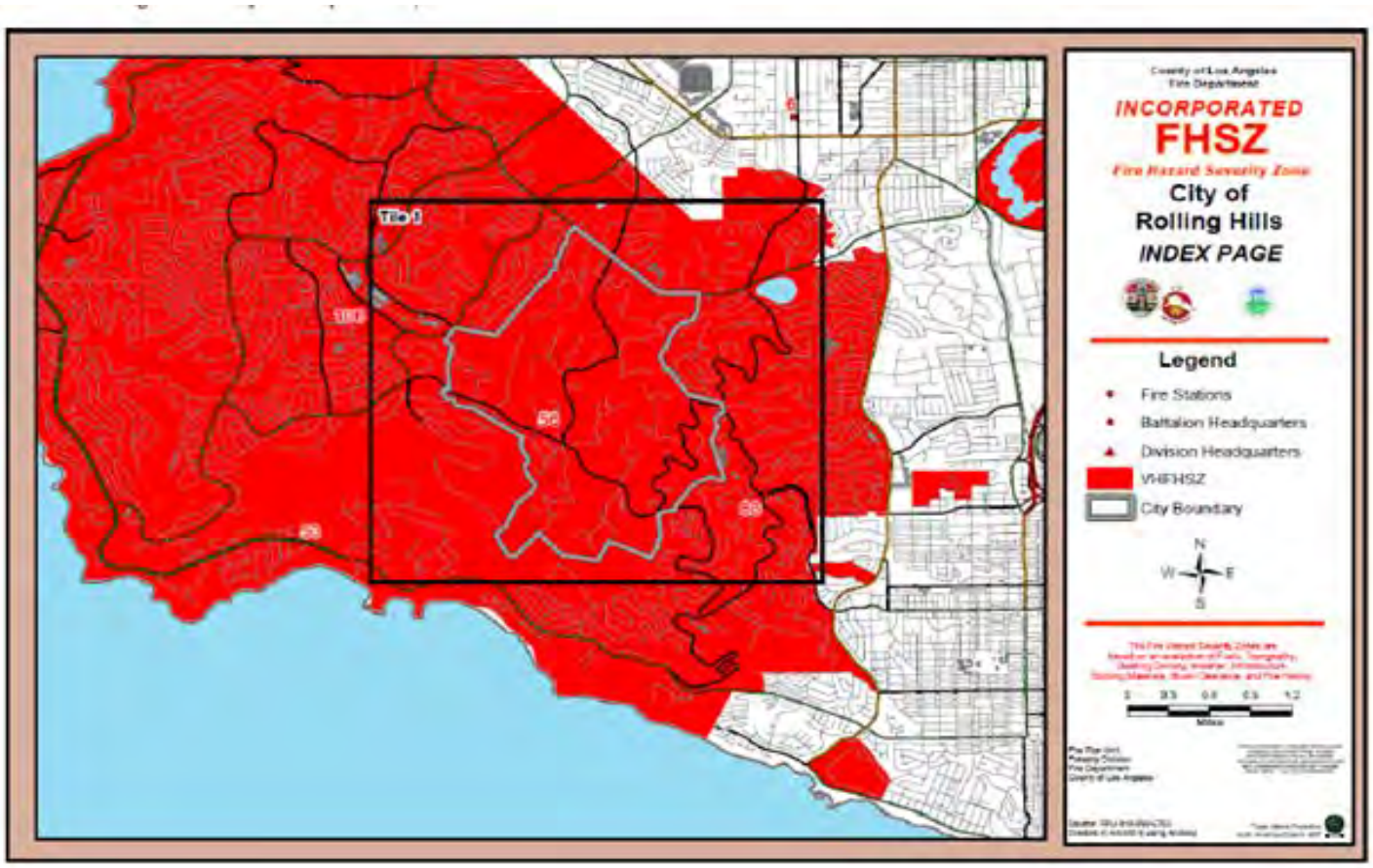


***Figure 1**. Very High Hazard Severity Zone for the City of Rolling Hills.*

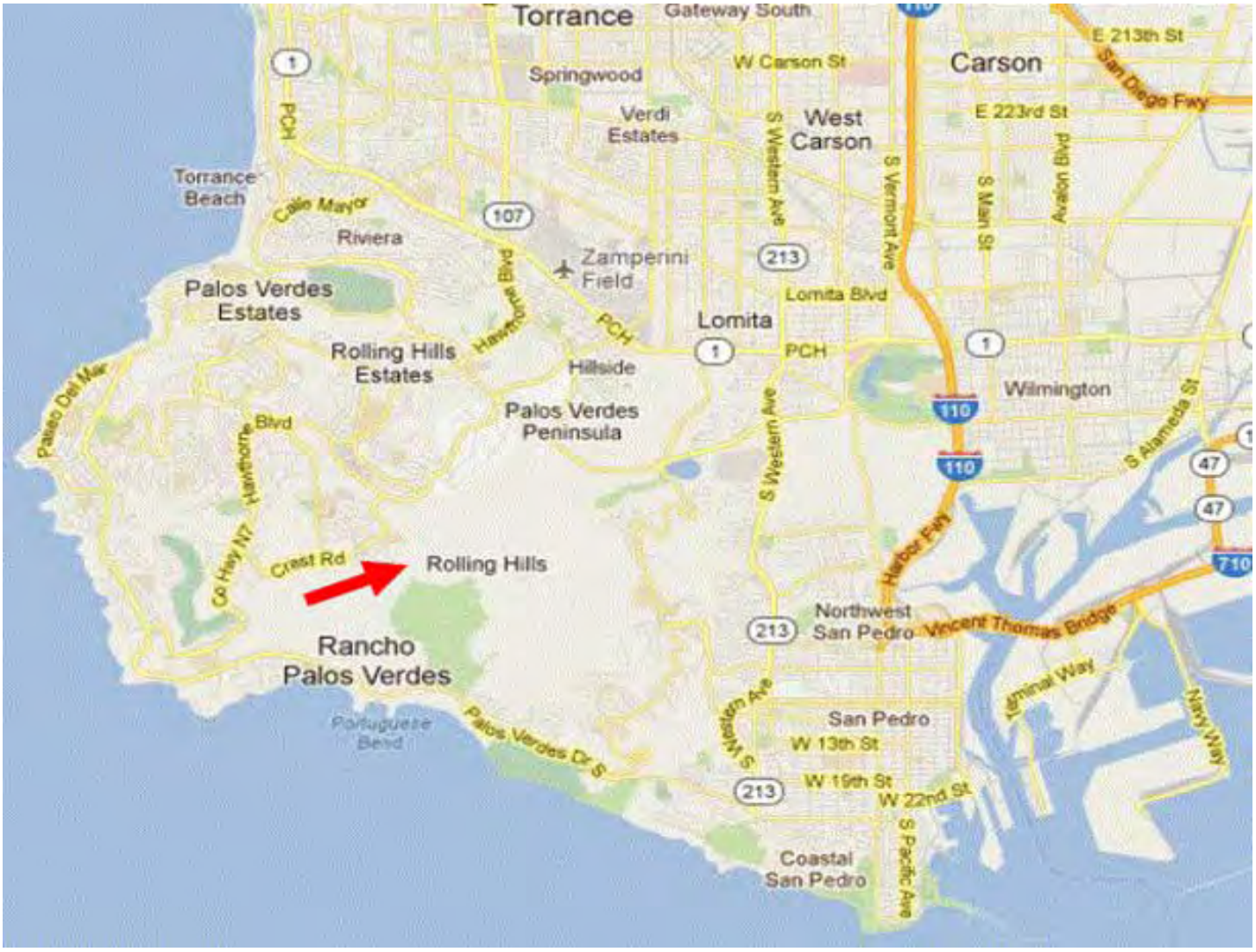


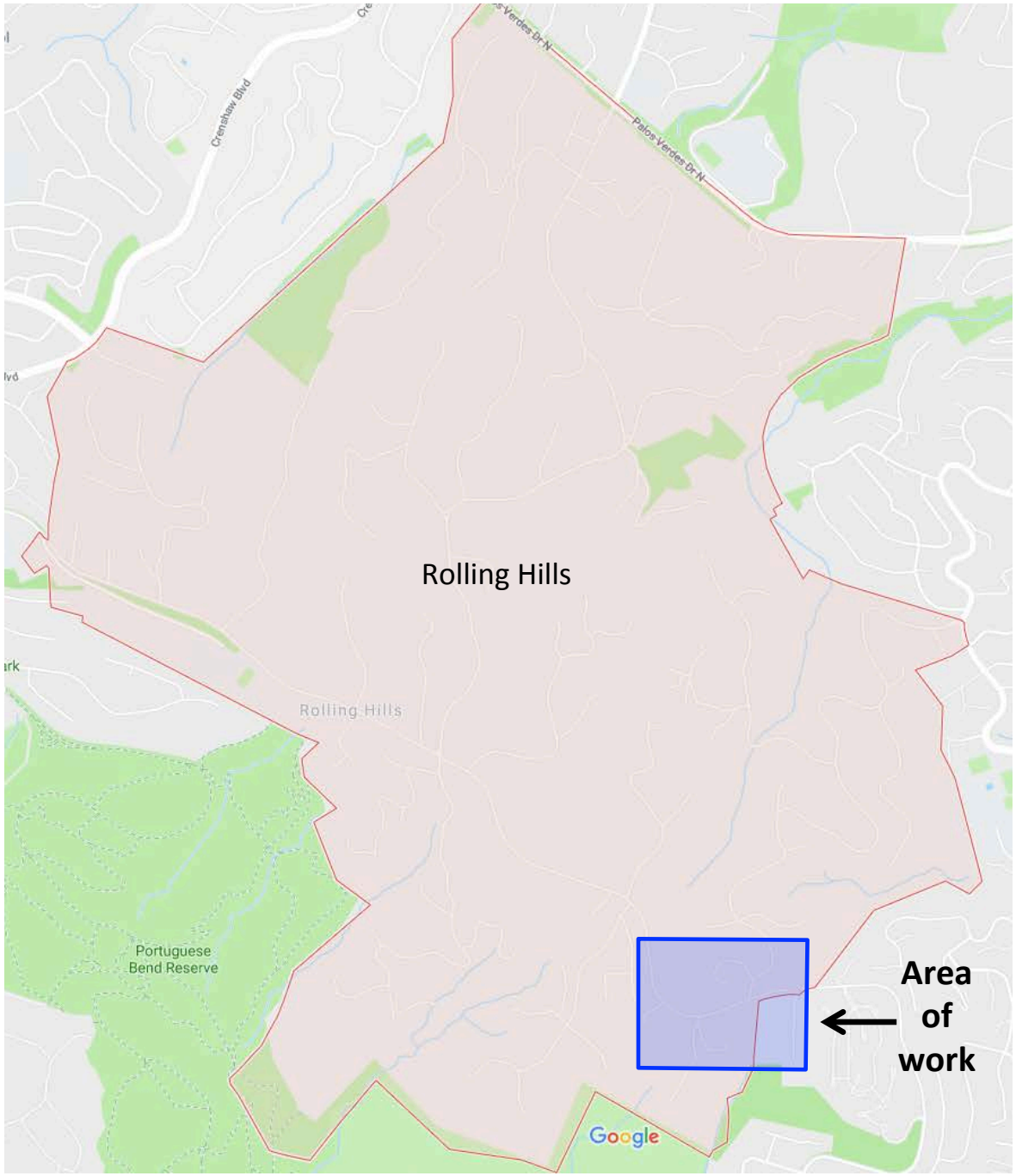
***Figure 2**. Location of Rolling Hills, CA with respect to Rancho Palos Verdes, San Pedro, and Torrance.*

Figure 3. *Proximity of Rolling Hills to nearby seismic faults. Epicenters of major earthquakes that devastated the region are also shown.*

Regional Map – City of Rolling Hills

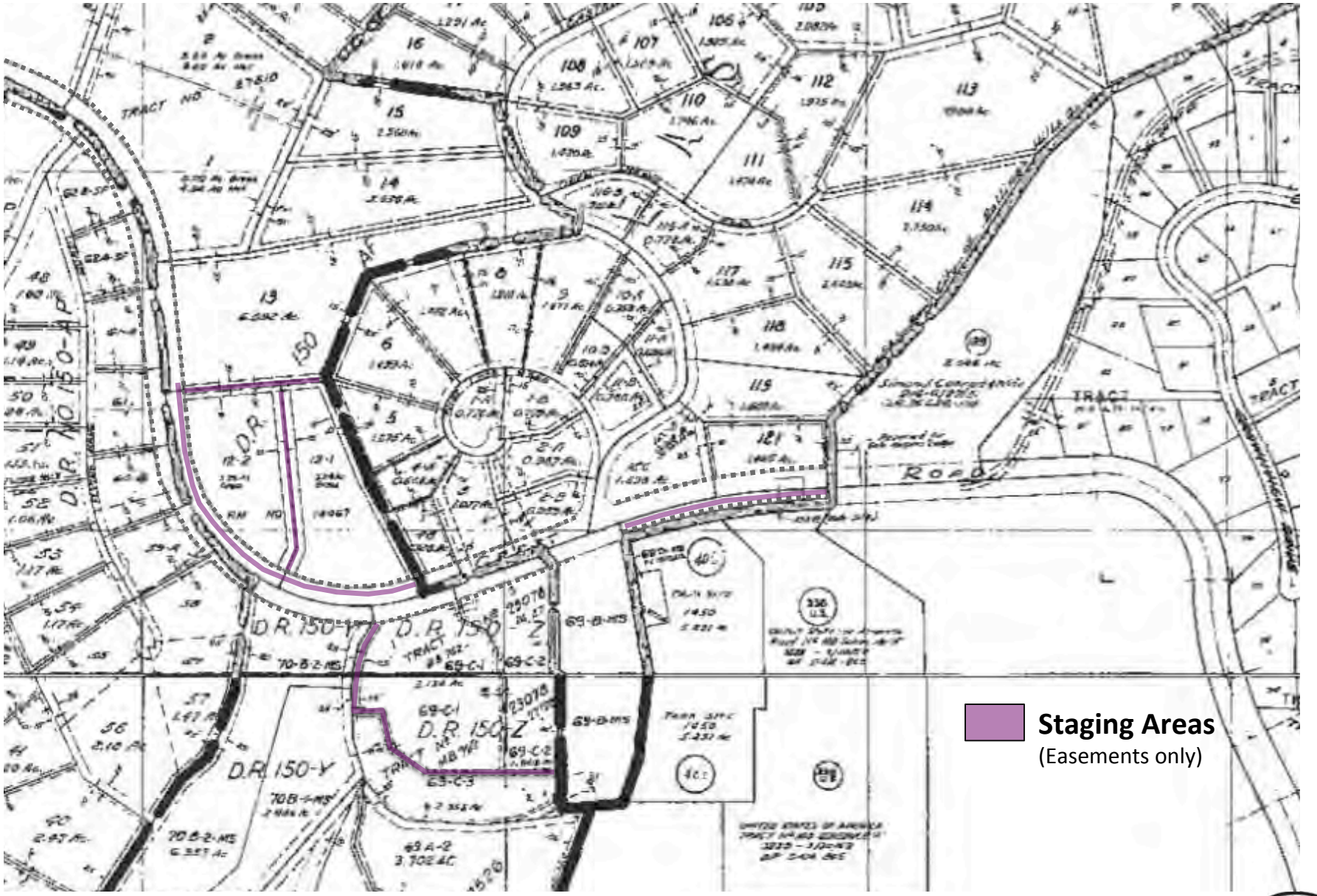
City Aerial Map – City of Rolling Hills

Project Map – City of Rolling Hills



Aerial Crest Road East Area of Work Map – City of Rolling Hills

Staging Map – City of Rolling Hills



Aerial Project Map – City of Rolling Hills

Path of Power Lines
(To Be Undergrounded)

ROLLING HILLS RULE 20C
REMOVALS ESTIMATE
FOR STATLER 16KV
TO BECOME FELDSPAR
16KV UG

33°44'51.40"N
118°20'21.30"W

33°44'50.12"N
118°20'23.22"W

33°44'53.43"N
118°20'14.84"W

33°44'53.09"N
118°20'14.67"W

33°44'53.15"N
118°20'12.97"W

33°44'53.41"N
118°20'10.17"W

FUTURE DIP POLE

FUTURE DIP POLE

FUTURE DIP POLE

FUTURE DIP POLE

120

33°44'49.84"N
118°20'27.13"W

33°44'49.02"N
118°20'25.66"W

33°44'53.46"N
118°20'09.33"W

33°44'53.42"N
118°20'05.37"W

33°44'53.69"N
118°20'04.90"W

NORTH

120

Hazard Mitigation Grant Program
CITY OF ROLLING HILLS
Prevent Wildfire through Power Line Undergrounding Project Subapplication DR-4344-0526
PROJECT TIMELINE

Project Title: Prevent Wildfire through Power Line Undergrounding | **SubGrantee:** City of Rolling Hills

Fund Source; timeline FY 2018/19, FY 2019/20, FY 2020/21, FY 2021/22 (O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M)

Task #		Resp. Party	Total Cost	Grant Amount	Local Match (Rule 20A)	Deliverable
Pre	**PROJECT PREPARATION - Pre-Award**					
A	NOI Preparation - Sr. Planner	City	$130	$98	$33	Prepare and submit NOI
B	Procure Consultant - Planning Director	City	$243	$182	$61	Receive quotes and present to Council for approval
C	Subapplication Preparation - Consultant	City/ Consultant	$10,500	$7,875	$2,625	Development and submittal of full subapplication: DR-4344-0526
D	Preliminary Draft Design - Utility (SCE)	Consultant	$1,500	$1,125	$375	Preliminary design for subapplication
E	Mtgs w/consultant - Sr. Planner	City	$346	$260	$87	Mtgs to share and review information
F	Mtgs w/SCE - Planning Director	City	$485	$364	$121	Mtgs to share and gather information
G	Public Meetings - Planning Director	City	$970	$728	$243	Meetings to review and share project
1	**PROJECT LAUNCH**					
	Funding Obligation Notification	**Cal OES**				**Receive funding notice to start project**
1.1	Outreach: Mailer to Affected Property Owners	City	$90	$68	$23	Alert property owners to dates of construction
1.2	Outreach: Mtgs w/ Community Assoc	City	$173	$130	$43	Gain approval; request easement use
1.3	Outreach: Mtgs w/Affected Property Owners	City	$692	$519	$173	Discuss project/construction with property owners
1.4	Permits and Rights-of-Way Agreements	City	$216	$162	$54	Complete applications and gain rights of way
1.5	Project Management/Liaison	City	$6,918	$5,189	$1,730	Serve as city project manager for DR-4344-0526
2	**DESIGN AND ENGINEERING**					
2.1	Final Design and Engineering - Utility (SCE)	Utility	$50,000	$37,500	$12,500	Develop and complete all design and engineering specifications for all phases of construction
2.2	Final Design and Engineering - Utility (Cox)	Utility	$20,000	$15,000	$5,000	Develop and complete all design and engineering specifications for all phases of construction
2.3	Final Design and Engineering - Utility (Frontier)	Utility	$10,000	$7,500	$2,500	Develop and complete all design and engineering specifications for all phases of construction
3	**PRE-CONSTRUCTION (SCE)**					
3.1	Develop Bid Specifications (SCE)	Utility	$10,000	$7,500	$2,500	Determine specifications for construction contractor(s)
3.2	Develop Composite Trench Drawings	Utility	included	included	included	Trench drawings for construction
3.3	Select Contractor(s) for Construction	Utility	included	included	included	Receive bids and determine lowest, most responsible
3.4	Procure Contractor(s) for Construction	Utility	included	included	included	Contract with chosen construction company
4	**CONSTRUCTION**					
4.1	Construction (Cox)	Utility	$70,000	$52,500	$17,500	All phases of construction undertaken
4.2	Construction (Frontier)	Utility	$45,013	$33,760	$11,253	All phases of construction undertaken
4.3	Construction (SCE) (duties included in SOW)	Utility	########	$975,000	$325,000	All phases of construction undertaken
4.4	Obtain Trenching Contractor (SCE)	Utility	included	included	included	Receive bids and determine lowest, most responsible
4.5	Trenching Equipment Rental	Utility	included	included	included	Included with trenching contractor
4.6	Landscape and Street Repair	Utility	included	included	included	Mediate construction and repair to previous condition
5	**GRANT MANAGEMENT**					
5.1	Invoicing	Consultant	$12,000	$9,000	$3,000	Invoice packages
5.2	Quarterly Reporting	City	included	included	included	Quarterly reports
5.3	Grant Close Out	City	included	included	included	Final grant close-out report
	TOTALS		########	$1,154,457	$384,819	

HMGP Cost Estimate Spreadsheet

DATE	JURSIDICTION NAME	DISASTER & PROJECT OR PLANNING #	PROJECT OR PLANNING TITLE
9/4/2018	CITY OF ROLLING HILLS	DR-4344-0526	REVENTION THROUGH POWER LINE UNDERGROU

#	Item Name	Unit Quantity	Unit of Measure	Unit Cost	Cost Estimate Total
1	Pre-Award: NOI Preparation - Sr. Planner	3	HR	$ 43.24	$ 130
2	Pre-Award: Procure Consultant - Plan. Dir. Labor	4	HR	$ 60.65	$ 243
3	Pre-Award: Subapplication Preparation - Consultant	70	EA	$ 150.00	$ 10,500
4	Pre-Award: Preliminary Draft Design - Utility (SCE)	1	EA	$ 1,500.00	$ 1,500
5	Pre-Award: Meetings w/consultant - Sr. Planner Labor	8	HR	$ 43.24	$ 346
6	Pre-Award: Meetings w/SCE - Plan. Dir. Labor	8	HR	$ 60.65	$ 485
7	Pre-Award: Public Meetings - Plan. Dir Labor	16	HR	$ 60.65	$ 970
8	Outreach: Mailer to Affected Property Owners	30	EA	$ 3.00	$ 90
9	Outreach: Meetings w/ Community Assoc - Sr. Planner L	4	HR	$ 43.24	$ 173
10	Outreach: Meetings w/Affected Property Owners - Sr. Pl	16	HR	$ 43.24	$ 692
11	Project Management w/Utility: Sr. Planner Labor	160	HR	$ 43.24	$ 6,918
12	Permits and Rights-of-Way Agreements: Sr. Planner Labo	5	HR	$ 43.24	$ 216
13	Final Design and Engineering: Utility (SCE)	1	EA	$ 50,000.00	$ 50,000
14	Pre-Construction: Utility (SCE) includes:	1	EA	$ 10,000.00	$ 10,000
15	- Develop Bid Specifications				$ -
16	- Develop Composite Trench Drawings				$ -
17	- Select Contractor(s)				$ -
18	- Procure Contractor(s)				$ -
19	Final Design/Eng/Construction: Utility (Cox) includes:	1	EA	$ 90,000.00	$ 90,000
20	- Develop Composite Trench Drawings, Construction				$ -
21	Final Design/Eng/Construction: Utility (Frontier) includes	1	EA	$ 55,013.00	$ 55,013
22	- Develop Composite Trench Drawings, Construction				$ -
23	Construction: (SCE) Materials and Management includes	2000	LF	$ 650.00	$ 1,300,000
24	- Obtain Trenching Contractor				$ -
25	- Trenching Equipment Rental				$ -
26	- Trenching Labor				$ -
27	- Tree Trimming (to free entangled lines)				$ -
28	- Lines				$ -
29	- Vault Encasement				$ -
30	- Piping for Line Enclosure				$ -
31	- Pole Removal (8)				$ -
32	- Stations: 55' CI 2 Poles, Insulators, 2BC/16Kv				$ -
33	- Stations: Cutouts, Xarm, Bonded Xarm, Sec Ground				$ -
34	- Remove overhead lines/poles				$ -
35	- Landscape and Street repair				$ -
36	Grant Administration (quarterly invoice/reports)	12	EA	$ 1,000.00	$ 12,000
37					$ -
38					$ -
39					$ -
40					$ -
				Total Project Cost Estimate:	$ 1,539,276

AC	ACRE
CF	CUBIC FOOT
CY	CUBIC YARD
DAY	DAY
EA	EACH
HR	HOUR
LF	LINEAR FOOT
LS	LUMP SUM
MBF	MILLION BOARD FEET
MI	MILE
SEAT	NUMBER OF SEATS
SF	SQUARE FOOT
SQ	UNKNOWN
SY	SQUARE YARD
SY/IN	SQUARE YARD PER INCH
TON	TON
FT	FOOT
IN	INCH

Cost Estimate Narrative

CITY OF ROLLING HILLS
DR-4344-0526
Wildfire Prevention though Power Line Undergrounding

Pre-Award Costs

Line Items 1 through 7

City Labor, Sr. Planner – NOI Preparation and Submission (Line 1), Meetings with Consultant (Line 5)

- The total amount is based on 11 hours
- Staff Position: Senior Planner
- Duty Description: Performs responsible, complex professional planning activities involving strategy and advanced planning as well as special projects; management of consultants; implementation of Grant Funding Package.
- Hours: 11 hours
- Hourly Rate: $43.24
- Based on the hourly rate for the position plus benefits paid by employer, which include:
    - Life Insurance
    - Medical Insurance
    - Dental Insurance
    - Vision Insurance
    - Workers Compensation
    - Employer Match Deferred Compensation
    - Social Security (employer portion)
    - Medicare (employer portion)
    - CalPERS Retirement
    - Accrued Vacation & Sick Hours

City Labor, Planning Director – Procure Consultant (Line 2), Meetings with Southern California Edison (Line 6), Public Meetings (Line 7)

- The total amount is based on 28 hours
- Staff position: Planning Director
- Duty Description: Directs and oversees the City's strategic and long-range goal planning function. Drives strategic initiatives and supports the development of long-term growth plans; oversight of consultants and Grant Funding Package.
- Hours: 28 hours
- Hourly Rate: $60.65
- Based on the hourly rate for the position plus benefits paid by employer, which include:
    - Life Insurance

- Medical Insurance
- Dental Insurance
- Vision Insurance
- Workers compensation
- Employer Match Deferred Compensation
- Social Security (employer portion)
- Medicare (employer portion)
- CalPERS Retirement
- Accrued Vacation & Sick Hours
- Auto Allowance

Consultant – Subapplication Preparation and Submission

- Writing grant application
- Research
- Collection of Data
- Preparation of BCA
- Printing and shipping documents
- Submitting grant
- 70 hours @ $150.00 per hour

Utility (Southern California Edison) – Preliminary Draft Design

- Prepare preliminary draft design
- The total amount is based on review of the project
- Staff Position: SCE
- Duty Description: Review of the project design; create a rough preliminary design
- Hours: Estimated 8 hours

PROJECT: Outreach to Community

Line Items 8 through 10

Mailer to Affected Property Owners (Line 8)

- Unit costs are based on preliminary quotes
- 30 @ $3 ea

City Labor, Senior Planner – Meetings with Community Association (Line 9) and Meetings with Affected Property Owners (Line 10)

- The total amount is based on 20 hours
- Staff position: Senior Planner
- Duty Description: Meet with Community Association to update and brief on project status, confirm agreement for use of easements during staging/construction, maintain open lines of communication with affected property owners and continue to act as community liaison.
- Hours: 28 hours
- Hourly Rate: $43.24

- Based on the hourly rate for the position plus benefits paid by employer, which include:
    - Life Insurance
    - Medical Insurance
    - Dental Insurance
    - Vision Insurance
    - Workers compensation
    - Employer Match Deferred Compensation
    - Social Security (employer portion)
    - Medicare (employer portion)
    - CalPERS Retirement
    - Accrued Vacation & Sick Hours

PROJECT: City Project Management

Line Items 11 and 12

City Labor, Senior Planner – Project Management w/Utilities (Line 11) and Permits and Rights-of-Way Agreements (Line 12)

- The total amount is based on 165 hours
- Staff position: Senior Planner
- Duty Description: Act as Project Manager in coordination with Utilities (SCE, Cox and Frontier) including:
    - Coordinating the flow of information between the City and the Utilities
    - Coordinating and leading meetings, agendas, reporting
    - Reviewing schedules for design, engineering and construction
    - Administration and recordkeeping for City
    - Photo documentation (as needed)
    - Pulling permits
    - Implementing Rights-of-Way and Easement Agreements
- Hours: 165 hours
- Hourly Rate: $43.24
- Based on the hourly rate for the position plus benefits paid by employer, which include:
    - Life Insurance
    - Medical Insurance
    - Dental Insurance
    - Vision Insurance
    - Workers compensation
    - Employer Match Deferred Compensation
    - Social Security (employer portion)
    - Medicare (employer portion)
    - CalPERS Retirement
    - Accrued Vacation & Sick Hours

PROJECT: Design, Engineering, Pre-Construction

Line Items 13 through 22

All stages of these line items – design (final preliminary, 50%, 100%), engineering, and pre-construction – will be the responsibility of the utility companies, SCE, Cox and Frontier. The rates of pay and benefits were not included in the utility companies' costs provided at the time of this submittal. The costs included are estimates until the final design is completed, as is typical. The three utility companies work in coordination for all undergrounding projects in the cities and areas they serve together.

Final Design and Engineering - SCE (Line 13) - $50,000

Duties: SCE will provide all:

- Design elements
- Engineering specifications
- Trench requirements and drawings
- Line requirements and specifications, and
- Any other activity required to begin and complete the primary portion of the design and engineering

Pre-Construction (Lines 14 - 18) - $10,000

Duties: SCE will:

- Develop Bid Specification
- Develop Composite Trench Drawings
- Select Contractor(s)
- Procure Contractor(s), and
- Any other activity required to begin and complete the primary portion of the pre-construction

Final Design and Engineering (and Construction) - Cox (Lines 19 and 20) - $90,000

Duties: Cox will provide all:

- Design elements
- Engineering specifications
- Trench drawings, and
- Line requirements to begin and complete their portion of the construction

Final Design and Engineering (and Construction) - Frontier (Lines 21 and 22) - $55,013

Duties: Frontier will provide all:

- Design elements
- Engineering specifications
- Trench drawings, and
- Line requirements to begin and complete their portion of the construction

PROJECT: Construction, including materials and management

Lines 23 through 35

The estimated cost per linear foot for construction, materials, and management provided by SCE is $650 for approximately 2,000 linear feet of trenching. This includes three (3) residential services which, by default, must be undergrounded at the time of the street undergrounding.

Cost: $1,300,000. This cost includes:

- Overseeing and managing all construction consultants, contractors and staff ensuring all regulations regarding construction are followed
- Managing project, providing scheduling to the City, coordinating with City Project Manager
- Attendance at construction meetings, and other coordination meetings as needed
- Obtaining trenching contractor
- Trenching equipment rental
- Trenching labor
- Tree trimming (to free entangled lines)
- Lines
- Vault encasement
- Piping for line enclosure
- Pole removal (8 poles)
- Stations completed
- Remove overhead lines and poles
- Mitigate and return landscape and street to pre-construction condition, and
- Any other activity to begin and complete the project construction.

PROJECT: Grant Invoicing and billing

- Collection of data (timesheet information, other data)
- Assisting with report formatting to fit requirements
- Reimbursement invoice preparation
- 10 hours @$100/hr.
- 12 quarterly reimbursement invoices

City of Rolling Hills INCORPORATED JANUARY 24, 1957

NO. 2 PORTUGUESE BEND ROAD
ROLLING HILLS, CA 90274
(310) 377-1521
FAX (310) 377-7288

LOCAL MATCH FUND COMMITMENT LETTER

September 4, 2018

City of Rolling Hills
2 Portuguese Bend Road
Rolling Hills, CA 90274

RE: DR-4344-0526 Project Subapplication Funding Match Commitment Letter

Dear State Hazard Mitigation Officer:

As part of the Hazard Mitigation Grant Program process, a local funding match of at least 25% is required. This letter serves as City of Rolling Hills' commitment to meet the local match fund requirements for the Hazard Mitigation Grant Program.

SOURCE OF NON-FEDERAL FUNDS:

LOCAL AGENCY FUNDING	OTHER AGENCY FUNDING	PRIVATE NON-PROFIT FUNDING	STATE AGENCY FUNDING
☐	☒	☐	☐

NAME OF FUNDING SOURCE: **Southern California Edison, Rule 20A**

FUNDS AVAILABILITY DATE: **12/1/2018**
PROVIDE EXACT MONTH/DATE/YEAR OF AVAILABILITY OF FUNDS

FEDERAL SHARE AMOUNT REQUESTED: **$1,154,457**
MUST MATCH $ AMOUNT PROVIDED IN SUBAPPLICATION

LOCAL SHARE AMOUNT MATCH: **$384,819**
MUST EQUAL A MINIMUM OF THE 25% FEDERAL SHARE REQUESTED

FUNDING TYPE: **Electric Utility Rule 20A Tariff Funds**
EXAMPLES: ADMINISTRATION, CASH, CONSULTING FEES, ENGINEERING FEES, FORCE ACCOUNT LABOR, AGENCY PERSONNEL, PROGRAM INCOME, ETC.

If additional federal funds are requested, an additional local match fund commitment letter will be required. Please contact Julia Stewart at 310-377-1521 or jstewart@cityofrh.net with any questions.

Sincerely,

Patrick Wilson, Mayor
310-377-1521 phone
310-377-7288 fax
pwilson@cityofrh.net

03 Sep 2018 Project: **Rolling Hill-Fire Prevention Through Power Line Undergrounding**

Total Benefits: **$6,494,741** Total Costs: **$1,569,003** BCR: **4.14**

Project Number: 0526 Disaster #: DR-4344 Program: HMGP Agency: **City of Rolling Hills**

State: **California** Point of Contact: Yolanta Schwartz Analyst: Sonia Hall

Project Summary:

Project Number: 0526 Disaster #: DR-4344

Program: HMGP Agency: City of Rolling Hills

Analyst: Sonia Hall Discount Rate: 0.070

Point of Contact: Yolanta Schwartz Phone Number: 310-377-1521

Address: 2 Portuguese Bend Road, Rolling Hills, California, 90274

Email: ys@cityofrh.net

Comments:

Structure Summary For:

Power Line Undergrounding, 2 Portuguese Bend Road, Rolling Hills, California, 90274, Los Angeles

Structure Type: Building Historic Building: No Contact:

Benefits: $6,494,741 Costs: $1,569,003 BCR: 4.14

Mitigation	Hazard	BCR	Benefits	Costs
Anchor/Brace non-structural	Damage-Frequency Assessment	4.14	$6,494,741	$1,569,003

Version: 5.3.0

03 Sep 2018 Project: **Rolling Hill-Fire Prevention Through Power Line Undergrounding**

Total Benefits: **$6,494,741** Total Costs: **$1,569,003** BCR: **4.14**

Project Number: 0526 Disaster #: DR-4344 Program: HMGP Agency: **City of Rolling Hills**

State: **California** Point of Contact: Yolanta Schwartz Analyst: Sonia Hall

Structure and Mitigation Details For: Power Line Undergrounding, 2 Portuguese Bend Road, Rolling Hills, California, 90274, Los Angeles

Benefits: $6,494,741 Costs: $1,569,003 BCR: 4.14

Hazard: **Damage-Frequency Assessment - Earthquake**

Mitigation Option: Anchor/Brace non-structural

Latitude: Longitude: Project Useful Life: 50

Mitigation Information

Basis of Damages: Historical Damages

Number of Estimated Damage Events: 3

Number of Events with Know Recurrence Intervals: 0

Utilities

Type of Service: Electrical

Other:

Number of Customers: Served: 19,417

Value per Unit of Service: 126.00

Total Value of Service per Day: $2,446,542

Facility Description:

Currently the city has old wooden poles and electrical that has utilities overhead.

03 Sep 2018 Project: **Rolling Hill-Fire Prevention Through Power Line Undergrounding**

Total Benefits: **$6,494,741** Total Costs: **$1,569,003** BCR: **4.14**

Project Number: 0526 Disaster #: DR-4344 Program: HMGP Agency: **City of Rolling Hills**

State: **California** Point of Contact: Yolanta Schwartz Analyst: Sonia Hall

Historic Damages Before and After Mitigation

Analysis Year: 2018 Analysis Duration: 51 Utilities ($/day): $2,446,542.00

Year Built: 1968 User Input Analysis Duration: Buildings ($/day):

Roads/Bridges ($/day):

Damages Before Mitigation

Damage Year: 1994
RI:
Are Damages In Current Dollars? Yes
Buildings (Days):
Utilities (Days): 5.0
Roads (Days):

Total	$12,251,070
Total Inflated	$12,251,070

Damages After Mitigation

RI: 30.00
Are Damages In Current Dollars? Yes
Buildings (Days):
Utilities (Days): 1.0
Roads (Days):

Total	$2,446,542

Volunteers Cost

Number of Volunteers Required: 20.0
Cost of Volunteers Time ($/Hour/Person): 21.0
Per-Person Cost of Lodging for a Volunteer:150.0
Number of Hours Volunteered/Person: 8.0
Number of Days Lodging/Volunteer: 5.0
Cost of Volunteers: 18,360

Total Benefits: **$6,494,741** Total Costs: **$1,569,003** BCR: **4.14**

Project Number: 0526 Disaster #: DR-4344 Program: HMGP Agency: **City of Rolling Hills**

State: **California** Point of Contact: Yolanta Schwartz Analyst: Sonia Hall

Damage Year: 1971
RI:
Are Damages In Current Dollars? Yes

Buildings (Days):
Utilities (Days): 1.0
Roads (Days):

Total	$2,452,902
Total Inflated	$2,452,902

Volunteers Cost

Number of Volunteers Required: 20.0
Cost of Volunteers Time ($/Hour/Person): 21.0
Per-Person Cost of Lodging for a Volunteer:150.0
Number of Hours Volunteered/Person: 8.0
Number of Days Lodging/Volunteer: 1.0
Cost of Volunteers: 6,360

Damage Year: 1968
RI:
Are Damages In Current Dollars? Yes

Buildings (Days):
Utilities (Days): 2.0
Roads (Days):

Total	$4,904,784
Total Inflated	$4,904,784

Volunteers Cost

Number of Volunteers Required: 25.0
Cost of Volunteers Time ($/Hour/Person): 21.0
Per-Person Cost of Lodging for a Volunteer:150.0
Number of Hours Volunteered/Person: 8.0
Number of Days Lodging/Volunteer: 2.0
Cost of Volunteers: 11,700

03 Sep 2018 Project: **Rolling Hill-Fire Prevention Through Power Line Undergrounding**

Total Benefits: **$6,494,741** Total Costs: **$1,569,003** BCR: **4.14**

Project Number: 0526 Disaster #: DR-4344 Program: HMGP Agency: **City of Rolling Hills**

State: **California** Point of Contact: Yolanta Schwartz Analyst: Sonia Hall

Damage Year: 1973
RI:
Are Damages In Current Dollars? Yes
Buildings (Days):
Utilities (Days): 2.0
Roads (Days):

Total	$4,912,164
Total Inflated	$4,912,164

Volunteers Cost

Number of Volunteers Required: 60.0
Cost of Volunteers Time ($/Hour/Person): 21.0
Per-Person Cost of Lodging for a Volunteer:150.0
Number of Hours Volunteered/Person: 8.0
Number of Days Lodging/Volunteer: 1.0
Cost of Volunteers: 19,080

Damage Year: 2009
RI:
Are Damages In Current Dollars? Yes
Buildings (Days):
Utilities (Days): 1.0
Roads (Days):

Total	$2,523,342
Total Inflated	$2,523,342

Volunteers Cost

Number of Volunteers Required: 100.0
Cost of Volunteers Time ($/Hour/Person): 21.0
Per-Person Cost of Lodging for a Volunteer:150.0
Number of Hours Volunteered/Person: 8.0
Number of Days Lodging/Volunteer: 4.0
Cost of Volunteers: 76,800

Social Benefits

Mental Stress and Anxiety

Lost Productivity

03 Sep 2018 Project: **Rolling Hill-Fire Prevention Through Power Line Undergrounding**

Total Benefits: **$6,494,741** Total Costs: **$1,569,003** BCR: **4.14**

Project Number: 0526 Disaster #: DR-4344 Program: HMGP Agency: **City of Rolling Hills**

State: **California** Point of Contact: Yolanta Schwartz Analyst: Sonia Hall

Number of Person:		Number of Worker:	
Treatment Costs per person:	$2,443.00	Productivity Loss per person:	$8,736.00
Total Mental Stress and Anxiety Cost:	$0.00	Total Lost Productivity Cost:	$0.00

BCR Calculation Results

Expected Annual Damages Before Mitigation		Expected Annual Damages After Mitigation		Expected Avoided Damages After Mitigation (Benefits)	
Annual:	$552,159	Annual:	$81,551	Annual:	$470,608
Present Value:	$7,620,206	Present Value:	$1,125,465	Present Value:	$6,494,741

Mitigation Benefits:	$6,494,741	Mitigation Costs:	$1,569,003
Benefits Minus Costs:	$4,925,738	Benefit-Cost Ratio:	4.14

Cost Estimate

Project Useful Life (years):	50	Construction Type:	
Mitigation Project Cost:	$1,539,276	Detailed Scope of Work:	Yes
Annual Project Maintenance Cost:	$2,154	Detailed Estimate for Entire Project:	Yes
Final Mitigation Project Cost:	$1,569,003	Years of Maintenance:	50
Cost Basis Year:		Present Worth of Annual Maintenance Costs:	$29,727
Construction Start Year:		Estimate Reflects Current Prices:	Yes
Construction End Year:		Project Escalation:	

Justification/Attachments

03 Sep 2018 Project: **Rolling Hill-Fire Prevention Through Power Line Undergrounding**

Total Benefits: **$6,494,741** Total Costs: **$1,569,003** BCR: **4.14**

Project Number: 0526 Disaster #: DR-4344 Program: HMGP Agency: **City of Rolling Hills**

State: **California** Point of Contact: Yolanta Schwartz Analyst: Sonia Hall

Field	Description	Attachments
Number of Customers Served	See attachments	Number of Customers served.pdf

Project Type	Useful Life (years)		Comment
	Standard Value	Acceptable Limits (documentation required)	
Acquisition / Relocation			
All Structures	100	100	
Elevation			
Residential building	30	30-50	
Non-Residential Building	25	25-50	
Public Building	50	50-100	
Historic Buildings	50	50-100	
Structural / Non-Structural Building Project			
Residential Building Retrofit	30	30	
Non-Residential Building Retrofit	25	25-50	
Public Building Retrofit	50	50-100	
Historic Building Retrofit	50	50-100	
Roof Diaphragm Retrofit	30	30	Roof hardening and roof clips
Tornado Safe Room - Residential	30	30	
Tornado Safe Room - Community	30	30-50	Retrofit or Small Community safe room ≤ 16 people (30 yr), New (50 yr)
Non-Structural Building Elements	30	30	Ceilings, electrical cabinets, generators, parapet walls, or chimneys
Non-Structural Major Equipment	15	15-30	Elevators, HVAC, sprinklers
Non-Structural Minor Equipment	5	5-20	Generic contents, racks, shelves
Infrastructure Projects			
Major Infrastructure (dams, levees)	50	35-100	
Concrete infrastructure, flood walls, roads, bridges, major drainage system	50	35-50	
Culverts (concrete, PVC, CMP, HDPE, etc.)	30	25-50	Culvert **with** end treatment (i.e., wing walls, end sections, head walls, etc.)
	10	5-20	Culvert **without** end treatment (i.e., wing walls, end sections, head walls, etc.)
Pump stations, substations, wastewater systems, or equipment such as generators	50	50	Structures
	5	5-30	Equipment
Hurricane Storm Shutters	15	15-30	Depends on type of storm shutter
Utility Mitigation Projects	50	50-100	Major (power lines, cable, hardening gas, water, sewer lines, etc.)
	5	5-30	Minor (backflow values, downspout disconnect, etc.)
Miscellaneous Equipment Projects			
Equipment purchases	2	2-10	Small, portable equipment (e.g., computer)
	30	5-30	Heavy equipment
Generators	19		The PUL may be altered based on manufacturer warranty or other documentation that can demonstrate that the generator life may be able to provide service longer than 19 years.
Wildfire Mitigation Projects			
Defensible Space/Hazardous Fuels Reduction	4	2-4	Brush - Depends on drought conditions
• Vegetation Management	1	1	Grass - Depends on geographic location and precipitation
	20	3-20	Forest Canopy - Must be maintained every 3 years
Ignition Resistant Construction	10	10-30	Depends on type of construction and materials used.

HMGP Cost Estimate Spreadsheet

DATE	JURSIDICTION NAME	DISASTER & PROJECT OR PLANNING #	PROJECT OR PLANNING TITLE
9/4/2018	CITY OF ROLLING HILLS	DR-4344-0526	REVENTION THROUGH POWER LINE UNDERGROU

#	Item Name	Unit Quantity	Unit of Measure	Unit Cost	Cost Estimate Total
1	Pre-Award: NOI Preparation - Sr. Planner	3	HR	$ 43.24	$ 130
2	Pre-Award: Procure Consultant - Plan. Dir. Labor	4	HR	$ 60.65	$ 243
3	Pre-Award: Subapplication Preparation - Consultant	70	EA	$ 150.00	$ 10,500
4	Pre-Award: Preliminary Draft Design - Utility (SCE)	1	EA	$ 1,500.00	$ 1,500
5	Pre-Award: Meetings w/consultant - Sr. Planner Labor	8	HR	$ 43.24	$ 346
6	Pre-Award: Meetings w/SCE - Plan. Dir. Labor	8	HR	$ 60.65	$ 485
7	Pre-Award: Public Meetings - Plan. Dir Labor	16	HR	$ 60.65	$ 970
8	Outreach: Mailer to Affected Property Owners	30	EA	$ 3.00	$ 90
9	Outreach: Meetings w/ Community Assoc - Sr. Planner L	4	HR	$ 43.24	$ 173
10	Outreach: Meetings w/Affected Property Owners - Sr. Pl	16	HR	$ 43.24	$ 692
11	Project Management w/Utility: Sr. Planner Labor	160	HR	$ 43.24	$ 6,918
12	Permits and Rights-of-Way Agreements: Sr. Planner Labo	5	HR	$ 43.24	$ 216
13	Final Design and Engineering: Utility (SCE)	1	EA	$ 50,000.00	$ 50,000
14	Pre-Construction: Utility (SCE) includes:	1	EA	$ 10,000.00	$ 10,000
15	- Develop Bid Specifications				$ -
16	- Develop Composite Trench Drawings				$ -
17	- Select Contractor(s)				$ -
18	- Procure Contractor(s)				$ -
19	Final Design/Eng/Construction: Utility (Cox) includes:	1	EA	$ 90,000.00	$ 90,000
20	- Develop Composite Trench Drawings, Construction				$ -
21	Final Design/Eng/Construction: Utility (Frontier) includes	1	EA	$ 55,013.00	$ 55,013
22	- Develop Composite Trench Drawings, Construction				$ -
23	Construction: (SCE) Materials and Management includes	2000	LF	$ 650.00	$ 1,300,000
24	- Obtain Trenching Contractor				$ -
25	- Trenching Equipment Rental				$ -
26	- Trenching Labor				$ -
27	- Tree Trimming (to free entangled lines)				$ -
28	- Lines				$ -
29	- Vault Encasement				$ -
30	- Piping for Line Enclosure				$ -
31	- Pole Removal (8)				$ -
32	- Stations: 55' CI 2 Poles, Insulators, 2BC/16Kv				$ -
33	- Stations: Cutouts, Xarm, Bonded Xarm, Sec Ground				$ -
34	- Remove overhead lines/poles				$ -
35	- Landscape and Street repair				$ -
36	Grant Administration (quarterly invoice/reports)	12	EA	$ 1,000.00	$ 12,000
37					$ -
38					$ -
39					$ -
40					$ -
				Total Project Cost Estimate:	$ 1,539,276

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

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Circuit Reliability Review

Rolling Hills

January 2017

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Overview of Rolling Hills

There are 6 circuits that serve Rolling Hills

Circuit Type	Sum of Customers	Circuit Type	Sum of Customers	Circuit Type	Sum of Customers	Circuit Type	Sum of Customers
BRIDLE(4.16KV)	367						
CODONA(4.16KV)	340						
FELDSPAR(16KV)	1,173						
SILICONE(16KV)	2,247						
STATLER(16KV)	1,674						
SURREY(4.16KV)	107						

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Grand Total 5,908

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The population of those served through the circuits in Rolling Hills is based on a household size of four.

There are a total of 5,908 connections X 4 in a household = 23,632 population.

Obtained	Input	Documentation Summary	Potential Sources	Software Input/ Justification
		The PUL is based on the type of mitigation.	help; which provide the FEMA Standard Values. If the FEMA standard values are not used, additional documentation is required from the project manager, or the project engineer to justify the PUL.	
☐	Facility Type	Choose one or more facility types for loss of function: utilities, roads/bridges, non-residential buildings, or not applicable. Provide photocopies of tax records, hard copy or electronic photos, appraisals, or maps.	Data is available from assessor, owner, local tax appraiser or surveyor office, or title documents.	
☐	Value of Services: Utilities	Enter the facility description, type of service, number of customers served and value per unit of service ($/person/day). Select electrical, water, wastewater, or other from the drop-down. If user chooses other, enter the description of the service. If a utility, enter the number of customers served by the utility. If other, enter the portion of the population that will be affected by the mitigation. Provide letters or technical studies from utilities that include engineering estimates or historic evidence of impact on service due to an event. FEMA Standard Values for Loss of Service for utilities: • Loss of electric power: $126/person/day • Loss of potable water: $93/person/day	Documentation is available from the agency providing the service. Local utility company data should indicate the number of affected customers. Determine the number of customer connections and then use census data to determine that average number of people at each location.	

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What are *annual maintenance costs*?
How do I determine *annual maintenance costs*?

Annual maintenance costs are those costs necessary for the upkeep or repair of mitigation project components so that the project maintains its effectiveness. Maintenance costs can include mowing, road maintenance, drainage cleaning, landscaping maintenance, and other site maintenance. Estimates can be provided by standard cost estimating software, contractors, or engineering documents. A reliable source should be used for developing the estimate such as a government representative or professional with relevant expertise.

How do I determine the number of *years of maintenance*?

The number of years of maintenance is typically equal to the project useful life.

What is the *present worth of annual maintenance costs*?

The present worth of annual maintenance costs are escalated using the Office of Management and Budget escalation factor of 7 percent over the number of years that maintenance is required.

City of Rolling Hills

Hazard Mitigation Plan

Fourth Draft

February 21, 2017

Prepared under contract with:
Carolyn J. Harshman, CEM
Emergency Planning Consultants

Section 6: Wildfire Hazards

Calculated Priority Risk Index (CPRI)	
Probability:	Likely
Magnitude/Severity:	Critical
Warning Time:	Less than 6 hours
Duration:	Less than one week

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B2

Q: B2. Does the Plan include information on previous occurrences of hazard events and on the probability of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **Why Are Wildfires a Threat to the Planning Area?** below.

Why are Wildfires a Threat to the Planning Area?

Since its incorporation in 1957 the City of Rolling Hills has only declared a local emergency on two occasions, in both cases related to brush fires. On June 25th 1973, the City Council of Rolling Hills declared a local emergency due to a brush fire that occurred on June 22, destroying ten homes within the "Flying Triangle" and "Southfield" areas. On September 14, 2009 the City Council declared a local emergency due to a brush fire that occurred on August 27, 2009 in the south east portion of the City.

With its many steep canyons and open scrub-covered hillsides, the Palos Verdes Peninsula area has always been vulnerable to the hazards associated with brush fires.

The earliest newspaper report of a wildfire on the Palos Verdes Peninsula was in October 1923, in which the Los Angeles Examiner reported a brush fire in the Palos Verdes Hills that burned an estimated 4,000 acres. Although no people were injured or killed and no structures were destroyed, a considerable amount of livestock perished in the fire, including 18 horses. In September 1945, the Peninsula News reported on a grass fire near Crest Road (in probably what is now the City of Rolling Hills) that destroyed one home and caused an estimated $50,000 worth of property damage. In June 1967, the Peninsula News reported that 45 acres had burned in the Portuguese Bend area located in what is now the city of Rancho Palos Verdes. Although no residences were damaged in this incident, "considerable farm land was destroyed as fire trucks and other equipment had to cross the fields in order to fight the flames."

The most destructive wildland fire that burned the Palos Verdes Peninsula to date occurred in June 1973. As reported in the Peninsula News, a fire that was started accidentally on Friday, June 22, 1973 by two youths playing with fireworks in Rancho Palos Verdes spread east into the "Flying Triangle" and "Southfield" areas of Rolling Hills where it destroyed 10 homes and 5 barns. The fire shifted west and burned into the Portuguese Bend area of Rancho Palos Verdes and destroyed 3 more homes. In all, the 1973 fire consumed a total of 900 acres and raged for 28 hours before it was finally extinguished. Fortunately, no human lives were lost. All

told, the disaster caused $1.3 million in private property damage in Rolling Hills and an additional $130,000 worth of damage in Rancho Palos Verdes.

The most recent fire in the planning area was on August 27 and 28, 2009, when a wildfire burned through approximately 230 total acres. The fire is believed to have originated in the Portuguese Bend Nature Reserve in Rancho Palos Verdes where 165 acres were charred. The remaining 65 acres were burned in Rolling Hills. Dozens of homes were threatened and approximately 1,200 residents were forced to evacuate, the majority in the adjoining City of Rancho Palos Verdes. Although some structures were reported damaged, no homes were lost and there were no reported injuries to residents or firefighters. (Source: Daily Breeze blog: South Bay History, Sam Gnerre, posted November 7, 2014)

In urban areas, the effectiveness of fire protection efforts is based upon several factors, including the age of structures, efficiency of circulation routes that ultimately affect response times and availability of water resources to combat fires. In wildland areas, taking the proper precautions, such as the use of fire resistant building materials, a pro-active Fire Prevention inspection program, and the development of defensible space around structures where combustible vegetation is controlled, can protect developed lands from fires and, therefore, reduce the potential loss of life and property.

Other factors contribute to the severity of fires including weather and winds. Specifically, winds commonly referred to as Santa Ana winds, which occur during fire season (typically from June to the first significant rain in November) are particularly significant. Such "fire weather" is characterized by several days of hot dry weather and high winds, resulting in low fuel moisture in vegetation.

California experiences large, destructive wildland fires almost every year, and Los Angeles County is no exception. Wildland fires have occurred within the county, particularly in the fall of the year, ranging from small, localized fires to disastrous fires covering thousands of acres. The most severe fire protection problem in the area is wildland fire during Santa Ana wind conditions.

Why are Wildfires a Threat to California?

A wildfire is an uncontrolled fire spreading through vegetative fuels and exposing or possibly consuming structures. They often begin unnoticed and spread quickly. Naturally occurring and non-native species of grasses, brush, and trees fuel wildfires. A Wildland Fire is a wildfire in an area in which development is essentially nonexistent, except for roads, railroads, power lines and similar facilities. A Wildland/Urban Interface Fire is a wildfire in a geographical area where structures and other human development meet or intermingle with wildland or vegetative fuels.

People start more than 80 percent of wildfires, usually as debris burns, arson, or carelessness. Lightning strikes are the next leading cause of wildfires. Wildfire behavior is based on three primary factors: fuel, topography, and weather. The type, and amount of fuel, as well as its burning qualities and level of moisture affect wildfire potential and behavior. The continuity of fuels, expressed in both

horizontal and vertical components, is also a determinant of wildfire potential and behavior. Topography is important because it affects the movement of air (and thus the fire) over the ground surface. The slope and shape of terrain can change the speed at which the fire travels, and the ability of firefighters to reach and extinguish the fire. Weather affects the probability of wildfire and has a significant effect on its behavior. Temperature, humidity and wind (both short and long term) affect the severity and duration of wildfires. Los Angeles County's topography, consisting of a semi-arid coastal plain and rolling highlands, when fueled by shrub overgrowth, occasional Santa Ana winds and high temperatures, creates an ever-present threat of wildland fire. Extreme weather conditions such as high temperature, low humidity, and/or winds of extraordinary force may cause an ordinary fire to expand into one of massive proportions.

For thousands of years, fires have been a natural part of the ecosystem in Southern California. However, wildfires present a substantial hazard to life and property in communities built within or adjacent to hillsides and mountainous areas. There is a huge potential for losses due to wildland/urban interface fires in Southern California. According to the California Division of Forestry (CDF), there were over seven thousand reportable fires in California in 2003, with over one million acres burned. According to CDF statistics, in the October 2003 Firestorms, over 4,800 homes were destroyed and 22 lives were lost.

In late October 2007, Southern California experienced an unusually severe fire weather event characterized by intense, dry, gusty Santa Ana winds. This weather event drove a series of destructive wildfires that took a devastating toll on people, property, natural resources, and infrastructure. Although some fires burned into early November, the heaviest damage occurred during the first three days of the siege when the winds were the strongest.

Historic Fires in Southern California

Large fires have been part of the Southern California landscape for millennia. Written documents reveal that during the 19th century human settlement of southern California altered the fire regime of coastal California by increasing the fire frequency. This was an era of very limited fire suppression, and yet like today, large crown fires covering tens of thousands of acres were not uncommon. One of the largest fires in Los Angeles County (60,000 acres) occurred in 1878.

Table: 20 Largest California Wildland Fires (By Acreage Burned)
(Source: CAL FIRE)

20 Largest California Wildland Fires (By *Acreage Burned)

	FIRE NAME/CAUSE	DATE	COUNTY	*ACRES*	STRUCTURES	DEATHS
1	CEDAR *(HUMAN)*	October 2003	SAN DIEGO	273,246	2,820	15
2	ZACA *(HUMAN)*	July 2007	SANTA BARBARA	240,207	1	0
3	MATILIJA *(UNDETERMINED)*	September 1932	VENTURA	220,000	0	0
4	WITCH *(POWERLINES)*	October 2007	SAN DIEGO	197,990	1,650	2
5	KLAMATH THEATER COMPLEX *(LIGHTNING)*	June 2008	SISKIYOU	192,038	0	2
6	MARBLE CONE *(LIGHTNING)*	July 1977	MONTEREY	177,866	0	0
7	LAGUNA *(POWERLINES)*	September 1970	SAN DIEGO	175,425	382	5
8	BASIN COMPLEX *(LIGHTNING)*	June 2008	MONTEREY	162,818	58	0
9	DAY FIRE *(HUMAN)*	September 2006	VENTURA	162,702	11	0
10	STATION FIRE *(HUMAN)*	August 2009	LOS ANGELES	160,557	209	2
11	MCNALLY *(HUMAN)*	July 2002	TULARE	150,696	17	0
12	STANISLAUS COMPLEX *(LIGHTNING)*	August 1987	TUOLUMNE	145,980	28	1
13	BIG BAR COMPLEX *(LIGHTNING)*	August 1999	TRINITY	140,948	0	0
14	CAMPBELL COMPLEX *(POWERLINES)*	August 1990	TEHAMA	125,892	27	0
15	WHEELER *(ARSON)*	July 1985	VENTURA	118,000	26	0
16	SIMI *(UNDER INVESTIGATION)*	October 2003	VENTURA	108,204	300	0
17	HWY. 58 *(VEHICLE)*	August 1996	SAN LUIS OBISPO	106,668	13	0
18	IRON ALPS COMPLEX *(LIGHTNING)*	June 2008	TRINITY	105,805	2	10
19	CLAMPITT *(POWERLINES)*	September 1970	LOS ANGELES	105,212	86	4
20	BAR COMPLEX *(LIGHTNING)*	July 2006	TRINITY	100,414	0	0

There is no doubt that there were fires with significant acreage loss in years prior to 1932, but those records are less reliable, and this list is meant to give an overview of the large acreage-loss fires in more recent times. (Also note that this list does not include fire jurisdiction. These are the top 20 within the state, regardless of whether they were state, federal, or local responsibility.)

9/23/2009

City of Rolling Hills

Hazard Mitigation Plan

Fourth Draft

February 21, 2017

Prepared under contract with:
Carolyn J. Harshman, CEM
Emergency Planning Consultants

Section 4: Earthquake Hazards

Calculated Priority Risk Index (CPRI)	
Probability:	Possible
Magnitude/Severity:	Critical
Warning Time:	Less than 6 hours
Duration:	Less than 6 hours

Q&A | ELEMENT B: HAZARD IDENTIFICATION AND RISK ASSESSMENT | B2

Q: B2. Does the Plan include information on previous occurrences of hazard events and on the probability of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))

A: See **Why Are Earthquakes a Threat to the Planning Area?** below.

Why Are Earthquakes a Threat to the Planning Area?

In terms of earthquakes, historically the planning area has been extremely lucky. Like the majority of the Los Angeles basin, the Palos Verdes Peninsula was largely uninhabited rangeland during the 7.9M Fort Tejon Earthquake in 1857. Articles in the Palos Verdes News indicate that the planning area sustained only minor property damage and no loss of life as a result of the major earthquakes that have occurred in the Los Angeles area since the area first began to develop rapidly following World War II.

The earliest report of any local earthquake-related damage comes from an article that appeared in the Palos Verdes News on April 10, 1968. The newspaper reported on two shocks, Magnitude 6 and Magnitude 7.25 in strength, respectively, that occurred a few days earlier that broke a water pipe in a drug store located in the nearby City of Palos Verdes Estates; consequently, flooding the store's basement and causing an estimated $4,000 to $5,000 in damage. On February 10, 1971, the Palos Verdes News reported that the Magnitude 6.6 San Fernando Earthquake resulted in 900 homes being without power in the Highridge area north of Crest Road in Rancho Palos Verdes for about an hour. Similarly, an article that appeared in the paper on October 3, 1987 reported that the Magnitude 5.9 Whittier Narrows Earthquake damaged a bank building in the Peninsula Shopping Center in Rolling Hills Estates, although the extent of the damage was not indicated. In addition, the article mentioned that cellular telephone service was disrupted most of the morning, but no power outages occurred.

The Magnitude 6.9 Northridge Earthquake of 1994 caused the most widespread, although still relatively minor damage within the planning area and surrounding area. On January 20, 1994, the Palos Verdes News reported that local damage consisted of fire and smoke damage to a liquor store on Western Avenue in Rancho Palos Verdes caused by liquor bottles falling from shelves and then igniting when a refrigeration unit sparked. In the same area, a long section of retaining wall along Western Avenue and Delasonde Drive collapsed onto the public sidewalk. In Rolling Hills Estates, scores of books fell from the shelves at the main library and several shops in the Peninsula Shopping Center in Rolling Hills Estates lost a day of business cleaning up fallen merchandise in the wake of the trembler. Additionally, in the nearby City of Palos

Verdes Estates, a portion of the road at Via Valmonte at Via Azalea buckled, breaking a natural gas line under the street. (Palos Verdes News, 1937-2004). Again, there were no reports of any significant damage within the boundaries of Rolling Hills.

The planning area is located in a seismically active area and near several of the many active and potentially active faults in Southern California. According to the Rolling Hills General Plan-Safety Element, the two faults posing the greatest threat to the planning area are the Palos Verdes Fault and the Newport-Inglewood Fault (see Map: Planning Area Fault Map).

The active Palos Verdes Fault trends northwest-southeast and marks the eastern termination of the Palos Verdes Hills. The Palos Verdes Fault is potentially capable of producing the most intense ground acceleration in the City, due to its proximity (1+ mile). A worst-case earthquake on the Palos Verdes Fault would produce seismic shaking with peak horizontal ground acceleration estimated at .53g (Richter Scale Magnitude 7.0).

The Newport-Inglewood Fault, located approximately 9+ miles from the City of Rolling Hills, is capable of producing a ground acceleration of .28g (Richter Scale Magnitude 6.9). These worst-case earthquakes (referred to as maximum credible earthquakes) may have shaking duration of up to 25 seconds.

Additional information on peak ground acceleration is shared later in this section under " Measuring and Defining Earthquakes". Please refer to the City's General Plan-Safety Element and the Technical Background Report for additional information.

Historic Earthquakes in Southern California

Since seismologists started recording and measuring earthquakes, there have been tens of thousands of recorded earthquakes in Southern California, most with a magnitude below three. No community in Southern California is beyond the reach of a damaging earthquake. Table: Earthquake Events in the Southern California Region describes the historical earthquake events that have affected Southern California.

Historically, the planning area has generally been spared a major destructive earthquake. However, based on a search of earthquake databases of the United States Geological Survey (USGS) - National Earthquake Information Center (NEIC), several major earthquakes (Magnitude 6.0 or more) have been recorded within approximately 100 kilometers, or about 62 miles of the project area since 1769.

Table: Historical Earthquakes M6.0+ near Los Angeles County
(Source: http://earthquake.usgs.gov/regional/sca/ca_eqs.php)

Date	Location	Maximum Magnitude (M)*
12/8/1812	Wrightwood	7.0
12/16/1858	San Bernardino Region	6.0
7/30/1894	Lytle Creek Region	6.0
4/21/1918	San Jacinto	6.9
7/23/1923	San Bernardino Region	6.0
3/11/1933	Long Beach	6.3
2/9/1971	San Fernando	6.5
1/17/1994	Northridge	6.9

To better understand the earthquake hazard, the scientific community has looked at historical records and accelerated research on those faults that are the sources of the earthquakes occurring in the Southern California region. Historical earthquake records can generally be divided into records of the pre-instrumental period and the instrumental period. In the absence of instrumentation, the detection of earthquakes are based on observations and felt reports, and are dependent upon population density and distribution. Since California was sparsely populated in the 1800s, the detection of pre-instrumental earthquakes is relatively difficult. However, two very large earthquakes, the Fort Tejon in 1857 (M7.9) and the Owens Valley in 1872 (M7.6) are evidence of the tremendously damaging potential of earthquakes in Southern California. In more recent times two M7.3 earthquakes struck Southern California, in Kern County (1952) and Landers (1992).

The damage from these four large earthquakes was limited because they occurred in areas that were sparsely populated at the time they happened. The seismic risk is much more severe today than in the past because the population at risk is in the millions, rather than a few hundred or a few thousand persons.

City of Rolling Hills INCORPORATED JANUARY 24, 1957

NO. 2 PORTUGUESE BEND ROAD
ROLLING HILLS, CA 90274
(310) 377-1521
FAX (310) 377-7288

PROJECT MAINTENANCE LETTER

September 4, 2018

City of Rolling Hills
Mayor Patrick Wilson
2 Portuguese Bend Road
Rolling Hills, CA 90274

RE: DR-4344-0526 Project Subapplication

Dear State Hazard Mitigation Officer:

This is to confirm that the City of Rolling Hills is committed to work through Southern California Edison to perform the necessary maintenance for the entire useful life (70-100 years) of this project once completed. Southern California Edison is allocating an annual budget of approximately $130,000 which will allow maintenance to occur as needed to ensure the Crest Road Power Line Undergrounding remains in good repair and operational.

ENTITY RESPONSIBLE FOR THE MAINTENANCE: Southern California Edison
Example: City of Townsville

PAST MAINTENANCE TASKS INVOLVED: Tasks in accordance with California State General Order No. 165, Overhead Electric Lines Maintenance Rules, prescribed by the Public Utilities Commission.

Explain the maintenance cost before mitigation and explain what the maintenance activities included in the past.

FUTURE MAINTENANCE TASKS INVOLVED: Tasks in accordance with California State General Order No. 165, Underground Electric Line Maintenance Rules prescribed by the Public Utilities Commission.

Explain the maintenance cost after mitigation and explain what the maintenance activities will include in the future.

FUTURE MAINTENANCE SCHEDULE: As prescribed by General Order 165
Example: Annually

FUTURE COST OF MAINTENANCE: 130,000
Example: $10,000.00

SOURCE OF FUTURE MAINTENANCE FUNDS: Southern California Edison Utility Funds
Example: Flood Control Funds

City of Rolling Hills INCORPORATED JANUARY 24, 1957

NO. 2 PORTUGUESE BEND ROAD
ROLLING HILLS, CA 90274
(310) 377-1521
FAX (310) 377-7288

Please contact Julia Stewart (jstewart@cityofrh.net or 310-377-1521) with any questions.

Sincerely,

Patrick Wilson, Mayor
310-377-1521 phone
310-377-7288 fax
pwilson@cityofrh.net

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)
SITE INFORMATION, ENVIRONMENTAL REVIEW, AND CHECKLIST

A. PURPOSE:

Federal agencies are required by law to independently assess the potential environmental impacts resulting from their proposed actions. This form will be used to screen applications for necessary compliance with those laws. It will be used to assess the amount of available information for environmental compliance and the cost burden of environmental compliance relative to the total project cost. It is extremely important that the information provided be in accurate and sufficient detail to permit FEMA to evaluate the environmental conditions and/or features for providing financial assistance to Subapplicants.

Although the information may be obtained from FEMA's own observations, previous environmental studies and/or research must be utilized. Such information is available from the jurisdictional Federal, state and local resource/regulatory agencies responsible for protecting or regulating resources such as wetlands, floodplains, coastal zones, threatened and endangered species, farmland, or properties listed in or considered eligible for listing to the National Register of Historic Places.

This information is designed to obtain an understanding by FEMA of the project site's present environmental condition and the proposed project's elements that may affect the environment. It is important to understand the comprehensive nature of the information requested. Information must be provided for the site and immediate surrounding area that will be directly or indirectly affected by implementation (construction and operation) of the Subapplicant's proposal.

B. PURPOSE AND NEED:

FEMA will provide federal financial assistance to State and Local governments and certain non-profit entities to respond to, recover from or help mitigate disasters by providing financial assistance from the grant programs within its jurisdiction.

C. PROJECT DESCRIPTION:

APPLICATION ID:	DR-4344-0526
PROPOSED PROJECT LOCATION:	Crest Road East near Eastfield Drive in the City of Rolling Hills **(ADDRESS, CITY, COUNTY, STATE, ZIP CODE)**
LATITUDE/LONGITUDE:	33.775837
PROPOSAL:	Underground Power Lines and Removal of Poles
SITE SIZE:	-118.343784

D. PROJECT COORDINATION, PERMITS AND APPROVALS:

Will the proposal require the following agency coordination, permits and/or approvals?

		YES	NO
1.	CWA Section 404/RHA Section 10	☐	☒
2.	Clean Water Act Section 401/402	☐	☒
3.	EO 11988 Floodplains 8-step Process	☐	☒
4.	EO 11990 Wetlands 8-step Process	☐	☒
5.	CZMA CC/Negative Determination	☐	☒
6.	Section 7 ESA	☐	☒
7.	NHPA Section 106	☐	☒
8.	FLPA Farmland Conversion Form AD-1006	☐	☒
9.	CAA General Conformity Determination	☐	☒
10.	Migratory Bird Treaty Act	☐	☒
11.	Fish and Wildlife Coordination Act	☐	☒
12.	Magnuson-Stevens Fishery & Management Act	☐	☒
13.	Other: _____	☐	☒

E. POTENTIAL ENVIRONMENTAL IMPACT:

Are any of the following land uses or environmental resources located on, or adjacent to the project site, and are directly or indirectly impacted by the proposed project?

Physical Characteristics of site(s) or vicinity:		**YES**	**NO**	**POSSIBLE**	**EXHIBITS***
1.	Flat, rolling, hilly, steep slopes, mountainous?	☐	☐	☒	☐
2.	Soil type?	☐	☒	☐	☐
3.	Any surface water bodies (streams, saltwater, lakes, ponds, rivers, wetlands) on or near the project area?	☐	☒	☐	☐
4.	Will the project require work over, in or adjacent to waters of the U.S.?	☐	☒	☐	☐
5.	Alter existing drainage pattern of the site, alter course of surface waters?	☐	☒	☐	☐
6.	Create increased stormwater runoff or otherwise degrade water quality?	☐	☒	☐	☐
7.	Source of collection and disposal of storm water runoff?	☐	☒	☐	☐
8.	Will the proposal alter surface water quality?	☐	☒	☐	☐
9.	Affect a sole source aquifer?	☐	☒	☐	☐
10.	Affect a Wild and Scenic River?	☐	☒	☐	☐
11.	Involve construction in the Coastal Zone?	☐	☒	☐	☐
12.	Could the proposal lead to increased erosion by clearing, grading, excavation?	☐	☒	☐	☐
13.	Could the proposal cause changes in geological substructures?	☐	☒	☐	☐
14.	Do seismic hazards exist in the area?	☐	☐	☒	☐

		YES	NO	POSSIBLE	EXHIBITS*
15.	Could the proposal increase mudslides, landslides, ground failure, subsidence or liquefaction?	☐	☒	☐	☐
16.	Located in a non-attainment or maintenance area for criteria air pollutants?	☐	☒	☐	☐
17.	Increase emission levels of regulated air pollutants and exceed *de minimis* standards?	☐	☒	☐	☐
18.	What types of noise would be created by this project (traffic, construction, operation)? Will the source produce short-term or long-term impacts?	☐	☐	☒	☐
19.	Affect sensitive receptors (residences, institutions, hospitals, schools within ¼ mile of project area?	☐	☐	☒	☐
20.	Will views in the immediate vicinity be altered or obstructed?	☐	☒	☐	☐
21.	Would the proposal result in an aesthetically negative site open to public view?	☐	☒	☐	☐
22.	Will the proposal produce light or glare?	☐	☒	☐	☐
23.	Could light or glare be a safety hazard or interfere with views?	☐	☒	☐	☐

Biological Characteristics:		YES	NO	POSSIBLE	EXHIBITS*
1.	Vegetation type? (Deciduous, coniferous, shrubs, grasses, pasture, cropland, hydrophytic)	☐	☒	☐	☐
2.	Wildlife observed on site or known to exist within immediate vicinity (Birds, mammals, fish)?	☐	☐	☒	☐
3.	Potential for endangered or threatened species and/or critical habitat in the project area?	☐	☒	☐	☐
4.	Result in the deterioration of existing or critical habitat?	☐	☒	☐	☐
5.	Have a substantial adverse effect on any riparian habitat?	☐	☒	☐	☐
6.	Interfere substantially with the movement of any migratory fish?	☐	☒	☐	☐
7.	Located in a migratory flyway or migration route?	☐	☒	☐	☐
8.	Conflict with any local ordinances protecting resources such as tree preservation?	☐	☒	☐	☐
9.	Introduce or cause the spread of invasive species during construction and/or operation?	☐	☒	☐	☐
10.	Affect any national/state/local wildlife/waterfowl refuges on or adjacent to project area?	☐	☒	☐	☐

Land Use and Socioeconomic Characteristics:		YES	NO	POSSIBLE	EXHIBITS*
1.	Have a disproportionate impact on low income or minority populations?	☐	☒	☐	☐
2.	Physically divide a community?	☐	☒	☐	☐
3.	Induce substantial population growth?	☐	☒	☐	☐
4.	Alter the present or planned use of an area?	☐	☒	☐	☐

		YES	NO	POSSIBLE	EXHIBITS*
5.	Displace a substantial number of people, housing or businesses?	☐	☒	☐	☐
6.	Would the proposal affect existing housing?	☐	☐	☒	☐
7.	Convert important farmland?	☐	☒	☐	☐
8.	Be located within two miles of a public airport?	☐	☒	☐	☐
9.	Has any part of the site been classified an environmentally sensitive area?	☐	☒	☐	☐
10.	Displace any existing recreational uses?	☐	☒	☐	☐

Historic and Cultural Characteristics:		**YES**	**NO**	**POSSIBLE**	**EXHIBITS***
1.	Result in an effect to historic properties on-site or adjacent to the site listed on or eligible for listing on the National Register of Historic Places?	☐	☒	☐	☐
2.	Is the proposed site on or adjacent to tribal lands?	☐	☐	☒	☐
3.	Result in excavation of soil?	☒	☐	☐	☐
4.	Would the proposal alter or destroy prehistoric or historic archeological sites?	☐	☒	☐	☐
5.	Result in an effect to properties designated as National Historic Landmarks?	☐	☒	☐	☐
6.	Would the proposal result in an adverse physical or aesthetic affect to a historic property?	☐	☒	☐	☐
7.	Anticipated level of effort for Section 106 compliance?	☐	☒	☐	☐

Hazardous/Toxic Materials:		**YES**	**NO**	**POSSIBLE**	**EXHIBITS***
1.	Does the site presently have known USTs or ASTs?	☐	☒	☐	☐
2.	Is there any evidence of existing USTs, such as vent pipes, fill caps, etc.?	☐	☒	☐	☐
3.	Have UST's ever been located on the property?	☐	☒	☐	☐
4.	Do the past uses of the site suggest hazardous or toxic materials may be present at or near the site?	☐	☐	☒	☐
5.	Are there curb cuts, footings, or other evidence of former buildings on site?	☐	☒	☐	☐
6.	Does the site or building contain any of the following: • PCB electric transformers? • Urea formaldehyde? Friable asbestos? • Lead-based paints? Radioactivity? • Radon? • Soil contamination?	☐	☐	☒	☐
7.	Is the site on or near an EPA or State Superfund or priority cleanup?	☐	☒	☐	☐

Energy and Utilities:		**YES**	**NO**	**POSSIBLE**	**EXHIBITS***
1.	What kinds of energy (electric, natural gas, oil) will be used to meet the project's needs for construction/operation?	☐	☒	☐	☐

		YES	NO	POSSIBLE	EXHIBITS*
2.	Are utilities available to the site? What type (electricity, natural gas, water, garbage, telephone, sanitary sewer)?	☐	☒	☐	☐

Public Services and Facilities:		YES	NO	POSSIBLE	EXHIBITS*
1.	Will the project result in an increased need for public services (fire, police, health care, schools)?	☐	☒	☐	☐
2.	Would the proposal result in a decrease in parks or open space?	☐	☒	☐	☐

Transportation:		YES	NO	POSSIBLE	EXHIBITS*
1.	Will the project change traffic patterns or volumes in the area?	☐	☐	☒	☐
2.	Does the site have access constraints?	☐	☒	☐	☐
3.	Will the project require any new roads or streets, or improvements to existing roads or streets?	☐	☒	☐	☐
4.	Will the proposal result in an increase of vehicular trips per day to the site?	☐	☐	☒	☐
5.	Will the proposal result in increased hazards to motor vehicles, bicyclists or pedestrians?	☐	☒	☐	☐

Construction Activities:		YES	NO	POSSIBLE	EXHIBITS*
1.	Would the proposal result in the following?	☐	☐	☐	☐
	a) increased ambient noise due to equipment?	☒	☐	☐	☐
	b) degrade local air quality due to dust, equipment exhaust and/or burning debris?	☐	☒	☐	☐
	c) deteriorate water quality from erosion or pollutant runoff?	☐	☒	☐	☐
	d) disrupt off-site and local traffic patterns?	☒	☐	☐	☐

Alternatives Considered:		EXHIBITS*
1.	Alternative locations (identify):	☐
2.	Alternative designs (identify):	☐

CEQ Significance Factors (40 CFR 1508.27):	YES	NO	POSSIBLE	EXHIBITS*
1. Is there anything in the context of the project that would suggest impacts might be significant?	☐	☒	☐	☐
2. Is the intensity of any of the following factors such that the impacts might be significant?	☐	☐	☐	☐
a) Beneficial and adverse impacts?	☐	☒	☐	☐
b) Human health or safety impacts?	☐	☒	☐	☐
c) Impacts on unique characteristics of the area, such as historic or cultural resources, park lands, prime farmlands, wetlands, floodplains, wild and scenic rivers, or ecologically critical areas?	☐	☒	☐	☐
d) Impacts that are likely to be highly controversial?	☐	☒	☐	☐
e) Impacts that are highly uncertain or involve unique/unknown risks?	☐	☒	☐	☐
f) The action establishes a precedent for future actions with potentially significant effects?	☐	☒	☐	☐
g) Impacts that are reasonably expected to be cumulative?	☐	☒	☐	☐
h) Adverse impacts on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, or impacts that may cause loss or destruction of significant scientific, cultural, or historical resources?	☐	☒	☐	☐
i) Adverse impacts on threatened or endangered species or its critical habitat as determined under the Endangered Species Act?	☐	☒	☐	☐
j) The action threatens a violation of Federal, state or local law or requirements imposed for the protection of the environment?	☐	☒	☐	☐

F. Does the proposal result in FEMA's Extraordinary Circumstances?

I.	Greater scope or size than normal for a particular category of action?	☐ Yes	☒ No
II.	High level of public controversy?	☐ Yes	☒ No
III.	Potential to degrade already poor environmental conditions?	☐ Yes	☒ No
IV.	Use of unproven technology with the potential for adverse effect?	☐ Yes	☒ No
V.	Presence of endangered or threatened species or their critical habitat?	☐ Yes	☒ No

VI. Presence of archaeological, cultural or historic properties? ☐ Yes ☒ No

VII. Presence of hazardous or toxic substances at levels that exceed Federal, state, or local regulations or standards requiring action? ☐ Yes ☒ No

VIII. Potential to affect adversely special status areas such as wetlands, coastal zones, wildlife refuges, wilderness areas, wild and scenic rivers or sole source drinking water aquifers? ☐ Yes ☒ No

IX. Potential to adversely affect human health and safety? ☐ Yes ☒ No

X. Would the project violate federal, state, local laws or tribal law or requirement imposed for the protection of the environment? ☐ Yes ☒ No

XI. Potential for significant cumulative impact with other RFFAs? ☐ Yes ☒ No

XI. Potential for significant cumulative impact with other RFFAs? ☐ Yes ☒ No

If yes, identify: _____

G. **Is the proposed project for HMA funding part of a larger proposal that would subject the entire project to Federal environmental review?** ☐ Yes ☒ No

H. **Does the application contain measures to avoid, reduce, minimize, or compensate potential environmental impacts?** ☒ Yes ☐ No

If yes, describe: Power poles treated with a known carcinogen would be removed appropriately based on Cal OSHA standards to avoid any risk to workers.

I. Were mitigation measures included in the proposal's budget? ☐ Yes ☒ No

J. What is the potential EHP cost of compliance relative to the requested federal share (cost of compliance refers to FEMA or FEMA contractor preparation of compliance activities not cost for mitigation measures that the Subapplicant would be responsible for):

High (>50% of requested Federal share) ☐
Medium (25-50% of requested Federal share) ☐
Low (<25% of requested Federal share) ☒

K. What is the anticipated Environmental compliance costs associated with the overall project?

High (>50% of requested Federal share) ☐
Medium (25-50% of requested Federal share) ☐
Low (<25% of requested Federal share) ☐
Not enough information to determine ☒

*** IF APPLICABLE, ADDITIONAL INSTRUCTIONS FOR NARRATIVE RESPONSES AND EXHIBITS**

1. **Floodplains** – Provide FEMA FIRM Map with site location clearly marked.

2. **Wetlands** – If the primary site alternative and/or its practicable alternative require a Section 10 of the Rivers and Harbors Act or a CWA Section 404 permit. Provide status of USACE permit receipt. Attach NWI wetlands map, as necessary.

3. **Viewshed** – If the proposed project is located in or adjacent to a residential or historic district, perform and provide a Visual Impact Assessment.

4. **Existing habitat** – Identify and describe any existing, observed in the field, or known or expected to exist flora and fauna species at the project site and immediately surrounding the site.

5. **Endangered/threatened species and/or critical habitat** – Contact local Ecological Services Field Office of the U.S. Fish and Wildlife Service (FWS) and obtain information and listing of any E/T **known to exist at the site or in the immediate vicinity.**

6. **Migratory Flyway or migration barrier** – If the proposed project is new construction or extension of an existing tower of 30' in height or more complete Tower Site Evaluation Form.

7. **Invasive Species** – Provide information about Subapplicant's plans for re-vegetation and avoidance of spreading invasive species during construction.

8. **Minority of low-income populations** – If the proposed project will impact minority and low- income populations as identified in Executive Order 12898, perform evaluation in accordance with EPA guidance on performing Environmental Justice Analysis.

9. **Farmland** – If alternative would convert or impact important farmland, complete and submit NRCS Form AD 1006 to the Natural Resources Conservation Service for rating. Attached completed and signed form (by NRCS).

10. **Historic and Cultural Characteristics** – Identify any listed, eligible or potentially eligible historic/archaeological resources the APE. Provide CHRIS, data sheets or other sources obtained from State Historic Preservation Officers used to identify such properties.

11. **Hazardous Substances** – Provide a description of any hazardous, toxic materials found at the site.

12. **Roadway and Access** – Provide description of what, where, how, length, width, depth, material, permanent or temporary and drawings including site plan and cross sectional drawing. If roadway is temporary, how will fill material (If CWA fill permit required, see #2 above) or roadway surfacing be removed and site restored.

13. **Alternatives Considered** – Provide a description and a justification for elimination of other proposed project locations and designs considered.

PREPARED BY:	Julia Stewart
TITLE:	Acting Planning Director
TELEPHONE:	310-377-1521
DATE:	08/29/18

Maps

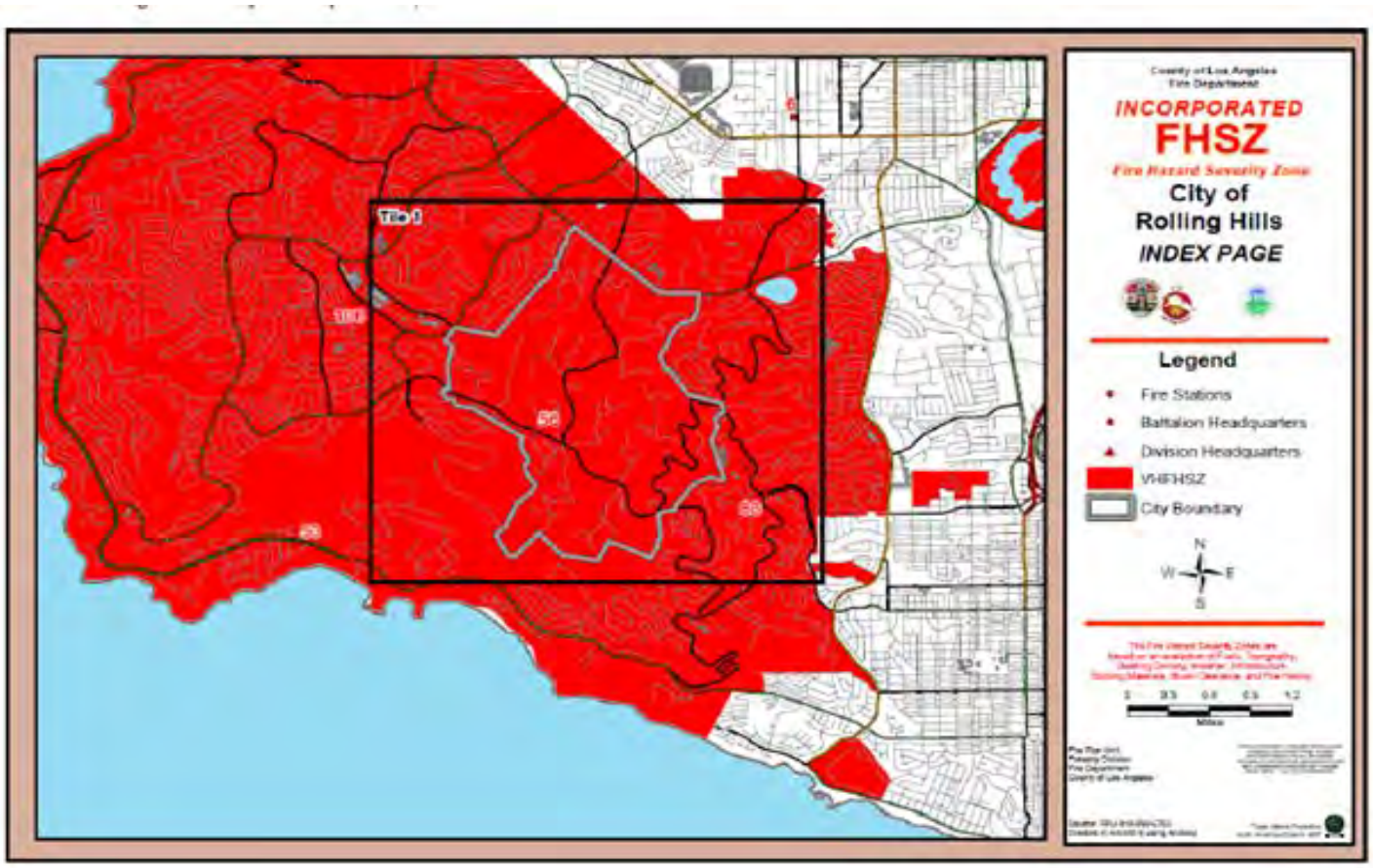

***Figure 1**. Very High Hazard Severity Zone for the City of Rolling Hills.*

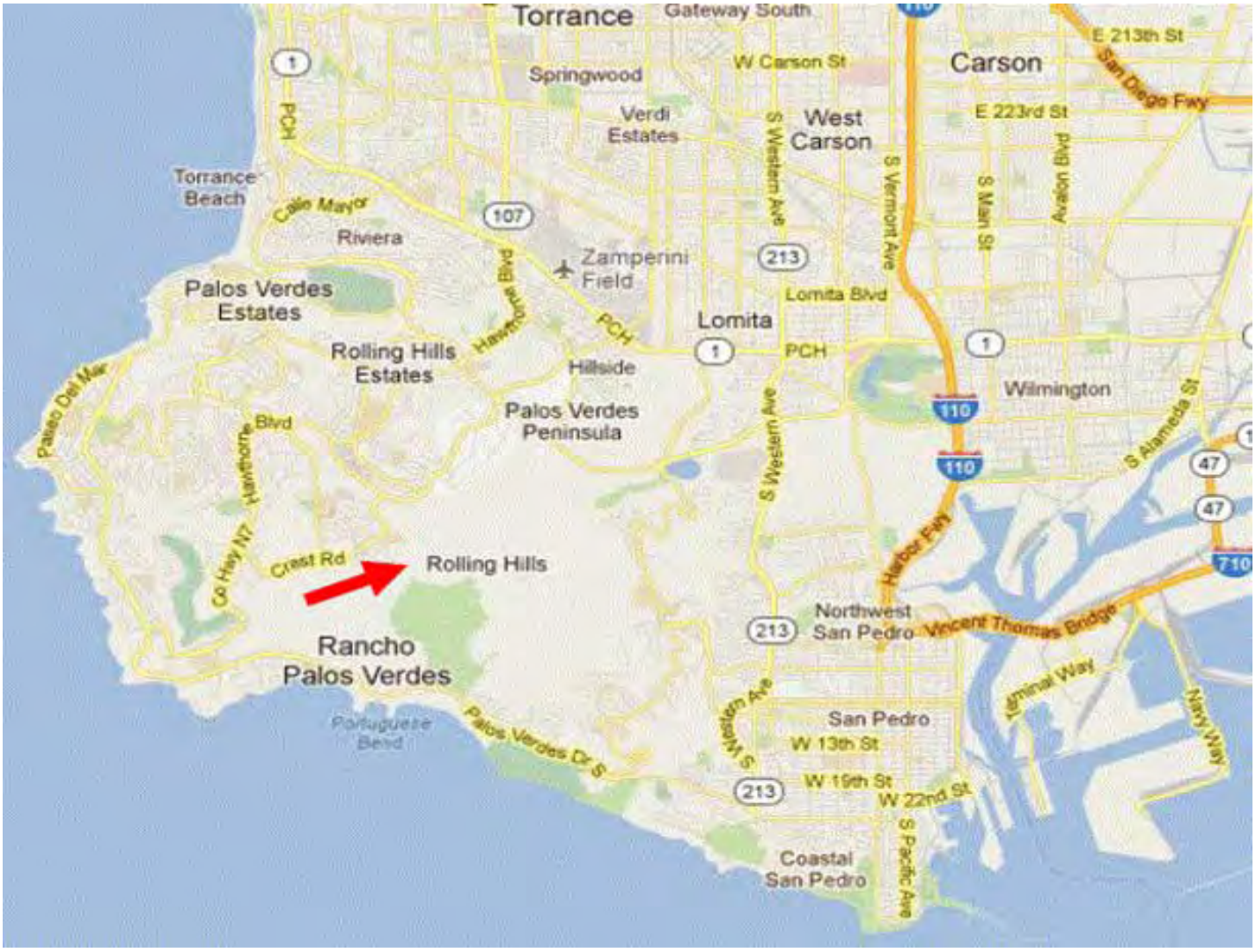

***Figure 2**. Location of Rolling Hills, CA with respect to Rancho Palos Verdes, San Pedro, and Torrance.*

Figure 3. *Proximity of Rolling Hills to nearby seismic faults. Epicenters of major earthquakes that devastated the region are also shown.*

GAVIN NEWSOM
GOVERNOR

Cal OES
GOVERNOR'S OFFICE
OF EMERGENCY SERVICES

MARK S. GHILARDUCCI
DIRECTOR

September 14, 2020

Elaine Jeng
City Manager
Rolling Hills, City of
2 Portuguese Bend Road
Rolling Hills, CA 90274

Subject: **Notification of Subapplication Approval**
Hazard Mitigation Grant Program
FEMA-**4344**-DR-CA, Project #**PJ0526**, FIPS #**037-62602**

Dear Ms. Jeng:

The California Governor's Office of Emergency Services (Cal OES) received notification that the Federal Emergency Management Agency (FEMA) has approved your organization's subaward application in the amount of **$1,145,457.00**. A copy of the FEMA award package is enclosed for your records. In order to receive payment as a grant subrecipient, your organization must have the following on file with the Recovery Grants Processing Unit:

- A valid, current (approved within the last 3 years) Governing Body Resolution
- A Project Assurances for Federal Assistance agreement
- A Supplemental Grant Subaward Information sheet
- A current Federal Funding Accountability and Transparency Act (FFATA) Financial Disclosure form. This form must be submitted each fiscal year.
- An active DUNS Number registration with the federal System for Award Management (SAM) website. The registration must remain active for the duration of this grant subaward.

For your convenience, this subapplication approval package includes the required post-obligation documents as well as guides to completing and renewing a SAM registration. Please complete the documents and mail copies to the address listed at the end of this letter, keeping the originals with your records. Alternatively, you may scan and email the completed documents to the Recovery Grants Processing Unit at HMGrantsPayments@CalOES.ca.gov. Electronic copies of the post-obligation documents can also be requested at the same address.

Payments will be made on a reimbursement basis using the enclosed Hazard Mitigation Reimbursement Request Form. A ten percent (10%) retention will be withheld from all reimbursement payments and will be released as part of the subaward closeout process.

Reimbursements can be made only for items listed on the approved subaward application. Expenditures for any other work should be separately maintained and are the sole responsibility of the subrecipient. Any funds received in excess of current needs or approved amounts, or those found owed as a result of a final inspection or audit, must be refunded to the State within 30 days of receipt of an invoice from Cal OES.

When mailing documents to the Recovery Grants Processing Unit, please use the following address:

California Governor's Office of Emergency Services
Attention: Recovery Grants Processing Unit
3650 Schriever Avenue
Mather, CA 95655

For further assistance regarding post-obligation documents or the reimbursement request process, please contact the Recovery Grants Processing Unit at (916) 845-8110. For program-related questions, please contact the Hazard Mitigation Grants Programs Unit at (916) 845-8150.

Recovery Grants Processing Unit

Enclosures

c: Applicant's File

*The Recovery Grants Processing Unit has the City's universal resolution, passed on 10/14/19, on file. A copy of the resolution is included in this package for your review. With your permission, the resolution can be applied to this project.

U.S. Department of Homeland Security
1111 Broadway, Suite 1200
Oakland, CA 94607-4052

FEMA

August 7, 2020

Mark S. Ghilarducci, Director
Governor's Authorized Representative
California Office of Emergency Services
3650 Schriever Avenue
Mather, CA 95655

Reference: Application Approval, HMGP #4344-526-112R
City of Rolling Hills, California
Fire Prevention Power Line Undergrounding
Supplement #129

Dear Mr. Ghilarducci:

The Federal Emergency Management Agency (FEMA) have approved and issued Hazard Mitigation Grant Program (HMGP) funds for the City of Rolling Hills (recipient), HMGP #4344-526-112R, Fire Prevention Power Line Undergrounding.

The total eligible costs are $1,527,276. As shown in the enclosed Obligation Report - Supplement #129, we have obligated $1,145,457 for up to 75 percent federal share; the non-Federal share match is $381,819. These funds are available in Smartlink for eligible disbursements.

This HMGP grant approval and obligation of funds are subject to the following:

1. **Scope of Work (SOW)** – The Project will underground existing overhead utilities lines and remove associated wooden utility poles along an unnamed road and Crest Road East within the southeastern portion of the City of Rolling Hills, Los Angeles County, California (33.747522, -118.339223 at approximate midpoint) to reduce the risk of wildfire and the associated risk of loss of life, property, and services in the area. The project will underground roughly 2,000 linear feet of power line (1,820 linear feet along Crest Road East and 180 linear feet between the existing power poles and three private residences within the City) and remove associated wooden utility poles. Transformers will be placed on the ground atop concrete pads situated at locations based on electrical demand and their current overhead location.

2. **Budget Revisions and Cost Overruns** - In accordance with the 2015 Hazard Mitigation Assistance Unified Guidance, Part VI D.3, when budget changes are made, all programmatic requirements continue to apply. Additional information regarding budget adjustments and revisions can be found in 2 CFR Part 200.308. The Recipient must obtain FEMA's prior written approval for any budget revisions.

   Cost overruns must be approved by FEMA Region IX before implementation and the subgrant must continue to meet programmatic eligibility requirements, including cost effectiveness and cost share. Additional information can be found in 2 CFR Part 200.

3. **Activity Completion Date** – The work schedule in the application states the Phase One completion time frame is 33 months. We will annotate May 7, 2023 as the project completion date. Please inform the subrecipient that work completed after this date is not eligible for federal funding, and federal funds may be de-obligated for work not completed within schedule for which there is no approved time extension.

4. **Grant Period of Performance** – The POP is the period during which the Cal OES is expected to complete all subgrant activities and costs within the grant. For 4344-DR-CA, the POP ends no later than 48 months from the close of the application period of April 2, 2019. Additional extensions beyond the April 2, 2023 POP are approved by FEMA Headquarters. Please refer to Part VI.D.4 of the *Guidance* and advise the Subrecipient; FEMA may de-obligate Federal funds for any work not completed by **May 7, 2023** where no time extension is approved.

5. **National Environmental Policy Act (NEPA)** – Project activities are covered in the December 2014 Region IX Programmatic Environmental Assessment for Recurring Actions in Arizona, California, and Nevada, as described in Section 2.3.4 (Repairing, Realigning, or Otherwise Modifying Roads, Trails, Utilities, and Rail Lines) and Section 2.3.5 (Constructing New Facilities or Relocating Existing Facilities). Please see Enclosures for further information.

6. This award of funds is subject to the enclosed *Standard Hazard Mitigation Grant Program Conditions,* amended August 2018. Federal funds may be de-obligated for work that does not comply with these conditions.

If you have any questions or need further assistance please contact me, or your staff may contact Thomas Berry, Sr. Hazard Mitigation Assistance Specialist, at Thomas.Berry@fema.dhs.gov.

Sincerely,

Digitally signed by ROBERT P MCCORD
Date: 2020.08.07 15:32:06 -07'00'

For Juliette Hayes
Director
Mitigation Division
FEMA Region IX

cc: Jennifer Hogan, State Hazard Mitigation Officer
Emily Winchell, Cal OES
Anthony Roggio, Cal OES
Robin Shepard, Cal OES
Monika Saputra, Cal OES

Enclosures (6):
Obligation Report - Supplement #129
Project Management Report
Record of Environmental Considerations
Endangered Species Act (ESA) Letter
Endangered Species Act (ESA) Review Form
Standard HMGP Conditions

U.S. Department of Homeland Security
Region IX
1111 Broadway, Suite 1200
Oakland, CA 94607-4052

FEMA

July 24, 2020

Elaine Jeng
City of Rolling Hills

Re: Fire Prevention Power Line Undergrounding project
HMGP-4344-526-112
Subrecipient: City of Rolling Hills

Dear Ms. Jeng:

On June 10, 2020 FEMA Environmental and Historic Preservation (EHP) received the enclosed Endangered Species Act (ESA) Review Form with concurrence from the U.S. Fish and Wildlife Service (USFWS) Carlsbad office. On July 9, 2020, the form was countersigned by the City of Rolling Hills. This completes the Section 7 consultation for your Hazard Mitigation Grant Program (HMGP) project application.

The proposed project activities are covered and have been appended to FEMA's March 2019 *Programmatic Formal Section 7 Consultation on Federal Emergency Management Agency's Disaster, Mitigation, and Preparedness Programs within the Carlsbad Fish and Wildlife Office's Jurisdiction, California* (USFWS PBO). The ESA Review Form describes the potential impacts and contains a list of applicable General Avoidance and Minimization Measures (AMMs) and Species-Specific Conservation Measures (CMs) which the City of Rolling Hills (Subrecipient) shall implement for the duration of the proposed project. The corresponding AMMs and CMs are described in detail in the USFWS PBO. **It is responsibility of the Subrecipient to comply with all applicable AMMs, CMs, and terms and conditions of the ESA Review Form and the USFWS PBO.**

Of particular note are:

- *CAGN 2 Seasonal Avoidance* - All clearing of vegetation within occupied or designated critical habitat (gnatcatcher habitat) must occur outside the breeding season, February 15-August 30. If the breeding season cannot be avoided, a California USFWS-approved biologist must conduct preconstruction nesting bird surveys prior to vegetation removal. If no active nests are found to occur within 300 feet of the area of disturbance, project activities may proceed.

- *CAGN 5 Habitat Restoration Plan* - Prior to construction, a Restoration Plan must be prepared that describes the efforts to restore all the areas of suitable habitat for the gnatcatcher that will be temporarily impacted. Restoration of temporary impacts must occur in accordance with a

restoration plan that is reviewed and approved by the California USFWS prior to the proposed project.

In addition to implementation of the applicable AMMs and CMs, the Subrecipient must submit the attached Post-Construction Notification Reporting Form included in this transmittal to FEMA EHP and the Carlsbad USFWS Office **within 45 days of project construction completion**. Failure to comply with any of the AMMs, CMs, and terms and conditions listed within the ESA Review Form may jeopardize federal assistance including funding.

If you require additional information related to this correspondence, please contact me via email (david.cohen@fema.dhs.gov) or phone (510) 627-7063. For information regarding the USFWS determination, please contact Scott Sobiech, Field Supervisor (scott_sobiech@fws.gov); (760) 431-9440 ext 248, or Jesse Bennett, Fish and Wildlife Biologist (jesse_bennett@fws.gov); (760) 431-9440 ext 305.

Sincerely,

David R. Cohen, for
Alessandro Amaglio
Environmental Officer
FEMA Region IX

Attachments:
List of AMMs and CMs
July 9, 2020 signed Endangered Species Act Review Form
FEMA PBO Post-construction Notification Reporting Form
2019 PBO with USFWS Carlsbad Office

HMGP 4344-526-112R / Fire Prevention Power Line Undergrounding (City of Rolling Hills)

Carlsbad USFWS Programmatic Biological Opinion

General Avoidance and Minimization Measures

GEN AMM-3 Dust Control Measures: To reduce dust, all traffic associated with the subapplicant's construction activities will be restricted to a speed limit of 20 miles per hour when traveling off of highways or county roads. Stockpiles of material that are susceptible to wind-blown dispersal will be covered with plastic sheeting or other suitable material to prevent movement of the material. During construction, water or other binding materials will be applied to disturbed ground that may become windborne. If binding agents are used, all manufacturers' recommendations for use will be followed.

GEN AMM-4 Spill Control Planning: The subapplicant will prepare a Spill Prevention and Pollution Control Plan to address the storage of hazardous materials and emergency cleanup of any hazardous material and will be available on site, if applicable. The plan will incorporate hazardous waste, stormwater, and other emergency planning requirements.

GEN AMM-5 Spill Prevention and Pollution Control Measures: The subapplicant will exercise every reasonable precaution to protect federally listed species and their habitats from pollution due to fuels, oils, lubricants, construction by- products, and pollutants such as construction chemicals, fresh cement, saw-water, or other harmful materials. Water containing mud, silt, concrete, or other by-products or pollutants from construction activities will be treated by filtration, retention in a settling pond, or similar measures. Fresh cement or concrete will not be allowed to enter the flowing water of streams, and curing concrete will not come into direct contact with waters supporting federally listed species. Construction pollutants will be collected and transported to an authorized disposal area, as appropriate, per all Federal, State, and local laws and regulations.

To reduce bottom substrate disturbance and excessive turbidity, removal of existing piles by cutting at the substrate surface or reverse pile driving with a sand collar at the base to minimize resuspension of any toxic substances is preferable; hydraulic jetting will not be used.

No petroleum product chemicals, silt, fine soils, or any substance or material deleterious to federally listed species will be allowed to pass into or be placed where it can pass into a stream channel. There will be no side-casting of material into any waterway.

All concrete or other similar rubble will be free of trash and reinforcement steel. No petroleum-based products (e.g., asphalt) will be used as a stabilizing material.

The subapplicant will store all hazardous materials in properly designated containers in a storage area with an impermeable membrane between the ground and the hazardous materials. The storage area will be encircled by a berm to prevent the discharge of pollutants to ground water or runoff into the habitats of federally listed species. A plan for the emergency cleanup of any hazardous material will be available on site, and adequate materials for spill cleanup will be maintained on-site.

GEN AMM-6 Equipment Inspection and Maintenance: Well-maintained equipment will be used to perform the work and, except in the case of a failure or breakdown, equipment maintenance will be performed off site. Equipment will be inspected daily by the operator for leaks or spills. If leaks or spills are encountered, the source of the leak will be identified, leaked material will be cleaned up, and the

cleaning materials will be collected and disposed of properly. Fueling of land- and marine-based equipment will be conducted in accordance with procedures to be developed in the Spill Prevention and Pollution Control Plan.

Vehicles and equipment that are used during the course of a project will be fueled and serviced in a "safe" area (i.e., outside of sensitive habitats) in a manner that will not affect federally listed species or their habitats. Spills, leaks, and other problems of a similar nature will be resolved immediately to prevent unnecessary effects on federally listed species and their habitats. A plan for the emergency cleanup of any spills of fuel or other material will be available on site, and adequate materials for spill cleanup will be maintained onsite.

GEN AMM-7 Fueling Activities: Avoidance and minimization measures will be applied to protect federally listed species and their habitats from pollution due to fuels, oils, lubricants, and other harmful materials. Vehicles and equipment that are used during project implementation will be fueled and serviced in a manner that will not affect federally listed species or their habitats. Machinery and equipment used during work will be serviced, fueled, and maintained on uplands to prevent contamination to surface waters. Fueling equipment and vehicles will be kept more than 200 feet away from waters of the State. Exceptions to this distance requirement may be allowed for large cranes, pile drivers, and drill rigs, if they cannot be easily moved.

GEN AMM-9 Materials Storage and Disposal: Stockpiled soils will be adequately covered to prevent sedimentation from runoff and wind. All hazardous materials will be stored in upland areas in storage trailers and/or shipping containers designed to provide adequate containment. Short-term laydown of hazardous materials for immediate use will be permitted provided the same containment precautions are taken as described for hazardous materials storage. All construction materials, wastes, debris, sediment, rubbish, trash, and fencing will be removed from the site once project construction is complete and transported to an authorized disposal area, as appropriate, in compliance with applicable Federal, State, and local laws and regulations. No disposal of construction materials or debris will occur in a floodplain. No storage of construction materials or debris will occur in a floodplain during flood season.

GEN AMM-10 Fire Prevention: With the exception of vegetation-clearing equipment, no vehicles or construction equipment will be operated in areas of tall, dry vegetation.

The subapplicant will develop and implement a fire prevention and suppression plan for all maintenance and repair activities that require welding or otherwise have a risk of starting a wildfire. Also, fire extinguishers will be required for all vehicles used within or adjacent to undeveloped open spaces.

GEN AMM-11 Waste Management: The work area will be kept free of loose trash, including small pieces of residual construction material, such as metal cuttings, broken glass, and hardware.

All food waste will be removed from the site on a daily basis.

All construction material, wastes, debris, sediment, rubbish, vegetation, trash, and fencing will be removed from the site once the project is completed and will be transported to an authorized disposal area, as appropriate, per all Federal, State, and local laws and regulations.

GEN AMM-13 Work Area Designation to Minimize Disturbance: The subapplicant will reduce, to the maximum extent practicable, the amount of disturbance at a site to the absolute minimum necessary to accomplish the project. Wherever possible, existing vegetation will be salvaged from the project area and stored for replanting after earthmoving activities are completed. Topsoil will be removed, stockpiled, covered, and encircled with silt fencing to prevent loss or movement of the soil into federally listed species habitats. All topsoil will be replaced in a manner to recreate pre-disturbance conditions as closely as possible.

Project planning must consider not only the effects of the action itself, but also all ancillary activities associated with the actions, such as equipment staging and refueling areas, topsoil or spoils stockpiling areas, material storage areas, disposal sites, routes of ingress and egress to the project site, and all other related activities necessary to complete the project.

GEN AMM-15 Environmental Awareness Training for Construction Personnel: All construction personnel will be given environmental awareness training by the project's environmental inspector or biological monitor before the start of construction. The training will familiarize all construction personnel with the federally listed species that may occur on site, their habitats, general provisions and protections afforded by the Act, measures to be implemented to protect these species, and the project boundaries.

This training will be provided within 3 days of the arrival of any new worker.

As part of the environmental awareness training, construction personnel will be notified that no dogs or any other pets under control of construction personnel will be allowed in the construction area, and that no firearms will be permitted in the construction area, unless carried by authorized security personnel or law enforcement.

GEN AMM-17 Daily Work Hours: Construction activities that could affect suitable habitat for federally listed species will be limited to daylight hours during weekdays, leaving a nighttime and weekend period for the species. Work will be allowed on weekends if the proposed construction is 14 days or less in length.

GEN AMM-18 Entrapment Prevention: To prevent entrapment of covered species, all vertically-sided holes or trenches will be covered at the end of the workday, or have escape ramps built into the walls of the excavation. If pipes are stored onsite or in associated staging areas, they will be capped when not in use. Construction materials that have the potential to entangle or entrap wildlife will be properly contained so that wildlife cannot interact with the materials. If a covered species is identified onsite, crews will immediately stop work within 50 feet of the individual, and inform the construction supervisor and the Service-approved biologist. Work will not continue within 50 feet of the individual until it has traveled off the project site of its own volition. For covered species, please refer to the species-specific Conservation Measures section of the programmatic biological opinion.

GEN AMM-21 Restoration of Upland Areas to Pre-Project Conditions: For projects that require restoration of upland areas to pre-project conditions as a result of ground disturbance during construction activities, the subapplicant will use native plants to the maximum extent practicable. Similarly, when hydroseeding, only native seed mix will be used.

Coastal California Gnatcatcher Conservation Measures

CAGN 2 Seasonal Avoidance: To minimize direct effects to nesting gnatcatchers, all clearing of vegetation within occupied or designated critical habitat (gnatcatcher habitat) will occur outside the breeding season (February 15-August 30) to the maximum extent practicable. If the breeding season cannot be avoided, a CFWO-approved biologist will conduct preconstruction nesting bird surveys prior to vegetation removal. If no active nests are found to occur within 300 feet of the area of disturbance, project activities may proceed.

CAGN 4 Habitat Avoidance: Project impacts will be avoided or minimized in coastal sage scrub, alluvial fan scrub, and other vegetation communities known to be occupied by the gnatcatcher. Staging and temporary construction areas will be located outside of suitable habitat and will use existing roads and developed areas to the maximum extent possible. If impacts to these habitats cannot be avoided, effects to gnatcatcher individuals will be avoided or minimized through implementation of the measures listed above.

CAGN 5 Habitat Restoration Plan: Prior to construction, a Restoration Plan will be prepared that describes the efforts to restore all the areas that had temporary impacts on suitable habitat for the gnatcatcher. Restoration of temporary impacts will occur in accordance with a restoration plan that is reviewed and approved by the CFWO prior to the proposed project.

CAGN 6 Limits on Habitat Disturbance: For any specific project, temporary impacts on occupied or designated critical habitat for the gnatcatcher will be limited to a maximum of 1 acre. Temporary impacts from all the projects covered under this programmatic consultation will also be limited to a maximum of 20 acres of gnatcatcher occupied or designated critical habitat. In addition, impacts will be limited to 10 gnatcatcher territories.

CAGN 7 No Permanent Loss of Habitat: No permanent loss of occupied or designated critical habitat for the gnatcatcher will occur.

FEDERAL EMERGENCY MANAGEMENT AGENCY
HAZARD MITIGATION GRANTS PROGRAM
Obligation Report w/ Signatures

Disaster No	FEMA Project No	Amendment No	State Application ID	Action No	Supplemental No	State	Recipient
4344	112 -R	0	526	1	129	CA	Statewide

Subrecipient: Rolling Hills
Subrecipient FIPS Code: 037-62602

Project Title : Rolling Hills Fire Prevention Through Power Line Undergounding

Total Amount Previously Allocated	Total Amount Previously Obligated	Total Amount Pending Obligation	Total Amount Available for New Obligation
$1,145,457.00	$1,145,457.00	$0.00	$0.00

Project Amount	Subrecipient Management Cost Amount	Total Obligation	IFMIS Date	IFMIS Status	FY
$1,145,457.00	$0.00	$1,145,457.00	08/07/2020	Accept	2020

Comments

Date: 08/07/2020 User Id: SSCOTT39

Comment: Approved funding for Fire Prevention Power Line Undergrounding Project.

Authorization

Preparer Name: STEVEN SCOTT

Preparation Date: 08/07/2020

HMO Authorization Name: THOMAS BERRY

HMO Authorization Date: 08/07/2020

Digitally signed by ROBERT P MCCORD
Date: 2020.08.07 15:33:34 -07'00'

Authorizing Official Signature	Authorizing Official Title	Authorization Date
Authorizing Official Signature	Authorizing Official Title	Authorization Date

FEDERAL EMERGENCY MANAGEMENT AGENCY
HAZARD MITIGATION GRANT PROGRAM
Project Management Report

Disaster Number	FEMA Project Number	Amendment Number	App ID	State	Recipient
4344	**112-R**	**0**	**526**	**CA**	**Statewide**

Subrecipient: Rolling Hills
FIPS Code: 037-62602
Project Title : Rolling Hills Fire Prevention Through Power Line Undergounding

Mitigation Project Description

Amendment Status : Approved
Approval Status: Approved

Project Title : Rolling Hills Fire Prevention Through Power Line Undergounding

Recipient : Statewide
Subrecipient : Rolling Hills

Recipient County Name : Los Angeles
Subrecipient County Name : Los Angeles

Recipient County Code : 37
Subrecipient County Code : 37

Recipient Place Name : Rolling Hills
Subrecipient Place Name : Rolling Hills

Recipient Place Code : 0
Subrecipient Place Code : 62602

Project Closeout Date : 00/00/0000

Work Schedule Status

Amend #	Description	Time Frame	Due Date	Revised Date	Completion Date
0	Technical Evaluations Finalized	2m	00/00/0000	00/00/0000	00/00/0000
0	Geotechnical and Surveying	2m	00/00/0000	00/00/0000	00/00/0000
0	Final Design Plans, Specs, and Cost Estimates	7m	00/00/0000	00/00/0000	00/00/0000
0	Development of CEQA Documents (as applicable)	2m	00/00/0000	00/00/0000	00/00/0000
0	Perparation and Advertisement for Bid	3m	00/00/0000	00/00/0000	00/00/0000
0	Board Approval of Construction Awards	3m	00/00/0000	00/00/0000	00/00/0000
0	Construction Begins	1m	00/00/0000	00/00/0000	00/00/0000
0	Construction Mobilization	1m	00/00/0000	00/00/0000	00/00/0000
0	Undergrounding	10m	00/00/0000	00/00/0000	00/00/0000
0	Punchlist Completion	1m	00/00/0000	00/00/0000	00/00/0000
0	Demobilization	1m	00/00/0000	00/00/0000	00/00/0000
0	Grant Close-out	3m	00/00/0000	00/00/0000	00/00/0000

Approved Amounts

Total Approved Net Eligible	Federal Share Percent	Total Approved Federal Share Amount	Non-Federal Share Percent	Total Approved Non-Fed Share Amount
$1,527,276	75.000000000	$1,145,457	25.00000000	$381,819

Allocations

Allocation Number	IFMIS Status	IFMIS Date	Submission Date	FY	ES/DFSC Support Req ID	ES/DFSC Amend Nr	Proj Alloc Amount Fed Share	Subrecipient Management Cost	Total Alloc Amount
62	A	08/07/2020	08/07/2020	2020	2913043	33	$1,145,457.00	$0.00	$1,818,075.75
						Total	$1,145,457.00	$0.00	$1,818,075.75

FEDERAL EMERGENCY MANAGEMENT AGENCY
HAZARD MITIGATION GRANT PROGRAM
Project Management Report

Disaster Number	FEMA Project Number	Amendment Number	App ID	State	Recipient
4344	**112-R**	**0**	**526**	**CA**	**Statewide**

Subrecipient: Rolling Hills
FIPS Code: 037-62602

Project Title : Rolling Hills Fire Prevention Through Power Line Undergounding

Obligations

Action Nr	IFMIS Status	IFMIS Date	Submission Date	FY	SFS Support Req ID	SFS Amend Number	Suppl Nr	Project Obligated Amt - Fed Share	Subrecipient Management Cost	Total Obligated Amount
1	A	08/07/202	08/07/2020	2020	3043572	0	129	$1,145,457.00	$0.00	$1,145,457.00
							Total	$1,145,457.00	$0.00	$1,145,457.00

STATE OF CALIFORNIA
CALIFORNIA GOVERNOR'S OFFICE OF EMERGENCY SERVICES
CAL OES 130

Cal OES ID No: 037-62602

DESIGNATION OF SUBRECIPIENT'S AGENT RESOLUTION
Hazard Mitigation Grant Program and Pre-Disaster Mitigation Program

BE IT RESOLVED BY THE City Council (Governing Body) OF THE City of Rolling Hills (Name of Applicant)

THAT City Manager (Title of Authorized Agent), OR

~~Planning and Community Services Director~~ (Title of Authorized Agent), OR

(Title of Authorized Agent)

is hereby authorized to execute for and on behalf of the CITY OF ROLLING HILLS (Name of Subrecipient), a public entity established under the laws of the State of California, this application and to file it with the California Governor's Office of Emergency Service. for the purpose of obtaining certain federal financial assistance under Public Law 93-288 as amended by the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, and/or state financial assistance under the California Disaster Assistance Act.

THAT the CITY OF ROLLING HILLS (Name of Subrecipient) a public entity established under the laws of the State of California, hereby authorizes its agent(s) to provide to the California Governor's Office of Emergency Service for all matters pertaining to such state disaster assistance the assurances and agreements required.

Please check the appropriate box below:

☒ This is a universal resolution and is effective for all open and futures Disasters/Grants up to three (3) years following the date of approval below.

☐ This is a Disaster/Grant specific resolution and is effective for only Disaster/Grant name/number(s) _____

Passed and approved this 14th day of October 2019

Leah Mirsch, Mayor
(Name and Title of Governing Body Representative)

Leah Mirsch
(Name and Title of Governing Body Representative)

(Name and Title of Governing Body Representative)

MAR 12 2020
637177.2

CERTIFICATION

I, Yohana Coronel (Name), duly appointed and City Clerk (Title) of City of Rolling Hills (Name of Applicant), do hereby certify that the above is a true and correct copy of a Resolution passed and approved by the City Council (Governing Body) of the City of Rolling Hills (Name of Applicant) on the 14th day of October, 2019.

(Signature)

City Clerk
(Title)

DRAFT

MINUTES OF A REGULAR MEETING OF THE CITY COUNCIL OF THE CITY OF ROLLING HILLS, CALIFORNIA MONDAY, OCTOBER 14, 2019

1. CALL TO ORDER

A regular meeting of the City Council of the City of Rolling Hills was called to order by Mayor Mirsch at 7:00p.m. in the City Council Chamber at City Hall, 2 Portuguese Bend Road, Rolling Hills, California.

2. ROLL CALL

Councilmembers Present:	Mayor Mirsch, Pieper, Dieringer, Black and Wilson.
Councilmembers Absent:	None
Others Present:	Elaine Jeng, P.E., City Manager
	Yolanta Schwartz, Planning Director
	Meredith Elguira, Planning and Community Services Director
	Yohana Coronel, City Clerk
	Michael Jenkins, City Attorney
	Alfred Visco, 15 Cinchring
	Arval Witte,
	Carol Witte,
	Cris Sarabia, Palos Verdes Peninsula Land Conservancy
	James O'Neill, City of Rancho Palos Verdes

Mayor Mirsch introduced Meredith Elguira, the City's new Planning and Community Services Director. Meredith will be replacing long time Planning Director Yolanta Schwartz.

3. OPEN AGENDA - PUBLIC COMMENT WELCOME

There were no public comments.

4. CONSENT CALENDAR

Matters which may be acted upon by the City Council in a single motion. Any Councilmember may request removal of any item from the Consent Calendar causing it to be considered under Council Actions.

A. MINUTES – REGULAR MEETING OF SEPTEMBER 09, 2019.
RECOMMENDATION: APPROVE AS PRESENTED

B. PAYMENT OF BILLS.
RECOMMENDATION: APPROVE AS PRESENTED

C. REPUBLIC SERVICES RECYCLING TONNAGE REPORT FOR AUGUST 2019.
RECOMMENDATION: APPROVE AS PRESENTED

City Manager Jeng responded that staff can request the County for a cost estimate but the staff intends to put the project out for competitive bids.

The motion carried without objection by a voice vote as follows:

AYES: COUNCILMEMBERS: Mayor Mirsch, Pieper, Dieringer, Black, and Wilson
NOES: COUNCILMEMBERS: None.
ABSENT: COUNCILMEMBERS: None.
ABSTAIN: COUNCILMEMBERS: None.

D. CONSIDER CALOES DESIGNATION OF SUBRECIPIENT'S AGENT AND FEDERAL FUNDING ACCOUNTABILITY.
CONSIDER ALLOCATION OF FUNDS FOR THE PREPARATION OF SAFETY ELEMENT TO BE REIMBURSED AT 75%.

Planning Director Schwartz reported that the City was awarded a grant application for the preparation of the Safety Element from CalOES. As part of the acceptance of the grant there are several forms required by CalOES. Planning Director Schwartz requested the City Council to approve the form to designate the subrecipient's agent, the City Manager. With the designation, going forward, other required forms can be signed by the City Manager. Planning Director Schwartz requested an allocation of half of the project cost to be spent this year.

Councilmember Dieringer motion to approve the item as presented. Mayor Pro Tem Pieper seconded the motion and the motion carried without objection by a voice vote as follows:

AYES: COUNCILMEMBERS: Mayor Mirsch, Pieper, Dieringer, Black, and Wilson
NOES: COUNCILMEMBERS: None.
ABSENT: COUNCILMEMBERS: None.
ABSTAIN: COUNCILMEMBERS: None.

9. MATTERS FROM THE CITY COUNCIL AND MEETING ATTENDANCE REPORTS

A. DISCUSS ON-GOING CUSTOMER SERVICE ISSUES WITH COX REPRESENTATIVE.

City Manager Jeng stated that at the last City Council meeting, Dr. Black requested an agenda item to discuss customer service issues with COX. City Manager Jeng invited two members of the COX team to the meeting. City Manager Jeng introduced Kristen Camuglia, the Government and Regulatory Affairs Liaison and Rey Castro, Construction Supervisor for the Peninsula.

Mr. Castro informed the City Council that the company is investing in a five-year plan to improve customer service.

Ms. Camuglia and Mr. Castro provided a presentation of the company with specific statistics for

PROJECT ASSURANCES FOR FEDERAL ASSISTANCE
HAZARD MITIGATION GRANTS

Note: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact California Governor's Office of Emergency Services (Cal OES). Further, certain federal assistance awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-federal share of project costs) to ensure proper planning, management and completion of the project described in this application.

2. Will give the awarding agency, the Comptroller General of the United States, Federal Office of Inspector General 2 CFR 200.336, and if appropriate, the state, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the assistance; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.

3. Will not dispose of, modify the use of, or change the terms of the real property title, or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the federal interest in the title of real property in accordance with awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with federal assistance funds to assure nondiscrimination during the useful life of the project.

4. Will comply with the requirements of the assistance-awarding agency with regard to the drafting, review and approval of construction plans and specifications.

5. Will provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progress reports and such other information as may be required by the assistance awarding agency or state.

6. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.

7. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gains.

8. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§ 4801 et seq.), which prohibits the use of lead based paint in construction or rehabilitation of residence structures.

9. Will comply with all federal statues relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§ 1681-1683 and 1685-1686) which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794) which prohibit discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§ 6101-6107) which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 93-255) as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616) as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§ 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. § 3601 et seq.), as amended, relating to nondiscrimination in the sale rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for federal assistance is being made, and (j) the requirements on any other nondiscrimination statute(s) which may apply to the application.

10. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provides for fair and equitable treatment of persons displaced or whose property is acquired as a result of federal and federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of federal participation in purchases.

11. Will comply with the flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $5,000 or more.

12. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.O. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved state management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§ 1451 et seq.); (f) conformity of federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. § 7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93-523); and (h) protection of endangered species under the Endangered Species Act of 1973, as amended, (P.O. 93-205).

13. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§ 1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

14. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470), EO 11593 (identification and preservation of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469a-1 et seq.).

15. Will comply with Standardized Emergency Management (SEMS) requirements as stated in the California Emergency Services Act, Government Code, Chapter 7 of Division 1 of Title 2, Section 8607.1(e) and CCR Title 19, Sections 2445, 2446, 2447 and 2448.

16. Subrecipients expending $750,000 or more in federal grant funds annually are required to secure an audit pursuant to OMB Uniform Guidance 2 CFR Part 200, Subpart F. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act of 1984 and the Single Audit Act Amendments of 1996.

17. Will disclose in writing any potential conflict of interest to the Federal awarding agency or pass-through entity in accordance with §200.112.

18. Will comply with all applicable requirements of all other federal laws, Executive Orders, regulations and policies governing this program.

19. Has requested through the State of California, federal financial assistance to be used to perform eligible work approved in the subrecipient application for federal assistance. Will, after the receipt of federal financial assistance, through the State of California, agree to the following:

    a. The state warrant covering federal financial assistance will be deposited in a special and separate account, and will be used to pay only eligible costs for projects described above;

    b. To return to the State of California such part of the funds so reimbursed pursuant to the above numbered application, which are excess to the approved actual expenditures as accepted by final audit of the federal or state government.

    c. In the event the approved amount of the above numbered project application is reduced, the reimbursement applicable to the amount of the reduction will be promptly refunded to the State of California.

20. The non-Federal entity for a Federal award must disclose, in a timely manner, in writing to the Federal awarding agency or pass-through entity all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the Federal award §200.113. Failure to make required disclosures can result in any of the remedies described in §200.338 Remedies for noncompliance, including suspension or debarment.

21. Will not make any award or permit any award (subaward or contract) to any party which is debarred or suspended or is otherwise excluded from or ineligible for participation in Federal assistance programs under Executive Order 12549 and 12689, "Debarment and Suspension.

"I, the official named below, CERTIFY UNDER PENALTY OF PERJURY that I am duly authorized by _____
(Name of Organization)
to enter into this agreement for and on behalf of said subrecipient, and by my signature do bind the subrecipient to the terms thereof .

_____ _____
Printed Name of Authorized Applicant's Agent Title

_____ _____
Signature of Authorized Applicant's Agent Date

Authorization

I, _____ , do hereby certify as the authorized representative or
Printed Name
officer of _____, that the information contained in this
Name of Organization
application is true and correct.

_____ _____ _____
Title Signature Date

California Governor's Office of Emergency Services
SUPPLEMENTAL GRANT SUBAWARD INFORMATION

The California Governor's Office of Emergency Services (Cal OES), makes a Grant Subaward of funds set forth to the following:

1. Subrecipient: Rolling Hills, City of **1a. DUNS#:** _____

2. Implementing Agency: _____ **2a. DUNS#:** _____

3. Implementing Agency Address: _____
Street City State ZIP+4

4. Location of Project: _____
City County ZIP+4

5. Federal Award Identification Number: FEMA-4344-DR-CA **6. Performance Period:** 08/07/2020 **to** 05/07/2023

7. Indirect Cost Rate: ☐ **N/A** ☐ **10% de minimis** ☐ **Federally Approved ICR** _____

8. Supplement Information

Supp No.	Federal Share	Non-Federal Share	Admin Cost	Total Supplement Cost	Fed / Non-Fed Percentage
129	$1,145,457.00	$381,819.00	$0.00	$1,527,276.00	75% / 25%
				$0.00	
				$0.00	
				$0.00	
				$0.00	
				$0.00	
Totals:	$1,145,457.00	$381,819.00	$0.00		

Total Project Cost: $1,527,276.00

9. Primary Authorized Agent:

Name: _____ Title: _____

Phone: _____ Email: _____

Mailing Address: _____
Street City State ZIP+4

Payment Mailing Address: _____
Street City State ZIP+4

California Governor's Office of Emergency Services
SUPPLEMENTAL GRANT SUBAWARD INFORMATION

Cal OES Contact Information Section:
Governor's Office of Emergency Services
Mark S. Ghilarducci, Director
3650 Schriever Avenue
Mather, CA 95655
Phone: (916) 845-8510

Cal OES Use Only	
Cal OES #	037-62602-00
FIPS #	037-62602
Subaward #	DR4344-PJ0526
PCA	82908
Federal Award Dates	10/08/2017
	07/07/2025

Federal Awarding Agency Section

Federal Program Fund / CFDA #	Federal Awarding Agency	Total Federal Award Amount
Hazard Mitigation Grant Program / 97.039	U.S. Department of Homeland Security, Federal Emergency Management Agency	$1,527,276.00

Project Description Section:
Fire Prevention through Power Line Undergrounding

Research and Development Section:

Is this Subaward a Research and Development grant? Yes ☐ No ☑

SUPPLEMENTAL GRANT SUBAWARD INFORMATION Instructions
Please complete the sections marked with an asterisk (*)

1. Subrecipient
The subrecipient is the unit of government or community-based organization (CBO) that has the legal responsibility for these grant subaward funds (e.g. Alameda County, City of Fresno, or Women's Place of Merced).

***1a. Federal DUNS Number (Subrecipient)**
Enter the 9-digit Federal Data Universal Numbering System (DUNS) ID number for the subrecipient listed above. If you do not yet have an assigned DUNS number, one may be obtained by contacting Dun & Bradstreet at www.dnb.com or at (866)-705-5711. The DUNS number must be current and active in the federal System for Award Management (SAM) for the duration of this grant subaward. Note: A DUNS number is required only for federally-funded grants.

***2. Implementing Agency**
Enter the complete name of the agency responsible for the day-to-day operation of the grant subaward (e.g. Sheriff's Department, Fire Department, or Department of Public Works). If the implementing agency is the same as the subrecipient, enter the subrecipient's name again.

***2a. Federal DUNS Number (Implementing Agency)**
Enter the 9-digit Federal Data Universal Numbering System (DUNS) ID number for the implementing agency listed above. If the implementing agency does not yet have an assigned DUNS number, one may be obtained by contacting Dun & Bradstreet at www.dnb.com or at (866)-705-5711. The DUNS number must be current and active in the federal System for Award Management (SAM) for the duration of this grant subaward. Note: A DUNS number is required only for federally-funded grants.

***3. Implementing Agency Address**
Enter the address of the implementing agency. Provide the complete nine digit ZIP code (ZIP+4).

***4. Location of Project**
Enter the city and county/operational area where the project is located. Provide the complete nine digit ZIP code (ZIP+4).

5. Federal Award Identification Number (FAIN)
This section shows the Federal Award Identification Number associated with this funding source/disaster. Example: 4301-DR-CA or FEMA-4301-DR-CA.

6. Performance Period
This section shows the beginning and ending dates of this grant subaward's project performance period.

SUPPLEMENTAL GRANT SUBAWARD INFORMATION Instructions
Please complete the sections marked with an asterisk (*)

***7. Indirect Cost Rate**
Indicate whether the subrecipient is using the 10% de minimis based on Modified Total Direct Costs (MTDC) or the indirect cost rate approved by the subrecipient's cognizant agency agreement. A copy of the approved ICR Negotiation Agreement must be enclosed with the application. Indicate N/A if the subrecipient will not be claiming indirect costs under this grant subaward. ***Indirect costs may not be allowable under certain federal fund sources.***

8. Supplement Information
This section features the FEMA supplement numbers, the federal and non-federal shares, and applicable subrecipient administrative costs for this grant subaward. The grant subaward's cost share percentage is displayed in the far right column.

***9. Primary Authorized Agent**
The primary authorized agent will be the main contact for Grants Processing Unit (GPU) correspondence and must be one of the authorized agents named in the governing body resolution. Enter the name, title, phone number, email address, and correspondence mailing address of the primary authorized agent for this project. Enter the payment mailing address where reimbursement payments should be mailed (payments will be sent to this address to the attention of the primary authorized agent).

Federal Awarding Agency Section
This section shows the federal awarding agency, federal program, and the Catalog of Federal Domestic Assistance (CFDA) number for this funding. Also shown is the total project cost related to this grant subaward.

Project Description Section
This section features the name or a short description of the project.

Research and Development Section
This section indicates whether this grant subaward is for research and development.

Cal OES
GOVERNOR'S OFFICE
OF EMERGENCY SERVICES

Cal OES ID No.:_____

DUNS Number:_____

Previous Fiscal Year End Date:_____

Federal Funding Accountability and Transparency Act (FFATA) Financial Disclosure

Public Law (PL) 109-282 Federal Funding Accountability and Transparency Act of 2006, as amended by Section 6202(a) of the Government Funding Transparency Act of 2008 (PL 110-252), which is outlined in the U.S. Department of Homeland Security, Federal Emergency Management Agency's Grant Program Directorate Information Bulletin No. 350, dated November 23, 2010 (www.fsrs.gov).

Entity Name: _____

You are subject to FFATA Financial Disclosure and must complete the below table if you can answer **YES** to **ALL** of the below criteria:

- Received 80% or more of annual gross revenues in U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements in your preceding fiscal year
- $25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements
- The public does not have access to information about the compensation of your senior executives.

Executive Name	Title	Annual Salary	Annual Dollar Value of Benefits	Total Compensation

☐ Not subject to FFATA Financial Disclosure.

I, _____ , do hereby certify, as the authorized agent
Printed Name

of the above named entity, the information contained in this document is true and correct.

_____
Title of Authorized Agent

_____ _____
Signature of Authorized Agent Date

HAZARD MITIGATION ASSISTANCE
NOTIFICATION TO SUBRECIPIENT
GRANT ADMINISTRATION PROCEDURES

1. PROCUREMENT/COMPETITIVE BIDS PROCESS

All contract/procurement transactions must be carried out in a manner consistent with financial administrative requirements found in Title 2 of the Code of Federal Regulations (2 CFR) Part 200.

2. ALLOWABLE COSTS AND REIMBURSEMENTS

Once the Federal Emergency Management Agency (FEMA) approves a total eligible activity cost and obligates funding, California Governor's Office of Emergency Services (Cal OES) can process reimbursement requests for eligible activities. Payments are made on a reimbursement basis and funds will be disbursed for activities that are consistent with the approved scope of work. Activity expenditures will be reimbursed at 75% of eligible costs. Additionally, Cal OES will withhold retention of 10% from each reimbursement request. The retention amount will be released to the subrecipient upon completion of the closeout process.

Reimbursement requests must be submitted to Cal OES on a Hazard Mitigation Reimbursement Request Form. The form must be signed by the subrecipient's Designated Authorized Agent. Reimbursement Request Forms can be emailed to: HMGrantsPayments@CalOES.ca.gov.

Alternatively, Reimbursement Request Forms can be mailed to:

California Governor's Office of Emergency Services
Attn: Recovery/Hazard Mitigation Grants Processing Unit
3650 Schriever Avenue
Mather, California 95655

Should the subrecipient be able to complete this work for less than the maximum allowable costs, the subrecipient will be reimbursed at 75% of the actual costs. Any remaining funds will be deobligated. If activity costs exceed the maximum allowable costs, the subrecipient will be reimbursed at 75% of the FEMA approved activity cost.

3. COST OVERRUNS (HMGP Only)

Cost over-runs can be considered if available funding exists in the declared disaster. Non-construction subaward adjustments of more than 10 % in any direct cost categories, where the awarding Agency's share exceeds $100,000, require a revision request. All construction cost adjustments that lead to the need for additional funds, and any changes to access contingency funds and re-budget to another direct cost category, require a revision request.

Potential cost over-runs should be explained by the subrecipient in the quarterly progress reports and may be verified by activity inspection. All cost over-runs must be requested

before expenditure of costs in excess of the total approved activity costs, and the request must be signed by the subrecipient's Designated Authorized Agent. All cost over-runs must be justified by the subrecipient and supported by a benefit cost analysis (BCA) prepared using the FEMA BCA Toolkit, if BCA is applicable to the project type. Unjustified over-runs will be denied by Cal OES.

Consult your Cal OES Grants Specialist when a potential cost overrun is identified. There is no guarantee that HMGP funds will be available to cover cost over-runs.

4. SCOPE OF WORK CHANGES

Any requests for changes to the approved scope of work must be consistent with program guidance and regulations, be signed by the subrecipient's Designated Authorized Agent, and submitted to a Cal OES Grants Specialist. Pre-approval is required before the start of any activity not included in the approved scope of work. Costs associated with any activity that is not included in the approved scope of work are not eligible for reimbursement.

5. QUARTERLY REPORT PROCEDURES

Subrecipients are required to submit progress reports to Cal OES on a quarterly basis until the end of the approved performance period

The first Quarterly Report is due to Cal OES within 15 days of the end of the first quarter following the initial award. Quarterly Reports will thereafter be numbered consecutively by quarter and year (e.g. a 24 month project is required to submit 8 quarterly reports.) The following is the schedule for the Quarterly Reports:

First Reporting Period:	January 1 - March 31	Report due by April 15
Second Reporting Period:	April 1 - June 30	Report due by July 15
Third Reporting Period:	July 1 - September 30	Report due by October 15
Fourth Reporting Period:	October 1 - December 31	Report due by January 15

Quarterly Reports shall include, at a minimum:

A. The status and completion date for the activity funded, including any problem or circumstances affecting the completion date, scope of work, or costs which are expected to result in noncompliance with the approved grant subaward conditions.

B. A description of milestones completed in accordance with the work schedule provided by the subrecipient. The milestones declared in the subrecipient's work schedule will be applied as a standard of the activity's progress.

The State Hazard Mitigation Officer and HMA staff will review the reports and forward a report to the FEMA Regional Administrator on the status of each grant subaward.

Cal OES may suspend reimbursements to subrecipients who are not current in the submission of quarterly progress reports. Reimbursement requests received for suspended grant subawards will be returned to the subrecipient. Completed Quarterly Reports should be emailed to the Cal OES Grant Specialist.

Alternatively, Quarterly Reports must be sent to:

California Governor's Office of Emergency Services
Attn: Hazard Mitigation Assistance Branch
3650 Schriever Avenue
Mather, California 95655

6. SITE VISITS
Cal OES reserves the right to inspect all activities and review documentation for compliance. If site visits or documentation reveal problems in project performance, Cal OES shall require the subrecipient to correct the deficiencies before close-out.

7. PERFORMANCE PERIOD EXTENSIONS
All performance period extension requests must include the dates and circumstances of all previous extensions on this activity, a detailed explanation for the delay, and a revised activity work schedule. All performance period extension requests must be submitted to Cal OES and signed by the subrecipient's Designated Authorized Agent. Any costs incurred outside of an approved performance period will not be considered eligible.

Extensions to the original performance period of up to twelve months may be granted by Cal OES upon written request from the subrecipient. If an extension is needed, a request must be submitted to Cal OES no less than 90 days prior to the end of the current approved performance period. Time extension requests received by Cal OES less than 90 days prior to the end of the current approved performance period may not be considered.

Extension requests must include:
- Verification that progress has been made as described in quarterly reports
- Reason(s) for delay
- Current status of the activity/activities
- Current POP termination date and new projected completion date
- Remaining available funds, both Federal and non-Federal
- Budget outlining how remaining Federal and non-Federal funds will be expended
- Plan for completion, including updated schedule

Cal OES will notify the subrecipient of FEMA's determination.

8. ADMINISTRATIVE DOCUMENTS
The administrative documents included with this package must be completed, signed by an authorized representative of the subrecipient and received by Cal OES before any payments can be processed. These forms include:
- Applicant Agent Resolution (Cal OES 130),
- Project Assurances (Cal OES 89),
- 2-101 Grant Subaward Face Sheet (PDM/FMA Only)
- 2-101a Supplemental Grant Subaward Information (HMGP Only)
- Federal Funding Accountability and Transparency Act – FFATA
- SAM Number verification
- STD 204 Payee Data Record (for PNPs only)

Completed forms can be emailed to: HMGrantsPayments@CalOES.ca.gov

Alternatively, completed forms can be mailed to:

California Governor's Office of Emergency Services
Attn: Recovery/Hazard Mitigation Grants Processing Unit
3650 Schriever Avenue
Mather, California 95655

9. CLOSEOUT

Subrecipients must submit Closeout Packages to Cal OES a minimum of 30 days prior to the Period of Performance (POP) completion date of the subaward. All activity costs are subject to audit; therefore, retention of adequate documentation is required to verify the scope of work and the activity costs. All activity documentation must be retained by the subrecipient for three years from the date of the audit waiver letter, which is the closeout notification for the subrecipient. The documentation required is dependent on the type of activity. The package must include at least the following:

- Final Claim form
- Accomplishments and results report
- Budget summary
- Inspection Report (projects only)
- Planned Maintenance Activities Statement
- Project Photographs/Materials (projects only)
- Resolution of Adoption (plans only)

10. AUDITS

Cal OES may request an audit of any funds disbursed to a subrecipient at any time. Each subrecipient is required to provide reasonable and timely access to all records. Subrecipients who expend combined federal awards above $750,000 must submit audit reports consistent with the requirements of the Office of Management and Budget OMB Circular A-133. Such audits of subrecipients will be conducted in accordance with the requirements of the Single Audit Act.

11. MONITORING

To ensure compliance with applicable Federal and State laws and regulations, subrecipient activities shall be monitored. Any finding(s) and program deficiencies shall be resolved though viable corrective action plans. Monitoring is comprised of desk and field reviews, of specific subrecipient records, including supporting financial documentation.

12. APPEALS (HMGP Only)

Subrecipients may appeal any determination made by FEMA by submitting justification in writing to Cal OES within 60 days of the receipt of FEMA's determination, including the monetary figure in dispute, provisions in Federal law, regulation, or policy that support their position.

Cal OES will review the appeal material submitted, make any additional investigations necessary, and forward the appeal with a written recommendation to the FEMA Regional Administrator within 60 days.

The FEMA Regional Administrator will notify Cal OES of the disposition of the subrecipient's appeal, or need for additional information, within 90 days following receipt of all related information.

If the Regional Administrator denies the appeal, the subrecipient may submit a second appeal to Cal OES. Cal OES will review the second appeal and may forward it with a written recommendation to the FEMA Deputy Associate Administrator through the FEMA Regional Administrator. Second appeals shall be submitted no later than 60 days after receipt of notice of the Regional Administrator's denial of the first appeal. In cases involving appeals of a highly technical nature, the Deputy Associate Administrator may refer the appeal to an independent scientific or technical body for review. The Deputy Associate Administrator shall render a determination on the appeal within 90 days following receipt of all related information. The second appeal's determination is final.

See Part 44 of the Code of Federal Regulations (44 CFR) Section 206.440.

SAM
SYSTEM FOR AWARD MANAGEMENT

Quick Start Guide for New Grantee Registration

Helpful Information

SAM an official **free, U.S. government-operated website** – it is FREE to register and maintain your entity registration record in SAM. It is FREE to get help.

What is an Entity?
In SAM, your company/business/ organization is referred to as an "Entity." You register your entity to do business with the U.S. Federal government by completing the registration process in SAM.

a

1. **DUNS Number:** You need a Data Universal Numbering System (DUNS) number to register your entity in SAM. DUNS numbers are unique for each physical location you are registering. If you do not have one, request a DUNS number for **free** to do business with the U.S. Federal government by visiting Dun & Bradstreet (D&B) at http://fedgov.dnb.com/webform. It takes no more than 1-2 business days to obtain a DUNS number.
2. **Taxpayer Identification Number:** You need your entity's Taxpayer ID Number (TIN) and Taxpayer Name (as it appears on your most recent tax return). Foreign entities that do not pay employees within the U.S. do not need to provide a TIN. Your TIN is usually your Employer Identification Number (EIN) assigned by the Internal Revenue Service (IRS). Sole proprietors may use their Social Security Number (SSN) assigned by the Social Security Administration (SSA) as their TIN, but are strongly encouraged to obtain a free EIN from the IRS by visiting: http://www.irs.gov/Businesses/Small-Businesses-& -Self-Employed/How-to-Apply-for-an-EIN Allow approximately two weeks before your new EIN is ready for use when registering in SAM.
3. All non-Federal entities must mail an original, signed notarized letter to the Federal Service Desk within 60 days of activation.

Steps for Registering

1. Type www.sam.gov in your Internet browser address bar.
2. Select Log In to complete authentication and create an account.
3. On the My SAM page, select Entity Registrations from the sub-navigation menu and select Register New Entity.
4. Select your type of Entity.
5. If you are registering in SAM.gov so you can apply for a Federal financial assistance opportunity on Grants.gov, and are not interested in pursuing Federal contracts, you will have a much shorter registration path. To choose the grants only path:
   - Select "I only want to apply for federal assistance opportunities like grants, loans, and other financial assistance programs." in response to the question "Why are you registering this entity to do business with the U.S. government?"
6. Complete the Core Data section:
   - Validate your DUNS information.
   - Enter Business Information (TIN, etc.) This page is also where you create your Marketing Partner Identification Number (MPIN). Remember your MPIN as it will help identify you in several other government systems. You must have it to apply in Grants.gov.
   - Enter your CAGE Code if you have one. CAGE codes are tied to DUNS Numbers and cannot be reused. Don't worry if you don't have a CAGE Code for the DUNS Number you are registering: one will be assigned to you after your registration is submitted. Foreign registrants must enter their NCAGE Code before proceeding.
   - Enter General Information (business types, organization structure, etc.) about your entity.
   - Provide your entity's Financial Information, i.e. U.S. bank Electronic Funds Transfer (EFT) Information for Federal government payment purposes. Foreign entities do not need to provide EFT information.
   - Answer the Executive Compensation questions.
   - Answer the Proceedings Details questions.
7. Complete the Points of Contact section:
   - Your Electronic Business POC is integral to your Grants.gov registration and application process. Your Government POC will be used by other government systems, such as the CAGE program, when they contact you. List someone with direct knowledge of this registration for both of those POCs.
8. Complete the Representations and Certifications section (for non-federal entities only):
   - Select Yes/No on the Financial Assistance Response page.
9. Make sure to select Submit after your final review. You will get Registration Submitted - Confirmation message on the screen. If you do not see this message, you have not submitted your registration.

Your registration will be reviewed. You will receive an email from SAM.gov when your registration is active.

Please give yourself plenty of time before your grant application submission deadline. Allow up to 12-15 business days after you submit before your registration is active in SAM, then an additional 24 hours for Grants.gov to recognize your information.

For FREE help registering in SAM, contact the supporting Federal Service Desk (FSD) at https://www.fsd.gov/

SAM
SYSTEM FOR AWARD MANAGEMENT

Quick Start Guide for Updating an Entity Registration

Helpful Information

Viewing Your Entity Record

- If you chose to make your record public, you can view your entity record by going to www.sam.gov, selecting Search Records, and searching by your DUNS number or Legal Business Name
- If your record is available in the public search, but expired, you can view it by searching for your entity by DUNS Number or Legal Business Name, selecting the "Inactive" checkbox, and clicking the "Apply Filters" button
- If you opted out of public search, you will need to log into SAM with the appropriate user account, select Entity Registrations and then Existing Entity Registrations to view your record

Before You Start

- When you renew or update your registration, you must review the entire record. Take the time to make sure all the information is accurate and complete.
- If your entity's physical address has changed since you last renewed, make sure to update the address Dun and Bradstreet (D&B) has on file prior to updating the registration in SAM.
- All non-Federal entities must mail an original, signed notarized letter to the Federal Service Desk within 60 days of activation.

Steps for Updating an Entity Registration

1. Type www.sam.gov in your Internet browser address bar and then log in.
2. On the My SAM page, select Entity Registrations and then Existing Entity Registrations from the sub-navigation menu.
3. Search for the entity you want to update or select the Legal Business Name of the entity the Entity List.
4. Select Update Entity from the Registration Details panel.
    - You may not update a registration in Submitted status. You may only update registrations that are Active, Expired, or a Work in Progress.
5. You may delete a Work in Progress if necessary. This will not affect your Active or Expired entity registration.
6. Select what you would like to update: Purpose of Registration and remaining entity registration. All sections applicable to the registration besides the Purpose of Registration or Point of Contacts only (skip to step 10).
7. Update the Core Data section.
8. Update the Assertions section (not required if registering for Federal Assistance opportunities only).
9. Update the Representations and Certifications section.
10. Update the Points of Contact section, including optional POCs. You may remove optional POCs if they are no longer relevant.
11. If you qualify as a small business, update your information in SBA's Dynamic Small Business Search (DSBS) or apply for a small business certification via the "SBA Supplemental" page.
12. Select Submit. Your registration will be reviewed. You will receive an email from SAM.gov when your registration is active.

Please note: *If your registration update requires IRS or CAGE revalidation, it could take 10-12 business days for it to become active and replace your previous registration.*

California Governor's Office of Emergency Services (Cal OES)
REIMBURSEMENT REQUEST FORM

Email Reimbursement Request to:

HMGrantsPayments@CalOES.ca.gov

Mail Reimbursement Request to:

California Governor's Office of Emergency Services
Recovery Grants Processing Unit
3650 Schriever Avenue
Mather, CA 95655

Subrecipient: _____

FIPS ID #: _____

Disaster/Subaward #: _____

☐ Please mark this box to indicate a change in the Mailing Address in the Authorized Agent section below

Project Number	Cumulative Expenditures to date	Reimbursement Request for the period of _____ to _____
	$	$

Under penalty of perjury, I certify that:

- I am the duly authorized officer of the claimant herein and this claim is for costs incurred within the Grant Performance Period
- By signing this report, I certify to the best of my knowledge and belief that the report is true, complete, and accurate, and the expenditures, disbursements and cash receipts are for the purposes and objectives set forth in the terms and conditions of the Federal award. I am aware that any false, fictitious, or fraudulent information, or the omission of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (U.S. Code Title 18, Section 1001 and Title 31, Sections 3729–3730 and 3801–3812)

Authorized Agent (Per Governing Body Resolution)

Printed Name _____ Title _____ Phone Number _____

Signature _____ Date _____ Email Address _____

New Mailing Address Only _____

Cal OES 400 (for Cal OES only)	
Obligated Amount	
Expenditures to Date	
Cost Share at 75%	
Less Retention	
Prior Payments Made	
Amount Allowable for Payment	

Reviewer _____ Title _____ Date _____

Approver _____ Title _____ Date _____

California Governor's Office of Emergency Services (Cal OES)
REIMBURSEMENT REQUEST FORM Instructions

Subrecipient	The subrecipient is the entity as identified in the original grant application. Do not identify any sub-departments or offices as the subrecipient.
FIPS ID #	This is the subrecipient's identification number as identified on the Notification of Approval Letter.
Disaster/ Subaward #	The disaster/subaward number can be found on the Notification of Approval Letter.
Address Change	Indicate a change in address by checking the box shown and noting the new address on the line labeled "New Mailing Address Only" in the Authorized Agent section.
Project Number	The project number can be found on the Notification of Approval Letter.
Cumulative Expenditures to Date	Provide the full, total grant expenditures incurred to date for this project (including applicable local share).
Reimbursement Request Period	The subrecipient may request reimbursement of all, or a portion of, grant expenditures incurred since the last Reimbursement Request. Indicate the month, day and year for the beginning of the period covered to the end of the period covered during which these expenditures were incurred. *This is not the Project/Budget Period listed on the subaward.* **HMGP Disaster Grants: No fiscal year restrictions. All other grants: A request period cannot cross the State fiscal year, which ends June 30 and begins July 1.**
Authorized Agent Information	Complete all line items as requested and ensure that the form is signed by an Authorized Agent named on the Governing Body Resolution. **The signature date must be on or after the final day of the indicated request period.**
Mail	This form can be sent to Cal OES via email or regular mail. The subrecipient should maintain duplicate records of all documents sent to Cal OES.
Supporting Documents	Supporting documents are not required to be submitted with the Reimbursement Request; however, Cal OES reserves the right to request documentation at any time. Subrecipients are reminded to maintain documents that support the expenditures and reimbursement amounts shown on the request.
Additional Assistance	For additional assistance regarding this Reimbursement Request Form, please contact the Recovery/Hazard Mitigation Grants Processing Unit at (916) 845-8110 or at HMGrantsPayments@CalOES.ca.gov.