CITY OF VENTURA
PUBLIC WORKS

June 17, 2026

ADDENDUM NO. 3

Interim Fire Station No. 7

Specification No. 2025-010

This addendum is hereby made a part of the contract documents to the same extent as if it were originally included. Contractor shall download the addendum through the QuestCDN bidding site. Failure to download this addendum will negate the Contractor's ability to submit a bid.

BID OPENING DATE

The Bid Opening Date has not changed. Bids are due **June 25th, 2026, at 2:00 p.m.**

INSTRUCTIONS TO BIDDERS

Item 17. Bid Guarantee
As clarification, in the Surety2000 website (https://surety2000.com), reference the "City of San Buenaventura" as "City of Ventura".

DRAWINGS

The following drawing sheets are hereby replaced in their entirety:

Sheet 32 OF 151, MODULAR DETAILS (rev.1, June 15, 2026)
Sheet 97 OF 151, SINGLE LINE DIAGRAM (rev.1, June 08, 2026)
Sheet 98 OF 151, PANEL SCHEDULES (rev.1, June 08, 2026)
Sheet 106 OF 151, APPARATUS BAY ELECTRICAL PLAN (rev.1, June 08, 2026)
Sheet 109 OF 151, CONDUIT & CABLE SCHEDULE (rev.1, June 08, 2026)
Sheet 150 OF 151, SOUTHERN CALIFORNIA EDISON - (SCE) Final Design Plans
Sheet 151 OF 151, SOUTHERN CALIFORNIA EDISON - (SCE) Final Design Plans

TECHNICAL SPECIFICATIONS:

Section 079200 – Joint Sealants has been added to the Contract Documents. The Table of Contents has been revised accordingly to reflect the inclusion of this new specification section.

QUESTIONS AND ANSWERS

Refer to ADDENDUM No. 3. – Question and Answers Log No. 1, attached hereto, for responses to questions received.

By downloading this addendum, Bidder acknowledges receipt of all issued addenda as uploaded to the QuestCDN bidding platform.

QUESTIONS / BIDDER RFI

The deadline for submission of all questions and RFIs is Thursday June 18, 2026, at 5:00 p.m.

ADDENDUMS

The deadline for CITY to issue ADDENDA is Monday June 22, 2026, by 2 PM.

ATTACHMENTS

ADDENDUM No. 3. – Question and Answers Log No. 1
EXHIBIT A -Table of Contents
EXHIBIT B - Section 079200 – Joint Sealants
Sheet 32 OF 151, MODULAR DETAILS (rev.1, June 15, 2026)
Sheet 97 OF 151, SINGLE LINE DIAGRAM (rev.1, June 08, 2026)
Sheet 98 OF 151, PANEL SCHEDULES (rev.1, June 08, 2026)
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Travis Gonsalves
Acting Principal Civil Engineer

Interim Fire Station No. 7 Project
Specification N0. 2025-010

ADDENDUM No. 3. – Question and Answers Log No. 1

1-1	Is there a specified security manufacturer or approved manufacturer list being requested for this project (Avigilon, Bosch, etc.) or are equivalent solutions acceptable?	Equivalent solutions are acceptable Contractor must submit for approval.
1-2	Are all required software licenses to be included within our proposal?	City/Owner will handle all software licensing.
1-3	Will owner IT/networking provide switches, IP addressing, VLAN configuration, and network connectivity, or should those items be included within our scope?	City/Owner will handle this scope.
1-4	Is central station monitoring or remote monitoring integration required as part of this project?	City/Owner will handle remote monitoring.
1-5	What is the required cabling, copper, and/or fiber, to be brought to the new Telecomm room from the street vault(s)? Cable count, # of pairs for Telco, Type of fiber & fiber count?	• Single mode fiber optic cable om-4. • 6 strands fiber count. • Contractor is required to provide service from Alessandro Drive to the Telecom Room in the Living Quarters. • Candidates for service delivery are: Spectrum Business, or Inet2.
1-6	Is there more information or a detail available for the Telecom room showing rack or cabinet location/specifics, as well as the area for the fire-rated backboard installation?	• City/Owner will provide a 20 U Rack, with installation required by Contractor. Rack will be wall mounted on fire-rated backboard. • Contractor will be required to provide and install fire-rated backboard.
1-7	Is there a design plan/layout for the cable tray?	Please refer to Sheet 19 “TELECOM PLAN”.
1-8	Is the cable tray needed in the telecom room?	Yes.
1-9	Please confirm whether the low-voltage contractor is required to furnish and install any telecom room equipment, including but not limited to: • Equipment rack(s) • Wall-mounted cabinet(s) • Telecommunications backboard(s) • Patch panels • Ladder rack/cable management	<u>City will furnish and Contractor will install:</u> • equipment racks • wall-mounted cabinets panels • patch panels <u>Contractor will furnish and install</u>: • Telecommunication Backboards. • Ladder rack/cable management (outside of cabinet)

	• Grounding/bonding components	• Grounding/bonding components
1-10	Fiber Optic Scope. Please confirm whether the low-voltage contractor is required to furnish, install, terminate, and test fiber optic cabling as part of this project, or if the scope is limited to conduit/pathway infrastructure only	• Contractor is required to furnish and install and test fiber optic cabling from Alessandro Drive to the Telecom Room located in the Living Quarters. • Refer to Plan Sheet # 19 TELECOM PLAN and Plan Sheet # 9 UTILITY PLAN. • 6 strand single-mode om-4.
1-11	If fiber optic cabling is required, please provide: • Fiber type (single-mode or multimode) • Strand count • Start and end locations • Termination requirements • Connector type • Fiber enclosure/FDP requirements • Testing requirements	• Fiber type/ Strand count: **6 strand single-mode om-4**. • Start and end locations: **From Alessandro Drive to Telecom Room, located in Living Quarters**. • Termination requirements/Connector Type: **SFP+ 10G, LC Connector.** • Fiber enclosure/FDP requirements: **See Plan Sheet 9 UTILITY PLAN.** • Testing requirements: **Contractor is responsible to set up testing with vendor for the Alerting Dispatch system. Other low-voltage systems are the responsibility of City/Owner**.
1-12	Telecom Service Entrance / Demarcation. Please identify the telecom service provider demarcation location and clarify the required pathway and termination point for incoming telecommunications services	• Telecom service Provide: **Spectrum Business or Inet2.** • Demarcation location: **See Plan Sheet 9 UTILITY PLAN.** • Pathway: **See Plan Sheet # 9 UTILITY PLAN.**
1-13	The Fire Alerting / USDD systems shown on the plans are not included in our proposal and are assumed to be furnished and installed by the specialty fire alarm / fire station alerting contractor	Correct. City/Owner will purchase and install the Fire Alerting/USDD system.
1-14	Regarding the SCE plans, Sheet 1 of 2 calls for precast tub-type vaults with cover restraints (referencing USG VA 410) to be placed on Alessandro Drive per Sheet 2 of 2. We are unable to find the required vault sizes specified in the drawings. Could you please provide the respective vault sizes for this location?	The dimensions for the MANHOLE TUB STYLE callout in the sheet 02 of 02 of SCE drawings are internal dimensions. Using the detail UGS VA 410 in SCE UGS standard, dimensions mentioned are external dimensions. Contractor should reach out to any supplier with these details, and Supplier can provide details of the vault that meets these specs.
1-15	ADDENDUM 2 Q&A #1-62 states the contractor is required to install insulation in the Apparatus Bay. What is the scope? Are there details?	**Correction to Addendum No.2 response to 1-62**. The Contractor **is not** responsible for insulation in the Apparatus Bay. Insulation will be included by the modular vendor.
1-16	Is the Contractor responsible for any painting scope at the modular or steel buildigs?	Contractor is not responsible for any painting of the Modular Building to Apparatus Bay.

1-17	Is there any monokote, intumescent paint, fireproofing, etc. that the contractor is responsible for? Sheet 22 general note3 6-G indicates fireproofing.	Contractor is not responsible for any monokote, intumescent paint, fireproofing.
1-18	Is there a spec for the masonry walls? No colors or finishes are called out in the plans. They do not reference a specification?	The masonry walls shall be gray in color with a smooth, untextured finish.
1-19	Waterproofing Locations and Specs. The response to RFI 1-55 states that waterproofing is required below grade at site or trash enclosure walls: Please provide exact locations and specifications for any required waterproofing.	Please refer to Plan Sheet #29, TYPICAL CONCRETE DETAILS – Detail 3 – Vapor Barrier Detail. No additional waterproofing is required.
1-20	Waterproofing Locations and Specs. RFI 1-56 asks if waterproofing is required at any below grade locations at the buildings. The answer refers to insulation, not waterproofing. Please respond to the waterproofing question.	See Response to 1-19 above.
1-21	Building Insulation. The answer to RFI 1-63 states that insulation is required for the prefabricated metal building. However, the responsibility matrix issued with Addendum 2 list Clear Span as responsible for insulation in the metal building: Please confirm whether the contractor is responsible for any insulation on the project and, if so, please provide exact locations and material specifications.	Contractor is not responsible for insulation for the Apparatus Bay (metal building). Insulation is included and pre-installed by the modular vendor.
1-22	24/7 Site Security. The responsibility matrix included in addendum 2 lists the contractor as responsible for 24/7 site security: Please confirm this requirement and provide a definition of 24/7 site security that specifies and armed guard on site 24/7, electronic surveillance, etc.	**24/7 site security is not required**. However, the site must be secured with fencing at all times, including temporary fencing if required.
1-23	OFCI Equip. The responsibility matrix included in addendum 2 list OFCI materials, equipment and accessories as a contractor responsibility: Please provide a comprehensive list of OFCI items.	The following Items are City/Owner/Modular-Vendor Furnished <u>and</u> Installed: • Modular Buildings (Living Space + Gym). • Apparatus Bay (Metal Building). • All equipment/furniture/appliances within the Modular Buildings (Living Space + Gym) and the Apparatus Bay (Metal Building). • Water Meters. The following Items are City/Owner Furnished and <u>Contractor</u> Installed: • Fire Alert Dispatching System.

		• The Emergency Generator.
1-24	Exterior Enhanced Painting and Logos. The Responsibility Matrix included in addendum 2 lists the contractor as responsible for Exterior Enhanced Painting and Logos: Please provide drawings, details and specifications for this scope of work.	No enhanced painting and Logos are required on either the Modular Building (Living Quarters + Gym) or the Apparatus Bay (Metal Building).
1-25	Seal Coat Surfacing. The Responsibility Matrix included in addendum 2 lists the contractor as responsible for Seal Coat Surfacing: Please provide drawings, details and specifications for this scope of work.	See Replacement Plan Sheet # 32 in this Addendum No. 3 and see additional technical specification in this Addendum No.3 (Exhibit B of Addendum No. 3).
1-26	Water Vapor Emission. The Responsibility Matrix included in addendum 2 lists the contractor as responsible for Water Vapor Emission: Please provide drawings, details and specifications for this scope of work.	"Water Vapor Emission" line item on the Responsibility Matrix provided under Addendum No. 2, is deleted from the Matrix.
1-27	Necessary Specialists. The Responsibility Matrix included in addendum 2 lists the contractor as responsible for All Necessary Specialists as Required by Regulatory Agencies per Site Conditions: Please provide a detailed list of the Specialists that the Contractor will be responsible for hiring.	"Necessary Specialists" line item on the Responsibility Matrix provided under Addendum No. 2, is deleted from the Matrix.
1-28	Foundation Counter Flashing. The Responsibility Matrix included in addendum 2 lists the contractor as responsible for Foundation Counter Flashing: Please provide drawings, details and specifications for this scope of work.	See Replacement Plan Sheet # 32 in this Addendum No. 3 and see additional technical specification in this Addendum No.3 (Exhibit B of Addendum No. 3).
1-29	Necessary Signage. The Responsibility Matrix included in addendum 2 lists the contractor as responsible for "all necessary signage throughout building." Please provide locations and specifications for what is considered all necessary signage.	The City/Owner will provide further details/guidance re/ signage in a subsequent Addendum (Addendum #4).
1-30	Fire Alarm/Alerting. The response to RFI 1-54 states that the fire alarm and the alert systems are the responsibility of the Modular vendor, but the responsibility matrix says that the contractor is responsible: Please clarify.	See Item 1-13 above. City/Owner will purchase and install the Fire Alerting/USDD system. See updated Attachment 2 from Addendum 2.
1-31	On the fillable Interim Fire Station proposal packet, will the City accept wet signatures & a scanned packet uploaded into the portal vs. Digital signature? Our company policy prefers wet signatures if possible.	The Contractor can submit proposal package with a digital signature or a scan of a wet signature.

TECHNICAL SPECIFICATION

TABLE OF CONTENTS

Electrical

Section 013300 Submittal Procedures

Section 017700 Closeout Procedures

Section 260500 Common Work Results For Electrical

Section 260503 Utility Coordination

Section 260521 Low Voltage Wire Connections

Section 260526 Grounding And Bonding

Section 260529 Hangers And Supports

Section 260533 Conduits

Section 260534 Boxes

Section 260553 Identification For Electrical Systems

Section 260573 Electrical Power System Studies

Section 260850 Field Electrical Acceptance Tests

Section 262214 Dry-Type Transformers

Section 262413 Switchboards

Section 262416 Panelboards

Section 262726 Wiring Devices

Section 262801 Low Voltage Molded Case Circuit Breakers

Section 263214 Diesel Generator Sets

Section 263624 Automatic Transfer Switches

Section 264314 Surge Protective Devices

- LIGHT

Section 260145 Lighting Control Devices

Section 265613 Lighting Pole And Standard

Section 265619 LED Exterior Lighting

Section 079200

Joint Sealants

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Nonsag gunnable joint sealants.

B. Self-leveling pourable joint sealants.

C. Joint backings and accessories.

1.02 REFERENCE STANDARDS

A. ASTM C661 - Standard Test Method for Indentation Hardness of Elastomeric-Type Sealants by Means of a Durometer; 2006 (Reapproved 2011).

B. ASTM C834 - Standard Specification for Latex Sealants; 2014.

C. ASTM C881/C881M - Standard Specification for Epoxy-Resin-Base Bonding Systems for Concrete; 2014.

D. ASTM C919 - Standard Practice for Use of Sealants in Acoustical Applications; 2012.

E. ASTM C920 - Standard Specification for Elastomeric Joint Sealants; 2014.

F. ASTM C1193 - Standard Guide for Use of Joint Sealants; 2013.

G. ASTM C1248 - Standard Test Method for Staining of Porous Substrate by Joint Sealants; 2008 (Reapproved 2012).

H. ASTM C1311 - Standard Specification for Solvent Release Sealants; 2014.

I. ASTM D2240 - Standard Test Method for Rubber Property--Durometer Hardness; 2005 (Reapproved 2010).

J. ASTM E119 - Standard Test Methods for Fire Tests of Building Construction and Materials; 2015.

K. UL 263 - Standard for Fire Tests of Building Construction and Materials; Current Edition, Including All Revisions.

1.03 SUBMITTALS

A. See Section 01 3301 - Submittals for submittal procedures.

B. Product Data for Sealants: Submit manufacturer's technical data sheets for each product to be used, that includes the following.
   1. Physical characteristics, including movement capability, VOC content, hardness, cure time, and color availability.
   2. List of backing materials approved for use with the specific product.
   3. Substrates that product is known to satisfactorily adhere to and with which it is compatible.
   4. Substrates the product should not be used on.
   5. Substrates for which use of primer is required.
   6. Installation instructions, including precautions, limitations, and recommended backing materials and tools.

C. Color Cards for Selection: Where sealant color is not specified, submit manufacturer's color cards showing standard colors available for selection.

D. Samples for Verification: Where custom sealant color is specified, obtain directions from Architect and submit at least two physical samples for verification of color of each required sealant.

1.04 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

B. Installer Qualifications: Company specializing in performing the work of this section and with at least three years of documented experience.

C. Work to be performed by workers thoroughly trained and familiar with the requirements of joint sealer

1.05 MOCK-UP

A. Provide mock-up of sealant joints in conjunction with window under provisions of Section 01 4000.

B. Construct mock-up with specified sealant types and with other components noted.

C. Locate where directed.

D. Mock-up may remain as part of the Work.

1.06 FIELD CONDITIONS

A. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.

1.07 WARRANTY

A. See Section 01 7700 - Closeout Proceedures for additional warranty requirements.

B. Correct defective work within a five year period after Date of Substantial Completion.

C. Warranty: Include coverage for installed sealants and accessories that fail to achieve watertight seal , exhibit loss of adhesion or cohesion, or do not cure.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Non-Sag Sealants: Permits application in joints on vertical surfaces without sagging or slumping.
   1. Bostik Inc: www.bostik-us.com
   2. Dow: www.dow.com
   3. Hilti, Inc: www.us.hilti.com
   4. Master Builders Solutions: www.master-builders-solutions.com/en-us/#sle.
   5. Pecora Corporation: www.pecora.com
   6. QUIKRETE Companies: www.quikrete.com
   7. Sherwin-Williams Company: www.sherwin-williams.com
   8. Sika Corporation: www.usa.sika.com/#sle.
   9. Tremco Commercial Sealants & Waterproofing: www.tremcosealants.com
   10. W.R. Meadows, Inc: www.wrmeadows.com

B. Self-Leveling Sealants: Pourable or self-leveling sealant that has sufficient flow to form a smooth, level surface when applied in a horizontal joint.
   1. Dow: www.dow.com
   2. Master Builders Solutions: www.master-builders-solutions.com/en-us
   3. Pecora Corporation: www.pecora.com
   4. QUIKRETE Companies: www.quikrete.com
   5. Sherwin-Williams Company: www.sherwin-williams.com
   6. Sika Corporation: www.usa.sika.com
   7. Tremco Commercial Sealants & Waterproofing: www.tremcosealants.com
   8. W.R. Meadows, Inc: www.wrmeadows.com

2.02 JOINT SEALANT APPLICATIONS

A. Scope:
   1. Exterior Joints: Seal open joints, whether or not the joint is indicated on drawings, unless specifically indicated not to be sealed. Exterior joints to be sealed include, but are not limited to, the following items.
      a. Wall expansion and control joints.
      b. Joints between door, window, and other frames and adjacent construction.
      c. Joints between different exposed materials.
      d. Openings below ledge angles in masonry.
      e. Other joints indicated below.
   2. Interior Joints: Do not seal interior joints unless specifically indicated to be sealed. Interior joints to be sealed include, but are not limited to, the following items.
      a. Joints between door, window, and other frames and adjacent construction.
      b. In sound-rated wall and ceiling assemblies, gaps at electrical outlets, wiring devices, piping, and other openings; between wall/ceiling and other construction; and other flanking sound paths.
      c. Other joints indicated below.
   3. Do not seal the following types of joints.
      a. Joints indicated to be treated with manufactured expansion joint cover or some other type of sealing device.
      b. Joints where sealant is specified to be provided by manufacturer of product to be sealed.
      c. Joints where installation of sealant is specified in another section.
      d. Joints between suspended panel ceilings/grid and walls.

B. Exterior Joints: Use non-sag non-staining silicone sealant, unless otherwise indicated.
   1. Lap Joints in Sheet Metal Fabrications: Butyl rubber, non-curing.
   2. Lap Joints between Manufactured Metal Panels: Butyl rubber, non-curing.
   3. Control and Expansion Joints in Concrete Paving: Self-leveling polyurethane "traffic-grade" sealant.
   4. Wiring Slots in Concrete Paving: Self-leveling epoxy sealant.

C. Interior Joints: Use non-sag polyurethane sealant, unless otherwise indicated.
   1. Wall and Ceiling Joints in Non-Wet Areas: Acrylic emulsion latex sealant.
   2. Wall and Ceiling Joints in Wet Areas: Non-sag polyurethane sealant for continuous liquid immersion.
   3. Floor Joints in Wet Areas: Non-sag polyurethane "non-traffic-grade" sealant suitable for continuous liquid immersion.
   4. Joints between Fixtures in Wet Areas and Floors, Walls, and Ceilings: Mildew-resistant silicone sealant; white.
   5. In Sound-Rated Assemblies: Acrylic emulsion latex sealant.
   6. Narrow Control Joints in Interior Concrete Slabs: Self-leveling epoxy sealant.

D. Interior Wet Areas: Bathrooms, restrooms, kitchens, food service areas, food processing areas, and _____; fixtures in wet areas include plumbing fixtures, food service equipment, countertops, cabinets, other similar items, and _____.

E. Sound-Rated Assemblies: Walls and ceilings identified as "STC-rated", "sound-rated", or "acoustical".

2.03 JOINT SEALANTS - GENERAL

A. Colors: As indicated on drawings or as selected by Architect from manufactuerer's full color line.

2.04 NONSAG JOINT SEALANTS

A. Non-Staining Silicone Sealant: ASTM C920, Grade NS, Uses M and A; not expected to withstand continuous water immersion or traffic.
   1. Movement Capability: Plus and minus 50 percent, minimum.

2. Non-Staining To Porous Stone: Non-staining to light-colored natural stone when tested in accordance with ASTM C1248.
3. Dirt Pick-Up: Reduced dirt pick-up compared to other silicone sealants.
4. Color: To be selected by Architect from manufacturer's standard range.

B. Type ___- Mildew-Resistant Silicone Sealant: ASTM C920, Grade NS, Uses M and A; single component, mildew resistant; not expected to withstand continuous water immersion or traffic.
1. Color: White.

C. Polyurethane Sealant: ASTM C920, Grade NS, Uses M and A; single or multi-component; not expected to withstand continuous water immersion or traffic.
1. Movement Capability: Plus and minus 25 percent, minimum.
2. Color: To be selected by Architect from manufacturer's standard range.

D. Polyurethane Sealant for Continuous Water Immersion: ASTM C920, Grade NS, Uses M and A; single or multi-component; explicitly approved by manufacturer for continuous water immersion; suitable for traffic exposure when recessed below traffic surface.
1. Movement Capability: Plus and minus 35 percent, minimum.

E. Non-Sag "Traffic-Grade" Polyurethane Sealant: ASTM C920, Grade NS, Uses M and A; single or multi-component; explicitly approved by manufacturer for continuous water immersion and traffic without the necessity to recess sealant below traffic surface.
1. Movement Capability: Plus and minus 25 percent, minimum.
2. Hardness Range: 40 to 50, Shore A, when tested in accordance with ASTM C661.

F. Epoxy Sealant: ASTM C881/C881M, Type I and III, Grade 3, Class B and C; two-component.
1. Hardness Range: 65 to 75, Shore D, when tested in accordance with ASTM C661.
2. Color: To be selected by Architect from manufacturer's standard range.

G. Acrylic Emulsion Latex: Water-based; ASTM C834, single component, non-staining, non-bleeding, non-sagging; not intended for exterior use.
1. Color: To be selected by Architect from manufacturer's standard range.

H. Acrylic Latex Sealant, Water-Based: ASTM C834 Type OP - Opaque and Grade Minus 18 degrees C (0 degrees F); ASTM C920 Class 100/50 for white and colors, and Class 25/25 for clear.
1. Color: To be selected by Architect from manufacturer's standard range.

I. Acrylic Latex Sealant: ASTM C834; for use as acoustical sealant and in firestopping systems for expansion joints and through penetrations.
1. Fire Rated System: Complies with UL 263 and ASTM E119 with UL fire resistance classifications.

J. Non-Curing Butyl Sealant: Solvent-based, single component, non-sag, non-skinning, non-hardening, non-bleeding; non-vapor-permeable; intended for fully concealed applications.

2.05 SELF-LEVELING SEALANTS

A. Self-Leveling Polyurethane Sealant: ASTM C920, Grade P, Uses M and A; single or multi-component; explicitly approved by manufacturer for traffic exposure; not expected to withstand continuous water immersion .
1. Movement Capability: Plus and minus 25 percent, minimum.
2. Color: Gray.

B. Flexible Polyurethane Foam: Single-component, gun grade, and low-expanding.

C. Semi-Rigid Self-Leveling Epoxy Joint Filler: Epoxy or epoxy/polyurethane copolymer; intended for filling cracks and control joints not subject to significant movement; rigid enough to support concrete edges under traffic.
1. Composition: Multi-component, 100 percent solids by weight.
2. Durometer Hardness: Minimum of 85 for Type A or 35 for Type D, after seven days when tested in accordance with ASTM D2240.
3. Joint Width, Minimum: 1/8 inch.

2.06 ACCESSORIES

A. Backer Rod: Cylindrical cellular foam rod with surface that sealant will not adhere to, compatible with specific sealant used, and recommended by backing and sealant manufacturers for specific application.

B. Backing Tape: Self-adhesive polyethylene tape with surface that sealant will not adhere to and recommended by tape and sealant manufacturers for specific application.

C. Masking Tape: Self-adhesive, nonabsorbent, non-staining, removable without adhesive residue, and compatible with surfaces adjacent to joints and sealants.

D. Joint Cleaner: Non-corrosive and non-staining type, type recommended by sealant manufacturer; compatible with joint forming materials.

E. Primers: Type recommended by sealant manufacturer to suit application; non-staining.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that joints are ready to receive work.

B. Verify that backing materials are compatible with sealants.

C. Verify that backer rods are of the correct size.

3.02 PREPARATION

A. Remove loose materials and foreign matter that could impair adhesion of sealant.

B. Clean joints, and prime as necessary, in accordance with manufacturer's instructions.

C. Perform preparation in accordance with manufacturer's instructions and ASTM C1193.

D. Mask elements and surfaces adjacent to joints from damage and disfigurement due to sealant work; be aware that sealant drips and smears may not be completely removable.

3.03 INSTALLATION

A. Perform work in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.

B. Perform installation in accordance with ASTM C1193.

C. Perform acoustical sealant application work in accordance with ASTM C919.

D. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer, except where specific dimensions are indicated.

E. Install bond breaker backing tape where backer rod cannot be used.

F. Install sealant free of air pockets, foreign embedded matter, ridges, and sags, and without getting sealant on adjacent surfaces.

G. Do not install sealant when ambient temperature is outside manufacturer's recommended temperature range, or will be outside that range during the entire curing period, unless manufacturer's approval is obtained and instructions are followed.

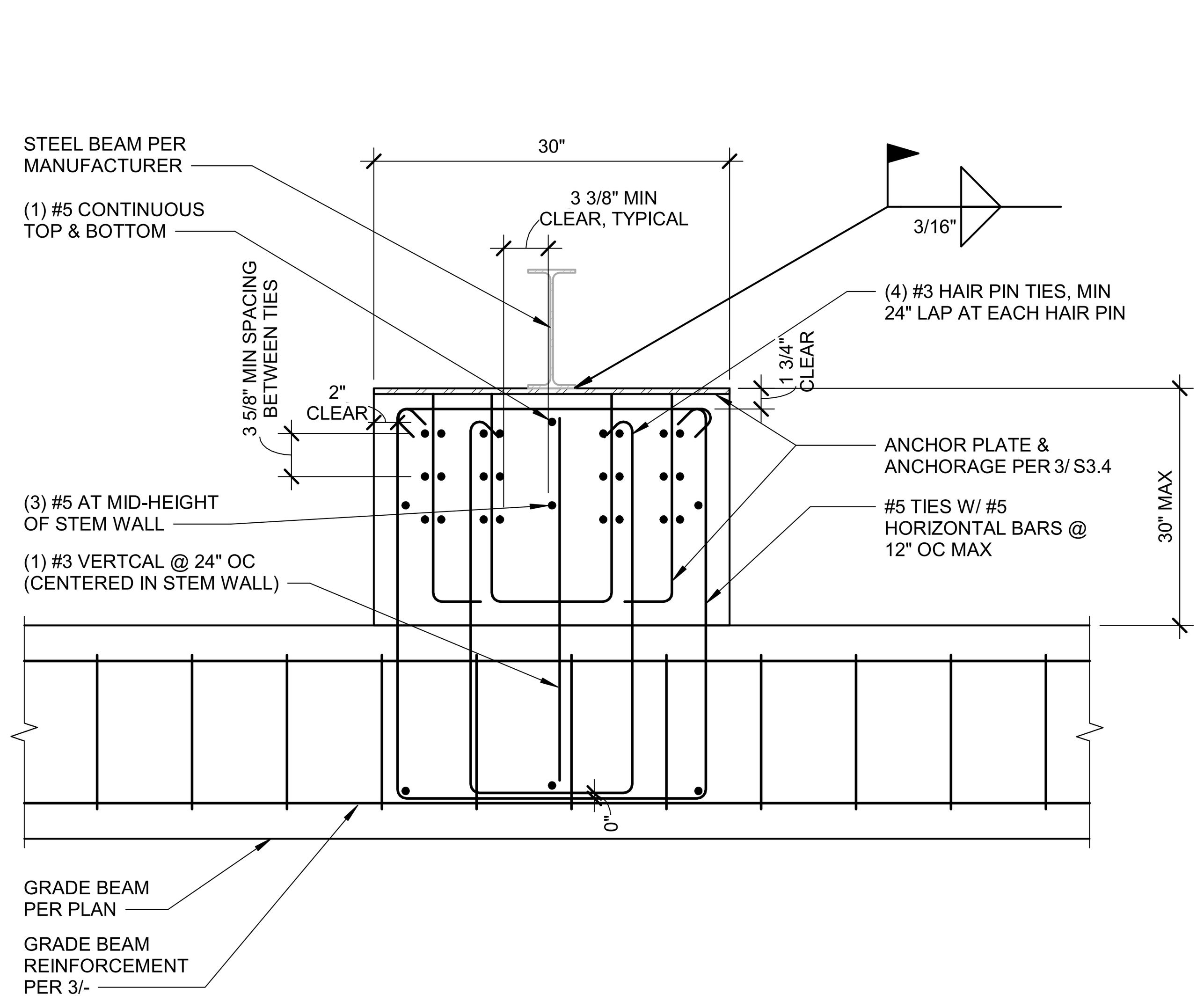
H. Nonsag Sealants: Tool surface concave, unless otherwise indicated; remove masking tape immediately after tooling sealant surface.

I. Concrete Floor Joint Filler: After full cure, shave joint filler flush with top of concrete slab.

3.04 POST-OCCUPANCY

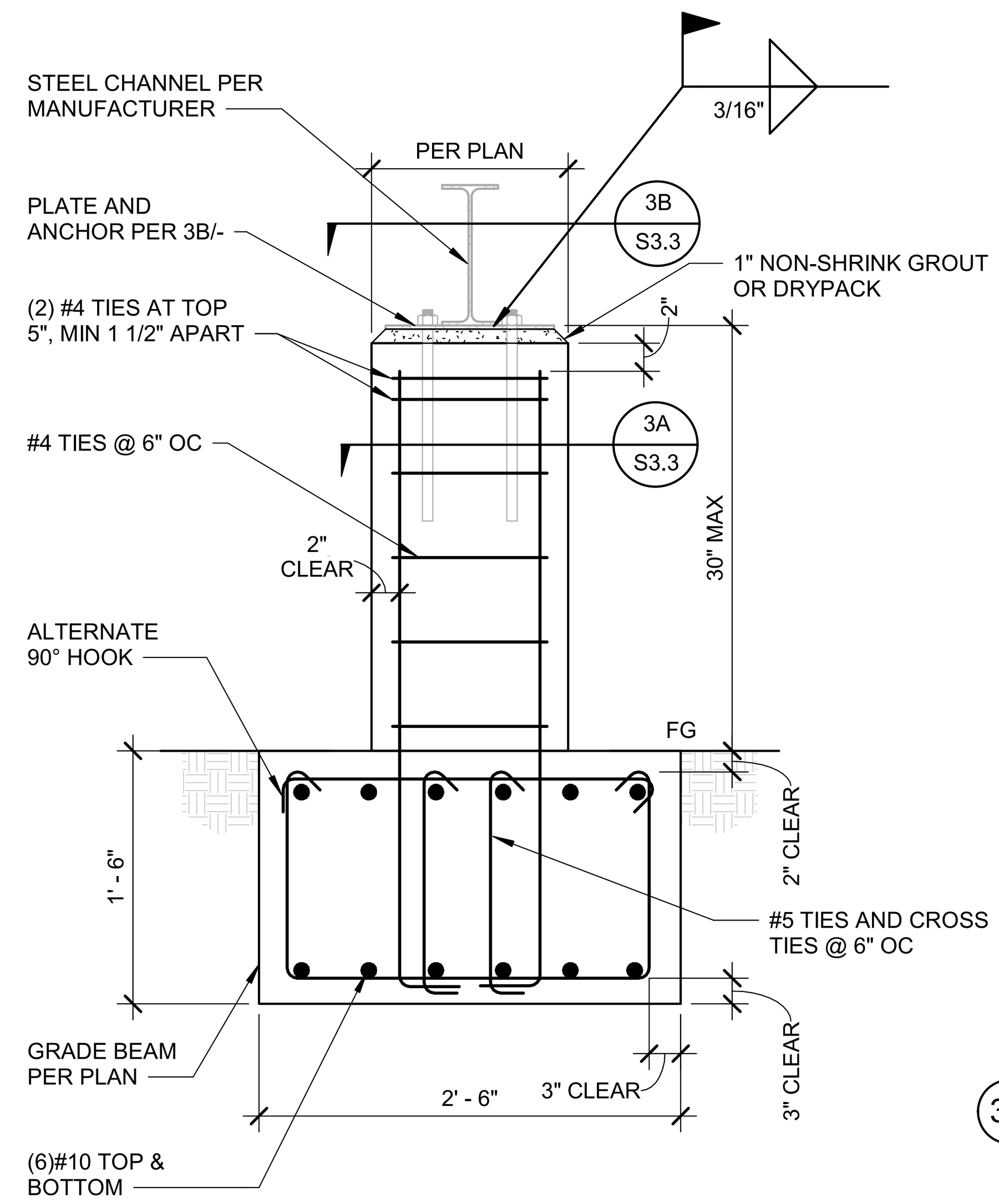
A. Post-Occupancy Inspection: Perform visual inspection of entire length of project sealant joints at a time that joints have opened to their greatest width; i.e. at low temperature in thermal cycle. Report failures immediately and repair.

End of Section



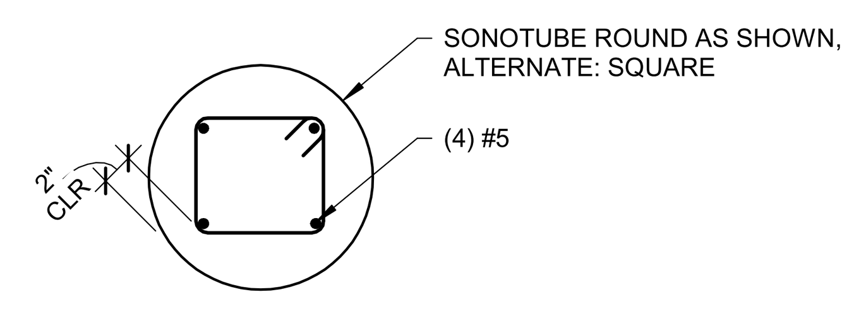
5 INTERIOR SECTION AT MODLINE

SCALE : 1" = 1'-0"

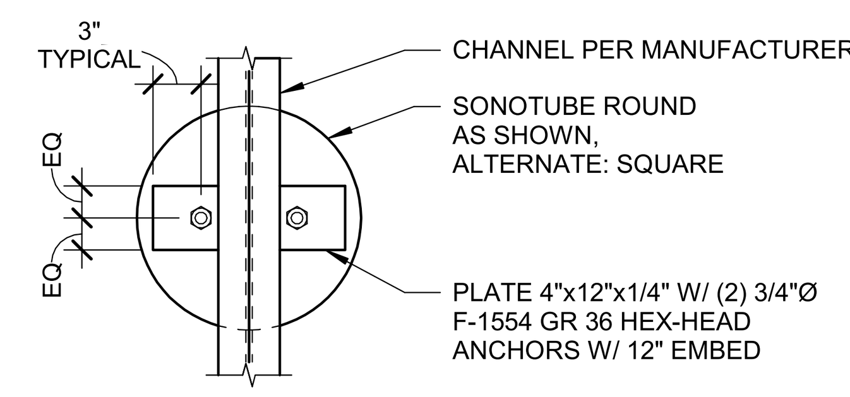


3 INTERIOR SECTION AT MODLINE

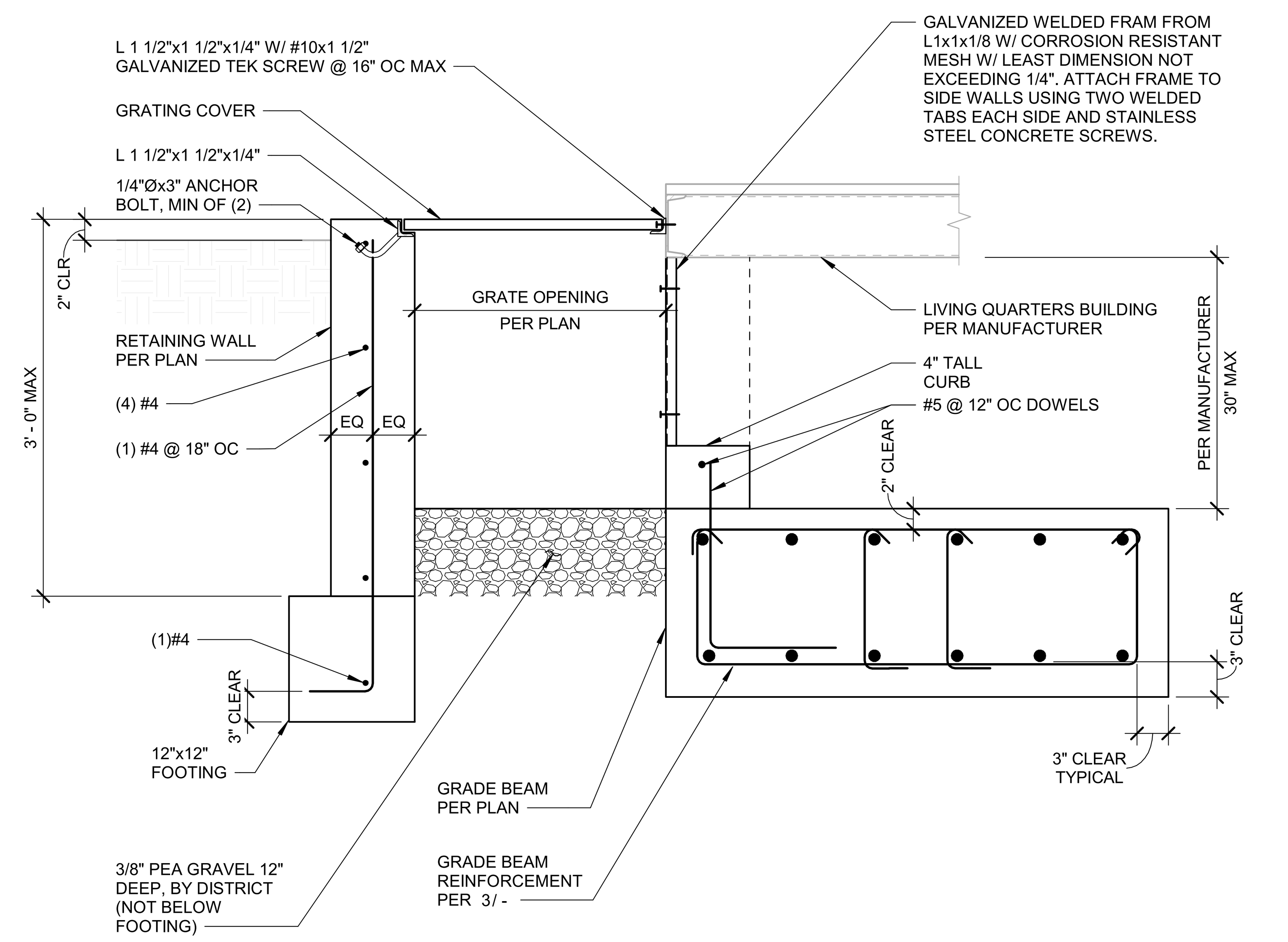
SCALE : 1" = 1'-0"



3A SECTION 'A'

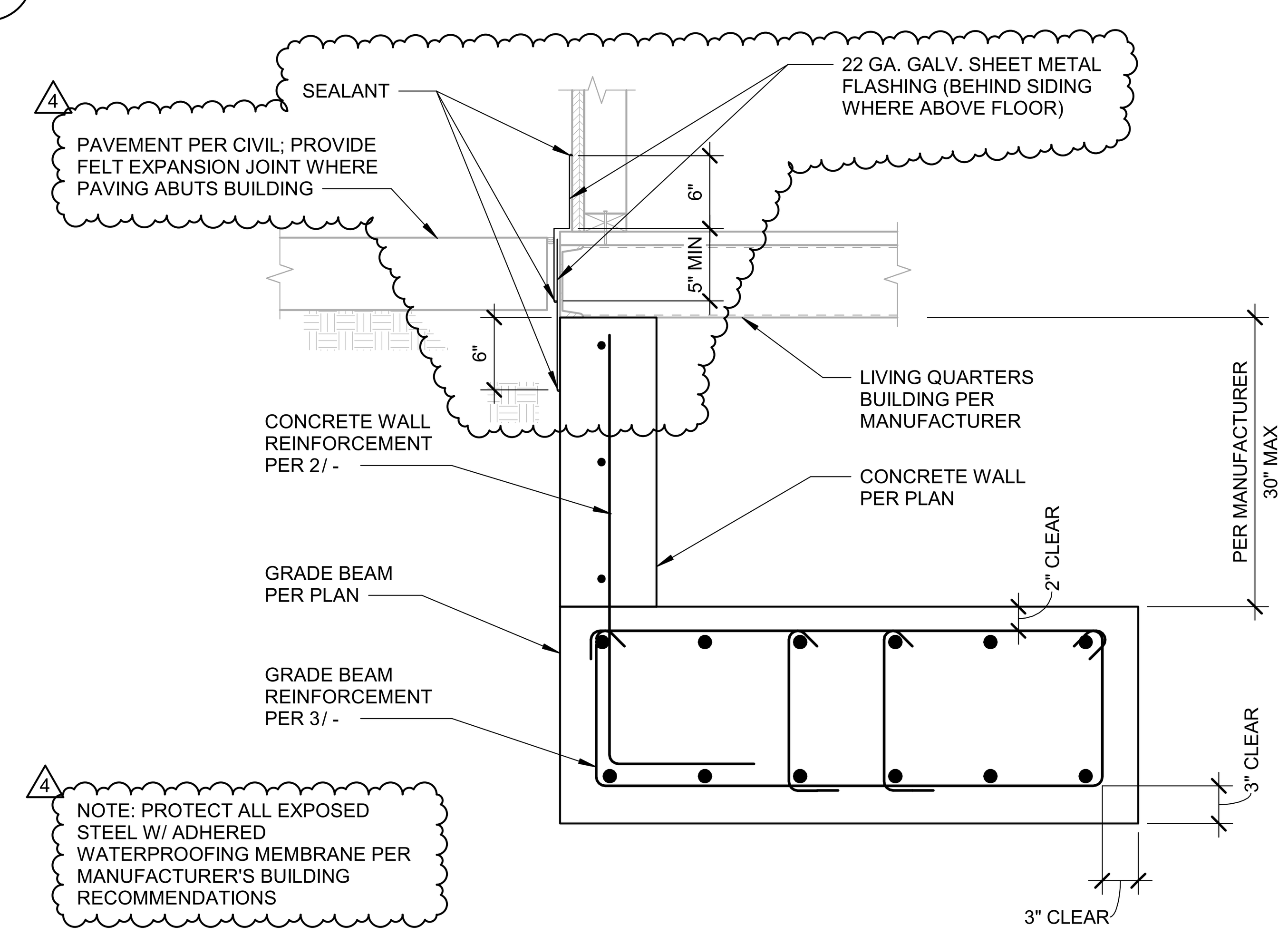


3B PLATE AT CONCRETE PIER



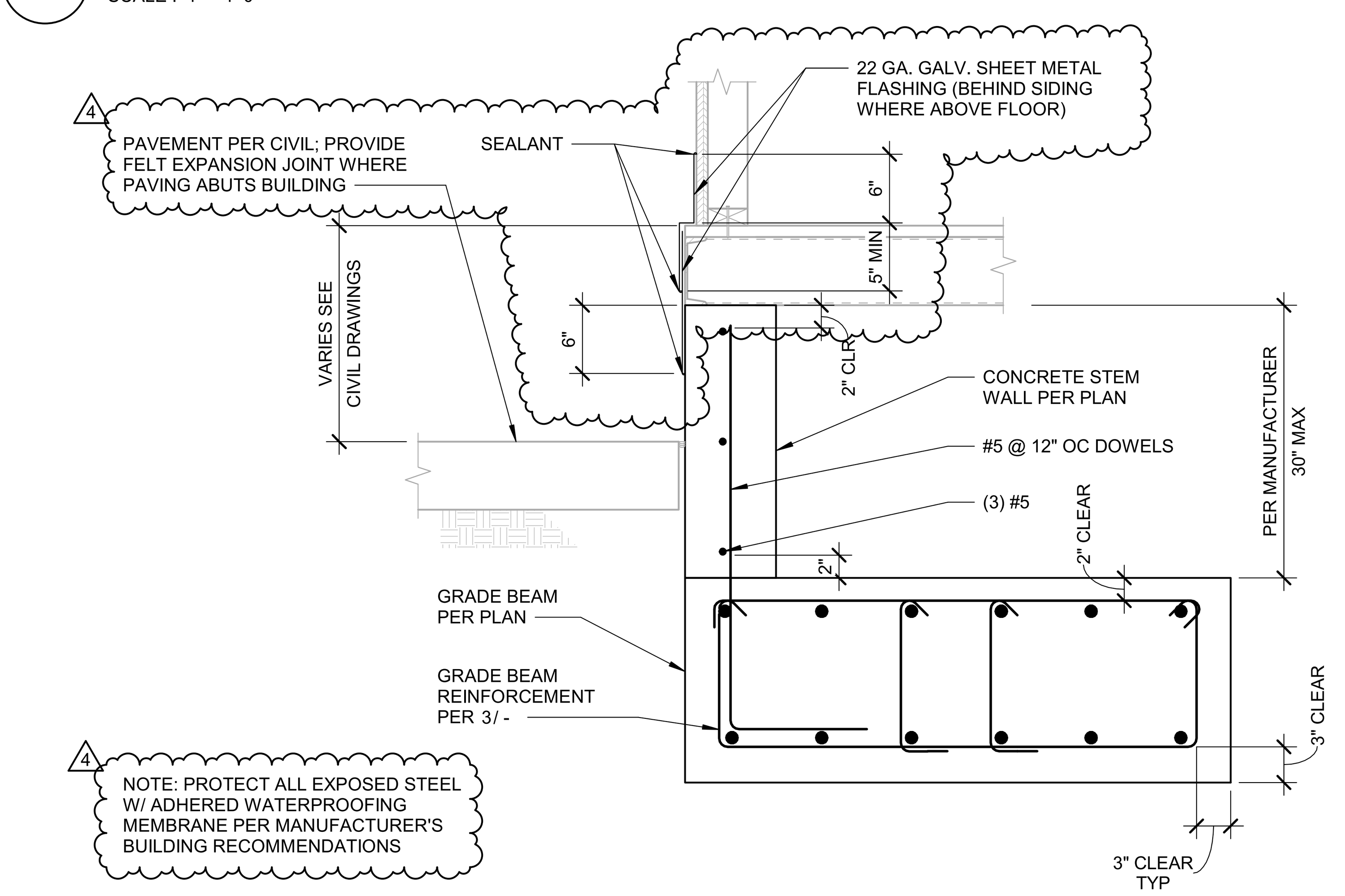
1 DETAIL

SCALE : 1" = 1'-0"



4 DETAIL

SCALE : 1" = 1'-0"



2 DETAIL

SCALE : 1" = 1'-0"

REV.	DESCRIPTION	CK'D	APP	DATE
4	ADDENDUM NO. 3			6/15/26
3	PLAN CHECK 3			4/17/26
2	PLAN CHECK 2			2/17/26
1	PLAN CHECK 1			8/11/25

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Los Angeles, CA 90017
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PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION
CITY OF SAN BUENAVENTURA

INTERIM FIRE STATION NO. 7

MODULAR DETAILS

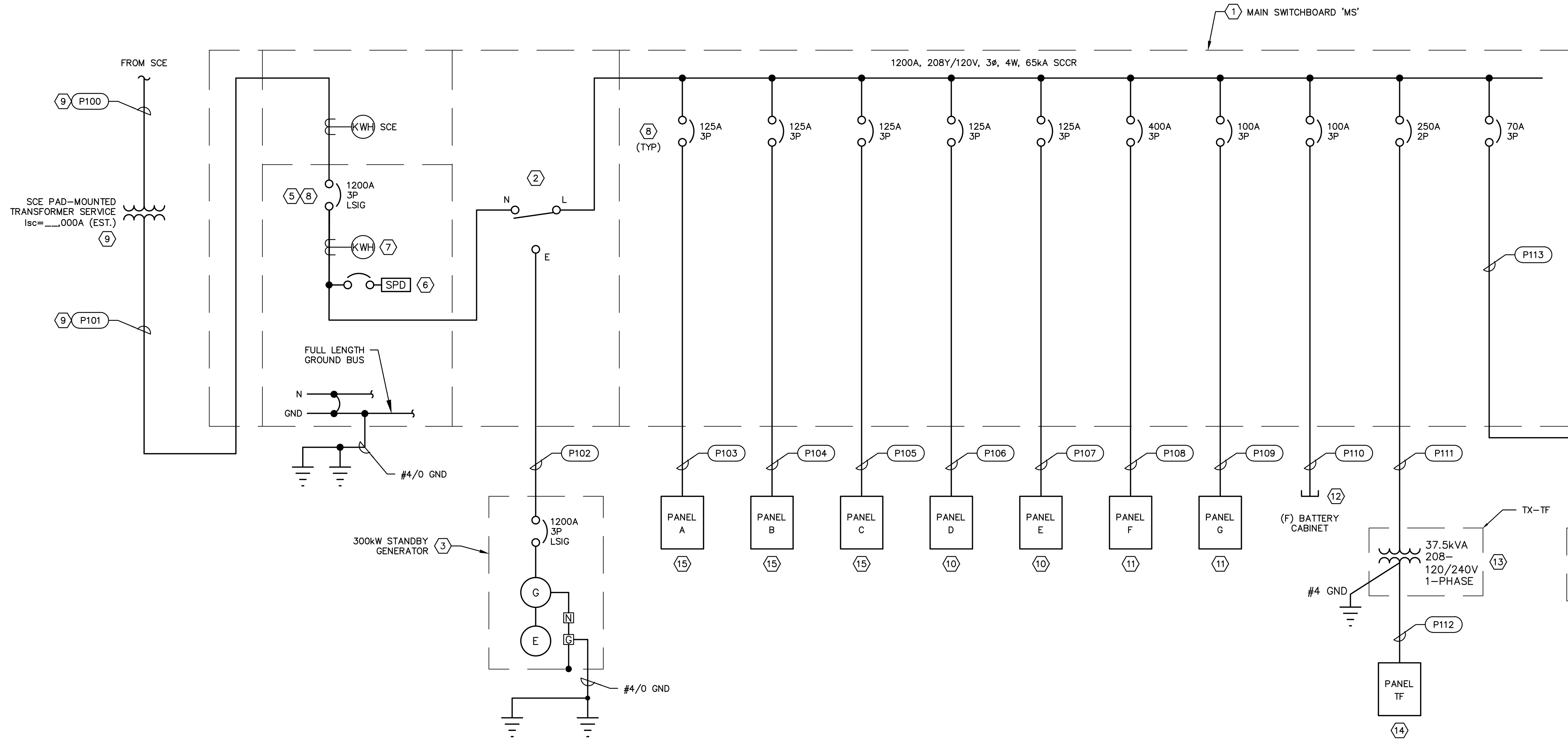
DRN. BY: Author DES. BY: Designer CK'D. BY: Checker

PRINCIPAL ENGINEER DATE

CITY ENGINEER DATE

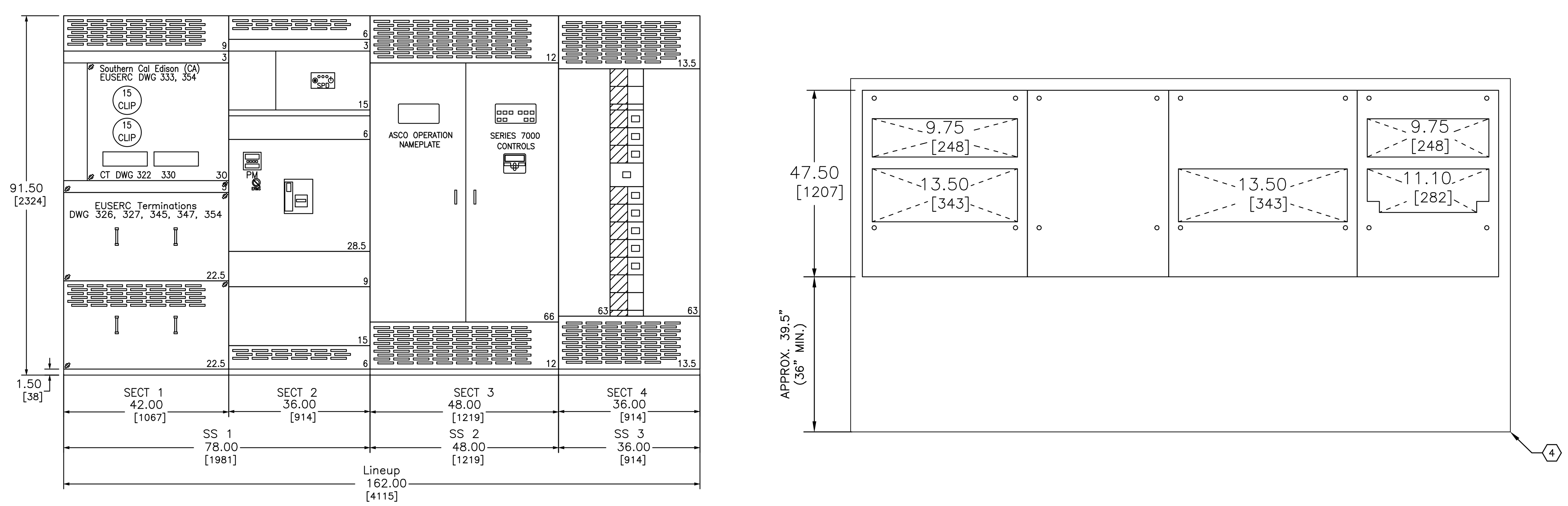
SPEC. NUMBER 2025-010 PROJECT NO. 93710

SEPTEMBER 7, 2025 SHEET 32 OF 151 DWG. NO. S3.3



SINGLE LINE DIAGRAM

SCALE: NO SCALE



EQUIPMENT ELEVATIONS & FLOOR PLAN – MAIN SWITCHBOARD 'MS'

SCALE: NO SCALE

GENERAL NOTES:

1. SEE ELECTRICAL SYMBOLS AND GENERAL NOTES ON SHEET 87.
2. SEE CONDUIT AND CABLE SCHEDULE ON SHEET 100.
3. ELECTRICAL EQUIPMENT DIMENSIONS ARE BASED ON PRELIMINARY LAYOUTS PROVIDED BY THE VENDORS. FINAL DIMENSIONS SHALL BE PROVIDED BY THE MANUFACTURERS VIA SHOP DRAWING SUBMITTALS AND CONFIRMED BY THE CONTRACTOR PRIOR TO INSTALLATION.
4. SCE SCOPE OF WORK IS SHOWN FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL CONFIRM ALL SCE WORK WITH SCE PLANNER/INSPECTOR, PLANS AND STANDARDS.

CONSTRUCTION NOTES:

(1) MAIN SWITCHBOARD 'MS', 1200A, 208Y/120V, 3-PHASE, 4-WIRE, COPPER BUSSING, RATED AT 65,000 SCCR IN NEMA 3R ENCLOSURE, MANUFACTURED BY SQUARE-D. MAIN SWITCHBOARD SHALL HAVE AN INTERNAL CPT FOR SPACE HEATERS (AS REQUIRED), LIGHTING, AND CONVENIENCE RECEPTACLE(S).

(2) AUTOMATIC DELAYED-TRANSITION TRANSFER SWITCH, 1200A, 208V, 4-POLE WITH SWITCHED NEUTRAL, 65kA WCR, INSTALLED IN MAIN SWITCHBOARD 'MS', ASCO 7000 SERIES. TRANSFER SWITCH SHALL HAVE PRE-TRANSFER RELAY SIGNAL.

(3) 300kW DIESEL STANDBY GENERATOR, CATERPILLAR C9, 208Y/120V, 3-PHASE, 4-WIRE WITH NEUTRAL BONDED AT GENERATOR, 60Hz, WITH 1200A, 3P, LSIG, 100% RATED, UL LISTED, MAIN AND SECONDARY/LOAD BANK CIRCUIT BREAKERS, AND DOUBLE-WALLED, SUB-BASE FUEL TANK SIZED TO OPERATE FOR 24 HOURS (MINIMUM) AT FULL LOAD. GENERATOR SHALL BE SIZED FOR CONNECTED LOAD (AS SHOWN) WITH A MAXIMUM VOLTAGE DIP OF 25%. GENERATOR SHALL BE HOUSED IN A WEATHERPROOF, SOUND-ATTENUATED (LEVEL 2) ENCLOSURE. THE ENCLOSURE SHALL MITIGATE SOUND TO A LEVEL OF 71dBA AT 23 FEET. ENCLOSURE COLOR SHALL BE PER CITY PREFERENCE. SUPPLIER SHALL PROVIDE SIZING STUDY RESULTS TO OWNER AND ENGINEER TO VERIFY THE GENERATOR TO BE SUPPLIED CAN START AND MAINTAIN THE AFOREMENTIONED LOADS. GENERATOR SHALL BE CATERPILLAR, NO SUBSTITUTIONS, OWNER FURNISHED, INSTALLED BY CONTRACTOR.

(4) SEE STRUCTURAL DRAWINGS FOR EQUIPMENT FOUNDATION DESIGN AND DETAILS.

(5) MAIN CIRCUIT BREAKER SHALL BE 1200A FRAME WITH 1200A TRIP, 208V, 3-POLE, 65kA INTERRUPTING CAPACITY, LSIG ELECTRONIC TRIP UNIT WITH ARC-FLASH REDUCTION MAINTENANCE SWITCH (ARMS), FIXED MOUNTED, SQUARE D POWERPACT PG, OR APPROVED EQUAL.

(6) SURGE PROTECTIVE DEVICE (SPD) RATED AT 240kA, 208Y/120V, 3-PHASE, 4-WIRE, STANDARD WITH SURGE COUNTER AND CIRCUIT BREAKER OR FUSIBLE DISCONNECT, SQUARE-D, OR APPROVED EQUAL.

(7) POWER METER FOR POWER MONITORING AND ENERGY AND POWER MEASUREMENT. METER SHALL HAVE REMOTE (DOOR-MOUNTED) DISPLAY, BASIC INSTRUMENTATION, THD, ALARMING, DUAL ETHERNET PORTS, SQUARE-D/SCHNEIDER ELECTRIC PM5563, COMM EXPANSION CARD AND DISPLAY, OR APPROVED EQUAL.

(8) CIRCUIT BREAKERS SHALL BE RATED FOR MIN. 65,000 AIC AND HAVE PROVISIONS FOR LOCKOUT-TAGOUT.

(9) ALL SCE WORK SHALL BE COORDINATED WITH SCE. SERVICE REQUEST #4044496 PROJECT #3166536 PRODUCT #TD2489602 – NEW METER & SERVICE. SCE PROJECT MANAGER STEVEN WALL, PHONE #805-654-7118, STEVEN.WALL@SCE.COM

(10) PANELBOARD IS TO BE PROVIDED BY GLOBAL MODULAR INC. AS PART OF LIVING QUARTER OR GYM MODULAR BUILDING PACKAGE. SEE PANEL SCHEDULE ON GLOBAL MODULAR INC. DRAWINGS FOR DETAILS. CONTRACTOR SHALL PROVIDE FEEDER AND CONNECTION TO PANELBOARD, AS SHOWN AND PER PLANS.

(11) CONTRACTOR SHALL PROVIDE AND INSTALL PANELBOARD, SEE PANEL SCHEDULE ON SHEET 89 FOR RATINGS AND DETAILS. PANELBOARDS SHALL HAVE BOLT-ON BRANCH CIRCUIT BREAKERS, COPPER BUSSING, FULL NEUTRAL, NEMA 1 ENCLOSURE FOR INDOOR INSTALLATIONS AND NEMA 3R FOR OUTDOOR INSTALLATIONS, SQUARE-D, OR APPROVED EQUAL.

(12) STUB-UP, CAP, AND TAG SPARE CONDUIT FOR FUTURE BATTERY CABINET. SEE PLANS FOR LOCATION AND DETAILS.

(13) LOW-VOLTAGE TRANSFORMER, DRY-TYPE, 37.5kVA, 208V PRIMARY TO 120/240V SECONDARY, SINGLE-PHASE, 60Hz, ENERGY-EFFICIENT, COPPER WINDINGS, NEMA 3R OUTDOOR-RATED ENCLOSURE, SQUARE-D, OR APPROVED EQUAL.

(14) (E) FIRE TRAINING FACILITIES TEMPORARY SERVICE PANEL SHALL BE DEMOLISHED AS PART OF THIS SCOPE AND IN CONJUNCTION WITH SCE TEMPORARY SERVICE REMOVAL. DEMOLITION SHALL BE COORDINATED WITH SCE AND THE CITY. CONTRACTOR SHALL PROVIDE AND INSTALL (N) PANELBOARD 'TF' TO REPLACE (E) TEMPORARY SERVICE PANEL LOAD CENTER SECTION "IN KIND". SEE PANEL SCHEDULE ON SHEET 89 FOR RATINGS AND BRANCH CIRCUIT DETAILS. ALL LOAD CONNECTIONS TO (N) PANEL 'TF' SHALL BE COORDINATED WITH THE CITY AND ARE NOT PART OF THIS ENGINEERING SCOPE.

(15) CONTRACTOR SHALL ENSURE BONDING JUMPERS ARE NOT INSTALLED BETWEEN THE NEUTRAL AND GROUND INSIDE THE PANEL BOARDS (DISTRIBUTION PANELS) EXCEPT FOR THE PANEL BOARD THAT IS FED FROM A SEPARATELY DERIVED SYSTEM.

(16) 70A, 240VAC, 3-POLE, 3-WIRE, NON-FUSIBLE, NEMA 1, HEAVY DUTY SAFETY SWITCH, SQUARE-D, EATON, OR APPROVED EQUAL.

LOAD SCHEDULE @ 208Y/120V, 3PH, 4W		
PANEL A	29.2 kVA	81.0 A
PANEL B	12.5 kVA	34.6 A
PANEL C	20.8 kVA	57.8 A
PANEL D	25.0 kVA	69.3 A
PANEL E	26.1 kVA	72.5 A
PANEL F	128.8 kVA	357.5 A (3)
PANEL G	20.6 kVA	57.2 A
(F) BATTERY CABINET	28.8 kVA	80.0 A
TRAIN. FACIL. TX-TF (37.5kVA, 1PH)	28.8 kVA	80.0 A
120 GAL WATER HEATER (APPARATUS BAY)	18.0 kVA	50.0 A
TOTAL	347.3 kVA	1040.2 A (3)

REV.	DESCRIPTION	CK'D	APP	DATE
3	ISSUED FOR BID ADDENDUM 03	DP/DR	-	06/08/26
2	ISSUED FOR BID	DP/DR	-	04/07/26
1	ISSUED FOR REVIEW	DP/DR	-	12/19/25
0	ISSUED FOR BID	AM/DR	-	06/11/25

REGISTERED PROFESSIONAL ENGINEER · NO. 21736 · ELECTRICAL · STATE OF CALIFORNIA

Cannon
60 S. California Street, Suite 401
Ventura, CA 93001
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PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION
CITY OF SAN BUENAVENTURA

FIRE STATION NO. 7
SINGLE LINE DIAGRAM

DRN. BY: AM	DES. BY: AM	CK'D. BY: AM/DR

PRINCIPAL ENGINEER — DATE

CITY ENGINEER — DATE

SPEC. NUMBER 2025-010	PROJECT NUMBER FA11-1061	
June 11, 2025	SHEET 97 OF151	DWG. NO. 2025-D-010

MAIN SWITCHBOARD 'MS'

BUS RATING: 1200A, 120/208V, 3PH, 4W
NEMA 3R
AIC RATING: 65K

DISTRIBUTION					CONNECTED VA (AMPS) %VD			
DIST (FT)	PANEL/LOAD	TRIP	POLES	COND SIZE	PHASE A	PHASE B	PHASE C	CALC TYPE
135	PANEL A (LIVING)	125	3	1	11640 (97.0A) 1.68%	11360 (94.7A) 1.64%	6180 (51.5A) 0.89%	CON
155	PANEL B (LIVING)	125	3	1	4200 (35.0A) 0.69%	4603 (38.4A) 0.76%	3660 (30.5A) 0.61%	CON
165	PANEL C (LIVING)	125	3	1	6065 (50.5A) 1.07%	8016 (66.8A) 1.41%	6756 (56.3A) 1.19%	CON
175	PANEL D (LIVING)	125	3	1	8760 (73.0A) 1.64%	9480 (79.0A) 1.77%	6720 (56.0A) 1.26%	CON
185	PANEL E (GYM)	125	3	1/0	9090 (75.8A) 1.42%	10893 (90.8A) 1.70%	6139 (51.2A) 0.96%	CON
55	PANEL F (APP BAY)	400	3	2-3/0	42066 (350.6A) 0.41%	42590 (354.9A) 0.42%	44145 (367.9A) 0.43%	CON
170	PANEL G (OUTSIDE)	100	3	2	6743 (56.2A) 1.54%	5540 (46.2A) 1.27%	8320 (69.3A) 1.90%	CON
	(F) BATTERY CABINET	100	3	-	9600 (80.0A)	9600 (80.0A)	9600 (80.0A)	
250	(E) TRAINING FACILITIES	250	2	300	18750 (156.3A) 1.61%	0	18750 (156.3A) 1.61%	CON
				KVA (AMPS):	116.91 (974.3A)	102.08 (850.7A)	110.27 (918.9A)	

Total KVA 329.27
Total Amps 914

VD CALCULATION TYPE
CON CONNECTED LOAD
CB 80% OF BREAKER RATING

PANEL F

BUS RATING: 400A 120/208V, 3PH, 4W
MAIN: 400A, 3-POLE
SPACES: 72 FULL SIZE BOLT-ON CB SPACES
AIC RATING: 22kA

MOUTING: SURFACE MOUNT, NEMA 1
LOCATION: APPARATUS BAY
WITH EQUIPMENT GND BUS, FULL NUETRAL

CKT %VD	DIST (FT)	NOTES	LOAD TYPE	CKT	DESCRIPTION	TRIP	POLES	COND SIZE	CONNECTED VA PHASE A	PHASE B	PHASE C	COND SIZE	POLES	TRIP	DESCRIPTION	CKT	LOAD TYPE	NOTES	DIST (FT)	CKT %VD
1.44%	75		C	1	CIRCULATION FAN 'CF-1'	15	1	12	696			12	1	15	LOUVER 'L-2' ACTUATOR	2	M		150	0.07%
1.21%	70		C	3	VERICAL EXHAUST FAN CONTROL PANEL 'VEXC-1'	30	3	10	18	2005	3	6	1	50	'VEXR-1' RECEPTACLE	4	R	4	80	1.64%
			C	5	-	-	-	-	3000		2005	6	1	50	'VEXR-2' RECEPTACLE	6	R	4	100	2.05%
			C	7	-	-	-	-	2005		3000	6	1	50	'VEXR-3 RECEPTACLE	8	R	4	120	2.46%
1.31%	65		C	9	ELECTRIC UNIT HEATER 'EUH-1'	40	3	8	3000	3747		10	1	15	EXHAUST FAN 'EF-1'	10	C	3	95	1.92%
			C	11	-	-	-	-	1176		3747	8	2	40	AIR COMPRESSOR 'AC-1'	12	C		90	1.80%
			C	13	-	-	-	-	3747		3203	-	-	-	-	14	C			
1.21%	60		C	15	ELECTRIC UNIT HEATER 'EUH-2'	40	3	8	3203	3747		6	1	30	EXHAUST FAN 'EF-2'	16	C		160	2.62%
			C	17	-	-	-	-	2400		3747	-	2	40	(F) DETOX SAUNA	18	C			
			C	19	-	-	-	-	3747		3328	-	-	-	-	20	C			
			C	21	(F) SCBA FILL STATION	80	3	-	3328	7133		-	2	20	SPARE	22				
			C	23	-	-	-	-	7133			-	-	-	-	24				
			C	25	-	-	-	-	7133			10	2	30	GENERATOR AUX POWER	26	C		75	1.32%
0.35%	15		C	27	SPLIT SYSTEM HEAT PUMP 'DS-1'	20	2	12	1766	1456		-	-	-	-	28	C			
			C	29	-	-	-	-	1766		1456	12	3	15	APP. BAY ROLL-UP DOOR OPERATOR #5	30	C		75	0.43%
0.61%	105		C	31	APP. BAY ROLL-UP DOOR OPERATOR #1	15	3	12	420	420		-	-	-	-	32	C			
			C	33	-	-	-	-	420		420	-	-	-	-	34	C			
			C	35	-	-	-	-	420		420	12	3	15	APP. BAY ROLL-UP DOOR OPERATOR #6	36	C		90	0.52%
0.75%	130		C	37	APP. BAY ROLL-UP DOOR OPERATOR #2	15	3	12	420	420		-	-	-	-	38	C			
			C	39	-	-	-	-	420		420	-	-	-	-	40	C			
			C	41	-	-	-	-	420		900	10	1	20	APP. BAY INDOOR RECEPTACLES	42	R		105	1.63%
0.84%	145		C	43	APP. BAY ROLL-UP DOOR OPERATOR #3	15	3	12	420	900		10	1	20	APP. BAY INDOOR RECEPTACLES	44	R		115	1.78%
			C	45	-	-	-	-	420		720	10	1	20	APP. BAY INDOOR RECEPTACLES	46	R		185	2.29%
			C	47	-	-	-	-	420		720	10	1	20	APP. BAY OUTDOOR RECEPTACLES	48	R		150	1.86%
0.29%	50		C	49	APP. BAY ROLL-UP DOOR OPERATOR #4	15	3	12	420	720		10	1	20	APP. BAY OUTDOOR RECEPTACLES	50	R		100	1.24%
			C	51	-	-	-	-	420		540	12	1	20	TURNOUT & EMT STORAGE ROOM RECEPTACLES	52	R		75	1.11%
			C	53	-	-	-	-	420		290	12	1	20	APP. BAY LIGHTING ZONE 1	54	L		300	2.39%
			L	55	TURNOUT, EMT STORAGE, AND AIR COMPRESSOR LIGHTING	20	1	12	290	580		10	1	20	APP. BAY LIGHTING ZONE 2	56	L		285	2.85%
1.77%	180		L	57	APP. BAY OUTDOOR LIGHTING	20	1	10	572	290		12	1	20	APP. BAY LIGHTING ZONE 3	58	L		265	2.11%
0.11%	115		L	59	MAPBOARD LIGHTING	20	1	12	35	232		12	1	20	APP. BAY LIGHTING ZONE 4	60	L		250	1.60%
				61	SPARE	20	1	-					1	20	SPARE	62				
2.86%	140	4	C	63	'VEXR-4' RECEPTACLE	50	1	6	3000				1	20	SPARE	64				
2.05%	160	4	C	65	'VEXR-5' RECEPTACLE	50	1	4		3000			1	20	SPARE	66				
				67	SPARE	20	1						1	20	SPARE	68				
				69	SPARE	20	1						1	20	SPARE	70				
				71	SPARE	20	1						1	20	SPARE	72				
									CON:	33653	34072	35316								
									25%:	8413	8518	8829								
									SUB:	0	0	0								
									TOT:	42066	42590	44145								
									AMPS	351	355	368								

PANEL NOTES:
1. BOLT-ON CIRCUIT BREAKERS.
2. ALL COPPER BUSSING.
3. ALL PADLOCKABLE CIRCUIT BREAKERS.
4. CIRCUIT BREAKER SHALL BE GFCI TYPE.

LOAD (VA)	LOAD TYPE LEGEND	
13500	R	RECEPTACLE
2289	L	LIGHTING (125% OF CONNECTED LOAD CEC 215.2)
18	M	MECHANICAL
0	K	KITCHEN APPLIANCE
0	N	NON-CONTINUOUS MISC.
87234	C	CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

PANEL G

BUS RATING: 225A 120/208V, 3PH, 4W
MAIN: 100A, 3-POLE
SPACES: 30 FULL SIZE BOLT-ON CB SPACES
AIC RATING: 22kA

MOUTING: SURFACE MOUNT, NEMA 3R
LOCATION: OUTSIDE
WITH EQUIPMENT GND BUS, FULL NUETRAL

CKT %VD	DIST (FT)	NOTES	LOAD TYPE	CKT	DESCRIPTION	TRIP	POLES	COND SIZE	CONNECTED VA PHASE A	PHASE B	PHASE C	COND SIZE	POLES	TRIP	DESCRIPTION	CKT	LOAD TYPE	NOTES	DIST (FT)	CKT %VD
1.98%	160		M	1	ACCESS GATE MOTOR	20	1	10	720			10	1	20	LIGHT POLES	2	L		255	2.33%
0.60%	195		R	3	PRESSURE WASHER RECEPT.	20	1	10	530	180			1	20	SPARE	4				
			C	5	(F) LEVEL 2, DUAL-PORT, POWER SHARE EV CHARGER	40	2	-			3328		1	20	SPARE	6				
			C	7	-	-	-	-	3328			10	2	20	OUTDOOR TRUCK WASH	8	N		195	2.33%
			C	9	(F) LEVEL 2, DUAL-PORT, POWER SHARE EV CHARGER	40	2	-	1200	3328		-	-	-	-	10	N			
			C	11	-	-	-	-		1200	3328		1	20	SPARE	12				
				13	SPARE	20	1						1	20	SPARE	14				
				15	SPARE	20	1						1	20	SPARE	16				
				17	SPARE	20	1						1	20	SPARE	18				
				19	SPARE	20	1						1	20	SPARE	20				
				21	SPARE	20	1						1	20	SPARE	22				
				23	SPARE	20	1						1	20	SPARE	24				
				25	SPARE	20	1						1	20	SPARE	26				
				27	SPARE	20	1						1	20	SPARE	28				
				29	SPARE	20	1						1	20	SPARE	30				
									CON:	5778	4708	6656								
									25%:	965	832	1664								
									SUB:	0	0	0								
									TOT:	6743	5540	8320								
									AMPS	56	46	69								

PANEL NOTES:
1. BOLT-ON CIRCUIT BREAKERS.
2. ALL COPPER BUSSING.
3. ALL PADLOCKABLE CIRCUIT BREAKERS.

LOAD (VA)	LOAD TYPE LEGEND	
180	R	RECEPTACLE
530	L	LIGHTING (125% OF CONNECTED LOAD CEC 215.2)
720	M	MECHANICAL
0	K	KITCHEN APPLIANCE
2400	N	NON-CONTINUOUS MISC.
13312	C	CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

PANEL TF

BUS RATING: 225A 120/240V, 1PH, 3W
MAIN: 200A, 2-POLE
SPACES: 30 FULL SIZE BOLT-ON CB SPACES
AIC RATING: 22kA

MOUTING: SURFACE MOUNT, NEMA 3R
LOCATION: OUTSIDE, TRAINING FACILITIES
WITH EQUIPMENT GND BUS, FULL NUETRAL

CKT %VD	DIST (FT)	NOTES	LOAD TYPE	CKT	DESCRIPTION	TRIP	POLES	COND SIZE	CONNECTED VA PHASE A	PHASE B	COND SIZE	POLES	TRIP	DESCRIPTION	CKT	LOAD TYPE	NOTES	DIST (FT)	CKT %VD
				1	(E) CIRCUIT	20	1							SPACE	2				
				3	(E) CIRCUIT	20	2							SPACE	4				
				5	-	-	-							SPACE	6				
				7	(E) CIRCUIT	20	2							SPACE	8				
				9	-	-	-							SPACE	10				
				11	(E) CIRCUIT	30	2							SPACE	12				
				13	-	-	-							SPACE	14				
				15	SPARE	50	2							SPACE	16				
				17	-	-	-							SPACE	18				
				19	(E) CIRCUIT	100	2							SPACE	20				
				21	-	-	-							SPACE	22				
				23	(E) CIRCUIT	100	2							SPACE	24				
				25	-	-	-							SPACE	26				
				27	SPACE									SPACE	28				
				29	SPACE									SPACE	30				
								CON:	0	0									
								25%:	0	0									
								SUB:	0	0									
								TOT:	0	0									
								AMPS	0	0									

PANEL NOTES:
1. BOLT-ON CIRCUIT BREAKERS.
2. ALL COPPER BUSSING.
3. CIRCUIT LABELS SHALL BE COORDINATED WITH THE CITY.

LOAD (VA)	LOAD TYPE LEGEND	
0	R	RECEPTACLE
0	L	LIGHTING (125% OF CONNECTED LOAD CEC 215.2)
0	M	MECHANICAL
0	K	KITCHEN APPLIANCE
0	N	NON-CONTINUOUS MISC.
0	C	CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

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REV.	DESCRIPTION	CK'D	APP	DATE
3	ISSUED FOR BID ADDENDUM 03	DP/DR	-	06/08/26
2	ISSUED FOR BID	DP/DR	-	04/07/26
1	ISSUED FOR REVIEW	DP/DR	-	12/19/25
0	ISSUED FOR BID	AM/DR	-	06/11/25

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION
CITY OF SAN BUENAVENTURA

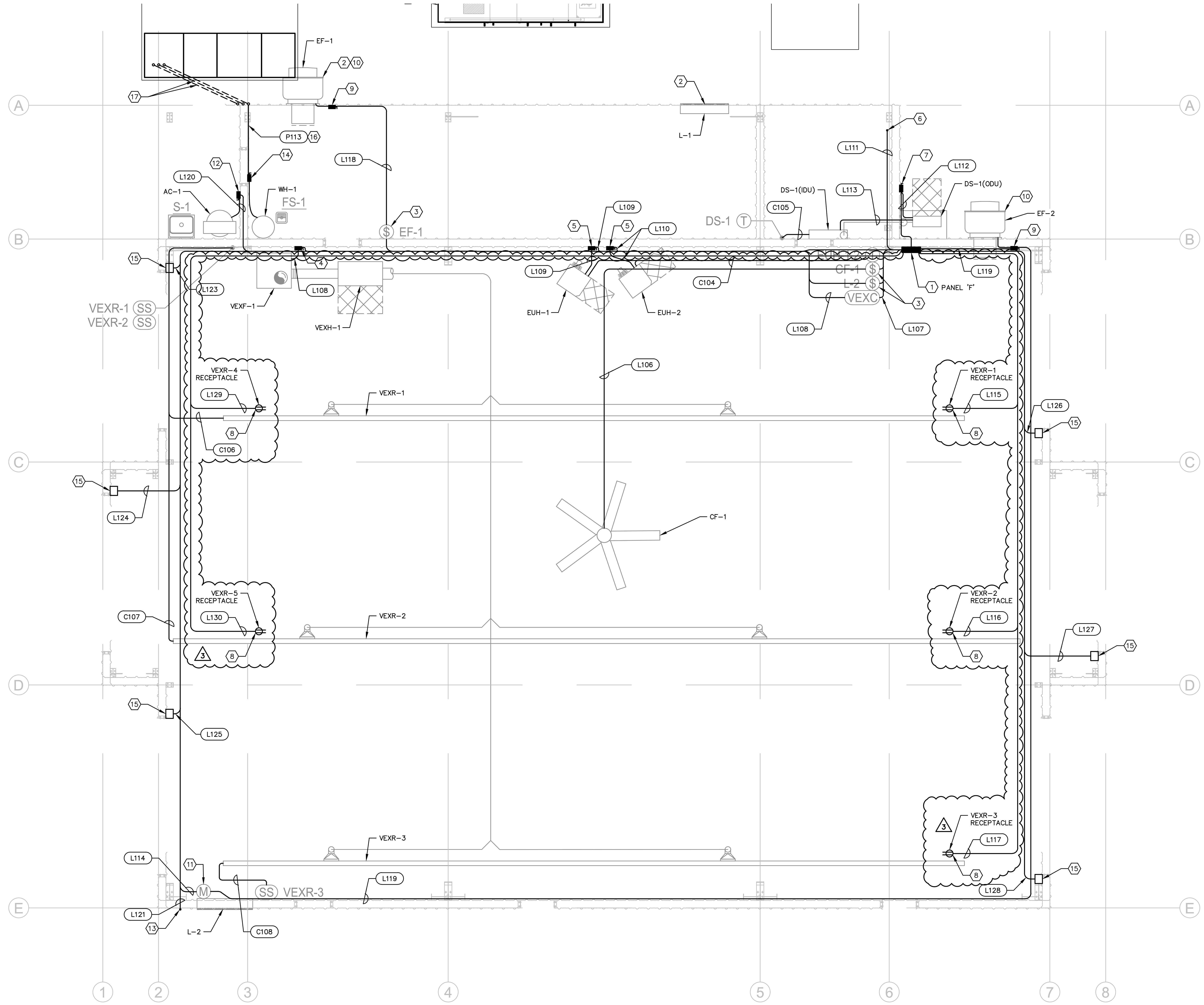
FIRE STATION NO. 7
PANEL SCHEDULES

DRN. BY: AM	DES. BY: AM	CK'D. BY: AM/DR

PRINCIPAL ENGINEER DATE

CITY ENGINEER DATE

SPEC. NUMBER 2025-010	PROJECT NUMBER FA11-1061
June 11, 2025	SHEET 98 OF 151	DWG. NO. 2025-D-010



GENERAL NOTES:

1. SEE ELECTRICAL SYMBOLS AND GENERAL NOTES ON SHEET 87.
2. SEE CONDUIT AND CABLE SCHEDULE ON SHEET 100.
3. SEE MECHANICAL AND PLUMBING PLANS FOR EQUIPMENT DETAILS.

CONSTRUCTION NOTES:

1. SEE SINGLE LINE DIAGRAM ON SHEET 88 FOR EQUIPMENT DETAILS.
2. GENERATOR SHALL MAINTAIN A MINIMUM 10' CLEARANCE FROM THE INTAKE LOUVER AND EXHAUST FAN.
3. 15A, 120VAC, SINGLE-POLE TOGGLE SWITCH, HORSEPOWER RATED, INDUSTRIAL GRADE, EXTRA HEAVY DUTY.
4. 30A, 240VAC, 3-POLE, 3-WIRE, NON-FUSIBLE, NEMA 1, HEAVY DUTY SAFETY SWITCH, SQUARE-D, EATON, OR APPROVED EQUAL.
5. 60A, 240VAC, 3-POLE, 3-WIRE, NON-FUSIBLE, NEMA 1, HEAVY DUTY SAFETY SWITCH, SQUARE-D, EATON, OR APPROVED EQUAL.
6. STUB, CAP AND TAG CONDUIT FOR (F) SCBA FILL STATION. FIELD VERIFY EXACT LOCATION OF CONDUIT STUB-OUT WITH THE CITY.
7. 30A, 240VAC, 2-POLE, 2-WIRE, NON-FUSIBLE, NEMA 3R, HEAVY DUTY SAFETY SWITCH, SQUARE-D, EATON, OR APPROVED EQUAL.
8. CONTRACTOR SHALL PROVIDE AND INSTALL 50A, 120VAC, NEMA 5-50R RECEPTACLE WITH WEATHERPROOF BOX WITH COVER, INDUSTRIAL GRADE, EXTRA HEAVY DUTY, RECEPTACLE ON LAST RAIL UPRIGHT CLOSEST TO THE ENTRY SIDE OF THE APPARATUS BAY PER RAIL, MAX 48" ABOVE THE RAIL. SEE MECHANICAL PLANS AND INSTALLATION DETAILS. COORDINATE EXACT LOCATION WITH VEHICLE EXHAUST SYSTEM (VEX SYSTEM) CONTRACTOR. (3)
9. 30A, 120VAC, 1-POLE, 2-WIRE WITH FACTORY INSTALLED NEUTRAL, NON-FUSIBLE, NEMA 1, HEAVY DUTY SAFETY SWITCH, SQUARE-D, EATON, OR APPROVED EQUAL.
10. EXHAUST FAN SHALL HAVE INTERNAL THERMAL/OVERLOAD PROTECTION, PER MECHANICAL PLANS.
11. SEE MECHANICAL PLANS FOR FAN INTERLOCK WITH DAMPER CONTROL DETAIL WIRING DIAGRAM.
12. 60A, 240VAC, 2-POLE, 2-WIRE, NON-FUSIBLE, NEMA 3R, HEAVY DUTY SAFETY SWITCH, SQUARE-D, EATON, OR APPROVED EQUAL.
13. STUB, CAP AND TAG CONDUIT FOR (F) DETOX SAUNA. FIELD VERIFY EXACT LOCATION OF CONDUIT STUB-OUT WITH THE CITY.
14. 70A, 240VAC, 3-POLE, 3-WIRE, NON-FUSIBLE, NEMA 1, HEAVY DUTY SAFETY SWITCH, SQUARE-D, EATON, OR APPROVED EQUAL.
15. APPARATUS BAY ROLL-UP GARAGE DOOR ELECTRIC OPERATOR. COORDINATE EXACT LOCATION WITH CLEARSPAN PRIOR TO CONDUIT AND WIRE INSTALLATION.
16. CONDUIT SHALL BE ROUTED UNDERGROUND AND STUBUP TO THE EDGE OF THE BUILDING WALL, ROUTE VERTICALLY ALONG THE WALL, PENETRATE INTO THE BUILDING AND ROUTED ALONG THE WALL TO THE WATER HEATER. CONDUIT SHALL BE SUPPORTED PER NEC ARTICLE 344.30.
17. (2) – 2"C – SPARE CONDUITS ROUTED FROM THE SWITCHBOARD DISTRIBUTION SECTION TO STUBUP TO THE EDGE OF THE BUILDING WALL AND CAP OFF 6" ABOVE GROUND FOR FUTURE USE.

0 5 10
1 INCH = 5 FEET

REV.	DESCRIPTION	CK'D	APP	DATE
3	ISSUED FOR BID ADDENDUM 03	DP/DR	-	06/08/26
2	ISSUED FOR BID	DP/DR	-	04/07/26
1	ISSUED FOR REVIEW	DP/DR	-	12/19/25
0	ISSUED FOR BID	AM/DR	-	06/11/25

PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION
CITY OF SAN BUENAVENTURA

FIRE STATION NO. 7
APPARATUS BAY ELECTRICAL PLAN

DRN. BY: AM | DES. BY: AM | CK'D. BY: AM/DR

PRINCIPAL ENGINEER DATE

CITY ENGINEER DATE

SPEC. NUMBER 2025-010 | PROJECT NUMBER FA11-1061

June 11, 2025 | SHEET 106 OF 151 | DWG. NO. 2025-D-010

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60 S. California Street, Suite 401
Ventura, CA 93001
P 805.503.4590 F 805.544.3863

REGISTERED PROFESSIONAL ENGINEER NO. 21736 ELECTRICAL STATE OF CALIFORNIA

CONDUIT & CABLE SCHEDULE

CONDUIT			CONDUIT FILL			COMMENTS
No.	Qty.	Size (In)		FROM	TO	
P-100	1	4	3/8" NYLON PULL CORD	SCE FACILITIES (SEE SCE PLANS FOR DETAILS)	SCE PAD-MOUNTED TRANSFORMER	CONDUIT QTY. & SIZE PER SCE PLANS, SEE SCE PLANS FOR DETAILS (SERVICE REQUEST #4044496 PROJECT #3166536)
P-101	4	4	3/8" NYLON PULL CORD	SCE PAD-MOUNTED TRANSFORMER	MAIN SWITCHBOARD 'MS' (PULL SECTION)	CONDUIT QTY. & SIZE PER SCE PLANS, SEE SCE PLANS FOR DETAILS (SERVICE REQUEST #4044496 PROJECT #3166536)
P-102	4	3	4#350kcmil, 1#4/0 GND	GENERATOR	MAIN SWITCHBOARD 'MS' (ATS)	
P-103	1	1-1/2	4#1, 1#6 GND	MAIN SWITCHBOARD 'MS' (DISTRIBUTION SECTION)	PANEL 'A'	
P-104	1	1-1/2	4#1, 1#6 GND	MAIN SWITCHBOARD 'MS' (DISTRIBUTION SECTION)	PANEL 'B'	
P-105	1	1-1/2	4#1, 1#6 GND	MAIN SWITCHBOARD 'MS' (DISTRIBUTION SECTION)	PANEL 'C'	
P-106	1	1-1/2	4#1, 1#6 GND	MAIN SWITCHBOARD 'MS' (DISTRIBUTION SECTION)	PANEL 'D'	
P-107	1	2	4#1/0, 1#4 GND	MAIN SWITCHBOARD 'MS' (DISTRIBUTION SECTION)	PANEL 'E'	
P-108	2	2	4#3/0, 1#2 GND	MAIN SWITCHBOARD 'MS' (DISTRIBUTION SECTION)	PANEL 'F'	
P-109	1	1-1/2	4#2, 1#8 GND	MAIN SWITCHBOARD 'MS' (DISTRIBUTION SECTION)	PANEL 'G'	
P-110	1	2	3/8" NYLON PULL CORD	MAIN SWITCHBOARD 'MS' (DISTRIBUTION SECTION)	(F) BATTERY CABINET	STUB-UP, CAP, AND TAG CONDUIT, AS SHOWN ON PLANS
P-111	1	2	2#300kcmil, 1#4 GND	MAIN SWITCHBOARD 'MS' (DISTRIBUTION SECTION)	TRANSFORMER 'TX-TF'	
P-112	1	2	3#3/0, 1#4 GND	TRANSFORMER 'TX-TF'	PANEL 'TF'	
P-113	1	2	3#4, 1#6 GND	MAIN SWITCHBOARD 'MS' (DISTRIBUTION SECTION)	120 GAL WATER HEATER (APPARATUS BAY)	ROUTE CONDUIT/WIRE THROUGH DISCONNECT SWITCH, AS SHOWN ON PLANS; SEE MECH. PLANS FOR EQUIPMENT DETAILS
L-100	1	1	3#10, 1#10 GND	PANEL 'F'	GENERATOR	GENERATOR AUXILIARY POWER
L-101	1	1	2#10, 1#10 GND	PANEL 'G'	LIGHT POLES	SEE CITY PLANS FOR LIGHT POLE INFORMATION
L-102	1	1	2#10, 1#10 GND	PANEL 'G'	ACCESS GATE MOTOR/CONTROLLER	
L-103	1	1	4#10, 1#10 GND	PANEL 'G'	PRESSURE WASHER RECEPT. & OUTDOOR TRUCK WASH	
L-104	1	1	3/8" NYLON PULL CORD	PANEL 'G'	(F) LEVEL 2, DUAL-PORT, POWER SHARE EV CHARGER	TERMINATE CONDUIT AT PULL BOX FOR (F) EV CHARGER, AS SHOWN ON PLANS
L-105	1	1	3/8" NYLON PULL CORD	PANEL 'G'	(F) LEVEL 2, DUAL-PORT, POWER SHARE EV CHARGER	TERMINATE CONDUIT AT PULL BOX FOR (F) EV CHARGER, AS SHOWN ON PLANS
L-106	1	1	2#12, 1#12 GND	PANEL 'F'	CIRCULATION FAN 'CF-1'	ROUTE CONDUIT/WIRE THROUGH SINGLE POLE SWITCH, AS SHOWN ON PLANS; SEE MECH. PLANS FOR EQUIPMENT DETAILS
L-107	1	1	3#10, 1#10 GND	PANEL 'F'	VEHICLE EXHAUST FAN CONTROL PANEL 'VEXC-1'	SEE MECHANICAL PLANS FOR VEHICLE EXHAUST SYSTEM DETAILS; COORDINATE WITH VEX CONTRACTOR
L-108	1	1	3#10, 1#10 GND	VEHICLE EXHAUST FAN CONTROL PANEL 'VEXC-1'	VEHICLE EXHAUST FAN 'VEXF-1'	ROUTE CONDUIT/WIRE THROUGH DISCONNECT SWITCH, AS SHOWN ON PLANS; COORDINATE WITH VEX CONTRACTOR
L-109	1	1	3#8, 1#10 GND	PANEL 'F'	ELECTRIC UNIT HEATER 'EUH-1'	ROUTE CONDUIT/WIRE THROUGH DISCONNECT SWITCH, AS SHOWN ON PLANS; SEE MECH. PLANS FOR EQUIPMENT DETAILS
L-110	1	1	3#8, 1#10 GND	PANEL 'F'	ELECTRIC UNIT HEATER 'EUH-2'	ROUTE CONDUIT/WIRE THROUGH DISCONNECT SWITCH, AS SHOWN ON PLANS; SEE MECH. PLANS FOR EQUIPMENT DETAILS
L-111	1	1-1/2	3/8" NYLON PULL CORD	PANEL 'F'	(F) SCBA FILL STATION	STUB, CAP AND TAG CONDUIT, AS SHOWN ON PLANS; COORDINATE EXACT STUB-OUT LOCATION W/ THE CITY
L-112	1	1	2#12, 1#12 GND	PANEL 'F'	SPLIT SYSTEM HEAT PUMP 'DS-1' (ODU)	ROUTE CONDUIT/WIRE THROUGH DISCONNECT SWITCH, AS SHOWN ON PLANS; SEE MECH. PLANS FOR EQUIPMENT DETAILS
L-113	1	1	2#12, 1#12 GND	SPLIT SYSTEM HEAT PUMP 'DS-1' (ODU)	SPLIT SYSTEM HEAT PUMP 'DS-1' (IDU)	SEE MECH. PLANS FOR EQUIPMENT DETAILS
L-114	1	1	2#12, 1#12 GND	PANEL 'F'	LOUVER 'L-2' ACTUATOR	ROUTE CONDUIT/WIRE THROUGH SINGLE POLE SWITCH, AS SHOWN ON PLANS; SEE MECH. PLANS FOR EQUIPMENT DETAILS
L-115	1	1	2#6, 1#10 GND	PANEL 'F'	'VEXR-1' RECEPTACLE	SEE MECH. PLANS FOR EQUIPMENT AND RECEPTACLE INSTALLATION DETAILS
L-116	1	1	2#6, 1#10 GND	PANEL 'F'	'VEXR-2' RECEPTACLE	SEE MECH. PLANS FOR EQUIPMENT AND RECEPTACLE INSTALLATION DETAILS
L-117	1	1	2#6, 1#10 GND	PANEL 'F'	'VEXR-3' RECEPTACLE	SEE MECH. PLANS FOR EQUIPMENT AND RECEPTACLE INSTALLATION DETAILS
L-118	1	1	2#10, 1#10 GND	PANEL 'F'	EXHAUST FAN 'EF-1'	ROUTE CONDUIT/WIRE THROUGH SINGLE POLE SWITCH AND DISCONNECT SWITCH, AS SHOWN ON PLANS; SEE MECH. PLANS FOR EQUIPMENT DETAILS
L-119	1	1	2#6, 1#6 GND	PANEL 'F'	EXHAUST FAN 'EF-2'	ROUTE CONDUIT/WIRE THROUGH DISCONNECT SWITCH AND LOUVER DAMPER INTERLOCK, AS SHOWN ON PLANS; SEE MECH. PLANS FOR EQUIPMENT DETAILS
L-120	1	1	2#8, 1#10 GND	PANEL 'F'	AIR COMPRESSOR 'AC-1'	ROUTE CONDUIT/WIRE THROUGH DISCONNECT SWITCH, AS SHOWN ON PLANS; SEE MECH. PLANS FOR EQUIPMENT DETAILS
L-121	1	1-1/2	3/8" NYLON PULL CORD	PANEL 'F'	(F) DETOX SAUNA	STUB, CAP AND TAG CONDUIT, AS SHOWN ON PLANS; COORDINATE EXACT STUB-OUT LOCATION W/ THE CITY
L-122						
L-123	1	1	3#12, 1#12 GND	PANEL 'F'	APP. BAY ROLL-UP GARAGE DOOR OPERATOR #1	COORDINATE EXACT LOCATION WITH CLEARSPAN PRIOR TO CONDUIT AND WIRE INSTALLATION
L-124	1	1	3#12, 1#12 GND	PANEL 'F'	APP. BAY ROLL-UP GARAGE DOOR OPERATOR #2	COORDINATE EXACT LOCATION WITH CLEARSPAN PRIOR TO CONDUIT AND WIRE INSTALLATION
L-125	1	1	3#12, 1#12 GND	PANEL 'F'	APP. BAY ROLL-UP GARAGE DOOR OPERATOR #3	COORDINATE EXACT LOCATION WITH CLEARSPAN PRIOR TO CONDUIT AND WIRE INSTALLATION
L-126	1	1	3#12, 1#12 GND	PANEL 'F'	APP. BAY ROLL-UP GARAGE DOOR OPERATOR #4	COORDINATE EXACT LOCATION WITH CLEARSPAN PRIOR TO CONDUIT AND WIRE INSTALLATION
L-127	1	1	3#12, 1#12 GND	PANEL 'F'	APP. BAY ROLL-UP GARAGE DOOR OPERATOR #5	COORDINATE EXACT LOCATION WITH CLEARSPAN PRIOR TO CONDUIT AND WIRE INSTALLATION
L-128	1	1	3#12, 1#12 GND	PANEL 'F'	APP. BAY ROLL-UP GARAGE DOOR OPERATOR #6	COORDINATE EXACT LOCATION WITH CLEARSPAN PRIOR TO CONDUIT AND WIRE INSTALLATION
L-129	1	1	2#4, 1#10 GND	PANEL 'F'	'VEXR-4' RECEPTACLE	SEE MECH. PLANS FOR EQUIPMENT AND RECEPTACLE INSTALLATION DETAILS
L-130	1	1	2#4, 1#10 GND	PANEL 'F'	'VEXR-5' RECEPTACLE	SEE MECH. PLANS FOR EQUIPMENT AND RECEPTACLE INSTALLATION DETAILS
C-100	1	1	4#14	MAIN SWITCHBOARD 'MS' (ATS)	GENERATOR	GENERATOR START/STOP CONTROL FROM ATS
C-101	1	1	2#14	GENERATOR REMOTE E-STOP BUTTON	GENERATOR	GENERATOR REMOTE EMERGENCY STOP
C-102	1	1	2#14	GENERATOR	GENERATOR REMOTE ANNUNCIATOR PANEL	GENERATOR BATTERY VOLTAGE TO REMOTE ANNUNCIATOR PANEL
C-103	1	1	MANUFACTURER SPECIFIED CABLE	FIRE STATION ALERT SYSTEM (LIVING QUARTERS)	FRONT ACCESS GATE PUSH BUTTON/DOORBELL	CONTRACTOR SHALL COORDINATE WIRE/CABLE WITH FIRE SYSTEM INTEGRATOR/CONTRACTOR; FIELD VERIFY EXACT CONDUIT STUB-UP LOCATIONS
C-104	1	1	MANUFACTURER SPECIFIED CABLES	'EUH-1,2' THERMOSTAT	ELECTRIC UNIT HEATERS 'EUH-1' & 'EUH-2'	CONTRACTOR SHALL COORDINATE WIRE/CABLE WITH HVAC CONTRACTOR AND PER EQUIPMENT MANUFACTURER RECOMMENDATION
C-105	1	1	MANUFACTURER SPECIFIED CABLE	SPLIT SYSTEM HEAT PUMP 'DS-1' CONTROLLER	SPLIT SYSTEM HEAT PUMP 'DS-1' (IDU)	CONTRACTOR SHALL COORDINATE WIRE/CABLE WITH HVAC CONTRACTOR AND PER EQUIPMENT MANUFACTURER RECOMMENDATION
C-106	1	1	MANUFACTURER SPECIFIED CABLE	'VEXR-1' SAFETY SHUT OFF BUTTON	'VEXR-1' CRAB RETURN SYSTEM CONTROL BOX	CONTRACTOR SHALL COORDINATE WIRE/CABLE WITH VEX CONTRACTOR; SEE MECH. PLANS FOR EQUIPMENT AND INSTALLATION DETAILS
C-107	1	1	MANUFACTURER SPECIFIED CABLE	'VEXR-2' SAFETY SHUT OFF BUTTON	'VEXR-2' CRAB RETURN SYSTEM CONTROL BOX	CONTRACTOR SHALL COORDINATE WIRE/CABLE WITH VEX CONTRACTOR; SEE MECH. PLANS FOR EQUIPMENT AND INSTALLATION DETAILS
C-108	1	1	MANUFACTURER SPECIFIED CABLE	'VEXR-3' SAFETY SHUT OFF BUTTON	'VEXR-3' CRAB RETURN SYSTEM CONTROL BOX	CONTRACTOR SHALL COORDINATE WIRE/CABLE WITH VEX CONTRACTOR; SEE MECH. PLANS FOR EQUIPMENT AND INSTALLATION DETAILS
S-100	1	1	3/C#18 TSP (SEE COMMENTS)	GENERATOR	GENERATOR REMOTE ANNUNCIATOR PANEL	MANUFACTURER RECOMMENDED CABLE: OLFLEX TRAY II CY, 3/C#18 CABLE, PART NO. 2218030

REV.	DESCRIPTION	CK'D	APP	DATE
3	ISSUED FOR BID ADDENDUM 03	DP/DR	-	06/08/26
2	ISSUED FOR BID	DP/DR	-	04/07/26
1	ISSUED FOR REVIEW	DP/DR	-	12/19/25
0	ISSUED FOR BID	AM/DR	-	06/11/25

REGISTERED PROFESSIONAL ENGINEER
DINESH BABU PEERAMSETTI
NO. 21736
ELECTRICAL
STATE OF CALIFORNIA

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PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION
CITY OF SAN BUENAVENTURA

FIRE STATION NO. 7
CONDUIT & CABLE SCHEDULE

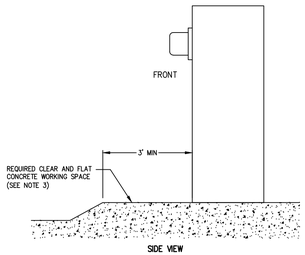
DRN. BY: AM | DES. BY: AM | CK'D. BY: AM/DR

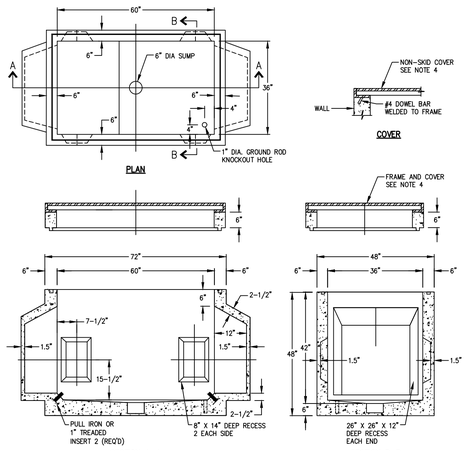
PRINCIPAL ENGINEER DATE

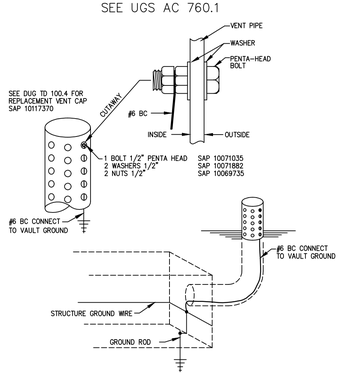
CITY ENGINEER DATE

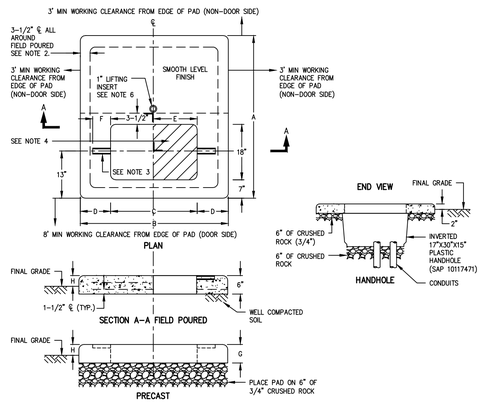
SPEC. NUMBER 2025-010 | PROJECT NUMBER FA11-1061

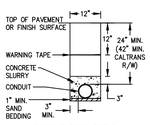
June 11, 2025 | SHEET 109 OF 151 | DWG. NO. 2025-D-010

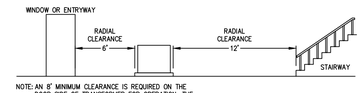


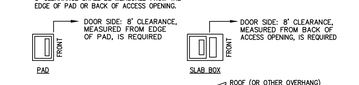


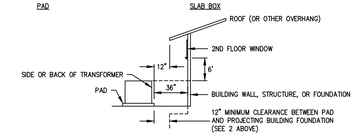


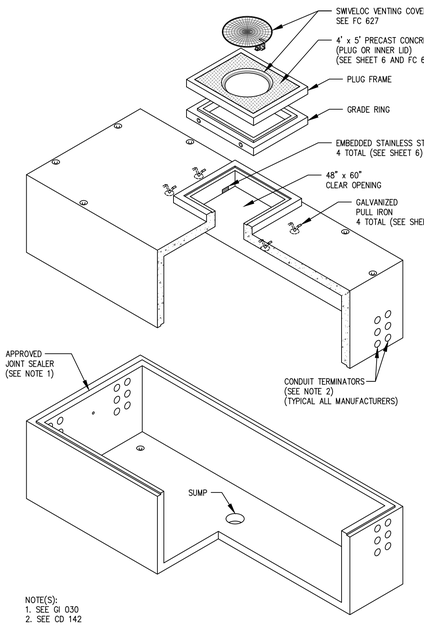












CONSTRUCTION NOTES:

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: PHONE:

CABLING CONSTRUCTION COORDINATOR: PHONE:

D05: 03/22/24

GROUND CONNECTION INSTALLATION IN A PVC VENT
SEE UGS AC 760.1

NOTE:

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 SHOULD BE MADE DURING NEW CONSTRUCTION, ADDED TO THE APPROPRIATE STRUCTURE DURING THE ROUTINE MAINTENANCE CYCLE, OR AS THE NEED ARISES BY REQUEST FOR ASSISTANCE FROM THE CONTRACT CABLE LOCATING COMPANY.

D37: REV. 10/26/20

WORKING SPACE AND CLEARANCE REQUIREMENTS 0–600V (SIDE VIEW)
UNDERGROUND SERVICE CONNECTIONS 0–600 VOLTS
SEE ESR FIGURE 3–2

NOTES:
1. A MINIMUM OF 3 FEET OF CLEAR, LEVEL CONCRETE WORKSPACE IS REQUIRED IN FRONT OF ALL TERMINATION, METERING, AND SERVICE EQUIPMENT.
2. SEE ESR–5 FOR METER–MOUNTING HEIGHT REQUIREMENTS. METER–MOUNTING HEIGHT WILL BE MEASURED FROM THE STANDING AND WORKING SPACE TO THE CENTERLINE OF THE METER(S).
3. WHEN SERVICE EQUIPMENT IS INSTALLED ON AN ELEVATED PORTION OF THE FLOOR/GROUND, OR HOUSEKEEEPING PAD, THE PAD SHALL BE FLUSH WITH THE BOTTOM OF THE SERVICE EQUIPMENT AND EXTEND A MINIMUM OF THREE FEET. THIS IS MEASURED FROM THE FRONT OF THE SERVICE EQUIPMENT OR THE OUTER DOOR(S) OF THE SWITCHBOARD NEMA 3R ENCLOSURE WHEN INSTALLED. IN NO CASE SHALL THE MAXIMUM METER HEIGHT OF 6'–3" BE EXCEEDED.
4. TO MAINTAIN A SAFE, CLEAR, AND LEVEL CONCRETE WORKING AREA IN FRONT OF NEW OR EXISTING METER AND SERVICE EQUIPMENT, A CONCRETE SLAB, ACCEPTABLE TO THE COMPANY, MUST BE USED.
5. FOR SWITCHBOARDS ABOVE 600V, FIVE–FOOT MINIMUM OF CLEAR AND LEVEL CONCRETE STANDING AND WORKING SPACE IS REQUIRED IN THE FRONT, REAR, AND SIDE OF ANY SECTION WHERE SUCH PART SUPPORTS OR PROVIDES ACCESS TO METERING, TESTING EQUIPMENT, OR SERVICE CABLE TERMINATION SECTIONS.

16.11 PROTECTIVE BARRIERS (POSTS/BOLLARDS) FOR SERVICE EQUIPMENT

BARRIER POSTS/BOLLARDS ARE USED TO PROTECT THE METER AND SERVICE EQUIPMENT, AS WELL AS PERSONNEL, FROM VEHICULAR CONTACT, AND TO PROHIBIT ENCROACHMENT INTO THE WORKING SPACE (FOR EXAMPLE, LOADING ZONES, DRIVEWAYS, CONGESTED AREAS, OFF STREET PARKING, AND SO ON).

THE CUSTOMER SHALL PROVIDE AND INSTALL "NON–REMOVABLE" BARRIERS (POSTS/BOLLARDS) TO PROVIDE THE PROPER SAFE WORKING CLEARANCES WHERE THE WORKSPACE IS EXPOSED TO VEHICULAR OR OTHER HAZARDOUS CONDITIONS. METERS WILL NOT BE SET UNTIL THE BARRIERS HAVE BEEN INSTALLED. METER CABINET DOORS MUST OPEN A MINIMUM OF 90 DEGREES AND NOT CONFLICT WITH BARRIER POSTS. A MINIMUM CLEARANCE OF 3–FEET IS REQUIRED FROM THE FACE OF THE SWITCH GEAR TO THE BOLLARD/POST.

D99: 11/14/25

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

NOTE(S):
1. STRUCTURAL DESIGN CRITERIA:
   - H20–S BRIDGE LOADING PER ASTM C857
   - COVER DESIGN SHALL MEET ASTM C1802, LOAD LEVEL 6 (FULL TRAFFIC).
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 615 AND FC 618 FOR PULL BOX COVERS. MINIMUM COVER COEFFICIENT OF FRICTION (COF) OF 0.70.
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 FOR PULL IRONS AND AC 720 FOR PULL EYES.
7. 2/0 GROUNDING REQUIRED.

D53C: 04/18/25

PAD FOR SURFACE–MOUNTED TRANSFORMER
POURED IN FIELD CONSTRUCTION AND PRECAST CONSTRUCTION (CONCRETE)
SEE UGS SS 504

TABLE SS 504–1: SURFACE–MOUNTED TRANSFORMER PADS – DIMENSIONS

	TRANSFORMER	PAD DIMENSIONS (IN)								WEIGHT (LB)	SAP
		A	B	C	D	E	F	G	H		
	1ø 25 KVA–167 KVA	54	48	26	11	12	6	4	2	750	10118012
FOR REFERENCE ONLY	3ø 75 KVA–150 KVA NO SWITCH	66	72	38	17	15	6	6	3	2,200	10118011 SEE NOTE 8
	3ø 75 KVA–500 KVA SW AND FUSE	72	94	50	22	22	14	6	3	3,200	10118013 SEE NOTE 8

NOTE(S):
1. CONCRETE TO BE 3,000 PSI (MINIMUM) AT 28 DAYS.
2. REINFORCING STEEL TO BE NO. 4 BARS INSTALLED IN A DOUBLE NET. PERIMETER BARS TO BE CONTINUOUS (8 INCH MINIMUM LAP OR WELD)
3. HOLD–DOWN BRACKETS TO BE P–3200 SERIES UNISTRUT (OR EQUAL).
4. PRIMARY CABLES MUST BE INSTALLED IN SHADED AREA OF DRAWING ABOVE AS FAR TO THE RIGHT AS POSSIBLE ON SINGLE PHASE TRANSFORMERS ONLY. ON THREE–PHASE TRANSFORMERS PRIMARY CABLES MUST BE INSTALLED IN THE UNSHADED AREA OF DRAWING ABOVE AS FAR LEFT AS POSSIBLE.
5. SEE AC 701 FOR PAD–MOUNTED TRANSFORMER/CAPACITOR GROUNDING REQUIREMENTS AND AC 703 FOR APPROVED GROUNDING MATERIALS.
6. 1–INCH LISTING INSERT TO BE LOCATED AT CENTER OF GRAVITY ON PRECAST PADS.
7. SEE SS 500 FOR APPROVED MANUFACTURERS.
8. THE THREE–PHASE TRANSFORMER SHALL ONLY BE USED ON A PAD WHEN FOUR OR FEWER SERVICES ARE TO BE INSTALLED. A SLAB BOX SHOULD BE USED WHEN MORE THAN FOUR SERVICES WILL BE INSTALLED.
9. USE A THIN LAYER OF REDI–CRETE (OR EQUIVALENT) FOR RODENT AND WEED CONTROL OR WHERE TRANSFORMER DOES NOT FULLY COVER OPENING IN PAD.
10. A 17" X 30" X 15" PLASTIC HANDHOLE (SAP 10117471) SHALL BE INVERTED AND INSTALLED UNDER THE CABLE OPENING OF THE PAD. THIS WILL PROVIDE ADEQUATE CABLE SLACK FOR OPERATION OF THE LOAD–BREAK ELBOWS ON SINGLE PHASE TRANSFORMERS ONLY.

D43: 03/26/25

TYPICAL CONDUIT BANK SECTION
SEE UGS CD 120

CONDUIT BANK DETAIL
1 CONDUIT
(NTS)

D72A: 11/14/25

LIST OF MATERIALS
[EDISON CO.]

SEE UGS SECTION INDEX
FOR REFERENCE DRAWINGS

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.

QTY.	UNIT	DESCRIPTION	SIZE	ITEM NO.	REF DWG.	REV. DATE

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, CA 92335
(909) 350–4111
(800) 257–6100

OLDCASTLE PRECAST
10650 HEMLOCK AVE,
FONTANA, CA 92337
(909) 428–3700
(800) 626–3860

FOR HANDHOLE AND PULLBOX MANUFACTURERS, SEE UGS HP 200.

D04A: 12/12/24

MINIMUM CLEARANCES FOR PADMOUNTED TRANSFORMERS
SEE DDS–3, 3–44

NOTE: AN 8' MINIMUM CLEARANCE IS REQUIRED ON THE DOOR SIDE OF TRANSFORMER FOR OPERATION. THE 8' CLEARANCE SHALL BE MEASURED FROM THE EDGE OF PAD OR BACK OF ACCESS OPENING.

PAD–MOUNTED TRANSFORMER INSTALLATIONS SHALL CONFORM TO THE FOLLOWING:
1. PAD–MOUNTED TRANSFORMERS SHALL NOT BE LOCATED DIRECTLY IN FRONT OF ENTRYWAYS, STAIRWAYS, BENEATH WINDOWS THAT CAN BE OPENED, OR WHERE THEY WILL OBSTRUCT THE VISION OF VEHICULAR TRAFFIC.
2. PAD–MOUNTED TRANSFORMERS SHALL BE LOCATED AT LEAST THE MINIMUM DISTANCE, AS IDENTIFIED IN THE FIGURE ABOVE, AWAY FROM BUILDINGS OR OTHER STRUCTURES TO ENSURE ADEQUATE SPACE FOR OPERATING, TO MINIMIZE VIBRATION HUMS, AND TO MEET FIRE SAFETY REQUIREMENTS.
3. WHENEVER POSSIBLE, PLACE PAD–MOUNTED STRUCTURES AND EQUIPMENT AWAY FROM AREAS WITH FREQUENT IRRIGATION TO HELP PREVENT FUTURE CORROSION.
   INSTALL NEW STAINLESS STEEL PAD–MOUNTED EQUIPMENT ONLY IF EVERY EFFORT HAS BEEN MADE TO LOCATE THE PAD MOUNT AWAY FROM HIGH–CORROSION AREAS AND THE PAD MOUNT IS EXPECTED TO BE CHANGED OUT WITHIN 15 YEARS DUE TO CORROSION. CONTACT FE FOR APPROVAL.
   EXISTING MILD STEEL PAD–MOUNTED EQUIPMENT MAY BE UPGRADED TO STAINLESS STEEL IF THE EXISTING EQUIPMENT HAS FAILED DUE TO CORROSION WITHIN 15 YEARS OF INSTALLATION. CONTACT FE FOR APPROVAL.
   * NOTE: ALL PAD–MOUNTED TRANSFORMERS PURCHASED AFTER 2004 ARE DESIGNED WITH STAINLESS STEEL BOTTOMS.
4. A CLEAR PASSAGEWAY OF 12 FEET MINIMUM SHALL BE AVAILABLE AT ALL TIMES, IMMEDIATELY ADJACENT TO ONE SIDE OF THE TRANSFORMER TO PROVIDE AN ACCESSIBLE ROADWAY FOR TRANSFORMER MAINTENANCE. THIS PASSAGEWAY SHALL BE DESIGNED TO MEET H–20 (20–TON) CONSTRUCTION.
5. IF SCE HAS INSTALLED OR AGREES TO INSTALL, TRANSFORMERS AT LOCATIONS WHERE SCE CANNOT USE ITS STANDARD TRANSFORMER LIFTING EQUIPMENT, AND SPECIAL LIFTING FACILITIES ARE REQUIRED TO INSTALL OR REMOVE THE TRANSFORMERS ON THE CUSTOMER'S PREMISES, THE CUSTOMER SHALL, AT THEIR EXPENSE, (1) FURNISH, INSTALL, OWN, AND MAINTAIN PERMANENT LIFTING FACILITIES, AND BE RESPONSIBLE FOR LIFTING THE TRANSFORMER TO AND FROM ITS PERMANENT POSITION, OR (2) PROVIDE (OR PAY FOR) PORTABLE LIFTING FACILITIES ACCEPTABLE TO SCE FOR INSTALLING OR REMOVING THE TRANSFORMERS. RIGHTS–OF–WAY AND SPACE PROVISIONS SHALL BE PROVIDED BY APPLICANT SUCH THAT ACCESS AND REQUIRED CLEARANCES FROM ADJACENT STRUCTURES CAN BE MAINTAINED.
6. TRANSFORMER STRUCTURES WILL NORMALLY BE INSTALLED ONLY IN NONTRAFFIC AREAS. TRANSFORMER PROTECTION IS REQUIRED WHEN COMPANY EQUIPMENT IS EXPOSED TO TRAFFIC. THIS PROTECTION MAY BE IN THE FORM OF BARRIERS, BARRICADES, OR CURB. A CURB MUST HAVE A MINIMUM HEIGHT OF 6 INCHES AND BE AT LEAST 6 INCHES THICK AND ITS FRONT FACE LOCATED 60 INCHES MINIMUM FROM THE EQUIPMENT FOUNDATION.

D54: 03/22/24

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

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.

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: 12/12/24

VAULT/MANHOLE RESTRAINT SYSTEM INSTALLED

☐ NO ENTRY	NO ENTRY
☐ EM3	EJ EM3 COVER & RESTRAINT KIT
☐ SWIVELLOC	NEENAH SWIVELOC/RESTRAINT KIT
☐ SQUARE PLATE SWIVELOC	NEENAH SWIVELOC COVER BEAM RES

D17: 03/22/24

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

D07: 03/22/24

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: 03/22/24

DUCT AND STRUCTURE INSPECTOR
NAME:
PHONE:
CABLING CONSTRUCTION COORDINATOR
NAME:
PHONE:

D48: 03/22/24

TIE–IN MADE THROUGH SIDE WALL OF STRUCTURE

(VAULT, MANHOLE, PME, SOE/CST, BURD, SLAB BOX, PULL BOX, PMH) THE CUSTOMER IS RESPONSIBLE TO TRENCH TO THE STRUCTURE ENTRANCE POINT AND BRING THE CONDUIT TO WITHIN 5' OF THE STRUCTURE BEING ENTERED. THE CUSTOMER IS TO PROVIDE SLIP COUPLING AND CONDUIT.

D09: 03/22/24

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.

D85: 03/22/24

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.

D13: 03/22/24

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.

D13: 03/22/24

FINAL DESIGN
APPROVED FOR CONSTRUCTION

DISTRICT: 39 – VENTURA
PROJ. MGR. WALL, STEVEN D PHONE 8056547118
PLANNER WALL, STEVEN D PHONE 8056547118
DESIGNER: RIFFEL, RILEY
PROJECT NO.: 3166536
SERVICE REQUEST: 4044496
MSR NO.:
PRODUCT–1: 2531078–LINE EXTENSION
ASSOC DESGN
CIRCUIT / VOLTAGE: RICARDO 16KV
GPS:
PRODUCT–2:
ASSOC DESGN
SUB / PG NO.: SAN MIGUEL
CIRCUIT CODE:
PRODUCT–3:
ASSOC DESGN
INVENTORY MAP 038–021C–8
J.P.A. NO.

TYPE	DATE	APPROVED BY	CHECKED BY	DRAWN BY	PAX #
P	3/17/26		S.WALL	R.RIFFEL	24687
F	5/20/26	J.YANEZ	S,WALL	R.RIFFEL	24687

Southern California Edison Company

PROPOSED CONSTRUCTION (LOCATION)
2269 ALESSANDRO DR
VENTURA CA 93001

SHEET 1 OF 2
DESIGN\DRWG NO. 1943594_0.01

ILE NAME:1943594_0.01_RECOVER.DWG SAVE DATE:5/27/2026 2:36 PM SAVED BY:DEZAVARA

PROJECT REQUIREMENTS (Y/N)	
EDISON EASEMENT REQUIRED	N
PWRD 88 REQUIRED UG	Y
CIVIL ONLY WORK ORDER	N
PERMIT REQUIRED	Y
PERMIT TYPE: ENCROACHMENT & TRAFFIC	
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
CIRCUIT MAP CHANGE REQ'D (TD 203)	Y
DIG ALERT APP	N
VERIFIED ACTIVE AND CONFIRMED USA TICKETS	N
UTILIQUEST NOTIFIED	N
FAA MARKING REQ'D	N
FAA TYPE: _____	
ACTUAL COST WORK ORDER	N
STANDARD ADHERENCE: 01 0/ 26 Y	

0124: 12/12/24

TD2531078
2 CI: M5818276 MANHOLE
6'x12'x7' TUB STYLE

TD2531078
CO: X5818277 PULL BOX 4
3'X5'X4' RPM PARKWAY

TD2531078
EX: X5160036 PULL BOX 3
3'X5'X4' RPM PARKWAY

TD2531078
CO: P5818278 PAD 5
94"x72" CONCRETE

TD2531078
1 EX: P5034934 PAD
94"x72" CONCRETE

INT. EX. 1-4" & EXT'D W/ (2) 1 1/4" (2) 42"
M8276 TO INT PT A

INT. EX. 1-4" & EXT'D W/ (2) 1 1/4" (3) 43"
M8276 TO INT PT B

INT PT A PWRD88 REQ'D

INT PT B PWRD88 REQ'D

CO: 2-5" (279') X8277 TO P/L

CO: 1-5" (168') P8278 TO X8277

CO: 4-4" (80') P8278 TO PNL

EX: 1-4" (608') X0036 TO P4934

NEW MAIN ELECTRICAL SWITCHGEAR ROOM

NEW APPARATUS BAY

NON-LIVING QUARTERS

1200A PANEL
120/208V 3P
264KW OTONS

2269 ALESSANDRO DR
VENTURA,CA 93001

ALESSANDRO DRIVE

S. SEAWARD AVENUE

EX 6" GAS

EX 16" DIP WATER

EX 30" SD

EX 8" WATER

GPS: 34.266939
-119.27019

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

SCALE: 1" = 40'
0 40 80

FINAL DESIGN
APPROVED FOR CONSTRUCTION

DISTRICT: 39 – VENTURA		PROJ. MGR.: WALL, STEVEN D PHONE 8056547118		PLANNER: WALL, STEVEN D PHONE 8056547118	DESIGNER: RIFFEL, RILEY
PROJECT NO.: 3166536	SERVICE REQUEST: 4044496	MSR NO.		PRODUCT-1: 2531078–LINE EXTENSION	ASSOC DESGN
CIRCUIT / VOLTAGE		GPS		PRODUCT-2	ASSOC DESGN
SUB / PG NO.		CIRCUIT CODE		PRODUCT-3	ASSOC DESGN

INVENTORY MAP: 038–021C–8			J.P.A. NO.		
P	3/17/26		S.WALL	R.RIFFEL	24687
F	5/20/26	J.YANEZ	S.WALL	R.RIFFEL	24687
TYPE	DATE	APPROVED BY	CHECKED BY	DRAWN BY	PAX #

Southern California Edison Company

PROPOSED CONSTRUCTION (LOCATION)
2269 ALESSANDRO DR
VENTURA CA 93001

SHEET: 2 of 2
DESIGN\DRWG NO.: 1943594_0.01

SPEC NO. 2025-010 DWG. NO. 2025-D-010 SHEET 151 OF 151

FILE NAME:1943594_0.01_RECOVERLINE SAVE DATE:5/27/2026 2:36 PM SAVED BY:CEJAVARA