ADDENDUM #1

SCCOE RIDDER PARK BACKUP GENERATOR

Bid # B 03-23-24

San Jose City Permits:

Building Permit # PC22-681986

SANTA CLARA COUNTY OFFICE OF EDUCATION

Prepared by Architect Artik Art and Architecture 394-A Umbarger Road San Jose, CA 95127 (408) 224-9890

This Addendum forms a part of the Contract Documents and modifies the original bidding documents dated 08/24/2023.

As noted below. Bidders must acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

CHANGES TO THE SPECIFICATIONS

- Item 1 Specification Section 00 21 13 INSTRUCTION TO BIDDERS
 - A. Section 2 Bid Schedule. Change Completion Date to 473 Calendar Days.
- Item 2 Specification Section 00 31 19 EXISTING CONDITIONS
 - A. Section 2.d Remove "As-Bults OR Original Construction Drawings" and replace with "As-Builts Drawings".

Item 3 Specification Section 00 41 13 – BID FORM

A. Item 2, Allowance(s) – Remove Item 2 and replace with the following:

<u>Allowance(s).</u> The Bidder's Base Bid shall include the following Allowance. Administration of the Allowance shall be per Specification Section 01 21 00 Allowances.

| TEMPORARY POWER Allowance: Allowance to provide temporary power | \$_10,000.00 |
|--|--------------|
| for the project per Spec. Section 01 21 00, attached is this addendum. | |
| | |

Item 4 Specification Section 00 52 13 – AGREEMENT

- A. Section 3 Remove "Two Hundred and Ten (210) consecutive calendar days" and replace with "Four Hundred Seventy Three (473) consecutive calendar days".
- B. Section 5 Liquidated Damages.Remove Section 5, Part 1 and replace with:
- 1. Liquidated Damages: Time is of the essence for all Work to be performed. It is hereby understood and agreed that it is and will be difficult and/or impossible to ascertain and determine the actual damage that SCCOE will sustain in the event of and by reason of Contractor's delay; therefore, Contractor shall forfeit to SCCOE the following sum(s) ("Liquidated Damages"):
 - Milestone No. 1: Initial complete submittal of Main Switchboard with ATS & MTS Submittals
 Five Hundred dollars (\$500.00) per day as Liquidated Damages for each and every day's delay
 beyond the time herein prescribed for each item on approved Submittal Schedule. Twenty-Eight
 (28) calendar days from Notice to Proceed date.
 - Milestone No. 2: Completion of all work except installation of Switchboard/Automatic Transfer Switch and Manual Transfer Switch.
 Five Hundred dollars (\$500.00) per day as Liquidated Damages for each and every day's delay

beyond the time herein prescribed in finishing the Work of Milestone No.1. Work to be completed within One-Hundred Twelve (112) calendar days of Notice to Proceed date.

Project Completion:

Five Hundred dollars (\$500.00) per day as Liquidated Damages for each and every day's delay beyond the Contract Time to complete all the work. All work to include final testing and commissioning. Seventy (70) calendar days from receipt of Switchboard/Automatic Transfer Switch and Manual Transfer Switch.

Item 5 Specification Section 00 52 14 - CONCEPTUAL CONSTRUCTION SCHEDULE

A. Add Section 00 52 14 Conceptual Construction Schedule, attached to this Addendum, to the Specifications.

Items 5 Spec Section 01 11 01 – SUMMARY OF WORK

A. Remove Section 1.5.2.

Item 6 Spec Section 01 21 00 - ALLOWANCES - added

Item 7 Spec Section 01 50 01 – TEMPORARY POWER

A. Remove Spec Section 01 50 01 from Div 01 bid documents and replace with Spec Section 01 50 01 attached to this Addendum.

Item 8 Specification Section 262413- Switchboards

- A. Added "Related Sections"
- B. Deleted "Enclosed, Insulated-Case Circuit Breaker" and "Instrumentation" sections
- C. Part 3 EXECUTION: Added reference to Section 015001, "Temporary power", Requirement for Training and minor edits.

CHANGES TO THE DRAWINGS

Architectural:

- Item 1 Sheet A0.01
 - B. Added sheet E.10 to the sheet index
- Item 2 Sheet A1.10
 - C. Refer to attached sheet A1.10 for added pathway of conduits in the building and keynote 4.
- Item 3 Sheet A1.11
 - A. Refer to attached sheet A1.11 for revised demolition of existing gate and fence.
- Item 4 Sheet A2.10

B. Refer to attached sheet A2.10 for added Keynote 22 for new striping.

Item 5 Sheet A2.11

- A. Refer to attached sheet A2.11 for added Keynote 23 for new gate and fence.
- B. Refer to updated keynote 16

Item 6 Sheet A12.12

C. Refer to attached sheet A12.12 for new detail 9 & 12 for new gate.

Item 7 Sheet A12.32

A. Refer to attached sheet A12.32 for new detail 15 & 16 for wall penetration.

Civil:

Item 1 Sheet C1

B. Refer to attached sheet C1 for revised demolition of fence and gate.

Items 2 Sheet C2

B. Refer to attached sheet C2 for Revised new fence and gate.

Electrical:

Item 1 Drawing E-1:

A. Added abbreviation "ARMS and OFCI"

Item 2 Drawing E—3:

A. Added abbreviation "OFCI"

Item 3. Drawing E-4:

A. Added 2 ND sentence to sheet Note 3A

Item 4. Drawings E-5:

- A. Added Surge Protection Device on Single Line Diagram.
- B. Added Sheet Notes 10 and 11

Item 5. Drawing E-6:

- A. Added Surge Protection Device on Single Line Diagram.
- B. Added Sheet Note 11

Item 6. Drawing E-8:

A. Added Detail 3, Switchboard anchoring detail.

ATTACHEMENTS

1. South and North Generator Staging Plan

DOCUMENT 00 52 14

CONCEPTUAL CONSTRUCTION SCHEDULE

| | Task Name | Duration | Start | Finish | | 1 | 1 | 1 | | 2024 | | | | 1 | | | | | | | | 2025 | | | | 1 | ١. | | | | Oct No |
|----|---|----------|--------------|--------------|-----|--------------|----------|------|-------|---------|--------|--------|-------|--------|--------|--------|-------|--------|------|-------|--------|------|-------|-------|-------|------|-------|------|-----|-----|--------|
| 1 | NOTICE TO PROCEED | 0 days | Mon 10/23/23 | Mon 10/23/23 | Aug | Sep 10/23 | Oct | NOT | ICE T | O PRO | CEE | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct No |
| 2 | Prepare Initial Submittals | 4 wks | Mon 10/23/23 | Fri 11/17/23 | | | | P | repa | re Init | ial Su | bmit | tals | | | | | | | | | | | | | | | | | | + |
| 3 | MILESTONE NO.1 - Initial Complete Submittal | 0 days | Fri 11/17/23 | Fri 11/17/23 | | 1 | 1/17 | • | MILE | STON | E NO | 1 - Ir | itial | Comp | lete S | ubmi | ttal | | | | | | | | | | | | | | |
| 4 | AOR Reviews/Approves Submittals | 2 wks | Mon 11/20/23 | Fri 12/1/23 | | П | | | AO | R Rev | ews/ | Appr | oves | Submi | ttals | | | | | | | | | | | | | | | | |
| 5 | Switchboard/ATS/MTS Procurement | 52 wks | Mon 12/4/23 | Fri 11/29/24 | | | | | | | | | | | | | | | | | | | T | | | | | | | | |
| 6 | Initial Construction | 8 wks | Mon 10/23/23 | Fri 12/15/23 | | | | | ' | nitial | Const | ructio | on | | | | | | | | | | T | | | | | | | | \top |
| 7 | Est. Delivery of Generators | 0 days | Fri 12/15/23 | Fri 12/15/23 | | | • | 2/15 | • | Est. D | elive | y of (| Gene | ators | | | | | | | | | T | | | | | | | | \top |
| 8 | Completion of Construction | 8 wks | Mon 12/18/23 | Fri 2/9/24 | | | | | | | Co | mple | tion | of Co | stru | ction | | | | | | | | | | | | | | | |
| 9 | Initial Testing / Commissioning | 1 wk | Mon 2/12/24 | Fri 2/16/24 | | | | | | | 11 | nitial | Testi | ng / C | omn | issior | ing | | | | | | T | | | | | | | | |
| 10 | MILESTONE NO. 2 - Completion of all Work except MSB/ATS/MTS | 0 days | Fri 2/16/24 | Fri 2/16/24 | | | | | | 2/10 | * | MILE | STOP | E NO | 2 - 0 | ompl | etion | of all | Worl | c exc | ept MS | B/A1 | rs/M | TS | | | | | | | |
| 11 | Receive and Install MSB/ATS/MTS | 6 wks | Mon 12/2/24 | Fri 1/10/25 | | H | \dashv | | | _ | | | | | | | | | | | | Re | ceive | and | Insta | MSE | /ATS | /MTS | | | + |
| 12 | Punchlist | 2 wks | Mon 1/13/25 | Fri 1/24/25 | | \vdash | \dashv | | | | | | | | | | | | | | | | Punc | hlist | | | | | | | + |
| 13 | Testing and Commissioning | 2 wks | Mon 1/27/25 | Fri 2/7/25 | | | | | | | | | | | | | | | | | | | Те | sting | and (| omm | issio | ning | | | + |
| 14 | PROJECT COMPLETION | 0 days | Fri 2/7/25 | Fri 2/7/25 | | H | | | | | | | | | | | | | | | - | 2/7 | ♠ P | ROJE | ст с | MPLI | TION | • | | | + |
| | | | | | | | • | | | | | | | | • | | | | | | | • | | | • | | | | | | |

END OF DOCUMENT

SECTION 012100 - ALLOWANCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
- B. Types of allowances include the following:
 - 1. Lump-sum allowances.

1.3 DEFINITIONS

A. Allowance is a quantity of work or dollar amount established in lieu of additional requirements, used to defer selection of actual materials and equipment to a later date when direction will be provided to Contractor. If necessary, additional requirements will be issued by Change Order.

1.4 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract, advise Architect of the date when final selection, or purchase and delivery, of each product or system described by an allowance must be completed by the Owner to avoid delaying the Work.
- B. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.
- C. Purchase products and systems selected by Architect from the designated supplier.

1.5 ACTION SUBMITTALS

A. Submit proposals for purchase of products or systems included in allowances in the form specified for Change Orders.

1.6 INFORMATIONAL SUBMITTALS

A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.

- B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the Work.

1.7 LUMP-SUM ALLOWANCES

- A. Allowance shall include cost to Contractor of specific products and materials ordered by Owner or selected by Architect under allowance and shall include rental fees, taxes, freight, and delivery to Project site.
- B. Unless otherwise indicated, Contractor's costs for receiving and handling at Project site, labor, installation, overhead and profit, and similar costs related to products and materials ordered by Owner or selected by Architect under allowance shall be included as part of the Contract Sum and not part of the allowance.

1.8 ADJUSTMENT OF ALLOWANCES

- A. Allowance Adjustment: To adjust allowance amounts, prepare a Change Order proposal based on the difference between purchase amount and the allowance
 - 1. Include installation costs in purchase amount only where indicated as part of the allowance.
 - 2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other markups.
 - 3. Submit substantiation of a change in scope of Work, if any, claimed in Change Orders related to unit-cost allowances.
 - 4. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.
- B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the purchase order amount or Contractor's handling, labor, installation, overhead, and profit.
 - 1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of Work has changed from what could have been foreseen from information in the Contract Documents.
 - 2. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPARATION

A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

- A. Allowance No. 1: Lump-Sum Allowance: Include the sum of \$10,000 for temporary power as specified in Section 01 50 01 TEMPORARY POWER
 - 1. This allowance includes material cost, receiving, handling, and installation, and Contractor overhead and profit.

END OF SECTION 012100

SECTION 015001 - TEMPORARY POWER

PART 1 - GENERAL

1.1 SUMMARY

- A. This section includes requirements for providing temporary electrical power for construction at both Bldg #1 and Bldg #3. Also included is providing temporary power to keep all electrical equipment in all buildings up and running during the replacement of the main switchboards for Bldg #1 and Bldg #3.
- B. The maximum time allowed for a power shutdown is 4 hours. Contractor shall coordinate his work with the Owner and PG&E to minimize shutdown times.
- C. Coordinate the switchover with PG&E so that the power is switched off and switched on as needed.
- D. Provide all cable extensions needed.
- E. The new generators shall be used for temporary power since they will be delivered and installed long before the new switchboards will be delivered.
- F. The existing switchboards may be used for temporary power.
- G. The existing 300 kW generator currently used to back up the Data Center in Bldg #3 shall also be used for temporary power.
- H. Temporary power shall conform to all applicable requirements of authorities having jurisdiction and serving utility companies and agencies, including the following:
 - 1. Cal OSHA
 - 2. California Building Code (CBC) requirements
 - 3. Health and safety regulations
 - 4. Utility agency and company regulations
 - 5. Police, Fire Department and Rescue Squad rules
 - 6. Environmental protection regulations
- I. Contractor shall arrange for services and pay all fees and service charges for temporary power as necessary for the Work. Contractor shall apply for and obtain

permits for temporary utilities, including permits for temporary generators, from authorities having jurisdiction.

1.2 REFERENCES

- A. NFPA Document 241 Building Construction and Demolition Activities
- B. ANSI A10 Series Safety Requirements for Construction and Demolition
- C. NECA Electrical Design Library Temporary Electrical Facilities
- Electrical Service: Comply with NEMA, NECA and UL standards and regulations for temporary electric service. Install service in compliance with California Electrical Code (CEC)

1.3 RELATED SECTIONS

- A. Section 262413 Switchboards
- B. Section 260622 Engine Generator

1.4 PROJECT CONDITIONS

- A. Conditions of Use: Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Take necessary fire prevention measures. Do not overload facilities, or permit them to interfere with progress. Do not allow hazardous, dangerous, or unsanitary conditions, or public nuisances to develop or persist on the site.
- B. Temporary power conduit, raceways, fittings, conductors, panels, connections, disconnects, overcurrent protection, shall comply with requirements of the serving electric utility, California Electrical Code (CEC) and requirements of authorities having jurisdiction.
- C. Service Disruptions: When necessary for energizing and de-energizing temporary electric power systems, minimize disruption of service to those served. Schedule transfers at times convenient to SCCOE and to occupants. Shutdown times must be limited to 4 hours.

1.5 SUBMITTALS

A. Submit proposed plan for providing temporary power for construction and for providing power during switchboard replacement.

1.6 MEASUREMENT AND PAYMENT

A. Full compensation for furnishing all labor, materials, tools, equipment and conforming to the requirements of this section for providing temporary power shall be considered as included in the allowance paid for Temporary Power and no additional compensation shall be allowed therefore.

PART 2 - PRODUCTS

2.1 POWER DISTRIBUTION EQUIPMENT

A. Provide conduit, cables, panels, and connectors, for the generators as needed.

PART 3 - EXECUTION

3.1 PROVIDING TEMPORARY POWER

- A. The first order of work is to order all electrical equipment needed for this project including the new switchboards and manual transfer switch. Submittals for all new electrical equipment shall be processed expeditiously. Obtain the proposed delivery date from the switchboard manufacturer to assist in planning for switchover from the existing switchboards to the new switchboards.
- B. The new Owner-Furnished, Contractor-Installed generators are expected to be delivered in November of 2023. The new Manual Transfer Switch (MTS) will take about 6 months. That equipment will be delivered before the new switchboards which has a lead time of approximately 1-year. Therefore, the generator, MTS and all possible electrical work shall be done before the new switchboards are delivered.
- C. Plan to do the replacement of the switchboards sequentially instead of concurrently.
- D. Conduct switchover work so that switchover for Bldg #1 is on one weekend and switchover for Bldg #3 is on another weekend.
 - 1. The Contractor shall prepare for the switchovers by doing all possible work before the switchovers, ensuring that the new generators are tested and ready to run and ensuring that all equipment and tools necessary for the work are available.
 - 2. PG&E can be scheduled to disconnect their service, say, close of business on Friday. The Contractor will disconnect and remove the existing switchboard and connect the existing feeders to the new generators for temporary power.
 - 3. Just before PG&E is scheduled to reconnect power the Contractor shall disconnect the temporary power and install the new switchboard and reconnect the existing feeders.
- E. Final startup and testing of the generator and other electrical equipment shall be done after the project is completed to confirm that the complete electrical system is operating as intended.

END OF SECTION 015001

SECTION 262413 - SWITCHBOARDS

PART 1 - GENERAL

1.1 SUMMARY

- A. Provide materials, equipment, fabrication, delivery, and testing for two switchboards in San Jose, CA. One switchboard shall be located in the South Building #1 and the second switchboard shall be located in the North Building #3 on concrete floors. The switchboards shall be in conformity with the project drawings and specifications, applicable codes, standards, and authorities having jurisdiction, for the following:
 - 1. Shall be designed to replace the existing main switchboard except that they will have provisions for both Utility Power and Generator Power.
 - 2. Shall have approximately the same footprint as the existing switchboard to facilitate reconnecting existing underground feeders. See project plans.
 - 3. Shall be rated 1200 A, 480 V and 42 KAIC minimum.
 - 4. Utility Metering Compartment: Fabricated compartment and section complying with utility company's requirements.
 - 5. Transfer Control between the main utility circuit breaker and the generator main circuit breaker.

1.2 REFERENCES

- A. American National Standards Institute (ANSI) C12 for Electricity Metering
- B. ANSI C57.13 Requirements for Instrument Transformers
- C. National Electrical Manufacturers' Association (NEMA) AB1 Molded Case Circuit

Breakers

- D. NEMA PB2 Dead Front Distribution Switchboards
- E. Underwriters Laboratories (UL) UL891

1.3 RELATED SECTIONS

- A. Section 015001 Temporary Power
- B. Section 260622 Engine Generator

1.4 SUBMITTALS

- A. Product Data: Type of switchboard, overcurrent protective device, transient voltage suppression device, ground-fault protector, accessory, and component indicated. Include dimensions and manufacturers' technical data on features, performance, electrical characteristics, ratings, and finishes.
- B. Shop Drawings: Switchboard and related equipment.

- 1. Dimensioned plans, elevations, sections, and details, including required clearances and service space around equipment. Show tabulations of installed devices, equipment features, and ratings.
- 2. Wiring Diagrams: Power, signal, and control wiring.
- C. Field quality-control test reports.
- D. Operation and maintenance data.

1.5 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- B. Comply with NEMA PB 2, "Deadfront Distribution Switchboards."
- C. Comply with NFPA 70.

1.6 WARRANTY

A. The manufacturer shall warrant products against defects in material and workmanship for 12 months from the date of commissioning. During the warranty period the manufacturer shall repair or replace defective products.

1.7 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. The Contractor shall coordinate with the Owner and Manufacturer in establishing delivery dates, receiving, unloading and storage of the Switchboards until it will be installed.
- B. The manufacturer is responsible for delivery of the Switchboards to the project site. The Owner and the Contractor shall inspect the Switchboards upon delivery.
- C. Provide protective coverings during construction.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.
 - 1. Square D.
 - 2. Eaton Corporation.
 - 3. General Electric Co.; Electrical Distribution & Protection Div.
 - 4. Siemens Energy & Automation, Inc.
 - 5. Industrial Electrical Manufacturing (IEM).

- B. Front-Connected, Front-Accessible Switchboards: Fixed, individually mounted main device, panel-mounted branches, and sections rear aligned.
- C. Nominal System Voltage: As shown on plans.
- D. Main-Bus Continuous rating: As shown on plans.
- E. Enclosure: Steel, NEMA 250, Type 1.
- F. Enclosure Finish: Factory-applied finish in manufacturer's standard gray finish over a rust-inhibiting primer on treated metal surface.
- G. Barriers: Between adjacent switchboard sections.
- H. Utility Metering Compartment: Fabricated compartment and section complying with utility company's requirements. If separate vertical section is required for utility metering, match and align with basic switchboard.
- I. Bus Transition and Incoming Pull Sections: Matched and aligned with basic switchboard.
- J. Dead Front or Hinged Front Panels: Allow access to circuit breaker, metering, accessory, and blank compartments.
- K. Pull Box on Top of Switchboard (if required for Generator Feeders):
 - 1. Adequate ventilation to maintain temperature in pull box within same limits as switchboard.
 - 2. Removable covers shall form top, front, and sides. Top covers at rear shall be easily removable for drilling and cutting.
 - 3. Cable supports shall be arranged to facilitate cabling and adequate to support cables indicated, including those for future installation.
- L. Buses and Connections: Three phase, four wire, unless otherwise indicated. Aluminum or hard-drawn copper of 98 percent conductivity with feeder circuit-breaker line connections.
 - 1. Ground Bus: 1/4-by-2-inch- minimum-size, hard-drawn copper of 98 percent conductivity, equipped with pressure connectors for feeder and branch-circuit around conductors.
 - 2. Contact Surfaces of Buses: Silver or Tin plated aluminum or copper.
 - 3. Main Phase Buses, Neutral Buses, and Equipment Ground Buses: Uniform capacity for entire length of switchboard's main and distribution sections. Provide for future extensions from one end.
- M. Future Devices: Equip compartments with mounting brackets, supports, bus connections, and appurtenances at full rating of circuit-breaker compartment.
- 2.2 SURGE PROTECTION DEVICES (SPD)
 - A. IEEE C62.41, integrally mounted, solid-state, parallel-connected, suppression and filtering modules.

- B. Surge Current Capacity:
 - 1. 250 KA per phase.
 - 2. 125 KA per mode.
- C. EMI/RFI Noise Attenuation Using 50-ohm Insertion Loss Test: 50 dB at 100 kHz.
- D. Maximum UL 1449 clamping levels shall not exceed 400 V, line to neutral and line to ground on 120/208 V systems and 800 V, line to neutral and line to ground on 277/480 V systems.

E. Accessories:

- 1. LED lights on failure of any surge diversion module.
- 2. Six-digit transient-counter set to total transient surges that deviate from the sine-wave envelope by more than 125 V.

2.3 OVERCURRENT PROTECTIVE DEVICES

- A. Molded-Case Circuit Breaker: NEMA AB 3, with interrupting capacity to meet available fault currents.
 - 1. Thermal-Magnetic Circuit Breakers: Inverse time-current element for low-level overloads, and instantaneous magnetic trip element for short circuits. Adjustable magnetic trip setting for circuit-breaker frame sizes 250 A and larger.
 - 2. Adjustable Instantaneous-Trip Circuit Breakers: Magnetic trip element with front-mounted, field-adjustable trip setting.
 - 3. Electronic trip-unit circuit breakers shall have RMS sensing, field-replaceable rating plug, and the following field-adjustable settings:
 - a. Instantaneous trip.
 - b. Long- and short-time pickup levels.
 - c. Ground-fault if shown on the Plans.
 - d. Arc Reduction Maintenance Switch (ARMS) where required.
 - 4. GFCI Circuit Breakers: Single- and two-pole configurations with 30-mA trip sensitivity.
- B. Molded-Case Circuit-Breaker Features and Accessories: Standard frame sizes, trip ratings, and number of poles.
 - 1. Lugs: Mechanical style, suitable for number, size, trip ratings, and conductor material.
 - 2. Application Listing: Appropriate for application; Type SWD for switching fluorescent lighting loads; Type HACR for heating, air-conditioning, and refrigerating equipment.

- 3. Ground-Fault Protection: Where shown on the Plans, integrally mounted relay and trip unit with adjustable pickup and time-delay settings, push-to-test feature, and ground-fault indicator.
- 4. Shunt Trip: Where shown on the Plans, 120-V trip coil energized from separate circuit, set to trip at 55 percent of rated voltage.

2.4 TRANSFER CONTROL

- A. Provide the switchboard with one utility main breaker and one generator main breaker. The transfer scheme shall be designed to automatically open the utility main breaker upon loss of utility power and transfer all loads to the generator main by closing the generator main breaker. The system shall be capable of transferring back automatically in an open transition mode based on the position of the auto retransfer selector switch.
- B. The logic for the automatic transfer scheme is provided by a Programmable Logic Controller (PLC). Microprocessor auto transfer controllers are also acceptable. Customer interface shall be via a touchscreen. The PLC utilizes breaker status, relay and switch inputs to determine the switchgear sequence of operation. The PLC outputs energize breaker close and trip circuits and touchscreen indicators.
- C. Manufacturer shall provide references and contact information of three previous projects that have used the transfer control system.

2.5 CONTROL POWER

- A. Control Circuits: 120 V, supplied through secondary disconnecting devices from control-power transformer.
- B. Control-Power Fuses: Primary and secondary fuses for current-limiting and overload protection of transformer and fuses for protection of control circuits.
- C. Control Wiring: Factory installed, with bundling, lacing, and protection included. Provide flexible conductors for No. 8 AWG and smaller, for conductors across hinges, and for conductors for interconnections between shipping units.

2.6 IDENTIFICATION

A. Mimic Bus: Continuously integrated mimic bus factory applied to front of switchboard. Arrange in single-line diagram format, using symbols and letter designations consistent with final mimic-bus diagram. Coordinate mimic-bus segments with devices in switchboard sections to which they are applied. Produce a concise visual presentation of principal switchboard components and connections.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Schedule installation of the Switchboards during weekend or holidays as described in Section 015001 Temporary Power, to minimize the disruption of normal operation of the facility.
- B. Install switchboard and accessories according to NEMA PB 2.1 and NECA 40.

- C. Install and anchor switchboard level on concrete floor per manufacturer's instructions and as shown on the Drawings.
- D. Temporary Lifting Provisions: Remove temporary lifting eyes, channels, and brackets and temporary blocking of moving parts from switchboard units and components.
- E. Operating Instructions: Frame and mount the printed basic operating instructions for switchboard, including control and key interlocking sequences and emergency procedures. Fabricate frame of finished wood or metal and cover instructions with clear acrylic plastic. Mount on front of switchboards.
- F. Install overcurrent protective devices, transfer control switch, transient voltage suppression devices, and instrumentation.
 - 1. Set field-adjustable switches and circuit-breaker trip ranges.
- G. Install equipment in accordance with reviewed product data, final shop drawings, manufacturer's written instructions and recommendations, and as indicated on the Drawings E-5, E-6, E-8 and E-9.

3.2 IDENTIFICATION

- A. Identify field-installed conductors, interconnecting wiring, and components; provide warning signs as specified in Division 26 Section "General Electrical Requirements."
- B. Every circuit shall be legibly identified as to its clear, evident and specific purpose or use. The identification shall include an approved degree of detail that allows each circuit to be distinguished from all others. Spares shall also be described accordingly. Label all circuit breakers with laminated plastic nameplates with stainless steel screws. The circuit breaker nameplate shall provide the load, size. See nameplate schedule attached.
- C. Switchboard Nameplates: Label each switchboard compartment with engraved metal or laminated-plastic nameplate mounted with corrosion-resistant screws. Switchboards shall be permanently marked to indicate each device or equipment where power originates.
- D. Warning labels and nameplates shall be present at access locations to advise personnel of possible hazards. The SWBD shall be marked in accordance with UL, NFPA 70 NEC, NFPA 70E, and other applicable standards.

3.3 FIELD QUALITY CONTROL AND COMMISSIONING

- A. Startup, Testing, Training and power system study shall be performed by the switchboard manufacturer.
- B. Functional testing, commissioning, and first parameter adjusting shall be carried out by a factory-trained manufacturer's field service representative. The manufacturer's field service technician shall provide all material, equipment, labor and technical supervision to perform inspection, testing and adjustments to ensure equipment is installed, adjusted, and tested in accordance with the manufacturer's recommendations and is ready for operation. The manufacturer's field service technician shall replace damaged or malfunctioning equipment and report to the Engineer any discrepancies or issues with the installation.

- C. Prepare for acceptance tests as follows:
 - 1. Test insulation resistance for each switchboard bus, component, connecting supply, feeder, and control circuit.
 - 2. Test continuity of each circuit.
- D. Perform field tests and inspections and prepare test reports:
 - 1. Perform each electrical test and visual and mechanical inspection stated in appropriate sections of NETA ATS.
 - 2. Provide certificate of proper installation and operation.
 - 3. Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.
 - 4. Provide 4 hours of on-site training in the operation of the switchboards including the operation of the Programmed Transfer Control equipment.

END OF SECTION 262413

ATTACHMENT CIRCUIT BREAKER NAMEPLATE SCHEDULE

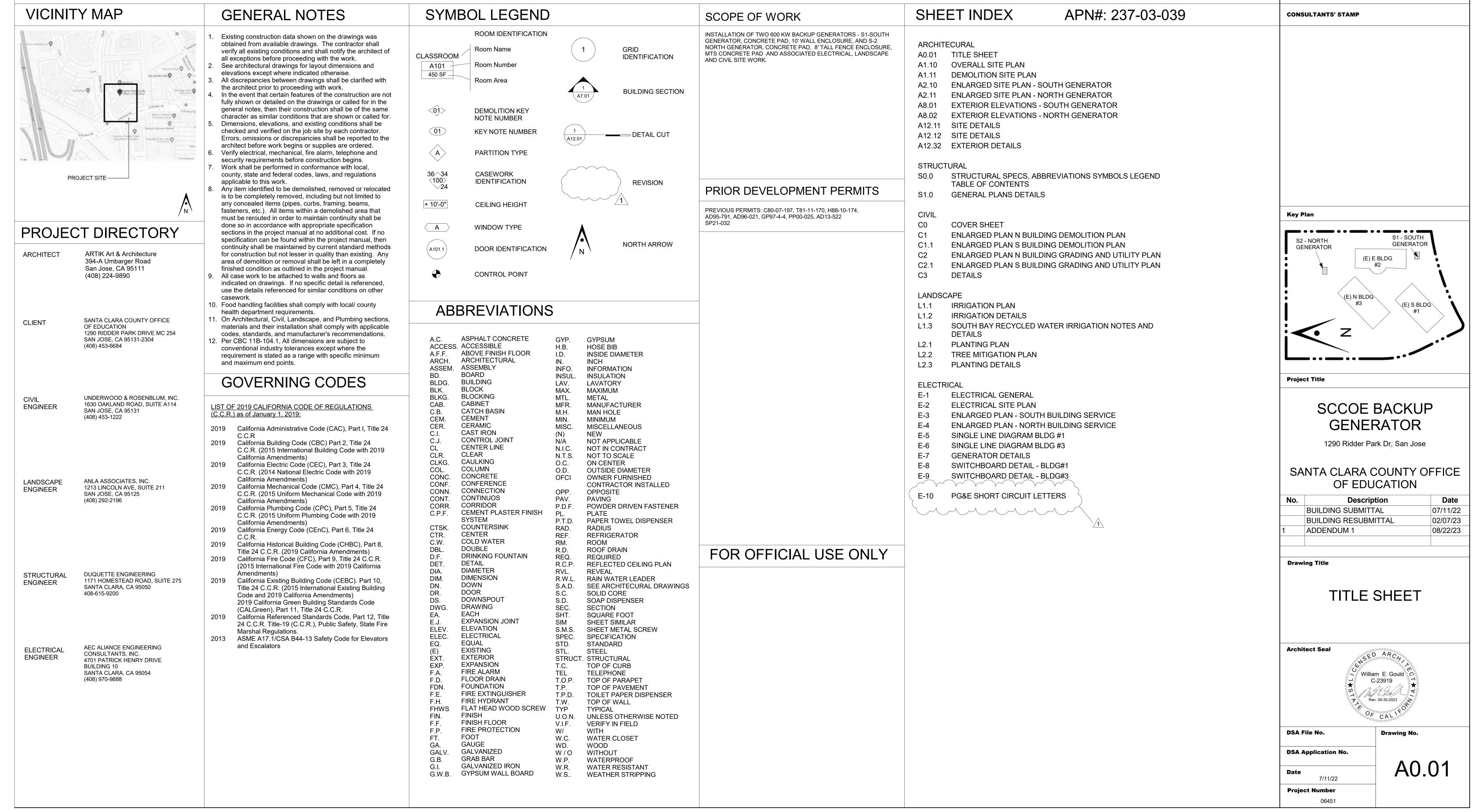
| TAG# | TYPE | SIZE | INSCRIPTION |
|------|-------|-----------|---------------------|
| | | | UTILITY BRKR |
| 1 | PLATE | 1" X 4" | Bldg #1 1000A/3P |
| _ | | | GEN BRKR |
| 2 | PLATE | 1" X 4" | Bldg #1 1000A/3P |
| 3 | PLATE | 3/4" X 4" | BUS BARN 100A/3P |
| 4 | PLATE | 3/4" X 4" | KITCHEN 400A/3P |
| 5 | PLATE | 3/4" X 4" | BLDG #1 1000A/3P |
| 6 | PLATE | 3/4" X 4" | BLDG #2 400A/3P |
| 7 | PLATE | 3/4" X 4" | PNL "SH" 100A/3P |
| | | | UTILITY BRKR |
| 1 | PLATE | 1" X 4" | Bldg #3 1000A/3P |
| _ | | | GEN BRKR |
| 2 | PLATE | 1" X 4" | Bldg #3 1000A/3P |
| 3 | PLATE | 3/4" X 4" | ELEV #1 70A/3P |
| 4 | PLATE | 3/4" X 4" | ELEV #2 90A/3P |
| 5 | PLATE | 3/4" X 4" | FILTER "H1" 400A/3P |
| 6 | PLATE | 3/4" X 4" | FILTER "H2" 400A/3P |
| 7 | PLATE | 3/4" X 4" | FILTER "H3" 400A/3P |
| 8 | PLATE | 3/4" X 4" | UDH 400A/3P |
| 9 | PLATE | 3/4" X 4" | MCC 800A/3P |
| 10 | PLATE | 3/4" X 4" | MTS 600A/3P |

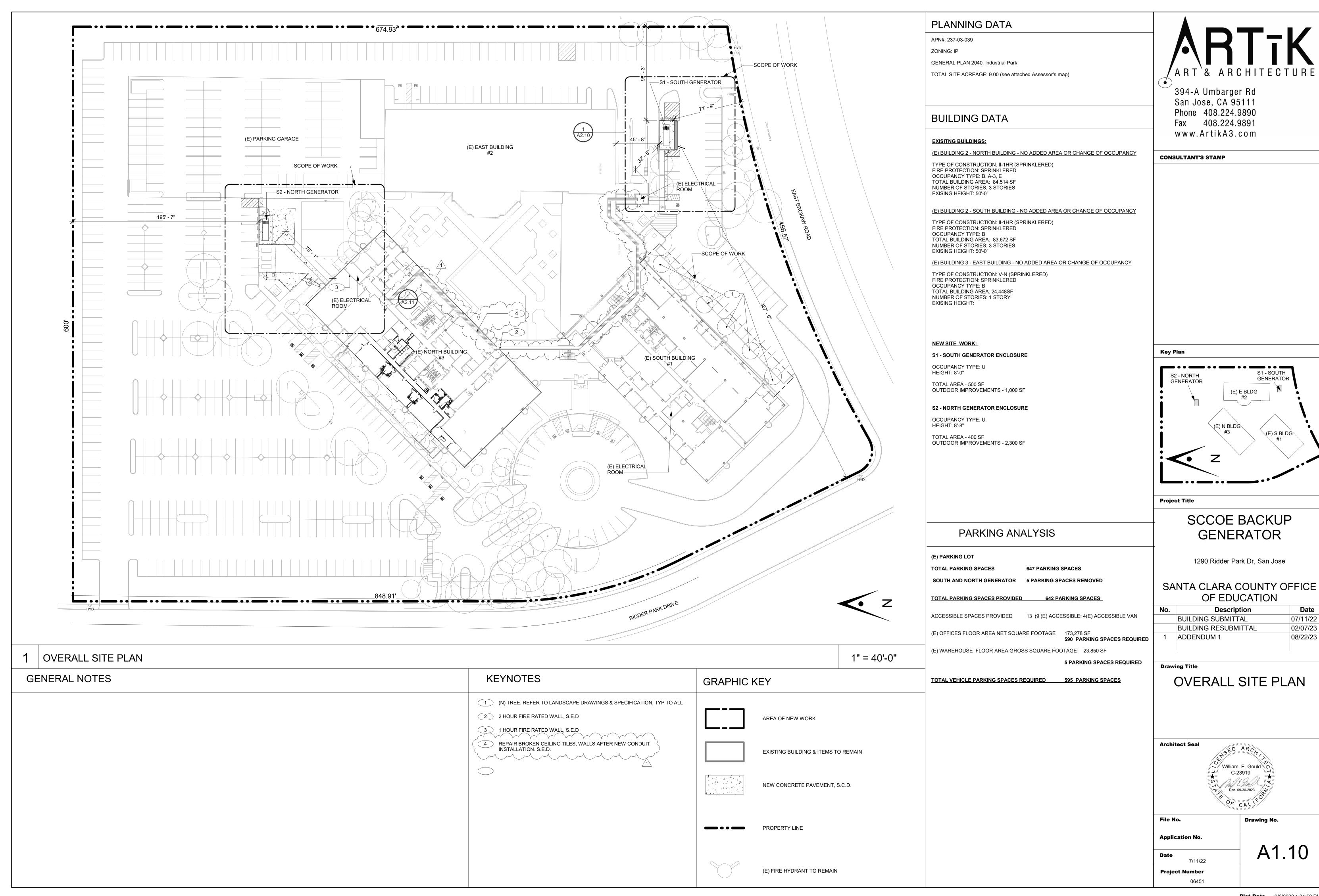
SCCOE BACKUP GENERATOR BUILDING SUBMITTAL

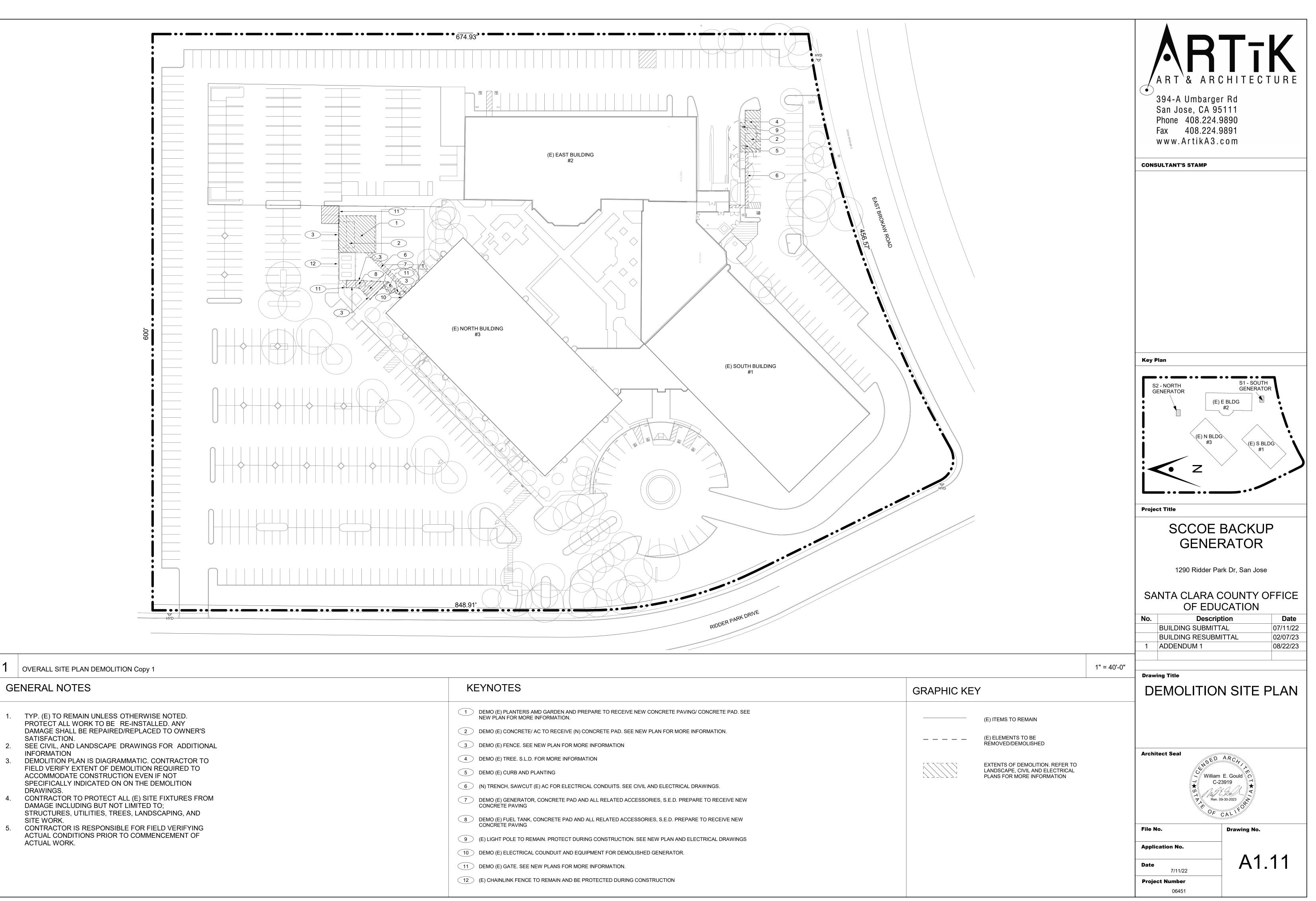
1290 Ridder Park Dr, San Jose

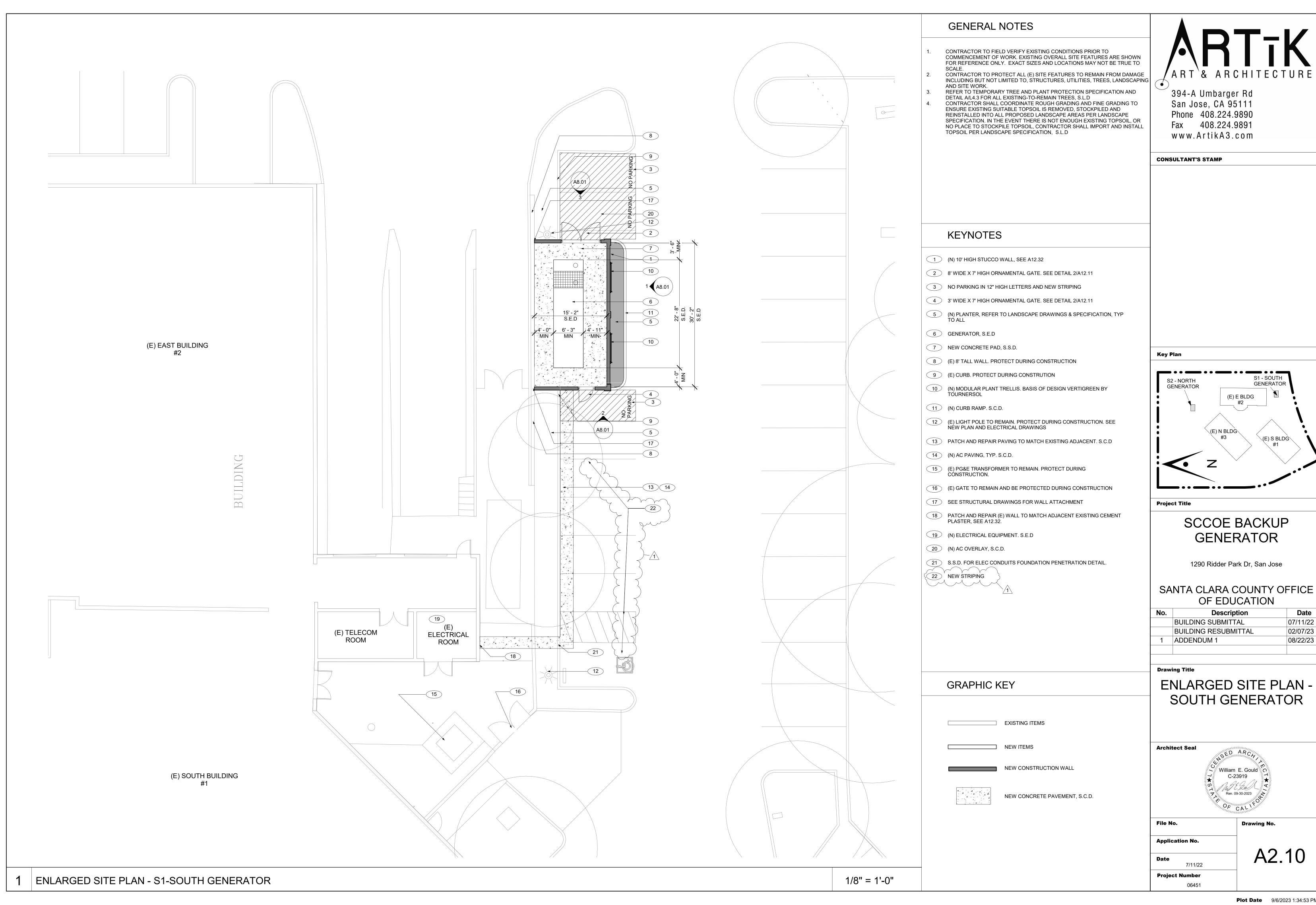


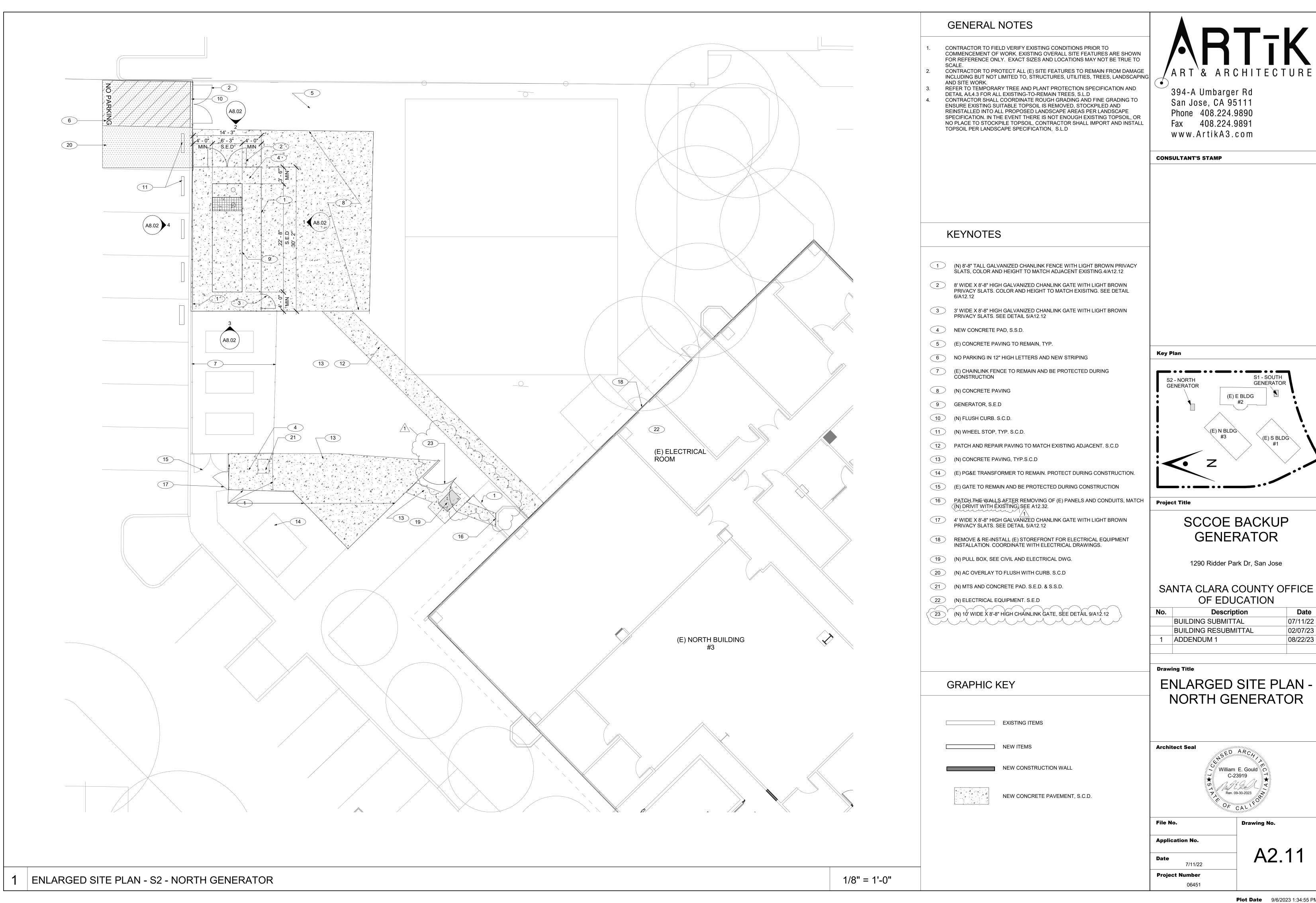
San Jose, CA 95111
Phone 408.224.9890
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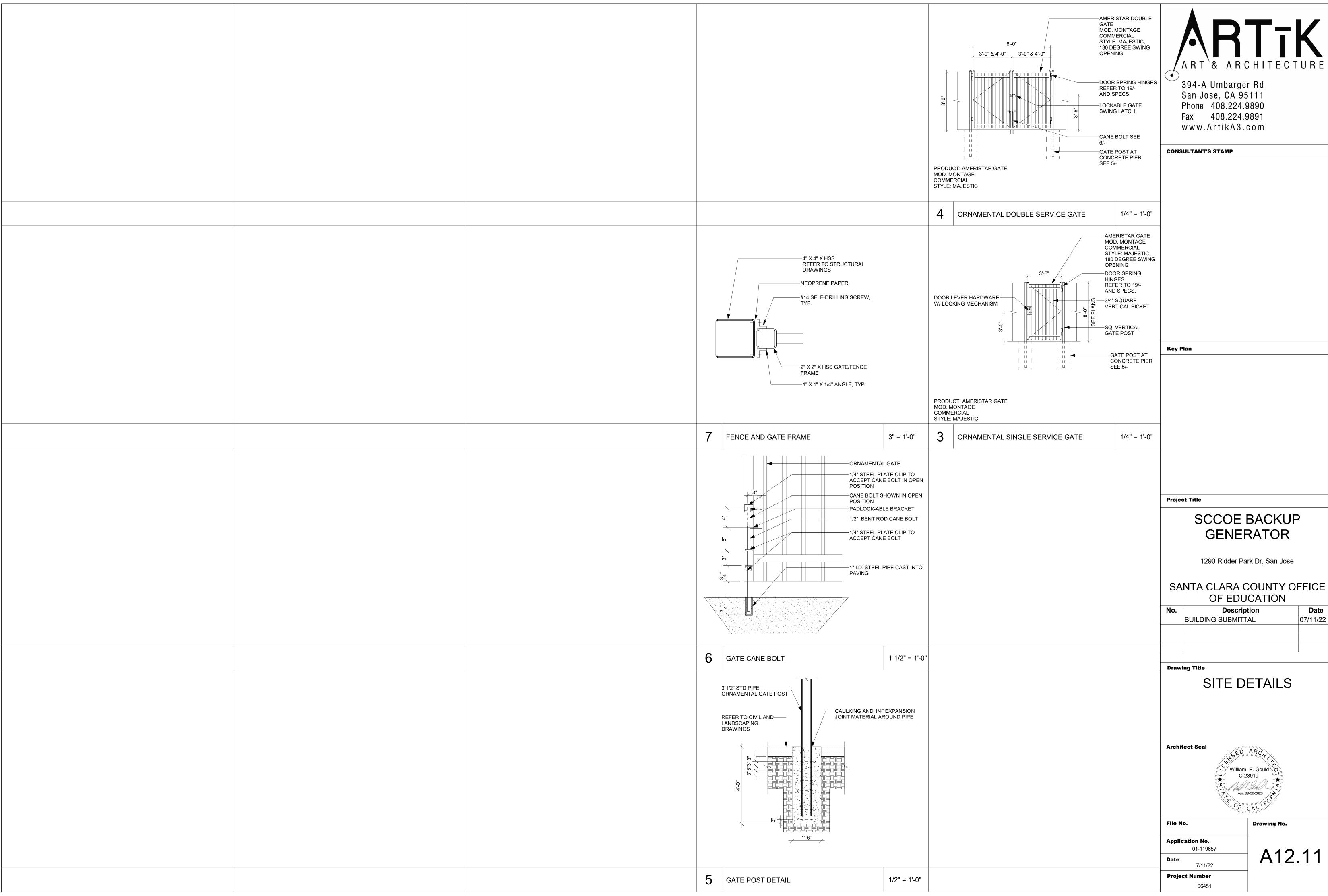


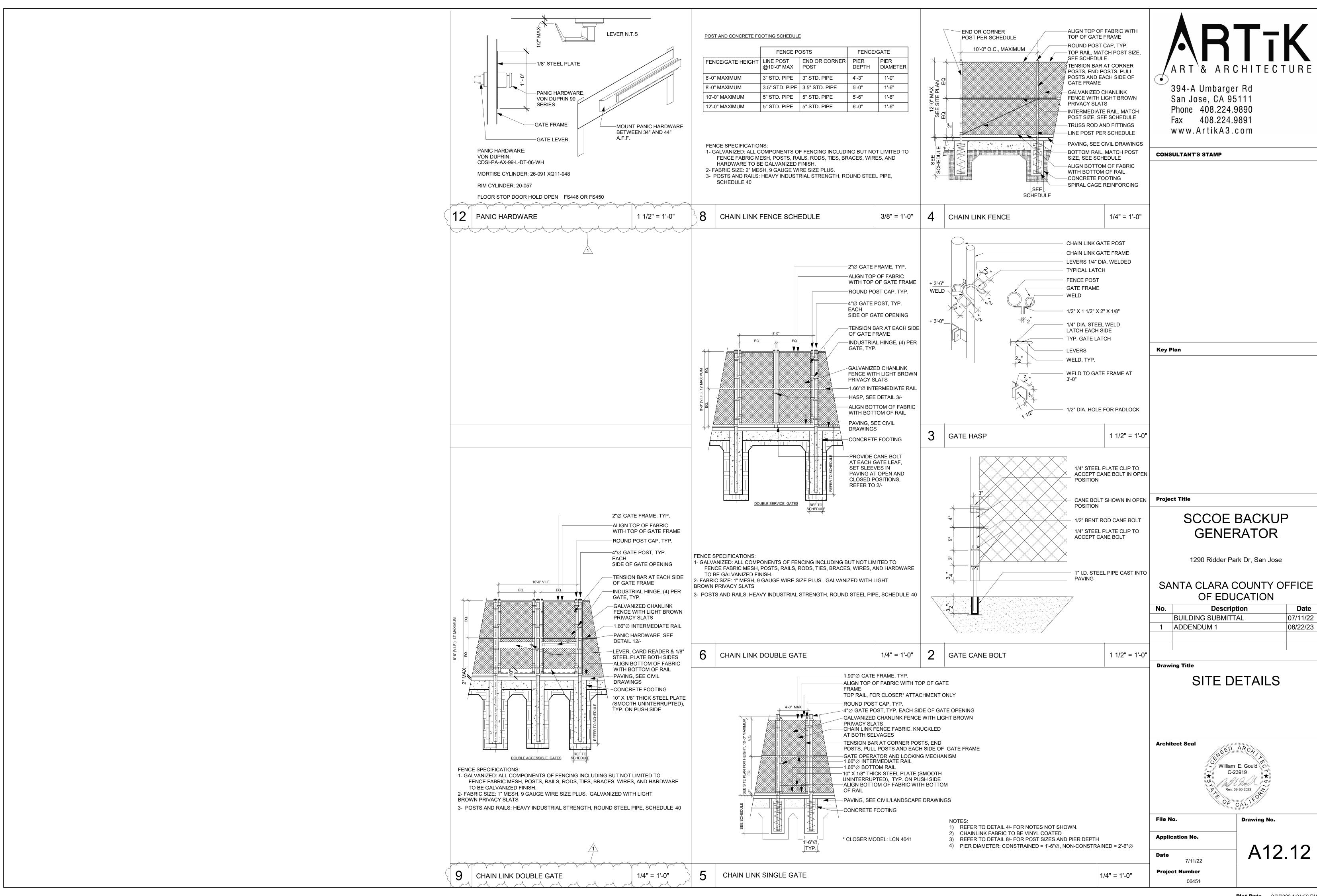


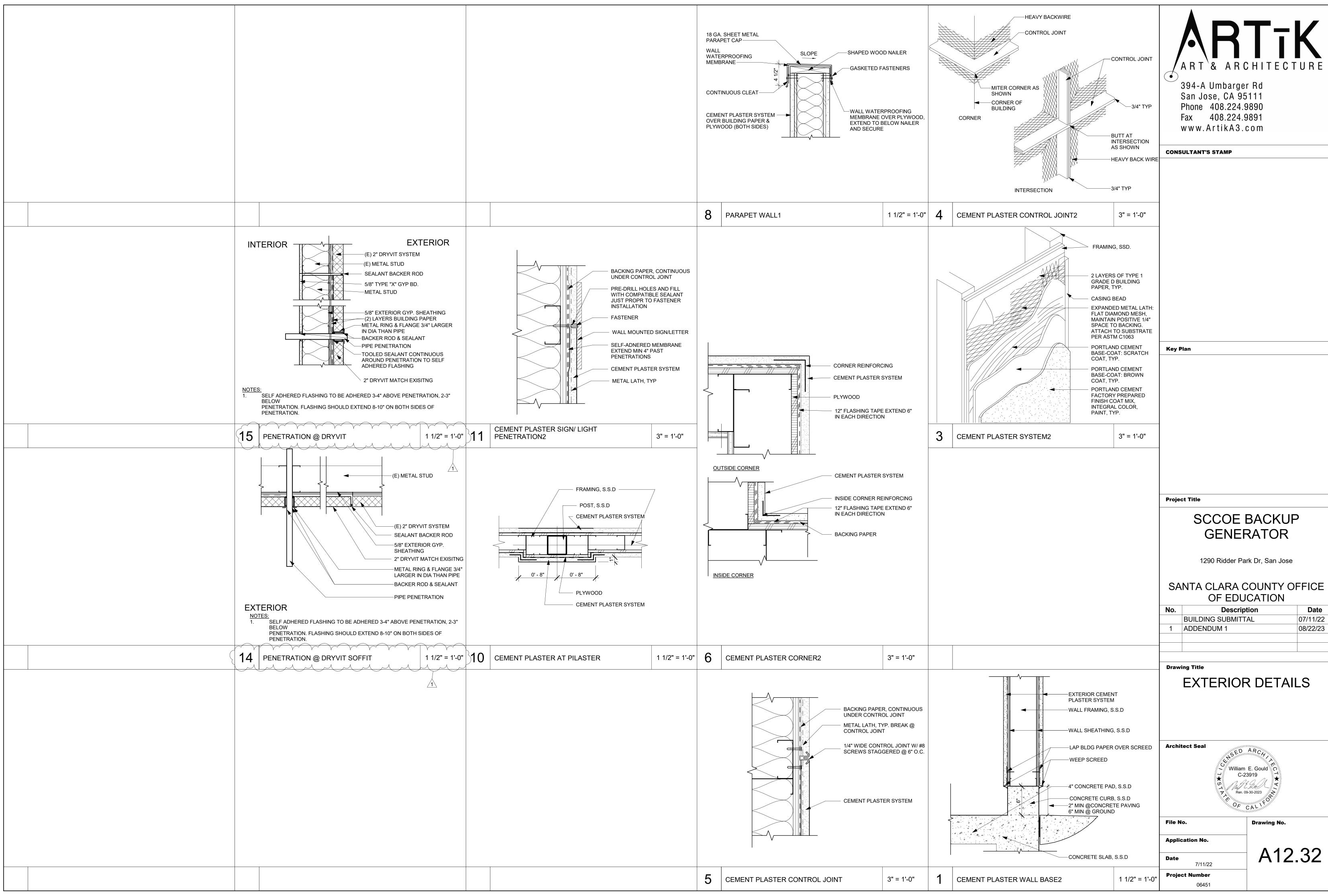


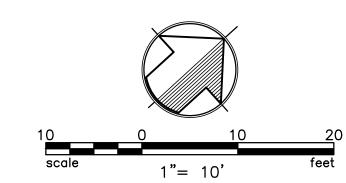


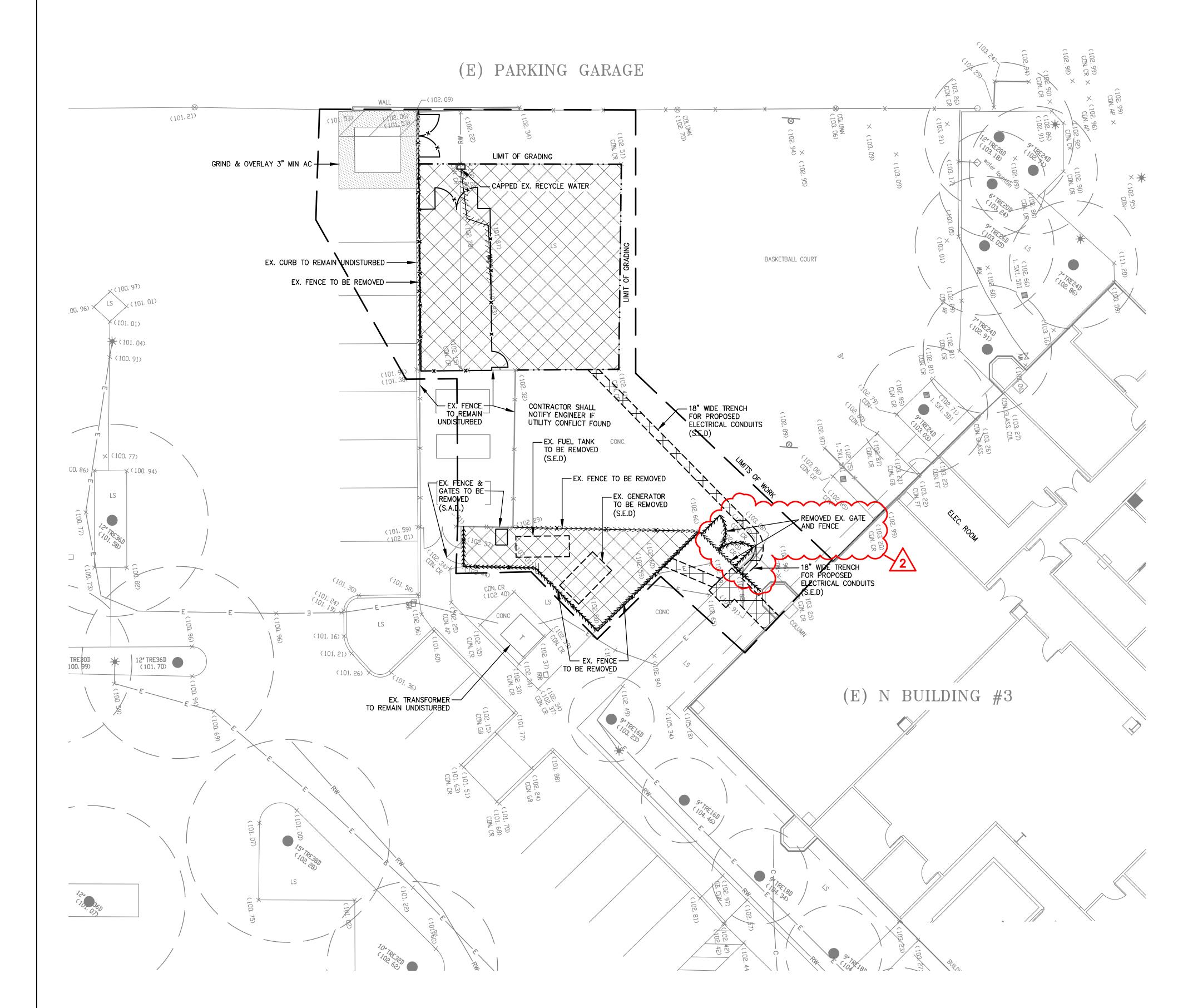














ALL CONTRACTORS SHALL CALL UNDERGROUND SERVICE ALERT (CA. 1-800-642-2444)

48 HOURS BEFORE DIGGING AND OBTAIN AN IDENTIFICATION NUMBER (SECTION 4210.1 OF THE GOVERNMENT CODE).

IT SHALL BE THE RESPONSIBILITY OF CONTRACTORS OR AGENTS TO IDENTIFY, LOCATE AND PROTECT ALL UTILITIES ABOVE AND UNDERGROUND, INCLUDING ANY UTILITIES NOT SHOWN. CONTRACTOR IS TO NOTIFY UTILITIES 48 HOURS PRIOR TO REMOVAL OF ANY GAS, ELECTRICAL, TELEPHONE, SEWER OR WATER LINES.

EXISTING UTILITIES SHOWN WERE IDENTIFIED FROM A SURFACE SURVEY.

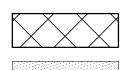
ADDITIONAL UNDERGROUND UTILITIES DO EXIST AND COULD NOT BE IDENTIFIED ON THIS MAP.

CONTRACTOR POTHOLE TO VERIFY EXISTING UTILITIES INVERT PRIOR TO CONSTRUCT NEW UTILITIES. IF THERE IS A CONFLICT, PLEASE NOTIFY TO THE CIVIL ENGINEER IMMEDIATELY.

DEMOLITION NOTES: "FOR INFORMATION ONLY"

- 1. CONTRACTOR SHALL NOTIFY THE BUILDING DEPARTMENT AT LEAST 24 HOURS PRIOR TO STARTING WORK.
- 2. ALL CONTRACTORS SHALL CALL U.S.A. (CA. 1-800-642-2444) 48 HOURS BEFORE DIGGING, AND OBTAIN AN IDENTIFICATION NUMBER (SECTION 4210.1 OF THE GOVERNMENT CODE).
- 3. HAZARDOUS MATERIALS: UPON DISCOVERY OF HAZARDOUS MATERIAL, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE CITY IN WRITING OF ANY:
- A. MATERIAL THAT THE CONTRACTOR BELIEVES MAY BE MATERIAL THAT IS HAZARDOUS WASTE, AS DEFINED IN SECTION 25117 OF THE HEALTH AND SAFETY CODE, THAT IS REQUIRED TO BE REMOVED TO A CLASS I, CLASS II, OR CLASS III DISPOSAL SITE IN ACCORDANCE WITH PROVISIONS OF EXISTING LAW.
- B. SUBSURFACE OR LATENT PHYSICAL CONDITIONS AT THE SITE DIFFERING FROM THOSE
- C. UNKNOWN PHYSICAL CONDITIONS AT THE SITE OF ANY UNUSUAL NATURE, DIFFERING FROM THOSE ORDINARILY ENCOUNTERED AND GENERALLY RECOGNIZED AS INHERENT IN WORK OF THE CHARACTER PROVIDED FOR IN THE CONTRACT: THE OWNER WILL INVESTIGATE THE SUSPECTED CONDITION AND, AS NECESSARY, INITIATE FURTHER ANALYSIS OF THE PROBLEM. IF REMEDIATION IS REQUIRED, A REMEDIATION PLAN WILL BE PREPARED.
- 4. IN THE EVENT THAT HUMAN REMAINS AND/OR CULTURAL MATERIALS ARE FOUND, ALL PROJECT— RELATED CONSTRUCTION SHOULD CEASE WITHIN A 100—FOOT RADIUS. THE CONTRACTOR SHALL, PURSUANT TO SECTION 7050.5 OF THE HEALTH AND SAFETY CODE, AND SECTION 5097.94 OF THE PUBLIC RESOURCES CODE OF THE STATE OF CALIFORNIA, NOTIFY THE SANTA CLARA COUNTY CORONER IMMEDIATELY.
- 5. CONTRACTOR SHALL REMOVE ALL U.S.A. MARKINGS AS SOON AS THEY ARE NO LONGER NEEDED. REMOVAL OF PAINT SHALL BE BY HIGH WATER PRESSURE METHOD ONLY.
- 6. CONTRACTOR IS RESPONSIBLE FOR CONTACTING APPROPRIATE UTILITY AGENCY PRIOR TO DEMOLITION OF ANY EXISTING UTILITIES.
- 7. REMOVE EXISTING PAVEMENT, CURB AND UTILITIES (AS SHOWN).
- 8. CONTRACTOR TO CONTROL DUST DURING DEMOLITION.
- 9. CONTRACTOR TO RECYCLE MATERIALS WHENEVER POSSIBLE.

DEMOLITION LEGEND



REMOVE EXISTING PAVEMENT/CONCRETE

GRIND & 3" AC OVERLAY

REMOVE EXISTING TREE

REMOVE EXISTING CURB/GUTTER

REMOVE EXISTING FENCE AND GATE

REMOVE EXISTING UNDERGROUND UTILITY

- · · - LIMIT OF SITE DEMOLITION, CLEARING AND GRADING

— — — SAW CUT LINE

AC ASPHALT CONCRETE

AD AREA DRAIN

CB CATCH BASIN

CO CLEAN OUT

CONC. CONCRETE

EX., EXIST. EXISTING

S.A.D SEE ARCHITECTURE DRAWING
S.E.D SEE ELECTRICAL DRAWING
TYP. TYPICAL

FOR INFORMATION ONLY

NOT REVIEWED OR APPROVED

BY PUBLIC WORKS



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CONSULTANT'S STAMP

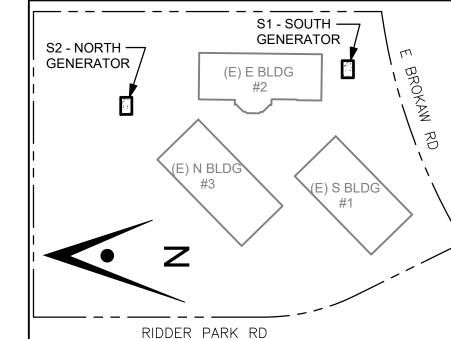


UNDERWOOD & ROSENBLUM, INC.

1630 Oakland Road Ste. A114 San Jose, Ca. 95131
Tel. No. (408) 453 1222 www.uandr.com
PROJECT NO. J22071



Key Plan



Project Title

SCCOE BACKUP GENERATOR

1290 Ridder Park Dr, San Jose

SANTA CLARA COUNTY OFFICE OF EDUCATION

| No. | Description | Date |
|-----|--------------------------|----------|
| | BUILDING SUBMITTAL | 07/11/22 |
| 1 | GENERATOR REVISIONS | 01/26/23 |
| 2 | GATE AND FENCE REVISIONS | 08/25/23 |
| | | |

Drawing Title

ENLARGED PLAN
N BUILDING
DEMOLITION PLAN

Architect Seal

PW Project #

File No.

Application No.

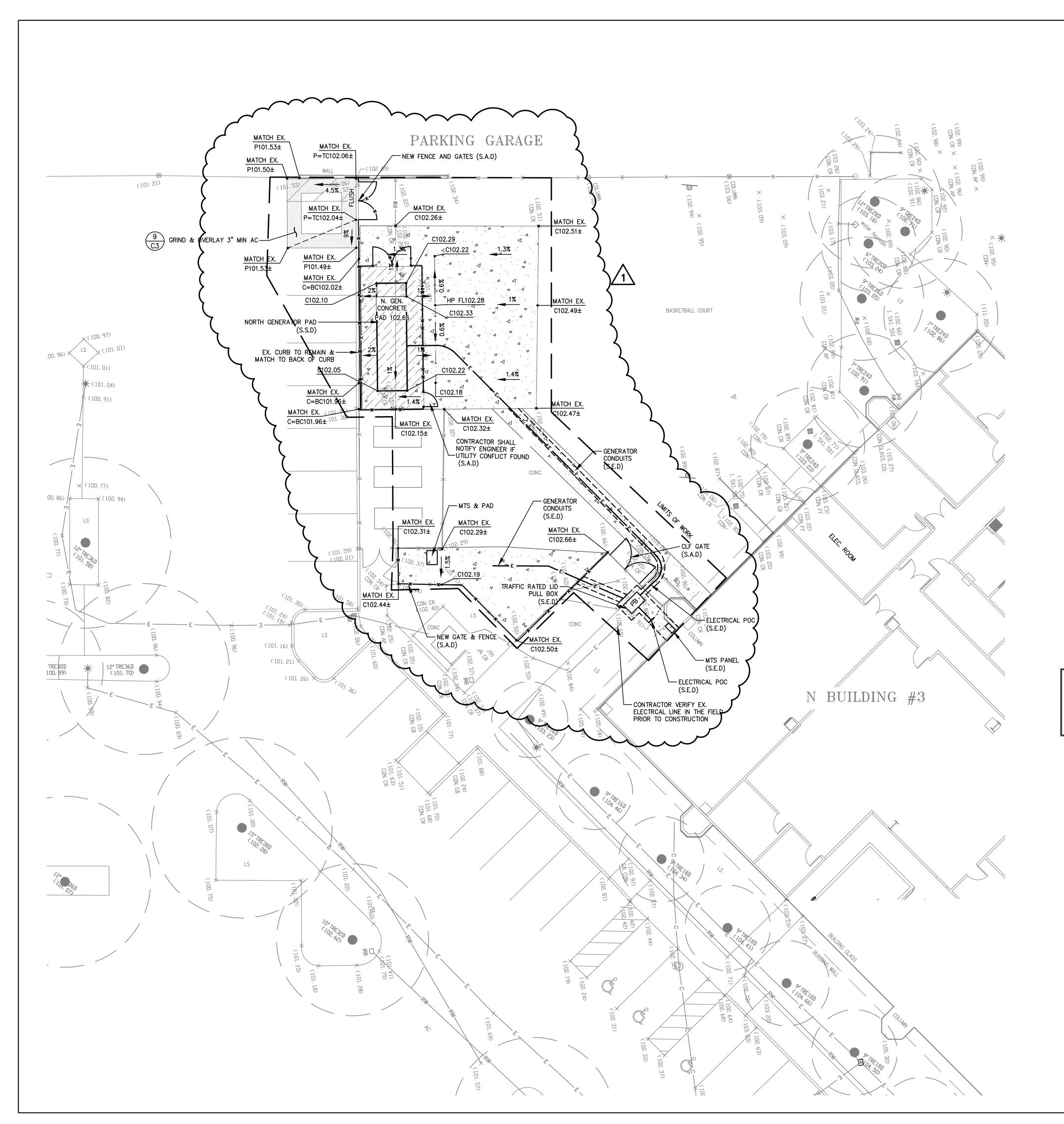
Date

06-24-2022

Project Number

Sheet 2 of 6

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ALL CONTRACTORS SHALL CALL UNDERGROUND SERVICE ALERT (CA. 1-800-642-2444)

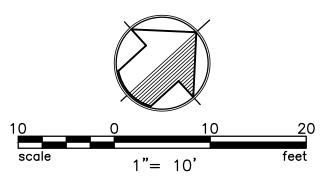
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CONTRACTOR POTHOLE TO VERIFY EXISTING UTILITIES INVERT PRIOR TO CONSTRUCT NEW UTILITIES. IF THERE IS A CONFLICT, PLEASE NOTIFY TO THE CIVIL ENGINEER IMMEDIATELY.



SEE SHEET CO FOR NOTES AND LEGEND

THIS PROJECT WILL NOT CREATE AND/OR REPLACE 5,000 S.F. OF IMPERVIOUS SURFACE AND IS THEREFORE NOT A REGULATED PROJECT AND DOES NOT REQUIRE LOW IMPACT DEVELOPMENT TREATMENT MEASURES.



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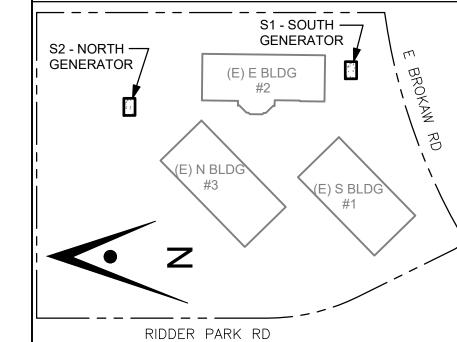


UNDERWOOD & ROSENBLUM, INC.

1630 Oakland Road Ste. A114 San Jose, Ca. 95131 Tel. No. (408) 453 1222 www.uandr.com PROJECT NO. J22071



Key Plan



Project Title

SCCOE BACKUP GENERATOR

1290 Ridder Park Dr, San Jose

SANTA CLARA COUNTY OFFICE OF EDUCATION

| No. | Description | Date |
|-----|---------------------|----------|
| | BUILDING SUBMITTAL | 07/11/22 |
| 1 | GENERATOR REVISIONS | 01/26/23 |
| | | |
| | | |

Drawing Tit

ENLARGED PLAN
N BUILDING
GRADING AND
UTILITY PLAN

Architect Seal

| File No. | Drawing No. |
|-----------------|--------------|
| Application No. | |
| - | |
| Date | \sim |
| 06-24-2022 | C2 |
| Project Number | |
| J22071 | |
| PW Project # | Sheet 4 of 6 |

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GENERAL NOTES

- 1. THE COMPLETE ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH THE 2019 CBC (CALIFORNIA BUILDING CODE), 2019 CEC (CALIFORNIA ELECTRICAL CODE), 2019 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS AND SAN JOSE CITY REQUIREMENTS, THE LATEST RULES AND REGULATIONS OF THE SAFETY ORDER ISSUED BY THE DIVISION OF INDUSTRIAL SAFETY, THE NATIONAL BOARD OF FIRE UNDERWRITERS, ALL APPLICABLE STATE AND LOCAL CODES ISSUED BY AUTHORITIES HAVING JURISDICTION.
- 2. THE CONTRACTOR, PRIOR TO BIDDING, SHALL VISIT THE JOB SITE TO BECOME ACQUAINTED WITH THE EXISTING INSTALLATION AND SYSTEMS RELATED TO HIS WORK AND SHALL INCLUDE IN THE BID PROPOSAL ALL LABOR AND MATERIALS REQUIRED FOR THE ELECTRICAL INSTALLATION TO BE COMPLETE AND OPERATIVE.
- 3. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE ENGINEER, THE SCCOE AND WITH OTHER WORK TO BE PROVIDED.
- 4. THE CONTRACTOR SHALL ORGANIZE AND CONDUCT HIS WORK TO MINIMIZE PLANT SHUTDOWN TIME. COORDINATE ALL POWER SHUTDOWNS WITH THE OWNER'S REPRESENTATIVE.
- 5. PROVIDE SUBMITTALS FOR ALL (N) ELECTRICAL EQUIPMENT FOR APPROVAL BEFORE ORDERING AND INSTALLATION.
- 6. SUBMIT COPIES OF PANEL SCHEDULES WHERE REQUIRED FOR APPROVAL.
- 7. EXISTING UTILITY LOCATIONS ARE APPROXIMATE ONLY.
- 8. ALL EXISTING EQUIPMENT SHALL REMAIN IN PLACE UNLESS OTHERWISE NOTED.
- 9. LOCATIONS OF CONTROLLERS, CONDUIT, PULL BOXES AND OTHER EQUIPMENT AS SHOWN ON THE PLANS ARE APPROXIMATE AND MAY BE CHANGED TO SUIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- 10. ALL EXTERIOR MOUNTED EQUIPMENT SHALL BE WEATHERPROOF.
- 11. UNLESS OTHERWISE INDICATED, THE MINIMUM SIZE OF CONDUCTORS SHALL BE #12 AWG THW, THWN OR XHHW STRANDED COPPER ONLY.
- 12. GREEN INSULATED GROUND CONDUCTORS SHALL BE INSTALLED IN ALL FEEDER AND BRANCH CIRCUIT CONDUITS.
- 13. ELECTRICAL EQUIPMENT AND FEEDERS SHALL BE SUPPORTED AND/OR ANCHORED IN ACCORDANCE WITH CBC SEISMIC REQUIREMENTS.
- 14. PROVIDE LABELS ON ALL EQUIPMENT AND DEVICES. LABELS SHALL BE PHENOLIC TYPE WITH BLACK LETTERS ON WHITE BACKGROUND, ATTACHED TO THE EQUIPMENT WITH STAINLESS STEEL SCREWS.
- 15. SEAL OPENINGS AROUND NEW CONDUIT AND CONDUIT OPENINGS WHERE CONDUIT WAS REMOVED TO PREVENT PASSAGE OF WATER OR WATER AND
- 16. THE CONTRACTOR SHALL MAINTAIN AT THE JOB SITE, AN UP TO DATE "AS-BUILT" DRAWING SET. THE "AS-BUILT" DRAWING SET SHALL REFLECT ALL APPROVED CHANGES TO THE DESIGN DRAWINGS. THE "AS-BUILT" DRAWING SET SHALL BE KEPT CLEAN AND IN GOOD CONDITION AND SHALL BE TURNED OVER TO THE OWNER AT THE COMPLETION OF THE PROJECT.
- 17. UPON COMPLETION OF HIS WORK, THE CONTRACTOR SHALL SCHEDULE AND PERFORM A COMPLETE FUNCTIONAL TEST TO DEMONSTRATE TO THE OWNER THAT THE NEW INSTALLATION IS OPERATING AS INTENDED. ANY DEFECTS OR DEFICIENCIES IN THE MATERIALS OR WORK SHALL BE CORRECTED IMMEDIATELY BY AND AT THE CONTRACTOR'S EXPENSE.

ABBREVIATIONS

| | A AF | AMMETER, AMPERE, AMBER AMPERE FRAME | INST | INSTANTANEOUS | |
|----|---------------------|--|-------------------|--|---|
| 1\ | ANNUN AFC AFG | ANNUNCIATOR AVAILABLE FAULT CURRENT ABOVE FINAL GRADE | KAIC KVA KW | THOUSAND AMPERE INTERRUPTING CAPACITY KILOVOLT AMPERE KILOWATT | |
| | ARMS AT ATS | ARC REDUCTION MAINTENANCE SWITCH AMPERE TRIP AUTOMATIC TRANSFER SWITCH | LT FLEX LTG | LIQUID TIGHT FLEX CONDUIT LIGHTING | |
| | BKR | BREAKER | MSB MT MTS | MAIN SWITCHBOARD EMPTY MANUAL TRANSFER SWITCH | |
| | C CBC CKT | CONDUIT, CONTACTOR, CONTROL CALIFORNIA BUILDING CODE CIRCUIT | (N) | NEW | |
| | CP | CONTROL PANEL | OFCI | OWNER-FURNISHED, CONTRACTOR INSTALLED | |
| | CT CU | CURRENT TRANSFORMER COPPER | PCGRS PNL | PVC COATED GALVANIZED RIGID STEEL CONDUIT PANEL | |
| | (E) ELEV | EXISTING ELEVATOR | PQM | POWER QUALITY METER | |
| | EM | EMERGENCY | RCPT | RECEPTACLE | |
| | EMS FLA | BUILDING ENERGY MANAGEMENT SYSTEM FULL LOAD AMPS | SCCR SPD ST | SHORT CIRCUIT RATING SURGE PROTECTION DEVICE SHUNT TRIP | _ |
| | G GEN | GREEN, GROUND, GENERATOR GENERATOR | TP TSP | TWISTED PAIR TWISTED SHIELDED PAIR | _ |
| | GFI GND GRS | GROUND FAULT GROUND GALVANIZED RIGID STEEL CONDUIT | UON | UNLESS OTHERWISE NOTED | |

LEGEND

SHEET NOTE REFERENCE

_ _ _ _

100

──

20A, 125V DUPLEX RECEPTACLE, NEMA 5-20R, +18", UON. "ELB"-2 INDICATES PANEL "ELB" CKT 2, RED COLOR IF ON EMERGENCY CKT.

GROUND FAULT PROTECTED EXPLOSION PROOF CORROSION RESISTANT TWIST LOCK WEATHERPROOF

LIGHT SWITCH +45" U.O.N.

NEW ELECTRICAL EQUIPMENT

EXISTING ELECTRICAL EQUIPMENT

ELECTRICAL EQUIPMENT TO BE 4444

DISCONNECTED AND REMOVED

CONDUIT RUN UNDERGROUND OR BELOW FLOOR CONDUIT RUN ABOVE GRADE OR ON CEILING

CONDUIT RUN WITH WIRES. () INDICATES GROUND, () INDICATES NEUTRAL,

(1) INDICATES HOT WIRES

FLEXIBLE METAL CONDUIT

EXISTING PRE CAST CONCRETE PULL BOX

NEW PRE CAST CONCRETE PULLBOX COVER MARKED "ELECTRICAL"

SEE CALTRANS STANDARD PLAN ES-E8.

MOTOR, SQUIRREL CAGE INDUCTION NUMBER IF PRESENT INDICATES HORSEPOWER

CIRCUIT BREAKER, THERMAL MAGNETIC TRIP SHOWN, 3 POLE UNLESS INDICATED OTHERWISE.

> SWITCH - CURRENT RATING INDICATED, 3 POLE UNLESS INDICATED OTHERWISE.

FUSE - RATING INDICATED

SURGE ARRESTER TRANSFORMER, SECONDARY VOLTAGES, PHASE AND \times RATING INDICATED AS APPLICABLE

> PUSH-BUTTON SWITCH, MOMENTARY CONTACT, NORMALLY OPEN

30 ᠳ NON FUSED DISCONNECT SWITCH, SIZE INDICATED, 3 POLE UNLESS INDICATED OTHERWISE.

(•) OR GROUND ELECTRODE. 5/8"ø X 10'-0" COPPER CLAD STEEL

REMOVE AND BECOME PROPERTY OF CONTRACTOR

DRAWING INDEX

ENLARGED PLAN - NORTH BUILDING (BLDG #3) SERVICE

E-1 ELECTRICAL GENERAL

EMERGENCY POWER SITE PLAN

E-3ENLARGED PLAN - SOUTH BUILDING (BLDG #1) SERVICE

E-5 SINGLE LINE DIAGRAM - BLDG #1

SINGLE LINE DIAGRAM - BLDG #3

E-6

E-2

E-4

E-7GENERATOR DETAILS

E-8 SWITCHBOARD DETAIL - BLDG #1

E-9 SWITCHBOARD DETAIL - BLDG #3

E-10 PG&E SHORT CIRCUIT LETTERS

SCOPE OF WORK

NORTH BUILDING:

THE SCOPE OF WORK INCLUDES REMOVING THE EXISTING 300 KW GENERATOR THAT PROVIDES BACKUP TO ONLY DATA CENTER AND PROVIDING A NEW 500 KW GENERATOR THAT WILL PROVIDE BACKUP POWER TO THE ENTIRE BUILDING.

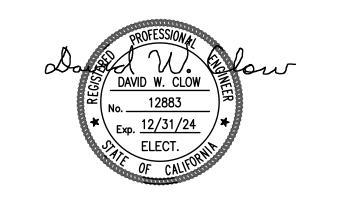
SOUTH BUILDING:

THE SCOPE OF WORK INCLUDES PROVIDING A NEW 500 KW GENERATOR THAT WILL PROVIDE BACKUP POWER FOR THE ENTIRE BUILDING.

— IN ASPHALT PAVEMENT AREAS SAW CUT AND PLANTS OR PAVED REPAIR PAVEMENT TO DIRT AREA AREA MATCH EXISTING. REPAIR SHALL BE NOT LESS THAN 2" THICK. - GRADE -BASE COURSE 95% COMPACTED - DETECTABLE WARNING TAPE → NATIVE BACKFILL 95% COMPACTED UNDER PAVED m AREA AND 85% COMPACTED ELECTRICAL IN PLANTED AREAS AND -SAND BEDDING CONTROL - CONDUITS AS SHOWN CONDUIT 2" ON THE PLAN TRENCH DETAIL (TYP) NO SCALE

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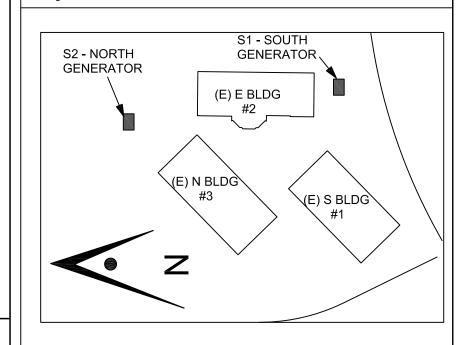
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Key Plan



Project Title

BACKUP GENERATOR AT RIDDER PARK

1290 RIDDER PARK DRIVE, MC 254 SAN JOSE, CA 95131

SCCOE

| | 1 | | |
|---|-------------|--------------------|---------|
| | No. | Description | Date |
| | | PLANNING SUBMITTAL | 5/26/22 |
| | | BUILDING SUBMITTAL | 7/11/22 |
| | \triangle | ADDENDUM 1 | 8/30/23 |
| ı | | | |

Drawing Title

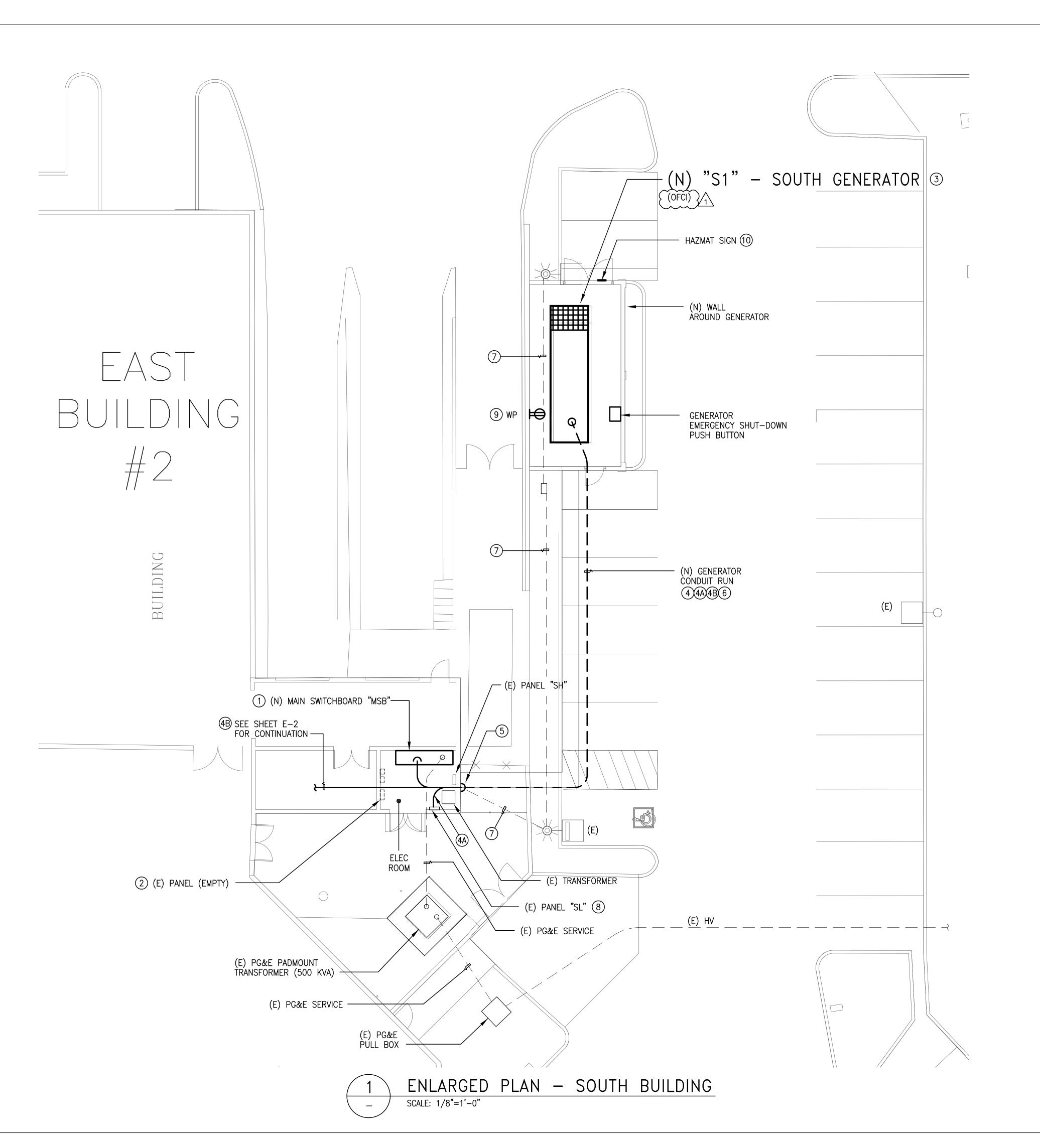
ELECTRICAL GENERAL

Architect Seal

| File No. | Drawing No. |
|----------------------|-------------|
| Application No. | _ |
| Date 01/26/23 | E-' |

Plot Date

01/11/2023



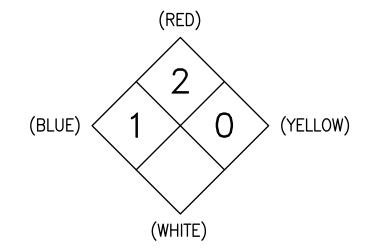
GENERAL NOTES:

- 1. ALL (E) ELECTRICAL EQUIPMENT SHALL REMAIN IN PLACE,
- 2. SEAL ALL CONDUIT OPENING AS SHOWN IN DETAILS ON SHEET E-8.
- 3. THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES BEFORE EXCAVATION.

SHEET NOTES:

- a. COORDINATE A POWER SHUTDOWN WITH PG&E AND OWNER REPRESENTATIVE.
 - b. DISCONNECT THE (E) PG&E SERVICE CABLES AND ALL OTHER FEEDER CABLES FROM (E) MSB.
 - c. RC (E) IEM SWBD AND INSTALL A NEW SWBD IN THE. SAME LOCATION. SEE SHEET E-5 AND E-8 FOR WORK
 - d. RECONNECT ALL THE (E) CABLES TO (N) MSB.
- REMOVE (E) UN-USED EMPTY PANEL AND ADJUST

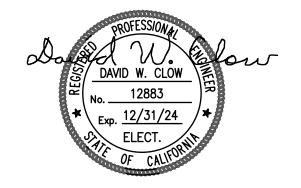
 a. SMALL PANEL LOCATIONS AS NEEDED TO MAKE SPACE FOR GENERATOR PROGRAMMED TRANSFER CONTROLS.
 - b. COORDINATE WITH PG&E TO RE-CONNECT THE ELECTRIC SERVICE.
- 3 INSTALL (N) 600 KW GENERATOR. SEE SHEET E-7 FOR DETAILS.
- 4) 3-4"C WITH CONDUCTORS PER NOTE 4) ON SHEET E-5. 1-1/2°C, 2#10 (GEN START)
- (4A) 1-1/2"C, 3#4 (GEN PANEL) 1#8 (G)
- 4B 1-1/2"C, 1 BELDEN 9841 (REMOTE ANNUN) 1 - CAT5 (BLDG EMS)
- (5) CONDUIT RISES ON OUTSIDE WALL, PENETRATES WALL AND RUNS IN CEILING SPACE.
- (6) INSTALL CONDUITS IN 24" WIDE TENCH.
- MAINTAIN (E) PARKING LIGHT CONDUIT AND CONDUCTORS IN OPERATION DURING CONSTRUCTION. REPLACE IF DAMAGED DURING CONSTRUCTION.
- 8 RC UNUSED CB'S AND INSTALL NEW 70A/2P FOR GEN ACCESSORIES PANEL.
- 9 INSTALL WEATHERPROOF 125 V, 20A, NEMA 5-20R RECEPTACLE AND CONNECT TO 20A CKT BKR IN GEN PANEL WITH 3/4"C, 2#12 AND 1#12 (G).
- 10 PROVIDE 16"x16" ALUMINUM HAZMAT SIGN. SEE ARCH PLANS.





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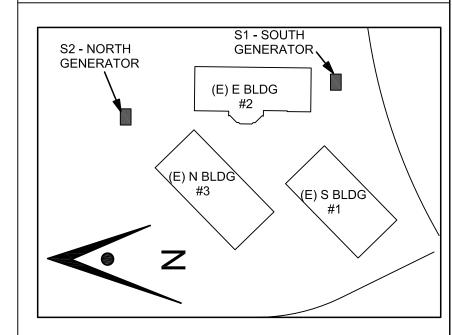
Santa Clara, CA 95054

phone (408) 970-9888 fax (408) 970-9316 PROJECT NO. 175-21-07 www.aec-engineers.com

Engineering

Consultants, Inc.

Key Plan



Project Title

BACKUP GENERATOR AT RIDDER PARK

1290 RIDDER PARK DRIVE, MC 254 SAN JOSE, CA 95131

SCCOE

| No. | Description | Date |
|-----|--------------------|---------|
| | PLANNING SUBMITTAL | 5/26/22 |
| | BUILDING SUBMITTAL | 7/11/22 |
| 1 | ADDENDUM 1 | 8/30/23 |
| | | |

Drawing Title

ENLARGED PLAN -SOUTH BLDG #1 SERVICE

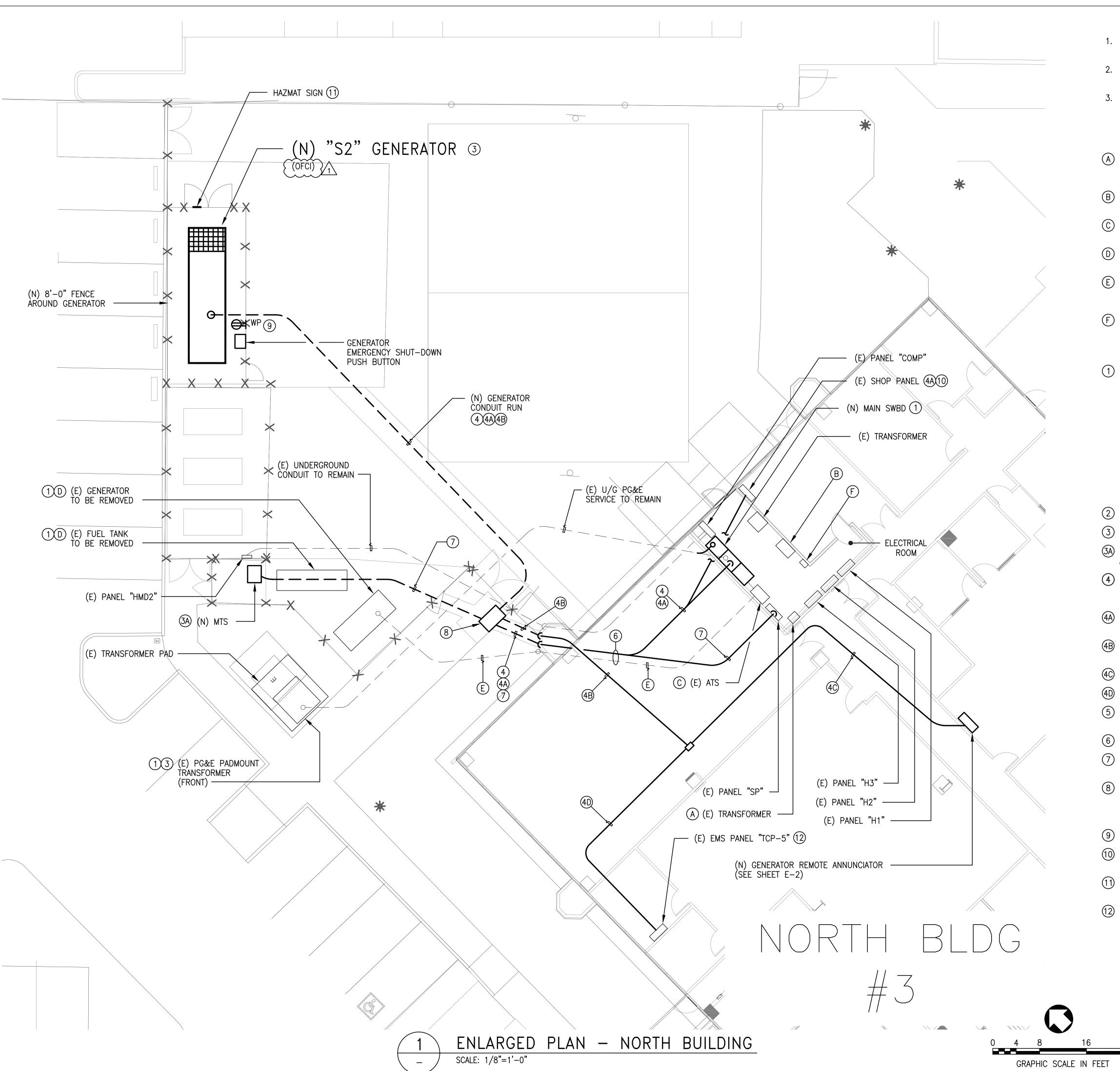
Architect Seal

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01/26/23

Project Number

GRAPHIC SCALE IN FEET



GENERAL NOTES:

- 1. ALL (E) ELECTRICAL EQUIPMENT SHALL REMAIN IN PLACE,
- 2. SEAL ALL CONDUIT OPENING AS SHOWN IN DETAILS ON
- 3. THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES BEFORE

DEMOLITION NOTES:

- A RC UN-USED (E) 25 KVA TRANSFORMER AND RC ASSOCIATED CONDUIT AND WIRES. INSTALL PULL BOX FOR CONDUCTORS PER NOTE (4B).
- B RC UN-USED (E) 150 KVA TRANSFORMER AND RC ASSOCIATED CONDUIT AND WIRES.
- © RC (E) GENERAC 600A ATS AFTER THE (N) GENERATOR IS INSTALLED AND OPERATING.
- D RC (E) GENERATOR AND RC (E) FUEL TANK AFTER THE (N) GENERATOR IS INSTALLED AND OPERATING.
- E DISCONNECT AND REMOVE (E) GENERATOR WIRING WHEN NO LONGER NEEDED. REMOVE ABOVE GRADE CONDUIT AND ELECTRICAL EQUIPMENT NO LONGER NEEDED.
- (F) RC UNUSED BYPASS CB AND ASSOCIATED CONDUIT.

SHEET NOTES:

COORDINATE A POWER SHUTDOWN WITH PG&E AND OWNER REPESENTATIVE.

USE (E) GENERATOR TO PROVIDE TEMPORARY POWER TO (E) PANEL "EM" AND DATA CENTER.

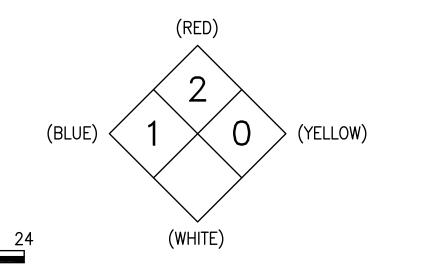
DISCONNECT THE (E) PG&E SERVICE CABLES AND ALL OTHER FEEDER CABLES FROM (E) MSB.

RC (E) IEM SWBD AND INSTALL A NEW SWBD IN THE. SAME LOCATION. SEE SHEET E-5 AND E-9 FOR WORK REQUIRED.

RECONNECT ALL THE (E) CABLES TO (N) MSB.

- NOT USED.
- (3) INSTALL (N) 600 KW GENERATOR ON CONCRETE PAD.
- (3A) INSTALL (N) 600A MTS ON CONCRETE PAD.

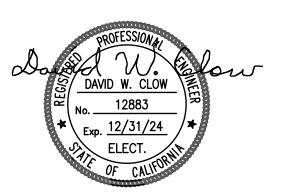
 SEE ANCHORING DETAIL 3 ON SHEET E-8.
- PROVIDE 24" WIDE TRENCH WITH THE FOLLOWING: 3-4"C WITH CONDUCTORS PER NOTE 4 ON SHEET E-5. 1-1/2"C, 2#10 (GEN START)
- (4A) 1-1/2"C, 3#4 (GEN PANEL) 1#8 (G)
- (4B) 1−1/2"C, 1 − BELDEN 9841 (REMOTE ANNUN) 1 − CAT5 (BLDG EMS)
- 4C 1"C, 1 BELDEN 9841 (REMOTE ANNUN)
- 4D 1"C, 1 CAT5 (BLDG EMS)
- 5 COORDINATE WITH PG&E TO RE-CONNECT THE ELECTRIC
- (6) INSTALL CONDUIT RUNS IN CEILING SPACE.
- 7) INSTALL 2 SETS FEEDERS PER NOTE (5) ON SHEET E-6.
- INSTALL TRAFFIC RATED PULL BOX WITH INSIDE DIMENSIONS ±36"X60"X42" DEEP AND SLIP RESISTANT COVER, MARKED "ELECTRICAL". PG&E CODE 02-5604 COVER AND 04-3361 VAULT.
- 9 SEE NOTE 9 ON SHEET E-3.
- (10) RC UNUSED CB'S AND INSTALL NEW 70A/2P FOR GEN ACCESSORIES PANEL.
- 11) PROVIDE 16"x16" ALUMINUM HAZARD SIGN. SEE ARCH PLANS.
- (E) GEN ANNUN AND CONNECT (N) EMS CABLE TO EMS PANEL "TCP-5"





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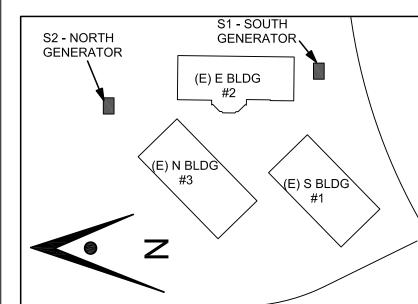
CONSULTANT'S STAMP



Engineering Consultants, Inc. 4701 Patrick Henry Drive, Bldg. 10 Santa Clara, CA 95054 PROJECT NO. 175-21-07

phone (408) 970-9888 fax (408) 970-9316 www.aec-engineers.com

Key Plan



Project Title

BACKUP GENERATOR AT RIDDER PARK

1290 RIDDER PARK DRIVE, MC 254 SAN JOSE, CA 95131

SCCOE

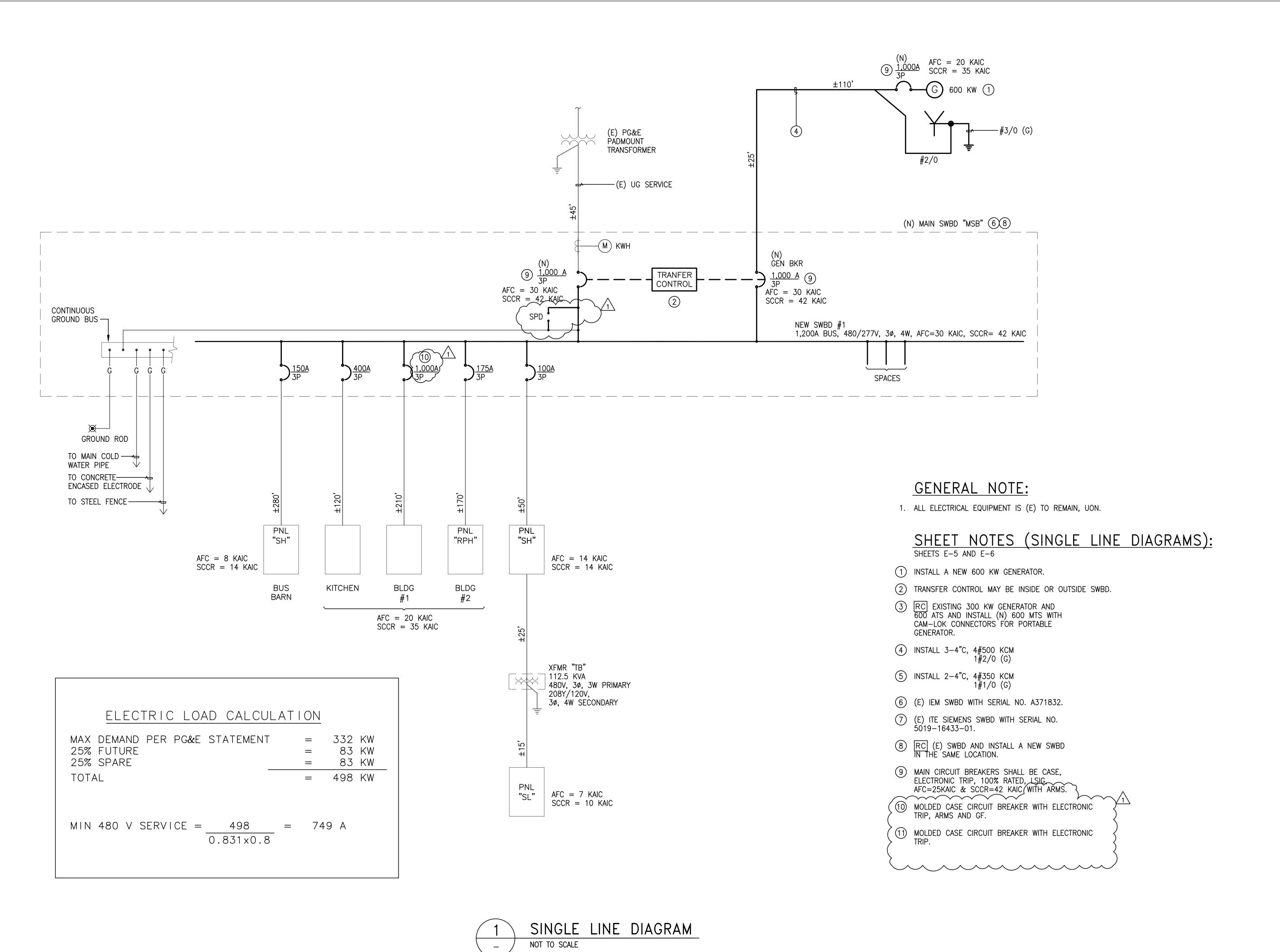
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| No. | Description | Date |
| | PLANNING SUBMITTAL | 5/26/22 |
| | BUILDING SUBMITTAL | 7/11/22 |
| \triangle | ADDENDUM 1 | 8/30/23 |
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Drawing Title

ENLARGED PLAN -NORTH BLDG #3 SERVICE

Architect Seal

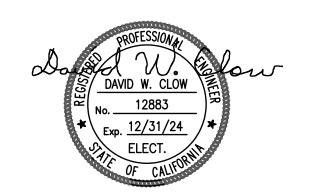
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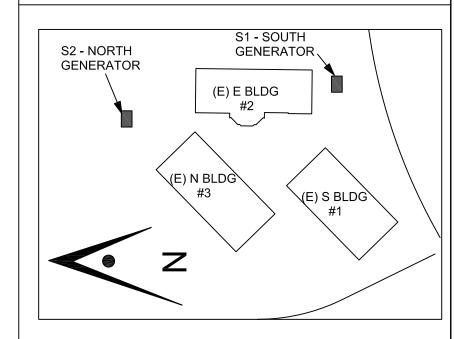
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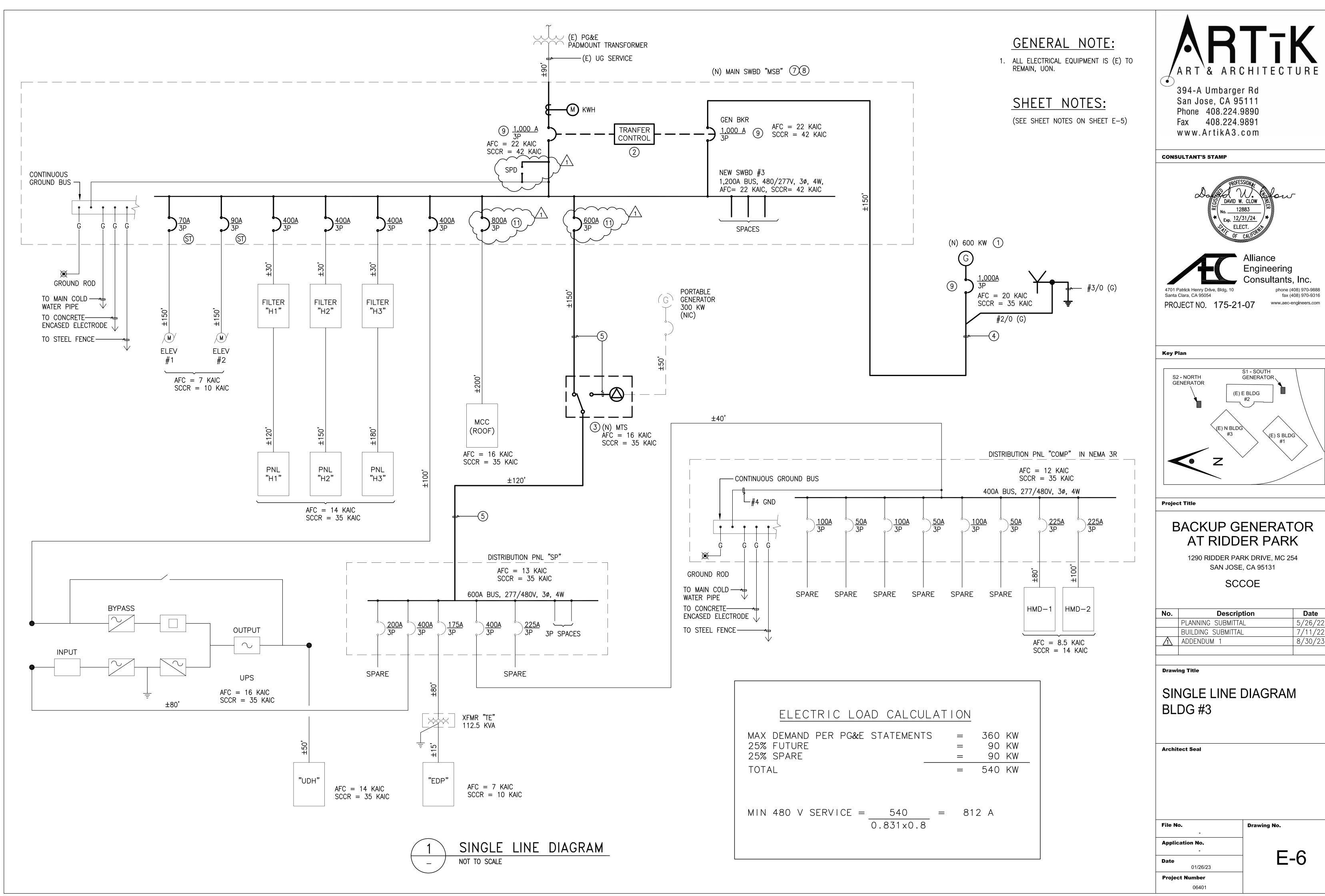
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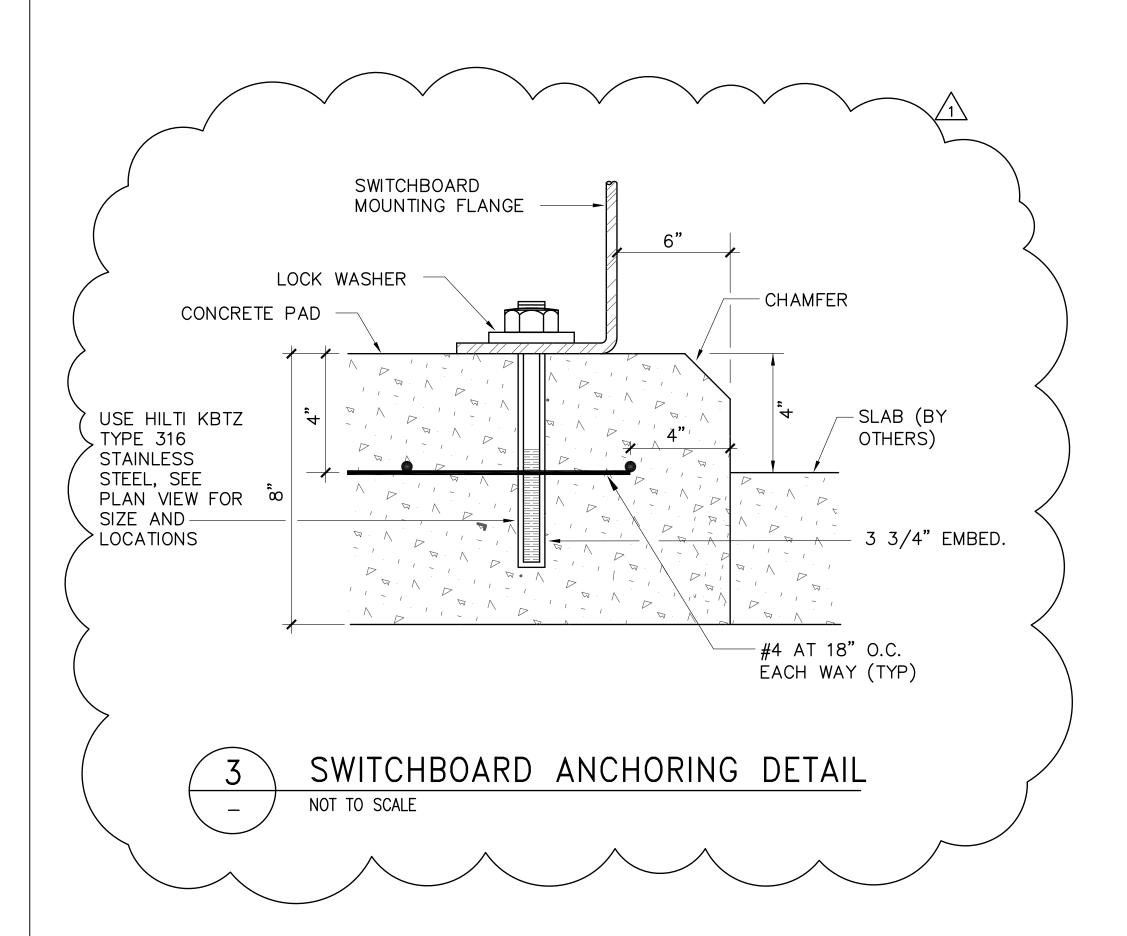
SINGLE LINE DIAGRAM BLDG #1

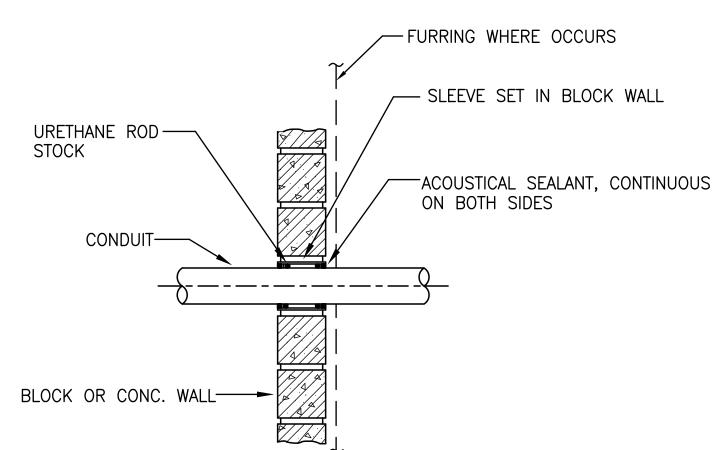
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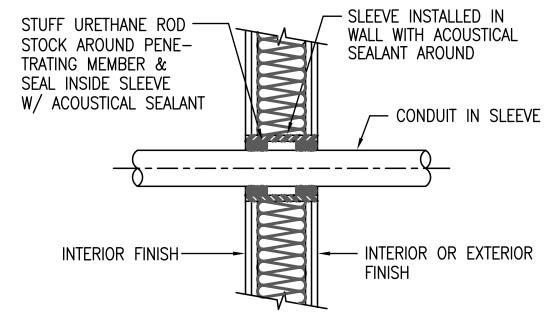
E-5







BLOCK OR CONCRETE WALL



NOTE: PATCH AND FINISH TO MATCH (E)

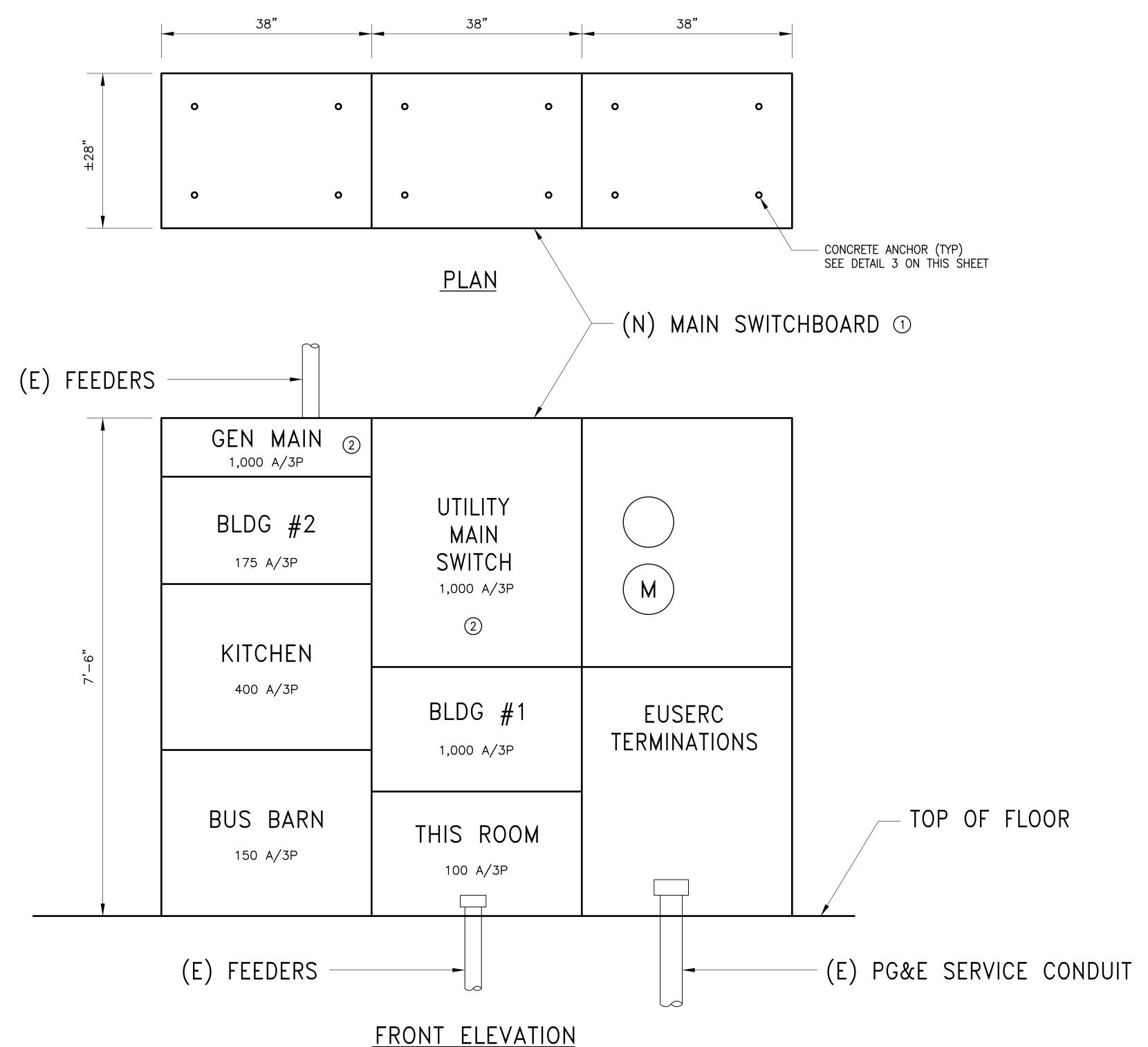
THESE RECOMMENDATIONS ARE BASED ON PRODUCT PERFORMANCE PER ASTME-814(UL1479) FIRE TEST AND UL THROUGH PENETRATION FIRESTOP SYSTEM #WL1001.

STUDWALL

TYPICAL CONDUIT WALL PENETRATION DETAILS NOT TO SCALE

SHEET NOTE:

- 1 RC EXISTING MAIN SWITCHBOARD AND INSTALL NEW MAIN SWITCHBOARD IN THE SAME LOCATION. SEE PLANS FOR DETAILS.
- (2) CIRCUIT BREAKERS WITH ELECTRICAL OPERATORS. THE PLC AND PROGRAMMED TRANSFER CONTROLS MAY BE LOCATED IN A SEPARATE CABINET.

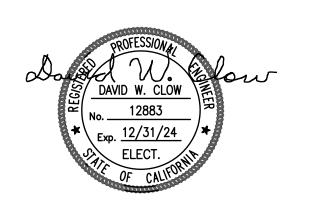


SOUTH BUILDING #1 - MAIN SWITCHBOARD

NOT TO SCALE

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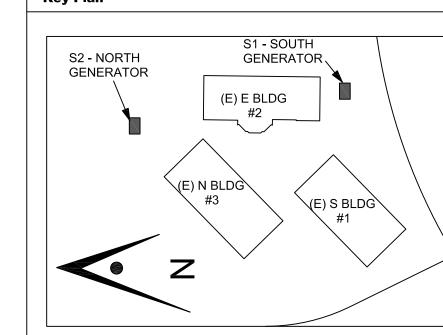
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Drawing Title

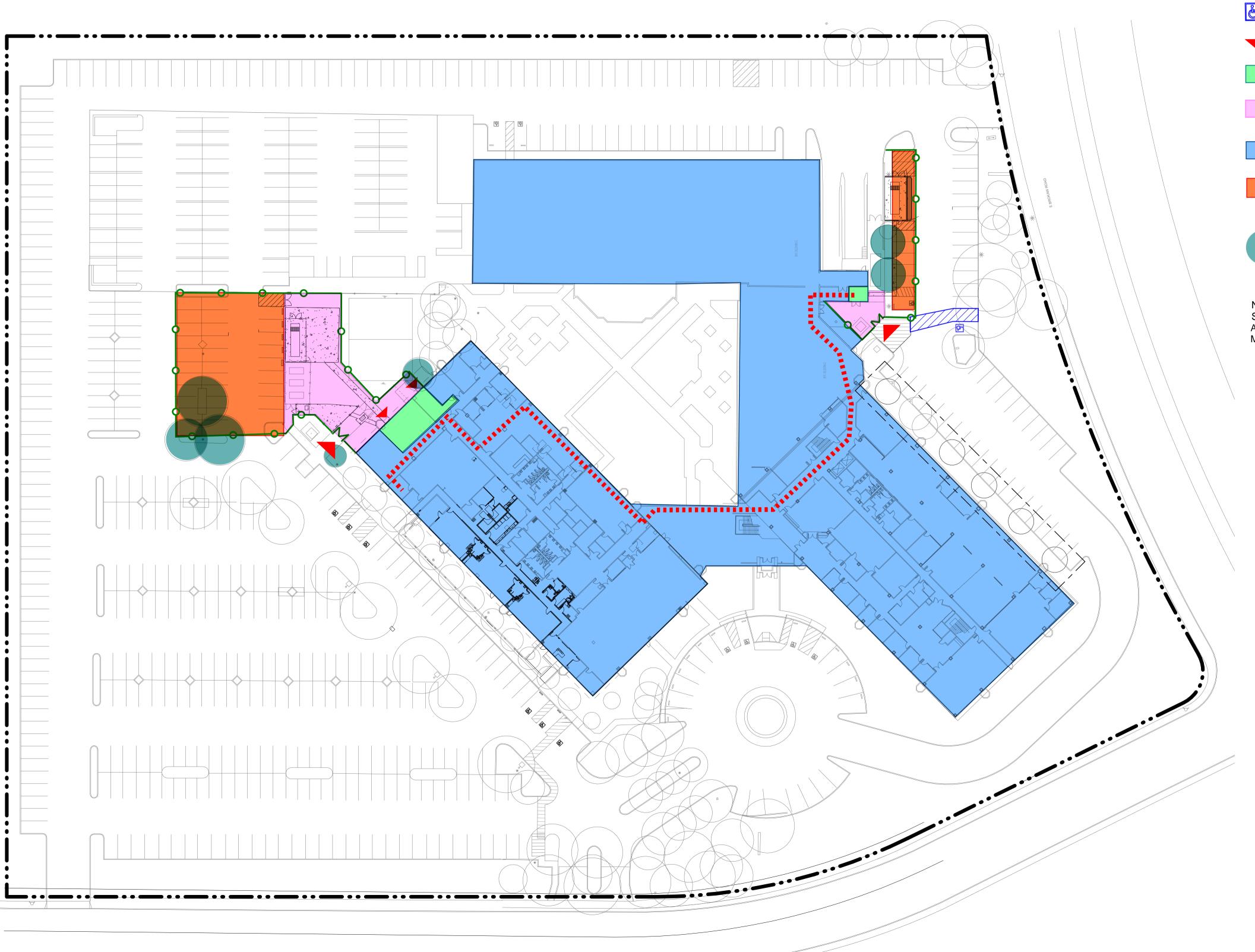
SWITCHBOARD **DETAILS BUILDING #1**

Architect Seal

File No. **Drawing No. Application No.** E-8 01/26/23 **Project Number**

01/11/2023

STAGING PLAN RIDDER PARK GENERATOR PROJECT



LEGEND

TEMPORARY CHAINLINK FENCE W/ SCREEN & PIPE CLAMPS

ACCESS AS REQUIRED. MUST COORDINATE WITH DISTRICT OPERATIONS.

TEMPORARY ADA PARKING AND STRIPPING

TEMPORARY ACCESS TO THE BUILDING/ SITE.

CONTRACTOR ACCESS INSIDE THE BUILDING

CONTRACTOR ACCESS ON SITE

NO CONTRACTOR ACCESS. COORDINATE WITH SCCOE ANY ACCESS TO THE BUILDING

CONTRACTOR LAYDOWN AREA. CONTRACTOR TO PROVIDE TRAILER AND UTILITIES. REPAIR ANY DAMAGED AREA, PLANTERS, PARKING, ETC RESTRIPE THE PARKING AFTER THE WORK IS COMPLETED.

CONTRACTOR TO PROTECT EXISITNG TREES PER SPECIFICATION 01 56 39 (NOT ALL TREES ARE MARKED)

NOTE: CONTRACTOR IS RESPONSIBLE FOR SECURING AND STORING THEIR OWN ALL CONSTRUCTION EQUIPMENT THROUGH ANY MEANS THEY SEE FIT