



# Office of General Services

DESIGN & CONSTRUCTION GROUP  
THE GOVERNOR NELSON A. ROCKEFELLER  
EMPIRE STATE PLAZA  
ALBANY, NY 12242

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## ADDENDUM NO. 02 TO PROJECT NO. 47331

### CONSTRUCTION WORK REHABILITATE THE EASTERN APPROACH STAIRCASE, PROMENADES, PORTICO, AND EXECUTIVE RAMP NEW YORK STATE CAPITOL ALBANY, NY

September 16, 2024

**NOTE:** This Addendum forms a part of the Contract Documents. Insert it in the Project Manual. Acknowledge receipt of this Addendum in the space provided on the Bid Form.

#### BIDDING REQUIREMENTS

1. DOCUMENT 001117 ADVERTISEMENT FOR BIDS - PROJECT LABOR AGREEMENT (PLA): REPLACE Paragraph 4 to Read:

“Pursuant to State Finance Law §§139-j and 139-k, this solicitation includes and imposes certain restrictions on communications between OGS D&C and a bidder during the procurement process. A bidder is restricted from making contacts from the earliest posting, on the OGS website, in a newspaper of general circulation, or in the Contract Reporter of written notice, advertisement or solicitation of offers through final award and approval of the contract by OGS D&C and the Office of the State Comptroller (“Restricted Period”) to other than designated staff unless it is a contact that is included among certain statutory exceptions set forth in State Finance Law §139-j (3)(a). Designated staff are Kimberly Belden, Catherine Skaczkowski, Jessica Hoffman, and Pierre Alric in the Division of Contract Management, telephone (518) 474-0203, fax (518) 473-7862, and KC Bianco ([kbianco@guthdeconzo.com](mailto:kbianco@guthdeconzo.com)) as an additional Designated Contact for the sole purpose of access to digital scan. OGS D&C employees are also required to obtain certain information when contacted during the restricted period and make a determination of the responsibility of the bidder pursuant to these two statutes. Certain findings of non-responsibility can result in rejection for contract award and in the event of two findings within a four-year period, the bidder is debarred from obtaining governmental Procurement Contracts. Bidders responding to this Advertisement must familiarize themselves with the State Finance Law requirements and will be expected to affirm that they understand and agree to comply on the bid form. Further information about these requirements can be found within the project manual or at: <https://ogs.ny.gov/ACPL/>”

2. DOCUMENT 002113 INSTRUCTIONS TO BIDDERS: Paragraph 3.1: Change Paragraph to Read:
  - “3.1. The designated contacts during the restricted period for this procurement will be:
    - Kimberly Belden, Contract Awards Unit, telephone – (518) 474-0203, fax – (518) 473-7862

- Catherine Skaczkowski, Contract Awards Unit, telephone – (518) 474-0203, fax – (518) 473-7862
- Jessica Hoffman, Assistant Director, Contract Management, telephone – (518) 474-0203
- Pierre Alric, Director, Contract Management, telephone – (518) 474-0201
- KC Bianco ([kbianco@guthdeconzo.com](mailto:kbianco@guthdeconzo.com)) for the sole purpose of access to digital scan.

**GENERAL REQUIREMENTS**

3. Page 011100 – 2, Subparagraph 1.04 A. 7: Add to Read:  
“JHA’s (Job Hazard Analysis) are to be completed daily, documenting all hazards and prevention of same for the scope of work being performed. CM will provide the JHA format for use by Contractor.”
4. SECTION 013591 HISTORIC TREATMENT PROCEDURES: Discard the Section bound in the Project Manual and substitute the accompanying Section (pages 013591 – 1 through 013591 – 8) noted “Revised 9/13/2024”.

**CONSTRUCTION WORK SPECIFICATIONS**

5. SECTION 260543 UNDERGROUND DUCTS AND RACEWAYS FOR ELECTRICAL SYSTEMS: Discard the Section bound in the Project Manual and substitute the accompanying Section (pages 260543 – 1 through 260543 – 6) noted “Revised 9/13/2024”.
6. SECTION 260544 SLEEVES AND SLEEVE SEALS FOR ELECTRICAL RACEWAYS AND CABLING: Add the accompanying Section (pages 260544 – 1 through 260544 – 4) to the Project Manual.
7. SECTION 260553 IDENTIFICATION FOR ELECTRICAL SYSTEMS: Add the accompanying Section (pages 260553 – 1 through 260553 – 13) to the Project Manual.

**APPENDIX**

8. SCHEDULE OF SUBMITTALS: Discard the Document bound in the Project Manual and use the accompanying Document (pages 1-18) noted REVISED 09/13/2024.
9. DIGITAL SCAN INSTRUCTIONS: Add the accompanying Document (page 1) to the Project Manual.

**DRAWINGS**

10. Revised Drawings:
  - a. Drawing Nos. E002, ED101-N-S, ED102, E100, E101-N-S, E102, and ET101-N-S, noted “REVISED DRAWING 9/13/2024” accompany this Addendum and supersede the same numbered originally issued drawings.
11. Addendum Drawing:
  - a. Drawing No. ET100 noted ADDENDUM DRAWING 9/13/2024 accompanies this Addendum and forms part of the Contract Documents.

**END OF ADDENDUM**

Brady M. Sherlock, P.E.  
Director, Division of Design  
Design & Construction

**SECTION 013591**  
**HISTORIC TREATMENT PROCEDURES**

**PART 1 GENERAL**

**1.01 SUMMARY**

- A. Section includes general protection and treatment procedures for designated historic spaces, areas, rooms, and surfaces in Project.

**1.02 RELATED WORK SPECIFIED ELSEWHERE**

- A. Photographic Documentation: Section 013233.
- B. Construction Facilities & Temporary Controls: Section 015000 for Fire-Prevention Plan.

**1.03 DEFINITIONS**

- A. Consolidate: To strengthen loose or deteriorated materials in place.
- B. Existing to Remain: Existing items that are not to be removed or salvaged, except to the degree indicated for performing required Work.
- C. Dismantle: To disassemble or detach a historic item from a surface, or a nonhistoric item from a historic surface, using gentle methods and equipment to prevent damage to historic items and surfaces; disposing of items unless indicated to be salvaged or reinstalled.
- D. Historic: Spaces, areas, rooms, surfaces, materials, finishes, and overall appearance that are important to the successful rehabilitation as determined by Director's Representative.
- E. Match: To blend with adjacent construction and manifest no apparent difference in material type, species, cut, form, detail, color, grain, texture, or finish; as approved by Director's Representative.
- F. Rebuild: To salvage and reinstall in place to match original coursing, color, jointing pattern or as otherwise indicated.
- G. Refinish: To remove existing finishes to base material and apply new finish to match original, or as otherwise indicated.
- H. Reinstall: To protect removed or salvaged item, repair and clean it as indicated for reuse, and reinstall it in original position, or where indicated.
- I. Remove: Detach items from existing construction and dispose of them off-site unless indicated to remain the Property of the State.

- J. Repair: To correct damage and defects, retaining existing materials, features, and finishes while employing as little new material as possible. This includes patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading materials.
- K. Replace: To remove, duplicate, and reinstall entire item with new material. The original item is the pattern for creating duplicates unless otherwise indicated.
- L. Replicate: To reproduce in exact detail, materials, and finish unless otherwise indicated.
- M. Reproduce: To fabricate a new item, accurate in detail to the original, and from either the same or a similar material as the original, unless otherwise indicated.
- N. Restore: To consolidate, replicate, reproduce, repair, and refinish as required to achieve the indicated results.
- O. Retain: To keep existing items that are not to be removed or salvaged.
- P. Reversible: New construction work, treatments, or processes that can be removed or undone in the future without damaging historic materials unless otherwise indicated.
- Q. Salvage: To disassemble or detach a historic item from a surface, or a non-historic item from a historic surface, using gentle methods and equipment to prevent damage to historic items and surfaces; protect salvaged items and deliver them to Director’s Representative.
- R. Salvage and Reinstall: Detach items from existing construction, in a manner to prevent damage, prepare for reuse, and reinstall where indicated.
- S. Stabilize: To provide structural reinforcement of unsafe or deteriorated items while maintaining the essential form as it exists at present; also, to reestablish a weather-resistant enclosure.
- T. Strip: To remove existing finish down to base material unless otherwise indicated.

**1.04 COORDINATION**

- A. Pedestrian and Vehicular Circulation: Coordinate historic treatment work with circulation patterns within Project building and site. Some work is near circulation patterns. Circulation patterns cannot be closed off entirely, and in places can be only temporarily redirected around small areas of work. Plan and execute the Work accordingly. All circulation modifications must be coordinated with Director’s Representative.

**1.05 PROJECT MEETINGS FOR HISTORIC TREATMENT**

- A. Preliminary Historic Treatment Conference: Before starting historic treatment work, conduct conference at Project site.
  - 1. Attendees: In addition to Director’s Representative, Architect, and Contractor, testing service representative, historic treatment specialists, chemical-cleaner manufacturer(s), and installers whose work interfaces with or affects historic treatment shall be represented at the meeting.

2. Agenda: Discuss items of significance that could affect progress of historic treatment work, including review of the following:
  - a. Discuss and finalize construction schedule; verify availability of materials, historic treatment specialists' personnel, equipment, and facilities needed to make progress and avoid delays.
  - b. Fire-prevention plan. Refer to Section 015000 "Construction Facilities & Temporary Controls."
  - c. Governing regulations.
  - d. Areas where existing construction is to remain and the required protection.
  - e. Hauling routes.
  - f. Sequence of historic treatment operations.
  - g. Storage, protection, and accounting for salvaged and specially-fabricated items.
  - h. Existing conditions, staging, and structural loading limitations of areas where materials are stored.
  - i. Qualifications of personnel assigned to historic treatment work and assigned duties.
  - j. Requirements for extent and quality of work, tolerances, and required clearances.
  - k. Methods and procedures related to historic treatments, including product manufacturers' written instructions and precautions regarding historic treatment procedures and their effects on materials, components, and vegetation.
  - l. Embedded work such as flashings and lintels, special details, collection of wastes, protection of occupants and the public, and condition of other construction that affect the Work or will affect the work.
  
3. Reporting: Record conference results and distribute copies to everyone in attendance and to others affected by decisions or actions resulting from conference.

**1.06 MATERIALS OWNERSHIP**

- A. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, antiques, and other items of interest or value to the State that may be encountered or uncovered during the Work, regardless of whether they were previously documented, remain State property.
  1. Carefully salvage each item or object, and protect it from damage, then promptly deliver it to the State where directed.
  2. Coordinate with Director's Representative who will establish special procedures for salvaging.

**1.07 ACTION SUBMITTALS**

- A. Historic Treatment Program: Submit 30 days before work begins.

**1.08 INFORMATIONAL SUBMITTALS**

- A. Preconstruction Documentation: Provide photographs, keyed to plans, that show preexisting conditions of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by Contractor's historic treatment operations. Refer to Section 013233 "Photographic Documentation" for requirements.
- B. Submit documentation of Title X "Lead-Safe Certified Firm" status.

**1.09 QUALITY ASSURANCE**

- A. Historic Treatment Specialist Qualifications: Work must be performed by a Contractor having not less than five years of successful experience in comparable historic work on at least three buildings listed or eligible to be listed in the National Register of Historic Places under the review of federal and/or state historic preservation agencies in the last five years, and employing personnel skilled in the restoration processes and operations indicated.
  - 1. Field Supervisor Qualifications: Full-time supervisor experienced in historic treatment work similar in nature, material, design, and extent to that indicated for this Project on Project site during times that historic work is in progress. Supervisors shall not be changed during Project without written notice to Director's Representative and acceptance of change by Director's Representative.
    - a. Construct new mockups of required work whenever a supervisor is replaced.
- B. Title X Requirement: Each firm conducting activities that disturb painted surfaces shall be a "Lead-Safe Certified Firm" according to 40 CFR 745, Subpart E, and use only workers that are trained in lead-safe work practices.
- C. "Historic Treatment Program" Paragraph below pertains to entire Project. Historic treatment programs for specific items of work are specified in Sections for those work items. Historic Treatment Program: Prepare a written plan for historic treatment for whole Project, including each phase or process and protection of surrounding materials during operations. Describe in detail the materials, methods, and equipment to be used for each phase of work. Show compliance with indicated methods and procedures specified in this and other Sections. Coordinate this whole-Project historic treatment program with specific requirements of programs required in other historic treatment Sections.
  - 1. Dust and Noise Control: Include locations of proposed temporary dust- and noise-control partitions and means of egress from occupied areas coordinated with continuing on-site operations and other known work in progress.
  - 2. Debris Hauling: Include plans clearly marked to show debris hauling routes, turning radii, and locations and details of temporary protective barriers.
  - 3. Refer to Section 015000 "Construction Facilities & Temporary Controls" for temporary protection requirements.

**1.10 SAFETY AND HEALTH STANDARD: ANSI/ASSP A10.6. STORAGE AND HANDLING OF HISTORIC MATERIALS**

- A. Identification: Photograph, tag, and catalog historic items to be salvaged.
  - 1. Identify each item with a non-permanent location identification tag indicating item name or use, location, and location identification number to document its original location. Indicate original locations on plans, elevations, sections, or photographs by annotating and identifying tag.
    - a. For groups of material, such as brick, provide location identification tag for pallet or container. Do not tag individually.
  - 2. Refer to Section 013233 “Photographic Documentation” for general photography requirements.
- B. Salvaged Historic Materials:
  - 1. Clean loose dirt and debris from salvaged historic items.
  - 2. Pack or crate items after cleaning; cushion against damage during handling. Label contents of containers.
  - 3. Store items in a secure area until delivery to the State.
  - 4. Transport items to storage space.
  - 5. Protect items from damage during transport and storage.
- C. Historic Materials for Reinstallation:
  - 1. Repair and clean historic items for reuse as indicated.
  - 2. Pack or crate items after cleaning and repairing; cushion against damage during handling. Label contents of containers.
  - 3. Protect items from damage during transport and storage.
  - 4. Reinstall items in locations indicated on Drawings. Comply with installation requirements as specified. Provide connections, supports, and miscellaneous materials to make items functional for use indicated.
- D. Existing Historic Materials to Remain: Protect construction indicated to remain against damage and soiling from construction work. Where permitted by Director’s Representative, items may be salvaged and taken to a suitable, protected storage location during construction work and reinstalled in their original locations after historic treatment and construction work in the vicinity is complete.
- E. Storage: Store historic items within a weathertight enclosure where they are protected from moisture, weather, condensation, and freezing temperatures.
  - 1. Secure stored materials to protect from theft.
- F. Storage Space:

1. Director's Representative will arrange for limited on-site location(s) for free storage of historic material. This storage space does not include security and climate control for stored material.
2. Arrange for off-site locations for storage and protection of historic material that cannot be stored and protected on-site.

## **PART 2 PRODUCTS (Not Used)**

## **PART 3 EXECUTION**

### **3.01 PROTECTION**

- A. Protect persons, motor vehicles, surrounding surfaces of building, building site, plants, and surrounding buildings from harm resulting from historic treatment procedures. Refer to Section 015000 "Construction Facilities & Temporary Controls" for temporary fencing, barriers, and other construction facility requirements.
  1. Use only proven protection methods, appropriate to each area and surface being protected.
  2. Provide temporary barricades, barriers, and directional signage to exclude the public from areas where historic treatment work is being performed.
  3. Erect temporary barriers to form and maintain fire-egress routes.
  4. Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that must remain in service during historic treatment work.
  5. Contain dust and debris generated by historic treatment work, and prevent it from reaching the public or adjacent interior surfaces.
  6. Provide shoring, bracing, and supports as necessary. Do not overload structural elements.
  7. Protect floors and other surfaces along hauling routes from damage, wear, and staining.
- B. Temporary Protection of Historic Materials:
  1. Protect existing historic materials with temporary protections and construction. Do not remove existing materials unless otherwise indicated.
  2. Do not attach temporary protection to historic surfaces except as indicated as part of the historic treatment program and approved by Director's Representative.
- C. Comply with each product manufacturer's written instructions for protections and precautions.
- D. Utility and Communications Services:
  1. Notify Director's Representative, authorities having jurisdiction, and entities owning or controlling wires, conduits, pipes, and other services affected by historic treatment work before commencing operations.

2. Disconnect and cap pipes and services as required by authorities having jurisdiction, as required for historic treatment work.
  3. Maintain existing services unless otherwise indicated; keep in service, and protect against damage during operations. Provide temporary services during interruptions to existing utilities.
- E. Existing Drains: Prior to the start of work in an area, test drainage system to ensure that it is functioning properly. Notify Director's Representative immediately of inadequate drainage or blockage. Do not begin work in an area until the drainage system is functioning properly.
1. Prevent solids such as stone or mortar residue or other debris from entering the drainage system. Clean out drains and drain lines that become sluggish or blocked by sand or other materials resulting from historic treatment work.
  2. Protect drains from pollutants. Block drains or filter out sediments, allowing only clean water to pass.

### **3.02 GENERAL HISTORIC TREATMENT**

- A. Have historic treatment work performed only by qualified historic treatment specialists.
- B. Ensure that supervisory personnel are present when historic treatment work begins and during its progress.
- C. Record existing work before each procedure (preconstruction), and record progress during the work. Use digital preconstruction documentation photographs. Comply with requirements in Section 013233 "Photographic Documentation."
- D. Perform daily inspections of Project site as the Work progresses to detect hazards resulting from historic treatment procedures.
- E. Follow the procedures in subparagraphs below and procedures approved in historic treatment program unless otherwise indicated:
  1. Retain as much existing material as feasible; repair and consolidate rather than replace.
  2. Use additional material or structure to reinforce, strengthen, prop, tie, and support existing material or structure.
  3. Use reversible processes wherever possible.
  4. Use historically accurate repair and replacement materials and techniques unless otherwise indicated.
- F. Notify Director's Representative of visible changes in the integrity of material or components whether from environmental causes including biological attack, UV degradation, freezing, or thawing or from structural defects including cracks, movement, or distortion.
  1. Do not proceed with the work in question until directed by Director's Representative.

- G. Where missing features are indicated to be repaired or replaced, provide work with appearance based on accurate duplications rather than on conjecture, subject to approval of Director's Representative.
- H. Where work requires existing features to be removed or salvaged and reinstalled, perform these operations without damage to the material itself, to adjacent materials, or to the substrate.

**END OF SECTION**

## SECTION 260543

### UNDERGROUND DUCTS AND RACEWAYS FOR ELECTRICAL SYSTEMS

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Metal conduits and fittings, including GRC and PVC-coated steel conduit.
  - 2. Polymer concrete handholes and boxes with polymer concrete cover.

##### 1.2 DEFINITIONS

- A. Direct Buried: Duct or a duct bank that is buried in the ground, without any additional casing materials such as concrete.
- B. Duct: A single duct or multiple ducts. Duct may be either installed singly or as component of a duct bank.
- C. Duct Bank:
  - 1. Two or more ducts installed in parallel, with or without additional casing materials.
  - 2. Multiple duct banks.
- D. GRC: Galvanized rigid (steel) conduit.
- E. Trafficways: Locations where vehicular or pedestrian traffic is a normal course of events.

##### 1.3 ACTION SUBMITTALS

- A. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
- B. Manufacturer's installation instructions shall be provided along with product data.
- C. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
- D. Product Data: For each type of product.
  - 1. Include accessories for handholes.
  - 2. Include underground-line warning tape.
  - 3. Include warning planks.

- E. Submit an Environmental Product Declaration (EPD) from the manufacturer for steel conduit and precast handholes and boxes within this specification section, if available. A statement of the contractor's good faith effort to obtain the EPD shall be provided if not available.
  - 1. Manufacturer-provided EPDs must be Product Specific Type III (Third-Party Reviewed), in adherence with ISO 14025 *Environmental labels and declarations*, ISO 14044 *Environmental management – Life cycle assessment*, and ISO 21930 *Core rules for environmental product declarations of construction products and services*.
- F. Shop Drawings:
  - 1. Factory-Fabricated Handholes and Boxes Other Than Precast Concrete:
    - a. Include dimensioned plans, sections, and elevations, and fabrication and installation details.
    - b. Include entry provisions, including locations and duct sizes.
    - c. Include cover design.
    - d. Include grounding details.
- G. Source quality-control reports.
- H. Field quality-control reports.

#### **1.4 MAINTENANCE MATERIALS SUBMITTALS**

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

#### **1.5 QUALITY ASSURANCE**

- A. Qualifications of Supervisor: The person supervising the Work of this Section shall be personally experienced in this type of Work and shall have been regularly employed by a company engaged in underground pipe or conduit cleaning for a minimum of 2 years.
  - 1. Furnish to the Director's Representative the names and addresses of 3 similar projects which the supervisor has worked on.

#### **1.6 FIELD CONDITIONS**

- A. Ground Water: Assume ground-water level is 36 inches (900 mm) below ground surface unless a higher water table is noted on Drawings.

**PART 2 - PRODUCTS****2.1 METAL CONDUIT AND FITTINGS**

- A. Coated Steel Conduit: PVC-coated GRC.
  - 1. Comply with NEMA RN 1.
  - 2. Coating Thickness: 0.040 inch (1 mm), minimum.
- B. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  - 1. Atkore International (Allied Tube & Conduit).
  - 2. Western Tube and Conduit Corporation.
  - 3. Wheatland Tube Company.
- C. Listed and labeled as defined in NFPA 70, by a nationally recognized testing laboratory, and marked for intended location and application.

**2.2 POLYMER CONCRETE HANDHOLES AND BOXES WITH POLYMER CONCRETE COVER**

- A. Description: Molded of sand and aggregate, bound together with a polymer resin, and reinforced with steel or fiberglass or a combination of the two. Heavy traffic rated AASHTO H20
- B. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  - 1. Quazite; Hubbell Power Systems.
  - 2. Armorcast.
  - 3. Oldcastle Precast.
- C. Standard: Comply with SCTE 77. Comply with tier requirements in "Underground Enclosure Application" Article.
- D. Configuration: Units shall be designed for flush burial and have open bottom unless otherwise indicated.
- E. Cover: Weatherproof, secured by tamper-resistant locking devices and having structural load rating consistent with enclosure. Paragraph below refers to custom bronze cover.
- F. Cover Legend: Molded lettering, "ELECTRIC."

## **PART 3 - EXECUTION**

### **3.1 PREPARATION**

- A. Coordinate layout and installation of handholes with final arrangement of other utilities, site grading, and surface features as determined in the field. Notify Architect if there is a conflict between areas of excavation and existing structures or archaeological sites to remain.
- B. Coordinate finished elevations of handholes to recess for a decorative bronze cover set flush with driveway. Revise locations and elevations as required to suit field conditions and to ensure that conduits will drain to manholes and handholes, and as approved by Architect.

### **3.2 EARTHWORK**

- A. Restoration: Replace area immediately after backfilling is completed or after construction vehicle traffic in immediate area is complete.
- B. Restore surface features at areas disturbed by excavation and re-establish original grades unless otherwise indicated. Replace removed sod immediately after backfilling is completed.
- C. Restore areas disturbed by trenching, storing of dirt, cable laying, and other work. Restore vegetation and include necessary topsoiling, fertilizing, liming, seeding, sodding, sprigging, and mulching.

### **3.3 PVC-COATED STEEL CONDUIT INSTALLATION**

- A. Slope: Pitch conduit a minimum slope of 1:300 down toward handholes and away from buildings and equipment.
- B. Curves and Bends: Use 5-degree angle couplings for small changes in direction. Use manufactured long sweep bends with a minimum radius of 9D, both horizontally and vertically, at other locations unless otherwise indicated.
  - 1. Duct shall have maximum of two 90 degree bends or the total of all bends shall be no more 180 degrees between pull points.
- C. Building Wall Penetrations: Install conduit penetrations of building walls as specified in Section 260544 "Sleeves and Sleeve Seals for Electrical Raceways and Cabling."
- D. Sealing: Provide closure at terminations of conduit with pulled cables. Use sealing compound and plugs to withstand at least 15-psig (1.03-MPa) hydrostatic pressure.
- E. Pulling Cord: Install 200-lbf- (1000-N-) test nylon cord in empty ducts.
- F. Direct-Buried Conduit:

1. Excavate trench bottom to provide firm and uniform support for duct. Comply with requirements in Sections 310000 "Earthwork" and 312000 "Earthwork" for preparation of trench bottoms for pipes less than 6 inches (150 mm) in nominal diameter.
  2. Width: Excavate trench 12 inches (300 mm) wider than conduit on each side.
  3. Depth: Install top of duct at least 36 inches (900 mm) below finished grade unless otherwise indicated.
  4. Install conduit with a minimum of 3 inches (75 mm) between conduits for like services and 6 inches (150 mm) between power and communications conduits.
- G. Warning Planks: Bury warning planks approximately 12 inches (300 mm) above buried conduit under paved areas, placing them 24 inches (600 mm) o.c. Align planks along the width and along the centerline of duct or duct bank. Provide an additional plank for each 12-inch (300-mm) increment of duct-bank width over a nominal 18 inches (450 mm). Space additional planks 12 inches (300 mm) apart, horizontally.
- H. Underground-Line Warning Tape: Bury conducting underground line specified in Section 260553 "Identification for Electrical Systems" no less than 12 inches (300 mm) above all conduits and approximately 12 inches (300 mm) below grade. Align tape parallel to and within 3 inches (75 mm) of centerline of conduit bank. Provide an additional warning tape for each 12-inch (300-mm) increment of duct-bank width over a nominal 18 inches (450 mm). Space additional tapes 12 inches (300 mm) apart, horizontally.

### 3.4 INSTALLATION OF HANDHOLES

- A. Install handholes level and plumb and with orientation and depth coordinated with connecting duct, to minimize bends and deflections required for proper entrances. Use box extension if required to match depths of duct, and seal joint between box and extension as recommended by manufacturer.
- B. Unless otherwise indicated, support units on a level bed of crushed stone or gravel, graded from 1/2-inch (12.5-mm) sieve to No. 4 (4.75-mm) sieve and compacted to same density as adjacent undisturbed earth.
- C. Elevation: In paved areas and trafficways, set cover flush or recessed when noted with finished grade.
- D. For enclosures installed in asphalt paving and subject to occasional, nondeliberate, heavy-vehicle loading, form and pour a concrete ring encircling, and in contact with, enclosure and with top surface screeded to top of box cover frame. Bottom of ring shall rest on compacted earth.
1. Concrete: 3000 psi (20 kPa), 28-day strength., complying with Section 033000 "Cast-in-Place Concrete," with a troweled finish.
  2. Dimensions: 10 inches wide by 12 inches deep (250 mm wide by 300 mm deep) or as required by manufacturer's instructions for traffic rating.
- E. Provide water-tight units when within 12" of the ground water.

3.5 FIELD QUALITY CONTROL

- A. Perform the following tests and inspections:
  - 1. Pull solid aluminum or wood test mandrel through conduits to prove joint integrity and adequate bend radii, and test for out-of-round duct. Provide a minimum 12-inch- (300-mm-) long mandrel equal to duct size minus 1/4 inch (6 mm). If obstructions are indicated, remove obstructions and retest.
- B. Correct deficiencies and retest as specified above to demonstrate compliance.
- C. Prepare test and inspection reports.

3.6 CLEANING

- A. Pull leather-washer-type duct cleaner, with graduated washer sizes, through full length of conduits until conduit cleaner indicates that conduit is clear of dirt and debris. Follow with rubber swab for final cleaning.

**END OF SECTION**

## SECTION 260544

### SLEEVES AND SLEEVE SEALS FOR ELECTRICAL RACEWAYS AND CABLING

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Round sleeves.
  - 2. Rectangular sleeves.
  - 3. Sleeve seal systems.
  - 4. Grout.
  - 5. Pourable sealants.
  - 6. Foam sealants

##### 1.2 SUBMITTALS

- A. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
- B. Manufacturer's installation instructions shall be provided along with product data.
- C. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
- D. Product Data: For each type of product.
- E. Submit an Environmental Product Declaration (EPD) from the manufacturer for steel pipe sleeves within this specification section, if available. A statement of the contractor's good faith effort to obtain the EPD shall be provided if not available.
  - 1. Manufacturer-provided EPDs must be Product Specific Type III (Third-Party Reviewed), in adherence with ISO 14025 *Environmental labels and declarations*, ISO 14044 *Environmental management – Life cycle assessment*, and ISO 21930 *Core rules for environmental product declarations of construction products and services*.

#### PART 2 - PRODUCTS

##### 2.1 ROUND SLEEVES

- A. Wall Sleeves, Steel:
  - 1. Description: ASTM A53/A53M, Type E, Grade B, Schedule 40, zinc coated, plain ends and integral waterstop.

- B. Wall Sleeves, Cast Iron:
  - 1. Description: Cast or fabricated "wall pipe," equivalent to ductile-iron pressure pipe, with plain ends and integral waterstop.
- C. Pipe Sleeves, PVC:
  - 1. Description: ASTM D1785, Schedule 40.
- D. Molded Sleeves, PVC:
  - 1. Description: With nailing flange for attaching to wooden forms.

## 2.2 RECTANGULAR SLEEVES

- A. Sheet Metal Sleeves, Galvanized Steel, Rectangular:
  - 1. Description:
    - a. Material: Galvanized sheet steel.
    - b. Minimum Metal Thickness:
      - 1) For sleeve cross-section rectangle perimeter less than 50 inches (1270 mm) and with no side larger than 16 inches (400 mm), thickness must be 0.052 inch (1.3 mm).
      - 2) For sleeve cross-section rectangle perimeter not less than 50 inches (1270 mm) or with one or more sides larger than 16 inches (400 mm), thickness must be 0.138 inch (3.5 mm).

## 2.3 SLEEVE SEAL SYSTEMS

- A. Description: Modular sealing device, designed for field assembly, to fill annular space between sleeve and raceway or cable or between raceway and cable.
  - 1. Sealing Elements: EPDM rubber interlocking links shaped to fit surface of pipe. Include type and number required for pipe material and size of pipe.
  - 2. Pressure Plates: Fiber-reinforced plastic, Stainless steel.
  - 3. Connecting Bolts and Nuts: Stainless steel of length required to secure pressure plates to sealing elements.

## 2.4 GROUT

- A. Description: Nonshrink; recommended for interior and exterior sealing openings in non-fire-rated walls or floors.
  - 1. Standard: ASTM C1107/C1107M, Grade B, post-hardening and volume-adjusting, dry, hydraulic-cement grout.
  - 2. Design Mix: 5000-psi (34.5-MPa), 28-day compressive strength.

3. Packaging: Premixed and factory packaged.

## **2.5 POURABLE SEALANTS**

- A. Description: Single-component, neutral-curing elastomeric sealants of grade indicated below.
  1. Grade: Pourable (self-leveling) formulation for openings in floors and other horizontal surfaces that are not fire rated.

## **2.6 FOAM SEALANTS**

- A. Description: Multicomponent, liquid elastomers that, when mixed, expand and cure in place to produce a flexible, nonshrinking foam. Foam expansion must not damage cables or crack penetrated structure.

## **PART 3 - EXECUTION**

### **3.1 INSTALLATION OF SLEEVES FOR NON-FIRE-RATED ELECTRICAL PENETRATIONS**

- A. Comply with NECA 1.
- B. Sleeves for Conduits Penetrating Above-Grade, Non-Fire-Rated, Concrete and Masonry-Unit Floors and Walls:
  1. Interior Penetrations of Non-Fire-Rated Walls and Floors:
    - a. Seal space outside of sleeves with mortar or grout. Pack sealing material solidly between sleeve and wall or floor so no voids remain. Tool exposed surfaces smooth; protect material while curing.
    - b. Seal annular space between sleeve and raceway or cable, using joint sealant appropriate for size, depth, and location of joint. Comply with requirements in Section 079200 "Joint Sealants."
  2. Use pipe sleeves unless penetration arrangement requires rectangular sleeved opening.
  3. Size pipe sleeves to provide 1/4-inch (6.4-mm) annular clear space between sleeve and raceway or cable, unless sleeve seal system is to be installed.
  4. Install sleeves for wall penetrations unless core-drilled holes or formed openings are used. Install sleeves during erection of walls. Cut sleeves to length for mounting flush with both surfaces of walls. Deburr after cutting.
- C. Sleeves for Conduits Penetrating Non-Fire-Rated Wall Assemblies:
  1. Use circular metal sleeves unless penetration arrangement requires rectangular sleeved opening.
  2. Seal space outside of sleeves with approved joint compound for wall assemblies.

- D. Roof-Penetration Sleeves: Seal penetration of individual raceways and cables with flexible boot-type flashing units applied in coordination with roofing work.
- E. Aboveground, Exterior-Wall Penetrations: Seal penetrations using [**steel**] [**cast-iron**] pipe sleeves and mechanical sleeve seal systems. Size sleeves to allow for 1-inch (25-mm) annular clear space between pipe and sleeve for installing mechanical sleeve seals.
- F. Underground, Exterior-Wall and Floor Penetrations:
  - 1. Install **cast-iron** pipe sleeves with integral waterstops. Size sleeves to allow for 1-inch (25-mm) annular clear space between raceway or cable and sleeve for installing sleeve seal system. Install sleeve during construction of floor or wall.
  - 2. Install steel pipe sleeves. Size sleeves to allow for 1-inch (25-mm) annular clear space between raceway or cable and sleeve for installing sleeve seal system. Grout sleeve into wall or floor opening.

### **3.2 INSTALLATION OF RECTANGULAR SLEEVES AND SLEEVE SEALS**

- A. Install sleeves in existing walls without compromising structural integrity of walls. Do not cut structural elements without reinforcing the wall to maintain the designed weight bearing and wall stiffness.
- B. Install conduits and cable with no crossings within the sleeve.
- C. Fill opening around conduits and cables with expanding foam without leaving voids.
- D. Provide metal sheet covering at both wall surfaces and finish to match surrounding surfaces. Metal sheet must be same material as sleeve.

### **3.3 INSTALLATION OF SLEEVE SEAL SYSTEMS**

- A. Install sleeve seal systems in sleeves in exterior concrete walls and slabs-on-grade at raceway entries into building.
- B. Install type and number of sealing elements recommended by manufacturer for raceway or cable material and size. Position raceway or cable in center of sleeve. Assemble mechanical sleeve seals and install in annular space between raceway or cable and sleeve. Tighten bolts against pressure plates that cause sealing elements to expand and make watertight seal.

**END OF SECTION**

## SECTION 260553

### IDENTIFICATION FOR ELECTRICAL SYSTEMS

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Labels.
  - 2. Bands and tubes.
  - 3. Tapes and stencils.
  - 4. Tags.
  - 5. Signs.
  - 6. Cable ties.
  - 7. Miscellaneous identification products.

##### 1.2 SUBMITTALS

- A. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
- B. Manufacturer's installation instructions shall be provided along with product data.
- C. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
- D. Product Data: For each type of product.
  - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for electrical identification products.
- E. Identification Schedule: For each piece of electrical equipment and electrical system components to be an index of nomenclature for electrical equipment and system components used in identification signs and labels. Use same designations indicated on Drawings.
- F. Delegated-Design Submittal: For arc-flash hazard study.
- G. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.

#### PART 2 - PRODUCTS

##### 2.1 PERFORMANCE REQUIREMENTS

- A. Comply with ASME A13.1 and IEEE C2.

- B. Comply with NFPA 70.
- C. Comply with 29 CFR 1910.144 and 29 CFR 1910.145.
- D. Comply with ANSI Z535.4 for safety signs and labels.
- E. Adhesive-attached labeling materials, including label stocks, laminating adhesives, and inks used by label printers, shall comply with UL 969.
- F. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes.
  - 1. Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces.

## **2.2 COLOR AND LEGEND REQUIREMENTS**

- A. Raceways and Cables Carrying Circuits at 600 V or Less:
  - 1. Black letters on an orange field.
  - 2. Legend: Indicate voltage and system or service type.
- B. Color-Coding for Phase- and Voltage-Level Identification, 600 V or Less: Use colors listed below for ungrounded feeder and branch-circuit conductors.
  - 1. Color shall be factory applied or field applied for sizes larger than No. 8 AWG if authorities having jurisdiction permit.
  - 2. Colors for 208/120-V Circuits:
    - a. Phase A: Black.
    - b. Phase B: Red.
    - c. Phase C: Blue.
  - 3. Color for Neutral: White.
  - 4. Color for Equipment Grounds: Green.
  - 5. Colors for Isolated Grounds: Green with two or more yellow stripes.
- C. Warning Label Colors:
  - 1. Identify system voltage with black letters on an orange background.
- D. Warning labels and signs shall include, but are not limited to, the following legends:
  - 1. Multiple Power Source Warning: "DANGER - ELECTRICAL SHOCK HAZARD - EQUIPMENT HAS MULTIPLE POWER SOURCES."
  - 2. Workspace Clearance Warning: "WARNING - OSHA REGULATION - AREA IN FRONT OF ELECTRICAL EQUIPMENT MUST BE KEPT CLEAR FOR 36 INCHES."
- E. Equipment Identification Labels:
  - 1. Black letters on a white field.

F. Nameplates:

1. General: Precision engrave letters and numbers with uniform margins, character size minimum 3/16 inch high.
  - a. Phenolic: Two color laminated engravers stock, 1/16 inch minimum thickness, machine engraved to expose inner core color (white).
  - b. Aluminum: Standard aluminum alloy plate stock, minimum .032 inches thick, engraved areas enamel filled or background enameled with natural aluminum engraved characters.
  - c. Materials for Outdoor Applications: As recommended by nameplate manufacturer to suit environmental conditions.

## 2.3 LABELS

A. Vinyl Wraparound Labels: Preprinted, flexible labels laminated with a clear, weather- and chemical-resistant coating and matching wraparound clear adhesive tape for securing label ends.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  - a. Brady Corporation.
  - b. Panduit Corp.
  - c. Seton Identification Products; a Brady Corporation company.

B. Snap-around Labels: Slit, pretensioned, flexible, preprinted, color-coded acrylic sleeves, with diameters sized to suit diameters and that stay in place by gripping action.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  - a. Brady Corporation.
  - b. Panduit Corp.
  - c. Seton Identification Products; a Brady Corporation company.

C. Self-Adhesive Wraparound Labels: Preprinted, 3-mil- thick, polyester or vinyl flexible label with acrylic pressure-sensitive adhesive.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  - a. Brady Corporation.
  - b. Ideal Industries, Inc.
  - c. Thomas & Betts Corp.
2. Self-Lamination: Clear; UV-, weather- and chemical-resistant; self-laminating, protective shield over the legend. Labels sized such that the clear shield overlaps the entire printed legend.

3. Marker for Labels:
  - a. Machine-printed, permanent, waterproof, black ink recommended by printer manufacturer.
- D. Self-Adhesive Labels: Polyester or Vinyl, thermal, transfer-printed, 3-mil- thick, multicolor, weather- and UV-resistant, pressure-sensitive adhesive labels, configured for intended use and location.
  1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
    - a. Brady Corporation.
    - b. Ideal Industries, Inc.
    - c. Thomas & Betts Corp.
  2. Minimum Nominal Size:
    - a. 1-1/2 by 6 inches for raceway and conductors.
    - b. 3-1/2 by 5 inches for equipment.
    - c. As required by authorities having jurisdiction.

## 2.4 BANDS AND TUBES

- A. Snap-around, Color-Coding Bands: Slit, pretensioned, flexible, solid-colored acrylic sleeves, 2 inches long, with diameters sized to suit diameters and that stay in place by gripping action.
  1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
    - a. Brady Corporation.
    - b. HellermannTyton.
    - c. Panduit Corp.
- B. Heat-Shrink Preprinted Tubes: Flame-retardant polyolefin tubes with machine-printed identification labels, sized to suit diameter and shrunk to fit firmly. Full shrink recovery occurs at a maximum of 200 deg F. Comply with UL 224.
  1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
    - a. 3M.
    - b. Brady Corporation.
    - c. Panduit Corp.

## 2.5 TAPES AND STENCILS

- A. Marker Tapes: Vinyl or vinyl-cloth, self-adhesive wraparound type, with circuit identification legend machine printed by thermal transfer or equivalent process.
1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
    - a. HellermannTyton.
    - b. Ideal Industries, Inc.
    - c. Panduit Corp.
- B. Self-Adhesive Vinyl Tape: Colored, heavy duty, waterproof, fade resistant; not less than 3 mils thick by 1 to 2 inches wide; compounded for outdoor use.
1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
    - a. Brady Corporation.
    - b. Carlton Industries, LP.
    - c. emedco.
- C. Tape and Stencil: 4-inch- wide black stripes on 10-inch centers placed diagonally over orange background and are 12 inches wide. Stop stripes at legends.
1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
    - a. Brimar Industries, Inc.
    - b. HellermannTyton.
    - c. Seton Identification Products; a Brady Corporation company.
- D. Underground-Line Warning Tape:
1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
    - a. Brady Corporation.
    - b. Ideal Industries, Inc.
    - c. Seton Identification Products; a Brady Corporation company.
  2. Tape:
    - a. Recommended by manufacturer for the method of installation and suitable to identify and locate underground electrical and communications lines.
    - b. Printing on tape shall be permanent and shall not be damaged by burial operations.
    - c. Tape material and ink shall be chemically inert and not subject to degradation when exposed to acids, alkalis, and other destructive substances commonly found in soils.

3. Color and Printing:
  - a. Comply with ANSI Z535.1, ANSI Z535.2, ANSI Z535.3, ANSI Z535.4, and ANSI Z535.5.
  - b. Inscriptions for Red-Colored Tapes: "ELECTRIC LINE, HIGH VOLTAGE"
  - c. Inscriptions for Orange-Colored Tapes: "TELEPHONE CABLE, CATV CABLE, COMMUNICATIONS CABLE, OPTICAL FIBER CABLE".
- E. Stenciled Legend: In nonfading, waterproof, black ink or paint. Minimum letter height shall be 1 inch.

## 2.6 TAGS

- A. Metal Tags: Brass or aluminum, 2 by 2 by 0.05 inch, with stamped legend, punched for use with self-locking cable tie fastener.
  1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
    - a. Brady Corporation.
    - b. Carlton Industries, LP.
    - c. Seton Identification Products; a Brady Corporation company.
- B. Nonmetallic Preprinted Tags: Polyethylene tags, 0.023 inch thick, color-coded for phase and voltage level, with factory printed permanent designations; punched for use with self-locking cable tie fastener.
  1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
    - a. Brady Corporation.
    - b. Panduit Corp.
    - c. Seton Identification Products; a Brady Corporation company.
- C. Write-on Tags:
  1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
    - a. Brimar Industries, Inc.
    - b. Carlton Industries, LP.
    - c. Seton Identification Products; a Brady Corporation company.
  2. Polyester Tags: 0.015 inch thick, with corrosion-resistant grommet and cable tie for attachment.
  3. Marker for Tags:
    - a. Permanent, waterproof, black ink marker recommended by tag manufacturer.

- b. Machine-printed, permanent, waterproof, black ink marker recommended by printer manufacturer.

## 2.7 SIGNS

### A. Baked-Enamel Signs:

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  - a. Carlton Industries, LP.
  - b. Champion America.
  - c. Marking Services, Inc.
2. Preprinted aluminum signs, high-intensity reflective, punched or drilled for fasteners, with colors, legend, and size required for application.
3. 1/4-inch grommets in corners for mounting.
4. Nominal Size: 7 by 10 inches.

### B. Metal-Backed Butyrate Signs:

1. Weather-resistant, nonfading, preprinted, cellulose-acetate butyrate signs, with 0.0396-inch galvanized-steel backing, punched and drilled for fasteners, and with colors, legend, and size required for application.
2. 1/4-inch grommets in corners for mounting.
3. Nominal Size: 10 by 14 inches.

### C. Laminated Acrylic or Melamine Plastic Signs:

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  - a. Brady Corporation.
  - b. Carlton Industries, LP.
  - c. Marking Services, Inc.
2. Engraved legend.
3. Thickness:
  - a. For signs up to 20 sq. in., minimum 1/16 inch thick.
  - b. For signs larger than 20 sq. in., 1/8 inch thick.
  - c. Engraved legend with black letters on white face.
  - d. Self-adhesive.
  - e. Framed with mitered acrylic molding and arranged for attachment at applicable equipment.

## **2.8 CABLE TIES**

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
  - 1. HellermannTyton.
  - 2. Ideal Industries, Inc.
  - 3. Panduit Corp.
  
- B. General-Purpose Cable Ties: Fungus inert, self-extinguishing, one piece, self-locking, and Type 6/6 nylon.
  - 1. Minimum Width: 3/16 inch.
  - 2. Tensile Strength at 73 Deg F according to ASTM D638: 12,000 psi.
  - 3. Temperature Range: Minus 40 to plus 185 deg F.
  - 4. Color: Black, except where used for color-coding.
  
- C. UV-Stabilized Cable Ties: Fungus inert, designed for continuous exposure to exterior sunlight, self-extinguishing, one piece, self-locking, and Type 6/6 nylon.
  - 1. Minimum Width: 3/16 inch.
  - 2. Tensile Strength at 73 Deg F according to ASTM D638: 12,000 psi.
  - 3. Temperature Range: Minus 40 to plus 185 deg F.
  - 4. Color: Black.
  
- D. Plenum-Rated Cable Ties: Self-extinguishing, UV stabilized, one piece, and self-locking.
  - 1. Minimum Width: 3/16 inch.
  - 2. Tensile Strength at 73 Deg F according to ASTM D638: 7000 psi.
  - 3. UL 94 Flame Rating: 94V-0.
  - 4. Temperature Range: Minus 50 to plus 284 deg F.
  - 5. Color: Black.

## **2.9 MISCELLANEOUS IDENTIFICATION PRODUCTS**

- A. Paint: Comply with requirements in painting Sections for paint materials and application requirements. Retain paint system applicable for surface material and location (exterior or interior).
  
- B. Fasteners for Labels and Signs: Self-tapping, stainless-steel screws or stainless-steel machine screws with nuts and flat and lock washers.

## **PART 3 - EXECUTION**

### **3.1 PREPARATION**

- A. Self-Adhesive Identification Products: Before applying electrical identification products, clean substrates of substances that could impair bond, using materials and methods recommended by manufacturer of identification product.

### 3.2 INSTALLATION

- A. Verify and coordinate identification names, abbreviations, colors, and other features with requirements in other Sections requiring identification applications, Drawings, Shop Drawings, manufacturer's wiring diagrams, and operation and maintenance manual. Use consistent designations throughout Project.
- B. Install identifying devices before installing acoustical ceilings and similar concealment.
- C. Verify identity of each item before installing identification products.
- D. Coordinate identification with Project Drawings, manufacturer's wiring diagrams, and operation and maintenance manual.
- E. Apply identification devices to surfaces that require finish after completing finish work.
- F. Install signs with approved legend to facilitate proper identification, operation, and maintenance of electrical systems and connected items.
- G. System Identification for Raceways and Cables under 600 V: Identification shall completely encircle cable or conduit. Place identification of two-color markings in contact, side by side.
  - 1. Secure tight to surface of conductor, cable, or raceway.
- H. Auxiliary Electrical Systems Conductor Identification: Identify field-installed alarm, control, and signal connections.
- I. Elevated Components: Increase sizes of labels, signs, and letters to those appropriate for viewing from the floor.
- J. Accessible Fittings for Raceways: Identify the covers of each junction and pull box of the following systems with the wiring system legend and system voltage. System legends shall be as follows:
  - 1. "EMERGENCY POWER."
  - 2. "POWER."
- K. Vinyl Wraparound Labels:
  - 1. Secure tight to surface of raceway or cable at a location with high visibility and accessibility.
  - 2. Attach labels that are not self-adhesive type with clear vinyl tape, with adhesive appropriate to the location and substrate.
- L. Snap-around Labels: Secure tight to surface at a location with high visibility and accessibility.
- M. Self-Adhesive Wraparound Labels: Secure tight to surface at a location with high visibility and accessibility.
- N. Self-Adhesive Labels:

1. On each item, install unique designation label that is consistent with wiring diagrams, schedules, and operation and maintenance manual.
  2. Unless otherwise indicated, provide a single line of text with 1/2-inch- high letters on 1-1/2-inch- high label; where two lines of text are required, use labels 2 inches high.
- O. Snap-around Color-Coding Bands: Secure tight to surface at a location with high visibility and accessibility.
- P. Heat-Shrink, Preprinted Tubes: Secure tight to surface at a location with high visibility and accessibility.
- Q. Marker Tapes: Secure tight to surface at a location with high visibility and accessibility.
- R. Self-Adhesive Vinyl Tape: Secure tight to surface at a location with high visibility and accessibility.
1. Field-Applied, Color-Coding Conductor Tape: Apply in half-lapped turns for a minimum distance of 6 inches where splices or taps are made. Apply last two turns of tape with no tension to prevent possible unwinding.
- S. Tape and Stencil: Comply with requirements in painting Sections for surface preparation and paint application.
- T. Floor Marking Tape: Apply stripes to finished surfaces following manufacturer's written instructions.
- U. Underground Line Warning Tape:
1. During backfilling of trenches, install continuous underground-line warning tape directly above cable or raceway at 6 to 8 inches below finished grade. Use multiple tapes where width of multiple lines installed in a common trench exceeds 16 inches overall.
  2. Install underground-line warning tape for direct-buried cables and cables in raceways.
- V. Metal Tags:
1. Place in a location with high visibility and accessibility.
  2. Secure using UV-stabilized cable ties.
- W. Nonmetallic Preprinted Tags:
1. Place in a location with high visibility and accessibility.
  2. Secure using UV-stabilized cable ties.
- X. Write-on Tags:
1. Place in a location with high visibility and accessibility.
  2. Secure using UV-stabilized cable ties.
- Y. Baked-Enamel Signs:
1. Attach signs that are not self-adhesive type with mechanical fasteners appropriate to the location and substrate.

2. Unless otherwise indicated, provide a single line of text with 1/2-inch- high letters on minimum 1-1/2-inch- high sign; where two lines of text are required, use signs minimum 2 inches high.

Z. Metal-Backed Butyrate Signs:

1. Attach signs that are not self-adhesive type with mechanical fasteners appropriate to the location and substrate.
2. Unless otherwise indicated, provide a single line of text with 1/2-inch- high letters on 1-1/2-inch- high sign; where two lines of text are required, use labels 2 inches high.

AA. Laminated Acrylic or Melamine Plastic Signs:

1. Attach signs that are not self-adhesive type with mechanical fasteners appropriate to the location and substrate.
2. Unless otherwise indicated, provide a single line of text with 1/2-inch- high letters on 1-1/2-inch- high sign; where two lines of text are required, use labels 2 inches high.

BB. Cable Ties: General purpose, for attaching tags, except as listed below:

1. Outdoors: UV-stabilized nylon.
2. In Spaces Handling Environmental Air: Plenum rated.

### 3.3 IDENTIFICATION SCHEDULE

- A. Install identification materials and devices at locations for most convenient viewing without interference with operation and maintenance of equipment. Install access doors or panels to provide view of identifying devices.
- B. Identify conductors, cables, and terminals in enclosures and at junctions, terminals, pull points, and locations of high visibility. Identify by system and circuit designation.
- C. Concealed Raceways, Duct Banks, More Than 600 V, within Buildings: Tape and stencil. Stencil legend "DANGER - CONCEALED HIGH-VOLTAGE WIRING" with 3-inch- high, black letters on 20-inch centers.
  1. Locate identification at changes in direction, at penetrations of walls and floors, and at 30-foot maximum intervals.
- D. Accessible Raceways, Armored and Metal-Clad Cables, More Than 600 V: Vinyl wraparound labels, Snap-around labels, Self-adhesive labels.
  1. Locate identification at changes in direction, at penetrations of walls and floors, at 50-foot maximum intervals in straight runs, and at 25-foot maximum intervals in congested areas.
- E. Accessible Raceways and Metal-Clad Cables, 600 V or Less, for Service, Feeder, and Branch Circuits, More Than 30 A: Identify with self-adhesive raceway labels.
  1. Locate identification at changes in direction, at penetrations of walls and floors, at 50-foot maximum intervals in straight runs, and at 25-foot maximum intervals in congested areas.

- F. Accessible Fittings for Raceways and Cables within Buildings: Identify the covers of each junction and pull box of the following systems with self-adhesive labels containing the wiring system legend and system voltage. System legends shall be as follows:
  - 1. "EMERGENCY POWER."
  - 2. "POWER."
- G. Power-Circuit Conductor Identification, 600 V or Less: For conductors in vaults, pull and junction boxes, manholes, and handholes, use self-adhesive vinyl tape to identify the phase.
  - 1. Locate identification at changes in direction, at penetrations of walls and floors, at 50-foot maximum intervals in straight runs, and at 25-foot maximum intervals in congested areas.
- H. Power-Circuit Conductor Identification, More Than 600 V: For conductors in vaults, pull and junction boxes, manholes, and handholes, use write-on tags, or nonmetallic preprinted tags colored and marked to indicate phase, and a separate tag with the circuit designation.
- I. Control-Circuit Conductor Identification: For conductors and cables in pull and junction boxes, manholes, and handholes, use write-on tags with the conductor or cable designation, origin, and destination.
- J. Control-Circuit Conductor Termination Identification: For identification at terminations, provide heat-shrink preprinted tubes or self-adhesive labels with the conductor designation.
- K. Conductors to Be Extended in the Future: Attach write-on tags to conductors and list source.
- L. Auxiliary Electrical Systems Conductor Identification: Marker tape that is uniform and consistent with system used by manufacturer for factory-installed connections.
  - 1. Identify conductors, cables, and terminals in enclosures and at junctions, terminals, and pull points. Identify by system and circuit designation.
- M. Locations of Underground Lines: Underground-line warning tape for power, lighting, communication, and control wiring and optical-fiber cable.
- N. Concealed Raceways and Duct Banks, More Than 600 V, within Buildings: Apply floor marking tape to the following finished surfaces:
  - 1. Floor surface directly above conduits running beneath and within 12 inches of a floor that is in contact with earth or is framed above unexcavated space.
  - 2. Wall surfaces directly external to raceways concealed within wall.
  - 3. Accessible surfaces of concrete envelope around raceways in vertical shafts, exposed in the building, or concealed above suspended ceilings.
- O. Instructional Signs: Self-adhesive labels, including the color code for grounded and ungrounded conductors.
- P. Warning Labels for Indoor Cabinets, Boxes, and Enclosures for Power and Lighting: Self-adhesive labels.
  - 1. Apply to exterior of door, cover, or other access.

2. For equipment with multiple power or control sources, apply to door or cover of equipment, including, but not limited to, the following:
  - a. Controls with external control power connections.
- Q. Arc Flash Warning Labeling: Self-adhesive labels.
- R. Operating Instruction Signs: Self-adhesive labels, Baked-enamel warning signs, Laminated acrylic or melamine plastic signs.
- S. Equipment Identification Labels:
  1. Indoor Equipment: Self-adhesive label, Baked-enamel signs, Laminated acrylic or melamine plastic sign.
  2. Outdoor Equipment: Laminated acrylic or melamine sign.
  3. Equipment to Be Labeled:
    - a. Panelboards: Typewritten directory of circuits in the location provided by panelboard manufacturer. Panelboard identification shall be in the form of a self-adhesive, engraved, engraved, laminated acrylic or melamine label.
    - b. Enclosures and electrical cabinets.
    - c. Access doors and panels for concealed electrical items.
    - d. Switchgear.
    - e. Switchboards.
    - f. Emergency system boxes and enclosures.
    - g. Enclosed switches.
    - h. Enclosed circuit breakers.
    - i. Enclosed controllers.
    - j. Variable-speed controllers.
    - k. Push-button stations.
    - l. Contactors.
    - m. Remote-controlled switches, dimmer modules, and control devices.
    - n. Monitoring and control equipment.

**END OF SECTION**



SCHEDULE OF SUBMITTALS									
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SUBMITTALS FOR APPROVAL					Send to:	Critical Submittals	Contractor's Projected Dates Allow at least 4 weeks for Approval (allows time for any resubmission)		
Spec Section	Sub Section	Type	Description	F F/O D S	Mark "X" for all that apply	Projected Transmittal Date:	Projected Approval Date:	Projected Delivery Date:	
<b>007213</b>			<b>GENERAL CONDITIONS</b>						
007213		PD	ARTICLE 6: Designate in writing competent supervision and/or management representatives as required - <b>include contact number in case of an emergency after work hours, including weekends and holidays (see 011000 Summary of Work)</b>	F					
007213		PD	ARTICLE 8: Permits and licenses	F					
<b>011100</b>			<b>SAFETY</b>						
011100		QCS	Site Specific Safety Plan	RSM					
011100		QCS	Employee Safety Orientation Training and Certificates						
011100		QCS	Emergency Action and Evacuation Plan						
<b>013113</b>			<b>PROJECT SCHEDULE</b>						
<b>013200</b>			<b>CONSTRUCTION PROGRESS DOCUMENTATION</b>						
013200		QCS	Scheduler Preparer Qualifications	S	X				
013200		QCS	Preliminary Project Schedule	S	X				
013200		QCS	Baseline Project Schedule	S	X				
013200		QCS	CMU-01 Agreement Form	S	X				
<b>013300</b>			<b>SUBMITTALS</b>						
013300		PD	Schedule of Submittals (This form completed and edited)	F	X				
013300	1.07.A	QCS	Submittal Coordinator Qualifications	F/O	X				
<b>013591</b>			<b>HISTORIC TREATMENT PROCEDURES</b>						
013591	1.07.A	SD	Historic Treatment Program	F					
013591	1.08.A	QCS	Preconstruction Documentation	F					
013591	1.08.B	QCS	Documentation of Title X "Lead-Safe Certified Firm" status	F					
<b>014339</b>			<b>MOCKUP REQUIREMENTS</b>						
014339	1.04.A	SD	Mockup Plan: Detailed, dimensioned plans and elevations.	F					
<b>015720</b>			<b>TEMPORARY MAINTENANCE OF SEWER FLOWS AND SEWER SERVICE</b>						
015720		PD	Diversion of Flow Plan	F					
<b>015813</b>			<b>PROJECT IDENTIFICATION SIGN</b>						
015813	1.02.A	SAM	Color samples	F					

# SCHEDULE OF SUBMITTALS

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SUBMITTALS FOR APPROVAL				Send to:	Critical Submittals	Contractor's Projected Dates Allow at least 4 weeks for Approval (allows time for any resubmission)		
Spec Section	Sub Section	Type	Description	F F/O D S	Mark "X" for all that apply	Projected Transmittal Date:	Projected Approval Date:	Projected Delivery Date:
015813		PD	Framing and Posts	F				
015813		PD	Plywood	F				
015813		PD	Background Enamel	F				
015813		PD	Lettering Enamel	F				
015813		PD	Enamel Colors	F				
<b>017123</b>				<b>FIELD ENGINEERING</b>				
017123		PD	Submit the name, address, telephone number, and registration number of the Land Surveyor before starting the survey work	F				
017123		PD	On request, submit documentation verifying accuracy of survey work	F				
017123		CCS	Upon completion of the Work, submit a certificate signed and sealed by the Land Surveyor, stating that the elevations and locations of the Work are in conformance with the Contract Documents	F				
017123		CCS	Maintain a complete and accurate log of control and survey work as it progresses.					
017123		CCS	Record location data for control points in sketch form and turn over 6 copies of sketches and computations to the Director's Representative	F				
017123		CCS	Submit Record Documents	F				
<b>017329</b>				<b>REMOVALS, CUTTING, AND PATCHING</b>				
<b>017419</b>				<b>CONSTRUCTION WASTE MANAGEMENT</b>				
017419		QCS	A copy of the Construction Waste Management (CWM) Plan					
017419		QCS	Monthly Construction Waste Management (CWM) Reports	F				
017419		QCS	Calculations and supporting documentation to demonstrate disposal, recycling, and/or salvage rates meeting the requirements of the CWM Plan.	F				
017419		CCS	Final Waste Management Report					
<b>017716</b>				<b>CONTRACT CLOSEOUT</b>				
017716	1.06	CCS	Project Record Documents	F				
017716	1.07	CCS	Operation and maintenance, 2 copies	F				
017716	1.08	CCS	Warranties	F				
017716	1.09	CCS	Spare Parts and Maintenance Materials	F				
<b>024297</b>				<b>SELECTIVE REMOVALS AND SALVAGING</b>				
024297	1.06.A	QCS	Proposed Protection Measures	D				
024297	1.06.B	QCS	Qualification Data	F/O				
024297	1.06.C	QCS	Program	D				
024297	1.06.D	SD	Temporary Shoring Shop Drawings	D				
024297	1.07.A	QCS	List of Items Indicated to Be Salvaged	F/O				
024297	1.07.B	QCS	Schedule of Selective Removals and Salvaging Activities	F/O				
024297	1.07.C	QCS	Pre-removals and Salvaging Photographs	F/O				
024297	1.07.D	QCS	Inventory of Salvaged Items	F/O				

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Spec Section	Sub Section	Type	Description	F F/O D S F/O	Mark "X" for all that apply	Projected Transmittal Date:	Projected Approval Date:	Projected Delivery Date:
024297	1.08.A	QCS	Warranties	F/O				
028733			<b>BIRD, BAT, AND RODENT DROPPINGS REMIEDIATION AND DISPOSAL</b>					
028733	1.06.A.	PD	Product Data					
028733	1.06.B.1	QCS	Worker Qualifications					
028733	1.06.B.2	QCS	Work Plan					
028733	1.06.B.3	QCS	Waste Transporter Permit					
028733	1.06.B.4	QCS	Safety Data					
028733	1.06.C	QCS	Remediation Company Qualification Data					
028733	1.06.D	QCS	Remediation Worker Qualification Data					
028733	1.06.E	QCS	Operation and Maintenance Data					
028733	1.06.F.1	CCS	Disposal Site Receipts					
028733	1.06.F.2	CCS	Copy of Daily Project Log					
028733	1.06.F.3	CCS	Assessment Report					
028733	1.06.F.4	CCS	Air Monitoring Data					
028733	1.06.F.5	CCS	Bulk Sampling Data					
033000			<b>CAST-IN-PLACE CONCRETE</b>					
033000	1.03.A	PD	Product Data					
033000	1.03.B	SD	Shop Drawings Reinforcement					
033000	1.03.C	SD	Shop Drawings Formwork					
033000	1.03.D	SD	Construction Joint Layout					
033000	1.03.E	SD	Contraction Joint Layout					
033000	1.03.H	SAM	Samples					
033000	1.03.I	QCS	Laboratory Test Reports					
033000	1.03.J	QCS	Material Certificates					
033000	1.03.K	QCS	Cold Weather and Hot Weather Concreting Procedures					
033000	1.03.L	PD	Certification that possolanic materials conforms to ASTM C 618-01, ASTM C 989, OR ASTM C 1240					
033000	1.03.M	PD	Certified recycled steel content					
033000	1.03.N	QCS	Formwork					
033000	1.03.O	PD	Recylced Aggregate					
033000	1.03.P	PD	VOC content for curing compounds, sealants and release agents					
040310			<b>HISTORIC MASONRY CLEANING</b>					
040310	1.05.A	PD	Product Data					
040310	1.05.B	QCS	Masonry cleaning historic treatment program					
040310	1.05.C.1	QCS	Qualification Data: Historic masonry cleaning specialists					
040310	1.05.C.2	QCS	Qualification Data: Microabrasion masonry cleaning specialist					
040310	1.06.A	CCS	Documentation: Masonry cleaning work					
040322			<b>HISTORIC BRICK UNIT MASONRY REPAIR AND REPOINTING</b>					

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Spec Section	Sub Section	Type	Description	F F/O D S	Mark "X" for all that apply	Projected Transmittal Date:	Projected Approval Date:	Projected Delivery Date:
040322	1.05.A	PD	Product Data					
040322	1.05.B	SD	Brick Masonry Shop Drawings					
040322	1.05.C	SAM	Samples					
040322	1.05.D	QCS	Brick masonry historic treatment program					
040322	1.05.E	QCS	Qualification Data					
040322	1.06.A	QCS	Quality-control program					
040323			<b>BRICK MASONRY VAULTS</b>					
040323	1.05.A	PD	Product Data					
040342			<b>HISTORIC STONE MASONRY REPAIR</b>					
040342	1.05.A	PD	Product Data					
040342	1.05.B	SD	Stone Control Sample Identification Drawings					
040342	1.05.C	SD	Stone Repair Shop Drawings					
040342	1.05.D	SAM	Samples for Initial Selection					
040342	1.05.E	QCS	Qualification Data					
040342	1.05.F	QCS	Quality-control Program					
040342	1.05.G	QCS	Stone repair historic treatment program					
040343			<b>HISTORIC STONE MASONRY REPOINTING</b>					
040343	1.05.A	PD	Product Data					
040343	1.05.B	SD	Shop Drawings					
040343	1.05.C	SAM	Samples					
040343	1.05.D	QCS	Qualification Data					
040343	1.05.E	QCS	Quality-control Program					
040343	1.05.F	QCS	Stone repointing historic treatment program					
040343			<b>HISTORIC STONE MASONRY REPOINTING</b>					
040343	1.05.A	PD	Product Data					
040343	1.05.B	SD	Shop Drawings					
040343	1.05.C	SAM	Samples					
040343	1.05.D	QCS	Qualification Data					
040343	1.05.E	QCS	Quality-control Program					
040343	1.05.F	QCS	Stone repointing historic treatment program					
040513			<b>MORTAR</b>					
040513	1.03.A	PD	Product Data					
040513	1.03.B.1	SAM	Samples: Mortar					
040513	1.03.B.2	SAM	Samples: Sand					
040513	1.04.A	QCS	Preconstruction Test Reports					
050170			<b>ORNAMENTAL METAL REPAIR</b>					
050170	1.04.A	PD	Product Data					
050170	1.04.B	SD	Shop Drawings					
050170	1.04.C	SAM	Samples					
050170	1.05.A	QCS	Qualification Data					
050170	1.05.B	QCS	Ornamental Metal Historic Treatment Program					

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Spec Section	Sub Section	Type	Description	F F/O D S	Mark "X" for all that apply	Projected Transmittal Date:	Projected Approval Date:	Projected Delivery Date:
<b>051200</b>				<b>STRUCTURAL STEEL</b>				
051200	1.5.A	PD	Product Data					
051200	1.5.B	SD	Shop Drawings					
051200	1.5.C	SD	Certified survey copies					
051200	1.5.D.1	QCS	Report: Certified furnished steel mill test reports					
051200	1.5.D.2	QCS	Report: Certified recycled steel content					
051200	1.5.D.3	QCS	Report: Certified compliance with ISO14001					
051200	1.5.D.4	QCS	Report: Anchor bolt checking certificates					
051200	1.5.D.5	QCS	Report: Welder qualification certificates					
051200	1.5.D.6	QCS	Report: Erected steelwork survey					
051200	1.5.E	PD	Verification of bio-degradable or low VOC, and low HAPS cleaning solutions					
<b>055000</b>				<b>METAL FABRICATIONS</b>				
055000	1.04.A.1	SD	Shop Drawings: Application to Project: Locate anchor bolts required for installation in other Work					
055000	1.04.A.2	SD	Shop Drawings: Application to Project: Indicate shop and field welds by standard AWS welding symbols in accordance with AWS A2.4.					
055000	1.04.A.3	SD	Shop Drawings: Floor Grating					
055000	1.04.B	PD	Product Data					
055000	1.04.C	QCS	Required Certificates					
<b>055100</b>				<b>METAL STAIRS</b>				
055100	1.04.A.1	SD	Shop Drawings: Application to Project: Include anchor bolt location plan (if any), erection drawings, and detail drawings of all components					
055100	1.04.A.2	SD	Shop Drawings: Application to Project: Indicate shop and field welds by standard AWS welding symbols in accordance with AWS A2.4.					
055100	1.04.B	PD	Product Data					
055100	1.04.C.1	QCS	Required Certificates					
055100	1.04.C.2	QCS	Fabricator's Qualification Data					
<b>057000</b>				<b>ORNAMENTAL METAL</b>				
057000	1.03.A	PD	Product Data					
057000	1.03.B	SD	Shop Drawings: Fabrication details and connections Include location of anchor bolts required					
057000	1.03.C.1	SAM	Samples: Bars and shapes					
057000	1.03.C.2	SAM	Samples: Joints					
057000	1.03.C.3	SAM	Samples: Fittings, Brackets and other Accessories					
057000	1.04.A	QCS	Fabricator's Qualification Data					
<b>061000</b>				<b>ROUGH CARPENTRY</b>				
061000	1.04.A	PD	Product Data					

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Spec Section	Sub Section	Type	Description	F F/O D S	Mark "X" for all that apply	Projected Transmittal Date:	Projected Approval Date:	Projected Delivery Date:
<b>071326 RUBBERIZED ASPHALT SHEET MEMBRANE WATERPROOFING SYSTEM</b>								
071326	1.05.A	PD	Product Data					
071326	1.05.B.1	SAM	Samples: Sheet Membrane					
071326	1.05.B.2	SAM	Samples: Drainage Panels					
071326	1.05.C	SD	Shop Drawings					
071326	1.06.A	QCS	Qualification Data: manufacturer					
071326	1.06.B	QCS	Qualification Data: installer and supervisor					
071326	1.06.C	QCS	Sample manufacturer's warranty					
071326	1.06.D	QCS	Flood testing reports					
071326	1.07.A	CCS	Manufacturer's warranty	F				
<b>072600 VAPOR RETARDER UNDER SLABS ON GRADE</b>								
072600	1.03.A	PD	Product Data					
072600	1.03.B.1	SAM	Vapor Barrier Material					
072600	1.03.B.2	SAM	Pressure-Sensitive Tape					
<b>075216 SBS MODIFIED BITUMEN ROOFING SYSTEM</b>								
075216	1.05.A	PACK	Submit items specified below, except contract closeout submittals, at the same time as a complete package					
075216	1.05.B	PD	Product Data					
075216	1.05.C	SD	Shop Drawings					
075216	1.06.A	QCS	Fire Hazard Certification					
075216	1.06.B	QCS	Wind Uplift Certification					
075216	1.06.C	QCS	Material Certification					
075216	1.06.D	QCS	Membrane Manufacturer's Qualifications Data					
075216	1.06.E	QCS	Installer's Qualifications Data					
075216	1.06.F	QCS	SBS -Roofing Manufacturere's Company Field Advisor Qualification Datga					
075216	1.06.G	QCS	Field quality-control reports.					
075216	1.06.H	QCS	Sample Warranty					
075216	1.07.A	CCS	Manufacturer's Special Warranty	F				
075216	1.07.A	CCS	Operation and Maintenance Manual	F				
<b>075323 ADHERED EPDM ROOFING SYSTEM</b>								
075323	1.05.A	PACK	Submit all items, except contract closeout submittals, at one time as a complete package.					
075323	1.05.B	PD	Product Data					
075323	1.05.C.1	SAM	Sheet Membrane					
075323	1.05.C.2	SAM	Sheet Flashing					
075323	1.06.A	QCS	Fire Hazard Certification					
075323	1.06.B	QCS	Wind Uplift Certification					
075323	1.06.C	QCS	Material Certification					
075323	1.06.D	QCS	Membrane Manufacturer's Qualification Data					
075323	1.06.E	QCS	Installer's Qualification Data					
075323	1.06.F	QCS	EDPM-Roofing Manufacturer's Company Field Advisor Qualification Data					
075323	1.06.G	QCS	Sample Warranty					
075323	1.07.A	CCS	Manufacturer's special warranty	F				

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075323	1.07.B	CCS	Operation and Maintenance Manual	F								
<b>076200 SHEET METAL FLASHING AND TRIM</b>												
076200	1.04.A	PD	Product Data									
076200	1.04.B	SD	Shop Drawings									
076200	1.04.C	SAM	Samples for Initial Selection									
076200	1.04.D.1	SAM	Samples for Verification: Sheet Metal Flashing									
076200	1.04.D.2	SAM	Samples for Verification: Trim, Metal Closures, Expansion Joints, Joint Intersections, and Miscellaneous Fabrications									
076200	1.04.D.3	SAM	Samples for Verification: Unit-Type Accessories and Miscellaneous Materials									
076200	1.05.A	QCS	Qualification Data: For fabricators and installers									
076200	1.05.B	QCS	Sample Warranty									
076200	1.06.A	CCS	Maintenance Data									
076200	1.06.B	CCS	Special Warranty									
<b>078400 FIRESTOPPING</b>												
078400	1.04.A	PACK	Submit the following items specified below in the same time as a package.									
078400	1.05.A	PD	Product Data									
078400	1.06.A	QCS	Qualification Data: For Installer and Company Field Advisor									
078400	1.06.B	QCS	Listed System Desgins									
078400	1.06.C	QCS	Firestopping Schedule									
078400	1.07.A	CCS	Installer Certificates	F								
<b>079100 PREFORMED JOINT SEALS</b>												
079100	1.02.A	PD	Product Data									
079100	1.02.B	SAM	Samples for Initial Selection									
079100	1.02.C	SAM	Samples for Verification									
079100	1.02.D	QCS	Performed Joint Seal Schedule									
079100	1.03.A	QCS	Test and Evaluation Reports									
079100	1.03.B	QCS	Sample Warranties									
<b>079200 JOINT SEALANTS</b>												
079200	1.02.A	PD	Product Data									
079200	1.02.B	SAM	Samples for Initial Selection									
079200	1.02.C	SAM	Samples for Verification									
079200	1.02.D	QCS	Joint-Sealant Schedule									
079200	1.03.A	QCS	Preconstruction Laboratory Test Reports									
079200	1.03.B	QCS	Preoconstruction Field-Adhesion-Test Reports									
079200	1.03.C	QCS	Field Quality-Control Reports									
079200	1.03.D	QCS	Sample Warranties									
079200	1.03.E.1	QCS	Installer's Qualifications Data									
079200	1.03.E.2	QCS	Company Field Advisor Qualifications Data									
079200	1.04.A	CCS	Manufacturer's special warranties									
<b>080311 HISTORIC TREATMENT OF STEEL WINDOWS AND DOORS</b>												

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080311	1.05.A	PD	Product Data						
080311	1.05.B	SD	Shop Drawings						
080311	1.05.C.1	SAM	Samples: Refinished Steel Window Members						
080311	1.05.C.2	SAM	Samples: Refinished Steel Door Leaf						
080311	1.05.C.3	SAM	Samples:Hardware						
080311	1.06.A	QCS	Qualification Statements						
080311	1.06.B	QCS	Steel Door and Window Historic Treatment Program						
<b>081113</b>									
<b>HOLLOW METAL DOORS AND FRAMES</b>									
081113	1.05.A	PD	Product Data						
081113	1.05.B	SD	Shop Drawings						
081113	1.05.C.1.a	SAM	Samples: Fabrication: Doors						
081113	1.05.C.1.b	SAM	Samples: Fabrication: Frames						
081113	1.05.D	QCS	Product Schedule						
081113	1.06.A	QCS	Field quality-control reports						
<b>081400</b>									
<b>WOOD DOORS</b>									
081400	1.03.A	PD	Product Data						
081400	1.03.B	SD	Shop Drawings						
081400	1.04.A	CCS	Special Warranty						
<b>083123</b>									
<b>FLOOR DOORS</b>									
083123	1.02.A	PD	Product Data						
083123	1.02.B	QCS	Product Schedule						
<b>085200</b>									
<b>WOOD WINDOWS</b>									
085200	1.03.A	PD	Product Data						
085200	1.03.B	SD	Shop Drawings						
085200	1.03.C.1	SAM	Samples for Initial Selection: Color Samples						
085200	1.03.C.2	SAM	Samples for Initial Selection: Corner Sample						
085200	1.03.C.3	SAM	Samples for Initial Selection: Hardware and Accessories						
085200	1.03.D	SAM	Samples for Verification						
085200	1.03.E	QCS	Product Schedule						
085200	1.04.A	QCS	Product Test reports						
085200	1.04.B	QCS	Field quality-control reports						
085200	1.04.C	QCS	Sample Warranties						
<b>087100</b>									
<b>FINISH HARDWARE</b>									
087100	1.06.A	PACK	Quality Control Package						
087100	1.06.B	PACK	Finish Hardware Package						
087100	1.07.A	CCS	Closeout Submittals Package	F					
087100	1.12.A	CCS	Maintenance Materials: Special Tools (2 sets)						
087100	1.12.B	CCS	Maintenance Materials: Lubricants						
<b>088100</b>									
<b>GLASS AND GLAZING</b>									
088100	1.04.A	PD	Product Data						
088100	1.04.B	PD	Environmental Product Declaration (EDP)						

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Spec Section	Sub Section	Type	Description	F F/O D S	Mark "X" for all that apply	Projected Transmittal Date:	Projected Approval Date:	Projected Delivery Date:
088100	1.04.C	SAM	Glass: 12 x 12 inch pieces for each type of glass specified					
<b>089100</b>								
<b>STATIONARY METAL WALL LOUVERS</b>								
089100	1.04.A	PD	Product Data					
089100	1.04.B	SD	Shop Drawings					
089100	1.05.A	QCS	Sample Special Warranty					
<b>099101</b>								
<b>CONSTRUCTION PAINTING</b>								
099101	1.04.A	PD	Product Data					
099101	1.04.B	SAM	Samples for Initial Selection: Each type of topcoat product					
099101	1.04.C	SAM	Samples: Each type of paint system and each pattern, color, and gloss					
099101	1.04.D	PD	Painting Schedule					
099101	1.04.E	QCS	Qualification Data: Painting historic treatment specialist					
099101	1.04.F	QCS	Painting Historic Treatment Program					
099101	1.05.A	QCS	VOC Certificates					
099101	1.08.A	CCS	Maintenance Material: Provide extra materials, from the same production run, that match rproducts installed and that are packaged with protective covering for storage and identified with levels describing contents.					
<b>099600</b>								
<b>HIGH-PERFORMANCE COATINGS</b>								
099600	1.03.A	PD	Product Data					
099600	1.03.B	SAM	Samples for Verification					
099600	1.03.C	QCS	Product List					
099600	1.04.A.1	CCS	Coatings: 5 percent, but not less than 1 gal. (3.8 L) of each material and color applied.					
<b>108113</b>								
<b>BIRD CONTROL DEVICES</b>								
108113	1.02.A	PD	Product Data					
108113	1.02.B	SAM	Samples					
108113	1.02.C	QCS	Manufacturer's Certificates					
108113	1.03.A	QCS	Sample warranty					
108113	1.03.B	QCS	Installer qualification statement					
<b>133423.16</b>								
<b>FABRICATED CONTROL BOOTHS</b>								
133423.16	1.2.A	PD	Product Data					
133423.16	1.2.C	SD	Shop Drawings					
133423.16	1.2.E	SAM	Samples for Initial Selection					
133423.16	1.2.F	SAM	Samples for Verification					
133423.16	1.2.G	QCS	Delegated Design Submittals					
133423.16	1.3.A	QCS	Sample Warranty					
133423.16	1.4.A	CCS	Maintenance Data	F				
<b>220576</b>								
<b>DRAINAGE ACCESSORIES</b>								
220576	1.02.A	PD	Product Data					

# SCHEDULE OF SUBMITTALS

**PROJECT NO.: 47331 C**

SUBMITTALS FOR APPROVAL				Send to:	Critical Submittals	Contractor's Projected Dates Allow at least 4 weeks for Approval (allows time for any resubmission)		
Spec Section	Sub Section	Type	Description	F F/O D S	Mark "X" for all that apply	Projected Transmittal Date:	Projected Approval Date:	Projected Delivery Date:
220576	1.03.A.1	CCS	Maintenance: Special Tools: Tools for Vandal Resistant Fasteners					
220576	1.03.A.2	CCS	Maintenance: Special Tools: T-Handle Wrench for Cleanout Plugs					
220577			<b>FLOOR AND AREA DRAINS</b>					
220577	1.02.A	PD	Product Data					
220577	1.03.A.1	CCS	Maintenance: Special Tools: Rools for Vandal Resistant Fasteners					
220800			<b>CLEANING AND TESTING</b>					
220800	1.01.A	QCS	Test Reports (Field Tests)					
221100			<b>PLUMBING PIPING</b>					
221100	1.02.A	PD	Product Data					
221100	1.02.B	QCS	Environmental Product Declaration (EPD)					
221100	1.02.C.1	QCS	Hydraulic press fitting manufacturer's printed field inspection preocedures					
221100	1.02.C.2	QCS	Brazer Qualification Data					
221426			<b>ROOF DRAINS</b>					
221426	1.03.A	PD	Product Data					
221426	1.03.B	CCS	Operation and Maintenance Data - 2 copies	F				
221426	1.04.A	CCS	Special Tools - Tools for Vandal Resistant Fasteners: one for each type	F				
230523			<b>VALVES</b>					
230523	1.02.A	PD	Product Data					
230523	1.02.B	SD	Valve Schedule					
230529			<b>PIPE HANGERS AND SUPPORTS</b>					
230529	1.03.A.1	SD	Details of trapeze hangers and upper hanger attachments for piping 4 inches in diameter and over.					
230529	1.03.A.2	SD	Details of pipe anchors.					
230529	1.03.A.3	SD	Details and method of installing restraints, anchors, and supports for grooved end piping systems					
230529	1.03.B	QCS	Environmental Product Declaration (EPD)					
230529	1.03.C	PD	Product Data					
230552			<b>FLEXIBLE VIBRATION ELIMINATORS</b>					
230552	1.02.A	PD	Product Data					
230553			<b>PIPE AND VALVE IDENTIFICATION</b>					
230553	1.02.A	PD	Product Data					
230593			<b>CLEANING AND TESTING</b>					
230593	1.02.A	QCS	Test Reports (Field Tests)					
230593	1.02.A.1	QCS	Test Reports - Propylene Glycol System Test					

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Spec Section	Sub Section	Type	Description	F F/O D S	Mark "X" for all that apply	Projected Transmittal Date:	Projected Approval Date:	Projected Delivery Date:
<b>230594</b>								
<b>BALANCING OF SYSTEMS</b>								
230594	1.02.A.1.a	QCS	Testing, Adjustment and Balancing Reports: Hydronic Systems					
230594	1.02.A.1.b	QCS	Testing, Adjustment and Balancing Reports: Air Systems					
<b>230700</b>								
<b>PIPING INSULATION</b>								
230700	1.03.A.1	PD	Product Data: Insulation Materials					
230700	1.03.A.2	PD	Product Data: Jacket Materials					
230700	1.03.B	QCS	Installer's Qualification Data					
<b>232000</b>								
<b>HVAC PIPING</b>								
232000	1.02.A	PD	Product Data					
232000	1.02.B	QCS	Environmental Product Declaration (EPD)					
232000	1.02.C.1	QCS	Installer's Qualification Data					
232000	1.02.C.2	QCS	Quality Control Submittals for Hydraulic Press Joints					
<b>232001</b>								
<b>STRAINERS</b>								
232001	1.02.A	PD	Product Data					
<b>232003</b>								
<b>THERMOMETERS AND GAUGES</b>								
232003	1.02.A	PD	Product Data					
<b>232006</b>								
<b>HYDRONIC SPECIALTIES</b>								
232006	1.03.A	PD	Product Data					
232006	1.03.B	CCS	Operation and Maintenance Data - 2 copies	F				
<b>232113</b>								
<b>COMBINATION BALANCING VALVE AND FLOW METERS</b>								
232113	1.02.A	PD	Product Data					
232113	1.02.B	CCS	Operation and Maintenance Data					
232113	1.03.A.1	CCS	Special Tools: One portable readout meter for use with combination balancing valve and flow meter					
232113	1.03.A.2	CCS	Special Tools: One calibrating and cross reference chart designed for mid range of required flows, or one valve calculator					
<b>232123</b>								
<b>PUMPS</b>								
232123	1.02.A	PD	Product Data					
232123	1.02.B	PD	Pump Schedule					
232123	1.02.C.1	QCS	Performance curves for each pump, showing gpm, brake HP and efficiency from free delivery to shut-off					
232123	1.02.C.2	QCS	Include parallel pump curve and system curve for parallel operating pumps.					
232123	1.02.C.3	QCS	Certificates: Affidavit required under QUALITY ASSURANCE Article.					
232123	1.02.C.4	QCS	Company Field Advisor Data					

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Spec Section	Sub Section	Type	Description	F F/O D S	Mark "X" for all that apply	Projected Transmittal Date:	Projected Approval Date:	Projected Delivery Date:
232123	1.02.D	CCS	Operation, Maintenance Data, and Parts Lists: 2 copies	F				
232123	1.04.A	CCS	Spare Parts: Deliver one spare set of mechanical seals for each size and type of pump equipped with mechanical seals	F				
232201			<b>STEAM SPECIALTIES</b>					
232201	1.02.A	PD	Product Data					
232202			<b>STEAM TRAPS</b>					
232202	1.02.A	PD	Product Data					
235716			<b>CONVERTERS</b>					
235716	1.03.A	SD	Shop Drawings					
235716	1.03.B	PD	Product Data					
260181			<b>HISTORIC LIGHT FIXTURE REPLICATION</b>					
260181	1.04.A	PD	Product Data					
260181	1.04.B	SD	Shop Drawings					
260181	1.04.C	SAM	Samples for Initial Selection					
260181	1.04.D	SAM	Samples for Verification: Replicated Light Fixtures					
260181	1.04.E	QCS	Qualification Data: Historic light fixture replication specialist					
260181	1.04.F	QCS	Light fixture replication historic treatment program					
260505			<b>WIRING FOR GATE SYSTEMS</b>					
260505	1.02.B	PACK	Submit the product data and the shop drawings specified below all at the same time as a package					
260505	1.02.C	PD	Product Data					
260505	1.02.D	SD	Show switches, controls, motors, and other electrical components					
260505	1.02.E	CCS	Operation and Maintenance Data: Deliver 2 copies	F				
260519			<b>WIRING, GENERAL - 600 VOLTS AND UNDER</b>					
260519	1.01.B	SD	For Electrical Circuit Protective Systems: Show proposed routes and installation details (include UL classification data, listing, and system number)					
260519	1.01.C	PD	Product Data					
260529			<b>FASTENERS, ATTACHMENTS, AND SUPPORTING DEVICES</b>					
260529	1.01.A	SD	Show support details if different from methods specified or shown on the drawings.					
260529	1.01.B	PD	Product Data					
260531			<b>EXPOSED CONDUIT - WET LOCATIONS</b>					
260531	1.02.A	PD	Product Data					

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Spec Section	Sub Section	Type	Description	F F/O D S	Mark "X" for all that apply	Projected Transmittal Date:	Projected Approval Date:	Projected Delivery Date:
260531	1.02.B	QCS	Environmental Product Declaration (EPD)					
260531	1.03.A	CCS	Spare Parts: Touch up coating compound for plastic coated rigid metal conduit (one spray type can and one non-spray can with brush top)					
260532			<b>INTERIOR RACEWAYS, FITTINGS, AND ACCESSORIES</b>					
260532	1.02.A	PD	Product Data					
260532	1.02.B	QCS	Environmental Product Declaration (EPD)					
260532	1.03.A	CCS	Spare Parts: Touch up coating compound for plastic coated rigid metal conduit (one spray type can and one non-spray can with brush top)					
260534			<b>OUTLET, JUNCTION, AND PULL BOXES</b>					
260534	1.02.A	PD	Product Data					
260543			<b>UNDERGROUND DUCTS AND RACEWAYS FOR ELECTRICAL SYSTEMS UPDATE</b>					
260543	1.03.D	PD	Product Data and Installation Instructions					
260543	1.03.E	QCS	Environmental Product Declaration (EPD)					
260543	1.03.F	SD	Shop Drawings					
260543	1.03.G	QCS	Source Quality-control Reports					
260543	1.03.H	QCS	Field Quality-control Reports					
260543	1.04.A	CCS	Maintenance Materials					
260544			<b>SLEEVES AND SLEEVE SEALS FOR ELECTRICAL RACEWAYS AND CABLING</b>					
260544	1.02.D	PD	Product Data and Installation Instructions					
260544	1.02.E	QCS	Environmental Product Declaration (EPD)					
260553			<b>IDENTIFICATION FOR ELECTRICAL SYSTEMS</b>					
260553	1.02.D	PD	Product Data and Installation Instructions					
260553	1.02.E	PD	Identification Schedule					
260553	1.05.F	QCS	Delegated-Design Submittal					
262416			<b>PANELBOARDS</b>					
262416	1.02.B	PACK	Submit the shop drawings, product data, and the quality control submittals specified below at the same time as a package.					
262416	1.02.C.1	SD	Cabinet and gutter size.					
262416	1.02.C.2	SD	Voltage and current rating					
262416	1.02.C.3	SD	Panelboard short circuit rating. Indicate if rating is Fully Rated Equipment Rating, or where acceptable, UL listed Integrated Equipment Short Circuit Rating					
262416	1.02.C.4	SD	Circuit breaker enumeration (frame, ATE, poles, I.C.)					

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**PROJECT NO.: 47331 C**

SUBMITTALS FOR APPROVAL				Send to:	Critical Submittals	Contractor's Projected Dates Allow at least 4 weeks for Approval (allows time for any resubmission)		
Spec Section	Sub Section	Type	Description	F F/O D S	Mark "X" for all that apply	Projected Transmittal Date:	Projected Approval Date:	Projected Delivery Date:
262416	1.02.C.5	SD	When indicated on the panelboard schedule, a coordinated selective scheme between the main circuit breaker and branch/feeder circuit breakers so that under fault conditions the branch/feeder circuit breaker clears the fault while the main circuit breaker remains closed.					
262416	1.02.C.6	SD	Accessories.					
262416	1.02.D	PD	Product Data					
262416	1.02.E	CCS	Operation and Maintenance Data: Deliver 2 copies	F				
262726			<b>WIRING DEVICES</b>					
262726	1.01.A	PD	Product Data					
262815			<b>CIRCUIT BREAKERS FOR EXISTING PANELBOARDS</b>					
265119			<b>LED LIGHTING FIXTURES</b>					
265119	1.01.B	PACK	Submit the product data, photometric data, and Quality Assurance specified all at the same time as a package					
265119	1.01.C	PD	Product Data					
265119	1.01.D	QCS	Photometric Data					
265700			<b>HISTORIC LIGHT FIXTURE REPAIR</b>					
265700	1.04.A	PD	Product Data					
265700	1.04.B	SD	Shop Drawings					
265700	1.04.C	SAM	Samples for Initial Selection: Glass and Accessories					
265700	1.04.D	SAM	Samples for Verification: Repaired Light Fixture					
265700	1.04.E	QCS	Qualification Data: Light fixture repair historic treatment specialist					
265700	1.04.F	QCS	Light Fixture Repair Historic Treatment Program					
265700	1.05.A	CCS	Documentation: Complete documentation of light fixture repair work performed					
281300			<b>CARD ACCESS CONTROL SYSTEM</b>					
281300	1.02.B	PACK	Submit the shop drawings, product data, and quality control submittals specified below at the same time as a package					
281300	1.02.C.1	SD	Bill of materials					
281300	1.02.C.2	SD	Composite wiring and/or schematic diagrams of the complete system as proposed to be installed (standard diagrams will not be accepted).					
281300	1.02.C.3	SD	Total electrical load of the complete system in supervisory and alarm conditions.					
281300	1.02.C.4	SD	Detailed description of system operation (format similar to SYSTEM DESCRIPTION).					
281300	1.02.D	PD	Product Data					
281300	1.02.E.1	QCS	Copy of license for installing Security Systems					
281300	1.02.E.2	QCS	Company Field Advisor Data					
281300	1.02.F.1	CCS	Test Report: System acceptance test report	F				

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**PROJECT NO.: 47331 C**

SUBMITTALS FOR APPROVAL				Send to:	Critical Submittals	Contractor's Projected Dates Allow at least 4 weeks for Approval (allows time for any resubmission)		
Spec Section	Sub Section	Type	Description	F F/O D S	Mark "X" for all that apply	Projected Transmittal Date:	Projected Approval Date:	Projected Delivery Date:
281300	1.02.F.2	CCS	Certificate: Affidavit, signed by the Company Field Advisor and notarized, certifying that the system meets the contract requirements and is operating properly.	F				
281300	1.02.F.3	CCS	Operation and Maintenance Data: Deliver 2 copies	F				
<b>310000</b>								
<b>EARTHWORK</b>								
310000	1.03.A.1	PD	Product Data: Permanent Sheeting, Shoring and Bracing					
310000	1.03.A.2	PD	Product Data: Filter Fabric					
310000	1.03.A.3	PD	Product Data: Geogrid					
310000	1.03.B.1	SAM	Select Granular Material					
310000	1.03.B.2	SAM	Subbase Course Type 2					
310000	1.03.B.3	SAM	Selected Fill					
310000	1.03.B.4	SAM	Cushion Material					
310000	1.03.B.5	SAM	Item B-12					
310000	1.03.B.6	SAM	Crushed Stone					
310000	1.03.B.7	SAM	Underdrain Filter Material					
310000	1.03.C.1	QCS	Subbase Materials					
310000	1.03.C.2	QCS	Other Aggregates					
310000	1.03.C.3	QCS	Excavation Procedure					
310000	1.03.4	QCS	Sheeting, Shoring, and Bracing (Not shown on the Drawings)					
<b>310101</b>								
<b>SITE RESTORATION</b>								
<b>311000</b>								
<b>SITE CLEARING</b>								
<b>311300</b>								
<b>SELECTIVE TREE REMOVAL AND TRIMMING</b>								
311300	1.02.A	QCS	Detailed experience and qualifications description of tree trimming and removal					
<b>312316.13</b>								
<b>TRENCHING</b>								
312316.13	1.04.B	PD	Written confirmation of the status of all utility construction					
312316.13	1.04.C	QCS	Sample of each type of offsite fill and/or bedding material that is to be used in backfilling					
<b>312513</b>								
<b>EROSION AND SEDIMENT CONTROL</b>								
<b>315000</b>								
<b>EXCAVATION SUPPORT AND PROTECTION</b>								
<b>321216</b>								
<b>ASPHALT PAVING</b>								
321216	1.04.A.1	PD	Paving Synthetics					
321216	1.04.A.2	PD	Asphaltic Pavement					
321216	1.04.B	QCS	Batch plant name, NYSDOT Plant Number, and location of asphalt plant					
321216	1.04.C	QCS	Material Delivery Tickets					
<b>321300</b>								
<b>CONCRETE WALKS</b>								

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Spec Section	Sub Section	Type	Description			F F/O D S	Mark "X" for all that apply	Projected Transmittal Date:
321300	1.04.A.1	PD	Concrete Design Mix					
321300	1.04.A.2	PD	Portland Cement					
321300	1.04.A.3	PD	Air-entraining Admixture					
321300	1.04.A.4	PD	Water-reducing or High Range Water-reducing Admixture					
321300	1.04.A.5	PD	Curing and Anti-Spalling Compound					
321300	1.04.A.6	PD	ADA Detectable Warning Surface					
321300	1.04.B.1	SAM	Bar Supports					
321300	1.04.B.2	SAM	Bar Reinforcement					
321300	1.04.B.3	SAM	ADA Detectable Warning Surface					
321316			<b>DECORATIVE CONCRETE PAVING</b>					
321316	1.05.A	PD	Product Data					
321316	1.05.B	SAM	Samples					
321316	1.05.C	QCS	Design Mixtures					
321316	1.06.A	QCS	Qualification Data: qualified Installer and ready-mix concrete manufacturer					
321316	1.06.B	QCS	Material Certificates					
321316	1.06.C	QCS	Material Test Reports: Aggregates					
321316	1.06.D	QCS	Field quality-control reports					
321373			<b>CONCRETE PAVING JOINT SEALANTS</b>					
321373	1.02.A	PD	Product Data					
321440			<b>STONE PAVING</b>					
321440	1.03.A	PD	Product Data					
321440	1.03.B.1	SAM	Samples: Pavers					
321440	1.03.B.2	SAM	Samples: Packaged Grout					
321613			<b>PORTLAND CEMENT CONCRETE CURBS</b>					
321613	1.05.A	PACK	Submit product data for design mix(es) and materials for concrete specified below at the same time as a package.					
321613	1.05.B.1	PD	Mix Design					
321613	1.05.B.2	PD	Portland Cement					
321613	1.05.B.3	PD	Fly Ash					
321613	1.05.B.4	PD	Air-entraining Admixture					
323113			<b>CHAIN LINK FENCE</b>					
323113	1.03.A	SD	Shop Drawings					
323113	1.03.B	PD	Product Data					
323113	1.03.C.1	SAM	Fence Fabric					
323113	1.03.C.2	SAM	Fence and Gate Posts					
323113	1.03.C.3	SAM	Miscellaneous Materials and Accessories					
323113	1.03.D.1	QCS	Test Reports: Security coils test procedure report.					
323113	1.03.D.2	QCS	Certificates: Affidavit required under Quality Assurance Article					

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SUBMITTALS FOR APPROVAL				Send to:	Critical Submittals	Contractor's Projected Dates Allow at least 4 weeks for Approval (allows time for any resubmission)		
Spec Section	Sub Section	Type	Description	F F/O D S	Mark "X" for all that apply	Projected Transmittal Date:	Projected Approval Date:	Projected Delivery Date:
323113	1.05.A	CCS	Extra Materials: Furnish additional 800 feet fo 30 inch security coils. Furnish ratchet tool and sufficient quantity of stainless steel twistable wire ties for installation of coils by facility personnel	F				
323115			<b>SLIDING GATE OPERATOR SYSTEM</b>					
323115	1.05.B	PACK	Submit shop drawings and product data at the same time as a package					
323115	1.05.D	SD	Show relationship of system with other Work. Include details of all major components. Include parts list showing manufacturers' names and part numbers for the complete installation					
323115	1.05.E	PD	Product Data					
323115	1.05.F.1	QCS	Test Report: System acceptance test report					
323115	1.05.F.2	QCS	Certificate: Affidavit, signed by the Company Field Advisor and notarized, certifying that the system meets the contract requirements and is operating properly.					
323115	1.05.F.3	QCS	Company Field Advisor Data					
323115	1.05.G	CCS	Operation and Maintenance Data: Deliver two copies	F				
323115	1.08.A.1	CCS	Spare Parts: One motor	F				
323115	1.08.A.2	CCS	Spare Parts: One reduction gear assembly.	F				
323115	1.08.A.3	CCS	Spare Parts: One chain	F				
323115	1.08.A.4	CCS	Spare Parts: Two of each type limit switch	F				
323115	1.08.A.5	CCS	Spare Parts: Two of each type circuit breaker	F				
323115	1.08.A.6	CCS	Spare Parts: Two of each type light.	F				
323115	1.08.A.7	CCS	Spare Parts: Special tools if required for the regular maintenance and minor repairs of the system.	F				
323115	1.08.A.8	CCS	Spare Parts: Required amounts of recommended lubricants for 3 years of service	F				
323119			<b>DECORATIVE METAL FENCES AND GATES</b>					
323119	1.03.A	PD	Product Data					
323119	1.03.B	SD	Shop Drawings					
323119	1.03.C	SAM	Samples: For each fence material and for each color specified					
323119	1.04.A	QCS	Field quality-control reports					
323119	1.05.A	CCS	Maintenance Data: For gate operators to include in maintenance manuals					
329120			<b>TOPSOIL</b>					
329120	1.01.A	SAM	Topsoil for Testing					
329219			<b>SEEDING</b>					
329219	1.01.A	PD	Hydro Mulch: Manufacturer's specifications and application rate					
329219	1.01.B	PD	Erosion Control Blanket: Manufacturer's specifications					

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Spec Section	Sub Section	Type	Description			F	F/O	D	S	Mark "X" for all that apply	Projected Transmittal Date:	Projected Approval Date:
329219	1.01.C	SAM	One pound of seed in vendor's unopened package with label and seed analysis.									
333913			<b>SANITARY MANHOLES, FRAMES &amp; COVERS</b>									
333913	1.05.A	SD	Shop Drawings									
333913	1.05.B	PD	Product Data									
334103			<b>DRAINAGE PIPE (STORM DRAINAGE)</b>									
334103	1.04.A	PD	Product Data									
334103	1.04.B	QCS	Construction permits obtained for work									
334103	1.04.C	QCS	Reports: field tests made and results obtained									
334103	1.04.D	QCS	Manufacturer's Installation Instructions									
334103	1.04.E	QCS	Manufacturer's Certification									
334103	1.05.A	CCS	Project Record Documents	F								
334104			<b>CORRUGATED POLYETHYLENE STORM DRAIN PIPE</b>									
334104	1.02.A	PD	Product Data									
334416			<b>TRENCH DRAINS</b>									
334416	1.02.A	SD	Shop Drawings									
334416	1.02.B	PD	Product Data									
334416	1.02.C	SAM	6 inch section of trench drain and grate									
334416	1.02.D	CCS	Operation and Maintenance Data: Deliver 2 copies	F								

Updated 07/24/2018

Printed 9/12/2024



Disclaimer: The “digital scan” incorporated within this addendum is for informational purposes only. The “digital scan” represents what conditions were at the time they were taken and may not accurately represent current or proposed conditions.

TROY OFFICE  
433 River Street  
Suite 6004  
Troy NY 12180  
T 518 266 9600  
F 518 266 8938

## MEMORANDUM

TO:	FROM:
<b>Whom it May Concern</b>	<b>KC Bianco (Guth DeConzo)</b>
COMPANY:	DATE:
	<b>9/16/24</b>
RE:	PROJECT NUMBER:
<b>3D Scan Instructions</b>	<b>47331</b>

This Memo is in intended to provided directions for obtaining access to the east and west approach 3D Scans. Please follow the directions below:

### Basic Scan Utilization

1. Please contact KC Bianco (kbianco@guthdeconzo.com) for the sole purpose of access to the digital scan of the project site.
2. An email will be sent to you to access the scans online via Autodesk Construction Cloud
3. An Autodesk account will need to be created by the user; this is a free account for 30 days.
4. Once logged in, navigate to the DOCS tab. Note: this is a large share file, syncing access may take some time.
5. There will be 2 folders, the .rcp file in each folder is the Scan file, the other folders are support folders/files.
6. The scans can be viewed and manipulated in a web browser
  - a. Visual changes, realviews, 3D views, dimension tools are all available in the online viewer.
7. Anything done online in the web viewer **WILL NOT BE SAVED.**

### Advanced Scan Utilization

1. Navigate to Autodesk Recap Pro online page
  - a. <https://www.autodesk.com/products/recap/trial-intake>
2. Select Business
3. Sign in with Autodesk Account (if not already created from step 3 above)
  - a. Note that this is a free 30 day trial of the software
4. Install Recap Pro
5. Back on the project site, download the .rcp file and the correct support file, save a copy local on your computer.
6. Once saved, open with Recap pro. Now any dimensions, views and settings changed in the scan can now be saved.

**Any questions should be submitted as bidders questions.**

TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE DRAWINGS ARE IN CONFORMANCE WITH THE ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE.

**WARNING:**  
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CONTRACT: **CONSTRUCTION**

TITLE: **REHABILITATE THE EASTERN APPROACH STAIRCASE, PROMENADES, PORTICO, AND EXECUTIVE RAMP**

LOCATION: **NEW YORK STATE CAPITOL ALBANY, NY**

CLIENT: **OFFICE OF GENERAL SERVICES**

REVISED 09/13/2024

MARK DATE DESCRIPTION

PROJECT NUMBER:	47331 - C
DESIGNED BY:	PJM
DRAWN BY:	PJM
FIELD CHECK:	PJM
APPROVED:	Approver

**ELECTRICAL SCHEDULES AND DETAILS**

DRAWING NUMBER: **E002**

**LUMINAIRE SCHEDULE**

CALLOUT	SYMBOL	LAMP	DESCRIPTION	BALLAST	MOUNTING	INPUT WATTS	VOLTS	NOTE 1
C2	○	(1) 20W LED, 3500K, CRI>80	CANOPY/PENDANT FIXTURE, DARK BRONZE HOUSING. WET LOCATION, DIFFUSED, DIMMING, 2904 LUMENS, INTEGRAL PHOTOCELL CONTROL	LED	SURFACE	20	120V 1P 2W	SAME AS C1 FIXTURE EXCEPT CONTROLLED BY INTEGRAL PHOTOCELL.
F1	○	(1) 40W LED, 2500K, CRI>80	HISTORICAL REFURBISHED FIXTURE. REINSTALL.	LED	RECESSED	40	120V 1P 2W	FACTORY WIRED FOR ON/OFF CONTROL
F2	○	(1) 70W LED, 2500K, CRI>80	HISTORICAL REFURBISHED FIXTURE. REINSTALL.	LED	RECESSED	70	120V 1P 2W	FACTORY WIRED FOR ON/OFF CONTROL
F3	○	(1) 28W LED, 2500K, CRI>80	HISTORICAL REFURBISHED FIXTURE. REINSTALL.	LED	RECESSED	28	120V 1P 2W	FACTORY WIRED FOR ON/OFF CONTROL
F4	—	(1) 26.9W LED, 4000K, CRI>80	4FT LONG LED, WET LOCATION LISTED, VAPOR TIGHT, LOW TEMPERATURE OPERATION, 3748 LUMENS	LED	SURFACE	26.9	120V 1P 2W	FACTORY WIRED FOR ON/OFF CONTROL
F4EM	—	(1) 26.9W LED, 4000K, CRI>80	4FT LONG LED, WET LOCATION LISTED, VAPOR TIGHT, LOW TEMPERATURE OPERATION, 3748 LUMENS, COLD WEATHER EMERGENCY BATTERY (1500LM)	LED	SURFACE	26.9	120V 1P 2W	FACTORY WIRED FOR ON/OFF CONTROL
F5	—	(1) 19.8W LED, 4000K, CRI>80	2FT LONG LED, WET LOCATION LISTED, VAPOR TIGHT, LOW TEMPERATURE OPERATION, 2896 LUMENS	LED	PENDANT/SURFACE	19.8	120V 1P 2W	FACTORY WIRED FOR ON/OFF CONTROL
F5EM	—	(1) 19.8W LED, 4000K, CRI>80	2FT LONG LED, WET LOCATION LISTED, VAPOR TIGHT, LOW TEMPERATURE OPERATION, 2896 LUMENS, COLD WEATHER EMERGENCY BATTERY (1500LM)	LED	PENDANT/SURFACE	19.8	120V 1P 2W	FACTORY WIRED FOR ON/OFF CONTROL
F6	—	(1) 13W LED, 3500K, CRI>80	WET LOCATION, LOW TEMPERATURE, VAPOR TIGHT FIXTURE	LED	SURFACE	13	120V 1P 2W	FACTORY WIRED FOR ON/OFF CONTROL
F7	—	(1) 26.7W LED, 3500K, CRI>80	4' LONG ARCHITECTURAL STRIP LIGHTING, LED, 4000LM, INTEGRAL OCCUPANCY SENSOR	LED	SURFACE	26.7	120V 1P 2W	FACTORY WIRED FOR DIMMING CONTROL TO 20% ON OFF-OCCUPANCY
F7EM	—	(1) 26.7W LED, 3500K, CRI>80	4' LONG ARCHITECTURAL STRIP LIGHTING, LED, 4000LM, INTEGRAL OCCUPANCY SENSOR, 90 MINUTE EMERGENCY BATTERY 1500LM.	LED	SURFACE	26.7	120V 1P 2W	FACTORY WIRED FOR DIMMING CONTROL TO 20% ON OFF-OCCUPANCY
W1	□	(1) 23W LED, 3000K, >70CRI	WALL MOUNT CUTOFF FIXTURE OVER DOORS, 3160 LUMENS, DARK BRONZE, INTEGRAL PHOTOCELL.	LED (-)20°F	WALL	23	120V 1P 2W	
W2	□	(1) 36W LED, 70CRI, 4000K	WALL MOUNT LIGHT OVERHEAD LOADING DOORS	LED (-)20°F	WALL	36	277V 1P 2W	

**LIGHT FIXTURE SCHEDULE NOTES:**

FASTEN LIGHTING FIXTURES SECURELY TO STRUCTURAL SUPPORTS AND ENSURE THAT FIXTURES ARE PLUMB AND LEVEL. FIXTURES INSTALLED IN LAY-IN CEILINGS SHALL BE INDEPENDENTLY SUPPORTED FROM BUILDING STRUCTURE PER NEC.

**EXISTING PANEL EMPP-BC-1**

Panel	ROOM	VOLTS	208Y/120V 3P 4W	AIC	EXISTING
EMPP-BC-1	MOUNTING SURFACE	BUS AMPS	225	MAIN BKR	MLO
	FED FROM UTILITY	NEUTRAL	100%	LUGS	STANDARD
	NOTE				

CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION	CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION	
1	50/3	0	EXISTING ELEVATOR DOOR COMPRESSOR	a	2	20/3	0	EXISTING RE SUPERHEAT PUMP
3	—	—	—	b	4	—	—	—
5	—	—	—	c	6	—	—	—
7	20/3	0	EXISTING NORTH COND PUMP	d	8	20/3	0	EXISTING WEST COND PUMP MAIN BASEMENT MER
9	—	—	—	b	10	—	—	—
11	—	—	—	c	12	—	—	—
13	15/3	0	EXISTING AHU-78-BP	d	14	20/1	0	EXISTING
15	—	—	—	b	16	20/1	0	EXISTING
17	—	—	—	c	18	20/1	0	EXISTING
19	20/1	0	EXISTING	d	20	50/3	13.9	PANEL EMPP-BC-1A
21	20/1	0	EXISTING	b	22	—	—	—
23	20/1	0	EXISTING	c	24	—	—	—

**NEW PANEL EMPP-BC-1A**

Panel	ROOM	VOLTS	208Y/120V 3P 4W	AIC	22,000
EMPP-BC-1A	MOUNTING SURFACE	BUS AMPS	50	MAIN BKR	MLO
	FED FROM EMPP-BC	NEUTRAL	100%	LUGS	STANDARD
	NOTE				

CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION	CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION	
1	20/3	3.99	SNOW MELT PUMP P1A	a	2	20/3	2.83	SNOW MELT PUMP MP1A
3	—	—	—	b	4	—	—	—
5	—	—	—	c	6	—	—	—
7	20/3	3.99	SNOW MELT PUMP P1B	d	8	20/3	2.83	SNOW MELT PUMP MP1B
9	—	—	—	b	10	—	—	—
11	—	—	—	c	12	—	—	—
13	20/1	0.18	GFCI	d	14	-/1	0	SPACE
15	20/1	0.1	STEAM PRV SAFETY PANEL	b	16	-/1	0	SPACE
17	-/1	0	SPACE	c	18	-/1	0	SPACE

<b>LARGEST MOTOR</b>	CONN KVA	3.99	CALC KVA	0.998	(25%)
<b>MOTORS</b>	CONN KVA	13.6	CALC KVA	13.6	(100%)
<b>RECEPTACLES</b>	CONN KVA	0.18	CALC KVA	0.18	(50%>10)
<b>CONTINUOUS</b>	CONN KVA	0.1	CALC KVA	0.125	(125%)
<b>TOTAL LOAD</b>	CONN KVA	14.9	CALC KVA	14.9	
<b>BALANCED 3-PHASE LOAD</b>	CONN KVA	41.5 A	CALC KVA	41.5 A	
<b>PHASE A</b>	LOAD	102%			
<b>PHASE B</b>	LOAD	100%			
<b>PHASE C</b>	LOAD	98%			

APPLY ARC FLASH LABELS USING DATA FROM UPLINE PANEL

**NEMA 3R EXTERIOR TEMPORARY PANEL**

Panel	ROOM	VOLTS	208Y/120V 3P 4W	AIC	22,000
TP1	MOUNTING SURFACE	BUS AMPS	60	MAIN BKR	60
	FED FROM EM-LP-BE	NEUTRAL	100%	LUGS	STANDARD
	NOTE				

CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION	CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION	
1	-/1	0	SPACE	a	2	-/1	0	SPACE
3	-/1	0	SPACE	b	4	-/1	0	SPACE
5	-/1	0	SPACE	c	6	-/1	0	SPACE
7	-/1	0	SPACE	d	8	-/1	0	SPACE
9	-/1	0	SPACE	b	10	-/1	0	SPACE
11	-/1	0	SPACE	c	12	-/1	0	SPACE
13	-/1	0	SPACE	d	14	-/1	0	SPACE
15	-/1	0	SPACE	b	16	-/1	0	SPACE
17	-/1	0	SPACE	c	18	-/1	0	SPACE
19	-/1	0	SPACE	d	20	-/1	0	SPACE
21	-/1	0	SPACE	b	22	-/1	0	SPACE
23	-/1	0	SPACE	c	24	-/1	0	SPACE
25	-/1	0	SPACE	d	26	-/1	0	SPACE
27	-/1	0	SPACE	b	28	-/1	0	SPACE
29	-/1	0	SPACE	c	30	-/1	0	SPACE

<b>LARGEST MOTOR</b>	CONN KVA	0	CALC KVA	0
<b>TOTAL LOAD</b>	CONN KVA	0	CALC KVA	0
<b>BALANCED 3-PHASE LOAD</b>	CONN KVA	0 A	CALC KVA	0 A
<b>PHASE A</b>	LOAD	0.00%		
<b>PHASE B</b>	LOAD	0.00%		
<b>PHASE C</b>	LOAD	0.00%		

APPLY ARC FLASH LABELS USING DATA FROM UPLINE PANEL

PROVIDE BREAKERS AND BRANCH CIRCUITS FOR TEMPORARY POWER TO GATES, SECURITY AND LIGHTING.

**NEMA 3R EXTERIOR TEMPORARY PANEL**

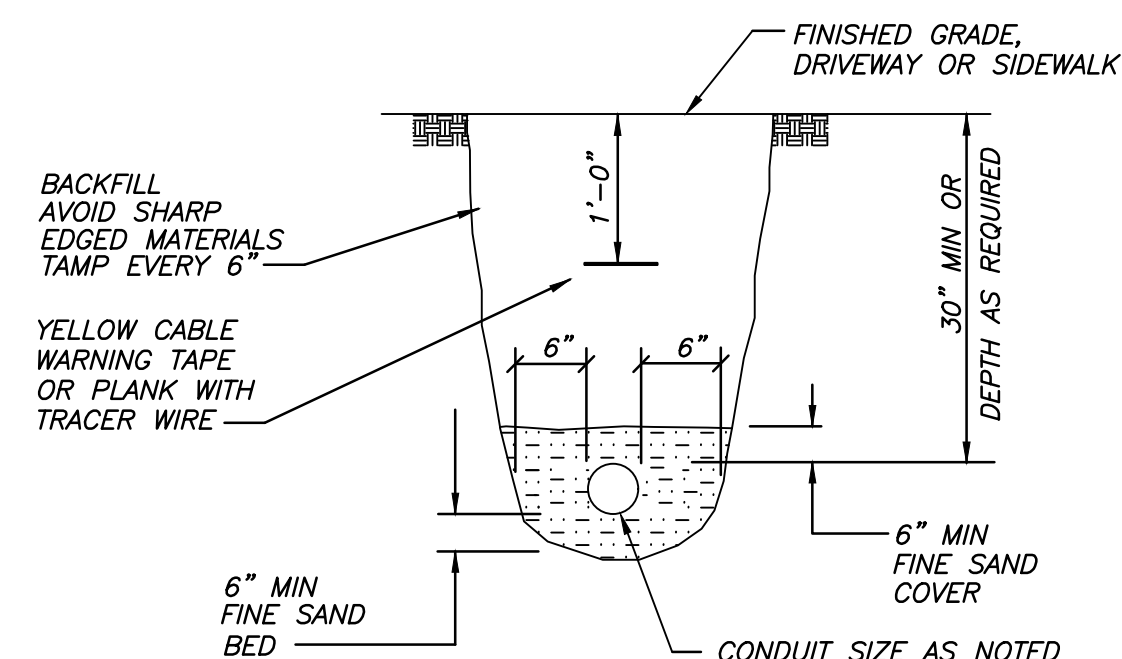
Panel	ROOM	VOLTS	208Y/120V 3P 4W	AIC	22,000
TP2	MOUNTING SURFACE	BUS AMPS	60	MAIN BKR	60
	FED FROM EM-LP-BE	NEUTRAL	100%	LUGS	STANDARD
	NOTE				

CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION	CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION	
1	-/1	0	SPACE	a	2	-/1	0	SPACE
3	-/1	0	SPACE	b	4	-/1	0	SPACE
5	-/1	0	SPACE	c	6	-/1	0	SPACE
7	-/1	0	SPACE	d	8	-/1	0	SPACE
9	-/1	0	SPACE	b	10	-/1	0	SPACE
11	-/1	0	SPACE	c	12	-/1	0	SPACE
13	-/1	0	SPACE	d	14	-/1	0	SPACE
15	-/1	0	SPACE	b	16	-/1	0	SPACE
17	-/1	0	SPACE	c	18	-/1	0	SPACE
19	-/1	0	SPACE	d	20	-/1	0	SPACE
21	-/1	0	SPACE	b	22	-/1	0	SPACE
23	-/1	0	SPACE	c	24	-/1	0	SPACE
25	-/1	0	SPACE	d	26	-/1	0	SPACE
27	-/1	0	SPACE	b	28	-/1	0	SPACE
29	-/1	0	SPACE	c	30	-/1	0	SPACE

<b>LARGEST MOTOR</b>	CONN KVA	0	CALC KVA	0
<b>TOTAL LOAD</b>	CONN KVA	0	CALC KVA	0
<b>BALANCED 3-PHASE LOAD</b>	CONN KVA	0 A	CALC KVA	0 A
<b>PHASE A</b>	LOAD	0.00%		
<b>PHASE B</b>	LOAD	0.00%		
<b>PHASE C</b>	LOAD	0.00%		

APPLY ARC FLASH LABELS USING DATA FROM UPLINE PANEL

PROVIDE BREAKERS AND BRANCH CIRCUITS FOR TEMPORARY POWER TO GATES, SECURITY AND LIGHTING.



**1 UNDERGROUND CONDUIT TRENCH DETAIL E002**  
NO SCALE

UNLESS OTHERWISE REQUIRED BY THE CONNECTED EQUIPMENT MANUFACTURER OR THE NEC:

MINIMUM CIRCUIT FOR 120V SHALL BE 2#12, #12EGC, IN 3/4" C FED FROM A 1P-15A C/B. SHARED NEUTRALS ARE NOT ACCEPTABLE UNLESS NOTED OTHERWISE. MINIMUM CIRCUIT SIZE FOR 240V/1P SHALL BE 2#12, #12EGC, IN 3/4" C FED FROM A 2P-20A C/B. PROVIDE FULL SIZE NEUTRAL CONDUCTOR WHEN NEUTRAL IS INDICATED OR REQUIRED BY CONNECTED EQUIPMENT. PROVIDE AN INSULATED GREEN EQUIPMENT GROUNDING CONDUCTOR (EGC) WITH EACH CIRCUIT. BOND RACEWAY, DISCONNECTS AND PANEL BOXES TO EQUIPMENT GROUNDING CONDUCTOR PER NEC. PROVIDE INSULATED GREEN WITH YELLOW TRACER ISOLATED GROUNDING CONDUCTOR WHERE IG IS CALLED FOR.

ALL WIRE SIZES ARE BASED ON COPPER CONDUCTORS. ALUMINUM CONDUCTORS SHALL NOT BE USED. PROVIDE THWN-2 INSULATION FOR GENERAL CONDUCTORS.

PROVIDE ARC FLASH WARNING PERMANENT LABELS ON ALL NEW PANELS INDICATING LEVEL OF PROTECTION REQUIRED, RESTRICTED APPROACH AND PROHIBITED APPROACH DISTANCES IN ACCORDANCE WITH NFPA 70E ARTICLES AND TABLES. UTILIZE DATA FROM UPSTREAM PANELS OR PROVIDE AN APPROVED ARC FLASH STUDY STUDY

SOME INFORMATION TAKEN FROM EXISTING DRAWINGS. FIELD VERIFY ALL BREAKER, SWITCH, FUSE, CONDUCTOR, CONDUIT AND PANEL SIZES BEFORE REMOVING, EXTENDING OR RECONNECTING TO EXISTING CIRCUITS.

TRACE EXISTING POWER CIRCUITS THAT ARE RELOCATED, REFEED, OR REUSED. UPDATE PANEL SCHEDULES WITH NEW TYPED CIRCUIT DIRECTORIES, INDICATED SOURCE FEED ON DIRECTORY. UPDATE FEEDER PANEL CIRCUIT DIRECTORIES.

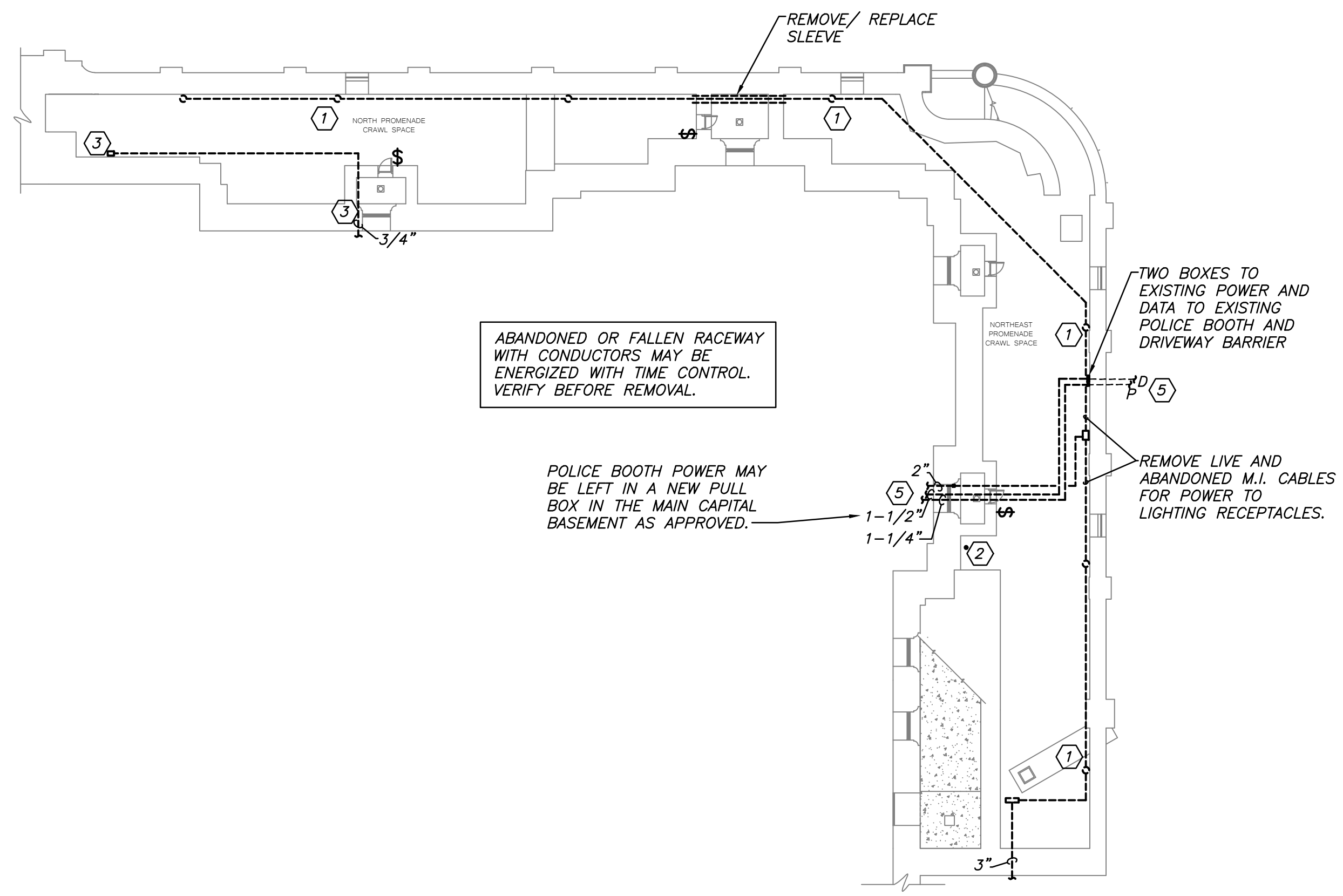
ALL PANEL BOARDS AND BRANCH CIRCUITS FOR WORK IN THIS PROJECT SHALL BE PROVIDED WITH PRINTED IDENTIFICATION LABEL IDENTIFYING WHAT EACH BREAKER FEEDS. PROVIDE PERMANENT LABELS ON EACH FIELD DEVICE (RECEPTACLE BACK BOXES, SYSTEMS FURNITURE POWER WHIPS, ETC.) INDICATING WHICH ELECTRICAL PANEL AND CIRCUIT THE DEVICE IS FED FROM.

BEFORE STARTING ANY PROJECT WORK, SUBMIT A WRITTEN ELECTRICAL SAFETY PLAN THAT COMPLIES WITH OSHA AND LATEST NFPA 70E, "ELECTRICAL SAFETY IN THE WORKPLACE". ARRANGE AN ELECTRICAL SAFETY MEETING WITH THE DIRECTOR'S REPRESENTATIVE AND DISCUSS ELECTRICAL SAFETY INCLUDING IDENTIFICATION OF HAZARDS AND PROCEDURES FOR DAILY WORK PLANS, MAINTAINING RESTRICTED AND PROHIBITED ACCESS BY QUALIFIED AND UNQUALIFIED PERSONNEL. EACH ATTENDEE SHALL SIGN AN ATTENDANCE SHEET FOR THIS MEETING.

**NOTES:**

- PERMANENTLY REMOVED RACEWAY, SECURITY DEVICES, FASTENER HOLES FOR SUPPORTS AND MOUNTING BRACKETS SUCH AS FOR CAMERAS EXPOSED TO THE EXTERIOR AND EXPOSED TO THE FINISHED INTERIOR SHALL BE PATCHED TO MATCH FINISHED SURFACE AS APPROVED BY THE ARCHITECT.

- KEYED DRAWINGS NOTES:**
- REMOVE SURFACE MOUNTED LIGHT FIXTURE AND POWER COMPLETE INCLUDING SURFACE MOUNTED JUNCTION BOX, CONDUCTORS AND CONDUIT BACK TO SOURCE IN CAPITAL BASEMENT. RECONNECT POWER TO DEVICES THAT REMAIN. INCLUDE REMOVAL OF MANUAL LIGHT SWITCHES AND RACEWAY.
  - PROTECT LIGHTNING PROTECTION DOWN CONDUCTOR DURING PROJECT WORK.
  - EXISTING HEAT TAPE POWER AND PANEL TO REMAIN IN SERVICE. PROTECT RACEWAY AND PANEL DURING PROJECT WORK.
  - LEAVE ENDS OF M.I. CABLE THAT CONTINUE ON OUT OF BASEMENT FOR RECONNECTION.
  - PER AS-BUILTS, THE EXISTING GATE HAS (2)CAT9E, (1)CAT3, (1) 6F MULTIMODE FIBER CABLE. COORDINATE WITH THE DIRECTOR'S REPRESENTATIVE AND REMOVE BACK TO THE MAIN CAPITAL BASEMENT LOCATION AS DIRECTED AND LEAVE COILED FOR REUSE. REMOVE POWER BACK TO PANEL EM-LP-BE (SEE E100).

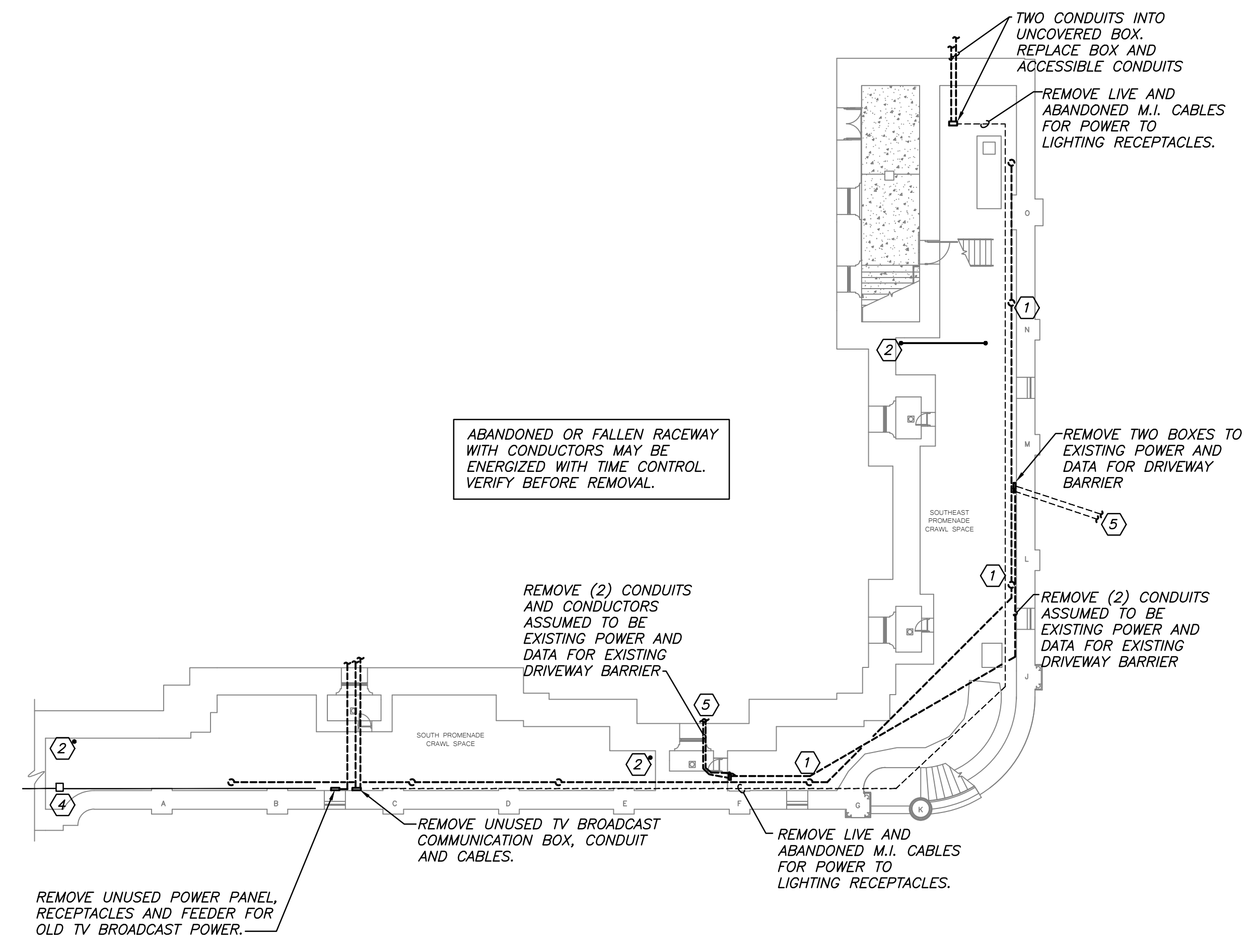


**1 NORTH PROMENADE BASEMENT ELECTRICAL REMOVALS PLAN**  
**ED101N** SCALE: 1/16" = 1'-0"

**PANEL EM-LP-BE** EXISTING PANEL REMOVALS

Panel	ROOM	VOLTS	208Y/120V	3P	4W	AIC	EXISTING
.	MOUNTING SURFACE	BUS	AMPS	225	MAIN	BKR	225
.	FED FROM UTILITY	NEUTRAL	100%	LUGS	STANDARD		
NOTE							
CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION	CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION
1	80/3	0	EM-LP-GOVRAMP PANEL IN POLICE HUT	a 2	40/1	0	SOUTH GATE OPERATOR
3				b 4	20/1	0	SPARE
5				c 6	20/1	0	SPARE
7	20/1	0	SPARE	d 8	20/1	0	SPARE
9	20/1	0	SPARE	b 10	20/1	0	SPARE
11	-/1	0	SPACE	c 12	-/1	0	SPACE
13	-/1	0	SPACE	d 14	-/1	0	SPACE
15	-/1	0	SPACE	b 16	-/1	0	SPACE
17	-/1	0	SPACE	c 18	-/1	0	SPACE
19	-/1	0	SPACE	d 20	-/1	0	SPACE
21	-/1	0	SPACE	b 22	-/1	0	SPACE
23	-/1	0	SPACE	c 24	-/1	0	SPACE
25	-/1	0	SPACE	d 26	-/1	0	SPACE
27	-/1	0	SPACE	b 28	-/1	0	SPACE
29	-/1	0	SPACE	c 30	-/1	0	SPACE
31	-/1	0	SPACE	d 32	-/1	0	SPACE
33	-/1	0	SPACE	b 34	-/1	0	SPACE
35	-/1	0	SPACE	c 36	-/1	0	SPACE
37	-/1	0	SPACE	d 38	-/1	0	SPACE
39	-/1	0	SPACE	b 40	-/1	0	SPACE
41	-/1	0	SPACE	c 42	-/1	0	SPACE
CONN KVA				CALC KVA			
CALC KVA				CALC KVA			
TOTAL LOAD				0			
BALANCED 3-PHASE LOAD				0 A			
PHASE A				0.00%			
PHASE B				0.00%			
PHASE C				0.00%			

DIRECTORY SHOWN IS TAKEN FROM AS-BUILT DRAWINGS. FIELD VERIFY BRANCH CIRCUITS, SPACES AND SPARES.



**1 SOUTH PROMENADE BASEMENT ELECTRICAL REMOVALS PLAN**  
**ED101S** SCALE: 1/16" = 1'-0"

TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE DRAWINGS ARE IN CONFORMANCE WITH THE ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE.

**WARNING:**  
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CONTRACT: CONSTRUCTION

TITLE: REHABILITATE THE EASTERN APPROACH STAIRCASE, PROMENADES, PORTICO, AND EXECUTIVE RAMP

LOCATION: NEW YORK STATE CAPITOL ALBANY, NY

CLIENT: OFFICE OF GENERAL SERVICES

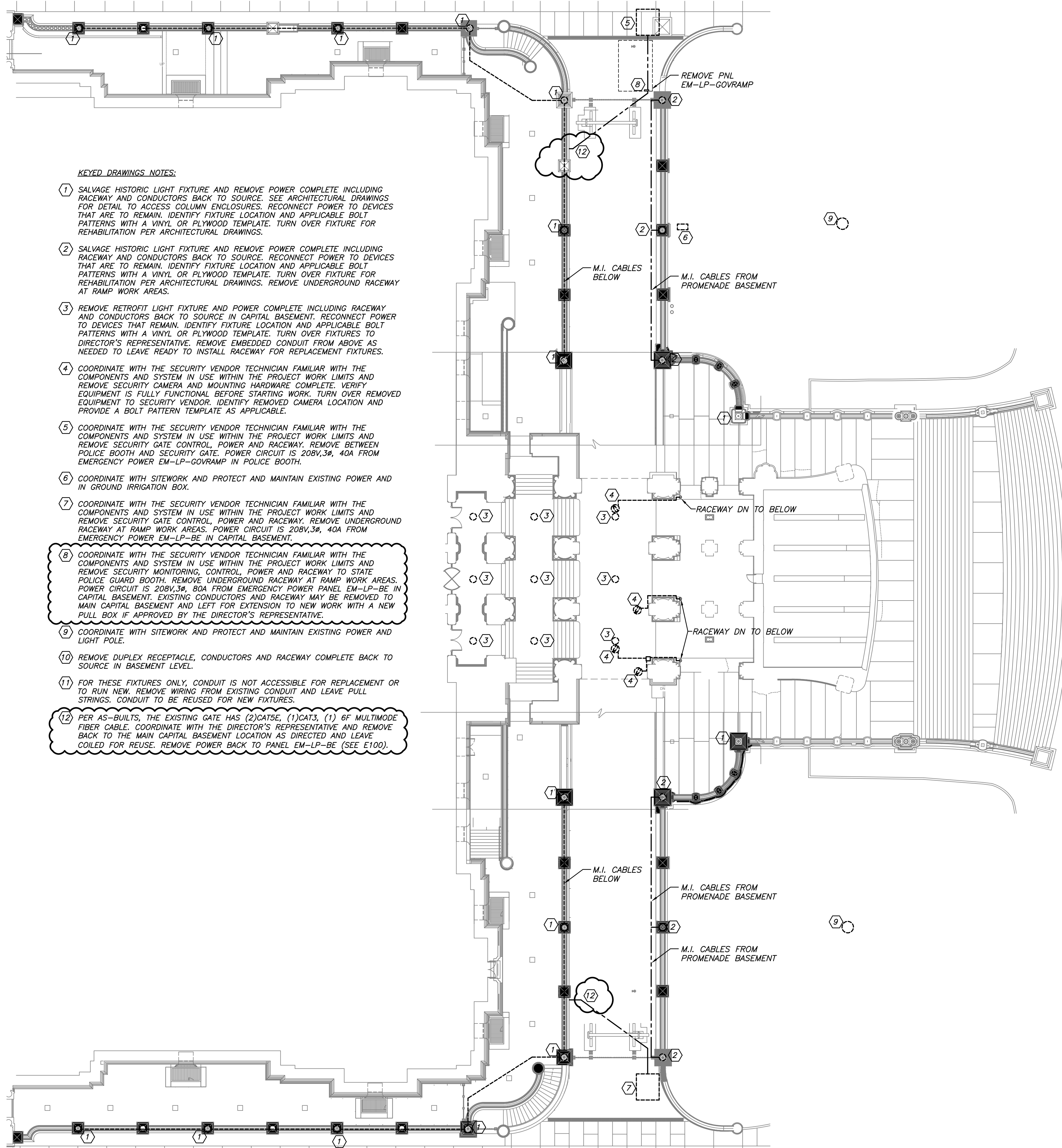
REVISED 09/13/2024

MARK	DATE	DESCRIPTION
2	09/13/2024	ADDENDUM 2
	06/21/2024	BID SET

PROJECT NUMBER:	47331 - C
DESIGNED BY:	PJM
DRAWN BY:	PJM
FIELD CHECK:	PJM
APPROVED:	Approver

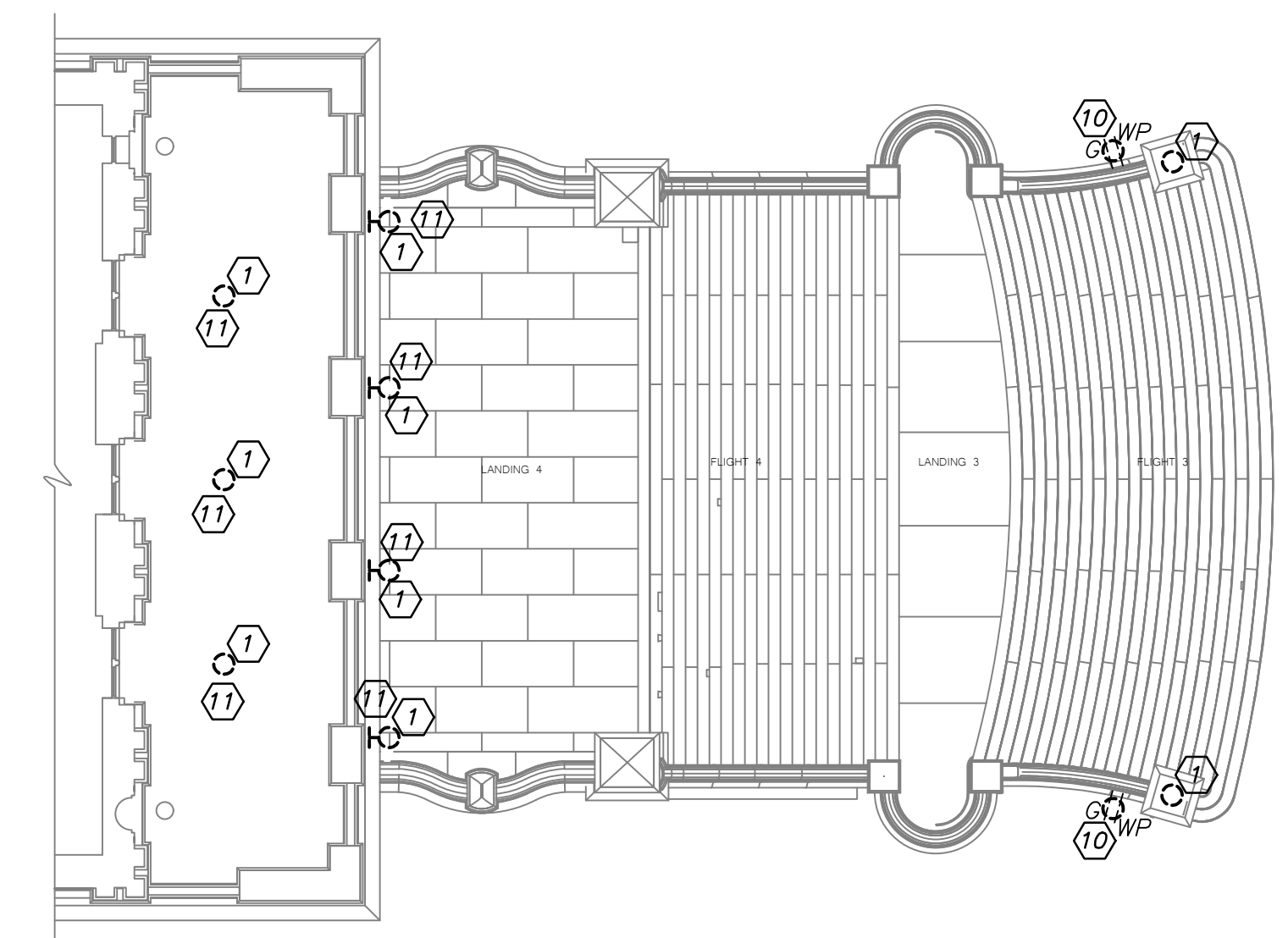
SHEET TITLE: **PROMENADE BASEMENT ELECTRICAL REMOVALS PLANS**

DRAWING NUMBER: **ED101-N-S**



**NOTES:**  
 1. PERMANENTLY REMOVED RACEWAY, SECURITY DEVICES, FASTENER HOLES FOR SUPPORTS AND MOUNTING BRACKETS SUCH AS FOR CAMERAS EXPOSED TO THE EXTERIOR AND EXPOSED TO THE FINISHED INTERIOR SHALL BE PATCHED TO MATCH FINISHED SURFACE AS APPROVED BY THE ARCHITECT.

- KEYED DRAWINGS NOTES:**
- 1 SALVAGE HISTORIC LIGHT FIXTURE AND REMOVE POWER COMPLETE INCLUDING RACEWAY AND CONDUCTORS BACK TO SOURCE. SEE ARCHITECTURAL DRAWINGS FOR DETAIL TO ACCESS COLUMN ENCLOSURES. RECONNECT POWER TO DEVICES THAT ARE TO REMAIN. IDENTIFY FIXTURE LOCATION AND APPLICABLE BOLT PATTERNS WITH A VINYL OR PLYWOOD TEMPLATE. TURN OVER FIXTURE FOR REHABILITATION PER ARCHITECTURAL DRAWINGS.
  - 2 SALVAGE HISTORIC LIGHT FIXTURE AND REMOVE POWER COMPLETE INCLUDING RACEWAY AND CONDUCTORS BACK TO SOURCE. RECONNECT POWER TO DEVICES THAT ARE TO REMAIN. IDENTIFY FIXTURE LOCATION AND APPLICABLE BOLT PATTERNS WITH A VINYL OR PLYWOOD TEMPLATE. TURN OVER FIXTURE FOR REHABILITATION PER ARCHITECTURAL DRAWINGS. REMOVE UNDERGROUND RACEWAY AT RAMP WORK AREAS.
  - 3 REMOVE RETROFIT LIGHT FIXTURE AND POWER COMPLETE INCLUDING RACEWAY AND CONDUCTORS BACK TO SOURCE IN CAPITAL BASEMENT. RECONNECT POWER TO DEVICES THAT REMAIN. IDENTIFY FIXTURE LOCATION AND APPLICABLE BOLT PATTERNS WITH A VINYL OR PLYWOOD TEMPLATE. TURN OVER FIXTURES TO DIRECTOR'S REPRESENTATIVE. REMOVE EMBEDDED CONDUIT FROM ABOVE AS NEEDED TO LEAVE READY TO INSTALL RACEWAY FOR REPLACEMENT FIXTURES.
  - 4 COORDINATE WITH THE SECURITY VENDOR TECHNICIAN FAMILIAR WITH THE COMPONENTS AND SYSTEM IN USE WITHIN THE PROJECT WORK LIMITS AND REMOVE SECURITY CAMERA AND MOUNTING HARDWARE COMPLETE. VERIFY EQUIPMENT IS FULLY FUNCTIONAL BEFORE STARTING WORK. TURN OVER REMOVED EQUIPMENT TO SECURITY VENDOR. IDENTIFY REMOVED CAMERA LOCATION AND PROVIDE A BOLT PATTERN TEMPLATE AS APPLICABLE.
  - 5 COORDINATE WITH THE SECURITY VENDOR TECHNICIAN FAMILIAR WITH THE COMPONENTS AND SYSTEM IN USE WITHIN THE PROJECT WORK LIMITS AND REMOVE SECURITY GATE CONTROL, POWER AND RACEWAY. REMOVE BETWEEN POLICE BOOTH AND SECURITY GATE. POWER CIRCUIT IS 208V, 3Ø, 40A FROM EMERGENCY POWER EM-LP-GOVRAMP IN POLICE BOOTH.
  - 6 COORDINATE WITH SITEMARK AND PROTECT AND MAINTAIN EXISTING POWER AND IN GROUND IRRIGATION BOX.
  - 7 COORDINATE WITH THE SECURITY VENDOR TECHNICIAN FAMILIAR WITH THE COMPONENTS AND SYSTEM IN USE WITHIN THE PROJECT WORK LIMITS AND REMOVE SECURITY MONITORING, CONTROL, POWER AND RACEWAY. REMOVE UNDERGROUND RACEWAY AT RAMP WORK AREAS. POWER CIRCUIT IS 208V, 3Ø, 40A FROM EMERGENCY POWER EM-LP-BE IN CAPITAL BASEMENT.
  - 8 COORDINATE WITH THE SECURITY VENDOR TECHNICIAN FAMILIAR WITH THE COMPONENTS AND SYSTEM IN USE WITHIN THE PROJECT WORK LIMITS AND REMOVE SECURITY MONITORING, CONTROL, POWER AND RACEWAY TO STATE POLICE GUARD BOOTH. REMOVE UNDERGROUND RACEWAY AT RAMP WORK AREAS. POWER CIRCUIT IS 208V, 3Ø, 80A FROM EMERGENCY POWER PANEL EM-LP-BE IN CAPITAL BASEMENT. EXISTING CONDUCTORS AND RACEWAY MAY BE REMOVED TO MAIN CAPITAL BASEMENT AND LEFT FOR EXTENSION TO NEW WORK WITH A NEW PULL BOX IF APPROVED BY THE DIRECTOR'S REPRESENTATIVE.
  - 9 COORDINATE WITH SITEMARK AND PROTECT AND MAINTAIN EXISTING POWER AND LIGHT POLE.
  - 10 REMOVE DUPLEX RECEPTACLE, CONDUCTORS AND RACEWAY COMPLETE BACK TO SOURCE IN BASEMENT LEVEL.
  - 11 FOR THESE FIXTURES ONLY, CONDUIT IS NOT ACCESSIBLE FOR REPLACEMENT OR TO RUN NEW. REMOVE WIRING FROM EXISTING CONDUIT AND LEAVE PULL STRINGS. CONDUIT TO BE REUSED FOR NEW FIXTURES.
  - 12 PER AS-BUILTS, THE EXISTING GATE HAS (2)CAT5E, (1)CAT3, (1) 6F MULTIMODE FIBER CABLE. COORDINATE WITH THE DIRECTOR'S REPRESENTATIVE AND REMOVE BACK TO THE MAIN CAPITAL BASEMENT LOCATION AS DIRECTED AND LEAVE COILED FOR REUSE. REMOVE POWER BACK TO PANEL EM-LP-BE (SEE E100).



**2 EASTERN APPROACH SECOND FLOOR ELECTRICAL REMOVAL PLAN**  
 ED102 SCALE: 1/16" = 1'-0"

**1 EASTERN APPROACH FIRST FLOOR ELECTRICAL REMOVAL PLAN**  
 ED102 SCALE: 1/16" = 1'-0"

CERTIFICATE OF AUTHORIZATION #: 019615

**ΣΨ Sigma Psi Consulting**  
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CONTRACT:	CONSTRUCTION
TITLE:	REHABILITATE THE EASTERN APPROACH STAIRCASE, PROMENADES, PORTICO, AND EXECUTIVE RAMP
LOCATION:	NEW YORK STATE CAPITOL ALBANY, NY
CLIENT:	OFFICE OF GENERAL SERVICES

REVISED 09/13/2024

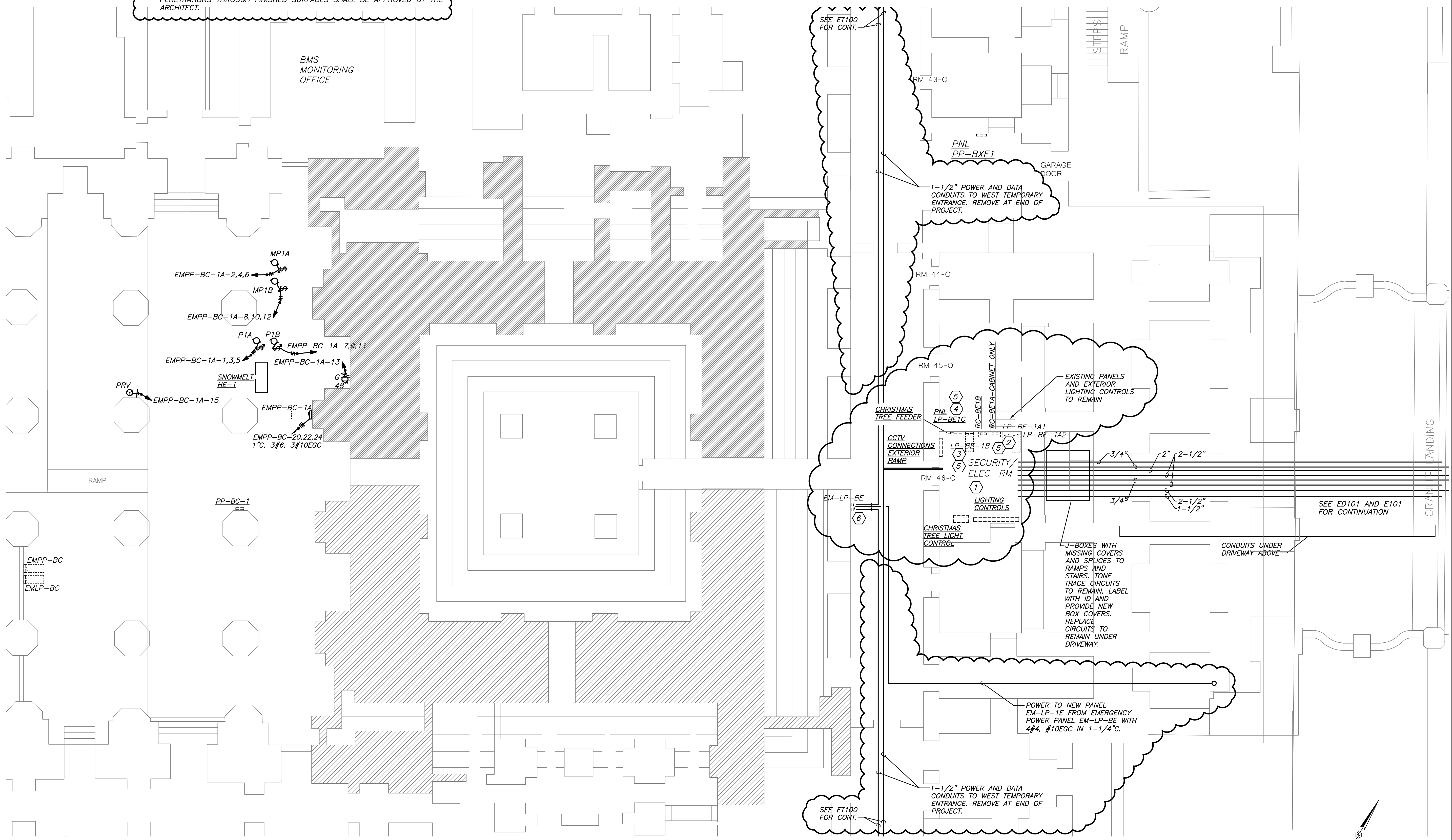
2	09/13/2024	ADDENDUM 2
	06/21/2024	BID SET
MARK DATE	DESCRIPTION	
PROJECT NUMBER:	47331 - C	
DESIGNED BY:	PJM	
DRAWN BY:	PJM	
FIELD CHECK:	PJM	
APPROVED:	Approver	
SHEET TITLE:	EASTERN APPROACH FIRST & SECOND FLOOR ELECTRICAL REMOVAL PLANS	
DRAWING NUMBER:	ED102	
SHEET: 250	OF	257

**NOTES:**

- BUILDING IS CRITICAL TO EMERGENCY OPERATIONS. ALL POWER SHOWN FOR THIS PROJECT IS TO BE FROM EMERGENCY POWER UNLESS NOTED OTHERWISE. RUN EMERGENCY POWER IN DEDICATED RACEWAY, CONDUIT AND BOXES SHALL BE LABELED AS EMERGENCY POWER AND HAVE CIRCUITS IDENTIFIED IN BOXES AND AT END DEVICES IN CONCEALED LOCATIONS WHEN EXPOSED TO PUBLIC AREAS.
- POWER AND SECURITY/ACCESS CONTROL SHALL BE RUN IN SEPARATE RACEWAY. PROVIDE LABELING OF SECURITY RACEWAY AND IDENTIFY SOURCE AND END DEVICES ON CONDUCTORS INSIDE BOXES.
- SECURITY DEVICES ARE FURNISHED BY THE SECURITY VENDOR SECURITY VENDOR AND INSTALLED BY THIS PROJECT. PROVIDE RACEWAY AND CONDUCTORS AS COORDINATED WITH THE SECURITY VENDOR SECURITY VENDOR. PROVIDE PULL STRINGS IN ALL SPARE/FUTURE SECURITY RACEWAY.
- ALL BOXES AND ENCLOSURES IN CRAWL SPACE AND UNDER STEPS SHALL BE NEMA 4X.
- ALL UNDERGROUND RACEWAY AND RACEWAY IN CRAWL SPACE AND UNDER OR IN STEPS SHALL BE PVC COATED RMC.
- ALL RACEWAY TO FIXTURES AND DEVICES EXPOSED TO THE EXTERIOR AND EXPOSED TO THE FINISHED INTERIOR SHALL BE CONCEALED. NEW PENETRATIONS THROUGH FINISHED SURFACES SHALL BE APPROVED BY THE ARCHITECT.

**KEYED DRAWINGS NOTES:**

- PRESUMED LOCATION OF CCTV AND ACCESS CONTROL SECURITY PANELS. REMOVE BACK TO THIS POINT FOR REMOVALS AND INSTALL NEW RACEWAY FROM THIS POINT. COORDINATE WITH THE SECURITY VENDOR SECURITY VENDOR FAMILIAR WITH THE COMPONENTS AND SYSTEM IN USE WITHIN THE PROJECT WORK LIMITS.
- EXISTING LP-BE-1A SEC. 1 AND SEC. 2 TO REMAIN - POLE FLOOD LIGHT POWER PANELS WITH EXISTING BUILDING COMPUTER TIME AND COLOR CONTROL. IT MAY BE POSSIBLE TO USE SPARE BREAKERS IN THESE PANELS IF NEEDED, BUT IT IS PREFERRED TO NOT MIX NON-LIGHTING WITH LIGHTING PANELS.
- EXISTING PANEL LP-BE-1B TO REMAIN - THIS PANEL IS CONTACTOR CONTROLLED AND OPERATED BY THE EXISTING BUILDING COMPUTER. THIS PANEL FEEDS THE HISTORIC STEP POLE LIGHTS.
- EXISTING PANEL LP-BE-1C TO REMAIN - THIS PANEL IS ASSUMED TO FEED POWER TO THE PROMENADE BASEMENT LIGHTS AND RECEPITALS. PANEL HAS (7) 1-POLE SPACES AND MAY BE USED FOR NEW CIRCUITS.
- NOTED PANELBOARDS IN THIS ROOM HAVE SEVERAL UNIDENTIFIED CIRCUITS, MISSING DIRECTORIES AND POTENTIALLY MISLABELED CIRCUITS. REMOVE COVERS AND TRACE CIRCUITS. PROVIDE UPDATED TYPED CIRCUIT DIRECTORIES AT COMPLETION OF PROJECT.
- EXISTING PANEL EM-LP-BE WITH FEEDS FOR EXISTING RAMP GATES AND POLICE BOOTH. PROVIDE NEW BRANCH CIRCUITS AND FEEDER WITH NEW BREAKERS FOR NEW BARRIERS, GATES, POLICE BOOTH AND NEW 1ST FLOOR PANEL EM-LP-1E.



**1 MAIN BUILDING PARTIAL BASEMENT ELECTRICAL PLAN**  
**E100** SCALE: 1/8" = 1'-0"

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CONTRACT: CONSTRUCTION

TITLE: REHABILITATE THE EASTERN APPROACH STAIRCASE, PROMENADES, PORTICO, AND EXECUTIVE RAMP

LOCATION: NEW YORK STATE CAPITOL ALBANY, NY

CLIENT: OFFICE OF GENERAL SERVICES

REVISED 09/13/2024

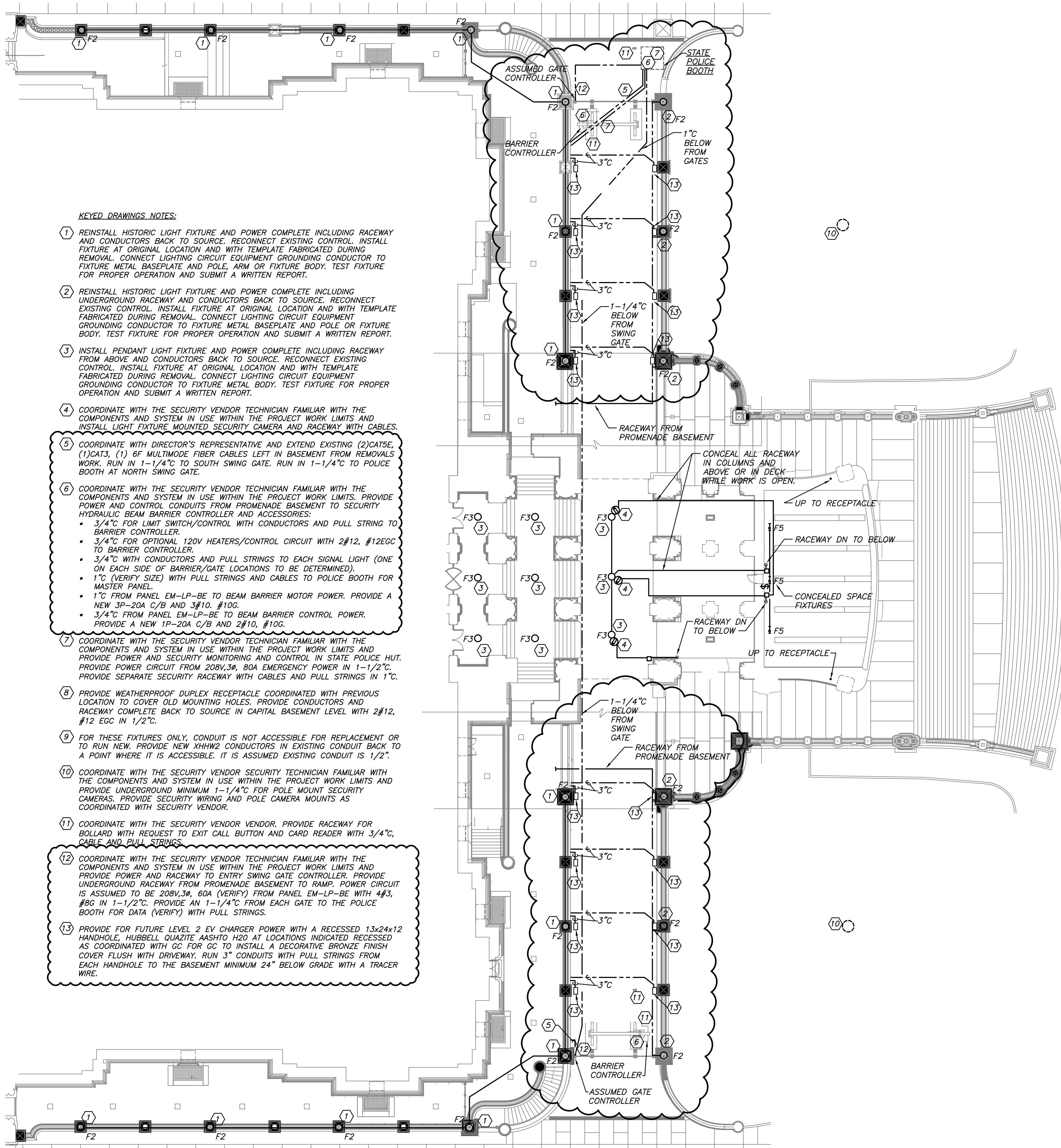
MARK	DATE	DESCRIPTION
2	09/13/2024	ADDENDUM 2
	06/21/2024	BID SET

PROJECT NUMBER:	47331 - C
DESIGNED BY:	PJM
DRAWN BY:	PJM
FIELD CHECK:	PJM
APPROVED:	Approver

SHEET TITLE:  
**MAIN BUILDING PARTIAL BASEMENT ELECTRICAL PLAN**

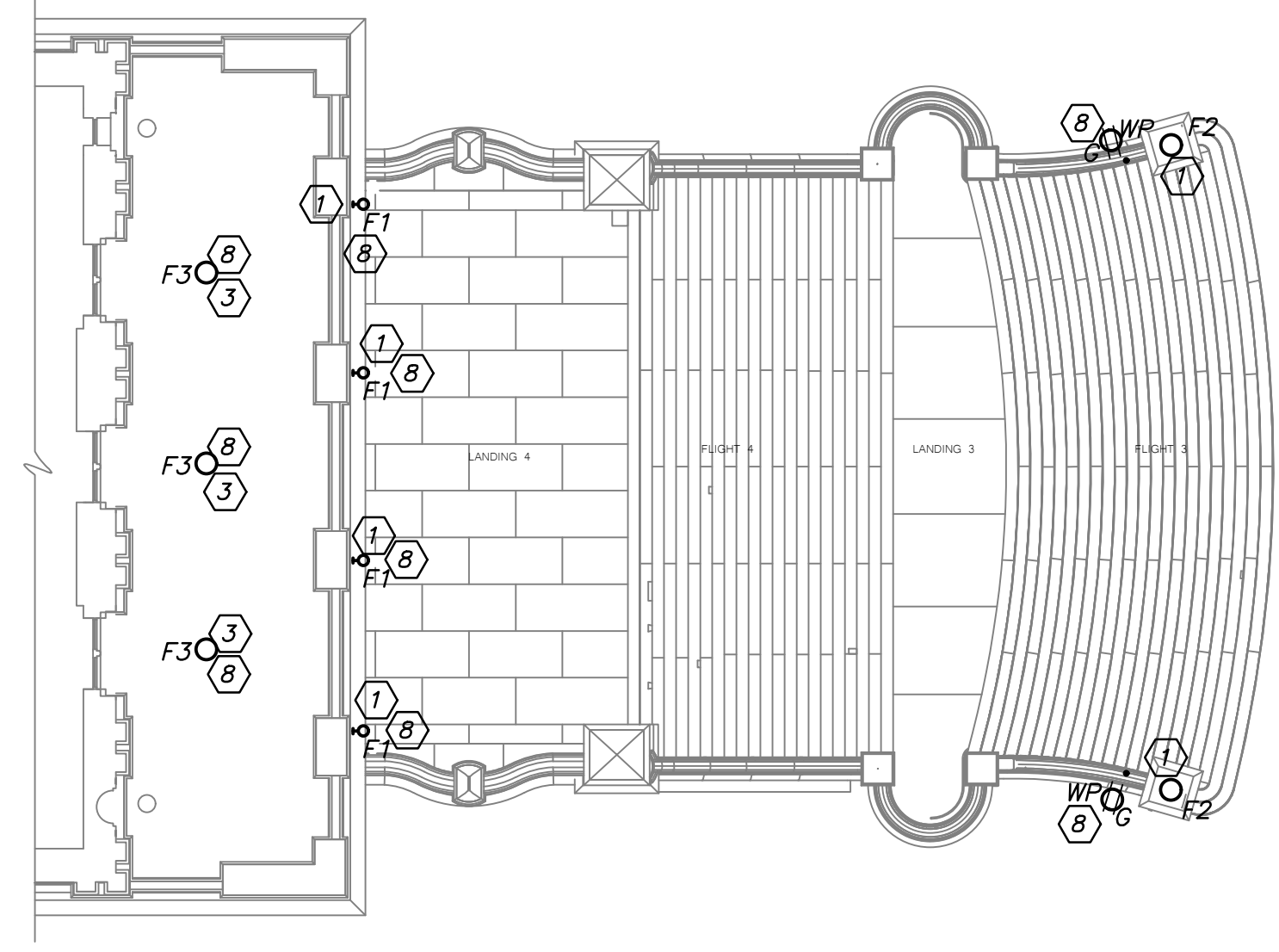
DRAWING NUMBER:  
**E100**





**1 EASTERN APPROACH FIRST FLOOR ELECTRICAL PLAN**  
**E102** SCALE: 1/16" = 1'-0"

- NOTES:**
- BUILDING IS CRITICAL TO EMERGENCY OPERATIONS. ALL POWER SHOWN FOR THIS PROJECT IS TO BE FROM EMERGENCY POWER UNLESS NOTED OTHERWISE. RUN EMERGENCY POWER IN DEDICATED RACEWAY. CONDUIT AND BOXES SHALL BE LABELED AS EMERGENCY POWER AND HAVE CIRCUITS IDENTIFIED IN BOXES AND AT END DEVICES IN CONCEALED LOCATIONS WHEN EXPOSED TO PUBLIC AREAS.
  - POWER AND SECURITY/ACCESS CONTROL SHALL BE RUN IN SEPARATE RACEWAY. PROVIDE LABELING OF SECURITY RACEWAY AND IDENTIFY SOURCE AND END DEVICES ON CONDUCTORS INSIDE BOXES.
  - SECURITY DEVICES ARE FURNISHED BY THE SECURITY VENDOR SECURITY VENDOR AND INSTALLED BY THIS PROJECT. PROVIDE RACEWAY AND CONDUCTORS AS COORDINATED WITH THE SECURITY VENDOR SECURITY VENDOR. PROVIDE PULL STRINGS IN ALL SPARE/FUTURE SECURITY RACEWAY.
  - ALL BOXES AND ENCLOSURES IN CRAWL SPACE AND UNDER STEPS SHALL BE NEMA 4X.
  - ALL UNDERGROUND RACEWAY AND RACEWAY IN CRAWL SPACE AND UNDER OR IN STEPS SHALL BE PVC COATED RMC.
  - ALL RACEWAY TO FIXTURES AND DEVICES EXPOSED TO THE EXTERIOR AND EXPOSED TO THE FINISHED INTERIOR SHALL BE CONCEALED. NEW PENETRATIONS THROUGH FINISHED SURFACES SHALL BE APPROVED BY THE ARCHITECT.



**2 EASTERN APPROACH SECOND FLOOR ELECTRICAL PLAN**  
**E102** SCALE: 1/16" = 1'-0"

**KEYED DRAWINGS NOTES:**

- REINSTALL HISTORIC LIGHT FIXTURE AND POWER COMPLETE INCLUDING RACEWAY AND CONDUCTORS BACK TO SOURCE. RECONNECT EXISTING CONTROL. INSTALL FIXTURE AT ORIGINAL LOCATION AND WITH TEMPLATE FABRICATED DURING REMOVAL. CONNECT LIGHTING CIRCUIT EQUIPMENT GROUNDING CONDUCTOR TO FIXTURE METAL BASEPLATE AND POLE, ARM OR FIXTURE BODY. TEST FIXTURE FOR PROPER OPERATION AND SUBMIT A WRITTEN REPORT.
- REINSTALL HISTORIC LIGHT FIXTURE AND POWER COMPLETE INCLUDING UNDERGROUND RACEWAY AND CONDUCTORS BACK TO SOURCE. RECONNECT EXISTING CONTROL. INSTALL FIXTURE AT ORIGINAL LOCATION AND WITH TEMPLATE FABRICATED DURING REMOVAL. CONNECT LIGHTING CIRCUIT EQUIPMENT GROUNDING CONDUCTOR TO FIXTURE METAL BASEPLATE AND POLE OR FIXTURE BODY. TEST FIXTURE FOR PROPER OPERATION AND SUBMIT A WRITTEN REPORT.
- INSTALL PENDANT LIGHT FIXTURE AND POWER COMPLETE INCLUDING RACEWAY FROM ABOVE AND CONDUCTORS BACK TO SOURCE. RECONNECT EXISTING CONTROL. INSTALL FIXTURE AT ORIGINAL LOCATION AND WITH TEMPLATE FABRICATED DURING REMOVAL. CONNECT LIGHTING CIRCUIT EQUIPMENT GROUNDING CONDUCTOR TO FIXTURE METAL BODY. TEST FIXTURE FOR PROPER OPERATION AND SUBMIT A WRITTEN REPORT.
- COORDINATE WITH THE SECURITY VENDOR TECHNICIAN FAMILIAR WITH THE COMPONENTS AND SYSTEM IN USE WITHIN THE PROJECT WORK LIMITS AND INSTALL LIGHT FIXTURE MOUNTED SECURITY CAMERA AND RACEWAY WITH CABLES.
- COORDINATE WITH DIRECTOR'S REPRESENTATIVE AND EXTEND EXISTING (2)CAT5E, (1)CAT3, (1) 6F MULTIMODE FIBER CABLES LEFT IN BASEMENT FROM REMOVALS WORK. RUN IN 1-1/4" TO SOUTH SWING GATE. RUN IN 1-1/4" TO POLICE BOOTH AT NORTH SWING GATE.
- COORDINATE WITH THE SECURITY VENDOR TECHNICIAN FAMILIAR WITH THE COMPONENTS AND SYSTEM IN USE WITHIN THE PROJECT WORK LIMITS. PROVIDE POWER AND CONTROL CONDUITS FROM PROMENADE BASEMENT TO SECURITY HYDRAULIC BEAM BARRIER CONTROLLER AND ACCESSORIES:
  - 3/4" FOR LIMIT SWITCH/CONTROL WITH CONDUCTORS AND PULL STRING TO BARRIER CONTROLLER.
  - 3/4" FOR OPTIONAL 120V HEATERS/CONTROL CIRCUIT WITH 2#12, #12EGC TO BARRIER CONTROLLER.
  - 3/4" WITH CONDUCTORS AND PULL STRINGS TO EACH SIGNAL LIGHT (ONE ON EACH SIDE OF BARRIER/GATE LOCATIONS TO BE DETERMINED).
  - 1" (VERIFY SIZE) WITH PULL STRINGS AND CABLES TO POLICE BOOTH FOR MASTER PANEL.
  - 1" FROM PANEL EM-LP-BE TO BEAM BARRIER MOTOR POWER. PROVIDE A NEW 3P-20A C/B AND 3#10, #10G.
  - 3/4" FROM PANEL EM-LP-BE TO BEAM BARRIER CONTROL POWER. PROVIDE A NEW 1P-20A C/B AND 2#10, #10G.
- COORDINATE WITH THE SECURITY VENDOR TECHNICIAN FAMILIAR WITH THE COMPONENTS AND SYSTEM IN USE WITHIN THE PROJECT WORK LIMITS AND PROVIDE POWER AND SECURITY MONITORING AND CONTROL IN STATE POLICE HUT. PROVIDE POWER CIRCUIT FROM 208V, 3Ø, 60A EMERGENCY POWER IN 1-1/2". PROVIDE SEPARATE SECURITY RACEWAY WITH CABLES AND PULL STRINGS IN 1".
- PROVIDE WEATHERPROOF DUPLEX RECEPTACLE COORDINATED WITH PREVIOUS LOCATION TO COVER OLD MOUNTING HOLES. PROVIDE CONDUCTORS AND RACEWAY COMPLETE BACK TO SOURCE IN CAPITAL BASEMENT LEVEL WITH 2#12, #12 EGC IN 1/2".
- FOR THESE FIXTURES ONLY, CONDUIT IS NOT ACCESSIBLE FOR REPLACEMENT OR TO RUN NEW. PROVIDE NEW XHHW2 CONDUCTORS IN EXISTING CONDUIT BACK TO A POINT WHERE IT IS ACCESSIBLE. IT IS ASSUMED EXISTING CONDUIT IS 1/2".
- COORDINATE WITH THE SECURITY VENDOR SECURITY TECHNICIAN FAMILIAR WITH THE COMPONENTS AND SYSTEM IN USE WITHIN THE PROJECT WORK LIMITS AND PROVIDE UNDERGROUND MINIMUM 1-1/4" FOR POLE MOUNT SECURITY CAMERAS. PROVIDE SECURITY WIRING AND POLE CAMERA MOUNTS AS COORDINATED WITH SECURITY VENDOR.
- COORDINATE WITH THE SECURITY VENDOR VENDOR. PROVIDE RACEWAY FOR BOLLARD WITH REQUEST TO EXIT CALL BUTTON AND CARD READER WITH 3/4" CABLE AND PULL STRINGS.
- COORDINATE WITH THE SECURITY VENDOR TECHNICIAN FAMILIAR WITH THE COMPONENTS AND SYSTEM IN USE WITHIN THE PROJECT WORK LIMITS AND PROVIDE POWER AND RACEWAY TO ENTRY SWING GATE CONTROLLER. PROVIDE UNDERGROUND RACEWAY FROM PROMENADE BASEMENT TO RAMP. POWER CIRCUIT IS ASSUMED TO BE 208V, 3Ø, 60A (VERIFY) FROM PANEL EM-LP-BE WITH 4#3, #8G IN 1-1/2". PROVIDE AN 1-1/4" FROM EACH GATE TO THE POLICE BOOTH FOR DATA (VERIFY) WITH PULL STRINGS.
- PROVIDE FOR FUTURE LEVEL 2 EV CHARGER POWER WITH A RECESSED 13x24x12 HANDBOLE, HUBBELL QUARTZITE AASHTO H20 AT LOCATIONS INDICATED RECESSED AS COORDINATED WITH GC FOR GC TO INSTALL A DECORATIVE BRONZE FINISH COVER FLUSH WITH DRIVEWAY. RUN 3" CONDUITS WITH PULL STRINGS FROM EACH HANDBOLE TO THE BASEMENT MINIMUM 24" BELOW GRADE WITH A TRACER WIRE.

TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE DRAWINGS ARE IN CONFORMANCE WITH THE ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE.

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LOCATION:	NEW YORK STATE CAPITOL ALBANY, NY
CLIENT:	OFFICE OF GENERAL SERVICES

REVISED 09/13/2024
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MARK	DATE	DESCRIPTION
2	09/13/2024	ADDENDUM 2
	06/21/2024	BID SET

PROJECT NUMBER:	47331 - C
DESIGNED BY:	PJM
DRAWN BY:	PJM
FIELD CHECK:	PJM
APPROVED:	Approver
SHEET TITLE: <b>EASTERN APPROACH FIRST FLOOR ELECTRICAL PLAN</b>	
DRAWING NUMBER: <b>E102</b>	
SHEET: 254	OF 257

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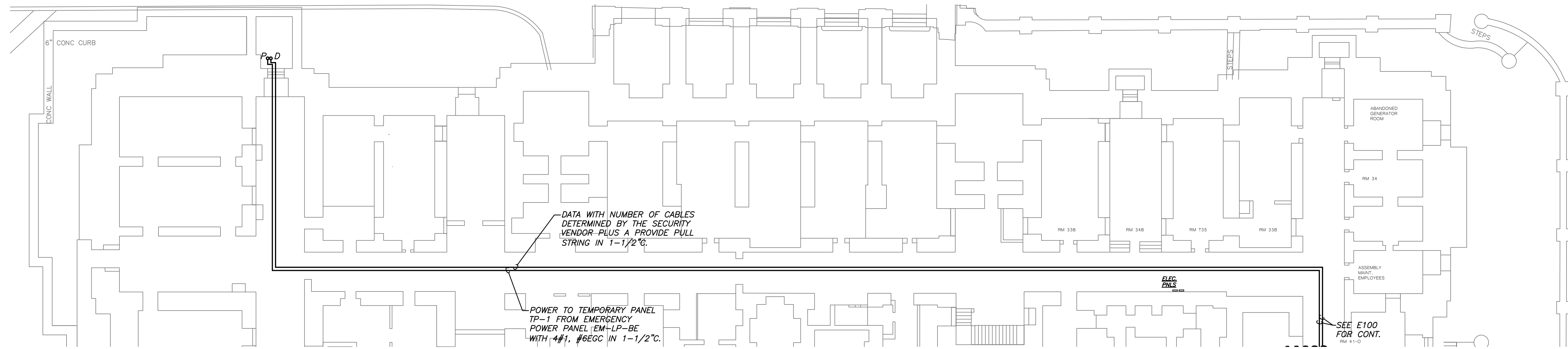
CONTRACT:	CONSTRUCTION
TITLE:	REHABILITATE THE EASTERN APPROACH STAIRCASE, PROMENADES, PORTICO, AND EXECUTIVE RAMP
LOCATION:	NEW YORK STATE CAPITOL ALBANY, NY
CLIENT:	OFFICE OF GENERAL SERVICES

REVISED 09/13/2024
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MARK	DATE	DESCRIPTION
2	09/13/2024	ADDENDUM 2
	06/21/2024	BID SET

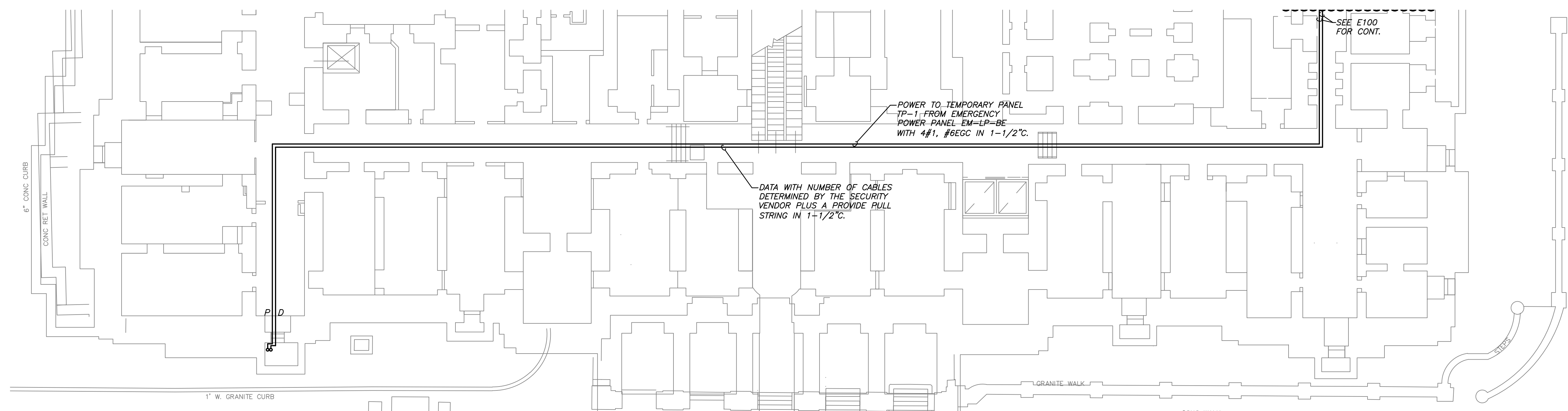
PROJECT NUMBER:	47331 - C
DESIGNED BY:	PJM
DRAWN BY:	PJM
FIELD CHECK:	PJM
APPROVED:	Approver

SHEET TITLE:	<b>WEST TEMPORARY ENTRANCE ELECTRICAL PLAN</b>
DRAWING NUMBER:	<b>ET100</b>
SHEET: 255.1	OF 257



**1 WEST TEMPORARY ENTRANCE BASEMENT ELECTRICAL PART PLAN NORTH**  
**ET100** SCALE: 1/16" = 1'-0"

ADDED NEW SHEET ET100



**1 WEST TEMPORARY ENTRANCE BASEMENT ELECTRICAL PART PLAN SOUTH**  
**ET100** SCALE: 1/16" = 1'-0"

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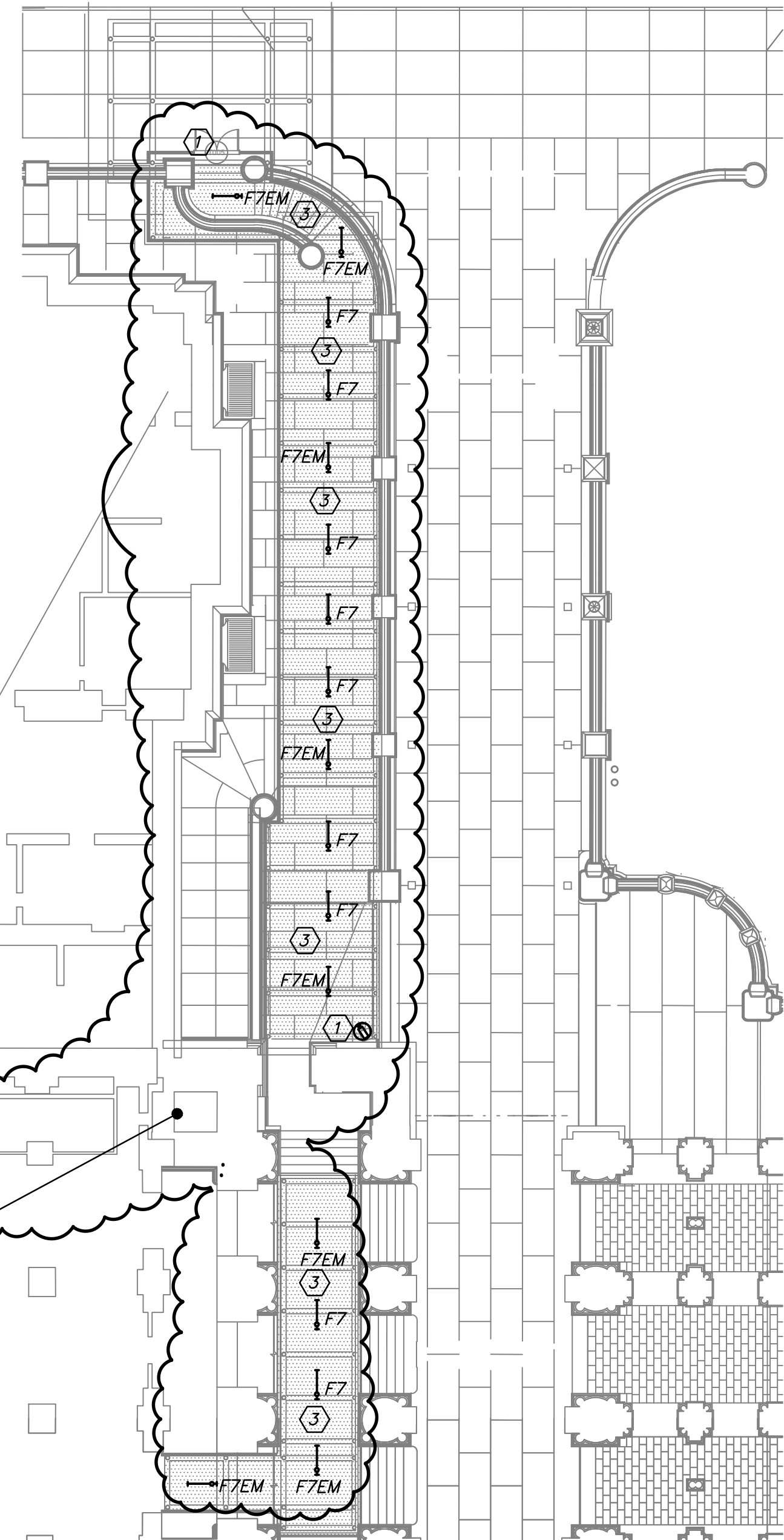
REVISED 09/13/2024

MARK	DATE	DESCRIPTION
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	06/21/2024	BID SET

PROJECT NUMBER:	47331 - C
DESIGNED BY:	PJM
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FIELD CHECK:	PJM
APPROVED:	Approver

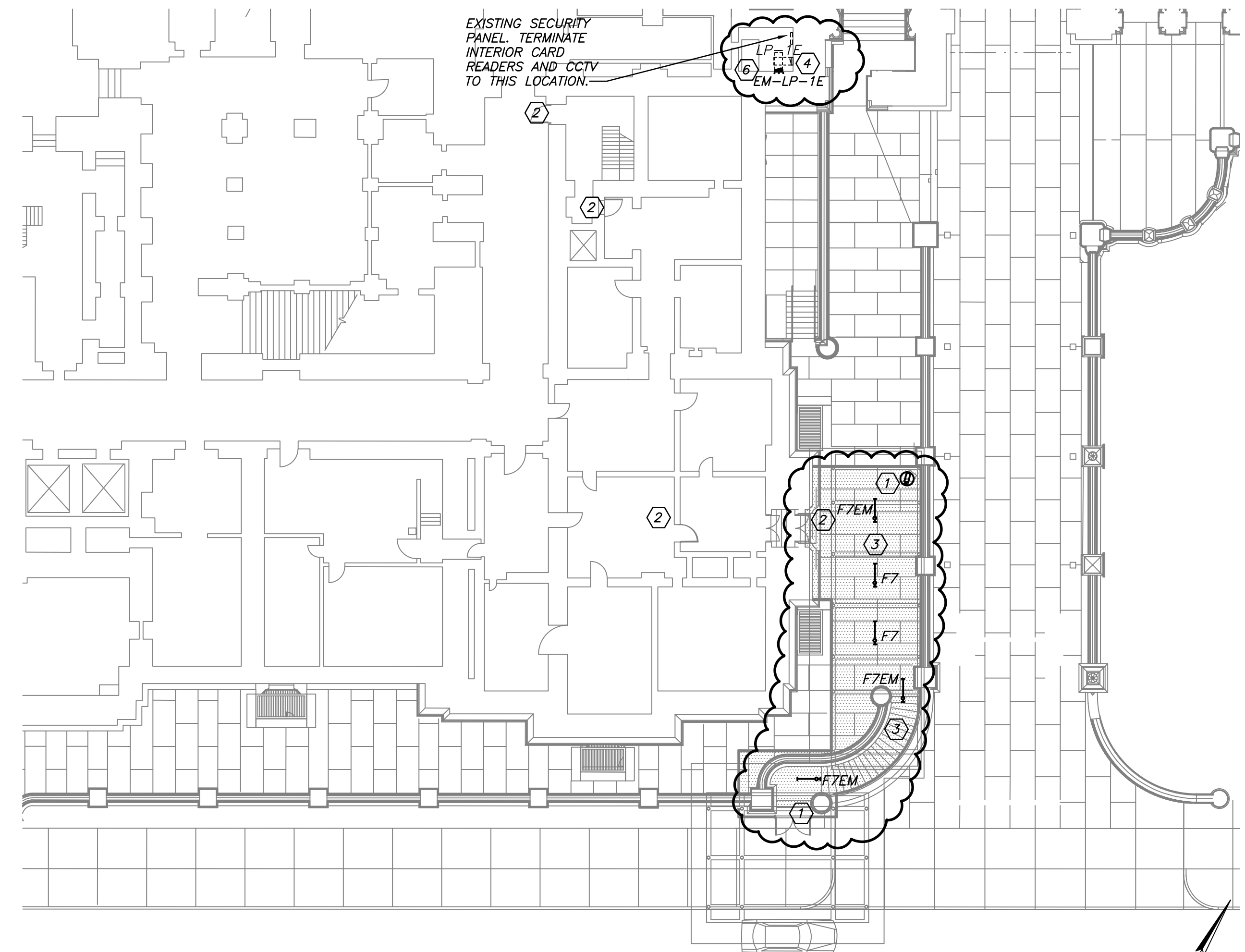
**NORTH AND SOUTH TEMPORARY ENTRANCE ELECTRICAL PLANS**

DRAWING NUMBER: **ET101-N-S**



**1 NORTH TEMPORARY ENTRANCE ELECTRICAL PLAN**  
ET101N SCALE: 1/16" = 1'-0"

- KEYED DRAWINGS NOTES:**
- COORDINATE WITH SECURITY VENDOR AND INSTALL A TEMPORARY CARD READER AT TEMPORARY ENTRANCE. INSTALL A TEMPORARY PTZ CAMERA AT THE DESIGNATED LOCATION. INSTALL RACEWAY AND CABLES WITH PULL STRINGS AS COORDINATED WITH SECURITY VENDOR.
  - COORDINATE WITH SECURITY VENDOR AND INSTALL A PERMANENT CARD READER AT DOOR. INSTALL RACEWAY AND CABLES WITH PULL STRINGS AS COORDINATED WITH SECURITY VENDOR.
  - INSTALL TEMPORARY ENTRANCE LIGHT FIXTURES AND POWER COMPLETE INCLUDING RACEWAY AND CONDUCTORS BACK TO SOURCE. INTERIOR FIXTURE TO BE ON CONTINUOUSLY. PROVIDE POWER WITH 2#12, #12EGC IN 3/4" WITH MOUNTING BOXES. ATTACH TO TEMPORARY CONSTRUCTION OR PATCH ALL EXISTING SURFACES AFTER REMOVAL OF TEMPORARY SERVICES.
  - EXISTING PANEL LP-1E SUPPLYING POWER CIRCUITS TO EXTERIOR PORTICO LIGHTS, TIMECLOCK CONTROL, AND SECURITY. TRANSFER EXTERIOR LIGHTING CIRCUITS AND TIME CLOCK POWER TO NEW EMERGENCY POWER PANEL EM-LP-1E. THERE IS NOT AN EXISTING CIRCUIT DIRECTORY. TRACE (36) EXISTING 1-POLE CIRCUITS, (1) EXISTING 2-POLE CIRCUIT AND PROVIDE A NEW CIRCUIT DIRECTORY.
  - EXISTING EMERGENCY POWER PANEL EM-LP-2E WITH UNKNOWN SPARES AND SPACES.
  - NEW PANEL EM-LP-1E TO REMAIN AFTER COMPLETION OF PROJECT. REMOVE TEMPORARY POWER CIRCUITS AND PROVIDE A FINAL CIRCUIT DIRECTORY.



**1 SOUTH TEMPORARY ENTRANCE ELECTRICAL PLAN**  
ET101S SCALE: 1/16" = 1'-0"

PANEL EM-LP-1E				NEW PANEL					
Panel	ROOM	VOLTS	208Y/120V 3P 4W	AIC	22,000				
...	MOUNTING SURFACE	BUS	AMPS 60	MAIN	BKR MLO				
	FED FROM EM-LP-BE	NEUTRAL	100%	LUGS	STANDARD				
NOTE									
TRANSFER FROM EXISTING PANEL LP-1E	CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION	CKT #	CKT BKR	LOAD KVA	CIRCUIT DESCRIPTION	
	1	20/1	0	EXISTING SECURITY PANEL	a	2	20/1	0	EXTERIOR LIGHTING
	3	20/1	0	SPARE	b	4	20/1	0	EXTERIOR LIGHTING
	5	20/1	0	SPARE	c	6	20/1	0	EXTERIOR LIGHTING
	7	20/1	0	SPARE	d	8	20/1	0	EXTERIOR LIGHTING
	9	20/1	0	SPARE	b	10	20/1	0	EXISTING EXTERIOR LIGHTING TIME CLOCK
	11	20/1	0	SPARE	c	12	20/1	0	SPARE
	13	20/1	0	SPARE	d	14	20/1	0	SPARE
	15	20/1	0	SPARE	b	16	20/1	0	SPARE
	17	20/1	0	SPARE	c	18	20/1	0	SPARE
	19	20/1	0	SPARE	d	20	20/1	0	SPARE
	21	20/1	0	SPARE	b	22	20/1	0	SPARE
	23	20/1	0	TEMPORARY LIGHTING	c	24	20/1	0	SPARE
	25	20/1	0	TEMPORARY LIGHTING	d	26	20/1	0	SPARE
	27	20/1	0	TEMPORARY LIGHTING	b	28	20/1	0	SPARE
	29	20/1	0	TEMPORARY LIGHTING	c	30	20/1	0	SPARE
				CONN KVA	CALC KVA			CALC KVA	
				TOTAL LOAD				0	
				BALANCED 3-PHASE LOAD				0 A	
				PHASE A				0.00%	
				PHASE B				0.00%	
				PHASE C				0.00%	

ASSUMED EXTERIOR LTG CKTS. TRACE AND VERIFY. TRANSFER FROM EXISTING PANEL LP-1E

APPLY ARC FLASH LABELS USING DATA FROM UPLINE PANEL