



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

ADDENDUM NO. 4 TO PROJECT NO. 45649

**CONSTRUCTION, HVAC, PLUMBING, AND ELECTRICAL WORK
PROVIDE FORENSIC IDENTIFICATION UNIT BUILDING &
HEADQUARTERS BUILDING ADDITION/RENOVATIONS
NEW YORK STATE POLICE
2541 ROUTE 44
SALT POINT, NEW YORK 12578**

January 14, 2021

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 001114 ADVERTISEMENT FOR BIDS: The last date for receipt of bids is changed from Wednesday, January 20, 2021, to Wednesday, February 3, 2021.

COMMON DIVISION 01 DOCUMENTS

2. Page 015000 – 7, Add the Following Article to PART 1 GENERAL:

“1.17 TEMPORARY FENCE ENCLOSURE

- A. Construction Work Contract:
 1. Provide temporary fence not less than 8 feet in height above grade.
 2. Fabric: #9 gage galvanized steel, or equal gage aluminum, woven together into 2 inch diamond mesh, with both top and bottom edges having a twisted and barbed finish.
 3. Posts, Rails, and Connections: Standard galvanized steel products of an approved manufacturer, of the size and types as required and approved. Provide top and bottom rails between all posts secured with bolted connections.
 4. Gates: Provide access gates for passage of employees and materials, complete with padlock. Fabricate gates with galvanized steel pipe perimeter covered with same fabric specified for fence. Furnish the Director’s Representative with 2 keys per gate.
 5. Provide each post and gate with “V” shaped extension arms and with 3 strands per side of 4 point heavy galvanized steel barbed wire.
 6. Erection: Set posts 4 feet into the ground and not more than 10 feet apart. Install bottom rail not more than 2 inches above existing grade. Pull fabric taut and wire tightly to posts and rails at not more than 2 feet on center.

7. Maintain the temporary fence enclosure throughout the life of the Contract, or until directed to be removed. Replace all items or portions of fence enclosure damaged or destroyed.”

CONSTRUCTION WORK SPECIFICATIONS

3. SECTION 072119 SPRAY INSULATION: Add the accompanying section (pages 072119 – 1 through 072119 – 5) noted “Printed 01/07/2021” to the Project Manual.
4. Page 096516-3: Add the paragraph 2.01, E to read as follows
 - “E. Rubber Wall Base: Type TS, Group 1, 4 inches high, 1/8” thickness, with matching preformed external corner units.
 1. Basis of Design, Manufacturer: Roppe
 2. Style: 1” Long Toe Base
 3. Adhesive and Filler/Wall Patch: As recommended by the base manufacturer for the type of substrate indicated.
 4. Color: As indicated on drawings.”
5. Page 096518-3:
 - a. Remove paragraph 2.02, B.
 - b. Remove paragraph 2.02, D.
6. Page 096518-4:
 - a. Remove paragraph 3.03, C.
7. SECTION 096813 TILE CARPETING: Discard the Section bound in the Project Manual and substitute the accompanying Section (pages 096813 – 1 thru 096813 – 6) noted “Printed 1/14/2021”.
8. Page 096816-4: Change paragraph 2.02, C to read as follows
 - “C. Rubber Wall Base: Type TS, Group 1, Style B, 4 inches high, 1/8” thickness, with matching preformed external corner units.”
9. Page 124813 - 1, 1.04, A, 1: Revise to read as follows:
 - “1. Full-size grille sections equal to 2 percent of amount installed, but no fewer than 2 full-size grille sections.”

HVAC WORK SPECIFICATIONS

10. Page 230523 – 5, Add the Following Article to PART 2 PRODUCTS:

“2.14 PROPANE REGULATORS

- A. General Requirements: Single stage suitable for propane. Steel jacket and corrosion-resistant components. End connections threaded for NPS 2 and smaller. Comply with ANSI Z21.80.
 1. Body and Diaphragm Case: Cast iron or die-cast aluminum.
 2. Springs: Zinc-plated steel; interchangeable.
 3. Diaphragm Plate: Zinc-plated steel.
 4. Seat Disc: Nitrile rubber resistant to gas impurities, abrasion, and deformation at the valve port.
 5. Orifice: Aluminum; interchangeable.
 6. Seal Plug: Ultraviolet-stabilized, mineral-filled nylon.

7. Single-port, self-contained regulator with orifice no larger than required at maximum pressure inlet, and no pressure sensing piping external to the regulator.
8. Pressure regulator shall maintain discharge pressure setting downstream, and not exceed 150 percent of design discharge pressure at shutoff.
9. Overpressure Protection Device: Factory mounted on pressure regulator.
10. Atmospheric Vent: Factory- or field-installed, stainless-steel screen in opening if not connected to vent piping.
11. Maximum Inlet Pressure: 100 psig.
12. Outlet Pressure: as defined in schedule.”

11. Page 260502 – 8, Sub-Paragraph 3.01 A. 2.: Delete this sub-paragraph in its entirety.

PLUMBING WORK SPECIFICATIONS

12. SECTION 310000 EARTHWORK: Add the accompanying section (pages 310000 – 1 through 310000 – 7) noted “Printed 01/08/2021” to the Project Manual.

ELECTRICAL WORK SPECIFICATIONS

13. SECTION 262726 WIRING DEVICES: Add the accompanying section (pages 262726 – 1 through 262726 – 4) noted “Printed 1/8/2021” to the Project Manual.

14. SECTION 260502 BASIC ELECTRICAL MATERIALS AND METHODS FOR DIRECT DIGITAL BUILDING CONTROL SYSTEM: Delete this Section in its entirety from the Electrical Work Project Manual.

15. Page 261116 – 2, 2.01. A.: Add the Following Sub-Paragraph
 “16. Provide service (primary) conduit and wiring from CHG&E manhole as indicated on drawings.”

16. Page 261116 – 2, Paragraph 2.01 B: Delete this paragraph in its entirety.

CONSTRUCTION WORK DRAWINGS

17. Revised Drawings:

- a. Drawing Nos. CG-102 and C-504, noted “01/08/2021 ADDENDUM 4” accompany this Addendum and supersede the same numbered originally issued drawings.
- b. Drawing Nos. A-604-H and A-605-F, noted “01/08/2021 ADDENDUM #4” accompany this Addendum and supersede the same numbered originally issued drawings.

18. Drawing A-106-H:

- a. Change "PIPE WITH SUPPORTS BY P-CONTRACT, REFER TO P DRAWINGS" TO "PIPE WITH SUPPORTS BY C-CONTRACT"

19. Drawing A402-H:

- a. Detail 10: Change “SOLID SURFACE” to “SOLID PLASTIC FABRICATION”
- b. Casework Legend, note A: Change “WOOD WALL CABINET” to “PLASTIC LAMINATE WALL CABINET”
- c. Casework Legend, note B: Change “WOOD BASE CABINET” to “PLASTIC LAMINATE BASE CABINET”

20. Drawing A402-F, Casework Legend, note H: Change ““SOLID SURFACE” to “SOLID PLASTIC FABRICATION”

21. Drawing A603-F:
- a. Detail 5: Change “SOLID SURFACE” to “SOLID PLASTIC FABRICATION”
 - b. Detail 6: Change “SOLID SURFACE” to “SOLID PLASTIC FABRICATION”
22. Drawing A-101-F:
- a. Change “C-CONTRACT TO PROVIDE 4"x4" 16 ga STEEL CLOSURE ANGLES, TYPICAL AT ENDS AND ALONG TOP EDGE” to “C-CONTRACT: PROVIDE CLOSURE ANGLES, 4"x4" 16 ga TYPE 304 STAINLESS STEEL WITH NUMBER 4 FINISH, TYPICAL AT ENDS, AROUND EXPOSED BASE AND ALONG TOP EDGE; PROVIDE PLATE AT DOORS, 6"x36" 16 ga TYPE 304 STAINLES STEEL WITH NUMBER 4 FINISH; COORDINATE WITH H-CONTRACT”
23. Drawing S-302-F:
- a. Revise Note 2 on Detail 6 to read “CLOSURE TRACK TO BE CONNECTED TO W-BEAM WITH 1” FLARE BEVEL WELDS (AT EACH FLANGE OF TRACK) SPACED AT 12” O.C.”

HVAC WORK DRAWINGS

24. Revised Drawings:
- a. Drawing Nos. M-203-H, M-702-H and M-703F, noted “01/08/2021 ADDENDUM #4” accompany this Addendum and supersede the same numbered originally issued drawings.

PLUMBING WORK DRAWINGS

25. P-001-H, General Notes: Revise note I to read
- a. Note I: Delete this note in its entirety, and replace with the following:
 - “I. CONTINUE WORK TO 5’ OUTSIDE BUILDING. PROVIDE ALL REQUIRED OFFSETS, FITTINGS AND CONNECTIONS. FIELD VERIFY EXACT LOCATION, DEPTH AND COMPOSITION OF SITE SERVICES AND COORDINATE ALL WORK WITH C-CONTRACTOR.”
26. FP-001-H, GENERAL NOTES: add the following note:
- “23.CONTINUE WORK TO 5’ OUTSIDE BUILDING. PROVIDE ALL REQUIRED OFFSETS, FITTINGS AND CONNECTIONS. FIELD VERIFY EXACT LOCATION, DEPTH AND COMPOSITION OF SITE SERVICES AND COORDINATE ALL WORK WITH C-CONTRACTOR.”
27. Drawing No. P-102-H, GENERAL NOTES, add the following note:
- “2. SAW CUTTING OF EXISTING CONCRETE SLAB, SUB-SLAB FILL, AND PATCHING OF SLAB WITHIN BUILDING BY C-CONTRACTOR. P-CONTRACTOR TO PROVIDE EXCAVATION, BEDDING, PIPING, AND BACKFILLING TO STRUCTURAL SUB-SLAB WITHIN BUILDING AND UP TO 5'-0" LEAVING THE BUILDING. REFER TO SPECIFIC 31000-P FOR TRENCHING AND BACKFILL REQUIREMENTS.”
28. Drawing No. P-103-H, GENERAL NOTES, add the following note:
- “2. SAW CUTTING OF EXISTING CONCRETE SLAB, SUB-SLAB FILL, AND PATCHING OF SLAB WITHIN BUILDING BY C-CONTRACTOR. P-CONTRACTOR TO PROVIDE EXCAVATION, BEDDING, PIPING, AND BACKFILLING TO STRUCTURAL SUB-SLAB WITHIN BUILDING AND UP TO 5'-0" LEAVING THE BUILDING. REFER TO SPECIFIC 31000-P FOR TRENCHING AND BACKFILL REQUIREMENTS.”

29. Drawing No. P-104-H, GENERAL NOTES, add the following note:
“3. SAW CUTTING OF EXISTING CONCRETE SLAB, SUB-SLAB FILL, AND PATCHING OF SLAB WITHIN BUILDING BY C-CONTRACTOR. P-CONTRACTOR TO PROVIDE EXCAVATION, BEDDING, PIPING, AND BACKFILLING TO STRUCTURAL SUB-SLAB WITHIN BUILDING AND UP TO 5'-0" LEAVING THE BUILDING. REFER TO SPECIFIC 31000-P FOR TRENCHING AND BACKFILL REQUIREMENTS.”
30. P-001-F, GENERAL NOTES:
a. Note G: Delete this note in its entirety, and replace with the following:
“G. CONTINUE WORK TO 5’ OUTSIDE BUILDING. PROVIDE ALL REQUIRED OFFSETS, FITTINGS AND CONNECTIONS. FIELD VERIFY EXACT LOCATION, DEPTH AND COMPOSITION OF SITE SERVICES AND COORDINATE ALL WORK WITH C-CONTRACTOR.”
31. FP-001-F, GENERAL NOTES, add note 23 to read:
“23. CONTINUE WORK TO 5’ OUTSIDE BUILDING. PROVIDE ALL REQUIRED OFFSETS, FITTINGS AND CONNECTIONS. FIELD VERIFY EXACT LOCATION, DEPTH AND COMPOSITION OF SITE SERVICES AND COORDINATE ALL WORK WITH C-CONTRACTOR.”
32. P-301-F:
a. Detail 4: Delete Detail 4 in its entirety.
b. Detail 5: Delete Detail 5 and replace with Drawing PSK-1 dated 1/8/21 accompanying this Addendum.

ELECTRICAL WORK DRAWINGS

33. Revised Drawings:
a. Drawing Nos. E-000-H, E-002-H, E-003-H, E-100-H, E-101-H, TA-001-H, TA-002-H, TA-101-H, TA-151-H, TA-301-H, TA-402-H, TA-501-H, TA-502-H, E-000-F, E-002-F, E-006-F, E-007-F, E-100-F, E-104-F, TA-002-F and TA-101-F noted “01/08/2021 ADDENDUM #4” accompany this Addendum and supersede the same numbered originally issued drawings.
34. E-107-H, Sheet Notes: Revise note 1 to read:
“1. PROVIDE ALL ELECTRICAL PATHWAYS FOR WORK SHOWN ON THIS DRAWING, INCLUDING BUT NOT LIMITED TO CONDUIT, CONDUIT BOXES, FITTINGS, J-HOOKS, AND PULL STRINGS. COORDINATE WORK WITH JCSS REFERENCE DOCUMENTS.”
35. E-103-F, Sheet Notes: Revise note 1 to read:
“1. PROVIDE ALL ELECTRICAL PATHWAYS FOR WORK SHOWN ON THIS DRAWING, INCLUDING BUT NOT LIMITED TO CONDUIT, CONDUIT BOXES, FITTINGS, J-HOOKS, AND PULL STRINGS. COORDINATE WORK WITH JCSS REFERENCE DOCUMENTS.”

END OF ADDENDUM

Erik T. Deyoe, P.E.
Director, Division of Design
Design & Construction

SECTION 072119
SPRAY INSULATION

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Building Insulation: section 072100.

1.02 SUBMITTALS

- A. Product Data: Catalog sheets, specifications, and installation instructions for each type of insulation specified.
 - 1. Include data substantiating that the materials comply with the specified thermal resistance and vapor resistance qualities.
- B. Samples: One for each product if requested
- C. Quality Control Submittal:
 - 1. Certificate: Affidavit required under Quality Assurance Article.
 - 2. Installer's Qualifications Data:
 - a. Name of each person who will be performing the Work and their employer's name, business address and telephone number.
 - b. Names and addresses of 3 similar projects that each person has worked on during the past 5 years.
 - 3. Submit evaluation report, test reports and listing from an independent recognized evaluation service or testing laboratory, indicating compliance with specifications for specified performance characteristics and physical properties.
 - 4. Submit Manufacturer's Field Reports within 3 days of inspection.

1.03 QUALITY ASSURANCE

- A. Manufacturer: company with experience in producing material required for this project, with sufficient production capacity to produce and deliver required units without causing delay in work.
- B. Installer: person specializing in sprayed insulation installations with documented experience. Approved by manufacturer. Installer to be certified by an ISO 17024 accredited certification organization. Submit copies of licenses to owner representative for each installer.
- C. Construct mock-up in accordance with Section 014339 Mock-up Requirements.
 - 1. Construct mock-up 20 ft² minimum.
 - 2. Allow 24 hours for inspection of mock-up by Director's Representative before proceeding with sprayed insulation work.

3. When accepted, Mock-up will demonstrate minimum standard for this work.
4. Approved Mock-up may be part of finished work.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Do not allow insulation materials to become wet or soiled, or covered with ice or snow. Comply with manufacturer's recommendations for handling, storage, and protection during installation.
- B. Do not deliver flammable insulation materials to the project site more than 2 days ahead of the time of installation. Protect at all times against ignition.
- C. Protect insulation materials subject to deterioration by sunlight from exposure to sunlight.
- D. Complete the installation and concealment of insulation materials as rapidly as possible.
- E. Deliver materials to site in original factory packaging, labelled with manufacturer's name and address

1.05 PROJECT CONDITIONS

- A. Do not proceed with the installation of insulation on walls or under slabs until the Work which follows (and which conceals the insulation) is ready to be performed.
- B. Examination of Substrate: Examine the substrate and the conditions under which the insulation Work is to be performed. Do not proceed with the insulation Work until unsatisfactory conditions have been corrected.
- C. Ventilate area to receive insulation by introducing fresh air and exhausting air continuously during and 24 hour after application to maintain non-toxic, unpolluted, safe working conditions.
- D. Provide temporary enclosures to prevent spray and noxious vapours from contaminating air beyond application area.
- E. Protect adjacent surfaces and equipment from damage by overspray and fall-out.
- F. Apply insulation only when surfaces and ambient temperatures are within manufacturers' prescribed limits.

1.05 HEALTH AND SAFETY

- A. Comply with requirements of Workplace Hazardous Materials Information System regarding use, handling, storage and disposal of insulation materials.

- B. Protect workers in accordance with manufacturer's recommendations.
- C. Ensure that workers wear gloves, supplied fresh air system, dust masks, long sleeved clothing, eye protection and protective clothing when applying foam insulation.
- D. Ensure that workers do not eat, drink or smoke while applying foam insulation.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Insulation: spray applied closed cell, rigid polyurethane foam to ASTM C1029. Type 2, two component, Medium density. Zero ozone depletion blowing agent. Properties as follows:
 - 1. Core density: minimum 2.23 lb/cf summer, 2.17 lb/cf winter (ASTM D 1622)
 - 2. Compressive strength: 18 psi summer, 23 psi winter (ASTM D 1621)
 - 3. Tensile strength: 18 psi summer, 54 psi winter (ASTM D 1623)
 - 4. Closed cell content by volume: Greater than 93 %. (ASTM D 6226)
 - 5. Water absorption: less than 0.87% summer, 0.81% winter. (ASTM D 2842)
 - 6. Dimensional stability: 5.45% summer, 4.14% winter (ASTM D 2126)
 - 7. Long term thermal resistance: R-6.7 (sf.h degree F/BTU) at 1 inch summer, R-6.9 (sf.h degree F/BTU) at 1 inch winter (ASTM C 518)
 - 8. Air leakage: Less than 0.002 L/ sm² (ASTM E 283)
 - 9. Water vapour transmission – Permeance: Less than 1 Perms at 1.625 inches (ASTM E 96)
 - 10. Surface burning characteristics. Class 1 Pass, Flame Spread Index 5, Smoke Developed Index 350 summer, 450 winter (ASTM E 84)
- B. Primers: in accordance with manufacturer's recommendations for surface conditions.
 - 1. Maximum VOC limit [100] g/L.

PART 3 EXECUTION

3.01 PREPARATION

- A. Clean all surfaces free of oil, grease, dust and debris. Ensure surfaces are clean, dry and properly fastened to ensure adhesion of the foam to the substrate.
- B. Ensure that all work by other trades that may penetrates through the insulation is in place and complete.

3.02 INSTALLATION

- A. Apply primer to surfaces where recommended by manufacturer. Apply primer in accordance with manufacturer's instructions.
- B. Spray apply insulation to maintain continuity of thermal protection to building elements and spaces.
- C. Spray apply insulation to final thickness as indicated on drawings. Apply in consecutive passes to thicknesses as recommended by manufacturer. Minimum thickness: .5 inch. Maximum thickness: 2 inch.
- D. Spray insulation to seal perimeter of electrical boxes, pipes, ducts, frames and other objects into or passing through insulation.
- E. Keep insulation away from heat emitting devices such as recessed light fixtures, chimneys and furnace vents. Maintain minimum distances as recommended by manufacturer's instructions.
- F. Finished surface of foam insulation to be free of voids and imbedded foreign objects.
- G. Remove masking materials and over spray from adjacent areas immediately after foam surface has hardened. Ensure cleaning methods do not damage work performed under other sections.
- H. Trim, as required, any excess thickness that would interfere with the application of cladding system by other trades.
- I. Do not enclose insulation until it has been inspected and approved by owner representative.

3.03 TOLERANCES

- A. Maximum variation from indicated thickness: minus $\frac{1}{4}$ inch, plus $\frac{1}{2}$ inch but not universally high or low

3.04 PROTECTION

- A. Protect installed products and accessories from damage during construction.
- B. Protect the spray foam from ultraviolet in accordance with manufacturer's requirements.

3.05 CLEANING

- A. Upon completion of insulation work, remove surplus materials, rubbish, tools and equipment.
 - 1. Remove insulation material spilled during installation and leave work area clean.

END OF SECTION

SECTION 096813

TILE CARPETING

PART 1 GENERAL

1.01 REFERENCES

- A. AATCC - The American Association of Textile Chemists and Colorists, Research Triangle Park, NC 27709, www.aatcc.org.
- B. CRI – Carpet and Rug Institute, Dalton, GA 30722-2048, www.carpet-rug.com.

1.02 SUBMITTALS

- A. Shop Drawings: Show dimensions of carpeted areas, locations of edges, columns, doorways, enclosing partitions, built-in furniture, cabinets, cutouts edge strips, and other installation details. Show details of special patterns.
- B. Product Data: Catalog sheets, specifications, and installation instructions for the following:
 - 1. Tile Carpeting:
 - a. Trade name and number.
 - b. Manufacturer.
 - c. Address of mill constructing carpet.
 - d. Construction type.
 - e. Gage.
 - f. Stitches per inch.
 - g. Pile height.
 - h. Face yarn.
 - i. Face yarn weight.
 - j. Weight density factor.
 - k. Primary backing.
 - l. Secondary backing.
 - m. Total weight.
 - n. Dye method.
 - o. Tuft bind.
 - p. Static resistance.
 - q. Flammability.
 - 2. Edge strips.
 - 3. Adhesive.
- C. Samples:
 - 1. Tile Carpeting: Full size piece of each type, color, and pattern specified.
 - 2. Base: 12-inch-long sections, each size and color required.
 - 3. Edge Strip: 12 inches long, each type specified.
 - 4. Color Samples: Manufacturer's standard color samples of each type and pattern specified.
- D. Quality Control Submittals:

1. Certificates: Affidavits required under Quality Assurance Article.
- E. Contract Closeout Submittals:
1. Maintenance and Cleaning Instructions: Furnish 2 copies to the Director's Representative.
 2. Warranty: Copy of specified warranty.

1.03 QUALITY ASSURANCE

- A. Flammability Certification:
1. Radiant Panel Flooring Flammability Test: NFPA 253. Class I, Minimum 0.45 watts per sq. centimeter.
 2. Methenamine Tablet Test: DOC-FF-1-70 and ASTM D 2859. Meet the "Standards for the Surface Flammability of Carpets".
 3. Smoke Density Test: NFPA 258 and ASTM E 662. Specific optical density (DM) of 450 or less (flaming).
- B. Colorfastness to Light: AATCC 16, Option E. Minimum rating of 4 on grey scale after 80 hours exposure.
- C. Colorfastness to Crocking: AATCC 165. Minimum rating of 4 wet and dry.
- D. Appearance Retention Rating: ASTM D 5252. CRI TM-101 "Severe" rating.
- E. Stain Resistance: AATCC 175. Rating of 8 or better.
- F. Static Resistance: AATCC 134. 3.5 kv or less, at 70 degrees F and 20 percent RH.
- G. Tuft Bind: ASTM D 1335. Average pounds of force not less than 12 pounds.
- H. Dimensional Stability: Aachen Method DIN 54318, 0.2 percent or less.
- I. Installer Qualifications: The persons installing the tile carpeting and their Supervisor shall be experienced in carpeting installation, including the requirements of the tile carpeting manufacturer, and shall have been regularly employed by a company engaged in installation of carpeting for a minimum of 5 years.
1. Furnish to the Director the names and addresses of 5 similar projects which the foregoing people have worked on during the past 3 years.
- J. Certifications: Furnish certification from tile carpeting installer that the substrate surfaces have been examined and are acceptable for installation of the Work of this Section.
- K. Performance Criteria:
1. The following criteria are REQUIRED for products included in this section:
 - a. All carpet installed in the building interior must meet the testing and product requirements of the Carpet and Rug Institute Green Label Plus program.

- b. All carpet products shall be certified to meet the NSF/ANSI 140-2007 Standard, Platinum level.
- c. All carpet cushion installed in the building interior must meet the requirements of the Carpet and Rug Institute Green Label program.
- d. All carpet adhesives must meet the requirements of Specification Section 018120, which includes a maximum permitted volatile organic compound of level 50 g/L.

1.04 DELIVERY, STORAGE AND HANDLING

- A. Deliver tile carpeting in original carpet mill packaging with each package having labels legible and intact.
- B. Store tile carpeting and related materials in an enclosed and dry area protected from damage and soiling.

1.05 PROJECT CONDITIONS

- A. Environmental Requirements: Continuously heat spaces to receive tile carpeting to a temperature of 68 degrees F for at least 48 hours prior to tile carpeting installation, during the installation, and for 72 hours after installation.
- B. Do not install the Work of this Section over concrete substrate until concrete has cured 30 days minimum.
- C. Do not install the Work of this Section until painting, finishing Work, and Work of other trades has been completed.

1.06 WARRANTY

- A. Manufacturer's Warranty: Minimum 15-year wear warranty.

1.07 EXTRA MATERIALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Tile Carpeting: Full size units equal to 5 percent of amount installed, but not less than 10 square yards for each color, pattern and type of tile carpeting installed.

PART 2 PRODUCTS

2.01 CARPETING MANUFACTURERS

- A. InterfacFLOR, LaGrange, GA30240, (800) 336-0225, www.interfaceflor.com
- B. Mannington Mills, Inc, Calhoun, GA 30703, (800) 241-2262
www.mannington.com
- C. Milliken and Company, LaGrange, GA 30240 (706) 880-5345,
www.millikencarpet.com

- D. Shaw Industries, Inc, Dalton, GA 30722 (877) 502-7429,
www.shawcontractgroup.com

2.02 MATERIALS

- A. Type A Tile Carpeting: Tufted, Textured Loop Pile, Pattern and color indicated on the drawings:
1. Fiber Type: 100 percent Type 6.6 Nylon.
 2. Minimum Face Yarn Weight: 24 oz.
 3. Maximum Pile Height (inches): .156.
 4. Minimum Pile Thickness (inches): .130.
 5. Minimum Stitches per Inch: 11.0.
 6. Minimum Gage: 1/2.
 7. Minimum Density: 6200.
 8. Dye Method: Yarn Dyed, Injection Dyed, or Solution Dyed.
 9. Backing System: Manufacturer's standard vinyl or thermoplastic hard-backing or integral-cushion thermoplastic backing system, recyclable content, maintaining a 100 percent moisture barrier between secondary backing and the floor substrate. Pre-adhered backing system may be used as an alternate without an applied releasable adhesive to surface substrate.
- B. Resilient Edge Strips: Not less than one-inch wide, tapered bullnose edge, thickness and color as selected.
- C. Rubber Wall Base: Type TS, Group 1, Style B, 4 inches high, 1/8" thickness, with matching preformed external corner units.
- D. Metal Edge Strips: Extruded aluminum, mill finish; butt type for concealed anchorage; countersunk stainless-steel fasteners, with anchors suitable for substrate surface.
- E. Trowelable Leveling and Patching Compounds: Latex-modified Portland cement based, or blended hydraulic-cement-based formulation provided or approved by tile carpeting manufacturer for application on substrate surface and grade level.
- F. Low VOC Flooring Adhesive and Joint Materials: Tile carpeting manufacturer's recommended water-resistant materials formulated for low VOC (VOC Limit 50g/L less water) and for application on substrate and grade level.
- G. Cleaning Solvents: Low toxicity, and a flash point in excess of 100 degrees F.
- H. Liquid Floor Stripper: Tile carpeting manufacturer's recommended type.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine surfaces scheduled to receive tile carpeting for defects that will adversely affect the proper installation. Do not proceed until unsatisfactory conditions are corrected.

3.02 PREPARATION

- A. Clean floors of dust, dirt, solvents, oil, grease, loose paint, and other substances. Allow floors to dry thoroughly.
- B. Concrete Floors: Level uneven surfaces and patch cracks and small holes with patching compound.
- C. Resilient Sheet Floors:
 - 1. Remove existing resilient sheet flooring.
- D. Resilient Tile Floors:
 - 1. Remove wax using liquid stripper or sander.
 - 2. Remove loose tiles, if any, and replace or patch as necessary.

3.03 INSTALLATION

- A. Install tile carpeting in accordance with CRI 104, Section 14 and with tile carpeting manufacturer's written installation instructions.
 - 1. Install pattern parallel to walls and borders.
 - 2. Maintain dye lot integrity. Do not mix dye lots in the same area.
- B. Cut and fit tile carpeting neatly around projections through floor and to walls and other vertical surfaces. Bind or seal cut edges as recommended by the tile carpeting manufacturer.
- C. Install vinyl base in accordance with manufacturer's instructions. Install base on walls, partitions, columns, and permanent fixtures unless otherwise indicated. Install base in as long lengths as practicable, with preformed external corner units. Miter internal corners. Scribe and fit base to door frames and other interruptions.
- D. Install edge strips where tile carpeting terminates at other floor coverings or finishes. Use one full length piece where possible. Where splicing cannot be avoided, butt ends tight and flush.

3.04 CLEANING AND PROTECTION

- A. Upon completion of the tile carpeting installation, immediately remove spots and smears of excessive adhesive from tile carpeting with cleaning solvent. Remove loose pieces of face yard with sharp scissors.
- B. Place usable remnants of tile carpeting in an area designated by the Director's Representative.
- C. Remove waste materials and tools.

- D. Upon completion, thoroughly vacuum clean carpeted areas.
- E. After each area of tile carpeting has been installed, protect from soiling and damage.
- F. Allow glue-down installation a minimum of 48 hours to cure before subjecting it to any traffic, moving of furniture, or other heavy equipment.

END OF SECTION

SECTION 310000

EARTHWORK

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Site Restoration: Section 310101.
- B. Topsoil: Section 329120.
- C. Seeding: Section 329219.

1.02 DEFINITIONS

- A. The following terms shall have the meanings ascribed to them in this Article, wherever they appear in this Section.
 - 1. Earth Excavation: The removal of all surface and subsurface material not classified as rock (as defined below).
 - 2. Rock: Limestone, sandstone, shale, granite, and similar material in solid beds or masses in its original or stratified position which can be removed only by blasting operations, drilling, wedging, or use of pneumatic tools, and boulders with a volume greater than 1.0 cu yd. Concrete building foundations and concrete slabs, not indicated, with a volume greater than 1.0 cu yd shall be classified as rock.
 - a. Limestone, sandstone, shale, granite, and similar material in a broken or weathered condition which can be removed with an excavator or backhoe equipped with a bucket with ripping teeth or any other style bucket shall be classified as earth excavation.
 - b. Masonry building foundations, whether indicated or not, shall be classified as earth excavation.
 - 3. Subgrade Surface: Surface upon which subbase or topsoil is placed.
 - 4. Subbase: Select granular material or subbase course Type 2, which is placed immediately beneath pavement or concrete slabs.
 - 5. Foundation Bearing Grade: Grade/elevation at which the bottom-of-footings are constructed.
 - 6. Maximum Density: The dry unit weight in pounds per cubic foot of the soil at "Optimum Moisture Content" when determined by ASTM D 698 (Method C), and ASTM D 2922 (Method B) as modified by NYS DOT in Manual STM-10.
 - 7. Unauthorized Excavation: The removal of material below required elevation indicated on the Drawings or beyond lateral dimensions indicated or specified without specific written direction by the Director.

1.03 PROJECT CONDITIONS

- A. Protect existing trees and plants during performance of the Work. Box trees and plants indicated to remain within the grading limit lines with temporary steel fencing or solidly constructed wood barricades as required. Protect root systems

from smothering. Do not store excavated material or allow vehicular traffic or parking within the branch drip line. Restrict foot traffic to prevent excessive compaction of soil over root systems.

- B. Cold Weather Requirements: When freezing temperatures are predicted, do not excavate to final required elevations for pipe, conduit or equipment requiring concrete work unless concrete can be placed immediately. Retain enough earth over the bottom elevation of excavations to prevent frost penetration.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Selected Fill: Sound, durable, sand, gravel, stone, or blends of these materials, free from organic and other deleterious materials. Comply with the gradation requirements specified below:

Sieve		Percent Passing
Sieve Size	Size opening (mm)	
4 inch	101.6	100
No. 40	0.425	0-70
No. 200	0.075	0-15

- B. Suitable Material (Fill and Backfill for Landscaped Areas): Material consisting of mineral soil (inorganic), blasted or broken rock and similar materials of natural or man-made origin, including mixtures thereof. Maximum particle size shall not exceed 2/3 of the specified layer thickness prior to compaction. NOTE: Material containing cinders, industrial waste, sludge, building rubble, land fill, muck, and peat shall be considered unsuitable for fill and backfill, except topsoil and organic silt may be used as suitable material in landscaped areas provided it is placed in the top layer of the subgrade surface.
- C. No. 2 Crushed Stone: Comply with the applicable portions of DOT Article 703-02.

Sieve		Percent Passing
Sieve Size	Size opening (mm)	
1-1/2 inch	38.1	100
1 inch	25.4	90-100
1/2 inch	12.7	0-15

- D. Pea Gravel: Comply with DOT Article 703-02 for screened gravel (size 1A, Table 703-4).
- E. Sand: ASTM C 33.
- F. Cushion Material: Comply with DOT Article 703-06 for cushion sand.

- G. Marker Tape: FL Industries Blackburn/Holub's Type YT6, or Seton Nameplate Corporations Type 6 ELE, imprinted with message suited to item buried below.

PART 3 EXECUTION

3.01 UNDERGROUND UTILITIES

- A. Locate existing underground utilities prior to commencing excavation work. Determine exact utility locations by hand excavated test pits. Support and protect utilities to remain in place.
- B. Remove inactive, abandoned utilities within the limits of the areas to be excavated. Cap or plug open ends of abandoned utilities extending outside the excavation limits.

3.02 EXCAVATION AND TRENCHING

- A. Excavate earth as required for the Work.
- B. Maintain sides and slopes of excavations in a safe condition until completion of backfilling. Comply with Code of Federal Regulations Title 29 - Labor, Part 1926 (OSHA).
 - 1. Trenches: Deposit excavated material on one side of trench only. Trim banks of excavated material to prevent cave-ins and prevent material from falling or sliding into trench. Keep a clear footway between excavated material and trench edge. Maintain areas to allow free drainage of surface water.
- C. Stockpile excavated materials classified as suitable material where directed, until required for fill. Place, grade, and shape stockpiles for proper drainage as approved by the Director's Representative.
- D. Concrete Slabs, Floors, and Bases: Excavate to the following depths below bottom of concrete for addition of Subbase Course Type 2:
 - 1. Interior: 6 inches unless otherwise indicated.
 - 2. Exterior: 8 inches unless otherwise indicated.
- E. Bell and Spigot Pipe Trenches: Open only enough trench length to facilitate laying pipe sections. Unless otherwise indicated on the Drawings, excavate trenches approximately 24 inches wide plus the outside pipe diameter, equally divided on each side of pipe centerline. Cut trenches to cross section, elevation, profile, line, and grade indicated. Accurately grade and shape trench bottom for uniform bearing of pipe in undisturbed earth. Excavate at bell and coupling joints to allow ample room for proper pipe connections
- F. Tubing and Piping (other than Bell and Spigot): Provide sufficient trench width for installation and to accommodate special backfill when specified.
- G. Pavement: Excavate to subgrade surface elevation.

- H. Unauthorized Excavations: Unless otherwise directed, backfill unauthorized excavation under footings, foundation bases, and retaining walls with compacted select granular material without altering the required footing elevation. Elsewhere, backfill and compact unauthorized excavation as specified for authorized excavation of the same classification, unless otherwise directed by the Director.
 - 1. Unauthorized excavations under structural Work such as footings, foundation bases, and retaining walls shall be reported immediately to the Director before any concrete or backfilling Work commences.
- I. Notify the Director's Representative upon completion of excavation operations. Do not proceed with the Work until the excavation is inspected and approved. Inspection of the excavation by the Director's Representative will be made on 3 working days' notice.

3.03 DEWATERING

- A. Prevent surface water and subsurface or ground water from flowing into excavations and trenches. Pump out any accumulated water.
- B. Do not allow water to accumulate in excavations or trenches. Remove water from all excavations immediately to prevent softening of foundation bottoms, undercutting footings, and soil changes detrimental to the stability of subgrades and foundations. Furnish and maintain pumps, sumps, suction and discharge piping systems, and other system components necessary to convey the water away from the Site.
- C. Convey water removed from excavations, and rainwater, to collecting or run-off area. Cut and maintain temporary drainage ditches and provide other necessary diversions outside excavation limits for each structure. Do not use trench excavations as temporary drainage ditches.
- D. Provide temporary controls to restrict the velocity of discharged water as necessary to prevent erosion and siltation of receiving areas.

3.04 PLACING FILL AND BACKFILL

- A. Surface Preparation of Fill Areas: Strip topsoil, remaining vegetation, and other deleterious materials prior to placement of fill. Break up or scarify old pavements to a maximum of 2 square feet. Prior to placement of fill, smooth out and compact areas where wheel rutting has occurred due to stripping or earthwork operations.
- B. Excavations: Backfill as promptly as Work permits, but not until completion of the following:
 - 1. Inspection, testing, approval, and recording locations of underground utilities.
 - 2. Removal of concrete formwork.
 - 3. Removal of temporary sheeting (or sheet-piling) and backfilling of voids caused by removals.
 - 4. Cutting off top of permanent sheeting (or sheet-piling).

5. Removal of trash and debris.
- C. Place backfill and fill materials in layers not more than 8 inches thick in loose depth unless otherwise specified. Before compaction, moisten or aerate each layer as necessary to facilitate compaction to the required density. Do not place backfill or fill material on surfaces that are muddy, frozen, or covered with ice. Do not backfill with excavated material unless it meets the requirements of this Section.
 1. Place fill and backfill against foundation walls, and in confined areas (such as trenches) not easily accessible by larger compaction equipment, in maximum 6 inch thick (loose depth) layers.
 2. For Open Graded Stone/Clean Stone (Item B-12, No. 1 crushed stone, No. 2 crushed stone, etc.) in access of six inches: Material must be wrapped in separation fabric.
 - D. Under Exterior Concrete Slabs and Bases:
 1. Up to Subgrade Surface Elevation: Place selected fill when fill or backfill is required.
 2. Subbase Material: Place 12 inches of Subbase Course Type 2 over subgrade surface.
 - E. Under Interior Concrete Slabs and Bases:
 1. Up to Subgrade Surface Elevation: Place selected fill when fill or backfill is required.
 2. Subbase Material: Place 6 inches of Subbase Course Type 2 over subgrade surface.
 - F. Under Exterior Pavement and Walks:
 1. Up to Subgrade Surface Elevation: Place selected fill when fill or backfill is required.
 2. Subbase Material: Subbase Course Type 2 over subgrade surface.
 - G. Landscape Areas: Place suitable material when required to complete fill or backfill areas up to subgrade surface elevation. Do not use material containing rocks over 4 inches in diameter within the top 12 inches of suitable material.
 - H. Crushed Stone Areas Around Concrete Pads: Provide 6 inches minimum thickness of crushed stone around concrete pads extending to limits indicated.
 - I. Plastic Pipe in Trenches: Place cushion material a minimum of six inches deep under pipe, 12 inches on both sides, and 12 inches above top of pipe. Complete balance of backfill as specified.
 - J. Copper Tubing, and Steel Gas Pipe: Place cushion material a minimum of 6 inches deep under pipe, 6 inches on either side, and 12 inches above top of pipe. Complete balance of backfill as specified
 - K. Marker Tape: Install marker tape 4 inches below finish grade directly over the following:
 1. Plastic pipe.

3.05 COMPACTION

- A. All materials with exception of open graded stone (No. 2 Coarse aggregate, No. 1 Coarse aggregate, Item B-12, etc.):
 - 1. Compact each layer of fill and backfill for the following area classifications to the percentage of maximum density specified below and at a moisture content suitable to obtain the required densities, but at not less than three percent drier or more than two percent wetter than the optimum content as determined by ASTM D 698 (Standard Proctor) or 1557 (Modified Proctor).
 - a. Structures (entire area within ten feet outside perimeter): 95 percent.
 - b. Concrete Slabs and Steps: 95 percent.
 - c. Landscaped Areas: 90 percent.
 - d. Pavements and Walks: 95 percent.
 - e. Pipe trenches: 95 percent.
 - f. Pipe Bedding: 95 percent.
 - 2. If a compacted layer fails to meet the specified percentage of maximum density, the layer will be re-compacted and retested. If compaction cannot be achieved the material/layer will be removed and replaced. No additional material may be placed over a compacted layer until the specified density is achieved

3.06 GRADING

- A. Rough Grading: Trim and grade excavations required by this Contract to a level 4 inches below the finish grades unless otherwise indicated. Provide a smooth uniform transition to adjacent areas.
- B. Finish Grading: Finish surfaces free from irregular surface changes, and as follows:
 - 1. Grassed Areas: Finish areas to receive topsoil to within not more than 1 inch above or below the required subgrade surface elevations.
 - 2. Walks and Pavements: Place and compact subbase material as specified. Shape surface of areas to required line, grade and cross section, with the finish surface not more than 1/2 inch above or below the required subbase elevation.
 - 3. Building Slabs: Grade subbase material smooth and even, free of voids, compacted as specified, and to required subbase elevation. Finish final grades within a tolerance of 1/4 inch when tested with a 10 foot straightedge.
- C. Spread approved topsoil, directly upon prepared subgrade surface to a depth measuring 4 inches after natural settlement of the topsoil has occurred in areas to be seeded or to receive sod. Provide greater depth to adjust grades when directed by the Director's Representative.
 - 1. Approved existing topsoil may be used. Provide additional topsoil from outside sources as required.

3.07 RESTORATION

- A. Restore pavements, walks, curbs, lawns, and other exterior surfaces damaged during performance of the Work to match the appearance and performance of existing corresponding surfaces as closely as practicable.
- B. Topsoil and seed or sod damaged lawn areas. Water as required until physical completion of the Work.

3.08 DISPOSAL OF EXCESS AND WASTE MATERIALS

- A. Remove from State Property and dispose of excess and unsuitable materials, including materials resulting from clearing and grubbing and removal of existing improvements.
- B. Transport excess and unsuitable materials, including materials resulting from clearing and grubbing and removal of existing improvements, to spoil areas on State property designated by the Director's Representative, and dispose of such materials as directed.
- C. Transport excess topsoil to areas on State property designated by the Director's Representative. Smooth grade deposited topsoil.

3.09 FIELD QUALITY CONTROL

- A. Compaction Testing: Notify the Director's Representative at least 3 working days in advance of all phases of filling and backfilling operations. Compaction testing will be performed by the Director's Representative to ascertain the compacted density of the fill and backfill materials. Compaction testing will be performed on certain layers of the fill and backfill as determined by the Director's Representative. If a compacted layer fails to meet the specified percentage of maximum density, the layer shall be recompact and will be retested. No additional material may be placed over a compacted layer until the specified density is achieved.

3.15 PROTECTION

- A. Protect graded areas from traffic and erosion and keep them free of trash and debris.

END OF SECTION

SECTION 262726

WIRING DEVICES

PART 1 GENERAL

1.01 SUBMITTALS

- A. Product Data: Catalog sheets, specifications and installation instructions.

PART 2 PRODUCTS

2.01 SWITCHES

- A. Local Switches, Single Pole:
 - 1. 20A, 120/277 V ac; Bryant's 4901, Crouse-Hinds/AH's 1991, Hubbell's 1121/1221, Leviton's 1121/1221, Pass & Seymour's 20AC1, or Woodhead's 1991.
- B. Local Switches, Double Pole:
 - 1. 20A, 120/277 V ac; Bryant's 4902, Crouse-Hinds/AH's 1992, Hubbell's 1222/1122, Leviton's 1222/1122, Pass & Seymour's 20AC2, or Woodhead's 1992.
 - 2. 30A, 120/277 V ac; Bryant's 3002, Crouse-Hinds/AH's 3992, Leviton's 3032, or Pass & Seymour's 30AC2.
- C. Local Switches, Three-Way:
 - 1. 20A, 120/277 V ac; Bryant's 4903, Crouse-Hinds/AH's 1993, Hubbell's 1223/1123, Leviton's 1223-2/1123-2, Pass & Seymour's 20AC3, or Woodhead's 1993.
- D. Dimmer Switches (Incandescent, 120 V ac):
 - 1. 600 Watts; Lutron's C-600.
 - 2. 1000 Watts; Lutron's C-1000
 - 3. 1500 Watts; Lutron's C-1500.
 - 4. 2000 Watts; Lutron's C-2000.

2.02 RECEPTACLES

- A. Specification Grade Receptacles:
 - 1. Duplex receptacle, NEMA 5-20R (20A, 125 V, 2P, 3W); Bryant's 5362, Crouse-Hinds/AH's 5352/5342, Hubbell's 5352, Leviton's 5352, or Pass & Seymour's 5352.
- B. Ground Fault Interrupter Receptacles:
 - 1. Duplex receptacle rated 20A (NEMA 5-20R), circuit ampacity 20A; Bryant's GFR53FT, Crouse-Hind/AH's GF5342, Hubbell's GF 5352,

Leviton's 6899, Pass & Seymour's 2091S, or Daniel Woodheads 5352GF.

- C. Weather Resistant Ground Fault Interrupter Receptacles:
 - 1. Duplex receptacle rated 20A (NEMA 5-20R), circuit ampacity 20A; Cooper's WRVGF20W or Leviton's 002-W7899-00W.
- D. Special Purpose Receptacles: Furnish matching nylon, polycarbonate or armored plug with each receptacle. Furnish matching wall plate with each receptacle (.040" brass, Type 302 stainless steel, weatherproof, threaded box type, as required):
 - 1. As produced by Bryant, Crouse-Hinds/AH, Hubbell, or Pass & Seymour. NEMA configuration and ratings to suit requirements.

2.03 WALL PLATES

- A. Stainless Steel Wall Plates: Type 302 stainless steel with satin finish; Bryant's 93 Series, Crouse-Hinds/AH's 93 Series, Hubbell's 93 Series, Leviton's 910 Series, or Pass & Seymour's 93 Series.
- B. Weatherproof Covers: Crouse-Hinds WLRs, WLRD, Hubbell's 52, 74 Series, or Pass & Seymour's 45 Series.
- C. Covers for Threaded Type Boxes: Stamped sheet steel, gasketed device covers as produced by Crouse-Hinds Co., or OZ/Gedney Co.

2.04 EMERGENCY SHUTDOWN SWITCHES

- A. Emergency Shutdown Break-Glass Switch: Square D. Co.'s Class 9001, Type K15, pushbutton operator with the following:
 - 1. N.O. and N.C. contacts.
 - 2. NEMA 4, 13 enclosure.

2.05 NAMEPLATES

- A. Phenolic Type: Standard phenolic nameplates with 3/16 inch minimum size lettering engraved thereon.
- B. Embossed Aluminum: Standard stamped or embossed aluminum tags, 3/16 inch minimum size lettering, as produced by Seton Name Plate Corp. or Tech Products Inc.

2.06 CORD REEL

- A. Industrial type cord reel with (2), duplex outlets in HBLPOB1D box. Cable to be 12/3 SJEO, 45 feet in length. Housing constructed of steel with powder coat finish. Multi-position nylon rollers on guide arm. Must be capable of mounting on ceiling, wall, floor, or bench. Positive latch mechanism.
- B. Manufacturers: Hubbell #HBL45123R or approved equal.

2.07 MOTOR RATED SWITCH

- A. 20A, 120/277V single pole toggle switch with lock out provisions: Leviton's 1121/1221.

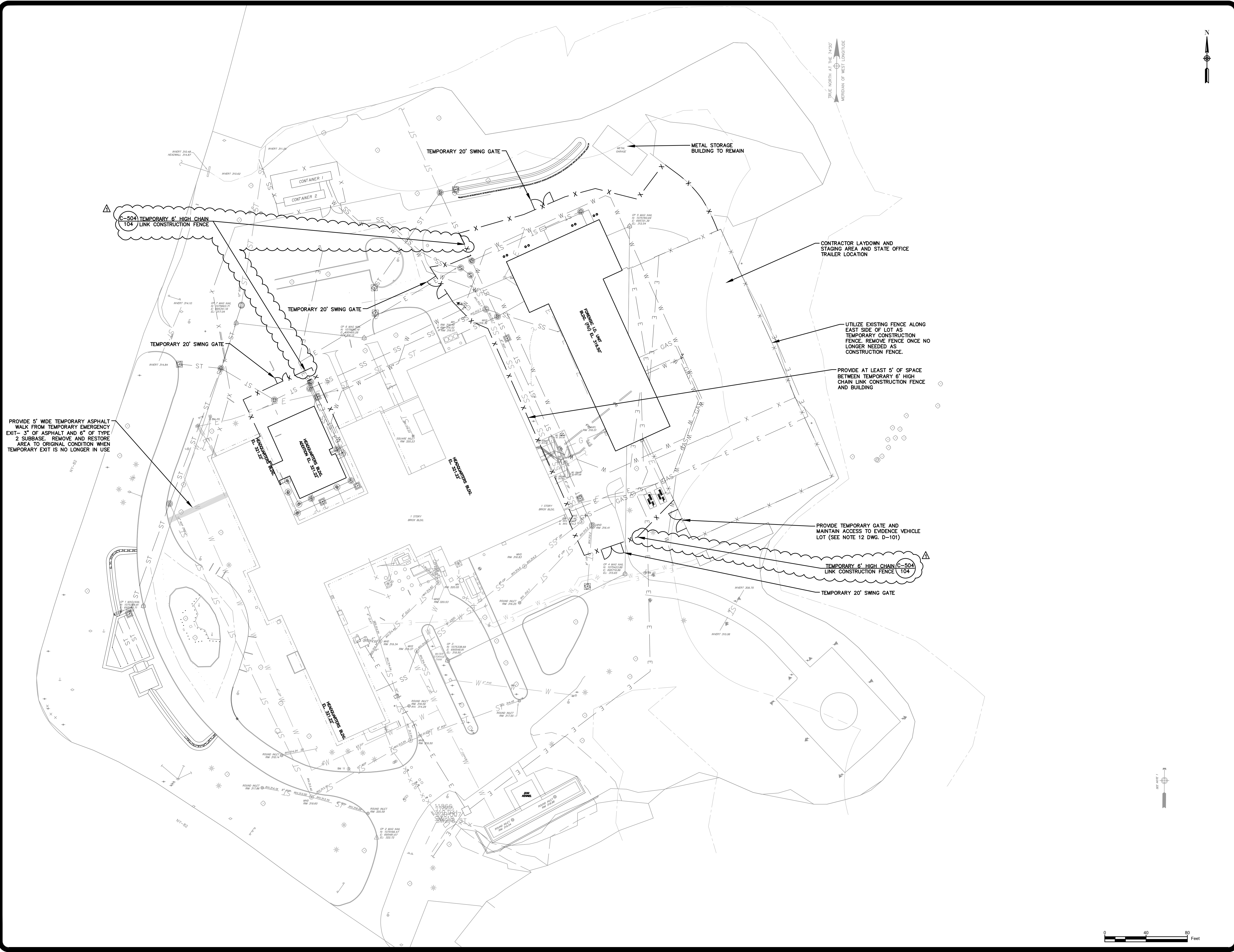
PART 3 EXECUTION

3.01 INSTALLATION

- A. Install wiring devices in outlet boxes.
- B. Local Switches:
 - 1. Install local switches rated 20A, 120/277 V ac for switches unless otherwise shown on the drawings or specified.
 - 2. Install switches indicated Sa, Sb, Sc, etc, for control of outlets or lights, with corresponding letters on the device.
 - 3. Where more than one switch occurs at same location in a 120 volt system, arrange switches in gangs and cover with one face plate.
 - 4. Install single and double pole switches so that switch handle is up when switch is in the "On" position.
- C. Receptacles:
 - 1. Install Specification Grade receptacles, NEMA 5-15R, 15A, 125 V, 2P, 3W, for duplex receptacles and single receptacles unless otherwise shown on the drawings or specified.
 - 2. Install receptacles with ground pole in the down position.
 - 3. Install Weather Resistant Ground Fault Interrupter Receptacles in wet and damp locations.
- D. Wall Plates:
 - 1. Install wall plates on all wiring devices in dry locations, with finish to match hardware in each area.
 - 2. Install blank wall plates on outlet boxes which are for future equipment except telephone outlets.
 - 3. Install 5/8 inch bushed wall plates on telephone outlets.
 - 4. Install labels on all receptacle wall plates indicating the panel and circuit designation.
- E. Weatherproof Covers: Install weatherproof covers on wiring devices in damp locations.
- F. Nameplates: Provide phenolic or embossed aluminum nameplate for each special purpose receptacle indicating phase, ampere and voltage rating of the circuit. Attach nameplate with rivets or tamperproof fasteners to wall plate or to wall above receptacle. Wall plates may be engraved with required data in lieu of separate nameplates.
- H. Mats: Where flush plates are required over outlet boxes that cannot be set deep enough for the plates to fit closely over the finished wall surfaces, provide oak mats to fill the space between the finished wall surface and the plate.

END OF SECTION

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 36x24 PLOT SHEET



WARNING:
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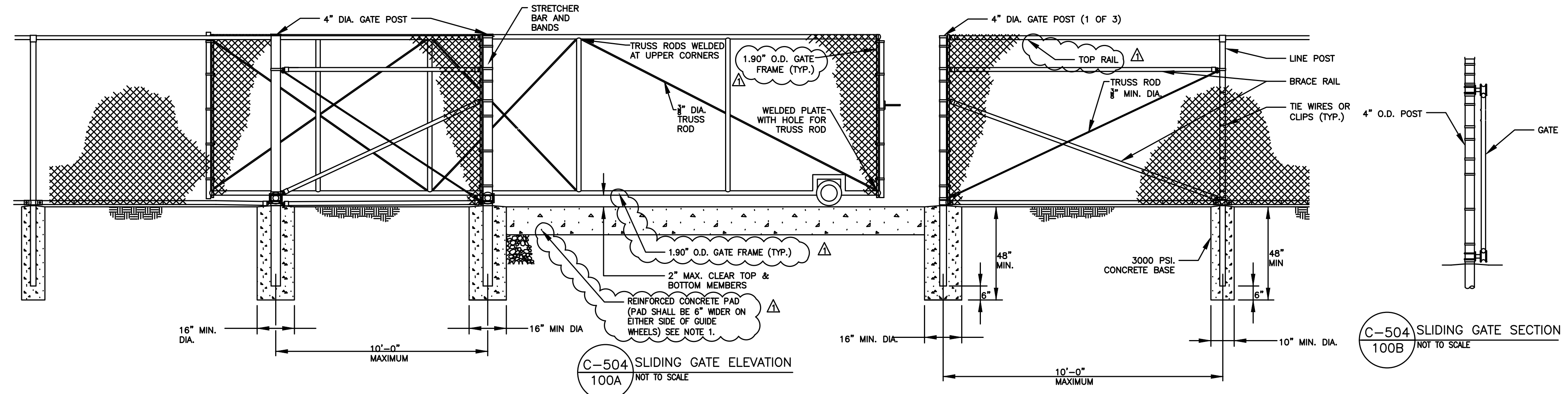
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 LOCATION: TROOP K HEADQUARTERS RT. 82 AND 44 POUGHKEEPSIE, NY 12603
 CLIENT: NEW YORK STATE POLICE

PROJECT NUMBER:	45649-C
DESIGNED BY:	AWR
DRAWN BY:	JTM
FIELD CHECK:	
APPROVED:	JMC
SHEET TITLE:	
TEMPORARY FENCE AND GATE PLAN	
DRAWING NUMBER:	
CG-102	
SHEET 5 OF 24	

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THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS "A" MISDEMEANOR.

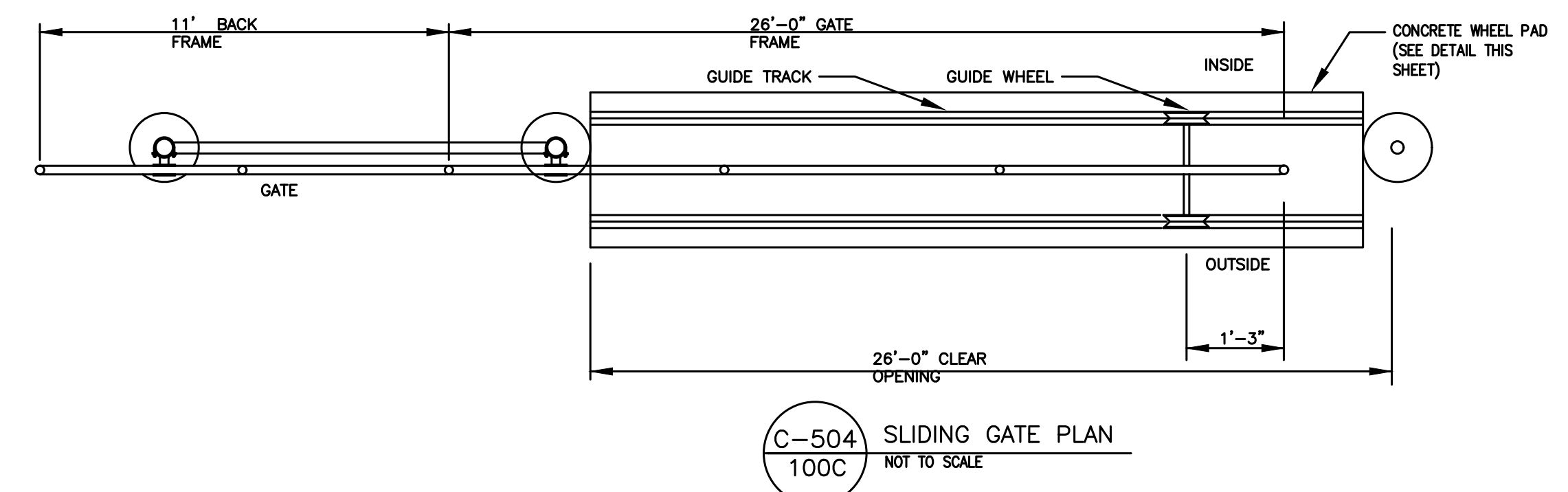


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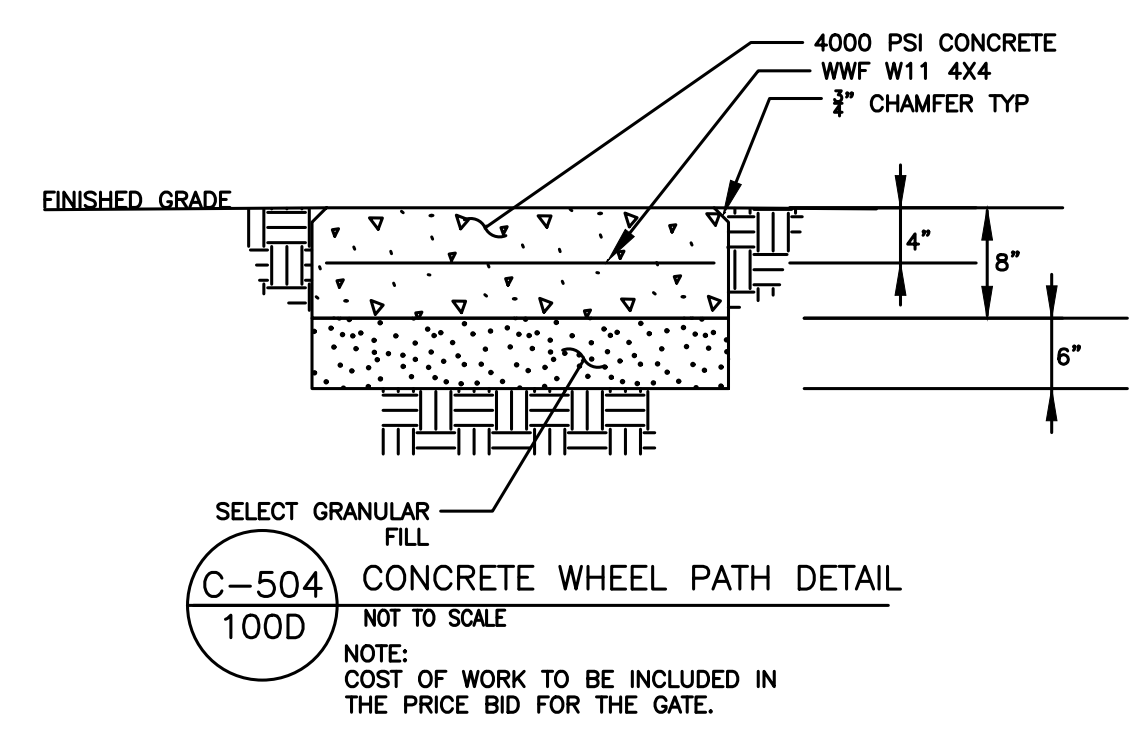


C-504 SLIDING GATE ELEVATION 100A
NOT TO SCALE
NOTE: 1. WHEEL AND CONCRETE PAD CAN BE ELIMINATED IF NOT REQUIRED BY THE GATE MANUFACTURER.

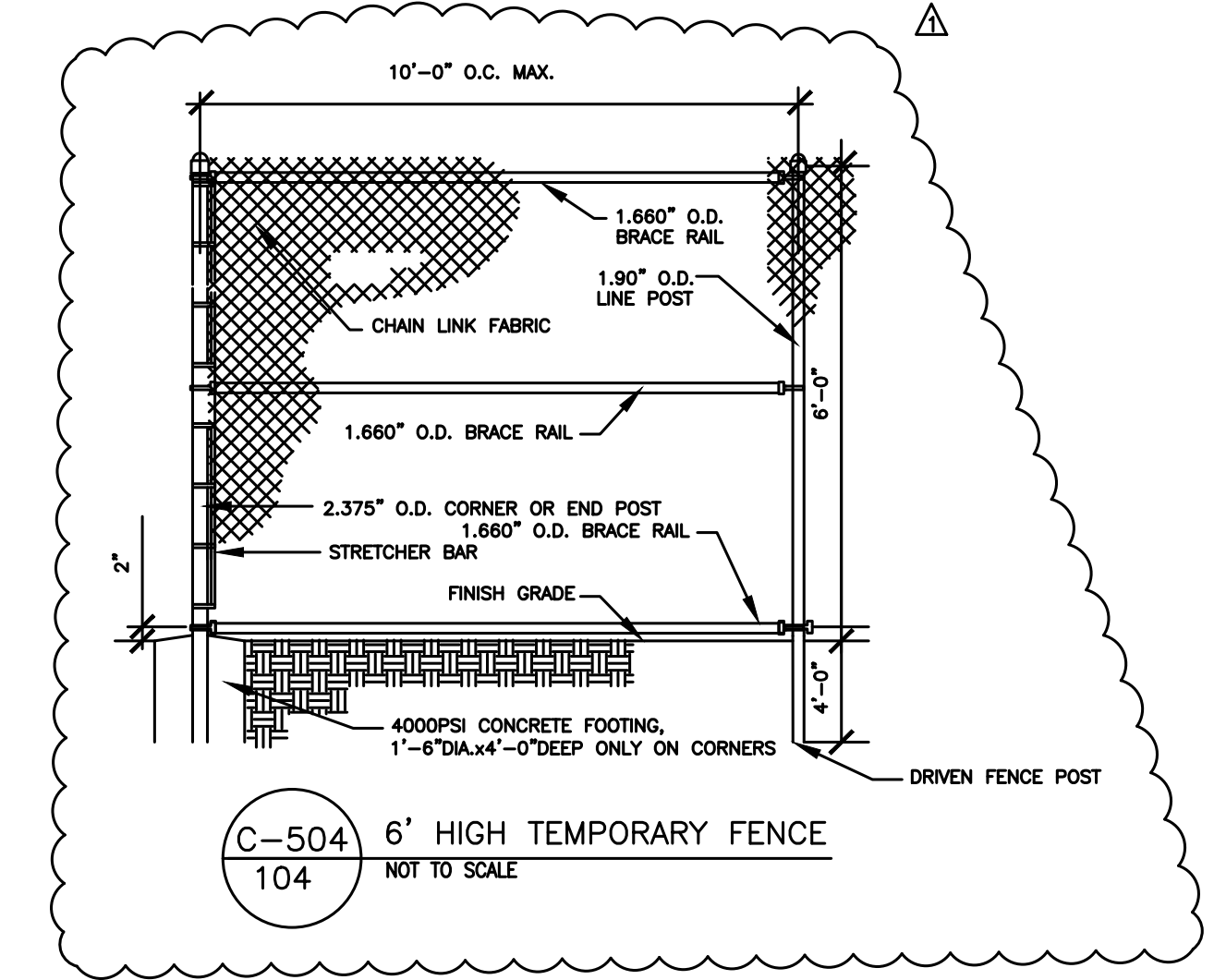
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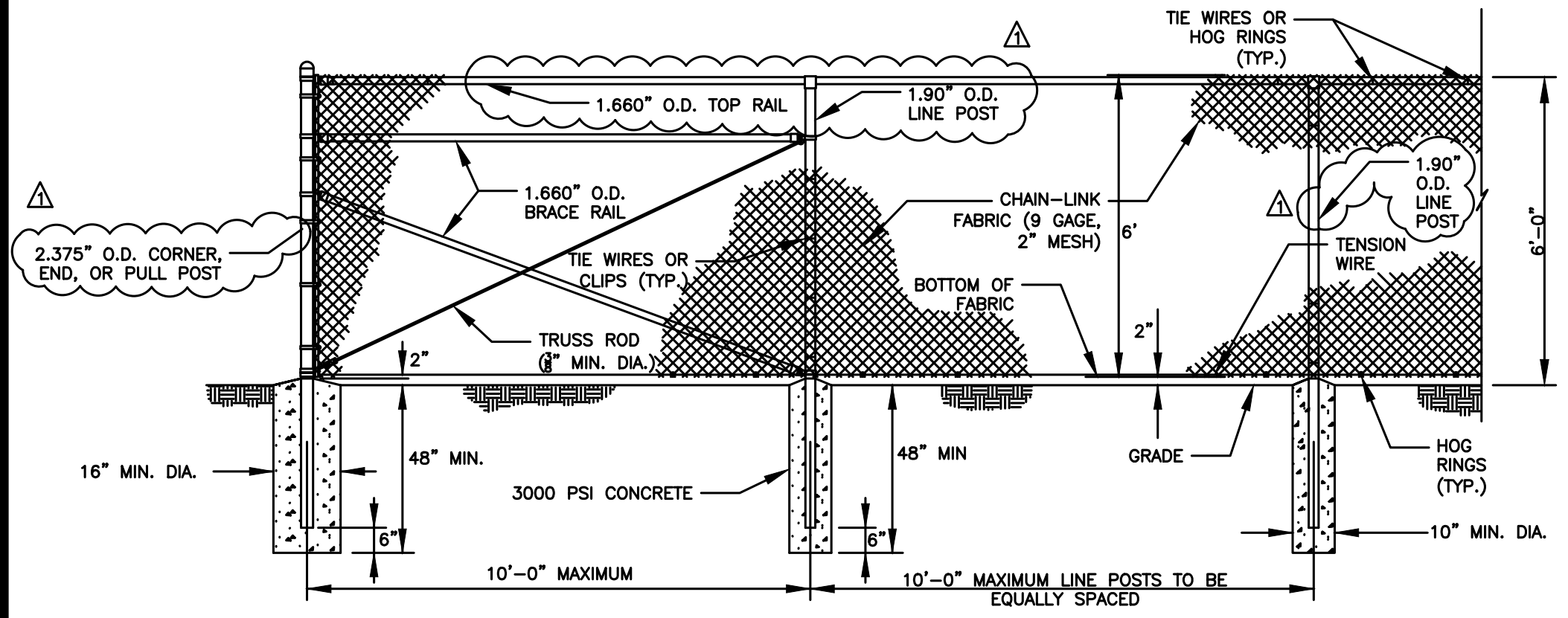
C-504 SLIDING GATE PLAN 100C
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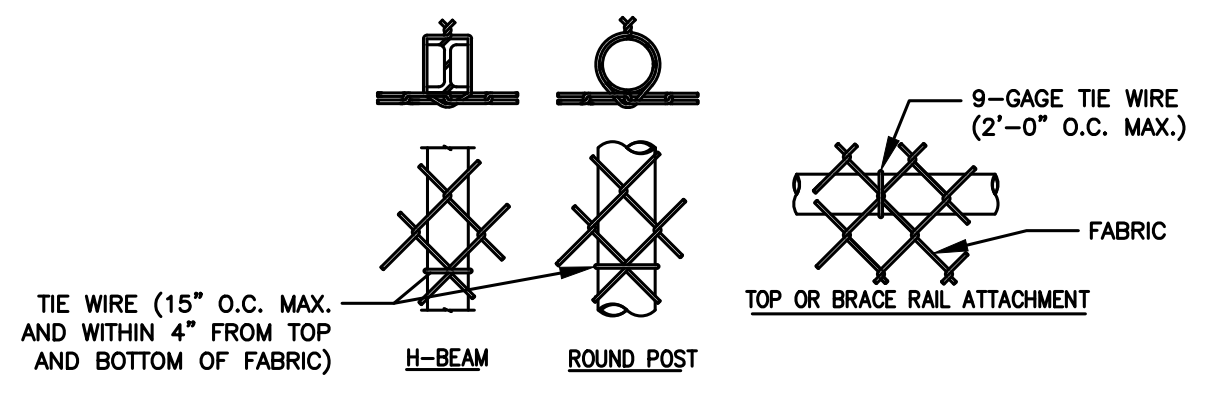
C-504 CONCRETE WHEEL PATH DETAIL 100D
NOT TO SCALE
NOTE: COST OF WORK TO BE INCLUDED IN THE PRICE BID FOR THE GATE.



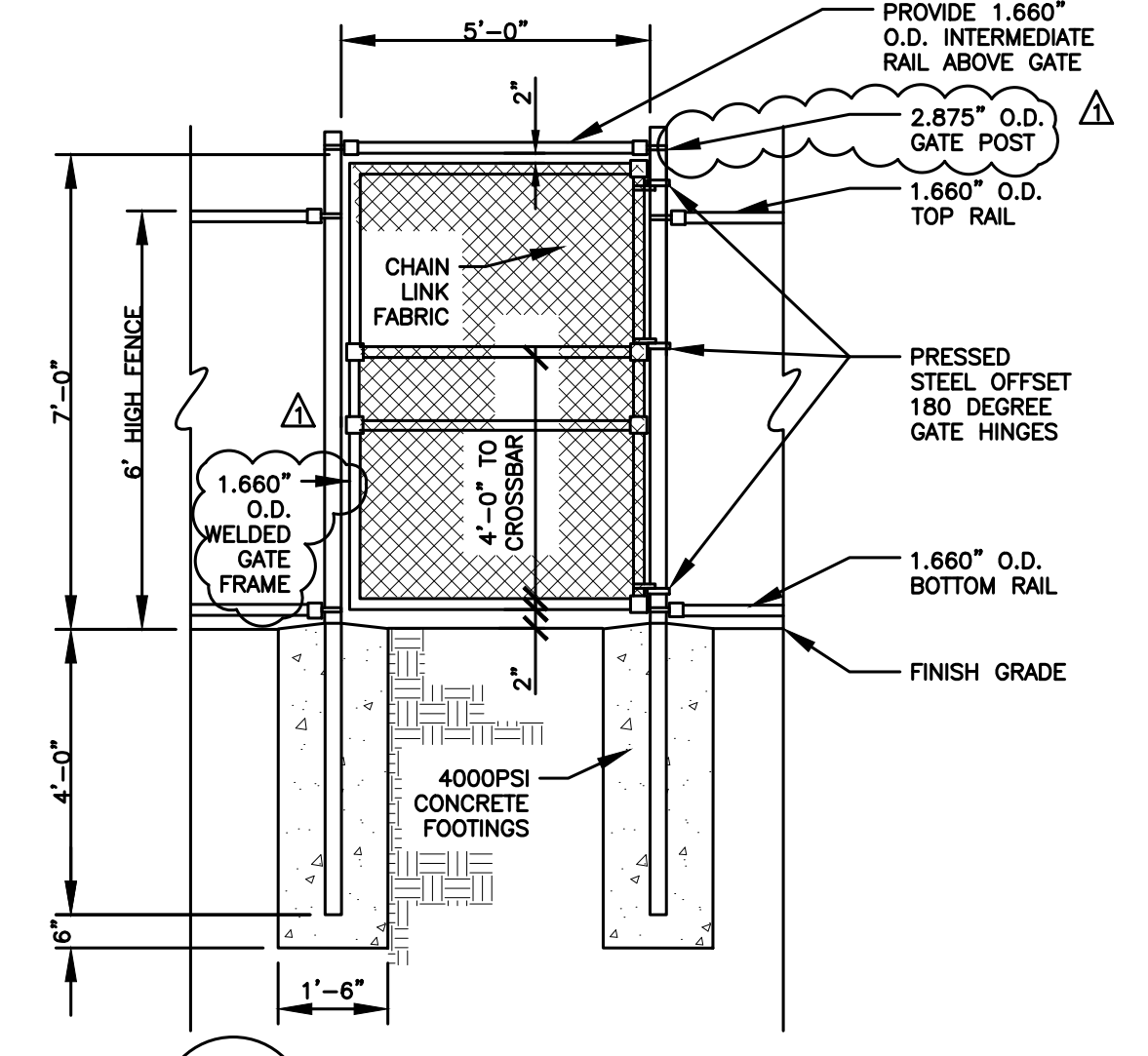
C-504 6' HIGH TEMPORARY FENCE 104
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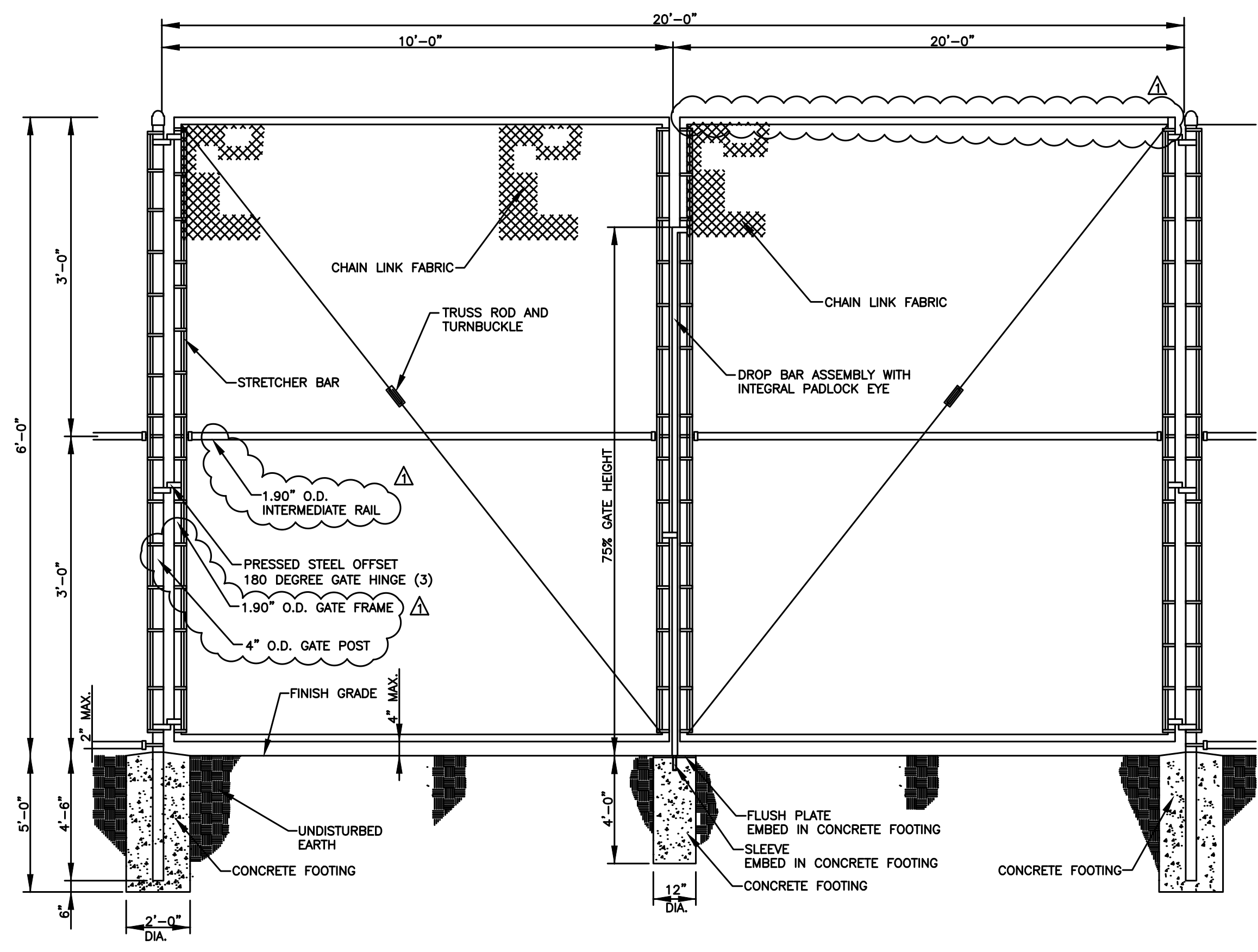
C-504 CHAIN LINK FENCE DETAIL 101
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C-504 LINE POST ATTACHMENTS 101A
NOT TO SCALE



C-504 7' HIGH 5' WIDE PERSONNEL GATE 102
NOT TO SCALE



C-504 20'-0\"/>

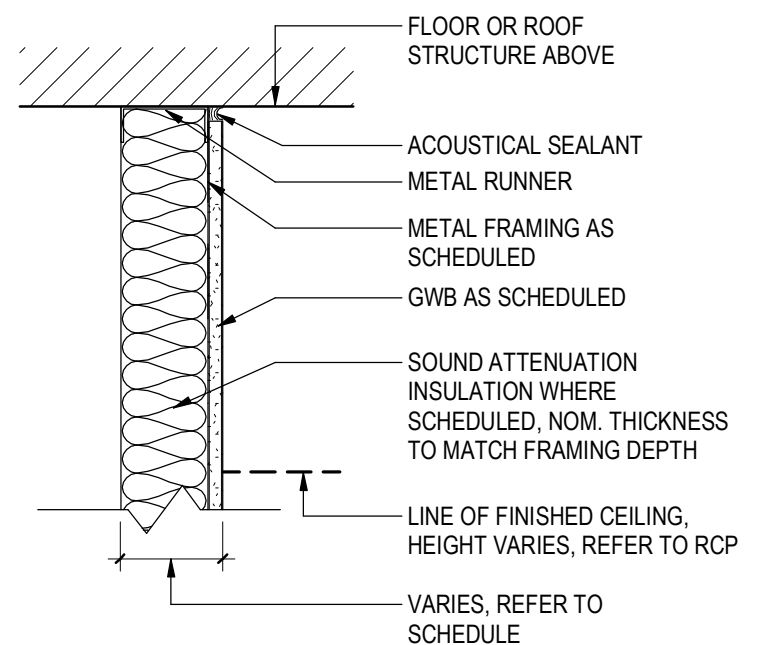
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PROJECT NUMBER: 45649-C
DESIGNED BY: AWR
DRAWN BY: JTM
FIELD CHECK: JMC
APPROVED: JMC

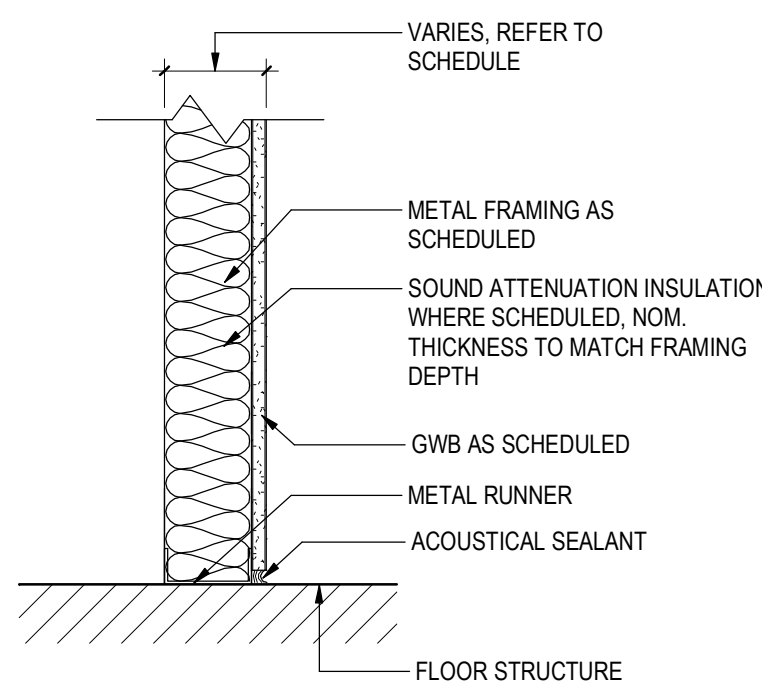
SHEET TITLE:
FENCING AND GATE DETAILS
DRAWING NUMBER:
C-504

FIU - PARTITION SCHEDULE																
TYPE	CONSTRUCTION DATA				TOP TERMINATION		RATED PARTITION		ACOUSTICAL PERFORMANCE							
	OVERALL PARTITION DEPTH	GWB THICKNESS	FRAMING SIZE	METAL GA.	STUD SPACING	DETAIL AT TOP	DETAIL AT BASE	STUDS TO ROOF DECK	INSULATION TO ROOF DECK	MASONRY TO B.O. STRUCTURE	SMOKE PARTITION	FIRE RATING (HRS)	FIRE TEST	SOUND INSULATION	STC RATING	STC TEST

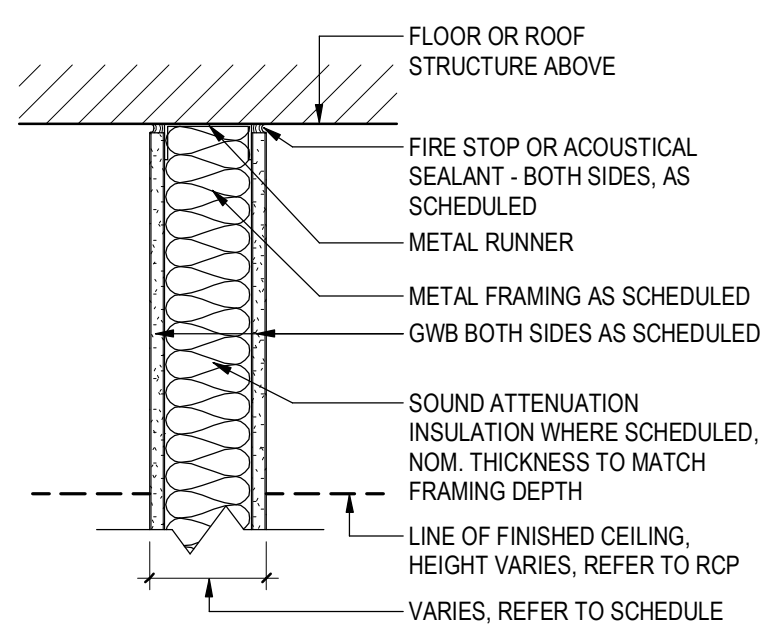
Group B - Material, Stud																	
B13	4 1/4"	5/8"	3 5/8"	16	1'-4"	TB1	BB1	•	•	•	•	•	•	•	•	•	0
B19	6 5/8"	5/8"	6"	16	1'-4"	TC1	BC1	•	•	•	•	•	•	•	•	•	40
Group C - Material, Stud, Material																	
C20	7 1/4"	5/8"	6"	16	1'-4"	TC1	BC1	•	•	•	•	•	•	•	•	•	40
Group M - CMU																	
M02	3 5/8"	0"	4" NOM.	-	-	TM1	BM1	•	•	•	•	•	•	•	•	•	40
M09	7 5/8"	0"	8" NOM.	-	-	TM1	BM1	•	•	•	•	•	•	•	•	•	45
M10	7 5/8"	0"	8" NOM.	-	-	TM1	BM1	•	•	•	•	•	•	•	•	•	45
Group N - Material, Furring CMU																	
N02	9 7/8"	5/8"	8" NOM. / 1 5/8"	16	1'-4"	TN1	BN1	•	•	•	•	•	•	•	•	•	45



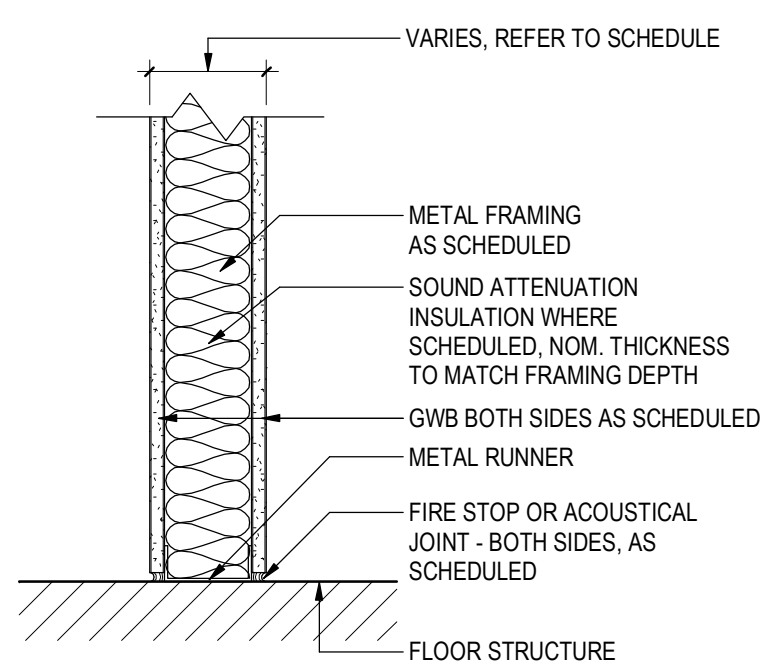
1 GROUP B - TB1
A-605-F 1 1/2" = 1'-0"



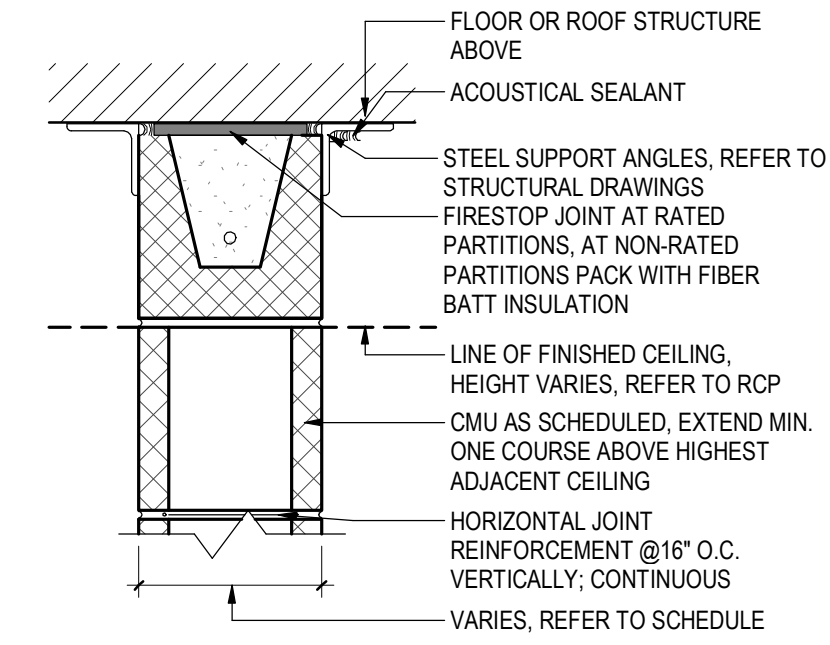
2 GROUP B - BB1
A-605-F 1 1/2" = 1'-0"



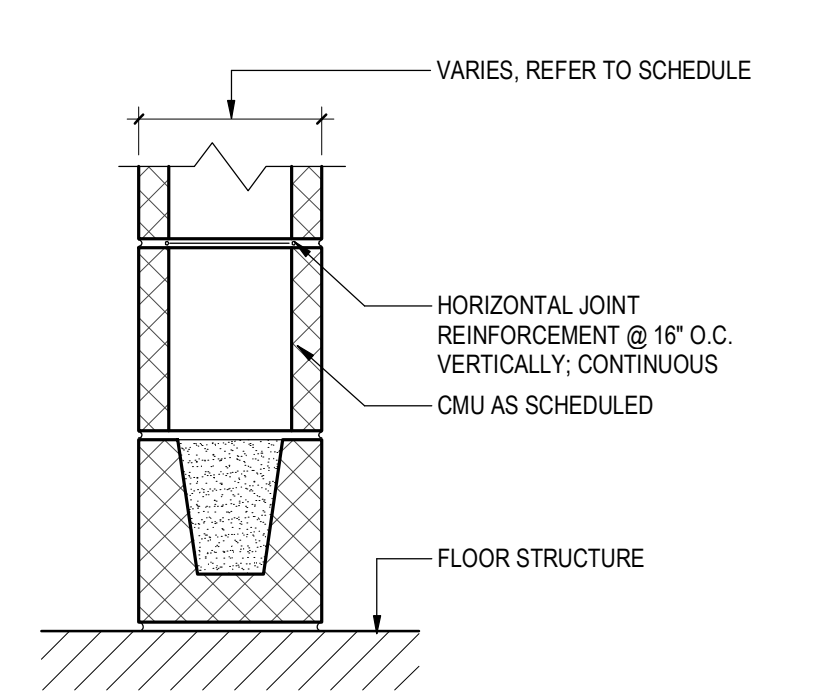
3 GROUP C - TC1
A-605-F 1 1/2" = 1'-0"



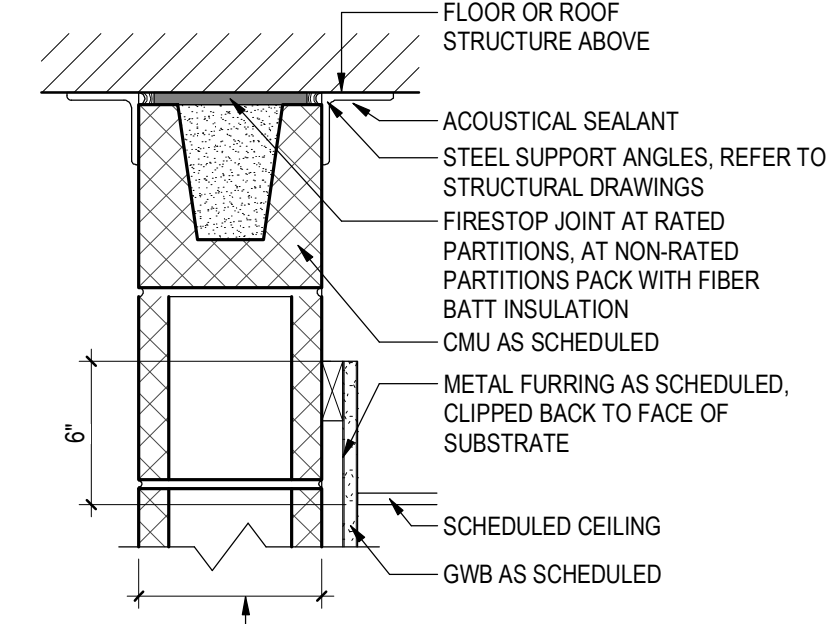
4 GROUP C - BC1
A-605-F 1 1/2" = 1'-0"



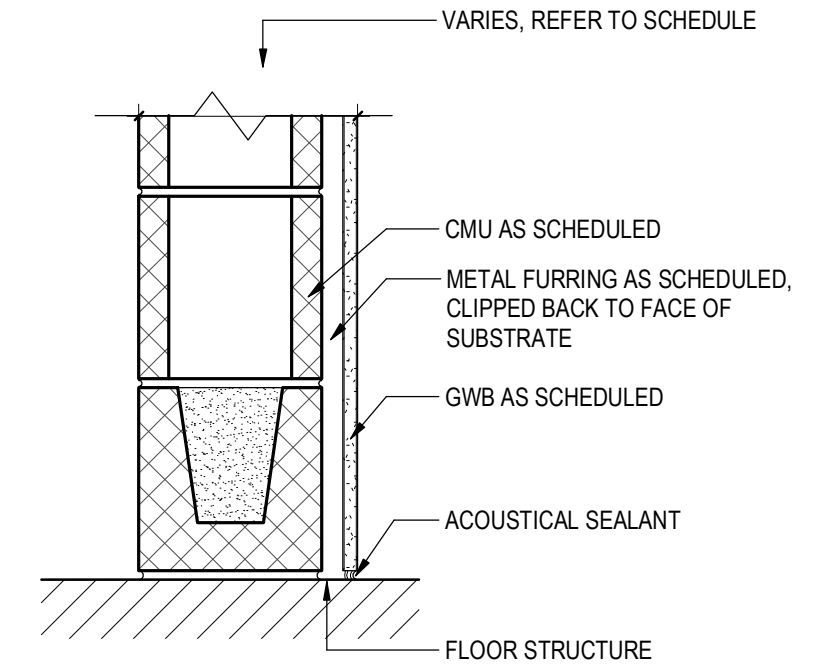
5 GROUP M - TM1
A-605-F 1 1/2" = 1'-0"



6 GROUP M - BASE BM1
A-605-F 1 1/2" = 1'-0"



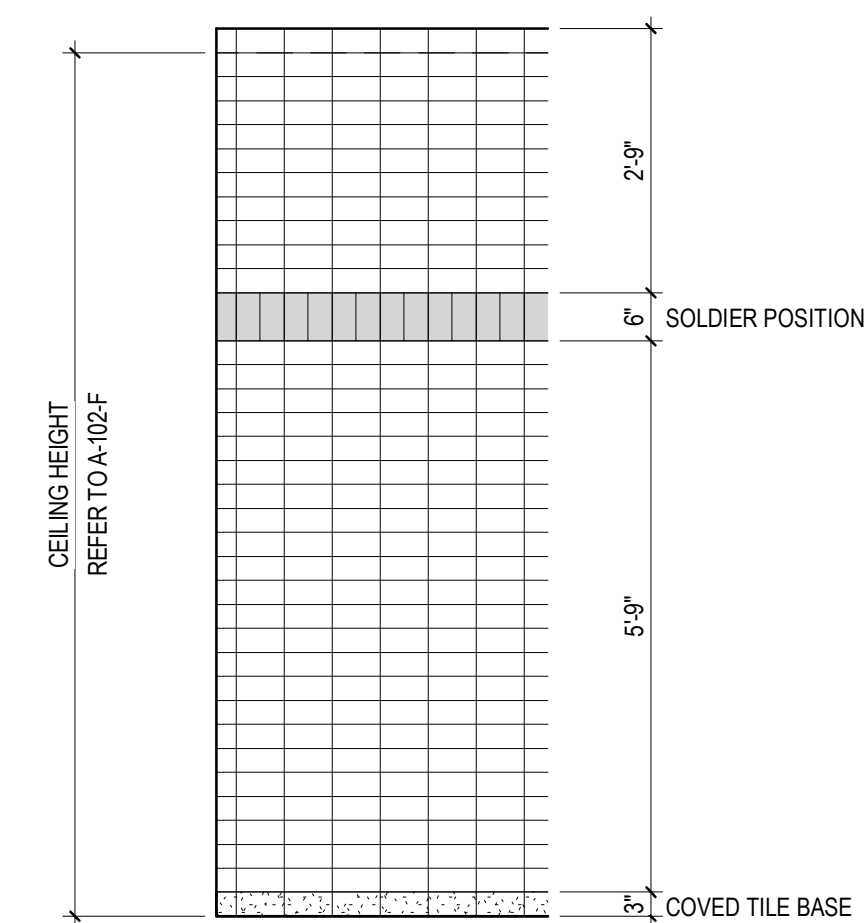
7 GROUP N - TN1
A-605-F 1 1/2" = 1'-0"



8 GROUP N - BN1
A-605-F 1 1/2" = 1'-0"

ROOM FINISH SCHEDULE									
NO.	FLOOR	BASE	WALL	CEILING	SIGN	WIN.	TRMT.	COMMENTS	
100	CPT-1	WDB-1	PNT-2	ACT-1	A	HLB		SQUARE LAY IN	
101	CPT-1	WDB-1	PNT-2	ACT-1	A	HLB		SQUARE LAY IN	
101-1	CPT-1	WDB-1	PNT-1	ACT-1	-	-		SQUARE LAY IN	
102	CPT-1	WDB-1	PNT-2	ACT-1	A	HLB		SQUARE LAY IN	
103	LIN-1	WDB-1	PNT-5	ACT-1	A	HLB		SQUARE LAY IN	
104	CPT-1	WDB-1	PNT-5	ACT-1/WGB-8	A	WS		SQUARE TEGULAR TILE	
105	CPT-2	WDB-1	PNT-4	ACT-1	A	HLB		SQUARE LAY IN	
106	CPT-1	WDB-1	PNT-4	ACT-1	A	HLB		SQUARE LAY IN	
107	CPT-2	WDB-1	PNT-4	ACT-1	A	-		SQUARE LAY IN	
107-1	CPT-1	WDB-1	PNT-1	ACT-1	-	-		SQUARE LAY IN	
108	CPT-1	WDB-1	PNT-1	ACT-1	A	HLB		SQUARE LAY IN	
109	CPT-1	WDB-1	PNT-4	ACT-1	A	HLB		SQUARE LAY IN	
110	SV-1	CB-1	PNT-6	ACT-1	A	HLB		SQUARE LAY IN	
110-1	SV-1	CB-1	PNT-1	ACT-1	-	-		SQUARE LAY IN	
110-2	SV-1	CB-1	PNT-1	ACT-1	-	-		SQUARE LAY IN	
110-3	SV-1	CB-1	PNT-1	ACT-1	-	-		SQUARE LAY IN	
110-4	SV-1	CB-1	PNT-6	ACT-1	-	-		SQUARE LAY IN	
111	CONC	RB-2	PNT-1	GWB-8	A	HLB		SQUARE LAY IN	
111-1	PFL-1	CBT-1	CWT-1	GWB-8	D	-		SQUARE LAY IN	
111-2	CONC	RB-2	PNT-1	-	-	-		SQUARE LAY IN	
111-3	BCF-1	BCC-1	WPP-1	GWB-8	A	-		SQUARE LAY IN	
111-4	BCF-1	BCC-1	WPP-1	GWB-8	A	-		SQUARE LAY IN	
111-5	BCF-1	BCC-1	WPP-1	GWB-8	A	-		SQUARE LAY IN	
111-6	BCF-1	BCC-1	WPP-1	GWB-8	A	-		SQUARE LAY IN	
112	CONC	RB-1	PNT-1	GWB-8	A	-		SQUARE LAY IN	
113	CONC	RB-2	PNT-1	GWB-8	A	-		SQUARE LAY IN	
114	CONC	RB-2	PNT-1	GWB-8	A	-		SQUARE LAY IN	
115	CONC	RB-2	PNT-1	GWB-8	A	-		SQUARE LAY IN	
116	CONC	RB-2	PNT-1	GWB-8	A	-		SQUARE LAY IN	
117	CONC	RB-2	PNT-1	GWB-8	A	-		SQUARE LAY IN	
150	LIN-1	WDB-1	PNT-1	ACT-1/GWB-2	-	-		SQUARE TEGULAR TILE	
151	LIN-1/WDB-1	WDB-1	PNT-4	WCT-1/GWB-2	-	-		SQUARE TEGULAR TILE	
152	LIN-1	WDB-1	PNT-1	ACT-1/GWB-2	-	-		SQUARE TEGULAR TILE	
153	LIN-1/WDB-1	WDB-1	PNT-4	WCT-1	-	-		SQUARE TEGULAR TILE	
154	PFL-1	CBT-1	CWT-1	GWB-8	D	-		SQUARE LAY IN	
155	CPT-1	WDB-1	PNT-1	GWB-8	-	-		SQUARE LAY IN	
156	PFL-1	CBT-1	CWT-1	GWB-8	C	-		SQUARE LAY IN	
157	PFL-1	CBT-1	CWT-1	GWB-8	B	-		SQUARE LAY IN	
158	LIN-1	RB-1	PNT-1	GWB-8	-	-		SQUARE LAY IN	
159	CONC	RB-1	PNT-1	STEEL PAINT	A	-		PAINT STEEL, WHITE	
159-1	CONC	RB-1	PNT-1	GWB-8	-	-		SQUARE LAY IN	
159-2	SS	(none)	PNT-1	-	-	-		SQUARE LAY IN	

WINDOW TREATMENT
HLB HORIZONTAL LOUVER BLINDS
WS MANUALLY OPERATED WINDOW SHADES



9 TILE PATTERN
A-605-F 1/2" = 1'-0"

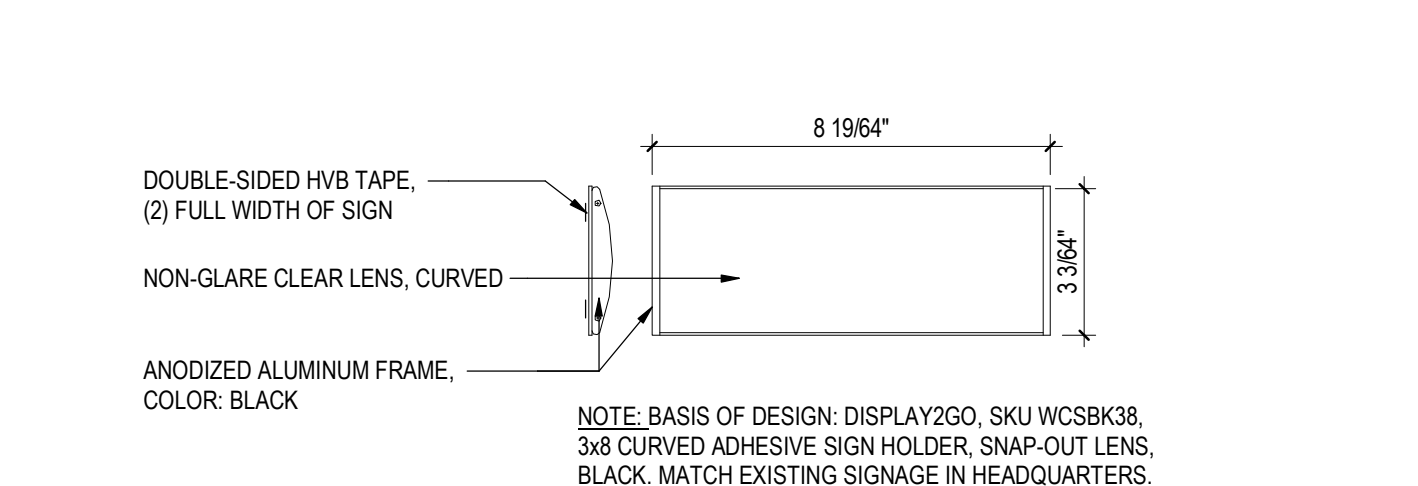
FLOOR FINISH LEGEND				
KEY	FINISH	MANUFACTURER	COLLECTION	COMMENTS
BCF-1	BIOCONTROL FLOORING	GERFLOR MIPOLAM	MIPOLAM	MIST 5340
CONC	CONCRETE	-	-	SEALED
CPT-1	CARPET	MOHAWK	ADIRONDAK II	EVERGREEN 686
CPT-2	CARPET	MOHAWK	ADIRONDAK II	LODGE 828
EPX-1	POURED EPOXY	FORBO	MARMOLEUM DUAL	EIGER 2629
LIN-1	LINOLEUM	EMSER	EURASIA	CAFE
PFL-1	PORCELAIN FLOOR TILE	EMSER	EURASIA	CAFE
SS	STAINLESS STEEL	-	-	1/4" DIAMOND PLATE
SV-1	SHEET VINYL	MANNINGTON	BIO SPEC	NEW GLACIER 15164
WM-1	WALK OFF MATT	MATS, INC	ADVANCE TRACK	CHARCOAL SPLASH

BASE FINISH LEGEND				
KEY	FINISH	MANUFACTURER	COLOR	COMMENTS
BC-1	BIOCONTROL COVE	GERFLOR FLOORING	MIST 5340	INTEGRAL BASE COVE FORMER 4012
CB-1	VINYL BASE	MANNINGTON	NEW GLACIER 15164	
CBT-1	CERAMIC BASE TILE	DALTILE	ARCHITECTURAL GRAY 0744	MATTE
FB-1	RUBBER BASE	ROPPE	BLACK BROWN 193	
RB-2	RUBBER BASE	ROPPE	LT BROWN 147	FINNAGLE LONS TOE
WDB-1	WOOD BASE	-	NATURAL VARIATIONS DARK CHERRY	WOOD TO MATCH SOLID POPLAR

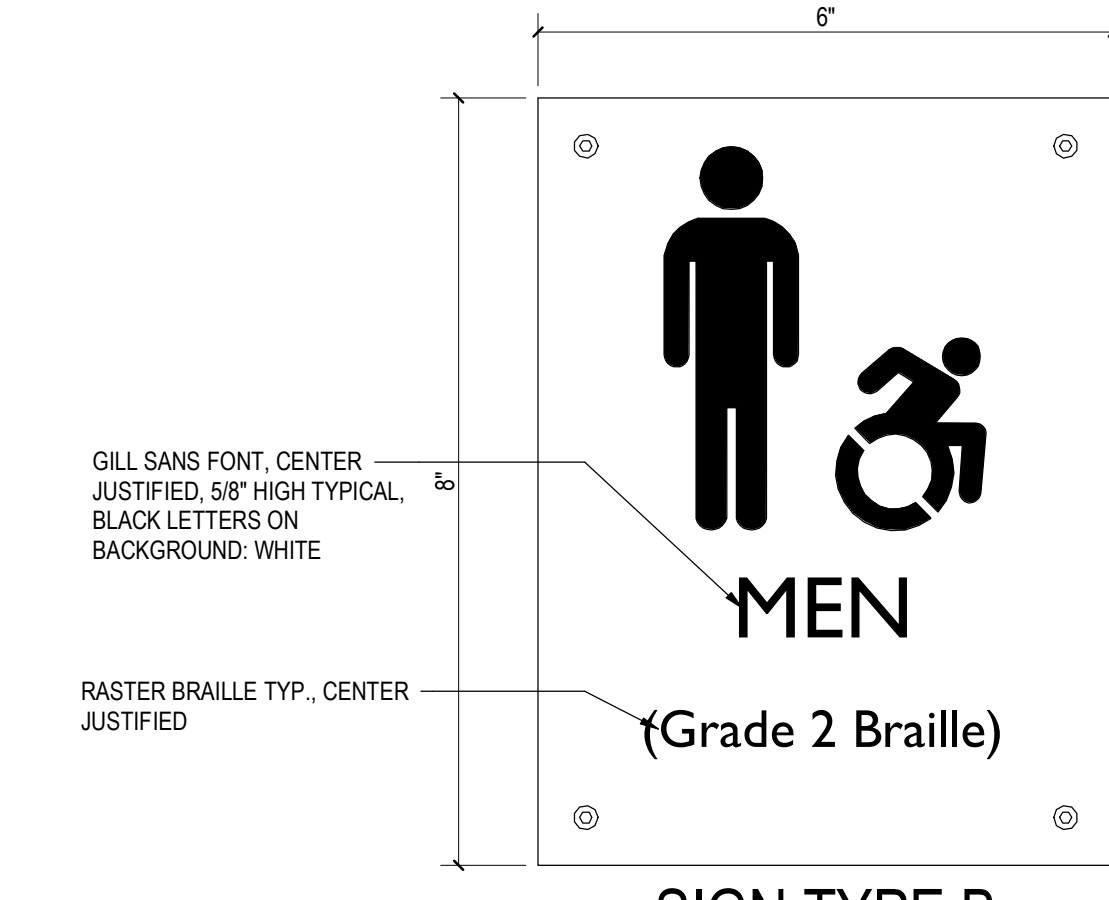
WALL FINISH LEGEND				
KEY	FINISH	MANUFACTURER	COLOR	COMMENTS
CWT-1	CERAMIC WALL TILE	DALTILE	ARCHITECTURAL GRAY 0709	MATTE
CWT-2	CERAMIC WALL TILE	DALTILE	ARTISAN BROWN 0744	MATTE
PNT-1	PAINT	BENJAMIN MOORE	BERSHIRE BEIGE AC-2	
PNT-2	PAINT	SHERWIN WILLIAMS	BACKDROP SW7025	PNT 4/ PNT 2 REFER TO A404 F
PNT-4	PAINT	BENJAMIN MOORE	COASTAL FOG AC-1	
PNT-5	PAINT	BENJAMIN MOORE	GREENBLER BEIGE GC-79	
PNT-6	PAINT	BENJAMIN MOORE	CHINA WHITE PM- 20	
PP-1	PROTECTIVE PANEL	-	-	
WPP-1	WALL PROTECTION PANEL	GERFLOR MIPOLAM	GREIGE 0013	

CEILING FINISH LEGEND				
KEY	FINISH	MANUFACTURER	COLOR	COMMENTS
ACT-1	ACOUSTICAL CEILING TILE	ARMSTRONG	ULTIMA 1912	SQUARE LAY IN
GWB-2	GYPSONUM BOARD - PAINT	SHERWIN WILLIAMS	BACKDROP SW7025	
GWB-8	GYPSONUM BOARD - PAINT	SHERWIN WILLIAMS	EXTRA WHITE 7006	
WCT-1	WOOD CEILING TILE	ARMSTRONG	NATURAL VARIATIONS DARK CHERRY UNO	SQUARE TEGULAR TILE

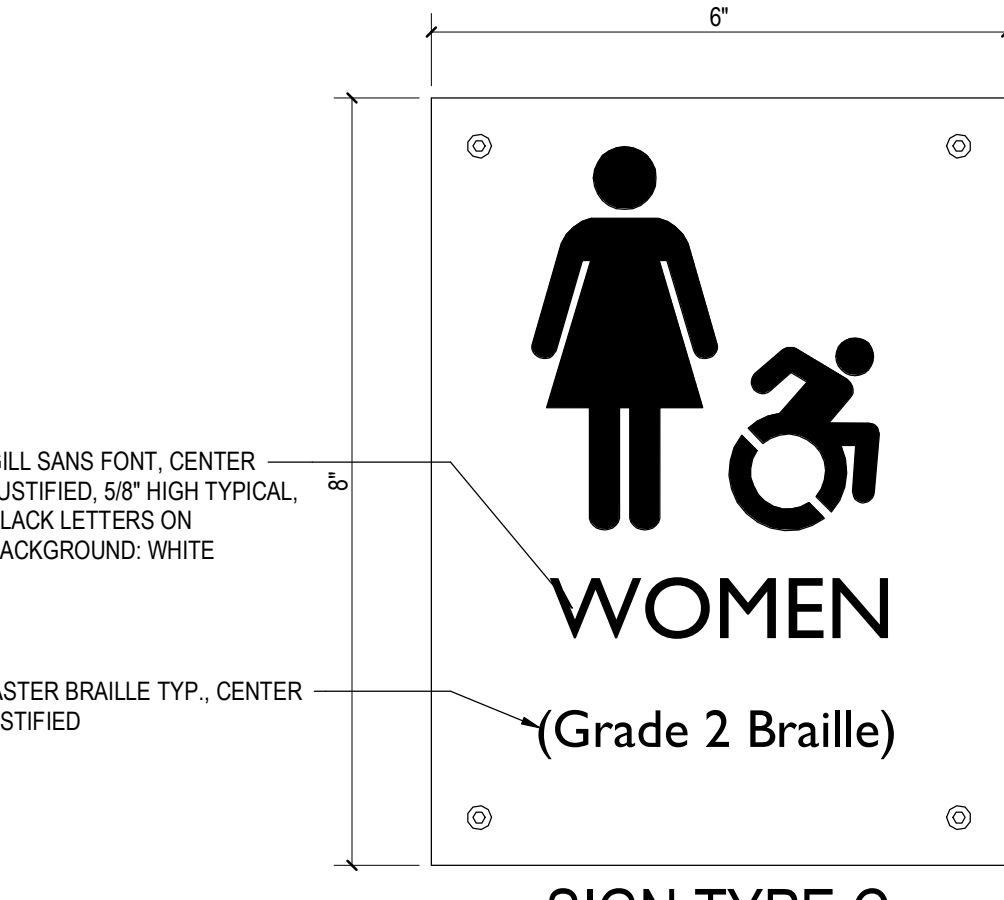
CASEWORK SCHEDULE			
DESCRIPTION	MATERIAL	MANUFACTURER	COLOR
TRANSACTION COUNTER	SOLID PLASTIC FABRICATION	CORIAN	NATURAL GRAY
103			
BASE CABINET	PLASTIC LAMINATE	WILSONART	LINEN D427 SOLIDCOR
WALL CABINET	PLASTIC LAMINATE	WILSONART	LINEN D427 SOLIDCOR
COUNTER WITH 5" BACKSPLASH	SOLID PLASTIC FABRICATION	CORIAN	NATURAL GRAY
110			
COUNTER WITH 5" BACKSPLASH	CHEMICAL RESISTANT EPOXY	KEWAUNEE	KEMRESIN SLATE
BASE CABINET	SOLID WOOD	KEWAUNEE	CHICORY MAPLE
INFILL PANEL	SOLID WOOD	KEWAUNEE	CHICORY MAPLE
WALL CABINET	SOLID WOOD	KEWAUNEE	CHICORY MAPLE
110-1			
COUNTER WITH 5" BACKSPLASH	CHEMICAL RESISTANT EPOXY	KEWAUNEE	KEMRESIN SLATE
BASE CABINET	SOLID WOOD	KEWAUNEE	CHICORY MAPLE
INFILL PANEL	SOLID WOOD	KEWAUNEE	CHICORY MAPLE
111			
COUNTER WITH 5" BACKSPLASH	CHEMICAL RESISTANT EPOXY	KEWAUNEE	KEMRESIN SLATE
BASE CABINET	METAL	KEWAUNEE	KEMRESIN STEEL BLACK 12
WALL CABINET	METAL	KEWAUNEE	KEMRESIN STEEL BLACK 12



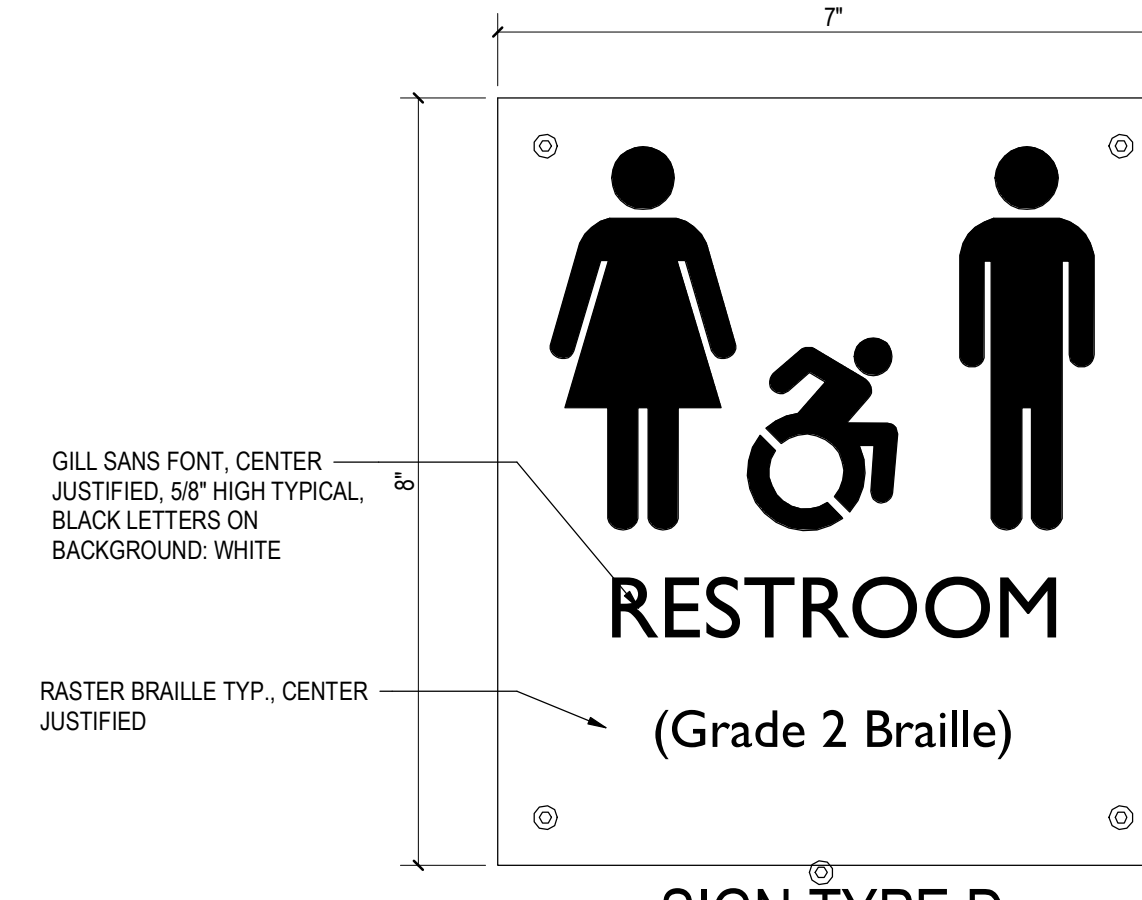
10 SIGN TYPES SIGN TYPE A
A-605-F 3" = 1'-0"



11 SIGN TYPES SIGN TYPE B
A-605-F 6" = 1'-0"



12 SIGN TYPES SIGN TYPE C
A-605-F 6" = 1'-0"



13 SIGN TYPES SIGN TYPE D
A-605-F 7" = 1'-0"

PARTITION NOTES
1. HORIZONTAL METAL 'C' CHANNEL BRIDGING CONTINUOUS AT 4'-0" O.C. WITH METAL FRAMING CLIPS AT EACH STUD. TYPICAL FOR ALL METAL STUD PARTITIONS.

PAINTING NOTES
1. UNLESS OTHERWISE SPECIFIED, ALL EXPOSED SURFACES TO BE PAINTED.
2. ALL GYPSONUM BOARD WALLS AND CEILINGS SHALL BE PROPERLY PREPARED, SPACKLED, SANDED, ETC. TO PROVIDE A SMOOTH FINISH AND SURFACE READY FOR PRIME AND PAINT.
3. THE CONTRACTOR SHALL EXAMINE ALL AREAS OF CONSTRUCTION AFTER COMPLETION OF WORK BY ALL TRADES (INCLUDING TELEPHONE INSTALLATION, FLOORING, ETC.) AND INDICATE ALL NECESSARY 'TOUCH-UP' PAINTING.
4. IT IS THE INTENT OF THE DRAWINGS THAT ALL EXPOSED SURFACES RECEIVE FINISHES AS INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS UNLESS NOTED OTHERWISE. ANY SURFACES WHICH DO NOT HAVE A SPECIFIC FINISH NOTED OR ARE NOTED TO REMAIN UNFINISHED SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND FINISHED PER THE ARCHITECT'S INSTRUCTION.
5. ALL PAINT SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION FOR THE PARTICULAR SURFACE.

FLOORING NOTES
1. THE GENERAL CONTRACTOR SHALL FLASH PATCH ALL CRACKS, HOLES OR OTHER IMPERFECTIONS. (PROJECTIONS SHALL BE REMOVED AND PATCHED TO PROVIDE A CONTINUOUS SMOOTH FLOOR SURFACE.) LEVEL NOT TO EXCEED 1/4" IN 10'-0" NON-CUMULATIVE.
2. THE GENERAL CONTRACTOR SHALL NOTIFY ARCHITECT AFTER FLOOR PATCHING IS DONE AND RECEIVE THEIR REVIEW PRIOR TO INSTALLATION OF FINISHED FLOORING.
3. UPON COMPLETION, ALL WORK SHALL BE CLEANED BY THE CONTRACTOR REMOVING ALL SPOTS OF ADHESIVE, SURFACE STAINS, AND ALL SCRAPES, CARTONS AND CONTAINERS SHALL BE REMOVED FROM THE BUILDING.
4. THE GENERAL CONTRACTOR TO COORDINATE WITH ALL FLOORING CONTRACTORS INVOLVED TO ASSURE FLUSH INSTALLATION OF ALL VARYING FLOOR MATERIALS USED. ALL TRANSITION METHODS TO BE APPROVED BY THE ARCHITECT.
5. AT ALL CHANGES IN FLOORING MATERIAL, PROVIDE APPROPRIATE TRANSITION STRIPS. TRANSITION STRIP COLOR TO MATCH RESILIENT BASE COLOR.

FINISH NOTES
1. ALL WOOD (WD) FINISH IS TO MATCH ARMSTRONG WOODWORKS NATURAL VARIATIONS DARK CHERRY.
2. ALL MANUFACTURERS AND COLORS PROVIDED IN THE FINISH COLOR LEGEND ARE PROVIDED FOR COLOR AND PATTERN REQUIREMENTS.
3. ALL DOOR FRAMES TO MATCH WOOD (WD) FINISH ARMSTRONG WOODWORKS NATURAL VARIATIONS DARK CHERRY.

NEW YORK STATE OF OPPORTUNITY. Office of General Services
DESIGN & CONSTRUCTION
CONSULTANT
Stantec
3 Columbia Circle Suite 6
Albany, NY 12203-5158
www.stantec.com

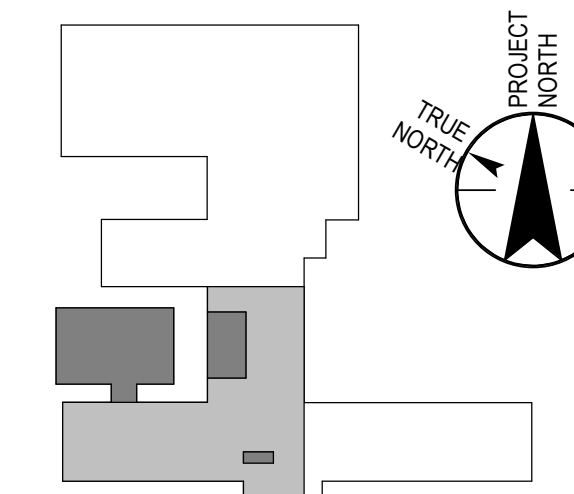
WARNING:
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REGISTERED ARCHITECT
WILLIAM H. DEWITT
NO. 019851
STATE OF NEW YORK
01/08/21

CONTRACT: CONSTRUCTION
TITLE: PROVIDE FORENSIC IDENTIFICATION UNIT BUILDING & HEADQUARTERS BUILDING ADDITION / RENOVATION
LOCATION: TROOP K HEADQUARTERS RT. 82 AND 44 POUGHKEEPSIE, NY 12603
CLIENT: NEW YORK STATE POLICE

1	01/08/2021	ADDENDUM #4
0	06/10/2020	BD/CONSTRUCTION DOCUMENTS
MARK	DATE	DESCRIPTION
PROJECT NUMBER:	45649-C	
DESIGNED BY:	C.P.	
DRAWN BY:	C.P.	
FIELD CHECK:	WD	
APPROVED:	WD	
SHEET TITLE:	FORENSIC IDENTIFICATION UNIT PARTITION AND FINISH SCHEDULE	
DRAWING NUMBER:	A-605-F	
SHEET	52	OF 117

KEYPLAN



WARNING:
THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AND ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT, FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS "A" MISDEAMEANOR.



CONTRACT: HVAC

TITLE: PROVIDE FORENSIC IDENTIFICATION UNIT BUILDING & HEADQUARTERS BUILDING ADDITION / RENOVATION

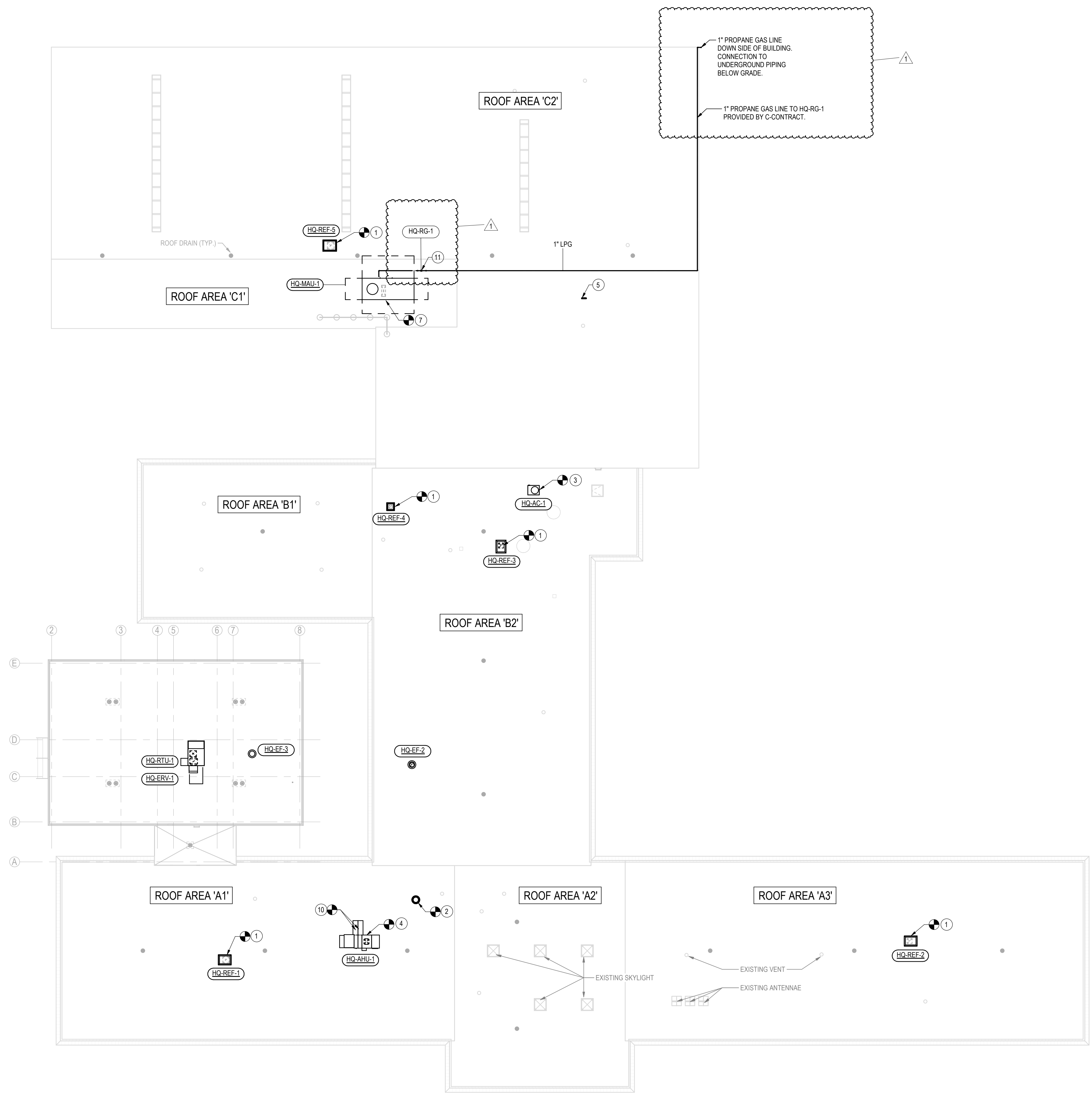
LOCATION: TROOP K HEADQUARTERS RT. 82 AND 44 POUGHKEEPSIE, NY 12603

CLIENT: NEW YORK STATE POLICE

PROJECT NUMBER:	45649-H	
DESIGNED BY:	FM	
DRAWN BY:	JLB	
FIELD CHECK:	JDR	
APPROVED:	JDR	
SHEET TITLE:	HEADQUARTERS ROOF HVAC PLAN	
DRAWING NUMBER:	M-203-H	
SHEET	59	OF 115

- GENERAL NOTES**
- C-CONTRACTOR TO PROVIDE ROOF FLASHING AND WALKWAY PROTECTION PADS (TYPICAL).
 - PROVIDE PRE-BALANCE CONDITIONS OF SYSTEMS BEING AFFECTED DURING ROOF REPLACEMENT PRIOR TO ANY REMOVALS. PRE-BALANCE CONDITIONS OF AFFECTED SYSTEMS SHALL BE RESTORED AFTER ROOF REPLACEMENT.
 - PROVIDE FOR CRANE AND ASSOCIATED EQUIPMENT REQUIRED TO REMOVE AND PLACE ROOFTOP EQUIPMENT. COORDINATE WITH ROOF REPLACEMENT REQUIREMENTS AND DIRECTOR'S REPRESENTATIVE FOR STORAGE LOCATIONS FOR EQUIPMENT TO BE REINSTALLED.
 - C-CONTRACTOR TO PROVIDE ROOF OPENINGS, INFILL UNUSED OPENINGS.
 - H-CONTRACTOR SHALL FURNISH CURBS FOR EXISTING EQUIPMENT WHERE INDICATED. FIELD VERIFY CURB DIMENSIONS AND PROVIDE MINIMUM OF 8 INCHES BETWEEN TOP OF ROOF SURFACE AND TOP OF WOOD NAILER. RECOMMENDED HEIGHT IS 18 TO 24 INCHES.
 - ALL DUCTWORK IS SHOWN DIAGRAMMATICALLY AND DOES NOT SHOW ALL OFFSETS, DROPS AND RISES OF RUNS.
 - CONTRACTOR TO VERIFY AND CONFIRM EXISTING CONDITIONS IN FIELD. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER OF RECORD AND DIRECTOR'S REPRESENTATIVE IN A TIMELY FASHION.

- KEY NOTES**
- PROVIDE EXHAUST FAN AS SCHEDULED. PROVIDE DUCTWORK AND TRANSITION TO CONNECT FAN TO EXISTING DUCTWORK BELOW. FURNISH CURB TO C-CONTRACTOR FOR INSTALLATION. INSTALL PER DETAIL 1/M-601-H.
 - REINSTALL EXISTING EXHAUST FAN EF-1-63. CONNECT TO EXISTING DUCTWORK AND DAMPER BELOW. FURNISH CURB TO C-CONTRACTOR FOR INSTALLATION. INSTALL PER DETAIL 1/M-601-H.
 - PROVIDE CONDENSING UNIT AND EVAPORATOR UNIT AS SCHEDULED. INSTALL IN ACCORDANCE TO MANUFACTURERS RECOMMENDATIONS. C-CONTRACTOR TO PROVIDE ROOF CURB/SUPPORT. CONTRACTOR TO REINSTALL EVAPORATOR UNIT IN THE SAME LOCATION AS THE REMOVED EVAPORATOR.
 - PROVIDE AIR HANDLING UNIT AS SCHEDULED. PROVIDE DUCTWORK AND PIPING TO CONNECT TO EXISTING DUCTWORK (18"x16" VERIFY IN FIELD) AND PIPING BELOW. FURNISH CURB TO C-CONTRACTOR FOR INSTALLATION.
 - PROVIDE 4" GOOSENECK WITH BIRDSCREEN AND DUCTWORK TO CONNECT TO EXISTING VEHICLE EXHAUST DUCTWORK BELOW. PROVIDE TYPE "L" VENT SELKIRK IPS OR APPROVED EQUAL. TERMINATE AT MINIMUM 2' ABOVE ROOF LINE. COORDINATE FLASHING WITH C-CONTRACT. SEE DETAIL 2 ON M-605-H.
 - REMOVED.
 - PROVIDE PROPANE FIRED / DX HEATING AND COOLING MAKE UP AIR UNIT AS SCHEDULED. PROVIDE DUCTWORK CONNECTION TO UNIT INTAKE. FURNISH CURB TO C-CONTRACTOR FOR INSTALLATION.
 - REMOVED.
 - H-CONTRACTOR TO CLEAN EXISTING TO REMAIN SUPPLY/RETURN/EXHAUST AIR DUCTWORK ASSOCIATED WITH ROOF REPLACEMENT PROJECT.
 - 1 1/2" DTWS/R PIPING SHALL PENETRATE THE ROOF DIRECTLY INTO THE DUAL TEMPERATURE COIL PLENUM OF AHU-1.
 - H-CONTRACTOR SHALL PROVIDE THE PROPANE REGULATOR HQ-RG-1 AND PIPING FROM HQ-RG-1 TO HQ-MAU-1.



1 HQ - ROOF HVAC PLAN
M-203-H 1/16" = 1'-0"



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CONTRACT: **HVAC**
TITLE: **PROVIDE FORENSIC IDENTIFICATION UNIT BUILDING & HEADQUARTERS BUILDING ADDITION / RENOVATION**
LOCATION: **TROOP K HEADQUARTERS RT. 82 AND 44 POUGHKEEPSIE, NY 12603**
CLIENT: **NEW YORK STATE POLICE**

PROJECT NUMBER: **45649-H**
DESIGNED BY: FM
DRAWN BY: JLB
FIELD CHECK: JDR
APPROVED: JDR
SHEET TITLE: **HEADQUARTERS SCHEDULES - SHEET #2**
DRAWING NUMBER: **M-702-H**
SHEET **69** OF 115

SPECIFICATION 237413		ROOF REPLACEMENT - AIR HANDLING UNIT SCHEDULE																							
UNIT IDENTIFICATION		FAN							ELECTRICAL				PHYSICAL CHARACTERISTICS					MANUFACTURER		MODEL NUMBER		NOTES			
MARK	ROOM(S) SERVED	TOTAL AIRFLOW (CFM)	ESP (IN-WG)	TSP (IN-WG)	SPEED (RPM)	BHP	HP	CONTROL	VOLTS	PHASE	FLA	WEIGHT (LBS)	HEIGHT (IN)	WIDTH (IN)	LENGTH (IN)	MANUFACTURER	MODEL NUMBER	NOTES							
		2,000	0.500	1.46	1,104	0.8	1	CONSTANT	208	3	3.34	2,189	36	42	175	YORK	XTO-36M42	1, 2, 3, 4, 5, 6, 7, 8							
DUAL TEMPERATURE COMBINATION HEATING AND COOLING COIL																									
MARK	ROOM(S) SERVED	HEATING CAPACITY (MBH)	HEATING FLUID FLOW (GPM)	EWT (F)	LWT (F)	MAX WPD (FT/W.C.)	HEATING AIRFLOW (CFM)	EAT DB (°F)	LAT DB (°F)	TOTAL COOLING CAPACITY (MBH)	SENSIBLE COOLING CAPACITY (MBH)	COOLING FLUID FLOW (GPM)	EWT (F)	LWT (F)	FLUID VELOCITY (FPS)	MAX WPD (FT/W.C.)	COOLING AIRFLOW (CFM)	EAT (DB/WB) (°F)	LAT (DB/WB) (°F)	FACE VELOCITY (FPM)	MAX APD (IN-WG)	NUMBER OF ROWS	FINS PER INCH	FIN TYPE	
HQ-AHU-1	H61, H63, H64, H65	185	6.2	200	140	.8	2,000	1.0	85.0	51.0	41.0	16.0	45	51.3	1.2	.8	2,000	90/74	71/67	479	0.29	3	12	AL	

NOTES:
1. PROVIDE UNIT WITH FACTORY MOUNTED AND WIRED VFD.
2. PROVIDE WITH UNITARY DIRECT DIGITAL CONTROLLER AND TEMPERATURE SENSOR. CONTROLLER SHALL BE CAPABLE OF INTERFACING WITH BUILDING AUTOMATION SYSTEM.
3. PROVIDE UNIT WITH SINGLE POINT POWER CONNECTION.
4. PROVIDE UNIT WITH CONVENIENCE RECEPTACLE AND VAPOR PROOF LIGHTS CAPABLE OF OPERATING WITH DISCONNECT IN THE OFF POSITION FOR SERVICING UNIT.
5. PROVIDE UNIT WITH EXTENDED LUBE LINES.
6. PROVIDE UNIT WITH FREEZE STAT.
7. FURNISH 24" HIGH SEISMIC STAMPED ROOF CURB TO C-CONTRACT, C-CONTRACT TO INSTALL ROOF CURB.
8. MANUFACTURER TO PROVIDE ELECTRIC HEATER INSIDE WATER COIL PLENUM.

SPECIFICATION 237413		ROOF REPLACEMENT - MAKEUP AIR UNIT SCHEDULE PART A																																
UNIT IDENTIFICATION		FAN							HEATING SECTION					COOLING SECTION																				
MARK	ROOM(S) SERVED	AIRFLOW (CFM)	ESP (IN-WG)	TSP (IN-WG)	SPEED (RPM)	BHP	HP	CONTROL	AIR					FUEL			BURNER		DX COOLING COIL					HOT GAS REHEAT										
									HEATING AIRFLOW (CFM)	EDB (F)	LDB (F)	FACE VELOCITY (FPM)	APD (IN-WG)	TYPE	PRESSURE RANGE (IN-WG)	FIRING RATE INPUT (MBH)	FIRING RATE OUTPUT (MBH)	CONTROL	MIN. TURN DOWN	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	NUMBER OF ROWS	REFRIG TYPE	FPI	FIN TYPE	TOTAL AIRFLOW (CFM)	EDB (F)	EWB (F)	LDB (F)	LWB (F)	FACE VELOCITY (FPM)	APD (IN-WG)	LAT DB (F)	LAT WB (F)
HQ-MAU-1	H-106	5,000	1.5	3.1	962	4.5	5	VFD	5,000.0	2.0	72.0	231.5	0.22	PROPANE	7"-14"	600	480	MODULATING	12:1	342.4	202.3	4	R410A	15	ALUMINUM	5,000	92.0	75.0	55	55	233.6	0.2	75.0	62.0

NOTES:
1. INTEGRATE WITH EXISTING OCCUPIED/UNOCCUPIED CONTROLS. REFER TO CONTROLS DIAGRAM AND SEQUENCES ON SHEET M-603-H.
2. FURNISH 24" HIGH SEISMIC STAMPED ROOF CURB TO C-CONTRACT, C-CONTRACT TO INSTALL ROOF CURB.

CONTINUED TO ROOF REPLACEMENT - MAKEUP AIR UNIT SCHEDULE PART B

SPECIFICATIONS 233419, 233421 & 233723		ROOF REPLACEMENT - FAN SCHEDULE																
UNIT IDENTIFICATION		PERFORMANCE				FAN WHEEL			FAN MOTOR			ELECTRICAL		OPERATING WEIGHT (LBS.)		BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL NUMBER	NOTES
MARK	UNIT/AREA SERVED	AIRFLOW (CFM)	ESP (IN-WG)	TSP (IN-WG)	FAN RPM	SONES	DIA (IN)	POWER (HP)	SIZE (HP)	SPEED (RPM)	DRIVE TYPE	VOLTS	PHASE	OPERATING WEIGHT (LBS.)	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL NUMBER	NOTES	
HQ-REF-1	H-62 CORRIDOR	1,900	1/4	1/4	636	6.1	18.5	0.19	1/4	1,725	BELT	115	1	161	GREENHECK	LBP-184	1-4,7,8	
HQ-REF-2	H-21 CORRIDOR	2,360	1/4	1/4	525	6.2	21.4	0.22	1/4	1,725	BELT	115	1	186	GREENHECK	LBP-214	1-4,7,8	
HQ-REF-3	H-70 TLTS, H-71 SHWRS, H-72 LOCKRS	2,090	1/4	1/4	496	5.8	21.4	0.19	1/4	1,725	BELT	115	1	186	GREENHECK	LBP-214	1-4,7,8	
HQ-REF-4	H-76 EVIDENCE VAULT	1,040	1/8	1/8	1725	10.6	10.9	0.16	1/6	1,725	DIRECT	115	1	35	GREENHECK	CUE-955-VG	1-5,7,8	
HQ-REF-5	H-106 PISTOL RANGE	3,580	1/4	1/4	1170	-	-	0.44	1/2	1,170	DIRECT	208	3	245	GREENHECK	AX-54-160-0624-B5	1-3, & 6-8	

NOTES:
1. FURNISH 24" TALL ROOF CURB TO C-CONTRACT FOR INSTALLATION BY C-CONTRACT.
2. PROVIDE MOTORIZED DAMPER.
3. E-CONTRACT TO PROVIDE DISCONNECT.
4. PROVIDE WITH ALUMINUM BIRDSCREEN.
5. PROVIDE WITH FAN MOUNTED SPEED CONTROLLER.
6. PROVIDE WITH A TWO SPEED TWO WINDING MOTOR.
7. PROVIDE DUCTWORK TRANSITION FROM EXISTING EXHAUST DUCTWORK TO EXHAUST FAN DUCTWORK CONNECTION.
8. THESE UNITS ARE REPLACE IN KIND WITH NO CHANGES TO EXISTING CAPACITIES.

CONTINUED FROM ROOF REPLACEMENT - MAKEUP AIR UNIT SCHEDULE PART A

ROOF REPLACEMENT - MAKEUP AIR UNIT SCHEDULE PART B									
PHYSICAL CHARACTERISTICS					EER RATING	ELECTRICAL	MANUFACTURER	MODEL NUMBER	NOTES
WEIGHT (LBS)	HEIGHT (IN)	WIDTH (IN)	LENGTH (IN)	VOLTS/PH/Hz					
3972	70.5	76.5	162.3	10.3	200/1/60	DAIKIN	DPS028A	1,2	

NOTES:
1. INTEGRATE WITH EXISTING OCCUPIED/UNOCCUPIED CONTROLS. REFER TO CONTROLS DIAGRAM AND SEQUENCES ON SHEET M-603-H.
2. FURNISH 24" HIGH SEISMIC STAMPED ROOF CURB TO C-CONTRACT, C-CONTRACT TO INSTALL ROOF CURB.

SPECIFICATION 236000		ROOF REPLACEMENT - SPLIT SYSTEM SCHEDULE																						
UNIT IDENTIFICATION		COOLING CAPACITY (MBH)	HEATING CAPACITY @ 17F (MBH)	AMBIENT DESIGN TEMP (F)	MINIMUM AMBIENT TEMP (F)	SEER (CLG) / HSPF (HTG)	REFRIGERANT	COMPRESSORS				CONDENSER FAN		EVAPORATOR FAN	PHYSICAL CHARACTERISTICS				ELECTRICAL		BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL	NOTES	
MARK	AREA SERVED							QTY.	TYPE	NO. OF CIRCUITS	OPERATION RANGE (F)	AIRFLOW (CFM)	NO. OF FANS	AIRFLOW (CFM)	HEIGHT (IN)	WIDTH (IN)	LENGTH (IN)	OPERATING WEIGHT (LBS)	VOLTS/PH/Hz	MCA				MOP
HQ-AC-1	OUTDOOR UNIT	36	21	95.0	-13.0	16 / 8.5	R-410A	1	ROTARY INVERTER	6	-13 TO 122	2,130	1	-	32	16	37	148	200/1/60	25	35	CARRIER	38MAQB36R-3	
	INDOOR UNIT							-	-	-	-	-	-	-	-	-	-	-	870	13	10	47	40	200/1/60

NOTES:

SPECIFICATION 233300		GRILLE, REGISTER, DIFFUSER SCHEDULE														
UNIT IDENTIFICATION		SYSTEM CLASSIFICATION	DIFFUSER FACE SIZE (IN)	FLOW RANGE (CFM)	STATIC PRESSURE (IN. WG.)	DIFFUSER NECK SIZE (IN)	NC LEVEL	FLOW PATTERN	MOUNTING TYPE	MATERIAL	ACCESSORY	MANUFACTURER	MODEL NUMBER	NOTES		
HQ-LS-1	SUPPLY														-	165-315
HQ-LS-2	SUPPLY	-	90-160	0.032	8	<10	SINGLE	GYPSUM CEILING	ALUMINUM	0BD	TITUS	FL-20	1,2,3,4,5			
HQ-SD-1	SUPPLY	24 X 24	210-300	0.03	8	<25	4-WAY	ACOUSTICAL CEILING TILE AND GYPSUM CEILING	ALUMINUM	0BD	TITUS	TMSA-AA	1,2,3,4,6			
HQ-SD-2	SUPPLY	24 X 24	50-80	0.01	6	<10	4-WAY	ACOUSTICAL CEILING TILE	ALUMINUM	0BD	TITUS	TMSA-AA	1,2,3,4			
HQ-RG-1	RETURN	24 X 24	200-300	-	-	<10	-	ACOUSTICAL CEILING TILE	ALUMINUM	0BD	TITUS	4FL	1,2,3,4			
HQ-LR-1	RETURN	-	190-370	-0.07	12	<25	SINGLE	GYPSUM CEILING	ALUMINUM	0BD	TITUS	FL-20	1,2,3,4,5			
HQ-LE-1	EXHAUST	-	50-250	-0.01	4	<10	SINGLE	GYPSUM CEILING	ALUMINUM	0BD	TITUS	CT-480	1,2,3,4,5			
HQ-EG-1	EXHAUST	24 X 24	50-250	-0.03	8	<15	-	GYPSUM CEILING	ALUMINUM	0BD	TITUS	PAR-AA	1,2,3,4			
HQ-EG-2	EXHAUST	12X12	50-125	0.015	6	<15	-	GYPSUM CEILING	ALUMINUM	0BD	TITUS	PAR	1,2,3,4			

NOTES:
1. REFER TO REFLECTED CEILING PLANS EXACT LOCATION. PROVIDE ALL FRAMES AND ACCESSORIES AS REQUIRED FOR PROPER INSTALLATION.
2. FLEXIBLE DUCTWORK SHALL BE THE SAME SIZE AS THE DIFFUSER NECK OR AN EQUIVALENT ROUND DUCT. FLEXIBLE DUCTWORK SHALL BE SUPPORTED TO PREVENT KINKS OR BENDS. MAXIMUM LENGTH OF FLEXIBLE DUCTWORK NOT TO EXCEED 5 FT.
3. COLOR TO BE SELECTED BY ARCHITECT FROM STANDARD COLORS.
4. BALANCE AIR TERMINALS TO VALUES LISTED ON PLAN.
5. PROVIDE LINEAR DIFFUSER WITH 1-SLOT AND FACTORY PLENUM. PROVIDE CABLE OPERATED DAMPER WHERE CEILING IS INACCESSIBLE. REFER TO DETAIL 6 / M-601-H.
6. PROVIDE ACOUSTICAL CEILING TYPE MOUNTING IN THE HEADQUARTERS ADDITION AND GYPSUM CEILING TYPE MOUNTING IN THE HEADQUARTERS LOCKER ROOM.
7. PROVIDE CABLE OPERATED DAMPER WHERE CEILING IS INACCESSIBLE.

SPECIFICATION 230523		ROOF REPLACEMENT PROPANE GAS REGULATOR				
UNIT IDENTIFICATION	CONNECTION SIZES	MAXIMUM INLET PRESSURE (PSIG)	OUTLET PRESSURE RANGE (IN.W.C.)	MODEL	MANUFACTURER	NOTES
HQ-RG-1	1/2 NPT	125	7 to 14	FISHER TYPE R622	EMERSON	1, 2, 3

NOTES:
1. INSTALL REGULATOR IN ACCORDANCE TO MANUFACTURERS IOM.

SPECIFICATION 238239		HOT WATER CABINET UNIT HEATER SCHEDULE																								
UNIT IDENTIFICATION		CAPACITY (MBH)	FAN			AIR			HEATING HOT WATER				CABINET				ELECTRICAL			CONTROL TYPE	OPERATING WEIGHT (LBS.)	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL NUMBER	NOTES		
MARK	ROOM SERVED		SPEED (RPM)	NO OF FANS	HP	AIRFLOW (CFM)	EDB (F)	LDB (F)	COIL QTY	GPM	WPD	EWT (F)	LWT(F)	WATER TYPE	LENGTH (IN)	HEIGHT (IN)	DEPTH (IN)	RECESS DEPTH (IN)	VOLTS						PHASE	HERTZ
HQ-CH-1	HA151	14.0	1,050	1	1/15	230	60.0	91.0	1.0	0.5	0.1	200.0	140.0	WATER	35"	25"	9-1/2"	5"	115	1	60	THERMOSTAT	97	STERLING	MODEL RWI - SIZE 02	1
HQ-CH-2	HA150	14.0	1,050	1	1/15	230	60.0	91.0	1.0	0.5	0.1	200.0	140.0	WATER	35"	25"	9-1/2"	6"	115	1	60	THERMOSTAT	97	STERLING	MODEL RWI - SIZE 02	1

NOTES:
1. E-CONTRACT TO PROVIDE DISCONNECT.

SPECIFICATION 238316				RADIANT FLOOR																		
UNIT IDENTIFICATION		LOCATION	ZONES	HEATED AREA (SQFT)	FLUID TYPE	CONSTRUCTION	ATTACHMENT METHOD	TUBE TYPE	TUBE SPACING (INCH)	LEADER LENGTH (FEET)	LOOP LENGTH (FEET)	# OF LOOPS	ROOM BTUH LOAD PER SQFT	SURFACE TEMP (F)	DESIGN TEMP DROP (F)	FLOW RATE (TOTAL GPM)	HEAD LOSS (FT H2O)	FLUID TEMP. REQUIRED (F)	FLUID TEMP SUPPLIED (F)	BASIS OF DESIGN MANUFACTURER	NOTES	
MARK																						
FIU-RFLR-1		GARAGE FLOOR	1	1350	30% PG	SLAB ON CONCRETE	EMBEDDED	HEPEX 1/2"	12	10	SEE M-203-F	7	19.2	79.6	20	3.2	2.6	114	114	UPONOR		

NOTES:
1. PROVIDE IN-SLAB SENSOR COMPATIBLE WITH RADIANT FLOOR.
2. COORDINATE RADIANT FLOOR LAYOUT WITH P-CONTRACT AND C-CONTRACT.

SPECIFICATION 238216				DUCT MOUNTED HOT WATER HEATING COIL SCHEDULE																			
UNIT IDENTIFICATION		COIL						AIR						FLUID						OPERATING WEIGHT (LBS.)	BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL NUMBER	NOTES
MARK	FCU SERVED	TOTAL CAPACITY (MBH)	HEIGHT (IN)	LENGTH (IN)	NUMBER OF ROWS	FIN DENSITY (FINS/IN)	FIN TYPE	TOTAL AIRFLOW (CFM)	EDB (F)	LDB (F)	FACE VELOCITY (FPM)	APD (IN-WG)	FLUID TYPE	FLUID FLOW (GPM)	EWT (F)	LWT (F)	WPD (FT)						
FIU-RHC-1	FIU-FCU-9	20.3	12	24	2	8	ALUMINUM	1210	72.0	87.0	605	0.21	PROPYLENE GLYCOL 30%	1.00	140.0	100.0	0.6	17.1	USACOILS	F58-208			
FIU-RHC-2	FIU-FCU-10	7.1	9	15	2	10	ALUMINUM	425	72.0	87.0	455	0.15	PROPYLENE GLYCOL 30%	0.35	140.0	100.0	0.1	10.4	USACOILS	F58-210			
FIU-RHC-3	FIU-FCU-11	4.4	9	15	2	8	ALUMINUM	260	72.0	87.0	280	0.06	PROPYLENE GLYCOL 30%	0.22	140.0	100.0	0.0	10.0	USACOILS	F58-208			
FIU-RHC-4	FIU-FCU-12	10.9	9	18	2	10	ALUMINUM	660	72.0	87.0	590	0.23	PROPYLENE GLYCOL 30%	0.55	140.0	100.0	0.2	11.9	USACOILS	F58-210			
FIU-RHC-5	FIU-FCU-13	13.3	12	18	2	8	ALUMINUM	800	72.0	87.0	535	0.17	PROPYLENE GLYCOL 30%	0.66	140.0	100.0	0.3	13.7	USACOILS	F58-208			
FIU-RHC-6	FIU-FCU-14	12.7	12	15	2	10	ALUMINUM	740	72.0	87.0	600	0.24	PROPYLENE GLYCOL 30%	0.63	140.0	100.0	0.2	12.5	USACOILS	F58-210			
FIU-RHC-7	FIU-FCU-15	7.1	9	15	2	10	ALUMINUM	425	72.0	87.0	455	0.15	PROPYLENE GLYCOL 30%	0.35	140.0	100.0	0.1	10.4	USACOILS	F58-210			
FIU-RHC-8	FIU-FCU-16	4.6	9	15	2	8	ALUMINUM	250	72.0	87.0	280	0.06	PROPYLENE GLYCOL 30%	0.22	140.0	100.0	0.0	10.4	USACOILS	F58-208			
FIU-RHC-9	FIU-FCU-17	9.6	12	15	2	8	ALUMINUM	575	72.0	87.0	460	0.13	PROPYLENE GLYCOL 30%	0.48	140.0	100.0	0.1	12.0	USACOILS	F58-208			
FIU-RHC-10	FIU-FCU-18	12.8	12	15	2	10	ALUMINUM	750	72.0	87.0	600	0.24	PROPYLENE GLYCOL 30%	0.63	140.0	100.0	0.2	12.5	USACOILS	F58-210			
FIU-RHC-11	FIU-FCU-19	7.2	9	15	2	10	ALUMINUM	430	72.0	87.0	460	0.16	PROPYLENE GLYCOL 30%	0.36	140.0	100.0	0.1	10.4	USACOILS	F58-210			
FIU-RHC-12	FIU-FCU-20	4.1	9	15	2	8	ALUMINUM	235	72.0	87.0	250	0.05	PROPYLENE GLYCOL 30%	0.20	140.0	100.0	0.0	10.0	USACOILS	F58-208			
FIU-RHC-13	FIU-FCU-21	4.5	9	15	2	8	ALUMINUM	265	72.0	87.0	285	0.06	PROPYLENE GLYCOL 30%	0.22	140.0	100.0	0.0	10.0	USACOILS	F58-208			

NOTES:

SPECIFICATION 233300				GRILLE, REGISTER, DIFFUSER SCHEDULE										
UNIT...	SYSTEM CLASSIFICATION	DIFFUSER FACE SIZE (IN)	FLOW RANGE (CFM)	STATIC PRESSURE (IN. WG.)	DIFFUSER NECK SIZE (IN)	NC LEVEL	FLOW PATTERN	MOUNTING TYPE	MATERIAL	ACCESSORY	MANUFACTURER	MODEL NUMBER	NOTES	
FIU-SD-1	SUPPLY	24 X 24	380-435	0.07	AS NOTED ON PLANS	<20	4-WAY	ACOUSTICAL CEILING TILE	ALUMINUM	OBD	TITUS	OMNI-AA	1,2,3,4,8	
FIU-SD-2	SUPPLY	24 X 24	120-630	0.08	AS NOTED ON PLANS	<30	4-WAY	ACOUSTICAL CEILING TILE AND GYPSUM CEILING	ALUMINUM	OBD	TITUS	TMS-AA	1,2,3,4,5,6,7,8	
FIU-SD-3	SUPPLY	24 X 24	220-275	0.07	AS NOTED ON PLANS	<20	4-WAY	ACOUSTICAL CEILING TILE	ALUMINUM	OBD	TITUS	PCS-AA	1,2,3,4,8	
FIU-SD-4	SUPPLY	16 X 16	80-170	0.01	AS NOTED ON PLANS	<20	4-WAY	GYPSUM CEILING	ALUMINUM	OBD	TITUS	PAS-AA	1,2,3,4,5,7,8	
FIU-SD-5	SUPPLY	24 X 24	385	0.07	AS NOTED ON PLANS	<25	-	ACOUSTICAL CEILING TILE	ALUMINUM	-	TITUS	PAR-AA	1,2,3,4,8	
FIU-SG-1	SUPPLY	10"X10"	40	0.02	10"X6"	<25	-	GYPSUM WALL	ALUMINUM	-	TITUS	45F	1,3,8	
FIU-SG-2	SUPPLY	20"X20"	140	0.02	14"X14"	<25	-	GYPSUM WALL	ALUMINUM	-	TITUS	45F	1,3,8	
FIU-TG-1	TRANSFER	20"X12"	450	-0.10	20"X12"	<25	-	GYPSUM WALL	ALUMINUM	-	TITUS	45F	1,3,8	
FIU-RG-1	RETURN	24 X 24	175-470	-0.13	AS NOTED ON PLANS	<25	-	ACOUSTICAL CEILING TILE	ALUMINUM	-	TITUS	PAR-AA	1,2,3,4,8	
FIU-RG-2	RETURN	12 X 12	25-200	-0.13	AS NOTED ON PLANS	<25	-	ACOUSTICAL CEILING TILE	ALUMINUM	-	TITUS	PAR-AA	1,2,3,4,8	
FIU-EG-1	EXHAUST	24 X 24	1000 MAX	-0.07	AS NOTED ON PLANS	<25	-	GYPSUM CEILING	ALUMINUM	-	TITUS	45F	1,2,3,4,5,6,8	
FIU-EG-2	EXHAUST	12 X 12	350 MAX	-0.07	AS NOTED ON PLANS	<25	-	GYPSUM CEILING	ALUMINUM	-	TITUS	45F	1,2,3,4,6,8	
FIU-EG-3	EXHAUST	8 X 4	100 MAX	-0.07	AS NOTED ON PLANS	<25	-	GYPSUM CEILING	ALUMINUM	-	TITUS	45F	1,2,3,4,6,8	

NOTES:
1. REFER TO REFLECTED CEILING PLANS FOR EXACT LOCATION.
2. FLEXIBLE DUCTWORK SHALL BE THE SAME SIZE AS THE DIFFUSER NECK OR AN EQUIVALENT ROUND DUCT. FLEXIBLE DUCTWORK SHALL BE SUPPORTED TO PREVENT KINKS OR BENDS. MAXIMUM LENGTH OF FLEXIBLE DUCTWORK NOT TO EXCEED 5 FT.
3. COLOR TO BE SELECTED BY ARCHITECT FROM STANDARD COLORS.
4. BALANCE AIR TERMINALS TO VALUES LISTED ON PLAN.
5. PROVIDE GYPSUM CEILING MOUNTING IN ROOM 111, ROOM 112, ROOM 113, ROOM 156, AND ROOM 157. ALL OTHER ROOMS USE ACOUSTICAL CEILING TYPE MOUNTING.
6. PROVIDE CABLE OPERATED DAMPER WHERE CEILING IS INACCESSIBLE.
7. PROVIDE WITH OPTIONAL DIRECTIONAL BLOW CLIPS. BALANCER SHALL ADJUST AIR FLOW PATTERNS FOR COMFORTABLE / DRAFT FREE PERFORMANCE. REFER TO SHEET M-301-F FOR SUGGESTED DIFFUSER BLOW PATTERNS.
8. PROVIDE ALL FRAMES AND ACCESSORIES AS REQUIRED FOR PROPER INSTALLATION.

SPECIFICATION 238413				HUMIDIFIER SCHEDULE														
UNIT IDENTIFICATION		MAKEUP WATER (GPM)	SUPPLY AIR (CFM)	EAT (F)	LAT (F)	GR/LB AIR IN	GR/LB AIR OUT	ABSORPTION DISTANCE (IN)	PHYSICAL CHARACTERISTICS			ELECTRICAL			BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL NUMBER	NOTES	
MARK	LOCATION							HEIGHT (IN)	WIDTH (IN)	OPERATING WEIGHT (LBS.)	V/PH/Hz	FLA	KW	OCF				
FIU-HUM-1	111	1.2	1210	72.0	72.0	0	70	120	56	26	330	200/3/60	37	15	50	ARMSTRONG	HUMIDICLEAN HC6100	1
FIU-HUM-2	159	1.2	750	72.0	72.0	0	70	120	56	26	330	200/3/60	23	9	30	ARMSTRONG	HUMIDICLEAN HC6100	1

NOTES:
1. PROVIDE CONDENSATE COOLER ON HUMIDIFIER DRAINS. USE ARMSTRONG TEMP-R-DRAIN OR APPROVED EQUAL.

CHARCOAL FILTER SCHEDULE														
UNIT IDENTIFICATION		FILTER					FILTER MEDIA							
MARK	UNIT SERVED	FUNCTION	FILTER TYPE	TOTAL AIRFLOW (CFM)	AIR PRESSURE DROP		EFFICIENCY (MERV)	QTY.	WIDTH (IN)	HEIGHT (IN)	DEPTH (IN)	MANUFACTURER	MODEL NUMBER	NOTES
					INITIAL (IN-WG)	FINAL (IN-WG)								
FIU-CF-1	FIU-EF-7	ODOR NEUTRALIZER	PLEATED	450	0.41	1.00	8	1	12	12	4	TRIDIM MANN+HUMMEL	TRISORB-XL HIGH EFFICIENCY CARBON SERIES	1, 2, 3

NOTES:
1. PROVIDE FILTER RACKS FOR FILTER INSTALLATION.
2. FINAL AIR PRESSURE DROPS ARE BASED ON DIRTY FILTERS.
3. PROVIDE HEAVY DUTY SELECTION.

SPECIFICATION 232006				AIR SEPARATOR SCHEDULE									
UNIT IDENTIFICATION			TYPE	CONNECTION SIZE (IN)	DIAMETER (IN)	HEIGHT (IN)	WEIGHT (LBS)	FLOW (GPM)	MAX WPD (FT)	MANUFACTURER	MODEL NUMBER	NOTES	
MARK	NUMBER	SYSTEM SERVED											
FIU-AS	1	HHW	CENTRIFUGAL	3	11	27	173	40.0	0.1	BELL AND GOSSETT	RL-3FB		

NOTES:

SPECIFICATION 089100				LOUVER SCHEDULE										
UNIT IDENTIFICATION		QTY	WIDTH (IN.)	HEIGHT (IN.)	CFM INTAKE	FREE AREA (SQ.FT.)	FREE AREA %	FREE AREA VEL. (FPM)	PRESSURE DROP (W.G.)	BEGINNING WATER PEN. (FPM)	MANUFACTURER	MODEL NUMBER	NOTES	
MARK	LOCATION													
FIU-LV-1	MECHANICAL ROOM MEZZANINE	1	34	47	3000	6.1	55%	500	0.04	989	GREENHECK	ESD435	1,2	
FIU-LV-2	MECHANICAL ROOM MEZZANINE	1	32	35	2000	4.02	52%	500	0.04	989	GREENHECK	ESD435	1,2	
FIU-LV-3	MECHANICAL ROOM MEZZANINE	1	36	39	2550	5.19	53.2	500	0.04	989	GREENHECK	ESD435	1,2	

NOTES:
1. LOUVER LOCATION TO BE COORDINATED WITH C CONTRACT.
2. SUBMIT COLOR OPTIONS FOR SELECTION BY DIRECTOR'S REPRESENTATIVE.

SPECIFICATION 233600				AIR TERMINAL UNIT APPLICATION SCHEDULE										
UNIT IDENTIFICATION			BOX CHARACTERISTICS			AIRFLOW		DIMENSIONS		ELECTRICAL		BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL NUMBER	NOTES
MARK	SYSTEM SERVED	ROOM(S) SERVED	BOX INLET (IN)	BOX OUTLET (IN)	MAX STATIC PRESSURE DROP (IN WC)	MAX AIRFLOW (CFM)	MINIMUM AIRFLOW (CFM)	HEIGHT (IN)	LENGTH (IN)	V/PH/Hz				
FIU-VAV-1	FIU-DOAS-1	111	12" Ø	14"X12.5"	0.50	2,000	145	15	18	115/1/60	TITUS	DESV	1,2,3	

NOTES:
1. BOXES TO BE PROVIDED WITH INTEGRAL ACCESS PANEL.
2. E CONTRACT TO PROVIDE DISCONNECT.
3. PROVIDE WITH 24V/120V TRANSFORMER.

SPECIFICATION 232123				PUMP SCHEDULE										
UNIT IDENTIFICATION			PUMP		MOTOR		ELECTRICAL				BASIS OF DESIGN MANUFACTURER	BASIS OF DESIGN MODEL NUMBER	NOTES	
MARK	LOCATION	SYSTEM SERVED	TYPE	FLOW (GPM)	HEAD (FT)	HP	SPEED (RPM)	VOLTS	HERTZ	PHASE				STARTER TYPE
FIU-PHP-1	159	BOILER	IN-LINE	20	15	1/4	1800	115	60	1	ATL	B&G	E-90	2
FIU-PHP-2	159	BOILER	IN-LINE	20	15	1/4	1800	115	60	1	ATL	B&G	E-90	2
FIU-SHW-1	159	HHW	IN-LINE	40	45	1-1/2	3414	200	60	3	VFD	B&G	E-90 1.5AAB	
FIU-SHW-2	159	HHW	IN-LINE	40	45	1-1/2	3414	200	60	3	VFD	B&G	E-90 1.5AAB	
FIU-THWP-1	111	RADIANT FLOOR	IN-LINE	4	3	0.0115	1492	115	60	1	ECM	B&G	ECO-CIRC 19-16	
FIU-THWP-2	111	RADIANT FLOOR	IN-LINE	4	3	0.0115	1492	115	60	1	ECM	B&G	ECO-CIRC 19-16	

NOTES:
1. PROVIDE ALL LEAD FREE BRONZE CONSTRUCTION.
2. PERFORMANCE REQUIREMENTS FOR APPROVED EQUAL TO AERCO PUMP KIT SCHEDULED HERE. REFER TO BOILER SCHEDULE, NOTE #1.

SPECIFICATION 232006				EXPANSION TANK SCHEDULE									
UNIT IDENTIFICATION			TYPE	FILL PRESSURE (PSI)	REQUIRED TANK VOLUME (GAL.)	REQUIRED ACCEPTANCE VOLUME (GAL.)	ACTUAL TANK VOLUME (GAL.)	ACTUAL ACCEPTANCE VOLUME (GAL.)	MANUFACTURER	MODEL NUMBER	NOTES		
MARK	NUMBER	SYSTEM SERVED											
FIU-ET	1	HHW	CENTRIFUGAL	9	17.36	8.15	20	11.3	BELL AND GOSSETT	HFT-40V			

NOTES:

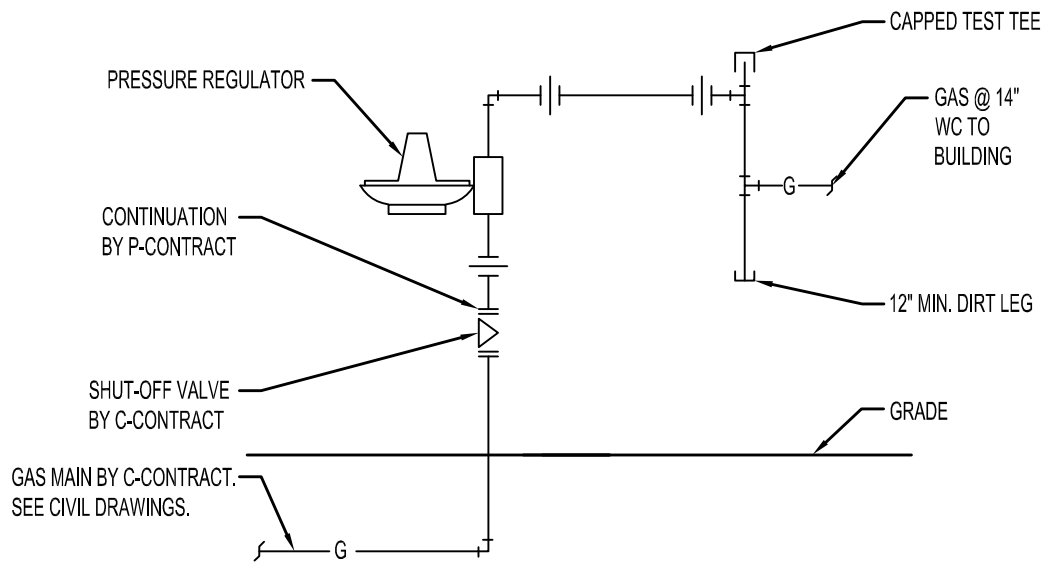


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CONTRACT: HVAC
TITLE: PROVIDE FORENSIC IDENTIFICATION UNIT BUILDING & HEADQUARTERS BUILDING ADDITION / RENOVATION
LOCATION: TROOP K HEADQUARTERS RT. 82 AND 44 POUGHKEEPSIE, NY 12603
CLIENT: NEW YORK STATE POLICE

PROJECT NUMBER: 45649-H
DESIGNED BY: FM
DRAWN BY: JLB
FIELD CHECK: JDR
APPROVED: JDR
SHEET TITLE: FORENSIC IDENTIFICATION UNIT SCHEDULES - SHEET #3
DRAWING NUMBER: M-703-F
SHEET 76 OF 117



5

PROPANE REGULATOR DETAIL

NOT TO SCALE



450 West Kirkpatrick Street • Syracuse, NY 13204
main: 315.463.4540 • fax: 315.463.4573

MEP-18059.00

TROOP K HEADQUARTERS
RT. 82 AND 44
POUGHKEEPSIE, NY 12603

DRAWING TITLE
**PROPANE
DETAIL**

DATE ISSUED 1/8/21

DRAWING NO.

PSK-1

REF DWG# P-301-F

DRAWN BY CMD

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	LPD
H67B	Illuminance	Fc	40.51	63.6	19.9	2.04	3.20	3.20
HA100	Illuminance	Fc	39.54	50.3	27.4	1.44	1.84	0.354
HA101	Illuminance	Fc	46.36	60.0	24.8	1.87	2.42	0.640
HA102	Illuminance	Fc	38.81	49.2	17.4	2.23	2.83	0.474
HA150	Illuminance	Fc	23.87	31.7	17.4	1.37	1.82	0.548
HA151	Illuminance	Fc	30.02	46.7	13.1	2.29	3.56	0.548
HA152	Illuminance	Fc	33.87	47.4	17.9	1.89	2.65	0.756
HA154	Illuminance	Fc	32.92	48.0	16.5	2.00	2.91	0.788
HA159	Illuminance	Fc	17.50	21.0	12.5	1.40	1.68	0.548

Type Mark	Description	Manufacturer	Catalog #	Wattage
B	2X2 RECESSED LED TROFFER	CREE	ZR22C-32L-35K-10V-FD	25 W
BE	SAME AS FIXTURE B WITH AN EMERGENCY BATTERY PACK	CREE	SAME AS FIXTURE B WITH EMERGENCY BACKUP	25 W
C	1X4 LED WRAPAROUND	CREE	4WSNLED-LD4-60HL-F-UNV-L840	41 W
EP	LED EMERGENCY WALLPACK WITH TWO INDIVIDUAL HEADS.	EATON		
G	6" CIRCULAR DOWNLIGHT	CREE	KR6-9L-35K-277V	18 W
S	RECESSED DOWNLIGHT (SHOWER)	EATON	SMD6-R69-35-VH	10 W
WD	EXTERIOR CANOPY DOWNLIGHT: 1X1'	LIGHTIDE	LT-SSGL-40W (EM)	40 W

ELECTRICAL SYMBOLS

- 120V DUPLEX RECEPTACLE
- 120V DUPLEX RECEPTACLE ABOVE THE COUNTER
- 120V DOUBLE DUPLEX RECEPTACLE
- 120V DUPLEX RECEPTACLE WITH GROUND FAULT INTERRUPTOR, WP DENOTES WEATHER PROTECTION
- FLOOR BOX 120V DUPLEX RECEPTACLE
- 120V CORD REEL DROP DOWN RECEPTACLE
- DOORBELL TRANSFORMER
- DOORBELL RINGER PUSHBUTTON
- DOORBELL
- SINGLE POLE SWITCH 'X' DENOTES SWITCH DESIGNATION
- SINGLE POLE SWITCH 'D' DENOTES DIMMER
- OCCUPANCY SENSOR
- PHOTOCELL
- WALL MOUNTED OCCUPANCY SENSOR
- TIMER SWITCH
- STROBE HORN SIGNAL # DENOTES CANDELA RATING
- STROBE SIGNAL # DENOTES CANDELA RATING
- MANUAL PULL STATION
- REMOTE GAS ANNUNCIATION STROBE
- TELEDATA OUTLET
- FLOOR BOX DATA RECEPTACLE
- JUNCTION BOX
- CEILING MOUNTED SMOKE DETECTOR
- IN DUCT SMOKE DETECTOR
- CEILING MOUNTED HEAT DETECTOR
- CARBON MONOXIDE SENSOR WITH SOUNDER BASE
- IN USE LIGHT
- MOTOR RATED SNAP SWITCH
- AUTOMATIC DOOR OPEN PUSH BUTTON
- DISCONNECT SWITCH, 30A, NEMA 1 UNLESS OTHERWISE NOTED, WP INDICATES NEMA 3R, AF DENOTES FRAME SIZE
- FUZED DISCONNECT SWITCH, 30A, NEMA 1 UNLESS OTHERWISE NOTED, WP INDICATES NEMA 3R, AF DENOTES FRAME SIZE AND AT DENOTES FUSE AMP RATING
- WALL MOUNTED EXIT LIGHT
- CEILING MOUNTED EXIT LIGHT
- GLASS BREAK EMERGENCY SHUT-OFF
- INTERFACE MODULE
- 2' X 4' LIGHT FIXTURE, SHADING INDICATES EMERGENCY BALLAST, 'X' INDICATES FIXTURE TYPE, 'F' INDICATES CIRCUIT DESIGNATION, 'S' INDICATES SWITCH DESIGNATION
- DAYLIGHT HARVESTING SENSOR
- FIRE ALARM ANNUNCIATOR PANEL
- FIRE ALARM CONTROL PANEL
- NOTIFICATION APPLIANCE CIRCUIT PANEL
- TAMPER SWITCH
- FLOW SWITCH
- DIRECT DIGITAL BUILDING CONTROL SYSTEM PANEL

SECURITY SYMBOLS

- 270 DEGREE SECURITY CAMERA
- CARD READER
- DOOR CONTACT SENSOR
- GLASS BREAK SENSOR
- WINDOW CONTACT
- INTERCOM CALL
- ELECTRIFIED LOCKING HARDWARE
- REQUEST TO EXIT DEVICE FOR ALARM SHUTTING
- PANIC BUTTON
- ARMING BUTTON
- MOTION DETECTOR
- TRANSFER HINGE
- SPEAKER

NOTES

- PROVIDE JUNCTION BOX FOR EACH DEVICE.
- PROVIDE MINIMUM 1" CONDUIT WITH NYLON PULL STRING FROM JUNCTION BOX TO 6" ABOVE NEAREST HUNG CEILING IN CORRIDOR.
- REFER TO SECURITY SYSTEM DRAWINGS FOR ADDITIONAL SCOPE OF WORK AND MOUNTING HEIGHT.
- REFER TO SECURITY SYSTEM DETAILS AND PROVIDE EMPTY CONDUITS FOR ELECTRIC STRIKE, HATCH, DOOR CONTACT, ETC AND WIRING THROUGH FOR SECURITY SYSTEM WIRING.

SITE GENERAL NOTES

- PRIOR TO ANY EXCAVATION, LOCATE ALL EXISTING UTILITIES.
- ALL CONDUITS UNDER PARKING OR DRIVING AREAS SHALL BE GRS OR CONCRETE ENCASED. PROVIDE GRS 90 DEGREE SWEEPS AND PVC TO GRS ADAPTERS AS REQUIRED.

LIGHTING GENERAL NOTES

- OCCUPANCY SENSOR LOCATIONS SHALL BE DETERMINED IN THE FIELD TO ACHIEVE OPTIMAL PERFORMANCE. PERFORM ALL SENSITIVITY AND AIMING ADJUSTMENTS.

FIRE ALARM GENERAL NOTES

- PROVIDE FAN SHUTDOWN RELAYS FOR ALL FANS OVER 2000 CFM. VERIFY CFM ON MECHANICAL SCHEDULES AND PROVIDE SHUTDOWNS AS REQUIRED.
- DO NOT INSTALL SMOKE DETECTORS WITHIN 3 FEET OF SUPPLY AND RETURN DIFFUSERS.
- PROVIDE INDEPENDENT CABLE SUPPORTS FOR FIRE ALARM CABLE. ALL EXPOSED FIRE ALARM CABLE SHALL BE RUN IN CONDUIT OR SURFACE RACEWAY AND BE INDEPENDENT OF ALL OTHER CABLING.

GENERAL ELECTRICAL NOTES

- THE ENTIRE INSTALLATION SHALL BE IN ACCORDANCE WITH THE APPLICABLE EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) THAT IS REFERENCED BY THE NEW YORK STATE UNIFORM CODE AND 2017 UNIFORM CODE SUPPLEMENT.
- THE WORD "PROVIDE" SHALL BE DEFINED ON ALL DRAWINGS AND SPECIFICATIONS TO BE PURCHASED, INSTALLED, WIRED, TESTED, ETC. AND SUPPLY ALL LABOR AND MATERIALS FOR A COMPLETE INSTALLATION. WHETHER OR NOT SHOWN, THE CONTRACTOR SHALL PROVIDE ALL APPURTENANCES, ACCESSORIES, AND COMPONENTS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.
- IN THE AREAS WHERE PROPOSED CONSTRUCTION MAY CONFLICT WITH EXISTING UTILITIES, THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO THESE UTILITIES.
- ANY CONDUIT ROUTING SHOWN ON THESE DRAWINGS ARE DIAGRAMMATIC ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL ROUTING AND PENETRATIONS WITH DIRECTORS REPRESENTATIVE AND ARCHITECT PRIOR TO INSTALLATION.
- CONTRACTOR SHALL PROVIDE PULL BOXES REQUIRED TO FACILITATE CABLE PULLING AND IN ACCORDANCE WITH NEC AND MANUFACTURER'S RECOMMENDATIONS. CABLE PULLING TENSIONS SHALL BE MEASURED WITH A DYNAMOMETER AND SHALL NOT EXCEED CONDUCTOR MANUFACTURER'S RECOMMENDATIONS.
- ALL ELECTRICAL WORK SHALL BE PERFORMED BY OR UNDER THE SUPERVISION OF A MASTER ELECTRICIAN LICENSED IN A NEW YORK STATE MUNICIPALITY.
- PROVIDE (2#10 COPPER AND 1#10 COPPER GROUND WIRING FOR BRANCH CIRCUITS EXCEEDING 100 FEET UNLESS OTHERWISE NOTED.
- COORDINATE DEVICE LOCATIONS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN. VERIFY DEVICE LOCATIONS ABOVE MILLWORK TO ENSURE CLEARANCE ABOVE THE COUNTER TOP AND BACKSPASH DEVICES THAT INTERFERE WITH NEW CASEWORK, MILLWORK, OR EQUIPMENT SHALL BE RELOCATED AT NO ADDITIONAL COST TO THE CONTRACT.
- COORDINATE ALL CONDUIT RUNS WITH OTHER TRADES PRIOR TO ROUGH-IN. RELOCATE ANY CONDUITS AS NECESSARY TO PERMIT INSTALLATION OF DUCTWORK OR PIPING.
- DO NOT INSTALL NORMAL AND EMERGENCY POWER IN THE SAME RACEWAY, JUNCTION BOX, OR OUTLET BOX. PROVIDE SEPARATE OR SEGREGATED RACEWAY SYSTEMS. ALL EMERGENCY CONDUIT AND BOXES SHALL BE IDENTIFIED WITH BLUE PAINT ON OUTLET BOXES AND EVERY 90 FEET ON CONDUIT ABOVE CEILING.
- ALL LOW VOLTAGE CABLE SHALL BE PLENUM RATED.
- THE DRAWINGS SHOW GENERAL LOCATION OF DEVICES AND CONTROL EQUIPMENT. INSTALL ALL DEVICES AND CONTROLS TO MEET ALL NEC REQUIREMENTS. COORDINATE EXACT LOCATION IN THE FIELD.
- PROVIDE CONCRETE HOUSEKEEPING PADS FOR ALL FLOOR MOUNTED EQUIPMENT.
- BUILDING HAS A SEISMIC DESIGN CATEGORY OF C, BUILDING RISK CATEGORY IV, AND HAS AN IMPORTANCE FACTOR OF 1.5. ALL BUILDING SYSTEMS MUST BE SEISMICALLY BRACED. REFER TO SPECIFICATIONS FOR REQUIREMENTS. CONTRACTOR TO RETAIN AN INDEPENDENT NYS LICENSED ENGINEER TO DESIGN THE CONNECTIONS AND BRACING FOR ALL EQUIPMENT ATTACHED TO THE STRUCTURE.

ELECTRICAL ABBREVIATIONS

- A AMPERE, AMP
- AC ABOVE COUNTER
- ACP ACCESS CONTROL PANEL
- ADA AMERICANS WITH DISABILITIES ACT
- AF AMPERE FRAME SIZE
- AFB ABOVE FINISHED FLOOR
- AFG ABOVE FINISHED GRADE
- APPROX APPROXIMATELY
- ATS AMPERE TRIP SIZE
- ATS AUTOMATIC TRANSFER SWITCH
- AWG AMERICAN WIRE GAUGE
- BFG BELOW FINISHED GRADE
- BLDG BUILDING
- C CONDUIT
- CW COMPLETE WITH CIRCUIT BREAKER
- CB CIRCUIT
- CKT DISCONNECT
- DISC DIVISION
- DWG DRAWING
- EC ELECTRICAL CONTRACTOR
- EM EMERGENCY
- EMT ELECTRICAL METALLIC TUBING
- EOL END OF LINE
- ETR EXISTING TO REMAIN
- FSS FUSED SAFETY SWITCH
- FA FIRE ALARM
- FT FOOT, FEET
- GC GENERAL CONTRACTOR
- GEN CONDUIT
- GP GENERAL PURPOSE
- ID INSIDE DIAMETER
- IN INCH
- JB JUNCTION BOX
- LTG LIGHTING
- KV KILOVOLT
- KVA KILOVOLT AMPERE
- KW KILOWATT
- MANF MANUFACTURER
- MAX MAXIMUM
- MC MECHANICAL CONTRACTOR
- MCB MAIN CIRCUIT BREAKER
- MCC MOTOR CONTROL CENTER
- MIN MINIMUM
- MLO MAIN LUGS ONLY
- MM MILLIMETER
- MTD MOUNTED
- NAC NOTIFICATION APPLIANCE CIRCUIT
- NEC NATIONAL ELECTRICAL CODE
- NIC NOT IN CONTRACT
- NTS NOT TO SCALE
- OCPD OVERCURRENT PROTECTION DEVICE
- OD OUTSIDE DIAMETER
- O&M OPERATION & MAINTENANCE
- PC PLUMBING CONTRACTOR
- PH PHASE, 0
- PSD POWER SUPPLY DEVICES
- PSL POWER SUPPLY LOCKS
- PTZ PAN TILT ZOOM
- RGS RIGID GALVANIZED STEEL
- RM ROOM
- RMC RIGID METALLIC CONDUIT
- SCH SCHEDULE
- SLC SIGNALING LINE CIRCUIT
- TYP TYPICAL
- UNO UNLESS NOTED OTHERWISE
- V VOLTAGE, VOLT
- W WATTAGE, WATT
- W WITH
- WFMR TRANSFORMER

ELECTRICAL EQUIPMENT LABELING

WARNING LABELS AND SIGNS SHALL INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

- MULTIPLE POWER SOURCE WARNING: "DANGER - ELECTRICAL SHOCK HAZARD - EQUIPMENT HAS MULTIPLE POWER SOURCES."
- WORKSPACE CLEARANCE WARNING: "WARNING - OSHA REGULATION - AREA IN FRONT OF ELECTRICAL EQUIPMENT MUST BE KEPT CLEAR FOR 36 INCHES."
- ARC FLASH WARNING: LABEL EQUIPMENT THAT RUNS 50V OR MORE AND THAT IS LIKELY TO BE SERVICED WHILE ENERGIZED WITH "ARC FLASH HAZARD- APPROPRIATE PPE REQUIRED" OR SIMILAR WORDING.

ELECTRICAL ENCLOSURE REQUIREMENTS

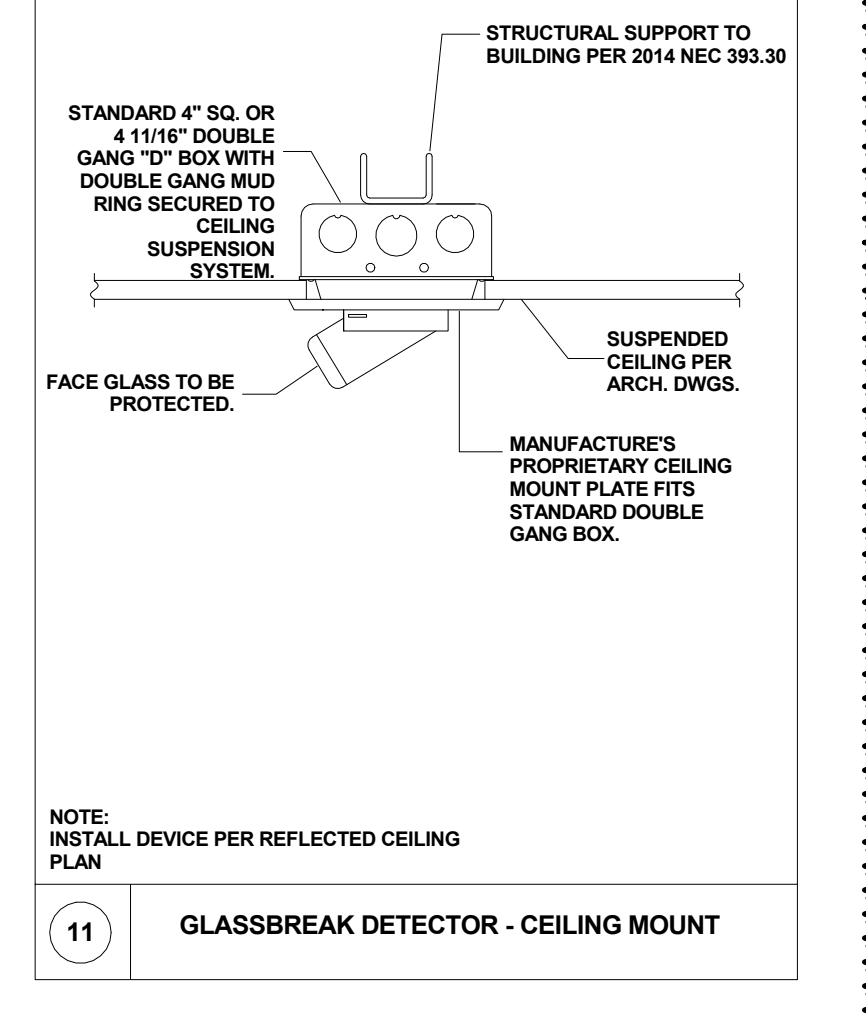
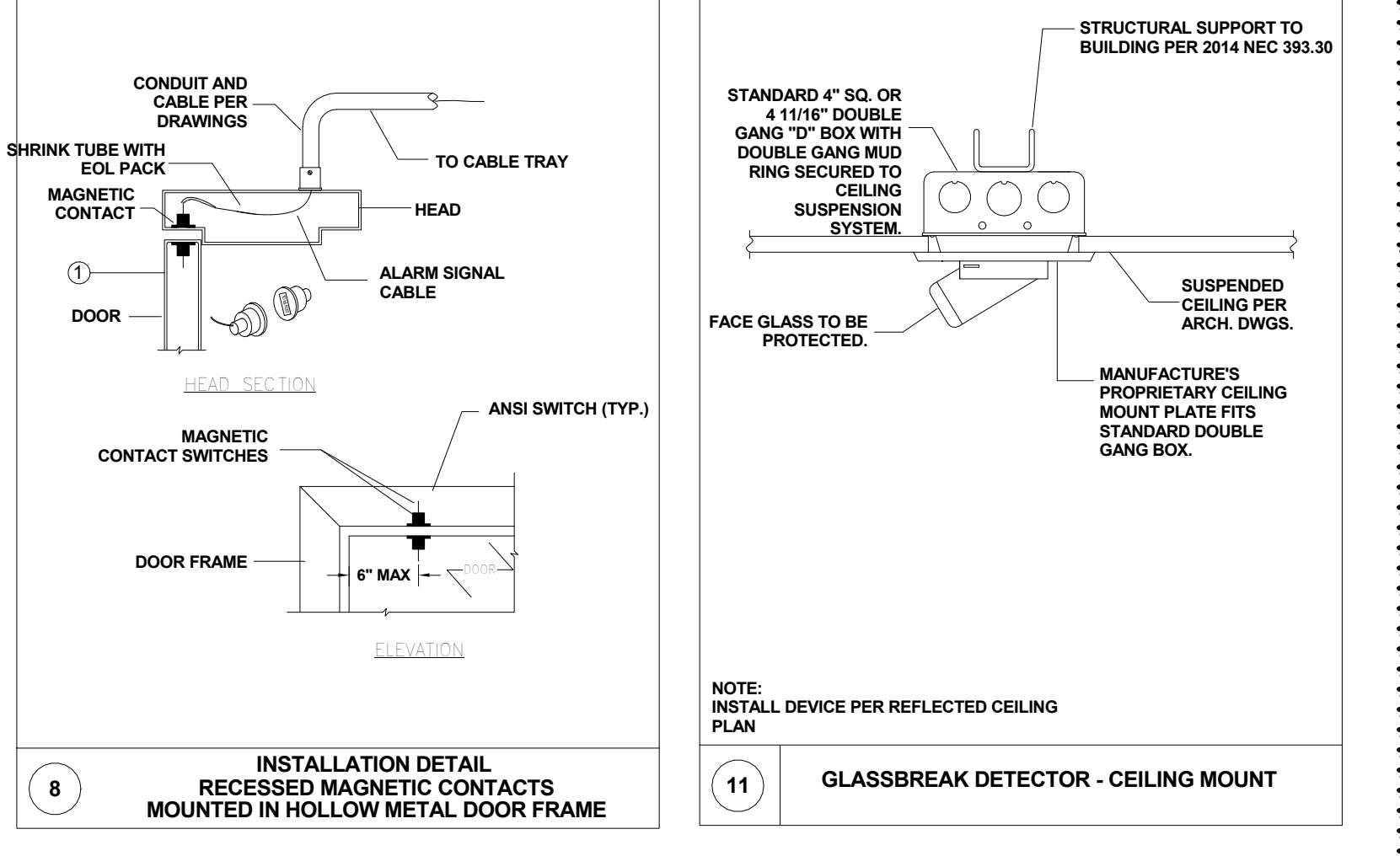
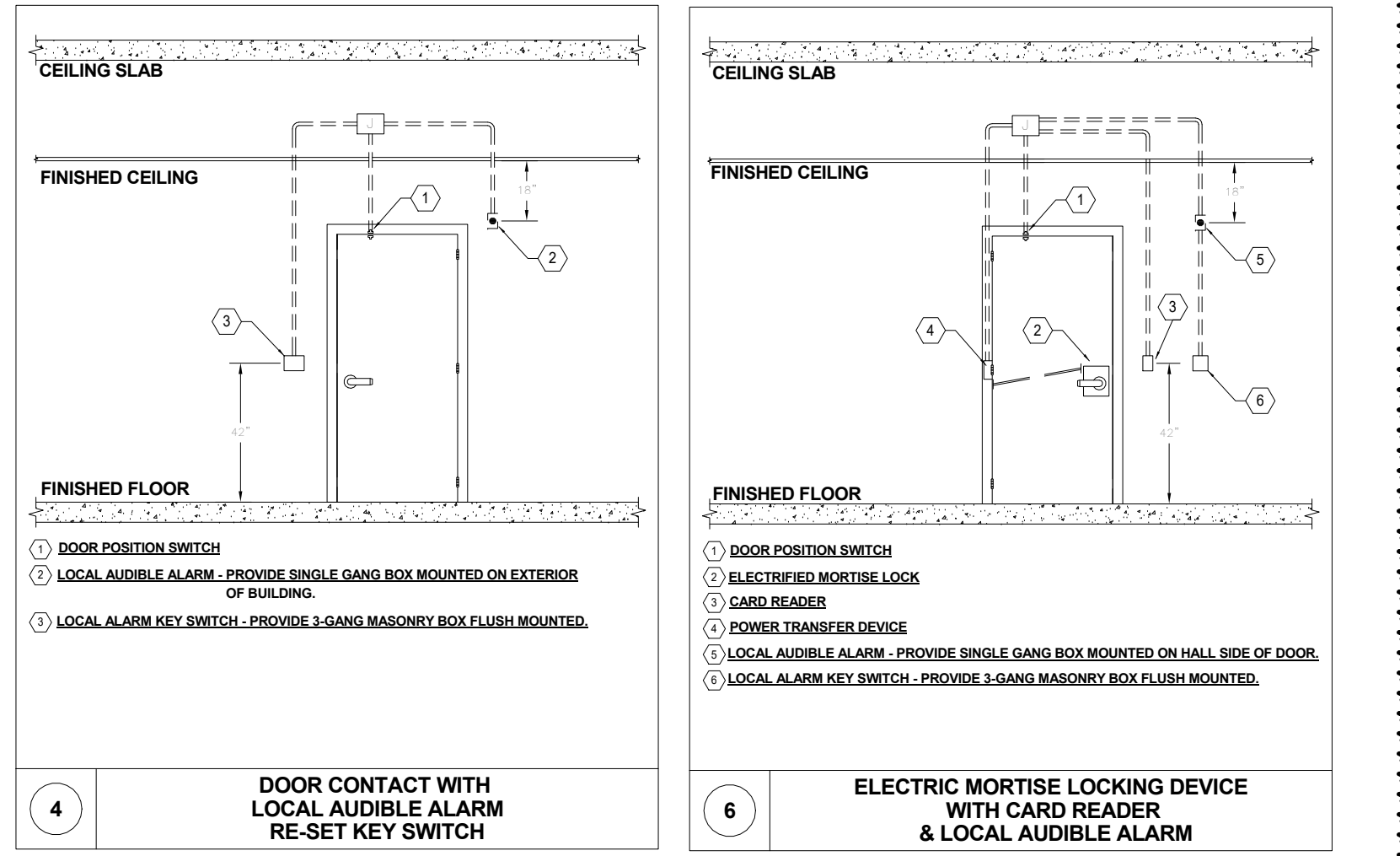
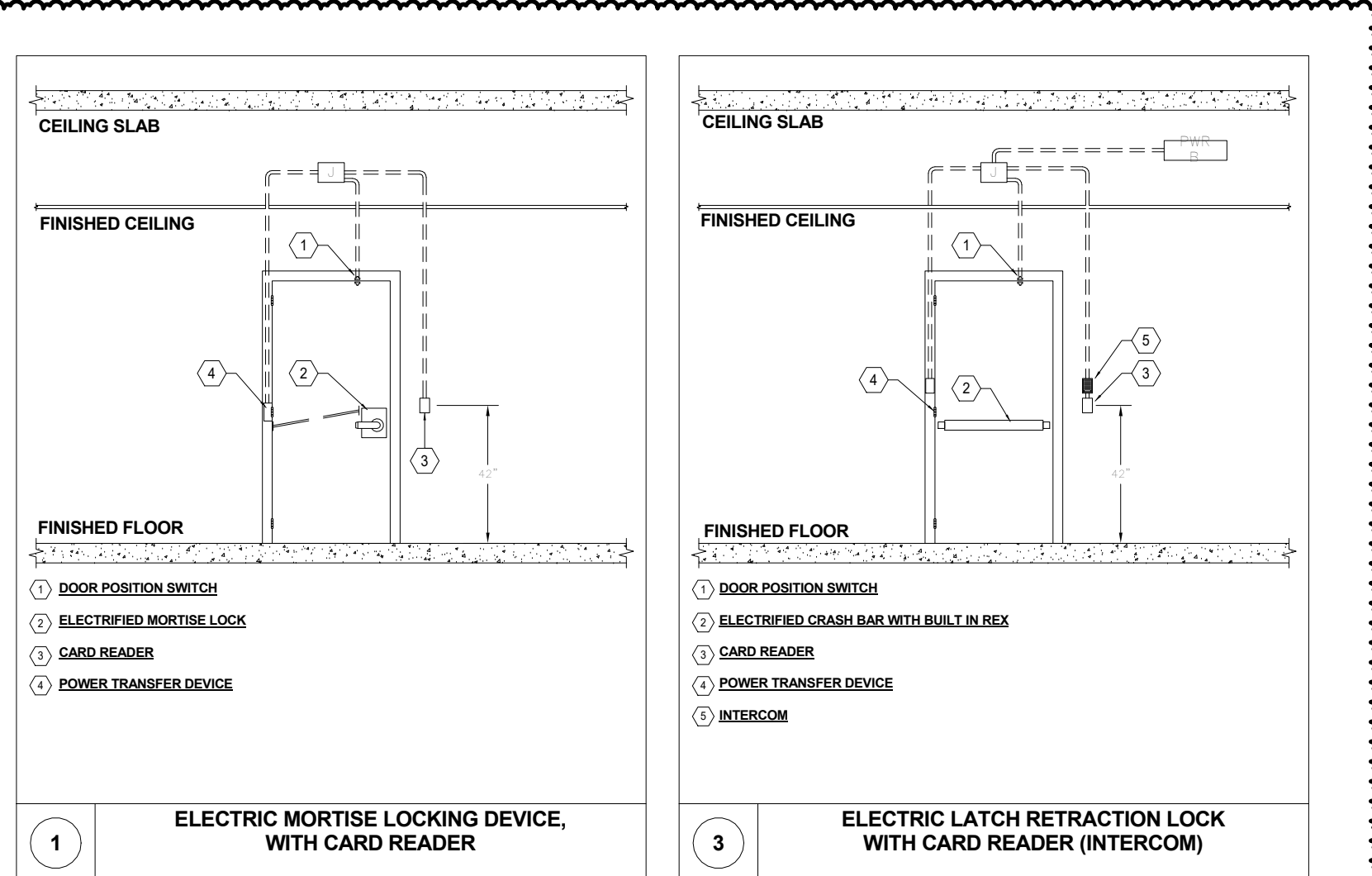
- NEMA RATING: FOR OUTDOOR LOCATIONS ABOVE GRADE, PROVIDE NEMA 4 ENCLOSURES AND PARTS ATTACHED THERETO (E.G., BREATHER DRAIN).
- ALL ELECTRICAL ENCLOSURES SHALL HAVE A KEY LOCK.

ELECTRICAL EQUIPMENT NOTES

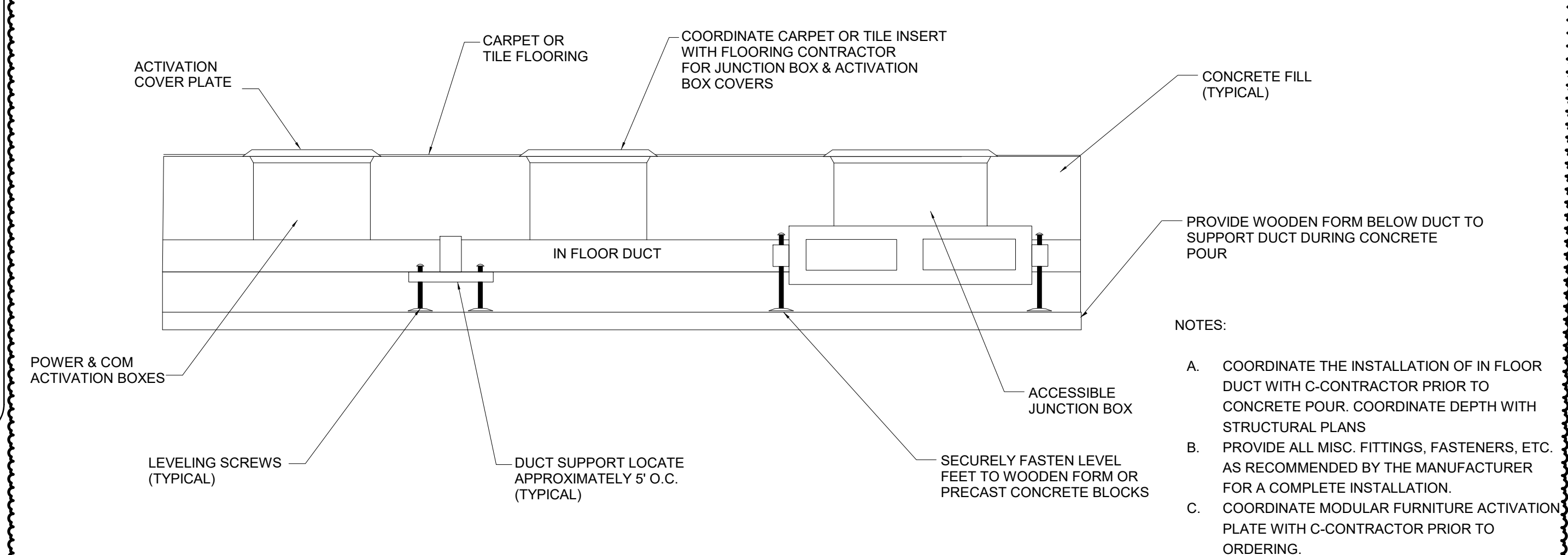
THE PLANS ARE DIAGRAMMATIC AND ARE NOT TO BE SCALED. THE LOCATIONS OF EQUIPMENT AND THE ROUTING OF WIRING AND CONDUITS SHOWN ARE APPROXIMATE. THE EC SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS IN THE FIELD PRIOR TO ORDERING LENGTHS.

ENERGY CONSERVATION CODE STATEMENT

2015 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE AND THE 2016 ENERGY CONSERVATION CODE SUPPLEMENT AS ADOPTED BY NEW YORK STATE
 "TO THE BEST OF MY KNOWLEDGE, BELIEF, AND PROFESSIONAL JUDGEMENT, THE PLANS AND SPECIFICATIONS BEARING MY RESPECTIVE PROFESSIONAL SEAL AND SIGNATURE ARE IN COMPLIANCE WITH THE ENERGY CODE."



2



3 IN-FLOOR DUCT DETAIL
E-000-H N.T.S.

NEW YORK STATE Office of General Services
 DESIGN & CONSTRUCTION
 CONSULTANT
Stantec
 3 Columbia Circle Suite 6
 Albany, NY 12203-5158
 www.stantec.com

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CONTRACT: **ELECTRICAL**
 TITLE: **PROVIDE FORENSIC IDENTIFICATION UNIT BUILDING & HEADQUARTERS BUILDING ADDITION / RENOVATION**
 LOCATION: **TROOP K HEADQUARTERS RT. 82 AND 44 POUGHKEEPSIE, NY 12603**
 CLIENT: **NEW YORK STATE POLICE**

PROJECT NUMBER:	45649-E		
DESIGNED BY:	GL	DATE:	01/08/2021
DRAWN BY:	NB	DATE:	12/23/2020
FIELD CHECK:		DATE:	06/10/2020
APPROVED:	RW	DATE:	
SHEET TITLE:	HEADQUARTERS LEAD SHEET / FIXTURE SCHEDULE		
DRAWING NUMBER:	E-000-H		
SHEET	86	OF	115



WARNING:
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CONTRACT: **ELECTRICAL**

TITLE: **PROVIDE FORENSIC IDENTIFICATION UNIT BUILDING & HEADQUARTERS BUILDING ADDITION / RENOVATION**

LOCATION: **TROOP K HEADQUARTERS RT. 82 AND 44 POUGHKEEPSIE, NY 12603**

CLIENT: **NEW YORK STATE POLICE**

PROJECT NUMBER:	45649-E		
DESIGNED BY:	OL	REVISION #4	01/08/2021
DRAWN BY:	NB	REVISION #3	12/23/2020
FIELD CHECK:		BID/CONSTRUCTION DOCUMENTS	06/10/2020
APPROVED:	RW	DATE	DESCRIPTION
SHEET TITLE:	HEADQUARTERS PANEL SCHEDULES		
DRAWING NUMBER:	E-002-H		
SHEET	88	OF	115

Stantec
Name: **HTG (EXISTING)** Location: ROOM 1-64 Supply From: DP-1 Serves:
Volts: 208Y/120V Phases: 3 Wires: 4
Mains Type: M.C.B Mains Rating: 100 A
Type: AIC Rating: 22,000 Mounting: Surface Enclosure: Type 1

CKT	Circuit Description	Wre Size	Trip	Pole s	CB	A	B	C	CB	Pole s	Trip	Wre Size	Circuit Description	CKT	
1	FAN COIL UNITS...	15A	1	--	0	0				--	1	15A	FCU-ROOM 13,16,17	2	
3	FCU-ROOM 19,20	15A	1	--			0	0		--	1	15A	FCU-ROOM 27,22	4	
5	FCU-ROOM 24	15A	1	--						--	1	15A	FCU-ROOM 27,31,32	6	
7	FCU-FOYER, LOBBY...	15A	1	--	0	0				--	1	15A	FCU-CONF...	8	
9	FCU-FIRST SEAGENT...	15A	1	--			0	0		--	1	15A	FCU-ROOM 34,37,64,65	10	
11	FCU-KITCHEN ROOM...	15A	1	--				0	0	--	1	15A	FCU-ROOM 42,43	12	
13	FCU-ROOM...	15A	1	--	0	0				--	1	15A	FCU-ROOM 43,49,50	14	
15	FCU-ROOM 79,81,91,9	15A	1	--			0	0		--	1	15A	FCU-ROOM 53	16	
17	FCU-ROOM 53,55,56	15A	1	--				0	0	--	1	15A	FCU-ROOM 60,61...	18	
19	ROOF EXHAUST FAN...	15A	1	--	0	0				--	1	15A	ROOF EXHAUST FAN...	20	
21	FCU-ROOM 104	15A	1	--			0	0		--	1	15A	MOTORIZED...	22	
23	HQ-EF-2	(2) #12, #12G IN 3/4"	20 A	1	--			250	360		1	20 A	(2) #12, #12G IN 3/4"	24	
25	Security Power Supplies	(2) #12, #12G IN 3/4"	20 A	1	--	900	360				1	20 A	(2) #12, #12G IN 3/4"	26	
27	RCPT - WMNS LCKR...	(2) #12, #12G IN 3/4"	20 A	1	--		360	1800			1	20 A	(2) #12, #12G IN 3/4"	28	
29	RCPT - WMNS LCKR...	(2) #12, #12G IN 3/4"	20 A	1	--			360	840		1	20 A	(2) #12, #12G IN 3/4"	30	
31	RCPT - WMNS LCKR...	(2) #12, #12G IN 3/4"	20 A	1	--	360	1296				1	20 A	(2) #12, #12G IN 3/4"	32	
33	HQ-OAV-1,2	(2) #12, #12G IN 3/4"	15 A	2	--		456	350			1	20 A	(2) #12, #12G IN 3/4"	34	
35	--	--	--	--	--				456	0	--	1	20 A	Spare	36
37	BR-MOS POWER	(2) #12, #12G IN 3/4"	20 A	1	--	750	0				1	20 A	Spare	38	
39	Door hardware power	(2) #12, #12G IN 3/4"	20 A	1	--		500	0			1	20 A	Spare	40	
41	Spare		20 A	1	--			0	0		1	20 A	Spare	42	
Total Load:						3.67 KVA	3.47 KVA	2.27 KVA							
Total Amps:						32 A	30 A	19 A							
Load Classification						Connected Load	Demand Factor	Estimated Demand	Panel Totals						
Appliance - Dwelling Unit						1740 VA	100.00%	1740 VA	Total Conn. Load: 9398 VA						
Other						3878 VA	100.00%	3878 VA	Total Est. Demand: 9398 VA						
Receptacle						3780 VA	100.00%	3780 VA	Total Conn.: 26 A						
									Total Est. Demand: 26 A						

CB Legend (blank = circuit breaker):
G = GFCI S = Shunt Trip D = Switching Duty A = AFCI H = HID Rated C = HACR Rated † = Existing Circuit ‡ = Revised Circuit

Notes:
CIRCUITS 23,24,25,26,27,28,29,30,31,32,34, and 37: UTILIZE EXISTING CIRCUIT BREAKERS
CIRCUIT 33,35: REPLACE EXISTING SPARE CIRCUIT BREAKERS WITH 2 POLE 20A CIRCUIT BREAKER

Stantec
Name: **HMDP** Location: CORRIDOR HA151 Supply From: DP-1 Serves:
Volts: 208Y/120V Phases: 3 Wires: 4
Mains Type: M.C.B Mains Rating: 150 A
Type: AIC Rating: 22,000 Mounting: Surface Enclosure: Type 1

CKT	Circuit Description	Wre Size	Trip	Pole s	CB	A	B	C	CB	Pole s	Trip	Wre Size	Circuit Description	CKT	
1	HQ-CUJ-1,2	(2) #12, #12G IN 3/4"	15 A	1	--	40	240				1	15 A	(2) #12, #12G IN 3/4"	2	
3	Projector - HA100	(2) #12, #12G IN 3/4"	20 A	1	--		180	480			1	20 A	(2) #12, #12G IN 3/4"	4	
5	Projector - HA101	(2) #12, #12G IN 3/4"	20 A	1	--			180	540		1	20 A	(2) #12, #12G IN 3/4"	6	
7	FLR RCPT HA100	(2) #12, #12G IN 3/4"	20 A	1	--	600	750				1	20 A	(2) #12, #12G IN 3/4"	8	
9	FLR RCPT HA100	(2) #12, #12G IN 3/4"	20 A	1	--		600	1080			1	20 A	(2) #12, #12G IN 3/4"	10	
11	RCPT - HA102	(2) #12, #12G IN 3/4"	20 A	1	--			900	1080		1	20 A	(2) #12, #12G IN 3/4"	12	
13	RCPT - HA102	(2) #12, #12G IN 3/4"	20 A	1	--	1440	360				1	20 A	(2) #12, #12G IN 3/4"	14	
15	RCPT - HA151/154	(2) #12, #12G IN 3/4"	20 A	1	--		1440	520			2	15 A	(2) #12, #12G IN 3/4"	16	
17	HQ-FPB-1	(2) #12, #12G IN 3/4"	20 A	2	--			1092	520		--	--		18	
19	--	--	--	--	--	1092	500				1	20 A	(2) #12, #12G IN 3/4"	20	
21	RCPT - Equip Rack	(2) #12, #12G IN 3/4"	20 A	1	--		360	500			1	20 A	(2) #12, #12G IN 3/4"	22	
23	RCPT - HA102	(2) #12, #12G IN 3/4"	20 A	1	--			360	500		1	20 A	(2) #12, #12G IN 3/4"	24	
25	FLR RCPT HA101	(2) #12, #12G IN 3/4"	20 A	1	--	600	600				1	20 A	(2) #12, #12G IN 3/4"	26	
27	FLR RCPT HA101	(2) #12, #12G IN 3/4"	20 A	1	--		600	600			1	20 A	(2) #12, #12G IN 3/4"	28	
29	FLR RCPT HA101	(2) #12, #12G IN 3/4"	20 A	1	--			600	600		1	20 A	(2) #12, #12G IN 3/4"	30	
31	RCPT - HA100	(2) #12, #12G IN 3/4"	20 A	1	--	720	0				3	15 A	(3) #12, #12G IN 3/4"	32	
33	RCPT - HA100	(2) #12, #12G IN 3/4"	20 A	1	--		720	0			--	--		34	
35	RCPT - HA101	(2) #12, #12G IN 3/4"	20 A	1	--			720	0		--	--		36	
37	HQ-RTU-1	(3) #6, #10G IN 1"	60 A	3	--	0	0				3	15 A	(3) #10, #10G IN 1"	38	
39	--	--	--	--	--		0	0			--	--		40	
41	--	--	--	--	--			0	0		--	--		42	
43	Roof Receptacles	(2) #12, #12G IN 3/4"	20 A	1	--	1080	250				1	20 A	(2) #12, #12G IN 3/4"	44	
45	WVTS Panel	(4) #2, #8G IN 1-1/2"	100...	3	--		10866				1	20 A	(2) #12, #12G IN 3/4"	46	
47	--	--	--	--	--			10866	0		--	1	20 A	Spare	48
49	--	--	--	--	--	10866	0				--	1	20 A	Spare	50
51	HQ-FPB-3	(2) #12, #12G IN 3/4"	20 A	2	--		1092	0			--	1	20 A	Spare	52
53	--	--	--	--	--			1092	0		--	1	20 A	Spare	54
Total Load:						19.14 KVA	19.04 KVA	19.05 KVA							
Total Amps:						159 A	159 A	159 A							
Load Classification						Connected Load	Demand Factor	Estimated Demand	Panel Totals						
Appliance - Dwelling Unit						500 VA	100.00%	500 VA	Total Conn. Load: 57226 VA						
Other						6688 VA	100.00%	6688 VA	Total Est. Demand: 44023 VA						
Power						34078 VA	70.00%	23855 VA	Total Conn.: 159 A						
Receptacle						15960 VA	81.33%	12980 VA	Total Est. Demand: 122 A						

CB Legend (blank = circuit breaker):
G = GFCI S = Shunt Trip D = Switching Duty A = AFCI H = HID Rated C = HACR Rated † = Existing Circuit ‡ = Revised Circuit

Notes:

Stantec
Name: **LP2 (EXISTING)** Location: ROOM 1-64 Supply From: DP-1 Serves:
Volts: 208Y/120V Phases: 3 Wires: 4
Mains Type: M.L.O. Mains Rating: 150 A
Type: AIC Rating: 22,000 Mounting: Surface Enclosure: Type 1

CKT	Circuit Description	Wre Size	Trip	Pole s	CB	A	B	C	CB	Pole s	Trip	Wre Size	Circuit Description	CKT
1	REST RMS, CONF RM...	20A	1	--	0	0				--	1	20A	LOBBY, DISPLAY CAS.	2
3	RM 08, 09 LTG	20A	1	--			0	0		--	1	20A	RM 11 LTG	4
5	RM 11 LTG	20A	1	--				0	0	--	1	20A	RM 11 LTG	6
7	FIRST SERGEANTS...	20A	1	--	0	0				--	1	20A	CORRIDOR 69 LTG	8
9	JAV CLOS, RM 37	20A	1	--			0	0		--	1	20A	RM 35 LTG	10
11	RM 66 LUNCH RM	20A	1	--				0	0	--	1	20A	RM 63, 64 LTG	12
13	RM 70 MENS REST RM	20A	1	--	0	0				--	1	20A	RM 67 CLASSRM LTG	14
15	RM 72 LOCKER ROOM	20A	1	--			0	0		--	1	20A	RM 67 EXH FAN	16
17	RM 72 LOCKER ROOM	20A	1	--				0	0	--	1	20A	FRONT ENTRANCE...	18
19	Spare									--	1	20A	Spare	20
21	Spare							0	1129		1	20 A	(2) #12, #12G IN 3/4"	22
23	Spare							0	1114		1	20 A	(2) #12, #12G IN 3/4"	24
25	Spare							0	522		1	20 A	(2) #12, #12G IN 3/4"	26
27	Spare							0	160		1	20 A	(2) #12, #12G IN 3/4"	28
29	Spare							0	0		1	20 A	(2) #12, #12G IN 3/4"	30
31	Spare							0	0		1	20 A	(2) #12, #12G IN 3/4"	32
33	Spare							0	0		1	20 A	(2) #12, #12G IN 3/4"	34
35	Spare							0	0		1	20 A	(2) #12, #12G IN 3/4"	36
37	Spare							0	0		1	20 A	(2) #12, #12G IN 3/4"	38
39	Spare							0	0		1	20 A	(2) #12, #12G IN 3/4"	40
41	Spare							0	0		1	20 A	(2) #12, #12G IN 3/4"	42
Total Load:						0.52 KVA	1.29 KVA	1.11 KVA						
Total Amps:						4 A	12 A	10 A						
Load Classification						Connected Load	Demand Factor	Estimated Demand	Panel Totals					
Lighting						1699 VA	125.00%	2124 VA	Total Conn. Load: 2925 VA					
Lighting - Dwelling Unit						1226 VA	100.00%	1226 VA	Total Est. Demand: 3350 VA					
									Total Conn.: 8 A					
									Total Est. Demand: 9 A					

CB Legend (blank = circuit breaker):
G = GFCI S = Shunt Trip D = Switching Duty A = AFCI H = HID Rated C = HACR Rated † = Existing Circuit ‡ = Revised Circuit

Notes:
CIRCUITS 22,24, and 26: UTILIZE EXISTING SPARE CIRCUIT BREAKERS

Stantec
Name: **WWTP** Location: CORRIDOR HA151 Supply From: HMDP Serves:
Volts: 208Y/120V Phases: 3 Wires: 4
Mains Type: M.C.B Mains Rating: 100 A
Type: AIC Rating: 10,000 Mounting: Surface Enclosure: NEMA 3R

CKT	Circuit Description	Wre Size	Trip	Pole s	CB	A	B	C	CB	Pole s	Trip	Wre Size	Circuit Description	CKT
1	Container 1 Process	(3) #6, #10G IN 1-1/2"	50 A	3	--	3600	1833				3	20 A	(3) #12, #12G IN 3/4"	2
3	--	--	--	--	--		3600	1833			--	--		4
5	--	--	--	--	--			3600	1833		--	--		6
7	Container 2 Process	(3) #6, #10G IN 1-1/2"	50 A	3	--	3600	1833				3	20 A	(3) #12, #12G IN 3/4"	8
9	--	--	--	--	--			3600	1833		--	--		10
11	--	--	--	--	--			3600	1833		--	--		12
13	--	--	--	--	--						--	--		14
15	--	--	--	--	--						--	--		16
17	--	--	--	--	--						--	--		18
19	--	--	--	--	--						--	--		20
21	--	--	--</											

WARNING:
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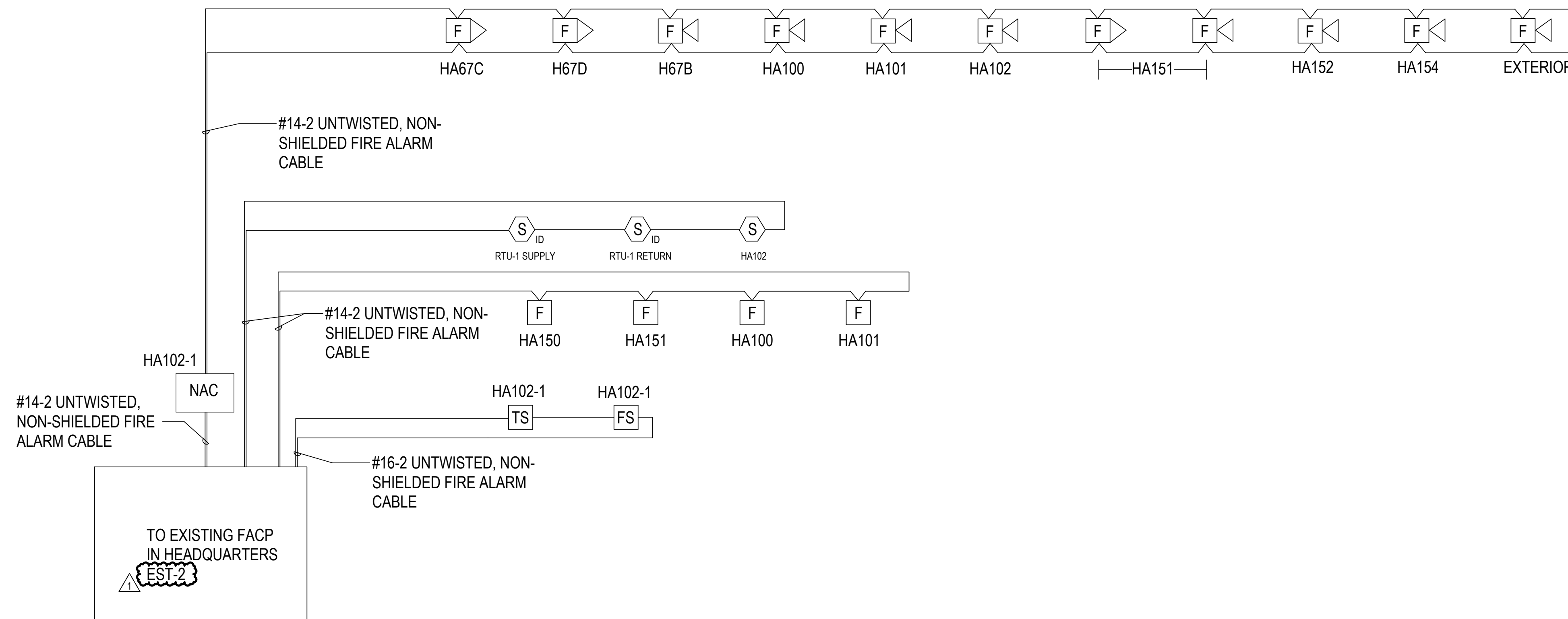


CONTRACT: **ELECTRICAL**

TITLE: **PROVIDE FORENSIC IDENTIFICATION UNIT BUILDING & HEADQUARTERS BUILDING ADDITION / RENOVATION**

LOCATION: **TROOP K HEADQUARTERS RT. 82 AND 44 POUGHKEEPSIE, NY 12603**

CLIENT: **NEW YORK STATE POLICE**



1 FIRE ALARM RISER DIAGRAM - HQ
 E-003-H N.T.S.

1/8/2021 1:52:56 PM RSN//RS_ABT1_NY_HA.corp.ods/191510240_TroopK/sin_arch_FUL_191510240_R17.rvt 36x24 PLOT SHEET

MARK	DATE	DESCRIPTION
1	01/08/2021	ADDITION #4
0	06/10/2020	BID/CONSTRUCTION DOCUMENTS

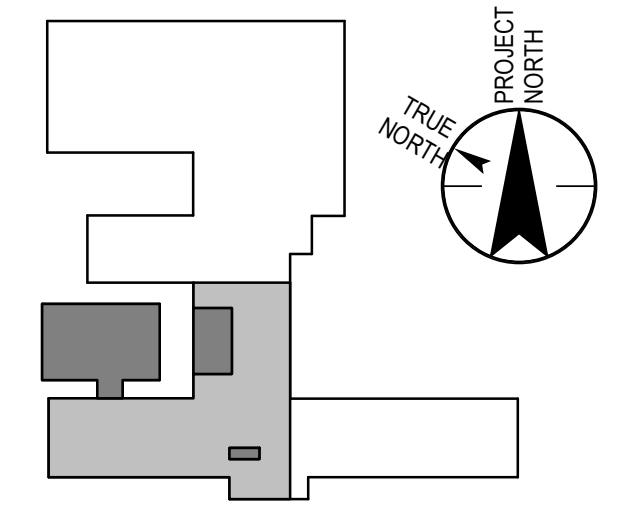
PROJECT NUMBER:	45649-E
DESIGNED BY:	GL
DRAWN BY:	NB
FIELD CHECK:	
APPROVED:	RW

SHEET TITLE: **HEADQUARTERS FA RISER DIAGRAM**

DRAWING NUMBER: **E-003-H**



KEYPLAN



WARNING:
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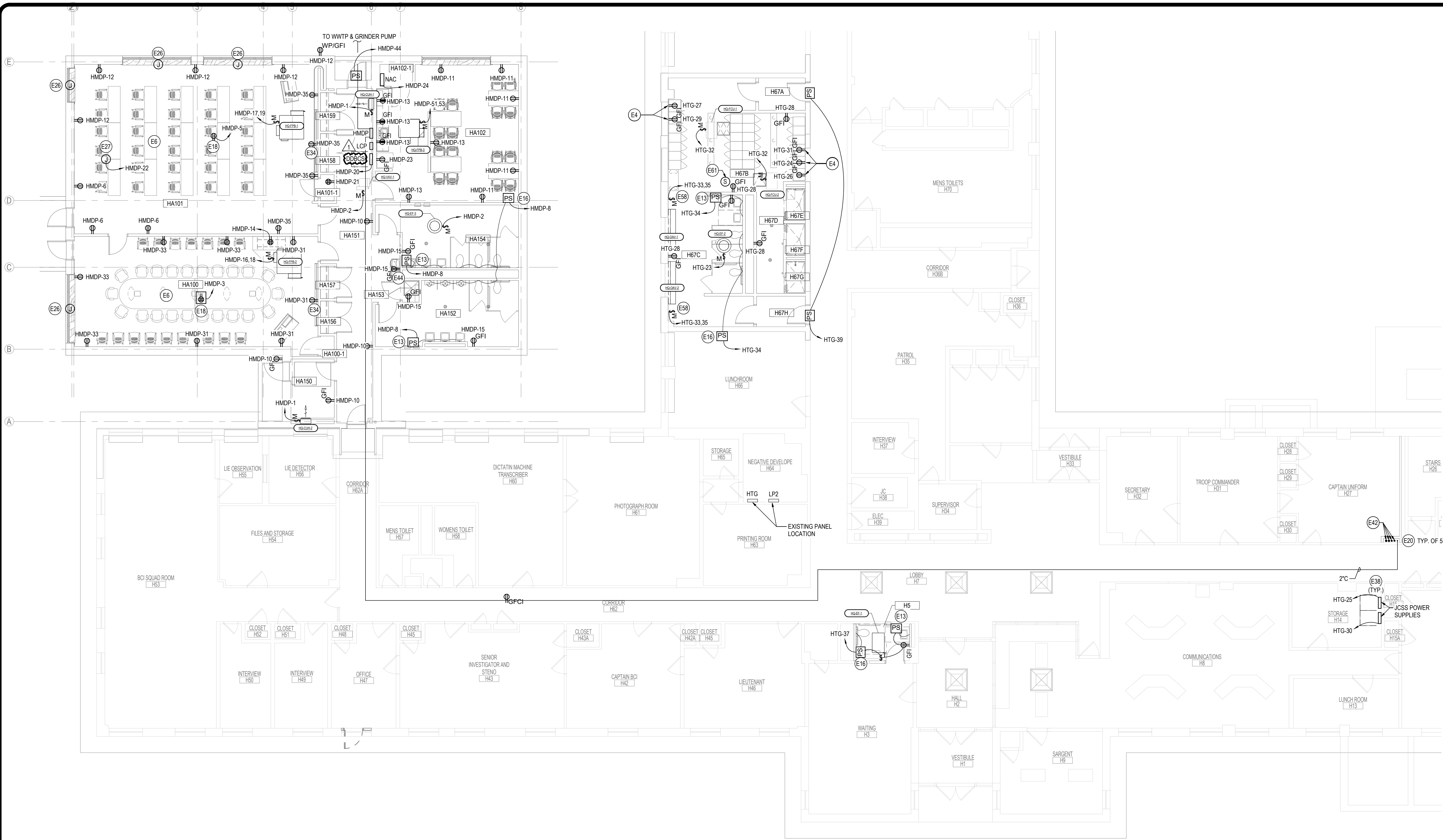


CONTRACT: **ELECTRICAL**

TITLE: **PROVIDE FORENSIC IDENTIFICATION UNIT BUILDING & HEADQUARTERS BUILDING ADDITION / RENOVATION**

LOCATION: **TROOP K HEADQUARTERS RT. 82 AND 44 POUGHKEEPSIE, NY 12603**

CLIENT: **NEW YORK STATE POLICE**



1 HQ POWER PLAN - SOUTH
E-100-H 1/8" = 1'-0"

- KEY NOTES**
- E4 PROVIDE ONE DUPLEX RECEPTACLE PER CUBBY, STACKED FOUR HIGH.
 - E6 REFER TO DRAWING E-102-H UNDERFLOOR POWER & DATA PLAN FOR ADDITIONAL POWER REQUIREMENTS IN THIS ROOM.
 - E13 POWER SUPPLY WIRING AND CONNECTIONS FOR TOUCHLESS SINK FAUCETS. POWER SUPPLY SHALL BE INSTALLED UNDERNEATH SINKS. POWER SUPPLY SHALL BE MOUNTED WITH-IN SINK COUNTER. COORDINATE EXACT LOCATION WITH PLUMBING/MECHANICAL CONTRACTOR.
 - E16 PROVIDE POWER SUPPLY WIRING AND CONNECTIONS FOR AUTO FLUSH VALVES. POWER SOURCE SHALL BE INSTALLED ABOVE DROP CEILING. COORDINATE EXACT LOCATION WITH PLUMBING / MECHANICAL CONTRACTOR.
 - E18 CEILING MOUNTED VIDEO PROJECTOR. COORDINATE EXACT LOCATION OF CEILING MOUNTED DUPLEX RECEPTACLE OUTLET TT-101-H.
 - E20 CONDUITS UP ABOVE FIRST FLOOR CEILING FROM BASEMENT SUPPLY THRU FIRST FLOOR CHASE. REFER TO ARCHITECTURAL DRAWINGS. COORDINATE FINAL LOCATION.
 - E26 POWER FOR ELECTRIC WINDOW SHADES. CONTROLS FOR OPERATION OF WINDOW SHADES TO BE LOCATED IN PODIUM. POWER TO PANEL HMDP CIRCUIT 31.
 - E27 CEILING MOUNTED VIDEO CAMERA. COORDINATE EXACT LOCATION OF CEILING MOUNTED DUPLEX RECEPTACLE OUTLET WITH DRAWING TT-101-H.
 - E34 POWER FOR PROJECTOR SCREEN AND COMPONENTS. COORDINATE TA SERIES DRAWINGS FOR MORE INFORMATION.
 - E38 EC PROVIDED HARDWIRED CONNECTIONS FOR POWER SUPPLIES FURNISHED BY 'C' CONTRACT. COORDINATE FINAL LOCATION WITH 'C' CONTRACT.
 - E42 PROVIDE 4" NYLON PVC CONDUIT BUSHINGS ON END OF CONDUITS STUBBED ABOVE CEILING. CONDUITS ARE FOR TELE/DATA PATHWAYS.
 - E44 COORDINATE EXACT MOUNTING HEIGHT WITH EQUIPMENT FOR ACCESSIBILITY. 1.1 - Power
 - E58 PROVIDE POWER CONNECTION TO FACTORY MOUNTED UNIT DISCONNECT.
 - E61 PROVIDE CEILING MOUNTED SPEAKER TO MATCH EXISTING PA SYSTEM. RUN WIRE BACK TO RADIO ROOM LOCATED IN BASEMENT AND CONNECT INTO EXISTING PA AMPLIFIER. WIRE SIZE AND TYPE SHALL BE FOR LOW IMPEDANCE SPEAKER PER MANUFACTURER'S RECOMMENDATIONS.

- SHEET NOTES**
1. REFER TO ONE LINE DIAGRAM ON DRAWING E-001-H.
 2. REFER TO PANELBOARD SCHEDULES ON DRAWING E-002-H FOR BRANCH CIRCUIT CHARACTERISTICS.
 3. PRIOR TO LABELING EQUIPMENT AND PANEL SCHEDULES CONTRACTOR SHALL COORDINATE WITH OWNER TO CONFIRM PROPER UNIQUE EQUIPMENT IDS.

MARK	DATE	DESCRIPTION
1	01/08/2021	ADDENDUM #4
0	05/10/2020	BID/CONSTRUCTION DOCUMENTS
PROJECT NUMBER: 45649-E		
DESIGNED BY: GL		
DRAWN BY: NB		
FIELD CHECK: RW		
APPROVED: RW		
SHEET TITLE: HEADQUARTERS FIRST FLOOR POWER PLAN - SOUTH		
DRAWING NUMBER: E-100-H		
SHEET 91 OF 115		

WARNING:
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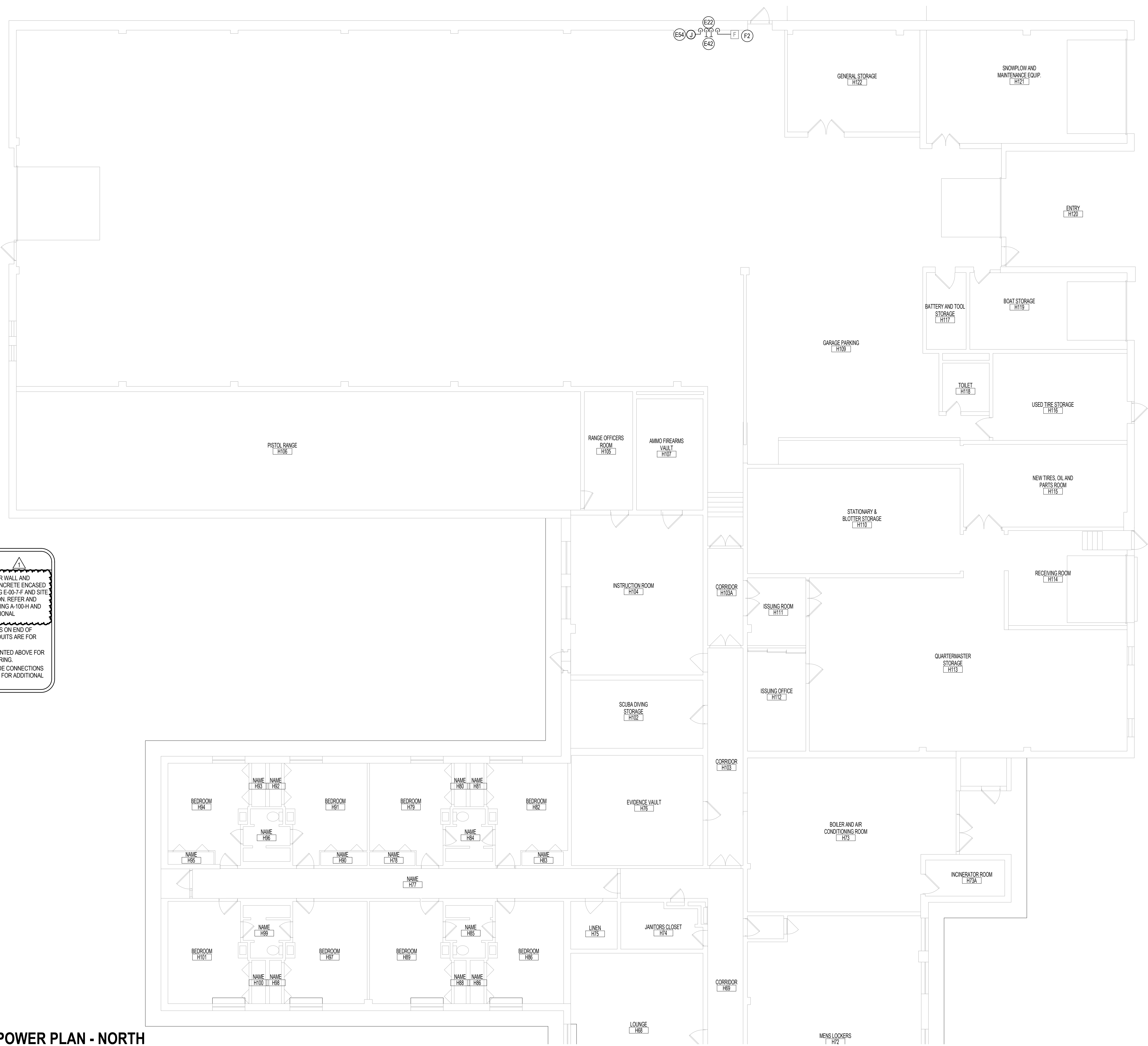
CONTRACT: **ELECTRICAL**

TITLE: **PROVIDE FORENSIC IDENTIFICATION UNIT BUILDING & HEADQUARTERS BUILDING ADDITION / RENOVATION**

LOCATION: **TROOP K HEADQUARTERS RT. 82 AND 44 POUGHKEEPSIE, NY 12603**

CLIENT: **NEW YORK STATE POLICE**

1	01/08/2021	ADDENDUM #4
0	06/10/2020	BID/CONSTRUCTION DOCUMENTS
MARK	DATE	DESCRIPTION
PROJECT NUMBER:	45649-E	
DESIGNED BY:	GL	
DRAWN BY:	NB	
FIELD CHECK:		
APPROVED:	RW	
SHEET TITLE:	HEADQUARTERS FIRST FLOOR POWER PLAN - NORTH	
DRAWING NUMBER:	E-101-H	
SHEET	92	OF 115



KEY NOTES

E22 RGS CONDUITS SHALL RUN DOWN INTERIOR WALL AND TRANSITION TO PVC IN UNDERGROUND CONCRETE ENCASED DUCTBANK. REFER TO DETAIL 3 ON DRAWING E-00-7-F AND SITE PLAN E-104-F FOR ADDITIONAL INFORMATION. REFER AND COORDINATE WITH ARCHITECTURAL DRAWING A-100-H AND STRUCTURAL DRAWING S-106-H FOR ADDITIONAL INFORMATION.

E42 PROVIDE 4" NYLON PVC CONDUIT BUSHINGS ON END OF CONDUITS STUBBED ABOVE CEILING. CONDUITS ARE FOR TELE/DATA PATHWAYS.

E54 PROVIDE JUNCTION BOX WITH COVER MOUNTED ABOVE FOR SPARE CONDUIT. PROVIDE NYLON PULL STRING.

F2 EXISTING PULL STATION LOCATION. PROVIDE CONNECTIONS AS REQUIRED. REFER TO DRAWING E-004-F FOR ADDITIONAL INFORMATION.

1 HQ POWER PLAN - NORTH
E-101-H 1/8" = 1'-0"

1/8/2021 1:55:08 PM RSN//RS_ALB1_NY_HA.corp.cds/191510240_TroopK/sin_arch_FUL_191510240_R17.rvt 36x24 PLOT SHEET

AV DEVICE SCHEDULE:

AV INDEX ID	SHEET	SYMBOL ID	ROOM NUMBER	AV BACK BOX	AV BACK BOX MOUNTING	AV BACK BOX ELEVATION	AV DEVICE DETAIL SHEET	AV CONDUIT SIZE	AV CONDUIT/CABLE DESTINATION (AV INDEX #)	IT CABLE QTY	PoE QTY (SUBSET OF IT CABLE QTY)	IT CONDUIT CABLE DESTINATION	AC POWER RECEPTACLE	ESTIMATED AV POWER LOAD
5	TA-101-H	FB	HA101	FSR FL-500P-4	FLUSH	IN-FLOOR	TA-401/402-H	1-1/4" C.	CLOSET RACK	1	1	NEAREST IDF	(1) NEMA 5-15R DUPLEX	500W
7	TA-101-H	AV	HA101		FLUSH		TA-401/402-H		CLOSET RACK	4		NEAREST IDF	(2) NEMA 5-15R DUPLEX	
8	TA-101-H	FB	HA100	FSR FL-500P-4	FLUSH	IN-FLOOR	TA-401/402-H	1-1/4" C.	CLOSET RACK	1	1	NEAREST IDF	(1) NEMA 5-15R DUPLEX	500W
9	TA-101-H	FB	HA100	FSR FL-500P-4	FLUSH	IN-FLOOR	TA-401/402-H	1-1/4" C.	CLOSET RACK	1	1	NEAREST IDF	(1) NEMA 5-15R DUPLEX	500W
10	TA-101-H	FB	HA100	FSR FL-500P-4	FLUSH	IN-FLOOR	TA-401/402-H	1-1/4" C.	CLOSET RACK	1	1	NEAREST IDF	(1) NEMA 5-15R DUPLEX	500W
12	TA-101-H	CAM	HA100	2-GANG	FLUSH	46" A.F.F	TA-401/402-H	1" C.	CLOSET RACK	1		NEAREST IDF		
13	TA-151-H	S	HA101	1-GANG	FLUSH	IN-CLG	TA-401/402-H	3/4" C.	CLOSET RACK					
14	TA-151-H	S	HA101	1-GANG	FLUSH	IN-CLG	TA-401/402-H	3/4" C.	CLOSET RACK					
15	TA-151-H	S	HA101	1-GANG	FLUSH	IN-CLG	TA-401/402-H	3/4" C.	CLOSET RACK					
16	TA-151-H	CAM-C	HA101	2-GANG	FLUSH	CEILING MOUNTED	TA-401/402-H	1" C.	CLOSET RACK	1		NEAREST IDF		
17	TA-151-H	S	HA101	1-GANG	FLUSH	IN-CLG	TA-401/402-H	3/4" C.	CLOSET RACK					
18	TA-151-H	LVC	HA101	INTEGRATED BACK -CAN	FLUSH	CEILING MOUNTED	TA-401/402-H		CLOSET RACK	1		NEAREST IDF		
19	TA-151-H	S	HA101	1-GANG	FLUSH	IN-CLG	TA-401/402-H	3/4" C.	CLOSET RACK					
20	TA-151-H	S	HA101	1-GANG	FLUSH	IN-CLG	TA-401/402-H	3/4" C.	CLOSET RACK					
21	TA-151-H	S	HA101	1-GANG	FLUSH	IN-CLG	TA-401/402-H	3/4" C.	CLOSET RACK					
22	TA-151-H	PRJ	HA101	2-GANG	FLUSH	CEILING MOUNTED	TA-401/402-H	1-1/4" C.	CLOSET RACK	2		NEAREST IDF	(1) NEMA 5-20R DUPLEX	1200W
23	TA-151-H	S	HA101	1-GANG	FLUSH	IN-CLG	TA-401/402-H	3/4" C.	CLOSET RACK					
24	TA-151-H	S	HA101	1-GANG	FLUSH	IN-CLG	TA-401/402-H	3/4" C.	CLOSET RACK					
25	TA-151-H	S	HA101	1-GANG	FLUSH	IN-CLG	TA-401/402-H	3/4" C.	CLOSET RACK					
26	TA-151-H	S	HA101	1-GANG	FLUSH	IN-CLG	TA-401/402-H	3/4" C.	CLOSET RACK					
27	TA-151-H	S	HA101	1-GANG	FLUSH	IN-CLG	TA-401/402-H	3/4" C.	CLOSET RACK					
28	TA-151-H	CAM-C	HA101	2-GANG	FLUSH	CEILING MOUNTED	TA-401/402-H	1" C.	CLOSET RACK	1		NEAREST IDF		
29	TA-151-H	S	HA100	1-GANG	FLUSH	IN-CLG	TA-401/402-H	3/4" C.	CLOSET RACK					
30	TA-151-H	S	HA100	1-GANG	FLUSH	IN-CLG	TA-401/402-H	3/4" C.	CLOSET RACK					
31	TA-151-H	S	HA100	1-GANG	FLUSH	IN-CLG	TA-401/402-H	3/4" C.	CLOSET RACK					
32	TA-151-H	S	HA100	1-GANG	FLUSH	IN-CLG	TA-401/402-H	3/4" C.	CLOSET RACK					
33	TA-151-H	LVC	HA100	INTEGRATED BACK -CAN	FLUSH	CEILING MOUNTED	TA-401/402-H		CLOSET RACK	1		NEAREST IDF		
34	TA-151-H	MIC	HA100	1-GANG	FLUSH	CEILING MOUNTED	TA-401/402-H		CLOSET RACK	2		NEAREST IDF		
35	TA-151-H	PRJ	HA100	2-GANG	FLUSH	CEILING MOUNTED	TA-401/402-H	1-1/4" C.	CLOSET RACK	2		NEAREST IDF	(1) NEMA 5-20R DUPLEX	1200W
36	TA-151-H	MIC	HA100	1-GANG	FLUSH	CEILING MOUNTED	TA-401/402-H		CLOSET RACK	2		NEAREST IDF		
37	TA-151-H	S	HA100	1-GANG	FLUSH	IN-CLG	TA-401/402-H	3/4" C.	CLOSET RACK					
38	TA-151-H	S	HA100	1-GANG	FLUSH	IN-CLG	TA-401/402-H	3/4" C.	CLOSET RACK					
39	TA-151-H	S	HA100	1-GANG	FLUSH	IN-CLG	TA-401/402-H	3/4" C.	CLOSET RACK					
40	TA-151-H	S	HA100	1-GANG	FLUSH	IN-CLG	TA-401/402-H	3/4" C.	CLOSET RACK					
53	TA-151-H	MIC	HA101	1-GANG	FLUSH	CEILING MOUNTED	TA-401/402-H	1-1/4" C.	CLOSET RACK	2		NEAREST IDF		
54	TA-151-H	MIC	HA101	1-GANG	FLUSH	CEILING MOUNTED	TA-401/402-H	1-1/4" C.	CLOSET RACK	2		NEAREST IDF		
57	TA-101-H	AV	HA100		FLUSH		TA-401/402-H		CLOSET RACK	4		NEAREST IDF	(2) NEMA 5-15R DUPLEX	
58	TA-101-H	FB	HA101	FSR FL-500P-4	FLUSH	IN-FLOOR	TA-401/402-H	1-1/4" C.	CLOSET RACK	1	1	NEAREST IDF	(1) NEMA 5-15R DUPLEX	500W
59	TA-101-H	SB	HA101	1-GANG	FLUSH	REFER TO DWG	TA-401/402-H	3/4" C.	CLOSET RACK			NEAREST IDF		
60	TA-101-H	SB	HA101	1-GANG	FLUSH	REFER TO DWG	TA-401/402-H	3/4" C.	CLOSET RACK			NEAREST IDF		
61	TA-101-H	SB	HA100	1-GANG	FLUSH	REFER TO DWG	TA-401/402-H	3/4" C.	CLOSET RACK			NEAREST IDF		
62	TA-101-H	SB	HA100	1-GANG	FLUSH	REFER TO DWG	TA-401/402-H	3/4" C.	CLOSET RACK			NEAREST IDF		

AV SYMBOLS:

XX
AUDIOVISUAL DEVICE SYMBOL, REFER TO AV DEVICE SCHEDULE ON SHEET TA-001-H FOR ADDITIONAL INFORMATION. ###* INDICATES AV INDEX ID AND XX* INDICATES SYMBOL ID

ABBREVIATIONS:

A AMPERES	N NEUTRAL
AC ABOVE COUNTER	NC NORMALLY CLOSED
AFC AT FINISHED CEILING	NIC NOT IN CONTRACT
AFP ABOVE FINISHED FLOOR	NID NETWORK INTERFACE DEVICE
AFP ABOVE FINISHED PLATFORM OR RAISED FLOOR	NTS NOT TO SCALE
AS ABOVE SLAB	NO NORMALLY OPEN
ATS ABOVE TABLE SURFACE	NO. NUMBER
AV AUDIOVISUAL	OD OUTSIDE DIAMETER
AWG AMERICAN WIRE GAGE	OFE OWNER FURNISHED EQUIPMENT
C CONDUIT	OSP OUTSIDE PLANT
CAM CAMERA	PA PUBLIC ADDRESS
CAM-C CEILING CAMERA	PB PULLBOX
CAT-3 TIA/EIA CATEGORY 3 RATED	PP PATCH PANEL
CAT-5E TIA/EIA CATEGORY 5 E RATED	PR PAIR
CAT-6A TIA/EIA CATEGORY 6A RATED	PBX PRIVATE BRANCH EXCHANGE
CAT-6E TIA/EIA CATEGORY 6 E RATED	PNL PANEL
CB CEILING BOX	POE POWER OVER ETHERNET
CCTV CLOSED CIRCUIT TELEVISION	PRJ PROJECTOR
CKT CIRCUIT	PTZ PAN/TILT/ZOOM
COAX COAXIAL CABLE	RM ROOM
CL CENTER LINE	RW RACEWAY
COND CONDUCTOR	SC SCREW COVER BOX
CLG CEILING	SB SPEAKER BACK BOX
CP CONSOLIDATION POINT	SM SINGLE MODE
CU COPPER	CEILING SPEAKER
DVR DIGITAL VIDEO RECORDER	ST STRAND
DWG DRAWING	STP SHIELDED TWISTED PAIR
EC CONDUCTOR	TBD TO BE DETERMINED
EM EMERGENCY	TEMP TEMPORARY
EMT ELECTRICAL METALLIC TUBING (WITH PULL STRING)	TGB TELECOMMUNICATIONS GROUND BAR
EX EXISTING	TR TELECOMMUNICATIONS ROOM
F/UTP FOILED/UNSHIELDED TWISTED PAIR	TS TAMPER SWITCH
FA FIRE ALARM	TSER TELECOMMUNICATIONS SERVICE
FACP FIRE ALARM CONTROL PANEL	TV TELEVISION
FB FLOOR BOX	TYP TYPICAL
FO FIBER OPTIC	UON UNLESS OTHERWISE NOTED
FP FLAT PANEL	UPS UNINTERRUPTIBLE POWER SUPPLY
GND GROUND	UTP UNSHIELDED TWISTED PAIR
HC HUNG CEILING	VA VOLT/AMPERS
HZ HERTZ	VIF VERIFY IN FIELD
ID INSIDE DIAMETER	VM VOLTMETER
IDF INTERMEDIATE DISTRIBUTION FRAME	VOIP VOICE OVER INTERNET PROTOCOL
LAN LOCAL AREA NETWORK	VP VAPOR PROOF
LV LOW VOLTAGE	W WATTS
LVC PROJECTION SCREEN	WAN WIDE AREA NETWORK
MAX MAXIMUM	WAP WIRELESS ACCESS POINT
MER MECHANICAL EQUIPMENT ROOM	WM WIRE MANAGEMENT
MC MAIN CROSS CONNECT	WP WATERPROOF
MIC MICROPHONE	WS WORKSTATION
MDF MAIN DISTRIBUTION FRAME	WT WATER TIGHT
MH MANHOLE	WW WIREWAY
MIN MINIMUM	XFRM TRANSFORMER
MM MULTIMODE	
MTD MOUNTED	
MTER MAIN TELECOMMUNICATIONS EQUIPMENT ROOM	



DESIGN & CONSTRUCTION

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CONTRACT: ELECTRICAL

TITLE: HEADQUARTERS BUILDING ADDITION / RENOVATION

LOCATION: TROOP K HEADQUARTERS
RT. 82 AND 44
POUGHKEEPSIE, NY 12603

CLIENT: NEW YORK STATE POLICE

1	01/08/2021	ADDENDUM #4
0	06/10/2020	BID/CONSTRUCTION DOCUMENTS
MARK	DATE	DESCRIPTION

PROJECT NUMBER: **45649-E**

DESIGNED BY: MT

DRAWN BY: MT

FIELD CHECK: DG

APPROVED: DG

SHEET TITLE: HEADQUARTERS AUDIOVISUAL DEVICE SCHEDULE, SYMBOLS AND ABBREVIATIONS

DRAWING NUMBER: TA-001-H

1/8/2021 3:38:17 PM RSN://RS_ABL_NW_HAcomp/05/191510240_TroopK/Hdr_arch_F01_191510240_R17.rvt 36x24 PLOT SHEET

NOTES:

- POWER AND DATA REQUIREMENTS SHOWN FOR REFERENCE ONLY AND ARE NOT FOR CONSTRUCTION.
- WHERE POWER CIRCUITS ARE SHOWN TERMINATING IN JUNCTION BOXES WITHOUT RECEPTACLES, THE WIRES SHALL BE TAPED AND THE BOXES COVERED. THESE CIRCUITS WILL BE CONNECTED BY OTHERS DURING INSTALLATION OF THE AV SYSTEMS EQUIPMENT.
- EMPTY CONDUIT RUNS ON THESE DRAWINGS SHOW ONLY INTERCONNECTION BETWEEN TERMINATION POINTS.
- HIGH LEVEL/HIGH CURRENT FEEDS (SUCH AS FOR POWER DISTRIBUTION PANELS, LIGHTING, AND BRANCH CIRCUITS,) ARE NOT TO BE RUN PARALLEL WITH AUDIO/VIDEO CONDUITS OR CABLING. IF HIGH LEVEL/HIGH CURRENT FEEDS MUST RUN PARALLEL TO AUDIO/VIDEO CONDUITS OR CABLING, MINIMUM SEPARATION MUST BE MAINTAINED ACCORDING TO THE FOLLOWING TABLE. "NA" INDICATES THAT THE USE SHOULD BE AVOIDED. SPACINGS ASSUME THAT POWER CONDUCTORS WILL NOT BE TWISTED PAIRS. CLOSER SPACINGS CAN BE USED IF POWER CONDUCTORS ARE TWISTED PAIRS.

MINIMUM ACCEPTABLE DISTANCE BETWEEN PARALLEL AV AND POWER CONDUITS

AV CONDUIT	POWER CONDUIT	COMBINED AMPACITY OF ALL PHASE CONDUCTORS IN POWER CONDUIT				
		UNDER 60A	60A	120A	240A	400A
EMT	EMT	2 FT.	3 FT.	4 FT.	NA	NA
EMT	RIGID STEEL	4 IN.	8 IN.	1 FT.	2 FT.	4 FT.
RIGID STEEL	RIGID STEEL	1 IN.	2 IN.	4 IN.	8 IN.	16 IN.

- NO LARGE POWER TRANSFORMERS OR MOTORS SHOULD BE LOCATED WITHIN 50 FEET OF AV EQUIPMENT SPACES.
- ALL AV CABLING THAT IS RUN OPEN-WIRE SHALL BE SUPPORTED FROM J-HOOKS NO GREATER THAN 3 FEET APART. NO CABLE IS TO BE UNSUPPORTED OR LAID OVER CEILING TILES, BLACK IRON, OR OTHER CEILING MEMBERS.
- THE METHOD OF INSTALLATION OF BOXES IN WALLS, AND THE METHOD OF PASSAGE OF CONDUITS AND WIREWAYS THROUGH ACOUSTICALLY SENSITIVE WALLS SHALL BE COORDINATED WITH THE ACOUSTICAL CONSULTANT.
- INSTALL FIRESTOP TO ALL SLAB AND WALL PENETRATIONS PROVIDED FOR THE INSTALLATION OF CABLE AND CONDUIT AS REQUIRED TO MAINTAIN FIRE RATING OF SLAB OR WALL. REVIEW C-CONTRACT PLANS FOR ADDITIONAL PARTITION TYPES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE FIRE RATING OF ALL WALLS AND FLOORS HAVING CABLING PENETRATIONS, COORDINATE SEALANT INSTALLATION WITH WORK OF OTHER TRADES. REFER TO ELECTRICAL SPECIFICATIONS FOR MATERIAL AND INSTALLATION PARAMETERS.
- ALL POWER, WIREWAYS, AND JUNCTION BOXES ARE TO BE REVIEWED FOR CODE AND SAFETY COMPLIANCE.
- REFER TO ELECTRICAL DRAWINGS FOR DISTRIBUTION PANEL ARE SIZING AND SPECIFICATION.
- ALL CABLE TRAY THAT IS SURFACE-MOUNTED ON SLAB BELOW RAISED FLOOR OR ABOVE EQUIPMENT RACKS SHALL BE SECURELY FASTENED AND LEFT OPEN FOR CABLE ACCESS.
- POWER FOR AV AND RELATED SYSTEMS SHALL USE AN EIA/TIA 607 COMPLIANT GROUNDING SYSTEM, REFER TO ELECTRICAL DRAWINGS. REFER TO AV DETAIL SHEETS FOR ADDITIONAL GROUNDING REQUIREMENTS IF APPLICABLE.
- ALL AV-RELATED EMPTY CONDUIT SHALL BE REAMED, CLEANED, CAPPED (WHERE APPROPRIATE), TAGGED, AND FURNISHED WITH PULL WIRES.
- WHERE EXACT DIMENSIONS ARE NOT INDICATED, THE SCALE OF THIS DRAWING IS SUFFICIENTLY ACCURATE FOR DETERMINING THE LOCATION OF EQUIPMENT, JUNCTION BOXES, OUTLET BOXES, WIREWAYS, PANELS, ETC. WHERE EXACT DIMENSIONS ARE INDICATED, THE REFERENCE SURFACE SHALL BE THE FINAL FINISHED SURFACE INCLUDING ANY ACOUSTICAL TREATMENT. ALL DIMENSIONS MUST BE VERIFIED AND ANY DEVIATIONS CAUSING CHANGES MUST BE COORDINATED WITH SHEN MILSOM & WILKE, LLC.
- NOTIFY DIRECTOR'S REPRESENTATIVES OF ANY DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AND THE AV DRAWINGS. OBTAIN CLARIFICATION BEFORE PROCEEDING WITH WORK.
- ALL AV DEVICES SHALL BE SECURELY MOUNTED PLUMB AND STRAIGHT TO WALLS, FLOORS, OR RACKS PER THE MANUFACTURER'S RECOMMENDED MOUNTING PRACTICE.
- THERE SHALL BE A MINIMUM OF ONE PULL BOX FOR EVERY 100' OF STRAIGHT EMPTY AV-RELATED CONDUIT AND ONE PULL BOX WHERE THERE ARE MORE THAN TWO 90° BENDS OR LESSER BENDS TOTALING 180° IN A CONDUIT RUN.
- MAINTAIN MINIMUM BEND RADIUS OF 10X OD FOR ALL AV-RELATED CONDUITS.
- CONTRACTOR SHALL RESTORE CEILINGS, WALLS AND ANY OTHER SURFACES AFFECTED BY THEIR WORK PRIOR TO COMPLETION OF WORK WITH LIKE MATERIALS TO MATCH EXISTING CONSTRUCTION.

NOTES:

- REFER TO AV ELECTRICAL PLANS AND/OR RISER DIAGRAMS FOR EMPTY CONDUIT SIZING.
- ALL POWER CIRCUITS INDICATED IN THIS DRAWING SET TO BE PROVIDED BY DEDICATED BREAKER PANEL(S). NO NON-AV CIRCUITS TO BE FED FROM DEDICATED AV BREAKER PANEL(S).
- POWER FOR ALL AV SERVICES IN EACH DESIGNATED SPACE SHALL BE ON THE SAME ELECTRICAL PHASE, AND THIS PHASE SHALL NOT INCLUDE MOTORS, APPLIANCES, OR ANY OTHER SOURCE THAT CAN CAUSE SIGNAL INTERFERENCE.
- GROUNDING: GROUND COMMUNICATIONS SYSTEMS AND EQUIPMENT IN ACCORDANCE WITH ANSI/TIA/EIA-807 GROUNDING STANDARDS AND APPLICABLE NEC REQUIREMENTS EXCEPT WHERE DRAWINGS OR SPECIFICATIONS EXCEED NEC REQUIREMENTS. ALL RACKS, METALLIC BACKBOARDS, CABLE SHEATHS, CABLE TRAYS, ETC. ENTERING OR RESIDING IN TECHNICAL EQUIPMENT SPACES SHALL BE GROUNDED TO THEIR RESPECTIVE GROUND SYSTEM USING A MINIMUM OF #6 AWG STRANDED COPPER BONDING CONDUCTOR AND COMPRESSOR CONNECTORS. ALL WIRES USED FOR TECHNICAL POWER SYSTEMS GROUNDING PURPOSES SHALL BE IDENTIFIED WITH GREEN INSULATION OR IDENTIFIED AT EACH TERMINATION POINT WITH A WRAP OF GREEN TAPE. ALL CABLES AND BUS BARS SHALL BE IDENTIFIED AND LABELED "TECHNICAL POWER SYSTEM GROUND".
- CONDUIT STUBS: PROVIDE NYLON BUSHING ON ALL CONDUIT STUBS AND NON-TERMINATING CONDUIT ENDS TO PROTECT WIRE PULLS.
- JUNCTION BOX COVERS: UNLESS OTHERWISE NOTED, ALL JUNCTION BOXES MUST BE PROVIDED WITH A COVER. WHERE RAISED DEVICE COVERS ARE SPECIFIED, MATCH COVER DEPTH TO WALL THICKNESS. WHERE JUNCTION BOXES ARE MOUNTED AT OR ABOVE FINISHED CEILING HEIGHT, INSTALL JUNCTION BOXES WITH OPEN SIDE FACING DOWN.
- POWER RECEPTALS: TECHNICAL POWER RECEPTALS, INCLUDING THOSE WITHIN FLOOR BOXES, WALL BOXES, OR CEILING BOXES, SHALL BE PROVIDED BY THE BUILDING CONTRACTOR AND APPEAR ON THE ELECTRICAL DRAWINGS. TECHNICAL POWER RECEPTALS IN RELATION TO TECHNOLOGY INFRASTRUCTURE IS CRITICAL. REFER TO THE ELECTRICAL DRAWINGS FOR COMPLETE POWER LAYOUTS AND CIRCUITING DETAILS
- NETWORK OUTLETS FOR AUDIOVISUAL SYSTEMS: ALL NETWORK OUTLETS SHALL APPEAR ON THE NETWORK DRAWINGS. REFER TO THE STRUCTURED CABLING SYSTEM SPECIFICATIONS (SECTIONS 27 21 00, 27 21 12, 27 21 26, AND 27 21 29) AND DRAWINGS FOR ADDITIONAL INFORMATION.

SCOPE OF WORK BETWEEN TRADES - RESPONSIBILITY MATRIX:

SCOPE OF WORK	PROVIDE	FURNISH	INSTALL
IN-WALL BLOCKING SUPPORT FOR AV MOUNTS		GC	GC
MOTORIZED PROJECTION SCREENS		EC	EC
WALL AND CEILING SPEAKER CUTOUTS			GC
FURNITURE CUTOUTS FOR AV EQUIPMENT (UNLESS PROVIDED BY FURNITURE PROVIDER)		GC	
KINDORF AND/OR BLACK IRON AS REQUIRED FOR CEILING MOUNTED AV DEVICES		GC	GC
CABLE CONTAINMENT INCLUDING:		EC	EC
CONDUIT WITH MEASURED PULLSTRINGS		EC	EC
CABLETRAY, LADDERTRAY, AND WIREWAYS		EC	EC
FLOORBOXES		EC	EC
JUNCTION BOXES, PULL BOXES, AND BACKBOXES		EC	EC
POWER OUTLETS		EC	EC
DEDICATED DISTRIBUTION PANELS, LOAD CENTERS, AND POWER ISOLATION TRANSFORMERS		EC	EC
AV CABLING (LOW VOLTAGE)		AV	AV
AV TERMINATIONS		AV	AV
CUSTOM ENGRAVED AV COVER PLATES		AV	AV
J-HOOKS AND OTHER SUPPORTS REQUIRED FOR OPEN-RUN AV CABLING		AV	AV
AV DEVICE WALL MOUNTS		AV	AV
AV DEVICES (AS DESCRIBED IN THE AV BID DOCUMENTS)		AV	AV
VOICE/DATA NETWORK CABLING (FIBER AND TWISTED PAIR)		ST	ST
VOICE/DATA COVER PLATES		ST	ST
CATV CABLING		ST	ST
LIGHTING & SHADE CONTROL INTERFACE		EC	EC

REFER TO AV DETAIL SHEETS FOR ADDITIONAL SCOPE DELINEATION AND INFORMATION

DEFINITION OF TERMS

FURNISH - TO PURCHASE AND DELIVER TO THE PROJECT SITE COMPLETE WITH EVERY NECESSARY APPURTENANCE AND SUPPORT. PURCHASING SHALL INCLUDE PAYMENT OF ALL SALES TAXES AND OTHER SURCHARGES AS MAY BE REQUIRED TO ASSURE THAT PURCHASED ITEMS ARE FREE OF ALL LIENS, CLAIMS, OR ENCUMBRANCES.

INSTALL - TO UNLOAD AT THE DELIVERY POINT AT THE SITE AND PERFORM EVERY OPERATION NECESSARY TO ESTABLISH SECURE MOUNTING AND CORRECT OPERATION AT THE PROPER LOCATION IN THE PROJECT, ALL AS PART OF THE WORK.

PROVIDE - TO FURNISH AND INSTALL.

LEGEND FOR SCOPE OF WORK BETWEEN TRADES:

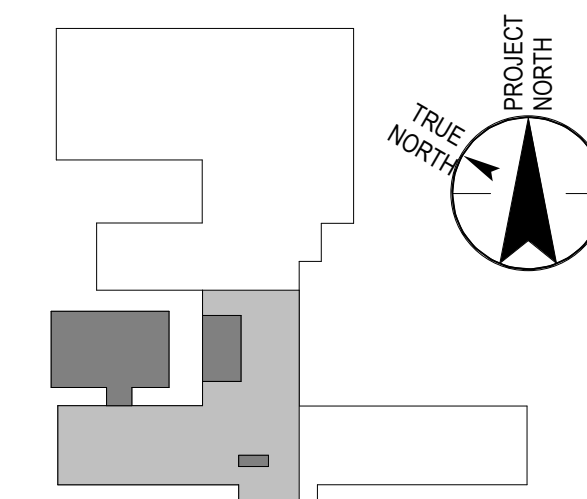
- GC = GENERAL CONTRACTOR
- EC = ELECTRICAL CONTRACTOR
- AV = AUDIOVISUAL CONTRACTOR
- O = OWNER
- ST = STRUCTURED CABLING, OR TELECOMMUNICATIONS CONTRACTOR

DESIGN & CONSTRUCTION

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Signature

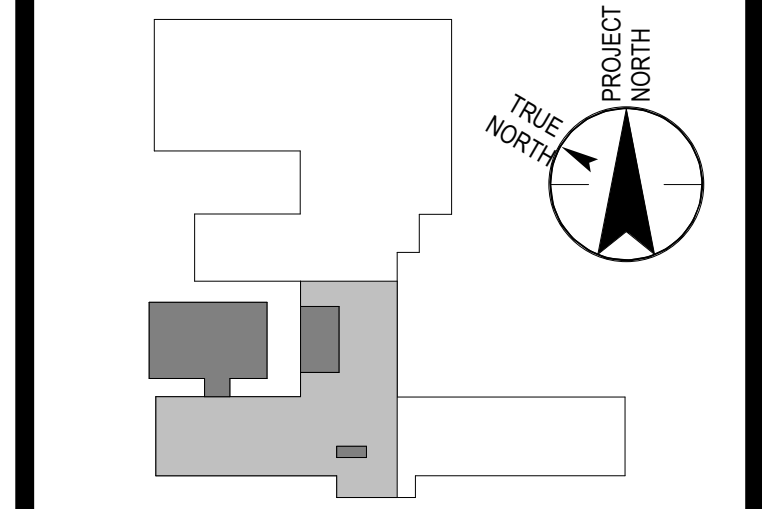
CONTRACT: ELECTRICAL

TITLE: HEADQUARTERS BUILDING ADDITION / RENOVATION

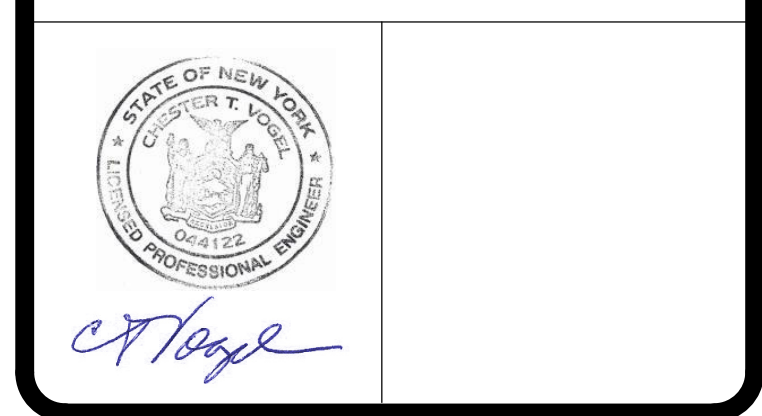
LOCATION: TROOP K HEADQUARTERS
RT. 82 AND 44
POUGHKEEPSIE, NY 12603

CLIENT: NEW YORK STATE POLICE

1	01/08/2021	ADDENDUM #4
0	05/19/2020	BID/CONSTRUCTION DOCUMENTS
MARK	DATE	DESCRIPTION
PROJECT NUMBER:	45649-E	
DESIGNED BY:	MT	
DRAWN BY:	MT	
FIELD CHECK:		
APPROVED:	DG	
SHEET TITLE:	HEADQUARTERS AUDIOVISUAL NOTES	
DRAWING NUMBER:	TA-002-H	
SHEET	101	of 115



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TITLE: HEADQUARTERS BUILDING ADDITION / RENOVATION

LOCATION: TROOP K HEADQUARTERS
RT. 82 AND 44
POUGHKEEPSIE, NY 12603

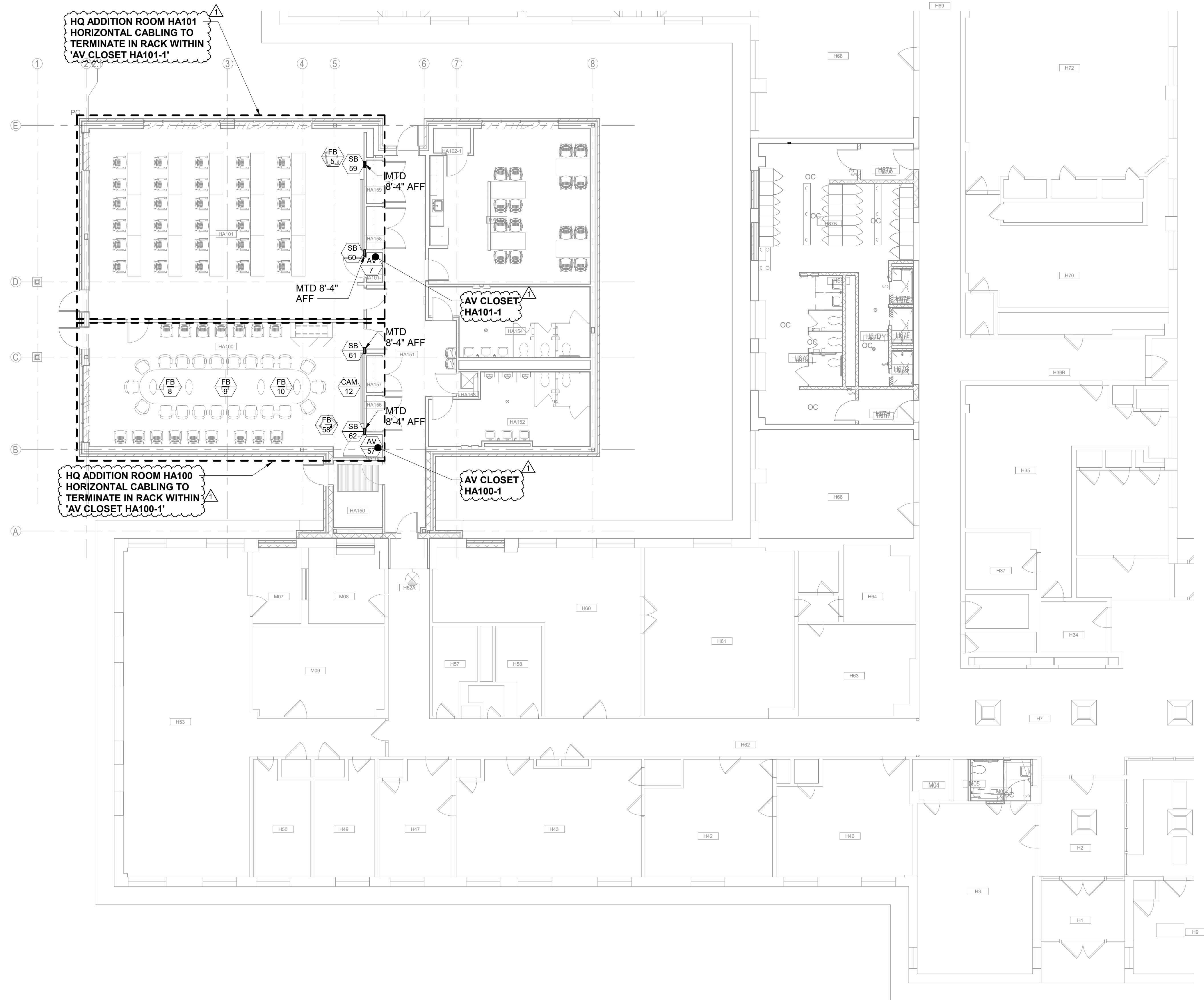
CLIENT: NEW YORK STATE POLICE

PROJECT NUMBER:	45649-E
DESIGNED BY:	MT
DRAWN BY:	MT
FIELD CHECK:	
APPROVED:	DG

MARK	DATE	DESCRIPTION
1	01/08/2021	ADDENDUM #4
0	06/10/2020	BID/CONSTRUCTION DOCUMENTS

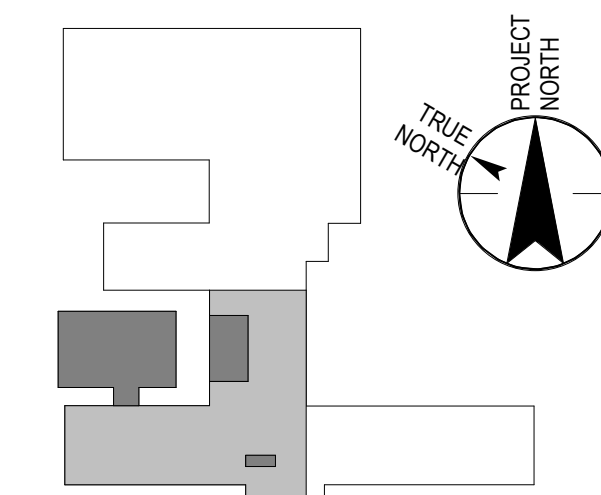
SHEET TITLE:
HEADQUARTERS
AUDIOVISUAL OVERALL
ELECTRICAL PLAN - FIRST
FLOOR HQ

DRAWING NUMBER:
TA-101-H



1 AUDIOVISUAL OVERALL ELECTRICAL PLAN - FIRST FLOOR HQ
1/8" = 1'-0"

KEYPLAN



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Signature

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TITLE: HEADQUARTERS BUILDING ADDITION / RENOVATION

LOCATION: TROOP K HEADQUARTERS
RT. 82 AND 44
POUGHKEEPSIE, NY 12603

CLIENT: NEW YORK STATE POLICE

MARK	DATE	DESCRIPTION
1	01/08/2021	ADDENDUM #4
0	06/10/2020	BID/CONSTRUCTION DOCUMENTS

PROJECT NUMBER: 45649-E

DESIGNED BY: MT

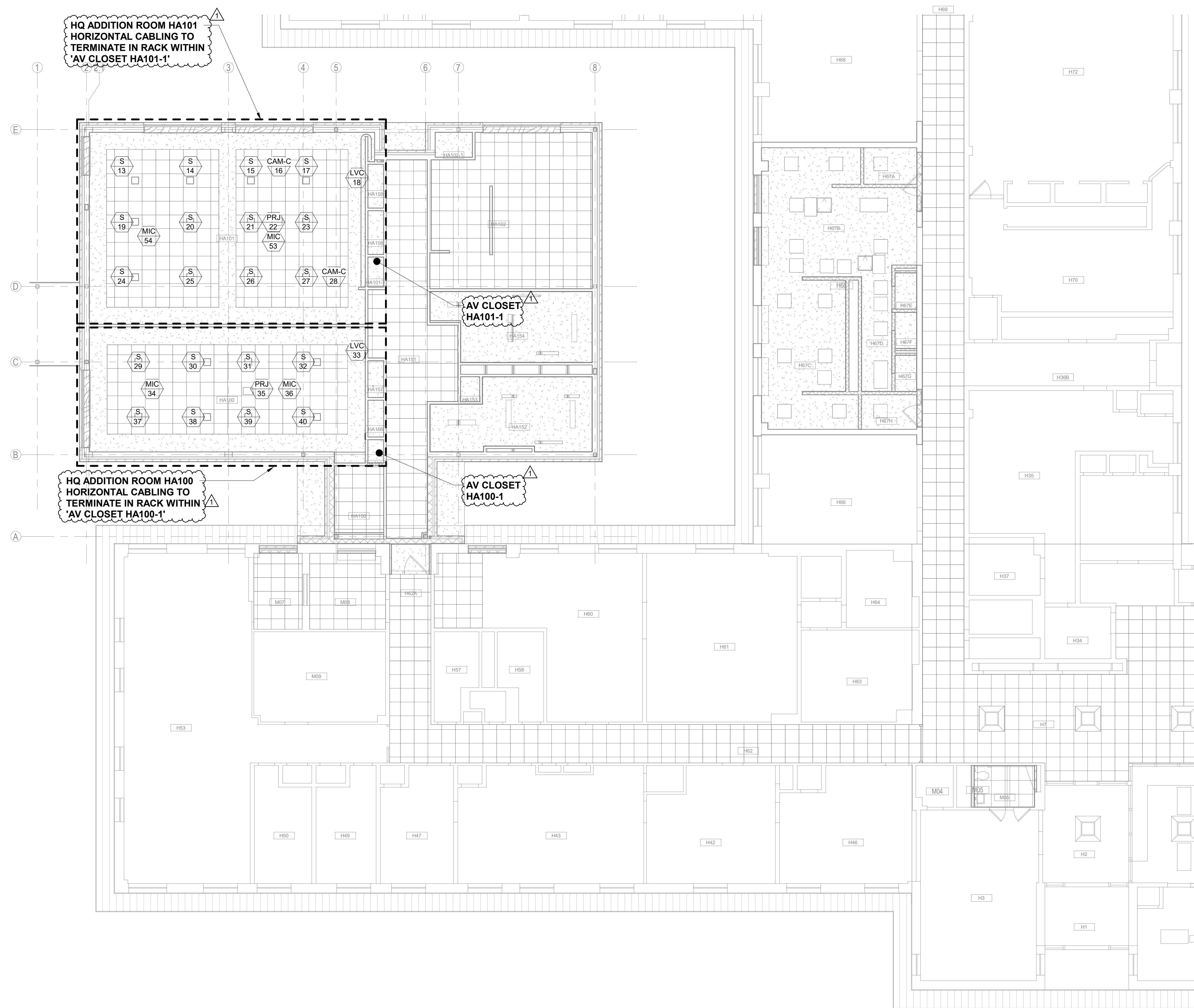
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FIELD CHECK:

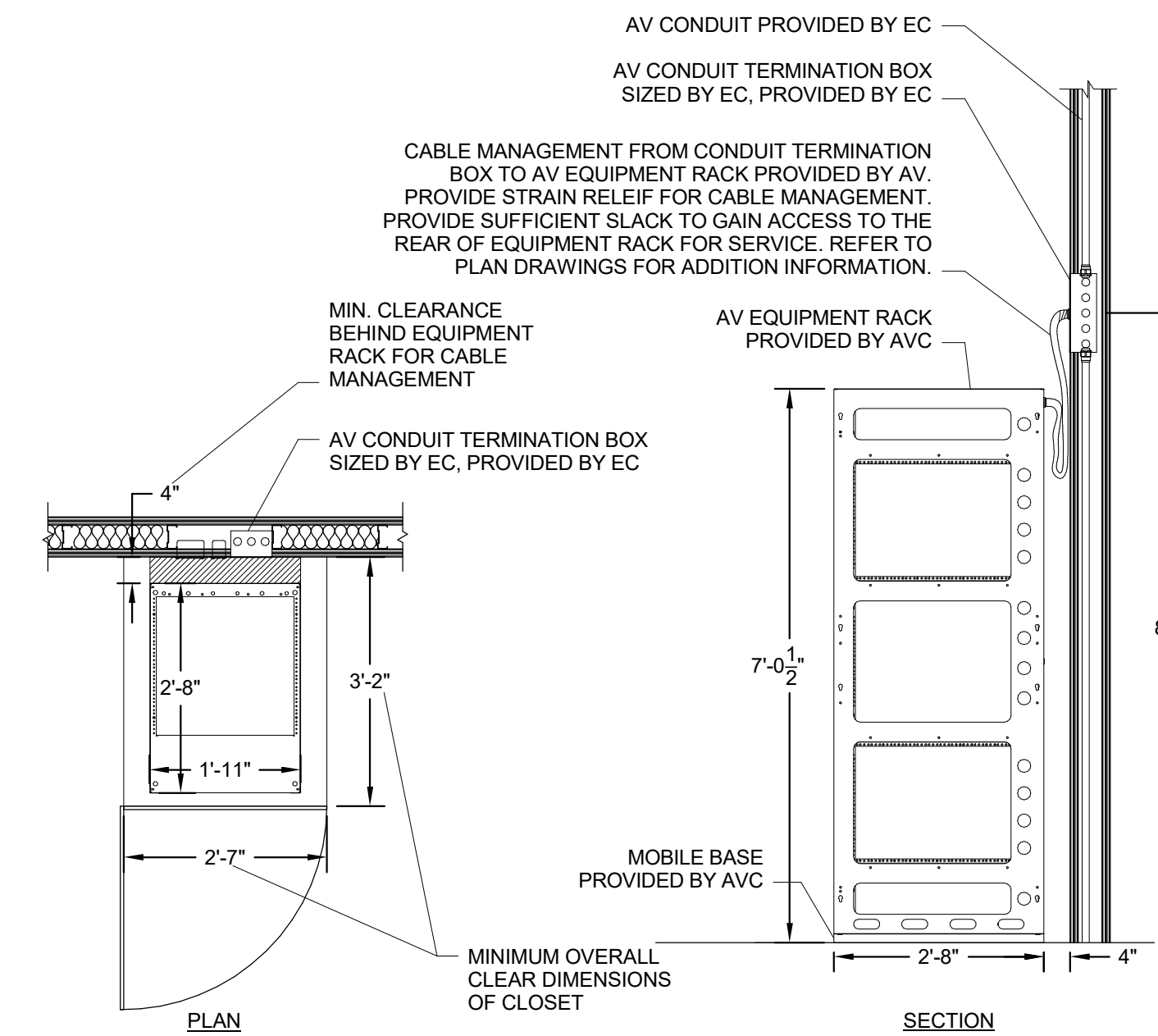
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SHEET TITLE: HEADQUARTERS AUDIOVISUAL OVERALL ELECTRICAL RCP - FIRST FLOOR HQ

DRAWING NUMBER: TA-151-H



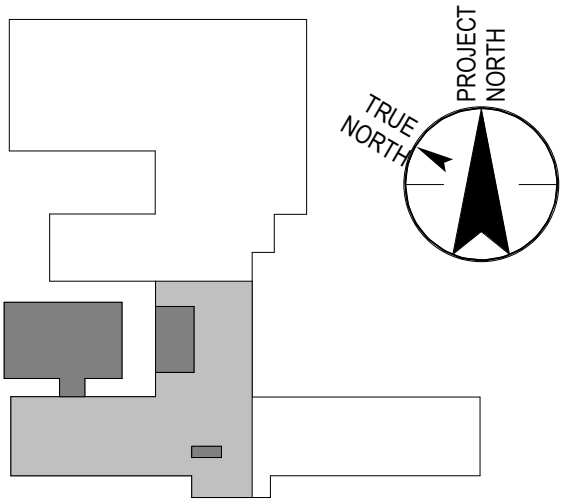
1 AUDIOVISUAL OVERALL ELECTRICAL RCP - FIRST FLOOR HQ
1/8" = 1'-0"



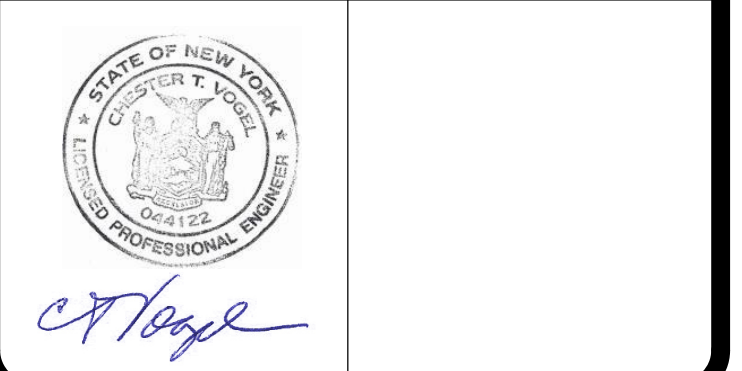
3 AUDIOVISUAL DETAIL - FULL-HEIGHT AV EQUIPMENT RACK
1/2"=10"

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CONTRACT: ELECTRICAL
TITLE: HEADQUARTERS BUILDING ADDITION / RENOVATION
LOCATION: TROOP K HEADQUARTERS RT. 82 AND 44 POUGHKEEPSIE, NY 12603
CLIENT: NEW YORK STATE POLICE

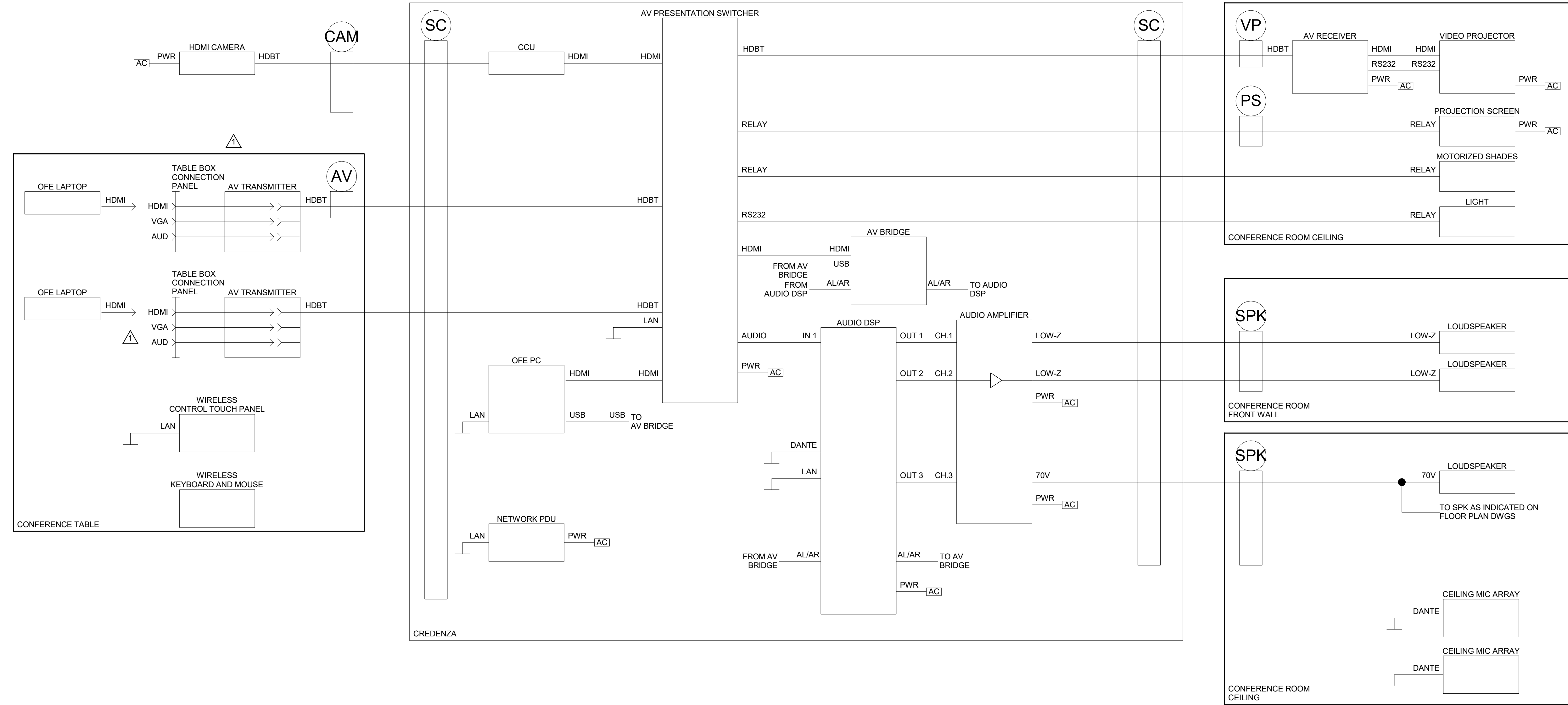
MARK	DATE	DESCRIPTION
1	01/08/2021	ADDENDUM #4
0	06/10/2020	BID/CONSTRUCTION DOCUMENTS

PROJECT NUMBER: 45649-E
DESIGNED BY: MT
DRAWN BY: MT
FIELD CHECK:
APPROVED: DG

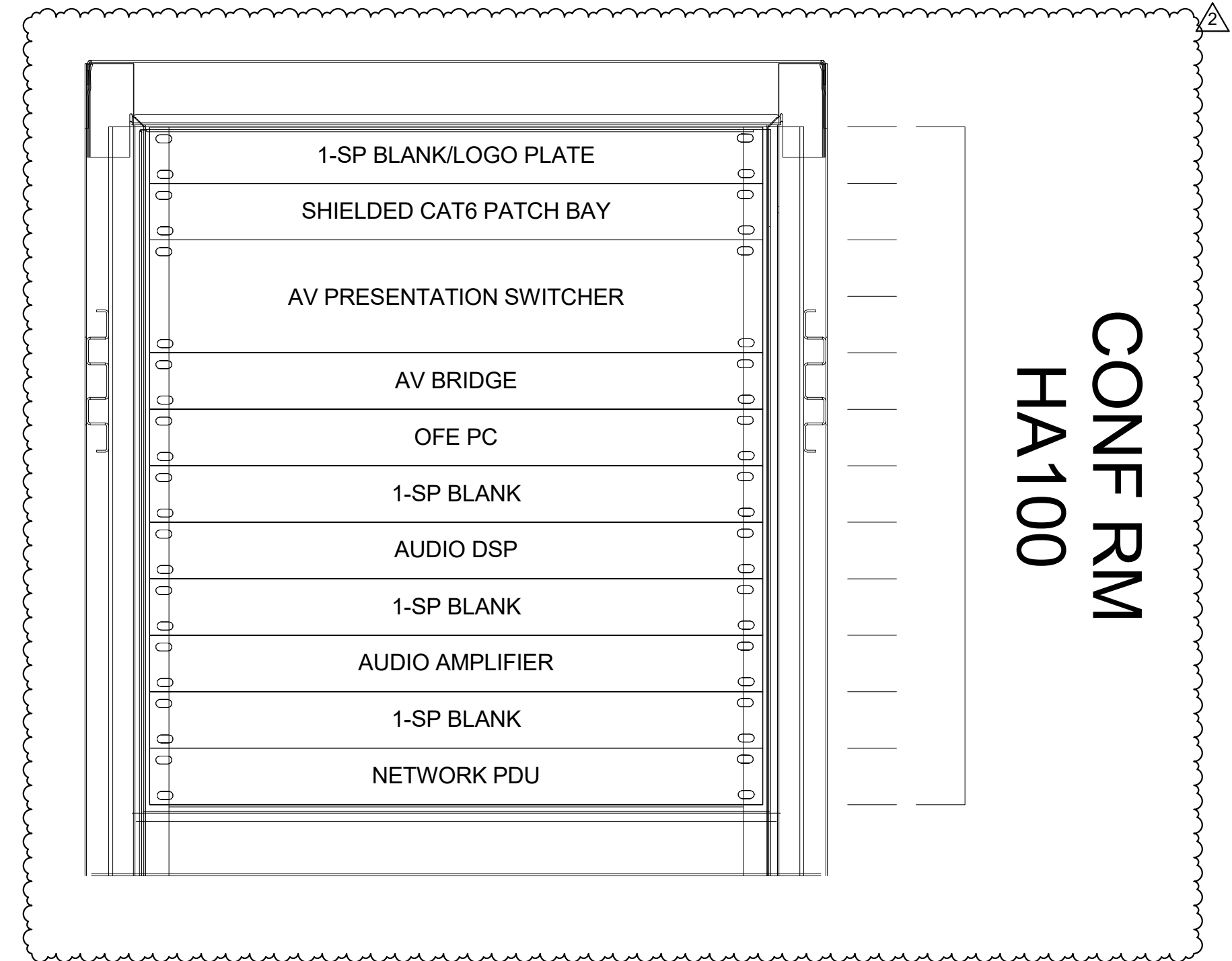
SHEET TITLE: HEADQUARTERS AUDIOVISUAL DETAILS

DRAWING NUMBER: TA-402-H

SHEET 108 of 115



1 AUDIOVISUAL SYSTEM DIAGRAM - CONFERENCE ROOM HA100
NO SCALE

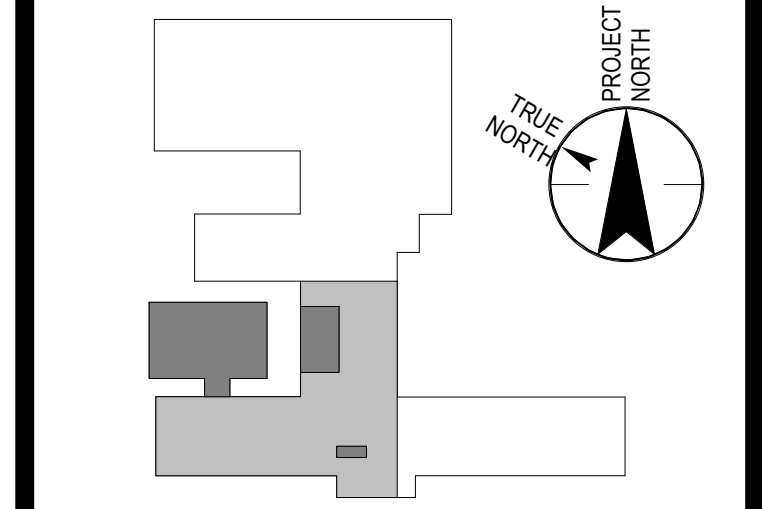


2 AUDIOVISUAL SYSTEM DIAGRAM - EQUIPMENT RACK ELEVATION
NO SCALE

DESIGN & CONSTRUCTION

CONSULTANT
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OFFICE OF GENERAL SERVICES
PROFESSIONAL ENGINEER
CT Lopez

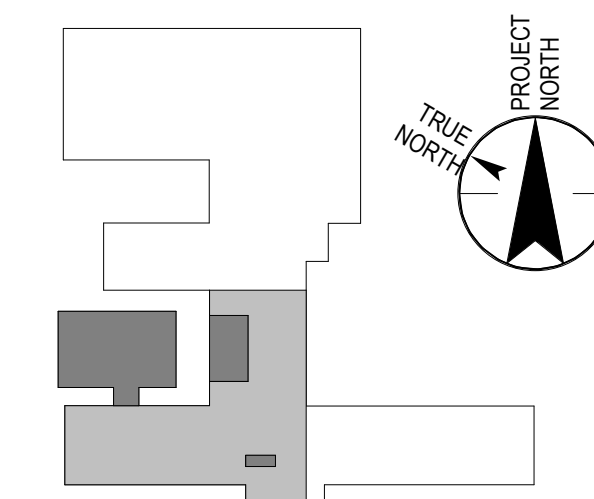
CONTRACT: ELECTRICAL
TITLE: HEADQUARTERS BUILDING ADDITION / RENOVATION
LOCATION: TROOP K HEADQUARTERS RT. 82 AND 44 POUGHKEEPSIE, NY 12603
CLIENT: NEW YORK STATE POLICE

MARK	DATE	DESCRIPTION
2	01/08/2021	ADDENDUM #4
1	12/23/2020	ADDENDUM #3
0	06/10/2020	BID/CONSTRUCTION DOCUMENTS

PROJECT NUMBER: **45649-E**
 DESIGNED BY: MT
 DRAWN BY: MT
 FIELD CHECK: DG
 APPROVED: DG
 SHEET TITLE: HEADQUARTERS AUDIOVISUAL SYSTEMS
 DRAWING NUMBER: TA-501-H
 SHEET 109 of 115

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LOCATION: TROOP K HEADQUARTERS
RT. 82 AND 44
POUGHKEEPSIE, NY 12603

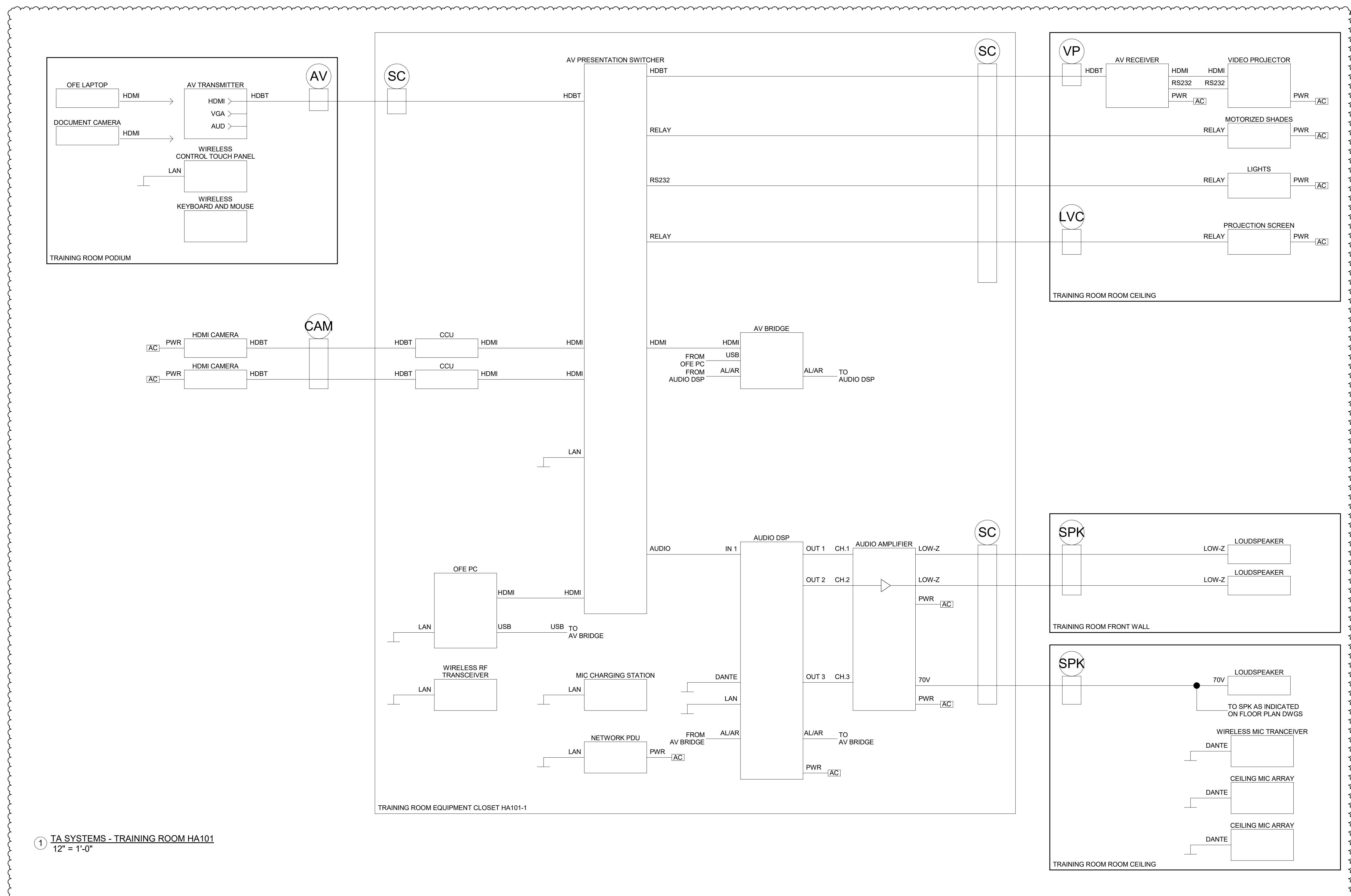
CLIENT: NEW YORK STATE POLICE

MARK	DATE	DESCRIPTION
1	01/08/2021	ADDENDUM #4
0	05/19/2020	BID/CONSTRUCTION DOCUMENTS

PROJECT NUMBER: **45649-E**
DESIGNED BY: MT
DRAWN BY: MT
FIELD CHECK: DG
APPROVED: DG

SHEET TITLE: HEADQUARTERS AUDIOVISUAL SYSTEMS

DRAWING NUMBER: TA-502-H



1 TA SYSTEMS - TRAINING ROOM HA101
12" = 1'-0"

1/11/2021 5:42:32 PM
RSH//RS_AB_LW_HAcomp.dwg/191510240_TroopK/Hn_arch_f01_191510240_R17.rvt
36x24 PLOT SHEET

ROOM	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	L/PD
110-1	illumiance	Fc	36.16	45.1	26.5	1.36	1.70	0.583
116	illumiance	Fc	43.06	51.6	31.0	1.39	1.66	0.661
111	illumiance	Fc	37.71	47.3	28.6	1.32	1.65	0.683
110-4	illumiance	Fc	22.95	32.7	16.0	1.43	2.04	0.583
113	illumiance	Fc	37.73	53.0	17.8	2.12	2.98	0.872
107-1	illumiance	Fc	18.37	28.4	10.6	1.73	2.68	0.644
107	illumiance	Fc	32.46	46.2	14.2	2.29	3.25	0.380
104	illumiance	Fc	37.87	45.8	24.2	1.56	1.89	0.700
152	illumiance	Fc	28.63	43.3	15.2	1.88	2.85	0.000
150	illumiance	Fc	28.84	38.2	11.5	2.51	3.32	0.444
102	illumiance	Fc	27.40	37.5	16.4	1.67	2.29	0.467
114	illumiance	Fc	21.88	32.5	13.3	1.65	2.44	0.644
115	illumiance	Fc	23.09	32.9	14.8	1.56	2.22	0.668
116	illumiance	Fc	21.87	32.6	13.3	1.64	2.45	0.661
100	illumiance	Fc	26.38	34.1	18.0	1.47	1.89	0.309
109	illumiance	Fc	33.89	43.1	21.3	1.59	2.02	0.368
101	illumiance	Fc	27.46	37.6	16.3	1.68	2.31	0.469
126	illumiance	Fc	42.19	85.1	18.6	2.27	4.58	0.000
158	illumiance	Fc	31.95	40.0	25.7	1.24	1.56	1.044
110	illumiance	Fc	61.16	77.5	27.8	2.20	2.79	0.583
159	illumiance	Fc	32.59	44.9	13.5	2.41	3.33	0.529
157	illumiance	Fc	26.09	34.6	15.2	1.72	2.28	0.450
106	illumiance	Fc	41.47	46.3	36.0	1.15	1.29	0.662
105	illumiance	Fc	41.41	46.2	36.0	1.15	1.28	0.663
111-1	illumiance	Fc	24.69	35.6	13.0	1.90	2.74	0.782
101-1	illumiance	Fc	27.08	32.9	22.7	1.19	1.45	0.998
112	illumiance	Fc	40.94	58.8	18.4	2.23	3.20	0.553
159-1	illumiance	Fc	42.99	51.1	30.0	1.43	1.70	0.696
154	illumiance	Fc	23.17	30.0	17.4	1.33	1.72	0.457
153	illumiance	Fc	25.59	32.0	20.3	1.26	1.58	0.000
151	illumiance	Fc	22.86	30.5	16.4	1.39	1.86	0.371
117	illumiance	Fc	28.77	40.6	16.7	1.72	2.43	0.663
156	illumiance	Fc	26.23	34.8	15.8	1.66	2.20	0.394

Type Mark	Description	Manufacturer	Catalog #	Wattage
A	25'x4' SUSPENDED PENDANT	CREE	LS4-40L-35K-10V	40 W
B	2x2 RECESSED LED TROFFER	CREE	ZR22C-32L-35K-10V-FD	25 W
B4	2x2 RECESSED LED TROFFER	CREE	ZR22C-40L-35K-10V-FD	25 W
B4E	SAME AS FIXTURE B4 WITH AN EMERGENCY BATTERY PACK	CREE	ZR22C-40L-35K-10V-FD	62 W
BE	SAME AS FIXTURE B WITH AN EMERGENCY BATTERY PACK	CREE	SAME AS FIXTURE 'B' WITH EMERGENCY BACKUP	25 W
C	1x4 LED WRAPAROUND	CREE	4WSNLED-LD4-60HL-F-UNV-L840	41 W
E	EMERGENCY EXIT LED LIGHTING FIXTURE	EATON	APXH7-R-2	1 W
E1	SAME AS FIXTURE 'E' WITH EATON-APWR2 REMOTE LED EMERGENCY HEADS. OR APPROVED EQUAL.	EATON	APXH7-R-2-APWR2	1 W
EP	LED EMERGENCY WALLPACK WITH TWO INDIVIDUAL HEADS.	EATON	APELH2	1 W
G	6" CIRCULAR DOWNLIGHT	CREE	KR6-8L-35K-27V	18 W
L1	LED STRIP SHOWCASE LIGHTING	BEYOND	106781	31 W
S	RECESSED DOWNLIGHT (SHOWER)	EATON	SMD6-R69-35WH	10 W
U	3' LED COVE LIGHTING	EATON	0.03-5W-840-90-ID-STD-UNV-AN-SM-3F0	15 W
W	WALL MOUNT EXTERIOR LED WALLPACK	EATON	LDPW-GL-48-120V	32 W
WD	EXTERIOR CANOPY DOWNLIGHT: 1X1'	LIGHTIDE	LT-SSSAL-40W (EM)	40 W
WE	SAME AS FIXTURE 'W' WITH EMERGENCY BATTERY PACK	EATON	LDPW-GL-48-120V-EMLED-CD	32 W

SITE GENERAL NOTES

- PRIOR TO ANY EXCAVATION, LOCATE ALL EXISTING UTILITIES.
- ALL CONDUITS UNDER PARKING OR DRIVING AREAS SHALL BE GRS OR CONCRETE ENCASED. PROVIDE GRS 90 DEGREE SWEEPS AND PVC TO GRS ADAPTERS AS REQUIRED.

LIGHTING GENERAL NOTES

- OCCUPANCY SENSOR LOCATIONS SHALL BE DETERMINED IN THE FIELD TO ACHIEVE OPTIMAL PERFORMANCE. PERFORM ALL SENSITIVITY AND AIMING ADJUSTMENTS.

FIRE ALARM GENERAL NOTES

- PROVIDE FAN SHUTDOWN RELAYS FOR ALL FANS OVER 2000 CFM. VERIFY CFM ON MECHANICAL SCHEDULES AND PROVIDE SHUTDOWNS AS REQUIRED.
- DO NOT INSTALL SMOKE DETECTORS WITHIN 3 FEET OF SUPPLY AND RETURN DIFFUSERS.
- PROVIDE INDEPENDENT CABLE SUPPORTS FOR FIRE ALARM CABLE. ALL EXPOSED FIRE ALARM CABLE SHALL BE RUN IN CONDUIT OR SURFACE RACEWAY AND BE INDEPENDENT OF ALL OTHER CABLES.

ELECTRICAL SYMBOLS

- 120V DUPLEX RECEPTACLE ABOVE THE COUNTER
- 120V DOUBLE DUPLEX RECEPTACLE
- 120V DUPLEX RECEPTACLE WITH GROUND FAULT INTERRUPTOR, WP DENOTES WEATHER PROTECTION
- FLOOR BOX 120V DUPLEX RECEPTACLE
- 120V CORD REEL DROP DOWN RECEPTACLE
- DOORBELL TRANSFORMER
- DOORBELL RINGER PUSHBUTTON
- DOORBELL
- SINGLE POLE SWITCH "X" DENOTES SWITCH DESIGNATION
- SINGLE POLE SWITCH "D" DENOTES DIMMER
- OCCUPANCY SENSOR
- PHOTOCELL
- WALL MOUNTED OCCUPANCY SENSOR
- STROBE HORN SIGNAL # DENOTES CANDELA RATING
- STROBE SIGNAL # DENOTES CANDELA RATING
- MANUAL PULL STATION
- REMOTE GAS ANNUNCIATION STROBE
- TELEDATA OUTLET
- FLOOR BOX DATA RECEPTACLE
- JUNCTION BOX
- CEILING MOUNTED SMOKE DETECTOR
- IN DUCT SMOKE DETECTOR
- CEILING MOUNTED HEAT DETECTOR
- CARBON MONOXIDE SENSOR WITH SOUNDER BASE
- IN USE LIGHT
- MOTOR RATED SNAP SWITCH
- AUTOMATIC DOOR OPEN PUSH BUTTON
- DISCONNECT SWITCH, 30A, NEMA 1 UNLESS OTHERWISE NOTED, WP INDICATES NEMA 3R, AF DENOTES FRAME SIZE.
- FUSED DISCONNECT SWITCH, 30A, NEMA 1 UNLESS OTHERWISE NOTED, WP INDICATES NEMA 3R, AF DENOTES FRAME SIZE AND AT DENOTES FUSE AMP RATING.
- WALL MOUNTED EXIT LIGHT.
- CEILING MOUNTED EXIT LIGHT.
- GLASS BREAK EMERGENCY SHUT-OFF
- INTERFACE MODULE
- 2' X 4' LIGHT FIXTURE, SHADING INDICATES EMERGENCY BALLAST. 'X' INDICATES FIXTURE TYPE, '#' INDICATES CIRCUIT DESIGNATION, 'a' INDICATES SWITCH DESIGNATION
- 2' X 2' LIGHT FIXTURE, SHADING INDICATES EMERGENCY BALLAST. 'X' INDICATES FIXTURE TYPE, '#' INDICATES CIRCUIT DESIGNATION, 'a' INDICATES SWITCH DESIGNATION
- FIRE ALARM ANNUNCIATOR PANEL
- FIRE ALARM CONTROL PANEL
- NOTIFICATION APPLIANCE CIRCUIT PANEL
- TAMPER SWITCH
- FLOW SWITCH
- DIRECT DIGITAL BUILDING CONTROL SYSTEM PANEL

SECURITY SYMBOLS

- 270 DEGREE SECURITY CAMERA
- CARD READER
- DOOR CONTACT SENSOR
- GLASS BREAK SENSOR
- WINDOW CONTACT
- INTERCOM CALL
- ELECTRIFIED LOCKING HARDWARE
- REQUEST TO EXIT DEVICE FOR ALARM SHUNTING
- PANIC BUTTON
- ARMING BUTTON
- MOTION DETECTOR
- TRANSFER HINGE

NOTES

- PROVIDE JUNCTION BOX FOR EACH DEVICE.
- PROVIDE MINIMUM 1" CONDUIT WITH NYLON PULL STRING FROM JUNCTION BOX TO 6' ABOVE NEAREST HUNG CEILING IN CORRIDOR.
- REFER TO SECURITY SYSTEM DRAWINGS FOR ADDITIONAL SCOPE OF WORK AND MOUNTING HEIGHT.
- REFER TO SECURITY SYSTEM DETAILS AND PROVIDE EMPTY CONDUITS FOR ELECTRIC STRIKE, HATCH, DOOR CONTACT, ETC AND WIRING TROUGH FOR SECURITY SYSTEM WIRING.

GENERAL ELECTRICAL NOTES

- THE ENTIRE INSTALLATION SHALL BE IN ACCORDANCE WITH THE 2014 EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) THAT IS REFERENCED BY THE NEW YORK STATE UNIFORM CODE AND 2017 UNIFORM CODE SUPPLEMENT.
- THE WORD "PROVIDE" SHALL BE DEFINED ON ALL DRAWINGS AND SPECIFICATIONS TO BE PURCHASED, INSTALLED, WIRED, TESTED, ETC. AND SUPPLY ALL LABOR AND MATERIALS FOR A COMPLETE INSTALLATION. WHETHER OR NOT SHOWN, THE CONTRACTOR SHALL PROVIDE ALL APPURTENANCES, ACCESSORIES, AND COMPONENTS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.
- IN THE AREAS WHERE PROPOSED CONSTRUCTION MAY CONFLICT WITH EXISTING UTILITIES, THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO THESE UTILITIES.
- ANY CONDUIT ROUTING SHOWN ON THESE DRAWINGS ARE DIAGRAMMATIC ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL ROUTING AND PENETRATIONS WITH DIRECTOR'S REPRESENTATIVE AND ARCHITECT PRIOR TO INSTALLATION.
- CONTRACTOR SHALL PROVIDE PULL BOXES REQUIRED TO FACILITATE CABLE PULLING AND IN ACCORDANCE WITH NEC AND MANUFACTURER'S RECOMMENDATIONS. CABLE PULLING TENSIONS SHALL BE MEASURED WITH A DYNAMOMETER AND SHALL NOT EXCEED CONDUCTOR MANUFACTURER'S RECOMMENDATIONS.
- ALL ELECTRICAL WORK SHALL BE PERFORMED BY OR UNDER THE SUPERVISION OF A MASTER ELECTRICIAN LICENSED IN A NEW YORK STATE MUNICIPALITY.
- PROVIDE #12 ALUMINUM COPPER AND #10 COPPER GROUND WIRING FOR BRANCH CIRCUITS EXCEEDING 100 FEET UNLESS OTHERWISE NOTED.
- COORDINATE DEVICE LOCATIONS WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN. VERIFY DEVICE LOCATIONS ABOVE MILLWORK TO ENSURE CLEARANCE ABOVE THE COUNTER TOP AND BACKSPLASH. DEVICES THAT INTERFERE WITH NEW CASEWORK, MILLWORK, OR EQUIPMENT SHALL BE RELOCATED AT NO ADDITIONAL COST TO THE CONTRACT.
- COORDINATE ALL CONDUIT RUNS WITH OTHER TRADES PRIOR TO ROUGH-IN. RELOCATE ANY CONDUITS AS NECESSARY TO PERMIT INSTALLATION OF DUCTWORK OR PIPING.
- DO NOT INSTALL NORMAL AND EMERGENCY POWER IN THE SAME RACEWAY. JUNCTION BOX, OR OUTLET BOX. PROVIDE SEPARATE OR SEGREGATED RACEWAY SYSTEMS. ALL EMERGENCY CONDUIT AND BOXES SHALL BE IDENTIFIED WITH BLUE PAINT ON OUTLET BOXES AND EVERY 50 FEET ON CONDUIT ABOVE CEILING.
- ALL LOW VOLTAGE CABLE SHALL BE PLENUM RATED.
- THE DRAWINGS SHOW GENERAL LOCATION OF DEVICES AND CONTROL EQUIPMENT. INSTALL ALL DEVICES AND CONTROLS TO MEET ALL NEC REQUIREMENTS. COORDINATE EXACT LOCATION IN THE FIELD.
- PROVIDE CONCRETE HOUSEKEEPING PADS FOR ALL FLOOR MOUNTED EQUIPMENT.
- BUILDING HAS A SEISMIC DESIGN CATEGORY OF C, BUILDING RISK CATEGORY IV, AND HAS AN IMPORTANCE FACTOR OF 1.5. ALL BUILDING SYSTEMS MUST BE SEISMICALLY BRACED. REFER TO SPECIFICATIONS FOR REQUIREMENTS. CONTRACTOR TO RETAIN AN INDEPENDENT NYS LICENSED ENGINEER TO DESIGN THE CONNECTIONS AND BRACING FOR ALL EQUIPMENT ATTACHED TO THE STRUCTURE.

ELECTRICAL ABBREVIATIONS

- A AMPERE, AMP
- AC ABOVE COUNTER
- ACP ACCESS CONTROL PANEL
- ADA AMERICANS WITH DISABILITIES ACT
- AF AMPERE FRAME SIZE
- AFP ABOVE FINISHED FLOOR
- AFG ABOVE FINISHED GRADE
- APPROX APPROXIMATELY
- AT AMPERE TRIP SIZE
- ATS AUTOMATIC TRANSFER SWITCH
- AWG AMERICAN WIRE GAUGE
- BFG BELOW FINISHED GRADE
- BLDG BUILDING
- C CONDUIT
- CBW COMPLETE WITH CIRCUIT BREAKER
- CKT CIRCUIT
- DISC DISCONNECT
- DIV DIVISION
- DWG DRAWING
- EC ELECTRICAL CONTRACTOR
- EM EMERGENCY
- EMT ELECTRICAL METALLIC TUBING
- EOL END OF LINE
- EXR EXISTING TO REMAIN
- FSS FUSED SAFETY SWITCH
- FA FIRE ALARM
- FAAP FIRE ALARM ANNUNCIATOR PANEL
- FT FOOT, FEET
- GC GENERAL CONTRACTOR
- GEN GENERATOR
- GND GROUND
- GP GENERAL PURPOSE
- ID INSIDE DIAMETER
- IN INCH
- JB JUNCTION BOX
- LTG LIGHTING
- KV KILOVOLT
- KVA KILOVOLT AMPERE
- KW KILOWATT
- MANF MANUFACTURER
- MAX MAXIMUM
- MC MECHANICAL CONTRACTOR
- MCB MAIN CIRCUIT BREAKER
- MCC MOTOR CONTROL CENTER
- MIN MINIMUM
- MLO MAIN LUGS ONLY
- MM MILLIMETER
- MTD MOUNTED
- NAC NOTIFICATION APPLIANCE CIRCUIT
- NEC NATIONAL ELECTRICAL CODE
- NIC NOT IN CONTRACT
- NTS NOT TO SCALE
- OCPD OVERCURRENT PROTECTION DEVICE
- OD OUTSIDE DIAMETER
- O&M OPERATION & MAINTENANCE
- PC PLUMBING CONTRACTOR
- PH PHASE, O
- PSD POWER SUPPLY DEVICES
- PSL POWER SUPPLY LOCKS
- PTZ PAN TILT ZOOM
- RGS RIGID GALVANIZED STEEL
- RM ROOM
- RMC RIGID METALLIC CONDUIT
- SCHS SCHEDULE
- SLC SIGNALING LINE CIRCUIT
- TYP TYPICAL
- UNO UNLESS NOTED OTHERWISE
- V VOLTAGE, VOLT
- W WATTAGE, WATT
- W WITH
- XFMR TRANSFORMER

ENERGY CONSERVATION CODE STATEMENT

2015 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE AND THE 2016 ENERGY CONSERVATION CODE SUPPLEMENT AS ADOPTED BY NEW YORK STATE

"TO THE BEST OF MY KNOWLEDGE, BELIEF, AND PROFESSIONAL JUDGEMENT, THE PLANS AND SPECIFICATIONS BEARING MY RESPECTIVE PROFESSIONAL SEAL AND SIGNATURE ARE IN COMPLIANCE WITH THE ENERGY CODE."

ELECTRICAL EQUIPMENT LABELING

WARNING LABELS AND SIGNS SHALL INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

- MULTIPLE POWER SOURCE WARNING: "DANGER - ELECTRICAL SHOCK HAZARD - EQUIPMENT HAS MULTIPLE POWER SOURCES."
- ALL WORKSPACE CLEARANCES SHALL BE IN ACCORDANCE WITH NEC SECTION 110.26. WORKSPACE CLEARANCE WARNING: "WARNING - OSHA REGULATION - AREA IN FRONT OF ELECTRICAL EQUIPMENT MUST BE KEPT CLEAR FOR 36 INCHES."
- ARC FLASH WARNING: LABEL EQUIPMENT THAT RUNS 50V OR MORE AND THAT IS LIKELY TO BE SERVICED WHILE ENERGIZED WITH "ARC FLASH HAZARD- APPROPRIATE PPE REQUIRED" OR SIMILAR WORDING.

ELECTRICAL ENCLOSURE REQUIREMENTS

- NEMA RATING: FOR OUTDOOR LOCATIONS ABOVE GRADE, PROVIDE NEMA 4 ENCLOSURES AND PARTS ATTACHED THERETO (E.G., BREATHER DRAIN).
- ALL ELECTRICAL ENCLOSURES SHALL HAVE A KEY LOCK.

ELECTRICAL EQUIPMENT NOTES

THE PLANS ARE DIAGRAMMATIC AND ARE NOT TO BE SCALED. THE LOCATIONS OF EQUIPMENT AND THE ROUTING OF WIRING AND CONDUITS SHOWN ARE APPROXIMATE. THE EC SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS IN THE FIELD PRIOR TO ORDERING LENGTHS.

NEW YORK STATE OFFICE OF General Services

DESIGN & CONSTRUCTION

CONSULTANT

Stantec
3 Columbia Circle Suite 6
Albany, NY 12203-5158
www.stantec.com

WARNING:
THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AND ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT, FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS "A" MISDEAMOR.

STATE OF NEW YORK
BRAND L. LINEBROOK
081529
LICENSED PROFESSIONAL ENGINEER

CONTRACT: **ELECTRICAL**

TITLE: **PROVIDE FORENSIC IDENTIFICATION UNIT BUILDING & HEADQUARTERS BUILDING ADDITION / RENOVATION**

LOCATION: **TROOP K HEADQUARTERS RT. 82 AND 44 POUGHKEEPSIE, NY 12603**

CLIENT: **NEW YORK STATE POLICE**

1	01/08/2021	ADDENDUM #4
0	05/10/2020	BID/CONSTRUCTION DOCUMENTS
MARK	DATE	DESCRIPTION

PROJECT NUMBER: **45649-E**

DESIGNED BY: **GL**

DRAWN BY: **NB**

FIELD CHECK: **RB**

APPROVED: **RW**

SHEET TITLE: **FORENSIC IDENTIFICATION UNIT LEAD SHEET / FIXTURE SCHEDULE**

DRAWING NUMBER: **E-000-F**

SHEET **89** OF **117**



WARNING:
THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AND ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT, FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS 'A' MISDEAMOR.



CONTRACT: **ELECTRICAL**
TITLE: **PROVIDE FORENSIC IDENTIFICATION UNIT BUILDING & HEADQUARTERS BUILDING ADDITION / RENOVATION**
LOCATION: **TROOP K HEADQUARTERS RT. 82 AND 44 POUGHKEEPSIE, NY 12603**
CLIENT: **NEW YORK STATE POLICE**

PROJECT NUMBER:	45649-E		
DESIGNED BY:	GL	DATE:	12/23/2020
DRAWN BY:	NB	DATE:	06/10/2020
FIELD CHECK:	RW	DATE:	
APPROVED:		DATE:	
SHEET TITLE:	FORENSIC IDENTIFICATION UNIT PANEL SCHEDULES		
DRAWING NUMBER:	E-002-F		
SHEET	91	OF	117

Stantec Name: FMDP Location: TELE / ELEC 159-1 Supply From: ATS Serves: Notes:

Volts: 208Y/120V Phases: 3 Wires: 4

Mains Type: M.C.B. Mains Rating: 600 A

Type: AIC Rating: 65,000 Mounting: Surface Enclosure: Type 1

CKT	Circuit Description	Wre Size	Trips	Pole s	CB	A	B	C	CB	Pole s	Trips	Wre Size	Circuit Description	CKT
1	PP1 PANEL	(4) #2 #10G IN 1-1/2"C	100	3		14026	0			3	30 A	(3) #10 #10G IN 3/4"C	TVSS	2
3							12496	0						4
5								12116	0					6
7	PP2 PANEL	(4) #250KCMIL #4G IN..	225	3		21367	0			3	100...		Spare	8
9							22057	0						10
11								20182	0					12
13	LPF1 PANEL	(4) #5 #10G IN 1-1/2"C	50 A	3		4292	0			3	50 A		Spare	14
15							3898	0						16
17								2983	0					18
19	PP3 PANEL	(4) #250KCMIL #4G IN..	225	3		26072	0			3	20 A		Spare	20
21							27607	0						22
23								24423	0					24
25	FIU-ACCU-6	(3)#2 #8G IN 1-1/2"C	100...	3		9000								26
27							9000							28
29								9000						30
31	FIU-ACCU-1	(3)#3 #8G IN 1-1/4"C	80 A	3		7800								32
33							7800							34
35								7800						36
37														38
39														40
41														42
Total Load:						81.80 KVA	81.62 KVA	74.36 KVA						
Total Amps:						691 A	690 A	620 A						

Load Classification

	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Lighting	5948 VA	125.00%	7435 VA	
Lighting - Dwelling Unit	3054 VA	98.85%	3019 VA	Total Conn. Load: 237707 VA
Lighting - Exterior	736 VA	125.00%	920 VA	Total Est. Demand: 184878 VA
Other	60973 VA	100.00%	60973 VA	Total Conn.: 660 A
Power	104826 VA	70.00%	73378 VA	Total Est. Demand: 513 A
Receptacle	56100 VA	58.91%	33050 VA	
Power Data room	24960 VA	88.01%	21968 VA	
DDC PANEL	4900 VA	100.00%	4900 VA	

CB Legend (blank = circuit breaker):
G = GFCL S = Shunt Trip D = Switching Duty A = AFCI H = HID Rated C = HACR Rated ↑ = Existing Circuit ↓ = Revised Circuit

Stantec Name: PP1 Location: GARAGE 111 Supply From: FMDP Serves: Notes:

Volts: 208Y/120V Phases: 3 Wires: 4

Mains Type: M.L.O. Mains Rating: 100 A

Type: AIC Rating: 22,000 Mounting: Surface Enclosure: Type 1

CKT	Circuit Description	Wre Size	Trips	Pole s	CB	A	B	C	CB	Pole s	Trips	Wre Size	Circuit Description	CKT
1	RCPT - 101	(2) #12 #12G IN 3/4"C	20 A	1		720	500			1	20 A	(2) #12 #12G IN 3/4"C	RCPT - 100	2
3	RCPT - 101	(2) #12 #12G IN 3/4"C	20 A	1				720	1080		1	20 A	(2) #12 #12G IN 3/4"C	4
5	RCPT - 101	(2) #12 #12G IN 3/4"C	20 A	1				360	1800		1	20 A	(2) #12 #12G IN 3/4"C	6
7	RCPT - 101	(2) #12 #12G IN 3/4"C	20 A	1		360	1440				1	20 A	(2) #12 #12G IN 3/4"C	8
9	RCPT - 101	(2) #12 #12G IN 3/4"C	20 A	1				180	0		1	20 A	(2) #12 #12G IN 3/4"C	10
11	Spare		20 A	1				0	0		1	20 A		12
13	RCPT - 110	(2) #12 #12G IN 3/4"C	20 A	1		540	0				1	20 A		14
15	DOOR POWER SUPPLY		20 A	1			500	500			1	20 A	(2) #12 #12G IN 3/4"C	16
17	RCPT - 110-1	(2) #12 #12G IN 3/4"C	20 A	1				1260	500		1	20 A	(2) #12 #12G IN 3/4"C	18
19	RCPT - 110	(2) #12 #12G IN 3/4"C	20 A	1		360	0				1	20 A	(2) #12 #12G IN 3/4"C	20
21	RCPT - Power Rack	(2) #12 #12G IN 3/4"C	20 A	1				180	1080		1	20 A	(2) #12 #12G IN 3/4"C	22
23	Power Door 151 - 153	(2) #12 #12G IN 3/4"C	20 A	1				600	540		1	20 A	(2) #12 #12G IN 3/4"C	24
25	RCPT - 100	(2) #12 #12G IN 3/4"C	20 A	1		990	720				1	20 A	(2) #12 #12G IN 3/4"C	26
27	RCPT - 111	(2) #12 #12G IN 3/4"C	20 A	1			1260	720			1	20 A	(2) #12 #12G IN 3/4"C	28
29	RCPT - 154,101-1	(2) #12 #12G IN 3/4"C	20 A	1				900	1260		1	20 A	(2) #12 #12G IN 3/4"C	30
31	RCPT - 111-3,117	(2) #12 #12G IN 3/4"C	20 A	1		1620	1800				1	20 A	(2) #12 #12G IN 3/4"C	32
33	RCPT - ...	(2) #12 #12G IN 3/4"C	20 A	1			1080	0			1	20 A		34
35	RCPT - 114,115,116,117	(2) #12 #12G IN 3/4"C	20 A	1				1080	900		1	20 A	(2) #12 #12G IN 3/4"C	36
37	FIU-AC-1	(3) #12 #12G IN 3/4"C	15 A	3		1188	1188				3	15 A	(3) #12 #12G IN 3/4"C	38
39							1188	1188						40
41								1188	1188					42
43	FP Fuming Cabinet	(2) #12 #12G IN 3/4"C	20 A	1		1920	500				1	20 A	(2) #12 #12G IN 3/4"C	44
45	Ninhydrin Chamber	(2) #10 #10G IN 3/4"C	30 A	1			2640	0			1	20 A		46
47	FP Development	(2) #12 #12G IN 3/4"C	20 A	1				360	0		1	20 A		48
49	Fume Hood	(2) #12 #12G IN 3/4"C	20 A	1		180	0				1	20 A		50
51	Fume Hood	(2) #12 #12G IN 3/4"C	20 A	1			180	0			1	20 A		52
53	Fume Hood	(2) #12 #12G IN 3/4"C	20 A	1				180			1	20 A		54
55	Spare		20 A	1		0								56
57	Spare		20 A	1				0						58
59	Spare		20 A	1				0						60
61	Spare		20 A	1		0								62
63	Spare		20 A	1				0						64
Total Load:						14.03 KVA	12.50 KVA	12.12 KVA						
Total Amps:						117 A	105 A	101 A						

Load Classification

	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Other	500 VA	100.00%	500 VA	
Power	9818 VA	70.00%	6873 VA	Total Conn. Load: 38638 VA
Receptacle	28320 VA	67.66%	19160 VA	Total Est. Demand: 26533 VA
				Total Conn.: 107 A
				Total Est. Demand: 74 A

CB Legend (blank = circuit breaker):
G = GFCL S = Shunt Trip D = Switching Duty A = AFCI H = HID Rated C = HACR Rated ↑ = Existing Circuit ↓ = Revised Circuit

Stantec Name: LPF1 Location: TELE / ELEC 159-1 Supply From: FMDP Serves: Notes:

Volts: 208Y/120V Phases: 3 Wires: 4

Mains Type: M.L.O. Mains Rating: 50 A

Type: AIC Rating: 65,000 Mounting: Surface Enclosure: Type 1

CKT	Circuit Description	Wre Size	Trips	Pole s	CB	A	B	C	CB	Pole s	Trips	Wre Size	Circuit Description	CKT
1	LTG - 100,101,104,105,106,107,108,109,110,111,112,113,114,115,116,117,118,119,120,121,122,123	(2) #12 #12G IN 3/4"C	20 A	1		1180	352			1	20 A	(2) #12 #12G IN 3/4"C	LTG - EXTERIOR	2
3		(2) #12 #12G IN 3/4"C	20 A	1				1398	562		1	20 A	(2) #12 #12G IN 3/4"C	4
5		(2) #12 #12G IN 3/4"C	20 A	1				1320	640		1	20 A	(2) #12 #12G IN 3/4"C	6
7	LTG - 111,112	(2) #12 #12G IN 3/4"C	20 A	1		1588	695				1	20 A	(2) #12 #12G IN 3/4"C	8
9	LTG - 117,116,115,114,113	(2) #12 #12G IN 3/4"C	20 A	1			1460	0			1	20 A		10
11	LTG - EXTERIOR	(2) #12 #12G IN 3/4"C	20 A	1				544	0		1	20 A		12
13	LTG - 112-1	(2) #12 #12G IN 3/4"C	20 A	1		500	0				1	20 A		14
15	LTG - 112-2	(2) #12 #12G IN 3/4"C	20 A	1			500	0			1	20 A		16
17	LTG - 111-3	(2) #12 #12G IN 3/4"C	20 A	1				500	0		1	20 A		18
19	Spare		20 A	1		0	0				1	20 A		20
21	Spare		20 A	1		0	0				1	20 A		22
23	Spare		20 A	1		0	0				1	20 A		24
Total Load:						4.29 KVA	3.90 KVA	2.98 KVA						
Total Amps:						37 A	34 A	25 A						

Load Classification

	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Lighting	5948 VA	125.00%	7435 VA	
Lighting - Dwelling Unit	3054 VA	98.85%	3019 VA	Total Conn. Load: 11173 VA
Lighting - Exterior	736 VA	125.00%	920 VA	Total Est. Demand: 12808 VA
Receptacle	1500 VA	100.00%	1500 VA	Total Conn.: 31 A
				Total Est. Demand: 36 A

CB Legend (blank = circuit breaker):
G = GFCL S = Shunt Trip D = Switching Duty A = AFCI H = HID Rated C = HACR Rated ↑ = Existing Circuit ↓ = Revised Circuit

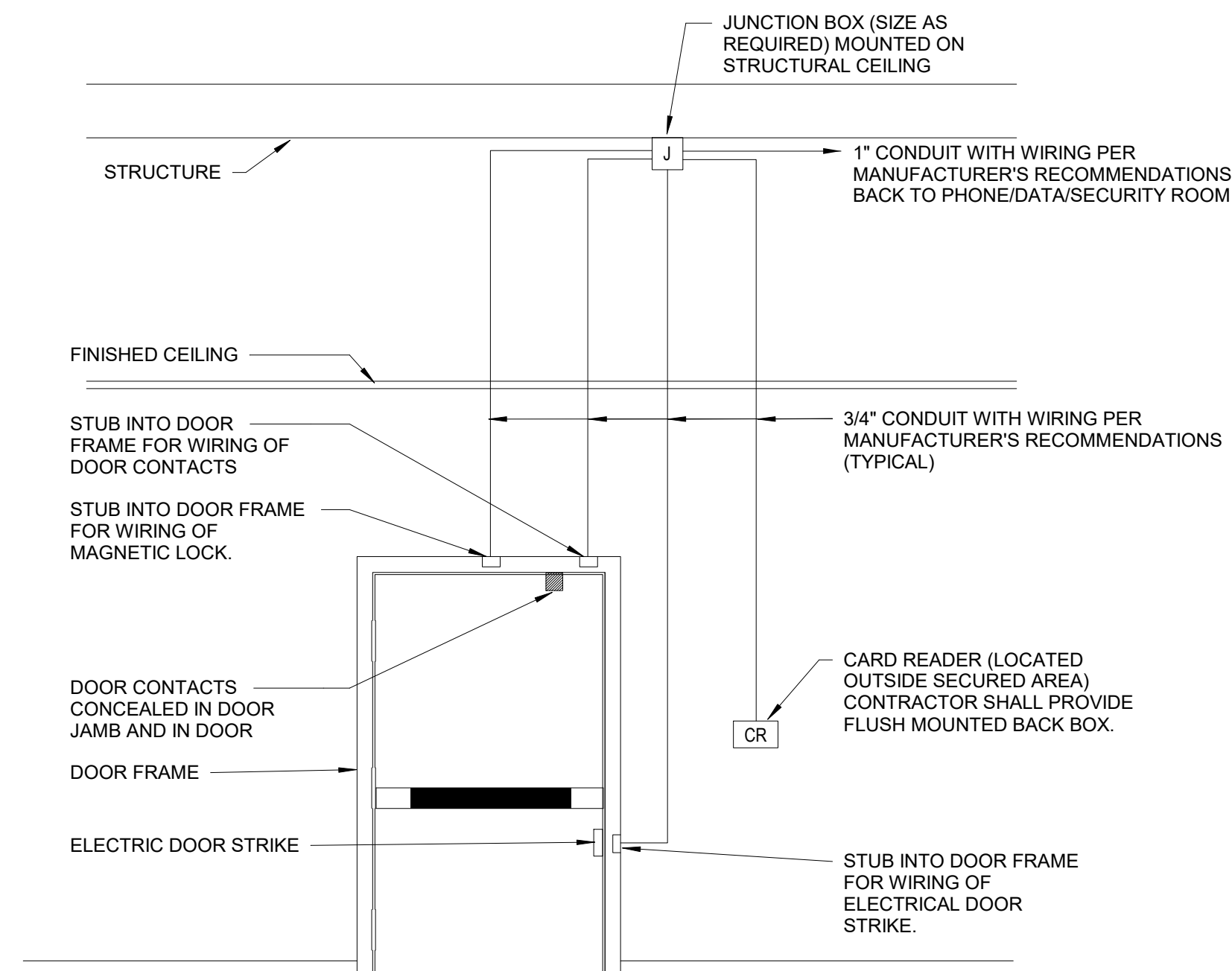
Stantec Name: PP2 Location: TELE / ELEC 159-1 Supply From: FMDP Serves: Notes:

Volts: 208Y/120V Phases: 3 Wires: 4

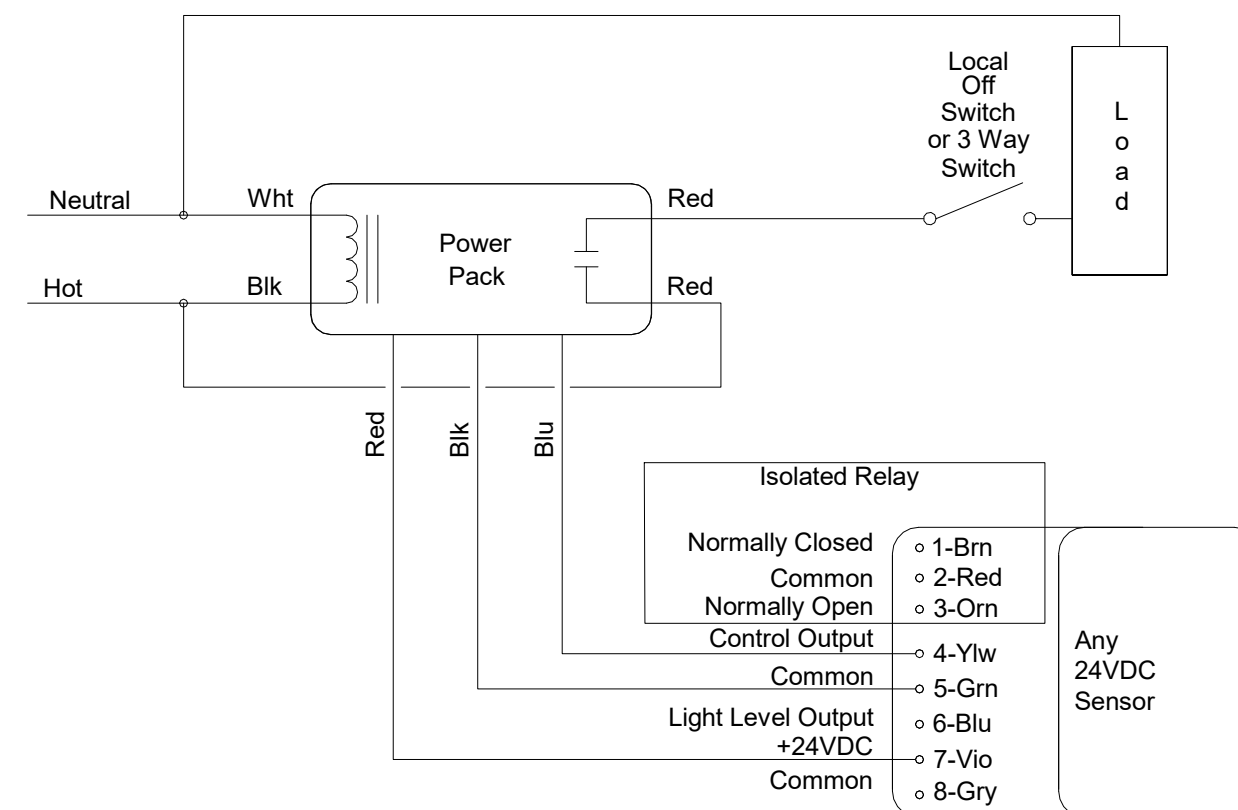
Mains Type: M.C.B. Mains Rating: 225 A

Type: AIC Rating: 65,000 Mounting: Surface Enclosure: Type 1

CKT	Circuit Description	Wre Size	Trips	Pole s	CB	A	B	M.L.O. C	CB	Pole s	Trips	Wre Size	Circuit Description	CKT
1	RCPT - 107	(2) #12 #12G IN 3/4"C	20 A	1		860	720			1	20 A	(2) #12 #12G IN 3/4"C	RCPT - 100	2
3	RCPT - 107	(2) #12 #12G IN 3/4"C	20 A	1			180	720		1	20 A	(2) #12 #12G IN 3/4"C	RCPT - 100	4
5	RCPT - 107	(2) #12 #12G IN 3/4"C	20 A	1				180	360		1	20 A	(2) #12 #12G IN 3/4"C	6
7	RCPT - 107	(2) #12 #12G IN 3/4"C	20 A	1		860	360							

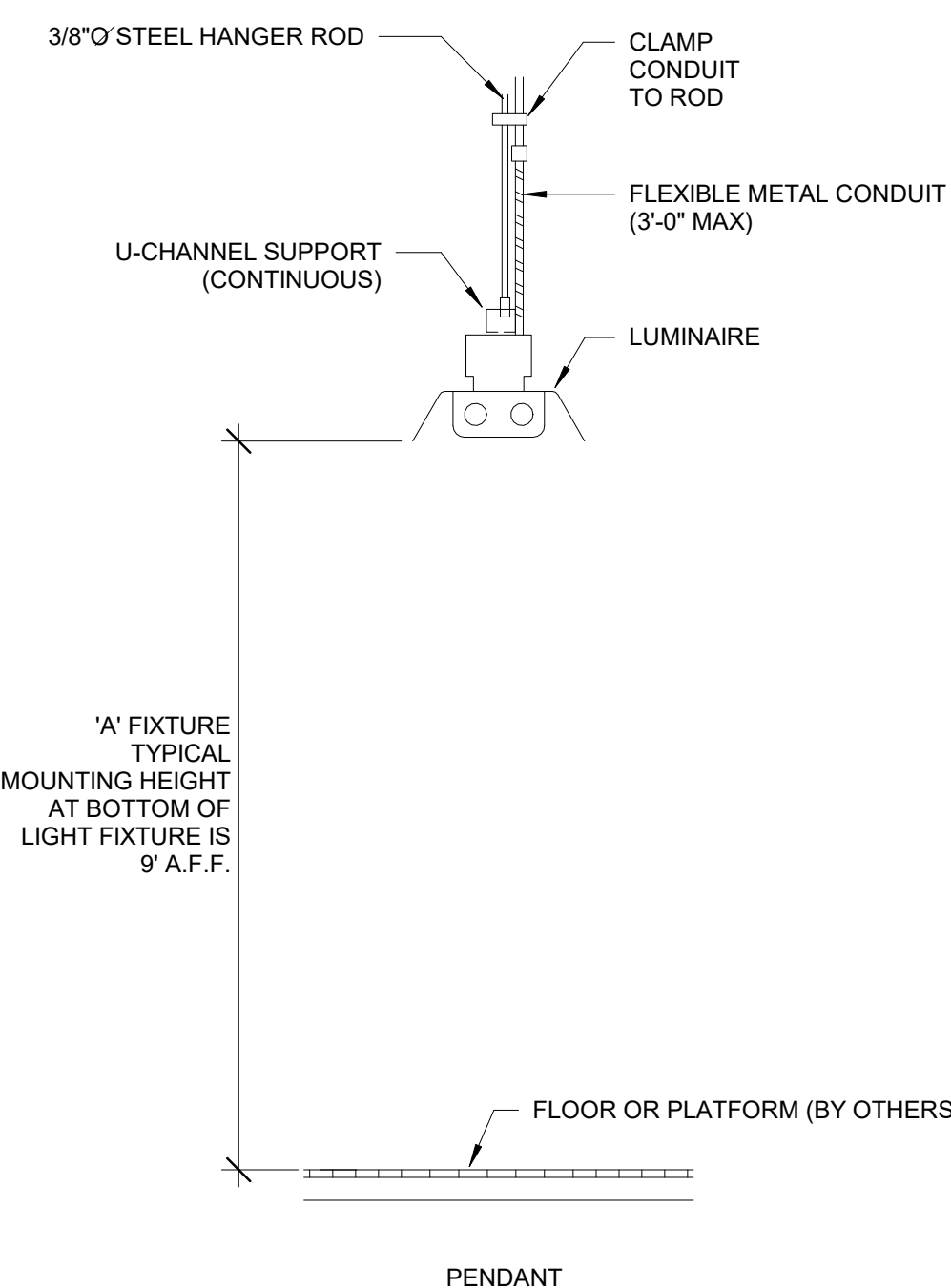


1 TYPICAL DOOR EXIT DEVICE WITH CARD READER
E-006-F N.T.S.

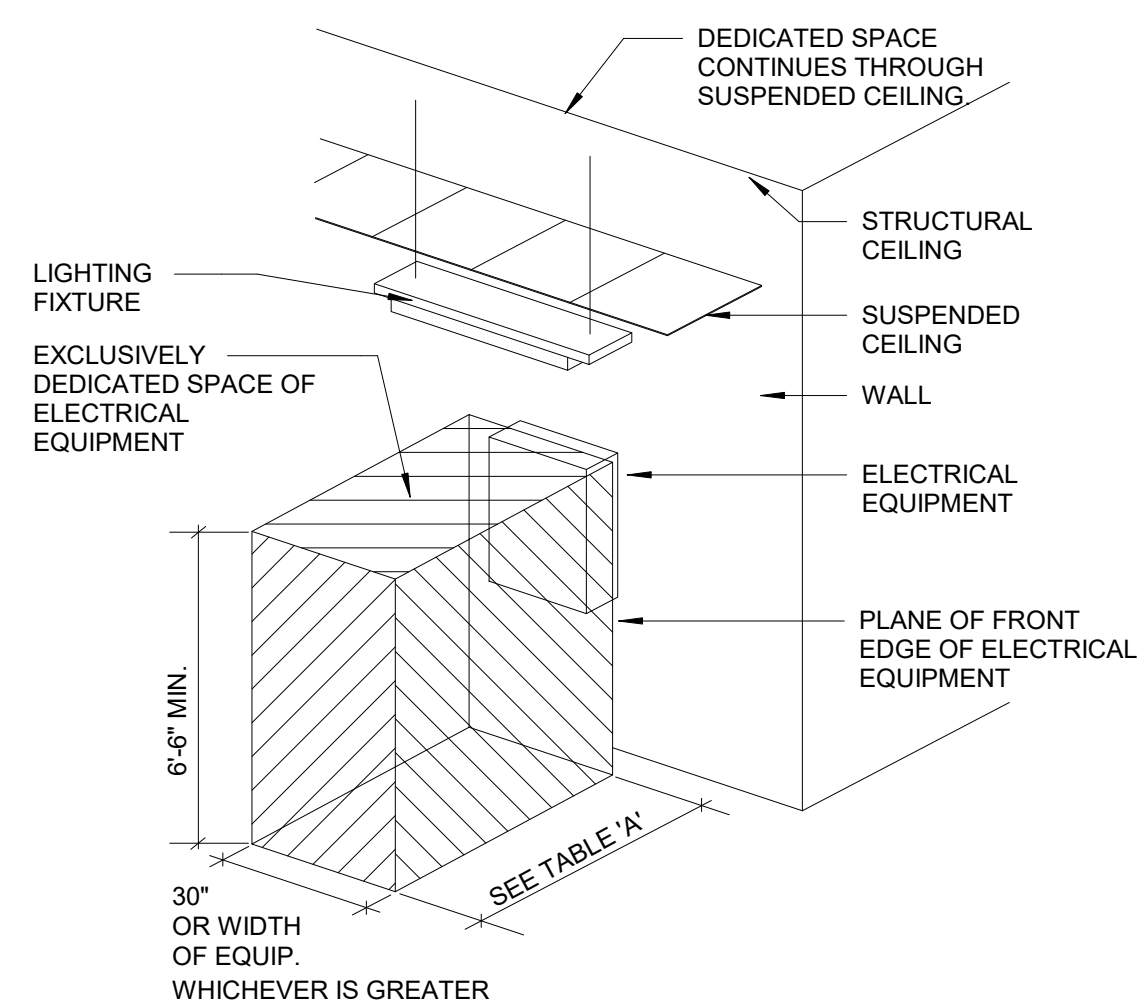


NOTES:
1. WIRE DIAGRAM BASIS OF DESIGN SHALL BE WATTSTOPPER "CX-100" SERIES.
2. ONE POWER PACK PER OCCUPANCY SENSOR.

2 CEILING MOUNTED OCCUPANCY SENSOR WIRING DIAGRAM
E-006-F N.T.S.



3 TYPICAL LED FIXTURE MOUNTING DETAIL
E-006-F N.T.S.



NOTES:
THIS FIGURE ILLUSTRATES THE WORKING SPACE IN FRONT OF THE ELECTRICAL EQUIPMENT AS REQUIRED BY THE NATIONAL ELECTRICAL CODE.
SEE 2017 N.E.C. FOR VOLTAGES GREATER THAN THOSE LISTED.
SEE 2017 N.E.C. FOR EXCEPTIONS TO TABLE 'A'.

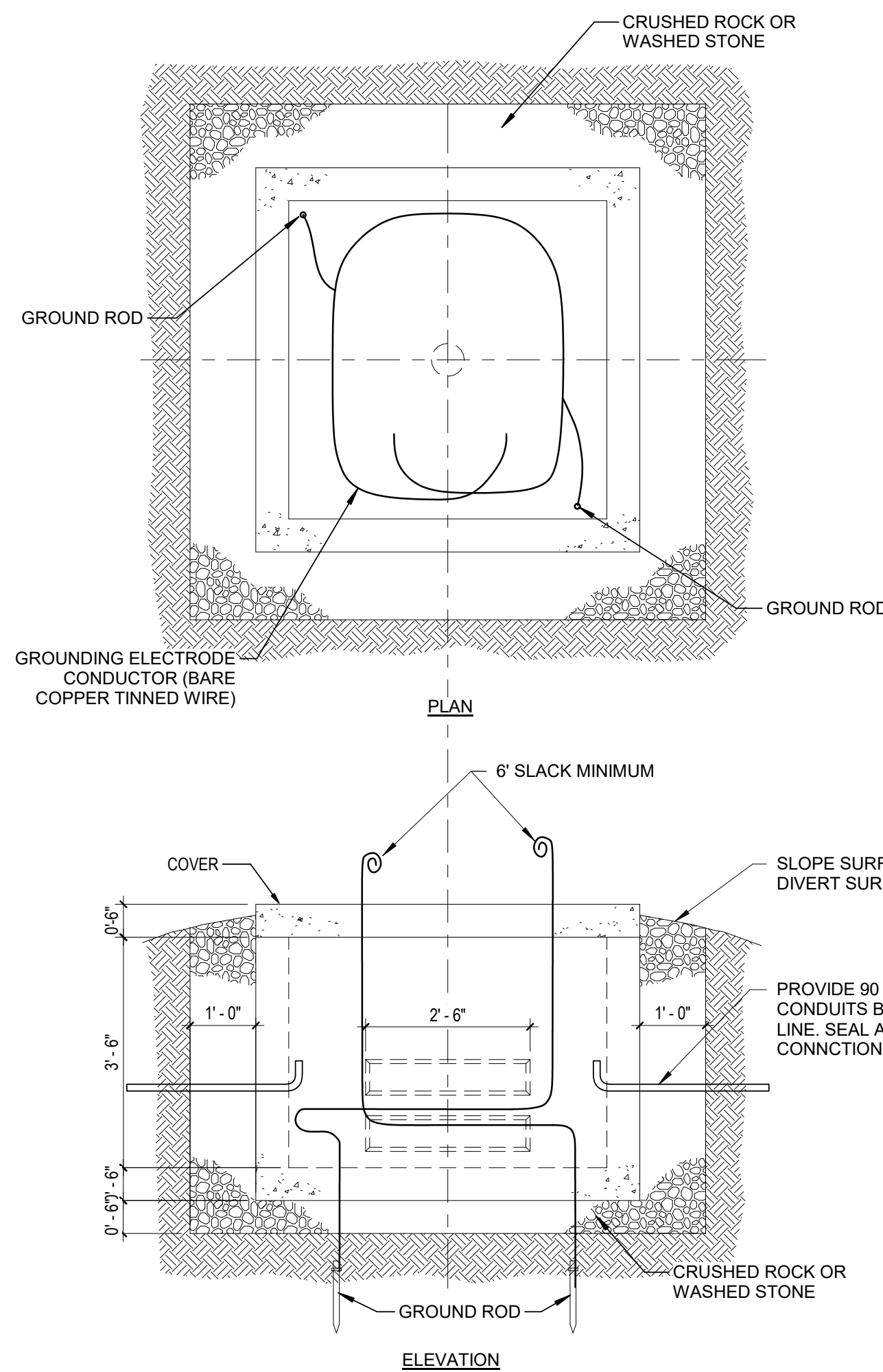
NEC 110.26 (A) (1) - WORKING CLEARANCES			
VOLTAGE TO GROUND NOMINAL	MINIMUM CLEAR DISTANCE (FEET)		
	CONDITION: 1	2	3
0 - 150	3	3	3
151 - 600	3	3.5	4

NEC 110.34 (A) - WORKING CLEARANCES			
VOLTAGE TO GROUND NOMINAL	MINIMUM CLEAR DISTANCE (FEET)		
	CONDITION: 1	2	3
601 - 2500	3	4	5
2501 - 9000	4	5	6
9001 - 25,000	5	6	9
25,001 - 75 kV	6	8	10
ABOVE 75kV	8	10	12

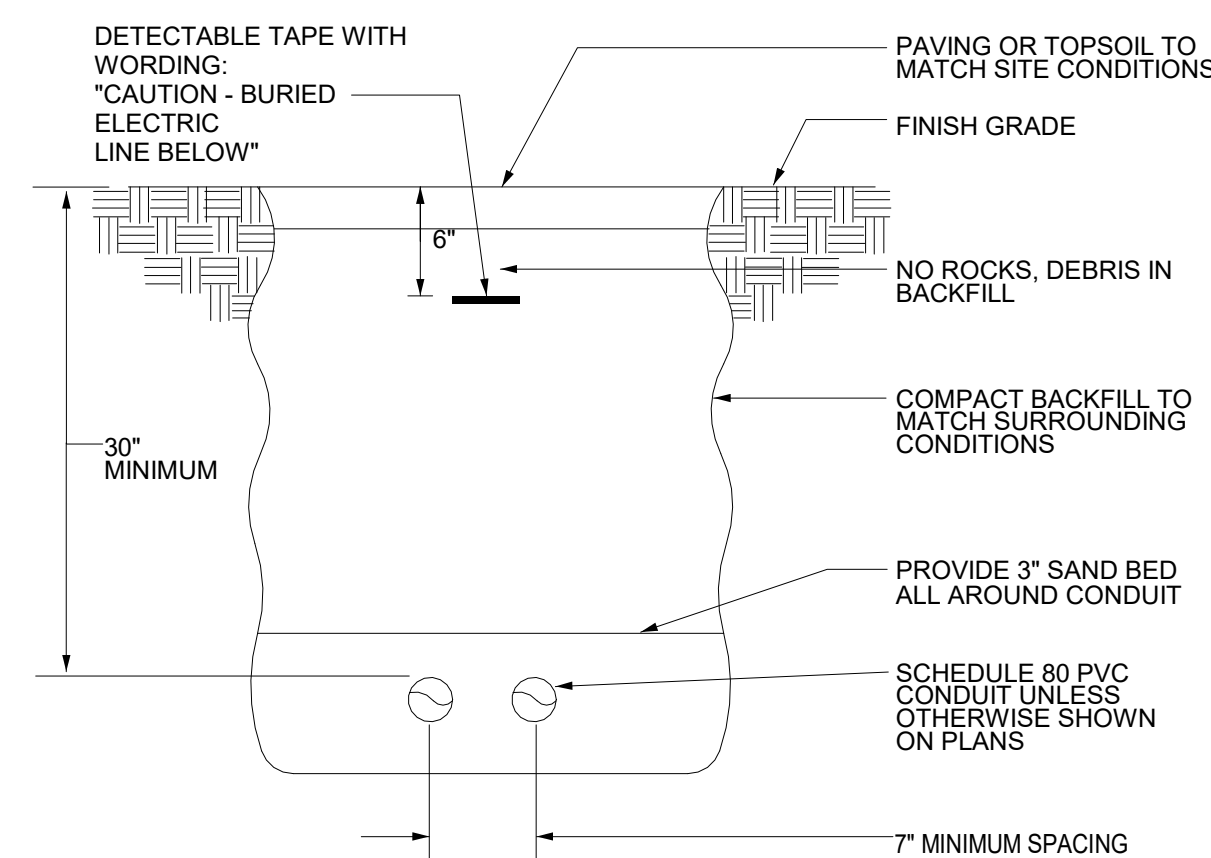
WHERE THE CONDITIONS ARE AS FOLLOWS:

1. EXPOSED LIVE PARTS ON ONE SIDE AND NO LIVE OR GROUNDED PARTS ON THE OTHER SIDE OF THE WORKING SPACE, OR EXPOSED LIVE PARTS ON BOTH SIDES EFFECTIVELY GUARDED BY SUITABLE WOOD OR OTHER INSULATING MATERIALS. INSULATED WIRE OR INSULATED BUSBARS OPERATING AT NOT OVER 300 VOLTS SHALL NOT BE CONSIDERED LIVE PARTS.
2. EXPOSED LIVE PARTS ON ONE SIDE AND GROUNDED PARTS ON THE OTHER SIDE.
3. EXPOSED LIVE PARTS ON BOTH SIDES OF THE WORK SPACE (NOT GUARDED AS PROVIDED IN CONDITION 1) WITH THE OPERATOR BETWEEN.

4 TYPICAL HORIZONTAL WORKING CLEARANCE
E-006-F N.T.S.

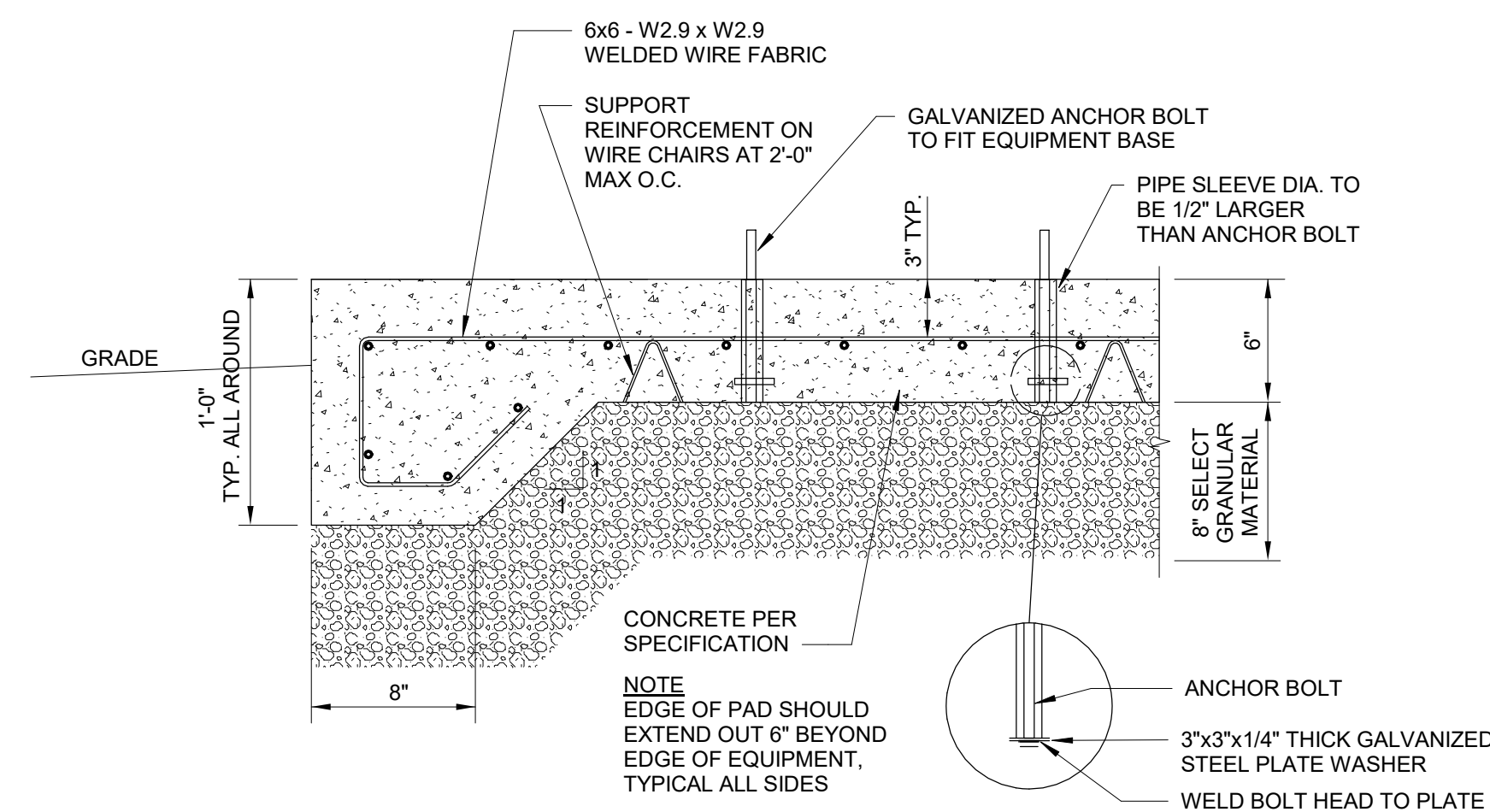


5 UTILITY TRANSFORMER PAD DETAIL
E-006-F N.T.S.



DETAIL NOTES:
A. READ THE SPECIFICATIONS.
B. REPAIR ALL SETTLEMENT.

6 TYPICAL UNDERGROUND CONDUIT DETAIL
E-006-F N.T.S.



7 TYP. EXTERIOR CONCRETE PAD DETAIL
E-006-F N.T.S.

WARNING:
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CONTRACT: ELECTRICAL
TITLE: PROVIDE FORENSIC IDENTIFICATION UNIT BUILDING & HEADQUARTERS BUILDING ADDITION / RENOVATION
LOCATION: TROOP K HEADQUARTERS RT. 82 AND 44 POUGHKEEPSIE, NY 12603
CLIENT: NEW YORK STATE POLICE

MARK	DATE	DESCRIPTION
1	01/08/2021	ADDENDUM #4
0	05/10/2020	BID/CONSTRUCTION DOCUMENTS

PROJECT NUMBER: **45649-E**
DESIGNED BY: GL
DRAWN BY: NB
FIELD CHECK:
APPROVED: RW
SHEET TITLE: FORENSIC IDENTIFICATION UNIT ELECTRICAL DETAILS 1/3
DRAWING NUMBER: E-006-F
SHEET 95 OF 117

WARNING:
THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AND ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT, FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS "A" MISDEAMOR.



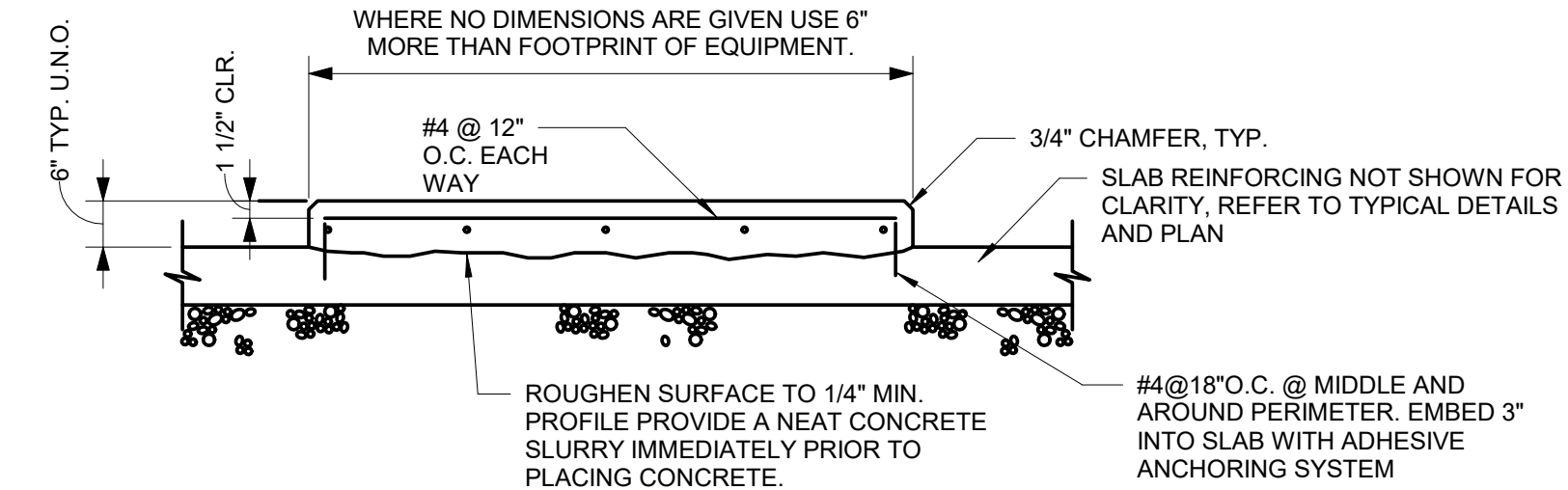
CONTRACT: **ELECTRICAL**

TITLE: **PROVIDE FORENSIC IDENTIFICATION UNIT BUILDING & HEADQUARTERS BUILDING ADDITION / RENOVATION**

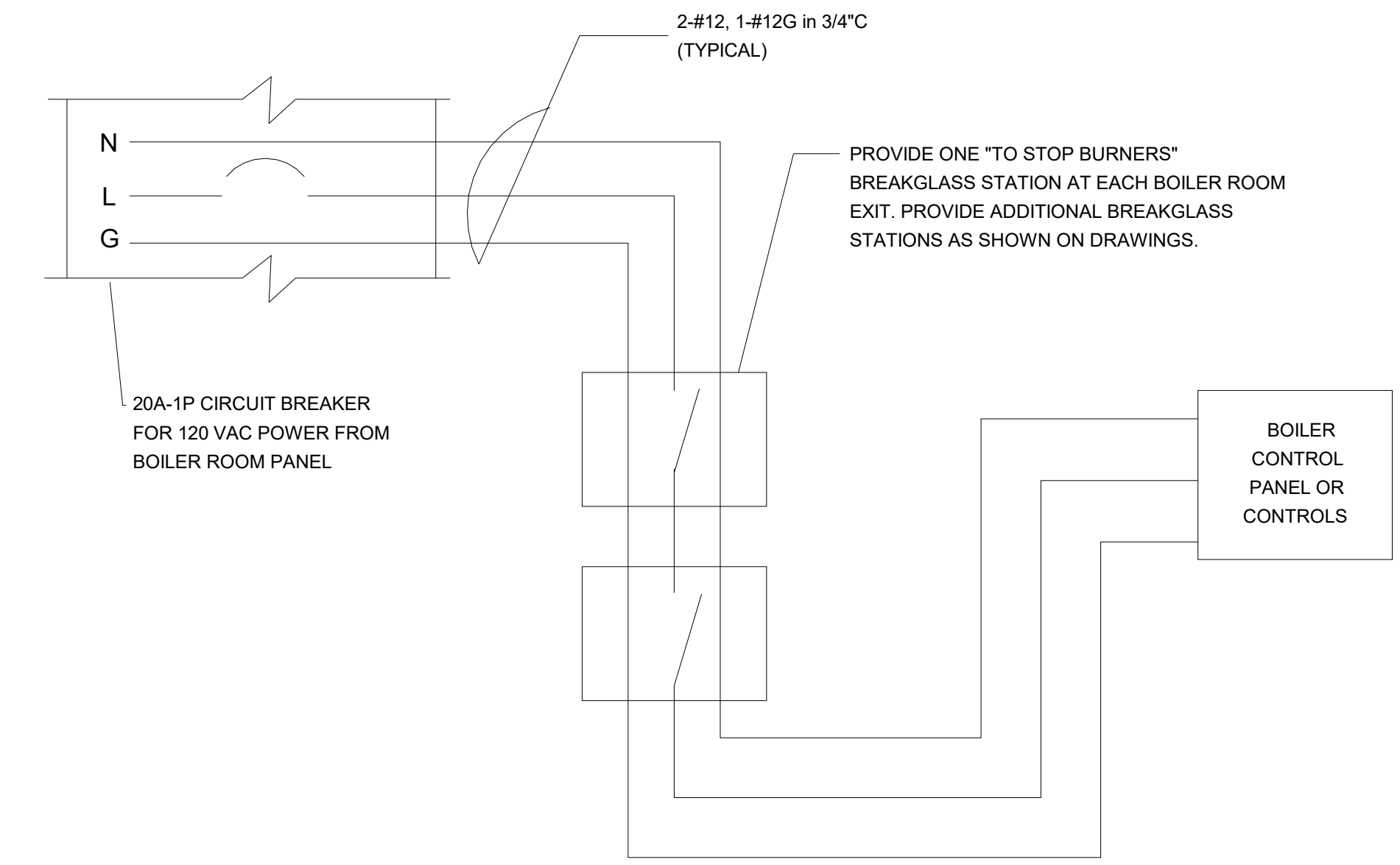
LOCATION: **TROOP K HEADQUARTERS RT. 82 AND 44 POUGHKEEPSIE, NY 12603**

CLIENT: **NEW YORK STATE POLICE**

1	01/08/2021	ADDITION #4
0	06/10/2020	BID/CONSTRUCTION DOCUMENTS
MARK	DATE	DESCRIPTION
PROJECT NUMBER:	45649-E	
DESIGNED BY:	GL	
DRAWN BY:	NB	
FIELD CHECK:		
APPROVED:	RW	
SHEET TITLE:	FORENSIC IDENTIFICATION UNIT ELECTRICAL DETAILS 2/3	
DRAWING NUMBER:	E-007-F	
SHEET	96	OF 117



5 TYPICAL INTERIOR HOUSEKEEPING PAD DETAIL
N.T.S.

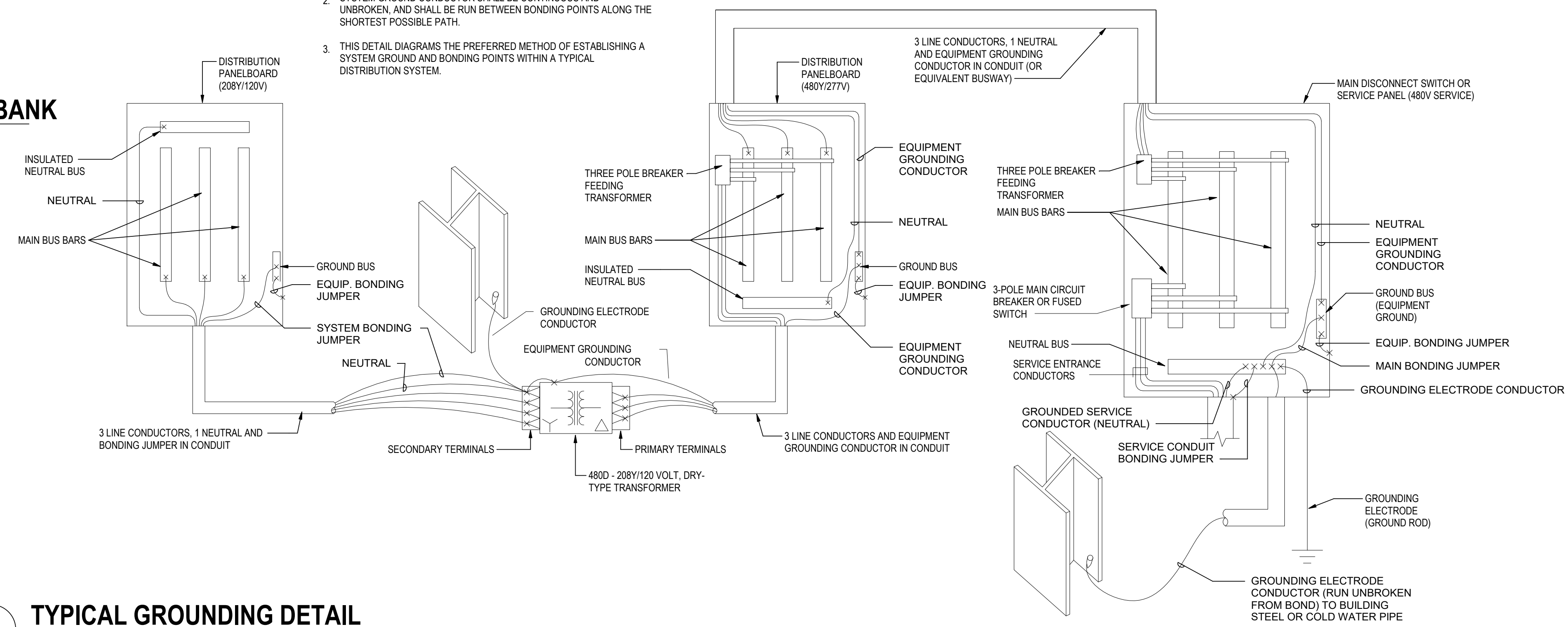


DETAIL NOTES:
A. PROVIDE DISCONNECT SWITCH AT BOILER CONTROL PANEL IF NONE EXISTS.

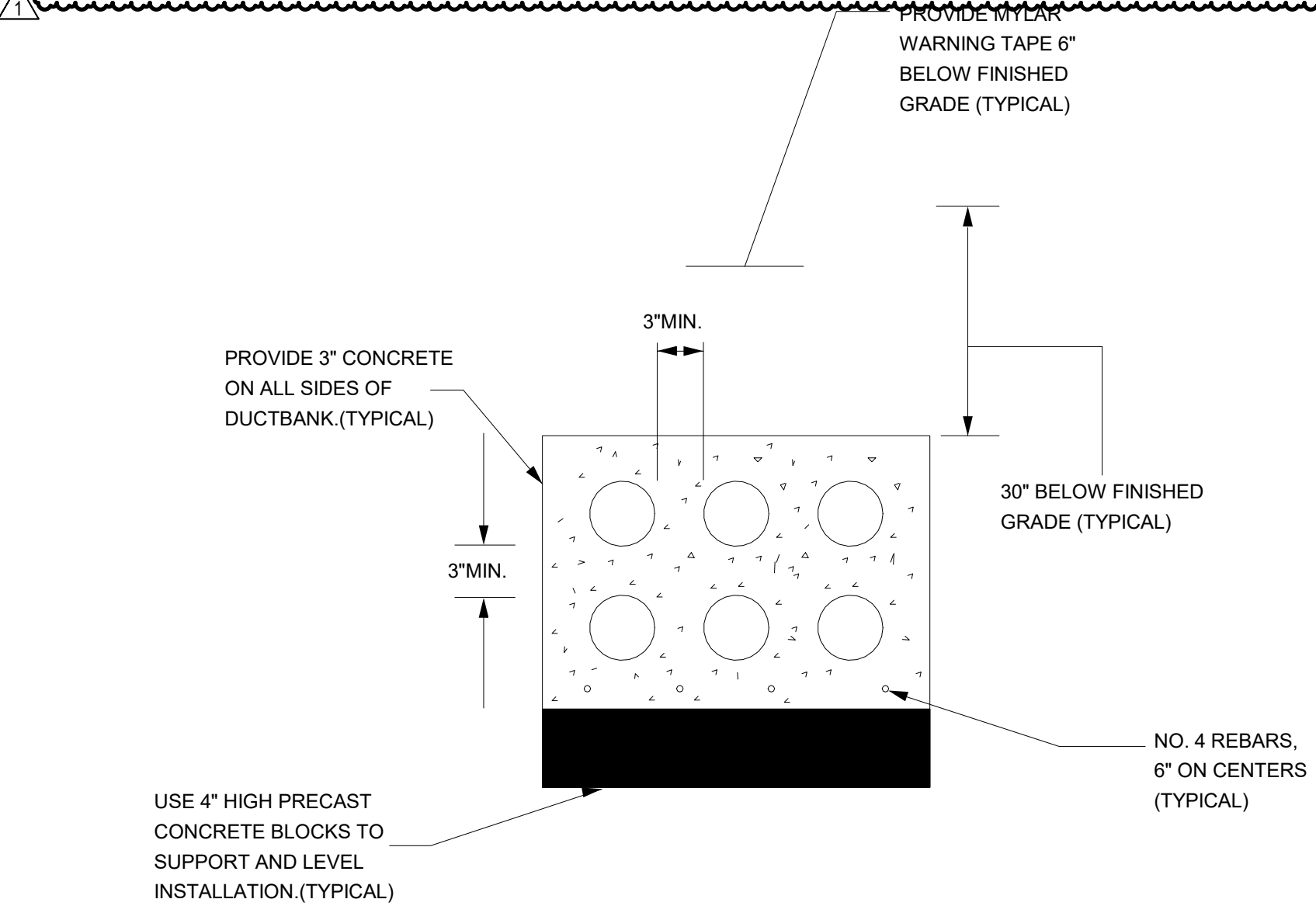
SYMBOL	BREAKGLASS	SURFACE MOUNTED	FLUSH MOUNTED
EPO	TO STOP GAS BURNERS	ASCO #124308	ASCO #124208

4 BOILER-EPO DETAIL
N.T.S.

- NOTES**
- ALL GROUNDING AND BONDING CONDUCTORS SHALL BE SIZED PER NEC, TABLE 250-122 AND 250-66. SEE ELECTRICAL RISER AND PANEL SCHEDULES FOR SIZING REQUIREMENTS.
 - SYSTEM GROUND CONDUCTOR SHALL BE CONTINUOUS AND UNBROKEN, AND SHALL BE RUN BETWEEN BONDING POINTS ALONG THE SHORTEST POSSIBLE PATH.
 - THIS DETAIL DIAGRAMS THE PREFERRED METHOD OF ESTABLISHING A SYSTEM GROUND AND BONDING POINTS WITHIN A TYPICAL DISTRIBUTION SYSTEM.

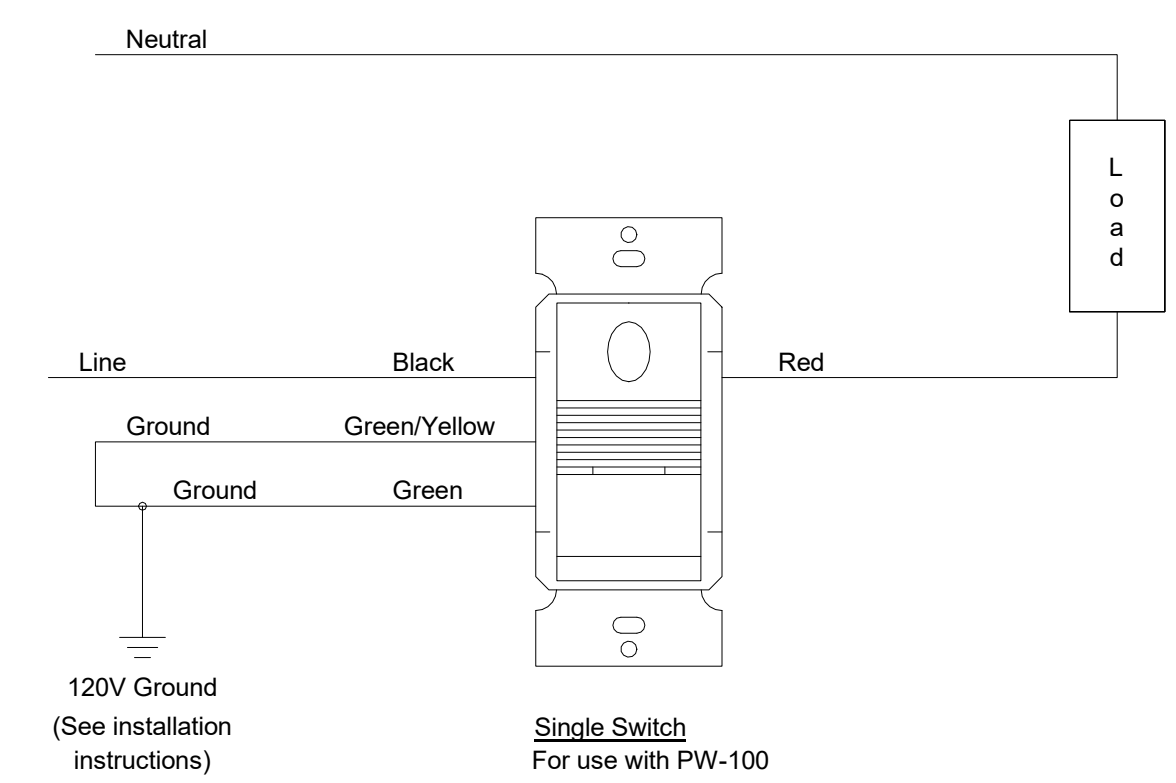


6 TYPICAL GROUNDING DETAIL
12" = 1'-0"



- DETAIL NOTES:**
- INSTALL CONDUIT SO BOTTOM OF DUCT IS AT PROPER ELEVATION.
 - LEAVE PULLROPE IN ALL SPARES.
 - TIE ALL CONDUIT DOWN TO PREVENT FLOAT-OUT.
 - REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
 - REFER TO DRAWINGS FOR CONDUIT SIZES AND NUMBER OF CONDUITS.
 - LARGER DUCTBANKS TO HAVE SIMILAR CONDUIT SPACING.

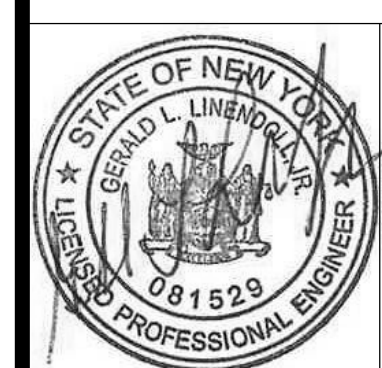
3 TYPICAL CONCRETE ENCASED UNDERGROUND CONDUIT DUCT BANK
N.T.S.



- NOTES:**
- WIRE DIAGRAM BASIS OF DESIGN SHALL BE WATTSTOPPER "PW-100" SERIES OR EQUIVALENT.

2 WALL SWITCH OCCUPANCY SENSOR WIRING DIAGRAM
N.T.S.

WARNING:
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ELECTRICAL

TITLE: PROVIDE FORENSIC IDENTIFICATION UNIT BUILDING & HEADQUARTERS BUILDING ADDITION / RENOVATION

LOCATION: TROOP K HEADQUARTERS RT. 82 AND 44 POUGHKEEPSIE, NY 12603

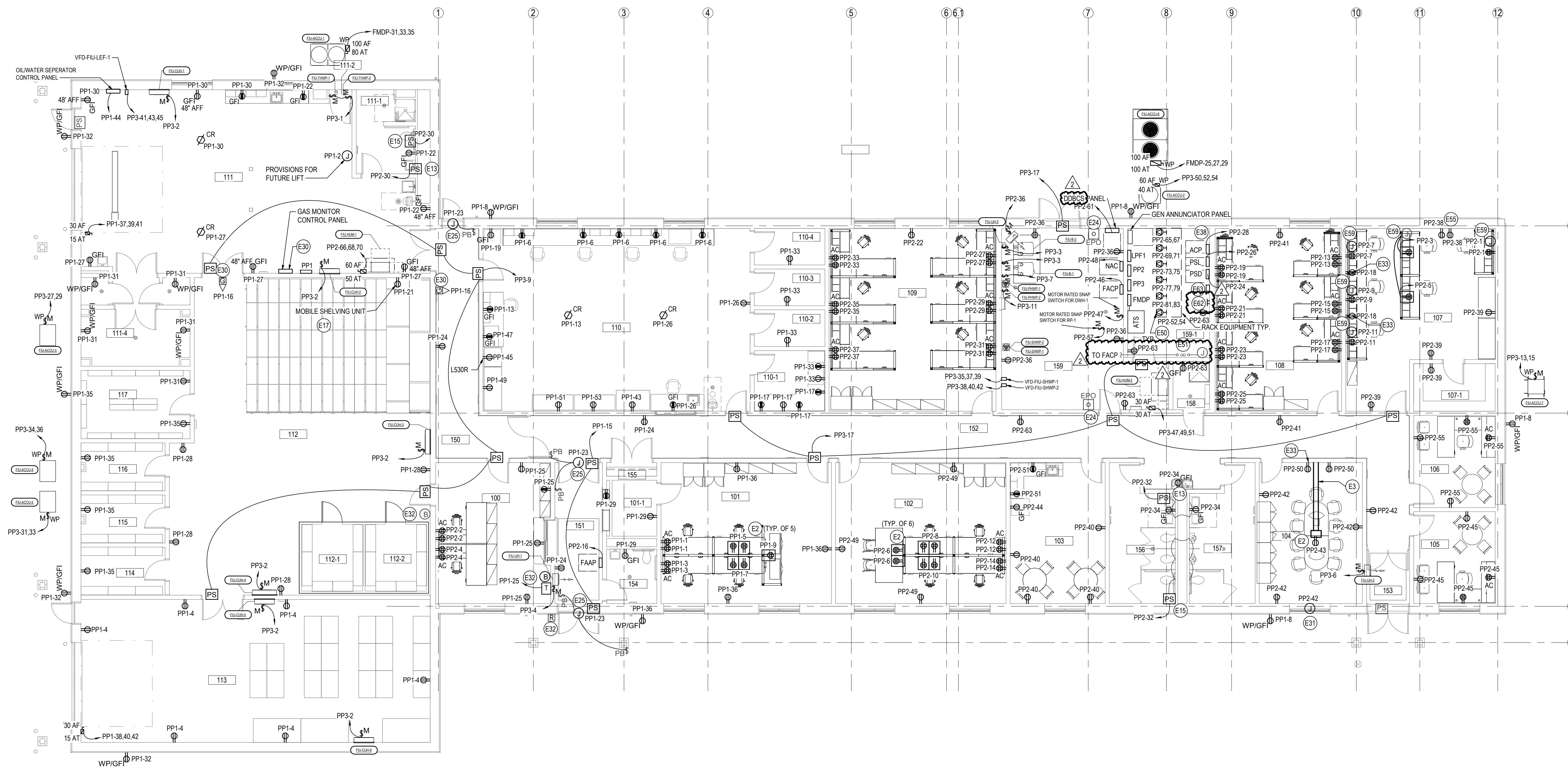
CLIENT: NEW YORK STATE POLICE

2	01/08/2021	ADDENDUM #4
1	12/23/2020	ADDENDUM #3
0	06/10/2020	BID/CONSTRUCTION DOCUMENTS
MARK	DATE	DESCRIPTION

PROJECT NUMBER: 45649-E
DESIGNED BY: GL
DRAWN BY: NB
FIELD CHECK:
APPROVED: RW

SHEET TITLE: FORENSIC IDENTIFICATION UNIT POWER PLAN

DRAWING NUMBER: E-100-F
SHEET 98 OF 117



1 FIU POWER PLAN
E-100-F 1/8" = 1'-0"

- KEY NOTES**
- E2 PROVIDE FLOOR BOX MANUFACTURED BY LEGRAND WIREMOLD CATALOG NO. RFB4. PROVIDE (2) DUPLEX RECEPTACLE BRACKETS MANUFACTURED BY LEGRAND WIREMOLD CATALOG NO. RFBDR. PROVIDE (2) COMMUNICATION BRACKETS MANUFACTURED BY LEGRAND WIREMOLD CATALOG NO. DTB-24TKO. PROVIDE FLOORPORT FLANGE COVER MANUFACTURED BY LEGRAND WIREMOLD CATALOG NO. FPBTCS. PROVIDE CONDUIT OVER TO ADJACENT WALL TO ABOVE CEILING FOR COMMUNICATION CONNECTION. PROVIDE NYLON BUSHINGS AT END OF CONDUIT.
 - E3 PROVIDE 1-1/4" CONDUIT FOR AV AND A 1" CONDUIT FOR IT BELOW FLOOR. RISE CONDUITS IN WALL TO ABOVE ACCESSIBLE CEILING.
 - E13 POWER SUPPLY WIRING AND CONNECTIONS FOR TOUCHLESS SINK FAUCETS. POWER SUPPLY SHALL BE INSTALLED UNDERNEATH SINKS. POWER SUPPLY SHALL BE MOUNTED WITH-IN SINK COUNTER. COORDINATE EXACT LOCATION WITH PLUMBING/MECHANICAL CONTRACTOR.
 - E15 MOUNT POWER SUPPLIES FOR AUTO FLUSH VALVES ABOVE CEILING IN ACCESSIBLE LOCATIONS.
 - E17 MOBILE SHELVING UNIT POWER, COORDINATE RECEPTACLE LOCATION WITH MOBILE SHELVING UNITS PRIOR TO ROUGH-IN.
 - E24 PROVIDE EPO BUTTON TIED TO BOILER SHUTOFF. REFER TO DETAIL 4 ON E-007-F.
 - E25 PROVIDE 120V CONNECTION TO ELECTRIC DOOR OPENER HARDWARE.
 - E30 REMOTE GAS ALARM STROBES. PROVIDE 120 VOLTS FROM PANEL PP1 CIRCUIT #16, THRU ALARM CONTACT AT GAS MONITOR PANEL TO ENERGIZE STROBES DURING ALARM. COORDINATE EXACT LOCATION OF GAS MONITOR PANEL WITH MECHANICAL CONTRACTOR.
 - E31 POWER FOR ELECTRIC WINDOW SHADES, POWER TO PANEL PP2 CIRCUIT 42.
 - E32 PROVIDE DOORBELL SYSTEM WITH PUSHBUTTON, TRANSFORMER AND BELLS. MOUNT BELLS ON WALL 90" AFF. COORDINATE FINAL LOCATION WITH DIRECTOR'S REPRESENTATIVE. MOUNT TRANSFORMER ON WALL ABOVE CEILING. PROVIDE WIRING AND CONNECTIONS BETWEEN BELLS AND PUSHBUTTON PER MANUFACTURER'S RECOMMENDATIONS.
 - E33 ELECTRICAL CONTRACTOR SHALL REFER TO TA SERIES DRAWINGS FOR EXACT RECEPTACLE MOUNTING LOCATION.
 - E38 EC PROVIDED HARDWIRED CONNECTIONS FOR POWER SUPPLIES FURNISHED BY 'C' CONTRACT. COORDINATE FINAL LOCATION WITH 'C' CONTRACT.
 - E51 (2) 1/4" CONDUITS AND (2) 1/4" CONDUITS STUBBED UP FROM EXISTING TO BUILDING TO PROVIDE ADDITIONAL INFORMATION.
 - E52 PROVIDE 4" NYLON PVC CONDUIT BUSHINGS ON ENDS OF CONDUITS STUBBED UP TO VERTICAL LADDER RACK. STUB (1) 1-1/4" CONDUIT TO JUNCTION BOX WITH PULL STRINGS AND LABEL BOTH ENDS OF CONDUIT INDICATING LOCATIONS SERVED FROM. EXTEND OTHER 1-1/4" CONDUIT TO SERVE FIRE ALARM CONTROL PANEL.
 - E53 MAS RECEPTABLES COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH DIRECTOR'S REPRESENTATIVE.
 - E54 PROVIDE JUNCTION BOX FOR POWER WHP CONNECTION TO ABOVE FURNITURE RECEPTACLE POWER. COORDINATE EXACT LOCATION WITH FURNITURE VENDOR.
 - E62 PROVIDE 10" WIDE TELECOMM EQUIPMENT GROUND BAR AT 84" AFF. FIELD VERIFY EXACT LOCATION WITH IT EQUIPMENT. PROVIDE #6 BONDING CONDUCTOR TO BUILDING STEEL LADDER TRAY, AND NEAREST ADJACENT PANEL WITH #6 GROUND WIRE.
 - E63 PROVIDE TELECOM SURGE PROTECTION BOX, CIRCA TELECOM MODEL # 1880CAT-100 (OR EQUIVALENT). PROVIDE BARE COPPER #6 CONDUCTOR IN CONDUIT BACK TO GROUND BUS BAR IN TELECOM ROOM 159-1. REFER TO DETAIL 2X008-F FOR MORE INFORMATION.

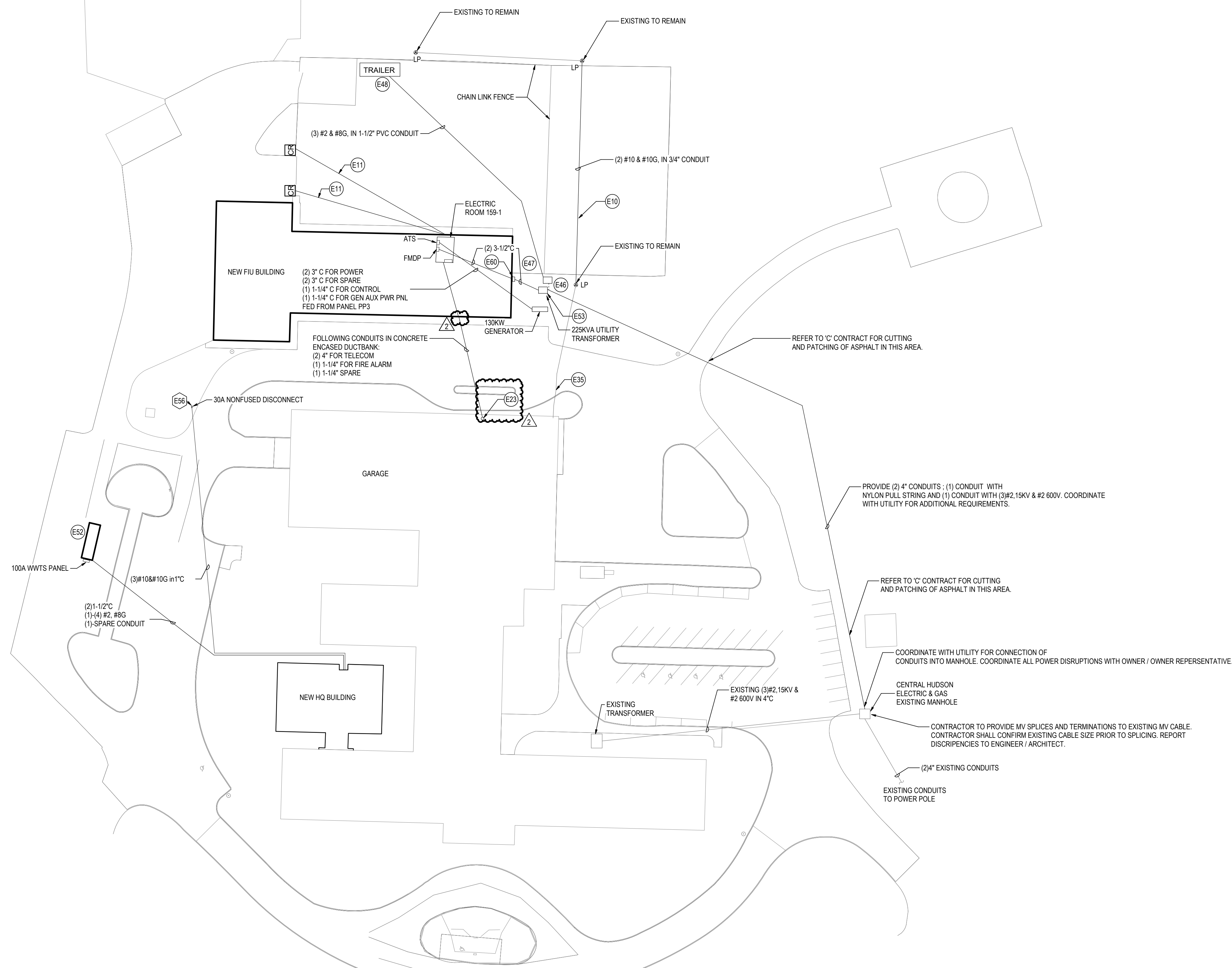
- SHEET NOTES**
1. REFER TO ONE LINE DIAGRAM ON DRAWING E-001-F.
 2. REFER TO PANELBOARD SCHEDULES ON DRAWING E-002-F FOR BRANCH CIRCUIT CHARACTERISTICS.
 3. PRIOR TO LABELING EQUIPMENT AND PANEL SCHEDULES, CONTRACTOR SHALL COORDINATE WITH DIRECTOR'S REPRESENTATIVE TO CONFIRM PROPER UNIQUE EQUIPMENT IDS.
 4. MOUNT ALL DISCONNECT SWITCHES ON STANCHIONS NEAR EQUIPMENT. DO NOT MOUNT ON BUILDING. IN ACCORDANCE WITH NEC WORKING CLEARANCES.
 5. CONTRACTOR TO COORDINATE WITH 'H' CONTRACT FOR EXACT LOCATIONS OF EQUIPMENT.

1/8/2021 3:16:40 PM RSN/RS_ALB1_NY_Ha.corp.ots/191510240_TroopK/fin_arch_FUL_191510240_R17.rvt 36x24 PLOT SHEET

WARNING:
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CONTRACT: **ELECTRICAL**
TITLE: **PROVIDE FORENSIC IDENTIFICATION UNIT BUILDING & HEADQUARTERS BUILDING ADDITION / RENOVATION**
LOCATION: **TROOP K HEADQUARTERS RT. 82 AND 44 POUGHKEEPSIE, NY 12603**
CLIENT: **NEW YORK STATE POLICE**



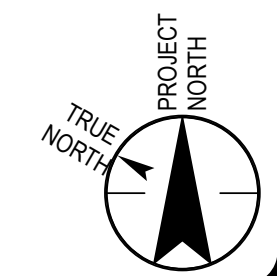
1 ELECTRICAL SITE PLAN
E-104-F 1" = 40'-0"

KEY NOTES

- E10 PROVIDE UNDERGROUND CONDUIT CONNECTION BETWEEN EXISTING LIGHT FIXTURES. PROVIDE WIRING TO EXTERNAL BRANCH CIRCUIT TO EXISTING LIGHTS MAINTAINING POWER. PROVIDE 3/4" RIGID NON-METALLIC CONDUIT. CONCRETE ENCASED A MINIMUM OF 30" BELOW GRADE. COORDINATE WITH 'C' CONTRACTOR PRIOR TO THE PLACEMENT OF NEW ASPHALT IN AREA.
- E11 PROVIDE 2" UNDERGROUND CONDUIT TO CARD READER LOCATION FROM ELEC ROOM 159.
- E22 PROVIDE CONDUITS THROUGH BUILDING FOUNDATION AND UP INTERIOR WALL. REFER TO DRAWING E-101-H FOR CONTINUATION AND ADDITIONAL INFORMATION. PROVIDE WATERTIGHT PENETRATIONS THROUGH FOUNDATION WALL AND SLAB.
- E23 EXISTING BRANCH CIRCUIT. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION OF POWER SOURCE. CONTRACTOR SHALL VERIFY CONDITIONS OF EXISTING BRANCH CIRCUIT AND CHECK INSULATION RESISTANCE OF CONDUCTORS PRIOR TO RECONNECTION.
- E32 PROVIDE TEMPORARY 20KVA OUTDOOR RATED 15KV PRIMARY - 240V-1PH SECONDARY TRANSFORMER TO SERVE AS TEMPORARY POWER TO TRAILER. COORDINATE WITH UTILITY COMPANY FOR PRIMARY CABLES, AND WIRING CONNECTION.
- E46 PROVIDE TRENCHING AND UNDERGROUND ROUTING OF SECONDARY FEEDER FROM TEMPORARY TRANSFORMER TO TRAILER. FIELD COORDINATE TRENCHING WITH EXISTING FENCE LOCATED IN THIS AREA.
- E47 PROVIDE 100A MCB, 240/120V, 1PH, 3W PANEL TO SERVE TEMPORARY TRAILER. PANEL SHOULD BE SERVICE ENTRANCE RATED.
- E48 PROVIDE 50A WEATHERPROOF DISCONNECT FOR EACH CONTAINER'S PROCESS POWER. PROVIDE 30A DISCONNECTS FOR EACH CONTAINERS HVAC POWER. COORDINATE FINAL EXACT LOCATION AND CONNECTION POINT WITH VENDOR.
- E52 PROVIDE 50A WEATHERPROOF DISCONNECT FOR EACH CONTAINER'S PROCESS POWER. PROVIDE 30A DISCONNECTS FOR EACH CONTAINERS HVAC POWER. COORDINATE FINAL EXACT LOCATION AND CONNECTION POINT WITH VENDOR.
- E53 UTILITY PAD MOUNTED TRANSFORMER. EC SHALL PROVIDE CONCRETE PAD PER UTILITY REQUIREMENTS. EC TO PROVIDE UTILITY METERING AND CT CABINET. EC TO COORDINATE WITH POWER COMPANY FOR EXACT LOCATION AND SPECIFIC REQUIREMENTS.
- E55 PROVIDE NEMA 3R 30A NON FUSED DISCONNECT FOR CONNECTION TO GRINDER PUMP. COORDINATE WITH CIVIL DRAWINGS FOR EXACT LOCATION.
- E60 PROVIDE NEMA 3R 600A LOCKABLE COMBINATION MANUAL TRANSFER SWITCH WITH GENERATOR TAP BOX (PSI #600-X-NF-4P-A-3WN-CML OR APPROVED EQUAL).

SHEET NOTES

1. PROVIDE OPENING IN EXISTING FOUNDATION WALL TO INSTALL SLEEVES AND CONDUITS.
2. TEMPORARILY DISCONNECT AND REMOVE EXISTING CEILING TILES, LIGHT FIXTURES, DIFFUSERS, ETC TO INSTALL CONDUITS ALONG THE CONDUITS PATHS. REINSTALL AFTER CONDUIT RUN INSTALLATION.
3. REFER TO ONE LINE DRAWING FOR CABLE/CONDUCTORS REQUIRED TO BE INSTALLED IN CONDUITS.
4. REFER TO C-CONTRACT DRAWINGS FOR ADDITIONAL INFORMATION.
5. PROVIDE EXCAVATION AND BACKFILLING FOR ALL UNDERGROUND AND BELOW SLAB ELECTRICAL SYSTEMS.



MARK	DATE	DESCRIPTION
2	01/08/2021	ADDENDUM #4
1	12/23/2020	ADDENDUM #3
0	06/10/2020	BID/CONSTRUCTION DOCUMENTS

PROJECT NUMBER: **45649-E**
DESIGNED BY: **GL**
DRAWN BY: **NB**
FIELD CHECK: **RW**
APPROVED: **RW**
SHEET TITLE: **FORENSIC IDENTIFICATION UNIT ELECTRICAL SITE PLAN**
DRAWING NUMBER: **E-104-F**
SHEET **103** OF **117**

NOTES:

- POWER AND DATA REQUIREMENTS SHOWN FOR REFERENCE ONLY AND ARE NOT FOR CONSTRUCTION.
- WHERE POWER CIRCUITS ARE SHOWN TERMINATING IN JUNCTION BOXES WITHOUT RECEPTACLES, THE WIRES SHALL BE TAPED AND THE BOXES COVERED. THESE CIRCUITS WILL BE CONNECTED BY OTHERS DURING INSTALLATION OF THE AV SYSTEMS EQUIPMENT.
- EMPTY CONDUIT RUNS ON THESE DRAWINGS SHOW ONLY INTERCONNECTION BETWEEN TERMINATION POINTS.
- HIGH LEVEL/HIGH CURRENT FEEDS (SUCH AS FOR POWER DISTRIBUTION PANELS, LIGHTING, AND BRANCH CIRCUITS,) ARE NOT TO BE RUN PARALLEL WITH AUDIO/VIDEO CONDUITS OR CABLING. IF HIGH LEVEL/HIGH CURRENT FEEDS MUST RUN PARALLEL TO AUDIO/VIDEO CONDUITS OR CABLING, MINIMUM SEPARATION MUST BE MAINTAINED ACCORDING TO THE FOLLOWING TABLE. "NA" INDICATES THAT THE USE SHOULD BE AVOIDED. SPACINGS ASSUME THAT POWER CONDUCTORS WILL NOT BE TWISTED PAIRS. CLOSER SPACINGS CAN BE USED IF POWER CONDUCTORS ARE TWISTED PAIRS.

MINIMUM ACCEPTABLE DISTANCE BETWEEN PARALLEL AV AND POWER CONDUITS

AV CONDUIT	POWER CONDUIT	COMBINED AMPACITY OF ALL PHASE CONDUCTORS IN POWER CONDUIT				
		UNDER 60A	60A	120A	240A	400A
EMT	EMT	2 FT.	3 FT.	4 FT.	NA	NA
EMT	RIGID STEEL	4 IN.	8 IN.	1 FT.	2 FT.	4 FT.
RIGID STEEL	RIGID STEEL	1 IN.	2 IN.	4 IN.	8 IN.	16 IN.

- NO LARGE POWER TRANSFORMERS OR MOTORS SHOULD BE LOCATED WITHIN 50 FEET OF AV EQUIPMENT SPACES.
- ALL AV CABLING THAT IS RUN OPEN-WIRE SHALL BE SUPPORTED FROM J-HOOKS NO GREATER THAN 3 FEET APART. NO CABLE IS TO BE UNSUPPORTED OR LAID OVER CEILING TILES, BLACK IRON, OR OTHER CEILING MEMBERS.
- THE METHOD OF INSTALLATION OF BOXES IN WALLS, AND THE METHOD OF PASSAGE OF CONDUITS AND WIREWAYS THROUGH ACOUSTICALLY SENSITIVE WALLS SHALL BE COORDINATED WITH THE ACOUSTICAL CONSULTANT.
- INSTALL FIRESTOP TO ALL SLAB AND WALL PENETRATIONS PROVIDED FOR THE INSTALLATION OF CABLE AND CONDUIT AS REQUIRED TO MAINTAIN FIRE RATING OF SLAB OR WALL. REVIEW C-CONTRACT PLANS FOR ADDITIONAL PARTITION TYPES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE FIRE RATING OF ALL WALLS AND FLOORS HAVING CABLING PENETRATIONS. COORDINATE SEALANT INSTALLATION WITH WORK OF OTHER TRADES. REFER TO ELECTRICAL SPECIFICATIONS FOR MATERIAL AND INSTALLATION PARAMETERS.
- ALL POWER, WIREWAYS, AND JUNCTION BOXES ARE TO BE REVIEWED FOR CODE AND SAFETY COMPLIANCE.
- REFER TO ELECTRICAL DRAWINGS FOR DISTRIBUTION PANEL ARE SIZING AND SPECIFICATION.
- ALL CABLE TRAY THAT IS SURFACE-MOUNTED ON SLAB BELOW RAISED FLOOR OR ABOVE EQUIPMENT RACKS SHALL BE SECURELY FASTENED AND LEFT OPEN FOR CABLE ACCESS.
- POWER FOR AV AND RELATED SYSTEMS SHALL USE AN EIA/TIA 607 COMPLIANT GROUNDING SYSTEM, REFER TO ELECTRICAL DRAWINGS. REFER TO AV DETAIL SHEETS FOR ADDITIONAL GROUNDING REQUIREMENTS IF APPLICABLE.
- ALL AV-RELATED EMPTY CONDUIT SHALL BE REAMED, CLEANED, CAPPED (WHERE APPROPRIATE), TAGGED, AND FURNISHED WITH PULL WIRES.
- WHERE EXACT DIMENSIONS ARE NOT INDICATED, THE SCALE OF THIS DRAWING IS SUFFICIENTLY ACCURATE FOR DETERMINING THE LOCATION OF EQUIPMENT, JUNCTION BOXES, OUTLET BOXES, WIREWAYS, PANELS, ETC. WHERE EXACT DIMENSIONS ARE INDICATED, THE REFERENCE SURFACE SHALL BE THE FINAL FINISHED SURFACE INCLUDING ANY ACOUSTICAL TREATMENT. ALL DIMENSIONS MUST BE VERIFIED AND ANY DEVIATIONS CAUSING CHANGES MUST BE COORDINATED WITH SHEN MILSON & WILKE, LLC.
- NOTIFY DIRECTOR'S REPRESENTATIVES OF ANY DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AND THE AV DRAWINGS. OBTAIN CLARIFICATION BEFORE PROCEEDING WITH WORK.
- ALL AV DEVICES SHALL BE SECURELY MOUNTED PLUMB AND STRAIGHT TO WALLS, FLOORS, OR RACKS PER THE MANUFACTURER'S RECOMMENDED MOUNTING PRACTICE.
- THERE SHALL BE A MINIMUM OF ONE PULL BOX FOR EVERY 100' OF STRAIGHT EMPTY AV-RELATED CONDUIT AND ONE PULL BOX WHERE THERE ARE MORE THAN TWO 90° BENDS OR LESSER BENDS TOTALING 180° IN A CONDUIT RUN.
- MAINTAIN MINIMUM BEND RADIUS OF 10X OD FOR ALL AV-RELATED CONDUITS.
- CONTRACTOR SHALL RESTORE CEILINGS, WALLS AND ANY OTHER SURFACES AFFECTED BY THEIR WORK PRIOR TO COMPLETION OF WORK WITH LIKE MATERIALS TO MATCH EXISTING CONSTRUCTION.

NOTES:

- REFER TO AV ELECTRICAL PLANS AND/OR RISER DIAGRAMS FOR EMPTY CONDUIT SIZING.
- ALL POWER CIRCUITS INDICATED IN THIS DRAWING SET TO BE PROVIDED BY DEDICATED BREAKER PANEL(S). NO NON-AV CIRCUITS TO BE FED FROM DEDICATED AV BREAKER PANEL(S).
- POWER FOR ALL AV SERVICES IN EACH DESIGNATED SPACE SHALL BE ON THE SAME ELECTRICAL PHASE, AND THIS PHASE SHALL NOT INCLUDE MOTORS, APPLIANCES, OR ANY OTHER SOURCE THAT CAN CAUSE SIGNAL INTERFERENCE.
- GROUNDING: GROUND COMMUNICATIONS SYSTEMS AND EQUIPMENT IN ACCORDANCE WITH ANSITIA/EIA-807 GROUNDING STANDARDS AND APPLICABLE NEC REQUIREMENTS EXCEPT WHERE DRAWINGS OR SPECIFICATIONS EXCEED NEC REQUIREMENTS. ALL RACKS, METALLIC BACKBOARDS, CABLE SHEATHS, CABLE TRAYS, ETC. ENTERING OR RESIDING IN TECHNICAL EQUIPMENT SPACES SHALL BE GROUNDED TO THEIR RESPECTIVE GROUND SYSTEM USING A MINIMUM OF #6 AWG STRANDED COPPER BONDING CONDUCTOR AND COMPRESSOR CONNECTORS. ALL WIRES USED FOR TECHNICAL POWER SYSTEMS GROUNDING PURPOSES SHALL BE IDENTIFIED WITH GREEN INSULATION OR IDENTIFIED AT EACH TERMINATION POINT WITH A WRAP OF GREEN TAPE. ALL CABLES AND BUS BARS SHALL BE IDENTIFIED AND LABELED "TECHNICAL POWER SYSTEM GROUND".
- CONDUIT STUBS: PROVIDE NYLON BUSHING ON ALL CONDUIT STUBS AND NON-TERMINATING CONDUIT ENDS TO PROTECT WIRE PULLS.
- JUNCTION BOX COVERS: UNLESS OTHERWISE NOTED, ALL JUNCTION BOXES MUST BE PROVIDED WITH A COVER. WHERE RAISED DEVICE COVERS ARE SPECIFIED, MATCH COVER DEPTH TO WALL THICKNESS. WHERE JUNCTION BOXES ARE MOUNTED AT OR ABOVE FINISHED CEILING HEIGHT, INSTALL JUNCTION BOXES WITH OPEN SIDE FACING DOWN.
- POWER RECEPTICALS: TECHNICAL POWER RECEPTICALS, INCLUDING THOSE WITHIN FLOOR BOXES, WALL BOXES, OR CEILING BOXES, SHALL BE PROVIDED BY THE BUILDING CONTRACTOR AND APPEAR ON THE ELECTRICAL DRAWINGS. TECHNICAL POWER RECEPTICALS IN RELATION TO TECHNOLOGY INFRASTRUCTURE IS CRITICAL. REFER TO THE ELECTRICAL DRAWINGS FOR COMPLETE POWER LAYOUTS AND CIRCUITING DETAILS
- NETWORK OUTLETS FOR AUDIOVISUAL SYSTEMS: ALL NETWORK OUTLETS SHALL APPEAR ON THE NETWORK DRAWINGS. REFER TO THE STRUCTURED CABLING SYSTEM SPECIFICATIONS (SECTIONS 27 21 00, 27 21 12, 27 21 26, AND 27 21 29) AND DRAWINGS FOR ADDITIONAL INFORMATION.

SCOPE OF WORK BETWEEN TRADES - RESPONSIBILITY MATRIX:

SCOPE OF WORK	PROVIDE	FURNISH	INSTALL
IN-WALL BLOCKING SUPPORT FOR AV MOUNTS		GC	GC
MOTORIZED PROJECTION SCREENS		EC	EC
WALL AND CEILING SPEAKER CUTOUTS			GC
FURNITURE CUTOUTS FOR AV EQUIPMENT (UNLESS PROVIDED BY FURNITURE PROVIDER)		GC	
KINDORF AND/OR BLACK IRON AS REQUIRED FOR CEILING MOUNTED AV DEVICES		GC	GC
CABLE CONTAINMENT INCLUDING:		EC	EC
CONDUIT WITH MEASURED PULLSTRINGS		EC	EC
CABLETRAY, LADDERTRAY, AND WIREWAYS		EC	EC
FLOORBOXES		EC	EC
JUNCTION BOXES, PULL BOXES, AND BACKBOXES		EC	EC
POWER OUTLETS		EC	EC
DEDICATED DISTRIBUTION PANELS, LOAD CENTERS, AND POWER ISOLATION TRANSFORMERS		EC	EC
AV CABLING (LOW VOLTAGE)		AV	AV
AV TERMINATIONS		AV	AV
CUSTOM ENGRAVED AV COVER PLATES		AV	AV
J-HOOKS AND OTHER SUPPORTS REQUIRED FOR OPEN-RUN AV CABLING		AV	AV
AV DEVICE WALL MOUNTS		AV	AV
AV DEVICES (AS DESCRIBED IN THE AV BID DOCUMENTS)		AV	AV
VOICE/DATA NETWORK CABLING (FIBER AND TWISTED PAIR)		ST	ST
VOICE/DATA COVER PLATES		ST	ST
CATV CABLING		ST	ST
LIGHTING & SHADE CONTROL INTERFACE		EC	EC

REFER TO AV DETAIL SHEETS FOR ADDITIONAL SCOPE DELINEATION AND INFORMATION

DEFINITION OF TERMS

FURNISH - TO PURCHASE AND DELIVER TO THE PROJECT SITE COMPLETE WITH EVERY NECESSARY APPURTENANCE AND SUPPORT. PURCHASING SHALL INCLUDE PAYMENT OF ALL SALES TAXES AND OTHER SURCHARGES AS MAY BE REQUIRED TO ASSURE THAT PURCHASED ITEMS ARE FREE OF ALL LIENS, CLAIMS, OR ENCUMBRANCES.

INSTALL - TO UNLOAD AT THE DELIVERY POINT AT THE SITE AND PERFORM EVERY OPERATION NECESSARY TO ESTABLISH SECURE MOUNTING AND CORRECT OPERATION AT THE PROPER LOCATION IN THE PROJECT, ALL AS PART OF THE WORK.

PROVIDE - TO FURNISH AND INSTALL.

LEGEND FOR SCOPE OF WORK BETWEEN TRADES:

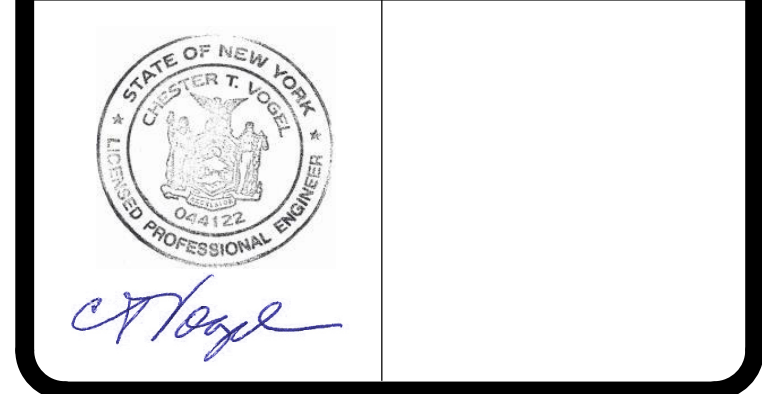
- GC = GENERAL CONTRACTOR
- EC = ELECTRICAL CONTRACTOR
- AV = AUDIOVISUAL CONTRACTOR
- O = OWNER
- ST = STRUCTURED CABLING, OR TELECOMMUNICATIONS CONTRACTOR

DESIGN & CONSTRUCTION

CONSULTANT

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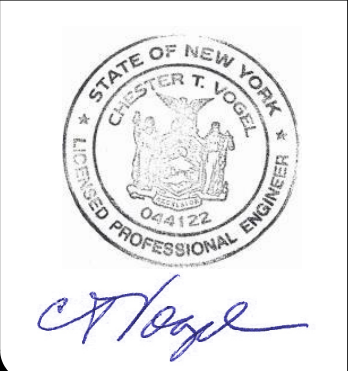
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CONTRACT:	ELECTRICAL
TITLE:	HEADQUARTERS BUILDING ADDITION / RENOVATION
LOCATION:	TROOP K HEADQUARTERS RT. 82 AND 44 POUGHKEEPSIE, NY 12603
CLIENT:	NEW YORK STATE POLICE

PROJECT NUMBER:	45649-E
DESIGNED BY:	MT
DRAWN BY:	MT
FIELD CHECK:	
APPROVED:	DG
SHEET TITLE:	FORENSIC IDENTIFICATION UNIT AUDIOVISUAL NOTES
DRAWING NUMBER:	TA-002-F
SHEET	106 of 117

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CONTRACT: ELECTRICAL

TITLE: HEADQUARTERS BUILDING ADDITION / RENOVATION

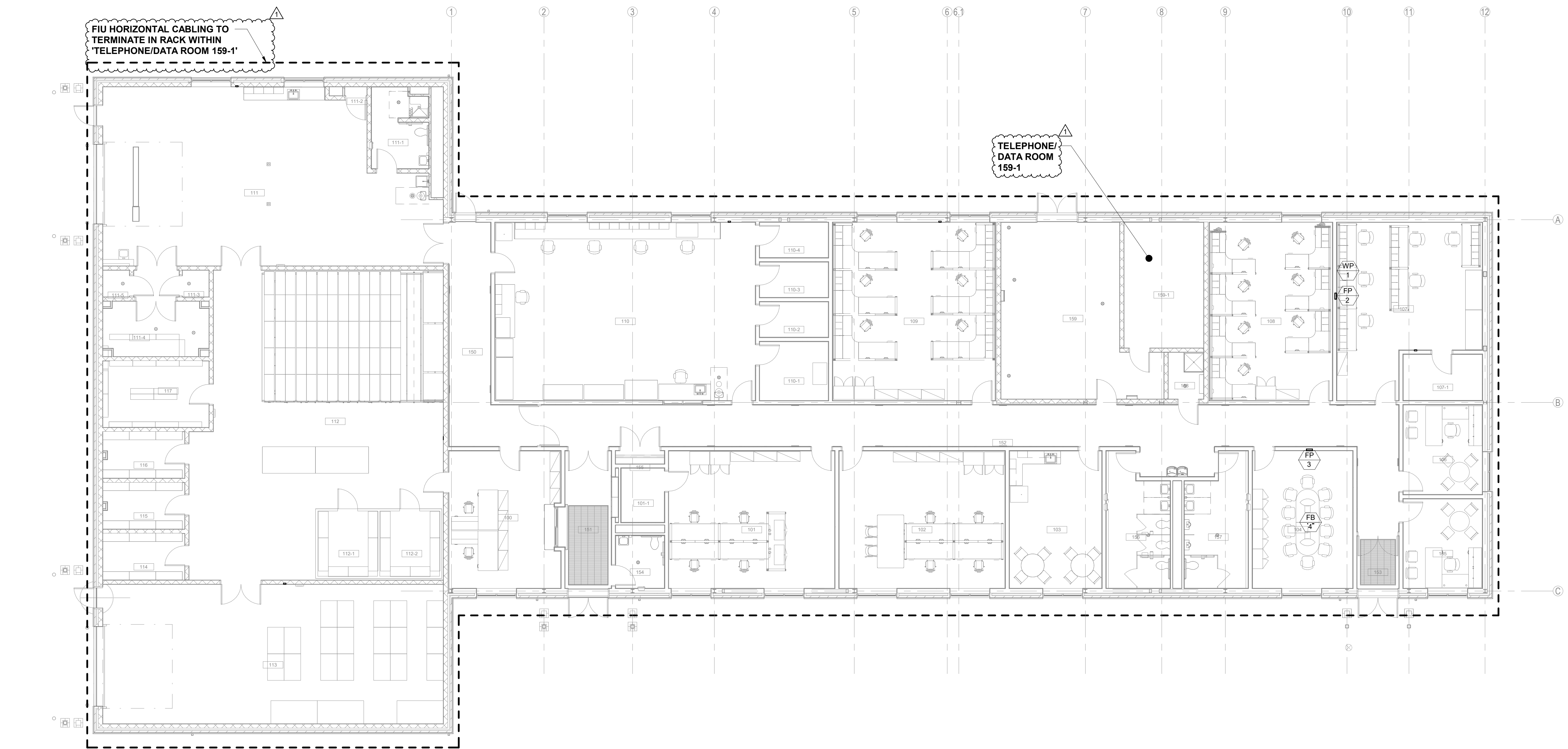
LOCATION: TROOP K HEADQUARTERS
RT. 82 AND 44
POUGHKEEPSIE, NY 12603

CLIENT: NEW YORK STATE POLICE

MARK	DATE	DESCRIPTION
1	01/08/2021	ADDENDUM #4
0	06/10/2020	BID/CONSTRUCTION DOCUMENTS

PROJECT NUMBER: **45649-E**
DESIGNED BY: MT
DRAWN BY: MT
FIELD CHECK: DG
APPROVED: DG

SHEET TITLE: FORENSIC IDENTIFICATION UNIT
AUDIOVISUAL OVERALL
ELECTRICAL PLAN - FIRST
FLOOR FIU
DRAWING NUMBER: TA-101-F



1 AUDIOVISUAL OVERALL ELECTRICAL PLAN - FIRST FLOOR FIU
1/8" = 1'-0"

