July 10, 2025

CN-296 NJSEA FIREHOUSE GARAGE ADDITIONS AND RENOVATION

East Rutherford, New Jersey

Proposal Due Date: July 17, 2025 by 12 PM

ADDENDUM No. 2

The Addendum is used for the purpose of amending the subject Bid Documents as below and is hereby made part of said Bid Documents to the same extent as though it were originally included therein. This Addendum makes the following changes and clarifications to the bid documents.

A. BID DOCUMENTS

I. Project Manual Book 1 of 3 – Modifications to the Project Manual

1. No Modifications.

II. Project Manual Book 2 of 3 – Modifications to the Project Manual

1. No Modifications.

III. Project Manual Book 3 of 3 – Modifications to the Project Manual

1. No Modifications.

IV. Modifications to Drawings prepared by DMR Architects and French & Parrello Associates

1. Electrical Drawings

Delete:

E1.0 Electrical Legend, Abbreviations & General Notes – Issued on June 18, 2025.
E2.0 Demolition Plan – Issued on June 18, 2025.
E3.0 Power Plan – Issued on July 8, 2025 with Addendum No. 1.
E5.0 Panel Schedules & Details – Issued on July 8, 2025 with Addendum No. 1.

- **Add:**

E1.0 Electrical Legend, Abbreviations & General Notes – Issued with this July 10, 2025 Addendum No. 2.
E2.0 Demolition Plan – Issued with this July 10, 2025 Addendum No. 2.
E3.0 Power Plan – Issued with this July 10, 2025 Addendum No. 2.
E5.0 Panel Schedules & Details – Issued with this July 10, 2025 Addendum No. 2.

2. Plumbing Drawings

Delete:

P5.0 Details – Issued on June 18, 2025.

Add:

P5.0 Details – Issued with this July 10, 2025 Addendum No. 2.

3. Mechanical Drawings

Delete:

M2.0 Demolition Plan – Issued on June 18, 2025.

Add:

M2.0 Demolition Plan – Issued with this July 10, 2025 Addendum No. 2.

B. BIDDER QUESTIONS AND RESPONSES:

1. QUESTION: As per Specification 096723 Resinous Flooring, the given system is a 65 mils hybrid epoxy polyester polyurethane broadcast flooring system. But A12.0 Finish Schedule calls out for a SIKA Floor Epoxy & Urethane System. Please clarify what kind of Sika System is to be used and what is the Thickness?

   RESPONSE: **Bidders to use as basis of design SIKAFLOOR – 22NA PurCem thickness ¼” with Primer/Sealer Sikafloor-2570 WB before application, and sealer/topcoat after installation.**

C. ADDENDUM DOCUMENT SUMMARY

1. Addendum No. 2_Electrical Drawings
   Drawing Sheet E1.0 – 1 page
   Drawing Sheet E2.0 – 1page
   Drawing Sheet E3.0 – 1 page
   Drawing Sheet E5.0 – 1 page
2. Addendum No. 2_Plumbing Drawings
   Drawing Sheet P5.0 – 1 page
3. Addendum No. 2_Mechanical Drawings
   Drawing Sheet M2.0 – 1 page

END OF ADDENDUM NO. 2

ELECTRICAL GENERAL NOTES

1. DRAWINGS ARE DIAGRAMMATIC AND DEFINE THE INTENT OF THE WORK. LOCATIONS OF EQUIPMENT, FIXTURES, DEVICES, PANELBOARDS, DUCTS, PIPING, DIFFUSERS, PARTITIONS, OPENINGS, ETC. ARE APPROXIMATE AND ARE SUBJECT TO MODIFICATIONS CAUSED BY STRUCTURAL CONDITIONS AND EQUIPMENT PROVIDED BY OTHER CONTRACTORS, SUBCONTRACTORS OR THE OWNER. COORDINATE ALL WORK WITH THE WORK OF OTHER TRADES. DETERMINE ROUGHING LOCATIONS FROM APPROVED SHOP DRAWINGS. MINOR MODIFICATIONS OF LOCATIONS REQUIRED TO EFFECT SUCH COORDINATION SHALL BE MADE AT NO COST TO THE OWNER.
2. THE DRAWINGS HAVE BEEN PRODUCED ENTIRELY ON FPA CADD SYSTEM. ANY OTHER LETTERING, LINES OR SYMBOLS, OTHER THAN PROFESSIONAL STAMPS AND SIGNATURES, HAVE BEEN MADE WITHOUT THE AUTHORIZATION OF FPA AND ARE INVALID.
3. REPRODUCTION OF ANY PORTION OF THE CONTRACT DRAWINGS FOR RESUBMITTAL AS SHOP DRAWINGS IS PROHIBITED. SHOP DRAWINGS PRODUCED IN SUCH A MANNER WILL BE REJECTED AND RETURNED.
4. SPECIFICATIONS MAY REQUIRE WORK, EQUIPMENT, SYSTEMS, METHODS, ETC. THAT IS NOT INDICATED ON THE DRAWINGS.
5. DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE COMPLEMENTARY TO EACH OTHER. WHERE DISCREPANCIES OR CONFLICTS OCCUR, THE CONTRACTOR SHALL INCLUDE THE MORE COSTLY METHOD IN HIS PROPOSAL UNLESS CLARIFIED BY BULLETIN OR ADDENDUM ACKNOWLEDGED PRIOR TO RECEIPT OF BIDS.
6. DRAWINGS SHALL NOT BE SCALED. DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND REQUIREMENTS OF THE WORK. ALTHOUGH SIZE AND LOCATION OF EQUIPMENT IS DRAWN TO SCALE WHEREVER POSSIBLE, CONTRACTOR SHALL MAKE USE OF ALL DATA IN ALL OF THE CONTRACT DOCUMENTS AND VERIFY INFORMATION AT THE PROJECT SITE.
7. THE OWNER WILL OCCUPY THE SITE AND EXISTING BUILDING[S] DURING THE ENTIRE CONSTRUCTION PERIOD. COOPERATE WITH THE OWNER DURING CONSTRUCTION OPERATIONS TO AVOID ANY CONFLICTS. PERFORM THE WORK SO AS NOT TO INTERFERE WITH THE OWNER'S OPERATIONS. SCHEDULE ALL POWER OUTAGES FOR OVERTIME ON SUNDAYS AND HOLIDAYS AT NO ADDITIONAL COST TO THE OWNER.
8. EXISTING PROJECT CONDITIONS INDICATED ARE BASED ON FIELD OBSERVATION, EXISTING DESIGN / CONSTRUCTION DOCUMENTS AND EXISTING RECORD DOCUMENTS AND ARE INTENDED TO INDICATE THE SCOPE OF THE WORK AFFECTED BY THIS PROJECT.
9. THE TERM “OTHERS” SHALL BE UNDERSTOOD TO MEAN CONTRACTORS, SUBCONTRACTORS OR TRADESMEN ON THE PROJECT PERFORMING WORK ON THIS PROJECT UNDER SECTIONS OR DIVISIONS OTHER THAN ELECTRICAL WORK.
10. VERIFY THAT FIELD MEASUREMENTS AND CIRCUITING ARRANGEMENTS ARE AS INDICATED.
11. PRIOR TO BIDDING VISIT THE PROJECT SITE TO DETERMINE THE CONDITIONS UNDER WHICH THE WORK IS TO BE DONE. SCHEDULE SITE VISIT WITH OWNER.
12. PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED FOR THE INSTALLATION, RELOCATION AND CONNECTION OF THE ELECTRICAL WORK.
13. ALL MATERIAL SHALL BE UNDERWRITERS' LABORATORIES LISTED FOR ITS APPLICATION WHERE SUCH LISTING IS APPLICABLE.
14. ALL EQUIPMENT SHALL BE AS INDICATED OR AS APPROVED BY THE ENGINEER.
15. SUBMIT SHOP DRAWINGS, PRODUCT DATA SHEETS AND WIRING DIAGRAMS FOR ALL ELECTRICAL CONSTRUCTION MATERIALS, DEVICES, EQUIPMENT, APPLIANCES AND SYSTEMS.
16. SUBMIT IN QUANTITY TO ALLOW DISTRIBUTION TO ARCHITECT (1), OWNER (2), ENGINEER (1), PRIME CONTRACTORS (1 EACH), AND CONTRACTOR'S OWN USE AS REQUIRED.
17. UNLESS SPECIFICALLY INDICATED OR REQUESTED OTHERWISE, BIND ALL PRODUCT DATA TOGETHER INTO A SINGLE SUBMITTAL PROPERLY INDEXED AND IDENTIFIED AND WITH ALL PERTINENT CATALOG NUMBERS, OPTIONS, ETC. HIGHLIGHTED OR TARGETED. LOOSE SHEETS OR BINDING SYSTEMS RELYING ON PAPER CLIPS OR SLIP ON SPLINES WILL BE DISCARDED AND THE TRANSMITTAL RETURNED TO THE CONTRACTOR.
18. UNLESS SPECIFICALLY INDICATED OR REQUESTED OTHERWISE, BIND ALL PRODUCT DATA TOGETHER PROPERLY INDEXED AND IDENTIFIED AND WITH ALL PERTINENT CATALOG NUMBERS, OPTIONS, ETC. HIGHLIGHTED OR TARGETED. LOOSE SHEETS OR BINDING SYSTEMS RELYING ON PAPER CLIPS OR SLIP ON SPLINES WILL BE DISCARDED AND THE TRANSMITTAL RETURNED TO THE CONTRACTOR.
19. OBTAIN SHOP DRAWINGS AND WIRING DIAGRAMS FROM OWNER AND OTHER CONTRACTORS FOR THE PROPER INSTALLATION OF RELATED ELECTRICAL WORK AND, UNLESS OTHERWISE NOTED, WIRE ALL CONTROL DEVICES, VALVES, THERMOSTATS, ETC. REQUIRED FOR THE PROPER OPERATION OF THEIR SYSTEMS.
20. OBTAIN ALL PERMITS REQUIRED, HAVE THE WORK INSPECTED FOR CODE COMPLIANCE AND PAY ALL FEES FOR INSPECTION AND CERTIFICATION.
21. MAKE THE NECESSARY ARRANGEMENTS, AND PAY ALL COSTS, FOR TEMPORARY AND/OR PERMANENT ELECTRIC SERVICE FOR THE PROJECT.
22. PROVIDE ADEQUATE TEMPORARY ELECTRICAL LIGHT AND POWER FOR THE PROJECT WORK OF ALL TRADES.
23. MAINTAIN CONTINUITY OF EXISTING CIRCUITS AFFECTED BY THIS WORK WHICH MUST REMAIN IN SERVICE.
24. MAINTAIN EXISTING ELECTRICAL SERVICE IN OPERATION UNTIL NEW SERVICE IS COMPLETE AND EXISTING LOADS ARE RECONNECTED.
25. MAKE ALL MODIFICATIONS NECESSARY TO EXISTING PANELBOARDS AND SWITCHBOARDS TO ACCEPT NEW CIRCUITS.
26. WHERE ELECTRICAL EQUIPMENT (I.E. SWITCHBOARDS, PANELBOARDS, BUS DUCTS, TRANSFORMERS, DISCONNECTS, ETC.) OR SYSTEMS (I.E. FIRE ALARM, SOUND, INTERCOMMUNICATIONS, ALARM, ETC.) IS INDICATED TO BE MODIFIED TO ACCEPT NEW WORK SAID MODIFICATIONS SHALL BE PERFORMED BY ELECTRICAL EQUIPMENT FABRICATORS OR MANUFACTURER'S REPRESENTATIVES WHO CAN AFFECT SUCH MODIFICATIONS WITHOUT VOIDING THE UL LABEL OR MANUFACTURER'S WARRANTIES.
27. WHERE NEW EQUIPMENT IS INDICATED TO BE "RECONNECTED" TO EXISTING WIRING, CONDUIT OR OTHER PART OF AN EXISTING ELECTRICAL SYSTEM, THE CONTRACTOR SHALL MODIFY OR EXTEND THE EXISTING SYSTEM COMPONENTS AS REQUIRED TO MEET THE CONNECTION POINT OF THE NEW ITEM. THE CONTRACTOR SHALL USE MATERIALS AND METHODS THAT MATCH THE EXISTING SYSTEM, OR AS SPECIFIED FOR NEW WORK, WHICHEVER IS MORE SUITABLE FOR THE APPLICATION.
28. WHERE EXISTING EQUIPMENT IS INDICATED TO BE "CONNECTED" OR "RECONNECTED" TO NEW WIRING, CONDUIT, ETC, THE CONTRACTOR SHALL FABRICATE AND INSTALL THE NEW SYSTEM CONNECTIONS TO MATCH THE CONNECTION POINTS AND OTHER REQUIREMENTS OF THE EXISTING EQUIPMENT. WHERE THE EXISTING EQUIPMENT MUST BE REMOVED AND REINSTALLED TO FACILITATE THE REMOVAL OF THE OLD CONNECTIONS AND/ OR THE CONNECTION OF THE NEW MATERIAL, THAT WORK SHALL BE A PART OF THIS CONTRACT.
29. EXACT LOCATION OF EQUIPMENT SHALL BE COORDINATED IN THE FIELD.
30. REFER TO APPROVED REFLECTED CEILING PLANS FOR EXACT LIGHTING LAYOUTS.
31. REFER TO DRAWINGS AND SPECIFICATIONS OF OTHER TRADES FOR EQUIPMENT LOCATIONS AND CONTROLS.
32. GROUNDING AND BONDING SHALL MEET NEC AND EQUIPMENT / SYSTEM MANUFACTURER'S REQUIREMENTS.
33. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF DEBRIS GENERATED BY HIS WORK AND WORKERS AT THE END OF EACH WORKING DAY AND FOR GENERAL GOOD HOUSEKEEPING BY HIS WORKERS. CONTRACTOR SHALL PROVIDE REQUIRED REFUSE CONTAINERS.
34. DISCONNECT AND REMOVE FROM THE PREMISES, OR STORE ON THE PREMISES IF REQUESTED BY THE OWNER, ALL EQUIPMENT FIXTURES, DEVICES, RACEWAY, WIRING, CABLE, SUPPORTING DEVICES, ETC. REMOVED OR ABANDONED AS A RESULT OF THIS WORK. MAKE SAFE ALL WIRING AND CABLE WHICH MUST REMAIN IN SERVICE.
35. REMOVE AND RELOCATE EXISTING EQUIPMENT, FIXTURES, DEVICES, ETC. AS INDICATED AND AS REQUIRED TO CLEAR NEW WORK. EXTEND AND CONNECT NEW WIRING TO EXISTING.
36. DISCONNECT AND REMOVE, OR TEMPORARILY RELOCATE, EXISTING LIGHTING FIXTURES, LOUDSPEAKERS, ETC. TO CLEAR THE INSTALLATION OF NEW DUCTWORK, PIPING, EQUIPMENT, ETC. THROUGHOUT THE ENTIRE RENOVATED AREAS AND REINSTALL WHEN WORK IS COMPLETE. REFER TO ARCHITECTURAL, MECHANICAL AND ELECTRICAL PLANS AND SPECIFICATIONS FOR THE EXTENT OF THE WORK. PROVIDE TEMPORARY NORMAL AND EMERGENCY LIGHTING; AND TEMPORARILY RECONNECT LOUDSPEAKERS, ETC. UNTIL THE CEILING IS REINSTALLED. EXTEND EXISTING WIRING TO NEW LOCATIONS AS REQUIRED.
37. TEMPORARILY RELOCATE, EXISTING FIRE ALARM DEVICES, HEAT/SMOKE DETECTORS, ETC. TO CLEAR THE INSTALLATION OF NEW DUCTWORK, PIPING, EQUIPMENT, ETC. THROUGHOUT THE ENTIRE RENOVATED AREA. PROVIDE TEMPORARY SUPPORT OF EXISTING DEVICES AND REINSTALL WHEN WORK IS COMPLETED. RE-TEST THE FIRE ALARM SYSTEM PER NFPA 72 REQUIREMENTS. EXISTING FIRE ALARM DEVICES SHALL NOT BE DISABLED OR REMOVED FROM SERVICE [UNTIL THE NEW SYSTEM IS INSTALLED AND TESTED PER NFPA 72 REACCEPTANCE TESTING OR THE SPRINKLER SYSTEM AND ALL NOTIFICATION, SIGNALING AND SUPERVISORY DEVICES ARE PROPERLY INSTALLED AND TESTED PER NFPA 13.] REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL PLANS AND SPECIFICATIONS FOR THE EXTENT OF THIS WORK.
38. PERFORM ALL CUTTING AND PATCHING REQUIRED FOR THE INSTALLATION OF THE WORK. CUT NO STRUCTURAL MEMBER WITHOUT WRITTEN PERMISSION FROM THE ENGINEER. FINISH AND PAINT ALL PATCHED SURFACES WITH TWO COATS OF PAINT TO MATCH EXISTING SURFACES AS CLOSELY AS POSSIBLE. SEAL OPENINGS VERMIN AND WATER PROOF AND MAINTAIN FIRE RATING. USE SPECIFIED TECHNOLOGIES, INC. “SPECSEAL” SERIES LCI FOR PENETRATIONS
39. ALL PENETRATIONS IN FOUNDATION WALLS AND FLOORS INCLUDING SLAB PENETRATIONS SHALL BE SUBSTANTIALLY SEALED BY UTILIZING A NON-CRACKING POLYURETHANE OR SIMILAR CAULK OR EQUIVALENT TO CLOSE OFF THE SOIL GAS ENTRY ROUTES. ALL CONDUITS IN THE SPACE BELOW THE FOUNDATION FLOOR WHICH PENETRATE THESE BARRIERS SHALL HAVE THREADED OR SOLVENTED FITTINGS.
40. EXISTING CONDUIT MAY BE REUSED IF APPROVED BY THE ENGINEER. WHERE SUCH REUSE IS NOT PRACTICABLE, PROVIDE NEW CONDUIT.
41. ALL NEW RACEWAY, WIRING AND CABLE IN NEW AND EXISTING FINISHED SPACES SHALL BE RUN CONCEALED IN NEW AND EXISTING CONSTRUCTION UNLESS OTHERWISE INDICATED; CUT AND PATCH AS REQUIRED. PROVIDE PULLBOXES, SIZE AND TYPE AS REQUIRED.
42. ALL NEW WIRING IS TO BE RUN CONCEALED WHERE POSSIBLE. PROVIDE PULLBOXES, SIZE AND LOCATION AS REQUIRED.
43. EXPOSED RACEWAY, IF PERMITTED, SHALL BE RUN TRUE, PLUMB AND PARALLEL OR PERPENDICULAR TO BUILDING LINES. [RIGID METAL CONDUIT,] [EMT WITH RAINTIGHT STEEL FITTINGS,] 3/4 INCH MINIMUM, SHALL BE USED OUTDOORS; ELECTRICAL METALLIC TUBING, 3/4 INCH MINIMUM, SHALL BE USED IN INDOOR UNFINISHED SPACES; SURFACE METAL RACEWAY (WIREMOLD) SHALL BE USED IN INDOOR FINISHED SPACES.
44. ALL WIRING SHALL BE COPPER CONDUCTOR WITH 600 VOLTS INSULATION IN METAL RACEWAY WITH APPROVED FITTINGS UNLESS OTHERWISE INDICATED.
45. SERVICE ENTRANCE CONDUCTORS UNDERGROUND IN RACEWAY: TYPE THHN-THWN 90 DEGREE C. WHERE EXPOSED WITHIN THE BUILDING OR STRUCTURE, ENCASE RACEWAY IN CONCRETE, MINIMUM 2-INCHES THICK.
46. FEEDERS AND BRANCH CIRCUITS UNDERGROUND IN RACEWAY: TYPE THHN-THWN 90 DEGREE C
47. INTERIOR FEEDERS AND BRANCH CIRCUITS IN RACEWAY: TYPE THHN 90 DEGREE C.
48. UNDERGROUND DIRECT BURIAL BRANCH CIRCUITS BEYOND BUILDING: TYPE UF, 75 DEGREE C.
49. BRANCH CIRCUIT HOMERUNS TO FIRST OUTLET: TYPE THHN IN RACEWAY. AFTER THE FIRST OUTLET BOX, APPROVED CABLE MAY BE USED.
50. FEEDERS SHALL BE MINIMUM #8 AWG; BRANCH CIRCUIT WIRING MINIMUM #12 AWG; CONTROL WIRING MINIMUM #14 AWG; UNLESS OTHERWISE INDICATED. FEEDER AND BRANCH CIRCUIT WIRING LARGER THAN #10 AWG SHALL BE STRANDED CONDUCTOR; #10 AWG AND SMALLER, STRANDED CONDUCTOR OR SOLID CONDUCTOR; CONTROL WIRING, STRANDED CONDUCTOR.
51. METAL CLAD CABLE TYPE MC WITH 600 VOLT THHN INSULATION AND INSULATED GROUND CONDUCTOR MAY BE USED IN NON HEALTH CARE FACILITIES FOR BRANCH CIRCUITS RUN IN HOLLOW SPACES, FISHED ABOVE EXISTING HUNG CEILINGS, FIXTURE CONNECTIONS AND ELSEWHERE AS PERMITTED BY THE NEC AND THE ENGINEER.
52. METAL CLAD CABLE TYPE MC/IG WITH 600 VOLT THHN INSULATION AND INSULATED GROUND CONDUCTOR MAY BE USED IN NON HEALTH CARE FACILITIES AND IN NON PATIENT CARE AREAS OF HEALTH CARE FACILITIES FOR COMPUTER POWER BRANCH CIRCUITS RUN IN HOLLOW SPACES, FISHED ABOVE EXISTING HUNG CEILINGS, AND ELSEWHERE AS PERMITTED BY THE NEC AND THE ENGINEER.
53. FIRE ALARM WIRING SHALL BE APPROVED FOR ITS APPLICATION; #14 AWG IN RACEWAY OR #14 AWG METAL CLAD CABLE FOR 120 VOLT CIRCUITS; #16 AWG FPLR OR FPLP FOR LOW VOLTAGE CIRCUITS IN NON AIR-HANDLING SPACES; AND #14 AWG FPLP FOR LOW VOLTAGE CIRCUITS IN AIR-HANDLING APPLICATIONS.
54. DO NOT INSTALL CONDUCTORS, WIRES OR CABLES OF ANY OTHER SYSTEM IN THE SAME RACEWAY OR CABLE WITH FIRE ALARM POWER SUPPLY CIRCUITS, NON-POWER LIMITED FIRE ALARM CIRCUITS OR POWER LIMITED FIRE ALARM CIRCUITS.
55. MAKE FLEXIBLE CONNECTIONS TO MOTORS AND OTHER ROTATING / VIBRATING EQUIPMENT.
56. TAPS AND SPLICES FOR BRANCH CIRCUITS AND FEEDERS SHALL BE MADE WITH AN INSULATED TERMINAL BY ILSCO, OR APPROVED EQUAL.
57. BRANCH CIRCUIT AND FEEDER TAPS SHALL BE FULL CIRCUIT SIZE UP TO THEIR OVERCURRENT PROTECTION DEVICE.
58. CONNECTIONS TO FIXTURE AND MOTOR LEADS #10 AWG AND SMALLER SHALL BE MADE WITH 3M "SCOTCHLOK" PRE-INSULATED SPRING PRESSURE CONNECTORS TYPES Y, R OR G OR APPROVED EQUAL.
59. STRANDED WIRING CONDUCTORS SHALL BE MADE UP TO SCREW TERMINALS WITH 3M, T&B OR PANDUIT LOCKING FORK CRIMP TERMINALS WITH NYLON INSULATED GRIPS.
60. UNLESS OTHERWISE INDICATED: ALL CONTROL, INTERLOCK AND TEMPERATURE CONTROL WIRING FOR HVAC EQUIPMENT AND SYSTEMS SHALL BE FURNISHED, INSTALLED AND CONNECTED BY THE MECHANICAL OR AUTOMATIC TEMPERATURE CONTROL CONTRACTOR; ALL CONTROL AND INTERLOCK WIRING FOR PLUMBING EQUIPMENT AND SYSTEMS SHALL BE FURNISHED, INSTALLED AND CONNECTED BY THE ELECTRICAL CONTRACTOR; ALL ELECTRICAL POWER WIRING TO CONTROL PANELS, MOTOR OPERATED DAMPERS, MOTOR STARTERS, MOTORS AND ALL MECHANICAL DEVICES THAT REQUIRE LINE VOLTAGE POWER SHALL BE FURNISHED, INSTALLED AND CONNECTED BY THE ELECTRICAL CONTRACTOR; ALL CONTROL AND INTERLOCK WIRING FROM AUTOMATIC TEMPERATURE CONTROL PANELS TO CONTROLLED OR INTERLOCKED DEVICES SHALL BE FURNISHED, INSTALLED AND CONNECTED BY THE MECHANICAL OR AUTOMATIC TEMPERATURE CONTROL CONTRACTOR; REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR REQUIREMENTS.
61. ALL CONTROL, INTERLOCK AND TEMPERATURE CONTROL WIRING INCLUDING CONNECTION TO THE BUILDING AUTOMATION SYSTEM SHALL BE FURNISHED, INSTALLED AND CONNECTED BY THE ELECTRICAL CONTRACTOR. REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR REQUIREMENTS.
62. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL 120V CONTROL POWER WIRING FEEDERS AND CIRCUIT BREAKERS REQUIRED FOR THE INSTALLATION OF MECHANICAL EQUIPMENT. STARTERS AND POWER DISCONNECT SWITCHES SHALL BE BY THE MECHANICAL CONTRACTOR. REFER TO SPECIFICATION SECTIONS AND COORDINATE WITH THE MECHANICAL CONTRACTOR FOR EXTENT OF WORK REQUIRED.
63. WIRE EMERGENCY LIGHTING FIXTURES (UNIT EQUIPMENT) TO LOCAL AREA LIGHTING CIRCUIT SERVING THE RESPECTIVE AREA AHEAD OF SWITCH / DIMMER CONTROL.
64. WIRE EXIT LIGHTS TO THE CIRCUITS INDICATED.
65. CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION AND INSTALLATION DETAILS AND VERIFY ALL MANUFACTURER'S REQUESTS PRIOR TO ANY SUBMISSION FOR CONSIDERATION BY THE ARCHITECT, ENGINEER OR OWNER.
66. WIRING RUNS INDICATED ON THE DRAWINGS EXPRESS THE INTENT OF CIRCUIT ASSIGNMENT AND SWITCH CONTROL. ACTUAL WIRING METHODS USED SHALL BE SUITED FOR THE CONSTRUCTION OF THE BUILDING. REFER TO DRAWINGS OF OTHER TRADES AND EXISTING CONDITIONS. SEE ARCHITECTURAL DRAWINGS FOR DETAILS. NUMBER OF CONDUCTORS IS NOT ALWAYS INDICATED
67. PROVIDE DISCONNECTS FOR ALL APPLIANCES, EQUIPMENT, MOTORS AND CONTROLLERS.
68. INSTALL MOTOR STARTERS, CONTROLLERS OR COMBINATION STARTERS FURNISHED FOR EACH MOTOR. LOCATE AS DIRECTED IN THE FIELD.
69. PROVIDE UN-SWITCHED 125 VOLT 20 AMP RECEPTACLE OUTLETS LOCATED ON THE SAME LEVEL AND WITHIN 25 FEET OF ALL HEATING, AIR-CONDITIONING AND REFRIGERATION EQUIPMENT UNLESS OTHERWISE NOTED.
70. PROVIDE PERMANENTLY INSTALLED LIGHTING OUTLETS TO ILLUMINATE THE AREAS IN ATTICS OR CRAWL SPACES IN WHICH EACH PIECE OF HEATING, AIR-CONDITIONING AND REFRIGERATION EQUIPMENT IS LOCATED. PROVIDE LUMINAIRE, LAMP AND LIGHT SWITCH APPROPRIATE FOR THE LOCATION. INSTALL LIGHT SWITCH NEAR THE ACCESS TO THE AREA UNLESS OTHERWISE NOTED.
71. ROUTE RACEWAYS THROUGH ROOF USING DEDICATED ROOF JACKS OR PITCH POCKETS. RUN RACEWAY ON ROOF ON DEDICATED ROOF SUPPORTS EIGHT INCHES HIGH MINIMUM.
72. PROVIDE SEISMIC RESTRAINTS AND ANCHORS FOR ENGINE-DRIVEN GENERATORS, LIGHTING FIXTURES, MOTOR CONTROL CENTERS, FLOOR MOUNTED SWITCHBOARDS, SWITCHGEAR, TRANSFORMERS, UNIT SUBSTATIONS, BUS DUCTS, WIREWAYS AND CONDUITS LARGER THAN 2-1/2" INCHES TRADE DIAMETER. PROVIDE SWAY BRACES FOR CONDUIT AND EQUIPMENT SUSPENDED FROM THE OVERHEAD. PROVIDE ANCHOR BOLTS FOR FLOOR AND WALL MOUNTED EQUIPMENT. COMPLY WITH INTERNATIONAL BUILDING CODE CHAPTER 16 - STRUCTURAL DESIGN AND CHAPTER 17 - STRUCTURAL TESTING AND INSPECTIONS.
73. PROVIDE SEISMIC RESTRAINTS AND ANCHORS FOR EQUIPMENT, FIXTURES, RACEWAY, ETC. AS REQUIRED BY INTERNATIONAL BUILDING CODE CHAPTER 16 - STRUCTURAL DESIGN AND CHAPTER 17 - STRUCTURAL TESTING AND INSPECTIONS AND AS SPECIFIED IN SPECIFICATION SECTION "SEISMIC CONTROLS".
74. ALL 125 VOLT, SINGLE PHASE, 15- AND 20-AMPERE SINGLE AND DUPLEX RECEPTACLES WHICH DO NOT SERVE A DEDICATED APPLIANCE AND ARE WITHIN A 6 FOOT RADIUS OF A SINK, ARE INSTALLED IN WET LOCATIONS, ARE INSTALLED IN BATHROOMS, ON ROOFS, OR OUTDOORS WITH DIRECT GRADE ACCESS, SHALL BE GROUND FAULT CIRCUIT INTERRUPTING TYPE WHERE AVAILABLE OR SHALL BE PROTECTED BY GROUND FAULT CIRCUIT INTERRUPTING CIRCUIT BREAKERS.
75. DO NOT INSTALL EXPOSED WIRING, OR CABLE NOT UL LISTED FOR THE PURPOSE; WOOD SUPPORTS OR ANCHORAGES; NONMETALLIC CONDUIT, BOXES OR FITTINGS; OR VINYL, PLASTIC, NYLON, OR OTHER COMBUSTIBLE OR SMOKE PRODUCING IDENTIFICATION OR CONSTRUCTION MATERIALS IN THE SPACE ABOVE HUNG CEILINGS USED AS A PLENUM FOR THE RETURN OF ENVIRONMENTAL AIR.
76. DEMONSTRATE PRODUCT CAPABILITY AND COMPLIANCE WITH REQUIREMENTS OF ALL ELECTRICAL DEVICES, EQUIPMENT AND SYSTEMS.
77. PERFORM MANUFACTURER'S RECOMMENDED TESTS AND SUBMIT RESULTS.
78. VERIFY PROPER ROTATION OF ALL ROTATING ELECTRICAL MACHINERY.
79. TEST SWITCHBOARDS, PANELBOARDS, TRANSFORMERS, CABLES, BUS DUCTS, SWITCHES, CIRCUIT BREAKERS, GROUNDING SYSTEM, GROUND FAULT PROTECTION SYSTEM, SURGE ARRESTORS AND TVSS DEVICES, GENERATORS, AND TRANSFER SWITCHES IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE CURRENT EDITION OF THE INTERNATIONAL ELECTRICAL TESTING ASSOCIATION ACCEPTANCE TESTING SPECIFICATIONS FOR ELECTRIC POWER DISTRIBUTION EQUIPMENT AND SYSTEMS (NETA ATS). PERFORM EACH VISUAL AND MECHANICAL INSPECTION AND ELECTRICAL TEST LISTED.
80. PROVIDE TWO SETS OF OPERATION AND MAINTENANCE MANUALS, BOUND AND INDEXED, WITH INSTRUCTIONS FOR ALL ELECTRICAL DEVICES, EQUIPMENT, APPLIANCES AND SYSTEMS.
81. PROVIDE ONE SET OF REPRODUCIBLE CONTRACT DRAWINGS, OR DIGITAL DATA FILES USING SAME SOFTWARE PROGRAM, VERSION, AND OPERATING SYSTEM AS CONTRACT DOCUMENTS, THAT HAVE BEEN REVISED AND ANNOTATED TO REFLECT THE AS-BUILT CONDITIONS OF THE PROJECT.
82. DELIVER CERTIFICATES OF ELECTRICAL AND OTHER INSPECTIONS, OR COPIES THEREOF, TO THE OWNER AT THE COMPLETION OF THE PROJECT WITH COPIES TO THE ENGINEER.
83. GUARANTEE ALL WORK IN WRITING TO THE OWNER AGAINST ANY AND ALL DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE AND PERFORM ALL CORRECTIVE WORK AT NO COST TO THE OWNER.
84. A CONTRACTOR MAKING A BID FOR WORK ON THIS PROJECT IS MADE AWARE BY THIS NOTE THAT IT IS THE INTENT OF THE OWNER TO HAVE A COMPLETELY INSTALLED JOB. THE CONTRACTOR MAKING A BID FOR THIS WORK WARRANTS THAT HE WILL COMPLETE AND WIRE, PROVIDING ALL NECESSARY ELECTRICAL WORK FOR EQUIPMENT SHOWN AND / OR DETAILED ON ANY PROJECT DRAWINGS OR SPECIFICATIONS AND NOT JUST THOSE COMMONLY REFERRED TO AS A SINGLE TRADE DRAWING UNLESS SPECIFICALLY IDENTIFIED ELSEWHERE AS WORK OF OTHER TRADES. WHERE EQUIPMENT REQUIRING WIRING IS SPECIFIED OR SHOWN ON DRAWINGS OTHER THAN ELECTRICAL DRAWINGS, OR INDICATED, OR IMPLIED, SUCH AS ON SHOP DRAWINGS SUBMITTED LATER, THE CONTRACTOR CAN AND SHALL REQUEST DIRECTION REGARDING CIRCUIT SIZING PROTECTION AND ROUTING WHERE NECESSARY BUT SHALL UNDERSTAND ALL NECESSARY WORK TO COMPLETE THE INSTALLATION SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER OR PROJECT.
85. THE INSTALLATION OF ALL ELECTRICAL WORK INDICATED ON ALL ELECTRICAL DRAWINGS AND IN THE SPECIFICATIONS AND ANY SUBSEQUENT BULLETINS OR ADDENDA SHALL COMPLY WITH NEW JERSEY ADMINISTRATIVE CODE TITLE 6A.
86. THE SPACE ABOVE THE HUNG CEILING(S) OF (LIST THE ROOMS, SPACES, OR AREAS) IS USED AS A PLENUM FOR THE RETURN OF ENVIRONMENTAL AIR. DO NOT INSTALL EXPOSED WIRING, OR CABLE NOT UL LISTED FOR THE PURPOSE; WOOD SUPPORTS OR ANCHORAGES; NONMETALLIC CONDUIT, BOXES OR FITTINGS; OR VINYL, PLASTIC, NYLON, OR OTHER COMBUSTIBLE OR SMOKE PRODUCING IDENTIFICATION OR CONSTRUCTION MATERIALS IN THIS SPACE.
87. PRE-EXISTING CONDITIONS ARE EXEMPT PER NJAC 5:23-6.8(D)10. "EXISTING WORKING CLEARANCES, CLEAR SPACE, ACCESS AND ENTRANCE DIMENSIONS TO WORKING SPACES, ILLUMINATION, HEADROOM CLEARANCES, AND LOCATION OF OVERCURRENT PROTECTION DEVICES SHALL BE ALLOWED TO REMAIN WITHOUT MODIFICATION."
88. A FIRE ALARM SYSTEM MEETING CURRENT CODES IS NOT REQUIRED TO BE INSTALLED IN THE PORTIONS OF THE EXISTING BUILDING THAT ARE NOT BEING RENOVATED, ALTERED OR REMODELED. NJAC 5:23-6.8(B)4.
89. THE CAPACITY OF THE EXISTING FIRE ALARM SYSTEM IS NOT BEING DIMINISHED BELOW THAT WHICH EXISTS AT THE PRESENT TIME. NJAC 5:23-6.5(C) AND 5:23-6.6(C).
90. THE EXISTING FIRE ALARM CONTROL PANEL IS BEING UPGRADED AND THE ADDITION OF FIRE ALARM DEVICES IN THE NEW ADDITION AND RENOVATED AREAS OF THE EXISTING BUILDING WILL NOT INCREASE THE LOAD ON THE EXISTING FIRE ALARM SYSTEM. NJAC 5:23-6.5(C) AND 5:23-6.6(C).
91. ALL NEW CONSTRUCTION AND RENOVATION WORK SHOWN ON THE DRAWINGS AND CONTAINED IN THE SPECIFICATIONS (UNLESS OTHERWISE NOTED AS "NOT IN CONTRACT" OR "N.I.C.") IS THE RESPONSIBILITY OF THE SINGLE PRIME GENERAL CONTRACTOR. REFERENCES TO SPECIFIC TRADE SUBCONTRACTORS (PLUMBING, MECHANICAL, ELECTRICAL, ETC.) ARE PROVIDED TO ASSIST THE SINGLE PRIME GENERAL CONTRACTOR IN THE DELINEATION OF SUBCONTRACTOR WORK. THE SINGLE PRIME GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DELINEATION OF ITS SUBCONTRACTORS' WORK AND THEREFORE SHALL NOT RELY ON SPECIFIC TRADE REFERENCES SHOWN ON THE CONTRACT DOCUMENTS.
92. CONTRACTOR SHALL PROVIDE AND INSTALL A LOCAL LOCKABLE DISCONNECT SWITCH BY EACH PIECE OF MOTORIZED OR PACKAGED EQUIPMENT. DISCONNECT AMPACITY RATING SHALL AT LEAST MATCH THAT OF THE UPSTREAM CIRCUIT BREAKER PROTECTING THE EQUIPMENT. INDOOR DISCONNECTS SHALL BE NEMA 1 TYPE AND OUTDOOR DISCONNECTS SHALL BE BE NEMA 3R TYPE.
93. IN ALL AREAS WHERE WORK IS BEING PERFORMED UNDER THIS CONTRACT, CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPORTING ALL EXISTING ELECTRICAL DEVICES AND WIRING/CONDUIT ABOVE THE EXISTING CEILINGS, PER NEC. ALL TELE / DATA AND FIRE ALARM WIRING SHALL BE INDEPENDENTLY SUPPORTED FROM THE STRUCTURE WITH J-HOOKS AND NOT TIE-WRAPPED TO CONDUITS OR MECHANICAL PIPING.. ALL EXISTING POWER WIRING/CONDUIT AND JUNCTION BOXES SHALL BE INDEPENDENTLY SUPPORTED TO THE STRUCTURE AND NOT TO THE CEILING GUIDE WIRES, HVAC DUCTS, PIPING, ETC. PROVIDE ALL REQUIRED SUPPORTS AND ACCESSORIES AS REQUIRED PER NEC.
94. CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY OF ANY CONFLICT DISCOVERED BEFORE PERFORMING ANY WORK RELATED TO SUCH CONFLICT.

DEMOLITION NOTES:

1. DEMOLITION SHALL INCLUDE THE REMOVAL OF ALL ASSOCIATED WIRING, CONDUIT, DISCONNECT SWITCHES, ETC UNLESS SPECIFICALLY NOTED OTHERWISE.
2. WHERE WIRING/CONDUIT SERVING AN EXISTING PIECE OF EQUIPMENT RUNS BELOW GRADE, CONTRACTOR SHALL REMOVE ALL WIRING BACK TO THE SOURCE AND CUT CONDUIT FLUSH WITH EXISTING FLOOR. PROVIDE A WATERPROOF SEAL AROUND ALL OPENINGS
3. THE CONTRACTOR SHALL PERFORM DEMOLITION AND REMOVAL WORK WITH MINIMUM INTERFERENCE WITH FUNCTIONING ELECTRICAL SYSTEMS. ALL AFFECTED SYSTEMS SHALL BE RECONNECTED AND RESTORED.
4. DEMOLITION AND REMOVAL WORK SHALL BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER. THE CONTRACTOR SHALL PATCH, REPAIR OR OTHERWISE RESTORE ANY DAMAGED INTERIOR OR EXTERIOR BUILDING SURFACE TO ITS ORIGINAL CONDITION.
5. THE CONTRACTOR SHALL REMOVE ALL ELECTRICAL LIGHT FIXTURES COMPLETE WITH ASSOCIATED WIRING, CONDUITS, ETC. WHERE THE REMOVAL OF THESE ITEMS DISRUPTS EXISTING WIRING THAT IS TO REMAIN, THE CONTRACTOR SHALL INSTALL JUNCTION BOXES AND OTHER DEVICES AND PROVIDE BYPASS CONNECTIONS NECESSARY TO MAKE CIRCUITS AFFECTED CONTINUOUS AND READY FOR OPERATION. OTHERWISE, WIRING SHALL BE REMOVED BACK TO THE NEAREST ELECTRICAL JUNCTION BOX THAT IS TO REMAIN OR TO PANELBOARD.
6. ALL UNUSED OUTLET BOXES OR CAPPED FLOOR OUTLETS SHALL BE PROVIDED WITH MATCHING BLANK COVERS.
7. EXISTING PANEL DIRECTORIES AFFECTED BY THE WORK SHALL BE MODIFIED TO REFLECT THE BRANCH CIRCUIT WIRING CHANGES.
8. PORTIONS OF FEEDER RUNS TO BE REMOVED OR ABANDONED AS A RESULT OF DEMOLITION WORK, BUT WHICH ARE REQUIRED TO REMAIN ENERGIZED, SHALL BE CUT AT CONVENIENT LOCATIONS, REROUTED AND RECONNECTED. NEW FEEDER EXTENSIONS SHALL MATCH EXISTING ONES IN ALL RESPECTS, CABLE TYPE, CONDUCTOR AMPACITY, CONDUIT SIZES, ETC.
9. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER HANDLING, DISPOSAL, AND ASSOCIATED COSTS OF ALL MATERIAL REMOVED FROM FIXTURES, DURING THIS CONTRACT, IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL CODES AND/OR REGULATIONS.
10. DISCONNECT AND REMOVE FROM THE PREMISES, OR STORE ON THE PREMISES IF REQUESTED BY THE OWNER, ALL EQUIPMENT AND LIGHT FIXTURES, AND SUPPORTING DEVICES REMOVED AS A RESULT OF THIS WORK.
11. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING CEILING SYSTEM INCLUDING BUT NOT LIMITED TO GRID, TILES, AND SUPPORT AND SHALL REPLACE IN KIND ANY DAMAGED CEILING COMPONENTS.
12. PRIOR TO RELOCATION OR DEMOLITION OF ANY LIGHTING FIXTURES, ALL CONTROLLED LIGHTING FIXTURES SHALL BE THOROUGHLY DECOMMISSIONED FROM THE EXISTING LIGHTING CONTROL SYSTEMS. REFER TO EXISTING SYSTEM MANUFACTURER'S WRITTEN INSTALLATION AND DECOMMISSIONING INSTRUCTIONS.

POWER DEVICE LEGEND

SYMBOLS	DESCRIPTION
▤ ▨	SURFACE MOUNTED PANELBOARD, POWER AND LIGHTING
▤ ▨	RECESSED PANELBOARD, POWER AND LIGHTING
)	HOMERUN TO PANELBOARD
☐X/Y/Z	DISCONNECT SWITCH. "X" INDICATES SWITCH SIZE, "Y" INDICATES NUMBER OF POLES, "Z" INDICATES FUSE SIZE (NF = NON-FUSED).
SM	MOTOR RATED DISCONNECT SWITCH.

LOW VOLTAGE DEVICE LEGEND

SYMBOLS	DESCRIPTION
S	SPEAKER, WALL MOUNTED:1-GANG JUNCTION BOX AND 3/4" CONDUIT UP TO ACCESSIBLE CEILING SPACE.

2

FIRE ALARM DEVICE LEGEND

SYMBOLS	DESCRIPTION
F	FIRE ALARM HORN / STROBE
F	FIRE ALARM STROBE
F	FIRE ALARM MANUAL PULL STATION
FACP	FIRE ALARM CONTROL PANEL
FANN	FIRE ALARM ANNUNCIATOR PANEL
SD	DUCT SMOKE DETECTOR
S SA	CEILING MOUNTED SMOKE DETECTOR. "A" INDICATES MOUNTED ABOVE CEILING.
R RA	CEILING MOUNTED RATE OF RISE HEAT DETECTOR, "A" INDICATES MOUNTED ABOVE CEILING.
H HA	CEILING MOUNTED HEAT DETECTOR, 135° UON. "A" INDICATES MOUNTED ABOVE CEILING.
H195 HA195	CEILING MOUNTED HEAT DETECTOR, 195° UON. "A" INDICATES MOUNTED ABOVE CEILING.
CO	CARBON MONOXIDE DETECTOR
SC	COMBINATION SMOKE/CARBON MONOXIDE DETECTOR
BD	BEAM DETECTOR
DH	DOOR HOLDER
TS	SPRINKLER SYSTEM TAMPER SWITCH
FS	SPRINKLER SYSTEM FLOW SWITCH
MM	ADDRESSABLE MONITOR MODULE
CM	ADDRESSABLE CONTROL MODULE
	REMOTE TEST KEY SWITCH AND INDICATING LIGHT FOR SMOKE DUCT DETECTOR.

WIRING DEVICE LEGEND

SYMBOLS	DESCRIPTION
ΦX ⊕X	NEMA 5-20R SIMPLEX RECEPTACLE. "X" INDICATES CIRCUIT NUMBER. SYMBOL WITH LINE THRU IT DENOTES MOUNTED ABOVE 18". COORDINATE HEIGHT WITH ARCHITECTURAL DRAWINGS.
ΦX ⊕X	NEMA 5-20R DUPLEX RECEPTACLE. "X" INDICATES CIRCUIT NUMBER. SYMBOL WITH LINE THRU IT DENOTES MOUNTED ABOVE 18". COORDINATE HEIGHT WITH ARCHITECTURAL DRAWINGS.
ΦX ⊕X	NEMA 5-20R DUPLEX RECEPTACLE WITH GROUND FAULT INTERRUPTER. "X" INDICATES CIRCUIT NUMBER. SYMBOL WITH LINE THRU IT DENOTES MOUNTED ABOVE 18". COORDINATE HEIGHT WITH ARCHITECTURAL DRAWINGS.
⊕X	NEMA 5-20R DOUBLE DUPLEX RECEPTACLE. "X" INDICATES CIRCUIT NUMBER. COORDINATE HEIGHT WITH ARCHITECTURAL DRAWINGS.
X	LIGHTING FIXTURE TYPE: SEE LIGHTING FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION.

ABBREVIATIONS

A	AMPERE	GND, G	GROUND
AFF	ABOVE FINISHED FLOOR	IC	INTERRUPTING CAPACITY
AFG	ABOVE FINISHED GRADE	IG	ISOLATED GROUND
C	CONDUIT(S)	I/L	INTERLOCKED
CB	CIRCUIT BREAKER	MC	MECHANICAL CONTRACTOR
CH	COUNTER HEIGHT	MOD	MOTOR OPERATED DAMPER
CO	CONDUIT ONLY	NIC	NOT IN CONTRACT
CT	CURRENT TRANSFORMER	NL	NIGHT LIGHT
CU	COPPER	NTS	NOT TO SCALE
CLG	CEILING	RGS	RIGID GALVANIZED STEEL
EC	ELECTRICAL CONTRACTOR	SPD	SURGE PROTECTIVE DEVICE
EG	EQUIPMENT GROUND	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
EM	EMERGENCY	T/C	TIME CLOCK
EMT	ELECTRICAL METALLIC TUBING	UON	UNLESS OTHERWISE NOTED
ETR	EXISTING TO REMAIN	V	VOLTS
EWC	ELECTRIC WATER COOLER	W	WALL MOUNTED
FA	FIRE ALARM	WP	WEATHERPROOF
FBO	FURNISHED BY OTHERS	RE	RELOCATE
GFI	GROUND FAULT INTERRUPTER		

MOUNTING HEIGHTS

HEIGHT	DESCRIPTION
10'-0"	EMERGENCY BATTERY UNITS (OR 1'-0" BELOW CEILING)
90" TO 6" BELOW CLG	FIRE ALARM AUDIBLE ALARM SIGNALS
7'-6" TO 8'-0"	FIRE ALARM COMBINATION ALARM SIGNALS
7'-0" TO 8'-0"	FIRE ALARM VISUAL SIGNALS
6'-6"	TOP OF ELECTRICAL PANEL BOARDS (LIGHTING OR POWER)
6'-0"	TOP OF HIGHEST ELECTRICAL DISCONNECT SWITCH OR STARTER
4'-0"	TOP OF WALL MOUNTED DEVICES SUCH AS LIGHT SWITCHES, MANUAL MOTOR STARTERS, THERMOSTATS, TELEPHONE/INTERCOM HANDSETS, FIRE ALARM PULLSTATIONS, ETC.
4'-0"	TOP OF WALL MOUNTED WIREMOLD (U.N.O.)
2'-0"	BOTTOM OF RECEPTACLES IN MECHANICAL ROOMS, REPAIR GARAGES, AND EXTERIOR OF BUILDING.
1'-6"	BOTTOM OF RECEPTACLES, TELEPHONE/TELEDATA OUTLETS, TELEVISION JACKS, ETC.
0'-0"	FINISHED FLOOR ELEVATION.

SYMBOL LIST NOTES

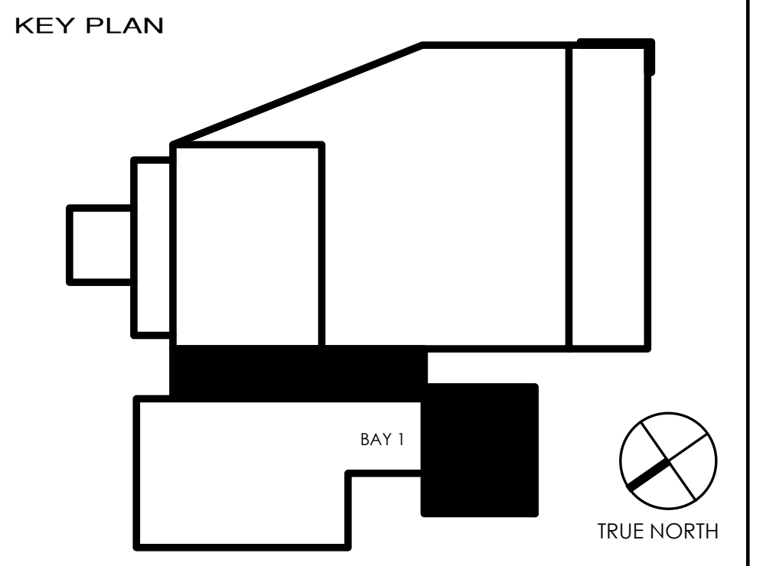
1. SYMBOLS ARE INDICATED FOR GENERAL REFERENCE ONLY. THE PRESENCE OF A SYMBOL DOES NOT INDICATE ITS USE ON THIS PROJECT. REFER TO PLAN DRAWINGS FOR SPECIFIC SYMBOLS USED.
2. PROVIDE MOLDED INSERTS AT ALL PADDED WALL LOCATIONS (GYMNASIUMS, MULIT-PURPOSE ROOMS, ETC.). INSERTS SHALL BE AS MANUFACTURED BY PORTER ATHLETIC OR EQUAL, MODEL NO. 343 OR NO. 344 AS REQUIRED. COLOR AS SELECTED BY ARCHITECT.
3. ALL WIRING DEVICES SHALL BE LABELED WITH PANEL AND CIRCUIT NUMBER ON DEVICE PLATES. LABELS SHALL BE CLEAR SELF-ADHESIVE WITH BLACK LETTERING UNLESS OTHERWISE INDICATED OR DIRECTED.

APPLICABLE CODES:

ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST CODES AND SUBCODES AS ADOPTED BY THE STATE OF NEW JERSEY:

- NEW JERSEY UNIFORM CONSTRUCTION CODE (NJUCC)
- REHABILITATION SUBCODE 5:23-6
- 2021 INTERNATIONAL BUILDING CODE - NJ EDITION
- 2020 NATIONAL ELECTRICAL CODE
- 2019 NFPA 13
- 2019 ENERGY CODE - ASHRAE STANDARD 90.1
- REQUIREMENTS OF LOCAL AUTHORITY HAVING JURISDICTION.

KEY PLAN



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NEW JERSEY SPORTS & NJSEA EXPOSITION AUTHORITY

PROJECT

NJSEA FIREHOUSE GARAGE ADDITIONS & RENOVATION

MEADOWLANDS SPORTS COMPLEX
East Rutherford, NJ 07073
Block:107.01 Lot: 1

STRUCTURAL / MEP / CIVIL CONSULTANT:

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ELECTRICAL LEGEND, ABBREVIATIONS & GENERAL NOTES

SCALE

DATE	DESCRIPTION	DRN	CHK
6/10/2025	DCA SUBMISSION		

REV	DATE	DESCRIPTION
1	6/26/2025	REVISED AS PER DCA COMMENTS
2	7/10/2025	ADDENDUM #2

PROJECT NO.	SHEET NO.
5669	E1.0

PLOT DATE: 6/9/2025 12:49:55 PM

O:\18K\18700\18704 -- Njsea\18704.016 -- Njsea Fire House\CADD\DWG\MEP\18704.016 -- E1.0.dwg E1.0
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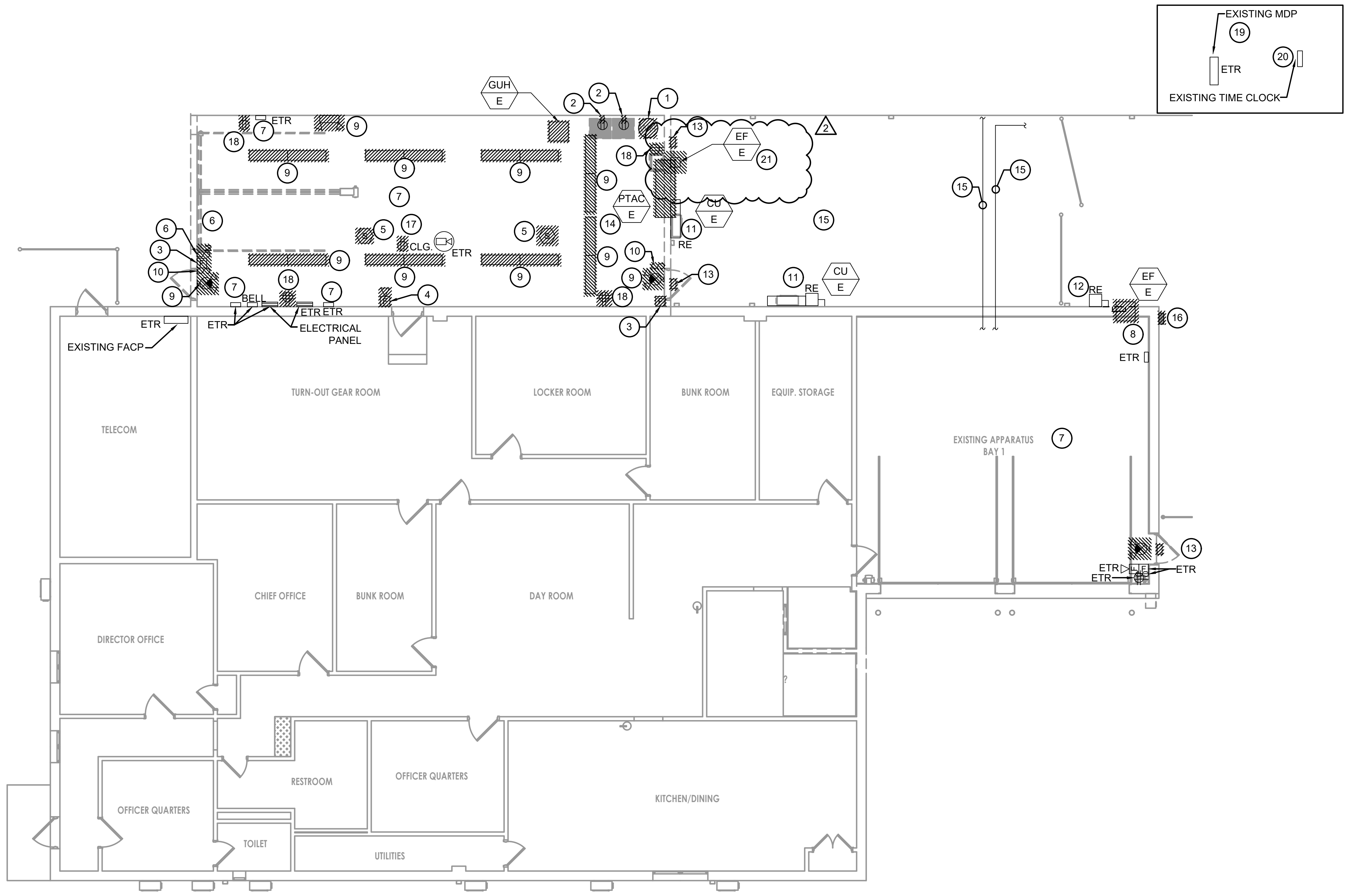
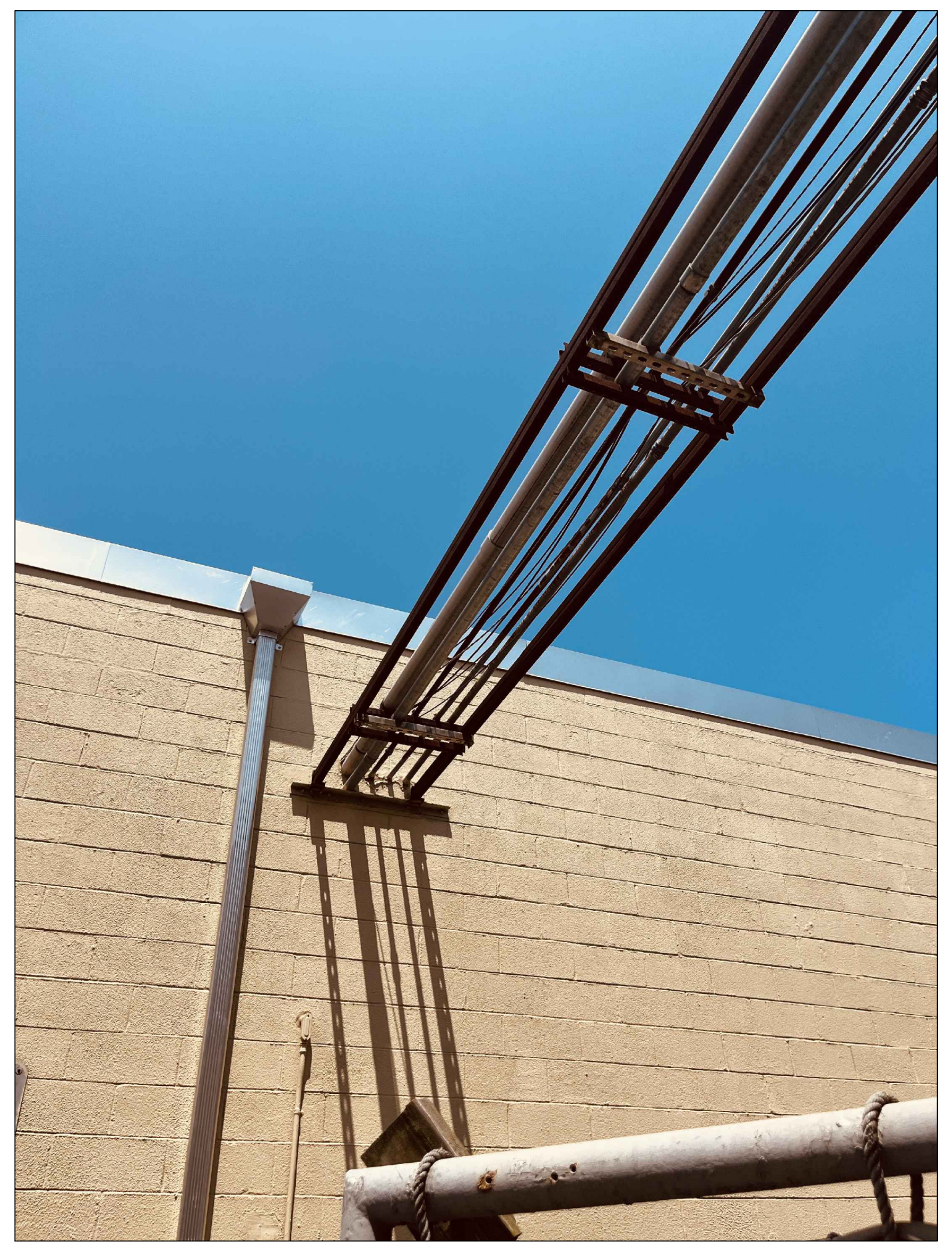


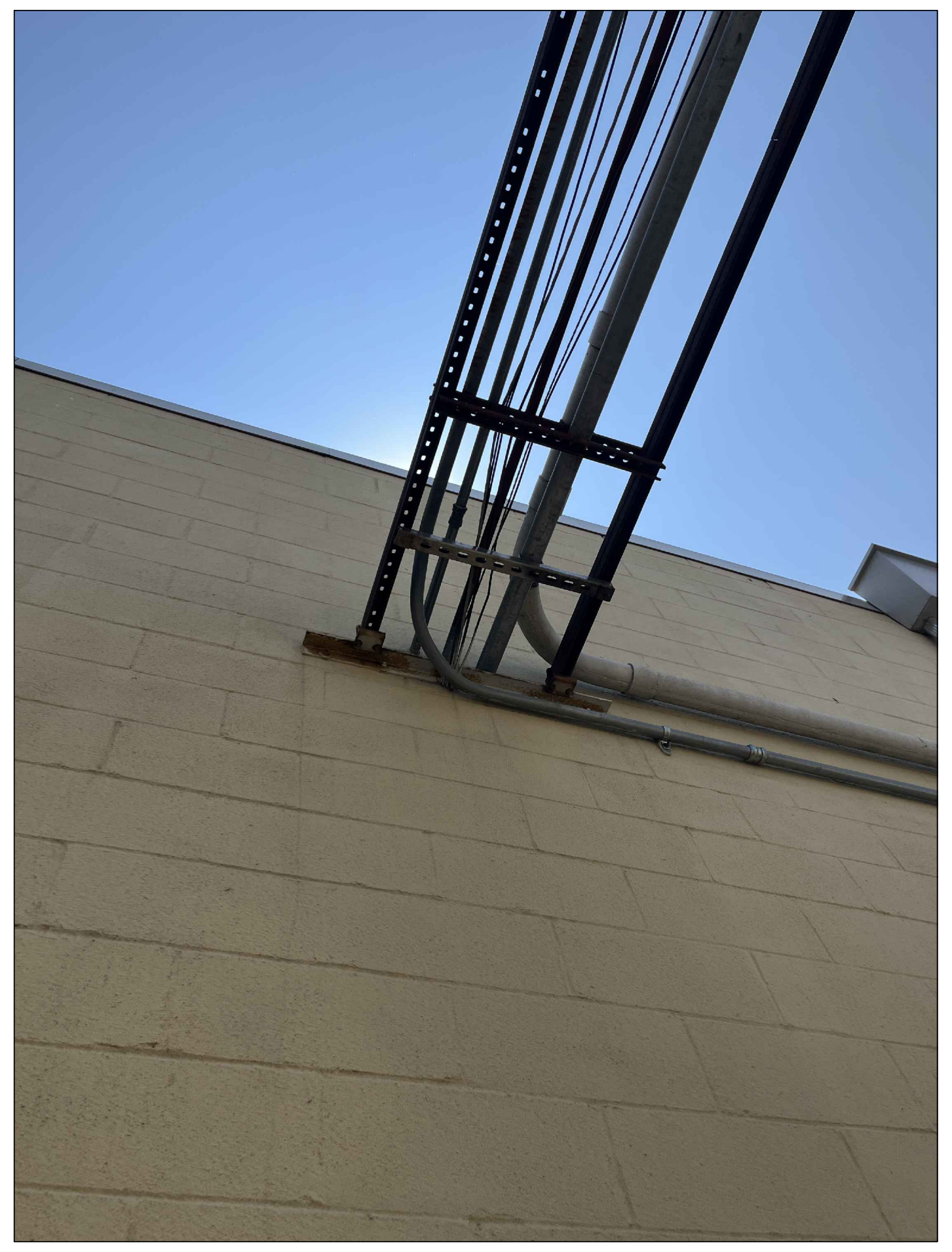
DEMOLITION PLAN

SCALE: 1/8" = 1' - 0"



PICTURE #1

PICTURE #2



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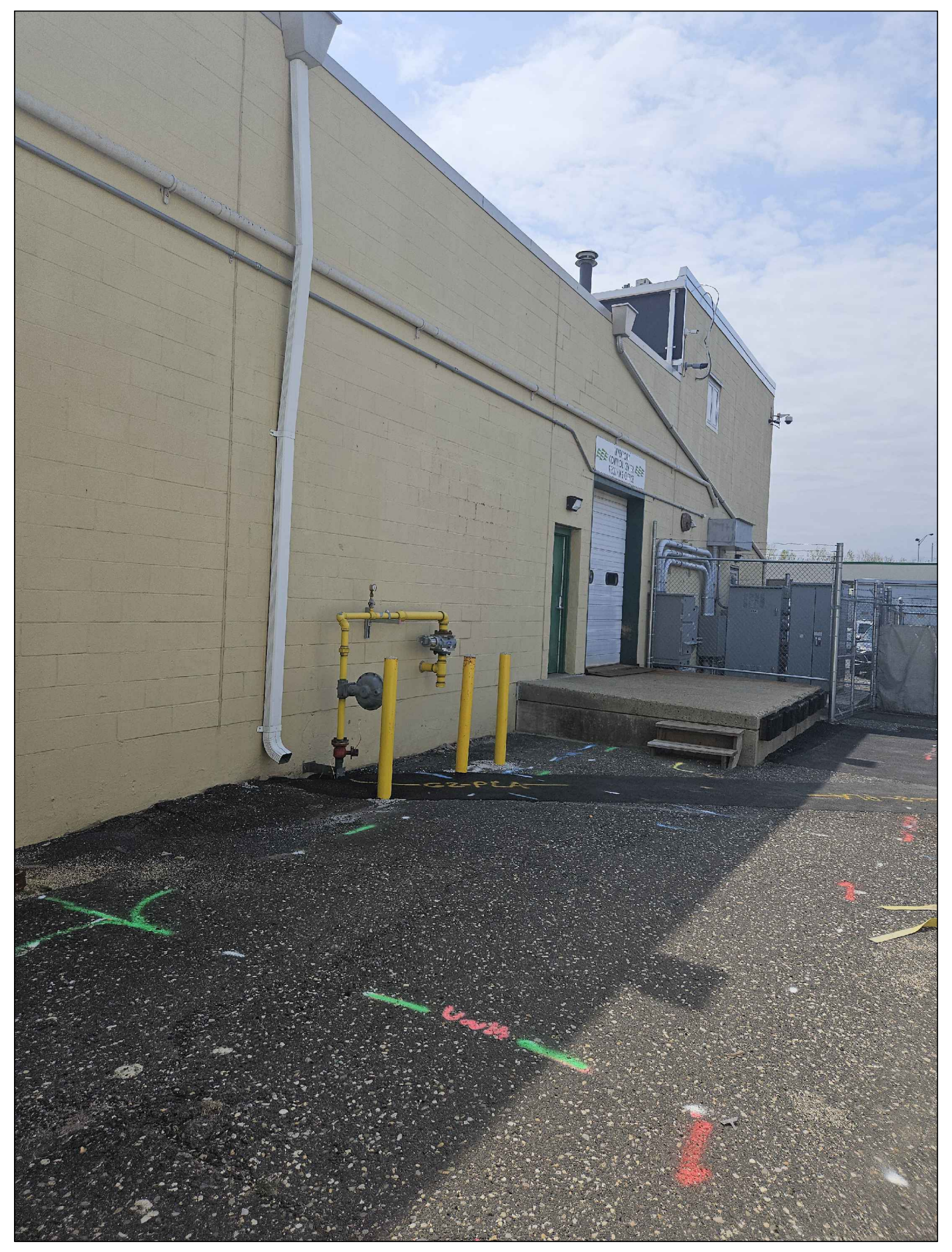


PICTURE #4

DEMOLITION GENERAL NOTES

1. FIELD COORDINATE AND REPORT ANY DISCREPANCIES WITH THE ARCHITECT OR ENGINEER.
2. FIELD VERIFY EXISTING CONDITIONS BEFORE PROCEEDING WITH ANY WORK.
3. PROTECT THE AREA OF WORK FROM ANY DAMAGE, DUST AND DEBRIS.
4. CONTRACTOR SHALL COORDINATE SCHEDULING WITH THE OWNER AND GENERAL CONTRACTOR TO COMPLY WITH THE OWNERS USAGE OF THE BUILDING.
5. THE ELECTRICAL CONTRACTOR SHALL PERFORM ALL REQUIRED ELECTRICAL DEMOLITION FOR MECHANICAL EQUIPMENT SCHEDULED FOR DEMOLITION BY OTHER TRADES. FIELD COORDINATE WITH THE MECHANICAL CONTRACTOR.
6. THE EXISTING FIRE ALARM DEVICES SHALL REMAIN CONNECTED AND OPERATIONAL WHILE THE NEW FIRE ALARM DEVICES ARE BEING INSTALLED. UPON APPROVAL OF THE NEW FIRE ALARM DEVICES, THE DEVICES THAT ARE INDICATED TO BE DEMOED SHALL BE REMOVED.
7. FURNISH AND INSTALL CONDUIT AND WIRE AS NECESSARY FOR THE CONTINUITY OF ANY FEEDERS OR BRANCH CIRCUITS ORIGINATING OUTSIDE THE DEMOLITION AREA THAT SERVES ANY ELECTRICAL EQUIPMENT OR DEVICES TO REMAIN. MODIFY OR REPLACE AS REQUIRED.
8. PROVIDE TEMPORARY SUPPORT FROM THE DECK FOR THE CEILING MOUNTED FIRE ALARM DEVICES INCLUDING THE ASSOCIATED CONDUCTOR AND CONDUIT DURING THE ENTIRE COURSE OF DEMOLITION WORK UNTIL THE INSTALLATION OF NEW CEILING.
9. PROVIDE EGRESS LIGHTING AS REQUIRED TO SERVE THE EGRESS PATH DURING DEMOLITION.
10. FREED UP CIRCUITS UPON DEMOLITION SHALL BE LABELED AS SPARE IN THE ELECTRICAL PANELS.
11. DISCONNECT ALL THE LIGHTING CONTROLS BETWEEN THE SCOPE OF WORK AREA AND AREAS NOT IN THIS IS SCOPE OF WORK. REMOVE AND RELOCATE ALL THE LIGHT SWITCHES THAT SERVE OTHER AREAS NOT IN THIS SCOPE OF WORK. PROVIDE WIRING AND CONDUIT AS NEEDED TO MAINTAIN CONTINUITY.
12. ALL EXISTING HEAT DETECTORS SHALL REMAIN AND/OR REINSTALLED DURING NEW PHASE WORK.

DEMOLITION KEY NOTES

① DISCONNECT THE POWER TO THE WATER HEATER INCLUDING WIRING/CONDUIT BACK TO THE SOURCE OF ORIGIN.

② REMOVE THE RECEPTACLES FOR THE WASHER AND DRYER. SAFE OFF THE WIRING. EXTEND WIRING/CONDUIT AS REQUIRED USING THE EXISTING WIRE SIZE. REFER TO THE NEW WORK PLAN FOR ADDITIONAL INFORMATION.

③ REMOVE THE PULL STATION. REMOVE THE CONDUIT/WIRING BACK TO THE SOURCE OF ORIGIN. TYPICAL FOR ALL IN THIS SPACE.

④ REMOVE THE HORN STROBE. REMOVE THE CONDUIT/WIRING BACK TO THE NEAREST DEVICE. TYPICAL FOR ALL IN THIS SPACE.

⑤ REMOVE THE SMOKE DETECTOR. REMOVE THE WIRING/CONDUIT BACK TO THE SOURCE OF ORIGIN. TYPICAL FOR ALL IN THIS SPACE.

⑥ REMOVE THE DISCONNECT SWITCH INCLUDING ALL ASSOCIATED POWER DEVICES SUCH AS PUSH BUTTONS AND JUNCTION BOXES FOR THE OVERHEAD DOOR THAT IS BEING REMOVED. REMOVE THE WIRING/CONDUIT BACK TO THE SOURCE OF ORIGIN.

⑦ ALL ELECTRICAL DEVICES, JUNCTION BOXES, AND ASSOCIATED WIRING/CONDUIT THAT SERVE OTHER AREAS SHALL BE RELOCATED FOR CLEARANCE PURPOSES AND OR DUE TO THE REMOVAL OF WALLS. ALL WIRING/CONDUIT SHALL BE RE-ROUTED AND EXTENDED. ALL WIRING SHALL BE EXTENDED USING THE EXISTING WIRE SIZE.

⑧ REMOVE THE DISCONNECT SWITCH INCLUDING WIRING/CONDUIT BACK TO THE SOURCE OF ORIGIN.

⑨ DISCONNECT AND REMOVE ALL EXISTING LIGHTING INCLUDING EXIT AND EMERGENCY LIGHTS, UNLESS SPECIFICALLY NOTED OTHERWISE. EXISTING CIRCUIT SHALL REMAIN AND BE RE-USED TO FEED THE NEW LIGHTING. PROVIDE A J-BOX TO EXTEND THE EXISTING BRANCH CIRCUIT AS REQUIRED. IF THERE ARE OTHER DEVICES BEING SERVED BY THE SAME CIRCUIT IN ANOTHER AREA, CONTRACTOR SHALL EXTEND THE WIRING/CONDUIT TO THE NEXT DEVICE IN LINE TO MAINTAIN CONTINUITY. NOTE THAT NOT ALL LIGHTING MAY BE INDICATED ON THESE PLANS. COORDINATE EXACT QUANTITY IN THE FIELD. REFER TO THE NEW WORK PLAN FOR ADDITIONAL INFORMATION.

⑩ REMOVE THE LIGHT SWITCH INCLUDING WIRING/CONDUIT BACK TO THE SOURCE OF ORIGIN.

⑪ EXTEND THE WIRING/CONDUIT FOR THE CONDENSING UNIT AND DISCONNECT SWITCH THAT IS BEING RELOCATED. EXTEND THE WIRING USING THE EXISTING WIRE SIZE.

⑫ RELOCATE THE DISCONNECT SWITCH. EXTEND THE WIRING USING THE EXISTING WIRE SIZE.

⑬ REMOVE THE EXTERIOR LIGHT. REMOVE THE WIRING/CONDUIT BACK TO THE SOURCE OF ORIGIN.

⑭ REMOVE THE DISCONNECT SWITCH INCLUDING WIRING/CONDUIT BACK TO THE SOURCE OF ORIGIN FOR THE HVAC UNIT THAT IS BEING REMOVED.

⑮ RE-ROUTE AND EXTEND ALL EXTERIOR CONDUIT/WIRING AS REQUIRED DUE TO THE RENOVATIONS. EXTEND THE WIRING USING THE EXISTING WIRE SIZE. REFER TO PICTURE #1, #2, #3, AND #4. REFER TO NEW WORK PLAN FOR WIRE SIZE.

⑯ REMOVE THE WIRING/ CONDUIT BACK TO THE SOURCE OF ORIGIN FOR THE TEMPORARY POWER FEED UPON COMPLETION OF THE NEW WORK.

⑰ REMOVE THE CEILING MOUNTED RECEPTACLES INCLUDING WIRING/CONDUIT BACK TO THE SOURCE OF ORIGIN.

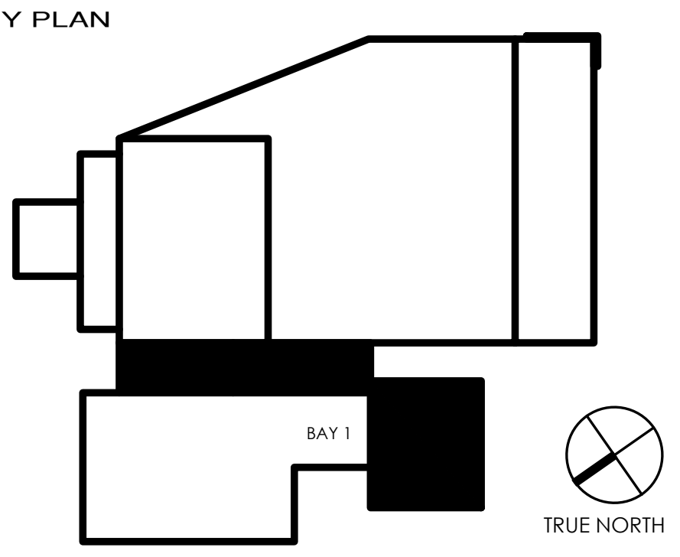
⑱ REMOVE THE RECEPTACLES INCLUDING WIRING/CONDUIT BACK TO THE SOURCE OF ORIGIN.

⑲ APPROXIMATE LOCATION OF MDP LOCATED IN THE ELECTRIC ROOM.

⑳ APPROXIMATE LOCATION OF TIME CLOCK LOCATED IN THE ELECTRIC ROOM.

㉑ REMOVE THE DISCONNECT SWITCH INCLUDING WIRING/CONDUIT BACK TO THE SOURCE OF ORIGIN FOR THE EXHAUST FAN THAT IS BEING REMOVED.

KEY PLAN



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PROJECT

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GARAGE ADDITIONS
& RENOVATION

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East Rutherford, NJ 07073
Block:107.01 Lot: 1

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ELECTRICAL
DEMOLITION
PLAN

SCALE

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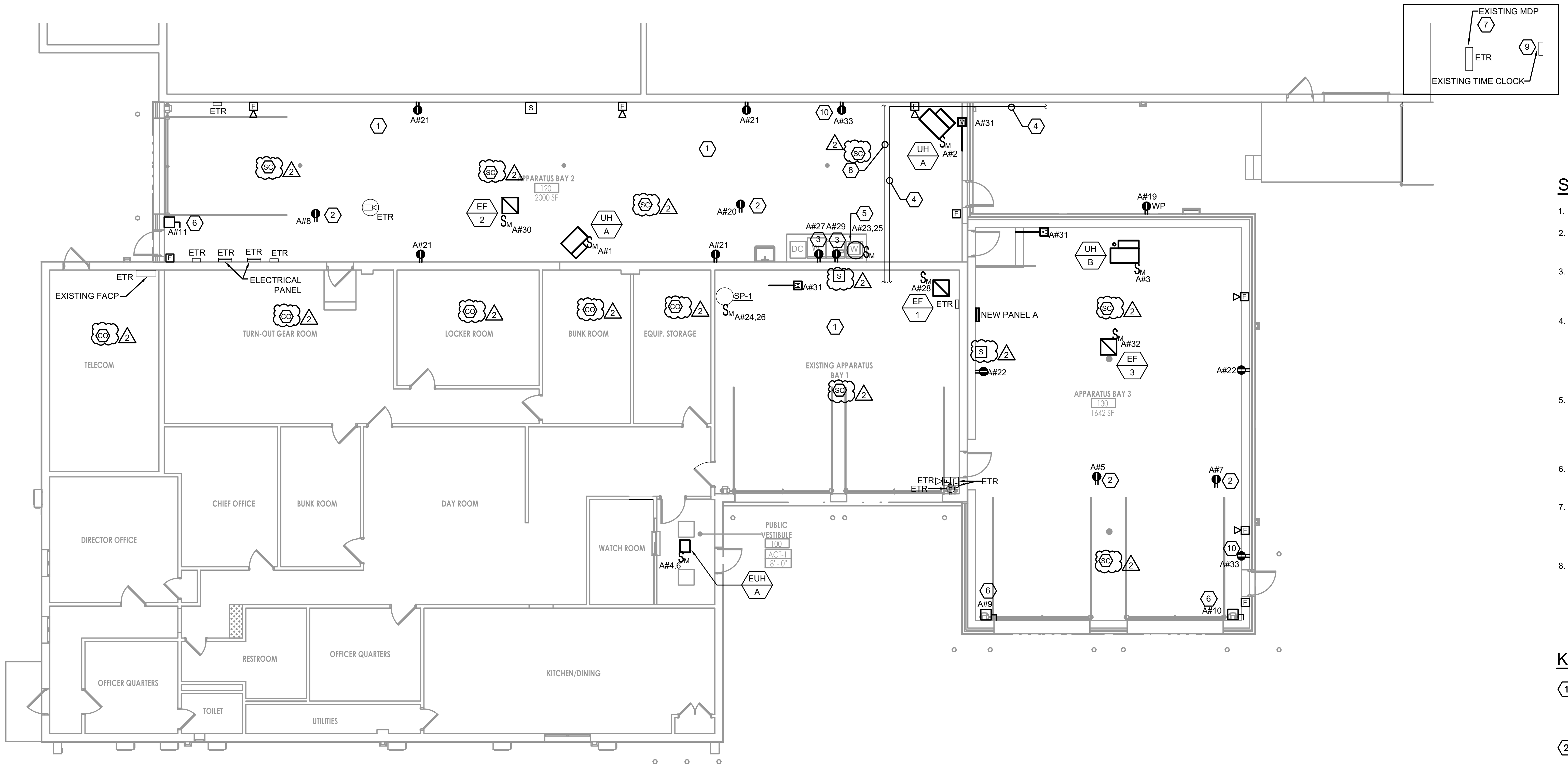


POWER PLAN

SCALE: 1/8" = 1' - 0"

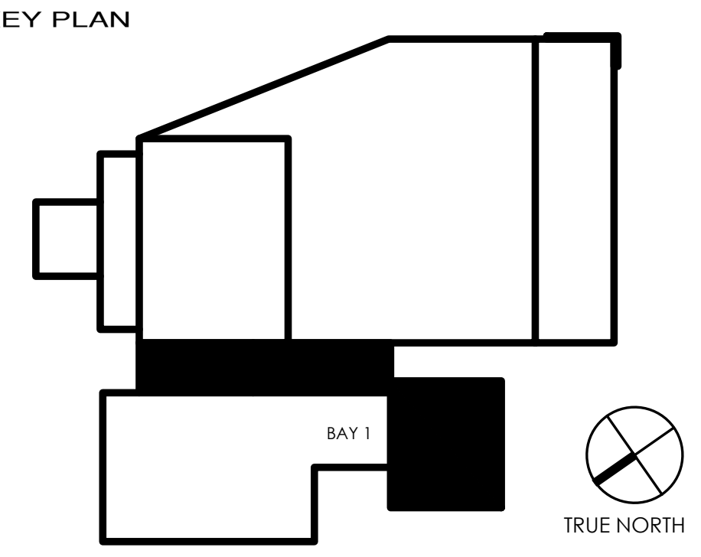
SHEET NOTES

1. PROTECT THE AREA OF WORK FROM ANY DAMAGE, DUST AND DEBRIS.
2. CONTRACTOR SHALL COORDINATE SCHEDULING WITH THE OWNER AND GENERAL CONTRACTOR TO COMPLY WITH THE OWNERS USAGE OF THE BUILDING.
3. IN ALL AREAS WHERE WORK IS BEING PERFORMED UNDER THIS CONTRACT, CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPORTING ALL EXISTING ELECTRICAL DEVICES AND WIRING/CONDUIT ABOVE THE EXISTING CEILINGS, PER NEC.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER CARE OF ALL OWNER'S EQUIPMENT AND/OR FURNISHINGS WHICH ARE REQUIRED TO BE TEMPORARILY REMOVED, STORED OR RELOCATED. CONTRACTOR SHALL REPLACE, REPAIR OR REIMBURSE OWNER FOR ALL DAMAGES TO SUCH PROPERTIES AT FULL REPLACEMENT VALUE AND EQUIVALENCY. CONTRACTOR SHALL ADVISE OWNER FOR DISPOSITION OF REMOVED EQUIPMENT AND/OR MATERIALS.
5. CONTRACTOR SHALL PROVIDE AND INSTALL A LOCAL LOCKABLE DISCONNECT SWITCH BY EACH PIECE OF MOTORIZED OR PACKAGED EQUIPMENT. DISCONNECT AMPACITY RATING SHALL AT LEAST MATCH THAT OF THE UPSTREAM CIRCUIT BREAKER PROTECTING THE EQUIPMENT. INDOOR DISCONNECTS SHALL BE NEMA 1 TYPE AND OUTDOOR DISCONNECTS SHALL BE BE NEMA 3R TYPE.
6. CIRCUIT NUMBERS ARE INDICATED FOR INTENT ONLY. THE CONTRACTOR SHALL ADJUST ACCORDINGLY IN THE FIELD TO BALANCE CIRCUITS EVENLY ON ALL PHASES.
7. CONNECT THE NEW FIRE ALARM DEVICES TO THE EXISTING BUILDING FIRE ALARM SYSTEM. CONFIRM THAT ALL THE NEW FIRE ALARM DEVICES ARE SYNCHRONIZED WITH THE EXISTING FIRE ALARM DEVICES/SYSTEM. THE EXISTING FIRE ALARM CONTROL PANEL IS LOCATED IN TELCOM. THE FIRE ALARM CONTROL PANEL IS HONEYWELL XLS140.
8. CONTRACTOR SHALL CONFIRM THE HEIGHT OF ALL RECEPTACLES WITH THE ARCHITECTURAL DRAWINGS.

KEY NOTES

1. ALL ELECTRICAL DEVICES JUNCTION BOXES, AND ASSOCIATED WIRING/CONDUIT THAT ARE TO REMAIN SHALL BE RELOCATED FOR CLEARANCE PURPOSES AND OR DUE TO THE REMOVAL OF WALLS IN THIS SPACE. ALL WIRING/CONDUIT SHALL BE RE-ROUTED AND EXTENDED. ALL WIRING SHALL BE EXTENDED USING THE EXISTING WIRE SIZE.
2. PROVIDE A CEILING MOUNTED RECEPTACLE FOR CORD REELS. COORDINATE THE EXACT LOCATION WITH THE ARCHITECTURAL DRAWINGS. CONTRACTOR SHALL PROVIDE ULINE RETRACTABLE CORD REELS MODEL#H-5644.
3. REUSE THE WIRING THAT WAS SAFED OFF DURING DEMOLITION TO CONNECT THE RECEPTACLES FOR THE EXISTING WASHER AND DRYER. EXTEND THE WIRING/CONDUIT AS REQUIRED USING THE EXISTING WIRE SIZE.
4. RE-ROUTE AND EXTEND ALL EXTERIOR CONDUIT/WIRING AS REQUIRED DUE TO THE RENOVATIONS. EXTEND THE WIRING USING THE EXISTING WIRE SIZE. PROVIDE (1) 3" CONDUIT WITH 4#350MC & #2GND. PROVIDE (1) 2" CONDUIT WITH 4#4/0 & #4 GND.
5. NEW EWH. REFER TO PANEL SCHEDULE FOR WIRE SIZE.
6. PROVIDE A 120V DISCONNECT SWITCH FOR THE OVER HEAD DOOR. REFER TO PANEL SCHEDULES FOR WIRE INFORMATION.
7. APPROXIMATE LOCATION OF MDP LOCATED IN THE ELECTRIC ROOM. PROVIDE A NEW FEEDER AND CONDUIT FROM EXISTING MDP TO CONNECT TO NEW PANEL A. NEW PANEL A IS APPROXIMATELY 180 FEET FROM THE EXISTING MDP. REFER TO THE PANEL SCHEDULES FOR FEEDER SIZE.
8. PROVIDE (3) 1" CONDUIT WITH 4#4/& #8 GND.
9. APPROXIMATE LOCATION OF TIME CLOCK LOCATED IN THE ELECTRIC ROOM.
10. PROVIDE A RECEPTACLE FOR THE CO NOx MONITORING SYSTEM. REFER TO THE PANEL SCHEDULE FOR WIRING INFORMATION.

KEY PLAN



CLIENT

NEW JERSEY SPORTS & NJSEA EXPOSITION AUTHORITY

PROJECT

NJSEA FIREHOUSE GARAGE ADDITIONS & RENOVATION

MEADOWLANDS SPORTS COMPLEX
East Rutherford, NJ 07073
Block:107.01 Lot: 1

STRUCTURAL / MEP / CIVIL CONSULTANT:

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DWG

ELECTRICAL POWER PLAN

SCALE

DATE	DESCRIPTION	DRN	CHK
6/10/2025	DCA SUBMISSION		

REV	DATE	DESCRIPTION
1	6/26/2025	REVISED AS PER DCA COMMENTS
2	7/10/2025	ADDENDUM #2

PROJECT NO.	SHEET NO.
5669	E3.0

PLOT DATE: 6/9/2025 12:49:55 PM

O: \18K\18700\18704 – Njsea\18704.016 – Njsea Fire House\CADD\DWG\MEP\18704.016 – E3.0.dwg E3.0
6/9/2025 12:49:55 PM

LIGHT FIXTURE SCHEDULE

TYPE	SYMBOL	DESCRIPTION	MANUFACTURER	CATALOG NO.	LAMPS	BALLAST		VOLTS	TOTAL WATTAGE	MOUNTING
						TYPE	QTY			
A	○	HIGH BAY LED	NICOR	HBC-5-150S-U-S-8-BK MOUNTING:HBC4100-200YOKE EMERGENCY:EMB4002UNVBK	LED	L	1	UNV	150	PENDANT
B	□	EXTERIOR VAPOR PROOF LIGHT	RAB	VXRGB-12-RED-DN FINISH: NATURAL SHOT	LED	L	1	UNV	12	SURFACE
C	▭	EXTERIORLED LINEAR SURFACE MOUNT FIXTURE	iN - STRIP SQUARE +	SS-1284-67-20-IG-3K-UNV-EA24 BRACKET: -1045-IG	LED	L	1	UNV	67	BRACKET
D	□	EXTERIOR LED BUILDING MOUNTED FIXTURE	iN - MIMIK 30	M30-M-36-T4-IG-3K-UNV-NA EMERGENCY:M30-M-36-T4-IG-3K-UNV-NA-REM	LED	E	1	UNV	36	SURFACE
E	▭	EXTERIOR LED WALL PACK FIXTURE	iN - SHIELD+2	SH2-80-IG-3K-UNV-0/10V	LED	E	1	UNV	80	SURFACE
F	□	2'X2' LAY IN LED	MINDSET	PTF-22-R-G-D-8035-E-M EMERGENCY:PTF-22-R-G-D-8035-E-M-B1-MJM1	LED	E	1	UNV	30	LAY IN
X	⊗	EXIT LIGHT	ISOLITE	RL-EM-R-U-WH-MTEB	LED	E	1	UNV	7	SURFACE

NOTES:

1. VERIFY ALL CEILING TYPES PRIOR TO ORDERING FIXTURES
2. VERIFY ALL OPERATING VOLTAGES PRIOR TO ORDERING FIXTURES
3. COORDINATE THE HEIGHT OF ALL SUSPENDED FIXTURES WITH THE OWNER, ARCHITECT, AND ENGINEER PRIOR TO INSTALLATION
4. ALL LAMPS SHALL HAVE A COLOR TEMPERATURE OF 3500 DEG. KELVIN AND A CRI OF 85 UNLESS SPECIFICALLY NOTED OTHERWISE

BALLAST TYPES

L LED DRIVER

EMERGENCY FIXTURES

◪ ◩ ●

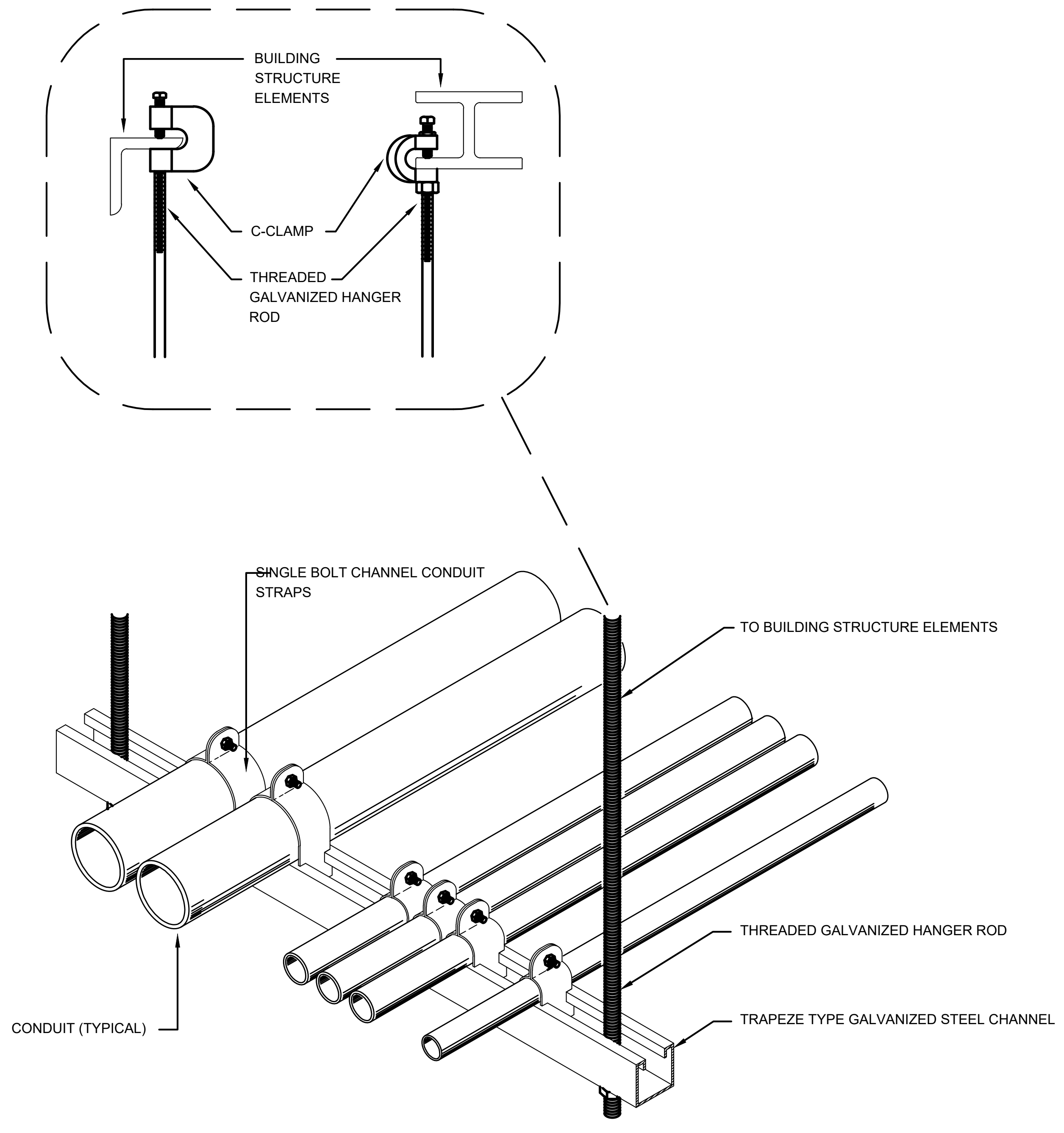
FIXTURES DESIGNATED WITH A "1/2 SHADE" OR "FULL SHADE" AND ALL EXIT SIGNS SHALL HAVE AN EMERGENCY BATTERY PACK, UNLESS SPECIFICALLY NOTED OTHERWISE. BATTERY SHALL BE ABLE TO OPERATE LED FIXTURES FOR MINIMUM 90 MINS.

SENSOR SCHEDULE

SYMBOL	DESCRIPTION	MANUFACTURER	MODEL NO.	MOUNTING	NOTES
OS	OCCUPANCY SENSOR - 360 DEGREE	WATTSTOPPER	LMPC-100	CEILING	DIGITAL PASSIVE IR
S_D	DIGITAL WALLBOX DIMMING SWITCH	WATTSTOPPER	LMDM-101	WALL	IR TRANSCEIVER, (2) RJ45 PORT
RC A	DIGITAL ON/OFF/0-10V DIMMING ROOM CONTROLLER	WATTSTOPPER	LMRC-211	ABOVE CEILING	0-10V, NOTES 1,2
RC B	DIGITAL ON/OFF ROOM CONTROLLER	WATTSTOPPER	LMRC-101/102	ABOVE CEILING	LINE VOLTAGE, NOTES 1,2

NOTES:

1. REFER TO ELECTRICAL SPECIFICATIONS AND ADDITIONAL REQUIREMENTS WHICH MAY NOT NECESSARILY BE REFLECTED IN CATALOG NUMBER AND/OR DESCRIPTION IN THE SCHEDULE.
2. CONTRACTOR SHALL PROVIDE THE APPROPRIATE NUMBER OF ROOM CONTROLLERS FOR THE PROJECT. COORDINATE WITH THE MANUFACTURER FOR THE CORRECT QUANTITY.
3. CONTRACTOR SHALL PROVIDE 4"X4" JUNCTION BOX AS REQUIRED. SEE DETAILS ON DRAWING E-500.00



CONDUIT SUSPENSION SUPPORT DETAIL

NOT TO SCALE

JOB NAME:NJSEA FIREHOUSE
RATING: 208/120V, 3 PH, 4W, 1200A

MDP
(EXISTING)

JOB NO.:18704.016
LOCATION: MAIN ELECTRIC ROOM

CKT. NO.	CIRCUIT DESCRIPTION	POLE	LOAD KVA	BKR.	BRANCH CIRCUIT	A	B	C	BRANCH CIRCUIT	BKR.	LOAD KVA	POLE	CIRCUIT DESCRIPTION	CKT. NO.
1	EXISTING SPACE	3				0.0				400		3	EXISTING LOADS	2
3							0.0							4
5								0.0						6
7	EXISTING LOADS	3		125		0.0				125		3	EXISTING LOADS	8
9							0.0							10
11								0.0						12
13	EXISTING SPACE	3				0.0				20		3	EXISTING LOADS	14
15							0.0							16
17								0.0						18
19	EXISTING LOADS	3		100		0.0				30		3	EXISTING LOADS	20
21							0.0							22
23								0.0						24
25	EXISTING SPARE	3		150		0.0				125		3	EXISTING LOADS	26
27							0.0							28
29								0.0						30
31	EXISTING LOADS	3		125		0.0				125		3	EXISTING LOADS	32
33							0.0							34
35								0.0						36
37	EXISTING LOADS	3		200		0.0				125		3	EXISTING LOADS	38
39							0.0							40
41								0.0						42
43	EXISTING LOADS	3		125		0.0				225		3	EXISTING LOADS	44
45							0.0							46
47								0.0						48
49	EXISTING LOADS	3		125		0.0				225		3	EXISTING LOADS	50
51							0.0							52
53								0.0						54
55	**NEW PANEL A**	**3**	**11.8**	**125**	**4#1 & 1#6EG IN 2"C**	11.8				125		3	EXISTING LOADS	56
57			**9.4**				9.4							58
59			**10.7**					10.7						60
					TOTAL (PHASE):	11.8	9.4	10.7						

⟨1⟩ ⚠2

PANEL TYPE: NEMA 1
MOUNTING: SURFACE
MAIN LUGS ONLY
INTERRUPTING RATING: EXISTING KA SYM.
FED FROM: 300 KVA TRANSFORMER AND DISCONNECT

TOTAL CONNECTED LOAD.:	31.9	KVA
	88.7	AMPS

NOTES

1. SINGLE SECTION 84 CIRCUIT PANELBOARD.
2. ALL BUSING TO BE COPPER WITH BOLT ON BREAKERS ONLY
3. CONTRACTOR IS RESPONSIBLE TO COORDINATE THE SHORT CIRCUIT RATING PRIOR TO PURCHASING ANY EQUIPMENT.
4. ALL WIRE SIZES ARE BASED ON 75 DEGREE WIRE.
5. SHORT CIRCUIT RATING: PANEL SHALL BE FULLY RATED TO INTERRUPT SYMMETRICAL SHORT CIRCUIT CURRENT AVAILABLE AT TERMINALS.

JOB NAME:NJSEA FIREHOUSE
RATING: 208/120V, 3 PH, 4W, 225A

A
(NEW)

JOB NO.:18704.016
LOCATION: APPARATUS BAY 3

CKT. NO.	CIRCUIT DESCRIPTION	POLE	LOAD KVA	BKR.	BRANCH CIRCUIT	A	B	C	BRANCH CIRCUIT	BKR.	LOAD KVA	POLE	CIRCUIT DESCRIPTION	CKT. NO.
1	UH-A	1	0.5	20	2#12 & 1#12EG IN 3/4"C	1.7			2#12 & 1#12EG IN 3/4"C	20	1.2	1	UH-B	2
3	UH-A	1	1.2	20	2#12 & 1#12EG IN 3/4"C		2.9		3#12 & 1#12EG IN 3/4"C	20	1.7	2	EHU-A	4
5	RECEPTACLES-CORD REEL	1	1.0	20	2#12 & 1#12EG IN 3/4"C			2.7			1.7			6
7	RECEPTACLES-CORD REEL	1	1.0	20	2#12 & 1#12EG IN 3/4"C	2.0			2#12 & 1#12EG IN 3/4"C	20	1.0	1	RECEPTACLES - CORD REEL	8
9	OVERHEAD DOOR	1	1.2	20	2#12 & 1#12EG IN 3/4"C		2.4		2#12 & 1#12EG IN 3/4"C	20	1.2	1	OVERHEAD DOOR	10
11	OVER HEAD DOOR	1	1.2	20	2#12 & 1#12EG IN 3/4"C			2.1	2#12 & 1#12EG IN 3/4"C	20	0.9	1	LIGHTING - APPARATUS BAY 2	12
13	LIGHTING - APPARATUS BAY 2	1	0.9	20	2#12 & 1#12EG IN 3/4"C	2.2			2#12 & 1#12EG IN 3/4"C	20	1.3	1	LIGHTING - APPARATUS BAY 3	14
15	EXTERIOR LIGHTING VIA TIMECLOCK	1	0.5	20	2#12 & 1#12EG IN 3/4"C		1.0		2#12 & 1#12EG IN 3/4"C	20	0.5	1	EXTERIOR LIGHTING - VIA TIMECLOCK	16
17	EXTERIOR FDC LIGHT	1	0.3	20	2#12 & 1#12EG IN 3/4"C			0.5	2#12 & 1#12EG IN 3/4"C	20	0.2	1	LIGHTING - VESTIBULE	18
19	RECEPTACLES - EXTERIOR	1	0.3	20	2#12 & 1#12EG IN 3/4"C	1.5			2#12 & 1#12EG IN 3/4"C	20	1.2	1	RECEPTACLES - CORD REEL	20
21	RECEPTACLES - APPARATUS BAY 2	1	0.6	20	2#12 & 1#12EG IN 3/4"C		0.8		2#12 & 1#12EG IN 3/4"C	20	0.2	1	RECEPTACLES - APPARATUS BAY 3	22
23	EWH	2	3.0	35	3#8 & 1#10EG IN 3/4"C			3.4	3#12 & 1#12EG IN 3/4"C	15	0.4	2	SP-1	24
25			3.0			3.4					0.4			26
27	WASHER	1	1.0	20	2#12 & 1#12EG IN 3/4"C		2.0		2#12 & 1#12EG IN 3/4"C	20	1.0	1	EF-1	28
29	DRYER	1	1.0	20	2#12 & 1#12EG IN 3/4"C			2.0	2#12 & 1#12EG IN 3/4"C	20	1.0	1	EF-2	30
31	MOTORIZED DAMPERS	1	1.0	20	2#12 & 1#12EG IN 3/4"C	1.0			2#12 & 1#12EG IN 3/4"C	20	1.0	1	EF-3	32
33	CO NOX PANEL	1	0.3	20	2#12 & 1#12EG IN 3/4"C		0.3						SPACE	34
35	SPACE							0.0					SPACE	36
37	SPACE					0.0							SPACE	38
39	SPACE						0.0						SPACE	40
41	SPACE							0.0					SPACE	42
					TOTAL (PHASE):	11.8	9.4	10.7						

PANEL TYPE: NEMA 1
MOUNTING: SURFACE ⚠2
MAIN CIRCUIT BREAKER: 125A
⟨2⟩ INTERRUPTING RATING: 42KA SYM.
FED FROM: EXISTING MDP

TOTAL CONNECTED LOAD.:	31.9	KVA
	88.7	AMPS

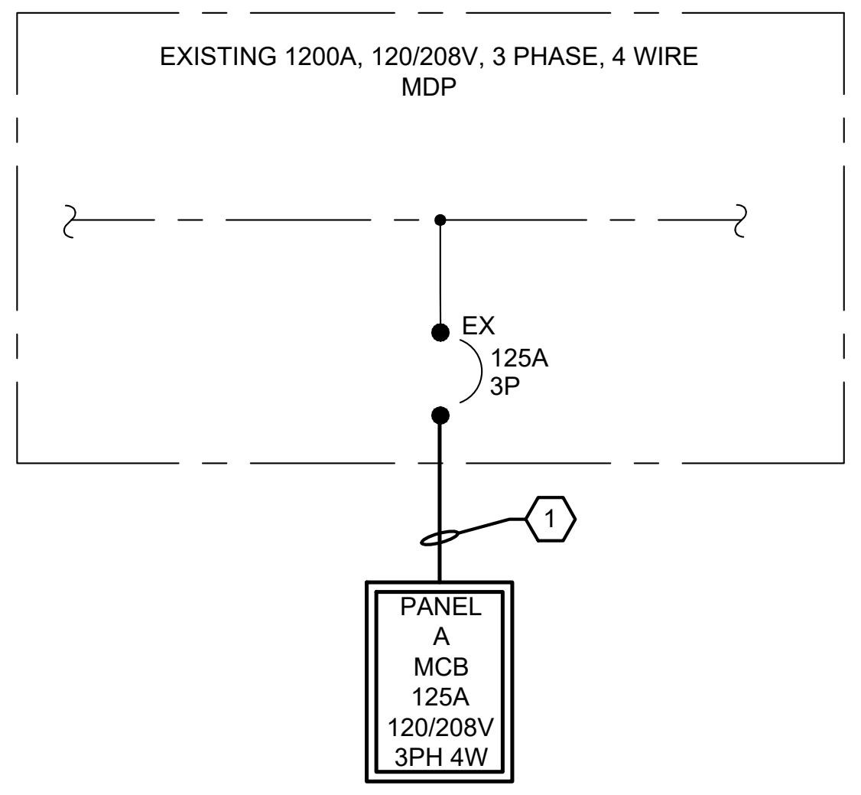
NOTES

1. ALL BUSING TO BE COPPER
2. BOLT ON BREAKERS ONLY
3. CONTRACTOR IS RESPONSIBLE TO COORDINATE THE SHORT CIRCUIT RATING PRIOR TO PURCHASING ANY EQUIPMENT.
4. ALL WIRE SIZES ARE BASED ON 75 DEGREE WIRE.
5. SHORT CIRCUIT RATING: PANEL SHALL BE FULLY RATED TO INTERRUPT SYMMETRICAL SHORT CIRCUIT CURRENT AVAILABLE AT TERMINALS.

PANEL SCHEDULE KEY NOTES

⟨1⟩ USE THE EXISTING 125A SPARE CIRCUIT BREAKER TO FEED NEW PANEL A. PROVIDE NEW FEEDER AS INDICATED.

⟨2⟩ CONTRACTOR SHALL CONFIRM THE BUILDING SERVICE AIC RATING AND MATCH THE EXISTING AIC RATING.



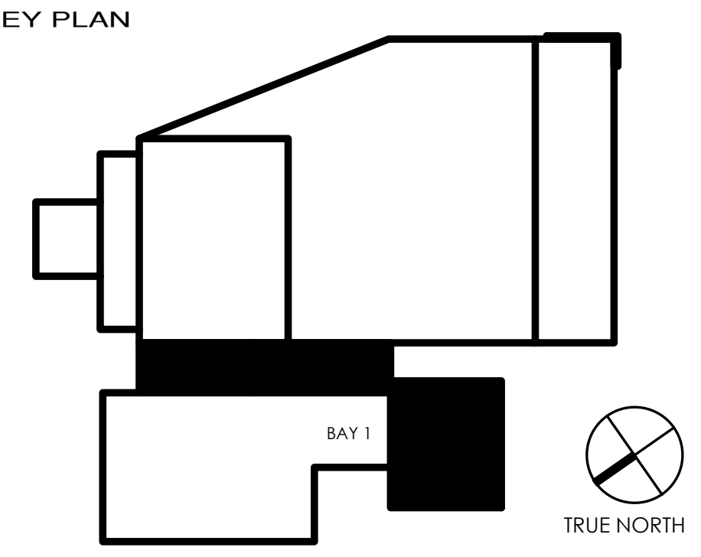
PARTIAL ONE LINE DIAGRAM

NOT TO SCALE

ONE LINE DIAGRAM KEY NOTES

⟨1⟩ SEE PANEL SCHEDULE FOR FEEDER SIZE

KEY PLAN



CLIENT

PROJECT

NJSEA FIREHOUSE GARAGE ADDITIONS & RENOVATION

MEADOWLANDS SPORTS COMPLEX
East Rutherford, NJ 07073
Block:107.01 Lot: 1

STRUCTURAL / MEP / CIVIL CONSULTANT:

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DWG

ELECTRICAL PANEL SCHEDULES & DETAILS

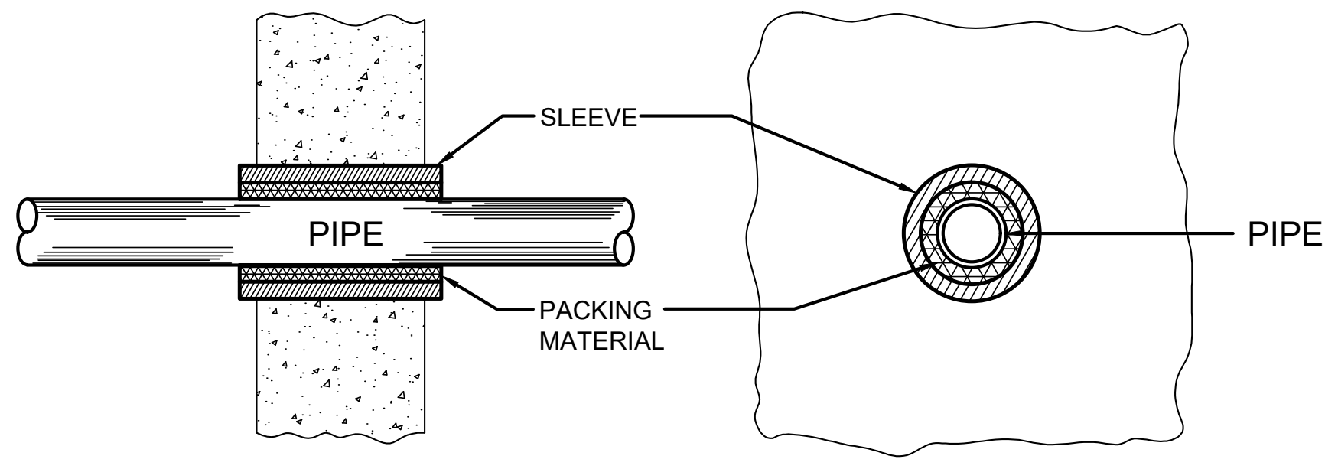
SCALE

DATE	DESCRIPTION	DRN	CHK
6/10/2025	DCA SUBMISSION		

REV	DATE	DESCRIPTION
1	6/26/2025	REVISED AS PER DCA COMMENTS
2	7/10/2025	ADDENDUM #2

PROJECT NO.	SHEET NO.
5669	E5.0

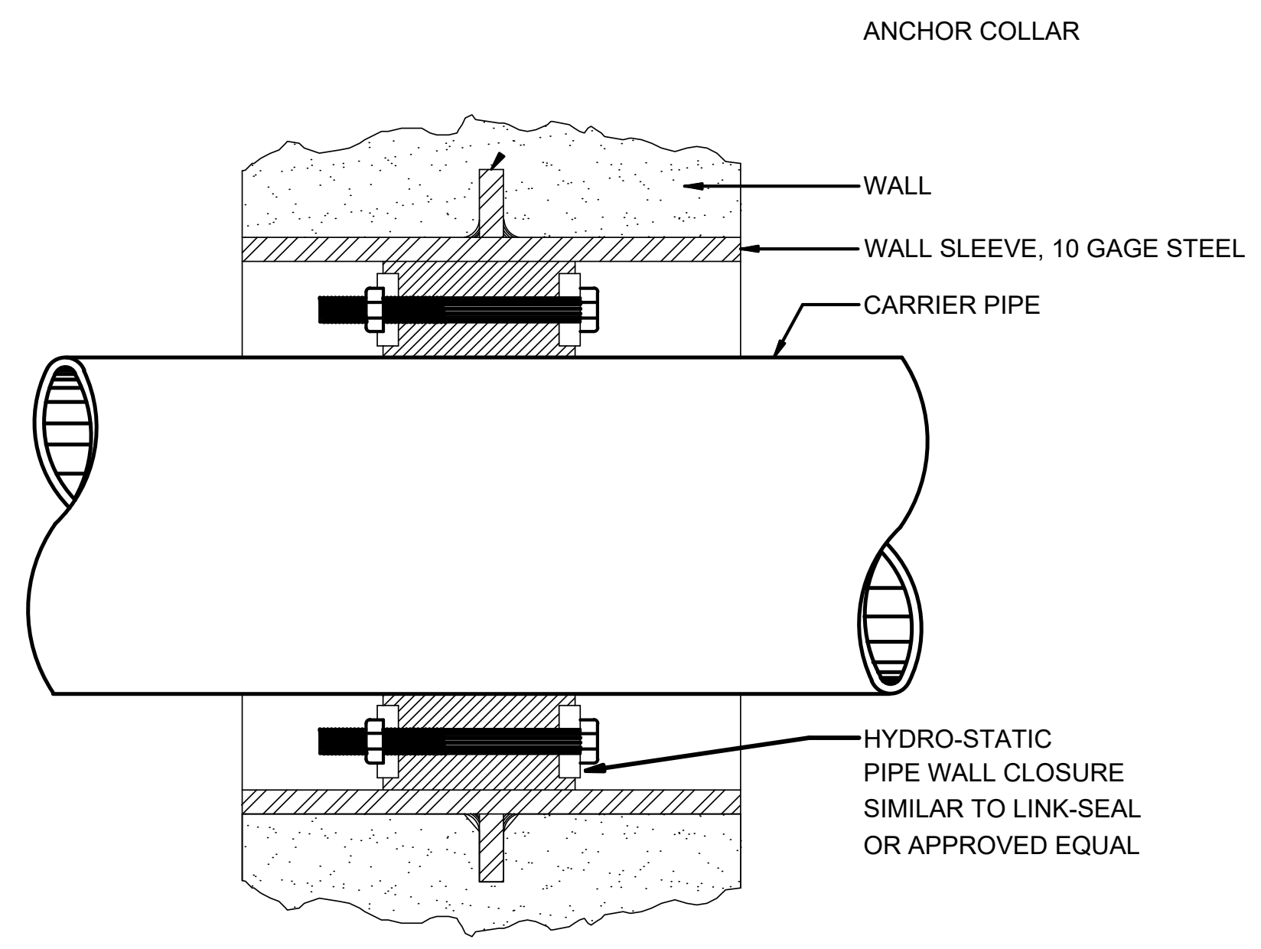
PLOT DATE: 6/9/2025 12:49:55 PM



(CONCRETE AND FOUNDATION WALLS)

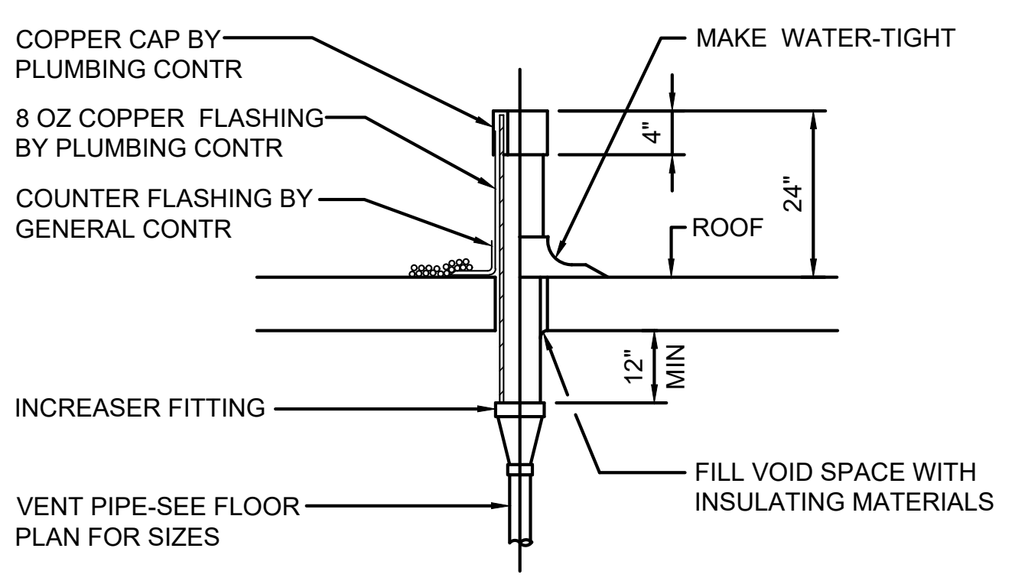
NOTE:
NO STRUCTURAL STRAIN SHOULD BE TRANSMITTED FROM ANY WALL TO THE PIPING SYSTEM. THE SLEEVING, RELIEVING ARCH, OR STRUCTURAL BEAM SUPPORT METHODS PROTECT THE PIPING FROM SUPERIMPOSED LOADS. THE "PACKING" MATERIAL AROUND THE PIPE IS FLEXIBLE ENOUGH TO RESPOND TO SETTLING IN THE STRUCTURE OR PIPING.

PIPE THRU WALL DETAIL
NOT TO SCALE



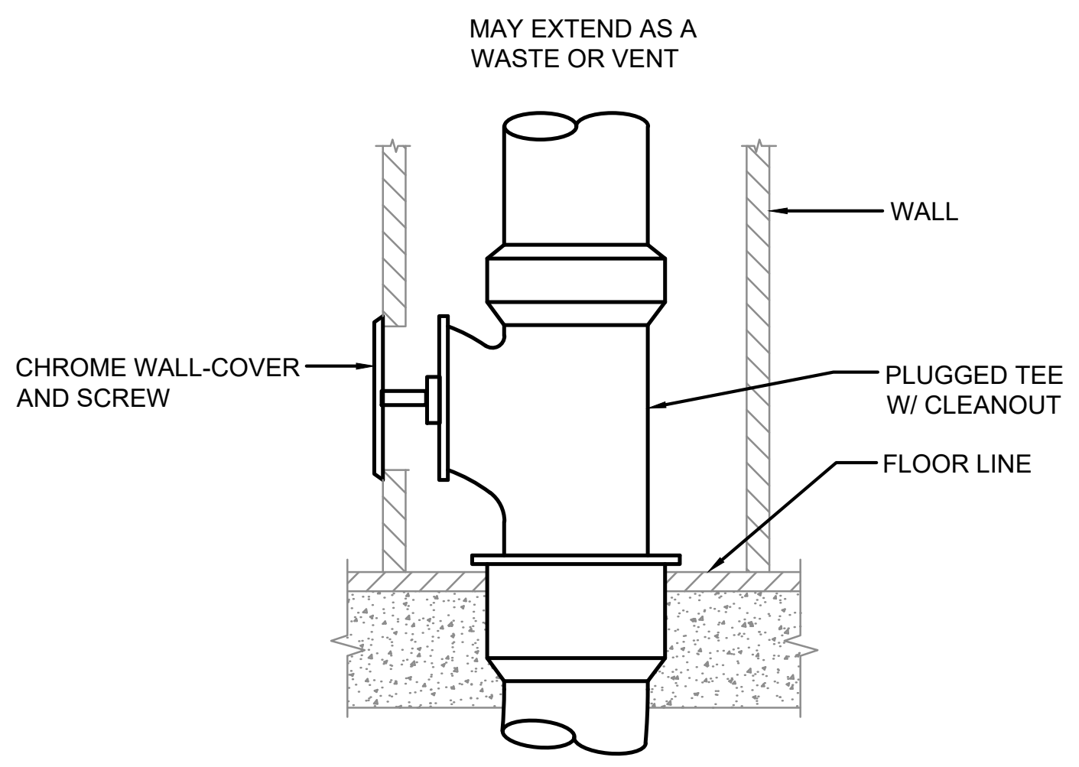
NOTE:
NO STRUCTURAL STRAIN SHOULD BE TRANSMITTED FROM ANY WALL TO THE PIPING SYSTEM. THE SLEEVING, RELIEVING ARCH, OR STRUCTURAL BEAM SUPPORT METHODS PROTECT THE PIPING FROM SUPERIMPOSED LOADS THE "PACKING" MATERIAL AROUND THE PIPE IS FLEXIBLE ENOUGH TO RESPOND TO SETTLING IN THE STRUCTURE OR PIPING

PIPE THRU FOUNDATION WALL PENETRATION
NOT TO SCALE

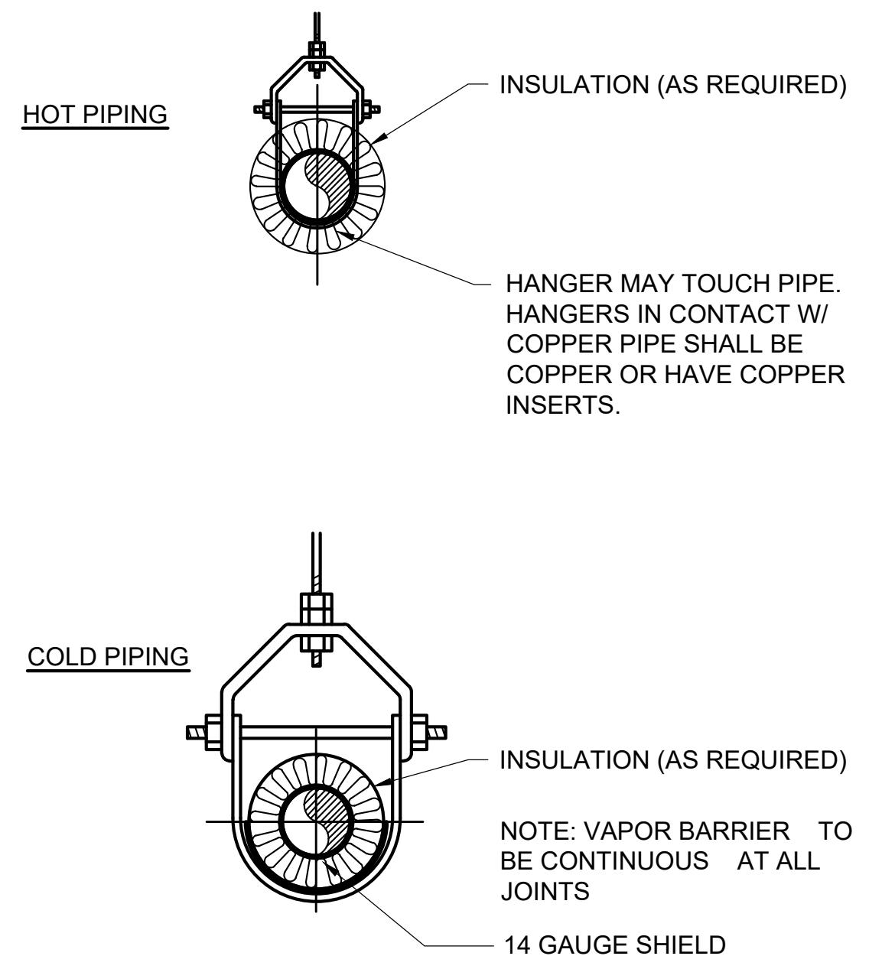


NOTES:
1. MINIMUM SIZE OF VENT EXTENSION THROUGH ROOF TO BE 3".
2. CHANGE OF DIAMETER TO BE MADE AT LEAST 12" BELOW ROOF.
3. VENT PIPE TO EXTEND 24" ABOVE ROOF AND TO BE SEALED WATERTIGHT BY PROPER FLASHING.
4. ALL VENT RISERS SHALL BE OFFSET AS REQUIRED TO CLEAR ROOF STRUCTURE, DUCTWORK OR MECH ROOFTOP UNITS. PLUMBING CONTRACTOR TO COORDINATE WITH OTHER TRADES.
5. ROOFING CONTRACTOR SHALL SUPPLY BOOT FLASHING FOR RUBBER ROOF SYSTEMS.

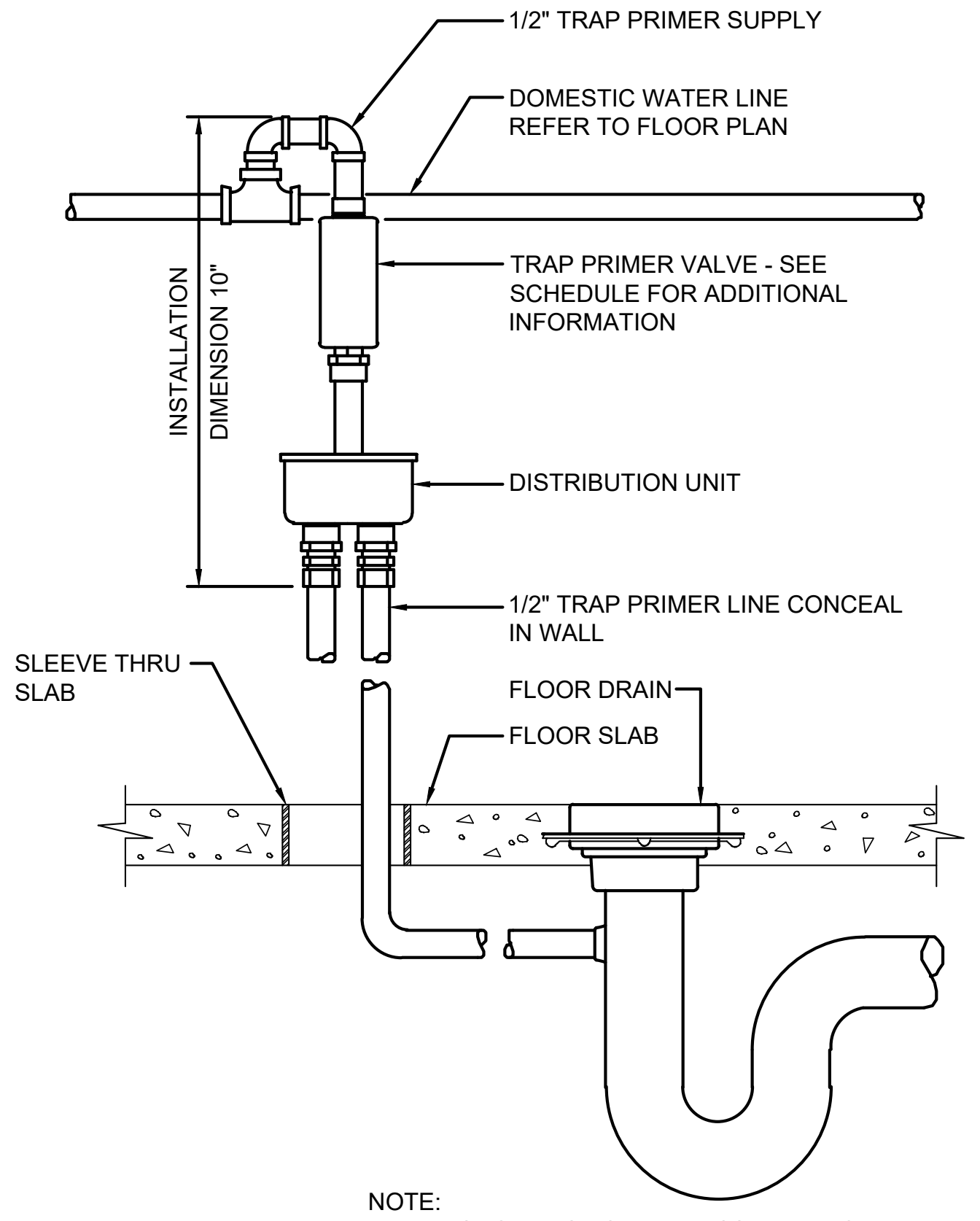
VENT INCREASER DETAIL
NOT TO SCALE



WALL CLEAN OUT DETAIL
NOT TO SCALE

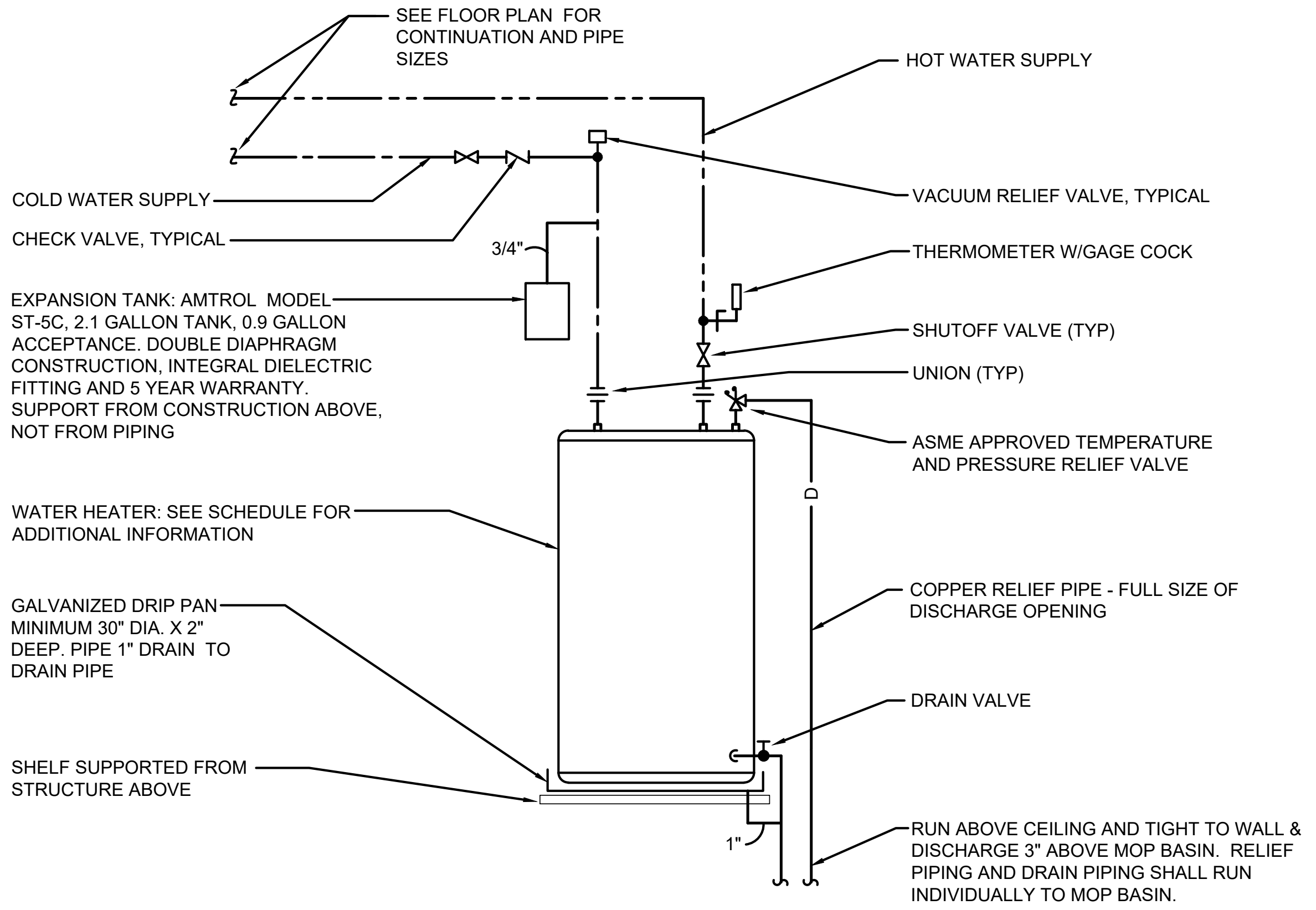


INSULATED PIPING PROTECTION DETAIL
NOT TO SCALE



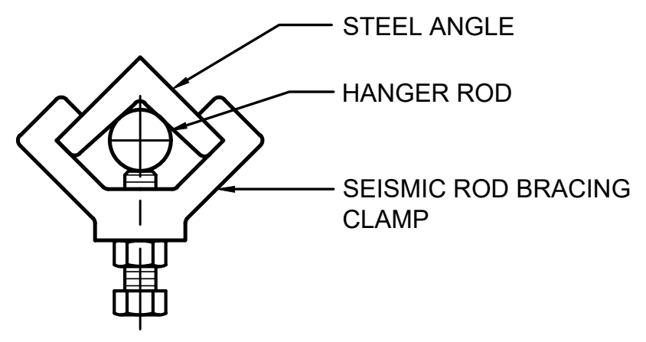
NOTE:
DETAIL SHOWN IS FOR A PRESSURE DROP PRIMER IN- LINE PRIMERS TO BE INSTALLED ABOVE CEILINGS WITH ACCESS PANELS AS REQUIRED

TRAP SEAL PRIMER DETAIL
NOT TO SCALE

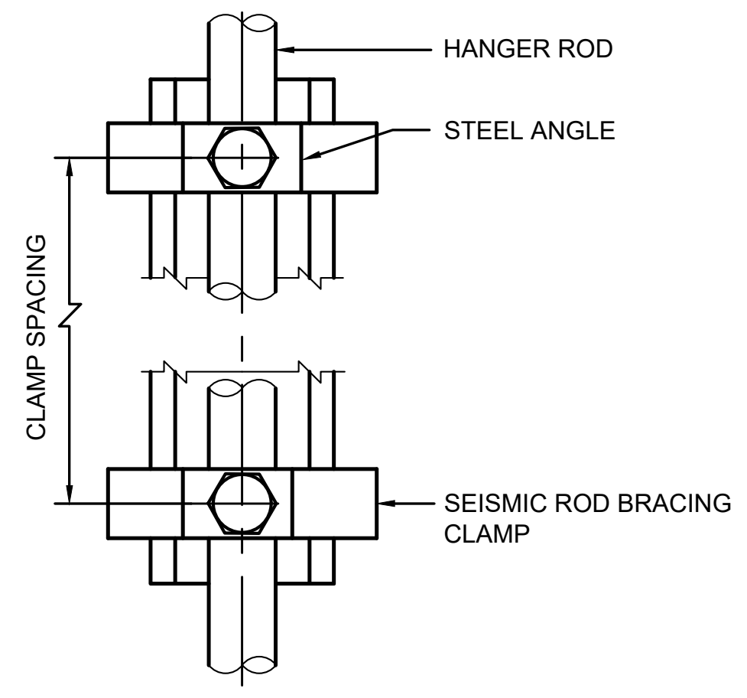


NOTE: ANCHOR OR SUPPORT WATER HEATER AS REQUIRED

SHELF MOUNTED ELECTRIC WATER HEATER DETAIL
NOT TO SCALE



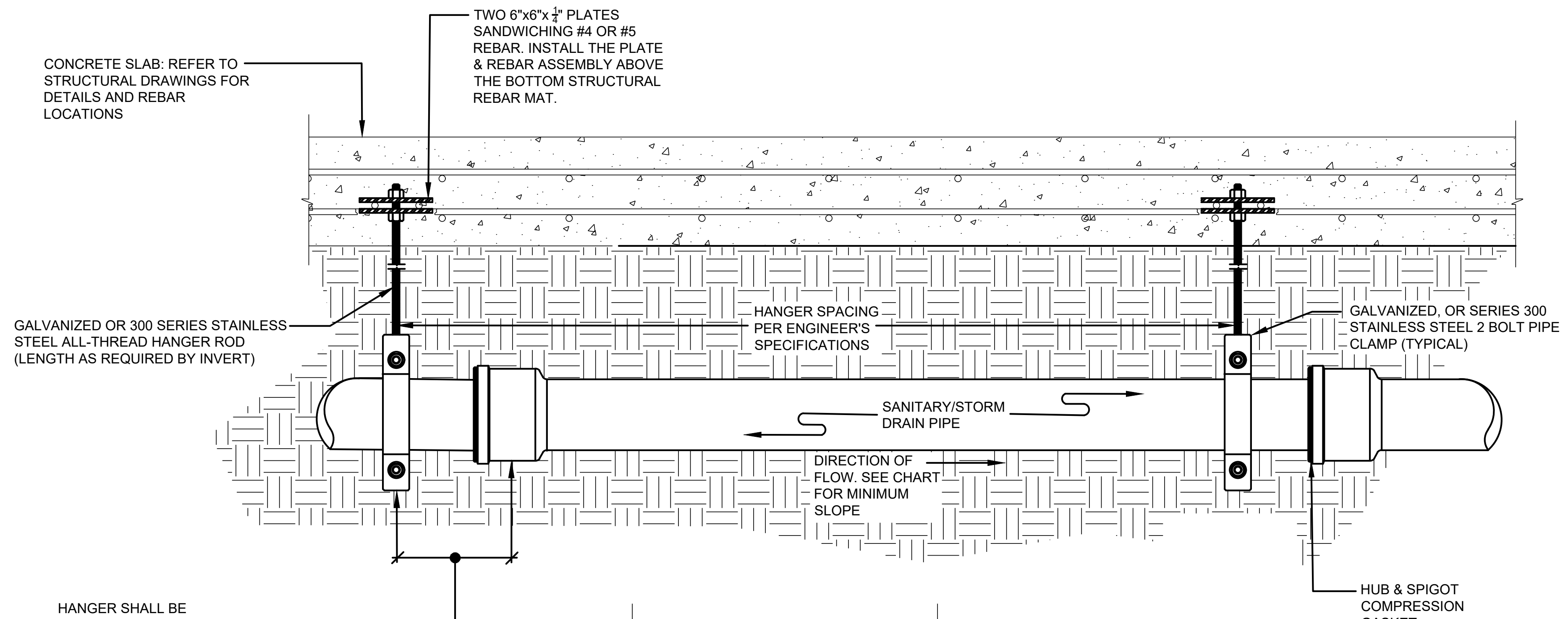
PLAN VIEW

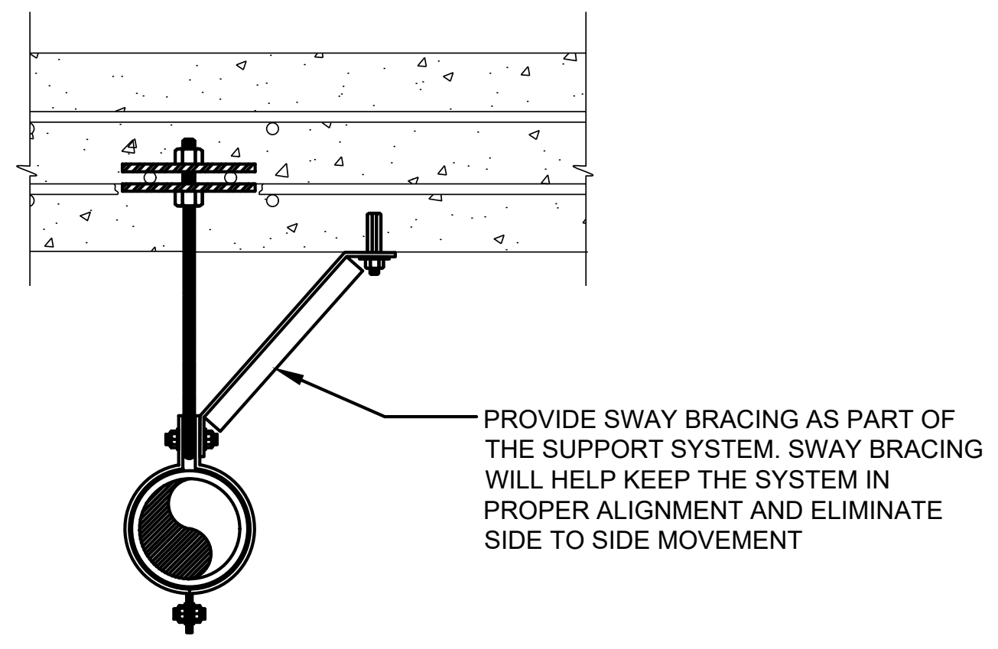


VERTICAL HANGER ROD INSTALLATION DETAILS				
ROD DIA (INCHES)	ROD LENGTHS OVER "X" INCHES	STEEL ANGLE SIZE (INCHES)	CLAMP SPACING	MIN NO. OF CLAMPS PER STIFFENER
3/8"	20"	1 X 1 X 1/4"	16"	3
1/2"	25"	1 X 1 X 1/4"	20"	3
5/8"	31"	1 X 1 X 1/4"	12"	3
3/4"	37"	1 1/2 X 1 1/2 X 1/4"	16"	3
7/8"	43"	1 1/2 X 1 1/2 X 1/4"	12"	4
1"	50"	1 1/2 X 1 1/2 X 1/4"	16"	4
1 1/8"	62"	1 1/2 X 1 1/2 X 1/4"	20"	4

SEISMIC ROD BRACING CLAMP DETAIL
NOT TO SCALE

2

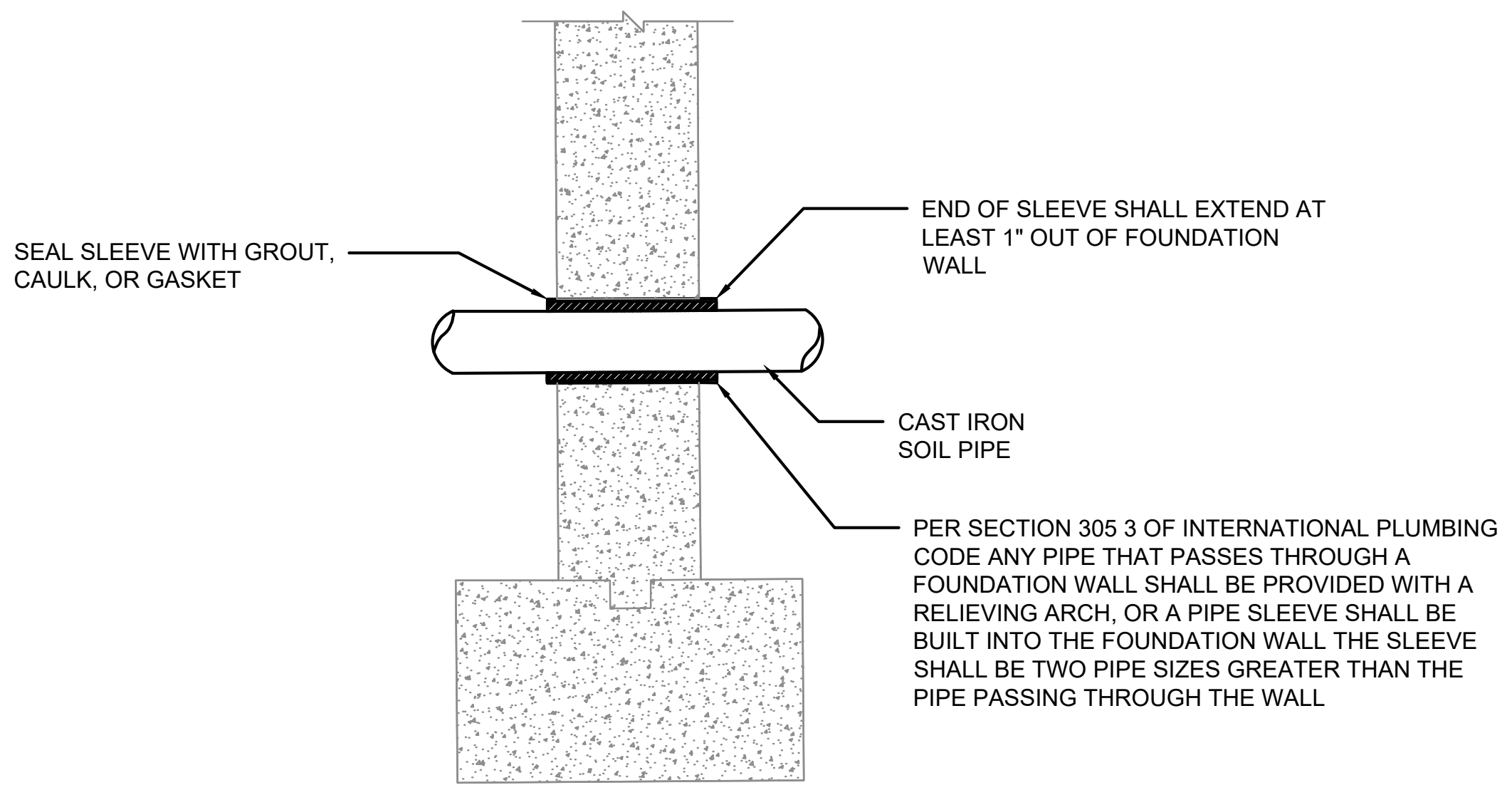




NOTE:
THE RECOMMENDED PIPE FOR USE IN SUSPENDING BELOW GRADE APPLICATIONS IS EXTRA HEAVY CAST IRON SOIL PIPE BEARING THE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE (CISPI), AND BE LISTED BY NSF INTERNATIONAL.

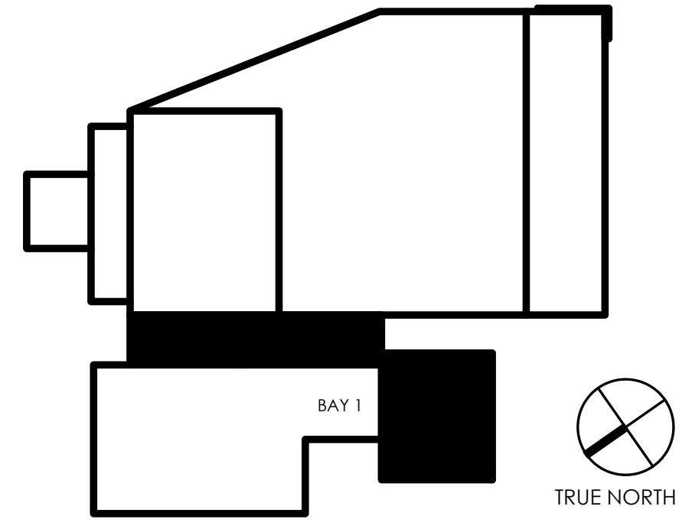
MINIMUM PIPE SLOPE PER IPC	
2 $\frac{1}{2}$" OR LESS	1/4"
3" – 6"	1/8"
8" OR LARGER	1/16"

UNDERGROUND CAST IRON PIPE SUSPENDED FROM SLAB DETAIL
NOT TO SCALE



CAST IRON THROUGH FOUNDATION WALL DETAIL
NOT TO SCALE

KEY PLAN



CLIENT

NEW JERSEY SPORTS & EXPOSITION AUTHORITY

PROJECT

NJSEA FIREHOUSE
GARAGE ADDITIONS
& RENOVATION

MEADOWLANDS SPORTS COMPLEX
East Rutherford, NJ 07073
Block:107.01 Lot: 1

STRUCTURAL / MEP / CIVIL CONSULTANT:

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DWG

PLUMBING
DETAILS

SCALE

DATE	DESCRIPTION	DRN	CHK
6/10/2025	DCA SUBMISSION		

REV	DATE	DESCRIPTION
1	6/26/2025	REVISED AS PER DCA COMMENTS
2	7/10/2025	ADDENDUM #2

PROJECT NO.	SHEET NO.
5669	P5.0

PLOT DATE: 6/9/2025 12:49:55 PM

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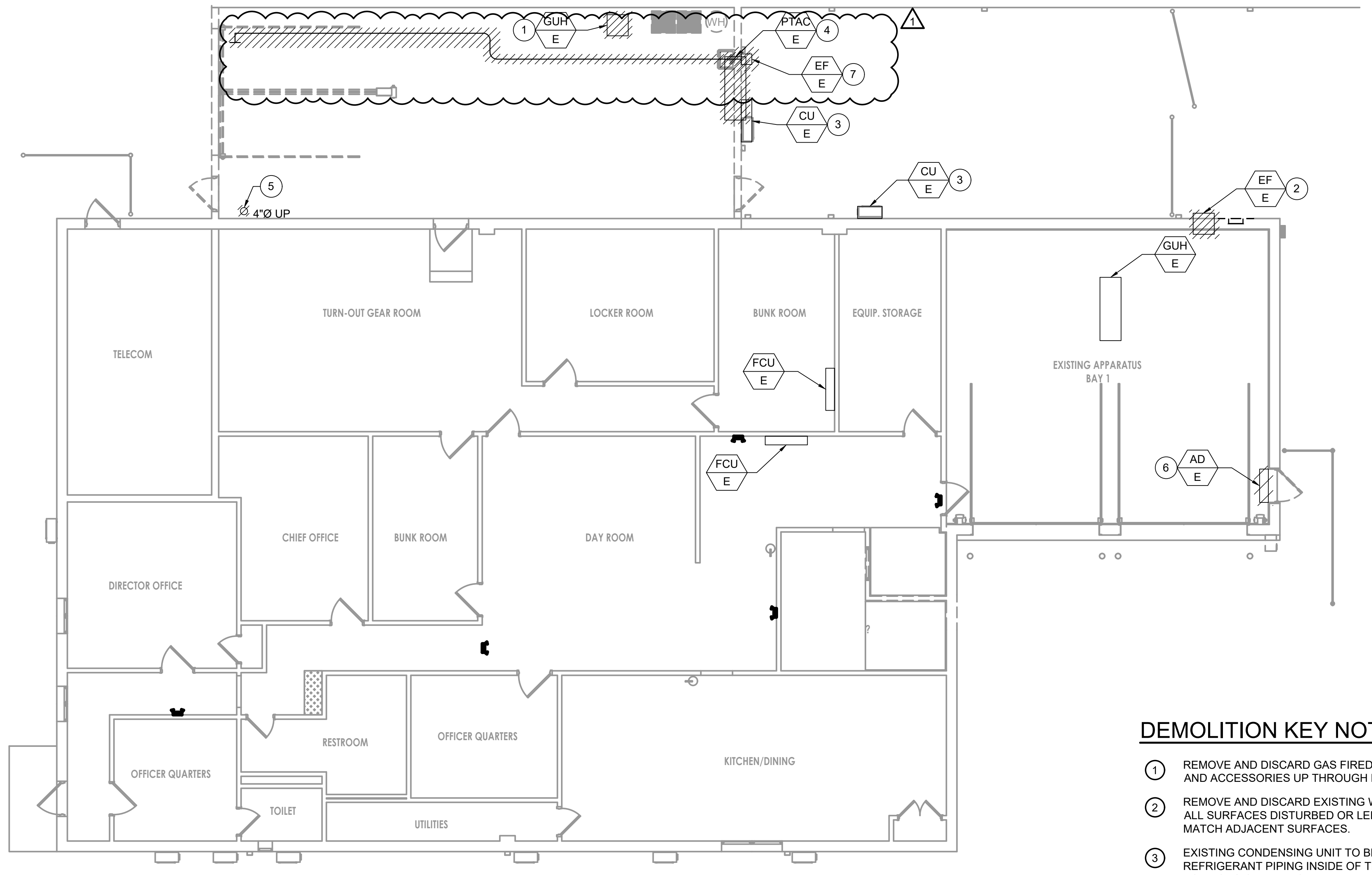
6/9/2025 12:49:55 PM



DEMOLITION PART PLAN

SCALE: 1/4" = 1' - 0"

DEMOLITION KEY NOTES

① REMOVE AND DISCARD GAS FIRED UNIT HEATER, FLUE, ALL SUPPORTS AND ACCESSORIES UP THROUGH ROOF.

② REMOVE AND DISCARD EXISTING WALL LOVER AND EXHAUST FAN. PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.

③ EXISTING CONDENSING UNIT TO BE RELOCATED TO ROOF. DISCONNECT REFRIGERANT PIPING INSIDE OF THE BUILDING. DISCARD UN-USED PORTIONS OF REFRIGERANT PIPING. REFER TO NEW WORK PLAN FOR MORE INFORMATION.

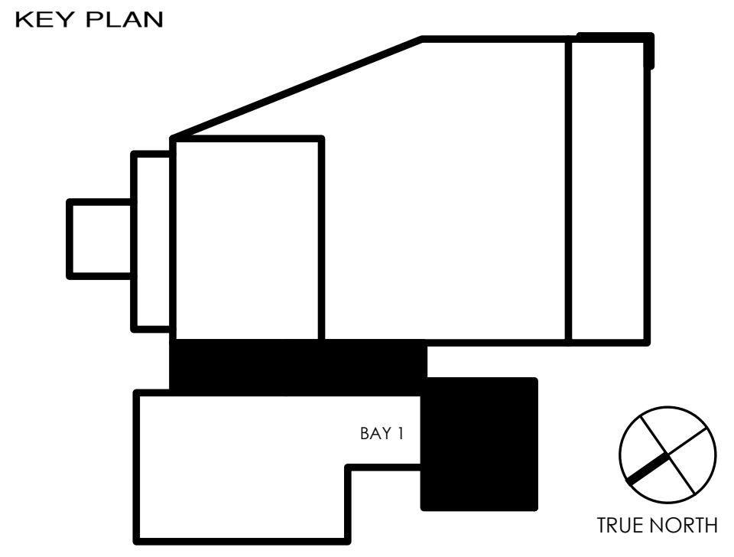
④ REMOVE AND DISCARD EXISTING PTAC UNIT.

⑤ REMOVE AND DISCARD EXISTING FLUE UP THROUGH ROOF. COORDINATE INFILL WITH ARCHITECT.

⑥ REMOVE AND DISCARD EXISTING AIR DOOR AND ALL ASSOCIATED ACCESSORIES.

⑦ REMOVE AND DISCARD EXISTING EXHAUST FAN, DUCTWORK, DAMPERS, REGISTERS/DIFFUSERS, SUPPORTS AND ALL ASSOCIATED ACCESSORIES. PATCH THE EXISTING WALL PENETRATION TO MATCH EXISTING SURFACES. SEE NEW WORK PLAN FOR ADDITIONAL INFORMATION. PATCH ALL SURFACES DISTURBED OR LEFT UNFINISHED BY THIS WORK TO MATCH ADJACENT SURFACES.

KEY PLAN



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MECHANICAL DEMOLITION PLAN

SCALE

DATE	DESCRIPTION	DRN	CHK
6/10/2025	DCA SUBMISSION		

REV	DATE	DESCRIPTION
1	6/26/2025	REVISED AS PER DCA COMMENTS
2	7/10/2025	ADDENDUM #2

PROJECT NO.	SHEET NO.
5669	M2.0

PLOT DATE: 6/9/2025 12:49:55 PM

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