

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES

HARRISBURG, PENNSYLVANIA

GOVERNOR JOSH SHAPIRO

REGINALD B. McNEIL II, SECRETARY

PROJECT NO. D.G.S. C-0948-0098 PHASE 1 AUTOMATION SYSTEM UPGRADE CAPITOL COMPLEX

HARRISBURG DAUPHIN COUNTY, PENNSYLVANIA

PROFESSIONAL/ENGINEER
GREENMAN-PEDERSEN, INC.
52 GLENMAURA NATIONAL BLVD.
SCRANTON, PA

ARCHITECTURAL CONSULTANT
MARTINA BACARELLA ARCHITECT
429 PITTSTON AVENUE
SCRANTON, PA

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COMMON DRAWINGS ALL CONTRACTS

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P-1 PLUMBING SITE PLAN
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BASE BID DESCRIPTIONS

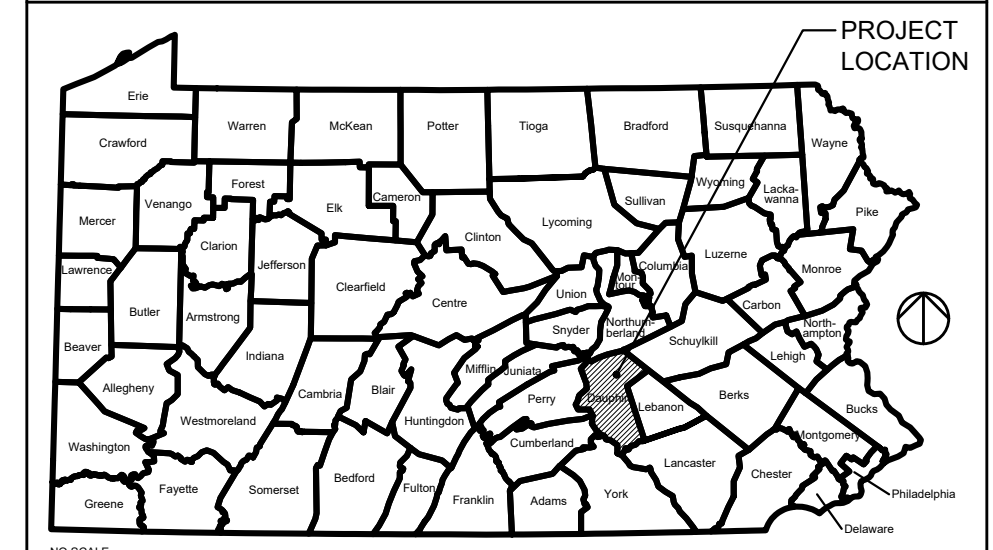
- BASE BID #1:
1. TELECOMMUNICATIONS CABLING SYSTEM INFRASTRUCTURE UPGRADES.
2. CHILLED WATER METERING.
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- BASE BID #2:
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1. ALL BASE BID #1 ITEMS.
2. ALL BASE BID #2 ITEMS.
3. ALL BASE BID #3 ITEMS.
4. GAS METERING.

CODE APPROVALS

AGENCY: PA LABOR AND INDUSTRY. BUILDING: LABOR AND INDUSTRY. FILE NUMBER: 551074 PERMIT NUMBER: 202400091 EXPIRATION DATE: NOT APPLICABLE.	AGENCY: PA LABOR AND INDUSTRY. BUILDING: MAIN CAPITOL EAST WING. FILE NUMBER: 550862 PERMIT NUMBER: 202400091 EXPIRATION DATE: NOT APPLICABLE.
AGENCY: PA LABOR AND INDUSTRY. BUILDING: HEALTH AND WELFARE. FILE NUMBER: 550851 PERMIT NUMBER: 202400085 EXPIRATION DATE: NOT APPLICABLE.	AGENCY: PA LABOR AND INDUSTRY. BUILDING: MAIN CAPITOL. FILE NUMBER: 550858 PERMIT NUMBER: 202400082 EXPIRATION DATE: NOT APPLICABLE.
AGENCY: PA LABOR AND INDUSTRY. BUILDING: PA JUDICIAL CENTER. FILE NUMBER: 550855 PERMIT NUMBER: 202400088 EXPIRATION DATE: NOT APPLICABLE.	AGENCY: PA LABOR AND INDUSTRY. BUILDING: SOUTH (IRVIS). FILE NUMBER: 550864 PERMIT NUMBER: 202400079 EXPIRATION DATE: NOT APPLICABLE.
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AGENCY: PA LABOR AND INDUSTRY. BUILDING: NORTH. FILE NUMBER: 550861 PERMIT NUMBER: 202400078 EXPIRATION DATE: NOT APPLICABLE.	AGENCY: PA PHMC. ER PROJECT #: 2023PR00185.001 EXPIRATION DATE: NOT APPLICABLE.

NOTES

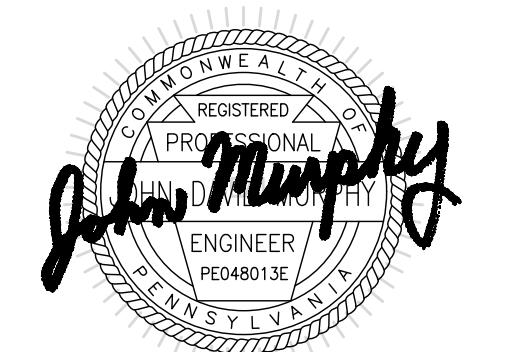
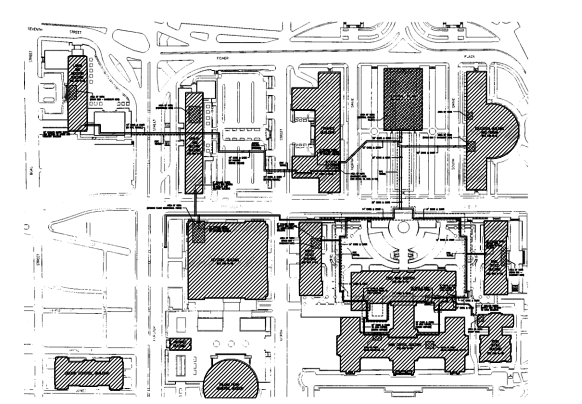
PROJECT LOCATION MAP



VICINITY MAP



CAMPUS / KEY PLAN



02/14/2024

PROFESSIONAL'S SIGNATURE

GREENMAN-PEDERSEN, INC

52 GLENMAURA NATIONAL BLVD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No.
C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE -
CAPITOL COMPLEX

DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

COVER SHEET

DRAWN BY
M. SKORANSKI

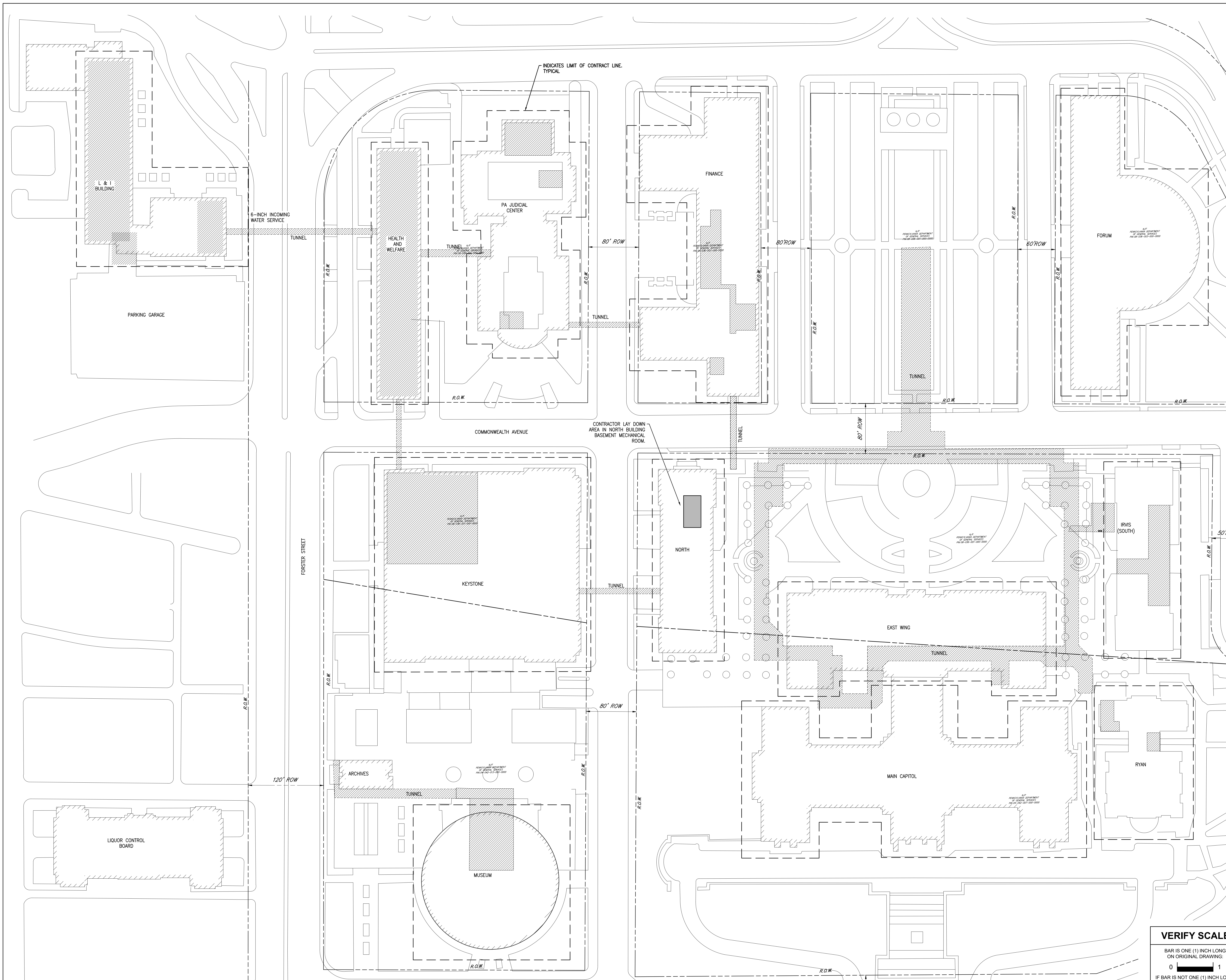
DATE
02/14/24

CHECKED BY
J. MURPHY

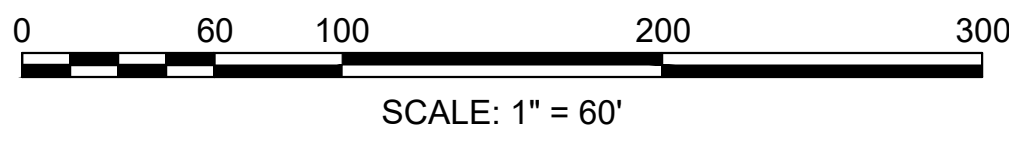
SCALE
AS NOTED

SHEET No.

CS-1



1
G-1 **OVERALL SITE PLAN**
Scale: 1" = 60'



VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
0 1
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

RECORD	REVISIONS

02/14/2024
SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

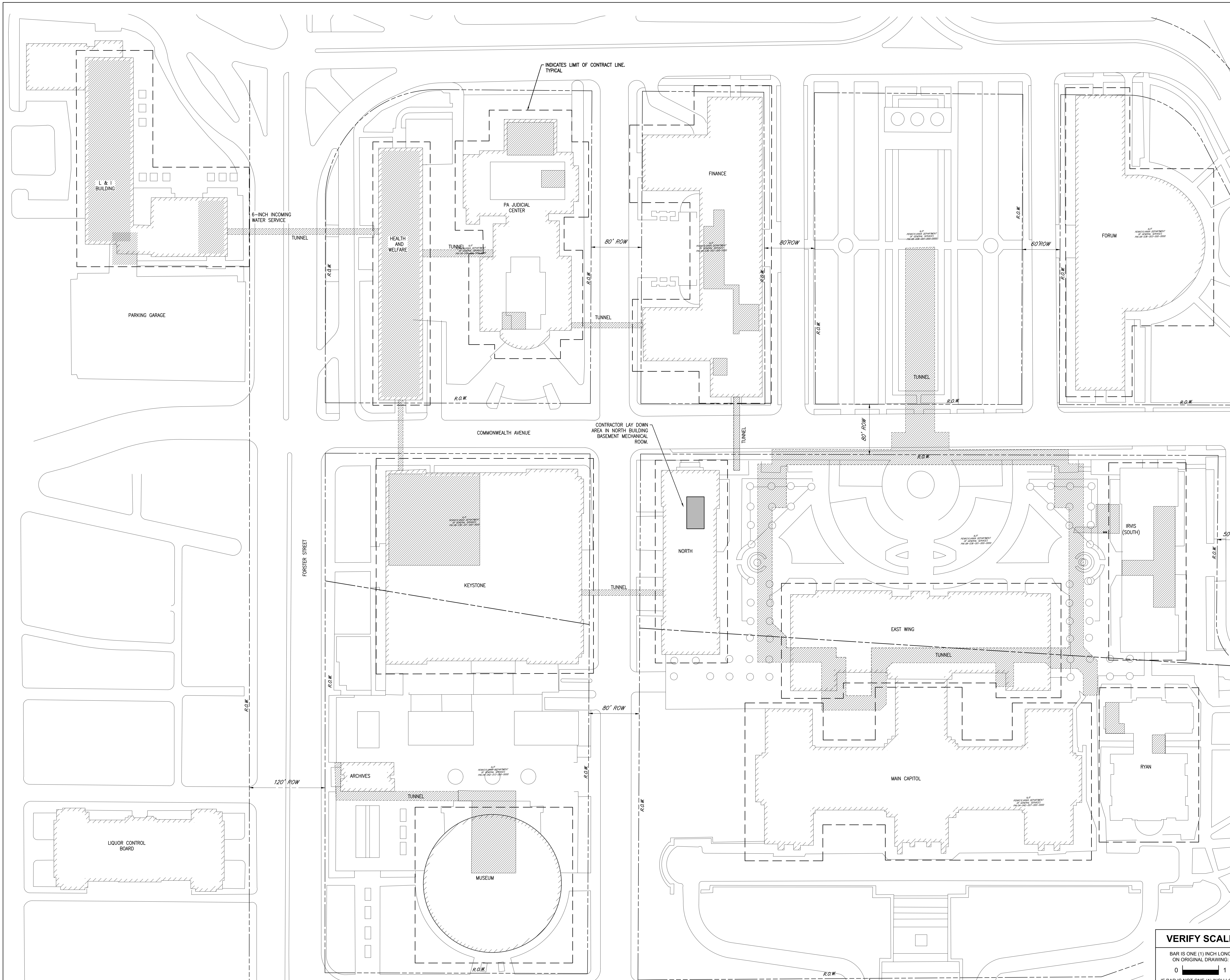
D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE - CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

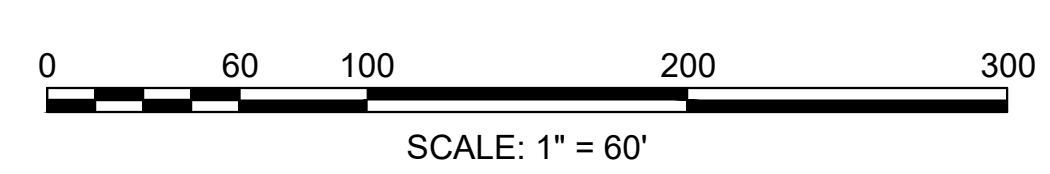
OVERALL SITE PLAN
DRAWN BY M. SKORANSKI DATE 02/14/24 DRAWING No. G-1
CHECKED BY M. RADZICKI SCALE AS NOTED

PROJECT SEQUENCING NOTES

1. ALL CONSTRUCTION SHALL BE PHASED FOR MAXIMUM CONTINUITY OF SERVICE. MAKE READY WORK SHALL BE SEQUENCED IN ADVANCE AND ALL EQUIPMENT/MATERIALS SHALL BE ON-SITE PRIOR TO SHUTDOWNS.
2. ALL CONSTRUCTION SEQUENCES MUST BE COMPLETED IN ORDER AS DICTATED BY CLIENT AGENCY OCCUPANCY REQUIREMENTS AND THE FOLLOWING SEQUENCING SCHEDULE:
 - 2.1. CHILLED WATER METERING (WINTER)
 - 2.1.1. SHUTDOWNS: (FEBRUARY 5 TO FEBRUARY 16)
 - 2.2. STEAM (SUMMER):
 - 2.2.1. ALL CAPITOL COMPLEX OWNED VALVE STEAM SYSTEM SHUT-DOWNS SHALL OCCUR DURING OFF HOURS (6PM-6AM). STEAM SYSTEM SHALL BE FULLY OPERATIONAL FROM 6AM-6PM AND NON-ESSENTIAL WEEKEND DAYS.
 - 2.2.2. ANY CORONA ENERGY (STEAM UTILITY) SUPPLIER SHUT-DOWNS SHALL OCCUR MONDAY-FRIDAY BETWEEN 6:30AM AND 3:00PM
 - 2.3. DOMESTIC WATER:
 - 2.3.1. ALL DOMESTIC WATER SYSTEM SHUT-DOWNS SHALL OCCUR DURING OFF HOURS (6PM-6AM). DOMESTIC WATER SYSTEM SHALL BE FULLY OPERATIONAL FROM 6AM-6PM.
 - 2.4. NATURAL GAS:
 - 2.4.1. ALL NATURAL GAS SYSTEM SHUTDOWNS SHALL OCCUR DURING OFF HOURS (6PM-6AM). NATURAL GAS SYSTEM SHALL BE FULLY OPERATIONAL FROM 6AM-6PM.
 - 2.5. BAS SYSTEM INTEGRATION:
 - 2.5.1. BAS SYSTEM INTEGRATION SHALL OCCUR AFTER ALL METERS ARE INSTALLED.
3. ROUTING OF UTILITIES/WORK IN GOVERNMENT OCCUPIED SPACES SHALL OCCUR DURING OFF HOURS (6PM TO 6AM). SCHEDULE OFF 14-DAYS ADVANCE WITH THE DEPARTMENT.
4. THROUGHOUT ALL STAGES OF THE CONSTRUCTION SEQUENCING, THE CONTRACTOR SHALL MAINTAIN BUILDING AND SITE OCCUPANCY SAFETY INCLUDING ALL NECESSARY ACCESS, EGRESS, UTILITIES, AND SERVICES THROUGHOUT THE CLIENT AGENCY OCCUPIED PORTIONS OF THE BUILDING AND SITE WITHOUT INTERRUPTION. CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY PARTITIONING, SEPARATION, UTILITIES, SERVICES OR OTHER MEANS AND METHODS AS REQUIRED IN ORDER TO MAINTAIN SEPARATION BETWEEN CONTRACTOR WORK AREAS AND CLIENT AGENCY OCCUPIED AREAS IN ORDER TO MAINTAIN A SAFE BUILDING AND SITE OCCUPANCY BY THE CLIENT AGENCY AND TO MAINTAIN THE SEQUENCING SCHEDULE.
5. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING AS OFTEN AS NECESSARY TO MAINTAIN A CLEAN ENVIRONMENT NECESSARY FOR CLIENT AGENCY OCCUPANCY.
6. CLIENT AGENCY ACCESS TO BUILDINGS MUST BE MAINTAINED AT ALL TIMES.
7. ALL UTILITY SHUT DOWNS MUST BE COORDINATED WITH THE BUILDING MANAGER AND DGS, PC, & APC. 14 DAY NOTICE MUST BE PROVIDED TO THE PROFESSIONAL AND THE CLIENT AGENCY PRIOR TO CONSTRUCTION OF ANY SHUT DOWNS. CONTRACTORS MUST FILL OUT THE UTILITY SHUT DOWN FORM AS PROVIDED IN SPECIFICATION SECTION 016400. COMPLETED FORMS ARE TO BE SUBMITTED THROUGH THE E-BUILDER D/N/R FORM TO THE APC AND PC.
8. ALL DELIVERIES OF MATERIALS AND MOVEMENT OF CONSTRUCTION VEHICLES ON THE SITE ARE TO BE COORDINATED WITH DGS, PC, & APC TO THEIR OCCURRENCE IN ORDER TO MAINTAIN A SAFE SITE CONDITION FOR BUILDING OCCUPANTS.
9. ALL UTILITY OR OTHER WORK WHICH IS OUTSIDE OF THE CONTRACTOR AREA IN A PARTICULAR SEQUENCE AND IS NECESSARY TO COMPLETE A SPECIFIC CONSTRUCTION SEQUENCE SHALL BE COORDINATED WITH THE DGS, PC, & APC IN ORDER TO REDUCE DISRUPTION TO BUILDING OCCUPANTS.
10. IF WORK REQUIRED TO BE COMPLETED FOR FUTURE CONSTRUCTION SEQUENCES PASSES THROUGH THE CONSTRUCTION AREA OF THE CURRENT CONSTRUCTION SEQUENCE, THE CONTRACTOR MUST COMPLETE THE WORK DURING THE CURRENT CONSTRUCTION SEQUENCE.
11. CONTRACTOR MUST PROTECT ALL EXISTING SYSTEMS INCLUDING INDIVIDUAL DEVICES TO REMAIN THROUGHOUT THE CONSTRUCTION PERIOD.
12. CONTRACTOR LAY-DOWN AREAS:
 - 12.1. NORTH OFFICE BUILDING BASEMENT MECHANICAL ROOM: (APPROXIMATELY 20'x20' AREA).
 - 12.2. PARKING LEVEL:
 - 12.2.1. LOW BOX TRUCK ACCESS ONLY.
 - 12.2.2. 7 PARKING SPACES.



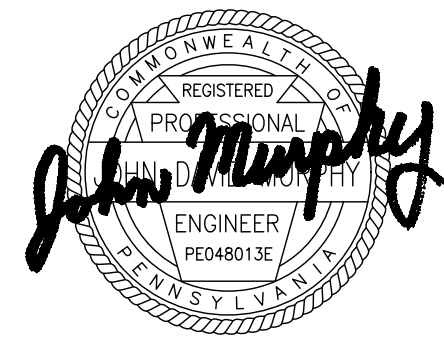
1 PH-1 OVERALL SITE PLAN
Scale: 1" = 60'



VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
0 1
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NO.	REVISION

RECORD REVISIONS


 02/14/2024
 SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES**
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

**AUTOMATION SYSTEM UPGRADE -
CAPITOL COMPLEX**
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

SEQUENCE OF CONSTRUCTION

DRAWN BY M. SKORANSKI	DATE 02/14/24	DRAWING No. PH-1
CHECKED BY M. RADZICKI	SCALE AS NOTED	

MECHANICAL ABBREVIATIONS

Table of mechanical abbreviations including AC (Alternating Current), CU (Copper), and various electrical and plumbing symbols.

GENERAL MECHANICAL NOTES:

- 1. THE INTENT OF THE PROJECT IS TO ACHIEVE THE PERFORMANCE OBJECTIVE OF CAPTURING THE FLUID FLOW AND ENERGY USAGE OF THE BUILDINGS BY PROVIDING METERS ON THE STEAM AND CHILLED WATER PIPING AS IT ENTERS OR LEAVES THE BUILDINGS...

PIPING SYMBOLS

Table of piping symbols for general, heating, and air conditioning systems, including symbols for atmospheric vent, pumped condensate, and chilled water supply.

DRAWING SYMBOLS

Table of drawing symbols for detail designation, section designation, equipment tag, and various mechanical components like valves and heaters.

SYMBOLS

Table of symbols for valves and fittings, including ball, butterfly, gate, globe, plug, and check valves.

DEMOLITION NOTES:

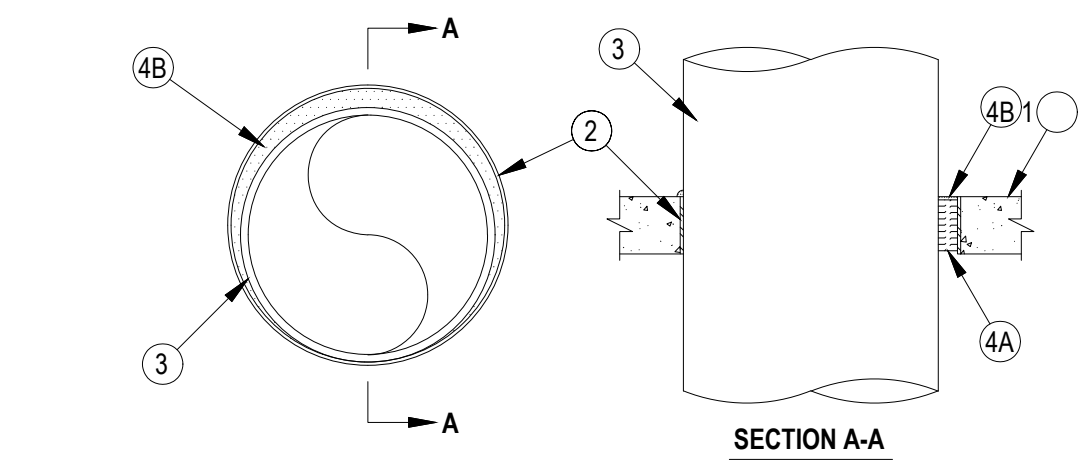
- 1. BEFORE STARTING WORK CONTRACTOR SHALL MAKE A THOROUGH EXAMINATION OF THOSE PORTIONS OF THE STRUCTURE IN WHICH THE WORK IS TO BE PERFORMED, CHECK ALL THE WORK ADJOINING OR AT UNDERLYING LOCATIONS, REPORT TO THE PROFESSIONAL...

GENERAL LOCATION AND SIZING NOTES FOR METERS:

- 1. STEAM METERS SHALL BE SIZED FOR THE ANTICIPATED FLOW RATHER THAN EXISTING LINE SIZE TO MAXIMIZE THE ACCURACY OF MEASUREMENT. THE CONTRACTOR, IN CONCERT WITH THE METER MANUFACTURER'S TECHNICAL STAFF, IS AT LIBERTY TO PROCEED WITH RESIZING OF THE METER AND PIPE BY A SINGLE PIPE SIZE TO EFFECT MORE ACCURATE FLUID MEASUREMENT...

System No. C-AJ-1226

Table with fire rating information for System No. C-AJ-1226, including F Rating and L Rating details.



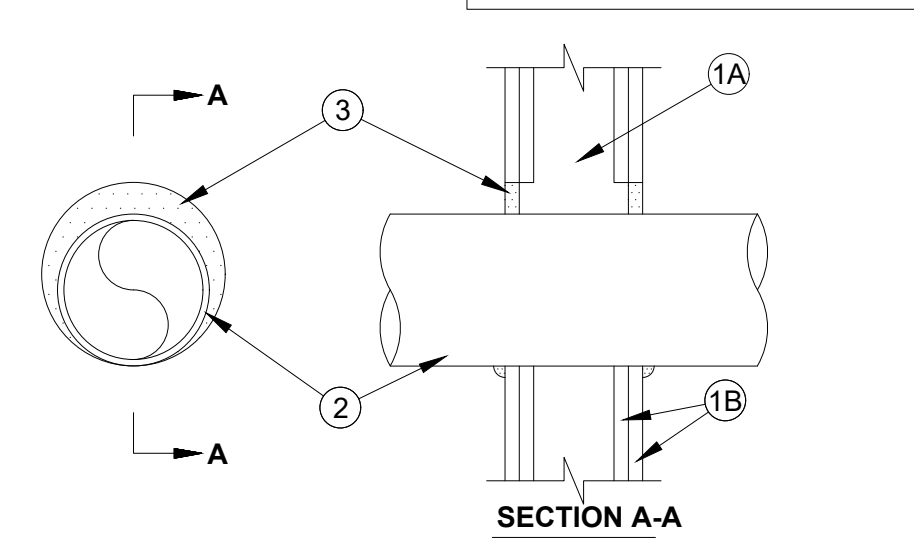
- 1. Floor or Wall Assembly - Min 4.1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified Concrete Blocks... 2. Metallic Sleeve - (Optional) Nom 3/4 in. diam (or smaller) Schedule 40 (or heavier) steel sleeve cast or grouted into floor or wall assembly...

Reproduced Courtesy of Underwriters Laboratories, Inc. June 27, 2007

Firestop Systems

System No. W-L-1054

Table with fire rating information for System No. W-L-1054, including F Rating and L Rating details for various pipe configurations.



- 1. Wall Assembly - The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features: A. Studs - Wall framing may consist of either wood studs or steel channel studs...

Reproduced Courtesy of Underwriters Laboratories, Inc. January 21, 2020

Firestop Systems

System No. W-L-1054

- 2. Through-Penetrants - One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. The annular space shall be min 0 in. to max 2-1/4 in. (57 mm). Pipe may be installed with continuous point contact...

Table showing movement direction, penetrant item, nominal penetrant diameter, annular space, movement/sealant depth, F-Rating, and L Rating with movement.

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Reproduced Courtesy of Underwriters Laboratories, Inc. January 21, 2020

Firestop Systems

SYMBOLS

Table of symbols for piping specialties and fittings, including anchor, pipe guides, flexible connection, reducers, and valves.

GENERAL PIPING NOTES:

- 1. CONTRACTOR SHALL VERIFY PIPE SIZES IN FIELD. THE STANDARDS FOR THICKNESS OF INSULATION HAS CHANGED SINCE THE ORIGINAL INSTALLATION AND PIPE SIZES MAY NOT BE AUTHORITY/KNOWN UNTIL THE PIPE IS EXPOSED.

GENERAL CONTROL NOTES:

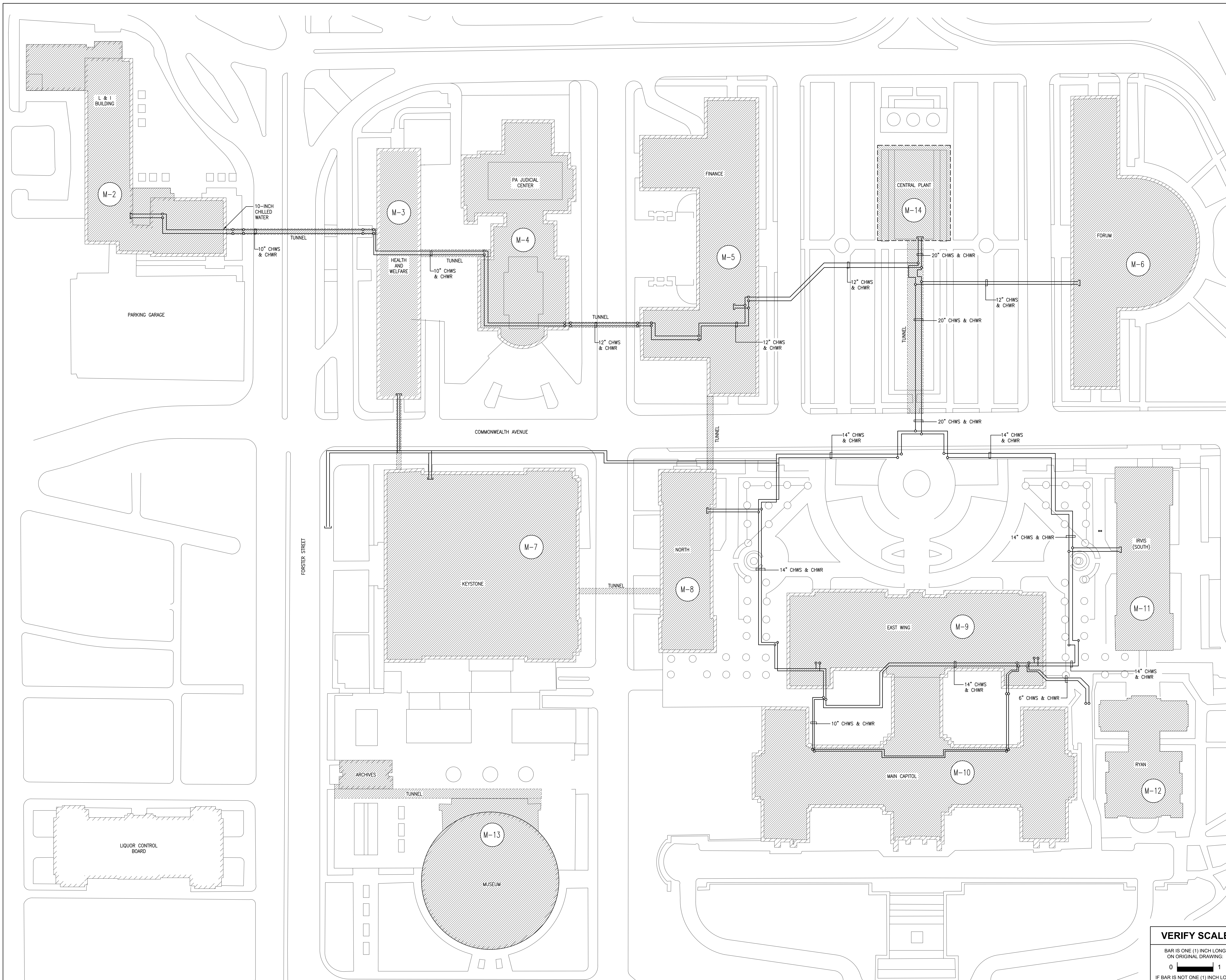
- 1. TRANSFORMERS OPERATION OF NEW METERS AND INSTRUMENTATION FROM BUILDING POWER CIRCUITS SHALL BE PROVIDED UNDER DIVISION 23 BY THE MECHANICAL CONTRACTOR.

VERIFY SCALE

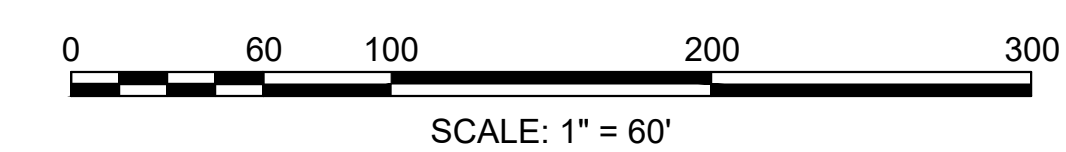
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IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

Project record and signature block for Greenman-Pedersen, Inc. including project name (Automation System Upgrade - Capitol Complex), date (02/14/24), and signatures of M. Skoranski and M. Radzicki.



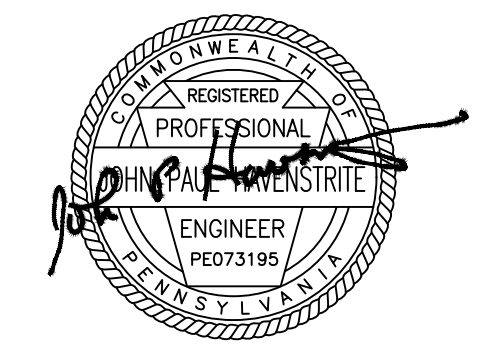
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M-1 MECHANICAL SITE PLAN
Scale: 1" = 60'



VERIFY SCALE
 BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
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NO.	REVISIONS

RECORD REVISIONS


 DATE: 02/14/2024
 SIGNATURE: _____ DATE: _____ SIGNATURE: _____ DATE: _____

GREENMAN-PEDERSEN, INC
 52 GLENMAURA NATIONAL BOULEVARD
 SCRANTON, PENNSYLVANIA 18505

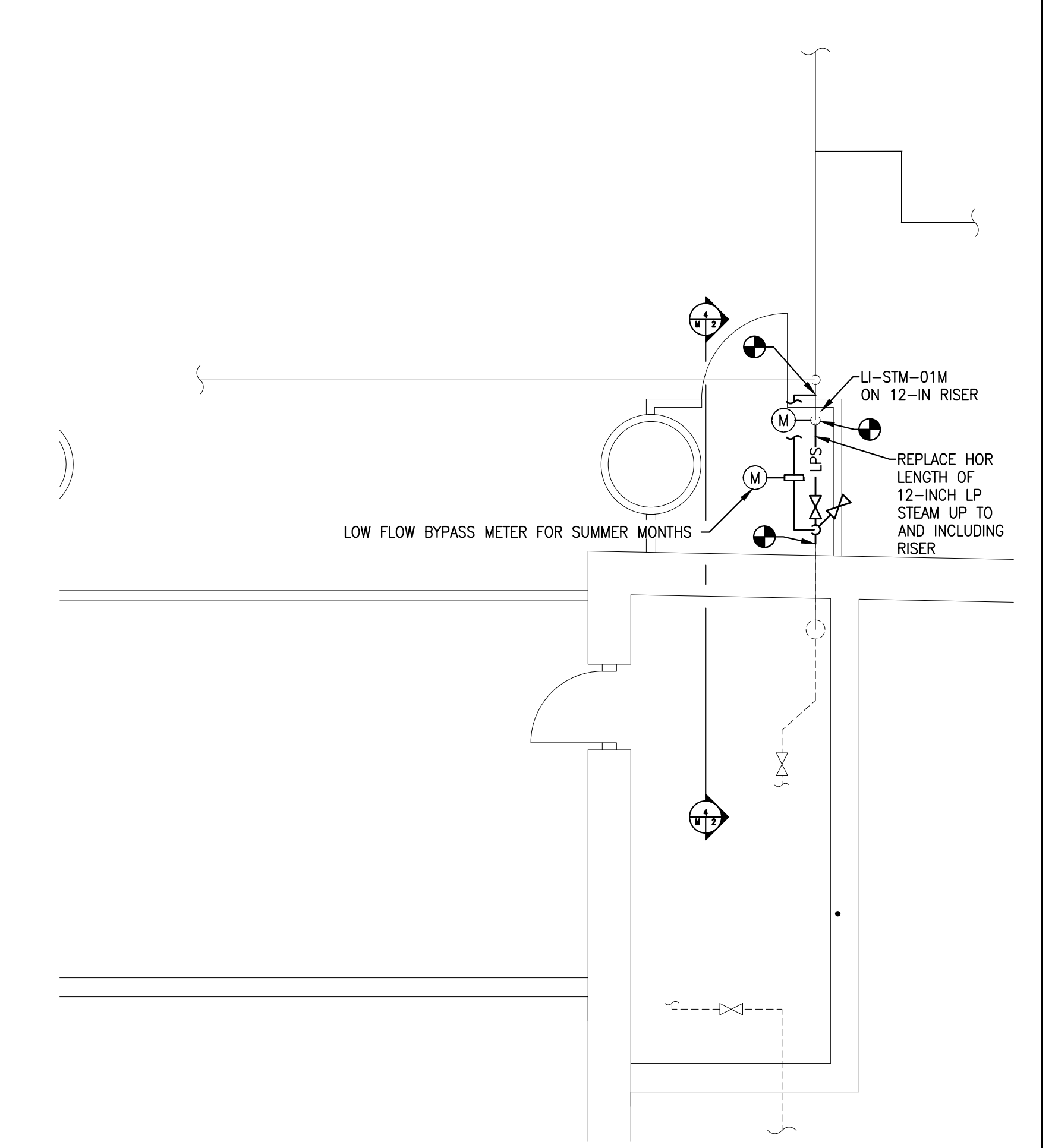
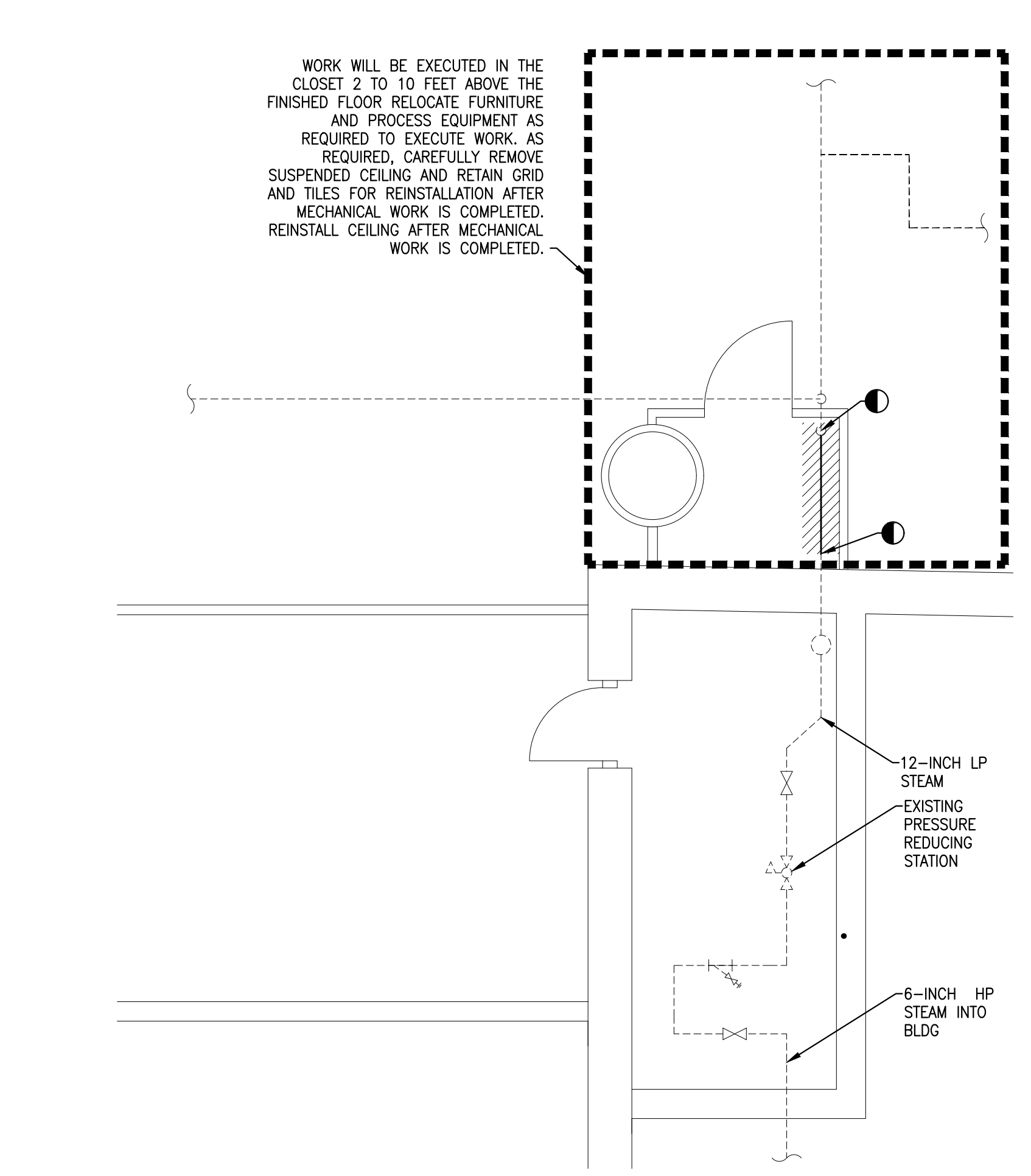
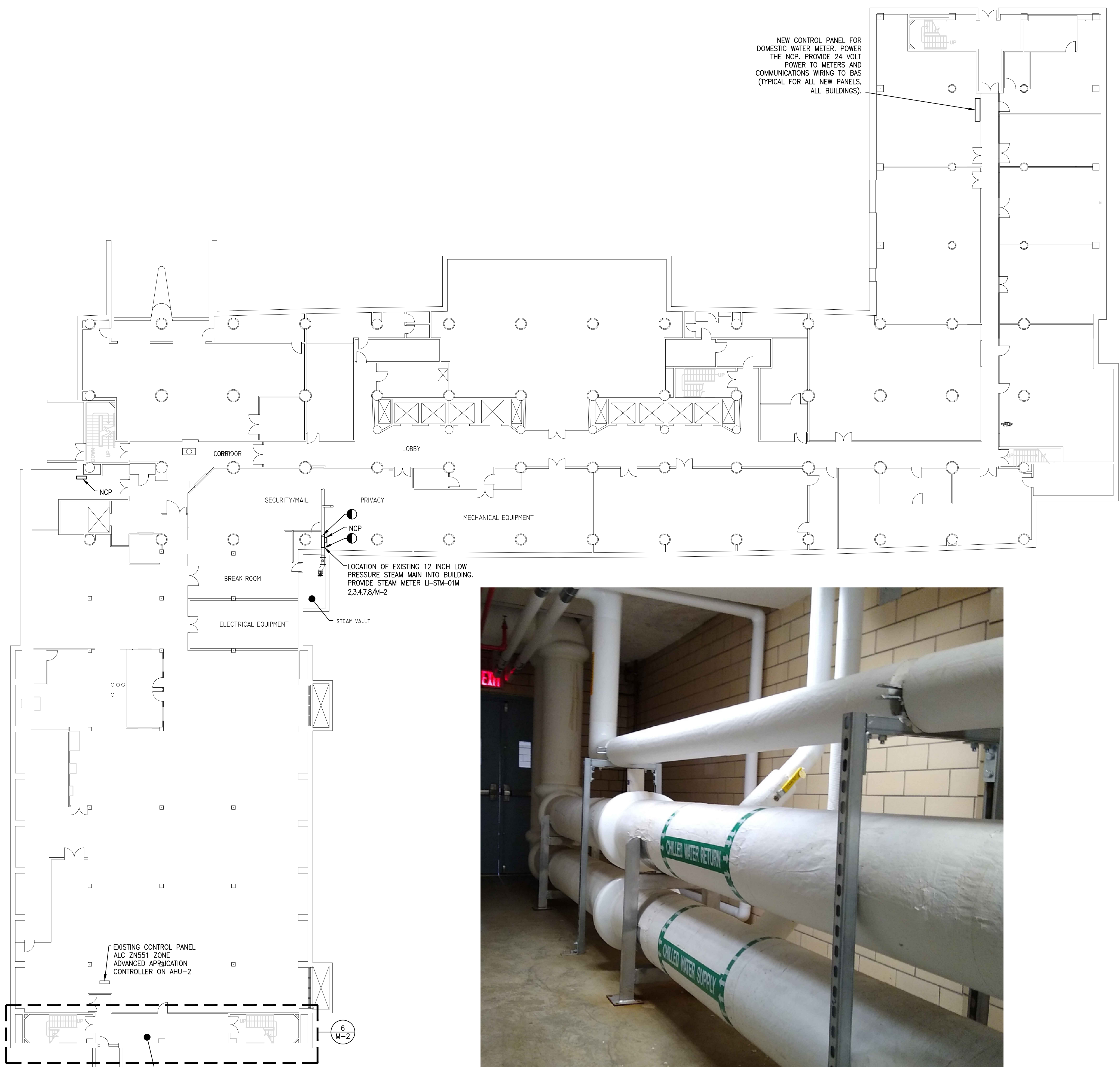
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE -
 CAPITOL COMPLEX
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, DAUPHIN COUNTY, PA

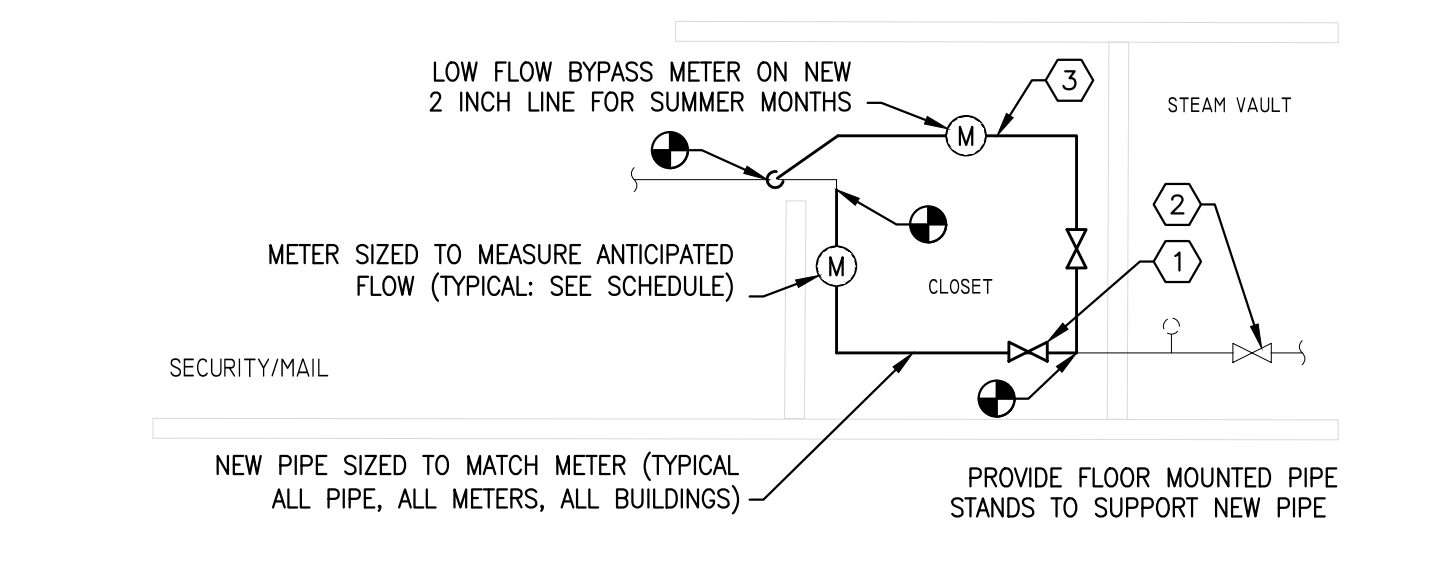
MECHANICAL SITE PLAN

DRAWN BY M. SKORANSKI	DATE 02/14/24	DRAWING No. M-1
CHECKED BY M. RADZICKI	SCALE AS NOTED	



2 **M-2** **BASEMENT STEAM PIPE DEMOLITION PARTIAL PLAN**
Scale: 1/4" = 1'-0"

3 **M-2** **BASEMENT STEAM METER PARTIAL PLAN**
Scale: 1/4" = 1'-0"

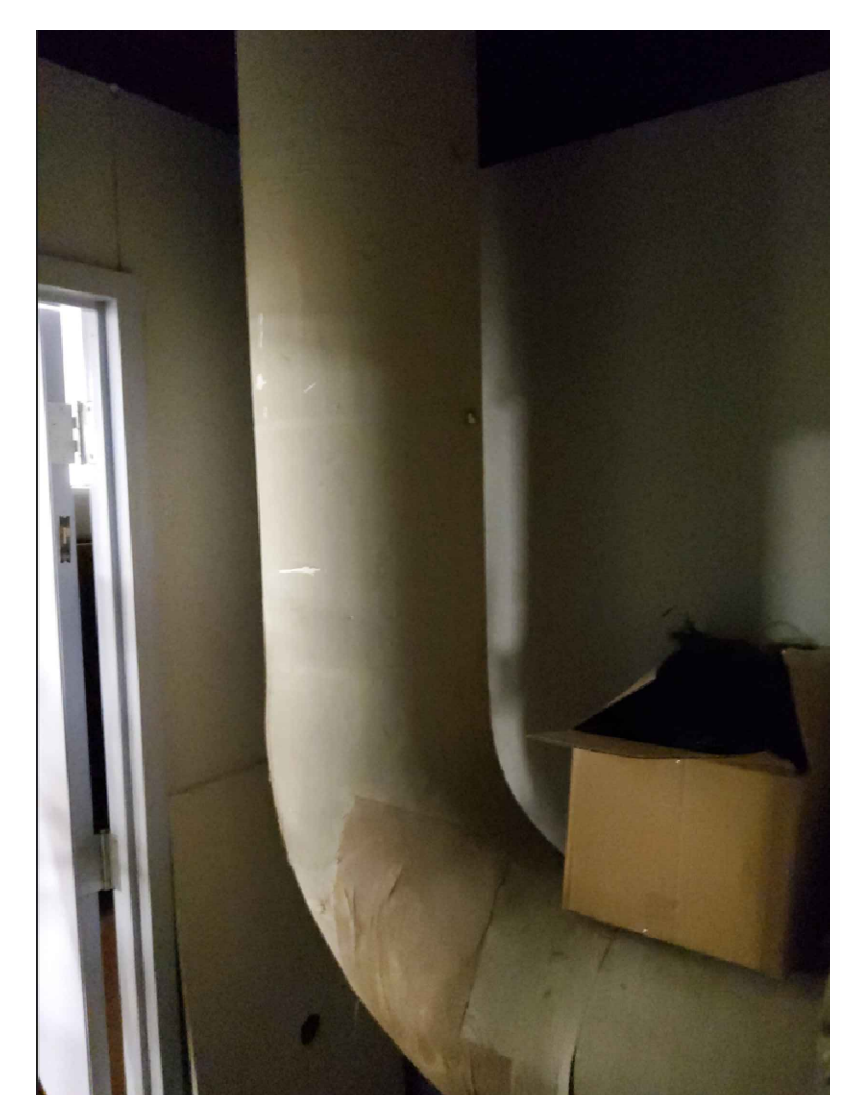


- IF THE EXISTING GATE VALVE IN THE VAULT (8/M-2) HOLDS, IT SHALL BE ACCEPTABLE TO ROUTE THE LOW FLOW BYPASS UPSTREAM OF THE SUBJECT VALVE ON THE LOW PRESSURE SIDE OF THE PRV AND ELIMINATE THE NEW VALVE ON THE LARGE PIPE IN THE CLOSET. NEATLY CORE A PENETRATION FROM THE CLOSET TO THE VAULT AND FIRESTOP THE PENETRATION AFTER PIPE INSTALLATION. PROVIDE SIGNAGE IN CLOSET INDICATING LOCATION OF THE ISOLATION VALVE. KEEP THE VALVE FOR THE LOW FLOW METER IN THE CLOSET.
- EXISTING GATE VALVE IN VAULT
- SUMMER BYPASS PIPE HEIGHT SHOWN GRAPHICALLY OFFSET HIGHER FOR CLARITY

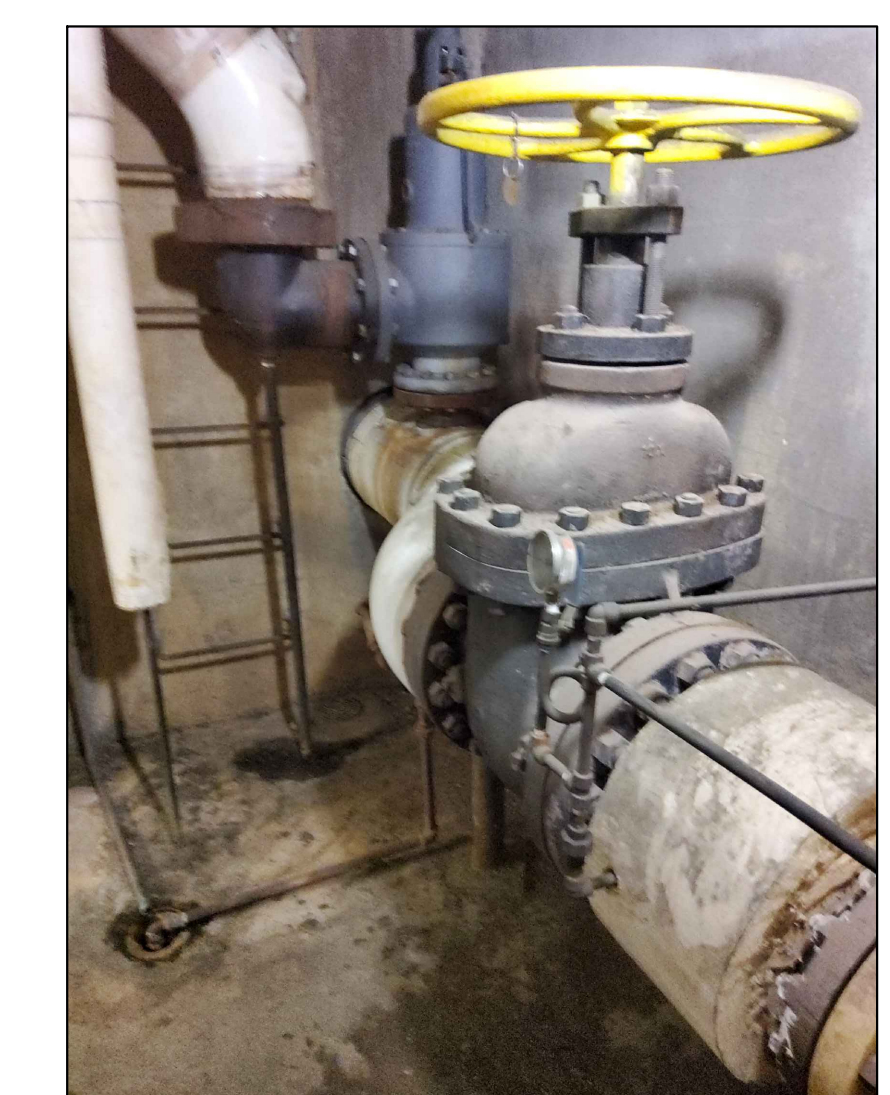
4 **M-2** **STEAM METER SCHEMATIC ELEVATION**
Scale: 1/4" = 1'-0"



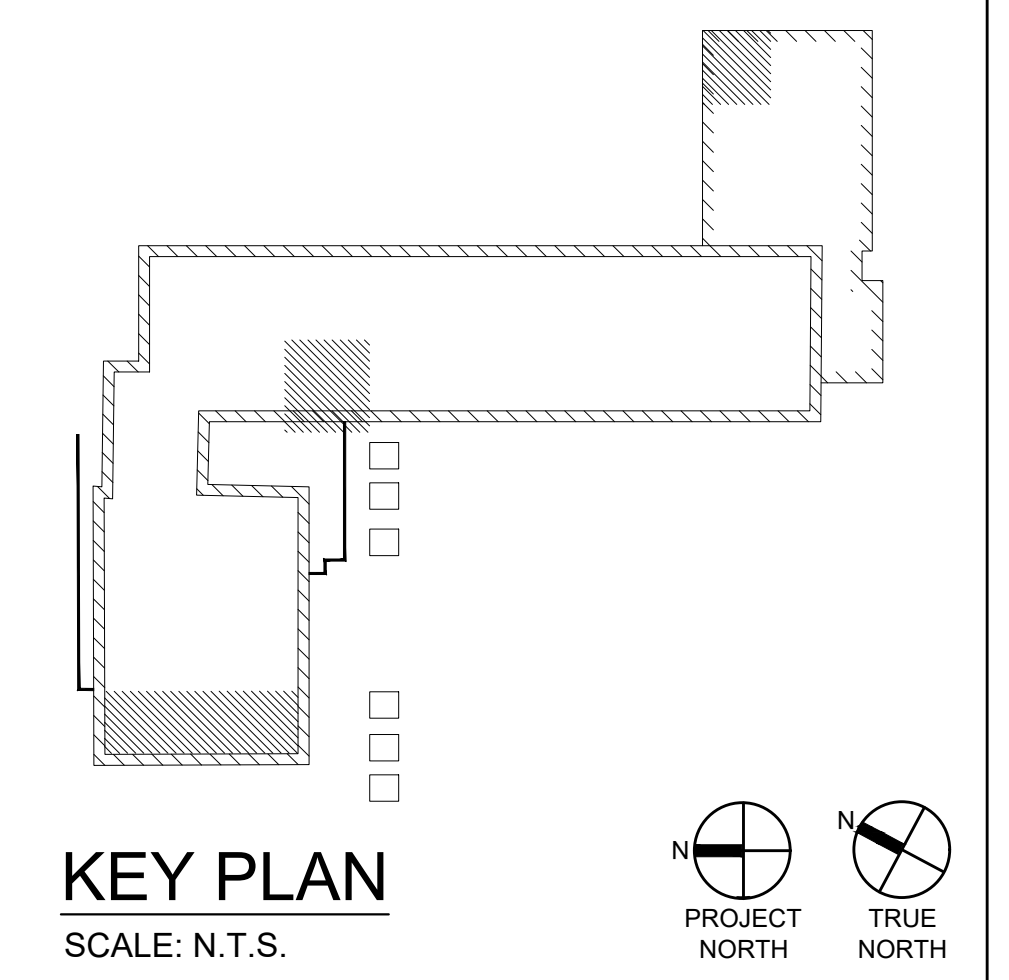
5 **M-2** **PHOTO: CHILLED WATER EXISTING CONDITIONS**
No Scale



7 **M-2** **PHOTO: NEW STEAM METER LOCATION**
Scale: NONE
In Closet



8 **M-2** **PHOTO: EXISTING VALVE**
Scale: NONE
In Vault



NO.	REVISIONS

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02/14/2024

SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE -
CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

LABOR & INDUSTRY BUILDING MECHANICAL PLAN

VERIFY SCALE

BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING.

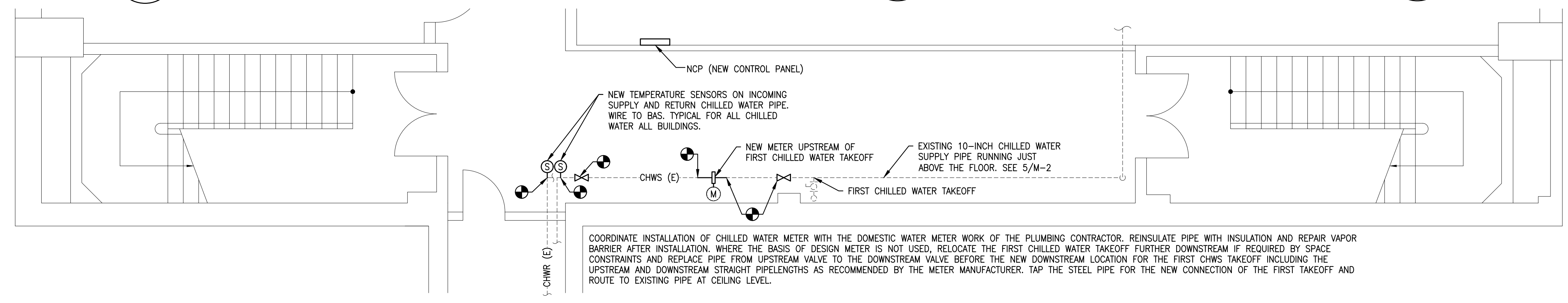
0 1

IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY

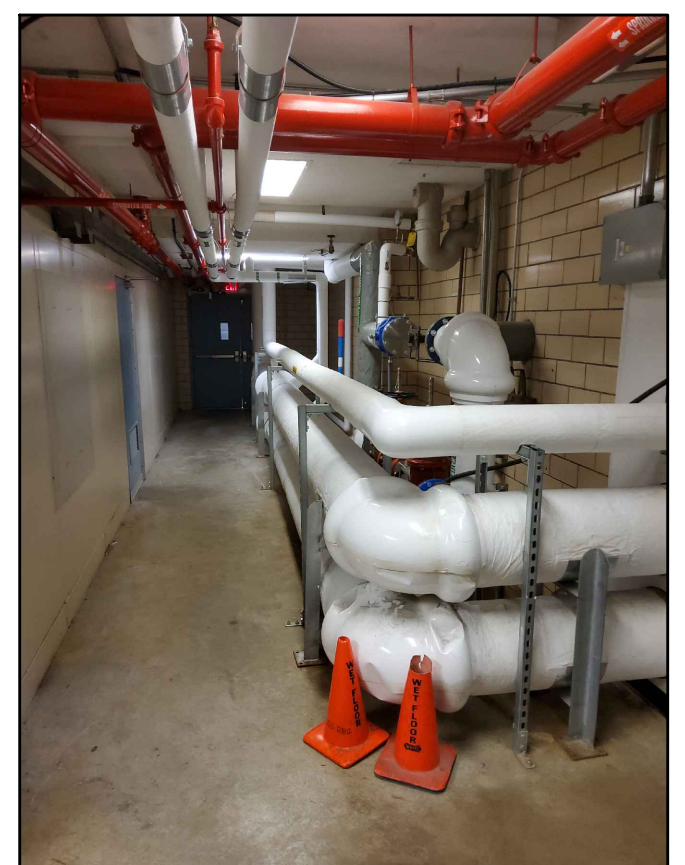
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

DRAWN BY: M. SKORANSKI DATE: 02/14/24 DRAWING No. M-2

CHECKED BY: M. RADZICKI SCALE: AS NOTED

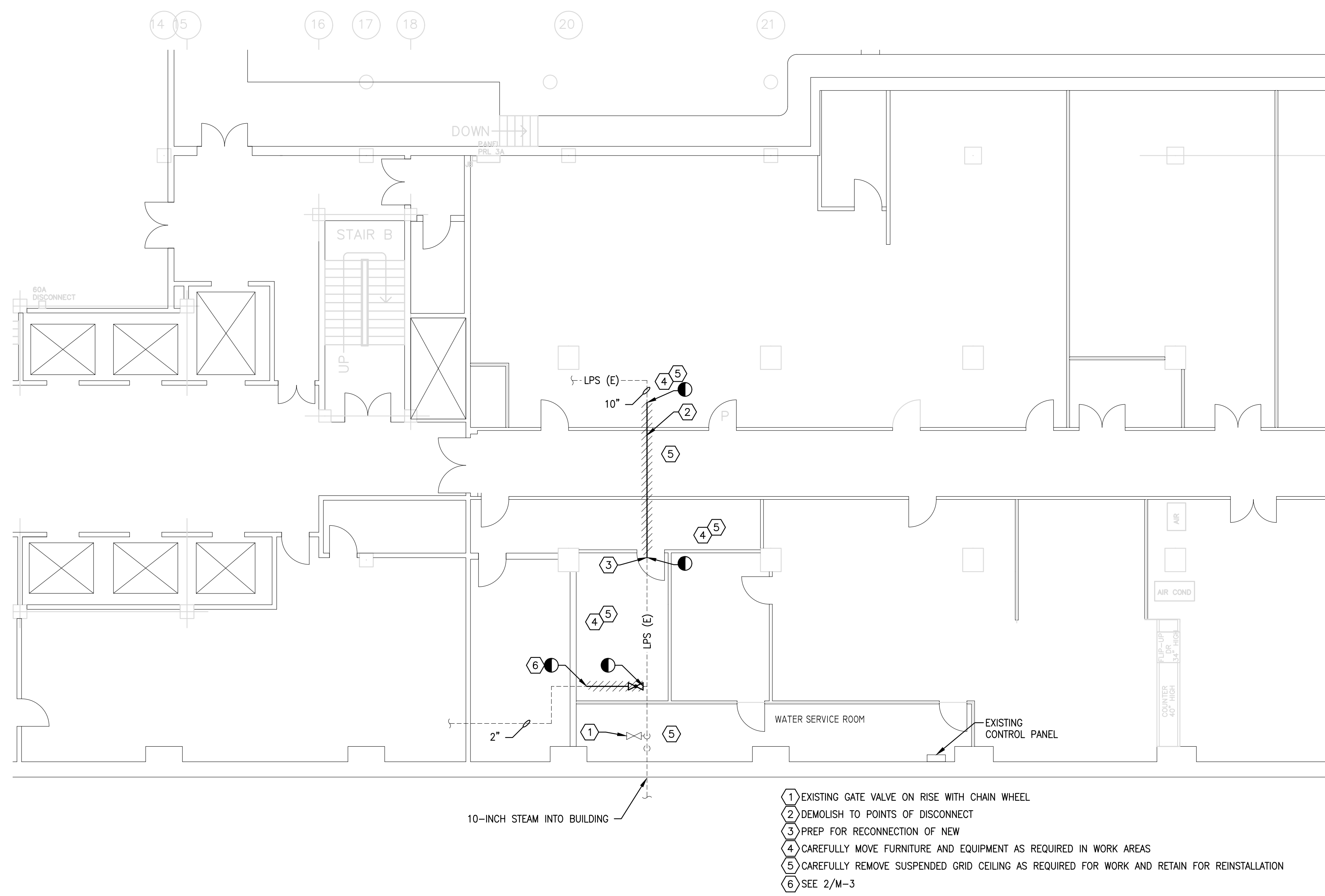


6 **M-2** **BASEMENT CHILLED WATER PARTIAL PLAN**
Scale: 1/4" = 1'-0"



9 **M-2** **PHOTO: CHILLED WATER PIPE**
No Scale

COORDINATE INSTALLATION OF CHILLED WATER METER WITH THE DOMESTIC WATER METER WORK OF THE PLUMBING CONTRACTOR. REINSULATE PIPE WITH INSULATION AND REPAIR VAPOR BARRIER AFTER INSTALLATION. WHERE THE BASIS OF DESIGN METER IS NOT USED, RELOCATE THE FIRST CHILLED WATER TAKEOFF FURTHER DOWNSTREAM IF REQUIRED BY SPACE CONSTRAINTS AND REPLACE PIPE FROM UPSTREAM VALVE TO THE DOWNSTREAM VALVE BEFORE THE NEW DOWNSTREAM LOCATION FOR THE FIRST CHWS TAKEOFF INCLUDING THE UPSTREAM AND DOWNSTREAM STRAIGHT PIPELENGTHS AS RECOMMENDED BY THE METER MANUFACTURER. TAP THE STEEL PIPE FOR THE NEW CONNECTION OF THE FIRST TAKEOFF AND ROUTE TO EXISTING PIPE AT CEILING LEVEL.



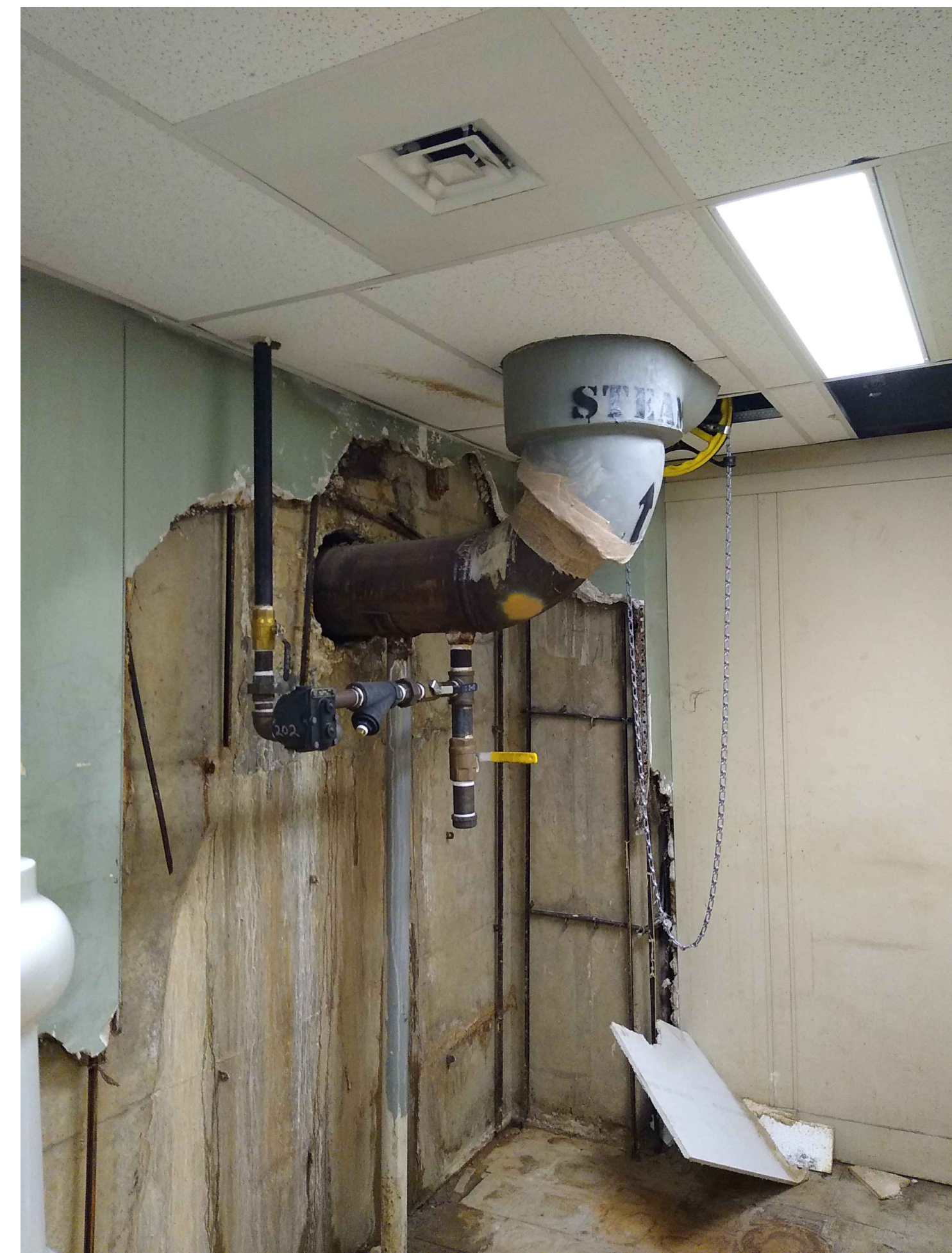
1 BASEMENT MECHANICAL DEMOLITION AND PREPARATION PART PLAN (STEAM)
 Scale: 1/8" = 1'-0"



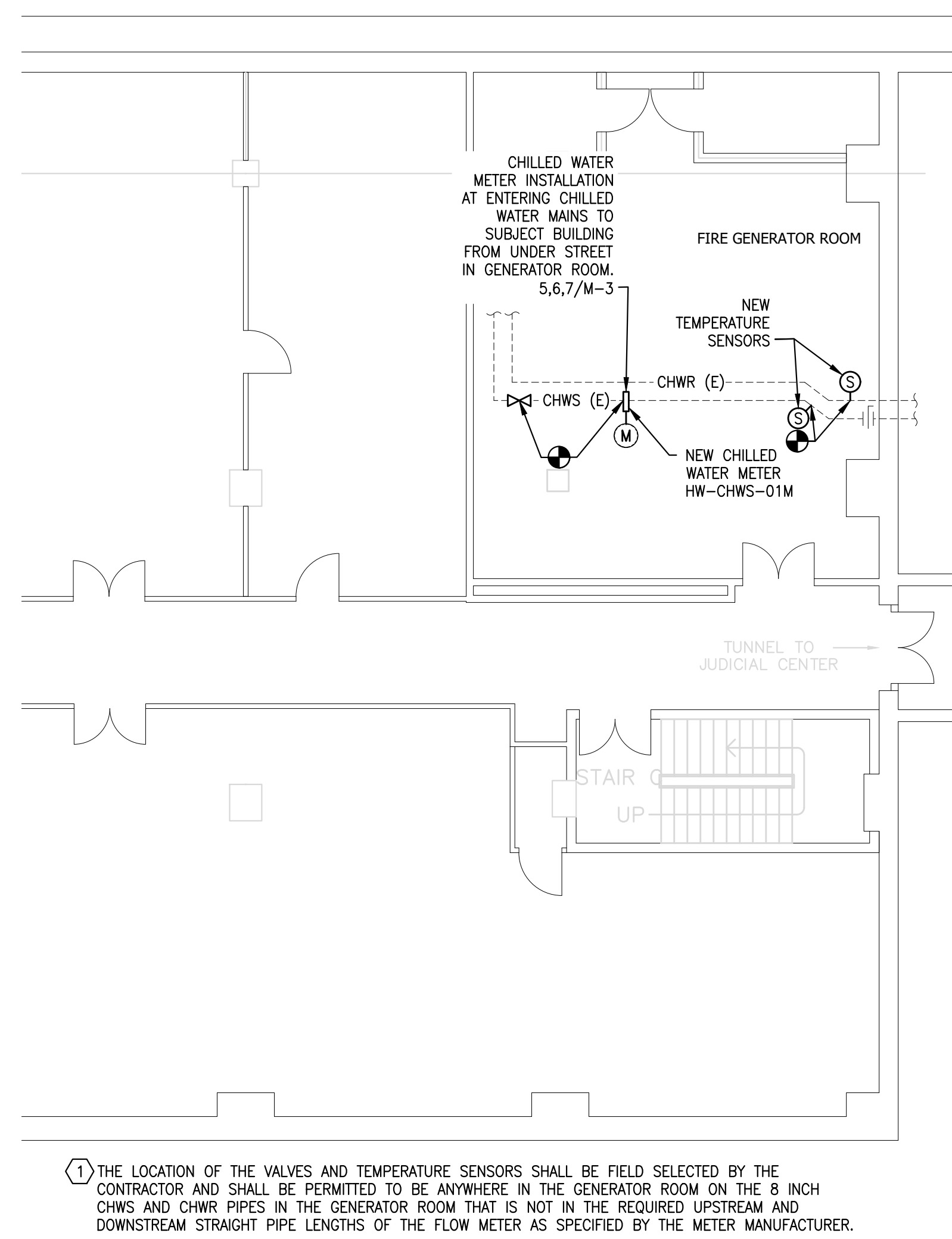
2 PHOTO: STEAM PIPE WORK (AOW)
 Scale: NONE NORTH 2 INCH MAIN



3 PHOTO: STEAM METER LOCATION
 Scale: NONE ABOVE CORRIDOR CEILING



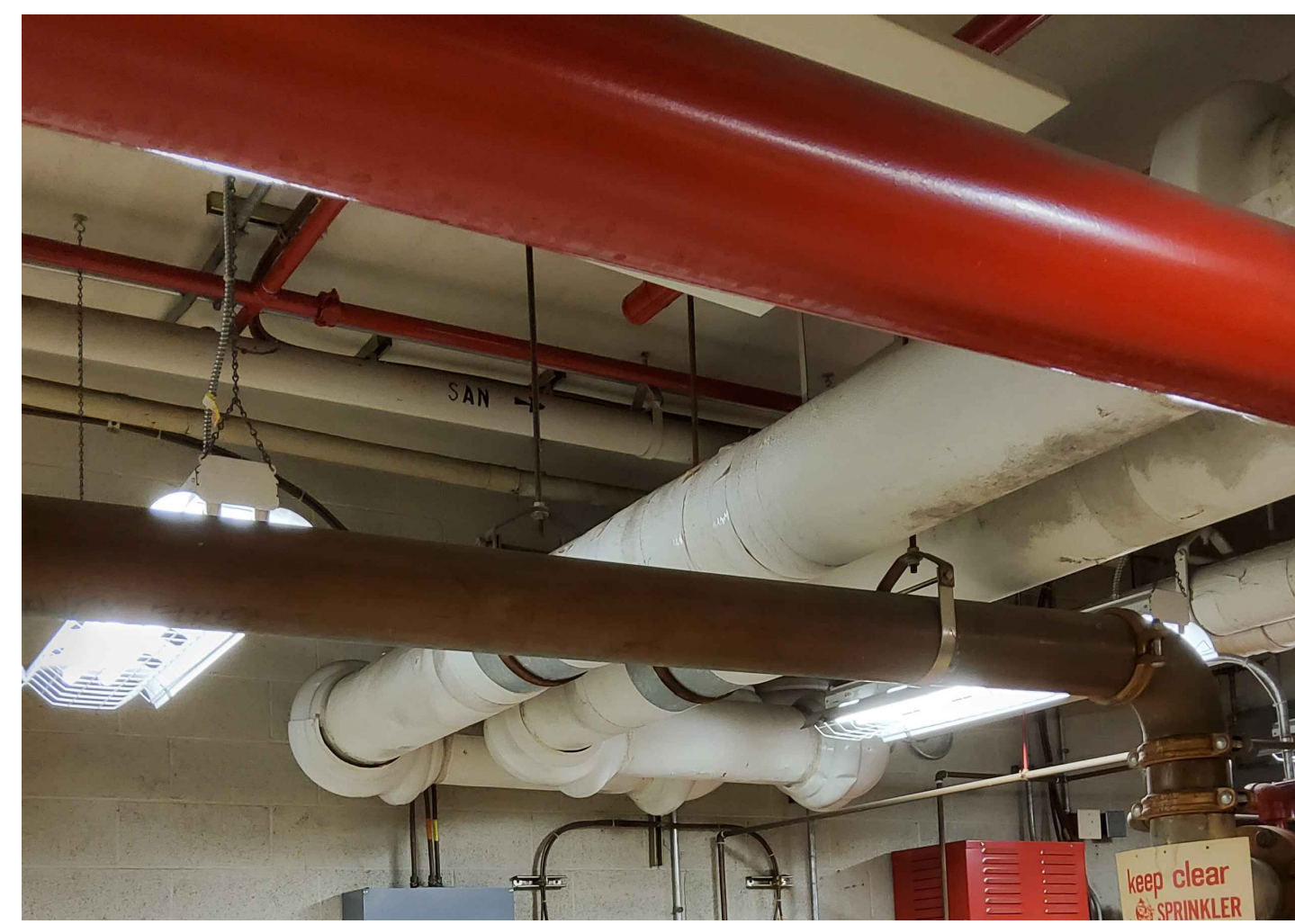
4 PHOTO: STEAM SERVICE ENTRANCE (AOW)
 Scale: NONE



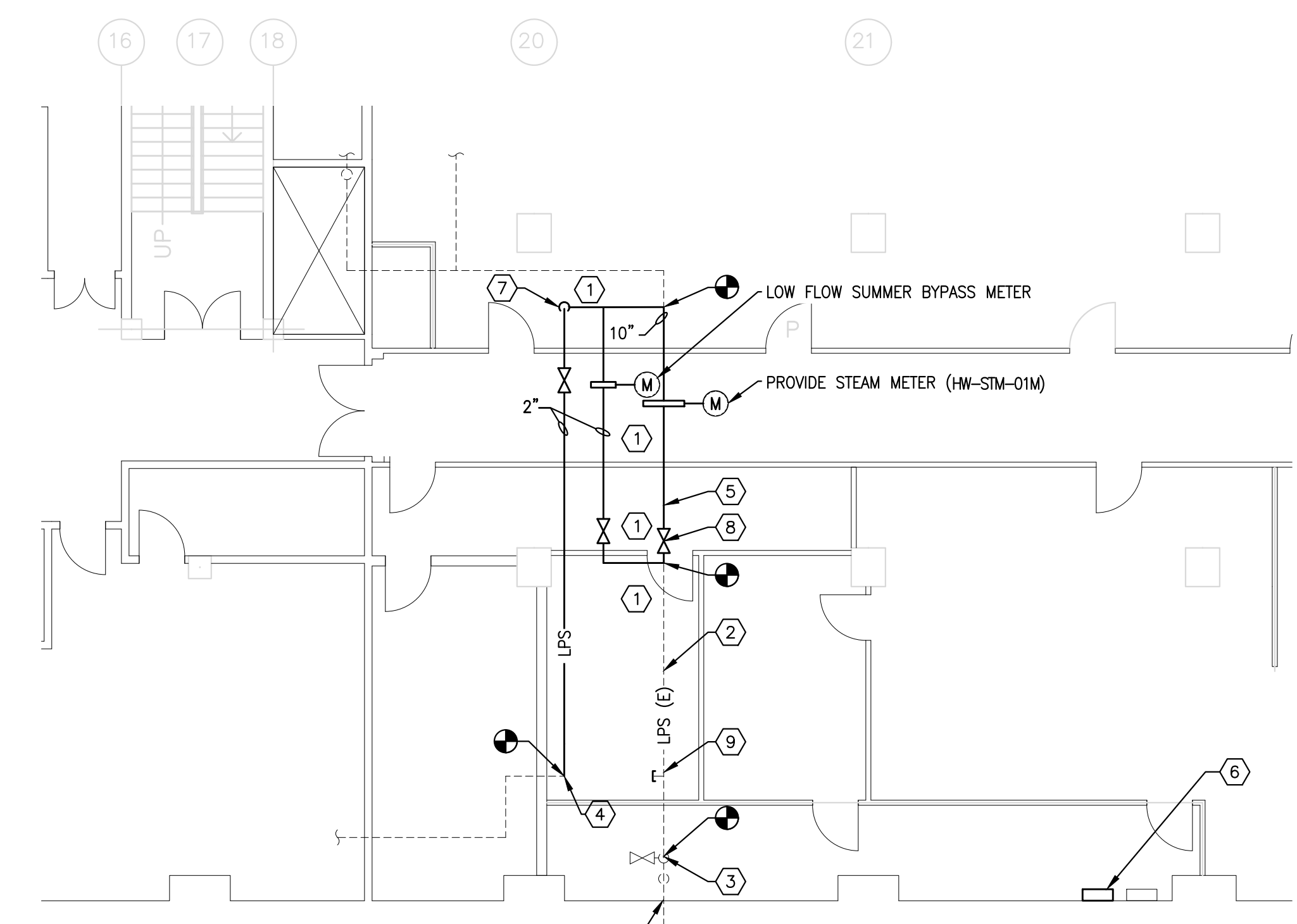
8 MECHANICAL PLAN (CHILLED WATER)
 Scale: 1/8" = 1'-0"



5 PHOTO: CHWS METER AOW
 Scale: NONE



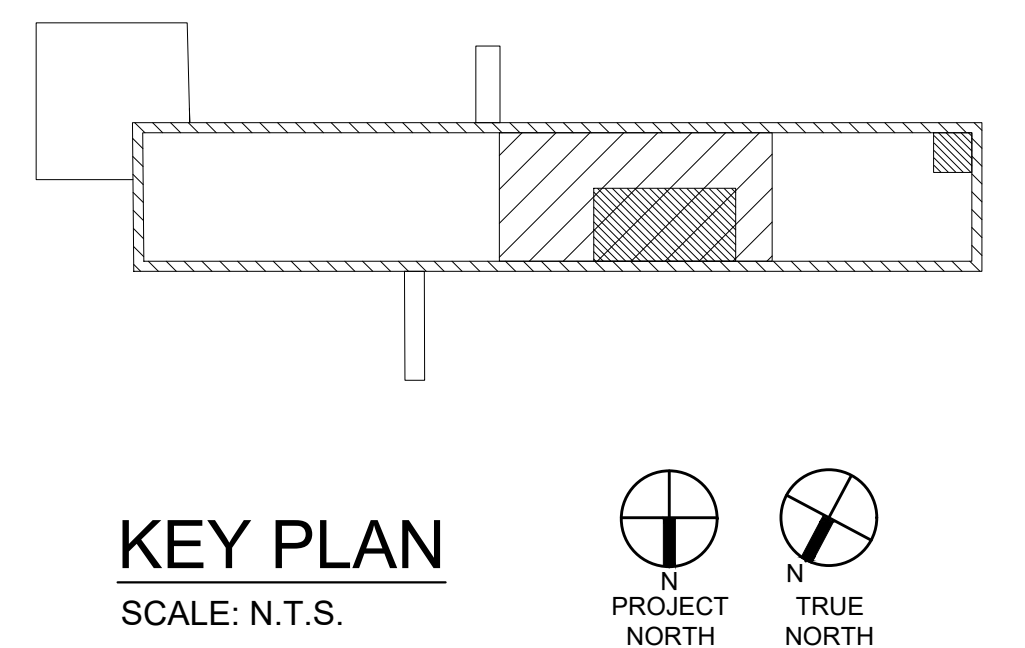
6 PHOTO: CHWS METER AOW
 Scale: NONE



9 BASEMENT MECHANICAL NEW STEAM WORK PART PLAN
 Scale: 1/8" = 1'-0"



7 PHOTO: CHILLED WATER PIPING
 Scale: NONE



KEY PLAN
 SCALE: N.T.S.

RECORD REVISIONS

02/14/2024

GREENMAN-PEDERSEN, INC
 52 GLENMAURA NATIONAL BOULEVARD
 SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE -
 CAPITOL COMPLEX
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, DAUPHIN COUNTY, PA

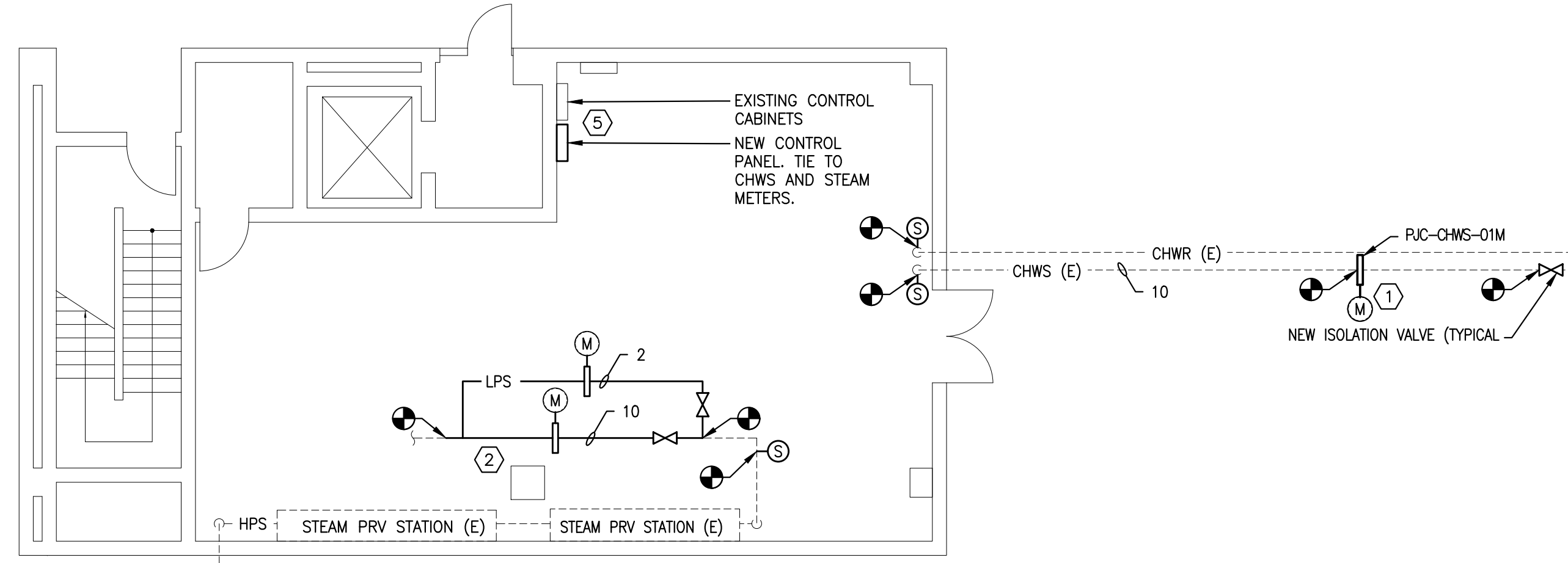
HEALTH & WELFARE BUILDING MECHANICAL PLAN

CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

DRAWN BY: M. SKORANSKI DATE: 02/14/24 DRAWING No. M-3

CHECKED BY: M. RADZICKI SCALE: AS NOTED

VERIFY SCALE	
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING: 0 1	
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY	
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.	

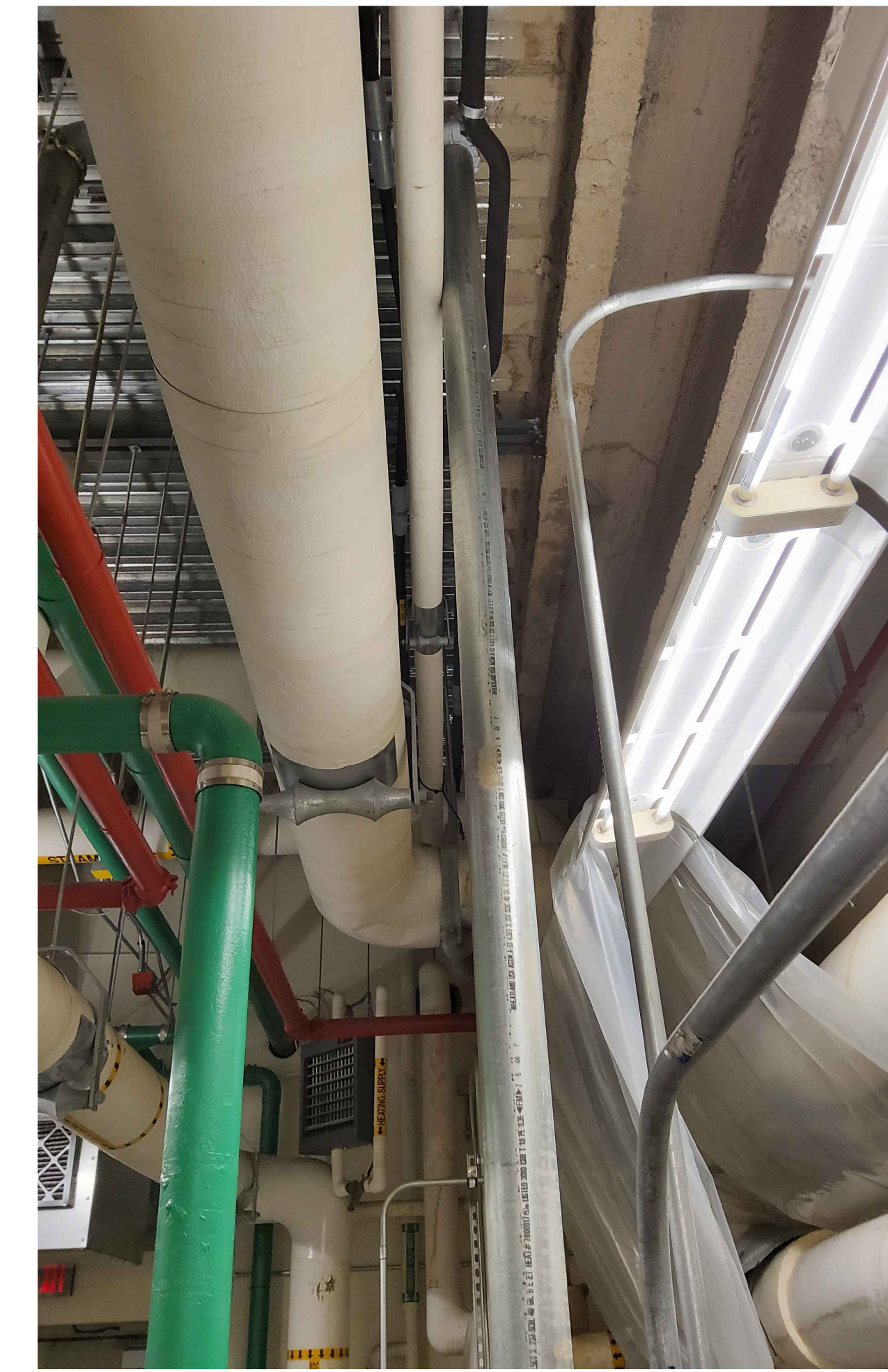


- ① PROVIDE CHILLED WATER METER (RUC-01M-01M) ON INCOMING CHILLED WATER SUPPLY PIPE. BREAK PIPE. INSTALL METER. PLACE AFTER REQUIRED PIPE DIAMETERS BEFORE AND AFTER FITTINGS BUT NOT LESS THEN RECOMMENDED BY MANUFACTURER (TYPICAL OF ALL METERS). WORK IS ABOVE CEILING ~12 FEET AFF IN PARKING LOT UNDER BUILDING. REMOVE CEILING AS REQUIRED AND REINSTALL CEILING AFTER METER INSTALLATION.
- ② PROVIDE STEAM METER (RUC-01M-01M). INSTALL METER SO AS TO ACHIEVE THE REQUIRED STRAIGHT PIPE LENGTH FOR ACCURATE MEASUREMENT. PROVIDE 2-INCH BYPASS METER (4/M-16--TYPICAL FOR ALL STEAM METERS EXCEPT THOSE DEDICATED TO DOMESTIC HOT WATER ONLY).
- ③ MAKE NEW CONNECTIONS FOR POWER AND BMS COMMUNICATION BETWEEN EXISTING AND NEW CONTROL PANEL.

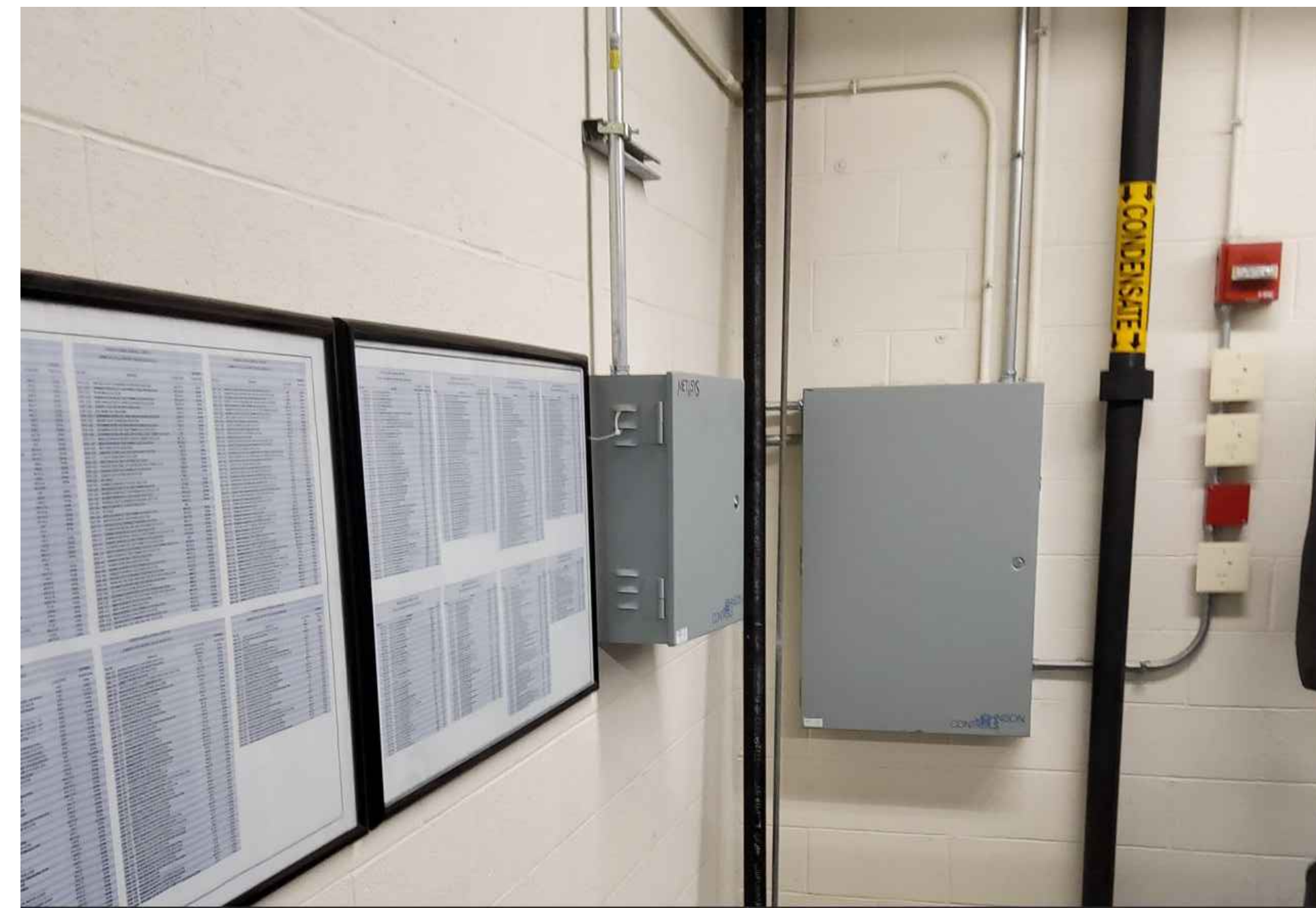
1
M-4 **BASEMENT MECHANICAL PLAN-STEAM AND CHILLED WATER METERS**
Scale: 1/8" = 1'-0"



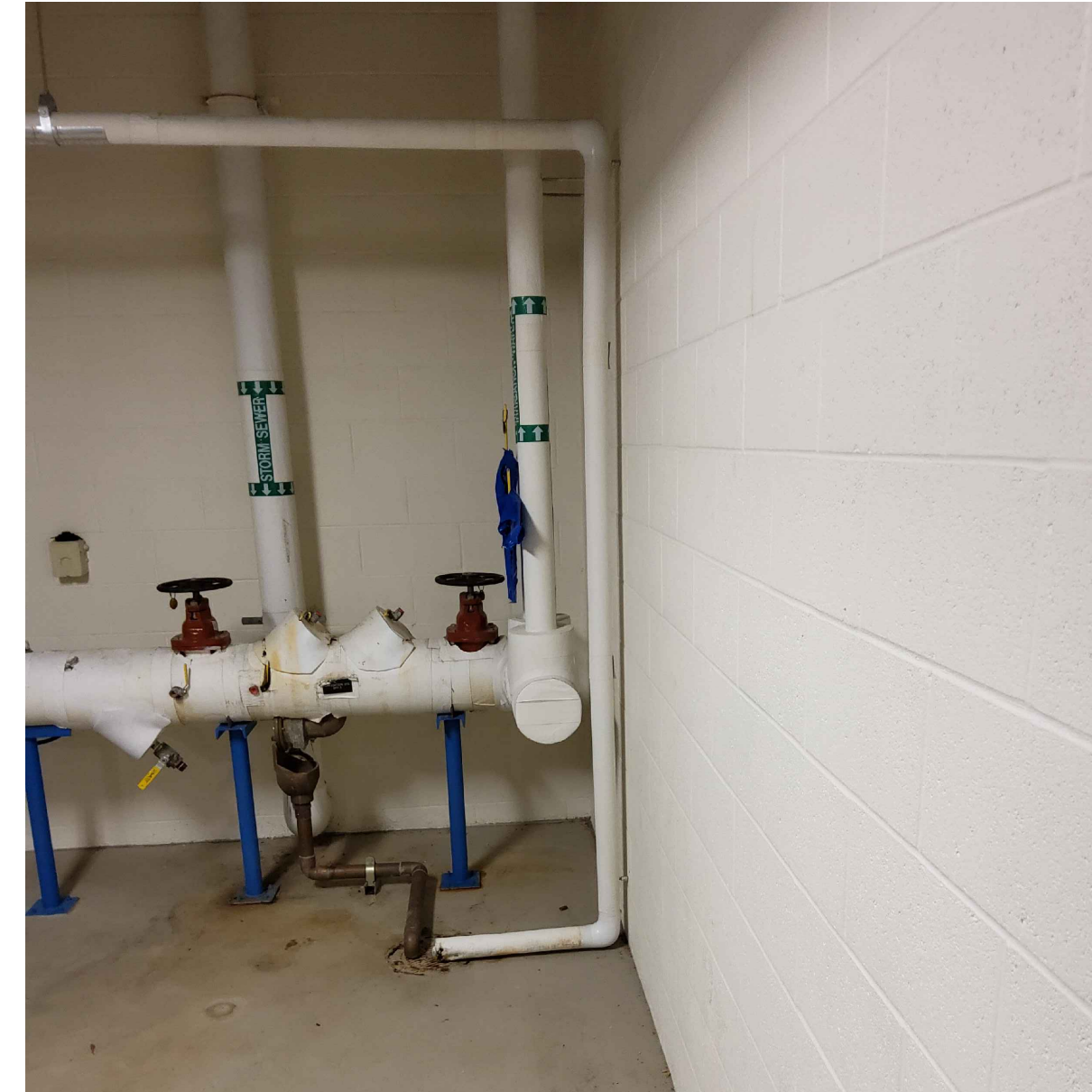
2
M-4 **PHOTO: EXISTING CONDITION--LOCATION OF NEW CHILLED WATER METER**
No Scale



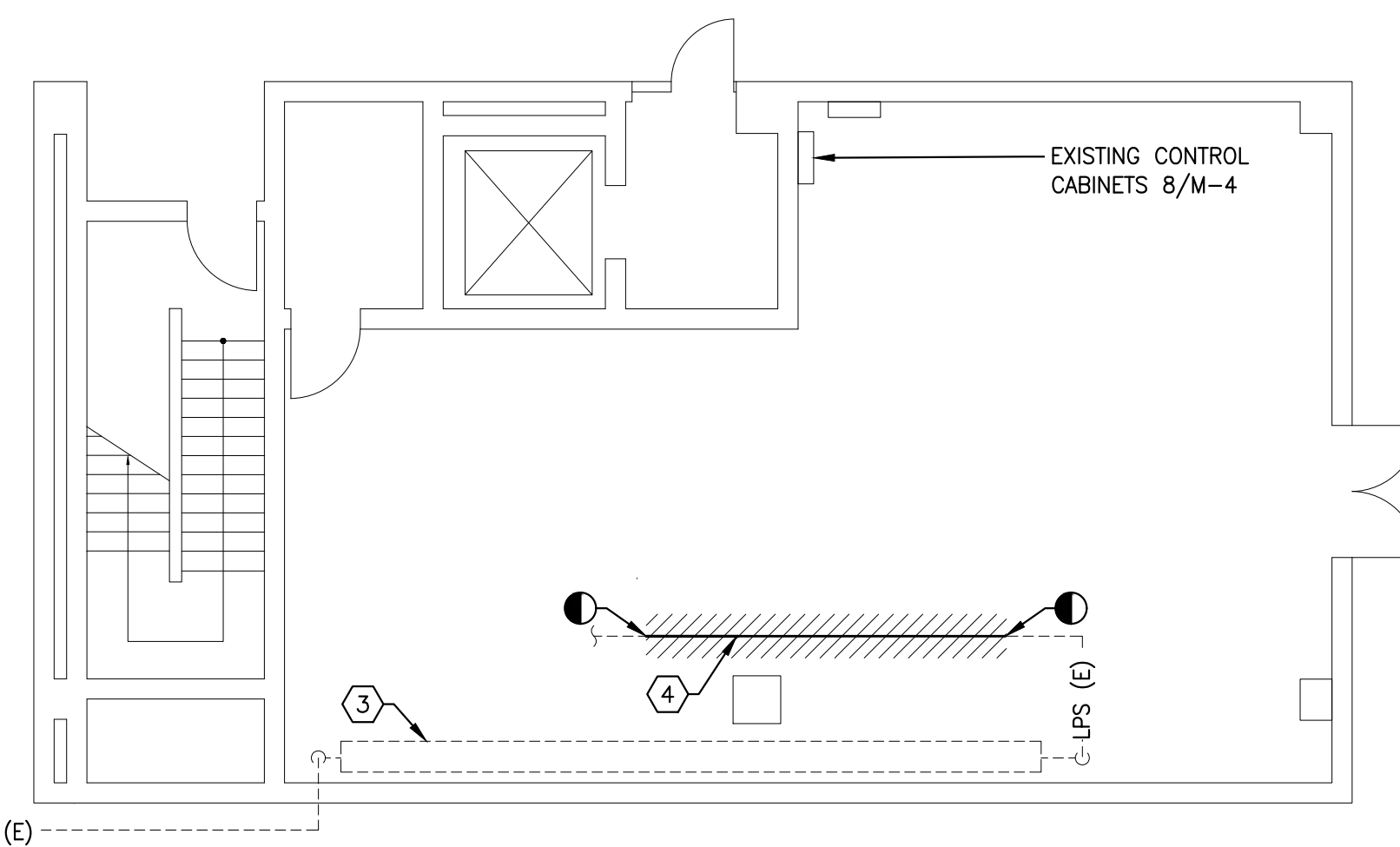
3
M-4 **PHOTO: EXISTING CONDITION--LOCATION OF NEW STEAM METER**
No Scale



8
M-4 **PHOTO: LOCATION OF NCP FOR STEAM AND CHILLED WATER METERS**
Scale: NONE



9
M-4 **LOCATION OF NEW CONTROL PANEL**
Scale: NONE



- ③ EXISTING PRESSURE REDUCING AND METERING STATION
- ④ DEMOLISH LENGTH OF 10-INCH PIPE NEEDED FOR UPSTREAM AND DOWNSTREAM STRAIGHT PIPE RUNS.
- ⑤ LOCATION OF NEW DOMESTIC WATER METER BY PC. MC SHALL INTERFACE TO BMS THROUGH NEW CONTROL PANEL

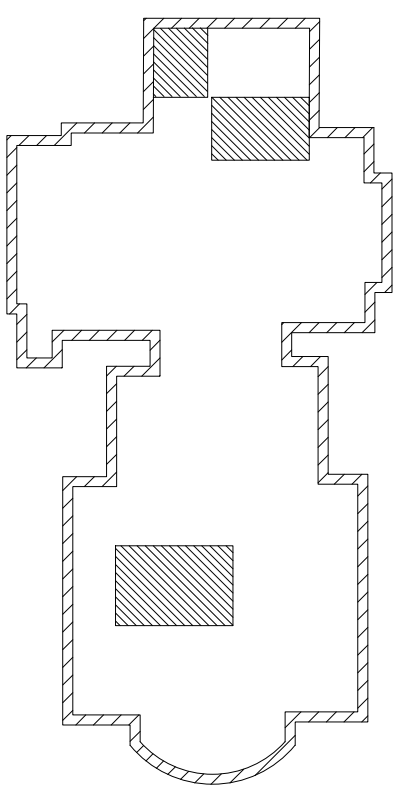
5
M-4 **STEAM DEMOLITION AND PREP WORK (ELEVATION)**
Scale: 1/8" = 1'-0"



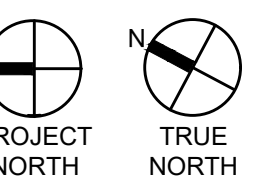
4
M-4 **BASEMENT NEW CONTROL PANEL FOR DOMESTIC WATER METER**
Scale: 1/8" = 1'-0"



6
M-4 **LOCATION OF EXISTING CONTROLLER**
Scale: NONE



KEY PLAN
SCALE: N.T.S.



NO.	REVISION	DATE

RECORD REVISIONS

02/14/2024 DATE

SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

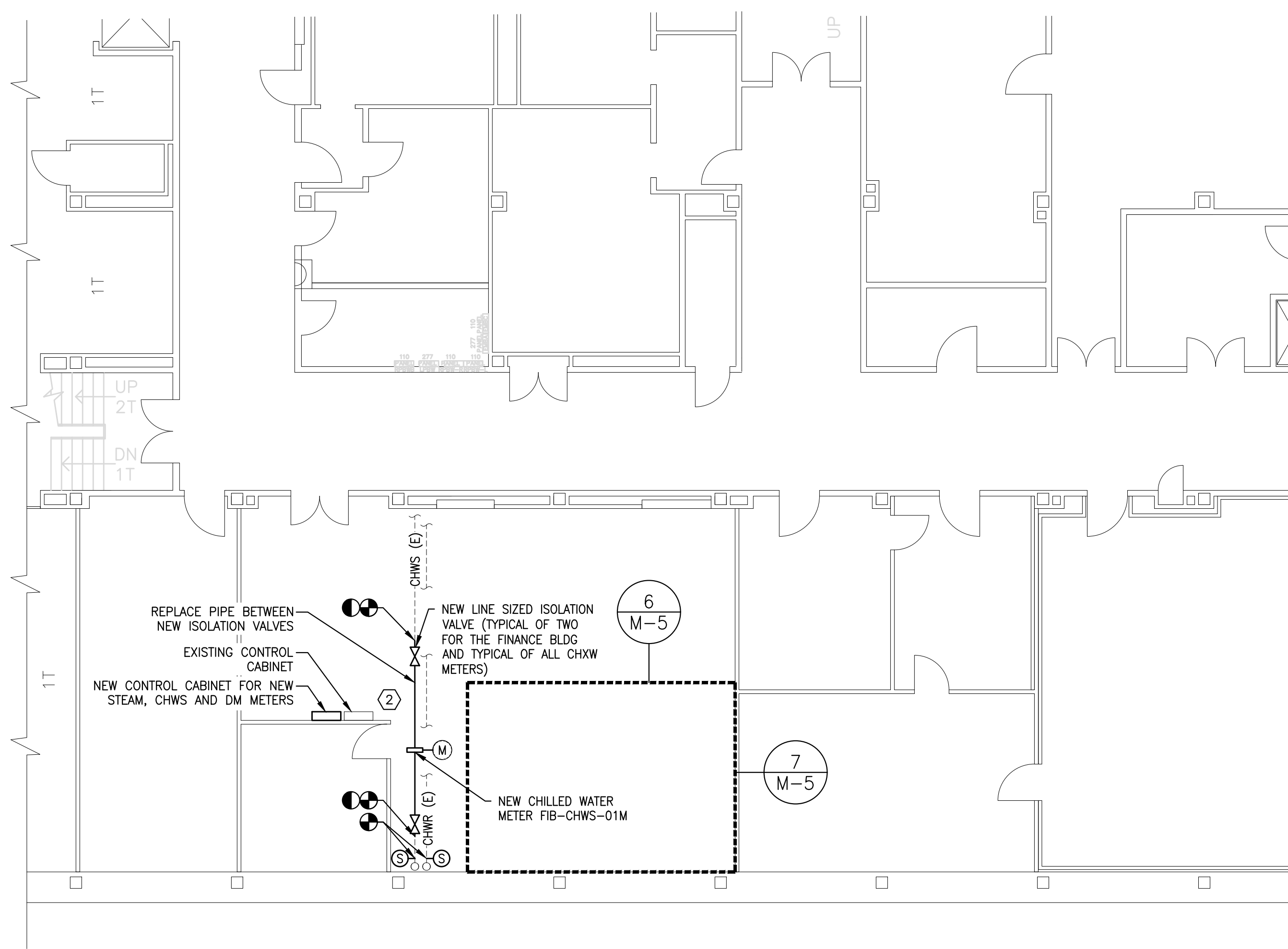
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE --
CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

PA JUDICIAL CENTER MECHANICAL PLAN

VERIFY SCALE		DRAWN BY		DATE		DRAWING No.	
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING: 0 1		M. SKORANSKI		02/14/24		M-4	
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY		CHECKED BY		SCALE		AS NOTED	
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.		M. RADZICKI		AS NOTED			



1 BASEMENT CHILLED WATER PLAN
M-5 Scale: 1/8" = 1'-0"

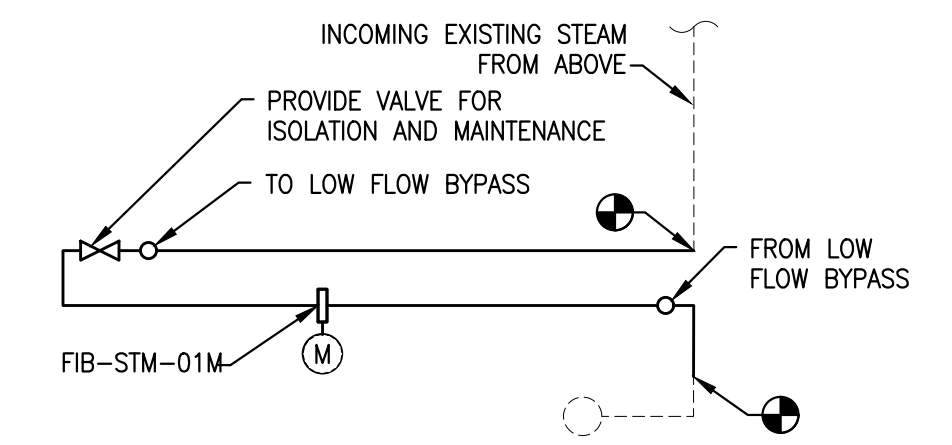
- 1 PROVIDE STEAM METER (FIB-STM-01M), BREAK PIPE AT ENTRANCE TO THE MECHANICAL EQUIPMENT ROOM, ROUTE ACROSS CEILING, INSTALL METER, DOUBLE BACK AND RECONNECT TO EXISTING RISER. ROUTE SUFFICIENT LENGTH OF STRAIGHT PIPE UPSTREAM AND DOWNSTREAM OF METER TO MEET THE MFR'S STRAIGHT PIPE RECOMMENDATIONS.
- 2 REPLACE 8-INCH CHILLED WATER PIPE BETWEEN POINTS OF DISCONNECT/RECONNECT AS SHOWN. DEMOLISH EXISTING FLOW METER AND DISCONNECT FROM CONTROL SYSTEM (8/M-5). TERMINATE CONNECTIONS TO BMS. PROVIDE NEW CHILLED WATER METER FIB-CHWS-01M



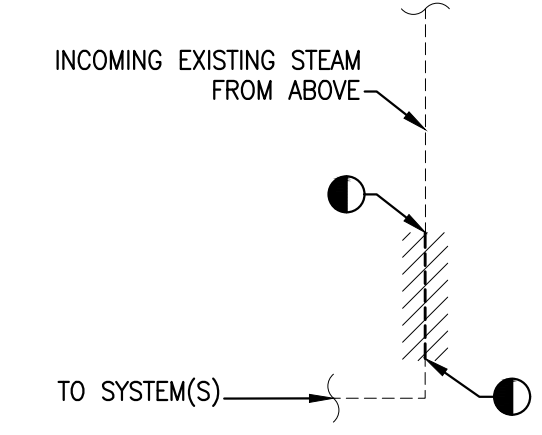
2 CHILLED WATER SERVICE ENTRANCE
M-5 Scale: NONE LOCATION OF NEW METER



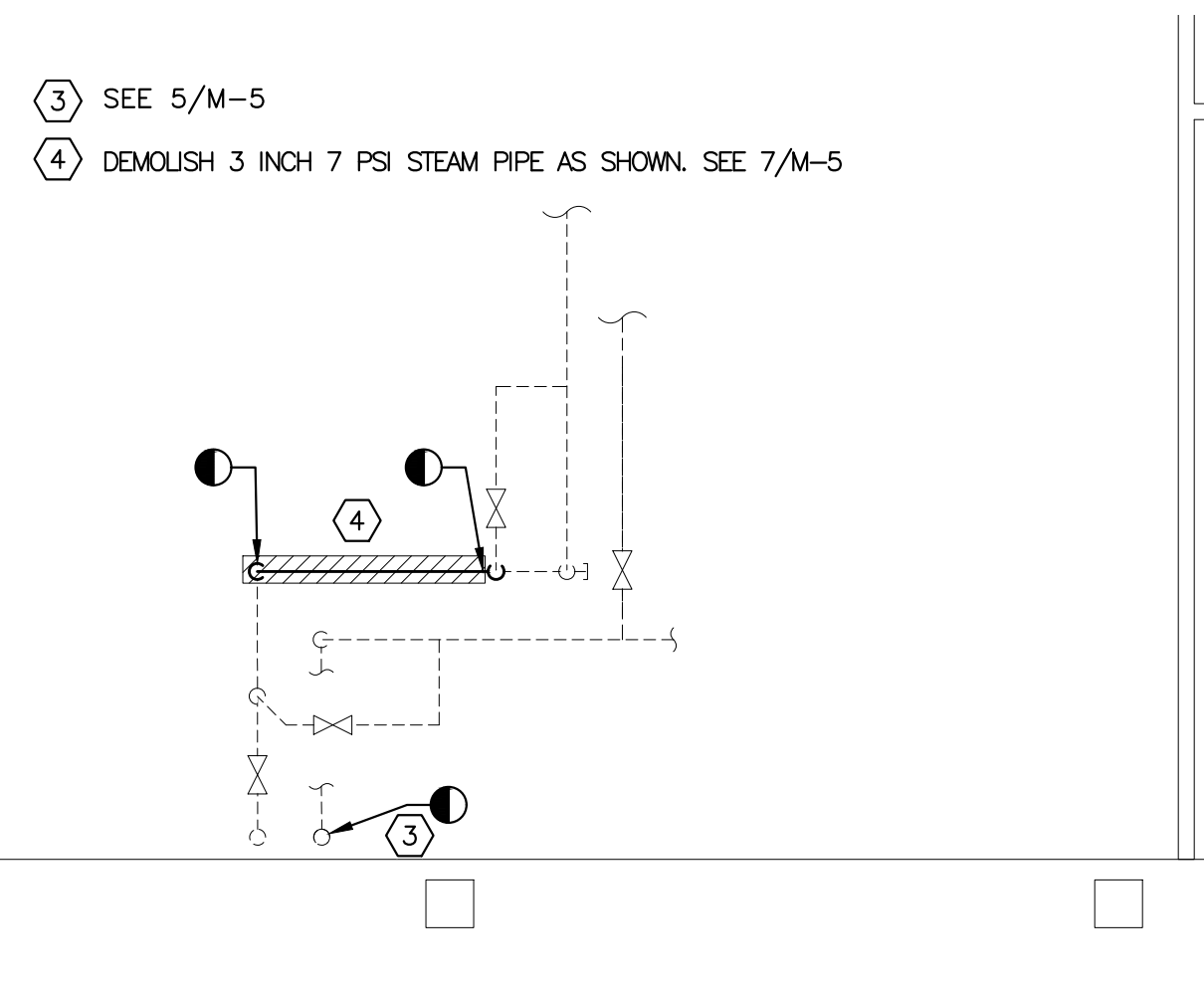
3 PHOTO: STEAM SERVICE ENTRANCE
M-5 Scale: NONE LOCATION OF NEW METER



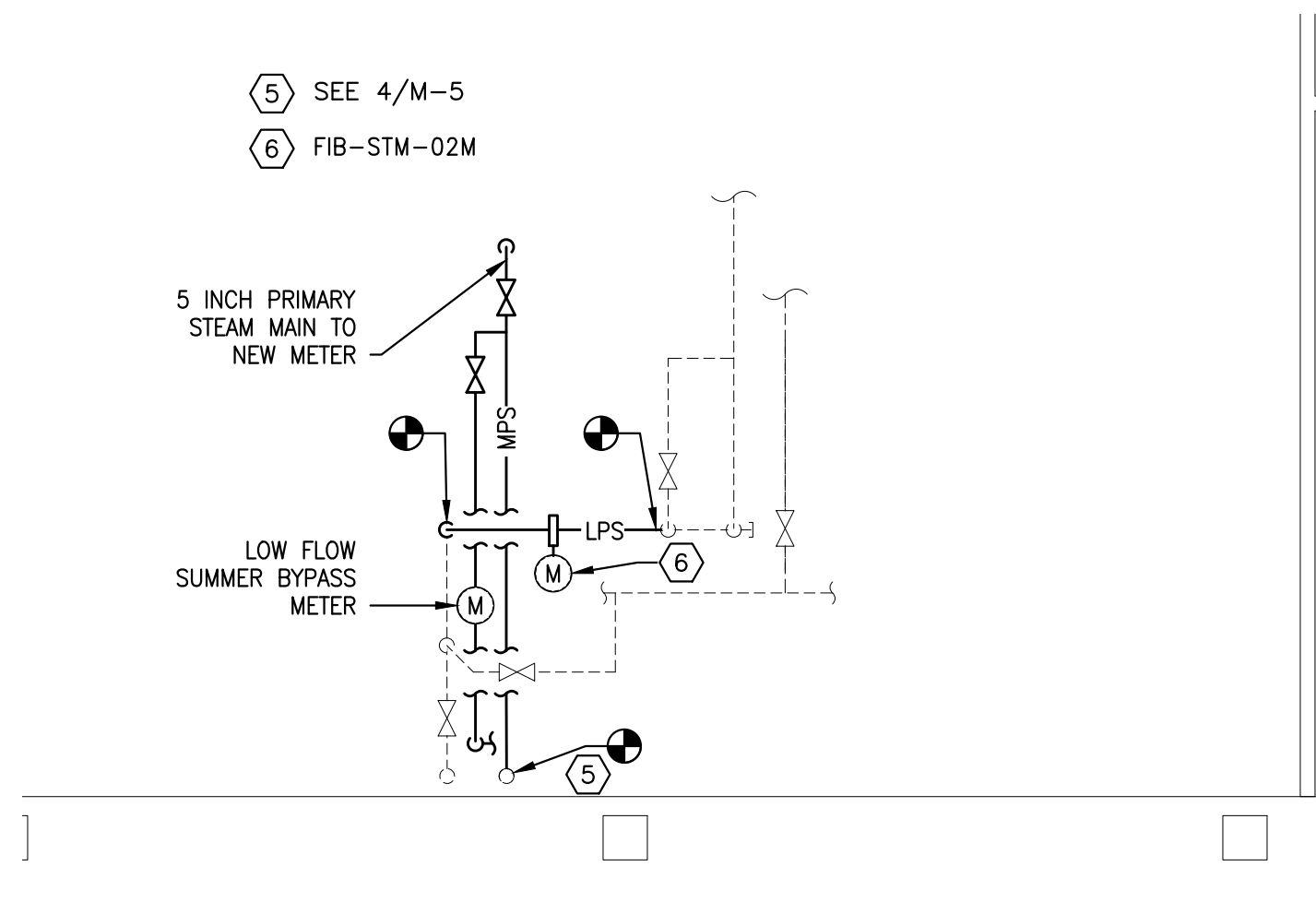
4 STEAM METER INSTALLATION (SCHM ELEV)
M-5 Scale: NONE 5 INCH INCOMING 23 PSI LINE



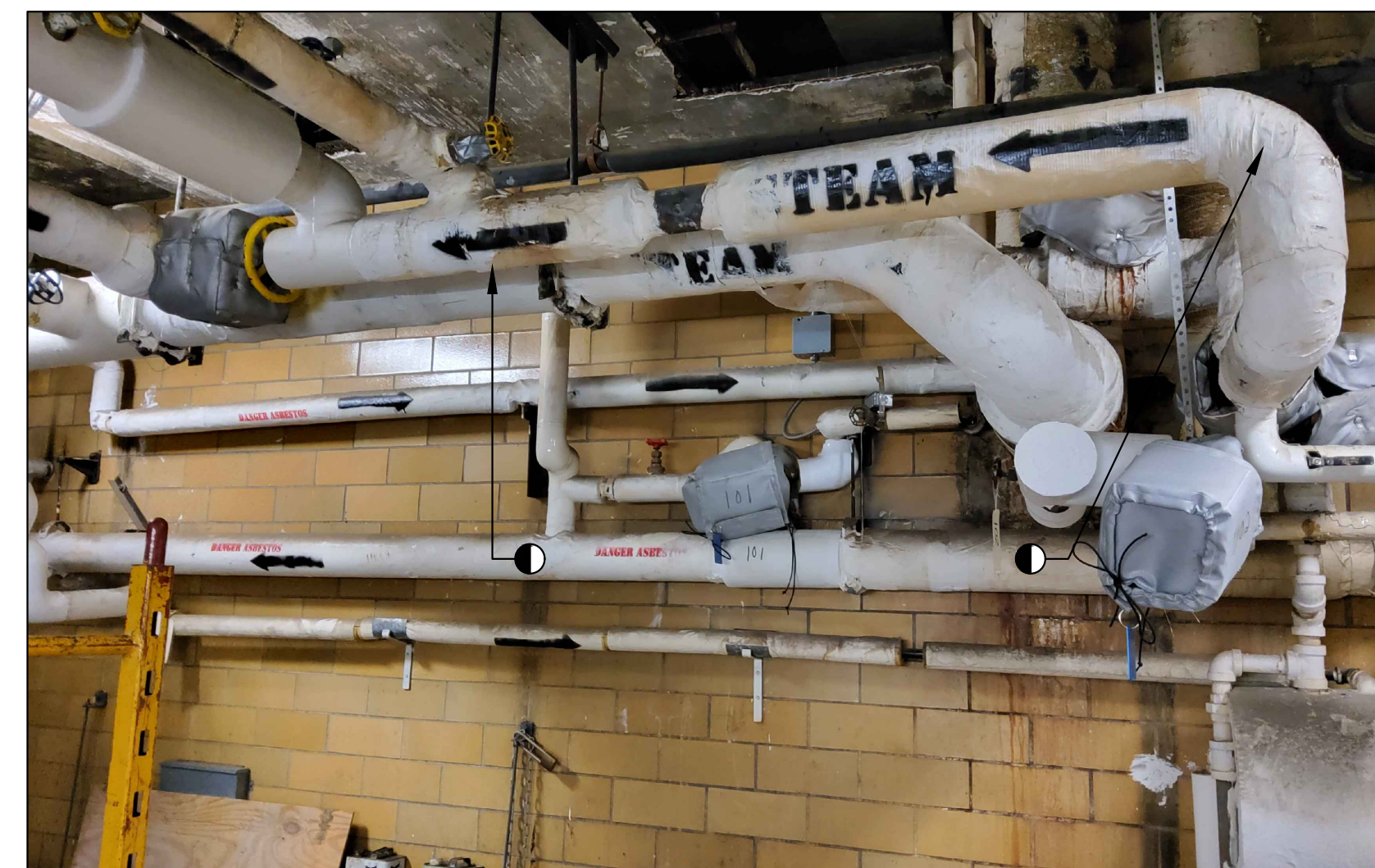
5 STEAM PIPE PREP/DEMOLITION (SCHM ELEV)
M-5 Scale: NONE



6 STEAM PIPE DEMOLITION/PIPE PREP
M-5 Scale: 1/4" = 1'-0" PART PLAN



7 NEW STEAM METER INSTALLATION
M-5 Scale: 1/4" = 1'-0" PART PLAN



7 PHOTO: EXISTING STEAM MAINS TO RECEIVE METERS
M-5 Scale: NONE



8 PHOTO: CHILLED WATER METER AND TEMP SENSORS TO BE DEMOLISHED
M-5 Scale: NONE

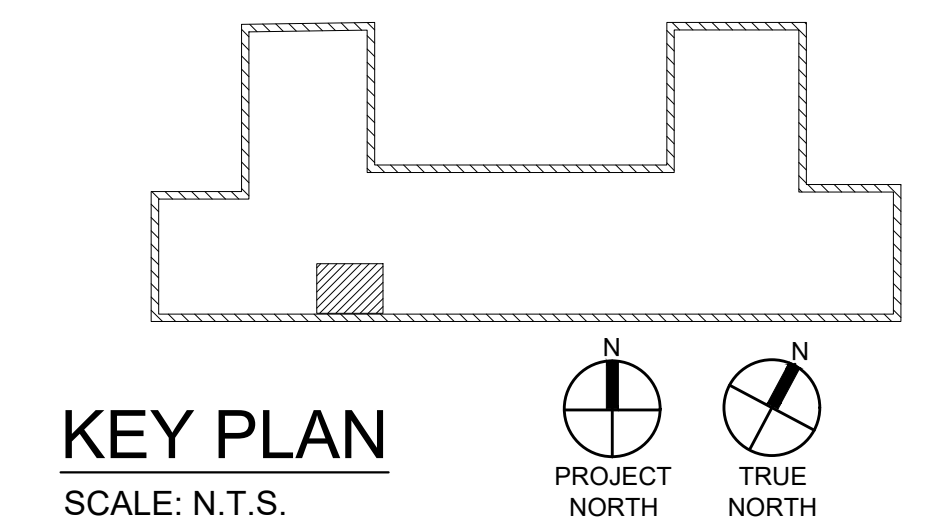
- 7 EXISTING INSTRUMENTATION TO BE DEMOLISHED AND CONNECTIONS TERMINATED SAFE
- 8 EXISTING CHWS PIPE TO BE REPLACED AS SHOWN



9 PHOTO: CHWS (REPLACE AS INDICATED), CHWR (REPLACE TEMP SENSOR)
M-5 Scale: NONE



10 PHOTO: ECP
M-5 Scale: NONE



KEY PLAN
SCALE: N.T.S.

RECORD REVISIONS

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

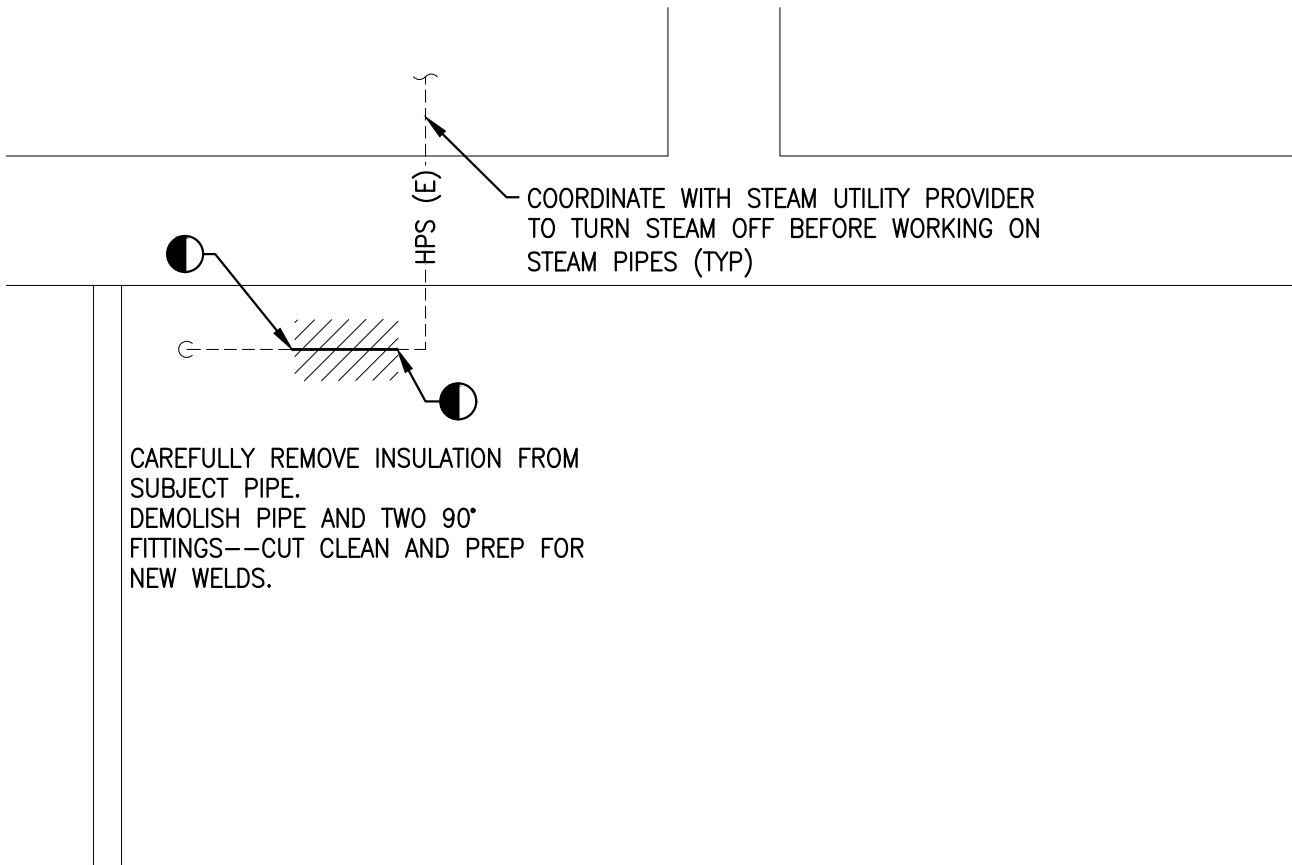
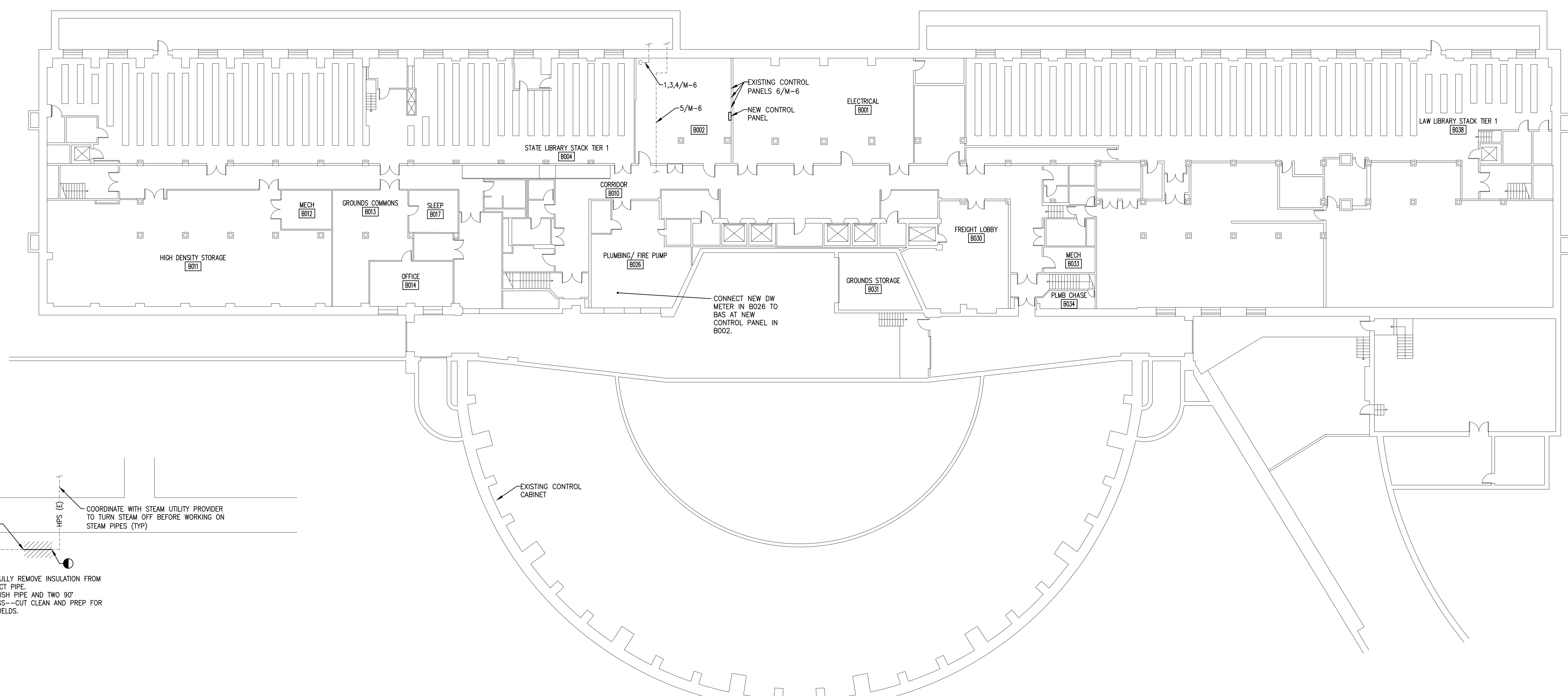
D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE -
CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

FINANCE BUILDING MECHANICAL PLAN

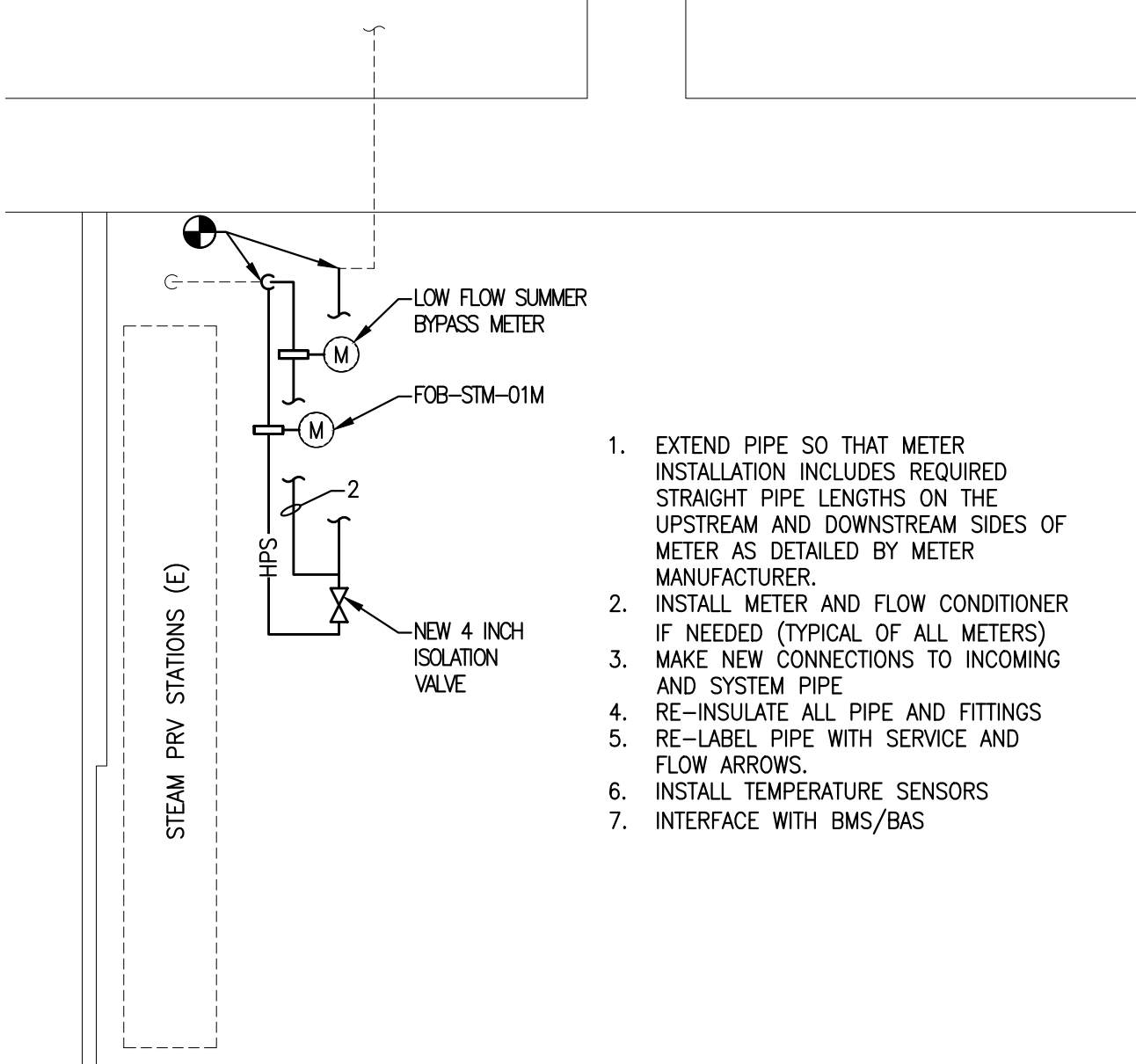
VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
0 1
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

DRAWN BY: M. SKORANSKI DATE: 02/14/24
CHECKED BY: M. RADZICKI SCALE: AS NOTED
DRAWING No. M-5

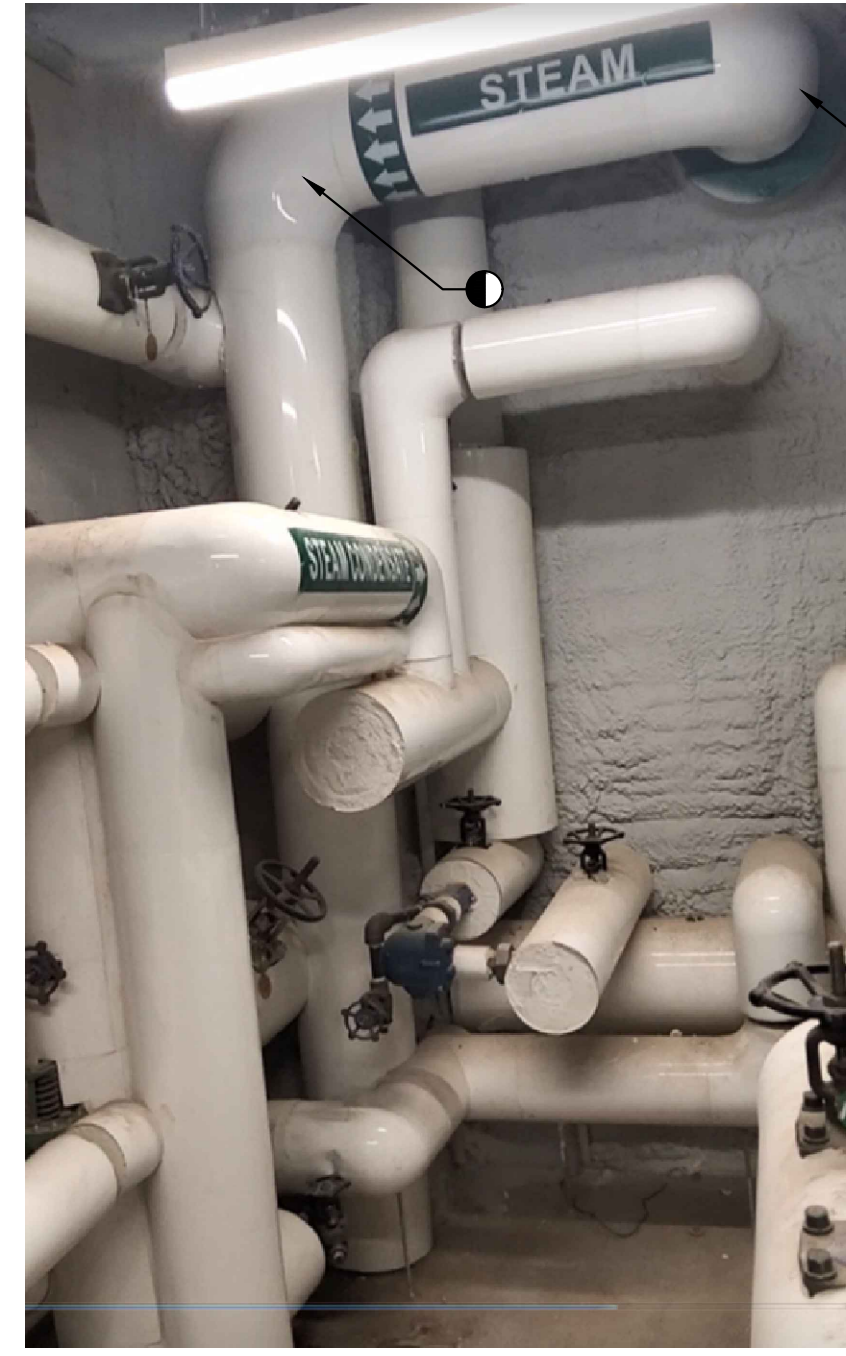


1 PIPE PREPARATION/DEMOLITION STEAM
Scale: 1/4" = 1'-0"

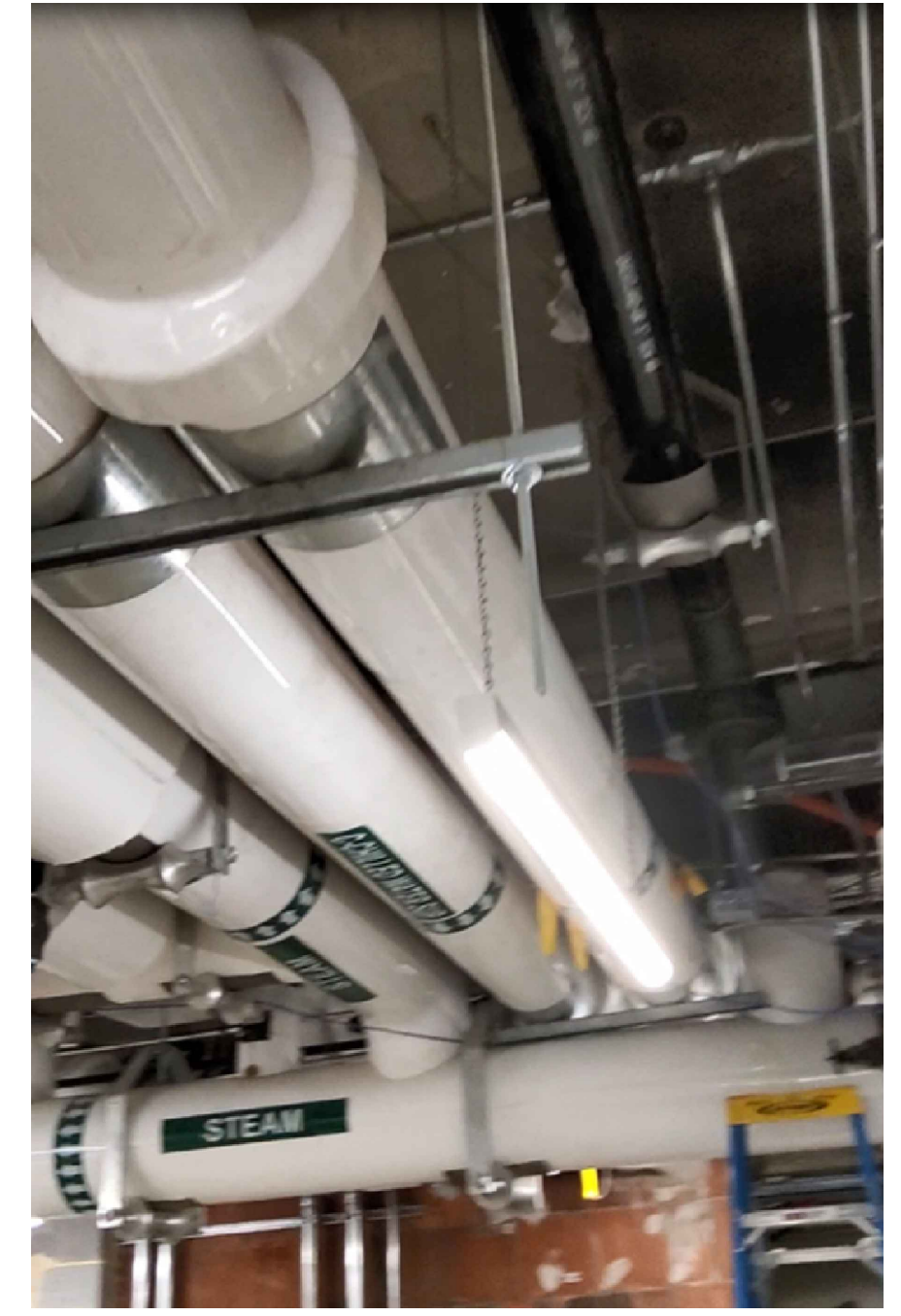
2 BASEMENT MECHANICAL PLAN
Scale: 1/16" = 1'-0"



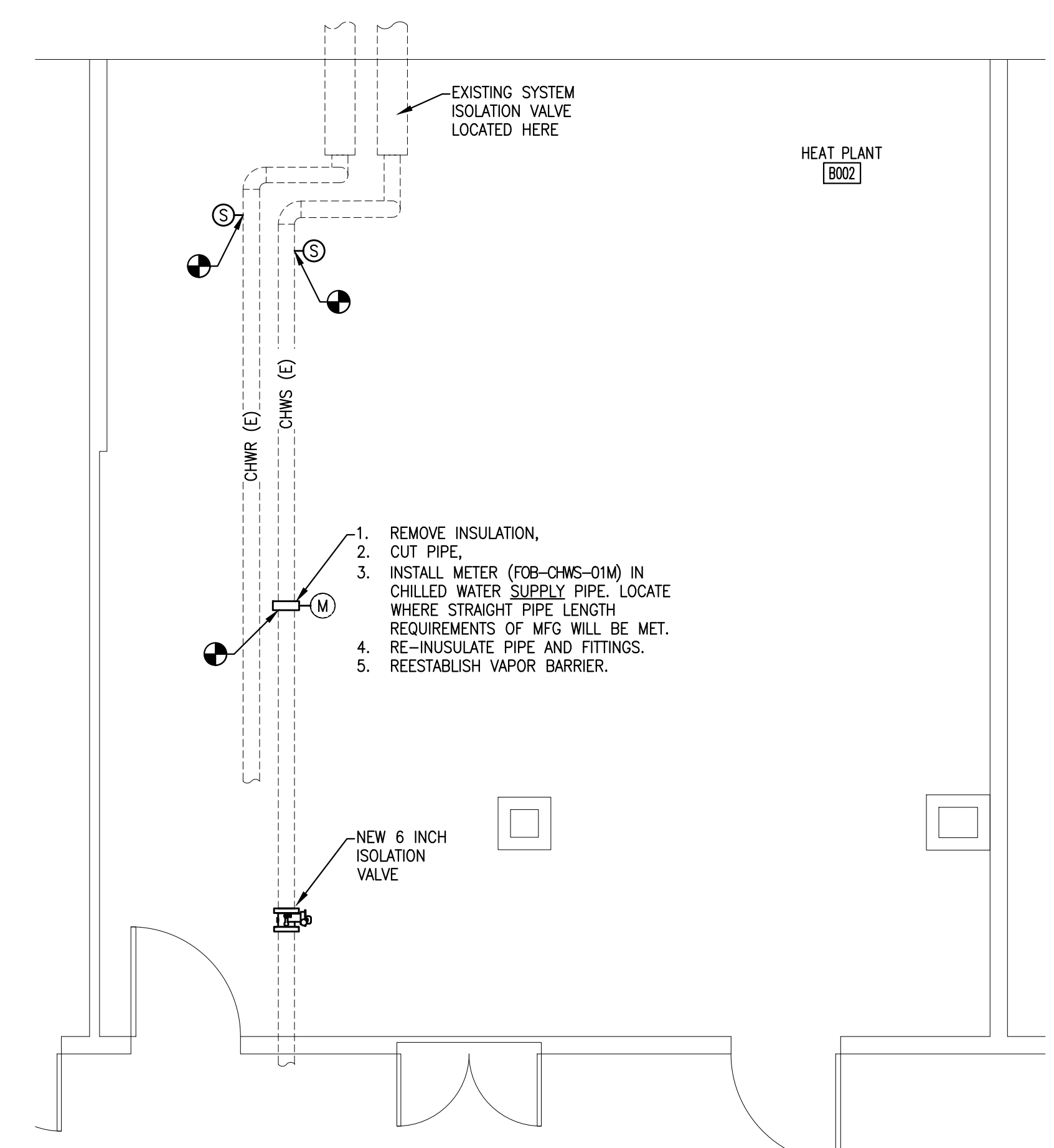
3 STEAM METER INSTALLATION
Scale: 1/4" = 1'-0"



4 PHOTO: STEAM SERVICE ENTRANCE
Scale: NONE METER LOCATION



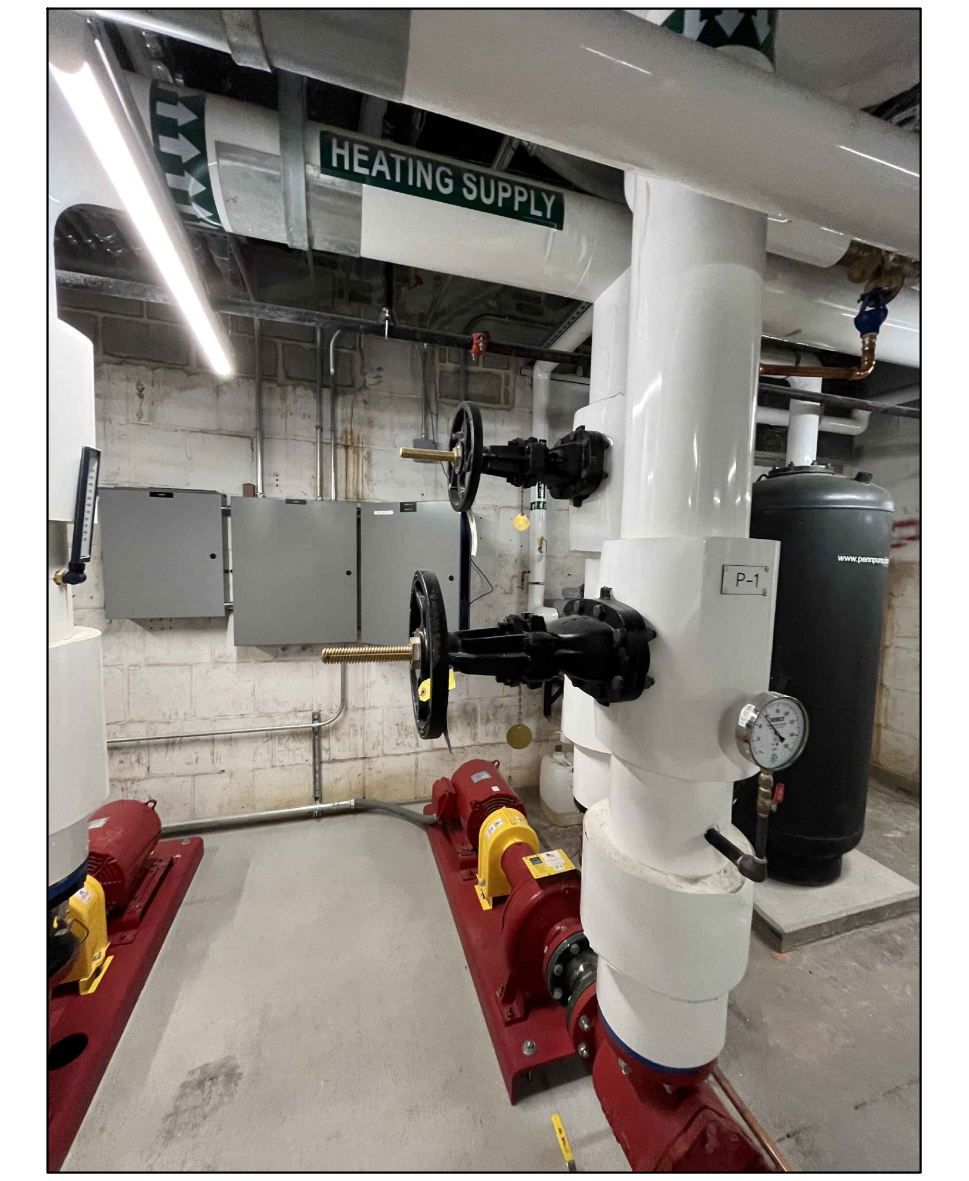
4A PHOTO: CHILLED WATER
Scale: NONE METER LOCATION



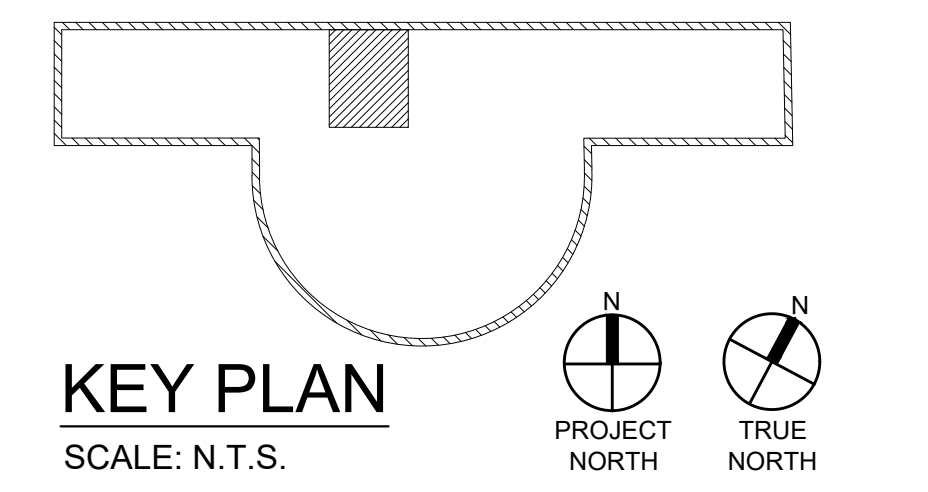
5 CHILLED WATER METER INSTALLATION
Scale: 1/4" = 1'-0"



6 EXISTING CONTROL PANELS
Scale: NONE



7 EXISTING CONTROL PANELS
Scale: NONE ALT VIEW



NO.	REVISIONS

REGISTERED PROFESSIONAL ENGINEER
M. RADZICKI
10073194
02/14/2024
SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

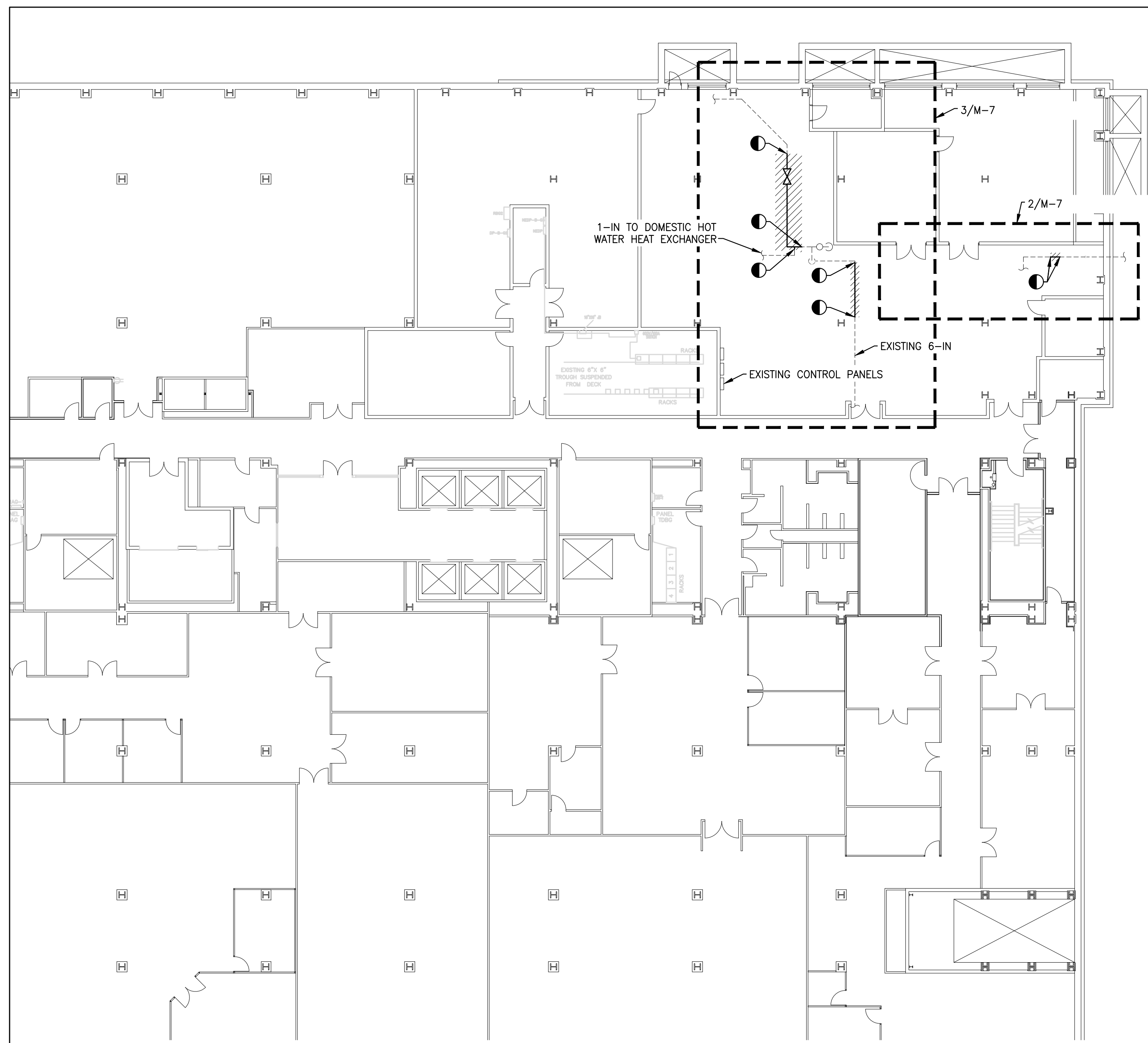
D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE -
CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

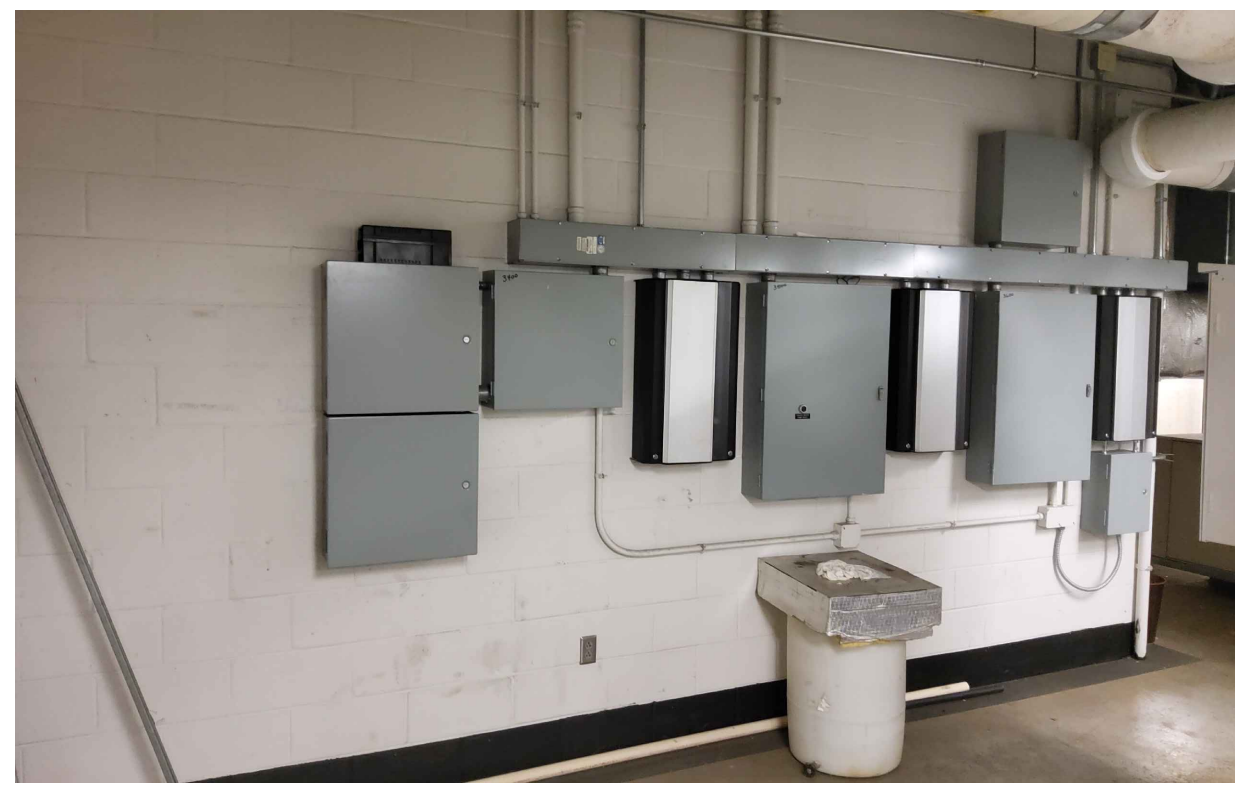
FORUM BUILDING MECHANICAL PLAN

VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
0 1
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

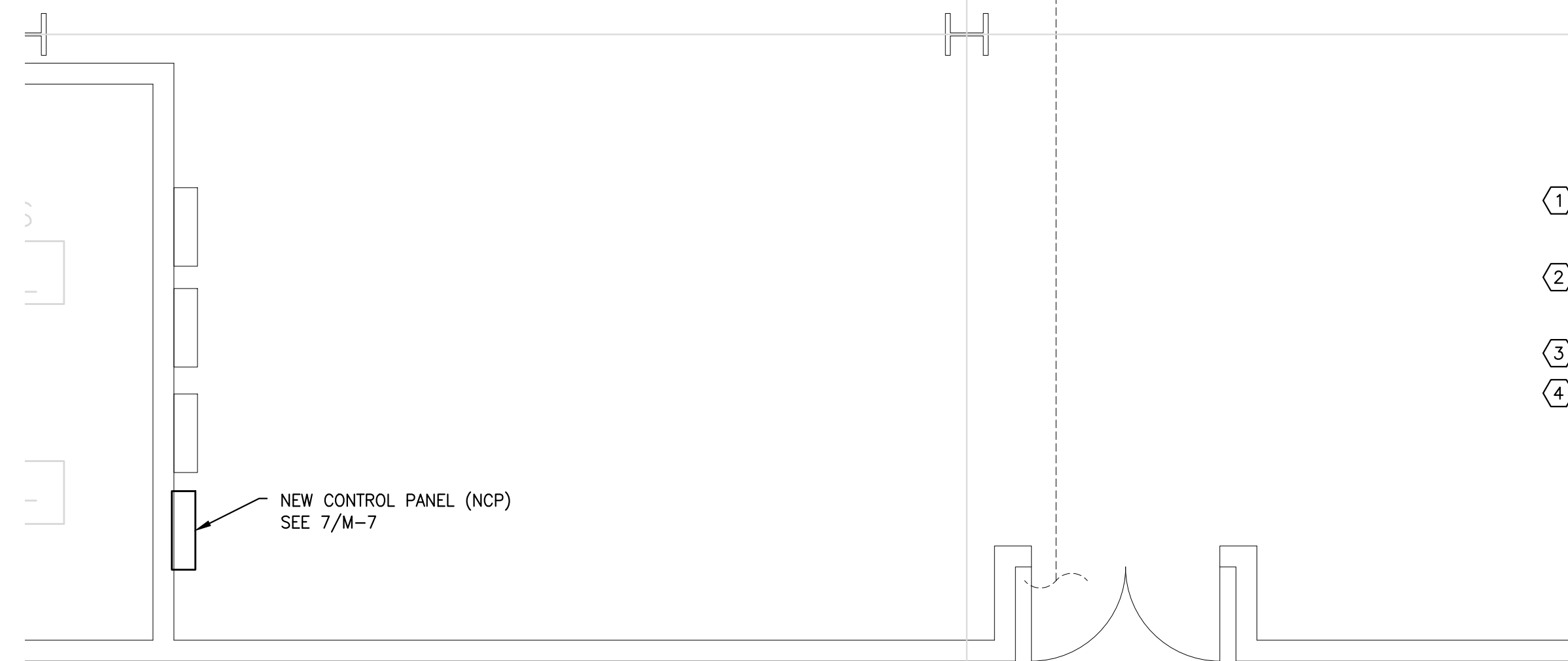
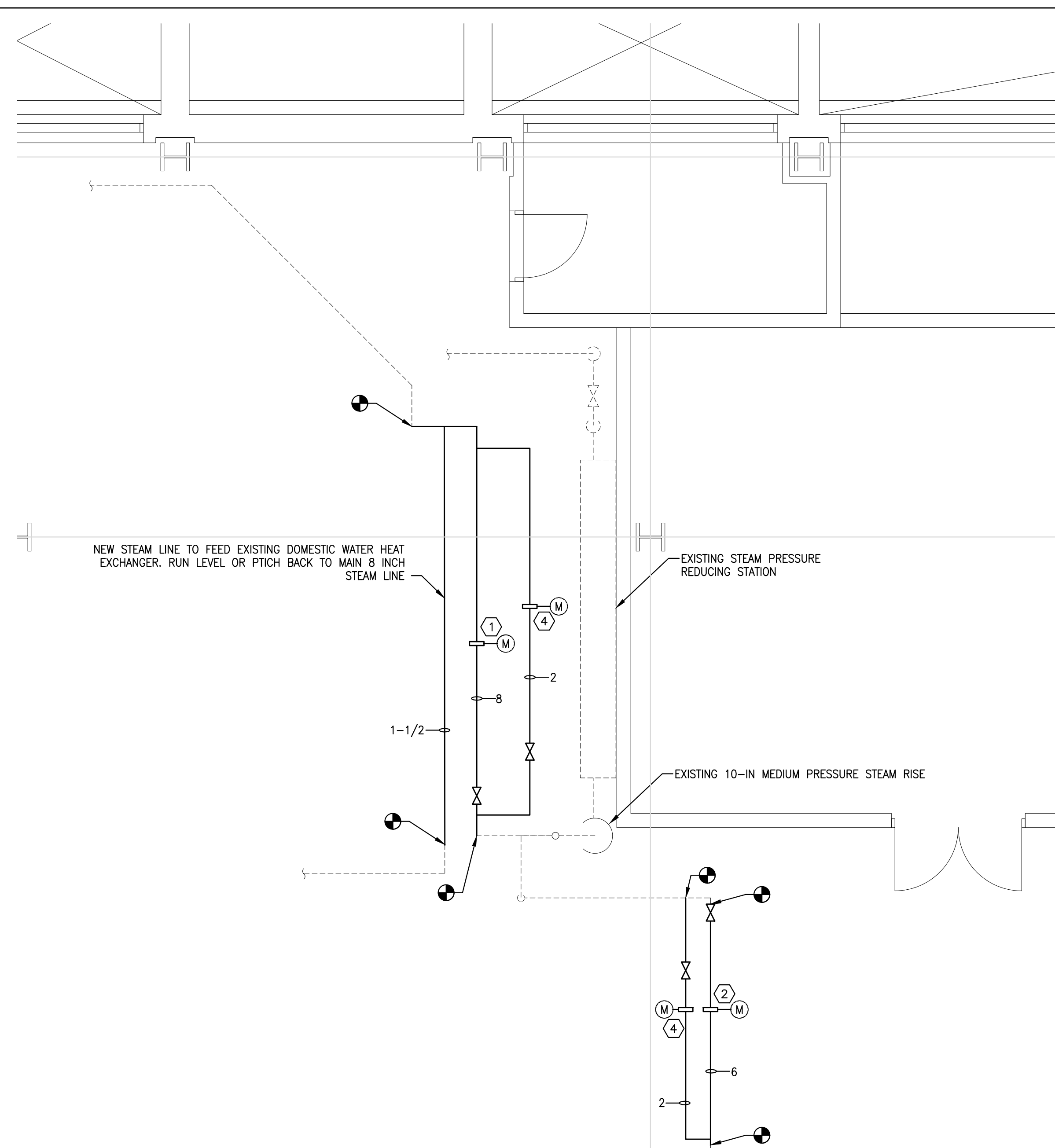
DRAWN BY: M. SKORANSKI DATE: 02/14/24 DRAWING No.: M-6
CHECKED BY: M. RADZICKI SCALE: AS NOTED



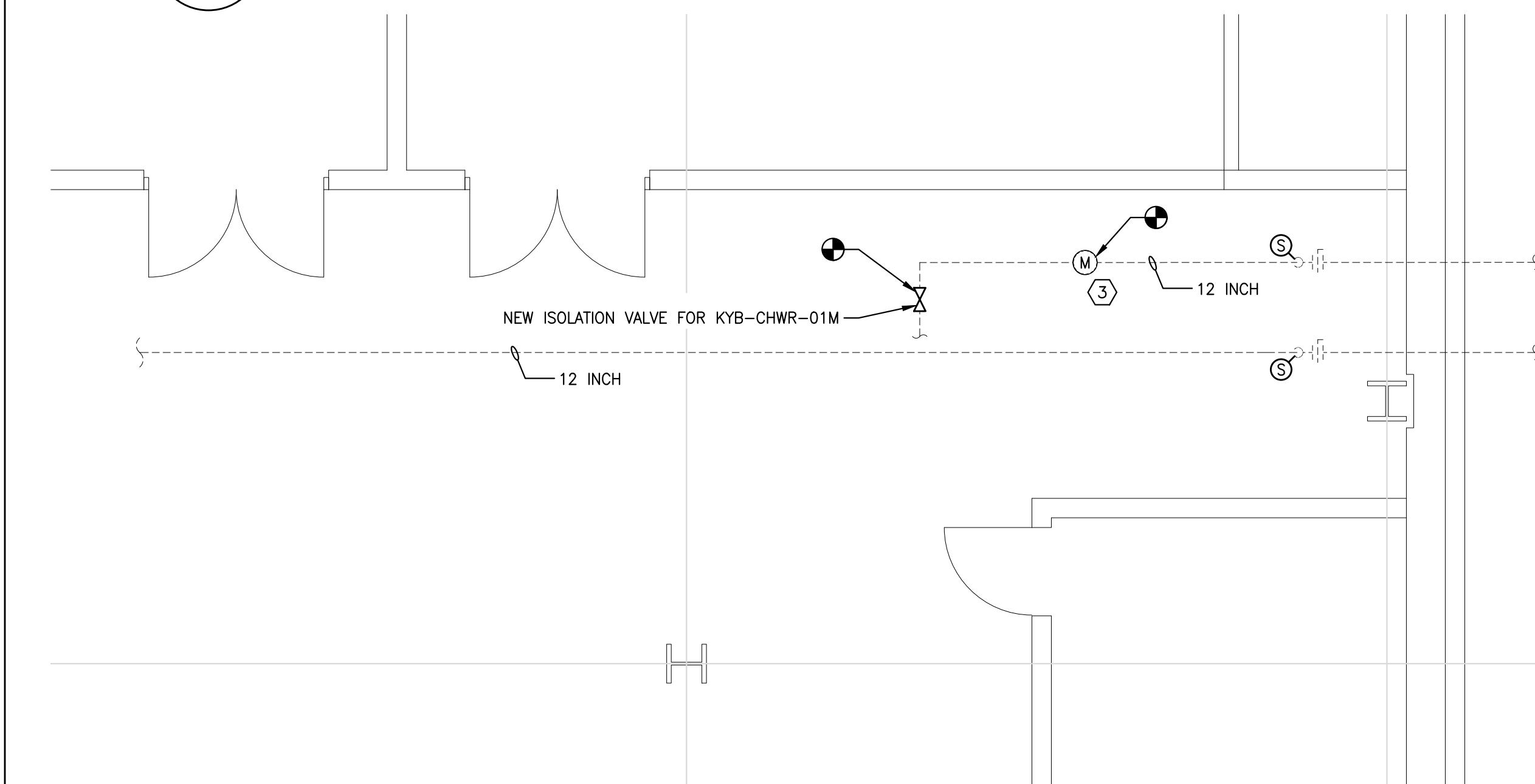
1
M-7 **BASEMENT MECHANICAL PLAN**
Scale: 1/16" = 1'-0"



7
M-7 **PHOTO: EXISTING CONTROL PANELS (ECP'S)**
NO SCALE



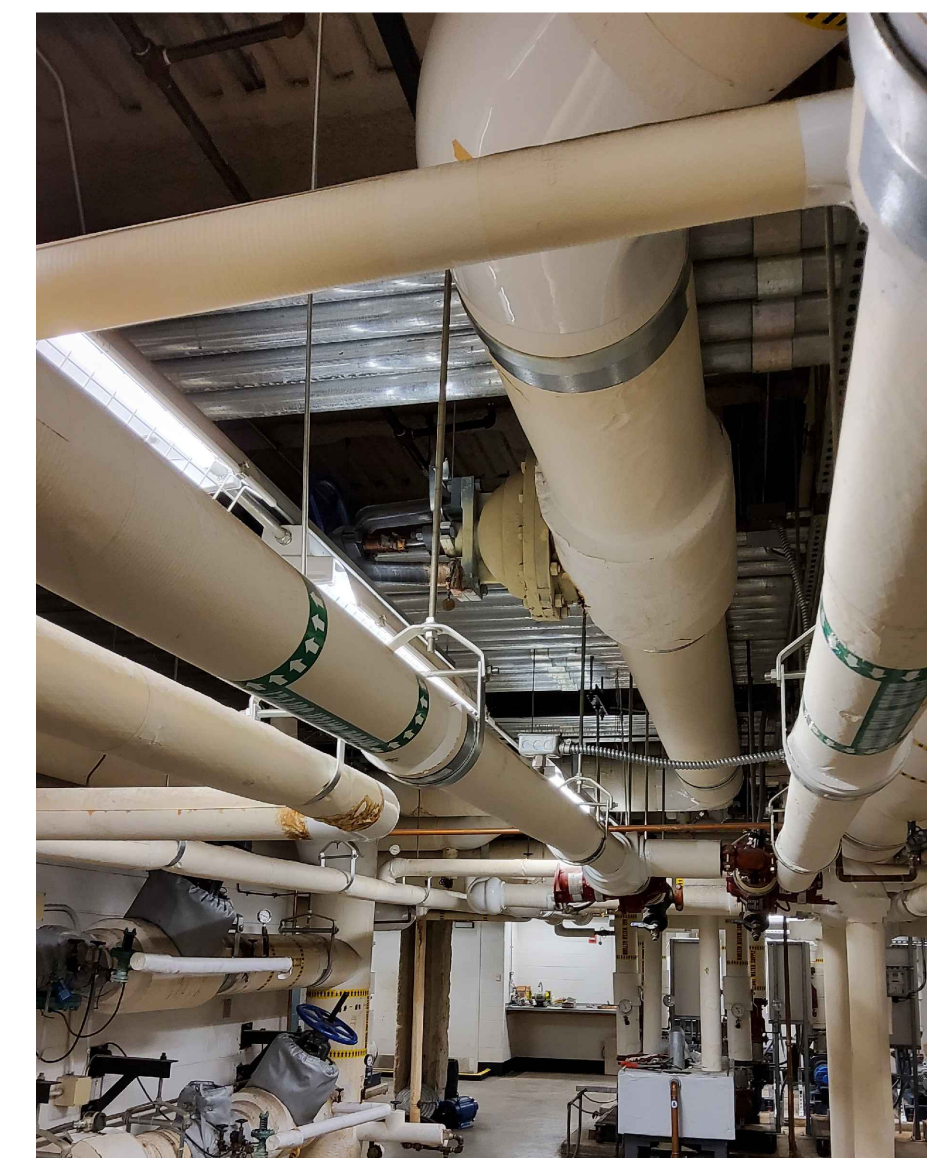
3
M-7 **STEAM METER PARTIAL PLAN**
Scale: 1/4" = 1'-0"



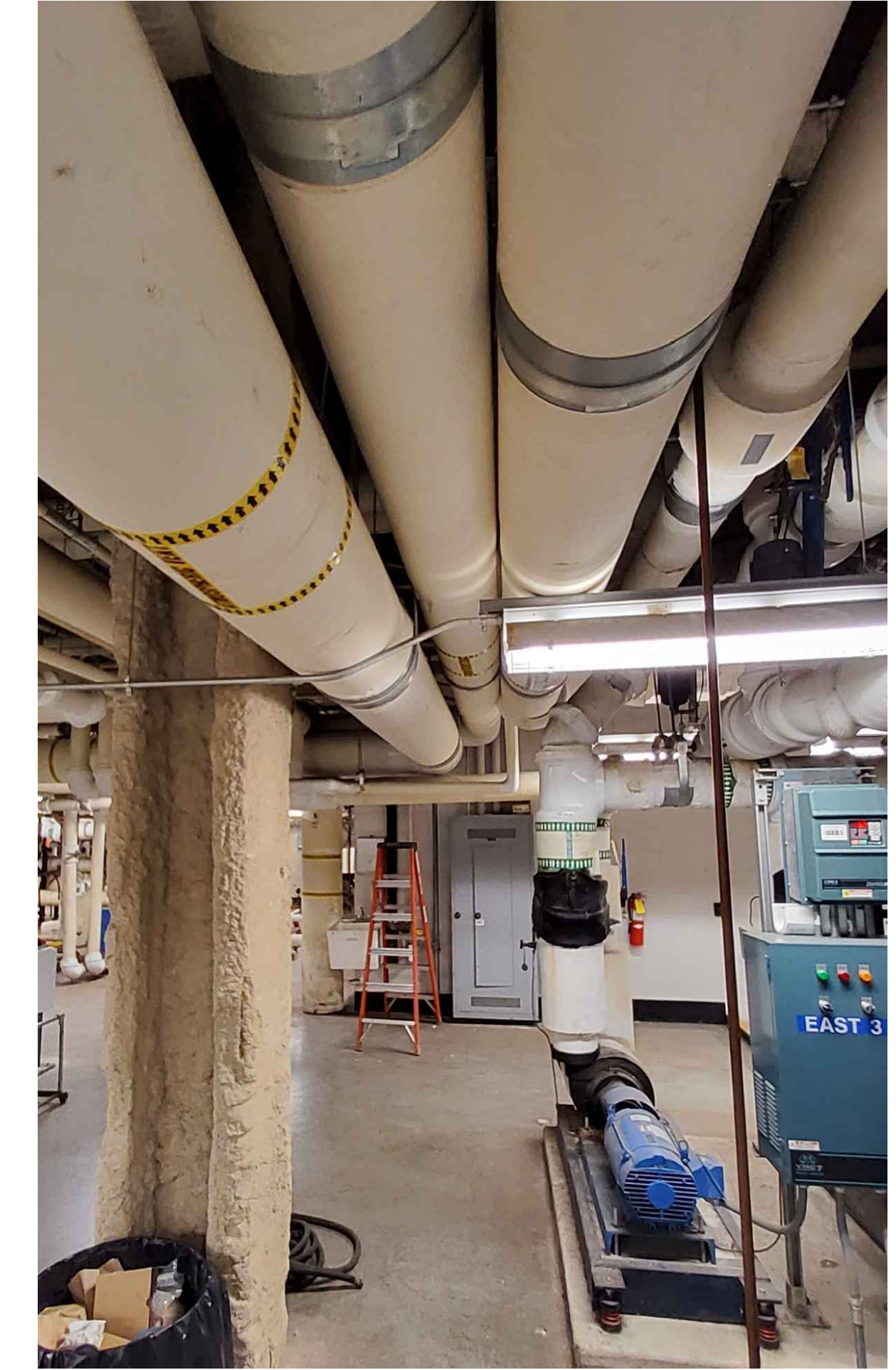
2
M-7 **CHILLED WATER METER PARTIAL PLAN**
Scale: 1/4" = 1'-0"



4
M-7 **PHOTO: LOCATION OF KYB-CHWR-01M**
NO SCALE



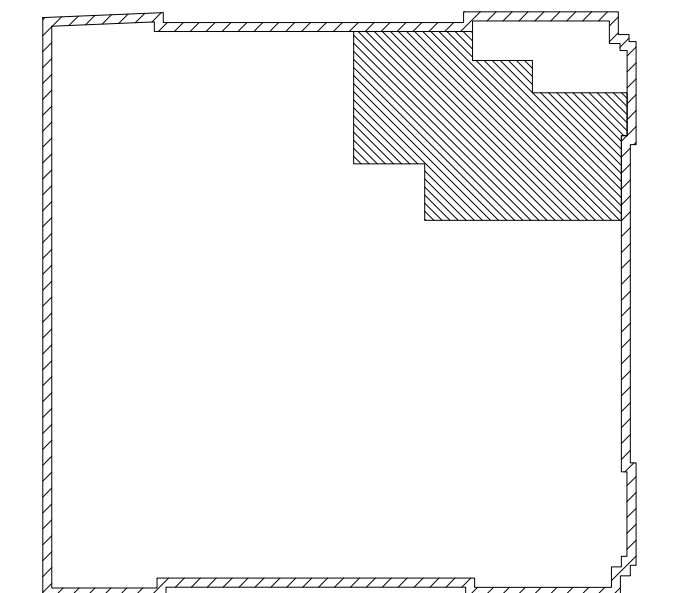
5
M-7 **PHOTO: LOCATION OF KYB-STM-01M**
NO SCALE



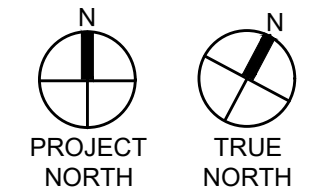
6
M-7 **PHOTO: LOCATION OF KYB-STM-02M**
NO SCALE

SHEET KEYNOTES

- 1 PROVIDE STEAM METER KYB-STM-01M AND NEW, RELOCATED, 8 INCH PIPE. ROUTE SUFFICIENT LENGTH OF STRAIGHT PIPE BEFORE AND AFTER METER; CONNECT TO EXISTING STEAM WHERE PREVIOUSLY DISCONNECTED. ROUTE NEW LINE TO FEED DOMESTIC WATER HEAT EXCHANGER.
- 2 PROVIDE NEW STEAM METER KYB-STM-02M ON 6 INCH STEAM LINE. REPLACE ALL PIPE THAT IS PART OF THE UPSTREAM AND DOWNSTREAM STRAIGHT PIPE LENGTH REQUIREMENTS OF THE METER MANUFACTURER.
- 3 PROVIDE CHILLED WATER METER KYB-CHWR-01M ON RETURN CHILLED WATER LINE.
- 4 PROVIDE LOW FLOW SUMMER BYPASS METER AROUND PRIMARY METER ON 2 INCH PIPE



KEY PLAN
SCALE: N.T.S.



NO.	REVISIONS

REGISTERED PROFESSIONAL ENGINEER
M. SKORANSKI
10033146
02/14/2024
SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

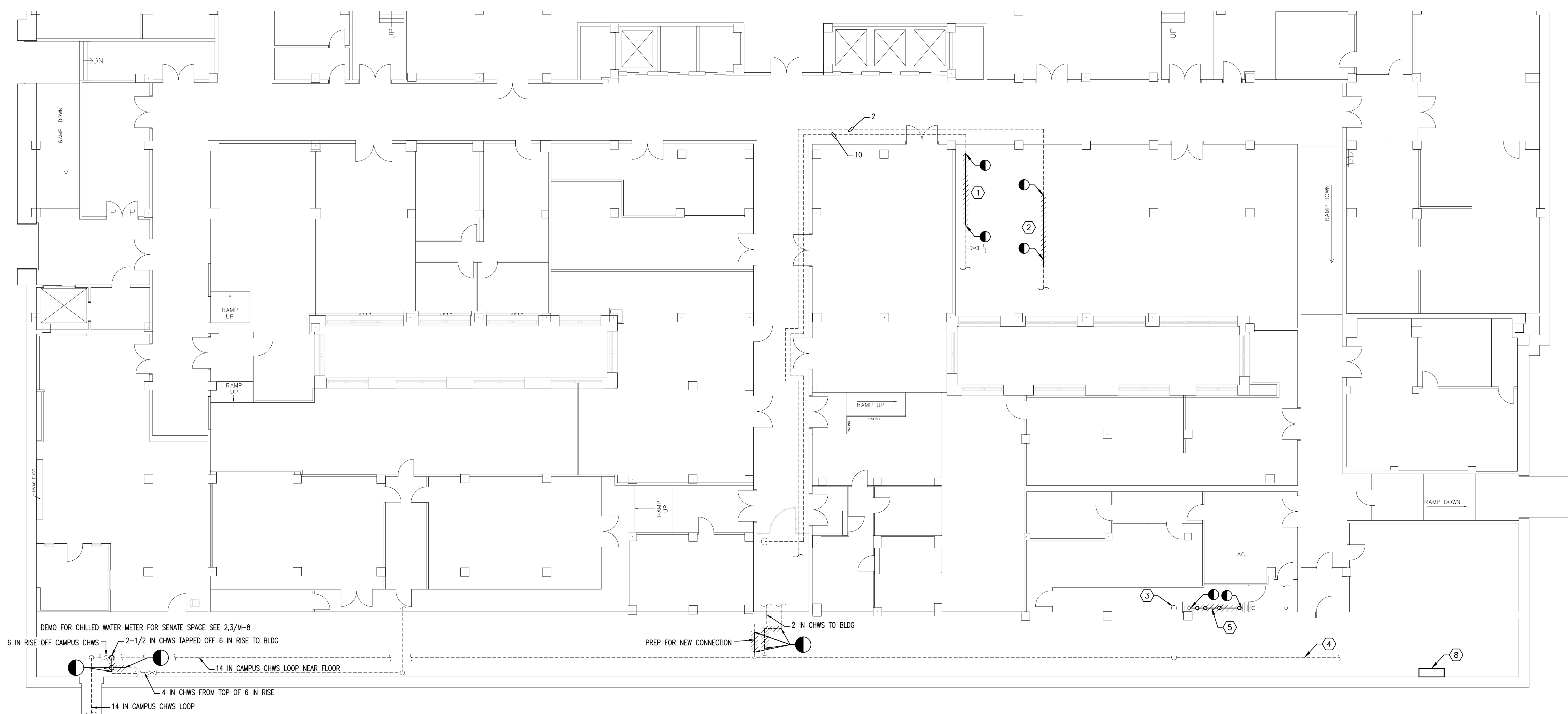
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE -
CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

KEYSTONE BUILDING MECHANICAL PLAN
DRAWN BY: M. SKORANSKI DATE: 02/14/24 DRAWING No.: M-7
CHECKED BY: M. RADZICKI SCALE: AS NOTED

VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
0 1
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.



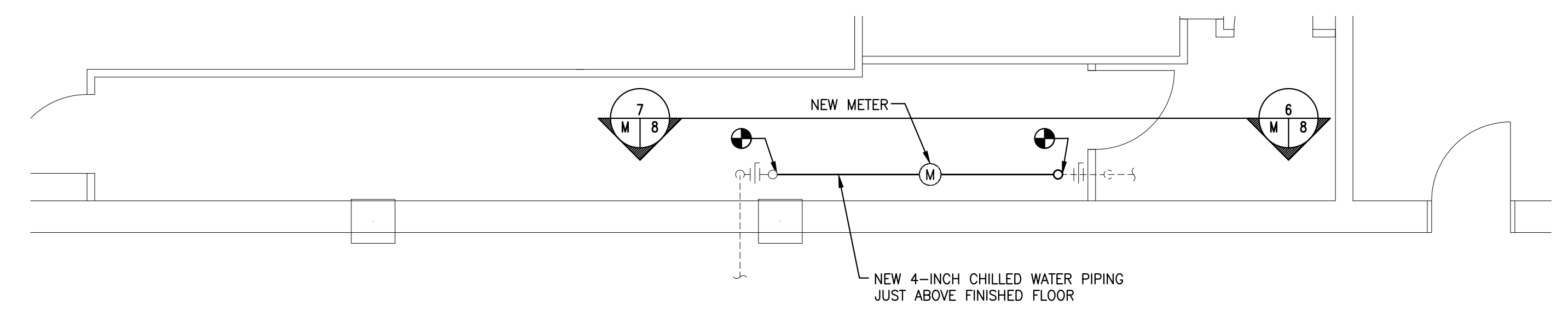
1 BASEMENT MECHANICAL PLAN PIPE PREPARATION AND DEMOLITION
 M-8 Scale: 3/32" = 1'-0"

SHEET KEYNOTES

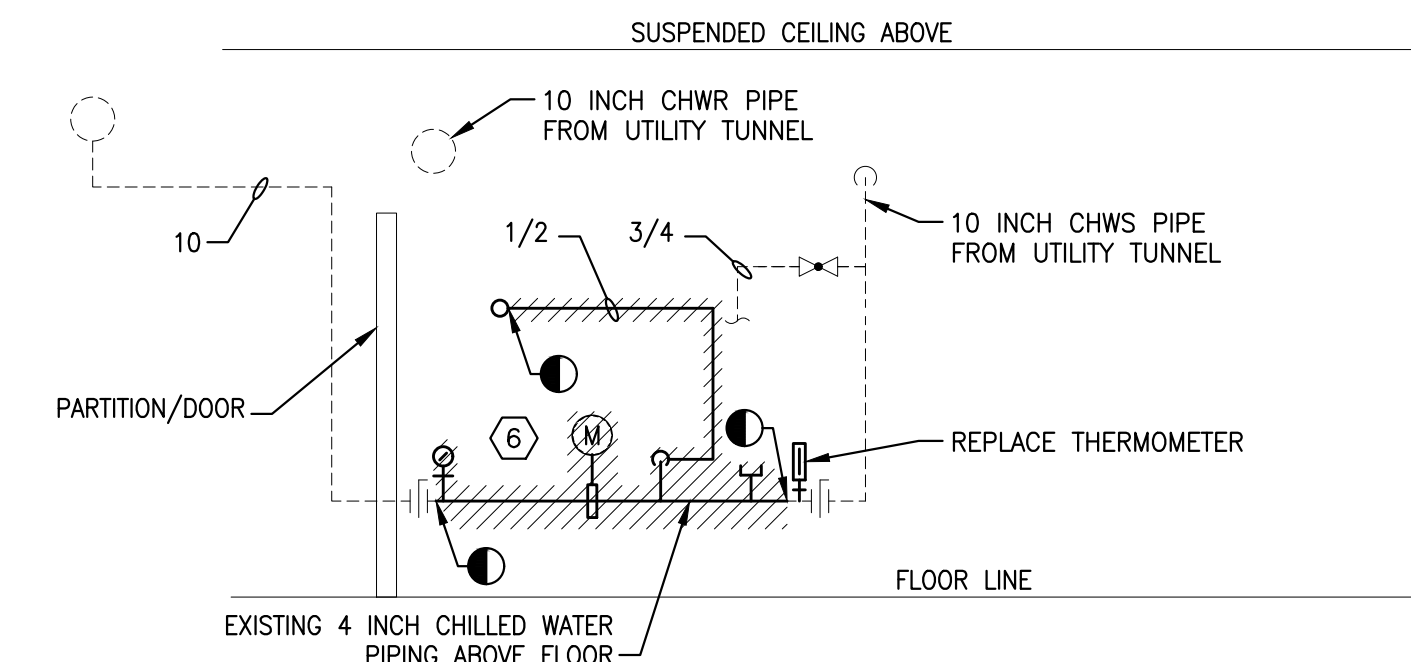
- ① PREP TO PROVIDE STEAM METER (NOB-STM-01M). BREAK PIPE IN CORRIDOR AND REMOVE PIPE EQUAL TO THAT REQUIRED FOR THE NEW METER AND THE LENGTH OF STRAIGHT PIPE BEFORE AND AFTER METER. 5/M-8.
- ② PREP AND DEMOLISH EXISTING PIPE TO PROVIDE NEW STEAM METER (NOB-STM-02M) FOR DOMESTIC HOT WATER STEAM LINE. BREAK PIPE IN CORRIDOR AND REMOVE PIPE EQUAL TO THAT REQUIRED FOR THE NEW METER AND THE LENGTH OF STRAIGHT PIPE BEFORE AND AFTER METER. 5/M-8B.
- ③ SEE 4,6,7,8/M-8; 3/M-8A
- ④ EXISTING 14 IN MAIN CHILLED WATER SUPPLY LOOP FOR CAMPUS
- ⑤ DEMOLISH 4-INCH CHILLED WATER LINE BETWEEN VALVES. DEMOLISH AND DISCONNECT SENSOR AND CHILLED WATER METER AND REMOVE WIRING BACK TO CABINET HOUSING THE BUILDING CONTROL INTERFACE DEVICE. REPLACE THERMOMETER. DEMOLISH 1/2-INCH CW LINE TO POINT OF DISCONNECT AS SHOWN ON 6/M-8.
- ⑥ DEMOLISH SHELF ABOVE 4-INCH CHILLED WATER PIPE TO MAKE ADEQUATE WORKING SPACE
- ⑦ NEW TEMPERATURE SENSOR
- ⑧ NEW CONTROL PANEL. CONNECT ALL NEW DATA OUTPUTS FROM METERS (3 STEAM, 2 CHWS AND 1 DW-SEE P-8) AND SENSORS TO THIS PANEL. EQUIP WITH CONTROLLERS AS REQUIRED. ALTERNATELY THE CONTRACTOR SHALL BE PERMITTED TO PROPOSE ADDITIONAL OR ALTERNATE LOCATIONS WITH NO ADJUSTMENT TO THE CONTRACT SUM SUBJECT TO THE APPROVAL OF DGS.



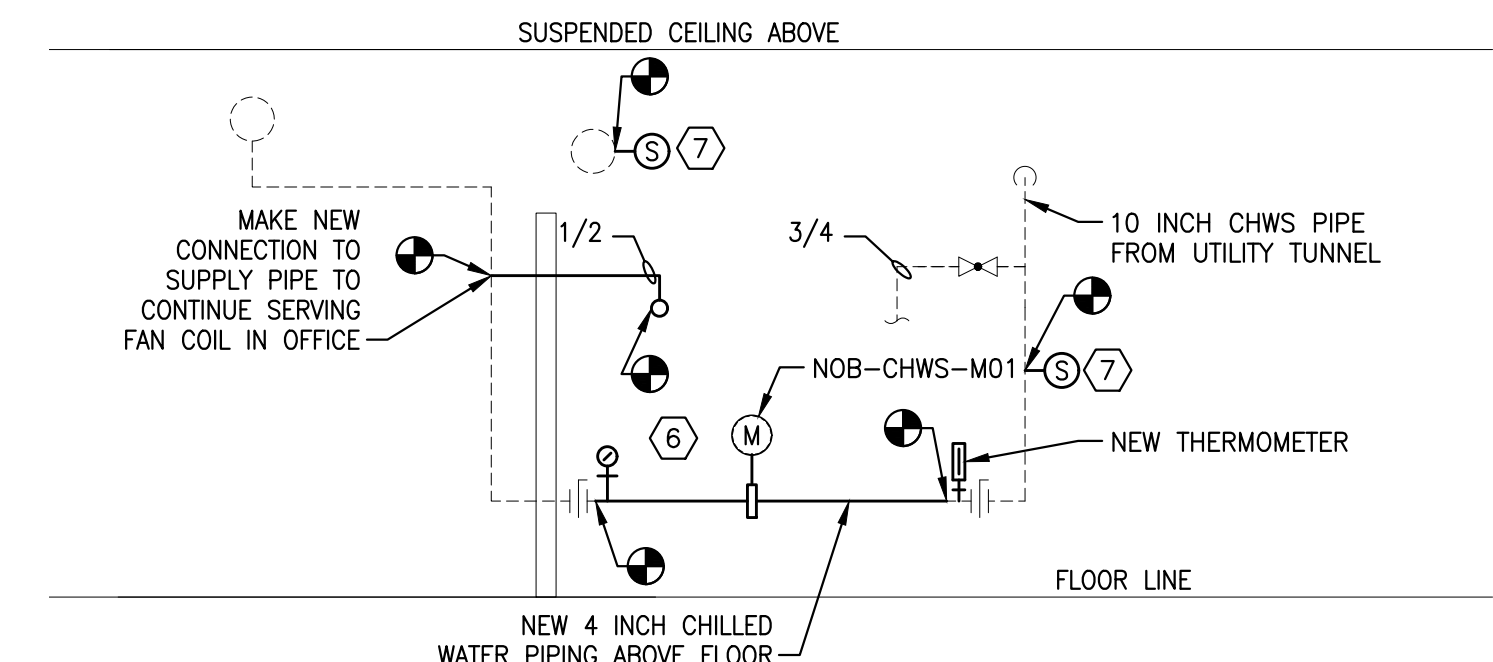
5 PHOTO: LOCATION NEW STEAM METER
 M-8 NOT TO SCALE NOB-STM-01M



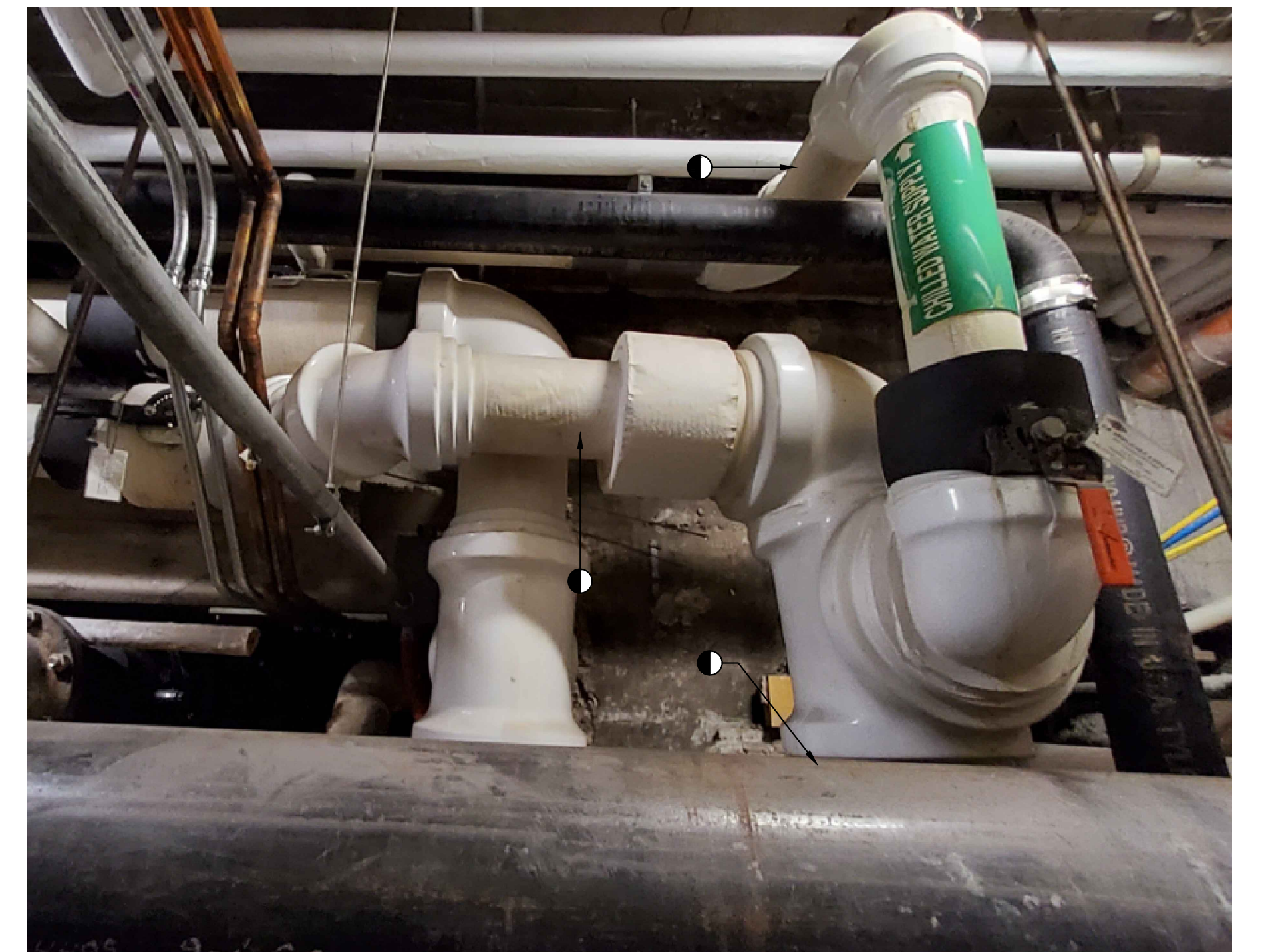
4 CHILLED WATER METER PLAN
 M-8 SCALE: 1/4"=1'-0"



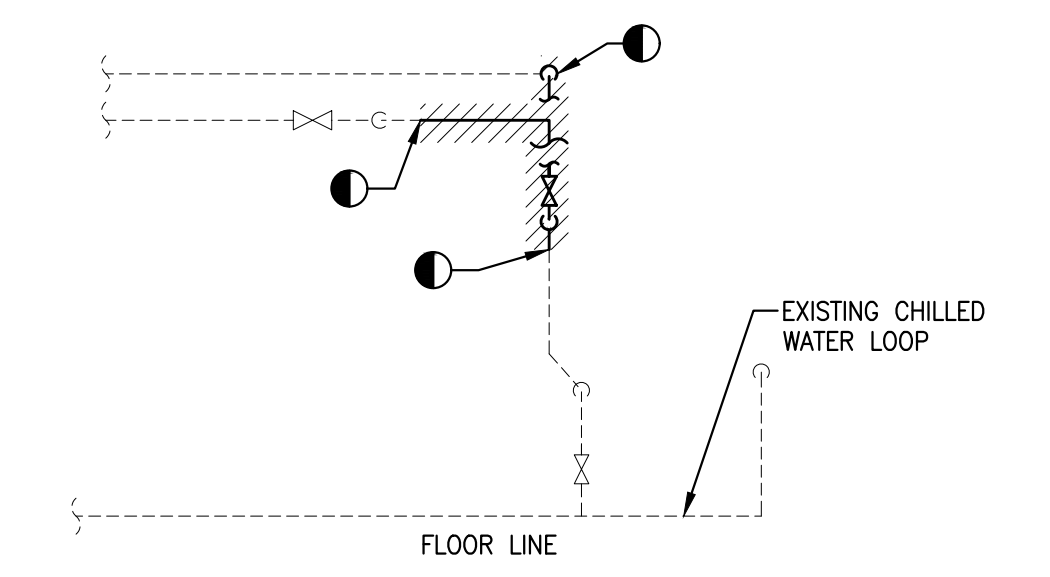
6 DEMOLITION FOR PRIMARY CHWS METER
 M-8 SCALE: 3/8"=1 FT ELEVATION



7 PRIMARY CHWS SCHEMATIC ELEVATION
 M-8 SCALE: 3/8"=1 FT ELEVATION



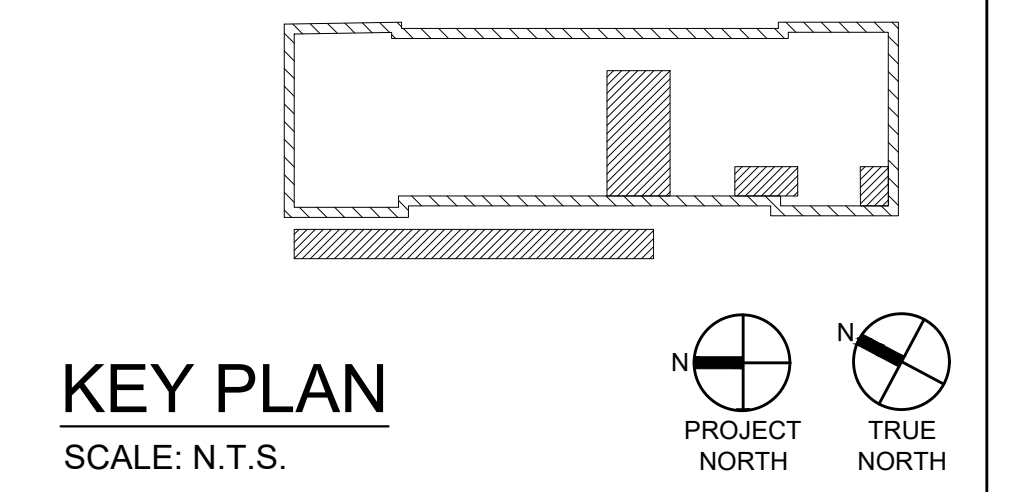
2 PHOTO: CHILLED WATER METER LOCATION (SENATE)
 M-8



3 DEMOLITION SCHEMATIC ELEVATION
 M-8 SCALE: NONE SENATE CHWS



8 PHOTO: CHILLED WATER METER LOCATION GENERAL BLDG
 M-8 NOB-CHWS-M1



KEY PLAN
 SCALE: N.T.S. PROJECT NORTH TRUE NORTH

NO.	REVISION

RECORD REVISIONS

02/14/2024
 SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
 52 GLENMAURA NATIONAL BOULEVARD
 SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

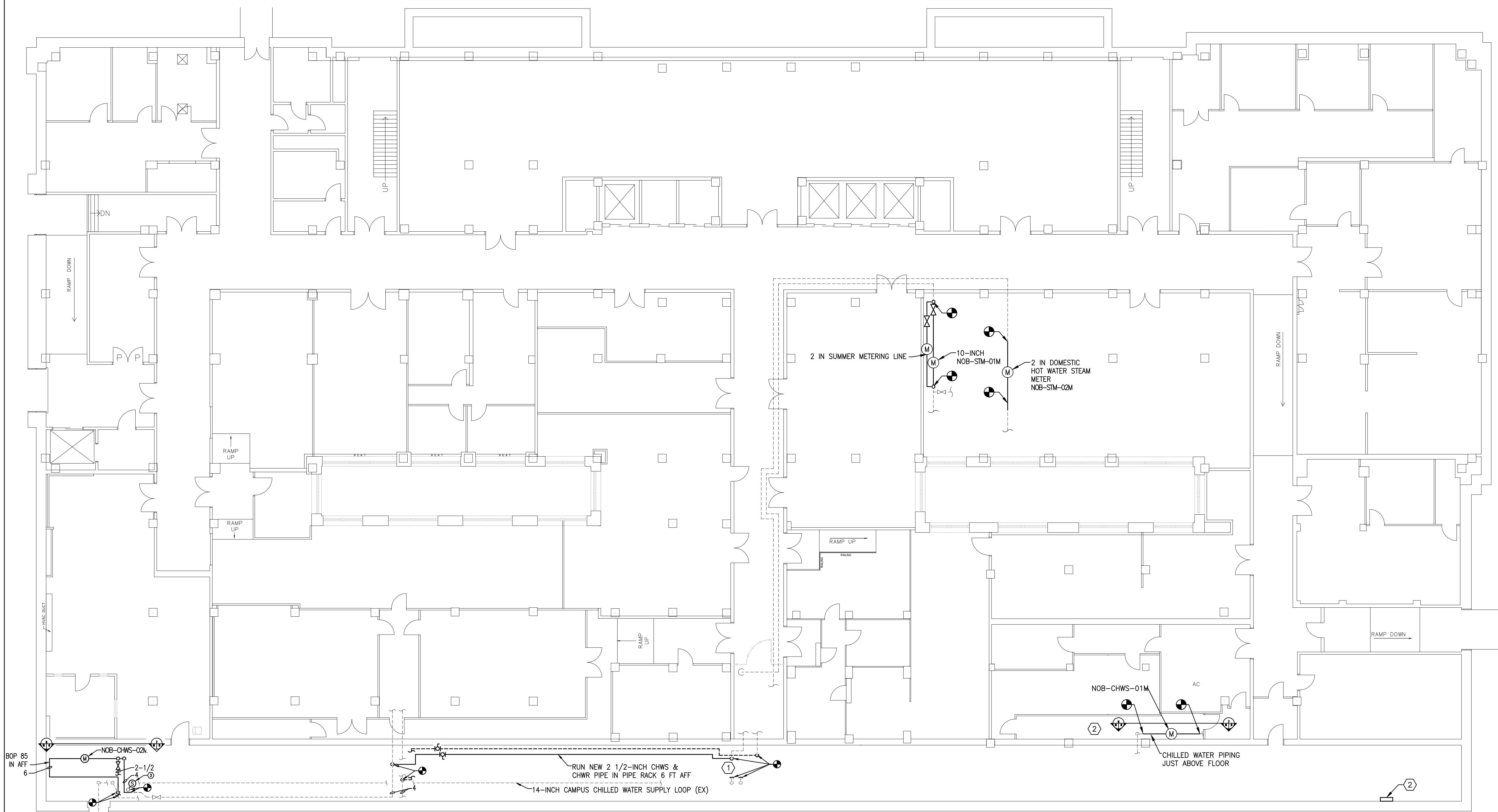
D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE -
 CAPITOL COMPLEX
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, DAUPHIN COUNTY, PA

NORTH OFFICE BUILDING MECHANICAL PLAN

VERIFY SCALE
 BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING.
 0 1
 IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
 CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

DRAWN BY: M. SKORANSKI DATE: 02/14/24 DRAWING No.: M-8
 CHECKED BY: M. RADZICKI SCALE: AS NOTED



1 BASEMENT MECHANICAL PLAN
M-8A Scale: 3/32" = 1'-0"

SHEET KEYNOTES

- ① SEE 6/M-8A
- ② PROVIDE NEW CONTROL PANEL
- ③ NEW TEMPERATURE SENSOR ON COMMON CHWR



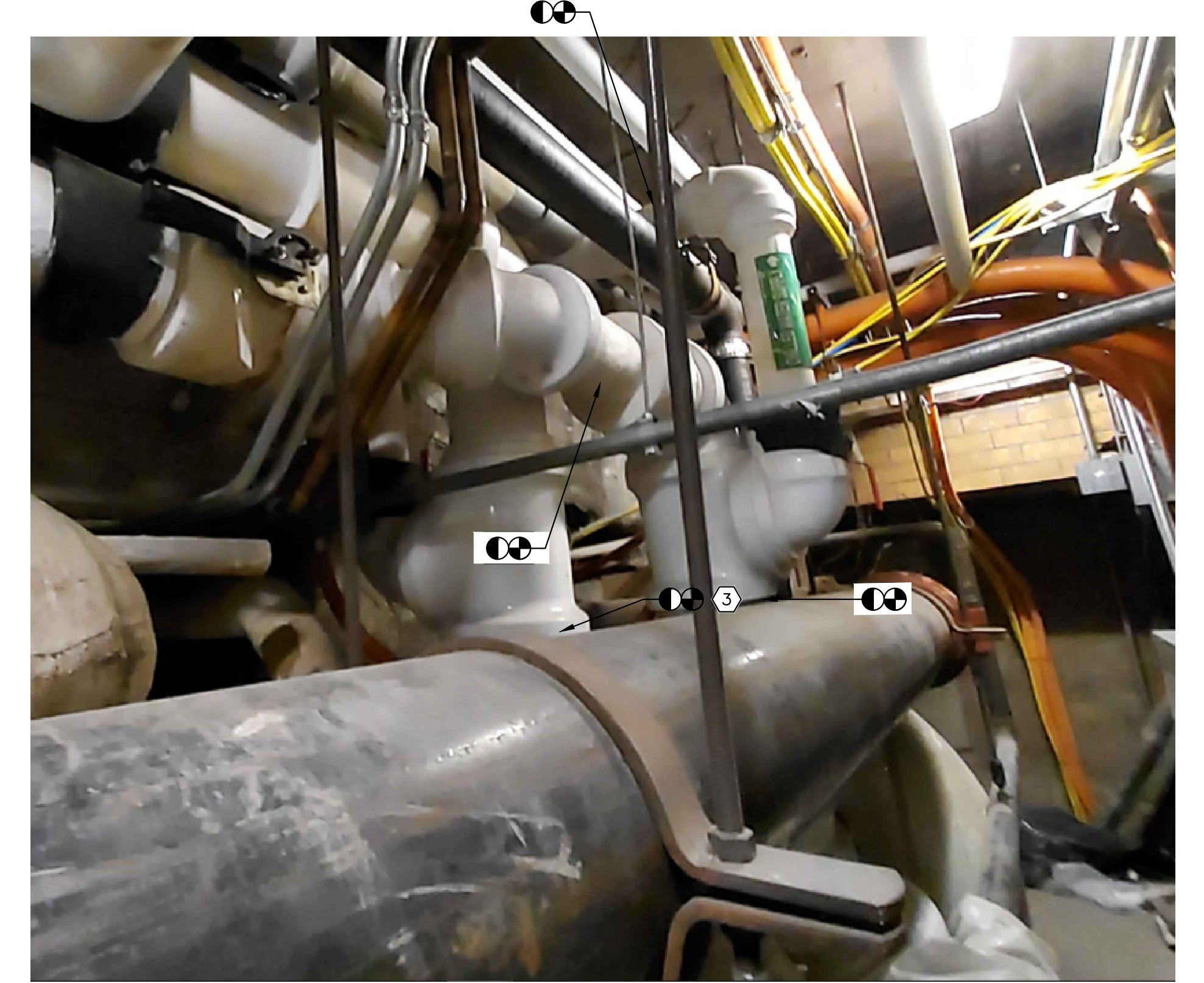
3 PHOTO: LOCATION OF NEW CHWS METER
M-8A NOT TO SCALE NOB-CHWS-M01



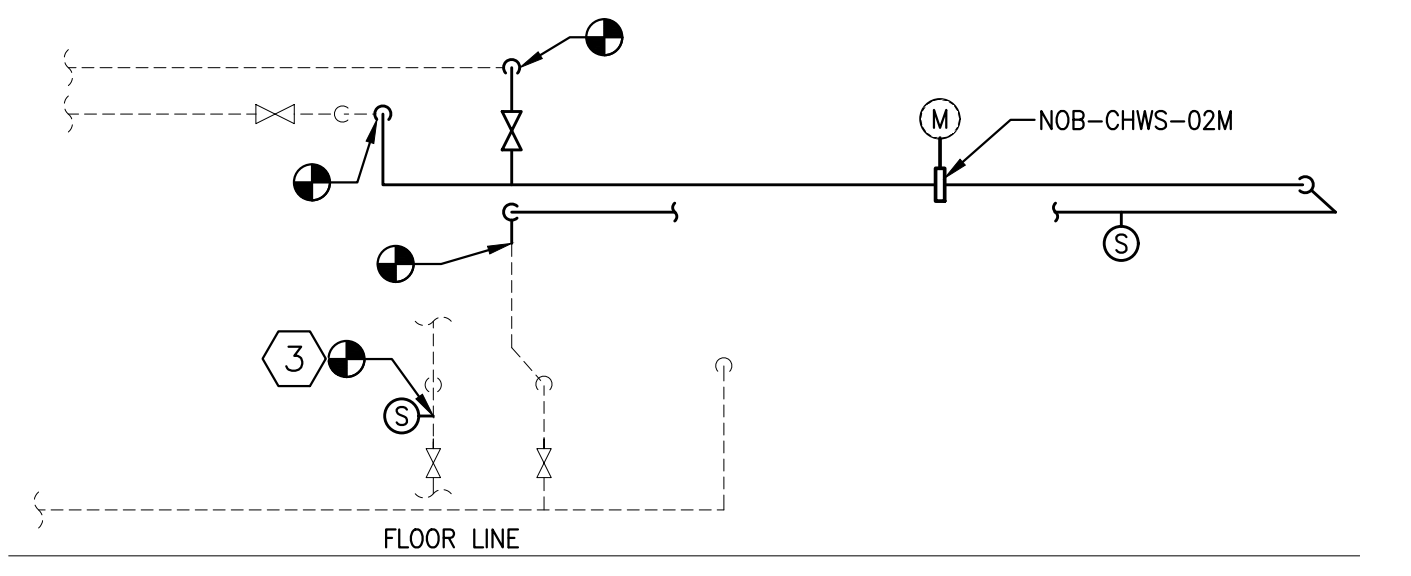
4 PHOTO: LOCATION OF NEW CHWS METER
M-8A NOT TO SCALE SENATE NOB-CHWS-M02



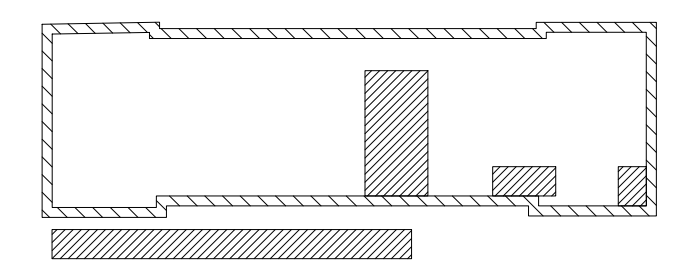
5 PHOTO: LOCATION OF NEW STEAM METER
M-8A NOT TO SCALE NOB-STM-M02 FOR DOMESTIC HOT WATER



2 PHOTO: CHILLED WATER METER LOCATION (SENATE)
M-8A SEE ALSO 4/M-8B NOB-CHWS-M2



7 SENATE CHILLED WATER SCHEMATIC ELEVATION
M-8A NO SCALE



KEY PLAN
SCALE: N.T.S. PROJECT NORTH TRUE NORTH

NO.	REVISION	DATE

RECORD REVISIONS

[Professional Engineer Seal]

02/14/2024
SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

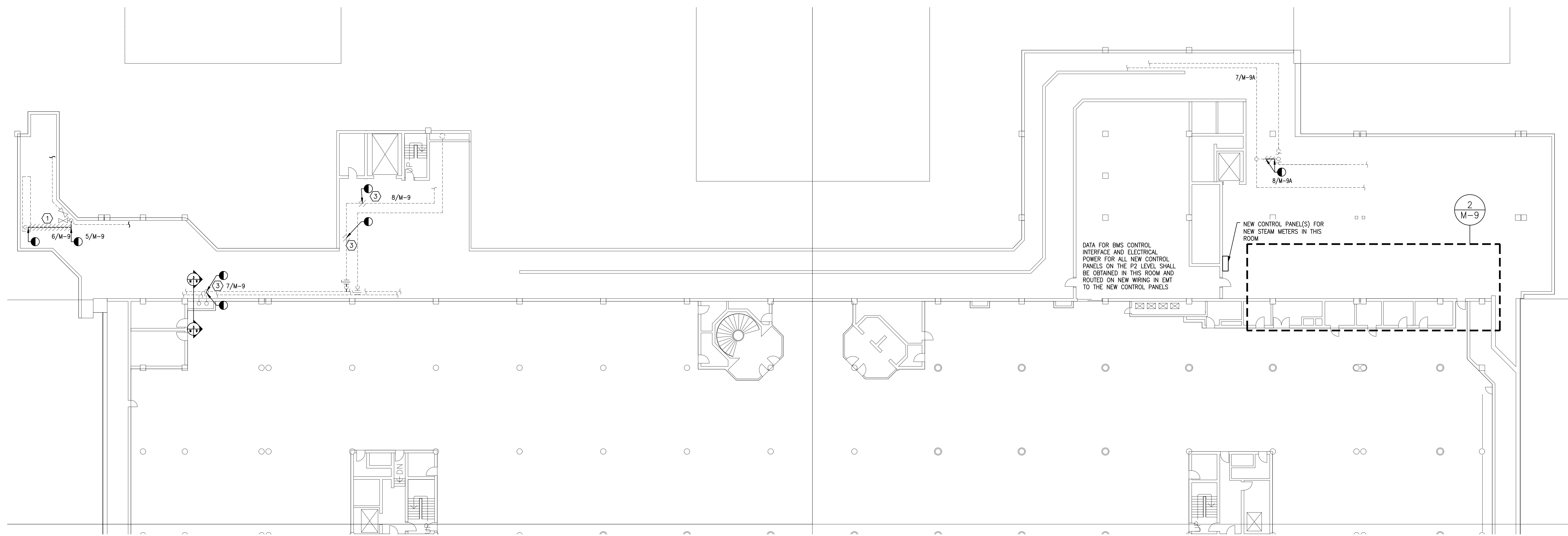
AUTOMATION SYSTEM UPGRADE -
CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

NORTH OFFICE BUILDING MECHANICAL PLAN
DRAWN BY: M. SKORANSKI DATE: 02/14/24 DRAWING No. M-8A
CHECKED BY: M. RADZICKI SCALE: AS NOTED

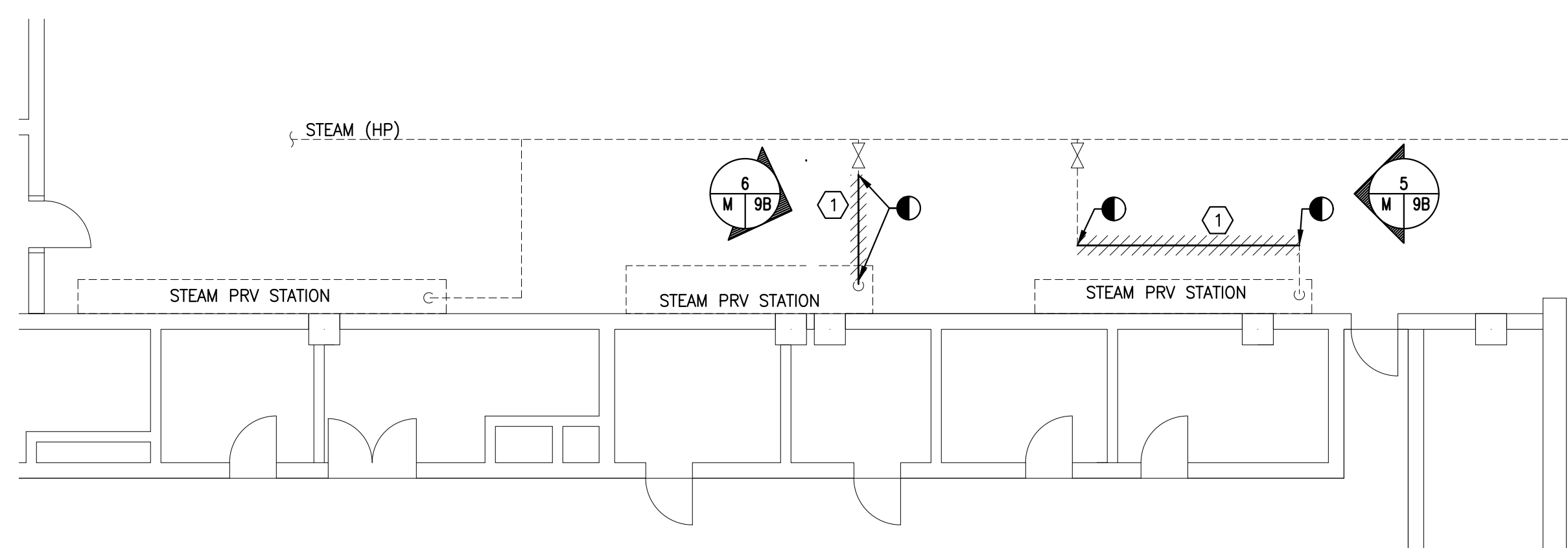


6 PHOTO: PONC FOR CHWS
M-8A NO SCALE

VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
0 1
IF BAR IS NOT ONE (1) INCH LONG ADJUST SCALE ACCORDINGLY
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

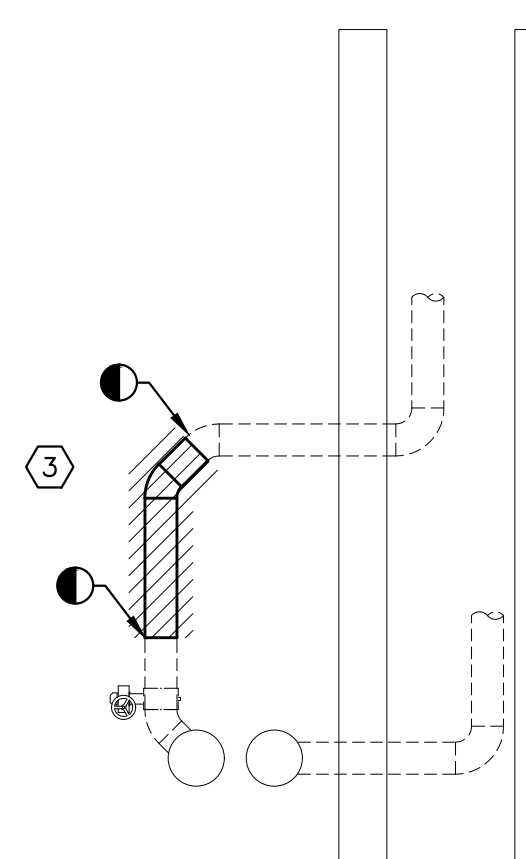


1 PIPE PREP AND DEMOLITION FOR INSTALLATION OF NEW METERS
Scale: 1/16" = 1'-0"

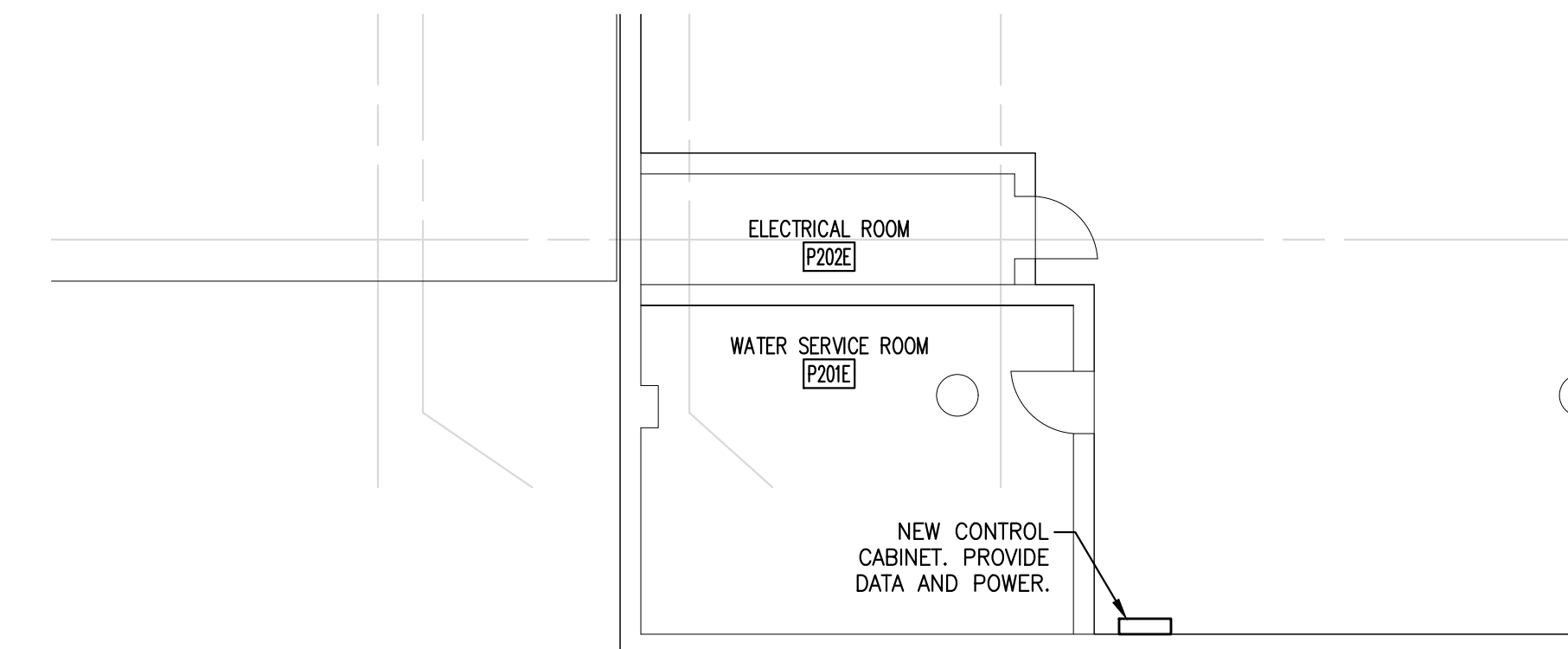


2 STEAM METER LOCATIONS
Scale: 1/8" = 1'-0" NORTH SIDE OF BUILDING

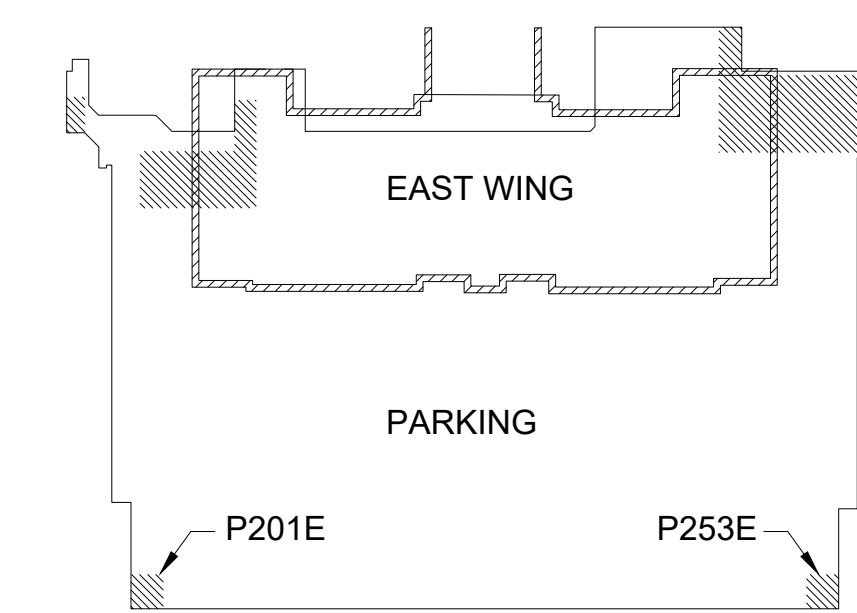
- ① DEMOLISH 5-INCH PIPE IN PREPARATION FOR NEW PIPE INSTALLATION AND METERS.
- ② BREAK PIPE IN PREPARATION FOR CHILLED WATER METER INSTALLATION
- ③ BREAK PIPE IN PREPARATION FOR VALVE INSTALLATION



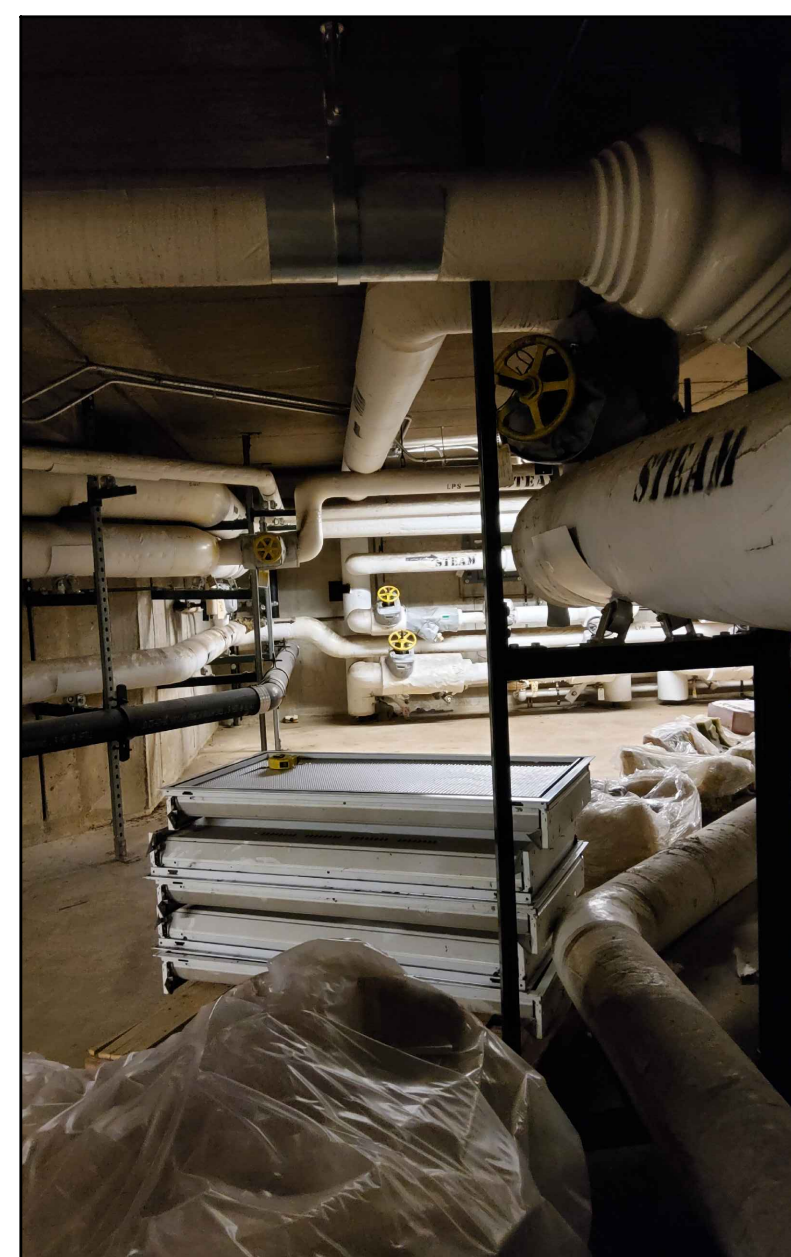
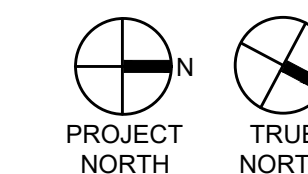
3 SECTION: CHILLED WATER PIPE PREP/DEMO
Scale: NO SCALE



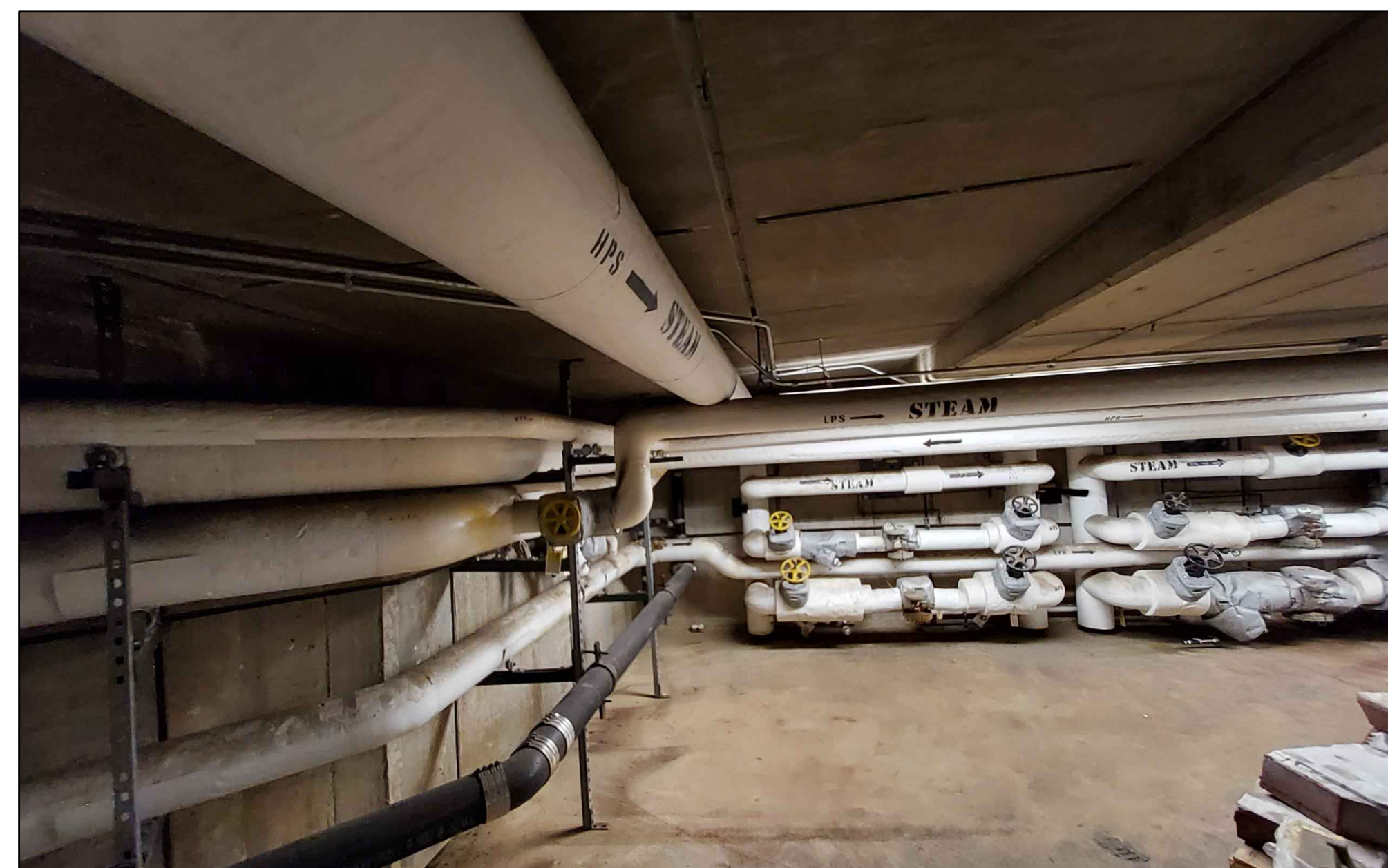
4 NEW CONTROL PANEL FOR DOM WATER
Scale: NO SCALE



KEY PLAN
SCALE: N.T.S.



5 PHOTO: SOUTH STEAM
Scale: NONE SERVES EAST BLDG



6 PHOTO: SOUTH STEAM
Scale: NONE SERVES EAST BLDG

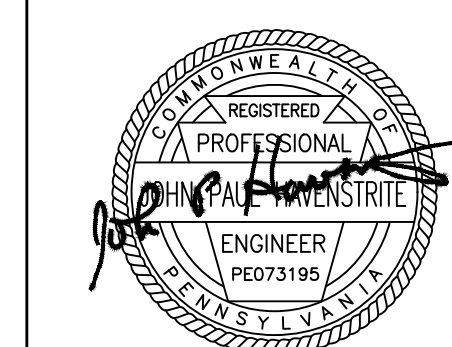


7 PHOTO: SOUTH CHWS
Scale: NONE SERVES EAST BLDG



8 PHOTO: SOUTH CHWS
Scale: NONE SERVES MAIN CAPITOL

RECORD REVISIONS



02/14/2024
SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

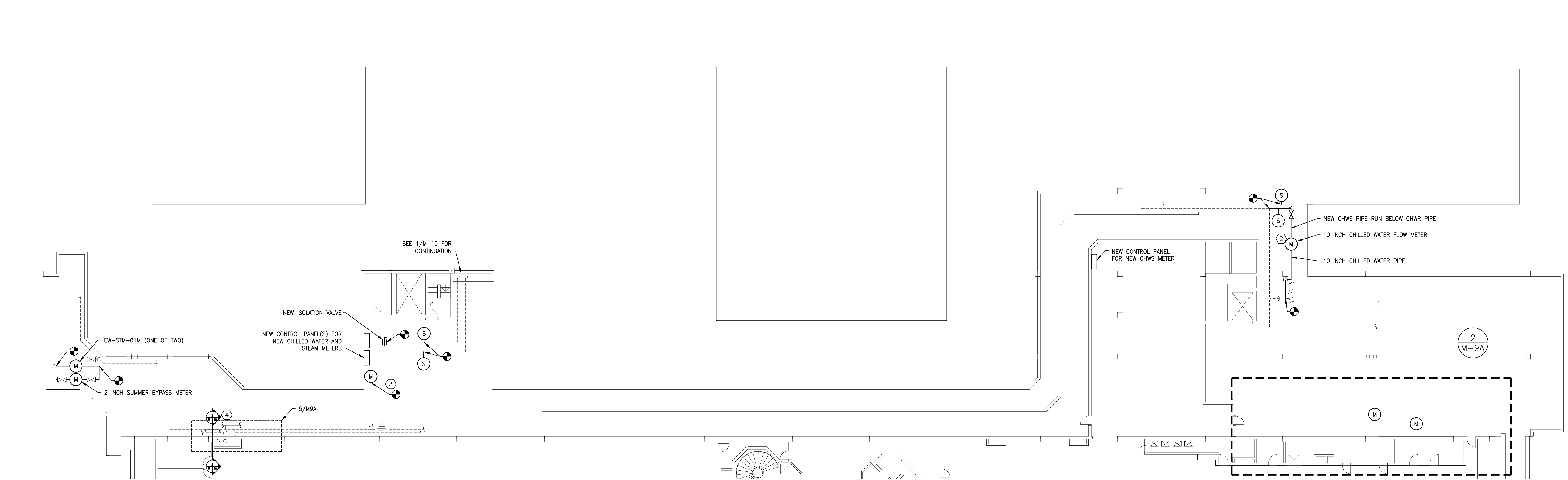
AUTOMATION SYSTEM UPGRADE --
CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

EAST ADDITION STEAM AND CH WATER METERS

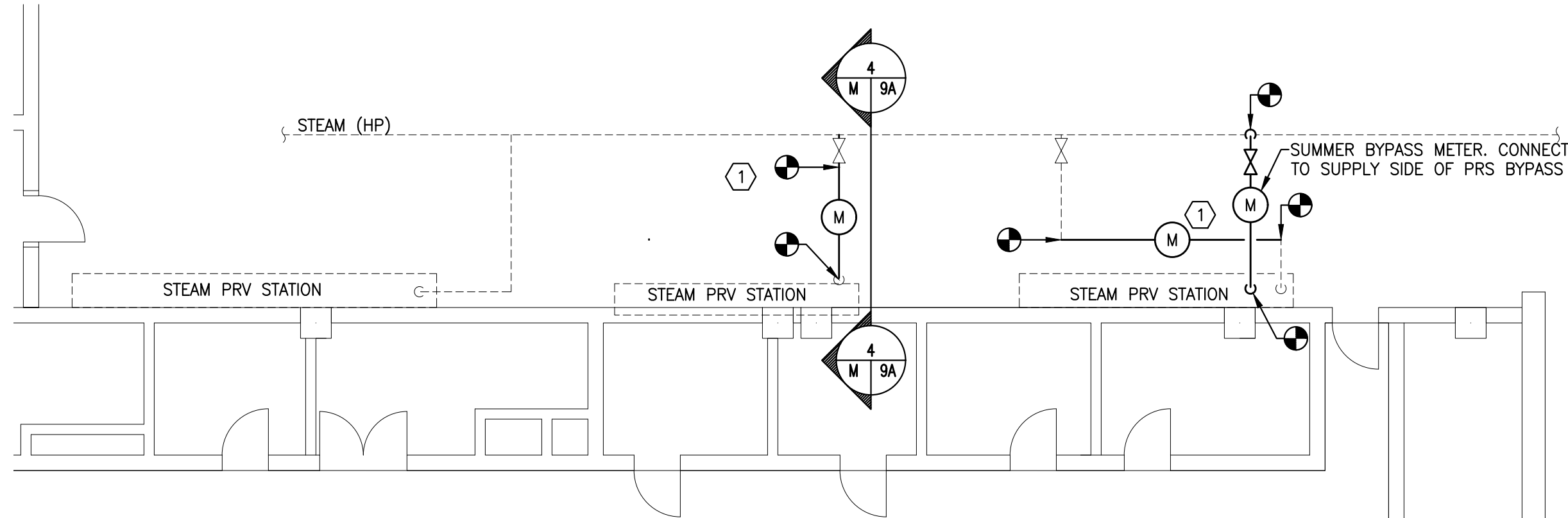
VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
0 1
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

DRAWN BY: M. SKORANSKI DATE: 02/14/24
CHECKED BY: M. RADZICKI SCALE: AS NOTED

DRAWING No. M-9



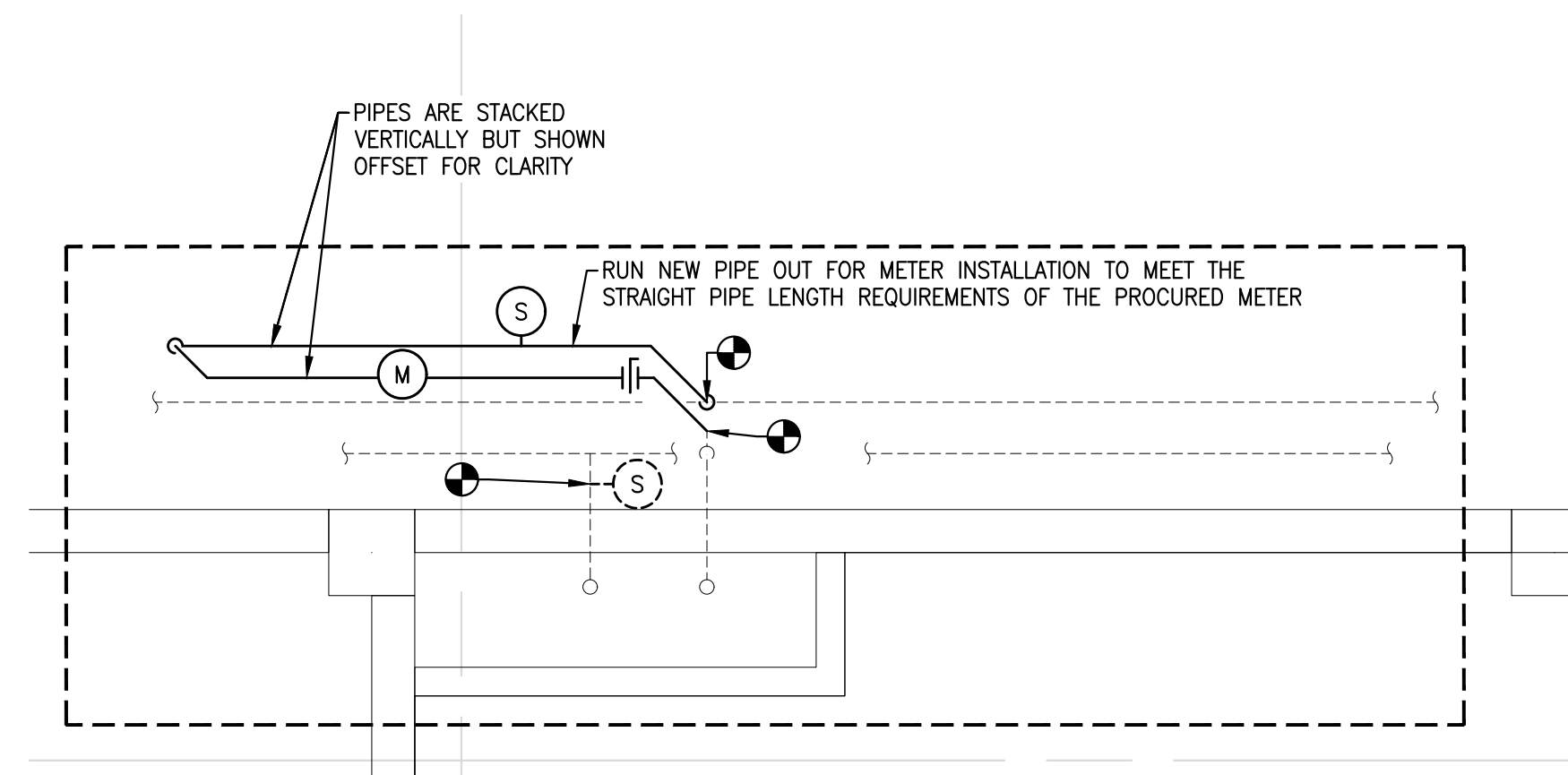
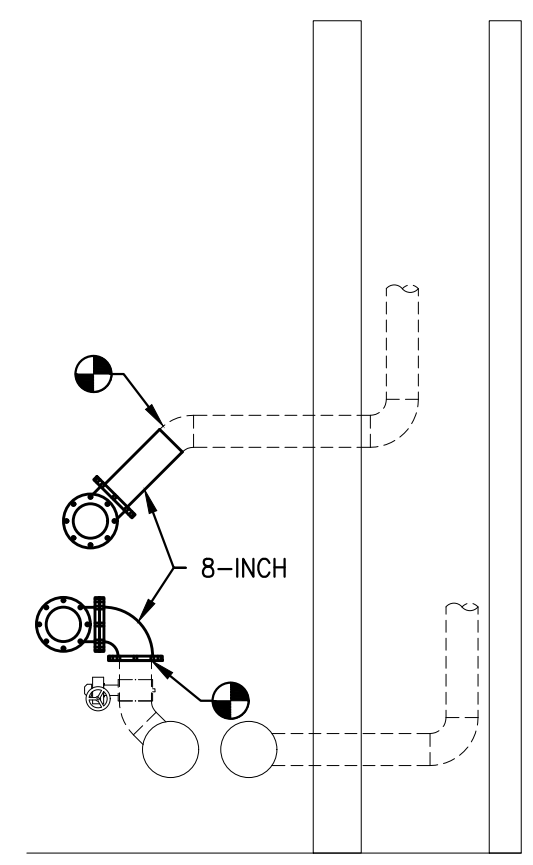
1
M-9A
METER INSTALLATION AND ASSOCIATED PIPE WORK P2 LEVEL
Scale: 1/16" = 1'-0"



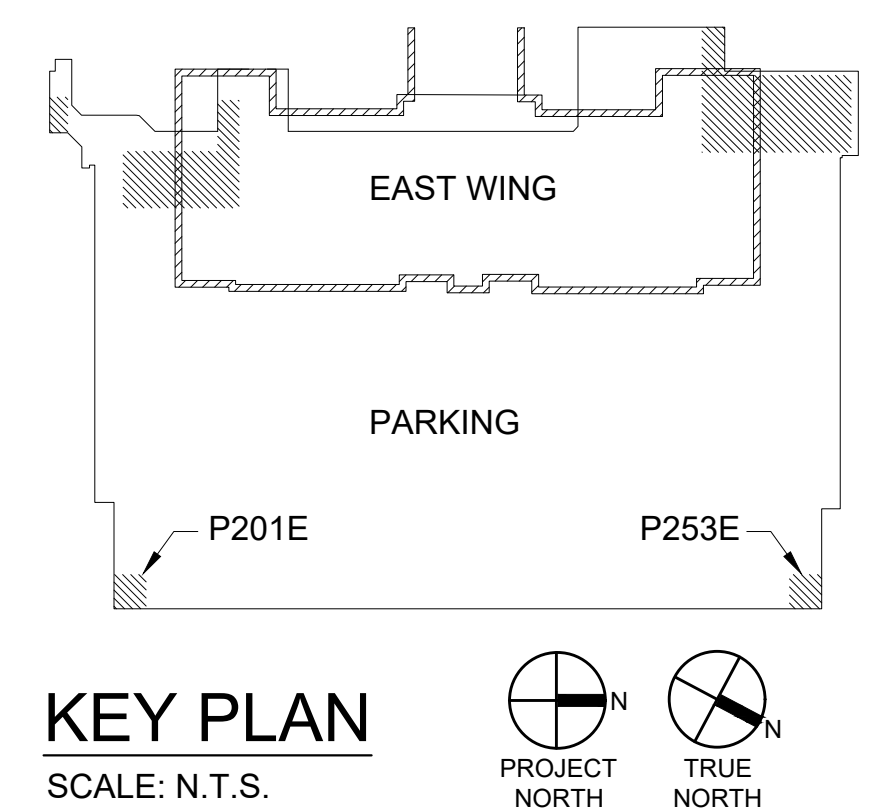
2
M-9A
STEAM METER LOCATIONS
Scale: 1/8" = 1'-0"

- ① PROVIDE STEAM METER (EW-STM-01M SECOND OF TWO) ON 5 INCH HIGH PRESSURE STEAM MAIN. BREAK PIPE. INSTALL METER.
- ② PROVIDE CHILLED WATER METER (EW-CHWS-02M). BREAK PIPE WHERE SHOWN. ROUTE NEW PIPE. INSTALL METER WHERE SHOWN.
- ③ PROVIDE CHILLED WATER METER (MC-CHWS-02M). BREAK PIPE. INSTALL METER.
- ④ PROVIDE CHILLED WATER METER (EW-CHWS-01M). BREAK PIPE WHERE SHOWN. ROUTE NEW PIPE. INSTALL METER WHERE SHOWN.

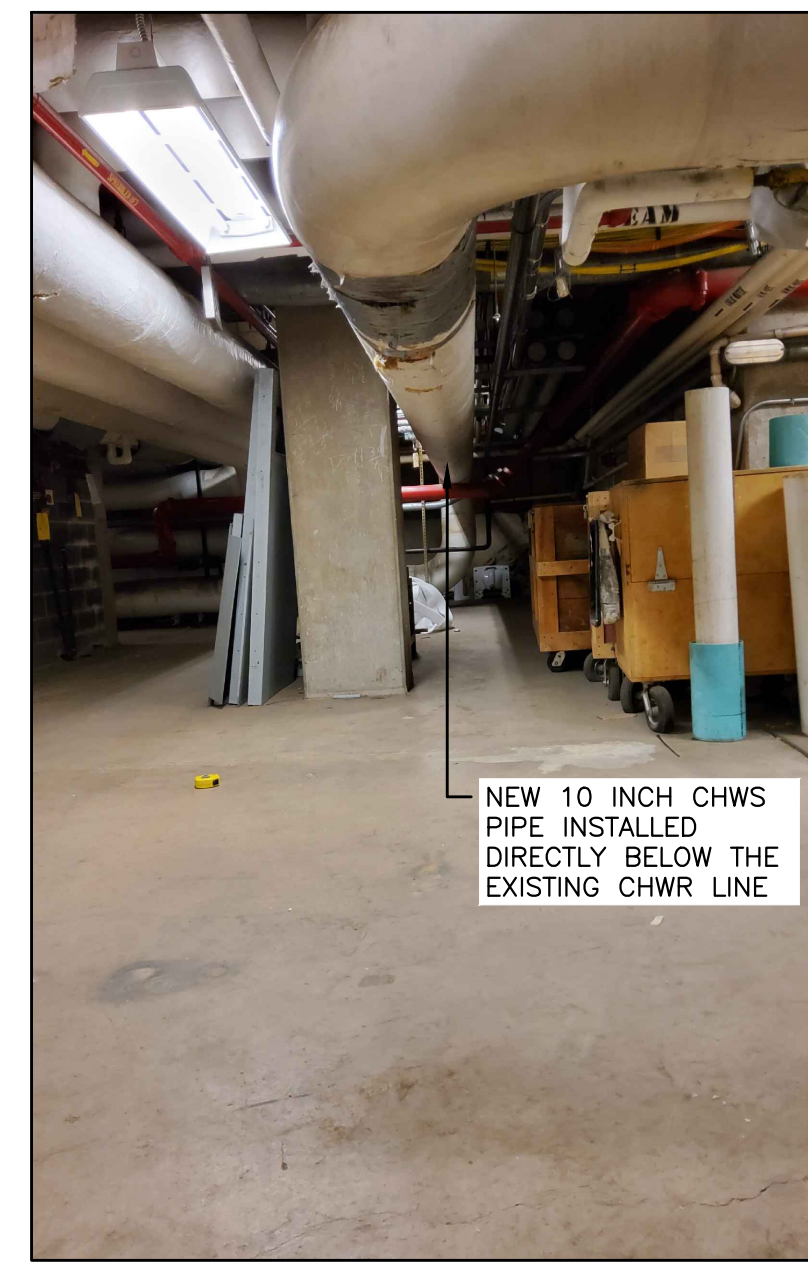
3
M-9A
SECTION: CHILLED WATER PIPE INSTALLATION
Scale: NO SCALE



5
M-9A
CHILLED WATER METER INSTALLATION
Scale: 1/4" = 1'-0"

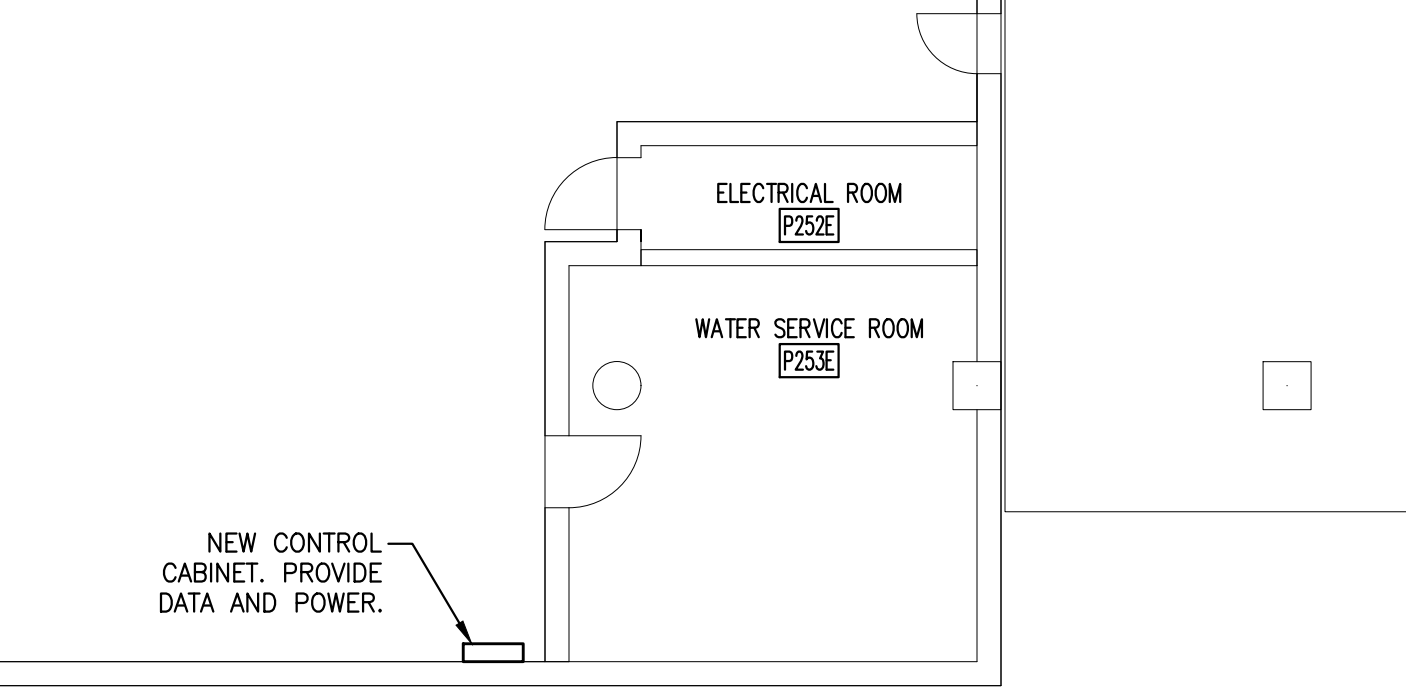
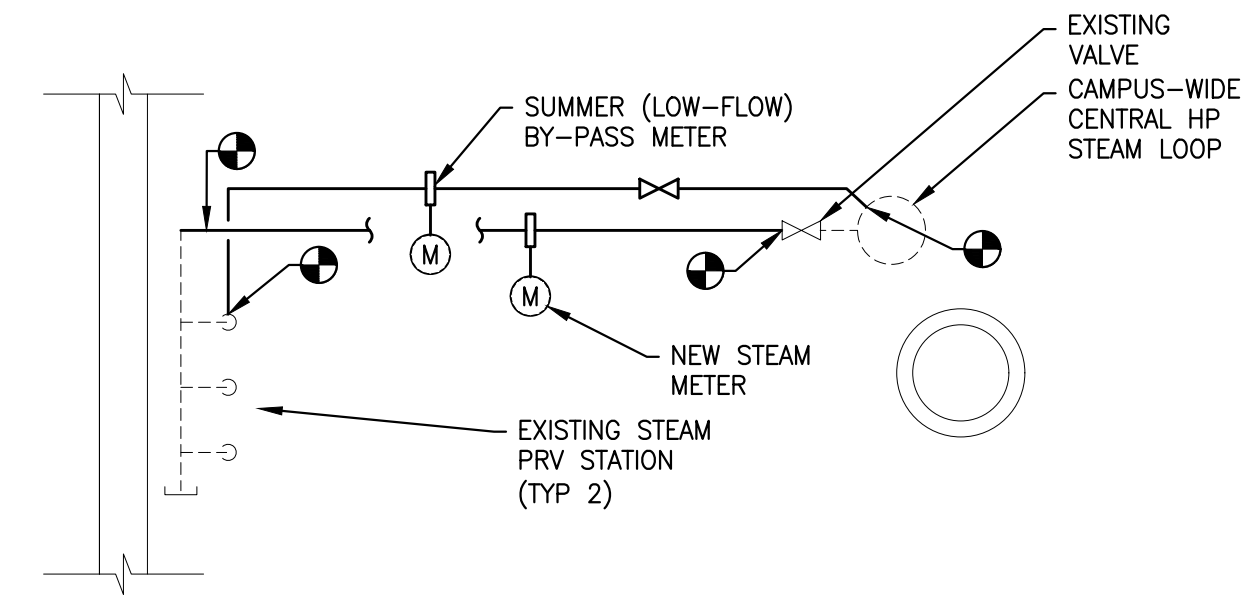


7
M-9A
EAST (CENTRAL CHWS)
Scale: NO SCALE SERVES EAST AND MAIN CAPITOL



8
M-9A
EAST (CENTRAL CHWS)
Scale: NO SCALE SERVES EAST AND MAIN CAPITOL

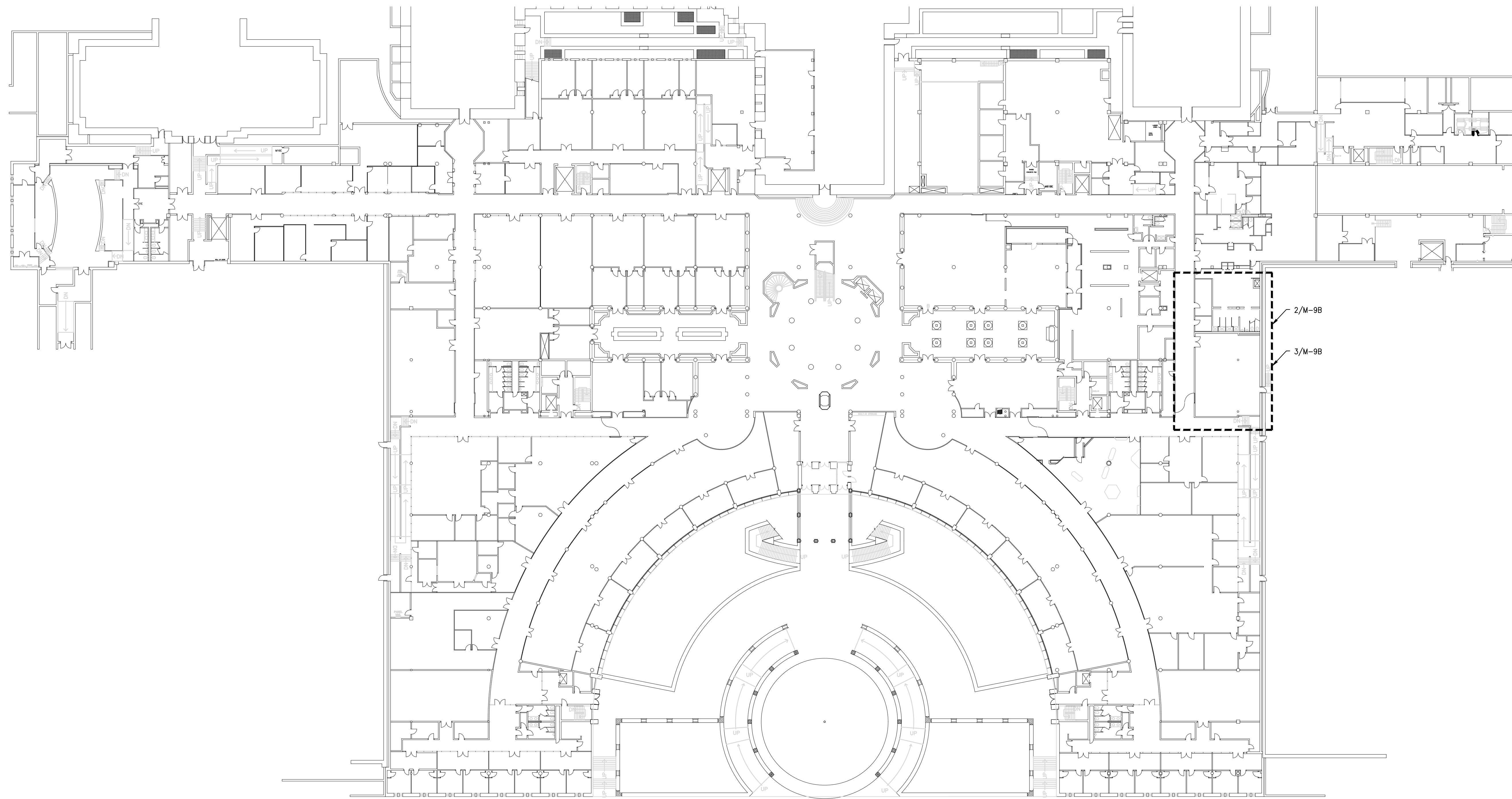
4
M-9A
TYPICAL STEAM METER SECTION
Scale: NO SCALE



6
M-9A
NEW CONTROL PANEL FOR DOM WATER
Scale: 1/8" = 1'-0" SEE KEYPLAN FOR LOCATION

VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
0 1
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

RECORD REVISIONS			
SIGNATURE		DATE	
SIGNATURE		DATE	
GREENMAN-PEDERSEN, INC 52 GLENMAURA NATIONAL BOULEVARD SCRANTON, PENNSYLVANIA 18505			
COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES HARRISBURG, PENNSYLVANIA			
D.G.S. PROJECT No. C-0948-0098 PHASE 1			
AUTOMATION SYSTEM UPGRADE – CAPITOL COMPLEX DEPARTMENT OF GENERAL SERVICES HARRISBURG, DAUPHIN COUNTY, PA EAST ADDITION STEAM AND CH WATER METERS			
DRAWN BY M. SKORANSKI	DATE 02/14/24	DRAWING No. M-9A	
CHECKED BY M. RADZICKI	SCALE AS NOTED		

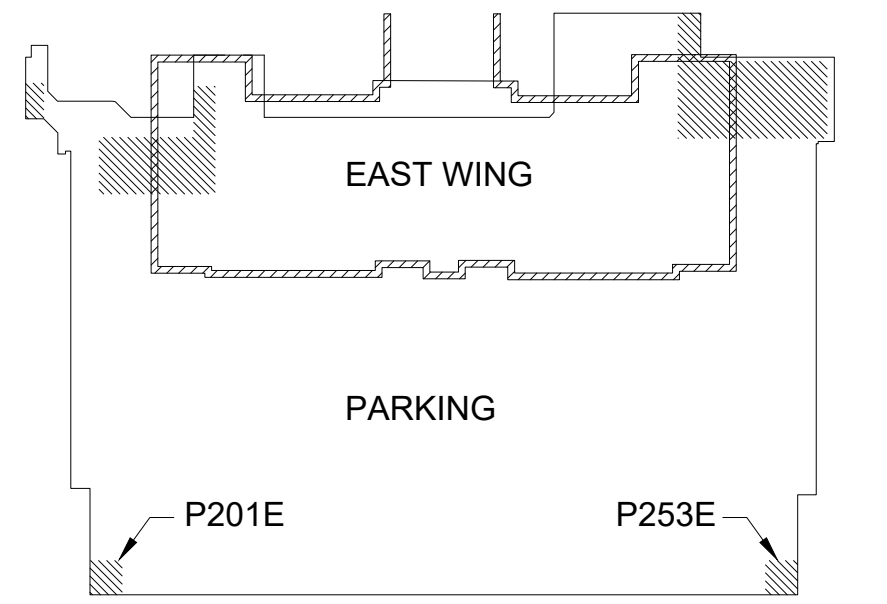


2 EAST ADDITION PARTIAL PLAN FIRST FLOOR CHWS METER
 M-9B Scale: 1/32" = 1'-0"

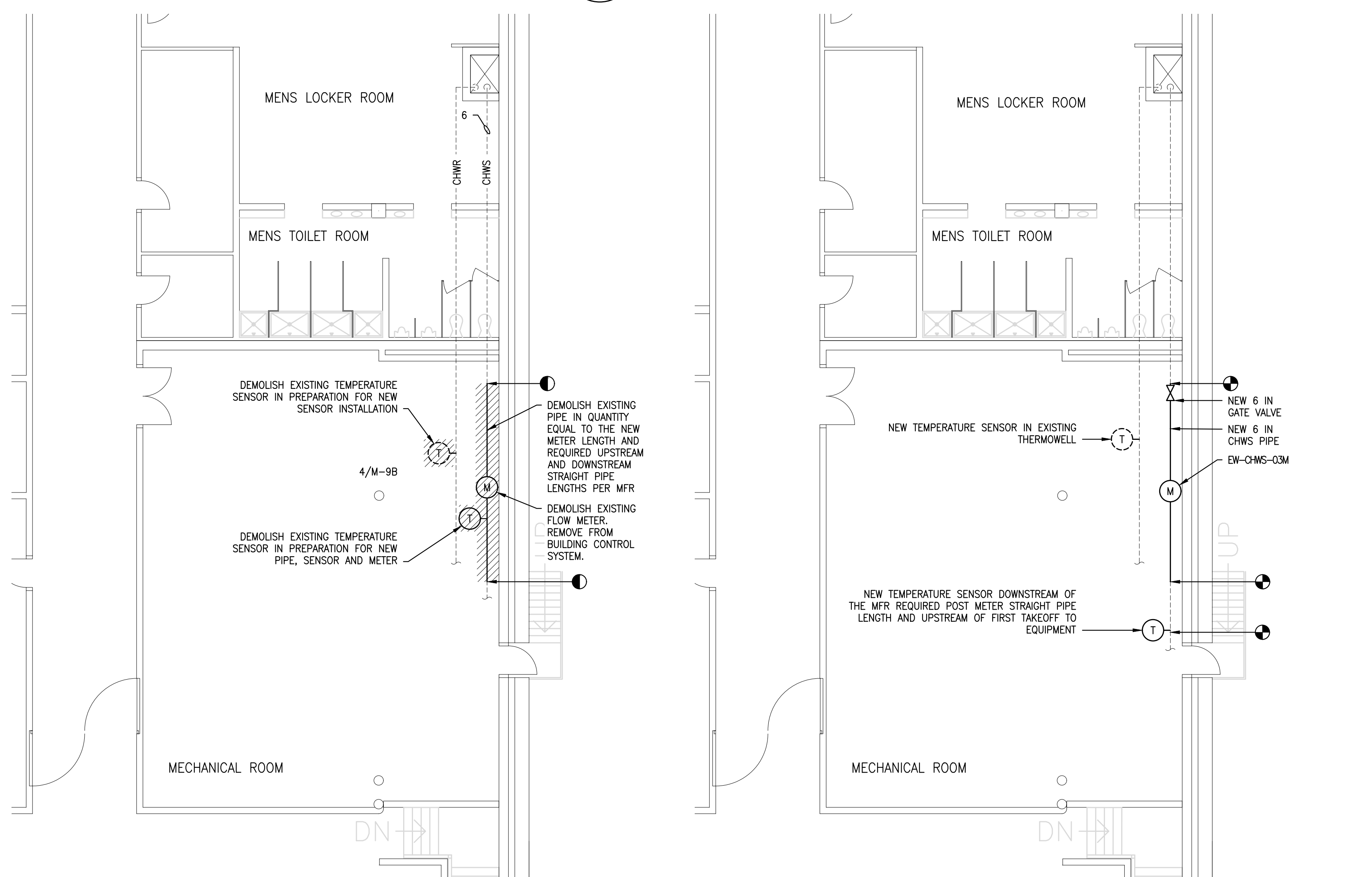
4 PHOTO NORTH CHWS
 M-9B Scale: NONE SERVES EAST BLDG NORTH



5 PHOTO NORTH STEAM
 M-9B Scale: NONE SERVES EAST BLDG NORTH

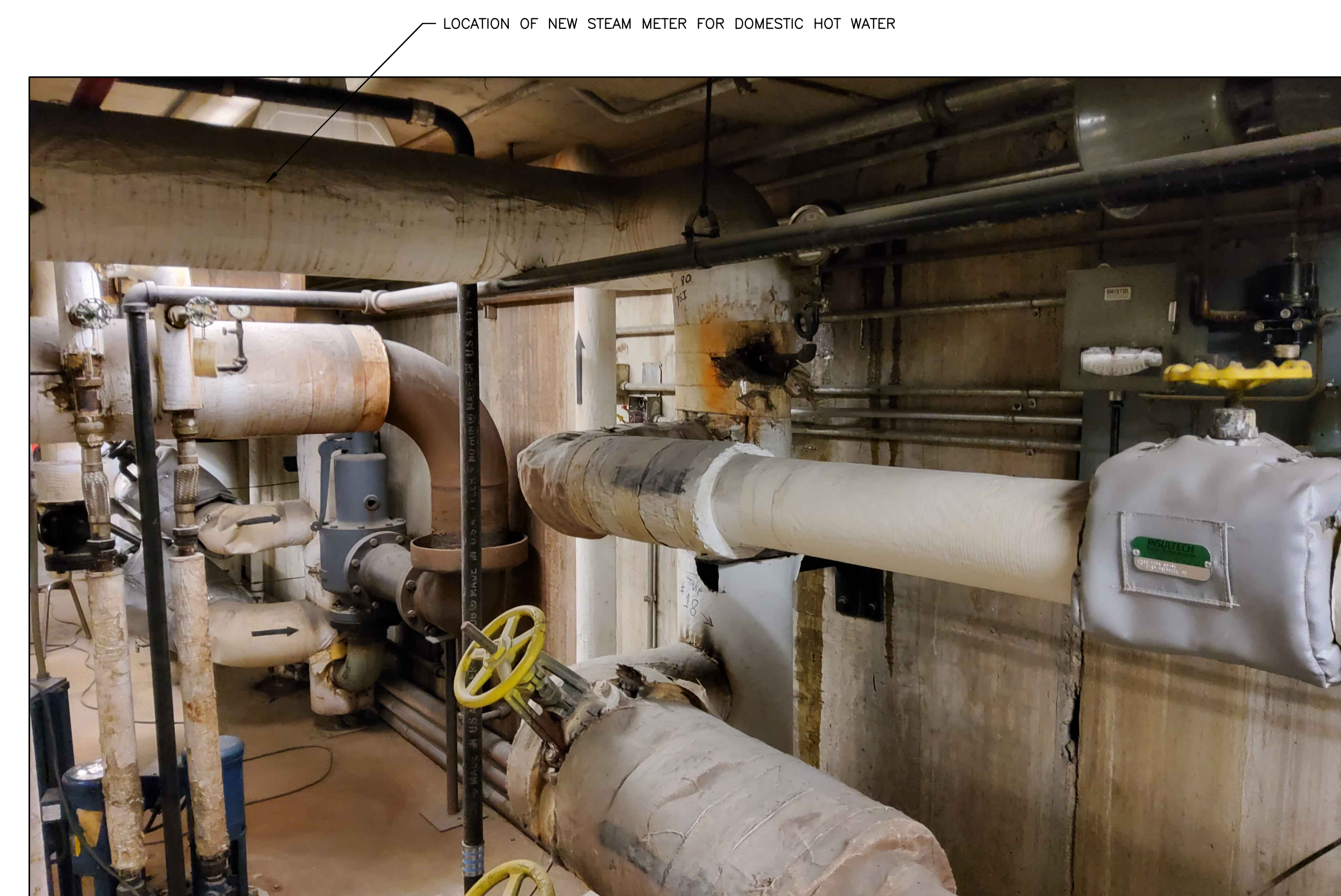


KEY PLAN
 SCALE: N.T.S. PROJECT NORTH TRUE NORTH



2 DEMOLITION/PIPE PREPARATION PART PLAN
 M-9B Scale: 1/8" = 1'-0" CHWS

3 CHWS METER INSTALLATION / NEW PIPE
 M-9B Scale: 1/8" = 1'-0"



6 PHOTO NORTH STEAM
 M-9B Scale: NONE SERVES EAST BLDG DOMESTIC HOT WATER

RECORD REVISIONS

02/14/2024
 SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
 52 GLENMAURA NATIONAL BOULEVARD
 SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

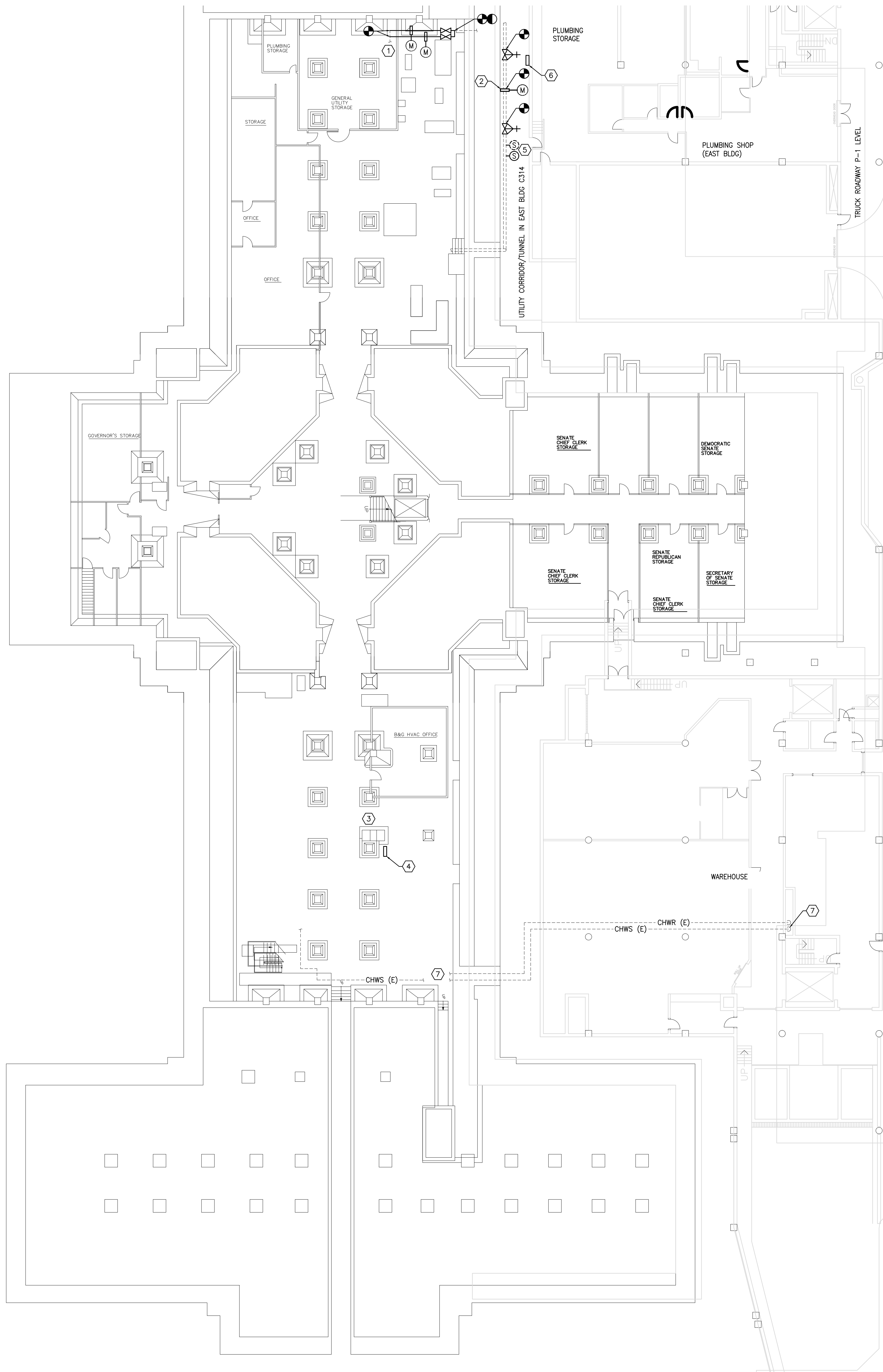
D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE -
 CAPITOL COMPLEX
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, DAUPHIN COUNTY, PA

EAST ADDITION STEAM AND CH WATER METERS

VERIFY SCALE
 BAR IS ONE (1) INCH LONG
 ON ORIGINAL DRAWING:
 0 1
 IF BAR IS NOT ONE (1) INCH LONG,
 ADJUST SCALE ACCORDINGLY
 CONTRACTOR SHALL FIELD VERIFY
 ALL DIMENSIONS.
 VARIANCE FROM CONTRACT
 DOCUMENTS NOT PERMITTED
 WITHOUT PROFESSIONAL & BUREAU
 OF CONSTRUCTION APPROVAL.

DRAWN BY: M. SKORANSKI DATE: 02/14/24 DRAWING No.: M-9B
 CHECKED BY: M. RADZICKI SCALE: AS NOTED



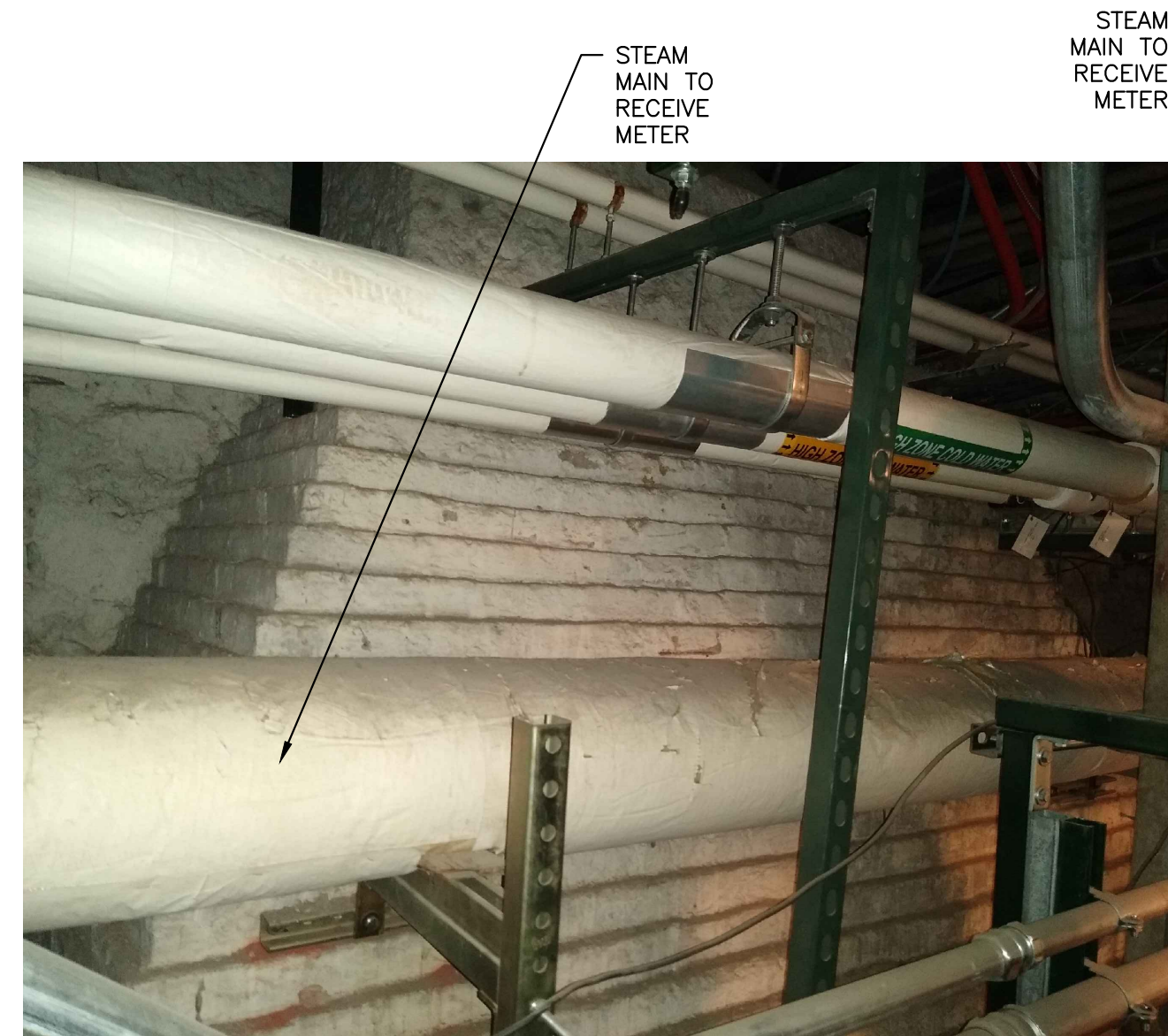
- ① PROVIDE STEAM METER (MC-STM-01M). BREAK PIPE OUTSIDE OF ROOM WITH PRESSURE REDUCING STATIONS. INSTALL METER. ROUTE SUFFICIENT LENGTH OF STRAIGHT PIPE AFTER METER EN ROUTE TO PRESSURE REDUCING STATIONS. PROVIDE LOW FLOW METER ON 2 INCH PIPE AROUND PRIMARY METER AND STEAM MAIN-PROVIDE NEW WALL PENETRATION FOR DOWNSTREAM CONNECTION TO EXISTING PIPE.
- ② PROVIDE CHILLED WATER METER MC-CHWS-01M. SEE 3/M-10.
- ③ LOCATION OF EXISTING CONTROL PANEL (4/M-10)
- ④ PROVIDE NEW CONTROL PANEL (POWER AND COMM FROM EXISTING NEARBY PANEL(S))
- ⑤ PROVIDE NEW TEMPERATURE SENSOR ON SUPPLY PIPE AND ON RETURN PIPE BELOW
- ⑥ PROVIDE NEW CONTROL PANEL. INTERCEPT COMMUNICATION TRUNK RACEWAY THAT RUNS THROUGH THIS UTILITY TUNNEL/CORRIDOR. PROVIDE POWER FROM PLUMBING STORAGE ROOM ADJACENT TO THE UTILITY TUNNEL.
- ⑦ SEE 1/MBA FOR SECOND CHILLED WATER METER FOR THE MAIN CAPITOL
- ⑧ EXISTING CHWS PIPE IN UTILITY TUNNEL BEHIND PLUMBING SHOP. SEE CONTINUATION 1/M-10



3 PHOTO: CHWS METER LOCATION
M-10 Scale: NONE NORTH SIDE OF BUILDING



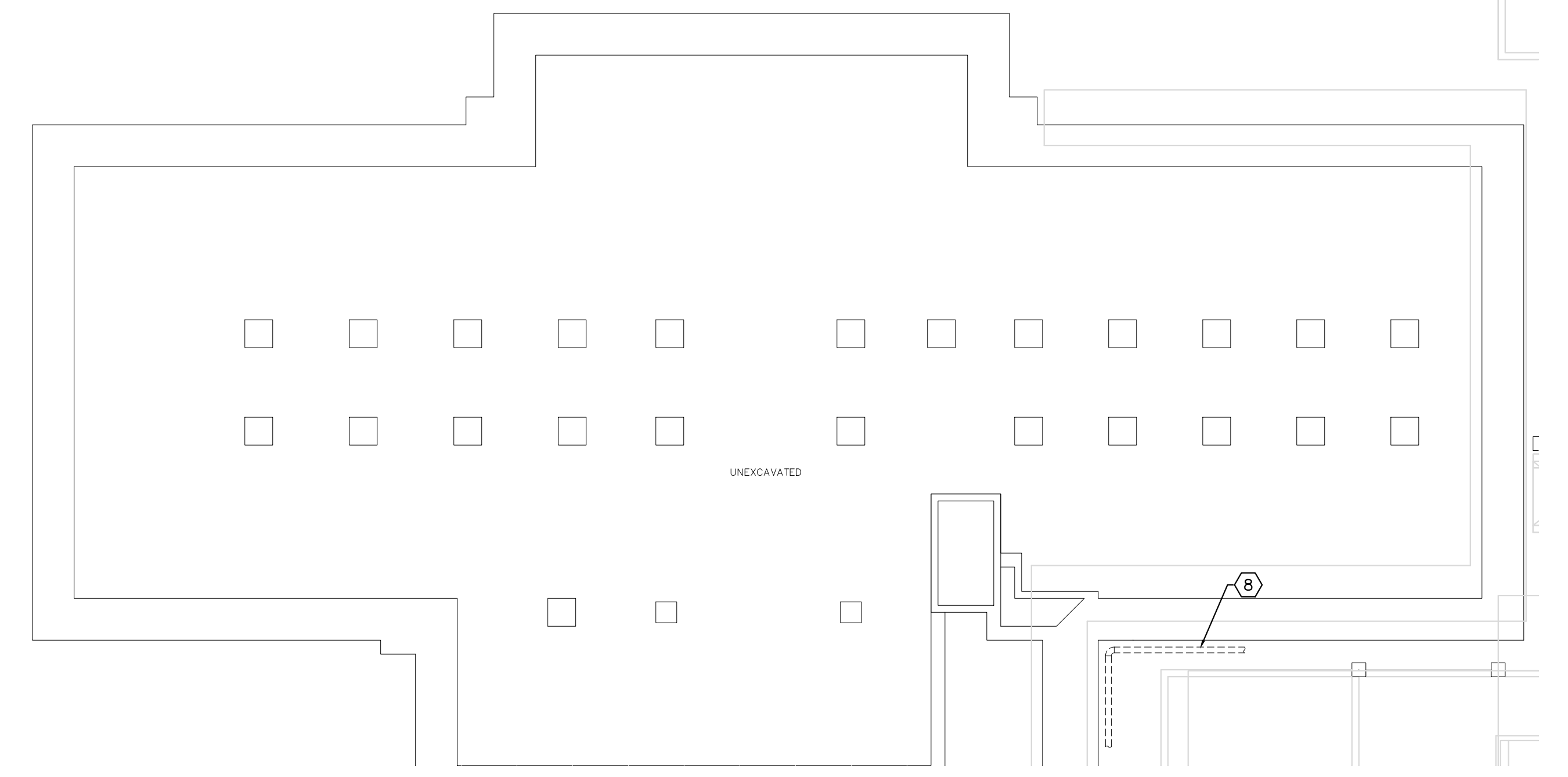
4 PHOTO: EXISTING CONTROL PANEL
M-10 Scale: NONE



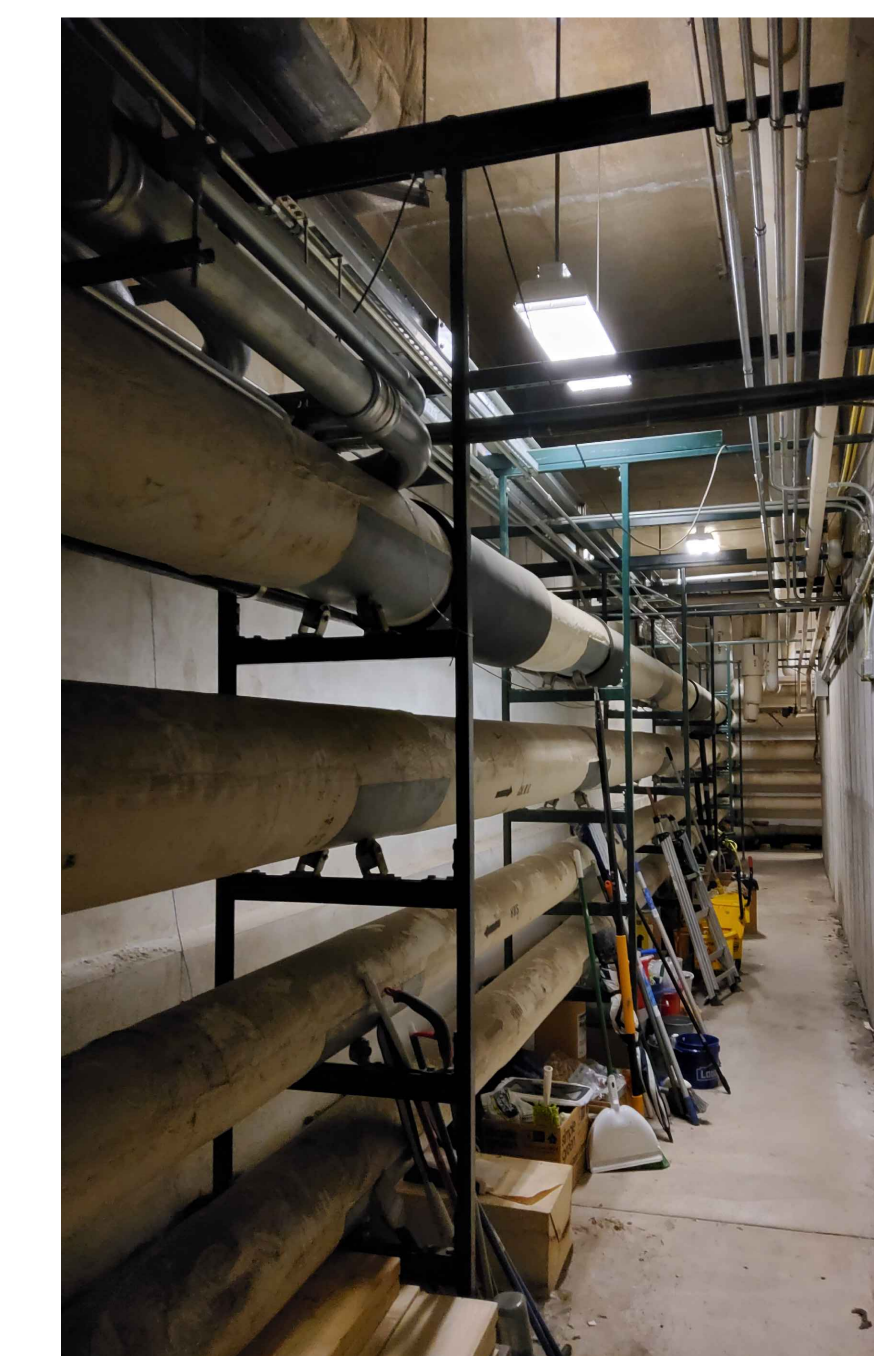
5 PHOTO: STEAM METER LOCATION
M-10 Scale: NONE NORTH SIDE OF BUILDING



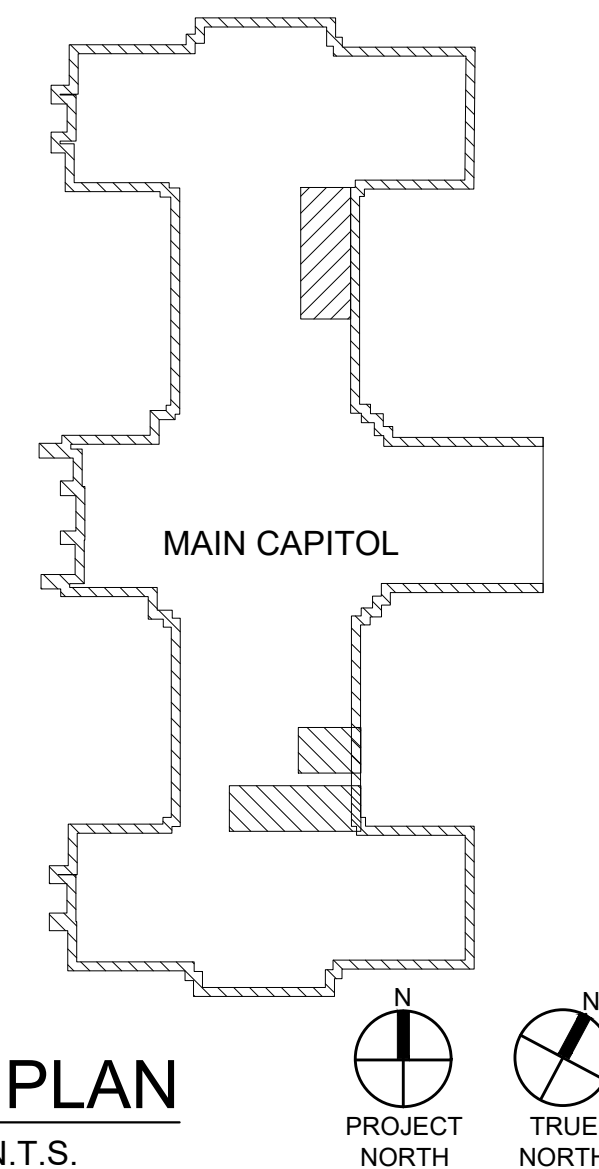
6 PHOTO: STEAM METER LOCATION
M-10 Scale: NONE ALT VIEW



2 BASEMENT MECHANICAL PLAN--NORTH
Scale: 1/16" = 1'-0" FOR REFERENCE



7 PHOTO: CHWS METER LOCATION
M-10 Scale: NONE NORTH SIDE OF BUILDING (ALT VIEW)



KEY PLAN
SCALE: N.T.S. PROJECT NORTH TRUE NORTH

1 BASEMENT MECHANICAL PLAN (SOUTH & CENTRAL)
Scale: 1/16" = 1'-0"

VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
0 1
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

RECORD REVISIONS

02/14/2024
SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

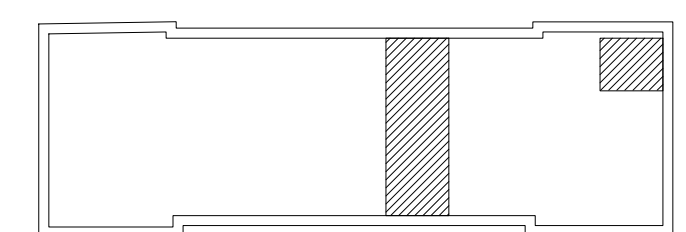
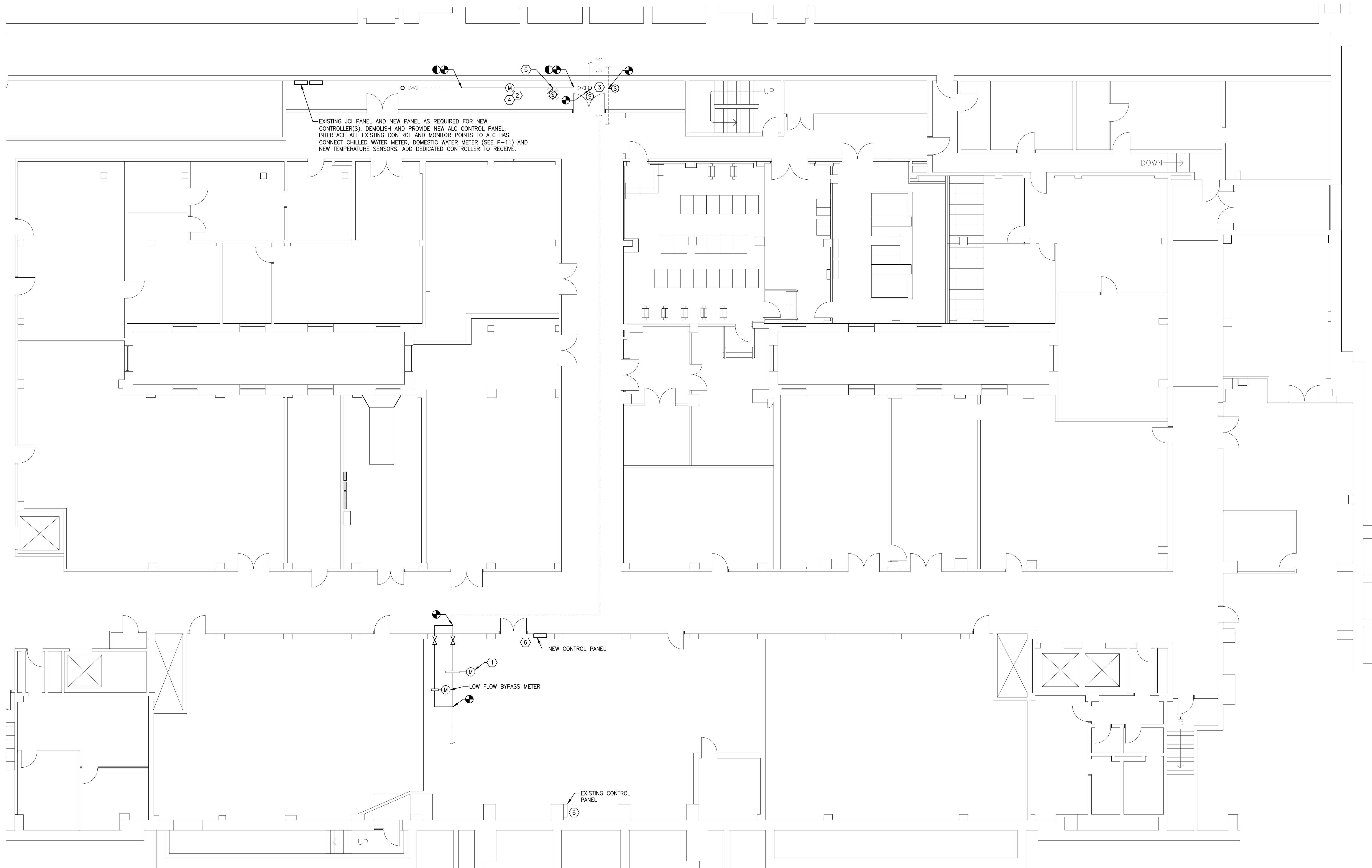
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

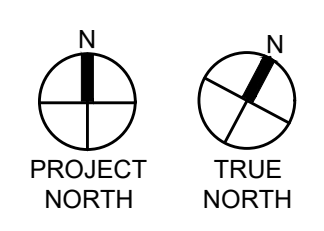
AUTOMATION SYSTEM UPGRADE - CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

MAIN CAPITOL CENTER SUB-BASEMENT MECHANICAL PLAN

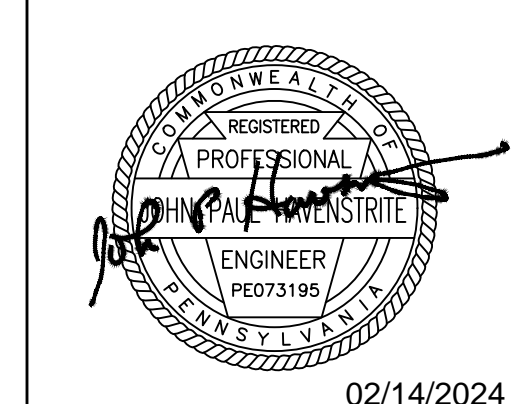
DRAWN BY: M. SKORANSKI DATE: 02/14/24 DRAWING No. M-10
CHECKED BY: M. RADZICKI SCALE: AS NOTED



KEY PLAN
SCALE: N.T.S.



RECORD REVISIONS



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GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE -
CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

IRVIS (SOUTH BUILDING) MECHANICAL PLAN

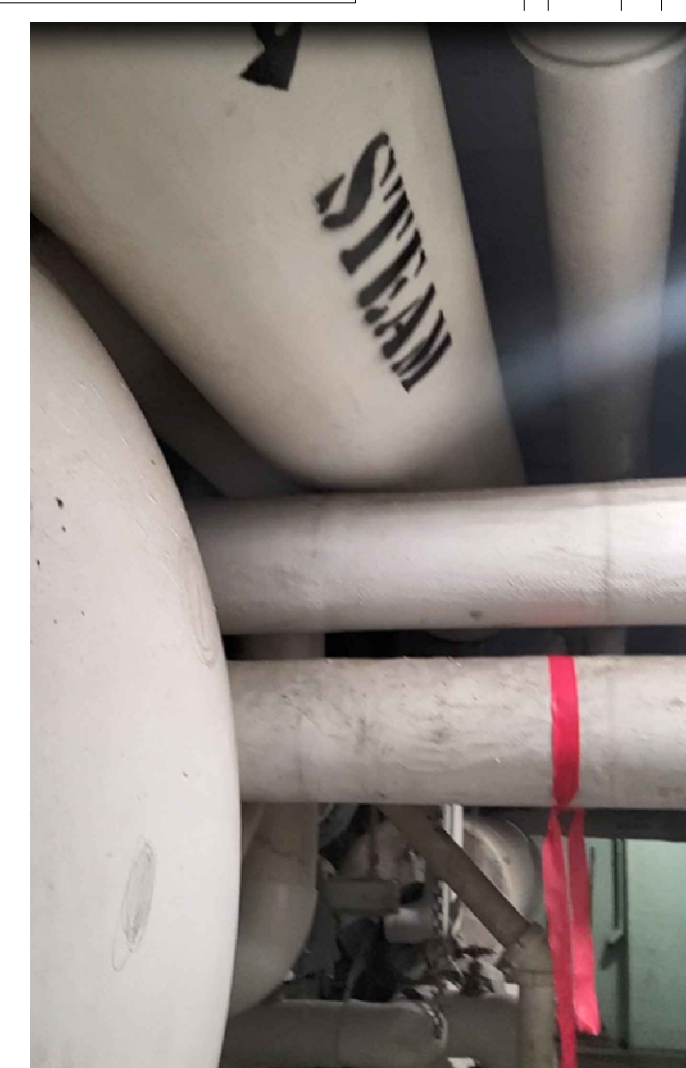
VERIFY SCALE
BAR IS ONE (1) INCH LONG
ON ORIGINAL DRAWING:
0 1
IF BAR IS NOT ONE (1) INCH LONG,
ADJUST SCALE ACCORDINGLY
CONTRACTOR SHALL FIELD VERIFY
ALL DIMENSIONS.
VARIANCE FROM CONTRACT
DOCUMENTS NOT PERMITTED
WITHOUT PROFESSIONAL & BUREAU
OF CONSTRUCTION APPROVAL.

DRAWN BY
M. SKORANSKI
DATE
02/14/24
CHECKED BY
M. RADZICKI
SCALE
AS NOTED

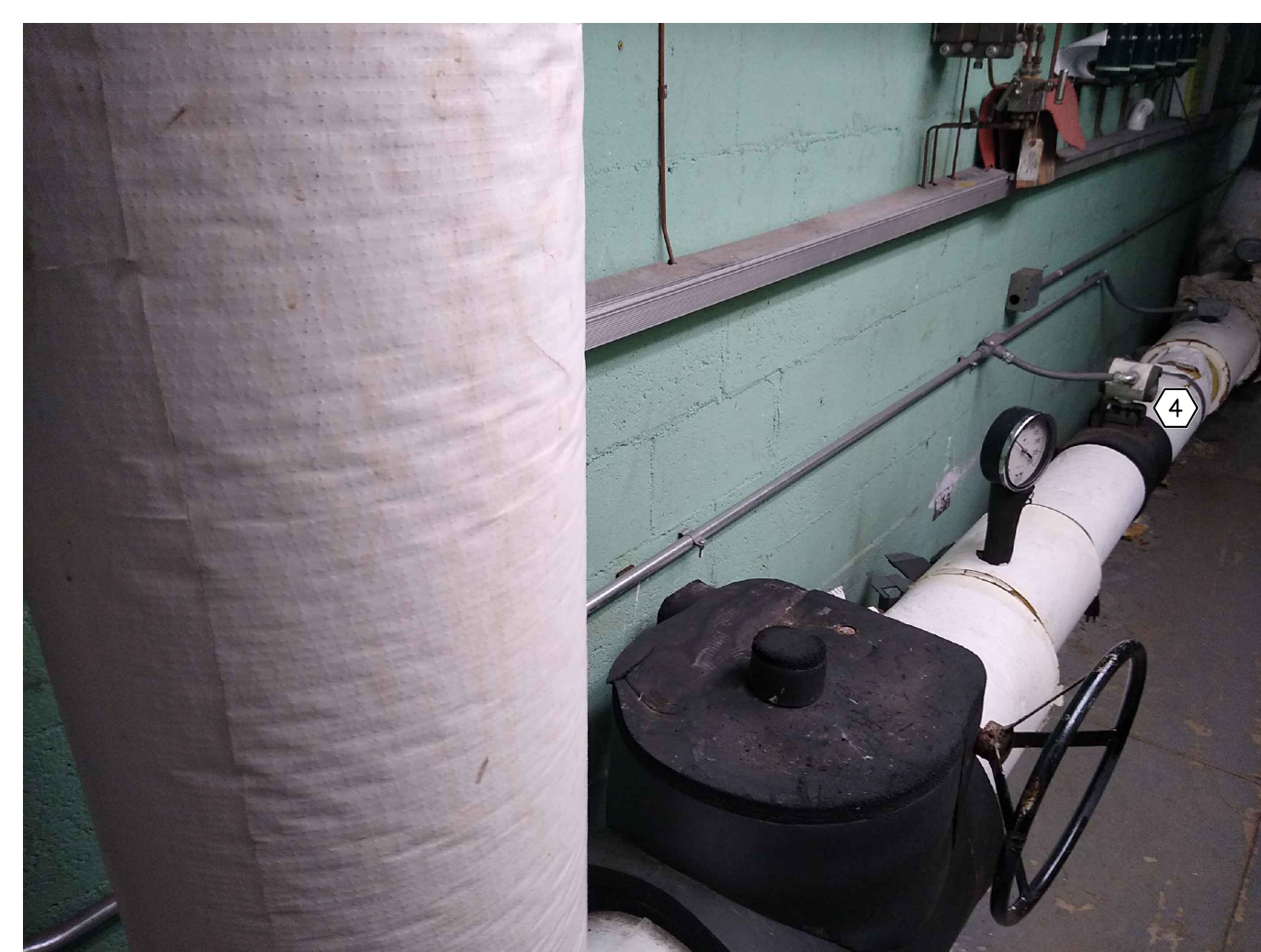
DRAWING No.
M-11

1
M-11 **BASEMENT MECHANICAL PLAN**
Scale: 1/8" = 1'-0"

- ① PROVIDE STEAM METER (10B-STH-01M). BREAK PIPE. INSTALL METER. ROUTE SUFFICIENT LENGTH OF STRAIGHT PIPE AFTER METER. DOUBLE BACK AND RECONNECT TO EXISTING RISER.
- ② PROVIDE CHILLED WATER METER 10B-CHWS-01M. RELOCATE PRESSURE AND TEMPERATURE GAUGES UPSTREAM OF INCOMING AND DOWN STREAM OF EXITING ISOLATION VALVES. CHECK CALIBRATION OF INSTRUMENTS AND REPLACE IF THEY ARE NOT READING ACCURATELY.
- ③ PROVIDE NEW TEMPERATURE SENSOR ON CHILLED WATER SUPPLY AND RETURN LINES TO MONITOR TEMPERATURES FOR THE INCOMING AND OUTGOING CHILLED WATER FOR THE ENTIRE BUILDING.
- ④ DEMOLISH THE EXISTING FLOW METER. DISCONNECT FROM CONTROL SYSTEM. REMOVE WIRING AND SAFELY TERMINATE CONNECTIONS.
- ⑤ DEMOLISH EXISTING TEMPERATURE SENSOR. DISCONNECT FROM CONTROL SYSTEM. REMOVE WIRING AND SAFELY TERMINATE CONNECTIONS.
- ⑥ DATA FOR NEW CONTROL PANEL CAN BE CONNECTED TO COMMUNICATIONS WIRING THAT SERVES EXISTING CONTROL PANEL (TYPICAL)



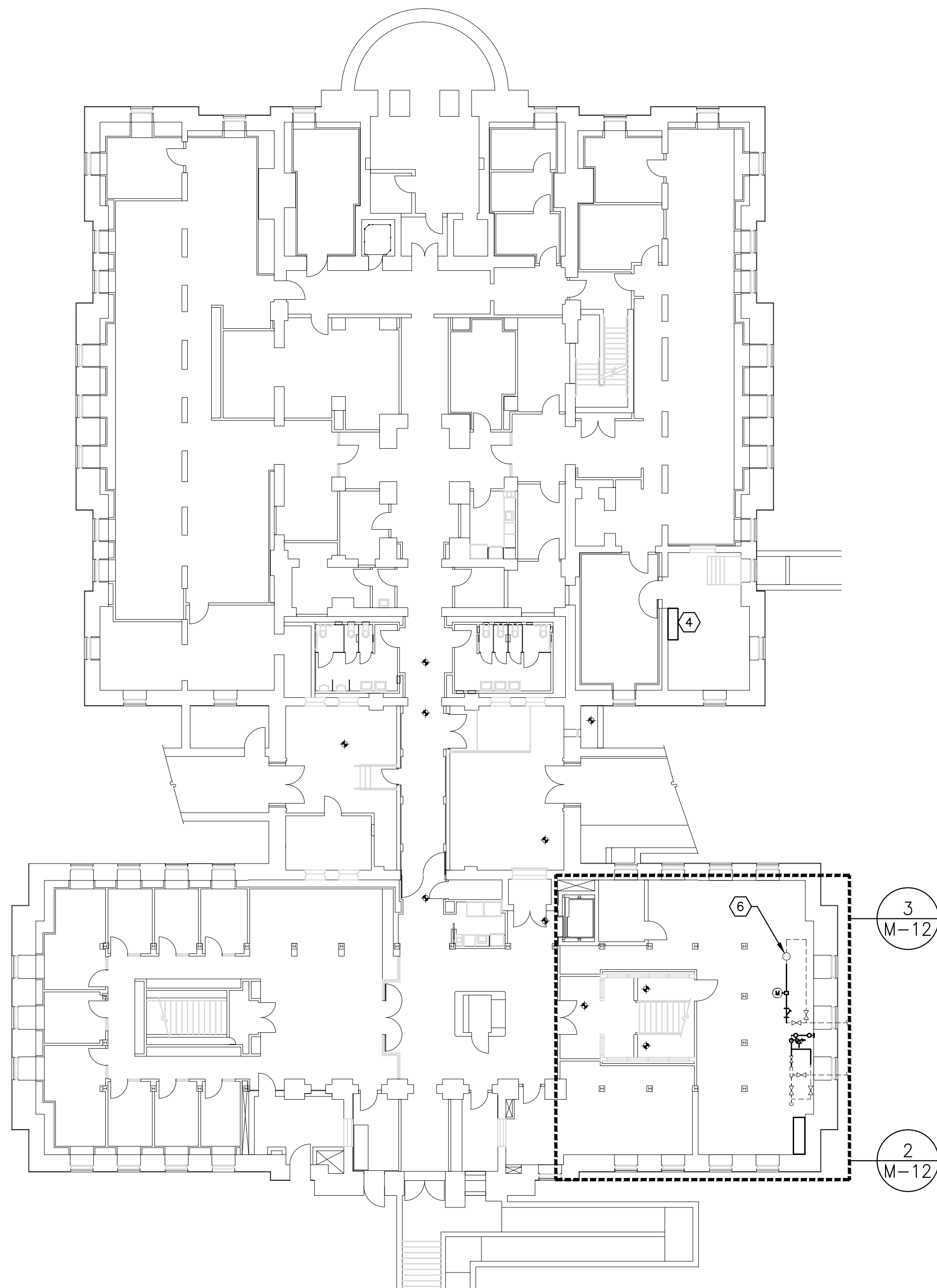
2
M-11 **EXISTING CONDITIONS STEAM METER LOCATION**
No Scale



3
M-11 **EXISTING CONDITIONS CHILLED WATER METER LOCATION**
No Scale



4
M-11 **EXISTING CONDITIONS CHILLED WATER METER LOCATION**
No Scale

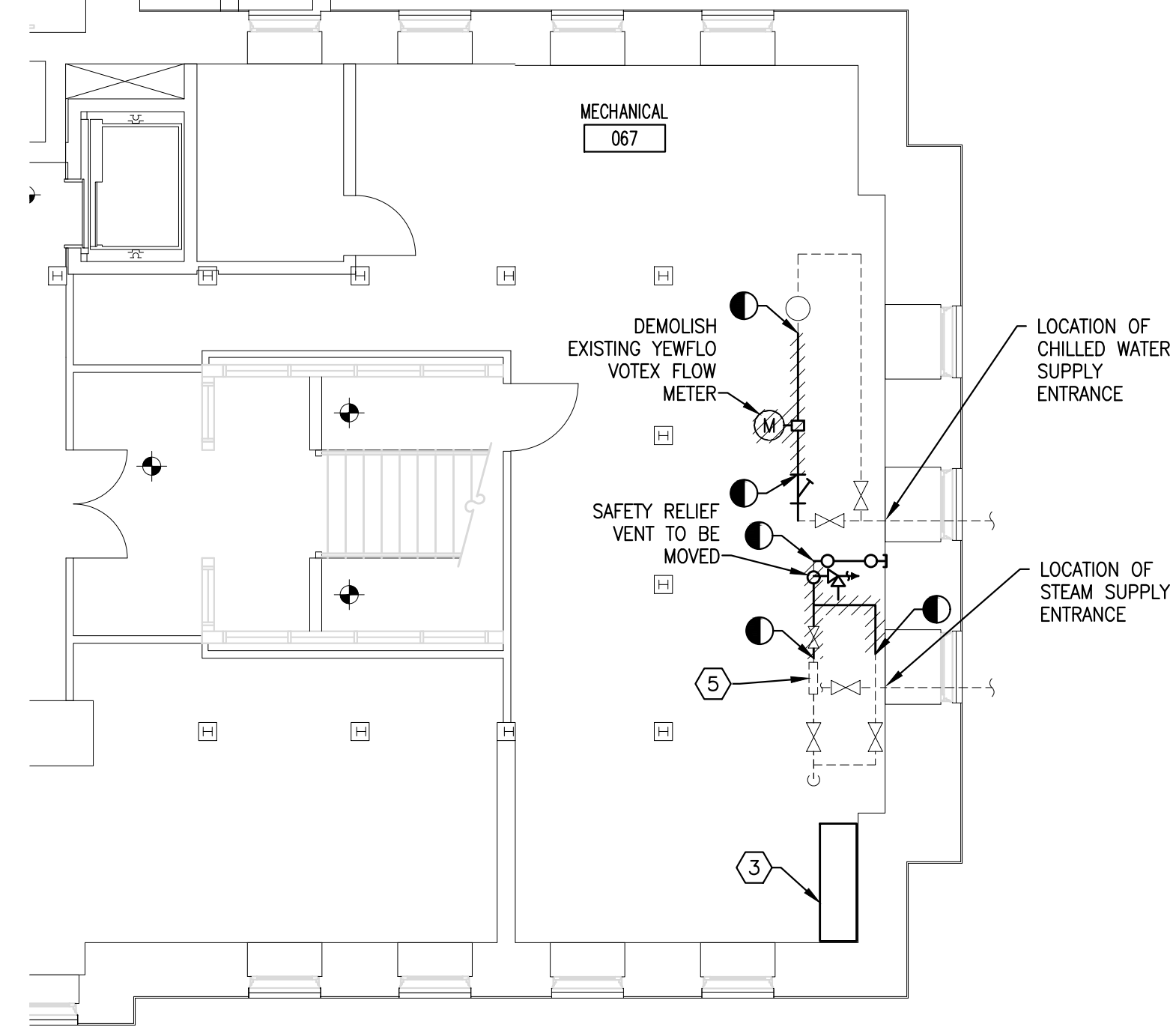


1
M-12
BASEMENT MECHANICAL PLAN-LOCATION
Scale: 1/8" = 1'-0" AND CONTROLS ADDITIONS

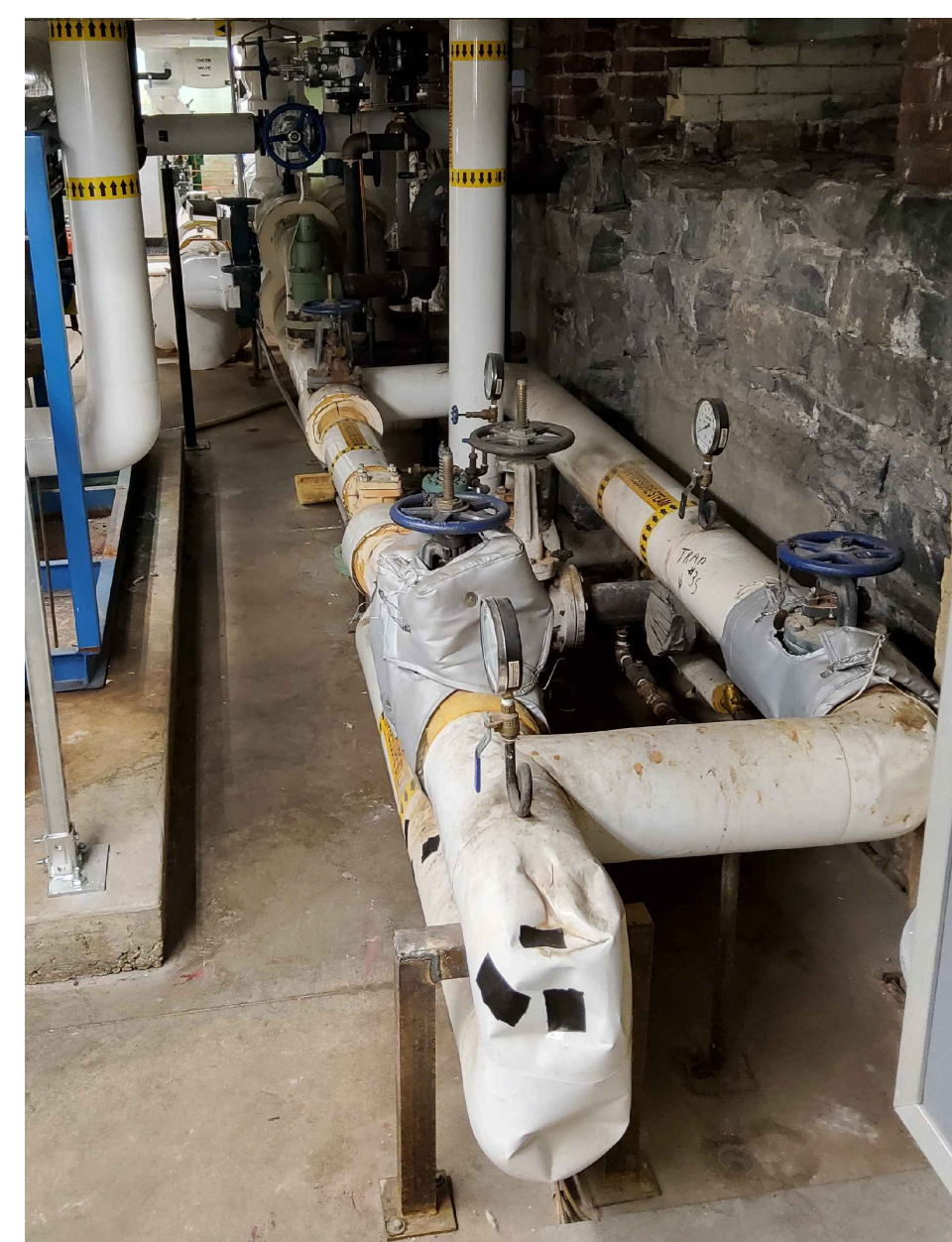


4
M-12
PHOTO: EXISTING JCI PANEL IN WATER SERVICE ROOM
Scale: NONE PROVIDE NEW CONTROL PANEL ADJACENT TO EXISTING

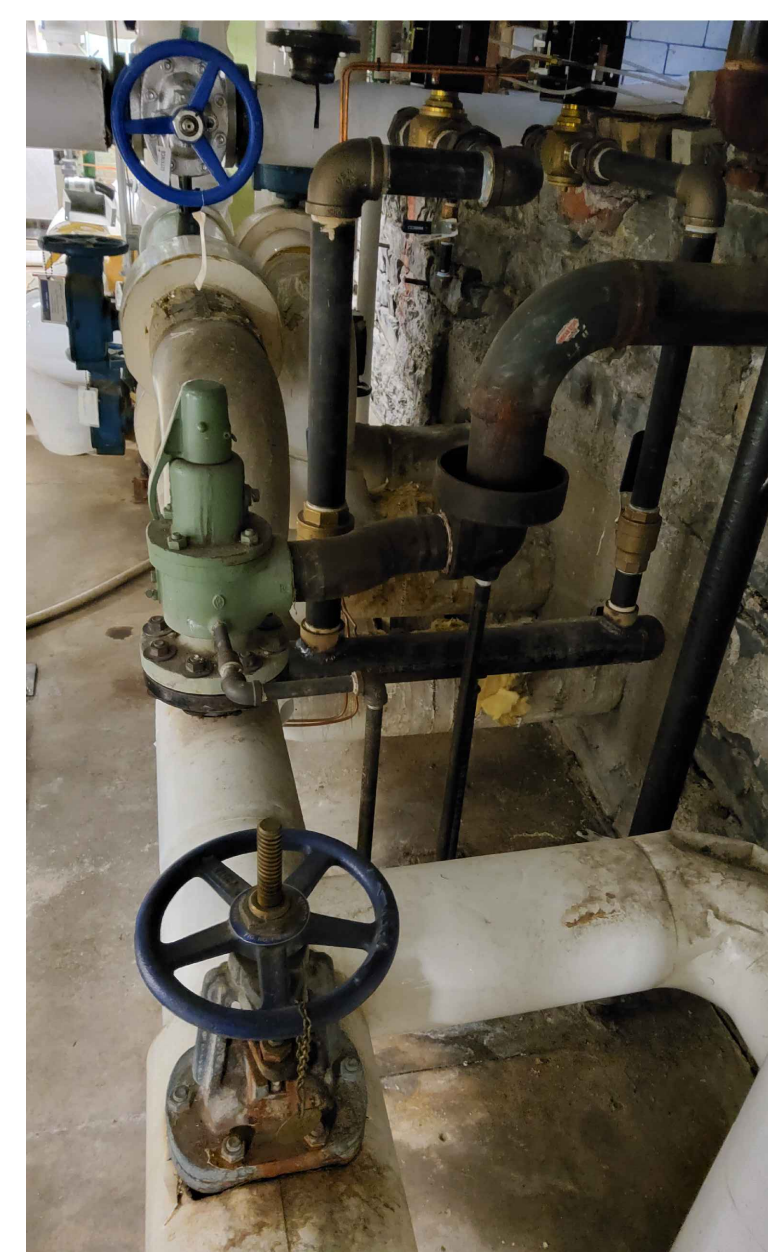
- 1 PROVIDE STEAM METER (ROB-STM-01M). BREAK PIPE AFTER PRESSURE REDUCTION—DEMOLISH AS SHOWN. INSTALL METER. MOVE SAFETY RELIEF. PROVIDE NEW ISOLATION VALVE RECONNECT TO EXISTING STEAM PIPE.
- 2 PROVIDE CHILLED WATER METER ROB-CHWS-01M
- 3 JOHNSON CONTROLS BMS CONTROL ENCLOSURE ROUTE WIRING FROM NEW METERS (SEE P-12 FOR DW METER) TO THIS PANEL. PROVIDE NEW CONTROLLER(S) TO RECEIVE SIGNALS.
- 4 NEW CONTROL PANEL FOR DOMESTIC WATER METER ADJACENT TO (UNDER) EXISTING CONTROL PANEL. SEE 4/M-12. CONNECT TO POWER AND COMM OF EXISTING CONTROL PANEL.
- 5 PRESSURE REDUCING VALVE
- 6 EXISTING PNEUMATIC CONTROL VALVE WITH POSITION SENSOR TO REMAIN
- 7 MOVE VENT TO LOW PRESSURE SIDE OF HIGH PRESSURE BY-PASS—REPIPE TO RELIEF EXHAUST PIPING.
- 8 REPLACE TEMPERATURE SENSORS ON CHWS AND CHWR PIPE



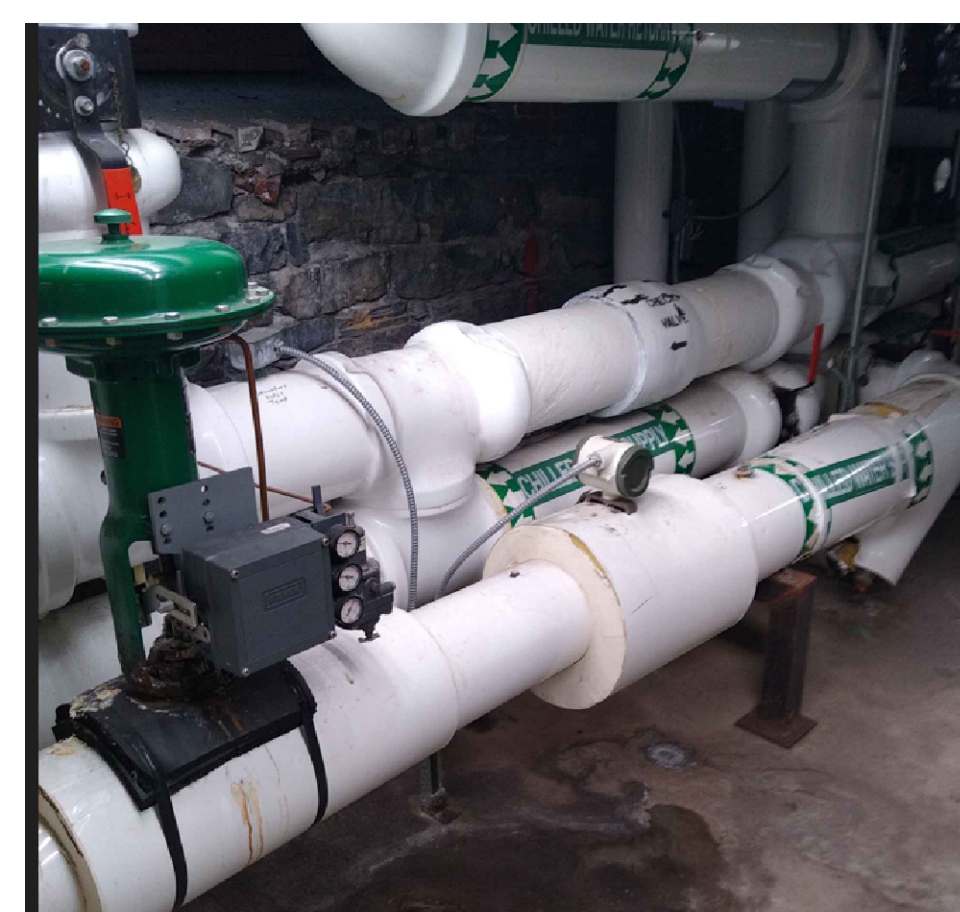
2
M-12
PIPE PREP/DEMOLITION
Scale: 1/8" = 1'-0"



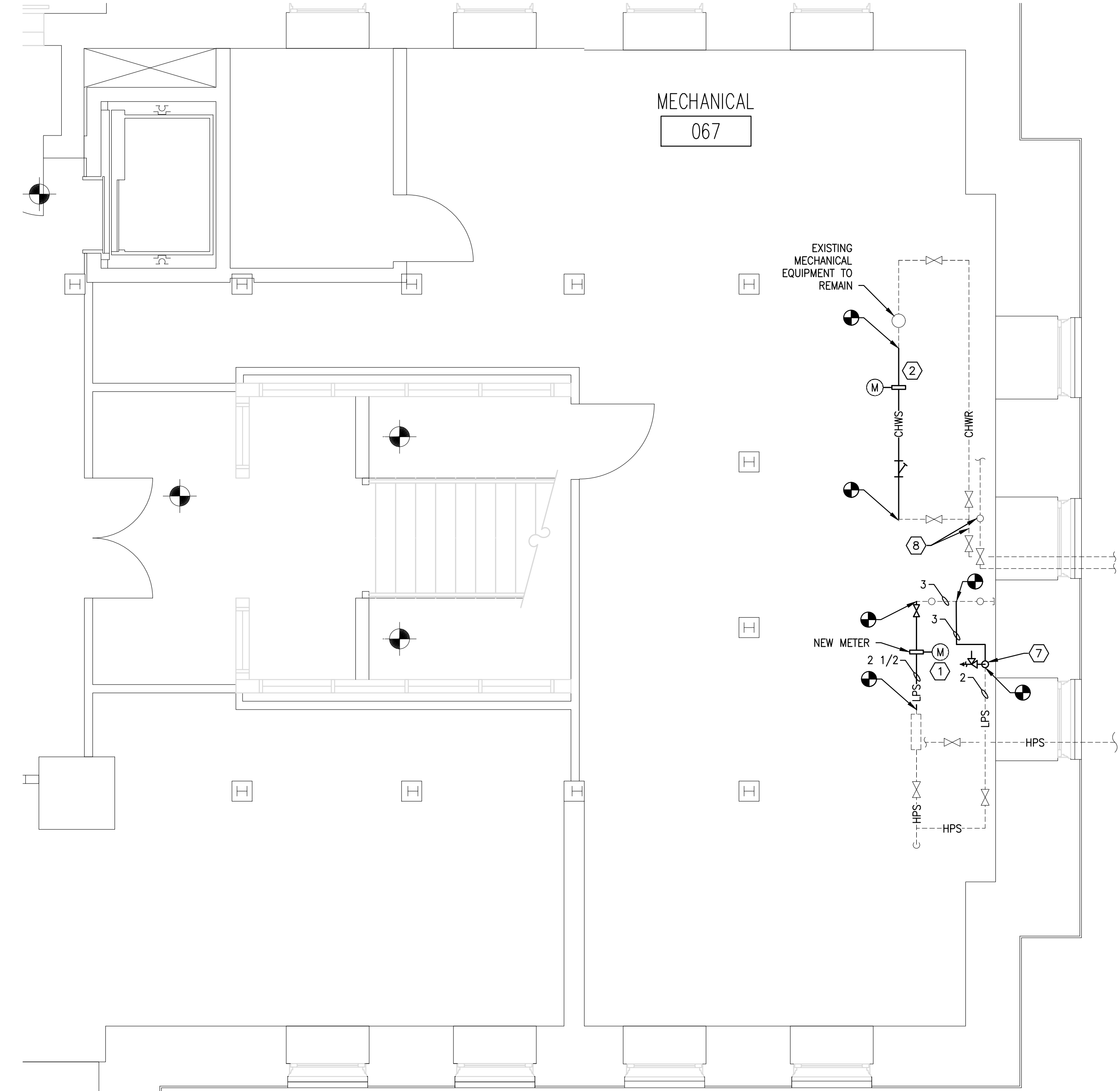
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M-12
PHOTO: STEAM SERVICE
Scale: NONE



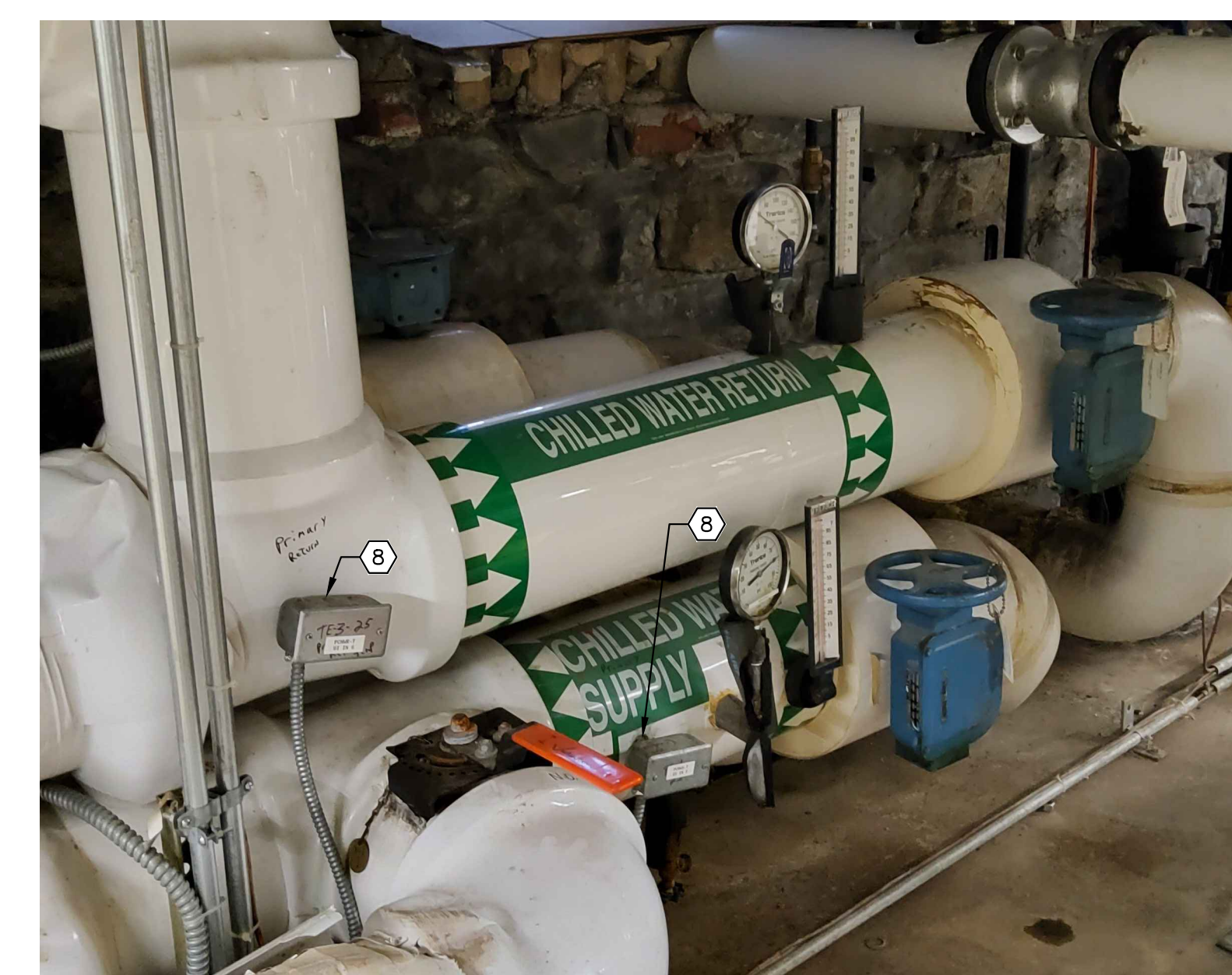
6
M-12
PHOTO: STEAM SERVICE
Scale: NONE AREA OF WORK



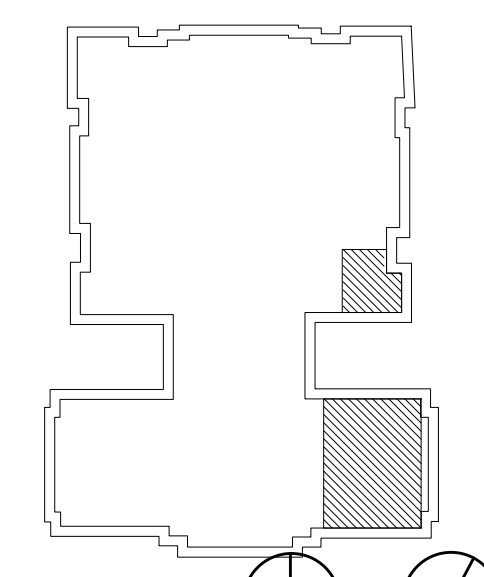
6
M-12
PHOTO: CHILLED WATER SERVICE
Scale: NONE



3
M-12
NEW METER AND PIPING WORK
Scale: 1/4" = 1'-0"



8
M-12
PHOTO: CHILLED WATER TEMPERATURE SENSORS
Scale: NONE TO BE REPLACED



KEY PLAN
SCALE: N.T.S.
PROJECT NORTH TRUE NORTH

NO.	REVISIONS

RECORD REVISIONS

M. RADZICKI
 ENGINEER
 10073186
 02/14/2024
 SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
 52 GLENMAURA NATIONAL BOULEVARD
 SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

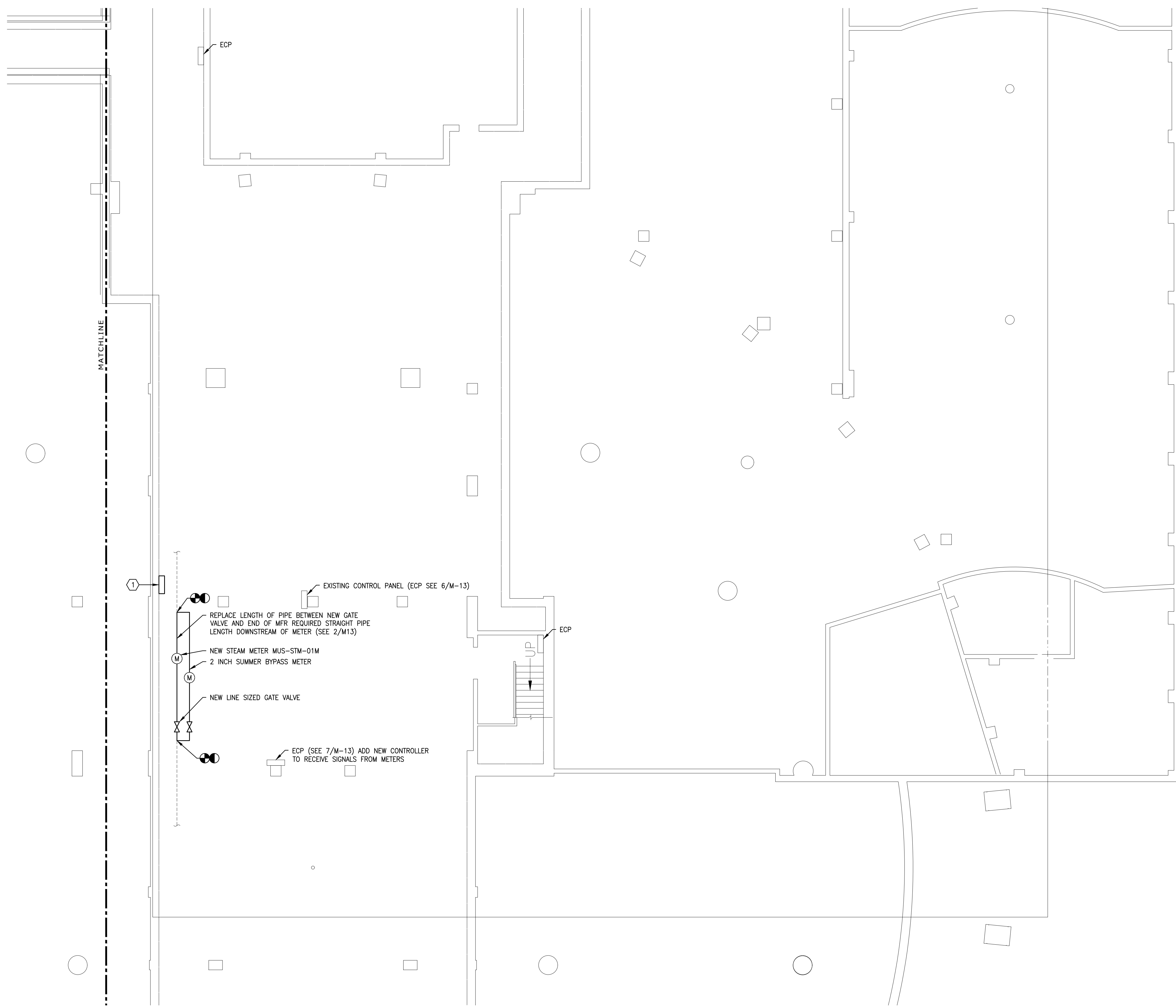
D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE -
 CAPITOL COMPLEX
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, DAUPHIN COUNTY, PA

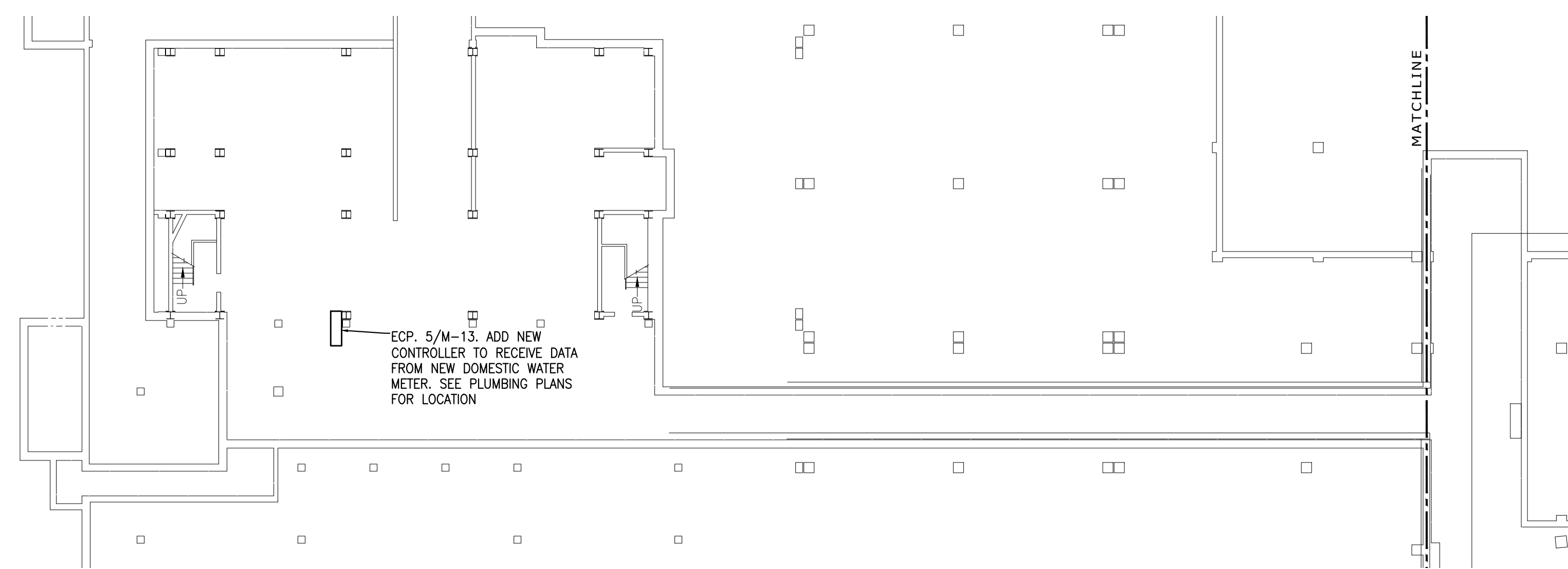
RYAN BUILDING MECHANICAL PLAN

VERIFY SCALE
 BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
 0 1
 IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
 CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

DRAWN BY: M. SKORANSKI DATE: 02/14/24 DRAWING No. M-12
 CHECKED BY: M. RADZICKI SCALE: AS NOTED



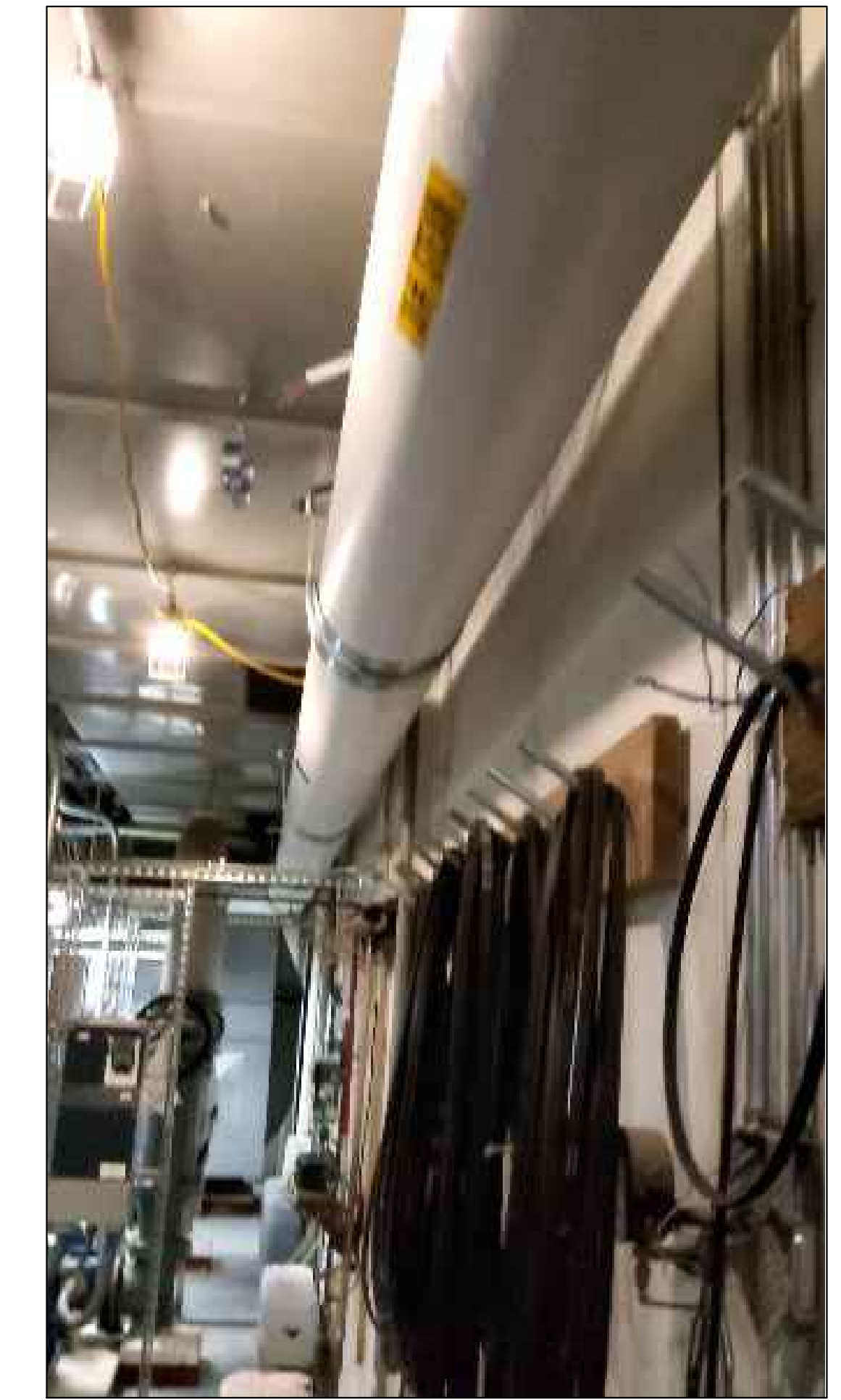
1 BASEMENT MECHANICAL PLAN
M-13
Scale: 1/8" = 1'-0"



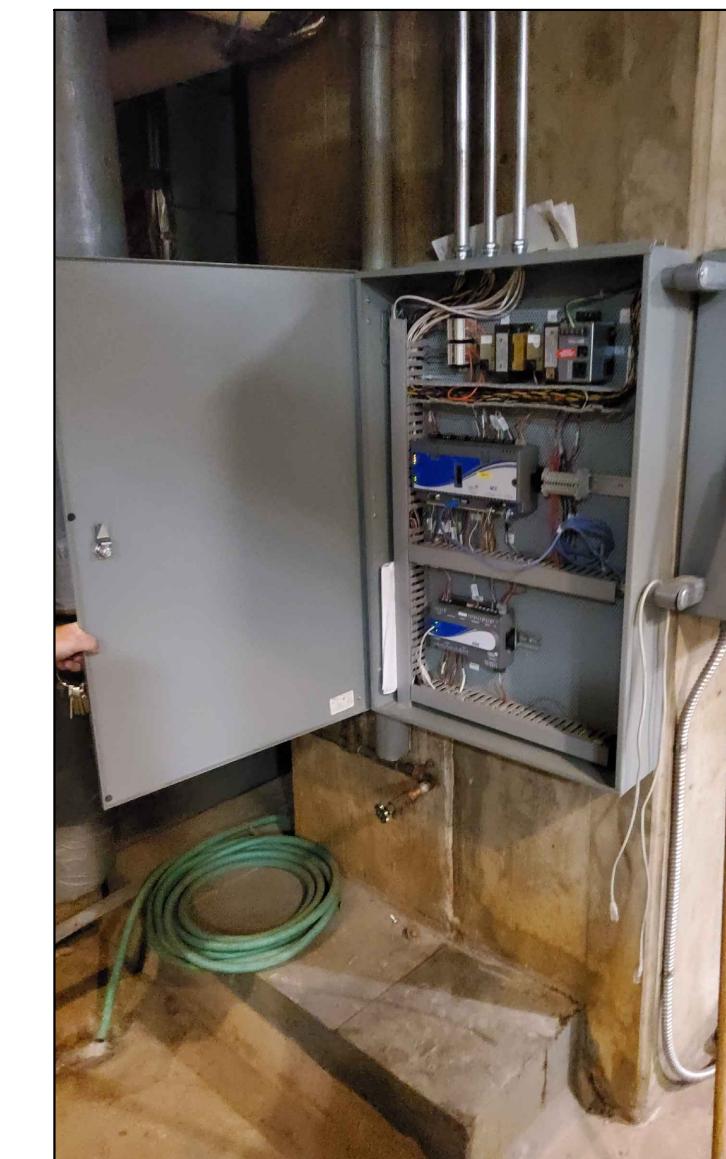
4 BASEMENT MECHANICAL PLAN
M-13
Scale: 1/16" = 1'-0" LOCATION OF NEW CONTROLLER



2 NEW STEAM METER LOCATION
M-13
Scale: NONE

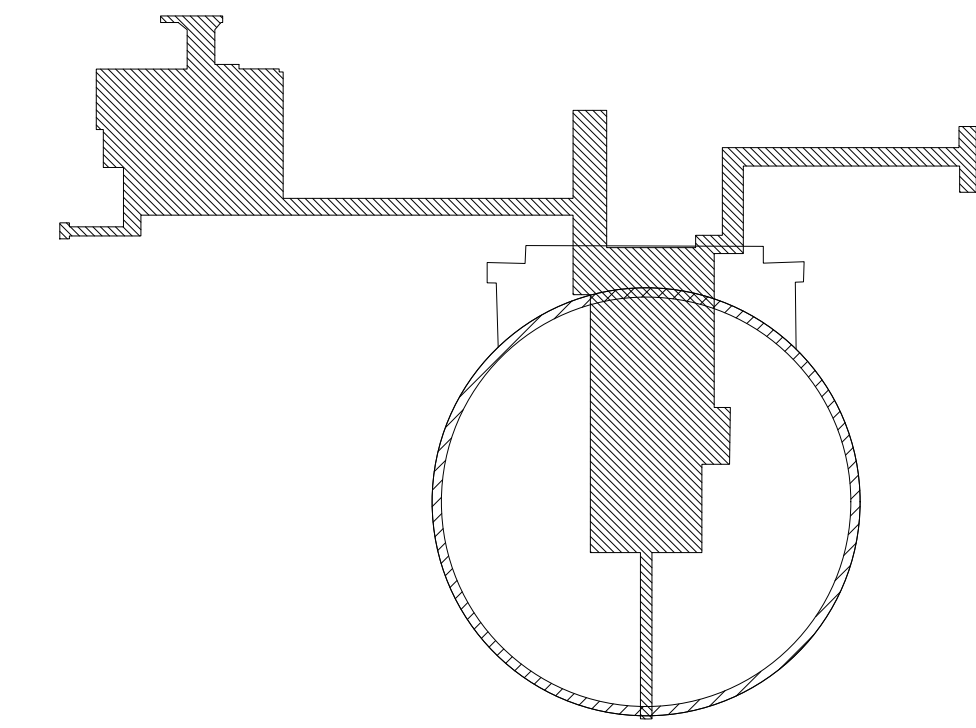


3 NEW STEAM METER LOCATION
M-13
Scale: NONE ALTERNATE VIEW

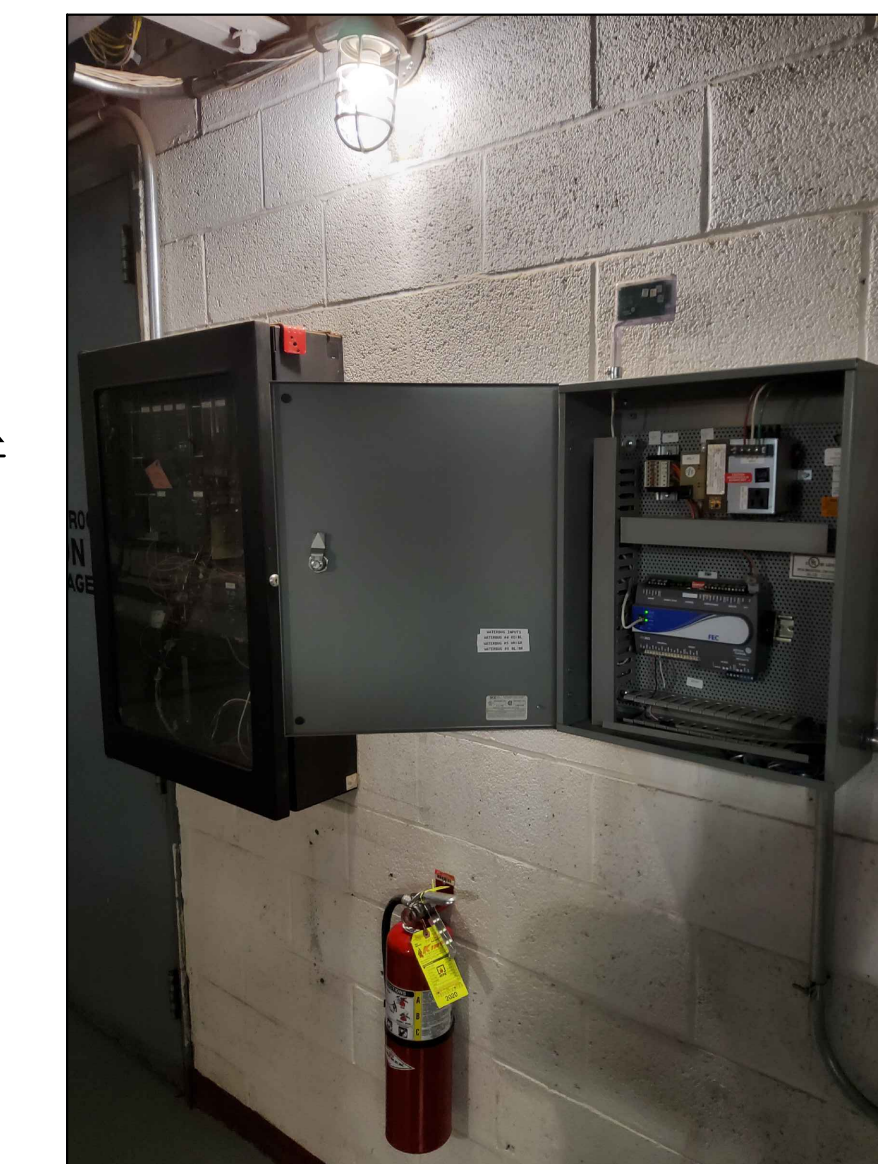
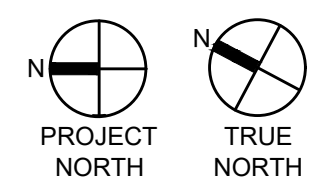


5 ECP NEAR DW METER
M-13
Scale: NONE

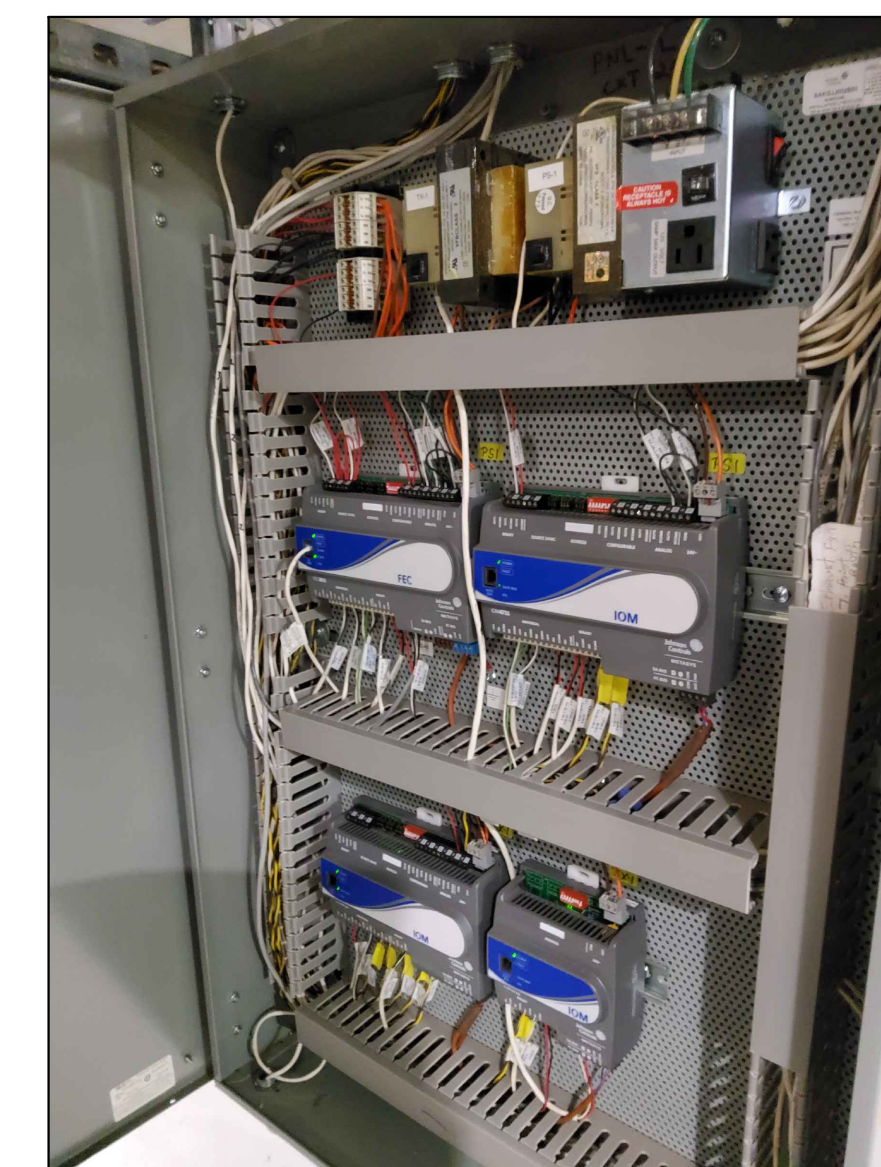
① NCP. CONNECT POWER AND DATA FROM ANY NEARBY ECP



KEY PLAN
SCALE: N.T.S.



8 ECP LAI
M-13
Scale: NONE

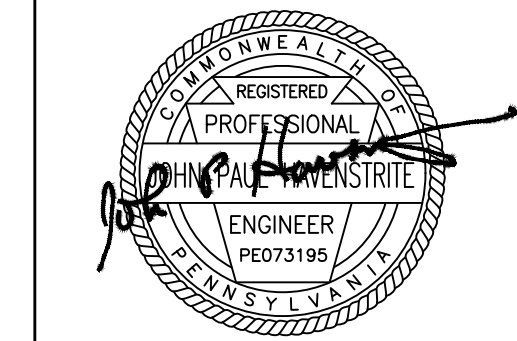


6 ECP CLOSEST TO STEAM METER
M-13
Scale: NONE



7 ECP LAI
M-13
Scale: NONE

RECORD REVISIONS



SIGNATURE DATE SIGNATURE DATE

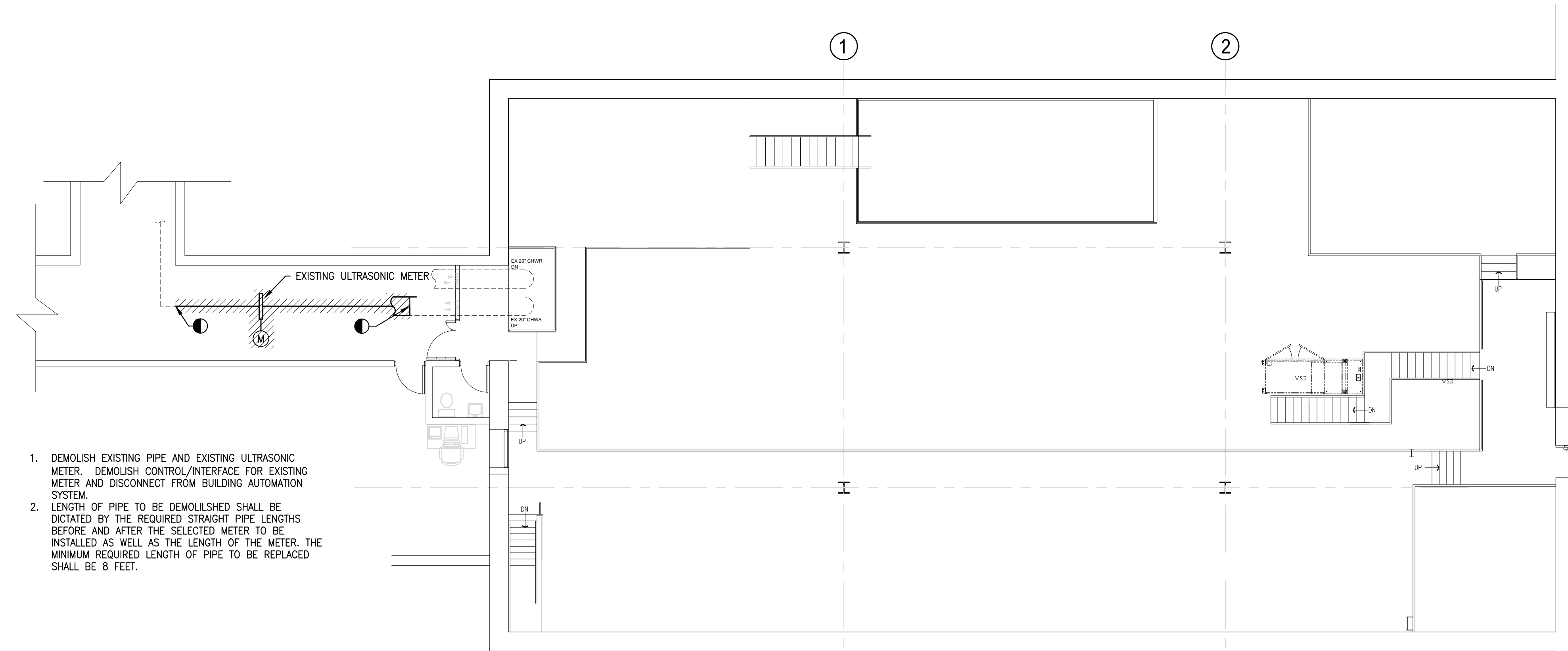
GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

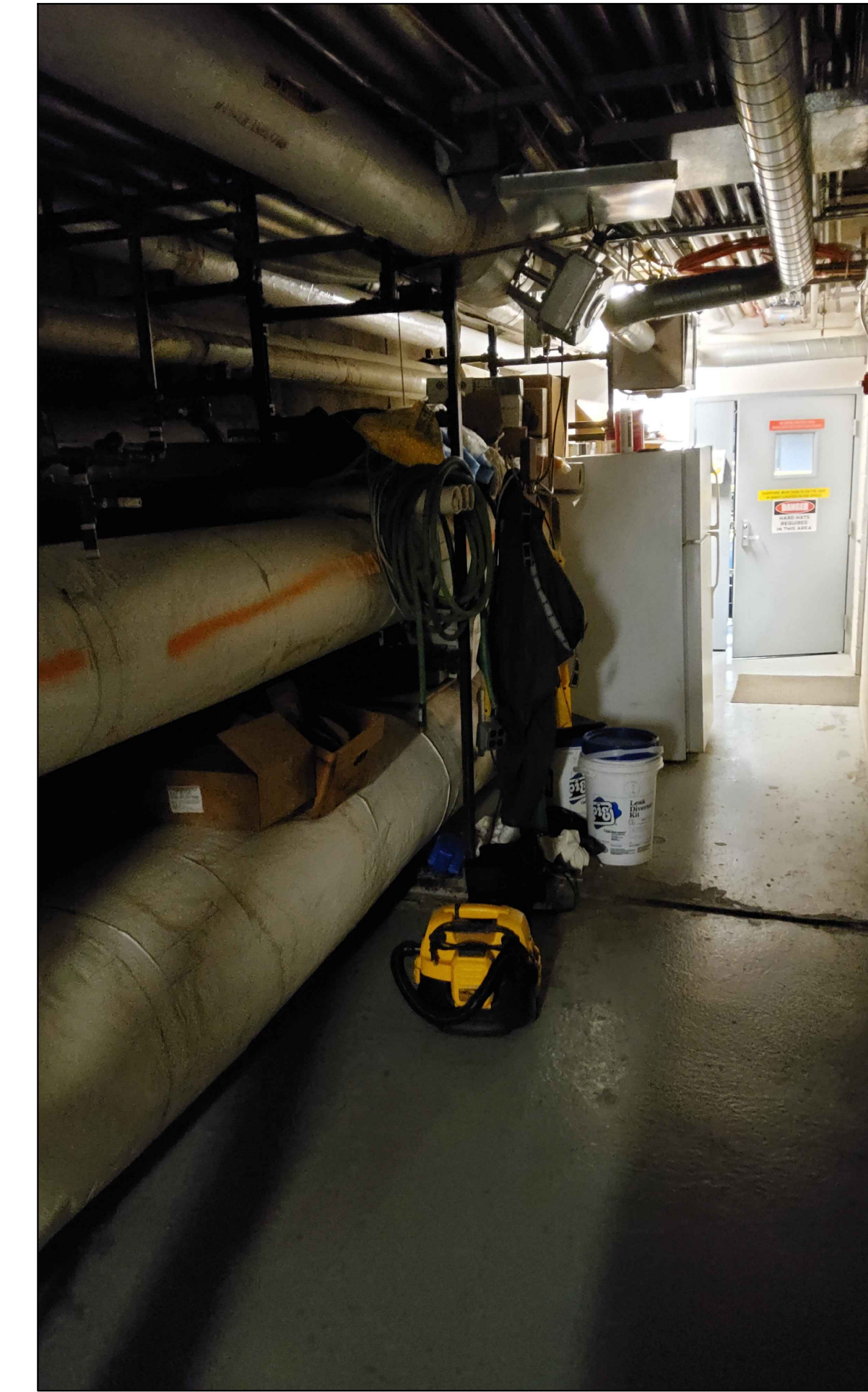
VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
0 1
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

AUTOMATION SYSTEM UPGRADE - CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA
PA STATE MUSEUM MECHANICAL PLAN
DRAWN BY: M. SKORANSKI DATE: 02/14/24 DRAWING No.: M-13
CHECKED BY: M. RADZICKI SCALE: AS NOTED

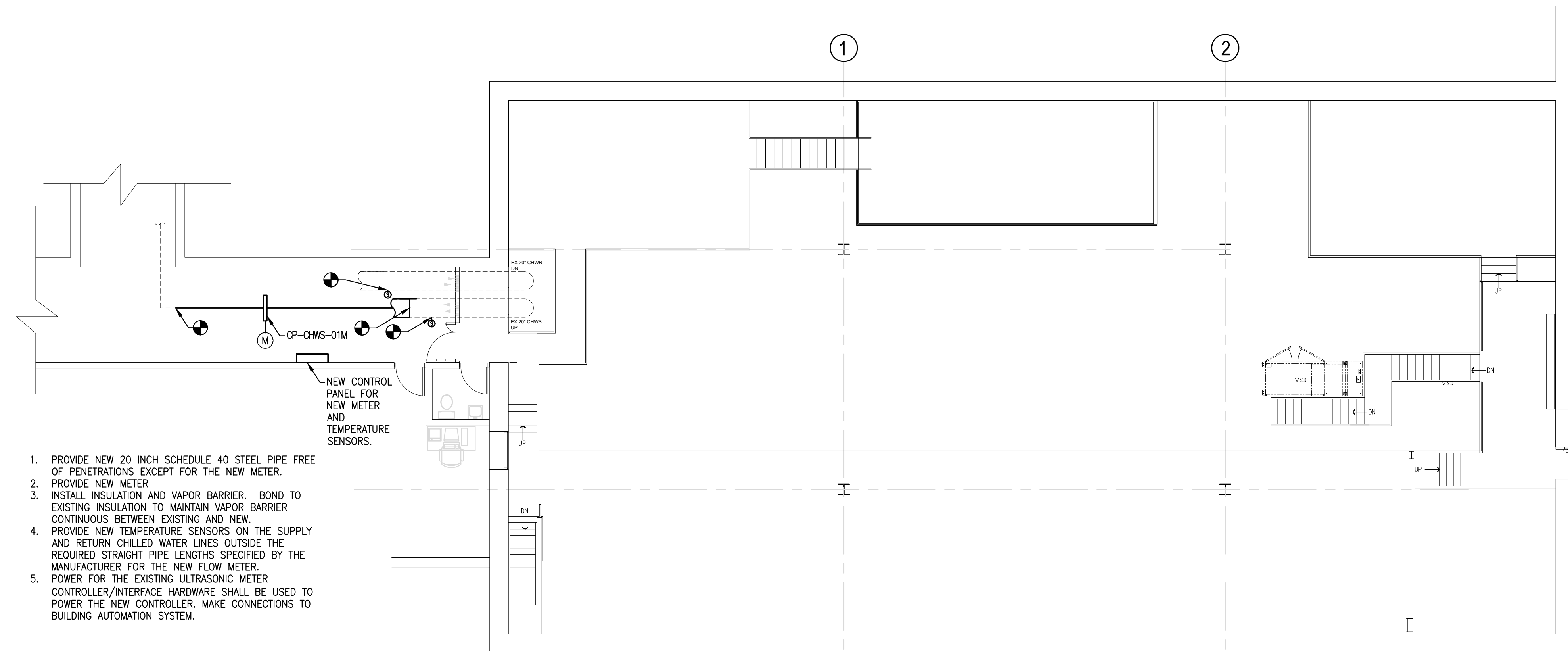


1. DEMOLISH EXISTING PIPE AND EXISTING ULTRASONIC METER. DEMOLISH CONTROL/INTERFACE FOR EXISTING METER AND DISCONNECT FROM BUILDING AUTOMATION SYSTEM.
2. LENGTH OF PIPE TO BE DEMOLISHED SHALL BE DICTATED BY THE REQUIRED STRAIGHT PIPE LENGTHS BEFORE AND AFTER THE SELECTED METER TO BE INSTALLED AS WELL AS THE LENGTH OF THE METER. THE MINIMUM REQUIRED LENGTH OF PIPE TO BE REPLACED SHALL BE 8 FEET.

1
M-14 **TUNNEL (CENTRAL PLANT) MECHANICAL DEMOLITION PLAN**
Scale: 1/8" = 1'-0"

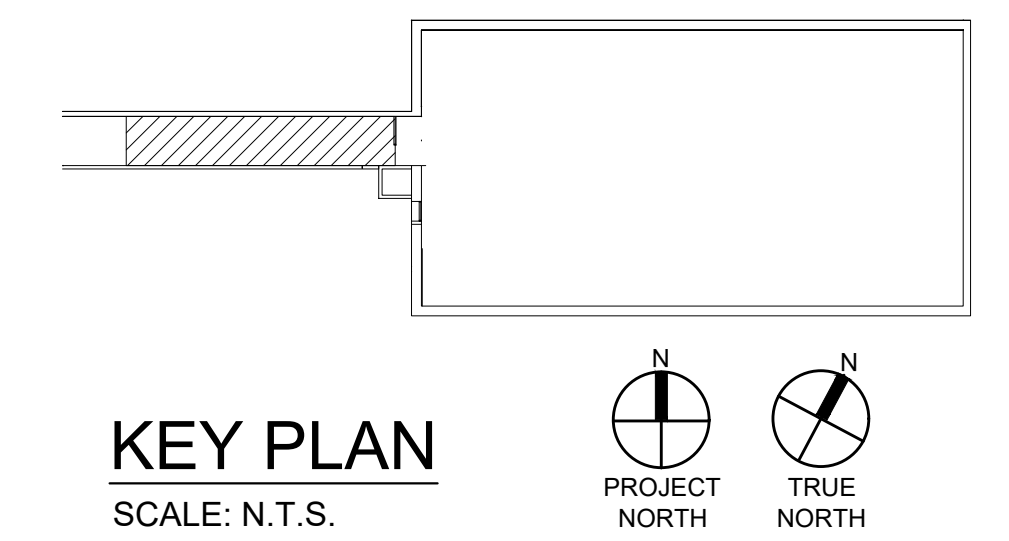


3
M-14 **PHOTO: LOCATION OF DEMOLITION AND NEW WORK**
Scale: NONE

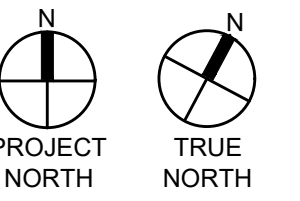


1. PROVIDE NEW 20 INCH SCHEDULE 40 STEEL PIPE FREE OF PENETRATIONS EXCEPT FOR THE NEW METER.
2. PROVIDE NEW METER.
3. INSTALL INSULATION AND VAPOR BARRIER. BOND TO EXISTING INSULATION TO MAINTAIN VAPOR BARRIER CONTINUOUS BETWEEN EXISTING AND NEW.
4. PROVIDE NEW TEMPERATURE SENSORS ON THE SUPPLY AND RETURN CHILLED WATER LINES OUTSIDE THE REQUIRED STRAIGHT PIPE LENGTHS SPECIFIED BY THE MANUFACTURER FOR THE NEW FLOW METER.
5. POWER FOR THE EXISTING ULTRASONIC METER CONTROLLER/INTERFACE HARDWARE SHALL BE USED TO POWER THE NEW CONTROLLER. MAKE CONNECTIONS TO BUILDING AUTOMATION SYSTEM.

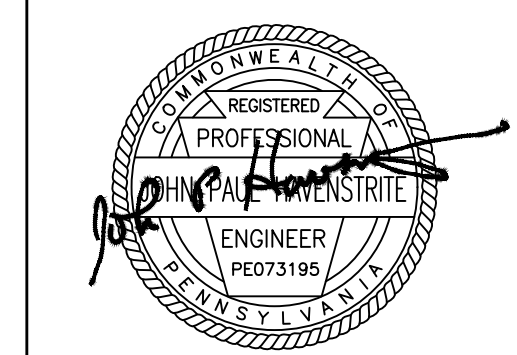
1
M-14 **TUNNEL (CENTRAL PLANT) MECHANICAL NEW WORK PLAN**
Scale: 1/8" = 1'-0"



KEY PLAN
SCALE: N.T.S.



RECORD REVISIONS



SIGNATURE DATE SIGNATURE DATE

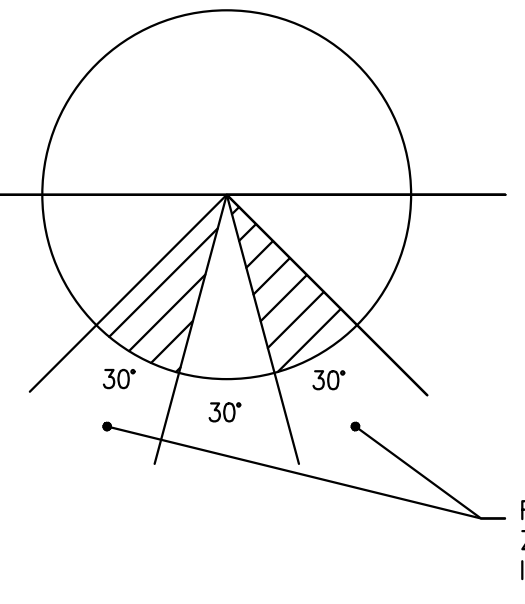
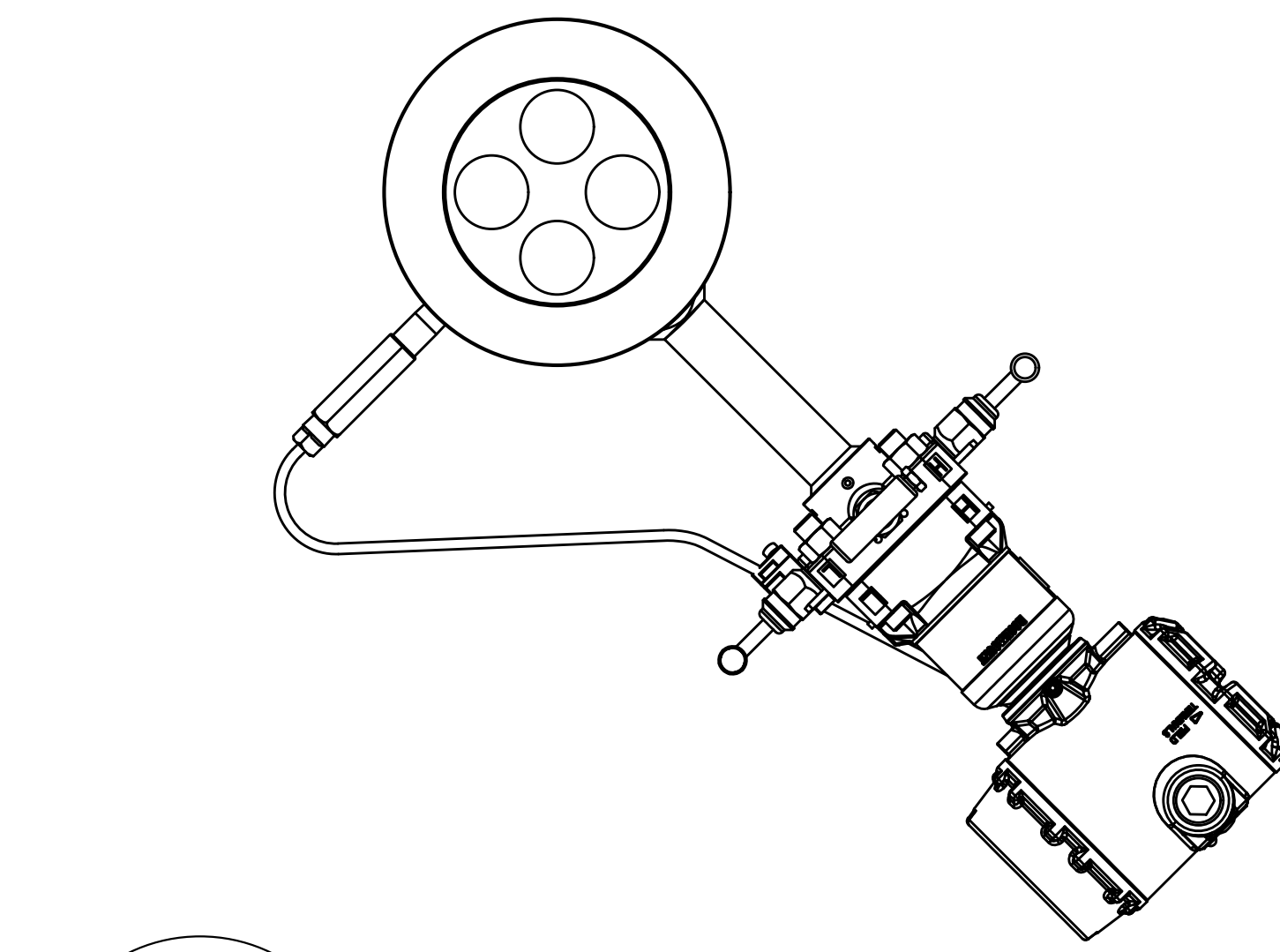
GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

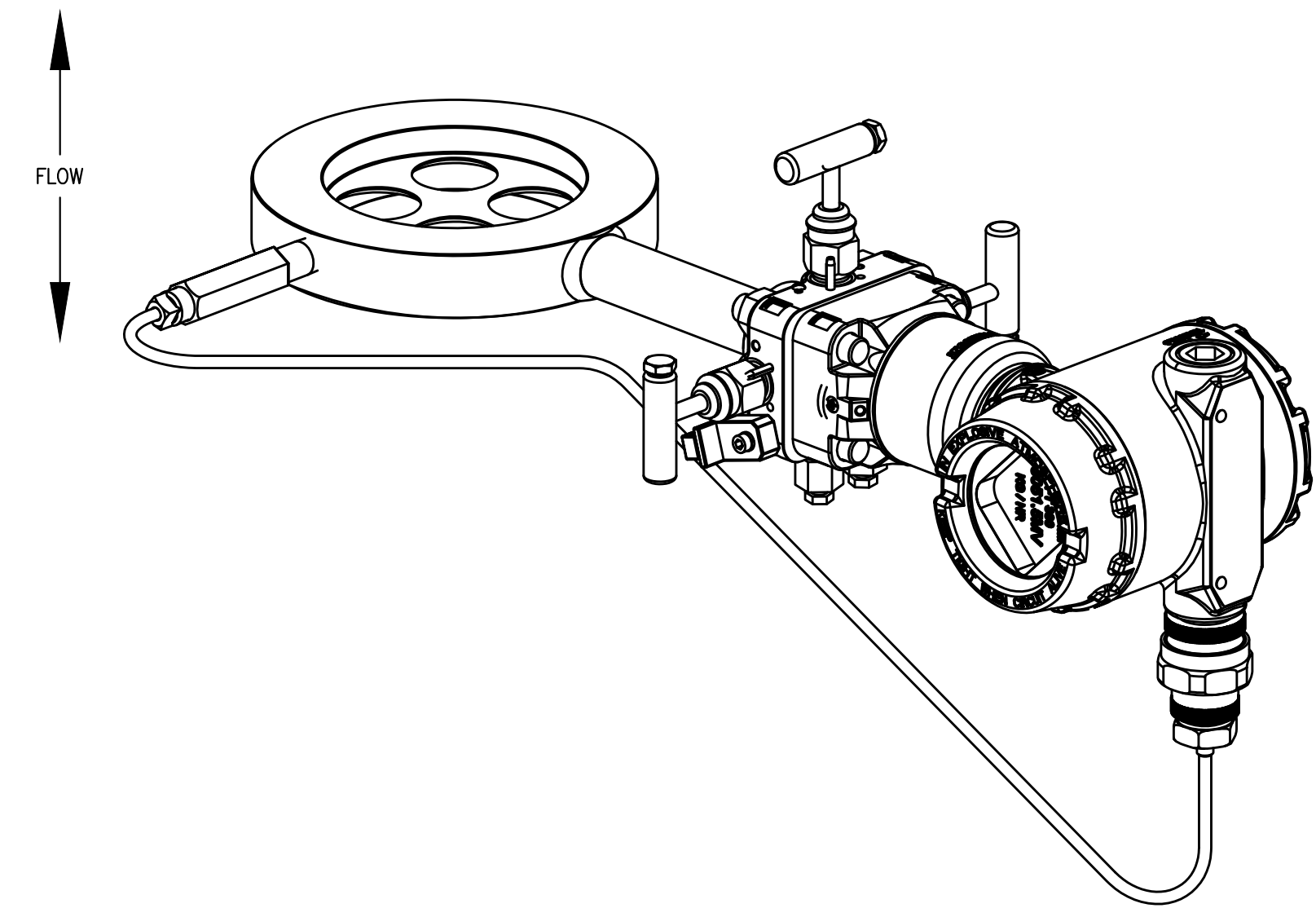
VERIFY SCALE BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING: 0 1 IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.	DRAWN BY M. SKORANSKI	DATE 02/14/24	DRAWING No. M-14
	CHECKED BY M. RADZICKI	SCALE AS NOTED	

AUTOMATION SYSTEM UPGRADE – CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA
CENTRAL PLANT MECHANICAL PLAN

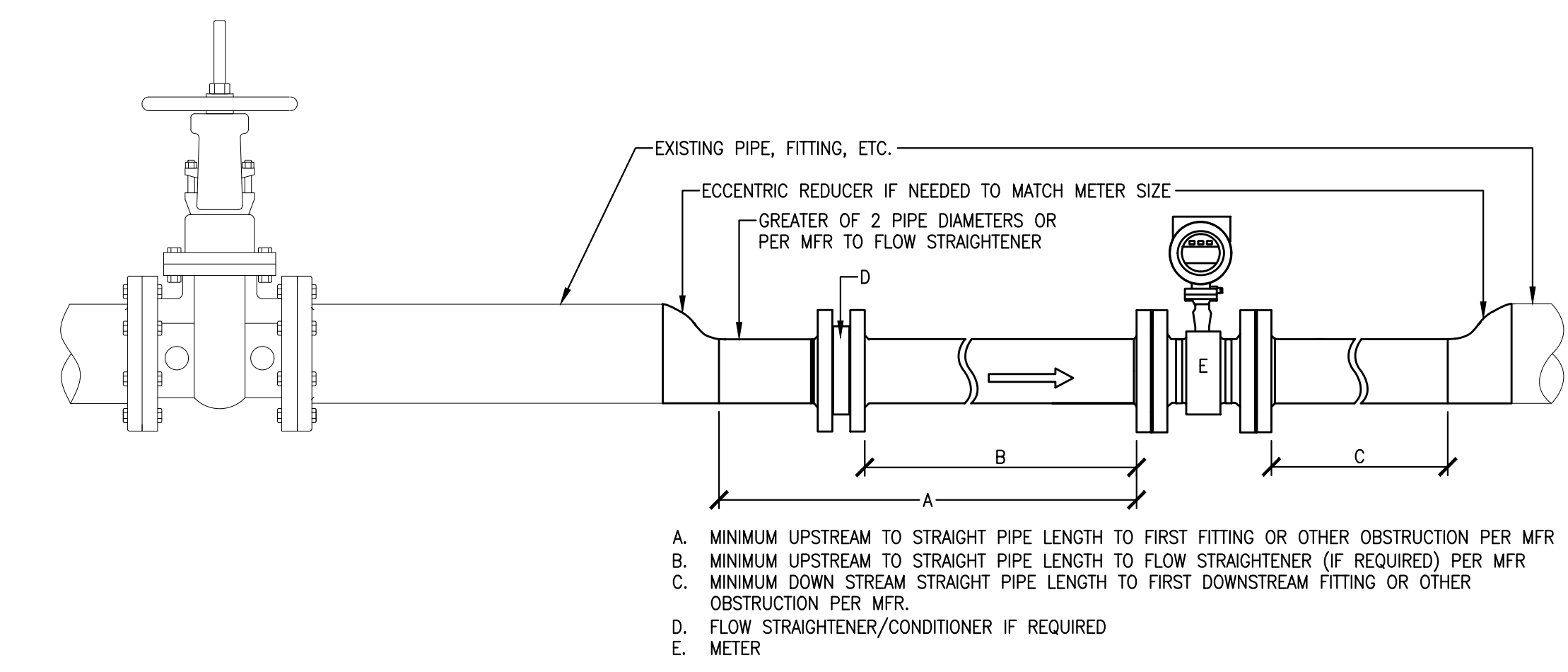


WHERE SPACE IS LIMITED AND THE INSTRUMENT CANNOT BE INSTALLED IN THE RECOMMENDED ZONE(S), THE INSTALLATION SHALL BE IN THE LOWER HALF OF THE PIPE'S CIRCUMFERENCE.

1 HORIZONTAL STEAM SERVICE
M-16 No Scale

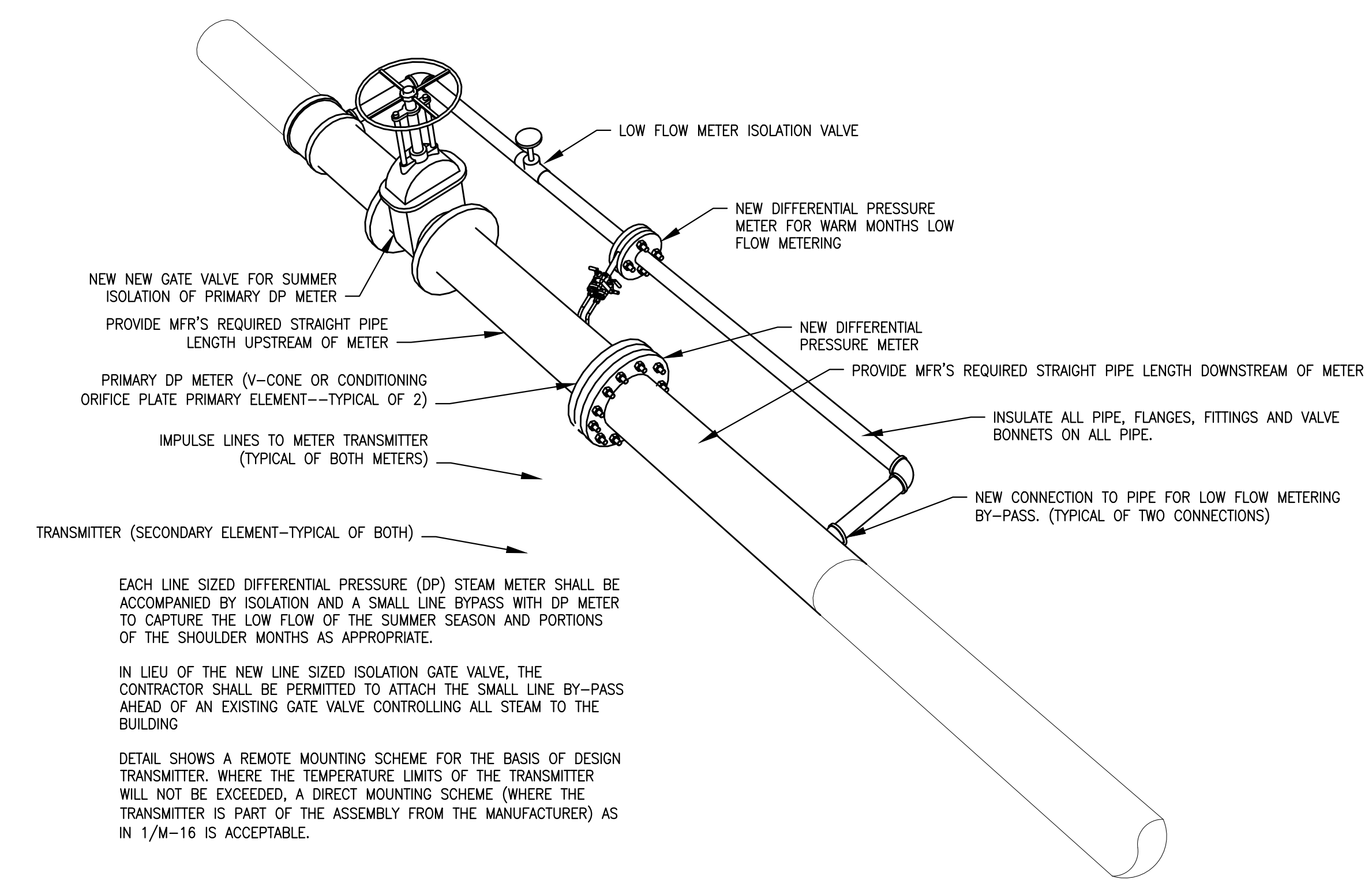


2 VERTICAL STEAM SERVICE
M-16 No Scale



- A. MINIMUM UPSTREAM TO STRAIGHT PIPE LENGTH TO FIRST FITTING OR OTHER OBSTRUCTION PER MFR
- B. MINIMUM UPSTREAM TO STRAIGHT PIPE LENGTH TO FLOW STRAIGHTENER (IF REQUIRED) PER MFR
- C. MINIMUM DOWN STREAM STRAIGHT PIPE LENGTH TO FIRST DOWNSTREAM FITTING OR OTHER OBSTRUCTION PER MFR
- D. FLOW STRAIGHTENER/CONDITIONER IF REQUIRED
- E. METER

3 FLOW STRAIGHTER/CONDITIONER WHERE REQUIRED
M-16 REQUIRED BY CONDITIONS AND METER SELECTED (SHOWN WITH PIPE REDUCTION—WHERE REQUIRED) HORIZONTAL PIPING
No Scale

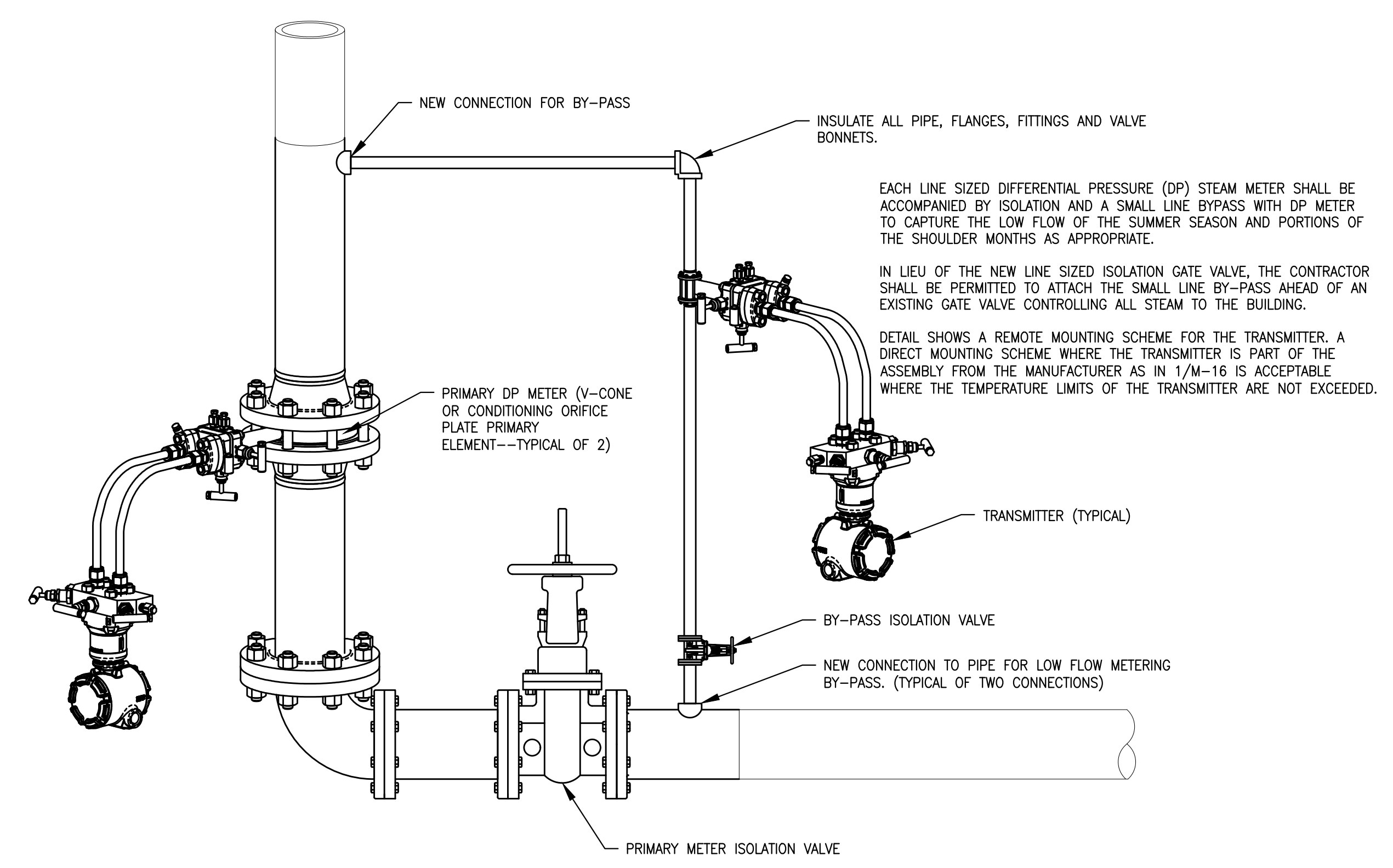


EACH LINE SIZED DIFFERENTIAL PRESSURE (DP) STEAM METER SHALL BE ACCOMPANIED BY ISOLATION AND A SMALL LINE BY-PASS WITH DP METER TO CAPTURE THE LOW FLOW OF THE SUMMER SEASON AND PORTIONS OF THE SHOULDER MONTHS AS APPROPRIATE.

IN LIEU OF THE NEW LINE SIZED ISOLATION GATE VALVE, THE CONTRACTOR SHALL BE PERMITTED TO ATTACH THE SMALL LINE BY-PASS AHEAD OF AN EXISTING GATE VALVE CONTROLLING ALL STEAM TO THE BUILDING

DETAIL SHOWS A REMOTE MOUNTING SCHEME FOR THE BASIS OF DESIGN TRANSMITTER, WHERE THE TEMPERATURE LIMITS OF THE TRANSMITTER WILL NOT BE EXCEEDED, A DIRECT MOUNTING SCHEME (WHERE THE TRANSMITTER IS PART OF THE ASSEMBLY FROM THE MANUFACTURER) AS IN 1/M-16 IS ACCEPTABLE.

4 STEAM METER PIPING DETAIL (HORIZONTAL PIPING)
M-16 No Scale

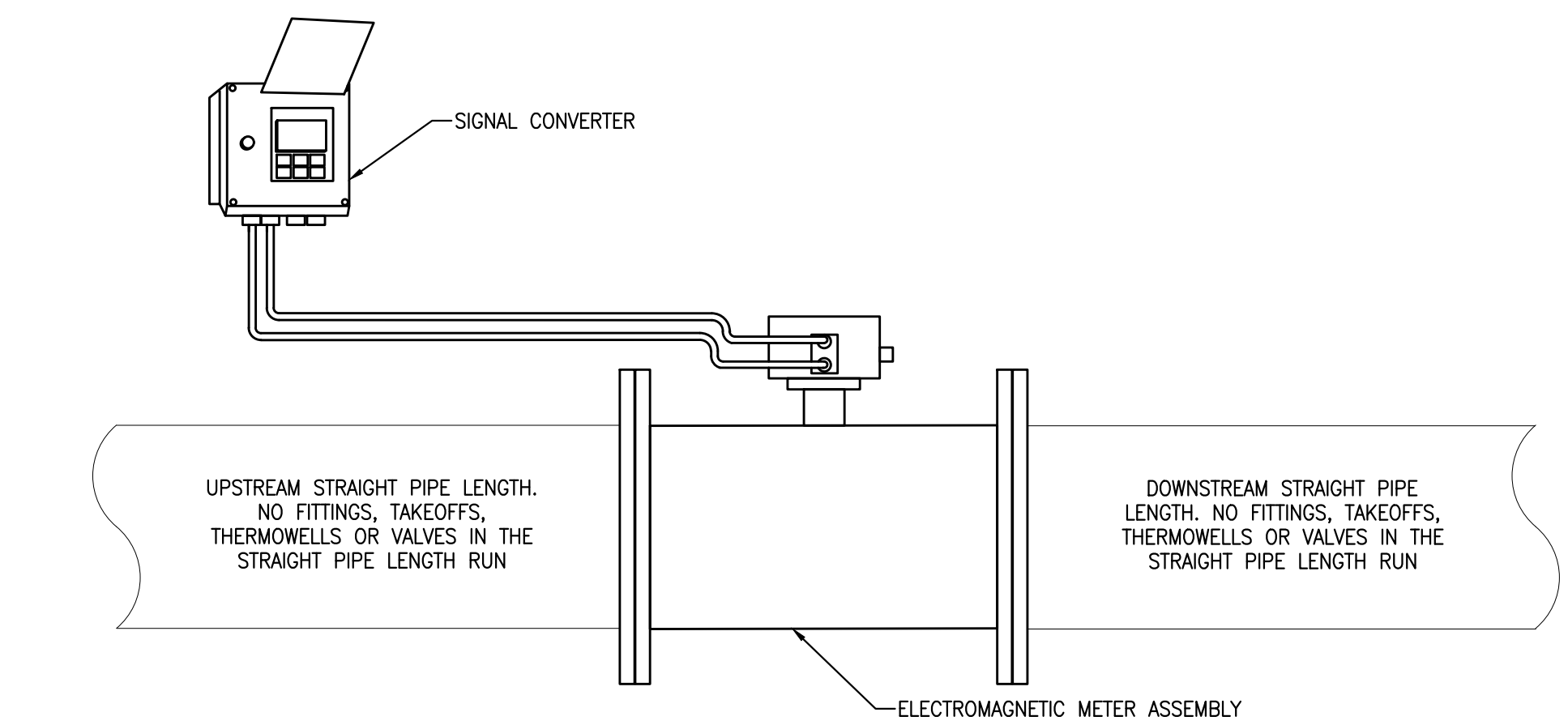


EACH LINE SIZED DIFFERENTIAL PRESSURE (DP) STEAM METER SHALL BE ACCOMPANIED BY ISOLATION AND A SMALL LINE BY-PASS WITH DP METER TO CAPTURE THE LOW FLOW OF THE SUMMER SEASON AND PORTIONS OF THE SHOULDER MONTHS AS APPROPRIATE.

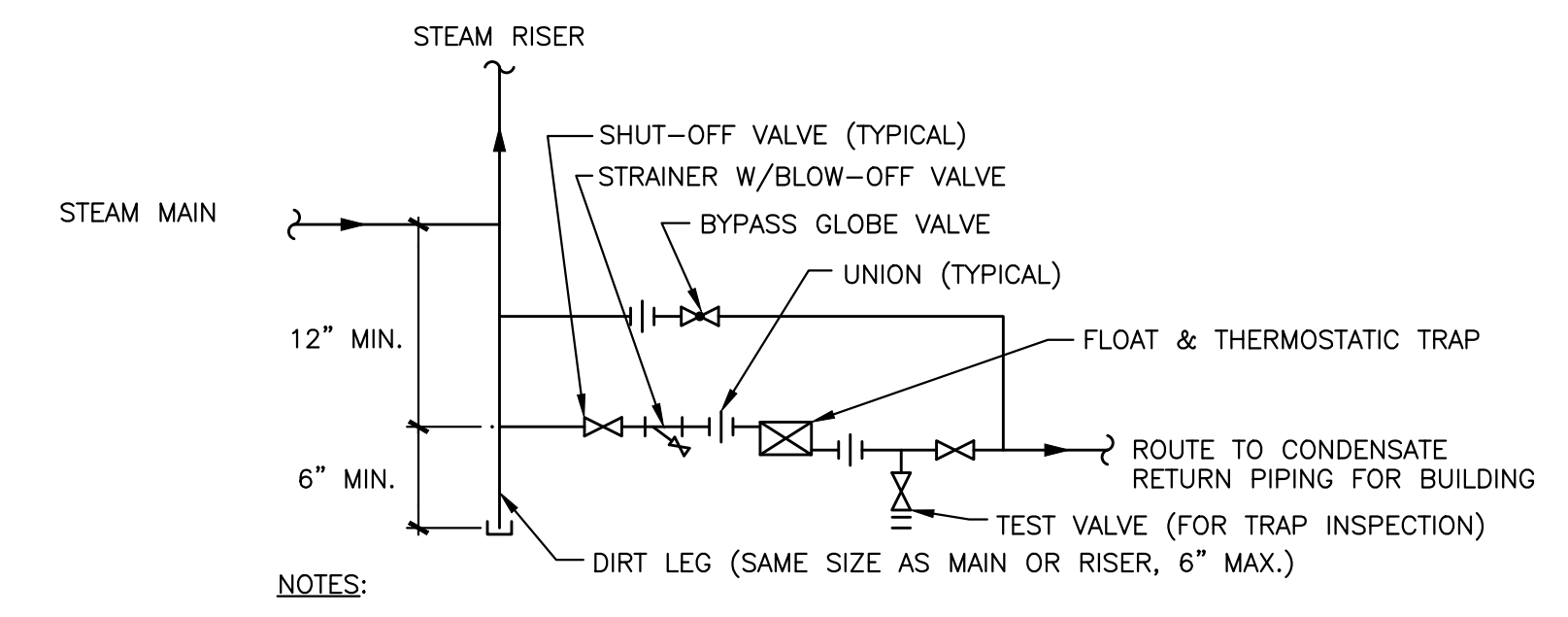
IN LIEU OF THE NEW LINE SIZED ISOLATION GATE VALVE, THE CONTRACTOR SHALL BE PERMITTED TO ATTACH THE SMALL LINE BY-PASS AHEAD OF AN EXISTING GATE VALVE CONTROLLING ALL STEAM TO THE BUILDING.

DETAIL SHOWS A REMOTE MOUNTING SCHEME FOR THE TRANSMITTER, A DIRECT MOUNTING SCHEME WHERE THE TRANSMITTER IS PART OF THE ASSEMBLY FROM THE MANUFACTURER AS IN 1/M-16 IS ACCEPTABLE WHERE THE TEMPERATURE LIMITS OF THE TRANSMITTER ARE NOT EXCEEDED.

5 STEAM METER PIPING DETAIL (VERTICAL PIPING)
M-16 No Scale

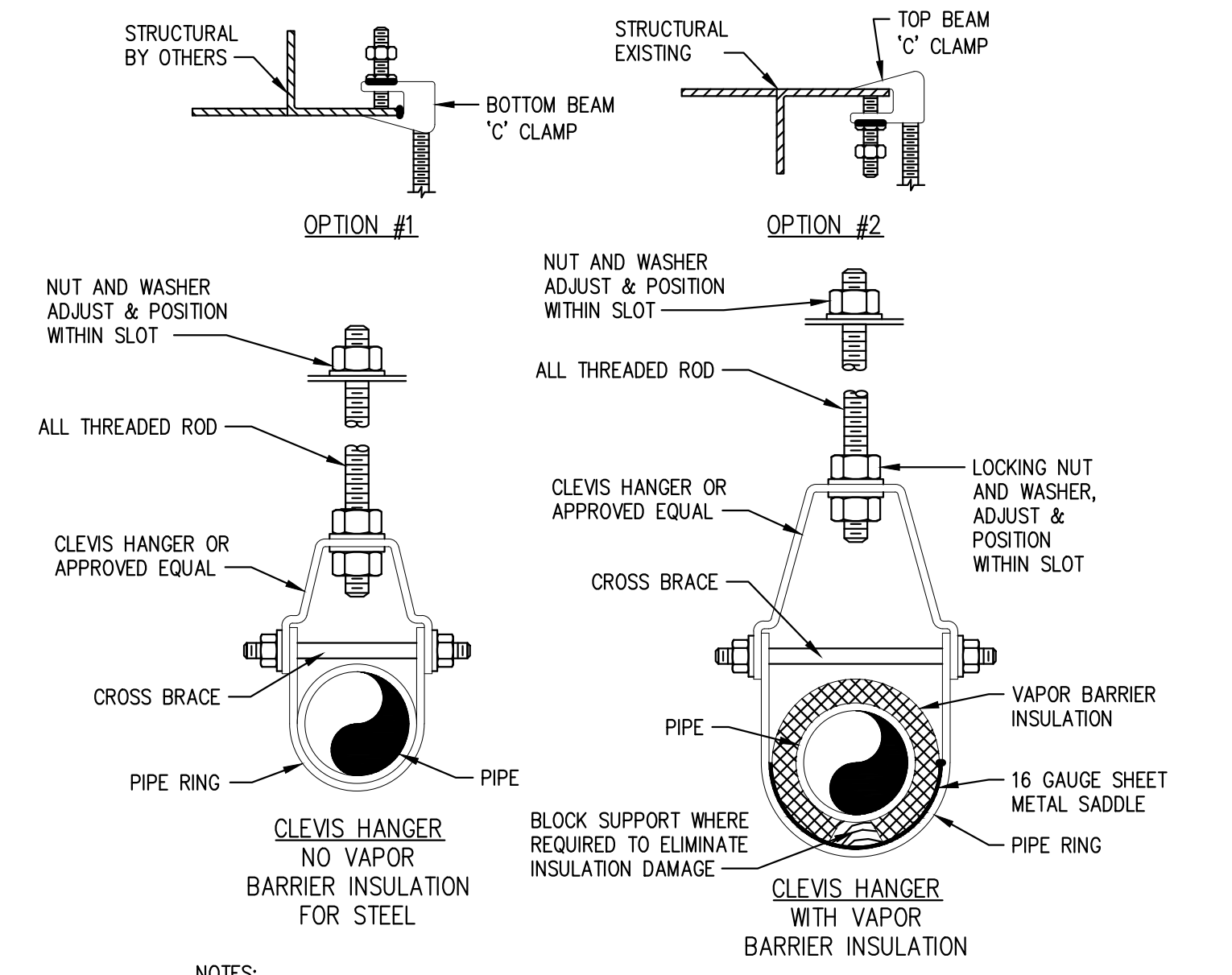


6 CHILLED WATER METER
M-16 No Scale



- NOTES:
- TRAP AND BYPASS PIPING IN SAME HORIZONTAL PLANE.

7 STEAM TRAP ASSEMBLY
M-16 No Scale



- NOTES:
- PIPE HANGER AND ROD SHALL BE GALVANIZED STEEL EXCEPT HANGERS FOR COPPER PIPING SHALL BE COPPER COATED.
 - FOR COPPER TUBING USE PLASTIC COATED B3100C OR APPROVED EQUAL.
 - COORDINATE SLOT LOCATIONS WITH HANGERS.

8 PIPE HANGER DETAIL
M-16 No Scale

RECORD REVISIONS

02/14/2024
 SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE –
CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

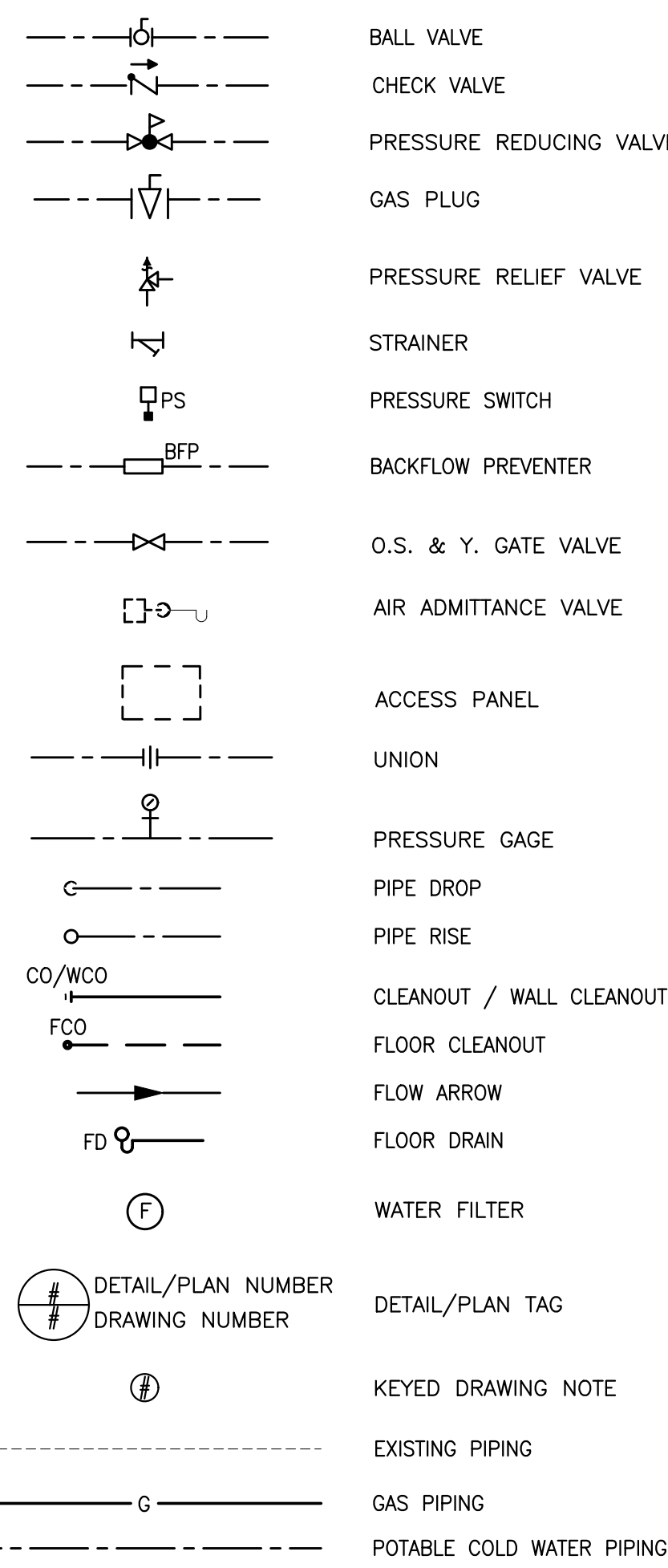
MECHANICAL DETAILS

VERIFY SCALE		DRAWN BY M. SKORANSKI	DATE 02/14/24	DRAWING No. M-16
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING: 0 1				
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY		CHECKED BY M. RADZICKI	SCALE AS NOTED	
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.				

ABBREVIATIONS

Table of abbreviations including AFF (Above Finish Floor), ALT (Alternate), ANW (Area of Work Access Panel), CAP (Capacity), etc.

LEGEND



GENERAL PLUMBING DEMOLITION NOTES

- 1. CONSTRUCTION MATERIALS AND EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE OWNER. UNWANTED CONSTRUCTION MATERIALS AND EQUIPMENT SHALL BE LEGALLY DISPOSED OF, OFF THE SITE UNLESS NOTED OTHERWISE.

GENERAL PLUMBING NOTES

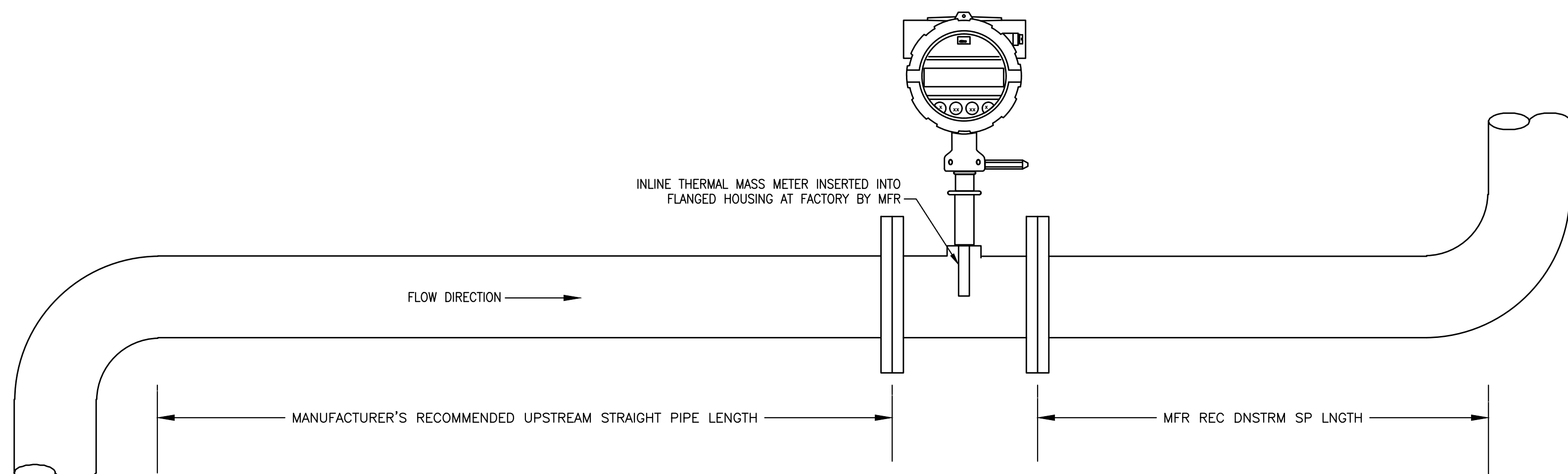
- A. GENERAL PLUMBING NOTES
1. PROVIDE ALL LABOR AND MATERIALS NEEDED TO INSTALL METERS IN EXISTING PLUMBING SYSTEM AND MAINTAIN ACCESS TO THE BUILDING DURING AND AFTER COMPLETION OF WORK.

GENERAL PLUMBING NOTES (CON'T.)

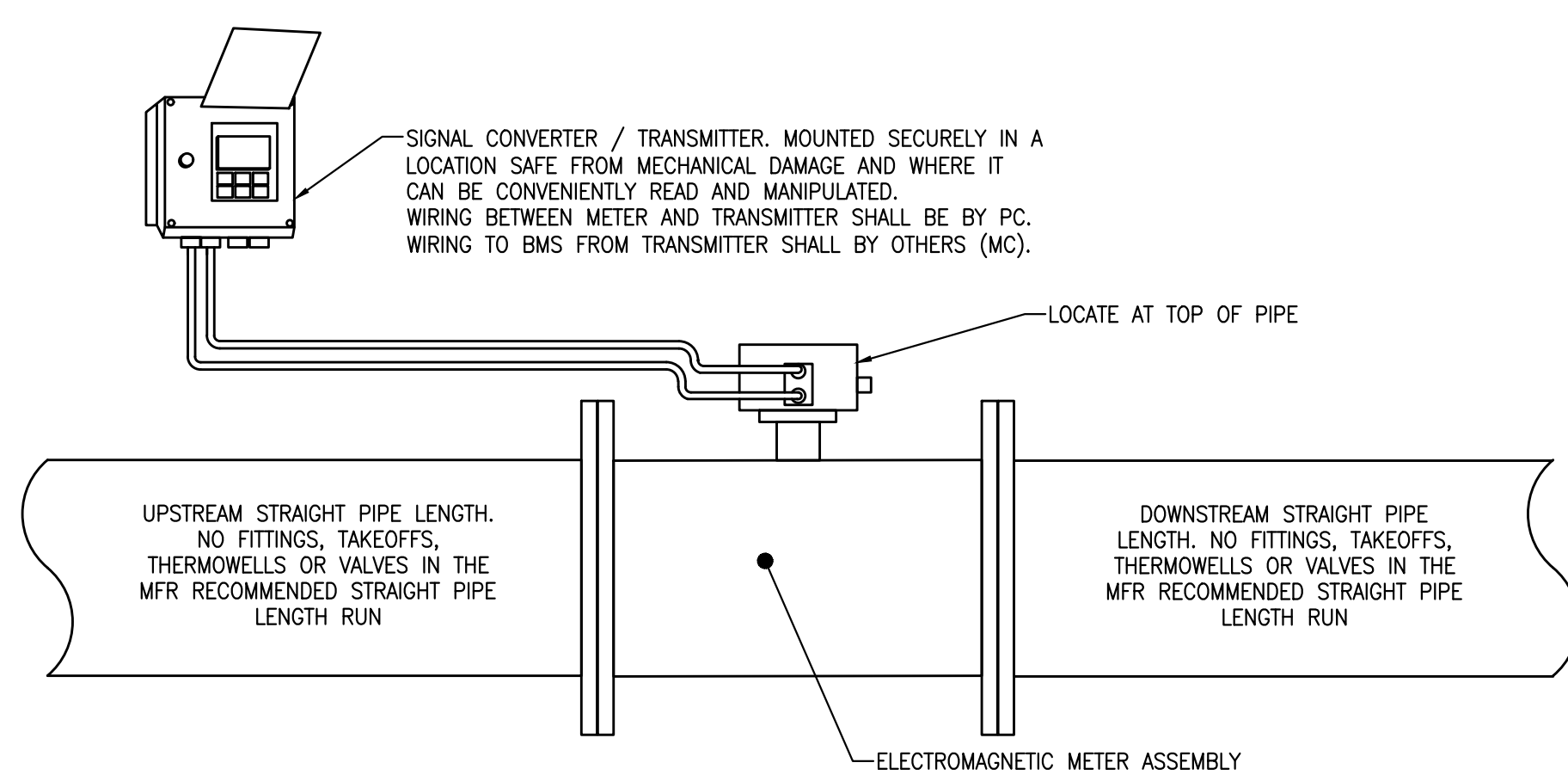
- C. PLUMBING INSTALLATION REQUIREMENTS
1. INSTALL ALL EQUIPMENT AND MATERIAL IN ACCORDANCE WITH MANUFACTURERS PRINTED INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS. MAINTAIN CLEARANCES FOR CLEARANCE ACCESS TO MAINTAIN AND SERVICE EQUIPMENT, VALVES AND CONTROL.

GENERAL LOCATION AND SIZING NOTES FOR PIPE AND METERS:

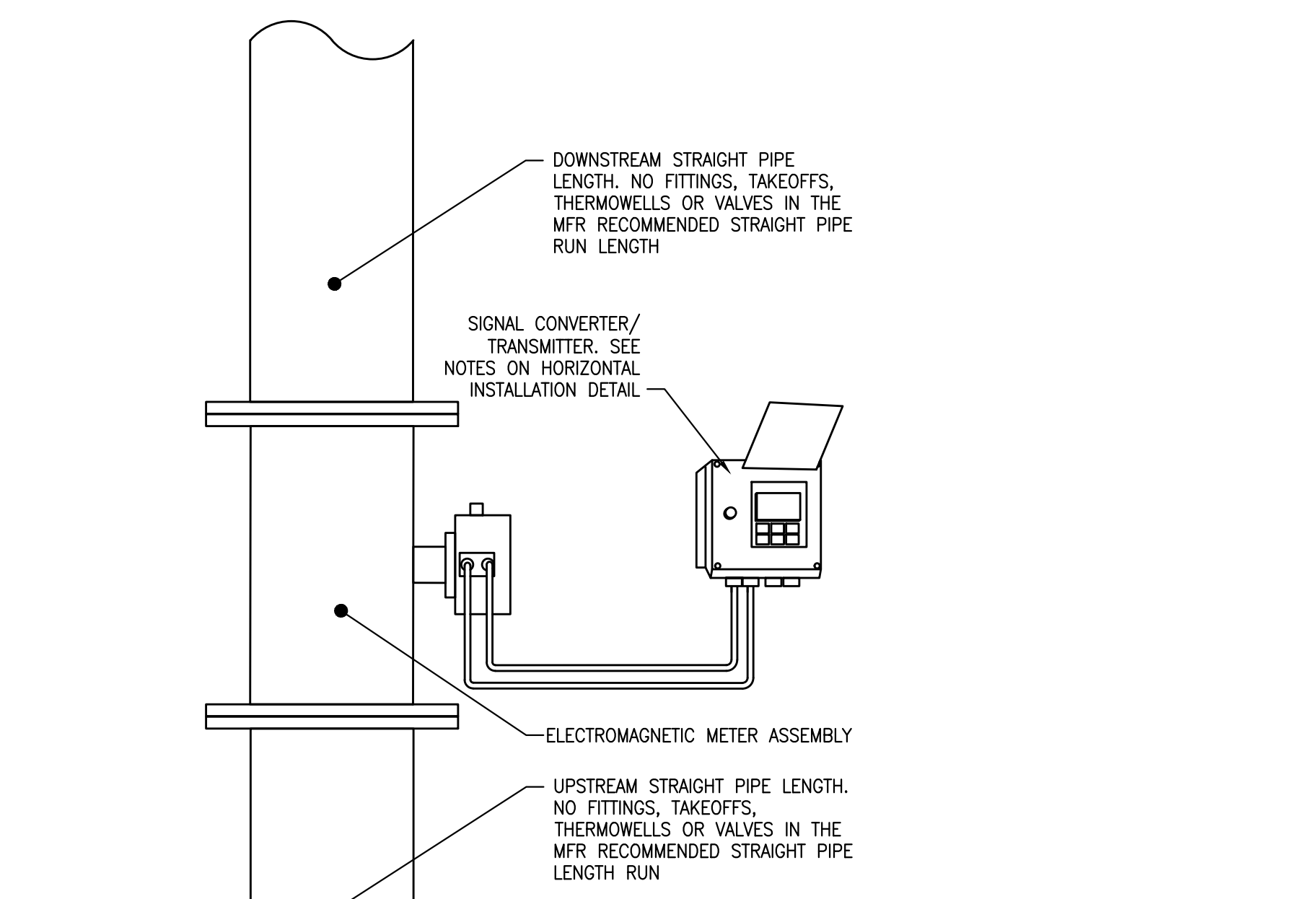
- 1. GAS METERS SHALL BE SIZED FOR THE ANTICIPATED FLOW RATHER THAN EXISTING LINE SIZE TO MAXIMIZE THE ACCURACY OF MEASUREMENT.



1 P-0 HORIZONTAL GAS SERVICE METER No Scale



2 P-0 DOMESTIC WATER SERVICE METER No Scale HORIZONTAL INSTALLATION



3 P-0 DOMESTIC WATER METER No Scale VERTICAL INSTALLATION

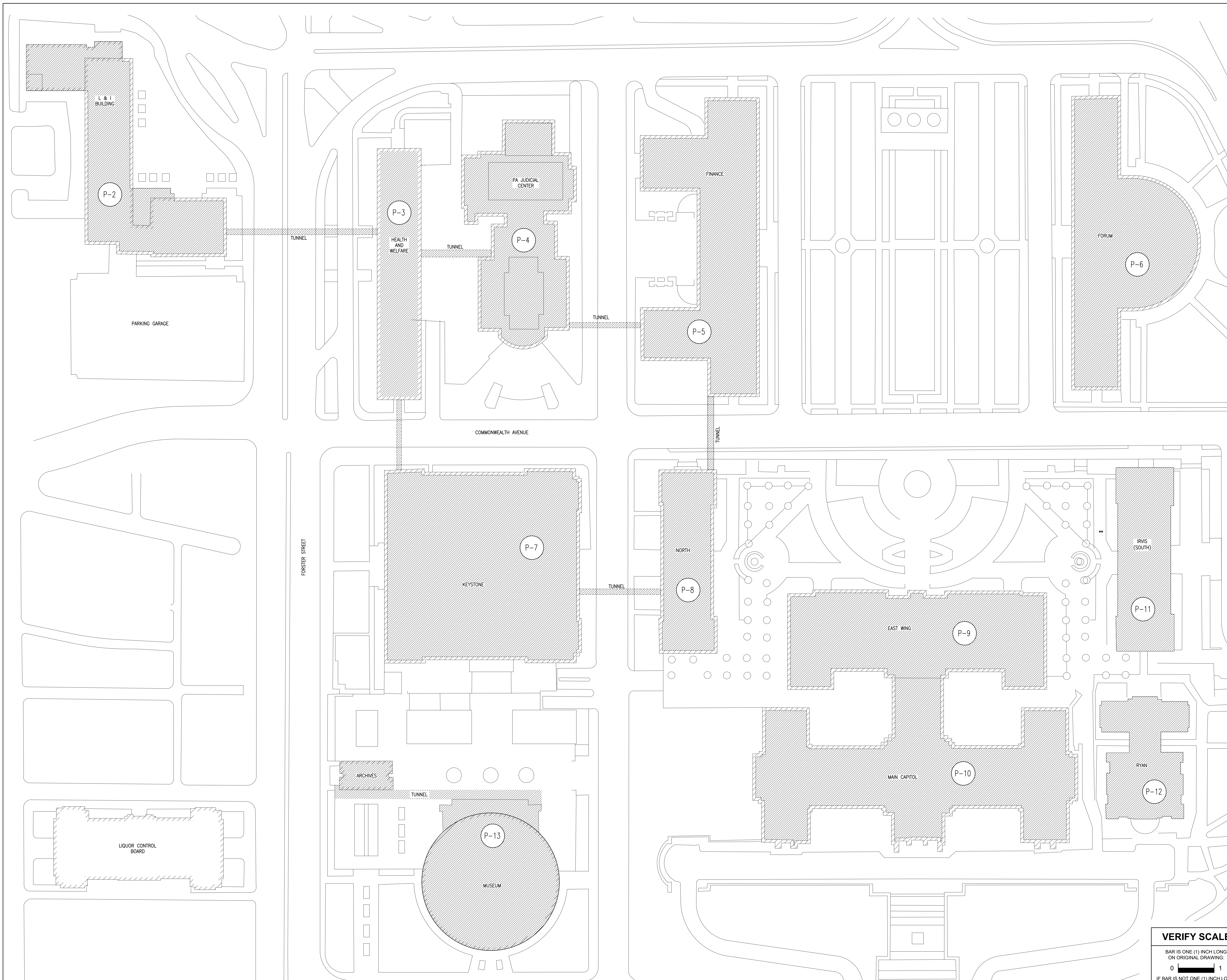
System No. C-AJ-1226. Includes technical drawing of a wall assembly and detailed specifications for firestop systems.

System No. W-L-1054. Includes technical drawing of a wall assembly and detailed specifications for firestop systems.

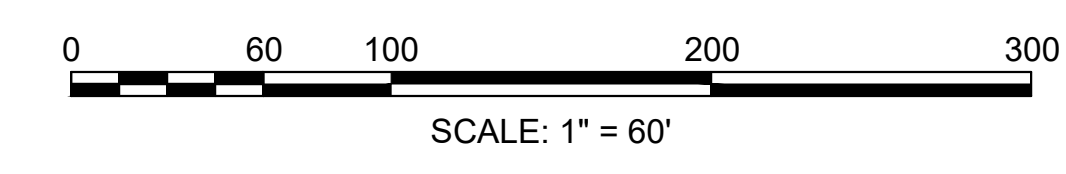
System No. W-L-1054. Includes technical drawing of a wall assembly and detailed specifications for firestop systems.

Project information block including record revisions table, professional seal, date (02/14/2024), signature line, and project name: GREENMAN-PEDERSEN, INC. COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES.

VERIFY SCALE section with a scale bar (0 to 1 inch), project name (AUTOMATION SYSTEM UPGRADE - CAPITOL COMPLEX), and project location (DEPARTMENT OF GENERAL SERVICES HARRISBURG, DAUPHIN COUNTY, PA).



1
P-1
PLUMBING SITE PLAN
Scale: 1" = 60'



VERIFY SCALE
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0 1
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NO.	DATE	REVISIONS

RECORD REVISIONS

02/14/2024
SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

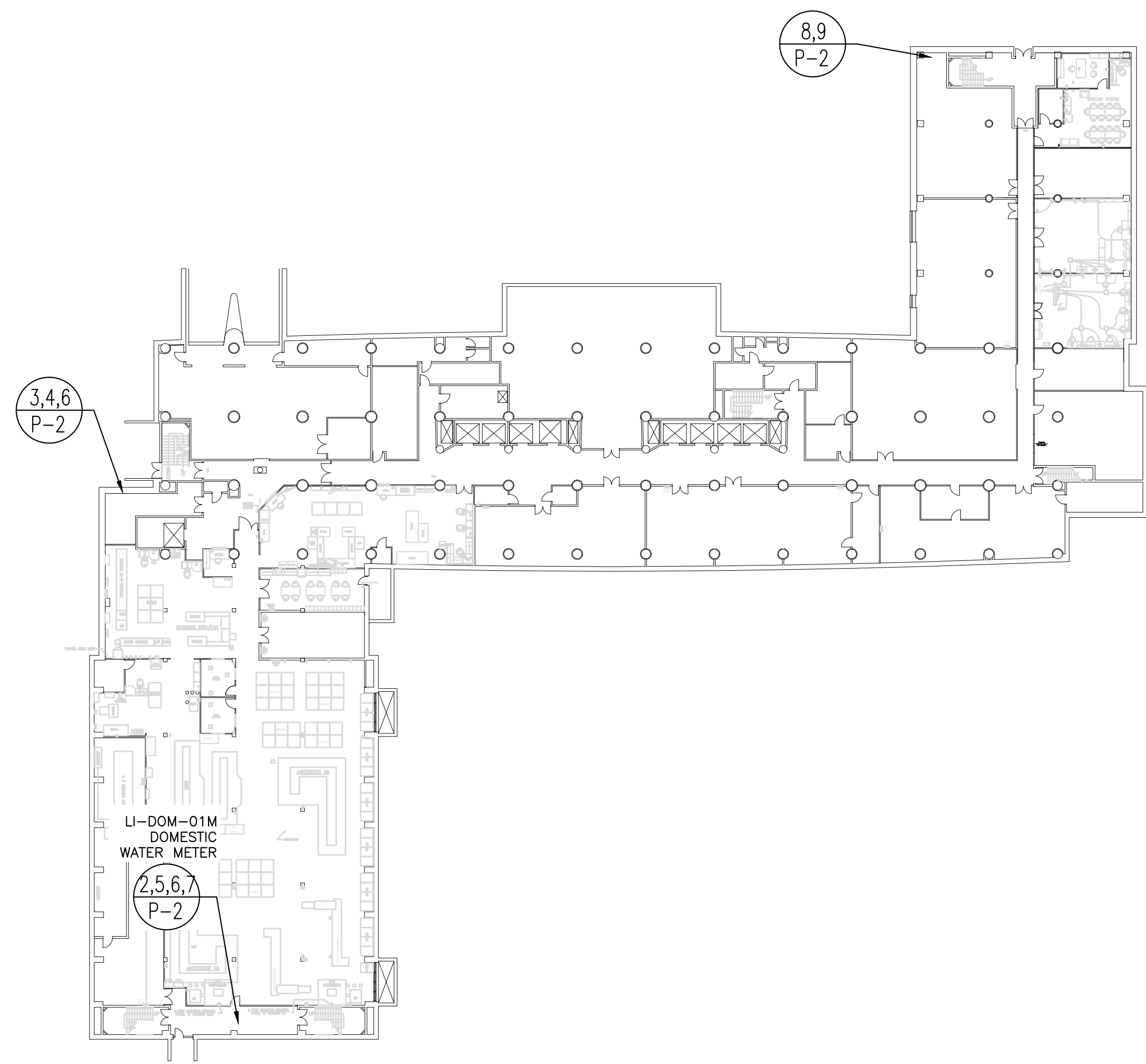
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

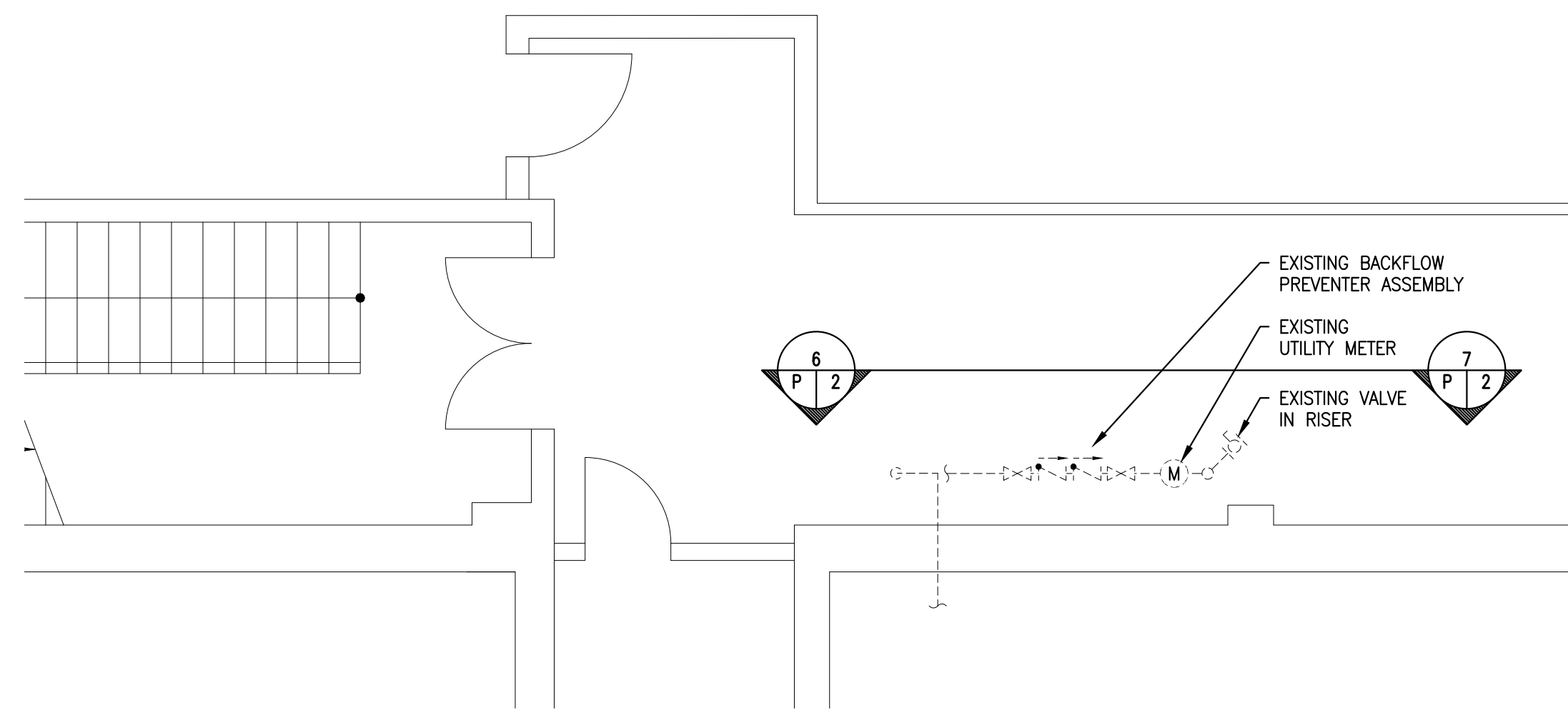
Automation System Upgrade –
Capitol Complex
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

PLUMBING SITE PLAN

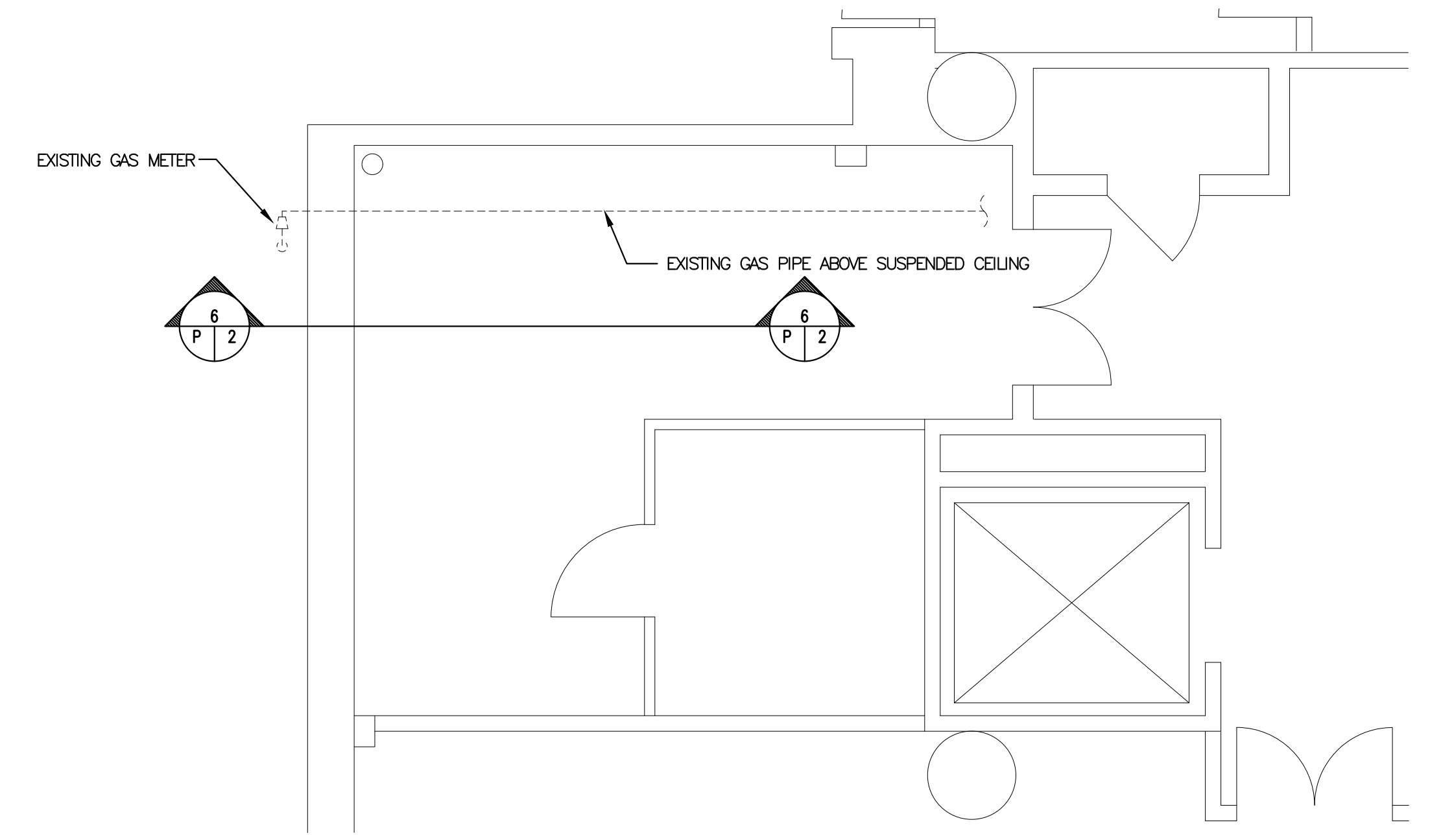
DRAWN BY J. OSBORNE	DATE 02/14/24	DRAWING No. P-1
CHECKED BY M. RADZICKI	SCALE AS NOTED	



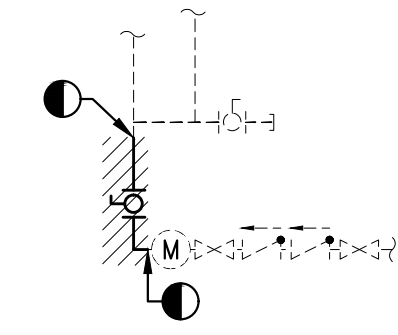
1 BASEMENT MECHANICAL PLAN
 P-2 Scale: 1/32" = 1'-0"



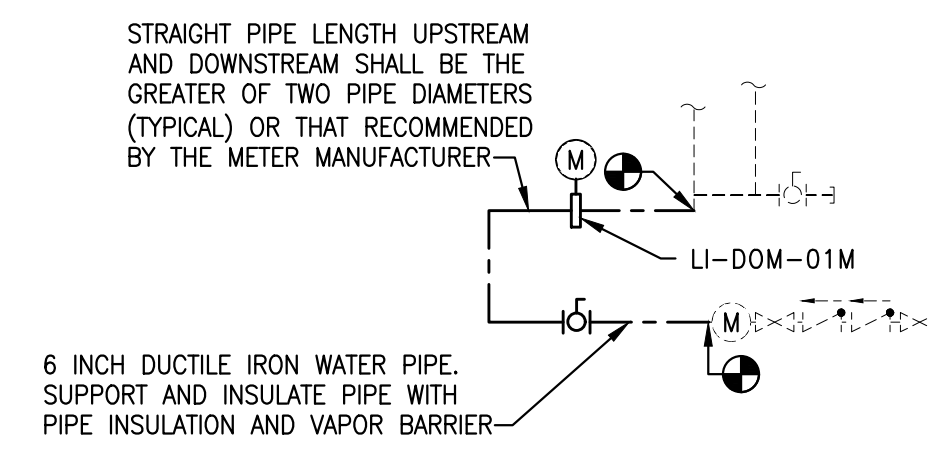
2 BASEMENT EAST WING DOMESTIC WATER PARTIAL PLAN
 P-2 No Scale



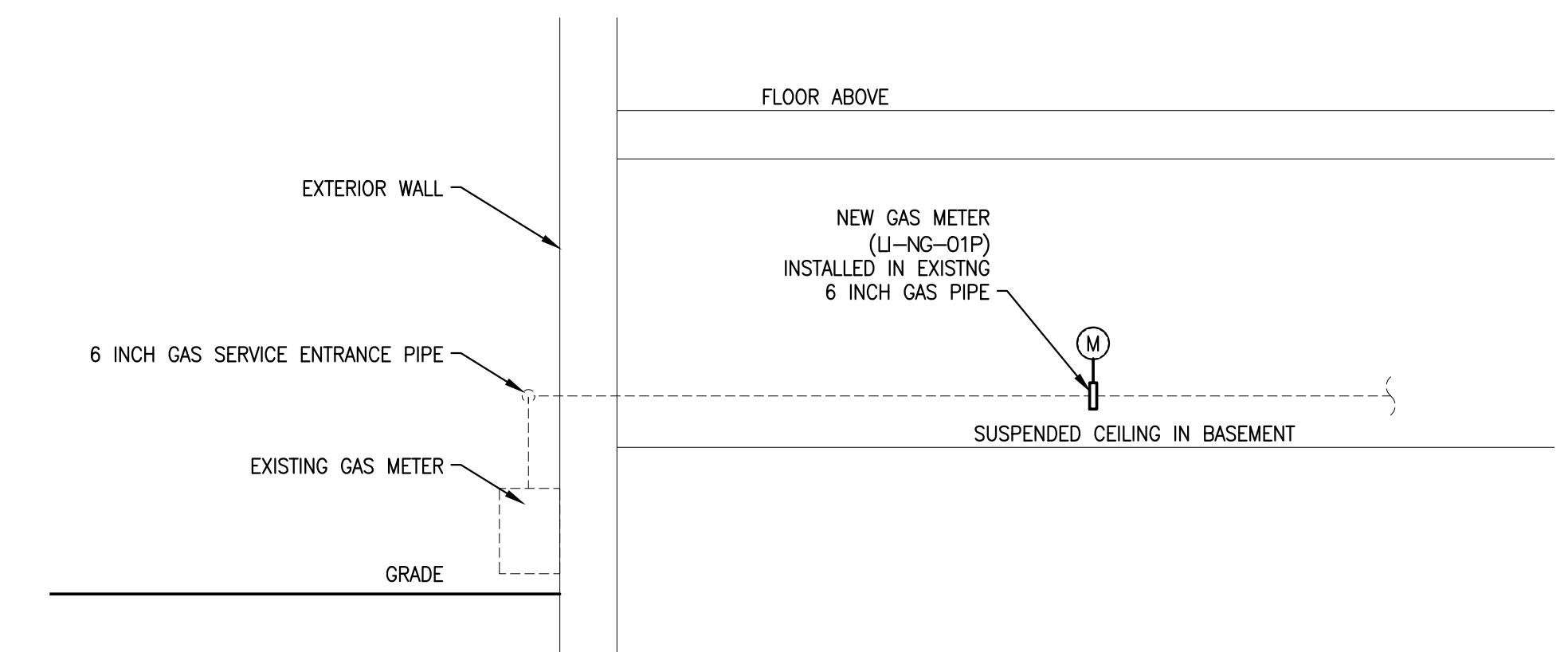
3 BASEMENT EXISTING GAS PIPE PARTIAL PLAN
 P-2 Scale: 1/4" = 1'-0"



6 DOMESTIC WATER DEMOLITION
 P-2 No Scale SCHEMATIC ELEVATION (EXIST CONDITIONS)



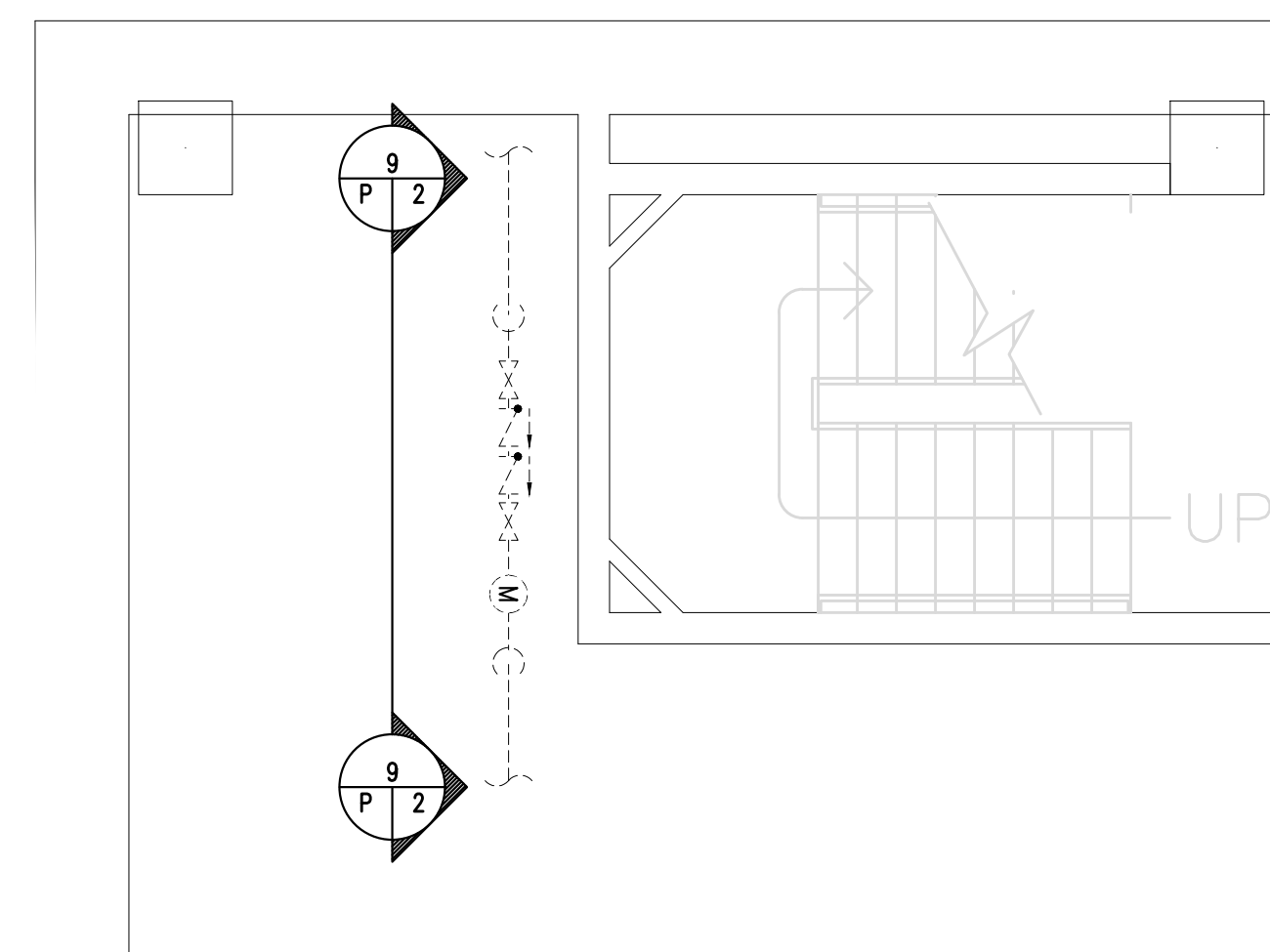
7 DOMESTIC WATER METER INSTALLATION
 P-2 No Scale SCHEMATIC ELEVATION



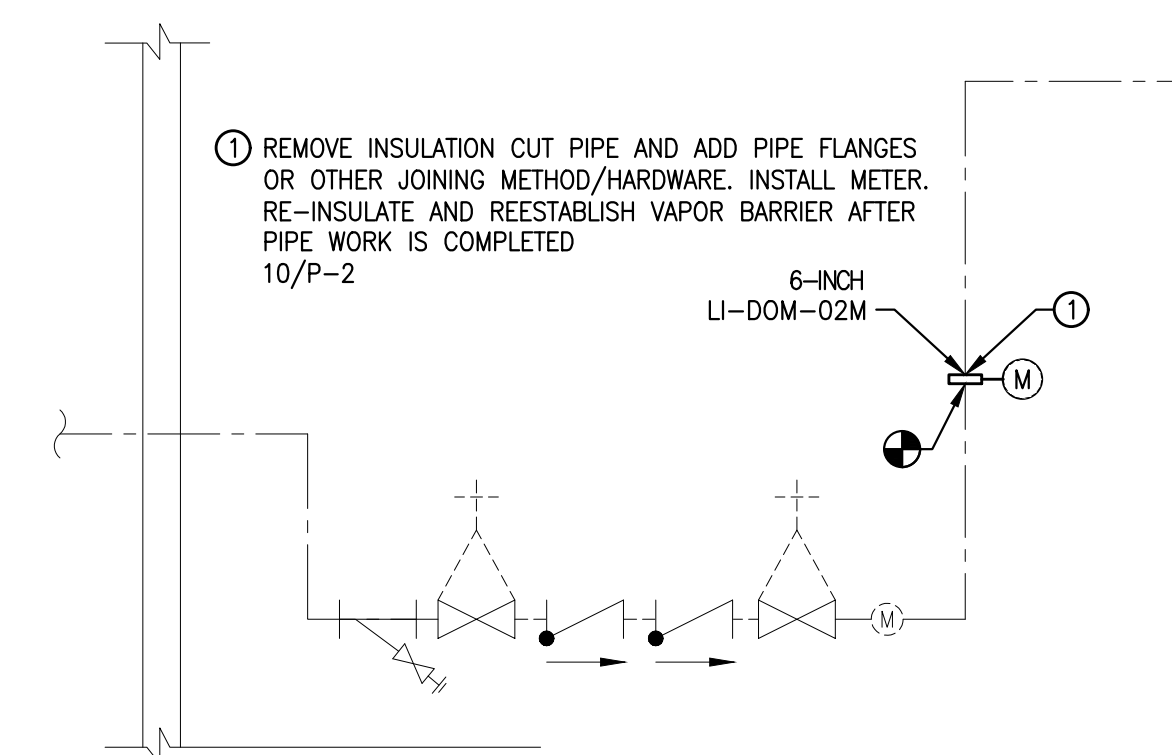
4 SECTION GAS METER INSTALLATION
 P-2 No Scale



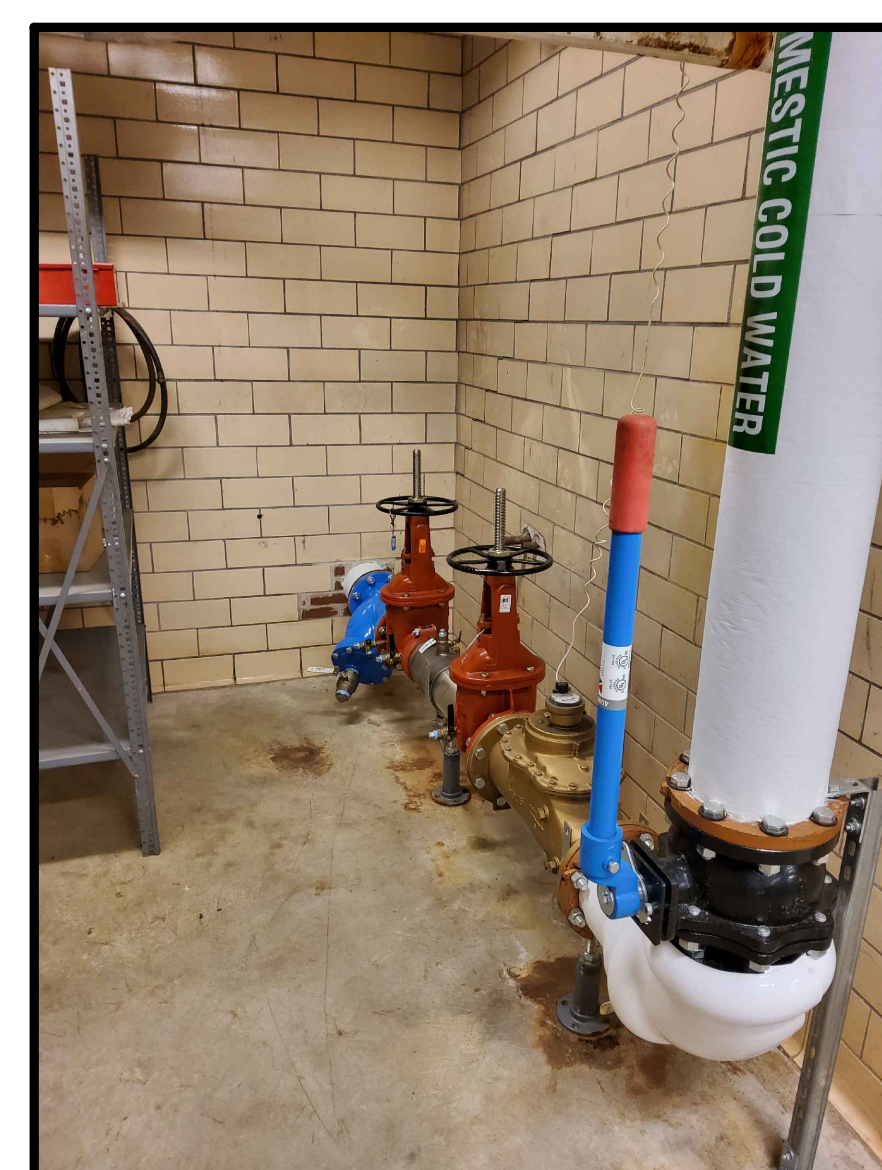
5 PHOTO: DOM WATER (SOUTH) EXISTING CONDITIONS
 P-2 No Scale



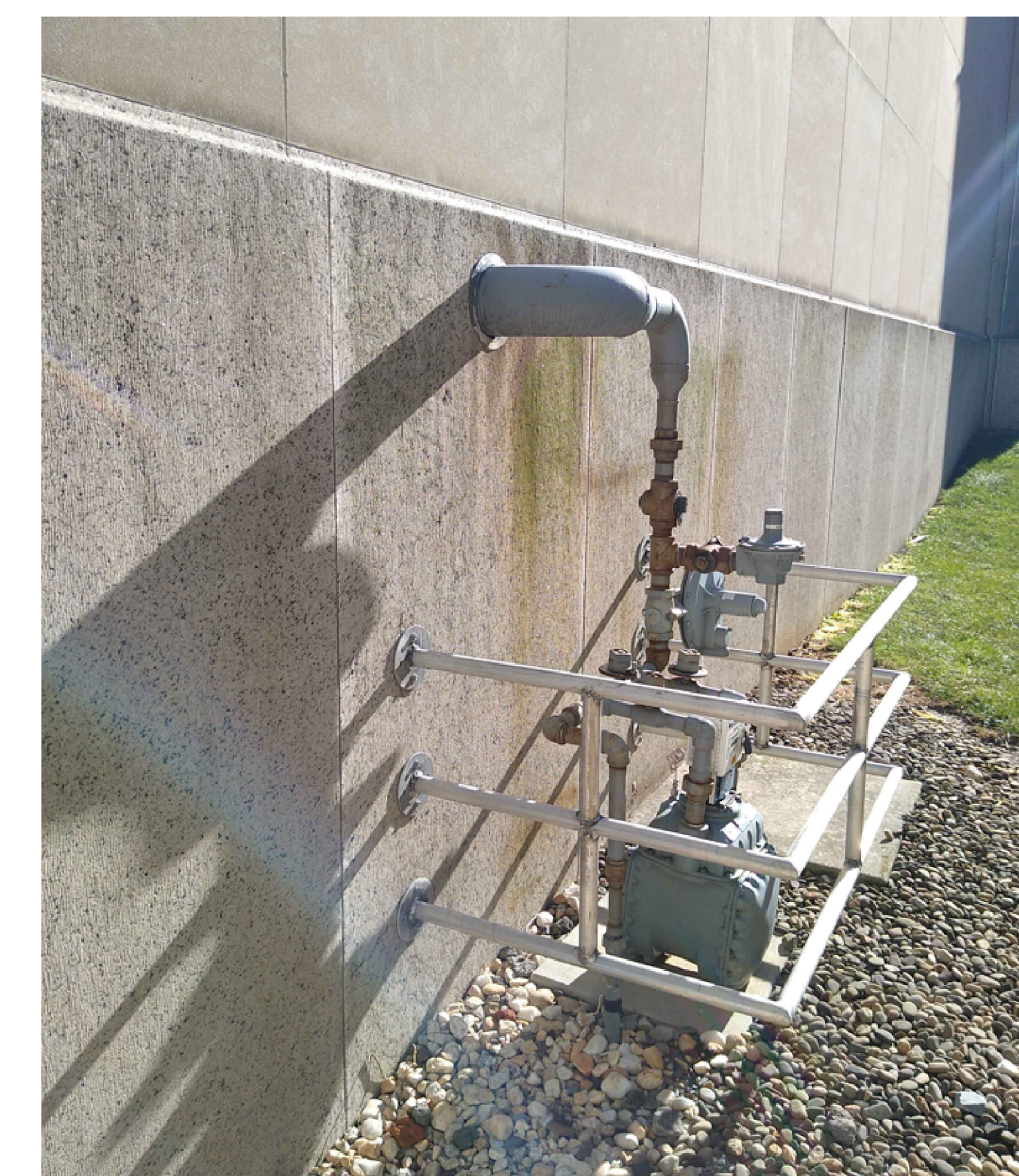
8 NORTH WING DOMESTIC WATER PARTIAL PLAN
 P-2 Scale: 1/4" = 1'-0"



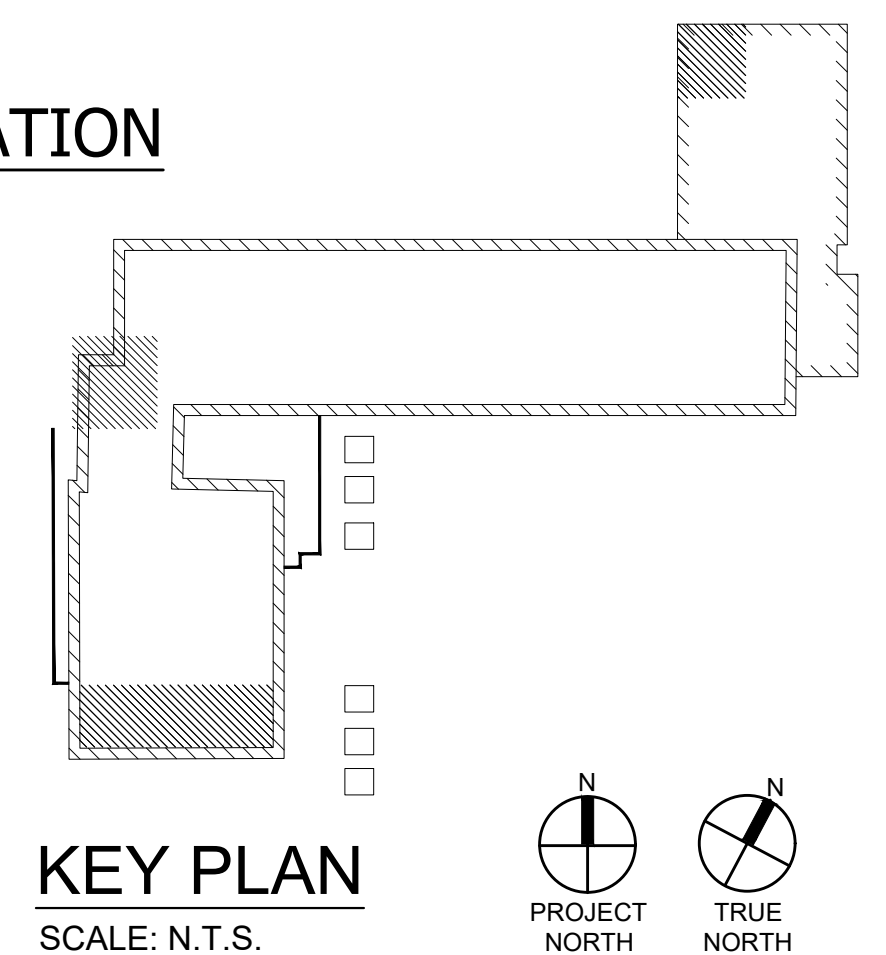
9 DOMESTIC WATER METER INSTALLATION
 P-2 Scale: 1/4" = 1'-0" (NORTH WING)



10 PHOTO: DOM WATER (NORTH WING) EXISTING CONDITIONS
 P-2 No Scale

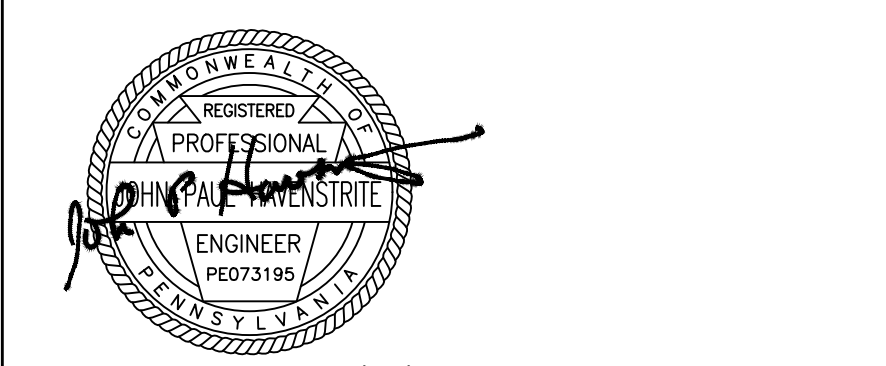


11 PHOTO: EXISTING GAS METER
 P-2 No Scale



KEY PLAN
 SCALE: N.T.S.

RECORD REVISIONS



SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
 52 GLENMAURA NATIONAL BOULEVARD
 SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

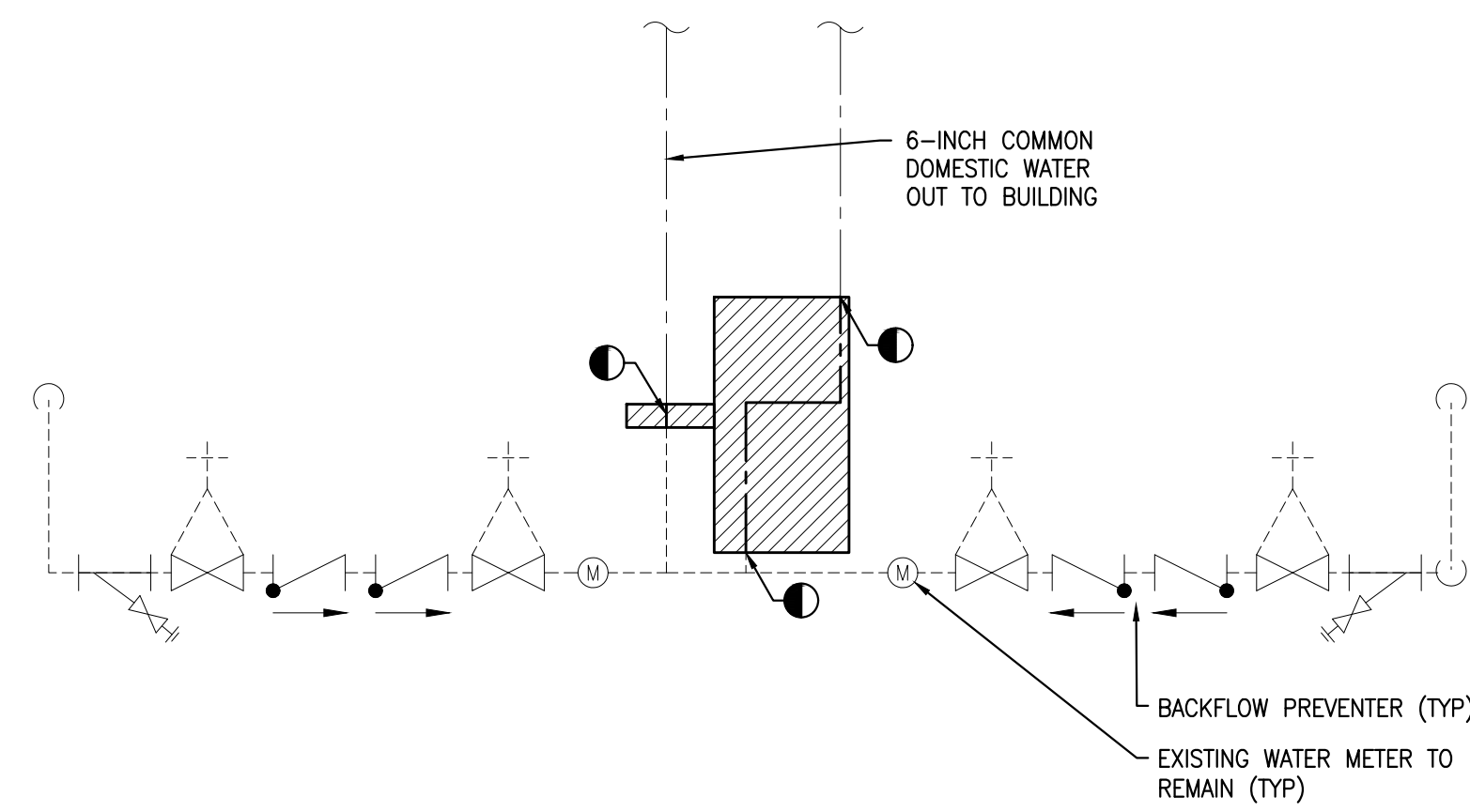
D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE -
 CAPITOL COMPLEX
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, DAUPHIN COUNTY, PA

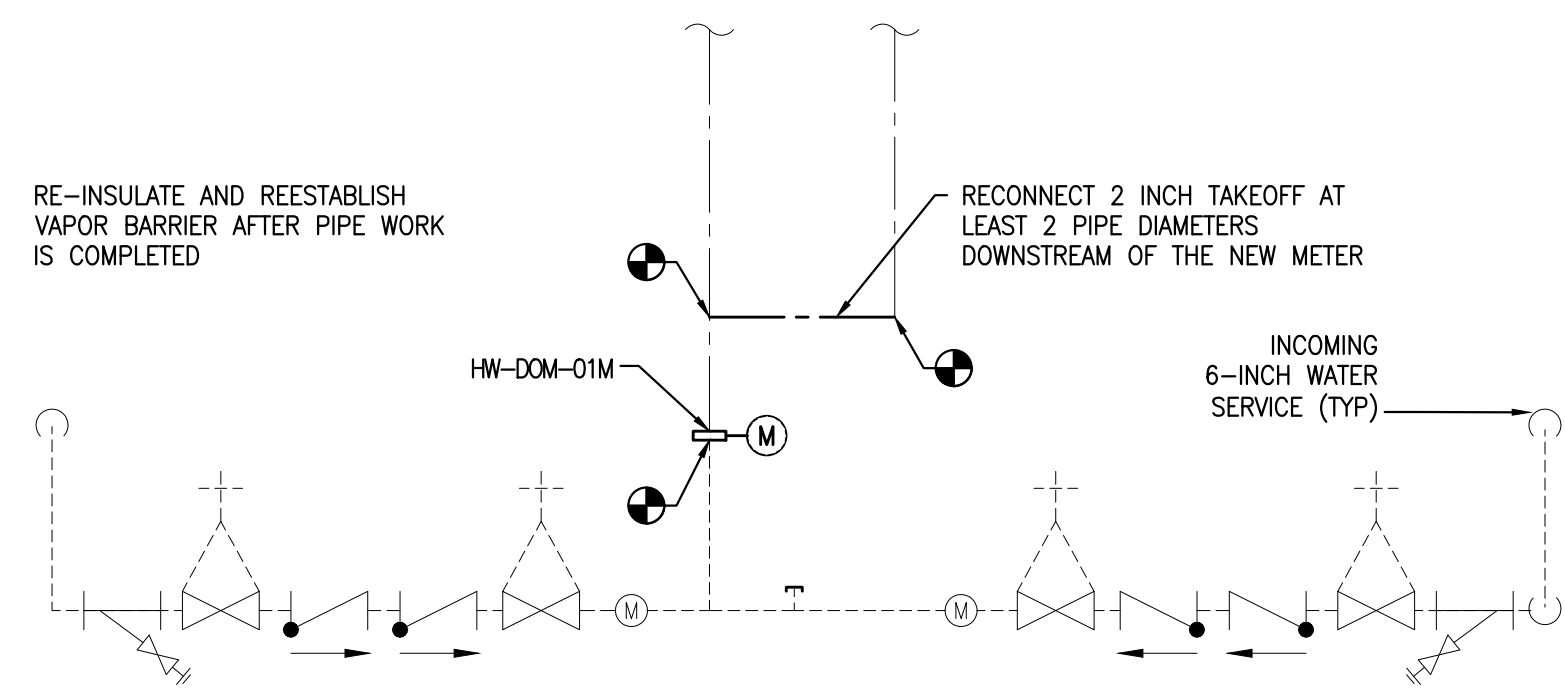
LABOR & INDUSTRY BUILDING PLUMBING PLAN

VERIFY SCALE
 BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
 0 1
 IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
 CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

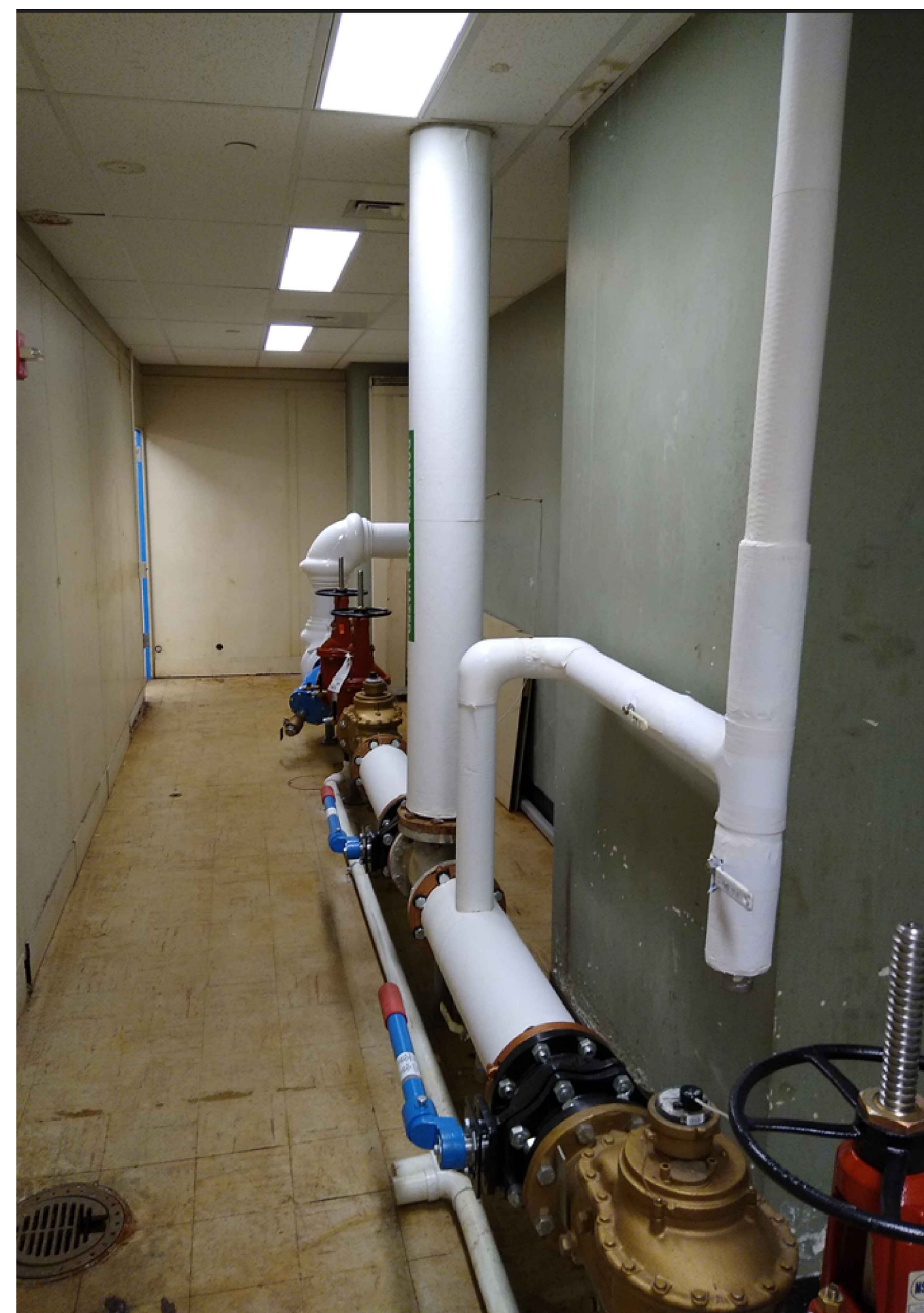
DRAWN BY: J. OSBORNE DATE: 02/14/24 DRAWING No.: P-2
 CHECKED BY: M. RADZICKI SCALE: AS NOTED



1 DOMESTIC WATER METER INSTALLATION PIPE PREPARATION
Scale: NONE



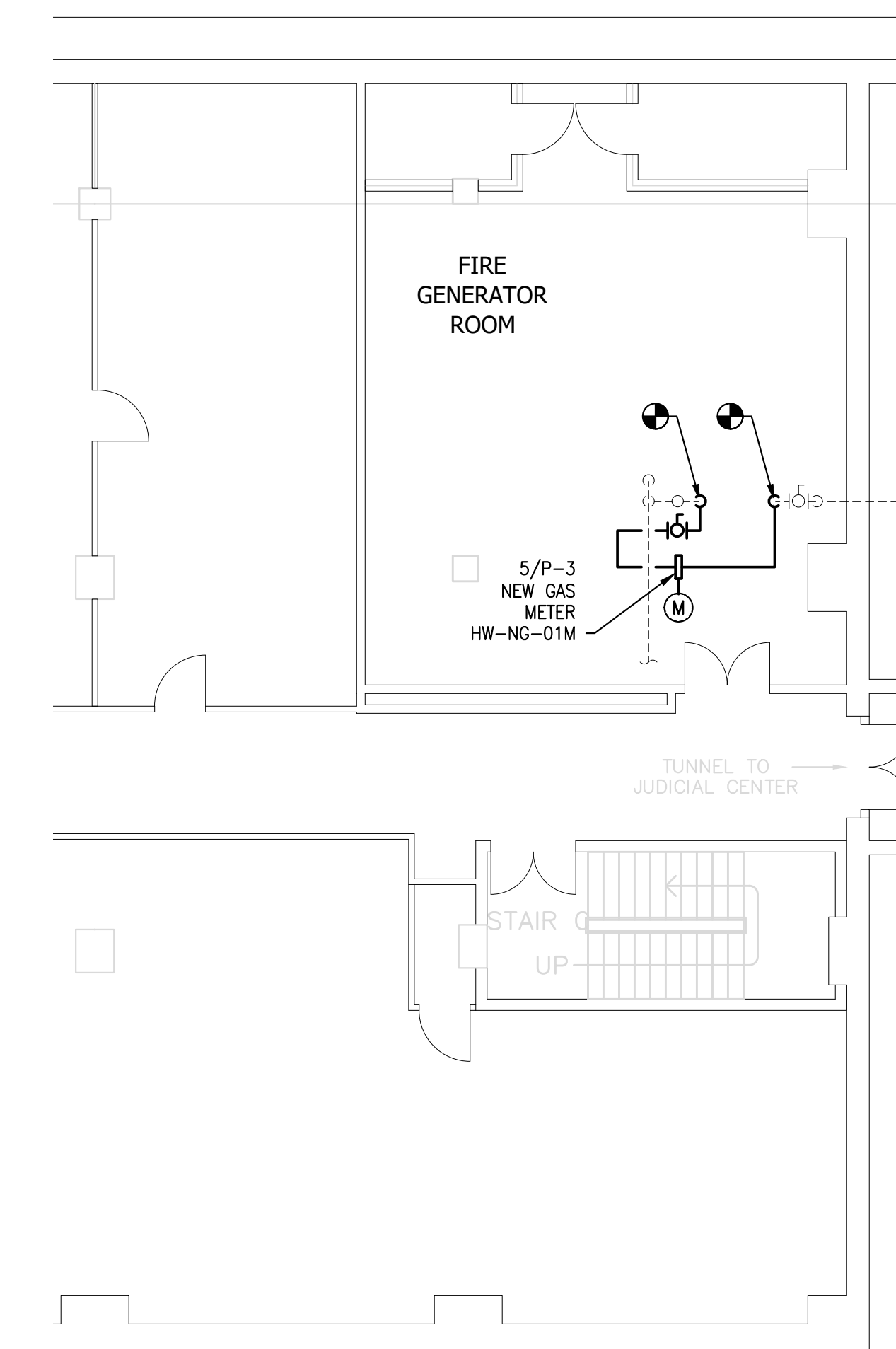
2 DOMESTIC WATER METER INSTALLATION
Scale: NONE



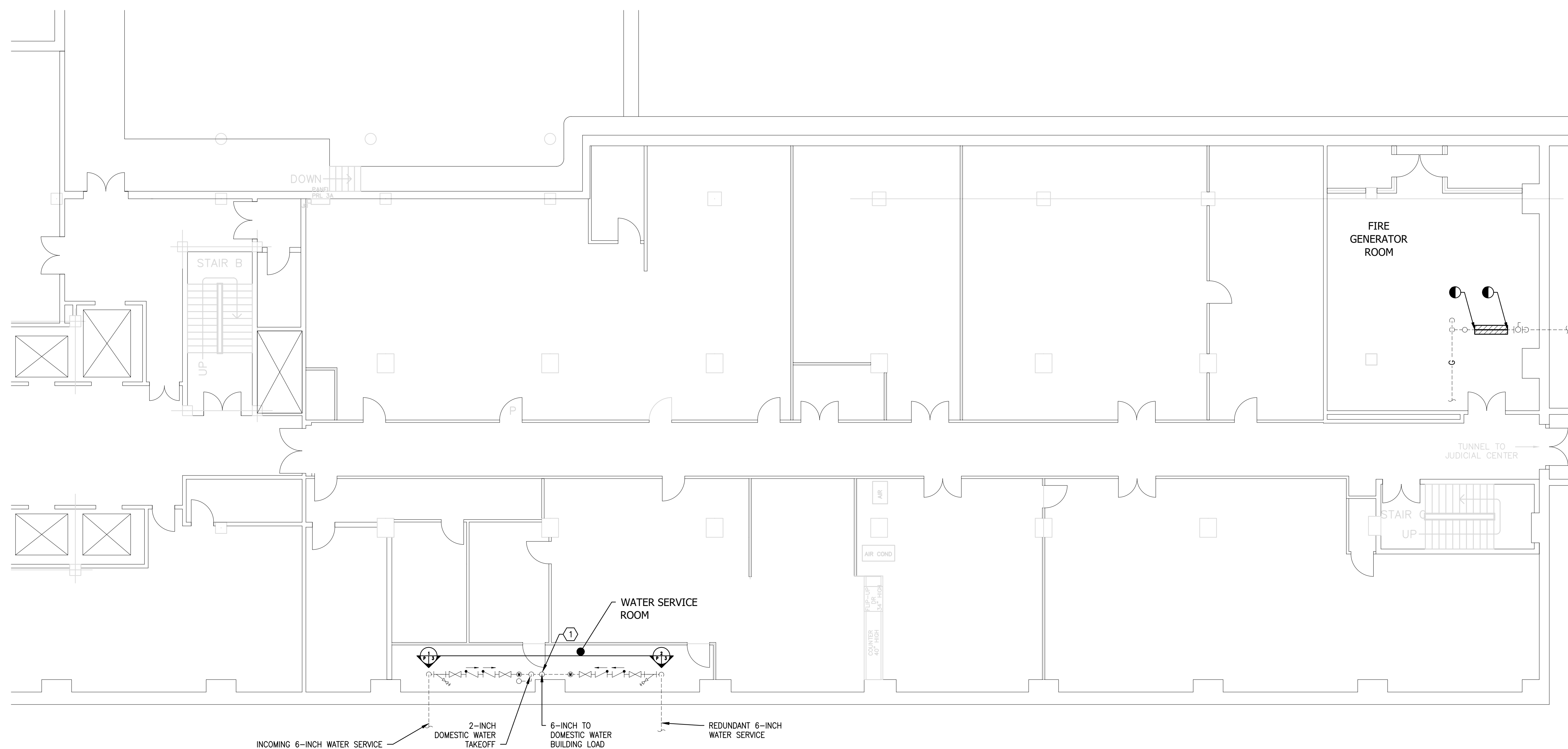
4 PHOTO: WATER SERVICE ENTRANCE
Scale: NONE



5 PHOTO: GAS SERVICE ENTRANCE
Scale: NONE
LOCATION OF METER

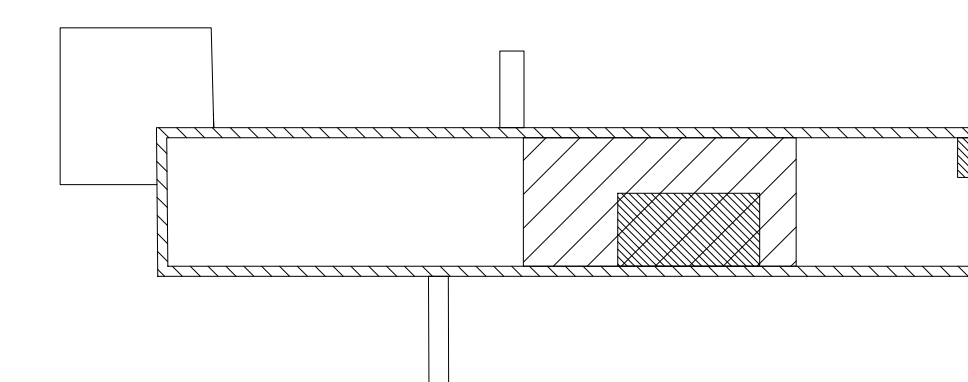


6 BASEMENT PLUMBING PART PLAN
Scale: 1/8" = 1'-0" GAS METER INSTALLATION

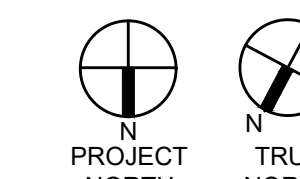


3 BASEMENT PLUMBING PART PLAN
Scale: 1/8" = 1'-0" EXISTING CONDITIONS AND DEMOLITION/PIPE PREP

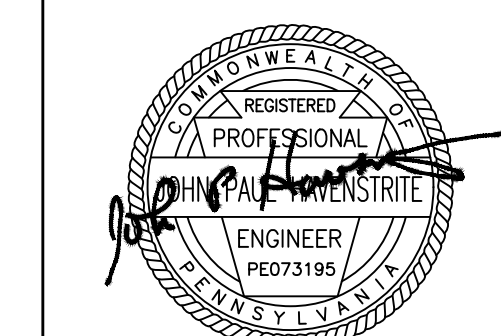
① BREAK RISER IN COMMON 6-INCH WATER SERVICE. PROVIDE WATER METER (HW-004-01M) AFTER REQUIRED NUMBER OF PIPE DIAMETERS IN STRAIGHT PIPE LENGTH. AFTER METER, PROVIDE ADDITIONAL REQUIRED NUMBER OF PIPE DIAMETERS IN STRAIGHT PIPE LENGTH BEFORE VALVES OR FITTINGS. DISCONNECT DOMESTIC WATER TAKEOFF FROM WEST SIDE OF RISER AND TIE TO SYSTEM SIDE OF NEW METER.



KEY PLAN
SCALE: N.T.S.



RECORD REVISIONS



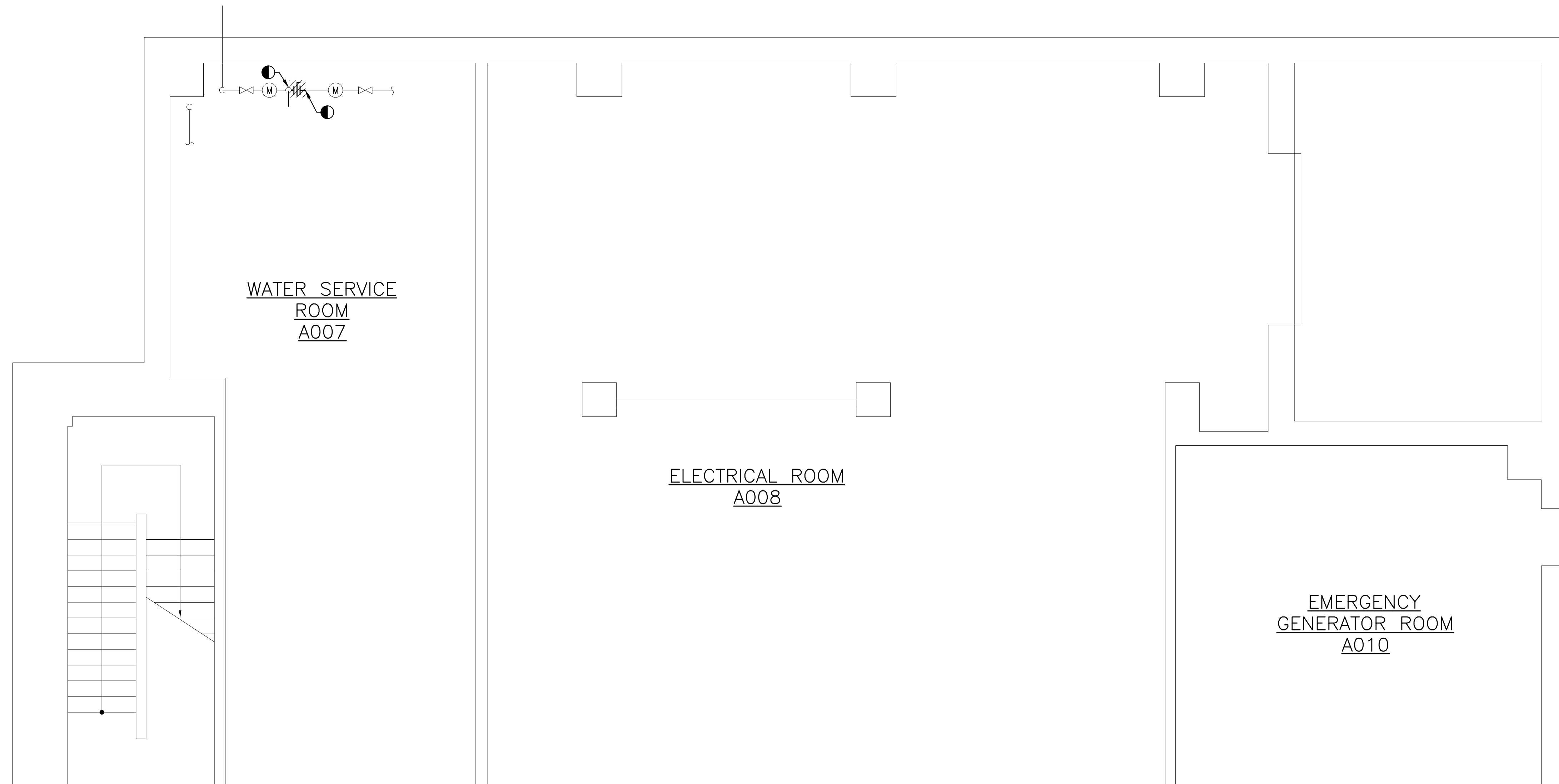
SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

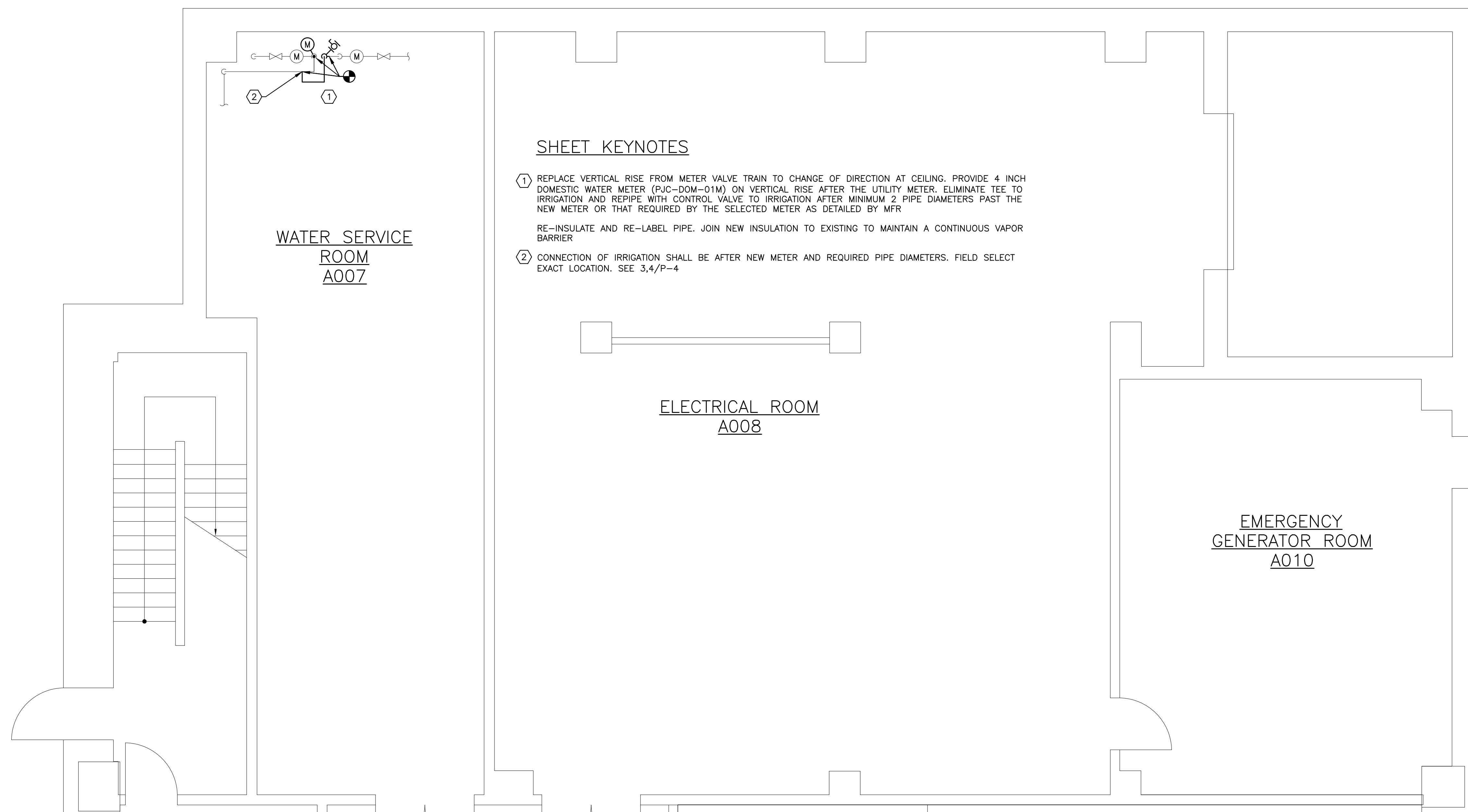
VERIFY SCALE		AUTOMATION SYSTEM UPGRADE – CAPITOL COMPLEX	
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING: 0 1		DEPARTMENT OF GENERAL SERVICES HARRISBURG, DAUPHIN COUNTY, PA	
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY		HEALTH & WELFARE BUILDING MECHANICAL PLAN	
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.		DRAWN BY J. OSBORNE	DATE 02/14/24
		CHECKED BY M. RADZICKI	SCALE AS NOTED
		DRAWING No. P-3	



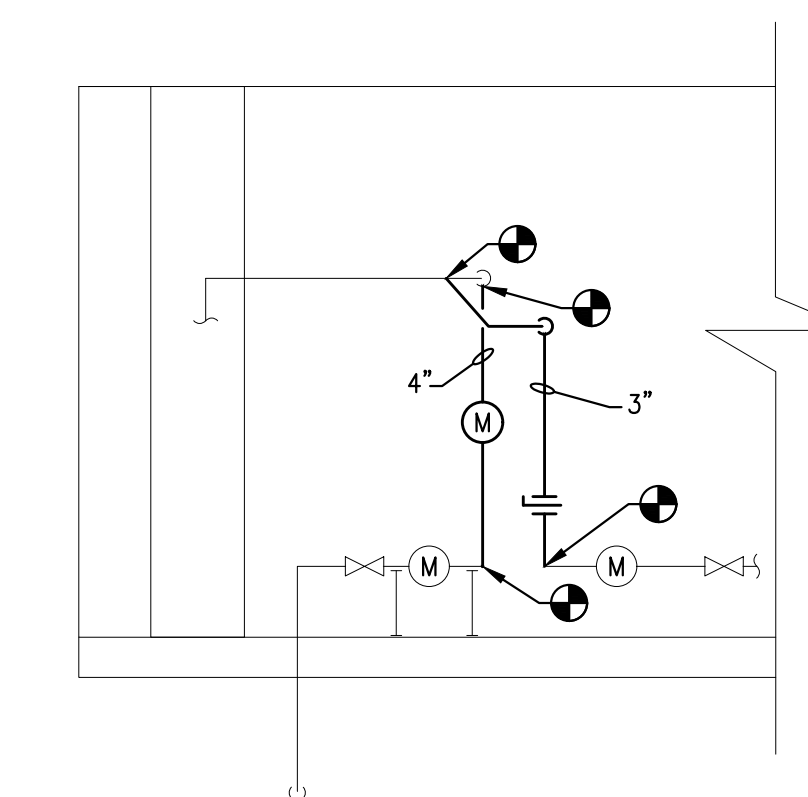
1
P-4 **BASEMENT MECHANICAL PLAN-WATER METER DEMOLITION AND PREP WORK**
Scale: 1/4" = 1'-0"



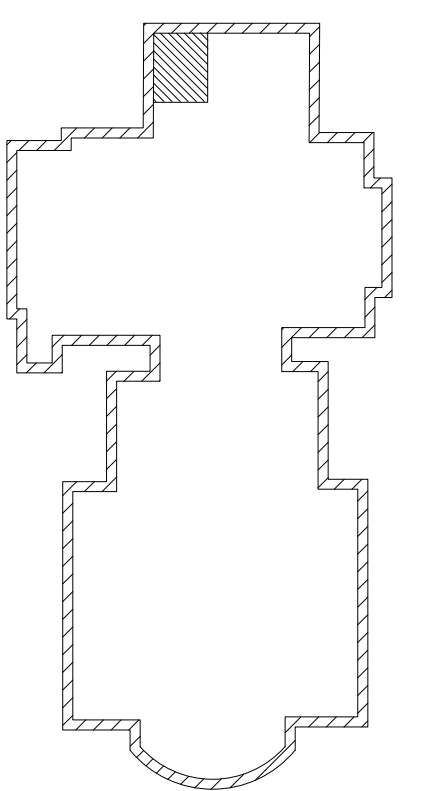
3
P-4 **PHOTO: JUDICIAL CENTER DOMESTIC WATER SERVICE**
NO SCALE



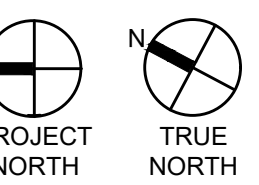
2
P-4 **BASEMENT MECHANICAL PLAN-WATER METER**
Scale: 1/4" = 1'-0"



4
P-4 **SCHEMATIC PIPE ELEVATION**
NO SCALE



KEY PLAN
SCALE: N.T.S.



NO.	REVISIONS

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

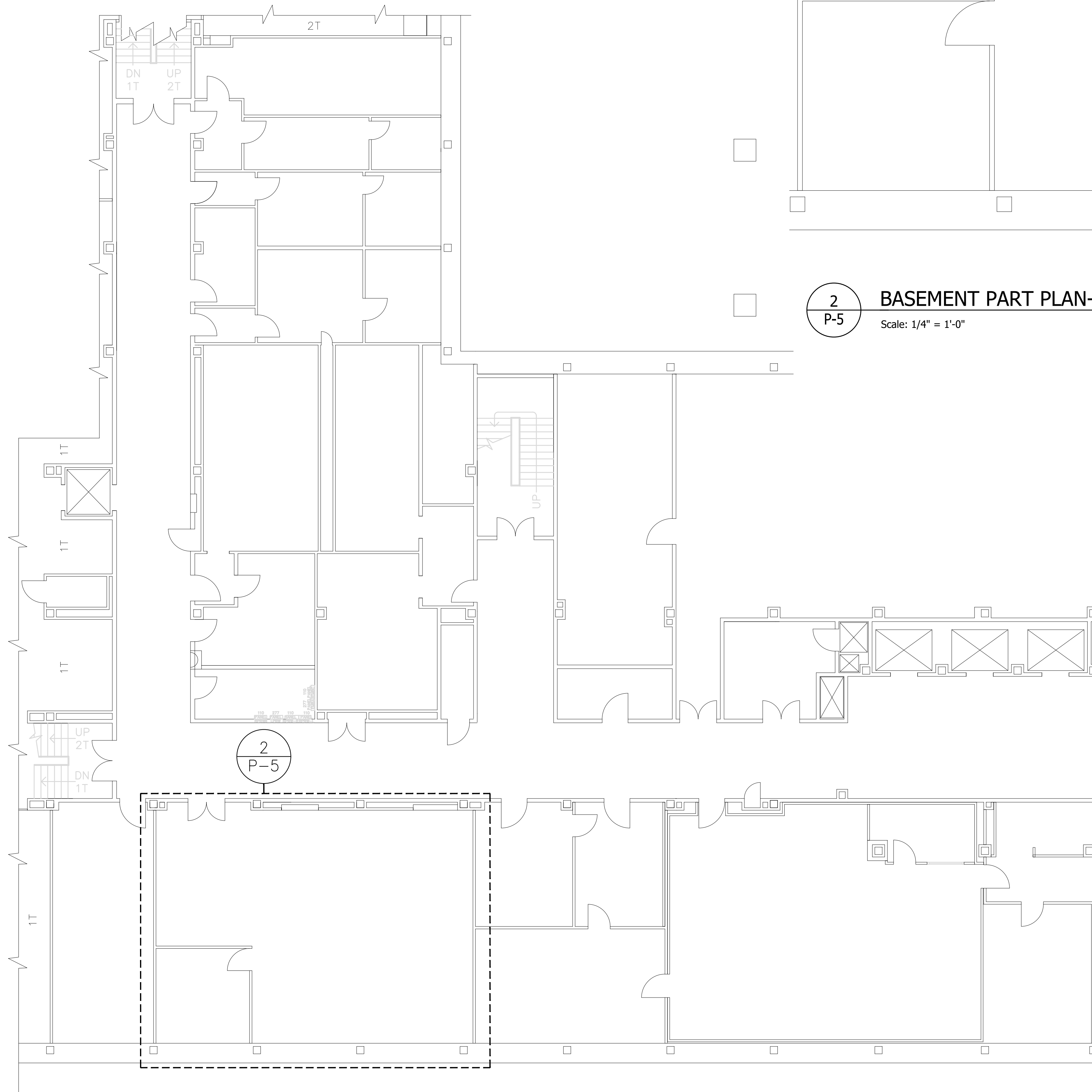
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

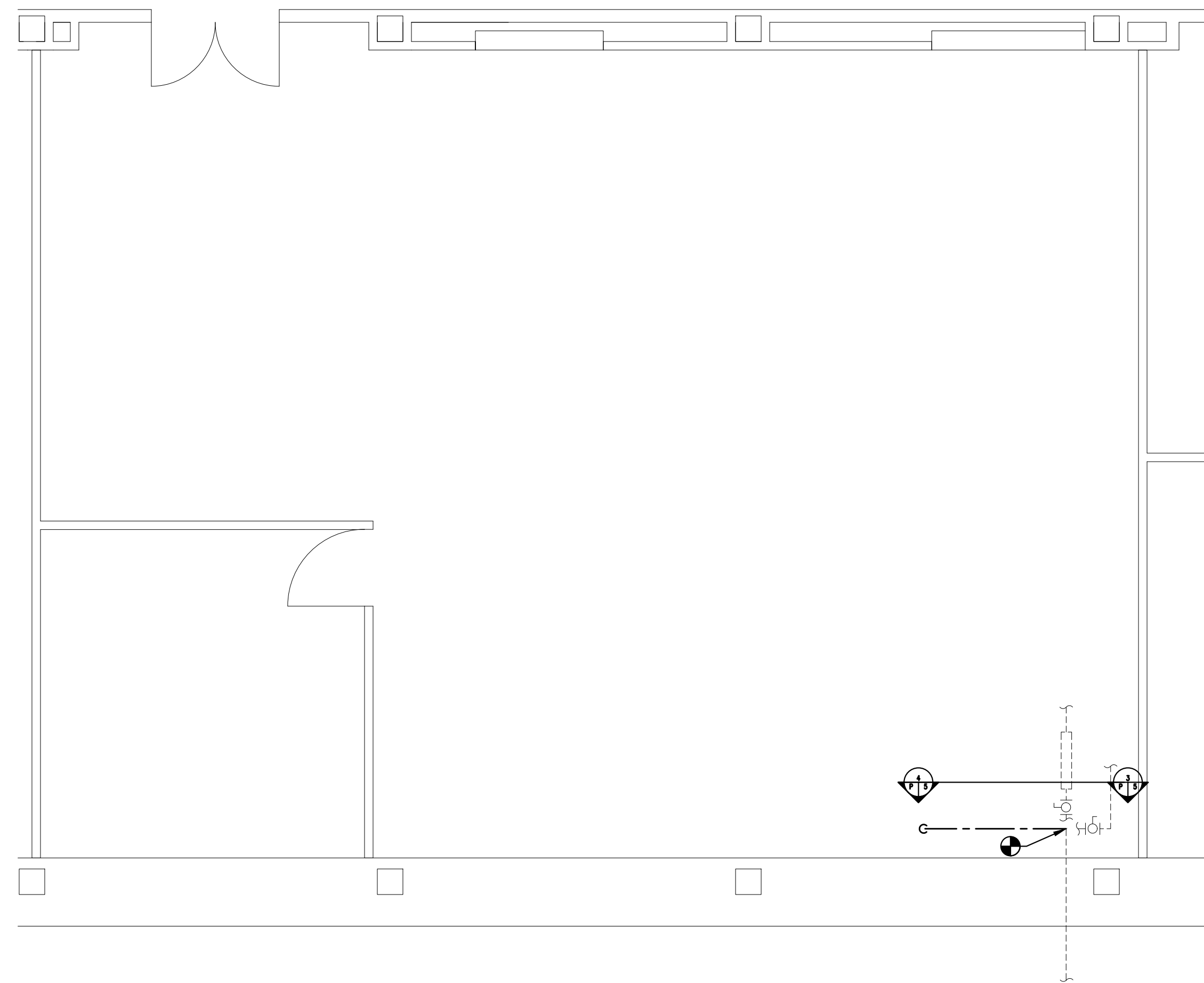
02/14/2024
DATE

VERIFY SCALE BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING: 0 1 IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.	DRAWN BY J. OSBORNE	DATE 02/14/24	DRAWING No. P-4
	CHECKED BY M. RADZICKI	SCALE AS NOTED	SIGNATURE DATE

1 PROVIDE DOMESTIC WATER METER FIB-00M-01M



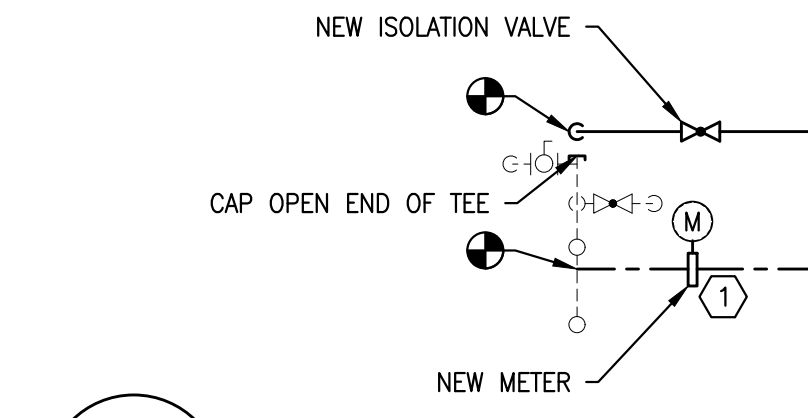
1 P-5 BASEMENT DOMESTIC WATER PLAN
Scale: 1/16" = 1'-0"



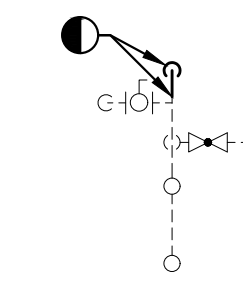
2 P-5 BASEMENT PART PLAN--DOMESTIC WATER METER
Scale: 1/4" = 1'-0"



5 P-5 DOMESTIC WATER SERVICE ENTRANCE
Scale: NONE PHOTO



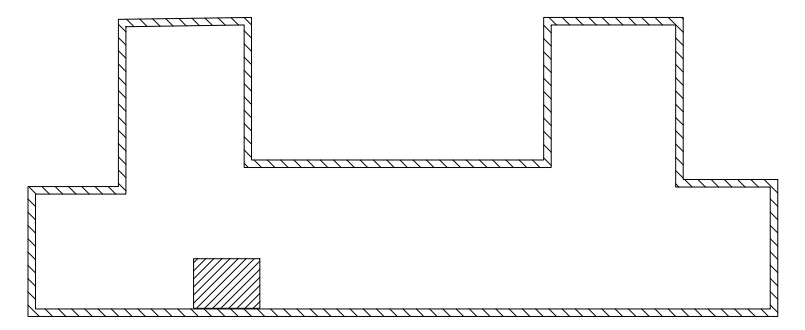
3 P-5 DOMESTIC WATER METER INSTALLATION
Scale: 1/4" = 1'-0" SCHEMATIC ELEVATION



4 P-5 DOMESTIC WATER METER PIPE PREPARATION / DEMO
Scale: 1/4" = 1'-0" SCHEMATIC ELEVATION



6 P-5 DOMESTIC WATER SERVICE ENTRANCE
Scale: NONE ALTERNATE VIEW PHOTO



KEY PLAN
SCALE: N.T.S.
PROJECT NORTH TRUE NORTH

NO.	REVISION	DATE

RECORD REVISIONS

ENGINEER
 10073186
 STATE OF PENNSYLVANIA

02/14/2024
 SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
 52 GLENMAURA NATIONAL BOULEVARD
 SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE -
 CAPITOL COMPLEX
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, DAUPHIN COUNTY, PA

FINANCE BUILDING PLUMBING PLAN

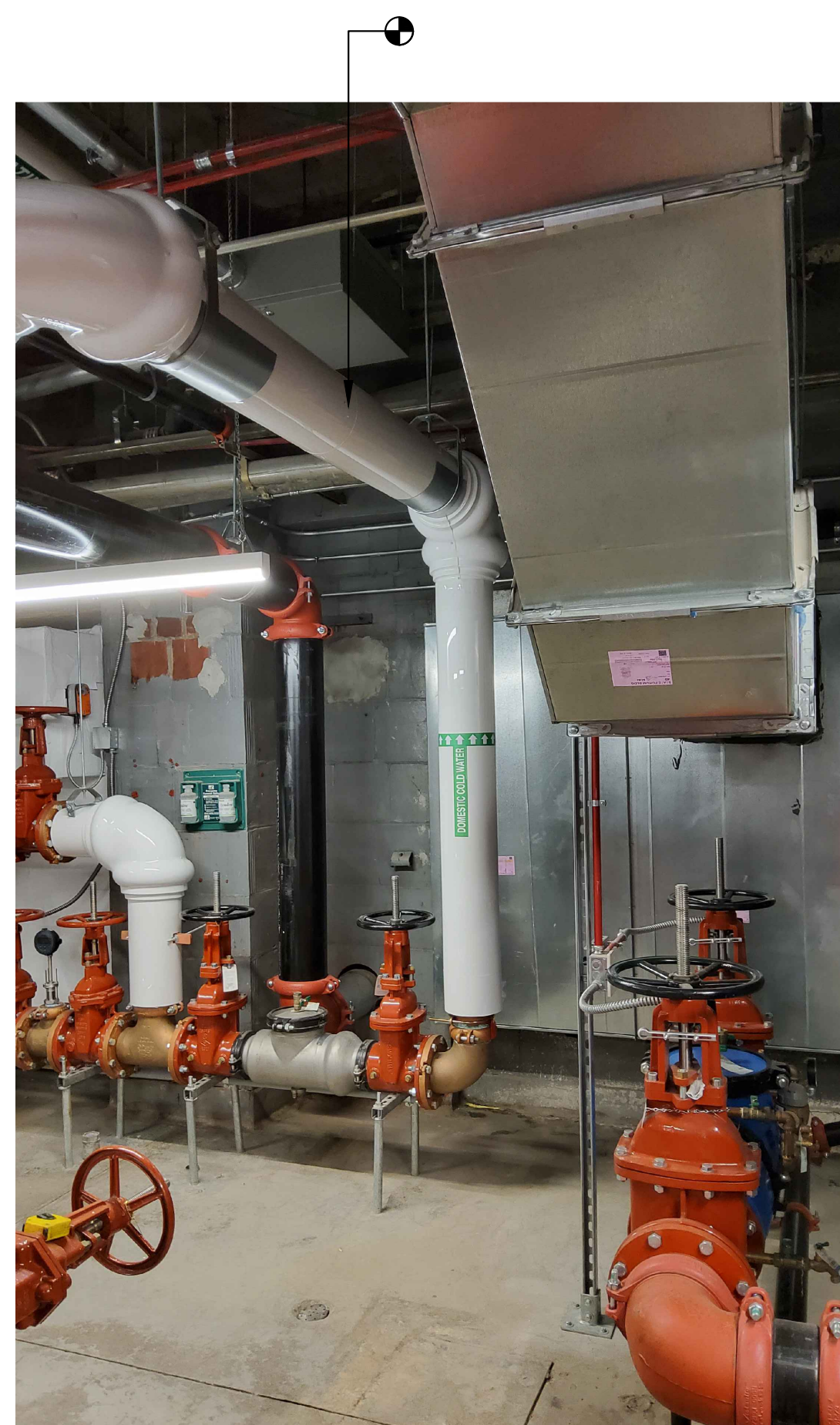
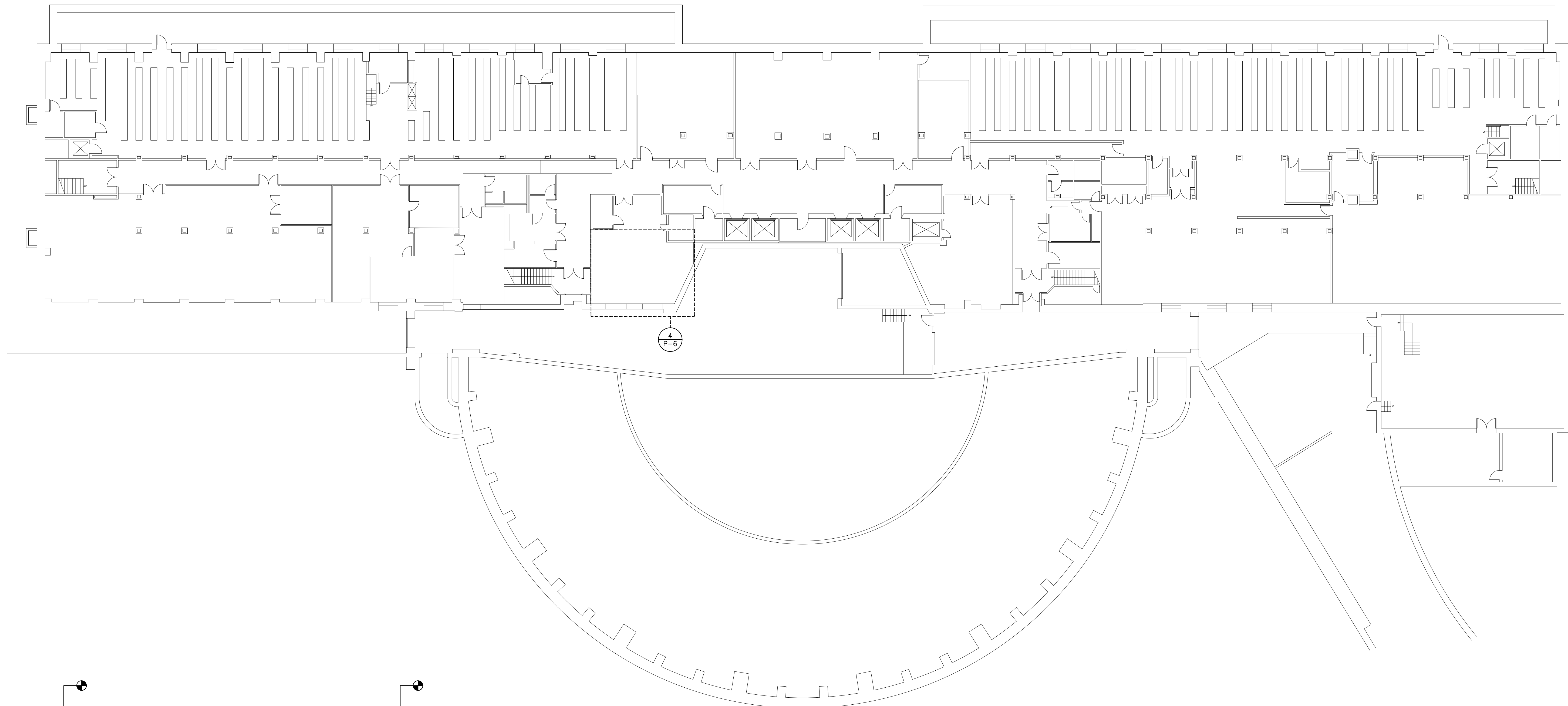
DRAWN BY: J. OSBORNE DATE: 02/14/24 DRAWING No.: P-5
 CHECKED BY: M. RADZICKI SCALE: AS NOTED

VERIFY SCALE

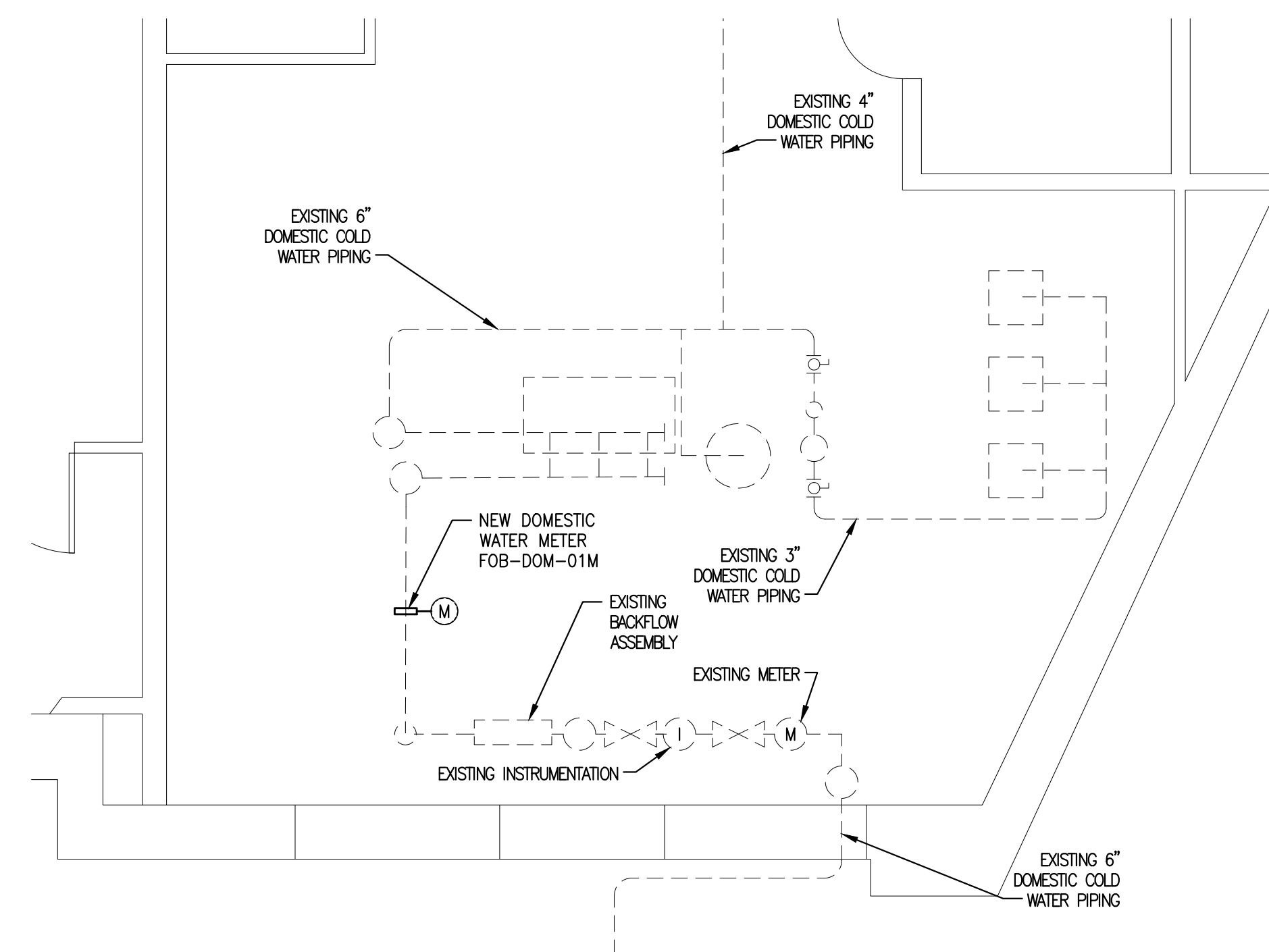
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
 0 1

IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY

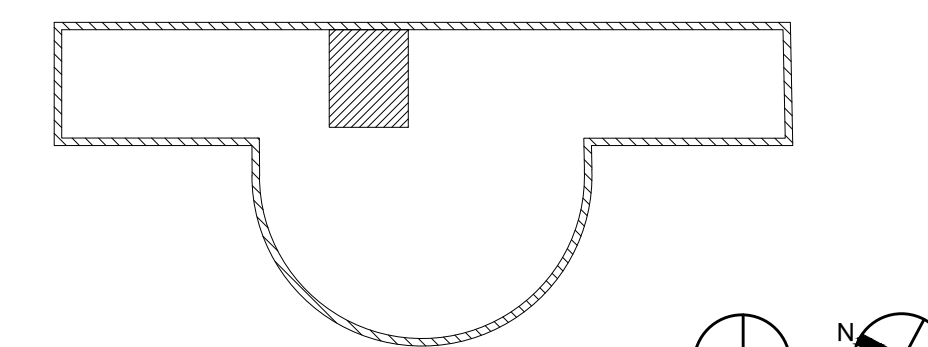
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.



1
P-6
BASEMENT PLUMBING PLAN
Scale: 1/16" = 1'-0"



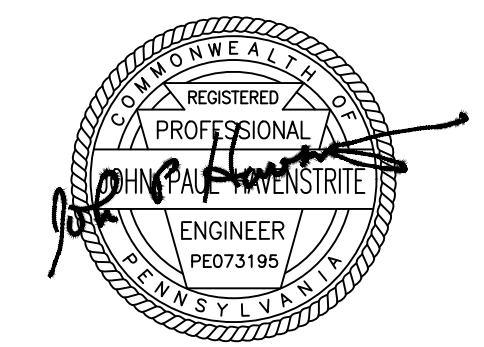
4
P-6
NEW METER PLUMBING PART PLAN
Scale: 1/4" = 1'-0"



KEY PLAN
SCALE: N.T.S.
PROJECT NORTH
TRUE NORTH

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GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE -
CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

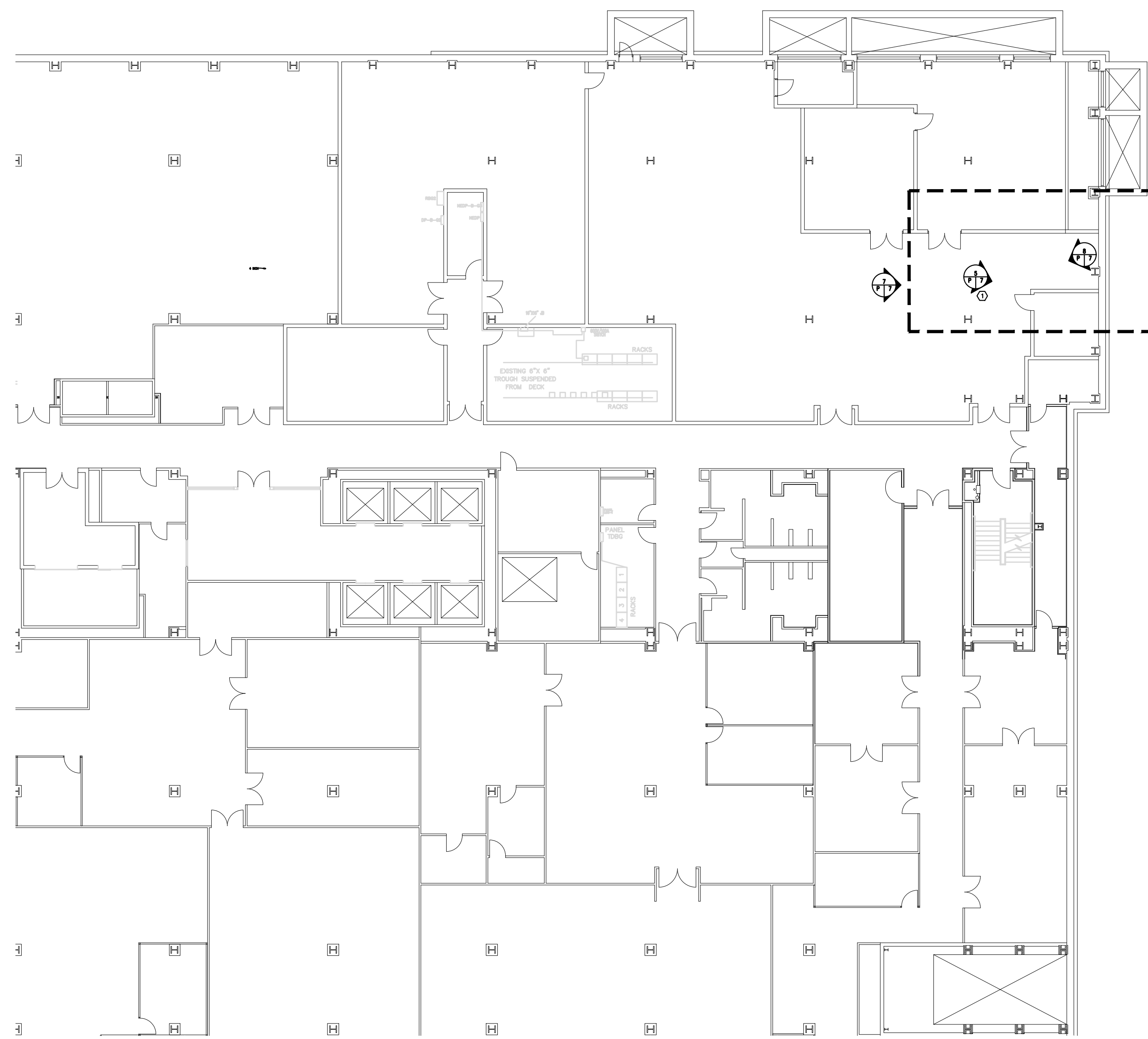
FORUM BUILDING PLUMBING PLAN

VERIFY SCALE
BAR IS ONE (1) INCH LONG
ON ORIGINAL DRAWING:
0 1
IF BAR IS NOT ONE (1) INCH LONG,
ADJUST SCALE ACCORDINGLY
CONTRACTOR SHALL FIELD VERIFY
ALL DIMENSIONS.
VARIANCE FROM CONTRACT
DOCUMENTS NOT PERMITTED
WITHOUT PROFESSIONAL & BUREAU
OF CONSTRUCTION APPROVAL.

DRAWN BY: J. OSBORNE
 DATE: 02/14/24
 CHECKED BY: M. RADZICKI
 SCALE: AS NOTED
 DRAWING No. P-6

2
P-6
PHOTO: LOCATION OF DW METER
Scale: NONE

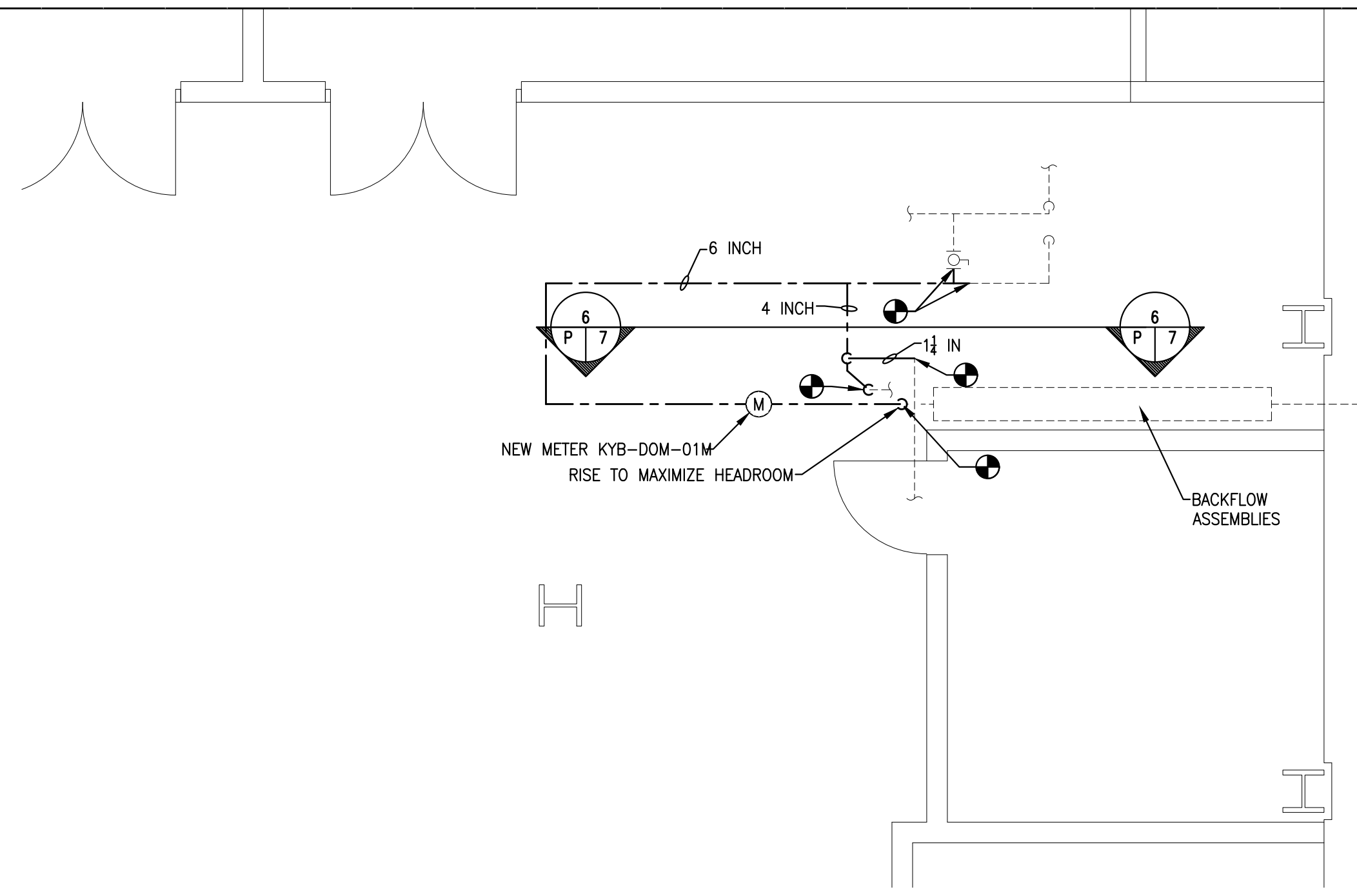
3
P-6
PHOTO: LOCATION OF DW METER
Scale: NONE ALTERNATE VIEW



1 BASEMENT PLUMBING PLAN
P-7 Scale: 1/16" = 1'-0"

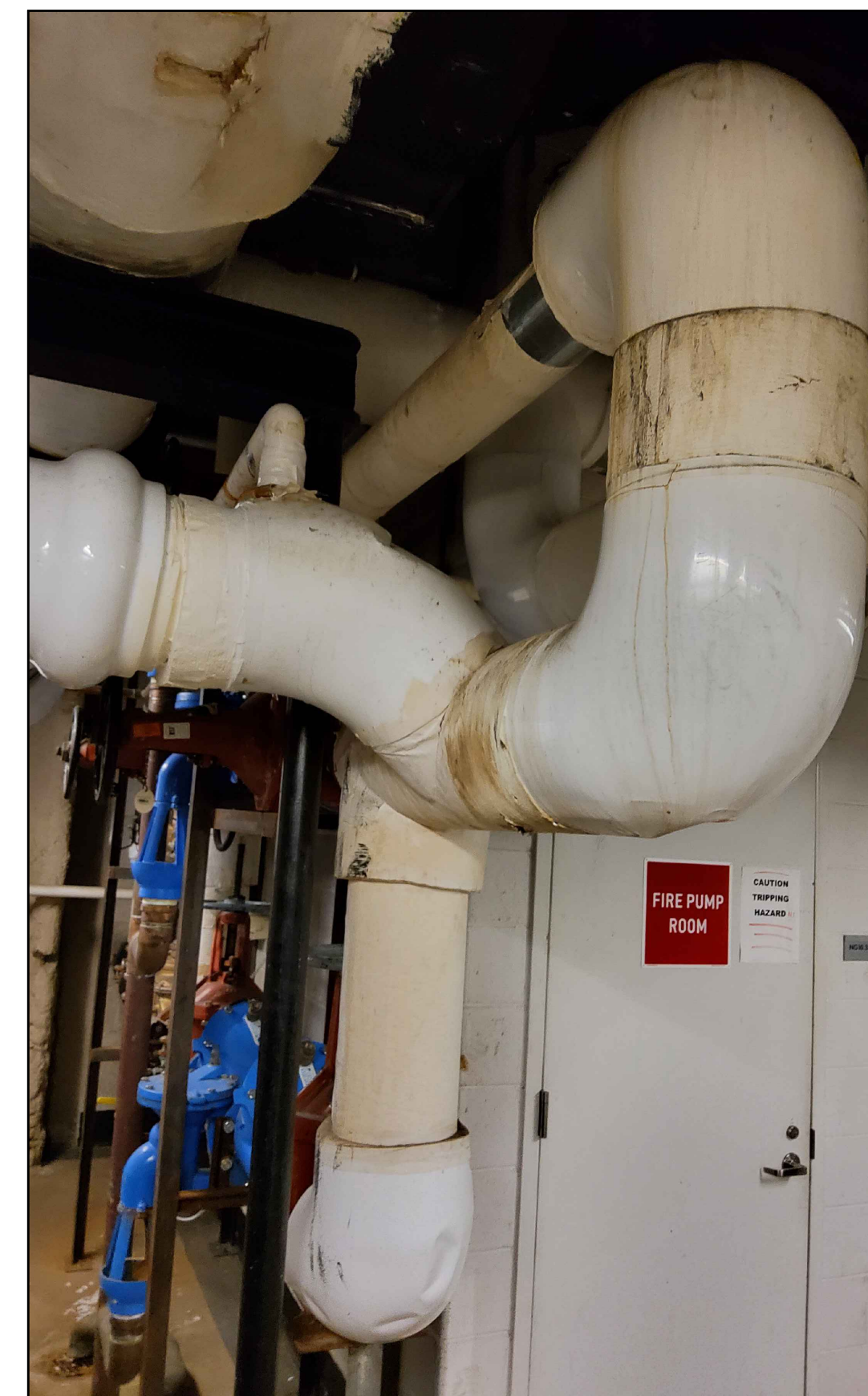
SHEET KEYNOTES

- 1 PROVIDE DOMESTIC WATER METER KYB-DOM-01M



3 BASEMENT PLUMBING NEW WORK PARTIAL PLAN
P-7 Scale: 1/4" = 1'-0"

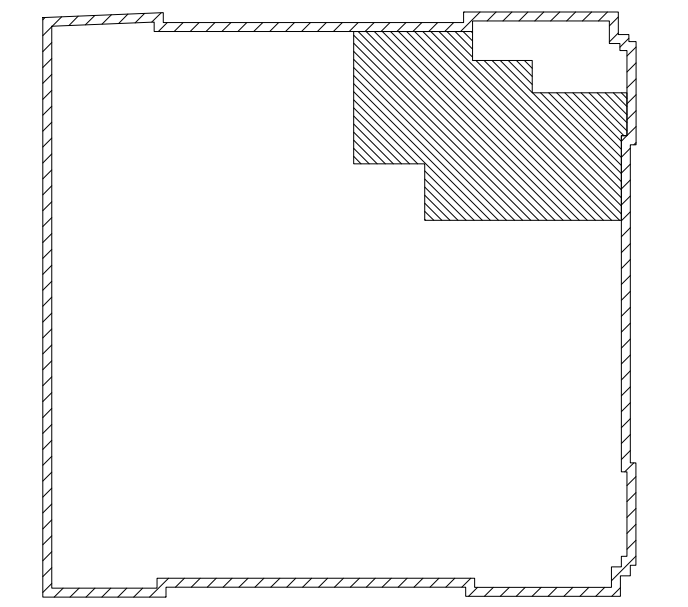
6 SCHEMATIC ELEVATION PLUMBING
P-7 NOT TO SCALE



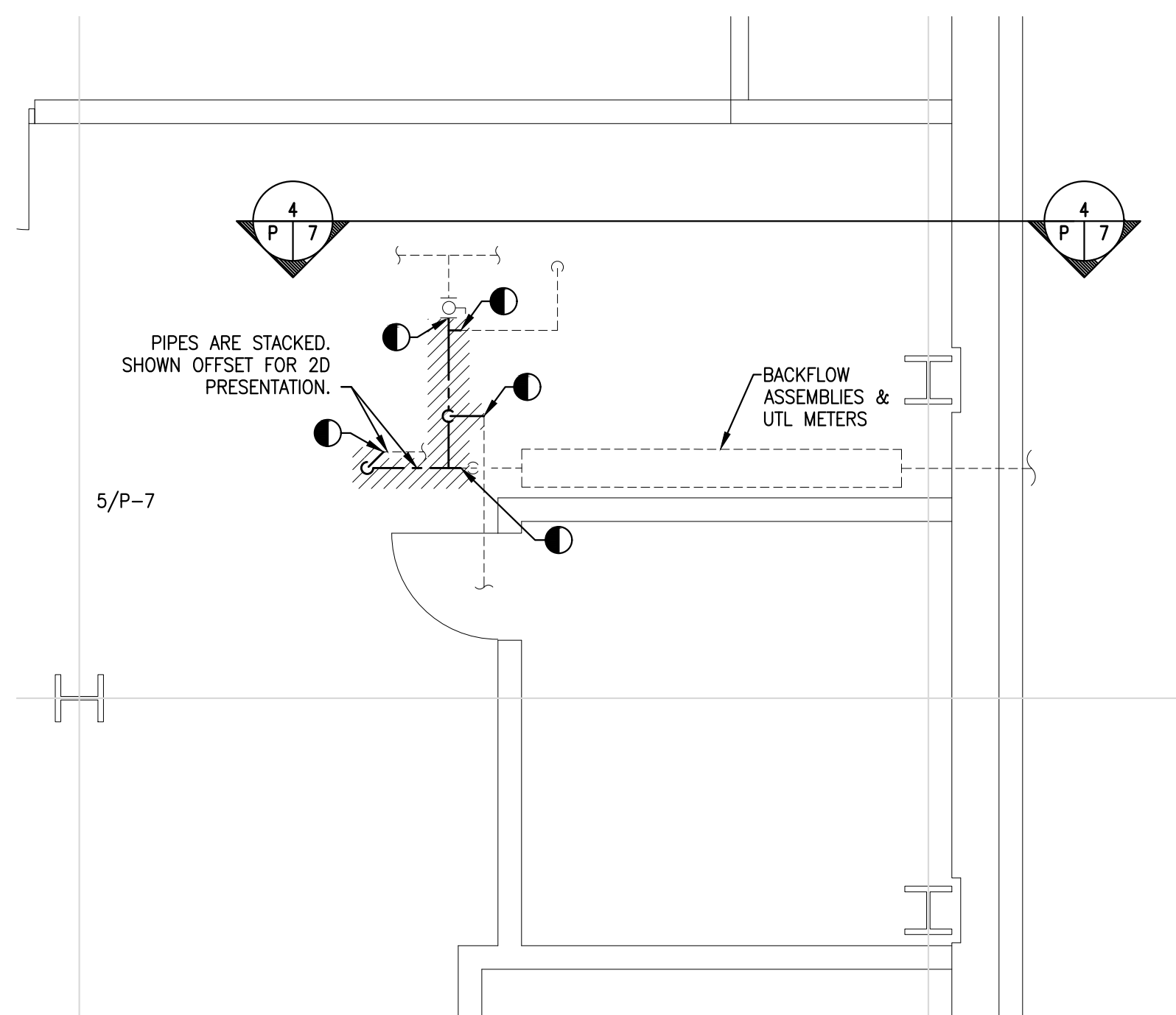
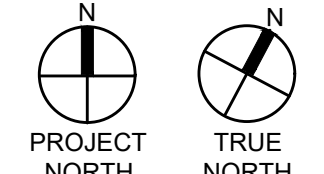
5 LOCATION OF PLUMBING WORK (DW METER)
P-7 Scale: NONE



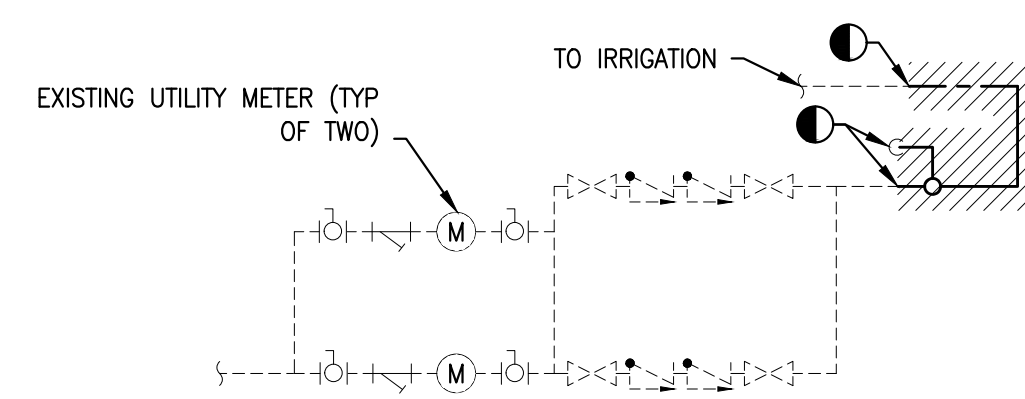
7 LOCATION OF PLMB WORK (ALT VIEW)
P-7 Scale: NONE



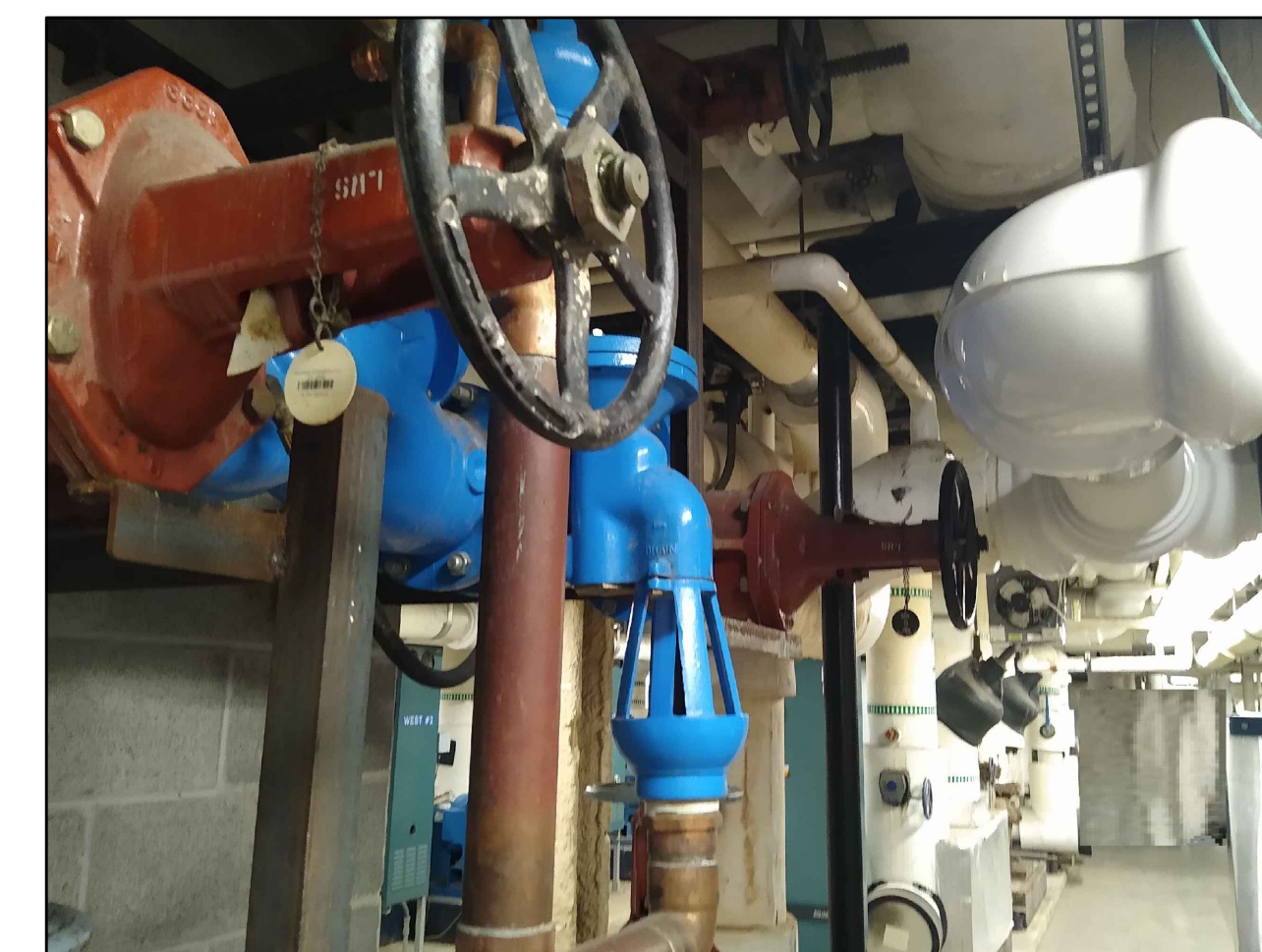
KEY PLAN
SCALE: N.T.S.



2 BASEMENT PLUMBING DEMOLITION PARTIAL PLAN
P-7 Scale: 1/4" = 1'-0"



4 SCHEMATIC ELEVATION PLUMBING DEMOLITION
P-7 NOT TO SCALE



8 LOCATION OF PLMB WORK (ALT VIEW)
P-7 Scale: NONE

RECORD REVISIONS

NO.	DESCRIPTION	DATE

02/14/2024
 SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

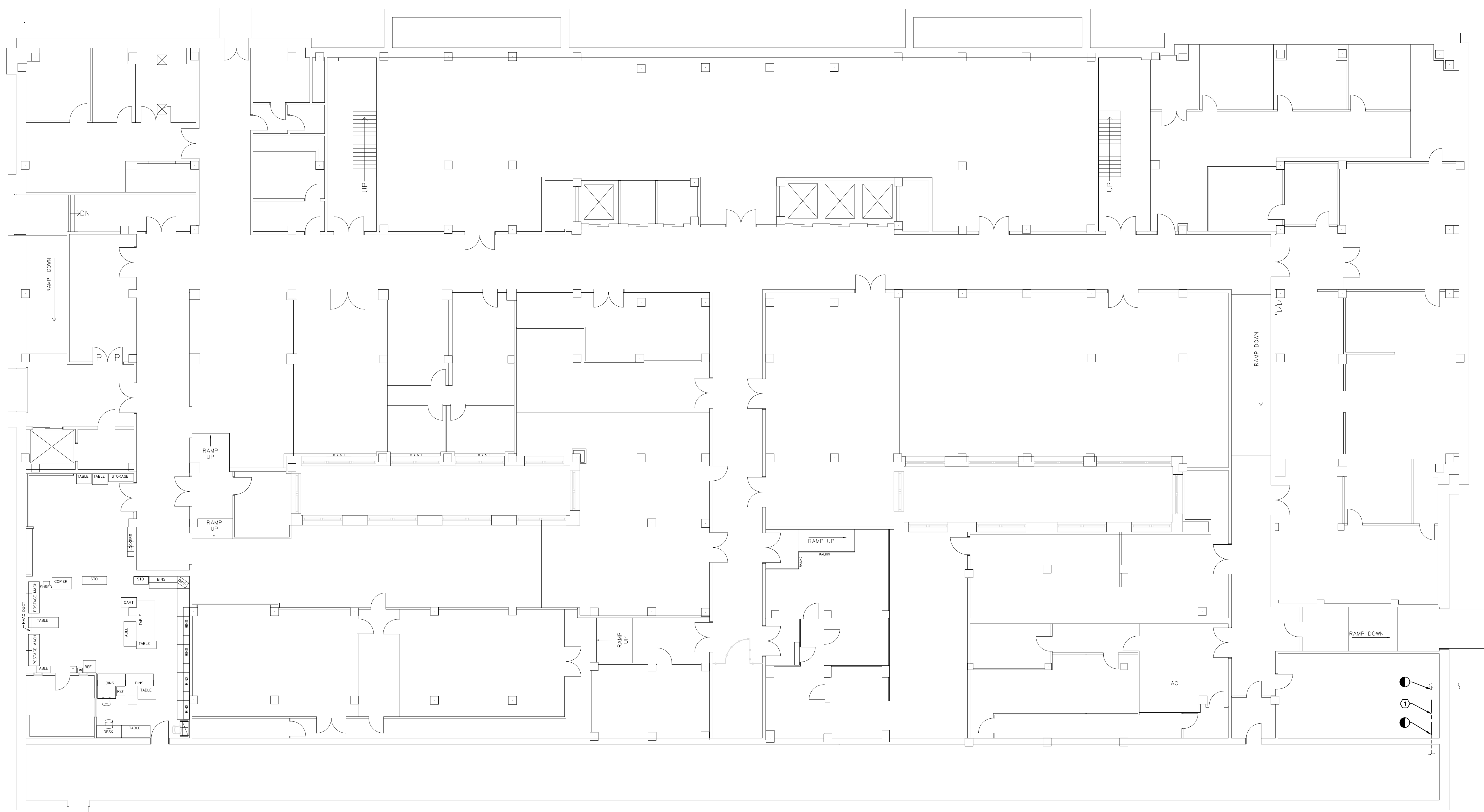
D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE -
CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

KEYSTONE BUILDING PLUMBING PLAN

VERIFY SCALE
BAR IS ONE (1) INCH LONG
ON ORIGINAL DRAWING:
0 1
IF BAR IS NOT ONE (1) INCH LONG,
ADJUST SCALE ACCORDINGLY
CONTRACTOR SHALL FIELD VERIFY
ALL DIMENSIONS.
VARIANCE FROM CONTRACT
DOCUMENTS NOT PERMITTED
WITHOUT PROFESSIONAL & BUREAU
OF CONSTRUCTION APPROVAL.

DRAWN BY: J. OSBORNE
 DATE: 02/14/24
 CHECKED BY: M. RADZICKI
 SCALE: AS NOTED
 DRAWING No.: P-7



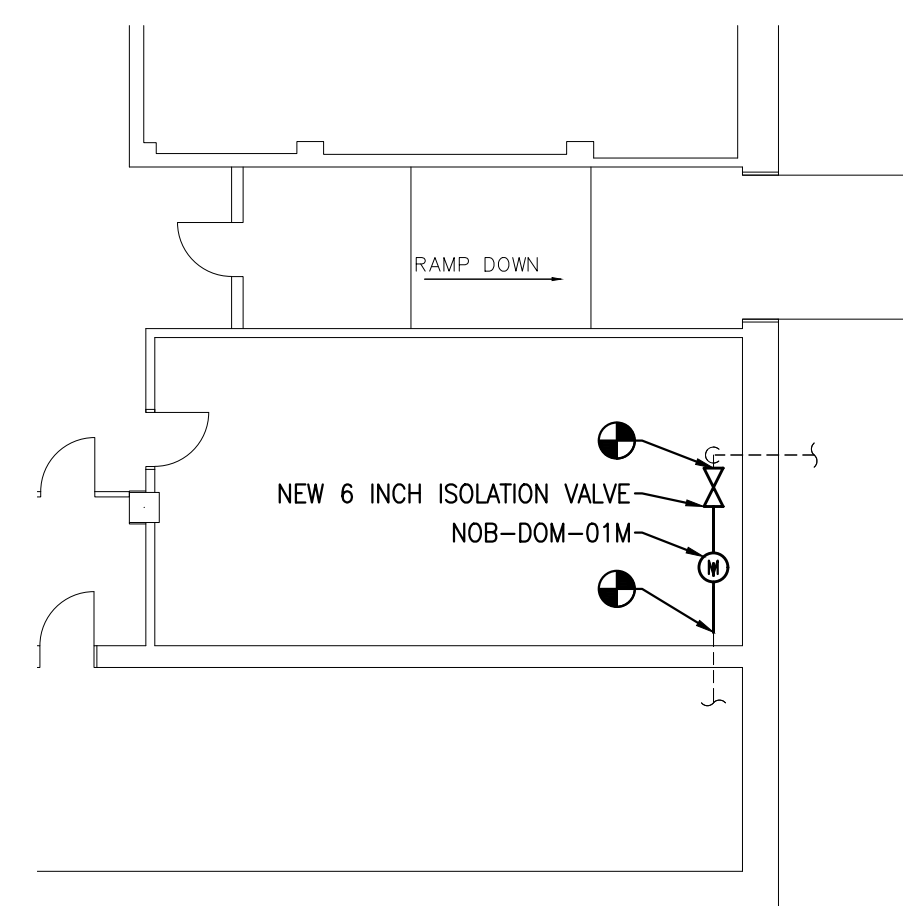
1 BASEMENT DOMESTIC WATER EXISTING CONDITION AND PIPE PREP
 P-8 Scale: 3/32" = 1'-0"

SHEET KEYNOTES

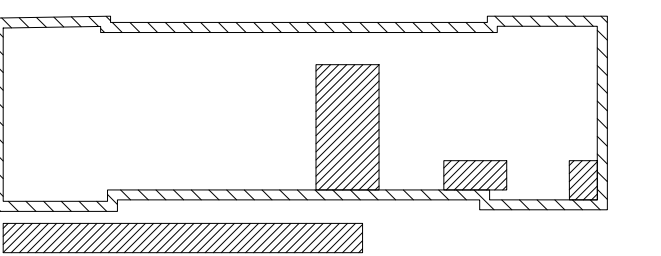
DEMOLISH EXISTING PIPE IN PREPARATION FOR NEW VALVE AND METER



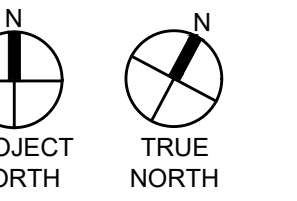
2 PHOTO: DOMESTIC WATER METER LOCATION
 P-8



3 BASEMENT PLUMBING PLAN
 P-8 Scale: 3/32" = 1'-0"



KEY PLAN
 SCALE: N.T.S.



NO.	REVISIONS

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02/14/2024
 SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
 52 GLENMAURA NATIONAL BOULEVARD
 SCRANTON, PENNSYLVANIA 18505

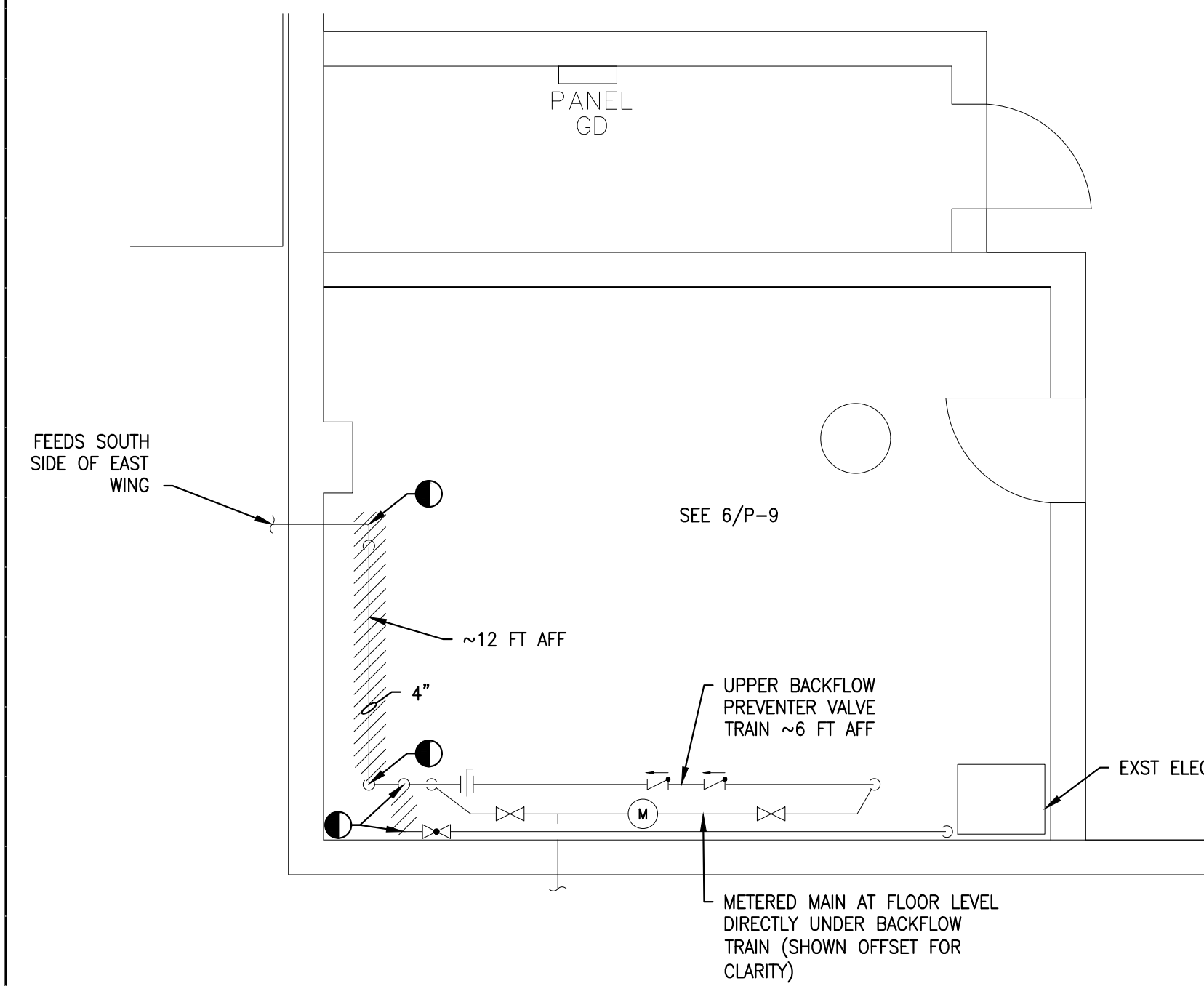
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

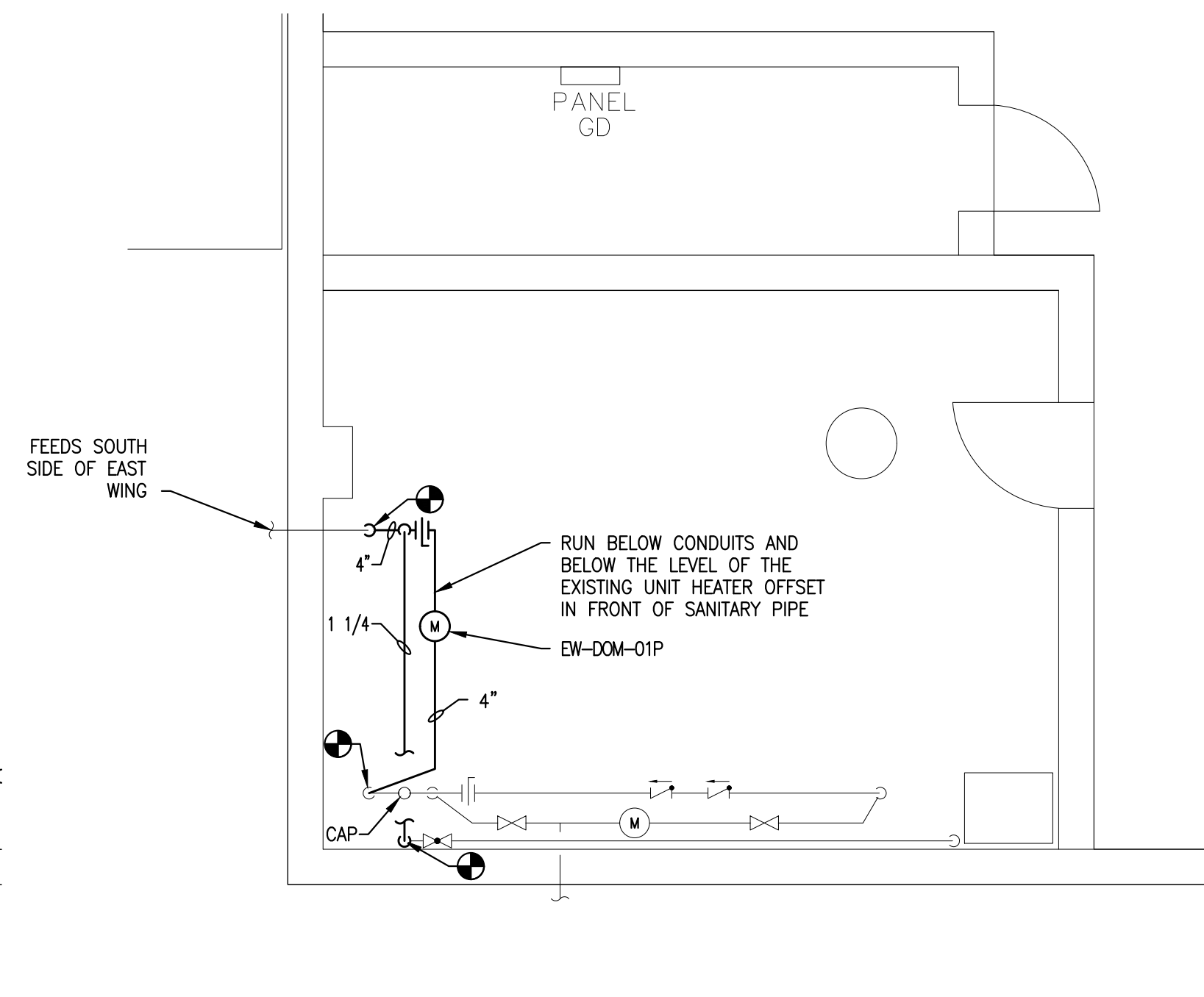
AUTOMATION SYSTEM UPGRADE -
 CAPITOL COMPLEX
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, DAUPHIN COUNTY, PA

NORTH OFFICE BUILDING MECHANICAL PLAN

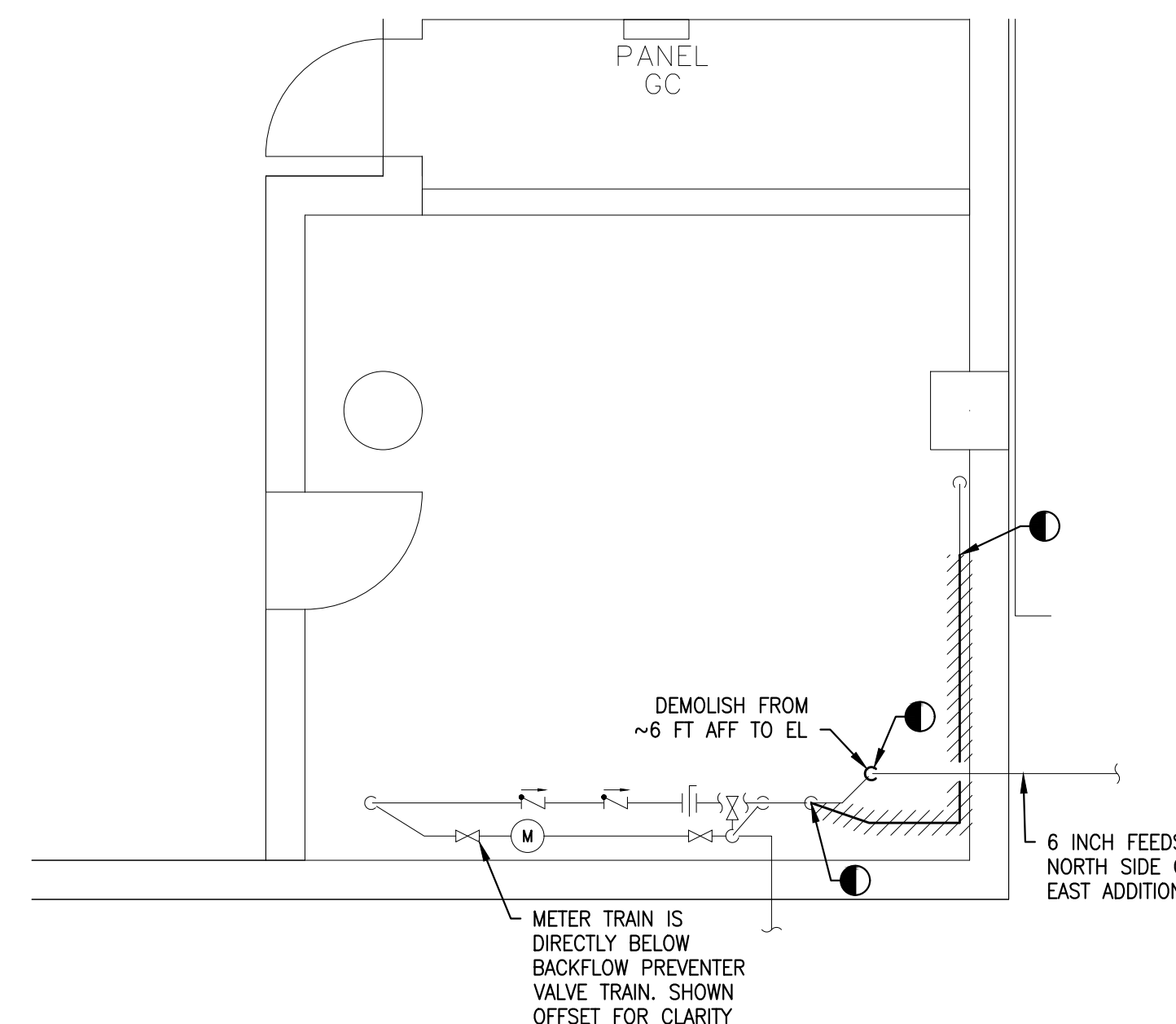
VERIFY SCALE BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING: 0 1 IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.	DRAWN BY J. OSBORNE	DATE 02/14/24	DRAWING No. P-8
	CHECKED BY M. RADZICKI	SCALE AS NOTED	



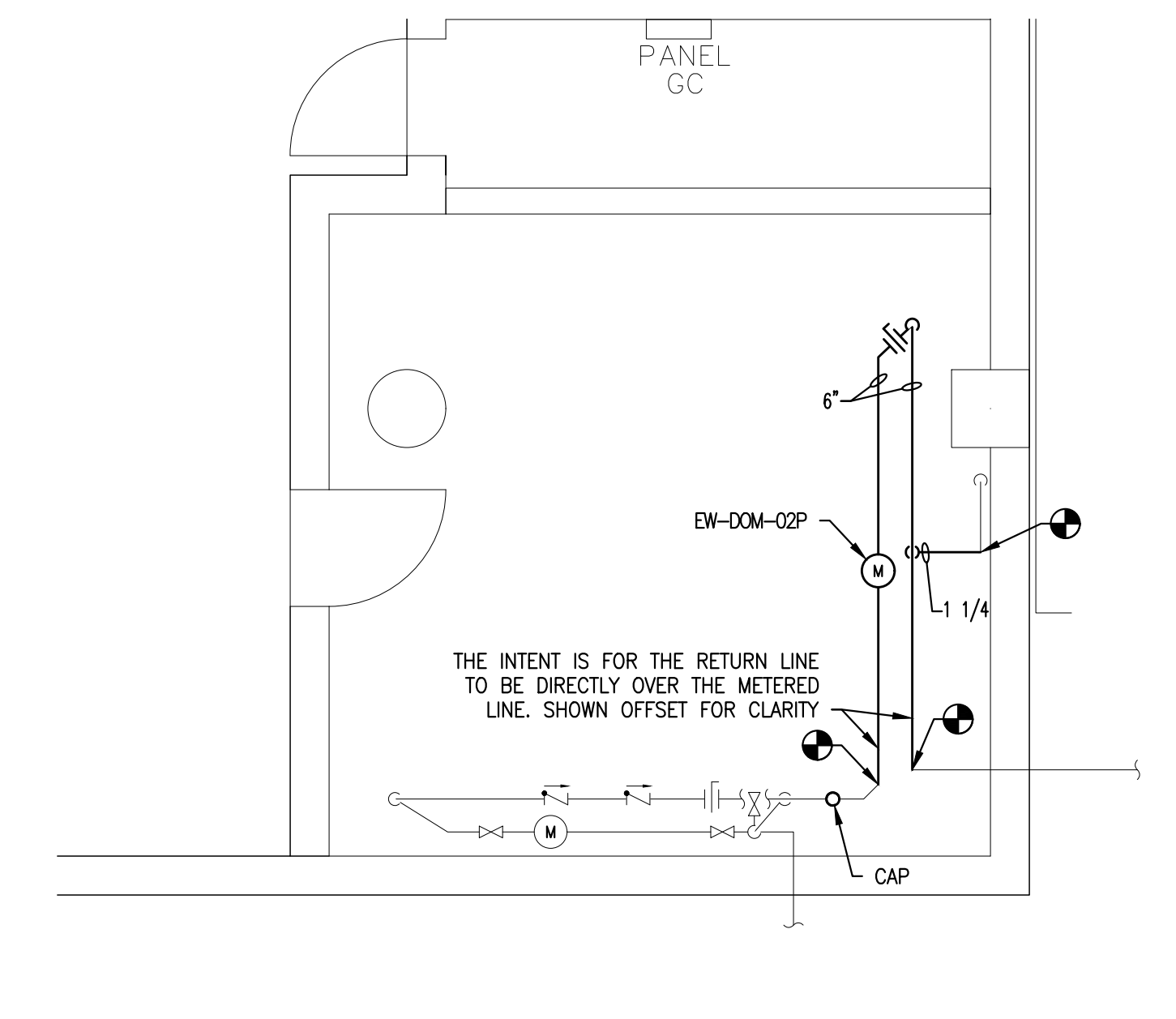
2
P-9 **P201E PIPE PREP/DEMO**
Scale: 1/4" = 1'-0"



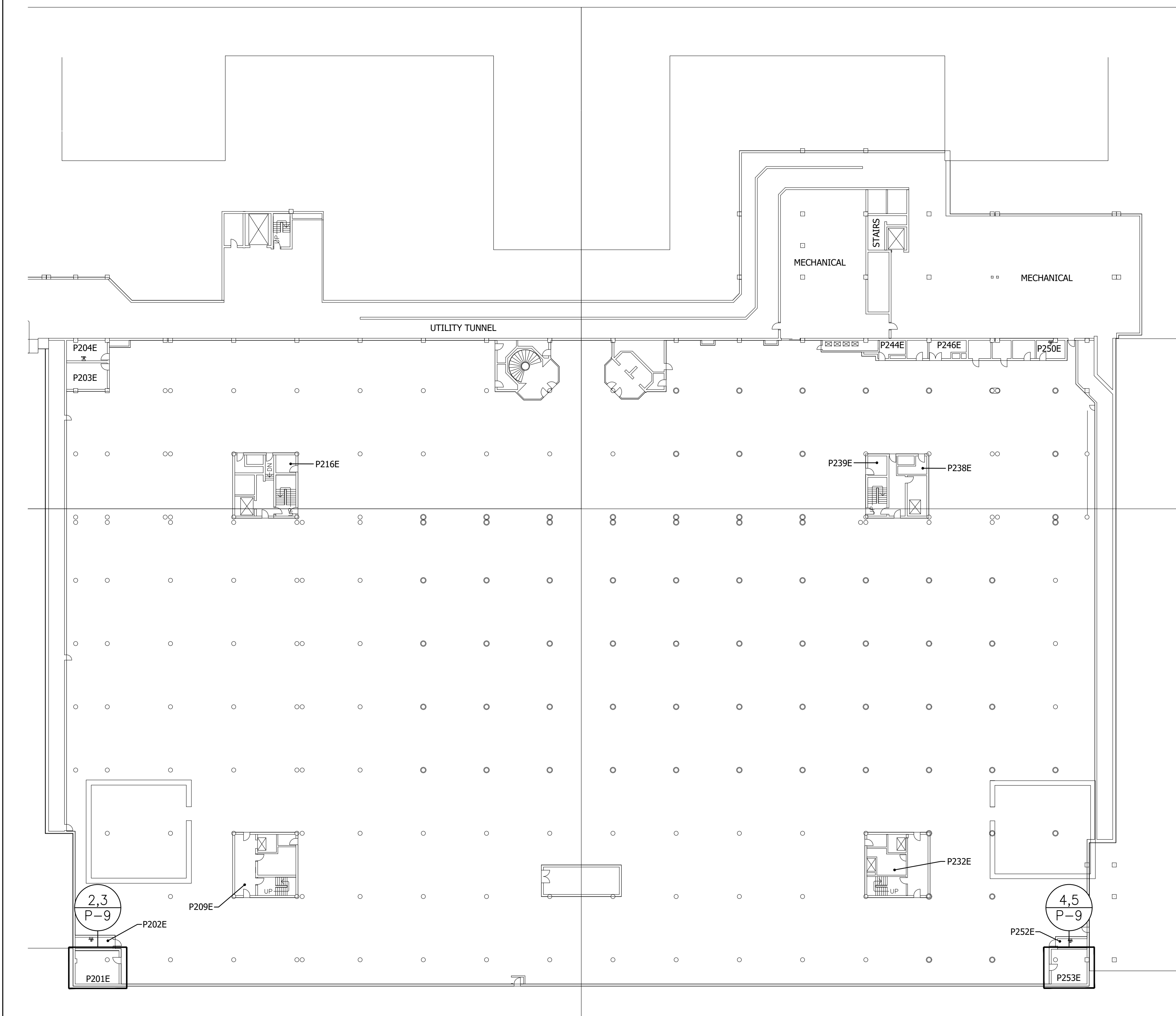
3
P-9 **P201E NEW WORK METER INSTALL**
Scale: 1/4" = 1'-0"



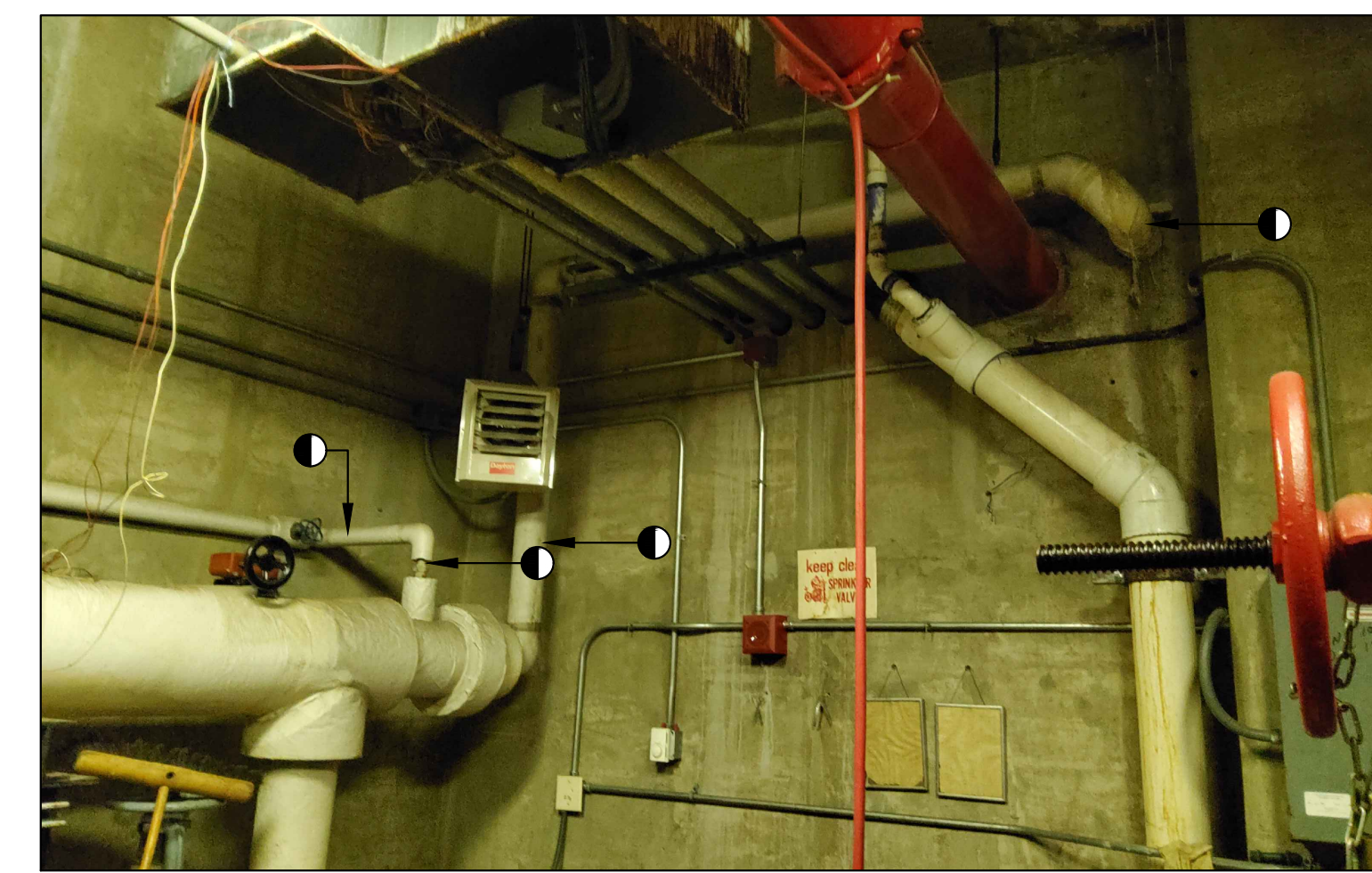
4
P-9 **P253E PIPE PREP/DEMO**
Scale: 1/4" = 1'-0"



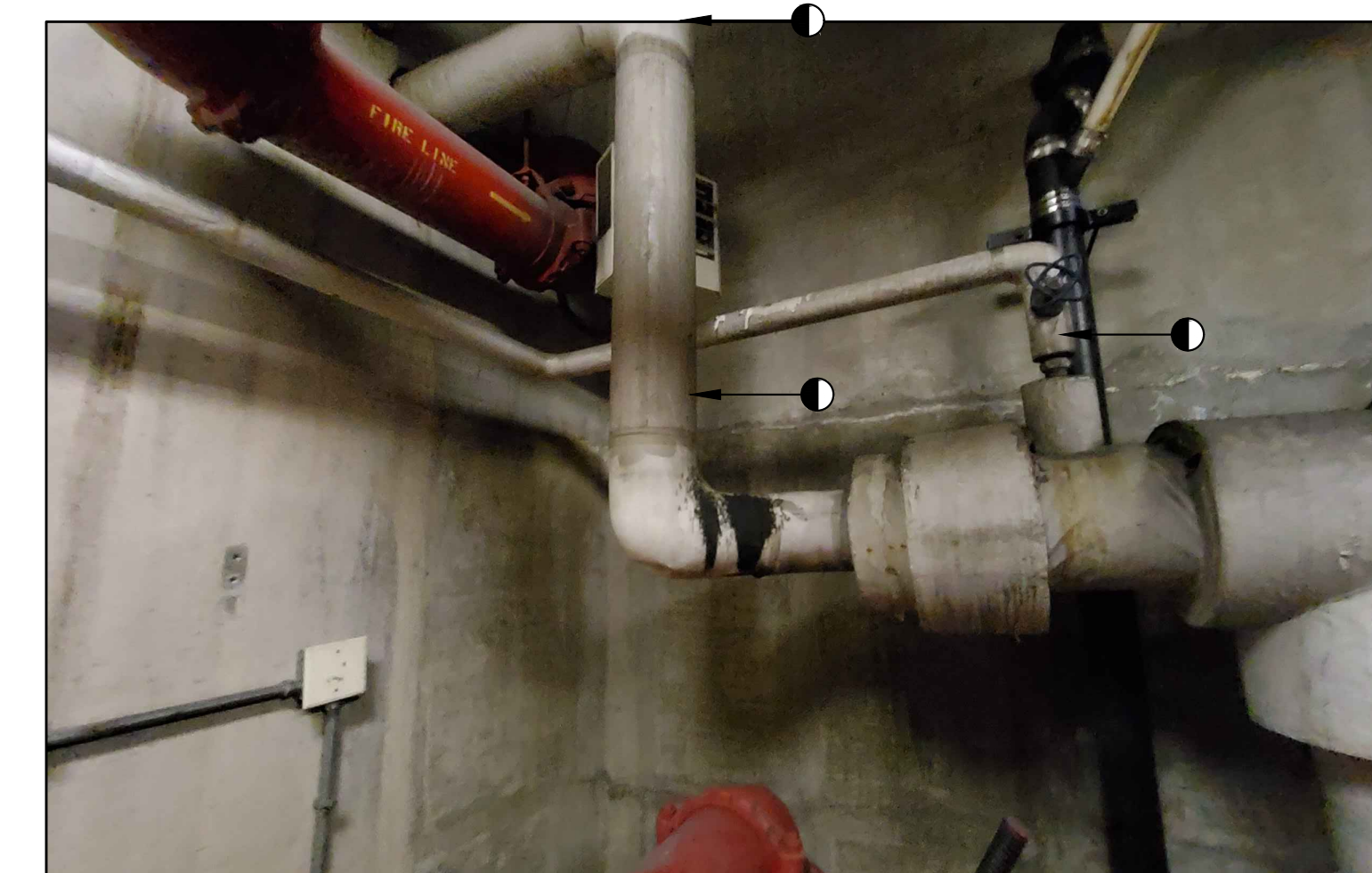
4
P-9 **P253E PIPE NEW WORK - METER INSTALLATION**
Scale: 1/4" = 1'-0"



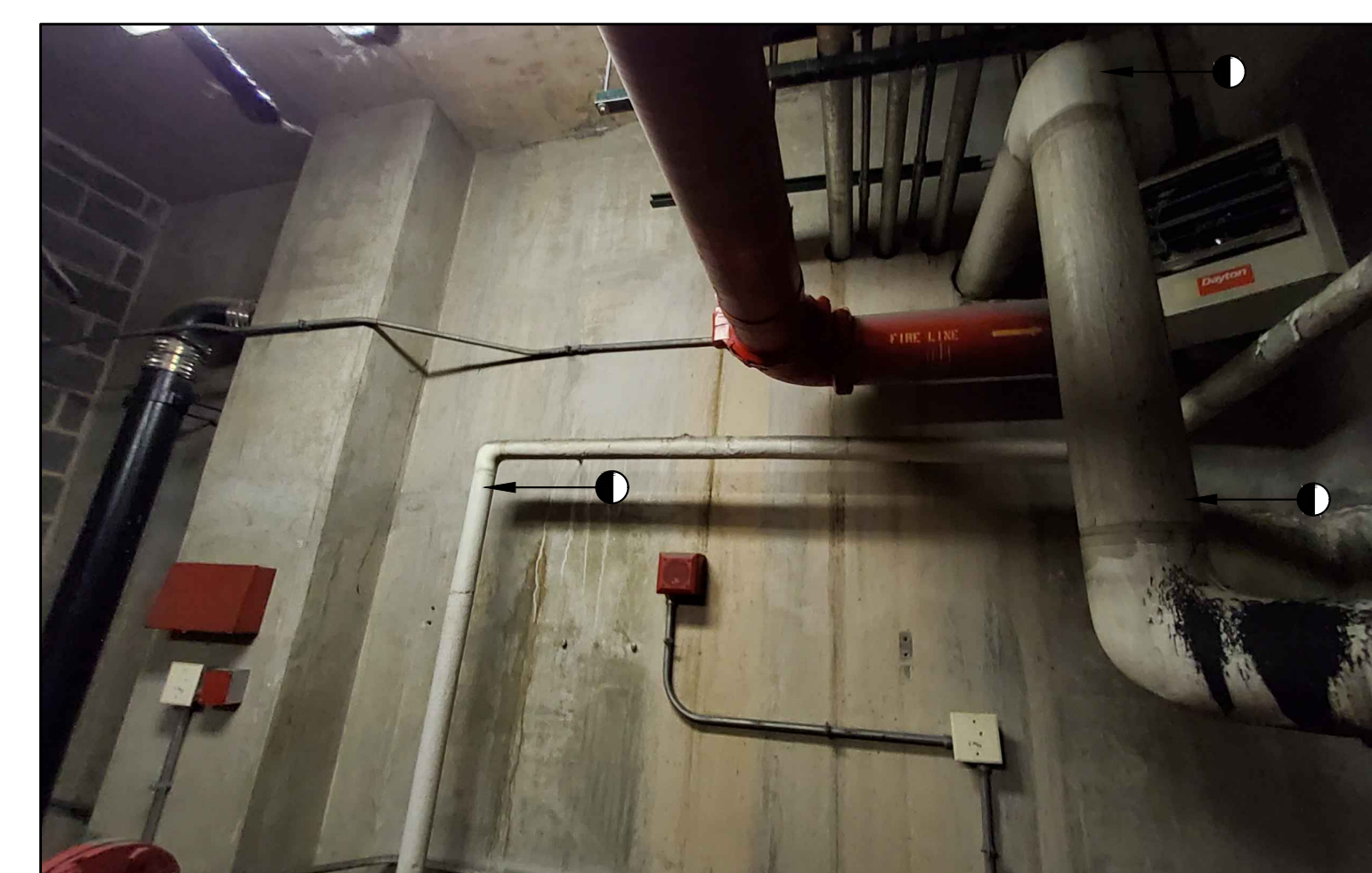
1
P-9 **METER LOCATIONS**
Scale: 1/32" = 1'-0"



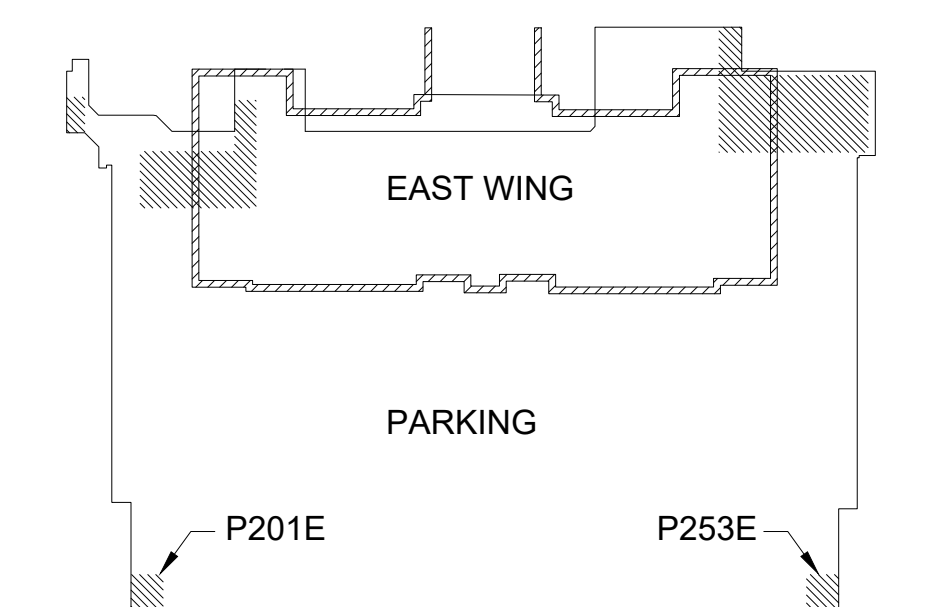
6
P-9 **PHOTO: ROOM P201E AREA OF WORK**
Scale: NONE



7
P-9 **PHOTO: ROOM P253E AREA OF WORK**
Scale: NONE



8
P-9 **PHOTO: ROOM P253E AREA OF WORK (ALT VIEW)**
Scale: NONE



KEY PLAN
SCALE: N.T.S.
PROJECT NORTH
TRUE NORTH

NO.	REVISIONS

RECORD REVISIONS

02/14/2024
 SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

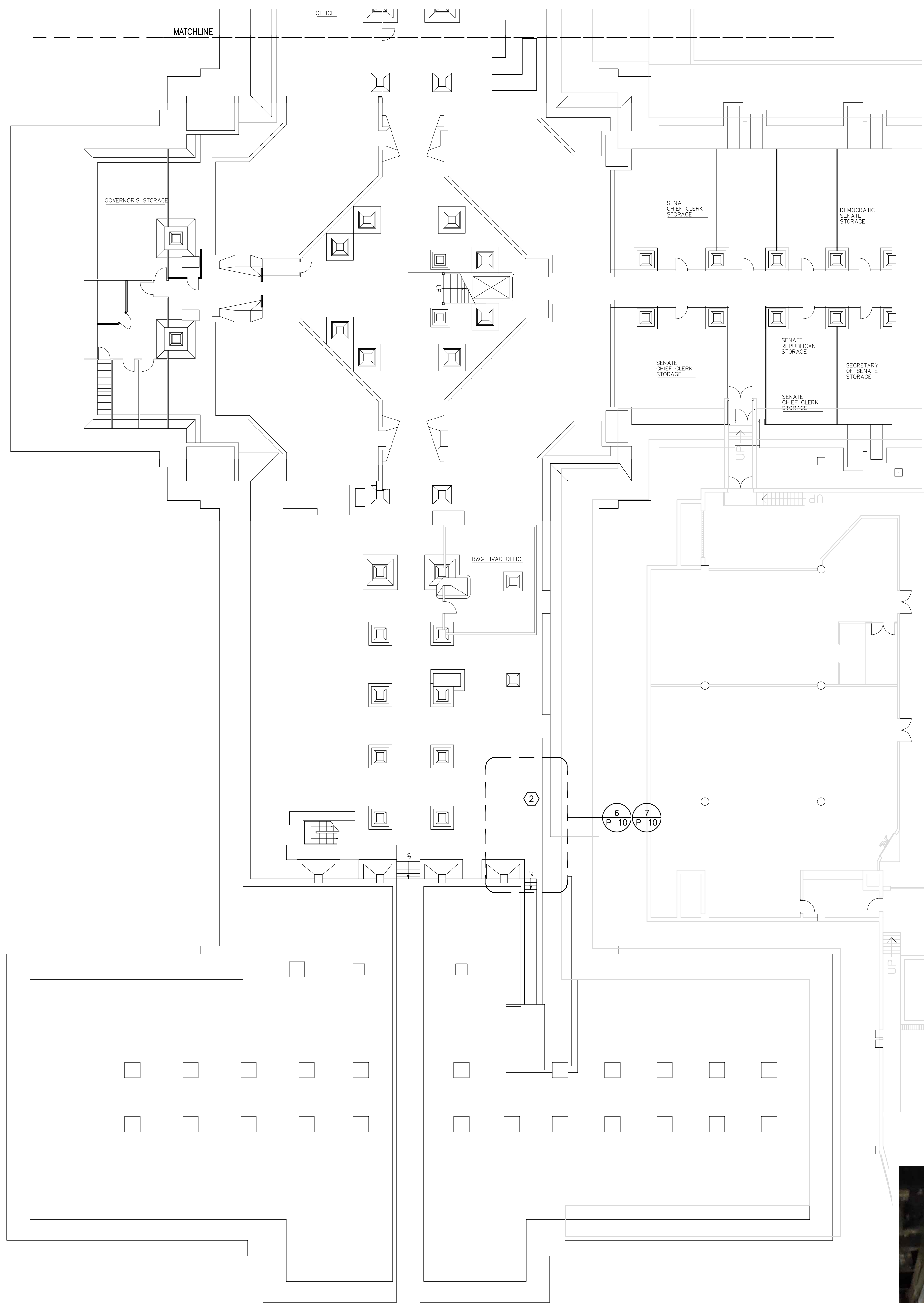
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

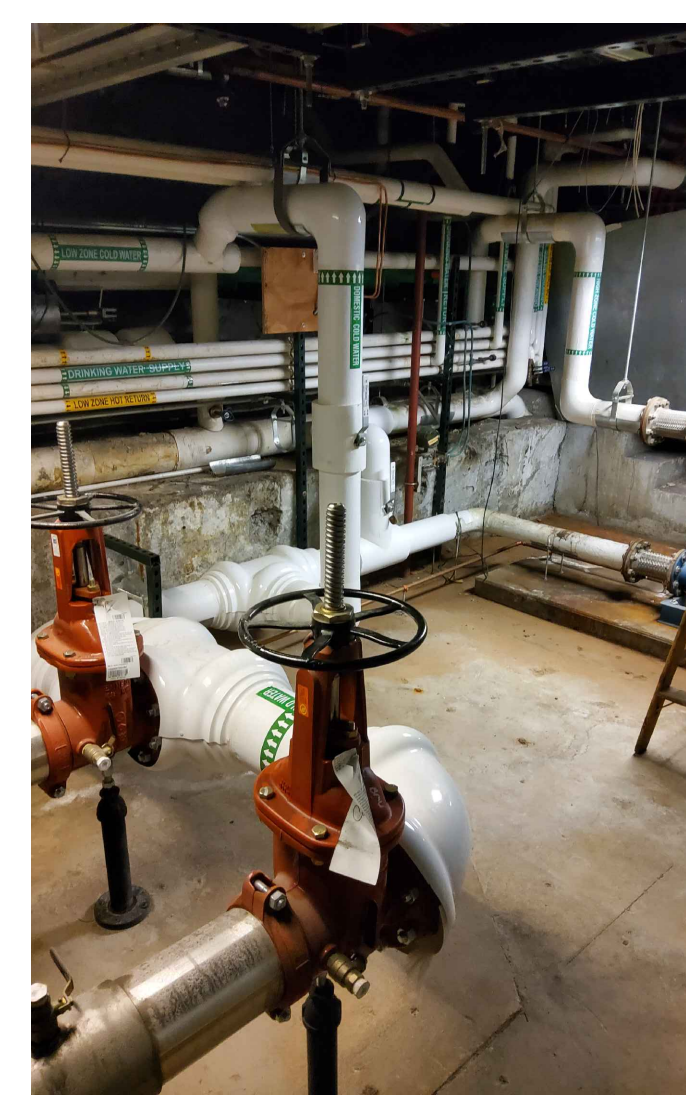
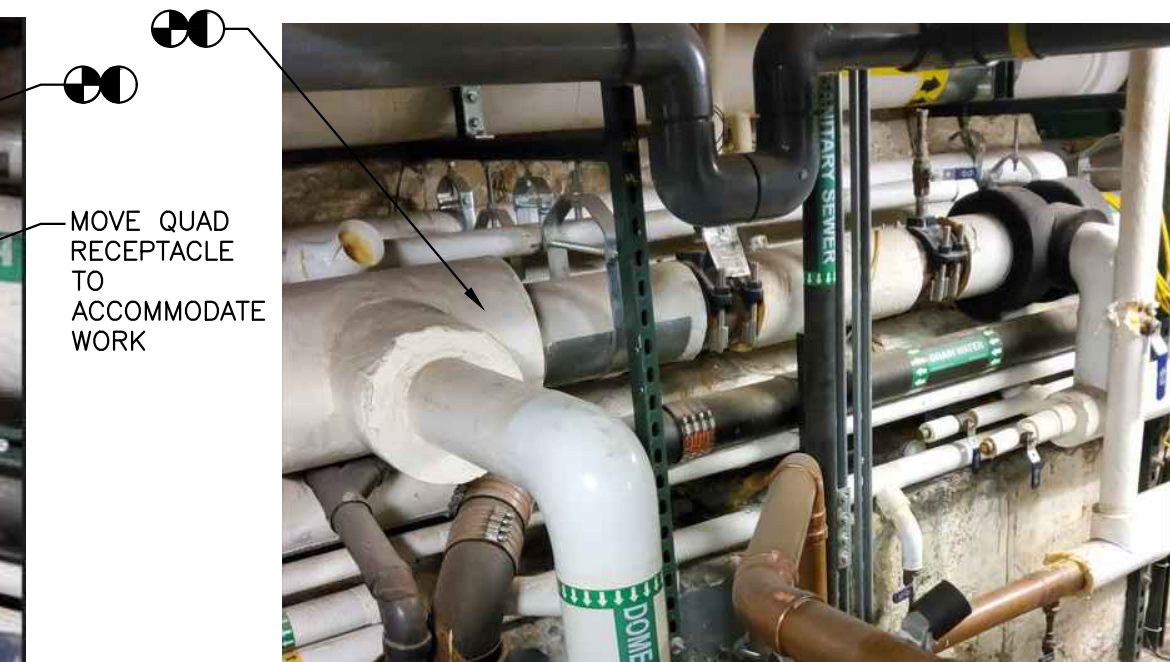
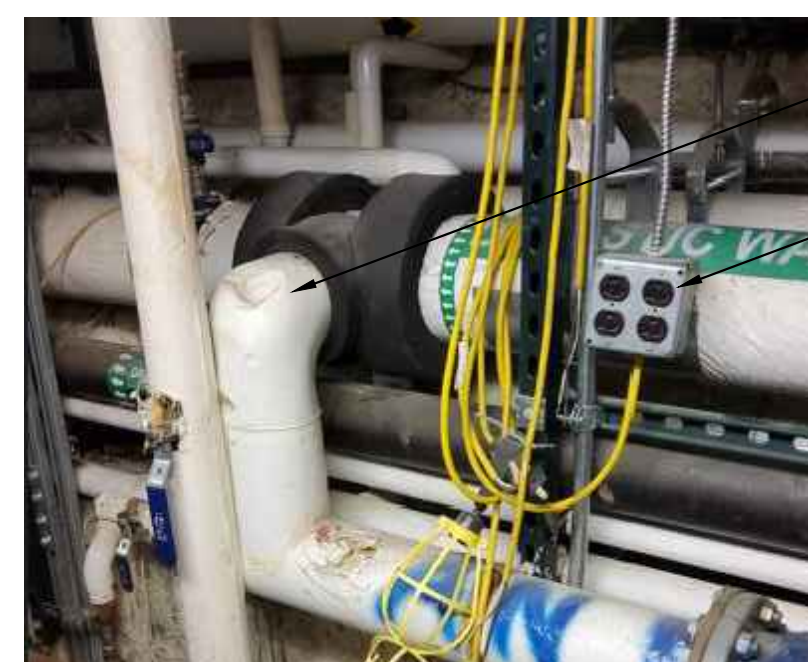
VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
0 1
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

AUTOMATION SYSTEM UPGRADE – CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA
EAST ADDITION DOMESTIC WATER METERS

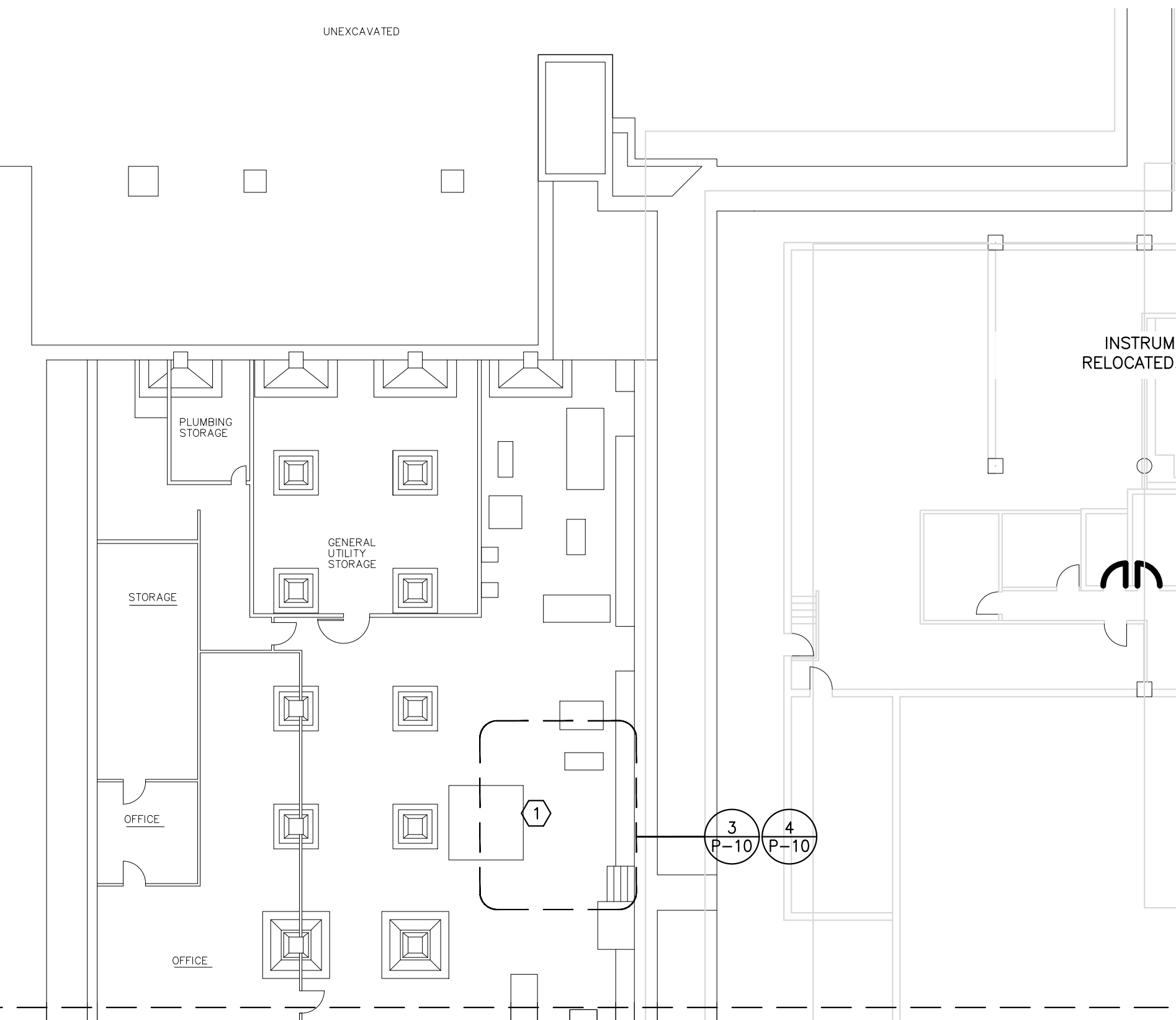
DRAWN BY: J. OSBORNE DATE: 02/14/24 DRAWING No.: P-9
 CHECKED BY: M. RADZICKI SCALE: AS NOTED



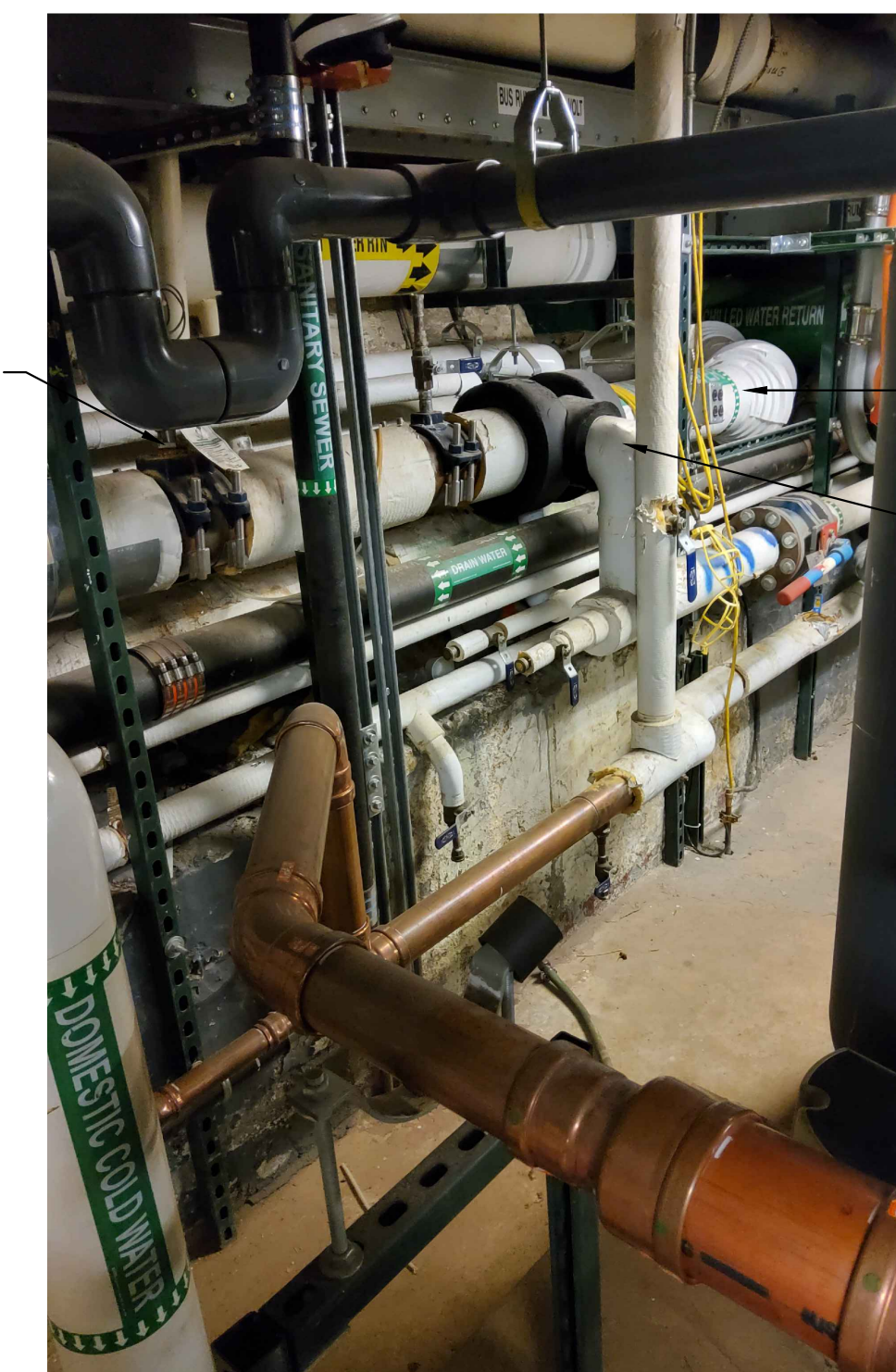
- ① PROVIDE DOMESTIC WATER METER MC-DM-01M (1 OF 2)
- ② PROVIDE DOMESTIC WATER METER MC-DM-01M (2 OF 2)



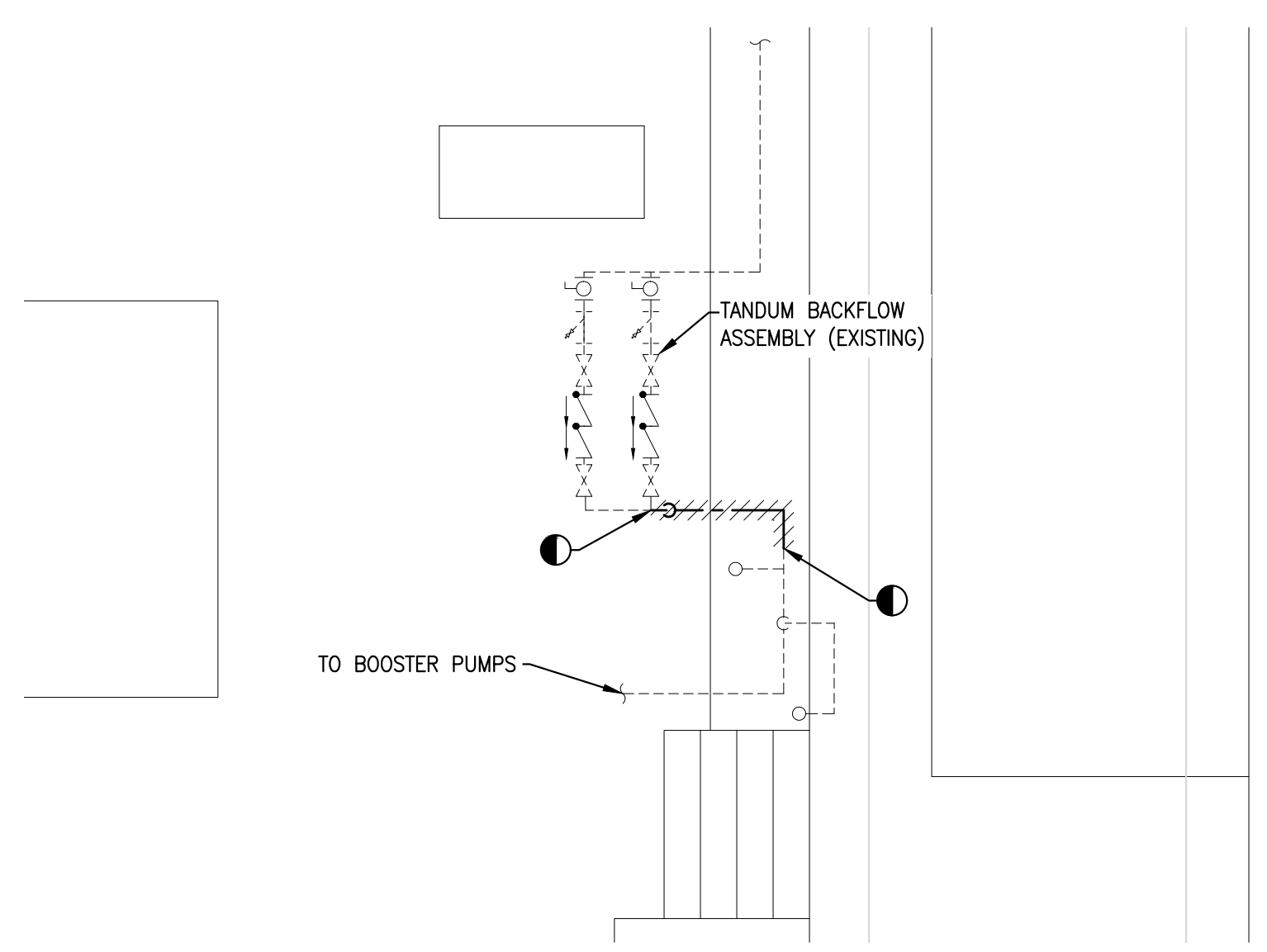
8 PHOTO: PLUMBING AOW NORTH
Scale: NONE



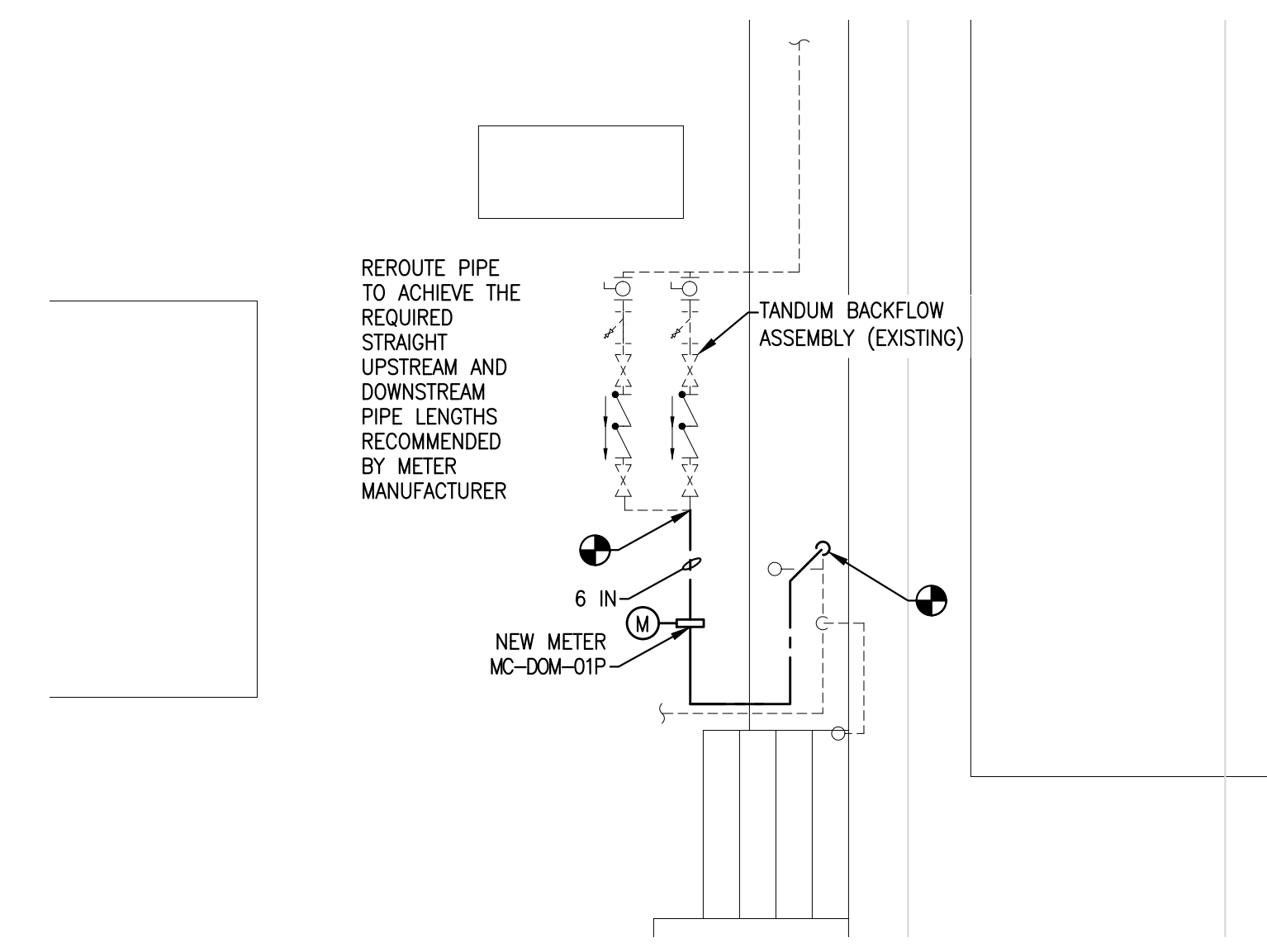
2 SUB-BASEMENT PLUMBING PLAN (PART 1)
P-10 Scale: 1/16" = 1'-0"



5 PHOTO: PLUMBING AOW SOUTH
Scale: NONE



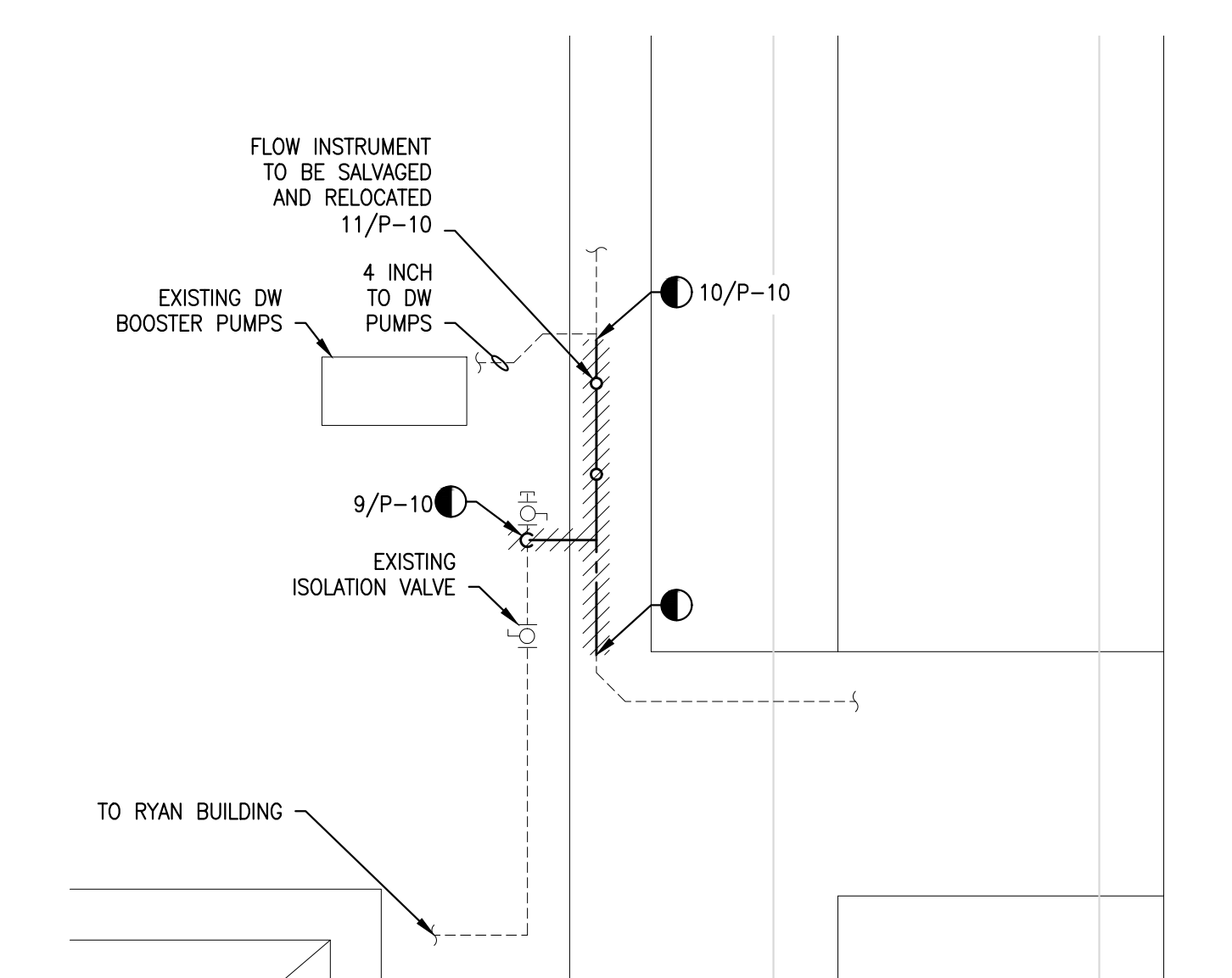
3 SUB-BASEMENT PLUMBING DEMO PLAN
P-10 Scale: 1/4" = 1'-0"
NORTH (SEE 8/P-10)



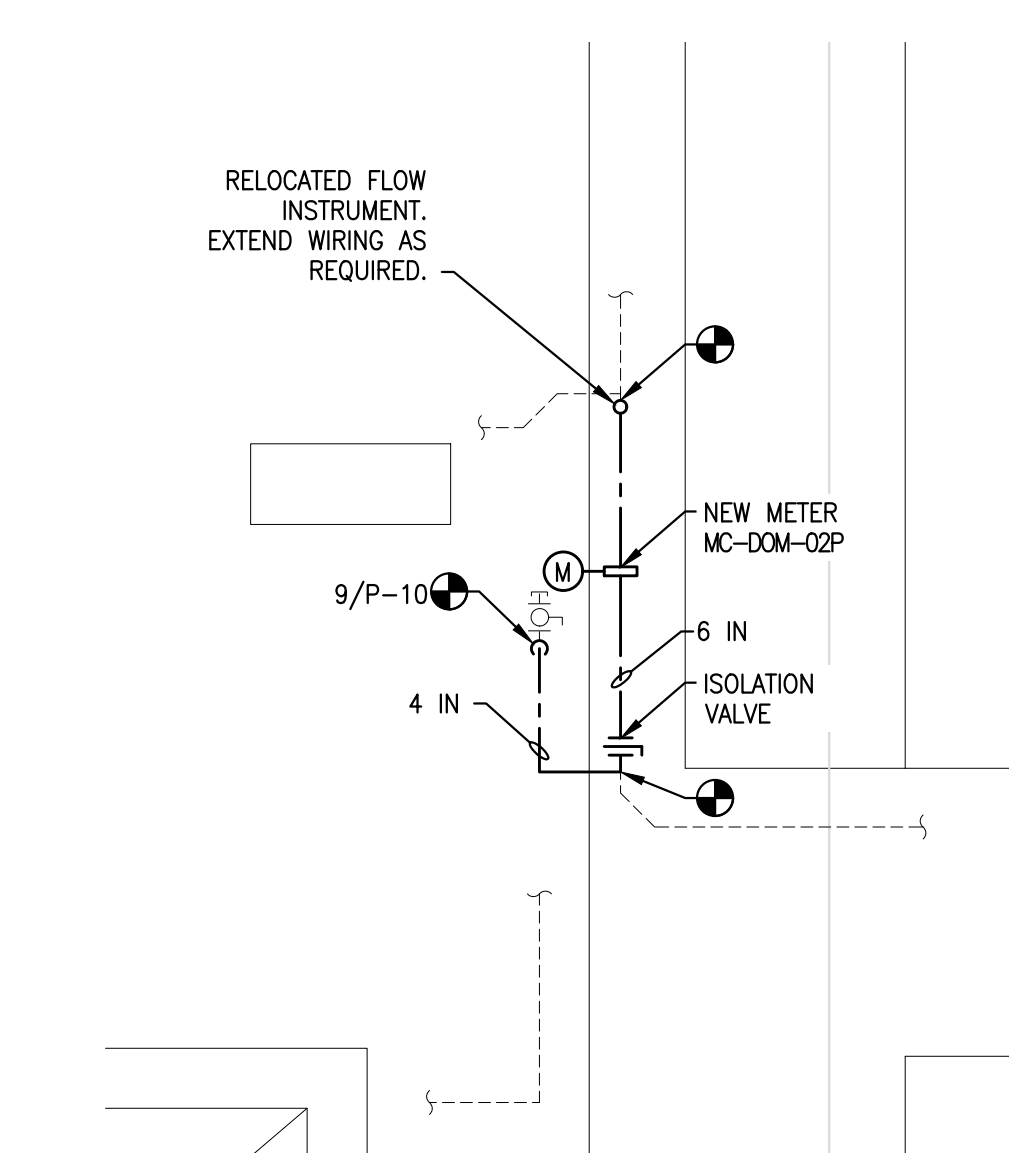
4 SUB-BASEMENT PLUMBING PLAN
P-10 Scale: 1/4" = 1'-0"



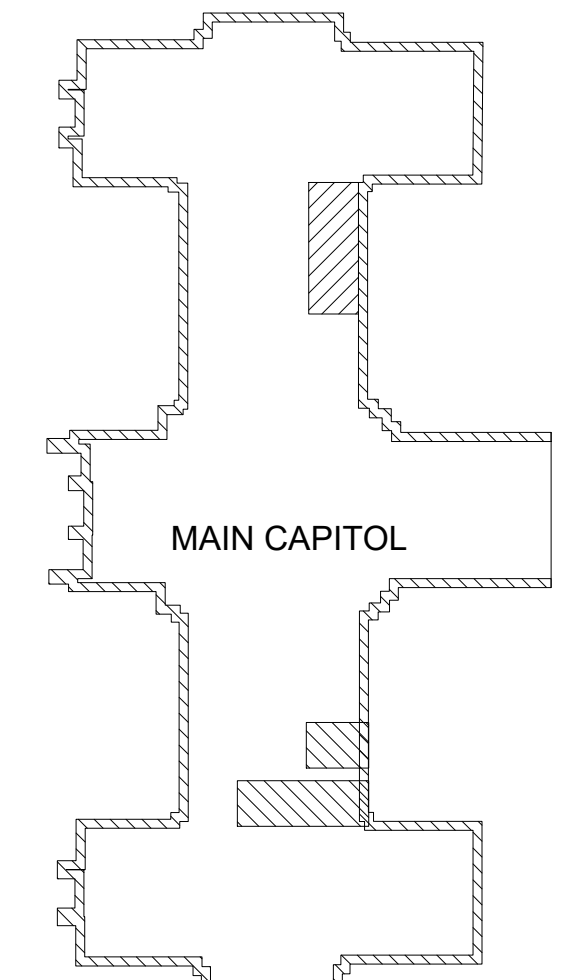
11 PHOTO: PLB AOW
P-10 Scale: NONE (INSTRUMENT TO BE RELOCATED)



6 SUB-BASEMENT PLUMBING DEMO PLAN
P-10 Scale: 1/4" = 1'-0"
SOUTH



7 SUB-BASEMENT PLUMBING PLAN
P-10 Scale: 1/4" = 1'-0"



KEY PLAN
SCALE: N.T.S.

NO.	REVISION	DATE

RECORD REVISIONS

[Professional Engineer Seal]
DATE: 02/14/2024

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

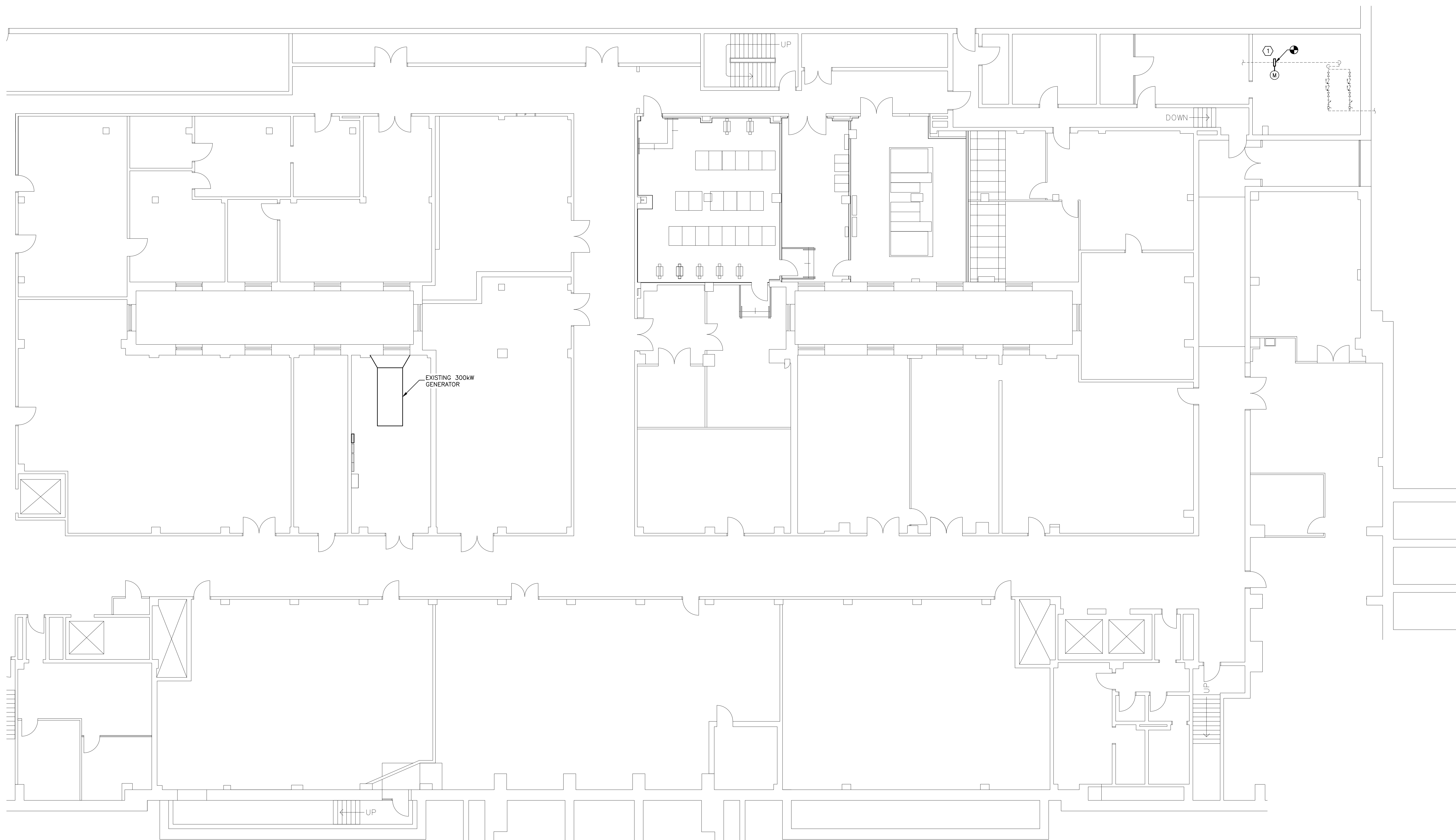
D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE -
CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

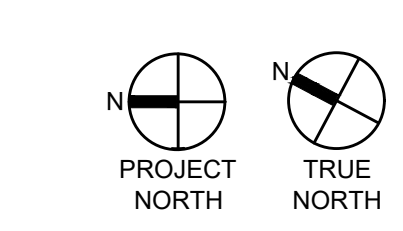
MAIN CAPITOL CENTER SUB-BASEMENT PLUMBING PLAN
DRAWING No. P-10

VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
0 1
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

DRAWN BY: J. OSBORNE
DATE: 02/14/24
CHECKED BY: M. RADZICKI
SCALE: AS NOTED



KEY PLAN
SCALE: N.T.S.



NO.	REVISIONS

1 BASEMENT PLUMBING PLAN
Scale: 1/8" = 1'-0"

① PROVIDE 6-INCH DOMESTIC WATER METER IOB-DOM-01M



2 PHOTO: LOCATION OF NEW DOMESTIC WATER METER
No Scale

REGISTERED PROFESSIONAL ENGINEER
M. RADZICKI
10073186
02/14/2024
SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

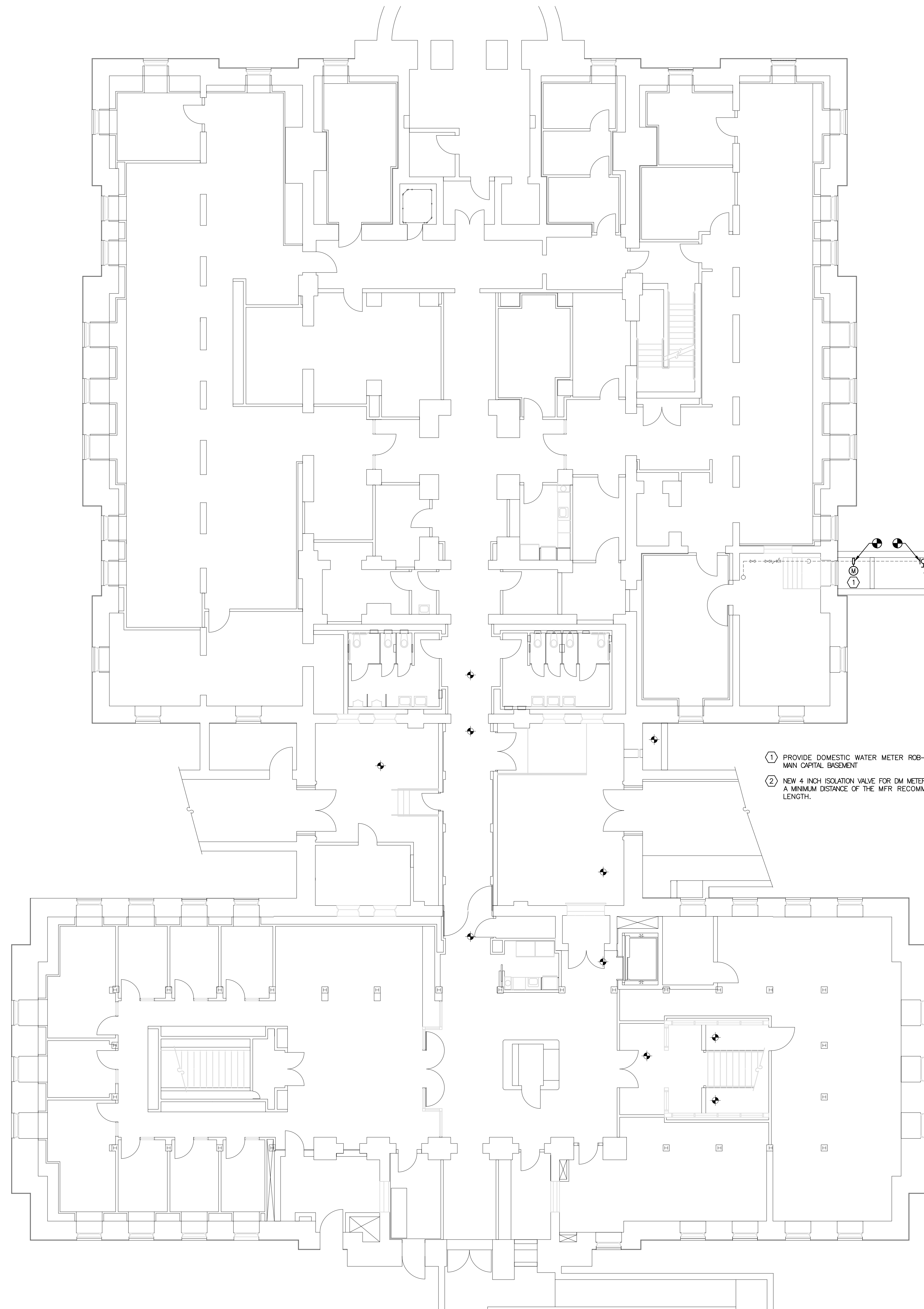
D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE -
CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

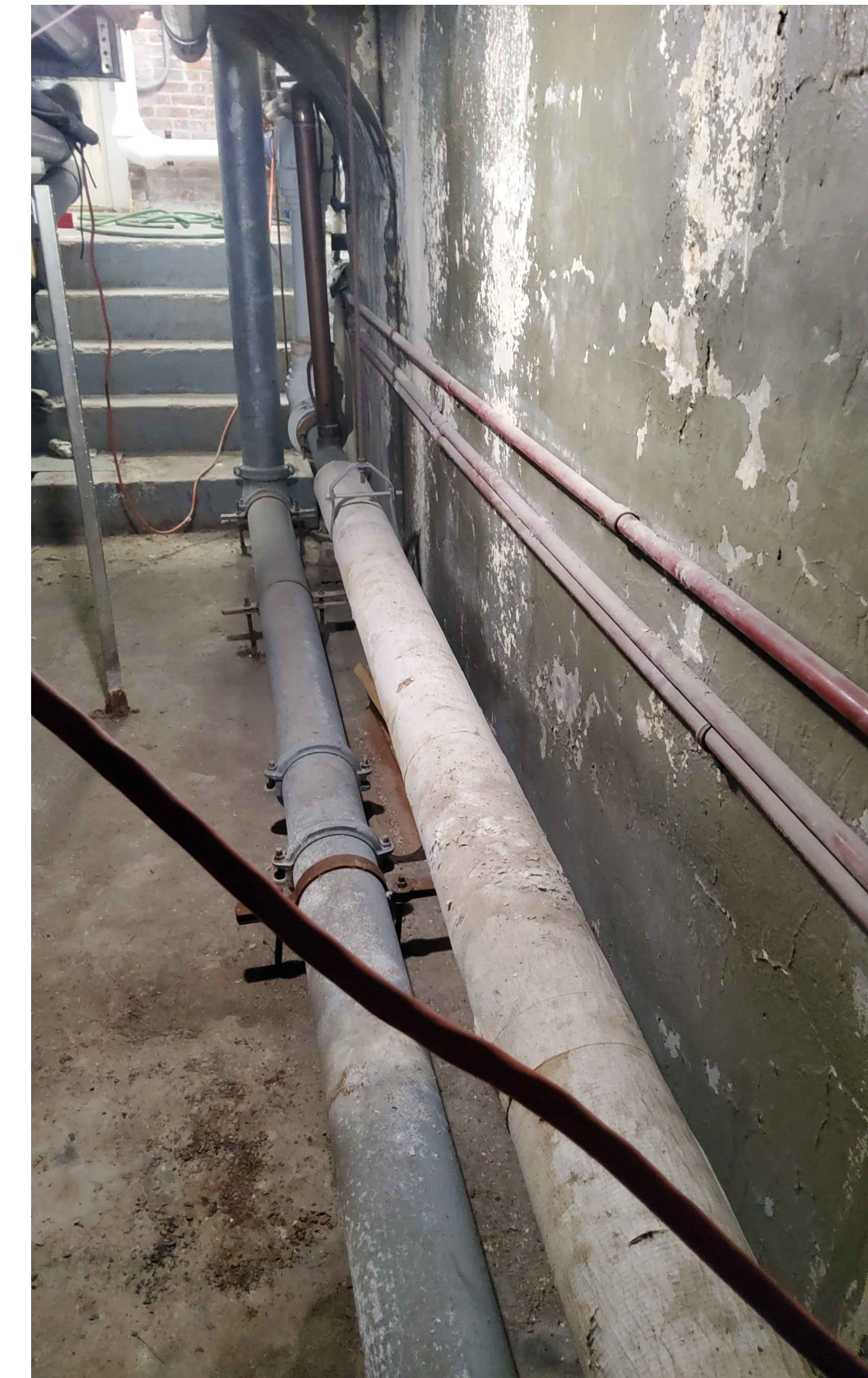
IRVIS (SOUTH BUILDING) PLUMBING PLAN

VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
0 1
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

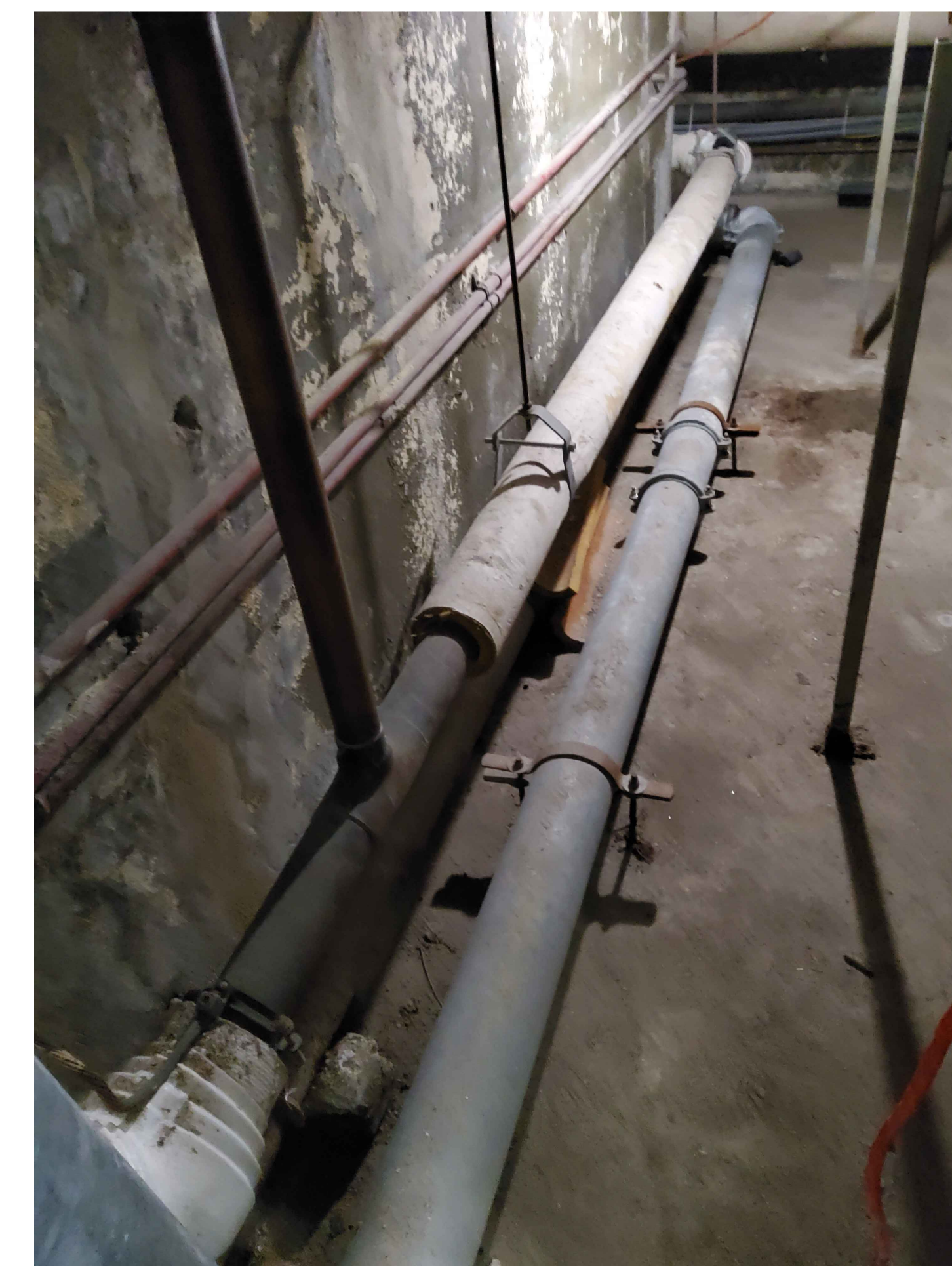
DRAWN BY: J. OSBORNE DATE: 02/14/24 DRAWING No.: P-11
CHECKED BY: M. RADZICKI SCALE: AS NOTED



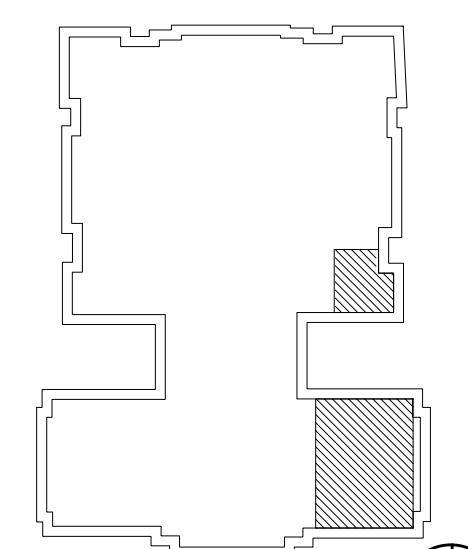
1
P-12 **BASEMENT PLUMBING PLAN**
Scale: 1/8" = 1'-0"



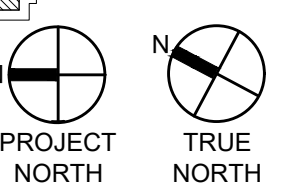
2
P-12 **NEW METER LOCATION IN TUNNEL**
Scale: NONE



3
P-12 **NEW METER LOCATION IN TUNNEL**
Scale: NONE ALT VIEW



KEY PLAN
SCALE: N.T.S.



NO.	REVISIONS

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02/14/2024
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GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

Automation System Upgrade -
Capitol Complex
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

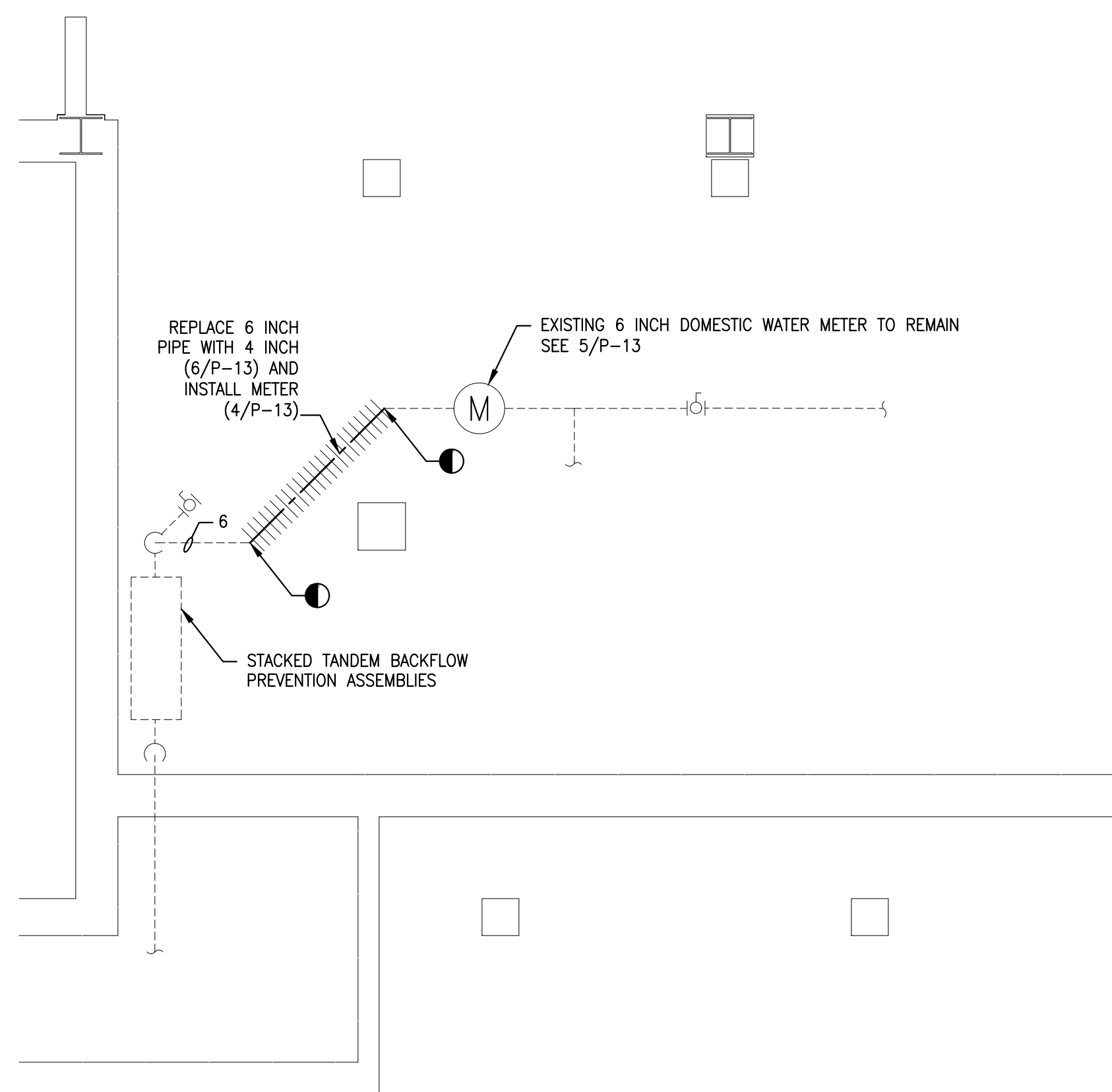
RYAN BUILDING PLUMBING PLAN

VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
0 1
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

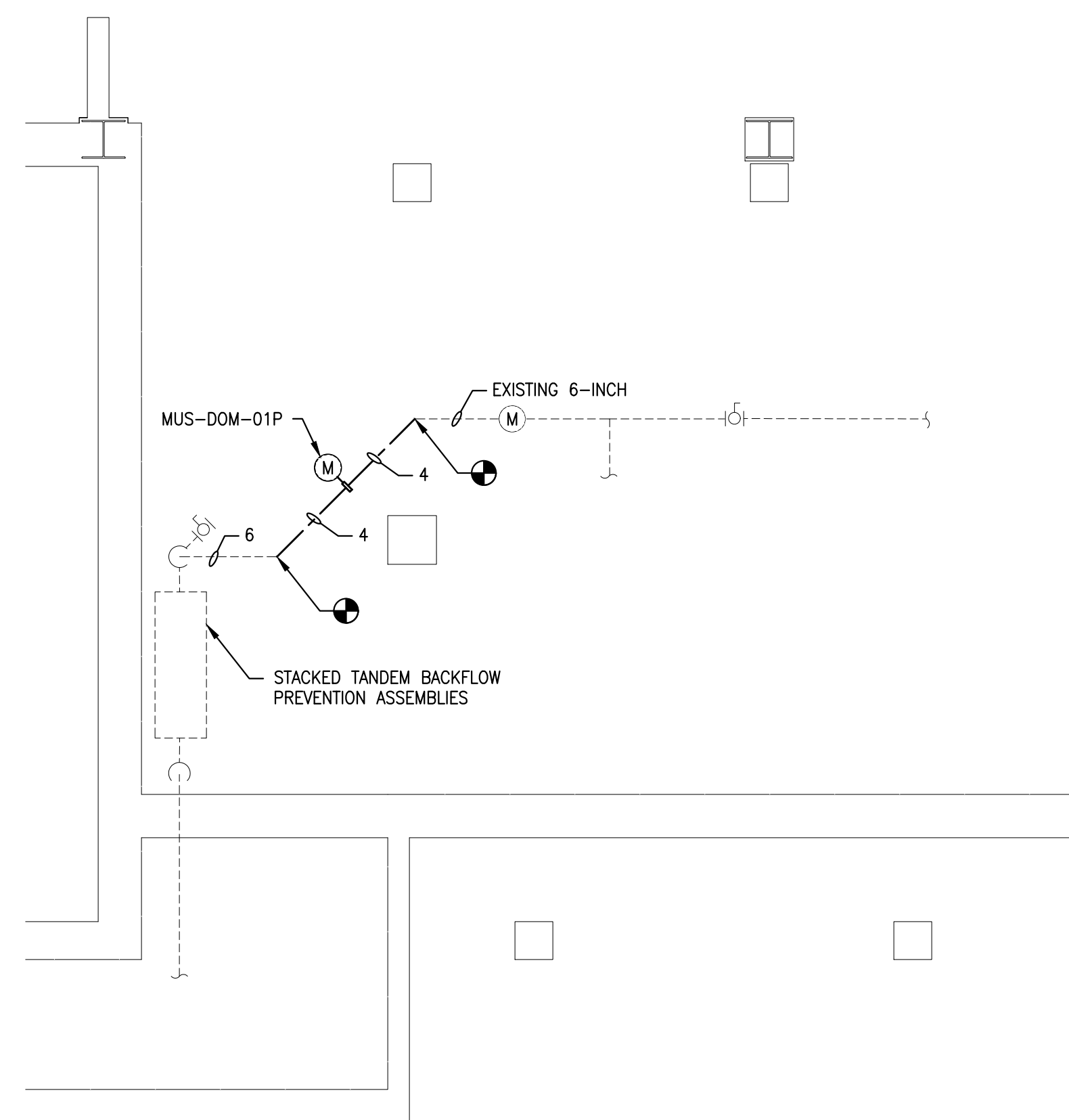
DRAWN BY J. OSBORNE	DATE 02/14/24	DRAWING No. P-12
CHECKED BY M. RADZICKI	SCALE AS NOTED	



1 BASEMENT PLUMBING PLAN
P-13 Scale: 1/16" = 1'-0"



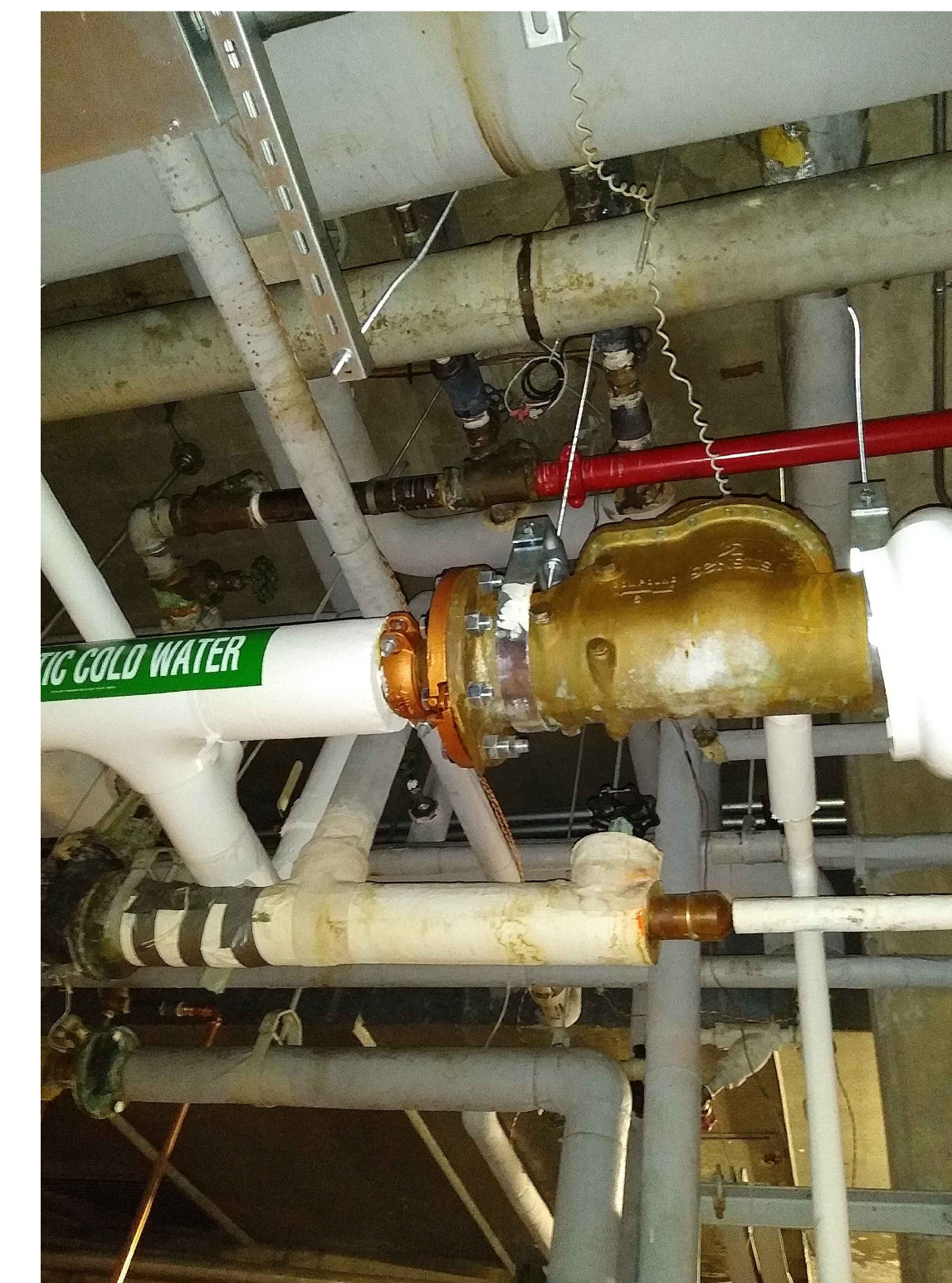
2 PLUMBING PART PLAN-DEMOLITION
P-13 Scale: 1/4" = 1'-0"



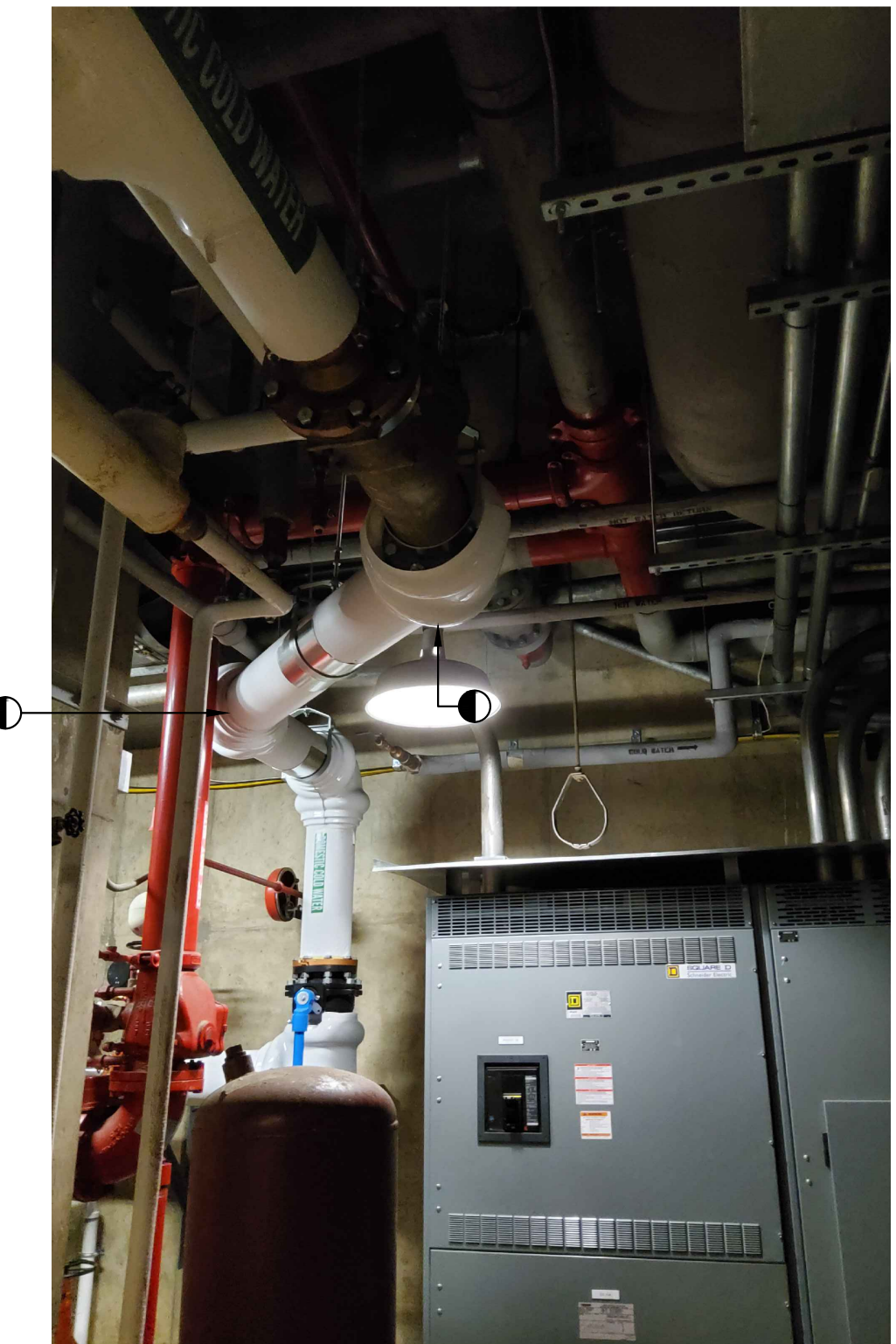
3 PLUMBING PART PLAN-NEW WORK
P-13 Scale: 1/4" = 1'-0" METER INSTALLATION AND PIPE REPLACEMENT



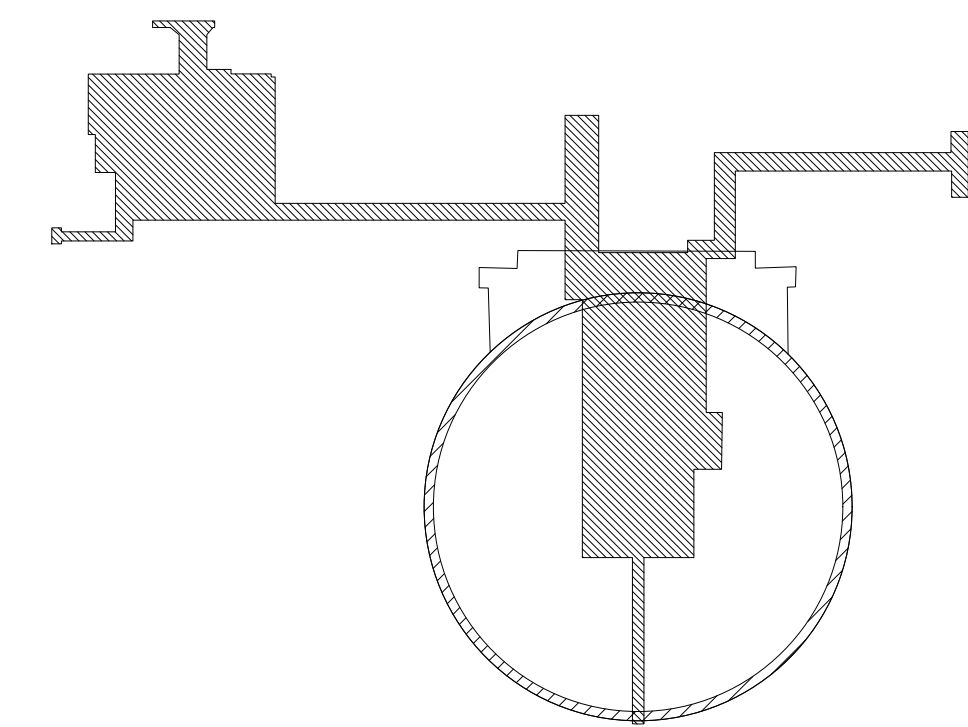
4 DM WATER GENERAL LOCATION
P-13 Scale: NONE (PHOTO)



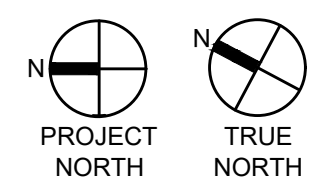
5 EXISTING DM WATER METER
P-13 Scale: NONE (PHOTO) METER TO REMAIN



6 DM WATER GENERAL LOCATION
P-13 Scale: NONE (PHOTO)



KEY PLAN
SCALE: N.T.S.



RECORD REVISIONS

02/14/2024
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GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE -
CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

PA STATE MUSEUM PLUMBING PLAN

VERIFY SCALE BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING: 0 1 IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.	DRAWN BY M. SKORANSKI	DATE 02/14/24	DRAWING No. P-13
	CHECKED BY M. RADZICKI	SCALE AS NOTED	

BUILDING SUMMARY: LABOR AND INDUSTRY										
METER NAME	QUANTITY	DRAWING NUMBER	FLOOR	MATERIAL	VOLTAGE	MANUFACTURER	LOAD TYPE	MODEL	METER TYPE	SIZE
LI-NG-OIP	1	P-2	BASEMENT	316 SST	24VDC	OMICON	NATURAL GAS	SEE SPECS	SEE NOTE 2	6"
LI-DM-OIP	1	P-2	BASEMENT	316 SST	24VDC	SEE SPECS	DOM. WATER	SEE SPECS	SEE NOTE 4	6"
LI-DM-OIP	1	P-2	BASEMENT	316 SST	24VDC	SEE SPECS	DOM. WATER	SEE SPECS	SEE NOTE 4	6"

NOTES (APPLY TO ALL METERS EXCEPT AS EXPLICITLY CALLED OUT):

1. THE PC SHALL PROVIDE WIRING BETWEEN THE METER AND THE SIGNAL CONVERTER AND POWER TO BOTH AS APPLICABLE. THE MC WILL PROVIDE WIRING FROM THE SIGNAL CONVERTER OR TRANSMITTER TO THE BMS. THE MC WILL PROVIDE WIRING FROM THE SIGNAL CONVERTER OR TRANSMITTER TO THE BMS.
2. THERMAL MASS METER.
3. PROVIDE A FLOW CONDITIONER POSITIONED PER THE MANUFACTURER'S REQUIREMENTS UPSTREAM OF THE METER TO MINIMIZE UPSTREAM STRAIGHT PIPE LENGTH REQUIREMENTS IF NEEDED.
4. PROVIDE 24 DC POWER SUPPLY TO METERS.
5. ELECTRO-MAGNETIC. PROVIDE SIGNAL CONVERTER OR MANUFACTURER'S COMPATIBLE PRODUCT.
6. THE GAS SERVICE IS USED FOR TWO GAS POWERED EMERGENCY GENERATORS. CAT 3408 SN 6N801762 IS RATED TO CONSUME A MAXIMUM OF 3733 CFH. THE CAT 3506 07Y07065 WILL CONSUME 1770 CFH. WITH BOTH GENERATORS RUNNING AT PEAK CONSUMPTION THE ANTICIPATED GAS CONSUMPTION RATE IS 5443 CFH. THE HIGH RANGE FOR THE SELECTED METER SHALL ACCOMMODATE THE PEAK CONSUMPTION AND THE LOW RANGE FOR THE METER SHALL BE AS LOW AS PRACTICABLE BUT NO HIGHER THAN 300 CFH. THE GAS PRESSURE IN THE LABOR AND INDUSTRY BUILDING IS SET TO 7 INCHES AND WILL RELIEVE AT 14 INCHES.
7. COORDINATE WITH MECHANICAL/CONTROLS CONTRACTOR TO WIRE AND INTEGRATE METERS WITH BAS

BUILDING SUMMARY: HEALTH AND WELFARE										
METER NAME	DRAWING NUMBER	FLOOR	MATERIAL	VOLTAGE	MANUFACTURER	LOAD TYPE	MODEL	METER TYPE	SIZE	
HW-NG-OIP	P-3	BASEMENT	316 SST	24VDC	SEE SPECS	NATURAL GAS	SEE SPECS	SEE NOTE 2	4"	
HW-DM-OIP	P-3	BASEMENT	316 SST	24VDC	SEE SPECS	DOM. WATER	SEE SPECS	SEE NOTE 4	6"	

NOTES (APPLY TO ALL METERS EXCEPT AS EXPLICITLY CALLED OUT):

1. THE PC SHALL PROVIDE WIRING BETWEEN THE METER AND THE SIGNAL CONVERTER AND POWER TO BOTH AS APPLICABLE. THE MC WILL PROVIDE WIRING FROM THE SIGNAL CONVERTER OR TRANSMITTER TO THE BMS.
2. THERMAL MASS METER.
3. MODIFY AND ADD TO PIPE AS REQUIRED MEET THE MANUFACTURERS REQUIRED UPSTREAM AND DOWNSTREAM STRAIGHT PIPE LENGTH REQUIREMENTS. PROVIDE A FLOW CONDITIONER POSITIONED PER THE MANUFACTURER'S REQUIREMENTS UPSTREAM OF THE METER TO MINIMIZE UPSTREAM STRAIGHT PIPE LENGTH REQUIREMENTS IF NEEDED.
4. PROVIDE DC POWER SUPPLY TO METERS.
5. ELECTRO-MAGNETIC. PROVIDE SIGNAL CONVERTER OR MANUFACTURER'S COMPATIBLE PRODUCT.
6. THE GAS SERVICE IS USED FOR TWO GAS POWERED EMERGENCY GENERATORS. CAT 3408 SN 6N801762 IS RATED TO CONSUME A MAXIMUM OF 3733 CFH. THE OLYMPIAN GENERATOR WILL CONSUME 790 CFH MAXIMUM. WITH BOTH GENERATORS RUNNING AT PEAK CONSUMPTION THE ANTICIPATED GAS CONSUMPTION RATE IS 4523 CFH. THE HIGH RANGE FOR THE SELECTED METER SHALL ACCOMMODATE THE PEAK CONSUMPTION AND THE LOW RANGE FOR THE METER SHALL BE AS LOW AS PRACTICABLE BUT NO HIGHER THAN 300 CFH. THE GAS PRESSURE IN THE HEALTH AND WELFARE BUILDING IS SET TO 7 INCHES WG AND WILL RELIEVE AT 14 INCHES.
7. COORDINATE WITH MECHANICAL/CONTROLS CONTRACTOR TO WIRE AND INTEGRATE METERS WITH BAS

BUILDING SUMMARY: JUDICIAL CENTER										
METER NAME	DRAWING NUMBER	FLOOR	MATERIAL	VOLTAGE	MANUFACTURER	LOAD TYPE	MODEL	METER TYPE	SIZE	
JC-DM-OIP	P-4	BASEMENT	316 SST	24VDC	SEE SPECS	DOM. WATER	SEE SPECS	SEE NOTE 4	4"	

NOTES (APPLY TO ALL METERS EXCEPT AS EXPLICITLY CALLED OUT):

1. THE PC SHALL PROVIDE WIRING BETWEEN THE METER AND THE SIGNAL CONVERTER AND POWER TO BOTH AS APPLICABLE. THE MC WILL PROVIDE WIRING FROM THE SIGNAL CONVERTER OR TRANSMITTER TO THE BMS.
2. MODIFY AND ADD TO PIPE AS REQUIRED MEET THE MANUFACTURERS REQUIRED UPSTREAM AND DOWNSTREAM STRAIGHT PIPE LENGTH REQUIREMENTS.
3. PROVIDE DC POWER SUPPLY TO METERS.
4. ELECTRO-MAGNETIC. PROVIDE SIGNAL CONVERTER OR MANUFACTURER'S COMPATIBLE PRODUCT.
5. COORDINATE WITH MECHANICAL/CONTROLS CONTRACTOR TO WIRE AND INTEGRATE METERS WITH BAS

BUILDING SUMMARY: FINANCE										
METER NAME	DRAWING NUMBER	FLOOR	MATERIAL	VOLTAGE	MANUFACTURER	LOAD TYPE	MODEL	METER TYPE	SIZE	
FB-DM-OIP	P-5	BASEMENT	316 SST	24VDC	SEE SPECS	DOM. WATER	SEE SPECS	SEE NOTE 4	6"	

NOTES (APPLY TO ALL METERS EXCEPT AS EXPLICITLY CALLED OUT):

1. THE PC SHALL PROVIDE WIRING BETWEEN THE METER AND THE SIGNAL CONVERTER AND POWER TO BOTH AS APPLICABLE. THE MC WILL PROVIDE WIRING FROM THE SIGNAL CONVERTER OR TRANSMITTER TO THE BMS.
2. MODIFY AND ADD TO PIPE AS REQUIRED MEET THE MANUFACTURERS REQUIRED UPSTREAM AND DOWNSTREAM STRAIGHT PIPE LENGTH REQUIREMENTS.
3. PROVIDE DC POWER SUPPLY TO METERS.
4. ELECTRO-MAGNETIC. PROVIDE SIGNAL CONVERTER OR MANUFACTURER'S COMPATIBLE PRODUCT.
5. COORDINATE WITH MECHANICAL/CONTROLS CONTRACTOR TO WIRE AND INTEGRATE METERS WITH BAS

BUILDING SUMMARY: FORUM										
METER NAME	DRAWING NUMBER	FLOOR	MATERIAL	VOLTAGE	MANUFACTURER	LOAD TYPE	MODEL	METER TYPE	SIZE	
FB-DM-OIP	P-6	BASEMENT	316 SST	24VDC	SEE SPECS	DOM. WATER	SEE SPECS	SEE NOTE 2,3	6"	

NOTES (APPLY TO ALL METERS EXCEPT AS EXPLICITLY CALLED OUT):

1. THE PC SHALL PROVIDE WIRING BETWEEN THE METER AND THE SIGNAL CONVERTER AND POWER TO BOTH AS APPLICABLE. THE MC WILL PROVIDE WIRING FROM THE SIGNAL CONVERTER OR TRANSMITTER TO THE BMS.
2. PROVIDE DC POWER SUPPLY TO METERS.
3. ELECTRO-MAGNETIC. PROVIDE SIGNAL CONVERTER OR MANUFACTURER'S COMPATIBLE PRODUCT.
4. COORDINATE WITH MECHANICAL/CONTROLS CONTRACTOR TO WIRE AND INTEGRATE METERS WITH BAS

BUILDING SUMMARY: COMMONWEALTH KEYSTONE										
METER NAME	DRAWING NUMBER	FLOOR	MATERIAL	VOLTAGE	MANUFACTURER	LOAD TYPE	MODEL	METER TYPE	SIZE	
KB-DM-OIP	P-7	BASEMENT	316 SST	24VDC	SEE SPECS	DOM. WATER	SEE SPECS	SEE NOTE 4	8"	

NOTES (APPLY TO ALL METERS EXCEPT AS EXPLICITLY CALLED OUT):

1. THE PC SHALL PROVIDE WIRING BETWEEN THE METER AND THE SIGNAL CONVERTER AND POWER TO BOTH AS APPLICABLE. THE MC WILL PROVIDE WIRING FROM THE SIGNAL CONVERTER OR TRANSMITTER TO THE BMS.
2. MODIFY AND ADD TO PIPE AS REQUIRED MEET THE MANUFACTURERS REQUIRED UPSTREAM AND DOWNSTREAM STRAIGHT PIPE LENGTH REQUIREMENTS.
3. PROVIDE DC POWER SUPPLY TO METERS.
4. ELECTRO-MAGNETIC. PROVIDE SIGNAL CONVERTER OR MANUFACTURER'S COMPATIBLE PRODUCT.
5. COORDINATE WITH MECHANICAL/CONTROLS CONTRACTOR TO WIRE AND INTEGRATE METERS WITH BAS

BUILDING SUMMARY: NORTH OFFICE										
METER NAME	DRAWING NUMBER	FLOOR	MATERIAL	VOLTAGE	MANUFACTURER	LOAD TYPE	MODEL	METER TYPE	SIZE	
NO-DM-OIP	P-8	BASEMENT	316 SST	24VDC	SEE SPECS	DOM. WATER	SEE SPECS	SEE NOTE 4	6"	

NOTES (APPLY TO ALL METERS EXCEPT AS EXPLICITLY CALLED OUT):

1. THE PC SHALL PROVIDE WIRING BETWEEN THE METER AND THE SIGNAL CONVERTER AND POWER TO BOTH AS APPLICABLE. THE MC WILL PROVIDE WIRING FROM THE SIGNAL CONVERTER OR TRANSMITTER TO THE BMS.
2. MODIFY AND ADD TO PIPE AS REQUIRED MEET THE MANUFACTURERS REQUIRED UPSTREAM AND DOWNSTREAM STRAIGHT PIPE LENGTH REQUIREMENTS.
3. PROVIDE DC POWER SUPPLY TO METERS.
4. ELECTRO-MAGNETIC. PROVIDE SIGNAL CONVERTER OR MANUFACTURER'S COMPATIBLE PRODUCT.
5. COORDINATE WITH MECHANICAL/CONTROLS CONTRACTOR TO WIRE AND INTEGRATE METERS WITH BAS

BUILDING SUMMARY: CAPITOL EAST WING										
METER NAME	DRAWING NUMBER	FLOOR	MATERIAL	VOLTAGE	MANUFACTURER	LOAD TYPE	MODEL	METER TYPE	SIZE	
EW-DM-OIP	P-9	P-2	316 SST	24VDC	SEE SPECS	DOM. WATER	SEE SPECS	SEE NOTES 4 AND 5	4"	
EW-DM-OIP	P-9	P-2	316 SST	24VDC	SEE SPECS	DOM. WATER	SEE SPECS	SEE NOTES 4 AND 5	6"	

NOTES (APPLY TO ALL METERS EXCEPT AS EXPLICITLY CALLED OUT):

1. THE PC SHALL PROVIDE WIRING BETWEEN THE METER AND THE SIGNAL CONVERTER AND POWER TO BOTH AS APPLICABLE. THE MC WILL PROVIDE WIRING FROM THE SIGNAL CONVERTER OR TRANSMITTER TO THE BMS.
2. MODIFY AND ADD TO PIPE AS REQUIRED MEET THE MANUFACTURERS REQUIRED UPSTREAM AND DOWNSTREAM STRAIGHT PIPE LENGTH REQUIREMENTS.
3. PROVIDE DC POWER SUPPLY TO METERS.
4. ELECTRO-MAGNETIC. PROVIDE SIGNAL CONVERTER OR MANUFACTURER'S COMPATIBLE PRODUCT.
5. COORDINATE WITH MECHANICAL/CONTROLS CONTRACTOR TO WIRE AND INTEGRATE METER WITH BAS

BUILDING SUMMARY: MAIN CAPITOL										
METER NAME	DRAWING NUMBER	FLOOR	MATERIAL	VOLTAGE	MANUFACTURER	LOAD TYPE	MODEL	METER TYPE	SIZE	
MC-DM-OIP	P-10	BASEMENT	316 SST	24VDC	SEE SPECS	DOM. WATER	SEE SPECS	ELECTRO-MAGNETIC	6"	
MC-DM-OIP	P-10	BASEMENT	316 SST	24VDC	SEE SPECS	DOM. WATER	SEE SPECS	ELECTRO-MAGNETIC	6"	

NOTES (APPLY TO ALL METERS EXCEPT AS EXPLICITLY CALLED OUT):

1. THE PC SHALL PROVIDE WIRING BETWEEN THE METER AND THE SIGNAL CONVERTER AND POWER TO BOTH AS APPLICABLE. THE MC WILL PROVIDE WIRING FROM THE SIGNAL CONVERTER OR TRANSMITTER TO THE BMS.
2. MODIFY AND ADD TO PIPE AS REQUIRED MEET THE MANUFACTURERS REQUIRED UPSTREAM AND DOWNSTREAM STRAIGHT PIPE LENGTH REQUIREMENTS.
3. PROVIDE DC POWER SUPPLY TO METERS.
4. ELECTRO-MAGNETIC. PROVIDE SIGNAL CONVERTER OR MANUFACTURER'S COMPATIBLE PRODUCT.
5. QUANTITY OF METERS IS TWO. SEE DRAWING P-10 FOR LOCATIONS.
6. COORDINATE WITH MECHANICAL/CONTROLS CONTRACTOR TO WIRE AND INTEGRATE METERS WITH BAS.

BUILDING SUMMARY: IRVIS OFFICE										
METER NAME	DRAWING NUMBER	FLOOR	MATERIAL	VOLTAGE	MANUFACTURER	LOAD TYPE	MODEL	METER TYPE	SIZE	
IO-DM-OIP	P-11	BASEMENT	316 SST	24VDC	SEE SPECS	DOM. WATER	SEE SPECS	SEE NOTE 4	6"	

NOTES (APPLY TO ALL METERS EXCEPT AS EXPLICITLY CALLED OUT):

1. THE PC SHALL PROVIDE WIRING BETWEEN THE METER AND THE SIGNAL CONVERTER AND POWER TO BOTH AS APPLICABLE. THE MC WILL PROVIDE WIRING FROM THE SIGNAL CONVERTER OR TRANSMITTER TO THE BMS.
2. MODIFY AND ADD TO PIPE AS REQUIRED MEET THE MANUFACTURERS REQUIRED UPSTREAM AND DOWNSTREAM STRAIGHT PIPE LENGTH REQUIREMENTS.
3. PROVIDE DC POWER SUPPLY TO METERS.
4. ELECTRO-MAGNETIC. PROVIDE SIGNAL CONVERTER OR MANUFACTURER'S COMPATIBLE PRODUCT.
5. COORDINATE WITH MECHANICAL/CONTROLS CONTRACTOR TO WIRE AND INTEGRATE METERS WITH BAS

BUILDING SUMMARY: RYAN										
METER NAME	DRAWING NUMBER	FLOOR	MATERIAL	VOLTAGE	MANUFACTURER	LOAD TYPE	MODEL	METER TYPE	SIZE	
RS-DM-OIP	P-12	BASEMENT	316 SST	24VDC	SEE SPECS	DOM. WATER	SEE SPECS	SEE NOTE 4	4"	

NOTES (APPLY TO ALL METERS EXCEPT AS EXPLICITLY CALLED OUT):

1. THE PC SHALL PROVIDE WIRING BETWEEN THE METER AND THE SIGNAL CONVERTER AND POWER TO BOTH AS APPLICABLE. THE MC WILL PROVIDE WIRING FROM THE SIGNAL CONVERTER OR TRANSMITTER TO THE BMS.
2. MODIFY AND ADD TO PIPE AS REQUIRED MEET THE MANUFACTURERS REQUIRED UPSTREAM AND DOWNSTREAM STRAIGHT PIPE LENGTH REQUIREMENTS.
3. PROVIDE DC POWER SUPPLY TO METERS.
4. ELECTRO-MAGNETIC. PROVIDE SIGNAL CONVERTER OR MANUFACTURER'S COMPATIBLE PRODUCT.
5. COORDINATE WITH MECHANICAL/CONTROLS CONTRACTOR TO WIRE AND INTEGRATE METERS WITH BAS

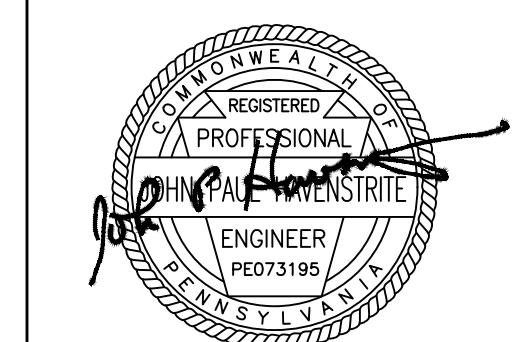
BUILDING SUMMARY: STATE MUSEUM										
METER NAME	DRAWING NUMBER	FLOOR	MATERIAL	VOLTAGE	MANUFACTURER	LOAD TYPE	MODEL	METER TYPE	SIZE	
MS-DM-OIP	P-13	BASEMENT	316 SST	24VDC	SEE SPECS	DOM. WATER	SEE SPECS	SEE NOTE 4	6"	

NOTES (APPLY TO ALL METERS EXCEPT AS EXPLICITLY CALLED OUT):

1. THE PC SHALL PROVIDE WIRING BETWEEN THE METER AND THE SIGNAL CONVERTER AND POWER TO BOTH AS APPLICABLE. THE MC WILL PROVIDE WIRING FROM THE SIGNAL CONVERTER OR TRANSMITTER TO THE BMS.
2. MODIFY AND ADD TO PIPE AS REQUIRED MEET THE MANUFACTURERS REQUIRED UPSTREAM AND DOWNSTREAM STRAIGHT PIPE LENGTH REQUIREMENTS.
3. PROVIDE DC POWER SUPPLY TO METERS.
4. ELECTRO-MAGNETIC. PROVIDE SIGNAL CONVERTER OR MANUFACTURER'S COMPATIBLE PRODUCT.
5. COORDINATE WITH MECHANICAL/CONTROLS CONTRACTOR TO WIRE AND INTEGRATE METERS WITH BAS

GENERAL INSULATION NOTE (APPLIES TO ALL WORK. ALL BUILDINGS. ALL PIPE AND FITTING WORK FOR ALL METERS): AS REQUIRED TO ACCOMMODATE ALL WORK, EXISTING INSULATION SHALL BE REMOVED AND CLEANLY CUT AT TERMINATION POINTS OF REMOVAL. NEW INSULATION SHALL BE INSTALLED OVER PIPE, FITTINGS, VALVES AND APPURTENANCES AT A THICKNESS THAT WILL SATISFY THE ENERGY CONSERVATION CODE CURRENTLY ADOPTED BY THE COMMONWEALTH OF PENNSYLVANIA. SEE SPECIFICATIONS IN THE PROJECT MANUAL. NATURAL GAS PIPE SHALL REMAIN WITHOUT INSULATION BUT SHALL BE PAINTED SAFETY YELLOW AND LABELED.

RECORD REVISIONS



SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC

52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE -
CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

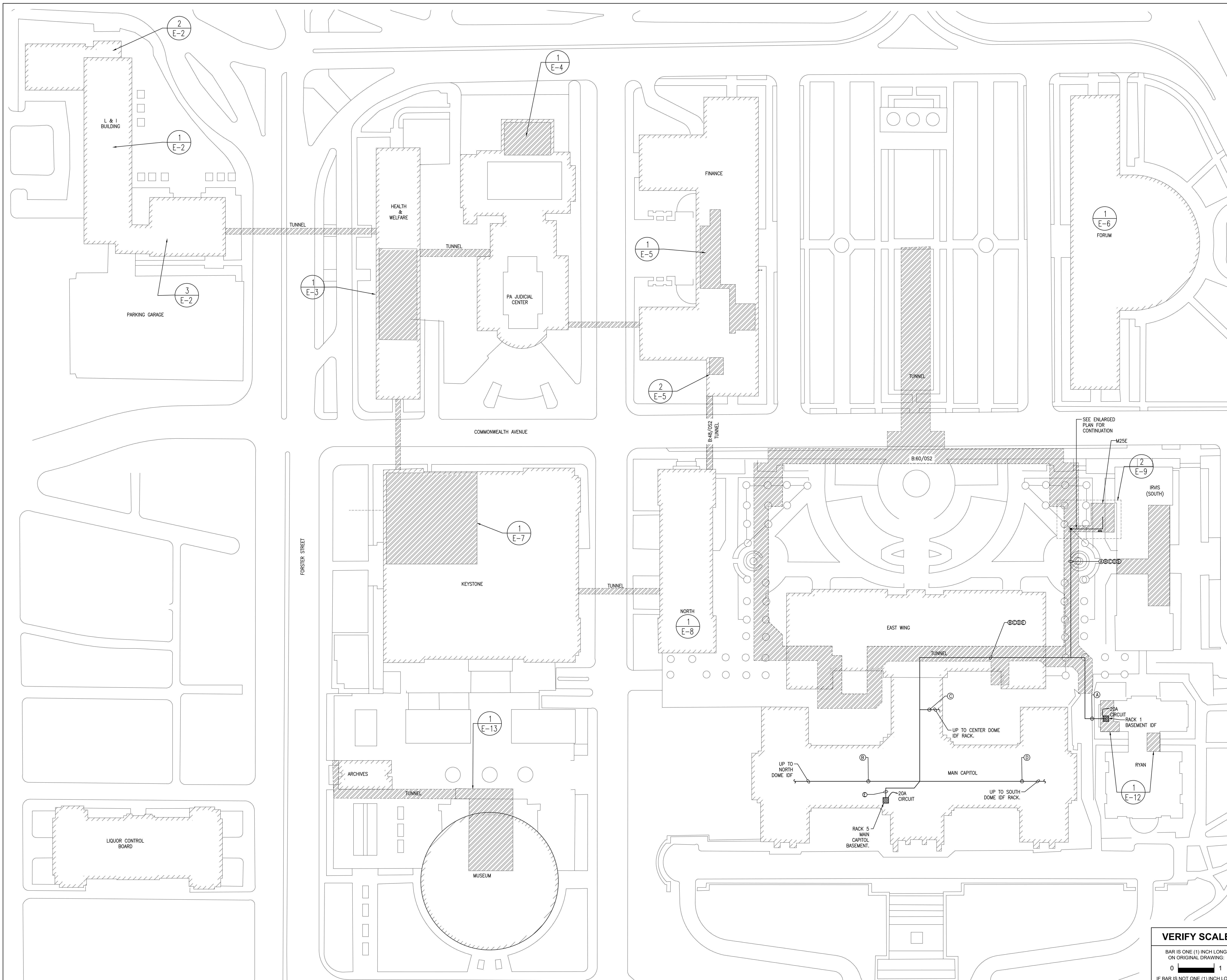
MECHANICAL SCHEDULES

VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
0 1
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

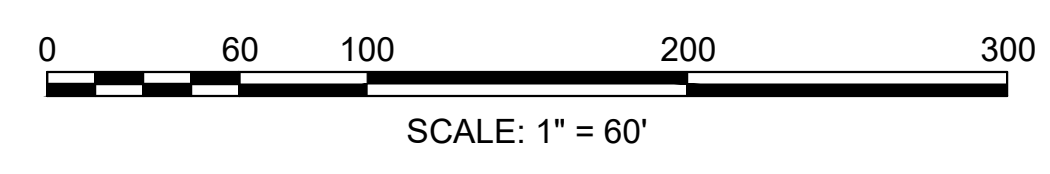
DRAWN BY J. OSBORNE DATE 02/14/24 DRAWING No. P-14
CHECKED BY M. RADZICKI SCALE AS NOTED

ELECTRICAL SYMBOLS LEGEND

- A-24/OS2 ARMORED, INDOOR/OUTDOOR, PLENUM RATED SINGLE MODE FIBER OPTIC CABLE(S). IDENTIFICATION LETTER AND STRAND COUNT AS INDICATED.
- 24/OS2 FIBER INSTALLED THROUGH BUILDINGS AND TUNNELS. INSTALL EXPOSED IN UNFINISHED AREAS(TUNNELS AND EQUIPMENT ROOMS). INSTALLED CONCEALED ABOVE CEILING IN FINISHED AREAS.
- RACK #1 SWING OUT WALL MOUNT DATA CABINET.
- 1 E-1 DETAIL IDENTIFICATION TAG-DETAIL AND DRAWING NUMBER AS INDICATED.



1 E-1 ELECTRICAL SITE PLAN
Scale: 1" = 60'



NO.	REVISIONS

RECORD REVISIONS

John Murphy
ENGINEER
02/14/2024
SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

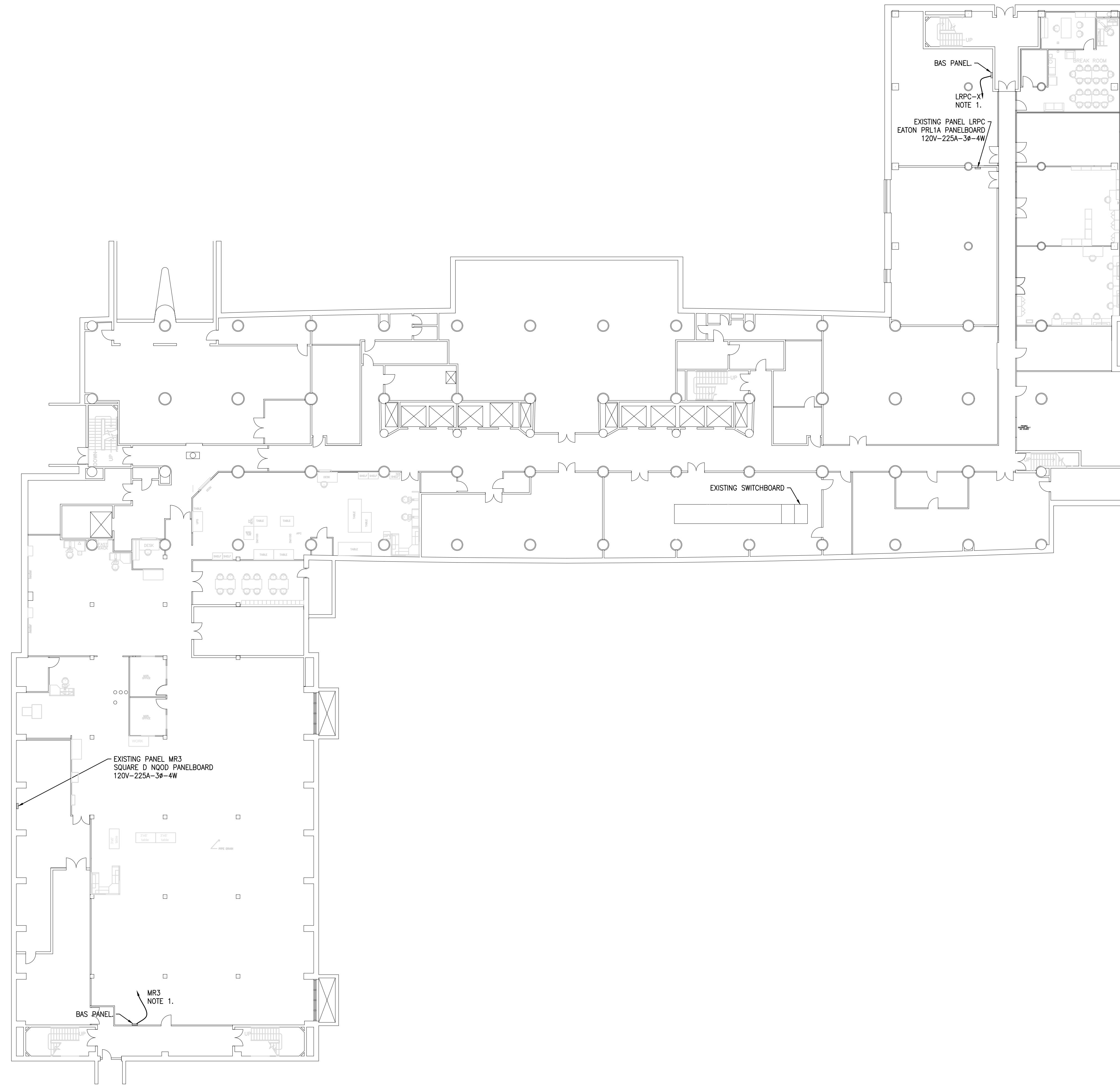
D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE - CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

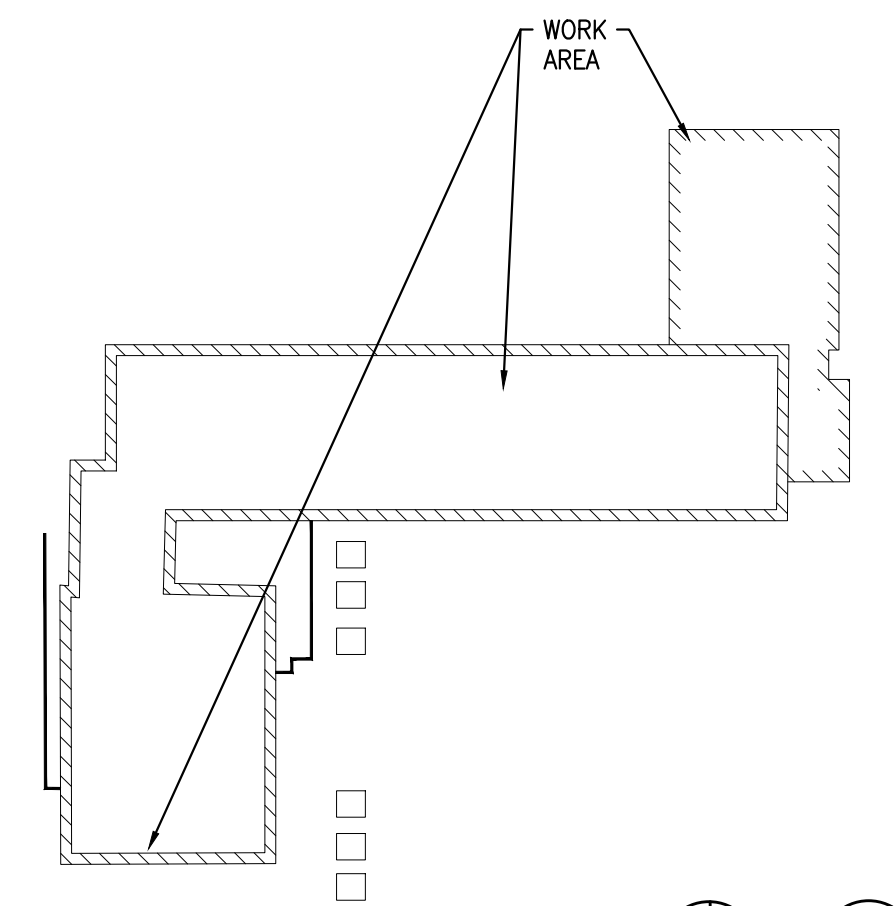
ELECTRICAL SITE PLAN

DRAWN BY B. SLOAT	DATE 02/14/24	DRAWING No. E-1
CHECKED BY J. MURPHY	SCALE AS NOTED	

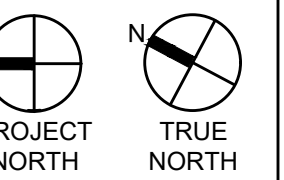
VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
0 1
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.



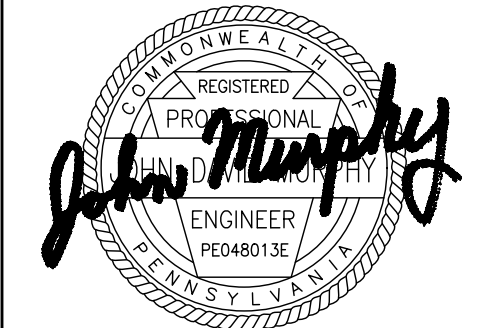
ELECTRICAL PLAN NOTES:
 1. 2 #12, 1 #120-3/4"Ø. TO 120 VOLT PANEL. PROVIDE 20A-1P CIRCUIT BREAKER IN EXISTING PANEL.



KEY PLAN
 SCALE: N.T.S.



RECORD REVISIONS



02/14/2024

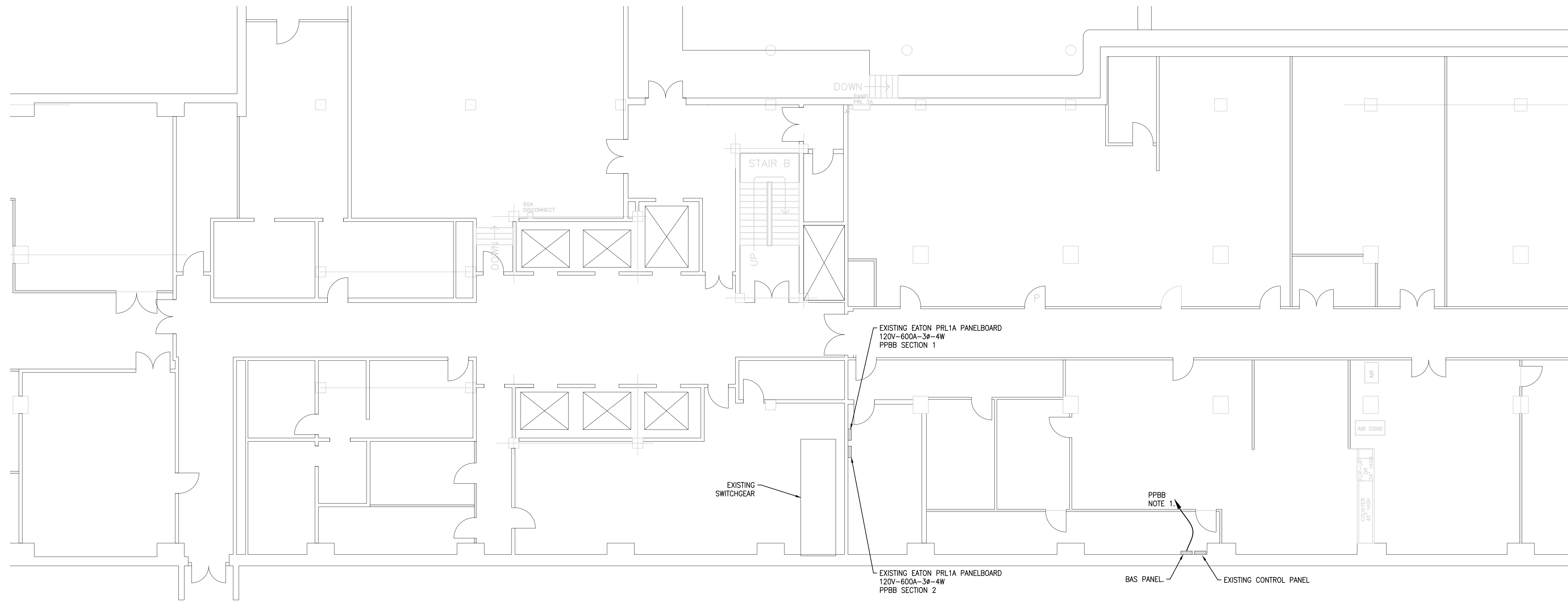
SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
 52 GLENMAURA NATIONAL BOULEVARD
 SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

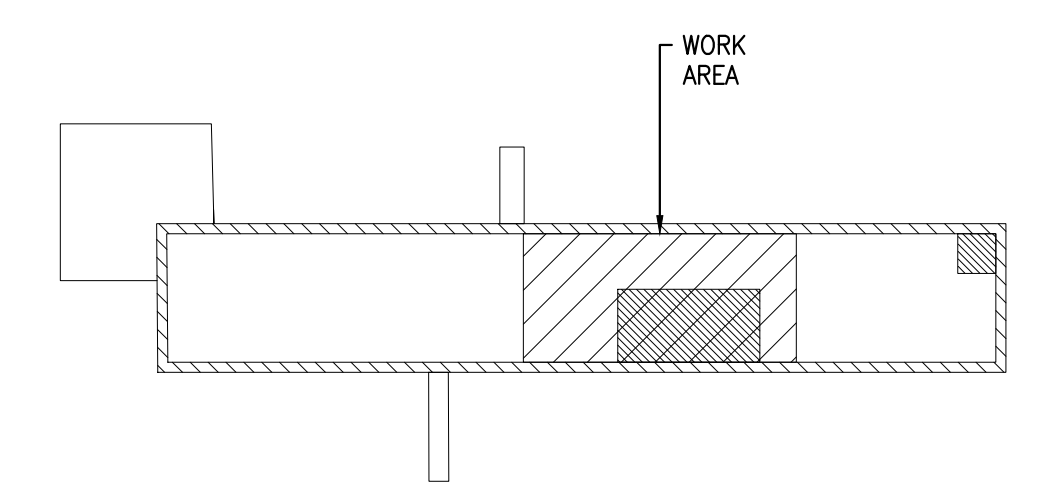
D.G.S. PROJECT No. C-0948-0098 PHASE 1

VERIFY SCALE BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING: 0 [] 1 IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.	DRAWN BY B. SLOAT	DATE 02/14/24	DRAWING No. E-2
	CHECKED BY J. MURPHY	SCALE AS NOTED	

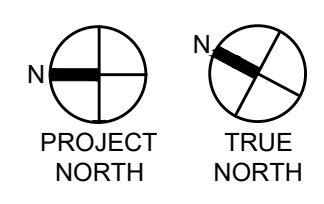


ELECTRICAL PLAN NOTES:
 1. 2 #12, 1 #12G-3/4" C. TO 120 VOLT PANEL. PROVIDE 20A-1P CIRCUIT BREAKER IN EXISTING PANEL.

1
E-3
BASEMENT ELECTRICAL PLAN
 Scale: 1/8" = 1'-0"



KEY PLAN
 SCALE: N.T.S.



NO.	DATE	DESCRIPTION

RECORD REVISIONS

John Murphy
 PROFESSIONAL ENGINEER
 02/14/2024
 SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
 52 GLENMAURA NATIONAL BOULEVARD
 SCRANTON, PENNSYLVANIA 18505

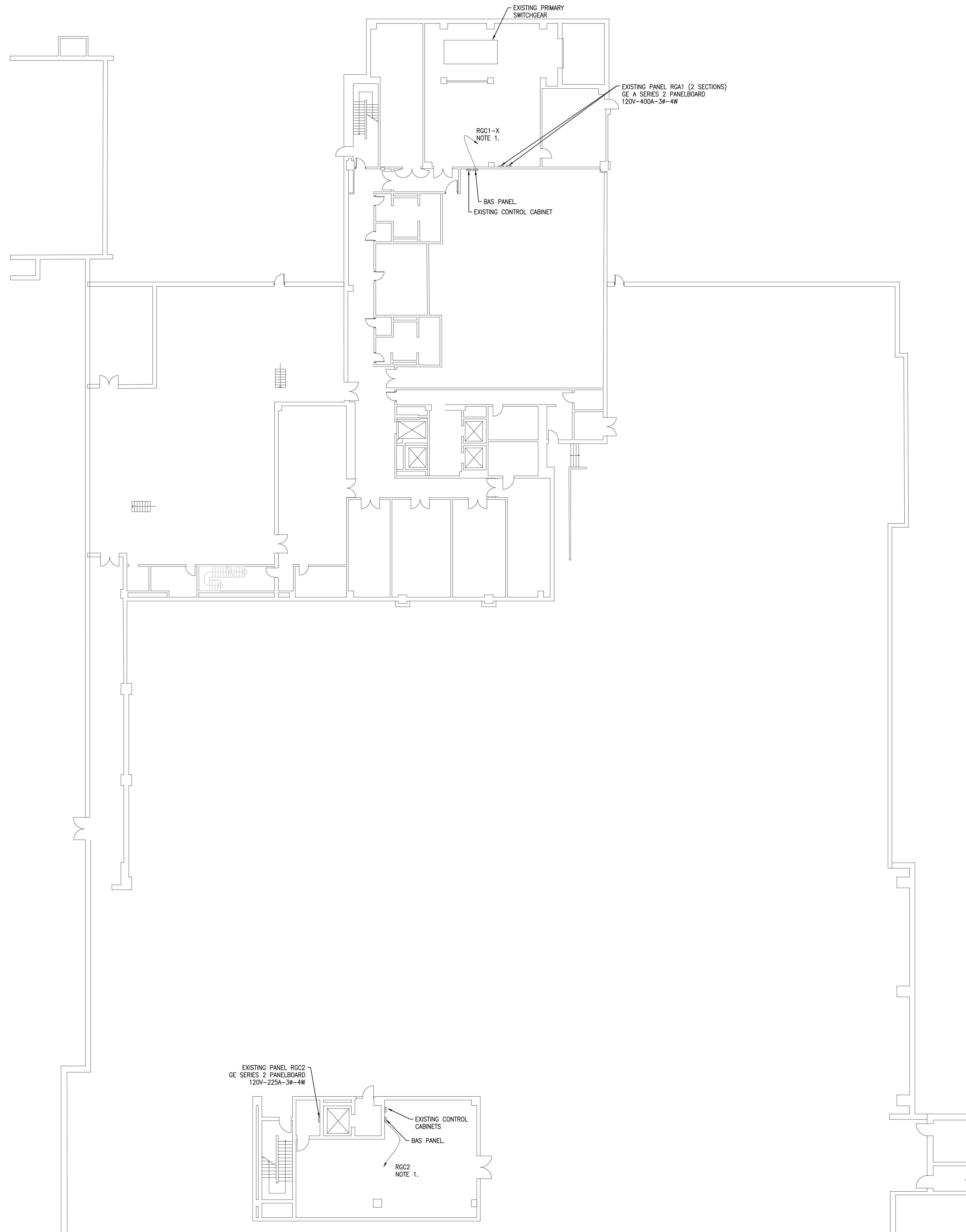
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

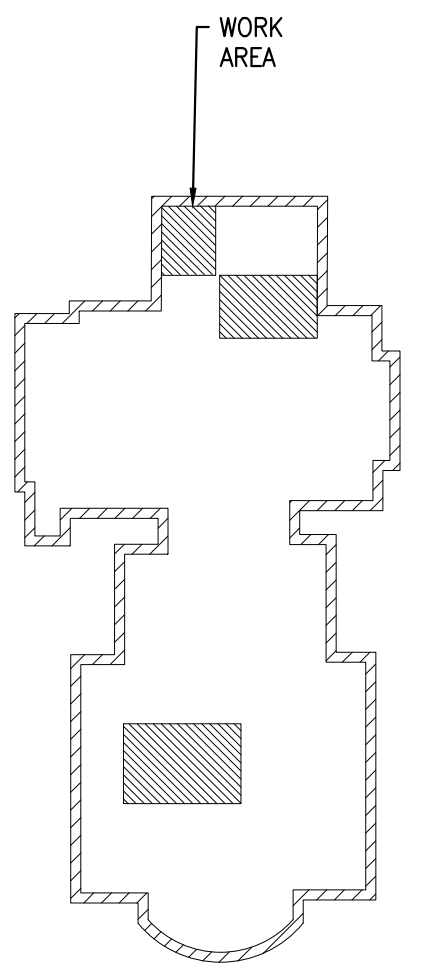
Automation System Upgrade -
 CAPITOL COMPLEX
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, DAUPHIN COUNTY, PA

HEALTH & WELFARE BUILDING ELECTRICAL PLAN

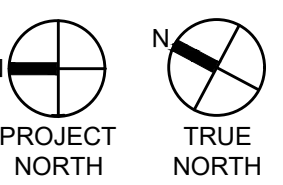
VERIFY SCALE BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING: 0 1 IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.	DRAWN BY B. SLOAT	DATE 02/14/24	DRAWING No. E-3
	CHECKED BY J. MURPHY	SCALE AS NOTED	



ELECTRICAL PLAN NOTES:
 1. 2 #12, 1 #12G-3/4"C. TO 120 VOLT PANEL. PROVIDE 20A-1P CIRCUIT BREAKER IN EXISTING PANEL.



KEY PLAN
 SCALE: N.T.S.



NO.	REVISIONS

RECORD REVISIONS

John Murphy
 PROFESSIONAL ENGINEER
 PENNSYLVANIA
 02/14/2024
 SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
 52 GLENMAURA NATIONAL BOULEVARD
 SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

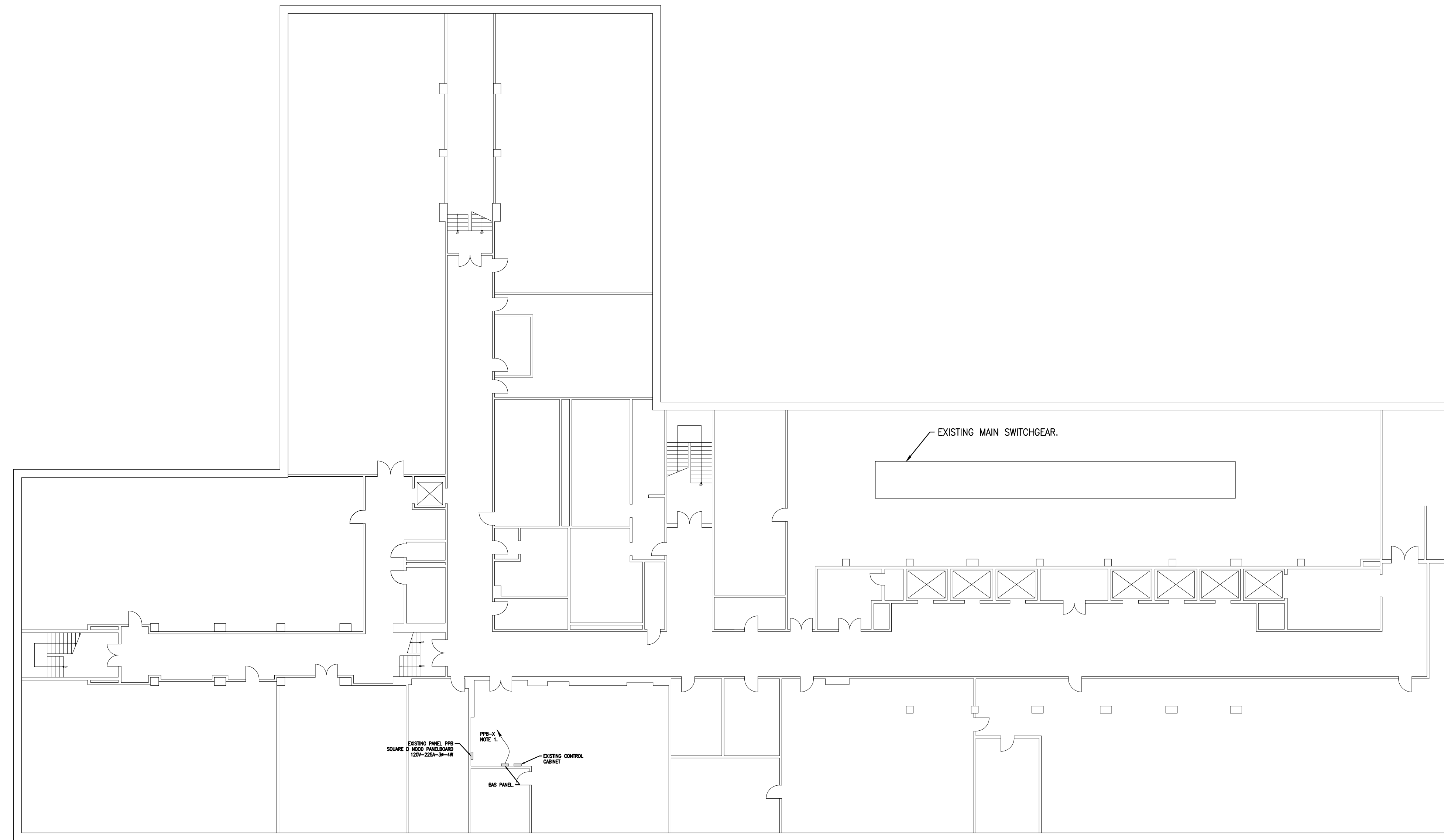
Automation System Upgrade -
 CAPITOL COMPLEX
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, DAUPHIN COUNTY, PA

PA JUDICIAL CENTER ELECTRICAL PLAN

VERIFY SCALE
 BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
 0 1
 IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
 CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

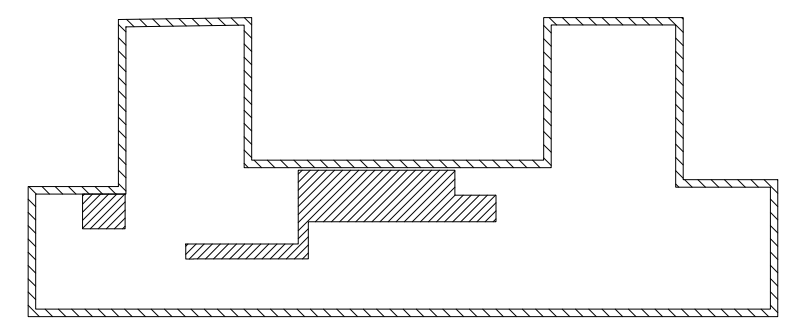
DRAWN BY B. SLOAT	DATE 02/14/24	DRAWING No. E-4
CHECKED BY J. MURPHY	SCALE AS NOTED	

1
E-4
BASEMENT ELECTRICAL PLAN-WATER AND ELECTRIC METERS
 Scale: 1/16" = 1'-0"



ELECTRICAL PLAN NOTES:
 1. 2 #12, 1 #10-3/4" TO 120 VOLT PANEL. PROVIDE 20A-1P CIRCUIT BREAKER IN EXISTING PANEL.

1
E-5
BASEMENT ELECTRICAL PLAN
 Scale: 1/16" = 1'-0"



KEY PLAN
 SCALE: N.T.S.
 PROJECT NORTH TRUE NORTH

NO.	DESCRIPTION	DATE

RECORD REVISIONS

John Murphy
 PROFESSIONAL ENGINEER
 PENNSYLVANIA
 02/14/2024
 SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
 52 GLENMAURA NATIONAL BOULEVARD
 SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

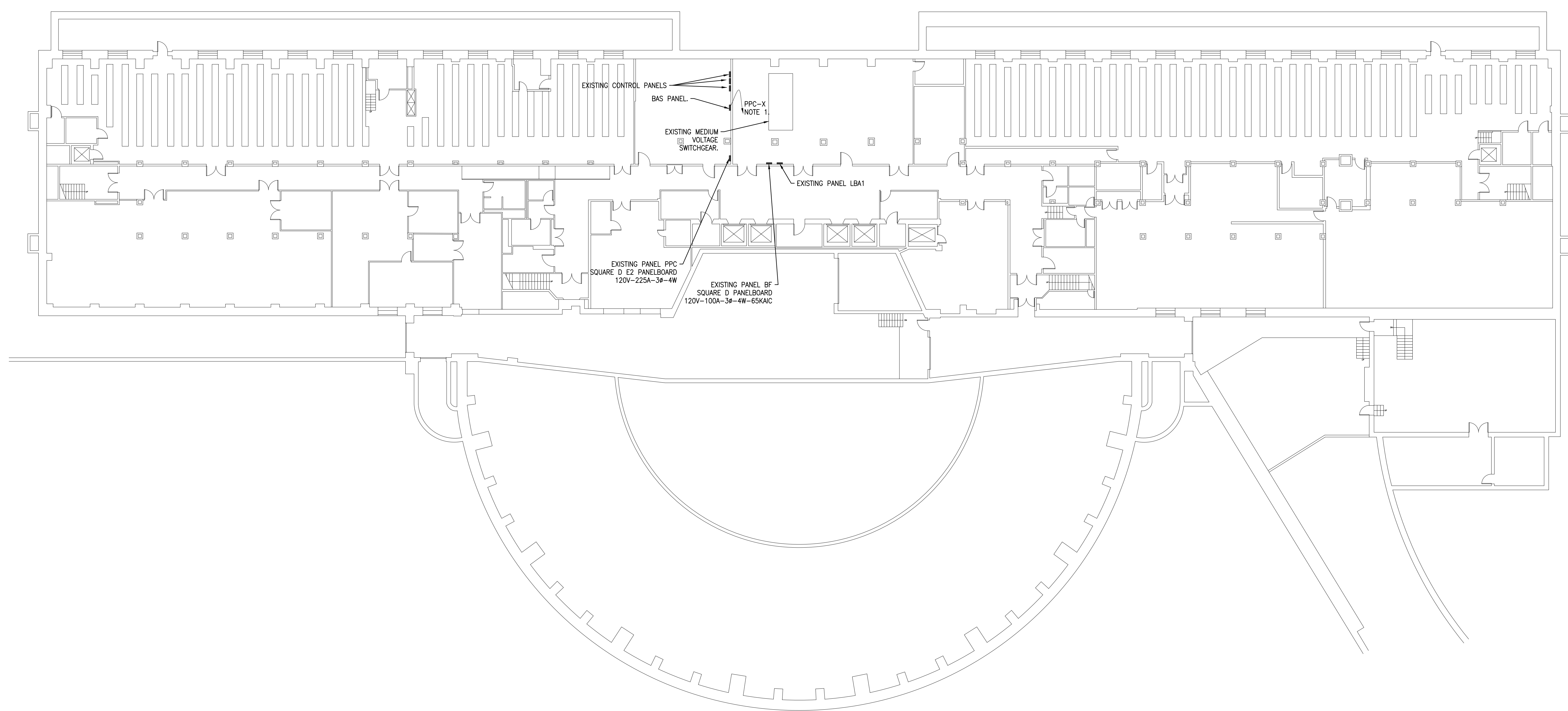
AUTOMATION SYSTEM UPGRADE -
 CAPITOL COMPLEX
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, DAUPHIN COUNTY, PA

FINANCE BUILDING ELECTRICAL PLAN

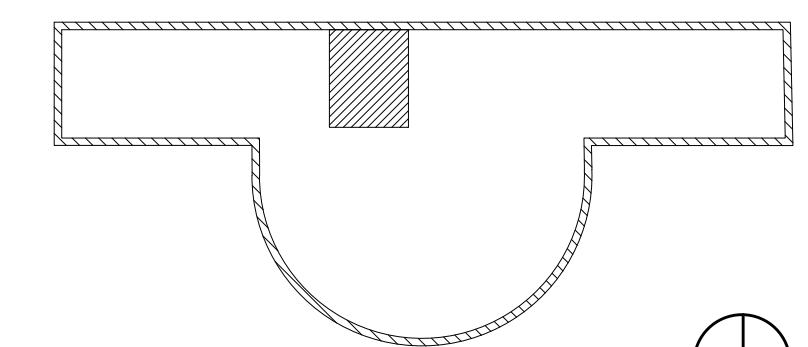
VERIFY SCALE
 BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
 0 1
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DRAWN BY B. SLOAT	DATE 02/14/24	DRAWING No. E-5
CHECKED BY J. MURPHY	SCALE AS NOTED	

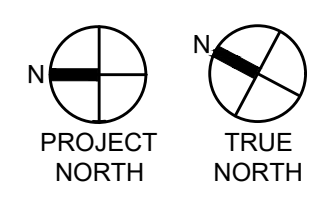
ELECTRICAL PLAN NOTES:
 1. 2 #12, 1 #10-3/4" C. TO 120 VOLT PANEL. PROVIDE 20A-1P CIRCUIT BREAKER IN EXISTING PANEL.



1
E-6 **BASEMENT ELECTRICAL PLAN**
 Scale: 1/16" = 1'-0"



KEY PLAN
 SCALE: N.T.S.



NO.	REVISIONS

RECORD REVISIONS

John Murphy
 PROFESSIONAL ENGINEER
 PENNSYLVANIA
 02/14/2024
 SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
 52 GLENMAURA NATIONAL BOULEVARD
 SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

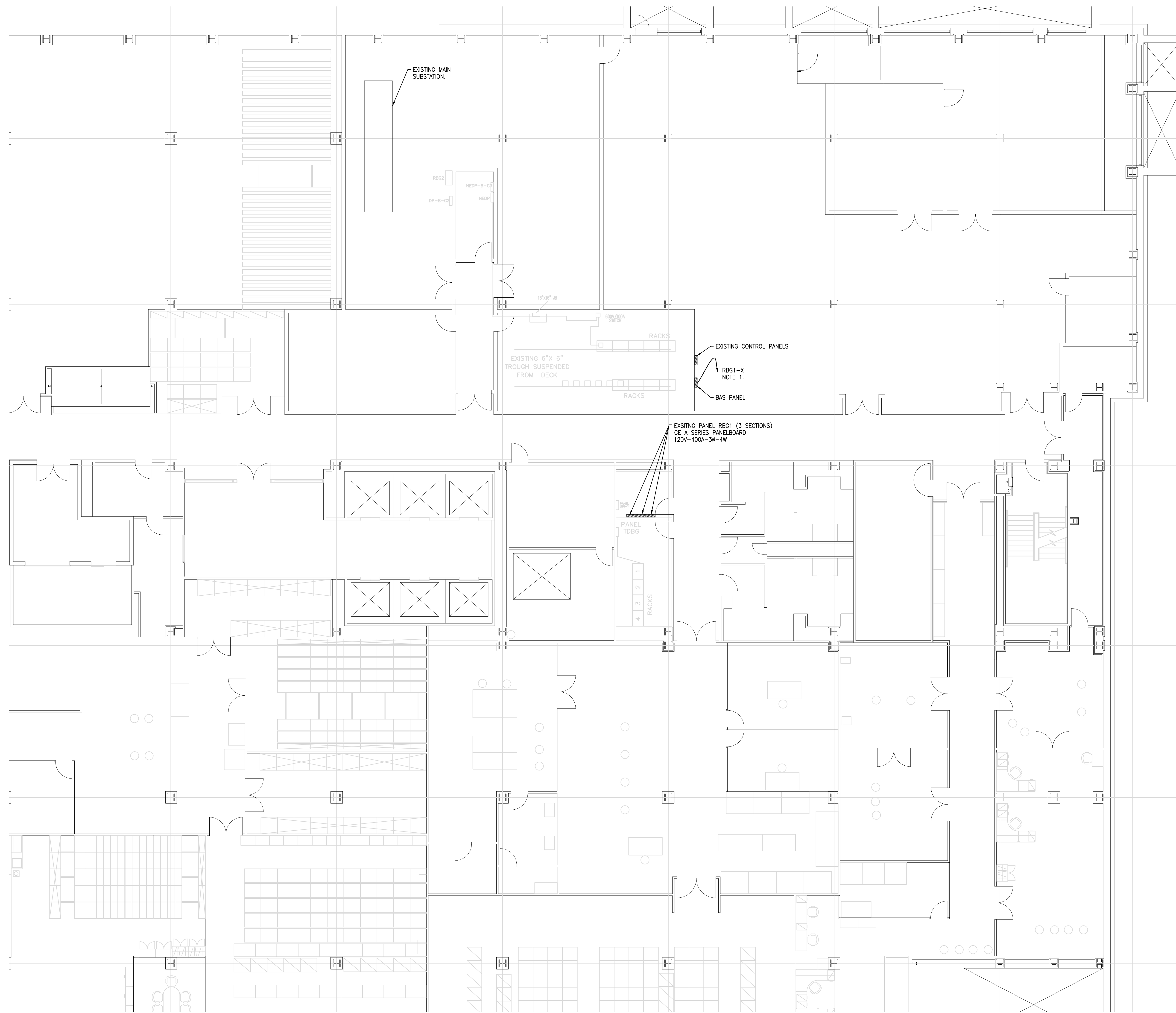
D.G.S. PROJECT No. C-0948-0098 PHASE 1

AUTOMATION SYSTEM UPGRADE -
 CAPITOL COMPLEX
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, DAUPHIN COUNTY, PA

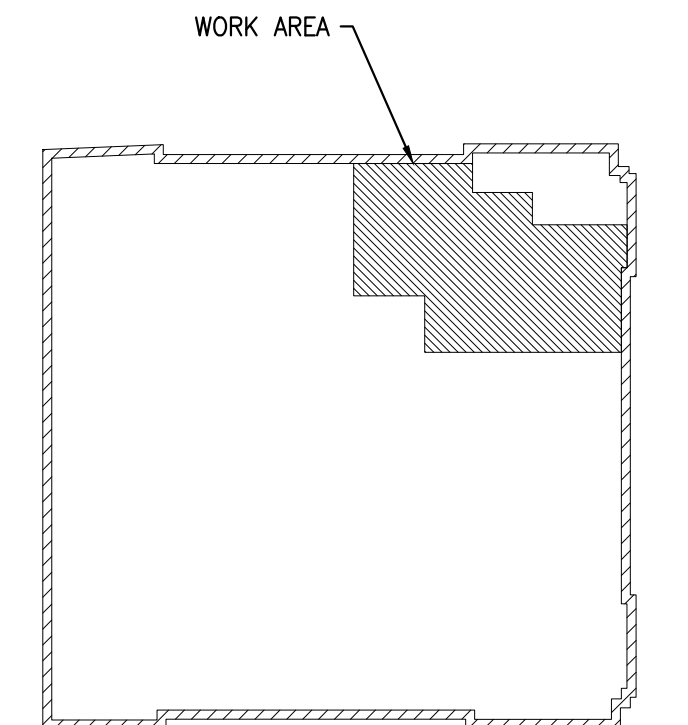
FORUM ELECTRICAL PLAN

VERIFY SCALE
 BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
 0 1
 IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
 CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

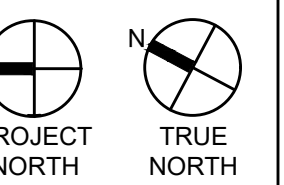
DRAWN BY B. SLOAT	DATE 02/14/24	DRAWING No. E-6
CHECKED BY J. MURPHY	SCALE AS NOTED	



ELECTRICAL PLAN NOTES:
 1. 2 #12, 1 #10-3/4" TO 120 VOLT PANEL. PROVIDE 20A-1P CIRCUIT BREAKER IN EXISTING PANEL.

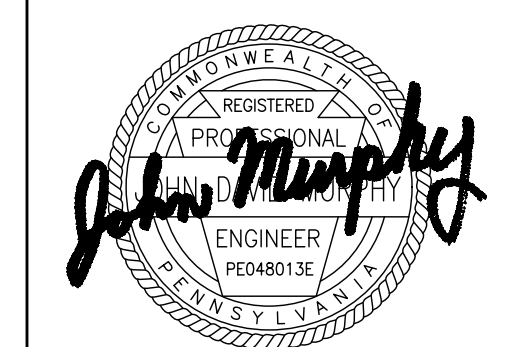


KEY PLAN
 SCALE: N.T.S.



1 BASEMENT ELECTRICAL PLAN
 E-7 Scale: 1/8" = 1'-0"

RECORD REVISIONS



SIGNATURE DATE SIGNATURE DATE
 02/14/2024

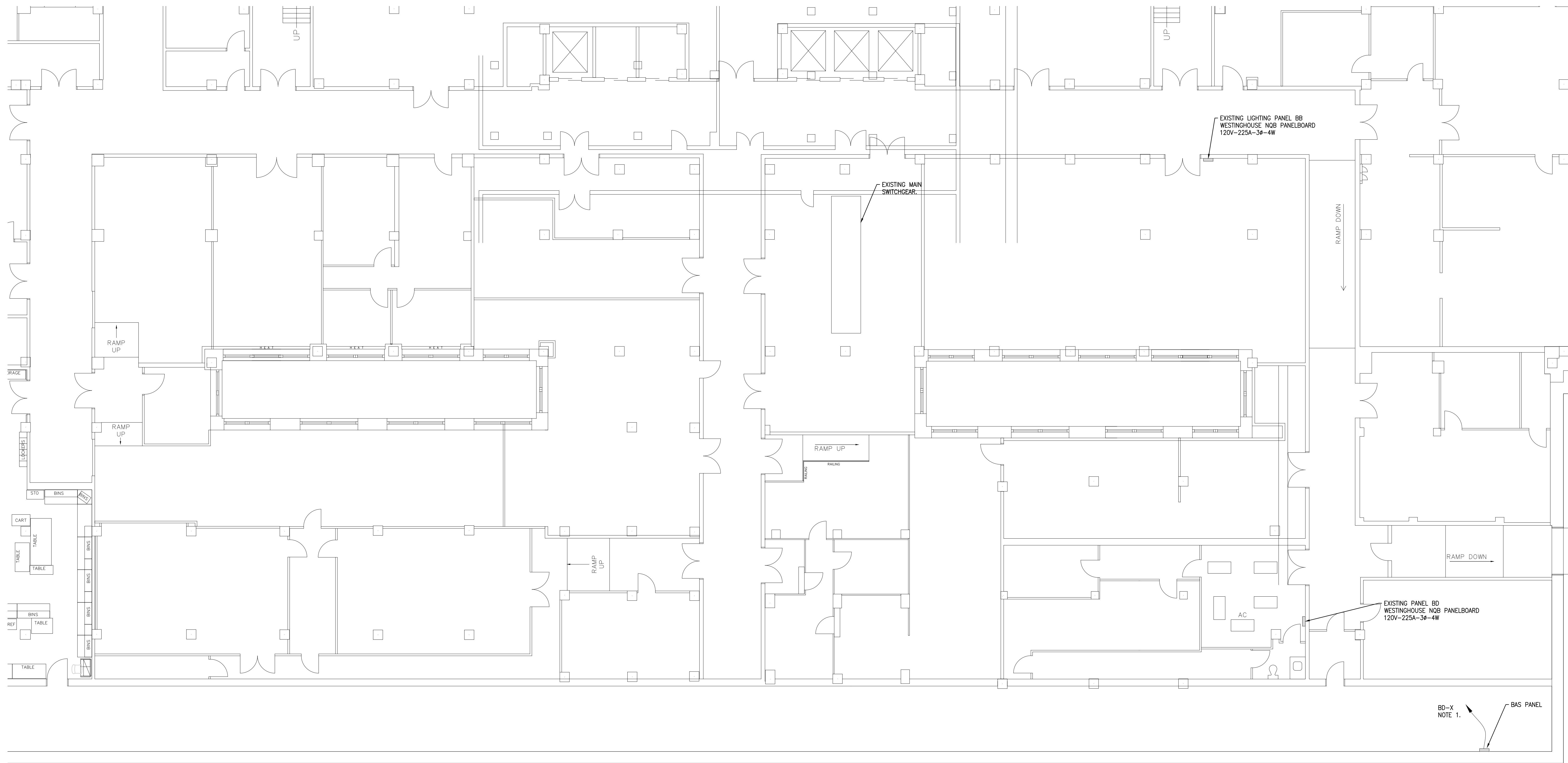
GREENMAN-PEDERSEN, INC
 52 GLENMAURA NATIONAL BOULEVARD
 SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

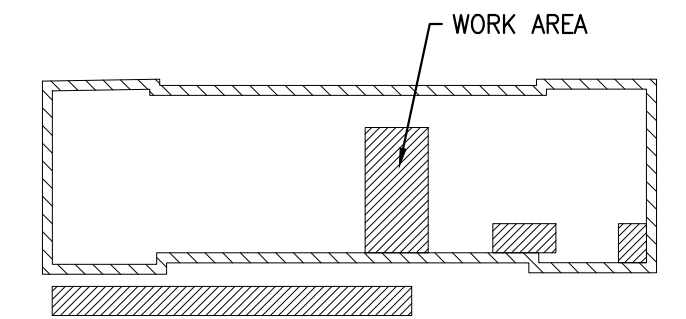
D.G.S. PROJECT No. C-0948-0098 PHASE 1

VERIFY SCALE BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING: 0 1 IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.	DRAWN BY B. SLOAT	DATE 02/14/24	DRAWING No. E-7
	CHECKED BY J. MURPHY	SCALE AS NOTED	

Automation System Upgrade – Capitol Complex
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, DAUPHIN COUNTY, PA
KEYSTONE BUILDING ELECTRICAL PLAN

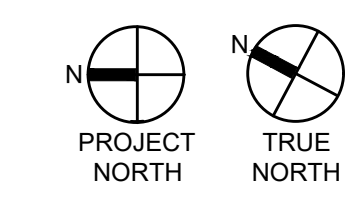


ELECTRICAL PLAN NOTES:
 1. 2 #12, 1 #10G-3/4"TC TO 120 VOLT PANEL. PROVIDE 20A-1P CIRCUIT BREAKER IN EXISTING PANEL.



1
E-8
BASEMENT ELECTRICAL PLAN
 Scale: 1/8" = 1'-0"

KEY PLAN
 SCALE: N.T.S.



RECORD REVISIONS

John Murphy
 PROFESSIONAL ENGINEER
 PENNSYLVANIA
 02/14/2024
 SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
 52 GLENMAURA NATIONAL BOULEVARD
 SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

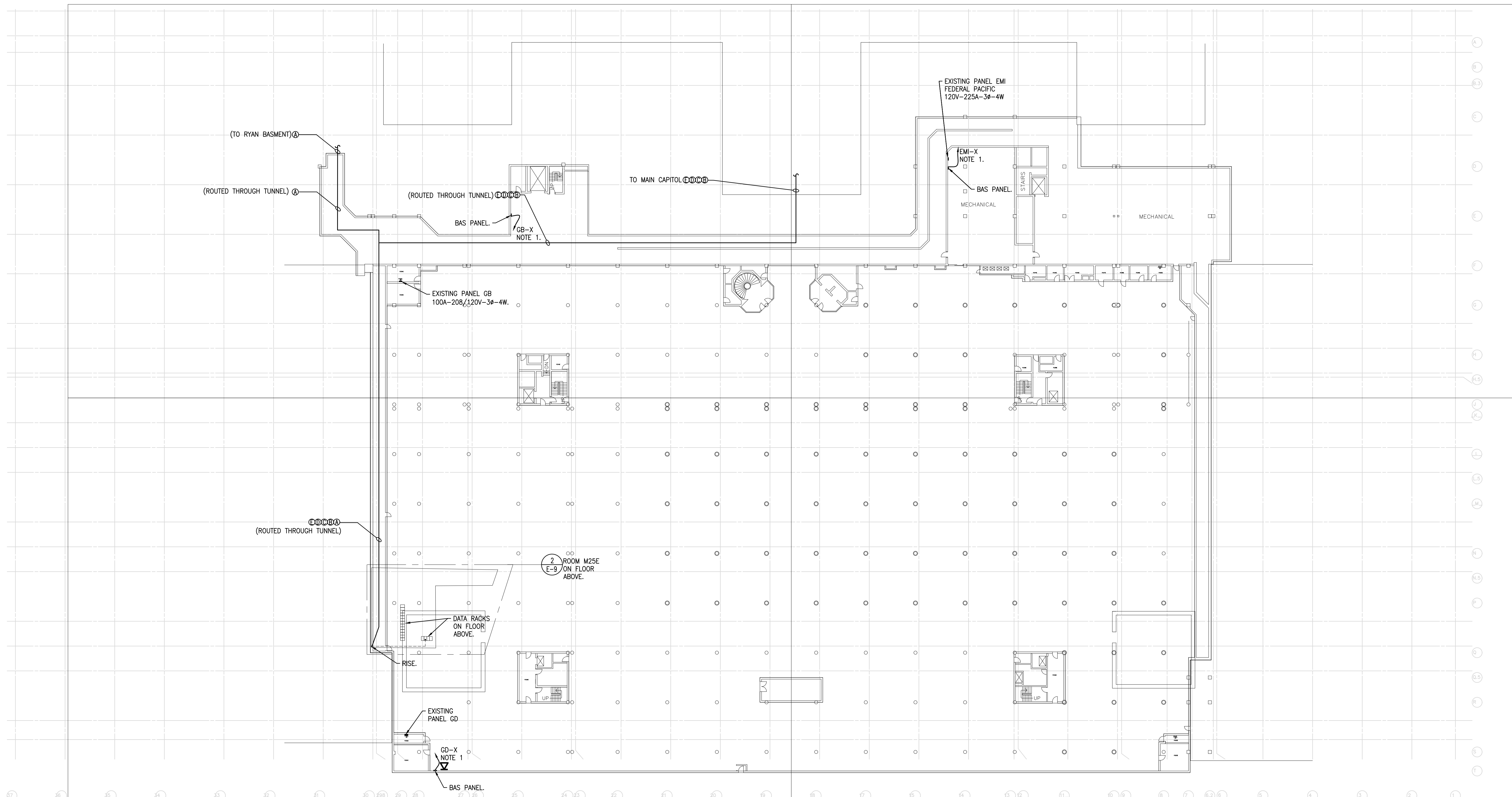
Automation System Upgrade -
 CAPITOL COMPLEX
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, DAUPHIN COUNTY, PA

NORTH BUILDING ELECTRICAL PLAN

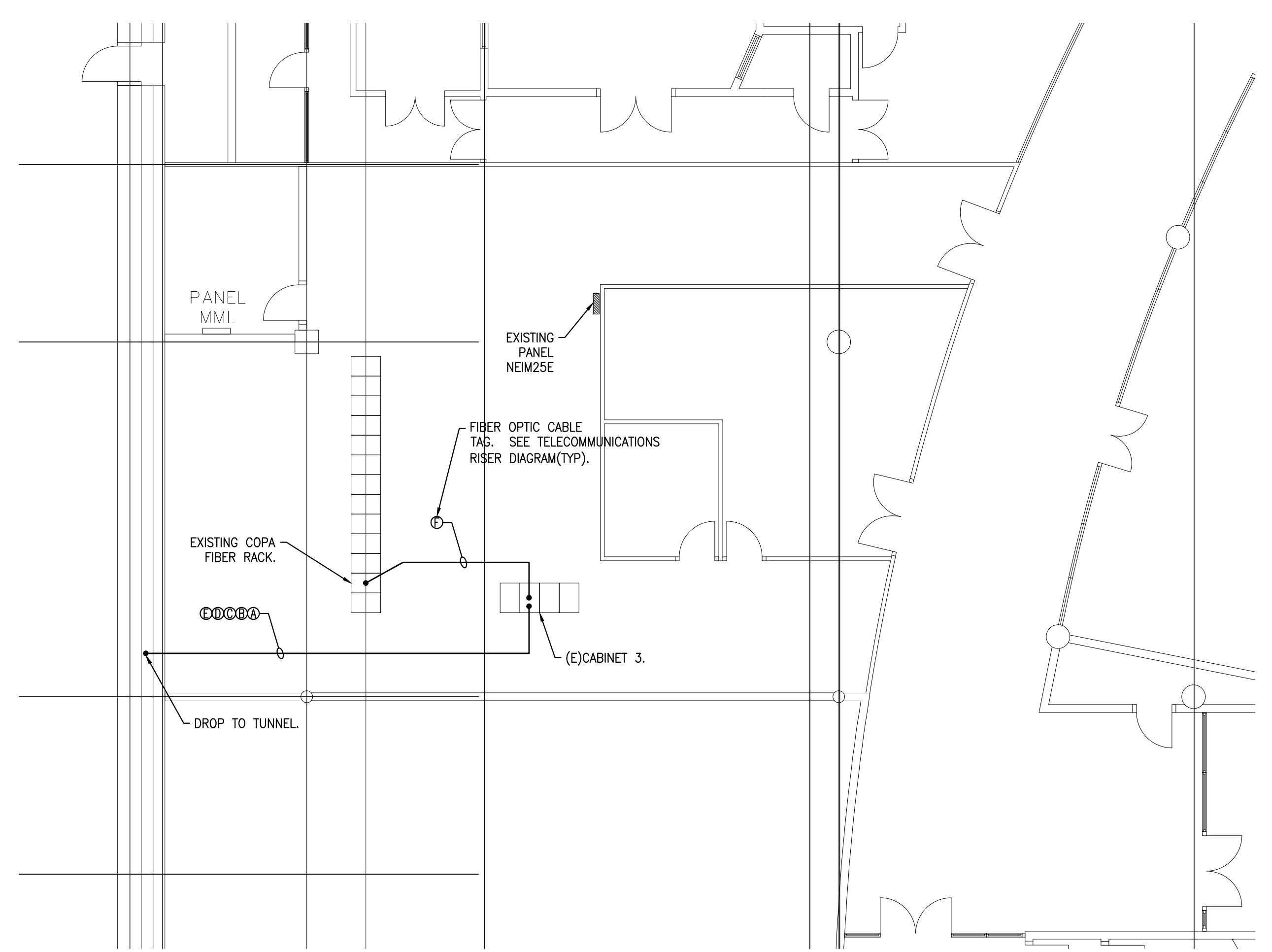
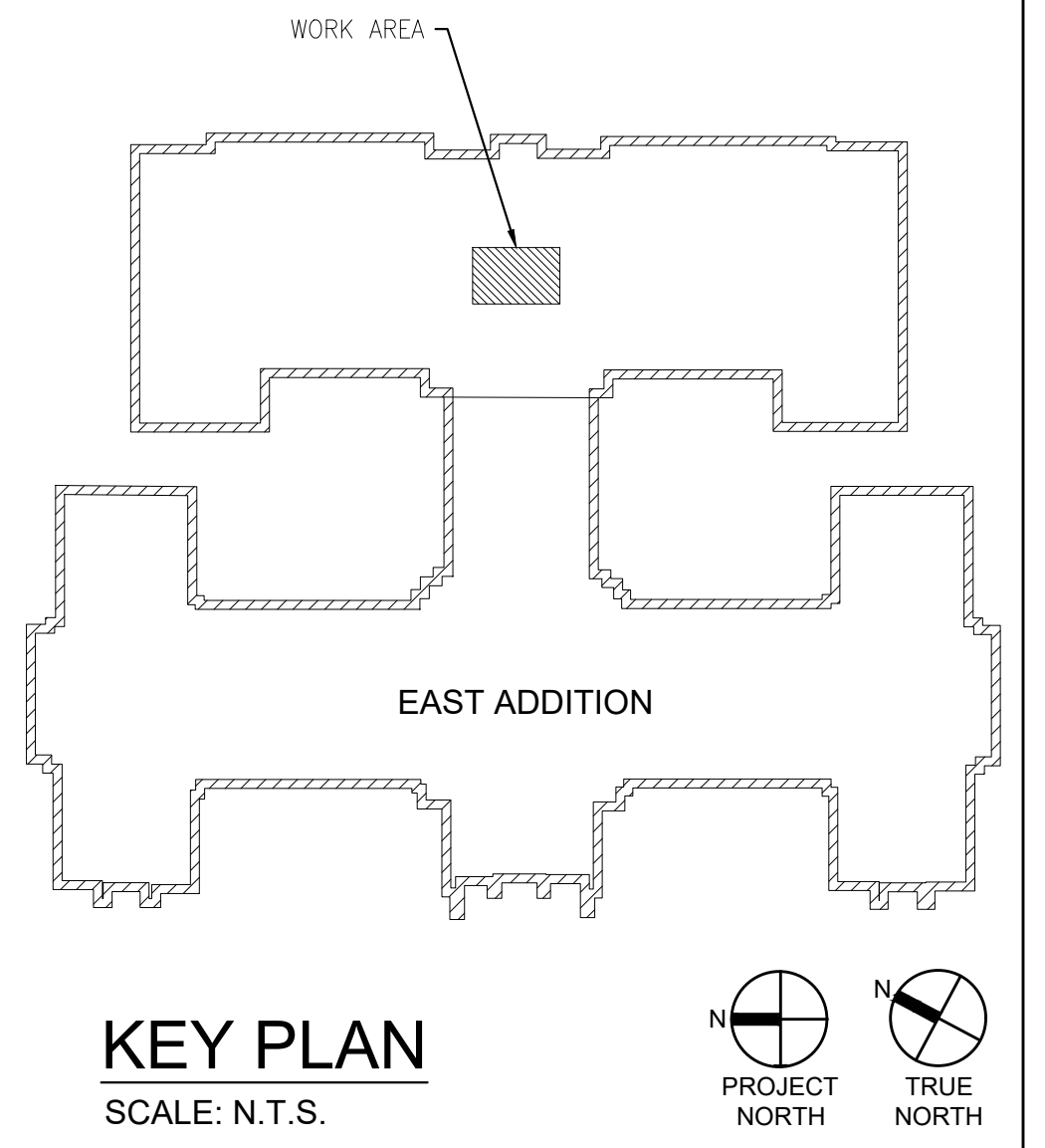
VERIFY SCALE
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 CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

DRAWN BY B. SLOAT	DATE 02/14/24	DRAWING No. E-8
CHECKED BY J. MURPHY	SCALE AS NOTED	

ELECTRICAL PLAN NOTES:
 1. 2 #12, 1 #12G-3/4" C. TO 120 VOLT PANEL. PROVIDE 20A-1P CIRCUIT BREAKER IN EXISTING PANEL.



1 EAST WING TUNNEL ELECTRICAL PLAN
 Scale: 1" = 30'-0"



2 EAST WING CONCOURSE LEVEL M25E ENLARGED PLAN
 Scale: 1/8" = 1'-0"

KEY PLAN
 SCALE: N.T.S.

NO.	REVISIONS

RECORD REVISIONS

John Murphy
 ENGINEER
 02/14/2024
 SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
 52 GLENMAURA NATIONAL BOULEVARD
 SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

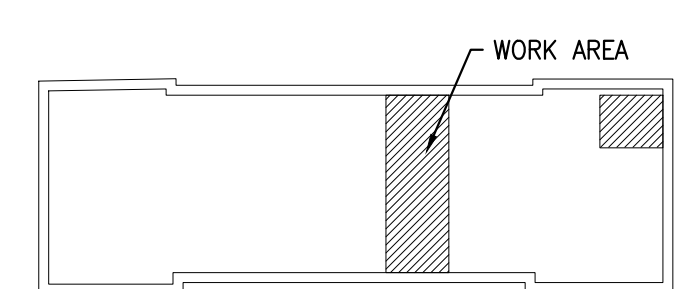
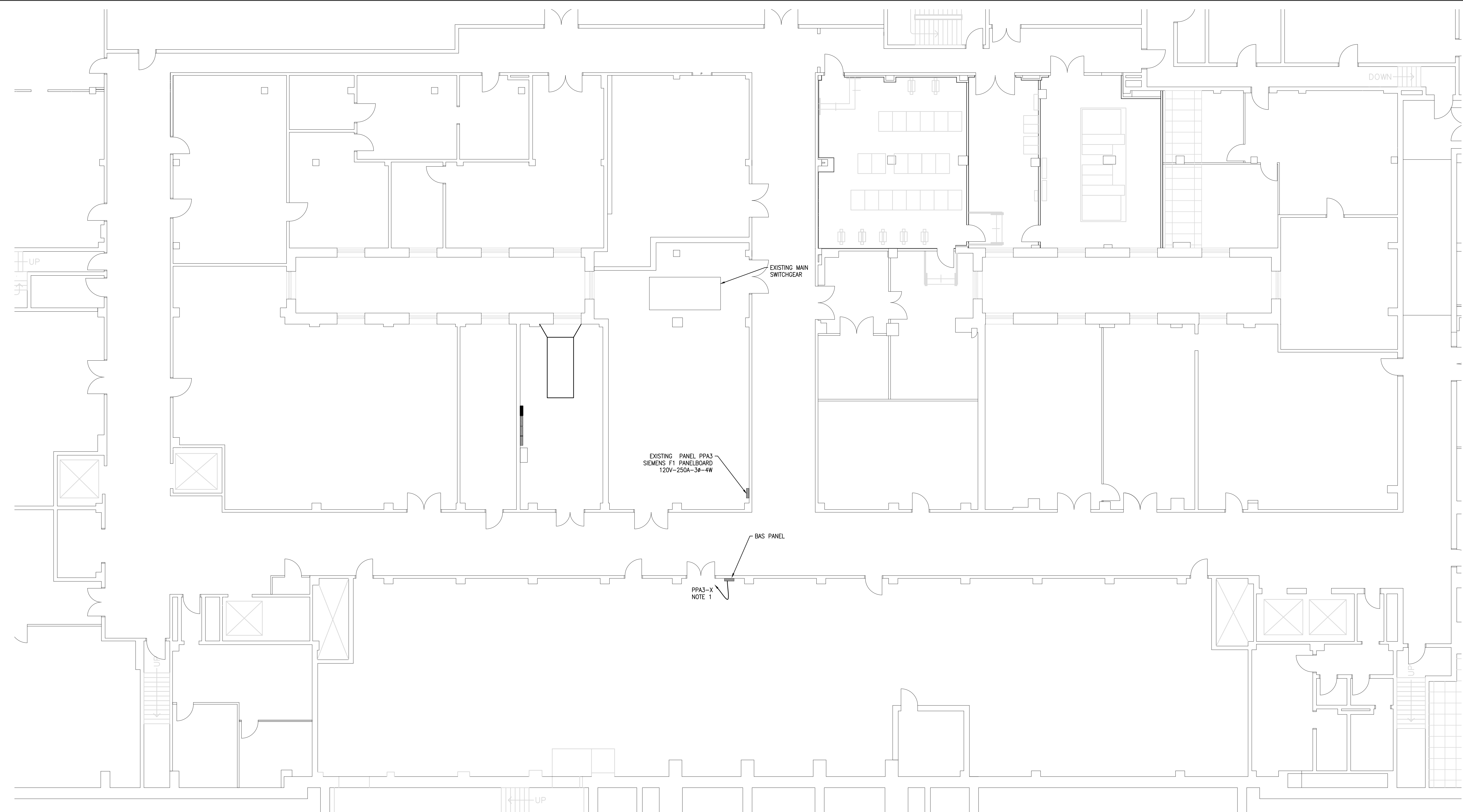
Automation System Upgrade -
 CAPITOL COMPLEX
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, DAUPHIN COUNTY, PA

EAST WING ELECTRICAL PLAN

VERIFY SCALE
 BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
 0 1
 IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
 CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

DRAWN BY B. SLOAT	DATE 02/14/24	DRAWING No. E-9
CHECKED BY J. MURPHY	SCALE AS NOTED	

ELECTRICAL PLAN NOTES:
 1. 2 #12, 1 #12G-3/4"C. TO 120 VOLT PANEL. PROVIDE 20A-1P CIRCUIT BREAKER IN EXISTING PANEL.



KEY PLAN
 SCALE: N.T.S.
 PROJECT NORTH TRUE NORTH

1 BASEMENT ELECTRICAL PLAN
 E-10 Scale: 1/8" = 1'-0"

NO.	REVISIONS

RECORD REVISIONS

John Murphy
 PROFESSIONAL ENGINEER
 PENNSYLVANIA
 02/14/2024
 SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
 52 GLENMAURA NATIONAL BOULEVARD
 SCRANTON, PENNSYLVANIA 18505

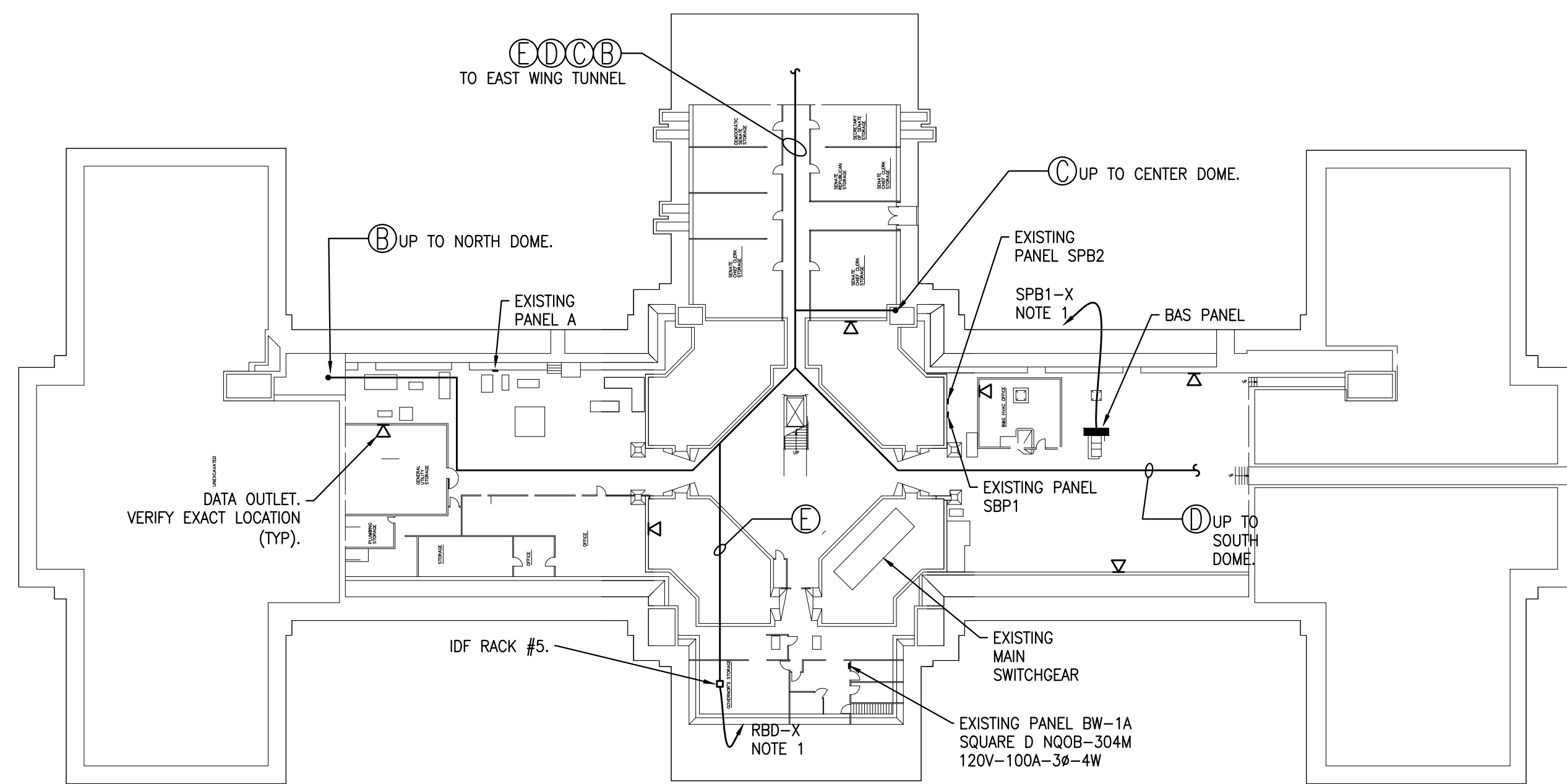
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

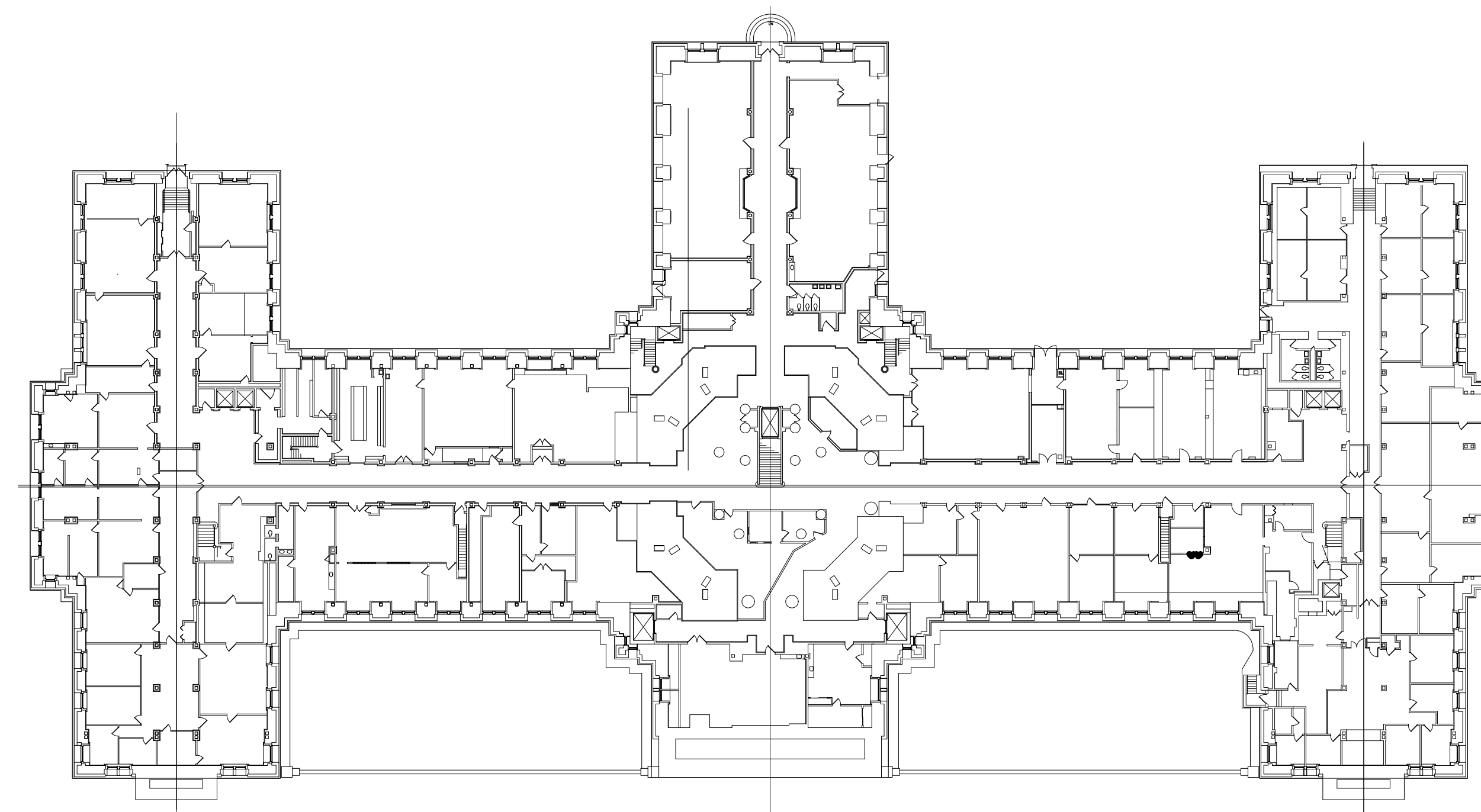
Automation System Upgrade -
 CAPITOL COMPLEX
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, DAUPHIN COUNTY, PA
 IRVIS (SOUTH BUILDING) ELECTRICAL PLAN

VERIFY SCALE
 BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
 0 1
 IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
 CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

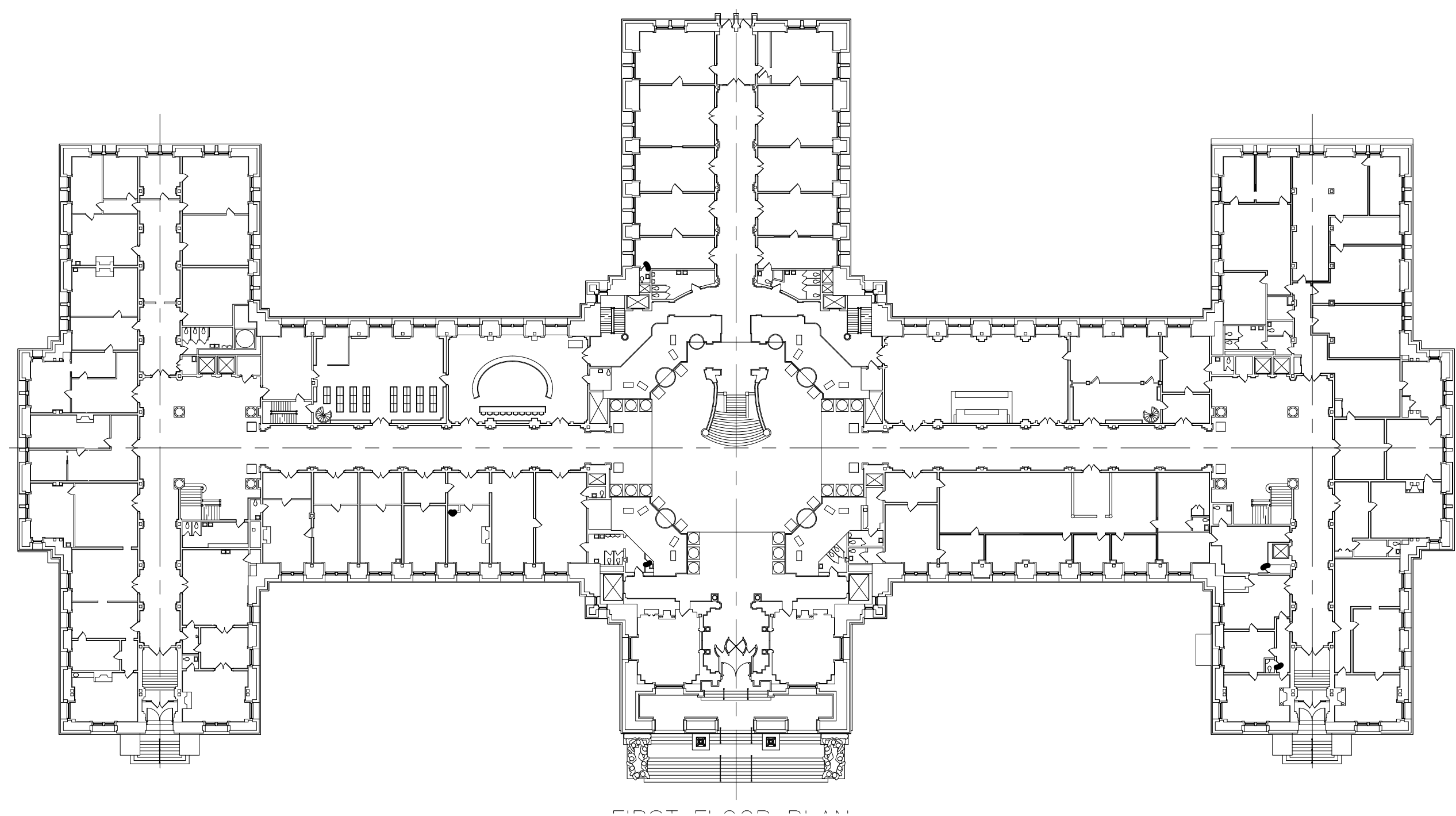
DRAWN BY B. SLOAT DATE 02/14/24 DRAWING No. E-10
 CHECKED BY J. MURPHY SCALE AS NOTED



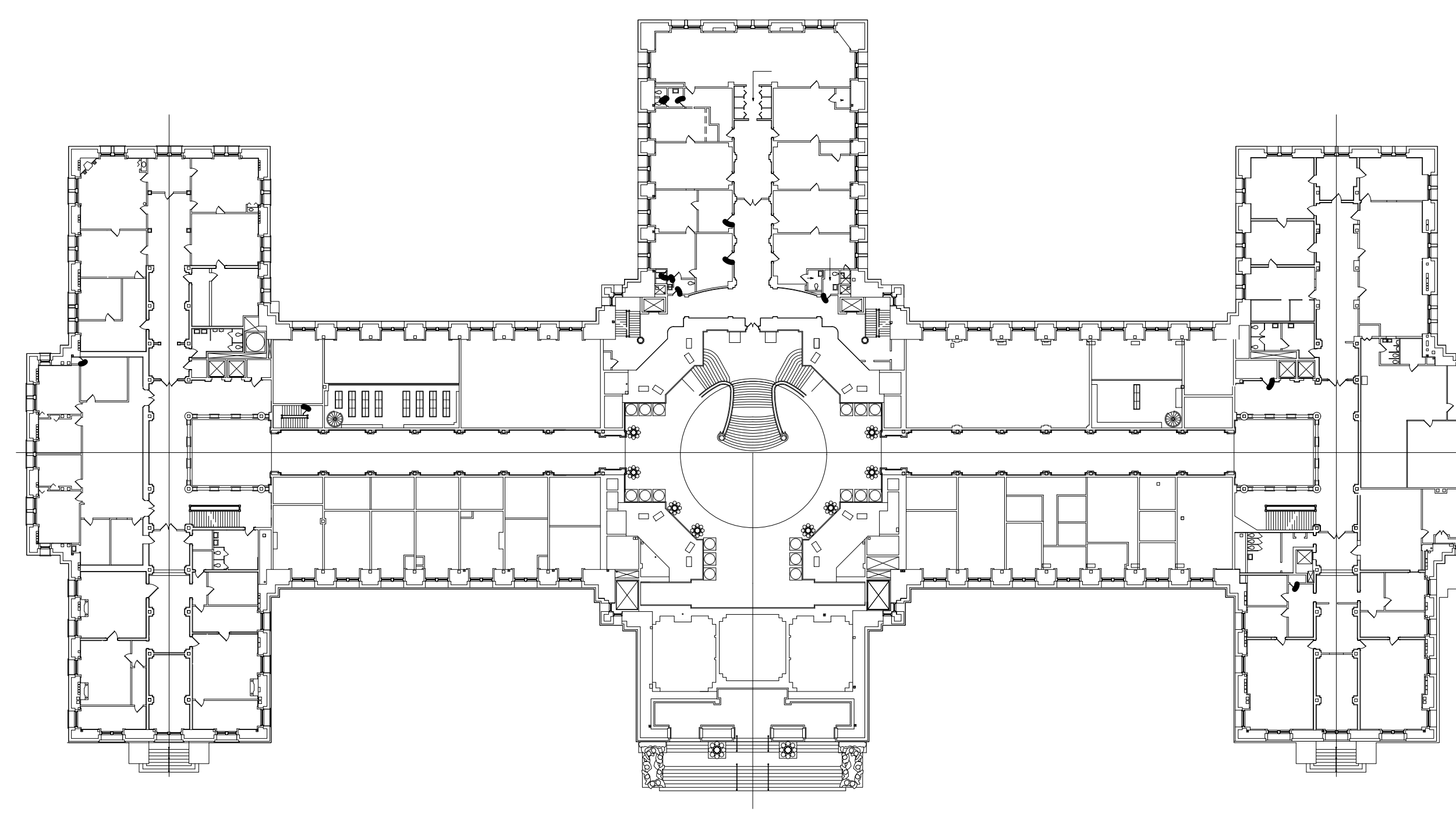
1 MAIN CAPITOL SUB-BASEMENT
E-11 Scale: 1" = 40'-0"



2 MAIN CAPITOL BASEMENT
E-11 Scale: 1" = 40'-0"



3 MAIN CAPITOL FIRST FLOOR
E-11 Scale: 1" = 40'-0"



4 MAIN CAPITOL ENTRESOL
E-11 Scale: 1" = 40'-0"

RECORD REVISIONS

John Murphy
PROFESSIONAL ENGINEER
PENNSYLVANIA

02/14/2024
SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

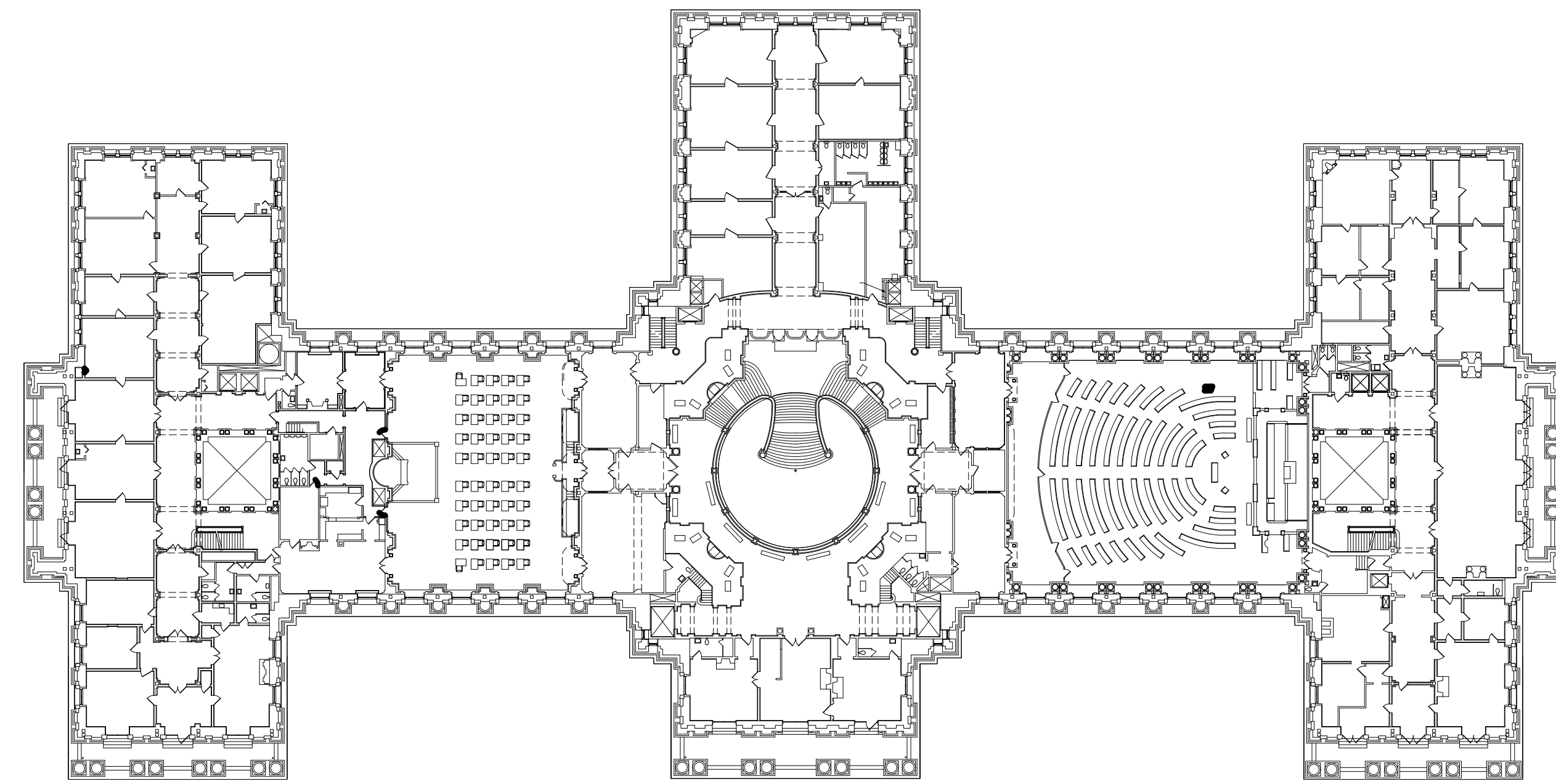
Automation System Upgrade - Capitol Complex
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

MAIN CAPITOL ELECTRICAL PLANS

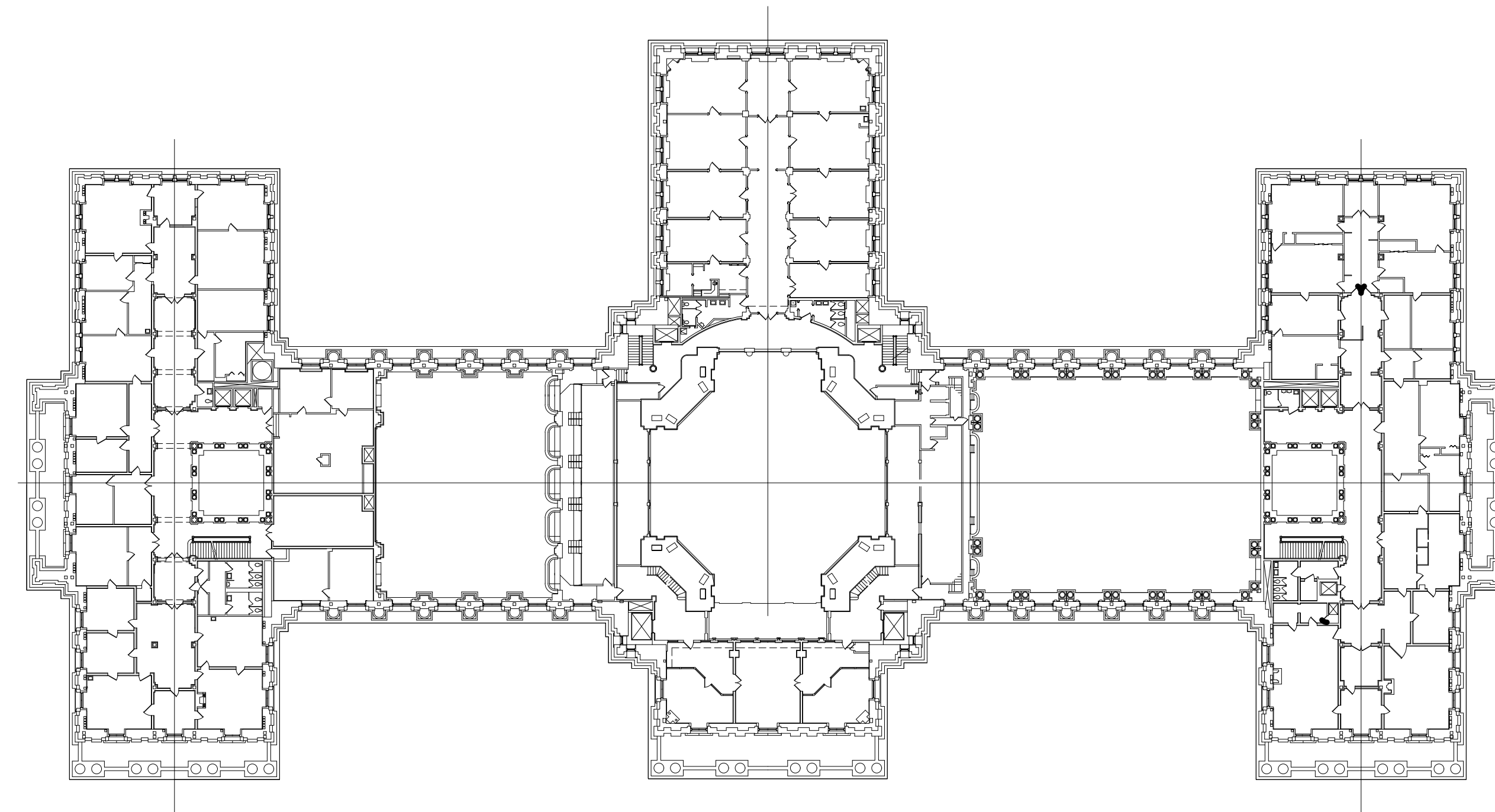
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

DRAWN BY B. SLOAT DATE 02/14/24 DRAWING No. E-11
CHECKED BY J. MURPHY SCALE AS NOTED

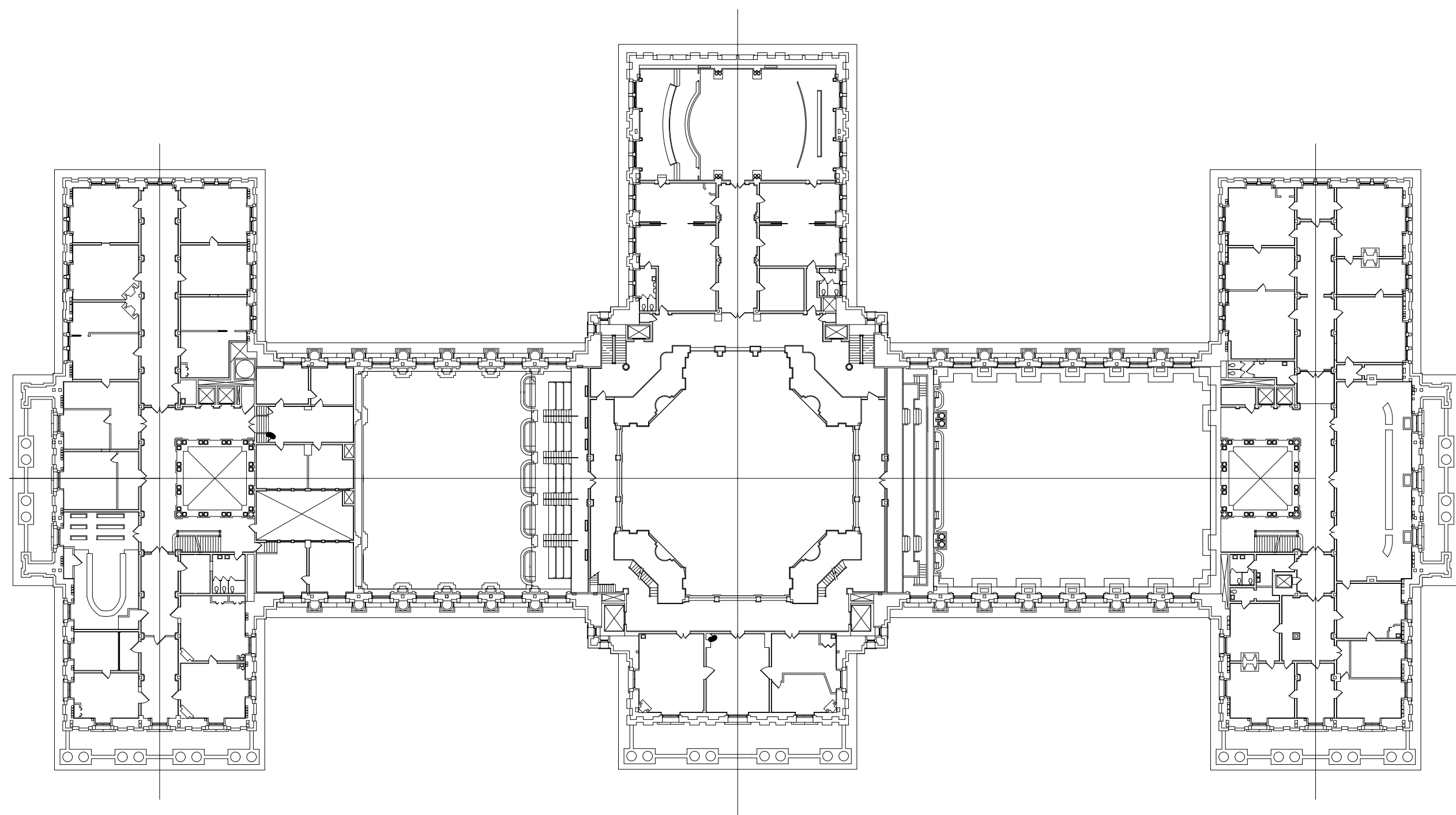
VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
0 1
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY



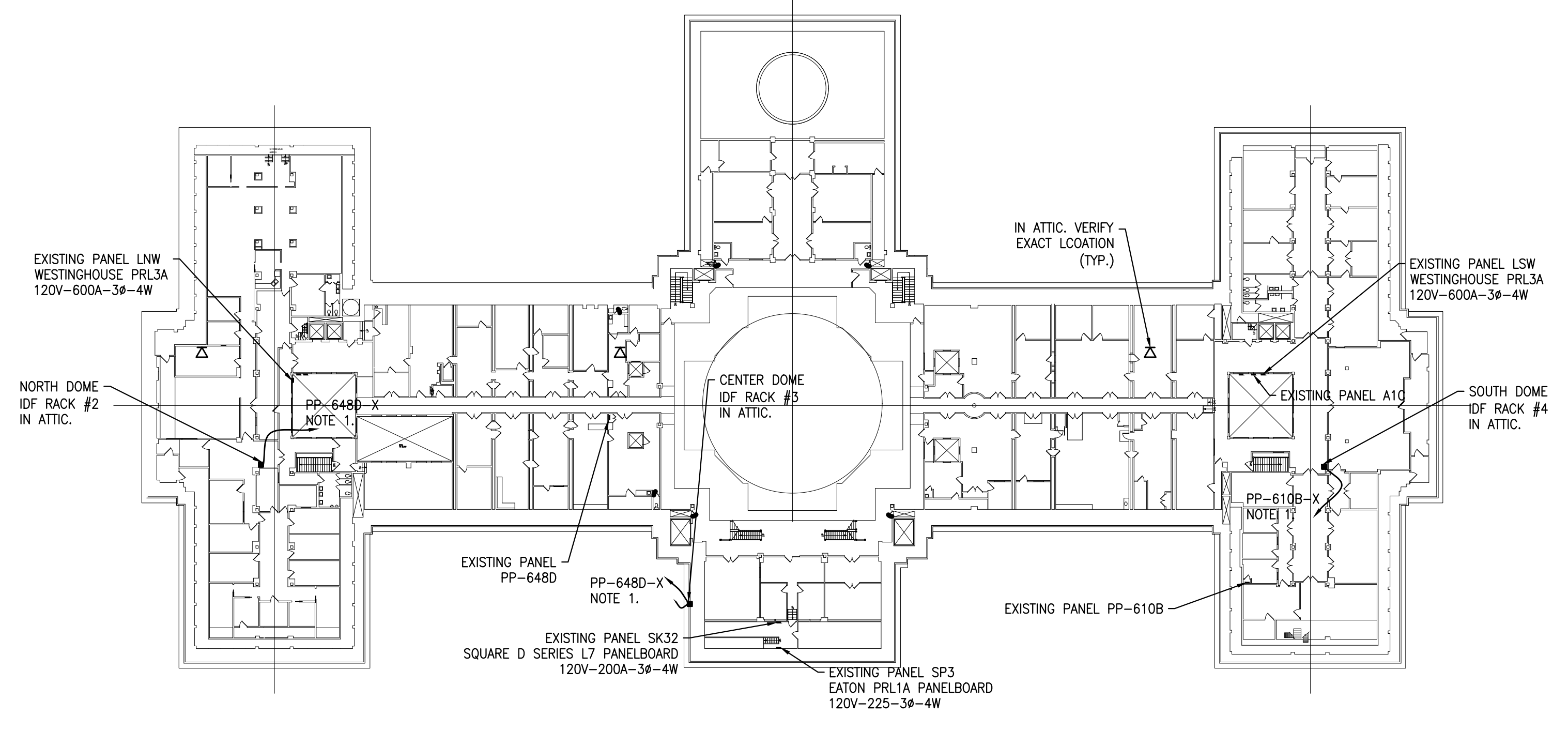
1 MAIN CAPITOL SECOND FLOOR
E-12 Scale: 1" = 40'-0"



2 MAIN CAPITOL THIRD FLOOR
E-12 Scale: 1" = 40'-0"



3 MAIN CAPITOL FOURTH FLOOR
E-12 Scale: 1" = 40'-0"



4 MAIN CAPITOL FIFTH FLOOR
E-12 Scale: 1" = 40'-0"

NOTES:
1. 2#12, 1#12G - 3/4" C TO PANEL INDICATED. PROVIDE 20A-1P BREAKER IN EXISTING PANEL SPACE.

RECORD REVISIONS

John Murphy
ENGINEER
02/14/2024
SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

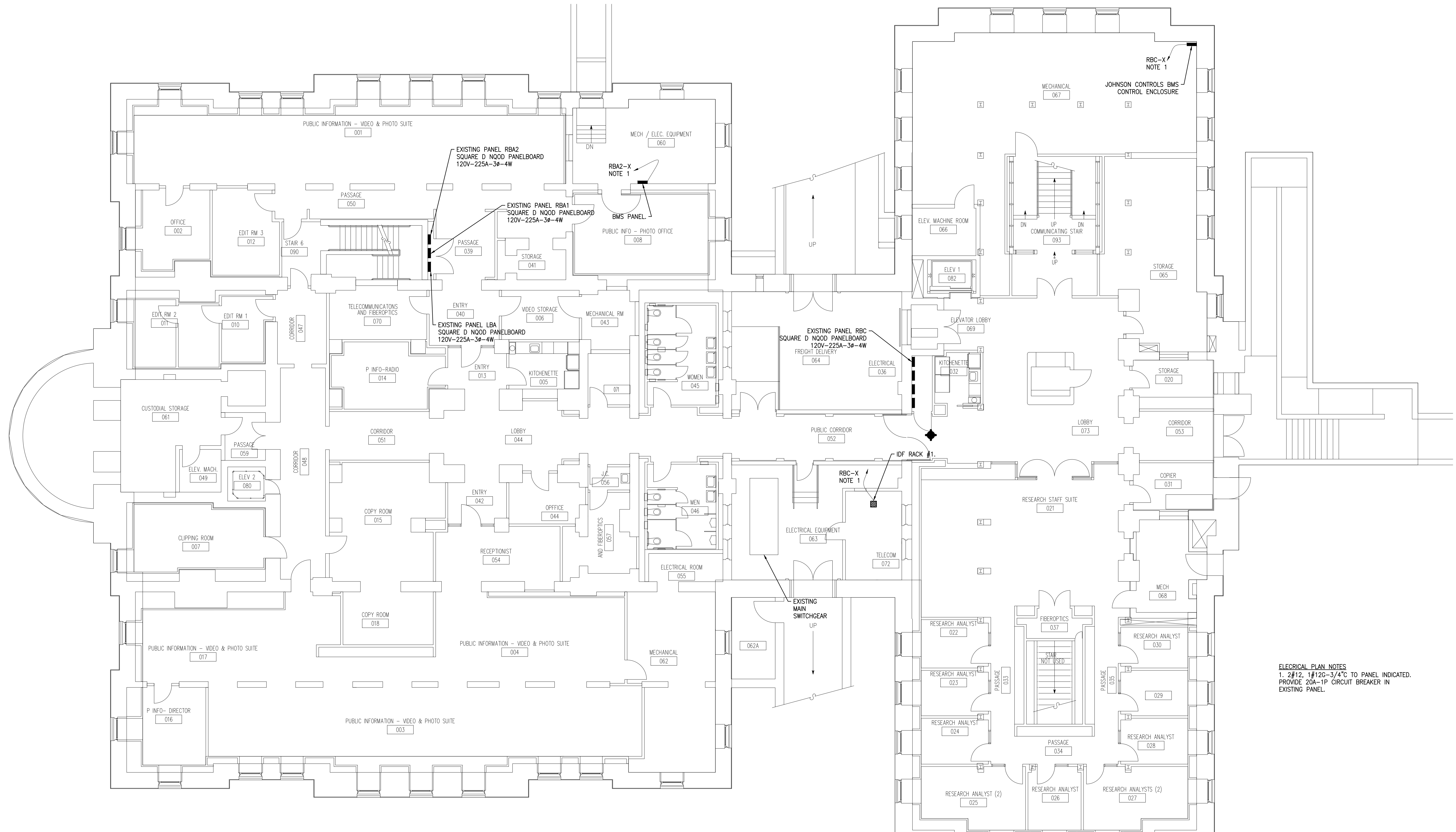
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

Automation System Upgrade - Capitol Complex
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

MAIN CAPITOL ELECTRICAL PLANS
DRAWN BY B. SLOAT DATE 02/14/24 DRAWING No. E-12
CHECKED BY J. MURPHY SCALE AS NOTED

VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
0 1
IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.



KEY PLAN
SCALE: N.T.S.

RECORD REVISIONS

John Murphy
PROFESSIONAL ENGINEER
RECORDING
02/14/2024

SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. C-0948-0098 PHASE 1

VERIFY SCALE
AUTOMATION SYSTEM UPGRADE –
CAPITOL COMPLEX
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, DAUPHIN COUNTY, PA

RYAN BUILDING ELECTRICAL PLAN

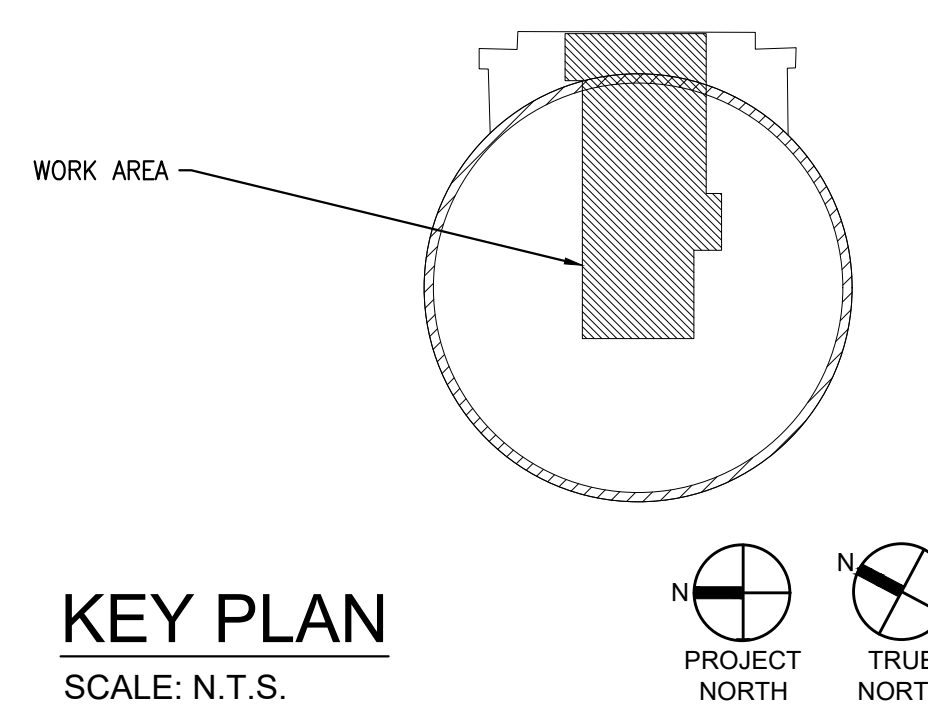
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.	DRAWN BY B. SLOAT	DATE 02/14/24	DRAWING No. E-13
	CHECKED BY J. MURPHY	SCALE AS NOTED	

ELECTRICAL PLAN NOTES
1. 2#12, 1#12G-3/4" TO PANEL INDICATED.
PROVIDE 20A-1P CIRCUIT BREAKER IN EXISTING PANEL.

1
E-13
BASEMENT ELECTRICAL PLAN
Scale: 1/8" = 1'-0"



ELECTRICAL PLAN NOTES:
 1. 2 #12, 1 #126-3/4" TO 120 VOLT PANEL. PROVIDE 20A-1P CIRCUIT BREAKER IN EXISTING PANEL.



KEY PLAN
 SCALE: N.T.S.

NO.	REVISIONS

RECORD REVISIONS

John Murphy
 PROFESSIONAL ENGINEER
 PENNSYLVANIA
 02/14/2024
 SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
 52 GLENMAURA NATIONAL BOULEVARD
 SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, PENNSYLVANIA

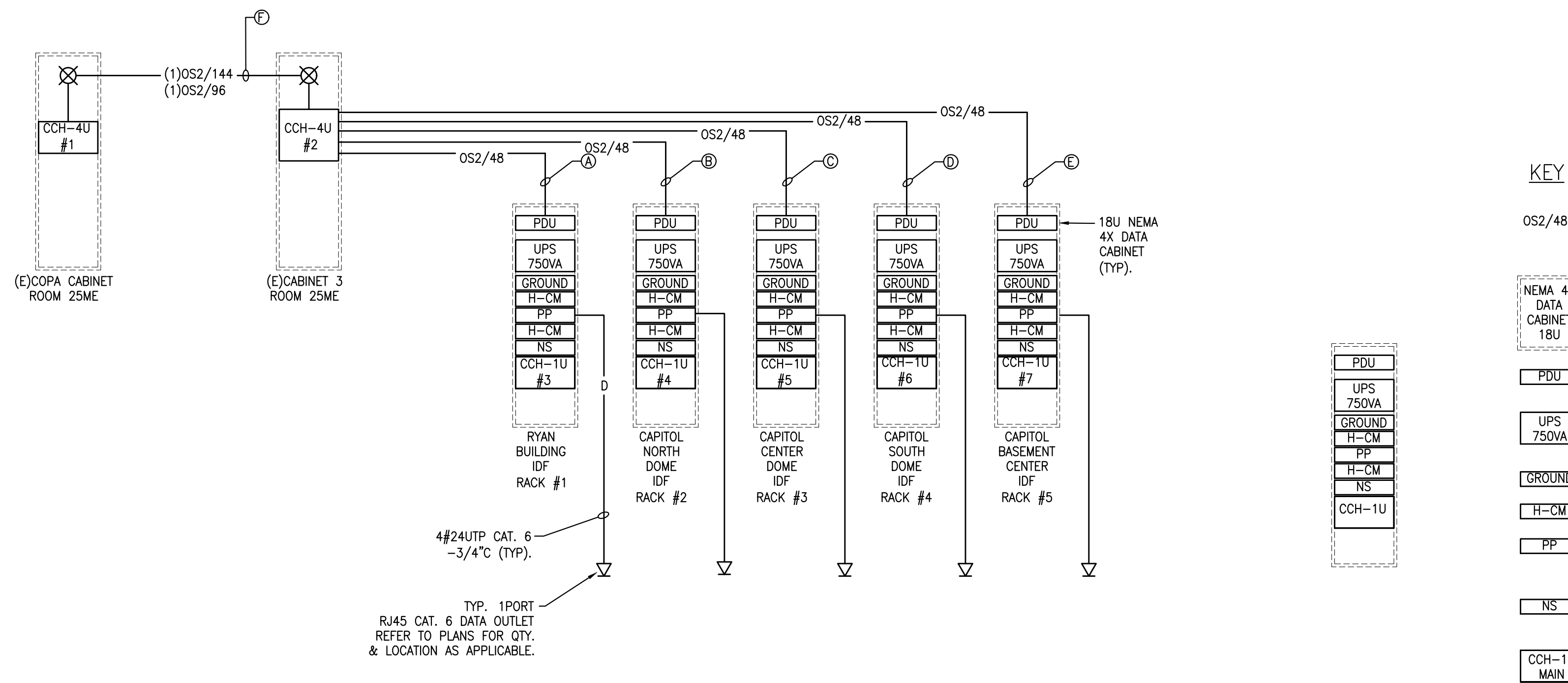
D.G.S. PROJECT No. C-0948-0098 PHASE 1

Automation System Upgrade -
 CAPITOL COMPLEX
 DEPARTMENT OF GENERAL SERVICES
 HARRISBURG, DAUPHIN COUNTY, PA

MUSEUM BUILDING ELECTRICAL PLAN

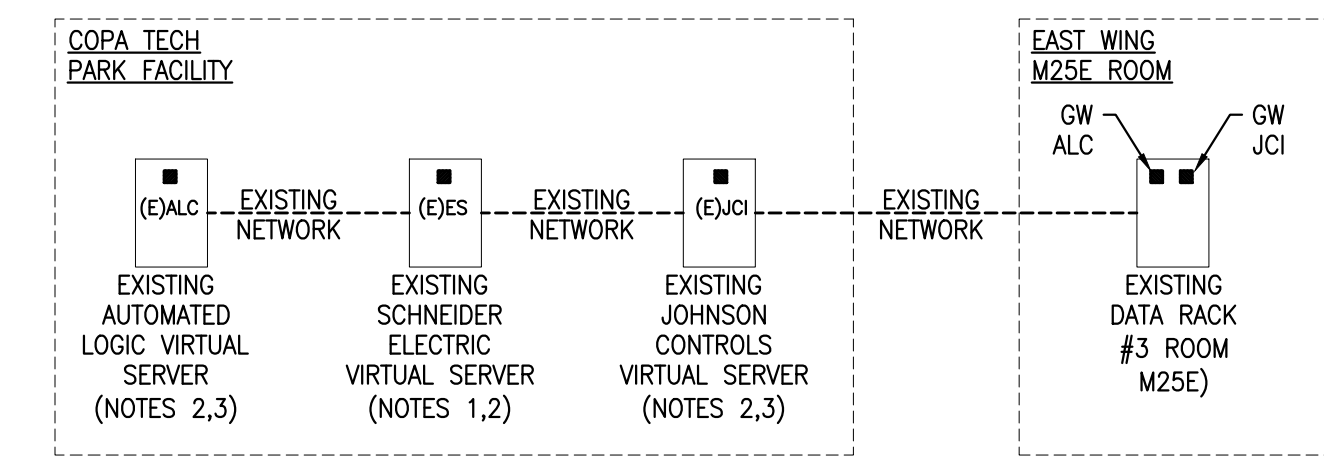
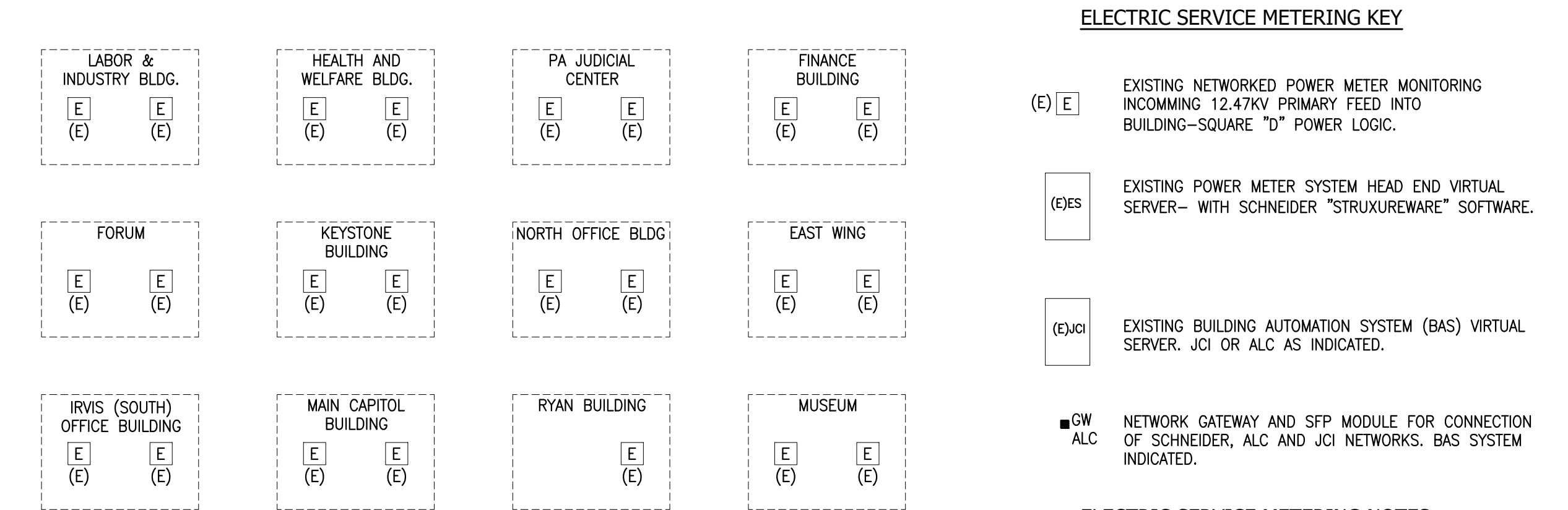
1 BASEMENT ELECTRICAL PLAN
 Scale: 1/8" = 1'-0"

VERIFY SCALE		DRAWN BY B. SLOAT	DATE 02/14/24	DRAWING No. E-14
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING: 0 1 IF BAR IS NOT ONE (1) INCH LONG, ADJUST SCALE ACCORDINGLY				
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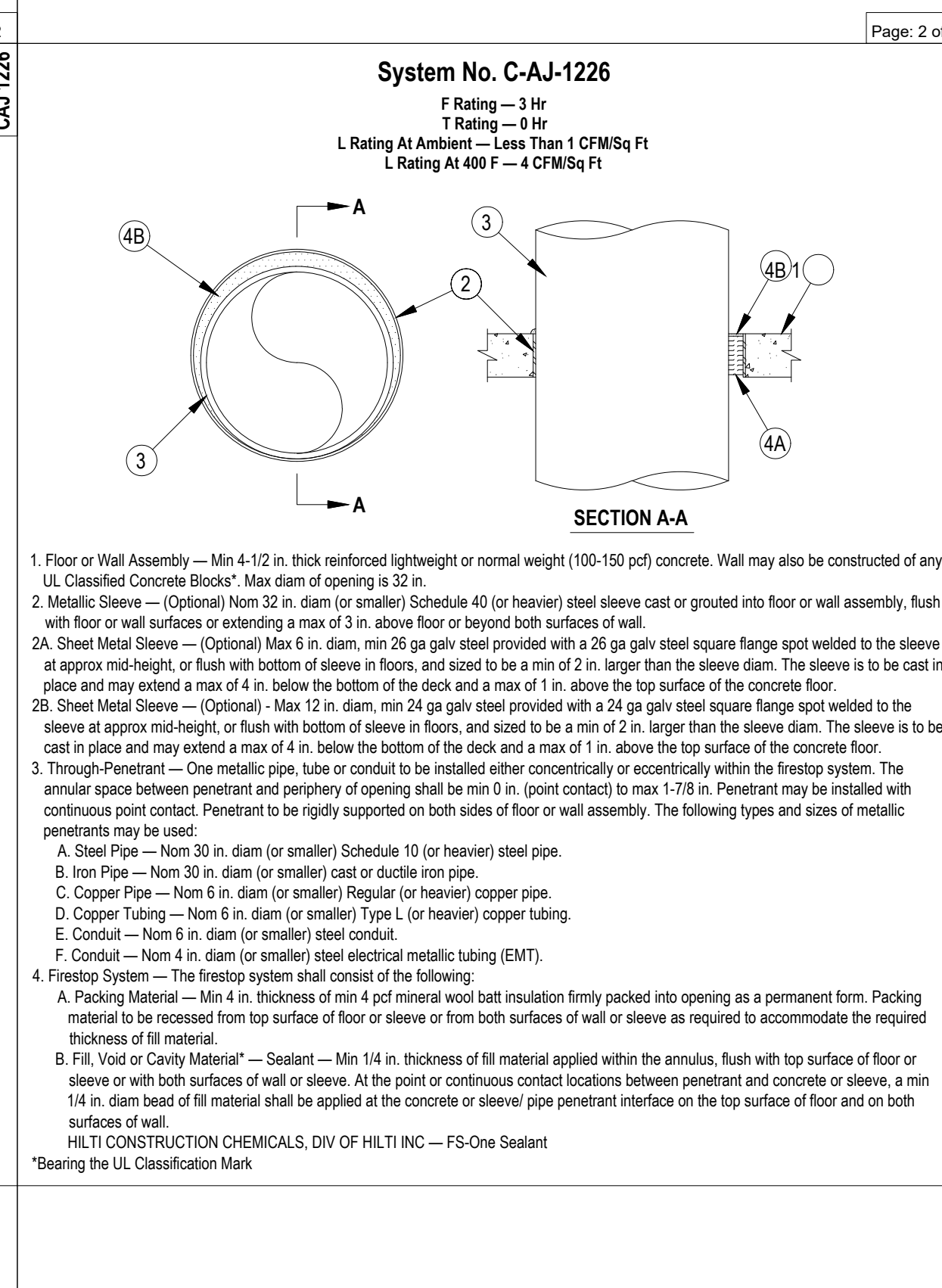
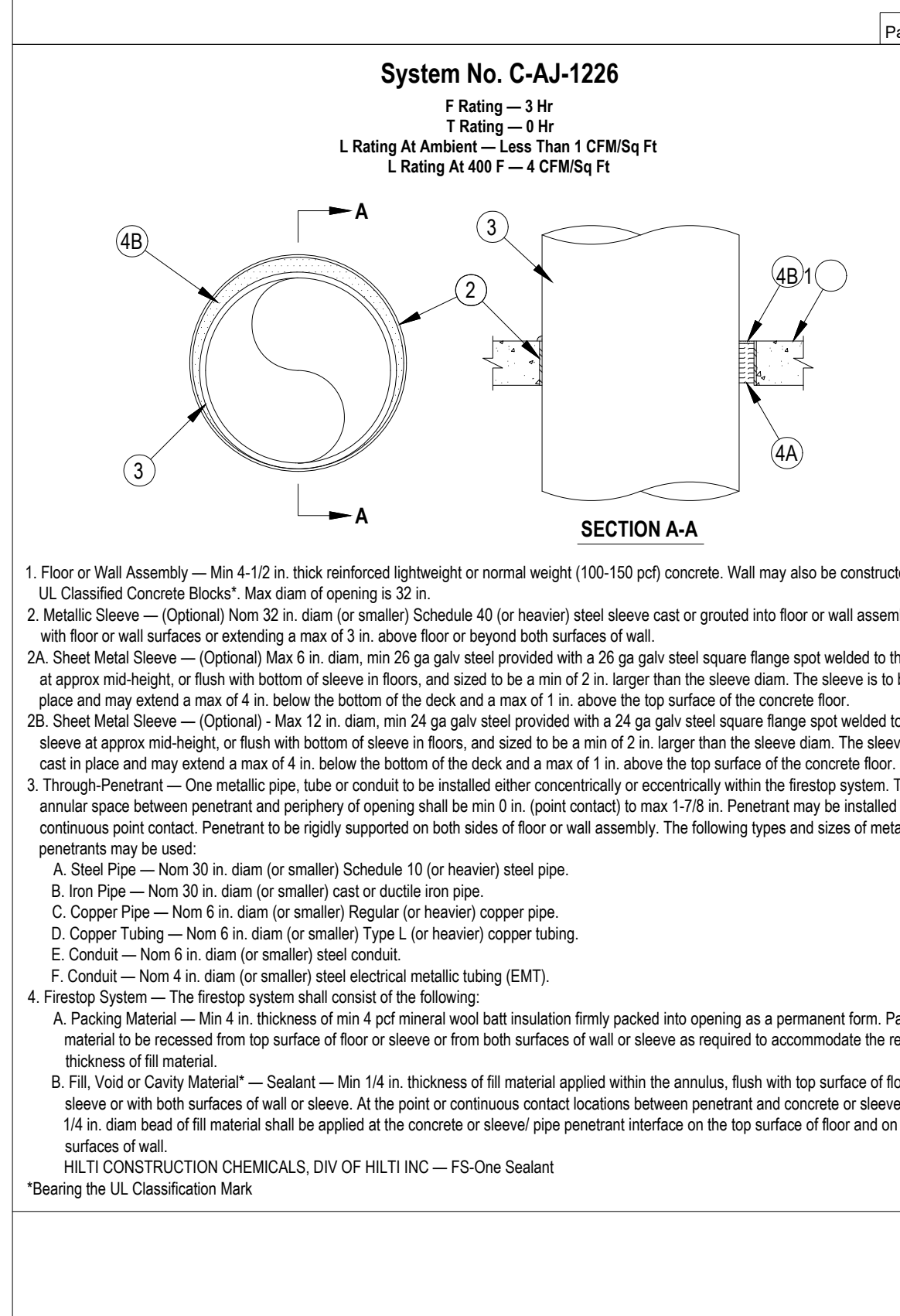
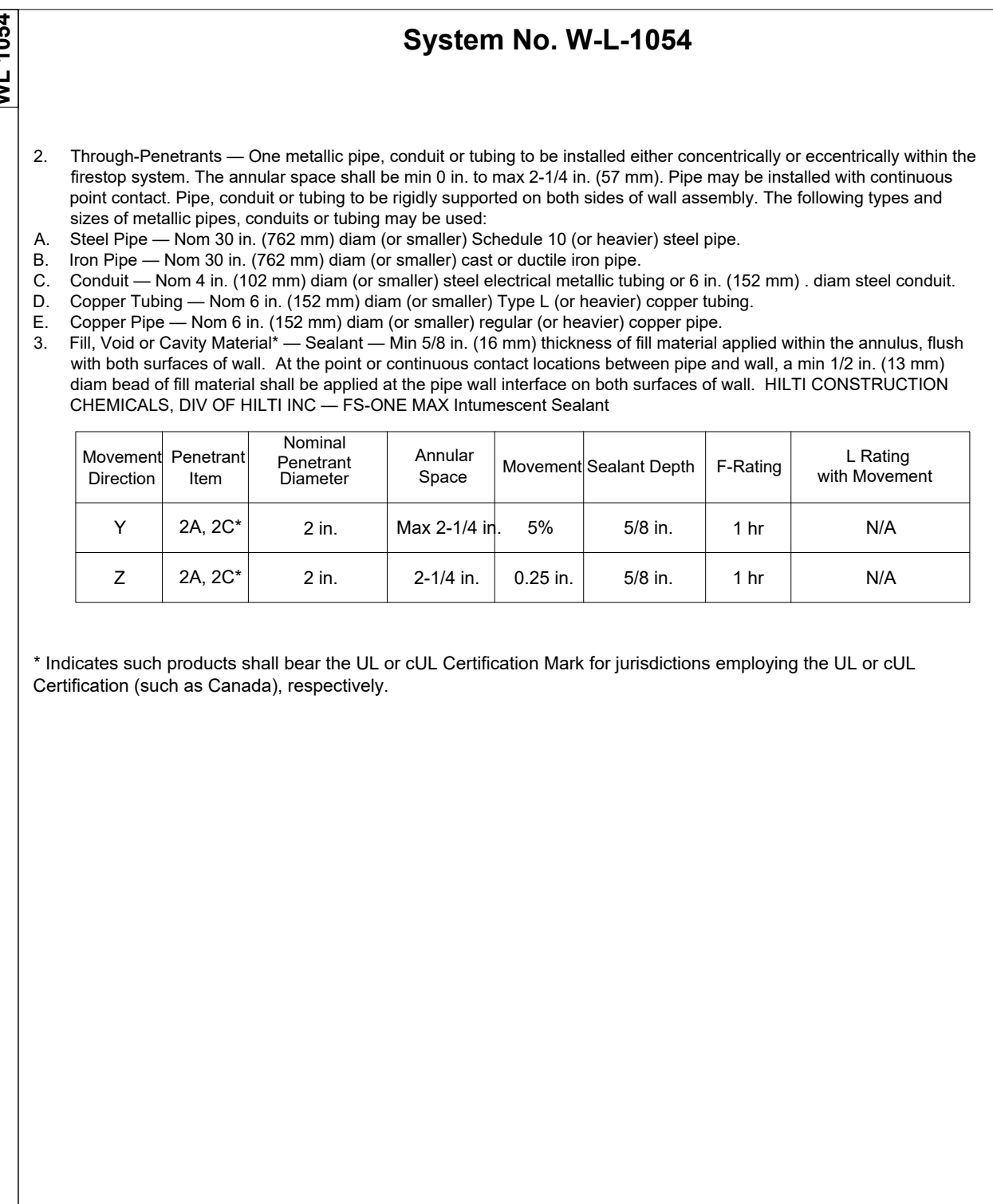
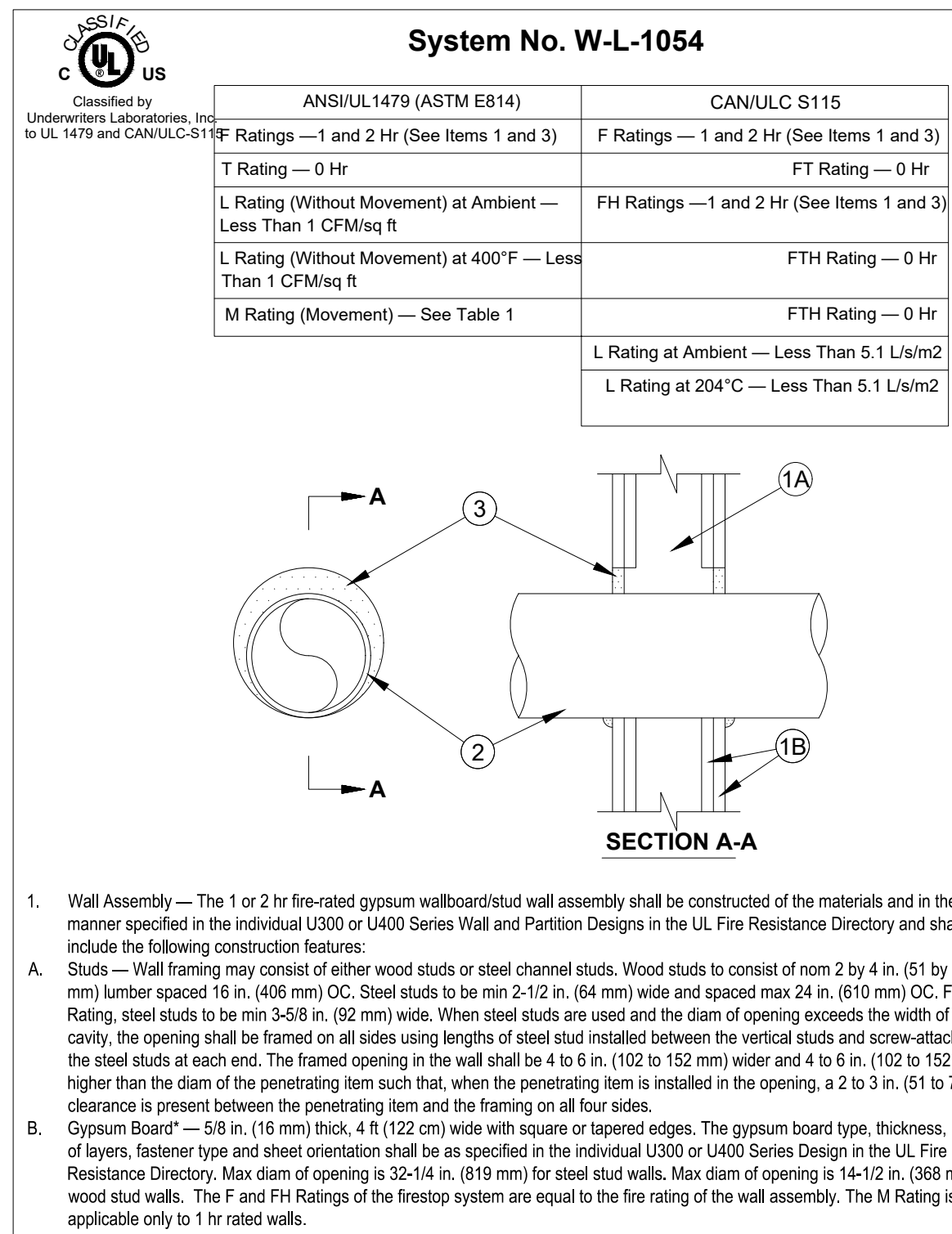


1 TELECOMMUNICATIONS RISER DIAGRAM
E-15 Scale: NONE

2 TYPICAL BAS DATA NETWORK RACK DETAIL
E-15 Scale: NONE



3 ELECTRIC SERVICE METERING INTEGRATION DETAIL
E-15 Scale: NONE



4 PENETRATION DETAILS
E-15 Scale: NONE

RECORD REVISIONS

John Murphy
PROFESSIONAL ENGINEER
PENNSYLVANIA

02/14/2024

SIGNATURE DATE SIGNATURE DATE

GREENMAN-PEDERSEN, INC
52 GLENMAURA NATIONAL BOULEVARD
SCRANTON, PENNSYLVANIA 18505

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF GENERAL SERVICES
HARRISBURG, PENNSYLVANIA

D.G.S. PROJECT No. **C-0948-0098 PHASE 1**

VERIFY SCALE
BAR IS ONE (1) INCH LONG ON ORIGINAL DRAWING:
0 1
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CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. VARIANCE FROM CONTRACT DOCUMENTS NOT PERMITTED WITHOUT PROFESSIONAL & BUREAU OF CONSTRUCTION APPROVAL.

DRAWN BY **B. SLOAT** DATE **02/14/24** DRAWING No. **E-15**

CHECKED BY **J. MURPHY** SCALE **AS NOTED**

ELECTRICAL DETAILS