

NOTE: ALL IDEAL DESIGN ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF ANDERSON ARCHITECTS & ENGINEERS, P.C. (A/E) AND ARE NOT TO BE REPRODUCED OR USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF ANDERSON ARCHITECTS & ENGINEERS, P.C. (A/E). ANY REUSE OF THIS DRAWING FOR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF ANDERSON ARCHITECTS & ENGINEERS, P.C. (A/E) IS A VIOLATION OF THE PROFESSIONAL SEAL AND MAY BE SUBJECT TO PENALTY UNDER THE PROFESSIONAL EMBROIDERED SEAL ACT. ANY REUSE OF THIS DRAWING FOR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF ANDERSON ARCHITECTS & ENGINEERS, P.C. (A/E) IS A VIOLATION OF THE PROFESSIONAL EMBROIDERED SEAL ACT. ANY REUSE OF THIS DRAWING FOR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF ANDERSON ARCHITECTS & ENGINEERS, P.C. (A/E) IS A VIOLATION OF THE PROFESSIONAL EMBROIDERED SEAL ACT.

Professional Seal

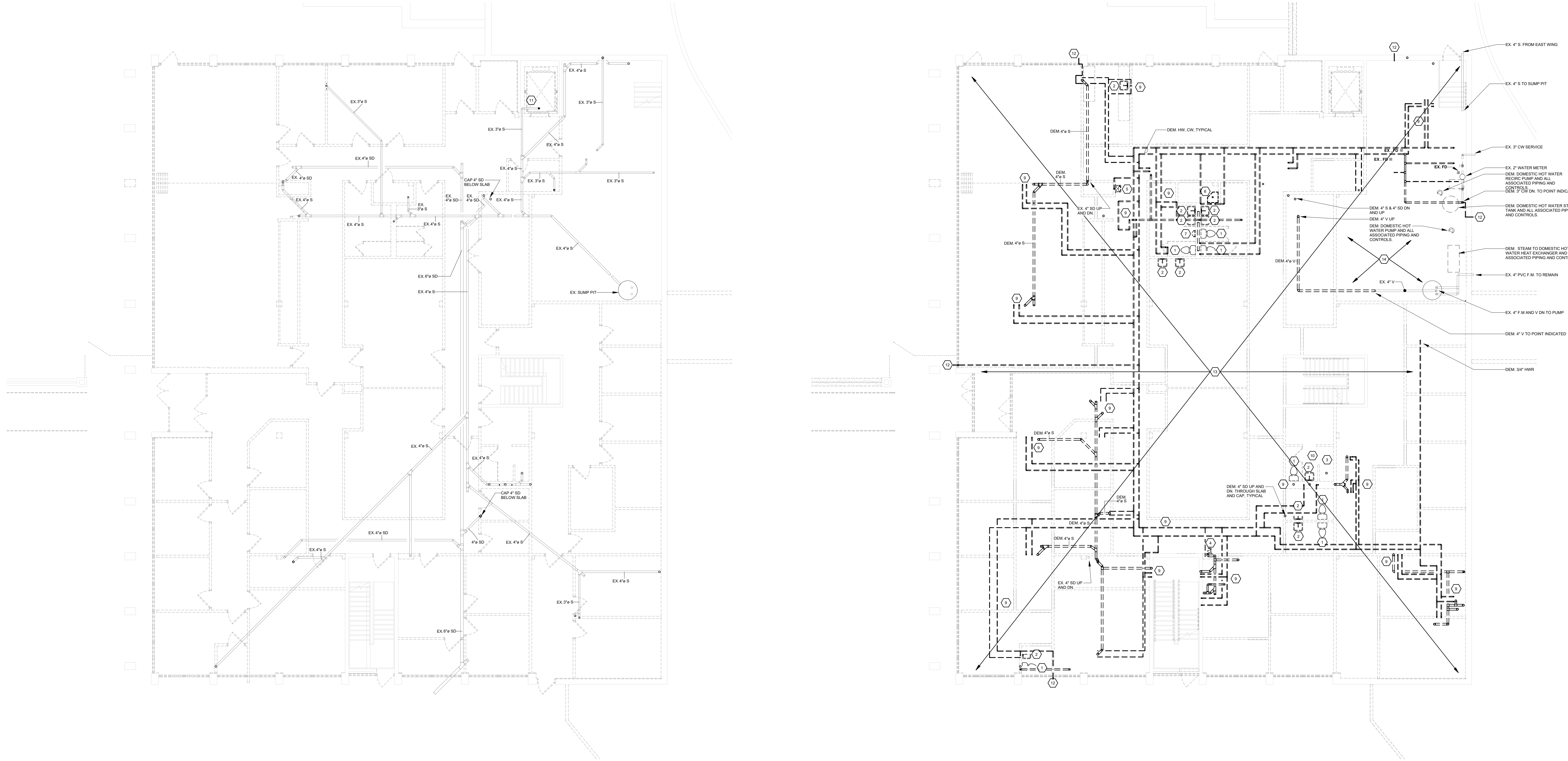
3	04/24/24	BID ISSUE
1	08/21/23	CON DOCS - NYSED
No.	Date	Issue
Sheet Title		

PLUMBING:
NORTH WING BELOW
SLAB & LOWER LEVEL
DEMOLITION PLANS

Job No.	2023-1011	Date	02/03/23
Scale	AS NOTED	Drawn / Checked	DC SZ

Sheet Number

P101



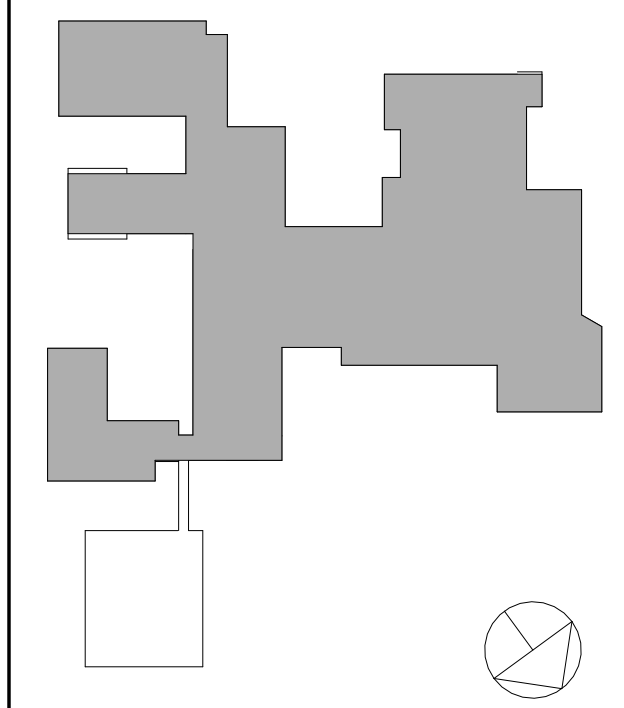
1 PLUMBING - NORTH WING BELOW SLAB DEMOLITION PLAN
1/8" = 1'-0"

2 PLUMBING - NORTH WING LOWER LEVEL DEMOLITION PLAN
1/8" = 1'-0"

BELOW SLAB & LOWER LEVEL PLUMBING PLAN DEMOLITION KEYED NOTES

#	NOTE TEXT
1	DEMOLISH WATER CLOSET COMPLETE. DEMOLISH ALL ASSOCIATED SUPPORTS, COLD, SANITARY AND VENT PIPING. CAP PIPING BELOW FLOOR SLAB. COORDINATE ALL FLOOR CUTTING/PATCHING WITH GENERAL CONTRACTOR.
2	DEMOLISH LAVATORY COMPLETE. DEMOLISH ALL ASSOCIATED SUPPORTS, COLD AND HOT WATER, SANITARY AND VENT PIPING COMPLETE. WHERE APPLICABLE CAP PIPING BELOW FLOOR SLAB. COORDINATE ALL FLOOR CUTTING/PATCHING WITH GENERAL CONTRACTOR.
3	DEMOLISH SHOWER COMPLETE. DEMOLISH ALL ASSOCIATED COLD, HOT, SANITARY AND VENT PIPING. CAP PIPING BELOW FLOOR SLAB. COORDINATE ALL FLOOR CUTTING/PATCHING WITH GENERAL CONTRACTOR.
4	DEMOLISH BATH TUB COMPLETE. DEMOLISH ALL ASSOCIATED COLD, HOT, SANITARY AND VENT PIPING. CAP PIPING BELOW FLOOR SLAB. COORDINATE ALL FLOOR CUTTING/PATCHING WITH GENERAL CONTRACTOR.
5	DEMOLISH WATER COOLER COMPLETE. DEMOLISH ALL ASSOCIATED SUPPORTS, COLD, SANITARY AND VENT PIPING COMPLETE.
6	DEMOLISH JANITOR SINK COMPLETE. DEMOLISH ALL ASSOCIATED SUPPORTS, COLD AND HOT WATER, SANITARY AND VENT PIPING COMPLETE.
7	DEMOLISH URINAL COMPLETE. DEMOLISH ALL ASSOCIATED COLD WATER, SANITARY AND VENT PIPING COMPLETE.
8	DEMOLISH 3" VTR COMPLETE. COORDINATE ROOF PATCHING WITH GENERAL CONTRACTOR.
9	DEMOLISH COLD WATER, HOT WATER, HOT WATER RECIR, SANITARY AND VENT PIPING COMPLETE. CAP SANITARY AND VENT PIPING BELOW FLOOR SLAB. COORDINATE ALL FLOOR CUTTING/PATCHING WITH GENERAL CONTRACTOR.
10	DEMOLISH FLOOR DRAIN COMPLETE. CAP PIPING BELOW SLAB. COORDINATE ALL FLOOR CUTTING/PATCHING WITH GENERAL CONTRACTOR.
11	DEMOLISH SUMP PUMP AND ALL ASSOCIATES COMPONENTS. EXTEND/MODIFY EXISTING SANITARY PIPING AS REQUIRED FOR REPLACEMENT. CLEANOUT AND PRESSURE WASH CLEAN EXISTING SUMP PIT.
12	DEMOLISH HOSE-BIB COMPLETE. DEMOLISH ALL ASSOCIATED COLD WATER PIPING COMPLETE. IN LOCATIONS WHERE HOSE-BIBS ARE TO NOT BE REINSTALLED, PATCH EXTERIOR WALL TO MATCH EXISTING CONDITIONS OR BETTER.
13	DEMOLISH ALL COLD, HOT, HOT WATER RECIRC., SANITARY AND VENT PIPING COMPLETE. CAP SANITARY AND VENT PIPING BELOW FINISHED FLOOR. COORDINATE FLOOR CUTTING AND PATCHING WITH GENERAL CONTRACTOR.
14	UNLESS OTHERWISE NOTED ALL PLUMBING EQUIPMENT, ASSOCIATED PIPING AND CONTROLS IN MECHANICAL ROOM SHALL BE REMOVED.

NOTES:
1. ALL INTERIOR AND EXTERIOR DEMOLITION WORK TO BE PERFORMED BY ABATEMENT CONTRACTOR. REFER TO BID DOCUMENTS FOR MORE INFORMATION.
2. ALL FLOOR CUTTING AND PATCHING REQUIRED FOR PLUMBING WORK SHALL BE PERFORMED BY THE GENERAL CONTRACTOR. PLUMBING CONTRACTOR SHALL COORDINATE.
3. PLUMBING CONTRACTOR SHALL POWER SNAKE AND FLUSH CLEAN ALL EXISTING TO REMAIN SANITARY AND STORM PIPING BELOW LOWER LEVEL FLOOR SLAB.



KEY PLAN

NOTE: ALL IDEAL DESIGN ARRANGEMENTS AND PLANS REQUESTED OR REPRESENTED BY THIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF ANDERSON ARCHITECTS, P.C. (AIA) AND ARE NOT TO BE REPRODUCED OR USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF ANDERSON ARCHITECTS, P.C. (AIA). ANY REUSE OF THIS DRAWING FOR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF ANDERSON ARCHITECTS, P.C. (AIA) IS A VIOLATION OF TITLE 16, SECTION 17-01 OF THE NEW YORK STATE EDUCATION LAW. ANY REUSE OF THIS DRAWING FOR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF ANDERSON ARCHITECTS, P.C. (AIA) IS A VIOLATION OF ARTICLE 146, SECTION 209 (2) OF THE NEW YORK STATE EDUCATION LAW.

Professional Seal

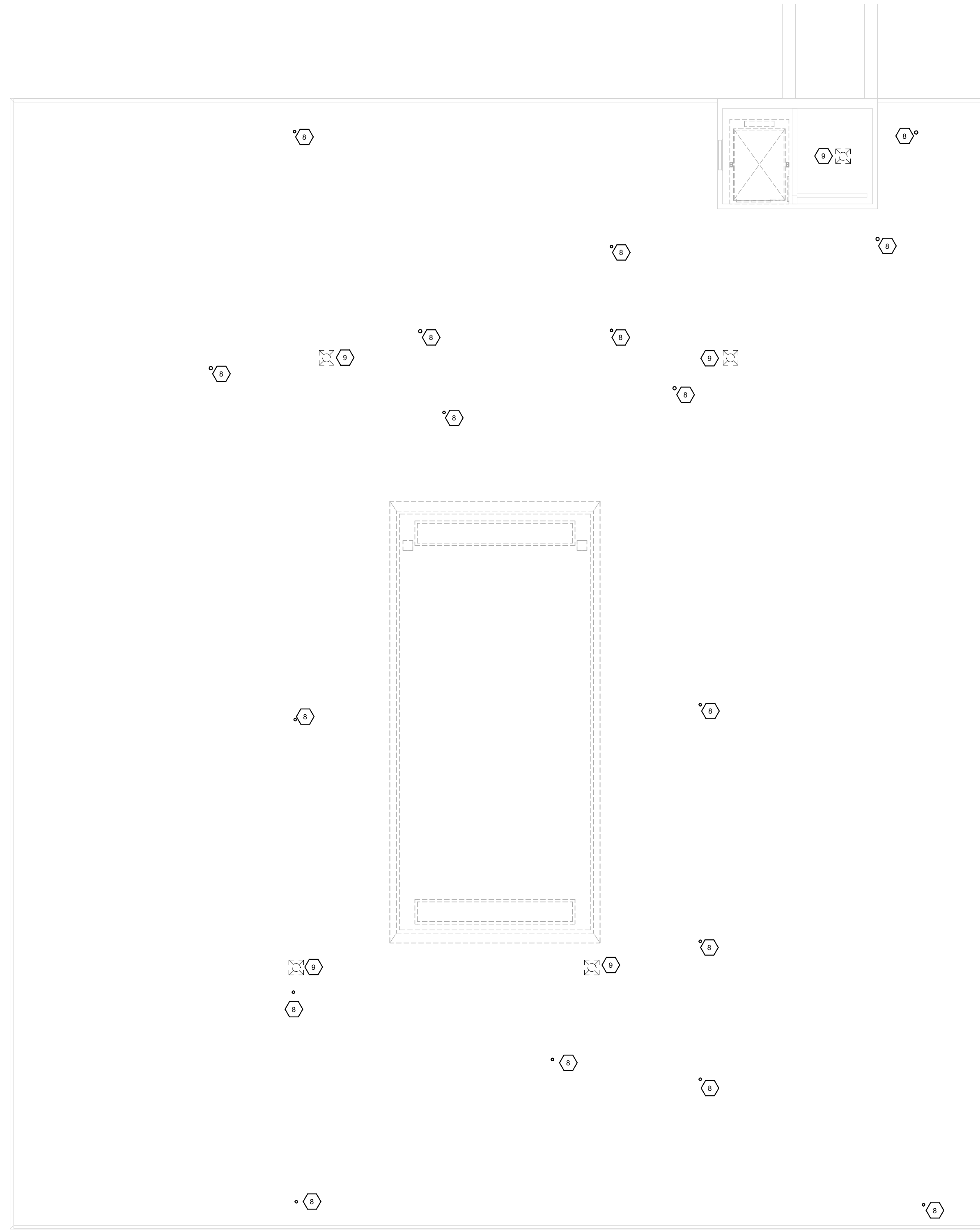
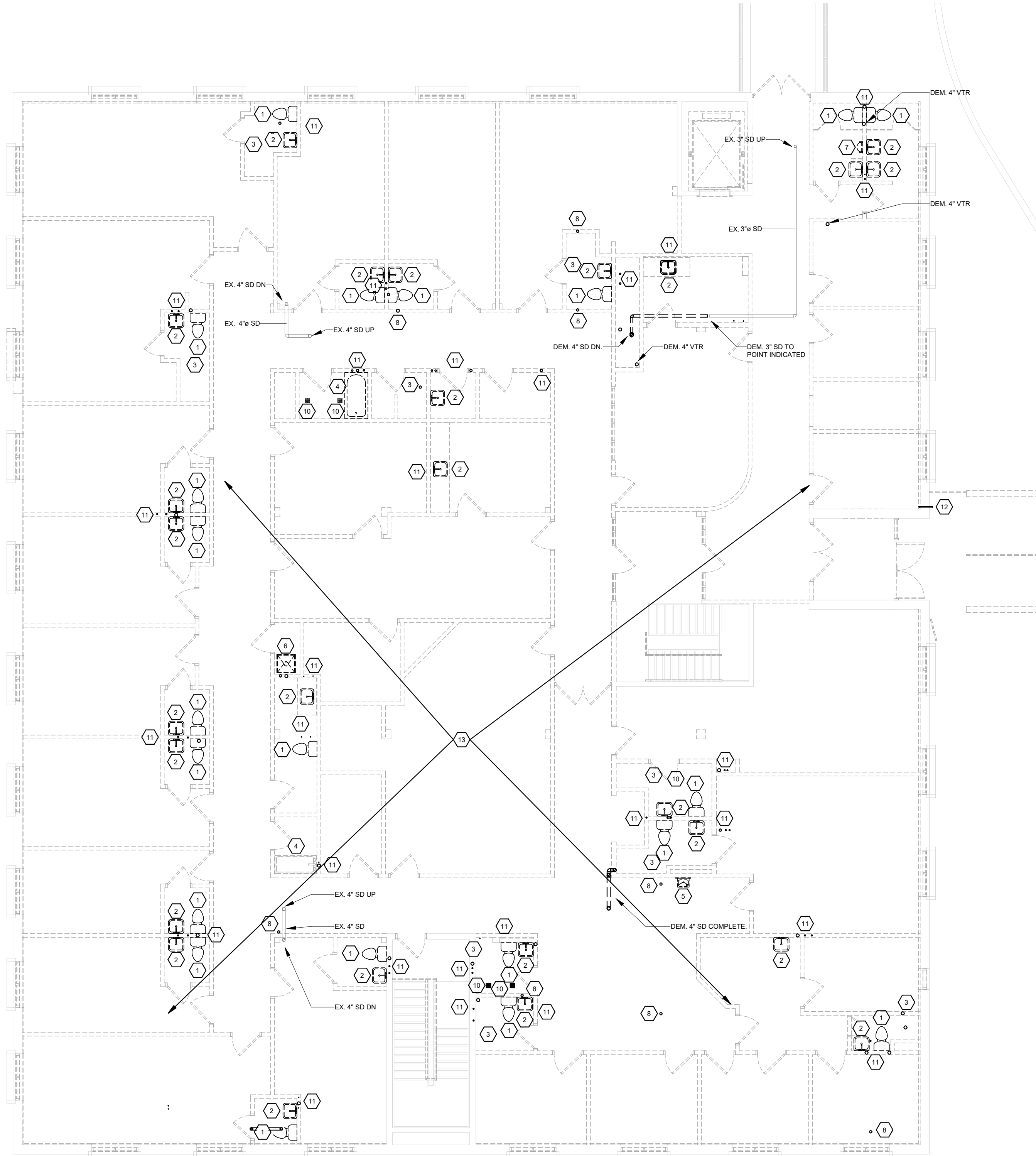
No.	Date	Issue
3	04/24/24	BID ISSUE
1	08/21/23	CON DOCS - NYSED

PLUMBING:
NORTH WING UPPER
LEVEL & ROOF
DEMOLITION PLANS

Job No.	2023-1011	Date	02/03/23
Scale	AS NOTED	Drawn / Checked	DC SZ

Sheet Number

P102



1 PLUMBING - NORTH WING UPPER LEVEL DEMOLITION PLAN
1/8" = 1'-0"

2 PLUMBING - NORTH WING ROOF DEMOLITION PLAN
1/8" = 1'-0"

#	NOTE TEXT
1	DEMOLISH WATER CLOSET COMPLETE. DEMOLISH ALL ASSOCIATED SUPPORTS, COLD WATER, SANITARY AND VENT PIPING COMPLETE.
2	DEMOLISH LAVATORY COMPLETE. DEMOLISH ALL ASSOCIATED SUPPORTS, COLD AND HOT WATER, SANITARY AND VENT PIPING COMPLETE.
3	DEMOLISH SHOWER COMPLETE. DEMOLISH ALL ASSOCIATED COLD AND HOT WATER, SANITARY AND VENT PIPING COMPLETE.
4	DEMOLISH BATH TUB COMPLETE. DEMOLISH ALL ASSOCIATED COLD AND HOT WATER, SANITARY AND VENT PIPING COMPLETE.
5	DEMOLISH WATER COOLER COMPLETE. DEMOLISH ALL ASSOCIATED SUPPORTS, COLD, SANITARY AND VENT PIPING COMPLETE.
6	DEMOLISH JANITOR SINK COMPLETE. DEMOLISH ALL ASSOCIATED SUPPORTS, COLD AND HOT WATER, SANITARY AND VENT PIPING COMPLETE.
7	DEMOLISH URINAL COMPLETE. DEMOLISH ALL ASSOCIATED SUPPORTS, COLD WATER, SANITARY AND VENT PIPING COMPLETE.
8	DEMOLISH VENT AND VENT THROUGH ROOF COMPLETE. DEMOLISH ALL ASSOCIATED VENT PIPING.
9	DEMOLISH ROOF DRAIN AND ALL ASSOCIATED COMPONENTS AS REQUIRED FOR REPLACEMENT.
10	DEMOLISH FLOOR DRAIN COMPLETE. DEMOLISH ALL ASSOCIATED SANITARY AND VENT PIPING COMPLETE.
11	DEMOLISH COLD WATER, HOT WATER, HOT WATER RECIR. SANITARY AND VENT PIPING COMPLETE.
12	DEMOLISH HOSE-BIB COMPLETE. DEMOLISH ALL ASSOCIATED COLD WATER PIPING COMPLETE.
13	DEMOLISH COLD WATER, HOT WATER, HOT WATER RECIR. SANITARY AND VENT PIPING COMPLETE.

NOTES:
1. ALL INTERIOR AND EXTERIOR DEMOLITION WORK TO BE PERFORMED BY ABATEMENT CONTRACTOR. REFER TO BID DOCUMENTS FOR MORE INFORMATION.
2. PLUMBING CONTRACTOR SHALL POWER SNAKE AND FLUSH CLEAN ALL EXISTING TO REMAIN STORM PIPING.

ORANGE-ULSTER BOCES
ARDEN HILL -
MAIN BUILDING
ALTERATIONS TO
NORTH WING
4 HARRIMAN DRIVE
GOSHEN, NY 10924

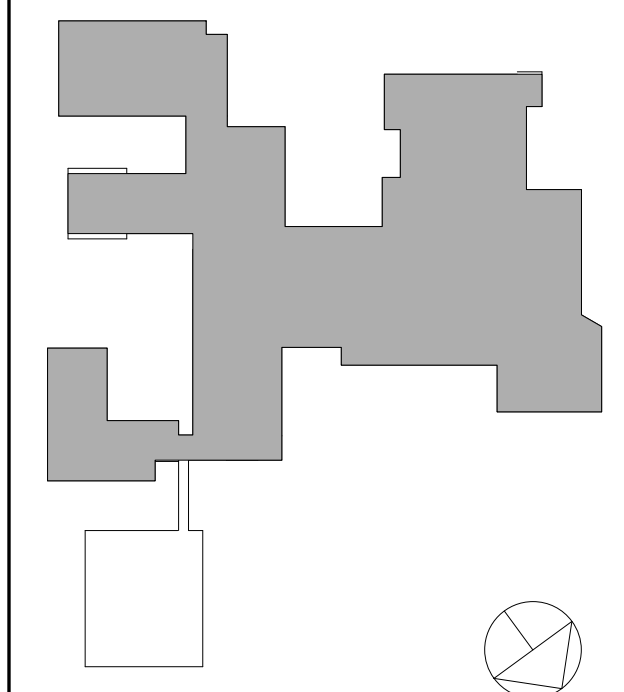


KG+D . ARCHITECTS PC
285 MAIN STREET MOUNT KISCO, NEW YORK, 10549
P.914.666.5900 KGDARCHITECTS.COM



GA23012
NY SED PROJECT CONTROL NO:
44-90-00-00-8-035-009

CONSTRUCTION DOCUMENTS



NOTE: ALL LEGAL, DESIGN, WORKMANSHIP AND PLUMBING INDICATED ON THIS DRAWING ARE THE PROPERTY OF GERARD ASSOCIATES, D.P.C. AND ARE NOT TO BE REPRODUCED OR USED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF GERARD ASSOCIATES, D.P.C. ANY REUSE OR MODIFICATION OF THIS DRAWING WITHOUT THE WRITTEN PERMISSION OF GERARD ASSOCIATES, D.P.C. IS A VIOLATION OF THE PROFESSIONAL SEAL AND MAY BE SUBJECT TO LEGAL ACTION. ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN, SHOP DETAILS MUST BE SUBMITTED TO THE OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION. ALTERATIONS BY ANY PERSON IN ANY WAY OF ANY ITEM CONTAINED ON THIS DOCUMENT, UNLESS ACTING UNDER THE DIRECTION OF THE LICENSED ARCHITECT, ENGINEER, PROFESSIONAL SEAL, IS A VIOLATION OF THE PROFESSIONAL SEAL AND MAY BE SUBJECT TO LEGAL ACTION. ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN, SHOP DETAILS MUST BE SUBMITTED TO THE OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION. ALTERATIONS BY ANY PERSON IN ANY WAY OF ANY ITEM CONTAINED ON THIS DOCUMENT, UNLESS ACTING UNDER THE DIRECTION OF THE LICENSED ARCHITECT, ENGINEER, PROFESSIONAL SEAL, IS A VIOLATION OF THE PROFESSIONAL SEAL AND MAY BE SUBJECT TO LEGAL ACTION.

Professional Seal

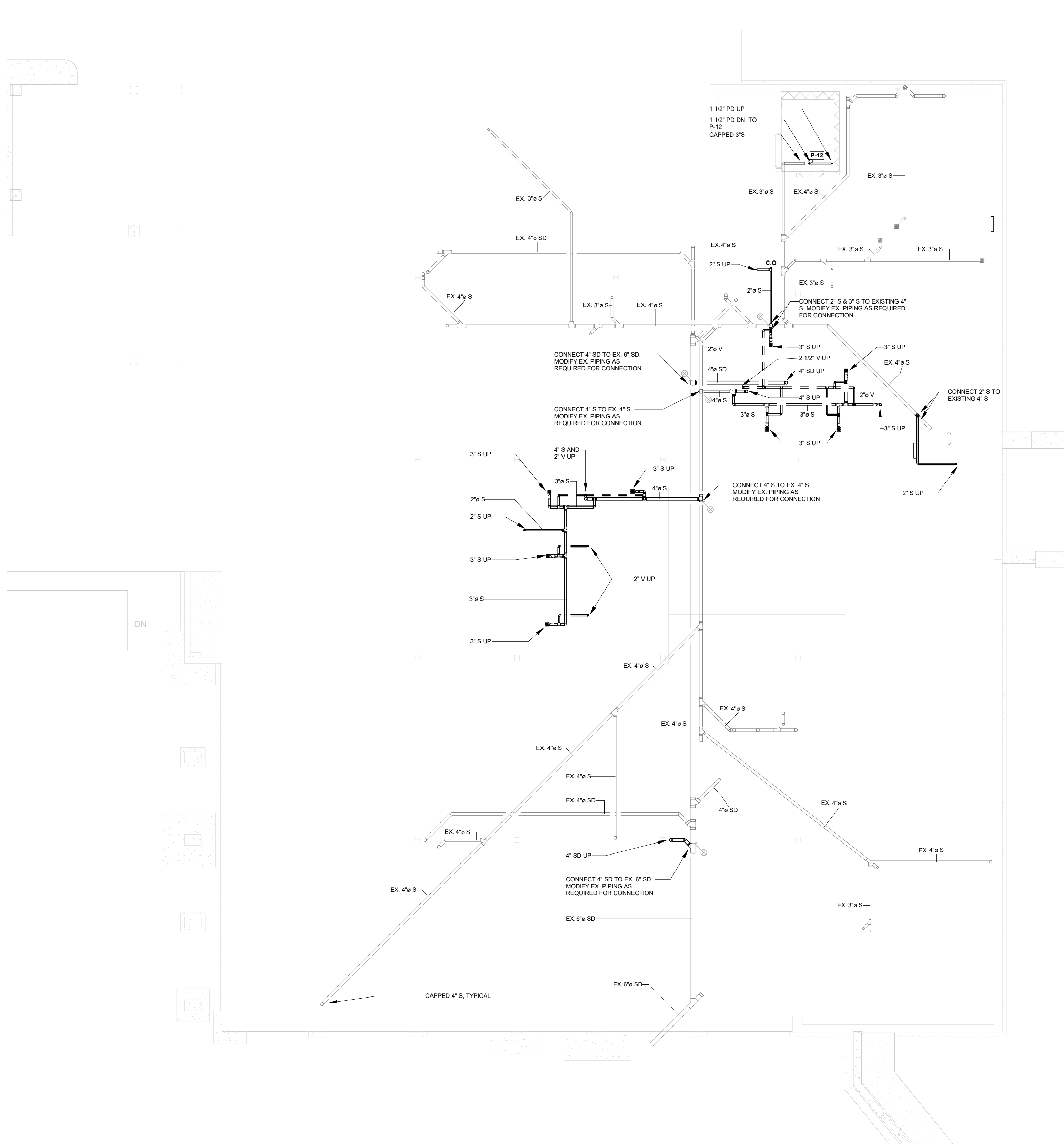
3	04/24/24	BID ISSUE
1	08/21/23	CON DOCS - NYSED
No.	Date	Issue

Sheet Title
**PLUMBING:
NORTH WING BELOW
SLAB & LOWER LEVEL
PLANS**

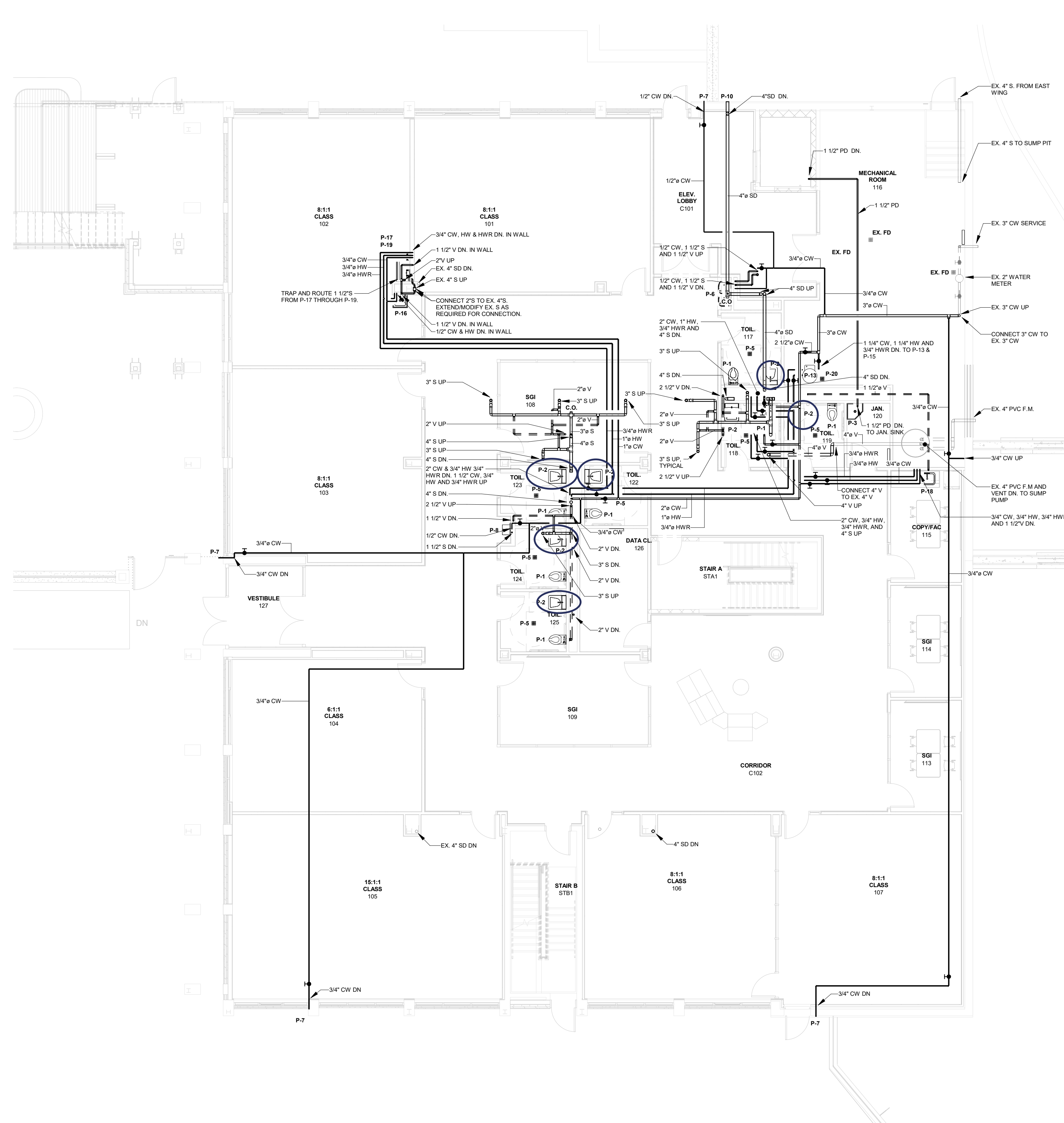
Job No. 2023-1011 Date 02/03/23
Scale AS NOTED Drawn / Checked DC SZ

Sheet Number

P201



1 PLUMBING - NORTH WING BELOW SLAB PLAN
1/8" = 1'-0"



2 PLUMBING - NORTH WING LOWER LEVEL PLAN
1/8" = 1'-0"

NOTES:
1. ALL FLOOR CUTTING AND PATCHING REQUIRED FOR PLUMBING WORK SHALL BE PERFORMED BY THE GENERAL CONTRACTOR. PLUMBING CONTRACTOR SHALL COORDINATE.

ORANGE-ULSTER BOCES
ARDEN HILL -
MAIN BUILDING
ALTERATIONS TO
NORTH WING
4 HARRIMAN DRIVE
GOSHEN, NY 10924



KG+D . ARCHITECTS P
285 MAIN STREET MOUNT KISCO . NEW YORK . 1
P:914.666.5900 KGDARCHITECTS.6

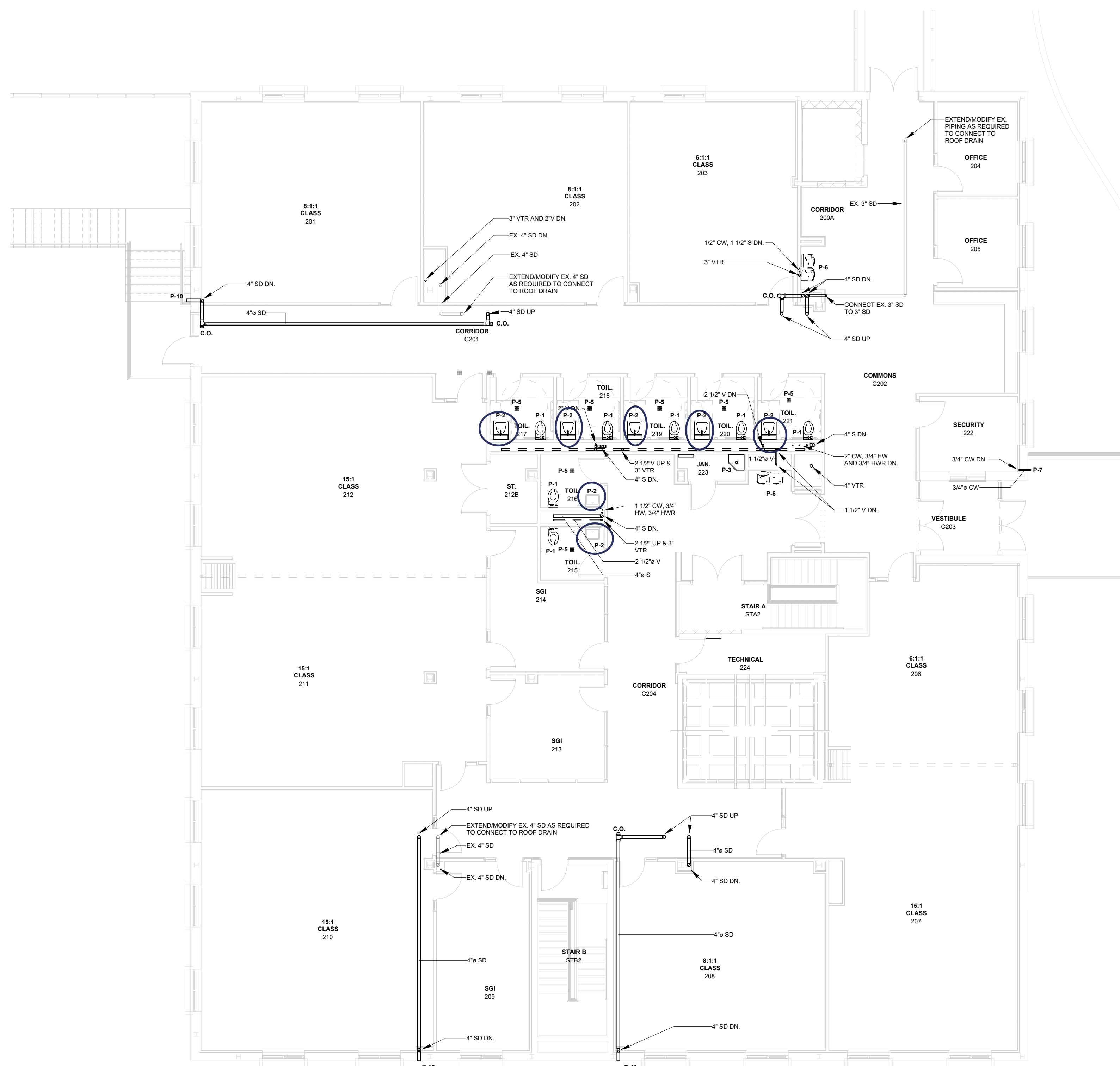


GA2301

NY SED PROJECT CONTROL NO.

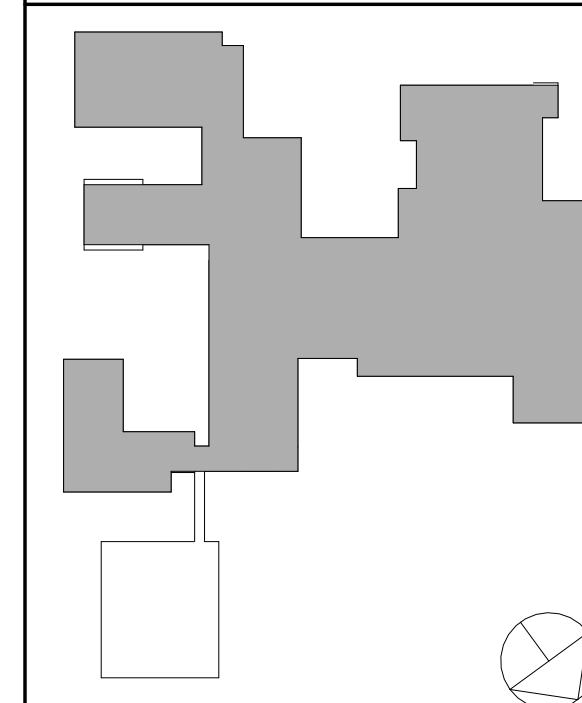
44-90-00-00-8-035-009

CONSTRUCTION DOCUMENTS



1 PLUMBING - NORTH WING UPPER LEVEL PLAN
1/8" = 1'-0"

2 PLUMBING - NORTH WING ROOF PLAN
1/8" = 1'-0"



NOTE PLAN

NOTE: ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KAUFER GARDEN, & DAVIDSON ARCHITECTS, PC (KGAD), AND HERE BY GRANTED TO THIS PROJECT. THIS PROJECT IS THE PROPERTY OF THE CITY OF NEW YORK AND PLANS SHALL BE USED OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF (KGAD).

NOTED DIMENSIONS ON THIS PLAN SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY DISCREPANCY DIMENSIONS AND CONDITIONS SHOWN. SHIP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL, BEFORE PROCEEDING WITH FABRICATION.

ALTERATIONS BY ANY PERSON, IN ANY WAY, OF ANY ITEM CONTAINED ON THIS DOCUMENT, UNLESS ACTING UNDER THE DIRECTION OF THE LICENSED ARCHITECTS WHOSE PROFESSIONAL SEAL IS AFFIXED HEREON, IS A VIOLATION OF TITLE 24, § 9-03.10 OF THE NEW YORK CITY CODE. SHIP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL, BEFORE PROCEEDING WITH FABRICATION.

COPYRIGHT KAUFER, GARDEN & DAVIDSON ARCHITECTS & ENGINEERS, PC ALL RIGHTS RESERVED.

THIS PLAN IS A SECTION OR ALTERATION OF THIS PLAN IS A VIOLATION OF TITLE 24, § 9-03.10 OF THE NEW YORK CITY CODE. SHIP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL, BEFORE PROCEEDING WITH FABRICATION.

UNLAWFUL ALTERATION OR ALTERATION OF THIS PLAN IS A VIOLATION OF TITLE 24, § 9-03.10 OF THE NEW YORK CITY CODE. SHIP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL, BEFORE PROCEEDING WITH FABRICATION.

Professional Seal

3	04/24/24	BID ISSUE
1	08/21/23	CON DOCS - NYSED
No.	Date	Issue

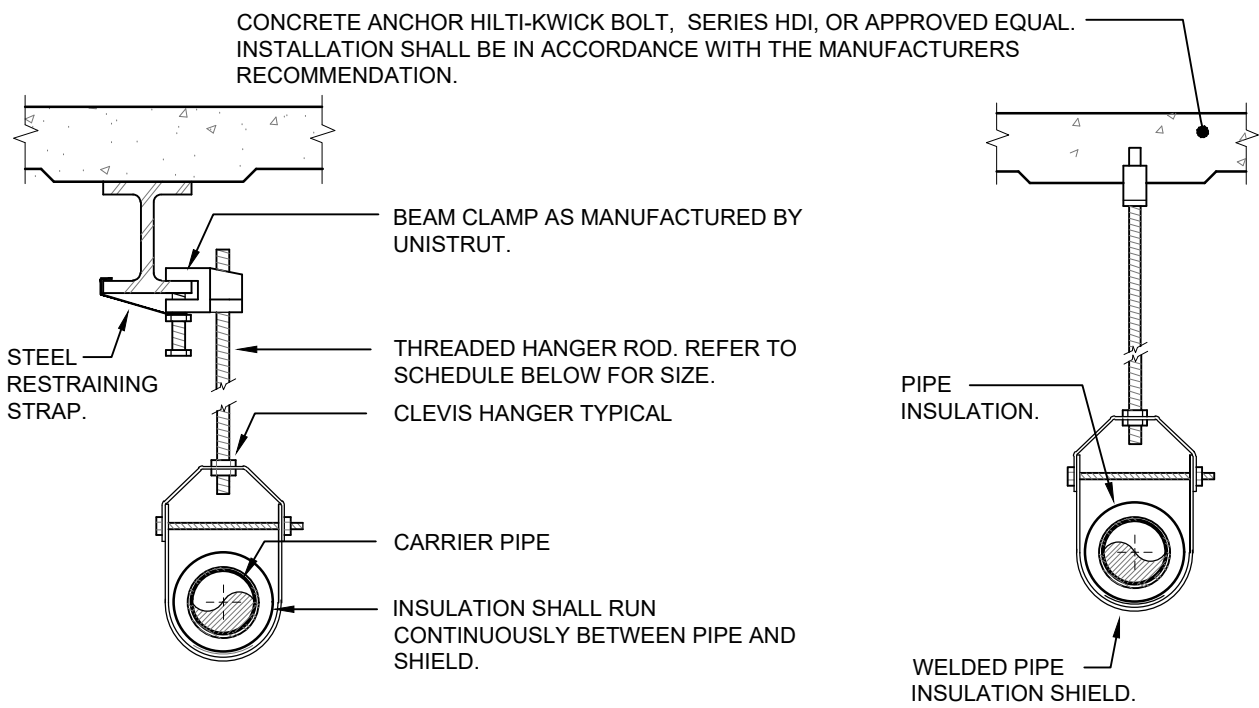
No.	Date	Issue
Sheet Title		

PLUMBING:
NORTH WING UPPER
LEVEL & ROOF PLANS

Job No. 2023-1011	Date 02/03/23
Scale AS NOTED	Drawn / Checked DC SZ

Sheet Number

P202

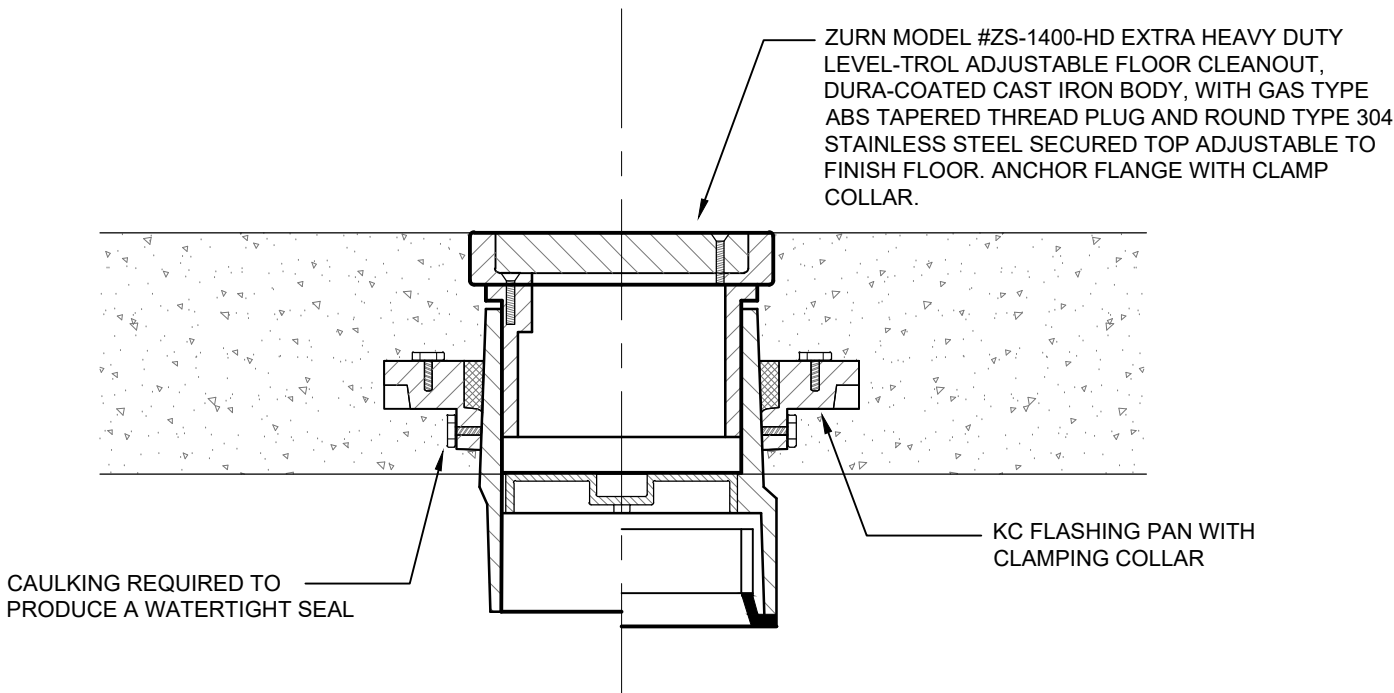


PIPE HANGER SCHEDULE				
PIPE DIA.	3/4"-2"	2 1/2"-3"	4"-5"	6" - 8"-12"
HANGER DIA.	3/8"	1/2"	5/8"	3/4" 7/8"

- NOTES:
1. CLEVIS HANGERS WITH WELDED INSULATION SHIELDS SIMILAR TO RAUCH FIG. 100SH ON ALL PIPES LARGER THAN 1".
 2. FOR PIPES 1" OR SMALLER, A BAND HANGER WITH INSULATION SHIELD MAY BE USED SIMILAR TO RAUCH FIG. NO. 1ASH.
 3. FOR NON-INSULATED PIPE, INSULATION SHIELDS MAY BE OMITTED.
 4. ALL PIPE HANGERS SHALL BE GALVANIZED STEEL OR FACTORY PAINTED BLACK WITH ENAMEL.
 5. FOR NON FERROUS PIPING WITHOUT INSULATION, ALL HANGERS SHALL BE COPPER PLATED OR FURNISHED WITH A DI-ELECTRIC BETWEEN PIPE AND HANGERS.

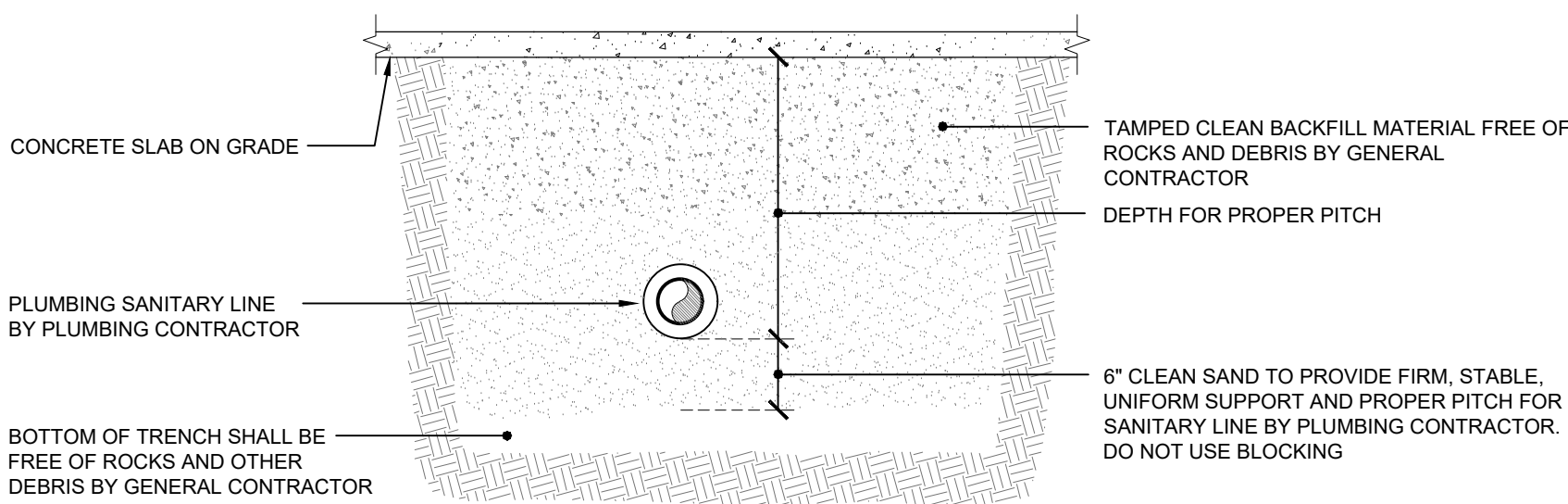
1 PIPE HANGER DETAIL

NOT TO SCALE



2 FLOOR CLEAN OUT DETAIL

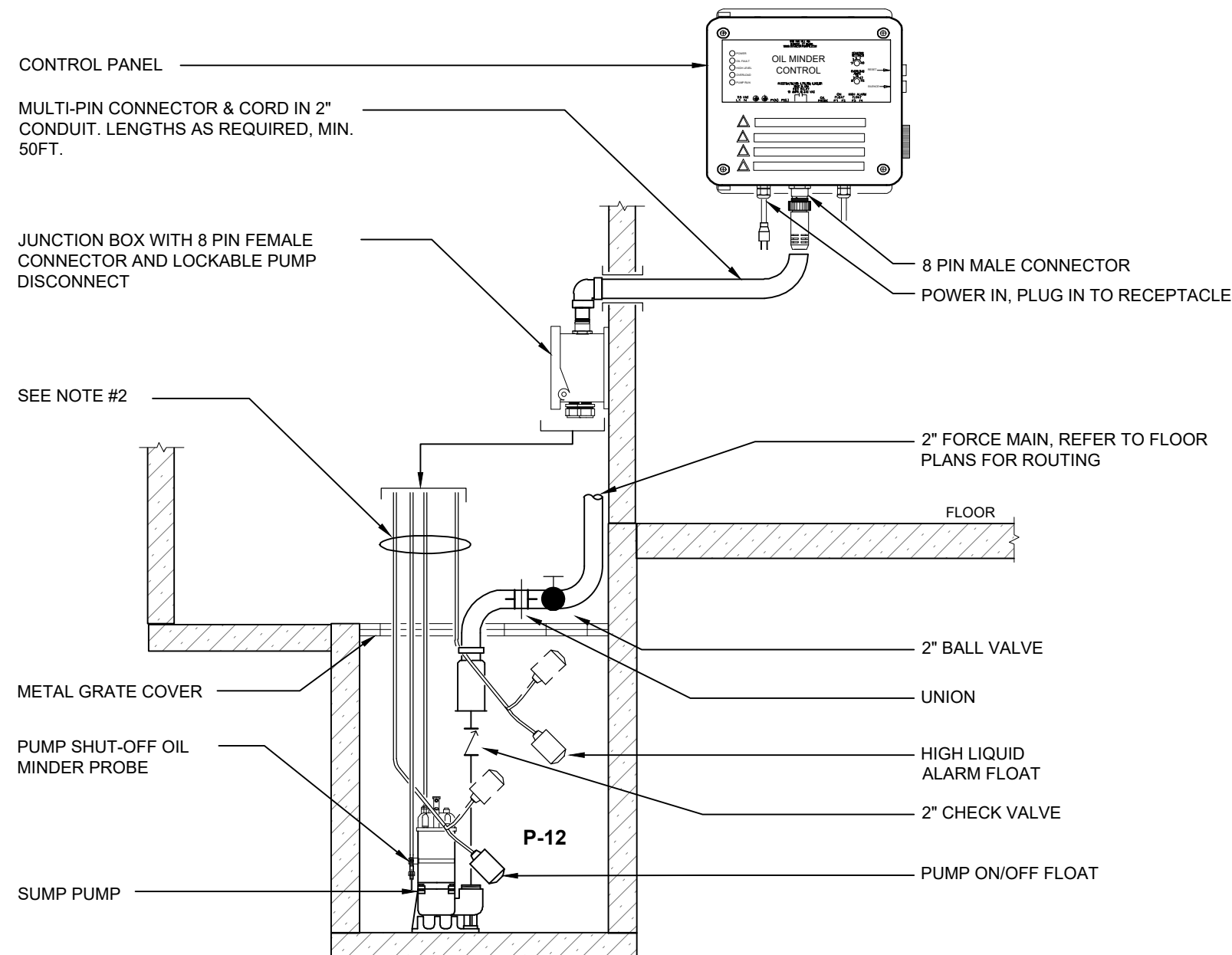
NOT TO SCALE



- NOTES:
1. ALL CONCRETE SLAB SAW CUTTING AND PATCHING SHALL BE BY THE GENERAL CONTRACTOR. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEYING AND PROVIDING LAYOUT TO AND COORDINATION WITH THE GENERAL CONTRACTOR.
 2. ALL TRENCHING, EXCAVATION AND BACKFILL OF TRENCH SHALL BE BY THE GENERAL CONTRACTOR. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR PITCHING THE PIPING WITH PROPER BEDDING AND PERFORMING TESTING PRIOR TO BACKFILLING.

3 TYPICAL SANITARY LINE BELOW SLAB DETAIL

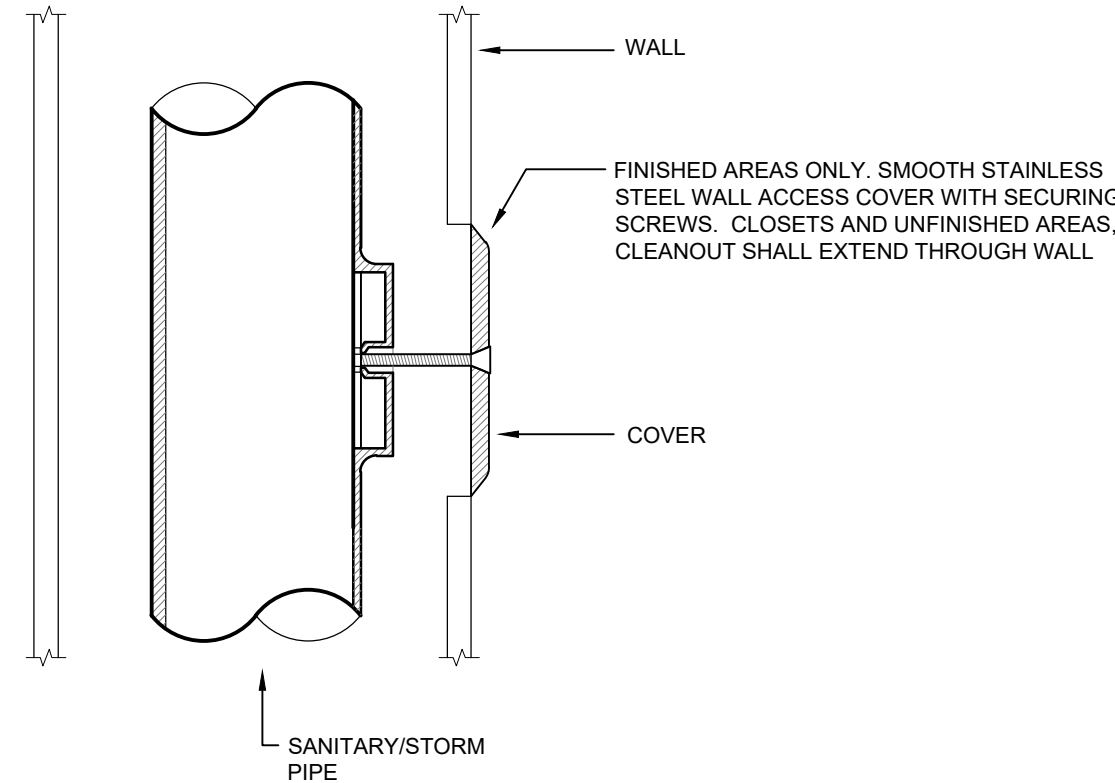
NOT TO SCALE



- NOTES:
1. JUNCTION BOX WILL BE PROVIDED WITH MULTI-PIN CONNECTOR AND CORD IN LENGTHS AS REQUIRED; 25 FT. IS STANDARD, OPTIONAL 25 FT. INCREMENTS AVAILABLE.
 2. OIL MINDER CABLE, POWER CABLE, PROBE CABLE, HIGH LIQUID ALARM CABLE & PUMP ON FLOAT CABLE ALL ROUTED IN 2" CONDUIT.
 3. SEAL ALL PIPE AND CONDUIT PENETRATIONS THROUGH ELEVATOR SHAFT WALLS.
 4. ROUTE PIPING AND CONDUIT IN ELEVATOR SHAFT TO AVOID CONFLICTS WITH ELEVATOR COMPONENTS, FRAMING AND ETC.
 5. TIE HIGH LIQUID LEVEL ALARM TO BUILDING MANAGEMENT SYSTEM. COORDINATE WITH MECHANICAL CONTRACTOR.
 6. CONTROL PANEL SHOULD BE MOUNTED IN MECHANICAL ROOM. COORDINATE EXACT LOCATION IN FIELD.

4 ELEVATOR SUMP PUMP (P-12) DETAIL

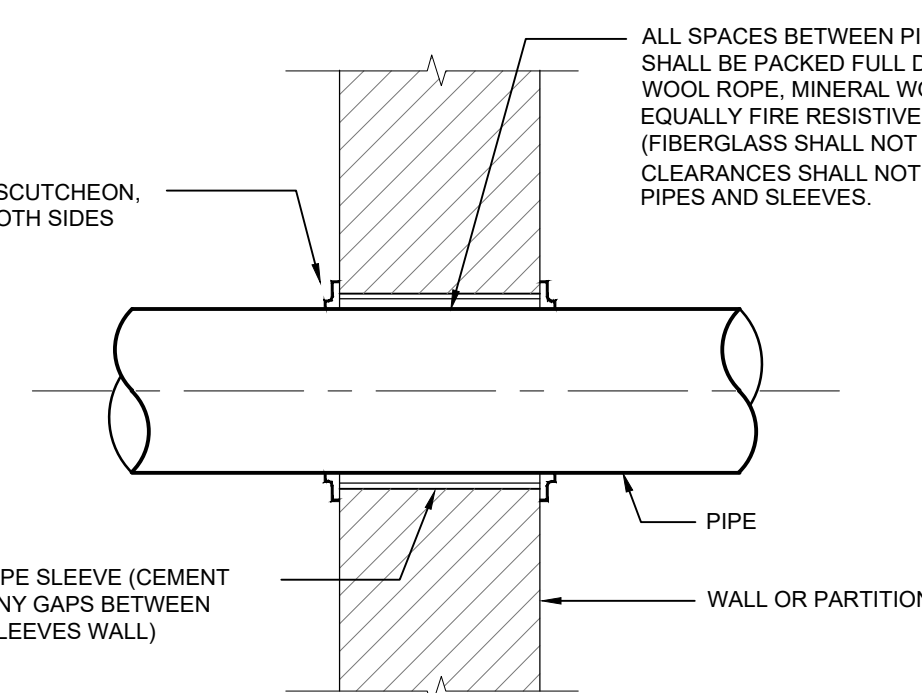
NOT TO SCALE



- NOTES:
1. COORDINATE WALL CLEAN OUT LOCATIONS WITH GENERAL CONTRACTOR.

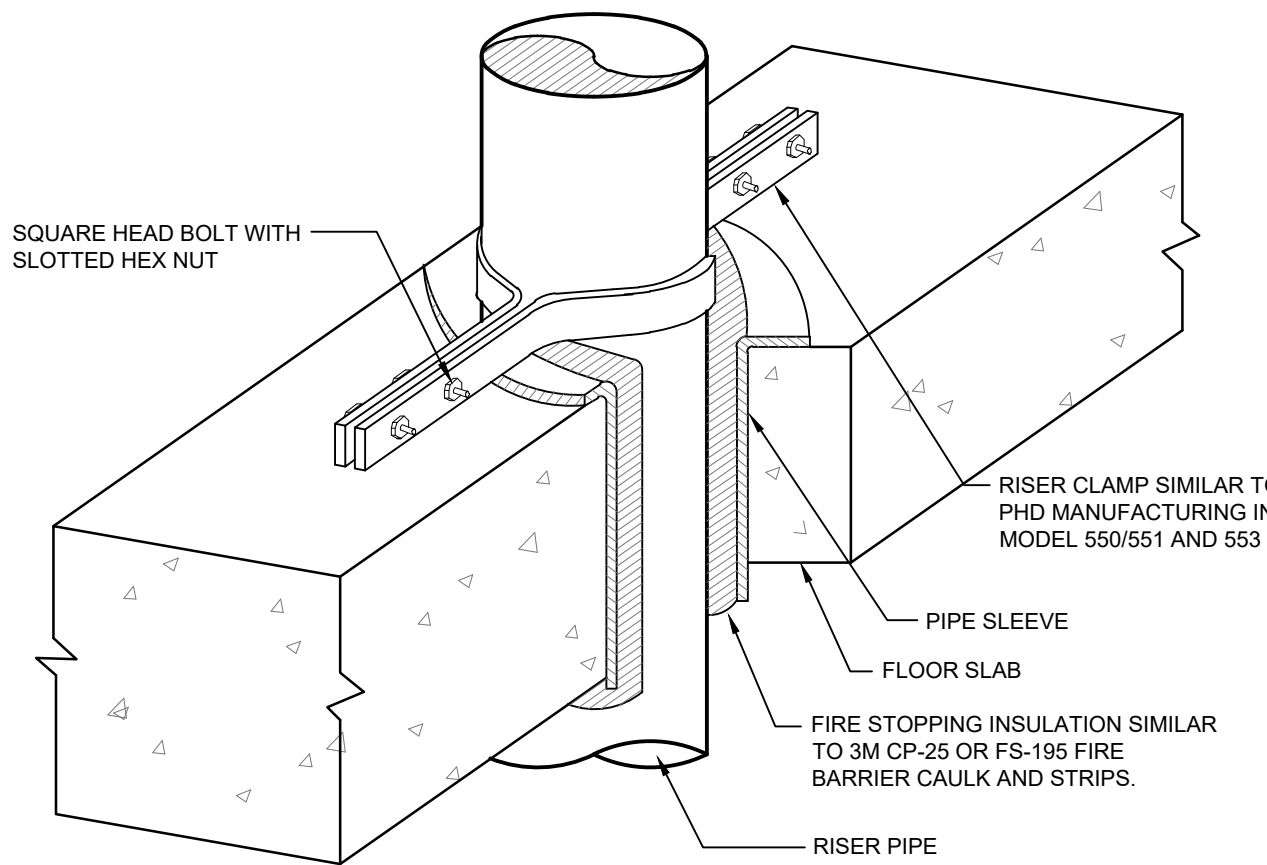
5 WALL CLEAN OUT DETAIL

NOT TO SCALE



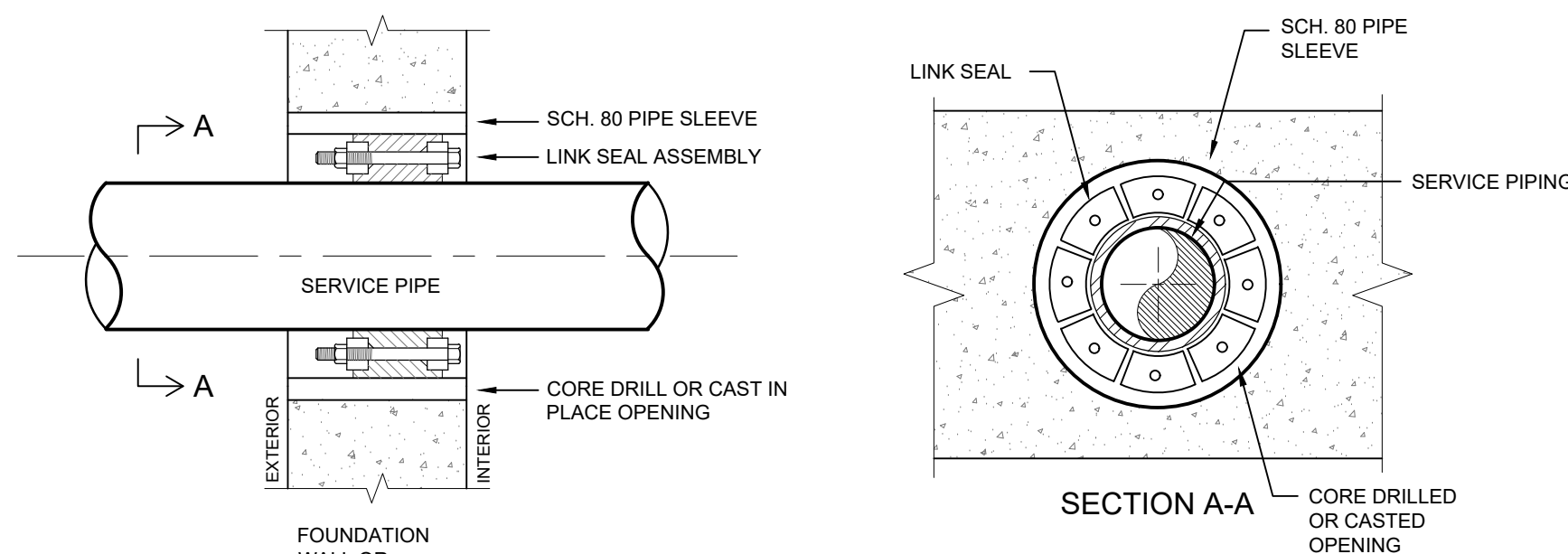
6 FIRESTOP DETAIL

NOT TO SCALE



7 PIPE PENETRATION THROUGH FLOOR DETAIL

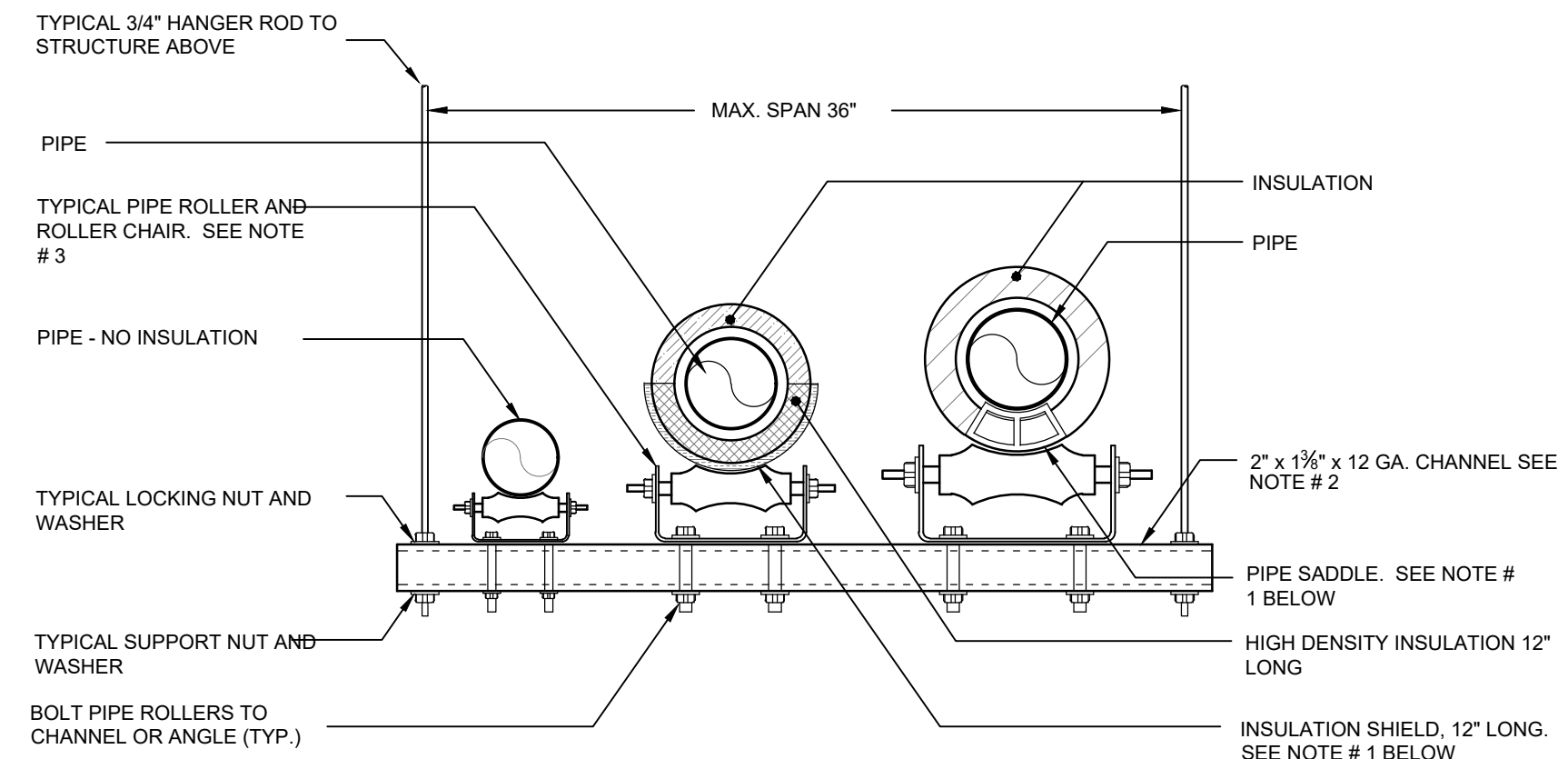
NOT TO SCALE



- NOTES:
1. SEAL ASSEMBLY BASED ON THUNDERLINE MODEL "C" LINK-SEAL MODULAR SEAL, WITH EPDM SEAL ELEMENT, COMPOSITE PRESSURE PLATES, STEEL WITH 2-PART ZINC DICHROMATE & ORGANIC COATED NUTS AND BOLTS RATED FOR AN OPERATING TEMPERATURE RANGE OF -40°F TO +250°F.
 2. USE LINK SEAL AT ALL LOCATIONS WHERE PIPES PENETRATE NEW OR EXISTING FOUNDATION WALLS AND SLABS ON GRADE.

8 LINK SEAL DETAIL

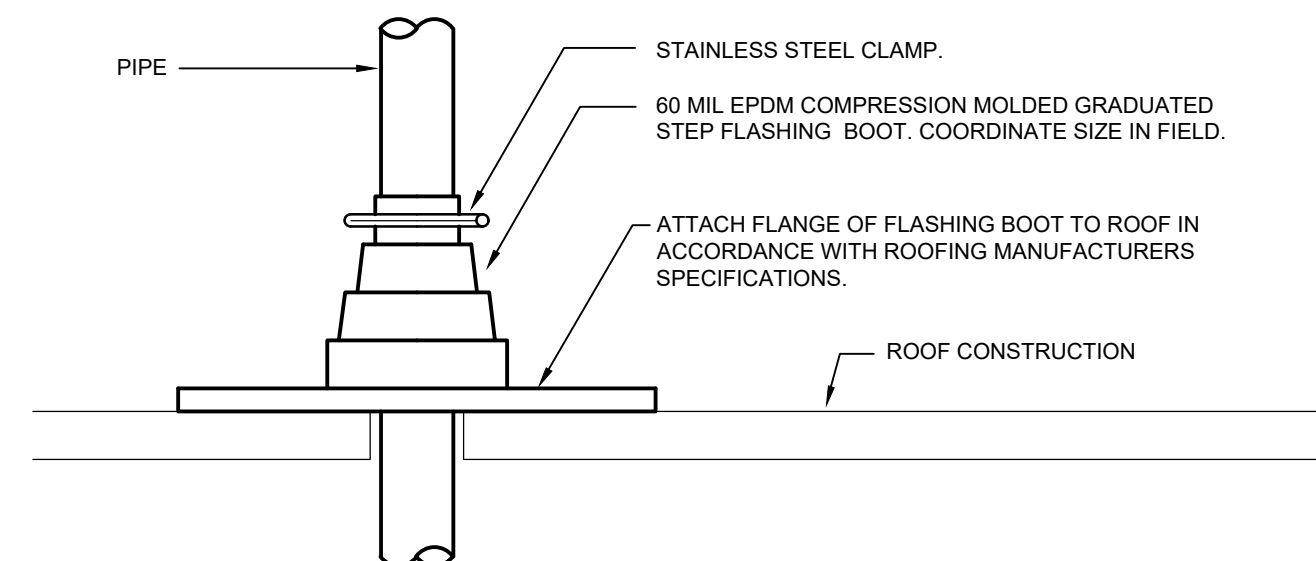
NOT TO SCALE



- NOTES:
1. PROVIDE INSULATION SHIELD OR PIPE SADDLE BASED ON THE PIPING SYSTEM AND PIPE SIZE AS INDICATED IN THE SPECIFICATIONS.
 2. TRAPEZE TYPE HANGER SHALL BE USED FOR A MAXIMUM 1,000 LB UNIFORM LOAD.
 3. ELIMINATE PIPE ROLLERS AND ROLLER CHAIRS AT ANCHOR POINTS.

9 TRAPEZE TYPE HANGER INSTALLATION DETAIL

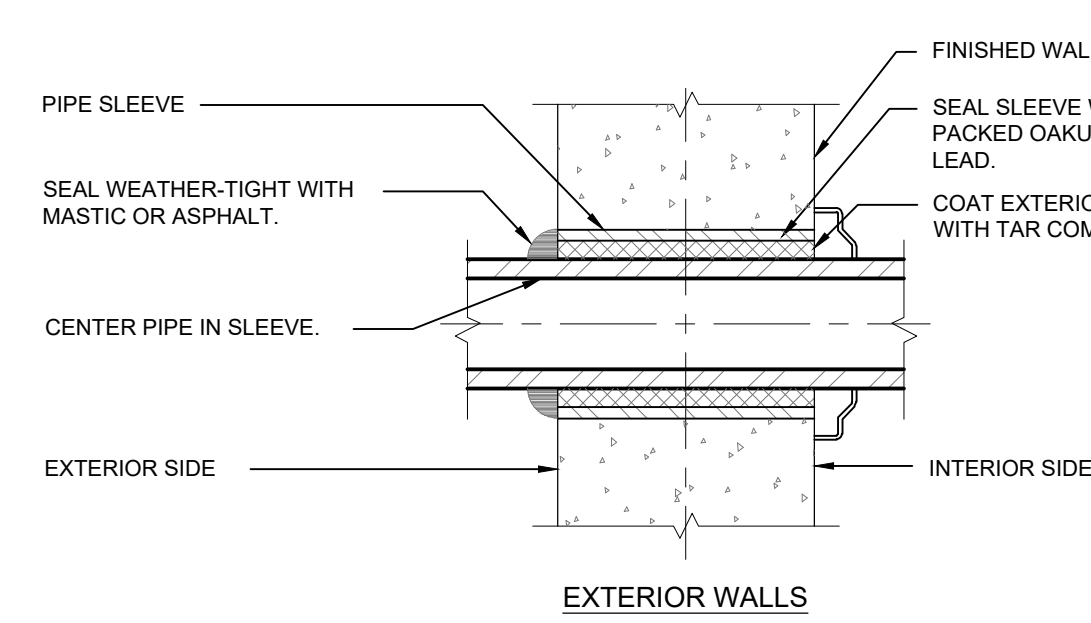
NOT TO SCALE



- NOTES:
1. CONTRACTOR TO SELECT FLASHING BOOT BASED ON QUANTITY & SIZE OF PIPE PENETRATIONS. FLASHING BOOT SHALL PROVIDE A WATERTIGHT SEAL.
 2. CLEAN AND PREPARE ROOF SURFACE AS REQUIRED FOR INSTALLATION OF FLASHING BOOT AND IN ACCORDANCE WITH ANY SPECIAL REQUIREMENTS PER THE ROOFING MANUFACTURER.
 3. COORDINATE QUANTITIES AND SIZES OF PIPE PENETRATIONS IN THE FIELD WITH CAP AND BOOT REQUIREMENTS.
 4. USE ONLY MATERIALS COMPATIBLE WITH THE ROOFING SYSTEM.
 5. TERMINATE VENT PIPING MINIMUM 24" ABOVE ROOF.

10 ROOF PIPE PENETRATION DETAIL

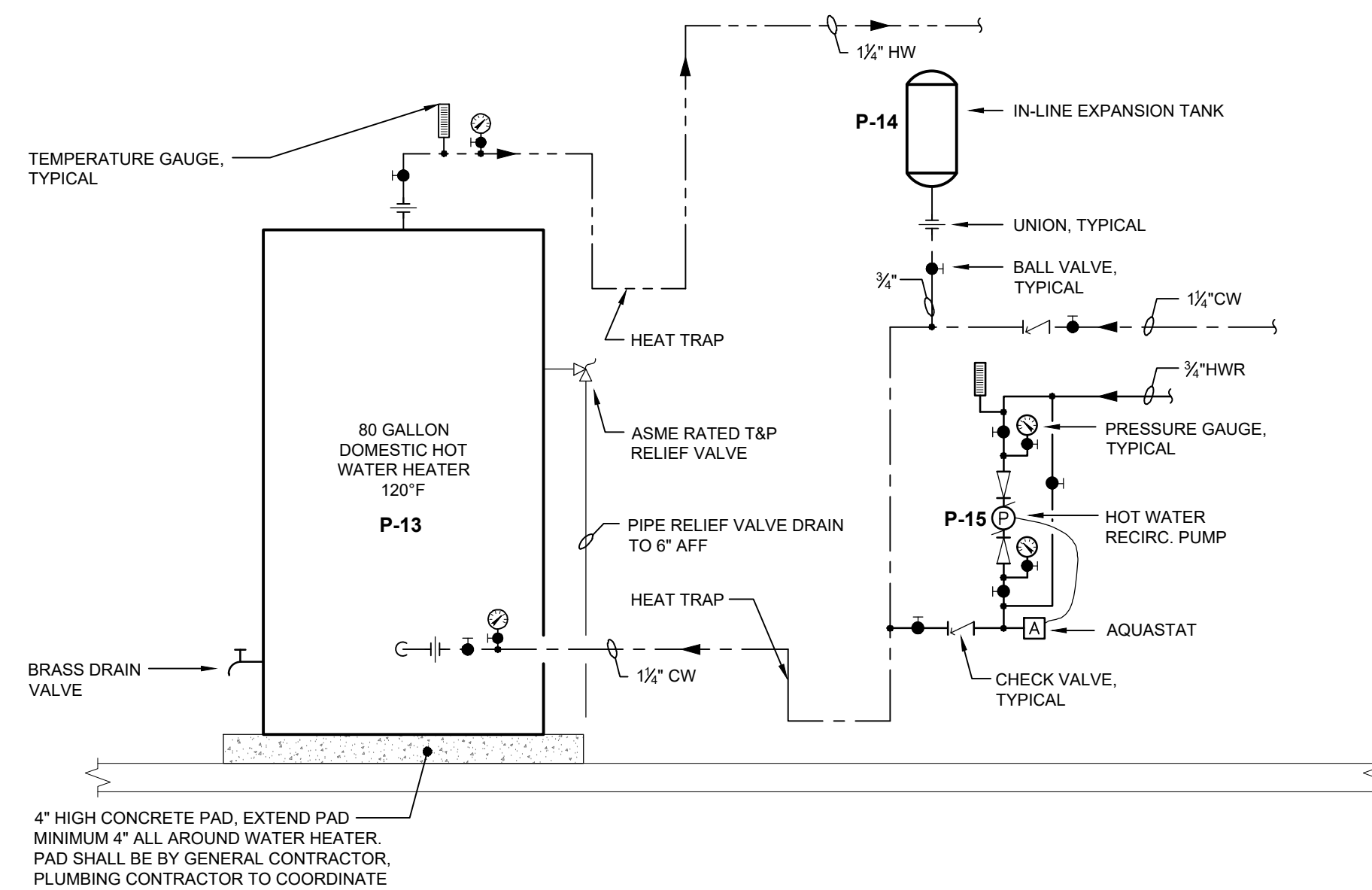
NOT TO SCALE



- NOTE:
1. PIPE SLEEVE FOR EXTERIOR WALL ABOVE GRADE.

11 EXTERIOR WALL PENETRATION DETAIL

NOT TO SCALE



- NOTES:
1. DISCHARGE PIPE FROM RELIEF VALVE SHALL BE SAME SIZE SHALL BE SAME SIZE OF RELIEF VALVE DISCHARGE.

12 DOMESTIC HOT WATER HEATER DETAIL

NOT TO SCALE

ORANGE-ULSTER BOCES
ARDEN HILL -
MAIN BUILDING
ALTERATIONS TO
NORTH WING
4 HARRIMAN DRIVE
GOSHEN, NY 10924

KG+D listen imagine build

KG+D . ARCHITECTS PC
385 MAIN STREET MOUNT KISCO, NEW YORK, 10924
P:914.666.5900 KGDARCHITECTS.COM

GERARD ASSOCIATES
CONSULTING ENGINEERS, D.P.C.
223 MAIN STREET, GOSHEN, NY 10924
(845) 291 1212 GerardAssociates.com

GA23012
NY SED PROJECT CONTROL NO:
44-90-00-00-8-035-009

CONSTRUCTION DOCUMENTS

NOTE: ALL IDEAS, DESIGN ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF ARCHITECT GARMENT & JAVASON ARCHITECTS PC (G&J) AND HAVE BEEN CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGN ARRANGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF G&J.

WRITTEN DIMENSIONS ON THIS DRAWING SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THE OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.

ALTERATIONS BY ANY PERSON IN ANY WAY OF ANY ITEM CONTAINED ON THIS DOCUMENT, UNLESS ACTING UNDER THE DIRECTION OF THE LICENSED ARCHITECT WHOSE PROFESSIONAL SEAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE 16, SECTION 16-150 OF THE NEW YORK STATE EDUCATION LAW.

COPYRIGHT 2023 GARMENT & JAVASON ARCHITECTS & ENGINEERS, PC. ALL RIGHTS RESERVED. UNAUTHORIZED REPRODUCTION OR ALTERATION OF THIS PLAN IS A VIOLATION OF ARTICLE 146, SECTION 7209 (2) OF THE NEW YORK STATE EDUCATION LAW.

Professional Seal

PLUMBING: DETAILS

Job No. 2023-1011 Date 02/03/2023
Scale AS NOTED Drawn / Checked DC/RL SZ/WH
Sheet Number

P601

ORANGE-ULSTER BOCES
ARDEN HILL -
MAIN BUILDING
ALTERATIONS TO
NORTH WING
4 HARRIMAN DRIVE
GOSHEN, NY 10924



KG+D . ARCHITECTS PC
385 MAIN STREET MOUNT KISCO, NEW YORK, 10549
P:914.666.5900 KGDARCHITECTS.COM



GA23012
NY SED PROJECT CONTROL NO:
44-90-00-00-8-035-009

CONSTRUCTION DOCUMENTS

NOTE: ALL LEGAL, DESIGN, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF ARDEN HILL, A DIVISION OF KG+D ARCHITECTS PC (KGAD), AND HAVE BEEN CREATED FOR USE ON THIS PROJECT. NONE OF SUCH LEGAL, DESIGN, ARRANGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF KGAD.
WRITTEN DIMENSIONS ON THIS DRAWING SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THE OFFICE FOR APPROVAL, BEFORE PROCEEDING WITH FABRICATION.
UNLESS ACTING UNDER THE DIRECTION OF THE LICENSED ARCHITECT WHOSE PROFESSIONAL SEAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE 16, SECTION 16-1.3 (b) OF NEW YORK STATE LAW.
COPYRIGHT 2023 ARDEN HILL, A DIVISION OF KG+D ARCHITECTS PC. ALL RIGHTS RESERVED.
UNAUTHORIZED REPRODUCTION OR ALTERATION OF THIS PLAN IS A VIOLATION OF ARTICLE 146, SECTION 7209 (2) OF THE NEW YORK STATE EDUCATION LAW.

Professional Seal

3	04/24/24	BID ISSUE
1	08/21/23	CON DOCS - NYSED
No.	Date	Issue

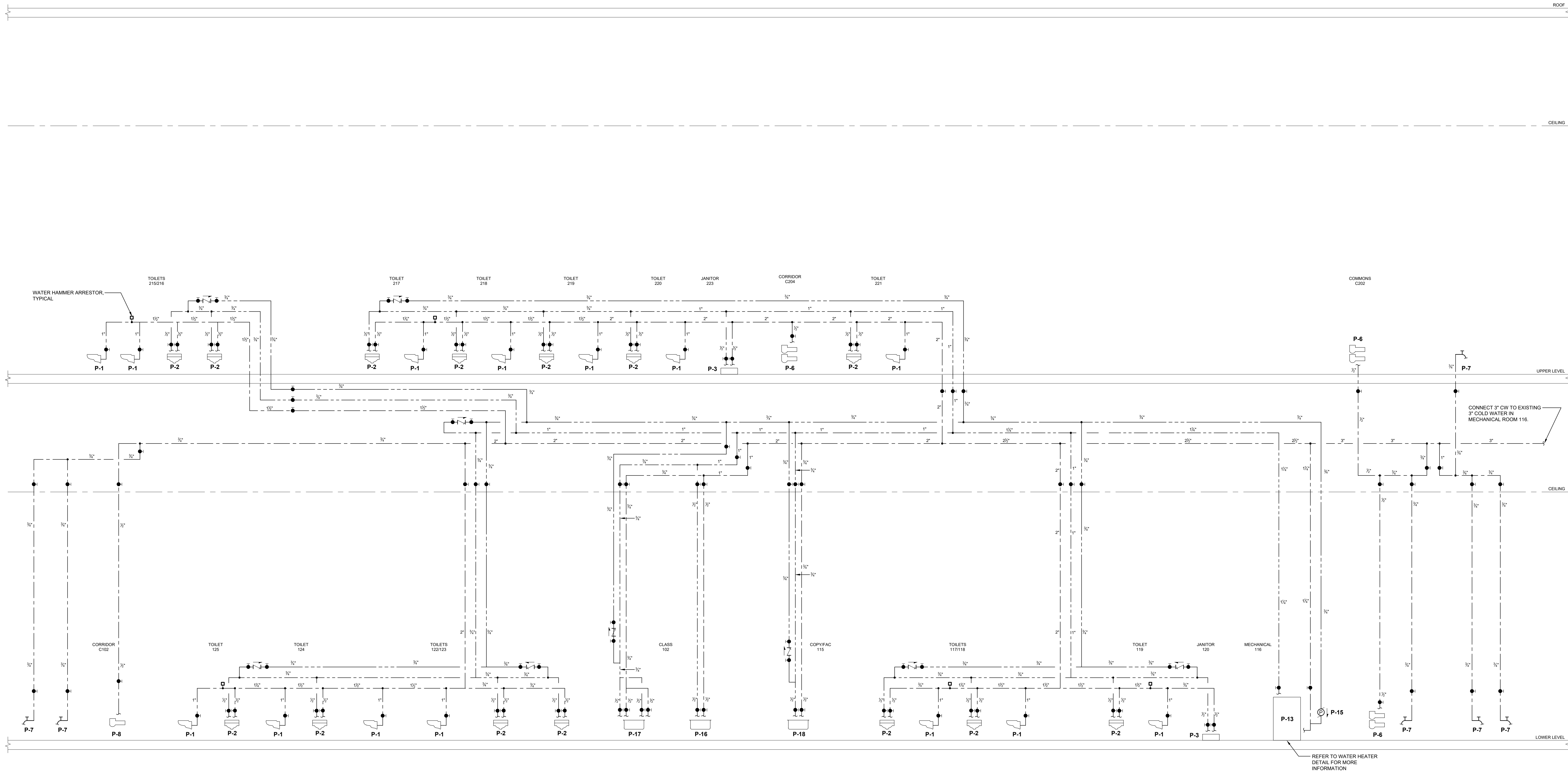
Sheet Title

PLUMBING:
DOMESTIC
WATER RISER
DIAGRAM

Job No.	2023-1011	Date	02/03/2023
Scale	AS NOTED	Drawn / Checked	DC/RL SZ/WH

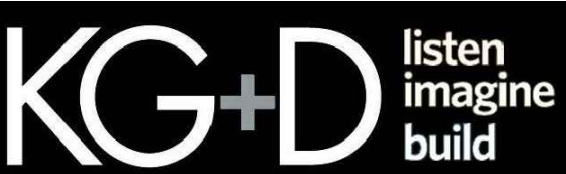
Sheet Number

P602



1 DOMESTIC WATER RISER DIAGRAM
NOT TO SCALE

ORANGE-ULSTER BOCES
ARDEN HILL -
MAIN BUILDING
ALTERATIONS TO
NORTH WING
4 HARRIMAN DRIVE
GOSHEN, NY 10924



KG+D . ARCHITECTS PC
385 MAIN STREET MOUNT KISCO, NEW YORK, 10549
P:914.666.5900 KGDARCHITECTS.COM



GA23012

NY SED PROJECT CONTROL NO:

44-90-00-00-8-035-009

CONSTRUCTION DOCUMENTS

NOTE: ALL IDEAS, DESIGN ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF ANTHONY GARIBAY & ASSOCIATES, P.C. (AG&A), AND HAVE BEEN CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGN ARRANGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF AG&A. WRITTEN DIMENSIONS ON THIS DRAWING SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THE OFFICE FOR APPROVAL, BEFORE PROCEEDING WITH FABRICATION. UNLESS ACTING UNDER THE DIRECTION OF THE LICENSED ARCHITECT WHOSE PROFESSIONAL SEAL IS AFFIXED HERETO, NO VIOLATION OF TITLE 16, SECTION 16-1.1 OF THE NEW YORK STATE EDUCATION LAW. UNAUTHORIZED REPRODUCTION OR ALTERATION OF THIS PLAN IS A VIOLATION OF ARTICLE 146, SECTION 7209 (2) OF THE NEW YORK STATE EDUCATION LAW.

Professional Seal

3	04/24/24	BID ISSUE
1	08/21/23	CON DOCS - NYSED
No.	Date	Issue

PLUMBING:
SANITARY
RISER
DIAGRAM

Job No.	2023-1011	Date	02/03/2023
Scale	AS NOTED	Drawn / Checked	DC/RL SZ/WH

Sheet Number

P603



1 SANITARY RISER DIAGRAM
NOT TO SCALE

PLUMBING NOTES:

1. ALL PLUMBING WORK SHALL BE INSTALLED IN ACCORDANCE WITH 2022 VERSION OF NYS EDUCATION DEPARTMENT MANUAL OF PLANNING STANDARDS FOR SCHOOLS, BUILDINGS, THE 2020 VERSION OF THE PLUMBING CODE, FIRE CODE, BUILDING CODE AND ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE, ALL LOCAL CODES AND GENERALLY ACCEPTED STANDARDS.
2. CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, FIXTURES, PIPING, VALVES, ACCESS DOORS, HANGERS, FITTINGS AND MISCELLANEOUS COMPONENTS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER THE PLUMBING SYSTEMS COMPLETE, OPERABLE, AND IN ACCORDANCE WITH APPLICABLE CODES AND GENERALLY ACCEPTED INDUSTRY STANDARDS.
3. CONTRACTOR SHALL COORDINATE LOCATIONS OF ALL PIPING AND EQUIPMENT WITH OTHER TRADES TO AVOID CONFLICTS. ROUGH-IN-G-IN DIMENSIONS OF FIXTURES MUST BE COORDINATED WITH GENERAL CONTRACTOR. SEE ARCHITECT'S DRAWINGS FOR EXACT LOCATIONS AND ELEVATIONS OF PLUMBING FIXTURES. CONTRACTOR SHALL PARTICIPATE IN MAKING COORDINATION DRAWINGS WITH OTHER PRIME CONTRACTS.
4. ALL PIPE OPENINGS THROUGH PARTITIONS, FLOORS AND CEILINGS SHALL HAVE PIPE SLEEVES. FOR PIPE PENETRATING FIRE RATED PARTITIONS, CEILINGS AND FLOORS THE CONTRACTOR SHALL SEAL AROUND ALL PIPE PENETRATIONS WITH HILTI INTUMESCENT FIRE STOP MATERIAL BETWEEN THE PIPE AND SLEEVE TO MAINTAIN FIRE AND SMOKE RATINGS. PROVIDE FIRE STOP SEALANT ON ALL EXISTING PIPING PENETRATING NEW FIRE RATED WALLS CONSTRUCTED AS PART OF THE PROJECT.
5. CONTRACTOR SHALL PITCH ALL SANITARY, STORM AND OVERFLOW DRAIN PIPING UNDER 3" A MINIMUM OF 1/8" PER FOOT. SANITARY AND STORM PIPING 3" AND ABOVE MAY BE PITCHED A MINIMUM OF 1/8" PER FOOT.
6. CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP AND MATERIAL INSTALLED UNDER THIS CONTRACT FREE FROM DEFECTS FOR A PERIOD OF ONE (1) YEAR FROM DATE OF SUBSTANTIAL COMPLETION AND ADJUSTANCE BY THE OWNER AND AGREES TO REPLACE DEFECTIVE WORK (INCLUDING ALL REQUIRED LABOR AND MATERIAL) AT NO ADDITIONAL COST TO OWNER DURING THE GUARANTEE PERIOD.
7. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL EQUIPMENT, PIPING, INSULATION, VALVES AND PLUMBING FIXTURES TO OWNER AND ARCHITECT FOR APPROVAL. DEMONSTRATE NEW PLUMBING SYSTEMS TO OWNER AND REVIEW MAINTENANCE PROCEDURES.
8. PROVIDE CHROME PLATED ESCUTCHEON PLATES WHERE PIPES PASS THROUGH WALLS, FLOORS AND CEILINGS IN FINISHED AREAS.
9. CONTRACTOR SHALL COORDINATE FINAL LOCATIONS OF ALL PIPING IN FINISHED AREAS WITH GENERAL CONTRACTOR TO ENSURE CONCEALMENT OF ALL PIPING IN WALLS, FLOORS, CEILINGS AND UNDER VANITIES.
10. CONTRACTOR SHALL LOCATE ALL PIPING ON THE WARM SIDE OF BUILDING INSULATION ENVELOPE.
11. CONTRACTOR SHALL FURNISH AND INSTALL ALL CONTROL WIRING (24V) AND (120V) FOR SYSTEMS SHOWN ON PLUMBING DRAWINGS AND TRANSFORMERS, CONDUIT, JUNCTION BOXES, CONDUCTORS, THERMOSTATS, APPURTENANCES AND ALL NECESSARY EQUIPMENT TO MAKE SYSTEMS COMPLETE AND OPERABLE.
12. CONTRACTOR SHALL PAY FOR ALL PERMITS AND INSPECTIONS FEES REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION.
13. CONTRACTOR SHALL PROVIDE ACCESS DOORS FOR ALL VALVES CONCEALED IN WALLS/CEILINGS. ACCESS DOORS SHALL HAVE APPROPRIATE FIRE RATINGS TO MAINTAIN INTEGRITY OF WALL/CEILING. ACCESS DOORS TO BE INSTALLED BY GENERAL CONTRACTOR.
14. CONTRACTOR SHALL NOT DRILL OR CUT ANY STRUCTURAL MEMBERS WITHOUT PERMISSION OF ARCHITECT, OR STRUCTURAL ENGINEER.
15. CONTRACTOR IS RESPONSIBLE FOR INSULATING ALL DOMESTIC HOT AND COLD WATER PIPING, HOT WATER RECIRCULATION PIPING, STORM AND OVERFLOW DRAIN PIPING. SEE PLUMBING INSULATION SCHEDULE ON THIS DRAWING.
16. ALL DOMESTIC WATER PIPING CONNECTIONS TO PLUMBING EQUIPMENT SHALL BE COPPER TYPE "L".
17. ALL NEW PIPES ARE TO BE SUPPORTED FROM STRUCTURE, NOT FROM EXISTING PIPING OR DUCTWORK.
18. CONTRACTOR SHALL BE RESPONSIBLE FOR DRAINING (AND PROPER DISPOSAL OF ALL DRAINED WATER) AND REFILLING EXISTING SYSTEMS AS REQUIRED FOR COMPLETION OF WORK.
19. CONNECTIONS TO EXISTING UTILITIES AND SERVICES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, INVERT ELEVATIONS, AND SIZES OF EXISTING PLUMBING SERVICES IN FIELD, AND SHALL CONNECT NEW PLUMBING SERVICES AS INDICATED ON DRAWINGS.
20. PROVIDE DIELECTRIC FITTINGS OR COUPLINGS WHEREVER DISSIMILAR METALS ARE JOINED.
21. PROVIDE SHUTOFF VALVES AT ALL FIXTURES AND EQUIPMENT ON COLD WATER AND HOT WATER SUPPLY LINES.
22. ALL WORK SHALL BE PROPERLY TESTED, BALANCED, AND CLEANED AND DISINFECTED.
23. A CLEANOUT SHALL BE LOCATED AT ALL CHANGES IN DIRECTION AND AT THE BASE OF EACH STACK AND LEADER.
24. ALL MOTOR STARTERS AND DISCONNECT SWITCHES FOR PLUMBING EQUIPMENT SHALL BE FURNISHED BY THE PLUMBING CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR, UNLESS OTHERWISE NOTED. DISCONNECT SWITCHES FURNISHED BY THE PLUMBING CONTRACTOR FOR PLUMBING EQUIPMENT SHALL BE HEAVY DUTY TYPE.
25. FIXTURE (GENERAL):
- A. FIXTURE SHALL BE COMPLETE WITH REQUIRED TRIM, INCLUDING BUT NOT LIMITED TO: SUPPORTS, FAUCETS, SUPPLIES, STOP VALVES, 17 GAUGE WASTE TAILPIECES, TRAPS, SEATS, FLUSHOMETER, VACUUM BREAKER, BOLTS, GASKETS CHROME PLATED ESCUTCHEONS, CAST BRASS FLOOR FLANGE AND BOLT CAPS. ALL SCREWS SHALL BE VANDAL-PROOF.
- B. EXPOSED METAL TRIM AND ROUGHING SHALL BE CHROME PLATED NICKEL BRASS. CHROME PLATED CAST BRASS "P" TRAPS WITH SCREW PLUG CLEANOUT, SLIP-JOINT INLET AND FEMALE CAST SWIVEL THREADED ELBOW OUTLET. CHROME PLATED BRASS NIPPLE AT WALL WITH CHROME PLATED ESCUTCHEON. SWING SPOUTS SHALL HAVE 140" SWING LIMIT STOPS.
- C. SUPPORT WALL FIXTURES SECURELY ON APPROVED COMMERCIAL GRADE CARRIERS AS MANUFACTURED BY JAY R. SMITH, JOSAM, OR ZURN.
26. PIPE TESTING:
- A. UPON COMPLETION OF THE ENTIRE SANITARY DRAIN AND VENT SYSTEM AND STORM WATER AND OVERFLOW DRAIN SYSTEM, THE CONTRACTOR SHALL PERFORM AN AIR TEST WITNESSED BY AUTHORITY HAVING JURISDICTION. AIR SHALL BE FORCED INTO THE SYSTEM UNTIL THERE IS A UNIFORM GAUGE PRESSURE OF 5 PSI OR SUFFICIENT TO BALANCE A 10 INCH COLUMN OF MERCURY. THIS TEST SHALL BE HELD FOR A PERIOD OF AT LEAST 15 MINUTES.
- B. WATER SUPPLY SYSTEM TEST SHALL BE DONE ON COMPLETION OF A SECTION OF OR THE ENTIRE WATER SUPPLY SYSTEM, THE SYSTEM, OR THE PORTION COMPLETE AND SHALL BE TESTED UNDER A WATER PRESSURE NOT LESS THAN THE WORKING PRESSURE OF THE SYSTEM, OR, BY AN AIR TEST OF NOT LESS THAN 50 PSI. TEST PRESSURE SHALL BE HELD FOR A MINIMUM OF 15 MINUTES. THE WATER UTILIZED FOR TESTS SHALL BE OBTAINED FROM A POTABLE SOURCE OF SUPPLY.
- C. FORCE MAIN PIPING TEST SHALL CONSIST OF PLUGGING PIPE AT CONNECTION TO EXISTING SYSTEM AND APPLYING A PRESSURE OF 5 PSI GREATER THAN THE PUMP RATING AND MAINTAINING SUCH PRESSURE FOR 15 MINUTES.
27. REFER TO SPECIFICATIONS FOR ADDITIONAL TESTING REQUIREMENTS.
28. DOMESTIC WATER PIPING DISINFECTION:
- A. ALL OPEN ENDS OF PIPING, VALVES AND EQUIPMENT SHALL BE PLUGGED EXCEPT WHEN ACTUAL WORK IS BEING PERFORMED, TO MINIMIZE ACCUMULATION OF DIRT AND DEBRIS.
- B. THE CONTRACTOR SHALL DISINFECT WATER PIPING BEFORE IT IS PLACED IN SERVICE.
- C. THE CONTRACTOR SHALL FURNISH ALL EQUIPMENT AND MATERIALS NECESSARY TO DO THE WORK OF DISINFECTING, AND SHALL PERFORM THE WORK IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN THE AWWA C651 OR AWWA C652 OR AS DESCRIBED BELOW.
- D. SYSTEM OR PART THEREOF SHALL BE FILLED WITH A WATER/CHLORINE SOLUTION CONTAINING AT LEAST 50 PARTS PER MILLION OF CHLORINE AND THE SYSTEM OR PART THEREOF SHALL BE ALLOWED TO STAND FOR 24 HOURS.
- E. DURING THE DISINFECTION PERIOD, CARE SHALL BE EXERCISED TO PREVENT CONTAMINATION OF WATER IN THE STREET MAIN OR THE ACTIVE WATER PIPING WITHIN THE BUILDING.
- F. FOLLOWING REQUIRED STANDING TIME, THE SYSTEM SHALL BE FLUSHED WITH CLEAN POTABLE WATER UNTIL THE CHLORINE IS PURGED FROM THE SYSTEM.
29. PIPING AND EQUIPMENT IDENTIFICATION:
- A. CONTRACTOR TO PROVIDE OPTI-CODE LABELS FOR ALL NEW PIPING. LABELS SHALL INDICATE SERVICE AND FLOW DIRECTION, LETTERS AND ARROWS INDICATING FLOW SHALL BE 2 1/2" HIGH PLACED EVERY 10' AND SHALL BE WHITE ON A GREEN BACKGROUND AND SHALL CONFORM TO ANSI AND OSHA STANDARDS. LABELS SHALL BE APPLIED OVER INSULATION ONLY.
- B. VALVE SERVICE IDENTIFICATION TAGS: NUMBER 19 B&S GAGE BRASS, WITH 1/4" HIGH VALVE SERVICE ABBREVIATED LETTERING ON ONE LINE OVER 1/2" HIGH VALVE SERVICE CHART NUMBER, BOTH DEEP STAMPED AND BLACK FILLED, AND WITH 3/16" TOP HOLE FOR BRASS "S" HOOK OR BRASS JACK CHAIN FASTENER.
- C. PROVIDE VALVE SERVICE IDENTIFICATION CHART MOUNTED IN LOCATION COORDINATING WITH OWNER'S REPRESENTATIVE. FRAME SHALL BE SATIN FINISHED EXTRUDED ALUMINUM WITH RIGID CLEAR PLASTIC GLAZING, SIZE TO FIT 8-1/2" x 11" VALVE CHART.
- D. EQUIPMENT SHALL HAVE 3" HIGH BLACK LAMACOID NAME PLATES WITH WHITE ENGRAVED LETTERS PERMANENTLY FASTENED TO ALL NEW EQUIPMENT.
30. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING START-UP OF ALL NEW EQUIPMENT, CONTROLS, AND ETC. TO ENSURE CORRECT OPERATION OF INSTALLED DEVICES.
31. CONTRACTOR SHALL PROVIDE OWNER WITH CATALOG DATA, OPERATING INSTRUCTIONS, MAINTENANCE INSTRUCTIONS, AND RECORD (AS-BUILT) DRAWINGS OF ALL COMPLETED WORK.
32. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL CUTTING, PATCHING, AND PAINTING ASSOCIATED WITH PLUMBING WORK WITH THE GENERAL CONTRACTOR WHO SHALL PERFECT THE WORK. ALL FLOORS AND WALLS WHERE AN EXISTING PIPE HAS BEEN REMOVED AND NOT REPLACED SHALL BE PATCHED BY THE GENERAL CONTRACTOR, THIS CONTRACTOR SHALL COORDINATE.
33. ALL NEW HOLES IN WALLS AND FLOORS SHALL BE CORE DRILLED BY THIS CONTRACTOR. PRIOR TO CORE DRILLING FLOORS, RADAR SCAN FLOOR SLABS. USE CAUTION WHEN CORE DRILLING TO AVOID DAMAGE TO EXISTING EQUIPMENT, SYSTEMS, STRUCTURE AND ETC. ANY ITEMS DAMAGED AS A RESULT OF CORE DRILLING SHALL BE REPAIRED BY THIS CONTRACTOR AT NO ADDITIONAL COST TO SCHOOL DISTRICT.

PIPE HANGER SCHEDULE

PIPE SIZE (INCHES)	MAXIMUM HORIZONTAL SPACING (FEET)		SINGLE STEEL ROD HANGER SIZE (INCHES)		HANGER TYPE STEEL	MAXIMUM VERTICAL SPACING (FEET)	
	COPPER TUBE	CAST IRON	TUBING	PIPING		COPPER TUBE	CAST IRON
1/2"	6	5	1/4"	3/4"	BAND	10	15
3/4"	6	5	1/4"	3/4"	BAND	10	15
1"	6	5	1/4"	3/4"	BAND	10	15
1 1/4"	6	5	1/4"	3/4"	CLEVIS	10	15
1 1/2"	6	5	1/4"	3/4"	CLEVIS	10	15
2"	10	5	1/4"	3/4"	CLEVIS	10	15
2 1/2"	10	5	3/8"	1/2"	CLEVIS	10	15
3"	10	5	3/8"	1/2"	CLEVIS	10	15
4"	10	5	1/2"	3/4"	CLEVIS	10	15
5"	10	5	1/2"	3/4"	CLEVIS	10	15
6"	10	5	1/2"	3/4"	CLEVIS	10	15
8"	10	5	3/4"	1/2"	CLEVIS	10	15
10"	10	5	3/4"	1/2"	CLEVIS	10	15
12"	10	5	3/4"	1/2"	CLEVIS	10	15

NOTES:

1. MAXIMUM HORIZONTAL SPACING OF CAST-IRON PIPE HANGERS SHALL BE INCREASED TO 10 FEET WHERE 10 FOOT LENGTHS OF PIPE ARE INSTALLED.
2. INSTALL HANGER OR SUPPORT CLOSE TO THE POINT OF CHANGE OF DIRECTION IN ALL PIPE RUNS.
3. INSTALL ADDITIONAL HANGERS ON SUPPORTS AT CONCENTRATED LOADS.
4. SUPPORT ALL BRANCH PIPING OVER 6'-0" IN LENGTH.
5. SUPPORT VERTICAL PIPING AT EVERY FLOOR.

SYMBOLS AND ABBREVIATIONS

SYMBOL	ABBREVIATION	DESCRIPTION
—	DN.	DOWN
—	GPH	GALLONS PER HOUR
—	GPM	GALLONS PER MINUTE
—	TYP.	TYPICAL
—	V	VOLTS
—	VTR	VENT THROUGH ROOF
— — — —	CW	DOMESTIC COLD WATER
— — — —	HW	DOMESTIC HOT WATER
— — — —	HWR	DOMESTIC HOT WATER RETURN
—	S	SANITARY
— — — —	V	VENT
●	—	BALL VALVE
—	-	MANUAL AIR VENT
—	-	THERMOMETER
—	-	PRESSURE GAUGE
—	-	UNION
—	CODP	CLEANOUT DECK PLATE
—	EX	EXISTING TO REMAIN
— — — — —	DEM	EXISTING TO BE REMOVED
—	NEW	NEW WORK
—	-	ELBOW UP
—	-	ELBOW DOWN
—	-	TEE UP
—	-	TEE DN
—	-	TRAP
—	FD	FLOOR DRAIN
—	-	POINT OF DISCONNECT/CONNECT
-	MC	MECHANICAL CONTRACTOR
-	OD	OVERFLOW DRAIN
-	FM	FORCE MAIN
—	RD	ROOF DRAIN
—	PRV	PRESSURE REDUCING VALVE
-	°F	DEGREES FAHRENHEIT
-	IN	INCHES
-	PSI	POUNDS PER SQUARE INCH
-	H	HEIGHT
-	W	WIDTH
-	L	LENGTH
—	Ø DIA / PH	DIAMETER / PHASE
—	-	PIPE CAP
-	MIN	MINIMUM
-	MAX	MAXIMUM
—	FT ²	SQUARE FEET
—	CO	CLEAN OUT
—	WCO	WALL CLEAN OUT
—	SD	STORM DRAIN
—	-	HOSE-BIBB
—	-	WALL HYDRANT
-	PC	PLUMBING CONTRACTOR
-	HZ	HERTZ
-	V	VOLTS
-	FT	FEET
-	HP	HORSEPOWER
-	FLA	FULL LOAD AMPS
-	RPM	REVOLUTIONS PER MINUTE

WATTS WATER HAMMER ARRESTORS		
NO. 15 SIZE	FIXTURE UNITS	CROSS REF. PDI STANDARD
1/2" M1	1-11	A
3/4" M1	12-32	B
1" M1	33-60	C
1-1/4" M1	61-113	D
1-1/2" M1	114-154	E
2" M1	155-330	F

PLUMBING EQUIPMENT SCHEDULE

TAG	SYMBOLS		PLUMBING CONNECTIONS					MANUFACTURER	CATALOG #	DESCRIPTION
	PLAN	ELEVATION	SAN/STORM	VENT	COLD	HOT	GAS			
P-1			4"	2"	1"	-	-	KOHLER	K-4325	WALL-MOUNTED, VITREOUS CHINA, ELONGATED BOWL, FLUSHOMETER TOILET WITH CONCEALED TRAPWAY, DIRECT-FED SIPHON JET ACTION, AND 1-1/2" TOP SPUD. FIXTURE COLOR OR SHALL BE WHITE. PROVIDE COMMERCIAL HEAVY DUTY PLASTIC TOILET SEAT, BEIMS MODEL 1955CT AND COMMERCIAL GRADE FLOOR MOUNTED VERTICAL ADJUSTABLE CLOSET CARRIERS. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS.
P-2			1 1/2"	1 1/2"	1/2"	1/2"	-	ZURN	ZER6500AV-TM -WS1-DF	EXPOSED, BATTERY POWERED, GEAR DRIVEN, ELECTRONIC SENSOR OPERATED WATER CLOSET FLUSHOMETER WITH MANUAL OVERRIDE BUTTON, CONTROL STOP WITH VANDAL-RESISTANT CAP AND VACUUM BREAKER. DUAL FLUSH, LOW CONSUMPTION, 1.6/1.1 GALLONS PER FLUSH, ADA COMPLIANT.
P-3			3"	1 1/2"	1/2"	1/2"	-	ACORN	TNC-24	ADA COMPLIANT, LOW-LEAD COMPLIANT, BATTERY POWERED, CHROME PLATED CAST BRASS BODY, SENSOR FAUCET WITH INFRARED PROXIMITY SENSOR, THIRTY SECOND TIME OUT FEATURE, IN LINE FILTER, (4) "AA" BATTERIES, 0.5 GPM VANDAL-RESISTANT LAMINAR FLOW, AND THERMOSTATIC MIXING VALVE.
P-4			-	-	3/4"	-	-	WOODFORD	24	FAUCET WITH EYEWASH/DRENCH HOSE. UNIT SHALL BE COMPLETE WITH SPEAKMAN SC-5811-RCP SERVICE SINK FAUCET CONNECTED TO EYEWASH. EYEWASH SHALL BE ACTIVATED BY SQUEEZE VALVE AND INCLUDE (2) YELLOW PLASTIC SPRAY HEADS WITH FLIP TOP DUST CAPS, INTEGRAL VACUUM BREAKER AND CHECK VALVE. PROVIDE SE-370 THERMOSTATIC MIXING VALVE. SERVICE SINK FAUCET SHALL HAVE VANDAL RESISTANT FOUR-ARM HANDLES, CAST BRASS NOZZLE WITH 3/4" HOSE THREAD, PAL HOOK AND TOP BRACE OUTLET, AND INTEGRAL VACUUM BREAKER.
P-5			3"	1 1/2"	-	-	-	WATTS	FD-100-M	VANDAL-PROOF, EPOXY COATED CAST IRON FLOOR DRAIN WITH ANCHOR FLANGE, REVERSIBLE CLAMPING COLLAR WITH PRIMARY & SECONDARY WEEPHOLES, ADJUSTABLE SQUARE HEEL-PROOF NICKEL BRONZE STRAINER, AND 3" NO HUB OUTLET. FLOOR DRAIN SHALL BE COMPLETE WITH 6"x6" STRAINER. PROVIDE SURESEAL MODEL SSS009V WATERLESS IN-LINE 3" DRAIN TRAP SEAL.
P-6			1 1/2"	1 1/2"	1/2"	-	-	ELKAY	LZSTLBSVRLK	BOTTLE FILLING STATION AND BI-LEVEL ADA VANDAL-RESISTANT COOLER, FILTERED, REFRIGERATED, AND LIGHT GRAY. FIXTURE FEATURES: ANTIMICROBIAL, FILTERED, GREEN TICKER, HANDS FREE, LAMINAR FLOW, REAL DRAIN, VISUAL FILTER MONITOR, VANDAL RESISTANT BUBBLER, ELECTRONIC BOTTLE FILLER SENSOR WITH ELECTRONIC FRONT AND SIDE BUBBLER PUSHBAR ACTIVATION, WALL MOUNTED, CHILLING CAPACITY OF 8 GALLONS PER HOUR OF 90°F DRINKING WATER AT 90°F AMBIENT. ELECTRICAL: 110V/60Hz, 6.0 FULL LOAD AMPS, 370 WATTS. ADA COMPLIANT, NSF 61 CERTIFIED. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS AND COOLER CONFIGURATION. PROVIDE COMMERCIAL GRADE, IN-WALL, FLOOR MOUNTED FIXTURE SUPPORT AND (2) SPARE FILTERS.
P-7			-	-	3/4"	-	-	ZURN	Z1320XL	ENCASED, LEAD FREE, NON-FREEZE, ANTI-SIPHON, AUTOMATIC DRAINING WALL HYDRANT WITH INTEGRAL BACKFLOW PREVENTER FOR FLUSH INSTALLATION WITH 3/4" MALE HOSE CONNECTION, TYPE 304 STAINLESS STEEL HOUSING WITH LOCKING HINGED COVER, OPERATING KEY AND WALL CLAMP.
P-8			1 1/2"	1 1/2"	1/2"	-	-	ELKAY	LZS8WSLK	BOTTLE FILLING STATION WITH SINGLE ADA VANDAL-RESISTANT COOLER, FILTERED, REFRIGERATED, AND LIGHT GRAY. FIXTURE FEATURES: ANTIMICROBIAL, FILTERED, GREEN TICKER, HANDS FREE, LAMINAR FLOW, REAL DRAIN, VISUAL FILTER MONITOR, VANDAL RESISTANT BUBBLER, ELECTRONIC BOTTLE FILLER SENSOR WITH ELECTRONIC FRONT AND SIDE BUBBLER PUSHBAR ACTIVATION, WALL MOUNTED, CHILLING CAPACITY OF 8 GALLONS PER HOUR OF 90°F DRINKING WATER AT 90°F AMBIENT. ELECTRICAL: 110V/60Hz, 6.0 FULL LOAD AMPS, 370 WATTS. ADA COMPLIANT, NSF 61 CERTIFIED. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS. PROVIDE COMMERCIAL GRADE, IN-WALL, FLOOR MOUNTED FIXTURE SUPPORT AND (2) SPARE FILTERS.
P-9			REFER TO PLAN	-	-	-	-	JAY R. SMITH	1011Y	ROOF DRAIN FOR IRMA ROOF APPLICATIONS. DUCO CAST IRON BODY WITH FLASHING CLAMP: 1/16", 4" HIGH STAINLESS STEEL PERFORATED DRAVEL STOP WITH 3/8" DIAMETER OPENINGS, AND NO-HUB OUTLET. ROOF DRAIN SHALL BE COMPLETE WITH SUMP RECEIVER, UNDERCUT CLAMP, VANDAL-PROOF CAST IRON DOME, AND CAST IRON CLAMPING RINGS. ROOF DRAIN IS TO BE PROVIDED AND SET BY THE PLUMBING CONTRACTOR.
P-10			REFER TO PLAN	-	-	-	-	JAY R. SMITH	1775A	SPECIAL PURPOSE DOWNSPOUT COVER, FABRICATED TYPE 304 STAINLESS STEEL DOWNSPOUTS WITH HINGED PERFORATED COVER. DOWNSPOUT COVER IS TO BE PROVIDED AND SET BY THE PLUMBING CONTRACTOR.
P-11			REFER TO PLAN	-	-	-	-	JAY R. SMITH	1011Y	ROOF DRAIN FOR IRMA ROOF APPLICATIONS. DUCO CAST IRON BODY WITH FLASHING CLAMP: 1/16", 4" HIGH STAINLESS STEEL PERFORATED DRAVEL STOP WITH 3/8" DIAMETER OPENINGS, AND NO-HUB OUTLET. ROOF DRAIN SHALL BE COMPLETE WITH SUMP RECEIVER, UNDERCUT CLAMP, VANDAL-PROOF CAST IRON DOME, AND CAST IRON CLAMPING RINGS. ROOF DRAIN IS TO BE PROVIDED AND SET BY THE PLUMBING CONTRACTOR.
P-12			-	2"	-	-	-	STANCOR	SE-50	OIL-IMMERSED SIMPLEX PUMP AND CONTROL SYSTEM, NEMA 4X CORROSION RESISTANT POLYCARBONATE ENCLOSURE, STAINLESS STEEL SENSOR PROBE, DIRECT PLUG-IN POWER SOURCE, SOLID STATE COMPONENTS, ALARMS, LIGHTS, SILENCE SWITCH, REMOTE MONITORING CIRCUIT FOR OIL, HIGH LIQUID AND HIGH AMPERAGE CONDITIONS, FACTORY ASSEMBLED AND TESTED, 74 GPM @ 37 FT HEAD, 1/2 HP - 120V/1, CONTROL PANEL SHALL HAVE AUXILIARY CONTACTS TO THE HIGH LIQUID LEVEL, ALARM TO BUILDING MANAGEMENT SYSTEM.
P-13			-	-	1 1/2"	1 1/2"	-	AO SMITH	DVE-80A	ASME RATED, COMMERCIAL ELECTRIC WATER HEATER. HEATER SHALL BE RATED AT 1800, 208 VOLTS, 3 PHASE, 60HZ, 30 FLA. TANK SHALL HAVE 80 GALLON CAPACITY AND 92 GPM RECOVERY AT 80°F TEMPERATURE RISE. HEATER SHALL HAVE 160 PSI WORKING PRESSURE AND BE EQUIPPED WITH TWO ANODE ROD. ALL INTERNAL SURFACES EXPOSED TO WATER SHALL BE GLASS LINED. HEATING ELEMENTS SHALL BE MEDIUM WATT DENSITY WITH ZINC PLATED COPPER SHEATH AND BE CONTROLLED BY INDIVIDUAL THERMOSTATS AND HIGH TEMPERATURE CUTOFF OUTER JACKET SHALL HAVE BAKED ENAMEL FINISH AND SHALL ENCLOSE THE TANK WITH FOAM INSULATION. HEATERS SHALL BE COMPLETE WITH ELECTRICAL JUNCTION BOX WITH HEAVY TERMINAL BLOCK, NEMA 1 DISCONNECT SWITCH, DRAIN VALVE AND ASME RATED TEMPERATURE AND PRESSURE RELIEF VALVE.
P-14			-	-	-	3/4"	-	AMTROL	ST-12C-DD	POTABLE WATER USE AND SHALL BE ASME RATED. MAXIMUM OPERATING TEMPERATURE 200°F AND MAXIMUM WORKING PRESSURE 150 PSI.
P-15			-	-	-	3/4"	-	TACO	003-B4	LOW-LEAD COMPLIANT, NSF 61, BRONZE, SELF-LUBRICATING, HOT WATER RECIRCULATION PUMP. FLOW RANGE: 0-7 GPM. HEAD RANGE: 0-4.5 FEET. PUMP MAXIMUM WORKING PRESSURE 125 PSI AND MAXIMUM OPERATING TEMPERATURE 220°F. PROVIDE TACO 563-2 TEMPERATURE ADJUSTAT. PROVIDE DISCONNECT SWITCH. ELECTRICAL: 120V/1600W, 0.43 AMPS, 3250 RPM, AND 140 HP.
P-16			1 1/2"	1 1/2"	1/2"	1/2"	-	ELKAY	ELV2219SACC	ADA COMPLIANT, 18-GAUGE, TYPE 304 STAINLESS STEEL, SINGLE BOWL, WALL HUNG LAVATORY SINK KIT. OVERALL SINK DIMENSIONS: 22 1/4 x 19 1/8". BOWL DIMENSIONS: 16 1/4 x 12 1/4 x 12". SINK SHALL HAVE REAR CENTER DRAIN, 3-3/8" DRAIN SIZE, BOTTOM SOUND DEADENING PADS, AND BUFFED SATIN FINISH. SINK KIT SHALL BE PROVIDED WITH ELKAY MODEL LKB721C FAUCET. PROVIDE ELKAY MODEL LKAD174 ADA COMPLIANT, CHROME PLATED BRASS, PERFORATED GRID STRAINER AND TRUEBRO MODEL 103 EZ LAV GUARD.
P-17			1 1/2"	1 1/2"	1/2"	1/2"	-	ELKAY	EWMA4820C	14-GAUGE, TYPE 304 STAINLESS STEEL, SINGLE BOWL, WALL HUNG MULTIPLE STATION HAND WASH SINK KIT. OVERALL SINK DIMENSIONS: 49 1/2 x 27 1/8". BOWL DIMENSIONS: 45 1/8 x 12 1/8". SINK SHALL HAVE CENTER DRAIN, 3-3/8" DRAIN SIZE AND BUFFED SATIN FINISH. SINK KIT SHALL BE PROVIDED WITH: (1) ELKAY MODEL LK18B STAINLESS STEEL GRID STRAINER AND TAILPIECE AND (2) ELKAY MODEL LK940GNS054H FAUCETS.
P-18			1 1/2"	1 1/2"	1/2"	1/2"	-	ELKAY	LK940GN054H	ADA COMPLIANT, WALL MOUNTED, SCRUBHANDWASH, 8" CENTERSET FAUCET WITH 4" WRIST BADE HANDLES, SOLID BRASS CONSTRUCTION WITH QUARTER TURN CERAMIC DISC VALVE. 1.5 GPM FLOW RATE. 1" HIGH GOOSENECK SPOUT WITH 5" REACH. FAUCET FINISH SHALL BE CHROME PLATED. FAUCET SHALL BE NSF 61 AND NSF 372 (LEAD FREE) COMPLIANT.
P-19			1 1/2"	1 1/2"	1/2"	1/2"	-	ELKAY	ELUHAD11650PD	ADA COMPLIANT, 18-GAUGE, TYPE 304 STAINLESS STEEL, SINGLE BOWL, UNDERMOUNT ADA SINK. OVERALL SINK DIMENSIONS: 16 1/4 x 26 3/8". BOWL DIMENSIONS: 15 1/2 x 16 1/4 x 7/8". SINK SHALL HAVE REAR CENTER DRAIN, BOTTOM ONLY SOUND DEADENING PADS, 3-3/8" DRAIN SIZE AND LUSTROUS SATIN FINISH. SINK SHALL BE PROVIDED WITH UNDERMOUNT BRACKETS AND ELKAY MODEL LKPDV18B CHROME PLATED BRASS BODY VANDAL RESISTANT GRID STRAINER. PROVIDE TRUEBRO MODEL 103 EZ LAV GUARD IN ADA LOCATIONS.
P-19			1 1/2"	-	-	-	-	ELKAY	LKAV3021	ADA COMPLIANT, DECK MOUNTED, SINGLE HOLE BAR FAUCET WITH LEVER HANDLE. SOLID BRASS CONSTRUCTION WITH CERAMIC DISC VALVE. 1.8 GPM FLOW RATE. 360° GOOSENECK SPOUT WITH STANDARD SPRAY. FAUCET FINISH SHALL BE SELECTED BY ARCHITECT. FAUCET SHALL BE NSF 61 AND NSF 372 (LEAD FREE) COMPLIANT.
P-20			3"	1 1/2"	-	-	-	WATTS	FD-100-M	VANDAL-PROOF, EPOXY COATED CAST IRON FLOOR DRAIN WITH ANCHOR FLANGE, REVERSIBLE CLAMPING COLLAR WITH PRIMARY & SECONDARY WEEPHOLES, ADJUSTABLE SQUARE HEEL-PROOF NICKEL BRONZE STRAINER, AND 3" NO HUB OUTLET. FLOOR DRAIN SHALL BE COMPLETE WITH 6"x6" STRAINER AND SEDIMENT BUCKET. PROVIDE SURESEAL MODEL SSS009V WATERLESS IN-LINE 3" DRAIN TRAP SEAL.

PLUMBING PIPING FITTING SCHEDULE

SERVICE	SIZE (IN)	MATERIAL	TYPE/WEIGHT	STANDARD
WATER PIPE AND FORCE MAIN PIPING (ABOVE GROUND)	ALL	COPPER	LEAD-FREE SOLDER ASTM B828	ASTM B 16.22
SANITARY, VENT, AND STORM (ABOVE GROUND)	ALL	SERVICE WEIGHT CAST IRON	NCHUB ASTM C127 ASTM C564	ASTM A 74
SANITARY, VENT, AND STORM (BELOW GROUND)	ALL	EXTRA-HEAVY CAST IRON	HUB AND SPIGOT ASTM C564	ASTM A 74

PLUMBING PIPING MATERIAL SCHEDULE

SERVICE	SIZE (IN)	MATERIAL	TYPE/WEIGHT	STANDARD
WATER PIPE AND FORCE MAIN PIPING (ABOVE GROUND)	ALL	COPPER	TYPE L TUBE	ASTM B 88
SANITARY, VENT & STORM (ABOVE GROUND)	ALL	CAST IRON	SERVICE WEIGHT	ASTM A 74
SANITARY, VENT, AND STORM (BELOW GROUND)	ALL	CAST IRON	EXTRA-HEAVY WEIGHT	ASTM A 74

PLUMBING PIPE INSULATION SCHEDULE

||
||
||