

Architect's Supplemental Instructions

Architect's Project No:
04561.01

Architect's ASI No: 033

Date Issued: 11/03/2016

Contract Date: 06/24/2016

Reason Code: 05 A/E Scope

Discipline Code: 11 (Plumbing)

Owner:

Webster University

Architect:

Cannon Design
1100 Clark Avenue
St. Louis, MO 63102

Contractor:

Paric Construction

Contract For: General construction

The Work shall be carried out in accordance with the following supplemental instructions issued in accordance with the Contract Documents without change in Contract Sum or Contract Time. Indicate your acceptance of these instructions for minor change to the Work as consistent with the Contract Documents and return a copy to the Architect within fourteen (14) business days of the date of issuance of these instructions. If you feel a change in Contract Sum or Contract Time is warranted, please submit an itemized quotation for the changes for approval within fourteen (14) business days of the date of issuance of these instructions prior to proceeding on the Work. Proceeding with the Work in accordance with these instructions indicates your acknowledgement that there will be no change.

Attachments:

Drawings:

P0011 Level 01 Area A/B Under Floor Plan - Plumbing
P0101.A Level 01 Area A Floor Plan - Plumbing
P0102.A Level 02 Area A Floor Plan - Plumbing
P0103.A Level 03 Area A Floor Plan - Plumbing
P0104.A Level 04 Area A Floor Plan - Plumbing
P0105.B Level 05 Roof Plan Area B - Plumbing
P0111.A Level 01 Area A Floor Plan - Plumbing Waste and Vent
P0112.A Level 02 Area A Floor Plan - Plumbing Waste and Vent
P0201.B Level 01 Area B Floor Plan – Laboratory Compressed Air and Vacuum Piping
P0401 Risers - Plumbing
P0402 Risers - Plumbing

Reason Codes:

#1. Jurisdictional Agency
#2. Constructor Driven
#3. Document Inconsistency
#4. Fast Track Driven
#5. A/E Scope
#6. Owners Scope
#7. Unforeseeable Conditions
#8. Other

Discipline Codes

#1. Demo-demolition
#2. Div1-Division 1 items on the spec book
(this item is not used)
#3. Electrical
#4. Elevator
#5. Equipment (Changes in equipment,
Owner Purchased)
#6. Fire Protection

Discipline Codes

#7. General Construction (Architectural)
#8. General Conditions (Div. 1)
#9. HVAC
#10. Other
#11. Plumbing
#12. Site Work/Landscaping
#13. Structural

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Architect's Supplemental Instructions

Page 2
P0404 Risers - Plumbing
P0405 Risers - Plumbing
P0406 Risers - Plumbing
P0407 Risers - Plumbing
P0408 Risers - Plumbing
P0409 Risers - Plumbing
P0601 Schedules – Plumbing
A0201 ENLARGED PLANS-LEVEL 01
<End of Drawing List>

Description: ASI – 033

ASI-033 is being issued for the purpose of addressing RFI # 261, 286, 309 and 310.

RFI-261; is requesting clarification for trap primers to the floor drains. There are five (5) different occurrences where trap primers are being required. The following is our recommendation on how to address them:

Item #1; Four (4) each Men's and Women's toilet room will be served by the lavatory tailpiece similar to J.R. Smith series 2698-1 or Wade model 4401-TS.

Items #2, #3, #4, and Item # 5; The Cadaver Lab #191, Receiving /Loading # 172, Mechanical Room # 178, Organics Bio Lab # 378 and Fire Pump Room # 166 will all require a water supply type trap primer, similar to PPP model P1-500/P2-500 with a or Sioux Chief model 695 with a distributor.

Refer to the appropriate sheets above with the exception of sheets (P0105.B and P0201.B) for all changes.

RFI-286; request a specification on the need for Overflow Roof Drains (OD-2). On sheet P0105.B, Level 05 Area B, the roof drains and overflow drains between column line 1 and column line 1.6 was miss labeled. Both the roof drain and overflow drain should have been labeled as OD-1 and RD-1. Refer to sheet P0105.B for corrections.

RFI-309; questions the need for a water supply and drain for the floor mounted Autoclave in room Lab Waste # 372B.

½" cold water to service line down in wall has been provided for the floor mounted Autoclave along with a floor sink for drains. Refer to sheets P0102.A, P0103.A, P0112.A, P0113.A, P0405 and P0408 for changes.

RFI-310; question the need for a water supply and drain for the counter top Autoclave in the Micro Bio Prep # 289A.

½" cold water service line down in wall has been provided for the counter top Autoclave along with a floor sink for drains. Refer to sheets P0101.A, P0102.A, P0111.A, P0112.A, P0404 and P0405 for changes.

Architect's Supplemental Instructions

Page 3

In addition to the above RFI's the following item was addressed but does not have a RFI number:

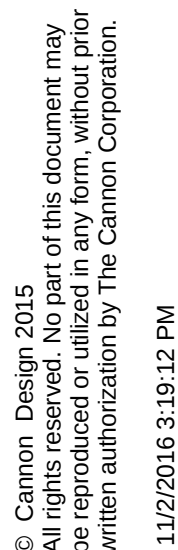
On drawing P0201.B; 1/2" oxygen service line between column line 1.6 and column line 1.7 was extended to 2 column line 1.6, drop down in wall to serve equipment on Level 1. Refer to P0201.B for changes.

A0201: Oxygen DISS gas outlet added for HPS-Equip Rack (06.10.17) in the closet within SIM LAB (133B) per Webster University's direction.

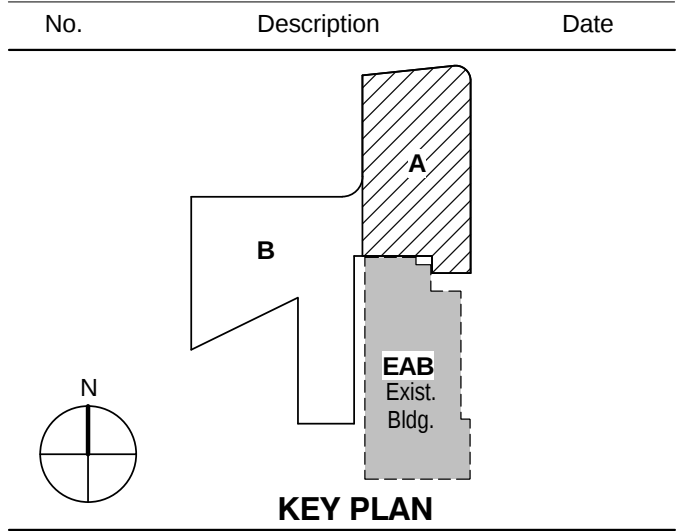
Please submit an itemized proposal for changes in contract Sum and Contract Time for proposed modifications to the Contract Documents described herein:

Issued by Architect: Michael R. Whitworth, WES

Accepted by Contractor:



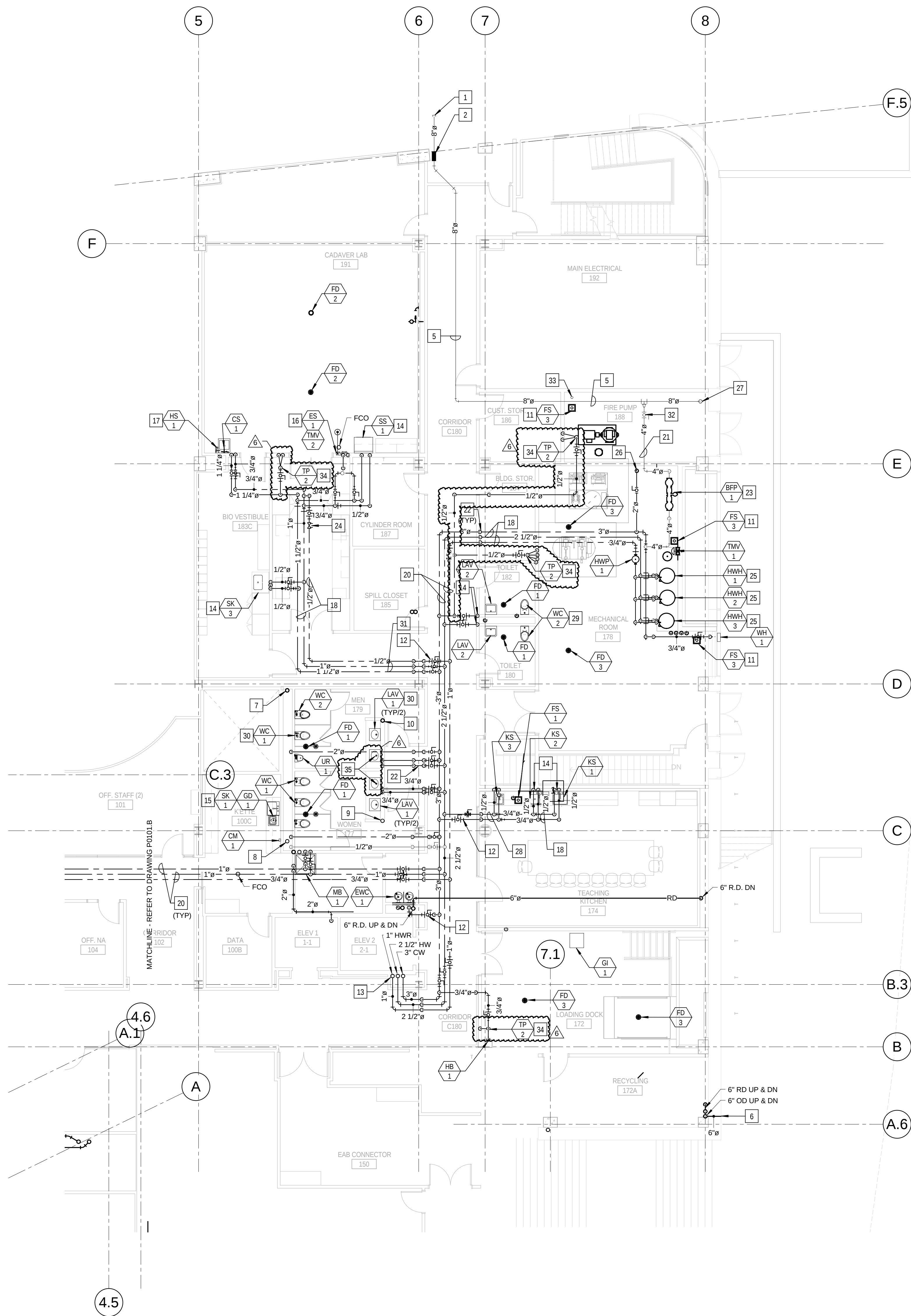
6	ASI - 033 (RFI 261,286,309 & 310)	03 NOV 2016
5	ASI - 024 (RFI 222,233,235 & 236)	24 AUG 2016
4	ADDENDUM 2-4	24 MAY 2016
3	ADDENDUM 2-2	19 APR 2016
2	MSD SUBMITTAL	12 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



LEVEL 01 AREA A FLOOR
PLAN - PLUMBING

Project No.: 04561.01 Checked by:

P0101.A



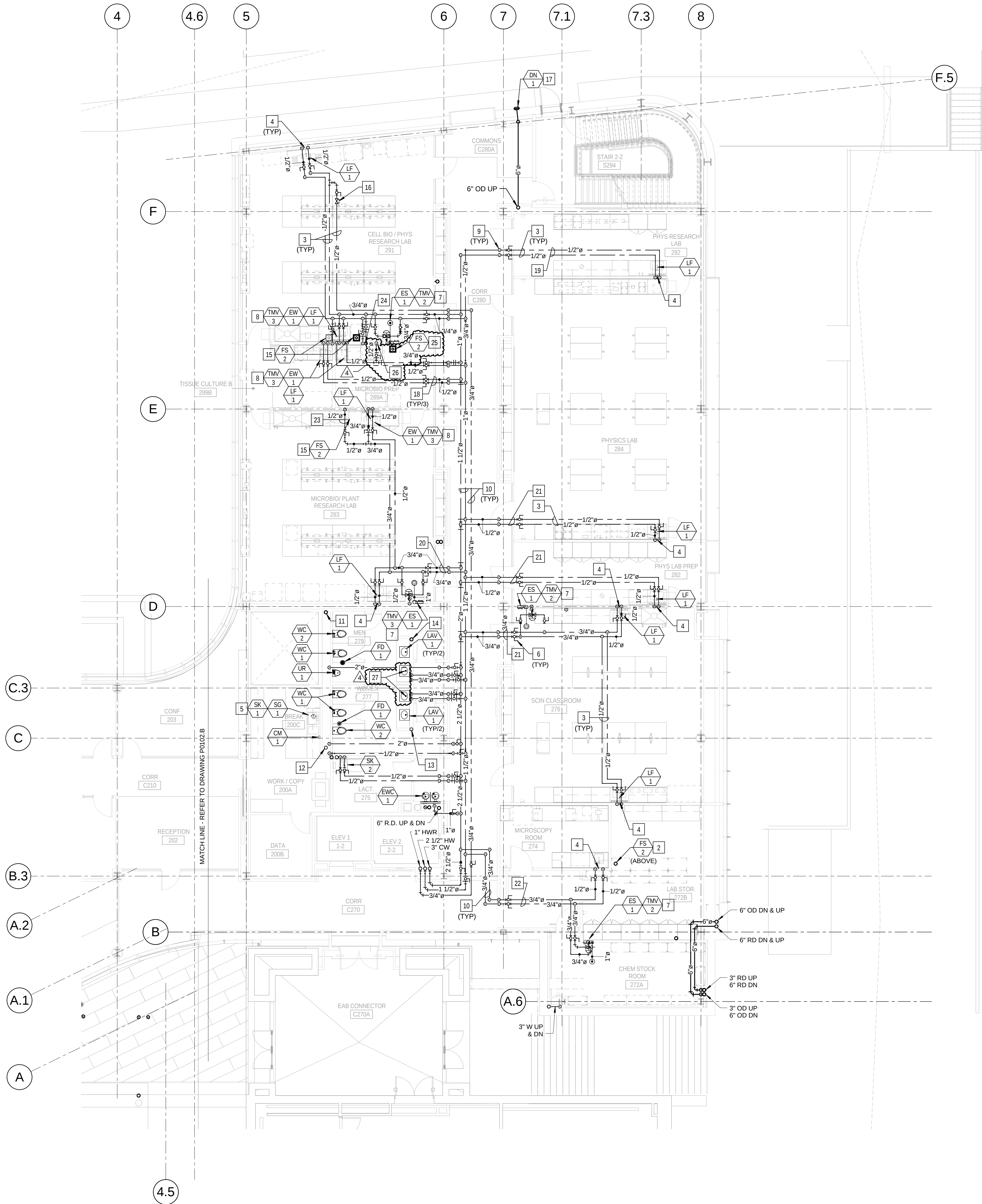
1 LEVEL 01 AREA A FLOOR PLAN - PLUMBING
1/8" = 1'-0"

KEYED NOTES - (THIS SHEET ONLY)

- 8" COMBINATION FIRE/DOMESTIC WATER SERVICE. REFER TO CIVIL DRAWINGS FOR CONTINUATION.
- SLEEVE AND SEAL WATER TIGHT WITH "LINK-SEAL" ASSEMBLY. REFER TO DETAIL ON SHEET P0501.
- NOT USED.
- BUILDING PRESSURE GAUGE POSITION TO BE VISIBLE.
- 8" GALVANIZED COMBINATION FIRE/DOMESTIC WATER SERVICE ABOVE CEILING. COORDINATE WITH OTHER TRADES PRIOR TO ROUGH IN. REFER TO DRAWING P0401, DETAIL 1.
- COORDINATE LOCATION OF DOWN SPOUT NOZZLE AND WALL SLEEVE WITH OTHER TRADES PRIOR TO ROUGH IN.
- 4" SANITARY VENT RISER UP TO SERVE WATER CLOSETS, URINALS AND FLOOR DRAINS ON EACH LEVEL.
- 4" SANITARY WASTE RISER UP TO SERVE WATER CLOSETS, URINALS AND FLOOR DRAINS ON EACH LEVEL.
- 2" SANITARY WASTE RISER UP TO SERVE LAVATORIES ON EACH LEVEL.
- 2" SANITARY VENT RISER UP TO SERVE LAVATORIES ON EACH LEVEL.
- COORDINATE LOCATION OF FLOOR -SINK WITH LAYOUT OF ROOM AND FOUNDATION BELOW PRIOR TO ROUGH IN.
- FURNISH AND INSTALL SHUT-OFF VALVES AT THE ENTRY TO EACH ROOM.
- FURNISH AND INSTALL 3" CW, 2 1/2" HW AND 1" HWR PIPING UP TO SERVE LEVEL 2. ALIGN PIPE WITH WALL ABOVE.
- FURNISH AND INSTALL 1/2" CW, 1/2" HW AND 2" VENT DOWN IN WALL TO SERVE FIXTURES.
- BREAK-ROOM SINKS ARE TO BE SERVED FROM WATER, WASTE AND VENT PIPING IN TOILET ROOM CHASE.
- EMERGENCY SHOWER TO BE SERVED WITH FIELD FURNISHED AND INSTALLED 1" TEMPERED WATER TO SHOWER HEAD FROM WALL RECESSED CABINET. EYEWASH PORTION OF ASSEMBLY WILL REQUIRE 2" WASTE AND 2" VENT TYPICAL FOR ALL INSTALLATIONS. REFER TO DRAWING P0403, DETAIL 3/P0403.
- WALL RECESSED CW AND HW HOSE STATION. SERVE WITH 1/2" CW AND 1/2" HW FROM CLINICAL SINK. COORDINATE LOCATION AND MOUNTING HEIGHT WITH OTHER TRADES PRIOR TO ROUGH IN.
- PIPING IN EACH ROOM SHALL BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH IN.
- NOT USED.
- PIPING IN CORRIDOR TO BE AT BOTTOM OF STRUCTURAL STEEL CROSS MEMBERS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH IN.
- 4" GALVANIZED DOMESTIC WATER TO DOMESTIC WATER BACKFLOW PREVENTER.
- DROP PIPING DOWN TO BELOW STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.
- DOMESTIC WATER SERVICE BACK FLOW PREVENTER. REFER TO DRAWING P0501, DETAIL 6/P0501.
- HOT WATER RETURN CIRCUIT SETTER VALVE. LOCATE IN AN ACCESSIBLE LOCATION ABOVE THE CEILING. REFER TO DRAWING P0502, DETAIL 11/P0502.
- REFER TO DRAWING P0403, DETAIL 2/P0403 FOR HOT WATER HEATER PIPING DIAGRAM.
- 2" DOMESTIC WATER SERVICE DOWN TO LEVEL 0. REFER TO DRAWING P0011 FOR CONTINUATION.
- 8" GALVANIZED WATER SERVICE DOWN FOR FIRE SERVICE.
- REFER TO DRAWING P0402, DETAIL 1 FOR RISER DIAGRAMS.
- REFER TO DRAWING P0402, DETAIL 2 FOR RISER DIAGRAMS.
- REFER TO DRAWING P0401 FOR PUBLIC TOILET ROOM RISER DIAGRAMS.
- REFER TO DRAWING P0405 FOR WATER SUPPORT RISER 1.
- 4" DOMESTIC WATER SERVICE VALVE.
- 4" C.I. STANDPIPE FOR SPRINKLER DRAINAGE. STUB 24" AFF.
- SUPPLY TYPE TRAP PRIMER (TP-2) LOCATED ABOVE ACCESSIBLE CEILING OR PROVIDE ACCESS PANEL. EXTEND 1/2" TRAP PRIMER DISTRIBUTION LINES DOWN IN WALL TO LEVEL 0.
- PROVIDE WASTE TYPE TRAP PRIMER (TP-3) ON LAVATORY DRAIN.

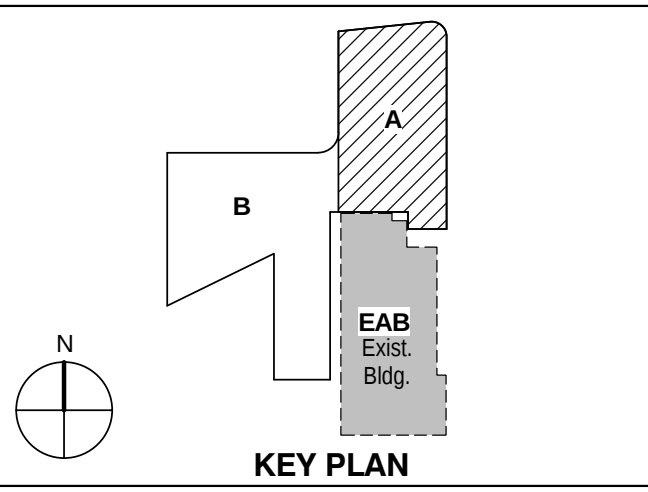
KEYED NOTES: (THIS SHEET ONLY)

- NOT USED.
- FLOOR SINK FOR USE ON LEVEL 3. COORDINATE INSTALLATION WITH THE GENERAL CONTRACTOR FOR THE FLOOR OPENING.
- PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 1/2" CW, 1/2" HW AND 2" VENT DOWN IN WALL TO SERVE FIXTURE.
- BREAKROOM SINKS ARE TO BE SERVED FROM WATER, WASTE AND VENT PIPING IN TOILET ROOM CHASE.
- PROVIDE SHUT-OFF VALVES AT THE ENTRY TO EACH ROOM.
- EMERGENCY SHOWER TO BE SERVED WITH FIELD FURNISHED AND INSTALLED 1" TEMPERED WATER TO SHOWER HEAD FROM WALL RECESSED CABINET. EYEWASH PORTION OF ASSEMBLY TO 2" WASTE AND 2" VENT. TYPICAL FOR ALL INSTALLATIONS. REFER TO DRAWING P0403, DETAIL 3.
- DECK MOUNTED EMERGENCY EYEWASH TO BE LOCATED AT SINK. INSTALL THERMOSTATIC MIXING VALVE IN CABINET SPACE BELOW THE SINK. COORDINATE MOUNTING REQUIREMENTS OF EYEWASH AND TMV WITH THE GENERAL CONTRACTOR. TYPICAL FOR ALL INSTALLATION. REFER TO DRAWING P0403, DETAIL 4.
- DROP PIPING DOWN TO BELOW STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.
- PIPING IN CORRIDOR TO BE RUN AT BOTTOM OF STRUCTURAL STEEL CROSS MEMBERS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 4" SANITARY VENT RISER UP TO SERVE WATER CLOSETS, URINALS AND FLOOR DRAINS ON EACH LEVEL.
- 4" SANITARY WASTE RISER UP TO SERVE WATER CLOSETS, URINALS AND FLOOR DRAINS ON EACH LEVEL.
- 2" SANITARY WASTE RISER UP TO SERVE LAVATORIES ON EACH LEVEL.
- 2" SANITARY VENT UP TO SERVE LAVATORIES ON EACH LEVEL.
- FLOOR SINK UNDER COUNTERTOP WITH IN CASEWORK. VERIFY LOCATION WITH EXACT EQUIPMENT PLACEMENT PRIOR TO ROUGH-IN. COORDINATE FLOOR OPENING WITH THE GENERAL CONTRACTOR.
- HOT WATER RETURN CIRCUIT SETTER VALVE. LOCATE IN AN ACCESSIBLE LOCATION ABOVE THE CEILING. REFER TO DRAWING P0502, DETAIL 11/P0502.
- COORDINATE AND VERIFY LOCATION OF DOWNSPOUT NOZZLE AND WALL SLEEVE PRIOR TO ROUGH-IN.
- REFER TO DRAWING P0405 WASTE SUPPLY, RISER 6.
- REFER TO DRAWING P0407 WATER SUPPLY, RISER 3.
- REFER TO DRAWING P0405 WATER SUPPLY, RISER 2.
- REFER TO DRAWING P0407 WATER SUPPLY, RISER 4.
- REFER TO DRAWING P0407 WATER SUPPLY, RISER 3.
- 1/2" HW DOWN IN WALL TO SERVE UNDERCOUNTER GLASS WASHER. VERIFY CONNECTION POINT AND LOCATION. PROVIDE ALL FITTINGS AS REQUIRED.
- 1/2" CW AND 1/2" HW DOWN IN WALL TO SERVE CLASS 1 BIOLOGICAL CABINET. VERIFY CONNECTION POINT AND LOCATION. PROVIDE ALL FITTINGS AS REQUIRED.
- FLOOR SINK TO SERVE COUNTERTOP AUTOCLAVE. VERIFY LOCATION WITH EXACT EQUIPMENT PLACEMENT PRIOR TO ROUGH-IN. COORDINATE FLOOR OPENING WITH THE GENERAL CONTRACTOR.
- 1/2" CW DOWN IN WALL TO SERVE COUNTERTOP AUTOCLAVE. VERIFY EXACT EQUIPMENT PLACEMENT PRIOR TO ROUGH-IN.
- PROVIDE WASTE TYPE TRAP PRIMER (TP-3) ON LAVATORY DRAIN.



1 LEVEL 02 AREA A FLOOR PLAN - PLUMBING
1/8" = 1'-0"

4	ASI - 033 (RFI 261.286.309 & 310)	03 NOV 2016
3	ADDENDUM 2-4	24 MAY 2015
2	ADDENDUM 2-2	19 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



KEY PLAN

LEVEL 02 AREA A FLOOR
PLAN - PLUMBING

Project No.: 04561.01 Checked by:

P0102.A

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314.534.1053

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314.991.2228

Kuhlmann Leavitt, Inc.
Environmental Graphics & Signage
7400 Pershing Ave
St. Louis, MO 63130
314.725.6616

KWA Architects
Architecture
9721 Litzinger Road
St. Louis, MO 63124
314.962.2560

Spellman Brady & Company
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8251 Maryland Avenue, Suite 300
St. Louis, MO 63105
314.862.0070

SWT Design
Landscape Architect
7722 Big Bend Blvd
St. Louis, MO 63119
314.644.5700

Webb Engineering Services, Inc.
Plumbing & Fire Protection
1400 S. 3rd Street, Suite 201
St. Louis, MO 63104
314.588.0600

- 1 NOT USED.

2 NOT USED.

3 PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.

4 1/2" CW, 1/2" HW AND 2" VENT DOWN IN WALL TO SERVE FIXTURE.

5 BREAKROOM SINKS ARE TO BE SERVED FROM WATER, WASTE AND VENT PIPING IN TOILET ROOM CHASE.

6 PROVIDE SHUT-OFF VALVES AT THE ENTRY TO EACH ROOM.

7 EMERGENCY SHOWER TO BE SERVED WITH FIELD FURNISHED AND INSTALLED 1" CW AND WATER TO SHOWER HEAD FROM WALL RECESSED CABINET. EYEWASH FORTION OF ASSEMBLY TO 2" WASTE AND 2" VENT TYPICAL FOR ALL INSTALLATIONS. REFER TO DRAWING P0403, DETAIL 3.

8 DECK MOUNTING OF EYEWASH TO BE LOCATED AT SINK. INSTALL THERMOSTATIC MIXING VALVE IN CABINET SPACE BELOW THE SINK. COORDINATE MOUNTING REQUIREMENTS OF EYEWASH AND TMV WITH THE GENERAL CONTRACTOR. TYPICAL FOR ALL INSTALLATION. REFER TO DRAWING P0403, DETAIL 4.

9 DROP PIPING DOWN TO BELOW STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.

10 PIPING IN CORRIDOR TO BE RUN AT BOTTOM OF STRUCTURAL STEEL CROSS MEMBERS. COORDINATE INSTALLATION WITH AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.

11 4" SANITARY VENT RISER UP.

12 4" SANITARY WASTE RISER UP TO SERVE WATER CLOSETS, URINALS AND FLOOR DRAINS ON EACH LEVEL.

13 2" SANITARY WASTE RISER UP TO SERVE LAVATORIES ON EACH LEVEL.

14 NOT USED.

15 NOT USED.

16 HOT WATER RETURN CIRCUIT SETTER VALVE. LOCATE IN AN ACCESSIBLE LOCATION ABOVE THE CEILING. REFER TO DRAWING P0502, DETAIL 11/P0502.

17 WATER SERVICE UP TO ISLAND LAB BENCH SINKS ON LEVEL 4. COORDINATE WITH CASEWORK.

18 NOT USED.

19 ROOF DRAIN AND OVERFLOW DRAINS FROM LEVEL 4. REFER TO DRAWING P0104 FOR CONTINUATION.

20 BACKFLOW PREVENTER FOR MECHANICAL MAKE-UP WATER. COORDINATE WITH THE MECHANICAL CONTRACTOR.

21 2" SANITARY VENT RISER UP TO SERVE LAVATORIES ON EACH LEVEL.

22 3/4" CW DOWN TO AUTOCLAVE. VERIFY SIZE AND CONNECTION POINT. PROVIDE ALL FITTINGS AS REQUIRED.

23 REFER TO DRAWING P0405 WATER SUPPLY RISER 7.

24 REFER TO DRAWING P0407 WATER SUPPLY RISER 1.

25 REFER TO DRAWING P0405 WATER SUPPLY RISER 3.

26 REFER TO DRAWING P0407 WATER SUPPLY RISER 5.

27 REFER TO DRAWING P0409 WATER SUPPLY RISER 1.

28 REFER TO DRAWING P0405 WATER SUPPLY RISER 5.

29 1/2" CW DOWN IN WALL TO SERVE ICE MACHINE. VERIFY CONNECTION POINT AND LOCATION. PROVIDE ALL FITTINGS AS REQUIRED.

30 1/2" HW DOWN IN WALL TO SERVE UNDERCOUNTER GLASS WASHER. VERIFY CONNECTION POINT TO UNIT AND LOCATION. PROVIDE ALL FITTINGS AS REQUIRED.

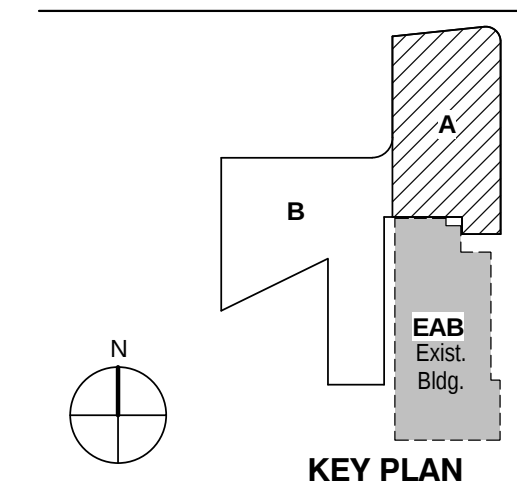
31 1/2" CW DOWN IN WALL TO SERVE FLOOR MOUNTED AUTOCLAVE. VERIFY EXACT EQUIPMENT PLACEMENT PRIOR TO ROUGH-IN.

32 PROVIDE WASTE TYPE TRAPE PRIMER (TP-3) ON LAVATORY DRAIN.

33 1/2" CW TRAP PRIMER DOWN IN WALL TO SERVE FLOOR SINK (FS-2).

5	ASI - 033 (RFI 261,286,309 & 310)	03 NOV 2016
4	ASI - 019 (RFI-193,208 & 212)	29 JUL 2016
3	ADDENDUM 2-4	24 MAY 2016
2	ADDENDUM 2-2	19 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016

No.	Description	Date
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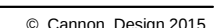
Drawing Title:

**LEVEL 03 AREA A FLOOR
PLAN - PLUMBING**

Project No.: 04561.01

Checked by:

P0103.A



William Tao & Associates, Inc
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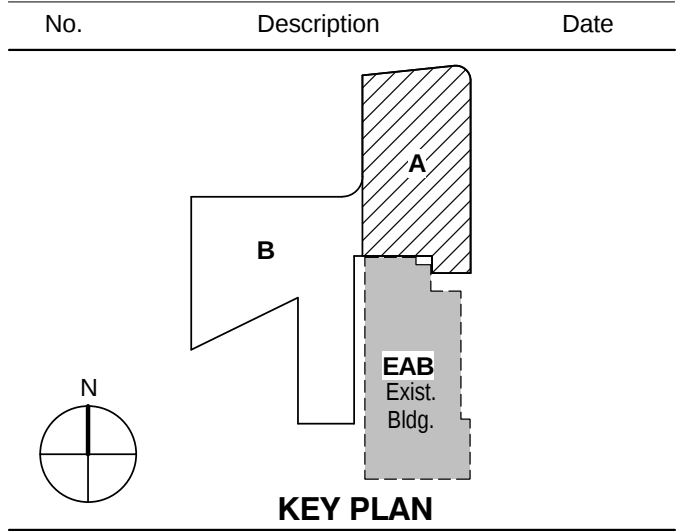
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Plumbing & Fire Protection
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P0105.B



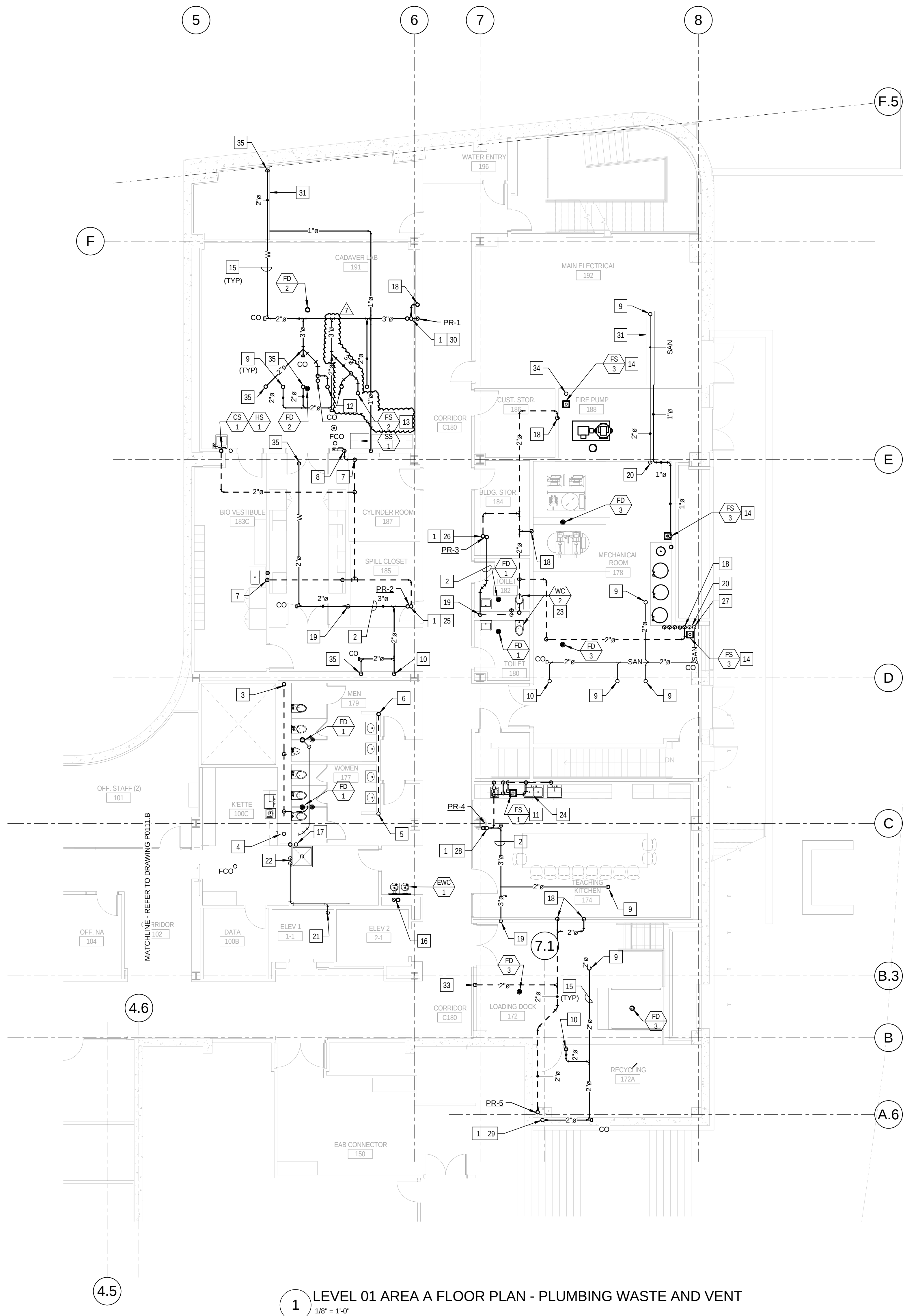
7	ASI - 033 (RFI 261,286,309 & 310)	03 NOV 2016
6	ASI - 025 Neutralization Tanks	09 SEP 2016
5	ASI - 024 (RFI 222,233,235 & 236)	24 AUG 2016
4	ASI - 014 (RFI-176)	21 JUL 2016
3	ADDENDUM 2-4	24 MAY 2015
2	ADDENDUM 2-2	19 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



LEVEL 01 AREA A FLOOR
PLAN - PLUMBING WASTE
AND VENT

Project No.: 04561.01 Checked by:

P0111.A



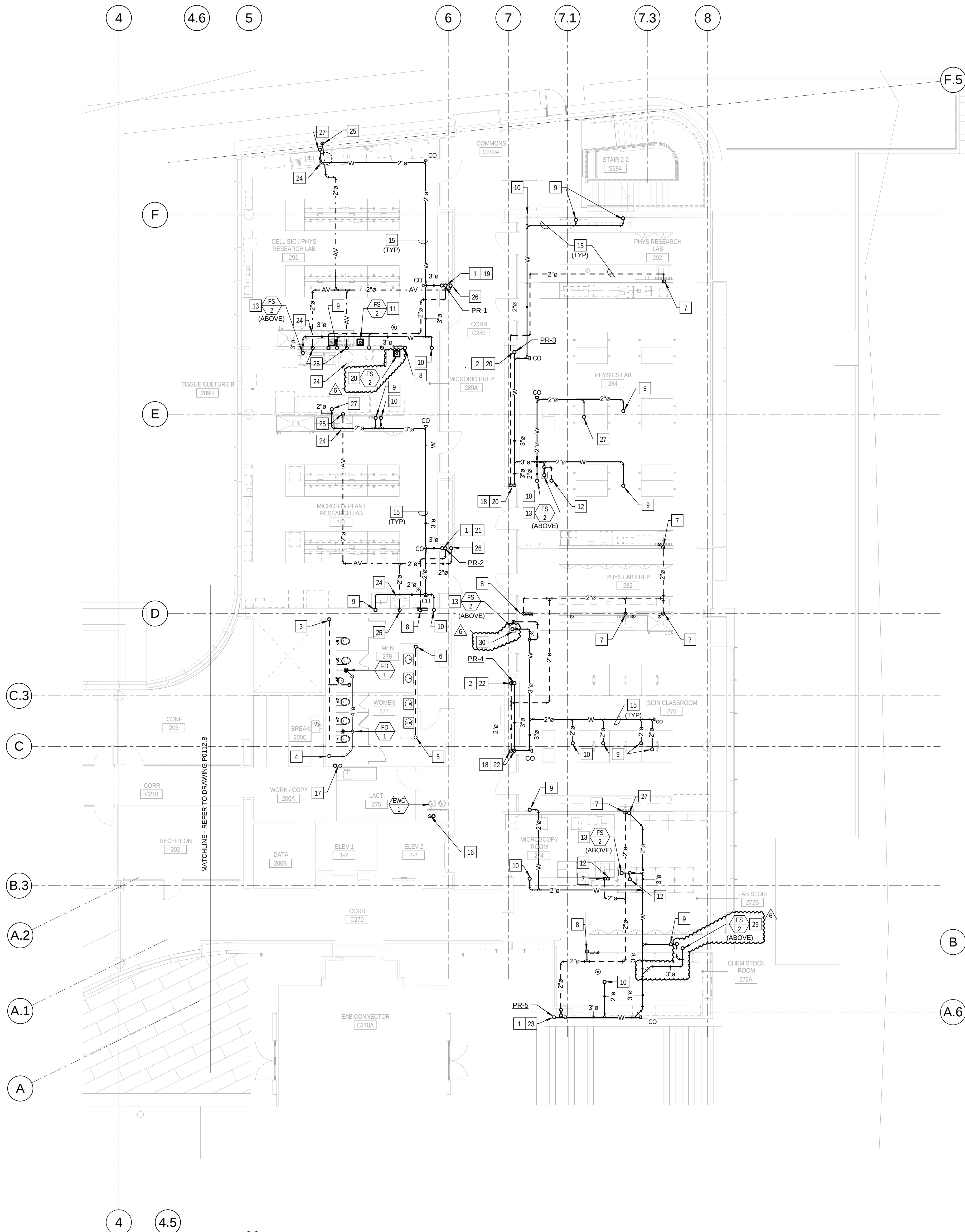
1 LEVEL 01 AREA A FLOOR PLAN - PLUMBING WASTE AND VENT
1/8" = 1'-0"

KEYED NOTES: (THIS SHEET ONLY)

- 3" SANITARY WASTE AND 3" SANITARY VENT RISERS.
- 3" SANITARY WASTE OFF-SET ABOVE THE CEILING TO CONTINUE DOWN TO LEVEL 0.
- 4" SANITARY VENT RISER UP AND DOWN.
- 4" SANITARY WASTE UP AND DOWN. REFER TO DRAWING P0401 FOR RISER DIAGRAM.
- 2" SANITARY WASTE UP AND DOWN. REFER TO DRAWING P0401 FOR RISER DIAGRAM.
- 2" SANITARY VENT UP AND DOWN.
- 2" SANITARY VENT DOWN IN WALL TO SERVE LABORATORY SINK.
- 2" SANITARY VENT DOWN IN WALL TO SERVE EMERGENCY SHOWER.
- 2" SANITARY WASTE UP TO LEVEL 2 LAB SINK.
- 2" SANITARY WASTE UP TO LEVEL 2 EMERGENCY SHOWER EYE/FACE WASH STATION. REFER TO DRAWING P0403 DETAIL 3/ P0403.
- FLOOR SINK TO BE LOCATED BELOW THE CASEWORK TO ACCEPT DISCHARGE FROM THE DISHWASHER AND UNDER COUNTER ICE MAKER. COORDINATE LOCATION WITH CABINET AND APPLIANCES.
- 2" SANITARY VENT UP TO LEVEL 2, ALIGN WITH CASEWORK AND WALL ABOVE.
- FLOOR SINK SET TO SERVE LEVEL 2. COORDINATE LOCATION OF FLOOR SINK WITH CASEWORK ABOVE AND WITH ABOVE CEILING CONDITIONS ON THIS LEVEL.
- FLOOR SINK SET TO SERVE THIS LEVEL.
- PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 2" SANITARY WASTE AND 2" SANITARY VENT RISERS TO SERVE ELECTRIC WATER COOLERS ON EACH LEVEL. REFER TO DRAWING P0401 FOR WASTE AND VENT RISERS.
- 3" SANITARY WASTE AND 2" VENT RISERS TO SERVE MOP BASINS ON LEVELS 1 AND 3 AND COUNTERTOP SINK ON LEVEL 2. REFER TO DRAWING P0401 FOR WASTE AND VENT RISER.
- 2" VENT UP FROM LEVEL 0. REFER TO DRAWING P0011.
- 3" WASTE DOWN TO LEVEL 0. REFER TO DRAWING P0011 FOR CONTINUATION.
- 2" WASTE DOWN TO LEVEL 0. REFER TO DRAWING P0011 FOR CONTINUATION.
- 2" DISCHARGE FROM ELEVATOR SUMP PUMP. EXTEND TO ABOVE THE CEILING OF LEVEL 1 TO JANITOR CLOSET 175.
- TERMINATE ELEVATOR SUMP PUMP DISCHARGE AT THE MOP BASIN WITH AN IN-DIRECT WASTE INTO THE BASIN.
- REFER TO DRAWING P0402 DETAIL 2/ P0402, FOR PLUMBING RISER DIAGRAMS.
- REFER TO DRAWING P0402 DETAIL 1/ P0402, FOR PLUMBING RISER DIAGRAMS.
- REFER TO DRAWING P0404 SANITARY WASTE AND VENT RISER DIAGRAM 2-2.
- REFER TO DRAWING P0406 SANITARY WASTE AND VENT RISER DIAGRAM 3-2.
- REFER TO DRAWING P0406 SANITARY WASTE AND VENT RISER DIAGRAM 3-4.
- REFER TO DRAWING P0408 SANITARY WASTE AND VENT RISER DIAGRAM 4-1.
- REFER TO DRAWING P0408 SANITARY WASTE AND VENT RISER DIAGRAM 5-1.
- REFER TO DRAWING P0404 SANITARY WASTE AND VENT RISER DIAGRAM 1-1.
- TROUGH SAFETY PAN TO BE SUSPENDED BELOW SANITARY WASTE PIPING. EXTEND 1" DRAIN TO SANITARY FLOOD RECEPTOR. REFER TO PLUMBING DRAWING P0503, DETAIL 4.
- NOT USED.
- 2" VENT DOWN IN WALL TO SERVE FLOOR DRAIN IN LOADING DOCK.
- 4" C.I. STANDPIPE FOR SPRINKLER DRAIN. STUB 24" AFF.
- 2" SANITARY WASTE UP TO POINT-OF-USE NEUTRALIZATION TANK.

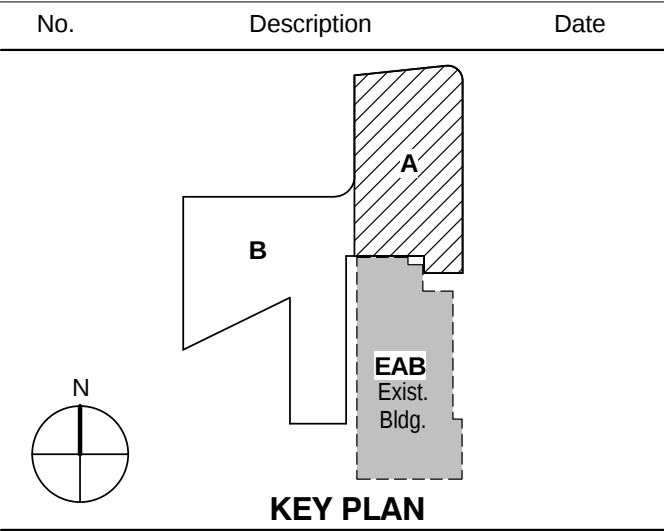
KEYED NOTES: (THIS SHEET ONLY)

- 3" SANITARY WASTE AND 3" SANITARY VENT RISERS.
- 3" SANITARY WASTE AND 3" SANITARY VENT DOWN FROM LEVEL 3. OFF-SET ABOVE THE CEILING TO CONTINUE DOWN.
- 4" SANITARY VENT RISER UP AND DOWN.
- 4" SANITARY WASTE UP AND DOWN. REFER TO DRAWING P0401 FOR RISER DIAGRAMS.
- 2" SANITARY WASTE UP AND DOWN. REFER TO DRAWING P0401 FOR RISER DIAGRAMS.
- 2" SANITARY VENT UP AND DOWN.
- 2" SANITARY VENT DOWN IN WALL TO SERVE LABORATORY SINK.
- 2" SANITARY VENT DOWN IN WALL TO SERVE EMERGENCY SHOWER.
- 2" SANITARY WASTE UP TO LEVEL 3 LAB SINK.
- 2" SANITARY WASTE UP TO LEVEL 3 EMERGENCY SHOWER EYE/FACE WASH STATION. REFER TO DRAWING P0403, DETAIL 3.
- FLOOR SINK TO BE LOCATED BELOW THE CASEWORK TO ACCEPT DISCHARGE FROM THE LAB EQUIPMENT. COORDINATE LOCATION WITH CASEWORK.
- 2" SANITARY VENT UP TO LEVEL 3, ALIGN WITH CASEWORK AND WALL ABOVE. REFER TO DRAWING P0403, DETAIL 3.
- FLOOR SINK SET TO SERVE LEVEL 3. COORDINATE LOCATION OF FLOOR SINK WITH CASEWORK ABOVE AND WITH ABOVE CEILING CONDITIONS ON THIS LEVEL.
- NOT USED.
- PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 2" SANITARY WASTE AND 2" SANITARY VENT RISERS TO SERVE ELECTRIC WATER COOLERS ON EACH LEVEL. REFER TO DRAWING P0401 FOR WASTE AND VENT RISER.
- 3" SANITARY WASTE AND 2" VENT RISERS TO SERVE MOP BASINS ON LEVELS 1 AND 3 AND COUNTERTOP SINK ON LEVEL 2. REFER TO DRAWING P0401 FOR WASTE AND VENT RISER.
- 3" SANITARY WASTE AND 3" SANITARY VENT DOWN.
- REFER TO DRAWING P0404 SANITARY WASTE AND VENT RISER DIAGRAM 1-2.
- REFER TO DRAWING P0406 SANITARY WASTE AND VENT RISER DIAGRAM 3-1.
- REFER TO DRAWING P0404 SANITARY WASTE AND VENT RISER DIAGRAM 2-3.
- REFER TO DRAWING P0408 SANITARY WASTE AND VENT RISER DIAGRAM 4-2.
- REFER TO DRAWING P0408 SANITARY WASTE AND VENT RISER DIAGRAM 5-2.
- 5-GALLON NEUTRALIZATION TANK WITH SLIP-ON COVER, LOCATED BELOW THE COUNTERTOP. REFER TO DRAWING P0404, DETAILS 1 AND 2 FOR PIPING DIAGRAM INSTALLATION.
- 2" ACID VENT DOWN IN WALL TO SERVE NEUTRALIZATION TANK.
- 2" ACID VENT RISER.
- 2" SANITARY WASTE UP TO POINT-OF-USE NEUTRALIZATION TANK.
- FLOOR SINK TO SERVE COUNTERTOP AUTOCLAVE. VERIFY LOCATION WITH EXACT EQUIPMENT PLACEMENT PRIOR TO ROUGH-IN. COORDINATE FLOOR OPENING WITH GENERAL CONTRACTOR.
- FLOOR SINK TO SERVE FLOOR MOUNTED AUTOCLAVE. VERIFY LOCATION WITH EXACT EQUIPMENT PLACEMENT PRIOR TO ROUGH-IN. COORDINATE FLOOR OPENING WITH GENERAL CONTRACTOR.
- 1/2" CW TRAP PRIMER UP TO LEVEL 3.



1 LEVEL 02 AREA A FLOOR PLAN - PLUMBING WASTE AND VENT
1/8" = 1'-0"

6	ASI - 033 (RFI 261.286.309 & 310)	03 NOV 2016
5	ASI - 025 Neutralization Tanks	09 SEP 2016
4	ASI - 014 (RFI-176)	21 JUL 2016
3	ADDENDUM 2-4	24 MAY 2015
2	ADDENDUM 2-2	19 APR 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



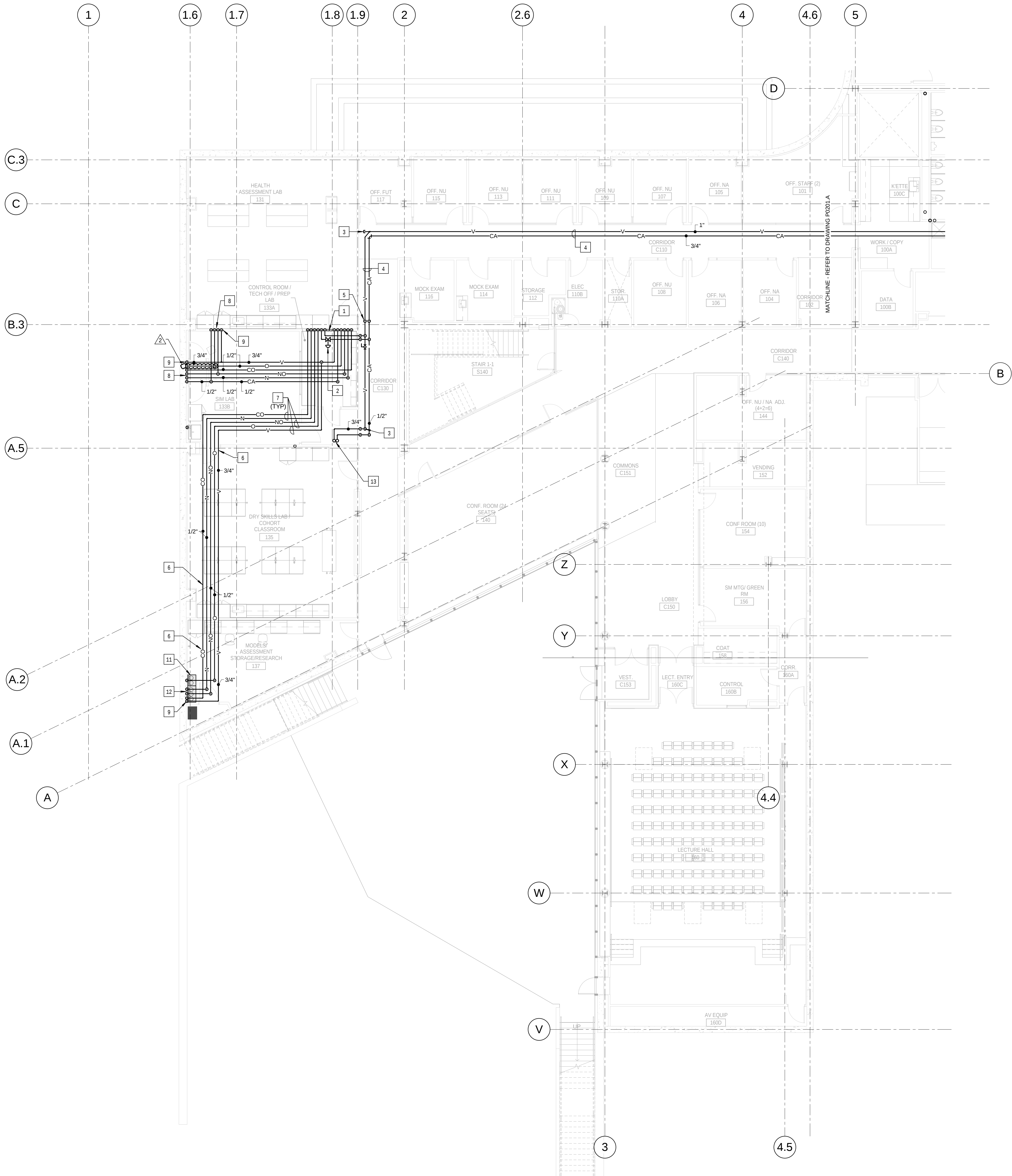
KEY PLAN

LEVEL 02 AREA A FLOOR
PLAN - PLUMBING WASTE
AND VENT

Project No.: 04561.01 Checked by:

P0112.A

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KEYED NOTES: (THIS SHEET ONLY)

- 1 MEDICAL GAS ZONE VALVE BOX RECESSED INTO WALL TO SERVE MEDICAL GASES INDICATED. BEACONMEDAES MOEL 2VB6-AAAAAB-ENG, SIX VALVE CONFIGURATION, WITH FIVE 1/2" VALVES AND ONE 3/4" VALVE FOR VACUUM. ASSEMBLY TO BE COMPLETE WITH MANUFACTURERS PRESSURE GAUGES. REFER TO SPECIFICATION SECTION 226313 GAS PIPING FOR LABORATORY AND HEALTHCARE FACILITIES. REFER TO THE ARCHITECTURAL DRAWINGS FOR ZONE VALVE BOX LOCATION AND MOUNTING HEIGHT.
- 2 INSTALL SINGLE STAGE IN-LINE AIR PRESSURE REGULATOR, BEACONMEDAES MODEL 6-122101-00. ADJUSTABLE FROM 5 TO 55 PSI DELIVERY RANGE, PROVIDE WITH MODEL 6-130115-00, 0 TO 100 PSI PRESSURE GAUGE. MOUNT ABOVE THE CEILING IN AN ACCESSABLE LOCATION. POSITION FOR FULL ACCESS TO THE ADJUSTMENT NUT AND GAUGE. SET TO 50 PSI.
- 3 PROVIDE CLEANOUT PLUG IN PIPING.
- 4 PIPING IN CORRIDOR TO BE RUN AT BOTTOM OF STRUCTURAL STEEL CROSS MEMBERS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 5 DROP PIPING DOWN TO BELOW STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.
- 6 HOLD PIPING TIGHT TO BOTTOM OF STRUCTURAL MEMBER.
- 7 PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES PRIOR TO ROUGH-IN.
- 8 EXTEND PIPING DOWN IN WALL TO WALL MOUNTED D.I.S.S SERVICE OUTLETS FOR THE MEDICAL GASES INDICATED. REFER TO SPECIFICATION SECTION 226313 GAS PIPING FOR LABORATORY AND HEALTHCARE FACILITIES FOR D.I.S.S. SERVICE OUTLETS. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE LOCATION AND MOUNTING HEIGHTS.
- 9 PROVIDE D.I.S.S. SERVICE FITTING FOR SCAVENGING SYSTEM CONNECTION.
- 10 NOT USED.
- 11 MANUFACTURED STEEL GAS CYLINDER CABINET FOR TWO OXYGEN CYLINDERS. SERVICE PIPING TO EXTEND DOWN INSIDE WALL AND ENTER THE CABINET FROM THROUGH THE REAR CABINET PANEL. CABINET TO BE FURNISHED AND INSTALLED BY OTHERS. COORDINATE PIPE ENTRY PRIOR TO ROUGH-IN. TERMINATE PIPING IN CABINET TO ACCEPT CONNECTION FROM CYLINDER REGULATOR ASSEMBLY.
- 12 MANUFACTURED STEEL GAS CYLINDER CABINET FOR THREE MEDICAL GAS CYLINDERS; NITROGEN, NITROUS OXIDE AND CARBON DIOXIDE. SERVICE PIPING TO EXTEND DOWN INSIDE WALL AND ENTER THE CABINET FROM THROUGH THE REAR CABINET PANEL. CABINET TO BE FURNISHED AND INSTALLED BY OTHERS. COORDINATE PIPE ENTRY PRIOR TO ROUGH-IN. TERMINATE PIPING IN CABINET TO ACCEPT CONNECTION FROM CYLINDER REGULATOR ASSEMBLY.
- 13 EXTEND VACUUM AND COMPRESSED AIR PIPING UP TO LEVEL 2. ALIGN WITH WALL ABOVE. REFER TO DRAWING P0202.B FOR CONTINUATION.



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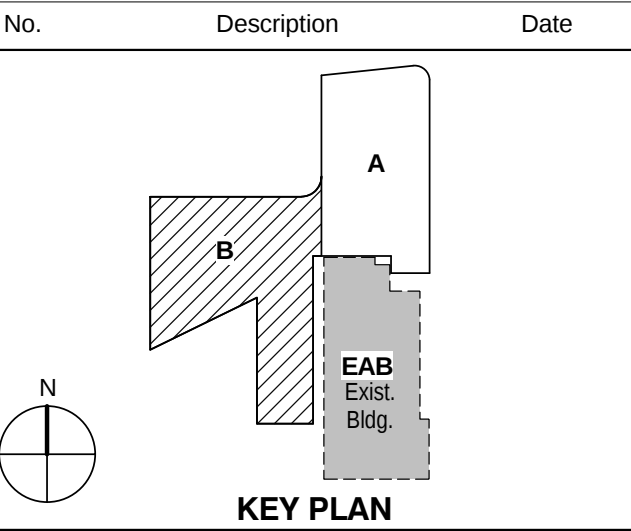
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2	ASI - 033 (RFI 261.286.309 & 310)	03 NOV 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016



Drawing Title:

**LEVEL 01 AREA B FLOOR
PLAN - LABORATORY
COMPRESSED AIR AND
VACUUM PIPING**

Project No.: 04561.01 Checked by:

P0201.B

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3	ASI - 033 (RFI 261.286.309 & 310)	03 NOV 2016
2	ADDENDUM 2-4	24 MAY 2016
1	ADDENDUM 2-1	17 MAR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date

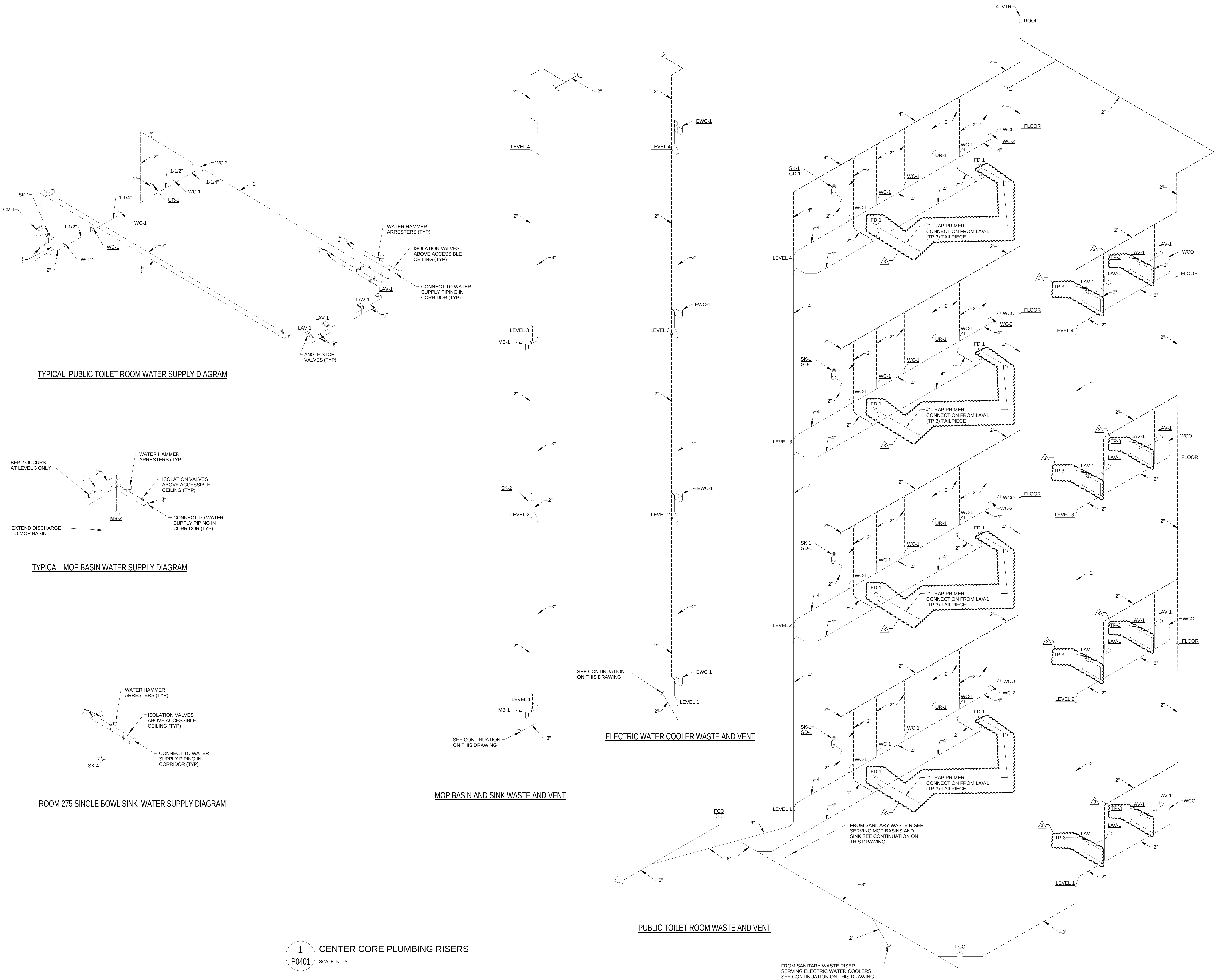
Drawing Title:

RISERS - PLUMBING

Project No.: 04561.01

Checked by:

P0401



TYPICAL PUBLIC TOILET ROOM WATER SUPPLY DIAGRAM

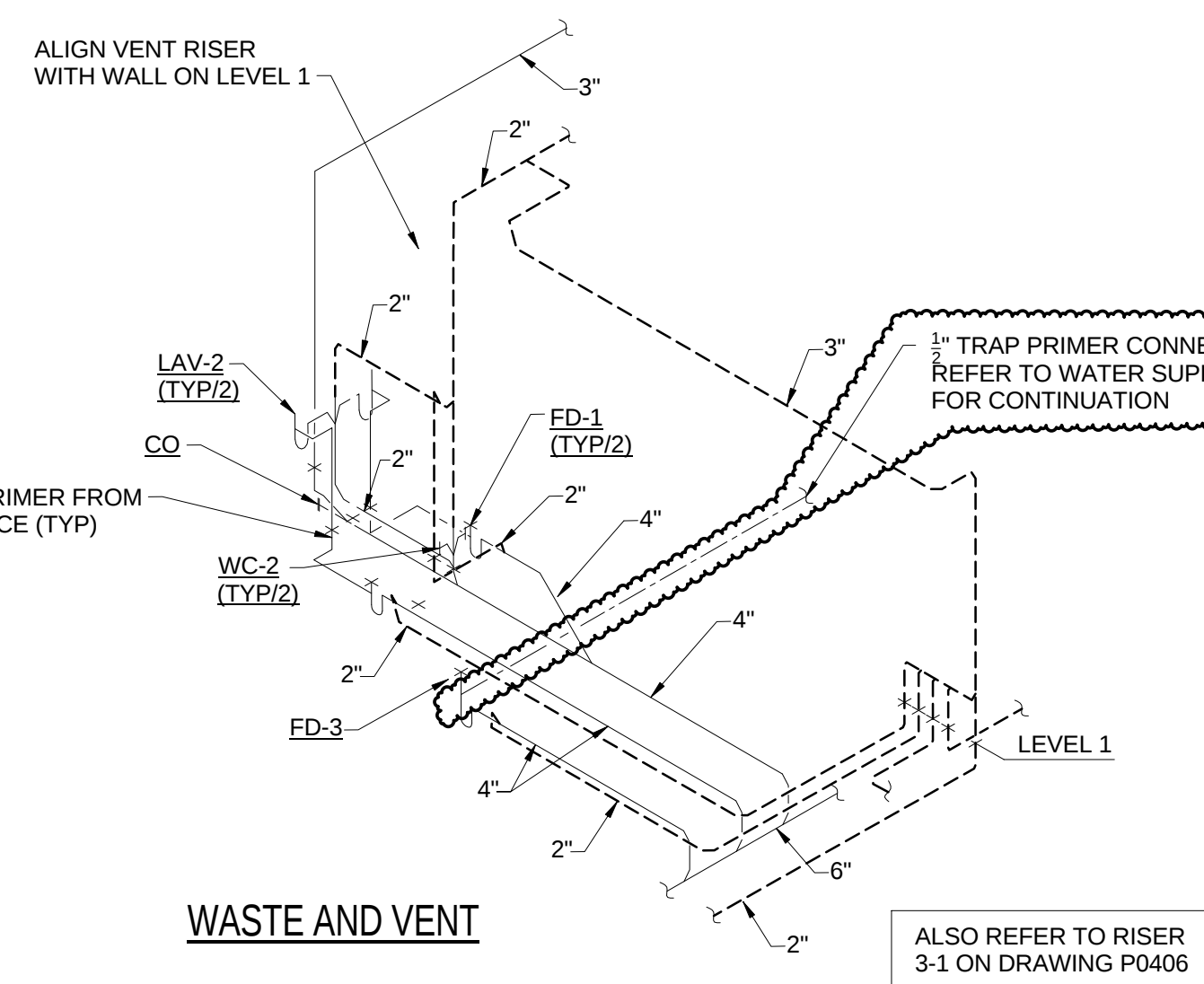
TYPICAL MOP BASIN WATER SUPPLY DIAGRAM

ROOM 275 SINGLE BOWL SINK WATER SUPPLY DIAGRAM

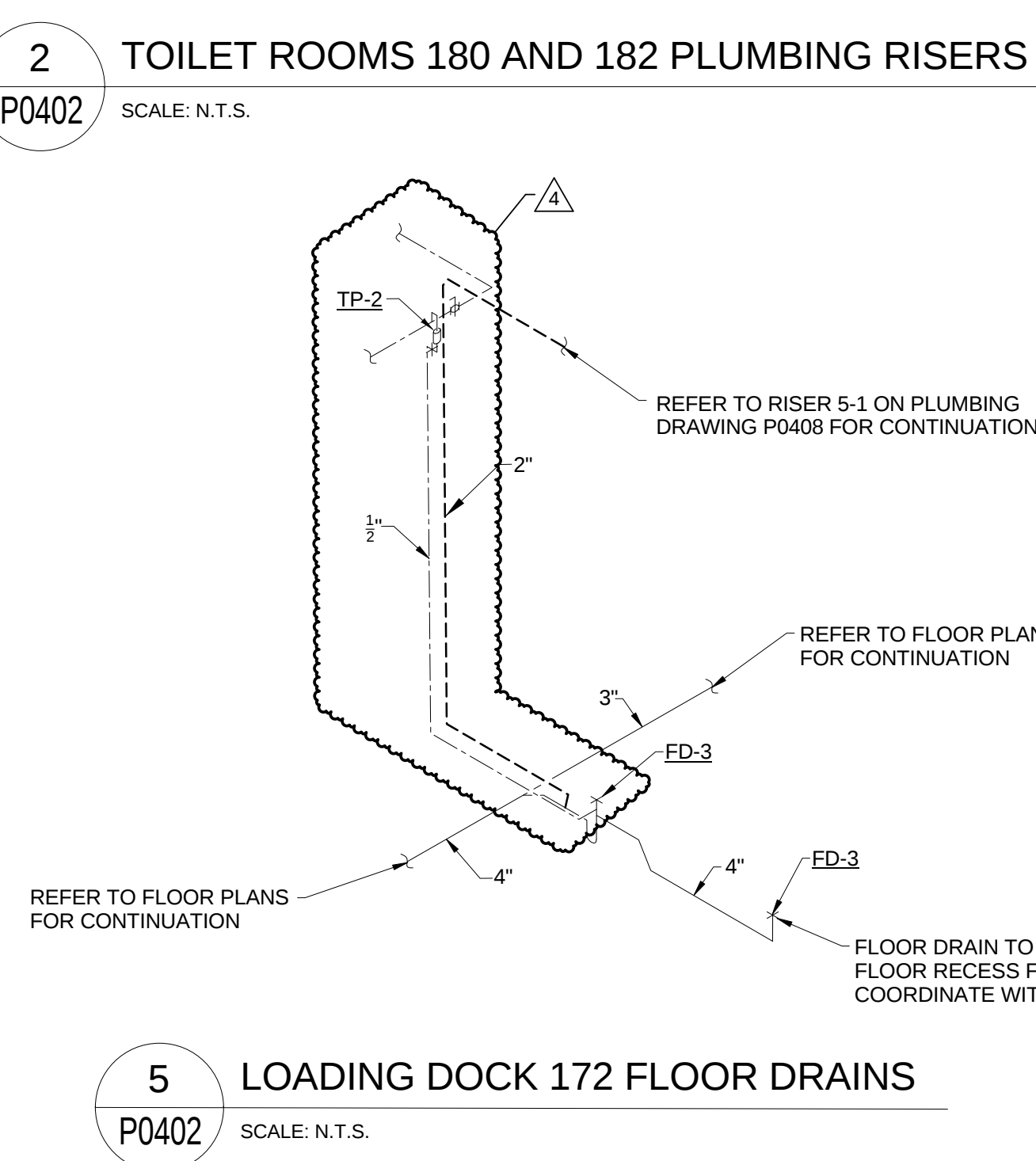
ELECTRIC WATER COOLER WASTE AND VENT

MOP BASIN AND SINK WASTE AND VENT

PUBLIC TOILET ROOM WASTE AND VENT



WATER SUPPLY

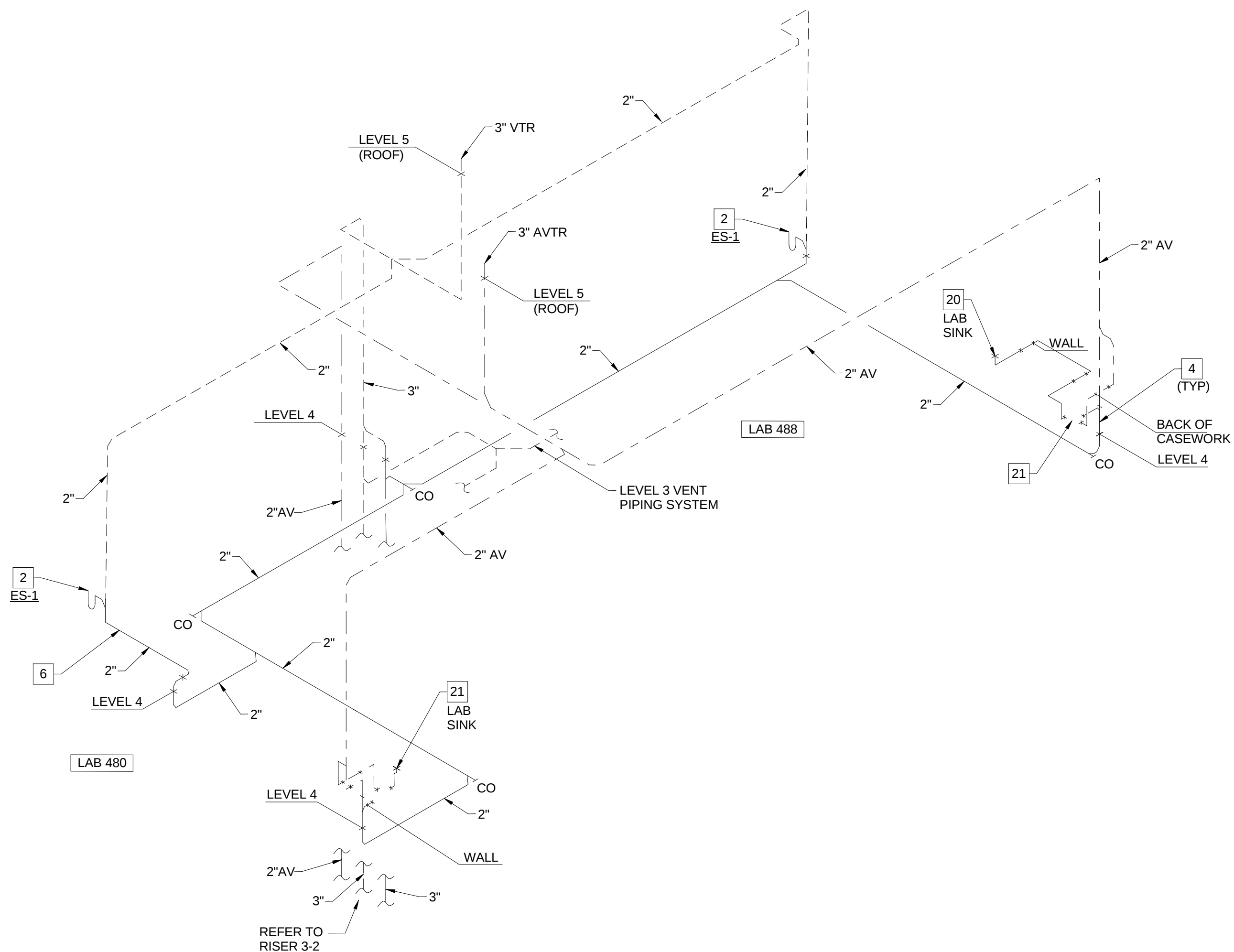


WATER SUPPLY

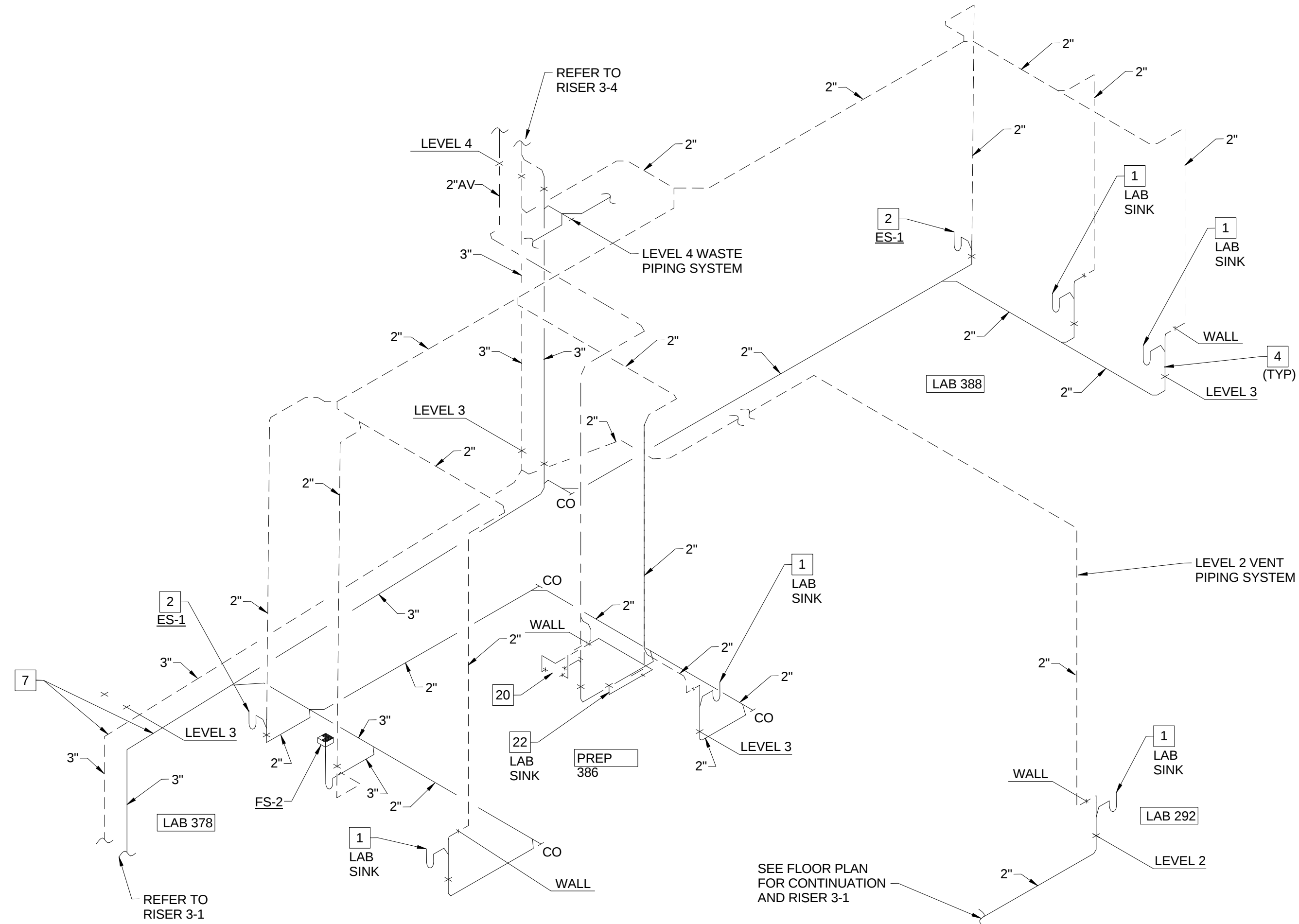


3. LEVEL 1 AND LEVEL 2 AREA B RISERS





3-4 SANITARY WASTE AND VENT RISER - LAB 480 AND LAB 488

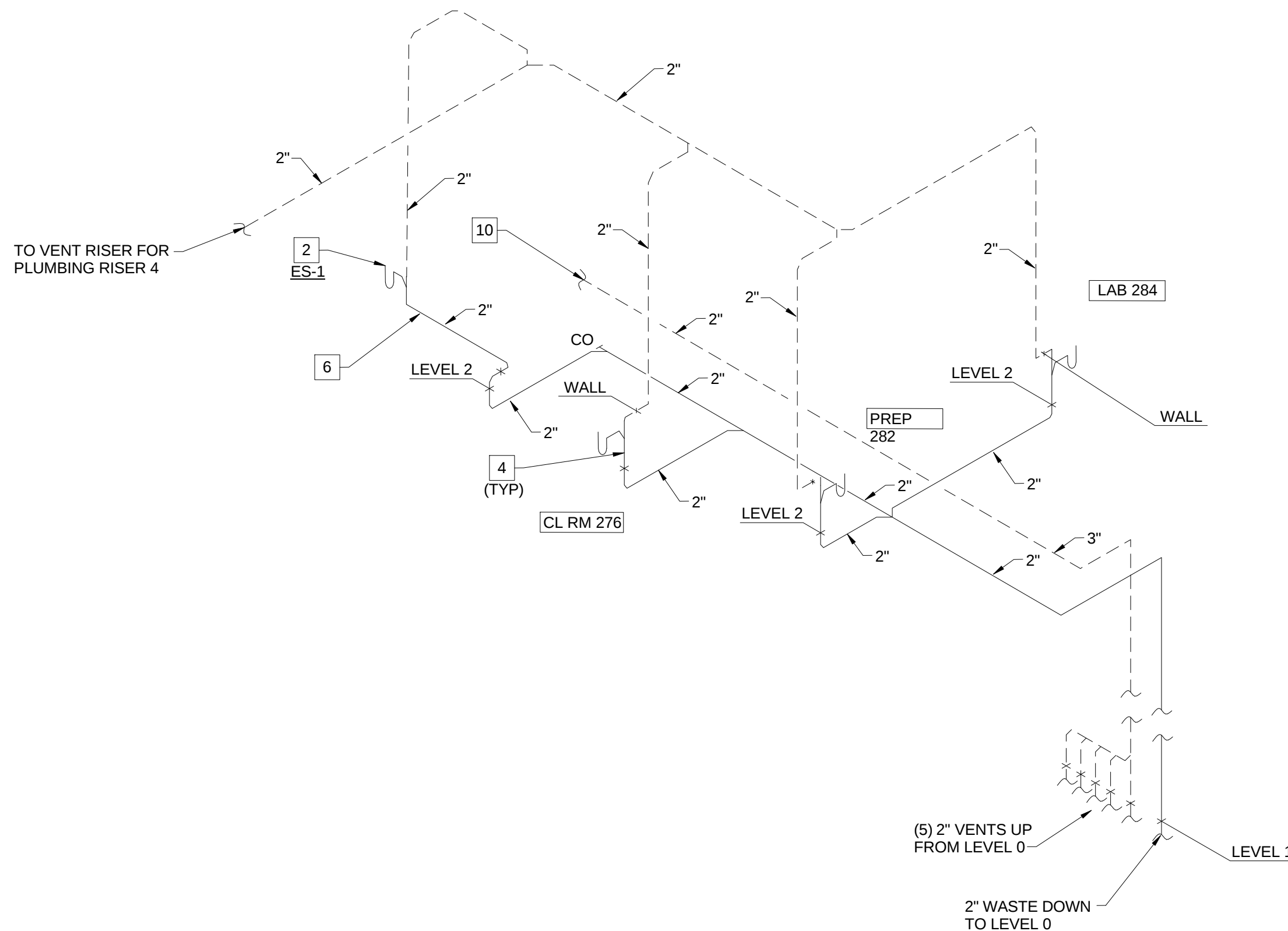


3-2 SANITARY WASTE AND VENT RISER - LAB 292, LAB 378, PREP 386 AND LAB 388

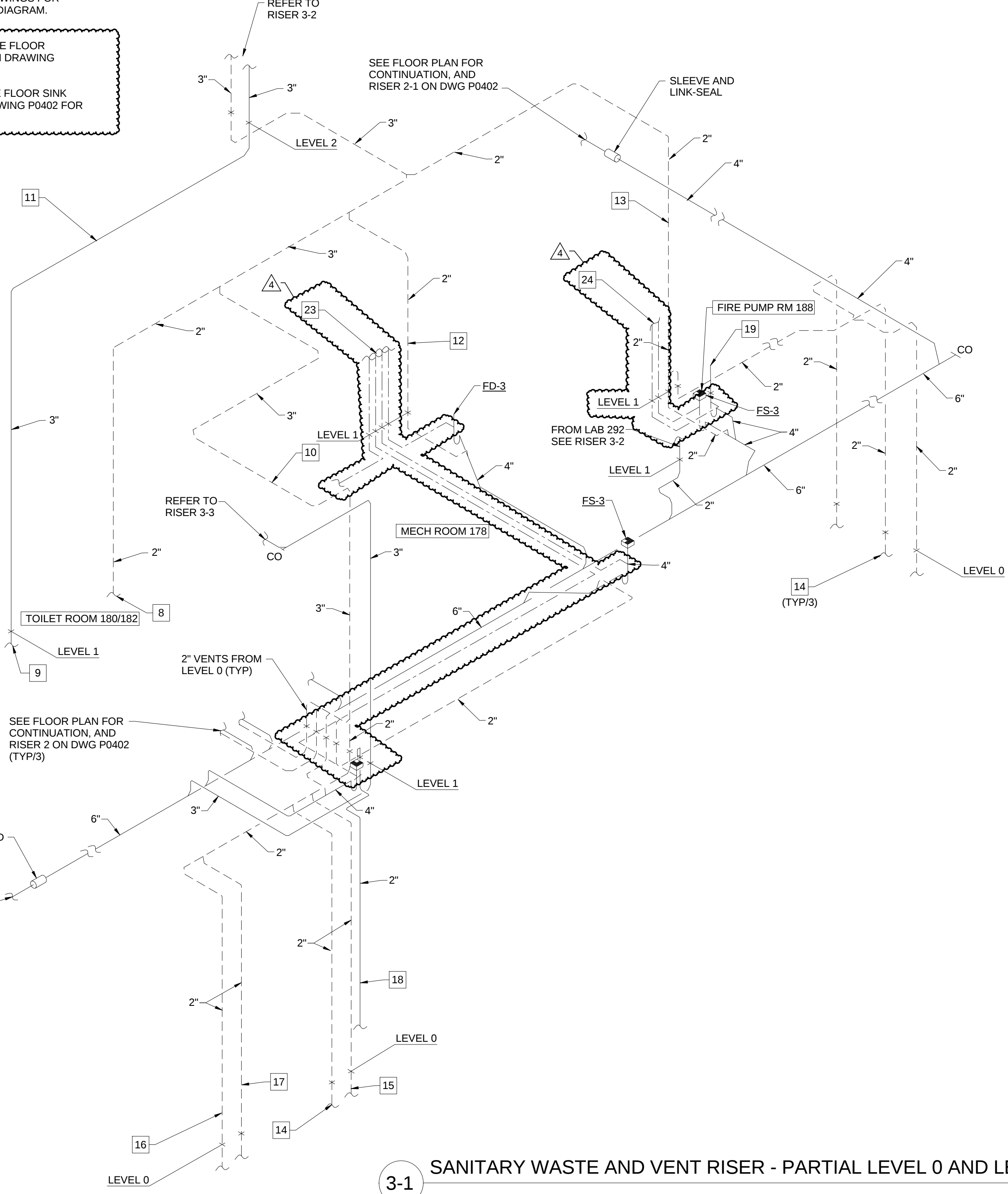
1 PLUMBING WASTE AND VENT RISERS FOR PLUMBING RISER PR-3
P0406 SCALE: N.T.S.

KEYED NOTES (THIS SHEET ONLY)

- 1 REFER TO DRAWING P0503, DETAIL 2/P0503 FOR TYPICAL LAB SINK WASTE CONNECTION DETAIL.
- 2 REFER TO DRAWING P0403, DETAIL 3/P0403 FOR TYPICAL EMERGENCY SHOWER PIPING DIAGRAM. COORDINATE PENETRATION THROUGH THE FLOOR WITH THE STRUCTURE BELOW AND THE ARCHITECTURAL DRAWINGS, OFF-SET THE PIPING AS REQUIRED.
- 3 OFF-SET VENT PIPING INTO THE WALL CAVITY TO EXTEND ABOVE THE CEILING. TYPICAL FOR LAB SINKS OR WHERE APPLICABLE.
- 4 WASTE PIPING TO BE LOCATED IN THE UTILITY SPACE BETWEEN THE WALL AND BACK OF CASEWORK. COORDINATE PENETRATION THROUGH THE FLOOR WITH THE STRUCTURE BELOW AND THE ARCHITECTURAL DRAWINGS, OFF-SET PIPING AS REQUIRED. TYPICAL FOR LAB SINKS OR WHERE APPLICABLE.
- 5 COORDINATE ROUTING AND INSTALLATION OF THE WASTE AND VENT PIPING ABOVE THE CEILING WITH STRUCTURAL ELEMENTS AND OTHER TRADES ON THIS PROJECT. HOLD PIPING AS HIGH AS POSSIBLE, WHERE POSSIBLE. TYPICAL FOR ALL ABOVE THE CEILING PIPING.
- 6 EXTEND WASTE FROM EMERGENCY SHOWER HORIZONTAL IN WALL CAVITY TO AN AREA BEHIND THE LABORATORY CASE WORK. TURN PIPING OUT OF WALL WITHIN UTILITY SPACE BEHIND THE CASEWORK TO TURN DOWN THROUGH THE FLOOR. COORDINATE PENETRATION THROUGH THE FLOOR WITH THE STRUCTURE BELOW AND THE ARCHITECTURAL DRAWINGS, OFF-SET PIPING AS REQUIRED.
- 7 3" WASTE AND 3" VENT TO BE OFF-SET AT LEVEL 2 TO CONTINUE DOWN. COORDINATE INSTALLATION AND ROUTING WITH STRUCTURE AND BUILDING CONDITIONS.
- 8 2" VENT IN PLUMBING CHASE SERVING PLUMBING FIXTURE IN TOILET ROOMS 180 / 182.
- 9 3" WASTE DOWN TO LEVEL 0 IN PLUMBING CHASE OF TOILET ROOMS 180 / 182.
- 10 3" VENT EXTENDED HIGH IN SPACE.
- 11 3" WASTE TO BE OFF-SET AT LEVEL 1 TO CONTINUE DOWN. COORDINATE INSTALLATION AND ROUTING WITH STRUCTURE AND BUILDING CONDITIONS.
- 12 2" VENT UP FROM LEVEL 0 SERVING FLOOR DRAINS IN MECHANICAL ROOM 178.
- 13 2" VENT UP FROM LEVEL 0 SERVING FLOOR SINK IN FIRE PUMP ROOM 188, AND FLOOR DRAINS ON LEVEL 0.
- 14 2" VENT FROM LEVEL 0 FLOOR DRAINS
- 15 2" VENT FROM SUMP PUMP SP-3, ON LEVEL 0.
- 16 2" VENT FROM SUMP PUMPS SP-1 / SP-2 ON LEVEL 0.
- 17 2" VENT FROM SAND INTERCEPTOR ON LEVEL 0.
- 18 2" PUMP DISCHARGE FROM SUMP PUMP SP-3 ON LEVEL 0. TERMINATE INTO FLOOR SINK FS-3 ON LEVEL 1 AS AN INDIRECT WASTE.
- 19 4 INCH CAST IRON OPEN STANDPIPE DRAIN - STUB TOP OF PIPE TWO FEET ABOVE FINISHED FLOOR. COORDINATE LOCATION WITH THE GENERAL CONTRACTOR AND FIRE SUPPRESSION CONTRACTOR.
- 20 LAB SINK TO BE CONNECTED TO POINT-OF-USE NEUTRALIZATION TANK REMOTE FROM THE SINK LOCATION. COORDINATE WITH THE ARCHITECTURAL DRAWINGS FOR THE CASEWORK. REFER TO DRAWING P0404, DETAIL 1/P0404 FOR TYPICAL PIPING DIAGRAM. PIPING TO BE ADJUSTED AS REQUIRED FOR EACH LOCATION.
- 21 POINT-OF-USE NEUTRALIZATION TANK. COORDINATE LOCATION AND PLACEMENT WITH WITH CASEWORK. CONSIDERATION SHALL BE GIVEN FOR SERVICE AND MAINTENANCE ACCESSIBILITY.
- 22 LAB SINK AND GLASS WASHER TO BE CONNECTED TO POINT-OF-USE NEUTRALIZATION TANK REMOTE FROM THE SINK LOCATION. COORDINATE WITH THE ARCHITECTURAL DRAWINGS FOR THE CASEWORK. REFER TO DRAWING P0404, DETAIL 1/P0404 FOR TYPICAL PIPING DIAGRAM. PIPING TO BE ADJUSTED AS REQUIRED FOR EACH LOCATION.
- 23 FOUR (4) 1/2" CW TRAP PRIMER DISTRIBUTORS DOWN IN WALL TO LEVEL 0 TO SERVE FLOOR DRAINS AND FLOOR SINKS IN LEVEL 1 MECHANICAL ROOM. REFER TO RISER 2-1 ON DRAWING P0402 FOR CONTINUATION.
- 24 TWO (2) 1/2" CW TRAP PRIMER DISTRIBUTORS DOWN IN WALL TO LEVEL 0 TO SERVE FLOOR SINK AND STANDPIPE DRAIN IN LEVEL 1 FIRE PUMP ROOM. REFER TO RISER 2-1 ON DRAWING P0402 FOR CONTINUATION.



3-3 SANITARY WASTE AND VENT RISER - CLASS ROOM 276 AND PREP 282



3-1 SANITARY WASTE AND VENT RISER - PARTIAL LEVEL 0 AND LEVEL 1

4	ASI - 033 (RFI 261.286.309 & 310)	03 NOV 2016
3	ASI - 025 Neutralization Tanks	09 SEP 2016
2	ADDENDUM 2-1	24 MAY 2016
1	ADDENDUM 2-2	19 APR 2016
ISSUED FOR CONSTRUCTION (BP2)		01 MAR 2016
No.	Description	Date

Drawing Title:

RISERS - PLUMBING

Project No.: 04561.01

Checked by:

P0406

4	ASI - 033 (RFI 261,286,309 & 310)	03 NOV 2016
3	ASI - 019 (RFI-193,208 & 212)	29 JUL 2016
2	ADDENDUM 2-4	24 MAY 2016
1	ADDENDUM 2-2	19 APR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016
No.	Description	Date

Drawing Title:

RISERS - PLUMBING

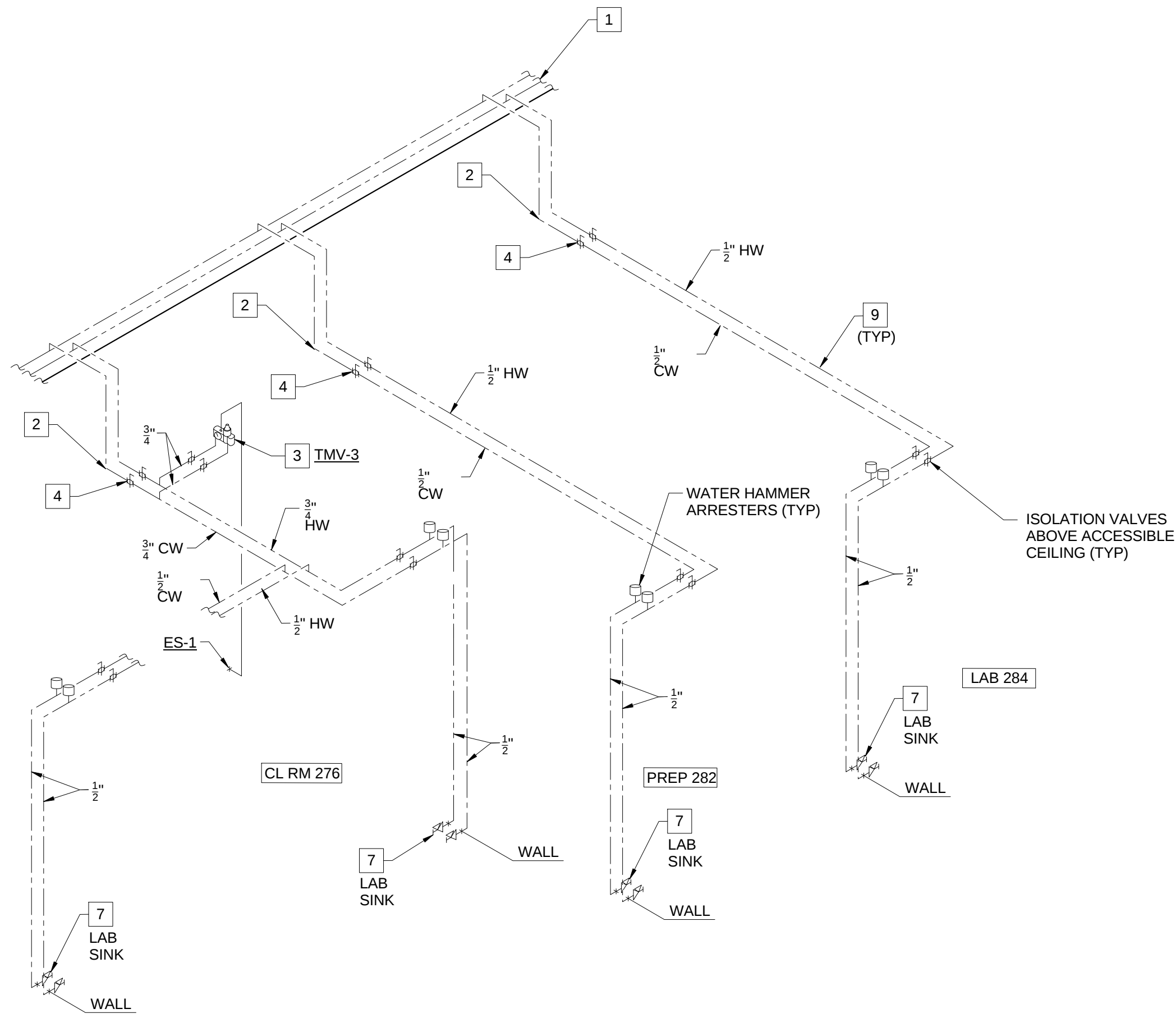
Project No.: 04561.01 Checked by:

P0407

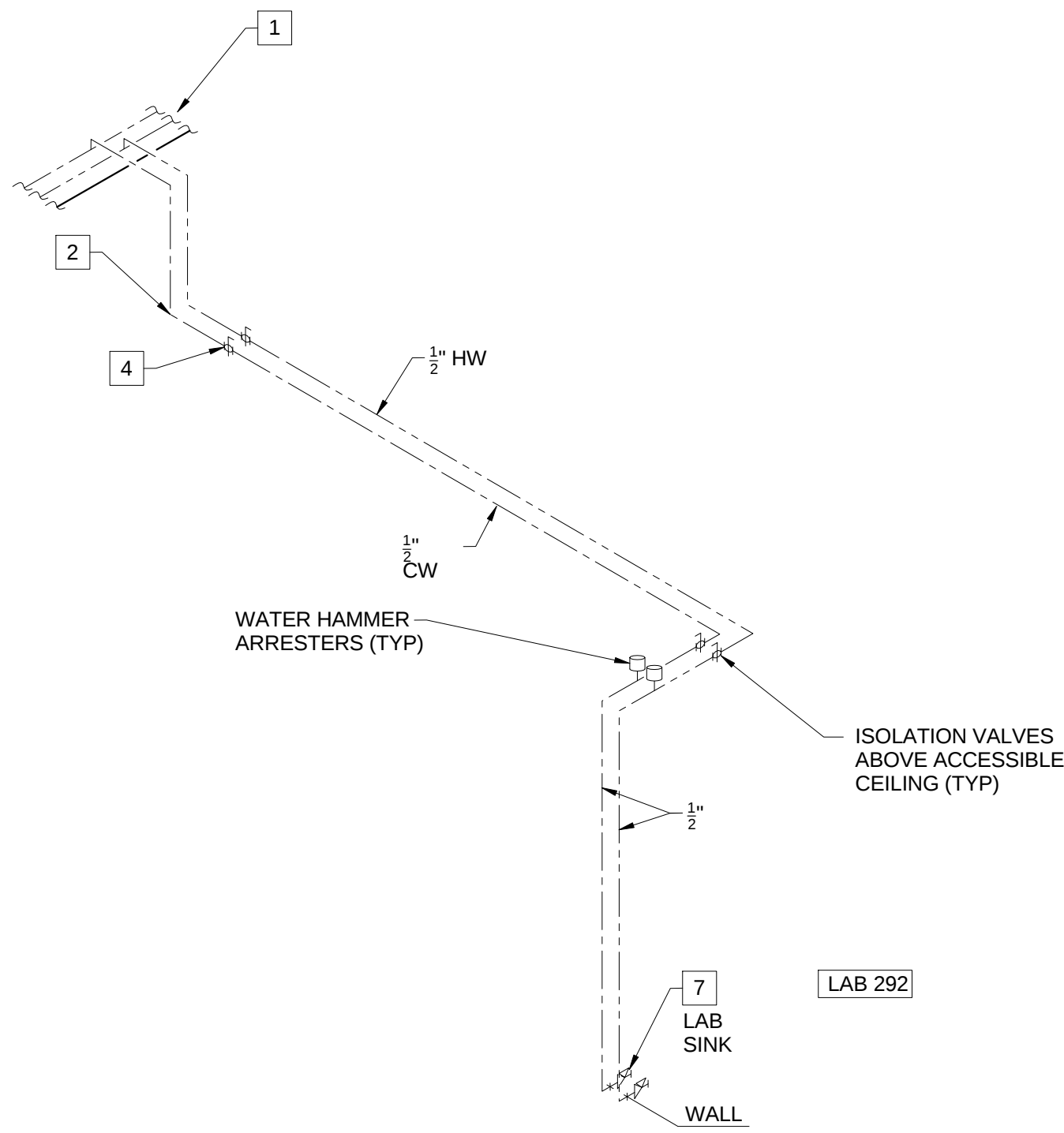
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KEYED NOTES (THIS SHEET ONLY)

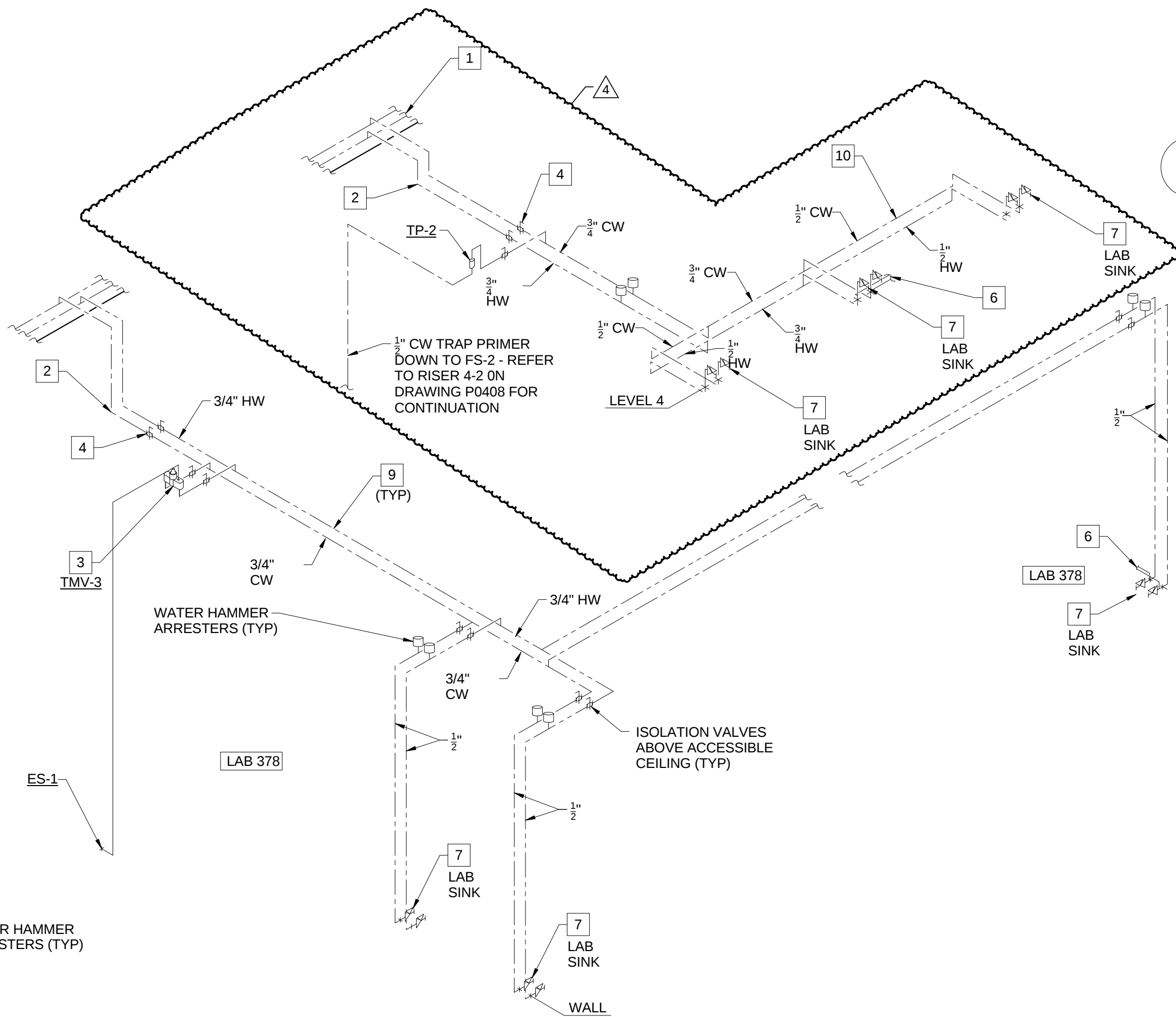
- 1 DOMESTIC WATER PIPING IN THE CORRIDOR TO BE RUN AT THE BOTTOM OF THE STRUCTURAL CROSS MEMBERS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES ON THIS PROJECT.
- 2 DROP PIPIDROP PIPING BELOW THE STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.
- 3 THERMOSTAT THERMOSTATIC MIXING VALVE (TMV-2) SERVING THE EMERGENCY SHOWER TO BE LOCATED ABOVE THE ACCESSIBLE CEILING. REFER TO DRAWING P0403, DETAIL 3/P0403 FOR PIPING DIAGRAM OF EMERGENCY SHOWER. VERIFY LOCATION AND PIPING CONFIGURATION PRIOR TO ROUGH-IN.
- 4 PROVIDE SHUT-OFF VALVES AT THE ENTRY TO EACH ROOM.
- 5 REFER TO DRAWING P0502, DETAIL 11/P0502 FOR HOT WATER RETURN PIPING DIAGRAM.
- 6 WATER PIPING CONNECTION TO THERMOSTATIC MIXING VALVE (TMV-3) SERVING THE DECK MOUNTED EMERGENCY EYEWASH. REFER TO DRAWING P0403, DETAIL 4/P0403 FOR PIPING DIAGRAM OF EMERGENCY EYEWASH. VERIFY LOCATION AND PIPING CONFIGURATION PRIOR TO ROUGH-IN.
- 7 LAB SINK WITH LAB FAUCET TYPE 'LF-1'.
- 8 WATER CONNECTION FOR AUTOCLAVE. COORDINATE LOCATION AND INSTALLATION WITH EQUIPMENT AND CASEWORK. VERIFY EQUIPMENT CONNECTIONS AND LOCATION, PROVIDE FITTINGS AND FINAL CONNECTIONS AS REQUIRED. COORDINATE INSTALLATION WITH EQUIPMENT.
- 9 DOMESTIC WATER PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION WITH OTHER TRADES ON THIS PROJECT PRIOR TO ROUGH-IN.
- 10 DOMESTIC WATER PIPING IN CEILING SPACE OF LEVEL 3 TO SERVE LAB SINKS ON LEVEL 4. COORDINATE ROUTING AND INSTALLATION WITH SPACE CONDITIONS.
- 11 WATER CONNECTION FOR UNDER COUNTER GLASS WASHER. COORDINATE LOCATION AND INSTALLATION WITH EQUIPMENT AND CASEWORK.



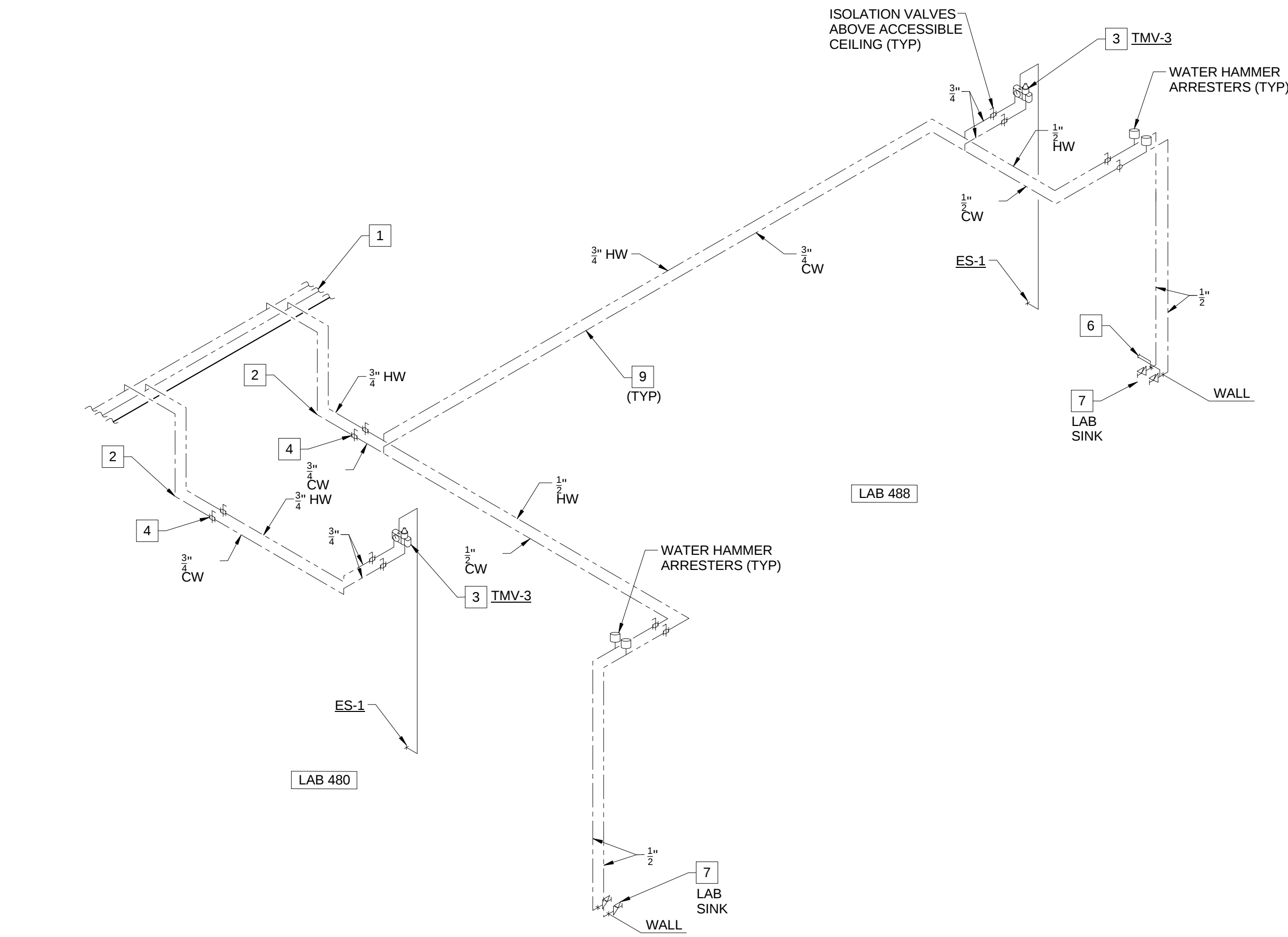
DOMESTIC WATER SUPPLY RISER - CLASS ROOM 276, PREP 282 AND LAB 284



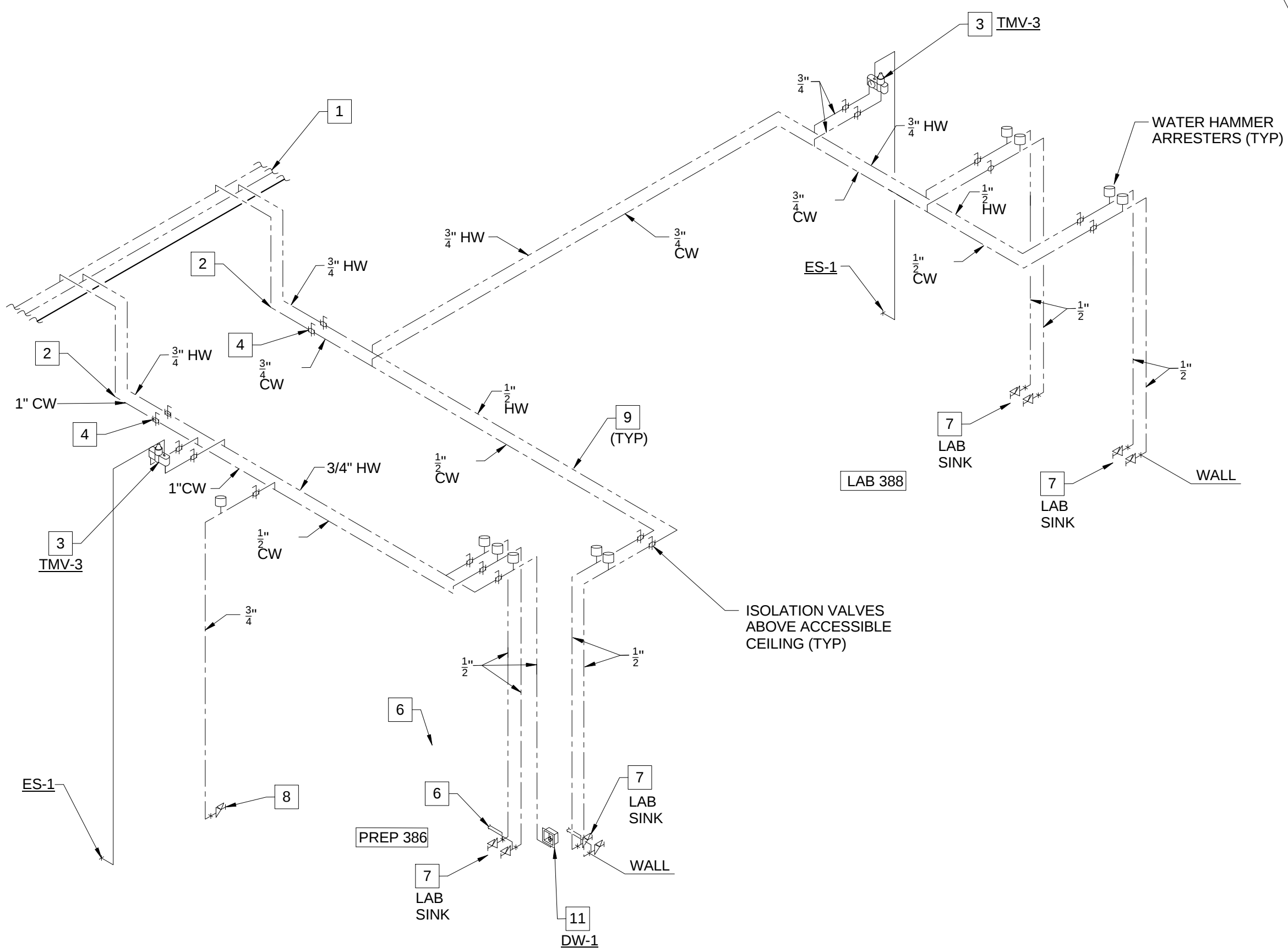
DOMESTIC WATER SUPPLY RISER - LAB 292



DOMESTIC WATER SUPPLY RISER - LAB 378

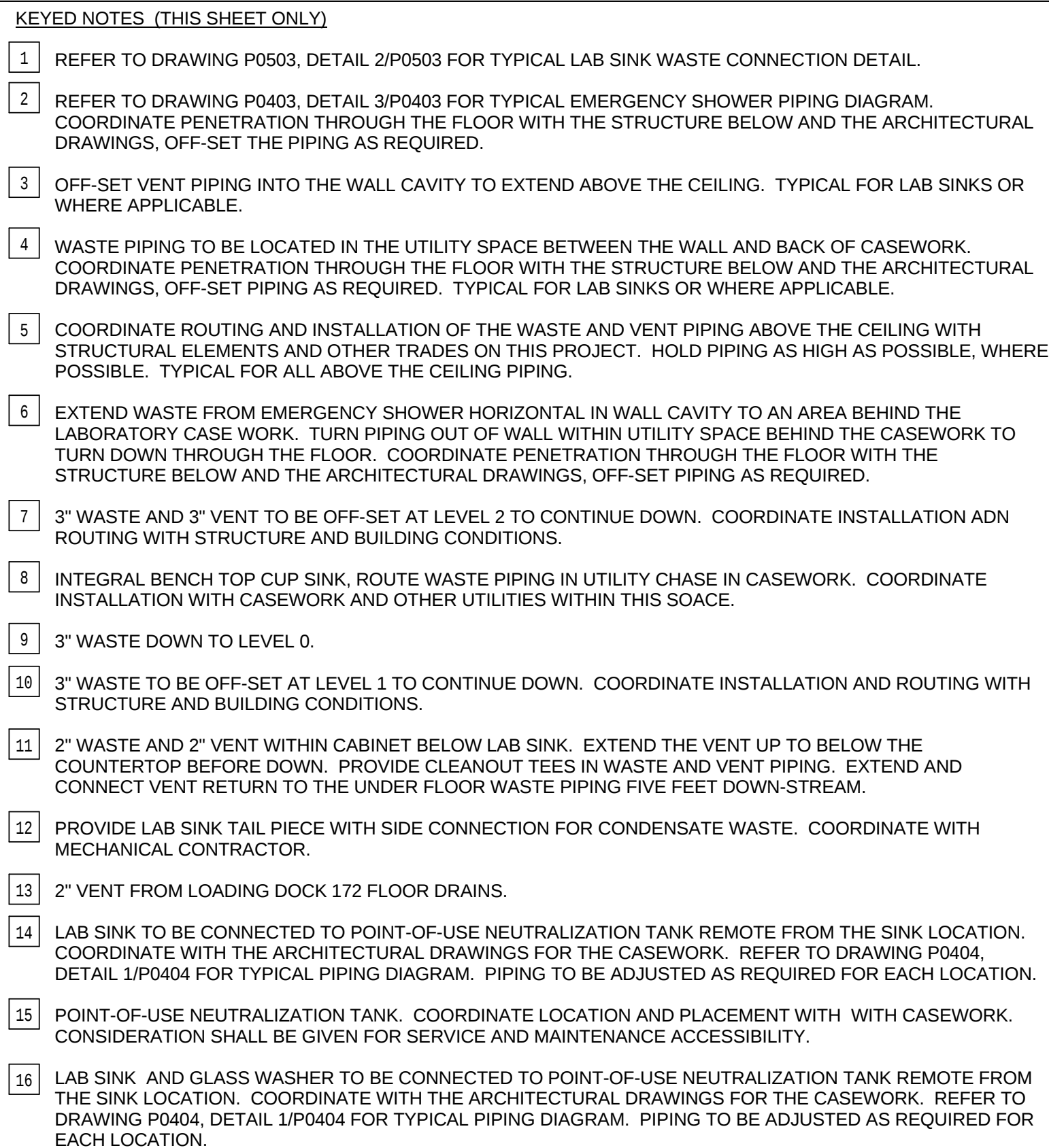


DOMESTIC WATER SUPPLY RISER - LAB 480 AND LAB 488



DOMESTIC WATER SUPPLY RISER - PREP 386 AND LAB 388

DOMESTIC WATER SUPPLY RISER DIAGRAMS
SCALE: N.T.S.

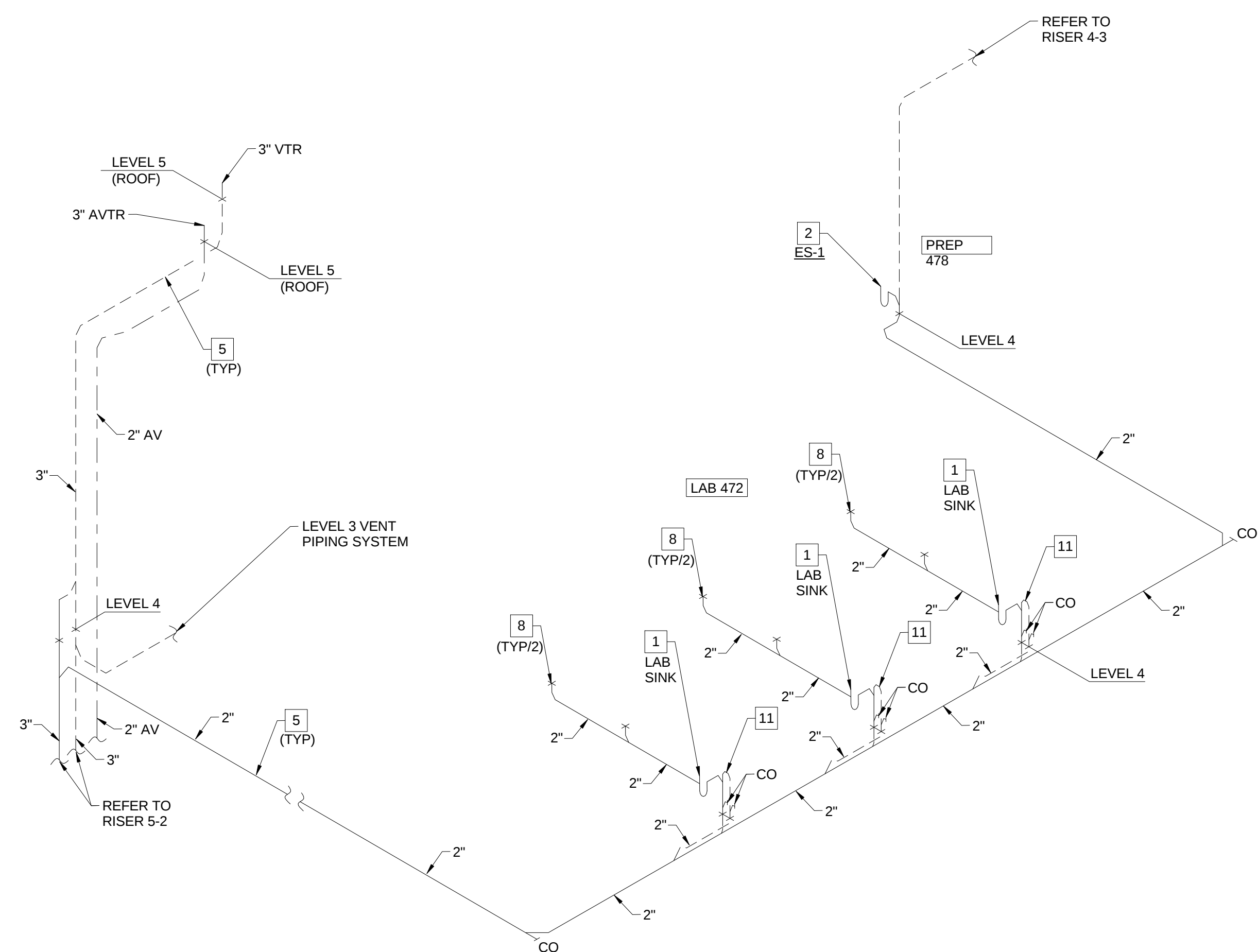


4-1

USER PR-4

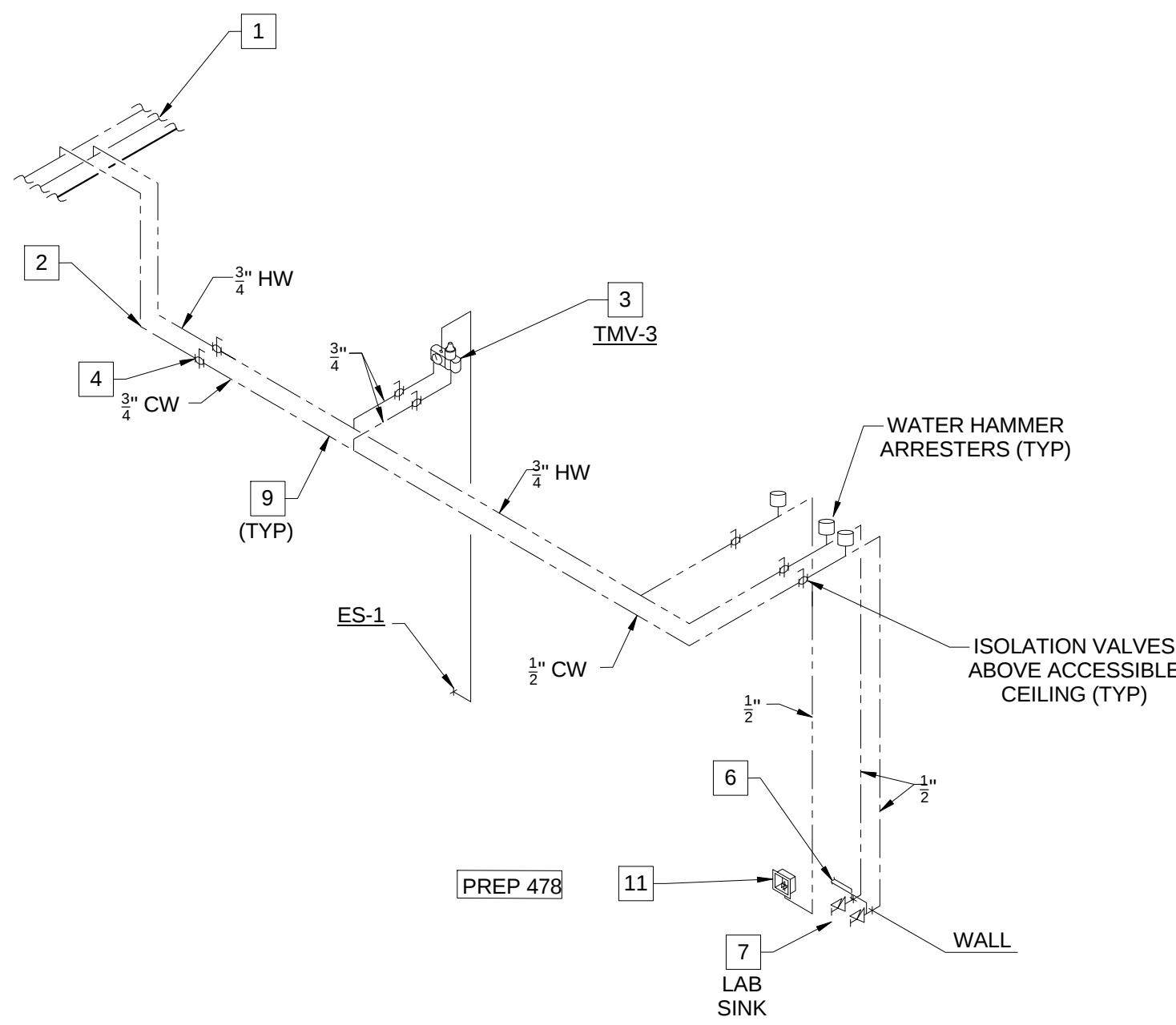
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P0408

1 PLUMBING WASTE AND VENT RISERS FOR PLUMBING RISERS PR-4 AND PR-5
P0408 SCALE: N.T.S.



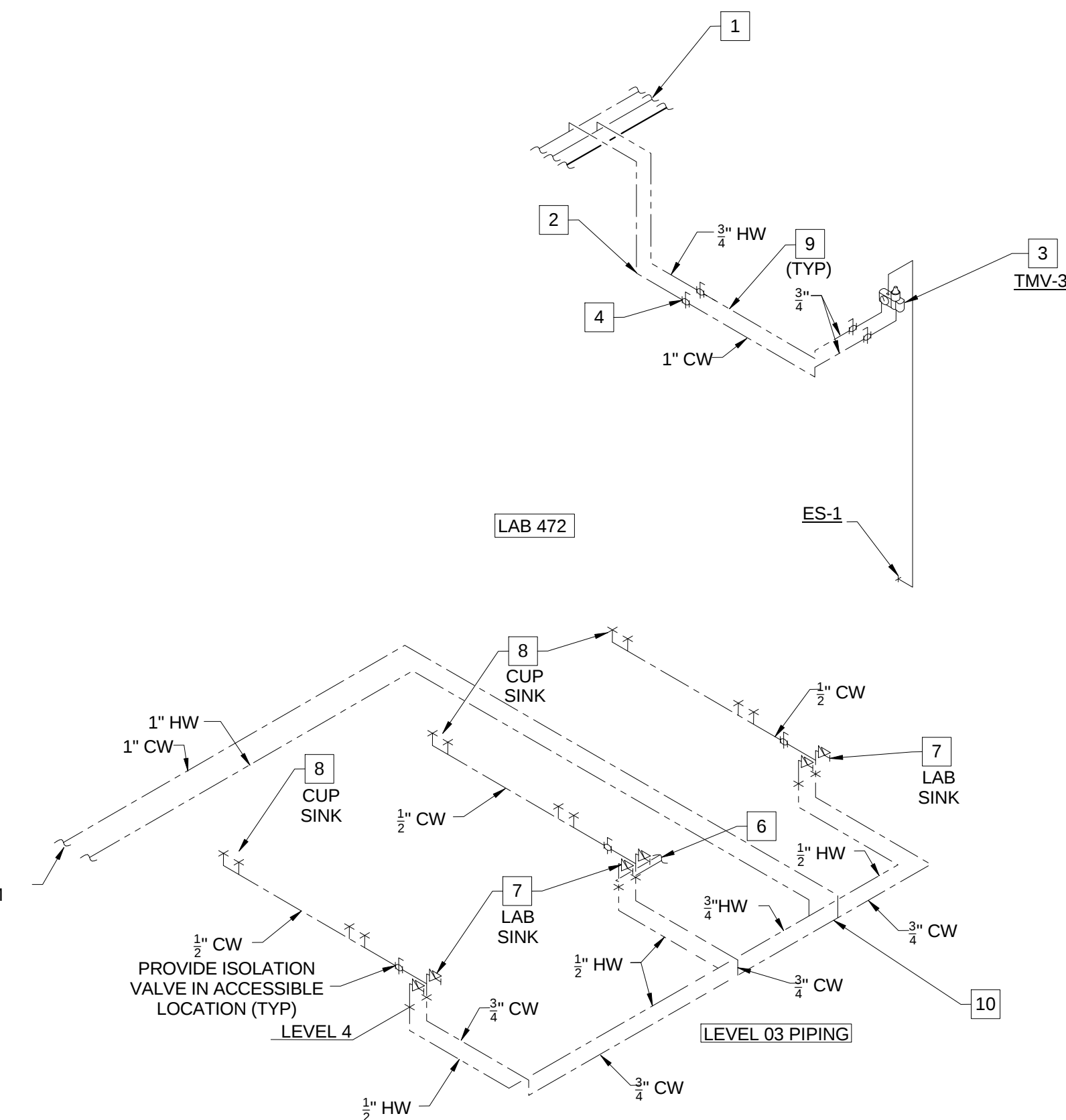
PLUMBING WASTE AND VENT RISERS FOR PLUMBING RISER PR-5

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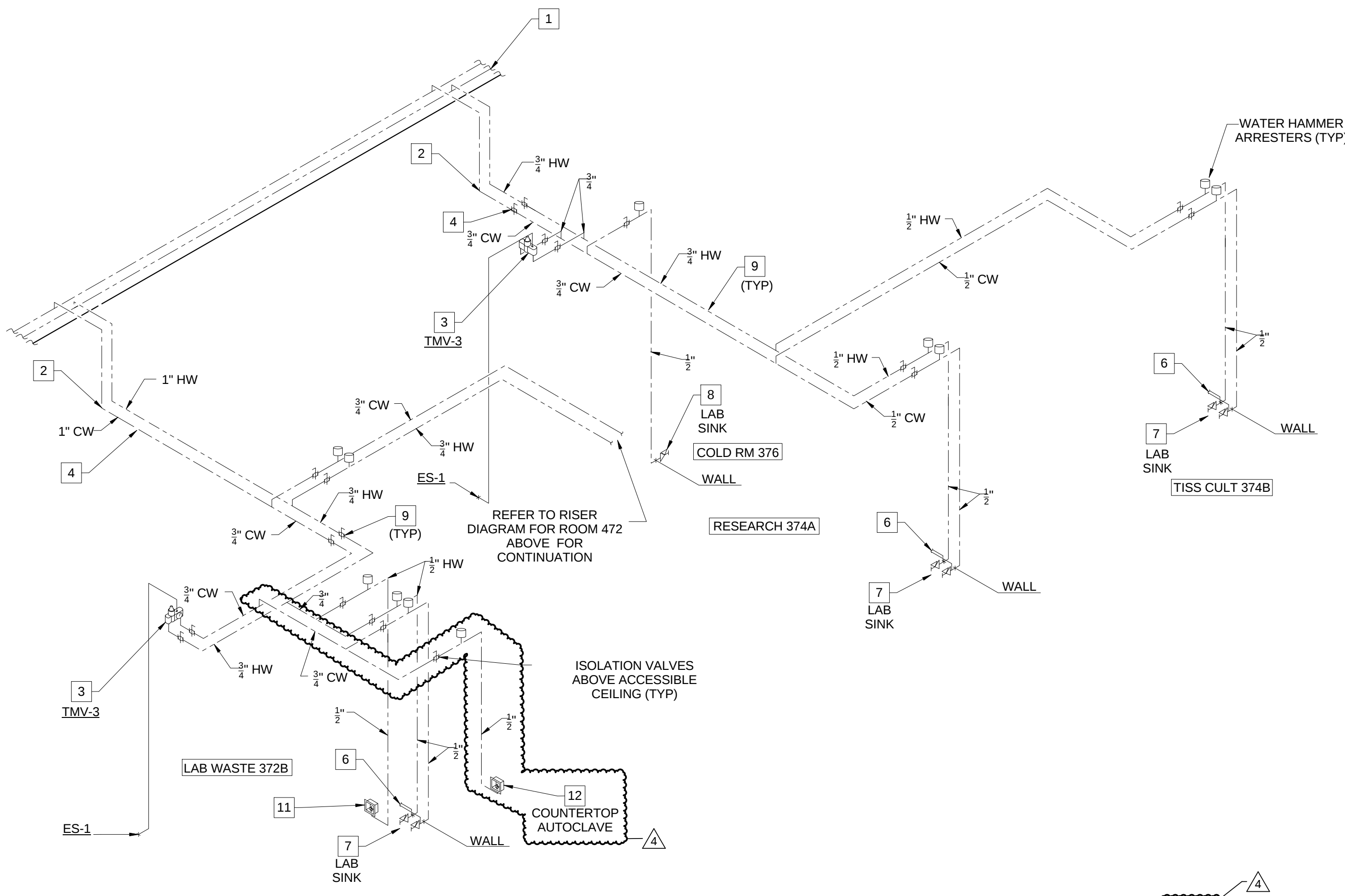


2 DOMESTIC WATER SUPPLY RISER - PREP 478

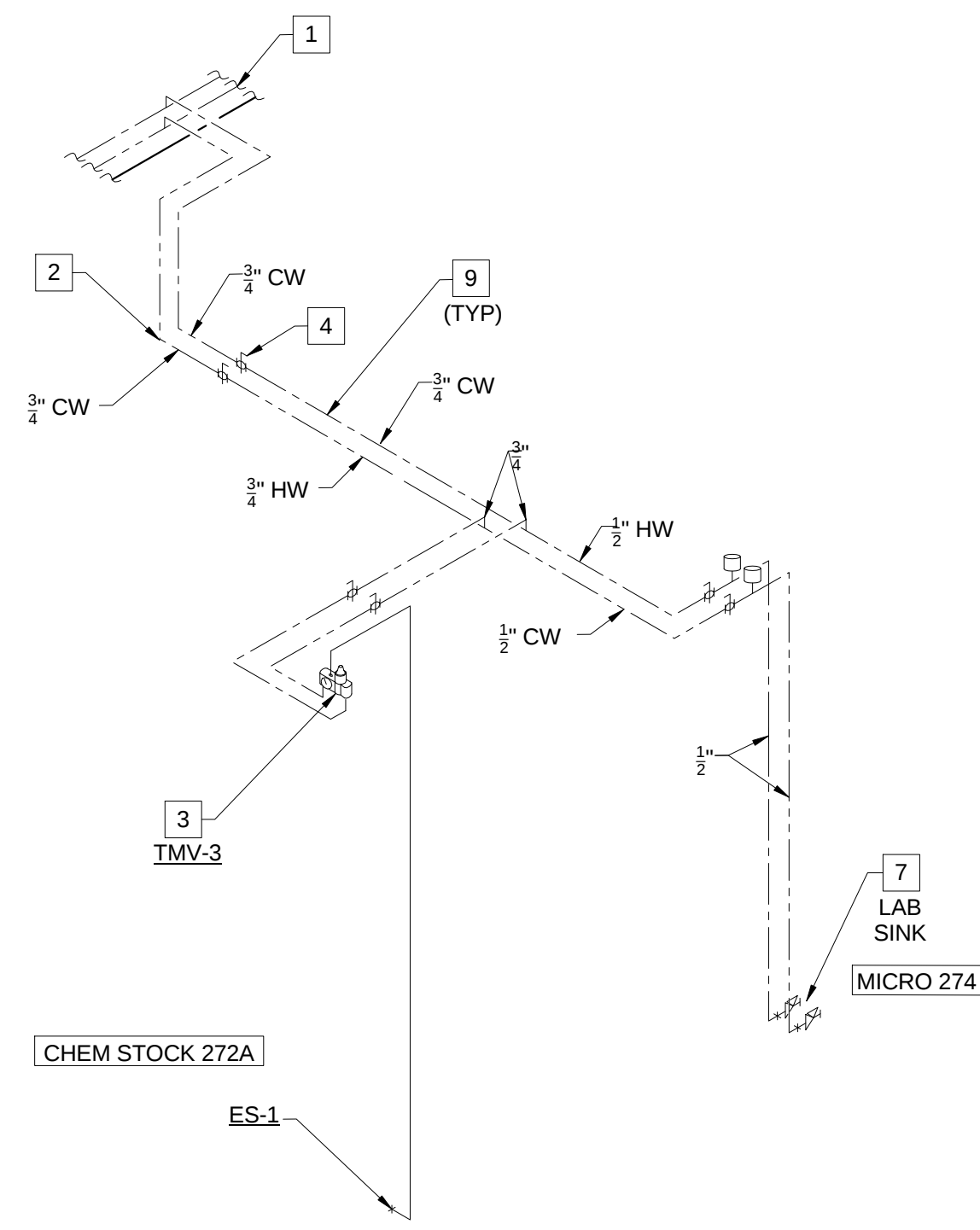
- KEYED NOTES (THIS SHEET ONLY)
- 1 DOMESTIC WATER PIPING IN THE CORRIDOR TO BE RUN AT THE BOTTOM OF THE STRUCTURAL CROSS MEMBERS. COORDINATE INSTALLATION AND ROUTING WITH OTHER TRADES ON THIS PROJECT.
 - 2 DROP PIPING BELOW THE STRUCTURAL STEEL MEMBER. HOLD TIGHT TO BOTTOM OF STEEL.
 - 3 THERMOSTATIC MIXING VALVE (TMV-2) SERVING THE EMERGENCY SHOWER TO BE LOCATED ABOVE THE ACCESSIBLE CEILING. REFER TO DRAWING P0403, DETAIL 3/P0403 FOR PIPING DIAGRAM OF EMERGENCY SHOWER. VERIFY LOCATION AND PIPING CONFIGURATION PRIOR TO ROUGH-IN.
 - 4 PROVIDE SHUT-OFF VALVES AT THE ENTRY TO EACH ROOM.
 - 5 REFER TO DRAWING P0502, DETAIL 11/P0502 FOR HOT WATER RETURN PIPING DIAGRAM.
 - 6 WATER PIPING CONNECTION TO THERMOSTATIC MIXING VALVE (TMV-3) SERVING THE DECK MOUNTED EMERGENCY EYEWASH. REFER TO DRAWING P0403, DETAIL 4/P0403 FOR PIPING DIAGRAM OF EMERGENCY EYEWASH. VERIFY LOCATION AND PIPING CONFIGURATION PRIOR TO ROUGH-IN.
 - 7 LAB SINK WITH LAB FAUCET TYPE 'LF-1'.
 - 8 CUP SINK WITH LAB FAUCET TYPE 'LF-2'. TYPICAL FOR SIX CUP SINKS AND TWELVE LAB FAUCET 'LF-2'. EXTEND COLD WATER PIPING WITHIN UTILITY CHASE OF CASEWORK. COORDINATE ROUTING AND INSTALLATION WITH OTHER SERVICES IN SPACE.
 - 9 DOMESTIC WATER PIPING IN EACH ROOM TO BE RUN AS HIGH AS POSSIBLE TO AVOID CONFLICTS. COORDINATE INSTALLATION WITH OTHER TRADES ON THIS PROJECT PRIOR TO ROUGH-IN.
 - 10 DOMESTIC WATER PIPING IN CEILING SPACE OF LEVEL 3 TO SERVE LAB AND CUP SINKS ON LEVEL 4. COORDINATE ROUTING AND INSTALLATION WITH SPACE CONDITIONS.
 - 11 WATER CONNECTION FOR UNDER COUNTER GLASS WASHER. COORDINATE LOCATION AND INSTALLATION WITH EQUIPMENT AND CASEWORK.
 - 12 WATER CONNECTION FOR COUNTERTOP MOUNTED AUTOCLAVE. COORDINATE LOCATION AND INSTALLATION WITH EQUIPMENT AND CASEWORK. PROVIDE WATER OUTLET BOX SIMILAR TO CW-1.



4 DOMESTIC WATER SUPPLY RISER - PREP 472



1 DOMESTIC WATER SUPPLY RISER - LAB WASTE 372B, RESEARCH 374A, TISSUE CULTURE 374B AND COLD ROOM 376



3 DOMESTIC WATER SUPPLY RISER - CHEM STOCK 272A AND MICROSCOPY 274

4	ASI - 033 (RFI 261,286,309 & 310)	03 NOV 2016
3	ASI - 019 (RFI-193,208 & 212)	29 JUL 2016
2	ADDENDUM 2-4	24 MAY 2016
1	ADDENDUM 2-2	19 APR 2016
-	ISSUED FOR CONSTRUCTION (BP2)	01 MAR 2016

No.	Description	Date
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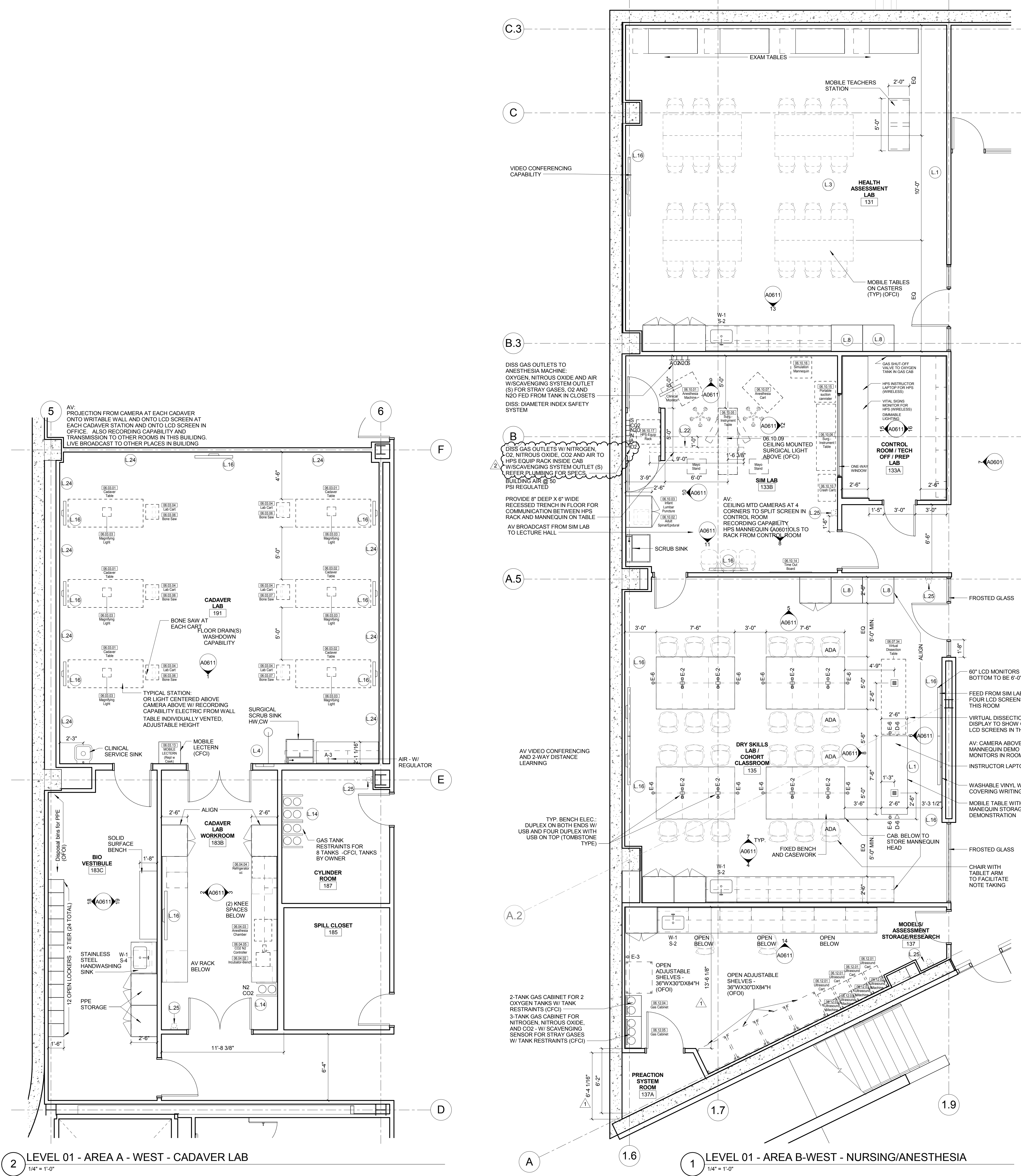
Drawing Title:

RISERS - PLUMBING

Project No.: 04561.01 Checked by:

P0409

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LAB KEYED NOTE LEGEND

- L.1 WRITABLE AND PROJECTABLE SURFACE, DIMENSIONS AS NOTED
- L.2 RECESSED, CEILING MOUNTED PROJECTION SCREEN
- L.3 WALL MOUNTED PROJECTOR ABOVE
- L.4 EMERGENCY SAFETY SHOWER WITH EYEWASH
- L.5 1151313 CHEMICAL FUME HOOD W/ STORAGE BELOW, TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED.
- L.7 WOOD LAB CASEWORK MICROSCOPE CAB
- L.8 WOOD LAB CASEWORK TALL CABINET WITH OPEN CUBBIES FOR BOOK BAG STORAGE.
- L.9 11 5313 CHEMICAL FUME HOOD - ACCESSIBLE - WITH MOBILE STORAGE BELOW, WHERE SHOWN, TYPICAL FUME HOOD TO HAVE ELECTRIC AND UTILITIES AS INDICATED.
- L.10 CABS BELOW WHITEBOARD
- L.11 RECESSED MOTORIZED ROOM DARKENING / BLACKOUT SHADES - USE DOUBLE SHADES AT WEST CLASSROOMS LEVEL 02 AND LECTURE HALL - REFER TO REFLECTED CEILING PLANS
- L.12 LCD MONITOR
- L.13 MOBILE LABORATORY CASEWORK SYSTEM. SEE DETAIL 09A0911
- L.14 MOVABLE WOOD LABORATORY CASEWORK, TABLE WITH MODIFIED EPOXY COUNTERTOP, CABINETS SUSPENDED BELOW AS INDICATED.
- L.15 FIXED WOOD LABORATORY CASEWORK, BASE CABINETS, MODIFIED EPOXY COUNTERTOP, WALL CABINETS AS SHOWN ON ELEVATION
- L.16 SEE CEILING PLAN FOR CEILING MOUNTED UNISTRUT SYSTEM SUPPORTED BY STRUCTURE ABOVE
- L.22 8" DEEP x 6" WIDE TRENCH WITH METAL COVER TO RECIEVE FLOOR FINISH TO MATCH ADJACENT FLOOR
- L.23 FLOOR BOX FOR ELECTRICAL & DATA
- L.24 09 6666 DRY ERASE FINISH (AWC-1)
- L.25 PROVIDE BLOCKING FOR FIRE EXTINGUISHER, MOUNTING HEIGHT: 3'-0" TO TOP OF EXTINGUISHER, FIRE EXTINGUISHER & ITS BRACKET BY OWNER.
- L.26 POINT EXHAUST (SNORKEL) FOR SOLDERING. SEE DETAIL 5/ A0913.

LAB UTILITY LEGEND

- CW WATER COLD WATER FAUCET, DECK MOUNTED GOOSENECK WITH SERRATED NOZZLE, VACUUM BREAKER
- W-1 WATER GENERAL MIXING FAUCET, DECK MOUNTED WITH VACUUM BREAKER, SERRATED NOZZLE.
- DI WATER FAUCET DECK MOUNTED
- PWS DI WATER FAUCET DECK MOUNTED
- PWR DI WATER FAUCET DECK MOUNTED
- EW WATER EYEWASH, DECK MOUNTED, AUTOFLOW SWING-DOWN, DH WATER DRENCH HOSE
- G GAS FUME HOOD CONTROL
- V VAC FUME HOOD CONTROL
- V-3 VAC WALL MOUNTED, SINGLE SERRATED OUTLET
- V-1 VAC TURRET BASE, SINGLE SERRATED OUTLET
- V-4 VAC OUTLET FOR BIOSAFETY CABINET CONNECTIONS
- V-5 VAC QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
- A-1 AIR FUME HOOD CONTROL
- A-1 AIR TURRET BASE, SINGLE SERRATED OUTLET
- A-3 AIR WALL MOUNTED, SINGLE SERRATED OUTLET
- A-4 AIR OUTLET FOR BIOSAFETY CABINET CONNECTIONS
- A-5 AIR QUICK DISCONNECT FOR OVERHEAD SERVICE CARRIER
- N NITROGEN FUMEHOOD CONTROL
- E ELEC. DUPLEX OUTLET (GFI) ON FUME HOOD
- E-1 ELEC. COUNTERTOP MOUNTED PEDESTAL, (1) DUPLEX ELECTRICAL OUTLET
- E-2 ELEC. COUNTERTOP MOUNTED PEDESTAL, (2) DUPLEX ELECTRICAL OUTLET
- E-3 ELEC. WALL MOUNTED, (1) DUPLEX ELECTRICAL OUTLET
- E-5 ELEC. DUPLEX ELECTRICAL OUTLET ON OVERHEAD SERVICE CARRIER
- D DATA DATA OUTLET
- D-1 DATA COUNTERTOP MOUNTED PEDESTAL, (2) DATA OUTLETS
- D-5 DATA DATA OUTLET ON OVERHEAD SERVICE CARRIER
- D-6 DATA DATA OUTLET ON TABLE APRON
- S-1 CLIP SINK LIPPED MODIFIED EPOXY CLIP SINK, 9"X3" W OVAL (DROP-IN)
- S-2 SINK LIPPED MODIFIED EPOXY ADA SINK 25"X15"X10"D (DROP-IN)
- S-3 SINK STAINLESS STEEL ADA SINK 25"X15"X10"D (DROP-IN)
- S-4 SINK STAINLESS STEEL ADA SINK 25"X15"X10"D (DROP-IN)
- S-5 SINK LIPPED MODIFIED EPOXY ADA SINK 18"X15"X10"D (DROP-IN)
- S-6 SINK LIPPED MODIFIED EPOXY ADA SINK 36"X15"X10"D (DROP-IN)
- OSC OVERHEAD SERVICE CARRIER. SEE DETAIL 10/ A0913.
- PTD PAPER TOWEL DISPENSER

CHEMICAL FUME HOOD LEGEND

- CFH-4 4'-0" WIDE CHEMICAL FUME HOOD
- CFH-6 6'-0" WIDE CHEMICAL FUME HOOD

LAB GENERAL NOTES

- ALL DIMENSIONS ARE TO GWB FACE PARTITION OR COLUMN CENTERLINE U.N.O.
- OWNER FURNISHED OWNER INSTALLED (OFOI) ITEMS ARE SHOWN DASHED FOR REFERENCE ONLY. COORDINATE SIZE AND INSTALLATION REQUIREMENTS WITH OWNERS REPRESENTATIVE.
- CENTER ALL DRYING RACKS WITH DRIP STOP TROUGHABOUT CENTERLINE OF SINKS U.N.O.
- ALL APRONS AT OPEN KNEE SPACE TO BE 4" U.N.O. PROVIDE APRON OF SOLID WOOD WITH EASED BOTTOM EDGE. FINISH TO MATCH VENEER SPECIES. MAINTAIN MINIMUM 27" CLEAR ABOVE FLOOR FINISH
- CENTER ALL COUNTERTOP MOUNTED UTILITY OUTLETS ON CENTER OF CASEWORK U.N.O.
- ALL SURFACE MOUNTED RACEWAY TO HAVE OUTLETS AT 2'-0" O.C. AND SHALL BE MOUNTED DIRECTLY ABOVE BACKSPASH U.N.O.
- ALL BACKSPASHES TO BE 4" HIGH U.N.O.
- DASHED LINES ON ELEVATIONS INDICATED ADJUSTABLE SHELVING INSIDE CASEWORK
- PROVIDE FINISHED BACK PANEL AT KNEE SPACES BELOW ALL FUMEHOODS, TYPICAL, SIMILAR TO DETAIL
- PROVIDE FINISHED BACK PANEL AT ALL KNEE SPACES, TYPICAL
- PROVIDE LOCK AND KEY WHERE A CIRCLE NEXT TO DRAWER OR DOOR HANDLE IS SHOWN OR WHERE NOTED
- REFER SHEETS A0911 FOR LABORATORY CASEWORK / MILLWORK DETAILS
- FOR TYPICAL MOUNTING HEIGHTS REF: 1/A0911
- ALL CASEWORK TO BE WOOD U.N.O.
- ALL CASEWORK IS LABORATORY CASEWORK UNLESS NOTED AS MILLWORK OR OFOI. SEE DIVISION 12 3553 - LABORATORY CASEWORK FOR SPECIFICATIONS
- ALL EQUIPMENT ITEMS HAVE A EQUIPMENT TAG - XXX.XX. SEE SHEETS A111 FOR EQUIPMENT SCHEDULES
- PROVIDE PAPER TOWEL DISPENSER (PTD) AT EACH SINK LOCATION



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2	ASI-033	03 NOV 2016
1	RFI 305	13 OCT 2016
- ISSUED FOR CONSTRUCTION (BP3)		
No.	Description	Date

Drawing Title:

ENLARGED PLANS-LEVEL
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Project No.: 04561.01

Checked by:

A0201