

PROJECT PHASE:

BID PACKAGE 04

#	DATE	REVISIONS	DESCRIPTION

DATE:	05-10-19	JOB NUMBER:	17-13
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SHEET NUMBER: **P0.00**

PLUMBING DETAILS, LEGENDS, NOTES AND SCHEDULES

PLUMBING PIPE LEGEND		
DESCRIPTION	TAG	LINETYPE
COLD WATER	CW	----
CONDENSATE	CD	- - - -
FIRE	F	----
FORCED MAIN	FM	----
GAS	G	----
HOT WATER	HW	----
IRRIGATION	IR	----
MEDICAL AIR	MA	----
MEDICAL VACUUM	VAC	----
SANITARY SEWER	SS	----
VENT	V	----

PLUMBING SYMBOL LEGEND			
D.F.U.	DRAIN FIXTURE UNITS		HEAT TAPE
GPM	GALLONS PER MINUTE		FROST PROOF HOSE BIBB (FPHB-1)
F.L.	FLOW LINE INVERT		FD-1 FLOOR DRAIN
	WATER/GAS METER		SWD-1 SAFE WASTE DRAIN
	REGULATOR		FLOOR SINK
	PRESSURE REDUCING VALVE		WCO-1/SCO-1 WALL CLEAN OUT/STACK CLEAN OUT
	CONTINUATION		FCO FLOOR CLEANOUT
	BALL VALVE		COTG-1/TWCO-1 CLEAN OUT TO GRADE/TWO-WAY CLEAN OUT
	MIXING VALVE		INDICATES DETAIL NUMBER
	UTILITY BOX/SUPPLY BOX		BACKFLOW PREVENTER (RPZ-1)

- GENERAL PLUMBING NOTES**
- THE ENTIRE PLUMBING SYSTEM SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE INTERNATIONAL PLUMBING CODE REGULATIONS AND LOCAL PLUMBING INSPECTOR.
 - THE PIPING INDICATED ON THESE PLANS ARE DIAGRAMMATICAL. ALL WORK SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION. CONTRACTOR SHALL COORDINATE ROUTING OF ALL PIPING WITH EXISTING CONDITIONS AND SHALL PROVIDE ANY NECESSARY OFFSETS, REROUTING, TEES, ELBOWS, ETC. REQUIRED FOR A COMPLETE AND COORDINATED INSTALLATION.
 - THE CONTRACTOR SHALL OBTAIN AND PAY ALL FEES RELATED TO PERMITTING, INSPECTIONS, TAP-ON FEES, ETC.
 - THE CONTRACTOR SHALL COORDINATE ANY PLUMBING OR PIPING SYSTEM SHUTDOWN WITH THE OWNER 48 HOURS IN ADVANCE.
 - ALL DOMESTIC WATER, NATURAL GAS, COMPRESSED AIR, AND VACUUM PIPING SHOWN IS ABOVE CEILING, EXPOSED OVERHEAD, AND WITHIN WALLS UNLESS OTHERWISE NOTED. WATER HAMMER ARRESTORS SHALL BE INSTALLED AT DISHWASHERS, WASHING MACHINES, SUPPLY BOXES, AND QUICK CLOSING VALVES NOT LISTED. INSTALL WHA-1 AS CLOSE TO QUICK CLOSING VALVE AS POSSIBLE PER MANUFACTURERS RECOMMENDATIONS. ISOLATION VALVES SHALL BE INSTALLED ON ALL SUPPLY FIXTURE GROUPS AND HOT WATER BALANCING VALVES.
 - FROST PROOF HOSE BIBBS AND SUPPLY PIPING SHALL BE INSTALLED ON THE INSIDE OF THE INSULATION, SEAL SHEATHING PENETRATION TO PREVENT AIR FROM REACHING THE VALVE.
 - ALL SANITARY WASTE PIPING SHOWN IS BELOW SLAB, BELOW FLOOR, OR WITHIN WALLS UNLESS OTHERWISE NOTED. ALL SANITARY VENT PIPING SHOWN IS ABOVE CEILING, EXPOSED OVERHEAD, OR WITHIN WALLS UNLESS OTHERWISE NOTED.
 - FLOOR DRAINS ARE TO BE THE SAME SIZE AS THE DRAIN LINE IT CONNECTS UNLESS NOTED OTHERWISE. IF SIZE IS NOT INDICATED ON DRAWINGS REFER TO PLUMBING ROUGH-IN SCHEDULE FOR PROPER SIZE.
 - FLUSH CONTROLS FOR HANDICAPPED WATER CLOSETS ARE TO BE MOUNTED TO THE OPEN SIDE OF THE TOILET AREAS.
 - CONTRACTOR SHALL COORDINATE AND PROVIDE ALL NECESSARY PIPING & PLUMBING FITTINGS, PIPING, MISCELLANEOUS ITEMS REQUIRED FOR A COMPLETE INSTALLATION OF ALL PLUMBING RELATED ITEMS.
 - ALL PIPING ON ROOF SHALL BE ANCHORED TO STEEL RIB FASTENERS APPROVED BY THE ROOF MANUFACTURER. INSTALL ANCHORS PER MANUFACTURERS RECOMMENDATION.
 - THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL UNDER SLAB PIPING WITH EXISTING STRUCTURAL FOUNDATIONS. UNDERGROUND UTILITY LOCATIONS SHALL BE VERIFIED PRIOR TO ANY WORK BEING PERFORMED. CONTRACTOR SHALL REPAIR OR REPLACE ALL PIPING NOT IN PROPER WORKING ORDER OR DAMAGED DURING INSTALLATION OF THE NEW UNDERGROUND PIPING.
 - ALL PLUMBING & PIPING SYSTEMS SHALL BE SUPPORTED AS REQUIRED BY THE LOCAL CODE REQUIREMENTS AND PER MANUFACTURERS RECOMMENDATIONS.
 - ALL PIPING PENETRATIONS THROUGH NEW, EXISTING WALL, OR FLOOR SHALL BE SEALED TO EQUAL THE RATING OF THE NEW, EXISTING WALL OR FLOOR.
 - THE PLUMBING SYSTEM SHALL BE TESTED AS REQUIRED BY LOCAL CODE OR BY THE REQUIREMENTS OF THE LOCAL PLUMBING INSPECTOR.
 - THE ENTIRE DOMESTIC WATER SYSTEM (EXISTING/NEW) SHALL BE DISINFECTED IN ACCORDANCE TO THE LOCAL CODE & HEALTH DEPARTMENT REQUIREMENTS.
 - DOMESTIC WATER AND SEWER LOCATED OUTSIDE OF FOOTING SHALL MAINTAIN A MINIMUM OF 10' SEPARATION UNLESS WRITTEN PERMISSION IS OBTAINED FROM LOCAL AUTHORITIES AND/OR PROPER CONTAMINATION PROVISIONS PER LOCAL CODE HAVE BEEN MET.
 - FINISHED FLOOR ELEVATION (F.F.E.) SHALL BE 0.00' FOR CALCULATION PURPOSES ONLY, UNLESS NOTED OTHERWISE.
 - THE BACKFLOW PREVENTION DEVICE SHALL BE INSTALLED PER LOCAL CODE & PER AUTHORITY HAVING JURISDICTION REQUIREMENTS. NON-LEAD TYPE ONLY.
 - ALL VENT THRU ROOF (VTR'S) PENETRATIONS INDICATED ON PLANS ARE PRELIMINARY. FINAL LOCATIONS SHALL BE COORDINATED WITH ALL TRADES. ALL VTR'S SHALL BE A MINIMUM OF 10'-0" FROM ALL FRESH AIR INTAKE OPENINGS.
 - ANY PVC PIPE PENETRATING A FIRE RATED ASSEMBLY SHALL BE EXTERNALLY SLEEVED WITH STEEL, FERROUS, OR COPPER MATERIALS, SECURELY FASTENED TO THE FIRE RATED ASSEMBLY. ANY SPACE BETWEEN THE SLEEVE AND THE FIRE RATED ASSEMBLY PENETRATED SHALL BE PROTECTED USING MATERIAL THAT CONFORMS TO ASTM E 814 OR UL 1479, SUCH AS FIRE STOP FS-1000 OR FLAME STOPPER 5000.
 - CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS FOR DISHWASHER, WASHING MACHINE, REFRIGERATOR, ETC.
 - PROVIDE SHUT-OFF VALVES FOR PROPER OPERATION AND SERVICING OF DOMESTIC WATER DISTRIBUTION SYSTEM. LOCATION SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING: AT EACH FIXTURE GROUP, AT EACH BRANCH TAKE-OFF FROM MAINS AND AT THE BASE OF EACH RISER. COORDINATE WITH ARCHITECTURAL PLAN FOR ACCESS DOOR LOCATIONS.
 - VALVES SHALL BE LOCATED 6" ABOVE ACCESSIBLE CEILING WHEN AT ALL POSSIBLE AND SHALL BE CLEAR OF ANY OBSTRUCTIONS FROM OTHER TRADES. MAINTENANCE SHALL BE ABLE TO ACCESS VALVES WITH STANDARD LADDER. SHOULD LOCATION NOT BE APPLICABLE CONTRACTOR SHALL PROVIDE A CONTROL CHAIN AND/OR ARM.
 - TEMPERED WATER, NOT EXCEEDING A MAXIMUM OF 110° F, SHALL BE DELIVERED FROM PUBLIC HANDWASHING FACILITIES THROUGH AN APPROVED WATER TEMPERATURE LIMITING DEVICE THAT CONFORMS TO ASSE 1070.
 - IT IS THE PLUMBING CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE SITE CONTRACTOR TO CONFIRM THAT THE INVERTS AND LOCATIONS OF THE BUILDING UTILITIES ARE COMPATIBLE WITH THE SITE UTILITIES PRIOR TO BEGINNING WORK.
 - CONTRACTOR SHALL PROVIDE A PRESSURE REDUCING VALVE (PRV-1) SHOULD THE WATER PRESSURE EXCEED 75 PSI. CONTRACTOR SHALL CONFIRM WITH ON SITE CONDITIONS AND LOCAL UTILITY.
 - ALL GAS PIPING ON ROOF SHALL BE PAINTED YELLOW, TYPICAL.

ROUGH-IN AND MOUNTING HEIGHT SCHEDULE					
NOTES: 1. ALL VENT LINE SIZES SHOWN ARE MINIMUM UNLESS SHOWN LARGER ON RISER DIAGRAMS. 2. SIZES SHOWN FOR WASTE ARE FOR RISERS ONLY. 3. ALL DRAIN AND VENT LINES BELOW SLAB SHALL BE 2" OR LARGER. 4. VENT LINES SHALL RISE 6" ABOVE FLOOD LEVEL RIM BEFORE OFFSETTING HORIZONTALLY, EXCEPT FOR INTERCEPTORS LOCATED OUTDOORS. 5. SIZES SHOWN APPLY UNLESS NOTED DIFFERENTLY ON PLANS.					
FIXTURE	WASTE	VENT	COLD WATER	HOT WATER	HEIGHT OF INSTALLATION
FLOOR DRAINS/SINKS	2"	1-1/2"			
JANITOR'S SINK	3"	1-1/2"	1/2"	1/2"	
SHOWER					MIXING VALVE HANDLE AT 38" MIN. & 48" MAX. A.F.F. (STANDARD AND ADA) SHOWER HEAD: STANDARD 78"
	2"	1-1/2"	1/2"	1/2"	* ALL DIMENSIONS TO CENTERLINE OF SHOWER HEAD, ALL ROLL-IN SHOWERS WITH CONTROLS AND HAND SHOWERS LOCATED ON BACKWALL SHALL BE LOCATED WITHIN 15" LEFT OR RIGHT OF CENTERLINE.

PIPING MATERIAL SCHEDULE	
DESCRIPTION	MATERIAL
FORCED MAIN PIPING	SCHEDULE 40 GALVANIZED STEEL WITH SCREWED JOINTS.
UNDER GROUND GAS	APPROVED PLASTIC WITH COMPATIBLE FITTINGS CONFORMING WITH ASTM D 2513 AND SHALL BE INSTALLED IN ACCORDANCE WITH GAS CODE OR WITH SCH. 40 STEEL WITH MALLEABLE IRON FITTINGS OR WELDED JOINTS WITH BUTT WELD FITTINGS. MILL COAT PIPE WITH HIGH DENSITY POLYETHYLENE OVER ADHESIVE UNDERCOATING WRAP FIELD JOINTS AND FITTINGS WITH REPUBLIC X-TRU TAPE OR EQUAL. PROVIDE WITH MARKER TAPE.
UNDERGROUND SANITARY SEWER AND VENT PIPING INSIDE BUILDING AND OUTSIDE BUILDING	PVC SCHEDULE 40 PIPE AND FITTINGS.
WATER SERVICE PIPE	WATER SERVICE PIPE SHALL CONFORM TO NSF 61 AND SHALL BE COPPER AND CONFORM TO THE STANDARDS LISTED IN TABLE 905.3 OF THE IPC.

PLUMBING PIPING INSULATION SCHEDULE						
DESCRIPTION	INSULATION TYPE	INSULATION THICKNESS				
		NOMINAL PIPE SIZE				
		<1	1 TO <1-1/2	1-1/2 TO <4	4 TO <8	≥8
DOMESTIC COLD WATER PIPING BELOW GRADE	PVC OR HDPE JACKET ONLY, NO INSULATION	1	1	1.5	1.5	1.5
DOMESTIC HOT WATER AND HOT WATER RETURN PIPING BELOW GRADE	ELASTOMERIC OR FOAM, ENCAPSULATE WITH PVC OR HDPE JACKET	1	1	1.5	1.5	1.5

PLUMBING EQUIPMENT SCHEDULE					
FIXTURE TAG	DESCRIPTION	MANUFACTURER	TRIM	ELECTRICAL REQUIREMENTS	
FD-1	FLOOR DRAIN-SQUARE	MIFAB F1000-S	CAST IRON BODY, ANCHOR FLANGE, SECURED ROUND ADJUSTABLE STRAINER HEAD WITH HOLE GRATE, LOOSE GRATE AND SEDIMENT BUCKETS, MIFAB TRAP GUARD, REFER TO PLANS FOR SIZES		
FS-1	FLOOR SINK 12-1/2" CAST IRON RECEPTOR, 8" DEEP	J. R. SMITH 3150	CAST IRON FLANGED RECEPTOR, SEEPAGE HOLES, ACID RESISTANT COATED INTERIOR, NICKEL BRONZE RIM, LOOSE GRATE, ALUMINUM DOME BOTTOM STRAINER, GRATE, MIFAB TRAP GUARD		
JS-1	JANITOR'S SINK FLOOR MOUNTED 24" x 24", ONE PIECE MOLDED CONSTRUCTION OF NATURAL CRUSHED STONE AND POLYESTER RESIN	MUSTEE CUSTODIAL FLOOR SINK MODEL 63M	MUSTEE VACUUM BREAKER, HOSE BRACKET 65.700, MOP HANGER 65.600, BUMPER GUARDS 83.401, WALL GUARDS 2 PANELS & 1 BRACKET 67.2424, SUPPLIED W/ CAST BRASS DRAIN, PROVIDE CHECK VALVES ON HOT AND COLD WATER LINES IN AN ACCESSIBLE LOCATION		
SP-1	SUMP PUMP	WEIL 1411-OSS	SUBMERSIBLE TYP PUMP, CONTROLS AND ALARM. 15 FOOT PWR COR'D, 2" OUTLET, CAPABLE OF 50 GPM AT 20 FEET, CHECK VALVE, OIL SMART PUMP SWITCH AND ALARM.	PUMP: 115V, 60HZ, 1PH, 1/2HP, 1750 RPM CONTROLS: OIL SMART ALARM 115V	
TWCO-1	TWO WAY CLEANOUT, SPEEDI-SET OUTLET	J. R. SMITH 4237	UNFINISHED FLOOR DUCCO CAST IRON CLEANOUT WITH ROUND ADJUSTABLE SCORIATED SECURED CAST IRON TOP, TAPERED THREAD BRONZE PLUG, REFER TO PLANS FOR SIZES		
YH-1	YARD HYDRANT	WOODFORD MODEL Y2	BACKFLOW PROTECTED, AUTOMATIC DRAINING, FREEZELESS YARD HYDRANT		



12.0 BELOW GRADE SLABS

All slabs that are below exterior grade are considered below grade slabs. This condition is anticipated within the south half of the project site within the basement area. In addition, any elevator pits, recessed mats, floor depressions, etc., are considered below grade slabs and the following recommendations do apply to these areas.

Although shallow groundwater was not encountered within the borings drilled, site earthwork can, and often does, manipulate the shallow groundwater regime. In view of the possibility for perched groundwater at the project site, it is recommended that any portions of the structure below exterior grade, as described above, be designed and constructed recognizing the possibility of shallow groundwater. A French drain system should be installed under the below grade floor slabs to limit hydrostatic pressure below the slab. A drainage system constructed with coarse free-draining gravel with a minimum 6-inch thickness and perforated pipes wrapped in filter fabric and installed on 30-ft. centers below the free draining gravel is considered adequate. Groundwater collected by these perforated pipe drains should be removed to free discharge by gravity flow. If gravity flow cannot be provided a sump and pump system consisting of a wet well with a duplex pump arrangement is recommended. At least one (1) pump should turn on when groundwater levels are more than 24-inches below finish floor elevation.

A French drain should be installed underneath all below grade slabs. Lateral drain pipes installed on 30-ft. centers should be at least 4-inches in diameter, with perimeter collector pipes at least 6-inches in diameter. An impervious moisture barrier consisting of 6-mil. plastic sheeting or equivalent should be provided below all slab areas. A minimum 10-mil plastic sheeting is recommended beneath all slab areas with an intended use sensitive to slab moisture. Soil moisture should not be allowed to dry and desiccate or be saturated by inundation prior to slab placement.

12.1 Retaining Wall Backfill & Drainage

A foundation drain is recommended to be installed around the portion of the perimeter where the below grade slab is at or below exterior grade level in

accordance with Section 1805 of the 2015 IBC. Below grade wall backfill should consist of free-draining crushed stone or alternatively, may consist of gravelly clays or clayey gravels. Crushed stone, if selected, must be imported from a quarry source whereas on-site soils suitable for wall backfill could probably be segregated and stockpiled during excavation. Depending upon the type of backfill selected and degree of wall restraint, the following table of lateral earth pressures are considered appropriate for wall design. **If a building floor slab is planned over the wall backfill, use of an imported free draining stone should be separated from the earth face of the excavation by using a nonwoven filter fabric.**

8.8 Utility Trenches

New utility trenches servicing the new structures are anticipated to be required. These trenches are often times sources of moisture migration into the structure. A relatively impervious material (clay with little rock, etc.) should be placed within the utility trench, surrounding the utility immediately outside the structure to reduce the potential for moisture migration into the structure via utility trenches. The "trench plug" should extend out from the structure a minimum of 5 ft. horizontally, and be placed in a controlled manner in accordance with Section 8.3 above.

8.3 Compaction Requirements

Item	Description
Subgrade Scarification Depth	At least 8 inches
Fill Lift Thickness	12-inches (loose) using the minimum compactor referenced below
Compaction Requirements ¹	Six (6) passes (3 each direction) minimum using a self-propelled vibratory compactor with a minimum drum diameter of 48-inches for granular soils, or 95% Standard Proctor Density (ASTM D698) for materials containing sufficient fines content.
Moisture Content	<ul style="list-style-type: none"> ± 2% optimum moisture for CL, SC, GC, GW & SW Soil Types; and 0 to 4% above optimum for CH Soil Types.
Field Density Testing Frequency (if material type allows)	<ul style="list-style-type: none"> Building Areas – One (1) test every 2500 sq. ft. per fill lift; Pavement Areas – One (1) test every 5000 sq. ft. per fill lift; and No less than three (3) tests per each fill lift.
¹ We recommend that engineered fill (including scarified compacted subgrade) be tested for moisture content and compaction during placement. Should the results of the in-place density tests indicate the specified moisture or compaction limits have not been met, the area represented by the test should be reworked and retested as required until the specified moisture and compaction requirements are achieved.	



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AT THE CHEROKEE NATION
TAHLEQUAH, OKLAHOMA

KEY PLAN:

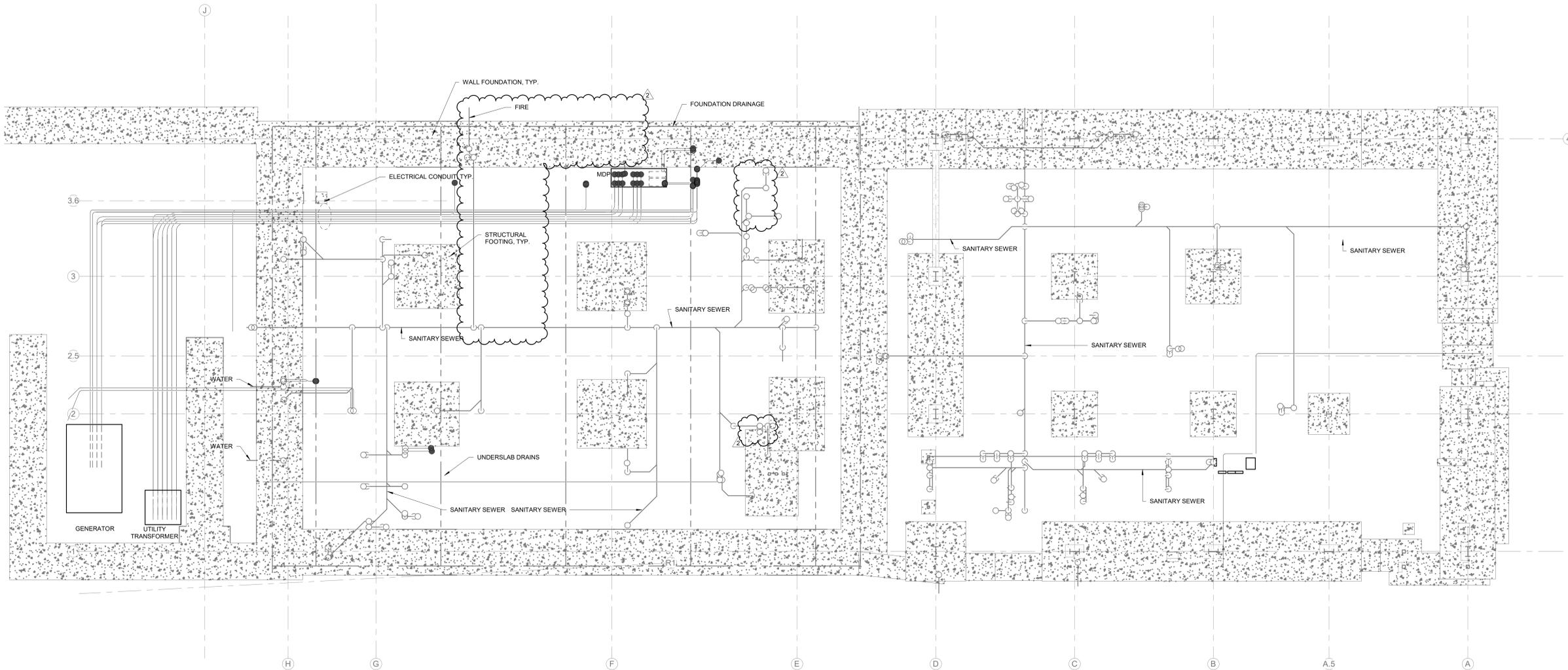
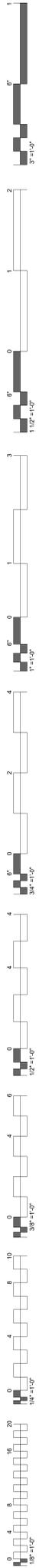
PROJECT PHASE:
BID PACKAGE 04

#	DATE	REVISIONS	DESCRIPTION

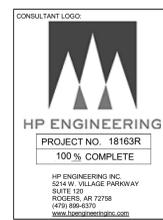
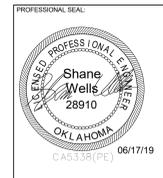
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SHEET NUMBER:
P0.01

UNDERGROUND PLUMBING
NOTES

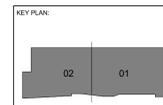


1 PLUMBING UNDERGROUND COORDINATION PLAN
1" = 10'-0"



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#	DATE	REVISIONS	DESCRIPTION
1	05-24-19	Bid Package 04	ASB 01
2	06-17-19	Bid Package 04	ASB 02

DATE: **05-10-19** JOB NUMBER: **17-13**

SHEET NUMBER:
P0.02

UNDERGROUND FOOTING COORDINATION

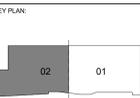


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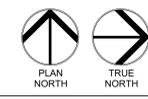
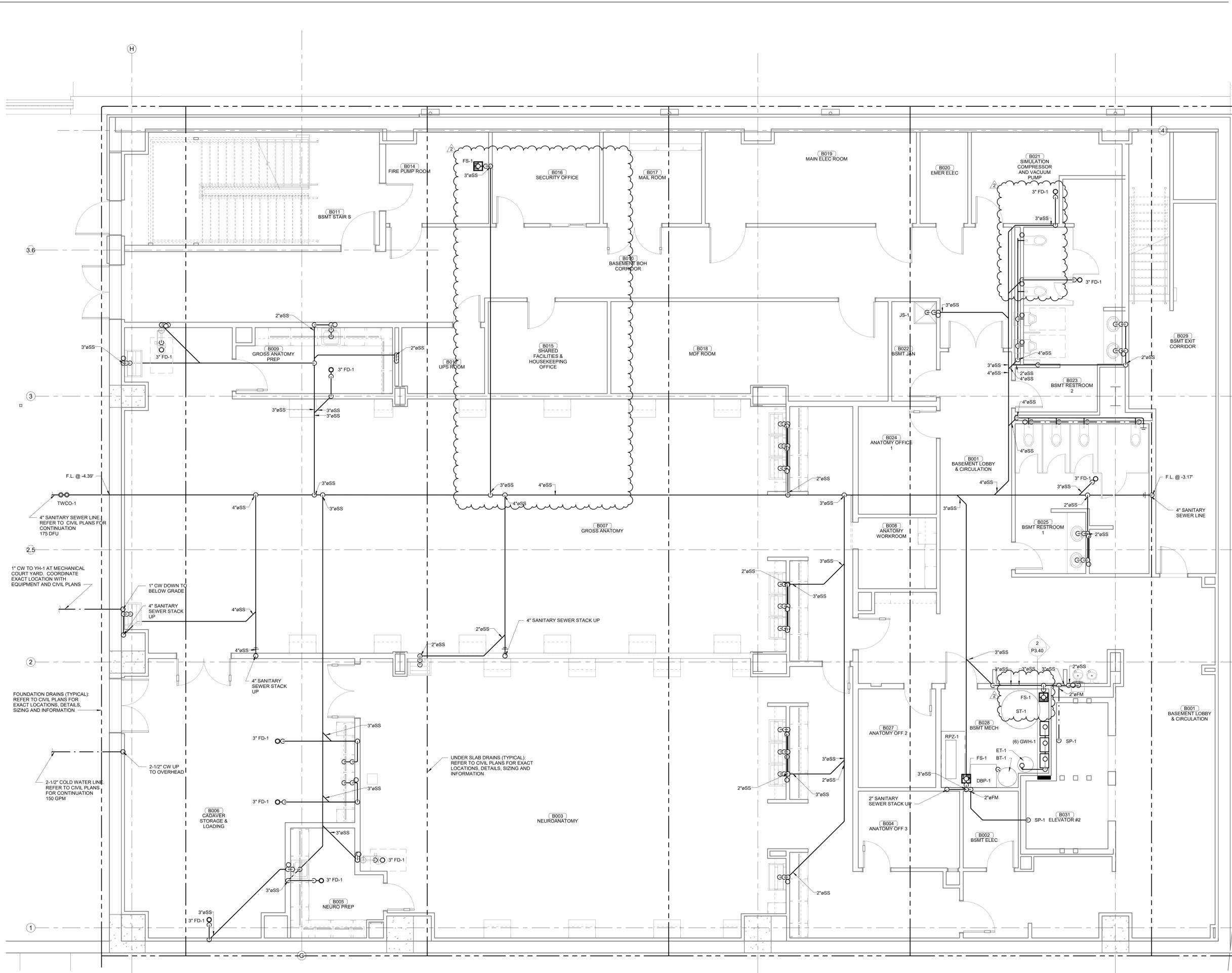
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BID PACKAGE 04

#	DATE	REVISIONS	DESCRIPTION
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2	06-17-19	Bid Package 04 ASI 02	

DATE: 05-10-19 JOB NUMBER: 17-13

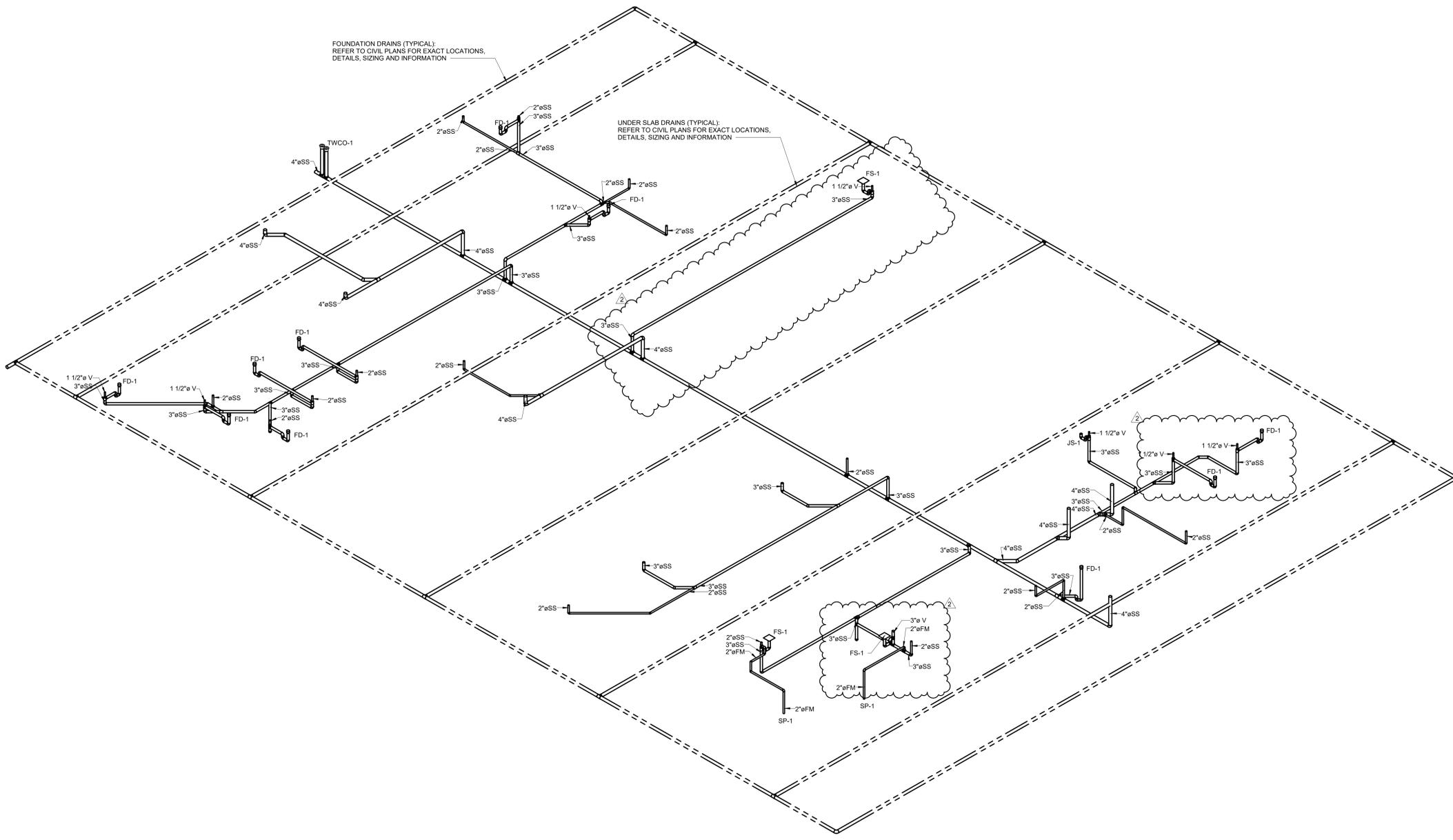
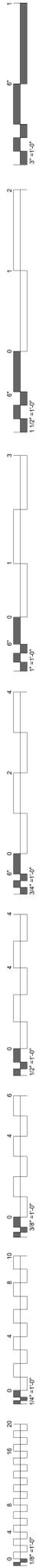
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UNDERGROUND BASEMENT
PLUMBING PLAN



1 PLUMBING PLAN - BASEMENT
1/4" = 1'-0"





**1 UNDERGROUND PLUMBING VENT ISOMETRIC
BASEMENT LEVEL**

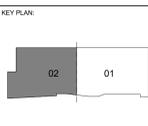


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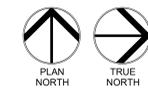
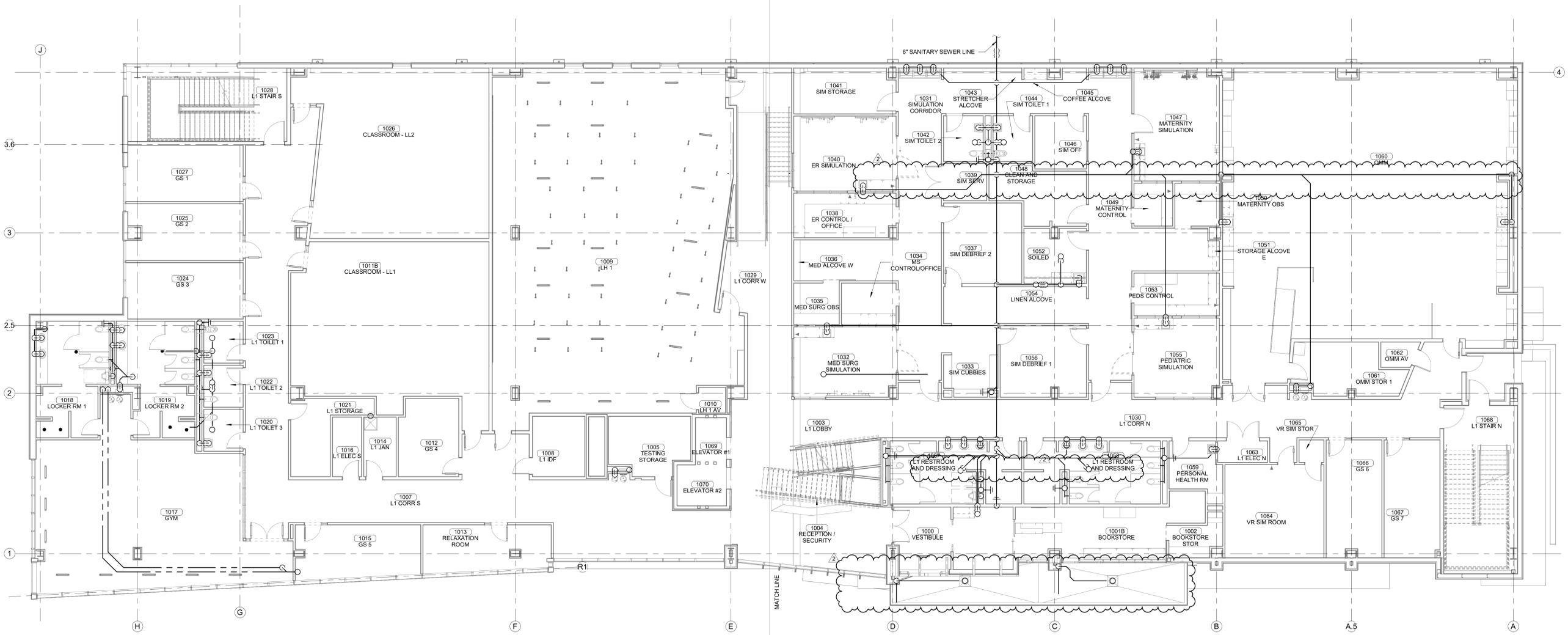
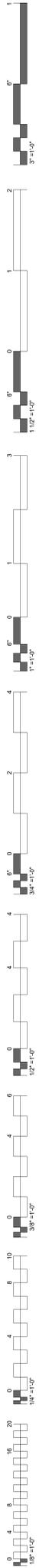
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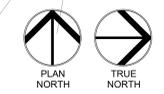
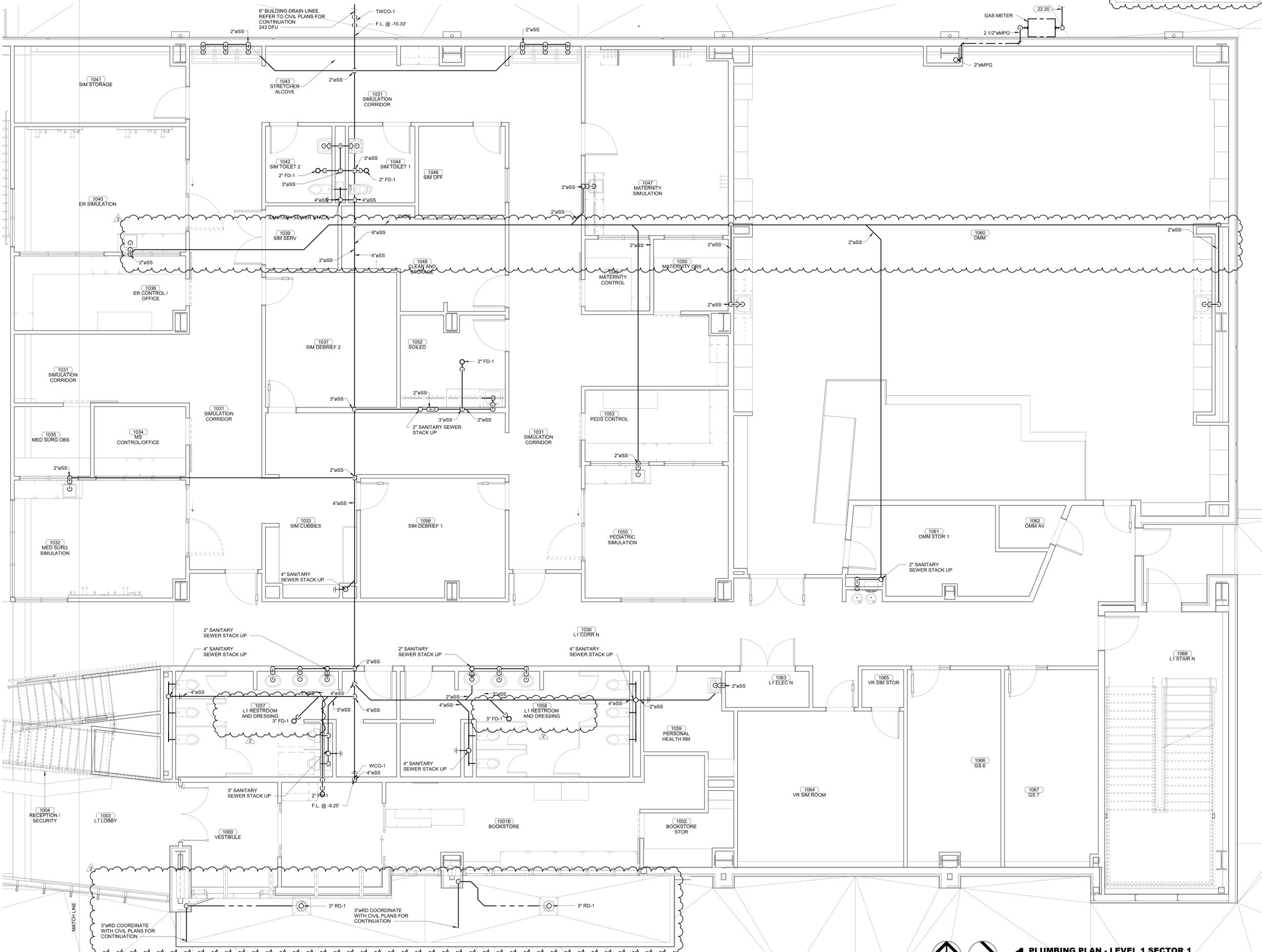
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P0.04

UNDERGROUND PLUMBING
VENT/DRAIN ISOMETRIC
BASEMENT



1 PLUMBING PLAN - LEVEL 1 OVERALL
 1/8" = 1'-0"

KEYNOTES
 22.20 2-1/2" MEDIUM PRESSURE GAS LINE (2 PSI).
 COORDINATE EXACT LOCATION OF GAS METER WITH
 LOCAL GAS UTILITY. REFER TO CIVIL PLANS FOR
 CONTINUATION. 7449.4 MBH



1 PLUMBING PLAN - LEVEL 1 SECTOR 1
 1/4" = 1'-0"

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PROFESSIONAL SEAL
 SHANE WELLS
 28910
 OKLAHOMA
 06/17/19

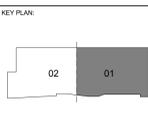
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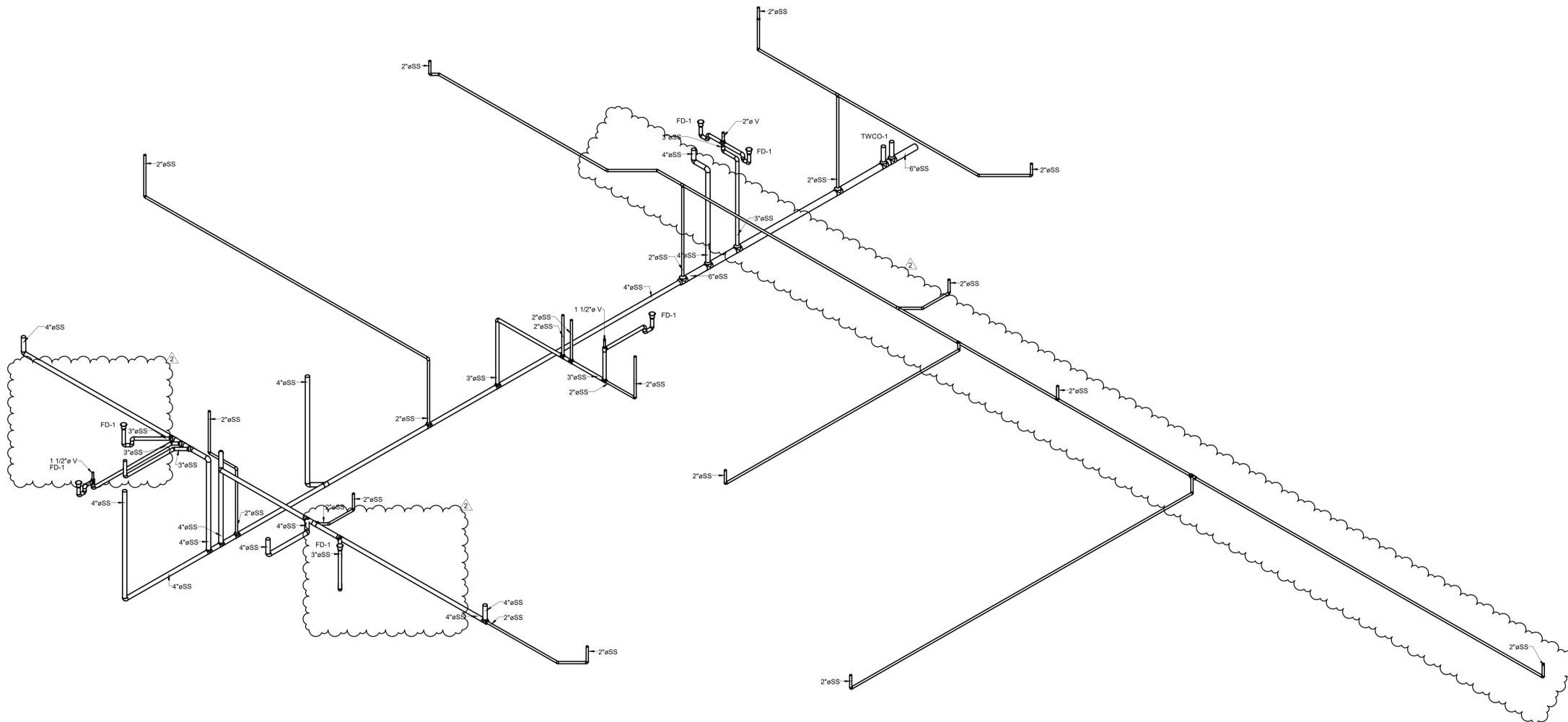
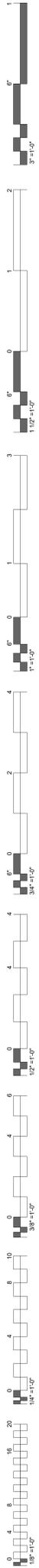
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UNDERGROUND LEVEL 01
 PLUMBING PLAN



1 - SECTOR 01
UNDERGROUND LEVEL 01 - PLUMBING VENT ISOMETRIC

#	DATE	REVISIONS DESCRIPTION
2	05-17-19	Bid Package 04 ASI 02



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NOTE:
ROUTE RC-1 TO FURTHEST POINT OF HW
LINE PRIOR TO DROPPING TO FIXTURES



KEY PLAN

PROJECT PHASE

CONSTRUCTION DOCUMENTS

#	DATE	REVISIONS	DESCRIPTION

DATE: 08-23-19

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PLUMBING LEGENDS, NOTES AND SCHEDULES

PLUMBING PIPE LEGEND

DESCRIPTION	TAG	LINETYPE
COLD WATER	CW	----
CONDENSATE	CD	----
FIRE	F	----
FORCED MAIN	FM	----
GAS	G	----
HOT WATER	HW	----
IRRIGATION	IR	----
MEDICAL AIR	MA	----
MEDIUM PRESSURE GAS	MPG	----
MEDICAL VACUUM	VAC	----
SANITARY SEWER	SS	----
VENT	V	----

PLUMBING SYMBOL LEGEND

D.F.U.	DRAIN FIXTURE UNITS		HWAT TAPE
GPM	GALLONS PER MINUTE		FROST PROOF HOSE BIBB (FRFB-10)
F.L.	FLOW LINE INVERT		FLOOR DRAIN
	WATER/GAS METER		SAFE WASTE DRAIN
	REGULATOR		FLOOR SINK
	PRESSURE REDUCING VALVE		WALL CLEAN OUT/ STACK CLEAN OUT
	CONTINUATION		FLOOR CLEANOUT
	BALL VALVE		CLEAN OUT TO GRADE/ TWO-WAY CLEAN OUT
	MIXING VALVE		INDICATES DETAIL NUMBER
	UTILITY BOX/SUPPLY BOX		BACKFLOW PREVENTER (RPZ-1)

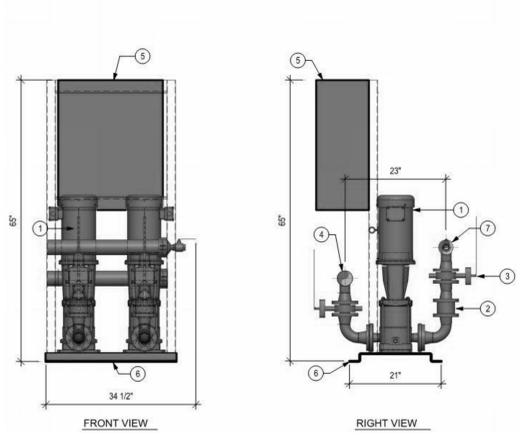
GENERAL PLUMBING NOTES

- THE ENTIRE PLUMBING SYSTEM SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE INTERNATIONAL PLUMBING CODE REGULATIONS AND LOCAL PLUMBING INSPECTOR.
- THE PIPING INDICATED ON THESE PLANS ARE DIAGRAMMATICAL. ALL WORK SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION. CONTRACTOR SHALL COORDINATE ROUTING OF ALL PIPING WITH EXISTING CONDITIONS AND SHALL PROVIDE ANY NECESSARY OFFSETS, REWORKING, TEES, ELBOWS, ETC. REQUIRED FOR A COMPLETE AND COORDINATED INSTALLATION.
- THE CONTRACTOR SHALL OBTAIN AND PAY ALL FEES RELATED TO PERMITTING, INSPECTIONS, TAP-ON FEES, ETC.
- THE CONTRACTOR SHALL COORDINATE ANY PLUMBING OR PIPING SYSTEM SHUTDOWN WITH THE OWNER 48 HOURS IN ADVANCE.
- ALL DOMESTIC WATER, NATURAL GAS, COMPRESSED AIR, AND VACUUM PIPING SHOWING IS ABOVE CEILING EXPOSED OVERHEAD, AND WITHIN WALLS UNLESS OTHERWISE NOTED. WATER HAMMER ARRESTORS SHALL BE INSTALLED AT DISHWASHERS, WASHING MACHINES, SUPPLY BOXES, AND QUICK CLOSING VALVES NOT LISTED. INSTALL WHA-1 AS CLOSE TO QUICK CLOSING VALVE AS POSSIBLE PER MANUFACTURER'S RECOMMENDATIONS. ISOLATION VALVES SHALL BE INSTALLED ON ALL SUPPLY FIXTURE GROUPS AND HOT WATER BALANCING VALVES.
- FROST PROOF HOSE BIBBS AND SUPPLY PIPING SHALL BE INSTALLED ON THE INSIDE OF THE INSULATION. SEAL SHEATHING IS REQUIRED TO PREVENT AIR FROM REACHING THE VALVE.
- ALL SANITARY WASTE PIPING SHOWN IS BELOW SLAB, BELOW FLOOR, OR WITHIN WALLS UNLESS OTHERWISE NOTED. ALL SANITARY VENT PIPING SHOWN IS ABOVE CEILING EXPOSED OVERHEAD, OR WITHIN WALLS UNLESS OTHERWISE NOTED.
- FLOOR DRAINS ARE TO BE THE SAME SIZE AS THE DRAIN LINE IT CONNECTS UNLESS NOTED OTHERWISE. IF SIZE IS NOT INDICATED ON DRAWINGS REFER TO PLUMBING ROUGH-IN SCHEDULE FOR PROPER SIZE.
- FLUSH CONTROLS FOR HANDICAPPED WATER CLOSETS ARE TO BE MOUNTED TO THE OPEN SIDE OF THE TOILET AREAS.
- CONTRACTOR SHALL COORDINATE AND PROVIDE ALL NECESSARY PIPING & PLUMBING FITTINGS, MISCELLANEOUS ITEMS REQUIRED FOR A COMPLETE INSTALLATION OF ALL PLUMBING RELATED ITEMS.
- ALL PIPING ON ROOF SHALL BE ANCHORED TO STEEL RIB FASTENERS APPROVED BY THE ROOF MANUFACTURER. INSTALL ANCHORS PER MANUFACTURER'S RECOMMENDATION.
- THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL UNDER SLAB PIPING WITH EXISTING STRUCTURAL FOUNDATIONS. UNDERGROUND UTILITY LOCATIONS SHALL BE PREFERRED PRIOR TO ANY WORK BEING PERFORMED. CONTRACTOR SHALL REPAIR OR REPLACE ALL PIPING NOT IN PROPER WORKING ORDER OR DAMAGED DURING INSTALLATION OF THE NEW UNDERGROUND PIPING.
- ALL PLUMBING & PIPING SYSTEMS SHALL BE SUPPORTED AS REQUIRED BY THE LOCAL CODE REQUIREMENTS AND PER MANUFACTURER'S RECOMMENDATIONS.
- ALL PIPING PENETRATIONS THROUGH NEW, EXISTING WALL, OR FLOOR SHALL BE SEALED TO EQUAL THE RATING OF THE NEW, EXISTING WALL OR FLOOR.
- THE PLUMBING SYSTEM SHALL BE TESTED AS REQUIRED BY LOCAL CODE OR BY THE REQUIREMENTS OF THE LOCAL PLUMBING INSPECTOR.
- THE ENTIRE DOMESTIC WATER SYSTEM (EXISTING/NEW) SHALL BE DISINFECTED IN ACCORDANCE TO THE LOCAL CODE & HEALTH DEPARTMENT REQUIREMENTS.
- DOMESTIC WATER AND SEWER LOCATED OUTSIDE OF FOOTING SHALL MAINTAIN A MINIMUM OF 10" SEPARATION UNLESS WRITTEN PERMISSION IS OBTAINED FROM LOCAL AUTHORITIES AND/OR PROPER CONTAMINATION PREVENTION PER LOCAL CODE HAVE BEEN MET.
- FINISHED FLOOR ELEVATION (IF E.) SHALL BE 0.00' FOR CALCULATION PURPOSES ONLY, UNLESS NOTED OTHERWISE.
- THE BACKFLOW PREVENTION DEVICE SHALL BE INSTALLED PER LOCAL CODE & PER AUTHORITY HAVING JURISDICTION REQUIREMENTS. NON-LEAD ONLY.
- ALL VENT THRU ROOF (VTR'S) PENETRATIONS INDICATED ON PLANS ARE PRELIMINARY. FINAL LOCATIONS SHALL BE COORDINATED WITH ALL TRADES. ALL VTR'S SHALL BE A MINIMUM OF 10'-0" FROM ALL FRESH AIR INTAKE OPENINGS.
- ANY PVC PIPE PENETRATING A FIRE RATED ASSEMBLY SHALL BE EXTERNALLY SLEEVED WITH STEEL, FERROUS OR COPPER MATERIALS, SECURELY FASTENED TO THE FIRE RATED ASSEMBLY. ANY SPACE BETWEEN THE SLEEVE AND THE FIRE RATED ASSEMBLY SHALL BE PENETRATED SHALL BE PROTECTED USING MATERIAL THAT CONFORMS TO ASTM E 814 OR IS A FIRE STOP PER ASTM E 1900 OR FLAME STOPPER 5000.
- CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS FOR DISHWASHER, WASHING MACHINE, REFRIGERATOR, ETC.
- PROVIDE SHUT-OFF VALVES FOR PROPER OPERATION AND SERVICING OF DOMESTIC WATER DISTRIBUTION SYSTEM. LOCATION SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING: AT EACH FIXTURE GROUP, AT EACH BRANCH TAKE-OFF FROM MAINS AND AT THE BASE OF EACH RISER. COORDINATE WITH ARCHITECTURAL PLAN FOR ACCESS DOOR LOCATIONS.
- VALVES SHALL BE LOCATED 6" ABOVE ACCESSIBLE CEILING WHEN AT ALL POSSIBLE AND SHALL BE KEYS OR OTHER IDENTIFIERS FROM OTHER TRADES. MAINTENANCE SHALL BE ABLE TO ACCESS VALVES WITH STANDARD LADDER. SHOULD LOCATION NOT BE APPLICABLE CONTRACTOR SHALL PROVIDE A CONTROL CHAIN AND ARM.
- ALL PIPING SHALL BE DELIVERED FROM PUBLIC HANDWASHING FACILITIES THROUGH AN APPROVED WATER TEMPERATURE LIMITING DEVICE THAT CONFORMS TO ASSE 1070.
- IT IS THE PLUMBING CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE SITE CONTRACTOR TO CONFIRM THAT THE INVERTS AND LOCATIONS OF THE BUILDING UTILITIES ARE COMPATIBLE WITH THE SITE UTILITIES PRIOR TO BEGINNING WORK.
- CONTRACTOR SHALL PROVIDE A PRESSURE REDUCING VALVE (PRV-1) SHOULD THE WATER PRESSURE EXCEED 75 PSI. CONTRACTOR SHALL CONFIRM WITH ON SITE CONDITIONS AND LOCAL UTILITY.
- ALL GAS PIPING ON ROOF SHALL BE PAINTED YELLOW, TYPICAL.

PLUMBING EQUIPMENT SCHEDULE

FIXTURE TAG	DESCRIPTION	MANUFACTURER	TRIM	ELECTRICAL REQUIREMENTS
AC-1	AIR COMPRESSOR	OHIO MEDICAL ACS300-208-TH80-DD-LAB	15 LPMX(OUTLETS)=4.24 CFM, SIMPLEX COMPRESSOR, 9.9 CFM @ 50 PSI, 80 GALLON TANK, HORIZONTAL TANK MOUNTED SIMPLEX, SIMPLEX SCROLL AIR COMPRESSOR	208V, 3PH, 3HP
BT-1	BOOSTER TANK	ELBI WLS-500	132 GALLON BOOSTER TANK, MAXIMUM WORKING PRESSURE 200 PSI, MAXIMUM OPERATING TEMP 240° F	
BV-1	BALL VALVE	APOLLO INTERNATIONAL 94ALF-A SERIES	LEAD FREE BALL VALVE, FULL PORT, BLOWOUT-PROOF, PRESSURE RETAINING, ADJUSTABLE STEM PACKING NUT	
DBP-1	DOMESTIC BOOSTER PUMP (DUPLX)	PREMER FLOW PVP-5-5-1/2 (DUPLX)	SYSTEM CONDITION POINT: 150 GPM @ 72 PSI, SUCTION PRESSURE 19 MIN. TO 30 MAX. PSI, (2) PUMPMOTORS MODEL EBARA EVMSU15-2, 5 HP, 3600 RPM, FLOW RATE OF 75 GPM @ 120' F.T.D. (EACH).	480V, 3 PH, 60HZ, 3.73 KW, 51HP
DN-1	DOWNSPOUT NOZZLE	ZURN Z199 ZARB	ROUGH BRONZE BODY, DECORATIVE WALL FLANGE AND OUTLET NOZZLE	
ESH-1	EYE/FACE WASH STATION 2-HEADS WITH SHOWER	GUARDIAN G1950P	EYE/FACE WASH: TWO F5-PLUS SPRAY HEADS WITH SHOWER, 1/2" IPS PVCY COATED BRASS STAY-OPEN BALL VALVE, 11.75" ORANGE ABS PLASTIC BOWL, SHOWER, 1" PVCY COATED BRASS STAY-OPEN BALL VALVE 10" DIAMETER ORANGE ABS SHOWER HEAD WITH 20 GPM FLOW CONTROL, TMV-2	
ET-1	EXPANSION TANK	ZURN WXTLP-120V	BRASS CONNECTION, WELDED STEEL CONSTRUCTION, BUTYL RUBBER BLADDER, MAXIMUM SUPPLY PRESSURE 80 PSI, PRE-CHARGED AIR	
EW-1	ELECTRIC WATER COOLER, SPLIT LEVEL, WALL MOUNTED, STANDARD AND HANDICAPPED, NO LEAD DESIGN, ONE PIECE, STAINLESS STEEL BASIN, WITH BOTTLE FILLING STATION	ELKAY LZWS-LRPBM28K	ADA APPROVED, W/ TOUCH PADS ON FRONT, BOTTLE FILLING STATION WITH INTEGRAL SWIRL-FLO FOUNTAIN, REFRIGERATED FILTERED STAINLESS, FLEXI-GUARD SAFETY BUBBLER, P-TRAP, WATER VALVE, FRAME PER MANUFACTURER'S INSTRUCTIONS	115V, 1PH, 370W
FD-1	FLOOR DRAIN-SQUARE	MIFAB F1000-S	CAST IRON BODY, ANCHOR FLANGE, SECURED ROUND ADJUSTABLE STRAINER HEAD WITH HOLE GRATE, LOOSE GRATE AND SEDIMENT BUCKETS, MIFAB TRAP GUARD, REFER TO PLANS FOR SIZES	
FPHB-1	FROST PROOF HOSE BIBB - BOX	J.R. SMITH 5590T-CAN	AUTOMATIC DRAINING, ANTI-SIPHON FREEZELESS, PROVIDE SHUT-OFF VALVE FOR SUPPLY LINE IN AN ACCESSIBLE LOCATION	
FS-1	FLOOR SINK	J. R. SMITH 3150	CAST IRON FLANGE RECEPTOR, SEEPAGE HOLES, ACID RESISTANT COATED INTERIOR, NICKEL BRONZE RIM, LOOSE GRATE, ALUMINUM DOME BOTTOM STRAINER, GRATE, MIFAB TRAP GUARD	
GD-1	GARBAGE DISPOSAL - RESIDENTIAL	INSINKERATOR BADGER 1	1/3 HORSEPOWER HEAVY DUTY MOTOR, RUGGED GALVANIZED STEEL CONSTRUCTION, INSTALL PER MANUFACTURER'S INSTRUCTIONS	120V, 60HZ, 1/3HP
GWH-1	(6) GAS WATER HEATER TANKLESS	LOCHINVAR WAN200PM	DIRECT-SPARK IGNITION, BUILT-IN CASCADING SEQUENCER, PROVIDE MANUFACTURER'S CONCENTRIC VENT KIT TO EXTERIOR, PROVIDE CATCH PAN & DRAIN, MIXING VALVE, ACID NEUTRALIZATION KIT, 199.9 MBH	120V, 60HZ, 1PH, 24VAC
HL-1	HANDICAPPED LAVATORY, UNDER MOUNT, VITREOUS CHINA - OVAL	ZURN Z5314	ZURN Z7440-XL-BA-FC SINGLE LEVER FAUCET, TMV-1, ZURN Z8743-PC GRID STRAINER, ZURN Z8700 SERIES P-TRAP, ZURN Z8800 SERIES STOP WITH FLEXIBLE SUPPLIES AND TURN KEY, ZURN Z8946-1NT ADA TRAP, STOP AND SUPPLY PROTECTOR PVC TYPE INSULATION AROUND 7" TRAP & IPS CONNECTIONS, THREE HOLES ON DECK, 4" CENTERS, COORDINATE WITH SINK PRIOR TO CUTTING	
HL-2	HANDICAPPED LAVATORY, WALL MOUNT, VITREOUS CHINA	ZURN Z5314	ZURN Z7440-XL-BA-FC SINGLE LEVER FAUCET, TMV-1, ZURN Z8743-PC GRID STRAINER, ZURN Z8700 SERIES P-TRAP, ZURN Z8800 SERIES STOP WITH FLEXIBLE SUPPLIES AND TURN KEY, ZURN Z8946-1NT ADA TRAP, STOP AND SUPPLY PROTECTOR PVC TYPE INSULATION AROUND 7" TRAP & IPS CONNECTIONS, CONCEALED ARM CARRIER SYSTEM, THREE HOLES ON DECK, 4" CENTERS	
HS-1	HANDICAPPED SINK SINGLE COMPARTMENT UNDER MOUNT 18-1/2"x18-1/2"x3-8" - EXAMS	ELKAY ELUH161655	ELKAY FAUCET LK800GN04T4, 8" FIXED CENTER, 4" REACH, 4" WRISTBLADE HANDLE, 3-1/2" OPENING DRAIN, MCGUIRE 151M HEAVY DUTY BRASS BASKET & STRAINER, 1 1/2" CHROME PLATED TAILPIECE, MCGUIRE 8912 1 1/2" x 1 1/2" HEAVY DUTY CHROME PLATED CAST BRASS P-TRAP W/ CLEANOUT PLUG, MCGUIRE 170L CHROME PLATED SOLID BRASS ANGLE STOPS W/ 5" CHROME PLATED COPPER EXTENSION TUBE & LOOSE KEYS, FLEXIBLE CHROME PLATED COPPER RISERS, MCGUIRE 111C SERIES 1 1/2" END OUTLET CONTINUOUS WASTE, PROVIDE THREE FAUCET HOLES ON DECK, COORDINATE WITH SINK PRIOR TO CUTTING	
HS-2	HANDICAPPED SINK SINGLE COMPARTMENT UNDERCOUNTER MOUNT 23-1/2"x18-1/4"x3-8" - OMM & CLINICAL SKILLS	ELKAY ELUHAD211555PD	ELKAY LK800GN05T4, 8" CENTERSET, 5" REACH, 4" WRISTBLADE HANDLE, 3-1/2" OPENING DRAIN, MCGUIRE 151M HEAVY DUTY BRASS BASKET & STRAINER, 1 1/2" CHROME PLATED TAILPIECE, MCGUIRE 8912 1 1/2" x 1 1/2" HEAVY DUTY CHROME PLATED CAST BRASS P-TRAP W/ CLEANOUT PLUG, MCGUIRE 170L CHROME PLATED SOLID BRASS ANGLE STOPS W/ 5" CHROME PLATED COPPER EXTENSION TUBE & LOOSE KEYS, FLEXIBLE CHROME PLATED COPPER RISERS, MCGUIRE 111C SERIES 1 1/2" END OUTLET CONTINUOUS WASTE, PROVIDE THREE FAUCET HOLES ON DECK, COORDINATE WITH SINK PRIOR TO CUTTING	
HS-5	HANDICAPPED SINK SINGLE COMPARTMENT HANDICAP - SURUB	JUST JADA-770-1-S	ELKAY LK8722C SENSOR FAUCET AC PLUG IN, 3-1/2" OPENING DRAIN, MCGUIRE 151M HEAVY DUTY BRASS BASKET & STRAINER, 1 1/2" CHROME PLATED TAILPIECE, MCGUIRE 8912 1 1/2" x 1 1/2" HEAVY DUTY CHROME PLATED CAST BRASS P-TRAP W/ CLEANOUT PLUG, MCGUIRE 170L CHROME PLATED SOLID BRASS ANGLE STOPS W/ 5" CHROME PLATED COPPER EXTENSION TUBE & LOOSE KEYS, FLEXIBLE CHROME PLATED COPPER RISERS, MCGUIRE 111C SERIES 1 1/2" END OUTLET CONTINUOUS WASTE, PROVIDE ONE FAUCET HOLE ON BACK SPLASH	120V PLUG
HSH-1	HANDICAPPED SHOWER, 60"X30" ROLL-IN	SCHLUTER DRAIN SYSTEM TILE BY OTHER	SCHLUTER DRAIN SYSTEM TILE BY OTHER	
HSH-2	HANDICAPPED SHOWER, 36"x36"	SCHLUTER DRAIN SYSTEM TILE BY OTHER	SCHLUTER DRAIN SYSTEM TILE BY OTHER	
HWC-1	HANDICAPPED WATER CLOSET, VITREOUS CHINA, FLUSH VALVE, WALL MOUNTED, ELONGATED RIM, 12" ROUGH-IN, SIPHON, JET BOWL, 1.28 GPF	ZURN Z5615 HET SERIES	EZ-FLO 65913 OPEN FRONT SEAT, ZURN Z6000AV-HET 1.28 GPF MANUAL FLUSH VALVE, J.R. SMITH 0211Y-M54 1000B CARRIER	
IHF-1	INSTA HOT FAUCET	INSINKERATOR MODEL C1300	SWIVELING GOOSENECK SPOUT, EASY-ACTION LEVER WITH AUTOMATIC SHUT-OFF, POLISHED CHROME, 2/3 GALLON STAINLESS STEEL TANK, TEMPERATURE CONTROL	115V, 11.3A
JS-1	JANITORS SINK, FLOOR MOUNTED	MUSTEE CUSTODIAL FLOOR SINK MODEL 63M	PROVIDE SERVICE FAUCET # 63 800A CHROME PLATED BRASS ON 8" CENTER W/ VACUUM BREAKER, HOSE BRACKET 65 700, MOP HANGERS 65 600, BUMPER GUARDS 63 401, WALL GUARDS 2 PANELS & 1 BRACKET 87 242, SUPPLIED W/ CAST BRASS DRAIN, PROVIDE CHECK VALVES ON HOT AND COLD WATER LINES IN AN ACCESSIBLE LOCATION	
L-1	LAVATORY, PEDESTAL SINK, VITREOUS CHINA	KOHLER K-2362-1	ZURN Z7440-XL-BA-FC SINGLE LEVER FAUCET, TMV-1, ZURN Z8743-PC GRID STRAINER, ZURN Z8700 SERIES P-TRAP, ZURN Z8800 SERIES STOP WITH FLEXIBLE SUPPLIES AND TURN KEY, ZURN Z8946-1NT ADA TRAP, STOP AND SUPPLY PROTECTOR PVC TYPE INSULATION AROUND 7" TRAP & IPS CONNECTIONS, CONCEALED ARM CARRIER SYSTEM, ONE HOLE ON DECK, 4" CENTER	
OD-1	OVERFLOW DRAIN	J.R. SMITH 1072	ADJUSTABLE, DUCO CAST IRON BODY, FLASHING CLAMP, GRAVEL STOP, POLYETHYLENE DOME, WATER DAM, SUMP PAN	
PRV-1	PRESSURE REDUCING VALVE	WATTS LF29AUB	LEAD FREE COPPER SILICON ALLOY WITH STAINLESS STEEL STRAINER AND HIGH-TEMPERATURE DIAPHRAGM, HIGH LOW-PRESSURE PORTS, NSF 61-4 APPROVED FOR POTABLE-WATER APPLICATIONS AND COMPLIANT WITH ASSE 1003 STANDARDS	
RC-1	HEAT TAPE	RAYCHEM	140' INVENT RAYCHEM HWAY SELF-REGULATION HEATING CABLE (HWAT-R2) WITH PLASTICIZER DIFFUSION SHIELD, HEAVY TWIN COIL POLYETHYLENE HEATING TAPE TO FURTHEST POINT OF HEATING TAPE, JUST BEFORE DROP. (1)CONTROLLER PER 500 FEET OF TAPE, CONTROLLERS (6 TOTAL), TO BE LOCATED IN THE MECHANICAL ROOM IN THE BASEMENT. COORDINATE WITH MANUFACTURER. CONTROLLER TO BE SET AT 140'. PROVIDE MCGUIRE CELL # 2900V, RICHARD T. WARREN, JR. P.E. INDUSTRIAL HEATER OFFICE. 901-382-4761, CELL: 901-240-2284.	208-240V, 30A
RD-1	ROOF DRAINS	J.R. SMITH 1015	ADJUSTABLE EXTENSION, DUCO CAST IRON BODY, FLASHING CLAMP, GRAVEL STOP, POLYETHYLENE DOME, AND SUMP PAN	
RH-1	ROOF HYDRANT	WOODFORD RHYZ-MS	FREEZELESS ROOF HYDRANT, BACKFLOW PROTECTED WITH DOUBLE CHECK BACKFLOW PREVENTER, BUILT IN DRAIN HOLE WHICH MUST BE PIPED TO A DRAIN LOCATION	
RPZ-1	REDUCE PRESSURE PRINCIPLE BACKFLOW PREVENTER, FOR DOMESTIC WATER	WATTS LF09M2 QT	PROVIDE SAME SIZE AS WATER LINE FROM METER, WATTS BALL VALVES AND "Y" STRAINER, SHALL MEET APPROVAL BY FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH AT THE UNIVERSITY OF SOUTHERN CALIFORNIA	
RPZ-2	REDUCE PRESSURE PRINCIPLE BACKFLOW PREVENTER, FOR IRRIGATION WATER	WATTS LF09M2 QT	PROVIDE SAME SIZE AS WATER LINE FROM METER, WATTS BALL VALVES AND "Y" STRAINER, SHALL MEET APPROVAL BY FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH AT THE UNIVERSITY OF SOUTHERN CALIFORNIA	
S-2	SINK SINGLE COMPARTMENT UNDER MOUNT 25-1/2"x19-1/4"x12" - SIM LABS	ELKAY ELUH231712	ELKAY LK800GN08T4 FAUCET, 8" REACH, 13" HEIGHT, 8" CENTERS, 4" WRISTBLADE HANDLE, 3-1/2" OPENING DRAIN, MCGUIRE 151M HEAVY DUTY BRASS BASKET & STRAINER, 1 1/2" CHROME PLATED TAILPIECE, MCGUIRE 8912 1 1/2" x 1 1/2" HEAVY DUTY CHROME PLATED CAST BRASS P-TRAP W/ CLEANOUT PLUG, MCGUIRE 170L CHROME PLATED SOLID BRASS ANGLE STOPS W/ 5" CHROME PLATED COPPER EXTENSION TUBE & LOOSE KEYS, FLEXIBLE CHROME PLATED COPPER RISERS, MCGUIRE 111C SERIES 1 1/2" END OUTLET CONTINUOUS WASTE, PROVIDE THREE FAUCET HOLES ON DECK, COORDINATE WITH SINK PRIOR TO CUTTING	
S-3	SINK DOUBLE COMPARTMENT UNDER MOUNT 31-1/2"x18-1/2"x9" - LOUNGES	ELKAY ECTRJ31179TC	MOEN ARBOR 5095 SINGLE HANDLE WITH PULL DOWN SPRAY, 14" HIGH SPOUT, 8-3/8" REACH, 3-1/2" OPENING DRAIN, MCGUIRE 151M HEAVY DUTY BRASS BASKET & STRAINER, 1 1/2" CHROME PLATED TAILPIECE, MCGUIRE 8912 1 1/2" x 1 1/2" HEAVY DUTY CHROME PLATED CAST BRASS P-TRAP W/ CLEANOUT PLUG, MCGUIRE 170L CHROME PLATED SOLID BRASS ANGLE STOPS W/ 5" CHROME PLATED COPPER EXTENSION TUBE & LOOSE KEYS, FLEXIBLE CHROME PLATED COPPER RISERS, MCGUIRE 111C SERIES 1 1/2" END OUTLET CONTINUOUS WASTE, PROVIDE ONE FAUCET HOLE ON DECK PER MANUFACTURER	
S-4	SINK DOUBLE COMPARTMENT - CADAVER STORAGE	PROVIDED BY OWNER AND INSTALLED BY PLUMBING CONTRACTOR	FAUCET PROVIDED BY MORTECH AND INSTALLED BY PLUMBING CONTRACTOR, 3-1/2" OPENING DRAIN, MCGUIRE 151M HEAVY DUTY BRASS BASKET & STRAINER, 1 1/2" CHROME PLATED TAILPIECE, MCGUIRE 8912 1 1/2" x 1 1/2" HEAVY DUTY CHROME PLATED CAST BRASS P-TRAP W/ CLEANOUT PLUG, MCGUIRE 170L CHROME PLATED SOLID BRASS ANGLE STOPS W/ 5" CHROME PLATED COPPER EXTENSION TUBE & LOOSE KEYS, FLEXIBLE CHROME PLATED COPPER RISERS, MCGUIRE 111C SERIES 1 1/2" END OUTLET CONTINUOUS WASTE, PROVIDE THREE FAUCET HOLES ON DECK PER MANUFACTURER	
S-5	SINK SINGLE COMPARTMENT - SCRUB	SLOAN ESS-2100 LESS FAUCET	FISHER 3816 SINGLE DECK BASE W/1/2" RIGID GOOSE NECK SPOUT, 5-1/2" REACH, KROWNE 16-120L DOUBLE FOOT PEDAL VALVE, 3-1/2" OPENING DRAIN, MCGUIRE HEAVY DUTY GRID STRAINER, 1 1/2" CHROME PLATED TAILPIECE, MCGUIRE 8912 1 1/2" x 1 1/2" HEAVY DUTY CHROME PLATED CAST BRASS P-TRAP W/ CLEANOUT PLUG, MCGUIRE 170L CHROME PLATED SOLID BRASS ANGLE STOPS W/ 5" CHROME PLATED COPPER EXTENSION TUBE & LOOSE KEYS, FLEXIBLE CHROME PLATED COPPER RISERS, MCGUIRE 111C SERIES 1 1/2" END OUTLET CONTINUOUS WASTE, PROVIDE ONE FAUCET HOLE ON DECK	
S-6	SINK SINGLE COMPARTMENT UNDERMOUNT - PREP	ELKAY ELUH281612	ELKAY LK800GN08T4 FAUCET, 8" REACH, 13" HEIGHT, 3-1/2" OPENING DRAIN, MCGUIRE 151M HEAVY DUTY BRASS BASKET & STRAINER, 1 1/2" CHROME PLATED TAILPIECE, MCGUIRE 8912 1 1/2" x 1 1/2" HEAVY DUTY CHROME PLATED CAST BRASS P-TRAP W/ CLEANOUT PLUG, MCGUIRE 170L CHROME PLATED SOLID BRASS ANGLE STOPS W/ 5" CHROME PLATED COPPER EXTENSION TUBE & LOOSE KEYS, FLEXIBLE CHROME PLATED COPPER RISERS, MCGUIRE 111C SERIES 1 1/2" END OUTLET CONTINUOUS WASTE, PROVIDE THREE FAUCET HOLES ON DECK, COORDINATE WITH SINK PRIOR TO CUTTING	
S-7	SINK THREE COMPARTMENT - SCRUB	SLOAN ESS-230 LESS FAUCET	FISHER 3816 SINGLE DECK BASE W/1/2" RIGID GOOSE NECK SPOUT, 5-1/2" REACH, KROWNE 16-120L DOUBLE FOOT PEDAL VALVE, 3-1/2" OPENING DRAIN, MCGUIRE HEAVY DUTY GRID STRAINER, 1 1/2" CHROME PLATED TAILPIECE, MCGUIRE 8912 1 1/2" x 1 1/2" HEAVY DUTY CHROME PLATED CAST BRASS P-TRAP W/ CLEANOUT PLUG, MCGUIRE 170L CHROME PLATED SOLID BRASS ANGLE STOPS W/ 5" CHROME PLATED COPPER EXTENSION TUBE & LOOSE KEYS, FLEXIBLE CHROME PLATED COPPER RISERS, MCGUIRE 111C SERIES 1 1/2" END OUTLET CONTINUOUS WASTE, PROVIDE ONE FAUCET HOLE ON DECK	
SB-1	SUPPLY BOX	GUY GRAY MIB2HAB	(1) 1/2" SUPPLY, PROVIDE WHA-1 (WATER HAMMER ARRESTOR)	
SCC-1	STACK CLEANOUT	J. R. SMITH 4510	DUCO CAST IRON CLEANOUT TEE, BRONZE PLUG, REMOVABLE STAINLESS STEEL COVER, REFER TO PLANS FOR SIZE, PROVIDE ROUND OR SQUARE FRAME AND COVER AS REQUIRED, REFER TO ARCHITECT, 12" A.F.F.	
ST-1	STORAGE TANK - 650 GALLON	LOCHINVAR RGAD850	125 WORKING PRESSURE, LOCK-TEMP BAFFLE, GLASS LINED, TEMPERATURE AND PRESSURE GAUGE, TEMPERATURE AND PRESSURE RELIEF VALVE, MAGNESIUM ANODE, ASME CERTIFIED, FIVE-YEAR ULTIMATE WARRANTY	
TMV-1	THERMOSTATIC MIXING VALVE - POINT OF USE	LEONARD Z704-F	LEAD FREE, INTEGRAL CHECK VALVE AND STRAINER, PROVIDE TEMPERATURE CONTROL, SET AT 110°	
TMV-2	THERMOSTATIC MIXING VALVE - EMERGENCY	GUARDIAN G3800LF	LEAD FREE, INTEGRAL CHECK VALVE AND STRAINER, PROVIDE TEMPERATURE CONTROL, SET AT 90°	
TWCCO-1	TWO WAY CLEANOUT, SPEEDI-SET OUTLET	J. R. SMITH 4237	UNFINISHED FLOOR DUCO CAST IRON CLEANOUT WITH ROUND ADJUSTABLE SCORATED SECURED CAST IRON COP. TAPERED THREADED BRONZE PLUG, REFER TO PLANS FOR SIZES	
UB-1	UTILITY BOX, WASTE, AND SUPPLY	OATLEY QUADTR0	(2) 1/2" SUPPLY VALVES, 2" DRAIN CONNECTION, 1/4" TURN VALVE, PROVIDE WHA-1 (WATER HAMMER ARRESTOR)	
UR-1	URINAL, WALL MOUNT, VITREOUS CHINA	ZURN Z575R	INTERGRA ELONGATED FLUSHING RIM, INTEGRAL TRAP, 2" FEMALE FLANGED OUTLET CONNECTION, J.R. SMITH 0215 URINAL SUPPORT, FLUSH VALVE ZURN Z601AV	208V, 3PH, 3HP
VP-1	VACUUM PUMP	OHIO MEDICAL S300-208-T1-V60	25.6 CFM @ 19" Hg0, 60 GALLON TANK, SIMPLEX ROTARY VANE VACUUM, VERTICAL TANK MOUNTED SIMPLEX	208V, 3PH, 3HP
WC-1	WATER CLOSET, VITREOUS CHINA, FLUSH VALVE, WALL MOUNTED, ELONGATED RIM, 1.28 GPF	ZURN Z5615 HET SERIES	EZ-FLO 65913 OPEN FRONT SEAT, ZURN Z6000AV-HET 1.28 GPF MANUAL FLUSH VALVE, J.R. SMITH 0211Y-M54-KX 1000B CARRIER	
WCO-1	WALL CLEANOUT	J. R. SMITH 4510	DUCO CAST IRON CLEANOUT TEE, BRONZE PLUG, REMOVABLE STAINLESS STEEL COVER, REFER TO PLANS FOR SIZE, PROVIDE ROUND OR SQUARE FRAME AND COVER AS REQUIRED, REFER TO ARCHITECT	
WHA-1	WATER HAMMER ARRESTOR	MOULIX GHEIF 6508660 HYDRARESTER	VACUUMER VACUUM BREAKER ARRESTOR, TYPE L, COPPER CONSTRUCTION, IF AN ACCESS DOOR IS NEEDED CONTACT THE ARCHITECT	

Key No.	Description	Qty
01	PUMPMOTOR	2
02	NSF WATER CHECK VALVE	2
03	NSF BUTTERFLY VALVE	4
04	S/S SUCTION HEADER	1
05	CONTROL PANEL	1
06	S/S FORMED BASE	1
07	S/S DISCHARGE HEADER	1



1 DOMESTIC BOOSTER PUMP DETAIL
SCALE: N.T.S.

GAS LOAD CALCULATION

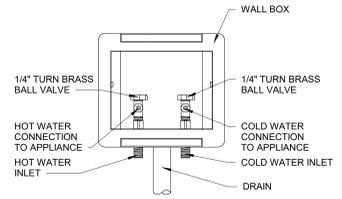
GAS LOAD CALCULATION NOTES:
GAS LINES HAVE BEEN SIZED AS PER TABLE 402.4(2) OF THE 2006 INTERNATIONAL FUEL GAS CODE FOR PRESSURES OF 2.0 PSI AND A PRESSURE DROP OF 1.0 PSI AND 0.6 SPECIFIC GRAVITY, USING A DISTANCE OF 400 FEET.

LONGEST RUN	304 (FEET) X 1.25 (FITTING LOSS) = 380 FEET TOTAL DEVELOPED LENGTH
GAS TYPE:	<0.5 PSI NATURAL
EQUIPMENT	MBH INPUT (EACH) QTY TOTAL MBH INPUT
RTU-2	850 1 850
RTU-1, 3, 4	1800 3 5400
GWH-1	199.9 6 1199.4



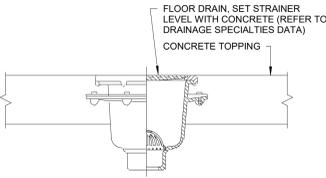
16 UTILITY BOX

N.T.S.



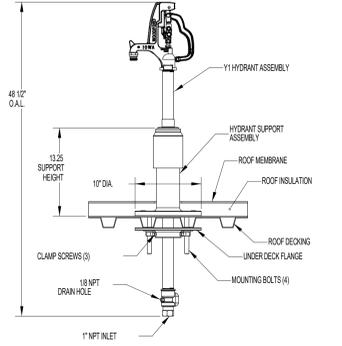
17 FLOOR SINK

N.T.S.



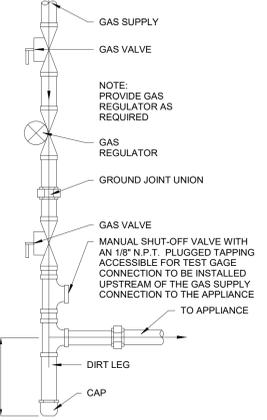
10 ROOF HYDRANT

1/4" = 1'-0"



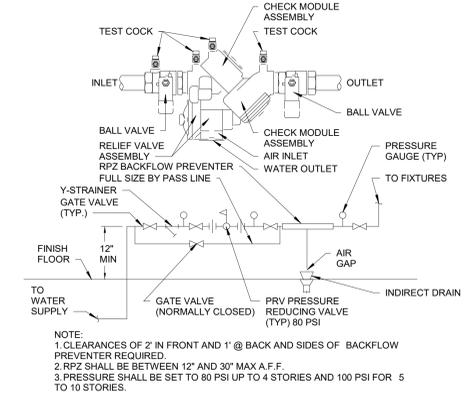
11 GAS CONNECTION

N.T.S.



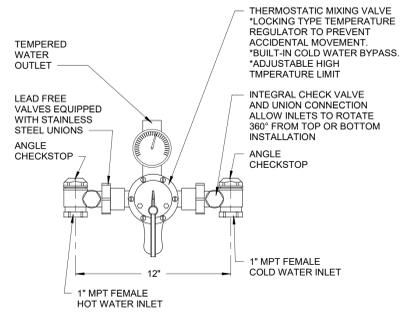
5 BACKFLOW PREVENTER DETAIL - HORIZONTAL

N.T.S.



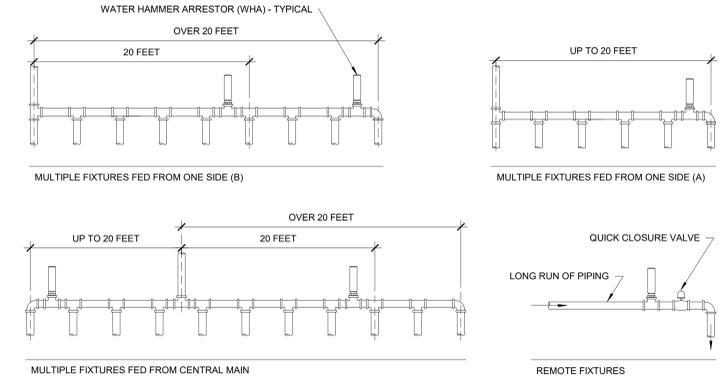
6 EMERGENCY MIXING VALVE

N.T.S.



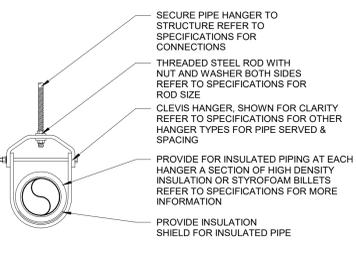
1 WATER HAMMER ARRESTOR INSTALLATION DETAIL

SCALE: N.T.S.



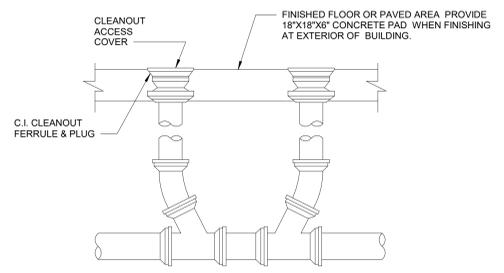
7 PIPE HANGER DETAIL

N.T.S.



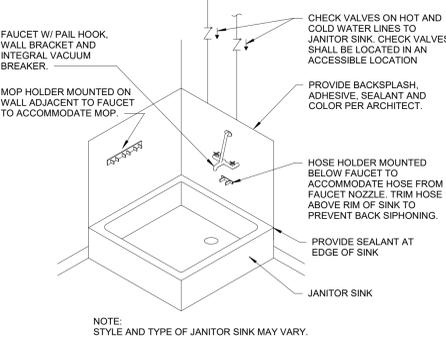
2 TWO WAY CLEANOUT

N.T.S.



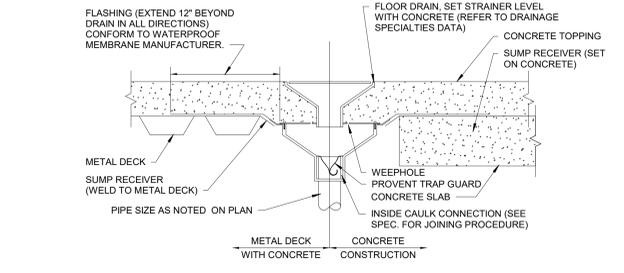
8 JANITOR'S SINK - SQUARE

N.T.S.



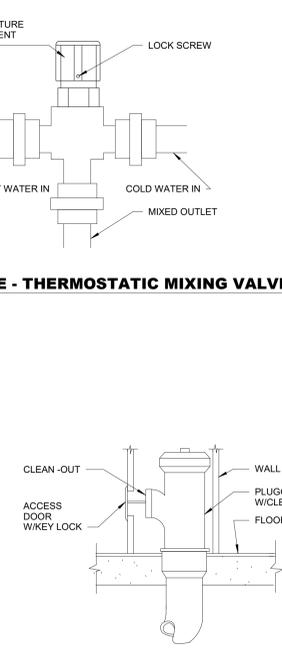
3 FLOOR DRAIN

N.T.S.



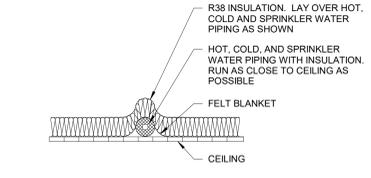
4 WALL AND STACK CLEANOUT

N.T.S.



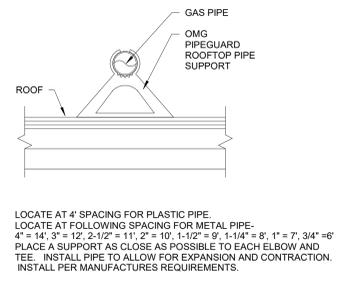
18 CEILING PIPE INSULATION

N.T.S.



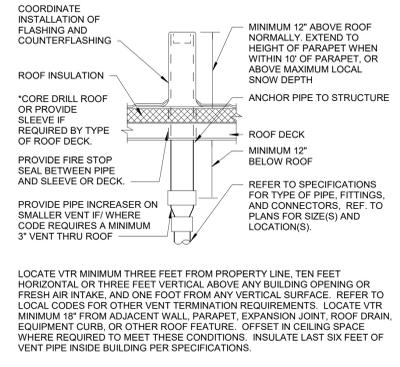
12 GAS PIPE SUPPORT ON ROOF - PLASTIC

N.T.S.



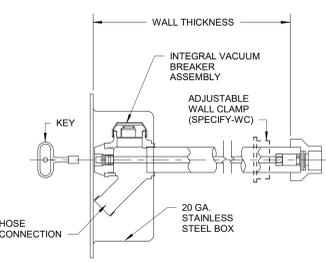
19 VENT THRU ROOF ("VTR")

N.T.S.



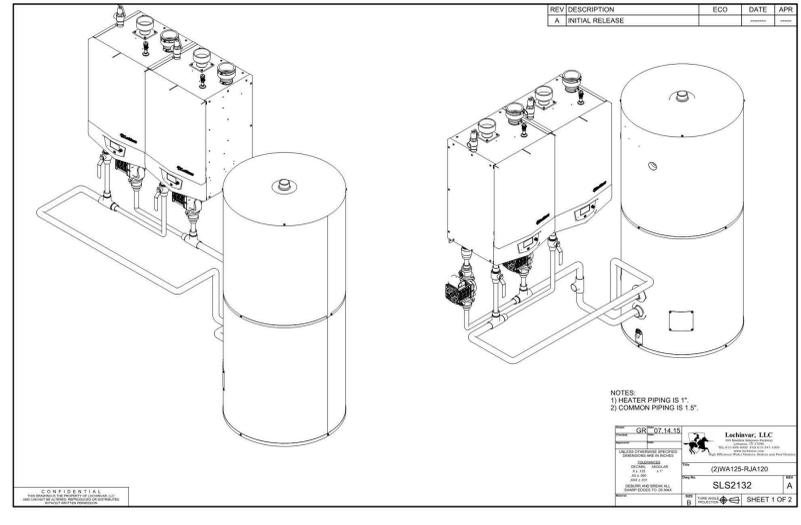
13 NON-FREEZE WALL HYDRANT

N.T.S.



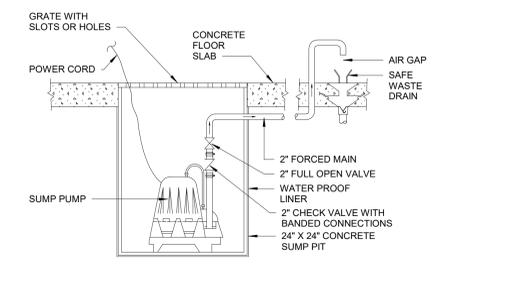
20 GAS WATER HEATER - TANKLESS w/STORAGE TANK

N.T.S.



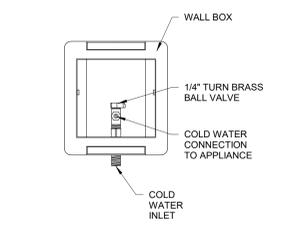
14 SUMP PUMP WITH AIR GAP

N.T.S.



15 SUPPLY BOX

N.T.S.



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08/23/19

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KEY PLAN

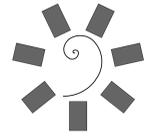
PROJECT PHASE:
CONSTRUCTION DOCUMENTS

#	DATE	REVISIONS	DESCRIPTION

DATE: 08-23-19 JOB NUMBER: 17-13
SHEET NUMBER: P1.01
PLUMBING DETAILS

NOTE: IT IS THE PLUMBING CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE SITE CONTRACTOR TO CONFIRM THAT THE INVERT AND LOCATION OF THE SANITARY SERVICE IS COMPATIBLE WITH THE SITE UTILITIES PRIOR TO BEGINNING WORK.

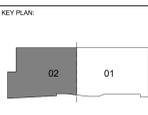
KEYNOTES
 22.04 4" SANITARY STACK UP.
 22.40 RADON MITIGATION STACK. COORDINATE WITH RADON MITIGATION DESIGN DRAWINGS.



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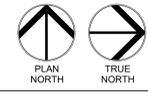
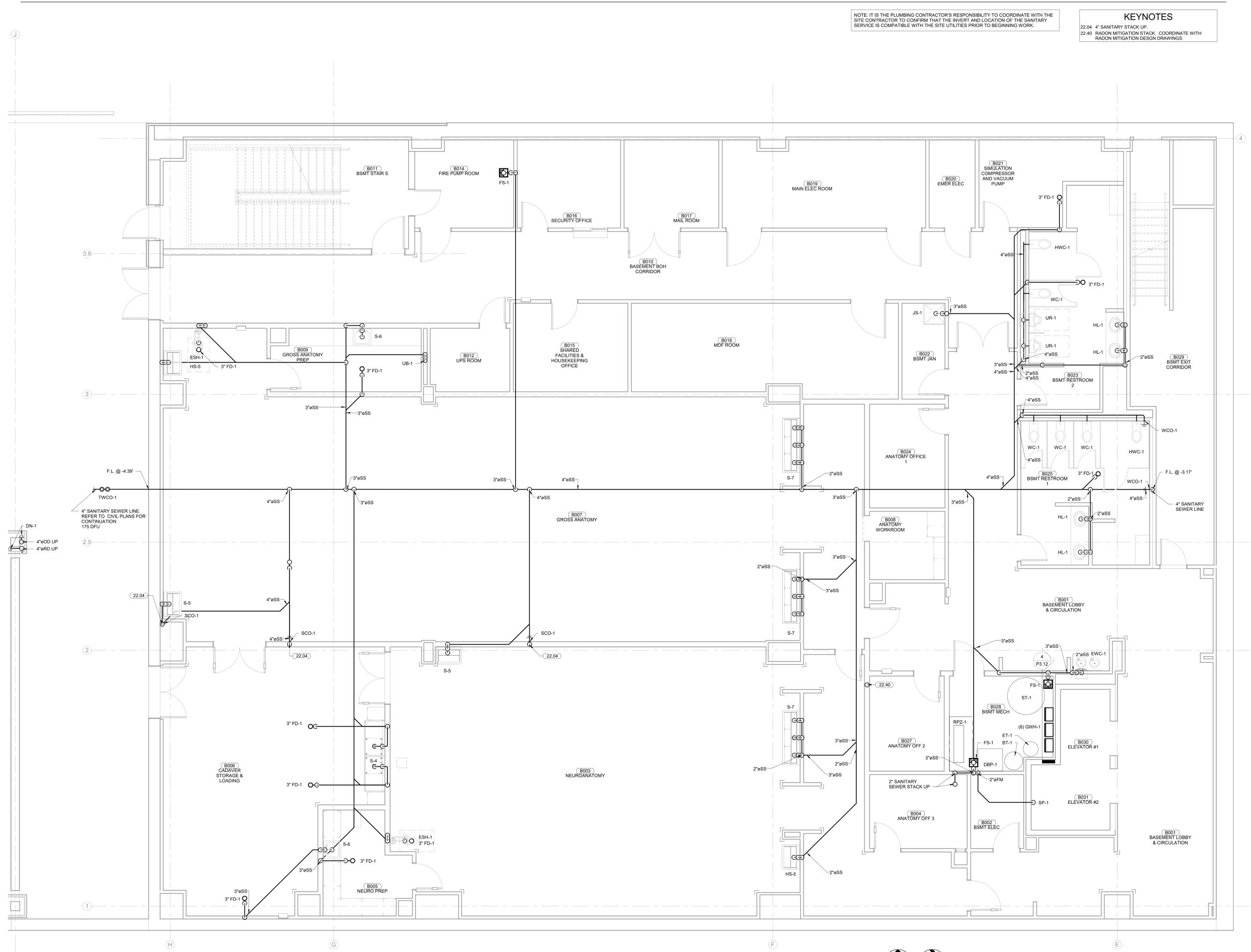
PROJECT PHASE:
CONSTRUCTION DOCUMENTS

#	DATE	REVISIONS DESCRIPTION

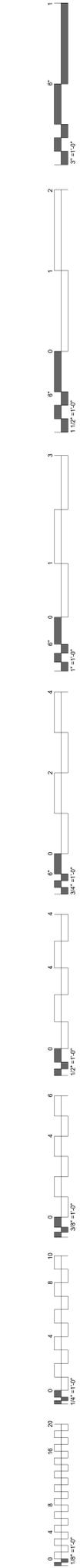
DATE: 08-23-19 JOB NUMBER: 17-13

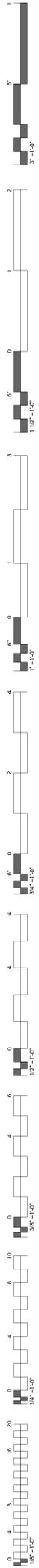
SHEET NUMBER:
P2.00

PLUMBING DRAIN PLAN - BASEMENT LEVEL



1 PLUMBING DRAIN PLAN - BASEMENT LEVEL
 1/4" = 1'-0"





- KEYNOTES**
- 22.01 DIRTY PIPE NEW 2" DRAIN LINE IN WALL TO MAIN DRAIN LINE.
 - 22.02 2" SANITARY STACK UP.
 - 22.04 4" SANITARY STACK UP.
 - 22.06 2" SANITARY STACK UP AND DOWN.
 - 22.11 4" SANITARY STACK DOWN.
 - 22.40 RADON MITIGATION STACK. COORDINATE WITH RADON MITIGATION DESIGN DRAWINGS.
 - 22.41 PROVIDE HOLDRITE SILENCER SYSTEM FOR THIS AREA.



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KEY PLAN:

02	01
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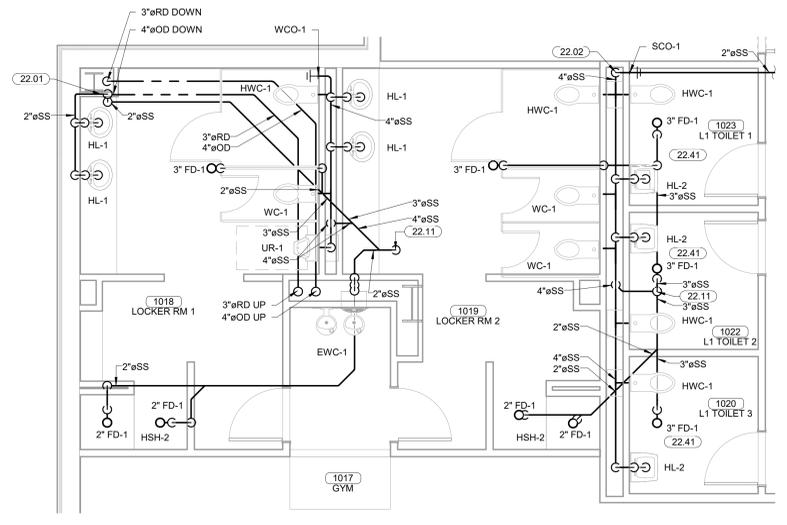
PROJECT PHASE:
CONSTRUCTION DOCUMENTS

#	DATE	REVISIONS	DESCRIPTION

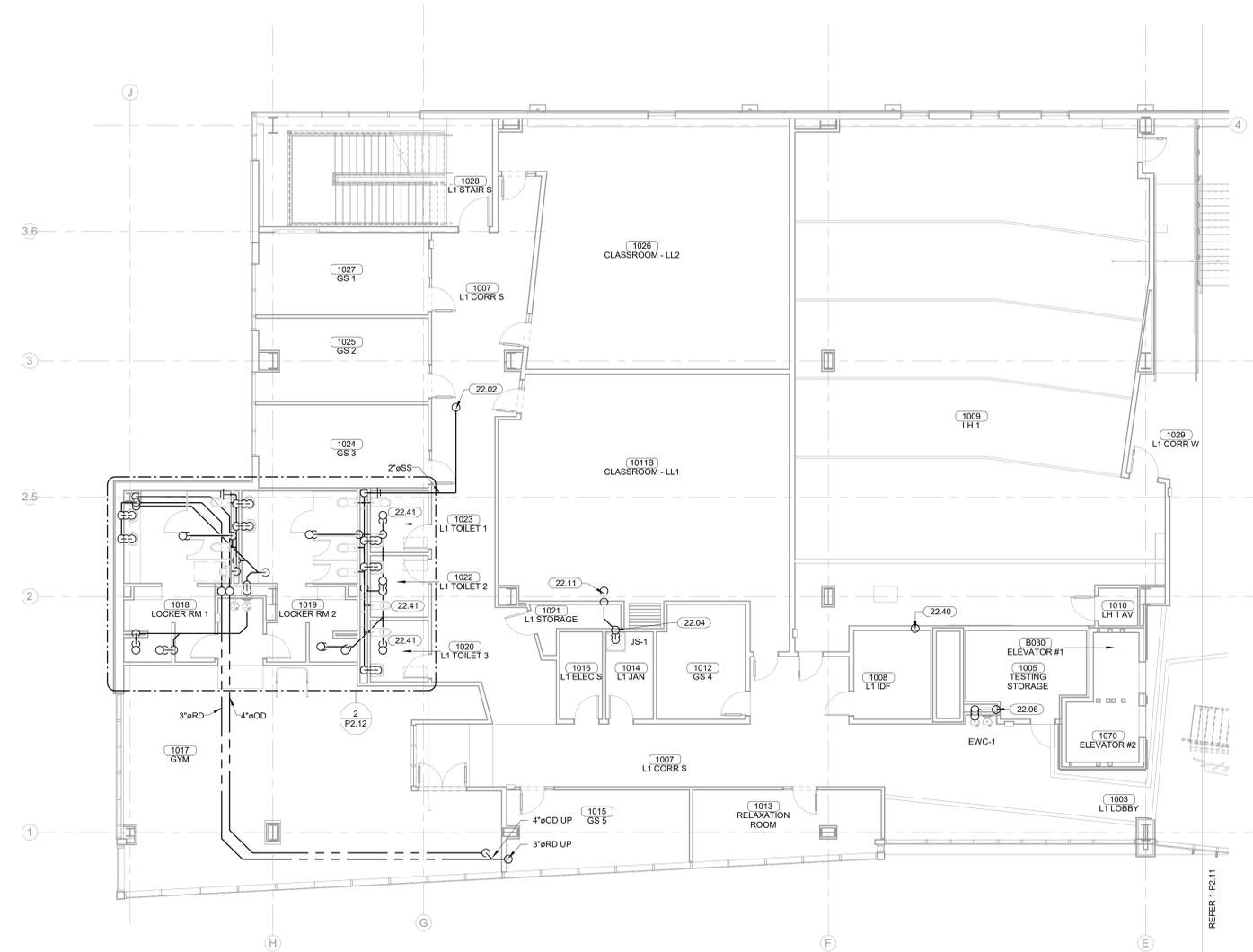
DATE: 08-23-19 JOB NUMBER: 17-13

SHEET NUMBER:
P2.12

PLUMBING DRAIN PLAN - LEVEL 01 SECTOR 02

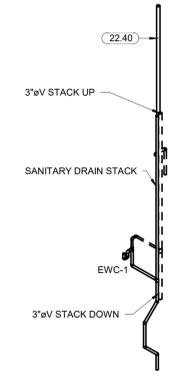
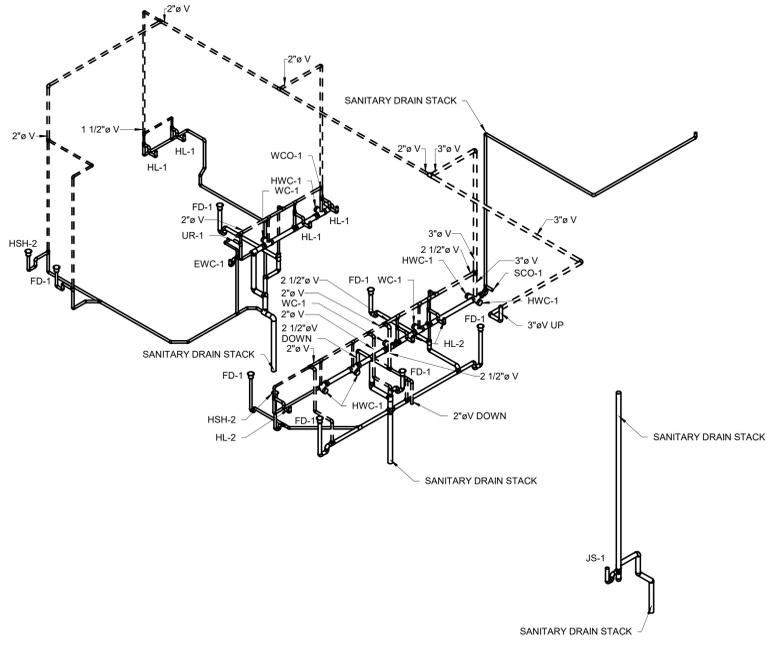
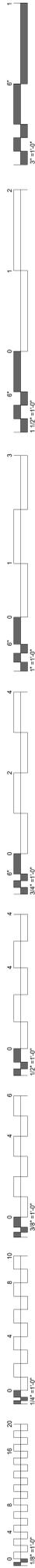


2 ENLARGED DRAIN PLAN - LEVEL 01 SECTOR 02 - LOCKER ROOMS
 1/4" = 1'-0"

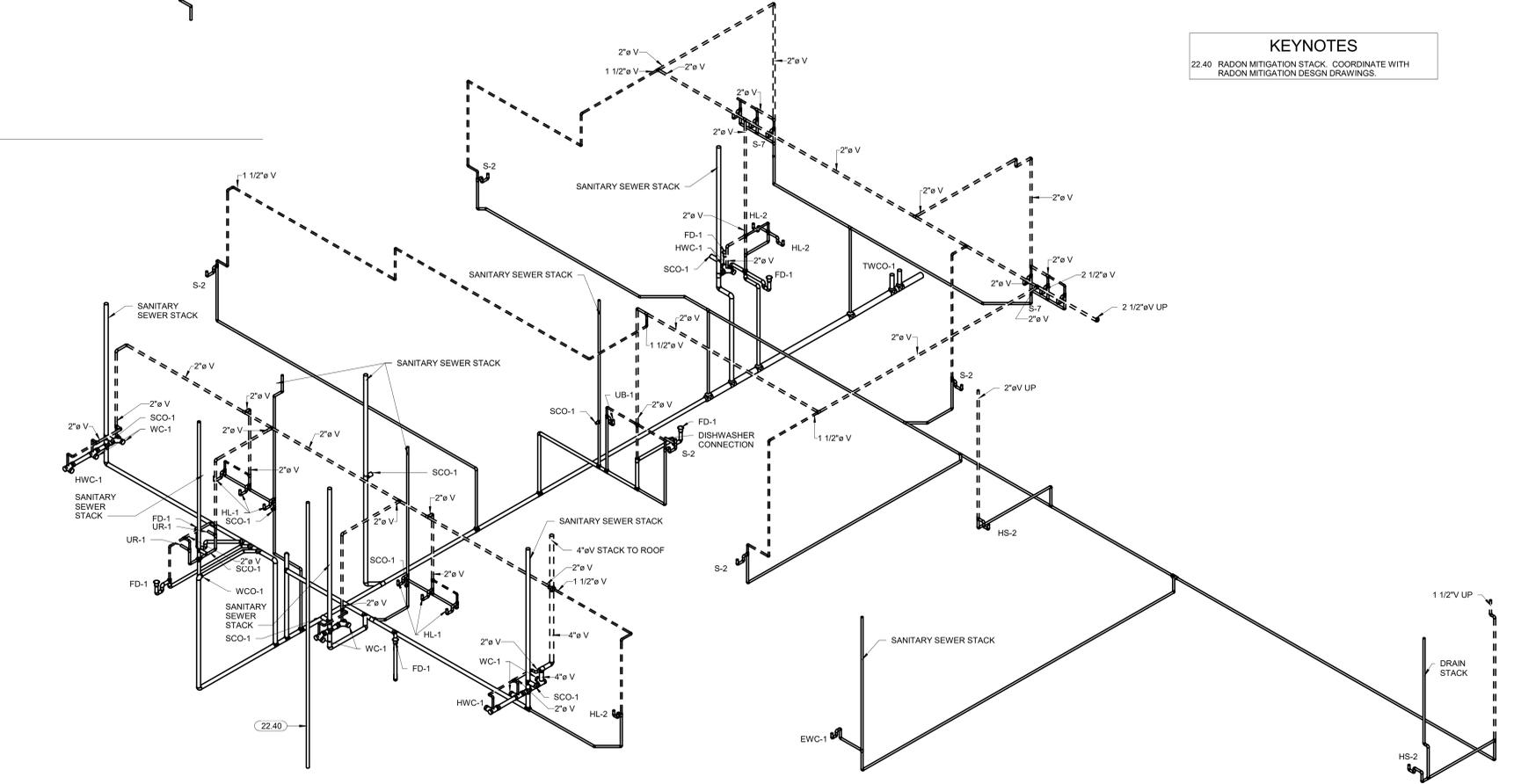


1 PLUMBING DRAIN PLAN - LEVEL 01 SECTOR 02
 1/8" = 1'-0"

PLAN NORTH TRUE NORTH



2 LEVEL 01 - PLUMBING VENT ISOMETRIC - SECTOR 02

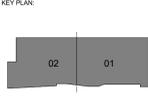


KEYNOTES
 22.40 RADON MITIGATION STACK COORDINATE WITH RADON MITIGATION DESIGN DRAWINGS.

1 LEVEL 01 - PLUMBING VENT ISOMETRIC - SECTOR 01



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 TAHLEQUAH, OKLAHOMA



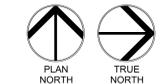
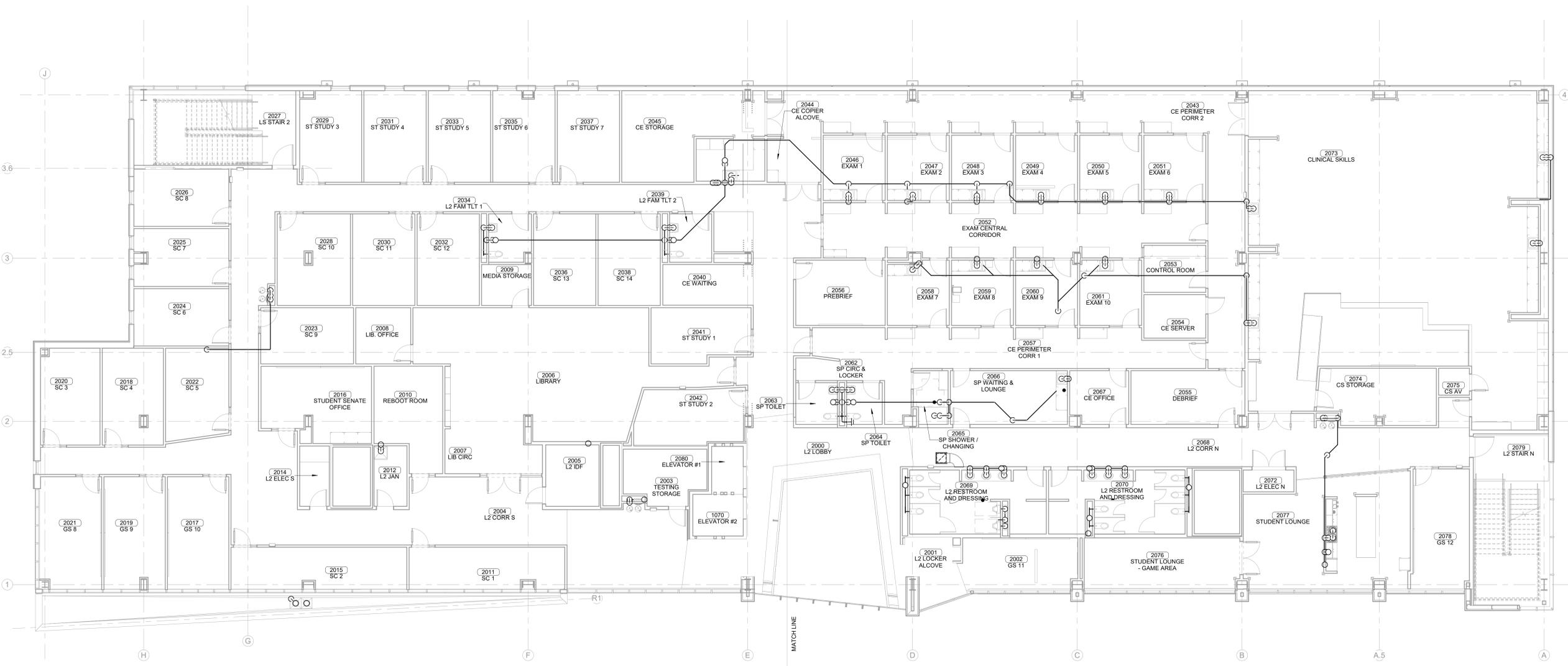
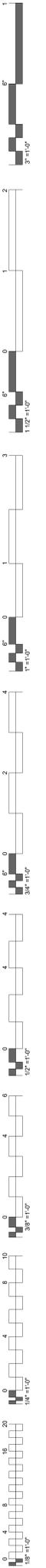
PROJECT PHASE:
CONSTRUCTION DOCUMENTS

#	DATE	REVISIONS DESCRIPTION

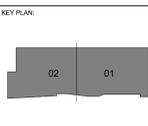
DATE: 08-23-19 JOB NUMBER: 17-13

SHEET NUMBER:
P2.13

PLUMBING DRAIN/VENT ISOMETRIC LEVEL 01



1 OVERALL PLUMBING DRAIN PLAN - LEVEL 02
1/8" = 1'-0"



PROJECT PHASE:
CONSTRUCTION DOCUMENTS

#	DATE	REVISIONS DESCRIPTION

DATE: 08-23-19 JOB NUMBER: 17-13

SHEET NUMBER:
P2.20

OVERALL DRAIN PLAN - LEVEL 02



- KEYNOTES**
- 22.01 DIRTY PIPE NEW 2" DRAIN LINE IN WALL TO MAIN DRAIN LINE.
 - 22.02 2" SANITARY STACK UP.
 - 22.03 3" SANITARY STACK UP.
 - 22.04 4" SANITARY STACK UP.
 - 22.05 2" SANITARY STACK UP AND DOWN.
 - 22.06 4" SANITARY STACK UP AND DOWN.
 - 22.07 2" SANITARY STACK DOWN.
 - 22.08 3" SANITARY STACK DOWN.
 - 22.09 4" SANITARY STACK DOWN.
 - 22.10 4" SANITARY STACK DOWN.
 - 22.11 RADON MITIGATION STACK. COORDINATE WITH RADON MITIGATION DESGN DRAWINGS.
 - 22.41 PROVIDE HOLDRITE SILENCER SYSTEM FOR THIS AREA.

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 REGISTERED PROFESSIONAL ENGINEER
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 28910
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CLIENT:

THE CHEROKEE NATION
 FOUNDED 1828
 SEPT. 6, 1925

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KEY PLAN:

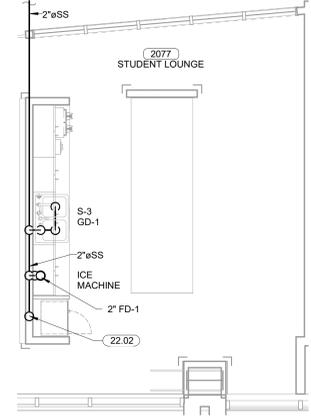
PROJECT PHASE:
 CONSTRUCTION DOCUMENTS

#	DATE	REVISIONS	DESCRIPTION

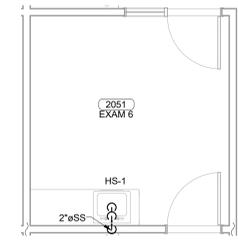
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 JOB NUMBER: 17-13

SHEET NUMBER:
P2.21

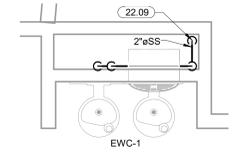
PLUMBING DRAIN PLAN - LEVEL 02 SECTOR 01



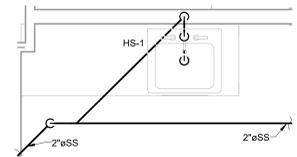
4 ENLARGED DRAIN PLAN - LEVEL 02 SECTOR 01 - STUDENT LOUNGE
 1/4" = 1'-0"



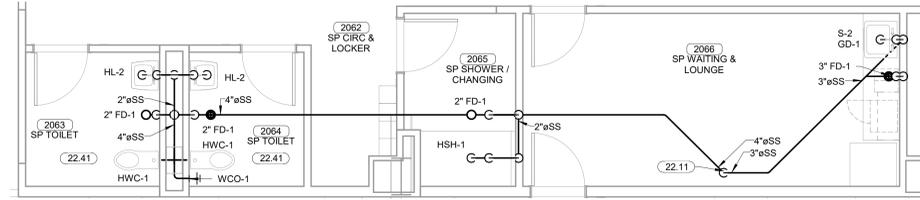
5 ENLARGED DRAIN PLAN - LEVEL 02 SECTOR 01 - TYPICAL EXAM ROOM
 1/4" = 1'-0"



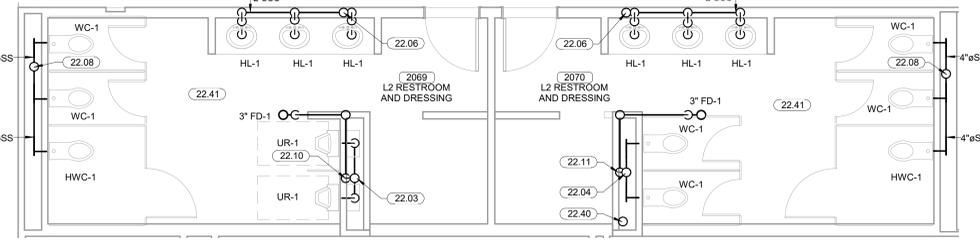
6 ENLARGED DRAIN PLAN - LEVEL 02 SECTOR 01 - DRINKING FOUNTAIN
 1/2" = 1'-0"



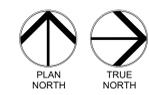
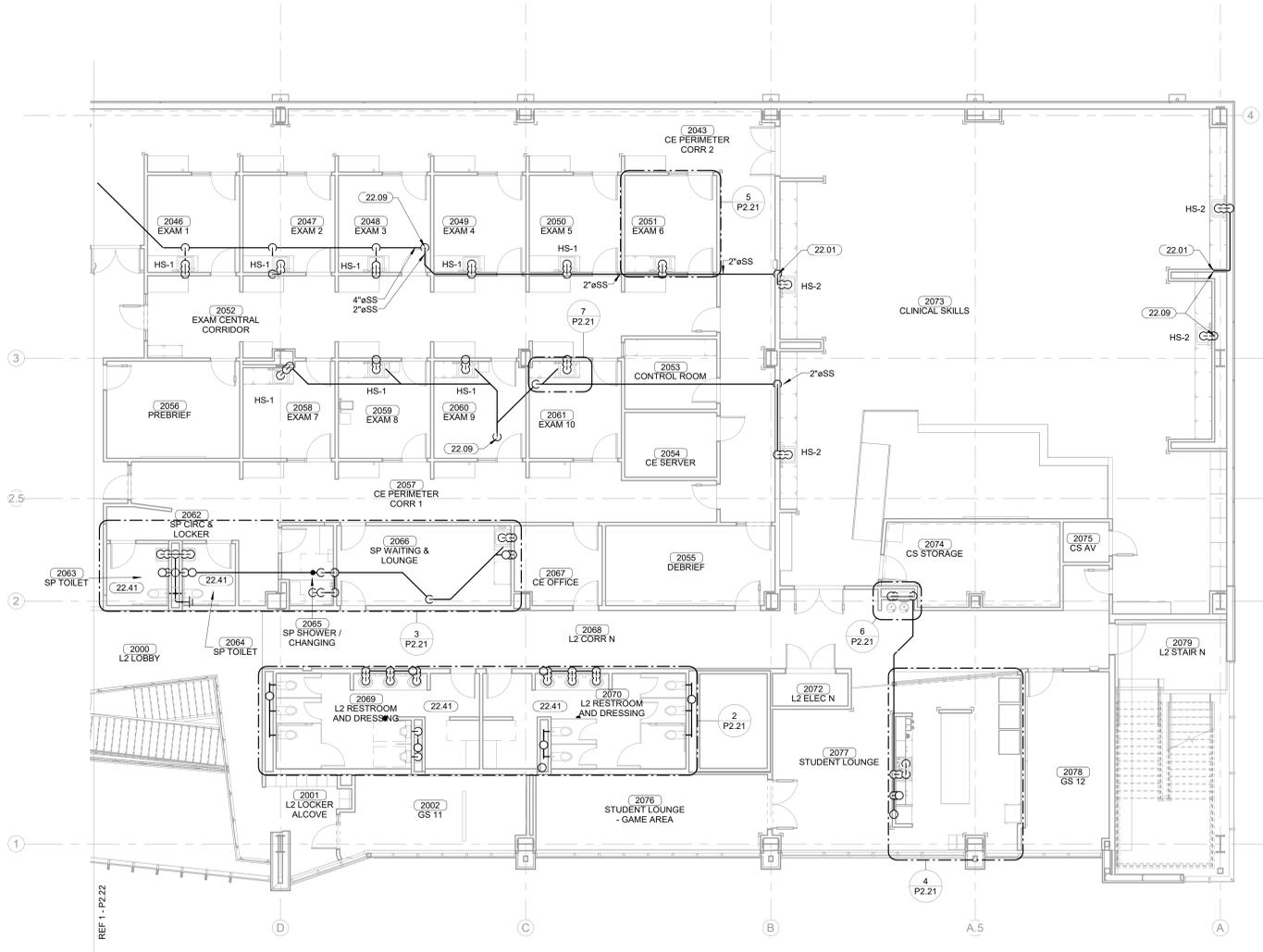
7 ENLARGED DRAIN PLAN - LEVEL 02 SECTOR 01 - TYPICAL SINK
 1/2" = 1'-0"



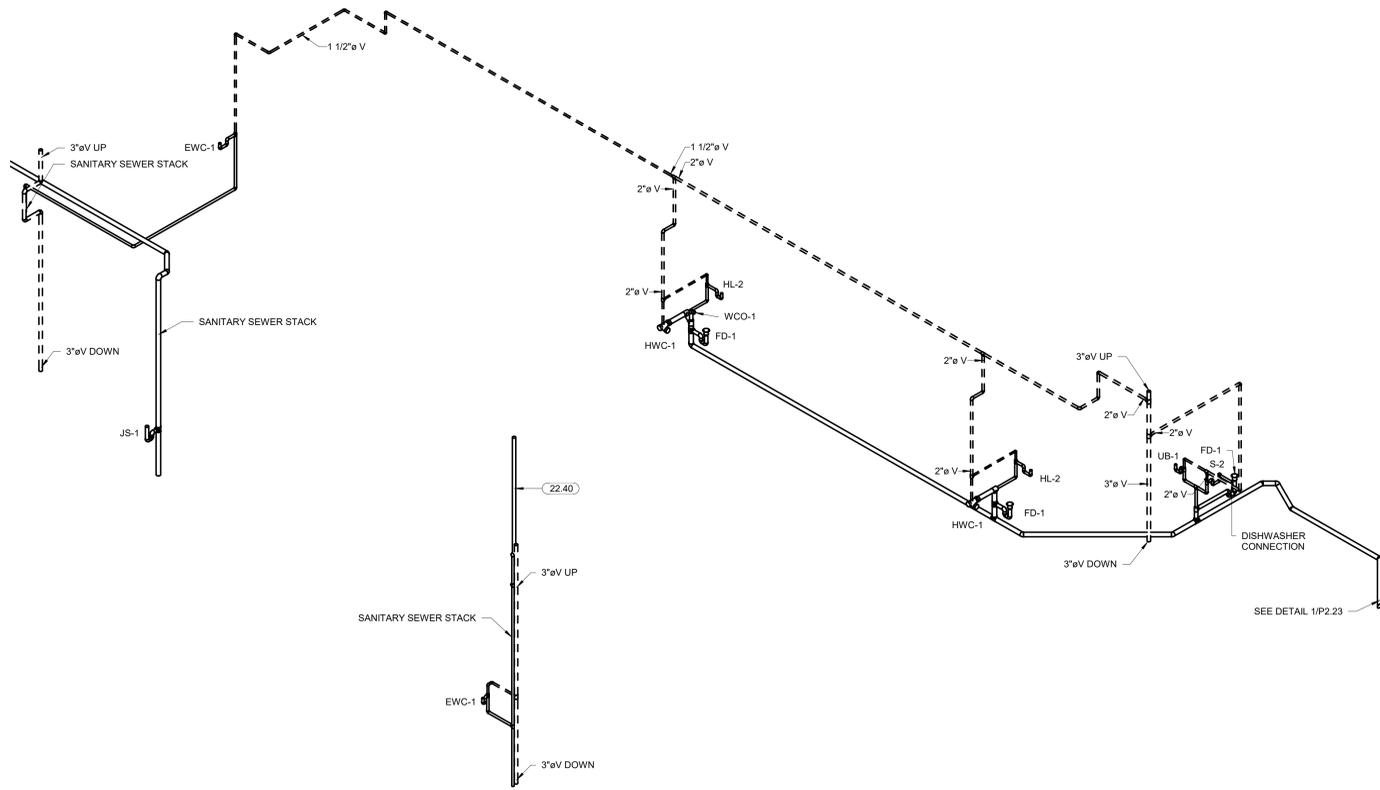
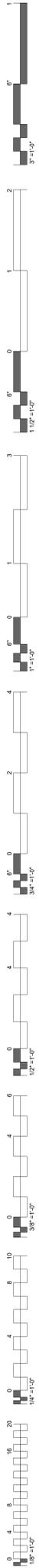
3 ENLARGED DRAIN PLAN - LEVEL 02 SECTOR 01 - SP CIRC & LOCKER
 1/4" = 1'-0"



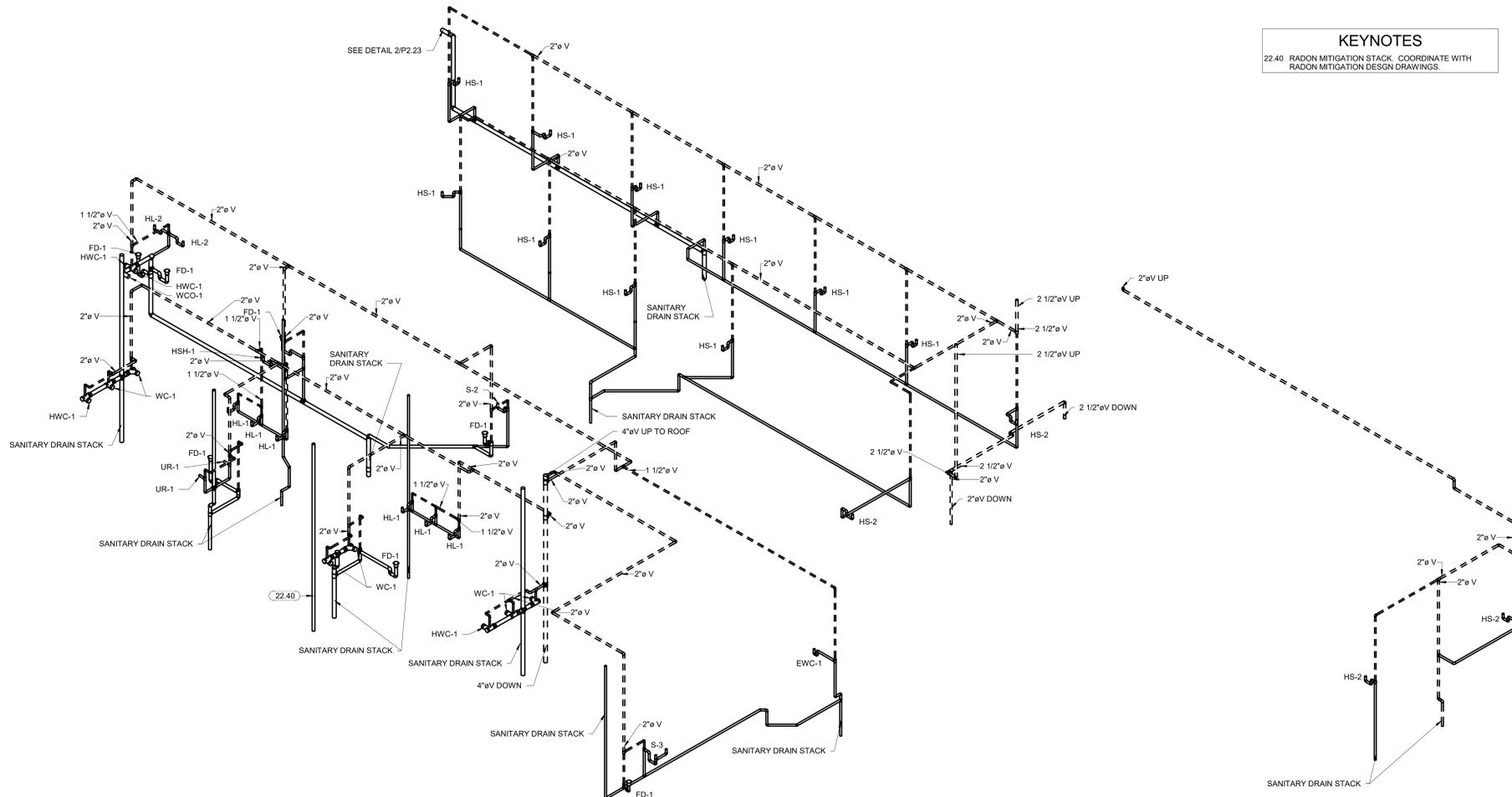
2 ENLARGED DRAIN PLAN - LEVEL 02 SECTOR 01 - MAIN RESTROOMS
 1/4" = 1'-0"



1 PLUMBING DRAIN PLAN - LEVEL 02 SECTOR 01
 1/8" = 1'-0"



2 LEVEL 02 - PLUMBING VENT ISOMETRIC - SECTOR 02



1 LEVEL 02 - PLUMBING VENT ISOMETRIC - SECTOR 01

KEYNOTES
 22.40 RADON MITIGATION STACK. COORDINATE WITH
 RADON MITIGATION DESIGN DRAWINGS.



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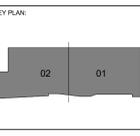
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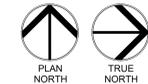
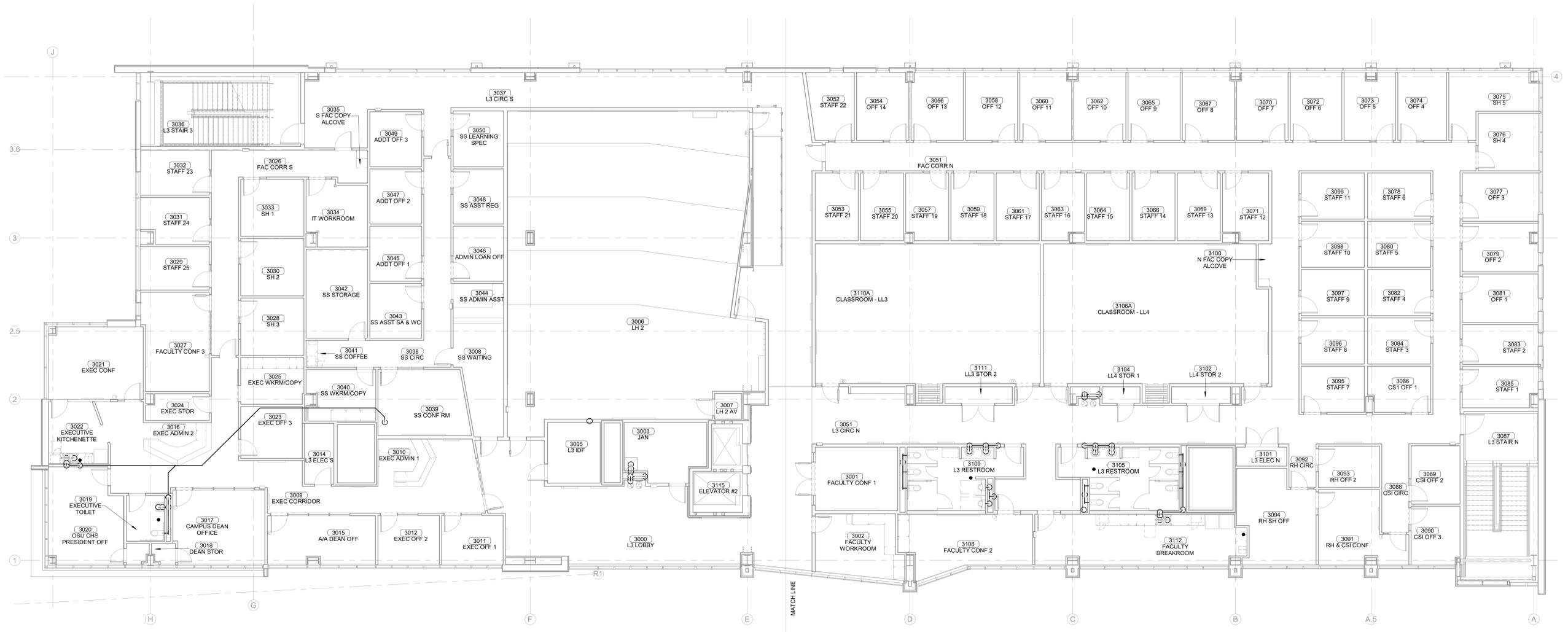
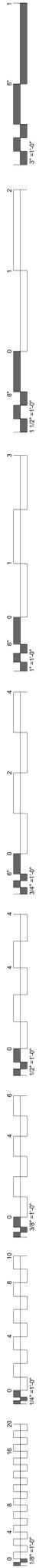
PROJECT PHASE
 CONSTRUCTION DOCUMENTS

#	DATE	REVISIONS DESCRIPTION

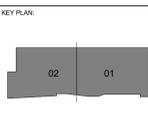
DATE: 08-23-19 **JOB NUMBER:** 17-13

SHEET NUMBER: P2.23

PLUMBING DRAIN/VENT
 ISOMETRIC LEVEL 02



1 OVERALL PLUMBING DRAIN PLAN - LEVEL 03
1/8" = 1'-0"



PROJECT PHASE:
CONSTRUCTION DOCUMENTS

#	DATE	REVISIONS	DESCRIPTION

DATE: 08-23-19 JOB NUMBER: 17-13

SHEET NUMBER:
P2.30

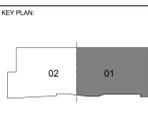
OVERALL DRAIN PLAN - LEVEL 03



KEYNOTES
 22.01 DIRTY PIPE NEW 2" DRAIN LINE IN WALL TO MAIN DRAIN LINE.
 22.09 2" SANITARY STACK DOWN.
 22.10 3" SANITARY STACK DOWN.
 22.11 4" SANITARY STACK DOWN.
 22.40 RADON MITIGATION STACK. COORDINATE WITH RADON MITIGATION DESGN DRAWINGS.
 22.41 PROVIDE HOLDRITE SILENCER SYSTEM FOR THIS AREA.



COLLEGE OF
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 AT THE CHEROKEE NATION
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PROJECT PHASE:
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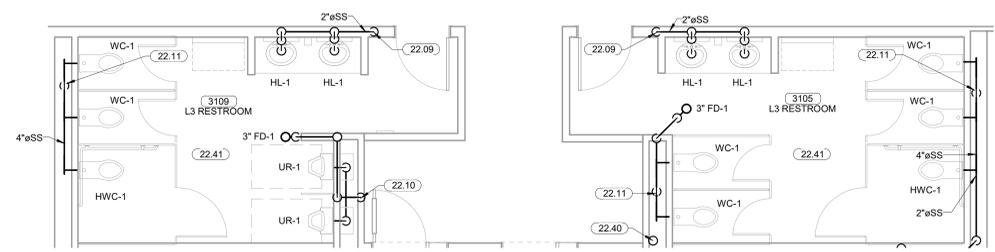
DATE: 08-23-19 JOB NUMBER: 17-13

SHEET NUMBER:
P2.31

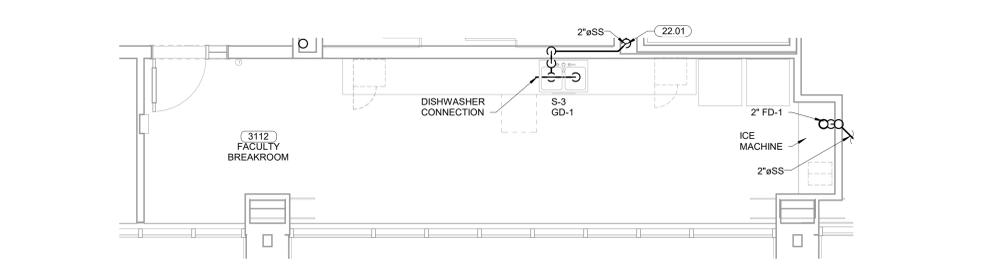
PLUMBING DRAIN PLAN - LEVEL 03 SECTOR 01



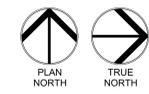
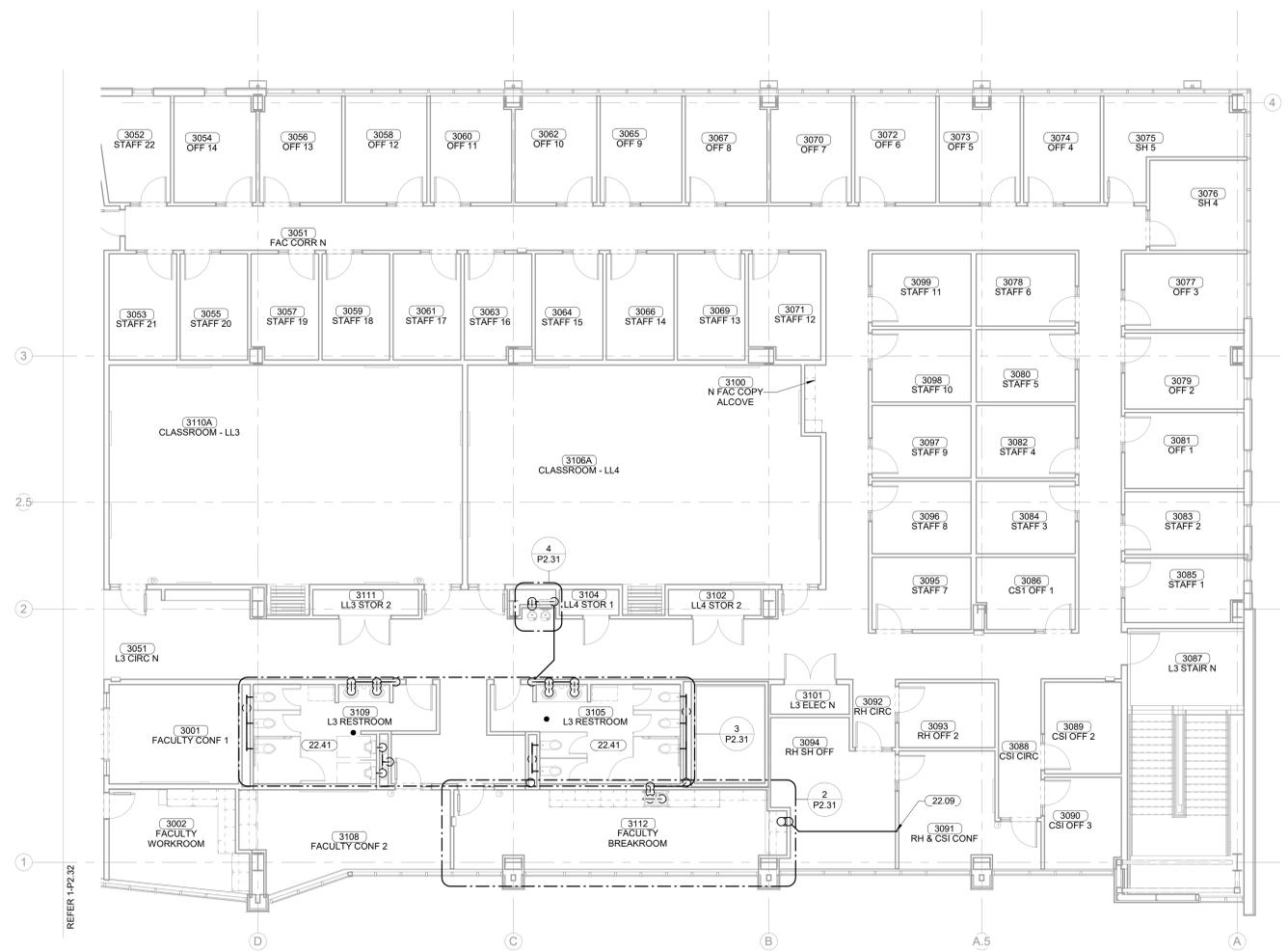
4 ENLARGED DRAIN PLAN - LEVEL 03 SECTOR 01 - DRINKING FOUNTAIN
 1/2" = 1'-0"



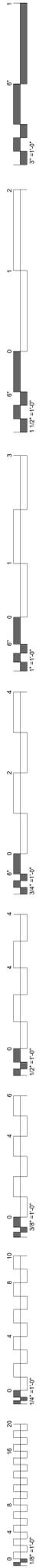
3 ENLARGED DRAIN PLAN - LEVEL 03 SECTOR 01 - MAIN RESTROOMS
 1/4" = 1'-0"



2 ENLARGED DRAIN PLAN - LEVEL 03 SECTOR 01 - FACULTY BREAKROOM
 1/4" = 1'-0"



1 PLUMBING DRAIN PLAN - LEVEL 03 SECTOR 01
 1/8" = 1'-0"



KEYNOTES
 22.09 2" SANITARY STACK DOWN
 22.11 4" SANITARY STACK DOWN
 22.40 RADON MITIGATION STACK, COORDINATE WITH RADON MITIGATION DESIGN DRAWINGS
 22.41 PROVIDE HOLDRITE SILENCER SYSTEM FOR THIS AREA



**James R. Childers
 Architect, Inc.**
 45 South 4th Street
 Fort Smith, AR 72901
 479-783-2450
 www.childersarchitect.com



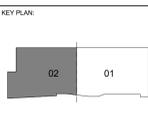
CONSULTANT LOGO

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 (479) 898-6370
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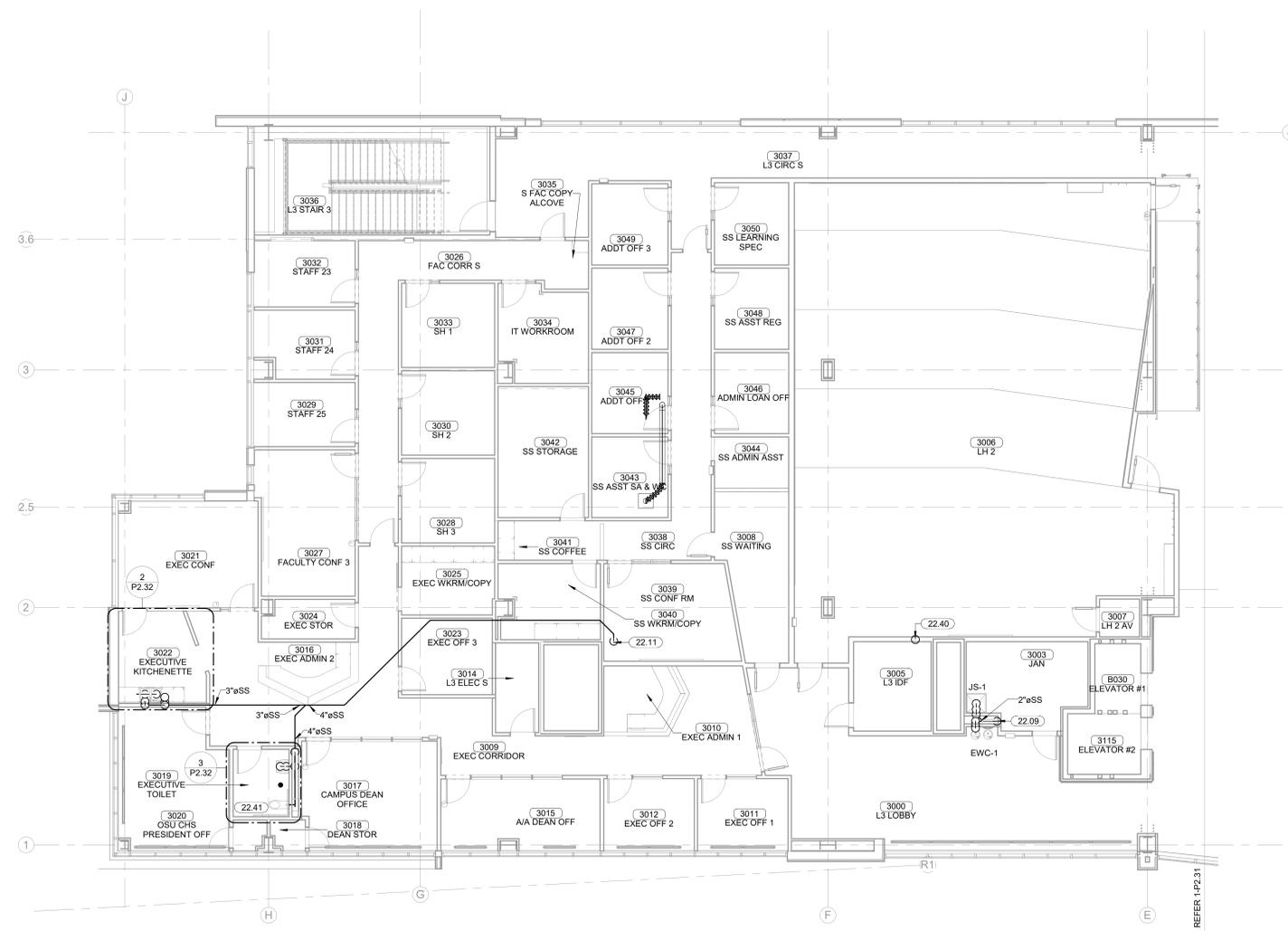
PROJECT PHASE
 CONSTRUCTION DOCUMENTS

#	DATE	REVISIONS	DESCRIPTION

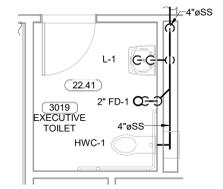
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SHEET NUMBER: P2.32

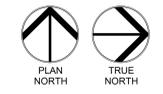
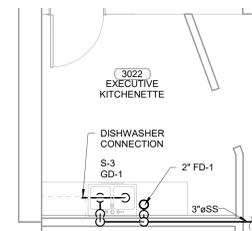
PLUMBING DRAIN PLAN - LEVEL 03 SECTOR 02



3 ENLARGED DRAIN PLAN - LEVEL 03 SECTOR 02 - EXECUTIVE TLT
 1/4" = 1'-0"



2 ENLARGED DRAIN PLAN - LEVEL 03 SECTOR 02 - EXEC. KITCHENETTE
 1/4" = 1'-0"



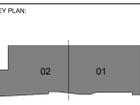
1 PLUMBING DRAIN PLAN - LEVEL 03 SECTOR 02
 1/8" = 1'-0"



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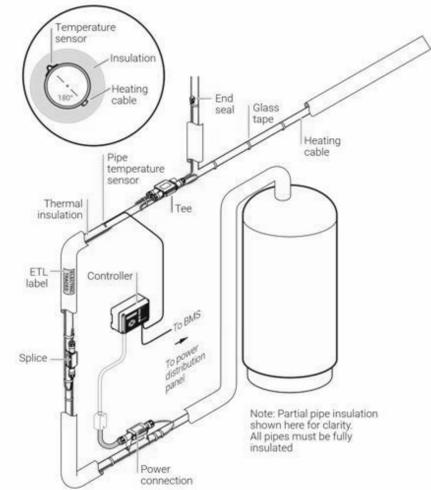
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CONSTRUCTION DOCUMENTS

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DATE: 08-23-19 JOB NUMBER: 17-13

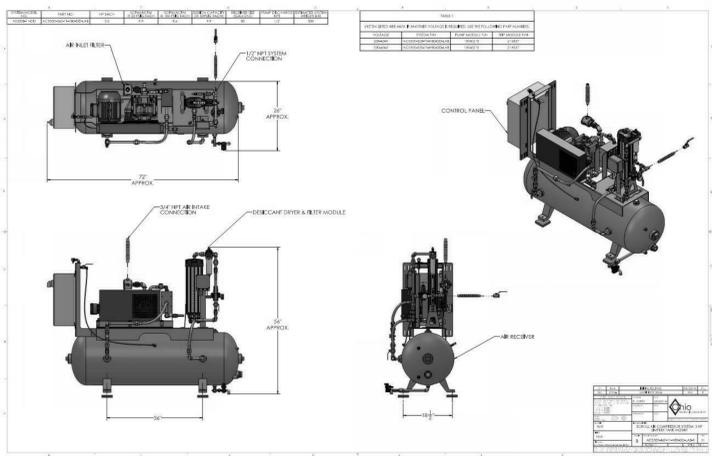
SHEET NUMBER:
P3.10

OVERALL SUPPLY PLAN - LEVEL 01

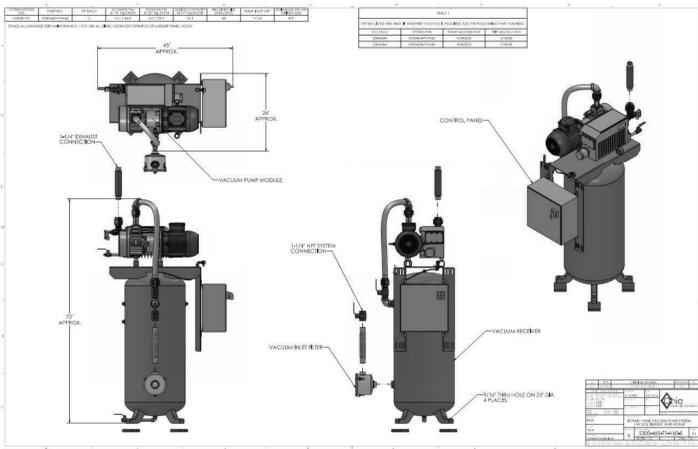


System for temperature maintenance of domestic hot water supply systems with energy efficient time based control and BMS communication capabilities.

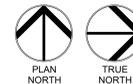
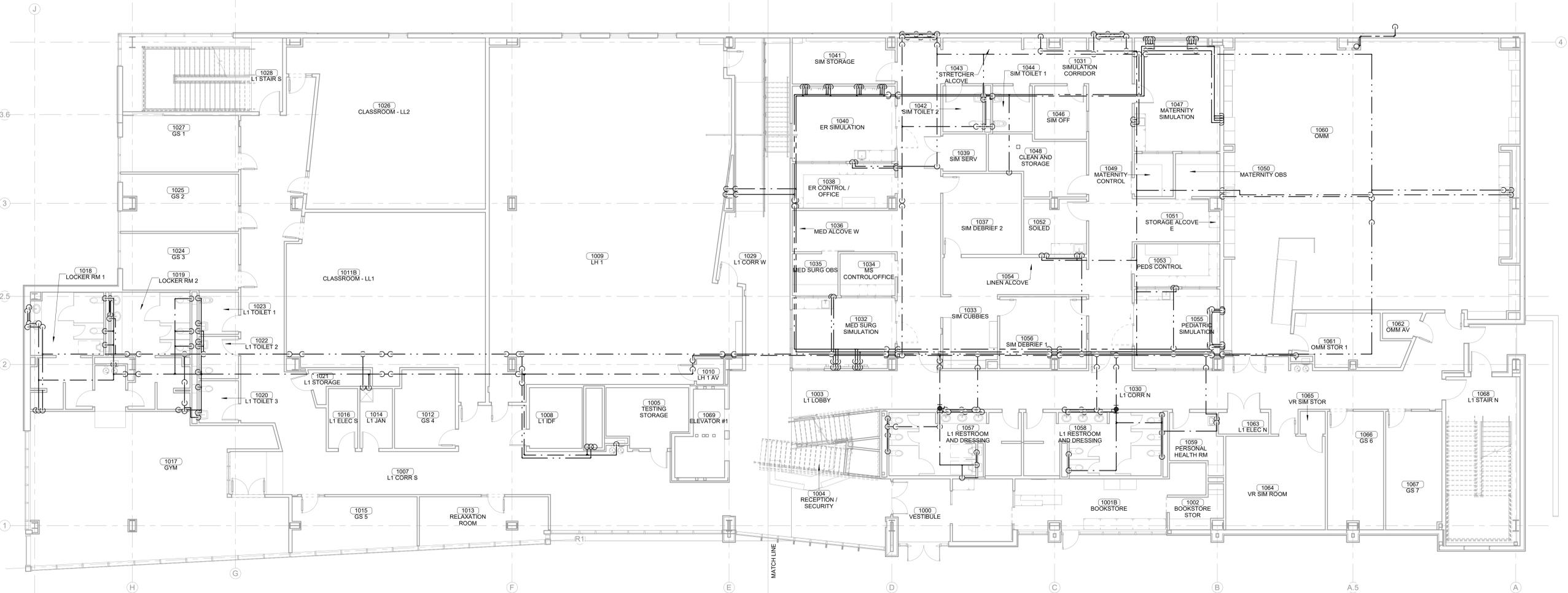
2 RAYCHEM - HWAT DETAIL
SCALE: N.T.S.



3 VACUUM PUMP DETAIL
SCALE: N.T.S.



4 AIR COMPRESSOR DETAIL
SCALE: N.T.S.



1 OVERALL PLUMBING SUPPLY PLAN - LEVEL 01
1/8" = 1'-0"

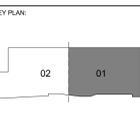


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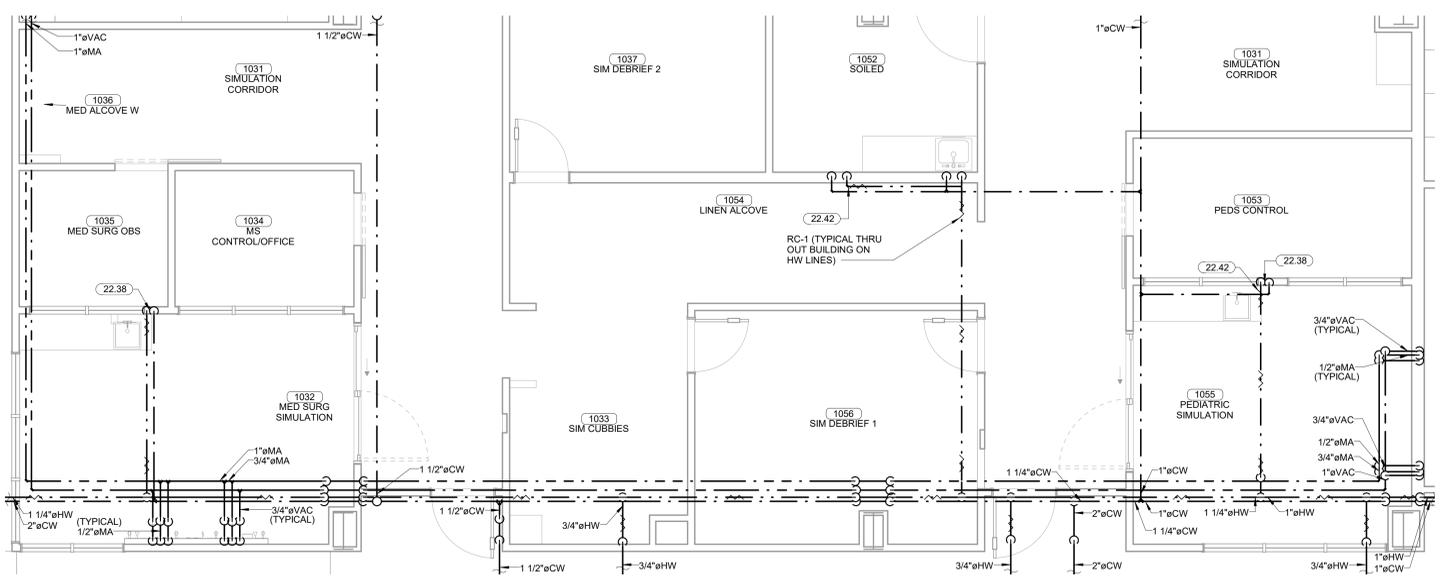
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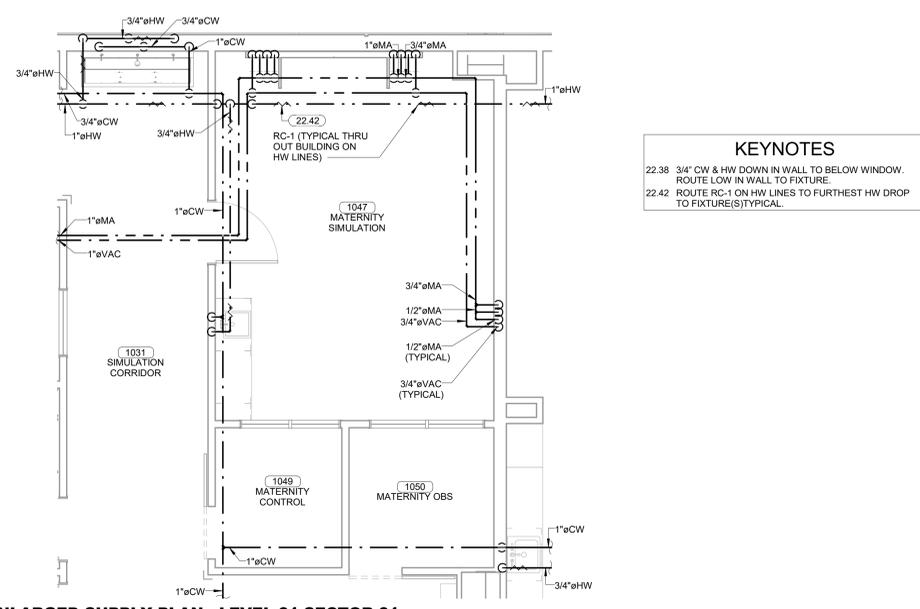
SHEET NUMBER:

P3.11

PLUMBING SUPPLY PLAN - LEVEL 01 SECTOR 01

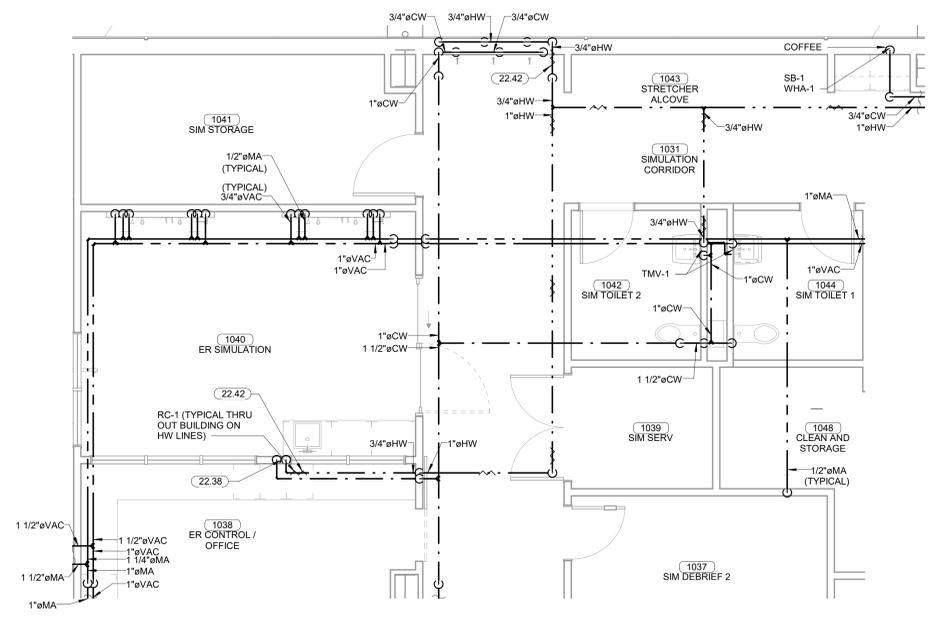


5 ENLARGED SUPPLY PLAN - LEVEL 01 SECTOR 01 - SIMULATION
1/4" = 1'-0"

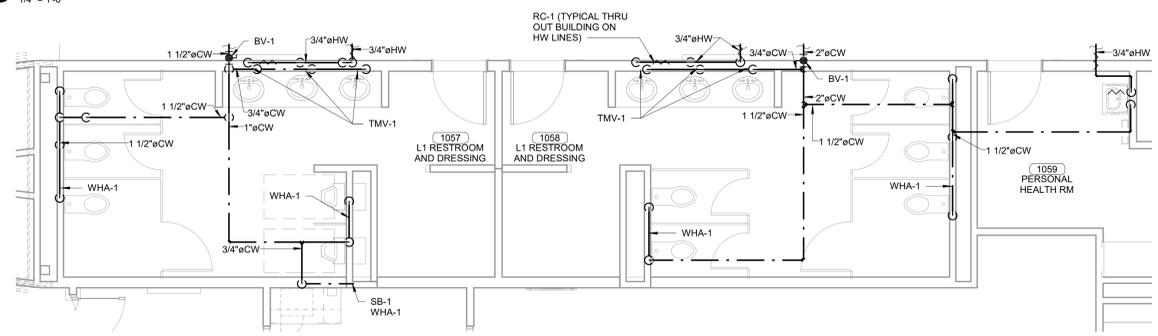


KEYNOTES
22.38 3/4" CW & HW DOWN IN WALL TO BELOW WINDOW. ROUTE LOW IN WALL TO FIXTURE.
22.42 ROUTE RC-1 ON HW LINES TO FURTHEST HW DROP TO FIXTURE(S) TYPICAL.

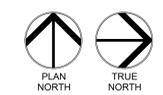
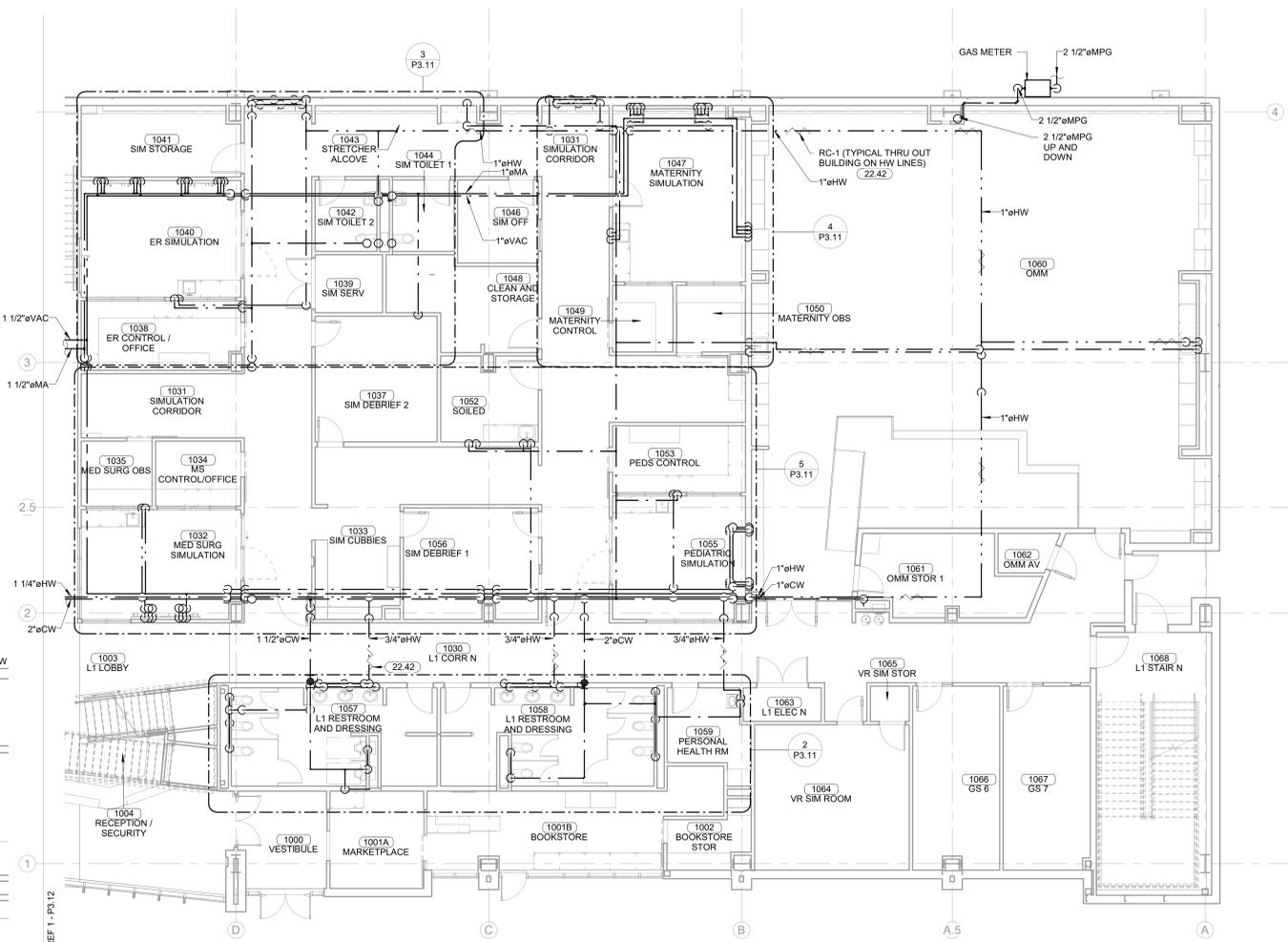
4 ENLARGED SUPPLY PLAN - LEVEL 01 SECTOR 01 - MATERNITY SIM
1/4" = 1'-0"



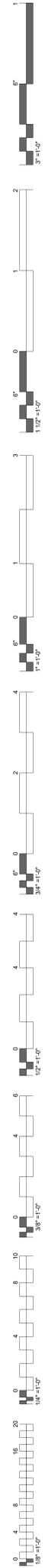
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1/4" = 1'-0"

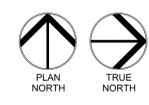
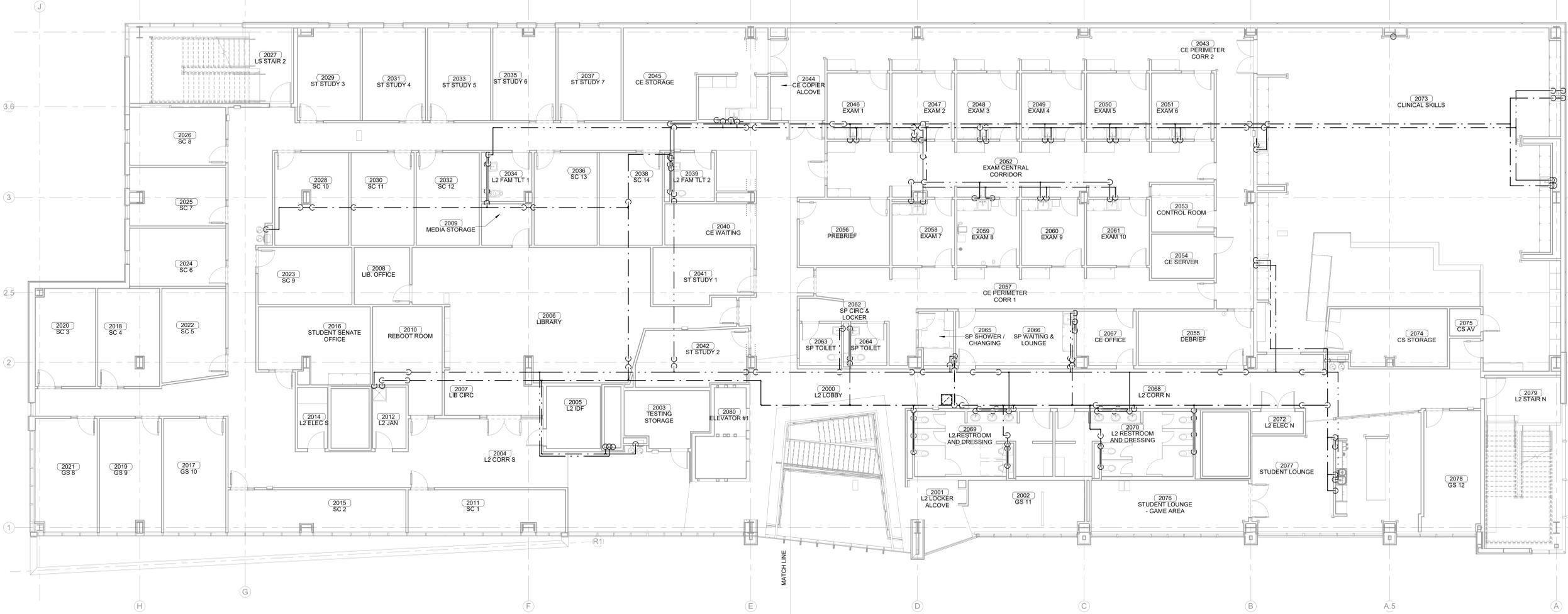
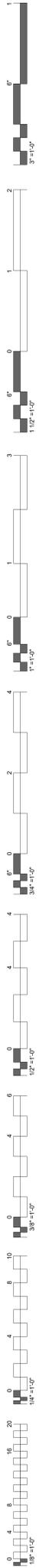


2 ENLARGED SUPPLY PLAN - LEVEL 01 SECTOR 01 - MAIN RESTROOMS
1/4" = 1'-0"

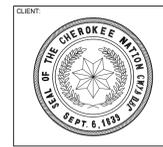
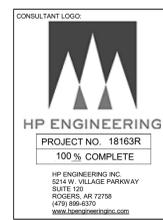
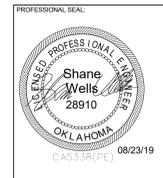


1 PLUMBING SUPPLY PLAN - LEVEL 01 SECTOR 01
1/8" = 1'-0"





1 OVERALL PLUMBING SUPPLY PLAN - LEVEL 02
1/8" = 1'-0"



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KEY PLAN:

02	01
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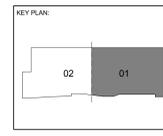
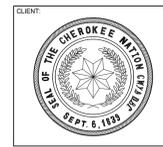
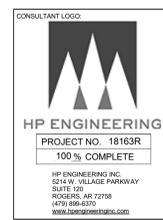
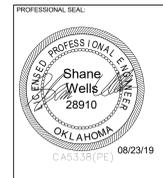
#	DATE	REVISIONS	DESCRIPTION

DATE: 08-23-19 JOB NUMBER: 17-13

SHEET NUMBER:
P3.20

OVERALL SUPPLY PLAN - LEVEL 02

KEYNOTES
 22.42 ROUTE RC-1 ON HW LINES TO FURTHEST HW DROP TO FIXTURE(S) TYPICAL



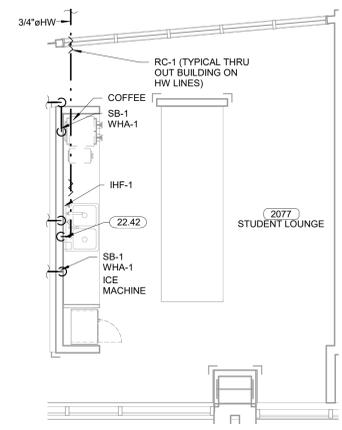
PROJECT PHASE
 CONSTRUCTION DOCUMENTS

#	DATE	REVISIONS	DESCRIPTION

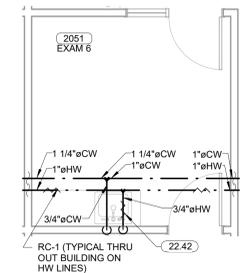
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SHEET NUMBER: P3.21

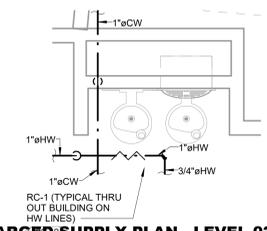
PLUMBING SUPPLY PLAN - LEVEL 02 SECTOR 01



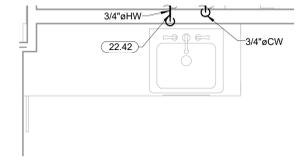
4 ENLARGED SUPPLY PLAN - LEVEL 02 SECTOR 01 - STUDENT LOUNGE
 1/4" = 1'-0"



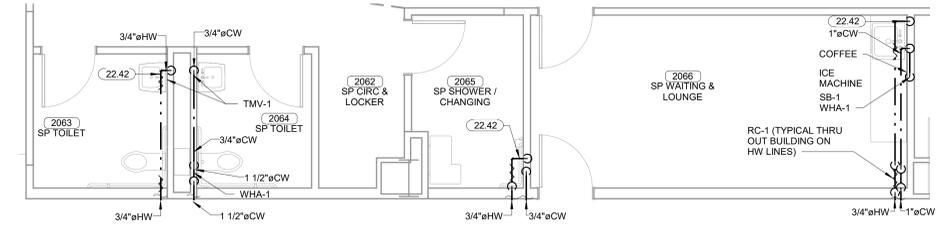
5 ENLARGED SUPPLY PLAN - LEVEL 02 SECTOR 01 - TYPICAL EXAM ROOM
 1/4" = 1'-0"



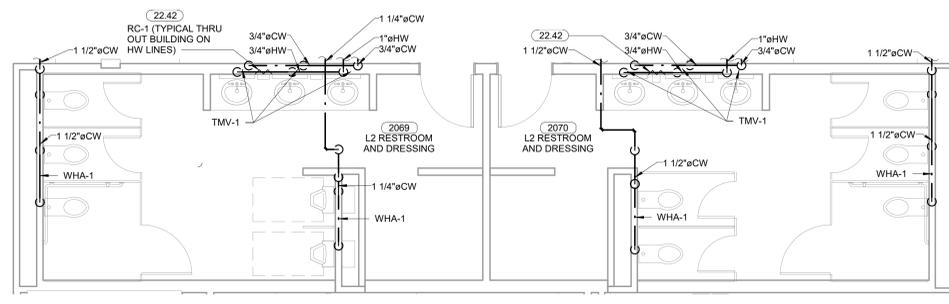
6 ENLARGED SUPPLY PLAN - LEVEL 02 SECTOR 01 - DRINKING FOUNTAIN
 1/2" = 1'-0"



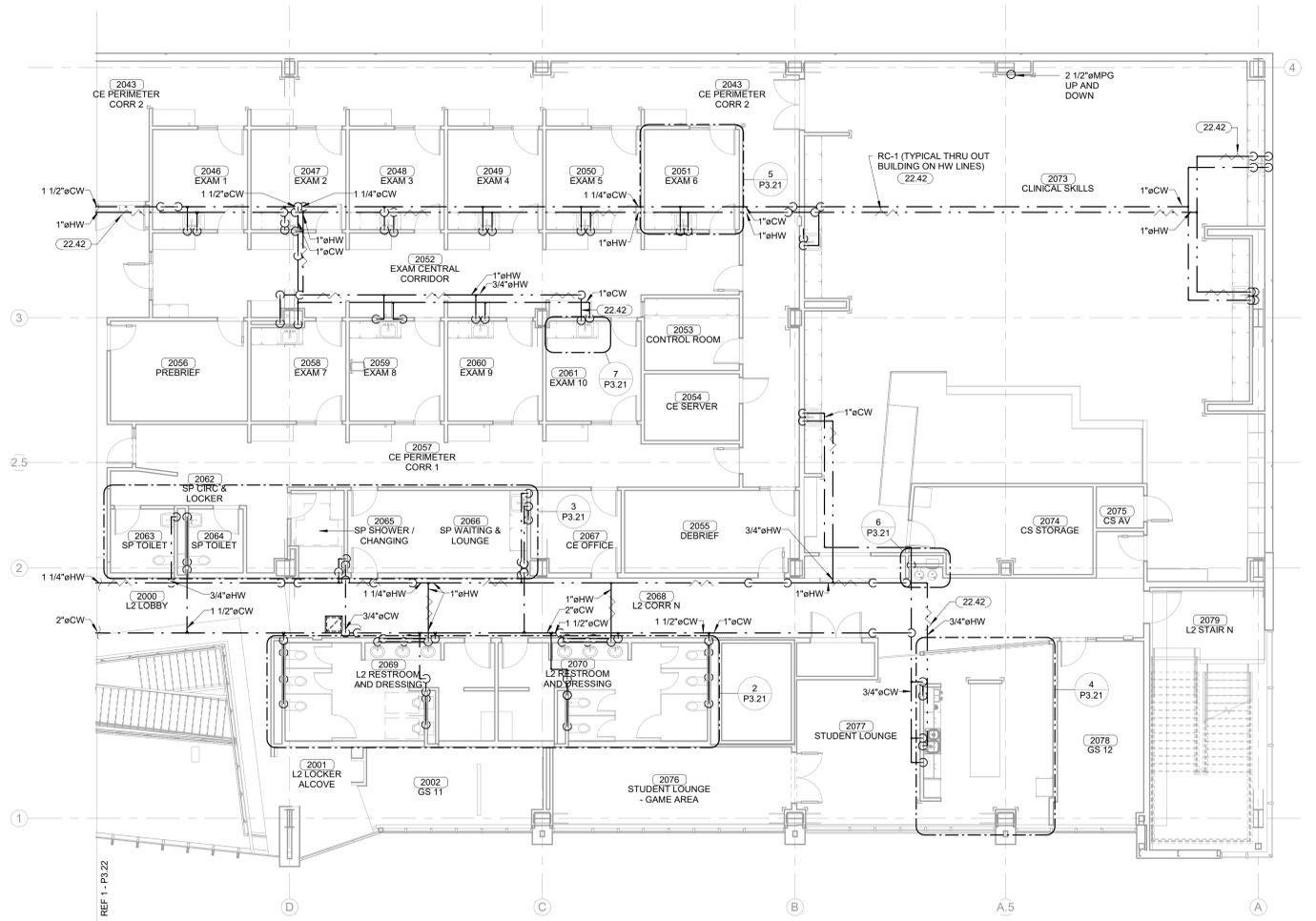
7 ENLARGED SUPPLY PLAN - LEVEL 02 SECTOR 01 - TYPICAL SINK
 1/2" = 1'-0"



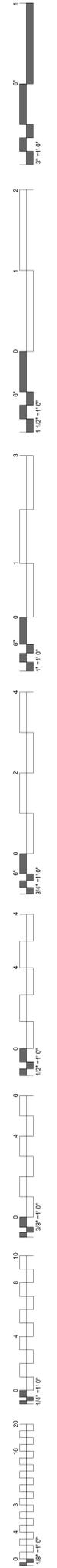
3 ENLARGED SUPPLY PLAN - LEVEL 02 SECTOR 01 - SP CIRC & LOCKER
 1/4" = 1'-0"

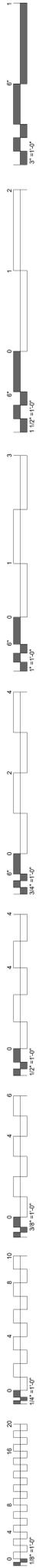


2 ENLARGED SUPPLY PLAN - LEVEL 02 SECTOR 01 - MAIN RESTROOMS
 1/4" = 1'-0"

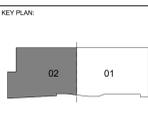


1 PLUMBING SUPPLY PLAN - LEVEL 02 SECTOR 01
 1/8" = 1'-0"





KEYNOTES
 22.26 2" CW STACK UP AND 2-1/2" CW DOWN. PROVIDE PRV-1.
 22.27 1-1/4" HW STACK UP AND DOWN.
 22.28 2-1/2" GAS STACK UP AND DOWN.
 22.42 ROUTE RC-1 ON HW LINES TO FURTHEST HW DROP TO FIXTURE(S) TYPICAL.



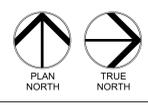
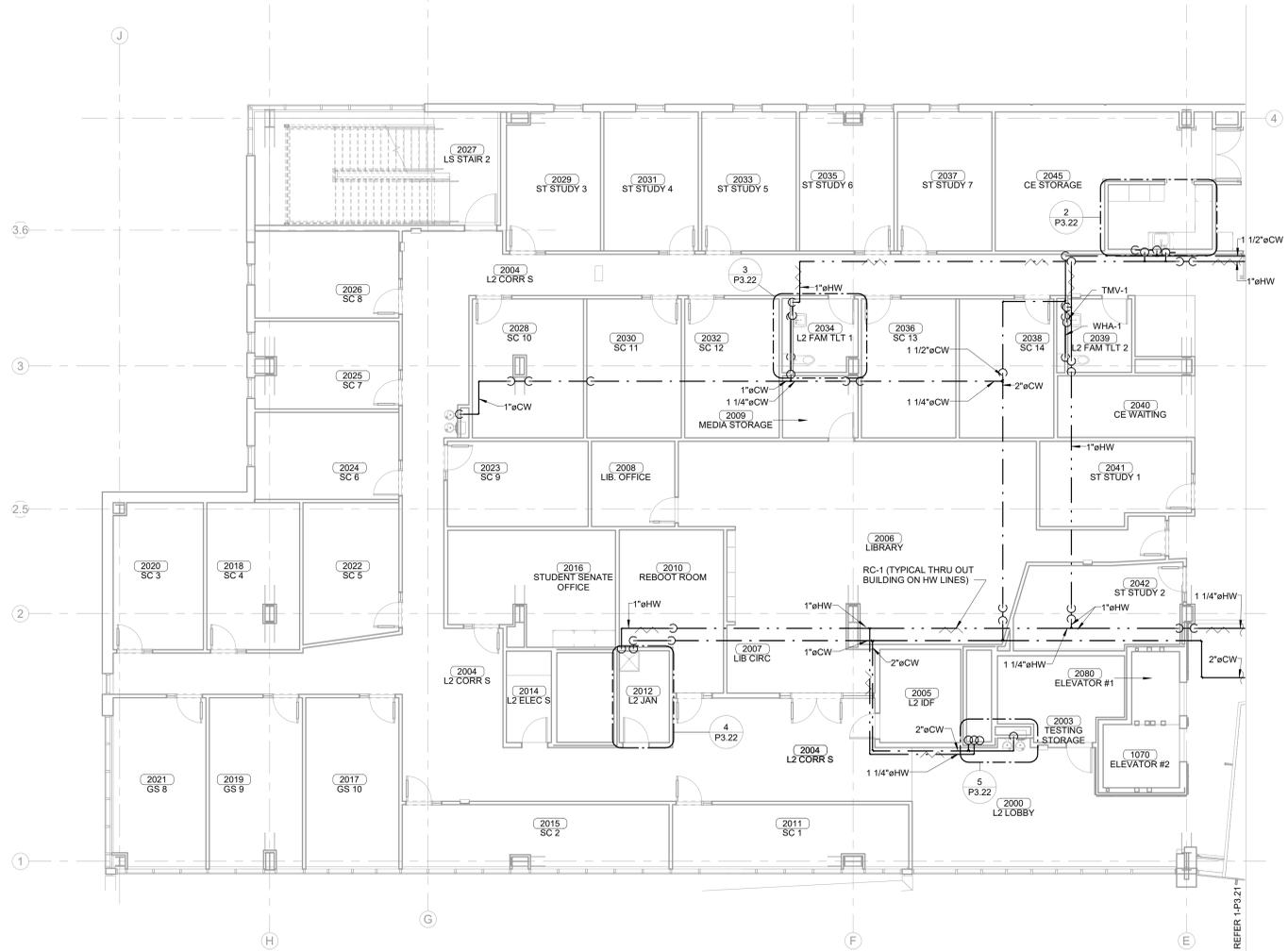
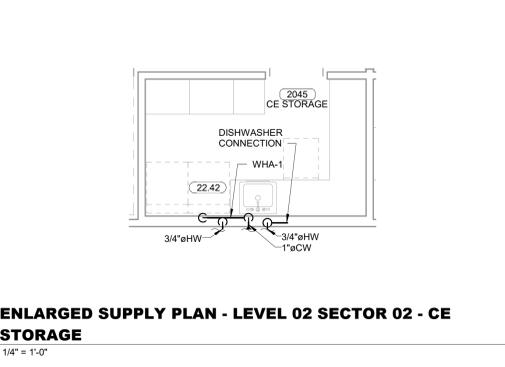
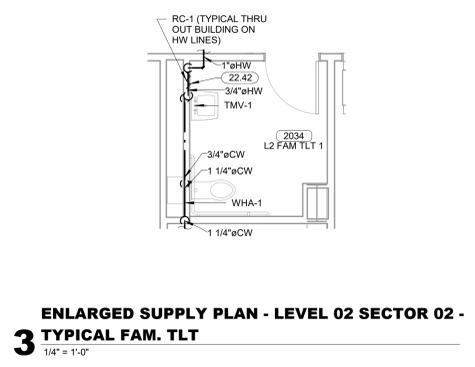
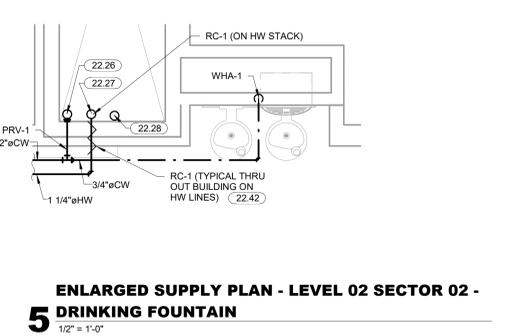
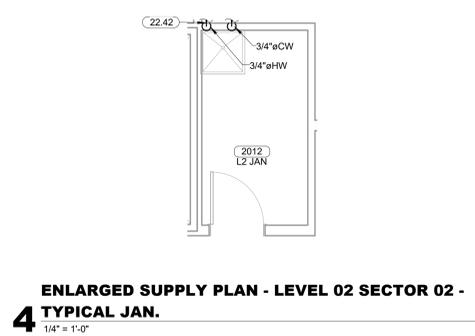
PROJECT PHASE:
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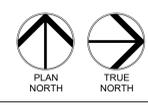
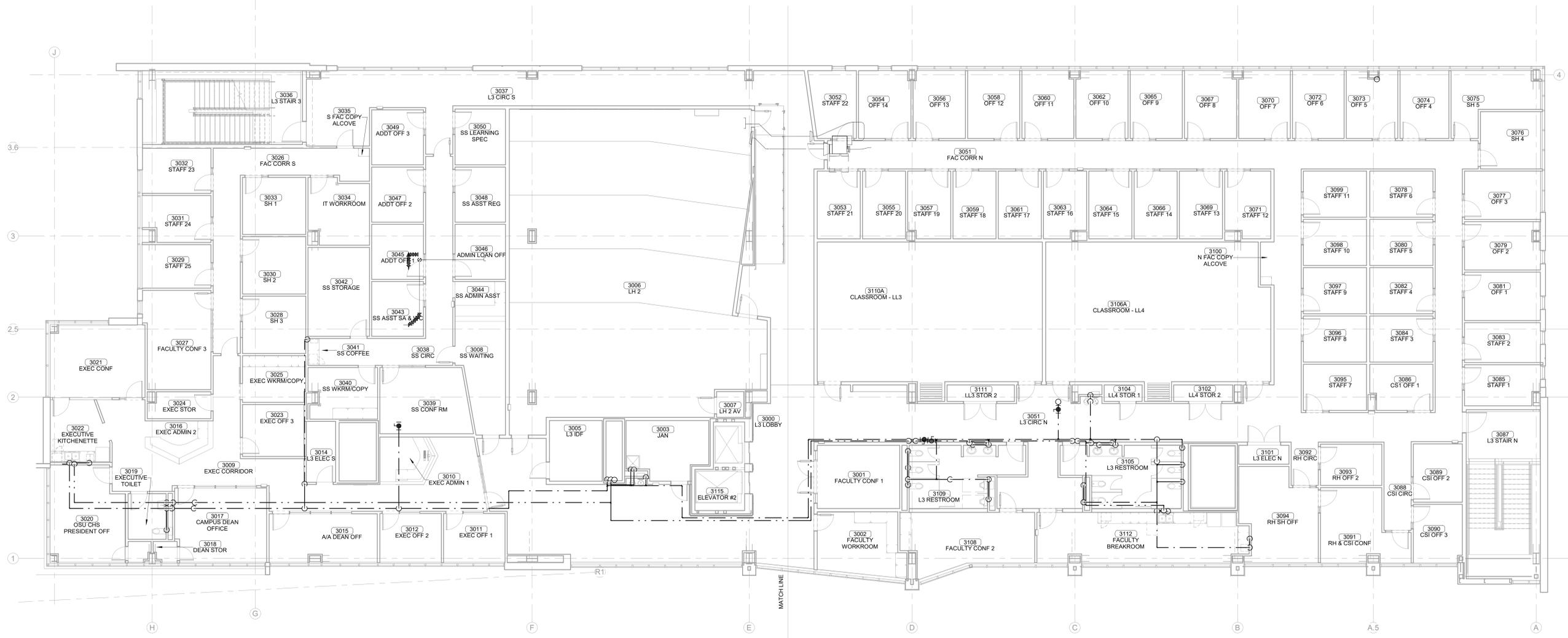
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P3.22

PLUMBING SUPPLY PLAN - LEVEL 02 SECTOR 02



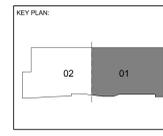
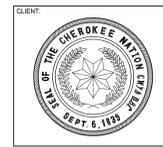
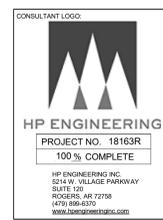
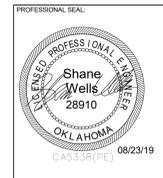


#	DATE	REVISIONS	DESCRIPTION



1 OVERALL PLUMBING SUPPLY PLAN - LEVEL 03
 1/8" = 1'-0"

KEYNOTES
 22.42 ROUTE RC-1 ON HW LINES TO FURTHEST HW DROP TO FIXTURE(S) TYPICAL.



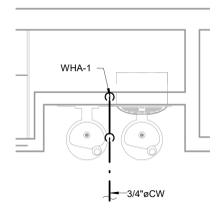
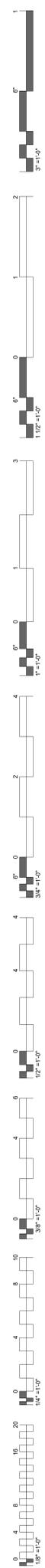
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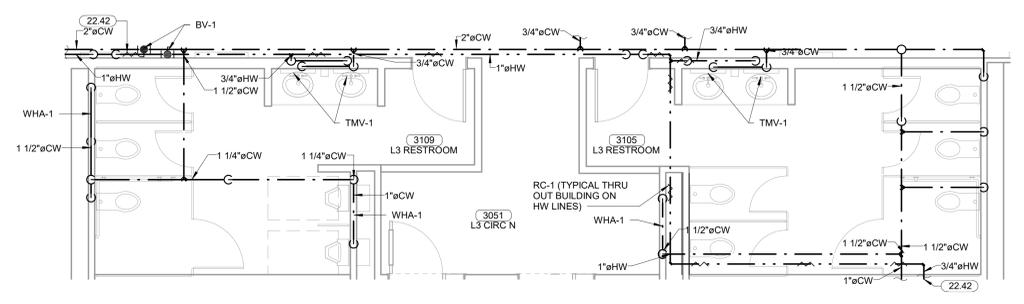
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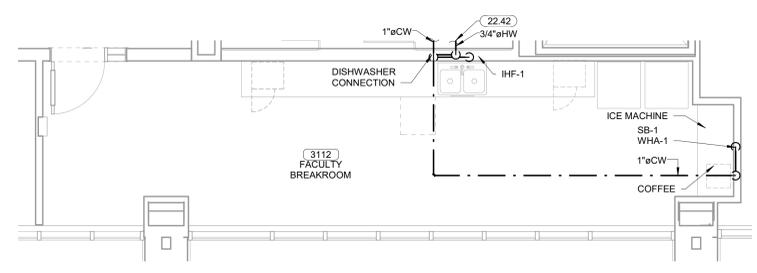
PLUMBING SUPPLY PLAN - LEVEL 03 SECTOR 01



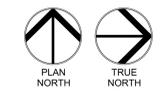
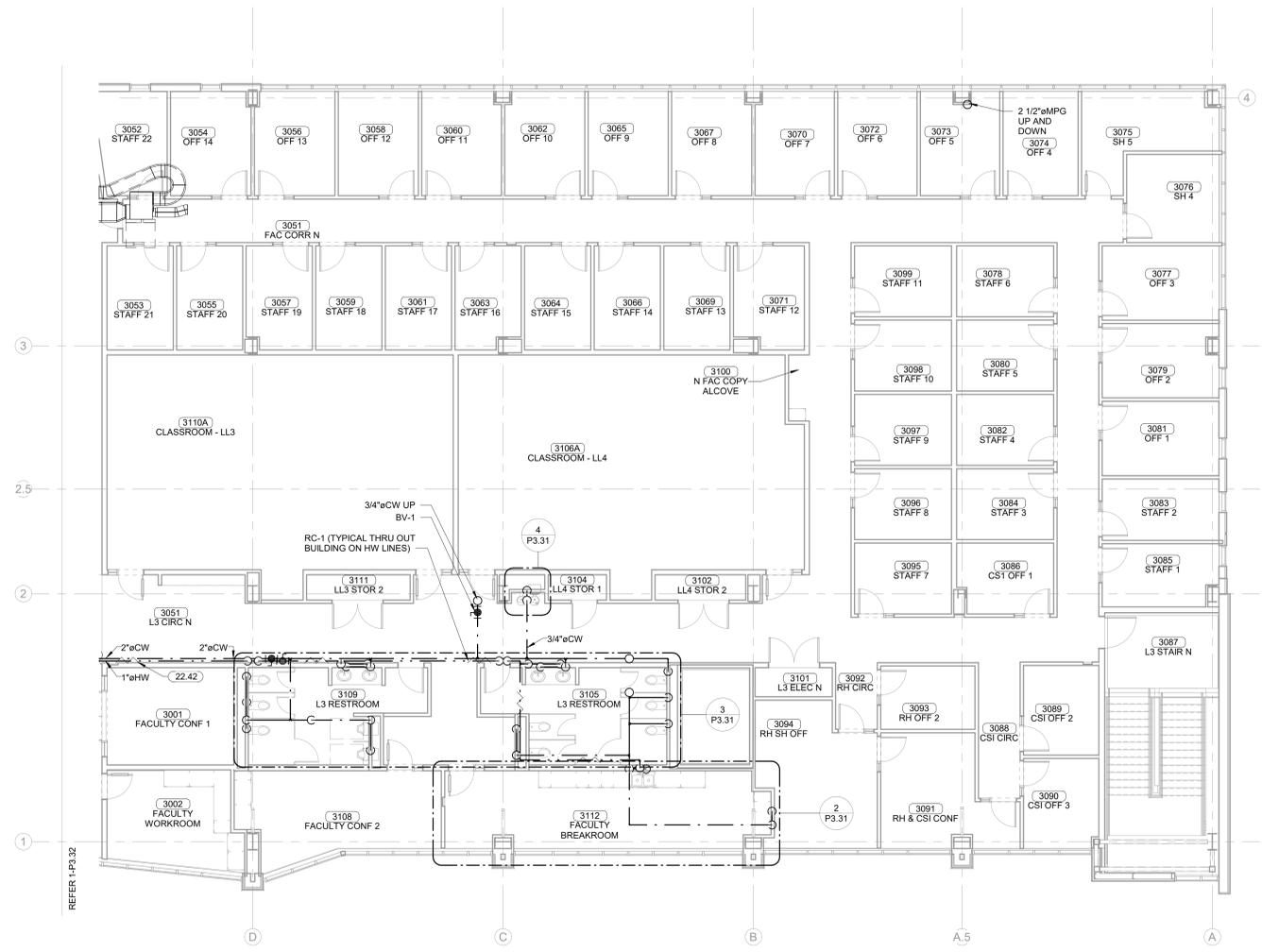
4 ENLARGED SUPPLY PLAN - LEVEL 03 SECTOR 01 - DRINKING FOUNTAIN
 1/2" = 1'-0"



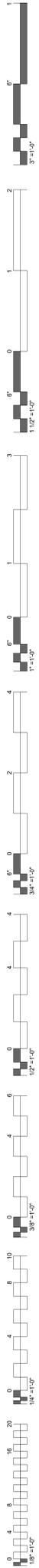
3 ENLARGED SUPPLY PLAN - LEVEL 03 SECTOR 01 - MAIN RESTROOMS
 1/4" = 1'-0"



2 ENLARGED SUPPLY PLAN - LEVEL 03 SECTOR 01 - FACULTY BREAKROOM
 1/4" = 1'-0"



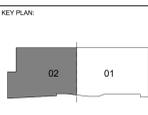
1 PLUMBING SUPPLY PLAN - LEVEL 03 SECTOR 01
 1/8" = 1'-0"



KEYNOTES
 22.28 2-1/2" GAS STACK UP AND DOWN.
 22.29 2" CW STACK DOWN. PROVIDE PRV-1.
 22.42 ROUTE RC-1 ON HW LINES TO FURTHEST HW DROP TO FIXTURE(S) TYPICAL.



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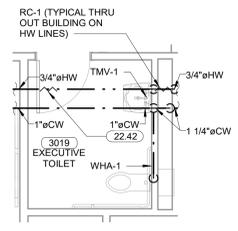
#	DATE	REVISIONS	DESCRIPTION

DATE: 08-23-19 JOB NUMBER: 17-13

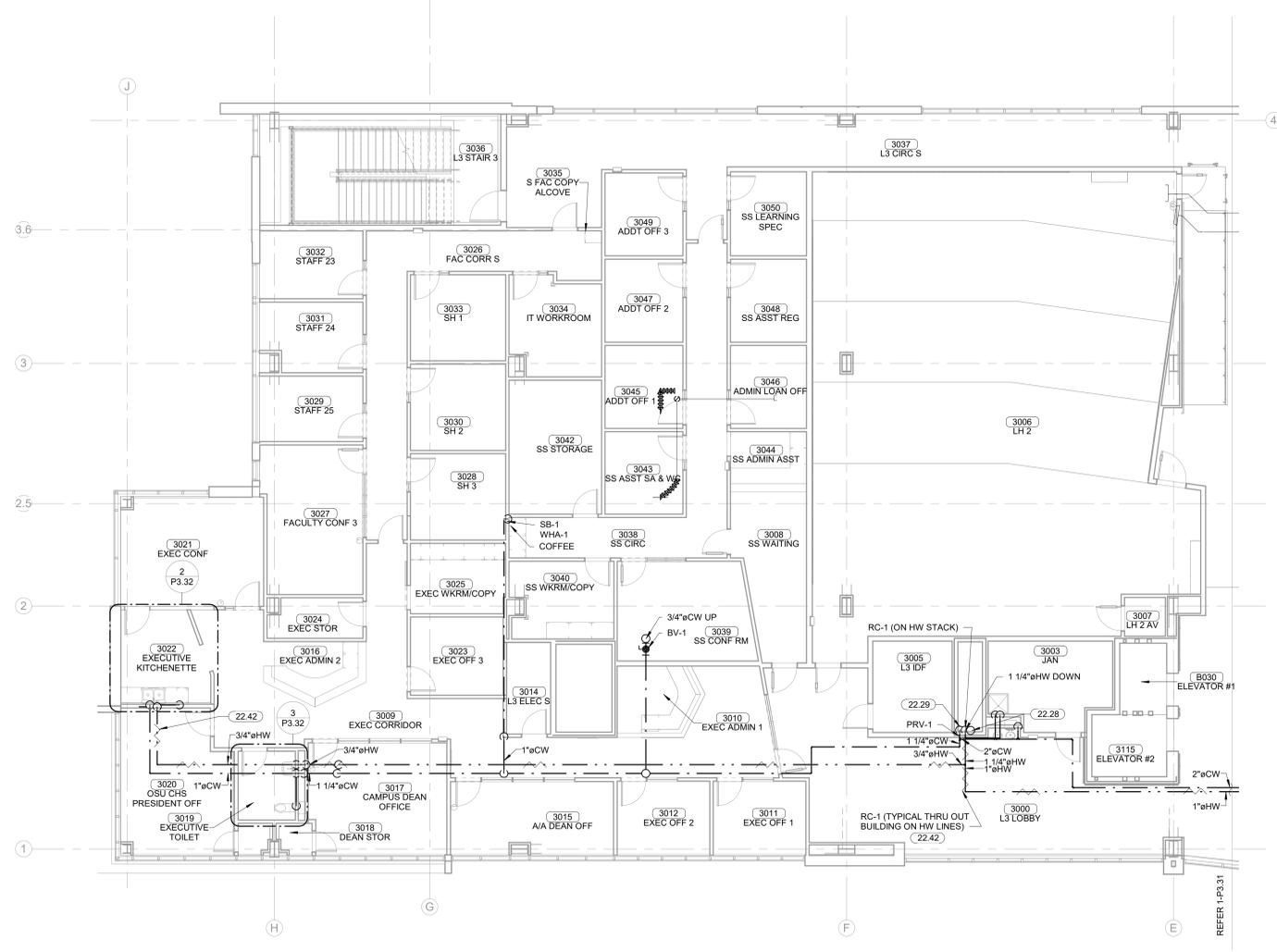
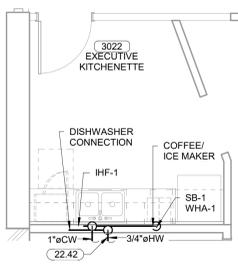
SHEET NUMBER:
P3.32

PLUMBING SUPPLY PLAN -
 LEVEL 03 SECTOR 02

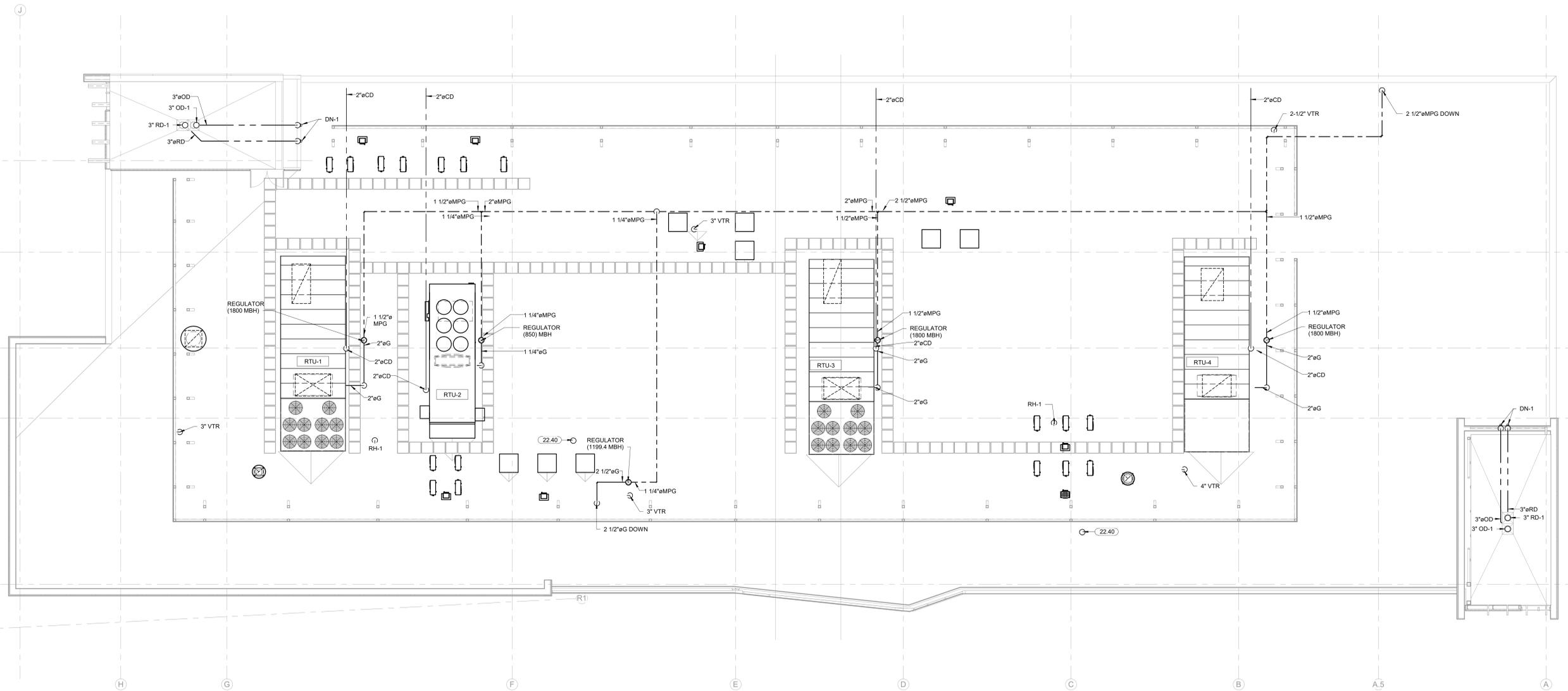
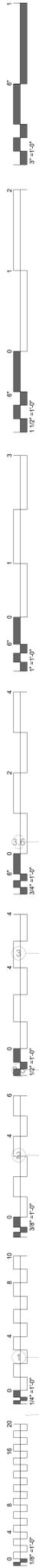
3 ENLARGED SUPPLY PLAN - LEVEL 03 SECTOR 02 - EXECUTIVE TLT
 1/4" = 1'-0"



2 ENLARGED SUPPLY PLAN - LEVEL 03 SECTOR 02 - EXEC. KITCHENETTE
 1/4" = 1'-0"



1 PLUMBING SUPPLY PLAN - LEVEL 03 SECTOR 02
 1/8" = 1'-0"



1 OVERALL PLUMBING ROOF PLAN
1/8" = 1'-0"

#	DATE	REVISIONS	DESCRIPTION