HENDERSON

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MO. CORPORATE NO: E-556D
EXPIRES 12/31/2020

SUMMIT MIDDLE SCHOOL #4

PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

13-20102-00

PLUMBING
GENERAL NOTES
AND LEGEND

GENERAL NOTES:

- PROVIDE A CONSTRUCTION RECORD SET OF "AS-BUILT" DOCUMENTS TO THE ARCHITECT REFLECTING ANY VARIANCES OF INSTALLED PIPING LOCATIONS OR EQUIPMENT CONTRARY TO THE CONSTRUCTION DOCUMENTS, REFER TO SPECIFICATIONS.
- 2. DRAWINGS ARE DIAGRAMMATIC ONLY AND REPRESENT THE GENERAL SCOPE OF THE WORK. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND PLANS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY THE ARCHITECT OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.
- 3. PROVIDE TO THE ARCHITECT A COPY OF INSPECTION REPORTS AND APPROVAL CERTIFICATES FROM LOCAL AND STATE INSPECTIONS, REFER TO SPECIFICATIONS.
- 4. INSTALLATION SHALL COMPLY WITH LEGALLY CONSTITUTED CODES AND THE REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION AND ALSO MEET ALL REQUIREMENTS OF THE LANDLORD. OBTAIN A COPY OF THE LANDLORD'S REQUIREMENTS AND REVIEW PRIOR TO SUBMITTING BID.
- 5. PLANS AND SPECIFICATIONS GOVERN WHERE THEY EXCEED CODE REQUIREMENTS.
- VERIFY LOCATION AND DEPTH OF UTILITIES AT POINTS OF CONNECTION BEFORE START OF PIPING INSTALLATION.
- REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND MOUNTING HEIGHTS OF PLUMBING FIXTURES.
- 8. DO NOT SCALE FLOOR PLANS FOR EXACT HORIZONTAL
- LOCATION OF PIPE ROUTING.

 9. INSTALL CONCEALED PIPING TIGHT TO THE STRUCTURE AND
- AS HIGH AS POSSIBLE.

 10. VALVES SHALL BE LINE SIZE UNLESS OTHERWISE NOTED.
- 11. INSTALL EXPOSED PIPING, WHERE NECESSARY, IN FINISHED AREAS TIGHT TO THE STRUCTURE, WALL OR CEILING AND AS HIGH AS POSSIBLE. INSTALL PIPING PARALLEL AND / OR PERPENDICULAR TO WALLS.
- 12. INSTALL VALVES AND APPURTENANCES A MAXIMUM OF 24"
 ABOVE CEILING IN ACCESSIBLE LOCATION WITHIN 24" OF
 ACCESS DOORS OR ACCESSIBLE CEILING TILES. PROVIDE PIPE
 AND FITTINGS TO INSTALL VALVES AND APPURTENANCES AT
 REQUIRED HEIGHT AND WITHIN 24" OF ACCESS DOORS OR
 ACCESSIBLE CEILING TILES.
- 13. INSTALL NO PLASTIC PIPE OF ANY KIND ABOVE SLAB INSIDE THE BUILDING. INSTALL NO PLASTIC PIPE IN THE CEILING RETURN AIR PLENUM.
- COORDINATE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
- 15. COORDINATE PIPING INSTALLATION WITH STRUCTURAL GRADE BEAMS, FOOTINGS, COLUMN PIERS, ETC. SLEEVE PIPING THROUGH GRADE BEAMS, FOOTING, ETC. WHERE REQUIRED AND AS NOTED ON PLANS. COORDINATE SLEEVE INSTALLATIONS WITH THE ARCHITECT, STRUCTURAL ENGINEER, STRUCTURAL CONTRACTOR AND GENERAL CONTRACTOR BEFORE CONCRETE IS INSTALLED.
- 16. CLEAN FAUCET AERATORS AND PIPE STRAINERS PRIOR TO TURNING BUILDING OVER TO THE OWNER.
- 17. COORDINATE PIPE ROUTING AWAY FROM ELECTRICAL PANELS.
 DO NOT INSTALL PIPING OVER ELECTRICAL PANELS.
- 18. PAINT ALL EXPOSED GAS AND WATER PIPING USING RUST INHIBITOR PAINT. PAINT AND COLOR SHALL BE COORDINATED WITH THE ARCHITECT AND / OR OWNER.
- 19. COORDINATE ALL ROOF PENETRATIONS WITH OTHER TRADES. MAINTAIN 10' MINIMUM CLEARANCE FROM ALL AIR INTAKES. MAINTAIN 2' CLEARANCE FROM ALL OTHER EQUIPMENT.
- 20. INSULATE PIPING ROUTED IN EXTERIOR BUILDING WALLS WITH MINIMUM 2" BATT INSULATION TO PREVENT FREEZING.
- 21. PROVIDE "HEAVY-DUTY" NO-HUB COUPLINGS ON SANITARY PIPING 4" AND LARGER. SEE DIVISION 22 SPECIFICATION SECTION "SANITARY DRAINAGE AND VENT AND PIPING SPECIALTIES" FOR MORE INFORMATION.
- 22. PROVIDE "HEAVY-DUTY" NO-HUB COUPLINGS ON STORM PIPING, INCLUDING CONNECTIONS TO ROOF DRAINS. SEE DIVISION 22 SPECIFICATION SECTION "STORM DRAINAGE PIPING AND SPECIALTIES" FOR MORE INFORMATION.
- 23. PROVIDE TRANSITION ADAPTER COUPLINGS FOR CONNECTION OF PVC DWV TO CAST IRON AT SLAB ON GRADE. SEE DIVISION 22 SPECIFICATION FOR MORE INFORMATION.
- 24. PROVIDE TRANSITION ADAPTER COUPLINGS FOR CONNECTION OF PVC DWV TO CAST IRON SANITARY, WASTE AND VENT PIPE AT SLAB ON GRADE. SEE DIVISION 22 SPECIFICATION SECTION "SANITARY DRAINAGE AND VENT PIPING AND SPECIALTIES" FOR MORE INFORMATION.
- 25. PROVIDE TRANSITION ADAPTER COUPLINGS FOR CONNECTION OF PVC DWV TO CAST IRON STORM PIPE AT SLAB ON GRADE. SEE DIVISION 22 SPECIFICATION SECTION "STORM DRAINAGE PIPING AND SPECIALTIES" FOR MORE INFORMATION.
- 26. FLOW CONTROL VALVES SHALL BE SIZE 1/2" AND SET AT 0.5 GPM UNLESS NOTED OTHERWISE.
- 27. WATER HAMMER ARRESTORS SHALL BE SIZE "A" UNLESS NOTED OTHERWISE.
- 28. PROVIDE VERTICAL LIFT SPRING LOADED CHECK VALVES IN HOT AND COLD WATER SUPPLIES FOR MOP SINK FAUCETS DOWNSTREAM OF SHUTOFF VALVES.
- 29. PROVIDE WALL PIPES AT PIPING PENETRATIONS OF ELEVATED WATERPROOF FLOOR SLABS, REFER TO SPECIFICATIONS.
- 30. PROVIDE SIZE AND LENGTH OF HOT WATER FIXTURE SUPPLY PIPE FROM CIRCULATED HOT WATER BRANCH OR MAIN TO TERMINATION OF HOT WATER FIXTURE SUPPLY PIPE AT EACH FIXTURE PER 2015 INTERNATIONAL ENERGY CONSERVATION CODE, TABLE C404.3.1. FOR ½" HOT WATER FIXTURE SUPPLY PIPE SIZE TO INDIVIDUAL LAVATORIES, PROVIDE MAXIMUM LENGTH OF TWO FEET. FOR ½" HOT WATER FIXTURE SUPPLY PIPE SIZE TO INDIVIDUAL SINKS, PROVIDE MAXIMUM LENGTH OF 43 FEET. FOR 3/4" HOT WATER FIXTURE SUPPLY PIPE SIZE TO INDIVIDUAL SINKS, PROVIDE MAXIMUM LENGTH OF 21 FEET.

THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS OR ABBE	REVIATIONS ARE USED. PIPING SYMBOLS		PIPING LINETYPES	V2.0
STANDARD MOUNTING HEIGHTS				
REFER TO THE ARCHITECTURAL DRAWINGS FOR PLUMBING FIXTURE MOUNTING HEIGHTS. UNO, INSTALL PLUMBING FIXTURES WITH THE MOUNTING		N OUTLET	CW	DOMESTIC COLD WATER (CW)
HEIGHTS AS LISTED BELOW WITH FINAL APPROVAL BY THE ARCHITECT.	——■ NITRO	JS OXIDE OUTLET	SCW	SOFTENED COLD WATER (SCW)
LAVATORY OR SINK STANDARD HEIGHT 31" FLOOR TO RIM	→ MEDIC	AL AIR OUTLET	HW	DOMESTIC HOT WATER (HW)
ADA ACCESSIBLE 34" FLOOR TO RIM CHILD HEIGHT 24" FLOOR TO RIM	→ NITRO	GEN OUTLET	HWR	DOMESTIC HOT WATER RECIRC. (HWR)
URINAL 24 TEOOR TO KIM	——— MEDIC	AL VACUUM INLET	140°	DOMESTIC HOT WATER (140°)
STANDARD HEIGHT 24" FLOOR TO RIM	■ ● FLOOR	SINK (FS), SIZE & TYPE	Т	TRAP PRIMER LINE (T)
ADA ACCESSIBLE 17" FLOOR TO RIM CHILD HEIGHT 14" FLOOR TO RIM	■ ● FLOOR	DRAIN (FD), SIZE & TYPE	s	SOIL PIPING - ABOVE FLOOR (S)
WATER CLOSET	© ROOF	DRAIN (RD), SIZE & TYPE	s	SOIL PIPING - BELOW FLOOR (S)
STANDARD HEIGHT 15" FLOOR TO RIM ADA ACCESSIBLE 17" TO 19" FLOOR TO TOP OF SEAT	——— IĀ BALL V	ALVE	W	WASTE PIPING - ABOVE FLOOR (W)
CHILD HEIGHT 10" FLOOR TO RIM	— ₩ CONTF	OL VALVE		WASTE PIPING - BELOW FLOOR (W)
WATER COOLER OR DRINKING FOUNTAIN STANDARD HEIGHT 41" FLOOR TO SPOUT	——— SHUT(FF VALVE	GW	GREASE WASTE - ABOVE FLOOR (GW)
ADA ACCESSIBLE 36" FLOOR TO SPOUT CHILD HEIGHT 30" FLOOR TO SPOUT	———— CHECI	VALVE	— — GW — —	GREASE WASTE - BELOW FLOOR (GW)
SHOWER VALVES		CING VALVE WITH PRESSURE PORTS	CGWV	COMBINATION GREASE WASTE AND VENT (CGWV
STANDARD HEIGHT - MEN 48" FLOOR TO CENTERLINE	_	RMETER	CWV	COMBINATION WASTE AND VENT (CWV)
STANDARD HEIGHT - WOMEN 42" FLOOR TO CENTERLINE ADA ACCESSIBLE 38" MIN TO 48" MAX FLOOR TO CENTERLINE				STORM DRAIN - ABOVE FLOOR (ST)
SHOWER HEADS	STRAIN		51	` '
MEN 6'-6" FLOOR TO CENTERLINE WOMEN 6'-0" FLOOR TO CENTERLINE	1	IER WITH BLOWOFF	st	STORM DRAIN - BELOW FLOOR (ST)
TUB VALVES	RELIEF	/SAFETY VALVE		OVERFLOW STORM DRAIN - ABOVE FLOOR (OST)
STANDARD HEIGHT 32" FLOOR TO CENTERLINE ADA ACCESSIBLE CENTER BETWEEN GRAB BAR AND TUB RIM	SOLEN	OID VALVE		VENT BELOW GRADE (VBG)
	PRESS	URE REDUCING VALVE	— — VBF — —	VENT BELOW FLOOR (VBF)
CLINIC SERVICE SINKS 30" FLOOR TO RIM	GAS P	RESSURE REGULATOR	ID	INDIRECT DRAIN (ID)
SURGEON'S SCRUB-UP SINKS 35" FLOOR TO FRONT RIM	—————— THERN	IOSTATIC MIXING VALVE	———CDH———	CONDENSATE DRAIN - HIGH EFFICIENCY RTU (CD
ICE MAKER OUTLET BOXES 24" FLOOR TO CENTER OF BOX		NCHOR	CD	CONDENSATE DRAIN (CD)
WASHING MACHINE OUTLET BOXES 42" FLOOR TO RIM	EXPAN	SION JOINT	——————————————————————————————————————	AUXILIARY CONDENSATE DRAIN (ACD)
JANITOR'S SINK FAUCET FITTING 42" FLOOR TO CENTERLINE		LOW PREVENTER	SPD	SUMP OR SEWAGE PUMP DISCHARGE (SPD)
HOSE BIBBS 36" AFF TO CENTERLINE		URE GAUGE	G	NATURAL GAS (G)
NON-FREEZE WALL HYDRANTS 18" AFG TO CENTERLINE	П	IOMETER	GV	GAS VENT (GV)
	1		MPG	MEDIUM PRESSURE NATURAL GAS (MPG)
USE THE DEFAULT MOUNTING HEIGHTS SHOWN ABOVE UNLESS NOTED OTHERWISE IN THE SPECIFICATIONS OR ELSEWHERE. MOUNTING	— UNION		5	, ,
HEIGHTS LISTED ARE ABOVE FINISHED FLOOR (AFF) OR ABOVE FINISHED GRADE (AFG). ALL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH		E CONNECTION		MEDIUM PRESSURE NATURAL GAS ON ROOF (MP
CURRENT ADA AND LOCAL REQUIREMENTS.	HOSE !	BIBB (HB)	NPW	NON-POTABLE WATER (NPW)
ANNOTATION	- H NON-F	REEZING WALL HYDRANT (NW)	LPG	LIQUEFIED PETROLEUM GAS (LPG)
	↑ MANUA VALVE	AL / AUTOMATIC AIR VENT OR VACUUM RELIEF	ws	WATER SERVICE (WS)
(1) PLUMBING PLAN NOTE CALLOUT	l n	URE / VACUUM SWITCH	———FP———	FIRE PROTECTION (FP)
PLUMBING EQUIPMENT DESIGNATION. (CONTRACTOR			———PD———	CONDENSATE PUMP DISCHARGE (PD)
1 FURNISHED AND INSTALLED). REFER TO PLUMBING FIXTURE OR EQUIPMENT SCHEDULES		OUT	V	VENT PIPING (V)
	——— 3 CAP		———AW———	ACID WASTE - ABOVE FLOOR (AW)
EQUIPMENT DESIGNATION (OWNER FURNISHED,	—————— WALL (CLEANOUT (WCO)	— — AW — —	ACID WASTE - BELOW FLOOR (AW)
CONTRACTOR INSTALLED)	⊕ FLOOR	CLEANOUT (FCO)	AV	ACID VENT (AV)
CU MECHANICAL EQUIPMENT DESIGNATION (CONTRACTOR	O EXTER	IOR CLEANOUT (ECO)	GWS	GRAY WATER (GWS)
furnished and installed unless noted otherwise)	 ELBOW	/ UP	CA	COMPRESSED AIR (CA)
CONNECTION POINT OF NEW WORK TO EXISTING	———⇒ ELBOV	DOWN		COMITICESCED AIR (OA)
	———— TEE UF	,		
DETAIL REFERENCE UPPER NUMBER INDICATES DETAIL NUMBER LOWER NUMBER INDICATES SHEET NUMBER	——————— TEE DO	DW N		
NOMBER LOWER NOMBER INDICATES SHEET NOMBER	———• Q ELBOV	UP WITH SHUT-OFF VALVE (SOV)		
SECTION CUT DESIGNATION		/ DOWN WITH SHUT-OFF VALVE (SOV)		
ABBREVIATIONS	4	WITH SHUT-OFF VALVE (SOV)		
	1	,		
ADA AMERICANS WITH MIN MINIMUM DISABILITIES ACT N/C NORMALLY CLOSED	"^"	DWN WITH SHUT OFF VALVE (SOV)		
AFF ABOVE FINISHED FLOOR N/O NORMALLY OPEN AFG ABOVE FINISHED GRADE NIC NOT IN CONTRACT	WAICE	R HAMMER ARRESTER (WHA) WITH PDI SIZES, r, D, & E)		
AHU AIR HANDLING UNIT ORD OVERFLOW ROOF DRAIN AP ACCESS PANEL PDI PLUMBING DRAINAGE		CULATION PUMP		
BAS BUILDING AUTOMATION INSTITUTE	———∞ P-TRAI			
BFF BELOW FINISHED FLOOR PRV PRESSURE REDUCING	— • • GAS C			
BFG BELOW FINISHED GRADE BOP BOTTOM OF PIPE PVC POLYVINYL CHLORIDE				
BOS BOTTOM OF STRUCTURE RCP REINFORCED CONCRETE BTU BRITISH THERMAL UNIT PIPE	TRAP F			
CP CONDENSATE PUMP RD ROOF DRAIN CPVC CHLORINATED POLYVINYL RPM REVOLUTIONS PER	TRAP F	PRIMER WITH DISTRIBUTION UNIT		
CHLORIDE CU COPPER RTU ROOFTOP UNIT				
DI DUCTILE IRON SF SQUARE FEET				
DN DOWN SP SUMP DFU DRAINAGE FIXTURE UNIT SS STAINLESS STEEL DS DOWNSPOUT SANITARY SEWER, SOIL				
IN MARKETANIA I CAMILADY CLIMED COIL				
(E) EXISTING STACK	1			
(E) EXISTING STACK EMS ENERGY MANAGEMENT TDH TOTAL DYNAMIC HEAD SYSTEM TFA TO FLOOR ABOVE				
(E) EXISTING STACK EMS ENERGY MANAGEMENT TDH TOTAL DYNAMIC HEAD SYSTEM TFA TO FLOOR ABOVE ETR EXISTING TO REMAIN TFB TO FLOOR BELOW	LINETYPE LEGEND		7	
(E) EXISTING EMS ENERGY MANAGEMENT SYSTEM ETR EXISTING TO REMAIN EWC ELECTRIC WATER COOLER FD FLOOR DRAIN STACK TDH TOTAL DYNAMIC HEAD TFA TO FLOOR ABOVE TFB TO FLOOR BELOW TYP TYPICAL UNDERWRITERS		DIFFERENT LINETYPES ARE LISED IN		
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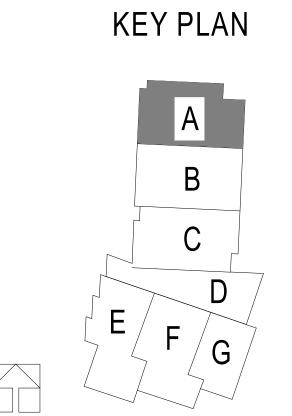
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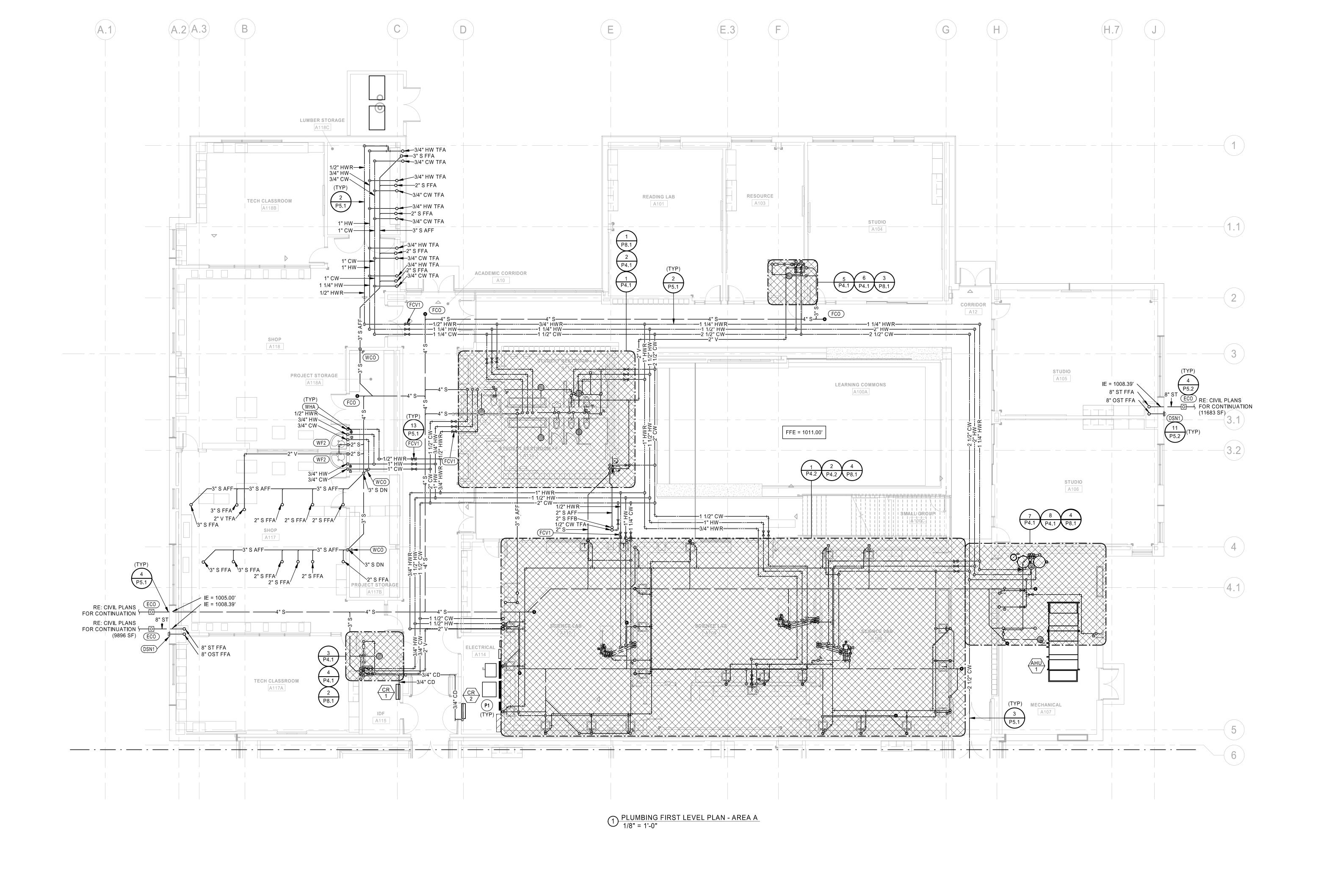
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PLUMBING FIRST

P1.1A

LEVEL PLAN -AREA A



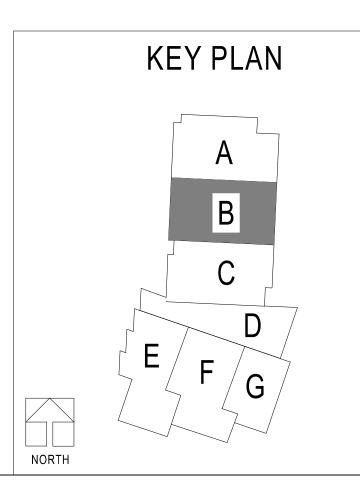


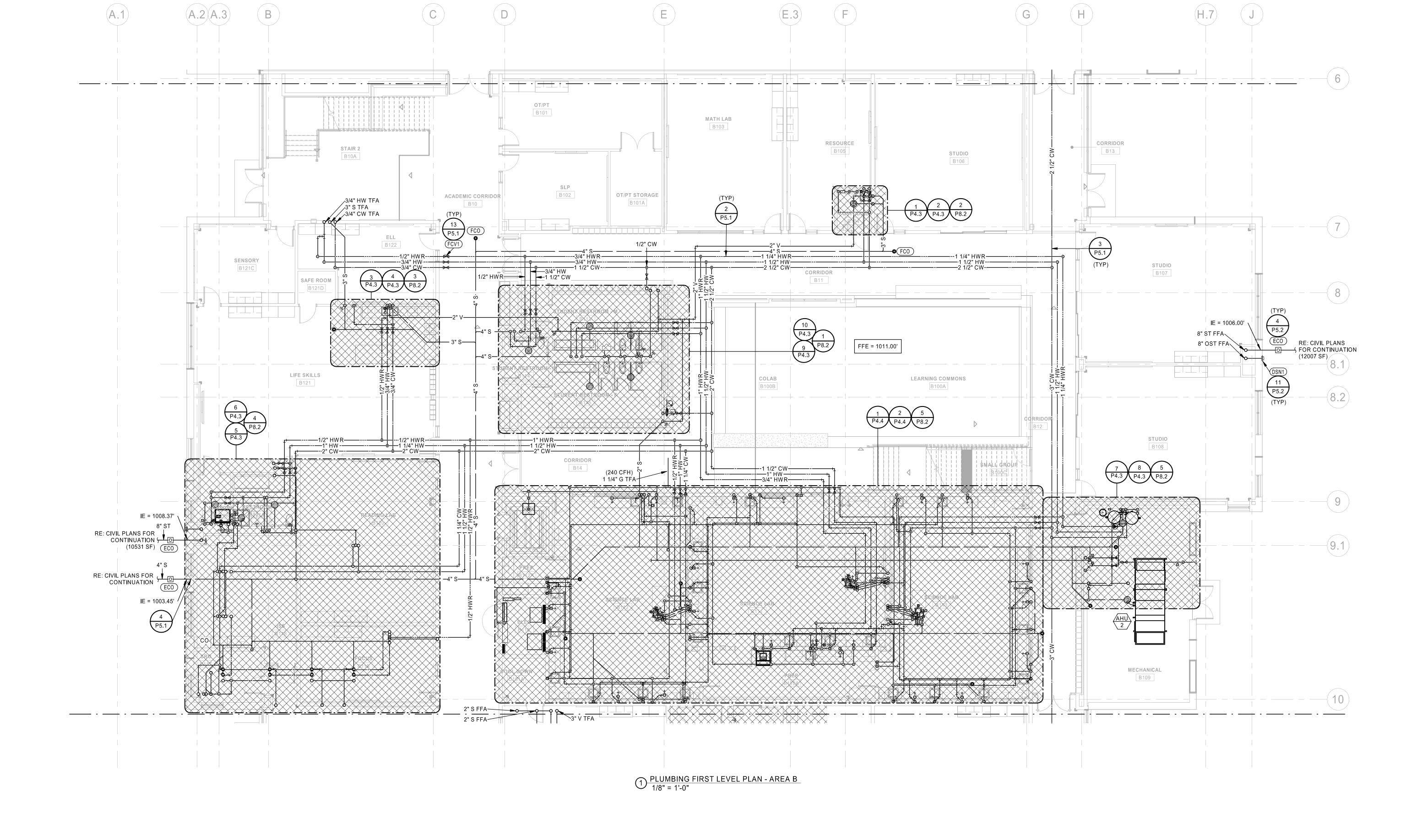
13-20102-00

PLUMBING FIRST

P1.1B

LEVEL PLAN -AREA B





Oct 8 2020
CARL J. HOLDEN
LICENSE # PE-2020016283

PACKAGE 3 - BUILDING & SITE 10/08/20

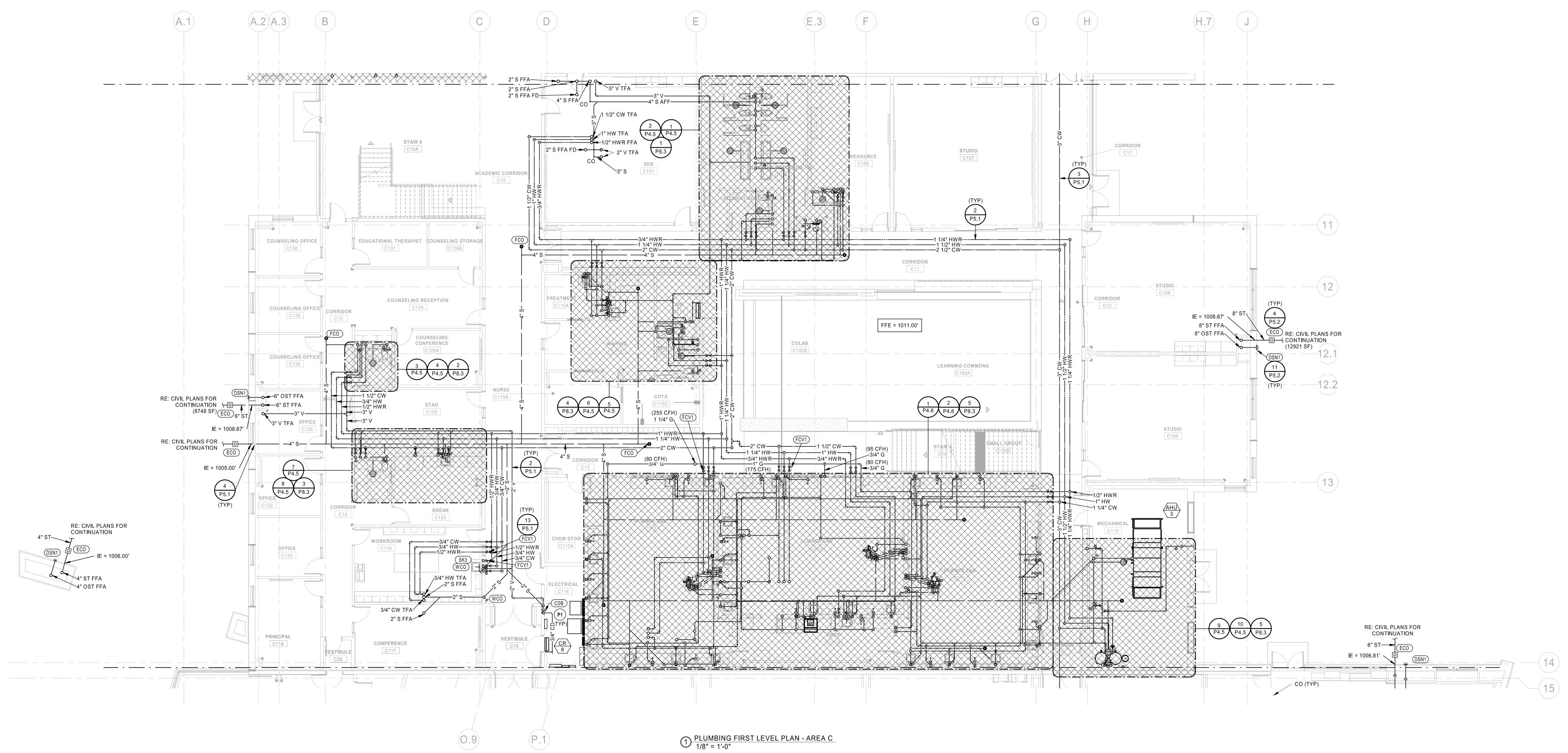
REVISIONS

KEY PLAN

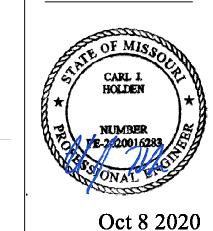
13-20102-00

PLUMBING FIRST LEVEL PLAN -AREA C

P1.1C



Group



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PACKAGE 3 - BUILDING & SITE

13-20102-00 PLUMBING FIRST LEVEL PLAN -AREA D

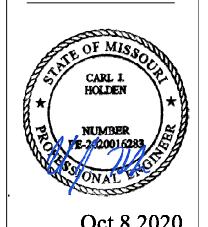
P1.1D

PLUMBING PLAN NOTES:

P1 DO NOT INSTALL PLUMBING PIPING OVER ELECTRICAL PANELS OR EQUIPMENT.

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Oct 8 2020
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LEE'S SUMMIT R-7 SCHOOL DISTRICT

PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

KEY PLAN

A
B
C
F
G

13-20102-00

PLUMBING FIRST
LEVEL PLAN AREA E

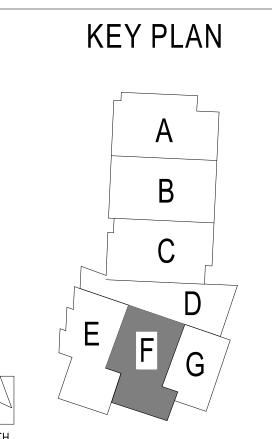
P1.1E

P1 DO NOT INSTALL PLUMBING PIPING OVER ELECTRICAL PANELS OR EQUIPMENT.

Group

Oct 8 2020
CARL J. HOLDEN
LICENSE # PE-2020016283

PACKAGE 3 - BUILDING & SITE 10/08/20 REVISIONS



13-20102-00 PLUMBING FIRST LEVEL PLAN -AREA F

P1.1F

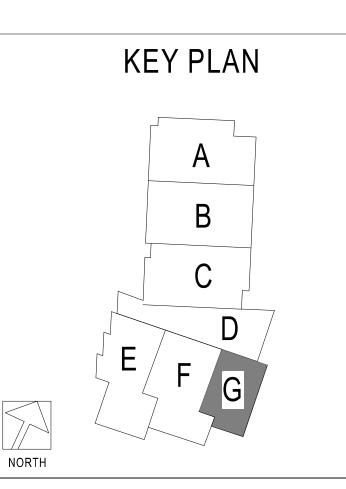
HENDERSON
ENGINEERS
8345 LENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.5000 FAX 913.742.5001

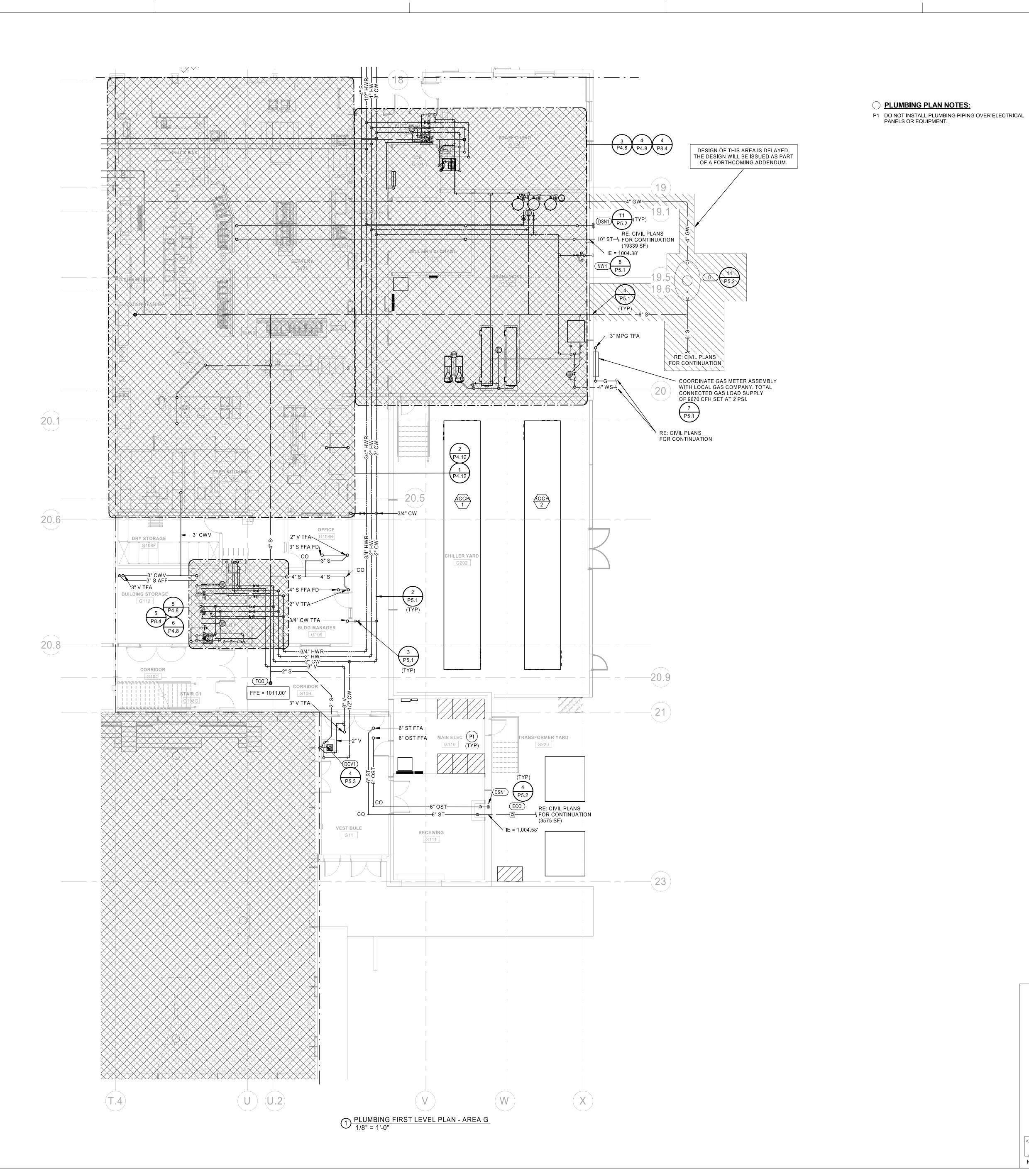
PACKAGE 3 - BUILDING & SITE 10/08/20 REVISIONS

13-20102-00

PLUMBING FIRST LEVEL PLAN -AREA G

P1.1G

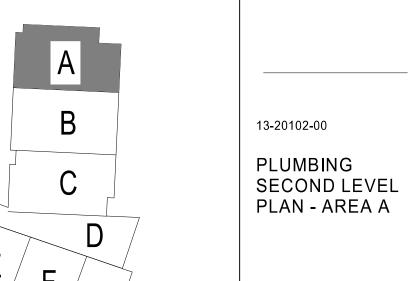




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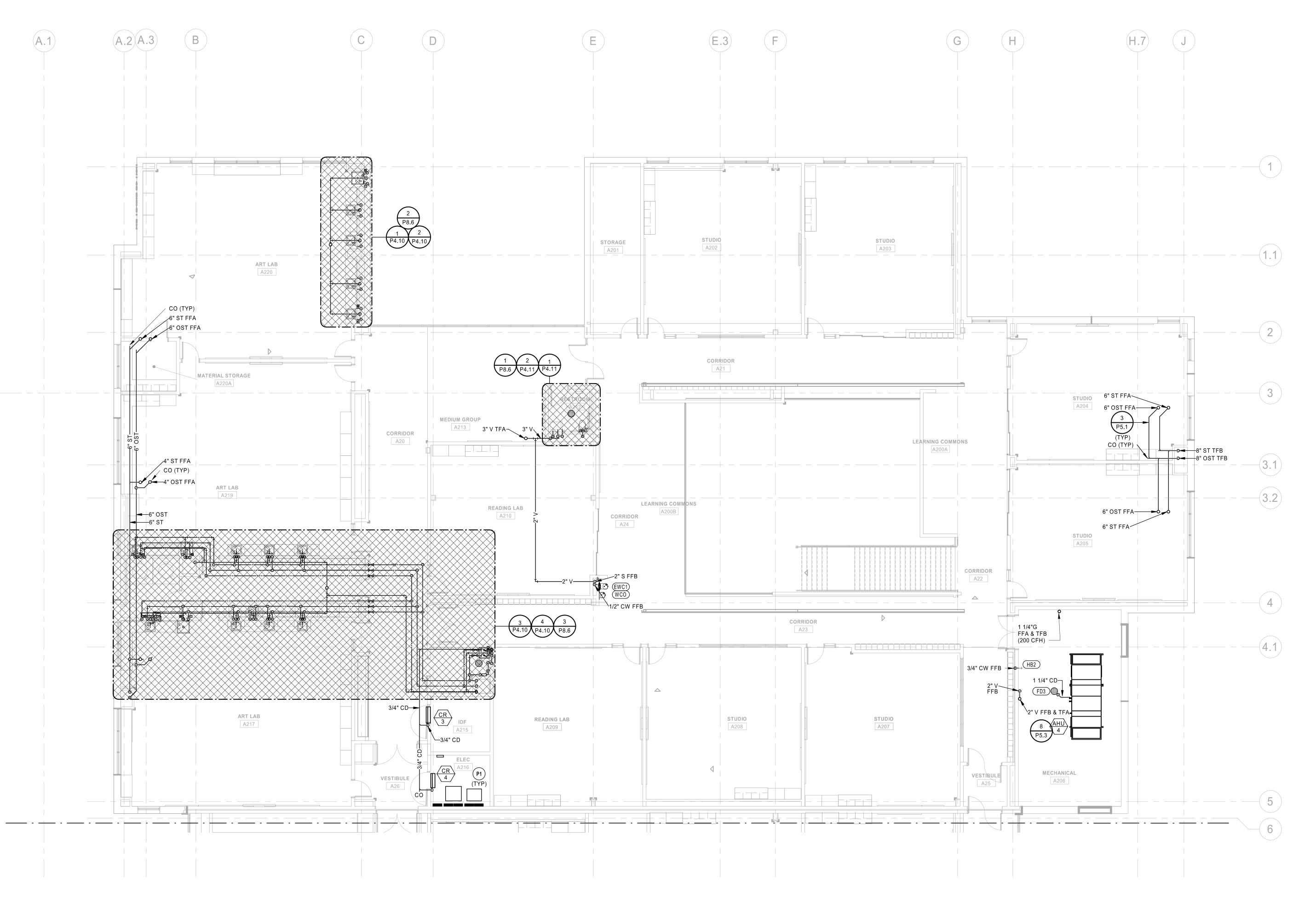
P1.2A

REVISIONS



KEY PLAN

A
B
C
F
G

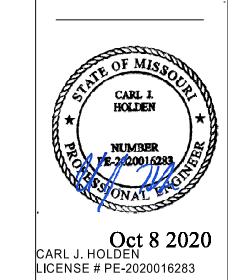


1/8" = 1'-0"

PLUMBING PLAN NOTES:

P1 DO NOT INSTALL PLUMBING PIPING OVER ELECTRICAL PANELS OR EQUIPMENT.





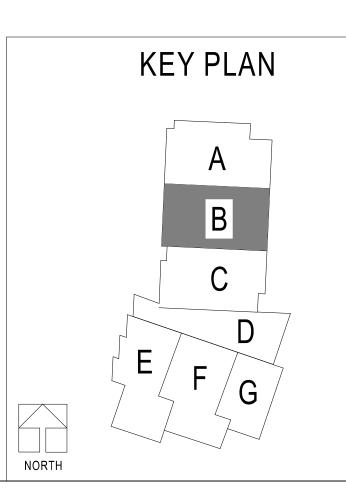
PACKAGE 3 - BUILDING & SITE 10/08/20 REVISIONS

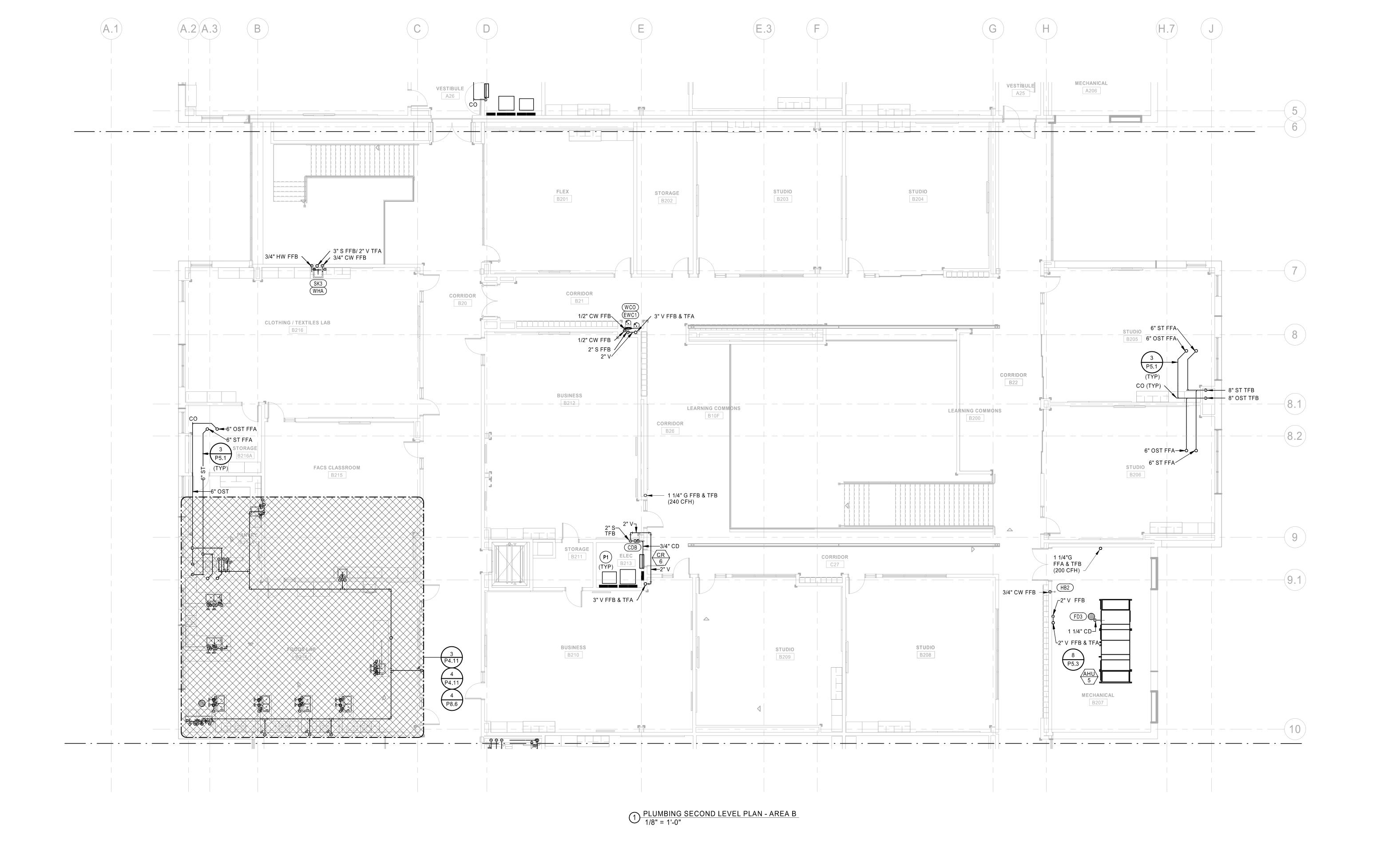
13-20102-00

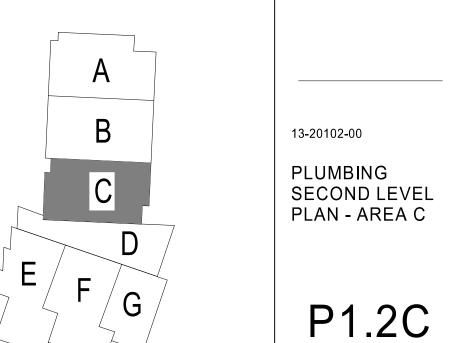
PLUMBING

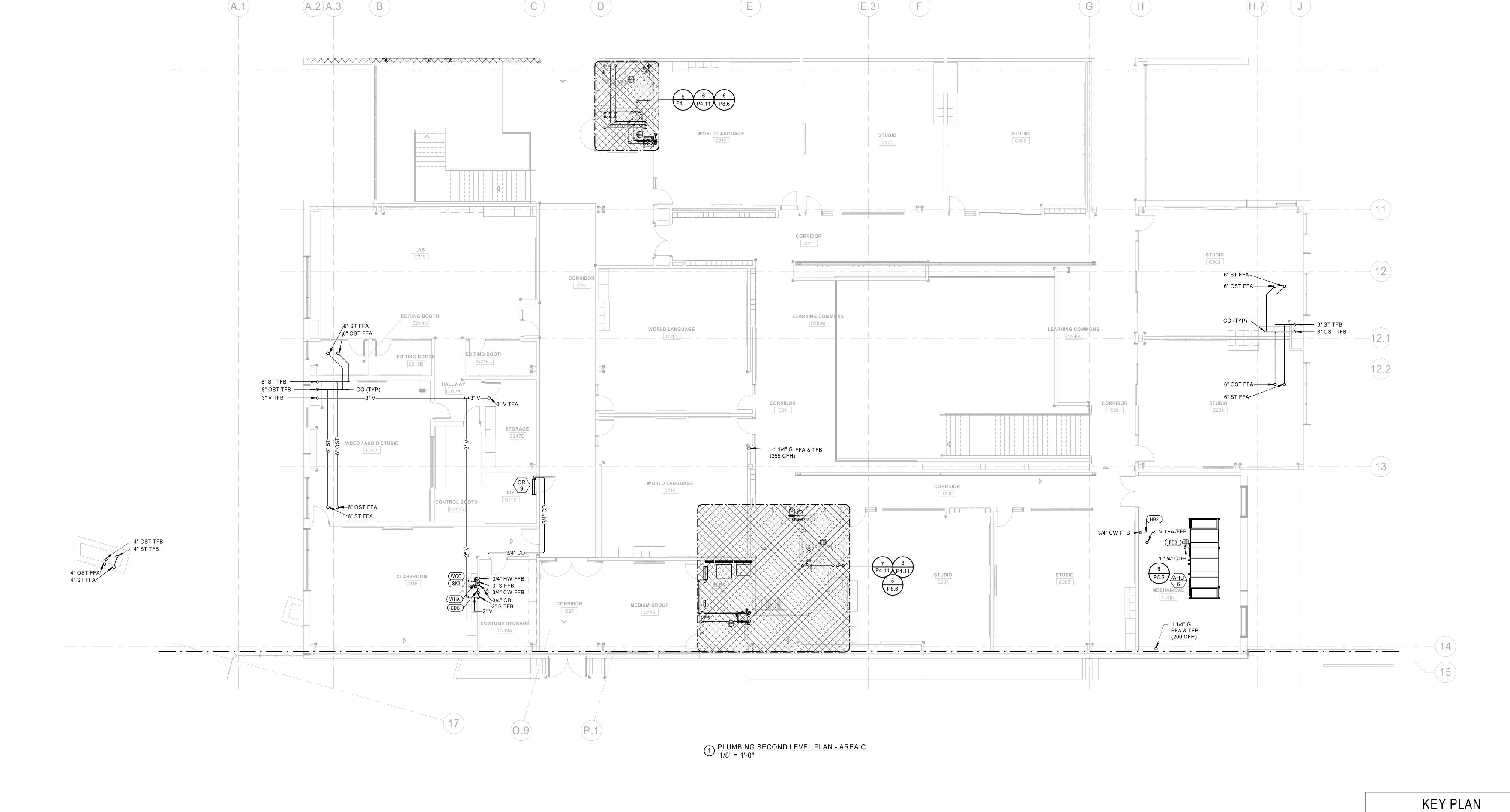
SECOND LEVEL PLAN - AREA B

P1.2B



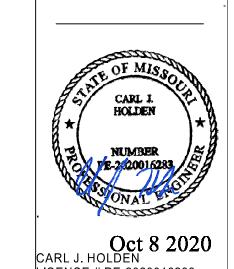






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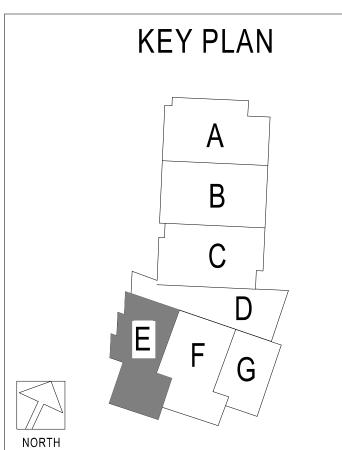
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LEE'S SUMMIT R-7 SCHOOL DISTRICT

PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

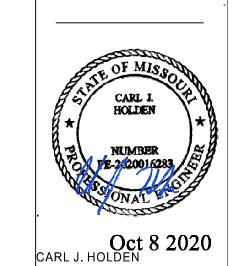


13-20102-00

PLUMBING
SECOND LEVEL
PLAN - AREA E

P1.2E

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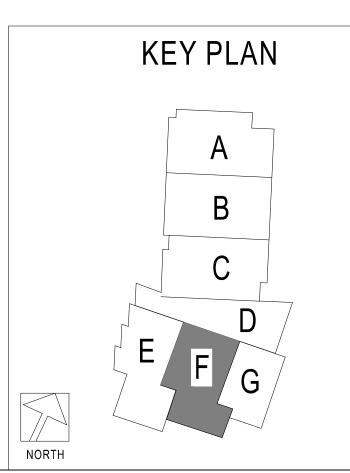


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E.E.S. SUMMILI MIDDLE SCHOOL #28 SUMMIT R-7 SCHOOL DISTRICT

PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

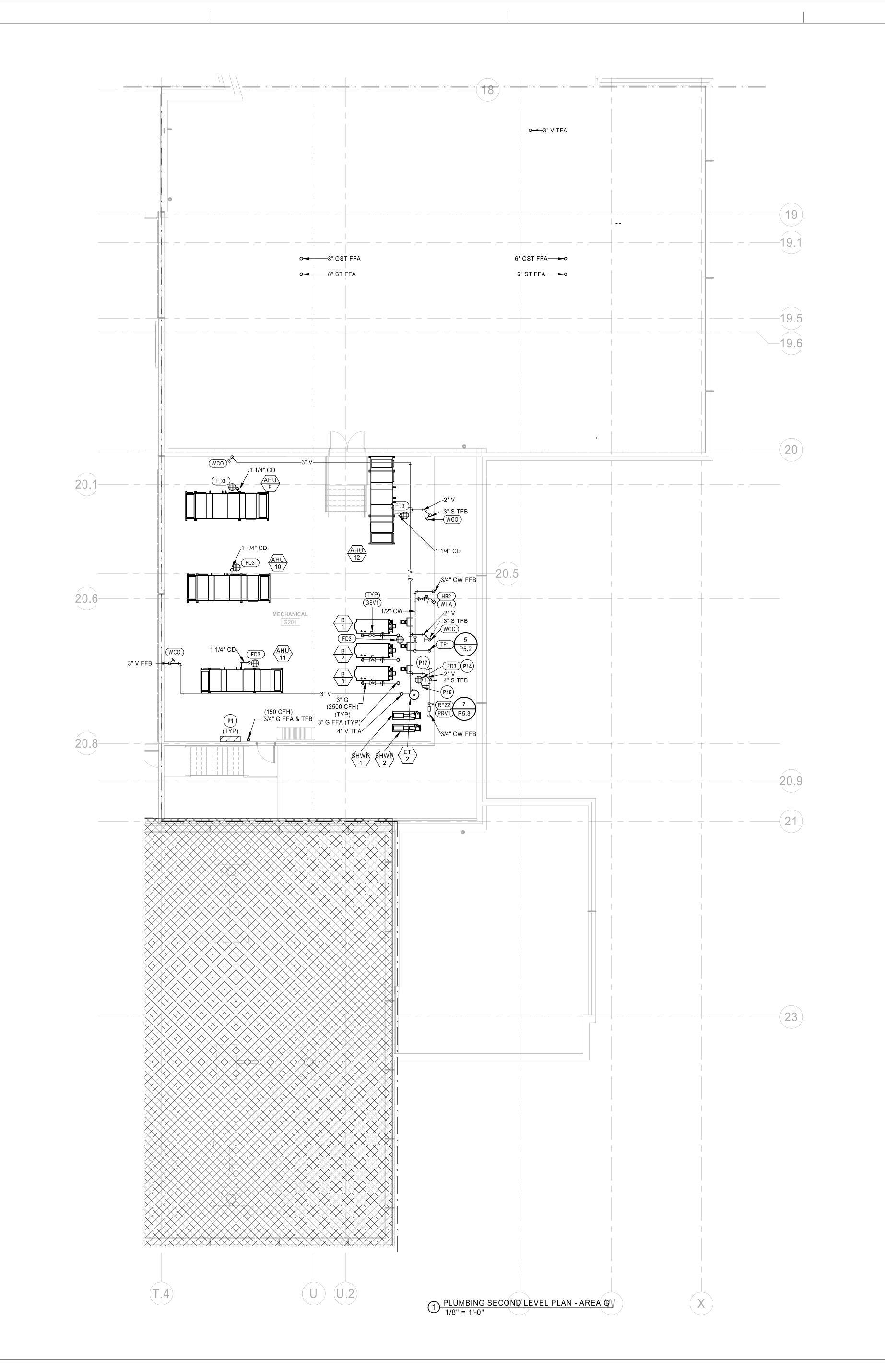


13-20102-00

PLUMBING
SECOND LEVEL
PLAN - AREA F

P1.2F

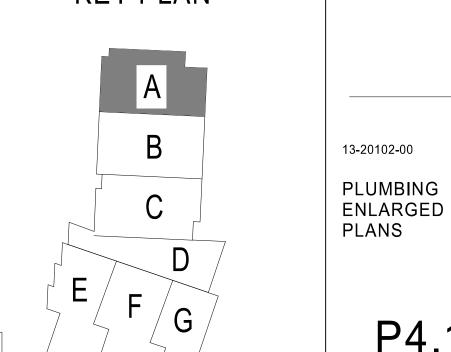
P1.2G

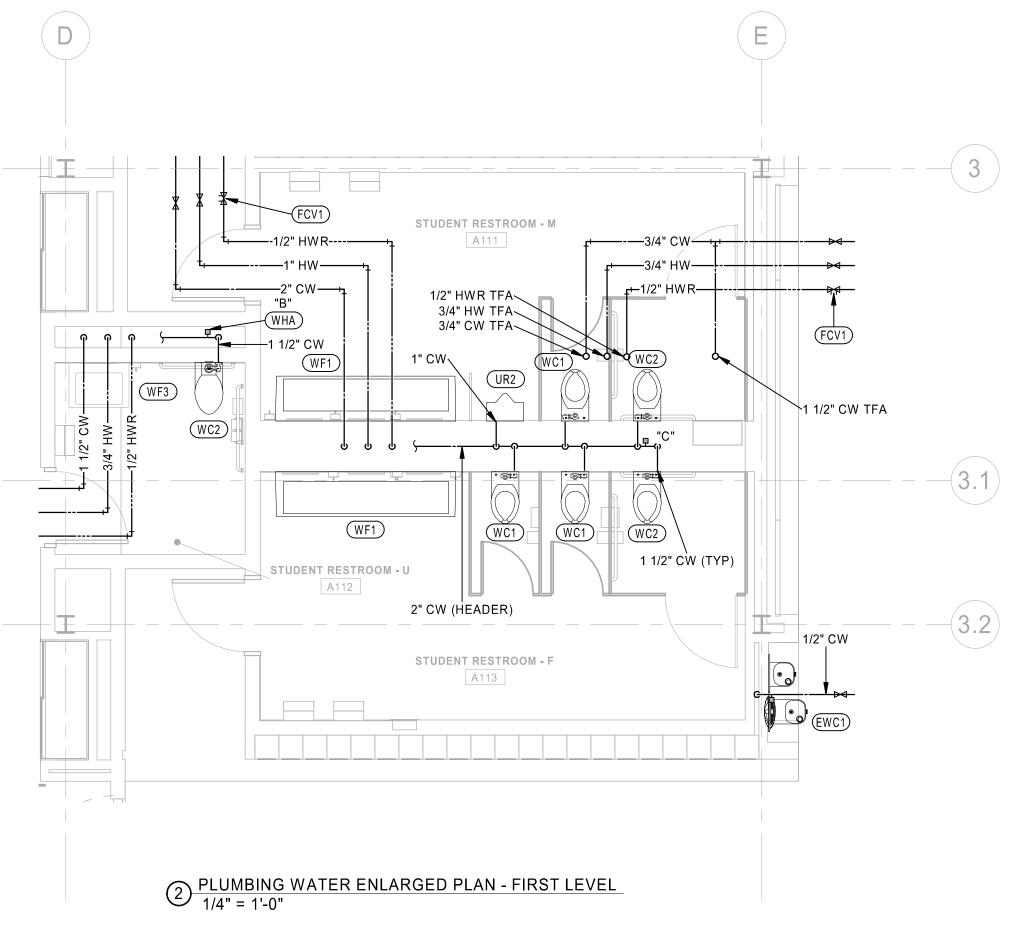


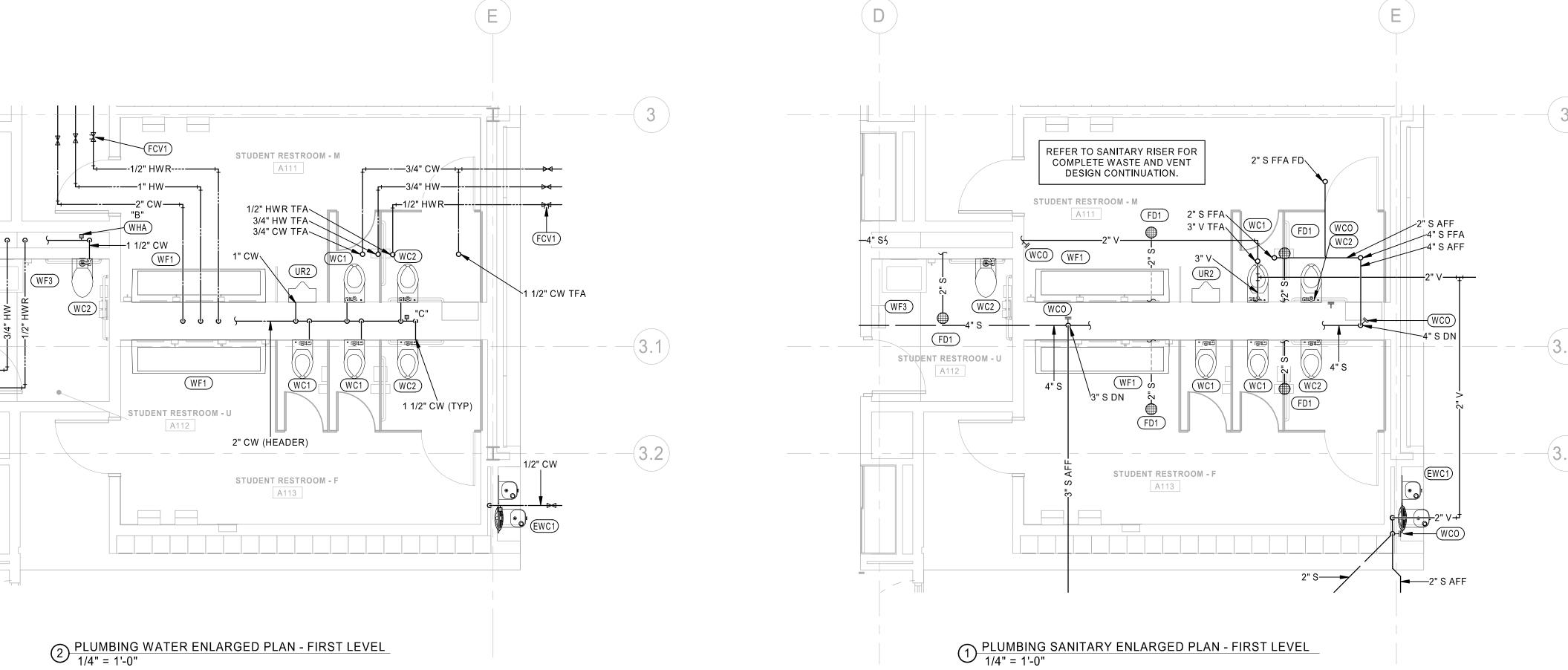
LEE'S SUMMIT R-7 SCHOOL DIS

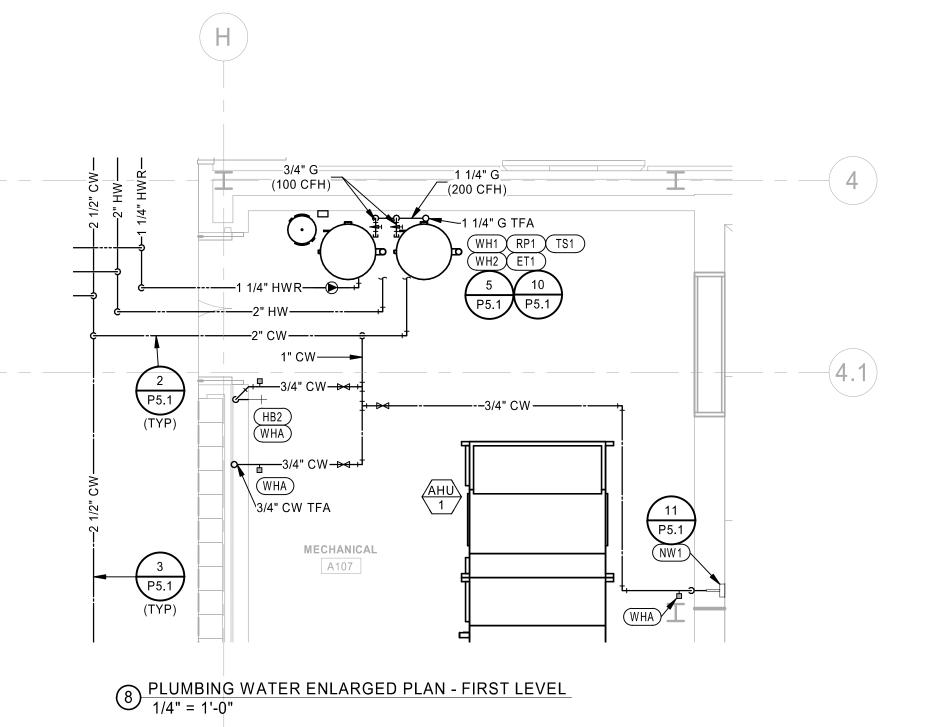
PACKAGE 3 - BUILDING & SITE 10/08/20 REVISIONS

P4.1





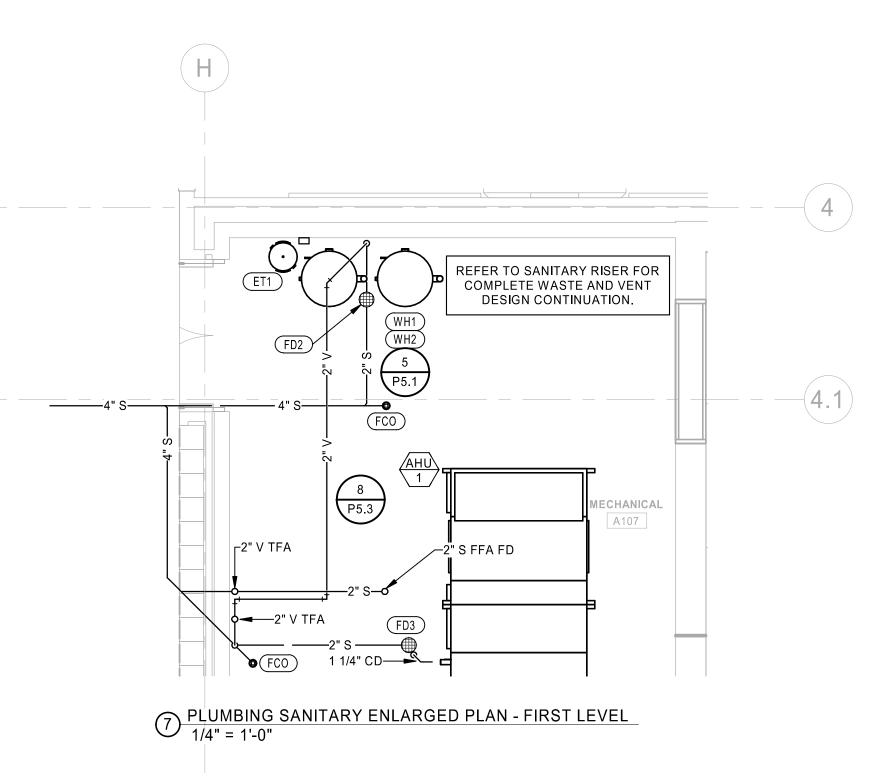


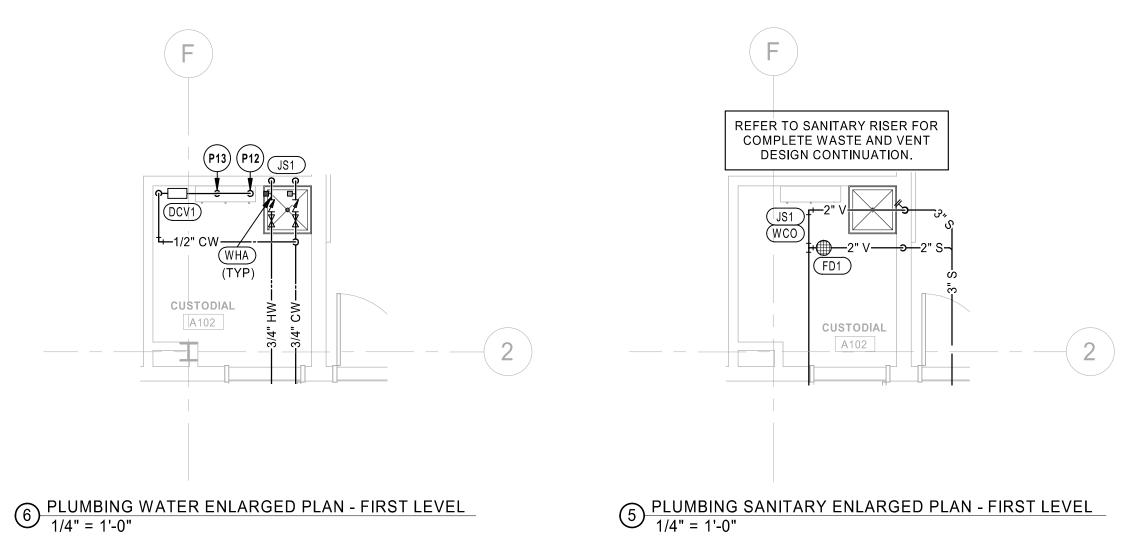


REFER TO SANITARY RISER FOR COMPLETE WASTE AND VENT DESIGN CONTINUATION.

CUSTODIAL A116

3 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL 1/4" = 1'-0"





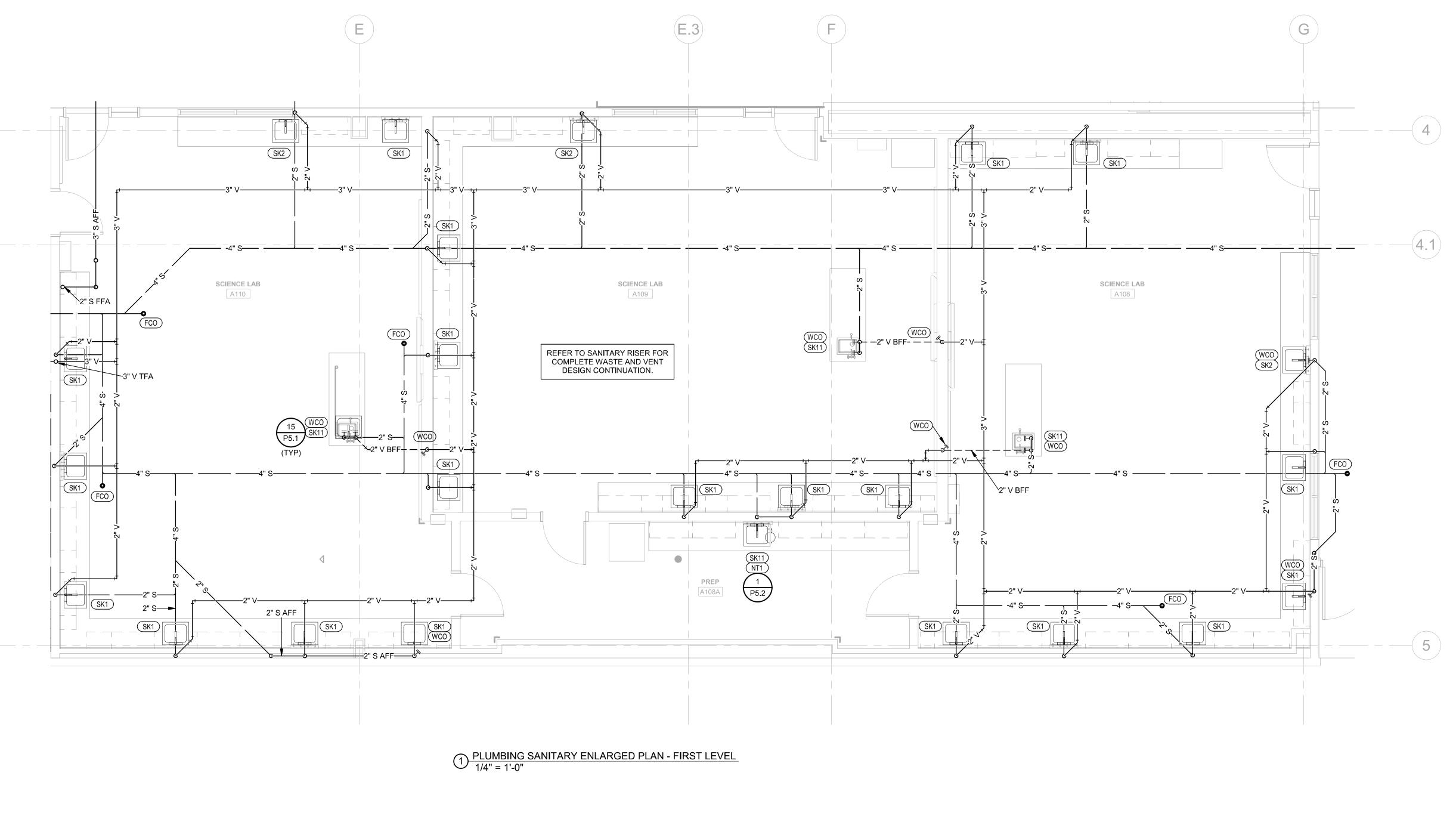
KEY PLAN

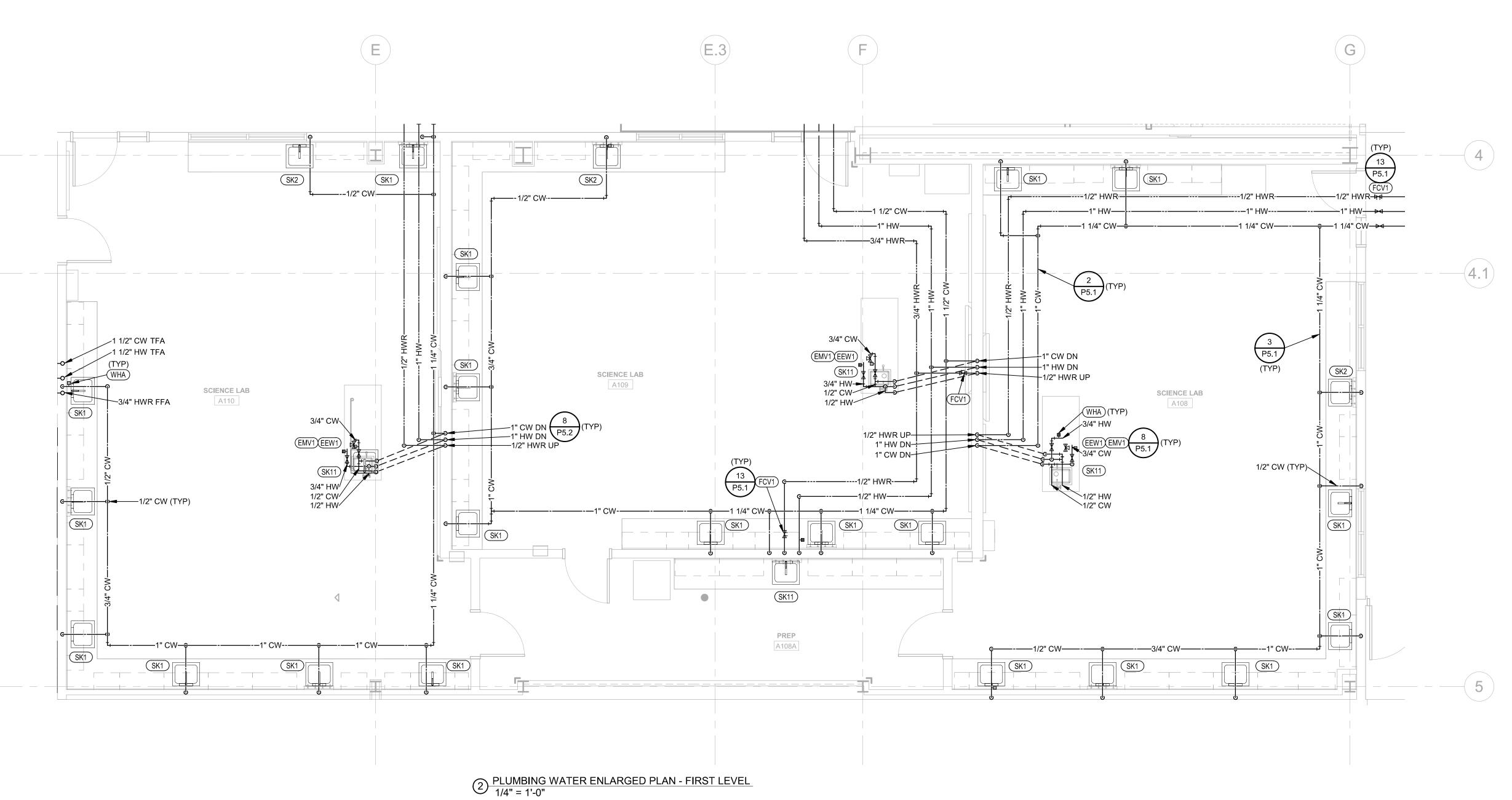
PACKAGE 3 - BUILDING & SITE 10/08/20 REVISIONS

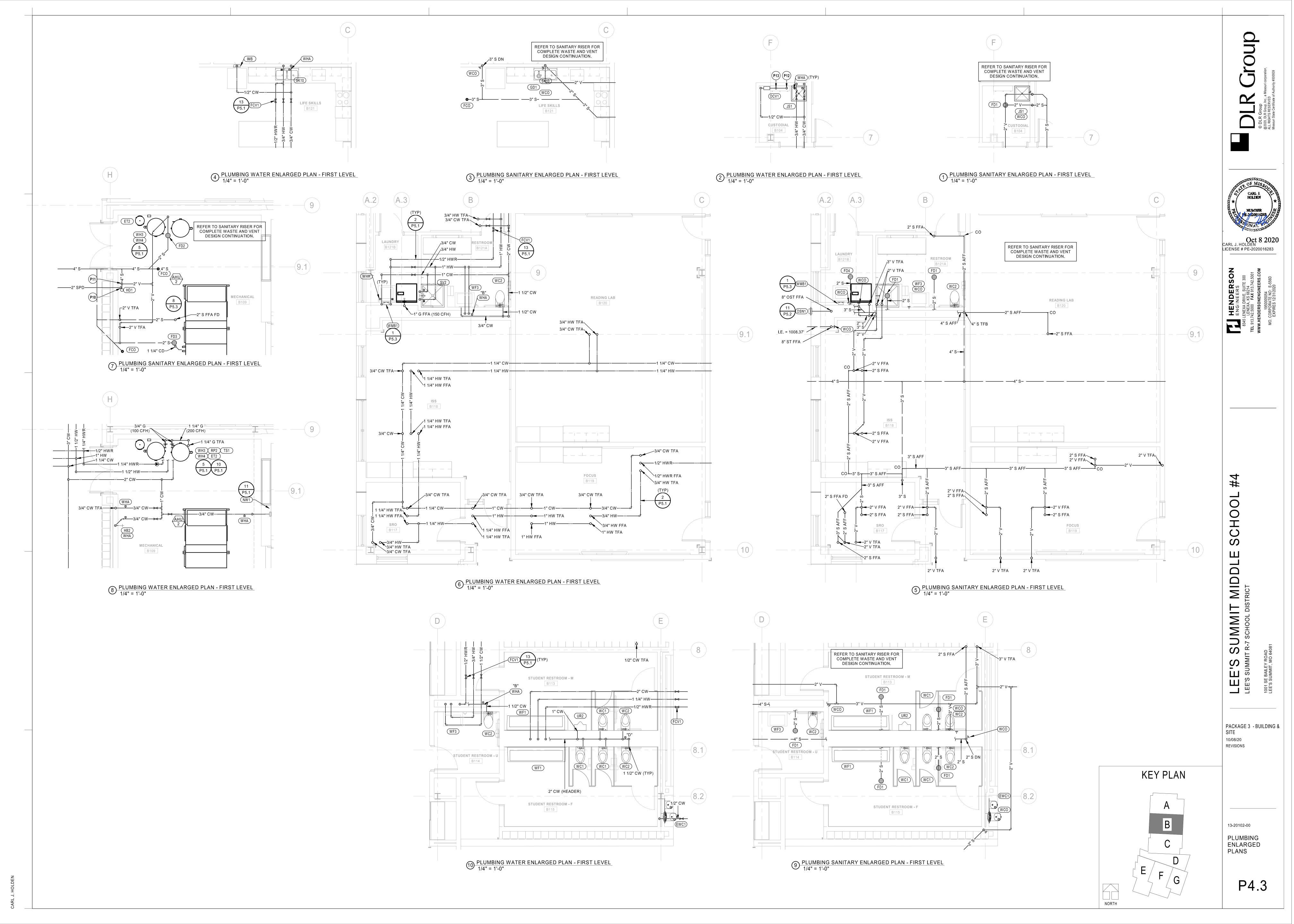
KEY PLAN

NORTH

13-20102-00 PLUMBING ENLARGED PLANS







O PLUMBING PLAN NOTES:

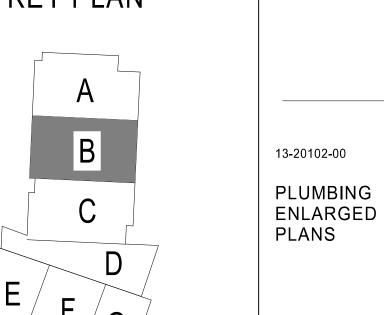
FINISH FLOOR.

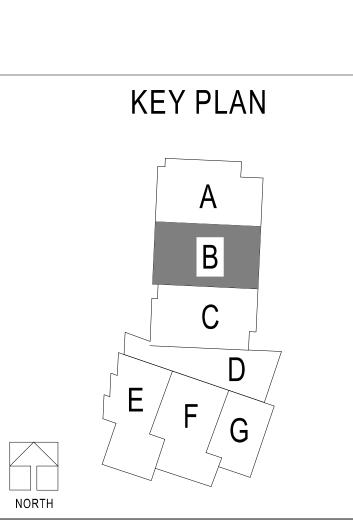
P8 INSTALL 1/2" GAS COCK IN VERTICAL RISE 12" ABOVE THE

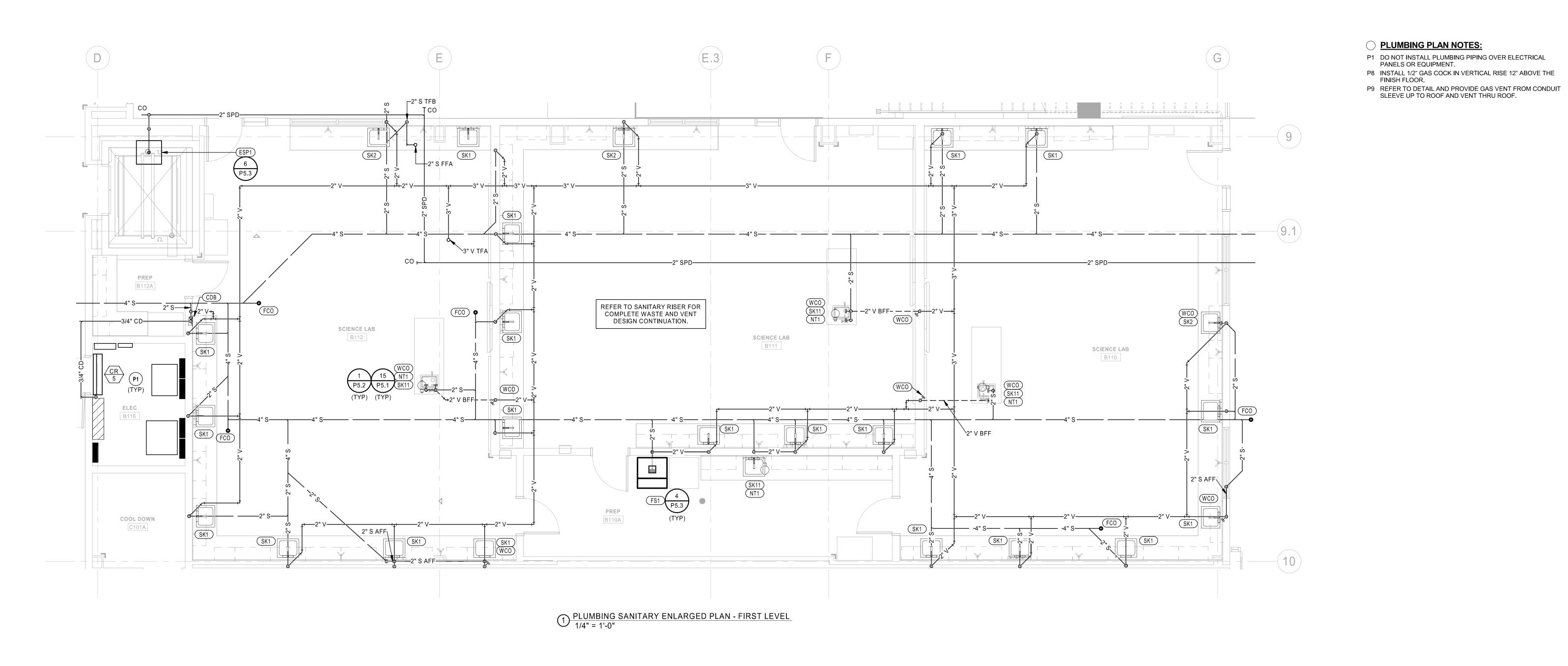
PACKAGE 3 - BUILDING & SITE 10/08/20

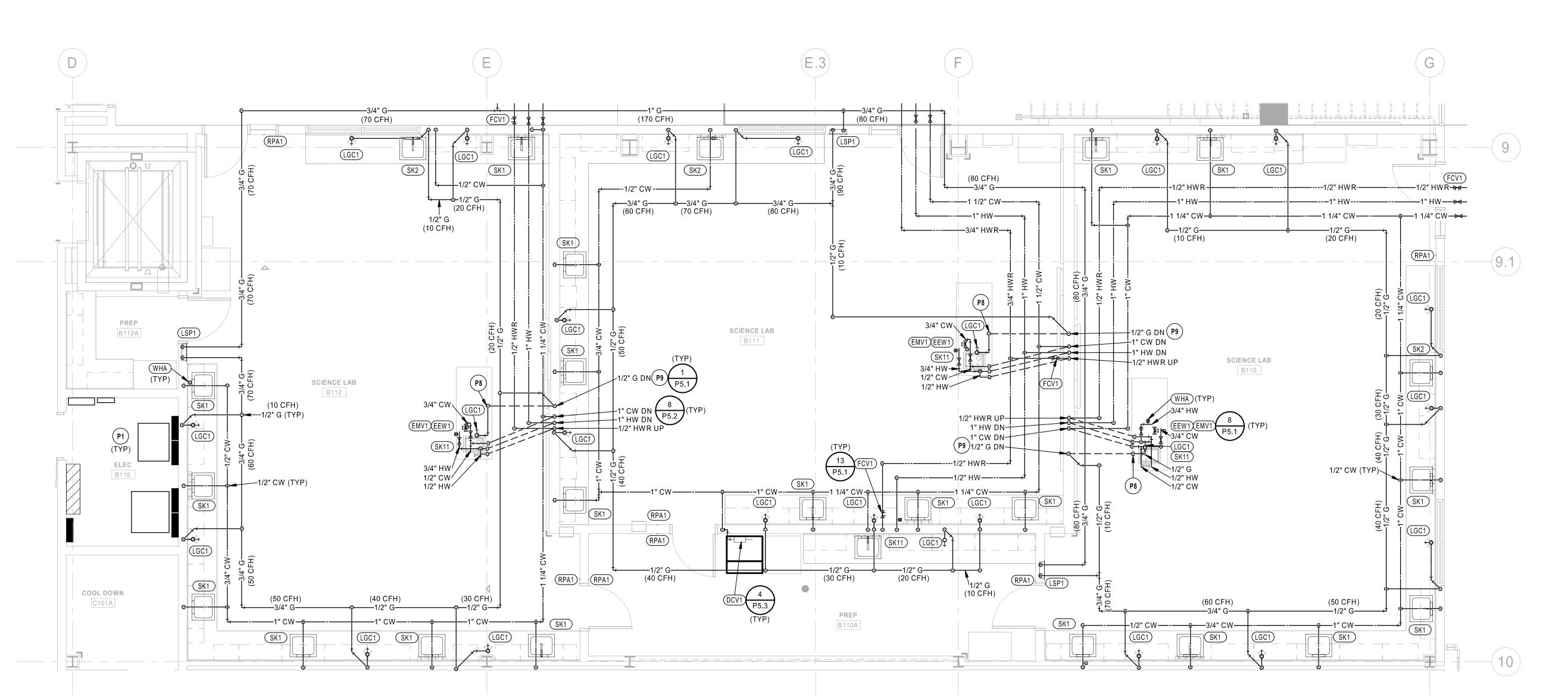
P4.4

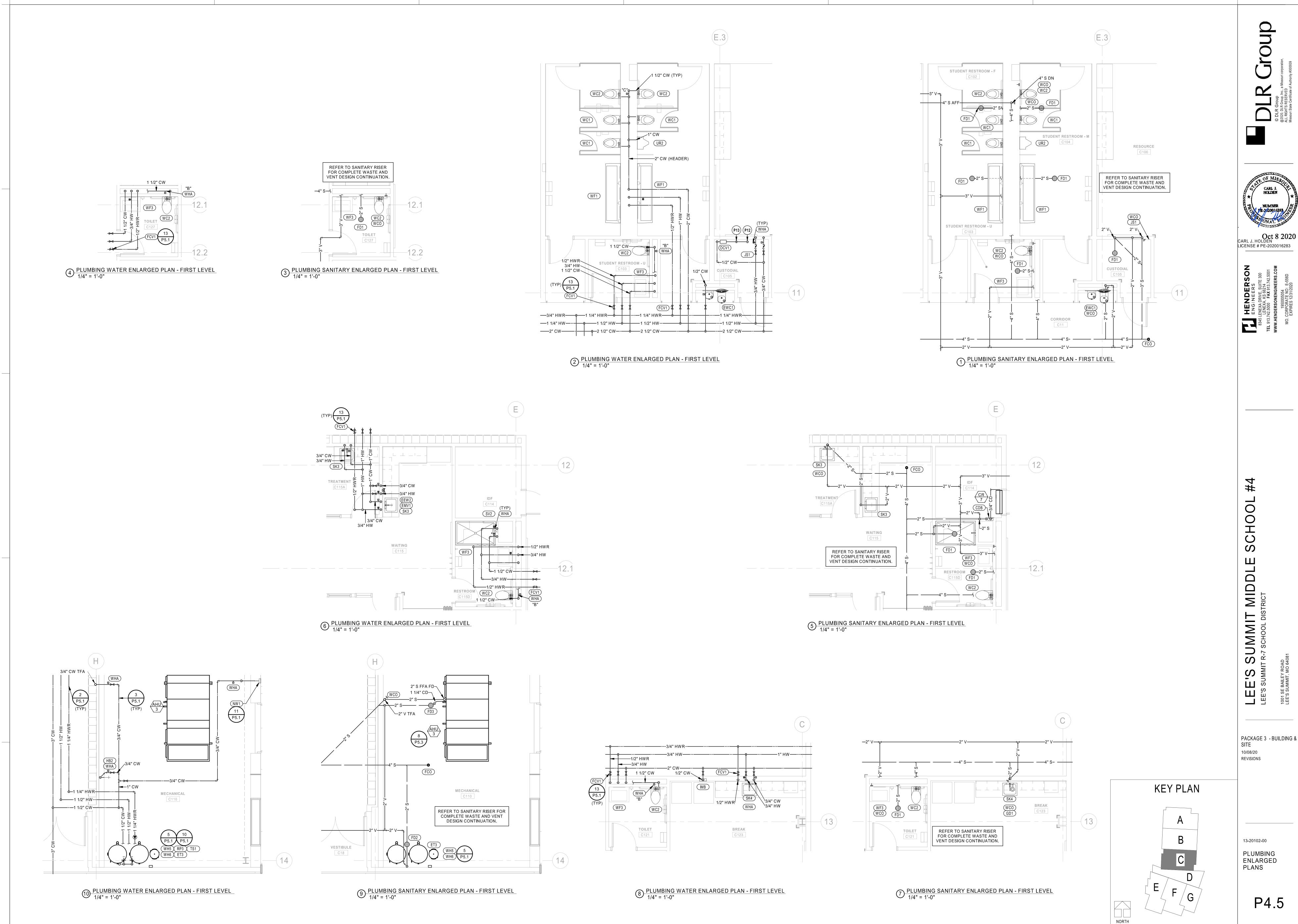
REVISIONS





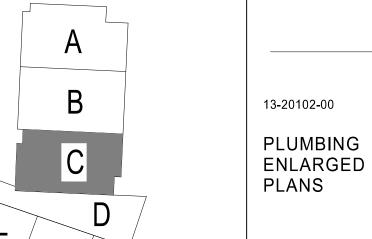




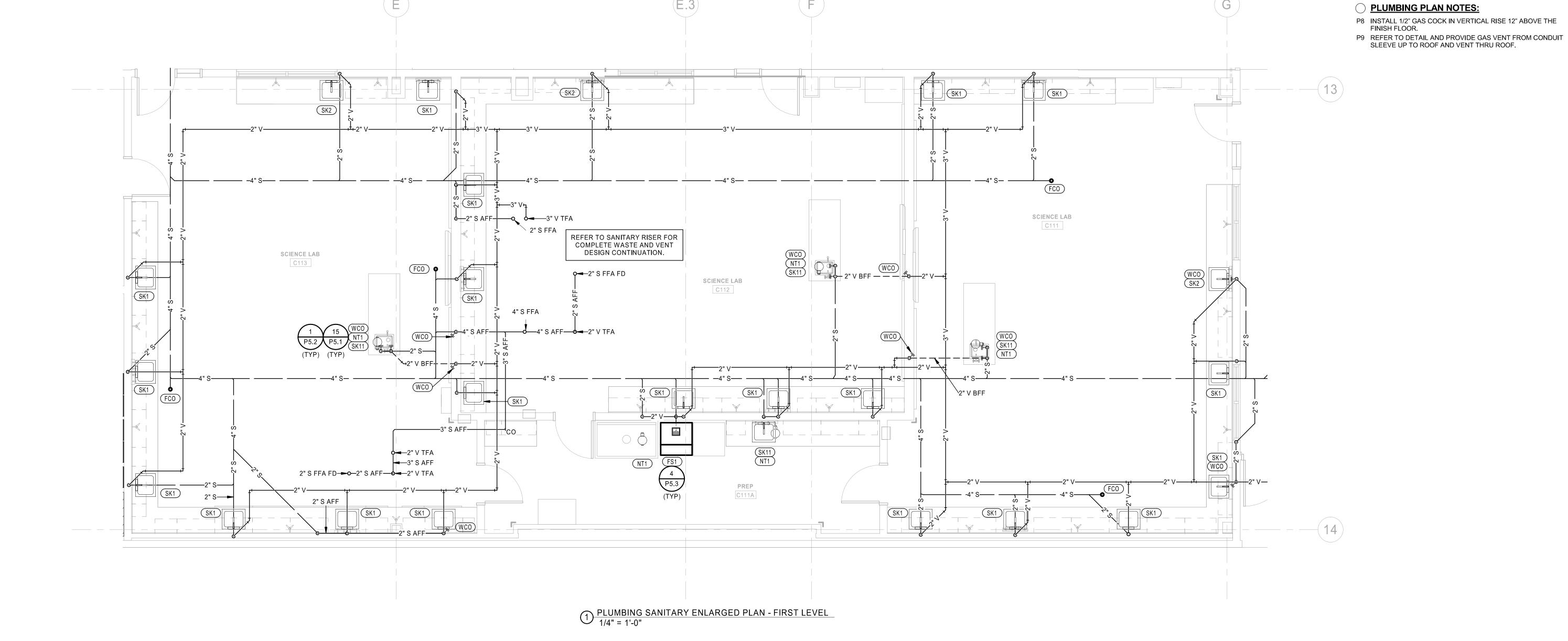


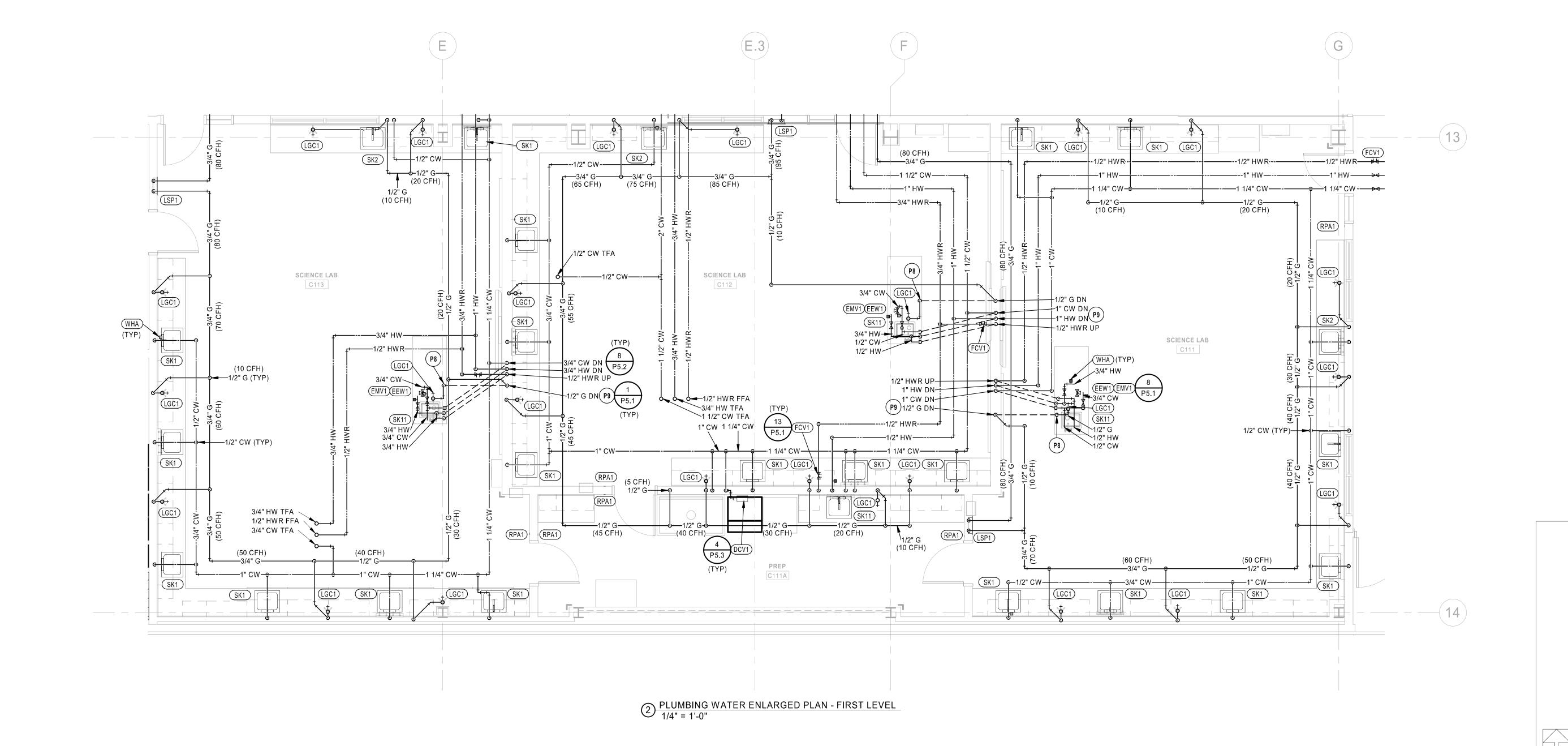
PACKAGE 3 - BUILDING & SITE

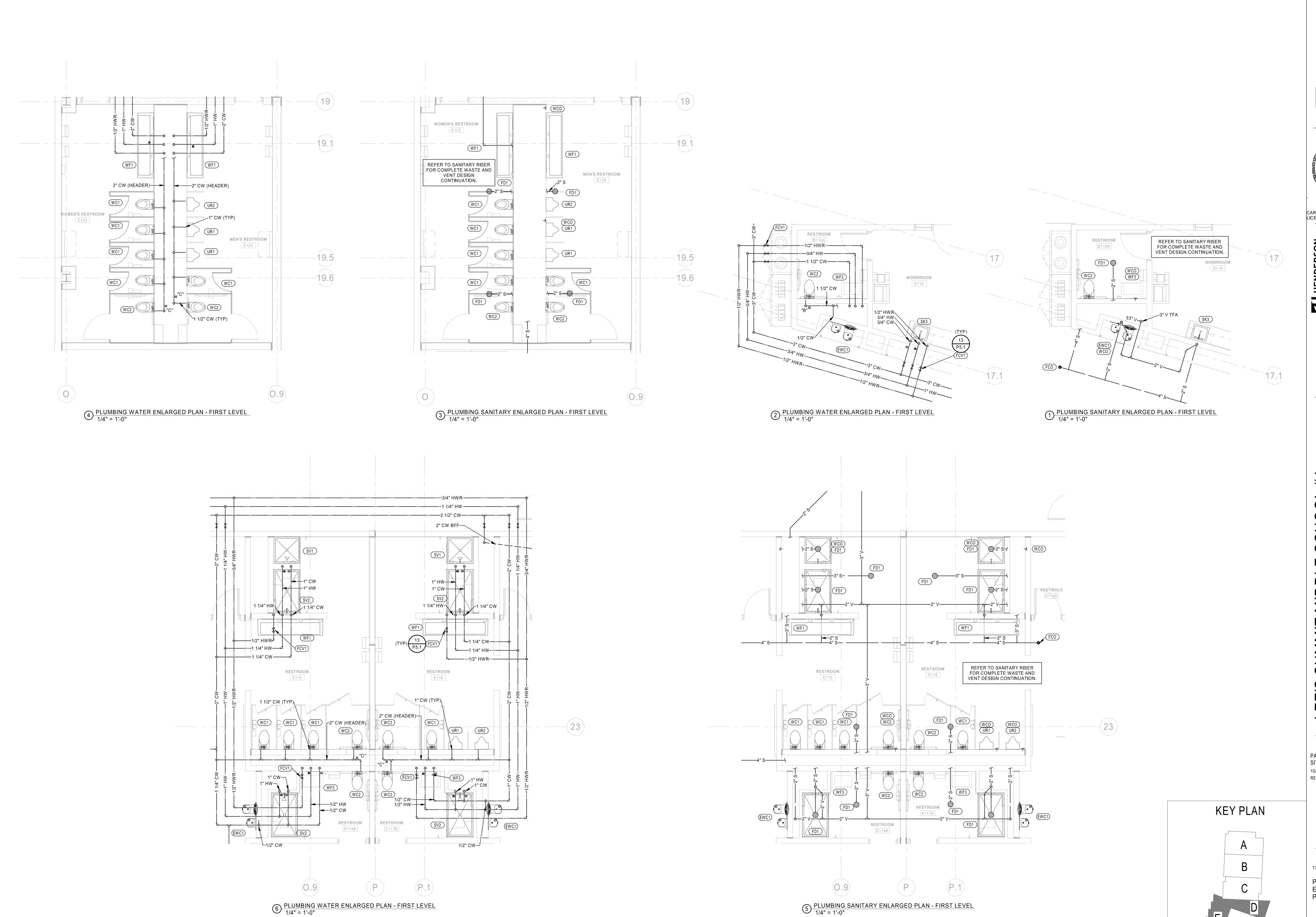
13-20102-00 PLUMBING ENLARGED



KEY PLAN







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LEE'S SUMMIT R-7 SCHOOL DIS

PACKAGE 3 - BUILDING & SITE 10/08/20 REVISIONS

13-20102-00

PLUMBING ENLARGED PLANS



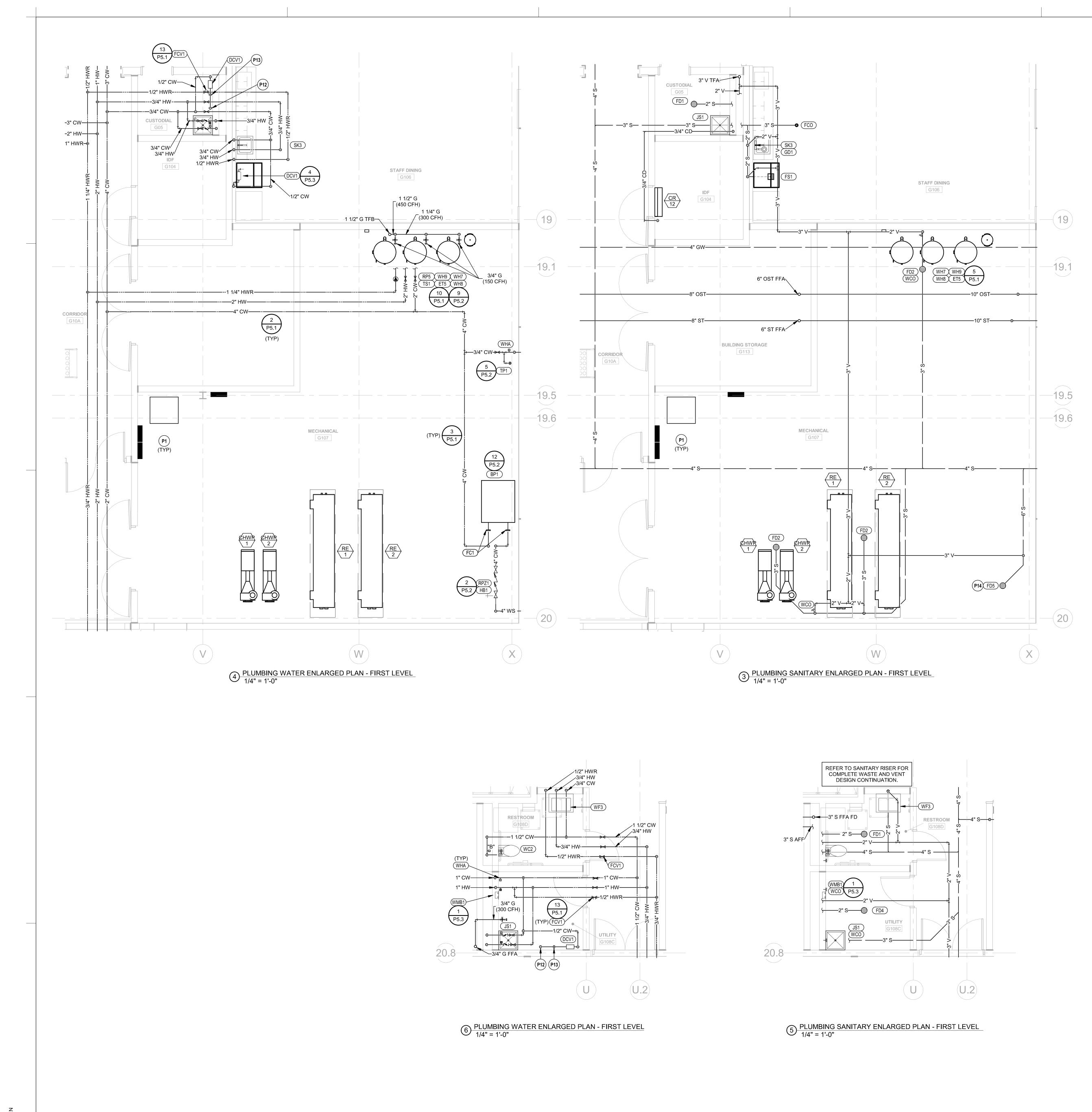
Oct 8 2020 CARL J. HOLDEN LICENSE # PE-2020016283

PACKAGE 3 - BUILDING & SITE

10/08/20 REVISIONS

Α 13-20102-00 PLUMBING ENLARGED PLANS

P4.8



RESTROOM 1 1/2" CW (HEADER) RESTROOM F104B 1 1/2" CW (TYP)

PLUMBING PLAN NOTES:

ARCHITECT.

P1 DO NOT INSTALL PLUMBING PIPING OVER ELECTRICAL PANELS OR EQUIPMENT.

P12 PROVIDE 1/2" COLD WATER TO OWNER PROVIDED 3M CLEANING EQUIPMENT, COORDINATE LOCATION WITH

P13 1/2" COLD WATER DOWN TO OWNER PROVIDED TERSANO CLEANING EQUIPMENT, COORDINATE LOCATION WITH

P14 PROVIDE DRAIN WITH TRAP PRIMER CONNECTION. REFER TO WATER PLANS FOR TRAP PRIMER LOCATION.

REFER TO SANITARY RISER FOR COMPLETE WASTE AND VENT DESIGN CONTINUATION.

RESTROOM F104A

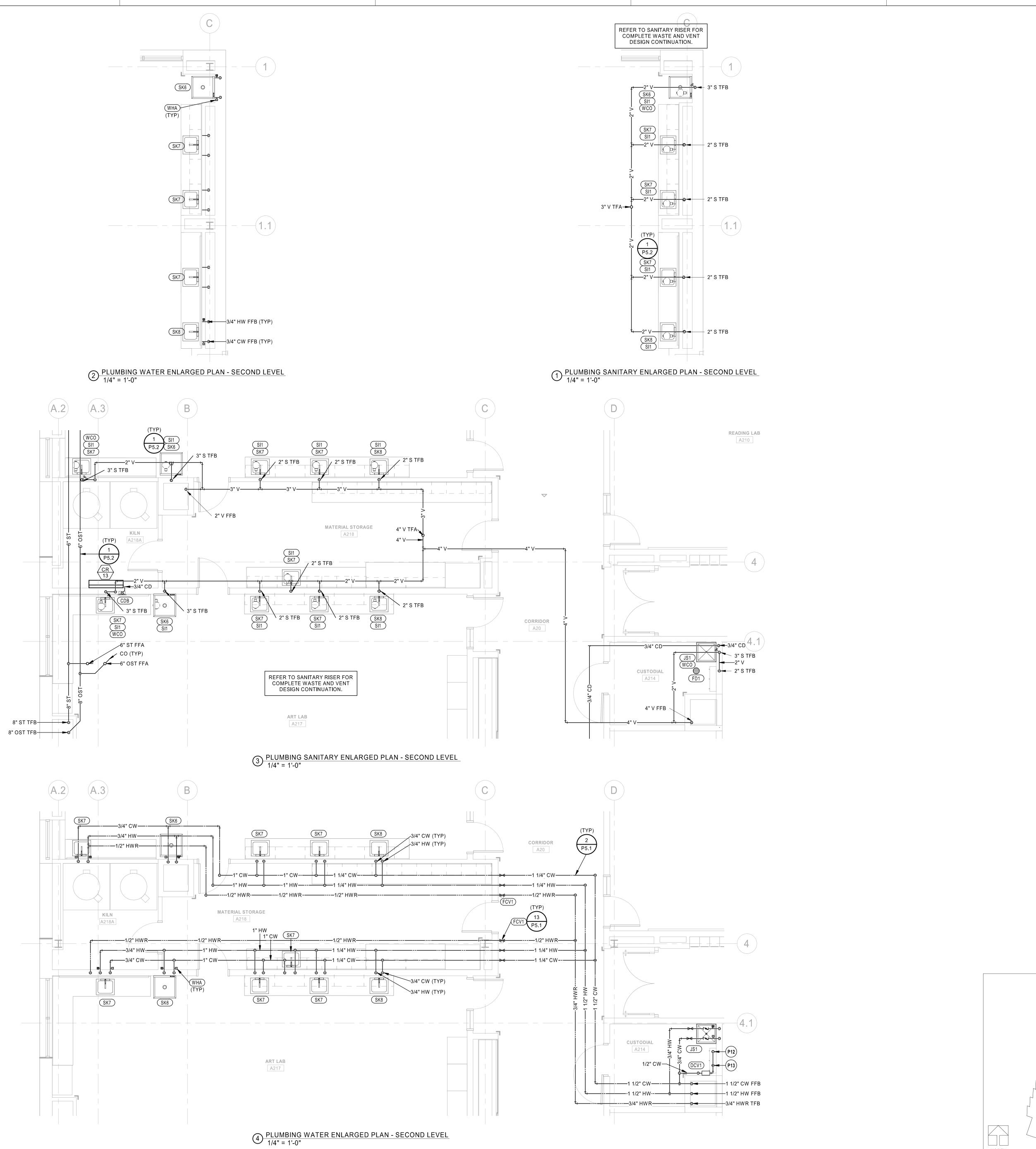
RESTROOM

5 P5.3

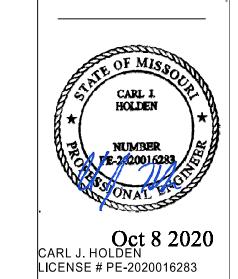
2 PLUMBING WATER ENLARGED PLAN - FIRST LEVEL 1/4" = 1'-0"

KEY PLAN

1/4" = 1'-0"



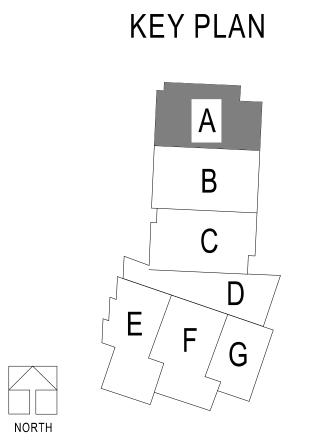
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PACKAGE 3 - BUILDING & SITE
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REVISIONS



13-20102-00

PLUMBING
ENLARGED
PLANS

O PLUMBING PLAN NOTES:

PANELS OR EQUIPMENT.

P1 DO NOT INSTALL PLUMBING PIPING OVER ELECTRICAL

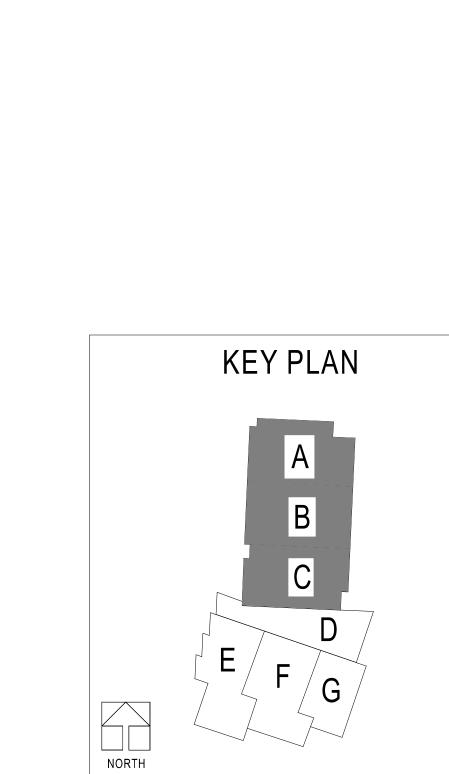
P12 PROVIDE 1/2" COLD WATER TO OWNER PROVIDED 3M CLEANING EQUIPMENT, COORDINATE LOCATION WITH

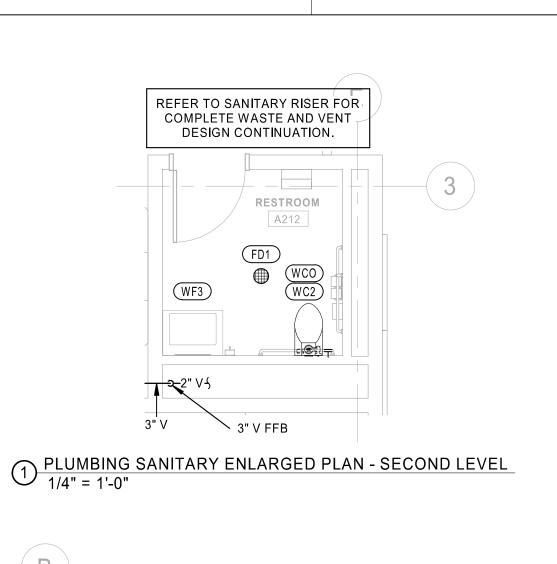
P13 1/2" COLD WATER DOWN TO OWNER PROVIDED TERSANO CLEANING EQUIPMENT, COORDINATE LOCATION WITH

PACKAGE 3 - BUILDING & SITE 10/08/20 REVISIONS

13-20102-00 PLUMBING ENLARGED PLANS

P4.11





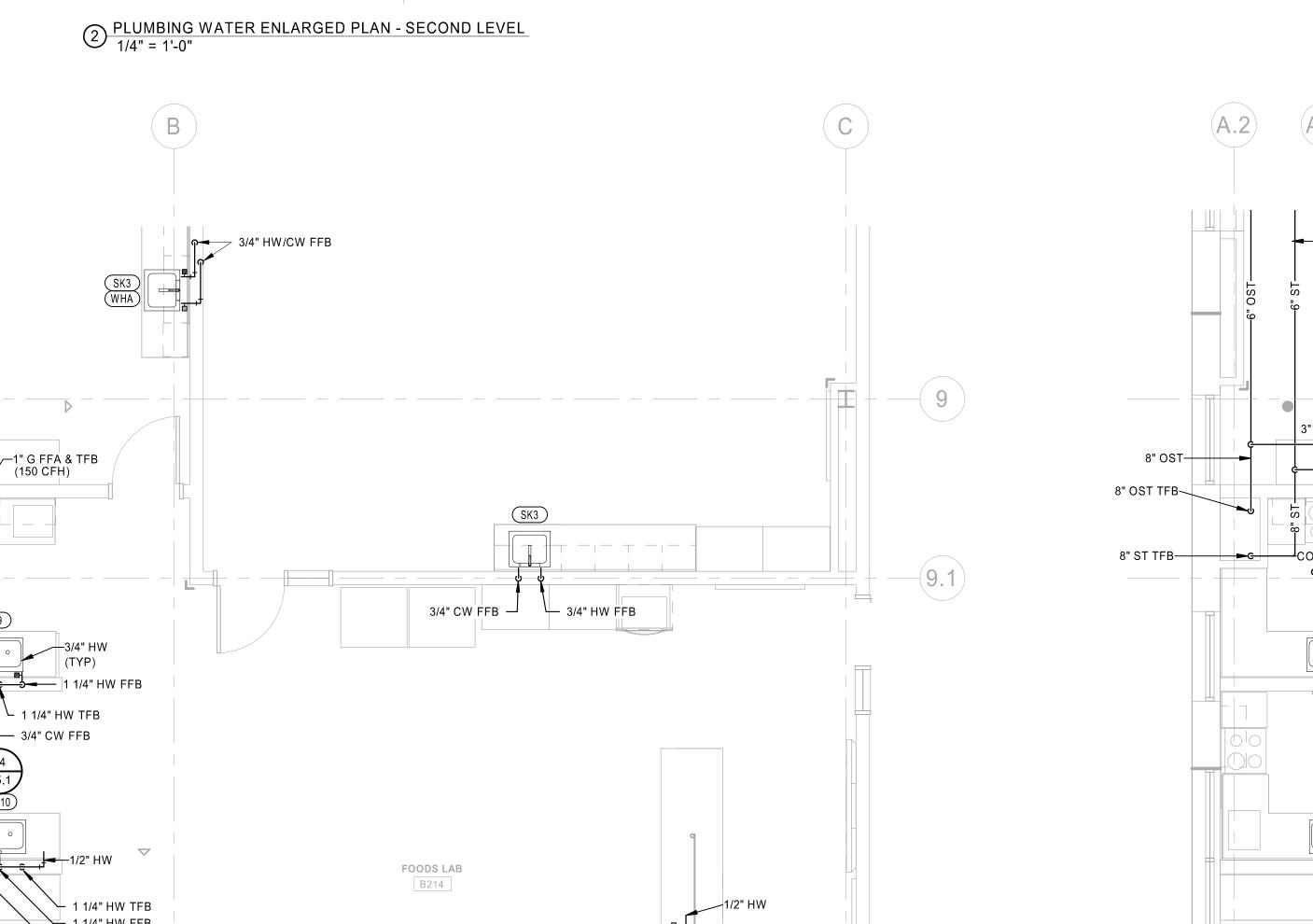
FACS CLASSROOM B215

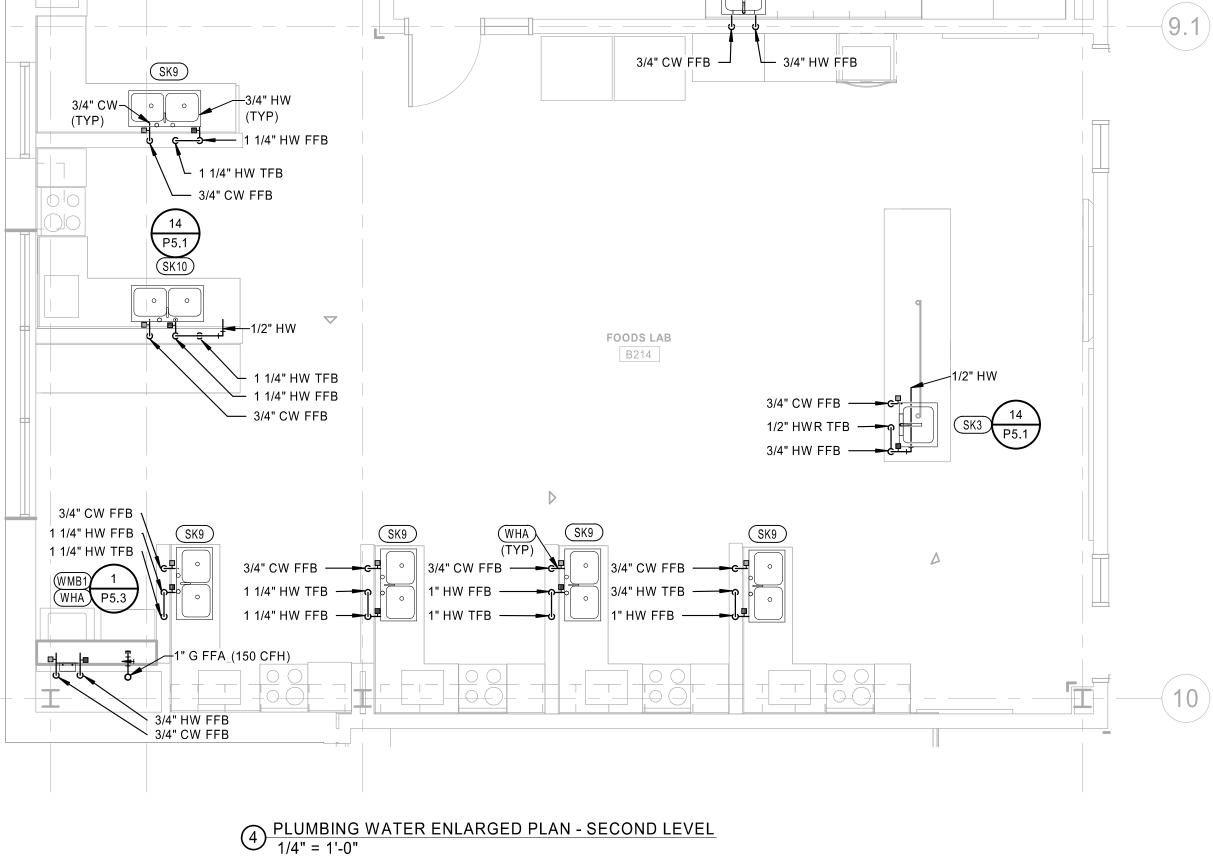
2" S TFB

FOODS LAB

REFER TO SANITARY RISER FOR COMPLETE WASTE AND VENT DESIGN CONTINUATION.

B214

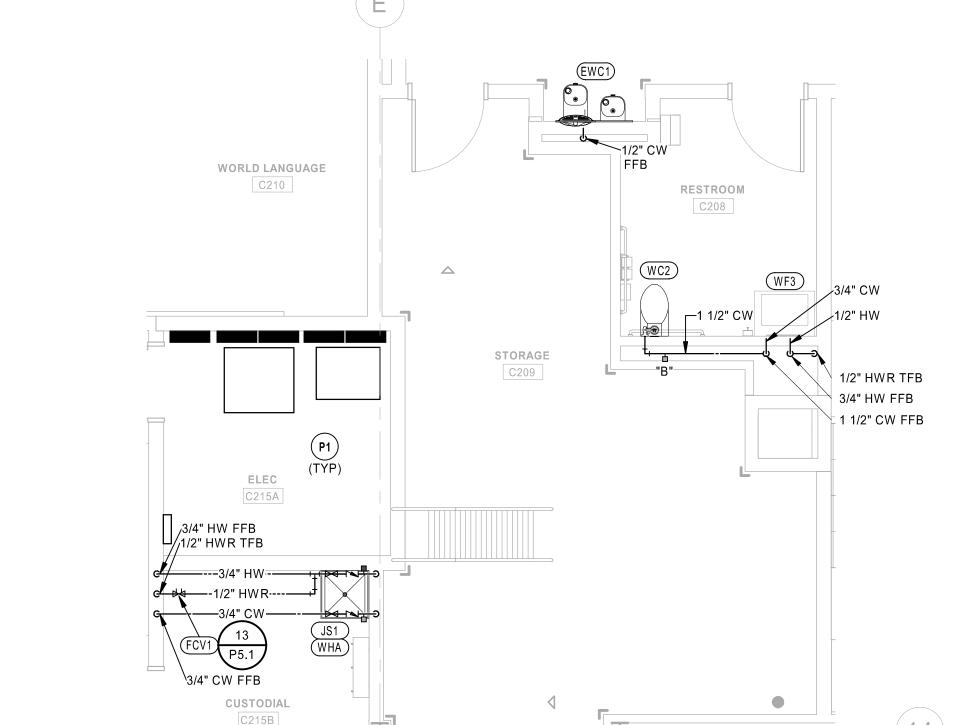


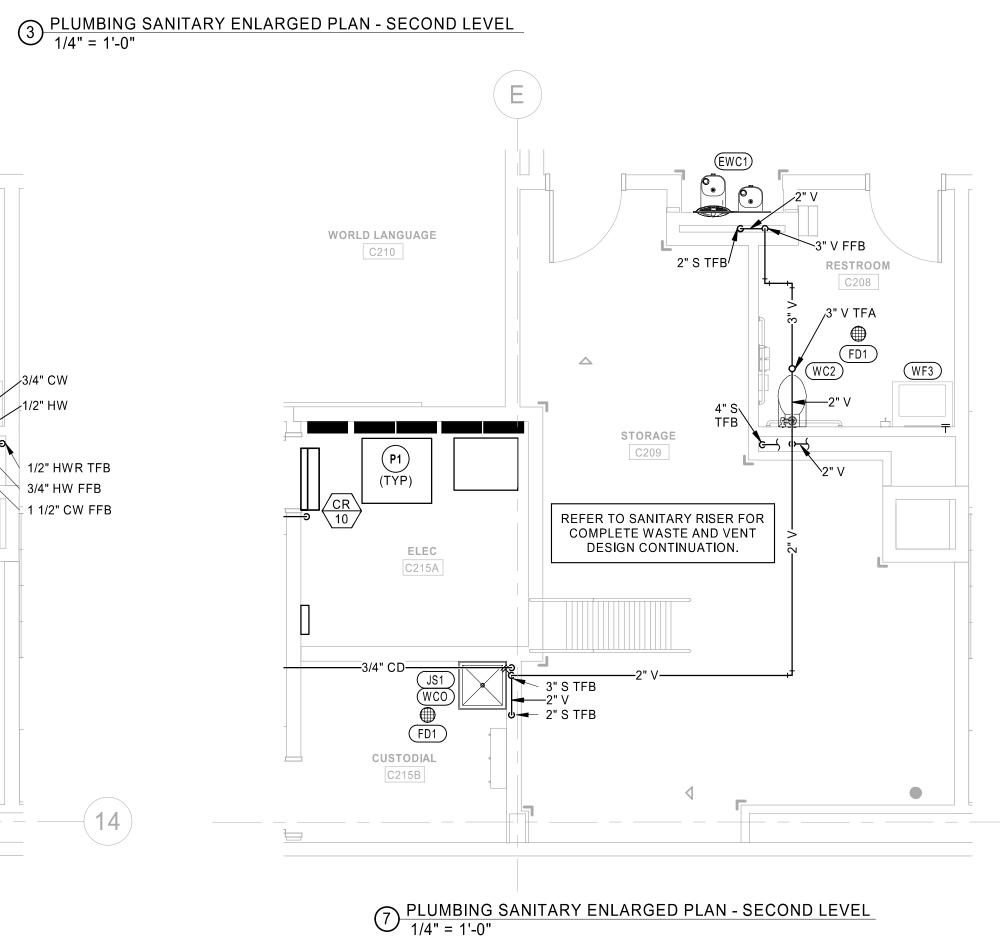


RESTROOM

1 1/2" CW FFB

3/4" CW FFB 3/4" HW FFB 1/2" HWR TFB

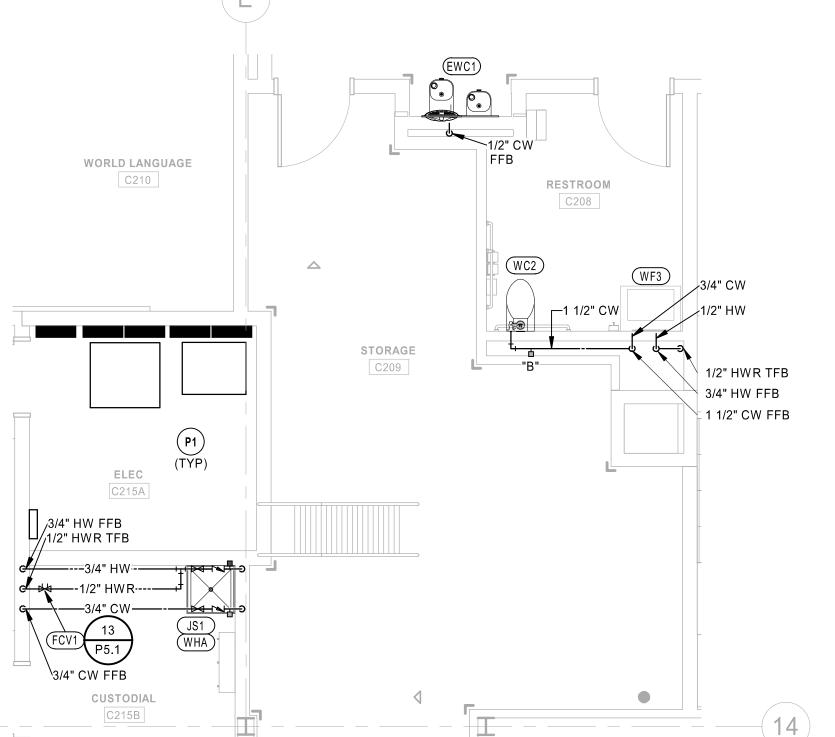




♦-3" V TFA

2" V TFB 2" S TFB

2" V FFB (TYP)



PANTRY B214A

6" ST (TYP)

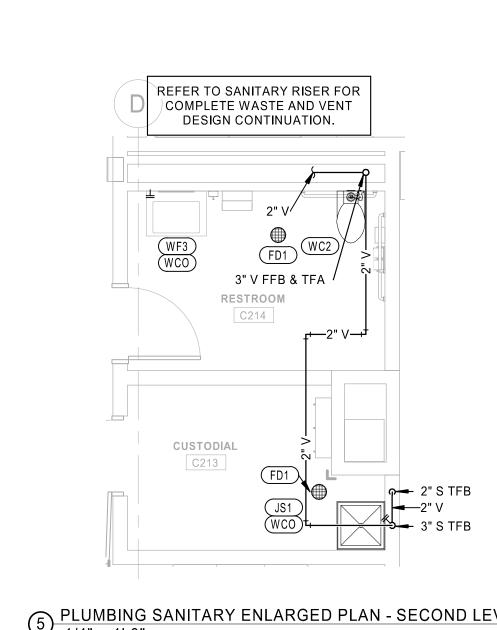
⁶" OST FFA

2" S TFB CO (TYP) 2" V TFB

2" S TFB

2" V TFB

6" ST FFA



1 1/2" CW FFB 1" HW FFB

CUSTODIAL

6 PLUMBING WATER ENLARGED PLAN - SECOND LEVEL 1/4" = 1'-0"

1/2" HWR TFB

5 PLUMBING SANITARY ENLARGED PLAN - SECOND LEVEL 1/4" = 1'-0"

8 PLUMBING WATER ENLARGED PLAN - SECOND LEVEL 1/4" = 1'-0"

- 1/2" BLACK STEEL

ROOF AND TURN

DOWN 18" ABOVE

ROOF. PROVIDE

INSECT SCREEN

HEADER TO OTHER

CSST BRANCHES IF

SHOWN ON PLANS.

ONE CSST BRANCH

SHOWN FOR CLARITY

LINE SIZE GAS COCK

ABOVE FINISH FLOOR

AND UNION PER

SPECIFICATIONS

3" LONG DIRT LEG

PROVIDE STRIKE

PLATE IN BACK OF

WALL TO COVER

TRANSITION FROM

CSST WITH FACTORY

CONNECT 1/2" BLACK

STEEL VENT PIPE TO

CSST WITH INTEGRAL

BLACK STEEL TO

CONNECTOR

EACH 1/4" VENT

POLYETHYLENE CONDUIT WITH VENT.

RE: FLOOR PLANS

PROVIDE AUTOMATIC VACUUM

RELIEF VALVE ABOVE TOP OF

RECIRCULATION PUMP WITH UNION

CONNECTIONS. PROVIDE SHUTOFF

VALVE, AQUASTAT AND STRAINER

UPSTREAM, CHECK VALVE AND

SHUTOFF VALVE DOWNSTREAM

TYPICAL SHUT-OFF VALVE

FURNISHED WITH WATER

TANK AS REQUIRED FOR

SIZE OF VALVE OUTLET.

HEATER (TYPICAL)

INSTALL ASME TEMPERATURE

AND PRESSURE RELIEF VALVE

CONNECT TO TOP OR SIDE OF

MODEL FURNISHED (TYPICAL)

VALVE DISCHARGE PIPE FULL

TERMINATE OVER APPROVED

RECEPTOR WITH AIR GAP PER

FOR LOCATION. (TYPICAL)

FURNISHED WITH WATER

SET WATER HEATER ON

CONCRETE EQUIPMENT PAD

PER SPECIFICATIONS (TYPICAL)

INSTALL DRAIN VALVE

HEATER (TYPICAL)

CODE. REFER TO FLOOR PLANS

PROVIDE HARD COPPER RELIEF

- COLD WATER SUPPLY TO

WATER HEATER

CHECK VALVE

- PROVIDE WARNING TAPE

PER SPECIFICATIONS 6"

MAXIMUM BURY DEPTH

ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD

1 UNDERGROUND CSST WITH INTEGRAL CONDUIT INSTALLATION DETAIL NTS

┡ │ EQUAL | EQUAL |

REFER TO SPECIFICATIONS, SCHEDULES, AND NOTES FOR MORE INFORMATION. PIPING ARRANGEMENT

PROVIDE SEISMIC STRAP OR BRACING WHEN REQUIRED BY LOCAL AUTHORITIES. POWER WIRING AND

DISCONNECT SWITCH ARE SPECIFIED BY ELECTRICAL. INTERLOCK OF AQUASTAT WITH RECIRCULATION

WITH WATER HEATER FURNISHED. REFER TO FLOOR PLANS FOR PIPE SIZES AND CONTINUATIONS.

5 DUAL REVERSE RETURN GAS FIRED WATER HEATER AND PUMP NTS

SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. VERIFY CONNECTION SIZES AND LOCATIONS

+>>----|-----<u>+</u>

CONDITIONS. REFER TO SPECIFICATIONS FOR MORE INFORMATION

MINIMUM, 3-1/2"

LINE SIZE GAS

VENT, EXTEND THRU

PACKAGE 3 - BUILDING 8

TYPICAL PIPE UNION, DIELECTRIC IF REQUIRED BY DISSIMILAR METALS. WATER SHUTOFF VALVE. VENT IN HOT WATER SUPPLY WITH INSULATION -HAMMER ARRESTER | CLEAN-PDI SIZE "A" OUT. PRESSURE REDUCING VALVE PRESSURE GAUGE THROTTLING VALVE -FLOOR SINK -PROVIDE INDIRECT DRAIN TO FLOOR SINK WITH CAST IRON P-TRAP. DO NOT USE PLASTIC PIPE FROM WASTE DISHWASHER CONNECTION TO SANITARY MAIN.

SOLENOID VALVE AND VACUUM BREAKER FURNISHED COMMERCIAL DISHWASHER BY DISHWASHER ┿║┾┵┩╬┼ (PROVIDED BY OTHERS) MANUFACTURER

REFER TO PLANS FOR PIPE SIZE(S) AND PENETRATION LOCATION(S).

PENETRATION MINIMUM 18" FROM ADJACENT WALLS, VENTS THRU

ROOF, EQUIPMENT CURBS, PARAPETS, ROOF DRAINS, EXPANSION

(12) GAS PIPE ROOF PENETRATION NTS

REFER TO SPECIFICATIONS FOR MORE INFORMATION. LOCATE

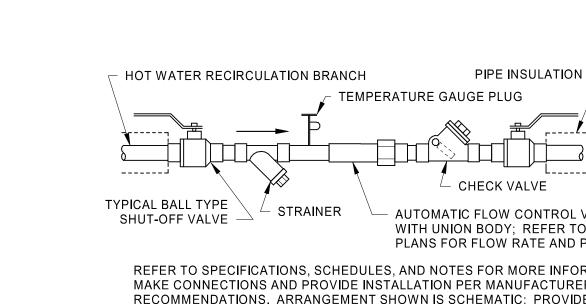
JOINTS, AND OTHER ROOF FEATURES.

CHASE - CLEANOUTS FLOOR PROVIDE LONG RADIUS PATTERN PIPE ABOVE DRAINAGE FITTINGS FOR UNDERSLAB - SLOPE AT 2 % WASTE AND VENT SYSTEM -ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. COMBINE VENTS FOR MORE THAN ONE FIXTURE MINIMUM 6" ABOVE HIGHEST FIXTURE FLOOD RIM IF POSSIBLE, OR PROVIDE SEPARATE LOOP FOR EACH ISLAND FIXTURE IF NOT POSSIBLE. REFER TO LOCAL CODE FOR ADDITIONAL INFORMATION.

ELBOWS AS CONNECT TO **REQUIRED FOR 180** VENT STACK OR DEGREE TURN HEADER 6" HIGH AS POSSIBLE. ABOVE FLOOD RIM OF HIGHEST ISLAND FIXTURE FIXTURE. P-TRAP — PARTITION OR 2" PIPE **MINIMUM 1-1/2"** FLOOR, 2" PIPE BELOW FLOOR.

PROVIDE AIR GAP FITTING IF WATER HAMMER ARRESTER, PDI SIZE "A" REQUIRED BY LOCAL CODES OR AUTHORITIES, OR HANG STRAINER WASTE HOSE AS HIGH AS POSSIBLE UNDER ADAPTER, SWEAT TO COUNTERTOP, 38" MAXIMUM. GARDEN HOSE THREAD NEARBY SINK 1/2" HOT WATER SUPPLY CONNECT DISHWASHER WITH SHUT-OFF VALVE DRAIN HOSE TO BRANCHING MAKE CONNECTIONS TO TAILPIECE OF SINK (REFER UNDERCOUNTER TO SCHEDULE AND/OR DISHWASHER SPECIFIED SPECIFICATIONS), OR IN DIVISION 11. CONNECT TO GARBAGE DISPOSER IF PROVIDED. INSTALL WATER AND WASTE HOSES - 10" MINIMUM FURNISHED WITH WASTE LINE DISHWASHER. PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. PROVIDE CONNECTIONS AND INSTALLATION AS RECOMMENDED BY EQUIPMENT MANUFACTURER. REFER TO PLUMBING FIXTURE SCHEDULE AND SPECIFICATIONS FOR ACCESSORIES SHOWN. IF SINK IS ADA, DO NOT ENCROACH ON ACCESSIBILITY ZONE.

REDUCERS AND ADAPTERS AS REQUIRED.



 CHECK VALVE AUTOMATIC FLOW CONTROL VALVE WITH UNION BODY; REFER TO FLOOR PLANS FOR FLOW RATE AND PIPE SIZE REFER TO SPECIFICATIONS, SCHEDULES, AND NOTES FOR MORE INFORMATION. MAKE CONNECTIONS AND PROVIDE INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS. ARRANGEMENT SHOWN IS SCHEMATIC: PROVIDE

PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. PROVIDE CONNECTION AS RECOMMENDED BY EQUIPMENT MANUFACTURER.

SERVICE LINE -GROUND JOINT VICINITY, IF ANY. APPLY FOR AND PAY GAS COMPANY FEES FOR INSTALLATION. USE WELDED OR SCREWED PIPE AND FITTINGS PER PLUMBING SPECIFICATIONS. - WATER HAMMER SHUT-OFF VALVE IN ACCESSIBLE LOCATION, ARRESTER PER ABOVE CEILING IF ANY SPECIFICATIONS AND SCHEDULE, PDI SIZE "A" 3/4" COLD WATER PIPE EXTERIOR BUILDING INSTALLED ABOVE HARD CEILING, PROVIDE ACCESS PROVIDE HYDRANT WITH DOOR PER SPECIFICATIONS — LENGTH OF SHAFT TO SUIT INSTALL RISER INSIDE THICKNESS OF WALL: PARTITION WHERE AVAILABLE: REFER TO PLANS WALL HYDRANT IF RISER IS EXPOSED, ANCHOR RECESSED IN BOX PER TIGHT TO EXTERIOR WALL SPECIFICATIONS AND ELBOWS AS REQUIRED -- CUT WALL AS REQUIRED INSTALL WALL HYDRANT, VALVE INTERIOR TO WALL GROUT OR OTHERWISE REPAIR WALL NEATLY WALL CLAMP AROUND FACE OF WALL HYDRANT TO SEAL INTERIOR FLOOR PENETRATION WEATHERTIGHT INSTALL HYDRANT APPROXIMATELY 24" ABOVE EXTERIOR GRADE, GRADE. ADJUST HEIGHT AS PAVEMENT, OR SIDEWALK REQUIRED TO SUIT MASONRY SEAMS, IF EXISTING. ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST AS REQUIRED TO SUIT FIELD CONDITIONS. INSTALL PER MANUFACTURER'S INSTRUCTIONS. IN NON-FREEZING CLIMATES, PIPE MAY BE INSTALLED CONCEALED IN EXTERIOR WALL RATHER THAN EXTERIOR TO WALL AS SHOWN. REFER TO PLANS FOR LOCATION.

FLOOR MOUNTING ELBOW BY TANK MANUFACTURER PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. MAKE PIPE SAME SIZE AS TANK FITTING. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION PROCEDURE VERIFY PROPER OPERATION WHEN INSTALLED. PROVIDE SEISMIC STRAP OR BRACING WHEN REQUIRED BY LOCAL AUTHORITIES.

PROVIDE METAL 360°

SIZE AND QUANTITY

MANUFACTURER'S

PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITONS. REFER TO

SUPPORTED. CHANNEL SUPPORT MAY BE USED AS A WALL BRACKET, ATTACH TO WALL WITH

INDICATED ABOVE, FOR VERTICAL INSULATED PIPING, ATTACH CLAMPS TO THE PIPE AND SEAL

ANCHOR BOLTS PER SPECIFICATIONS. FOR HORIZONTAL INSULATED PIPING, ATTACH CLAMPS AS

ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. PROVIDE CONNECTIONS SHOWN IN

PROVIDE DIELECTRIC UNION IF CONNECTING DISSIMILAR METALS. FOR PIPE SIZE(S) REFER TO FLOOR PLANS, OR

EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS. VERIFY CONNECTION LOCATIONS BEFORE

CLEANOUTS IN ENDS AND TURNS OF PIPE PER LOCAL CODE REQUIREMENTS: ADAPTER WITH THREADED

INSTALLING PIPE RUNS. REFER TO SPECIFICATIONS FOR PIPE AND FITTING MATERIALS AND INSTALLATION.

CODE REQUIREMENTS FOR HVAC UNIT TONNAGE. PROVIDE GAS COCK, UNION AND DIRT LEG SAME SIZE AS

BRANCH PIPE. SLOPE CONDENSATE PIPE AS MUCH AS POSSIBLE TOWARD DISCHARGE, 2% MINIMUM. PROVIDE

CLEANOUT PLUG. OMIT CONDENSATE DRAIN ON MAKEUP AIR UNIT. PROVIDE MINIMUM 6" CLEARANCE TO ROOF

6 CONNECTIONS TO ROOF-TOP UNIT

PIPE HANGER TO

STRUCTURE ABOVE

FILL TANK WITH AIR

WATER PRESSURE.

AIR CHARGING VALVE

PRESSURE TO MATCH

PROVIDE DIELECTRIC

UNION IF REQUIRED

DISSIMILAR METALS

FOR CONNECTION OF

SPECIFICATIONS FOR MORE INFORMATION. PIPE AND CONDUIT OF ALL TRADES MAY BE COMBINED ON

THE SAME SUPPORT CHANNEL. COORDINATE SUPPORT CHANNEL LENGTH WITH PIPING AND CONDUIT

TO BE SUPPORTED. SUPPORT CHANNEL SPACING SHALL BE DETERMINED BY SMALLEST PIPE TO BE

PROVIDE TWO-PIECE

JNINSULATED STEEL

OR PLASTIC PIPE

PROVIDE PLASTIC

FOR COPPER PIPE

UNINSULATED

COPPER PIPE

COLD INSULATED

- PIPE INSULATION

- HOT INSULATED

GAS FIRED ROOF-TOP AIR

AIR UNIT PER MECHANICAL

BRANCH PIPE SIZE TO UNIT

CONNECTION SIZE, AT UNIT

MINIMUM DOWNSTREAM OF

GROUND JOINT PIPE UNION

SHOWN ON PLANS, RE:

GAS COCK FULL SIZE OF

FOR SIZE OF BRANCH PIPE

BRANCH OFF TOP OF GAS

TO ALLOW FOR EXPANSION

AND CONTRACTION OF PIPE

LINE SIZE TEE, EXIT THRU

- 3" LONG LINE SIZE DIRT LEG

MINIMUM ABOVE ROOF

WITH BOTTOM MINIMUM 3-1/2"

SIDE OUTLET

→ ARRANGE PIPE AND ELBOWS

GAS PRESSURE REGULATOR IF

BRANCH PIPE. REFER TO PLAN

SCHEDULES, AND SPECIFICATIONS

PRESSURE REGULATOR, IF

PIPE REDUCED FROM

CONNECTION STUB

PLANS

CONDITIONING UNIT OR MAKEUP

INSTALL TEE TEN PIPE DIAMETERS

REGULATOR SHOWN ON PLANS

GALVANIC ISOLATOR

PIPE CLAMP (TYP)

SUPPORT NUT

RECOMMENDATIONS

OF HANGER RODS PER

ENGINEERED THERMAI

HANGER-SHIELD INSERT OF

FOR PIPES 4" AND SMALLER.

PRE-ENGINEERED THERMAL

HANGER-SHIELD INSERT OF

INSULATION MAY BE PROVIDED

CLEVIS HANGER,

SHOWN FOR CLARITY

CUT INSULATION TO

SEAL EXPOSED

PROVIDED UNDER DIVISION 15

GAS PIPE UP EXTERIOR WALL

OF BUILDING AND ONTO

AS SHOWN ON PLAN

ROOF, LOCATION AND SIZE

HOT PIPE

INSULATION ENDS

WITH JOINT SEALANT

FIT AROUND HANGER.

SIZE HANGER FOR

HOT PIPE OUTSIDE

FLEXIBLE UNICELLULAR

CUT INSULATION TO

FIT AROUND TRAPEZE

PROVIDE 1-5/8"x1-5/8" 14

GA. CHANNEL SUPPORT

ADAPTER(S) AS REQUIRED TO

CONNECT CONDENSATE DRAIN

PIPE TO STUB ON EQUIPMENT.

THAN EQUIPMENT CONNECTION

PROVIDE DRAIN PIPE ONE

SIZE, MINIMUM 3/4"

GREATER OF 4" OR

1/2" PLUS STATIC

PROVIDE TRAP DEPTH

PRESSURE IN INCHES

6" TALL VENT OPEN TO

ATMOSPHERE ONLY

DRAIN PIPE

SERVICE AREAS OF UNIT,

FROM COLD WATER

SUPPLY TO WATER

VALVES INTERVENING -

HEATER, WITH NO CHECK

POLYPROYPLENE LINING

AND BUTYL DIAPHRAGM,

FDA AND NSF APPROVED

FOR DOMESTIC WATER

SERVICE

WELDED STEEL EXPANSION

DISCHARGE AWAY FROM

WHERE REQUIRED BY

CODE FOR LENGTH OF

OR AT ROOF DRAIN OR

GUTTER IF REQUIRED BY

LOCAL AUTHORITIES OR

SUPPORT PIPE ON ROOF

PER SPECIFICATIONS -

SHOWN ON PLANS

OF WATER COLUMN

NOMINAL PIPE SIZE LARGER

INSULATION AT BOTH CLAMP ENDS.

HANGER. SEAL BOTH

ENDS OF EXPOSED

INSULATION WITH

JOINT SEALANT -

INSULATION SHIELD AND HIGH

DENSITY INSULATION OR PRE

CALCIUM SILICATE INSULATION.

INTEGRAL BASE FOR BALL DRAIN VALVE

3/4" PIPE FROM COLD WATER SUPPLY TO WATER HEATER, - PROVIDE WITH NO CHECK VALVES INTERVENING FDA-COMPLIANT BUTYL DIAPHRAGM WELDED STEEL **EXPANSION TANK WITH** POLYPROPYLENE LINING, NSF APROVED FOR DOMESTIC WATER SERVICE PROPER OPERATION WHEN INSTALLED. PROVIDE SEISMIC STRAP OR BRACING WHEN REQUIRED BY LOCAL AUTHORITIES.

PROVIDE GAS COCK TO ISOLATE HEADER

ALTERNATE LOCATION IS BEHIND ACCESS

LINE SIZE GAS. RE

AND CONTINUATION

CSST PIPE

FLOOR PLANS FOR SIZE

PROVIDE ACCESS PANEL

WITH CYLINDER LOCK AND

PROVIDE STRIKE PLATE IN

FRONT OF WALL TO COVER

CONNECT LINE SIZE GAS

TO EQUIPMENT. PROVIDE

REDUCER AT EQUIPMENT

PROVIDE LINE SIZE GAS

6" OF EQUIPMENT

CONNECTION -

COCK AND UNION WITHIN

TRANSITION FROM CSST

TO BLACK STEEL WITH

PLUG VENT PORT IN

SLEEVE ADAPTOR

MAXIMUM BURY DEPTH

FACTORY CONNECTOR.

18" MINIMUM, 36"

PROVIDE 1/2" REBAR AND

ATTACH CSST TO REBAR

WITH PLASTIC "ZIP" TIES

BRACE CSST VERTICALLY

ABOVE & BELOW SLAB TO

COLD WATER BRANCH TO

HOT WATER TO FIXTURES -

PROVIDE THERMOMETER IN TEE

PIPE UNIONS (TYPICAL) ABOVE TOP

OF TANK (TO FACILITATE REMOVAL

PROVIDE DIELECTRIC PIPE UNION AT

OF DISSIMILAR METALS (TYPICAL)

PROVIDE 12"WIDE x 12"DEEP HEAT

LINE SIZE GAS SUPPLY TO WATER

GAS-FIRED WATER HEATER PER

SPECIFICATIONS AND SCHEDULE

3" LONG DIRT LEG (TYPICAL)

EQUIPMENT CONNECTION IF

UNION WITH GROUND JOINT (TYPICAL)

TRAP AT INLET AND OUTLET

TANK CONNECTION FOR CONNECTION

EXPANSION TANK

FITTING (TYPICAL)

OF WATER HEATER)

(TYPICAL) -

(TYPICAL

PUMP IS SPECIFIED BY ELECTRICAL.

HEATER (TYPICAL) -

GAS COCK (TYPICAL)

PROVIDE REDUCER AT

REQUIRED (TYPICAL)

CONNECTION IF REQUIRED

FEEDING UNDERSLAB CSST SYSTEM.

PANEL IF INDICATED ON FLOOR PLANS

- PIPE HANGER NEXT TO ELBOW DIELECTRIC PIPE UNION AT TANK CONNECTION FOR CONNECTION OF DISSIMILAR METALS AIR CHARGING VALVE. FILL TANK WITH AIR PRESSURE TO MATCH WATER PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION PROCEDURE. VERIFY

REVISIONS

13-20102-00 PLUMBING DETAILS

MINIMUM SIDE SLOPE OF

TRENCH SHALL BE 1 TO 1

UNLESS OTHERWISE

TRENCH AND BACKFILL

PER SPECIFICATIONS

LOAD-BEARING ZONE,

INSIDE AND OUTSIDE

REQUIRED

FLOOR SLAB

(TYPICAL) -

PIPE (TYPICAL)

INSTALL PIPING

OUTSIDE OF

OF BUILDING

FLOOR SLAB

MINIMUM

FOOTING

DO NOT INSTALL

PIPES THROUGH

FOOTING PAD 3"

ENCASEMENT

TYPICAL CONCRETE

EXTEND SLEEVE 12"

ZONE, BOTH SIDES

PAST LOAD BEARING

CONNECT BRANCH TO

FOR EXPANSION AND

ROOF SUPPORT PER

3" LONG LINE SIZE DIRT

LEG WITH BOTTOM

MINIMUM 3-1/2"

MINABOVE ROOF

PIPE RUN -

GAS PIPE MAIN

SPECIFICATIONS -

ROOF INSULATION

ROOF DECK

CONTRACTION OF MAIN

TOP OF MAIN, TO ALLOW

<u>INSIDE</u>

AFFECTED CONTRACTORS PRIOR TO THE START OF WORK.

<u>► TRANSVERSE TO FOOTING</u>

VERIFY EXCAVATION CONDITIONS (SOIL/ROCK) WITH GEOTECHNICAL REPORT AND/OR SITE

INVESTIGATIONS. REFER TO SPECIFICATIONS FOR OTHER CONDITIONS. DO NOT INSTALL

PIPES UNDER INTERIOR BUILDING SPREAD FOOTINGS OR PILE CAPS. COORDINATE WITH

FOUNDATION

DECK FLANGE COUNTERTOP 3/4" WATER SUPPLY FULL PORT BALL VALVE

GRADE OR PAVING

BUILDING FOOTING

OR FOUNDATION

PROVIDE PLASTIC

BUILDING ONLY. DO

UNDER DRIP LINE

GRADE OR PAVING

PROVIDE SLEEVES

LOCATION, SLEEVES

SHALL BE CAST IRON

NOMINAL PIPE SIZES

LARGER THAN PIPE.

INSTALL CAP AND TEE

TEN PIPE DIAMETERS

OF GAS PRESSURE

PIPE INCREASER

INSTALLATION OF

WITH DIVISION 7

PENETRATION

- ANCHOR PIPE TO

STRUCTURE

INSTALL STRAINER

COUNTER FLASHING

CUT ROOF FOR PIPE

REGULATOR

COORDINATE

FLASHING AND

MINIMUM DOWNSTREAM

ELEVATION AND

SOIL PIPE TWO

PIPE-MARKER

EXTERIOR TO

NOT TRENCH

OF TREES.

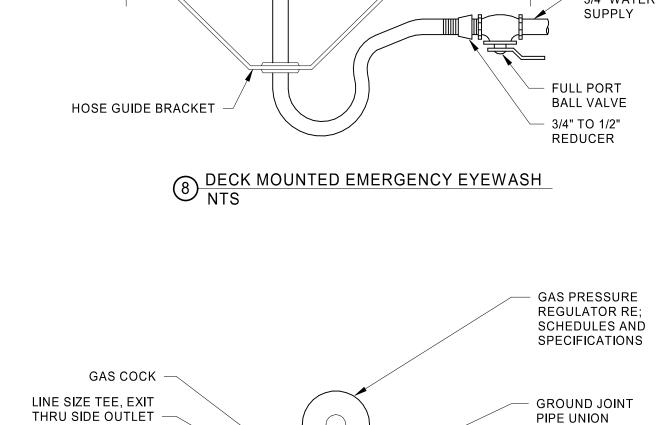
AT PROPER

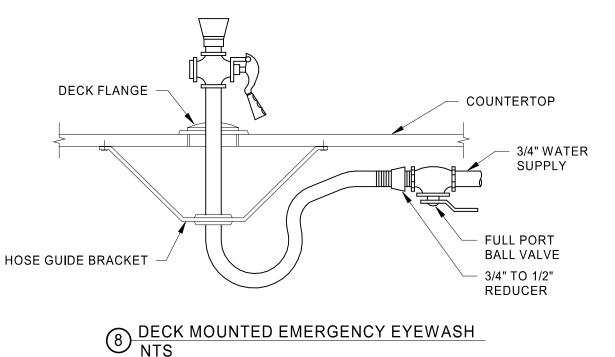
6" MINIMUM

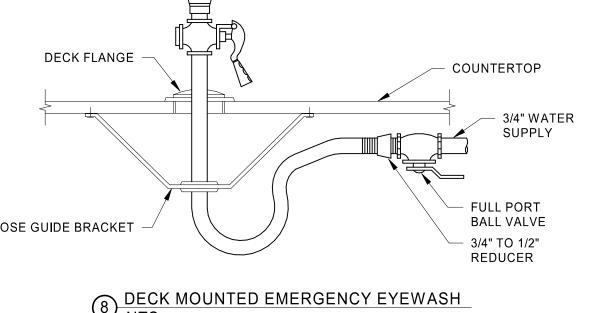
CONCRETE

ENCASEMENT

WARNING TAPE







STRAINER - ANCHOR RISER TO WALL AT PIPE INCREASER REGULATOR SET AT DISCHARGE PRESSURE PLAN. GAS COCK (TYPICAL) -METER BYPASS GAS METER OF CFH CAPACITY SHOWN ON FLOOR PLAN -GRADE OR PAVEMENT NATURAL GAS

PROVIDED BY GAS

METER BYPASS

COMPANY (VERIFY)

PRESSURE TEST FITTING

SECURE PIPE HANGER TO STRUCTURE (TYP)

THREADED STEEL

WASHER BOTH

SIDES (TYP). -

ROD WITH NUT AND

CLEVIS HANGER

HANGER FOR COLD

PLUS INSULATION

WITH HANGER.

THICKNESS. DO NOT

PROVIDE A SECTION

OF HIGH DENSITY

INSULATION OR

BILLETS AT EACH

HANGER OF COLD

INSULATED PIPE.

PROVIDE SHORT

INSULATION OR

COLD PIPE

REFER TO SPECIFICATIONS FOR INSULATION TYPES,

INSULATION THICKNESSES, HANGER TYPES, HANGER ROD

CONNECTIONS TO STRUCTURE AND HANGER SPACING.

INSULATION SHIELD FOR

JACKET OVER HIGH DENSITY

MAINTAIN VAPOR BARRIER

LAPPING INSULATION

STYROFOAM BILLETS.

STYROFOAM

SHOWN FOR CLARITY. SIZE

PIPE OUTSIDE DIAMETER

PENETRATE INSULATION

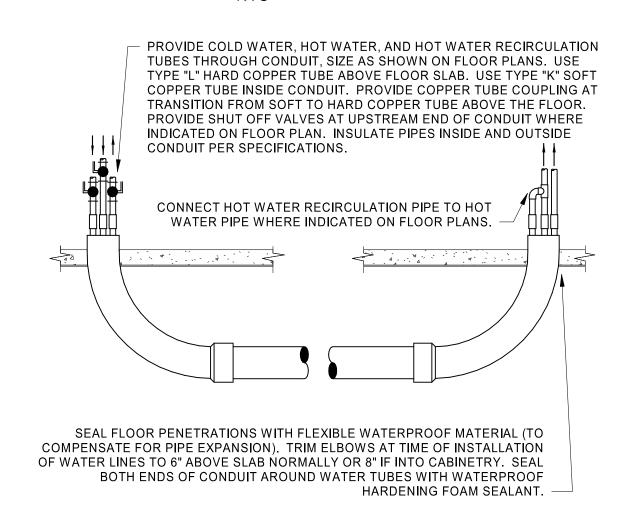
TEN FOOT INTERVALS USING OFFSET RISER CLAMPS PROVIDE EARTHQUAKE GAS SHUT-OFF VALVE HERE IF REQUIRED BY LOCAL AUTHORITIES. ANCHOR VALVE TO BUILDING WALL 6" LONG DIRT LEG AT BOTTOM OF RISER. GAS SHUT-OFF COCK PIPE INCREASER PIPE UNION WITH VERIFY REQUIREMENTS FOR METERING AND PIPING WITH GAS COMPANY. COORDINATE WITH GAS COMPANY WITH REGARD TO INSTALLATION OF OTHER PLUMBING UTILITIES IN

DETAILS

GREASE INTERCEPTOR PROCEPTOR 2 MANHOLE
NTS

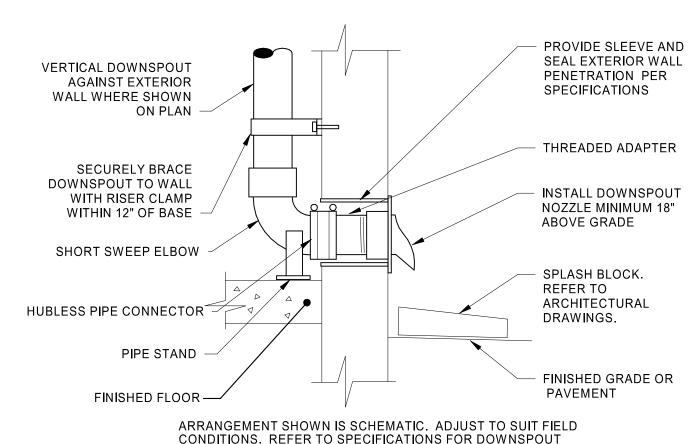
CAST IRON CLEANOUT PAVEMENT OR HOUSING WITH "CO" CAST IN GRADE: CUT AS HEAVY DUTY COVER REQUIRED AND PATCH TO MATCH EXISTING SCREWED PLUG IN CLEANOUT FERRULE AS PROVIDE 18"x18"x8" SPECIFIED. APPLY TEFLON THICK 3000 PSI CLASS JOINT COMPOUND TO "C" CONCRETE PAD, CLEANOUT PLUG THREADS. -REINFORCED WITH 6x6x1/4 WIRE MESH. RISER SHALL BE CAST IRON, CROWN TO SHED WATER; SAME SIZE AS SEWER UP TO TROWEL SMOOTH AND 4" MAXIMUM, OF LENGTH AS EDGE. OMIT IF ECO IS IN REQUIRED BY DEPTH OF SIDEWALK. SURROUND JOINT WITH CONCRETE PROVIDE CAST IRON LONG SWEEP AT END OF LINE, OR HORIZONTAL SANITARY OR COMBINATION WYE AND EIGHTH STORM DRAIN, SIZE AS BEND IN RUN OF LINE, --! SHOWN ON PLAN, TYPE OF REDUCING TYPE IF REQUIRED. PIPE PER SPECIFICATIONS. ENTER TOP OF PIPE. DIRECTION OF FLOW

LOCATE EXTERIOR CLEANOUTS AT ENDS OF RUNS, AT TURNS OF PIPE GREATER THAN 45 DEGREES, AT MINIMUM 75 FOOT INTERVALS ON STRAIGHT RUNS, AND WHERE SHOWN ON PLANS. PROVIDE EARTH BACKFILL AND COMPACTION PER ARCHITECTURAL SPECIFICATIONS. REFER TO SPECIFICATIONS AND SCHEDULES FOR MORE INFORMATION.

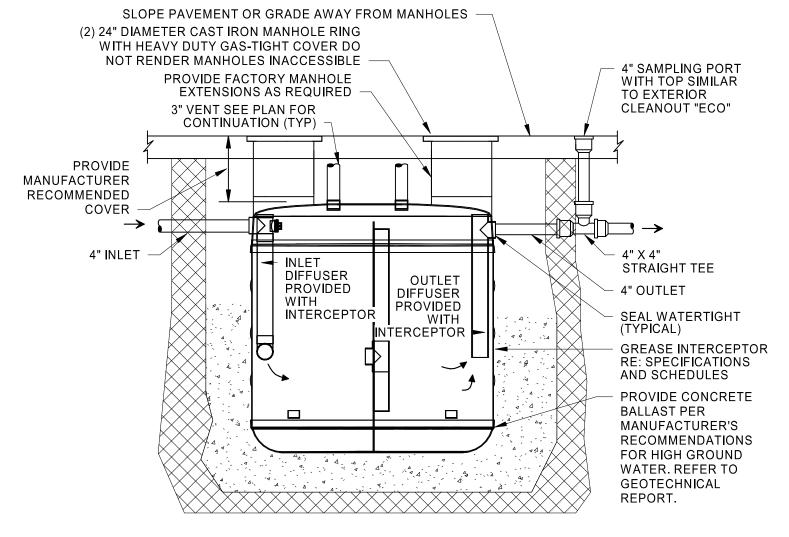


PROVIDE PVC CONDUIT WITH FITTINGS AND JOINTS PER SPECIFICATIONS. SIZE CONDUIT TO HOUSE INSULATED PIPES AS REQUIRED (INDIVIDUAL CONDUITS FOR SINGLE INSULATED PIPES MAY BE PROVIDED IN LIEU OF A SINGLE LARGER CONDUIT). SET CONDUIT ON COMPACTED OR UNDISTURBED EARTH. USE MINIMUM QUANTITY OF FITTINGS REQUIRED. PROVIDE LONG SWEEP ELBOWS AT BOTH ENDS. AVOID ELBOWS IN HORIZONTAL RUN IF AT ALL POSSIBLE. STUB ELBOWS ABOVE FLOOR AT LOCATIONS SHOWN ON FLOOR PLAN. BURY PIPE AT DEPTH AS REQUIRED TO ACHIEVE APROXIMATELY A 90 DEGREE PENETRATION OF SLAB.

8 WATER CONDUIT BELOW SLAB



NOZZLE, AND TYPE OF PIPE, FITTINGS, AND CONNECTORS.

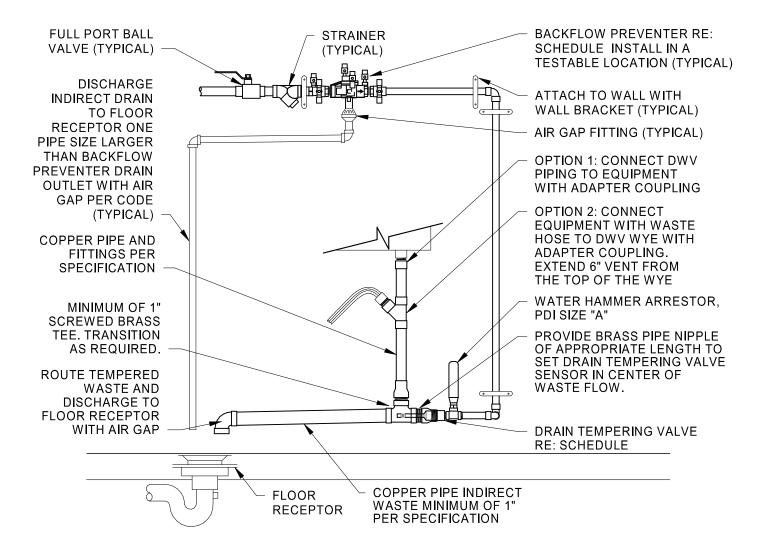


PIPING ARRANGEMENT SHOWN IN SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS, SUBMIT PROPOSED GREASE INTERCEPTOR INSTALLATION PLANS AND SPECIFICATIONS TO LOCAL AUTHORITIES FOR THEIR APPROVAL BEFORE ACQUISITION OF INTERCEPTOR. PROVIDE CAPACITY AS REQUIRED BY LOCAL AUTHORITIES. INSTALL SEPARATOR PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. REFER TO FLOOR PLANS, SPECIFICATION AND SCHEDULES FOR EXTERIOR CLEANOUT.

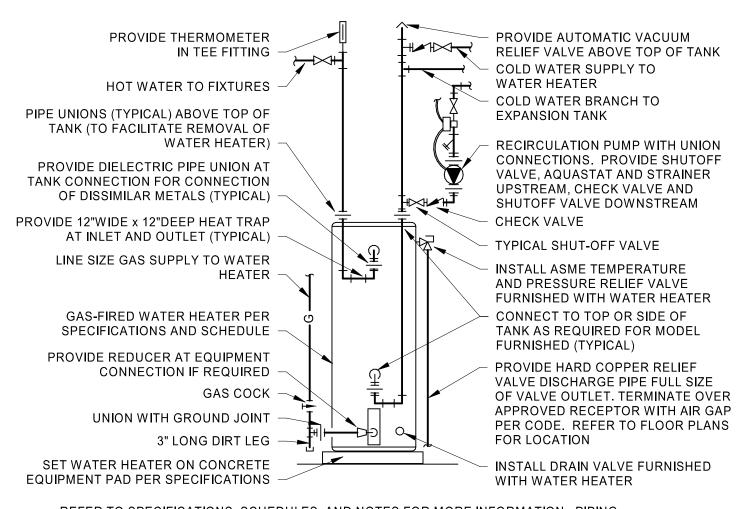
ROOF PENETRATION ESCUTCHEON AT PER SEPARATE DETAIL CEILING PENETRATION DO NOT INSTALL GAS COCK ANY GAS VALVES IN INSTALL AUTOMATIC CEILING SPACE GAS SHUT-OFF VALVE EXHAUST HOOD FURNISHED WITH EXHAUST HOOD FIRE PROVIDE QUANTITY SUPPRESSION SYSTEM AND SIZE OF BRANCH PIPE DROP OF SIZE CONNECTIONS AS AND AT LOCATION REQUIRED BY SHOWN ON PLAN EQUIPMENT SERVED. PROVIDE GAS COCK GAS PIPE HEADER ALONG WITH LEVER HANDLE WALL BEHIND COOKING LOCATED WHERE **EQUIPMENT (OR INSIDE** ACCESSIBLE BESIDE WALL IF SHOWN ON OR ABOVE EQUIPMENT. PLAN), SIZES AS SHOWN INSTALL FLEXIBLE APPLIANCE 6" DIRT LEG AT **CONNECTOR HOSE** BOTTOM OF RISER FURNISHED WITH CONNECT HOSE TO KITCHEN EQUIPMENT KITCHEN EQUIPMENT KITCHEN FLOOR

REFER TO SPECIFICATIONS FOR MORE INFORMATION ABOUT PIPE, FITTINGS, AND CONNECTORS. PIPING ARRANGEMENT SHOWN IS SCHEMATIC; ADJUST TO SUIT FIELD CONDITIONS. IF EXPOSED, ATTACH RISER AND HEADER TO WALL WITH 1" CLEARANCE BEHIND PIPE (UNLESS INSTALLED INSIDE WALL AS SHOWN ON PLANS). MAKE FINAL CONNECTION TO EQUIPMENT AS RECOMMENDED BY MANUFACTURER. INSTALL ANY GAS PRESSURE REGULATORS FURNISHED BY FOOD SERVICE EQUIPMENT CONTRACTOR.

3 COOKING APPLIANCE GAS PIPE NTS

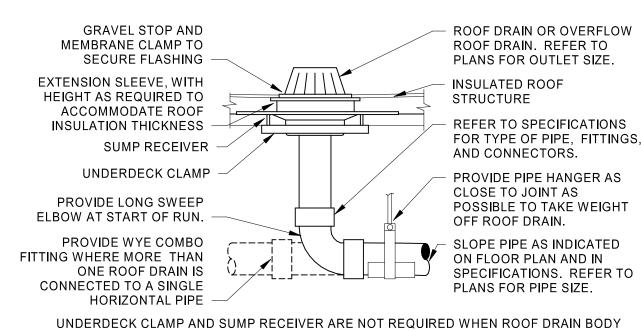


PIPING ARRANGEMENT SHOWN IN SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. PROVIDE REDUCED PRESSURE BACKFLOW PREVENTER OF MANUFACTURER APPROVED BY LOCAL AUTHORITIES. INSTALL WITH REQUIRED CLEARANCES. INSTALL BACKFLOW PREVENTER IN HORIZONTAL UPRIGHT POSITION. PROVIDE ANY REQUIRED CERTIFICATION OF TEST OF BACKFLOW PREVENTER TO LOCAL AUTHORITIES. ALL ITEMS SHALL BE APPROVED FOR DOMESTIC WATER SERVICE. INSTALL BACKFLOW PREVENTER SO IT CAN BE EASILY SERVICED AND TESTED. SUPPORT ASSEMBLY FROM WALL WITH WALL BRACKETS.

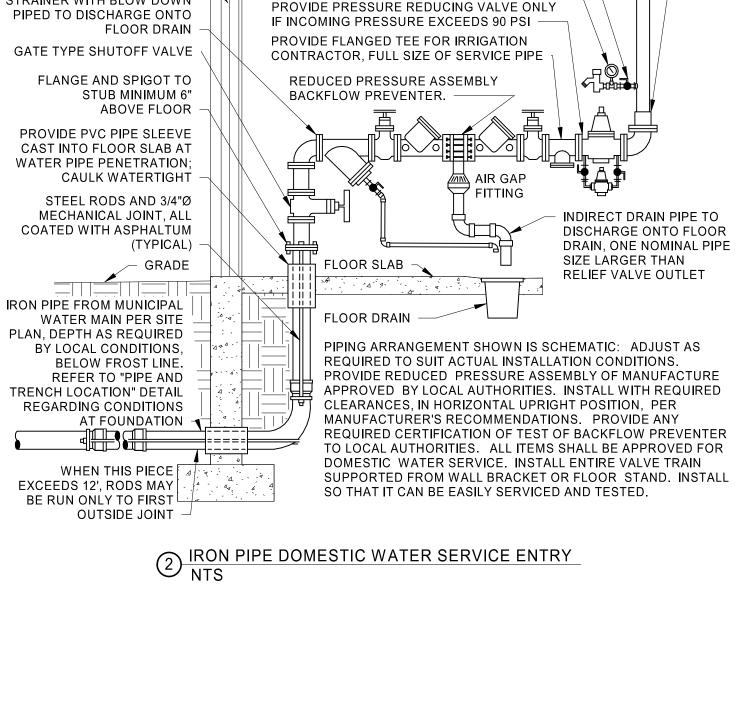


REFER TO SPECIFICATIONS, SCHEDULES, AND NOTES FOR MORE INFORMATION. PIPING ARRANGEMENT SHOWN IS SCHEMATIC; ADJUST TO SUIT FIELD CONDITIONS. VERIFY CONNECTION SIZES AND LOCATIONS WITH WATER HEATER FURNISHED. REFER TO FLOOR PLANS FOR PIPE SIZES AND CONTINUATIONS. PROVIDE SEISMIC STRAP OR BRACING AND FLEXIBLE CONNECTORS ON PIPE WHEN REQUIRED BY LOCAL AUTHORITIES. PROVIDE HEAT TRAP ON COLD WATER SUPPLY WHEN REQUIRED BY LOCAL AUTHORITIES. POWER WIRING AND DISCONNECT SWITCH ARE SPECIFIED BY ELECTRICAL. INTERLOCK OF AQUASTAT WITH RECIRCULATION PUMP IS SPECIFIED BY ELECTRICAL

GAS FIRED WATER HEATER AND PUMP NTS



IS CAST INTO CONCRETE ROOF. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. INSULATE ROOF DRAIN SUMP AND PIPE PER SPECIFICATIONS. LOCATE DRAINS WHERE SHOWN ON ARCHITECTURAL PLANS. VERIFY WITH STRUCTURAL PLANS FOR ROOF LOW POINTS. COORDINATE WITH STRUCTURAL DRAWINGS REGARDING PROVISION FOR SUPPLEMENTARY STEEL FRAMING AROUND ROOF OPENING. COORDINATE ROOF DRAIN INSTALLATION WITH ARCHITECTURAL DETAILS AND ROOFING INSTALLATION. SET OVERFLOW DRAIN WEIR ELEVATION 2" ABOVE PRIMARY ROOF DRAIN WEIR ELEVATION.



BUILDING EXTERIOR WALL:

REFER TO STRUCTURAL AND

ARCHITECTURAL DRAWINGS

STRAINER WITH BLOW DOWN

FOR ACTUAL CONDITIONS

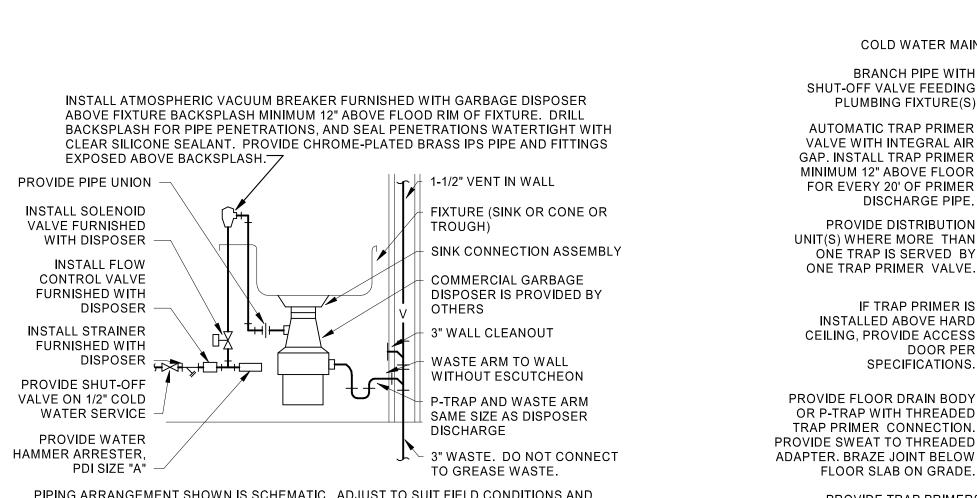
TRANSITION TO COPPER PIPE SIZE AS SHOWN

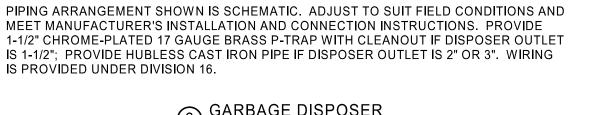
BALL VALVE (TYPICAL) -

ON FLOOR PLANS

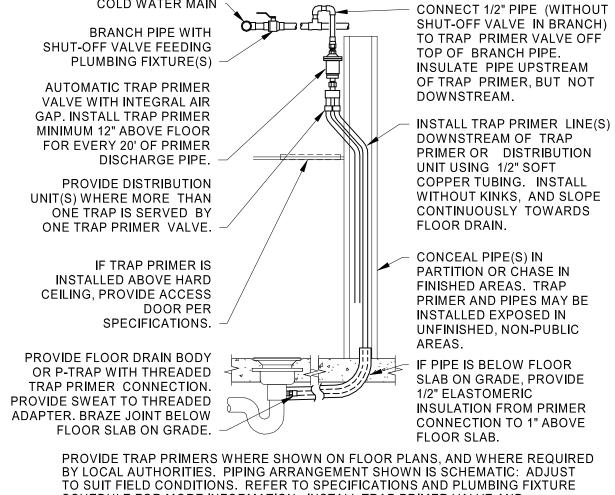
HOSE BIBB (FOR SYSTEM DRAIN DOWN), WITH

SHUTOFF VALVE AND PRESSURE GAUGE $\,\,\,\,\,\,\,\,\,\,\,\,\,\,\,\,\,$









PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD

INSTRUCTIONS. REFER TO SPECIFICATIONS FOR ACID RESISTANT PIPE,

EASY REMOVAL OF TANK AND REPLACEMENT OF LIMESTONE CHIPS.

FITTINGS, JOINTS, AND LIMESTONE CHIPS. INSTALL BASIN AND PIPE FOR

UNDER COUNTER ACID NEUTRALIZATION TANK
NTS

CONDITIONS AND MEET TANK MANUFACTURER'S INSTALLATION

SINK INSTALLED IN

SINK INSTALLED IN

PLUG OR CAP VENT

OPENING ON TANK

PROVIDE TYPE OF

WASTE AND VENT

SPECIFICATIONS

COUPLING AT

UNDERFLOOR

CONNECTION TO

WASTE PIPE PER

PIPE PER

FUME HOOD

CASEWORK OR CUP

CASEWORK OR FUME

RESISTANT WASTE PIPE

ACID NEUTRALIZATION

TANK FILLED WITH

LIMESTONE CHIPS,

AND PLUMBING

PER SPECIFICATIONS

FIXTURE SCHEDULE

DIP TUBE FURNISHED

WITH TANK, TO FORM

TO TAILPIECE FURNISHED

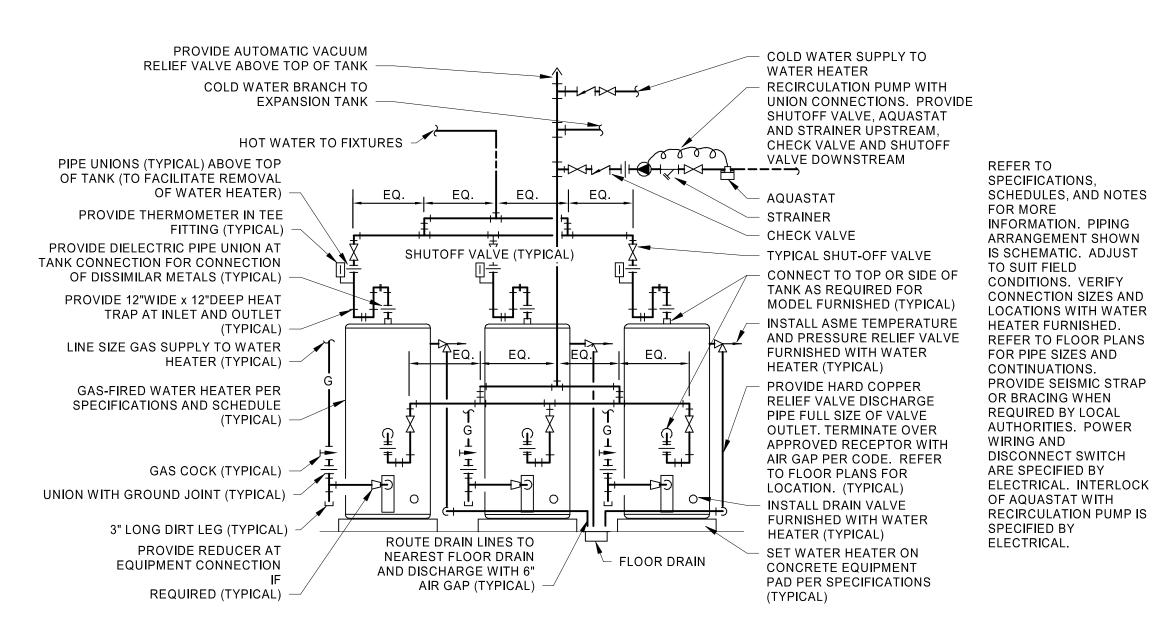
HOOD CABINETRY

CONNECT ACID

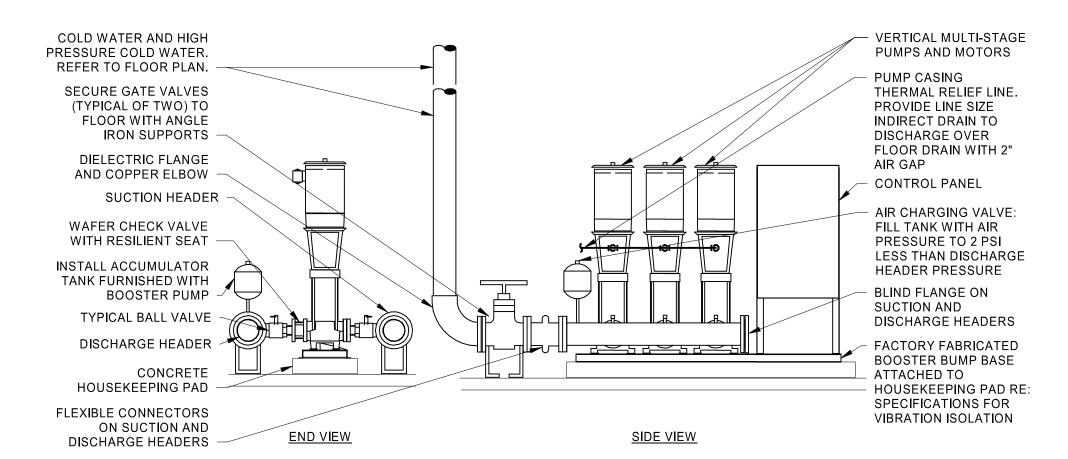
WITH SINK

A TRAP -

SCHEDULE FOR MORE INFORMATION. INSTALL TRAP PRIMER VALVE AND DISTRIBUTION UNIT PER MANUFACTURER'S RECOMMENDATIONS.







REFER TO SPECIFICATIONS, SCHEDULES, AND NOTES FOR MORE INFORMATION ABOUT PUMPS, CONTROLS, PIPE, VALVES, HOUSEKEEPING PAD, FLEXIBLE CONNECTORS, ETC. PIPING ARRANGEMENT IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. VERIFY CONNECTION SIZES AND LOCATIONS PER MANUFACTURER'S REQUIREMENTS. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL

Oct 8 2020

LICENSE # PE-2020016283

DETAILS

P5.3

13-20102-00 PLUMBING

10/08/20 REVISIONS

PACKAGE 3 - BUILDING &

INTERLOCK OF HIGH LEVEL ALARM WITH BUILDING AUTOMATION SYSTEM, REFER TO SPECIFICATIONS IF PROVIDED, IS SPECIFIED BY MECHANICAL. 5 ELECTRIC WATER HEATER OVERHEAD NTS

ELEVATOR SHAFT WALL

SEAL WALL

AIR TIGHT

PENETRATION

SEE FLOOR PLANS

FINISHED FLOOR

DISCHARGE (SPD)

SHUTOFF VALVE

STRUCTURAL FOOTING

SUMP PUMP

- UNION

ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. LOCATE FLOATS AT

ELEVATIONS AS RECOMMENDED BY PUMP MANUFACTURER. INTERLOCK OF HIGH LEVEL ALARM

WITH ALARM BELL, REFER TO FLOOR PLANS IF PROVIDED, IS SPECIFIED BY ELECTRICAL.

HIGH LEVEL ALARM

ON-OFF TETHERED

FLOAT SWITCH

TETHERED FLOAT SWITCH

FOR CONTINUATION

REFER TO SPECIFICATIONS, SCHEDULES AND NOTES FOR MORE INFORMATION. PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. VERIFY CONNECTION SIZES AND LOCATIONS PER MANUFACTURER'S REQUIREMENTS. REFER TO FLOOR PLANS FOR PIPE SIZES. PROVIDE SEISMIC STRAP OR BRACING IF/AS REQUIRED BY LOCAL AUTHORITIES AND/OR SEPARATE DETAIL. INSTALL WITH BOTTOM MINIMUM 6'-6" ABOVE FLOOR IF ABOVE JANITOR'S SINK; OTHERWISE HIGH AS POSSIBLE. PLATFORM SHALL BE PLYWOOD ON UNISTRUT FRAME BRACKETED AND ANCHORED TO WALL, AND/OR SUSPENDED FROM STRUCTURE ABOVE WITH THREADED ROD. POWER WIRING AND DISCONNECT SWITCH ARE SPECIFIED BY ELECTRICAL. INTERLOCK OF AQUASTAT WITH RECIRCULATION PUMP IS SPECIFIED BY ELECTRICAL IF

DISCHARGE INTO RECEPTOR CEILING, IF ANY — L_ ADEQUATE SPACE AND SHOWN ON PLAN, WITH AIR EASY ACCESS GAP PER LOCAL CODE

PROVIDE A HARD COPPER HOT WATER TO FIXTURES RELIEF VALVE DISCHARGE PIPE 3/4" BRANCH TO FULL SIZE OF VALVE OUTLET -EXPANSION TANK ELECTRIC WATER HEATER PER SPECIFICATIONS AND/OR - PROVIDE 12"WIDE x 12"DEEP → HEAT TRAP AT INLET AND SCHEDULE OUTLET (TYPICAL) DRAIN VALVE WITH HOSE BIBB BY WATER HEATER FROM RECIRCULATION PUMP MANUFACTURER IF SHOWN ELSEWHERE PROVIDE 6" DEEP PROVIDE DIELECTRIC PIPE UNION RUST-PROOF WATER-TIGHT PAN UNDER HEATER, WITH AT TANK CONNECTIONS FOR 77 CONNECTION OF DISSIMILAR DRAIN PIPE -METALS (TYPICAL) PROVIDE PLATFORM. ATTACH ROUTE RELIEF VALVE TO BACKBOARD AND/OR DISCHARGE PIPE AND DRAIN SUSPEND FROM STRUCTURE - IF CEILING EXISTS, INSTALL PAN PIPE SEPARATELY TO ABOVE, MINIMUM 6" CLEAR OF ABOVE IT IF THERE IS

INSTALL WITH MINIMUM 6" CLEARANCE TO BUILDING PROVIDE AUTOMATIC STRUCTURE ABOVE -VACUUM RELIEF VALVE REFER TO SPECIFICATIONS ABOVE TOP OF HEATER INSTALL ASME TEMPERATURE CHECK VALVE AND PRESSURE RELIEF VALVE - SHUT-OFF VALVE FURNISHED WITH WATER HEATER -- COLD WATER SUPPLY THERMOMETER

WASHING MACHINE BOX
NTS

PIPING ARRANGEMENT SHOWN IS SCHEMATIC: ADJUST TO SUIT FIELD CONDITIONS. PROVIDE CONNECTIONS AS RECOMMENDED BY EQUIPMENT

IN SPECIFICATIONS | | "B" TYPICAL - PEX TO COPPER ADAPTER(S) IF ADAPTERS AND FITTINGS AS REQUIRED TO CONNECT PIPE TO VALVE ANGLE SHUT-OFF VALVE WITH HOSE THREAD OUTLET AND VACUUM BREAKER - 1-1/2" VENT PIPE WHERE SHOWN ON PLAN (NOT REQUIRED AT SOVENT) WASHING MACHINE BOX PER SPECIFICATIONS AND/OR SCHEDULE. MOUNT WITH BOTTOM AT 42" AFF. MAKE WATERTIGHT THREADED CONNECTION TO BOX OUTLET AS MINIMUM 24" LONG TAILPIECE - 2" P-TRAP WITH CLEANOUT 2" WASTE PIPE IF CONVENTIONALLY VENTED, 3" WASTE IF SOVENT

- PEX OR COPPER HOT AND COLD

WATER WATER SUPPLIES AS INDICATED

COORDINATE MINIMUM 12" ABOVE ROOF INSTALLATION OF NORMALLY. EXTEND TO FLASHING AND HEIGHT OF PARAPET WHEN COUNTERFLASHING WITHIN 10' OF PARAPET, OR **ROOF INSULATION** ABOVE MAXIMUM LOCAL SNOW DEPTH. CORE DRILL ROOF OR PROVIDE SLEEVE IF ANCHOR PIPE TO REQUIRED BY TYPE OF STRUCTURE. ROOF DECK. 📥 ROOF DECK PROVIDE FIRE STOP SEAL BETWEEN PIPE MINIMUM 12" BELOW AND SLEEVE OR PROVIDE PIPE INCREASER ON REFER TO SPECIFICATIONS SMALLER VENT IF/WHERE FOR TYPE OF PIPE, CODE REQUIRES A MINIMUM 3" FITTINGS, AND VENT THRU ROOF -CONNECTORS. REFER TO PLANS FOR SIZE(S) AND LOCATION(S).

LOCATE VTR MINIMUM THREE FEET FROM PROPERTY LINE, TEN FEET

OR FRESH AIR INTAKE, TWENTY FIVE FEET FROM ANY OPENING OR

FRESH AIR INTAKE IN MEDICAL FACILITIES AND ONE FOOT FROM ANY

VERTICAL SURFACE. REFER TO LOCAL CODES FOR OTHER VENT

TERMINATION REQUIREMENTS. LOCATE VTR MINIMUM 18" FROM

VENT PIPE INSIDE BUILDING PER SPECIFICATIONS.

HIGH LEVEL ALARM, RE:

WIRING FOR HIGH LEVEL

ALARM IS SPECIFIED BY

SIMPLEX RECEPTACLE &

WALL NEAR ELEVATOR

DOORS IS SPECIFIED BY

SWITCH PIGGYBACK PLUG

NON-CLOG CHECK VALVE -

SUMP PUMP DISCHARGE

GROMMET AROUND WIRING

ELEVATOR SHAFT FLOOR

STEEL GRATE IS

SCHEDULE, RE:

SCHEDULES -

CONCRETE PIT OF

SPECIFIED IN DIVISION 3

DIMENSIONS SHOWN IN

STRUCTURAL DRAWINGS -

SUMP PUMP; REFER TO

SPECIFICATIONS AND

OUTLET BOX MOUNTED ON

SUMP PUMP PLUG WITH FLOAT

SPECIFICATIONS AND

SCHEDULES. POWER

ELECTRICAL

ELECTRICAL

HORIZONTAL OR THREE FEET VERTICAL ABOVE ANY BUILDING OPENING

ADJACENT WALL, PARAPET, EXPANSION JOINT, ROOF DRAIN, EQUIPMENT

CURB, OR OTHER ROOF FEATURE. OFFSET IN CEILING SPACE WHERE

REQUIRED TO MEET THESE CONDITIONS. INSULATE LAST SIX FEET OF

SLOPE PIPE AS MUCH AS DISCHARGE INDIRECT POSSIBLE TOWARD WASTE INTO RECEPTOR DISCHARGE, 2% MINIMUM WHERE SHOWN ON PLANS WITH AIR GAP PER CODE PROVIDE ADAPTER(S) AS PROVIDE CLEANOUTS IN ENDS AND TURNS OF PIPE WITH REQUIRED TO CONNECT INDIRECT DRAIN PIPE TO ADAPTER AND THREADED EQUIPMENT OR DRAIN PAN. CLEANOUT PLUG -PROVIDE INDIRECT WASTE PIPE ONE PIPE SIZE LARGER THAN EQUIPMENT CONNECTION SIZE, INSULATE INDIRECT WASTE MINIMUM 3/4" OR AS SHOWN ON PIPE RECEIVING HOT OR PLANS CHILLED WASTE: REFER TO SPECIFICATIONS. DO NOT MAXIMUM TAILPIECE LENGTH INSULATE INDIRECT WASTE IS 24" IF TRAPPED PIPES IN FOOD SERVICE PROVIDE COPPER DWV P-MAINTAIN MINIMUM 1" TRAP WITH CLEANOUT IF CLEARANCE TO FLOOR, OR 6" MORE THAN 2' HORIZONTAL TO CEILING OR ROOF -OR 4' TOTAL DRAIN LENGTH ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. PROVIDE

FILTERED COLD WATER SUPPLY TO OTHER EQUIPMENT IF/AS SHOWN ON FLOOR PLAN PROVIDE WATER HAMMER ARRESTER, PDI SIZE "A" PROVIDE ADAPTER AND SIX FOOT LONG TYPE "K" SOFT COPPER TUBING, (SIZE OF CUBER WATER INLET) AND CONNECT TO CUBER WATER INLET 6"TALL VENT OPEN TO IF FURNISHED WITH ICE THE ATMOSPHERE MACHINE, INSTALL WATER FILTER ASSEMBLY PER MANUFACTURER'S - CONNECT TO CUBER INSTRUCTIONS, WHERE AND ICE BIN DRAIN EASILY ACCESSIBLE OUTLETS AS REQUIRED REFER TO "INDIRECT PROVIDE FLOOR SINK WASTE" DETAIL FOR WHERE SHOWN ON FLOOR MORE INFORMATION PLANS -

ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. PROVIDE

CONNECTIONS SHOWN IN EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS.

REFER TO SPECIFICATIONS FOR PIPE AND FITTING MATERIALS AND INSTALLATION. PROVIDE

DIELECTRIC UNION IF CONNECTING DISSIMILAR METALS. AT MOTORIZED EQUIPMENT ABOVE

CEILING, PROVIDE NEOPRENE TUBE AND STAINLESS STEEL SCREW CLAMPS FOR FLEXIBLE

CONNECTION. FOR PIPE SIZE(S) REFER TO FLOOR PLANS, OR CODE REQUIREMENTS FOR

HVAC UNIT TONNAGE. PROVIDE HANGERS OR SUPPORTS PER SPECIFICATIONS. DO NOT

COMBINE CONDENSATE DRAIN PIPES WITH NON-CONDENSATE INDIRECT DRAINS.

SLOPE PIPE AS MUCH AS

PROVIDE CLEANOUTS IN

ENDS AND TURNS OF

PIPE: ADAPTER WITH

CONDENSATE INTO

RECEPTOR WHERE

ROOF-TOP UNIT,

SHOWN ON PLANS WITH

DISCHARGE AWAY FROM

ROOF DRAIN IF REQUIRED

SERVICE AREA, OR AT

BY LOCAL AUTHORITIES.

AIR GAP PER CODE. ON

THREADED CLEANOUT

POSSIBLE TOWARD

DISCHARGE, 2%

MINIMUM

PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST AS

REQUIRED TO SUIT ACTUAL INSTALLATION CONDITIONS

4 ICE MACHINE CONNECTIONS NTS

AND MEET RECOMMENDATIONS OF EQUIPMENT

ADAPTER(S) AS REQUIRED

CONDENSATE STUB(S) ON

CONNECTION SIZE OR CODE

REQUIRED SIZE WHICHEVER

IS LARGER. 3/4" MINIMUM.

H = 1" + UNIT STATIC

PRESSURE (IN. W.C.)

H FOR DRAW-THRU UNITS;

1" FOR BLOW-THRU UNITS; -

H/2 + PIPE DIAMETER FOR

H + PIPE DIAMETER FOR

4" MINIMUM TRAP DEPTH. —

6" TO ROOF OR CEILING —

FOR CONDENSATE

CLEARANCE TO FLOOR, OR

REFER TO SPECIFICATIONS

INSULATION REQUIREMENTS. -

DRAW-THRU UNITS;

BLOW-THRU UNITS;

EQUIPMENT. PROVIDE

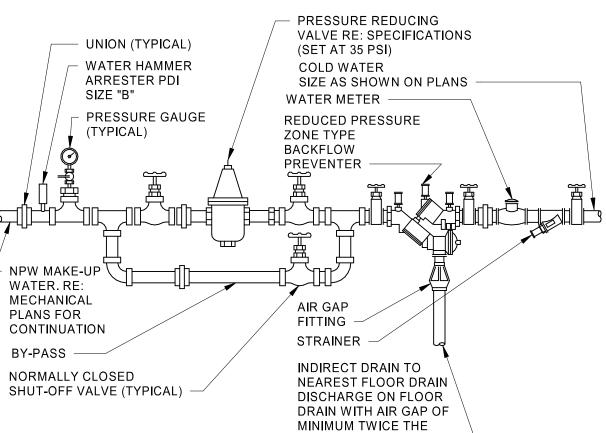
DRAIN PIPE SIZED TO

MATCH EQUIPMENT

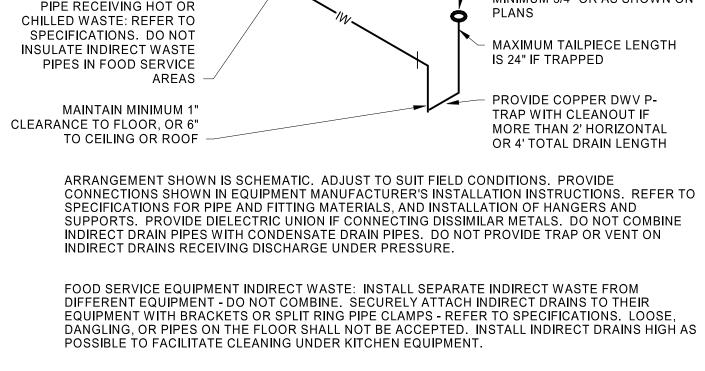
TO CONNECT DRAIN PIPE TO

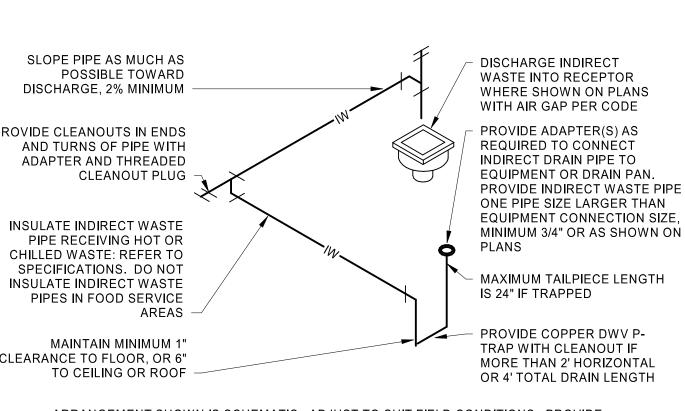
BRACE PIPING TO WALL WITH BRACKETS AND U-BOLTS OR RISER CLAMPS AS REQUIRED.

PIPE DIAMETER — ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. DO NOT INSTALL VALVE TRAIN ABOVE ELECTRICAL EQUIPMENT. VALVING SHALL BE SAME SIZE AS SERVICE PIPE -- REFER TO PLANS FOR SERVICE LINE SIZE. VERIFY EQUIPMENT PRESSURE REQUIREMENTS BEFORE SETTING PRESSURE REDUCING VALVE. PROVIDE TEST AND CERTIFICATION OF BACKFLOW PREVENTER TO LOCAL AUTHORITIES. INSTALL RPZ WITH ADEQUATE SPACE FOR TESTING AND SERVICE, MAXIMUM 5'-0" AFF.



CONTINUATION SHUT-OFF VALVE (TYPICAL) —





PROVIDE 3/4" COLD WATER SUPPLY CONCEALED IN PARTITION; STUB OUT AND PROVIDE SHUTOFF VALVE -PROVIDE STRAINER AND DOUBLE CHECK VALVE BACKFLOW PREVENTER PER SPECIFICATIONS AND SCHEDULE. LOCATE PER LOCAL REQUIREMENTS FOR ACCESSIBILITY -

PLUMBING FIXTURE SCHEDULE FIXTURES IN THIS SCHEDULE OR THEIR APPROVED EQUIVALENT ARE

PROVIDED BY THE PLUMBING CONTRACTOR. SUBMIT SHOP DRAWINGS ON EACH OF THESE ITEMS. REFER TO SPECIFICATIONS FOR FURTHER INFORMATION AND INSTALLATION REQUIREMENTS. VERIFY ROUGH-IN REQUIREMENTS WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE PLUMBING FIXTURE MOUNTING HEIGHTS.

PLUMBING FIXTURE SCHEDULE

LAN MARK	DESCRIPTION
AAV1	AIR ADMITTANCE VALVE; STUDOR "MINI-VENT" # 20301, MEETING ASSE 1051 TYPE "A", POLYSTYRENE PROTECTIVE COVER, ABS VALVE WITH ELASTROMERIC MEMBRANE AND PVC CONNECTOR, 2" INLET, AND ATMOSPHERIC PORT.
AAV2	AIR ADMITTANCE VALVE; STUDOR "MAXI-VENT" # 20302 MEETING ASSE 1050 TYPE "A", POLYSTYRENE PROTECTIVE COVER, ABS VALVE WITH ELASTROMERIC MEMBRANE AND PVC CONNECTOR, 2" INLET, AND ATMOSPHERIC PORT. PROVIDE UV PROTECTIVE COVER IF INSTALLED OUTDOORS EXPOSED TO SUNLIGHT.

- ACCESS PANEL: JAY R. SMITH # 4762 24" x 24" CL, TYPE 304 STAINLESS STEEL PANEL AND FRAME WITH CONCEALED HINGE. KEY OPERATED CYLINDER LOCK. PROVIDE WITH NAILER SLOTS FOR INSTALLATION IN STUD WALLS AND ANCHOR STRAPS FOR INSTALLATION IN MASONRY CONSTRUCTION. ACCESS PANEL: JAY R. SMITH # 4762 - 12" x 12" - CL, TYPE 304 STAINLESS STEEL PANEL AND FRAME WITH CONCEALED HINGE, KEY
- OPERATED CYLINDER LOCK. PROVIDE WITH NAILER SLOTS FOR INSTALLATION IN STUD WALLS AND ANCHOR STRAPS FOR INSTALLATION IN MASONRY CONSTRUCTION. CONDENSATE DRAIN BOX: GUY GRAY MODEL # B200TS, 20 GAUGE GALVANIZED STEEL BOX, 18 GAUGE STEEL FACEPLATE, 2" BOTTOM
- OUTLET DRAIN. TRIM: PROVIDE TAIL PIECE AND 2" DIAMETER P-TRAP. SIOUX CHIEF # 249, DISHWASHER AIR GAP MEETING ASSE 1021 WITH POLYPROPYLENE BODY, CHROME-PLATED BRASS CAP, 1/2" INLET HOSE BARB, AND 3/4" OUTLET HOSE BARB. DOUBLE CHECK VALVE BACKFLOW PREVENTER: WATTS # 719QT-S. MEETING ASSE 1015. CAST BRONZE BODY. SCREW DRIVER SLOTTED TEST COCKS, QUARTER TURN BALL VALVES, AND STRAINER.
- DRINKING FOUNTAIN (ADA ACCESSIBLE): ELKAY # EDFP217C WALL-MOUNTED, MODULAR, BARRIER FREE, STAINLESS STEEL RECTANGULAR BOWLS AND WALL PLATE. TRIM: McGUIRE # 2165CC COMPRESSION ANGLE STOP VALVE WITH RISER AND ESCUTCHEON, McGUIRE # B8872CF 1-1/4" 17 GAUGE CAST CHROME PLATED BRASS ADJUSTABLE P-TRAP AND WASTE ARM WITH CLEANOUT PLUG AND ESCUTCHEON DOWNSPOUT NOZZLE: JAY R. SMITH # 1770T, CAST BRONZE BODY AND
- FLANGE. PROVIDE OUTLET SIZE AS SHOWN ON PLANS. EXTERIOR CLEANOUT: JAY R. SMITH # 4261L SERIES DUCO CAST IRON DOUBLE FLANGED HOUSING WITH HEAVY DUTY SECURED SCORIATED CAST IRON COVER WITH LIFTING DEVICE AND CLEANOUT BODY WITH ABS PLASTIC PLUG WITH GASKET SEAL AND PUSH-ON JOINT. REFER TO SPECIFICATIONS FOR INSTALLATION. DECK-MOUNTED EMERGENCY EYE / FACE WASH: GUARDIAN # G1806, FOUR FILTERED SPRAY HEADS WITH SELF REGULATING FLOW CONTROL AND DUST COVERS, CHROME-PLATED BRASS STAY-OPEN
- FROM STORAGE TO OPERATING POSITION, AND 1/2" INLET. DECK-MOUNTED EMERGENCY EYE / FACE WASH: GUARDIAN # G1806, FOUR FILTERED SPRAY HEADS WITH SELF REGULATING FLOW CONTROL AND DUST COVERS, CHROME-PLATED BRASS STAY-OPEN BALL VALVE, EPOXY COATED ALUMINUM FLAG HANDLE, 90° SWIVEL FROM STORAGE TO OPERATING POSITION, AND 1/2" INLET. EMERGENCY MIXING VALVE: POWERS # ES150-AF05012, BRONZE BODY WITH ROUGH BRONZE FINISH, MEETING ASSE 1071, CORROSION RESISTANT INTERNAL PARTS, CHECK STOPS WITH REMOVABLE STRAINERS, DUAL INTERNAL COLD WATER BYPASS, PARAFFIN FILLED

BALL VALVE, EPOXY COATED ALUMINUM FLAG HANDLE, 90° SWIVEL

TEMPERATURE ELEMENT. DIAL THERMOMETER ON OUTLET. CAPABLE

17 GAUGE CAST CHROME PLATED BRASS ADJUSTABLE P-TRAP AND

WASTE ARM WITH CLEANOUT PLUG AND ESCUTCHEON, AND SUITABLE

- OF 4 GPM WITH A 5 PSI DIFFERENTIAL AND A MINIMUM FLOW RATE OF 1.0 GPM, AND STAINLESS STEEL WALL-MOUNTED CABINET. MAXIMUM TEMPERATURE STOP SET FOR 90°F. ELECTRIC WATER COOLER (ADA ACCESSIBLE): ELKAY # EZSTL8WS WALL-MOUNTED, BARRIER FREE, DUAL-LEVEL WATER COOLER WITH BOTTLE FILLING STATION, FRONT AND SIDE PUSH ACTUATOR BARS, STAINLESS STEEL BOWL, FLEXIBLE POLYESTER ELASTOMER SAFETY BUBBLER AND GALVANIZED STEEL FRONT AND SIDES, CHILLER WITH 8.0 GALLONS PER HOUR CAPACITY. 50°F DRINKING WATER AT 80°F INLET TEMPERATURES 90°F ROOM TEMPERATURE. TRIM: McGUIRE # LF2165CC LEAD FREE BRASS COMPRESSION ANGLE STOP VALVE WITH RISER AND ESCUTCHEON, McGUIRE # B8912CF 1-1/2"
- CARRIER WITH STANCHIONS TO FLOOR. INSTALL "WCO" UNDERNEATH WASTE CONNECTION. ELECTRICAL REQUIREMENTS: 115-VOLT, 5.0 FULL FLEXIBLE CONNECTOR: UNITED FLEXIBLE #AFBX1, 4" X 12" LONG CORRUGATED 316L STAINLESS STEEL BELLOWS AND 304 STAINLESS STEEL SINGLE BRAID WITH CLASS 150 STAINLESS STEEL WELDED PLATE FLANGE ON EACH PIPE WITH A MAXIMUM OPERATING
- PRESSURE OF 261 PSI. | FLOOR CLEANOUT: JAY R. SMITH, CAST IRON BODY, FLASHING FLANGE WITH CLAMPING COLLAR, ABS PLUG, AND ADJUSTABLE, ROUND, SECURED, NICKEL BRONZE, TOP. #4031L (-F-C), SCORIATED TOP FOR EXPOSED, FLUSH WITH FINISHED FLOOR, APPLICATION(S), # 4031L (-F-C-Y), STAINLESS STEEL MARKER FOR INSTALLATION IN CARPETED |FLOOR AREA(S), # 4151 (-F-C), 1/8" RECESS FOR INSTALLATION IN TILED | FLOOR AREA(S), # 4191 (-F-C), 1/2" RECESS FOR INSTALLATION IN TERRAZZO AND SIMILAR POURED FLOOR AREA(S). REFER TO
- FLOW CONTROL VALVE: FLOWDESIGN # ICSS "AUTOFLOW", SERIES 300 STAINLESS UNION BODY WITH NICKEL PLATED UNION NUT, STAINLESS STEEL PRESSURE COMPENSATING CARTRIDGE, MEETING NSF 61 ANNEX G, NAMEPLATE AND 1/2" VALVE BODY SIZE UNLESS SHOWN OTHERWISE ON PLANS. PROVIDE 0.5 GPM FLOW RATE CARTRIDGE

SPECIFICATIONS FOR INSTALLATION.

UNLESS SHOWN OTHERWISE ON PLANS.

- FLOOR DRAIN: JAY R .SMITH # 2005L (-A), CAST IRON BODY AND CLAMPING COLLAR, ADJUSTABLE 6" ROUND NICKEL BRONZE STRAINER. USE PUSH-ON JOINT OF OUTLET SIZE AS SHOWN ON PLANS. TRAP SEAL: PROVIDE TRAP SEAL PER SPECIFICATIONS FOR ACTUAL FLOOR DRAIN MODEL AND SIZE
- EQUIPMENT FLOOR DRAIN: JAY R. SMITH # 2110L (-B), CAST IRON BODY 8" ROUND, LOOSE, MEDIUM DUTY, CAST IRON GRATE, SEDIMENT BUCKET, BOTTOM OUTLET, SEEPAGE PAN, AND MEMBRANE FLASHING CLAMP. USE PUSH-ON JOINT OF OUTLET SIZE AS SHOWN ON PLANS. TRAP SEAL: PROVIDE TRAP SEAL PER SPECIFICATIONS FOR ACTUAL FLOOR DRAIN MODEL AND SIZE. EQUIPMENT FLOOR DRAIN: JAY R. SMITH # 2233L (-M), CAST IRON BODY,
- 12" ROUND, LOOSE, HEAVY DUTY, DUCTILE IRON GRATE, SEDIMENT BUCKET, BOTTOM OUTLET, SEEPAGE PAN, AND MEMBRANE FLASHING CLAMP. USE PUSH-ON JOINT OF OUTLET SIZE AS SHOWN ON PLANS. TRAP SEAL: PROVIDE TRAP SEAL PER SPECIFICATIONS FOR ACTUAL FLOOR DRAIN MODEL AND SIZE. PVC LARGE FLOOR DRAIN: SIOUX CHIEF # 860-APU SERIES WITH 5"
- DEEP ROUND PVC BODY WITH PVC SOCKET OUTLET, ANCHOR FLANGE, ROUND PVC DEBRIS BUCKET, 9" ROUND PVC GRATE. TRAP SEAL: PROVIDE TRAP SEAL PER SPECIFICATIONS FOR ACTUAL FLOOR DRAIN MODEL AND SIZE. EQUIPMENT FLOOR DRAIN: JAY R. SMITH # 2230L, CAST IRON BODY, 12" ROUND, LOOSE, MEDIUM DUTY, CAST IRON GRATE, SEDIMENT BUCKET, BOTTOM OUTLET, SEEPAGE PAN, AND MEMBRANE FLASHING CLAMP.

PROVIDE TRAP PRIMER PORT IF TRAP PRIMER IS PROVIDED ON THE

- DRAWINGS. USE PUSH-ON JOINT OF OUTLET SIZE AS SHOWN ON FLOOR SINK: JAY R. SMITH # 3101L (-12), 6" DEEP CAST IRON BODY WITH ACID RESISTING ENAMELED INTERIOR, ANCHOR FLANGE WITH SEEPAGE HOLES, CLAMP COLLAR, WHITE ABS SEDIMENT BUCKET, AND 8-1/2" SQUARE NICKEL BRONZE RIM AND HALF GRATE. USE PUSH-ON
- JOINT OF OUTLET SIZE AS SHOWN ON PLANS. GARBAGE DISPOSER: IN-SINK-ERATOR "BADGER 5" RESIDENTIAL DISPOSER WITH 1/2 H.P. MOTOR WITH POWER CORD, PLASTIC GRIND CHAMBER, GALVANIZED STEEL CUTTING ELEMENT, AND PERMANENTLY LUBRICATED UPPER AND LOWER BEARINGS.

TRIM: WASTE DISCHARGE KIT AND DISHWASHER TAILPIECE

ELECTRICAL REQUIREMENTS: 120-VOLT, 6.9 FULL LOAD AMPS

- GREASE INTERCEPTOR: GREENTURTLE PROCEPTOR GMC 1000. FIBERGLASS REINFORCED PLASTICS BODY. SINGLE BAFFLE DESIGN 1000 GALLON CAPACITY AND RATED FOR 577 GALLONS OF GREASE STORED. WITH (1) 24" GASKETED. AASHTO H-20 LOAD RATED COVEF WITH EXTENSIONS. TRAPPED INLET AND OUTLET AND (2) 3" VENT CONNECTIONS. EXTEND CLEANOUTS TO GRADE. UNIT SHALL INCLUDE 30 YEAR WARRANTY AGAINST LEAKS AND STRUCTURAL FAILURE. GAS SOLENOID VALVE: ASCO # 821 UL LISTED AND FM APPROVED FOR
- NATURAL GAS SERVICE, ALUMINUM BODY WITH GENERAL PURPOSE ENCLOSURE, FNPT CONNECTIONS, BUNA "N" SEAL, DIAPHRAGM AND DISC, 120V SINGLE PHASE, NORMALLY CLOSED TYPE, MOLDED EPOXY SOLENOID COVER, CLASS "F" COIL FOR CONTINUOUS DUTY. HOSE BIBB: PRIER PRODUCTS # C-158NP.75. ROUGH CHROME PLATED
- BRASS 3/4" FEMALE FIP INLET, 3/4" THREADED HOSE CONNECTION, METAL WHEEL HANDLE AND ASSE 1011 INTEGRAL VACUUM BREAKER HOSE BIBB: PRIER PRODUCTS # C-255NP.75, ROUGH CHROME PLATED BRASS 3/4" FEMALE INLET, 3/4" THREADED HOSE CONNECTION, LOOSE KEY HANDLE, AND ASSE 1011 INTEGRAL BREAKER. HUB DRAIN FLOOR SINK: JAY R. SMITH # 3821T (-DBS). 7" DEEP x 4" DIAMETER CAST IRON BODY WITH ACID RESISTING ENAMELED
- INTERIOR AND EXTERIOR FUNNEL WITH 3" CAST IRON P-TRAP WITH THREADED CONNECTION AND ALUMINUM DOME BOTTOM STRAINER. TRAP SEAL: PROVIDE TRAP SEAL PER SPECIFICATIONS FOR ACTUAL HUB DRAIN MODEL AND SIZE. ICE MAKER BOX: GUY GRAY MODEL # BIM875, 20 GAUGE GALVANIZED STEEL BOX, 18 GAUGE STEEL FACEPLATE, BOTTOM INLET WATER SUPPLY WITH LEAD FREE 1/2" x 1/4" COMPRESSION ANGLE STOP VALVE.

PROVIDE EQUIPMENT CONNECTION.

TRIM: LOOP 4 FEET OF 1/4" TYPE "K" SOFT COPPER TUBING AND

PLUMBING FIXTURE SCHEDULE

PLAN MARK JANITOR'S SINK: FLORESTONE # MSR-2424, 24" X 24" X 10" MOLDED ONE PIECE BASIN WITH INTEGRAL STAINLESS STEEL DRAIN BODY. FAUCET: CHICAGO FAUCET # 897-CP FAUCET WITH WALL BRACE, INTEGRAL VACUUM BREAKER, PAIL HOOK, AND 3/4" MALE HOSE THREADED OUTLET. SECURE FAUCET IN WALL WITH BACKBOARD. TRIM: # BP TYPE 304, 20 GAUGE, STAINLESS STEEL WALL SURROUNDS, # T-35 THREE FOOT LONG REINFORCED HOSE WITH 3/4" CHROME COUPLING AND WALL HOOK, # V-70 EXTRUDED VINYL BUMPER GUARD. AND # T-40 24" STAINLESS STEEL MOP HANGER.

LABORATORY GAS COCK: (DOUBLE TURRET DECK MOUNTED) CHICAGO FAUCET # 982-909-957-3KAGV - VANDAL RESISTANT CHROME PLATED BRASS BODY DOUBLE TURRET WITH 3/8" OUTLETS AND INLET: CHICAGO # 957-3K 3/8" NPT THREADED BRASS INLET SHANK WITH LOCKNUT AND WASHER: TWO LOW PRESSURE GAS COCKS WITH CHROME PLATED BRASS BODY. 3/8" NPT INLETS. HOSE BARB AND LEVER HANDLE WITH COLOR CODED INDEX BUTTON READING GAS. SECURELY BRACE GAS COCK TO THE CASEWORK COUNTERTOP. LABORATORY SERVICE PANEL: ISIMET-LSP-2211-3-F-U, 3/4" LINE SIZE SOLENOID VALVE PROVIDED INSIDE LABORATORY 24"H X 24"W X 6"D SERVICE PANEL. FURNISH LABORATORY SERVICE PANEL TO DIVISION 26 FOR INSTALLATION. REFER TO ELECTRICAL DRAWINGS FOR MORE INFORMATION. REFER TO SPECIFICATION SECTION 229000 FOR MORE INFORMATION. PROVIDE CONNECTION TO SOLENOID VALVE.

|WALL-MOUNTED LAVATORY (ADA ACCESSIBLE): AMERICAN STANDARD # 0355.012 "LUCERNE" 20-1/2" X 18-1/4" RECTANGULAR WALL MOUNTED WHITE VITREOUS CHINA FIXTURE WITH FAUCET LEDGE AND FRONT OVERFLOV FAUCET: SLOAN # EFX-250-CP SINGLE HOLE, BATTERY, SENSOR OPERATED FAUCET LESS WITH "Y" STRAINER FILTERED SOLENOID VALVE AND 0.5 GPM AERATOR TRIM: McGUIRE # 155A GRID DRAIN WITH TAILPIECE, McGUIRE # LF2165CCLK LEAD FREE BRASS LOOSE KEY COMPRESSION ANGLE STOP VALVES WITH RISERS AND ESCUTCHEONS. McGUIRE # B8872CF 1-1/4" 17 GAUGE CAST CHROME PLATED BRASS ADJUSTABLE P-TRAP AND WASTE ARM WITH CLEANOUT PLUG AND ESCUTCHEON, CONCEALED ARM CARRIER WITH STANCHIONS TO FLOOR, PLUMBEREX "PRO-EXTREME" # X-4222 INSULATION KIT FOR WATER AND WASTE

THERMOSTATIC MIXING VALVE: POWERS # LFG480, SOLID LEAD FREE BRASS OR BRONZE BODY, THERMOSTATIC WAX ELEMENT, CORROSION RESISTANT INTERNAL PARTS, AND INTEGRAL CHECKS, ASSE 1070 COMPLIANT, CAPABLE OF 1.6 GPM WITH A 20 PSI DIFFERENTIAL AND A MINIMUM FLOW RATE OF 0.25 GPM. SET TEMPERATURE TO 100F FOR SINGLE TEMPERATURE LAVATORIES. MOUNT BELOW THE PLUMBING NEUTRALIZING TANK: ORION "STYLE 10", 2 GALLON, OPAQUE, 10.16" HIGH x 9" DIAMETER, TANK WITH 1-1/2" INLET AND 2" OUTLET, AND A 2" CLEANOUT. PROVIDE WITH LIMESTONE CHIPS WITH A MINIMUM OF 90%

NON-FREEZE WALL HYDRANT: PRIER PRODUCTS # C-634NBX1, SATIN NICKEL PLATED BRASS 1" MALE INLET BY 3/4" FEMALE INLET, 3/4" THREADED HOSE CONNECTION, LOOSE KEY HANDLE, HYDRANT LENGTH AS REQUIRED FOR INSTALLED WALL THICKNESS, ADJUSTABLE WALL CLAMP. BRASS BOX WITH SATIN NICKEL PLATED FINISH AND INTEGRAL ASSE 1052 DOUBLE CHECK VACUUM BREAKER. OVERFLOW ROOF DRAIN: JAY R. SMITH # 1080Y (-E0X-C-R-LESS DOME), 15" DIAMETER CAST IRON BODY, FLASHING CLAMP, GRAVEL STOP, UNDERDECK CLAMP, SUMP RECEIVER, HUBLESS OUTLET, FIXED EXTENSION – HEIGHT AS REQUIRED BY INSTALLED INSULATION THICKNESS, CAST IRON DOME BOLTED OR LOCKED DOWN AND 2" HIGH WATER DAM. PROVIDE OUTLET SIZE AS SHOWN ON PLANS.

CALCIUM CARBONATE CONTENT.

CAST IRON ROOF DRAIN DOME: MIFB # RG2016DDC ROOF GUARD CAST IRON 19" DIAMETER REPLACEMENT ROOF DOME. PRESSURE REDUCING VALVE: WATTS # LF223, LEAD FREE BRONZE BODY, STAINLESS STEEL SEAT, STAINLESS STEEL BOLTS, INLET AND OUTLET SIZE AS SHOWN ON PLANS, 25 - 75 PSI REDUCED PRESSURE RANGE. SET OUTLET PRESSURE TO XX PSI WITH FLOW RATE OF YY GPM AT A FALL OFF PRESSURE OF ZZ PSI DIFFERENTIAL REMOTE CHILLER: ELKAY # ECH8 AIR COOLED CHILLER WITH 8.0 GALLONS PER HOUR CAPACITY, 50° F DRINKING WATER AT 80° F INLET EMPERATURES 90° F ROOM TEMPERATURE. ROOF DRAIN: JAY R. SMITH # 1010Y (-E0X-C-R-LESS DOME), 15

DIAMETER CAST IRON BODY, FLASHING CLAMP, GRAVEL STOP, UNDERDECK CLAMP, SUMP RECEIVER, HUBLESS OUTLET, FIXED EXTENSION – HEIGHT AS REQUIRED BY INSTALLED INSULATION THICKNESS, AND CAST IRON DOME BOLTED OR LOCKED DOWN. PROVIDE OUTLET SIZE AS SHOWN ON PLANS. CAST IRON ROOF DRAIN DOME: MIFB # RG2016DDC ROOF GUARD CAST IRON 19" DIAMETER REPLACEMENT ROOF DOME. REMOTE PANIC ASSEMBLY: ISEMET # IP-0, EMERGENCY SHUT OFF BUTTON THAT INTEGRATES WITH LABORATORY SERVICE PANEL. REMOTE PANIC ASSEMBLY TO DIVISION 26 FOR INSTALLATION, REFER TO ELECTRICAL DRAWINGS FOR MORE INFORMATION. REFER TO

SPECIFICATION SECTION 229000 FOR MORE INFORMATION. REDUCED PRESSURE ZONE BACKFLOW PREVENTER: WATTS # 957-NRS, MEETING ASSE 1013, 304 STAINLESS STEEL BODY AND SLEEVE. QUARTER TURN TEST COCKS. RESILIENT SEATED NON-RISING STEM GATE VALVES AND WATTS #77F-DI-FDA EPOXY COATED CAST IRON STRAINER AND # 957AG AIR GAP FITTING REDUCED PRESSURE ZONE BACKFLOW PREVENTER: WATTS # 009QT-S, MEETING ASSE 1013, CAST BRONZE BODY, QUARTER TURN

TEST COCKS, QUARTER TURN BALL VALVES, BRONZE STRAINER, AND # | SOLIDS INTERCEPTOR: JAY R. SMITH # 8714-ARIO, FABRICATED STEEL BODY, CAST IRON COVER, ACID-RESISTING ENAMEL COATING INSIDE AND OUT, PERFORATED STAINLESS STEEL BUCKET, AND 2" INLET AND

SINK: SINK IS INTEGRAL WITH THE CASEWORK AND SPECIFIED IN ANOTHER DIVISION. FAUCET: CHICAGO FAUCET # 930-VR317XKCP SINGLE HOLE LEAD FREE FAUCET WITH VANDAL PROOF WRISTBLADE HANDLES, QUARTER TURN CERAMIC CARTRIDGES, 6" RIGID/SWING GOOSENECK SPOUT WITH ATMOSPHERIC VACUUM BREAKER, AND FULL FLOW NOZZLE. TRIM: CHICAGO # 1025-ABCP LEAD FREE BRASS LOOSE KEY COMPRESSION ANGLE STOP VALVES WITH ESCUTCHEONS, BRASSCRAFT SERIES "S1" BRAIDED STAINLESS STEEL FLEXIBLE RISERS, LENGTH AS REQUIRED, ORION # UTP 1-1/2" POLYPROPYLENE FULL DROP UNION P-TRAP, PIPE TO WALL WITH ESCUTCHEON, ORION # RLNS 1-1/2" IPS TO MECHANICAL JOINT SINK ADAPTER AND ORION # WA-1 POLYPROPYLENE DRAIN WITH 1-1/2" IPS TAILPIECE. THERMOSTATIC MIXING VALVE: POWERS # LFG480, SOLID LEAD FREE BRASS OR BRONZE BODY. THERMOSTATIC WAX ELEMENT, CORROSION. RESISTANT INTERNAL PARTS, AND INTEGRAL CHECKS, ASSE 1070 COMPLIANT, CAPABLE OF 1.6 GPM WITH A 20 PSI DIFFERENTIAL AND A

MINIMUM FLOW RATE OF 0.25 GPM. SET TEMPERATURE TO 110F FOR

DUAL TEMPERATURE LAVATORIES AND HAND SINKS, 100F FOR SINGLE

TEMPERATURE LAVATORIES AND HAND SINKS AND 120F FOR SINKS.

MOUNT BELOW THE PLUMBING FIXTURE WHERE INDICATED ON SINK (ADA ACCESSIBLE): SINK IS INTEGRAL WITH THE CASEWORK AND SPECIFIED IN ANOTHER DIVISION. FAUCET: CHICAGO FAUCET # 930-VR317XKCP SINGLE HOLE LEAD FREE FAUCET WITH VANDAL PROOF WRISTBLADE HANDLES, QUARTER TURN CERAMIC CARTRIDGES, 6" RIGID/SWING GOOSENECK SPOUT WITH ATMOSPHERIC VACUUM BREAKER, AND FULL FLOW NOZZLE. TRIM: CHICAGO # 1025-ABCP LEAD FREE BRASS LOOSE KEY COMPRESSION ANGLE STOP VALVES WITH ESCUTCHEONS BRASSCRAFT SERIES "S1" BRAIDED STAINLESS STEEL FLEXIBLE RISERS, LENGTH AS REQUIRED, ORION # UTP 1-1/2" POLYPROPYLENE |FULL DROP UNION P-TRAP, PIPE TO WALL WITH ESCUTCHEON, ORION # | RLNS 1-1/2" IPS TO MECHANICAL JOINT SINK ADAPTER AND ORION # |WA-1 POLYPROPYLENE DRAIN WITH 1-1/2" IPS TAILPIECE. THERMOSTATIC MIXING VALVE: POWERS # LFG480, SOLID LEAD FREE BRASS OR BRONZE BODY, THERMOSTATIC WAX ELEMENT, CORROSION RESISTANT INTERNAL PARTS, AND INTEGRAL CHECKS, ASSE 1070 COMPLIANT, CAPABLE OF 1.6 GPM WITH A 20 PSI DIFFERENTIAL AND A MINIMUM FLOW RATE OF 0.25 GPM. SET TEMPERATURE TO 110F FOR DUAL TEMPERATURE LAVATORIES AND HAND SINKS, 100F FOR SINGLE

TEMPERATURE LAVATORIES AND HAND SINKS AND 120F FOR SINKS.

MOUNT BELOW THE PLUMBING FIXTURE WHERE INDICATED ON UNDERMOUNT SINK (ADA ACCESSIBLE): ELKAY # ELUHAD111655PD. 14" x 18-1/2" x 5-3/8" DEEP. SINGLE COMPARTMENT, SELF-RIMMING, 18 GAUGE TYPE 304 STAINLESS STEEL, FIXTURE WITH FAUCET LEDGE PROVIDE A BEAD OF SILICONE CAULK BETWEEN THE SINK AND COUNTERTOP PER THE MANUFACTURES INSTALLATION INSTRUCTIONS. FAUCET: CHICAGO FAUCET # 201-A317ABVPAXKCP 8" SPREAD LEAD FREE FAUCET WITH VANDAL RESISTANT # 317 WRIST BLADE HANDLES, QUARTER TURN CERAMIC CARTRIDGES AND # E32VPJKCP 2.2 GPM TRIM: McGUIRE # LF2165CC LEAD FREE BRASS WHEEL HANDLE ANGLE STOP VALVES WITH RISERS AND ESCUTCHEONS. McGUIRE # 151M CUP STRAINER WITH 1-1/2" 17 GAUGE TAILPIECE, McGUIRE # B8912CF 1-1/2" 17 GAUGE CAST CHROME PLATED BRASS ADJUSTABLE P-TRAP WITH BRASS CLEANOUT AND ESCUTCHEON, AND PLUMBEREX "PRO-EXTREME" # X-4222 INSULATION KIT FOR WATER AND WASTE

THERMOSTATIC MIXING VALVE: POWERS # LFG480, SOLID LEAD FREE BRASS OR BRONZE BODY. THERMOSTATIC WAX ELEMENT, CORROSION RESISTANT INTERNAL PARTS, AND INTEGRAL CHECKS, ASSE 1070 COMPLIANT CAPABLE OF 1.6 GPM WITH A 20 PSI DIFFERENTIAL AND A MINIMUM FLOW RATE OF 0.25 GPM. SET TEMPERATURE TO 110F FOR DUAL TEMPERATURE LAVATORIES AND HAND SINKS, 100F FOR SINGLE TEMPERATURE LAVATORIES AND HAND SINKS AND 120F FOR SINKS. MOUNT BELOW THE PLUMBING FIXTURE WHERE INDICATED ON PLAN(S).

PLUMBING FIXTURE SCHEDULE

PLAN MARK DESCRIPTION UNDERMOUNT SINK (ADA ACCESSIBLE): ELKAY # ELUHAD361855, 35-3/4" x 18-1/2" x 5-3/8" DEEP, DOUBLE COMPARTMENT, SELF-RIMMING, 18 GAUGE TYPE 304 STAINLESS STEEL. PROVIDE A BEAD OF SILICONE CAULK BETWEEN THE SINK AND COUNTERTOP PER THE MANUFACTURES INSTALLATION INSTRUCTIONS. FAUCET: CHICAGO FAUCET # 201-A317ABVPAXKCP 8" SPREAD LEAD FREE FAUCET WITH VANDAL RESISTANT # 317 WRIST BLADE HANDLES QUARTER TURN CERAMIC CARTRIDGES AND # E32VPJKCP 2.2 GPM AFRATOR TRIM: McGUIRE # LE2165CC LEAD FREE BRASS WHEEL HANDLE ANGLE STOP VALVES WITH RISERS AND ESCUTCHEONS, (2) McGUIRE # 151M CUP STRAINERS WITH 1-1/2" 17 GAUGE TAILPIECE, McGUIRE # 111C16G17 1-1/2" 17 GAUGE CONTINUOUS WASTE, McGUIRE # B8912CF 1-1/2" 17 GAUGE CAST CHROME PLATED BRASS ADJUSTABLE P-TRAP WITH BRASS CLEANOUT AND ESCUTCHEON, AND PLUMBEREX # E03061 KITCHEN END OUTLET AND P-TRAP INSULATION KIT AND # X-4112 VALVE AND SUPPLY COVERS THERMOSTATIC MIXING VALVE: POWERS # LFG480, SOLID LEAD FREE BRASS OR BRONZE BODY, THERMOSTATIC WAX ELEMENT, CORROSION RESISTANT INTERNAL PARTS, AND INTEGRAL CHECKS, ASSE 1070 COMPLIANT, CAPABLE OF 1.6 GPM WITH A 20 PSI DIFFERENTIAL AND A MINIMUM FLOW RATE OF 0.25 GPM. SET TEMPERATURE TO 110F FOR DUAL TEMPERATURE LAVATORIES AND HAND SINKS, 100F FOR SINGLE TEMPERATURE LAVATORIES AND HAND SINKS AND 120F FOR SINKS. MOUNT BELOW THE PLUMBING FIXTURE WHERE INDICATED ON

HAND SINK (ADA ACCESSIBLE): ELKAY # #CHS-1716, 16-3/4" X 15-1/2" RECTANGULAR, WALL MOUNTED, 18 GAUGE TYPE 304 STAINLESS STEEL. BACKSPLASH AND SIDE BRACKETS AND WALL MOUNTING FAUCET: CHICAGO FAUCET # 631-218017AB 8" BACK MOUNT FAUCET WITH 7 1/4" - 8 3/4" ADJUSTABLE "G" SUPPLY ARMS, VANDAL RESISTANT #317 WRISTBLADE HANDLES, GN2A GOOSENECK SPOUT, # E61VP .5 GPM VANDAL RESISTANT LAMINAR FLOW AERATOR, QUARTER TURN CFRAMIC CARTRIDGES TRIM: McGUIRE # "PRODRAIN2" GRID DRAIN WITH 1-1/2" 17 GAUGE TAILPIECE, McGUIRE # LF2165CCLK LEAD FREE BRASS LOOSE KEY COMPRESSION ANGLE STOP VALVES WITH RISERS AND ESCUTCHEONS McGUIRE # B8912CF 1-1/2" 17 GAUGE CAST CHROME PLATED BRASS ADJUSTABLE P-TRAP AND WASTE ARM WITH CLEANOUT PLUG AND ESCUTCHEON, WALL BRACKET, PROVIDE BACKBOARD AND SECURE FIXTURE TO IT, AND PLUMBEREX "PRO-EXTREME" # X-4222 INSULATION KIT FOR WATER AND WASTE PIPES. THERMOSTATIC MIXING VALVE: POWERS # LFG480, SOLID LEAD FREE BRASS OR BRONZE BODY, THERMOSTATIC WAX ELEMENT, CORROSION RESISTANT INTERNAL PARTS, AND INTEGRAL CHECKS, ASSE 1070 COMPLIANT. CAPABLE OF 1.6 GPM WITH A 20 PSI DIFFERENTIAL AND A MINIMUM FLOW RATE OF 0.25 GPM. SET TEMPERATURE TO 110F FOR DUAL TEMPERATURE LAVATORIES AND HAND SINKS. 100F FOR SINGLE

TEMPERATURE LAVATORIES AND HAND SINKS AND 120F FOR SINKS.

MOUNT BELOW THE PLUMBING FIXTURE WHERE INDICATED ON PLAN(S). UTILITY SINK: ELKAY # WNSF-8124, ONE 24" x 24" x 14" DEEP COMPARTMENT, 8" HIGH BACKSPLASH, 14 GAUGE TYPE 304 STAINLESS STEEL, AND 16 GAUGE STAINLESS STEEL ADJUSTABLE LEGS. FAUCET: CHICAGO FAUCET #445-206578AB 3 3/8" BACK MOUNT FAUCET WITH 3" - 3 3/8" ADJUSTABLE "R" ARMS WITH INTEGRAL SHUT OFF. VANDAL RESISTANT # 369 LEVER HANDLES. L9 SWING SPOUT. # E1 FULI FLOW OUTLET, QUARTER TURN CERAMIC CARTRIDGES TRIM: ELKAY # LK24RT GRID STRAINER WITH LEVER HANDLE AND 1-1/2" TAILPIECE, AND 1-1/2" HARD COPPER TYPE "DWV" FABRICATED INDIRECT WASTE LINE ROUTED TO FLOOR SINK. THERMOSTATIC MIXING VALVE: POWERS # LFG480, SOLID LEAD FREE BRASS OR BRONZE BODY, THERMOSTATIC WAX ELEMENT, CORROSION RESISTANT INTERNAL PARTS, AND INTEGRAL CHECKS, ASSE 1070 COMPLIANT, CAPABLE OF 1.6 GPM WITH A 20 PSI DIFFERENTIAL AND A MINIMUM FLOW RATE OF 0.25 GPM. SET TEMPERATURE TO 110F FOR DUAL TEMPERATURE LAVATORIES AND HAND SINKS. 100F FOR SINGLE TEMPERATURE LAVATORIES AND HAND SINKS AND 120F FOR SINKS. MOUNT BELOW THE PLUMBING FIXTURE WHERE INDICATED ON

SK7 UNDERMOUNT SINK: ELKAY # DCFU1618. 16-1/2" x 18-1/4" x 8" DEEP. SINGLE COMPARTMENT, SELF-RIMMING, 18 GAUGE TYPE 304 STAINLESS STEEL, FIXTURE WITH FAUCET LEDGE. PROVIDE A BEAD OF SILICONE CAULK BETWEEN THE SINK AND COUNTERTOP PER THE MANUFACTURES INSTALLATION INSTRUCTIONS. FAUCET: CHICAGO FAUCET # 201-A317ABVPAXKCP 8" SPREAD LEAD FREE FAUCET WITH VANDAL RESISTANT # 317 WRIST BLADE HANDLES, QUARTER TURN CERAMIC CARTRIDGES AND # E32VPJKCP 2.2 GPM TRIM: McGUIRE # LF2165CC LEAD FREE BRASS WHEEL HANDLE ANGLE STOP VALVES WITH RISERS AND ESCUTCHEONS. McGUIRE # 151M CUP STRAINER WITH 1-1/2" 17 GAUGE TAILPIECE, McGUIRE # B8912CF 1-1/2" 17 GAUGE CAST CHROME PLATED BRASS ADJUSTABLE P-TRAP WITH BRASS CLEANOUT AND ESCUTCHEON. THERMOSTATIC MIXING VALVE: POWERS # LFG480, SOLID LEAD FREE BRASS OR BRONZE BODY, THERMOSTATIC WAX ELEMENT, CORROSION RESISTANT INTERNAL PARTS, AND INTEGRAL CHECKS, ASSE 1070 COMPLIANT, CAPABLE OF 1.6 GPM WITH A 20 PSI DIFFERENTIAL AND A |MINIMUM FLOW RATE OF 0.25 GPM. SET TEMPERATURE TO 110F FOR DUAL TEMPERATURE LAVATORIES AND HAND SINKS, 100F FOR SINGLE TEMPERATURE LAVATORIES AND HAND SINKS AND 120F FOR SINKS. MOUNT BELOW THE PLUMBING FIXTURE WHERE INDICATED ON

UNDERMOUNT SINK (ADA ACCESSIBLE): ELKAY # ELUHAD161655PD 18-1/2" x 18-1/2" x 6-7/8" DEEP, SINGLE COMPARTMENT, SELF-RIMMING 18 GAUGE TYPE 304 STAINLESS STEEL, FIXTURE WITH FAUCET LEDGE. PROVIDE A BEAD OF SILICONE CAULK BETWEEN THE SINK AND COUNTERTOP PER THE MANUFACTURES INSTALLATION INSTRUCTIONS. FAUCET: CHICAGO FAUCET # 201-A317ABVPAXKCP 8" SPREAD LEAD FREE FAUCET WITH VANDAL RESISTANT # 317 WRIST BLADE HANDLES, QUARTER TURN CERAMIC CARTRIDGES AND # E32VPJKCP 2.2 GPM AFRATOR TRIM: McGUIRE # LF2165CC LEAD FREE BRASS WHEEL HANDLE ANGLE STOP VALVES WITH RISERS AND ESCUTCHEONS, McGUIRE # 151M CUP STRAINER WITH 1-1/2" 17 GAUGE TAILPIECE, McGUIRE # B8912CF 1-1/2" 17 GAUGE CAST CHROME PLATED BRASS ADJUSTABLE P-TRAP WITH BRASS CLEANOUT AND ESCUTCHEON, AND PLUMBEREX

"PRO-EXTREME" # X-4222 INSULATION KIT FOR WATER AND WASTE THERMOSTATIC MIXING VALVE: POWERS # LFG480, SOLID LEAD FREE BRASS OR BRONZE BODY, THERMOSTATIC WAX ELEMENT, CORROSION RESISTANT INTERNAL PARTS, AND INTEGRAL CHECKS, ASSE 1070 COMPLIANT, CAPABLE OF 1.6 GPM WITH A 20 PSI DIFFERENTIAL AND A MINIMUM FLOW RATE OF 0.25 GPM. SET TEMPERATURE TO 110F FOR DUAL TEMPERATURE LAVATORIES AND HAND SINKS, 100F FOR SINGLE TEMPERATURE LAVATORIES AND HAND SINKS AND 120F FOR SINKS. MOUNT BELOW THE PLUMBING FIXTURE WHERE INDICATED ON

UNDERMOUNT SINK: ELKAY # ELUH361710, 35-3/4" x 18-1/2" x 10" DEEP, DOUBLE COMPARTMENT, SELF-RIMMING, 18 GAUGE TYPE 304 STAINLESS STEEL. PROVIDE A BEAD OF SILICONE CAULK BETWEEN THE SINK AND COUNTERTOP PER THE MANUFACTURES INSTALLATION INSTRUCTIONS. FAUCET: CHICAGO FAUCET # 201-A317ABVPAXKCP 8" SPREAD LEAD FREE FAUCET WITH VANDAL RESISTANT # 317 WRIST BLADE HANDLES, QUARTER TURN CERAMIC CARTRIDGES AND # E32VPJKCP 2.2 GPM TRIM: McGUIRE # LV2165CC LEAD FREE BRASS WHEEL HANDLE ANGLE STOP VALVES WITH RISERS AND ESCUTCHEONS, (2) McGUIRE # 151M CUP STRAINERS WITH 1-1/2" 17 GAUGE TAILPIECE, McGUIRE # 111C16G17 1-1/2" 17 GAUGE CONTINUOUS WASTE, McGUIRE # B8912CF 1-1/2" 17 GAUGE CAST CHROME PLATED BRASS ADJUSTABLE P-TRAP WITH BRASS CLEANOUT AND ESCUTCHEON. THERMOSTATIC MIXING VALVE: POWERS # LFG480, SOLID LEAD FREE BRASS OR BRONZE BODY, THERMOSTATIC WAX ELEMENT, CORROSION RESISTANT INTERNAL PARTS, AND INTEGRAL CHECKS, ASSE 1070 COMPLIANT, CAPABLE OF 1.6 GPM WITH A 20 PSI DIFFERENTIAL AND A MINIMUM FLOW RATE OF 0.25 GPM. SET TEMPERATURE TO 110F FOR DUAL TEMPERATURE LAVATORIES AND HAND SINKS, 100F FOR SINGLE TEMPERATURE LAVATORIES AND HAND SINKS AND 120F FOR SINKS. MOUNT BELOW THE PLUMBING FIXTURE WHERE INDICATED ON

x 18-1/2" x 5-3/8" DEEP, DOUBLE COMPARTMENT, SELF-RIMMING, 18 GAUGE TYPE 304 STAINLESS STEEL. PROVIDE A BEAD OF SILICONE CAULK BETWEEN THE SINK AND COUNTERTOP PER THE MANUFACTURES INSTALLATION INSTRUCTIONS. FAUCET: CHICAGO FAUCET # 201-A317ABVPAXKCP 8" SPREAD LEAD FREE FAUCET WITH VANDAL RESISTANT # 317 WRIST BLADE HANDLES, QUARTER TURN CERAMIC CARTRIDGES AND # E32VPJKCP 2.2 GPM TRIM: McGUIRE # LV2165CC LEAD FREE BRASS WHEEL HANDLE ANGLE STOP VALVES WITH RISERS AND ESCUTCHEONS. (2) McGUIRE # 151M CUP STRAINERS WITH 1-1/2" 17 GAUGE TAILPIECE, McGUIRE # 111C16G17 1-1/2" 17 GAUGE CONTINUOUS WASTE, McGUIRE # B8912CF 1-1/2" 17 GAUGE CAST CHROME PLATED BRASS ADJUSTABLE P-TRAP WITH BRASS CLEANOUT AND ESCUTCHEON AND PLUMBEREX

UNDERMOUNT SINK (ADA ACCESSIBLE): ELKAY # ELUHAD31186, 30-3/4"

"PRO-EXTREME" # X-4222 INSULATION KIT FOR WATER AND WASTE THERMOSTATIC MIXING VALVE: POWERS # LFG480, SOLID LEAD FREE BRASS OR BRONZE BODY THERMOSTATIC WAX FLEMENT CORROSION RESISTANT INTERNAL PARTS, AND INTEGRAL CHECKS, ASSE 1070 COMPLIANT, CAPABLE OF 1.6 GPM WITH A 20 PSI DIFFERENTIAL AND A MINIMUM FLOW RATE OF 0.25 GPM. SET TEMPERATURE TO 110F FOR DUAL TEMPERATURE LAVATORIES AND HAND SINKS, 100F FOR SINGLE TEMPERATURE LAVATORIES AND HAND SINKS AND 120F FOR SINKS. MOUNT BELOW THE PLUMBING FIXTURE WHERE INDICATED ON PLAN(S).

PLUMBING FIXTURE SCHEDULE

PLAN MARK DESCRIPTION SINK: SINK IS INTEGRAL WITH THE CASEWORK AND SPECIFIED IN ANOTHER DIVISION. FAUCET: CHICAGO FAUCET # 201-A317ABVPAXKCP 8" SPREAD LEAD FREE FAUCET WITH VANDAL RESISTANT # 317 WRIST BLADE HANDLES, QUARTER TURN CERAMIC CARTRIDGES AND # E32VPJKCP 2.2 GPM TRIM: CHICAGO # 1025-ABCP LEAD FREE BRASS LOOSE KEY COMPRESSION ANGLE STOP VALVES WITH ESCUTCHEONS. BRASSCRAFT SERIES "S1" BRAIDED STAINLESS STEEL FLEXIBLE RISERS, LENGTH AS REQUIRED, ORION # UTP 1-1/2" POLYPROPYLENE FULL DROP UNION P-TRAP, PIPE TO WALL WITH ESCUTCHEON, ORION # RLNS 1-1/2" IPS TO MECHANICAL JOINT SINK ADAPTER AND ORION # WA-1 POLYPROPYLENE DRAIN WITH 1-1/2" IPS TAILPIECE. THERMOSTATIC MIXING VALVE: POWERS # LFG480, SOLID LEAD FREE BRASS OR BRONZE BODY, THERMOSTATIC WAX ELEMENT, CORROSION RESISTANT INTERNAL PARTS, AND INTEGRAL CHECKS, ASSE 1070 COMPLIANT, CAPABLE OF 1.6 GPM WITH A 20 PSI DIFFERENTIAL AND A MINIMUM FLOW RATE OF 0.25 GPM. SET TEMPERATURE TO 110F FOR DUAL TEMPERATURE LAVATORIES AND HAND SINKS, 100F FOR SINGLE TEMPERATURE LAVATORIES AND HAND SINKS AND 120F FOR SINKS. MOUNT BELOW THE PLUMBING FIXTURE WHERE INDICATED ON

SHOWER VALVE: WATTS "HYDROGUARD" # PB410, PISTON TYPE PRESSURE BALANCING MIXING VALVE WITH BRASS STEM, MEETING ASSE 1016P. SINGLE BLADE LEVER HANDLE. SET ADJUSTABLE LIMIT STOP SCREW TO 110F, INTEGRAL SERVICE STOPS, 1.5 GPM "HYDROGUARD" SHOWER HEAD WITH ARM AND FLANGE. SHOWER VALVE (ADA ACCESSIBLE): WATTS "HYDROGUARD" # PB410 PISTON TYPE PRESSURE BALANCING MIXING VALVE WITH BRASS STEM, MEETING ASSE 1016P, SINGLE BLADE LEVER HANDLE, SET ADJUSTABLE LIMIT STOP SCREW TO 110F, INTEGRAL SERVICE STOPS, DIVERTER VALVE. 1.5 GPM "HYDROGUARD" SHOWER HEAD WITH ARM AND FLANGE, 2,5 GPM WALL / HAND SHOWER WITH FLEXIBLE METAL HOSE, IN-LINE VACUUM BREAKER, WALL CONNECTION AND FLANGE, AND 30" SLIDE BAR. TRAP PRIMER: PRECISION PLUMBING PRODUCTS # PR-500 "PRIME RITE", CORROSION RESISTANT BRASS BODY, "O" RING SEALS, 1/2" INLET AND OUTLET, AND INTEGRAL VACUUM BREAKER. INSTALL THE VALVE AT A MINIMUM OF 12" ABOVE FINISHED FLOOR.

TIME SWITCH: INTERMATIC #ET1705CSPST, 7 DAY, ONE CIRCUIT-SINGLE POLE SINGLE THROW, ELECTRONIC TIME SWITCH OR EQUAL BY TORK. TIME SWITCH SHALL BE MOTOR RATED (1 H.P. @ 120 VOLT. SINGLE PHASE). MINIMUM OF 20 SET POINTS (14 ON/OFF CYCLES) AND BATTERY BACK UP. COORDINATE WITH DIVISION 16 FOR INSTALLATION AND INTERLOCK OF TIME SWITCH IN SERIES WITH THE AQUASTAT AND RECIRCULATION PUMP. URINAL: AMERICAN STANDARD # 6561,017 "TRIMBROOK" WHITE VITREOUS CHINA FIXTURE WITH FLUSHING RIM, 3/4" TOP SPUD, AND SIPHON FLUSH ACTION. VALVE - TOTO TEU1GNC-22, "ECO-POWER" WATER TURBINE AND BATTERY POWERED 10 GALLON PER FLUSH EXPOSED

CHROME-PLATED, SENSOR OPERATED PISTON TYPE FLUSH VALVE

MECHANICAL OVERRIDE PUSH BUTTON, WITH BRASS PISTON WITH

CHLORAMINE RESISTANT SEAT AND SEALS AND SELF-CLEANING

MECHANISM, ESCUTCHEON, INTEGRAL SCREWDRIVER STOP, VACUUM BREAKER, 1-1/4" FLUSH TUBE AND SWEAT ADAPTER KIT. TRIM: SUITABLE CARRIER WITH STANCHIONS TO FLOOR. URINAL (ADA ACCESSIBLE): AMERICAN STANDARD # 6561.017 'TRIMBROOK" WHITE VITREOUS CHINA FIXTURE WITH FLUSHING RIM, 3/4" TOP SPUD, AND SIPHON FLUSH ACTION, VALVE - TOTO TEU1GNC-22, "ECO-POWER" WATER TURBINE AND BATTERY POWERED, 1.0 GALLON PER FLUSH, EXPOSED, CHROME-PLATED. SENSOR OPERATED PISTON TYPE FLUSH VALVE MECHANICAL OVERRIDE PUSH BUTTON, WITH BRASS PISTON WITH CHLORAMINE RESISTANT SEAT AND SEALS AND SELF-CLEANING MECHANISM, ESCUTCHEON, INTEGRAL SCREWDRIVER STOP, VACUUM

BREAKER, 1-1/4" FLUSH TUBE AND SWEAT ADAPTER KIT

TRIM: SUITABLE CARRIER WITH STANCHIONS TO FLOOR.

WALL-MOUNTED WATER CLOSET: AMERICAN STANDARD # 2257.001 'AFWALL" WHITE VITREOUS CHINA FIXTURE WITH ELONGATED UNIVERSAL BOWL AND DIRECT-FED SIPHON JET ACTION. VALVE: TOTO TET1GNC-32, "ECO-POWER" WATER TURBINE AND BATTERY POWERED, 1.6 GALLON PER FLUSH, EXPOSED, CHROME-PLATED. SENSOR OPERATED PISTON TYPE FLUSH VALVE MECHANICAL OVERRIDE PUSH BUTTON, WITH BRASS PISTON WITH CHLORAMINE RESISTANT SEAT AND SEALS AND SELF-CLEANING MECHANISM, ESCUTCHEON, INTEGRAL SCREWDRIVER STOP, VACUUM BREAKER AND SWEAT ADAPTER KIT TRIM: CHURCH # 9500SSC WHITE OPEN-FRONT CONTOURED, SOLID PLASTIC, HEAVY DUTY, SEAT LESS COVER WITH SELF-SUSTAINING CHECK HINGES AND STAINLESS STEEL BOLTS. PROVIDE SUITABLE

WALL-MOUNTED WATER CLOSET (ADA ACCESSIBLE): AMERICAN STANDARD # 2257.001 "AFWALL" WHITE VITREOUS CHINA FIXTURE WITH ELONGATED UNIVERSAL BOWL AND DIRECT-FED SIPHON JET ACTION. VALVE: TOTO TET1GNC-32, "ECO-POWER" WATER TURBINE AND BATTERY POWERED, 1.6 GALLON PER FLUSH, EXPOSED, CHROME-PLATED, SENSOR OPERATED PISTON TYPE FLUSH VALVE MECHANICAL OVERRIDE PUSH BUTTON, WITH BRASS PISTON WITH CHLORAMINE RESISTANT SEAT AND SEALS AND SELF-CLEANING MECHANISM, ESCUTCHEON, INTEGRAL SCREWDRIVER STOP, VACUUM BREAKER, AND SWEAT ADAPTER KIT. TRIM: CHURCH # 9500SSC WHITE OPEN-FRONT CONTOURED, SOLID PLASTIC, HEAVY DUTY, SEAT LESS COVER WITH SELF-SUSTAINING CHECK HINGES AND STAINLESS STEEL BOLTS. PROVIDE SUITABLE FIXTURE CARRIER WALL CLEANOUT: JAY R. SMITH # 4530S, CAST IRON CLEANOUT TEE

FIXTURE CARRIER.

AND IRON PLUG WITH GASKET SEAL. REFER TO SPECIFICATIONS FOR THREE STATION LAVATORY: BRADLEY "VERGE" # LVSD3-SHANK-GLACIER-STAIN 90" RECTANGULAR WALL HUNG MULTI-LAV STAINLESS STEEL FRONT ACCESS PANEL, AND WASTE, LESS LIQUID SOAP DISPENSER. ANCHOR BACKSPLASH AND HOUSING FRAMEWORK SECURELY TO WALL. INSTALLATION SHALL CONFORM TO ADA REQUIREMENTS. INSTALL "WCO" UNDERNEATH WASTE CONNECTION. 3 FAUCETS: SLOAN # EFX-250-CP SINGLE HOLE, BATTERY, SENSOR OPERATED FAUCET LESS WITH "Y" STRAINER FILTERED SOLENOID VALVE AND 0.5 GPM AERATOR THERMOSTATIC MIXING VALVE: POWERS # LFG480, SOLID LEAD FREE BRASS OR BRONZE BODY, THERMOSTATIC WAX ELEMENT, CORROSION RESISTANT INTERNAL PARTS, AND INTEGRAL CHECKS, ASSE 1070 COMPLIANT, CAPABLE OF 1.6 GPM WITH A 20 PSI DIFFERENTIAL AND A

MINIMUM FLOW RATE OF 0.25 GPM. SET TEMPERATURE TO 110F FOR

DUAL TEMPERATURE LAVATORIES AND HAND SINKS. 100F FOR SINGLI

TEMPERATURE LAVATORIES AND HAND SINKS AND 120F FOR SINKS.

MOUNT BELOW THE PLUMBING FIXTURE WHERE INDICATED ON

COUNTER SUNK PLUG, STAINLESS STEEL ROUND COVER AND SCREW

THREE STATION LAVATORY: BRADLEY # SN2003-A-AST4-STD-TMA-NSD-BS 36" ELLIPTICAL FLOOR MOUNTED MULTI-LAV OF 16 GAUGE STAINLESS STEEL CONSTRUCTION WITH BACKSPLASH, INDIVIDUAL PNEUMATIC SECTIONAL CONTROLS, 0.5 GPM VANDAL RESISTANT SPRAY NOZZLES, INDIVIDUAL CHECKSTOPS, INTEGRAL THERMOSTATIC MIXING VALVE AND WASTE. LESS LIQUID SOAP DISPENSOR. ANCHOR BACKSPLASH AND HOUSING FRAMEWORK SECURELY TO WALL AND FLOOR. INSTALLATION SHALL CONFORM TO ADA REQUIREMENTS. INSTALL "WCO" UNDERNEATH WASTE CONNECTION. TRIM: McGUIRE # LF2165CC LEAD FREE WHEEL HANDLE ANGLE STOP VALVES WITH RISERS AND ESCUTCHEONS, McGUIRE # 8912-C-F 1-1/2" 17 GAUGE TUBULAR CHROME PLATED BRASS ADJUSTABLE P-TRAP WITH BRASS CLEANOUT AND ESCUTCHEON. THERMOSTATIC MIXING VALVE: POWERS # LFG480, SOLID LEAD FREE BRASS OR BRONZE BODY, THERMOSTATIC WAX ELEMENT, CORROSION RESISTANT INTERNAL PARTS, AND INTEGRAL CHECKS, ASSE 1070 COMPLIANT, CAPABLE OF 1.6 GPM WITH A 20 PSI DIFFERENTIAL AND A MINIMUM FLOW RATE OF 0.25 GPM. SET TEMPERATURE TO 110F FOR DUAL TEMPERATURE LAVATORIES AND HAND SINKS. 100F FOR SINGLE TEMPERATURE LAVATORIES AND HAND SINKS AND 120F FOR SINKS. MOUNT BELOW THE PLUMBING FIXTURE WHERE INDICATED ON

SINGLE STATION LAVATORY: BRADLEY "VERGE" # LVSD1-SHANK-GLACIER-STAIN 90" RECTANGULAR WALL HUNG MULTI-LAV STAINLESS STEEL FRONT ACCESS PANEL, AND WASTE, LESS LIQUID SOAP DISPENSER. ANCHOR BACKSPLASH AND HOUSING FRAMEWORK SECURELY TO WALL. INSTALLATION SHALL CONFORM TO ADA REQUIREMENTS. INSTALL "WCO" UNDERNEATH WASTE FAUCET: SLOAN # EFX-250-CP SINGLE HOLE, BATTERY, SENSOR OPERATED FAUCET LESS WITH "Y" STRAINER FILTERED SOLENOID VALVE AND 0.5 GPM AERATOR THERMOSTATIC MIXING VALVE: POWERS # LFG480, SOLID LEAD FREE BRASS OR BRONZE BODY, THERMOSTATIC WAX ELEMENT, CORROSION RESISTANT INTERNAL PARTS, AND INTEGRAL CHECKS, ASSE 1070 COMPLIANT, CAPABLE OF 1.6 GPM WITH A 20 PSI DIFFERENTIAL AND A MINIMUM FLOW RATE OF 0.25 GPM. SET TEMPERATURE TO 110F FOR DUAL TEMPERATURE LAVATORIES AND HAND SINKS. 100F FOR SINGLE TEMPERATURE LAVATORIES AND HAND SINKS AND 120F FOR SINKS. MOUNT BELOW THE PLUMBING FIXTURE WHERE INDICATED ON

FIXTURE BRANCH CONNECTION SCHEDULE

DESCRIPTION

WATER HAMMER ARRESTER: PRECISION PLUMBING PRODUCTS, HARD

DRAWN COPPER BODY WITH WROUGHT COPPER FITTINGS, PISTON

TYPE WITH LUBRICATED EPDM "O" RING SEALS, MEETING ASSE 1010

PLANS. PROVIDE SIZE "A" UNLESS SHOWN OTHERWISE ON THE PLANS

OR PDI WH-201. PROVIDE PDI SIZES "A" THROUGH "F" AS SHOWN ON

WASHING MACHINE BOX: GUY GRAY MODEL # B200TS, 20 GAUGE

TRIM: PROVIDE 24" LONG TAIL PIECE AND 2" DIAMETER P-TRAP.

GALVANIZED STEEL BOX, 18 GAUGE STEEL FACEPLATE, TOP INLET

WATER SUPPLIES WITH ANGLED WHEEL HANDLE 3/4" HOSE BIBBS, AND

PLUMBING FIXTURE SCHEDULE

FIXTURE	COLD WATER	HOT WATER	WASTE	VENT
6" FLOOR DRAIN			6"	3"
DRINKING FOUNTAIN	1/2"		2"	1 1/2"
FLOOR DRAIN			2"	2"
JANITOR'S SINK	1/2"	1/2"	3"	2"
LAVATORY/HAND SINK	1/2"	1/2"	2"	1 1/2"
SINK	1/2"	1/2"	2"	2"
URINAL	1"	1"	2"	2"
WASHFOUNTAIN	1"	1"	2"	1 1/2"
WATER CLOSET (FLUSH VALVE)	1 1/4"		4"	2"

NOTE: PIPE SIZES SHOWN ARE MINIMUM

2" BOTTOM OUTLET DRAIN.

ELECTRIC STORAGE WATER HEATER SCHEDULE												
	MANUFACTURE		AREA	TANK SIZE	ELE	CTRICAL DATA		RECOVERY				
MARK	R	MODEL#	SERVED	(GALLONS)	VOLTS	PHASE	KW	(GPH)	NOTES			
WH10	A.O. SMITH	#DEL-20	AREA F	20	208	1	3	12	A, B			
WH11	A.O. SMITH	#DRE-52	AREA S	52	277	3	0		A, B			

PLAN MARK

WHA

100°F TEMPERATURE RISE WITH 140°F OPERATING TEMPERATURE

DUAL ELEMENT WIRED FOR NON-SIMULTANEOUS OPERATION DUAL ELEMENT WIRED FOR SIMULTANEOUS OPERATION WITH UNBALANCED THREE PHASE CIRCUIT FURNISH WITH IMMERSION THERMOSTAT

"LOW BOY" DESIGN

GAS STORAGE WATER HEATER SCHEDULE														
		AREA	TANK SIZE	ELECTRIC	CAL DATA		RECOVERY							
MANUFACTURER	MODEL	SERVED	(GALLONS)	VOLTS	PHASE	INPUT (MBH)	(GPH)	WEIGHT (LBS)	NOTES					
A.O. SMITH	#BTXL 100	AREA A	75	120	1	100	115	1050	A, B, C, D					
A.O. SMITH	#BTXL 100	AREA A	75	120	1	100	115	1050	A, B, C, D					
A.O. SMITH	#BTXL 100	AREA B	75	120	1	100	115	1050	A, B, C, D					
A.O. SMITH	#BTXL 100	AREA B	75	120	1	100	115	1050	A, B, C, D					
A.O. SMITH	#BTXL 100	AREA C	75	120	1	100	115	1050	A, B, C, D					
A.O. SMITH	#BTXL 100	AREA C	75	120	1	100	115	1050	A, B, C, D					
A.O. SMITH	#BTH 150	AREA G	100	120	1	150	178	1375	A, B, C, D					
A.O. SMITH	#BTH 150	AREA G	100	120	1	150	178	1375	A, B, C, D					

A.O. SMITH #BTH 150 AREA G 100 120 1 150 178 1375 A, B, C, D

100° TEMPERATURE RISE WITH 140°F OPERATING TEMPERATURE AUTOMATIC FLUE DAMPER INTERLOCKED WITH WATER HEATER FIRE CONTROL FURNISH WITH A. O. SMITH # 9003910105 FACTORY COMBUSTION AIR INTAKE AND EXHAUST KIT.

PLUMBING EXPANSION TANK SCHEDULE

			MIN.			
			ACCEPTANCE	AIR		
		TANK SIZE	VOLUME	PRESSURE		
MANUFACTURER	MODEL	(GALLONS)	(GALLONS)	SETTING (PSI)	SERVICE	NOTES
AMTROL	ST-25V	10.3	4.6	125	WH1 WH2	Α
AMTROL	ST-25V	10.3	4.6	125	WH3 WH4	А
AMTROL	ST-25V	10.3	4.6	125	WH5 WH6	А
AMTROL	ST-60V	34	15.3	125	WH7 WH8 WH9	А
AMTROL	ST-5	2	0.9	125	WH10	А
AMTROL	ST-8	3.2	0	0	WH11	Α
	AMTROL AMTROL AMTROL AMTROL AMTROL	AMTROL ST-25V AMTROL ST-25V AMTROL ST-25V AMTROL ST-60V AMTROL ST-5	MANUFACTURER MODEL (GALLONS) AMTROL ST-25V 10.3 AMTROL ST-25V 10.3 AMTROL ST-25V 10.3 AMTROL ST-60V 34 AMTROL ST-5 2	MANUFACTURER MODEL TANK SIZE (GALLONS) VOLUME (GALLONS) AMTROL ST-25V 10.3 4.6 AMTROL ST-25V 10.3 4.6 AMTROL ST-25V 10.3 4.6 AMTROL ST-60V 34 15.3 AMTROL ST-5 2 0.9	MANUFACTURER MODEL TANK SIZE (GALLONS) VOLUME (GALLONS) PRESSURE SETTING (PSI) AMTROL ST-25V 10.3 4.6 125 AMTROL ST-25V 10.3 4.6 125 AMTROL ST-25V 10.3 4.6 125 AMTROL ST-60V 34 15.3 125 AMTROL ST-5 2 0.9 125	MANUFACTURER MODEL TANK SIZE (GALLONS) VOLUME (GALLONS) PRESSURE SETTING (PSI) SERVICE AMTROL ST-25V 10.3 4.6 125 WH1 WH2 AMTROL ST-25V 10.3 4.6 125 WH3 WH4 AMTROL ST-25V 10.3 4.6 125 WH5 WH6 AMTROL ST-60V 34 15.3 125 WH7 WH8 WH9 AMTROL ST-5 2 0.9 125 WH10

FURNISH WITH CONDENSATE NEUTRALIZATION KIT TO MATCH HEATER INPUT, AO SMITH # CNS SERIES

A. CHARGE TANK WITH AIR TO IDENTICAL PRESSURE AS STATIC DOMESTIC WATER PRESSURE.

RECIRCULATION PUMP SCHEDULE														
					HEAD	CONNECTION	ELECTF							
MARK	MANUFACTURER	MODEL	LOCATION	GPM	(FT.)	SIZE	VOLTS	PH	HP	NOTES				
RP1	BELL & GOSSETT	NBF-45	LVL1 - AREA A	5.5	17	1 1/4"	120	1	1/18	A, B, C, D				
RP2	BELL & GOSSETT	NBF-45	LVL1 - AREA B	5.5	17	1 1/4"	120	1	1/18	A, B, C, D				
RP3	BELL & GOSSETT	NBF-45	LVL1 - AREA C	5.5	17	1 1/4"	120	1	1/18	A, B, C, D				
RP4	BELL & GOSSETT	NBF-12U	AREA F	1	11	3/4"	120	1	1/18	A, B, C, D				
RP5	BELL & GOSSETT	NBF-36	AREA G	9	17	1 1/4"	120	1	1/6	A, B, C, D				
RP6	BELL & GOSSETT	NBF-12U	AREA S	1.5	11	1"	120	1	1/6	A, B, C, D				

ALL LEAD FREE CAST BRONZE BOOSTER.

BELOW SET POINT.

PROVIDE WITH STRAINER UPSTREAM OF PUMP. PROVIDE ADJUSTABLE, SURFACE MOUNTED AQUASTAT - HONEYWELL L6006C SET AQUASTAT TO SHUT OFF RECIRCULATION PUMP AT WATER HEATER SET POINT AND ON AT 10°F

ELEVATOR SLIMP DLIMP SCHEDLILE (3/1/4 HD AND SMALLER)

	AIONS	OIVIT I	DOLL	. (3/4 LIF AND SWALLEN)					
					DISCHARGE	ELECTRICAL			
MARK	MANUFACTURER	MODEL	GPM	HEAD (FT.)	SIZE (IN.)	VOLTS	PH	HP	NOTES
ESP1	WEIL	1411-538	50	21	2"	120	3	0.5	A, B, C, D, E

PROVIDE WEIL #8245 FLOAT SWITCH WITH POWER CORD AND PIGGYBACK PLUG PROVIDE WITH WEIL #8341K1015 HIGH LEVEL ALARM WITH AUXILIARY CONTACT, REFER TO SPECIFICATIONS

PROVIDE 2" DISCHARGE PIPING, SHUTOFF VALVE AND ZOELLER #30-0030 FLAPPER NON-CLOG CHECK VALVE REFER TO DETAIL FOR MORE INSTALLATION INFORMATION INSTALL IN 24"SQUARE x 24" DEEP SUMP PIT LOCATED IN ELEVATOR PIT, SEE ARCHITECTURAL DRAWINGS.

	GAS PRES	SURE F	REGULATO	OR SCHEI	DULE FOR	2 PSI SYSTEM	S
ARK	MANUFACTURER /	VALVE	VALVE BODY	MAX. FLOW	INLET PRESSURE	OUTLET PRESSURE	NOTES
	MODEL#	TYPE	SIZE (INCHES)	RATE CFH	PSI	INCHES WATER COLUMN	
PR1	PIETRO-FIORENTINI 31051	С	1/2"	552	1	7"	A, B, C, D, E, F, G & H
PR2	PIETRO-FIORENTINI 31153	С	1-1/4"	3,735	1	7"	A, B, C, D, E, F, G & H

C = SELF CONTAINED "DIRECT ACTING" DIAPHRAGM TYPE WITH INTERNAL VENT LIMITER DROOP = 1" WATER COLUMN MAXIMUM

65# ALUMINUM BODY, SCREWED CONNECTIONS AND OVERPRESSURE PROTECTION TO 25# MAXIMUM FLOW RATE SCHEDULED, MATCH BODY SIZE AND MAXIMUM FLOW RATE TO EQUIPMENT FLOW RATE. REFER TO EQUIPMENT SHOP DRAWINGS FOR EXACT LOADS LISTED TO MEET ANSI Z21.80 / CSA 6.22 WITH CSA LISTING STAMP ON REGULATOR BODY

GAS PRESSURE REGULATOR INLET PRESSURE = OPERATING PRESSURE - DESIGN FRICTION LOSS

2PSI MAXIMUM INLET PRESSURE & 1 PSI MINIMUM INLET PRESSURE PROVIDE EXTERNAL VENT LIMITER (WHERE APPROVED BY LOCAL AUTHORITIES) FOR INDOOR INSTALLATION AND INSTAL PER SPECIFICATIONS. INSTALL OUTDOORS PER SPECIFICATIONS.

	RECIRCULATION PUMP SCHEDULE														
					HEAD	CONNECTION	ELECTF								
MARK	MANUFACTURER	MODEL	LOCATION	GPM	(FT.)	SIZE	VOLTS	PH	HP	NOTES					
RP1	BELL & GOSSETT	NBF-45	LVL1 - AREA A	5.5	17	1 1/4"	120	1	1/18	A, B, C, D					
RP2	BELL & GOSSETT	NBF-45	LVL1 - AREA B	5.5	17	1 1/4"	120	1	1/18	A, B, C, D					
RP3	BELL & GOSSETT	NBF-45	LVL1 - AREA C	5.5	17	1 1/4"	120	1	1/18	A, B, C, D					
RP4	BELL & GOSSETT	NBF-12U	AREA F	1	11	3/4"	120	1	1/18	A, B, C, D					
RP5	BELL & GOSSETT	NBF-36	AREA G	9	17	1 1/4"	120	1	1/6	A, B, C, D					
RP6	BELL & GOSSETT	NBF-12U	AREA S	1.5	11	1"	120	1	1/6	A, B, C, D					

ALL LEAD FREE CAST BRONZE BOOSTER.

MANUFACTURER MODEL

DOMESTIC GROUNDFOS CRE 15-3 T-VFD

PROVIDE WITH STRAINER UPSTREAM OF PUMP. PROVIDE ADJUSTABLE SURFACE MOUNTED ADJUSTAT - HONEYWELL 16006C

	TAQUASTAT TO SHUT OFF RECIRCULATION PUMP AT WATER HEATER SET POINT AND ON AT 10°F BELOW SET POINT.												
DOMESTIC BOOSTER PUMP SCHEDULE													
				SYSTEM	INDIVIDUAL	SUCTION	DISCHARGE	ELECT	RICAL (NC	TE B)			
TYPE	DISCHARGE HEADER	SUCTION HEADER	NUMBER OF	FLOW RATE	PUMP	HEADER SIZE	HEADER SIZE						
(NOTE A)	PRESSURE (PSI)	PRESSURE (PSI)	PUMPS	(GPM)	CAPACITY (%)	(IN.)	(IN.)	VOLTS	PHASE	HP			
					1	1							

NOTES:

BOOSTER

PLAN(S).

- BOOSTER PUMP CONFIGURATION TYPES: T-VFD = TRIPLEX W/ VARIABLE FREQUENCY DRIVE FOR EACH VERTICAL MULTI-STAGE PUMP (GRUNDFOS #CRE 15-3). REFER TO SPECIFICATIONS FOR MORE INFORMATION. MOTOR HORSEPOWER SHOWN IF FOR ONE PUMP.
- PROVIDE WITH CONTROL PANEL. REFER TO SPECIFICATIONS FOR MORE INFORMATION.
- MINIMUM DISCHARGE HEADER PRESSURE IS 77.99 PSI. PROVIDE PUMPS WITH SCHEDULED DESIGN FLOW RATE WITH TOTAL DYNAMIC HEAD = DISCHARGE PRESSURE - SUCTION PRESSURE + 2PSI FOR SYSTEM LOSSES

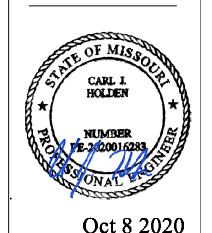
ACCUMULATOR

60.0

TANK SIZE (GAL.) NOTES

A, B, C, D, E

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LEE'S SUMMIT R-7 SCHOOL DISTRICT

EE'S SUMMIT R-7 SCHOOL DIS 01 SE BAILEY ROAD E'S SUMMIT, MO 64081

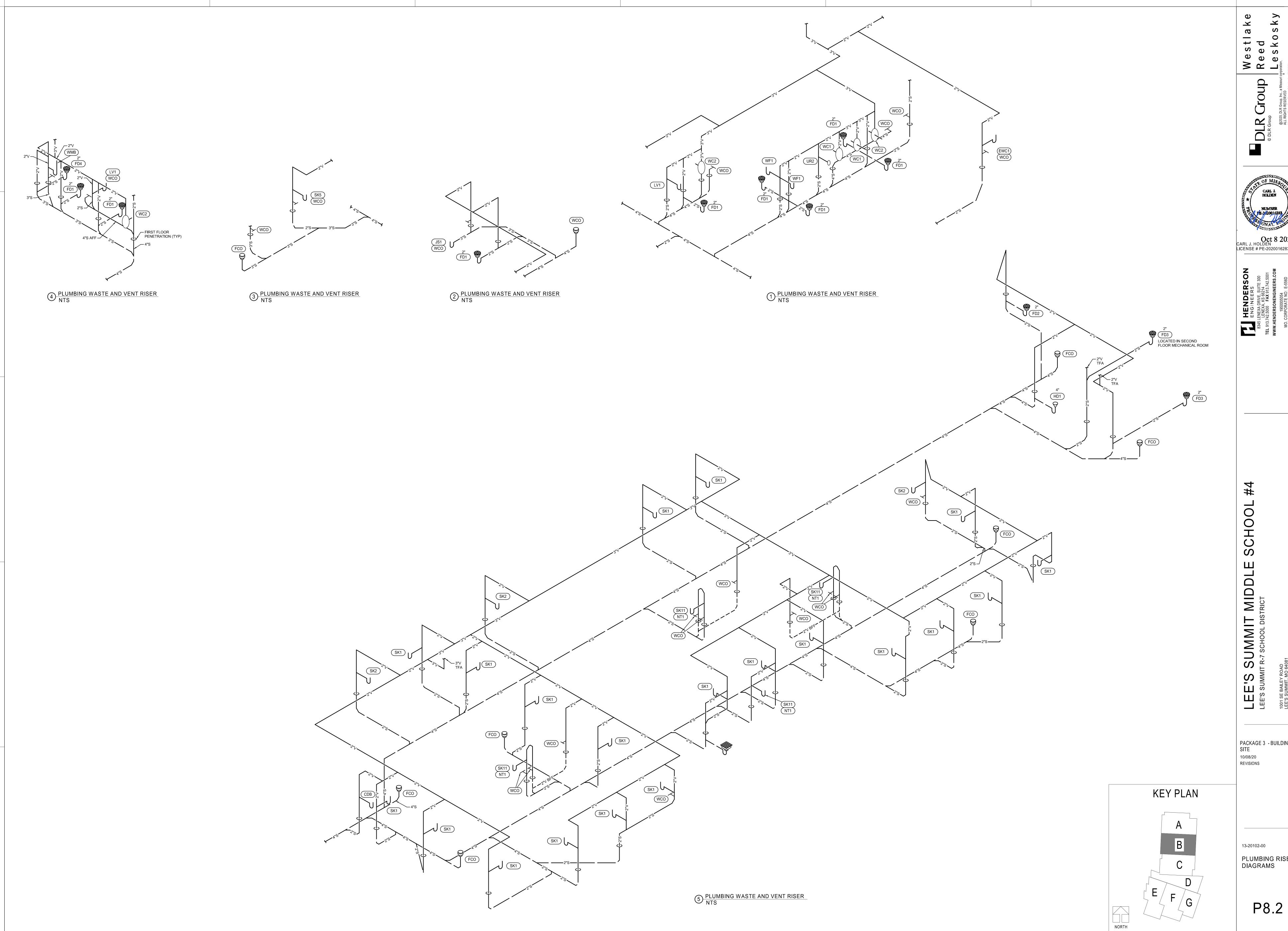
PACKAGE 3 - BUILDING & SITE
10/08/20
REVISIONS

KEY PLAN

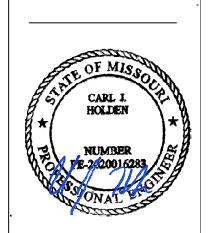
A
B
C
C
F
G

13-20102-00
PLUMBING RISER DIAGRAMS

P8.1



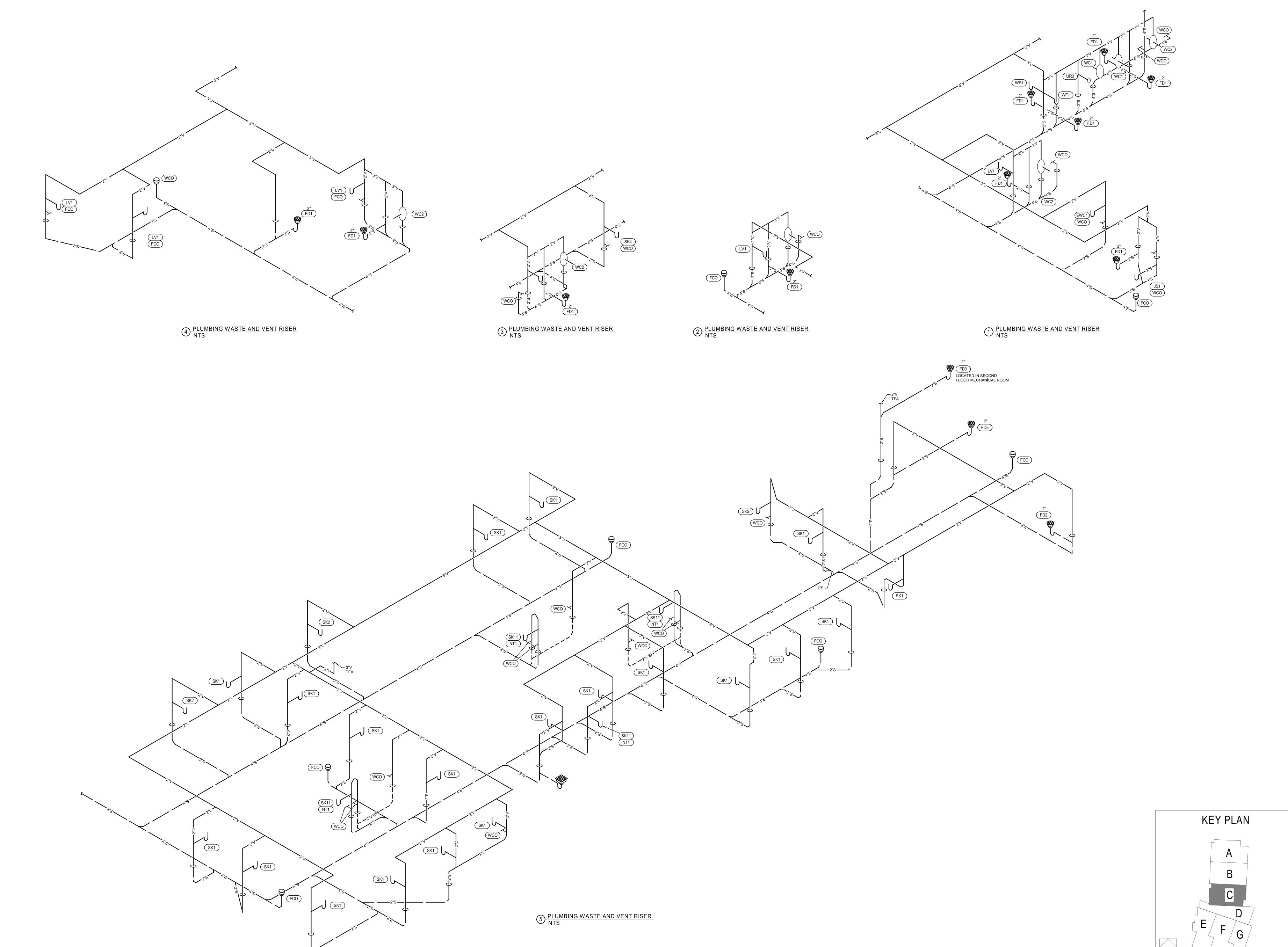
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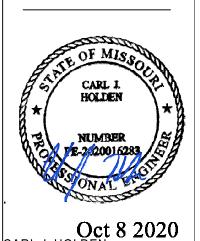
PACKAGE 3 - BUILDING & SITE

PLUMBING RISER DIAGRAMS



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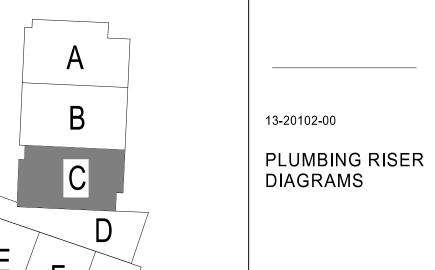


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LEE'S SUMMIT R-7 SCHOOL DISTRICT

PACKAGE 3 - BUILDING & SITE 10/08/20 REVISIONS



P8.3

10/08/20 REVISIONS

13-20102-00

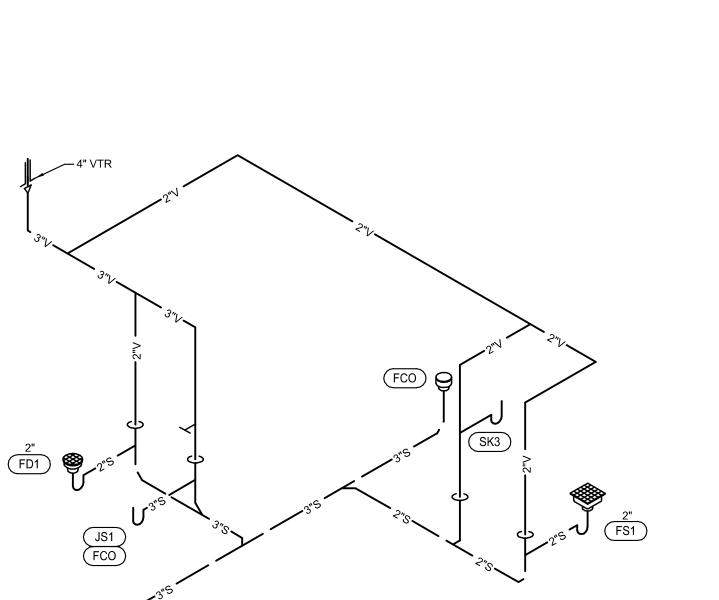
PLUMBING RISER DIAGRAMS

P8.4

PACKAGE 3 - BUILDING & SITE

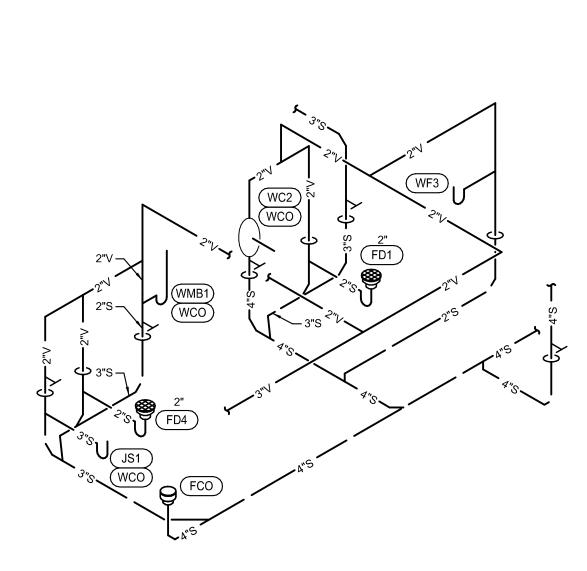


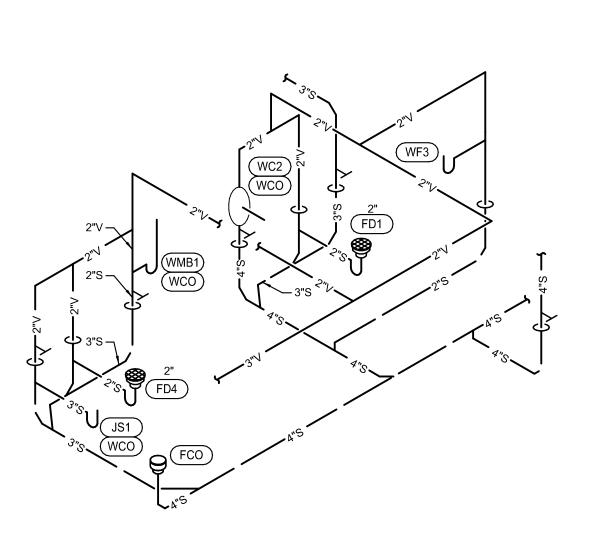
KEY PLAN



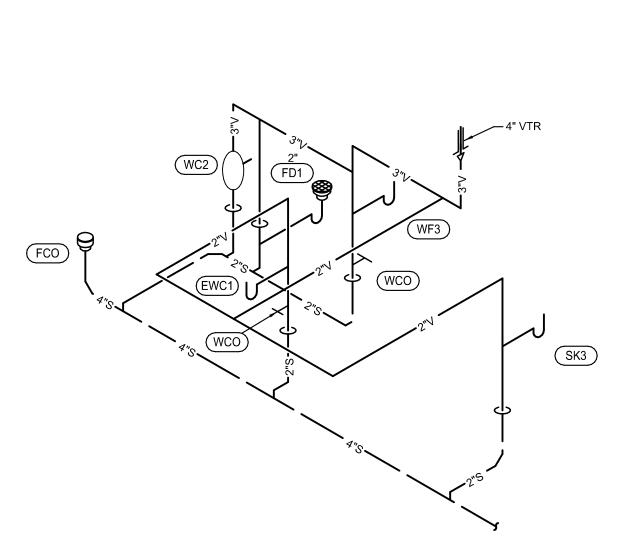
4 PLUMBING WASTE AND VENT RISER NTS

1 PLUMBING WASTE AND VENT RISER NTS



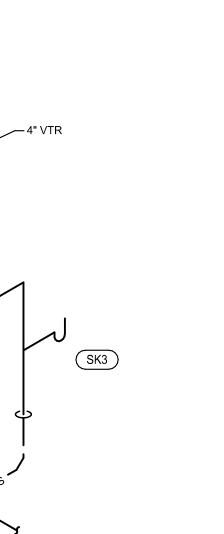


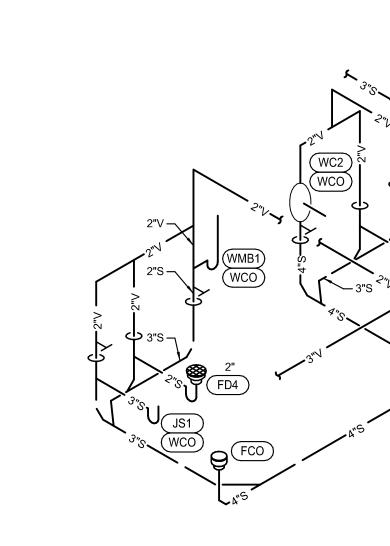
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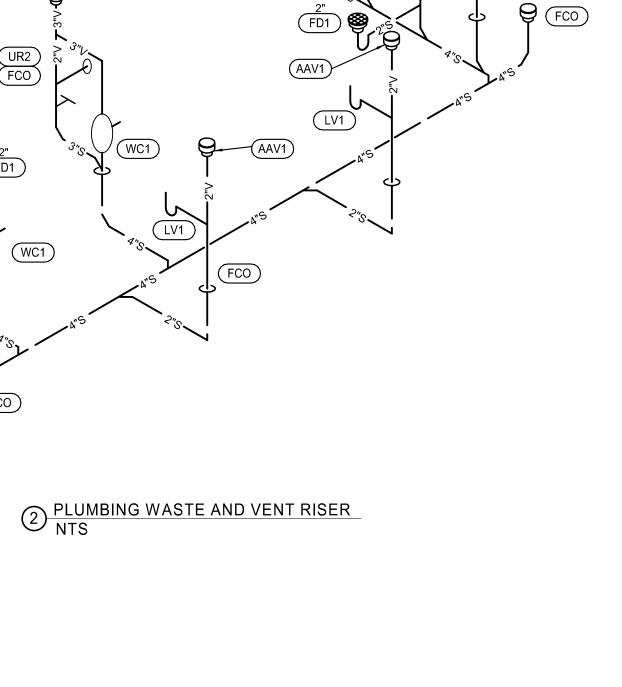


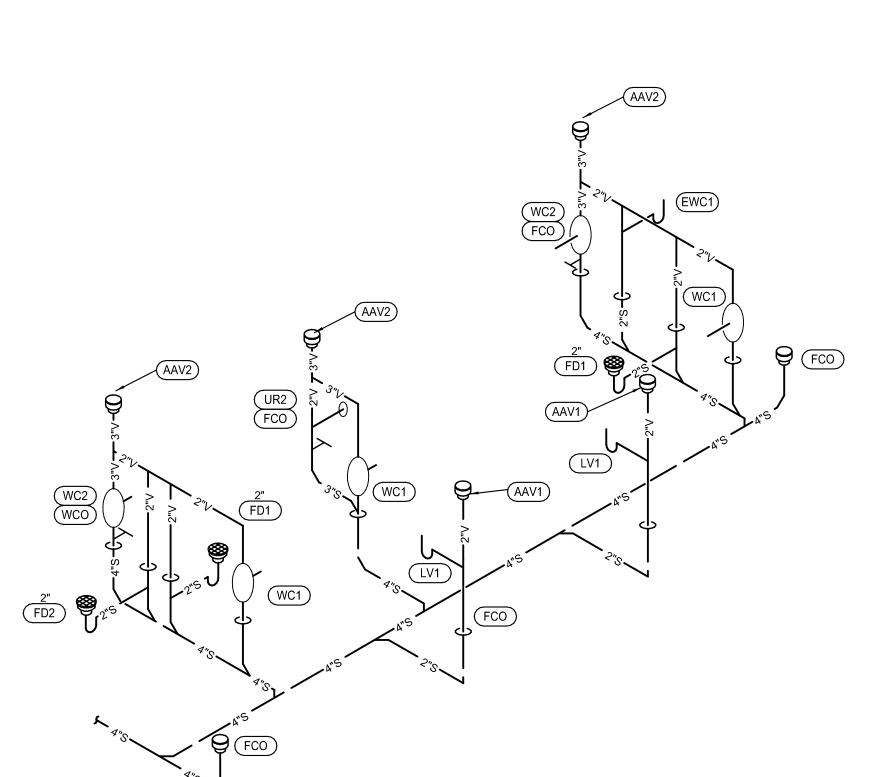
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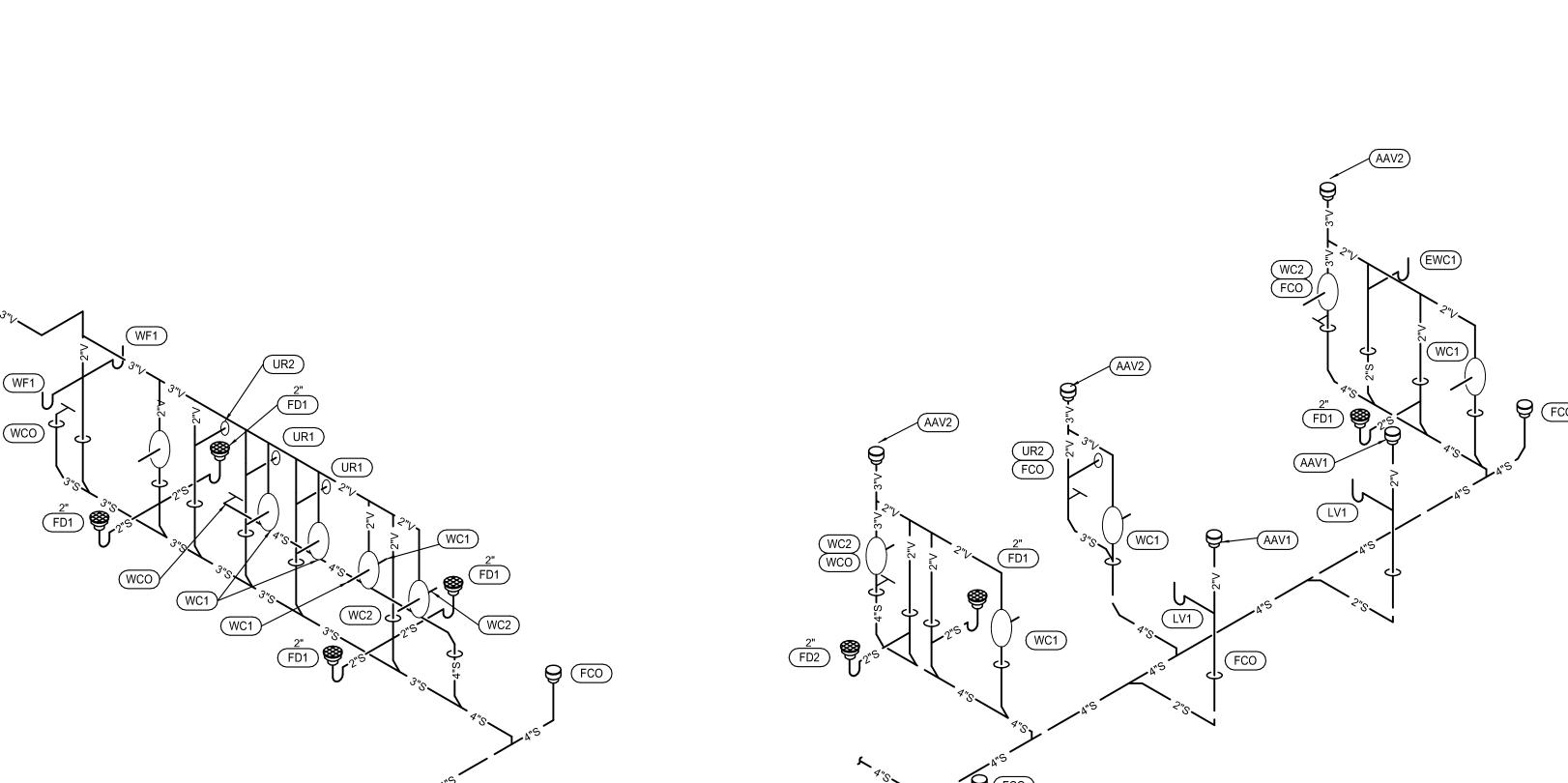
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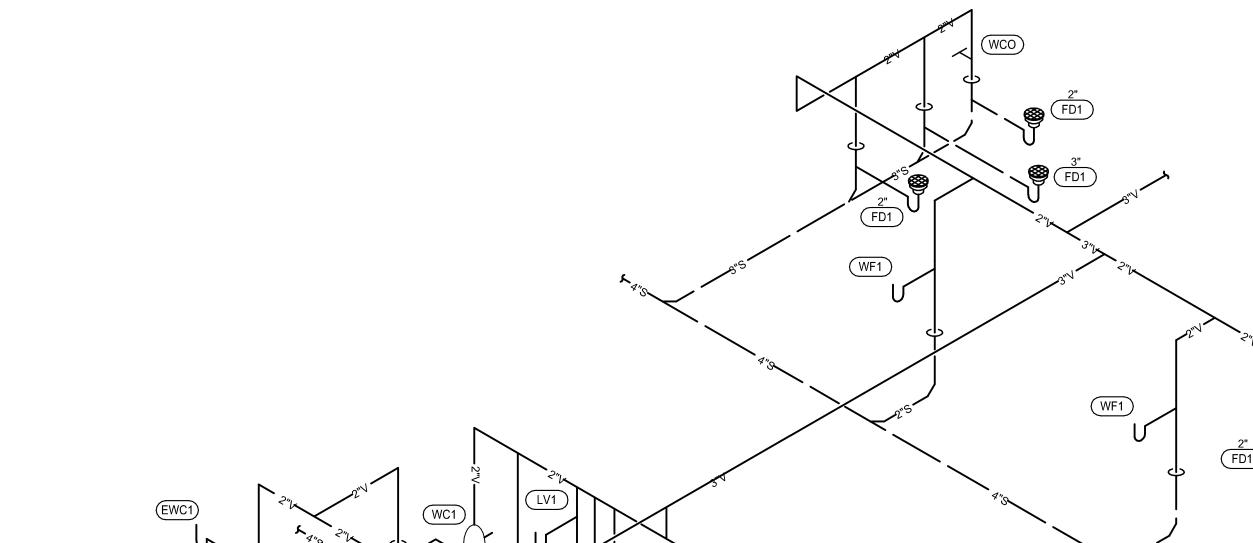












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HENDERSON ENGINEERS 8345 LENEXA DRIVE, SUITE 300

PACKAGE 3 - BUILDING & SITE

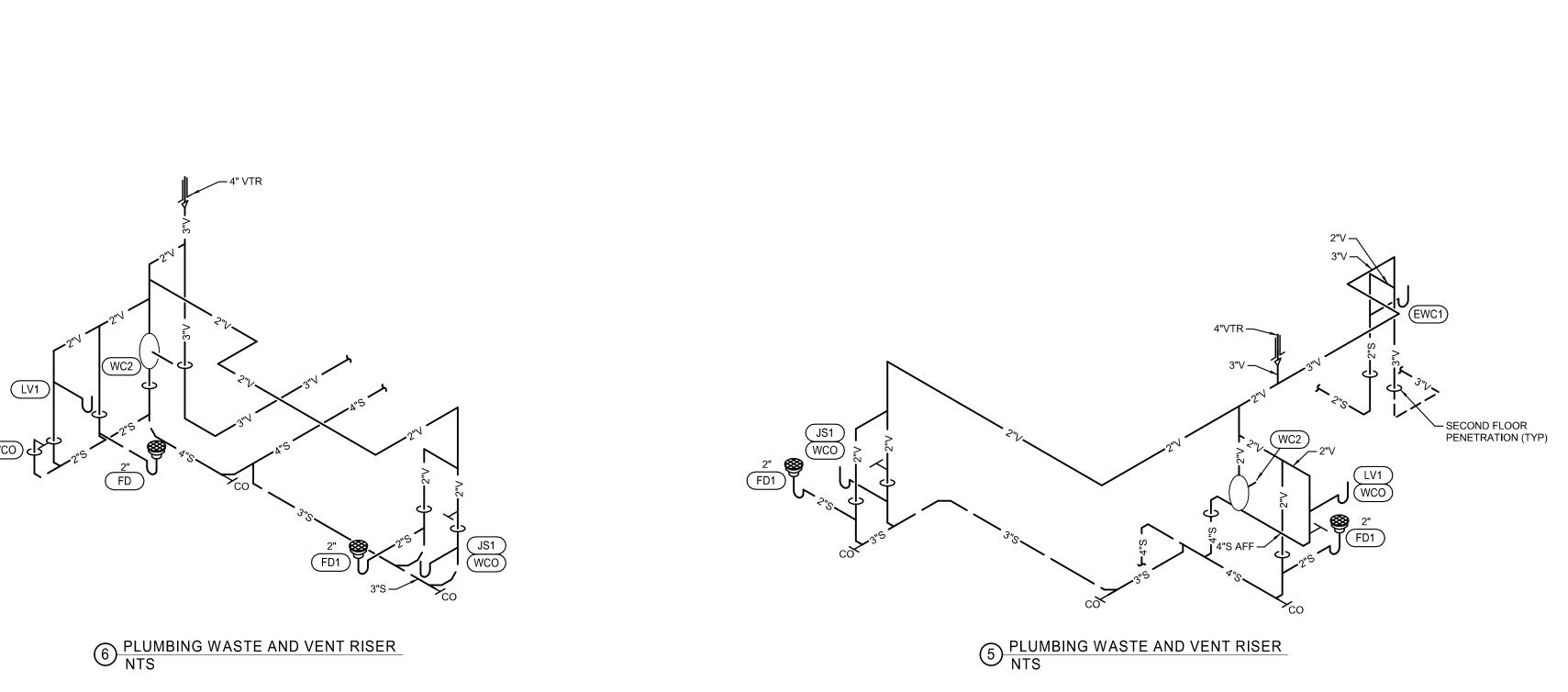
10/08/20 REVISIONS

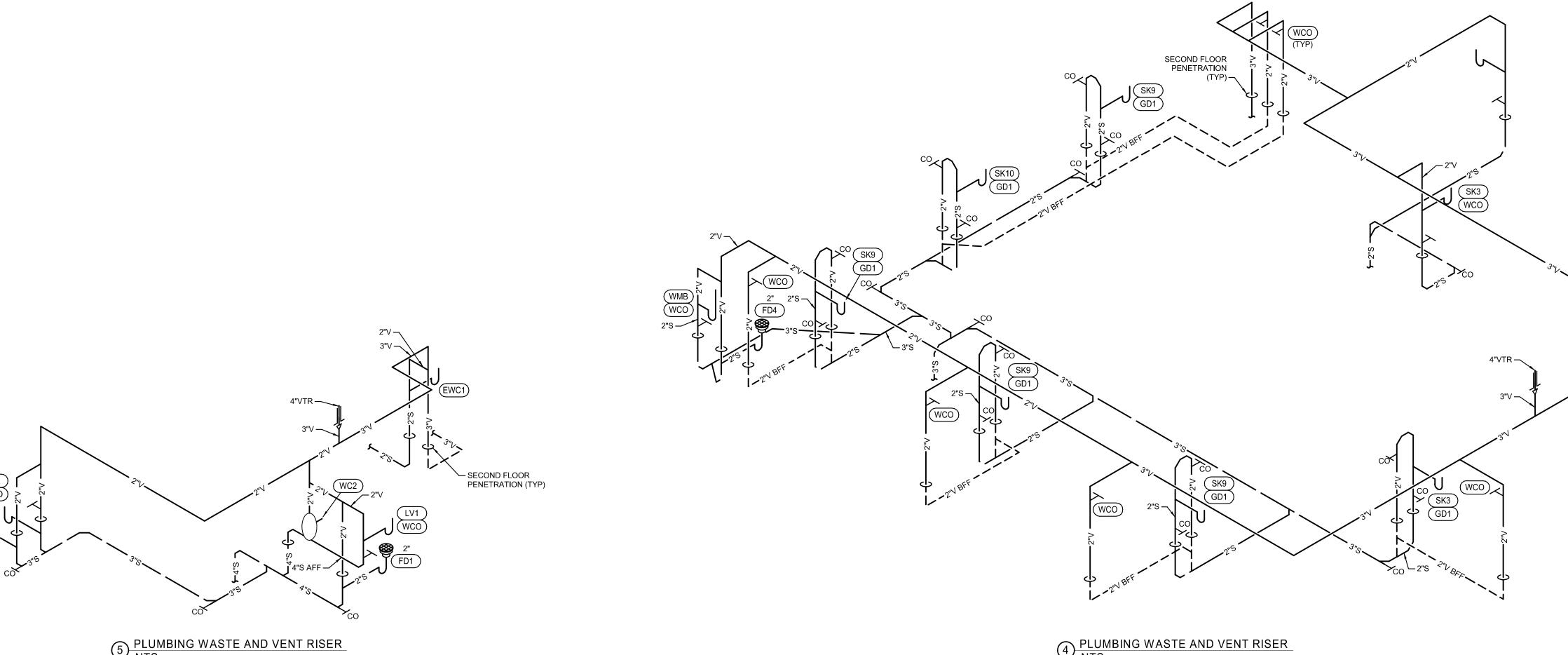
KEY PLAN

13-20102-00 PLUMBING RISER DIAGRAMS

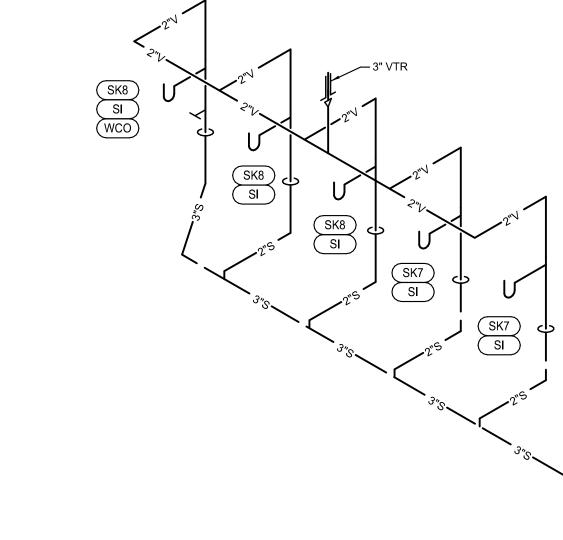
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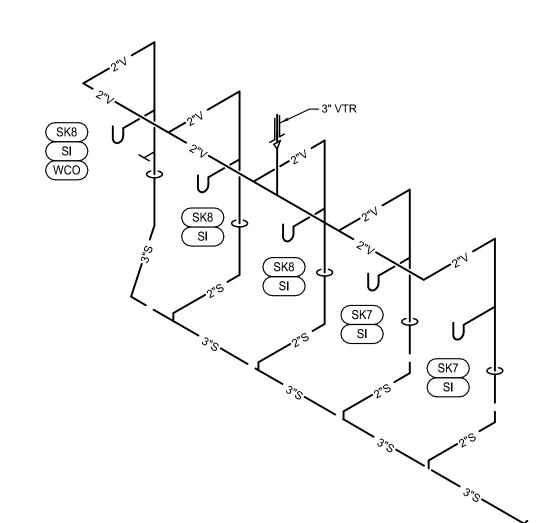
5 PLUMBING WASTE AND VENT RISER NTS 4 PLUMBING WASTE AND VENT RISER NTS



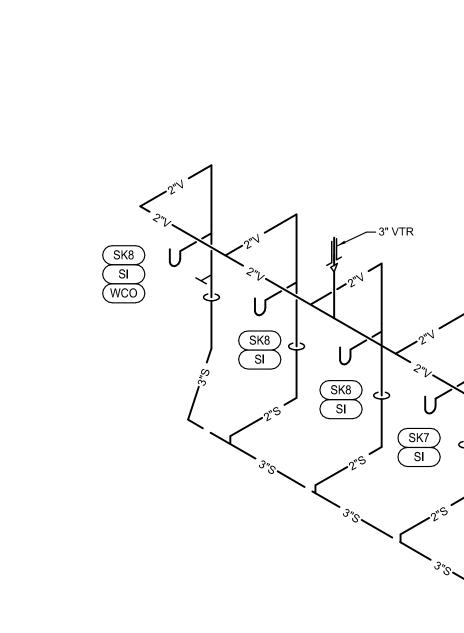


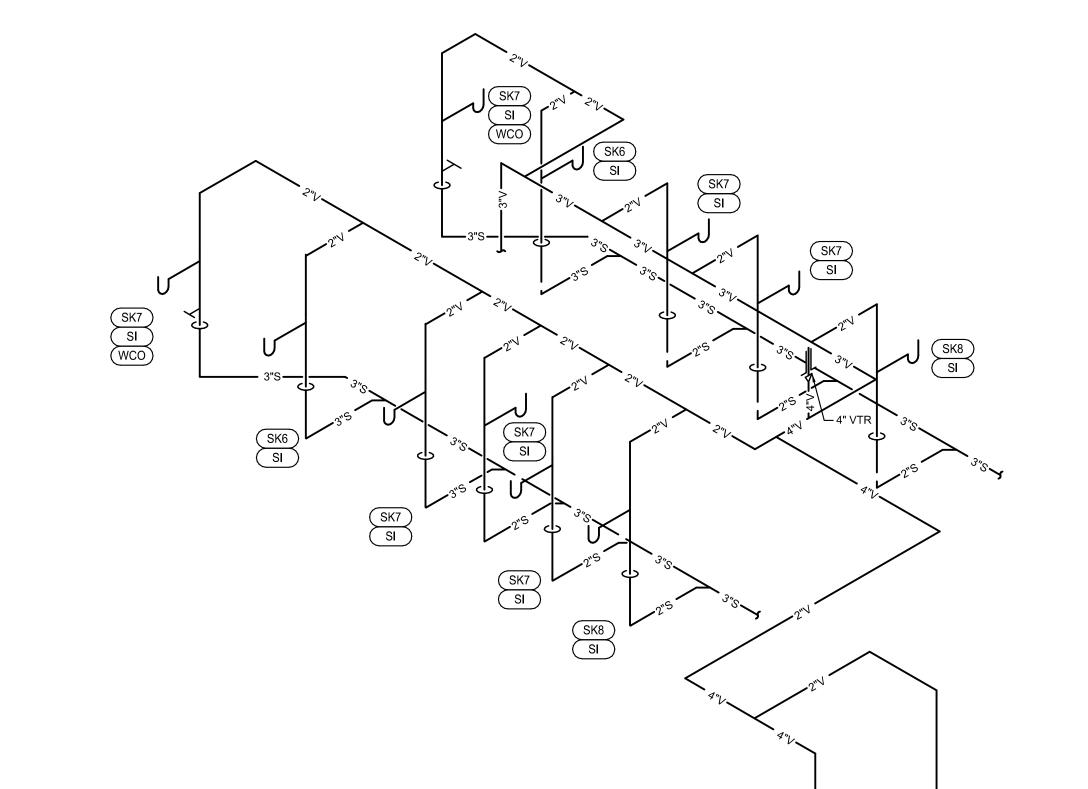
1 PLUMBING WASTE AND VENT RISER NTS





2 PLUMBING WASTE AND VENT RISER NTS





3 PLUMBING WASTE AND VENT RISER NTS