W/O

WS

MAKE-UP AIR UNIT

JB JUNCTION BOX

J-BOX JUNCTION BOX

KILOWATT

MAXIMUM

MANHOLE

MBH 1000 BTU PER HOUR

KW

MAU

MAX

IN WC INCHES OF WATER COLUMN W/

WITH

WITHOUT

WSFU WATER SUPPLY FIXTURE

WVS WASTE VENT STACK

WC WATER COLUMN WASTE STACK

THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS OR ABBE	PIPING SYMBOLS	PIPING LINETYPES
REFER TO THE ARCHITECTURAL DRAWINGS FOR PLUMBING FIXTURE	OXYGEN OUTLET	——————————————————————————————————————
MOUNTING HEIGHTS. UNO, INSTALL PLUMBING FIXTURES WITH THE MOUNTING HEIGHTS AS LISTED BELOW WITH FINAL APPROVAL BY THE ARCHITECT.	■ NITROUS OXIDE OU	ITLET SOFTENED COLD WATER (SCW)
LAVATORY OR SINK	────────── MEDICAL AIR OUTLE	ET ————————————————————————————————————
STANDARD HEIGHT 31" FLOOR TO RIM ADA ACCESSIBLE 34" FLOOR TO RIM	────◆ NITROGEN OUTLET	——————————————————————————————————————
CHILD HEIGHT 24" FLOOR TO RIM	─────■ MEDICAL VACUUM I	140° DOMESTIC HOT WATER (140°)
URINAL STANDARD HEIGHT 24" FLOOR TO RIM	■ ● FLOOR SINK (FS), S	
ADA ACCESSIBLE 17" FLOOR TO RIM CHILD HEIGHT 14" FLOOR TO RIM	■ ● FLOOR DRAIN (FD),	
WATER CLOSET	ROOF DRAIN (RD), S	
STANDARD HEIGHT 15" FLOOR TO RIM ADA ACCESSIBLE 17" TO 19" FLOOR TO TOP OF SEAT	BALL VALVE	
CHILD HEIGHT 10" FLOOR TO RIM	— ₩ CONTROL VALVE	
WATER COOLER OR DRINKING FOUNTAIN STANDARD HEIGHT 41" FLOOR TO SPOUT	——— SHUTOFF VALVE	GREASE WASTE - ABOVE FLOOR (GW)
ADA ACCESSIBLE 36" FLOOR TO SPOUT	——————————————————————————————————————	— — GW — — GREASE WASTE - BELOW FLOOR (GW)
CHILD HEIGHT 30" FLOOR TO SPOUT		WITH PRESSURE PORTS ——CGWV——— COMBINATION GREASE WASTE AND VENT (CO
SHOWER VALVES STANDARD HEIGHT - MEN 48" FLOOR TO CENTERLINE	WATER METER	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	STRAINER	
MEN 6'-6" FLOOR TO CENTERLINE WOMEN 6'-0" FLOOR TO CENTERLINE	STRAINER WITH BL	
TUB VALVES	RELIEF/SAFETY VAL	
STANDARD HEIGHT 32" FLOOR TO CENTERLINE ADA ACCESSIBLE CENTER BETWEEN GRAB BAR AND TUB RIM	SOLENOID VALVE	— VBG — VENT BELOW GRADE (VBG)
CLINIC SERVICE SINKS 30" FLOOR TO RIM	PRESSURE REDUCI	
SURGEON'S SCRUB-UP SINKS 35" FLOOR TO FRONT RIM	GAS PRESSURE RE	
ICE MAKER OUTLET BOXES 24" FLOOR TO CENTER OF BOX	THERMOSTATIC MIX	
WASHING MACHINE OUTLET BOXES 42" FLOOR TO CENTER OF BOX	PIPE ANCHOR	——————————————————————————————————————
	EXPANSION JOINT	ACD——ACD——AUXILIARY CONDENSATE DRAIN (ACD)
JANITOR'S SINK FAUCET FITTING 42" FLOOR TO CENTERLINE	BACKFLOW PREVE	NTER SPD——SPD——SUMP OR SEWAGE PUMP DISCHARGE (SPD)
HOSE BIBBS 36" AFF TO CENTERLINE	PRESSURE GAUGE	——————————————————————————————————————
NON-FREEZE WALL HYDRANTS 18" AFG TO CENTERLINE	THERMOMETER	GAS VENT (GV)
USE THE DEFAULT MOUNTING HEIGHTS SHOWN ABOVE UNLESS NOTED	———— UNION	———MPG——— MEDIUM PRESSURE NATURAL GAS (MPG)
OTHERWISE IN THE SPECIFICATIONS OR ELSEWHERE. MOUNTING HEIGHTS LISTED ARE ABOVE FINISHED FLOOR (AFF) OR ABOVE FINISHED	———— FLANGE CONNECTI	ON — MPG — MEDIUM PRESSURE NATURAL GAS ON ROOF
GRADE (AFG). ALL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH CURRENT ADA AND LOCAL REQUIREMENTS.	─────────────────────────────────────	——NPW——— NON-POTABLE WATER (NPW)
		LL HYDRANT (NW) ——LPG———LIQUEFIED PETROLEUM GAS (LPG)
ANNOTATION		TIC AIR VENT OR VACUUM RELIEF ———WS——— WATER SERVICE (WS)
1 PLUMBING PLAN NOTE CALLOUT	VALVE	FP—FP—FIRE PROTECTION (FP)
PLUMBING EQUIPMENT DESIGNATION. (CONTRACTOR	PRESSURE / VACUL	JM SWITCH ————————————————————————————————————
1 FURNISHED AND INSTALLED). REFER TO PLUMBING FIXTURE OR EQUIPMENT SCHEDULES		
ON EQUI MENT SCHEDULES	——₃ CAP	————AW———— ACID WASTE - ABOVE FLOOR (AW)
EQUIPMENT DESIGNATION (OWNER FURNISHED, CONTRACTOR INSTALLED)	——ƏH WALL CLEANOUT (V	MCO) — AW — ACID WASTE - BELOW FLOOR (AW)
CONTRACTOR INSTALLED)	© FLOOR CLEANOUT	(FCO) ——AV——————————————————————————————————
MECHANICAL EQUIPMENT DESIGNATION (CONTRACTOR FURNISHED AND INSTALLED UNLESS NOTED OTHERWISE)	EXTERIOR CLEANO	UT (ECO) ————GWS———— GRAY WATER (GWS)
furnished and installed unless noted otherwise)	—— ⊸ ELBOW UP	——————————————————————————————————————
CONNECTION POINT OF NEW WORK TO EXISTING	———⇔ ELBOW DOWN	
	———— TEE UP	
(1) DETAIL REFERENCE UPPER NUMBER INDICATES DETAIL NUMBER LOWER NUMBER INDICATES SHEET NUMBER	————— TEE DOWN	
	ELBOW UP WITH SH	HUT-OFF VALVE (SOV)
P1 SECTION CUT DESIGNATION	————•2 ELBOW DOWN WITH	H SHUT-OFF VALVE (SOV)
ABBREVIATIONS	——— ō ⊢——— TEE UP WITH SHUT-	-OFF VALVE (SOV)
ADA AMERICANS WITH MIN MINIMUM		HUT OFF VALVE (SOV)
DISABILITIES ACT N/C NORMALLY CLOSED AFF ABOVE FINISHED FLOOR N/O NORMALLY OPEN		RRESTER (WHA) WITH PDI SIZES,
AFG ABOVE FINISHED GRADE NIC NOT IN CONTRACT AHU AIR HANDLING UNIT ORD OVERFLOW ROOF DRAIN	(A, B, C, D, & E)	
AP ACCESS PANEL PDI PLUMBING DRAINAGE BAS BUILDING AUTOMATION INSTITUTE	RECIRCULATION PU	JMP
SYSTEM PH/Ø PHASE BFF BELOW FINISHED FLOOR PRV PRESSURE REDUCING	———∞ P-TRAP	
BFG BELOW FINISHED GRADE VALVE		
BOS BOTTOM OF STRUCTURE RCP REINFORCED CONCRETE	TRAP PRIMER	
CP CONDENSATE PUMP RD ROOF DRAIN	TRAP PRIMER WITH	I DISTRIBUTION UNIT
CPVC CHLORINATED POLYVINYL RPM REVOLUTIONS PER CHLORIDE MINUTE		
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 (E) EXISTING STACK		
EMS ENERGY MANAGEMENT TDH TOTAL DYNAMIC HEAD SYSTEM TFA TO FLOOR ABOVE		
ETR EXISTING TO REMAIN TFB TO FLOOR BELOW EWC ELECTRIC WATER COOLER TYP TYPICAL	LINETYPE LEGEND	
FD FLOOR DRAIN UL UNDERWRITERS FFA FROM FLOOR ABOVE LABORATORIES, INC.	THROUGHOUT THE DRAWINGS DIFFERENT LI	INETYPES ARE USED IN
FFB FROM FLOOR BELOW UNO UNLESS NOTED FF FINISHED FLOOR OTHERWISE	COMBINATION WITH THE SYMBOLS TO INDICATE EXISTING, TO BE DEMOLISHED, TO BE INCLUI	ATE THE STATUS OF ITEMS AS
FL FLOW LINE UPS UNINTERRUPTIBLE	AND/OR ITEMS WHICH ARE ANTICIPATED TO THE STATUS OF ITEMS USING THESE LINETY	BE PROVIDED IN THE FUTURE.
FLA FULL LOAD AMPS POWER SUPPLY FLR FLOOR VCP VITRIFIED CLAY PIPE OPPM CALLONS DEPLATIONS VCP VARIABLE ERECUENCY	VIEW IN WHICH THEY APPEAR. PHASING SHO	DWN IN DRAWINGS IS NOT
GPM GALLONS PER MINUTE VFD VARIABLE FREQUENCY HD HEAD, HUB DRAIN DRIVE	INTENDED TO FULLY DESCRIBE ALL NECESSA WHICH IS DETERMINED BY THE CONTRACTOR	R AS PART OF THEIR
HZ HERTZ VS VENT STACK IE INVERT ELEVATION VTR VENT THROUGH ROOF	RESPONSIBILITIES. ANY SUCH PHASES DESC DOCUMENTS ARE GENERAL AND ONLY INTEN	

LINETYPES MAY BE USED ON ANY DEVICE, EQUIPMENT, NOTE, LINE, SHAPE,

NEW

FUTURE

ORDER FOR THE SAKE OF DESCRIBING THE PROJECT. THE FOLLOWING

DEMOLISH— — — —

<u>G</u>	ENERAL NOTES:	ſ
1.	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.	
6.	VERIFY LOCATION AND DEPTH OF UTILITIES AT POINTS OF CONNECTION BEFORE START OF PIPING INSTALLATION.	
7.	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.	
14.	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	

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 1/2" 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.

DOWNSTREAM OF SHUTOFF VALVES.

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LICENSE # PE-2020016283

PACKAGE 3 - BUILDING & 10/08/20 REVISIONS

13-20102-00 PLUMBING **GENERAL NOTES** AND LEGEND

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PACKAGE 3 - BUILDING
SITE

10/08/20

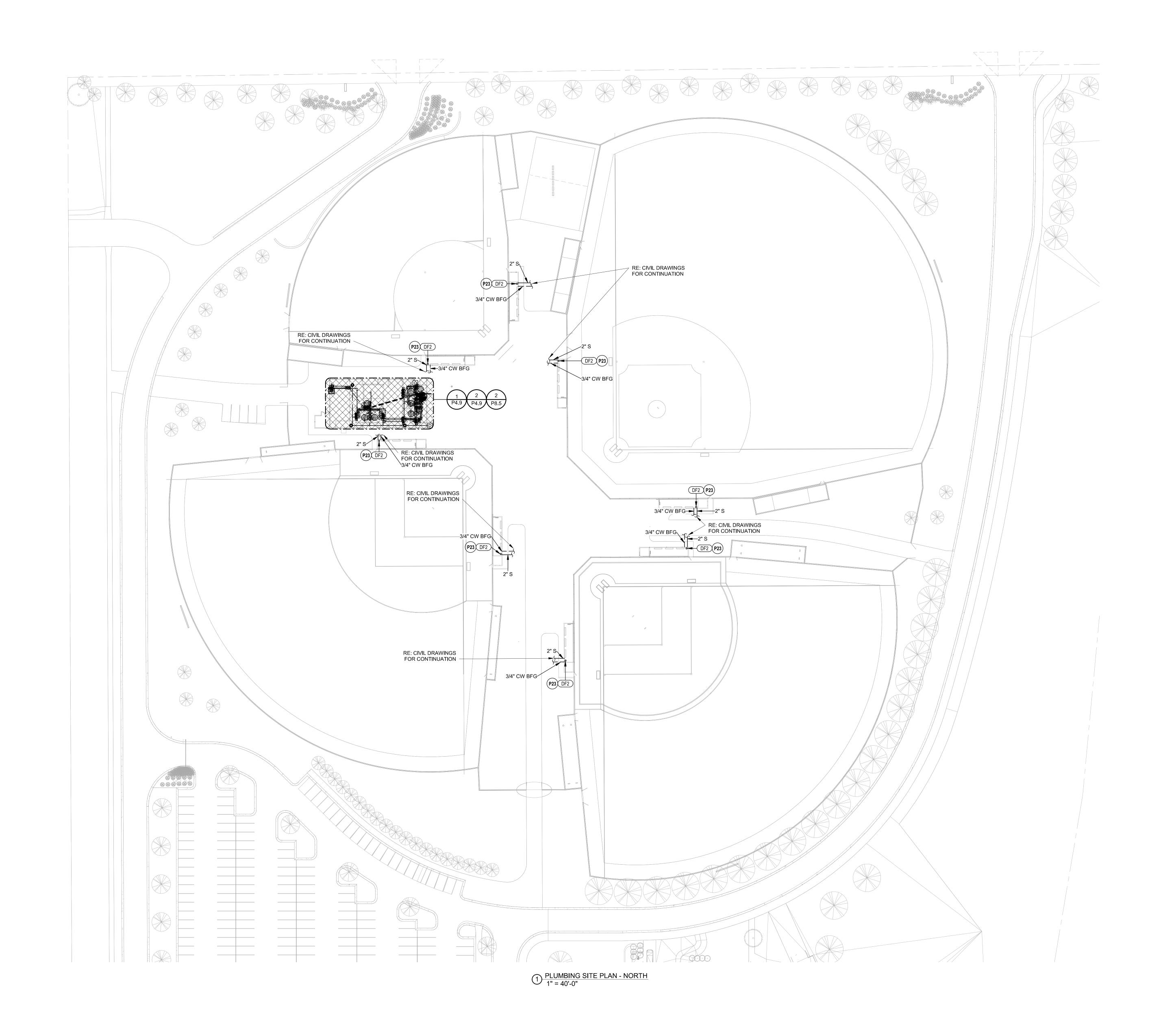
REVISIONS

ADDENDUM 002 10/1

13-20102-00 2
PLUMBING SITE PLAN - NORTH

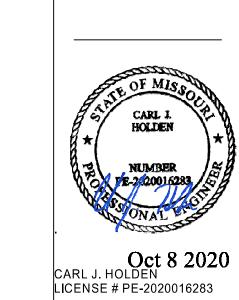
P1.01

www.



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

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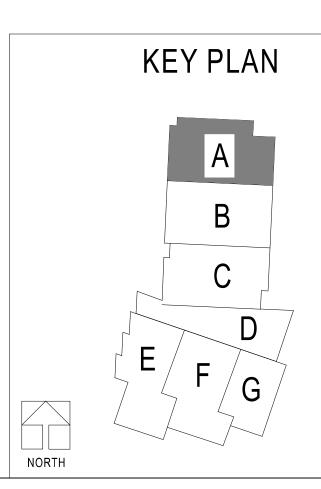
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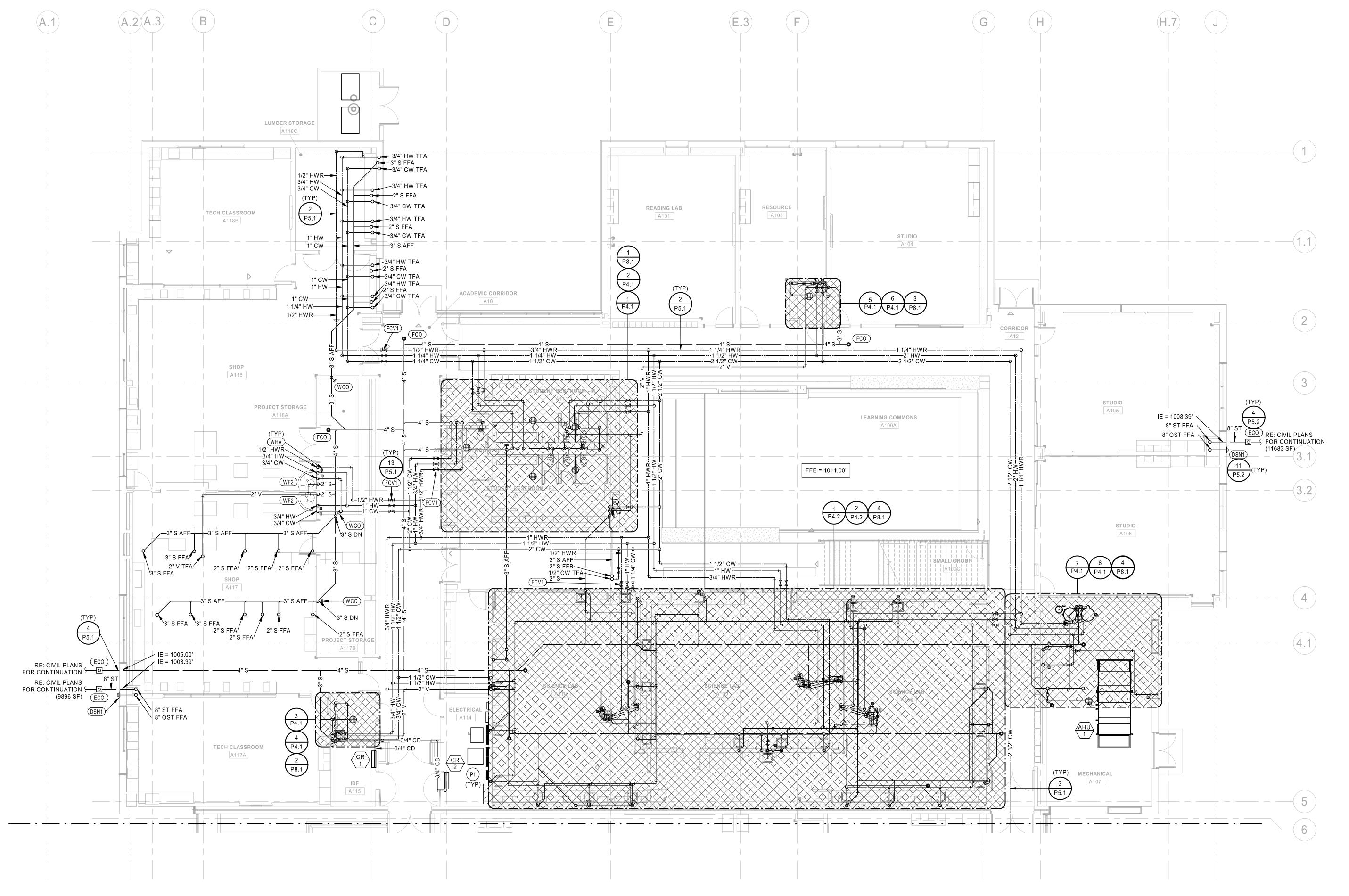
13-20102-00

PLUMBING FIRST

P1.1A

LEVEL PLAN -AREA A





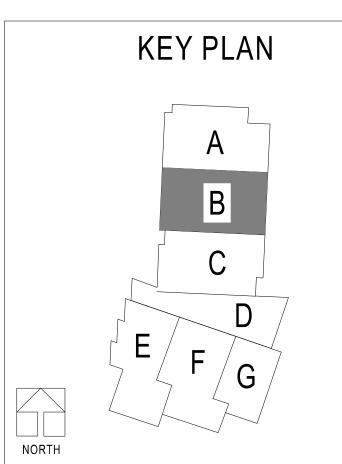
1/8" = 1'-0"

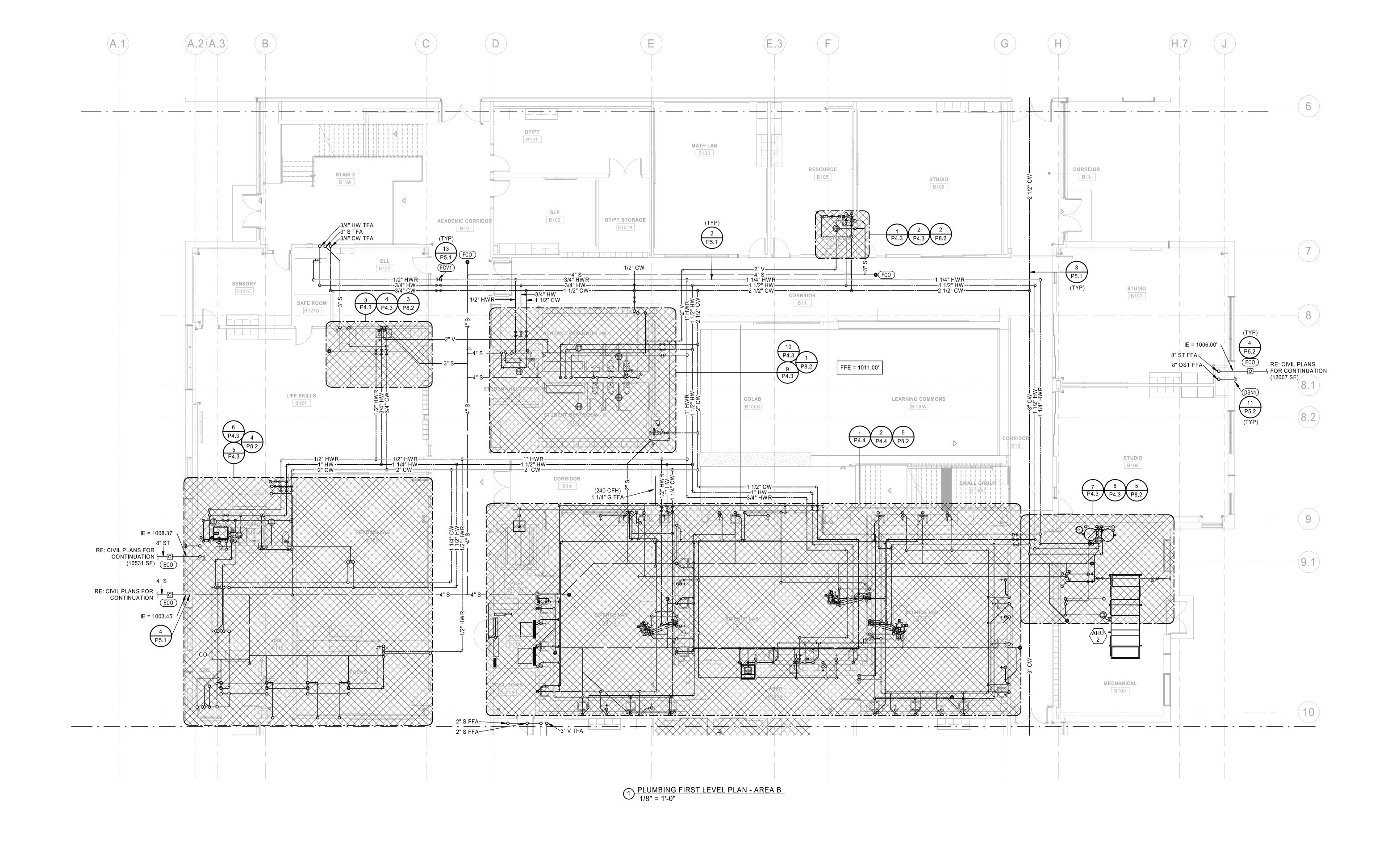
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PLUMBING FIRST

P1.1B

LEVEL PLAN -AREA B





Oct 13 2020

CARL J. HOLDEN LICENSE # PE-2020016283

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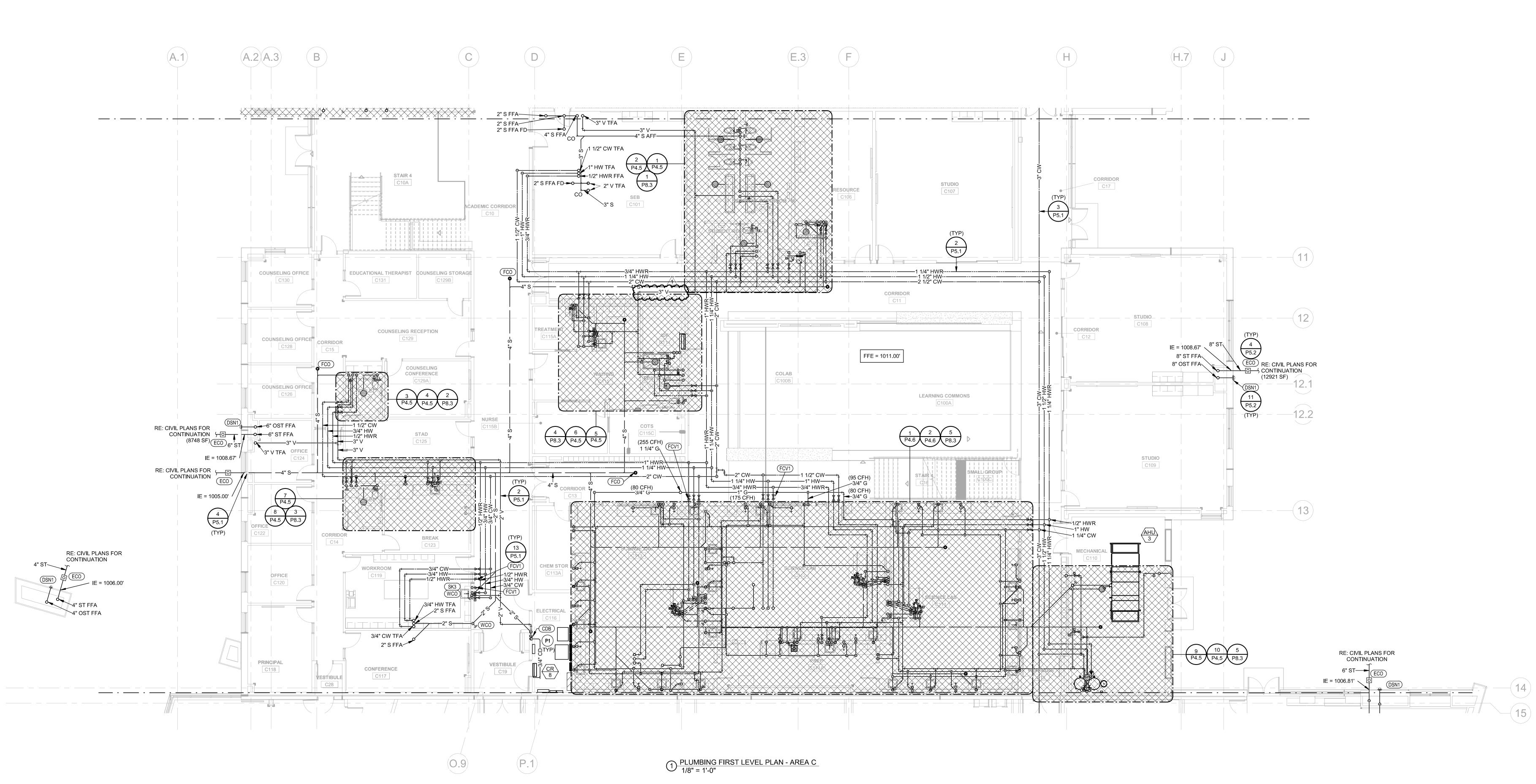
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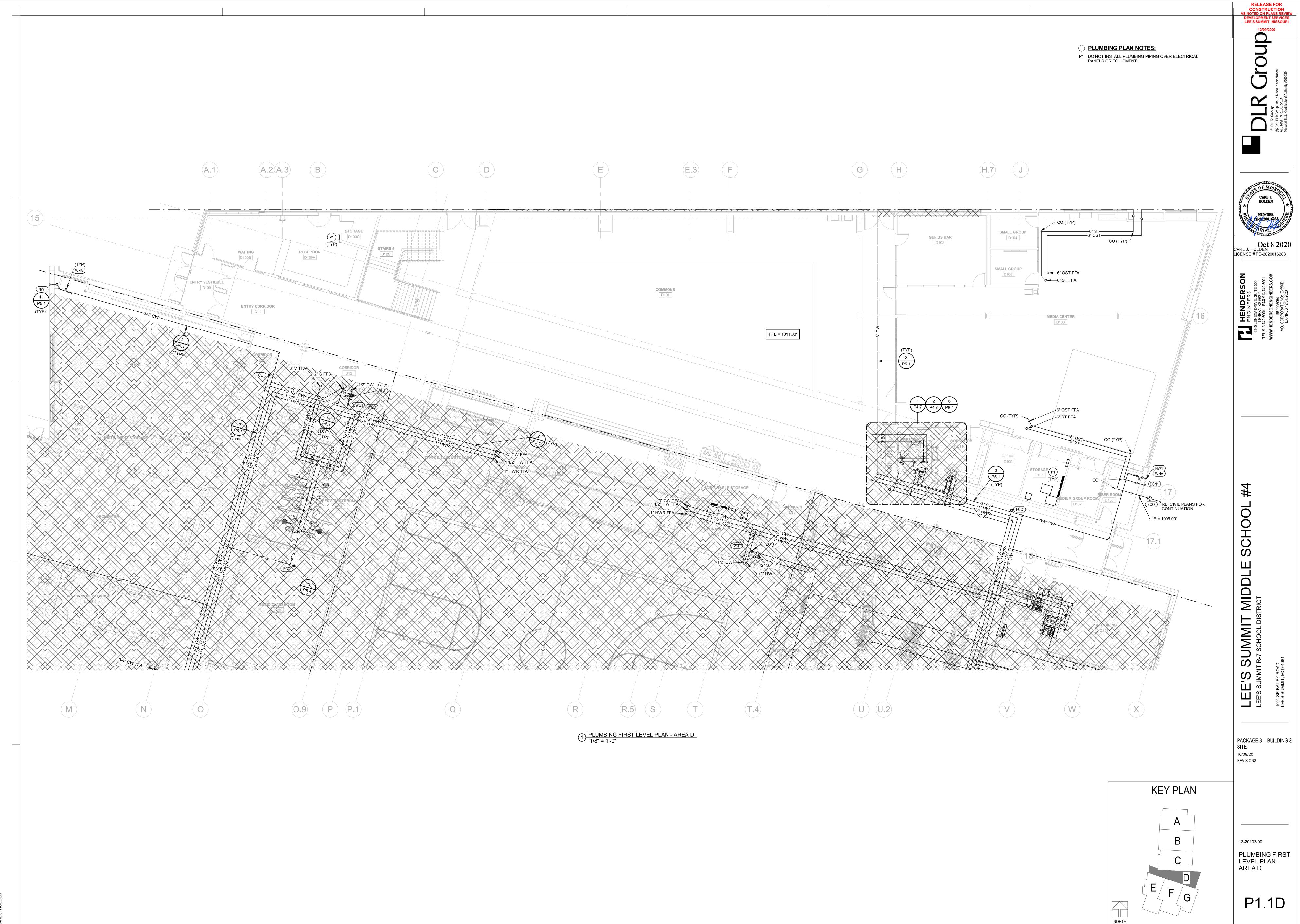
KEY PLAN

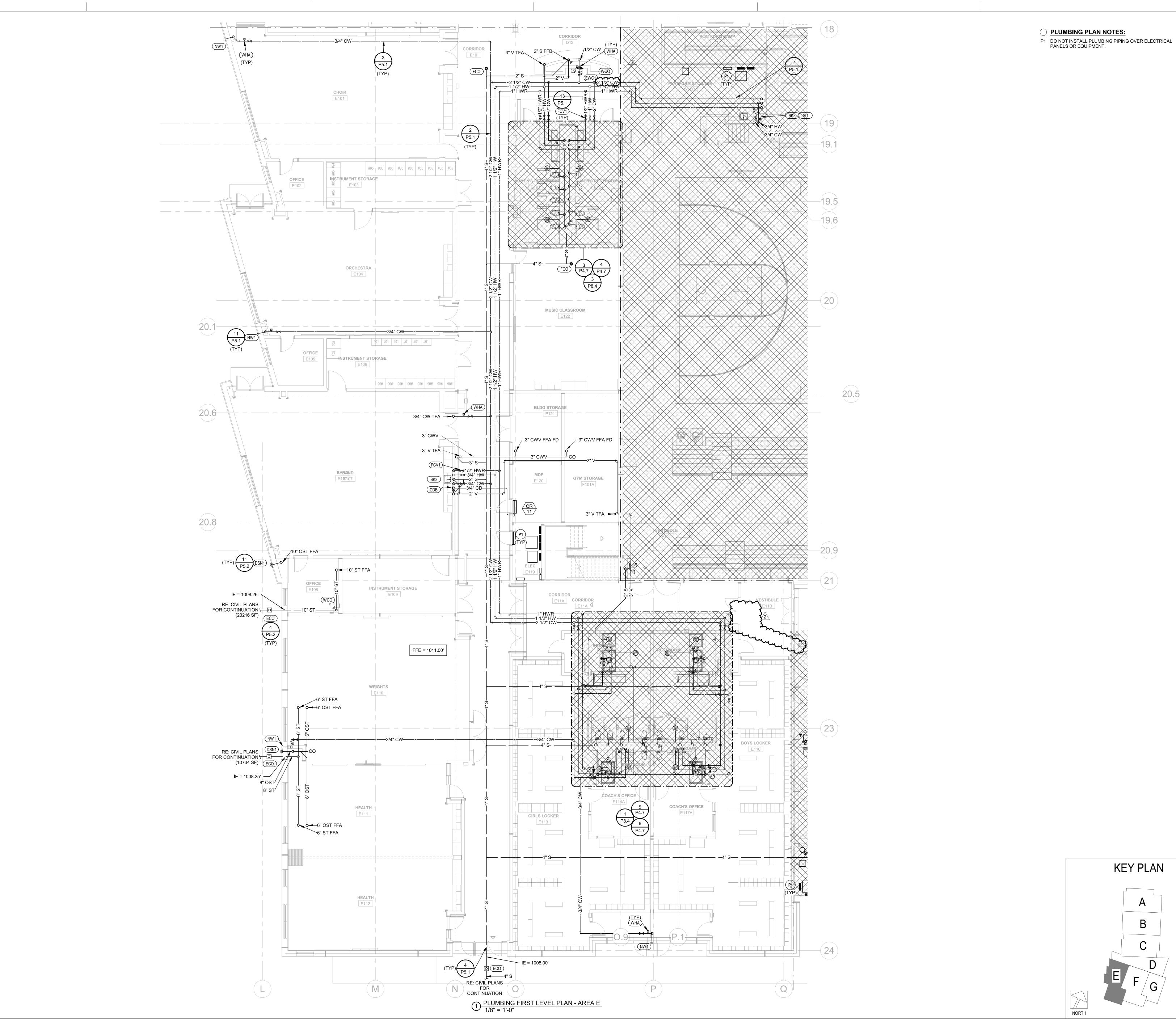
13-20102-00 PLUMBING FIRST LEVEL PLAN -

AREA C

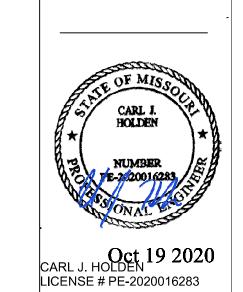
P1.1C







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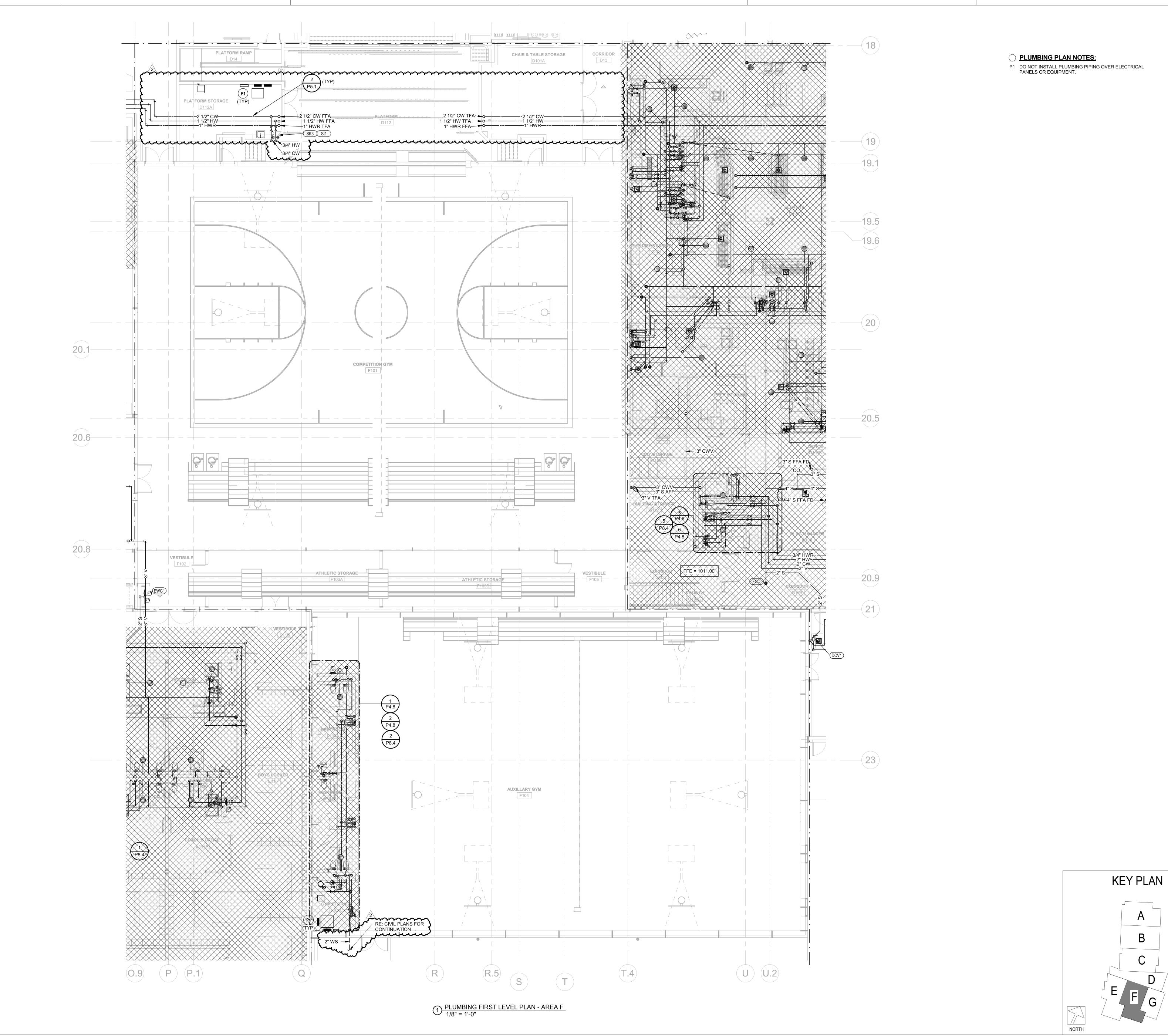


PACKAGE 3 - BUILDING & SITE

10/08/20 REVISIONS ADDENDUM 002

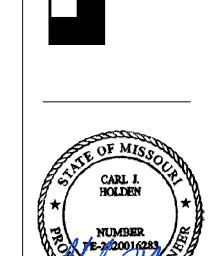
Α 13-20102-00 PLUMBING FIRST LEVEL PLAN -AREA E

P1.1E



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Oct 19 2020
CARL J. HOLDEN
LICENSE # PE-2020016283

Oct 19 2020

LICENSE # PE-2020016283

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LEE'S SUMMIT R-7 SCHOOL DISTF 1001 SE BAILEY ROAD LEE'S SUMMIT, MO 64081

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A

B

13-20102-00

PLUMBING FIRST
LEVEL PLAN AREA F

P1.1F

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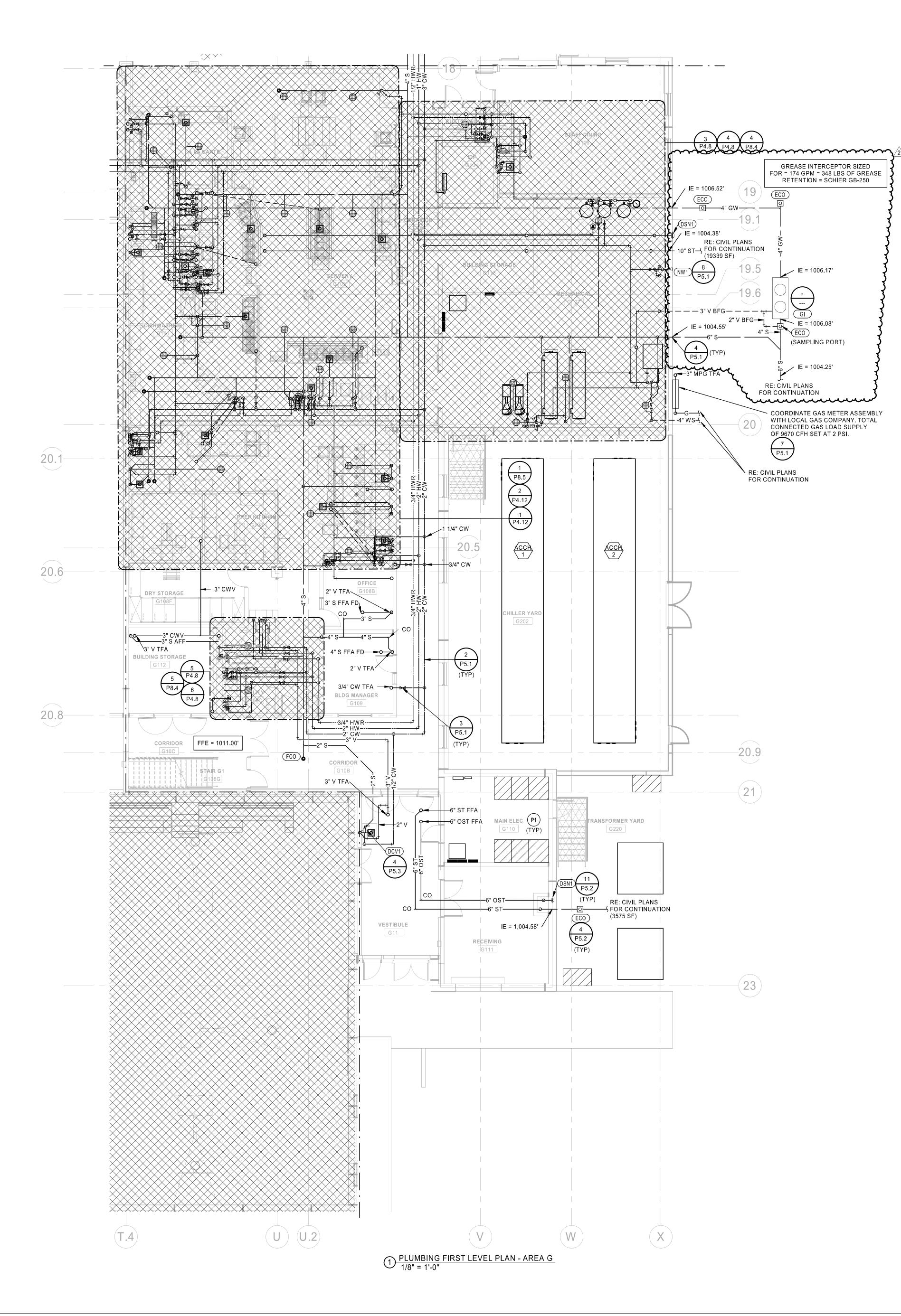
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13-20102-00

PLUMBING FIRST LEVEL PLAN -AREA G

P1.1G

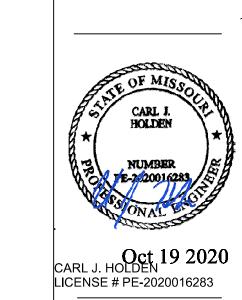
KEY PLAN



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

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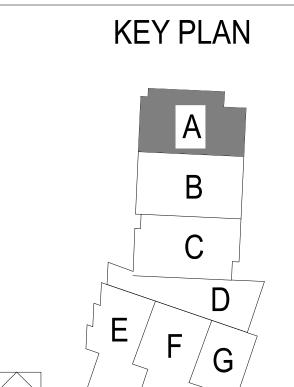
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MO. CORPORATE NO: E-556D
EXPIRES 12/3/2020

E'S SUMMIT MIDDLE SCHOOIS SUMMIT R-7 SCHOOL DISTRICT

PACKAGE 3 - BUILDIN

PACKAGE 3 - BUILDING & SITE

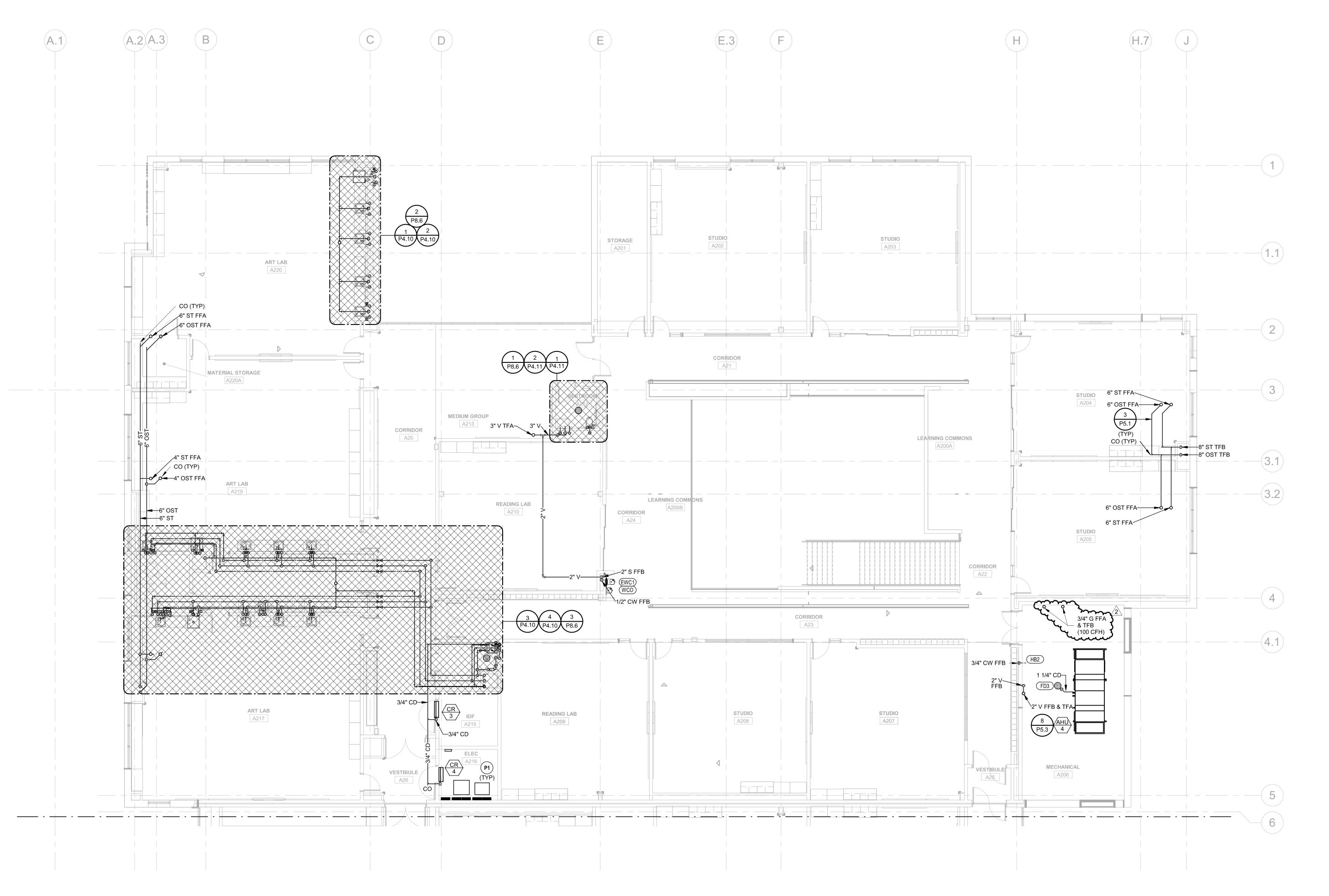
10/08/20
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ADDENDUM 002 10/19/20



13-20102-00

PLUMBING
SECOND LEVEL
PLAN - AREA A

P1.2A



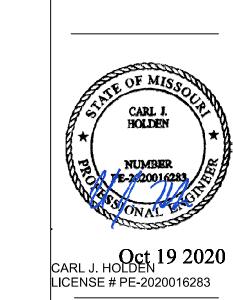
1 PLUMBING SECOND LEVEL PLAN - AREA A 1/8" = 1'-0"

PLUMBING PLAN NOTES:

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12/09/2020

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PACKAGE 3 - BUILDING & SITE 10/08/20 REVISIONS ADDENDUM 002

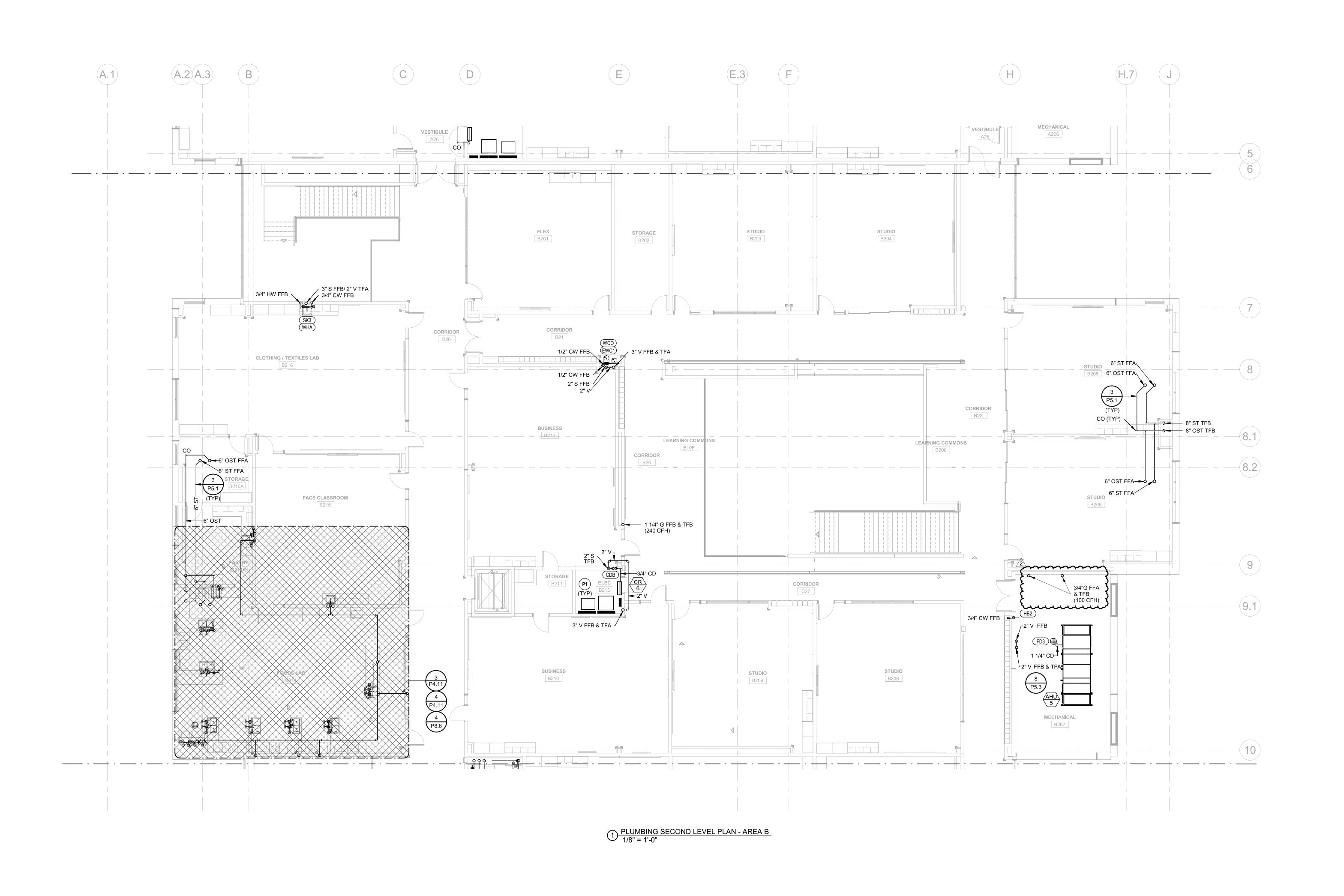
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PLUMBING

SECOND LEVEL PLAN - AREA B

P1.2B

KEY PLAN



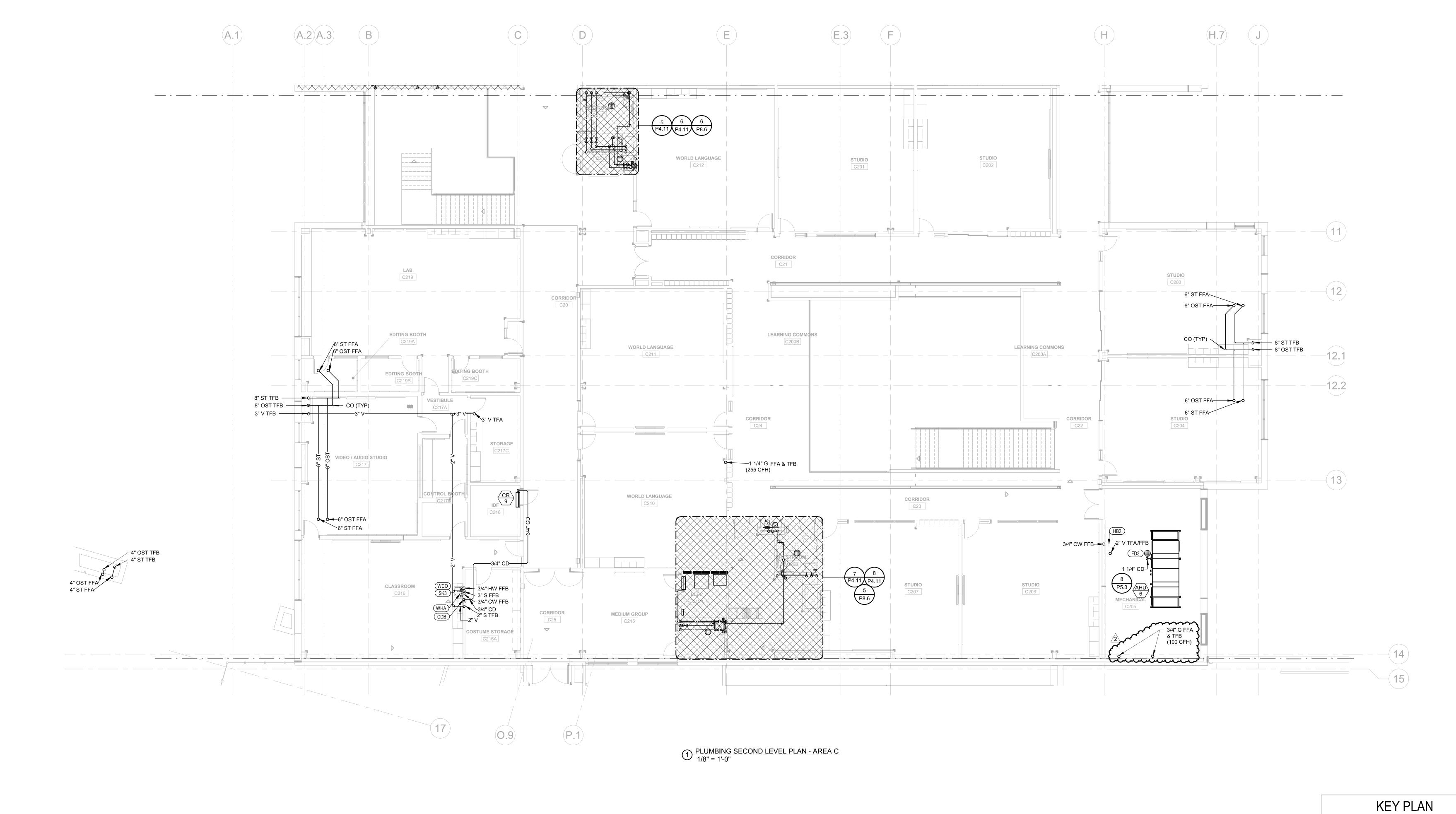
A

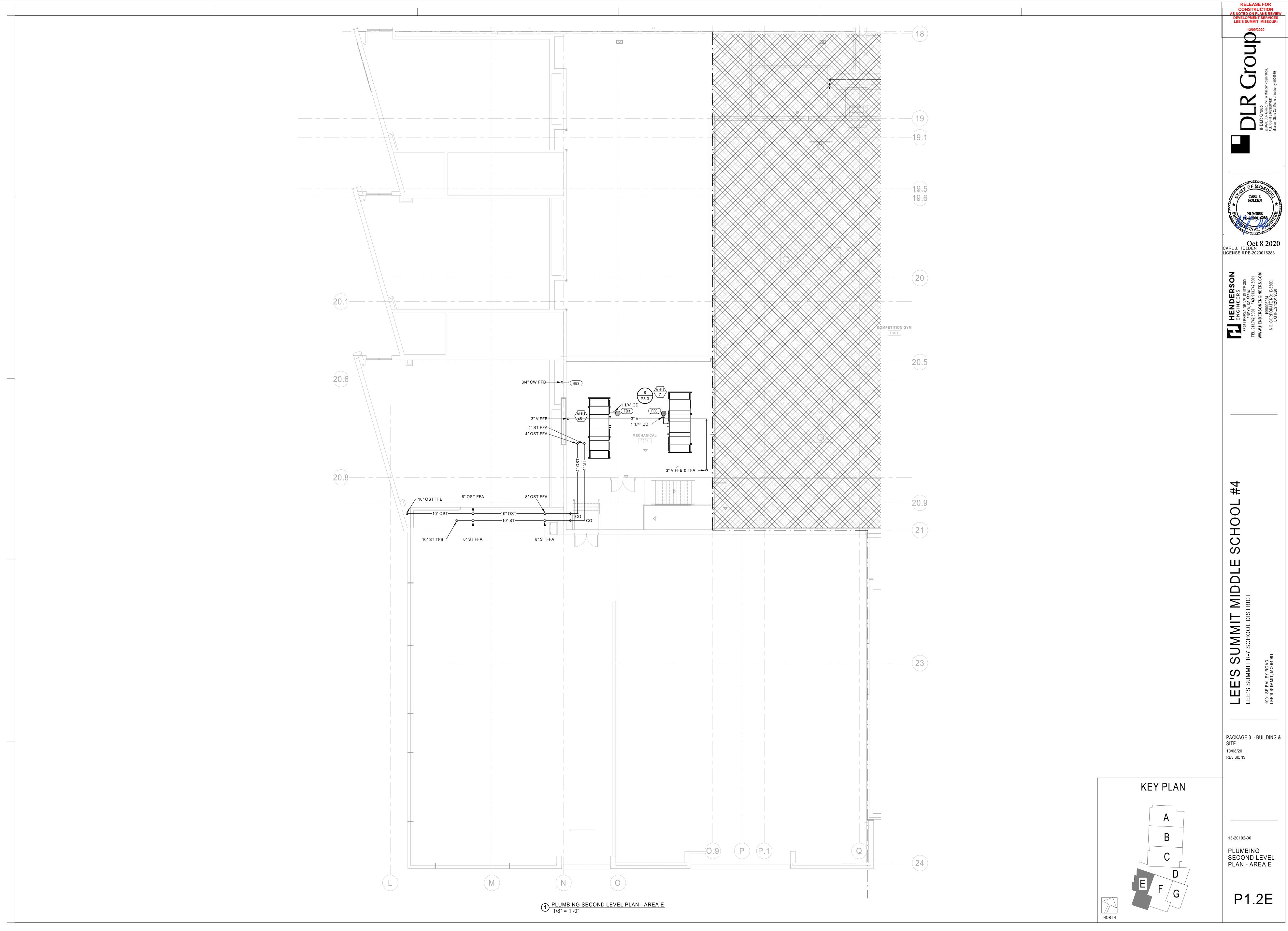
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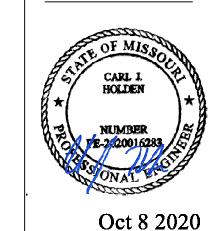
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PLUMBING
SECOND LEVEL
PLAN - AREA C

P1.2C

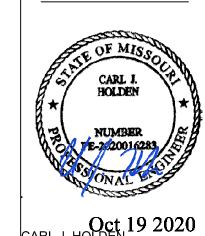








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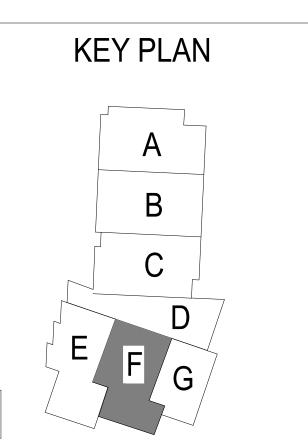


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PACKAGE 3 - BUILDING & SITE

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13-20102-00

PLUMBING
SECOND LEVEL
PLAN - AREA F

P1.2F

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

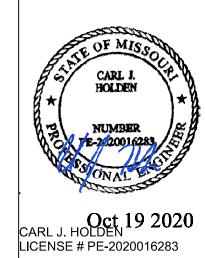
P14 PROVIDE DRAIN WITH TRAP PRIMER CONNECTION. REFER TO WATER PLANS FOR TRAP PRIMER LOCATION.

TO WATER PLANS FOR TRAP PRIMER LOCATION.
P16 3/4" NON-POTABLE WATER. REFER TO MECHANICAL

DRAWINGS FOR CONTINUATION.
P17 1/2" NON-POTABLE WATER FOR BOILER NEUTRALIZATION
KIT. REFER TO MECHANICAL DRAWINGS FOR
CONTINUATION.

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LEE'S SUMMIT R-7 SCHOOL DISTRICT

PACKAGE 3 - BUILDING & SITE

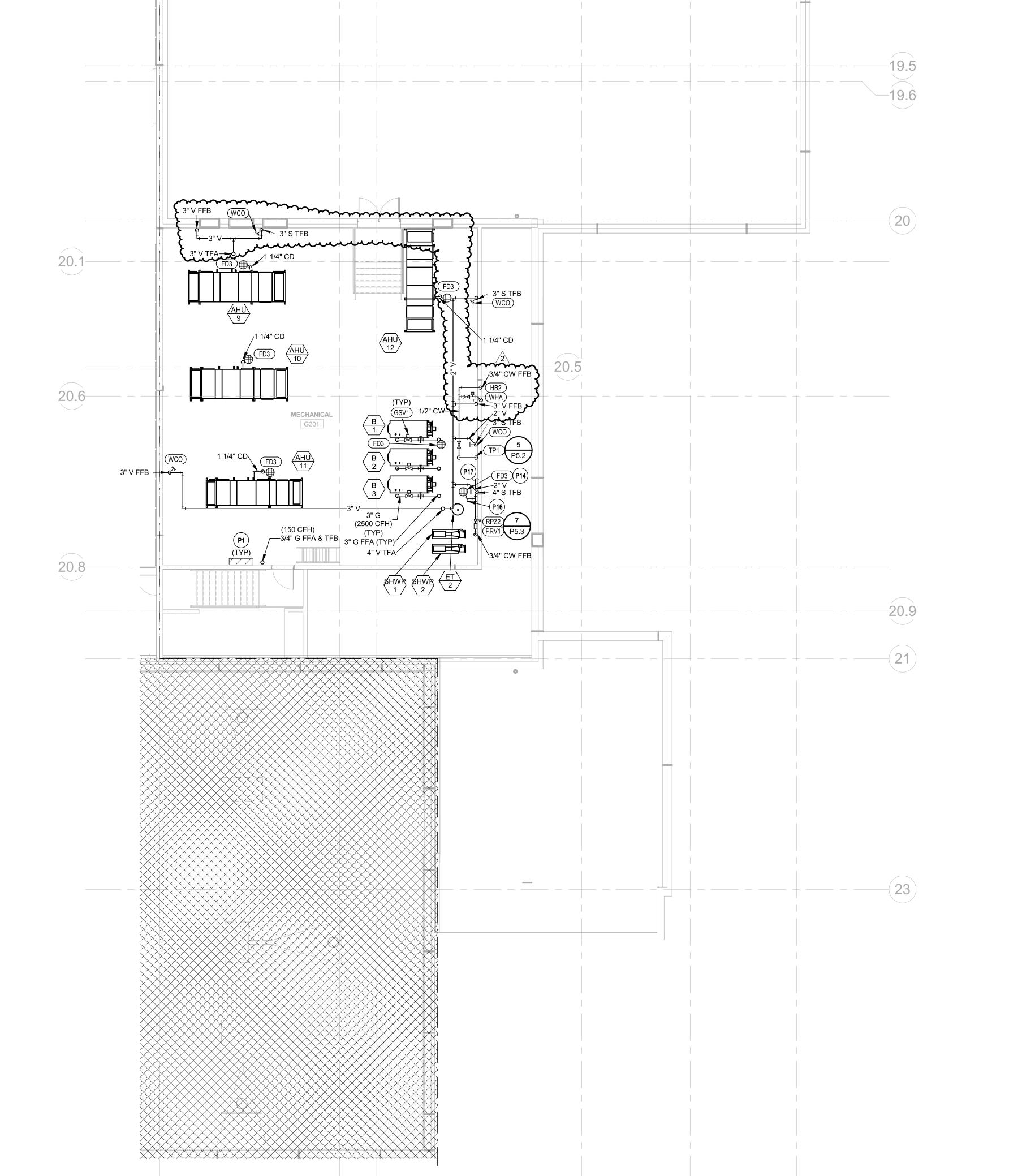
10/08/20
REVISIONS
ADDENDUM 002 10/19/20

13-20102-00

PLUMBING SECOND LEVEL PLAN - AREA G

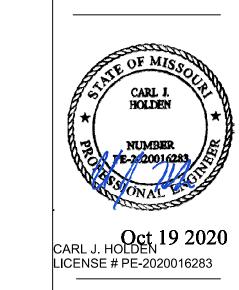
CARL J. HOLDEN

P1.2G



1) PLUMBING SECOND LEVEL PLAN - AREA G





SUMMIT |

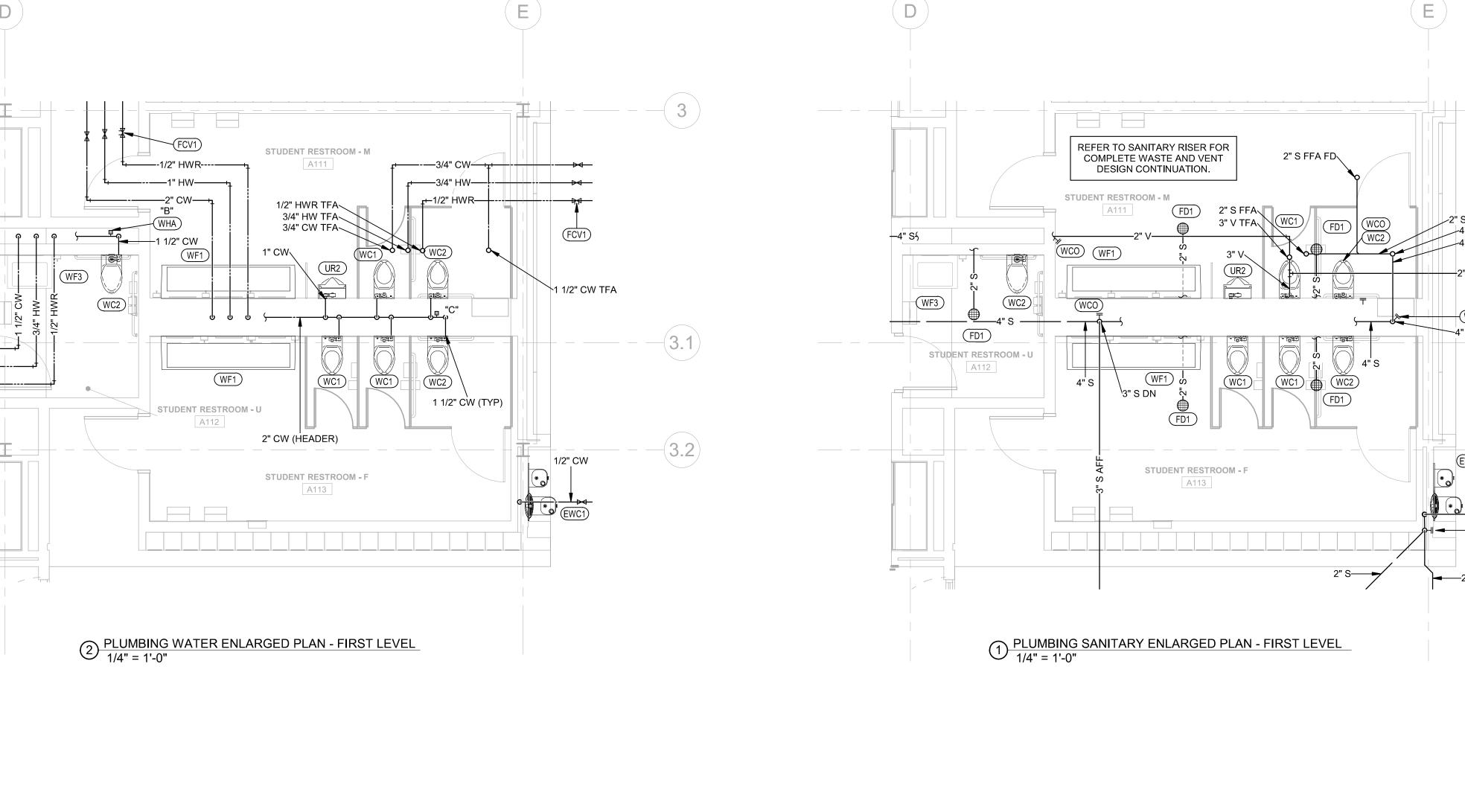
PACKAGE 3 - BUILDING & SITE 10/08/20 REVISIONS

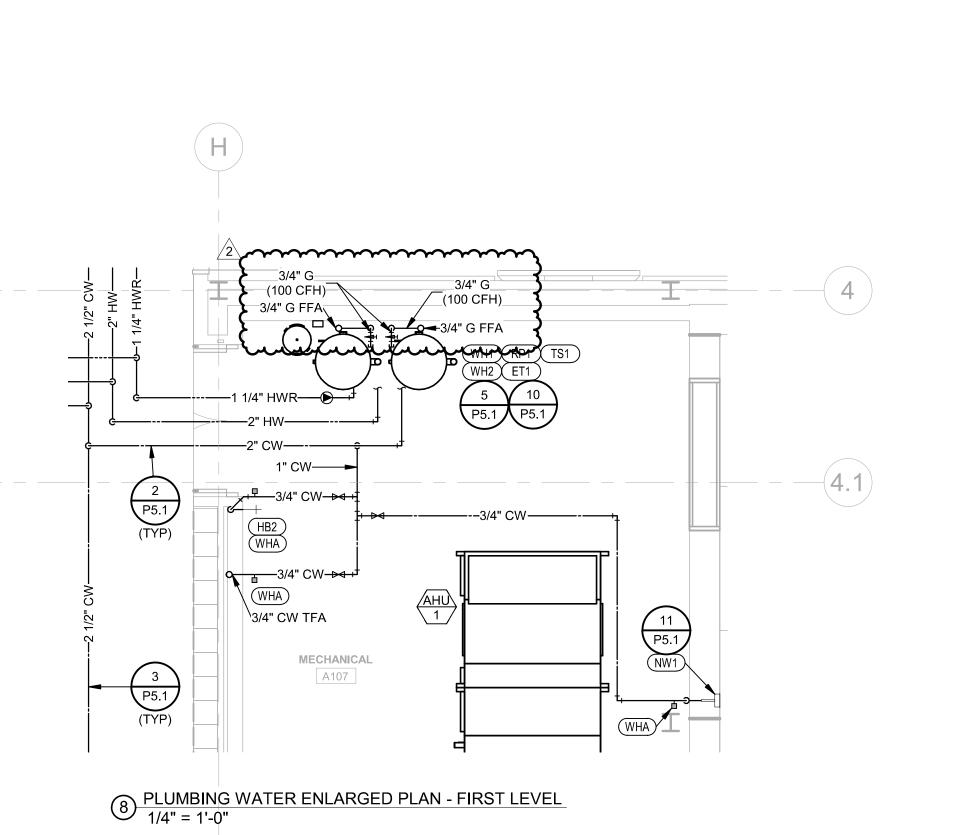
ADDENDUM 002

13-20102-00

PLUMBING ENLARGED PLANS

P4.1



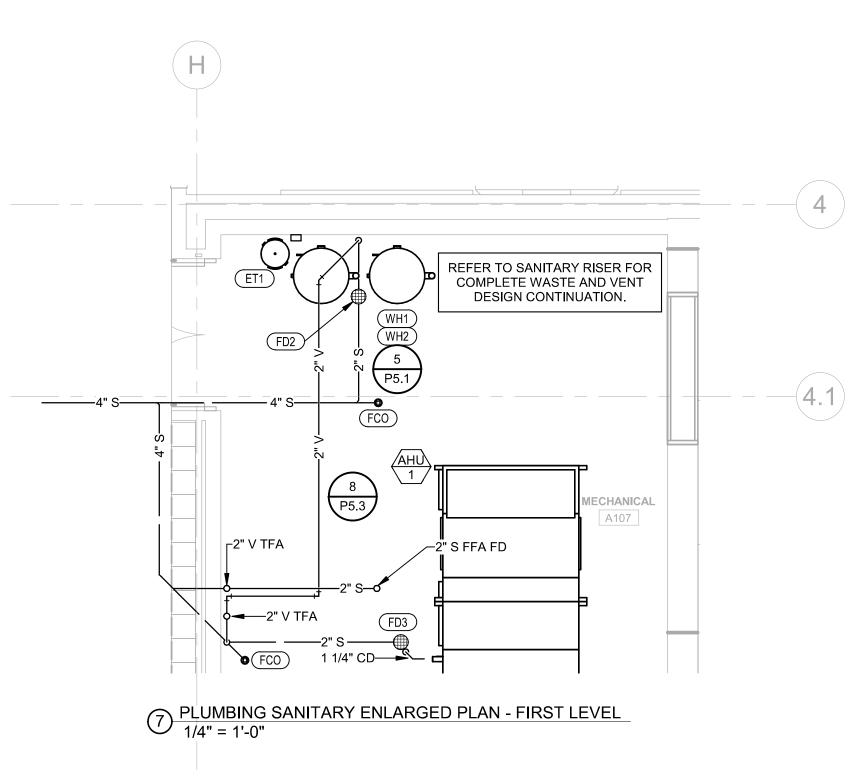


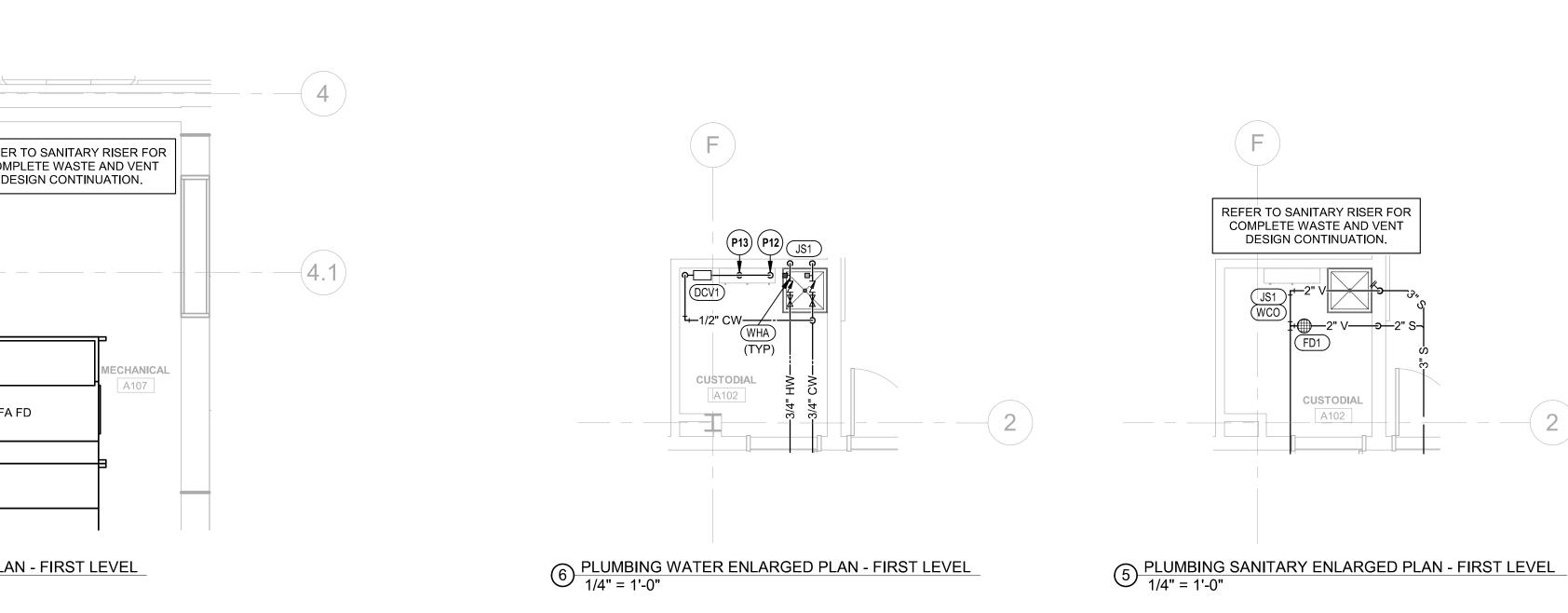
REFER TO SANITARY RISER FOR COMPLETE WASTE AND VENT DESIGN CONTINUATION.

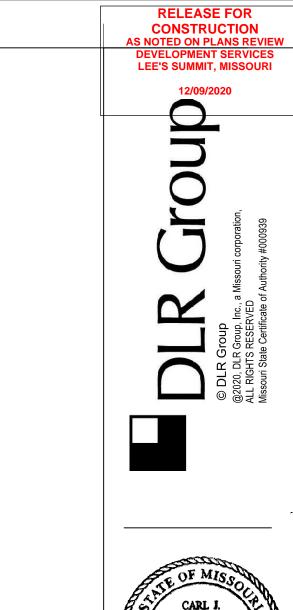
CUSTODIAL A116

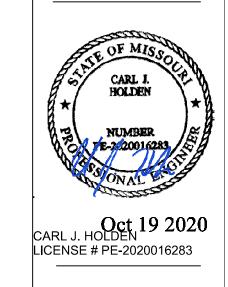
3 PLUMBING SANITARY ENLARGED PLAN - FIRST LEVEL 1/4" = 1'-0"

2" S









PACKAGE 3 - BUILDING & SITE 10/08/20 REVISIONS ADDENDUM 001 ADDENDUM 002

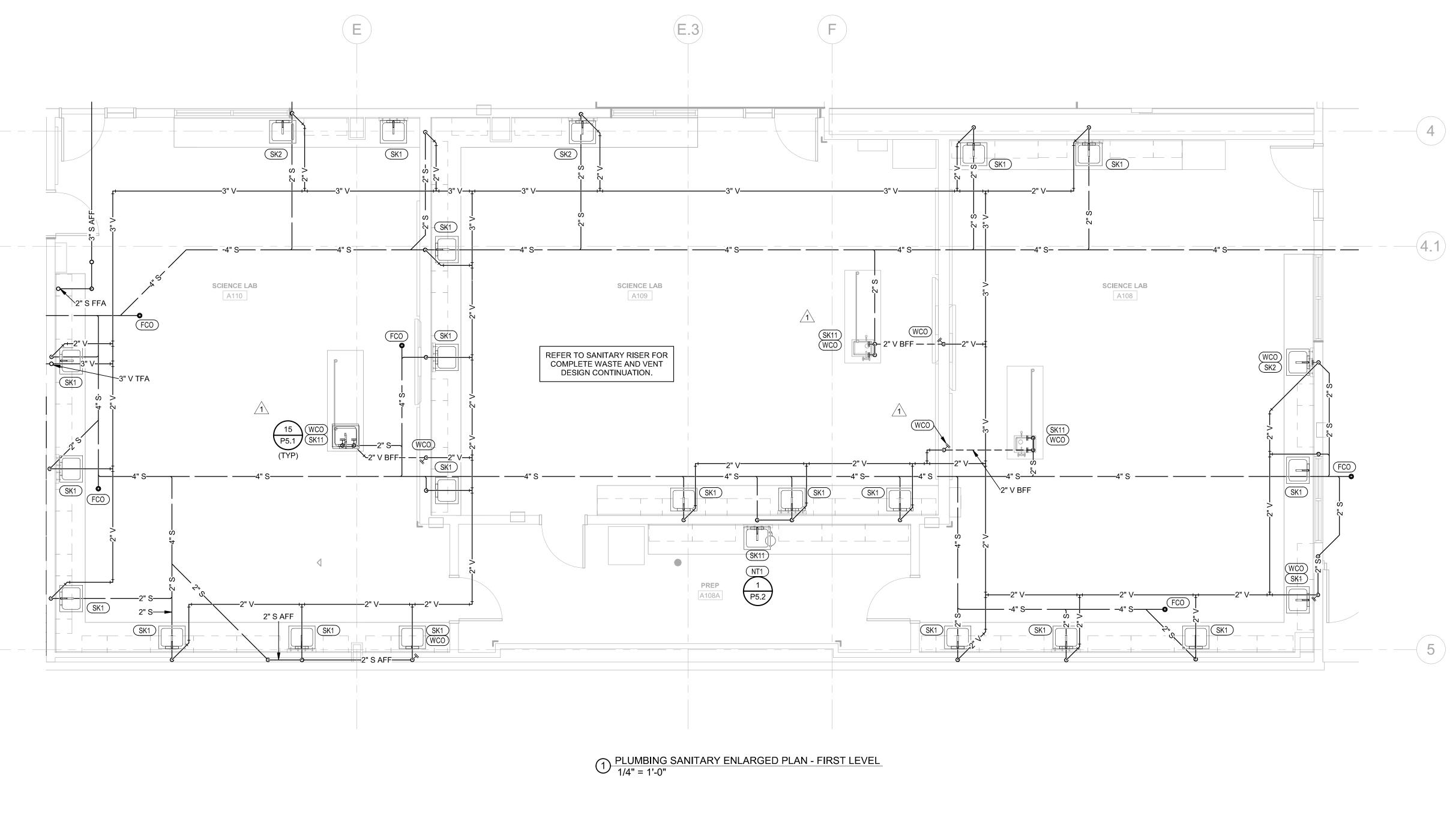
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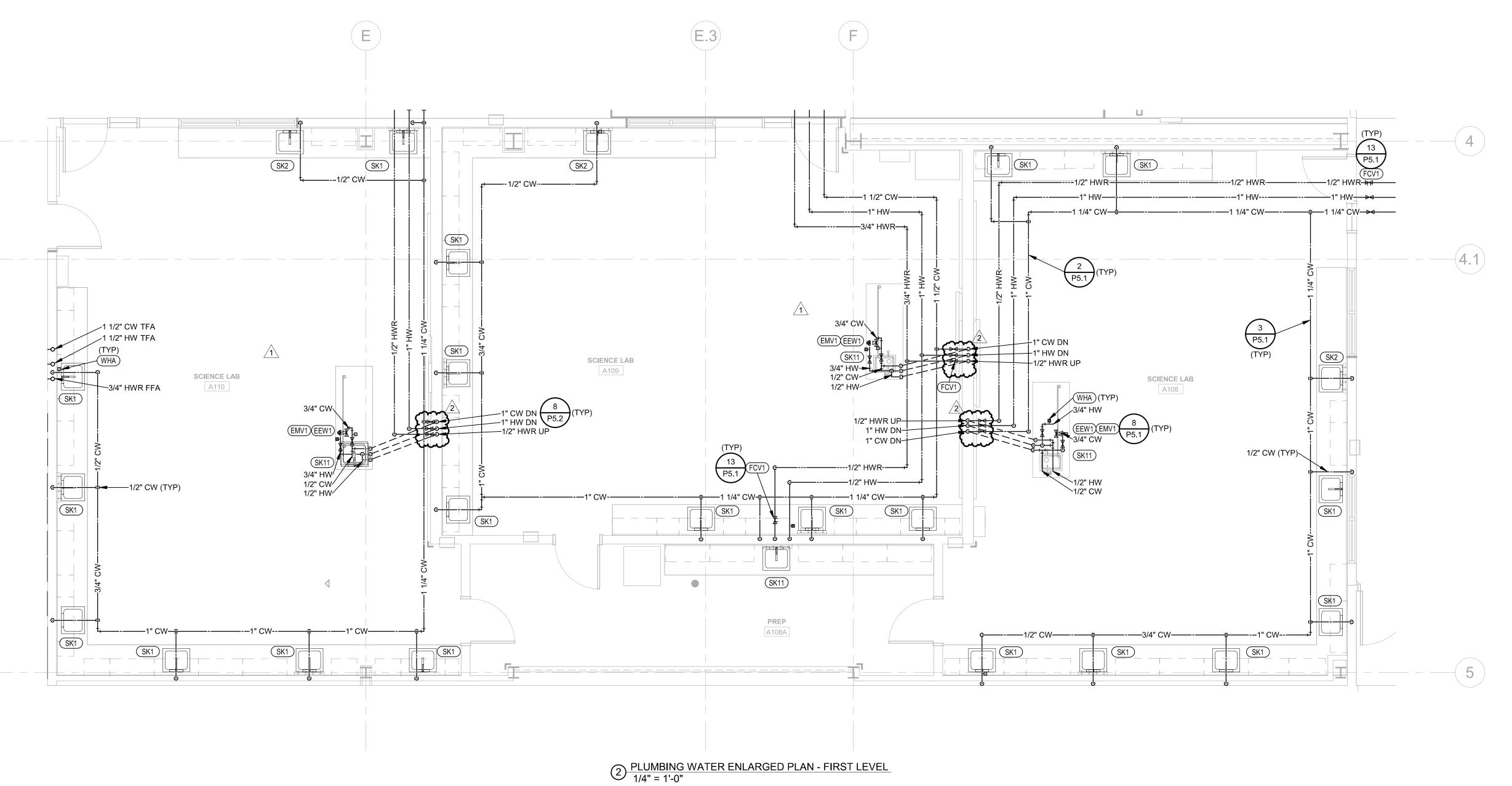
KEY PLAN

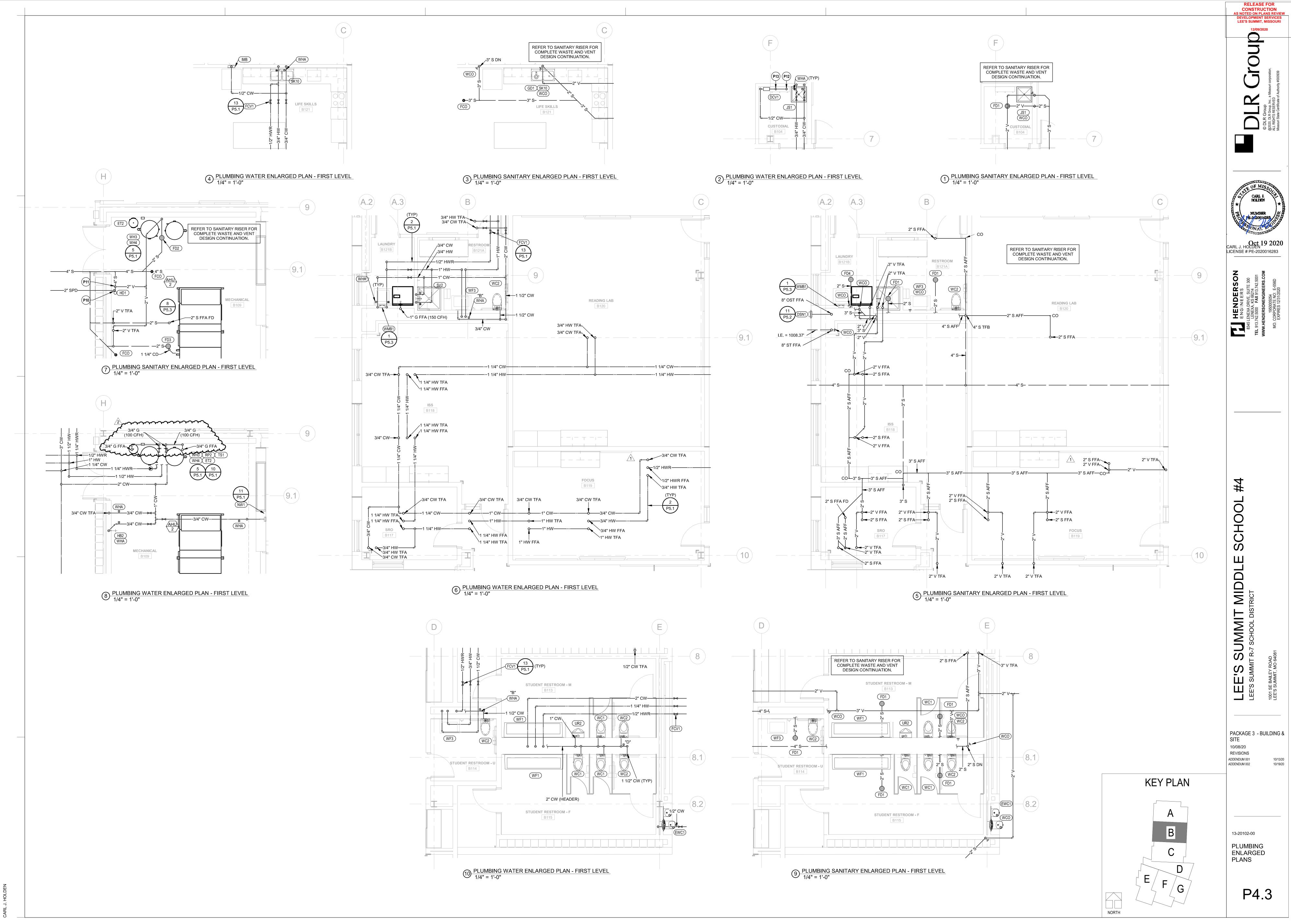
NORTH

PLUMBING ENLARGED PLANS

P4.2





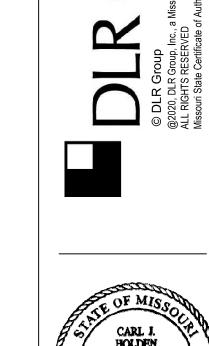


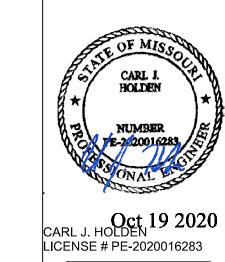
O PLUMBING PLAN NOTES:

FINISH FLOOR.

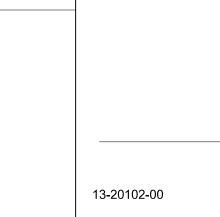
P8 INSTALL 1/2" GAS COCK IN VERTICAL RISE 12" ABOVE THE

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI





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



KEY PLAN

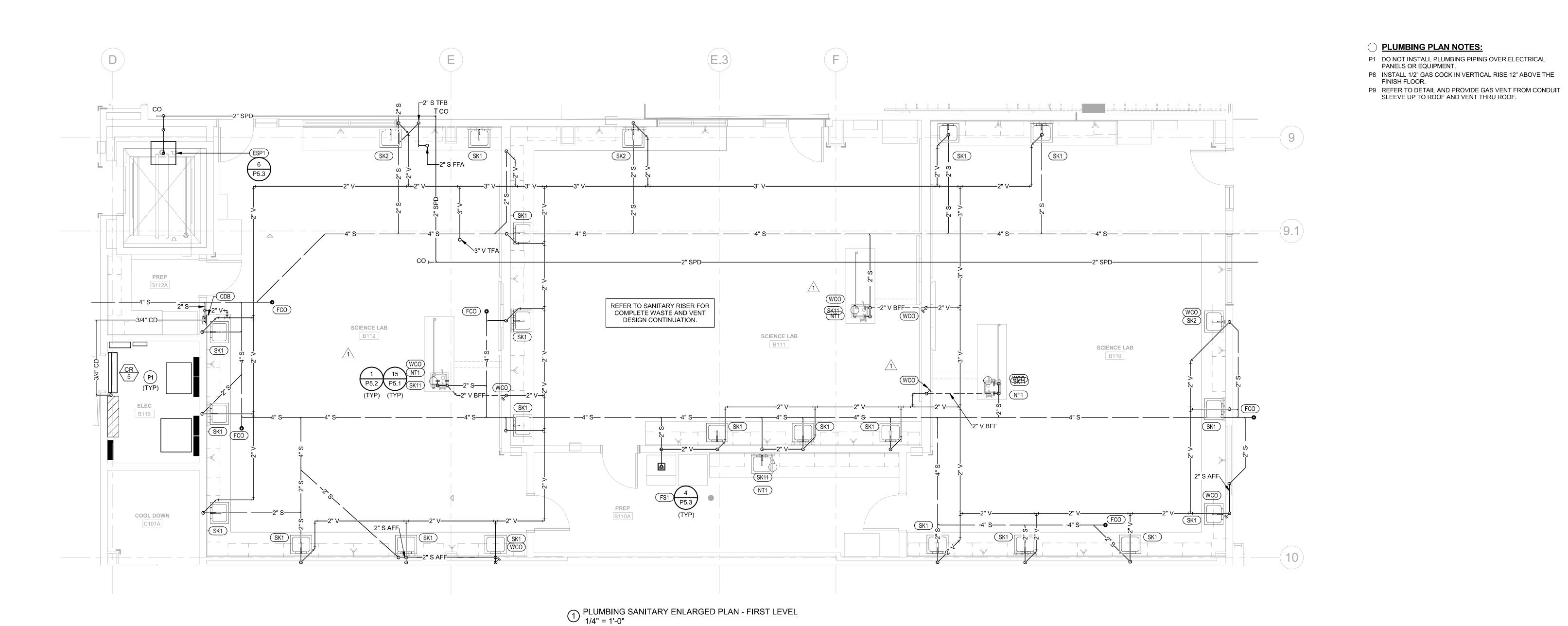
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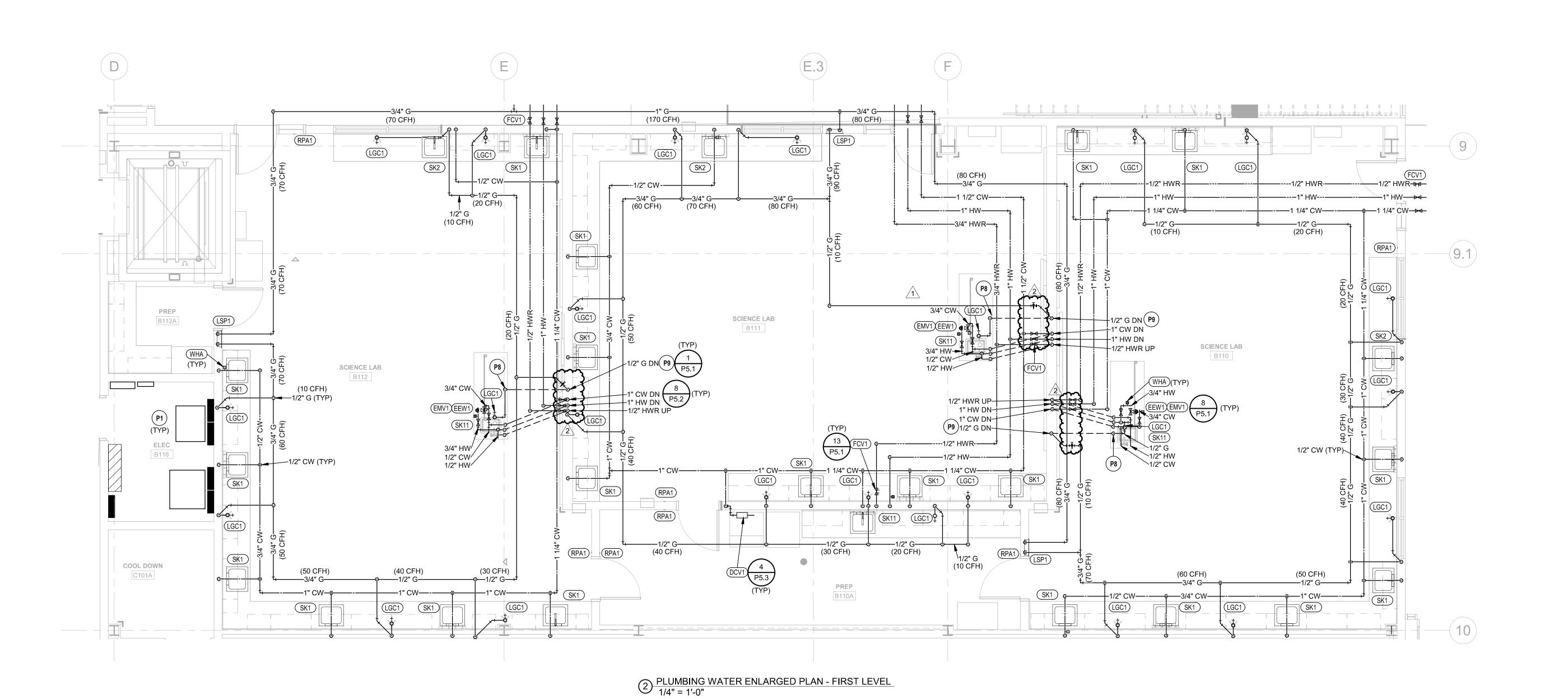
NORTH

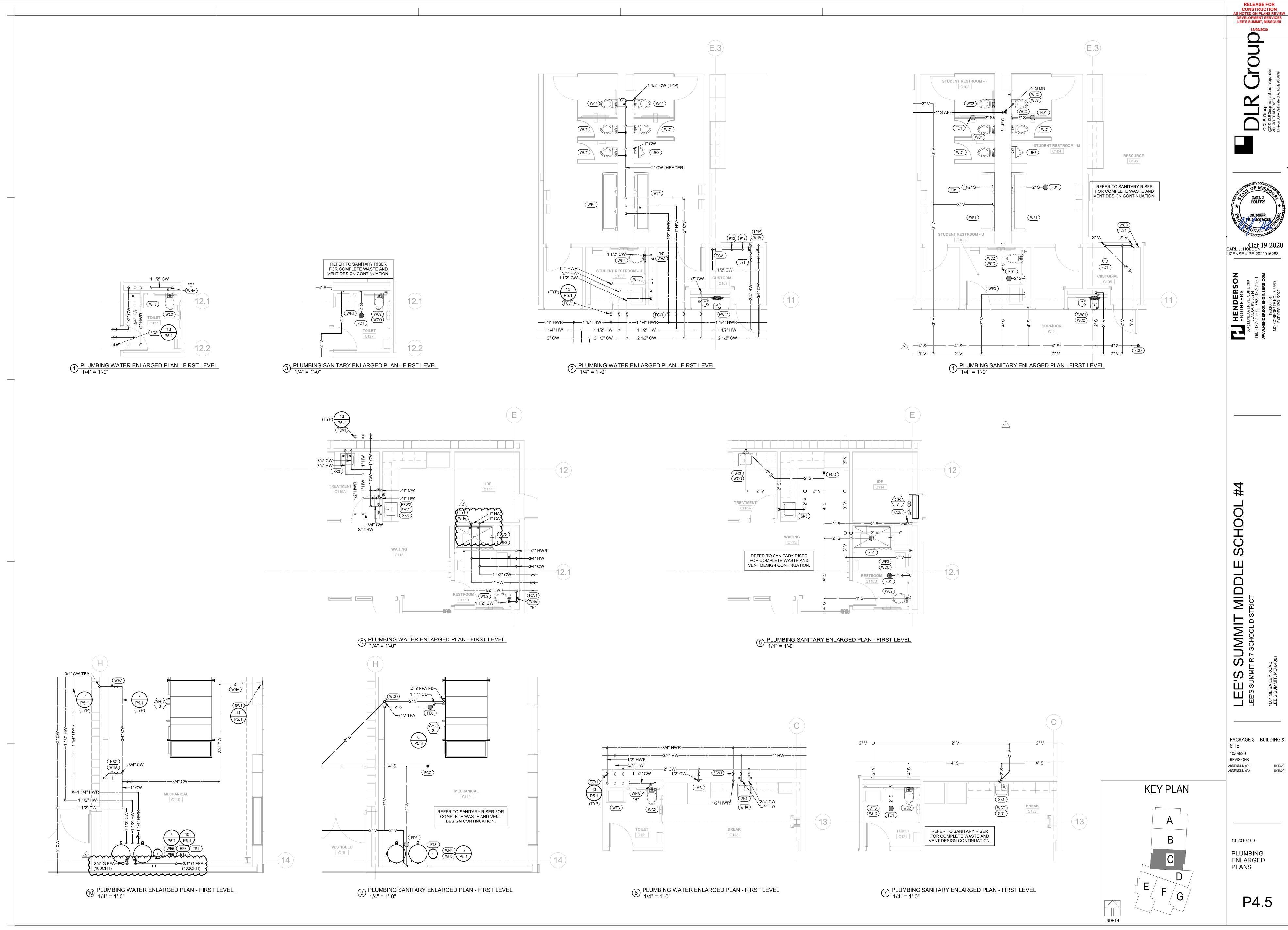
ADDENDUM 001 ADDENDUM 002

PLUMBING ENLARGED PLANS

P4.4







PLUMBING PLAN NOTES:

SCIENCE LAB

2" V BFF — 2" V—

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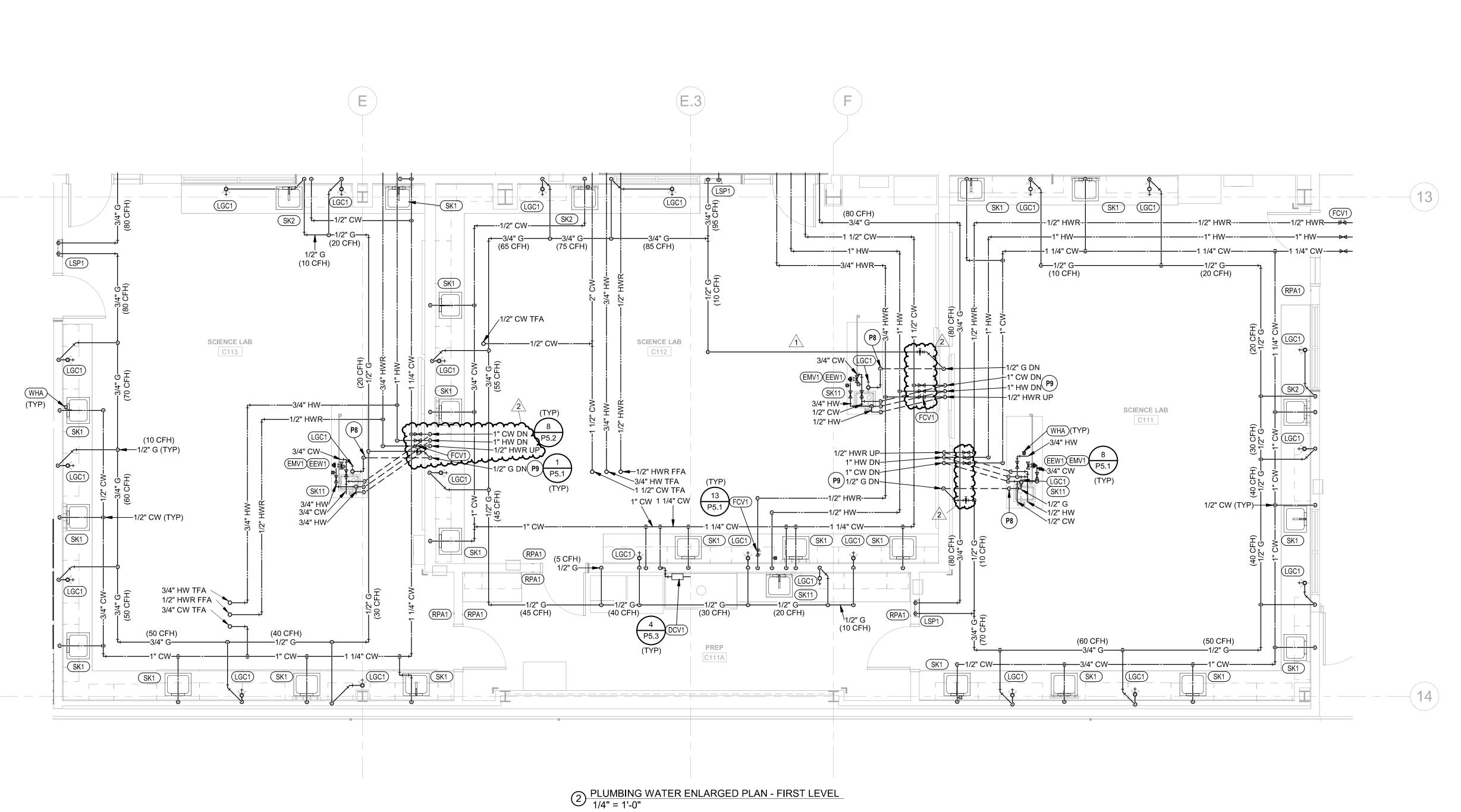
PACKAGE 3 - BUILDING & SITE

10/08/20 REVISIONS ADDENDUM 001 ADDENDUM 002

13-20102-00 PLUMBING ENLARGED PLANS

P4.6

KEY PLAN



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

SCIENCE LAB

1/4" = 1'-0"

Ç<−2" S FFA FD

4" S FFA

3 4" S AFF **3** 4" S AFF **3** 2" V TFA

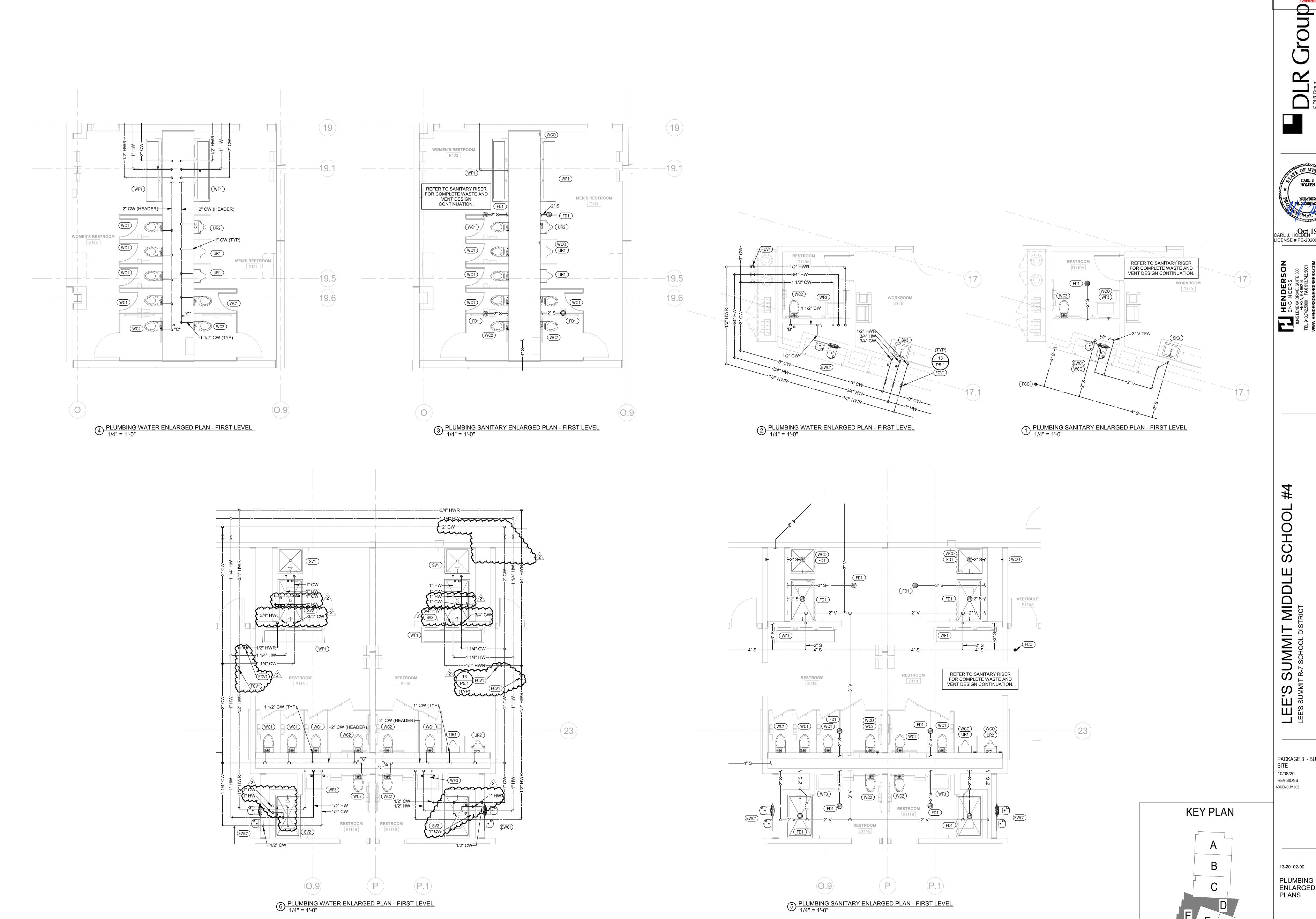
∳−2" V TFA

2" S FFA FD-**→**0—2" S AFF—0 2" V TFA

SCIENCE LAB C113

SK1

2" S——



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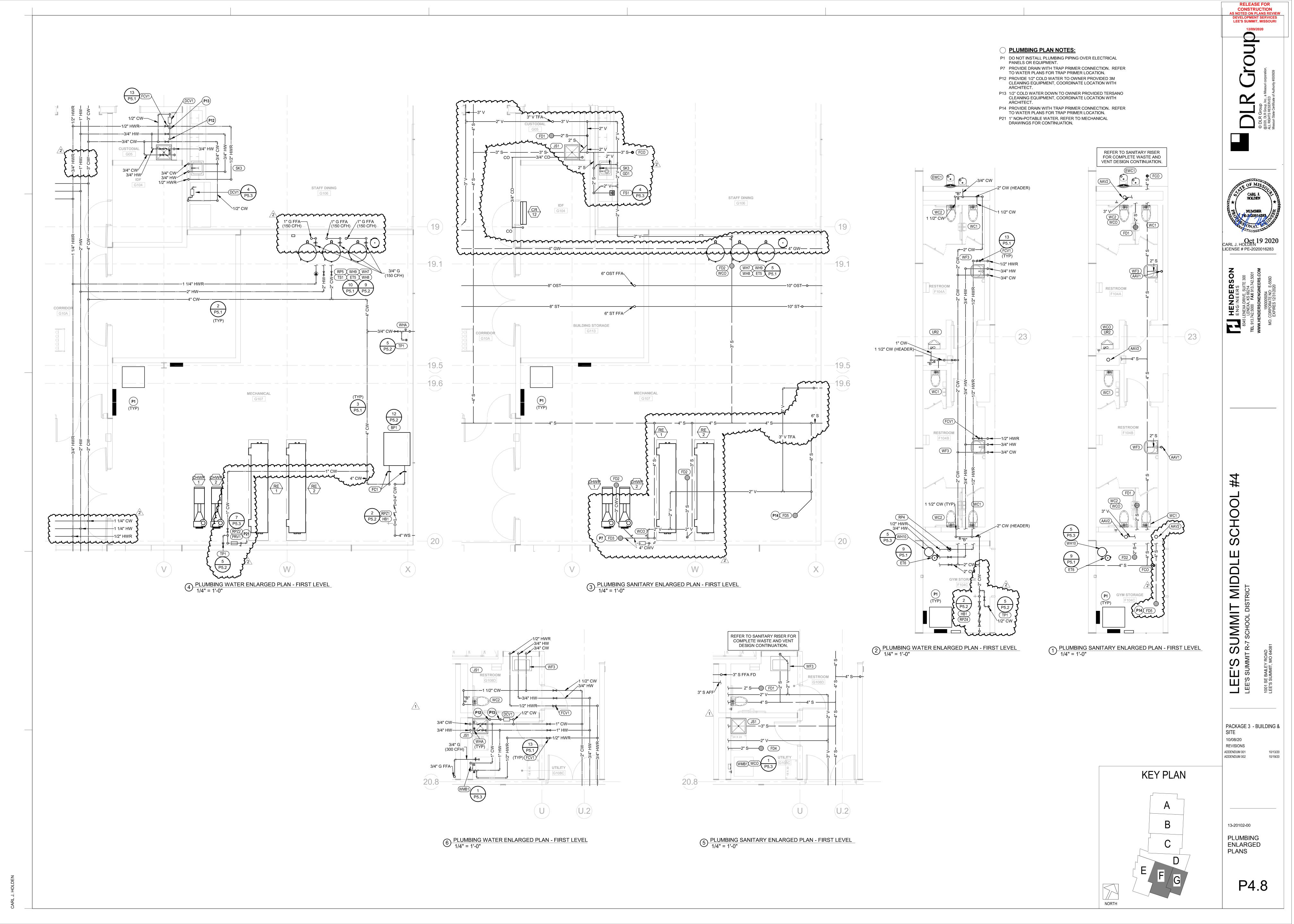
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SUMMIT |

PACKAGE 3 - BUILDING & SITE 10/08/20 REVISIONS ADDENDUM 002

13-20102-00 PLUMBING ENLARGED PLANS

P4.7



DOWN WITH OWNER, SHUT OFF PUMP FOR WINTER.

P22 DISCONNECT CUBER SUPPLY LINE AND REMOVE WATER FILTERS DURING WINTER DRAIN DOWN PROCEDURE.

P24 LEAD FREE JUG FILLER. MOUNT AT 3'-0" AFF.

DRAIN BOX WITH AIR GAP.

P25 ROUTE CD PIPING DOWN INSIDE CHASE AND DISCHARGE TO P26 MOUNT REMOTE CHILLER ON SHELF APPROX. 8'-0" AFF.

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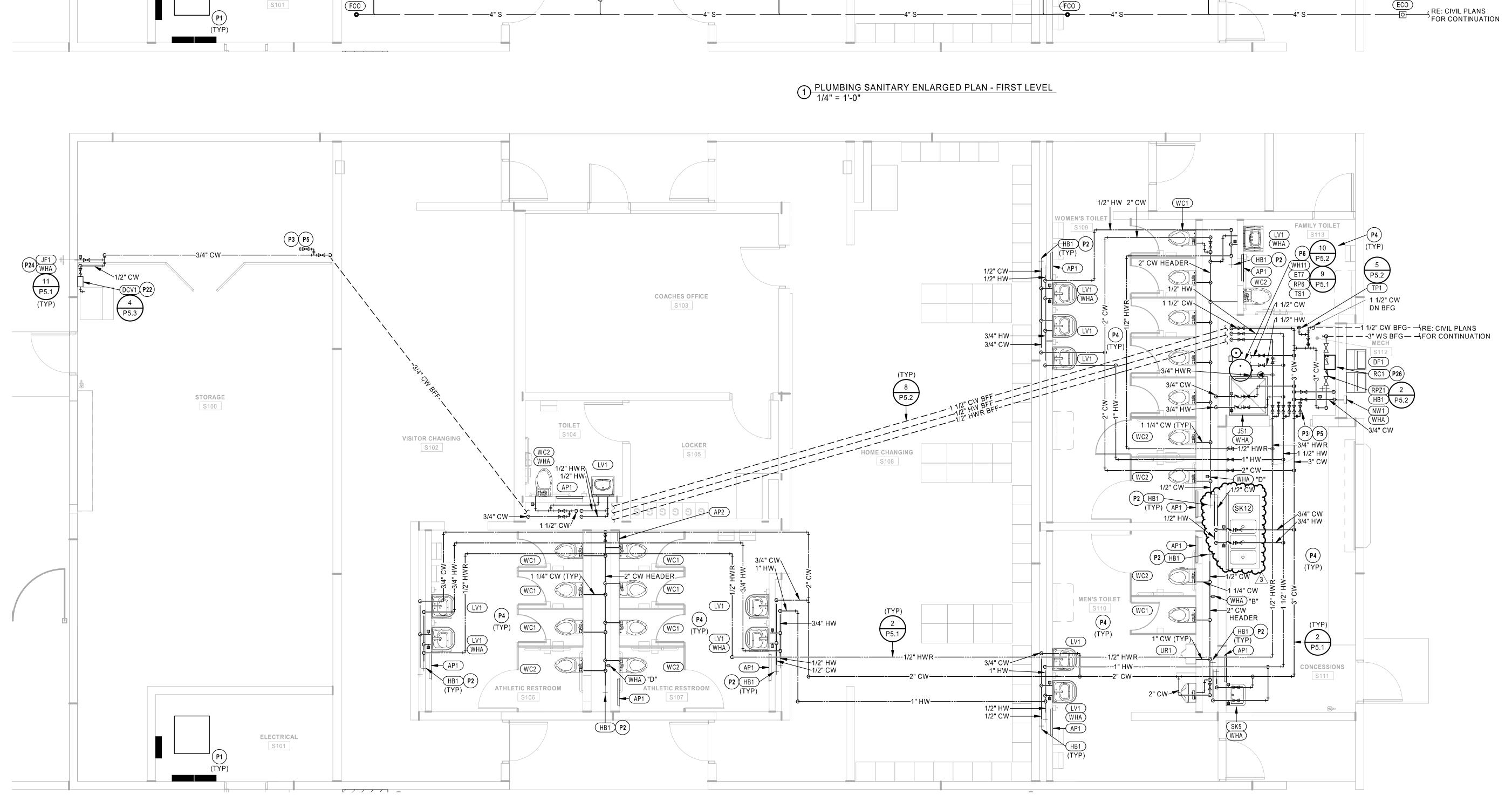
PACKAGE 3 - BUILDING & SITE 10/08/20 REVISIONS ADDENDUM 002

13-20102-00 PLUMBING ENLARGED PLANS

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

WOMEN'S TOILET

MEN'S TOILET



COACHES OFFICE

S103

LOCKER

REFER TO SANITARY RISER FOR COMPLETE WASTE AND

VENT DESIGN CONTINUATION

WC1 ATHLETIC RESTROOM

HOME CHANGING

S108

VISITOR CHANGING

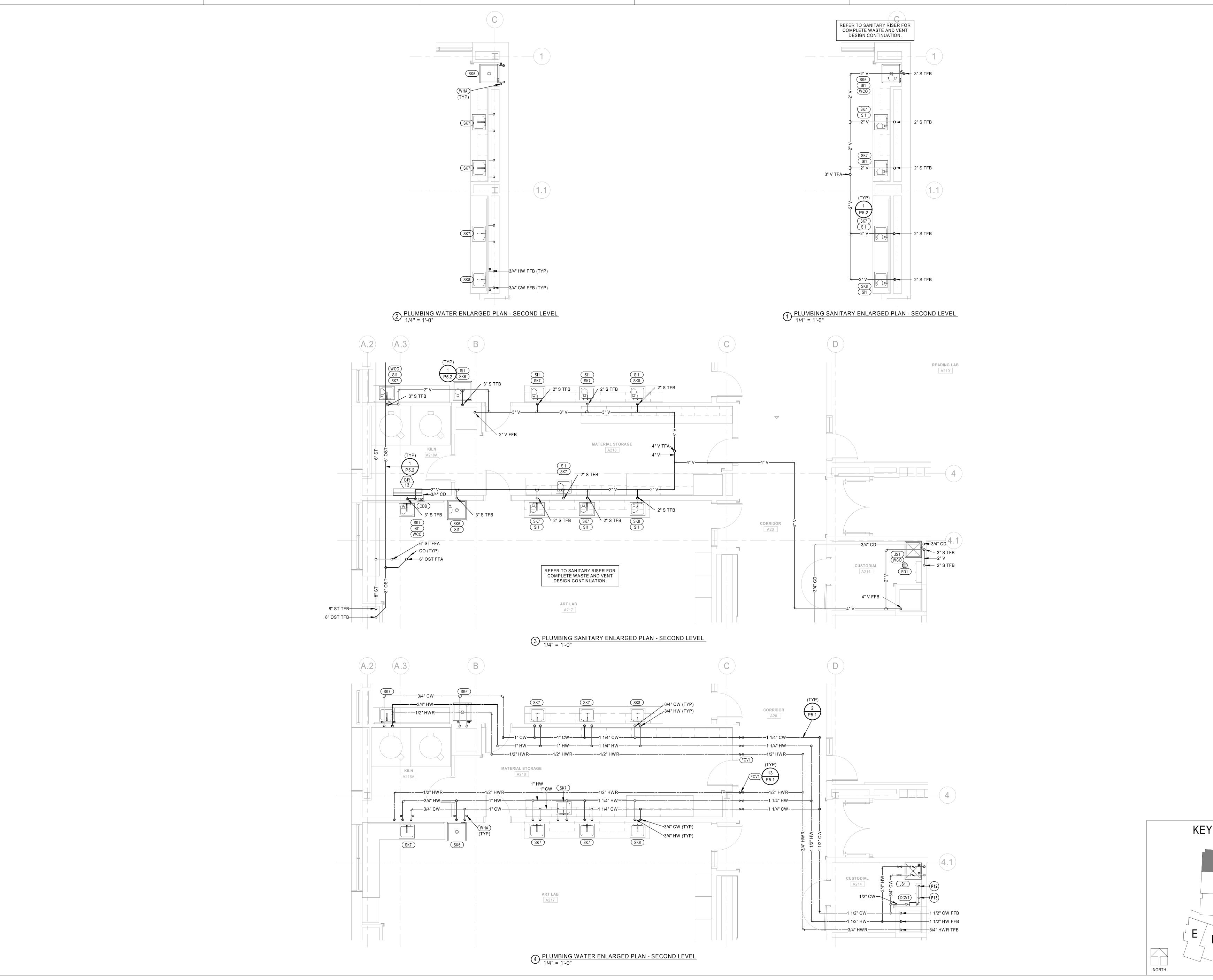
S102

ATHLETIC RESTROOM (WC1)

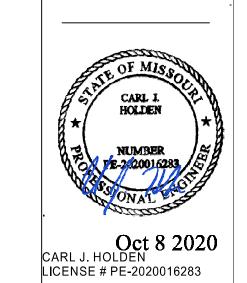
TOILET

STORAGE

S100

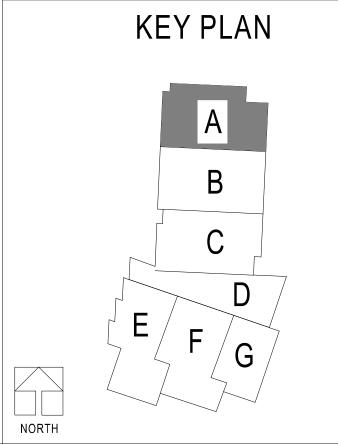


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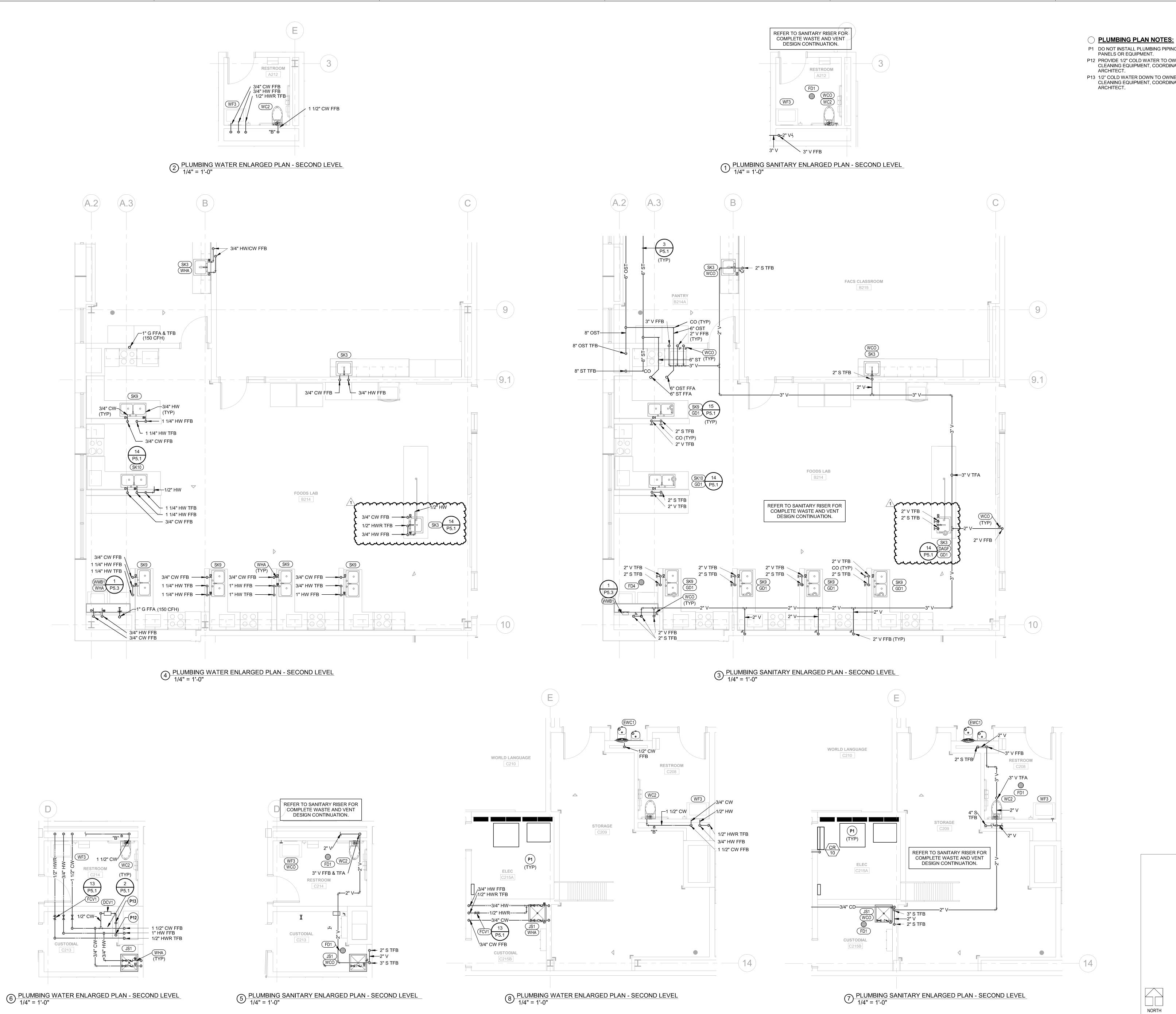
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PACKAGE 3 - BUILDING & SITE 10/08/20 REVISIONS



13-20102-00 PLUMBING ENLARGED PLANS

P4.10



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

RELEASE FOR
CONSTRUCTION
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PACKAGE 3 - BUILDING & SITE 10/08/20 REVISIONS ADDENDUM 001

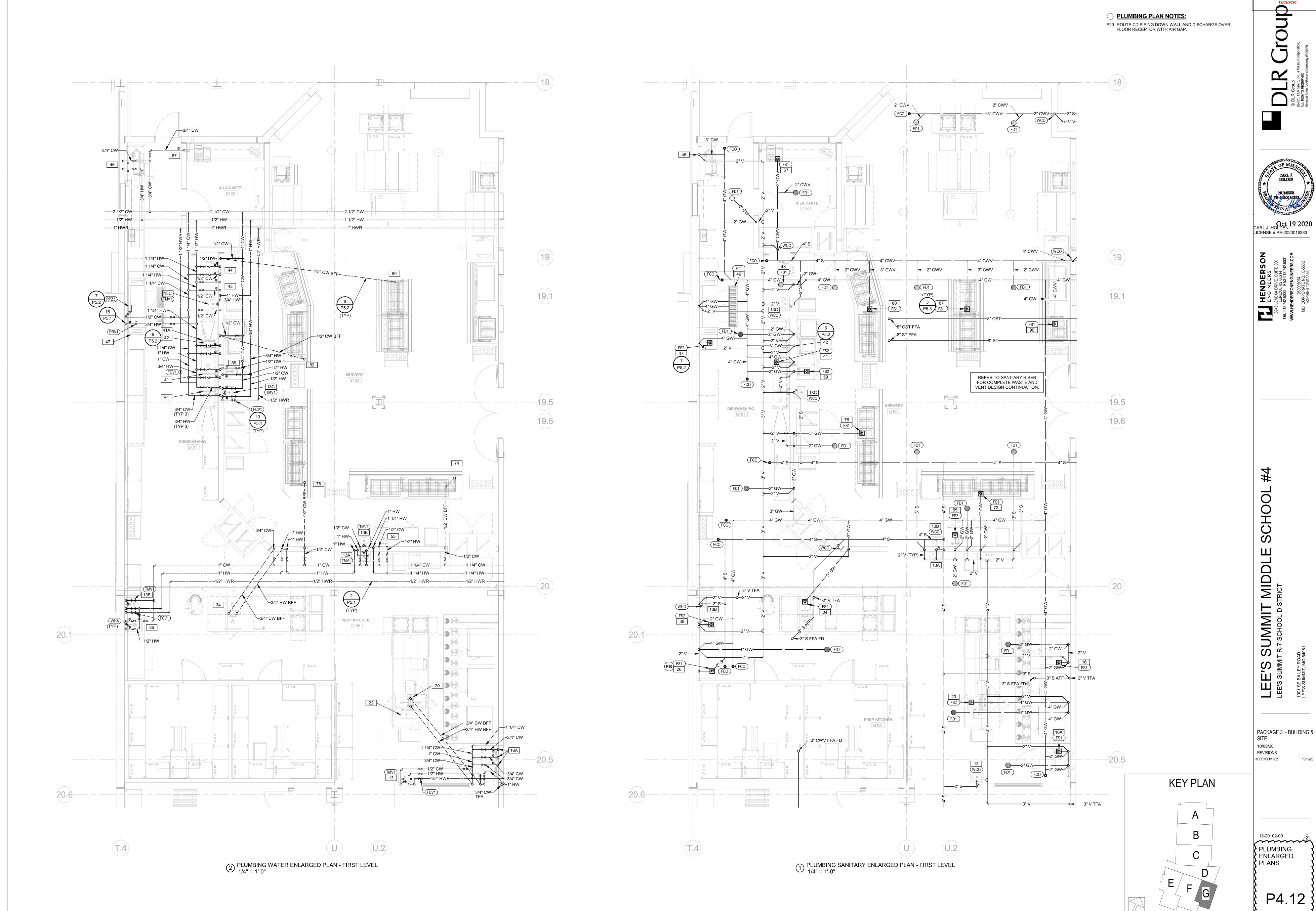
13-20102-00

KEY PLAN

G

PLUMBING ENLARGED PLANS

P4.11



RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
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mmmm

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

CONDITIONS. REFER TO SPECIFICATIONS FOR MORE INFORMATION

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

- PIPE HANGER NEXT

DIELECTRIC PIPE

UNION AT TANK

CONNECTION FOR

CONNECTION OF

AIR CHARGING

VALVE. FILL TANK

WITH AIR PRESSURE

TO MATCH WATER

PIPE INSULATION

CHECK VALVE

AUTOMATIC FLOW CONTROL VALVE

WITH UNION BODY; REFER TO FLOOR

PLANS FOR FLOW RATE AND PIPE SIZE

DISSIMILAR METALS

TO ELBOW

- PROVIDE

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>

MINIMUM, 3-1/2"

LINE SIZE GAS

VENT, EXTEND THRU

CONSTRUCTION

LEE'S SUMMIT, MISSOURI

PACKAGE 3 - BUILDING 8 REVISIONS

13-20102-00 PLUMBING

DETAILS

MINIMUM SIDE SLOPE OF TRENCH SHALL BE 1 TO 1 **UNLESS OTHERWISE** REQUIRED FLOOR SLAB GRADE OR PAVING TRENCH AND BACKFILL BUILDING FOOTING PER SPECIFICATIONS OR FOUNDATION (TYPICAL) -PIPE (TYPICAL) PROVIDE PLASTIC PIPE-MARKER INSTALL PIPING WARNING TAPE OUTSIDE OF EXTERIOR TO FOUNDATION BUILDING ONLY. DO LOAD-BEARING ZONE, NOT TRENCH INSIDE AND OUTSIDE UNDER DRIP LINE OF BUILDING OF TREES. <u>INSIDE</u> FLOOR SLAB **GRADE OR PAVING** PROVIDE SLEEVES DO NOT INSTALL AT PROPER PIPES THROUGH ELEVATION AND FOOTING PAD 3" LOCATION, SLEEVES MINIMUM SHALL BE CAST IRON TYPICAL CONCRETE SOIL PIPE TWO ENCASEMENT NOMINAL PIPE SIZES LARGER THAN PIPE. EXTEND SLEEVE 12" PAST LOAD BEARING 6" MINIMUM ZONE, BOTH SIDES <u> → TRANSVERSE TO FOOTING</u> CONCRETE FOOTING ENCASEMENT 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 AFFECTED CONTRACTORS PRIOR TO THE START OF WORK.

DECK FLANGE

HOSE GUIDE BRACKET

GAS COCK

PIPE RUN -

GAS PIPE MAIN

SPECIFICATIONS -

ROOF INSULATION

ROOF DECK

COMMERCIAL DISHWASHER

(PROVIDED BY OTHERS)

DIELECTRIC IF REQUIRED

BY DISSIMILAR METALS.

TYPICAL PIPE UNION,

HOT WATER SUPPLY

WITH INSULATION -

SHUTOFF VALVE.

LINE SIZE TEE, EXIT

THRU SIDE OUTLET

CONNECT BRANCH TO

FOR EXPANSION AND

ROOF SUPPORT PER

3" LONG LINE SIZE DIRT

LEG WITH BOTTOM

MINIMUM 3-1/2"

MINABOVE ROOF

CONTRACTION OF MAIN

TOP OF MAIN, TO ALLOW

DECK MOUNTED EMERGENCY EYEWASH
 NTS

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.

COUNTERTOP

FULL PORT

BALL VALVE

3/4" TO 1/2"

REDUCER

GAS PRESSURE

REGULATOR RE;

SCHEDULES AND

SPECIFICATIONS

GROUND JOINT

INSTALL CAP AND TEE

TEN PIPE DIAMETERS

OF GAS PRESSURE

PIPE INCREASER

INSTALLATION OF

WITH DIVISION 7

PENETRATION

- ANCHOR PIPE TO

STRUCTURE

INSTALL STRAINER SOLENOID VALVE AND VACUUM

BY DISHWASHER

MANUFACTURER

VENT IN

BREAKER FURNISHED

COUNTER FLASHING

CUT ROOF FOR PIPE

MINIMUM DOWNSTREAM

PIPE UNION

REGULATOR

COORDINATE

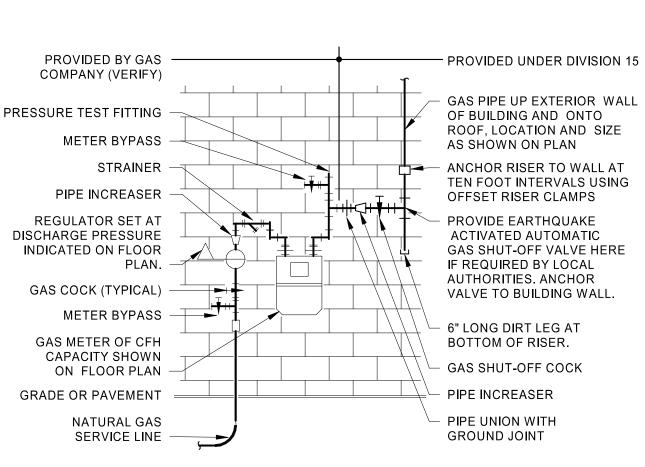
FLASHING AND

3/4" WATER

SUPPLY

SECURE PIPE HANGER TO STRUCTURE (TYP) THREADED STEEL ROD WITH NUT AND WASHER BOTH SIDES (TYP). -CLEVIS HANGER SHOWN FOR CLARITY. SIZE HANGER FOR COLD CLEVIS HANGER, PIPE OUTSIDE DIAMETER SHOWN FOR CLARITY PLUS INSULATION SIZE HANGER FOR THICKNESS. DO NOT HOT PIPE OUTSIDE PENETRATE INSULATION WITH HANGER. PROVIDE A SECTION OF HIGH DENSITY INSULATION OR STYROFOAM BILLETS AT EACH HANGER OF COLD INSULATED PIPE. PROVIDE SHORT CUT INSULATION TO INSULATION SHIELD FOR FIT AROUND HANGER. LAPPING INSULATION SEAL EXPOSED JACKET OVER HIGH DENSITY **INSULATION ENDS** INSULATION OR WITH JOINT SEALANT STYROFOAM BILLETS. COLD PIPE **HOT PIPE** MAINTAIN VAPOR BARRIER

> REFER TO SPECIFICATIONS FOR INSULATION TYPES, INSULATION THICKNESSES, HANGER TYPES, HANGER ROD CONNECTIONS TO STRUCTURE AND HANGER SPACING.



VERIFY REQUIREMENTS FOR METERING AND PIPING WITH GAS COMPANY. COORDINATE WITH GAS COMPANY WITH REGARD TO INSTALLATION OF OTHER PLUMBING UTILITIES IN 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.

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 CHASE - CLEANOUTS FLOOR PROVIDE LONG **MINIMUM 1-1/2"** RADIUS PATTERN PIPE ABOVE DRAINAGE FLOOR, 2" PIPE FITTINGS FOR BELOW FLOOR. 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.

UNDERCOUNTER DISHWASHER SPECIFIED IN DIVISION 11. INSTALL WATER AND WASTE HOSES FURNISHED WITH DISHWASHER.

 WASTE LINE 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.

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 TO SCHEDULE AND/OR SPECIFICATIONS), OR CONNECT TO GARBAGE DISPOSER IF PROVIDED. - 10" MINIMUM

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.

┿║┾┵┩╬┼

WATER

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

GAS FIRED ROOF-TOP AIR CONDITIONING UNIT OR MAKEUP AIR UNIT PER MECHANICAL PLANS PIPE REDUCED FROM ADAPTER(S) AS REQUIRED TO BRANCH PIPE SIZE TO UNIT CONNECT CONDENSATE DRAIN CONNECTION SIZE, AT UNIT PIPE TO STUB ON EQUIPMENT. CONNECTION STUB PROVIDE DRAIN PIPE ONE INSTALL TEE TEN PIPE DIAMETERS NOMINAL PIPE SIZE LARGER MINIMUM DOWNSTREAM OF THAN EQUIPMENT CONNECTION PRESSURE REGULATOR, IF SIZE, MINIMUM 3/4" REGULATOR SHOWN ON PLANS GROUND JOINT PIPE UNION PROVIDE TRAP DEPTH GREATER OF 4" OR GAS PRESSURE REGULATOR IF 1/2" PLUS STATIC SHOWN ON PLANS, RE: PRESSURE IN INCHES SCHEDULES, AND SPECIFICATIONS OF WATER COLUMN GAS COCK FULL SIZE OF BRANCH PIPE. REFER TO PLAN FOR SIZE OF BRANCH PIPE 6" TALL VENT OPEN TO BRANCH OFF TOP OF GAS ATMOSPHERE ONLY WHERE REQUIRED BY → ARRANGE PIPE AND ELBOWS CODE FOR LENGTH OF TO ALLOW FOR EXPANSION AND CONTRACTION OF PIPE DRAIN PIPE DISCHARGE AWAY FROM SERVICE AREAS OF UNIT, OR AT ROOF DRAIN OR GUTTER IF REQUIRED BY LINE SIZE TEE, EXIT THRU LOCAL AUTHORITIES OR SIDE OUTLET SHOWN ON PLANS - 3" LONG LINE SIZE DIRT LEG SUPPORT PIPE ON ROOF WITH BOTTOM MINIMUM 3-1/2" PER SPECIFICATIONS -MINIMUM ABOVE ROOF

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

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

GALVANIC ISOLATOR

PIPE CLAMP (TYP)

SUPPORT NUT

RECOMMENDATIONS

OF HANGER RODS PER

PROVIDE METAL 360°

ENGINEERED THERMAI

HANGER-SHIELD INSERT OF

FOR PIPES 4" AND SMALLER.

PRE-ENGINEERED THERMAL

HANGER-SHIELD INSERT OF

INSULATION MAY BE PROVIDED

FLEXIBLE UNICELLULAR

CUT INSULATION TO

FIT AROUND TRAPEZE

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

GA. CHANNEL SUPPORT

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.

ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. PROVIDE CONNECTIONS SHOWN IN EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS. VERIFY CONNECTION LOCATIONS BEFORE INSTALLING PIPE RUNS. REFER TO SPECIFICATIONS FOR PIPE AND FITTING MATERIALS AND INSTALLATION. PROVIDE DIELECTRIC UNION IF CONNECTING DISSIMILAR METALS. FOR PIPE SIZE(S) REFER TO FLOOR PLANS, OR 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 CLEANOUTS IN ENDS AND TURNS OF PIPE PER LOCAL CODE REQUIREMENTS: ADAPTER WITH THREADED CLEANOUT PLUG. OMIT CONDENSATE DRAIN ON MAKEUP AIR UNIT. PROVIDE MINIMUM 6" CLEARANCE TO ROOF

6 CONNECTIONS TO ROOF-TOP UNIT

FROM COLD WATER PIPE HANGER TO SUPPLY TO WATER STRUCTURE ABOVE HEATER, WITH NO CHECK AIR CHARGING VALVE VALVES INTERVENING -FILL TANK WITH AIR WELDED STEEL EXPANSION PRESSURE TO MATCH WATER PRESSURE. POLYPROYPLENE LINING AND BUTYL DIAPHRAGM, PROVIDE DIELECTRIC UNION IF REQUIRED FDA AND NSF APPROVED FOR DOMESTIC WATER FOR CONNECTION OF DISSIMILAR METALS SERVICE INTEGRAL BASE FOR BALL DRAIN VALVE 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.

MAKE CONNECTIONS AND PROVIDE INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS. ARRANGEMENT SHOWN IS SCHEMATIC: PROVIDE REDUCERS AND ADAPTERS AS REQUIRED.

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

STRAINER

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

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.

3/4" PIPE FROM COLD

VALVES INTERVENING

WATER SUPPLY TO

WATER HEATER,

WITH NO CHECK

FDA-COMPLIANT

WELDED STEEL

BUTYL DIAPHRAGM

NSF APROVED FOR

DOMESTIC WATER

SERVICE

PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO

SUIT FIELD CONDITIONS. FOLLOW MANUFACTURER'S

STRAP OR BRACING WHEN REQUIRED BY LOCAL

INSTRUCTIONS FOR INSTALLATION PROCEDURE. VERIFY

PROPER OPERATION WHEN INSTALLED. PROVIDE SEISMIC

EXPANSION TANK WITH

AUTHORITIES.

HOT WATER RECIRCULATION BRANCH

TYPICAL BALL TYPE

SHUT-OFF VALVE -

POLYPROPYLENE LINING,

HEATER (TYPICAL) -

GAS COCK (TYPICAL)

PROVIDE REDUCER AT

REQUIRED (TYPICAL)

TO BLACK STEEL WITH

PLUG VENT PORT IN

SLEEVE ADAPTOR

MAXIMUM BURY DEPTH

CONNECTION IF REQUIRED

FEEDING UNDERSLAB CSST SYSTEM.

PANEL IF INDICATED ON FLOOR PLANS

CONSTRUCTION

LEE'S SUMMIT, MISSOURI

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

SPECIFICATIONS

CONNECT 1/2" PIPE (WITHOUT

SHUT-OFF VALVE IN BRANCH)

TO TRAP PRIMER VALVE OFF

INSULATE PIPE UPSTREAM

DOWNSTREAM OF TRAP

COPPER TUBING. INSTALL

UNIT USING 1/2" SOFT

PRIMER OR DISTRIBUTION

WITHOUT KINKS, AND SLOPE

CONTINUOUSLY TOWARDS

OF TRAP PRIMER, BUT NOT

INSTALL TRAP PRIMER LINE(S)

TOP OF BRANCH PIPE.

DOWNSTREAM.

FLOOR DRAIN.

CONCEAL PIPE(S) IN

PARTITION OR CHASE IN

FINISHED AREAS. TRAP

INSTALLED EXPOSED IN

UNFINISHED, NON-PUBLIC

IF PIPE IS BELOW FLOOR

1/2" ELASTOMERIC

FLOOR SLAB.

SLAB ON GRADE, PROVIDE

INSULATION FROM PRIMER

CONNECTION TO 1" ABOVE

PRIMER AND PIPES MAY BE

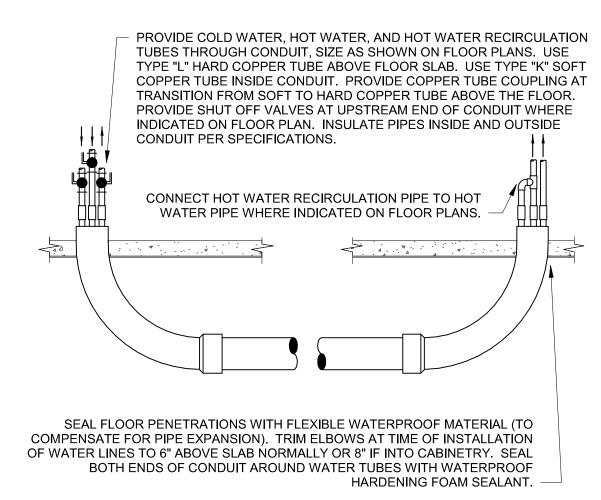
PIPE PER

FUME HOOD

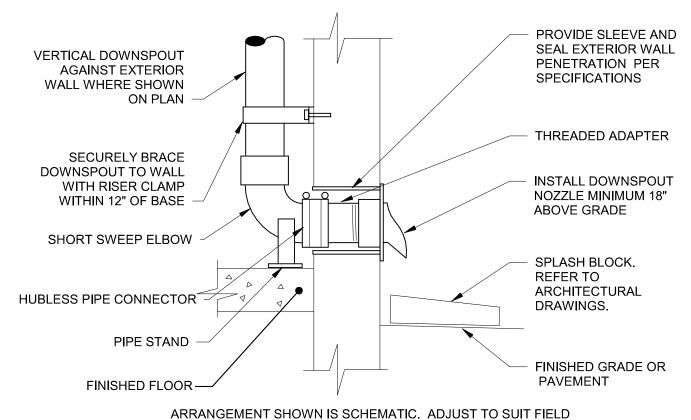
CASEWORK OR CUP

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

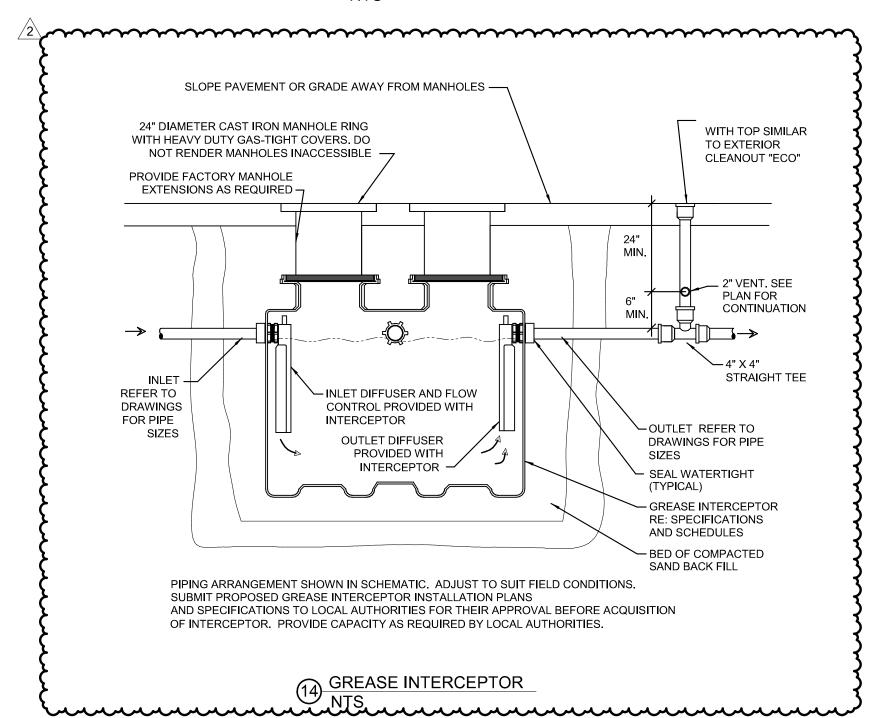
LOCATE EXTERIOR CLEANOUTS AT ENDS OF RUNS, AT TURNS OF PIPE GREATER THAN 45 DEGREES, AT MINIMUM 75 FOOT INTERVALS ON STRAIGHT RUNS, AND WHERE SHOWN ON PLANS. PROVIDE EARTH BACKFILL AND COMPACTION PER ARCHITECTURAL SPECIFICATIONS. REFER TO SPECIFICATIONS AND SCHEDULES FOR MORE INFORMATION.

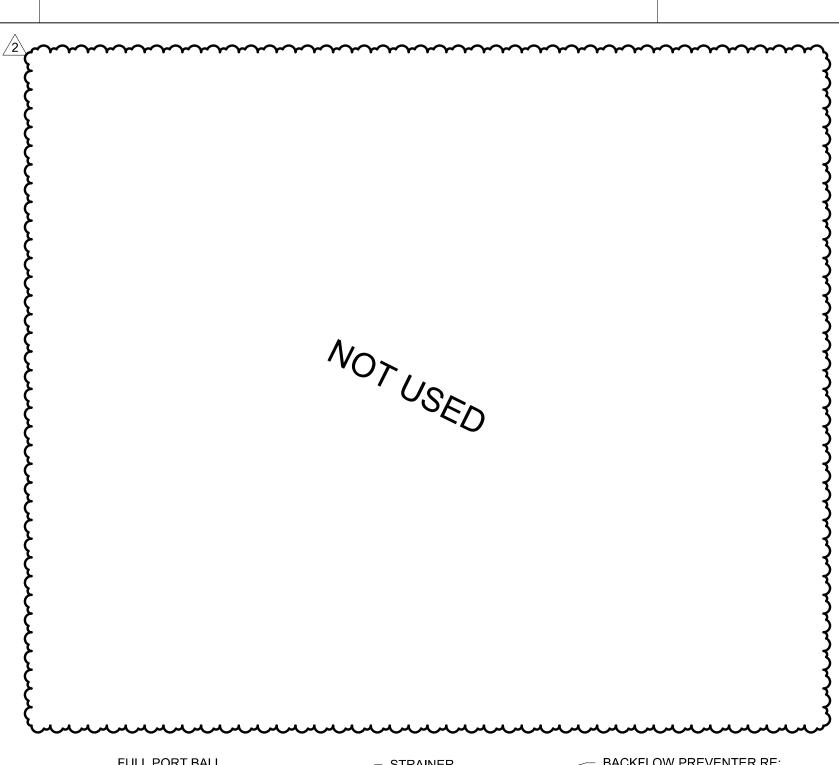


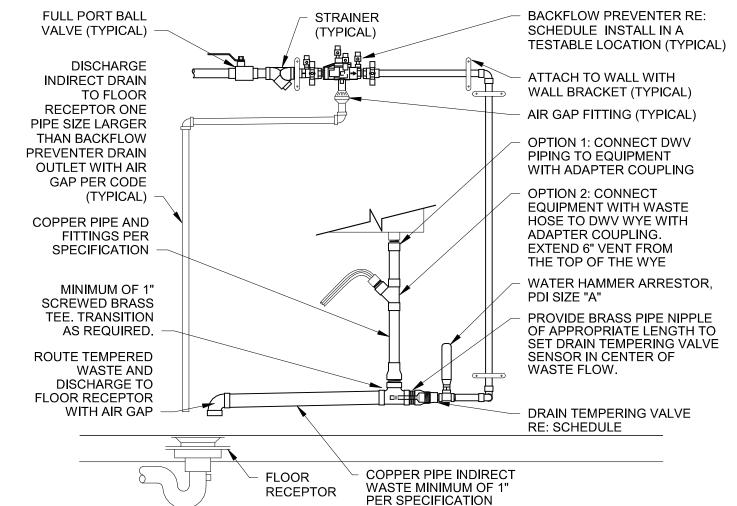
PROVIDE PVC CONDUIT WITH FITTINGS AND JOINTS PER SPECIFICATIONS. SIZE CONDUIT TO HOUSE INSULATED PIPES AS REQUIRED (INDIVIDUAL CONDUITS FOR SINGLE INSULATED PIPES MAY BE PROVIDED IN LIEU OF A SINGLE LARGER CONDUIT). SET CONDUIT ON COMPACTED OR UNDISTURBED EARTH. USE MINIMUM QUANTITY OF FITTINGS REQUIRED. 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.



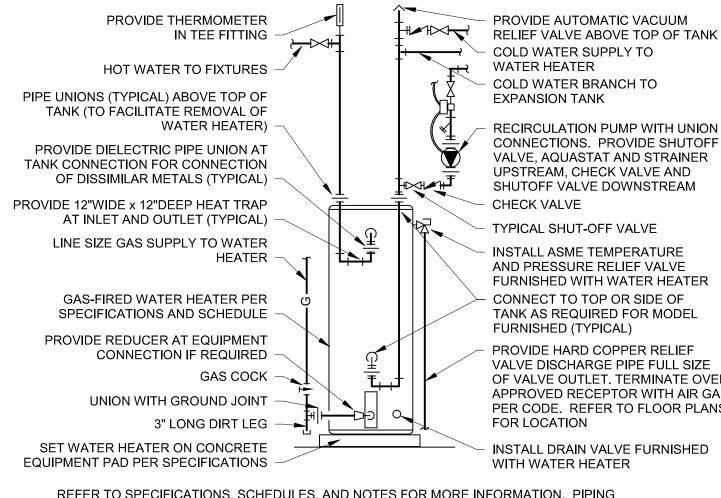
CONDITIONS. REFER TO SPECIFICATIONS FOR DOWNSPOUT NOZZLE, AND TYPE OF PIPE, FITTINGS, AND CONNECTORS.





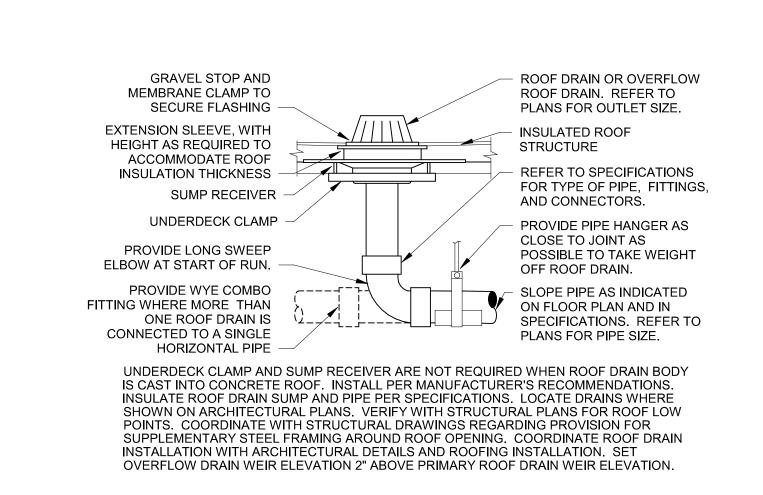


PIPING ARRANGEMENT SHOWN IN SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. PROVIDE REDUCED PRESSURE BACKFLOW PREVENTER OF MANUFACTURER APPROVED BY LOCAL AUTHORITIES. INSTALL WITH REQUIRED CLEARANCES. INSTALL BACKFLOW PREVENTER IN HORIZONTAL UPRIGHT POSITION. PROVIDE ANY REQUIRED CERTIFICATION OF TEST OF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

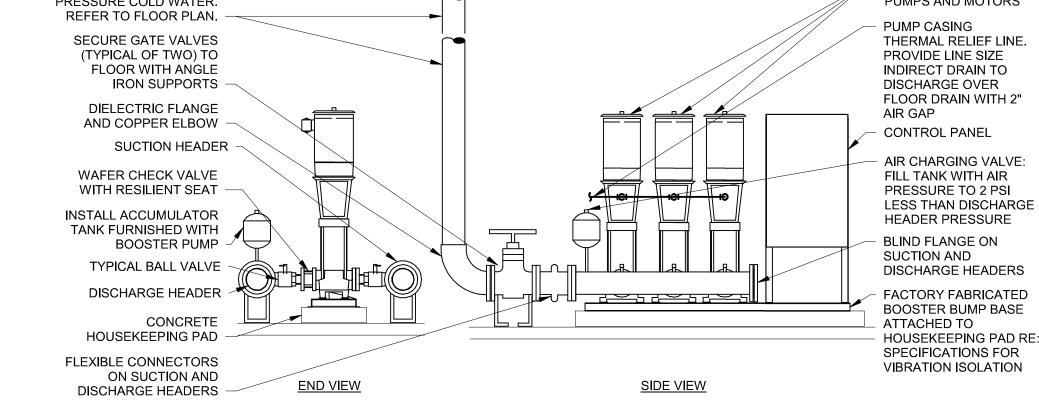


ARRANGEMENT SHOWN IS SCHEMATIC; ADJUST TO SUIT FIELD CONDITIONS. VERIFY CONNECTION SIZES AND LOCATIONS WITH WATER HEATER FURNISHED. REFER TO FLOOR PLANS FOR PIPE SIZES AND CONTINUATIONS. PROVIDE SEISMIC STRAP OR BRACING AND FLEXIBLE CONNECTORS ON PIPE WHEN REQUIRED BY LOCAL AUTHORITIES. PROVIDE HEAT 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

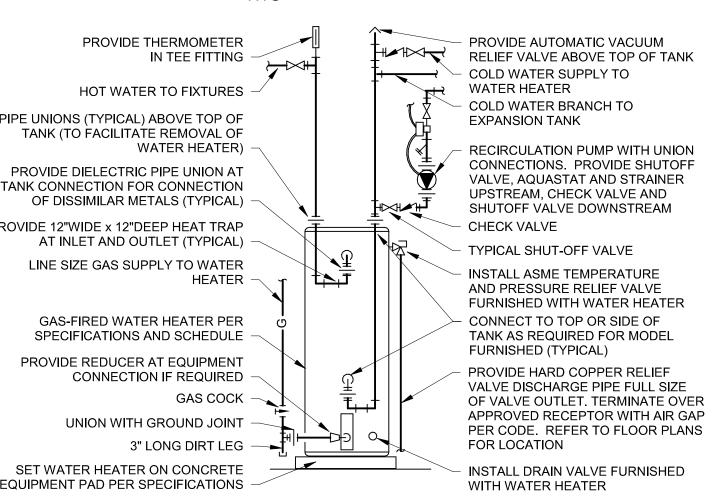




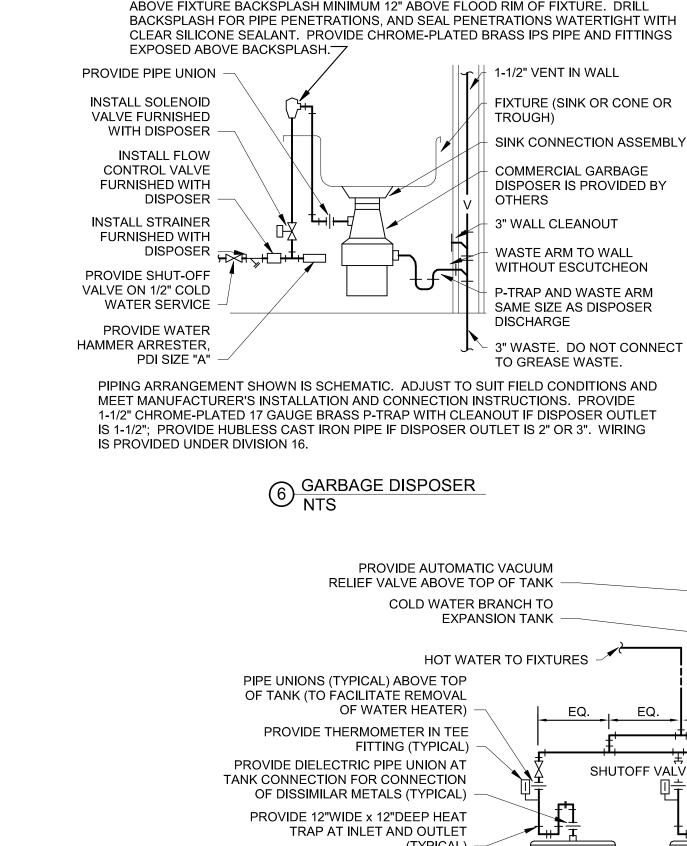


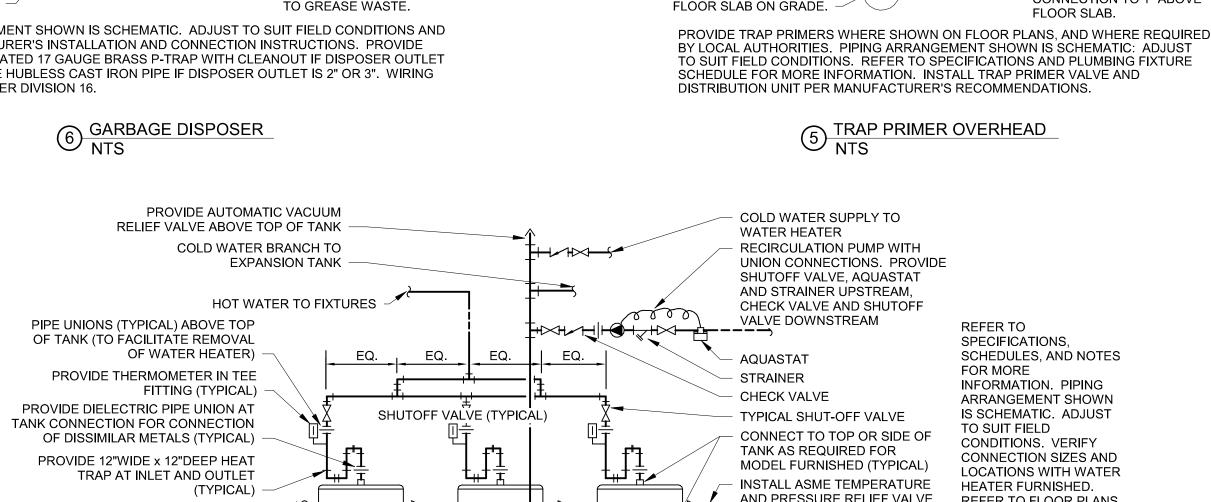
REFER TO SPECIFICATIONS, SCHEDULES, AND NOTES FOR MORE INFORMATION ABOUT PUMPS, CONTROLS, PIPE, VALVES, CONNECTION SIZES AND LOCATIONS PER MANUFACTURER'S REQUIREMENTS. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL CONNECTIONS.

AND TESTED. SUPPORT ASSEMBLY FROM WALL WITH WALL BRACKETS.



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





TRANSITION TO COPPER PIPE SIZE AS SHOWN

BALL VALVE (TYPICAL)

FITTING

PIPING ARRANGEMENT SHOWN IS SCHEMATIC: ADJUST AS

PROVIDE REDUCED PRESSURE ASSEMBLY OF MANUFACTURE

APPROVED BY LOCAL AUTHORITIES. INSTALL WITH REQUIRED

REQUIRED CERTIFICATION OF TEST OF BACKFLOW PREVENTER TO LOCAL AUTHORITIES. ALL ITEMS SHALL BE APPROVED FOR

SUPPORTED FROM WALL BRACKET OR FLOOR STAND. INSTALL

DOMESTIC WATER SERVICE. INSTALL ENTIRE VALVE TRAIN

REQUIRED TO SUIT ACTUAL INSTALLATION CONDITIONS.

CLEARANCES, IN HORIZONTAL UPRIGHT POSITION, PER

MANUFACTURER'S RECOMMENDATIONS. PROVIDE ANY

SO THAT IT CAN BE EASILY SERVICED AND TESTED.

INDIRECT DRAIN PIPE TO

DISCHARGE ONTO FLOOR

SIZE LARGER THAN

RELIEF VALVE OUTLET

DRAIN, ONE NOMINAL PIPE

CASEWORK OR FUME

RESISTANT WASTE PIPE

ACID NEUTRALIZATION

TANK FILLED WITH

LIMESTONE CHIPS,

AND PLUMBING

BRANCH PIPE WITH

DISCHARGE PIPE.

IF TRAP PRIMER IS

SPECIFICATIONS.

DOOR PER

SHUT-OFF VALVE FEEDING

AUTOMATIC TRAP PRIMER

VALVE WITH INTEGRAL AIR

GAP. INSTALL TRAP PRIMER

MINIMUM 12" ABOVE FLOOR

FOR EVERY 20' OF PRIMER

UNIT(S) WHERE MORE THAN

ONE TRAP IS SERVED BY

INSTALLED ABOVE HARD

CEILING, PROVIDE ACCESS

PROVIDE FLOOR DRAIN BODY

TRAP PRIMER CONNECTION.

PROVIDE SWEAT TO THREADED

ADAPTER. BRAZE JOINT BELOW

OR P-TRAP WITH THREADED

ONE TRAP PRIMER VALVE.

PROVIDE DISTRIBUTION

PLUMBING FIXTURE(S)

PER SPECIFICATIONS

FIXTURE SCHEDULE

DIP TUBE FURNISHED

WITH TANK, TO FORM

TO TAILPIECE FURNISHED

HOOD CABINETRY

CONNECT ACID

WITH SINK

A TRAP

PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD

INSTRUCTIONS. REFER TO SPECIFICATIONS FOR ACID RESISTANT PIPE,

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

UNDER COUNTER ACID NEUTRALIZATION TANK
NTS

EASY REMOVAL OF TANK AND REPLACEMENT OF LIMESTONE CHIPS.

CONDITIONS AND MEET TANK MANUFACTURER'S INSTALLATION

ON FLOOR PLANS

HOSE BIBB (FOR SYSTEM DRAIN DOWN), WITH

SHUTOFF VÄLVE AND PRESSURE GAUGE —

PROVIDE PRESSURE REDUCING VALVE ONLY

IF INCOMING PRESSURE EXCEEDS 90 PSI —

CONTRACTOR, FULL SIZE OF SERVICE PIPE

PROVIDE FLANGED TEE FOR IRRIGATION

REDUCED PRESSURE ASSEMBLY

BACKFLOW PREVENTER.

 $lac{1}{14}$ FLOOR SLAB $^-$

FLOOR DRAIN

2 IRON PIPE DOMESTIC WATER SERVICE ENTRY

INSTALL ATMOSPHERIC VACUUM BREAKER FURNISHED WITH GARBAGE DISPOSER

BUILDING EXTERIOR WALL:

REFER TO STRUCTURAL AND

ARCHITECTURAL DRAWINGS

STRAINER WITH BLOW DOWN

PIPED TO DISCHARGE ONTO

GATE TYPE SHUTOFF VALVE

PROVIDE PVC PIPE SLEEVE

CAST INTO FLOOR SLAB AT

WATER PIPE PENETRATION;

CAULK WATERTIGHT

STEEL RODS AND 3/4"Ø

MECHANICAL JOINT, ALL

COATED WITH ASPHALTUM

IRON PIPE FROM MUNICIPAL

PLAN, DEPTH AS REQUIRED

TRENCH LOCATION" DETAIL

REGARDING CONDITIONS

EXCEEDS 12', RODS MAY

BE RUN ONLY TO FIRST L

WATER MAIN PER SITE

BY LOCAL CONDITIONS.

BELOW FROST LINE.

REFER TO "PIPE AND

WHEN THIS PIECE

OUTSIDE JOINT

AT FOUNDATION ¬

FLANGE AND SPIGOT TO

FLOOR DRAIN

STUB MINIMUM 6"

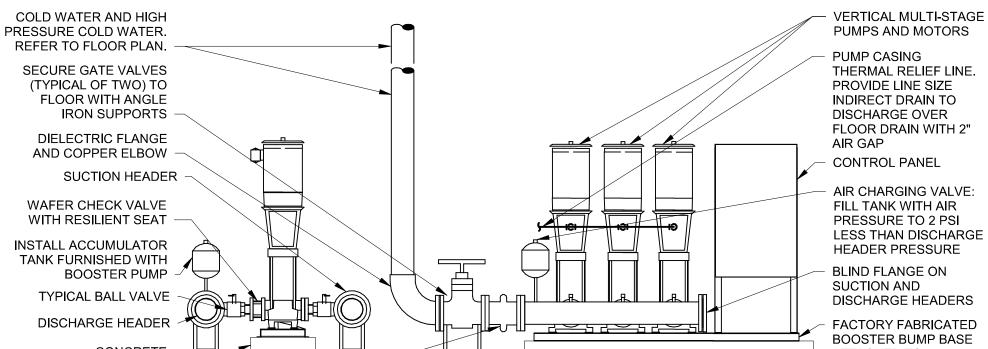
ABOVE FLOOR

(TYPICAL)

GRADE

FOR ACTUAL CONDITIONS

RECIRCULATION PUMP WITH UNION CONNECTIONS. PROVIDE SHUTOFF VALVE, AQUASTAT AND STRAINER UPSTREAM, CHECK VALVE AND SHUTOFF VALVE DOWNSTREAM REFER TO SPECIFICATIONS, SCHEDULES, AND NOTES FOR MORE STRAINER INFORMATION. PIPING CHECK VALVE ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TYPICAL SHUT-OFF VALVE TO SUIT FIELD CONNECT TO TOP OR SIDE OF CONDITIONS. VERIFY TANK AS REQUIRED FOR CONNECTION SIZES AND MODEL FURNISHED (TYPICAL) **LOCATIONS WITH WATER** INSTALL ASME TEMPERATURE HEATER FURNISHED. AND PRESSURE RELIEF VALVE REFER TO FLOOR PLANS LINE SIZE GAS SUPPLY TO WATER FURNISHED WITH WATER FOR PIPE SIZES AND HEATER (TYPICAL) HEATER (TYPICAL) CONTINUATIONS. PROVIDE SEISMIC STRAP PROVIDE HARD COPPER GAS-FIRED WATER HEATER PER OR BRACING WHEN RELIEF VALVE DISCHARGE SPECIFICATIONS AND SCHEDULE REQUIRED BY LOCAL PIPE FULL SIZE OF VALVE (TYPICAL) AUTHORITIES. POWER **OUTLET. TERMINATE OVER** WIRING AND APPROVED RECEPTOR WITH DISCONNECT SWITCH AIR GAP PER CODE. REFER ARE SPECIFIED BY GAS COCK (TYPICAL) TO FLOOR PLANS FOR ELECTRICAL. INTERLOCK LOCATION. (TYPICAL) UNION WITH GROUND JOINT (TYPICAL) OF AQUASTAT WITH INSTALL DRAIN VALVE RECIRCULATION PUMP IS FURNISHED WITH WATER SPECIFIED BY 3" LONG DIRT LEG (TYPICAL) HEATER (TYPICAL) ROUTE DRAIN LINES TO ELECTRICAL. PROVIDE REDUCER AT SET WATER HEATER ON NEAREST FLOOR DRAIN **EQUIPMENT CONNECTION** CONCRETE EQUIPMENT AND DISCHARGE WITH 6" PAD PER SPECIFICATIONS AIR GAP (TYPICAL) -REQUIRED (TYPICAL) (TYPICAL) 9 THREE GAS FIRED WATER HEATERS AND PUMP NTS



HOUSEKEEPING PAD, FLEXIBLE CONNECTORS, ETC. PIPING ARRANGEMENT IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. VERIFY

DOMESTIC WATER BOOSTER PUMP SYSTEM NTS

DETAILS

13-20102-00 PLUMBING

PACKAGE 3 - BUILDING & 10/08/20 REVISIONS

5 ELECTRIC WATER HEATER OVERHEAD NTS

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

REFER TO SPECIFICATIONS ABOVE TOP OF HEATER INSTALL ASME TEMPERATURE CHECK VALVE AND PRESSURE RELIEF VALVE ELEVATOR SHAFT WALL - SHUT-OFF VALVE FURNISHED WITH WATER HEATER - SEAL WALL - COLD WATER SUPPLY THERMOMETER PENETRATION AIR TIGHT PROVIDE A HARD COPPER HOT WATER TO FIXTURES SEE FLOOR PLANS RELIEF VALVE DISCHARGE PIPE 3/4" BRANCH TO FOR CONTINUATION FULL SIZE OF VALVE OUTLET -EXPANSION TANK ELECTRIC WATER HEATER PER SPECIFICATIONS AND/OR - PROVIDE 12"WIDE x 12"DEEP FINISHED FLOOR → HEAT TRAP AT INLET AND SCHEDULE OUTLET (TYPICAL) DRAIN VALVE WITH HOSE BIBB BY WATER HEATER SUMP PUMP FROM RECIRCULATION PUMP DISCHARGE (SPD) MANUFACTURER IF SHOWN ELSEWHERE PROVIDE 6" DEEP PROVIDE DIELECTRIC PIPE UNION RUST-PROOF WATER-TIGHT - UNION SHUTOFF VALVE 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 STRUCTURAL FOOTING 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 HIGH LEVEL ALARM TETHERED FLOAT SWITCH ON-OFF TETHERED FLOAT SWITCH

2" WASTE PIPE IF CONVENTIONALLY VENTED, 3" WASTE IF SOVENT PIPING ARRANGEMENT SHOWN IS SCHEMATIC: ADJUST TO SUIT FIELD CONDITIONS. PROVIDE

IN SPECIFICATIONS | | "B" TYPICAL - PEX TO COPPER ADAPTER(S) IF TO CONNECT PIPE TO VALVE WASHING MACHINE BOX PER MAKE WATERTIGHT THREADED MINIMUM 24" LONG TAILPIECE - 2" P-TRAP WITH CLEANOUT

ADAPTERS AND FITTINGS AS REQUIRED ANGLE SHUT-OFF VALVE WITH HOSE THREAD OUTLET AND VACUUM BREAKER - 1-1/2" VENT PIPE WHERE SHOWN ON PLAN (NOT REQUIRED AT SOVENT) SPECIFICATIONS AND/OR SCHEDULE. MOUNT WITH BOTTOM AT 42" AFF. CONNECTION TO BOX OUTLET AS

- PEX OR COPPER HOT AND COLD WATER WATER SUPPLIES AS INDICATED

Oct 8 2020

LICENSE # PE-2020016283

RELEASE FOR CONSTRUCTION

LEE'S SUMMIT, MISSOURI

MORE INFORMATION VERTICAL SURFACE. REFER TO LOCAL CODES FOR OTHER VENT PLANS -TERMINATION REQUIREMENTS. LOCATE VTR MINIMUM 18" FROM FOOD SERVICE EQUIPMENT INDIRECT WASTE: INSTALL SEPARATE INDIRECT WASTE FROM ADJACENT WALL, PARAPET, EXPANSION JOINT, ROOF DRAIN, EQUIPMENT DIFFERENT EQUIPMENT - DO NOT COMBINE. SECURELY ATTACH INDIRECT DRAINS TO THEIR PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST AS CURB, OR OTHER ROOF FEATURE. OFFSET IN CEILING SPACE WHERE REQUIRED TO SUIT ACTUAL INSTALLATION CONDITIONS EQUIPMENT WITH BRACKETS OR SPLIT RING PIPE CLAMPS - REFER TO SPECIFICATIONS. LOOSE, REQUIRED TO MEET THESE CONDITIONS. INSULATE LAST SIX FEET OF CONNECTIONS AS RECOMMENDED BY EQUIPMENT AND MEET RECOMMENDATIONS OF EQUIPMENT DANGLING, OR PIPES ON THE FLOOR SHALL NOT BE ACCEPTED. INSTALL INDIRECT DRAINS HIGH AS POSSIBLE TO FACILITATE CLEANING UNDER KITCHEN EQUIPMENT. VENT PIPE INSIDE BUILDING PER SPECIFICATIONS. 4 ICE MACHINE CONNECTIONS NTS WASHING MACHINE BOX
NTS INSTALL WITH MINIMUM 6" HIGH LEVEL ALARM, RE: CLEARANCE TO BUILDING ADAPTER(S) AS REQUIRED PROVIDE AUTOMATIC SPECIFICATIONS AND STRUCTURE ABOVE -TO CONNECT DRAIN PIPE TO VACUUM RELIEF VALVE SCHEDULES. POWER CONDENSATE STUB(S) ON PRESSURE REDUCING WIRING FOR HIGH LEVEL EQUIPMENT. PROVIDE VALVE RE: SPECIFICATIONS ALARM IS SPECIFIED BY UNION (TYPICAL) DRAIN PIPE SIZED TO (SET AT 35 PSI)

COORDINATE

FLASHING AND

INSTALLATION OF

COUNTERFLASHING

CORE DRILL ROOF OR

REQUIRED BY TYPE OF

PROVIDE FIRE STOP

SEAL BETWEEN PIPE

PROVIDE PIPE INCREASER ON

CODE REQUIRES A MINIMUM 3"

SMALLER VENT IF/WHERE

AND SLEEVE OR

VENT THRU ROOF -

ELECTRICAL

ELECTRICAL

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

ROOF INSULATION

PROVIDE SLEEVE IF

ROOF DECK. 📥

MINIMUM 12" ABOVE ROOF

NORMALLY. EXTEND TO

ABOVE MAXIMUM LOCAL

SNOW DEPTH.

STRUCTURE.

ROOF DECK

ANCHOR PIPE TO

MINIMUM 12" BELOW

FOR TYPE OF PIPE,

FITTINGS, 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

HORIZONTAL OR THREE FEET VERTICAL ABOVE ANY BUILDING OPENING

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.

INTERLOCK OF HIGH LEVEL ALARM WITH BUILDING AUTOMATION SYSTEM, REFER TO

SPECIFICATIONS IF PROVIDED, IS SPECIFIED BY MECHANICAL.

REFER TO SPECIFICATIONS

CONNECTORS. REFER TO

PLANS FOR SIZE(S) AND

HEIGHT OF PARAPET WHEN

WITHIN 10' OF PARAPET, OR

COLD WATER

REDUCED PRESSURE

WATER METER

ZONE TYPE

BACKFLOW

PREVENTER

FITTING —

ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. DO NOT

AS SERVICE PIPE -- REFER TO PLANS FOR SERVICE LINE SIZE. VERIFY EQUIPMENT

INSTALL VALVE TRAIN ABOVE ELECTRICAL EQUIPMENT. VALVING SHALL BE SAME SIZE

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.

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

STRAINER -

INDIRECT DRAIN TO

MINIMUM TWICE THE

PIPE DIAMETER —

NEAREST FLOOR DRAIN

DISCHARGE ON FLOOR

DRAIN WITH AIR GAP OF

SIZE AS SHOWN ON PLANS

OR 4' TOTAL DRAIN LENGTH ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. PROVIDE SPECIFICATIONS FOR PIPE AND FITTING MATERIALS, AND INSTALLATION OF HANGERS AND SUPPORTS. PROVIDE DIELECTRIC UNION IF CONNECTING DISSIMILAR METALS. DO NOT COMBINE INDIRECT DRAIN PIPES WITH CONDENSATE DRAIN PIPES. DO NOT PROVIDE TRAP OR VENT ON INDIRECT DRAINS RECEIVING DISCHARGE UNDER PRESSURE.

PIPE RECEIVING HOT OR PLANS MAXIMUM TAILPIECE LENGTH IS 24" IF TRAPPED PIPES IN FOOD SERVICE PROVIDE COPPER DWV P-MAINTAIN MINIMUM 1" TRAP WITH CLEANOUT IF MORE THAN 2' HORIZONTAL TO CEILING OR ROOF -CONNECTIONS SHOWN IN EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS. REFER TO

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 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 CHILLED WASTE: REFER TO SPECIFICATIONS. DO NOT INSULATE INDIRECT WASTE CLEARANCE TO FLOOR, OR 6"

- FILTERED COLD WATER SUPPLY TO OTHER PROVIDE 3/4" COLD WATER EQUIPMENT IF/AS SHOWN SUPPLY CONCEALED IN ON FLOOR PLAN PARTITION; STUB OUT AND PROVIDE WATER HAMMER PROVIDE SHUTOFF VALVE -ARRESTER, PDI SIZE "A" PROVIDE STRAINER AND PROVIDE ADAPTER AND SIX DOUBLE CHECK VALVE BACKFLOW PREVENTER FOOT LONG TYPE "K" SOFT COPPER TUBING, (SIZE OF PER SPECIFICATIONS AND SCHEDULE. LOCATE PER CUBER WATER INLET) AND LOCAL REQUIREMENTS CONNECT TO CUBER FOR ACCESSIBILITY -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

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.

PROVIDE FLOOR SINK

MATCH EQUIPMENT

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;

WHERE SHOWN ON FLOOR

REFER TO "INDIRECT

WASTE" DETAIL FOR

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

PROVIDE CLEANOUTS IN ENDS

WATER HAMMER

PRESSURE GAUGE

ARRESTER PDI

(TYPICAL)

WATER. RE:

PLANS FOR

BY-PASS

MECHANICAL

CONTINUATION

NORMALLY CLOSED

SHUT-OFF VALVE (TYPICAL) —

P5.3

RELEASE FOR **CONSTRUCTION**

LEE'S SUMMIT, MISSOURI

LICENSE # PE-2020016283

H 9

PACKAGE 3 - BUILDING & 10/08/20 REVISIONS ADDENDUM 002

13-20102-00 PLUMBING

PLUMBING FIXTURE SCHEDULE

PLAN MARK DESCRIPTION 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 AFRATOR TRIM: McGUIRE # LE2165CC 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

> 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

BRASS CLEANOUT AND ESCUTCHEON, AND PLUMBEREX

"PRO-EXTREME" # X-4222 INSULATION KIT FOR WATER AND WASTE

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 # LF2165CC 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 |PLAN(S).

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 CERAMIC 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 DUAL TEMPERATURE LAVATORIES AND HAND SINKS. 100F FOR SINGLE TEMPERATURE I AVATORIES 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"

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 FULL 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 PLAN(S)

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 PLAN(S). UNDERMOUNT SINK (ADA ACCESSIBLE): ELKAY # ELUHAD161655PD,

UNDERMOUNT SINK: ELKAY # DCFU1618, 16-1/2" x 18-1/4" x 8" DEEP.

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 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).

PLAN(S).

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 # LEG480, 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

PLUMBING FIXTURE SCHEDULE PLAN MARK

> UNDERMOUNT SINK (ADA ACCESSIBLE): FLKAY # FLUHAD31186, 30-3/4" 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 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 "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

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 , The state of the

> SINK: ELKAY WELDBILT # WNSF-8345, THREE 15" x 24" x 14" DEEP COMPARTMENTS, RIGHT DRAINBOARD, 8" HIGH BACKSPLASH, 14 GAUGE TYPE 304 STAINLESS STEEL, AND 16 GAUGE STAINLESS STEEL ADJUSTABLE LEGS. FAUCET: CHICAGO FAUCET # 445-L9RABXKCP LEAD FREE ADJUSTABLE DECK MOUNTED FAUCETS WITH # 369 LEVER HANDLES, QUARTER TURN CERAMIC CARTRIDGES AND # E1JKRCF OUTLETS. TRIM: (3) ELKAY # LK24RT GRID STRAINERS WITH LEVER HANDLE AND 1-1/2" TAILPIECE, AND 1-1/2" HARD COPPER TYPE "DWV" FABRICATED SHOWER VALVE: WATTS "HYDROGUARD" # PB410. PISTON TYP 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. 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 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, 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. 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

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 FIXTURE CARRIER.

MECHANISM, ESCUTCHEON, INTEGRAL SCREWDRIVER STOP, VACUUM

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, COUNTER SUNK PLUG. STAINLESS STEEL ROUND COVER AND SCREW.

INSTALLATION.

AND IRON PLUG WITH GASKET SEAL. REFER TO SPECIFICATIONS FOR

|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 SINGLE

> 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" #

TEMPERATURE LAVATORIES AND HAND SINKS AND 120F FOR SINKS.

MOUNT BELOW THE PLUMBING FIXTURE WHERE INDICATED ON

THREE STATION LAVATORY: BRADLEY # SN2003-A-AST4-STD-

I VSD1-SHANK-GI ACIFR-STAIN 90" RECTANGUI AR 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. 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 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 OR PDI WH-201. PROVIDE PDI SIZES "A" THROUGH "F" AS SHOWN ON PLANS. PROVIDE SIZE "A" UNLESS SHOWN OTHERWISE ON THE PLANS. WASHING MACHINE BOX: GUY GRAY MODEL # B200TS, 20 GAUGE GALVANIZED STEEL BOX, 18 GAUGE STEEL FACEPLATE, TOP INLET |WATER SUPPLIES WITH ANGLED WHEEL HANDLE 3/4" HOSE BIBBS, AND | 2" BOTTOM OUTLET DRAIN. TRIM: PROVIDE 24" LONG TAIL PIECE AND 2" DIAMETER P-TRAP.

N DER

SCHEDULES

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 BACKELOW PREVENTER: WATTS # 719OT-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 DRINKING FOUNTAIN: MOST DEPENDABLE FOUNTAINS, # 400 SMSS OUTDOOR, FREEZE RESISTANT, SINGLE STATION, TUBULAR, PEDESTAL, NON-FILTERED, NON-REFRIGERATED LEAD FREE, WITH ONE-PIECE WELDED, 304 SCHEDULE 10 STAINLESS STEEL CONSTRUCTION WITH PUSH BUTTON ACTIVATION. 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 BALL VALVE, EPOXY COATED ALUMINUM FLAG HANDLE, 90° SWIVEL 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 TEMPERATURE ELEMENT. DIAL THERMOMETER ON OUTLET. CAPABLE 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" 17 GAUGE CAST CHROME PLATED BRASS ADJUSTABLE P-TRAP AND WASTE ARM WITH CLEANOUT PLUG AND ESCUTCHEON, AND SUITABLE CARRIER WITH STANCHIONS TO FLOOR. INSTALL "WCO" UNDERNEATH WASTE CONNECTION. ELECTRICAL REQUIREMENTS: 115-VOLT, 5.0 FULL LOAD AMPS. 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 TFRRAZZO AND SIMILAR POURED FLOOR AREA(S). REFER TO SPECIFICATIONS FOR INSTALLATION. 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 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 OUTLIET SEEPAGE PAN AND MEMBRANE ELASHING 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

SEEPAGE HOLES. CLAMP COLLAR. WHITE ABS SEDIMENT BUCKET. AND

8-1/2" SQUARE NICKEL BRONZE RIM AND HALF GRATE. USE PUSH-ON

WITH ACID RESISTING ENAMELED INTERIOR, ANCHOR FLANGE WITH

SEEPAGE HOLES, CLAMP COLLAR, ALUMINUM SEDIMENT BUCKET, AND 12" SQUARE NICKEL BRONZE RIM AND HALF GRATE. USE PUSH-ON

FLOOR TROUGH: ADVANCE TABCO # FTG-1260-FT2, 60" X 12" X 4" DEEP,

GRATE, AND 3" OUTLET. PROVIDE WITH SEEPAGE CONTROL FLANGES,

DISPOSER WITH 1/2 H P. MOTOR WITH POWER CORD, PLASTIC GRIND

GREASE INTERCEPTOR: SCHIER PRODUCTS GB-250(2)-EXT-H20, HDPE

CAPACITY AND RATED FLOW RATE OF 200 GPM AND 1068 POUNDS OF

RATED COVERS WITH EXTENSIONS. INSTALL TWO INTERCEPTORS IN

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

ANIT-SIPHON AIR RELIEF, TWO 28" GASKETED AASHTO H-20 LOAD

GREASE STORED, WITH INTEGRAL INLET AND OUTLET DIFFUSERS WITH

CHAMBER, GALVANIZED STEEL CUTTING ELEMENT, AND PERMANENTLY

WELDED 14 GAUGE 304 STAINLESS STEEL, STAINLESS STEEL BAR

GARBAGE DISPOSER: IN-SINK-ERATOR "BADGER 5" RESIDENTIAL

WASTE CUP, AND REMOVABLE STAINLESS STEEL BASKET

TRIM: WASTE DISCHARGE KIT AND DISHWASHER TAILPIECE.

ELECTRICAL REQUIREMENTS: 120-VOLT, 6,9 FULL LOAD AMPS

SEAMLESS HIGH DENSITY POLYETHYLENE BODY, 250 GALLON

PARALLEL. REFER TO MANUFACTURERS INSTALLATION

SOLENOID COVER, CLASS "F" COIL FOR CONTINUOUS DUTY.

FLOOR SINK: JAY R. SMITH # 3131L (-12), 10" DEEP CAST IRON BODY

ACID RESISTING ENAMELED INTERIOR. ANCHOR FLANGE WITH

JOINT OF OUTLET SIZE AS SHOWN ON PLANS.

JOINT OF OUTLET SIZE AS SHOWN ON PLANS.

LUBRICATED UPPER AND LOWER BEARINGS

RECOMMENDATIONS.

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

PLUMBING FIXTURE SCHEDULE

DESCRIPTION

AIR ADMITTANCE VALVE; STUDOR "MINI-VENT" # 20301, MEETING ASSE

1051 TYPE "A", POLYSTYRENE PROTECTIVE COVER, ABS VALVE WITH

AIR ADMITTANCE VALVE; STUDOR "MAXI-VENT" # 20302 MEETING ASSE

1050 TYPE "A". POLYSTYRENE PROTECTIVE COVER. ABS VALVE WITH

ATMOSPHERIC PORT. PROVIDE UV PROTECTIVE COVER IF INSTALLED

STAINLESS STEEL PANEL AND FRAME WITH CONCEALED HINGE. KEY

STAINLESS STEEL PANEL AND FRAME WITH CONCEALED HINGE, KEY

OPERATED CYLINDER LOCK. PROVIDE WITH NAILER SLOTS FOR

ELASTROMERIC MEMBRANE AND PVC CONNECTOR, 2" INLET, AND

ACCESS PANEL: JAY R. SMITH # 4762 - 24" x 24" - CL, TYPE 304

INSTALLATION IN STUD WALLS AND ANCHOR STRAPS FOR

ACCESS PANEL: JAY R. SMITH # 4762 - 12" x 12" - CL, TYPE 304

INSTALLATION IN STUD WALLS AND ANCHOR STRAPS FOR

OPERATED CYLINDER LOCK. PROVIDE WITH NAILER SLOTS FOR

ELASTROMERIC MEMBRANE AND PVC CONNECTOR, 2" INLET, AND

THE ARCHITECTURAL DRAWINGS FOR THE PLUMBING FIXTURE

OUTDOORS EXPOSED TO SUNLIGHT

INSTALLATION IN MASONRY CONSTRUCTION.

INSTALLATION IN MASONRY CONSTRUCTION

ATMOSPHERIC PORT

MOUNTING

HEIGHTS.

PLAN MARK

PLUMBING FIXTURE SCHEDULE

PLAN MARK 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. TRIM: LOOP 4 FEET OF 1/4" TYPE "K" SOFT COPPER TUBING AND PROVIDE EQUIPMENT CONNECTION.

JUG FILLING HYDRANT: MIFAB #MHY-30, LEAD FREE, CHROME PLATED BRONZE, WITH INTEGRAL ANTI-SIPHON BACKFLOW PREVENTER 3/4" MALE INLET, 3/4" THREADED HOSE CONNECTION, WITH LOOSE KEY HANDLE, HYDRANT LENGTH AS REQUIRED FOR INSTALLED WALL. PROVIDE WITH ONE EXTRA LOOSE KEY HANDLE. MOUNT AT 3'-0" AFF FOR JUG FILLING. 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 FAUCET: SLOAN # EFX-250-CP SINGLE HOLE, BATTERY, SENSOR OPERATED FAUCET LESS WITH "Y" STRAINER FILTERED SOLENOID VALVE AND 0.5 GPM AFRATOR 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 FI EMENT 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" CALCIUM CARBONATE CONTENT

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. HYDRAN' 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. 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

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.

TEMPERATURES 90° F ROOM TEMPERATURE.

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 # 909AG AIR GAP FITTING REDUCED PRESSURE ZONE BACKFLOW PREVENTER: WATTS # LF919QT, MEETING ASSE 1013, LEAD FREE CAST BRONZE BODY, QUARTER TURN TEST COCKS, QUARTER TURN BALL VALVES AND # 909AG AIR GAP FITTING. REDUCED PRESSURE ZONE BACKFLOW PREVENTER: WATTS # LF919QT-S, MEETING ASSE 1013, LEAD FREE CAST BRONZE BODY, QUARTER TURN TEST COCKS, QUARTER TURN BALL VALVES, LEAD FREE BRONZE STRAINER, AND # 909AG AIR GAP FITTING. SOLIDS INTERCEPTOR: JAY R. SMITH #8714-ARIO, FABRICATED STEEL

> 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

BODY, CAST IRON COVER, ACID-RESISTING ENAMEL COATING INSIDE

AND OUT, PERFORATED STAINLESS STEEL BUCKET, AND 2" INLET AND

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

PLAN(S).

RELEASE FOR CONSTRUCTION

LEE'S SUMMIT, MISSOURI

LICENSE # PE-2020016283

PACKAGE 3 - BUILDING & 10/08/20 REVISIONS ADDENDUM 002

13-20102-00 PLUMBING SCHEDULES

P6.2

DOMESTIC BOOSTER PUMP SCHEDULE TYPE DISCHARGE HEADER SUCTION HEADER NUMBER OF FLOW RATE PUMP HEADER SIZE HEADER SIZE ELECTRICAL (NOTE B) (NOTE A) PRESSURE (PSI) PRESSURE (PSI) PUMPS (GPM) CAPACITY (%) (IN.) | VOLTS | PHASE | HP | TANK SIZE (GAL.) | NOTES SERVICE MANUFACTURER MODEL 213 DOMESTIC GROUNDFOS CRE 15-3 T-VFD 75.99 36.38 60.0 A, B, C, D, E BOOSTER

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

	GAS PRESSURE REGULATOR SCHEDULE FOR 2 PSI SYSTEMS											
MARK	MANUFACTURER /	VALVE	VALVE BODY	MAX. FLOW	INLET PRESSURE	OUTLET PRESSURE	NOTES					
	MODEL#	TYPE	SIZE (INCHES)	RATE CFH	PSI	INCHES WATER COLUMN						
GPR1	PIETRO-FIORENTINI 31051	С	1/2"	552	1	7"	A, B, C, D, E, F, G & H					
GPR2	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.

FIXTURE BRANCH CONNECTION 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.

NOTES:

ELECTRIC STORAGE WATER HEATER SCHEDULE

				AREA	TANK SIZE	ELE	CTRICAL DATA		RECOVERY	i L	
^ ^	MARK	MANUFACTURER	MODEL#	SERVED	(GALLONS)	VOLTS	PHASE	KW	(GPH)	NOTES	
$2\sqrt{3}$	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	ALEMAN AND AND AND AND AND AND AND AND AND A	~#D\\\	~~~	maham	~~~~	γ	ᢇᡐᠬ	~~ ¹² ~~~	~~~	1
(WH11	A.O. SMITH	#DRE-52	AREA S	50	480	3	18	74	A, C	3
,	NOTES:										

100°F TEMPERATURE RISE WITH 140°F OPERATING TEMPERATURE SINGLE ELEMENT

100° TEMPERATURE RISE WITH 140°F OPERATING TEMPERATURE.

THREE ELEMENTS WIRED FOR SIMULTANEOUS OPERATION FURNISH WITH IMMERSION THERMOSTAT

"LOW BOY" DESIGN

	GAS STORAGE WATER HEATER SCHEDULE													
AREA TANK SIZE ELECTRICAL DATA RECOVERY														
MARK	MANUFACTURER	MODEL	SERVED	(GALLONS)	VOLTS	PHASE	INPUT (MBH)	(GPH)	NOTES					
WH1	A.O. SMITH	#BTXL 100	AREA A	75	120	1	100	115	A, B, C, D					
WH2	A.O. SMITH	#BTXL 100	AREA A	75	120	1	100	115	A, B, C, D					
WH3	A.O. SMITH	#BTXL 100	AREA B	75	120	1	100	115	A, B, C, D					
WH4	A.O. SMITH	#BTXL 100	AREA B	75	120	1	100	115	A, B, C, D					
WH5	A.O. SMITH	#BTXL 100	AREA C	75	120	1	100	115	A, B, C, D					
WH6	A.O. SMITH	#BTXL 100	AREA C	75	120	1	100	115	A, B, C, D					
WH7	A.O. SMITH	#BTH 150	AREA G	100	120	1	150	178	A, B, C, D					
WH8	A.O. SMITH	#BTH 150	AREA G	100	120	1	150	178	A, B, C, D					
WH9	A.O. SMITH	#BTH 150	AREA G	100	120	1	150	178	A, B, C, D					

AUTOMATIC FLUE DAMPER INTERLOCKED WITH WATER HEATER FIRE CONTROL. FURNISH WITH A. O. SMITH # 9003910105 FACTORY COMBUSTION AIR INTAKE AND EXHAUST KIT. FURNISH WITH CONDENSATE NEUTRALIZATION KIT TO MATCH HEATER INPUT, AO SMITH # CNS SERIES

PLUMBING EXPANSION TANK SCHEDULE

					MIIN.			
					ACCEPTANCE	AIR		
				TANK SIZE	VOLUME	PRESSURE		
	MARK	MANUFACTURER	MODEL	(GALLONS)	(GALLONS)	SETTING (PSI)	SERVICE	NOTES
	ET1	AMTROL	ST-25V	10.3	4.6	125	WH1 WH2	Α
	ET2	AMTROL	ST-25V	10.3	4.6	125	WH3 WH4	Α
	ET3	AMTROL	ST-25V	10.3	4.6	125	WH5 WH6	Α
	ET5	AMTROL	ST-60V	34	15.3	125	WH7 WH8 WH9	Α
2	ET6	AMTROL	ST-5	2	0.9	125	WH10	Α
	ET7	AMTROL	ST-8	3.2	1.4	125	WH11	Α
	NOTES:							

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

	RECIRCULATION PUMP SCHEDULE												
HEAD CONNECTION ELECTRICAL DATA													
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	LVL1 - AREA F	1	11	3/4"	120	1	1/18	A, B, C, D			
RP5	BELL & GOSSETT	NBF-36	LVL1 - AREA G	9	17	1 1/4"	120	1	1/6	A, B, C, D			
RP6	BELL & GOSSETT	NBF-12U	LVL1 - AREA S	1.5	11	1"	120	1	1/6	A, B, C, D			

A. ALL LEAD FREE CAST BRONZE BOOSTER. PROVIDE WITH STRAINER UPSTREAM OF PUMP.

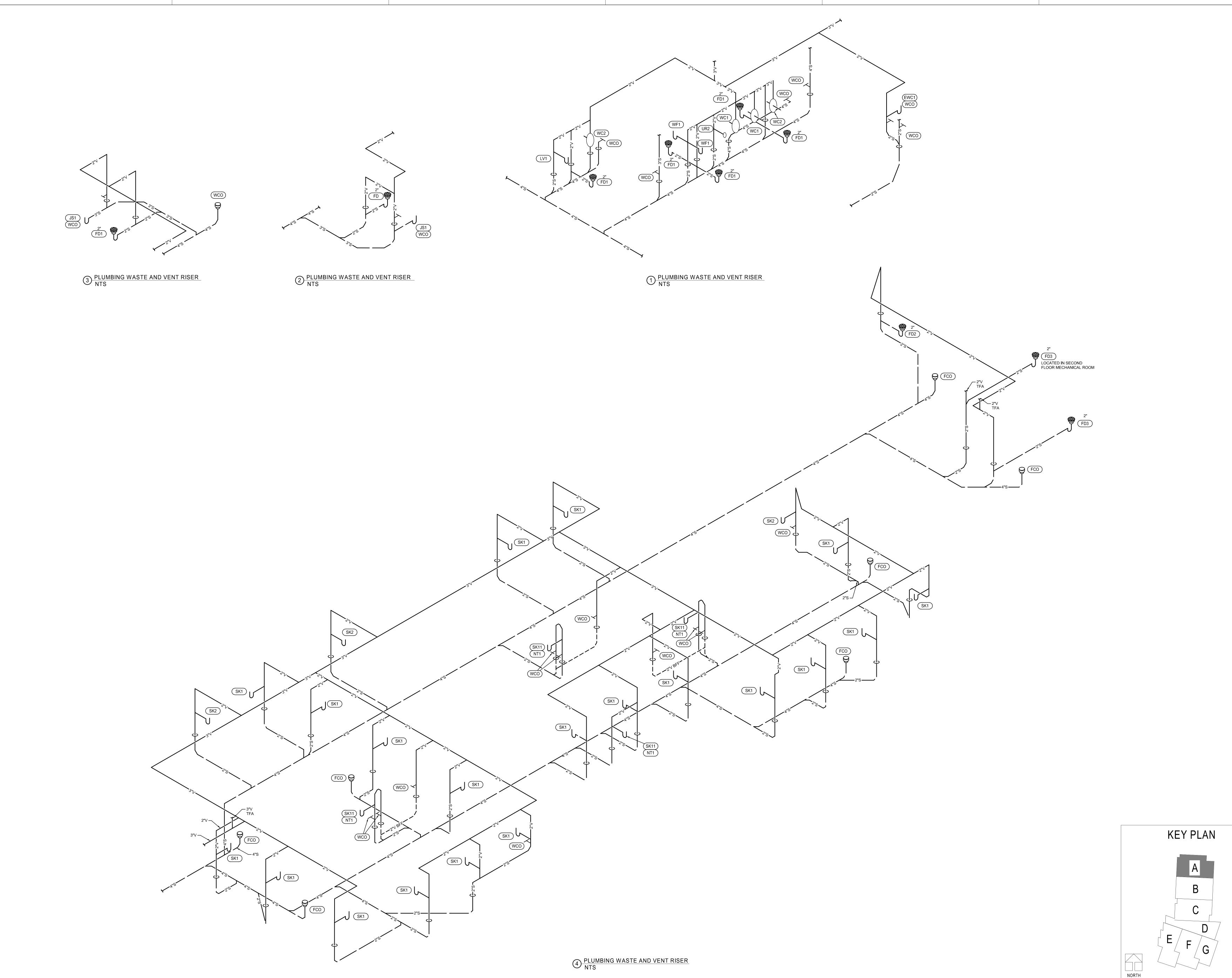
REFER TO DETAIL FOR MORE INSTALLATION INFORMATION.

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

ELE\	ELEVATOR SUMP PUMP SCHEDULE (3/4 HP AND SMALLER)												
					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				

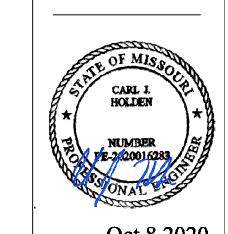
PROVIDE WEIL #8245 FLOAT SWITCH WITH POWER CORD AND PIGGYBACK PLUG. PROVIDE WITH WEIL #8341K1015 HIGH LEVEL ALARM WITH AUXILIARY CONTACT, REFER TO SPECIFICATIONS. PROVIDE 2" DISCHARGE PIPING, SHUTOFF VALVE AND ZOELLER #30-0030 FLAPPER NON-CLOG CHECK VALVE.

E. INSTALL IN 24"SQUARE x 24" DEEP SUMP PIT LOCATED IN ELEVATOR PIT, SEE ARCHITECTURAL DRAWINGS.



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LEE'S SUMMIT, MISSOURI

12/09/2020
State Certificate of Anthority #000939



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

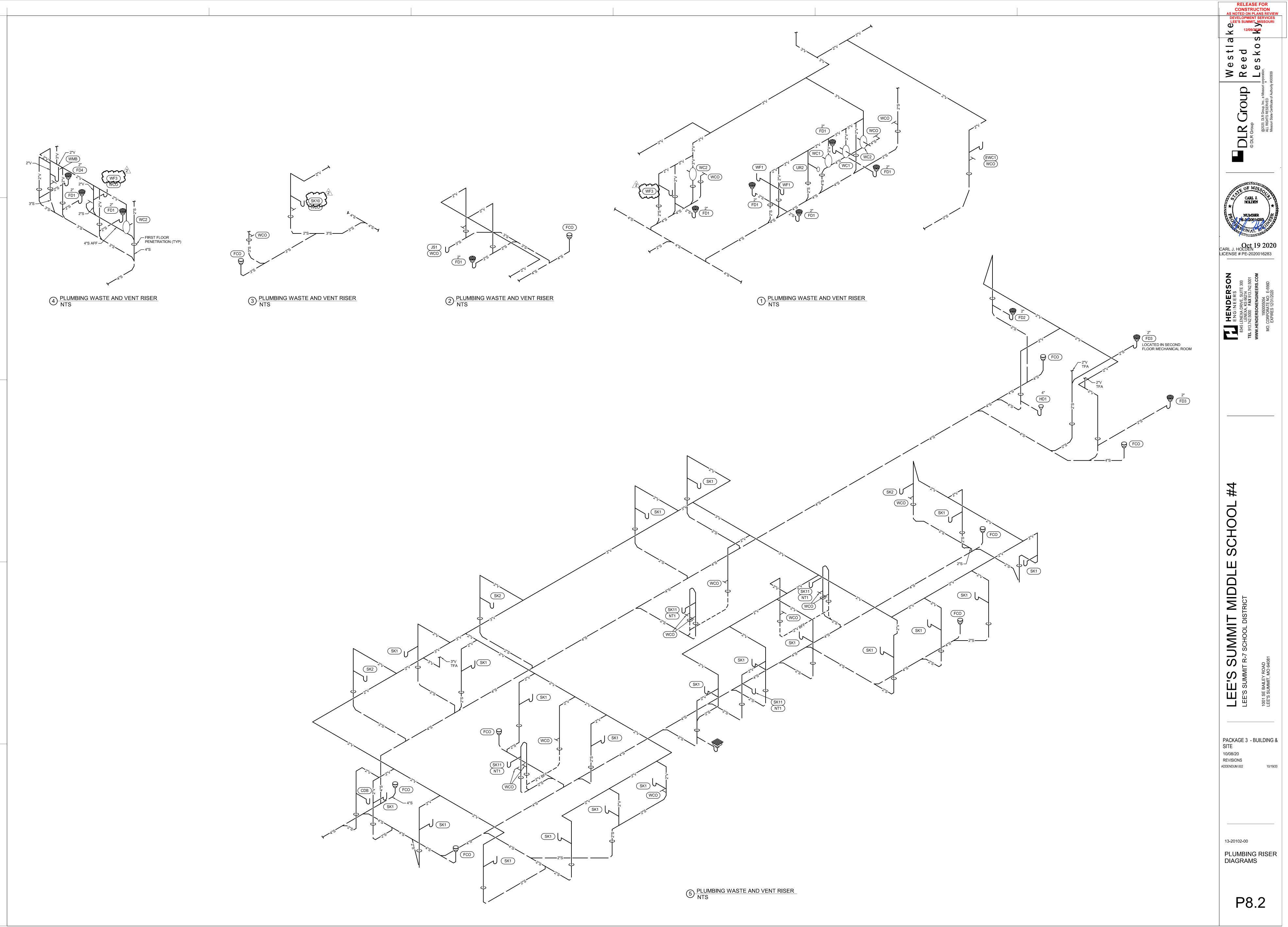
HENDERSON
ENGINEERS
8345 LENEXA DRIVE, SUITE 300
LENEXA, KS 66214
TEL 913.742.5000 FAX 913.742.5001
www.hendersonengineers.com
1950005054
MO. CORPORATE NO: E-556D

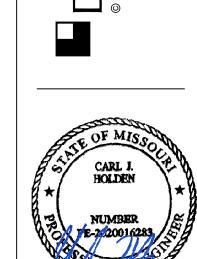
LEE'S SUMMIT R-7 SCHOOL DISTRICT

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

13-20102-00

PLUMBING RISER DIAGRAMS





Oct 19 2020 CARL J. HOLDEN LICENSE # PE-2020016283

PACKAGE 3 - BUILDING & SITE

PLUMBING RISER DIAGRAMS

WF1

1) PLUMBING WASTE AND VENT RISER NTS

4 PLUMBING WASTE AND VENT RISER NTS

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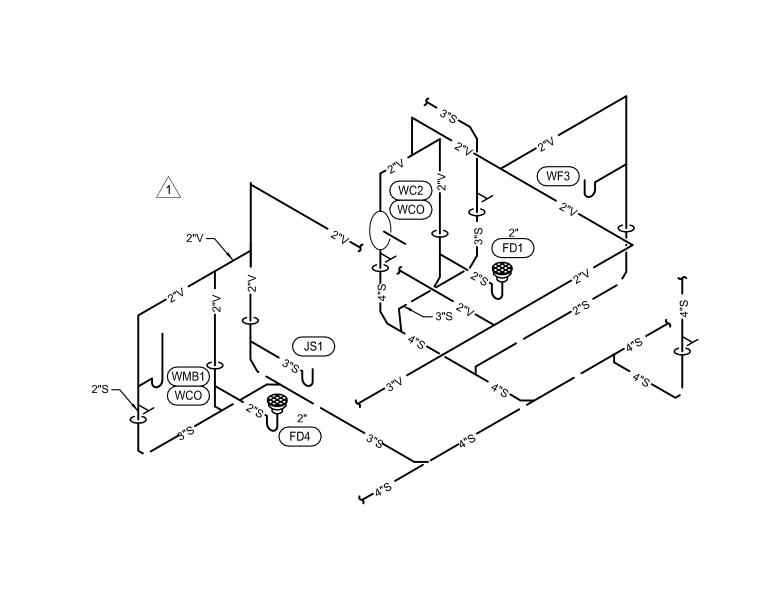
PACKAGE 3 - BUILDING & SITE 10/08/20 REVISIONS ADDENDUM 001 ADDENDUM 002

13-20102-00

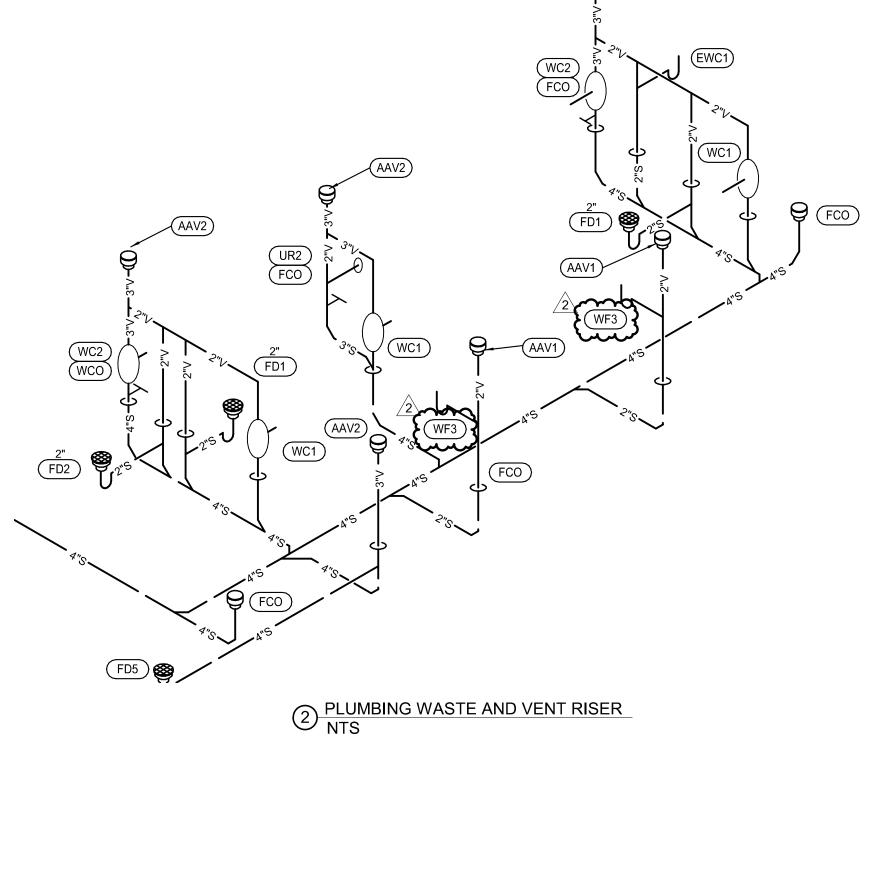
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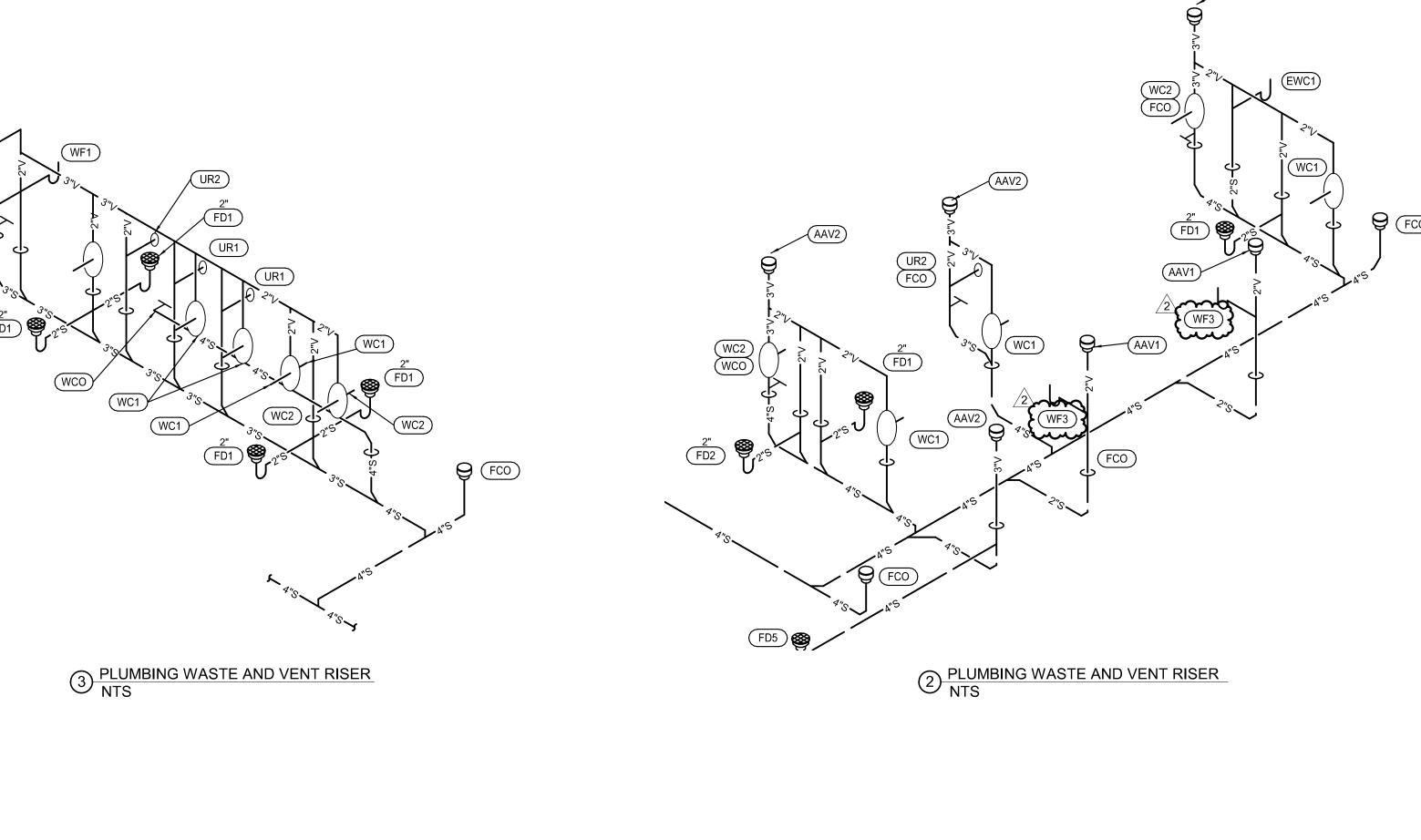
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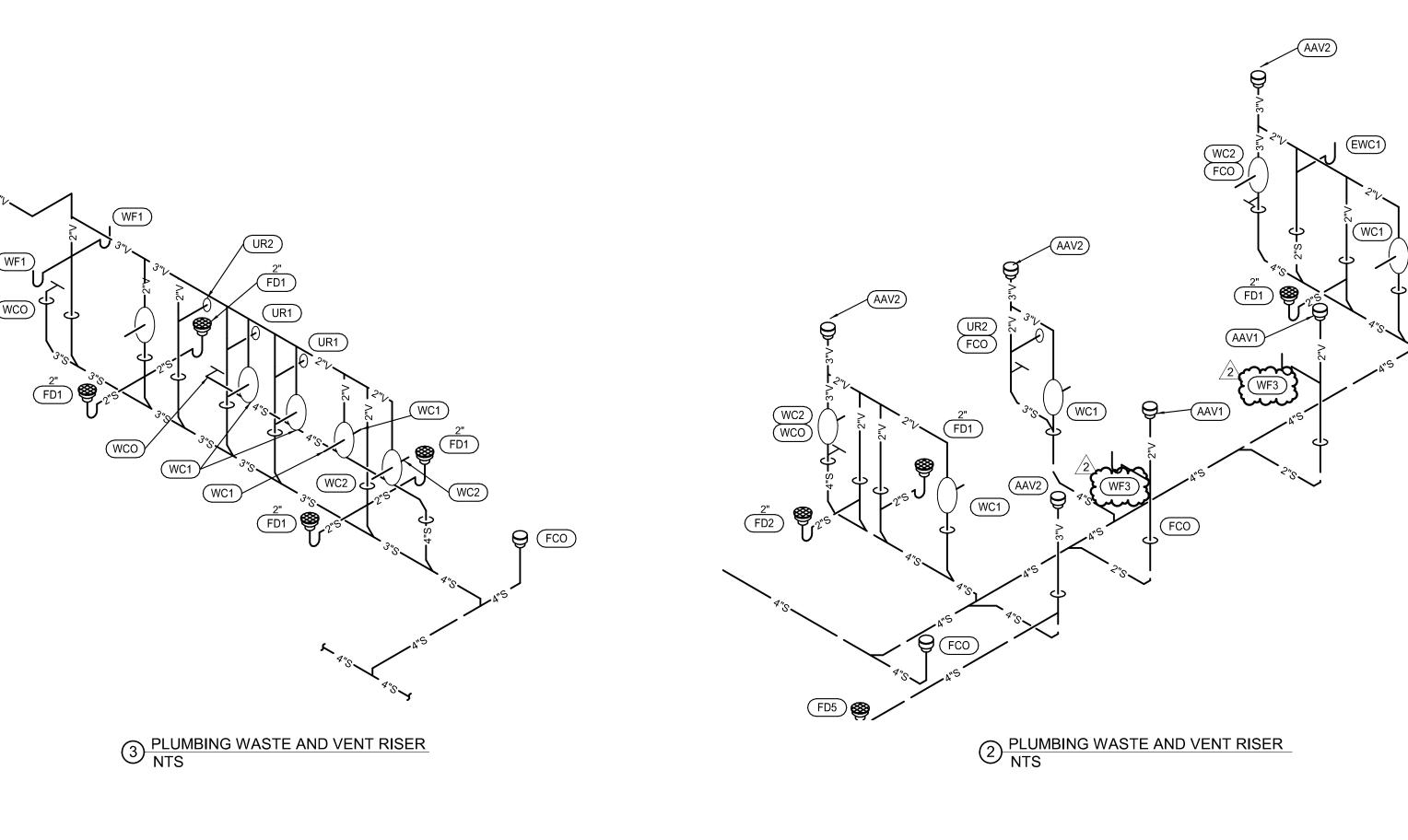
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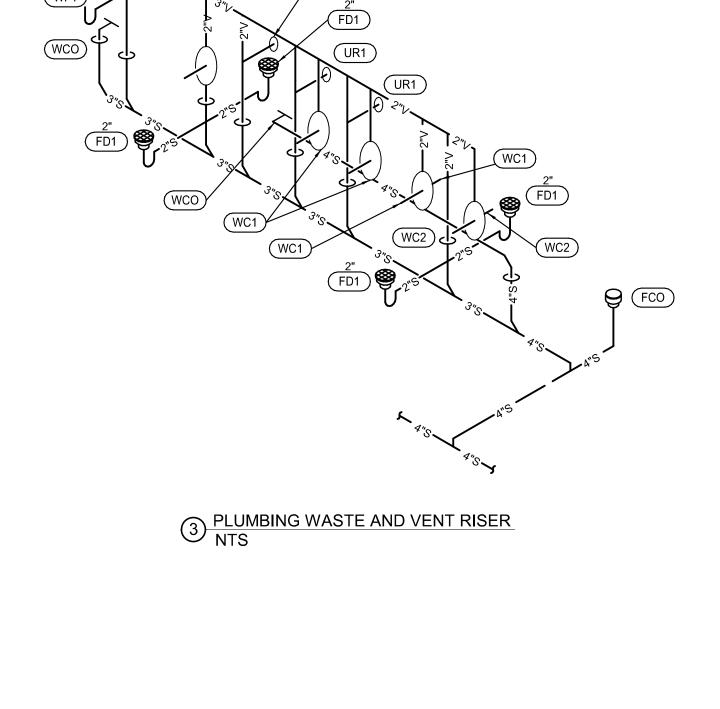


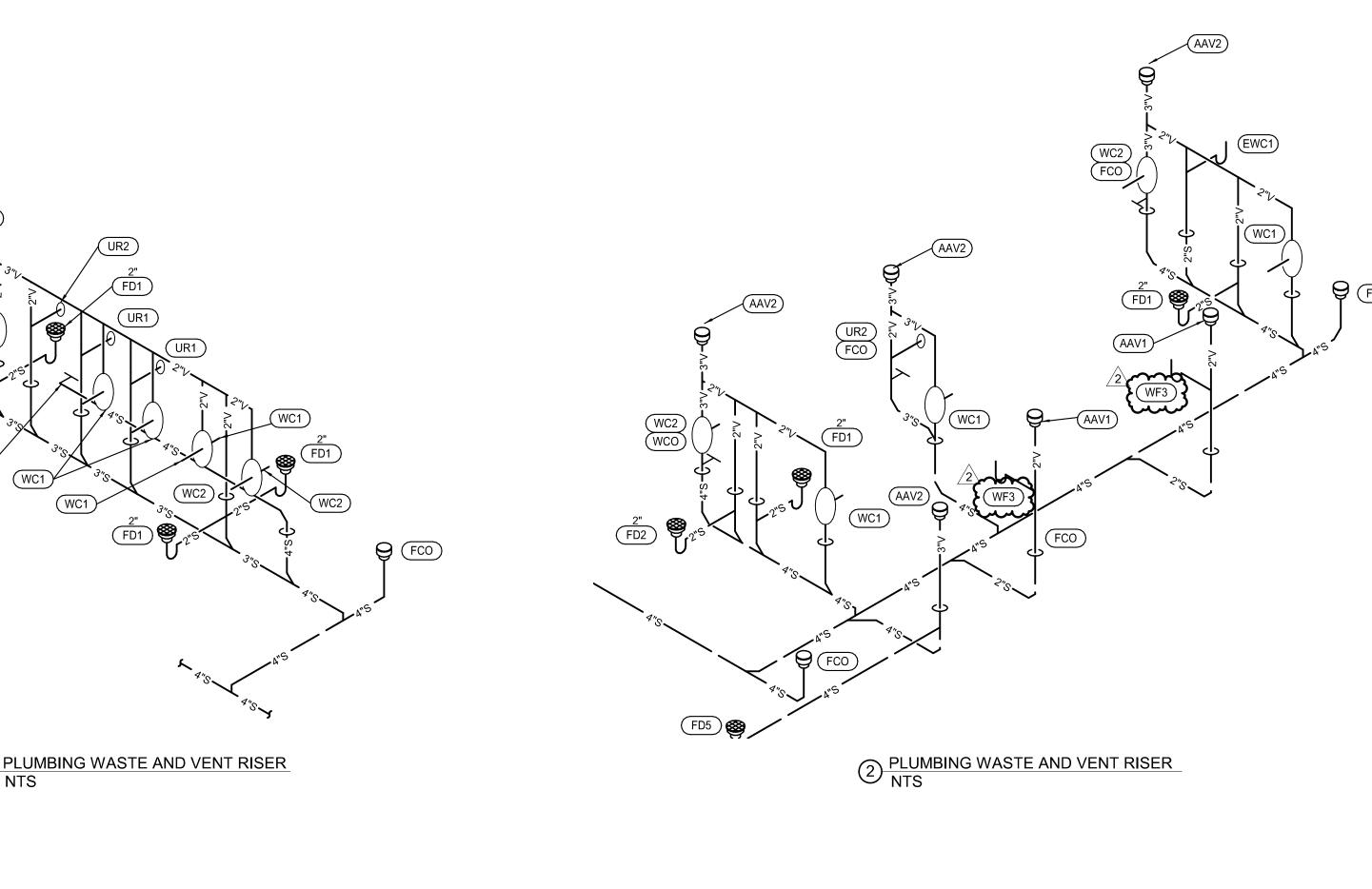
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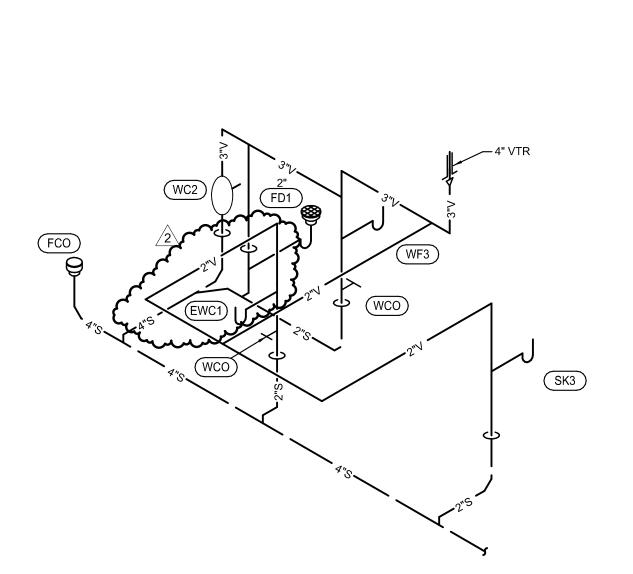






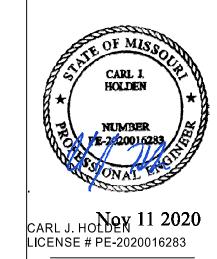






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12/09/2020

DLR Group



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

LEE'S SUMMIT R-7 SCHOOL DISTRICT

PACKAGE 3 - BUILDING & SITE 10/08/20 REVISIONS ADDENDUM 002 placeholder

13-20102-00 PLUMBING RISER DIAGRAMS

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LEE'S SUMMIT, MISSOURI
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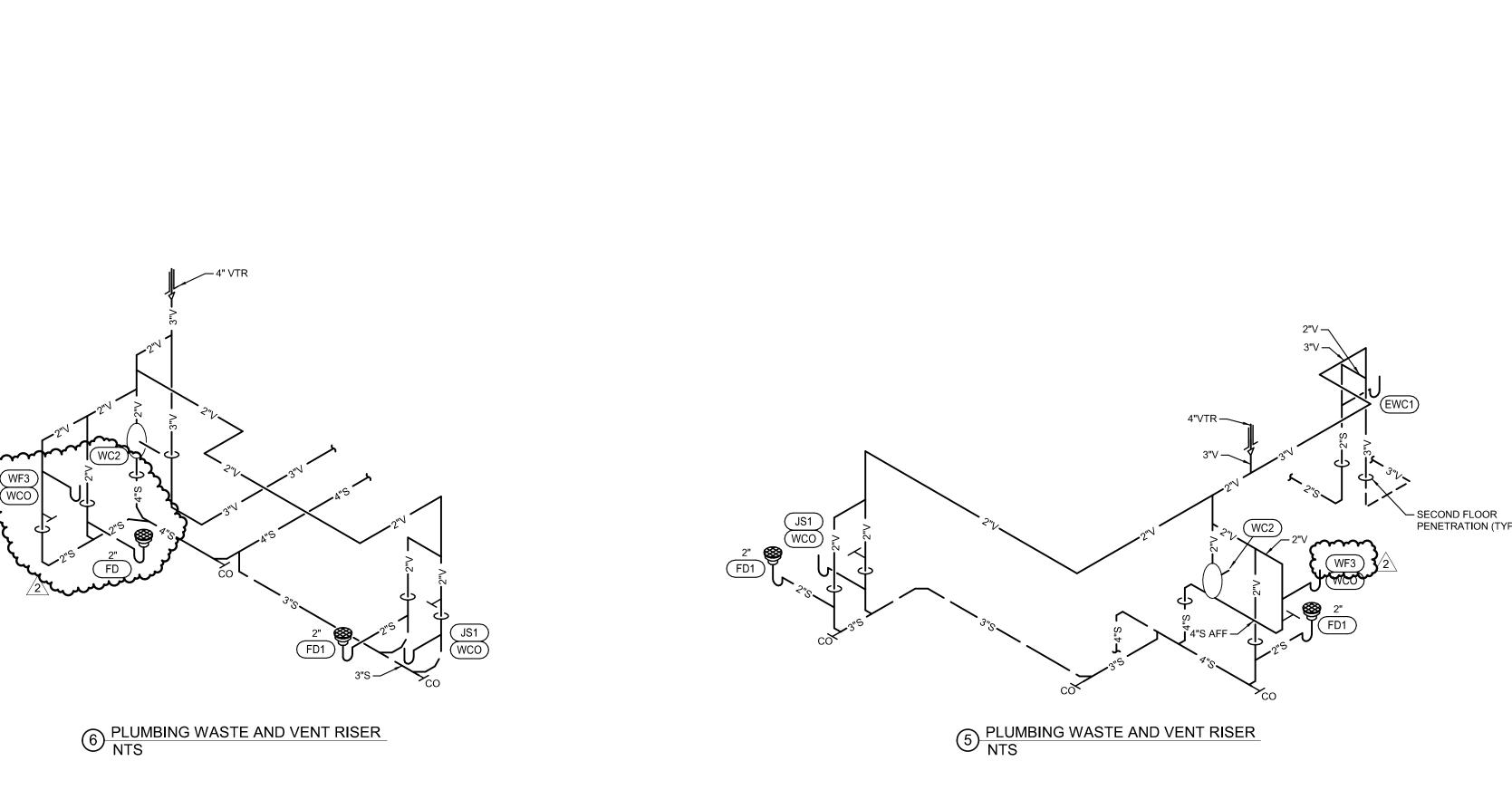
DLR Group

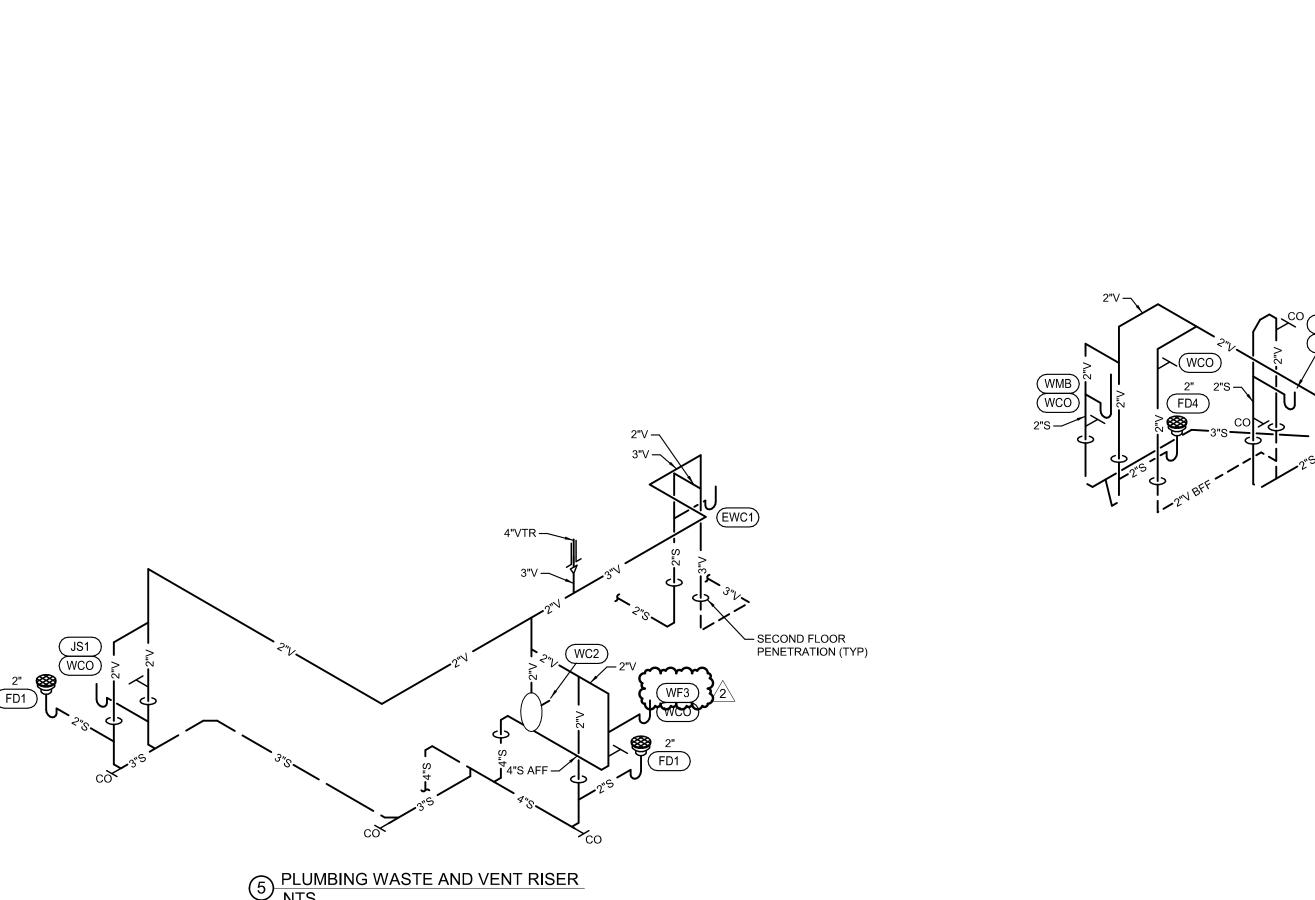
Oct 19 2020 CARL J. HOLDEN LICENSE # PE-2020016283

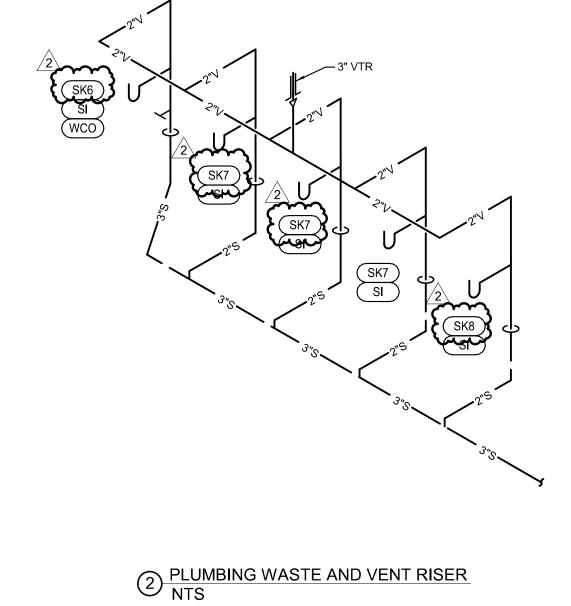
HENDERSON
ENGINEERS
8345 LENEXA DRIVE, SUITE 300
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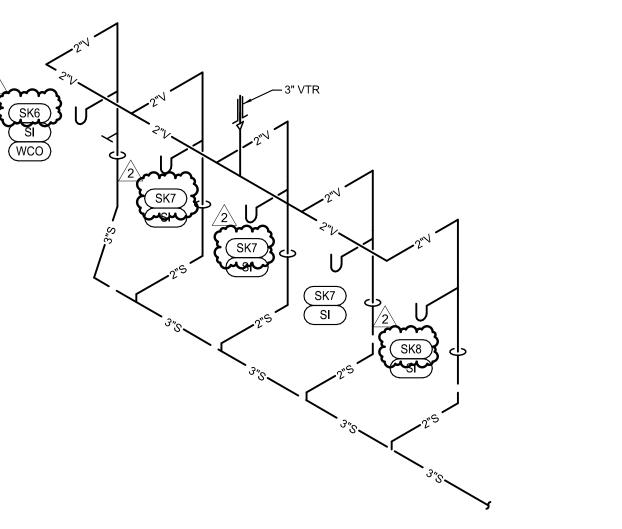
13-20102-00 PLUMBING RISER DIAGRAMS

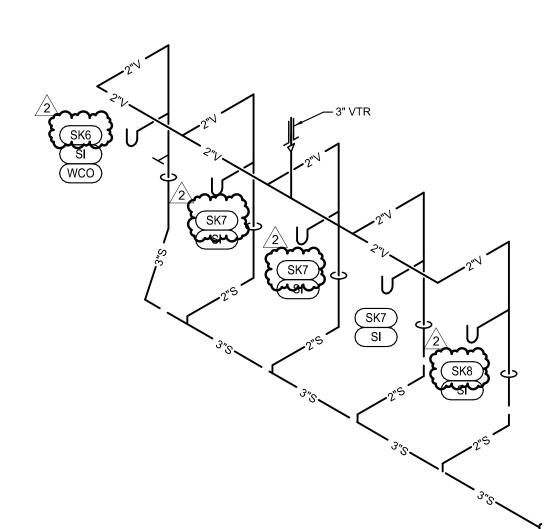
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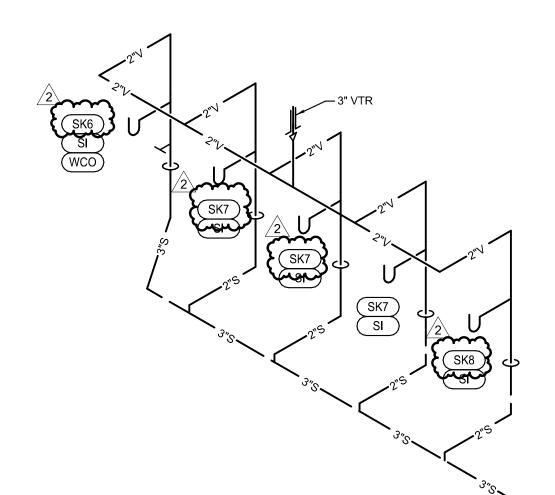


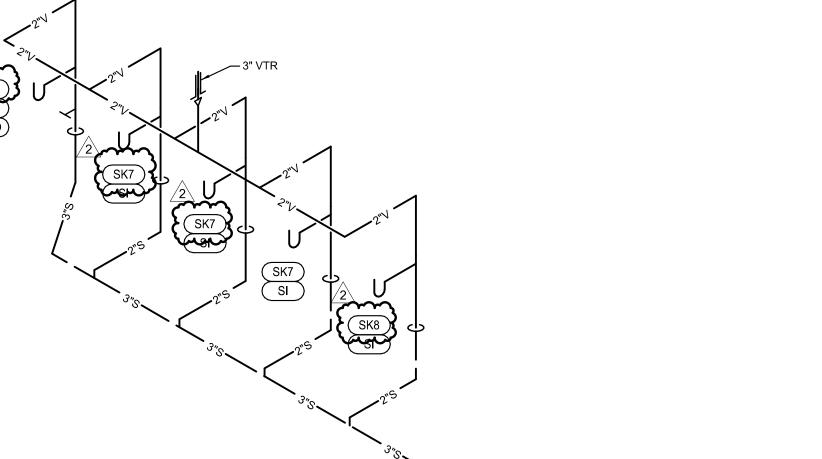


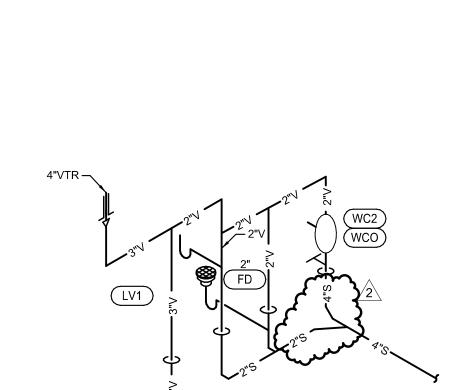






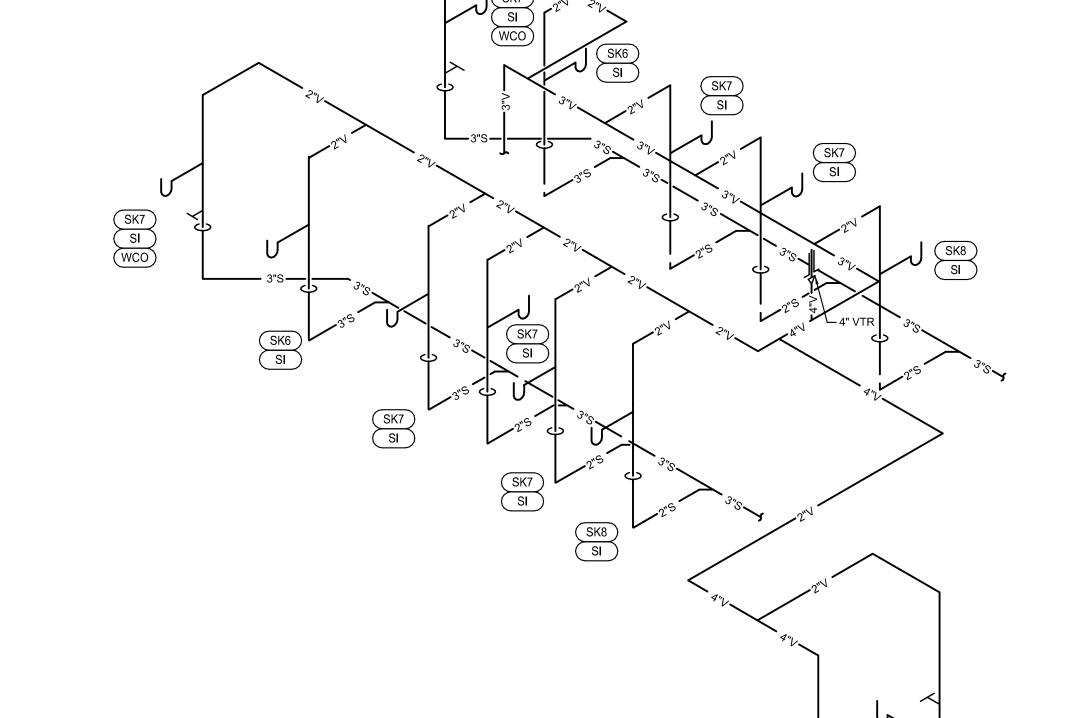






1 PLUMBING WASTE AND VENT RISER NTS

SECOND FLOOR
PENETRATION
(TYP)—



3 PLUMBING WASTE AND VENT RISER NTS