

GENERAL PROJECT NOTES

- LOWEST BRANCHES OF ALL SANITARY RISERS SHALL CONNECT SEPARATELY TO MAIN UNLESS OTHERWISE NOTED.
- ALL SANITARY PIPING BELOW SLAB SHALL BE MINIMUM 2".
- REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF ALL PLUMBING FIXTURES. DO NOT DIMENSION LOCATIONS FROM THESE DRAWINGS.
- COORDINATE ALL RISER LOCATIONS WITH STRUCTURAL BUILDING COMPONENTS.
- SANITARY PIPING SHALL RUN AT A 2% SLOPE MINIMUM UNLESS NOTED OTHERWISE. COORDINATE INSTALLATION OF PIPING WITH EXISTING SHELL CONDITIONS IN THE CEILING SPACE BELOW.
- CONDENSATE DRAIN PIPING SHALL RUN AT A 2% SLOPE MINIMUM UNLESS NOTED OTHERWISE.
- LOCATIONS OF DRAINS AND CONNECTIONS TO FIXTURES AND EQUIPMENT SHALL BE COORDINATED WITH THE FIXTURE PLAN, EQUIPMENT CUTS AND MECHANICAL/ELECTRICAL PLANS. NO WORK SHALL BE INSTALLED UNTIL THE LOCATIONS HAVE BEEN VERIFIED. WORK SHALL NOT BE INSTALLED UNTIL THE LOCATIONS HAVE BEEN VERIFIED.
- PLUMBING FIXTURES SHALL BE CAULKED TO THE ADJOINING FLOOR OR WALL SURFACE WITH CAULK COLOR AS SELECTED BY THE ARCHITECT.
- COORDINATE GAS PRESSURE AND SERVICE W/ GAS COMPANY.
- WALL CLEANOUTS SHALL BE PROVIDED AT THE BASE OF EACH SANITARY RISER.
- COORDINATE MOTORS AND OTHER ELECTRICAL EQUIPMENT FURNISHED UNDER DIV. 15 WITH DIV. 16. PROVIDE EQUIPMENT COORDINATION TABLE AS A SHOP DRAWING FOR REVIEW. TABLE SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING INFORMATION:
A) EQUIPMENT POWER REQUIREMENTS INCLUDING AMPS & VOLTAGES.
B) DISCONNECTING MEANS AND OVER CURRENT PROTECTION REQUIREMENTS.
C) CONTROL REQUIREMENTS.
- UNLESS OTHERWISE INDICATED, PIPING SHALL BE SUPPORTED FROM THE STRUCTURE ABOVE. INTERMEDIATE STRUCTURAL SUPPORTS SHALL BE PROVIDED IN AN APPROVED MANNER AS REQUIRED TO MEET MINIMUM SUPPORT SPACING REQUIRED BY THE SPECIFICATIONS.
- COORDINATE THE INSTALLATION OF LIGHTING FIXTURES WITH PIPING, DUCTWORK, AIR DEVICES, SPRINKLERS AND EQUIPMENT BEING INSTALLED IN THE FACILITY SUCH THAT PIPING, DUCTWORK, AIR DEVICES, AND EQUIPMENT DO NOT BLOCK OR IMPEDE LIGHTING.
- PROVIDE HANGERS, ANCHORS, ETC... ON PIPING PER SUPPORT MANUFACTURER'S RECOMMENDATIONS.
- INSTALL PIPING SO THAT VALVING IS ACCESSIBLE. PROVIDE ACCESS PANELS PER SPECIFICATIONS.
- ROUTE DOMESTIC WATER PIPING, SPRINKLER PIPING, HVAC PIPING, GAS PIPING, ETC... IN PIPE CHASES AND FURRED OUT WALLS AND ABOVE CEILINGS. NO PIPING SHALL BE EXPOSED UNLESS APPROVED BY THE ARCHITECT OR OWNER.
- REFER TO ARCHITECTURAL DRAWINGS FOR ROOF, WALL AND CEILING CONSTRUCTION TYPES AND DETAILS. REFER TO STRUCTURAL DRAWINGS FOR STEEL SIZES AND LOCATIONS.
- INSTALL EQUIPMENT, IE: AHU'S, HEATING COILS, WATER HEATERS, PUMPS, WATER SOURCE HEAT PUMPS, FAN COIL UNITS, BOILERS, CHILLER, ETC... IN SUCH A MANNER AS TO PROVIDE ADEQUATE SPACE FOR MAINTENANCE EQUIPMENT ACCESS.
- THE SPRINKLER SYSTEM SHALL BE DESIGNED & COORDINATED WITH DUCTWORK, PIPING, LIGHTING, EQUIPMENT AND ARCHITECTURAL REFLECTED CEILING PLANS. NO CHANGE ORDERS SHALL BE ACCEPTED.
- PROVIDE PIPE SLEEVES AT WALL, FLOOR AND ROOF PENETRATIONS, ALL EXTERIOR ROOF & WALL PIPING PENETRATIONS SHALL BE WEATHER TIGHT, REFER TO DETAILS OF EXTERIOR & INTERIOR WALL PENETRATIONS FOR MORE INFORMATION.
- FIRE STOP ALL PIPING AND DUCT PENETRATIONS THRU FIRE WALLS AND FLOORS, IN ADDITION PROVIDE FIRE DAMPERS WHERE REQUIRED BY CODE IN ALL DUCTS THAT PASS THROUGH FIRE WALLS-REFER TO ARCHITECTURAL DWG.'S FOR FIRE WALL LOCATIONS.

PLUMBING ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AF	ABOVE FINISHED FLOOR
BTU	BRITISH THERMAL UNIT
CAP	CAPACITY
CLG.	COOLING
DB	DRY BULB
DEG	DEGREE
DESIG	DESIGNATION
DFU	DRAINAGE FIXTURE UNIT
DWG.	DRAWING
EAT	ENTERING AIR TEMPERATURE
EWT	ENTERING WATER TEMPERATURE
F	FAHRENHEIT
FT	FEET
GAL	GALLONS
GPM	GALLONS PER MINUTE
FT. OF HD.	FEET OF HEAD
HP	HORSEPOWER
HR	HOUR
HTG	HEATING
I.D.	INSIDE DIAMETER
IN. W.C.	INCHES OF WATER COLUMN
KW	KILOWATTS
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MBH	THOUSAND BTU/HR
MCA	MINIMUM CIRCUIT AMPS
MIN	MINIMUM
MOCPP	MAXIMUM OVER CURRENT PROTECTION
NO.	NUMBER
NFCW	NON-FRITABLE COLD WATER
PD	PRESSURE DROP
RPM	REVOLUTIONS PER MINUTE
ST	STORAGE TANK
SOFT	SQUARE FOOT
TD	TRENCH DRAIN
TYP	TYPICAL
V-PH	VOLTS-PHASE
V-PH-HZ	VOLTS-PHASE-HERTZ
WB	WET BULB
WH	WATER HEATER
WPD	WATER PRESSURE DROP
WSFU	WATER SUPPLY FIXTURE UNIT

PLUMBING LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
SP.SAN	SP.SAN	SANITARY PIPE
SW	SW	STORM WATER
CD	CD	CONDENSATE DRAIN
FD	FD	FOUNDATION DRAIN
CO	CO	CLEANOUT
V	V	VENT PIPE
CW	CW	COLD WATER
HW	HW	HOT WATER
HWR	HWR	HOT WATER RECIRCULATING
G	G	GAS
F	F	FIRE LINE
AS	AS	ANGLE STOP VALVE
BV	BV	BALL VALVE
CV	CV	CHECK VALVE
BWV	BWV	BACK WATER VALVE
FMF	FMF	FLOW METER FITTING
CB	CB	COMBINATION BALANCING/SHUT-OFF VALVE
RZBP	RZBP	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
PRV	PRV	PRESSURE REDUCING VALVE
RV	RV	RELIEF VALVE
MAV	MAV	MANUAL AIR VALVE
AAV	AAV	AUTOMATIC AIR VALVE
STW	STW	STRAINER W/VALVE
U	U	UNION
SA	SA	SHOCK ABSORBER
GR	GR	GAS PRESSURE REGULATOR
FWC	FWC	FLEXIBLE PIPE CONNECTION
TU	TU	PIPE TURNING UP
TD	TD	PIPE TURNING DOWN
TU	TU	TEE TURNING UP
TD	TD	TEE TURNING DOWN
WH	WH	WALL HYDRANT
HB	HB	HOSE BIBB
AD	AD	AREA DRAIN
FD	FD	FLOOR DRAIN
TD	TD	TRENCH DRAIN
1	1	DETAIL DESIGNATION

PLUMBING FIXTURE SCHEDULE

DESIG	DESCRIPTION	SAN	SW	VENT	CW	HW	MANUFACTURER & MODEL	TRIM AND ACCESSORIES	REMARKS	NOTES
P-1	WATER CLOSET (TANK TYPE)	3"	-	2"	1"	-				
P-1A	WATER CLOSET (TANK TYPE) ADA COMPLIANT	3"	-	2"	1"	-				
P-4	LAVATORY (COUNTERTOP BOWL) ADA COMPLIANT	1-1/2"	-	1-1/2"	1/2"	1/2"		METERING FAUCET		
P-4A	LAVATORY (WALL HUNG BOWL) ADA COMPLIANT	1-1/2"	-	1-1/2"	1/2"	1/2"		WRIST BLADE FAUCET		
P-5	SHOWER (54"x30")	2"	-	1-1/2"	1/2"	1/2"				
P-5	SHOWER ADA COMPLIANT (71"x30")	2"	-	1-1/2"	1/2"	1/2"				
P-6	KITCHEN SINK (DOUBLE BOWL)	1-1/2"	-	1-1/2"	1/2"	1/2"				
P-7	PANTRY SINK (SINGLE BOWL)	1-1/2"	-	1-1/2"	1/2"	1/2"				
P-7B	LAUNDRY TUB (LEG MOUNTED)	2"	-	1-1/2"	1/2"	1/2"				
P-8	CLOTHES WASHER	2"	-	2"	3/4"	3/4"		PROVIDED WITH GUY GREY BOX		
P-9	DISHWASHER	3/4"	-	-	3/4"		PROVIDED UNDER ANOTHER DIVISION		PROVIDE WITH AIR GAP FITTING	1
P-10	SERVICE SINK (FLOOR MOUNTED)	3"	-	2"	3/4"	3/4"	FAUCET: FIAT MODEL MSB 2424	SINK: FIAT MODEL MSB 2424	ALUMINUM BUMPER GUARD, HOSE & BRACKET, MOP HANGER	
P-11	WASH STATION	-	-	-	3/4"	3/4"				
P-12	ICE MAKER	-	-	-	1/2"	-			BACKFLOW PREVENTER ASSE 1024	
FD-1	4" DIAMETER FLOOR DRAIN	3"	-	-	-	-	ZURN # 2-415B-HD-P	TRAP PRIMER CONNECTION	PROVIDE WITH DEEP SEAL P-TRAP	
FD-2	3" DIAMETER FLOOR DRAIN	2"	-	-	-	-			PROVIDE WITH DEEP SEAL P-TRAP	

NOTES:

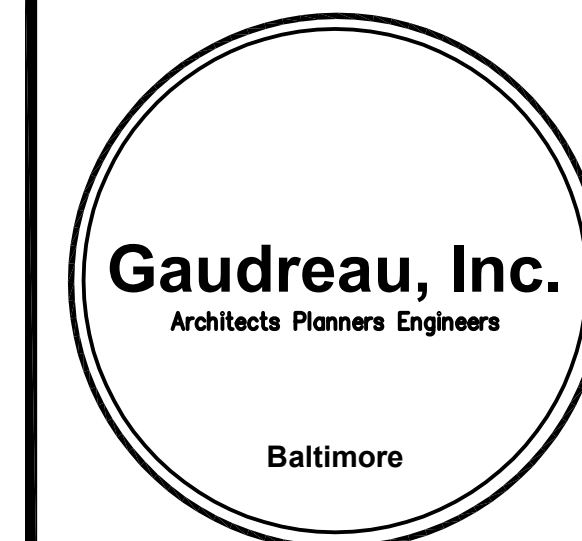
- COORDINATE LOCATION OF PLUMBING FIXTURES WITH ARCHITECTURAL DRAWINGS.
- VERIFY ALL FINISHES AND COLORS WITH THE ARCHITECT.
- PROVIDE FLUSH VALVE WITH OVERRIDE OPTION.
- COORDINATE SINK CENTER-SET WITH FAUCET CENTER-SET.
- COORDINATE WITH WALL THICKNESS.

PLUMBING EQUIPMENT LIST

- WATER HEATER (WH-01)**
LOCHINVAR ARMOR MODEL AWN286PW
285 MBH INPUT, 322 GPM RECOVERY AT 100°F RISE.
96% EFFICIENCY, SEALED COMBUSTION, STAINLESS STEEL HEAT EXCHANGER, ALL BRONZE CIRCULATING PUMP. PROVIDE WITH SMART SYSTEM CONTROL PANEL W/SOFTWARE, ALARM BELL, CONDENSATE NEUTRALIZATION KIT, CONCENTRIC VENT KIT, BMS GATEWAY TO LON OR BACNET.
- STORAGE TANK (ST-01)**
LOCHINVAR MODEL RUS080
80 GALLON, VERTICAL, GLASS LINED TANK, PROVIDE WITH TEMPERATURE AND PRESSURE GAUGE, HANDHOLE, LIFTING LUGS, TEMPERATURE AND PRESSURE RELIEF VALVE.
- HOT WATER RECIRCULATING PUMP (CP-01)**
BELL AND GOSSETT MODEL NBF36
5 GPM AT 25 FEET OF HEAD, 270 WATTS, 120V-1PH, 2.3 FLA, 3,300 RPM
PUMP SHALL HAVE ALL BRONZE CONSTRUCTION. PROVIDE WITH AQUASTAT.

PLUMBING DRAWING LIST

SUBMISSION	PERMIT
SHEET	TITLE
P001	GENERAL NOTES, ABBREVIATIONS, LEGEND & SCHEDULES
P101	BASEMENT AND FIRST FLOOR PLAN - PLUMBING NEW WORK
P102	SECOND AND THIRD FLOOR PLAN - PLUMBING NEW WORK
P401	PART PLANS & PLUMBING DETAILS
P601	RISER DIAGRAM



810 Light Street Baltimore, Maryland 21230

NO	DATE	DESCRIPTION

REVISIONS

NOTRE DAME PREP CONVENT RENOVATION

815 Hampton Lane Towson, MD 21286

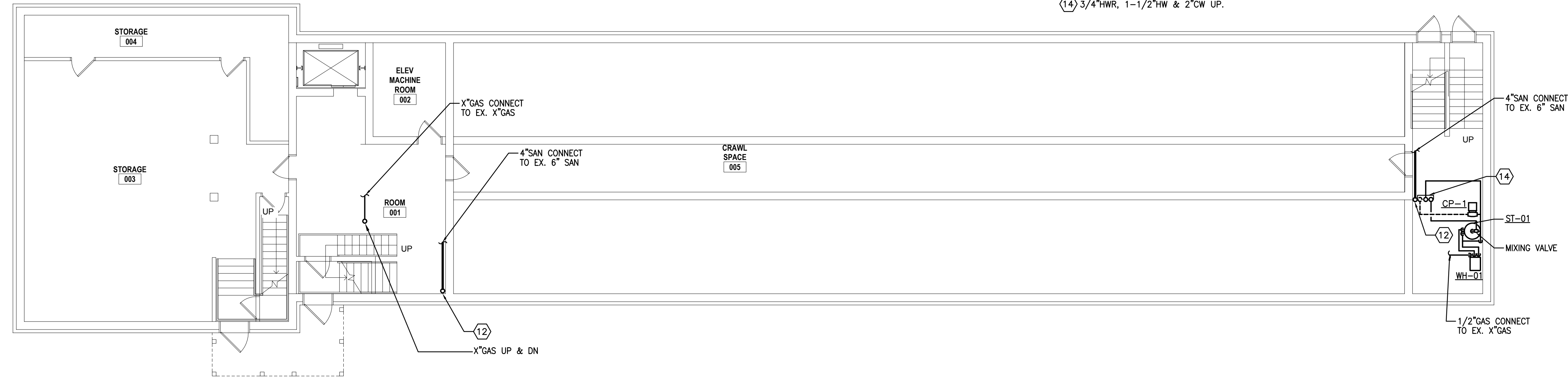
PLUMBING LEGEND, NOTES & SCHEDULES

PROJECT NO	DWG NO
13007-00	
DRAWN BY	
FDD	
DATE	
03/15/13	

P-001

SPECIFIC NOTES (REFER TO P101 WHERE INDICATED):

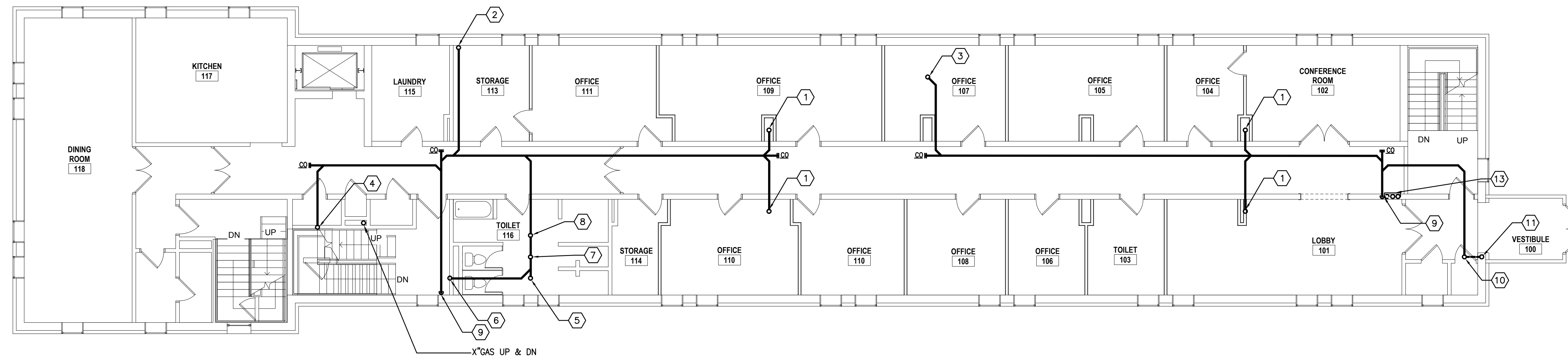
- ① 3" SAN UP.
- ② 1-1/2" SAN UP.
- ③ 1-1/2" SAN UP TO P-7.
- ④ 3" SAN UP TO P-10.
- ⑤ 3" SAN UP TO P-1A.
- ⑥ 1-1/2" SAN UP TO P-3A.
- ⑦ 2" SAN UP TO P-8.
- ⑧ 1-1/2" SAN UP TO P-7B.
- ⑨ 4" SAN DN.
- ⑩ 3" SAN UP TO ED-1.
- ⑪ 2" VENT UP.
- ⑫ 4" SAN UP.
- ⑬ 3/4" HWR, 1-1/2" HW & 2" CW UP & DN.
- ⑭ 3/4" HWR, 1-1/2" HW & 2" CW UP.



BASEMENT FLOOR PLAN - PLUMBING - NEW WORK

SCALE: 1/8"=1'-0"

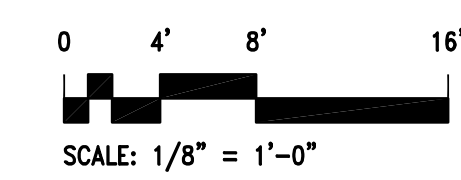
- NOTES:
- FOR PIPING, VALVING & PIPE SIZES NOT SHOWN ON PLAN REFER TO RISER DIAGRAMS ON DWG. P101.
 - PROVIDE ACCESS PANELS IN CEILINGS/WALL TO FACILITATE ACCESS TO ALL VALVING ASSOCIATED WITH CW, HW & HWR PIPING.



FIRST FLOOR PLAN - PLUMBING - NEW WORK

SCALE: 1/8"=1'-0"

- NOTES:
- FOR PIPING, VALVING & PIPE SIZES NOT SHOWN ON PLAN REFER TO RISER DIAGRAMS ON DWG. P101.
 - PROVIDE ACCESS PANELS IN CEILINGS/WALL TO FACILITATE ACCESS TO ALL VALVING ASSOCIATED WITH CW, HW & HWR PIPING.



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NO	DATE	DESCRIPTION

REVISIONS

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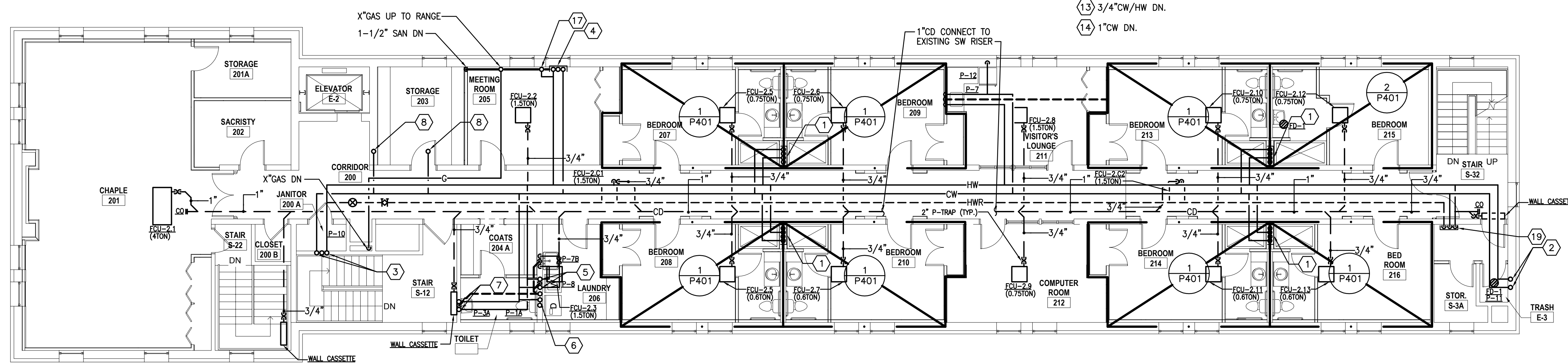
815 Hampton Lane
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**BASEMENT AND
FIRST FLOOR
PLAN - PLUMBING
NEW WORK**

PROJECT NO 13007-00	DWG NO
DRAWN BY FDD	P-101
DATE 03/15/13	

SPECIFIC NOTES (REFER TO P102 WHERE INDICATED):

- ① 1" CW, 3/4" HW, 3" SAN & 2" V UP AND DN.
- ② 3/4" CW/HW UP AND DN TO P-11.
- ③ 3/4" CW/HW UP AND DN TO P-10.
- ④ 1/2" CW/HW & N 1-1/2" SAN UP TO P-6.
- ⑤ 3/4" CW/HW UP AND DN TO P-8.
- ⑥ 1" CW UP AND DN TO P-1A.
- ⑦ 3/4" CW/HW UP AND DN TO P-3A.
- ⑧ 1/2" CW UP TO P-12.
- ⑨ 1" CW, 3/4" HW, 3" SAN & 2" V DN.
- ⑩ 3/4" CW/HW DN.
- ⑪ 3/4" CW/HW DN.
- ⑫ 1/2" CW/HW DN.
- ⑬ 3/4" CW/HW DN.
- ⑭ 1" CW DN.
- ⑮ 3/4" CW/HW DN.
- ⑯ 1/2" CW DN.
- ⑰ 1/2" HW UP TO P-9.
- ⑱ 1/2" HW DN.
- ⑲ 3/4" HW, 1-1/2" HW & 2" CW DN.

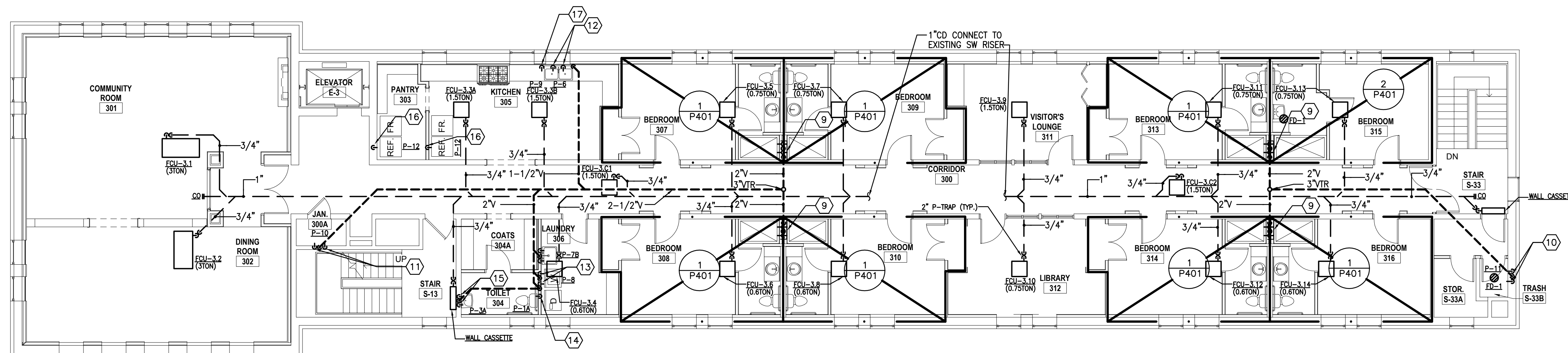


SECOND FLOOR PLAN - PLUMBING - NEW WORK

SCALE: 1/8"=1'-0"

NOTES:

- 1. FOR PIPING, VALVING & PIPE SIZES NOT SHOWN ON PLAN REFER TO RISER DIAGRAMS ON DWG. P101.
- 2. PROVIDE ACCESS PANELS IN CEILINGS/WALL TO FACILITATE ACCESS TO ALL VALVING ASSOCIATED WITH CW, HW & HW R PIPING.

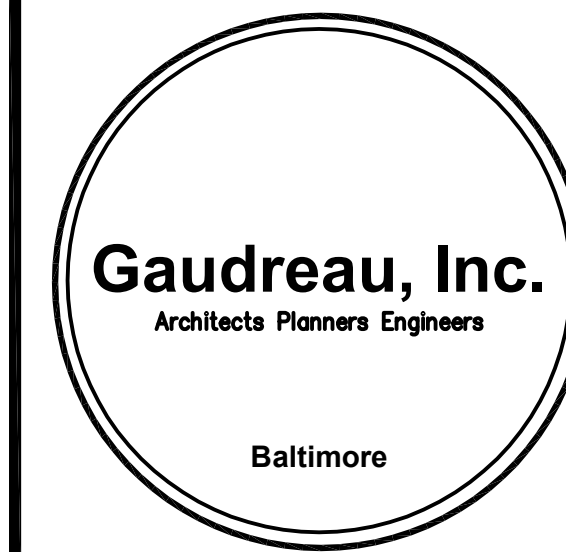


THIRD FLOOR PLAN - PLUMBING - NEW WORK

SCALE: 1/8"=1'-0"

NOTES:

- 1. FOR PIPING, VALVING & PIPE SIZES NOT SHOWN ON PLAN REFER TO RISER DIAGRAMS ON DWG. P101.
- 2. PROVIDE ACCESS PANELS IN CEILINGS/WALL TO FACILITATE ACCESS TO ALL VALVING ASSOCIATED WITH CW, HW & HW R PIPING.



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NO	DATE	DESCRIPTION

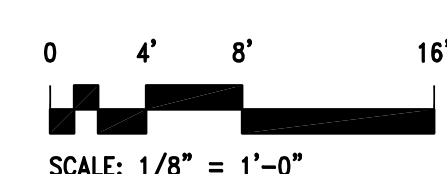
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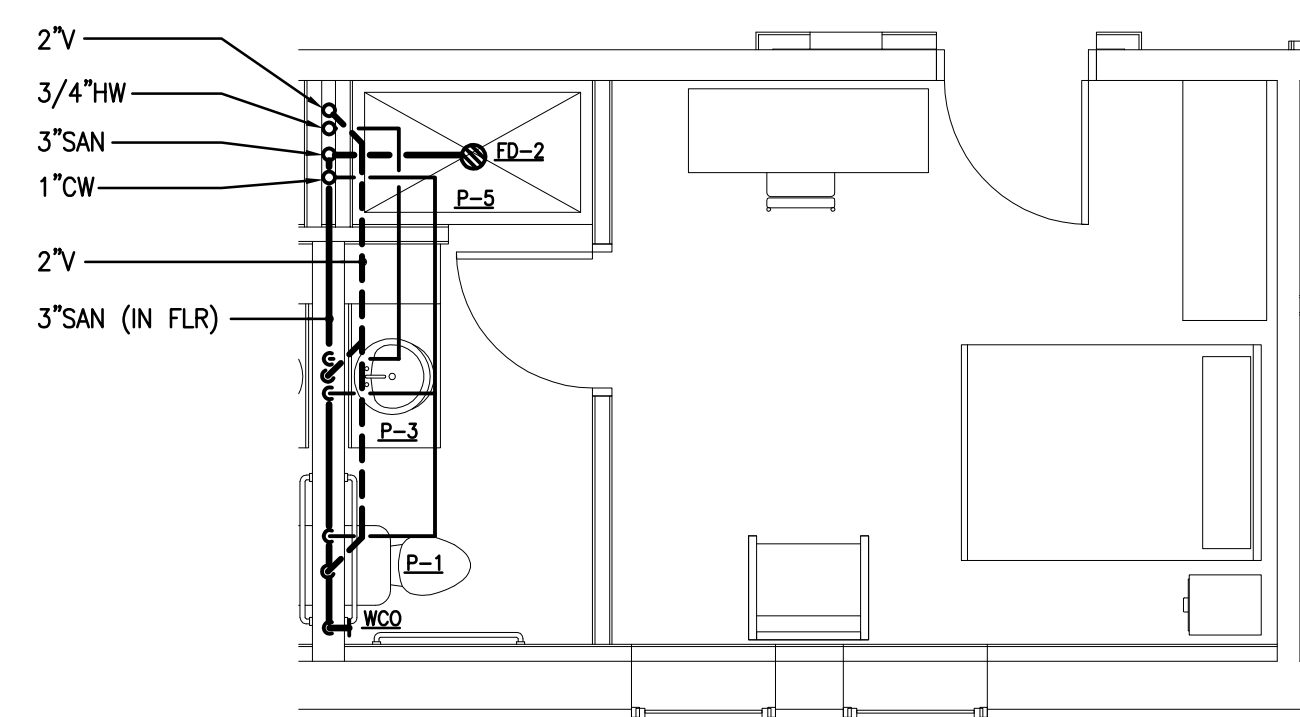
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SECOND AND THIRD FLOOR PLAN - PLUMBING NEW WORK

PROJECT NO 13007-00	DWG NO
DRAWN BY FDD	P-102
DATE 03/15/13	

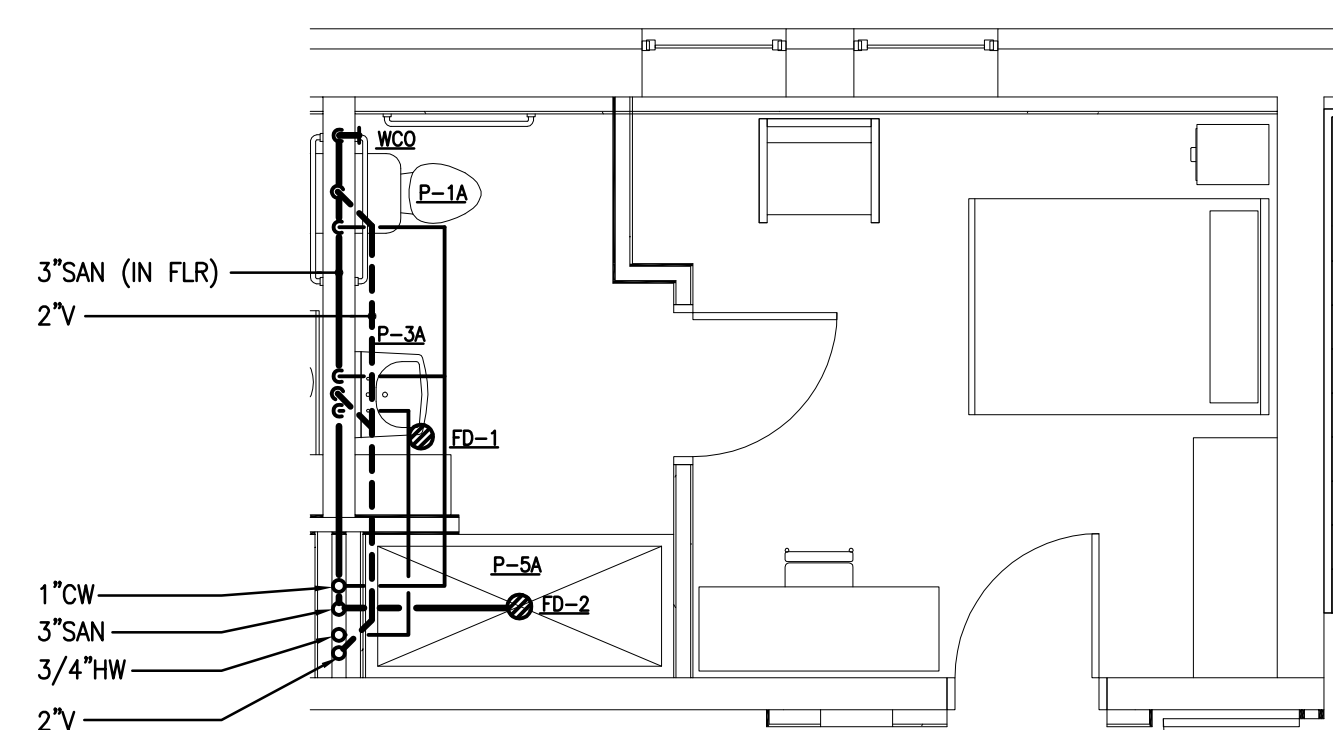




BEDROOM - PLUMBING - NEW WORK

SCALE: 1/4"=1'-0"

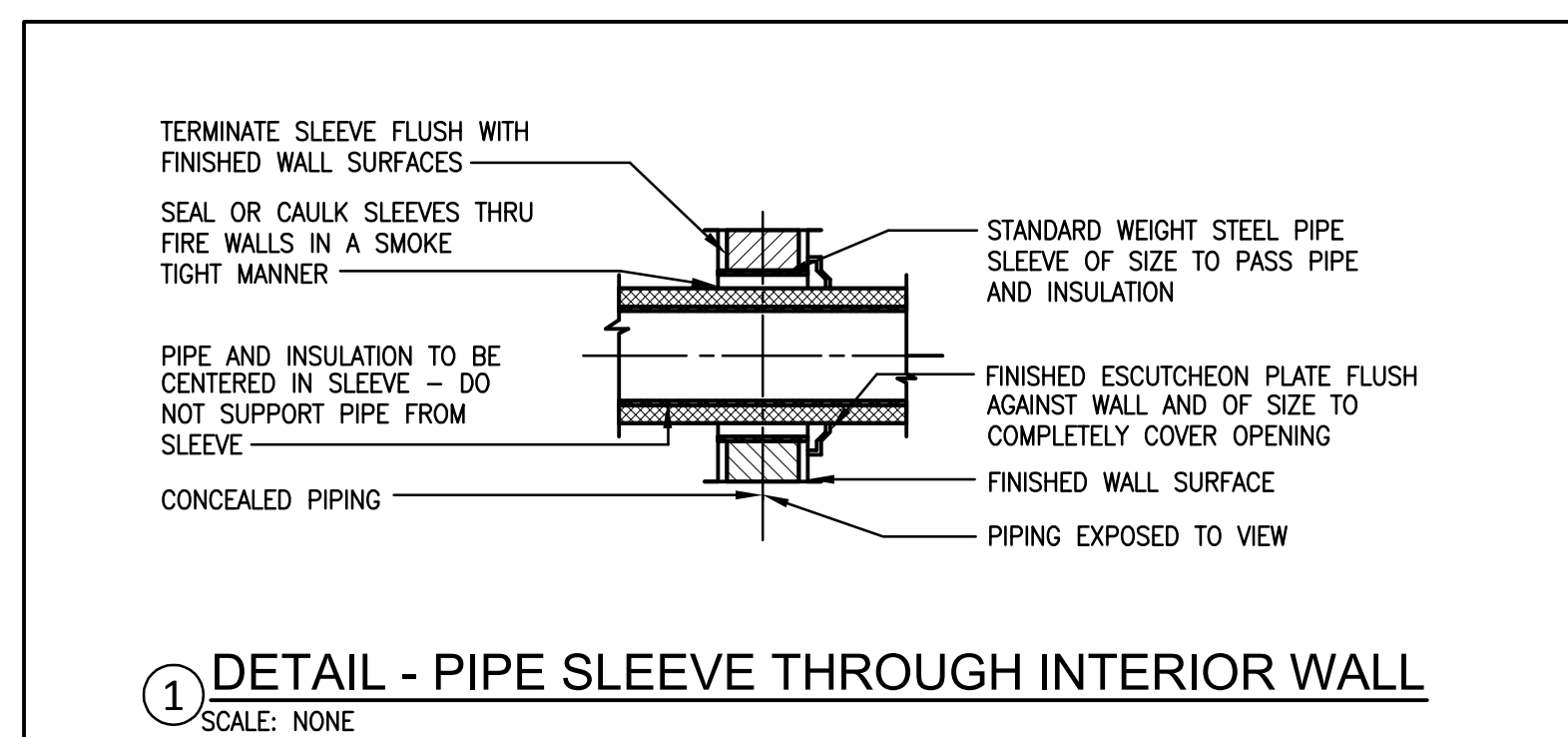
- NOTES:
- FOR PIPING, VALVING & PIPE SIZES NOT SHOWN ON PLAN REFER TO RISER DIAGRAMS ON DWG. P-01.
 - PROVIDE ACCESS PANELS IN CEILINGS/WALL TO FACILITATE ACCESS TO ALL VALVING ASSOCIATED WITH CW, HW & HWR PIPING.



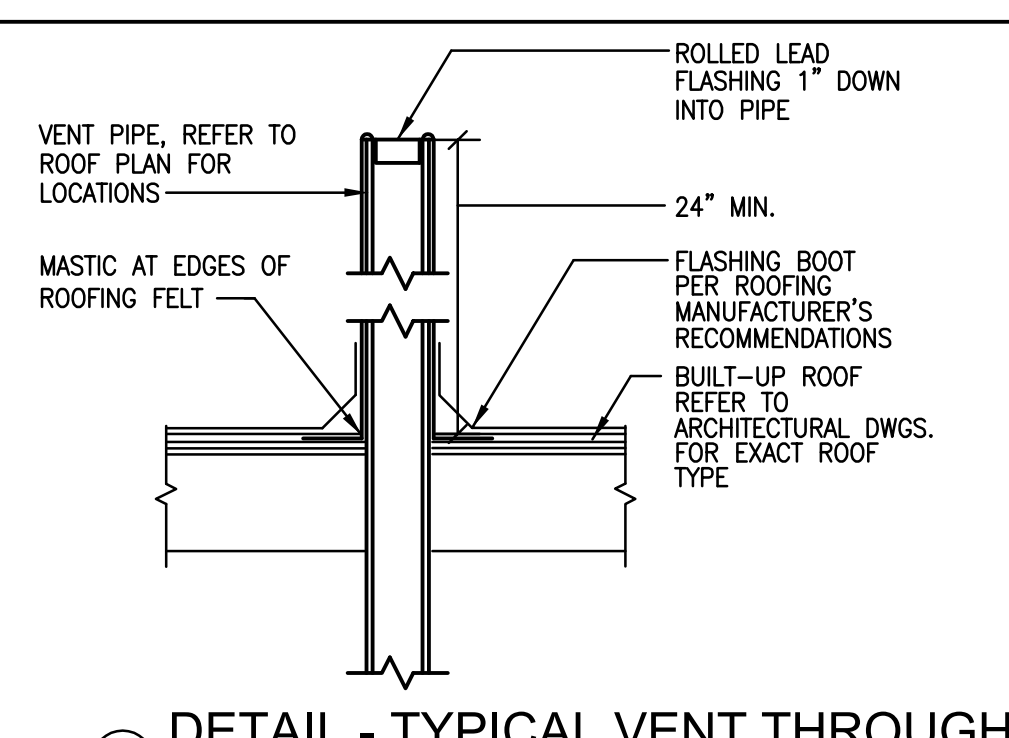
ADA BEDROOM - PLUMBING - NEW WORK

SCALE: 1/4"=1'-0"

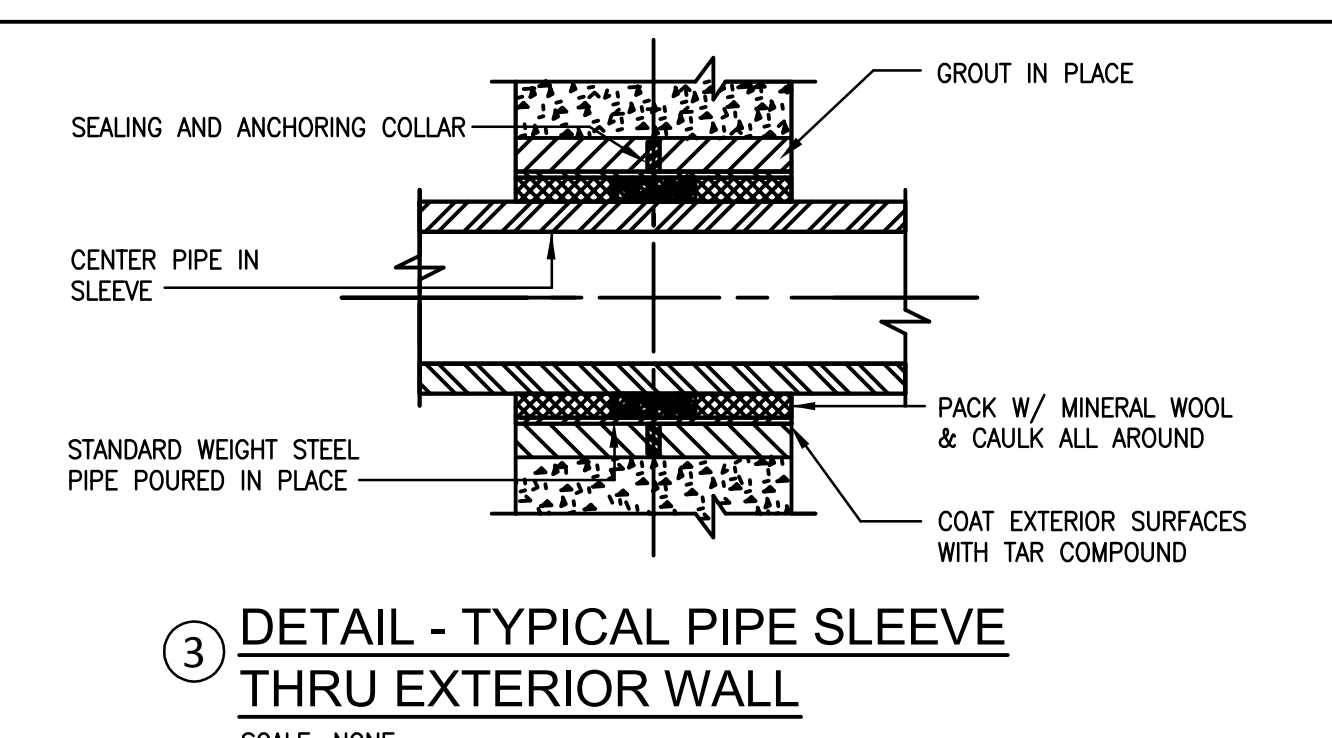
- NOTES:
- FOR PIPING, VALVING & PIPE SIZES NOT SHOWN ON PLAN REFER TO RISER DIAGRAMS ON DWG. P-01.
 - PROVIDE ACCESS PANELS IN CEILINGS/WALL TO FACILITATE ACCESS TO ALL VALVING ASSOCIATED WITH CW, HW & HWR PIPING.



1 DETAIL - PIPE SLEEVE THROUGH INTERIOR WALL
SCALE: NONE

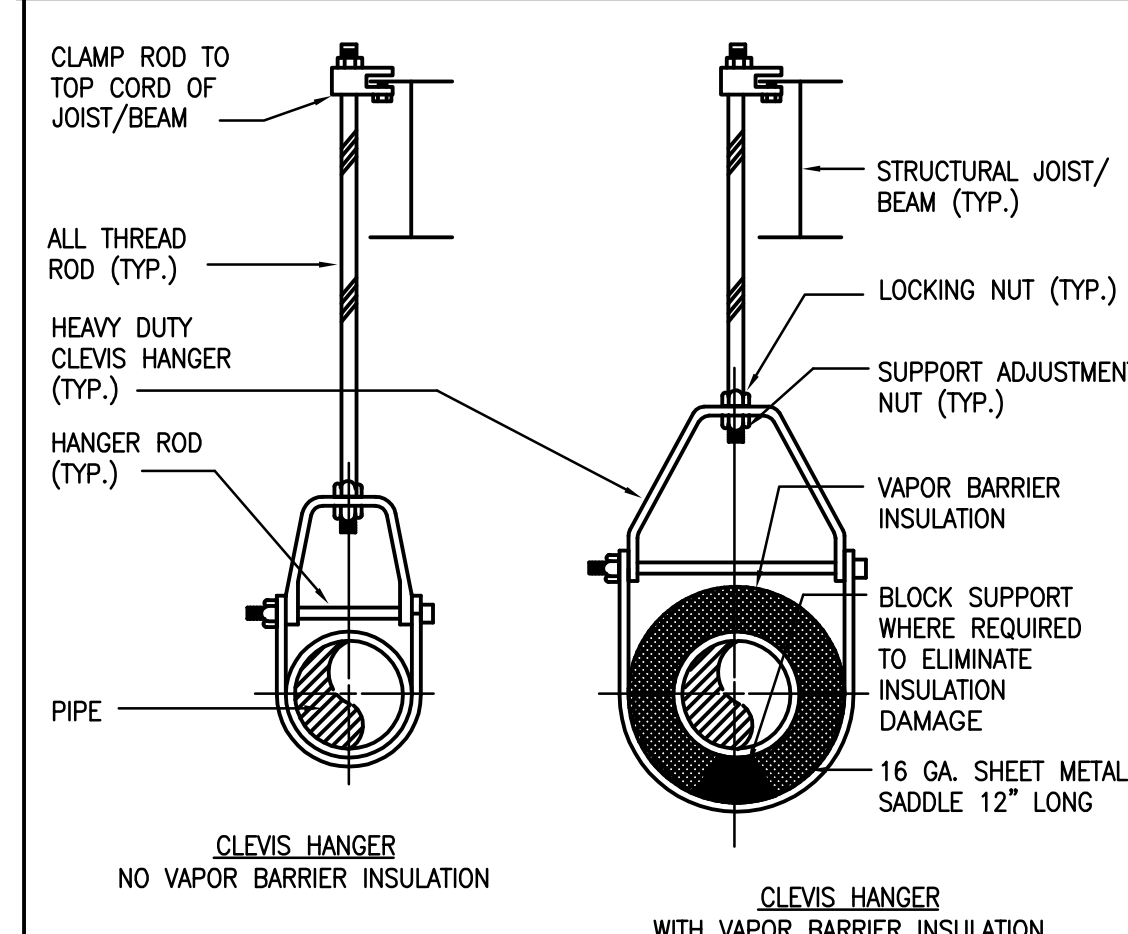


2 DETAIL - TYPICAL VENT THROUGH ROOF PENETRATION
SCALE: NONE

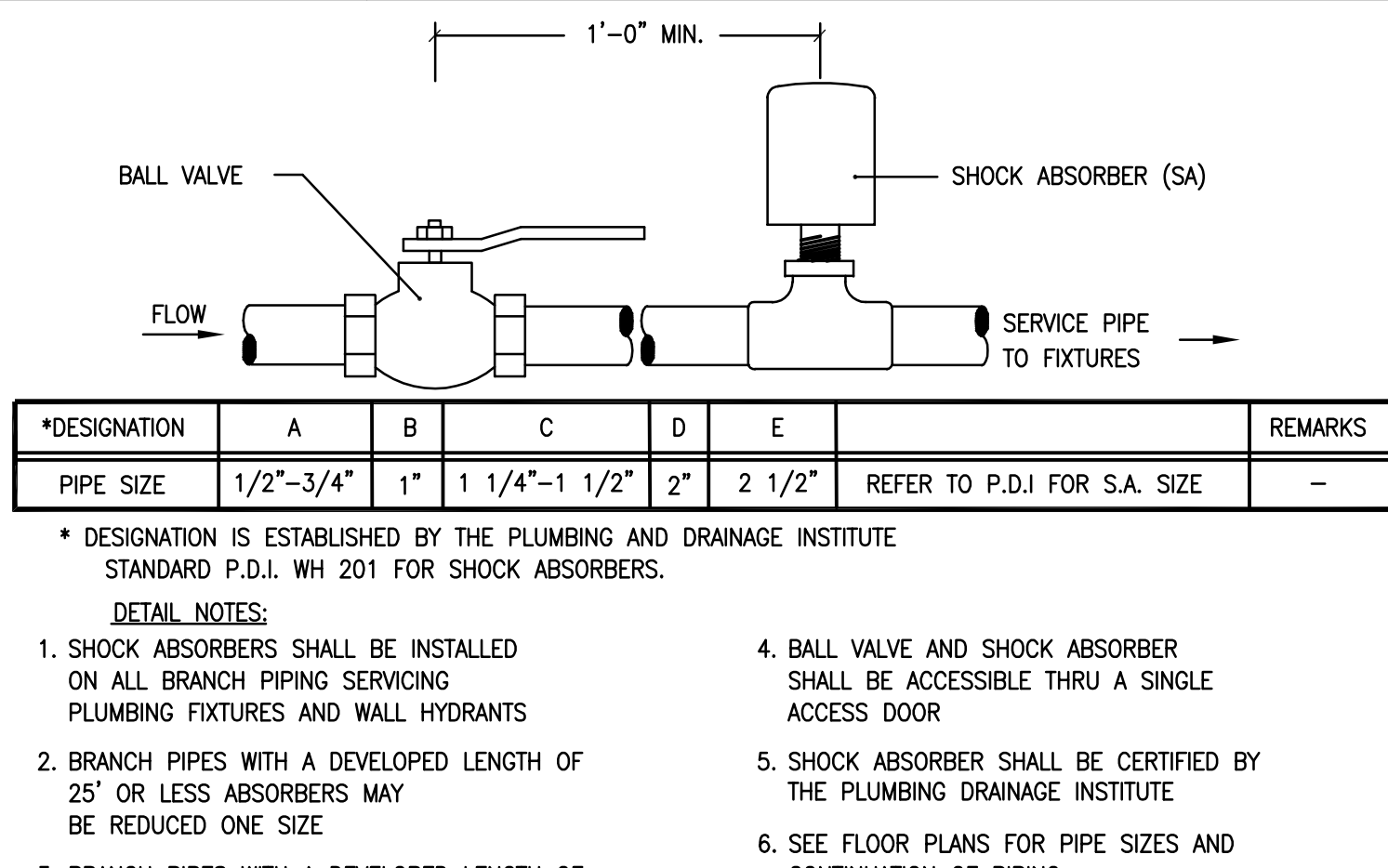


3 DETAIL - TYPICAL PIPE SLEEVE THRU EXTERIOR WALL
SCALE: NONE

- NOTES: 1. REFER TO ARCHITECTURAL DRAWING FOR TYPES OF WALLS & THEIR CONSTRUCTION.
2. PROVIDE SLEEVES @ ALL WALL PENETRATIONS.



4 PIPE SUPPORT DETAIL
SCALE: NONE

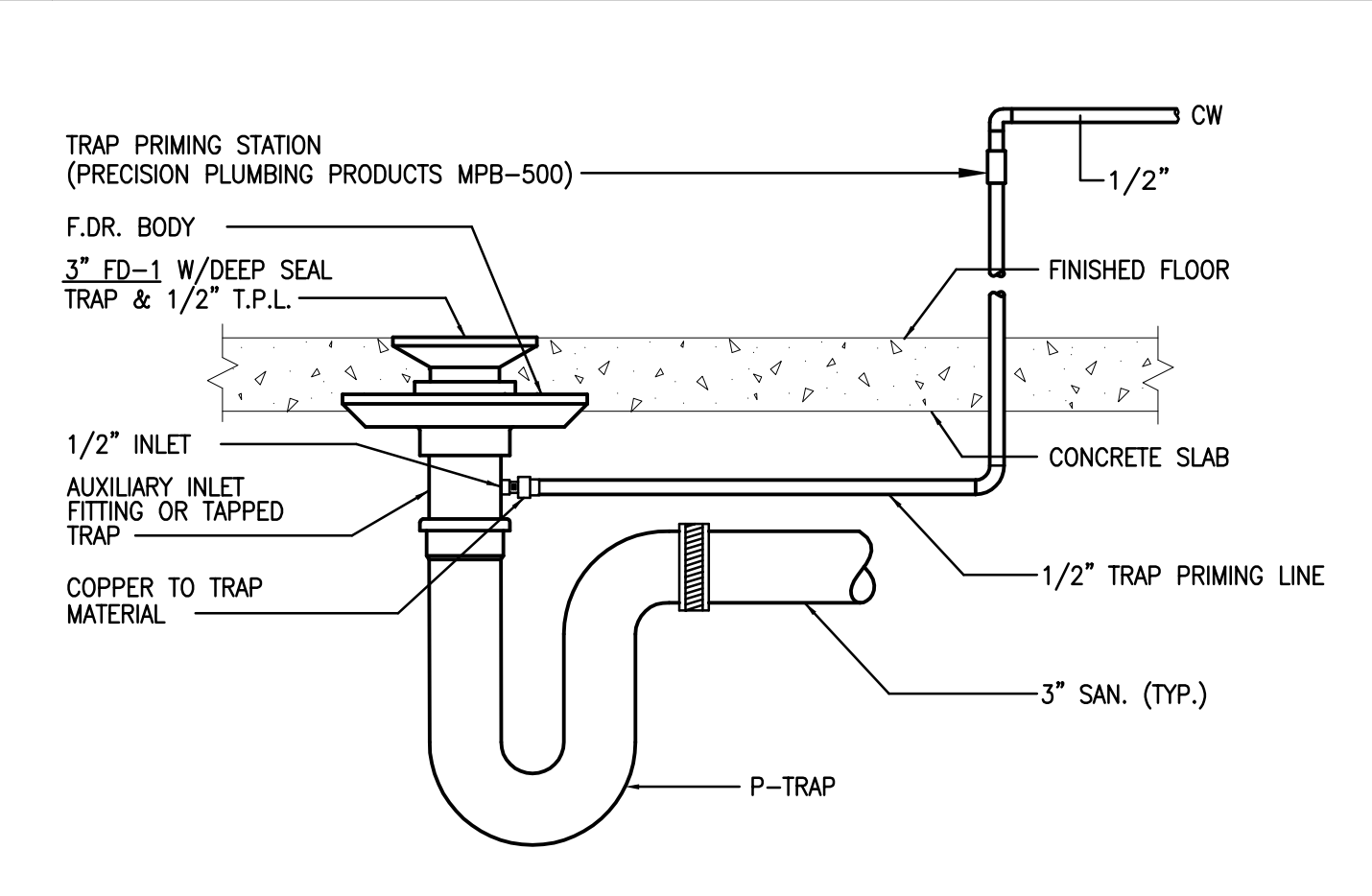


5 DETAIL - TYPICAL SHOCK ABSORBER INSTALLATION
SCALE: NONE

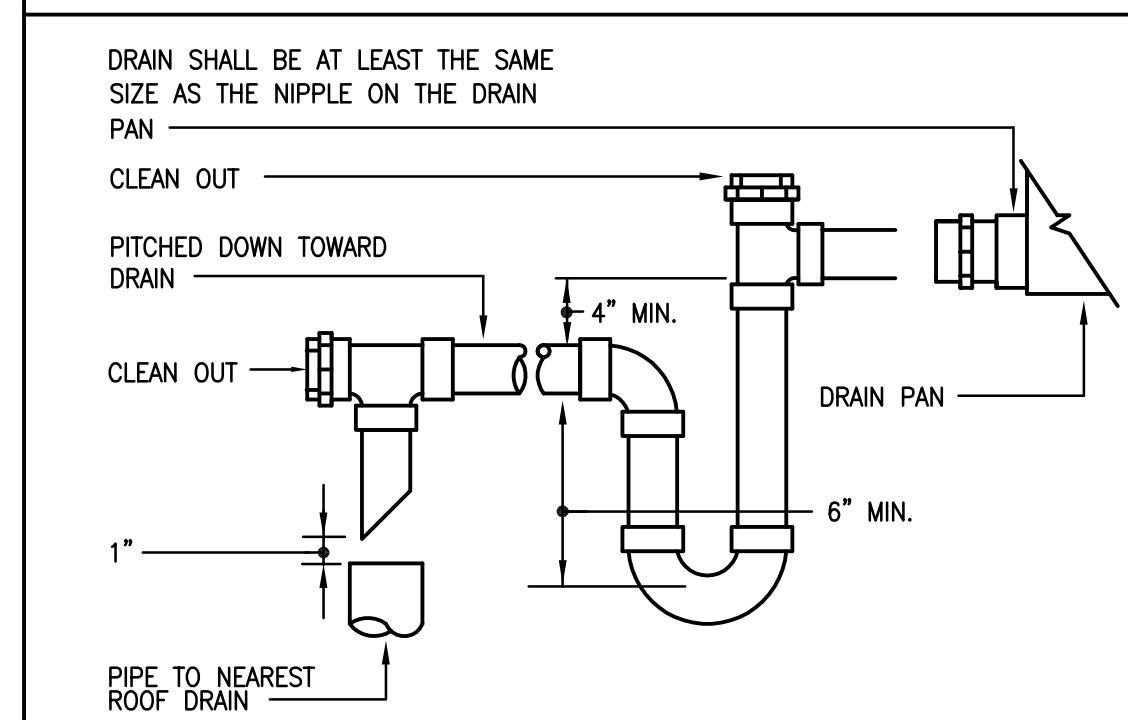
*DESIGNATION	A	B	C	D	E	REMARKS
PIPE SIZE	1/2"-3/4"	1"	1 1/4"-1 1/2"	2"	2 1/2"	REFER TO P.D.I. FOR S.A. SIZE

* DESIGNATION IS ESTABLISHED BY THE PLUMBING AND DRAINAGE INSTITUTE STANDARD P.D.I. WH 201 FOR SHOCK ABSORBERS.

- DETAIL NOTES:
- SHOCK ABSORBERS SHALL BE INSTALLED ON ALL BRANCH PIPING SERVING PLUMBING FIXTURES AND WALL HYDRANTS
 - BRANCH PIPES WITH A DEVELOPED LENGTH OF 25' OR LESS ABSORBERS MAY BE REDUCED ONE SIZE
 - BRANCH PIPES WITH A DEVELOPED LENGTH OF 75' OR GREATER ABSORBERS MAY BE INCREASED ONE SIZE
 - BALL VALVE AND SHOCK ABSORBER SHALL BE ACCESSIBLE THRU A SINGLE ACCESS DOOR
 - SHOCK ABSORBER SHALL BE CERTIFIED BY THE PLUMBING DRAINAGE INSTITUTE
 - SEE FLOOR PLANS FOR PIPE SIZES AND CONTINUATION OF PIPING
 - ADHERE TO LOCAL CODE REQUIREMENTS.



6 DETAIL - FLOOR DRAIN WITH TRAP PRIMING LINE
SCALE: NONE



7 DETAIL - TYPICAL CONDENSATE PIPE & TRAP
SCALE: NONE



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NO	DATE	DESCRIPTION

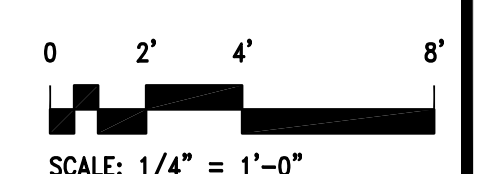
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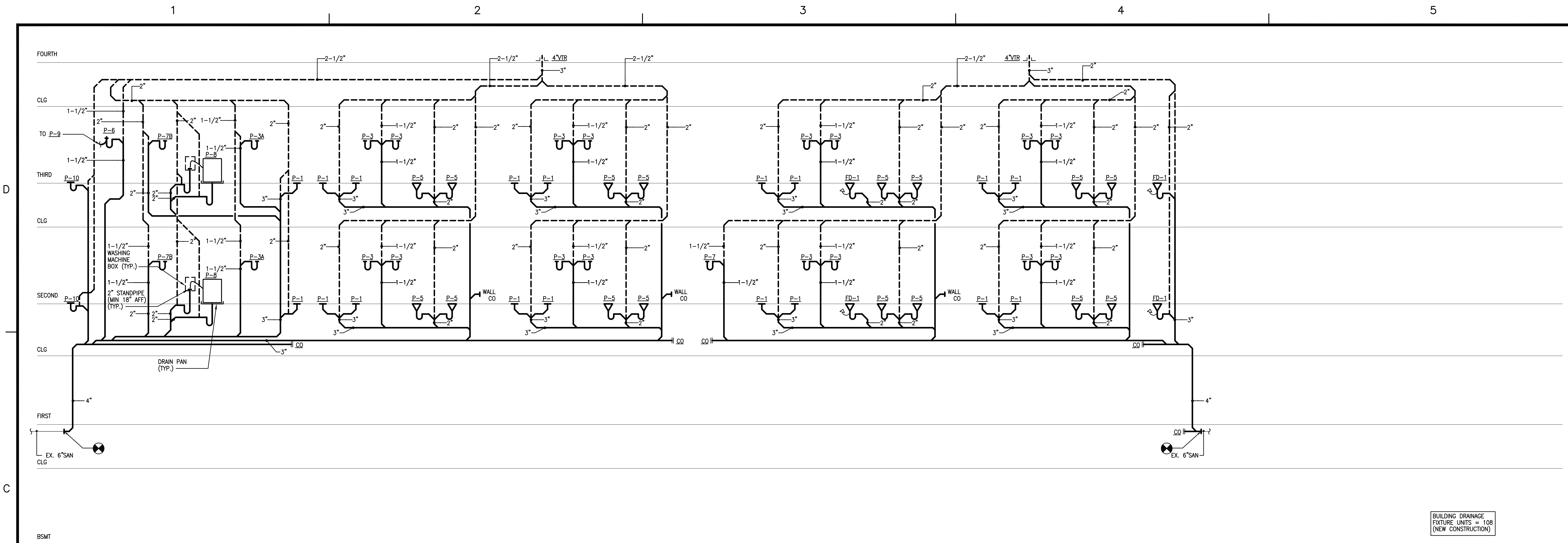
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PART PLANS & PLUMBING DETAILS

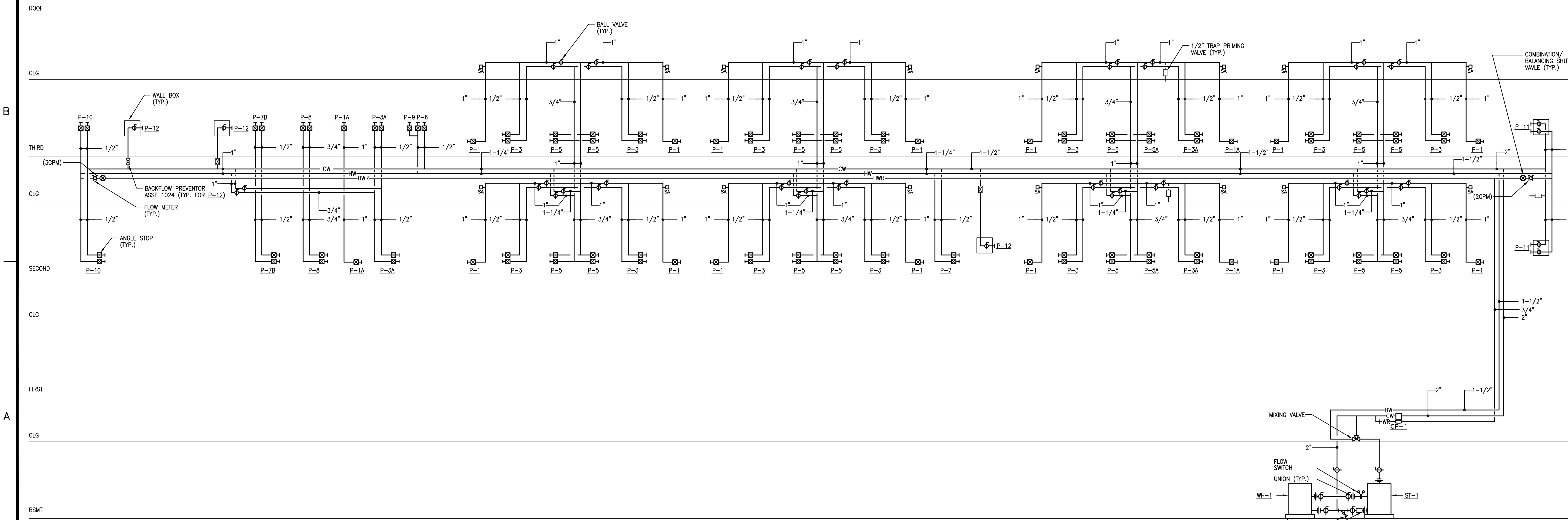
PROJECT NO 13007-00	DWG NO P-401
DRAWN BY FDD	DATE 03/15/13





BUILDING DRAINAGE
FIXTURE UNITS = 108
(NEW CONSTRUCTION)

SANITARY RISER DIAGRAM
SCALE: NONE



DOMESTIC WATER
FIXTURE UNITS:
CW = 61.1
HW = 43.5
(NEW CONSTRUCTION)

DOMESTIC RISER DIAGRAM
SCALE: NONE



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NO	DATE	DESCRIPTION
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**NOTRE DAME
PREP CONVENT
RENOVATION**

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Towson, MD 21286

**RISER
DIAGRAMS**

PROJECT NO 13007-00	DWG NO
DRAWN BY FDD	P-601
DATE 03/15/13	