

## PLUMBING PIPING SYMBOLS

## GENERAL PLUMBING SYMBOLS



















## PLUMBING VALVE SYMBOLS









## DRAWING SYMBOLS

AE	ARCHITECT / ENGINEER	ICW	INDUSTRIAL COLD WATER	V	VENT
AD	AREA DRAIN	INV	INVERT	VAC	VACUUM
AFF	ABOVE FINISH FLOOR	IPC	INTERNATIONAL PLUMBING CODE	VB	VACUUM BREAKER
AFB	ABOVE FINISH GRADE	IRW	IRRIGATION WATER	VCO	VACUUM CLEAN
AG	AIR GAP	IW	INDIRECT WASTE	VP	VACUUM PUMP
AP	ACCESS PANEL	IWH	INSTANTANEOUS WATER HEATER	VS	VENT STACK
AS	AUTOMATIC SPRINKLER	IWR	INDUSTRIAL WATER RETURN	VTR	VENT THROUGH
ASD	ADJUSTABLE SPEED DRIVES	IWS	INDUSTRIAL WATER SUPPLY		
ASD	AUTOMATIC SPRINKLER DRAIN			W	WASTE
ASHRAE	AMERICAN SOCIETY HEATING, REFRIGERATION, AIR CONDITIONING ENGINEERS	KW	KILOWATT	WC	WATER CLOSURE
		KWHr	KILOWATT-HOUR	WCO	WALL CLEANOUT
ASME	AMERICAN SOCIETY MECHANICAL ENGINEERS	LS	LITER PER SECOND	WG	WATER GAGE
ASPE	AMERICAN SOCIETY PLUMBING ENGINEERS	LA	LABORATORY AIR	WH	WALL HYDRANT
ASR	AUTOMATIC SPRINKLER RISER	LAV	LAVATORY	WH	WATER HEATER
AV	ACID VENT	LBS/Hr	POUNDS PER HOUR	WHA	WATER HAMMER
AW	ACID WASTE	LOW	LABORATORY COLD WATER	WL	WATER LINE
		LWH	LABORATORY HOT WATER	WM	WATER METER
B/G	BELOW GRADE	LWG	LABORATORY LIQUID GAS	WPD	WATER PRESSURE
BFP	REDUCED PRESSURE BACKFLOW PREVENTER	LOX	LIQUID OXYGEN	WS	WASTE STACK
BHP	BREAK HOSEPOWER				
BSP	BLACK STEEL PIPE	LW	LABORATORY VACUUM	YCO	YARD CLEANOUT
BT	BATHTUB	LV	LOW WATER	YH	YARD HYDRANT
BTU	BRITISH THERMAL UNIT				
BTUH	BRITISH THERMAL UNIT PER HOUR	M	METER		
		MA	MEDICAL AIR		
C	CELSIUS	MAV	MANUAL AIR VENT		
CGA	COMPRESSED GAS ASSOCIATION	MBH	1000 BTUH		
CH	CHILLED WATER SUPPLY	MED	MEDICAL		
CHR	CHILLED WATER RETURN	MER	MECHANICAL EQUIPMENT ROOM		
CI	CAST IRON	MH	MANHOLE		
CO	CLEANOUT	MOU	MEMORANDUM OF UNDERSTANDING		
CS	CULICAL SINK	MSB	MECHANICAL SERVICE BASIN		
CV	CONTROL VALVE	MV	MEDICAL VACUUM		
		N2	NITROGEN		
DOW	DOMESTIC COLD WATER	N2O	NITROUS OXIDE		
DHW	DOMESTIC HOT WATER	NO	NORMALLY CLOSED		
DHWr	DOMESTIC HOT WATER RETURN	NG	NATURAL GAS		
DHWIR	DOMESTIC WATER RETURN	NIC	NOT IN CONTRACT		
DHWS	DOMESTIC HOT WATER SUPPLY	NO	NORMALLY OPEN		
DI	DEIONIZED WATER	NOIA	NOMINAL		
DN	DOWN	NPW	NON POTABLE WATER		
DOE	DEPARTMENT OF ENERGY	NTS	NOT TO SCALE		
DS	DOWNSPOUT				
DW	DISHWASHER	O2	OXYGEN		
DWG	DRAWING	OC	ON CENTER		
DWH	DOMESTIC WATER HEATER	OD	OUTSIDE DIAMETER		
DWR	DRINKING WATER RETURN	OFD	OVERFLOW DRAIN		
DWS	DRINKING WATER SUPPLY	OR	OPERATING ROOM		
DWV	DRAIN WATER VENT	OVFL	OVERFLOW		
		PA	PASCAL		
EL	ELEVATION	PD	PRESSURE DROP OR DRAINAGE		
EMCS	ENERGY MANAGEMENT AND CENTRAL SYSTEM	PI	PLUMBING AND DRAINAGE INSTITUTE		
EPA	ENVIRONMENTAL PROTECTION AGENCY	PG	PRESSURE GAGE		
EPACT	ENERGY POLICY ACT	PP	PLUMBING PUMP		
ESC	ESCUITECHON	PPM	PARTS PER MILLION		
ESH	EMERGENCY SHOWER	PRS	PRESSURE REDUCING STATION		
ET	EXPANSION TANK	PRV	PRESSURE REDUCING VALVE		
EWC	ELECTRIC WATER COOLER	PSI	POUNDS PER SQUARE INCH		
EW	ELECTRIC WATER HEATER	PSIA	POUNDS PER SQUARE INCH ATMOSPHERE		
EWS	EXISTING WATER STATION	PSIG	POUNDS PER SQUARE INCH GAUGE		
EX	EXISTING	PTVR	PRESSURE TEMPERATURE RELIEF VALVE		
		PW	POTABLE WATER		
F	FAHRENHEIT				
FCO	FLOOR CLEANOUT	RD	ROOF DRAIN		
FD	FILTERED COLD WATER	RDL	ROOF DRAIN LEADER		
FD	FLOOR DRAIN	RL	ROOF LEADER		
DC	FIRE DEPARTMENT CONNECTION	RO	REVERSE OSMOSIS WATER		
FM	FLOW METER	RFBFP	REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER		
FOP	FUEL OIL PUMP	RWL	RAIN WATER LEADER		
FOR	FUEL OIL RETURN				
FOS	FUEL OIL SUPPLY	SAN	SANITARY SEWER		
FOV	FUEL OIL VENT	SAMCNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION		
FS	FLOOR SINK	SCFM	STANDARD CUBIC FOOT/MINUTE		
FS	FLOW SWITCH	SCW	SOFTENED COLD WATER		
FU	FIXTURE UNITS	SDMH	STORM DRAIN MANHOLE		
FUPD	FEEDWATER PUMP DISCHARGE	SP	SUMP PUMP		
FWS	FEEDWATER PUMP SUCTION	SPR	SPRINKLER LINE		
GAL	GALLON	SQFT	SQUARE FEET		
GCO	GRADE CLEANOUTS	SS	STAINLESS STEEL		
GH	HOT GLYCOL-WATER HEATING SUPPLY	ST	STORAGE TANK		
CHR	HOT GLYCOL-WATER HEATING RETURN	SW	STORM WATER		
GPD	GALLONS PER DAY				
GRD	GALLONS PER HOUR	TCV	TEMPERATURE CONTROL VALVE		
QPM	GALLONS PER MINUTE	TD	TEMPERATURE DIFFERENCE		
QPR	GAS PRESSURE REGULATOR	TRENCH	TRENCH DRAIN		
GRS	GAS REGULATOR STATION	TDH	TOTAL DYNAMIC HEAD		
GT	GREASE TRAP	TEMP	TEMPERATURE		
GTR	GAS VENT THROUGH ROOF	TWV	THERMOSTATIC MIXING VALVE		
GWH	GAS FIRED WATER HEATER	TP	TRAP PRIMER		
		TSTAT	THERMOSTAT		
H&CW	HOT AND COLD WATER	TWR	TEMPERED WATER RETURN		
HB	HOSE BIBB	TWS	TEMPERED WATER SUPPLY		
HD	HUB DRAIN	TYP	TYPICAL		
HEX	HEAT EXCHANGER	UPC	UNIFORM PLUMBING CODE		
HP	HOT WATER				
H&P	HOT WATER STORAGE TANK (DOMESTIC)				
HST	HOT WATER BOILER				
HWB	HOT WATER HEATER				
HWC	HOT WATER CIRCULATING PUMP				
HWP	HOT WATER PUMP				
HYD	HYDRANT				

— — — — —	DOMESTIC COLD WATER, COLD WATER
— — — — —	DOMESTIC HOT WATER, HOT WATER
— — — — —	DOMESTIC HOT WATER RETURN, HOT WATER RETURN
— D — D — D —	DRAIN
— SAN — SAN — SAN —	SANITARY SEWER
— SS — SS — SS —	SANITARY SEWER (OPTIONAL)
— SAN — SAN — SAN —	SANITARY SEWER, BELOW GRADE
— — — — —	SANITARY VENT
— NG — NG — NG —	NATURAL GAS

	DIRECTION OF PIPE PITCH (DOWN)
	DIRECTION OF FLOW
	ANCHOR
	REDUCER OR INCREASER
	ECCENTRIC REDUCER
	TOP CONNECTION, 45° OR 90°
	BOTTOM CONNECTION, 45° OR 90°
	SIDE CONNECTION
	CAPPED OUTLET
	RISE OR DROP IN PIPE
	UNION
	PIPE UP
	PIPE DOWN
	POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK
	LIMIT OF DEMOLITION
	INVERTED BUCKET TRAP SET INCLUDING PIPING ACCESSORIES
	FLOAT & THERMOSTATIC TRAP SET INCLUDING PIPING ACCESSORIES
	STRAINER
	THERMOMETER
	PRESSURE GAGE
	FLOW ELEMENT
	CLEAN OUT
	HOSE BIB

	GATE VALVE
	GLOBE VALVE
	GATE VALVE WITH 3/4" HOSE ADAPTER
	CHECK VALVE
	ANGLE GLOBE VALVE
	BUTTERFLY VALVE
	BALL VALVE
	MODULATING CONTROL VALVE
	TWO POSITION CONTROL VALVE
	THREE-WAY MODULATING CONTROL VALVE
	THREE-WAY TWO POSITION CONTROL VALVE
	PRESSURE REGULATING VALVE
	AUTOMATIC FLOW CONTROL VALVE
	PRESSURE RELIEF VALVE
	MANUAL AIR VENT
	TEST PLUG (PRESSURE/TEMPERATURE)
	AUTOMATIC AIR VENT
	PLUG VALVE

	DETAIL NUMBER
	DRAWING NUMBER WHERE DRAWN
	SECTION LETTER
	DRAWING NUMBER WHERE SHOWN
	BUILDING NO. WHERE EQUIPMENT IS LOCATED
	EQUIPMENT ABBREVIATION (PUMP)
	PUMP NO 3 IN BUILDING NO 26
	TYPICAL UNIT NO.

## DEDUCTIVE ALTERNATES

DEDUCT	
1	Delete one elevator (shaft to remain)
2	Delete the generator
3	Delete the glazing and HVAC components from the overhead connector
4	Delete Terrazzo tile from floors and walls of corridors & lobbies
5	Use storefront windows in lieu of curtain wall
6	Paint in lieu of tile
7	Delete the penthouse structure
8	Fixed furnishings in lieu of Herman Miller
9	Use T5 28 watt lighting in lieu of LED lighting
10	Use stucco in lieu of brick
11	Delete the entire overhead connector
REFER TO SPECIFICATIONS AND OTHER DISCIPLINES FOR ADDITIONAL INFORMATION WITH RESPECT TO DEDUCTIVE ALTERNATES.	

REFER TO SPECIFICATIONS AND OTHER DISCIPLINES FOR ADDITIONAL INFORMATION WITH RESPECT TO DEDUCTIVE ALTERNATES.

# 100% CONSTRUCTION DOCUMENTS

[illegible]




CONSULTANTS:



**ROWE PROFESSIONAL  
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Landscape Architecture • Planning

511 Broadway Street, Myrtle Beach, SC 29577      Tel: 843.444.1020  
www.rowepsic.com      Fax: 843.448.3936

	<h1>ARCHITECT/ENGINEERS:</h1> <div>  <p>1000 Abernathy Road NE, Suite 900 400 Northpark Tower Center Atlanta, Georgia 30328 Tel (404) 808-8800</p> </div> <div> <p>architects • engineers • planners</p>  <p>1101 Johnson Avenue, Suite 104 Myrtle Beach, SC 29577 (843) 712-1470</p> </div> <p>Accord Architects &amp; Engineers</p>
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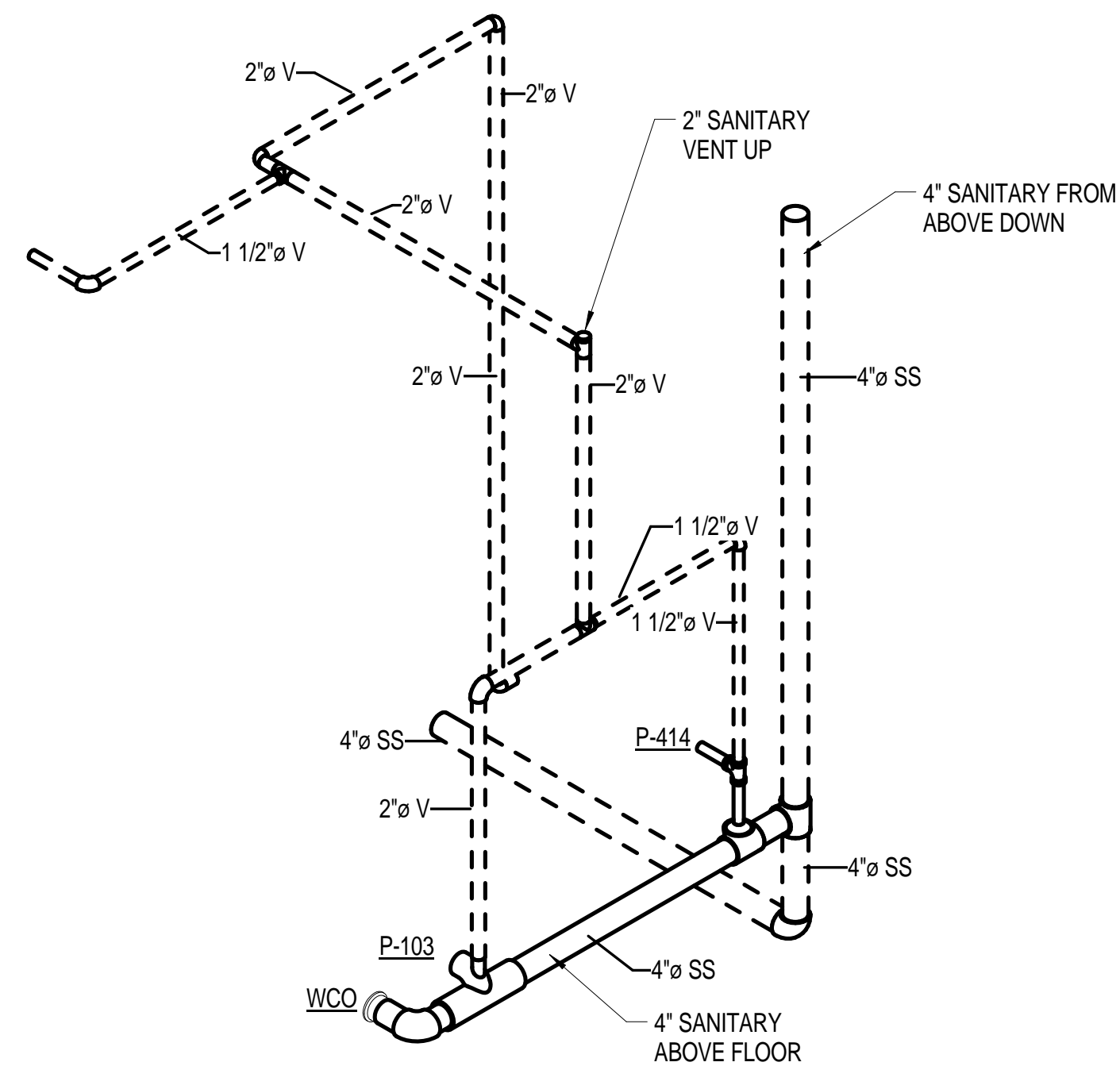
Drawing Title
<b>SYMBOLS, LEGENDS AND ABBREVIATIONS</b>
Approved: Project Director

Project Title		
CONSTRUCT CLINIC ADDITION TRACK 3 CLINIC BUILD		
Location		
WJBD VA MEDICAL CENTER COLUMBIA, SC 29209		
Date	Checked	Drawn
07/30/15	BMS	BJO

Project Number <b>544-302</b>
Building Number <b>122</b>
Drawing Number <b>PL-001</b>

Office of  
Facilities  
Management

 Department of  
Veterans Affairs



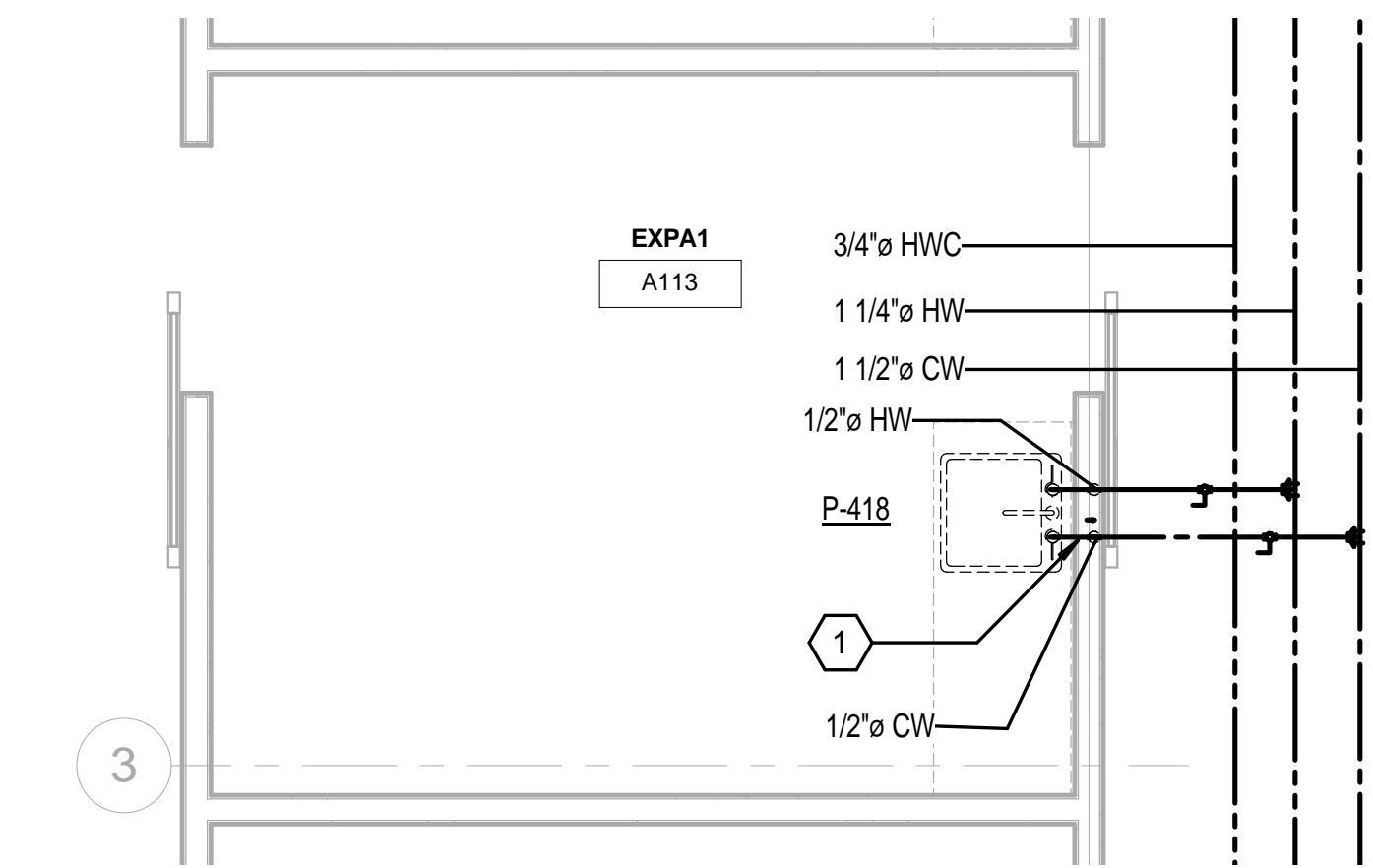


KEY NOTES

- ROUTE NEW 1/2" DOMESTIC COLD AND HOT WATER DOWN TO SINK FAUCET. PROVIDE STOPS AND SUPPLIES FOR FAUCET.
- ROUTE 1-1/2" DOMESTIC COLD WATER DOWN. ROUTE 1" DOMESTIC COLD WATER TO INLET OF WATER CLOSET ABOVE FLOOR. ROUTE 1/2" DOMESTIC COLD WATER ABOVE FLOOR TO LAVATORY FAUCET. PROVIDE STOPS AND SUPPLIES FOR FAUCET. PROVIDE WATER HAMMER ARRESTOR (WHA-"A") PER THE PLUMBING AND DRAINAGE INSTITUTE WITH ACCESS PANEL
- ROUTE 1/2" DOMESTIC HOT WATER DOWN. ROUTE 1/2" DOMESTIC HOT WATER ABOVE FLOOR TO LAVATORY FAUCET. PROVIDE STOPS AND SUPPLIES FOR FAUCET.
- ROUTE NEW 1/2" DOMESTIC COLD WATER DOWN TO DRINKING FOUNTAIN. PROVIDE INLINE FILTER WITH ACCESS PANEL FOR DRINKING FOUNTAIN.
- PROVIDE ISOLATION VALVES WITH ACCESS PANELS WHERE CEILING IS ACCESSIBLE (TYPICAL).
- ROUTE 3/4" DOMESTIC COLD WATER DOWN TO ELECTRONIC TRAP PRIMER UNIT (TP-1). ROUTE 1/2" DOMESTIC COLD WATER DOWN BELOW SLAB TO EACH FLOOR DRAIN TRAP PRIMER CONNECTION.
- ROUTE 3/4" DOMESTIC COLD WATER DOWN TO HOSE BIBB.
- ROUTE 3/4" DOMESTIC COLD WATER DOWN TO NON-FREEZE WALL HYDRANT. WALL HYDRANT TO BE MOUNTED 18" ABOVE GRADE.
- ROUTE 1-1/2" DOMESTIC COLD WATER DOWN TO MECHANICAL EQUIPMENT MAKE-UP WATER. PROVIDE BACKFLOW PREVENTER.
- ROUTE 1-1/2" DOMESTIC COLD WATER DOWN. ROUTE 3/4" DOMESTIC COLD WATER UP. ROUTE 1" DOMESTIC COLD WATER TO INLET OF WATER CLOSET ABOVE FLOOR. ROUTE 1/2" DOMESTIC COLD WATER ABOVE FLOOR TO LAVATORY FAUCET. PROVIDE STOPS AND SUPPLIES FOR FAUCET. PROVIDE WATER HAMMER ARRESTOR (WHA-"A") PER THE PLUMBING AND DRAINAGE INSTITUTE WITH ACCESS PANEL

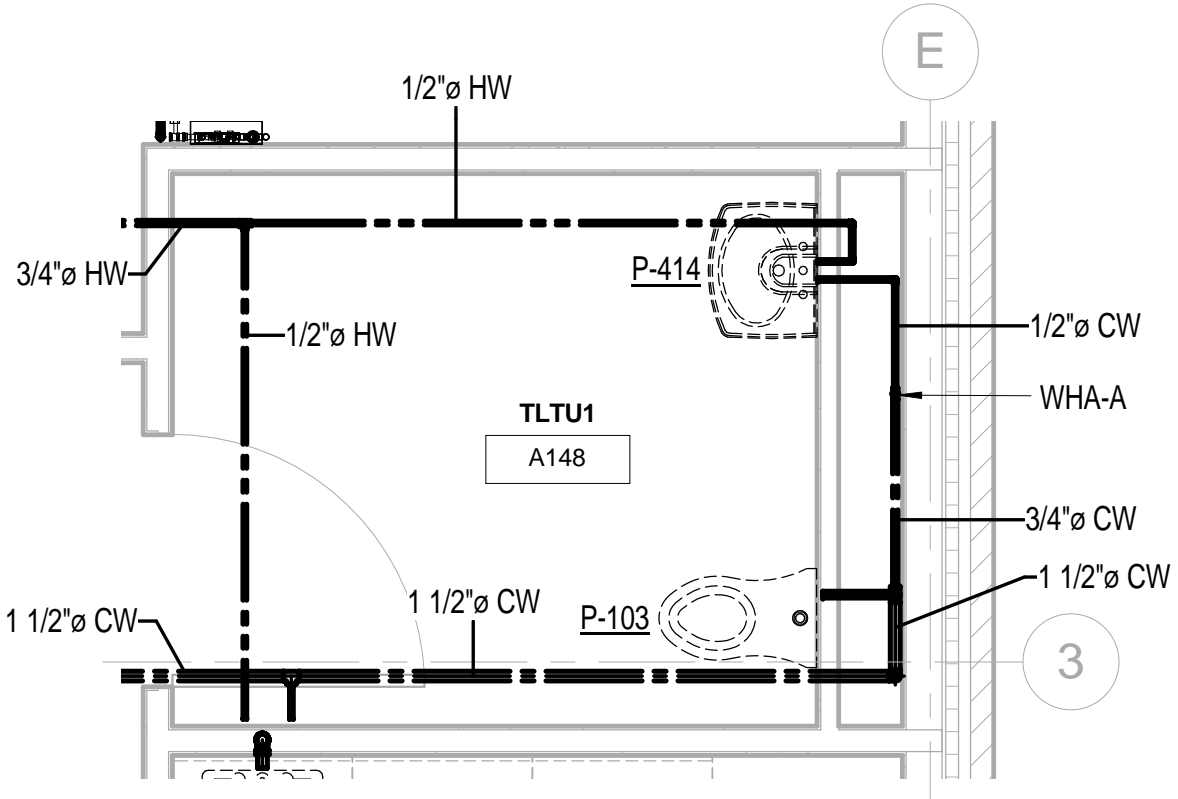
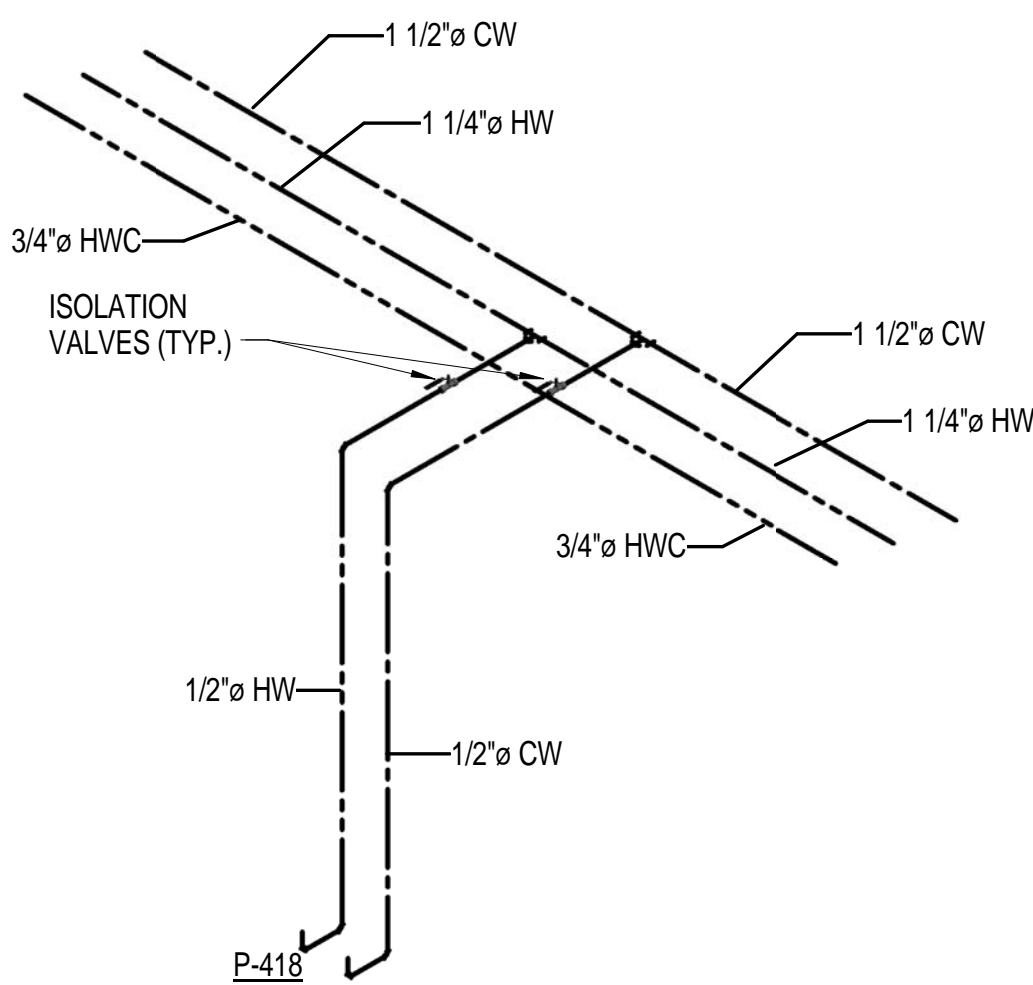
GENERAL NOTES

- PROVIDE ALL NECESSARY PIPE, FITTINGS AND TRANSITIONS TO CONNECT TO EQUIPMENT AND FIXTURES.
- VERIFY ALL SIZES WITH MANUFACTURER'S INSTALLATION LITERATURE.
- REFER TO PLUMBING SCHEDULE FOR EQUIPMENT IDENTIFICATION.
- CORE DRILL SLAB AND WALL AS NECESSARY. COORDINATE WITH STRUCTURAL ENGINEERS. PROVIDE SLEEVES AT ALL PENETRATIONS; FIRESTOP AT FIRE PARTITIONS.
- PROVIDE BALANCING VALVES FOR SERVICE LINES AT ALL EQUIPMENT.
- PROVIDE CLEARANCES FOR ALL MAINTENANCE, INSPECTION AND OR REMOVAL.
- PROVIDE INDIRECT WASTE DRAIN AIR GAPS AS DESIGNATED PER EQUIPMENT DRAINAGE REQUIREMENTS. MINIMUM AIR GAPS SHALL BE 2 PIPE DIAMETERS.
- PROVIDE ACCESS PANELS AT ALL CONCEALED AREAS. PROVIDE PIPING ENCLOSURES AT ALL FINISHED AREAS.
- ALL PIPING SHALL BE CONCEALED; LOCATE ABOVE CEILING OR IN WALL CAVITY BUILD OUT.
- OFFSET OF PIPING INSTALLATIONS MAY BE REQUIRED, BUT NOT SHOWN IN ALL OCCURRENCES.
- DO NOT EXCEED MINIMUM DISTANCE REQUIREMENTS FOR ELBOW AND TRANSITIONS LOCATIONS FROM EQUIPMENT.
- PROVIDE ESCUTCHEON PLATES ON PIPE PENETRATIONS AT ALL FINISHED AREAS.
- DRAWINGS ARE SCHEMATIC IN NATURE.



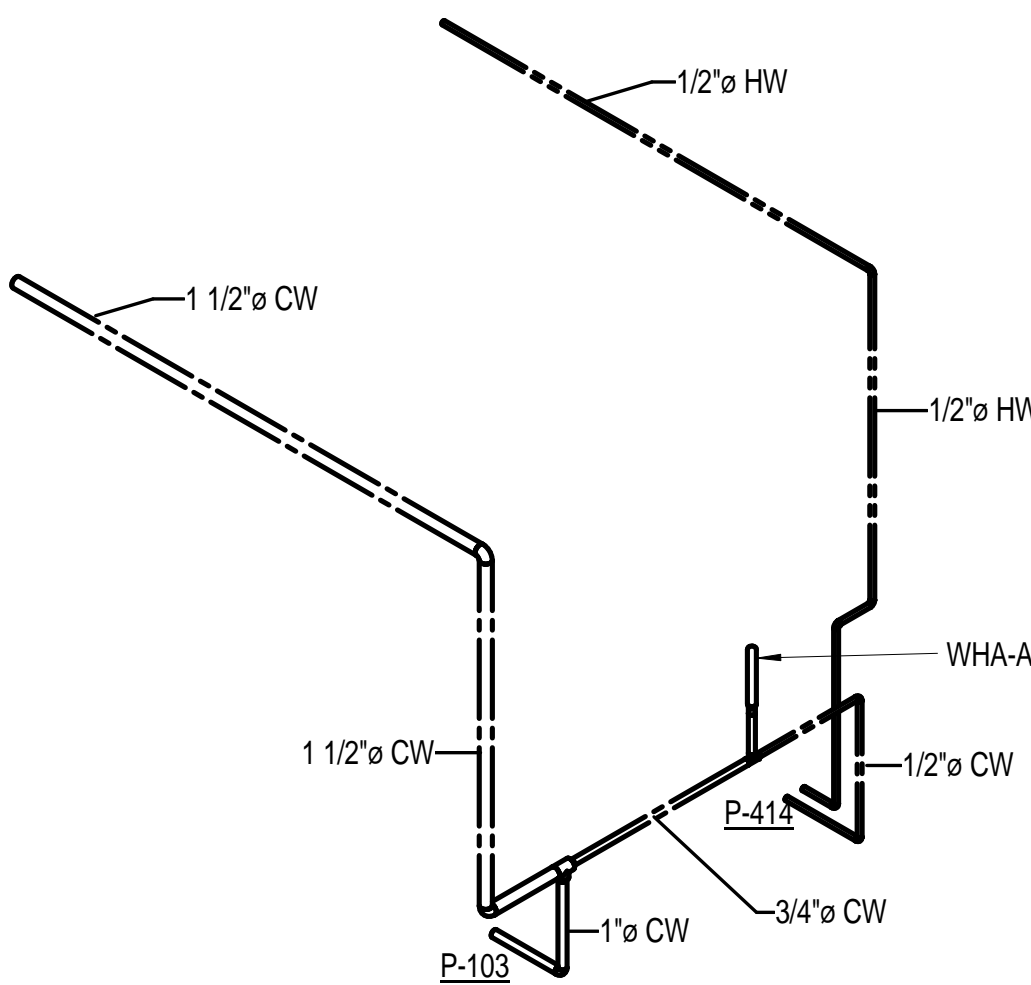
2 ENLARGED SCALE - TYPICAL EXAM ROOM

3/8" = 1'-0"



3 TYPICAL DOMESTIC WATER RISER AT CHASE

3/8" = 1'-0"



1 FIRST FLOOR PLAN - DOMESTIC WATER AND GAS

1/8" = 1'-0"

ARCHITECT/ENGINEERS:

**URS**  
architects engineers planners  
**aa+e**  
Accord Architects & Engineers

Drawing Title  
**FIRST FLOOR PLAN - PLUMBING - DOMESTIC WATER AND GAS**

Approved: Project Director

Project Title  
**CONSTRUCT CLINIC ADDITION TRACK 3 CLINIC BUILD**

Location  
WJBD VA MEDICAL CENTER  
COLUMBIA, SC 29209

Date  
07/30/15

Project Number  
**544-302**

Building Number  
**122**

Drawing Number  
**PL-102**

Office of  
Facilities  
Management

Department of  
Veterans Affairs

GENERAL NOTES

- 1. PROVIDE ALL NECESSARY PIPE, FITTINGS AND TRANSITIONS TO CONNECT TO EQUIPMENT AND FIXTURES.
- 2. VERIFY ALL SIZES WITH MANUFACTURER'S INSTALLATION LITERATURE.
- 3. REFER TO PLUMBING SCHEDULE FOR EQUIPMENT IDENTIFICATION.
- 4. CORE DRILL SLAB AND WALL AS NECESSARY. COORDINATE WITH STRUCTURAL ENGINEERS. PROVIDE SLEEVES AT ALL PENETRATIONS; FIRESTOP AT FIRE PARTITIONS.
- 5. PROVIDE BALANCING VALVES FOR SERVICE LINES AT ALL EQUIPMENT.
- 6. PROVIDE CLEARANCES FOR ALL MAINTENANCE, INSPECTION AND OR REMOVAL.
- 7. PROVIDE INDIRECT WASTE DRAIN AIR GAPS AS DESIGNATED PER EQUIPMENT DRAINAGE REQUIREMENTS. MINIMUM AIR GAPS SHALL BE 2 PIPE DIAMETERS.
- 8. PROVIDE ACCESS PANELS AT ALL CONCEALED AREAS. PROVIDE PIPING ENCLOSURES AT ALL FINISHED AREAS.
- 9. ALL PIPING SHALL BE CONCEALED; LOCATE ABOVE CEILING OR IN WALL CAVITY BUILD OUT.
- 10. OFFSET OF PIPING INSTALLATIONS MAY BE REQUIRED, BUT NOT SHOWN IN ALL OCCURRENCES.
- 11. DO NOT EXCEED MINIMUM DISTANCE REQUIREMENTS FOR ELBOW AND TRANSITIONS LOCATIONS FROM EQUIPMENT.
- 12. PROVIDE ESCUTCHEON PLATES ON PIPE PENETRATIONS AT ALL FINISHED AREAS.
- 13. DRAWINGS ARE SCHEMATIC IN NATURE.

KEY NOTES

- 1. ROUTE NEW 1-1/2" WASTE FROM SINK P-TRAP DOWN BELOW FLOOR. ROUTE 1-1/2" VENT UP.
- 2. ROUTE NEW 1-1/2" WASTE FROM LAVATORY P-TRAP DOWN BELOW FLOOR. ROUTE 1-1/2" VENT UP.
- 3. ROUTE 1-1/2" WASTE FROM P-TRAP OF LAVATORY ABOVE FLOOR AND DOWN. ROUTE 1-1/2" VENT UP.
- 4. ROUTE 4" WASTE DOWN BELOW FLOOR. ROUTE 2" VENT UP TO 3" VENT THRU ROOF.
- 5. PROVIDE WALL CLEANOUT WITH ACCESS PANEL.
- 6. ROUTE 1-1/2" WASTE FROM P-TRAP OF DRINKING FOUNTAIN DOWN BELOW FLOOR. ROUTE 1-1/2" VENT UP.
- 7. ROUTE 4" WASTE FROM WATER CLOSET ABOVE FLOOR. ROUTE 2" VENT UP.
- 8. ROUTE 3" WASTE FROM ABOVE DOWN. ROUTE 4" WASTE DOWN BELOW FLOOR.
- 9. ROUTE 3" STORM DOWN CLOSE TO BUILDING.

DEDUCT #7

DEDUCT #11

DEDUCT #7

1 SECOND FLOOR PLAN - PLUMBING - SANITARY WASTE AND VENT  
1/8" = 1'-0"

100% CONSTRUCTION DOCUMENTS

Revisions:

Dates

CONSULTANTS:



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843.712.1470

Drawing Title

SECOND FLOOR PLAN - PLUMBING -  
SANITARY WASTE AND VENT

Approved: Project Director

Project Title

CONSTRUCT CLINIC  
ADDITION TRACK 3 CLINIC  
BUILD

Location

WJBD VA MEDICAL CENTER  
COLUMBIA, SC 29209

Date

07/30/15

Checked

BMS

Drawn

BJO

Project Number

544-302

Building Number

122

Drawing Number

PL-103

Office of  
Facilities  
Management



7/29/2015 2:36:04 PM  
Plot Date

VA FORM 08-6231, OCT 1978



7/29/2015 2:36:06 PM


Plot Date

1


SECOND FLOOR PLAN - DOMESTIC WATER

1/8" = 1'-0"

CONSULTANTS:




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Drawing Title

SECOND FLOOR PLAN - PLUMBING - DOMESTIC WATER

Approved: Project Director

Project Title

CONSTRUCT CLINIC ADDITION TRACK 3 CLINIC BUILD

Location

WJBD VA MEDICAL CENTER COLUMBIA, SC 29209

Date

07/30/15

Checked

BMS

Drawn

BJO

Project Number

544-302

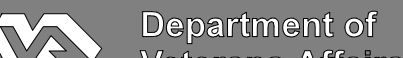
Building Number

122

Drawing Number

PL-104

Office of Facilities Management



Department of Veterans Affairs

VA FORM 08-6231, OCT. 1978

one thirty second inch = one foot

one sixteenth inch = one foot

one inch = one foot

three quarters inch = one foot

one half inch = one foot

one eighth inch = one foot

one quarter inch = one foot

one eighth inch = one foot

KEY NOTES

- ROUTE NEW 1/2" DOMESTIC COLD AND HOT WATER DOWN TO SINK FAUCET. PROVIDE STOPS AND SUPPLIES FOR FAUCET.
- ROUTE 1-1/2" DOMESTIC COLD WATER DOWN. ROUTE 1" DOMESTIC COLD WATER TO INLET OF WATER CLOSET ABOVE FLOOR. ROUTE 1/2" DOMESTIC COLD WATER ABOVE FLOOR TO LAVATORY FAUCET. PROVIDE STOPS AND SUPPLIES FOR FAUCET. PROVIDE WATER HAMMER ARRESTOR (WHA-"A") PER THE PLUMBING AND DRAINAGE INSTITUTE WITH ACCESS PANEL
- ROUTE 1/2" DOMESTIC HOT WATER DOWN. ROUTE 1/2" DOMESTIC HOT WATER ABOVE FLOOR TO LAVATORY FAUCET. PROVIDE STOPS AND SUPPLIES FOR FAUCET.
- ROUTE NEW 1/2" DOMESTIC COLD WATER DOWN TO DRINKING FOUNTAIN. PROVIDE INLINE FILTER WITH ACCESS PANEL FOR DRINKING FOUNTAIN.
- PROVIDE ISOLATION VALVES WITH ACCESS PANELS (TYPICAL).
- ROUTE 1-1/2" DOMESTIC COLD WATER DOWN. ROUTE 3/4" DOMESTIC COLD WATER UP TO HOSE BIBB ON PENTHOUSE. ROUTE 1" DOMESTIC COLD WATER TO INLET OF WATER CLOSET ABOVE FLOOR. ROUTE 1/2" DOMESTIC COLD WATER ABOVE FLOOR TO LAVATORY FAUCET. PROVIDE STOPS AND SUPPLIES FOR FAUCET. PROVIDE WATER HAMMER ARRESTOR (WHA-"A") PER THE PLUMBING AND DRAINAGE INSTITUTE WITH ACCESS PANEL

GENERAL NOTES

- PROVIDE ALL NECESSARY PIPE, FITTINGS AND TRANSITIONS TO CONNECT TO EQUIPMENT AND FIXTURES.
- VERIFY ALL SIZES WITH MANUFACTURER'S INSTALLATION LITERATURE.
- REFER TO PLUMBING SCHEDULE FOR EQUIPMENT IDENTIFICATION.
- CORE DRILL SLAB AND WALL AS NECESSARY. COORDINATE WITH STRUCTURAL ENGINEERS. PROVIDE SLEEVES AT ALL PENETRATIONS; FIRESTOP AT FIRE PARTITIONS.
- PROVIDE BALANCING VALVES FOR SERVICE LINES AT ALL EQUIPMENT.
- PROVIDE CLEARANCES FOR ALL MAINTENANCE, INSPECTION AND OR REMOVAL.
- PROVIDE INDIRECT WASTE DRAIN AIR GAPS AS DESIGNATED PER EQUIPMENT DRAINAGE REQUIREMENTS. MINIMUM AIR GAPS SHALL BE 2 PIPE DIAMETERS.
- PROVIDE ACCESS PANELS AT ALL CONCEALED AREAS. PROVIDE PIPING ENCLOSURES AT ALL FINISHED AREAS.
- ALL PIPING SHALL BE CONCEALED; LOCATE ABOVE CEILING OR IN WALL CAVITY BUILD OUT.
- OFFSET OF PIPING INSTALLATIONS MAY BE REQUIRED, BUT NOT SHOWN IN ALL OCCURRENCES.
- DO NOT EXCEED MINIMUM DISTANCE REQUIREMENTS FOR ELBOW AND TRANSITIONS LOCATIONS FROM EQUIPMENT.
- PROVIDE ESCUTCHEON PLATES ON PIPE PENETRATIONS AT ALL FINISHED AREAS.
- DRAWINGS ARE SCHEMATIC IN NATURE.

DEDUCT #7




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Plot Date

one eighth inch = one foot  
one quarter inch = one foot  
three eighths inch = one foot  
one half inch = one foot  
three quarters inch = one foot  
one inch = one foot  
one sixteenth inch = one foot  
one thirty second inch = one foot

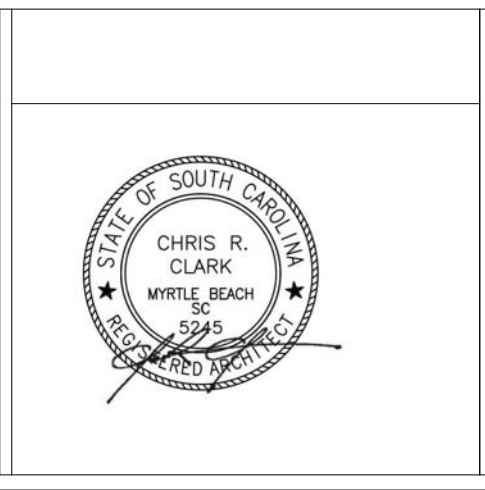
1 ROOF PLAN  
1/8" = 1'-0"

Revisions:	Dates


CONSULTANTS:




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Atlanta, Georgia 30328  
Tel: (404) 880-1800



**aa+e**  
Accord Architects & Engineers  
1101 Johnson Avenue,  
Suite 104  
Myrtle Beach, SC 29577  
843.712.1470

Drawing Title
ROOF PLAN - PLUMBING
Approved: Project Director

Project Title
CONSTRUCT CLINIC ADDITION TRACK 3 CLINIC BUILD
Location
WJBD VA MEDICAL CENTER COLUMBIA, SC 29209
Date
07/30/15
Checked
BMS
Drawn
BJO

Project Number
544-302
Building Number
122
Drawing Number
PL-105

**Office of  
Facilities  
Management**



Department of  
Veterans Affairs

GENERAL NOTES

1. PROVIDE ALL NECESSARY PIPE, FITTINGS AND TRANSITIONS TO CONNECT TO EQUIPMENT AND FIXTURES.
2. VERIFY ALL SIZES WITH MANUFACTURER'S INSTALLATION LITERATURE.
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4. CORE DRILL SLAB AND WALL AS NECESSARY. COORDINATE WITH STRUCTURAL ENGINEERS. PROVIDE SLEEVES AT ALL PENETRATIONS; FIRESTOP AT FIRE PARTITIONS.
5. PROVIDE BALANCING VALVES FOR SERVICE LINES AT ALL EQUIPMENT.
6. PROVIDE CLEARANCES FOR ALL MAINTENANCE, INSPECTION AND OR REMOVAL.
7. PROVIDE INDIRECT WASTE DRAIN AIR GAPS AS DESIGNATED PER EQUIPMENT DRAINAGE REQUIREMENTS. MINIMUM AIR GAPS SHALL BE 2 PIPE DIAMETERS.
8. PROVIDE ACCESS PANELS AT ALL CONCEALED AREAS. PROVIDE PIPING ENCLOSURES AT ALL FINISHED AREAS.
9. ALL PIPING SHALL BE CONCEALED; LOCATE ABOVE CEILING OR IN WALL CAVITY BUILD OUT.
10. OFFSET OF PIPING INSTALLATIONS MAY BE REQUIRED, BUT NOT SHOWN IN ALL OCCURRENCES.
11. DO NOT EXCEED MINIMUM DISTANCE REQUIREMENTS FOR ELBOW AND TRANSITIONS LOCATIONS FROM EQUIPMENT.
12. PROVIDE ESCUTCHEON PLATES ON PIPE PENETRATIONS AT ALL FINISHED AREAS.
13. DRAWINGS ARE SCHEMATIC IN NATURE.

KEY NOTES

- 1 4" VENT THRU ROOF.
- 2 3" VENT THRU ROOF.
- 3 3" VENT THRU ROOF, OFFSET PIPING AS SHOWN.
- 4 ROOF SCUPPER (TYP.), SEE ARCHITECTURAL FOR EXACT LOCATION.
- 5 PROVIDE FLOOR DRAIN, ROUTE WASTE FROM FLOOR DRAIN P-TRAP BELOW FLOOR. PROVIDE MECHANICAL TRAP GUARD. SEE DETAIL 12/PL-501.
- 6 ROUTE 3/4" DOMESTIC COLD WATER UP TO HOSE BIBB. (ISOLATION VALVE IN VERTICAL RISER)
- 7 ROUTE 3" SANITARY DOWN.
- 8 ROUTE 2" VENT BELOW FLOOR.
- 9 ROOF DRAIN (TYP. OF 3), SEE ARCHITECTURAL FOR EXACT LOCATION.

100% CONSTRUCTION DOCUMENTS

Plot Date 7/29/2015 2:36:10 PM

one thirty second inch = one foot  
one sixteenth inch = one foot  
one inch = one foot  
one eighth inch = one foot  
one quarter inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one eighth inch = one foot  
one quarter inch = one foot

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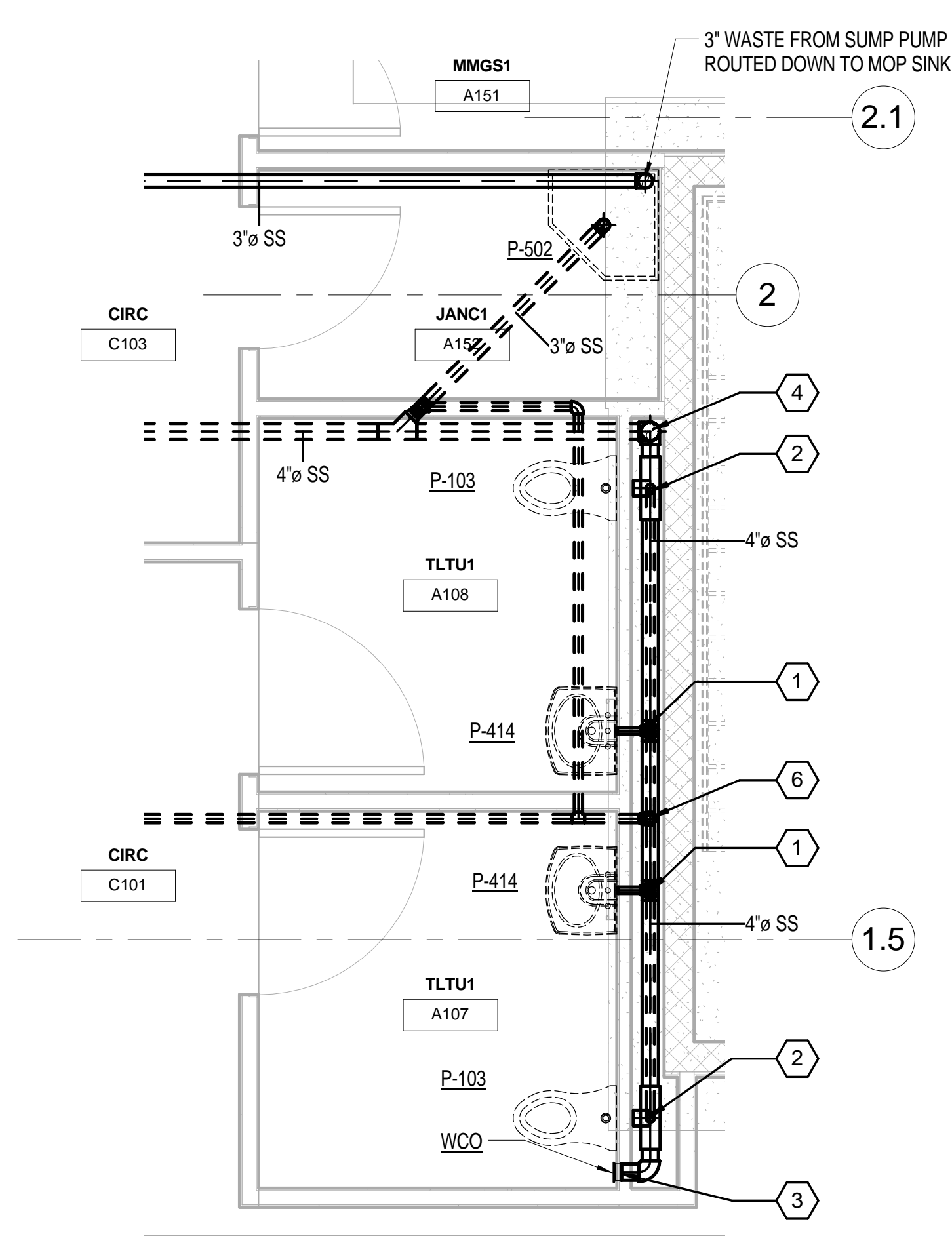
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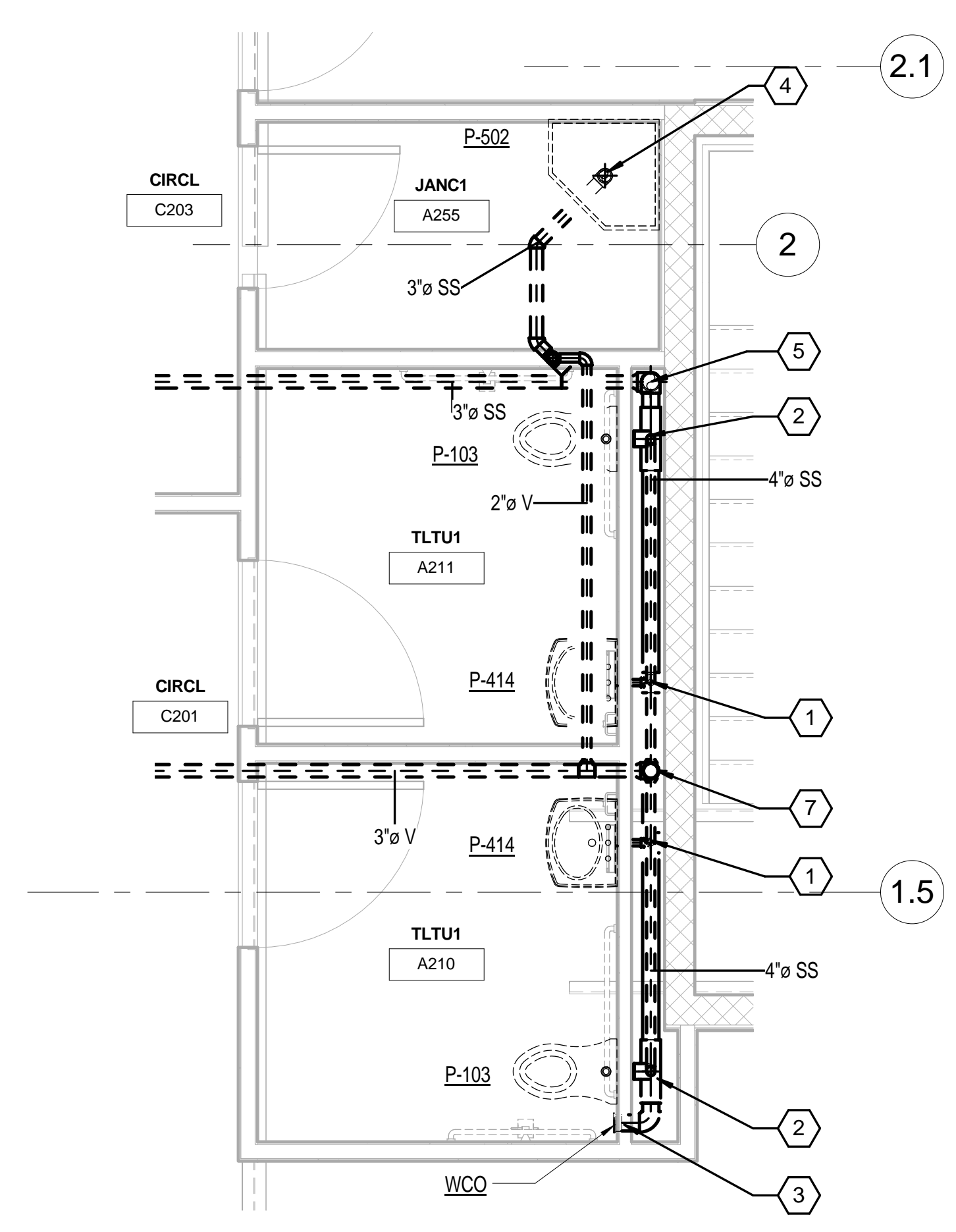
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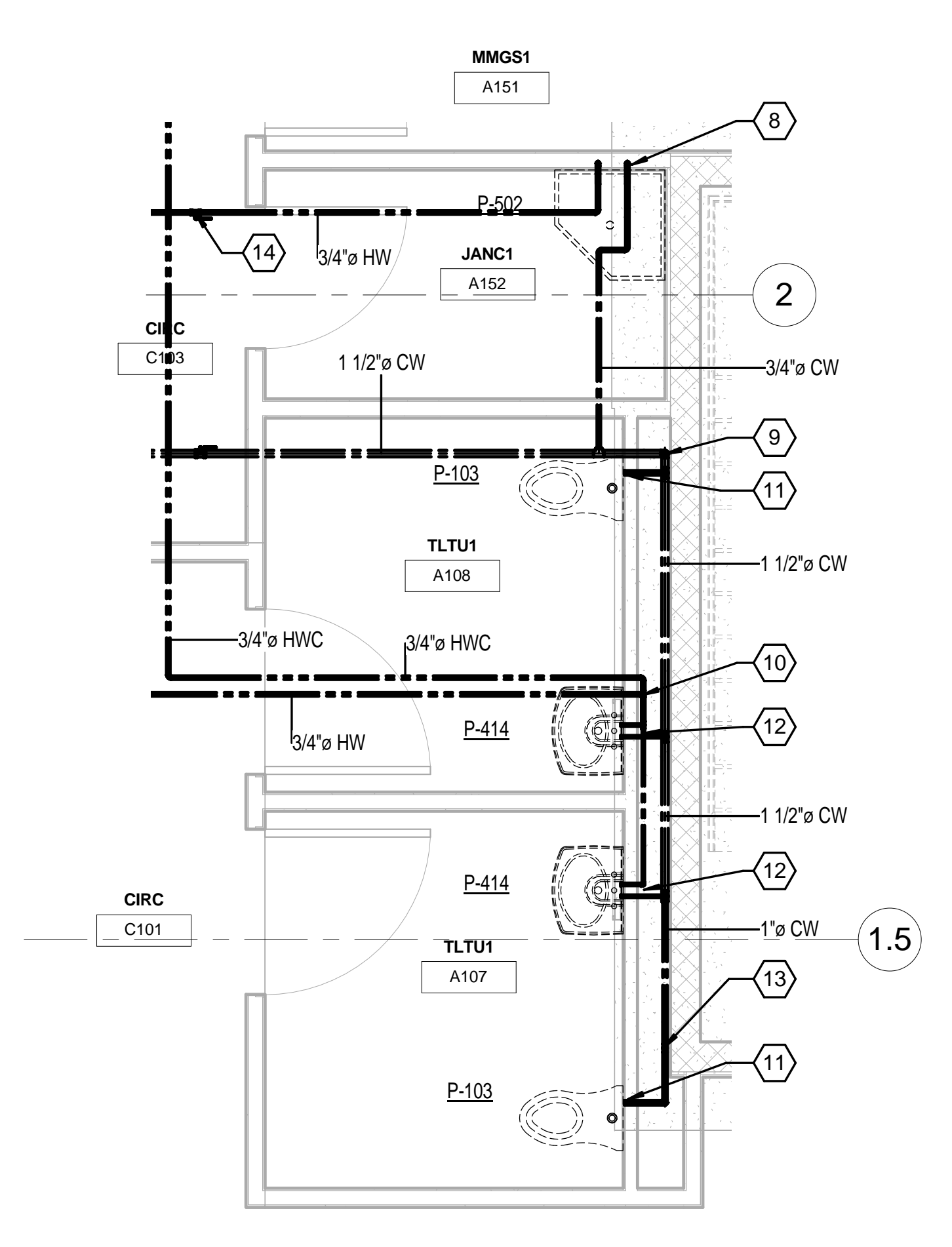
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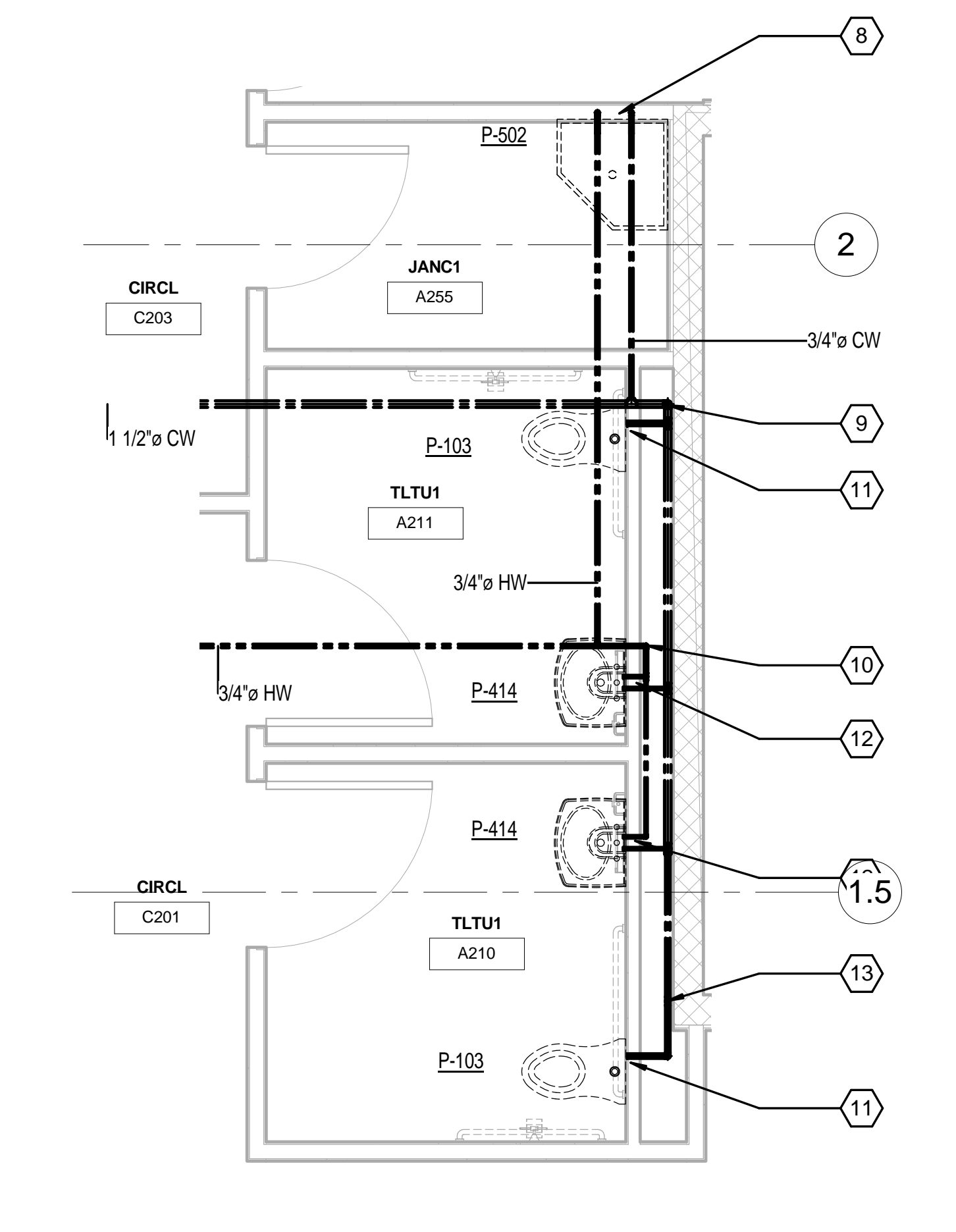
1 FIRST FLOOR RESTROOM - SANITARY WASTE AND VENT  
3/8" = 1'-0"



3 SECOND FLOOR PLAN - SANITARY WASTE AND VENT  
3/8" = 1'-0"



2 FIRST FLOOR PLAN RESTROOM - DOMESTIC WATER  
3/8" = 1'-0"



4 SECOND FLOOR PLAN - PLUMBING - DOMESTIC WATER  
3/8" = 1'-0"

### GENERAL NOTES

1. PROVIDE ALL NECESSARY PIPE, FITTINGS AND TRANSITIONS TO CONNECT TO EQUIPMENT AND FIXTURES.
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12. PROVIDE ESCUTCHEON PLATES ON PIPE PENETRATIONS AT ALL FINISHED AREAS.
13. DRAWINGS ARE SCHEMATIC IN NATURE.

### KEY NOTES

1. ROUTE NEW 1-1/2" WASTE FROM LAVATORY P-TRAP DOWN ABOVE FLOOR. ROUTE 1-1/2" VENT UP.
2. ROUTE 4" WASTE FROM WATER CLOSET ABOVE FLOOR. ROUTE 2" VENT UP.
3. PROVIDE WALL CLEANOUT.
4. ROUTE 3" SANITARY WASTE DOWN. ROUTE 2" WASTE UP.
5. ROUTE 4" WASTE DOWN BELOW FLOOR.
6. ROUTE 2" VENT UP.
7. ROUTE 3" VENT UP TO 4" VENT THRU ROOF.
8. ROUTE 3/4" DOMESTIC COLD AND HOT WATER DOWN TO MOP SINK FAUCET.
9. ROUTE 1-1/2" DOMESTIC COLD WATER DOWN.
10. ROUTE 1/2" DOMESTIC HOT WATER DOWN.
11. ROUTE 1" DOMESTIC COLD WATER ABOVE FLOOR TO INLET OF WATER CLOSET.
12. ROUTE 1/2" DOMESTIC COLD AND HOT WATER ABOVE FLOOR TO LAVATORY FAUCET. PROVIDE STOPS AND SUPPLIES FOR FAUCET.
13. PROVIDE WATER HAMMER ARRESTOR (WHA-"B") PER THE PLUMBING AND DRAINAGE INSTITUTE WITH ACCESS PANEL.
14. PROVIDE ISOLATION VALVES WITH ACCESS PANELS WHERE CEILING IS ACCESSIBLE (TYPICAL).

## 100% CONSTRUCTION DOCUMENTS

<div>CONSULTANTS:  Engineering • Surveying • Aerial Photography / Mapping 511 Broadway Street, Myrtle Beach, SC 29577 www.rowepsc.com</div>		<div> CHRIS R. CLARK REGISTERED PROFESSIONAL ENGINEER No. 3565 EXPIRATION DATE 12/31/2018</div>	<div>ARCHITECT/ENGINEERS:  1000 Abernathy Road NE, Suite 900 400 Northpark Tower Center Atlanta, Georgia 30328 Tel: 678.338.8800</div> <div> 1101 Johnson Avenue, Suite 104 Myrtle Beach, SC 29577 843.712.1470 Accord Architects &amp; Engineers</div>	<div>Drawing Title <b>ENLARGED SCALE PLANS</b></div> <div>Approved: Project Director</div>	<div>Project Title <b>CONSTRUCT CLINIC ADDITION TRACK 3 CLINIC BUILD</b></div> <div>Location WJBD VA MEDICAL CENTER COLUMBIA, SC 29209</div> <div>Date 07/30/15</div> <div>Checked BMS</div> <div>Drawn BJO</div>	<div>Project Number <b>544-302</b></div> <div>Building Number <b>122</b></div> <div>Drawing Number <b>PL-401</b></div>	<div>Office of Facilities Management</div> <div></div>
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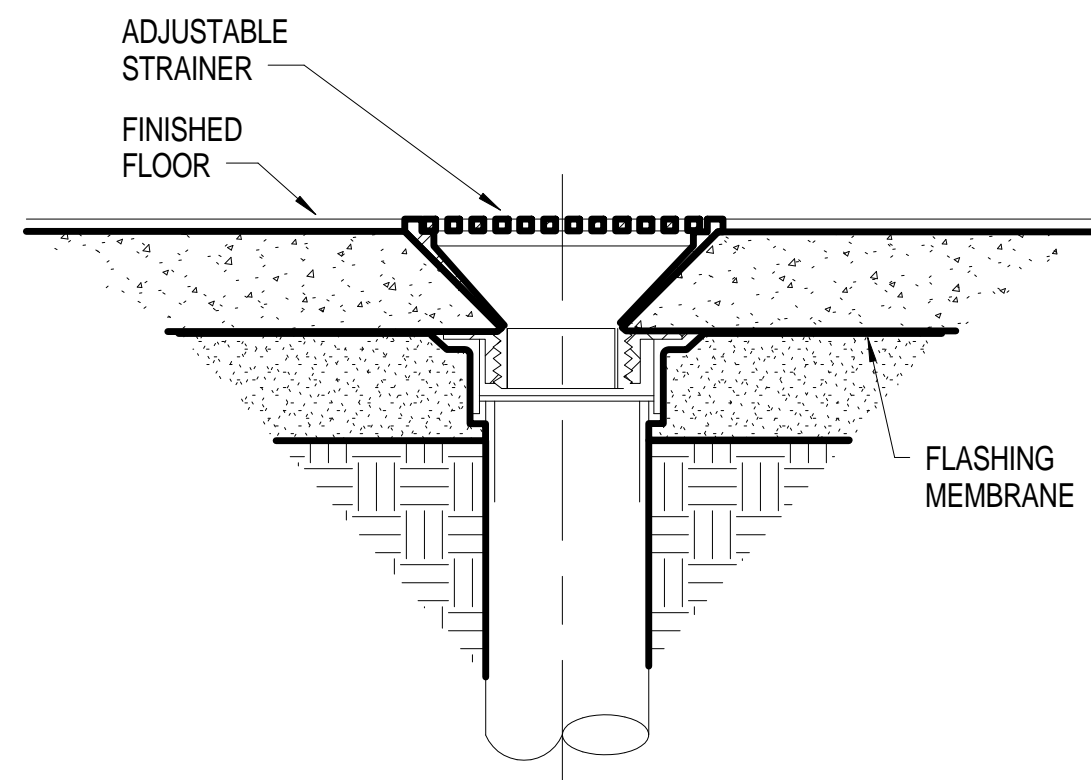
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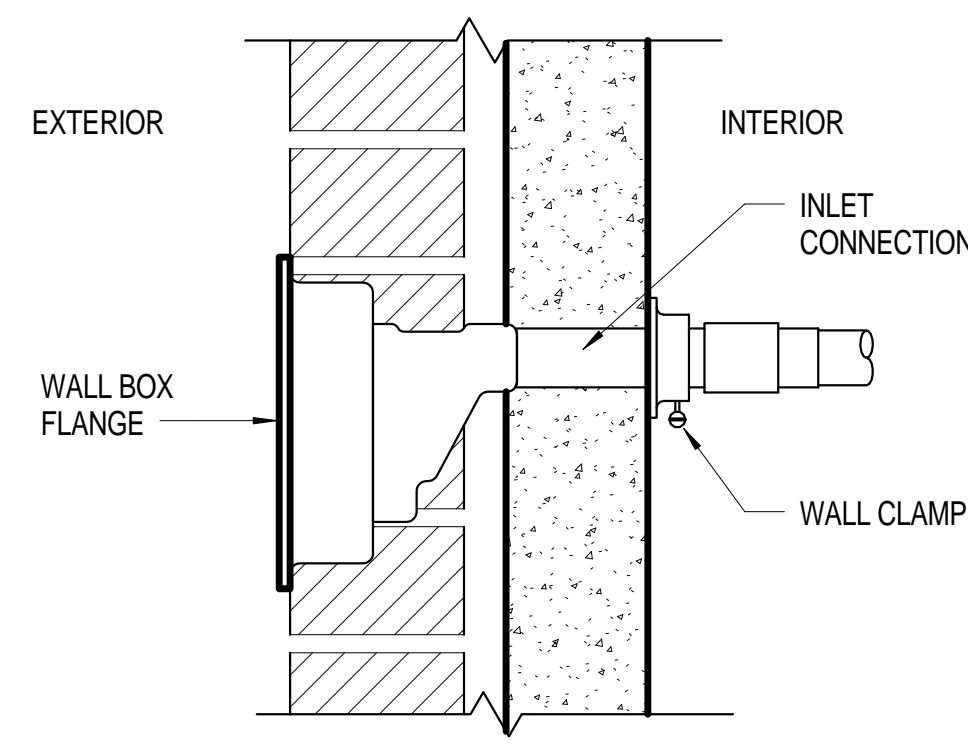
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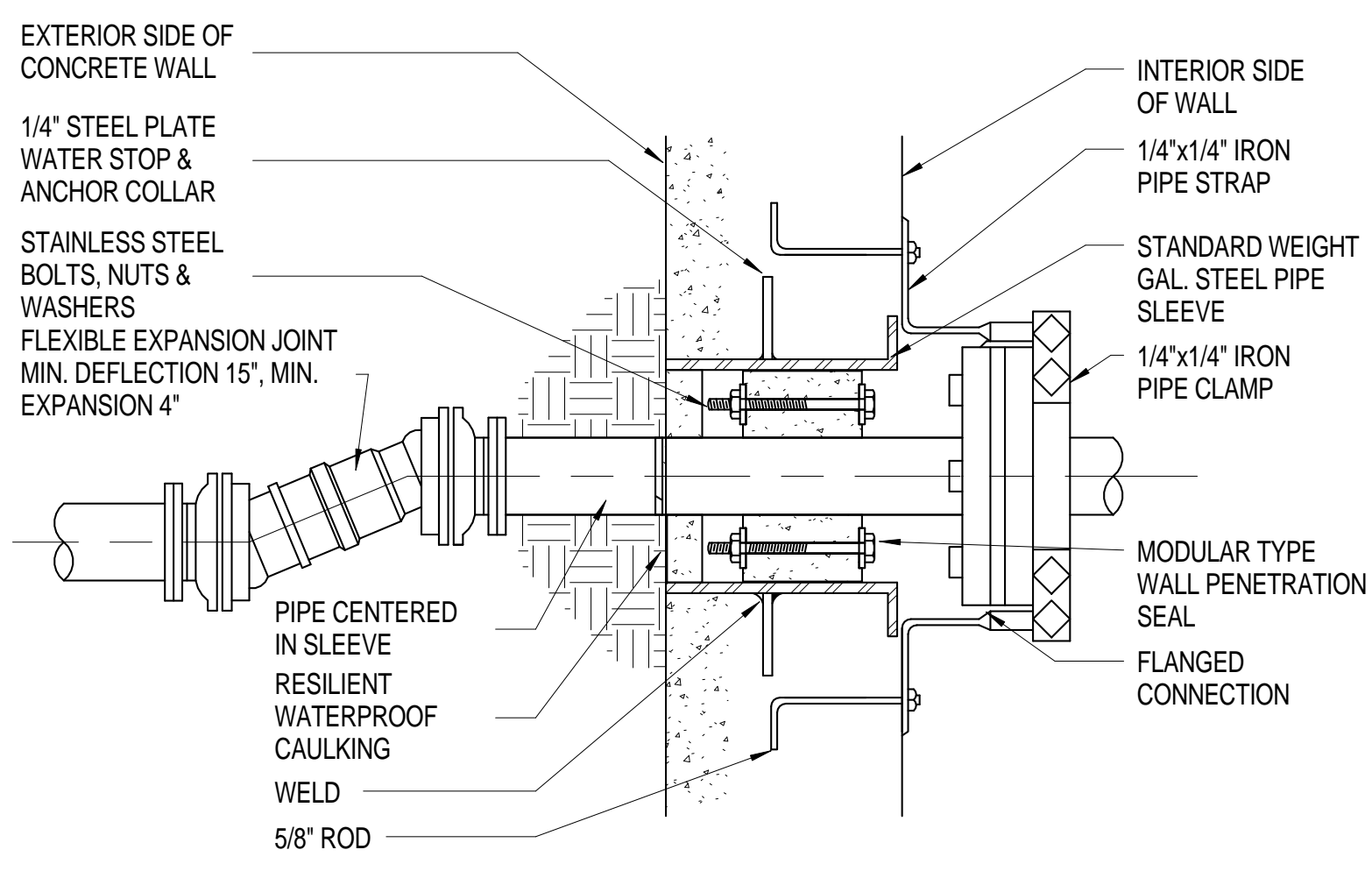




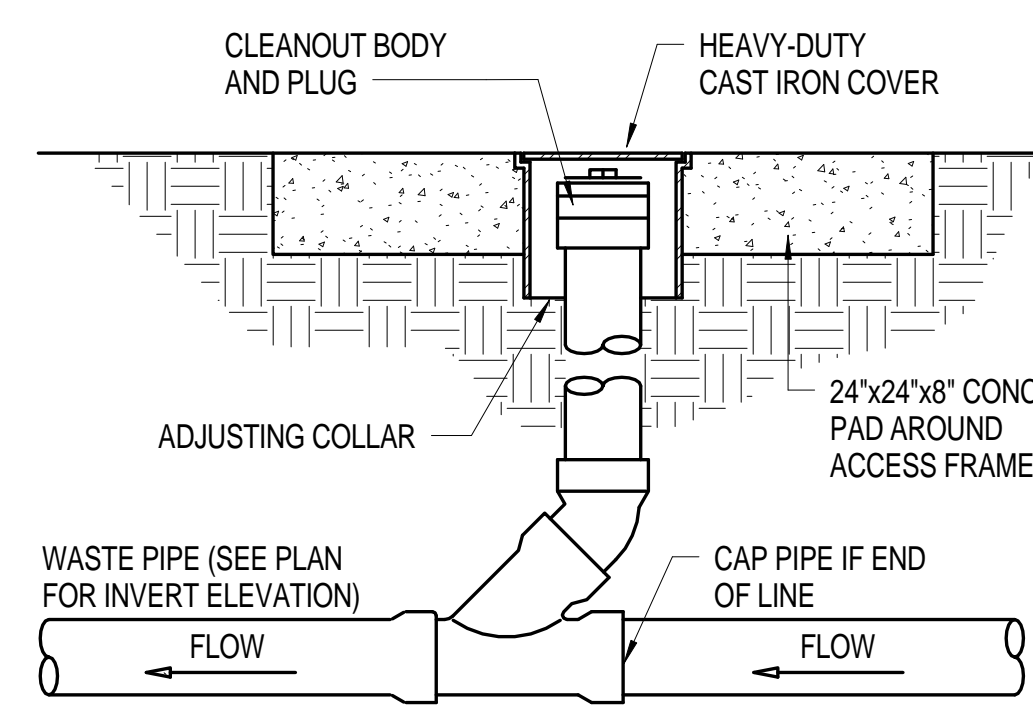
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1/8" = 1'-0"



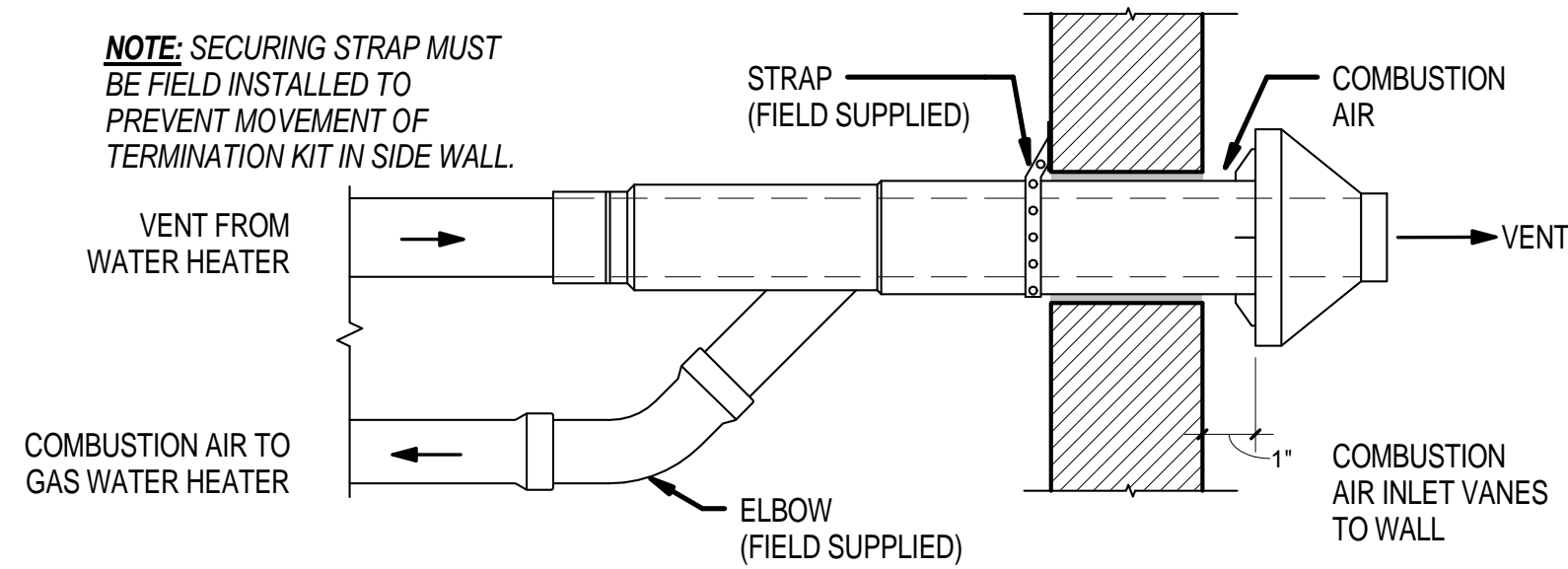
2 WALL HYDRANT  
3" = 1'-0"



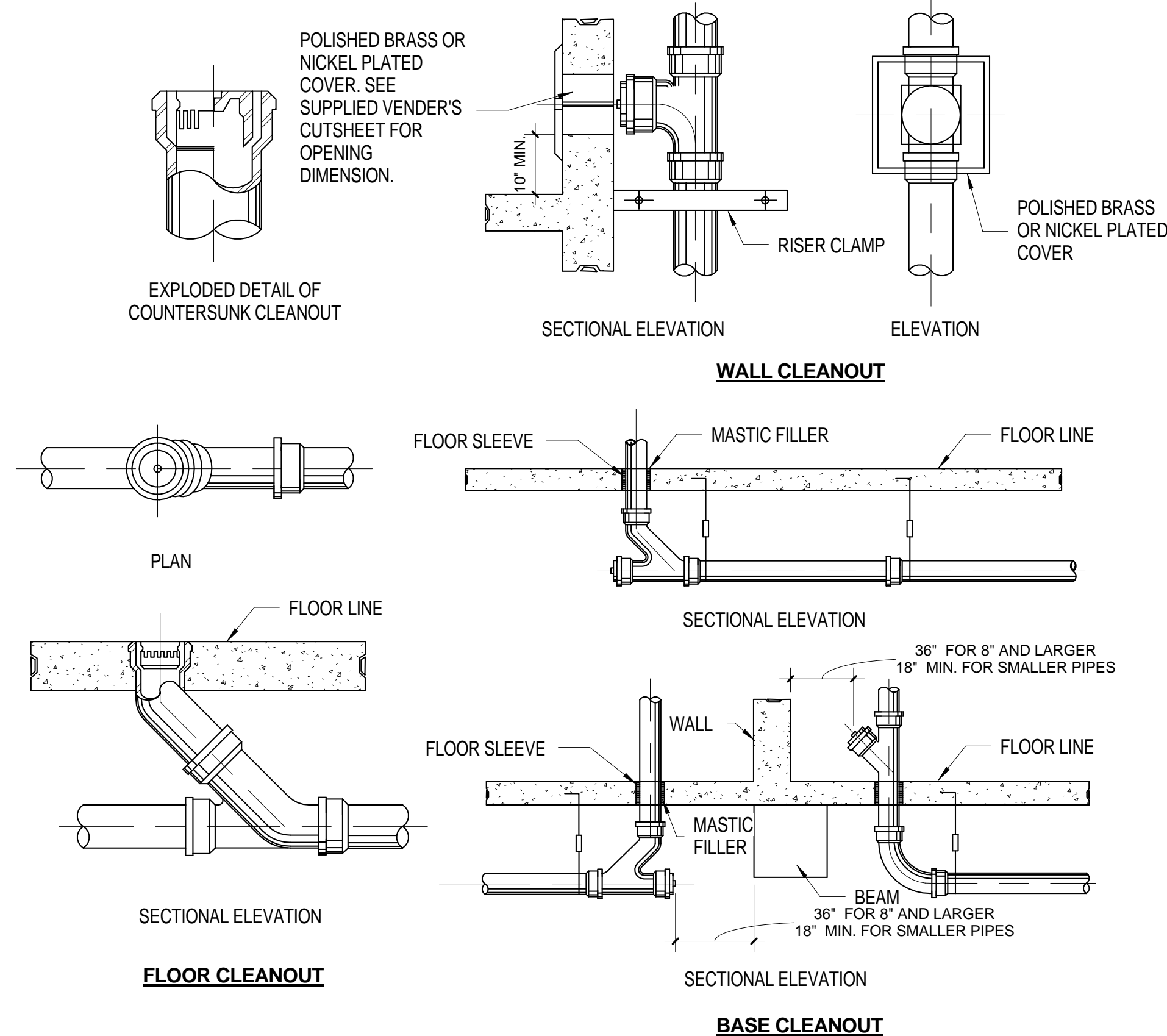
3 PIPE PENETRATION THROUGH WALLS BELOW GRADE  
1/2" = 1'-0"



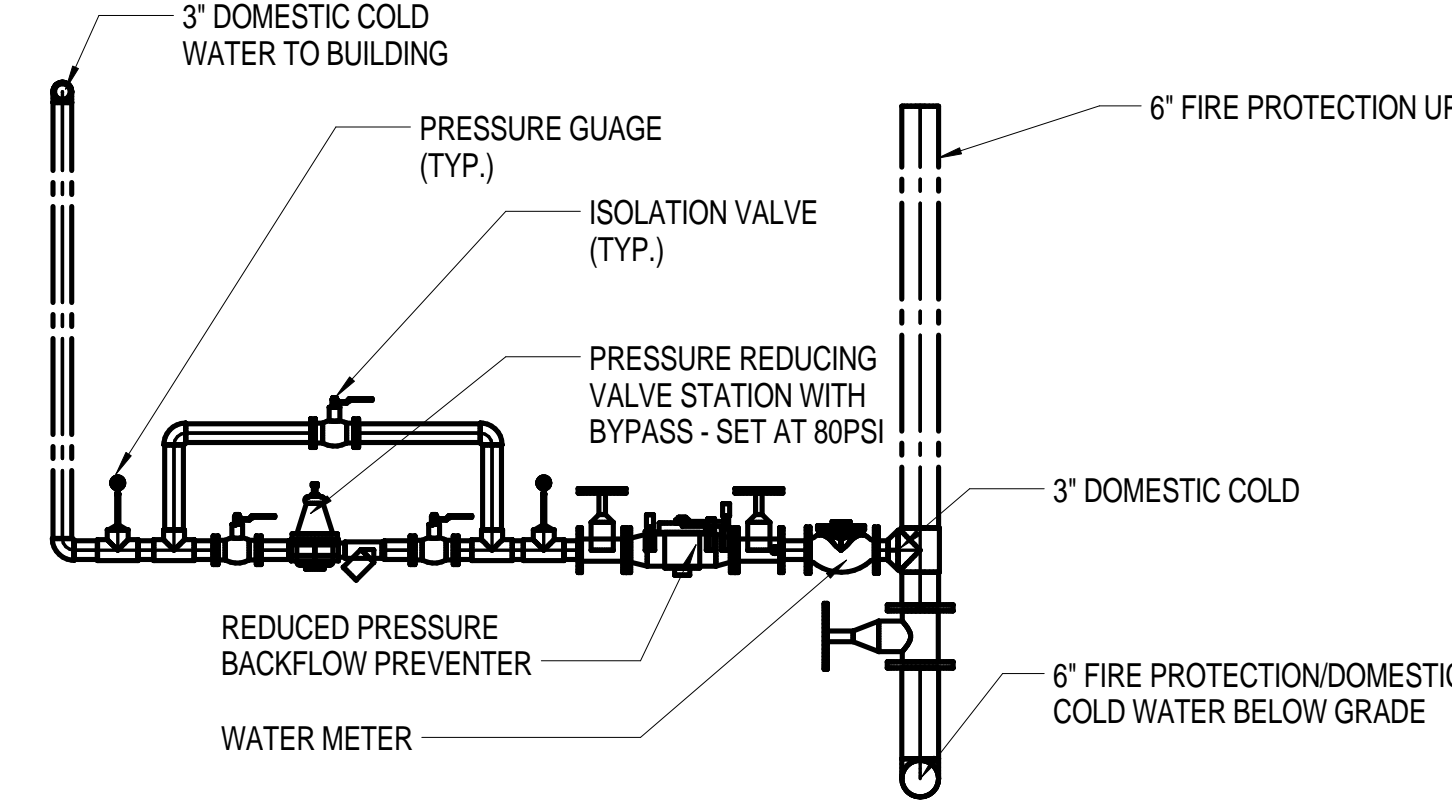
4 GRADE CLEANOUT  
12" = 1'-0"



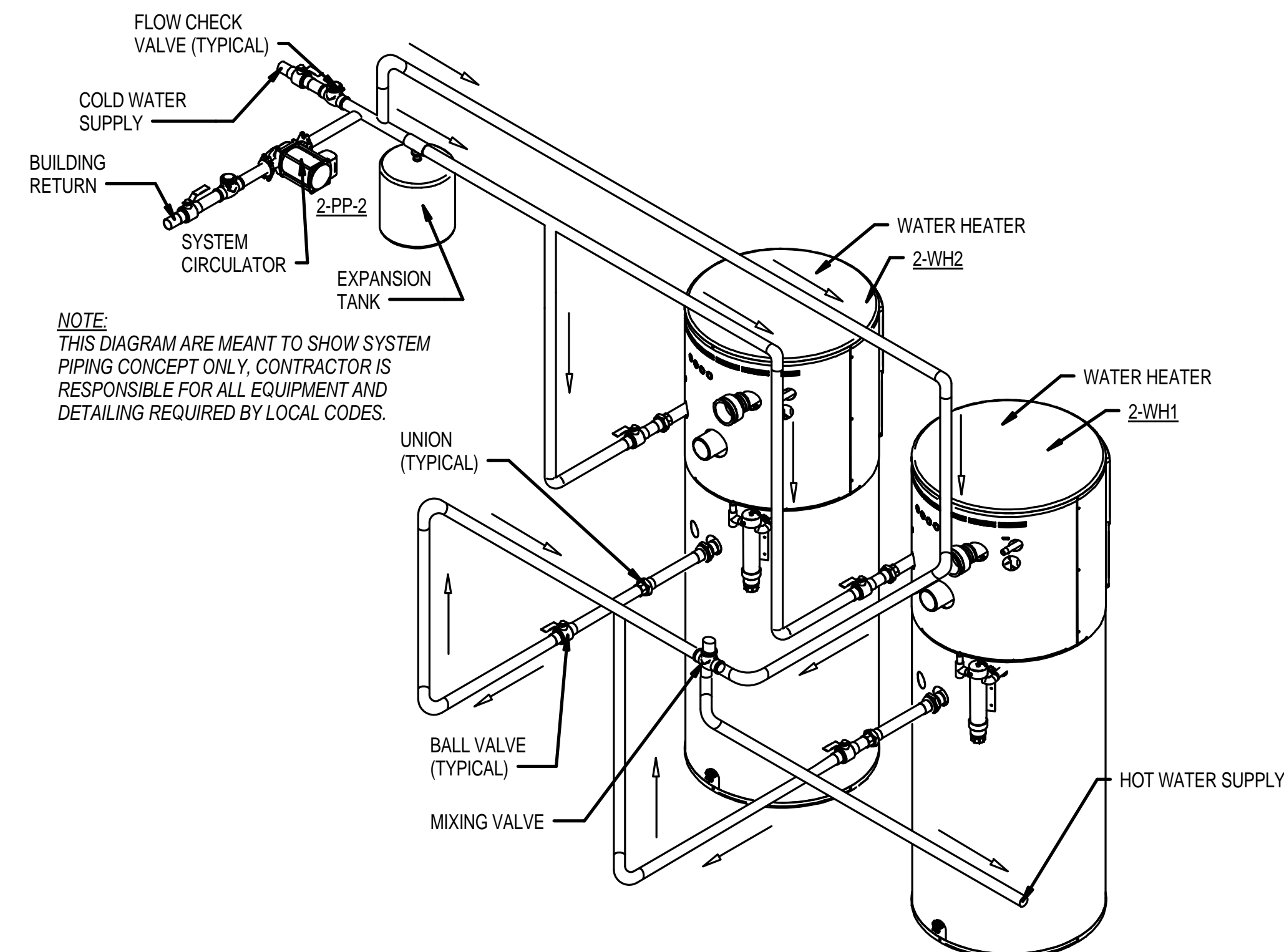
5 CONCENTRIC VENT - SIDE WALL  
3/16" = 1'-0"



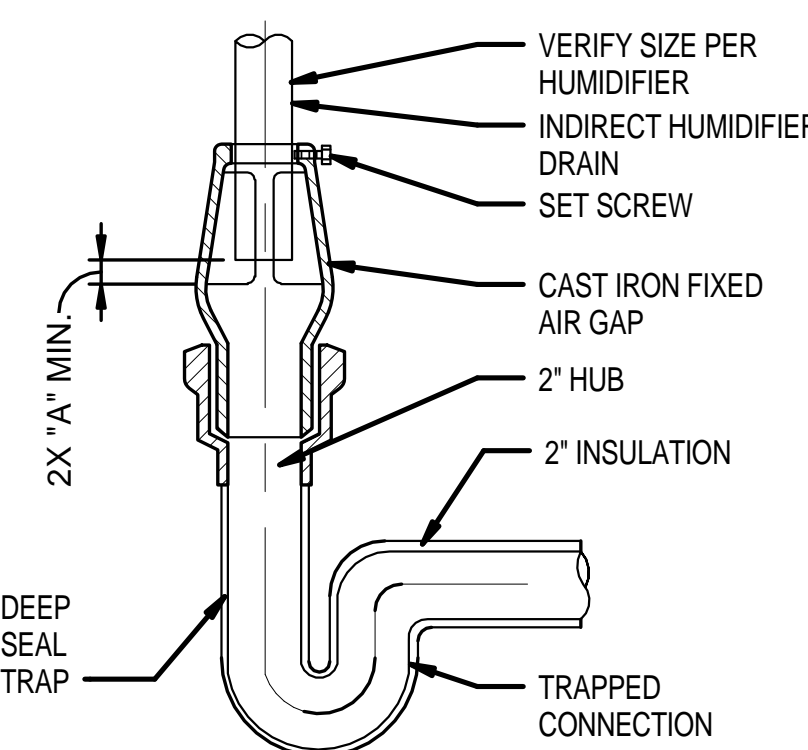
6 FLOOR, WALL AND BASE CLEANOUT  
3/8" = 1'-0"



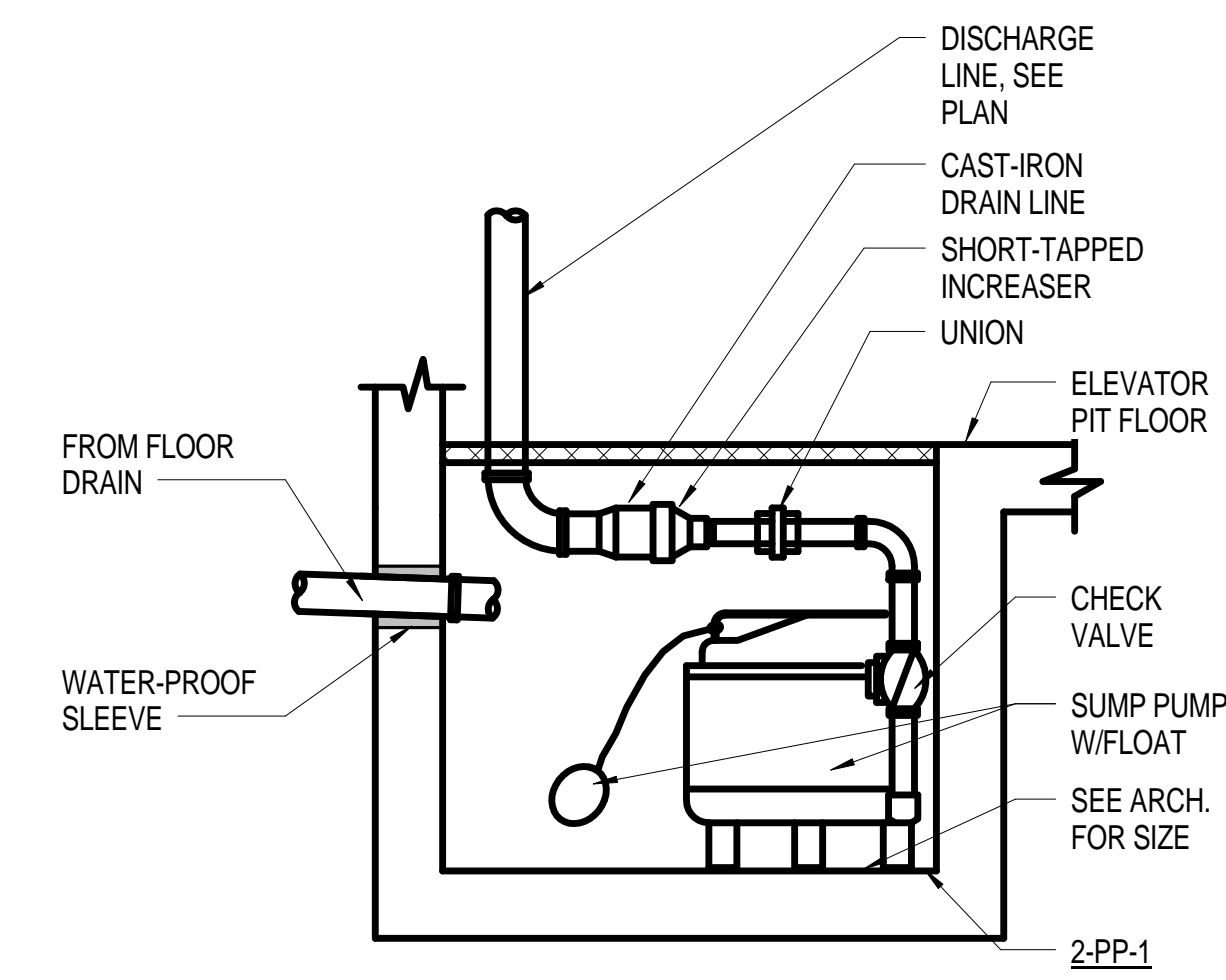
7 WATER SERVICE ENTRANCE  
1/2" = 1'-0"



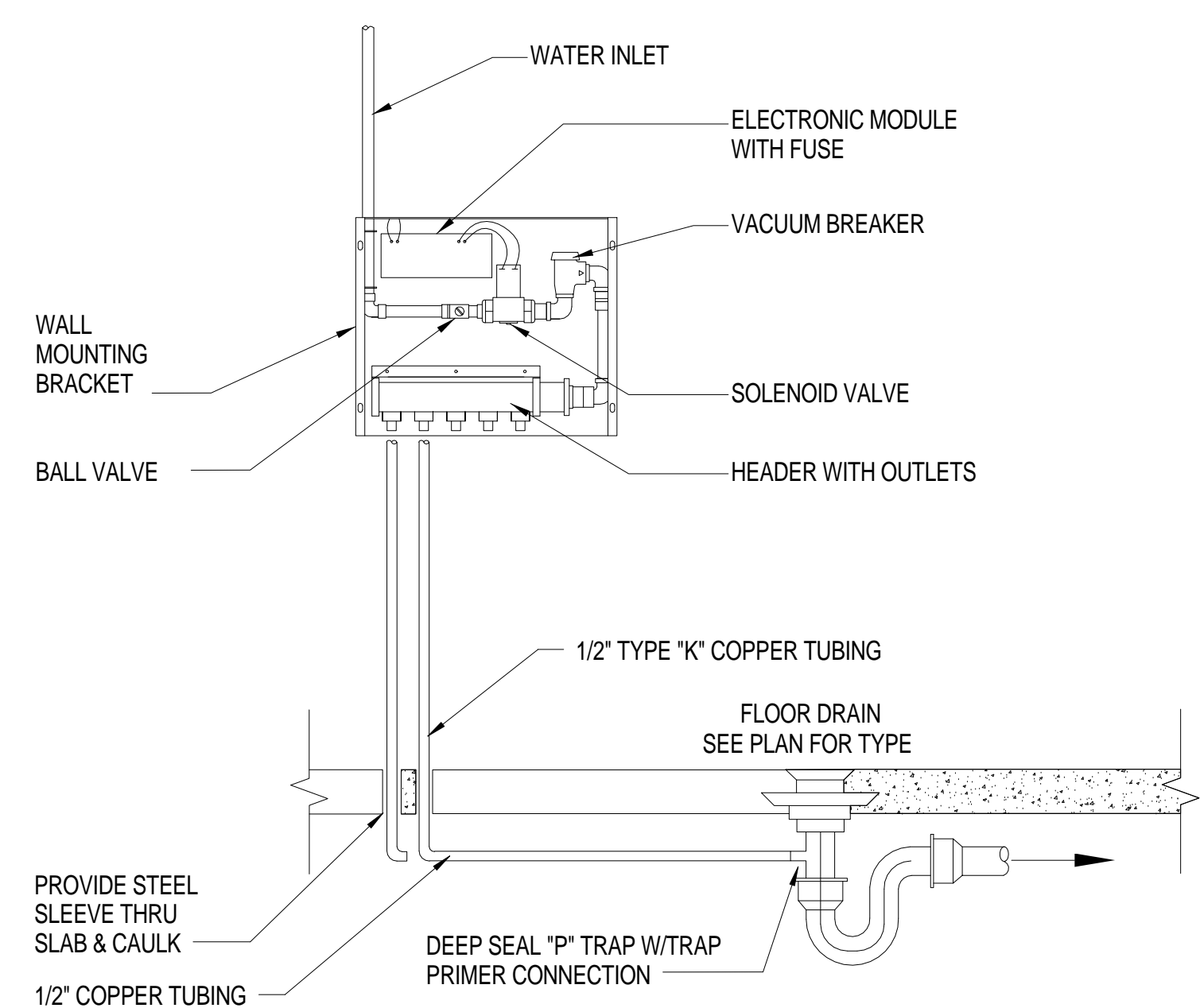
8 GAS WATER HEATER - DOUBLE  
3/16" = 1'-0"



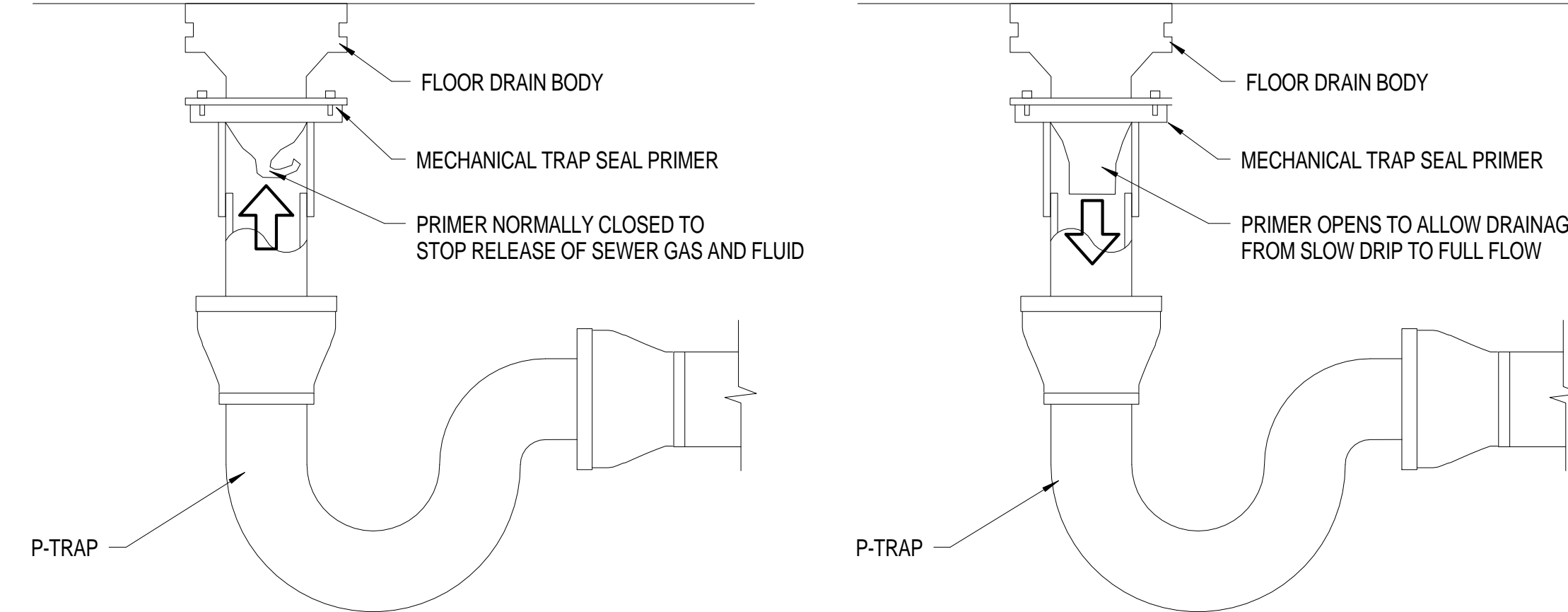
9 FIXED AIR GAP  
12" = 1'-0"



10 ELEVATOR SUMP PUMP  
1/8" = 1'-0"



11 ELECTRONIC TRAP PRIMER  
1/2" = 1'-0"



12 MECHANICAL TRAP GUARD SYSTEM (PENTHOUSE LEVEL)  
3/16" = 1'-0"

## 100% CONSTRUCTION DOCUMENTS

<div>Revisions:</div> <div>Dates</div>		<div>CONSULTANTS:</div> <div><div><b>ROWE PROFESSIONAL SERVICES COMPANY</b> Engineering • Surveying • Aerial Photography / Mapping Landscape Architecture • Planning 511 Broadway Street, Myrtle Beach, SC 29577 Tel: 843.444.1020 www.roweps.com Fax: 843.446.3936</div><div><b>CHRIS R. CLARK</b> REGISTERED PROFESSIONAL ENGINEER No. 3595 EXPIRATION DATE 12/31/2025</div></div>	<div>ARCHITECT/ENGINEERS:</div> <div><div><b>URS</b> 1000 Abernathy Road NE, Suite 900 400 Northpark Tower Center Atlanta, Georgia 30328 Tel: (678) 450-8800</div><div><b>aa+e</b> 1101 Johnson Avenue, Suite 104 Myrtle Beach, SC 29577 843.712.1470</div><div>Accord Architects &amp; Engineers</div></div>	<div>Drawing Title</div> <div>DETAILS - PLUMBING</div> <div>Approved: Project Director</div>	<div>Project Title</div> <div>CONSTRUCT CLINIC ADDITION TRACK 3 CLINIC BUILD</div> <div>Location</div> <div>WJBD VA MEDICAL CENTER COLUMBIA, SC 29209</div> <div>Date</div> <div>07/30/15</div> <div>Checked</div> <div>BMS</div> <div>Drawn</div> <div>BJO</div>	<div>Project Number</div> <div>544-302</div> <div>Building Number</div> <div>122</div> <div>Drawing Number</div> <div>PL-501</div>	<div>Office of Facilities Management</div> <div>Department of Veterans Affairs</div>
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## PLUMBING FIXTURE SCHEDULE

[illegible]

## GAS FIRED WATER HEATER SCHEDULE

[illegible]

## PLUMBING PUMP SCHEDULE





[illegible]

NOTE: 1. PROVIDE OIL MINDER DETECTOR UNIT.

## WATER HAMMER ARRESTOR SCHEDULE

MARK	FIXTURE UNITS	PIPE SIZE	HEIGHT	DIAMETER	REMARKS
A	1 - 11	3/4 INCH	5-1/8 INCH	3-1/4 INCH	PLUMBING AND DRAINAGE INSTITUTE
B	12 - 32	1 INCH	6-1/8 INCH	3-1/4 INCH	PLUMBING AND DRAINAGE INSTITUTE

## 100% CONSTRUCTION DOCUMENTS

		CONSULTANTS:						<b>ARCHITECT/ENGINEERS:</b>  <small>1000 Abernethy Road NE, Suite 900 400 Northpark Tower Center Atlanta, Georgia 30328 Tel: (770) 800-0000</small>		Drawing Title  <b>SCHEDULES - PLUMBING</b>		Project Title <b>CONSTRUCT CLINIC ADDITION TRACK 3 CLINIC BUILD</b>		Project Number <b>544-302</b>		<b>Office of Facilities Management</b>  Department of Veterans Affairs	
		 <small>Engineering • Surveying • Aerial Photography / Mapping Landscape Architecture • Planning</small> <small>311 Broadway Street, Myrtle Beach, SC 29577 Tel: 843.444.1020 www.rowepsc.com Fax: 843.448.3936</small>				 <small>CHRIS R. CLARK MYRTLE BEACH SC</small>		<small>1101 Johnson Avenue, Suite 104 Myrtle Beach, SC 29577 843.775.1470</small> <b>aa+e</b> Accord Architects & Engineers		Approved: Project Director		Location <b>WJBD VA MEDICAL CENTER COLUMBIA, SC 29209</b>		Drawing Number  <b>PL-601</b>			
Revisions:		Dates										Date <b>07/30/15</b>		Checked <b>BMS</b>		Drawn <b>BJO</b>	



## 100% CONSTRUCTION DOCUMENTS