

SYMBOL	DESCRIPTION
CW	COLD WATER PIPING
HW	110° HOT WATER PIPING
HWC	HOT WATER CIRCULATING PIPING
S	SANITARY DRAINAGE PIPING (ABOVE SLAB)
S U/G	SANITARY DRAINAGE PIPING (UNDERGROUND)
ST	STORM LEADER -PRIMARY
STO	STORM OVERFLOW LEADER -SECONDARY
ST U/G	STORM PIPING (UNDERGROUND)
V	VENT PIPING
CD	CONDENSATE PIPING
CD U/G	CONDENSATE PIPING (UNDERGROUND)
OR	BALL VALVE
OR	CIRCUIT SETTER VALVE
OR	CHECK VALVE
OR	PRESSURE REGULATING VALVE
OR	THERMOSTATIC MIXING VALVE
OR	BUTTERFLY VALVE
	GLOBE VALVE
	COMBINATION BALANCING/SHUTOFF VALVE
	RELIEF VALVE
	FLOW MEASUREMENT STATION
	Y-TYPE STRAINER
	PLUG VALVE
OR	CLEANOUTS
	PIPE END CAP
	PIPE TURNING DOWN
	PIPE TURNING UP
	PIPE TURNING DOWN (TEE)
	PIPING TEE
	ROLL DOWN
	P-TRAP
	FLOW ARROW
HB-?OR WHY-?	HOSE BIBB / WALL HYDRANT
PDL-7"	WATER HAMMER ARRESTER & SIZE - REFER TO SCHEDULE SHEETS
	THERMOMETER
	PRESSURE GAUGE
	CIRCULATING PUMP

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
AS	ABOVE SLAB	NA	NOT APPLICABLE
AD	ACCESS DOOR	NC	NORMALLY CLOSED
ADA	AMERICANS WITH DISABILITIES ACT	NIC	NOT IN CONTRACT
AFF	ABOVE FINISHED FLOOR	NO	NORMALLY OPEN
AGC	ABOVE FINISHED GRADE	NSF	NATIONAL SANITATION FOUNDATION
ALT	ALTERNATE	NTS	NOT TO SCALE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	OC	ON CENTER
AP	ACCESS PANEL	OD	OUTSIDE DIAMETER
ASTM	AMERICAN STANDARDS TESTING MATERIALS	ORWL	OVERFLOW RAIN WATER LEADER
AWWA	AMERICAN WATER WORKS ASSOCIATION	PCT	PERCENT
BAS	BUILDING AUTOMATION SYSTEM	PCW	PUMPED COLD WATER
BFP	BACKFLOW PREVENTER	PDI	PLUMBING DRAINAGE INSTITUTE
BG	BELOW GRADE	PH	PHASE
BHP	BREAK HORSEPOWER	PW	PUMPED INDUSTRIAL WASTE
BOP	BOTTOM OF PIPE	PC	POINT OF CONNECTION
BS	BELOW SLAB	PPP	PRECISION PLUMBING PRODUCTS
BTU	BRITISH THERMAL UNIT PER HOUR	PRV	PRESSURE REDUCING VALVE
		PSAN	PUMPED SANITARY
		PSI	POUNDS PER SQUARE INCH
		PW	PROCESS WATER
CA	COMPRESSED AIR	RM	ROOM
CAP	CAPACITY	RPM	REVOLUTION PER MINUTE
CD	CONDENSATE	RWL	RAIN WATER LEADER
CFH	CUBIC FEET PER HOUR	S	SANITARY
CO	CLEANOUT	S U/G	SANITARY UNDERGROUND
CONN	CONNECTION	SCH	SCHEDULE
CONT	CONTINUE	SEC	SECOND
CP	CIRCULATING PUMP	SH	SHOWER
CW	DOMESTIC COLD WATER	SHT	SHEET
DF	DRINKING FOUNTAIN	SK	SINK
DFU	DRAINAGE FIXTURE UNITS	SOL	SODA LINE
DIA	DIAMETER	SSL	STATIC PRESSURE
DN	DOWN	SPEC	SPECIFICATION
DWG	DRAWING	SQ	SQUARE
DW	DOMESTIC CLEAN	SS	STAINLESS STEEL
ECO	EXTERIOR CLEANOUT	SSD	SUB SOIL DRAIN
EFF	EFFICIENCY	ST	STORM
ELEC	ELECTRIC, ELECTRICAL	STO	STORM OVERFLOW
ELEV	ELEVATION	STD	STANDARD
EQUIP	EQUIPMENT	STL	STEEL
EWC	ELECTRIC WATER COOLER	STM	STEAM
EWI	ELECTRIC WATER HEATER	STS	STORM SEWER
EXIST	EXISTING	TDH	TOTAL DYNAMIC HEAD
°F	DEGREES FAHRENHEIT	TEMP	TEMPERATURE
FCO	FLOOR CLEANOUT	TET	THERMAL EXPANSION TANK
FD	FLOOR DRAIN	TMV	THERMOSTATIC MIXING VALVE
FIN	FINISH	TOP	TOP OF PIPE
FL	FLOOR	TOS	TOP OF SLAB
FPS	FEET PER SECOND	TP	TRAP PRIMER
FT	FEET	TYP	TYPICAL
FU	FIXTURE UNITS	UL	UNDERWRITER LABORATORY
G	NATURAL GAS	U/G	UNDERGROUND
GAL	GALLON(S)	UNO	UNLESS NOTED OTHERWISE
GPM	GALLONS PER MINUTE	UR	URINAL
GR	GREASE WASTE	V	VENT
H2O	WATER	V	VOLTS, VOLTAGE
HB	HOSE BIBB	VACUUM	VACUUM
HP	HORSEPOWER	VTR	VENT THROUGH ROOF
HR	HOUR	VIV	VALVE IN VERTICAL
HW	DOMESTIC HOT WATER	VLV	VALVE
HWC	DOMESTIC HOT WATER CIRCULATION	VOL	VOLUME
HZ	HERTZ	W	WATT (S)
IE	INVERT ELEVATION	W/	WITH
ID	INTERNAL DIAMETER	WC	WATER CLOSET
IN	INCHES	WCO	WALL CLEANOUT
IPS	INTERNATIONAL PIPE STANDARD	WHA	WATER HAMMER ARRESTOR
IRR	IRRIGATION WATER	WHY	WALL HYDRANT
IW	INDUSTRIAL WASTE	WYU	WATER SUPPLY FIXTURE UNITS
KW	KILOWATTS		
LAV	LAVATORY		
LF	LINEAR FEET		
MAX	MAXIMUM		
MBH	1000 BRITISH THERMAL UNITS PER HOUR		
MECH	MECHANICAL		
MEZZ	MEZZANINE		
MIN	MINIMUM		
MNTG	MOUNTING		
MS	MOP SINK		

1. REFER TO THE PROJECT'S BOOK-TYPE SPECIFICATION FOR ADDITIONAL REQUIREMENTS, DEFINITIONS, MATERIAL SPECIFICATIONS, ETC. IN THE CASE OF CONFLICTING SPECIFICATIONS THE CONTRACTOR SHALL ASSUME THE MORE STRINGENT CRITERIA APPLIES.

2. ALL WORK SHALL BE PERFORMED BY A LICENSED CONTRACTOR IN A FIRST CLASS WORKSMANLIKE MANNER. THE COMPLETE SYSTEM SHALL BE FULLY AND PROPERLY OPERATIVE, AND IN COMPLIANCE WITH APPLICABLE CODES, ORDINANCES, AND GOVERNING AUTHORITIES, AND SUBJECT TO ACCEPTANCE BY OWNER/ENGINEER.

3. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, FEES, INSPECTIONS AND TAXES REQUIRED TO INSTALL AND COMPLETE SYSTEMS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN. CONTRACTOR SHALL PERFORM AND/OR PAY FOR ALL TESTS INDICATED AND/OR REQUIRED BY AUTHORITIES HAVING JURISDICTION FOR ALL SYSTEMS PROVIDED.

4. ALL REQUIRED INSURANCES SHALL BE PROVIDED AND MAINTAINED BY THE CONTRACTOR FOR THE PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE, AND OTHER INSURANCES REQUIRED BY THE OWNER, FOR THE DURATION OF THE WORK.

5. ALL MATERIALS SHALL BE NEW, FREE OF DEFECTS, AND SHALL BE LISTED AND BEAR THE LABEL OF UNDERWRITERS LABORATORIES INC. WHERE APPLICABLE. ALL MATERIALS AND WORKSMANSHIP SHALL BE IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND ORDINANCES. ALL REQUIREMENTS AND MATERIALS SHALL BE AS INDICATED IN THESE DRAWINGS AND SPECIFICATIONS.

6. THE CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKSMANSHIP FREE FROM DEFECTS FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED BY THE CONTRACTOR WITHOUT ADDITIONAL CHARGE, AND SHALL INCLUDE REPLACEMENT AND REPAIRS OF ANY OTHER TRADE WHICH MAY HAVE BEEN DAMAGED BY FAILURE OF PLUMBING TRADE WORK.

7. THE CONTRACTOR SHALL COMPLETELY FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS, PRIOR TO COMMENCEMENT OF WORK. VERIFY MEASUREMENTS AT BUILDING SITE, NOTIFY ARCHITECT AND/OR ENGINEER OF ANY CHANGES REQUIRED DUE TO SUCH CONDITIONS BEFORE PROCEEDING WITH THE WORK. SUBMIT DISCREPANCIES, DIFFERENCES AND PROPOSED VARIATIONS TO CONTRACT DOCUMENTS FOR CONSIDERATION AND DECISION BEFORE PROCEEDING.

8. REFER TO CONTRACT DOCUMENTS CREATED BY SPECIALTY CONSULTANTS (SUCH AS LANDSCAPE, SITE, LIGHTING, CIVIL AND/OR INTERIOR DESIGN AS APPLICABLE) AND ASSOCIATED SHOP DRAWINGS TO CONFIRM REQUIREMENTS PRIOR TO ROUGH IN FOR QUANTITY, SIZE AND LOCATION OF REQUIRED SERVICES.

9. DRAWINGS ARE DIAGRAMMATIC. DO NOT SCALE FROM DRAWINGS, BUT FIT WORK TO ACTUAL CONDITIONS AND SPACE REQUIREMENTS.

10. CONTRACTOR SHALL INCLUDE IN THE (R BID ANY ITEM(S) SHOWN OR CALLED OUT ON THESE DRAWINGS AND ANY ITEM NOT SHOWN OR CALLED OUT THAT IS REQUIRED TO COMPLETE WORK AND BE IN CONFLICT ON ANY ITEM FROM THESE DRAWINGS/SPECIFICATIONS, OR ANOTHER TRADES REFERENCE TO AN ITEM OF THIS DISCIPLINE, THE CONTRACTOR IS RESPONSIBLE TO GET CLARIFICATION IN WRITING SIGNED BY THE ENGINEER AND ARCHITECT PRIOR TO SUBMITTING BID AND INCLUDE SAID ITEM(S) IN THERE BID. IF A CONFLICT OR ITEM(S) NOT SHOWN THAT ARE REQUIRED TO COMPLETE WORK SHOWN IS FOUND AFTER BID HAS BEEN AWARDED CONTRACTOR IS RESPONSIBLE FOR THE MORE EXPENSIVE OPTION AT NO ADDITIONAL CHARGE TO THE OWNER. THE ARCHITECT AND ENGINEER SHALL INTERPRET ALL CONFLICTS. THE CONTRACTOR BY BIDDING AGREES TO ABIDE BY THE ARCHITECTS AND ENGINEERS INTERPRETATION OF THE CONTRACT DOCUMENTS.

11. PHASING OF CONSTRUCTION SHALL BE DONE AS DIRECTED IN ARCHITECT'S CONSTRUCTION PHASING.

12. PROVIDE TEMPORARY POTABLE WATER SERVICE AS REQUIRED ON SITE FOR ALL TRADES.

13. OBTAIN FULL INFORMATION REGARDING PECULIARITIES AND LIMITATIONS OF SPACE AVAILABLE FOR INSTALLATION OF THE EQUIPMENT AND MATERIALS UNDER CONTRACT, AND PROVIDE READY ACCESSIBILITY TO DAMPERS, VALVES, AND OTHER APPARATUS, INCLUDING ANY PART OF SYSTEM REQUIRED TO BE REACHED FOR MAINTENANCE AND OPERATIONS.

14. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION AND IN STRICT COMPLIANCE WITH ALL APPLICABLE CODES, STANDARDS AND AUTHORITY HAVING JURISDICTION.

15. SUBMIT SHOP DRAWINGS OF ALL PIPING LAYOUTS, MATERIALS, EQUIPMENT AND/OR PROPOSED INSTALLATIONS FOR PROCESSING PRIOR TO FABRICATION AND/OR CONSTRUCTION. REVIEW AND MATERIALS. ALL SHOP DRAWINGS AND/OR REQUESTS FOR ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS SHALL BE ACCEPTED FOR REVIEW ONLY WHEN SUBMITTED THROUGH THE ARCHITECT. ALL SUBMITTALS SHALL BE MADE WITHIN 30 DAYS OF NOTICE TO PROCEED. CONTRACTOR ASSUMES ALL FINANCIAL RISKS FOR PROCEEDING WITHOUT SHOP DRAWINGS PROCESSED WITHOUT EXCEPTION ON ANY NON- SPECIFIED ITEM. SHOP DRAWINGS AND SUBMITTALS FOR EACH TRADE IS REVIEWABLE FOR NO MORE THAN 10 BUSINESS DAYS. IF AN ITEM IS UNLESS A PURCHASE ORDER FROM CONTRACTOR, PIPING LAYOUTS AND/OR SYSTEMS IF SUBMITTED AT VARIANCE TO THE CONTRACT DOCUMENTS SHALL INCLUDE REASON FOR PROPOSED CHANGE, CREDIT OFFERING TO OWNER AND C. O. D. PURCHASE ORDER TO ENGINEER TO REVIEW ALTERNATIVE DESIGN, FAILURE TO INCLUDE ANY OF THESE ITEMS WILL RESULT IN REJECTION. CIRCUMSTANCES NECESSITATING A REVISION TO THE CONTRACT DOCUMENTS NOT PROCESSED PRIOR TO INSTALLATION MAY NOT BE ACCEPTED AND WILL NOT BE REVIEWED UNLESS ACCOMPANIED BY A PURCHASE ORDER FROM THE CONTRACTOR.

16. CONTRACTOR SHALL SUBMIT PLAN SHOWING ALL HOLES TO BE CORED IN EXISTING STRUCTURE, DIMENSIONED ON 1/4" SCALE PLANS, TO ARCHITECT/ENGINEER FOR REVIEW. FOR ALL PIPING AND PENETRATIONS PRIOR TO START OF CONSTRUCTION.

17. NEW HVAC DUCTWORK SYSTEMS SHALL HAVE PRIORITY OVER PLUMBING SYSTEM. PLUMBING CONTRACTOR SHALL THOROUGHLY INVESTIGATE PROPOSED PLUMBING SYSTEM AND PROPOSED NEW WORK OF ALL TRADES, AND INCLUDE IN HIS BID THE COST OF RELOCATING AND REWORKING NEW PLUMBING WORK, AS REQUIRED BY HVAC DUCTWORK. SPACE PERMITTING NEW HVAC DUCTWORK SHALL BE REROUTED AROUND PLUMBING PIPING. GENERAL CONTRACTOR SHALL COORDINATE ALL TRADES.

18. PROVIDE AN ACCURATE LAYOUT, GRADES, AND ELEVATIONS, SET SLEEVES AND OPENINGS IN AMPLE TIME, TAKE PROPER PRECAUTIONS TO PROTECT ALL NEW WORK AND EQUIPMENT FROM DAMAGE.

19. THE CONTRACTOR SHALL VERIFY EXACT LOCATION, SIZE AND COMPATIBILITY WITH ANY INTERFACE OR CONFLICT OF BUILDING SERVICES AND INCORPORATE SUCH ACCOMMODATIONS INTO THE CONTRACT. AN ALLOWANCE SHALL BE MADE IN THE CONTRACTOR'S BID TO ACCOMMODATE DIFFERENCES FROM THE ACTUAL LOCATION VERSUS THE LOCATION INDICATED FROM THE AVAILABLE INFORMATION.

20. WHERE SPECIFIC PRODUCTS, MANUFACTURERS AND/OR MODEL NUMBERS ARE LISTED TO ESTABLISH QUALITY STANDARDS AND/OR SPACE LIMITATIONS, SUBSTITUTIONS OF EQUAL STATUS WITH APPROPRIATE CREDITS MAY BE CONSIDERED IF ACCEPTED IN WRITING VIA PROCESSED SHOP DRAWINGS BY THE OWNER AND THE ENGINEER PRIOR TO INSTALLATION. THIS CONTRACTOR WILL ABSORB ALL COORDINATION EFFORTS AND ALL IMPACTS IMPOSED ON OTHER TRADES.

21. EQUIPMENT, PIPING, ETC., SHALL BE LOCATED AS REQUIRED TO ACCOMMODATE BUILDING CONDITIONS INDICATED BY ALL TRADES.

22. EACH FURNITURE AND EQUIPMENT SUPPLY SHALL BE PROVIDED WITH A SUPPLY STOP OR SHUT-OFF VALVE AS APPLICABLE, AND A CALCULATED SHOCK ABSORBERS WATER HAMMER ARRESTORS AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

23. THE CONTRACTOR SHALL MAKE ALL NECESSARY CONNECTIONS TO ALL EQUIPMENT FURNISHED BY OTHER SUPPLIERS INCLUDING OWNER SUPPLIED EQUIPMENT IF ANY IS PROVIDED.

24. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIXTURE ROUGH-IN DIMENSIONS AND CORRECT FLOOR AND WALL PENETRATIONS.

25. PROVIDE ACCESS PANELS IN ALL WALLS AND CEILINGS FOR ALL VALVES, DAMPERS, CONTROL DEVICES, ETC. ACCESS PANELS SHALL BE MILCOR FLUSH TYPE.

26. VERIFY ALL VOLTAGES WITH ELECTRICAL CONTRACTOR BEFORE ORDERING ANY EQUIPMENT.

27. CUT ALL OPENINGS AND CHASES REQUIRED TO ACCOMMODATE THE WORK BY THIS CONTRACTOR. ALL WORK DONE UNDER THIS HEADINGS MUST CONFORM IN EVERY RESPECT TO ARCHITECTURAL AND STRUCTURAL REQUIREMENTS, AND FINISH AND QUALITY OF MATERIALS AND WORKSMANSHIP REQUIRED OF APPLICABLE TRADES FOR THE PROJECT.

28. PROVIDE AND INSTALL FIRE AND SMOKE PENETRATION SEALS FOR OPENINGS IN FLOORS/SLABS, WALLS AND OTHER ELEMENTS OF CONSTRUCTION DEFINED ON DRAWINGS. FIRE AND SMOKE PENETRATION SEALS, FIRE-SMOKE SEALING SYSTEM SHALL HAVE THE SAME RATING AS THE BARRIER PENETRATED. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

29. VIBRATION ISOLATION: ALL EQUIPMENT AS PER MANUFACTURER RECOMMENDATIONS TO ELIMINATE ANY OBJECTIONABLE NOISE, SUBJECT TO REVIEW BY ENGINEER.

30. VERIFY ALL DIMENSIONS WITH STRUCTURE PRIOR TO ANY FABRICATION OR INSTALLATION.

31. ON ALL SCHEDULED EQUIPMENT WHOSE MODEL NUMBER IS INCONSISTENT WITH THE PERFORMANCE CHARACTERISTICS INDICATED, THE CONTRACTOR SHALL BASE HIS PRICE ON THE MORE EXPENSIVE SOLUTION. ANY SUCH DISCREPANCIES SUCH AS MANUFACTURER'S MODEL CHANGE SHALL BE RESOLVED PRIOR TO THE ORDERING OF ANY EQUIPMENT.

32. ALL EQUIPMENT SUPPORTS, PIPING SUPPORTS, AND ROOF PENETRATIONS SHALL BE FABRICATED AND/OR INSTALLED IN A MANNER ACCEPTABLE TO THE BUILDING STRUCTURAL ENGINEER AND ARCHITECT.

33. FOR ALL SLABS AND PARTICULARLY SLABS CONTAINING REINFORCING IN TENSION (POST TENSION), ASCERTAIN LOCATION OF REINFORCING COMPONENTS AND OBTAIN STRUCTURAL ENGINEERS APPROVAL FOR PENETRATION SIZE(S) AND LOCATION(S) PRIOR TO PROCEEDING WITH ANY WORK.

34. ALL POTABLE WATER SYSTEMS SHALL BE FLUSHED CLEAN, STERILIZED WITH AN APPROVED SOLUTION AND THOROUGHLY FLUSHED OF ALL RESIDUAL SOLUTION AFTER FINAL PRESSURE TEST AND WITH ALL TRIM AND CONNECTIONS INSTALLED.

35. CONTRACTOR SHALL OBTAIN APPROVED MANUFACTURER'S INSTALLATION DRAWINGS AND DIMENSIONED ROUGH-IN LAYOUT AND/OR CATALOG CUTS OF ALL EQUIPMENT PRIOR TO PROCEEDING WITH ANY WORK.

36. CONTRACTOR SHALL PROVIDE ALL SYSTEMS INDICATED IN THESE SPECIFICATIONS ON THE DRAWINGS AND AS REQUIRED TO COMPLY WITH LOCAL CODES AND ORDINANCES AS APPLICABLE TO COMPLETING WORK FOR INTENDED OCCUPANCY. IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS FOR CONTRACTOR TO PROVIDE A COMPLETE AND OPERATING INSTALLATION INCLUDING PROVIDING SERVICES AND CONNECTIONS TO ITEMS THAT MAY ONLY BE INDICATED ON AIR CONDITIONING, ELECTRICAL, AND/OR ARCHITECTURAL CONTRACT DOCUMENTS.

37. SEE ARCHITECTURAL DRAWINGS AND SITE CONDITIONS FOR AREAS AND SYSTEMS PRIOR TO BID AND COMMENCEMENT OF WORK AND ORDERING OF MATERIALS. TO INCLUDE WHERE APPLICABLE ANY DEMOLITION AND PREPARATION WORK REQUIRED WITHIN THE SCOPE OF THIS PROJECT.

38. PROVIDE INTERFACE CONNECTIONS TO UTILITY SYSTEMS AS REQUIRED.

39. PROVIDE ALL FIXTURES AND EQUIPMENT WITH APPROVED PLUMBING FITTINGS. VISIBLE PARTS OF FIXTURE AND EQUIPMENT TRIM AND ACCESSORIES, INCLUDING SUPPLIES, P-TRAPS, WASTE ARMES AND ESCUTCHEONS SHALL BE HEAVILY CHROME PLATED.

40. PROVIDE WALL HUNG FIXTURES NOT SUPPLIED WITH FLOOR MOUNTED CARRIERS WITH MINIMUM 1/4" THICK STEEL WALL PLATE SECURED TO STUDS FOR WALL HANGER, AND INSTALLED WITH APPROVED STRUTS AND BRACING SO THAT FIXTURE CAN WITHSTAND 300 POUND VERTICAL DOWNWARD FORCE AT FRONT EDGE OF FIXTURE WITHOUT DAMAGE TO INSTALLATION.

41. ALL TRAPS FOR FLOOR DRAINS, OPEN SIGHT DRAINS, HUB DRAINS, AND INDIRECT WASTES SHALL BE PROVIDED WITH AUTOMATIC TRAP SEAL PRIMING SYSTEMS. SEE SPECIFICATION FOR ACCEPTABLE PRIMING SYSTEMS.

42. FOR ALL PIPING AGAINST BLOCK WALLS - INSTALL FURRED SPACE AS REQUIRED TO ACCEPT PIPING, CUTTING OF BLOCK NOT PERMITTED, UNLESS PERMITTED BY ARCHITECT IN WRITING.

43. INSTALL CLEANOUTS AS SHOWN, AND AS REQUIRED BY APPLICABLE CODES AND GOVERNING AUTHORITIES.

44. PROVIDE THE REQUIRED CLEARANCES AND SPACE FOR ALL PLUMBING FIXTURES. PLUMBING CONTRACTOR SHALL VERIFY AND COORDINATE PRIOR TO THE START OF CONSTRUCTION.

45. ALL PLUMBING TRADE ITEMS SHALL BE INDIVIDUALLY AND RIGIDLY SUPPORTED FROM STRUCTURE ABOVE INDEPENDENT OF ALL OTHER TRADES (DO NOT HANG PLUMBING TRADE ITEMS FROM ANOTHER TRADE).

46. CONTRACTOR SHALL INSTALL SWAY BRACING ON ALL PIPING AS REQUIRED BY THE FLORIDA PLUMBING CODE SECTION 308.6. ON EACH VALVE, COORDINATE WITH OWNERS IDENTIFICATION SYSTEM.

47. CONTRACTOR SHALL LOCATE ALL VALVES SO THAT THEY ARE COMPLETELY ACCESSIBLE. E AND INSTALL PERMANENT STAMPED BRASS VALVE TAG S.

48. ALL PLUMBING FLUSH VALVES, FIXTURES STOPS, VALVES, ETC., SHALL BE RIGIDLY SECURED (NO MOVEMENT WHEN OPERATED).

49. DIELECTRIC COUPLINGS SHALL BE INSTALLED BETWEEN ALL DISSIMILAR METALS IN PIPING AND EQUIPMENT CONNECTIONS.

50. TEMPERATURE OF HOT WATER TO REST ROOMS SHALL NOT EXCEED 110°F. PER FLORIDA ENERGY CODE. CONTRACTOR SHALL VERIFY TEMPERATURE OF HOT WATER SYSTEM WITH OWNER. IF TEMPERATURE EXCEED 110°F, INSTALL TEMPERING VALVES AS REQUIRED, SUBJECT TO REVIEW BY ENGINEER.

51. DO NOT INSTALL ANY PLUMBING PIPING OR SYSTEM COMPONENT IN THE SPACE ABOVE AN ELECTRICAL PANEL, TYPICAL THROUGHOUT JOB.

52. AIR CONDITIONING CONDENSATE TRAPS SHALL BE MADE UP OF UNIONS. ON EACH SIDE OF TRAP AND TRAP SHALL BE COMPLETELY REMOVABLE FOR CLEANING. CONTRACTOR SHALL DEMONSTRATE TRAP REMOVAL PRIOR TO FINAL ACCEPTANCE.

53. AS BUILT DRAWINGS:

A. CONTRACTOR SHALL FURNISH COMPLETE SET OF REPRODUCIBLE PLANS INCORPORATING ALL SUCH APPROVED CHANGES, DEVIATIONS, ETC. THAT OCCURRED DURING CONSTRUCTION. CONTRACTORS "AS-BUILT" DRAWINGS TO INCLUDE ALL MODIFICATIONS TO SHOP DRAWINGS, WIRING DIAGRAMS AS WELL AS PLANS.

B. ALL "AS-BUILT" DRAWINGS SHALL INCLUDE ALL SCHEDULED MATERIALS, EQUIPMENT AND FULL DATA INDICATED ON CONTRACT DOCUMENTS REVISED TO REFLECT ALL SUBSTITUTED ITEMS.

C. IF ENGINEER CERTIFIED AS-BUILT DRAWINGS ARE NOT REQUIRED BY, SUBMITTED TO AND ACCEPTED BY THE AUTHORITY HAVING JURISDICTION PRIOR TO ISSUANCE OF THE PERMITS OF OCCUPANCY, THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR CODE COMPLIANCE AND/OR CONTRACTOR COMPLIANCE WITH THE INTENT OF THE PERMITTED CONTRACT DOCUMENTS.

SYMBOL

PLUMBING RISER DESIGNATION:

A = RISER IDENTIFYING SYSTEM TYPE
 1 = RISER IDENTIFYING SYSTEM NUMBER

SECTION SYMBOL:

A = IDENTIFYING LETTER
 B = SHEET WHERE SECTION IS SHOWN
 SIM = SIMILAR
 (ONLY NOTED IF IT APPLIES)

TITLE SYMBOL ON SHEET WHERE SHOWN

A = IDENTIFYING NUMBER/LETTER

**REVISION CLOUD AND
 REVISION NUMBER**

**KEYED REFERENCE
 NOTE OR SHEET NOTE**

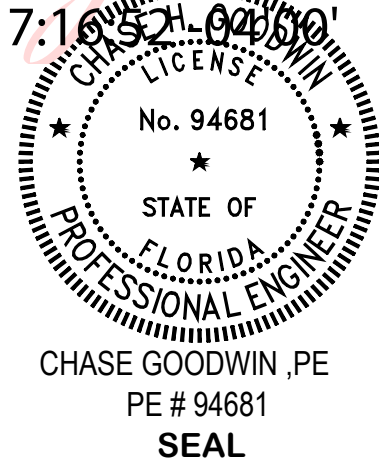
POINT OF CONNECTION

- A. FLORIDA BUILDING CODE - 8th EDITION 2023 (WITH CURRENT REVISIONS & AMENDMENTS).
- B. FLORIDA PLUMBING CODE - 8th EDITION 2023 (WITH CURRENT REVISIONS & AMENDMENTS).
- C. FLORIDA ELECTRICAL CODE - 8th EDITION 2023 (WITH CURRENT REVISIONS & AMENDMENTS).
- D. NFPA 101 - 2023 (FLORIDA FIRE PREVENTION CODE - 8th EDITION WITH CURRENT REVISIONS & AMENDMENTS).
- E. NFPA 70 - 2023 (NATIONAL ELECTRICAL CODE - 8th EDITION WITH CURRENT REVISIONS & AMENDMENTS).
- F. ASTM STANDARDS IN BUILDING CODES.
- G. U.L. BUILDING STANDARDS.
- H. FIRE RESISTANCE DIRECTORY.
- I. BUILDING MATERIALS DIRECTORY.
- J. ALL APPLICABLE LOCAL CODES WITH LATEST REVISIONS.
- K. FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION.
- L. AMERICAN DISABILITIES ACT (CURRENT EDITION).

B-P001	PLUMBING - GENERAL NOTES, CODES, & LEGENDS
B-P002	PLUMBING - SCHEDULES
B-P003	PLUMBING - DETAILS
B-P101	PLUMBING - FLOOR PLAN AND RISER DIAGRAMS



17:10 52H-0450'



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PE# 78477 CA LIC. 31555
THESE DRAWINGS ARE NOT VALID FOR ANY

THESE DRAWINGS ARE NOT VALID FOR ANY
PURPOSE WHICH REQUIRES THE ORIGINAL
SIGNATURE AND SEAL OF THE ENGINEER

UNLESS THE ORIGINAL SIGNATURE AND SEAL ARE AFFIXED, DRAWINGS NOT SIGNED AND SEALED BY THE ENGINEER SHALL NOT BE SUBMITTED TO ANY AUTHORITY OR USED FOR ANY PURPOSE WHERE SIGNED AND SEALED DOCUMENTS ARE REQUIRED.

ISSUE FOR
100% CONSTRUCTION
DOCUMENTS

ISSUE DATE
02/15/2026

REVISIONS

[illegible]

PROJECT TEAM

PRINCIPAL IN CHARGE
SCOTT RAYNOR

PROJECT MANAGER
SCOTT RAYNOE

DESIGN TEAM
CEA

CEA
PROJECT NAME

COLUMBIA STORM
PROCESSING & SERVICE
CENTER - BLDG B -
TRUCK STOCK

PROJECT NO.

814C632800

SHEET TITLE
SHEET NAME
PLUMBING SCHEDULES

SHEET NUMBER

B-P002

MARK	FIXTURE	MANUFACTURER	MODEL NO.	TYPE	MATERIAL	WASTE	VENT	CW	HW	
WHY-1	WALL HYDRANT	ZURN	Z1320XL	WALL MOUNTED	---	---	---	3/4"	---	ENCASED, NON-FREEZE, ANTI-SIPHON, AUTOMATIC DRAINING WALL HYDRANT WITH INTEGRAL BACKFLOW PREVENTER, 3/4" HOSE THREAD OUTLET SPOUT, AND NICKEL BRONZE HOUSING.
TP-1	TRAP PRIMER	PRECISION PLUMB PRODUCTS	PT SERIES	---	---	---	---	1/2"	---	PRIME-TIME ELECTRONIC TRAP PRIMING ASSEMBLY. ATMOSPHERIC VACUUM BREAKER, 24 HOUR ADJUSTABLE TIME. 120V/1 PHASE/60Hz. PROVIDE OUTLETS PER FLOOR DRAINS SERVING ON DRAWINGS.
IMB-1	ICE MAKER BOX WITH SHUT-OFF VALVE	OATEY	PART NO. 39151	---	---	---	---	1/2"	---	HIGH IMPACT POLYSTYRENE, 2 SUPPORT BRACKETS, SNAP-ON FACEPLATE FRAME, ACCOMMODATES UP TO 1" DRYWALL WITH 1/4 TURN SHUT-OFF VALVE
HR-1	HOSE REEL	REELCRAFT	RS7000 SERIES	VARIES SEE PLANS	---	---	---	---	---	HOSE REELS SHALL BE SPRING RETRACTABLE TYPE WITH INTEGRAL STOPS. THE RETRACTION SHALL BE LIMITED TO NORMAL WALKING SPEED. THERE WILL BE THREE TYPES OF REELS - COMPRESSED AIR, POWER, AND TWO FLUID TYPES. REFER TO PLANS FOR LOCATION, TYPE, AND QUANTITY. END FITTINGS TBD.

[illegible]

UNIT NO.	LOCATION	COMPRESSOR TYPE	BASIS OF DESIGN	SERVICE TYPE	MAX. OPERATING PRESSURE (PSIG)	OUTPUT (SCFM@ 90 PSI)	RECEIVER SIZE AND TYPE	DRAIN CONNECTION (INCHES)	ELECTRICAL				WEIGHT (LBS.)	NOTES	
									HP	V/PHX/V	MCA	MOPP			
AC-1	TRUCK STOCK	ROTARY SCREW COMPRESSOR	INGERSOLL RAND 2340LS-V	GENERAL SERVICE COMPRESSED AIR ISO CLASS 3.4.4.	175	14.3	60 GALLON VERTICAL	-	5.0	208/360	17.5	25	534	1.2	

NOTES: COMPRESSORS SHALL BE PROVIDED WITH THE FOLLOWING:

1. PROVIDE WITH "F" SERIES FILTERS AND ELECTRONIC DRAIN VALVE. PROVIDE 115V, 15AMP PLUG OUTLET.
2. ANCHOR UNIT TO HOUSEKEEPING PAD PER MANUFACTURER'S RECOMMENDATIONS.

CLEANOUT APPLICATION	TYPE	ZURN	JOSAM	J.R. SMITH
FINISH CONCRETE FLOOR (CAST IRON BODY, BRONZE PLUG, NICKEL BRONZE TOP)	ROUND SQUARE	ZN-1400-IC-BP ZN-1400-IC-BP-T	55000-2-X 55000-2-SQ-X	4228-C 4048-C
FINISH WALL (CAST IRON BODY, BRONZE PLUG, STAINLESS STEEL COVER)	ROUND	ZN-1446-BP	58910-19 & 58800 (COVER)	4532-S
EXPOSED PIPING (CAST IRON BODY, BRONZE PLUG)	HORIZONTAL VERTICAL	ZN-1440 ZN-1445	58900 58910	4420-C 4512-S
TILED AREA (CAST IRON BODY, BRONZE PLUG, NICKEL BRONZE TOP)	ROUND SQUARE	ZN-1400-IC-BP-X ZN-1400-IC-BP-T	5500-2-12-X 55000-2-12-SQ-X	4168-C 4168-C
CARPETED AREA (CAST IRON BODY, BRONZE PLUG, NICKEL BRONZE TOP)	ROUND	ZN-1400-IC-BP-CF	55000-2-13-X	4028C-Y
TERRAZZO AREA (CAST IRON BODY, BRONZE PLUG, NICKEL BRONZE TOP)	ROUND SQUARE	ZN-1400-IC-BP-Z ---	55000-2-13-X 55000-2-13-SQ-X	4188-C 4208-C

ARRESTOR SIZE (WHA)	WATER SUPPLY FIXTURE UNITS	PDI STD WH 201
1/2"	1-11	PDI-A
3/4"	12-32	PDI-B
1"	33-60	PDI-C
1-1/4"	61-133	PDI-D
1-1/2"	114-154	PDI-E
2"	155-330	PDI-F

NOTE:
ALL ARRESTORS SHALL BE INSTALLED PER PDI (PLUMBING AND DRAINAGE INSTITUTE) STANDARD PDI-WH201 (2008) FOR SIZING AND PLACEMENT.

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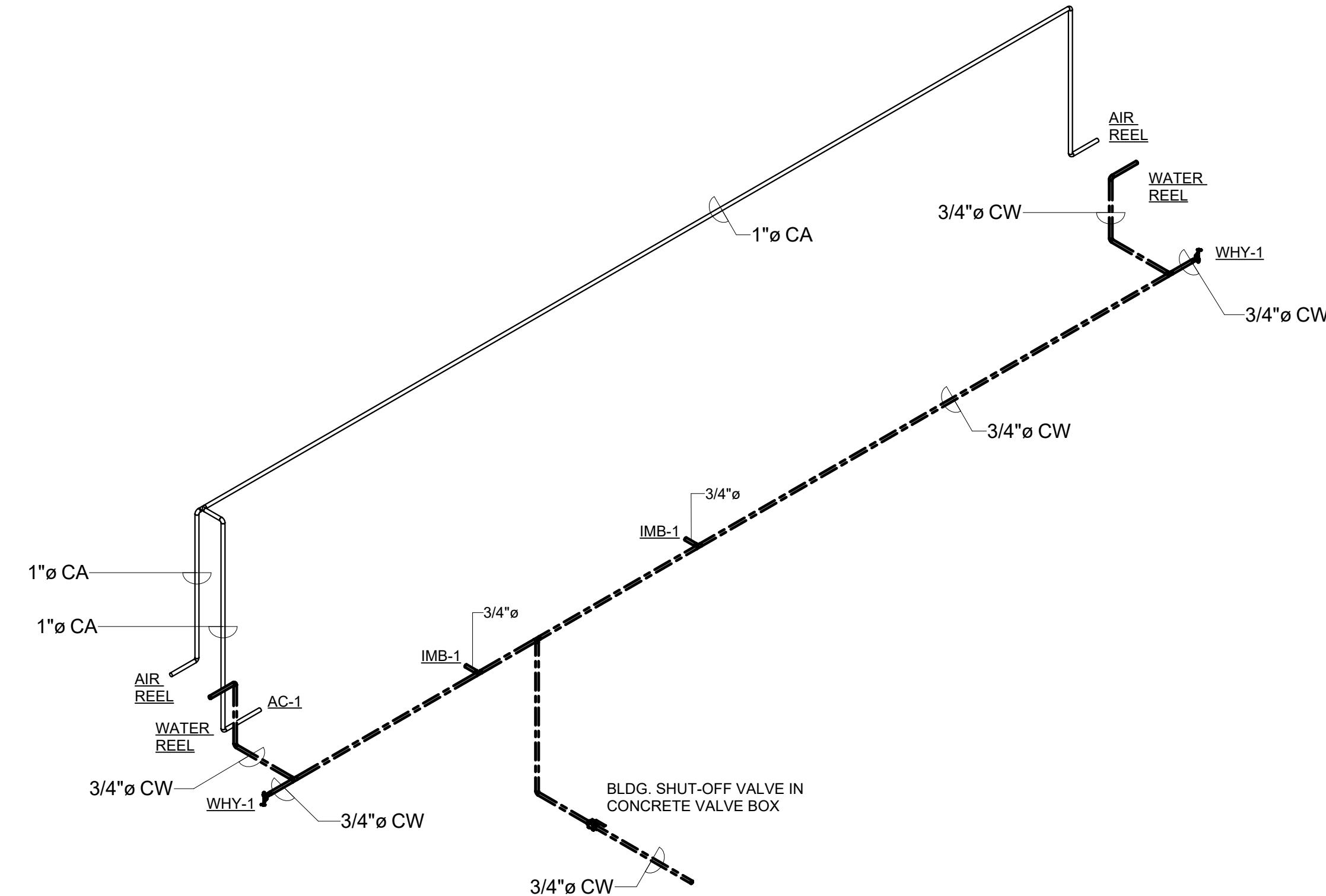
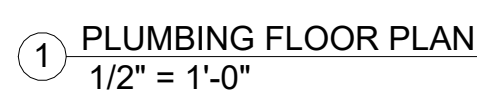
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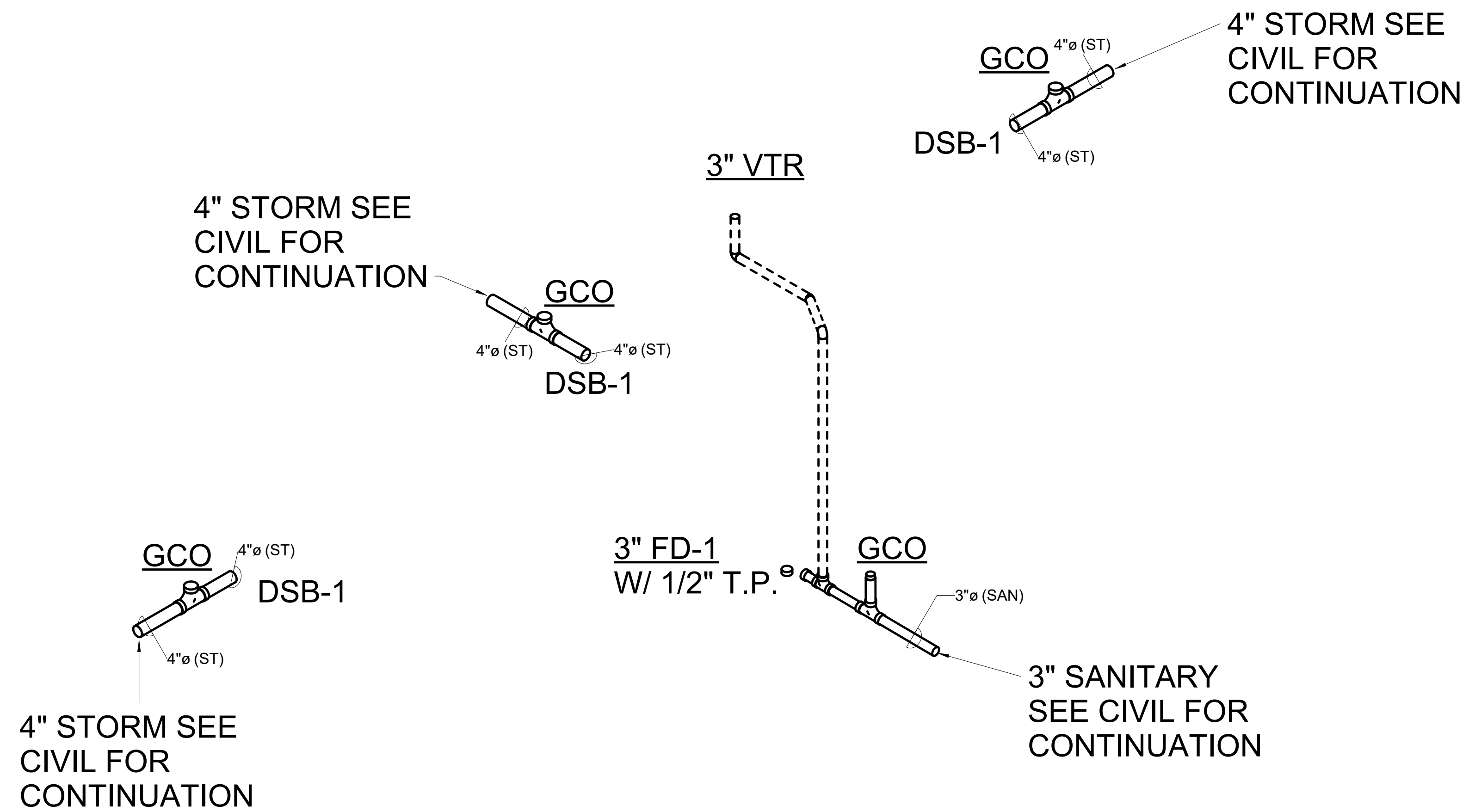
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B-P101



2 PRESSURE RISER



3 GRAVITY RISER