

**PLUMBING NOTES**

- PLUMBING CONTRACTOR (P.C.) SHALL FIELD VERIFY ALL CONDITIONS AT THE JOB SITE PRIOR TO BEGINNING WORK. NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
- P.C. SHALL COORDINATE SCHEDULING OF WORK WITH GENERAL CONTRACTOR.
- UNLESS OTHERWISE INDICATED ON PLANS, ALL DOMESTIC WATER PIPING AND SANITARY VENTS FOR SPACES ARE ROUTED ABOVE CEILING. SANITARY WASTE AND DRAIN PIPING IS LOCATED BELOW FLOOR (IN LOWER LEVEL AREAS OR UNDER SLAB).
- PLUMBING WORK SHALL INCLUDE INSTALLATION OF DOMESTIC HOT AND COLD WATER PIPING, AND WASTE AND VENT PIPING AS INDICATED ON PLUMBING PLANS. DOMESTIC WATER SYSTEM COMPONENTS SHALL BE DESIGNED TO WITHSTAND THE MAXIMUM SYSTEM STATIC AND FLOW PRESSURE, BUT IN NO CASE SHALL BE LESS THAN 125 POUND CLASS.
- COORDINATE PLUMBING WORK WITH OTHER TRADES TO AVOID CONFLICTS.
- DOMESTIC WATER PIPE SHALL BE TYPE L HARD COPPER WITH SOLDERED FITTINGS - PIPE SIZES INDICATED ARE NOMINAL DIMENSIONS.
- WASTE AND VENT PIPING SHALL BE SCHEDULE 40 PVC. DO NOT INSTALL PVC IN HVAC PLENUMS. USE SCHEDULE 40 CAST IRON INSTEAD.
- DOMESTIC WATER PIPE ABOVE GRADE SHALL BE INSULATED. PROVIDE 1" FIBERGLASS INSULATION WITH FACTORY JACKET, PREFORMED FITTINGS WITH PVC JACKETS AT ELBOWS.
- LABEL ALL DOMESTIC WATER PIPING. SEE DETAIL SHEET.

PLUMBING FIXTURE SCHEDULE										
SYM	DESCRIPTION	MFR	MODEL	CW	HW	WASTE	ACCESSORIES			
P1	SINGLE BOWL SINK ADA	SURFACE MOUNTED, SELF-RIMMING, SINGLE BOWL, 18 gpm, STAINLESS STEEL, 6" DEEP, 8" CENTERS	JUST KOHLER ELKAY	SL-ADA-1921-A-GR	3/4"	3/4"	1/2"	CHICAGO 1100-GN2AE35-317AB DUAL WRISTBLADE FAUCET 1.5 gpm, K-8801 CUP STRAINER, CHROME P-TRAP, STOPS AND THERMOSTATIC MIXING VALVE.		

LEGEND		ABBREVIATIONS	
	BALL VALVE	CCO	GRADE CLEANOUT
	SHOCK ABSORBER	FCO	FLOOR CLEANOUT
	TRAP PRIMER	LAV	LAVATORY
	ANTI-FREEZE WALL HYDRANT	FS	FLOOR SINK
	PIPE ELBOW	HB	HOSE BIBB
	PIPE TEE	MB	MOP BASIN
	PIPE ELBOW DOWN	V	PLUMBING VENT
	(SIZE) HOT WATER	VTR	VENT THRU ROOF
	(SIZE) COLD WATER	CW	COLD WATER
	(SIZE) SANITARY WASTE	HW	HOT WATER
	CONNECT TO EXISTING	HWR	HOT WATER RETURN
		AFWH	ANTI-FREEZE WALL HYDRANT
		UR	URINAL
		WC	WATER CLOSET
		DW	DISH WASHER
		ER	EYE WASH
		ES/EW	EMERGENCY SHOWER/EYE WASH
		DT	DILUTION TANK
		HD	HUB DRAIN FOR MECHANICAL CONDENSATE, SHALL BE LOCATED ABOVE CEILING. PROVIDE ACCESS AND TP
		TP	TRAP PRIMER
		GW	GREASE WASTE
		AAD	AIR ADMITTANCE DEVICE 6" ABOVE FLOOR RIM

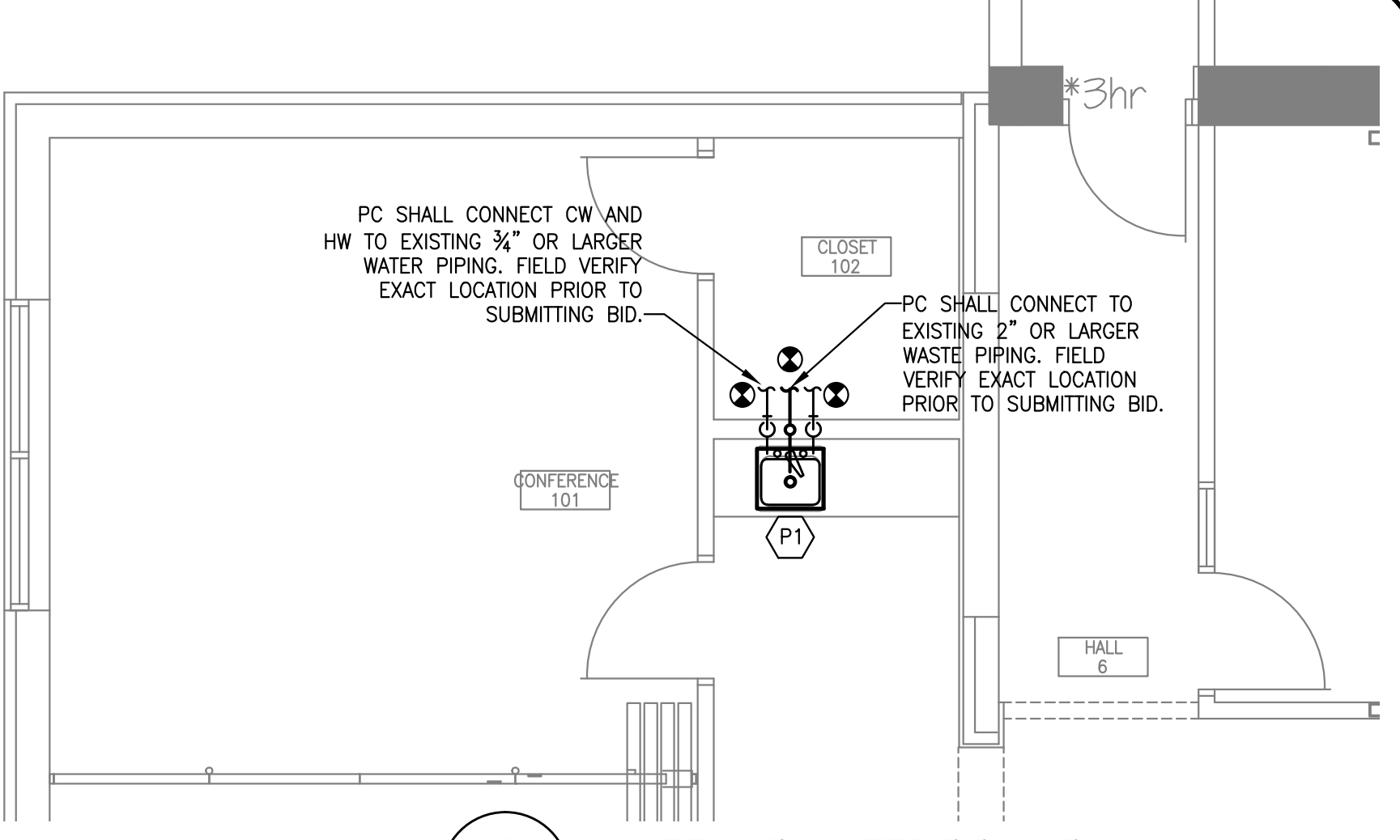
PLUMBING SPECIALTIES SCHEDULE			
SYM	DESCRIPTION	*MFR & MODEL	NOTE
FD	FLOOR DRAIN	SMITH 2005-03B	1,6,10
FCO	FLOOR CLEANOUT	SMITH 4040 SERIES	1,7
WCO	WALL CLEANOUT	SMITH 4530 SERIES	2,11
CCO	GRADE CLEANOUT	SMITH 4250 SERIES	3
AFWH	WALL HYDRANT	SMITH 55090T	4
HB	HOSE BIBB	T&S BRASS B-0736-POL	4
SA-1	SHOCK ABSORBER	SMITH 5005	5
SA-2	SHOCK ABSORBER	SMITH 5010	5
SA-3	SHOCK ABSORBER	SMITH 5020	5
TP	TRAP PRIMER	PPP PR-500	5,8
FS-1	FLOOR SINK	SMITH 3008-12	6,9
AAD	AIR ADMITTANCE DEVICE	STUDDOR 20301	5

- \*ACCEPTABLE EQUAL ALTERNATES BY ZURN OR WADE.
- NOTE:
- SATIN BRONZE COVER
  - ROUND STAINLESS STEEL COVER, MAINTAIN 16" MIN CLEARANCE
  - CAST IRON TOP
  - W/ VACUUM BREAKER
  - MOUNT IN ACCESSIBLE LOCATION.
  - SEE RISER FOR DRAINS WITH PRIMER TRAPS.
  - CARPET FLANGES WHERE REQ'D. SEE ARCH. ROOM FINISH SCHED.
  - DISTRIBUTION UNITS (DU) AS REQUIRED. SEE PLAN.
  - FULL GRATE, SEDIMENT BUCKET
  - SQUARE GRATE
  - CLEANOUTS ON 6" AND SMALLER PIPES SHALL BE PROVIDED A CLEARANCE OF NOT LESS THAN 18" FOR RODDING.
  - DRY VENTS MUST RISE 6" ABOVE FLOOR LEVEL RISE OF THE FIXTURE. EXCEPT ISOLATED FLOOR DRAINS AND INTERCEPTORS SHALL RISE 6" BEFORE TURNING HORIZONTAL AND A WALL CLEANOUT IS INSTALLED IN THIS VENT.

**KEY NOTES**

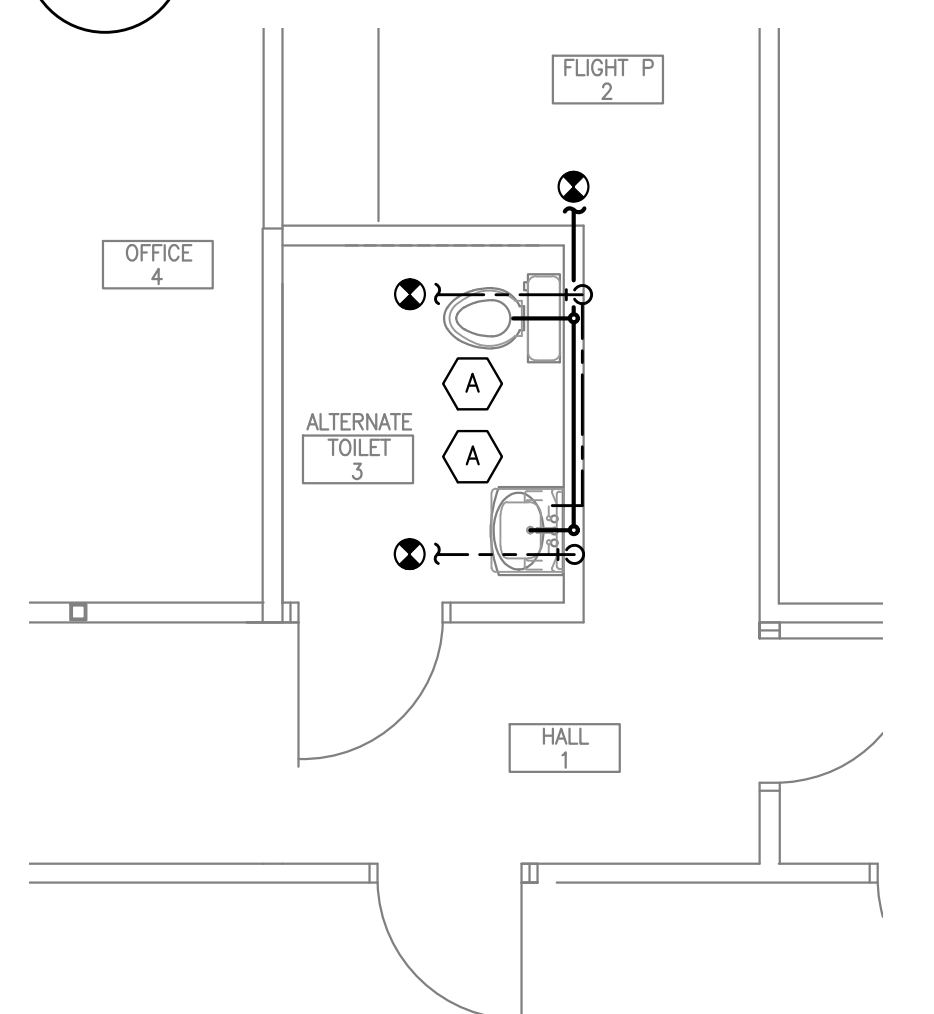
(A) RELOCATED EXISTING FIXTURES. PC SHALL CONNECT EXISTING FIXTURES TO NEW WASTE AND WATER PIPING.

FIXTURE UNIT CALCULATIONS (BASED UPON 2015 CODE REQUIREMENTS)									
Fixture Type	Number of Fixtures	Load Value Per Fixture			Load Value Fixture Total			Drainage Fixture Unit Value (Per Fixture)	
		Cold	Hot	Total	Cold	Hot	Total	Per Fixture	Total
Sink	1	2.25	2.25	3	2.25	2.25	3	2	2
	Total # of Fixtures				Total Water Fixture Units			Waste Fixture Units Totals	

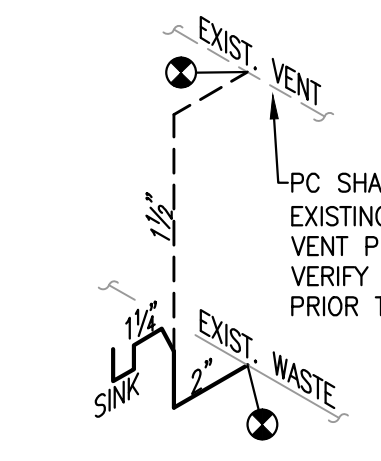


**1 WASTE AND WATER PIPING PLAN**  
SCALE: 1/8" = 1'-0"

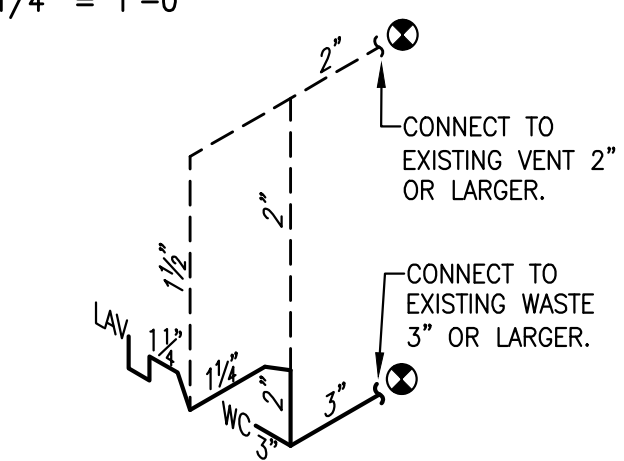
ALL DOMESTIC WATER BRANCH PIPE NOT OTHERWISE INDICATED SHALL BE 1/2"



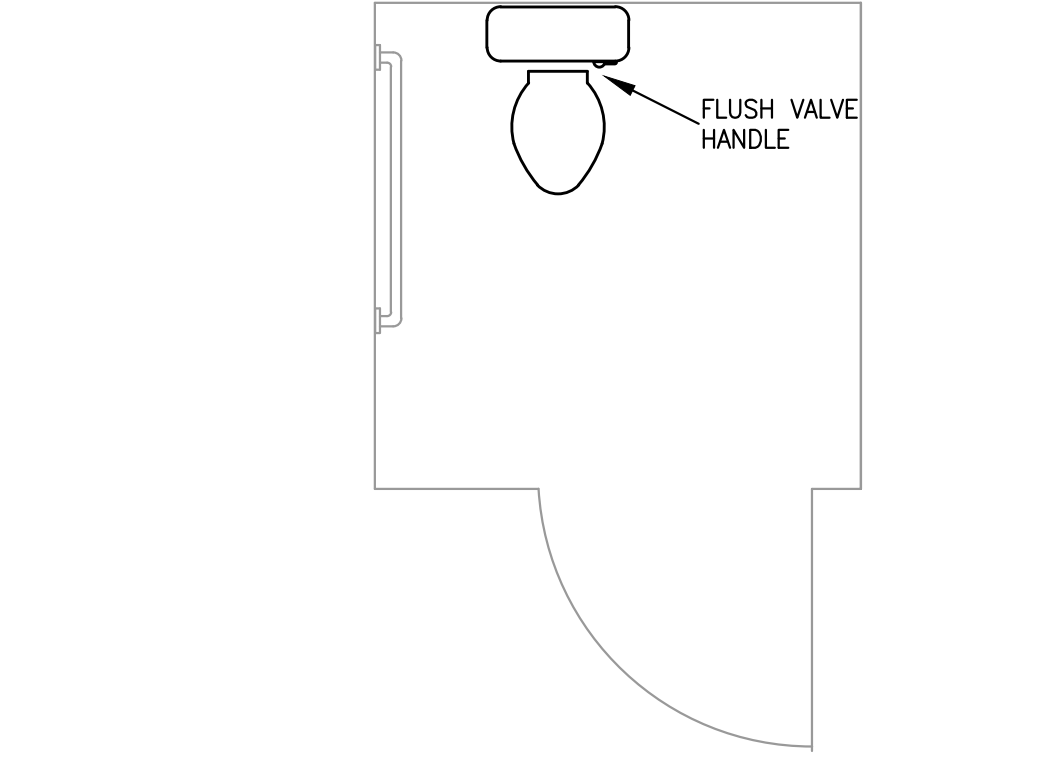
**2 ALTERNATE TOILET 3 WASTE AND WATER PIPING PLAN**  
SCALE: 1/4" = 1'-0"



**3 WASTE RISER**  
SCALE: NO SCALE

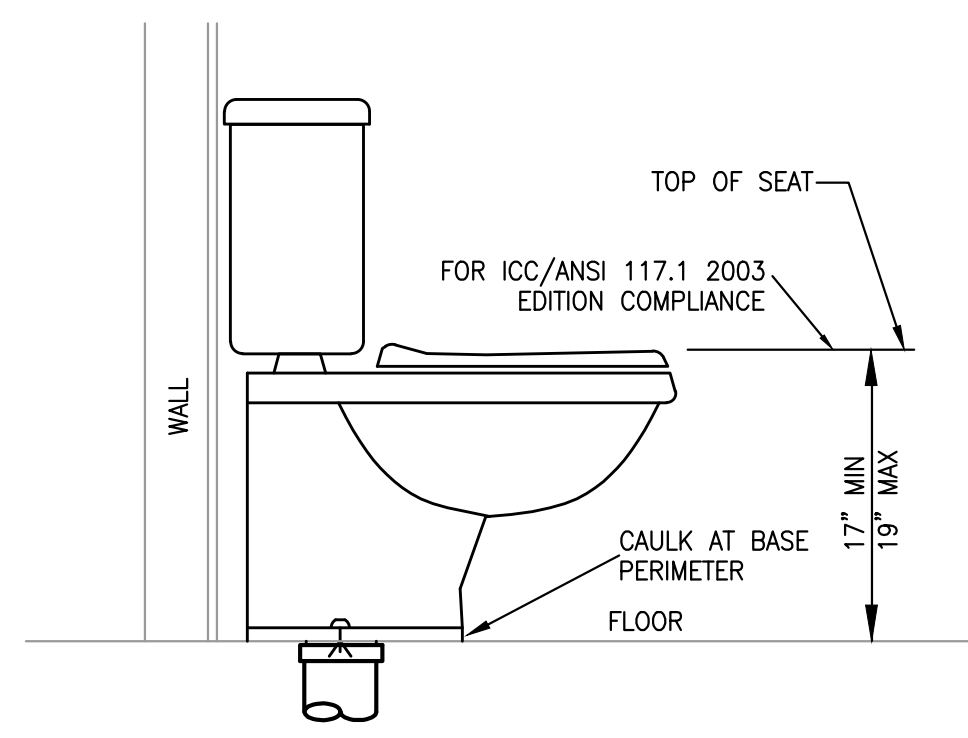


**4 ALTERNATE TOILET 3 WASTE RISER**  
SCALE: NO SCALE

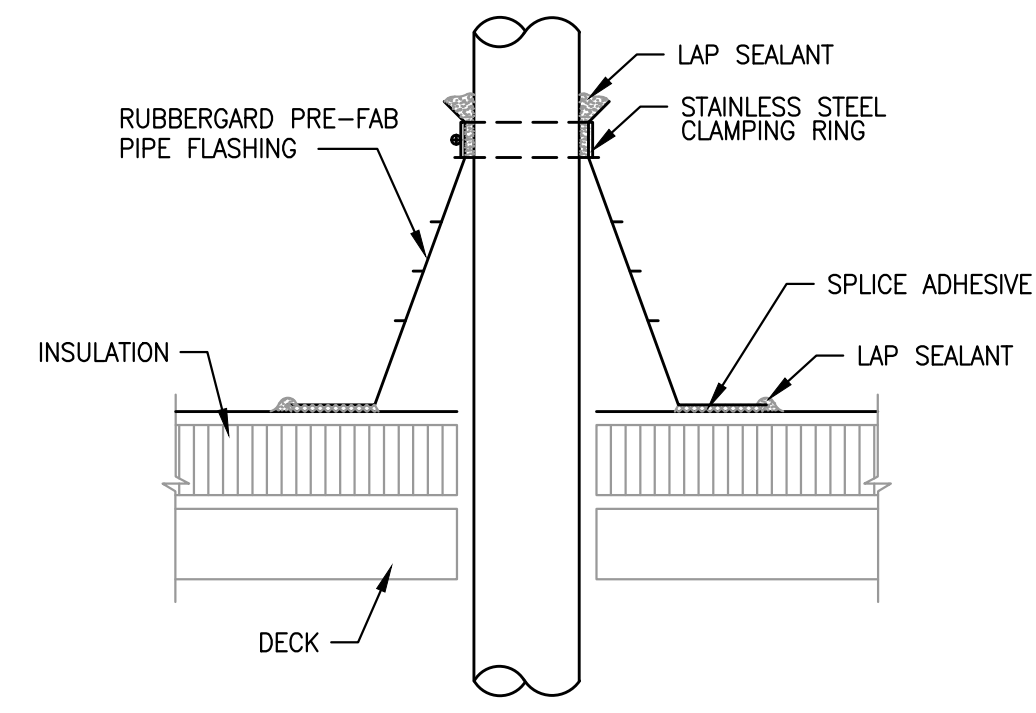


THE FLUSH CONTROLS SHALL BE LOCATED ON THE OPPOSITE SIDE OF THE NEAREST WALL AT 44" MAX ABOVE FINISHED FLOOR IN ACCORDANCE WITH ICC/ANSI 117.1 2003 EDITION.

**5 ADA WATER CLOSET DETAIL**  
SCALE: NONE

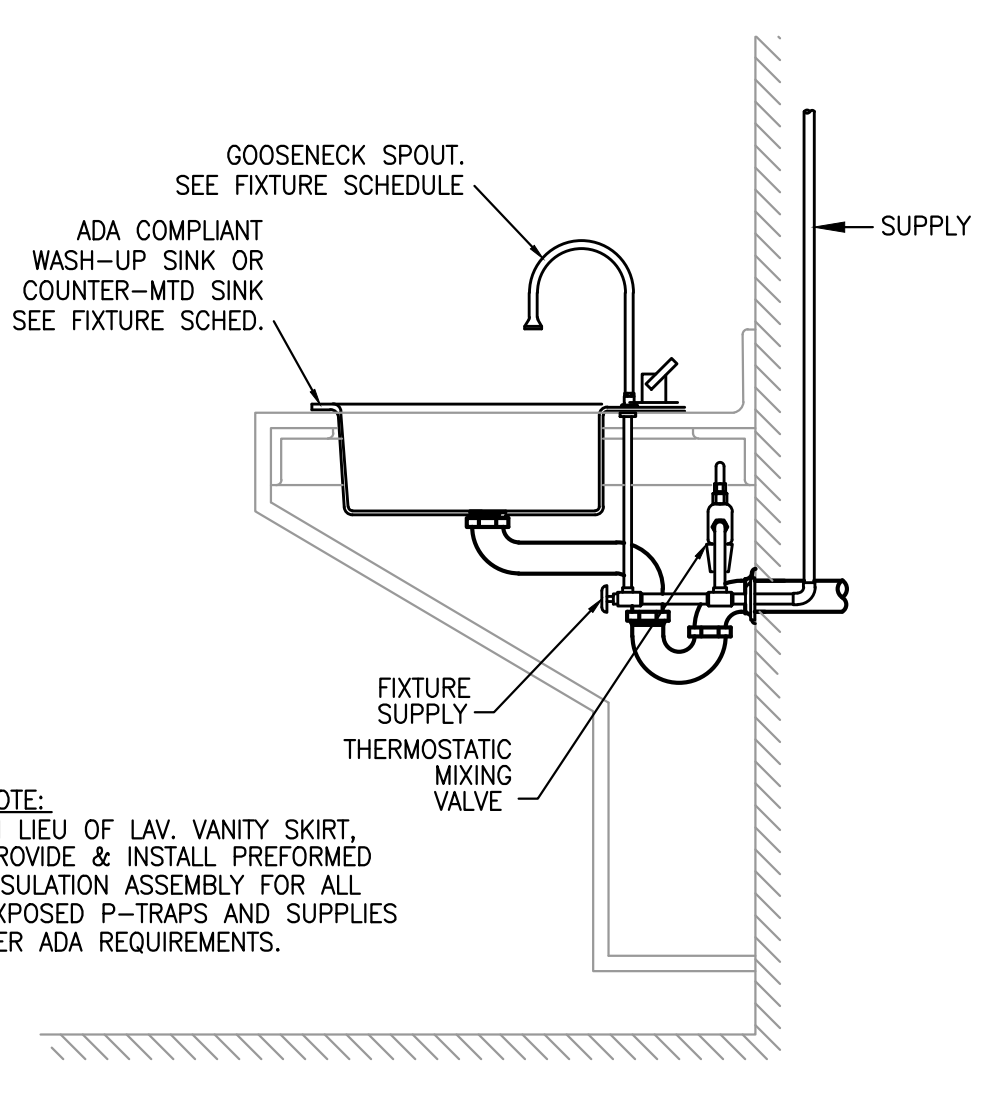


**6 FLUSH TANK ADA WATER CLOSET DETAIL**  
SCALE: NONE



- NOTES:
- PIPE BATTEN REQUIRED WHEN THIS DETAIL IS USED ON MECHANICALLY ANCHORED SYSTEMS.
  - REMOVE ALL EXISTING FLASHING, LEADS ETC. PIPE SURFACE MUST BE FREE OF ALL RUST, GREASE, ETC.
  - PIPE MUST BE ANCHORED TO BOTTOM SIDE OF DECK TO ASSURE STABILITY.
  - INSTALL PIPE FLASHING ACCORDING TO MANUFACTURER'S WRITTEN RECOMMENDATIONS.

**7 TYPICAL VENT (VTR) DETAIL**  
SCALE: NONE



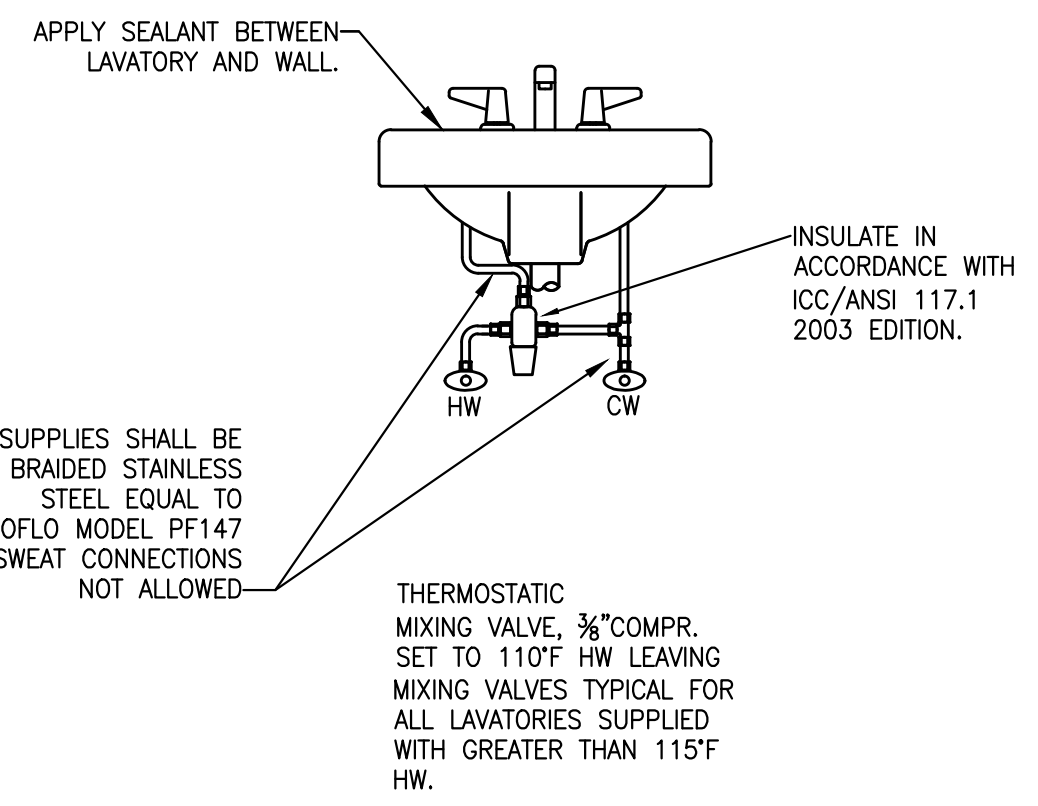
NOTE: IN LIEU OF LAV. VANITY SKIRT, PROVIDE & INSTALL PREFORMED INSULATION ASSEMBLY FOR ALL EXPOSED P-TRAPS AND SUPPLIES PER ADA REQUIREMENTS.

**8 SINK COUNTER DETAIL**  
SCALE: NONE

PIPE SUPPORT SPACING		
PIPE MATERIAL	MAXIMUM HORIZONTAL SPACING (FEET)	MAXIMUM VERTICAL SPACING (FEET)
ABS PIPE	4	10
ALUMINUM PIPE AND TUBING	10	15
BRASS PIPE	10	10
BRASS TUBING 1/2" DIAMETER AND SMALLER	6	10
BRASS TUBING 3/4" DIAMETER AND LARGER	10	10
CAST-IRON PIPE*	5	15
COPPER OR COPPER-ALLOY PIPE	12	10
COPPER OR COPPER-ALLOY TUBING 1/2" DIAMETER OR SMALLER	6	10
COPPER OR COPPER-ALLOY TUBING 3/4" DIAMETER OR LARGER	10	10
CPVC PIPE OR TUBING 1" AND SMALLER	3	10 <sup>a</sup>
CPVC PIPE OR TUBING 1 1/2" AND LARGER	4	10 <sup>a</sup>
LEAD PIPE	CONTINUOUS	10 <sup>b</sup>
PB PIPE OR TUBING	2 1/2 (32")	4
PEX TUBING	2 1/2 (32")	4
POLYPROPYLENE (PP) PIPE OR TUBING 1" OR SMALLER	2 1/2 (32")	10 <sup>a</sup>
POLYPROPYLENE (PP) PIPE OR TUBING 1 1/2" OR LARGER	4	10 <sup>a</sup>
PVC PIPE	4	10 <sup>a</sup>
STEEL TUBING	8	10
STEEL PIPE	12	15

a. THE MAXIMUM HORIZONTAL SPACING OF CAST-IRON PIPE HANGERS SHALL BE INCREASED TO 10 FEET WHERE 10-FOOT LENGTHS OF PIPE ARE INSTALLED.  
b. MID-STORY GUIDE.

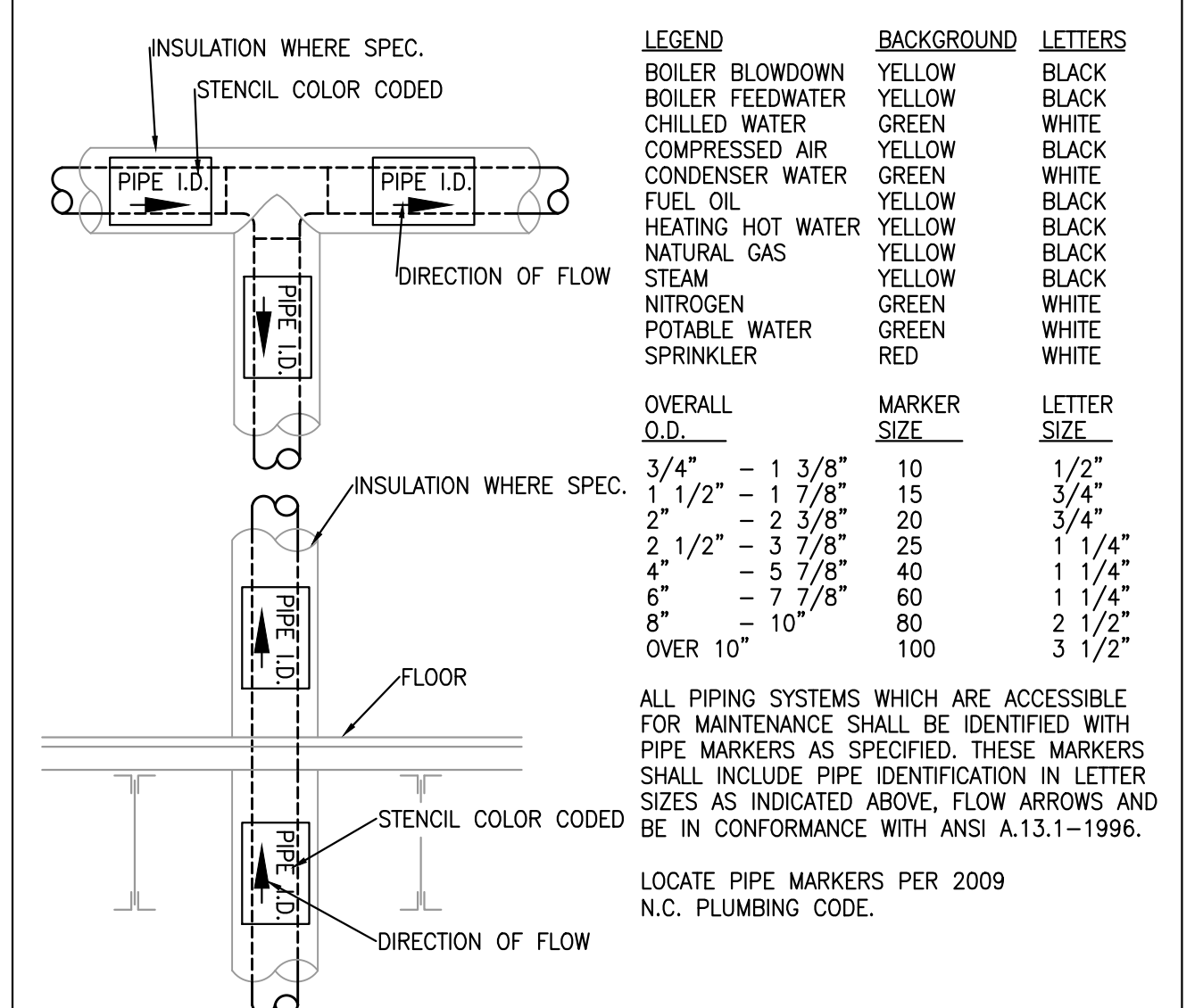
**9 TYPICAL PIPE HANGER DETAIL**  
SCALE: NONE



SUPPLIES SHALL BE BRAIDED STAINLESS STEEL EQUAL TO PROFLO MODEL PF147 SWEAT CONNECTIONS NOT ALLOWED

THERMOSTATIC MIXING VALVE, 3/4" COMP. SET TO 110°F HW LEAVING MIXING VALVES TYPICAL FOR ALL LAVATORIES SUPPLIED WITH GREATER THAN 115°F HW.

**10 TYPICAL WALL MOUNT LAVATORY**  
SCALE: NONE



LEGEND	BACKGROUND	LETTERS
BOILER BLOWDOWN	YELLOW	BLACK
BOILER FEEDWATER	YELLOW	BLACK
CHILLED WATER	GREEN	WHITE
COMPRESSED AIR	YELLOW	BLACK
CONDENSER WATER	GREEN	WHITE
FUEL OIL	YELLOW	BLACK
HEATING HOT WATER	YELLOW	BLACK
NATURAL GAS	YELLOW	BLACK
STEAM	YELLOW	BLACK
NITROGEN	GREEN	WHITE
POTABLE WATER	GREEN	WHITE
SPRINKLER	RED	WHITE

OVERALL O.D.	MARKER SIZE	LETTER SIZE
3/4"	10	1/2"
1 1/2"	15	3/4"
2"	20	3/4"
2 1/2"	25	1 1/4"
4"	40	1 1/4"
6"	60	1 1/4"
8"	80	2 1/2"
OVER 10"	100	3 1/2"

ALL PIPING SYSTEMS WHICH ARE ACCESSIBLE FOR MAINTENANCE SHALL BE IDENTIFIED WITH PIPE MARKERS AS SPECIFIED. THESE MARKERS SHALL INCLUDE PIPE IDENTIFICATION IN LETTER SIZES AS INDICATED ABOVE. FLOW ARROWS AND BE IN CONFORMANCE WITH ANSI A.13.1-1996.

LOCATE PIPE MARKERS PER 2009 N.C. PLUMBING CODE.

**11 PIPE LABELING**  
SCALE: NONE

**RAMSAY BURGIN SMITH ARCHITECTS**

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SALISBURY, NORTH CAROLINA 28144  
Phone: (704) 639-5121 Fax: (704) 639-5361  
Email: rbsa@rbsarch.com (www.rbsarch.com)

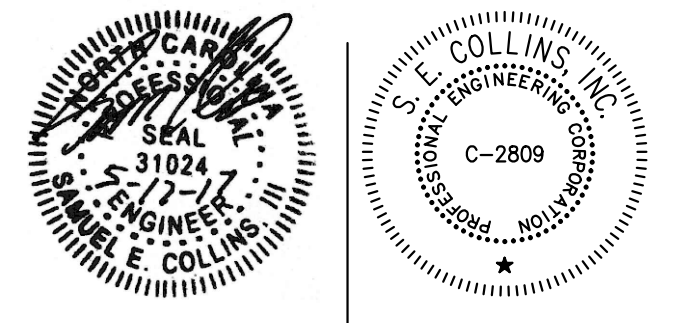
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**PLUMBING**  
WASTE AND WATER PIPING PLANS AND DETAILS

**ROWAN COUNTY AIRPORT**  
TERMINAL EXPANSION



PAD DRAWN BY  
SEC CHECKED BY  
APRIL 10, 2017  
DATE  
COMM. NO.  
SHEET NO. P.1  
OF 1