

**GENERAL PLUMBING NOTES**

1. ALL DOMESTIC WATER PIPING (INTERIOR) SHALL BE HARD DRAIN COPPER TYPE "L" ABOVE GRADE OR CPVC & SOFT DRAIN COPPER TYPE "K" W/ BRASSED JOINTS OR RIGID PLASTIC BELOW GRADE. EXTERIOR WATER LINES SHALL HAVE A MINIMUM 48" OF INSULATION W/ VAPOR BARRIER.
2. INSULATE ALL DOMESTIC (INTERIOR) WATER PIPING, HOT & COLD, W/ 1/2" FIBERGLASS.
3. SANITARY WASTE & VENT PIPING SHALL BE PVC PIPING AS APPROVED BY THE LOCAL AUTHORITY. INSTALL & TEST ALL SANITARY WASTE & VENT PIPING IN ACCORDANCE W/ ALL LOCAL, STATE & FEDERAL CODES.
4. COMPLETELY FLUSH & STERILIZE ALL DOMESTIC WATER PIPING PER AWWA RECOMMENDATIONS & PER THE LOCAL COUNTY HEALTH DEPARTMENT REQUIREMENTS. PROVIDE & PAY FOR ALL APPLICABLE TESTS, PERMITS & FEES. DOMESTIC WATER PIPING SHALL BE PRESURE TESTED TO 100 PSIG FOR SIX (6) HOURS W/ NO DROP.
5. VERIFY THE EXISTING INCOMING DOMESTIC WATER LINE SIZE & PRESURE & BACK FLOW PREVENTER.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING & PAYING FOR ALL FEES, PERMITS & INSPECTIONS REQUIRED FOR THE PERFORMANCE OF THIS WORK.
7. IT IS THE INTENT THAT THE CONTRACTOR PROVIDE COMPLETE SANITARY & WATER PIPING SYSTEMS W/ ALL NECESSARY APPURTENANCES IN CONFORMANCE W/ ALL APPLICABLE ORDINANCES. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SUCH SYSTEMS WHETHER THE REQUIRED WORK IS INDICATED IN THE CONTRACT DOCUMENTS OR NOT.
8. DRAINAGE ARE SCHEMATIC IN NATURE & CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL CONDITIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD CONSTRUCTION, ATTC TRASSES, OTHER TRADES, ETC. COORD. W/ GENERAL CONTRACTOR FOR PROVIDING & INSTALLING ALL OFFSETS, JOGS, TRANSITIONS, CORE DRILL, SMALL CUTS, LENTILS & OTHER NECESSARY FITTINGS TO INSTALL WORK. WORK WHICH HAS BEEN INSTALLED HAS NOT BEEN COORDINATED W/ OTHER TRADES & HAS TO BE RELOCATED SHALL BE DONE SO AT THE EXPENSE OF THIS CONTRACTOR.
9. CONTRACTOR SHALL OBTAIN A COMPLETE SET OF PLANS & BE FAMILIAR W/ THE ENTIRE PROJECT IN ORDER TO UNDERSTAND THE COMPLETE SCOPE OF THE PROJECT.
10. SOIL & WASTE PIPE SHALL SLOPE 2% MINIMUM UNLESS OTHERWISE NOTED OR REQUIRED BY CODE.
11. ALL DRAIN & WATER LINES SHALL BE KEPT TIGHT TO THE UNDERSIDE OF EQUIPMENT & SECURED IN PLACE.
12. CONTRACTOR SHALL VERIFY THE LOCATION DIRECTION & SLOPE OF THE EXISTING SANITARY LINE TO THE BUILDING.
13. ALL VENTS THRU THE ROOF SHALL BE 3" MIN. UNLESS OTHERWISE NOTED.
14. ANY PENETRATIONS OF THE ROOF SHALL BE ON THE BACK SIDE & SHALL BE COORED W/ THE BUILDING OWNERS ROOFING CONTRACTOR BEFORE ANY WORK CAN PROCEED.
15. AT LEAST (1) SOIL OR WASTE STACK SHALL EXTEND FULL SIZE THROUGH THE ROOF & SHALL BE AS DIRECT AS POSSIBLE & FREE FROM SHARP ANGLES & TURNS.
16. ALL PLUMBING FIXTURE VENTS TO TERMINATE A MINIMUM OF 12 INCHES FROM ANY VERTICAL SURFACE & 10 FEET FROM ANY OUTSIDE AIR INTAKE.
17. ALL CLEAN OUTS SHALL BE INSTALLED WHERE READILY ACCESSIBLE. THE CONTRACTOR SHALL COORDINATE ALL CLEAN OUT LOCATIONS W/ EQUIPMENT, CABINETS, ETC. PRIOR TO ANY INSTALLATION.
18. CLEAN OUTS SHALL BE INSTALLED & EACH CHANGE OF DIRECTION OF THE BUILDING DRAIN OR HORIZONTAL WASTE OR SOILS LINE GREATER THAN 45 DEGREE PER OPC 108.3.3
19. ALL VALVES, TRAP PRIMERS, SHOCK ARRESTORS OR OTHER EQUIPMENT SHOULD BE INSTALLED ABOVE NON-ACCESSIBLE CEILING SHALL BE INSTALLED BEHIND AN ACCESS PANEL.
20. PROVIDE TEMPERATURE CONTROL VALVES & ALL HAND SINKS, MAINTAIN A MAX. TEMPERATURE OF 110 DEGREES MANUFACTURE WATER MODEL UG-B OR EQUAL WHICH MEETS ASSE 107 REQUIREMENTS OR INSTALL A TEMPER VALVE & THE WATER HEATER AS DETAILED.
21. INSTALLATION SHALL CONFORM TO THE ENERGY CODE FOR NEW COMMERCIAL BUILDINGS.
22. PRIOR TO COMMENCING WORK ON THIS PROJECT, CONTRACTOR SHALL VERIFY DEPTH, SIZE, LOCATION & CONDITION OF ALL EXISTING UTILITIES IN FIELD BEFORE STARTING WORK. SHOULD CONDITIONS EXIST OTHER THAN THOSE INDICATED WHICH WOULD CAUSE THE DESIGN TO BE ALTERED, CONTRACTOR SHALL NOTIFY TENANT IMMEDIATELY.
23. CONTRACTOR SHALL COORDINATE INSTALLATION OF PLUMBING WORK W/ ALL OTHER TRADES SO AS TO AVOID UNNECESSARY DELAY OR INTERFERENCES. CONTRACTOR TO REVIEW ARCHITECTURAL & EQUIPMENT SHEETS.
24. ALL PLUMBING WORK & MATERIALS SHALL BE INSTALLED IN ACCORDANCE W/ ALL APPLICABLE STATE & LOCAL ORDINANCES & REGULATIONS HAVING JURISDICTION OVER SUCH WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS BEFORE STARTING WORK. ALL PLUMBING WORK & MATERIALS SHALL MEET THE REQUIREMENTS OF THE LATEST EDITIONS OF THE LOCAL PLUMBING CODE UNLESS OTHERWISE REQUIRED BY THE DEPARTMENT OF BUILDING & SAFETY. OBTAIN & PAY FOR ALL PERMITS, FEES & INSPECTIONS REQUIRED BY GOVERNING AUTHORITIES. ALL PIPING TO BE CONSIDERED UNLESS NOTED OTHERWISE.
25. THE EQUIPMENT ROUGH-INS AS SHOWN ARE BASED UPON AVAILABLE INFORMATION HOWEVER IN SOME INSTANCES, THE TENANT OR SUPPLIER MAY SUBSTITUTE FOR THE EQUIPMENT ITEM IN SOME INSTANCES. THE CONTRACTOR SHALL VERIFY THE EQUIPMENT ITEM IN ALL CRITICAL DIRECTIONS W/ THE TENANT PRIOR TO CONSTRUCTION. FAILURE OF THE CONTRACTOR TO VERIFY THESE DIMENSIONS SHALL PLACE THE RESPONSIBILITY FOR ANY SUBSEQUENT RELOCATION DIRECTLY ON THE CONTRACTOR.
26. INSTALL SHUTOFF VALVES ON ALL SUPPLY, HOT & COLD BRANDED WATER LINES TO FIXTURE. ALSO PROVIDE A DRAIN VALVE & EACH FIXTURE.
27. ALL VALVES, UNIONS, ETC. SHALL BE THE SAME SIZE AS PIPE UNLESS OTHERWISE INDICATED ON DRAWINGS.
28. ALL EXPOSED PLUMBING LINES UNDER THE SINK SHALL BE PROTECTED BY INSULATION & COMPLY W/ ADA404.4.9.4
29. PROVIDE BACK FLOW PREVENTER (WILKINS, MODEL 575X, 1" WATER LINE) FOR SERVICE INTO THE BUILDING & VACUUM BREAK & THE WATER HEATERS OR EQUAL.
30. THE INSTALLATION & MATERIALS FOR THE PLUMBING SYSTEM SHALL COMPLY W/ THE OHIO PLUMBING CODE.
31. THE WATER HEATER SHALL BE PROTECTED BY AN APPROVED RELIEF VALVE & SHALL BE INSTALLED IN ACCORDANCE W/ THE OHIO PLUMBING CODE. THE WATER HEATER SHALL BE PIPED TO A FLOOR DRAIN, WASTE PIPING OR SERVICE SINK W/ A MIN. 2" AIR GAP. VERIFY.
32. PER OPC 608.3, "BEVICES, APPURTENANCES, APPLIANCES AND APPARATUS, ALL DEVICES, APPURTENANCES, APPLIANCES AND APPARATUS INTENDED TO SERVE SOME SPECIAL FUNCTION SUCH AS STERILIZATION, DISTILLATION, PROCESSING, COOLING, OR STORAGE OF ICE OR FOODS, AND THAT CONNECT TO THE WATER SUPPLY SYSTEM SHALL BE PROVIDED WITH PROTECTION AGAINST BACKFLOW AND CONTAMINATION OF THE WATER SUPPLY SYSTEM THAT HANDLE OR TREAT POTABLE WATER SHALL BE PROTECTED AGAINST CONTAMINATION." AN APPROVED BACK FLOW PREVENTION DEVICE SHALL BE SELECTED FROM OPC TABLE 608.1
33. PER ASHRAE 90.1 14.6 HEAT TRAPS - VERTICAL PIPE SEEPS, SPRING STORAGE WATER HEATERS AND STORAGE TANKS NOT HAVING INTERNAL HEAT TRAPS AND SERVING A NONREGULATING SYSTEM SHALL HAVE HEAT TRAPS ON BOTH THE INLET AND OUTLET PIPING AS CLOSE AS PRACTICAL TO THE STORAGE TANK. A HEAT TRAP IS A MEANS TO PREVENT BACKFLOW OF WATER INTO THE WATER SUPPLY SYSTEM. HEAT TRAPS SHALL BE EITHER A DEVICE SPECIFICALLY DESIGNED FOR THE PURPOSE OR THE RAIN THE REMANENT OF TUBING THAT FORMS A LOOP OF 360 DEGREES OR PIPING THAT FROM THE POINT OF CONNECTION TO THE WATER HEATER (INLET OR OUTLET) INCLUDES A LENGTH OF PIPE DIRECTED DOWNWARD BEFORE CONNECTION TO THE VERTICAL INCLUDING THE SUPPLY WATER OR HOT WATER DISTRIBUTION SYSTEM, AS APPLICABLE.
34. THE PLUMBING CONTRACTOR HAS THE RIGHT TO SUBSTITUTE THE MANUFACTURER OF THE EQUIPMENT OR FIXTURES AS LONG AS THE EQUIPMENT OR FIXTURES MEETS OR EXCEEDS THE EQUIPMENT REQUIREMENTS AS INDICATED & HAS APPROVAL FROM THE TENANT BEFORE ORDERING.
35. THE AUTO VENT SHALL BE MIN. 4" ABOVE THE DRAINAGE PIPE IF CONNECTS TO INSTALL IN VERTICAL UPRIGHT POSITION.

**PLUMBING ACCESSIBILITY NOTES**

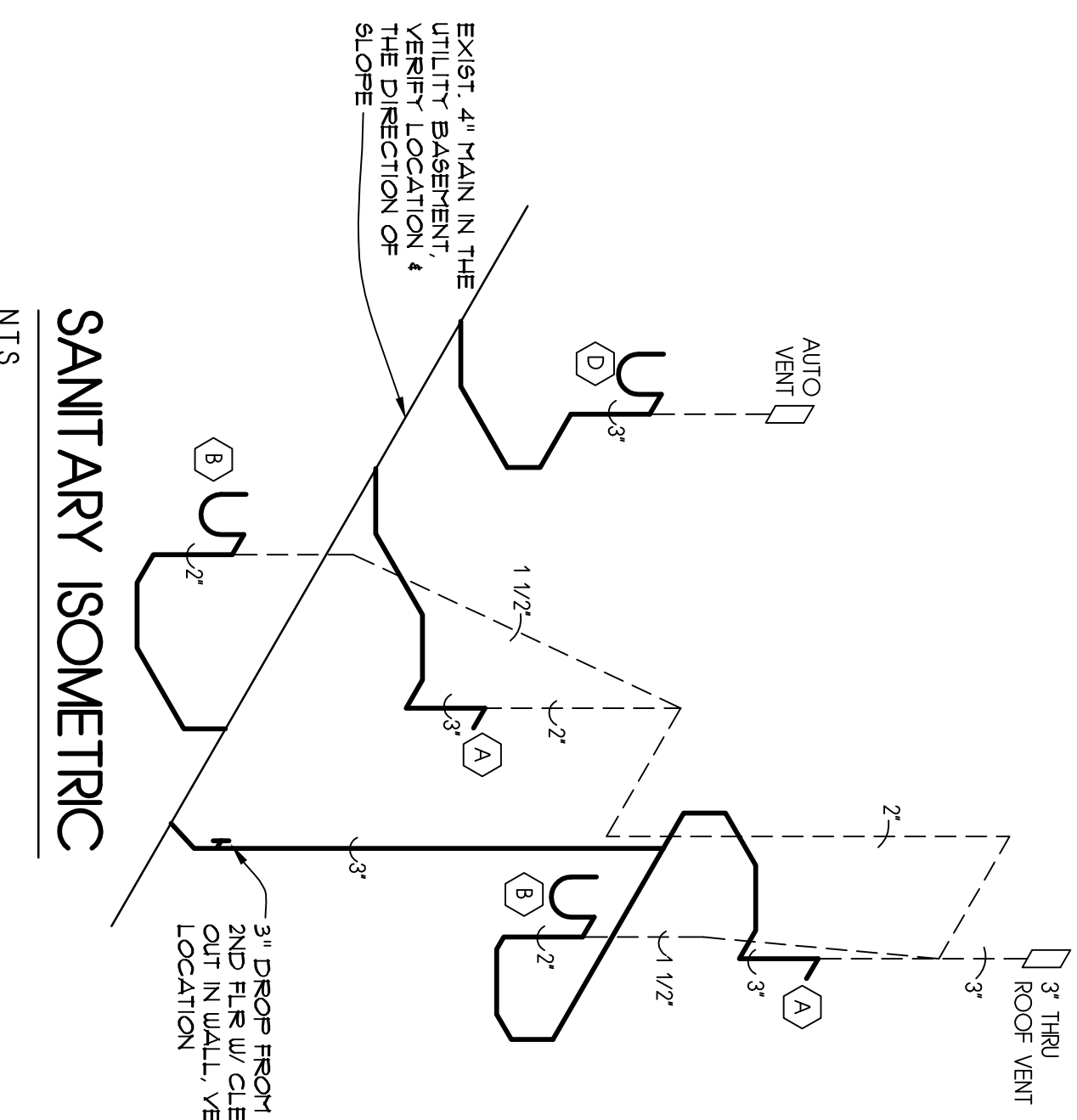
1. TOILET FLUSH CONTROLS SHALL BE OPERABLE W/ ONE HAND & SHALL NOT REQUIRE TYPING OR REACHING. CONTROLS SHALL BE MOUNTED NO MORE THAN 44" ABOVE THE FLOOR. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LBS/FT.
2. HOT WATER & DRAIN PIPES UNDER LAVATOIRES SHALL BE INSULATED OR OTHERWISE COVERED. THESE SHALL BE NO SHAPE OR ABSORBE SURFACE UNDER LAVATOIRES.
3. FAUCET CONTROLS & OPERATING MECHANISMS SHALL BE OPERABLE W/ ONE HAND & SHALL NOT REQUIRE TYPING OR REACHING. CONTROLS SHALL BE NO GREATER THAN 44" ABOVE THE FLOOR. LEVER FAUCET TYPE & ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGN. SELF CLOSING VALVES ARE ALLOWED IF THE FAUCETS REMAIN OPEN FOR AT LEAST 10 SECONDS.
4. FLUSH HANDLES SHALL BE ON THE WIDE SIDE OF ROOM.

SYMBOL	FIXTURE	DESCRIPTION	TRAP/VENT	DRAIN/DOWN/DUMP	REMARKS			
(A)	ADA W/ CLOS	AMERICAN STANDARD "4" x 16 1/2" ELONGATED BOWL (16" GALLON) SEAT, GROMMET #5 OR CHAIR. RESPOC OPEN FRONT SEAT LESS COVER OR EQUAL.	3"	2"	4"	1/2"	-	MOUNT AT 8" AFF.
(B)	ADA SINK (WALL)	AMERICAN STANDARD WARE, CHAIR USER LAVATORY" #40203 W/ HERITAGE TUB HANDLE GOOSENECK FAUCET #82034H W/ GRID DRAIN	1 1/2"	1 1/4"	2"	1/2"	1/2"	MOUNT TOP # 3/4" AFF.
(C)	HOT SINK (WALL)	FLAT TOP SINK #7859 - 22 1/2" W/ BURNER GUARD #E-117-1A 1 1/2" x 1 1/2" x 1 1/2" HOSE & HOSE BRACKET	3"	1 1/2"	3"	3/4"	3/4"	-
(D)	5 GAL. WATER HEATER	1-0.5" SHUT-OFF, 1/2" NPT ELECTRICAL WATER HEATER 5 GALLON WATER HEATER WITH RELIEF VALVE & THERMOSTAT. PROVIDE EXPANSION TANK PIPE FULL SIZE DISCHARGE TO HOT SINK W/ APPROVED AIR GAP.	-	-	-	3/4"	3/4"	14
(E)	FLOOR DRAIN	2" X 1/2" TRAP PRIMER TYPE "B" STRAINER	3"	-	-	-	-	-

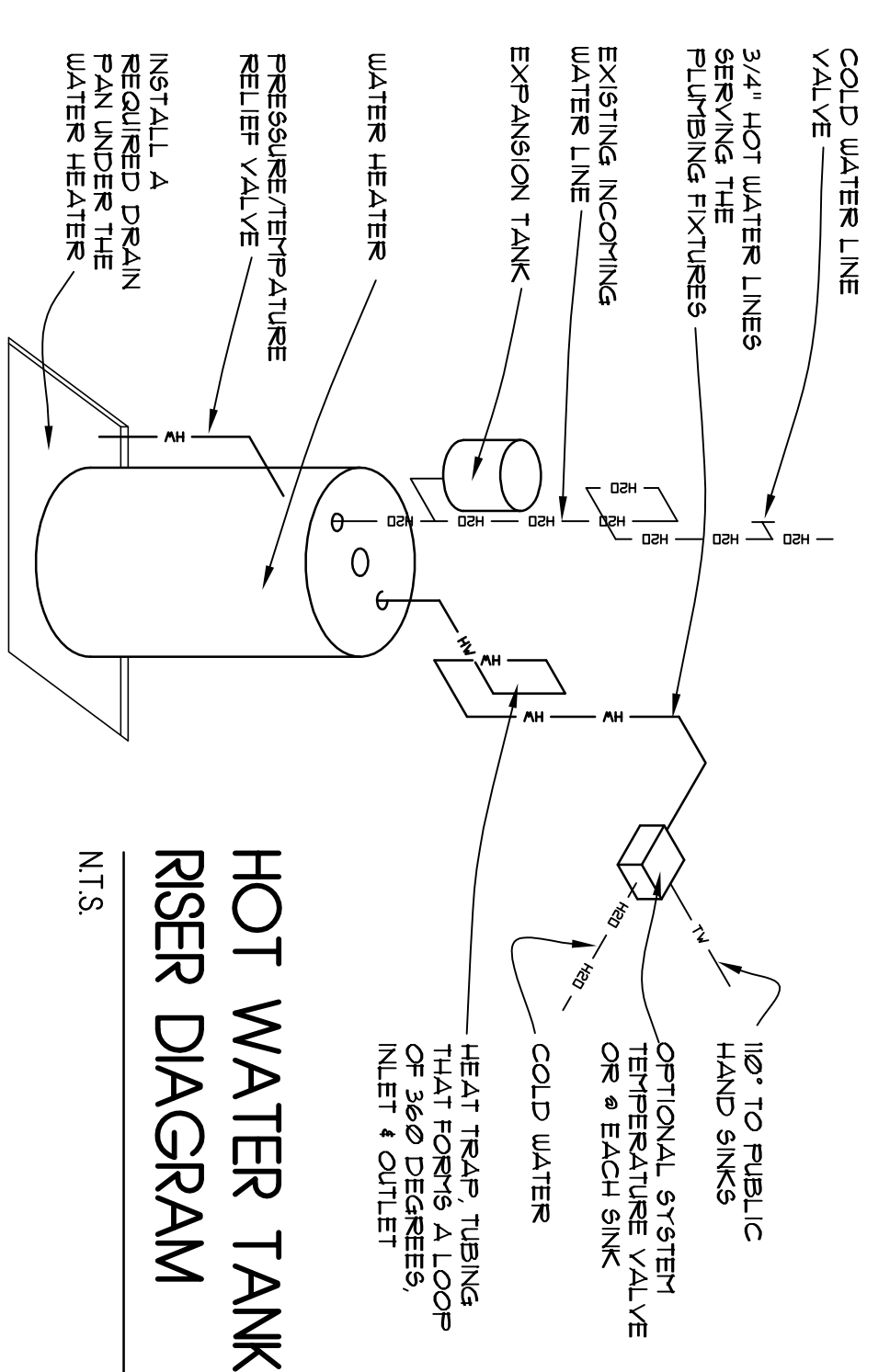
**\*\* ALTERNATE PLUMBING FIXTURES MAY BE SUBSTITUTED W/ OWNER APPROVAL. ALL PLUMBING FIXTURES SHALL BE INSTALLED IN ACCORDANCE W/ MANUFACTURERS SPECS.**

**REMARKS:**

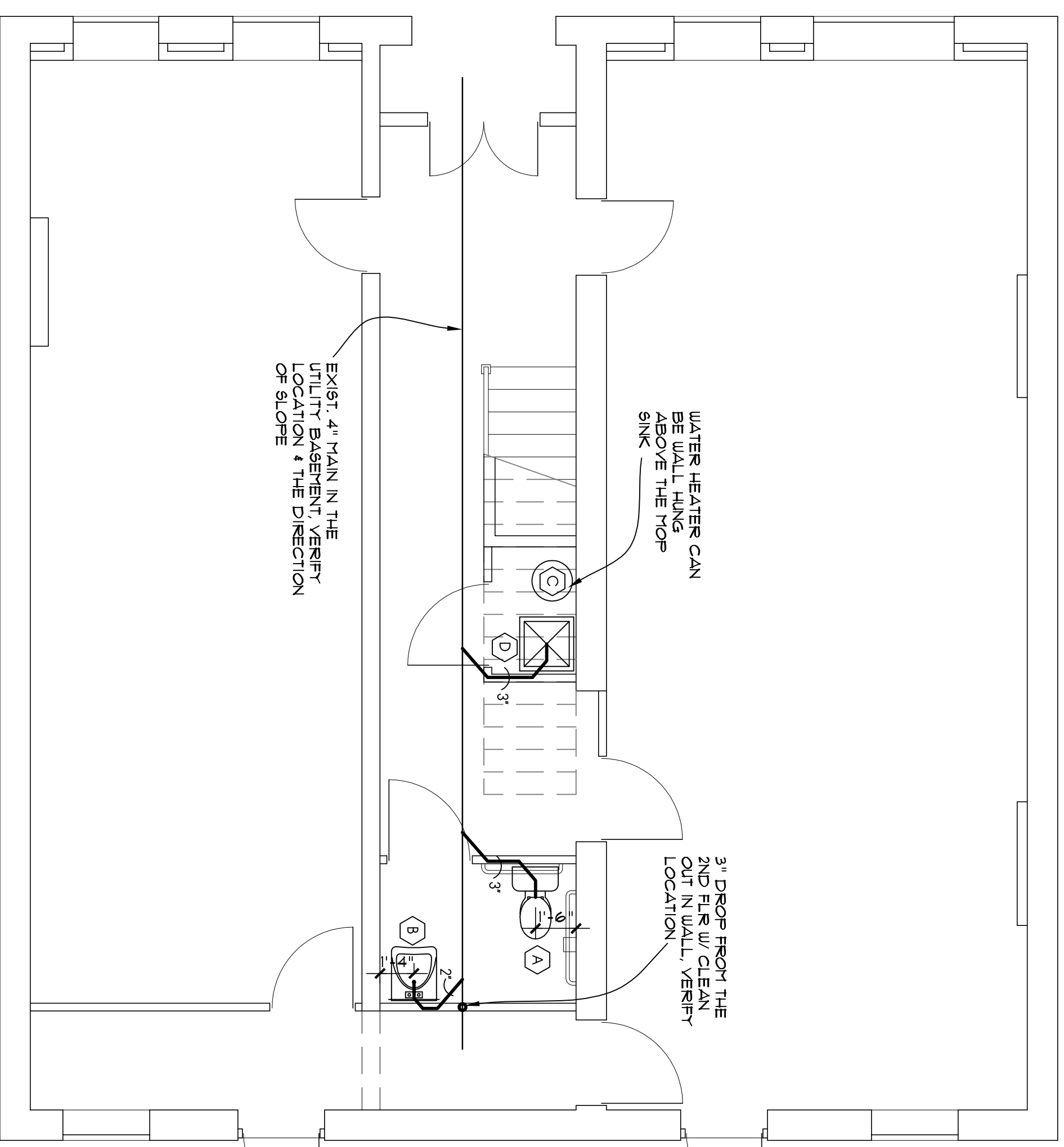
1. CHROME COATED SUPPLY W/ STOP & CHROME FLATED BRASS ESCUTCHEON PLATES AT WALL PENETRATIONS.
2. 1 1/4" CHROME FLATED CAST BRASS TAILPIECE & TRAP W/ CLEANOUT PLUS CHROME FLATED COPPER SUPPLIES W/ STOP, CHROME FLATED BRASS ESCUTCHEON PLATES AT WALL PENETRATIONS.
3. INSULATE TRAPS & SUPPLIES PER ADA GUIDELINES. MOUNT TOP OF FRONT RIM AT 34" AFF.
4. DRAIN PIPE SHALL EXTEND TO 2" ABOVE FLOOR DRAIN MAINTAIN 2" AIR GAP.



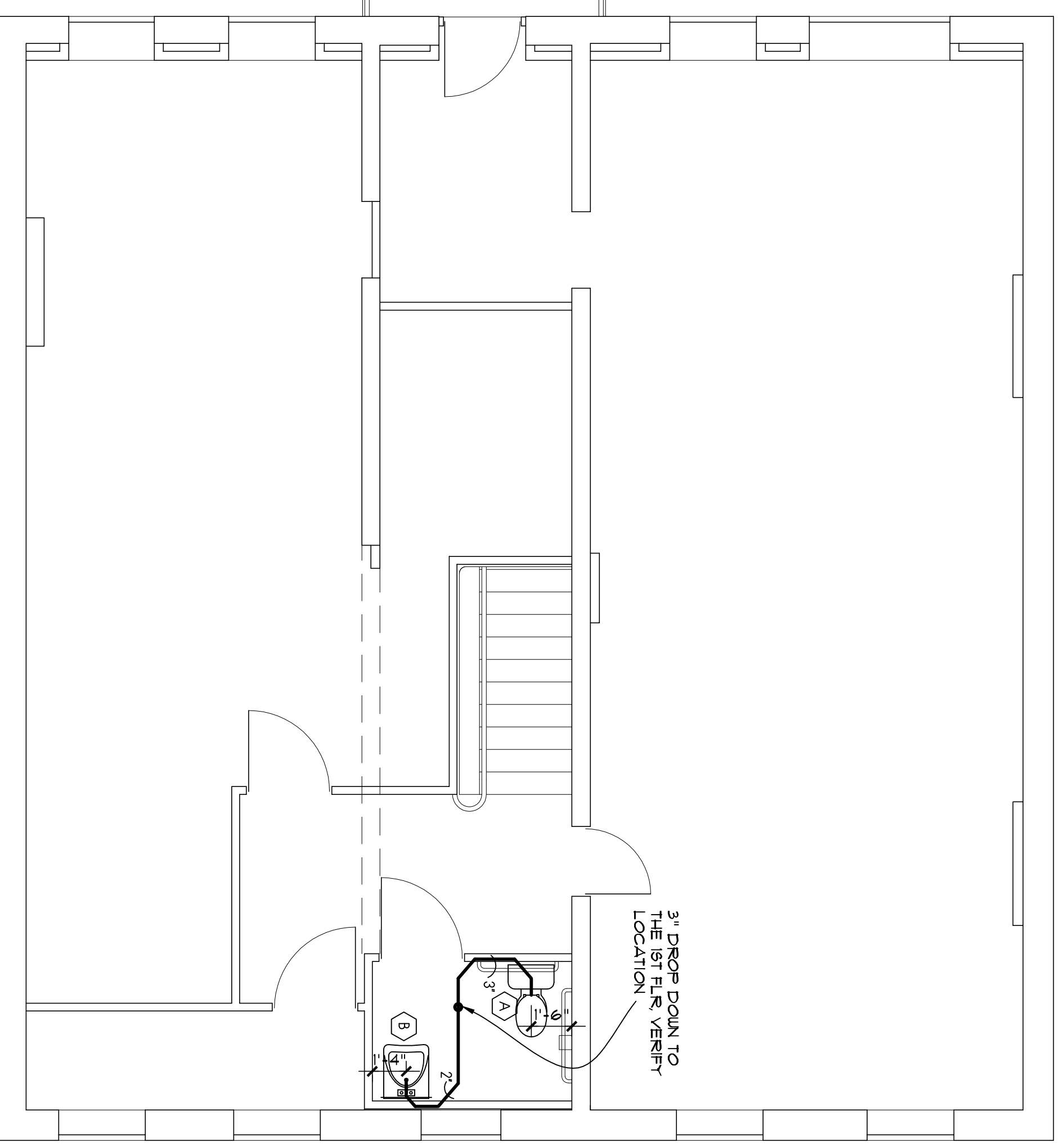
**SANITARY ISOMETRIC**  
NTS.



**HOT WATER TANK RISER DIAGRAM**  
NTS.

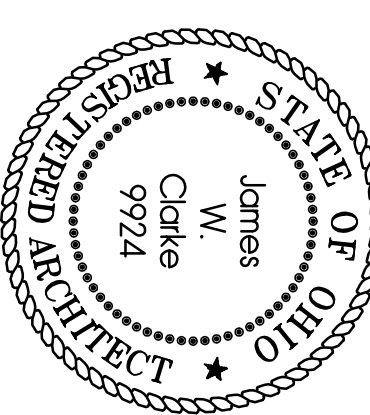


**FIRST FLOOR PLUMBING PLAN**  
1/4" = 1'-0"



**SECOND FLOOR PLUMBING PLAN**  
1/4" = 1'-0"

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**DATE:** JULY 27, 2011

**REVISION DATES:**

**PROJECT:**  
OFFICE BUILDING  
94 N. SANDUSKY ST.  
DELAWARE, OHIO 43015

**PROJECT NUMBER:** CAD0199  
**SHEET TITLE:**

**PLUMBING PLANS/NOTES**

**SHEET NUMBER:** P1