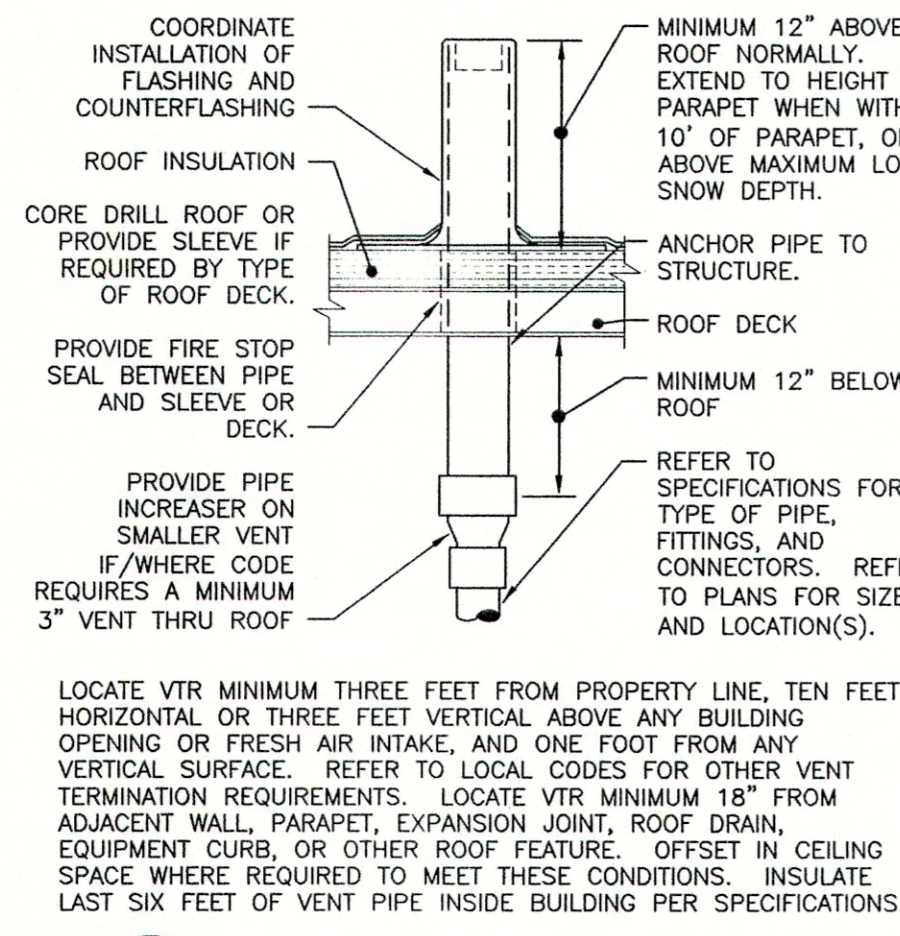


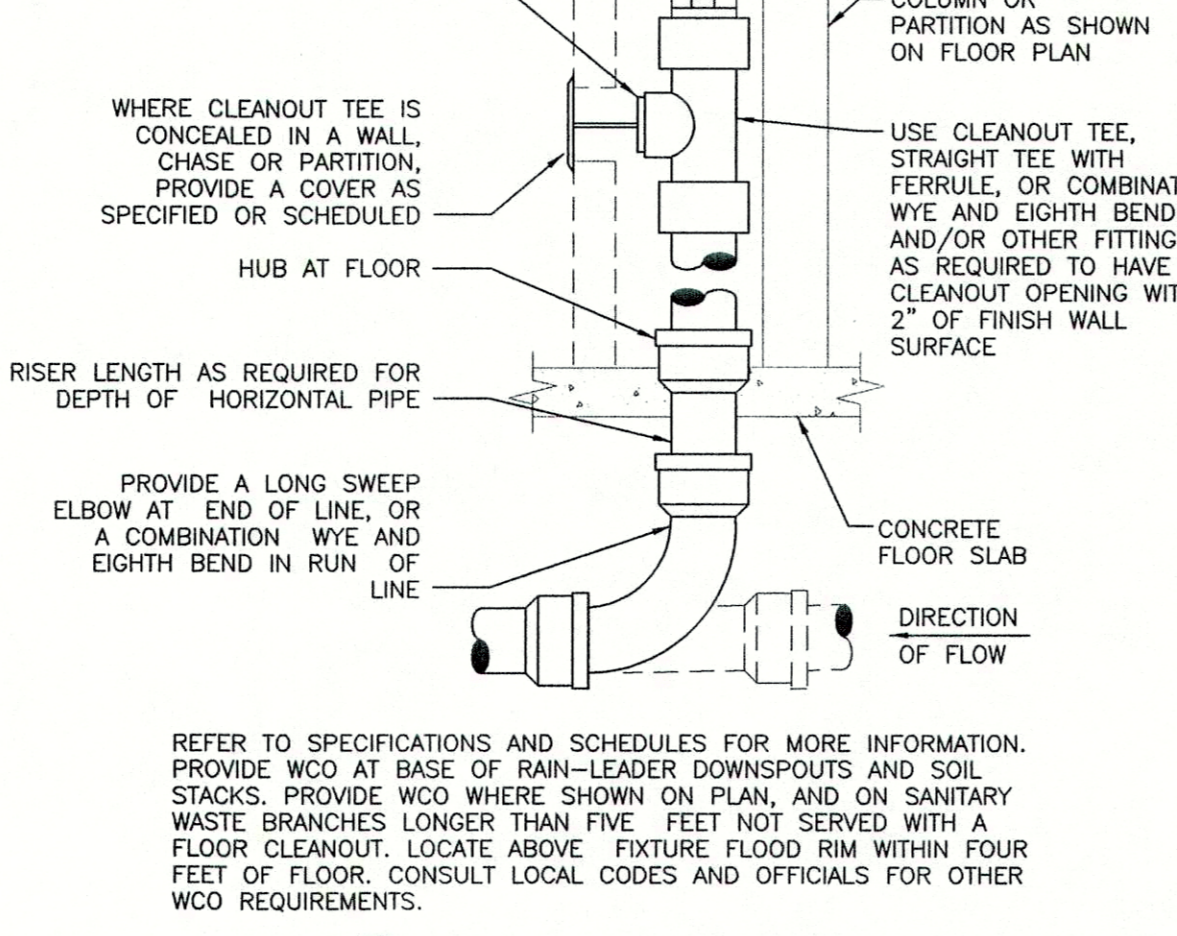
5 GAS METER SETTING
NO SCALE

VERIFY REQUIREMENTS FOR METERING AND PIPING WITH GAS COMPANY. COORDINATE WITH GAS COMPANY WITH REGARD TO INSTALLATION OF OTHER PLUMBING UTILITIES IN VICINITY, IF ANY. APPLY FOR AND PAY GAS COMPANY FEES FOR INSTALLATION. USE WELDED OR SCREWED PIPE AND FITTINGS PER PLUMBING SPECIFICATIONS.



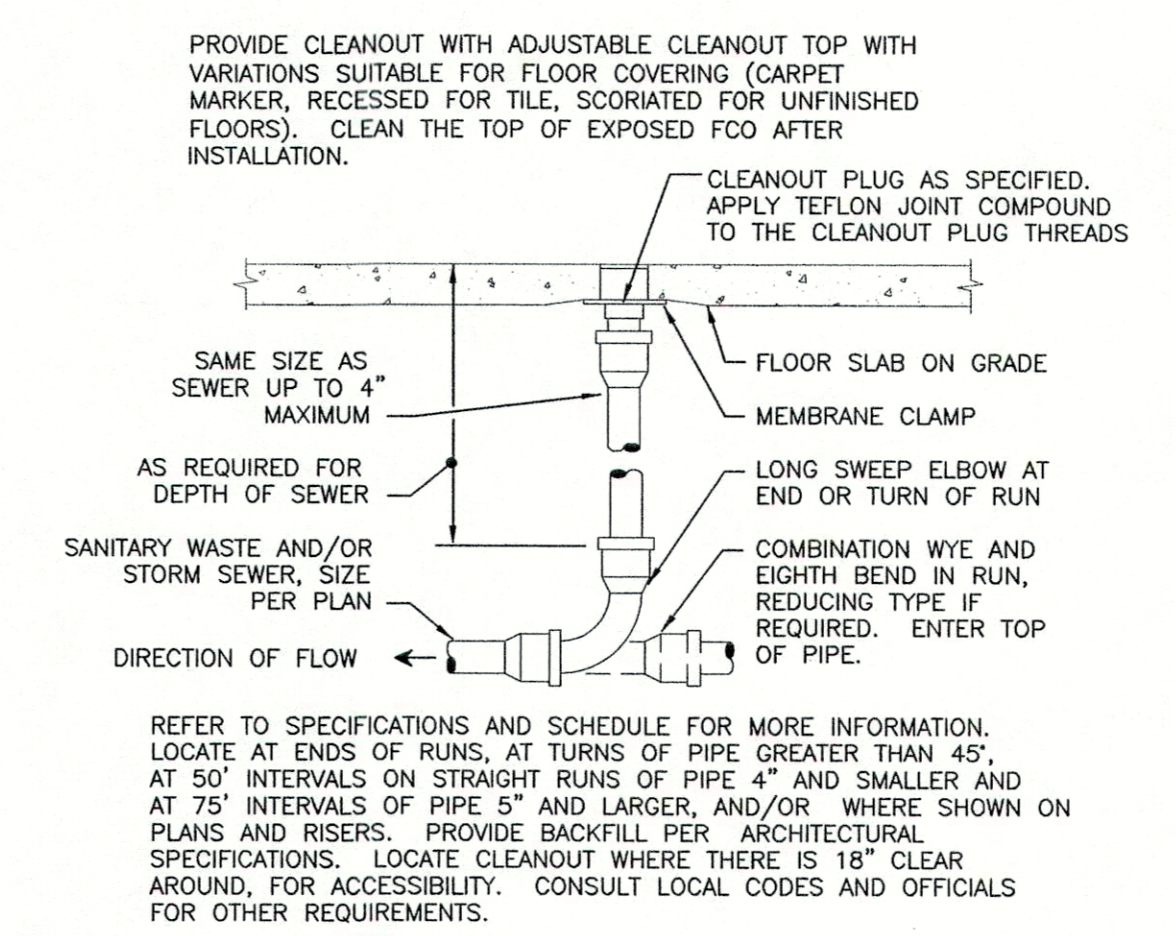
4 VENT THRU ROOF ("VTR")
NO SCALE

LOCATE VTR MINIMUM THREE FEET FROM PROPERTY LINE, TEN FEET HORIZONTAL OR THREE FEET VERTICAL ABOVE ANY BUILDING OPENING OR FRESH AIR INTAKE, AND ONE FOOT FROM ANY VERTICAL SURFACE. REFER TO LOCAL CODES FOR OTHER VENT TERMINATION REQUIREMENTS. LOCATE VTR MINIMUM 18" FROM ADJACENT WALL, PARAPET, EXPANSION JOINT, ROOF DRAIN, EQUIPMENT CURB, OR OTHER ROOF FEATURE. OFFSET IN CEILING SPACE WHERE REQUIRED TO MEET THESE CONDITIONS. INSULATE LAST SIX FEET OF VENT PIPE INSIDE BUILDING PER SPECIFICATIONS.



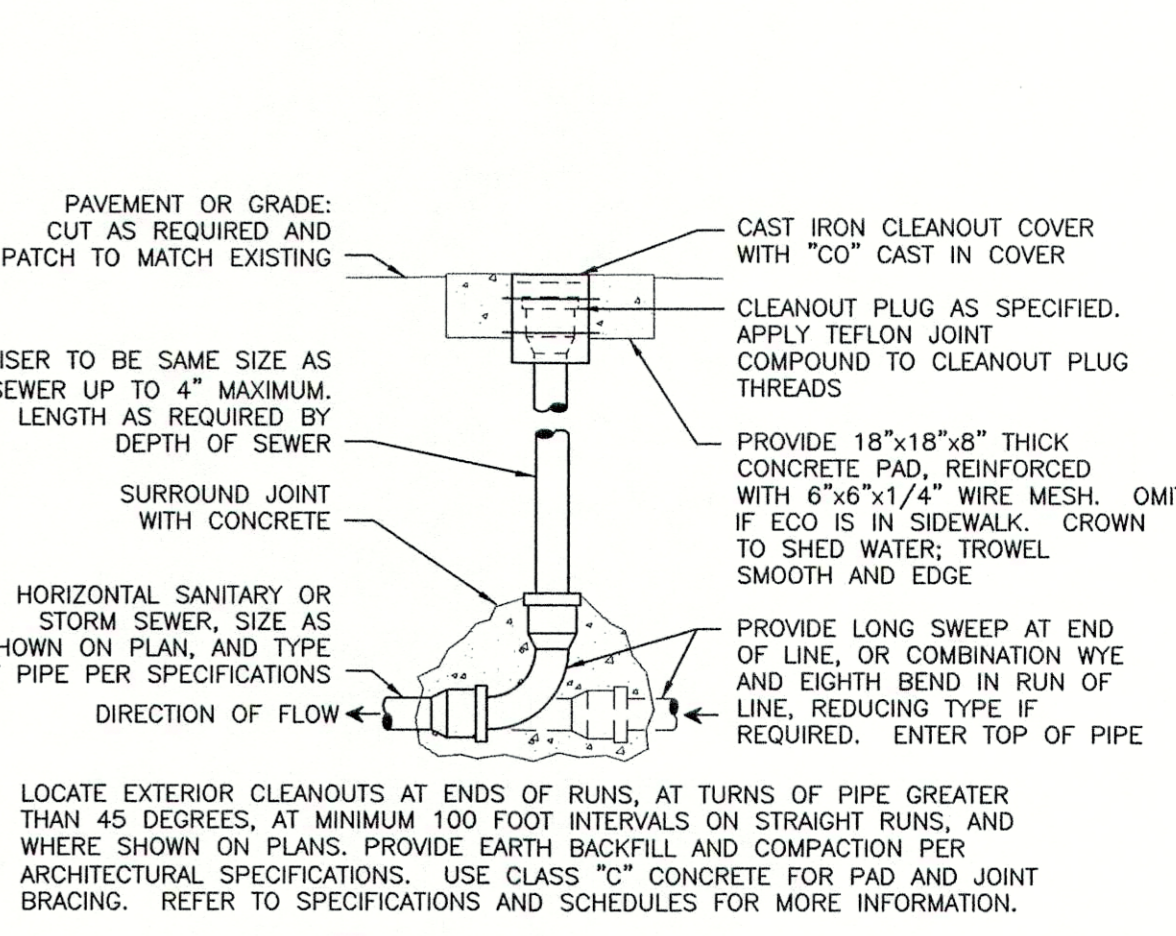
3 WALL CLEANOUT
NO SCALE

REFER TO SPECIFICATIONS AND SCHEDULES FOR MORE INFORMATION. LOCATE AT ENDS OF RUNS, AT TURNS OF PIPE GREATER THAN 45°, AT 50' INTERVALS ON STRAIGHT RUNS OF PIPE 4" AND SMALLER AND AT 75' INTERVALS OF PIPE 5" AND LARGER, AND/OR WHERE SHOWN ON PLANS AND RISERS. PROVIDE BACKFILL PER ARCHITECTURAL SPECIFICATIONS. LOCATE CLEANOUT WHERE THERE IS 18" CLEAR AROUND, FOR ACCESSIBILITY. CONSULT LOCAL CODES AND OFFICIALS FOR OTHER REQUIREMENTS.



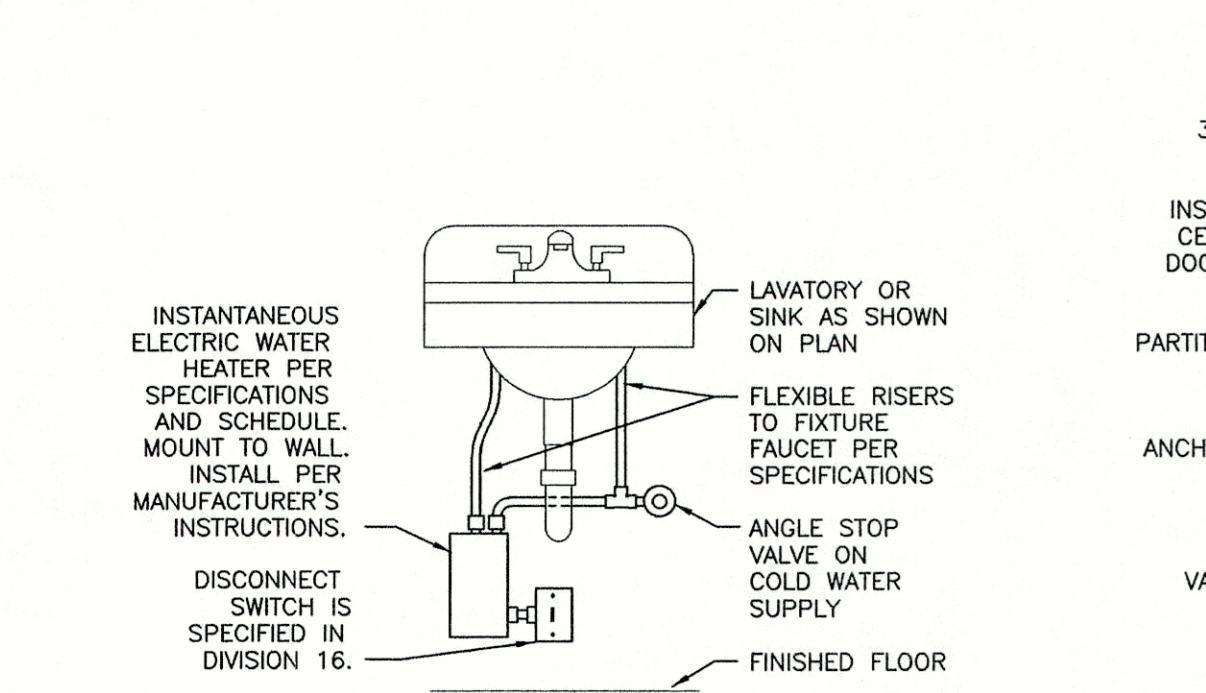
2 FLOOR CLEANOUT
NO SCALE

REFER TO SPECIFICATIONS AND SCHEDULES FOR MORE INFORMATION. LOCATE AT ENDS OF RUNS, AT TURNS OF PIPE GREATER THAN 45°, AT 50' INTERVALS ON STRAIGHT RUNS OF PIPE 4" AND SMALLER AND AT 75' INTERVALS OF PIPE 5" AND LARGER, AND/OR WHERE SHOWN ON PLANS AND RISERS. PROVIDE BACKFILL PER ARCHITECTURAL SPECIFICATIONS. LOCATE CLEANOUT WHERE THERE IS 18" CLEAR AROUND, FOR ACCESSIBILITY. CONSULT LOCAL CODES AND OFFICIALS FOR OTHER REQUIREMENTS.



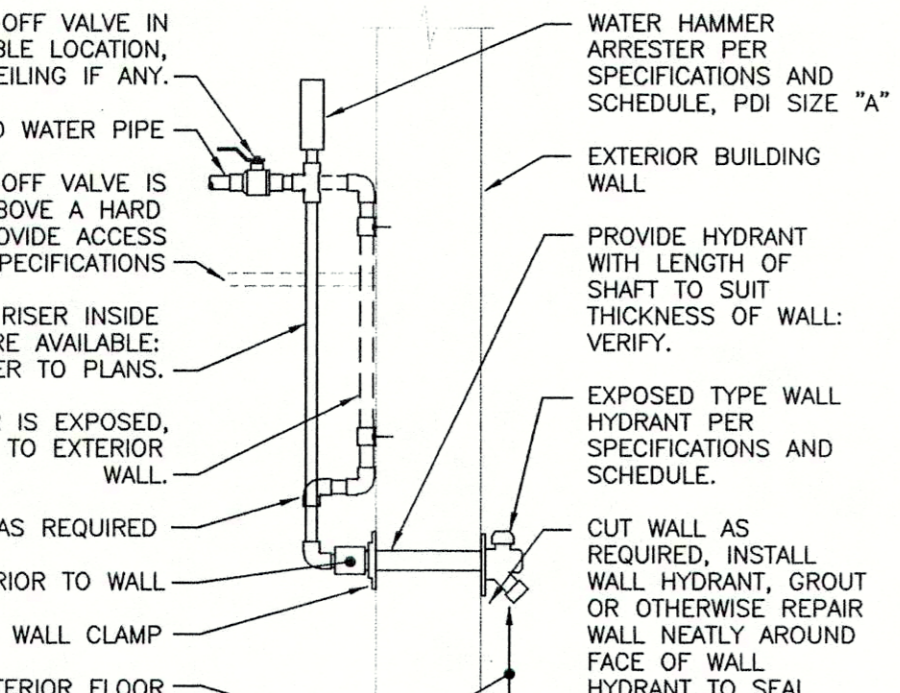
1 EXTERIOR CLEANOUT
NO SCALE

LOCATE EXTERIOR CLEANOUTS AT ENDS OF RUNS, AT TURNS OF PIPE GREATER THAN 45 DEGREES, AT MINIMUM 100 FOOT INTERVALS ON STRAIGHT RUNS, AND WHERE SHOWN ON PLANS. PROVIDE EARTH BACKFILL AND COMPACTION PER ARCHITECTURAL SPECIFICATIONS. USE CLASS "C" CONCRETE FOR PAD AND JOINT BRACING. REFER TO SPECIFICATIONS AND SCHEDULES FOR MORE INFORMATION.



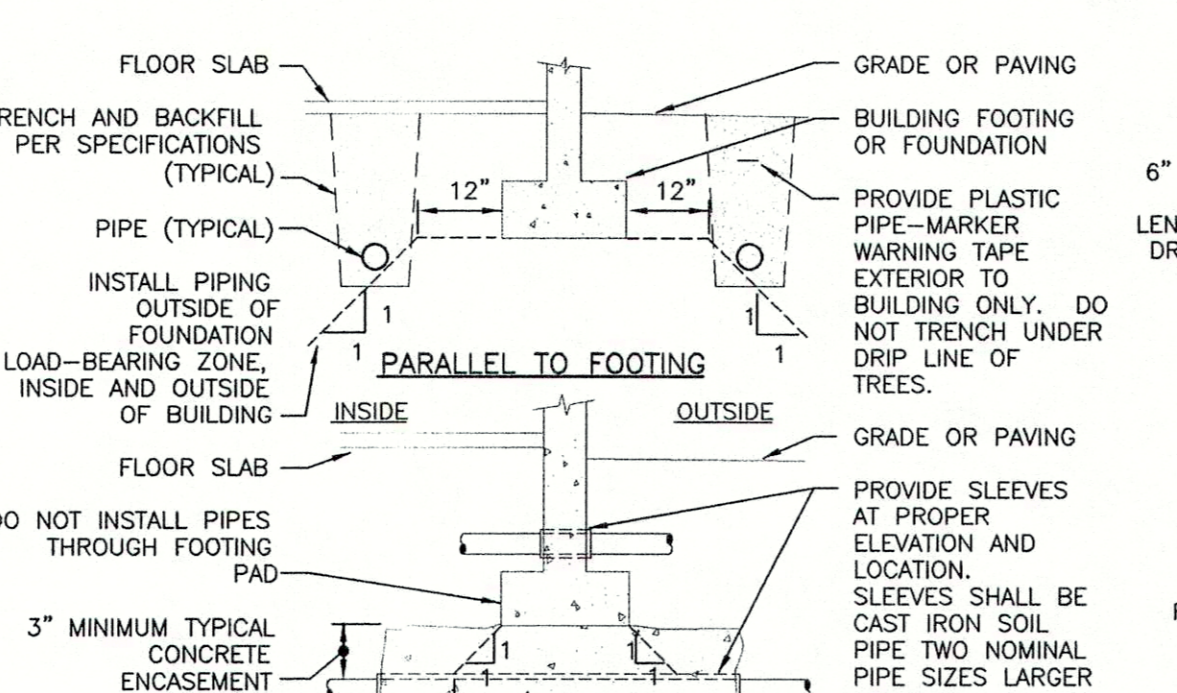
10 INSTANTANEOUS WATER HEATER
NOT TO SCALE

REFER TO SPECIFICATIONS, SCHEDULES, AND NOTES FOR MORE INFORMATION. PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. VERIFY CONNECTION SIZES AND LOCATIONS PER MANUFACTURER'S REQUIREMENTS, AND INSTALL PER MANUFACTURER'S INSTRUCTIONS. REFER TO FLOOR PLANS FOR PIPE SIZES. IF LAVATORY OR SINK IS TO BE ADA COMPLIANT, DO NOT MOUNT WATER HEATER TO ENCRICH ON ADA-REQUIRED SPACE. PROVIDE T&P RELIEF VALVE ON WATER HEATER. OUTLET ONLY IF REQUIRED BY LOCAL AUTHORITIES, AND DISCHARGE WERE DIRECTED BY AUTHORITIES.



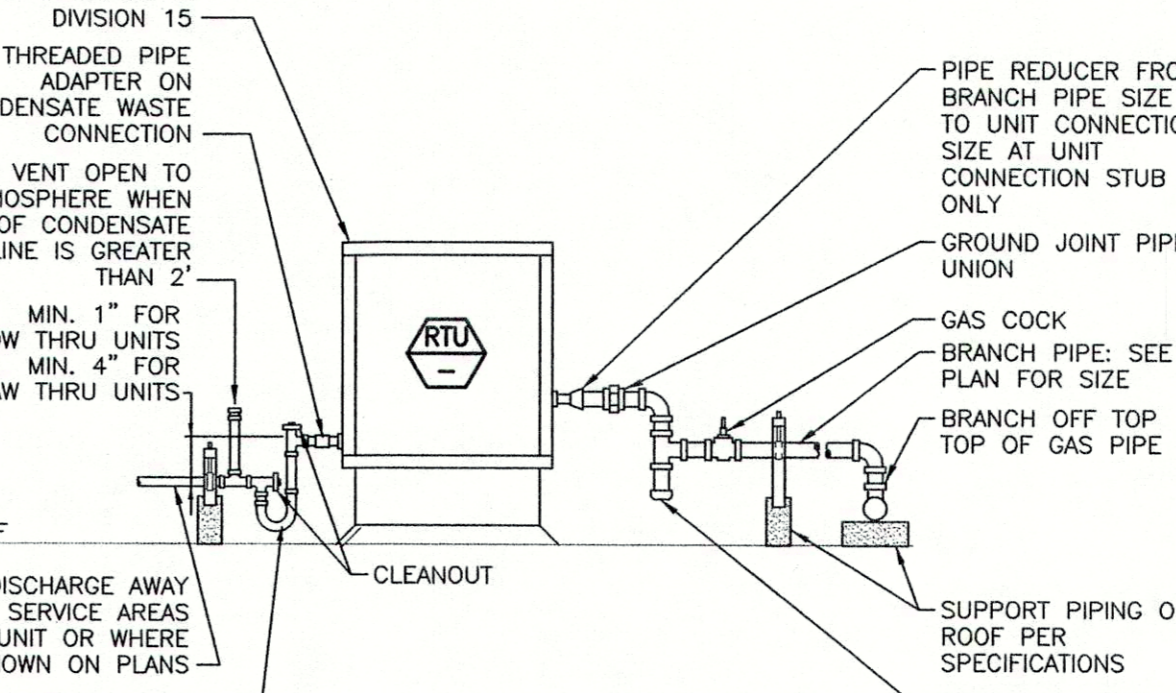
9 NON-FREEZE WALL HYDRANT
NO SCALE

ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST AS REQUIRED TO SUIT FIELD CONDITIONS. INSTALL PER MANUFACTURER'S INSTRUCTIONS. IN NON-FREEZING CLIMATES, PIPE MAY BE INSTALLED CONCEALED IN EXTERIOR WALL RATHER THAN EXTERIOR TO WALL AS SHOWN. REFER TO PLANS FOR LOCATION.



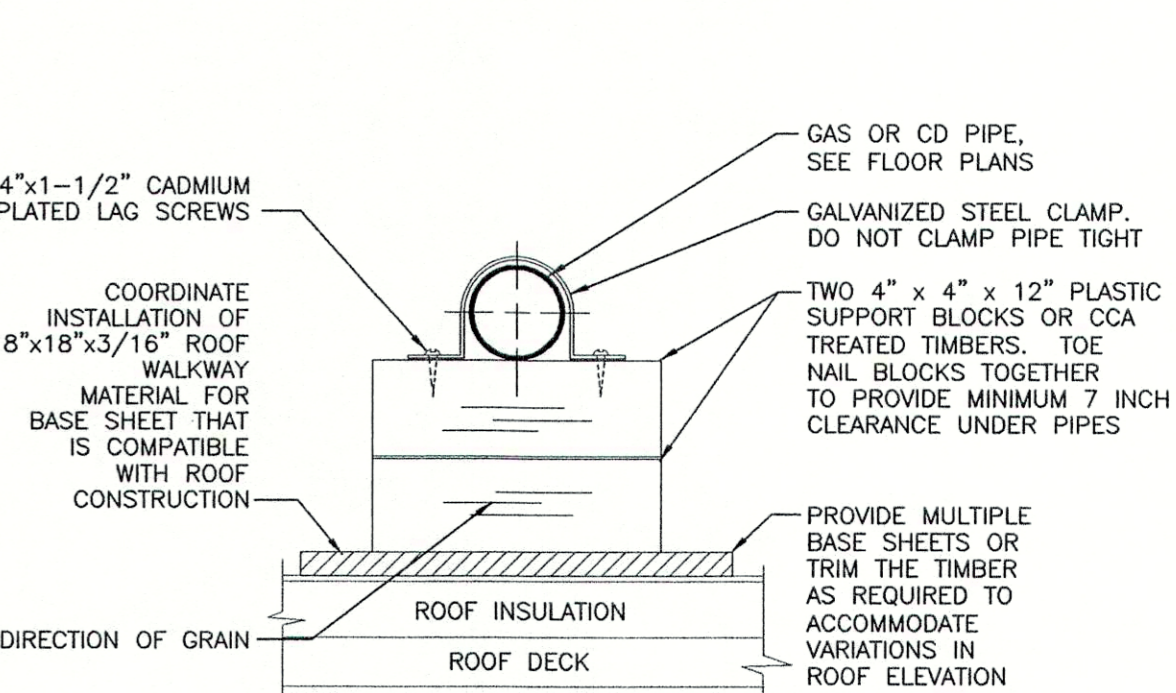
8 PIPE AND TRENCH LOCATION
NO SCALE

VERIFY EXCAVATION CONDITIONS (SOIL/ROCK) WITH GEOTECHNICAL REPORT AND/OR SITE INVESTIGATIONS. REFER TO SPECIFICATIONS FOR OTHER CONDITIONS. DO NOT INSTALL PIPES UNDER INTERIOR BUILDING SPREAD FOOTINGS OR PILE CAPS. COORDINATE WITH AFFECTED CONTRACTORS PRIOR TO THE START OF WORK.



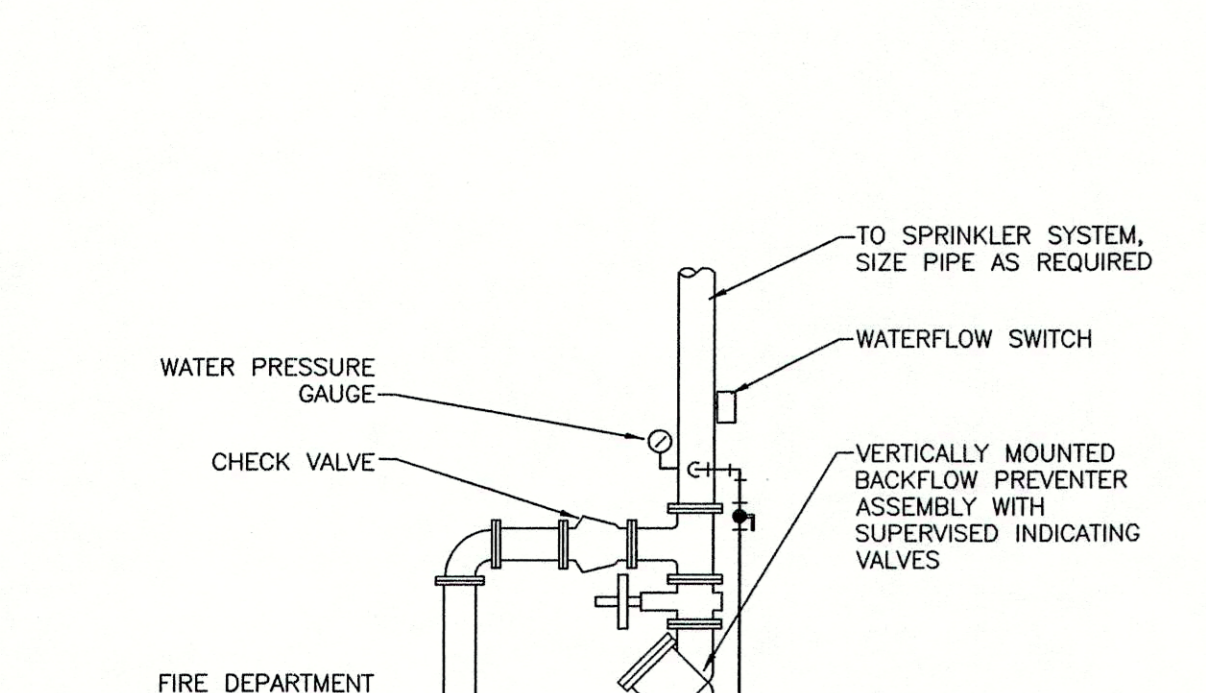
7 CONNECTIONS TO ROOFTOP UNIT
NOT TO SCALE

PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST AS REQUIRED. VERIFY CONNECTION LOCATIONS BEFORE INSTALLING PIPE RUNS. REFER TO SPECIFICATIONS FOR MORE INFORMATION. DO NOT PROVIDE TRAP ON UNITS WHICH HAVE AN INTERNAL TRAP.



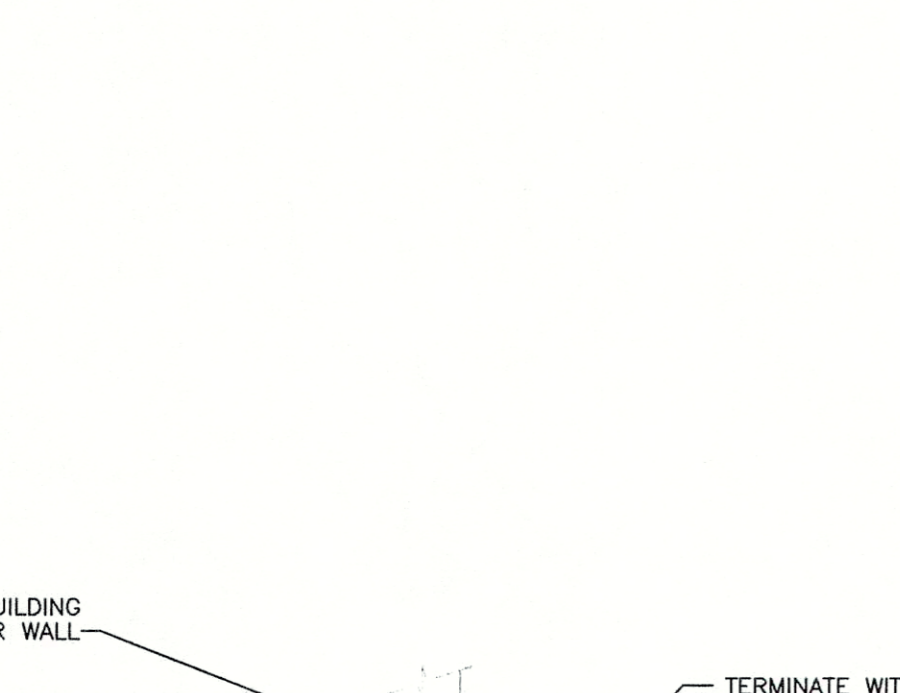
6 SUPPORT OF PIPE ON ROOF
NO SCALE

LOCATE SUPPORTS AT 4' SPACING FOR PLASTIC PIPE AND AT THE FOLLOWING SPACING FOR METAL PIPE: 5"-16" 4"-14" 3"-12" 2"-1/2"-11" 2"-10" 1-1/2"-9" 1-1/4"-8" 1"-7" 3/4"-6". PLACE A SUPPORT AS CLOSE AS POSSIBLE TO EACH ELBOW AND TEE. PLACE BASE SHEETS ON ROOFING BEFORE GRAVEL IF ANY. SET BLOCKS FREE ON BASE SHEETS. STACK BLOCKS AND NAIL THEM TOGETHER WHERE REQUIRED TO ELEVATE PIPING. INSTALL PIPE TO ALLOW FOR EXPANSION AND CONTRACTION.



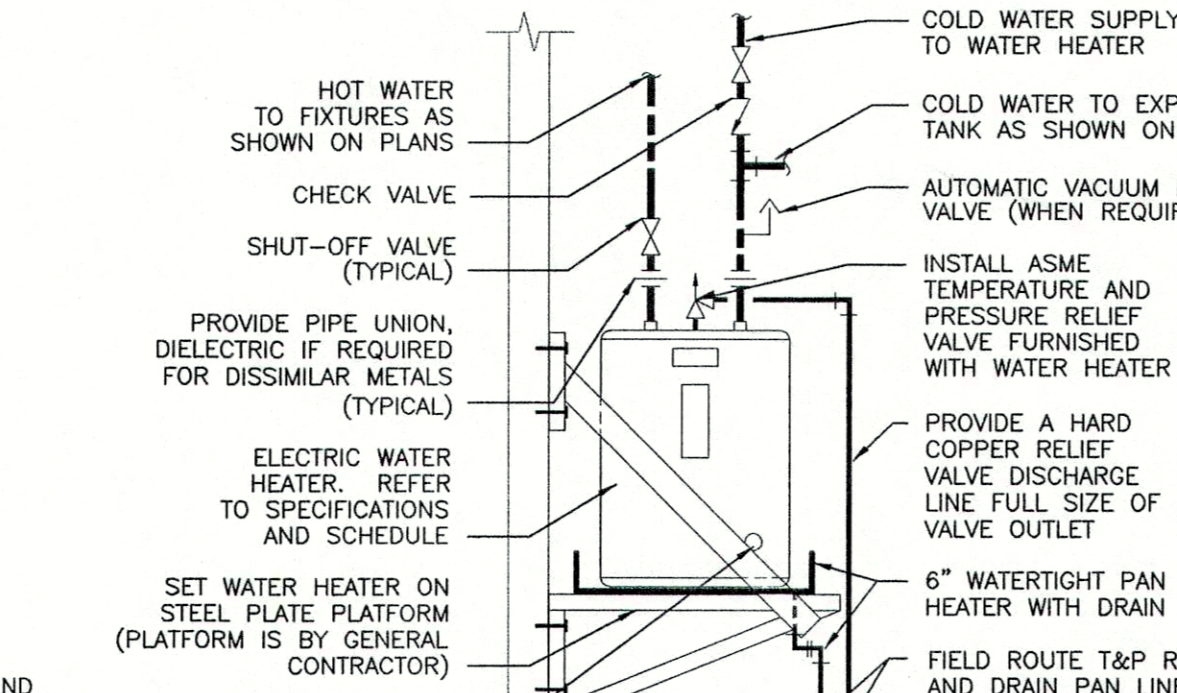
15 FIRE PROTECTION RISER-WET PIPE
NO SCALE

ARRANGEMENT SHOWN IS SCHEMATIC. MODIFY TO SUIT CONDITIONS AND MEET NFPA AND LOCAL CODE REQUIREMENTS. PROVIDE ANY REQUIRED CERTIFICATION OF TEST OF BACKFLOW PREVENTER TO LOCAL AUTHORITIES. COORDINATE INSTALLATION OF ALARM DEVICES WITH OTHER TRADES. PROVIDE SPARE SPRINKLER CABINET WITH SPRINKLERS AND WRENCHES. PROVIDE BELL ON EXTERIOR WALL.



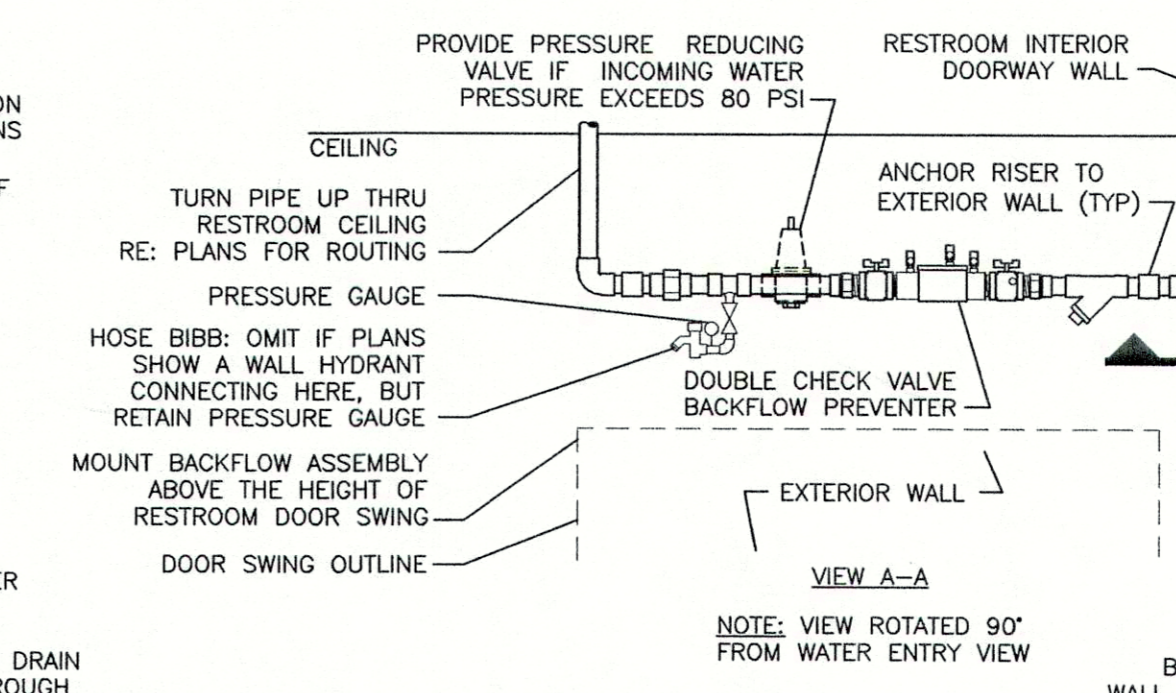
14 FIRE WATER SERVICE ENTRY PIPE
NO SCALE

PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. REFER TO "PIPE AND TRENCH LOCATION DETAIL" FOR CONDITIONS AT FOUNDATION. VERIFY FOUNDATION WITH ARCHITECTURAL DRAWINGS. COORDINATE WHO IS TO PROVIDE THE FIRE SERVICE ENTRY PIPE WITH THE GENERAL CONTRACTOR OR CONSTRUCTION MANAGER PRIOR TO SUBMITTING BID. REFER TO THE FIRE PROTECTION SPECIFICATIONS FOR MORE INFORMATION.



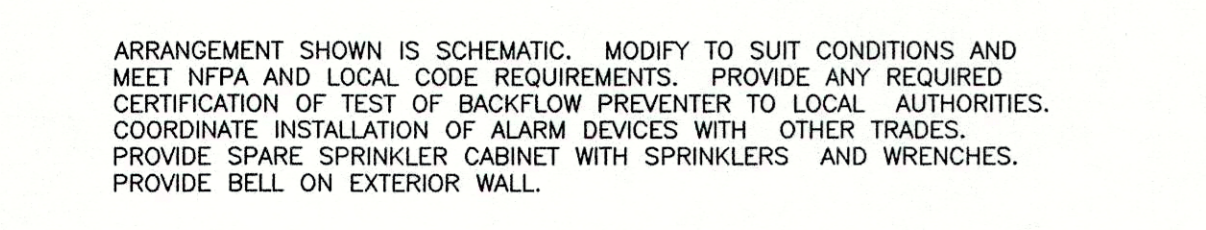
12 SHELF MOUNTED WATER HEATER
NO SCALE

REFER TO SPECIFICATIONS, SCHEDULES AND NOTES FOR MORE INFORMATION. PIPING ARRANGEMENT SHOWN IS SCHEMATIC. VERIFY ALL CONNECTION SIZES AND LOCATIONS PER MANUFACTURER'S REQUIREMENTS. ADJUST TO SUIT FIELD CONDITIONS. REFER TO FLOOR PLANS FOR PIPE SIZES. PROVIDE SEISMIC STRAP OR BRACING IF/AS REQUIRED BY LOCAL AUTHORITIES. PROVIDE HEAT TRAP AND AUTOMATIC VACUUM RELIEF VALVE WHEN REQUIRED BY LOCAL AUTHORITIES.



11 DOMESTIC WATER SERVICE ENTRY (DCV)
NOT TO SCALE

PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. LOCATE PIT WHERE INDICATED ON DRAWINGS. DUCTILE METER SHALL BE SUPPLIED BY CONTRACTOR AND MAINTAINED BY OWNER. PROVIDE DOUBLE CHECK VALVE BACKFLOW PREVENTER OF MANUFACTURER APPROVED BY LOCAL AUTHORITIES. INSTALL WITH REQUIRED CLEARANCES. INSTALL BACKFLOW PREVENTER IN HORIZONTAL UPRIGHT POSITION. PROVIDE ANY REQUIRED CERTIFICATION OF TEST OF BACKFLOW PREVENTER TO LOCAL AUTHORITIES. ALL ITEMS SHALL BE APPROVED FOR DOMESTIC WATER SERVICE. INSTALL BACKFLOW PREVENTER SO IT CAN BE EASILY SERVICED AND TESTED. CONTRACTOR SHALL OBTAIN PLANS AND SPECIFICATIONS FROM LOCAL MUNICIPAL WATER COMPANY FOR WATER PIT REQUIREMENTS. PAY ANY FEES REQUIRED BY WATER CO. FURNISH AND INSTALL ITEMS NOT PROVIDED BY WATER COMPANY. VERIFY EXCAVATION REQUIREMENTS WITH SITE EXAMINATION OR GEOTECHNICAL REPORT.



13 SMALL EXPANSION TANK
NO SCALE

PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. MAKE PIPE SAME SIZE AS TANK FITTING. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION PROCEDURE. VERIFY PROPER OPERATION WHEN INSTALLED.

DATE	DESCRIPTION	BY

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IN
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CITY OF BOULTE
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FOR THE SPECTRA GROUP, INC.
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