

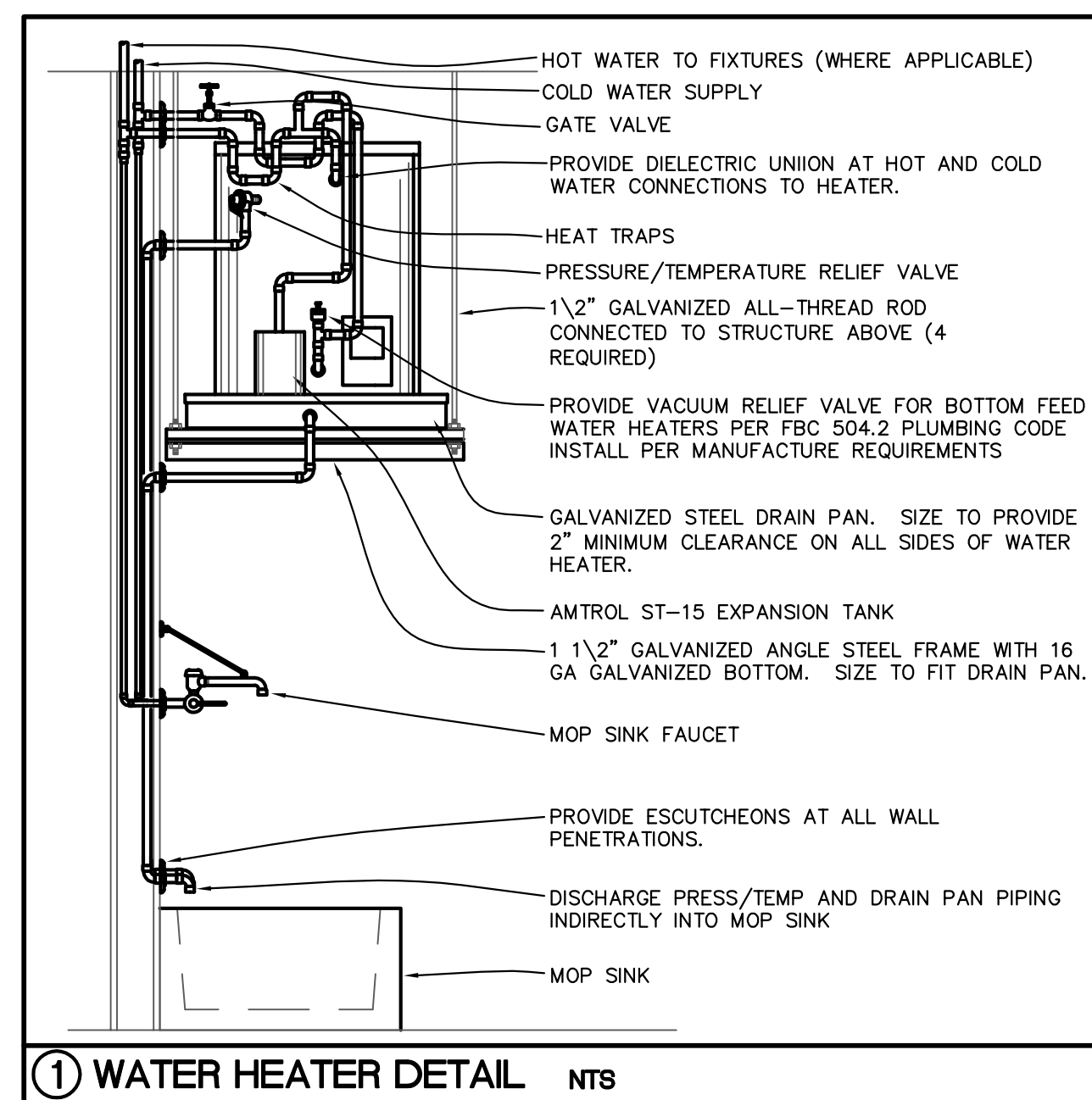
**MATERIAL SPECIFICATIONS:**

- DOMESTIC HOT AND COLD WATER PIPING SHALL BE SCH 40 CPVC WITH SOLVENT WELDED FITTINGS ABOVE AND BELOW GROUND.
- SANITARY WASTE AND VENT PIPING SHALL BE DWV SCHEDULE 40 PVC ABOVE AND BELOW GRADE.
- INSULATION SHALL BE FLEXIBLE UNICELLULAR-SELF-SEAL ARMAFLEX 2000 3/4" THICK FOR HOT WATER PIPING UP TO 2" SIZE - PROVIDE SHEET METAL SADDLES AT EACH HANGER.
- GAS PIPING TO BE SCH. 40 BLACK STEEL WITH THREADED CONNECTIONS AND THREADED FITTINGS. PROVIDE PIPE HANGERS AT ALL FITTINGS, AT EACH DROP AND EVERY 10 FEET OF STRAIGHT PIPE RUN. REFER TO SPECIFICATIONS. ((PRIMED AND PAINTED YELLOW, 2 COATS))

| PLUMBING LEGEND |         |                            |
|-----------------|---------|----------------------------|
| SYMBOL          | ABBREV. | DESCRIPTION                |
| —               | W       | WASTE PIPING               |
| — (E) W         | (E) W   | EXISTING WASTE PIPING      |
| - - -           | V       | VENT PIPING                |
| - - - (E) V     | (E) V   | EXISTING VENT PIPING       |
| —               | CW      | COLD WATER PIPING          |
| — (E) CW        | (E) CW  | EXISTING COLD WATER PIPING |
| —               | HW      | HOT WATER PIPING           |
| — (E) HW        | (E) HW  | EXISTING HOT WATER PIPING  |
| —               | (E)     | EXISTING                   |
| ⊙ OR ✕          | VTR     | VENT THRU ROOF             |
| ⊙ OR ✕          | FCO     | FLOOR CLEAN OUT            |
| ⊙ OR ✕          | GCO     | GRADE CLEAN OUT            |
| ⊙               |         | POINT OF NEW CONNECTION    |
| ①               |         | KEY NOTE                   |
| ⊙               |         | HOSE BIBB                  |
| ⊙               |         | BALL VALVE                 |

**FIXTURE SPECIFICATIONS:**

- WC-1** WATER CLOSET, BARRIER FREE - AMERICAN STANDARD, CADET RIGHT HEIGHT NO. 2467.100, FLOOR MOUNTED, FLOOR OUTLET, 16.5" HIGH, TANK TYPE, ELONGATED BOWL. PRESSURE-ASSISTED SIPHON JET FLUSH ACTION, CLOSE COUPLED FLUSHOMETER TANK, VITREOUS CHINA, 1.6 GPF, EVERCLEAN SURFACE, BEMIS/OLSONITE NO. 95SSCT OPEN FRONT SEAT LESS COVER, STAINLESS STEEL CHECK HINGE. 1/2" CW, 4" SAN.
- LAV-1** LAVATORY, BARRIER FREE - AMERICAN STANDARD LUCERNE NO. 0355.012, 20X18" VITREOUS CHINA, WALL HUNG, 4" CENTERS. PROVIDE FLOOR CARRIER WITH CONCEALED ARMS. TWO-LEVER FAUCET - HC - DELTA NO. 2529-HDF, CHROME FAUCET, TWO-LEVER HANDLE, 1/2 GPM FLOW RESTRICTOR, GRID DRAIN ASSEMBLY, TOP OF FRONT RIM MOUNTED 3/4" FROM FINISHED FLOOR. PROVIDE STOPS, SUPPLIES, TRAP, ETC., TO MAKE A COMPLETE INSTALLATION. INSULATE TRAP AND SUPPLIES WITH TRUEBRO NO. 103 LAV GUARD. 1/2" CW, 1/2" HW, 1-1/4" SAN.
- EW-1** ELECTRIC WATER COOLER - TWO-LEVEL - ELKAY EZSTLBC, WALL MOUNTED, PUSH BARS ON THE FRONT AND BOTH SIDES, STAINLESS STEEL BASINS. 1/5 HP, 8.0 GPM, 325 WATTS, 3.7 FLA. MOUNT ONE AT 38-3/8" ORIFICE HEIGHT AND ONE AT 32-7/8" ORIFICE HEIGHT. PROVIDE FLOOR CARRIER STOP, SUPPLY TRAP, ETC., TO MAKE COMPLETE INSTALLATION. 1/2" CW, 1-1/2" SAN.
- MS-1** MOP SINK - FIAT, MOLDED STONE NO. MSB2424, 24X24" COMBINATION DOME STRAINER AND LINT BASKET. FIAT NO. 830-AA SERVICE SINK FAUCET WITH VACUUM BREAKER. PROVIDE WITH HOSE AND HOSE HOOK, MOP BRACKET, 1/2" CW, 1/2" HW, 3" SAN.
- EW-1** ELECTRIC WATER HEATER - LOCHINVAR, LIGHT DUTY COMMERCIAL, JUNIOR MODEL JRJ012H, 12 GALLON, 3KW ELEMENT, 208 VOLT/1PH. HEAT TRAPS, EXPANSION TANK AND CODE APPROVED DRAIN PAN. SEE DETAIL. 3/4" T&P, 1" DRAIN PAN DRAIN PIPING



**PLUMBING SPECIFICATIONS:**

ALL WORK SHALL COMPLY WITH APPLICABLE NATIONAL, STATE, AND LOCAL CODES. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, THE 2007 FLORIDA PLUMBING CODE.

REVIEW PLANS OF ALL TRADES PRIOR TO BIDDING AND INSTALLATION TO INCLUDE ALL PLUMBING FOR COMPLETE SYSTEMS SHOWN ON THE PLANS AND AS REQUIRED.

COORDINATE WITH OTHER TRADES TO PREVENT INTERFERENCE WITH HVAC DUCTS, STRUCTURE, ELECTRICAL LIGHTING AND OTHER PIPING IN THE CEILING SPACE. VENT PIPING AND WATER PIPING SHALL BE HELD EITHER ABOVE OR BELOW HVAC DUCTWORK AS COORDINATED WITH THE HVAC CONTRACTOR.

ALL CHANGES SHALL BE REVIEWED BY THE ARCHITECT.

COORDINATE WITH ARCHITECTURAL DRAWINGS BEFORE ROUGHING-IN PLUMBING FIXTURES AND EQUIPMENT SUPPLIES.

THE PLUMBING SUBCONTRACTOR SHALL FURNISH AND INSTALL ALL PLUMBING FIXTURES, UNLESS NOTED OTHERWISE.

VERIFY MOUNTING HEIGHT AND WATER CONNECTION SIZES TO ALL PLUMBING FIXTURES PRIOR TO ROUGH-IN. FURNISH CUT-OUT TEMPLATES, FOR PLUMBING FIXTURES TO BE INSTALLED IN MILLWORK, TO THE GENERAL EQUIPMENT.

MAKE PROPER HOT AND COLD WATER, WASTE AND VENT PIPING CONNECTIONS TO ALL FIXTURES AND EQUIPMENT EVEN THOUGH ALL FITTINGS AND CONNECTIONS ARE NOT SHOWN.

VERIFY LOCATION OF EXISTING WATER SERVICE AND THE LOCATION/INVERTS OF SANITARY PIPING PRIOR TO INSTALLATION. CUT AND PATCH CONCRETE AS REQUIRED.

ALL PLUMBING VENTS IN EXTERIOR WALLS SHALL BE OFF SET A MINIMUM OF 3'-0" BEFORE ROOF PENETRATION.

IT IS NOT THE INTENT OF THESE DRAWINGS TO COVER ALL WORK AND MATERIAL. ANY EQUIPMENT, PLUMBING FIXTURE, TRIM HARDWARE AND/OR DEVICES USUALLY UTILIZED IN THE CLASS OF WORK, THOUGH NOT SPECIFICALLY MENTIONED OR SHOWN ON THESE DRAWINGS, BUT WHICH MAY BE NECESSARY FOR THE SATISFACTORY COMPLETION OF THE WORK (AS DETERMINED BY THE ARCHITECT) SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AS PART OF HIS TOTAL WORK.

THE EQUIPMENT ROUGH-IN ITEMS AND THEIR DIMENSIONED LOCATIONS FOR ALL CONNECTIONS ARE ACCURATE TO THE BEST OF OUR KNOWLEDGE. IN SOME INSTANCES THE OWNER OR SUPPLIER MAY MAKE SUBSTITUTIONS OR THE EQUIPMENT ITEMS MAY VARY FROM WHAT IS SHOWN. THEREFORE, THESE ITEMS AND DIMENSIONS SHALL BE VERIFIED WITH THE EQUIPMENT SUPPLIER, OWNER AND/OR EQUIPMENT ROUGH-IN DRAWING. FAILURE OF THE APPROPRIATE CONTRACTOR TO VERIFY ROUGH-INS OR THEIR LOCATIONS SHALL PLACE THE RESPONSIBILITY FOR ANY SUBSEQUENT RELOCATION AND/OR ADDITIONAL ROUGH-INS DIRECTLY UPON THE CONTRACTOR.

CONTRACTOR SHALL SUPPLY TO THE ARCHITECT THE REQUIRED COPIES OF SHOP DRAWINGS FOR APPROVAL SO THE QUALITY OF INTENDED MATERIALS OR EQUIPMENT CAN BE REVIEWED BEFORE INSTALLATION. THERE WILL BE NO DRAW UNTIL SHOP DRAWINGS HAVE BEEN SUBMITTED AND REVIEWED BY THE ARCHITECT/ENGINEER.

DO NOT SCALE THIS DRAWING. REFER TO ARCHITECTURAL FLOOR PLAN FOR BUILDING DIMENSIONS.

THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DO NOT NECESSARILY SHOW ALL ELBOWS, OFFSETS, UNION, VALVES AND FITTINGS REQUIRED TO COMPLETE THE INSTALLATION OF THE WORK. THE SUBMISSION OF A PROPOSAL SHALL BE CONSTRUED AS EVIDENCE THAT THE CONTRACTOR HAS FAMILIARIZED HIMSELF WITH THE PLANS AND BUILDING SITE. CLAIMS MADE SUBSEQUENT TO THE PROPOSAL FOR MATERIALS AND LABOR BECAUSE OF DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED, IF THEY COULD HAVE BEEN FORESEEN HAD PROPER EXAMINATION BEEN MADE.

VERIFY SERVICE POINTS AND METERING LOCATIONS FOR PROJECT WITH LOCAL UTILITIES AND/OR LANDLORD (DOMESTIC WATER, SANITARY SEWER, GAS, ETC.)

THE CONTRACTOR SHALL COOPERATE FULLY AMONG THE TRADES.

ALL ROOF PENETRATIONS FOR ROOF DRAINS AND PLUMBING, GAS AND REFRIGERANT PIPING SHALL BE MADE IN ACCORDANCE WITH ROOF SYSTEM MANUFACTURER'S GUIDELINES. COORDINATE WITH ARCHITECTURAL DETAIL AND/OR LANDLORD FOR ROOF SYSTEM USED.

PLUMBING CONTRACTOR SHALL VERIFY WITH THE LOCAL HEALTH DEPARTMENT AND/OR WATER COMPANY AS TO THE METER AND VALVING ARRANGEMENTS OF THE DOMESTIC WATER SERVICE LINE WHICH ENTERS THE BUILDING. SHOULD A BACKFLOW PREVENTER ASSEMBLY AND/OR PRESSURE REDUCING VALVE ASSEMBLY BE REQUIRED, THE PLUMBER SHALL FURNISH AND INSTALL SAME PER LOCAL AND STATE REQUIREMENTS. THE BACKFLOW ASSEMBLY SHALL BE A "WATTS" SERIES #909, OR APPROVED EQUAL MEETING ASSE. STANDARDS 1013,1015, AND 1020. IF BACKFLOW PREVENTER IS REQUIRED, PROVIDE PROPERLY SIZED THERMAL EXPANSION TANK IN SUPPLY PIPING OF WATER HEATER. IF WATER PRESSURE IS 65 PSI OR ABOVE, THE PRESSURE REDUCING VALVE ASSEMBLY SHALL BE A "WATTS" SERIES #U5 SET AT 50 POUNDS. DELIVERY PRESSURE UNLESS OTHERWISE NOTED.

THE POTABLE WATER SUPPLY SHALL BE PROTECTED AGAINST BACKFLOW AND SIPHONAGE BOTH NATURAL AND INDUCED. ALL EQUIPMENT CONNECTED TO THE POTABLE WATER SYSTEM BEING CAPABLE OF POLLUTING OR CONTAMINATING THE POTABLE WATER DISTRIBUTION SYSTEM OR ANY PART THEREOF BY MEANS OF A REVERSAL OF FLOW, PRESSURE DROP, PRESSURE LOSS, INDUCED VACUUM OR BY INJECTION BECAUSE ANY PRIMARY OR AUXILIARY PUMPING SYSTEM CONNECTED THERE TO MUST BE ISOLATED AND CONTAINED BY MEANS OF APPROVED BACKFLOW DEVICES, CHECK VALVES, AIR GAPS OR VACUUM BREAKERS. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL THESE DEVICES PER LOCAL CODE REQUIREMENTS.

THE WATER PIPING SYSTEM SHALL BE FLUSHED AND STERILIZED IN ACCORDANCE WITH LOCAL REGULATIONS.

THE HOT AND COLD WATER SUPPLY BRANCHES FOR ALL EQUIPMENT HAVING QUICK CLOSING VALVES OF ANY TYPE SHALL HAVE WATER HAMMER ARRESTOR INSTALLED AT THE HIGH POINT ON THE END OF EACH BRANCH.

FURNISH AND INSTALL SHUTOFF OR BALL VALVE AND DIELECTRIC UNIONS ON ALL EQUIPMENT HOT AND COLD WATER LINES. PLUMBING CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO EQUIPMENT. COORDINATE WITH EQUIPMENT SUPPLIER FOR EXACT REQUIREMENTS.

PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL A PRESSURE REDUCING VALVE ON THE INLET OF THE DISHWASHER TO REDUCE INCOMING WATER PRESSURE TO LESS THAN 20 PSI.

VERIFY MOUNTING HEIGHTS OF ALL BARRIER FREE FIXTURES WITH ARCHITECTURAL PLANS.

ALL EXPOSED GAS PIPING SHALL BE PAINTED TO MATCH ADJACENT WALL.

THE NATURAL GAS EQUIPMENT SHALL BE LOW PRESSURE. THE REGULATOR OUTLET PRESSURE SHALL BE 7" WATER COLUMN. IF THE GAS COMPANY IS UNABLE TO PROVIDE THIS PRESSURE, IMMEDIATELY CONTACT THE ARCHITECT, ENGINEER, OR OWNER FOR INSTRUCTIONS. GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL, U.O.N.

PROVIDE CHROME PLATED ESCUTCHEONS AT ALL WALL PENETRATIONS.

PLUMBING CONTRACTOR SHALL INSTALL 4" SOIL AND WASTE PIPING WITH MINIMUM SLOPE OF 1/8" PER FOOT UNLESS OTHERWISE REQUIRED.

ALL VENT PIPE TO BE COMPATIBLE WITH STRUCTURE, MECHANICAL EQUIPMENT AND DUCTWORK, ELECTRICAL EQUIPMENT AND LIGHTING. ALL V.T.R.'S SHALL BE EXTENDED TO A MINIMUM OF 2" ABOVE PARAPET HEIGHT AND MAINTAINED 10'-0" MINIMUM FROM ALL OUTSIDE AIR INTAKES.

MATERIALS, EQUIPMENT, ASSEMBLIES AND SYSTEMS SHALL MEET ALL PERTINENT REQUIREMENTS OF NATIONALLY RECOGNIZED TESTING ORGANIZATIONS SUCH AS UL, ASTM, ASSE, AWWA, AGA AND NFPA AS WELL AS THE MOST CURRENT VERSION OF THE STATE AND LOCAL CODES.

ALL INSTALLED SYSTEMS, DEVICES AND RELATED ITEMS SHALL BE TESTED IN PLACE. REPLACE ANY AND ALL CONTRACTOR SUPPLIED DEFECTIVE DEVICES, ITEMS OR SYSTEMS AT CONTRACTOR'S OWN EXPENSE BEFORE COMPLETION OF PROJECT.

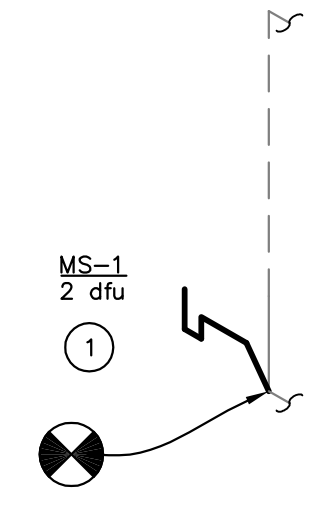
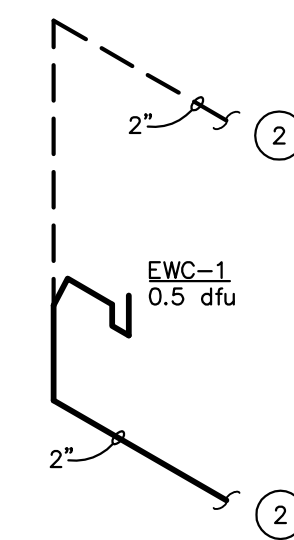
WHERE JOB CONDITIONS REQUIRE CHANGES FROM THE CONTRACT DOCUMENTS THAT DO NOT CHANGE THE SCOPE OR NATURE OF WORK REQUIRED, THE CONTRACTOR SHALL MAKE SUCH CHANGES WITHOUT ADDITIONAL COST TO THE OWNER. NO OTHER CHANGES MAY BE MADE WITHOUT WRITTEN PERMISSION OF THE ENGINEER.

ALL EQUIPMENT, FIXTURES AND MATERIALS SHALL BE NEW AND UNUSED, AND INSTALLED IN STRICT CONFORMANCE TO MANUFACTURERS RECOMMENDATIONS (U.O.N.). PROVIDE COMPLETE WITH ALL TRIM, STOPS, HANGERS, CARRIERS, SUPPORTS, ETC. INCLUDING PROVISIONS FOR BARRIER FREE USE, IF REQUIRED. WHERE FIXTURES ARE ACCESSIBLE THEY MUST COMPLY WITH ALL FEDERAL A.D.A. REGULATIONS.

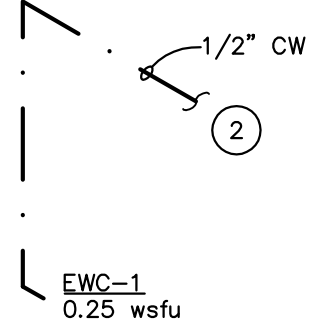
CONTRACTOR SHALL GUARANTEE ALL WORK FOR WHICH MATERIALS ARE FURNISHED, FABRICATED OR FIELD ERRECTED. ALL FACTORY ASSEMBLED EQUIPMENT FOR WHICH NO SPECIFIC MANUFACTURERS GUARANTEE IS FURNISHED AND ALL WORK IN CONNECTION WITH THE INSTALLATION OF MANUFACTURERS GUARANTEED EQUIPMENT. THE CONTRACTOR'S GUARANTEE SHALL LAST ONE YEAR FROM THE FINAL OWNER ACCEPTANCE OF THE WORK AND SHALL APPLY TO ALL DEFECTS IN MATERIALS AND WORKMANSHIP OF ANY KIND.

ALL FACET CONTROLS SHALL BE OPERABLE WITH ONE HAND AND NOT REQUIRE TIGHT GRASPING.

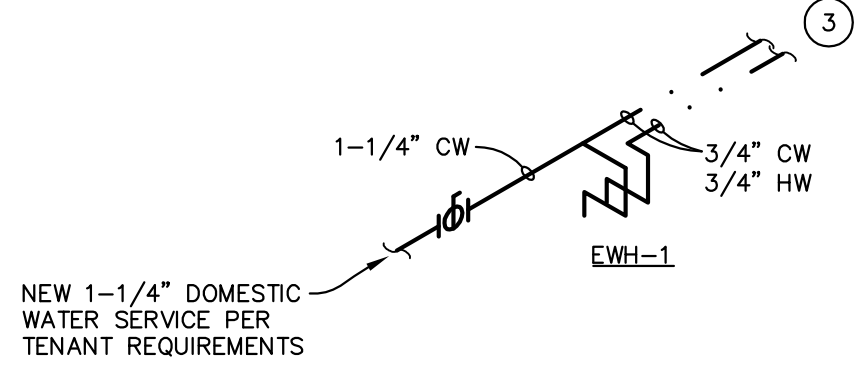
ALL BARRIER FREE WATER CLOSET CONTROLS SHALL BE LOCATED ON UNIT TOWARDS WIDE SIDE OF STALL. VERIFY IF RIGHT OR LEFT SIDE LOCATION.



**① WASTE AND VENT ISOMETRIC**  
P-5.1 NOT TO SCALE



**② DOMESTIC WATER ISOMETRIC**  
P-5.1 NOT TO SCALE



- DRAWING NOTES:**
- NEW FIXTURE TO BE ROUTED TO EXISTING SANITARY. CONNECT TO NEW HOT AND COLD WATER PIPING.
  - ROUTE NEW SANITARY, VENT AND WATER PIPING TO EXISTING PIPING. CONTRACTOR TO FIELD VERIFY POINT OF NEW CONNECTION PRIOR TO START OF WORK.
  - ROUTE NEW WATER HEATER HOT AND COLD WATER PIPING TO EXISTING FIXTURES.

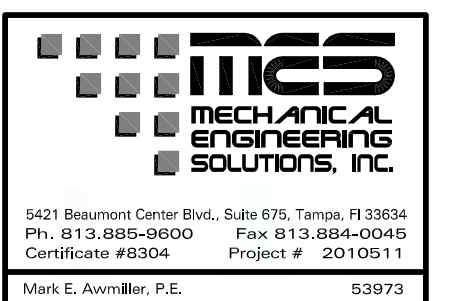


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| Mark | Date   | Description |
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|      | 3/2/10 | Permit Set  |

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| Issue/Revision | Permit Set   |
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| CAD File Name  | 10003-CD.vwx |
| Drawn By       | DM           |
| Checked By     | MEA          |
| Plot Date:     | 3/2/10       |
| Record Date:   | Record Date  |
| Sheet Title    |              |

**NOTES AND DETAILS - PLUMBING**

SCALE: AS NOTED

Drawing No.

P-5.1