

**PLUMBING SYMBOLS LEGEND**

	DOMESTIC COLD WATER - CW
	SOFTENED COLD WATER - S
	FILTERED WATER - FW
	EXISTING DOMESTIC COLD WATER (E)CW
	DOMESTIC HOT WATER - HW - 110°F
	DOMESTIC HOT WATER - HW - 140°F
	EXISTING DOMESTIC HOT WATER (E)HW
	DOMESTIC HOT WATER RETURN - HWR
	DOM. HOT WATER RETURN - 140°F
	EXISTING HOT WATER RETURN (E)HWR
	VENT PIPING ABOVE FLOOR - V
	EXIST. VENT PIPING ABOVE FLOOR (E)V
	SANITARY SEWER PIPING - SS
	EXISTING SANITARY SEWER PIPING (E)SS
	GREASE PIPING - GW
	EXISTING GREASE LADEN PIPING (E)GW
	STORM DRAIN PIPING - SD
	EXISTING STORM DRAIN PIPING (E)SD
	CONDENSATE DISCHARGE PIPING - CD
	EXIST. CONDENSATE DISCHARGE (E)CD
	FIRE PROTECTION PIPING - F
	EXISTING FIRE PROTECTION PIPING (E)F
	NATURAL GAS PIPING - G
	EXISTING NATURAL GAS PIPING (E)G
	COMPRESSED AIR PIPING - A
	EXISTING COMPRESSED AIR PIPING (E)A
	OIL PIPING - O
	SODA/BEER PIPING CHASE
	RISE AND FALL IN PIPING
	SHUT OFF VALVE: BALL
	CONNECT TO EXISTING
	PLUMBING RISER NUMBER
	PLUMBING NOTE
	FIXTURE DESIGNATION
	AFF ABOVE FINISHED FLOOR
	CD CONDENSATE DRAIN PIPING
	CW DOMESTIC COLD WATER
	ECO EXTERIOR CLEAN OUT
	EWC ELECTRIC WATER COOLER
	FOO FLOOR CLEAN OUT
	FD FLOOR DRAIN
	FPWH FROSTPROOF WALL HYDRANT
	G GAS PIPING
	HB HOSE BIBB
	HD HUB DRAIN
	HW DOMESTIC HOT WATER
	RD ROOF DRAIN
	RL ROOF LEADER
	SD STORM DRAIN
	SS SANITARY SEWER
	TD TRENCH DRAIN
	TP TRAP PRIMER
	VTR VENT THRU ROOF
	WCO WALL CLEAN OUT
	WH WALL HYDRANT
	WHA WATER HAMMER ARRESTER

(NOT ALL SYMBOLS ARE USED)

**PLUMBING SYMBOLS AND ABBREVIATIONS**

SYMBOL	DESCRIPTION
	PUMP
	BALANCING VALVE
	BACKFLOW PREVENTER
	CHECK VALVE
	PRESSURE REDUCING VALVE
	SHUT OFF VALVE
	STRAINER WITH BLOWDOWN
	UNION
	RECIRCULATING HOT WATER CIRCUIT VALVING
	REMOVE TO POINT AND CAP
	REMOVE TO POINT FOR RECONNECTION
	SHOWER HEAD
	CLEANOUT IN FLOOR OR AT GRADE
	CLEANOUT IN HORIZONTAL PIPE
	FLOOR DRAIN
	PIPE BRANCH TAKE-OFF FROM BOTTOM
	PIPE BRANCH TAKE-OFF FROM TOP
	PIPE DROP
	PIPE RISE
	ROOF DRAIN/SANITARY VENT
	ROOF DRAIN ABOVE
	VENT THRU ROOF
	HOSE BIBB
	MEDICAL GAS OUTLET
	THERMOSTATIC MIXING VALVE
	COMPRESSED AIR PIPING
	ACID VENT PIPING
	ACID WASTE PIPING
	CARBON DIOXIDE PIPING
	COLD WATER PIPING
	DEIONIZED WATER PIPING
	DISTILLED WATER PIPING
	GAS PIPING
	HOT WATER PIPING (140°F)
	MEDICAL AIR PIPING
	MEDICAL AIR INTAKE PIPING
	MEDICAL VACUUM PIPING
	MEDICAL VACUUM DISCHARGE PIPING
	NITROGEN PIPING
	NITROUS OXIDE PIPING
	OXYGEN PIPING
	OVERFLOW STORM PIPING
	PROCESS AIR PIPING
	PUMP DISCHARGE PIPING
	PURIFIED WATER PIPING
	RECIRCULATING HOT WATER PIPING
	SANITARY SEWER (ABOVE GROUND)
	SANITARY SEWER (UNDERGROUND/UNDERFLOOR)
	STORM SEWER (ABOVE GROUND)
	STORM SEWER (UNDERGROUND/UNDERFLOOR)
	TEMPERED WATER PIPING
	VENT PIPING
	WASTE ANESTHETIC GAS DISCHARGE PIPING
	140°F HOT WATER PIPING
	140°F RECIRCULATING HOT WATER PIPING

**GENERAL PLUMBING NOTES**

1. THE PLUMBING SYSTEM INSTALLATION SHALL COMPLY WITH THE 2012 NORTH CAROLINA PLUMBING CODE, 2012 NORTH CAROLINA FUEL GAS CODE AND ANY APPLICABLE LOCAL CODES. ALL WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
2. PLUMBING CONTRACTOR SHALL READ ALL JOB RELATED SPECIFICATIONS AND DRAWINGS FOR ADDITIONAL INFORMATION.
3. VALVES AND FITTINGS SHALL BE OF SAME SIZE OF LINE ON WHICH THEY ARE LOCATED, UNLESS OTHERWISE INDICATED ON DRAWINGS.
4. CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES. CONTRACTOR SHALL FIELD VERIFY ALL MEASUREMENTS AND LOCATIONS OF PLUMBING FIXTURES AND COORDINATE ALL CONNECTIONS WITH PIPING AND FIXTURE LOCATIONS FROM ARCHITECTURAL PLANS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING FIRE RATING AND WEATHERPROOFING INTEGRITY OF ALL PIPING PENETRATIONS. SEE ARCHITECTURAL PLANS FOR PENETRATION DETAILS.
6. ALL WATER SUPPLY AND DRAINAGE PIPING SHALL BE RUN AS CLOSE TO PLAN DESIGN AS POSSIBLE WITH NO CHANGES IN SIZE.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY SUPPORTING DEVICES FOR ALL FIXTURES INCLUDED IN CONTRACT OR HEREIN SPECIFIED OR OTHERWISE NOT NOTED FOR A COMPLETE AND OPERABLE SYSTEM.
8. ALL WATER SUPPLY AND DRAINAGE PIPING SHALL BE MARKED WITH THE SEAL OF APPROVAL OF THE NATIONAL SANITATION FOUNDATION.
9. FURNISH AND INSTALL WALL HYDRANTS 24" ABOVE FINISHED GRADE/FLOOR AND PROVIDE WITH VACUUM BREAKER.
10. SEE ARCHITECTURAL DRAWINGS FOR EXACT PLUMBING FIXTURE LOCATIONS, MOUNTING HEIGHTS AND DIMENSIONS.
11. CONTRACTOR SHALL INSTALL DELECTRIC COUPLINGS AND UNIONS AT CONNECTIONS OF DISSIMILAR METALS.
12. CONTRACTOR SHALL SUBMIT DRAWINGS (INCLUDING PIPING PLANS AND EQUIPMENT LOCATIONS) TO ARCHITECT/ENGINEER FOR REVIEW PRIOR TO INSTALLATION OR PURCHASING OF ANY PIPING AND EQUIPMENT.
13. PROVIDE REDUCED PRESSURE BACKFLOW PREVENTERS FOR DOMESTIC WATER SUPPLIES AS REQUIRED BY STATE AND LOCAL CODES.
14. PENETRATIONS OF WALL FOOTINGS WITH PIPING SHALL NOT BE PERMITTED. PLUMBING CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR TO DROP FOOTINGS AS REQUIRED TO CLEAR PLUMBING SERVICES WHERE NECESSARY. ALL PIPING PENETRATIONS OF A BEARING WALL OR FOOTING SHALL BE SLEEVED AND LOCATIONS APPROVED BY THE STRUCTURAL ENGINEER.
15. PROVIDE WATER HAMMER ARRESTORS AT QUICK CLOSING VALVE CONNECTIONS SUCH FOR WASHING MACHINES, ICE MAKERS, DISHWASHERS AND AT WATER ENTRY.
16. CONTRACTOR SHALL PROVIDE MEANS OF WATER SHUTOFF AT EACH FIXTURE.

**PLUMBING EXECUTION NOTES**

1. PROVIDE SWING JOINTS ON ALL SUPPLY BRANCHES. TOP OR BOTTOM PIPE CONNECTIONS ARE TO BE AT THE PLUMBING CONTRACTORS DISCRETION.
2. PLAN VIEWS GENERALLY SHOW PIPING ABOVE CEILINGS OR BELOW FLOOR. SEE RISER DIAGRAMS FOR CLARITY OF PIPING AT OTHER ELEVATIONS.
3. SEE MINIMUM FIXTURE CONNECTION SCHEDULE FOR WASTE, VENT AND SUPPLY PIPE SIZES.
4. UNLESS NOTED OTHERWISE, ALL WASTE PIPING 2" OR SMALLER SHALL BE PITCHED AT A MINIMUM SLOPE OF 1/4" PER FOOT. WASTE PIPING OF 3" AND LARGER SHALL BE PITCHED AT A MINIMUM SLOPE OF 1/8" PER FT.
5. VENTS MUST CONNECT TO EACH OTHER AT A MINIMUM OF 36" ABOVE FLOOR.
6. PROVIDE WATER METER COUPLINGS AND TUBES. NO PIPE DOPE OR PLUMBING TAPE IS TO BE USED ON THREADED ENDS OF WATER COUPLINGS AND TUBES. SPACER TUBES MUST BE INSTALLED IN A HORIZONTAL APPLICATION TO ACCOMMODATE THE METERS. SUPPLY AND INSTALL NECESSARY TRANSITION FITTINGS FOR CONNECTING THE THREADED METER COUPLINGS TO THE PIPING.

**FIRE PROTECTION NOTES**

1. ALL WORK AND MATERIALS SHALL BE IN COMPLIANCE WITH STATE AND LOCAL CODE REQUIREMENTS. SUBCONTRACTORS SHALL OBTAIN AND PAY FOR ALL PERMITS AND INSPECTION FEES AS NECESSARY FOR CONSTRUCTION.
2. ALL FIRE PROTECTION SYSTEMS AND COMPONENTS SHALL BE IN COMPLIANCE WITH NFPA SECTIONS 101 AND 102 AS WELL AS LOCAL FIRE PREVENTION REQUIREMENTS.

**PLUMBING GENERAL NOTES**

1. ALL PIPING SHALL BE ROUTED IN THE SUSPENDED CEILING SPACE UNLESS OTHERWISE INDICATED. ALL PIPING EXPOSED TO VIEW SHALL BE ROUTED AS HIGH AS POSSIBLE AND TIGHT TO THE UNDERSIDE OF THE STRUCTURAL STEEL.
2. EXPOSED PIPING IN FINISHED AREAS SHALL BE CHROME PLATED WITH CHROME PLATED ESCUTCHEON AT PIPE ENTRY TO FINISHED AREA.
3. SLEEVE OR CORE-DRILL FLOOR SLABS, WALLS, ETC. AS REQUIRED FOR PIPING AND FIRE-STOP OPENING AROUND PIPE. VERIFY LOCATION OF STRUCTURAL BEAMS, JOISTS, ETC. BEFORE DRILLING.
4. ALL OPENINGS IN DRAINAGE AND/OR VENT SYSTEMS AS A RESULT OF INSTALLATION ROUGH-IN SHALL BE PROTECTED WITH A TEST PLUG THAT IS SECURELY LOCKED IN PLACE UNTIL FINAL FINISHED CONNECTIONS ARE INSTALLED.
5. ALL PIPING SHALL BE CONCEALED IN WALLS AND BEHIND FIXED FURNISHINGS UNLESS OTHERWISE INDICATED.
6. WHEREVER FOUNDATION WALLS, OUTSIDE WALLS, ROOFS, ETC. ARE PENETRATED FOR INSTALLATION OF SYSTEMS, THEY SHALL BE PATCHED TO MATCH EXISTING CONSTRUCTION AND SEALED WEATHER TIGHT. WORK SHALL BE PERFORMED BY CRAFTSMEN SKILLED IN THEIR RESPECTIVE TRADES.
7. ALL PIPING SHALL BE RUN PARALLEL TO BUILDING LINES AND SUPPORTED AND ANCHORED AS REQUIRED TO FACILITATE EXPANSION AND CONTRACTION. ALL PIPING SHALL BE CONCEALED EXCEPT IN UNFINISHED SPACES. INSTALL AS REQUIRED TO MEET ALL CONSTRUCTION CONDITIONS AND TO ALLOW FOR INSTALLATION OF OTHER WORK INCLUDING DUCTS AND ELECTRICAL CONDUIT. AT ALL CONNECTIONS BETWEEN FERROUS PIPE AND NON-FERROUS PIPING, PROVIDE AN ISOLATING DIELECTRIC FITTING.
8. PROVIDE ALL FITTINGS, ACCESSORIES, OFFSETS AND MATERIALS NECESSARY TO COMPLETE THE PLUMBING SYSTEMS IN ACCORDANCE WITH THE MANUFACTURER'S AND THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.
9. SANITARY DRAINAGE PIPING ABOVE FLOOR SHALL BE TYPE M GAS PIPING. FITTINGS AND CONNECTIONS FOR SANITARY DRAINAGE PIPING BELOW FLOOR SHALL BE CAST IRON WEIGHT HUB AND SWEAT TYPE CAST IRON WITH NEOPRENE GASKET JOINTS. ALL DRAINAGE PIPING SHALL BE MINIMALLY PITCHED 1/4" PER FOOT UNLESS OTHERWISE REQUIRED BY EXISTING CONDITIONS.
10. HOSE BIBBS SHALL BE NON-FREEZE TYPE.
11. CONDENSATE AND DIRECT DRAIN PIPING SHALL BE TYPE M COPPER TUBING UP TO 1 1/2" O.D. TYPE DWV TUBING AND FITTINGS FOR 2" AND LARGER SIZES.
12. PROVIDE CLEANOUTS AT THE END OF EACH HORIZONTAL RUN, AND AT THE BASE OF ALL VERTICAL WASTE AND DRAIN PIPES. CLEANOUTS SHALL BE OF THE SAME SIZE AS THE PIPES THEY SERVE.
13. HOT AND COLD WATER PIPING SHALL BE TYPE L COPPER TUBING WITH WROUGHT COPPER FITTINGS AND SWEAT CONNECTIONS. PROVIDE MINIMUM 18" HIGH FULL AIR CHAMBER AT EACH FIXTURE STOP.
14. INSULATE ALL HOT AND COLD WATER PIPING AND DOWNSPOUTS. PROVIDE 1" PREFORMED FIBERGLASS AS-J-VB, FLAME SPREAD 25, SMOKE DEVELOPED 50, ASTM C-547.
15. ACCESS PANELS SHALL BE PROVIDED WHERE CONCEALED CONTROL DEVICES, VALVES, ETC. ARE CONCEALED WITHIN WALLS WHERE ACCESS FOR ADJUSTMENT AND MAINTENANCE IS POSSIBLE THROUGH LAY IN SUSPENDED CEILINGS. ACCESS PANELS ARE NOT REQUIRED.
16. TEST WATER SYSTEM UNDER 150 PSIG HYDROSTATIC PRESSURE, FOR FOUR (4) HOURS MINIMUM. WHEN TESTING INDICATES MATERIALS OR WORKMANSHIP IS DEFICIENT, REPLACE OR REPAIR AS REQUIRED, AND REPEAT TEST UNTIL STANDARDS ARE ACHIEVED.
17. PROVIDE A COMPLETE NATURAL GAS PIPING SYSTEM AS NOTED ON THE DRAWINGS. PROVIDE EITHER THREADED STEEL OR MALLEABLE IRON PIPE WITH MALLEABLE FITTINGS OR WELDED STEEL. PROVIDE ALL UNIONS, SHUT-OFF VALVES AND DIRT LEGS REQUIRED BY NFPA-54 AND GOVERNING LOCAL CODES. PROVIDE ALL TESTS, METERS, INSPECTIONS, HANGERS AND EQUIPMENT CONNECTIONS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM.
18. THE DOMESTIC WATER SYSTEM, DRAINAGE SYSTEMS, AND GAS PIPING SYSTEM SHALL BE FLUSHED AND PRESSURE TESTED. THE DOMESTIC WATER SYSTEM SHALL BE PURIFIED.
19. INSULATE ALL DRAIN TRAPS AT ICE MACHINES WITH 1" FIBERGLASS INSULATION TO PREVENT CONDENSATION.

mcmilian  
pazdan  
smith  
ARCHITECTURE

ATLANTA CHARLOTTE GREENVILLE  
877.4.DEVITA  
Devita & Associates, Inc. Project: 17239  
NC Perm License # C-0819  
BHM Checked By: DV



WINDSOR AUGHTRY  
HOME2 ASHEVILLE  
380 AIRPORT RD.  
ASHEVILLE, NC 28704

SHEET ISSUE  
07/30/18  
FOR CONSTRUCTION

Revisions		
Number	Description	Date

PRINCIPAL IN CHARGE  
PROJECT ARCHITECT  
DRAWN BY  
SHEET TITLE  
**PLUMBING  
GENERAL NOTES &  
LEGENDS**

SHEET NO. PROJ. NO.  
017378.00

**P002**

Order Plans @