

PLUMBING SYMBOL LIST

PLUMBING BASIC SYMBOLS (NOT ALL SYMBOLS ARE NECESSARILY USED ON THIS PROJECT)

	EXISTING PIPING
	EXISTING PIPING TO BE REMOVED
	PIPING TO BE ABANDONED
	NEW SOIL, WASTE OR SANITARY PIPING
	VENT PIPING (SANITARY)
	PIPING BELOW SLAB
	DOMESTIC COLD WATER PIPING
	DOMESTIC HOT WATER PIPING (120°)
	DOMESTIC HOT WATER CIRCULATION PIPING
	PIPING W/FREEZE PROTECTION CABLE & INSULATION
	ARROW INDICATES DIRECTION OF FLOW
	COMPRESSED AIR PIPING
	GAS PIPING
	EJECTOR DISCHARGE PIPING
	INDIRECT WASTE PIPING
	PUMP DISCHARGE PIPING
	SUMP PUMP DISCHARGE PIPING
	STORM WATER DRAINAGE PIPING
	TEMPERED WATER PIPING
	DISCONNECT FROM EXISTING
	CONNECT TO EXISTING
	SHOCK ARRESTER
	FLEXIBLE CONNECTION
	EXPANSION LOOP SIZE
	HOSE BIBB
	WALL HYDRANT
	FRESH AIR INLET
	CLEAN OUT/PLUGGED OUTLET
	CAPPED OUTLET
	CLEAN-OUT DECK PLATE
	P-TRAP
	VACUUM BREAKER
	BOTTOM PIPE CONNECTION
	TOP PIPE CONNECTION
	SIDE CONNECTION
	PIPE DOWN/DROP
	PIPE RISE/UP
	PIPE SLOPE
	VALVE IN VERTICAL
	UNION
	REDUCER
	WATER PROOF SLEEVE
	SLEEVE
	PRESSURE GAUGE W/GAUGE COCK
	TEMPERATURE GAUGE
	FLOOR DRAIN
	ROOF DRAIN
	PUMP
	WATER METER
	AUTOMATIC BALL DRIP
	VENT THRU ROOF
	TRAP
	TAMPER SWITCH
	PRESSURE SWITCH W/GAUGE COCK
	WATERFLOW SWITCH
	TEMPERATURE AND PRESSURE RELIEF VALVE
	PLUG VALVE
	MIXING VALVE
	RELIEF VALVE
	BALL VALVE W/LOCK SHIELD
	GATE VALVE
	GLOBE VALVE
	OUTSIDE SCREW & YOKE (OS & Y) VALVE
	CHECK VALVE
	PRESSURE REDUCING VALVE (PRV)
	SOLENOID VALVE
	FLOAT VALVE
	BALANCING VALVE
	Y STRAINER W/FLOW-OFF VALVE
	BACKFLOW PREVENTER ASSEMBLY
	REDUCED PRESSURE ZONE BACKFLOW PREVENTER ASSEMBLY
	DETECTOR CHECK VALVE ASSEMBLY
	BALANCING VALVE ASSEMBLY
	RISE DESIGNATION
	RISE SERVICE
	RISE NUMBER

PLUMBING ABBREVIATIONS (NOT ALL ABBREV. ARE NECESSARILY USED ON THIS PROJECT)

AD	AREA DRAIN
AF	ABOVE FINISHED FLOOR
BLOC	BUILDING
BPP	BOTTOM OF PIPE
CO	CLEANOUT
COOP	CLEANOUT DECK PLATE
CM	COFFEE MAKER
CY	CHECK VALVE
OW	CAPPED AND VALVED OUTLET
CW	COLD WATER
CLG	CLEANING
CONN	CONNECT
CONT	CONTINUATION
DA	DOWN (PENETRATES FLOOR SLAB)
DN	DRAIN
DR	DRAWING
DWG	EXISTING
(E)	EXISTING TO BE REMOVED
(ER)	EXISTING TO BE REMOVED & RELOCATED
(EPR)	EJECTOR DISCHARGE
EJ DIS	ELEVATION
EL	ELECTRIC WATER COOLER
ENC	FRESH AIR INLET
FAI	FLOOR DRAIN
FD	FIXTURE UNIT
FU	FLOOR
FL	FLOOR HYDRANT
FL H	FEET
FT	GENERAL CONTRACTOR
GC	GALLONS
GAL	GALLONS PER MINUTE
GPM	HOSE BIBB
HB	HUNG CEILING
HCLG	HOT WATER
HW	HOT WATER RETURN
HWR	INSIDE DIAMETER
ID	INDIRECT WASTE
IN	INCH
IN	JANITOR'S SINK
JS	LAWATORY
LAV	MEDICAL GAS ALARM PANEL
MAP	MAXIMUM
MAX	MINIMUM
MIN	MOP RECEPTOR
MR	NORMALLY CLOSED
NC	NORMALLY OPEN
NO	NOT IN THIS CONTRACT
NO	NORMALLY OPEN
NS	NOT TO SCALE
OD	OUTSIDE DIAMETER
OS&Y	OUTSIDE SCREW & YOKE GATE VALVE
OSKAY	PUMPING CONTRACTOR
PC	PUMP DISCHARGE
PD	PLUGGED OUTLET
PO	PRESSURE REDUCING VALVE
PRV	POUNDS PER SQUARE INCH (GAUGE)
PSI	ROOF DRAIN
RD	RELOCATED EXISTING
(RE)	EXISTING TO BE REMOVED AND RETURN TO OWNER
(RR)	SHOCK ABSORBER
SA	SANITARY
SAN	SUMP PUMP DISCHARGE
SD	SHOWER
SH	SINK
SK	SQUARE FOOT
SQ FT	STORM
ST	TYPICAL
TYP	UNLESS OTHERWISE NOTED
UN	UP (PENETRATES FLOOR SLAB)
UP	URNAL
UR	VENT
V	VACUUM BREAKER
VB	VENT THROUGH ROOF
VTR	WASTE
W	WATER CLOSET
WC	WALL HYDRANT
WCO	ZONE CONTROL VALVE BOX
ZOV	

PLUMBING HOSPITAL/LAB SYMBOLS (NOT ALL SYMBOLS ARE NECESSARILY USED ON THIS PROJECT)

A	AIR PIPING
CO2	CARBON DIOXIDE PIPING
DE	DEIONIZED WATER PIPING
DI	DISTILLED WATER PIPING
LV	LABORATORY VENT PIPING
LW	LABORATORY WASTE PIPING
MA	MEDICAL AIR PIPING
MG	MEDICAL GAS PIPING
MWC	MEDICAL VACUUM PIPING
N	NITROGEN PIPING
NO2	NITROUS OXIDE PIPING
O2	OXYGEN PIPING
V	VACUUM PIPING
WGD	WASTE ANESTHETIC GAS DISPOSAL PIPING

DEMOLITION NOTES

- THE CONTRACTOR SHALL INCLUDE IN HIS PRICE ALL COSTS ASSOCIATED WITH THE DEMOLITION OF EXISTING PLUMBING SYSTEMS AS SHOWN ON THE DRAWINGS AND IN THE SPECIFICATIONS WITH ALLOWANCES FOR EXCEPTED OR UNDESIRABLE DIFFICULTIES WHEN CONCEALED WORK HAS BEEN OPENED. NO WORK SHALL BE ACCEPTED, EXCEPT IN CERTAIN CASES CONSIDERED JUSTIFIABLE BY THE OWNER.
- THE CONTRACTOR SHALL REMOVE AND/OR RELOCATE ALL EXISTING PLUMBING SYSTEMS WHICH ARE NO LONGER REQUIRED TO FUNCTION SHALL BE REMOVED BACK TO AS-BUILT CONDITIONS.
- THE CONTRACTOR SHALL REMOVE AND/OR RELOCATE ALL EXISTING PLUMBING SYSTEMS WHICH ARE NO LONGER REQUIRED TO FUNCTION SHALL BE REMOVED BACK TO AS-BUILT CONDITIONS.
- DEMOLITION AND REMOVAL WORK SHALL BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER. THE CONTRACTOR SHALL PATCH, REPAIR OR OTHERWISE RESTORE ANY DAMAGED INTERIOR OR EXTERIOR BUILDING SURFACE TO ITS ORIGINAL CONDITION.
- THE CONTRACTOR SHALL REMOVE ALL PIPING SUPPORTS, ETC. FROM EXISTING SYSTEMS AND SHALL PROVIDE ALL NECESSARY PATCHES AND ITEMS SHALL INSTALL AND PROVIDE BYPASS CONNECTIONS NECESSARY.
- ALL PIPING WHICH BECOMES EXPOSED DURING THE ALTERATION WORK SHALL BE REMOVED AND REROUTED CONCEALED BEHIND FINISHED SURFACES.
- PORTIONS OF MAINS TO BE REMOVED OR ABANDONED AS A RESULT OF DEMOLITION WORK, BUT WHICH ARE REQUIRED TO REMAIN ACTIVE, SHALL BE CUT AT CONVENIENT LOCATIONS, REROUTED AND RECONNECTED.
- THE CONTRACTOR SHALL NOTIFY THE OWNER AT THE APPROPRIATE TIME OF THE PROJECTED DEMOLITION AND PHASING SCHEDULE SO THAT REMOVAL OR RELOCATION OF EXISTING PIPING THAT IS TO REMAIN THE CONTRACTOR'S RESPONSIBILITY MAY BE CARRIED OUT IN COORDINATION WITH THE PROJECT REQUIREMENTS.
- ALL EXISTING MATERIAL AND EQUIPMENT IN USABLE CONDITION, WHICH IS TO BE REMOVED UNDER THIS CONTRACT, SHALL REMAIN THE PROPERTY OF THE OWNER OR SHALL BE DISPOSED OF BY THE PLUMBING CONTRACTOR, AS DIRECTED BY THE OWNER.
- ARRANGE TO WORK CONTINUOUSLY, INCLUDING OVER TIME, IF REQUIRED, TO ASSURE THAT SYSTEMS WILL BE SHUT DOWN ONLY DURING THE TIME NECESSARY TO MAKE THE NECESSARY CONNECTIONS TO THE EXISTING SYSTEMS.

GENERAL NOTES

- GENERAL NOTES, SYMBOLS LIST AND DETAILS ARE APPLICABLE TO ALL DRAWINGS MARKED P.
- DRAWINGS ARE DIAGRAMMATIC. DETERMINE LOCATIONS OF SYSTEMS AND COMPONENTS IN FIELD.
- NEITHER ACCURACY NOR COMPLETION OF UTILITY LOCATIONS SHOWN ON DRAWINGS SHALL BE GUARANTEED. THE CONTRACTOR SHALL EXERCISE CAUTION AND IDENTIFY LOCATIONS OF UNMARKED UTILITY LINES AS NECESSARY TO PERFORM WORK OF THIS SECTION.
- ALL PLUMBING WORK SHALL BE IN ACCORDANCE WITH THE CURRENT PLUMBING CODE AND ALL APPLICABLE LOCAL CODES AND DRAWINGS.
- IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO COORDINATE HIS WORK WITH THAT OF ALL OTHER TRADES, INCLUDING (BUT NOT LIMITED TO) ELECTRICAL, MECHANICAL, PLUMBING, SPRINKLER, PLUMBING STRUCTURAL AND GENERAL ARCHITECTURE.
- ANY INTERFERENCE SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND THE OWNER'S REPRESENTATIVE AND SHALL BE RESOLVED PRIOR TO THE INSTALLATION OF THE WORK INVOLVED.
- NO WORK SHALL BE INSTALLED IN VIOLATION OF ANY GOVERNING CODES. ANY WORK SHOWN ON THE DRAWINGS WHICH IS IN VIOLATION OF SUCH CODES SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND THE OWNER'S REPRESENTATIVE AND SHALL BE RESOLVED PRIOR TO THE INSTALLATION OF THE WORK INVOLVED.
- ALL PIPING PENETRATING CEILING AND WALLS SHALL BE INSTALLED WITH CHROME (STAINLESS WHERE NOTED) PLATED SCOUTCHAINS AT THE PENETRATION. ALL PIPING PENETRATING EXTERIOR WALLS AND ROOFS SHALL BE FLASHED IN AN APPROVED MANNER AND SHALL BE SEALED TO PREVENT LEAKAGE. ALL PENETRATIONS SHALL BE PROTECTED AS REQUIRED BY LOCAL CODE AUTHORITY. (SEE DETAILS)
- MANUFACTURER'S MODEL NUMBERS ARE EXPRESSED SOLELY TO ESTABLISH STANDARDS OF QUALITY FOR PERFORMANCE AND MATERIALS.
- PRODUCT INSTALLATION SHALL ADHERE TO MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE ACCESS PANELS FOR EQUIPMENT THAT REQUIRES PERIODIC SERVICE.
- TOPS OF ALL FLOOR DRAINS SHALL BE SET FLUSH WITH FINISHED FLOOR. ALL FLOOR DRAINS SHALL BE SET FLUSH WITH FINISHED FLOOR. BUILDING STRUCTURE AND SHALL NOT REST ON CEILING TILES OR CEILING STRUCTURE.
- CONTRACTOR SHALL COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL PLUMBING EQUIPMENT WITH THE ELECTRICAL DRAWINGS AND SHALL FURNISH EQUIPMENT WIRING FOR THE VOLTAGES SHOWN THEREIN.
- PROVIDE SHUTOFF VALVES ON ALL BRANCH PIPING AND ON ALL SUPPLIES TO ALL FIXTURES AND EQUIPMENT. PROVIDE SHUTOFF VALVES ON ALL WATER MAIN BRANCHES IN CORRIDORS AND WHERE INDICATED ON DRAWINGS. ALL VALVES SHALL BE ACCESSIBLE.
- ALL SLEEVES THROUGH CONCRETE FLOORS AND ALL CORE DRILLING OF CONCRETE FLOORS AND WALLS SHALL BE BY THIS CONTRACTOR.
- CONCRETE PANS AND PLATFORMS FOR WORK OF THIS SECTION WILL BE PROVIDED BY GENERAL CONTRACTOR. PROVIDE INFORMATION AND HARDWARE AS NECESSARY TO COORDINATE WORK.
- SCHEDULE WORK OF THIS SECTION TO AVOID INTERFERENCES WITH FIRE-PROOFING WORK.
- COORDINATE ROOF PENETRATIONS WITH WORK OF OTHER SECTIONS AND WITH FLASHING REQUIREMENTS.
- RUN PIPING CONCEALED, UNLESS SPECIFIED OTHERWISE, AND CLEAR OF CEILING INSERTS.
- STRUCTURAL WELDING SHALL BE 1/4-INCH FILLET UNLESS REQUIRED OTHERWISE.
- PROVIDE CLAMPS, OFFSETS, EXPANSION JOINTS, ANCHORS AND GUEYS AS NECESSARY TO PREVENT STRESS ON PIPING.
- PROVIDE BALANCING VALVES AT SYSTEM LOOP RETURNS AND AT RETURN RISERS. PROVIDE SHUT-OFF VALVES AT SYSTEM LOOP SUPPLIES AND AT LOW POINTS.
- PROVIDE VENTS AT HIGH POINTS IN PIPING SYSTEMS AND DRAIN VALVES AT LOW POINTS.
- PROVIDE GAGE FITTINGS AND THERMOMETER WELLS AT HOT WATER SUPPLY AND RETURN BRANCHES AND AT PUMP INLETS AND OUTLETS.
- VERIFY EXACT SIZES, LOCATIONS, INSETS AND ELEVATIONS PRIOR TO RUNNING ANY PIPING. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF ALL FIXTURES AND EQUIPMENT.
- ALL GAS PIPING TO COMPLY WITH LOCAL AND STATE CODES.
- GAS PIPING AND SAFETY DEVICES SHALL CONFORM TO THE REQUIREMENTS OF NFPA 54 AND SHALL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE STATE REGULATOR BOARD.
- GAS PIPING SHALL BE TESTED ACCORDING TO THE STATE FUEL GAS CODE AND NATIONAL CODE PROVISIONS OF THE LOCAL PLUMBING INSPECTOR. IF ANY LEAKS ARE DETECTED, THE PIPING SHALL BE REPAIRED AND RE-TESTED. MATERIAL SHALL BE RE-TESTED AND INSPECTION AND TEST SHALL BE REDONE.
- PLUMBING SUBCONTRACTOR IS RESPONSIBLE FOR EXTENDING ALL REGULATOR VENTS TO ATMOSPHERE. REGULATORS ARE PART OF EQUIPMENT GAS TRAIN.
- WATER HEATERS SHALL BE INSTALLED WITH DRAIN PANS UNDER HEATERS. ROUTE PAN DRAINS TO NEAREST FLOOR DRAIN OR SAFE DRAIN.
- PIPING SHALL NOT RUN OVER ELECTRICAL PANELS AND SHALL BE COORDINATED WITH WORK OF OTHER TRADES.

DRAWING NO.	DRAWING TITLE
P-000	PLUMBING COVER SHEET
P-100	PLUMBING RENOVATION BASEMENT PLAN
P-101	PLUMBING RENOVATION FLOOR PLAN
P-200	PLUMBING BASEMENT PLAN
P-201	PLUMBING FLOOR PLAN
P-300	PLUMBING SCHEDULES AND DETAILS
P-400	PLUMBING SPECIFICATIONS

Revisions

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Title

PLUMBING COVER SHEET