

ABBREVIATIONS

3PL	THIRD PARTY LOGISTICS
AFF	ABOVE FINISHED FLOOR
AHD	AUTHORITIES HAVING JURISDICTION
APPROX	APPROXIMATE
BLDG	BUILDING
CBL	COLD BEVERAGE LINE
CLG	CEILING
CONST	CONSTRUCTION
CW	DOMESTIC COLD WATER
CXA	COMMISSIONING AGENT
DEG	DEGREES
DTL	DETAIL
DN	DOWN
DWG(S)	DRAWING(S)
EA	EACH
EC	ELECTRICAL CONTRACTOR
ELEC	ELECTRICAL
EM	EMERGENCY
(E) OR (EX)	EXISTING
EXT	EXTERIOR
FD	FLOOR DRAIN
FS	FLOOR SINK
F&I	FURNISH & INSTALL
FLR	FLOOR
FT	FOOT/FEET
FCO	FLOOR CLEANOUT
FW	FILTERED COLD WATER
GC	GENERAL CONTRACTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GR	GREASE WASTE
HR	HOUR
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
HW	HOT WATER
HS	HANDSINK
HWR	HOT WATER RETURN
IW	INDIRECT WASTE
LL	LANDLORD
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MECH	MECHANICAL
MEP	MECHANICAL, ELECTRICAL, AND PLUMBING
MFG	MANUFACTURER
MIN	MINIMUM
MS	MOP SINK
NL	NIGHTLIGHT
NTS	NOT TO SCALE
PC	PLUMBING CONTRACTOR
PS	PREP SINK
POC	POINT OF CONNECTION
PM	PROJECT MANAGER
REF	REFERENCE
REQ(D)	REQUIRE(D)
REV	REVISION
SAN	SANITARY WASTE
SF	SQUARE FEET
SH	SHEET
SPECS	SPECIFICATION(S)
SST	STAINLESS STEEL
TEL	TELEPHONE
TEMP	TEMPORARY
TYP	TYPICAL
TMV	TEMPERATURE MIXING VALVE
TW	TEMPERED HOT WATER
UNO	UNLESS NOTED OTHERWISE
V	VENT
WH	WATER HEATER
WP	WEATHER PROOF
WCO	WALL CLEANOUT

PLUMBING SYMBOL LEGEND

— SAN —	SAN	SANITARY OR WASTE PIPING BELOW SLAB
— V —	V	VENT PIPING
— GW —	GW	GREASE WASTE
— CBL —	CBL	COLD BEVERAGE LINE
— CD —	CD	CONDENSATE DRAIN
— CW —	CW	COLD WATER PIPING
— HW —	HW	HOT WATER PIPING
— FW —	FW	COLD WATER FILTERED
— CWN —	CWN	COLD WATER NANO FILTERED
— CWS —	CWS	COLD WATER SOFTENED
— TW —	TW	TEMPERED WATER
— RO —	RO	REVERSE OSMOSIS WATER
— GAS —	GAS	GAS PIPING
— RD —	RD	REFRIGERANT DISCHARGE PIPING
— RS —	RS	REFRIGERANT SUCTION PIPING
	BV	BALL VALVE
	GV	GATE VALVE
	CH, V	CHECK VALVE
	RV	RELIEF VALVE
	HB	HOSE BIBB
		SHOCK ABSORBER
		STRAINER
	WCO	WALL CLEANOUT
	FCO	FLOOR CLEANOUT
	FD	FLOOR DRAIN
	FS	FLOOR SINK
	WM	WATER METER
	POC	CONNECT TO EXISTING

VALVES

GENERAL
 PLUMBING CONTRACTOR SHALL PROVIDE VALVES WHERE INDICATED ON PLANS AND AS NECESSARY FOR PROPER SYSTEM OPERATION AND COMPONENT ISOLATION. INSTALL VALVES FOR EACH FIXTURE AND ITEM OF EQUIPMENT. PROVIDE BRAIDED STAINLESS STEEL HOSE (UNLESS NOTED OTHERWISE) BETWEEN VALVE AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS. LOCATE SHUT-OFF VALVES ADJACENT TO EQUIPMENT FOR EASY ACCESS SUCH THAT CAN BE REACHED WITHOUT MOVING EQUIPMENT. SHUT-OFF VALVES SHALL BE BALL TYPE. VALVES SHALL BE LISTED/APPROVED FOR USE PER AHJ AND CODE REQUIREMENTS.

VALVES
 PROVIDE VALVES FOR WORKING PRESSURE IN WATER PIPING OF 125 PSI OR GREATER, UNLESS NOTED OTHERWISE. VALVES SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:

VALVE TYPE	DESCRIPTION
CHECK VALVE (UP TO 2" (51MM))	BRONZE, HORIZ. SWING V.PATTERN, RENEWABLE SEAT/DISC
BALL VALVE (UP TO 3" (76MM))	BRASS, FULL PORT, QUARTER TURN
GATE VALVE (UP TO 3" (76MM))	BRONZE, NON-RISING STEEL SOLID WEDGE
TEMP. AND PRESS. RELIEF VALVE	RATED FOR POTABLE WATER HEATING, PRESSURE VESSEL W/ SAFETY CERTIFICATION PER AHJ.
WATER HAMMER ARRESTOR	PRE-CHARGED, SEALED CHAMBER
BACKFLOW PREVENTER (WHOLE-HOUSE)	DOUBLE CHECK VALVE ASSEMBLY WITH TWO BALL VALVES AND SAFETY CERTIFICATION PER AHJ
BACKFLOW PREVENTER (SINGLE DEVICE)	DOUBLE CHECK VALVE ASSEMBLY W/ SAFETY CERTIFICATION PER AHJ
VACUUM RELIEF VALVE	BRASS BODY AND STAINLESS STEEL INTERNALS
PRESSURE REDUCING VALVE	BRONZE, 25 TO 75 PSI REDUCE PRESSURE RANGE AND UPSTREAM/DOWNSTREAM PRESSURE GAUGES
TEMPERED SEAL PRIMER	BRONZE, PRESSURE BASED AUTOMATIC PRIMING

SUPPLY WATER SERVICE
 IF WATER PRESSURE SUPPLIED TO STORE IS GREATER THAN 65 PSI THEN PROVIDE A PRESSURE REGULATOR IN MAIN SUPPLY TO REDUCE WATER PRESSURE. PROVIDE BACKFLOW PREVENTION ON WATER SERVICE IF REQUIRED BY LOCAL CODES.

THERMOSTATIC MIXING VALVE
 PROVIDE A SINGLE THERMOSTATIC MIXING VALVE (TMV) LOCATED AT HOT WATER TANK AND SET FOR 110°F (OR AS REQUIRED BY AHJ) TO SERVE HAND SINKS. MIXING VALVE TO BE INSTALLED PER MANUFACTURER REQUIREMENTS WITH CHECK VALVES AT SUPPLY LINES.

PIPING

SOIL, WASTE, AND VENT PIPING
 SOIL, WASTE, AND VENT PIPING 10" (254MM) AND SMALLER SHALL BE SERVICE WEIGHT, HUBLESS, CAST IRON PIPE, AND FITTINGS WITH NEOPRENE GASKET AND STAINLESS STEEL SHIELD AND CLAMP. PROVIDE HUB AND SPOGOT SERVICE WEIGHT CAST IRON SOIL PIPE AND FITTINGS BELOW GRADE WHERE REQUIRED BY LOCAL CODES. SCHEDULE 40 ABS OR PVC PIPE AND FITTINGS WITH SOLVENT WELD MAY BE SUBSTITUTED FOR SOIL, WASTE, AND VENT PIPING ABOVE AND BELOW GRADE IF ALLOWED BY LOCAL AUTHORITY. ADHESIVES SHALL NOT EXCEED A VOC CONTENT OF 510 G/L FOR PVC AND 325 G/L FOR ABS. ALL HORIZONTAL RUNS SHALL DRAIN AT A GRADE OF 1/4" PER FOOT (2MM PER METER) WHERE POSSIBLE BUT IN NO CASE LESS THAN 1/8" PER FOOT (10MM PER METER) WHERE ALLOWED & SIZED PER AHJ AND CODE.

COORDINATE WITH LOCAL AUTHORITIES FOR DRAINAGE REQUIREMENTS FOR EQUIPMENT DESIGNATED WITH INDIRECT WASTE TO FLOOR SINKS. PROVIDE PIPED DRAIN (P-TRAP AND VENT) TO SANITARY IF REQUIRED BY LOCAL JURISDICTION.

DOMESTIC WATER PIPING
 DOMESTIC WATER PIPING 2 1/2" (64MM) AND SMALLER SHALL BE COPPER TUBE WITH WROUGHT COPPER SWEAT FITTINGS JOINED WITH NON-LEAD, NON-ANTIMONY SOLDER. PROVIDE TYPE "L" COPPER TUBE ABOVE GRADE AND TYPE "K" BELOW GRADE.

CONDENSATE DRAINAGE PIPING
 THE PLUMBING CONTRACTOR SHALL PROVIDE CONDENSATE DRAINS FOR AIR HANDLING UNITS AND STARBUCKS EQUIPMENT (REFER TO SCHEDULE). CONDENSATE DRAINAGE PIPING SHALL BE TYPE "M" COPPER TUBING WITH WROUGHT COPPER SWEAT FITTINGS JOINED WITH 50/50 SOLDER.

NATURAL GAS PIPING
 GAS PIPING SHALL BE SCHEDULE 40, SEAMLESS, BLACK STEEL PIPE. PROVIDE PIPING SUPPORT BLOCKING ON ROOF, COMPATIBLE WITH ROOFING SYSTEM.

HANGERS AND SUPPORTS
 THE PLUMBING CONTRACTOR SHALL FURNISH ALL PIPE SUPPORTS REQUIRED FOR EQUIPMENT AND MATERIAL. ALL HORIZONTAL RUNS OF PIPING SHALL BE SUPPORTED BY PIPE HANGERS INSTALLED AS REQUIRED BY LOCAL CODES. ADDITIONAL SUPPORTS SHALL BE PROVIDED WHERE REQUIRED TO PREVENT SAGGING. HANGERS AND PIPE ATTACHMENTS TO BE FACTORY FABRICATED WITH GALVANIZED COATINGS; NON-METALLIC COATED FOR HANGERS IN DIRECT CONTACT WITH COPPER TUBING.

CONNECTIONS
 INSTALL UNIONS ADJACENT TO EACH VALVE AND AT FINAL CONNECTION TO EACH PIECE OF EQUIPMENT. INSTALL DIELECTRIC COUPLINGS TO CONNECT PIPING MATERIALS OF DISSIMILAR METALS. SCREW JOINT STEEL PIPING UP TO AND INCLUDING 1-1/2" (38MM) FOR GAS PIPING. USE NON-LEAD, NON-ANTIMONY SOLDER FOR SOLDERING DOMESTIC WATER COPPER PIPE.

CLEANOUTS
 PROVIDE FLOOR AND WALL CLEANOUTS AS INDICATED ON THE DRAWINGS OR WHERE REQUIRED BY CODE IN ALL SOIL, WASTE, AND DRAIN LINES. IN AREAS WITH CERAMIC TILE OR CARPETED FLOORING, PROVIDE CLEANOUTS WITH SQUARE, ADJUSTABLE, NICKEL BRONZE TOP. IN AREAS WITH RESILIENT (NYL) FLOORING, PROVIDE CLEANOUTS WITH SQUARE, ADJUSTABLE, NICKEL BRONZE TOP WITH TILE RECESS. CLEANOUTS SHALL BE SAME SIZE PIPE EXCEPT THAT CLEANOUTS LARGER THAN 4" WILL NOT BE RECESSED. WHERE CLEANOUTS OCCUR IN WALLS OF FINISHED AREAS, THEY SHALL BE CONCEALED BEHIND CHROME PLATED ACCESS COVERS.

INSTALLATION
 INSTALL PIPING FREE OF SAGS AND BENDS. PROVIDE BRACKET STANDOFFS FROM MOUNTING SURFACES SUFFICIENT TO ALLOW THE 1/8" OF CLEANING SPACE ALL AROUND PIPING, INCLUDING ADDED PIPE INSULATION. INSTALL FITTINGS FOR CHANGES IN DIRECTION AND BRANCH CONNECTIONS. INSTALL SLEEVES FOR PIPES PASSING THROUGH CONCRETE AND MASONRY WALLS, GYPSUM BOARD PARTITION, CONCRETE AND ROOF SLABS. SEAL PIPE PENETRATIONS THROUGH RATED CONSTRUCTION WITH FIRE STOPPING SEALANT. FINAL PER CODE REQUIREMENTS. UNDERGROUND WATER AND SEWER LINES SHALL BE LAID IN SEPARATE TRENCHES WITH A MINIMUM HOISTING RENTAL SPACE AS REQUIRED BY CODE. EXCAVATED TO THE PROPER DEPTH AND GRADE TO PROVIDE THE REQUIRED FALL.

TESTING
 ALL PIPES SHALL BE TESTED BY AN APPROVED METHOD BEFORE THEY ARE BACKFILLED OR CONCEALED. AFTER TESTING IS COMPLETE, THE PLUMBING CONTRACTOR SHALL DISINFECT THE POTABLE WATER SYSTEM AS REQUIRED BY LOCAL AUTHORITY. TEST WATER PURITY ACCORDING TO LOCAL REQUIREMENTS AND SUBMIT CERTIFIED TEST RESULTS TO ENGINEER FOR REVIEW AND APPROVAL.

IDENTIFICATION
 PROVIDE PIPE IDENTIFICATION EVERY 10 FEET (EXCEPT WHERE PIPES ARE EXPOSED TO PUBLIC) IN ACCORDANCE WITH SPECIFICATIONS.

INSULATION

WATER PIPING
 PROVIDE THERMAL INSULATION ON ALL HOT WATER, TEMPERED WATER, AND HOT WATER RETURN PIPING. PROVIDE THERMAL INSULATION ON COLD WATER AND HORIZONTAL WASTE PIPING IN CEILING SPACES, AND ON ALL COLD WATER PIPING IN CASEWORK AND BAR AREAS. USE SELF SEALING CLOSED CELL FOAM OR JACKETED FIBERGLASS INSULATION WITH MANUFACTURERS APPROVED ADHESIVES, SEALERS, AND COATING. ALL MATERIALS USED SHALL NOT EXCEED 25 FOR FLAME SPREAD INDEX, UNLESS OTHERWISE REQUIRED BY THE LOCAL AUTHORITY FOR ENERGY CODES. THE MINIMUM INSULATION SHALL BE AS FOLLOWS:

PIPE SIZE (DIAMETER)	INSULATION THICKNESS
LESS THAN OR EQUAL TO 1 1/2" (38MM)	1" (24MM)
2" (51MM) OR GREATER	1 1/2" (38MM)

(INSULATION VALUE = K VALUE NOT EXCEEDING 0.027 BTU PER INCH-H²-F²)

SAFETY COVERS
 INSTALL SPECIFIED NO SCALD SAFETY COVERS WITH INSULATED FOAM LINER AND TAMPER PROOF STRAP AS FURNISHED BY STARBUCKS AT ALL EXPOSED PIPING.

ICE BIN DRAIN
 INSULATE ICE BIN DRAIN LINES WITH 1/2" THICK SELF SEALING SECTIONAL CLOSED CELL FOAM.

HVAC PIPING
 INSULATE REFRIGERANT SUCTION PIPING AND COOLING COIL CONDENSATE PIPING WITH 3/4" THICK SELF SEALING CLOSED CELL FOAM. INSULATE HVAC HOT AND CHILLED WATER PIPING SYSTEMS AND LOW PRESSURE STEAM AND CONDENSATE PIPING WITH 1-1/2" THICK HEAVY DUTY SELF SEALING JACKETED FIBERGLASS. INSTALL THICKER INSULATION WHERE REQUIRED BY CODE.

RAIN CONDUCTORS
 INSULATE RAIN WATER CONDUCTORS THAT PASS THROUGH OCCUPIED AREAS WITH 1/2" THICK FIBERGLASS.

LEED SYSTEM COMMISSIONING

CONTRACTOR RESPONSIBILITIES FOR BUILDING COMMISSIONING

CONTRACTOR SHALL PROVIDE SUPPORT AND WORK AS SPECIFIED, NEEDED AND REQUIRED TO CONDUCT AND FACILITATE STARBUCKS STAFF BUILDING COMMISSIONING EFFORTS. THIS WORK WILL BE COMPRISED OF THREE DISTINCT EFFORTS: 1) SUPPORT STARBUCKS COMMISSIONING AGENT (CXA) DURING INSTALLATION VERIFICATION AND CORRECT DISCLOSED DEFICIENCIES; 2) PERFORM TESTING, ADJUSTING, BALANCING AND SYSTEM STARTUP AND SUPPORT FUNCTIONAL PERFORMANCE TESTING BY STARBUCKS CXA; 3) CORRECT DEFICIENCIES DISCLOSED BY FUNCTIONAL PERFORMANCE TESTING AND SUBMIT REPORTS. CONTRACTOR SHALL PERFORM AND PROVIDE THE FOLLOWING:

A. SYSTEMS SUBJECT TO COMMISSIONING MAY INCLUDE, BUT ARE NOT LIMITED TO, DOMESTIC HOT WATER GENERATION, HVAC SYSTEMS, ROOFTOP UNITS, EXHAUST FANS, HVAC CONTROLS, LIGHTING CONTROLS, AIR CURTAINS, BUILT-IN REFRIGERATION EQUIPMENT, AND RENEWABLE ENERGY SYSTEMS.

B. CONTRACTOR SHALL INCLUDE COMMISSIONING ACTIVITIES IN PROJECT SCHEDULE AND SHOW INTERVALS FOR PERFORMANCE OF WORK FOR WHICH CONTRACTOR IS RESPONSIBLE AND INTERVALS FOR WORK PERFORMED BY STARBUCKS CXA. CONTRACTOR SHALL SHOW RESOURCES FOR PERFORMING ALL WORK RELATED TO COMMISSIONING ACTIVITIES ON A LINE ITEM IN THE SCHEDULE OF VALUES.

C. CONTRACTOR SHALL INSTALL EQUIPMENT IN ACCORDANCE WITH THE MANUFACTURERS REQUIREMENTS AND ALL CONTRACT DOCUMENTS. ENSURE THAT ALL EQUIPMENT IS INSTALLED TOTALLY COMPLETE, AND ACCESSIBLE TO STARBUCKS CXA FOR INSTALLATION VERIFICATION AND FUNCTIONAL PERFORMANCE TESTING PRIOR TO THE SCHEDULED START OF INSTALLATION VERIFICATION.

D. INSTALLATION VERIFICATION SHALL BE PERFORMED BY STARBUCKS CONTRACTOR SHALL SUPPORT STARBUCKS CXA INSTALLATION VERIFICATION EFFORTS AS NECESSARY. PROVIDE ALL ACCESS AND EQUIPMENT NECESSARY FOR STARBUCKS STAFF TO VERIFY THAT THE EQUIPMENT IS INSTALLED CORRECTLY.

E. CONTRACTOR SHALL BE READILY AVAILABLE FOR INSTALLATION VERIFICATION TO CORRECT ANY DEFICIENCIES OR DEFECTS DISCLOSED BY THE INSTALLATION VERIFICATION PROCESS. CORRECTIONS SHALL BE MADE IN A TIMELY MANNER WITHOUT DISRUPTION OF THE CONSTRUCTION SCHEDULE.

F. ALL HVAC EXHAUST FAN AND AIR CURTAIN EQUIPMENT SHALL BE TESTED, ADJUSTED AND BALANCED AT THE CONTRACTOR TESTING, ADJUSTING AND BALANCE AGENT (SEE TESTING, ADJUSTING AND BALANCING) AFTER THE SYSTEM IS VERIFIED TO BE COMPLETE AND CORRECTLY INSTALLED BY STARBUCKS CXA. IN ACCORDANCE WITH THE REQUIREMENTS OF THE DOCUMENTS, ALL HVAC CONTROL SYSTEMS SHALL BE TESTED TO ENSURE THAT CONTROL DEVICES, COMPONENTS, EQUIPMENT AND SYSTEMS ARE CALIBRATED, ADJUSTED AND OPERATING IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. SEQUENCES OF OPERATION SHALL BE TESTED TO ENSURE THAT THEY OPERATE IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS. DELIVERABLES: PRELIMINARY WRITTEN TESTING AND BALANCE REPORT CONFORMING TO THE REQUIREMENTS SPECIFIED HEREIN, DOCUMENTING THE INFORMATION SPECIFIED, AND TO THE STARBUCKS CXA IMMEDIATELY UPON COMPLETION OF THE WORK.

G. CONTRACTOR SHALL INFORM STARBUCKS CXA WHEN EQUIPMENT IS READY FOR FUNCTIONAL PERFORMANCE TESTING. ALL EQUIPMENT SHALL BE READY FOR FUNCTIONAL PERFORMANCE TESTING PRIOR TO STARTING TESTING. CONTRACTOR SHALL OPERATE EQUIPMENT FOR STARBUCKS CXA AND VERIFY BY DEMONSTRATION THE CORRECT OPERATION OF EQUIPMENT, RESPONSE OF SENSORS, AND PROPER EXECUTION OF HVAC CONTROL AND LIGHTING SEQUENCES, INCLUDING BUT NOT LIMITED TO, AIR MOVEMENT, TEMPERATURE, SOUND, AND CONTROL RESPONSE. PROVIDE ANY SECURITY ACCESS, HARDWARE, SOFTWARE, OR OTHER SUPPORT AS NEEDED FOR THE STARBUCKS CXA TO EFFICIENTLY WITNESS AND DOCUMENT ALL EQUIPMENT TESTING. STARBUCKS CXA WILL RECORD THE EQUIPMENT OPERATION AND RESPONSE TO TESTING SEQUENCES AND PREPARE A LIST OF ANY DEFICIENCIES DISCLOSED BY THE FUNCTIONAL PERFORMANCE TESTS FOR CORRECTION BY THE CONTRACTOR. EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO, AIR HANDLING UNITS, ROOFTOP AND SPLIT TYPE, CONDENSING UNITS, EXHAUST FANS, LIGHTING CONTROLS, ETC. DELIVERABLES: PROVIDE COMPLETED COPIES OF ALL START UP REPORTS, FILLED OUT ON THE MANUFACTURERS' FORMS, TO THE STARBUCKS CXA.

H. CONTRACTOR IS RESPONSIBLE FOR CORRECTING ANY ISSUES OR DEFICIENCIES DISCLOSED DURING THE FUNCTIONAL PERFORMANCE TESTING PROCESS. CORRECTIONS SHOULD BE MADE IN A TIMELY MANNER WITHOUT DISRUPTION TO THE SYSTEM AND CONSTRUCTION SCHEDULE.

J. CONTRACTOR SHALL BE READILY AVAILABLE FOR ANY RE-TESTING OF EQUIPMENT DEEMED NECESSARY BY STARBUCKS CXA DURING INSTALLATION VERIFICATION AND FUNCTIONAL PERFORMANCE TESTING. CONTRACTOR IS RESPONSIBLE FOR CORRECTING ANY ISSUES OR DEFICIENCIES FOUND IN THE SYSTEM DURING ANY AND ALL RE-TESTING. CORRECTIONS SHOULD BE MADE IN A TIMELY MANNER WITHOUT DISRUPTION TO THE SYSTEM AND CONSTRUCTION SCHEDULE. DELIVERABLES: FINAL BALANCE REPORT, DEFICIENCIES LIST NOTING CORRECTIVE ACTIONS PERFORMED BY CONTRACTOR IN RESPONSE TO INSTALLATION VERIFICATION, AND FUNCTIONAL PERFORMANCE TEST RESULTS.

K. CONSTRUCTION AND POST CONSTRUCTION TESTING: ADDITIONAL TESTING MAY BE REQUIRED BY LEED AND OTHER PROCESSES THAT MAY OCCUR OUT OF SEQUENCE WITH COMMISSIONING SERVICE. CONTRACTOR SHALL CONDUCT, DOCUMENT, SUPPORT AND SCHEDULE THIS TESTING AS DIRECTED BY STARBUCKS CXA.

GENERAL PLUMBING NOTES

- PLUMBING CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR TO PATCH AND REPAIR ALL EXISTING WALLS, FLOORS, CEILING OR OTHER SURFACES IDENTIFIED TO REMAIN THAT MAY BECOME DAMAGED DURING THE COURSE OF WORK.
- EXPOSED/SURFACE MOUNTED PIPING IS ONLY ALLOWED IN THE BAR AREA UNDER COUNTERTOPS, WHERE IT DOES NOT OBSTRUCT CABINETS/DEVICES, AND WHERE APPROVED BY STARBUCKS CONSTRUCTION MANAGER. IF ROUTED THROUGH CABINETS, IT SHALL BE ROUTED TO MAXIMIZE STORAGE SPACE AND BE PROTECTED FROM DAMAGE.
- DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL INTENT FOR ARRANGEMENT OF SYSTEM(S). FURNISH AND INSTALL ALL COMPONENTS NEEDED WHETHER INDICATED OR NOT TO PROVIDE A COMPLETE OPERATING SYSTEM. OVERALL CASEWORK COMPONENT DIMENSIONS AND PLUMBING DETAILS ARE SHOWN FOR REFERENCE AND COORDINATION ONLY.
- CONTRACTOR TO VERIFY ALL DIMENSIONS, INCLUDING CLEARANCES REQUIRED BY OTHER TRADES, AND NOTIFY STARBUCKS CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH WORK. ALL DIMENSIONS ARE TO THE FACE OF THE FINISHED SURFACE UNLESS NOTED OTHERWISE. ALL DIMENSIONS TO BE TAKEN FROM ACTUAL BUILDING DIMENSIONS.
- THE PLUMBING CONTRACTOR SHALL COORDINATE PLUMBING WORK WITH OTHER TRADES. THE PLUMBING CONTRACTOR SHALL TAKE PRECEDENCE OVER ALL OTHER TRADES. ALL DIMENSIONS AND STRUCTURAL DRAWINGS FOR FIXTURES IN CASEWORK AND PLUMBING DETAILS.
- ALL PIPING AND PLUMBING DEVICES SHALL BE SUPPORTED FROM STRUCTURE (NOT FROM HVAC UNITS OR OTHER PIPES/CONDUITS).

GENERAL NOTES

THE INTENT OF THE SPECIFICATIONS AND THE DRAWINGS IS TO PROVIDE A COMPLETE AND FULLY OPERATIONAL PLUMBING SYSTEM. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIAL, AND EQUIPMENT RELATED TO THE INSTALLATION OF THE PLUMBING WORK.

SITE EXAMINATION
 THE CONTRACTOR SHALL THOROUGHLY EXAMINE ALL AREAS WHERE FIXTURES, EQUIPMENT, AND PIPING WILL BE INSTALLED AND WILL REPORT ANY DISCREPANCIES TO THE GENERAL CONTRACTOR IN HIS OPINION, PREVENTS THE PROPER INSTALLATION OF THE PLUMBING WORK.

STANDARDS
 EQUIPMENT AND MATERIALS SHALL CONFORM WITH THE APPROPRIATE PROVISIONS OF CSA, UL, ASME, ASTM, UL, NEMA, ANSI, ASHRAE, NFPA, AS APPLICABLE TO EACH INDIVIDUAL UNIT OR ASSEMBLY.

CODES
 ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE PROVINCIAL AND LOCAL CODES AND ORDINANCES. IN CASE OF CONFLICT BETWEEN THE DRAWINGS AND SPECIFICATIONS AND THE CODES AND ORDINANCES, THE HIGHEST STANDARD SHALL APPLY. CONTRACTOR SHALL SATISFY CODE REQUIREMENTS AS A MINIMUM STANDARD WITHOUT ANY EXTRA COST TO STARBUCKS.

PERMITS AND FEES
 THE CONTRACTOR SHALL PROCURE AND PAY FOR ALL PERMITS, FEES, AND INSPECTIONS NECESSARY TO COMPLETE THE PLUMBING WORK.

WARRANTY
 THE CONTRACTOR SHALL UNCONDITIONALLY WARRANT ALL WORK TO BE FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE BY STARBUCKS AND WILL REPAIR OR REPLACE ANY DEFECTIVE WORK PROMPTLY AND WITHOUT CHARGE AND RESTORE ANY OTHER EXISTING WORK DAMAGED IN THE COURSE OF REPAIRING DEFECTIVE MATERIALS AND WORKMANSHIP.

LEED
 ALL WORK, MATERIALS AND EQUIPMENT SHALL MEET LEED REQUIREMENTS & CODE. IN CASE OF CONFLICT, THE HIGHER STANDARD SHALL APPLY.

PLUMBING FIXTURES

WATER HEATER
 SIZE WATER HEATER PER STARBUCKS STANDARD AND PER AHJ, WHICHEVER IS MORE STRINGENT. PROVIDE A GLASS-LINED, ENERGY EFFICIENT, GAS FIRED (OR ELECTRIC EQUIVALENT) WATER HEATER. PROVIDE INSTALLATION COMPLETE WITH FITTINGS AS SHOWN IN THE DRAWINGS. SET HOT WATER TEMPERATURE AT 120°F OR AS REQUIRED BY AHJ.

WATER FILTRATION
 STARBUCKS WATER FILTRATION VENDOR WILL FURNISH FILTRATION SYSTEM. GENERAL CONTRACTOR SHALL CONFIRM WITH STARBUCKS CONSTRUCTION MANAGER WHETHER VENDOR OR PLUMBING CONTRACTOR SHALL INSTALL FILTRATION SYSTEM.

CONNECTIONS
 THE PLUMBING CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO EQUIPMENT INCLUDING REQUIRED MATERIAL SUCH AS PIPING, VALVES, FILTERS, TRAPS, CHECKS VALVES, VACUUM BREAKERS, AND FLEXIBLE AND RIGID TUBING.

PROVIDE AND COORDINATE LINE VOLTAGE WIRING, LINE VOLTAGE CONTROL AND INTERLOCK WIRING FOR MECHANICAL SYSTEMS, AND LOW VOLTAGE CONTROL WIRING. FURNISH WIRING DIAGRAMS TO THE ELECTRICAL CONTRACTOR AS REQUIRED FOR PROPER EQUIPMENT INSTALLATION. COORDINATE ACTUAL WIRE SIZING AMPS FOR PLUMBING EQUIPMENT (FROM THE EQUIPMENT NAMEPLATE) WITH THE ELECTRICAL CONTRACTOR TO ENSURE PROPER INSTALLATION.

SCHEDULES
 REFER TO SCHEDULES ON DRAWINGS (PLUMBING & ARCH. SCHEDULES) FOR A DESCRIPTION OF LISTED ITEMS AND FURNISH ANY AND ALL PLUMBING FIXTURES LISTED AS "GC". ANY DISCREPANCIES ABOUT WHO IS TO PROVIDE PLUMBING FIXTURES IN THE SCHEDULE SHALL BE BROUGHT TO STARBUCKS ATTENTION FOR CLARIFICATION. INSTALL ALL FIXTURES LISTED REGARDLESS OF WHO SUPPLIES.



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Order Plans