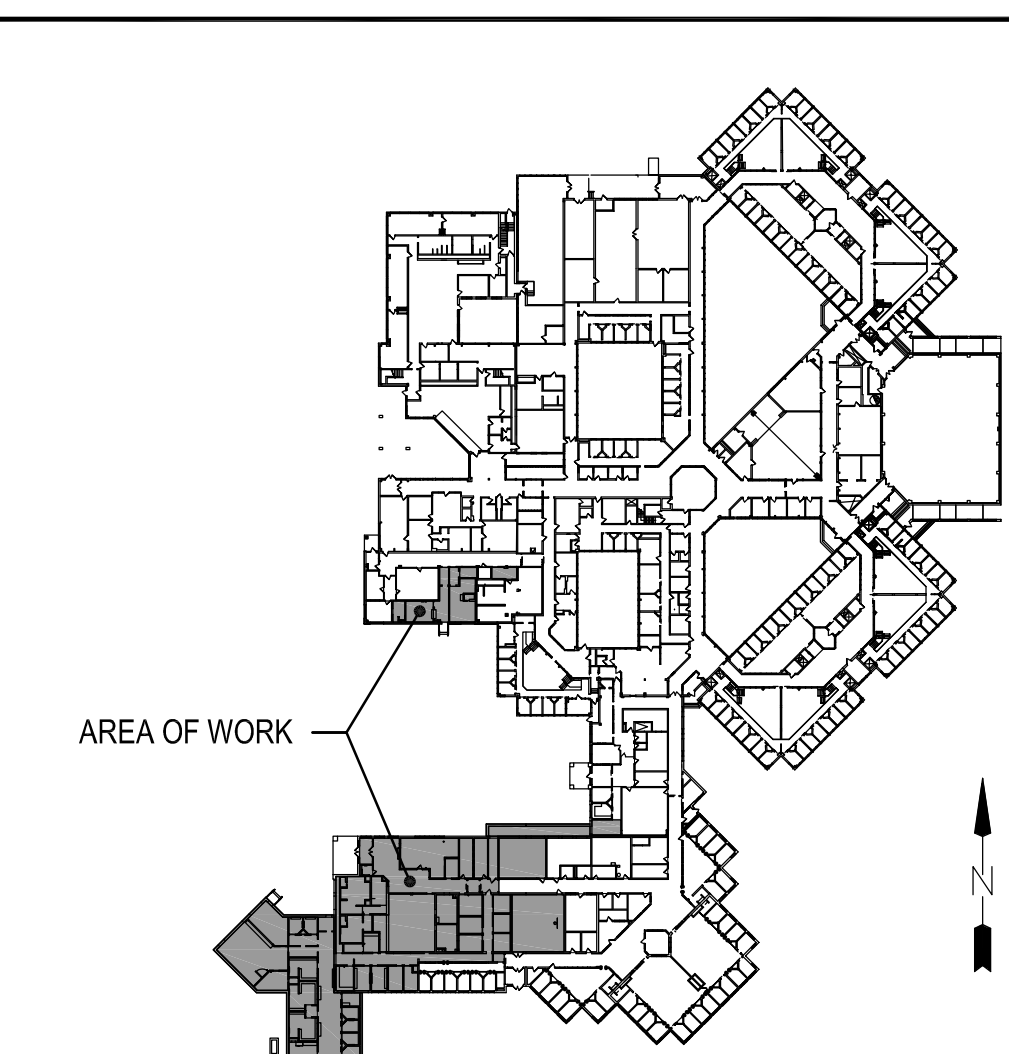


PLUMBING

ABBREVIATIONS			PIPING SPECIALTIES			PIPING DESIGNATIONS			PLUMBING GENERAL NOTES		
A	ABOVE	FT	FOOT/FEET	R					<p>A. ROUGH-IN AND CONNECT HW, HVR, TV, CW, VENT, STORM, SANITARY WASTE & VENT LINES TO FIXTURES IN ACCORDANCE WITH SIZES INDICATED ON FIXTURE SCHEDULE.</p> <p>B. ALL DIMENSIONS AND PIPE SIZES ARE IN INCHES, UNLESS NOTED OTHERWISE.</p> <p>C. FURNISH AND INSTALL 2" MINIMUM SIZE SANITARY WASTE & VENT PIPING BELOW GROUND INSIDE BUILDING REGARDLESS OF SIZE INDICATED ON PLUMBING FIXTURE SCHEDULE.</p> <p>D. INSTALL ALL PIPING WITHIN BUILDING THERMAL ENVELOPE, ABOVE CEILING UNDER BUILDING INSULATION AND ON BUILDING SIDE OF WALL INSULATION, UNLESS NOTED OTHERWISE.</p> <p>E. FURNISH AND INSTALL ACCESS PANELS, FIRE-RATED WHERE REQUIRED, FOR ACCESS TO ALL CONCEALED VALVES, TRAPS OR OTHER EQUIPMENT FURNISHED UNDER THIS CONTRACT, WHERE NO OTHER MEANS IS PROVIDED. PROVIDE BEADED EDGEO IN PLASTER OF GIMP, WALLS & CEILING.</p> <p>F. INSTALL UNIONS ON PIPING TO PERMIT EASY DISCONNECTING. INSTALL UNIONS AT CONNECTION TO ALL EQUIPMENT.</p> <p>G. ALL EQUIPMENT AND PIPING 50 POUNDS AND GREATER SHALL BE SUPPORTED FROM TRUSS TOP CHORD, UNLESS NOTED OTHERWISE.</p> <p>H. COORDINATE LOCATION OF ALL PIPING AND DEVICES WITH THE WORK OF OTHER TRADES BEFORE INSTALLATION, WHERE A CONFLICT IN AVAILABLE CLEARANCES OCCURS, OBTAIN CLARIFICATION FROM THE ARCHITECT, AND PROVIDE WHATEVER ADDITIONAL PIPING, FITTINGS, ETC., ARE REQUIRED TO INSTALL PLUMBING SYSTEM WITHOUT ANY ADDITIONAL COST TO THE CONTRACT.</p> <p>I. FURNISH OPERATIONAL, MAINTENANCE AND EMERGENCY INSTRUCTIONS TO THE RESPONSIBLE DESIGNATED MAINTENANCE STAFF BEFORE ANY PART OF THE SYSTEM IS TURNED OVER TO THE OWNER, AND SUBMIT WRITTEN CONFIRMATION TO THE ARCHITECT AS TO WHAT INFORMATION WAS GIVEN TO WHOM AND WHEN.</p> <p>J. TEST INSTALLATION IN ACCORDANCE WITH THE APPROPRIATE CODE REQUIREMENTS AS EACH, NOTIFY THE OWNER PRIOR TO TESTING SYSTEM. SUBMIT TESTING REPORTS IN OPERATION AND MAINTENANCE MANUAL.</p> <p>K. PROVIDE PAINTING AS DETAILED IN THE SPECIFICATIONS.</p> <p>L. VERIFY MOUNTING HEIGHTS OF PLUMBING FIXTURES WITH ARCHITECTURAL DRAWINGS BEFORE ROUGH-IN.</p> <p>M. FOR HANDICAPPED/ACCESSIBLE PLUMBING FIXTURES, CONFIRM EXACT MOUNTING HEIGHT WITH AUTHORITY HAVING JURISDICTION AND ADJUST AS REQUIRED BEFORE INSTALLATION.</p> <p>N. PROVIDE CONDENSATE TRAPS FOR ALL CONDENSATE DRAINS. SEE DETAIL FOR INSTALLATION.</p> <p>O. PROVIDE RUBBER TRAP GUARDS AT EACH FLOOR DRAIN, TRENCH DRAIN, AND FLOOR SINK.</p> <p>P. LOCATE ROOF DRAINS AND EMERGENCY OVERFLOW ROOF DRAINS WHERE INDICATED ON ROOF PLAN, SEE ARCHITECTURAL DRAWINGS. COORDINATE LOCATION OF ROOF DRAINS WITH OTHER TRADES.</p> <p>Q. PROVIDE WATER HAMMER ARRESTORS ON HW AND CW PIPING AT EVERY TOILET GROUP, LOCATE IN ACCESSIBLE POSITION FOR SERVICING. SEE PLUMBING DOMESTIC WATER RISER DIAGRAMS FOR TYPE AND LOCATION.</p> <p>R. ALL VENTS SHALL BE LOCATED A MINIMUM OF 10 FEET AWAY FROM MECHANICAL UNIT OUTSIDE AIR INTAKES AND BUILDING OPENINGS.</p> <p>S. PROTECT THE OPEN ENDS OF ALL PIPE WITH PROTECTIVE PLASTIC (ON A DAILY BASIS) TO PREVENT ANY DEBRIS OR DIRT FROM ENTERING THE SYSTEM DURING CONSTRUCTION.</p> <p>T. INSTALL WALL HYDRANTS AT 24" ABOVE FINISHED GRADE AND PLACED IN A MANOR TO RETAIN FUNCTIONALITY.</p> <p>U. THE CONTRACTOR SHALL PROVIDE FINAL CONNECTIONS TO EQUIPMENT CONNECTED TO THE INSTALLED SYSTEM INCLUDING COMPONENTS PROVIDED BY OTHERS.</p> <p>V. AT THE END OF EACH PHASE AND AT THE COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR A COMPLETELY OPERABLE SYSTEM. THE COMPLETED SYSTEM SHALL COMPLY WITH REQUIRED PERFORMANCE TESTING AND FULL FUNCTIONALITY AS INTENDED.</p> <p>W. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULL COMPLIANCE WITH THE PROJECT PHASING AND FOR PROVIDING A COMPLETELY OPERABLE SYSTEM AT THE COMPLETION OF EACH PHASE. IF REQUIRED SERVICES TO A SYSTEM ARE NOT AVAILABLE DURING A PHASE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY UTILITIES UNTIL TEMPORARY SERVICES ARE AVAILABLE.</p> <p>X. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING ALL SYSTEM PERFORMANCE TESTING, START-UP, DEMONSTRATION AND TRAINING WITH THE OWNER, FINAL OFFICIAL COPIES OF TESTING CERTIFICATES COMPLETE WITH PROPER WITNESS VALIDATION SHALL BE RETURNED TO THE OWNER AS PART OF THE FINAL OPERATION AND MAINTENANCE MANUALS SUBMITTAL.</p>		
AF	ABOVE FINISHED FLOOR	FUT	FUTURE	RCP	REINFORCED CONCRETE PIPE	— — — — —	DOMESTIC COLD WATER PIPING				
AFV	ABOVE FINISHED GRADE	FV	FLUSH VALVE	RF	ROOF DRAIN	— — — — —	DOMESTIC HOT WATER PIPING				
AFTR	ABOVE FLOOD LEVEL RIM	FVXF	FLUSH VALVE TRANSFORMER	RF	ROOF	— — — — —	DOMESTIC HOT WATER RECIRCULATION PIPING				
AHU	AIR HANDLING UNIT	GA	GAUGE/GAUGE	RI	ROUGH-IN	— — — — —	TEMPERED HOT WATER PIPING	—TW—			
APPROX	APPROXIMATE	GAL	GALLON	RM	ROOM	— — — — —	SANITARY SEWER PIPING	—SAN—			
ARCH	ARCHITECTURAL	GALV	GALVANIC OR GALVANIZED	RWZ	REDUCED PRESSURE ZONE	— — — — —	CONDENSATE DRAIN	—CD—			
AUTO	AUTOMATIC	GC	GENERAL CONTRACTOR	S	SINK	— — — — —	STORM SEWER PIPING	—SD—			
AV	ACID VENT	GEN	GENERAL	S	SINK	— — — — —	SANITARY SEWER VENT PIPING	— — — — —			
B	BELOW FLOOR	GPH	GALLONS PER HOUR	SAC	STUB & CAP	— — — — —	NATURAL GAS PIPING	—G—			
BFF	BELOW FINISHED FLOOR	GPM	GALLONS PER MINUTE	SAW	SOIL AND WASTE	— — — — —	FLOOR CLEANOUT (FCO)	— — — — —			
BFG	BELOW FINISHED GRADE	GR	GRILLE	SAN	SANITARY	— — — — —	WALL CLEANOUT (WCO)	— — — — —			
BJP	BACKFLOW PREVENTER	GRD	GRADE	SF	SQUARE FEET	— — — — —	INLINE/OVERHEAD CLEANOUT (CO)	— — — — —			
B	BETWEEN JOISTS	GV	GATE VALVE	SH	SHOWER	— — — — —	FLOW DIRECTION	— — — — —			
BLDG	BUILDING	H	HIGH	SHT	SHEET	— — — — —					
BUT	BELOW	HC	HEATING (HVAC) CONTRACTOR	SP	SUMP PUMP	— — — — —					
BLW	BOTTOM	HDCP	HANDICAPPED (ACCESSIBLE)	SPEC	SPECIFICATIONS	— — — — —					
BTU	BRITISH THERMAL UNIT	HORIZ	HORIZONTAL	SQ	SQUARE	— — — — —					
C		HP	HORSE POWER	SS	SERVICE SINK	— — — — —					
CB	CATCH BASIN	HT	HEIGHT	SST	SECONDARY STORM	— — — — —					
CB	CAST IRON BOOT	HTG	HEATING	ST	STORM	— — — — —					
CIP	CAST IRON PIPE	HT	HEATING	STD	STANDARD	— — — — —					
CL	CEILING	HW	HOT WATER	STL	STEEL	— — — — —					
CLD	CLEANOUT	HWR	HOT WATER RECIRCULATION	STOR	STORAGE	— — — — —					
CONN	CONCRETE	I	INSIDE DIAMETER	SUSP	SUSPENDED/SUSPENDED	— — — — —					
CONN	CONNECT/CONNECTION	IN OR *	INCH	T	TEMP	— — — — —					
CONST	CONSTRUCT/CONSTRUCTION	INT	INTERIOR	THRU	THROUGH	— — — — —					
CONT	CONTINUED/CONTINUATION	INV	INVERT (ER)	TJ	THROUGH JOISTS	— — — — —					

KEY PLAN



ISSUED FOR BID