

PLUMBING SYMBOLS

NOTE: THIS IS A MASTER LEGEND AND NOT ALL SYMBOLS, ABBREVIATIONS, ETC. ARE NECESSARILY USED ON THE DRAWINGS.

- ANNOTATION**
- ① PLUMBING PLAN NOTE CALLOUT
 - ① PLUMBING EQUIPMENT DESIGNATION. (CONTRACTOR FURNISHED AND INSTALLED). REFER TO PLUMBING FIXTURE OR EQUIPMENT SCHEDULES
 - ① EQUIPMENT DESIGNATION (OWNER FURNISHED, CONTRACTOR INSTALLED)
 - CU 1 MECHANICAL EQUIPMENT DESIGNATION (CONTRACTOR FURNISHED AND INSTALLED UNLESS NOTED OTHERWISE)
 - ⊕ CONNECTION POINT OF NEW WORK TO EXISTING
 - ① MT 1 DETAIL REFERENCE UPPER NUMBER INDICATES DETAIL NUMBER LOWER NUMBER INDICATES SHEET NUMBER
 - ⊕ SECTION CUT DESIGNATION

STANDARD MOUNTING HEIGHTS

PLUMBING (AFT, AFG, UNLESS NOTED OTHERWISE)
REFER TO THE ARCHITECTURAL DRAWINGS FOR PLUMBING FIXTURE MOUNTING HEIGHTS. UNO, INSTAL PLUMBING FIXTURES WITH THE MOUNTING HEIGHTS AS LISTED BELOW WITH FINAL APPROVAL BY THE ARCHITECT.

ADA ACCESSIBLE DRINKING FOUNTAIN	35" FLOOR TO RIM
ADA ACCESSIBLE LAVATORIES	34" FLOOR TO RIM
ADA ACCESSIBLE SHOWER VALVES	38" MINIMUM TO 48" MAXIMUM FLOOR TO CENTERLINE
ADA ACCESSIBLE TUB VALVES	CENTER BETWEEN GRAB BAR AND TUB RIM
ADA ACCESSIBLE URINALS	17" FLOOR TO RIM
ADA ACCESSIBLE WATER CLOSET	17" TO 19" FLOOR TO TOP OF SEAT
ADA ACCESSIBLE WATER COOLER	35" FLOOR TO RIM
ADULT STANDARD DRINKING FOUNTAIN	40" FLOOR TO RIM
ADULT STANDARD WATER COOLER	30" FLOOR TO RIM
CHILD STANDARD DRINKING FOUNTAIN	30" FLOOR TO RIM
CHILD STANDARD WATER COOLER	14" FLOOR TO RIM
CHILD URINAL	14" FLOOR TO RIM
CLINIC SERVICE SINKS	30" FLOOR TO RIM
JANITOR'S SINK FAUCET FITTINGS	42" FLOOR TO CENTERLINE
HOSE BIBS	36" AFF TO CENTERLINE
ICE MAKER OUTLET BOXES	24" FLOOR TO CENTER OF BOX
LAVATORY OR SINK	31" FLOOR TO RIM
NON FREEZE HYDRANT	18" AFG TO CENTERLINE
SHOWER HEADS	6"-0" MEN & 5"-6" WOMEN FLOOR TO CENTERLINE
SHOWER VALVES	48" MEN & 42" WOMEN FLOOR TO CENTERLINE
STANDARD URINALS	22" FLOOR TO RIM
SURGEON'S SCRUB-UP SINKS	35" FLOOR TO FRONT RIM
TUB VALVES	32" FLOOR TO CENTERLINE
WASHING MACHINE OUTLET BOXES	42" FLOOR TO RIM
WATER CLOSET	15" FLOOR TO RIM

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	MH	MANHOLE
AFG	ABOVE FINISHED GRADE	MIN	MINIMUM
AHU	AIR HANDLING UNIT	N/C	NORMALLY CLOSED
BFF	BELOW FINISHED FLOOR	N/O	NORMALLY OPEN
BFG	BELOW FINISHED GRADE	ORD	OVERFLOW ROOF DRAIN
BOP	BOTTOM OF PIPE	PDI	PLUMBING DRAINAGE INSTITUTE
BOS	BOTTOM OF STRUCTURE	POL	POLYVINYL CHLORIDE
BTU	BRITISH THERMAL UNIT	PRV	PRESSURE REDUCING VALVE
CPVC	CHLORINATED POLYVINYL CHLORIDE	RD	ROOF DRAIN
DN	DOWN	RPM	REVOLUTIONS PER MINUTE
DFU	DRAINAGE FIXTURE UNIT	RTU	ROOFTOP UNIT
DS	DOWNSPOUT	SF	SQUARE FEET, SUPPLY FAN
ETR	EXISTING TO REMAIN	SP	SUMP PUMP
EWC	ELECTRIC WATER COOLER	SS	STAINLESS STEEL, SANITARY
FD	FLOOR DRAIN	SEWER	SEWER, SOIL STACK
FFA	FROM FLOOR ABOVE	TDH	TOTAL DYNAMIC HEAD
FTB	FROM FLOOR BELOW	TFA	TO FLOOR ABOVE
FF	FINISHED FLOOR	TFB	TO FLOOR BELOW
FL	FLOOR LINE	TYP	TYPICAL
FLA	FULL LOAD AMPS	UL	UNDERWRITERS LABORATORIES,
FLR	FLOOR	UNC	UNLESS NOTED OTHERWISE
GPM	GALLONS PER MINUTE	UPS	UNINTERRUPTIBLE POWER SUPPLY
HD	HEAD, HUB DRAIN	V	VOLTS(S)
IE	INVERTI ELEVATION	VCP	VITRIFIED CLAY PIPE
IN WC	INCHES OF WATER COLUMN	VS	VENT STACK
JB	JUNCTION BOX	VENT	VENT THROUGH ROOF
J-BOX	JUNCTION BOX	W/	WITH
KW	KILOWATT	W/O	WITHOUT
MAU	MAKE-UP AIR UNIT	WC	WATER COLUMN
MAX	MAXIMUM	WS	WASTE STACK
MBH	1000 BTU PER HOUR	WSU	WATER SUPPLY FIXTURE UNIT

- PIPING**
- DOMESTIC COLD WATER (CW)
 - DOMESTIC HOT WATER (HW)
 - T TRAP PRIMER LINE (1)
 - S SANITARY PIPING - BELOW FLOOR (S)
 - OW OILY WASTE (GW)
 - V VENT (V)
 - ID INDIRECT DRAIN (ID)
 - CD CONDENSATE DRAIN (CD)
 - ACD AUXILIARY CONDENSATE DRAIN (ACD)
 - SPD SUMP OR SEWAGE PUMP DISCHARGE (SPD)
 - G NATURAL GAS (G)
 - WS WATER SERVICE (WS)
 - OP OIL PIPING
 - FLOOR DRAIN, SIZE & TYPE
 - BALL VALVE
 - SHUTOFF VALVE
 - WATER METER
 - STRAINER
 - STRAINER WITH BLOWOFF
 - GAS PRESSURE REGULATOR
 - THERMOSTATIC MIXING VALVE
 - BACKFLOW PREVENTER
 - PRESSURE GAUGE
 - UNION
 - FLANGE CONNECTION
 - HOSE BIBB (HB)
 - CLEANOUT
 - WALL CLEANOUT (WCO)
 - FLOOR CLEANOUT (FCO)
 - EXTERIOR CLEANOUT (ECO)
 - ELBOW UP
 - ELBOW DOWN
 - TEE UP
 - TEE DOWN
 - ELBOW UP WITH SHUT-OFF VALVE (SOV)
 - ELBOW DOWN WITH SHUT-OFF VALVE (SOV)
 - TEE UP WITH SHUT-OFF VALVE (SOV)
 - TEE DOWN WITH SHUT-OFF VALVE (SOV)
 - "A" WATER HAMMER ARRESTER (WHA)
 - WITH PDI SIZES, (A, B, C, D, & E)
 - P-TRAP
 - GAS COCK

PLUMBING FIXTURE SCHEDULE:

- FIXTURES IN THIS SCHEDULE OR THEIR APPROVED EQUIVALENT ARE PROVIDED BY THE PLUMBING CONTRACTOR. SUBMIT SHOP DRAWINGS ON EACH OF THESE ITEMS. REFER TO SPECIFICATIONS FOR FURTHER INFORMATION AND INSTALLATION REQUIREMENTS. VERIFY ROUGH-IN REQUIREMENTS WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE PLUMBING FIXTURE MOUNTING HEIGHTS.
- (COIG)** EXTERIOR CLEANOUT: JAY R. SMITH # 4261L SERIES DUCO CAST IRON DOUBLE FLANGED HOUSING WITH HEAVY DUTY SECURED SCORATED CAST IRON COVER WITH LIFTING DEVICE AND CLEANOUT BODY WITH ABS PLASTIC PLUG WITH GASKET SEAL AND PUSH-ON JOINT. REFER TO SPECIFICATIONS FOR INSTALLATION.
 - (DCO)** DOUBLE CLEANOUT: TWO (2) JAY R. SMITH # 4261L SERIES DUCO CAST IRON DOUBLE FLANGED HOUSING WITH HEAVY DUTY SECURED SCORATED CAST IRON COVER WITH LIFTING DEVICE AND CLEANOUT BODY WITH ABS PLASTIC PLUG WITH GASKET SEAL AND PUSH-ON JOINT. REFER TO SPECIFICATIONS FOR INSTALLATION.
 - (FCO)** FLOOR CLEANOUT - HEAVY DUTY: JAY R. SMITH # 4111L CAST IRON BODY, FLASHING FLANGE WITH CLAMPING COLLAR, ABS PLUG, AND ADJUSTABLE, ROUND, SECURED, HEAVY DUTY SCORATED NICKEL BROW TOP. REFER TO SPECIFICATIONS FOR INSTALLATION. SEE DETAIL 5/P-5.01.
 - (WCO)** WALL CLEANOUT: JAY R. SMITH # 4530S, CAST IRON CLEANOUT TEE, COUNTER SUNK PLUG, STAINLESS STEEL ROUND COVER AND SCREW, AND IRON PLUG WITH GASKET SEAL. REFER TO SPECIFICATIONS FOR INSTALLATION.
NOTE FOR CLEANOUTS: USE TYPICAL CLEANOUTS, AVOID WALL CLEANOUTS WHENEVER POSSIBLE.
 - (EWC)** ELECTRIC WATER COOLER (ADA ACCESSIBLE): OASIS #P8ACSL FREE WITH STAINLESS STEEL RECTANGULAR BOWLS, FLEXIBLE POLYESTER ELASTOMER SAFETY BUBBLERS WITH WALL MOUNTING BRACKET WITH COLLAR SHELF, STAINLESS STEEL FRONT PANEL WITH GRILL, 8.0 GALLONS PER HOUR CAPACITY, 50° F DRINKING WATER AT 80° F INLET TEMPERATURES 90° F ROOM TEMPERATURE. TRIM: MCGUIRE # 2165CC COMPRESSION ANGLE STOP VALVE WITH RISER AND ESCUTCHEON, MCGUIRE # 8872CF 1-1/4" 17 GAUGE TUBULAR CHROME PLATED BRASS ADJUSTABLE P-TRAP AND WASTE ARM WITH CLEANOUT PLUG AND ESCUTCHEON. ELECTRICAL REQUIREMENTS: 120-VOLT, 3.7 FULL LOAD AMPS.
 - (ET)** EXPANSION TANK: AMIROL "THERM-X-TROL" # ST-5, WELDED STEEL PRESSURE TANK, POLYPROPYLENE LINING, FLEXIBLE BUTYL DIAPHRAGM, AIR CHARGING VALVE, 150 PSI MAXIMUM WORKING PRESSURE, 2.0 GALLON CAPACITY, 0.45 MAXIMUM ACCEPTANCE FACTOR, 3/4" PIPE CONNECTION. SET THE AIR CHARGE PRESSURE TO MATCH EXISTING WATER SYSTEM PRESSURE.
 - (FD-1)** FLOOR DRAIN: JAY R. SMITH # 2005L (-A), CAST IRON BODY AND CLAMPING COLLAR, ADJUSTABLE 6" ROUND NICKEL BRONZE STRAINER. USE PUSH-ON JOINT OF OUTLET SIZE AS SHOWN ON PLANS WITH TRAP PRIMER IN SHOP TOILET ROOM.
NOTE FOR FLOOR DRAINS: USE 6" DRAINS IN SHOP, AND 4" DRAINS IN RESTROOMS.
 - (HB)** HOSE BIBB: CHICAGO FAUCET # 852-CP, POLISHED CHROME PLATED BRASS, 3/4" FEMALE INLET, 3/4" THREADED HOSE CONNECTION, # 293-6 LOOSE KEY HANDLE, AND INTEGRAL VACUUM BREAKER. SV3 1056 PRESSURE VACUUM BREAKER SHALL BE INCLUDED WITH INSTALLATION.
 - (SOI)** SAND/OIL SEPARATOR: PRE-CAST CONCRETE SAND/OIL, 750 GAL, GRADE 60 REINFORCED WITH REBAR CONFORMING TO ASTM A-615 WITH 24" CAST IRON RING AND A-1161 COVER STAMPED SEWER. SEE 06/P5.01
 - (L-1)** WALL-MOUNTED LAVATORY: AMERICAN STANDARD # 0355.012 "LUCERNE" 20-1/2" X 18-1/4" RECTANGULAR WALL MOUNTED WHITE VITREOUS CHINA FIXTURE WITH FAUCET LEDGE AND FRONT OVERFLOW FAUCET: CHICAGO FAUCET # 802-VCP 4" CENTERSET, VANDAL RESISTANT, FAUCET WITH # 390 LEVER HANDLES AND # E12 2.2 GPM AERATOR. TRIM: MCGUIRE # 155A GRID DRAIN WITH TAILPIECE, MCGUIRE # 2165CCLK LOOSE KEY COMPRESSION ANGLE STOP VALVES WITH RISERS AND ESCUTCHEONS, MCGUIRE # 8872CF 1-1/4" 17 GAUGE TUBULAR CHROME PLATED BRASS ADJUSTABLE P-TRAP WITH BRASS CLEANOUT AND WASTE ARM WITH CLEANOUT PLUG AND ESCUTCHEON, ZURN 21231 CHAIR CARRIER, ANCHOR TO FLOOR.
 - (L-2)** WALL-MOUNTED LAVATORY (ADA ACCESSIBLE): AMERICAN STANDARD # 0355.012 "LUCERNE" 20-1/2" X 18-1/4" RECTANGULAR WALL MOUNTED WHITE VITREOUS CHINA FIXTURE WITH FAUCET LEDGE AND FRONT OVERFLOW FAUCET: CHICAGO FAUCET # 802-VCP 4" CENTERSET, VANDAL RESISTANT, FAUCET WITH # 390 LEVER HANDLES AND # E12 2.2 GPM AERATOR. TRIM: MCGUIRE # 155A GRID DRAIN WITH TAILPIECE, MCGUIRE # 2165CCLK LOOSE KEY COMPRESSION ANGLE STOP VALVES WITH RISERS AND ESCUTCHEONS, MCGUIRE # 8872CF 1-1/4" 17 GAUGE TUBULAR CHROME PLATED BRASS ADJUSTABLE P-TRAP WITH BRASS CLEANOUT AND WASTE ARM WITH CLEANOUT PLUG AND ESCUTCHEON, ZURN 21231 CHAIR CARRIER, ANCHOR TO FLOOR, AND TRUEBRO "HANDI LAV-GUARD" # 102 INSULATION KIT FOR WATER AND WASTE PIPES.
 - (SK-1)** SINK (ADA ACCESSIBLE): ELKAY # LRA0-1517-2, 15" X 18" X 5" SINGLE COMPARTMENT, SELF-RIMMING, 18 GAUGE TYPE 302 STAINLESS STEEL, FIXTURE WITH FAUCET LEDGE. SET IN BED OF PUTTY. FAUCET: CHICAGO FAUCET # 894-CP 4" INTERSET FAUCET WITH WRIST BLADE HANDLES AND # E3 2.2 GPM AERATOR. TRIM: MCGUIRE # 2165CC WHEEL HANDLE ANGLE STOP VALVES WITH RISERS AND ESCUTCHEONS, MCGUIRE # 151M CUP STRAINER WITH 1-1/2" 17 GAUGE TAILPIECE, MCGUIRE # 8912-CF 1-1/2" 17 GAUGE TUBULAR CHROME PLATED BRASS ADJUSTABLE P-TRAP WITH BRASS CLEANOUT AND ESCUTCHEON, TRUEBRO "HANDI LAV-GUARD" # 102 INSULATION KIT FOR WATER AND WASTE PIPES.
 - (SK-2)** SINK: ELKAY #SS8124 FREE STANDING, RECTANGULAR WALL MOUNTED, STAINLESS STEEL, SINGLE COMPARTMENT, FAUCET: CHICAGO FAUCET # 894-CP 4" INTERSET FAUCET WITH WRIST BLADE HANDLES AND # E3 2.2 GPM AERATOR. TRIM: MCGUIRE # 2165CC WHEEL HANDLE ANGLE STOP VALVES WITH RISERS AND ESCUTCHEONS, MCGUIRE # 151M CUP STRAINER WITH 1-1/2" 17 GAUGE TAILPIECE, MCGUIRE # 8912-CF 1-1/2" 17 GAUGE TUBULAR CHROME PLATED BRASS ADJUSTABLE P-TRAP WITH BRASS CLEANOUT AND ESCUTCHEON, TRUEBRO "HANDI LAV-GUARD" # 102 INSULATION KIT FOR WATER AND WASTE PIPES.
 - (TP)** TRAP PRIMER: PRECISION PLUMBING PRODUCTS # PR-500 "PRIME RITE", CORROSION RESISTANT, NIBBLE BODY, "O" RING SEALS, 1/2" INLET AND OUTLET, AND INTEGRAL VACUUM BREAKER. INSTALL THE VALVE AT A MINIMUM OF 12" ABOVE FINISHED FLOOR. SERVES RESTROOM FLOOR DRAINS. ALL TRAP PRIMERS SHALL BE ASSE 1018 APPROVED.
 - (TS)** TRAP SEAL: RECTORSIAL SURESEAL #97044 TRAP SEAL WITH FLOOR DRAINS IN SHOP AREA.
 - (IMB)** ICE MAKER BOX: GUY GRAY MODEL # BM875, 20 GAUGE GALVANIZED STEEL BOX, 18 GAUGE STEEL FACEPLATE, BOTTOM INLET WATER SUPPLY WITH 1/2" X 1/4" COMPRESSION ANGLE STOP VALVE. TRIM: LOOP 4 FEET OF 1/4" TYPE "K" SOFT COPPER TUBING.
 - (WC-1)** FLOOR-MOUNTED WATER CLOSET (ADA ACCESSIBLE): AMERICAN STANDARD # 2377.100 "CADET" TANK TYPE WHITE VITREOUS CHINA FIXTURE WITH ELONGATED BOWL, 1.6 GALLON PER FLUSH, CLOSE-COUPLED TANK WITH PRESSURE ASSISTED SIPHON JET ACTION. INSTALL TRIP LEVER ON THE WIDE SIDE OF THE SILL. TRIM: CHURCH # 550550 WHITE OPEX-FRONT CONTOURED, SOLID PLASTIC, HEAVY DUTY, SEAT LESS COVER WITH SELF-SUSTAINING CHECK HINGES AND STAINLESS STEEL BOLTS, MCGUIRE # 2166CC ANGLE STOP VALVE WITH RISER AND CHROME-PLATED ESCUTCHEON.
 - (WHA)** WATER HAMMER ARRESTER: PRECISION PLUMBING PRODUCTS, HARD DRAWN COPPER BODY WITH WROUGHT COPPER FITTINGS, PISTON TYPE WITH LUBRICATED EPDM "O" RING SEALS, ASSE 1010 CERTIFICATION. PROVIDE PDI SIZES "A" THROUGH "T" AS SHOWN ON PLANS. PROVIDE SIZE "A" UNLESS SHOWN OTHERWISE ON THE PLANS.
 - (WH)** WATER HEATER: A.O. SMITH # AH-540P TANK-LESS 15,000 TO 199,000 BTU FULLY MODULATING WATER HEATER WITH INTEGRATED REDCIRCULATION PUMP WITH POWER DIRECT VENT DESIGN, 6 GPM AT A 60 DEGREE TEMPERATURE RISE. SET WATER HEATER OPERATING TEMPERATURE TO 120° F. COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR ELECTRICAL REQUIREMENTS AND INSTALLATION.
 - (EW)** WALL-MOUNTED EMERGENCY EYE WASH: ECON SAFETY PRODUCTS MODEL #01030401
 - (TMV)** THERMOSTATIC MIXING VALVE: POWERS # 480, SOLID BRASS BODY, WAX ELEMENT, CORROSION RESISTANT INTERNAL PARTS, AND INTEGRAL CHECKS, ASSE 1070 COMPLIANT, CAPABLE OF 2.2 GPM WITH A 20 PSI DIFFERENTIAL AND A MINIMUM FLOW RATE OF 0.5 GPM, MAXIMUM TEMPERATURE STOP SET FOR 110 DEGREES. MOUNT BELOW THE PLUMBING FIXTURE WHERE INDICATED ON PLANS(S).
 - (HBE)** HOSE BIBB - EXTERIOR: HOSE BIB WITH LOCKABLE RECESSED WALL BOX. ENCLOSED FREEZE-PROOF UNIT WITH KEY - ALL EXTERIOR LOCATIONS.
 - (RAC)** AIR COMPRESSOR: FURNISHED BY OWNER, INSTALLED BY THE OWNER.
 - (TD-1)** TRENCH DRAIN: ZURN #Z886 MODULAR CHANNEL SECTIONS, HIGH DENSITY POLYETHYLENE, WITH BUILT IN SLOPE. PROVIDE CATCH BASIN ZURN #Z887-6. PROVIDE GRADE ZURN #P6-DGC.
 - (BFP)** BACKFLOW PREVENTER: WATTS LF-909-01 REDUCED PRESSURE ZONE ASSEMBLIES WITH A 909G FITTING FOR DRAINAGE.

PLUMBING GENERAL NOTES:

- DRAWINGS ARE DIAGRAMMATIC ONLY AND REPRESENT THE GENERAL SCOPE OF THE WORK. REVIEW THE GENERAL NOTES, SPECIFICATIONS AND PLANS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY THE ARCHITECT OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO SUBMISSION OF BID.
- FURNISH A CONSTRUCTION RECORD SET OF "AS-BUILT" DOCUMENTS TO THE OWNER REFLECTING ANY VARIANCES OF INSTALLED PIPING LOCATIONS OR EQUIPMENT CONTRARY TO THE CONSTRUCTION DOCUMENTS PREPARED BY THE ENGINEER-OF-RECORD AFTER FINAL INSPECTION OF INSTALLED PLUMBING SYSTEMS.
- FURNISH TO THE OWNER A COPY OF INSPECTION REPORTS AND APPROVAL CERTIFICATES FROM LOCAL AND STATE INSPECTIONS.
- PLANS AND SPECIFICATIONS GOVERN WHERE THEY EXCEED CODE REQUIREMENTS.
- REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND MOUNTING HEIGHTS OF PLUMBING FIXTURES.
- DO NOT SCALE FLOOR PLANS FOR EXACT HORIZONTAL LOCATION OF PIPE ROUTING.
- VALVES SHALL BE LINE SIZE UNLESS OTHERWISE NOTED.
- PIPING IN FINISHED AREAS SHALL BE ROUTED CONCEALED, EXPOSED PIPING, WHERE NECESSARY, SHALL BE ROUTED AS HIGH AS POSSIBLE AND TIGHT TO WALLS. ALL EXPOSED PIPING TO BE INSULATED WITH ARMAFLEX.
- COORDINATE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
- COORDINATE PIPING INSTALLATION WITH STRUCTURAL GRADE BEAMS, FOOTINGS, COLUMN PIERS, ETC. SLEEVE PIPING THROUGH GRADE BEAMS, FOOTING, ETC. WHERE REQUIRED AND AS NOTED ON PLANS. COORDINATE SLEEVE INSTALLATIONS WITH THE ARCHITECT, STRUCTURAL ENGINEER, STRUCTURAL CONTRACTOR AND GENERAL CONTRACTOR BEFORE CONCRETE IS INSTALLED.
- CLEAN FAUCET AERATORS AND PIPE STRAINERS PRIOR TO TURNING BUILDING OVER TO THE OWNER.
- PROVIDE TRAP PRIMERS WHERE REQUIRED BY LOCAL AUTHORITIES.
- COORDINATE PIPE ROUTING AWAY FROM ELECTRICAL PANELS. DO NOT ROUTE PIPING OVER ELECTRICAL PANELS.
- PAINT ALL EXPOSED GAS PIPING USING RUST INHIBITOR PAINT AND COLOR SHALL BE COORDINATED WITH THE ARCHITECT AND / OR OWNER.
- COORDINATE ALL ROOF PENETRATIONS WITH OTHER TRADES. MAINTAIN A MINIMUM CLEARANCE FROM ALL AIR INTAKES. MAINTAIN 2" CLEARANCE FROM ALL STEEP EQUIPMENT. NO ROOF PENETRATIONS ON FRONT OF BUILDING.
- INSULATE PIPING ROUTED IN EXTERIOR BUILDING WALLS WITH MINIMUM 1" BATT INSULATION TO PREVENT FREEZING.
- PROVIDE SLEEVE ADAPTER COUPLINGS AND CONNECTIONS OF PVC DWV TO CAST IRON W/ SLAB OVERGRADE. SEE DIVISION 26 SPECIFICATION SECTION "DRAINAGE AND SANITARY SYSTEMS" FOR MORE INFORMATION.
- WATER HAMMER ARRESTORS SHALL BE SIZE "A" UNLESS NOTED OTHERWISE.
- MADE CHECK FOR AIR IN HOT AND COLD WATER SUPPLIES FOR MOP SINK PIPING AND STRAINERS OF SHUTOFF VALVES.
- AIR PIPING MUST BE BLED THOROUGHLY PRIOR TO CONNECTING TO TOOLS OR EQUIPMENT.
- ALL WORK SHALL BE DONE IN STRICT COMPLIANCE WITH THE 2012 INTERNATIONAL MECHANICAL CODE, THE 2012 INTERNATIONAL PLUMBING CODE, THE 2009 INTERNATIONAL ENERGY CONSERVATION CODE, ALL STATE REQUIREMENTS, AND LOCAL REQUIREMENTS.
- ALL FLOOR CLEANOUTS TO BE FLUSH/LEVEL WITH FINISH FLOOR.

DESIGN COMPLIES WITH IECC 2009

FOR ALL BIDDING QUESTIONS, CONTACT THE OWNER. DO NOT CONTACT THE ENGINEER.

PLUMBING SHEET SCHEDULE

SHEET NO.	SHEET DESCRIPTION
P1.01	PLUMBING SCHEDULES
P2.01	PLUMBING SITE PLANS
P3.01	PLUMBING FLOOR PLANS
P3.02	NATURAL GAS & COMPRESSED AIR PLANS
P4.01	PLUMBING RISER DETAILS
P5.01	PLUMBING DETAILS
P6.01	PLUMBING SPECIFICATIONS
P6.02	PLUMBING SPECIFICATIONS

GAS LOAD SUMMARY

SYSTEM	DESIGNATION	EQUIPMENT	MBH
WATER HEATER	WH	ABOVE TECH TOOL	199
BUILDING HEATING	AHU-1	ROOF	80
		SUB-TOTAL	80
BUILDING HEATING	RH-1	RADIANT HEATER	80
	RH-2	RADIANT HEATER	80
	RH-3	RADIANT HEATER	80
	RH-4	RADIANT HEATER	80
		SUB-TOTAL	320
TOTAL NATURAL GAS CONNECTED LOAD			599
MBH CAPACITY			599
TOTAL DEVELOPED LENGTH INCLUDING EQUIVALENT PIPE LENGTH FOR FITTING AND VALVE FRICTION LOSSES TO GAS METER			144 FT X 1.2 = 173 FT
GAS METER REQUIREMENTS			CONSULT GAS UTILITY COMPANY FOR REGULATOR RATING

PLUMBING PIPE MATERIAL SCHEDULE

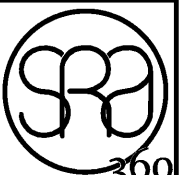
PIPING SYSTEM	ABBREVIATION	PIPING MATERIAL
SANITARY DRAINAGE & VENT (ABOVE GRADE)	S, W OR V	HUBLESS CAST IRON (USE PVC WHERE ALLOWED BY CODE)
SANITARY DRAINAGE & VENT (BELOW GRADE)	S, W OR V	SERVICE WEIGHT CAST IRON (PVC DWV OPTIONAL)
POTABLE WATER (ABOVE GRADE)	CW, HW OR HWR	PEX UPONOR PRE-INSULATED PIPE (NO SUBSTITUTIONS)
POTABLE WATER - 2" & SMALLER (BELOW GRADE)	CW, HW OR HWR	PEX UPONOR PRE-INSULATED PIPE (NO SUBSTITUTIONS)
NATURAL GAS (ABOVE GRADE & ON ROOF)	G	SCHEDULE 40 BLACK STEEL
NATURAL GAS (BELOW GRADE)	G	APPROVED "PE" PIPE FOR GAS
COMPRESSED AIR	CA	TYPE L HARD DRAWN COPPER
OIL PIPING	OL	5/8" O.D., 0.049 WALL, J524 HYDRAULIC PIPING

REFER TO SPECIFICATIONS FOR FITTINGS, INSTALLATION REQUIREMENTS AND FURTHER INFORMATION

FIXTURE BRANCH CONNECTION SCHEDULE

FIXTURE	COLD WATER	HOT WATER	WASTE	VENT
WATER CLOSET (FV)	1-1/4"	---	4"	2"
WATER CLOSET (TANK)	1/2"	---	4"	2"
URINAL	1"	---	2"	2-1/2"
LAVATORY/ HAND SINK	1/2"	1/2"	2"	1-1/2"
DRINKING FOUNTAIN	1/2"	---	2"	1-1/2"
JANITOR'S SINK	1/2"	1/2"	3"	2"
WASH FOUNTAIN	1"	1"	2"	1-1/2"
FLOOR DRAIN	REFER TO PLAN FOR SIZES			
SINK	1/2"	1/2"	2"	2"
FLOOR CLEANOUT	REFER TO PLAN FOR SIZES			
WALL CLEANOUT	REFER TO PLAN FOR SIZES			
CLEANOUT TO GRADE	REFER TO PLAN FOR SIZES			
ICE-MAKER CONNECTION BOX	1/2"	---	2"	2"
TRAP PRIMER	1/2"	---	---	---

NOTE:
PIPE SIZES SHOWN ARE MINIMUM.
NOT ALL FIXTURES SHOWN IN THIS SCHEDULE ARE USED ON THIS PROJECT.



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10/19/2018
Date

Revisions

2/28/18 - Prototype Update

Project No. 18-042

Drawn By:

Date: 10/19/18

Sheet Title:

PLUMBING SCHEDULES

Drawing No.

P-1.01

LH9N-09-2018

Order Plans

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