

PLUMBING SEISMIC NOTES

1 GAS, HIGH HAZARD AND FIRE PROTECTION PIPING SHALL BE SEISMIC SUPPORTED PER THE SPECIFICATIONS. OTHER PIPING IN BOILER AND MECHANICAL EQUIPMENT ROOMS THAT IS GREATER THAN 1" AND PIPING 2-1/2" AND LARGER THAT IS SUSPENDED MORE THAN 12" FROM POINT OF CONNECTION TO STRUCTURE SHALL BE BRACED IN TWO DIRECTIONS (90° OPPOSING) USING ROD OF SAME LOAD CHARACTERISTICS AS PRIMARY SUSPENSION ROD.

2 PIPING IN EQUIPMENT ROOMS THAT IS LESS THAN 2-1/2" DIAMETER SHALL BE TRANSVERSELY BRACED AT MAXIMUM 30'-0" ON CENTER. PIPING 16" OR LESS IN DIAMETER SHALL BE TRANSVERSELY BRACED AT MAXIMUM 40'-0" ON CENTER AND LONGITUDINALLY AT 80'-0" ON CENTER. PIPING LARGER THAN 16" DIAMETER SHALL BE TRANSVERSELY BRACED AT MAXIMUM 30'-0" ON CENTER AND LONGITUDINALLY AT 60'-0" ON CENTER. A TRANSVERSE BRACE SHALL ALSO BE PROVIDED WITHIN 10'-0" OR 15 PIPE DIAMETERS OF EACH CHANGE OF DIRECTION.

FINAL DOCUMENTATION

PROVIDE A ONE YEAR WARRANTY FOR ALL SYSTEMS, MATERIAL AND LABOR INCLUDING TRANSPORTATION AND TRAVEL TIME.

PROVIDE INSTRUCTION TO OWNER'S PERSONNEL FOR ALL SYSTEMS AND EQUIPMENT ON SITE. THIS INSTRUCTION SHALL BE FOR A MINIMUM OF TWO HOURS.

CONTRACTOR SHALL PROVIDE A BOOK AT FINAL INVOICE WITH ALL WARRANTIES, INSTRUCTION

ADA NOTES

LIGHT SWITCHES, ELECTRICAL OUTLETS, AND OTHER ENVIRONMENTAL CONTROLS SHALL HAVE OPERABLE PARTS TO THE CONTROLS NO HIGHER THAN 48" AND NO LOWER THAN 15", A.F.F.

PLUMBING GENERAL NOTES

1 NOTES APPLY TO ALL PLUMBING SHEETS UNLESS OTHERWISE NOTED.

2 COORDINATE PIPE ROUTING AWAY FROM ELECTRICAL PANELS. DO NOT INSTALL PIPING OVER ELECTRICAL PANELS.

3 EXACT LOCATION OF ALL EQUIPMENT AND PIPING SHALL BE COORDINATED WITH OTHER TRADES. CEILING MOUNTED SPRINKLER, LIGHTING AND ELECTRICAL REQUIREMENTS TAKE PRECEDENCE OVER CEILING MOUNTED MECHANICAL REQUIREMENTS.

4 ALL WORK SHALL CONFORM TO THAT 2012 INTERNATIONAL PLUMBING CODE W/LATEST STATE AMENDMENTS AND ALL APPLICABLE LOCAL CODES.

5 CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK WITH THAT OF OTHER TRADES, HVAC, STRUCTURAL, ETC. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR BUILDING DETAILS AND DIMENSIONS. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES, DOCUMENTS AND SERVICES RELATED TO THE INSTALLATION OF THE WORK.

6 PROVIDE ALL MATERIALS FOR A COMPLETE INSTALLATION, IN ALL RESPECTS READY FOR INTENDED USE, AND IN STRICT ACCORDANCE WITH STATE AND LOCAL CODES. GET THE NAMES OF AUTHORITIES HAVING JURISDICTION (AHJ), AND MANUFACTURER'S RECOMMENDATIONS. OBTAIN AND PAY FOR ALL PERMITS REQUIRED BY THIS WORK.

7 REFER TO SPECIFICATIONS AND PLANS FOR ACCEPTABLE MANUFACTURERS AND MODELS OF PLUMBING FIXTURES AND EQUIPMENT, AND PROPER APPLICATIONS OF SAME.

9 CUTTING OF ROOF AND FLASHING OF PIPE CURBS, SANITARY VENT THROUGH ROOF, ETC., SHALL BE COORDINATED WITH AND PERFORMED BY THE ROOFING CONTRACTOR, AT THIS CONTRACTOR'S EXPENSE, TO MAINTAIN THE ROOF WARRANTY.

10 CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID AND FIELD VERIFY EXISTING CONDITIONS TO ENSURE THAT THE WORK REPRESENTED ON THESE DRAWINGS AND IN THESE SPECIFICATIONS CAN BE INSTALLED AS INDICATED. CONTRACTOR SHALL TAKE ALL INTERFERENCE INTO CONSIDERATION, PROVIDE ALL NECESSARY OFFSETS TO SUIT FIELD CONDITIONS AS REQUIRED.

11 CONTRACTOR SHALL COORDINATE ALL SANITARY SEWER, STORM DRAIN, FIRE AND DOMESTIC WATER LINES AND NATURAL GAS LINES WITH CIVIL DRAWINGS. SEE CIVIL DRAWINGS FOR CONTINUATION OF ALL UTILITY LINES.

12 DO NOT SCALE FLOOR PLANS FOR EXACT HORIZONTAL LOCATION OF PIPE ROUTING.

13 INFORMATION AND COMPONENTS SHOWN ON RISER DIAGRAMS OR DETAILS, BUT NOT SHOWN ON PLANS, AND VICE-VERSA, SHALL BE PROVIDED AS IF EXPRESSLY REQUIRED BY BOTH.

14 ALL DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENTS OR GEOMETRIC RELATIONSHIPS OF EQUIPMENT AND SERVICES. THEY ARE NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, FITTING, OR COMPONENT. CONTRACTOR SHALL NOT SCALE DRAWINGS. EQUIPMENT SCHEDULES SHALL TAKE PRECEDENCE OVER CONFLICTING DRAWING INFORMATION. DRAWINGS SPECIFIC TO THIS DISCIPLINE DO NOT LIMIT THE RESPONSIBILITY OF WORK REQUIRED BY CONTRACT DOCUMENTS. REFER TO ARCHITECTURAL, STRUCTURAL, ELECTRICAL, AND OTHER DRAWINGS FOR COMPLETE INFORMATION.

15 PROVIDE FIRE SEAL WHERE PIPES PENETRATE FIRE RATED ASSEMBLY.

16 DRAWINGS ARE DIAGRAMMATIC ONLY AND REPRESENT THE GENERAL SCOPE OF THE WORK. REVIEW THE GENERAL NOTES AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS THAT MAY NOT BE SPECIFICALLY CALLED OUT IN THIS PORTION OF THE CONSTRUCTION DOCUMENTS. NOTIFY THE ARCHITECT OR OWNER'S CONSTRUCTION MANAGER OF ANY CONFLICTS OR DISCREPANCIES.

17 PLANS AND SPECIFICATIONS GOVERN WHERE THEY EXCEED CODE REQUIREMENTS.

18 PROVIDE TO THE ARCHITECT OR OWNER'S CONSTRUCTION MANAGER A COPY OF INSPECTION REPORTS AND APPROVAL CERTIFICATES FROM LOCAL AND STATE INSPECTIONS.

19 ALL WORK IS TO CONFORM TO THE LATEST EDITIONS OF THE AR. STATE PLUMBING CODE, AR. STATE GAS CODE, NFPA AND ALL LOCAL ORDINANCES.

21 MAKE ALL UTILITY CONNECTIONS AND INSTALLATIONS IN FULL ACCORDANCE WITH ALL UTILITY REGULATIONS. PROVIDE ALL ADDITIONAL APPURTENANCES AS REQUIRED BY THE UTILITY COMPANY. THE COMPLETED INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE INDUSTRY STANDARDS OF GOOD PRACTICE AND SAFETY, AND THE MANUFACTURER'S STRICTEST RECOMMENDATIONS FOR EQUIPMENT AND PRODUCT APPLICATION AND INSTALLATION.

22 ALL SEWER PIPING BELOW SLAB TO BE 2" DIAMETER MINIMUM.

23 NO STRUCTURAL MEMBERS MAY BE CUT OR MODIFIED WITHOUT THE WRITTEN PERMISSION OF THE STRUCTURAL ENGINEER.

25 PROVIDE CLEANOUTS IN ALL SANITARY, STORM DRAINAGE & OVERFLOW LINES, WHETHER SHOWN OR NOT, AT INTERVALS NOT TO EXCEED 50 FEET, AT EACH DIRECTION 45 DEGREES AND GREATER, AND ON ALL VERTICAL RISERS AT A HEIGHT OF 30" A.F.F. AT THE BASE OF EACH STACK.

26 INSULATE ALL CONDENSATE LINES INSIDE BUILDING AS PER INSTALLATION REQUIREMENTS FOR COLD WATER LINE, IN SPECIFICATIONS.

27 SLOPE ALL SANITARY AND STORM LINES ARE 1/4" PER FOOT FOR PIPES LESS THAN 3" IN DIAMETER, AND NOT LESS THAN 1/8" PER FOOT FOR PIPES 3" AND LARGER. VERIFY INVERTS WITH SITE DRAWINGS AND COORDINATE INSTALLATION TO ASSURE PROPER FLOW.

28 SLEEVE AND SEAL ALL PIPE PENETRATIONS THRU RATED WALLS AND FLOORS. PIPE SLEEVES THROUGH FLOORS SHALL TERMINATE A MINIMUM OF 2" ABOVE FINISHED FLOOR. PLASTIC PIPING SHALL NOT BE USED TO PENETRATE FIRE RATED CONSTRUCTION.

30 ALL VENTS THROUGH ROOF SHALL BE PROVIDED WITH #6 LEAD FLASHING OR ELASTOMERIC FLASHING SYSTEM TO MAINTAIN ROOF WARRANTY.

32 PROVIDE A CONSTRUCTION RECORD SET OF "AS-BUILT" DOCUMENTS TO THE ARCHITECT OR OWNER'S CONSTRUCTION MANAGER REFLECTING ANY VARIANCES OF INSTALLED PIPING LOCATIONS OR EQUIPMENT CONTRARY TO THE CONSTRUCTION DOCUMENTS.

34 INSTALL VTR'S, EXHAUST FANS, AND FLUES A MINIMUM 5' FROM PARAPET OR OUTSIDE WALL AND 10'-0" MINIMUM FROM EQUIPMENT WITH OUTSIDE AIR INTAKE. VALVES SHALL BE LINE SIZE UNLESS OTHERWISE NOTED.

35 CLEAN FAUCET AERATORS AND PIPE STRAINERS PRIOR TO TURNING BUILDING OVER TO THE OWNER.

37 PIPING IS SHOWN IN ITS GENERAL LOCATION (UNLESS DIMENSIONED). EXACT LOCATION SHALL BE DETERMINED BY JOB CONDITIONS. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THEIR WORK WITH THAT OF OTHER TRADES & ARRANGE PIPING TO CLEAR STRUCTURAL MEMBERS & DUCTWORK. IF THE PLUMBING CONTRACTOR INSTALLS HIS WORK PRIOR TO COORDINATING WITH ALL OTHER TRADES OR AS TO CAUSE ANY INTERFERENCE WITH WORK OF OTHER TRADES, THEY SHALL MAKE THE NECESSARY CHANGES TO THE WORK OR CORRECT THE CONDITION WITHOUT EXTRA CHARGE. CONTRACTOR SHALL VERIFY LOCATIONS OF SEWER, WATER, GAS & ANY OTHER UTILITY CONNECTIONS FROM APPROVED SITE PLANS PRIOR TO BID. REROUTING UTILITIES FROM THAT SHOWN ON PLANS AT CONTRACTOR'S RISK. THE PLUMBING CONTRACTOR TO FURNISH ALL REQUIRED MATERIAL TO PROVIDE FOR THE PROPER INSTALLATION OF ALL PLUMBING EQUIPMENT. ANY OF THE CONFLICTS OR DISCREPANCIES REGARDING WHAT IS REQUIRED AS TO WHAT IS INDICATED ON PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO BID & PRIOR TO CONSTRUCTION SO THIS CAN BE CLARIFIED. IF DISCREPANCIES ARE NOT BROUGHT TO THE ARCHITECT'S ATTENTION PRIOR TO FINAL BIDS, THEN THE PLUMBING CONTRACTOR ACCEPTS THE DRAWINGS AS SUFFICIENT & CHANGES DURING CONSTRUCTION WILL NOT BE CONSIDERED. IF INSTALLED DRAWINGS TO BE REVISED OR FORMAL ENGINEER'S APPROVAL OF THE PLUMBING CONTRACTOR SHALL PAY ALL COSTS INVOLVED IN DRAWING REVISIONS AND/OR ENGINEER'S DOCUMENTED CORRESPONDENCE GENERATION.

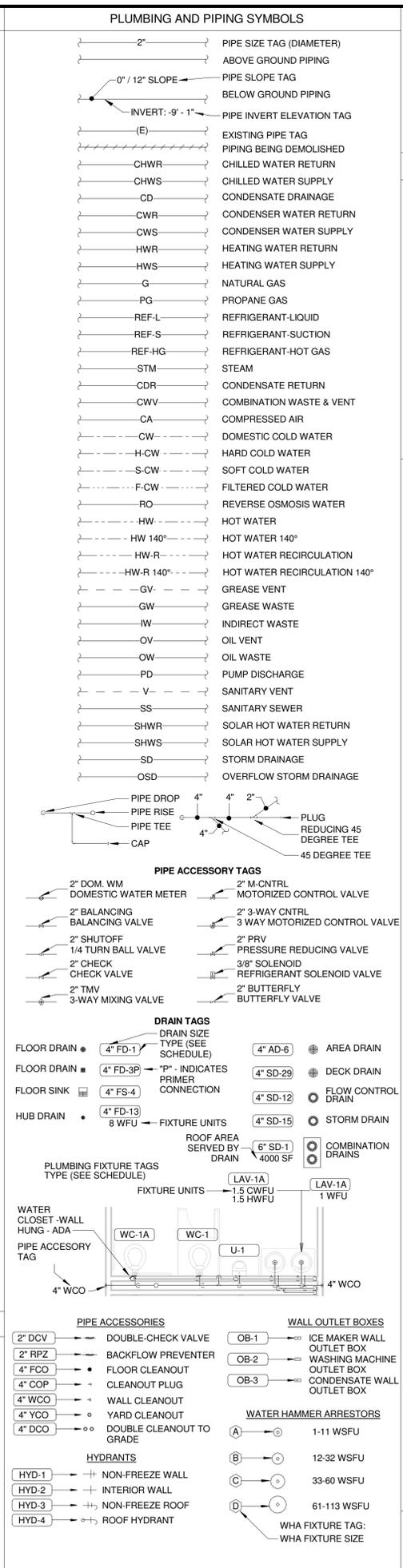
38 PROVIDE PRESSURE REDUCERS IN WATER SUPPLY LINES TO KEEP PRESSURE BELOW 70 PSI AT ALL OUTLETS. MINIMUM PRESSURE ACCEPTABLE AT WATER OUTLETS IS 15 PSI AT DIRECT SUPPLY FLUSH VALVES, AND 8 PSI AT ALL OTHER OUTLETS.

39 PROVIDE WATER HAMMER ARRESTORS IN BRANCH WATER LINES AS REQUIRED BY MANUFACTURE. GOOD PRACTICE OR MINIMUM OF ONE ARRESTOR FOR EACH FIXTURE OR BANK OF FIXTURES. AIR CHAMBERS SHALL NOT BE USED.

40 PROVIDE STOP VALVES AT EVERY FIXTURE ON BOTH HOT AND COLD WATER SUPPLY LINES. VALVES, ESCUTCHEONS, FITTINGS, ETC. SHALL BE CHROMIUM PLATED WHERE PIPING IS EXPOSED.

41 EACH FIXTURE OR GROUP OF FIXTURES SHALL BE PROVIDED WITH A SHUT OFF VALVE IN THE CEILING SPACE. PROVIDE AN ACCESS PANEL IN SOLID CEILINGS.

ABBREVIATIONS	
Ø	ROUND
A	AIR
AB	ABOVE BASE
ABV	ABOVE
AC	AIR CONDITIONING
ACOUS	ACOUSTICAL
AD	AREA DRAIN
ADD	ADDITONAL
ADDL	ADDITIONAL
AFF	ABOVE FINISHED FLOOR
AG	ABOVE GROUND
ALT	ALTERNATE
AP	ACCESS PANEL
APPROX	APPROXIMATE
ARCH	ARCHITECT/ARCHITECTURAL
AV	ACID RESISTANT VENT
AW	ACID RESISTANT WASTE
AUTO	AUTOMATIC
BFF	BELOW FINISHED FLOOR
BLDG	BUILDING
BLW	BELOW
BM	BEAM
BO	BY OTHER
BOT	BOTTOM
BSMT	BASEMENT
BTU	BRITISH THERMAL UNITS
BTUH	BRITISH THERMAL UNITS PER HOUR
BTWN	BETWEEN
CAP	CAPACITY
CB	CATCH BASIN
CCW	COUNTER CLOCKWISE
CFCV	CONSTANT FLOW CONTROL VALVE
CFM	CUBIC FEET PER MINUTE
CHW	CIRCULATING HOT WATER
CI	CAST IRON
CLG	CEILING
CLG	COOLING
CO	CLEAN OUT
COL	COLUMN
COMB	COMBINATION
CONC	CONCRETE
COND	CONDENSATE
CONF	CONFERENCE
CONN	CONNECT
CONST	CONSTRUCTION
CONT	CONTINUE/CONTINUATION
CONTR	CONTRACT/CONTRACTOR
COP	CLEANOUT PLUG
COORD	COORDINATE
COTG	CLEANOUT TO GRADE
CTR	CENTER
CUFT	CUBIC FEET
CV	CHECK VALVE
CW	COLD WATER
CW	CLOCKWISE
D	DEGREE
DB	DRY BULB
DCOTG	DOUBLE CLEANOUT TO GRADE
DET	DETAIL
DIA	DIAMETER
DIAG	DIAGONAL
DISCH	DISCHARGE
DI	DIVISION
DJ	DEIONIZED WATER
DMPR	DAMPER
DN	DOWN
DWG	DRAWING
DW	DISTILLED WATER
EA	EACH
EAT	ENTERING AIR TEMPERATURE
EL	ELBOW
ELEC	ELECTRICAL
ELEV	ELEVATION
EP	EXPLOSION PROOF
EQ	EQUAL
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EWT	ENTERING WATER TEMPERATURE
EA	EXHAUST AIR
EAH	EXHAUST HOOD
EXIST	EXISTING
EXP	EXPANSION
EXPJT	EXPANSION JOINT
EXT	EXTERIOR
F	DEGREES FAHRENHEIT
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FD	FIRE DAMPER
FDV	FIRE DEPARTMENT VALVE
FES	FREESTANDING EXPANSION TANK
FHC	FIRE HOSE CABINET
FL	FLOOR
FLG	FLANGE
FO	FUEL OIL
FOV	FUEL OIL VENT
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
FS	FEET PER MINUTE
FRP	FIBERGLASS REINFORCED PIPE
FS	FULL SIZE
FS	FLOOR SINK
FT	FOOT/FEET
FTG	FOOTING
FTR	FIN TUBE RADIATION
FUT	FUTURE
GA	GAGE/GAUGE
GAL	GALLON
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GEN	GENERATOR
GENL	GENERAL
GPH	GALLONS PER MINUTE
GR	GRADE
GW	GREASE WASTE
HB	HOSE BIB
HD	HEAD
HORZ	HORIZONTAL
HP	HORSE POWER
HP	HIGH PRESSURE
HTG	HEATING
HTR	HEATER
HW	HOT WATER
HYD	HYDRANT
ID	INDIRECT
IET	INLINE EXPANSION TANK
INL	INLET
INSUL	INSULATION
INT	INTERIOR
INV	INVERT
INWG	INCHES WATER GAUGE
JST SPC	JOIST SPACE
JT	JOINT
LAB	LABORATORY
LAB	LABORATORY
LB	POUND
LB/HR	POUNDS PER HOUR
LAT	LEAVING AIR TEMPERATURE
LF	LINEAL FOOT
LOC	LOCATION
LP	LOW PRESSURE
LPG	LIQUEFIED PETROLEUM GAS
LRF	LIQUID REFRIGERANT
LS	LAWN SPRINKLER
LVR	LOUVER
LWT	LEAVING WATER TEMPERATURE
M/A	MIXED AIR
MAN	MANUAL
MATL	MATERIAL
MAV	MANUAL AIR VENT
MAX	MAXIMUM
MBD	MOTORIZED BYPASS DAMPER
MBH	ONE THOUSAND BTU PER HOUR
MC	ONE THOUSAND CUBIC FEET
MCW	MAKE-UP COLD WATER
MCD	MOTORIZED DAMPER
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MILE
MIN	MINIMUM
MISC	MISCELLANEOUS
MTR	MOTOR
MUA	MAKE-UP AIR
N	NOISE CRITERIA
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NUMBER
NO	NORMALLY OPEN
NOM	NOMINAL
NTS	NOT TO SCALE
O	OXYGEN
O/A	OUTSIDE AIR
OC	ON CENTER
OC	OVERFLOW
OPNG	OPENING
ORD	OVERFLOW ROOF DRAIN
PD	PRESSURE DROP
PV	POST INDICATOR VALVE
PLBG	PLUMBING
PR	PAIR
PREL	PRELIMINARY
PRESS	PRESSURE
PRM	PRIMARY
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
PW	POTABLE WATER
PWR	POWER
R	RADIANT
RA	RETURN AIR
RCP	RADIANT CEILING PANEL
RD	ROOF DRAIN
REC	RECESSED
RED	REDUCER
REFR	REFRIGERATION
RH	RELATIVE HUMIDITY
REOD	REQUIRED
REV	REVERSE
RIA	RELIEF AIR
ROOM	ROOM
RPM	REVOLUTIONS PER MINUTE
RW	RAIN WATER
SF	SQUARE FOOT
SHA	SUPPLY AIR
SAH	SANITARY
SCHED	SCHEDULE
SECT	SECTION
SF	SQUARE FOOT
SD	SMOKE DAMPER
SHT	SHEET
SIM	SIMILAR
SLV	SLEEVE
SM	SURFACE MOUNT
SP	STANDPIPE
SP	STATIC PRESSURE
SPEC	SPECIFICATION
SPS	STATIC PRESSURE STATION
SQ	SQUARE
SR	SUCTION REFRIGERANT
SSD	SOIL SUBRAIN
SS	STAINLESS STEEL
STD	STANDARD
STEAM	STEAM
STRUCT	STRUCTURAL
SUCT	SUCTION
SUSP	SUSPENDED
T	THERMOSTAT
TCP	TEMPERATURE CONTROL PANEL
TD	TEMPERATURE DROP
TDR	TRENCH DRAIN
TEFC	TOTALLY ENCLOSED FAN COOLED
TEMP	TEMPERATURE
TYP	TYPICAL
UNOTED	UNLESS OTHERWISE NOTED
UG	UNDERGROUND
VACUUM	VACUUM
VENT	VENT
VAV	VARIABLE AIR VOLUME
VENT	VENTILATION
VOL	VOLUME
VTR	VENT THROUGH ROOF
W	WASTE
WAGD	WASTE ANESTHETIC GAS DISPOSAL
WB	WET BULB
WCO	WALL CLEAN OUT
WTR	WATER
YCO	YARD CLEANOUT
2YCO	2-WAY YARD CLEANOUT



09/11/25

GENERAL PLUMBING SYMBOLS

* NOTE *

ALL OF GENERAL NOTES ON THIS SHEET ARE TO BE APPLIED TO ALL OTHER DRAWINGS IN THIS SET. THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN THIS SET OF DRAWINGS.

Burris Architecture
 820 Tiger Blvd, Suite 4, Bentonville, Ar 72712
 479-319-6045

SMOKE
 730 E MAIN ST
 FARMINGTON, AR

DATE 09/11/25
 JOB NO. 25089
 REVISIONS

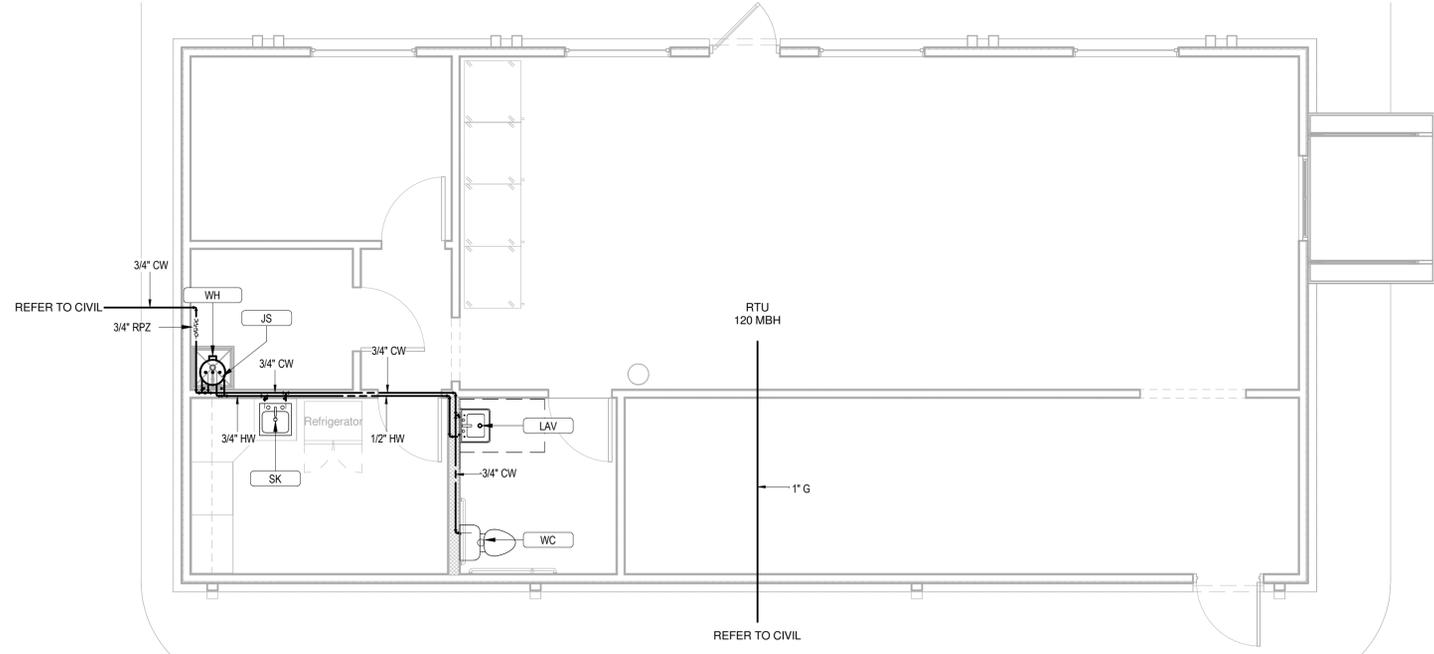
P0.1

PLUMBING LEGEND AND NOTES

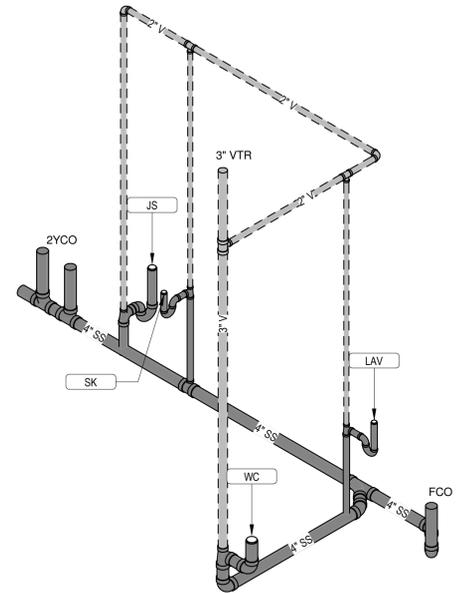


STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 18039
CALEB MELTON
09/11/25

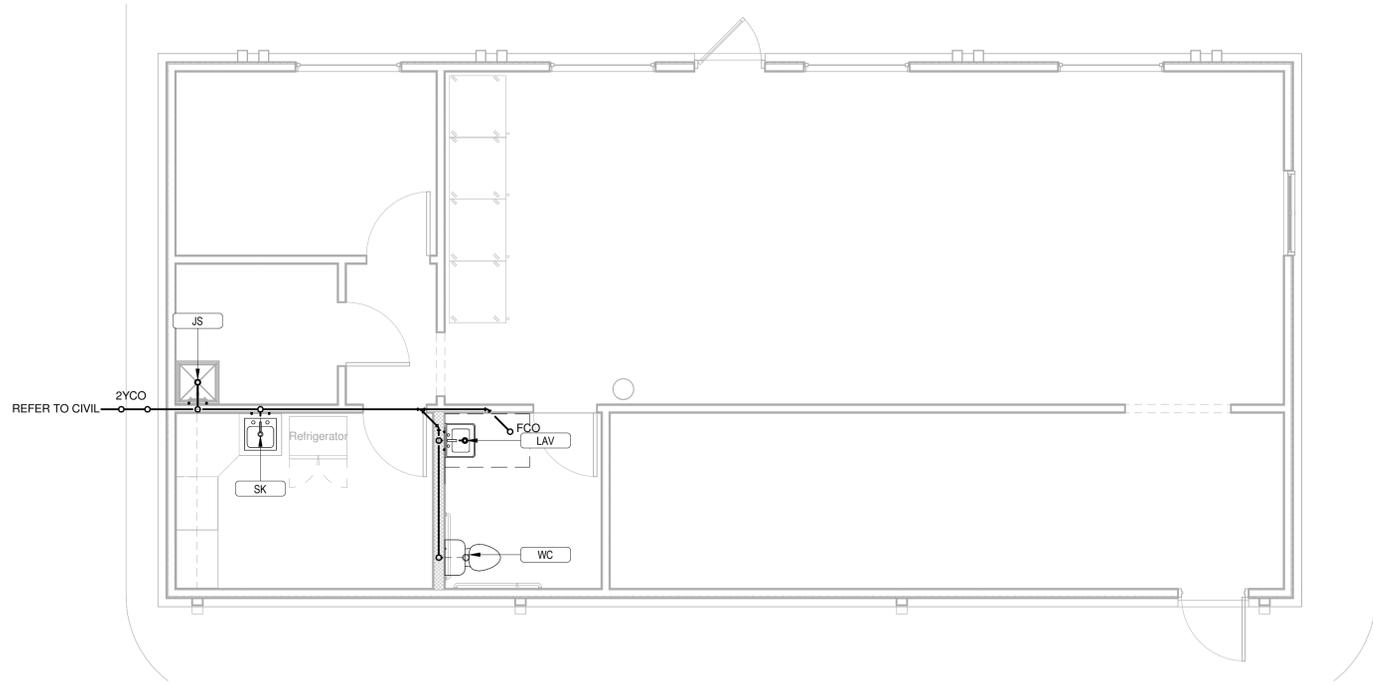
OMN ENGINEERS
PO BOX 2106
LOVELL, AR 72745
479-696-7873



1 SUPPLY PLAN
1/4" = 1'-0"



3 RISER DIAGRAM
P1.0



2 WASTE PLAN
1/4" = 1'-0"

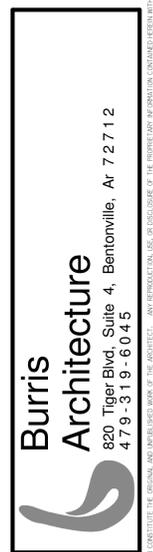
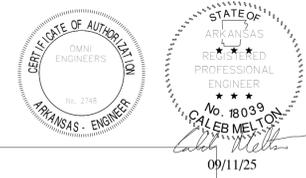
Burris Architecture
820 Tiger Blvd, Suite 4, Bentonville, Ar 72712
479-319-6045

SMOKE
730 E MAIN ST
FARMINGTON, AR

DATE 09/11/25
JOB NO. 25089
REVISIONS

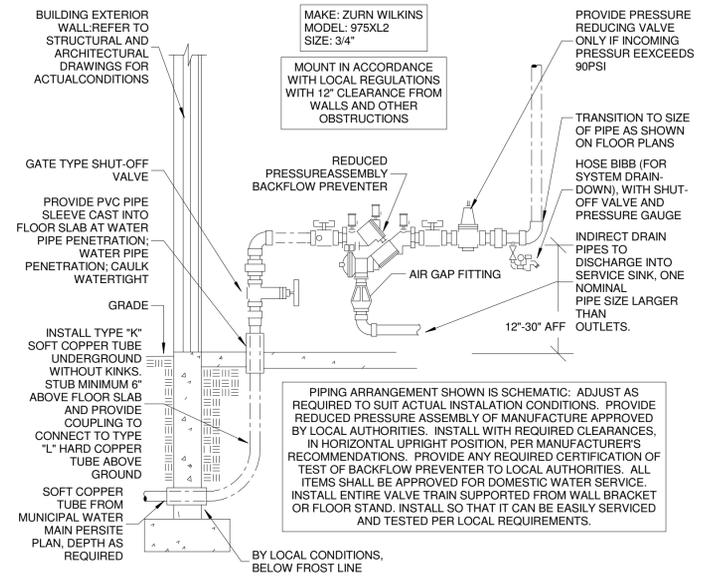
P1.0
PLUMBING SUPPLY PLANS

THIS DRAWING IS THE PROPERTY OF BURRIS ARCHITECTURE AND SHALL REMAIN THE PROPERTY OF BURRIS ARCHITECTURE. NO PART OF THIS DRAWING SHALL BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF BURRIS ARCHITECTURE. ALL DIMENSIONS SHALL BE TO FACE UNLESS OTHERWISE NOTED. ALL FINISHES SHALL BE AS NOTED OR AS SHOWN IN THE ARCHITECTURAL DRAWINGS. THE ARCHITECT ASSUMES NO LIABILITY FOR THE ACCURACY OF THE INFORMATION PROVIDED HEREON. THE ARCHITECT'S RESPONSIBILITY IS LIMITED TO THE DESIGN AND CONSTRUCTION OF THE PLUMBING SYSTEMS SHOWN ON THIS DRAWING. THE ARCHITECT DOES NOT WARRANT THE FITNESS OF THE INFORMATION PROVIDED HEREON FOR ANY OTHER PURPOSES. THE ARCHITECT'S LIABILITY IS LIMITED TO THE DESIGN AND CONSTRUCTION OF THE PLUMBING SYSTEMS SHOWN ON THIS DRAWING.

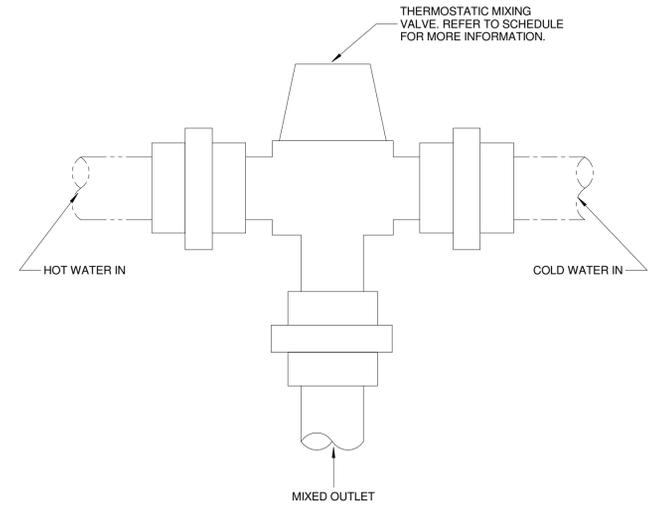


DATE: 09/11/25
 JOB NO: 25089
 REVISIONS:

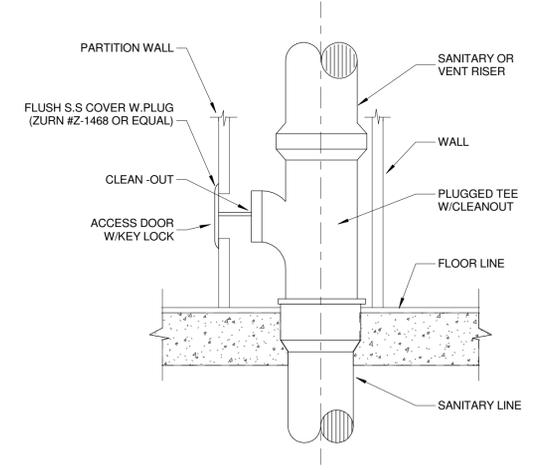
P2.0
 PLUMBING SCHEDULE AND DETAILS



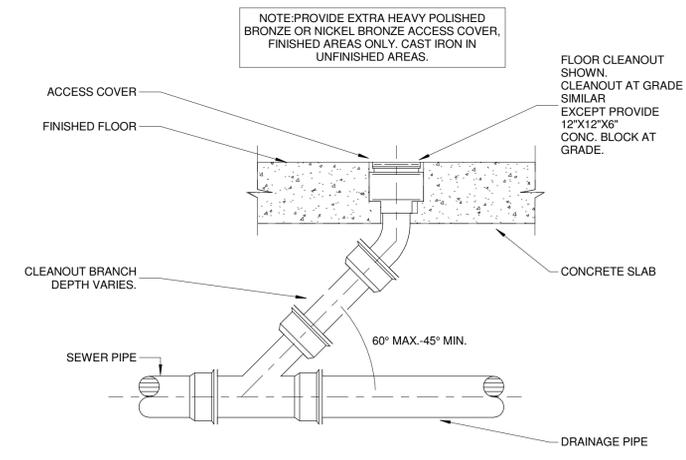
5 DOMESTIC WATER SERVICE ENTRY
 P2.0 N.T.S.



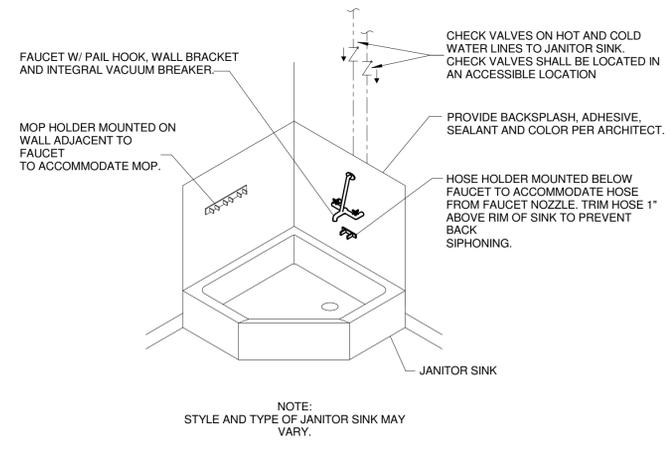
2 THERMOSTATIC MIXING VALVE
 P2.0 N.T.S.



1 WALL AND STACK CLEANOUT
 P2.0 N.T.S.



4 FLOOR CLEANOUT TO GRADE
 P2.0 N.T.S.



3 CORNER ANGLED JANITOR SINK
 P2.0 N.T.S.

PLUMBING FIXTURE SCHEDULE

ID	DESCRIPTION	MANUFACTURER	MODEL	MATERIAL DESCRIPTION	WASTE PIPE SIZE	VENT PIPE SIZE	COLD WATER PIPE SIZE	HOT WATER PIPE SIZE	SPECIFICATION	NOTES
SK	HAND SINK	ELKAY	ECTRU30179RT	STAINLESS STEEL	2"	1-1/2"	1/2"	1/2"	UNDER MOUNT LAVATORY, SINGLE HOLE FAUCET. DECK-MOUNTED MANUAL KITCHEN FAUCET BLACK, WITH VANDAL RESISTANT SPRAY, EXTERNAL ASSE 1070 COMPLIANT THERMOSTATIC MIXING VALVE, GRID DRAIN, LOOSE KEY ANGLE STOPS AND SUPPLIES INSULATE WATER AND WASTE WITH ADA INSULATION KIT	B, E / 1
JS	JANITOR SINK	FIAT	MSB24	---	3"	2"	3/4"	3/4"	SERVICE BASIN WITH CAP ON TWO SIDES, WITH CHROME PLATED 3" DRAIN AND CAST IRON TRAP. FAUCET SHALL INCLUDE PAIL HOOK AND ATMOSPHERIC VACUUM BREAKER SPOUT. FURNISH 5'-0" LENGTH OF 5-PLY GARDEN HOSE AND FITTINGS. PROVIDE WITH MOP HANGER.	D / 3
LAV	LAVATORY	NAMEEKS	CERRA STYLE	WHITE VITREOUS CHINA	2"	1-1/2"	1/2"	1/2"	WALL MOUNT LAVATORY, SINGLE HOLE FAUCET. DECK-MOUNTED MANUAL FAUCET BLACK, WITH VANDAL RESISTANT SPRAY. EXTERNAL ASSE 1070 COMPLIANT THERMOSTATIC MIXING VALVE. GRID DRAIN LOOSE KEY ANGLE STOPS AND SUPPLIES INSULATE WATER AND WASTE WITH ADA INSULATION KIT. MOUNT AT ADA COMPLIANT HEIGHT.	B, C, E / 2
WC	WATER CLOSET - FLOOR MOUNT - FLUSH TANK	AMERICAN STANDARD	CADET PRO	WHITE VITREOUS CHINA	4"	2"	3/4"	---	ELONGATED FLOOR MOUNTED TANK TYPE WATER CLOSET, WITH CHURCH 295CT ELONGATED OPEN FRONT SEAT. INSTALL AT STANDARD NON-ADA HEIGHT OR ADA HEIGHT AS REQUIRED.	A, C / 3

NOTES
 A. CONTRACTOR TO COORDINATE WITH FIXTURE SUPPLIER FOR LEFT/RIGHT HAND FLUSH LEVER TO COMPLY WITH ADA REQUIREMENTS.
 B. PROVIDE TRUE-BRO LAV GUARD 2 E-Z-SERIES PIPING COVERS FOR ALL EXPOSED PIPING.
 C. FIXTURE TO BE WHITE.
 D. LOCATE MOP HANGER BRACKET NEAR SINK. COORDINATE FINAL LOCATION WITH OWNER.
 E. PROVIDE WATTS SERIES USG-B MIXING VALVE OR EQUAL. SET FOR 105° DISCHARGE.

MOUNTING TYPES:
 1 COUNTERTOP
 2 WALL
 3 FLOOR
 4 UNDERMOUNT
 5 ROUGH-IN

SPECIALTY FIXTURE SCHEDULE

ID	FIXTURE	MANUFACTURER	MODEL	DESCRIPTION	NOTES
TMV	TEMPERATURE MIXING VALVE	WATTS	USG-B	+/-3°F UP TO 120°F, WITH BUILT-IN CHECK VALVES, BRASS BODY AND COPPER THERMOSTAT.	---
TP	TRAP PRIMER	SIoux CHIEF	695	BRONZE PRIMER VALVE WITH REMOVABLE OPERATING PARTS, INTEGRAL VACUUM BREAKER AND GASKETED ACCESS COVER.	---
VAL	VALVES	NIBCO	FP-600-A	FULL PORT BRASS BALL VALVE WITH PLASTIC JACKET TYPE HANDLE.	---

NOTES
 A. SIZE PER MANUFACTURE'S RECOMMENDATION

WATER HEATER SCHEDULE

ID	MANUFACTURER	MODEL	HEATING INPUT	GALLONS	UNIT WEIGHT	VOLT/ PHASE	NOTES
WH	A.O. SMITH	DEL-6	3 KW	6	42	240/1	A-G, b

NOTES
 A. ROUTE CONDENSATE TO BUILDING EXTERIOR AND TERMINATE IN AN APPROVED LOCATION
 B. PROVIDE WALL-MOUNTED PLATFORM INSTALLED ABOVE SERVICE SINK.
 C. PROVIDE EXPANSION TANK ET SIZED PER MANUFACTURER'S RECOMMENDATION
 D. SCHEDULE KW IS FOR SINGLE ELEMENT
 E. NOT USED
 F. NOTES ARE COMPREHENSIVE, SOME NOTES MAY NOT BE USED ON ALL PROJECTS.
 G. T&P DISCHARGE ROUTING WILL BE LOCATED AT SERVICE SINK

HOT WATER OUTLET TEMP (°F)
 a. 105°F
 b. 110°F
 c. 120°F
 d. 140°F

MOUNTING TYPES

PLUMBING SPECIFICATIONS

PLUMBING SPECIFICATIONS

DIVISION 15

15A: GENERAL

1.1 GENERAL REQUIREMENTS

-REQUIREMENTS UNDER DIVISION ONE AND THE GENERAL AND SUPPLEMENTARY CONDITIONS OF THESE SPECIFICATIONS SHALL BE A PART OF THIS SECTION. THE CONTRACTOR SHALL BE WELL ACQUAINTED WITH ITS CONTENTS AS TO REQUIREMENTS THAT AFFECT THIS DIVISION OR SECTION. THE WORK REQUIRED UNDER THIS SECTION INCLUDES MATERIAL, EQUIPMENT, APPLIANCES, TRANSPORTATION, SERVICES, AND LABOR REQUIRED TO COMPLETE THE ENTIRE SYSTEM AS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS.
-THE SPECIFICATIONS AND DRAWINGS FOR THE PROJECTS ARE COMPLEMENTARY, AND PORTIONS OF THE WORK DESCRIBED IN ONE, SHALL BE PROVIDED AS IF DESCRIBED IN BOTH IN THE EVENT OF DISCREPANCIES, NOTIFY THE ENGINEER AND/OR OWNER AND REQUEST CLARIFICATION PRIOR TO PROCEEDING WITH THE WORK INVOLVED.

1.2 INSPECTION OF SITE

-PRIOR TO SUBMITTING BID, VISIT THE SITE OF THE PROPOSED WORK AND BECOME FULLY INFORMED AS TO THE CONDITIONS UNDER WHICH THE WORK IS TO BE DONE. FAILURE TO DO SO WILL NOT BE CONSIDERED SUFFICIENT JUSTIFICATION TO REQUEST OR OBTAIN EXTRA COMPENSATION OVER AND ABOVE THE CONTRACT PRICE.

1.3 MATERIAL AND WORKMANSHIP

-PROVIDE NEW MATERIAL, EQUIPMENT, AND APPARATUS UNDER THIS CONTRACT UNLESS OTHERWISE STATED HEREIN, OF BEST QUALITY NORMALLY USED FOR THE PURPOSE IN GOOD COMMERCIAL PRACTICE, AND FREE FROM ANY DEFECTS. MODEL NUMBERS LISTED IN THE SPECIFICATIONS OR SHOWN ON THE DRAWINGS ARE NOT NECESSARILY INTENDED TO DESIGNATE THE REQUIRED TRIM. WRITTEN DESCRIPTIONS OF THE TRIM GOVERN MODEL NUMBERS.
-WORK PERFORMED UNDER THIS CONTRACT SHALL PROVIDE A NEAT AND "WORKMANLIKE" APPEARANCE WHEN COMPLETED. TO THE SATISFACTION OF THE ARCHITECT AND ENGINEER, WORKMANSHIP SHALL BE THE FINEST POSSIBLE BY EXPERIENCED MECHANICS. INSTALLATIONS SHALL COMPLY WITH APPLICABLE CODES AND LAWS.
-THE COMPLETE INSTALLATION SHALL FUNCTION AS DESIGNED AND INTENDED WITH RESPECT TO EFFICIENCY, CAPACITY, NOISE LEVEL, ETC. ABNORMAL NOISE CAUSED BY RATTLING EQUIPMENT, PIPING, AND SQUEAKS IN ROTATING COMPONENTS WILL NOT BE ACCEPTABLE IN GENERAL. MATERIALS AND EQUIPMENT SHALL BE OF COMMERCIAL SPECIFICATION GRADE IN QUALITY. LIGHT DUTY AND RESIDENTIAL TYPE EQUIPMENT WILL NOT BE ACCEPTED.
-REMOVE FROM THE PREMISES WASTE MATERIAL PRESENT AS A RESULT OF WORK, INCLUDING CARTONS, CRATING, PAPER, STICKERS, AND/OR EXCAVATION MATERIAL NOT USED IN BACKFILLING, ETC. CLEAN EQUIPMENT INSTALLED UNDER THIS CONTRACT TO PRESENT A NEAT AND CLEAN INSTALLATION AT THE TERMINATION OF THE WORK.
-REPAIR OR REPLACE PUBLIC AND PRIVATE PROPERTY DAMAGED AS A RESULT OF WORK PERFORMED UNDER THIS CONTRACT TO THE SATISFACTION OF AUTHORITIES AND REGULATIONS HAVING JURISDICTION.

1.4 COORDINATION

-COORDINATE WORK WITH THAT OF OTHER TRADES SO THAT THE VARIOUS COMPONENTS OF THE SYSTEMS WILL BE INSTALLED AT THE PROPER TIME, WILL FIT THE AVAILABLE SPACE, AND WILL ALLOW PROPER SERVICE ACCESS TO THOSE ITEMS REQUIRING MAINTENANCE. COMPONENTS WHICH ARE INSTALLED WITHOUT REGARD TO THE ABOVE SHALL BE RELOCATED AT NO ADDITIONAL COST TO THE OWNER.
-UNLESS OTHERWISE INDICATED, THE GENERAL CONTRACTOR WILL PROVIDE CHASES AND OPENINGS IN BUILDING CONSTRUCTION REQUIRED FOR INSTALLATION OF THE SYSTEMS SPECIFIED HEREIN. THE CONTRACTOR SHALL FURNISH THE GENERAL CONTRACTOR WITH INFORMATION WHERE CHASES AND OPENINGS ARE REQUIRED, KEEP INFORMED AS TO THE WORK OF OTHER TRADES ENGAGED IN THE CONSTRUCTION OF THE PROJECT, AND EXECUTE WORK IN A MANNER AS TO NOT INTERFERE WITH OR DELAY THE WORK OF OTHER TRADES.
-FIGURED DIMENSIONS SHALL BE TAKEN IN PREFERENCE TO SCALE DIMENSIONS. CONTRACTOR SHALL TAKE HIS OWN MEASUREMENTS AT THE BUILDING, AS VARIATIONS MAY OCCUR. CONTRACTOR WILL BE HELD RESPONSIBLE FOR ERRORS THAT COULD HAVE BEEN AVOIDED BY PROPER CHECKING AND INSPECTION.
-PROVIDE MATERIALS WITH TRIM THAT WILL PROPERLY FIT THE TYPES OF CEILING, WALL, OR FLOOR FINISHES ACTUALLY INSTALLED. MODEL NUMBERS LISTED IN THE SPECIFICATIONS OR SHOWN ON THE DRAWINGS ARE NOT INTENDED TO DESIGNATE THE REQUIRED TRIM.

1.5 ORDINANCES AND CODES

-WORK PERFORMED UNDER THIS CONTRACT SHALL, AT A MINIMUM, BE IN CONFORMANCE WITH APPLICABLE NATIONAL, STATE, AND LOCAL CODES HAVING JURISDICTION. EQUIPMENT FURNISHED AND ASSOCIATED INSTALLATION WORK PERFORMED UNDER THIS CONTRACT SHALL BE IN STRICT COMPLIANCE WITH CURRENT APPLICABLE CODES ADOPTED BY THE LOCAL A.H.J. INCLUDING ANY AMENDMENTS AND STANDARDS AS SET FORTH BY THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), UNDERWRITERS LABORATORIES (UL), OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME), AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR CONDITIONING ENGINEERS (ASHRAE), AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), AMERICAN SOCIETY OF TESTING MATERIALS (ASTM), AND OTHER NATIONAL STANDARDS AND CODES WHERE APPLICABLE. WHERE THE CONTRACT DOCUMENTS EXCEED THE REQUIREMENTS OF THEIR REFERENCED CODES, STANDARDS, ETC., THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE.
-PROCURE AND PAY FOR PERMITS AND LICENSES REQUIRED FOR THE ACCOMPLISHMENT OF THE WORK HEREIN DESCRIBED, WHERE REQUIRED, OBTAIN, PAY FOR, AND FURNISH CERTIFICATES OF INSPECTION TO THE OWNER. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR VIOLATIONS OF THE LAW.

1.6 PROTECTION OF EQUIPMENT AND MATERIALS

-STORE AND PROTECT FROM DAMAGE EQUIPMENT AND MATERIALS DELIVERED TO JOB SITE. COVER WITH WATERPROOF, TEAR-RESISTANT, HEAVY TARP OR POLYETHYLENE PLASTIC AS REQUIRED TO PROTECT FROM PLASTER, DIRT, PAINT, WATER, OR PHYSICAL DAMAGE. EQUIPMENT AND MATERIAL THAT HAS BEEN DAMAGED BY CONSTRUCTION ACTIVITIES WILL BE REJECTED, AND CONTRACTOR IS OBLIGATED TO FURNISH NEW EQUIPMENT AND MATERIAL OF A LIKE KIND AS APPROVED BY OWNER.
-KEEP PREMISES CLEAN FROM FOREIGN MATERIAL CREATED DURING WORK PERFORMED UNDER THIS CONTRACT. PIPING, EQUIPMENT, ETC., SHALL HAVE A NEAT AND CLEAN APPEARANCE AT THE TERMINATION OF THE WORK.
-PLUG OR CAP OPEN ENDS OF PIPING SYSTEMS WHILE STORED OR INSTALLED DURING CONSTRUCTION WHEN NOT IN USE TO PREVENT THE ENTRANCE OF DEBRIS INTO THE SYSTEMS.

1.7 SUBSTITUTIONS

-THE BASE BID SHALL INCLUDE ONLY THE PRODUCTS FROM MANUFACTURERS SPECIFICALLY NAMED IN THE DRAWINGS AND SPECIFICATIONS. NO SUBSTITUTION WILL BE CONSIDERED PRIOR TO RECEIPT OF BIDS UNLESS WRITTEN REQUEST FOR APPROVAL TO BID HAS BEEN RECEIVED BY THE ENGINEER AT LEAST TEN CALENDAR DAYS PRIOR TO THE DATE FOR RECEIPT OF BIDS. EACH SUCH REQUEST SHALL INCLUDE THE NAME OF THE MATERIAL OR EQUIPMENT FOR WHICH IT IS TO BE SUBSTITUTED AND A COMPLETE DESCRIPTION OF THE PROPOSED SUBSTITUTE INCLUDING DRAWINGS, CUTS, PERFORMANCE AND TEST DATA AND OTHER INFORMATION NECESSARY FOR AN EVALUATION. A STATEMENT SETTING FORTH CHANGES IN OTHER MATERIALS, EQUIPMENT OR OTHER WORK THAT INCORPORATION OF THE SUBSTITUTE WOULD REQUIRE SHALL BE INCLUDED. THE BURDEN OF PROOF OF THE MERIT OF THE PROPOSED SUBSTITUTE IS UPON THE PROPOSER. THE ENGINEER'S DECISION OF APPROVAL OR DISAPPROVAL TO BID OF A PROPOSED SUBSTITUTION SHALL BE FINAL.
-THE TERMS "APPROVED", "APPROVED EQUAL", AND "EQUAL" REFER TO APPROVAL BY THE ENGINEER AS AN ACCEPTABLE ALTERNATE BID. NO SUBSTITUTIONS WILL BE CONSIDERED THAT ARE NOT BID AS AN ALTERNATE. NO MATERIAL SUBSTITUTIONS SHALL BE CONSIDERED FOR APPROVAL PRIOR TO AWARD OF CONTRACT.
-COORDINATE AND VERIFY WITH OTHER TRADES WHETHER OR NOT THE SUBSTITUTED EQUIPMENT CAN BE INSTALLED AS SHOWN ON THE CONSTRUCTION DRAWINGS WITHOUT MODIFICATION TO ASSOCIATED SYSTEMS OR ARCHITECTURAL OR ENGINEERING DESIGN. INCLUDE ADDITIONAL COSTS FOR ARCHITECTURAL AND ENGINEERING DESIGN FEES IN BID IF DRAWING MODIFICATIONS ARE REQUIRED BECAUSE OF SUBSTITUTED EQUIPMENT.

1.8 OPERATION AND MAINTENANCE INSTRUCTIONS

-COLLECT AND COMPLETE A COMPLETE BROCHURE OF FIXTURES, MATERIALS, AND EQUIPMENT FURNISHED AND INSTALLED ON THIS PROJECT. INCLUDE OPERATIONAL AND MAINTENANCE INSTRUCTIONS, MANUFACTURER'S CATALOG SHEETS, WIRING DIAGRAMS, PARTS LISTS, APPROVED SHOP DRAWINGS, AND DESCRIPTIVE LITERATURE FURNISHED BY THE MANUFACTURER. INCLUDE AN INSIDE COVER SHEET THAT LISTS THE PROJECT NAME, DATE, OWNER, ARCHITECT, ENGINEER, GENERAL CONTRACTOR, SUBCONTRACTOR, AND AN INDEX OF CONTENTS.
-SUBMIT COPIES OF LITERATURE BOUND IN APPROVED BINDERS TO THE ARCHITECT AND OWNER AT THE TERMINATION OF THE WORK. PAPER CLIPS, STAPLES, RUBBER BANDS, AND MAILING ENVELOPES ARE NOT CONSIDERED APPROVED BINDERS. FINAL APPROVAL OF PLUMBING SYSTEMS WILL BE WITHHELD UNTIL THIS EQUIPMENT BROCHURE IS DEEMED COMPLETE BY THE ARCHITECT, ENGINEER, AND OWNER.

1.9 SPARE PARTS

-FURNISH TO OWNER, WITH RECEIPT, THE SPARE PARTS TO INCLUDE FAUCET WASHERS AND O-RINGS, FLOWMETER REPAIR KITS, AND WATER CLOSET TANK REPAIR KITS FOR THE FIXTURES FURNISHED FOR THIS PROJECT.

1.10 WARRANTIES

-WARRANT EACH SYSTEM AND EACH ELEMENT THEREOF AGAINST ALL DEFECTS DUE TO FAULTY WORKMANSHIP, DESIGN, OR MATERIAL FOR A PERIOD OF 12 MONTHS FROM DATE OF SUBSTANTIAL COMPLETION, UNLESS SPECIFIC ITEMS ARE NOTED TO CARRY A LONGER WARRANTY IN THE CONSTRUCTION DOCUMENTS OR MANUFACTURER'S STANDARD WARRANTY EXCEEDS 12 MONTHS. REMEDY ALL DEFECTS, OCCURRING WITHIN THE WARRANTY PERIOD(S), AS STATED IN THE GENERAL CONDITIONS AND DIVISION 1.
-WARRANTIES SHALL INCLUDE LABOR AND MATERIAL. MAKE REPAIRS OR REPLACEMENTS WITHOUT ANY ADDITIONAL COSTS TO THE OWNER.
-PERFORM THE REMEDIAL WORK PROMPTLY, UPON WRITTEN NOTICE FROM THE ENGINEER OR OWNER.
-AT THE TIME OF SUBSTANTIAL COMPLETION, DELIVER TO THE OWNER ALL WARRANTIES, IN WRITING AND PROPERLY EXECUTED, INCLUDING TERM LIMITS FOR WARRANTIES EXTENDING BEYOND THE ONE YEAR PERIOD, EACH WARRANTY INSTRUMENT BEING ADDRESSED TO THE OWNER AND STATING THE COMMENCEMENT DATE AND TERM.

1.11 CUTTING AND PATCHING

-PERFORM CUTTING OF WALLS, FLOORS, CEILINGS, ETC. AS REQUIRED TO INSTALL WORK UNDER THIS SECTION. OBTAIN PERMISSION FROM THE ARCHITECT PRIOR TO CUTTING. DO NO CUT OR DISTURB STRUCTURAL MEMBERS WITHOUT PRIOR APPROVAL FROM THE ARCHITECT. CUT HOLES AS SMALL AS POSSIBLE. GENERAL CONTRACTOR SHALL PATCH WALLS, FLOORS, ETC. AS REQUIRED BY WORK UNDER THIS SECTION. PATCHING SHALL MATCH THE ORIGINAL MATERIAL AND CONSTRUCTION. REPAIR AND REFINISH AREAS DISTURBED BY WORK TO THE CONDITION OF ADJOINING SURFACES IN A MANNER SATISFACTORY TO THE ARCHITECT.

1.12 ROUGH-IN

-COORDINATE WITHOUT DELAY ROUGHING-IN WITH GENERAL CONSTRUCTION. CONCEAL PIPING AND CONDUIT ROUGH-IN EXCEPT IN UNFINISHED AREAS WHERE OTHERWISE SHOWN.

1.13 STRUCTURAL STEEL

-STRUCTURAL STEEL USED FOR PIPE SUPPORTS, EQUIPMENT SUPPORTS, ETC., SHALL BE NEW, CLEAN, AND CONFORM TO ASTM DESIGNATION A-36.
-SUPPORT PLUMBING AND MECHANICAL EQUIPMENT AND PIPING FROM THE BUILDING STRUCTURE. DO NOT SUPPORT PLUMBING EQUIPMENT FROM CEILINGS, OTHER MECHANICAL OR ELECTRICAL COMPONENTS, AND OTHER NON-STRUCTURAL ELEMENTS.

1.14 ACCESS DOORS

-PROVIDE ACCESS DOORS IN CEILINGS AND WALLS WHERE INDICATED OR REQUIRED FOR ACCESS TO CONCEALED VALVES AND EQUIPMENT INSTALLED UNDER THIS SECTION. PROVIDE CONCEALED HINGES, SCREWDRIWER-TYPE LOCK, ANCHOR STRAPS; MANUFACTURED BY MILCOR, ZURN, TITUS, OR EQUAL. OBTAIN ARCHITECT'S APPROVAL OF TYPE, SIZE, LOCATION, AND COLOR BEFORE ORDERING.

1.15 PENETRATIONS

-SEAL FLOOR, EXTERIOR WALL AND ROOF PENETRATIONS WATER AND WEATHER TIGHT WITH APPROPRIATE NON-SHRINK, NON-HARDENING COMMERCIAL CONSTRUCTION SEALANT. SEAL ROOF PENETRATIONS WITH FOUR POUND PER SQUARE FOOT LEAD FLASHING. PROVIDE A SLEEVE, AND SEAL NON-FIRE-RATED FLOOR AND WALL PENETRATIONS WITH FIBERGLASS PACKING AND SILICONE CAULK (FOR ACOUSTICAL INSULATION).
-COORDINATE FIRE RATING REQUIREMENTS AND LOCATIONS WITH THE ARCHITECT. SEAL PENETRATIONS OF FIRE-RATED ASSEMBLIES WITH 3M #CP-25 FIRE BARRIER CAULK (PROVIDE THICKNESS AND METHOD AS REQUIRED AND RECOMMENDED BY MANUFACTURER) TO MAINTAIN THE FIRE RESISTANCE RATING OF FIRE-RATED ASSEMBLIES.
-SEAL EXTERIOR WALL PENETRATIONS BELOW GRADE WITH CAST IRON WALL PIPES AND MODULAR MECHANICAL SLEEVE SEALS, MANUFACTURED BY THUNDERLINE/LINK SEAL, CALPICO, INC AND METRAFLEX.
-PROVIDE SLEEVES FOR HORIZONTAL PIPE PASSING THROUGH OR UNDER THE FOUNDATION. SLEEVES SHALL BE CAST IRON SOIL PIPE TWO NOMINAL PIPE SIZES LARGER THAT THE PIPE SERVED.
-PROVIDE SLEEVES FOR VERTICAL PIPE PASSING THROUGH SLAB ON GRADE. SLEEVES SHALL BE SCHEDULE 40 PVC PIPE, TWO NOMINAL PIPE SIZES LARGER THAN THE PIPE SERVED. SEAL WATER-TIGHT WITH SILICONE CAULK.

15B: HEATING, VENTILATION, AND AIR CONDITIONING

REFERENCE MECHANICAL SPECIFICATIONS.

15C: PLUMBING

1.1 MATERIALS

1.1.1 DOMESTIC WATER PIPING

-ABOVE AND BELOW GRADE WATER PIPING SHALL BE PEX TUBING CONFORMING TO ASTM F877 CROSS-LINKED POLYETHYLENE TUBING HOT AND COLD-WATER DISTRIBUTION SYSTEMS, ASTM F876 CROSS-LINKED POLYETHYLENE TUBE, ASTM F1807 FITTING AND ASTM F2159 FITTINGS, COMPLY WITH NSF STANDARD 14 AND 61. PEX TUBING SHALL BE WATTS WATERPEX CROSS-LINKED POLYETHYLENE OR EQUAL. ALL PEX TUBING BELOW GRADE SHALL BE SLEEVED WITH PVC PIPE.
-FITTINGS SHALL BE MECHANICAL CRIMP FITTINGS IN COMPLIANCE WITH ASTM F1807 AND F2159. PEX FITTINGS SHALL BE WATTS BRASS CRIMPING FITTINGS USING EITHER WATTS COPPER CRIMPING OR STAINLESS STEEL CINCHCLAMP OR EQUAL, INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
-ABOVE AND BELOW GRADE WATER PIPING SHALL BE TYPE "L" AND "M" HARD DRAWN SEAMLESS COPPER TUBING CONFORMING TO ASTM 888.
-COPPER UNIONS SHALL BE CAST-COPPER-ALLOY, HEXAGONAL-STOCK BODY, WITH BALL-AND-SOCKET, METAL-TO-METAL SEATING SURFACE AND SOLDER-JOINT. JOINING MATERIAL SHALL BE ASTM B813 WATER-FLUSHABLE, LEAD-FREE FLUX ALLOY SOLDER.

1.1.2 FILTERED WATER PIPING

-ABOVE AND BELOW GRADE FILTERED WATER PIPING SHALL BE CPVC TUBING CONFORMING TO ASTM D2846 AND CSA B137 CHLORINATED POLY (VINYL CHLORIDE) PLASTIC HOT AND COLD-WATER DISTRIBUTION SYSTEMS, ASTM D1784 RIGID AND CHLORINATED PVC COMPOUNDS, ASTM F493 SOLVENT CEMENTS, COMPLY WITH NSF STANDARD 14 AND 61. CPVC TUBING SHALL BE FLOWGUARD GOLD CPVC CTS OR EQUAL.
-FITTINGS SHALL BE SOCKET TYPE JOINTS IN COMPLIANCE WITH ASTM D2846 AND CSA B137. CPVC FITTINGS SHALL BE FLOWGUARD GOLD CPVC CTS FITTINGS OR EQUAL. JOINING MATERIAL SHALL BE ASTM F493 SOLVENT CEMENT, INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
-ABOVE AND BELOW GRADE FILTERED WATER PIPING SHALL BE TYPE "L" AND "M" HARD DRAWN SEAMLESS COPPER TUBING CONFORMING TO ASTM 888.
-COPPER UNIONS SHALL BE CAST-COPPER-ALLOY, HEXAGONAL-STOCK BODY, WITH BALL-AND-SOCKET, METAL-TO-METAL SEATING SURFACE AND SOLDER-JOINT. JOINING MATERIAL SHALL BE ASTM B813 WATER-FLUSHABLE, LEAD-FREE FLUX ALLOY SOLDER.

1.1.3 SOIL, WASTE, AND VENT PIPING

-ABOVE AND BELOW GRADE SOIL, WASTE, AND VENT PIPING SHALL BE PVC PLASTIC, SCHEDULE 40 DWV PIPE CONFORMING TO ASTM D2665 WITH PLAIN ENDS. CELLULAR (FOAM) CORE PVC NOT ALLOWED. INSTALL PER ASTM D2665 AND ASTM D2321.
-FITTINGS SHALL BE PVC SOCKET-TYPE DWV PIPE FITTINGS; ASTM D2665 MADE TO ASTM D3311 DRAIN, WASTE, AND VENT PARTS.
-ABOVE AND BELOW GRADE SOIL, WASTE, AND VENT PIPING SHALL BE HUB-AND-SPIGOT CAST-IRON SOIL PIPE AND FITTINGS CONFORMING TO ASTM A74 WITH ASTM C564 RUBBER GASKETS. INSTALL CAST-IRON SOIL PIPING ACCORDING TO CISPI'S "CAST IRON SOIL PIPE AND FITTINGS HANDBOOK" CHAPTER IV, "INSTALLATION OF CAST IRON SOIL PIPE AND FITTINGS".
-ABOVE GRADE SOIL, WASTE, AND VENT PIPING SHALL BE ALLOWED TO BE COPPER DRAINAGE TUBING CONFORMING TO ASTM 8306 AT PLUMBING CONTRACTOR'S OPTION.

1.1.4 INDIRECT AND CONDENSATE DRAIN LINES

-PROVIDE HARD DRAWN, TYPE "M" OR "L" COPPER PIPE FOR ALL CONDENSATE DRAIN PIPING FROM COOLER AND FREEZER EVAPORATORS, PROVIDE HEAT TRACE FOR ALL CONDENSATE DRAIN PIPING LOCATED IN FREEZERS, AND ROUTE TO FLOOR DRAIN IN BUILDING.
-PROVIDE PVC PIPE FOR ALL OTHER INDIRECT AND CONDENSATE DRAIN PIPING FROM HVAC, PLUMBING, AND BEVERAGE EQUIPMENT, AND ROUTE TO FLOOR DRAIN IN BUILDING.

1.1.5 GAS PIPING

-GAS PIPING SHALL BE SCHEDULE 40 BLACK CARBON STEEL CONFORMING TO ASTM A53. PIPING 2" AND SMALLER SHALL BE WELDED OR THREADED WITH MALLEABLE IRON FITTINGS. PIPING 2-1/2" AND LARGER SHALL BE WELDED WITH BUTT-WELDED FITTINGS.
-FITTINGS SHALL CONFORM TO ASME B16.3, MALLEABLE IRON OR ASTM A334, FORGED STEEL WELDED TYPE.
-PROVIDE SHUT-OFF VALVE, DIRT LEG, AND UNION AT EACH ROOFTOP UNIT. PAINT ALL GAS PIPING EXPOSED TO WEATHER WITH ONE COAT OF PRIMER, AND TWO COATS OF RUST-PROOF PAINT. COLOR SHALL MATCH BUILDING COLORS. COORDINATE WITH OWNER'S CONSTRUCTION MANAGER.
-PROVIDE TREATED WOOD BLOCKING 6X6X12, 8'-0" OC MAX WITH GALVANIZED PIPE STRAP, 1 1/4" ZINC COATED LAG SCREWS, AND RUBBER WALK PAD ADHERED TO ROOF.

1.1.6 FLASHING

-SHEET LEAD, 4 POUNDS PER SQUARE FOOT, MINIMUM.

1.2 INSULATION

1.2.1 DOMESTIC COLD WATER (WITHIN BUILDING)

-COPPER PIPING: 1/2" WALL ONE-PIECE FIBERGLASS COVERING HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 WITH FIRE RESISTANT JACKET WITH SELF-SEALING LAP TO PROVIDE A CONTINUOUS VAPOR BARRIER BY CERTAINTED, OWENS-CORNING, OR ARMSTRONG. (SEE BELOW FOR PLUMBING FITTING INSULATION REQUIREMENTS.)
-PEX TUBING: NO INSULATION REQUIRED.
-EXCEPTION: FOR NON-RECIRCULATING HOT WATER SYSTEM, PROVIDE 1/2" WALL ONE-PIECE FIBERGLASS COVERING HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 WITH FIRE RESISTANT JACKET WITH SELF-SEALING LAP TO PROVIDE A CONTINUOUS VAPOR BARRIER BY CERTAINTED, OWENS-CORNING, OR ARMSTRONG ON THE FIRST 8 FEET OF INLET PIPING AT WATER HEATER.
-CPVC TUBING: NO INSULATION REQUIRED.

1.2.2 DOMESTIC HOT WATER

-COPPER PIPING: 1/2" WALL ONE-PIECE FIBERGLASS COVERING HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 WITH FIRE RESISTANT JACKET WITH SELF-SEALING LAP TO PROVIDE A CONTINUOUS VAPOR BARRIER BY CERTAINTED, OWENS-CORNING, OR ARMSTRONG. (SEE BELOW FOR PLUMBING FITTING INSULATION REQUIREMENTS.)
-PEX TUBING: 1/2" WALL ONE-PIECE FIBERGLASS COVERING HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 WITH FIRE RESISTANT JACKET WITH SELF-SEALING LAP TO PROVIDE A CONTINUOUS VAPOR BARRIER BY CERTAINTED, OWENS-CORNING, OR ARMSTRONG. (SEE BELOW FOR PLUMBING FITTING INSULATION REQUIREMENTS.)
-FOR HOT WATER PIPING BEING SERVED BY SYSTEM WITH RECIRCULATING PUMP, PROVIDE 1" WALL ONE-PIECE FIBERGLASS COVERING HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 WITH FIRE RESISTANT JACKET WITH SELF-SEALING LAP TO PROVIDE A CONTINUOUS VAPOR BARRIER BY CERTAINTED, OWENS-CORNING, OR ARMSTRONG. (SEE BELOW FOR PLUMBING FITTING INSULATION REQUIREMENTS.)

1.2.3.1 INDIRECT AND CONDENSATE DRAIN PIPING (WITHIN BUILDING)

-COPPER PIPING: PROVIDE 1" FLEXIBLE UNICELLULAR INSULATION BY ARMACELL.
-PVC PIPING: NO INSULATION REQUIRED.
-FOR PIPING AT HANGERS, PROVIDE 8" LONG SECTIONS OF HIGH DENSITY, HIGH TEMPERATURE CALCIUM SILICATE BY JOHNS-MANVILLE, FIBERGLASS BY KNAUF, OR 8" LONG STYROFOAM BILLETS BY DOW. INSULATION SHALL BE CONTINUOUS ALONG THE PIPE SURFACE, EXCEPT AT VALVES, UNIONS, AND WHERE PIPING IS EXPOSED AT FIXTURES.
-FOR HOT AND COLD-WATER PIPING EXPOSED, CONCEALED IN WALLS, AND/OR INSTALLED INSIDE MASONRY UNITS OF WALLS, COVER FITTINGS WITH ZESTON, KNAUF, OR EQUAL ONE-PIECE PVC PREMOLDED INSULATING COVERS, FITTING COVERS, JACKETS, AND ADHESIVES SHALL NOT EXCEED FLAME SPREAD RATING OF 25 AND SMOKE DEVELOPMENT RATING OF 50 PER ASTM E84. AT ALL ELBOWS AND TEES, FILL VOIDS BETWEEN COVERS AND PIPING WITH FIBERGLASS INSULATION AND TAPE JOINTS. INSTALL PIPE INSULATION IN COMPLIANCE WITH MANUFACTURER'S RECOMMENDATIONS. WHERE PREMOLDED INSULATING FITTINGS ARE NOT APPROVED BY LOCAL AUTHORITIES, MITER INSULATION AT FITTINGS.

1.2.4 PIPING INSTALLATION

-GENERAL: CLEAN PIPE THOROUGHLY PRIOR TO INSTALLATION. REAM ENDS OF PIPE TO REMOVE BURRS. CUT PIPE ACCURATELY TO MEASUREMENTS TAKEN ON THE JOB. INSTALL WITH ADEQUATE CLEARANCE FOR INSTALLATION OF COVERINGS WHERE REQUIRED. PIPE SHALL NOT BE SPRUNG OR BENT. NEATLY ALIGN PIPE. CONNECT IT SECURELY, AND SUPPORT IT FROM THE BUILDING, AND SUPPORT IT FROM THE BUILDING STRUCTURE WITH HANGERS AS SPECIFIED BELOW. PROVIDE CHROME-PLATED ESCUTCHEONS ON PIPES PASSING THROUGH CEILINGS, FLOORS, OR WALLS OF FINISHED SPACES. RUN PIPES FREELY THROUGH FLOOR AND WALL PENETRATIONS USING PIPE SLEEVES. DO NOT GROUT IN PLACE UNLESS REQUIRED FOR STRUCTURAL FIRE INTEGRITY. INSTALL PIPE CONCEALED IN FINISHED SPACES WHEREVER POSSIBLE. USE A DIELECTRIC UNION WHERE FERROUS AND COPPER PIPE CONNECT. DIELECTRIC UNION SHALL HAVE A ZINC STEEL BODY, A THREADED NYLON INSERT, AND INSULATION PRESSURE GASKET. NO FERROUS METAL-TO-COPPER CONNECTION MADE WITHOUT INSULATING UNIONS WILL BE ALLOWED.
-HANGERS & SUPPORTS: PIPE HANGERS SHALL BE AS DESCRIBED IN THE SPECIFICATIONS BY B-LINE OR EQUAL BY ANVIL, MICHIGAN, TRUSSCO, OR UNISTRUT. CONNECT HANGERS TO THE STRUCTURE WITH SIDE BEAM CONNECTORS AND ALL THREAD HANGER RODS. PROVIDE ENGINEERED SUPPORT STRUTS BETWEEN JOISTS AND OTHER STRUCTURAL MEMBERS AS REQUIRED TO PROVIDE A RIGID HANGING.
-DOMESTIC WATER: ARRANGE COLD, HOT, AND HOT WATER RECIRCULATION PIPING TO DRAIN AT THE LOWEST POINT IN EACH SYSTEM. INSTALL AT LEAST ONE PIPE UNION ADJACENT TO ALL SHUT-OFF VALVES. AT CONNECTION POINT OF EACH PIECE OF EQUIPMENT, AND ELSEWHERE IN THE SYSTEM WHERE REQUIRED TO ALLOW PROPER MAINTENANCE, PROVIDE UNIONS OF THE GROUND JOINT TYPE. MAKE ALLOWANCE FOR EXPANSION AND CONTRACTION WHERE REQUIRED BY THE INSTALLATION. WHERE WATER PIPING OCCURS IN EXTERIOR WALLS, HOLD PIPE AS CLOSE AS POSSIBLE TO THE INTERIOR FACE OF THE WALL AND INSTALL INSULATION BATT OR OTHER INSULATION (MINIMUM R-8) BETWEEN PIPING AND THE EXTERIOR WALL FACE.

1.3 EXTERIOR UTILITY CONNECTIONS

-TERMINATE DOMESTIC WATER, STORM, AND SEWER LINES AT A POINT APPROXIMATELY FIVE FEET FROM THE BUILDING WALL, OR AS SHOWN ON THE DRAWINGS. MAKE CONNECTION TO THE VARIOUS SERVICES PROVIDED BY OTHERS AND COORDINATE CONNECTION REQUIREMENTS WITH CIVIL ENGINEER. VERIFY THAT INSTALLATION WILL TIE INTO THE VARIOUS SERVICE PROVIDED BY OTHERS AT THE INDICATED INVERT ELEVATION POINT PRIOR TO INSTALLATION. IF THE INSTALLATION WILL NOT TIE INTO THE INDICATED INVERT ELEVATION POINT WHILE MAINTAINING PROPER FALL, NOTIFY THE ARCHITECT AND CIVIL ENGINEER SO THAT AN ALTERNATIVE MAY BE DETERMINED.
-PROVIDE SERVICE PIPING AND ACCESSORIES REQUIRED TO COMPLETE UTILITY CONNECTIONS THAT ARE NOT FURNISHED BY THE SERVING UTILITY.

1.4 TESTING AND INSPECTION

-UPON COMPLETION OF EACH PHASE OF THE INSTALLATION, TEST EACH SYSTEM IN CONFORMANCE WITH LOCAL CODE REQUIREMENTS AND AS NOTED BELOW. FURNISH LABOR AND EQUIPMENT REQUIRED TO TEST PLUMBING WORK INSTALLED UNDER THIS CONTRACT, AND ASSUME COSTS INVOLVED IN MAKING THE TESTS, AND REPAIRING AND/OR REPLACING DAMAGE RESULTING THEREFROM.
-NOTIFY THE ARCHITECT AND AUTHORITY HAVING JURISDICTION, THREE (3) WORKING DAYS PRIOR TO MAKING PLUMBING SYSTEM TESTS. LEAVE CONCEALED WORK UNCOVERED UNTIL THE REQUIRED TESTS HAVE BEEN COMPLETED, BUT IF NECESSARY DUE TO CONSTRUCTION PROCEDURE, TESTS ON PORTIONS OF THE WORK MAY BE MADE, AND WHEN SATISFACTORY, THE WORK MAY BE CONCEALED. TEST PIPING BEFORE INSULATION IS INSTALLED, AND BEFORE BACKFILL. PIPES, JOINTS, FLANGES, VALVE STEMS, ETC., SHALL BE LEAK TIGHT. REPAIR OR REPLACE SYSTEM DEFECTS WITH NEW MATERIALS. CAULKING OF DEFECTIVE JOINTS, CRACK OR HOLES WILL NOT BE PERMITTED. REPEAT TESTS AFTER DEFECTS HAVE BEEN ELIMINATED. MAKE TESTS IN THE PRESENCE OF THE ADMINISTRATIVE AUTHORITY AND/OR THE OWNER'S AUTHORIZED REPRESENTATIVE.
-WORK SHALL BE INSPECTED FOR COMPLIANCE WITH CODES, ORDINANCES, REGULATIONS, AND ADHERENCE TO CONTRACT DOCUMENTS. PLUMBING CONTRACTOR SHALL SUPPLY OWNER WITH SIGNED FORMS OR PROOF OF ACCEPTANCE BY THE LOCAL AUTHORITY BEFORE CONTINUING FROM ONE STAGE TO ANOTHER. FINAL APPROVAL SHALL BE OBTAINED BEFORE FINAL PAYMENT IS MADE ON THE CONTRACT.

1.5 GUARANTEE

-THE WORK TO BE PERFORMED UNDER THIS CONTRACT SHALL INCLUDE THE FURNISHING, INSTALLATION, AND CONNECTION OF PLUMBING SYSTEMS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS. BY SIGNING THE CONTRACT, THE PLUMBING CONTRACTOR ACKNOWLEDGES THAT HE HAS ACQUAINTED HIMSELF WITH THE SITE AND THE EXISTING CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED, AND THE DRAWINGS AND SPECIFICATIONS PERTAINING THERETO, AND HE INDICATES THAT HE WILL COMPLY WITH THE REQUIREMENTS AND INTENT OF PERTINENT DOCUMENTS IN THE PERFORMANCE OF THE WORK.



OMN ENGINEERS
PO BOX 2106
LOWELL, AR 72745
479-696-7873

Burris
Architecture
820 Tigner Blvd, Suite 4, Bentonville, Ar 72712
479-319-6045

SMOKE
730 E MAIN ST
FARMINGTON, AR

DATE	09/11/25
JOB NO.	25089
REVISIONS	

P3.0
PLUMBING SPECIFICATIONS