

GENERAL CONDITIONS:

ALL WORK PERFORMED TO BE IN ACCORDANCE WITH THE STATE OF OHIO PLUMBING CODE AND OTHER APPLICABLE REQUIREMENTS PER THE AUTHORITY HAVING JURISDICTION.
 ALL EQUIPMENT TO BE INSTALLED PER MANUFACTURERS REQUIREMENTS AND RECOMMENDATIONS.
 ALL MATERIALS AND EQUIPMENT PROVIDED TO BE WARRANTED FOR ONE YEAR FROM DATE OF OWNER ACCEPTANCE.
 ALL MATERIALS INSTALLED TO BE NEW AND FREE OF DEFECTS.
 ALL INSTALLATIONS TO BE COORDINATED WITH THE ARCHITECTURAL CONSTRAINTS AND OTHER TRADES INVOLVED LEAVING ACCESS FOR REPAIRS AND MAINTENANCE.
 PROVIDE ACCESS PANELS FOR REPAIRABLE ITEMS INSTALLED IN INACCESSIBLE LOCATIONS.
 PROVIDE SUBMITTALS FOR APPROVAL BY OWNER BEFORE PURCHASING ANY EQUIPMENT.
 ALL EQUIPMENT AND SYSTEMS INDICATED ON SCHEDULE AND PLANS IS BASIS OF DESIGN. ANY DEVIATIONS OR SUBSTITUTIONS TO BE APPROVED BY ENGINEER AND OWNER.
 INCLUDE COSTS FOR ALL PERMITS AND INSPECTIONS.

DOMESTIC WATER PIPING SYSTEMS:

ALL DOMESTIC HOT AND COLD WATER PIPING ABOVE GRADE 3" AND BELOW SHALL BE TYPE L COPPER COMPLYING WITH ASTM B 88 WITH WROUGHT COPPER SOLDER JOINT FITTINGS. ALL DOMESTIC HOT AND COLD WATER PIPING BELOW GRADE 3" AND BELOW SHALL BE TYPE K SOFT COPPER BURED IN SAND COMPLYING WITH ASTM B 88 WITH WROUGHT COPPER SOLDER JOINT FITTINGS. SHUTOFF VALVES TO BE 2-PIECE FULL PORT BRONZE BODY BALL TYPE WITH SOLDERED JOINTS. ALL JOINTS TO BE MADE WITH A LEAD FREE SOLDER CONFORMING TO ASTM B 33 AND A WATER SOLUBLE FLUX CONFORMING TO ASTM B 813. ALL CUT ENDS SHALL BE REAMED TO FULL INSIDE DIAMETER OF PIPE. PROVIDE DIELECTRIC UNIONS AT ALL CONNECTIONS TO DISSIMILAR METALS. PIPING SUPPORTS TO BE COPPER CLEVIS HANGERS WITH ALL THREADED AND APPROPRIATE BUILDING ATTACHMENT TO MATCH SPECIFIC CONSTRUCTION. HANGER SPACING TO BE 10 FEET HORIZONTAL 10 FEET VERTICAL FOR 1-1/2" AND LARGER, 6 FEET HORIZONTAL 10 FEET VERTICAL FOR 1-1/4" AND SMALLER.

PROVIDE SLEEVES FOR ALL PENETRATIONS THROUGH WALLS, FLOORS AND CEILINGS. INSTALL UL LISTED FIRESTOPPING SYSTEMS AT ALL RATED PENETRATIONS EQUAL TO THE "T" AND "T" RATINGS OF FLOOR WALL OR CEILING. PROVIDE ESCUTCHEONS AT PENETRATIONS IN EXPOSED AREAS.

PROVIDE METHODS OF STRESS AND STRAIN RELIEF IN PIPING WITH ANCHORS AND EXPANSION COMPENSATION JOINTS. AVOID CREATING STRESS OR STRAIN TO BUILDING COMPONENTS.

PROTECT ALL COPPER PIPING PASSING THROUGH CORNER WALLS AND FLOORS WITH A PROTECTIVE SHEATHING OR WRAPPING THAT WILL WITHSTAND ANY REACTION FROM LIME AND ACID OF CONCRETE, CINDER OR OTHER CORROSIVE MATERIAL.

ANY COPPER PIPE INSTALLED THROUGH HOLES OR NOTCHES IN STUDS, JOISTS RAFTERS, OR SIMILAR MEMBERS LESS THAN 1-1/2" FROM THE NEAREST EDGE OF THE MEMBER SHALL BE PROTECTED WITH STEEL PROTECTIVE SHIELD PLATES A MINIMUM OF 1/16" THICK AND SHALL EXTEND 2" ABOVE AND BELOW THE AREA OF PIPE PENETRATION.

HYDROSTATICALLY TEST ALL PIPING SYSTEMS AT 1.5 TIMES THE SYSTEM WORKING PRESSURE BUT NOT LESS THAN 100 PSI. DISCONNECT ALL COILS AND EQUIPMENT WHILE CONDUCTING TEST. SYSTEM TO REMAIN PRESSURIZED FOR 24 HOUR PERIOD WITH LESS THAN 2% TOTAL DROP IN PRESSURE.

THE DOMESTIC WATER PIPING SYSTEM SHALL BE FLUSHED WITH CLEAN, POTABLE WATER UNTIL DIRTY WATER DOES NOT APPEAR AT POINTS OF OUTLET. THE SYSTEM SHALL BE FILLED WITH A WATER/CHLORINE SOLUTION CONTAINING AT LEAST 50 PPM OF CHLORINE AND ALLOWED TO STAND FOR 24 HOURS. FOLLOWING THE REQUIRED STANDING TIME, THE SYSTEM SHALL BE FLUSHED WITH CLEAN POTABLE WATER UNTIL THE CHLORINE IS PURGED FROM THE SYSTEM. THIS PROCEDURE SHALL BE REPEATED WHERE SHOWN BY A BACTERIOLOGICAL EXAMINATION THAT CONTAMINATION REMAINS PRESENT IN THE SYSTEM. PROVIDE A CERTIFIED TEST OF WATER SYSTEM POTABILITY AND PROVIDE A COPY TO THE OWNER BEFORE BUILDING OCCUPATION.

SANITARY DRAINAGE AND VENT PIPING SYSTEMS:

ALL SANITARY DRAIN AND VENT PIPING ABOVE GRADE LOCATED WITHIN CEILING PLENUMS SHALL BE NO-HUB DWV CAST IRON WITH DRAINAGE PATTERN CAST IRON FITTINGS. COUPLINGS TO BE STAINLESS STEEL BAND WITH RUBBER GASKET.

ALL SANITARY DRAIN AND VENT PIPING ABOVE AND BELOW GRADE SHALL BE SCHEDULE 40 PVC TYPE DWV PLAIN END PIPE CONFORMING TO ASTM D 2665 AND ASTM D 2949 WITH PVC DWV TYPE SOCKET JOINT FITTINGS CONFORMING TO ASTM D 3311. SOLVENT CEMENT JOINTS SHALL BE CLEANED AND FREE FROM MOISTURE WITH A PRIMER CONFORMING TO ASTM F 656 LEAVING A VISIBLE PURPLE COLOR AFTER DRYING. SOLVENT CEMENT SHALL CONFORM TO ASTM D 2546 AND BE APPLIED TO ALL JOINTS AND JOINTS MADE WHILE SURFACES ARE WET IN ACCORDANCE WITH ASTM D 2855.

ALL PIPING TO BE PITCHED AT A MINIMUM SLOPE OF 1/4" PER FOOT FOR SIZES 2-1/2" OR LESS, 1/8" PER FOOT FOR SIZES 3" TO 6" AND 1/8" PER FOOT FOR SIZES 8" AND LARGER.

NO PLASTIC PIPING SHALL BE INSTALLED WITHIN AIR PLENUMS. PROVIDE CAST IRON PIPE AS SPECIFIED.

PROVIDE SLEEVES FOR ALL PENETRATIONS THROUGH WALLS, FLOORS AND CEILINGS. INSTALL UL LISTED FIRESTOPPING SYSTEMS AT ALL RATED PENETRATIONS EQUAL TO THE "T" AND "T" RATINGS OF FLOOR WALL OR CEILING. PROVIDE ESCUTCHEONS AT PENETRATIONS IN EXPOSED AREAS.

PROVIDE METHODS OF STRESS AND STRAIN RELIEF IN PIPING WITH ANCHORS AND EXPANSION COMPENSATION JOINTS. AVOID CREATING STRESS OR STRAIN TO BUILDING COMPONENTS.

ANY PLASTIC PIPE INSTALLED THROUGH HOLES OR NOTCHES IN STUDS, JOISTS RAFTERS, OR SIMILAR MEMBERS LESS THAN 1-1/2" FROM THE NEAREST EDGE OF THE MEMBER SHALL BE PROTECTED WITH STEEL PROTECTIVE SHIELD PLATES A MINIMUM OF 1/16" THICK AND SHALL EXTEND 2" ABOVE AND BELOW THE AREA OF PIPE PENETRATION.

DRAINAGE AND VENT SYSTEM SYSTEM SHALL BE WATER OR AIR TEST INCLUDING FINAL TEST AS CALLED FOR IN OBCS SECTION 312.2, 312.3 AND 313.4. PROVIDE FOUR DAYS NOTICE TO BUILDING INSPECTOR BEFORE PROCEEDING WITH WORK.

PROVIDE EXCAVATION AND BACKFILL FOR ALL UNDERGROUND PIPING WITH CONTINUOUS SUPPORT THROUGHOUT ENTIRE LENGTH OF PIPE. PROVIDE BACKFILL OF LOOSE EARTH FREE FROM ROCKS, BROKEN CONCRETE OR OTHER RUBBLE IN 6" COMPACTED LAYERS. UNDERCUT ALL TRENCHES WHERE ROCK OR UNSUITABLE MATERIAL IS ENCOUNTERED AND PROVIDE PREMIUM BACKFILL CONSISTING OF SAND OR BANK RUN GRAVEL IN 6" COMPACTED LAYERS.

PLUMBING FIXTURES:
 ALL SHOWERS AND PUBLIC HANDWASHING FACILITIES TO BE PROVIDED WITH HOT WATER AT A TEMPERATURE NOT GREATER THAN 110° F. AS PROVIDED BY A THERMOSTATIC MIXING VALVE CONFORMING TO ASSE 1016 OR ASSE 1017.

ALL FIXTURES AND SUPPLY LINES TO BE INSTALLED AS TO PREVENT BACKFLOW.
 INSTALL ALL FIXTURES WITH SERVICE SHUTOFF VALVES FOR REPAIR OR REPLACEMENT.
 PROVIDE WATER TIGHT JOINTS WHERE FIXTURE COMES IN CONTACT WITH WALL OR FLOOR WITH A WATER RESISTANT CAULK. COLOR TO MATCH FIXTURE OR AS APPROVED BY ARCHITECT.

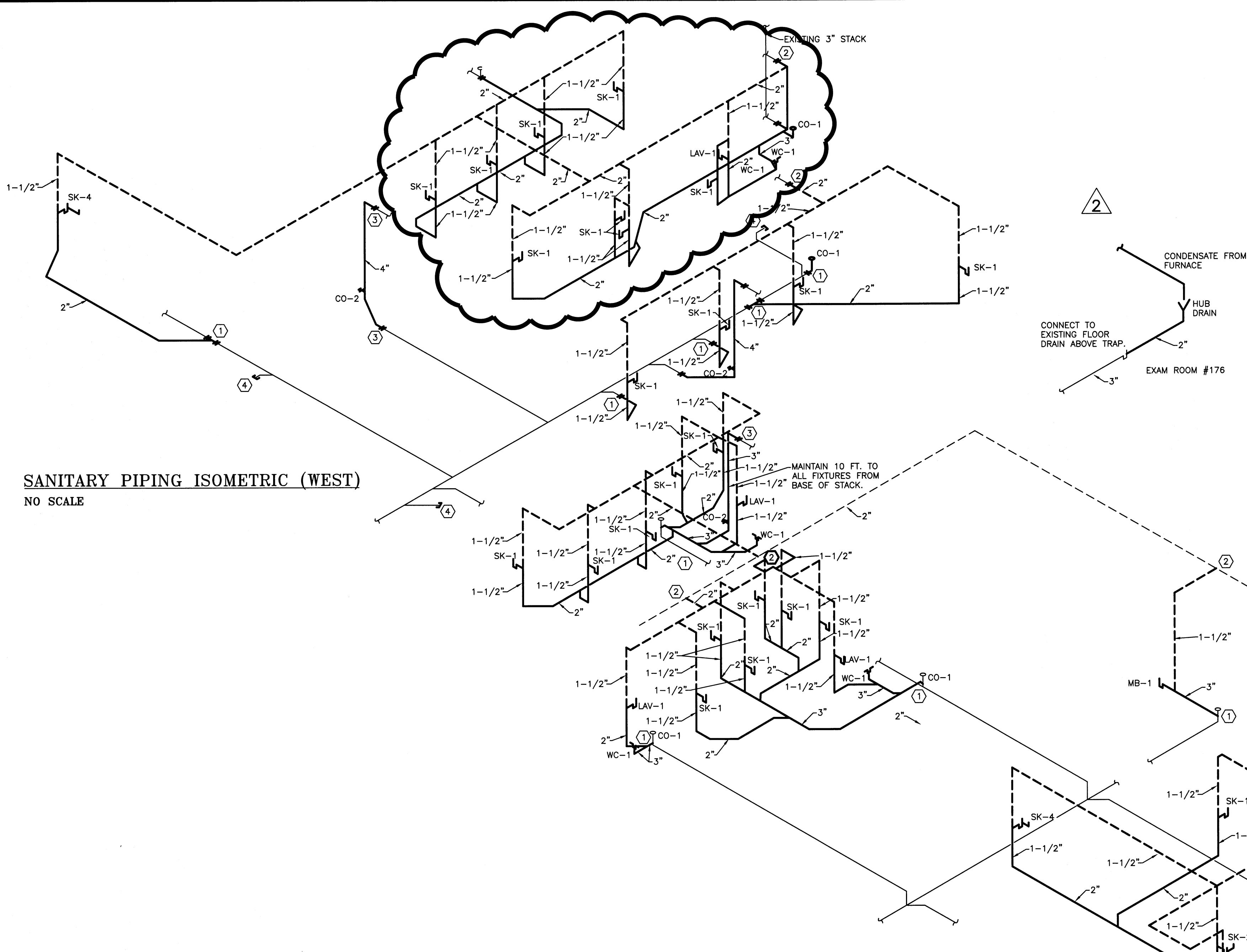
INSULATION SYSTEMS:
 INSULATE ALL CONCEALED DOMESTIC HOT, COLD, AND RECIRCULATION WATER PIPING WITH 3/4" ARMAFLEX. SEAL ALL JOINTS VAPOR TIGHT. PAINT ALL INSULATION EXPOSED TO WEATHER WITH A U.V. RESISTANT PAINT.
 INSULATE ALL EXPOSED DOMESTIC HOT, COLD, AND RECIRCULATION WATER PIPING WITH 1" FIBERGLASS WITH ALL SERVICE JACKET FINISH. SEAL ALL JOINTS LEAVING VAPOR TIGHT BARRIER.
 DO NOT COVER PIPING SYSTEMS BEFORE PIPE HAS BEEN HYDROSTATICALLY TESTED.
 DO NOT INSTALL INSULATION AT FIRESTOPPING PENETRATIONS UNLESS INSULATION IS PART OF FIRESTOPPING SYSTEM.

ANY INSULATION EXPOSED WITHIN AN AIR PLENUM TO BE LABELED BY MANUFACTURE TO HAVE A FLAME SPREAD RATING OF NOT MORE THAN 25 AND A SMOKE SPREAD RATING OF NOT MORE THAN 50.

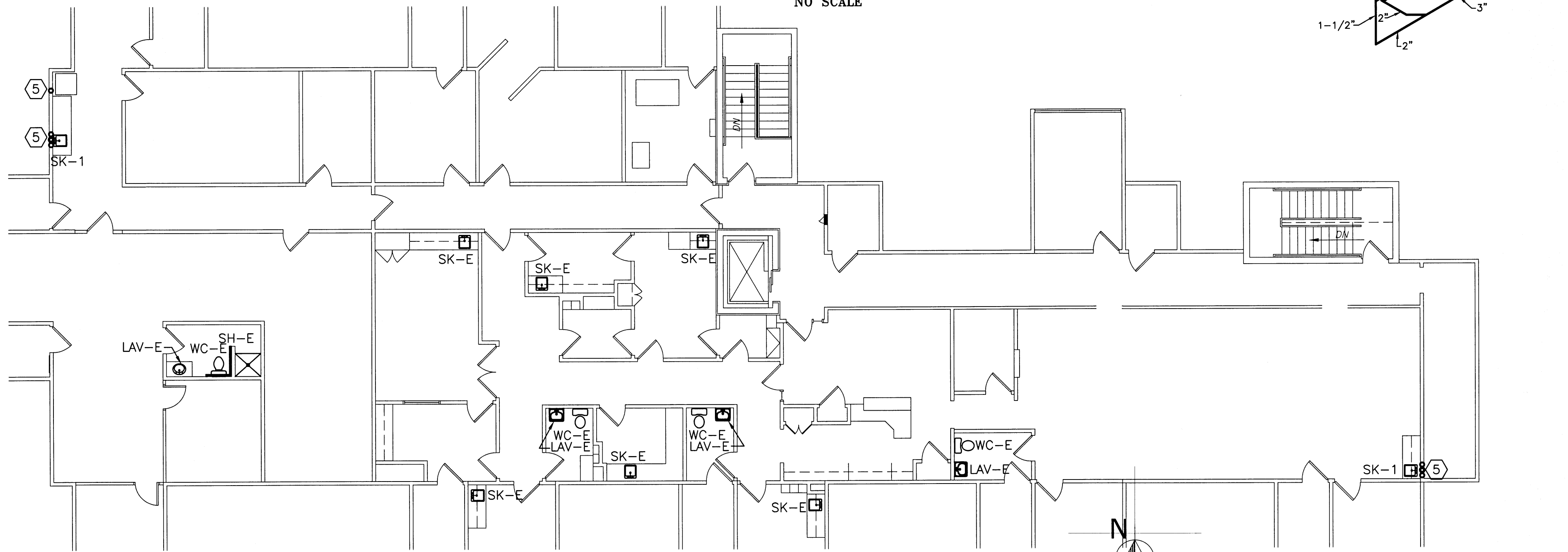
PLUMBING FIXTURES:

- WC-1 EXISTING RELOCATED WATER CLOSET. PROVIDE NEW PLASTIC OPEN FRONT SEAT AND STOP WITH SUPPLY. WATER SUPPLY AND FLUSH HANDLE TO BE LOCATED ON ACCESSIBLE SIDE FOR ADA COMPLIANCE.
- WC-E EXISTING WATER CLOSET.
- LAV-1 EXISTING RELOCATED LAVATORY AND FAUCET. PROVIDE NEW STOPS WITH SUPPLIES AND THERMOSTATIC MIXING VALVE.
- LAV-E EXISTING LAVATORY.
- SK-1 EXISTING RELOCATED SINGLE BOWL SINK AND FAUCET. PROVIDE NEW STOPS WITH SUPPLIES.
- SK-2 EXISTING RELOCATED DOUBLE BOWL SINK AND FAUCET. PROVIDE NEW STOPS WITH SUPPLIES.
- SK-3 EXISTING RELOCATED DEEP BOWL SINK AND FAUCET. PROVIDE NEW STOPS WITH SUPPLIES.
- SK-4 ELKAY LR-3322 DOUBLE BOWL STAINLESS STEEL SINK 33" X 22" WITH ZURN S5300W BASKET STRAINERS "DELTA" 26134587 DECK MOUNTED GOOSE NECK FAUCET WITH 6" WRIST BLADES, CHROME P-T-RAP, AND STOPS WITH SUPPLIES.
- SK-5 ELKAY DLR-1919-10 STAINLESS STEEL SINK 19.5" O.D. X 19" O.D. X 10" DEEP, (3) FAUCET HOLES 4" O.C. PROVIDE WITH "ELKAY" LK-18B PERFORATED GRID STRAINER, "DELTA" 2612945 DECK MOUNT GOOSENECK FAUCET WITH 6" WRIST BLADES, CHROME PLATED P-T-RAP, AND STOPS WITH SUPPLIES.
- SK-E EXISTING SINK.
- SH-E EXISTING SHOWER.
- EW-1 EXISTING RELOCATED EYE WASH. PROVIDE NEW STOP WITH SUPPLY.
- WC-1 ELKAY EBFA-8 ELECTRIC WATER COOLER, 8 GPH CAPACITY, 4.8 FLA, 410 WATTS, 1/5 HP COMPRESSOR. PROVIDE WITH CHROME STOP AND SUPPLY, AND CUP DISPENSER MOUNTED AT ADA HEIGHT. MOUNT UNIT AT WHEELCHAIR HEIGHT.
- DE-1 WATER COOLER AND DISPENSER PROVIDED BY OWNER.
- MB-1 MUSTEE NO. 63M MOLDED STONE MOP BASIN, 24"X24" WITH 65,700 HOSE AND HOSE HOLDER, 65,600 MOP HANGER AND CHICAGO NO. 897 FAUCET WITH VACUUM BREAKER. PROVIDE STOP/CHECK VALVES IN WATER LINES FOR ISOLATION.
- CO-1 SMITH 4020S FLOOR CLEAN OUT WITH ROUND SCORATED SECURED NICKEL BRONZE TOP OR TOP TO MATCH FLOOR FINISH AND FLOOR TYPES. REFER TO DRAWING FOR SIZES. REFER TO ARCHITECTURAL DRAWINGS FOR FLOOR FINISHES.
- CO-2 SMITH 4472 WALL CLEANOUT THREADED PLUG WITH STAINLESS STEEL ROUND COVER REFER

SANITARY PIPING ISOMETRIC (WEST)
 NO SCALE

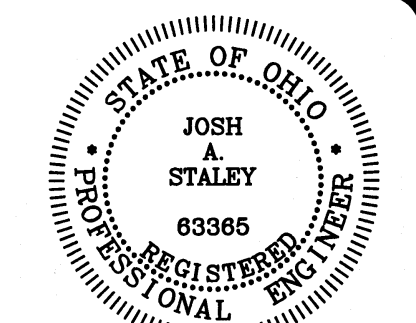


SANITARY PIPING ISOMETRIC (EAST)
 NO SCALE



PARTIAL SECOND FLOOR PLUMBING PLAN
 SCALE: 3/32" = 1' - 0"

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GENERAL NOTES

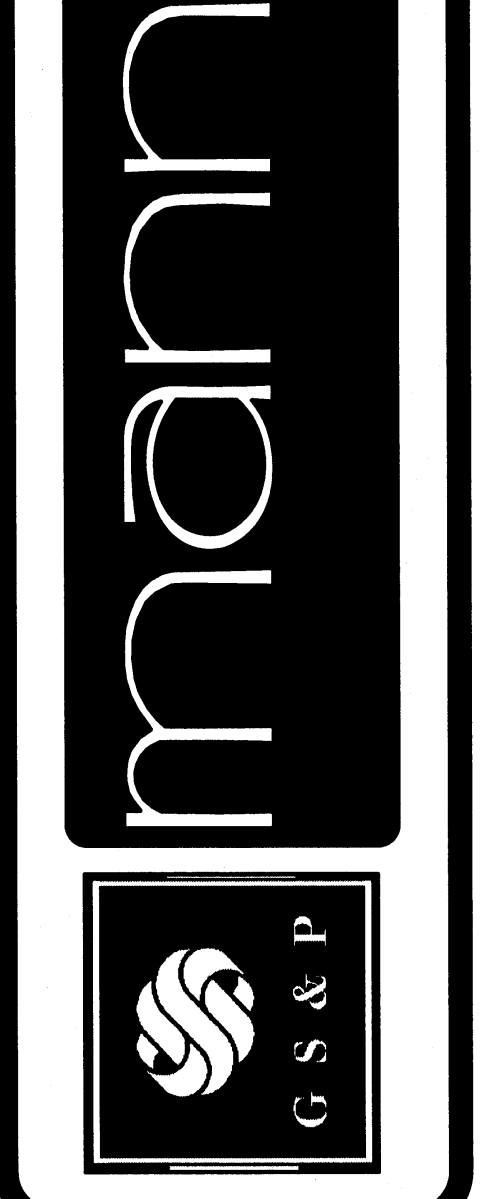
- 1 SEE ARCHITECTURAL DETAILS FOR EXACT LOCATIONS AND DIMENSIONS OF EQUIPMENT, FIXTURES, OPENINGS AND OUTLETS. COMMUNICATE WITH ARCHITECT ANY DISCREPANCIES.
- 2 PROVIDE EXISTING FLOOR, CEILING OR WALL CUTTING AND PATCHING TO MATCH EXISTING CONDITIONS FOR ANY PLUMBING WORK AS REQUIRED.
- 3 REMOVE EXISTING PIPING AS REQUIRED AND CAP BEHIND WALLS, ABOVE CEILING OR BELOW FLOOR AS CLOSE TO MAIN AS POSSIBLE. LEAVE NO PIPING EXPOSED IF NOT REUSED.

CODED NOTES

- 1 CONNECT NEW SANITARY TO EXISTING UNDERGROUND SANITARY AND EXTEND TO FIXTURE(S) AS INDICATED.
- 2 CONNECT NEW SANITARY VENT TO EXISTING SANITARY VENT AND EXTEND AS INDICATED.
- 3 REROUTE EXISTING 4" SANITARY STACK SERVING SECOND FLOOR FIXTURES, PROVIDE CLEANOUT AT BASE OF RISER.
- 4 CAP EXISTING UNDERGROUND SANITARY LINE CLOSE TO MAIN. CUT AND PATCH FLOOR TO MATCH EXISTING CONDITIONS.
- 5 1/2" DCW, 1/2" DHW AND 1-1/2" SAN UP FROM FIRST FLOOR TO SINK.
- 6 1/2" DCW FROM BELOW WITH SHUTOFF VALVE AND DOUBLE CHECK BACKFLOW PREVENTER TO ICE MAKER.

revisions
 1 1-24-08
 2 8-18-08

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scale
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