

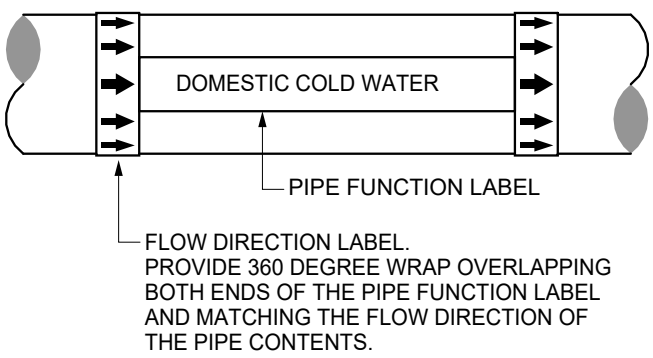
GENERAL NOTES

1. LOCATIONS OF UTILITIES SHOWN ON PLANS ARE APPROXIMATE. VERIFY WITH LOCAL UTILITY PRIOR TO BIDDING.
2. CONTRACTOR SHALL VERIFY LOCATION, SIZE AND ELEVATION OF ALL EXISTING PIPING PRIOR TO INSTALLING ANY NEW PIPE.
3. ALL OUTSIDE CLEANOUTS SHALL BE BROUGHT TO GRADE AND EMBEDDED IN 18"x18"x6" THICK CONCRETE PAD (J.R. SMITH 4288 OR EQUAL).
4. WHEREVER DISSIMILAR METALS ARE CONNECTED ON WATER LINES, A DIELECTRIC UNION SHALL BE USED.
5. ALL HORIZONTAL WATER, GAS AND VENT PIPING IS RUN ABOVE CEILING AS SHOWN UNLESS OTHERWISE NOTED.
6. ALL HORIZONTAL SANITARY AND STORM PIPING IS RUN BELOW FLOOR AS SHOWN UNLESS OTHERWISE NOTED.
7. COORDINATE ALL PIPE ROUTING TO AVOID CONFLICTS WITH STRUCTURAL, MECHANICAL, AND ELECTRICAL FEATURES OF BUILDING.
8. ALL WALL HYDRANTS AND FREEZE PROOF BOX SHALL BE MOUNTED 24" ABOVE FINISH GRADE OR FINISH FLOOR UNLESS OTHERWISE NOTED.
9. ALL WATER PIPING INSTALLED IN EXTERIOR WALLS SHALL BE LOCATED ON THE INTERIOR SIDE OF THE EXTERIOR WALL INSULATION.
10. ALL FIXTURES, OR GROUPS OF FIXTURES SHALL HAVE A FULL PORT, QUARTER TURN BALL VALVE INSTALLED IN THE SUPPLY PIPING.
11. 18" HIGH AIR CHAMBERS SHALL BE PROVIDED ON HOT AND COLD WATER CONNECTION AT EACH FLOOR OR EQUIPMENT.
12. ALL WORK SHALL COMPLY WITH ALL APPLICABLE NFPA, STATE, COUNTY, AND LOCAL LAWS AND ORDINANCES.
13. CONTRACTOR SHALL COORDINATE EXACT LOCATION OF NATURAL GAS CONNECTION POINTS TO EQUIPMENT.
14. ALL CEILING SPACES ARE TO BE CONSIDERED 'RETURN AIR PLENUM' ANY AND ALL PIPING ROUTED IN A RETURN AIR PLENUM SHALL MEET ASTM E84. THIS INCLUDES EXISTING PIPING INSTALLATIONS.
15. PLUMBING DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL DETAILS OF THE WORK. OBTAIN DIMENSIONS AND PERTINENT INFORMATION FROM ARCHITECTURAL DRAWINGS.
16. ALL FLOOR DRAINS TO BE INSTALLED WITH RIMGRATE FLUSH WITH FINISH FLOOR.
17. SEAL ALL FIXTURES IN CONTACT WITH WALLS, FLOORS AND/OR COUNTERS WITH A SANITARY TYPE, MILDEW RESISTANT, ONE-PART SILICONE CAULK.
18. NATURAL GAS PIPING SHALL BE REDUCED IN SIZE AT THE CONNECTION TO THE PIECE OF EQUIPMENT.
19. ALL NATURAL GAS PIPING THAT IS EXPOSED TO THE WEATHER SHALL BE CLEANED FREE OF RUST, BE PRIMED AND THEN PAINTED. COORDINATE COLOR WITH ARCHITECT.
20. NATURAL GAS PIPING ROUTED ON ROOF TOPS SHALL BE PROVIDED WITH SUPPORTS AND ELEVATED ABOVE THE ROOF IN ACCORDANCE WITH IFGC AND NFPA 54.
21. SEVERAL AREAS ARE SOUND SENSITIVE. IN AREAS WHERE EXTRANEOUS NOISE IS TO BE ATTENUATED ALL PLUMBING PIPING SHALL BE METALLIC AND INSULATED WITH A MINIMUM OF 2 INCHES OF FIBERGLASS INSULATION. REFER TO SPECIFICATIONS FOR PIPING MATERIALS. COORDINATE LOCATIONS OF ALL SOUND SENSITIVE AREAS WITH ARCHITECT AND OWNER.
- SEE SECTION 220710 - PLUMBING PIPING INSULATION
- SEE SECTION 221116 - DOMESTIC WATER PIPING
- SEE SECTION 221316 - STORM, SANITARY WASTE AND VENT PIPING
22. ALL DRAIN, WASTE AND VENT (DWV) PIPING THAT IS 2-1/2" AND SMALLER SHALL BE SLOPED AT 1/4-INCH PER FOOT (2%).
23. ALL DRAIN, WASTE AND VENT (DWV) PIPING THAT IS 3" AND LARGER SHALL BE SLOPED AT 1/8-INCH PER FOOT (1%), UNLESS OTHERWISE NOTED.
24. ALL PIPING STUB-UPS SHALL BE CAPPED, PLUGGED OR OTHERWISE PROTECTED TO PREVENT CONSTRUCTION DEBRIS FROM ENTERING THE INSTALLED PIPING. PIPING STUB-UPS SHALL BE PROTECTED FOR THE DURATION OF CONSTRUCTION. ANY FOREIGN MATERIAL THAT ENTERS THE PIPING (CONSTRUCTION DEBRIS, DIRT, GRAVEL, CONCRETE, ETC) SHALL BE REMOVED AND CLEANED. FOR ANY SECTIONS OF PIPING THAT CONTRAINS DEBRIS THAT CANNOT BE CLEARED, THE SECTION OF PIPING SHALL BE REMOVED AND REPLACED AT NO ADDITIONAL COST TO THE OWNER.
25. PRIOR TO SUBSTANTIAL COMPLETION, ALL SANITARY LINES 3 INCHES AND LARGER SHALL BE HYDRO-FLUSHED AND VIDEO INSPECTED TO 100 FEET BEYOND THE FOUNDATION WALL OR TO THE NEAREST MANHOLE, WHICHEVER IS CLOSER.

PIPE LABELS

SYSTEM	BACKGROUND COLOR	TEXT COLOR
COLD WATER	GREEN	WHITE
HOT WATER	GREEN	WHITE
HOT WATER RETURN	GREEN	WHITE
NON-POTABLE WATER	PURPLE	WHITE
SANITARY & WASTE	WHITE	BLACK
VENT	WHITE	BLACK
STORM	WHITE	BLACK
FIRE PROTECTION	RED	WHITE

- NOTES:
1. PIPE LABELS FOR DOMESTIC SYSTEMS SHALL CONFORM TO ASME 13.1.
2. ALL PIPE LABELS SHALL HAVE ARROWS INDICATING DIRECTION OF FLOW.



DETAIL NOTES

- A. PROVIDE A PIPE LABEL FOR EACH PIPE FUNCTION.
- B. PROVIDE AT LEAST ONE LABE ON EACH PIPE FOR EVERY ROOM THE PIPE PASSES THROUGH.
- C. PROVIDE LABELS IN LARGE SPACES ON MAXIMUM 20'-0" CENTERS FOR EVERY PIPE UNLESS OTHERWISE NOTED IN THE SPECIFICATIONS.
- D. LABELS TO BE LOCATED IN AN EASILY VISIBLE LOCATION AS THEY WOULD NORMALLY BE SEEN. E.G ON THE BOTTOM OF PIPES IN THE AIR AND ON THE TOP OF OR SIDES OF PIPES MOUNTED LOW.
- E. LABELS SHALL BE COLOR CODED, PRE-PRINTED, SELF-ADHESIVE VINYL OR PRE-COLORED, SEMIRIGID PLASTIC FORMED TO COVER THE FULL CIRCUMFERENCE OF PIPING WITH OUT THE USE OF ADHESIVES.
- F. SEE SPECIFICATIONS FOR OTHER REQUIREMENTS AND LIST OF PIPE FUNCTIONS.
- G. LABELS ON MULTIPLE PARALLEL LINES SHALL BE ALIGNED AND CENTERED.

DETAIL OF PIPE IDENTIFICATION

NO SCALE

PLUMBING LEGEND

—	SOIL OR WASTE LINE	ADA	AMERICANS WITH DISABILITIES ACT
—	VENT LINE	AE	AIR EXHAUST
—ST—	STORM LINE (ST)	AFF	ABOVE FINISH FLOOR
—	COLD WATER LINE (CW)	AHJ	AUTHORITY HAVING JURISDICTION
—	HOT WATER LINE (HW)	AI	AIR INTAKE
—	HOT WATER RETURN LINE (HWR)	BFP	BELOW FINISHED FLOOR
—G—	GAS LINE	BFP	BACKFLOW PREVENTER
—NPCW—	NON-POTABLE COLD WATER LINE (NPCW)	BTUH	BRITISH THERMAL UNIT PER HOUR
—	BALL VALVE	CO	CLEAN OUT
—	UNION	CCO	CONCRETE CLEAN OUT
—	PIPE TURNING UP	CFH	CUBIC FEET PER HOUR (1,000 BTUH)
—	PIPE TURNING DOWN	EST.	ESTIMATED (APPROXIMATELY)
—	P TRAP	FCO	FLOOR CLEAN OUT
—	KITCHEN EQUIPMENT NUMBER	FLA	FULL LOAD AMPERAGE
—HB—	HOSE BIBB	FT.HD	FEET OF HEAD
—WH—	WALL HYDRANT	GAL	GALLONS
—BH—	ROOF HYDRANT	GPH	GALLONS PER HOUR
—HD—	HUB DRAIN	GPM	GALLONS PER MINUTE
—ED—	FLOOR DRAIN	HP	HORSE POWER
—MED—	MECHANICAL FLOOR DRAIN	IND, IW	INDIRECT, INDIRECT WASTE
—BD—	ROOF DRAIN	IN.WC	INCHES WATER COLUMN
—ERD—	EMERGENCY ROOF DRAIN	INV	INVERT ELEVATION
—ES#1—	FLOOR SINK #1	KW	KILOWATT
—	CONNECT TO EXISTING	NC	NORMALLY CLOSED
—TP—	TRAP PRIMER	NO	NORMALLY OPENED
—TYP—	TYPICAL	P#	PLUMBING FIXTURE NUMBER
—VS—	VENT STACK	PSI	POUNDS PER SQUARE INCH
—VTR—	VENT THROUGH ROOF	RPM	REVOLUTIONS PER MINUTE
—WCO—	WALL CLEAN OUT	RPZ	REDUCED PRESSURE ZONE
—WHA—	WATER HAMMER ARRESTOR	SC	STORM CONDUCTOR
—WS—	WASTE STACK	SS	SOIL STACK
—		TG	TRAP GUARD

PLUMBING SPECIALTIES SCHEDULE

MARK	EQUIPMENT	DRAIN WASTE	VENT	CW	HW	REMARKS
FD-1	FLOOR DRAIN	SEE PLANS	SEE PLANS	-	-	J.R. SMITH #2005 WITH 6" ROUND NICKEL BRONZE REINFORCED GRATE. PROVIDE TRAP GUARD AND DEEP SEAL P-TRAP. FOR FLOOR DRAINS COLLECTING CONDENSATE ONLY, PROVIDE OPTION #3580 FUNNEL FOR SINGLE CONDENSATE LINE OR FOR MULTIPLE CONDENSATE LINES. PROVIDE F37 OR F38 RAISED RIM.
MFD	MECHANICAL FLOOR DRAIN	SEE PLANS	SEE PLANS	-	-	J.R. SMITH #2230 WITH SEDIMENT BUCKET AND TRAP PRIMER CONNECTION. PROVIDE DEEP SEAL TRAP, TRAP GUARD AND COORDINATE EXACT LOCATION WITH HVAC EQUIPMENT. INSULATE SUSPENDED DRAIN BODY AND ALL HORIZONTAL PIPING SERVING MECHANICAL ROOM DRAIN UNTIL PIPING TURNS VERTICAL.
FS-1	FLOOR SINK	SEE PLANS	SEE PLANS	-	-	8" DIAMETER, 8" DEEP PORCELAIN ENAMELED CAST IRON BODY, THREE QUARTER (3/4) CAST IRON PORCELAIN ENAMELED GRATE AND BOTTOM DOME STRAINER.
RD	ROOF DRAIN	SEE PLANS	-	-	-	J.R. SMITH #1011, COMPLETE WITH UNDER DECK CLAMP AND ALUMINUM DOME.
ERD	EMERGENCY ROOF DRAIN	SEE PLANS	-	-	-	J.R. SMITH #1070, COMPLETE WITH INTERNAL PVC STANDPIPE, UNDER DECK CLAMP AND ALUMINUM DOME.
DSN-1	DOWN SPOUT NOZZLE (JUMBS TONGUE)	SEE PLANS	-	-	-	J.R. SMITH #1770-BS COMPLETE WITH WALL FLANGE AND BIRD SCREEN IN OPENING. SECURELY ANCHOR FLANGE TO WALL WITH BRASS SCREWS AND SEAL WEATHER TIGHT. MOUNT 24" ABOVE FINISHED GRADE AND PROVIDE SPLASH BLOCK.
TG	TRAP GUARD	SEE PLANS	-	-	-	J.R. SMITH #2692 QUAD CLOSE, MECHANICAL TRAP SEAL DEVICE. SIZED TO ACCOMMODATE FLOOR DRAIN. MUST MEET ASSE 1072.
FCO	FLOOR CLEANOUT	SEE PLANS	SEE PLANS	-	-	J.R. SMITH #4020 ROUND, CAST IRON BODY, ADJUSTABLE TOP, NICKEL BRONZE COVER, AND CLOSURE PLUG.
YCO	YARD CLEANOUT	SEE PLANS	SEE PLANS	-	-	J.R. SMITH SERIES 4000 CLEANOUT OR APPROVED EQUAL WITH SINGLE, TWO-WAY CLEANOUT CHARLOTTE PIPE #PVIC 448 OR APPROVED EQUAL AND NICKEL BRONZE COVER PLATE WITH VANDAL PROOF TOP. SET FLUSH WITH CONCRETE PAD (SEE DETAIL ON SHEET P0.02).
WH-1	WALL HYDRANT	-	-	3/4"	-	J.R. SMITH #5619 FREEZE RESISTANT WALL HYDRANT, INTEGRAL VACUUM BREAKER, DUAL CHECK, LOOSE T-HANDLE KEY, LOCKABLE NICKEL BRONZE FACE. CONTRACTOR TO VERIFY WALL THICKNESS BEFORE ORDERING.
RH	ROOF HYDRANT	-	-	3/4"	-	WOODFORD #58H-MS FREEZE RESISTANT ROOF HYDRANT, NO DRAIN REQUIRED, DUAL CHECK VALVE ON OUTLET WITH 3/4" HOSE CONNECTION. UNDER DECK FLANGE AND MOUNTING HARDWARE.

- PLUMBING FIXTURE CONNECTION SCHEDULE NOTES :
1. SIZES NOTED ABOVE ARE FOR EQUIPMENT ROUGH-IN.
2. PROVIDE QUARTER TURN BALL VALVE ABOVE CEILING IN BRANCH PIPING TO EQUIPMENT OR GROUP OF FIXTURES.

PLUMBING SPECIALTY - APPROVED EQUALS
FLOOR DRAIN - J.R. SMITH, JOSAM, MIFAB, WADE, ZURN
MECHANICAL FLOOR DRAIN - J.R. SMITH, JOSAM, MIFAB, WADE, ZURN
FLOOR CLEANOUT - J.R. SMITH, JOSAM, MIFAB, WADE, ZURN
TRAP GUARD - J.R. SMITH, RECTOR SEAL, OATEY
HOSE BIBB / WALL HYDRANT - J.R. SMITH, ZURN, WOODFORD, CHICAGO FAUCETS

BACKFLOW PREVENTER - WATTS, AMES, ZURN
CIRCULATING PUMP - ARMSTRONG, BELL & GOSSETT, GRUNDFOS

PLUMBING FIXTURE CONNECTION SCHEDULE

MARK	FIXTURE	WASTE	VENT	CW	HW	REMARKS
WC-1	WATER CLOSET	4"	2"	1"	-	FLOOR MOUNTED - KOHLER WK-9603 COMPLETE, SLOAN ROYAL SMOOTH 8111-1.6 GPF BATTERY POWERED SENSOR FLUSH VALVE WITH Y-J BRACKET. AND CHURCH DURA GUARD #21555CT OPEN FRONT SEAT. RIM OF WATER CLOSET AT 15-3/16" ABOVE FINISHED FLOOR.
WC-2	WATER CLOSET, ADA	4"	2"	1"	-	FLOOR MOUNTED - KOHLER WK-9607 COMPLETE, SLOAN ROYAL SMOOTH 8111-1.6 GPF BATTERY POWERED SENSOR FLUSH VALVE WITH Y-J BRACKET. AND CHURCH DURA GUARD #21555CT OPEN FRONT SEAT. RIM OF WATER CLOSET AT 17" ABOVE FINISHED FLOOR. MUST MEET ADA.
WC-3	WATER CLOSET, JUVENILE	4"	2"	1"	-	FLOOR MOUNTED - KOHLER K-96064 PRIMARY WATER CLOSET, SLOAN ROYAL SMOOTH 8111-1.6 GPF BATTERY POWERED SENSOR FLUSH VALVE WITH Y-J BRACKET AND CHURCH DURA GUARD #21555SC SEAT
UR-1	URINAL	2"	2"	3/4"	-	WALL HUNG - KOHLER K-5016-ET COMPLETE, SLOAN OPTIMA G2 #186- 0.5 GPF BATTERY POWERED SENSOR FLUSH VALVE WITH Y-J BRACKET, J.R. SMITH #637 FIXTURE SUPPORT WITH LIP 24" ABOVE FINISHED FLOOR.
UR-2	URINAL, ADA	2"	2"	3/4"	-	WALL HUNG - KOHLER K-5016-ET COMPLETE, SLOAN OPTIMA G2 #186- 0.5 GPF BATTERY POWERED SENSOR FLUSH VALVE WITH Y-J BRACKET, J.R. SMITH #637 FIXTURE SUPPORT WITH LIP 17" ABOVE FINISHED FLOOR. MUST MEET ADA.
L-1	LAVATORY	2"	2"	1/2"	1/2"	UNDERMOUNT - KOHLER K-2882 COMPLETE, BOBRICK B-8892, HARDWIRED, SINGLE HOLE, SENSOR OPERATED FAUCET, MATTE BLACK FINISH, MCGUIRE 155A OUTLET WITH TAILPIECE, MCGUIRE LFH2165 STOPS AND SUPPLIES, MCGUIRE 8872C P-TRAP WITH CLEANOUT PLUG. INSULATE P-TRAP, STOPS AND SUPPLIES WITH MCGUIRE PROWRAP INSULATOR KIT. WATTS LFUSG-B-M2-SC THERMOSTATIC MIXING VALVE (ASSE 1070) WITH OUTLET TEMPERATURE SET AT 105°F. MUST MEET ADA.
L-2	LAVATORY, ADA	2"	2"	1/2"	1/2"	WALL HUNG - AMERICAN STANDARD, 8024 001EC, CENTER HOLE ONLY, COMPLETE, BOBRICK B-8892, HARDWIRED, SINGLE HOLE, SENSOR OPERATED FAUCET, MATTE BLACK FINISH, MCGUIRE 155A OUTLET WITH TAILPIECE, JR SMITH #700-M31 FIXTURE SUPPORT, MCGUIRE LFH2165 STOPS AND SUPPLIES, MCGUIRE 8872C P-TRAP WITH CLEANOUT PLUG. INSULATE P-TRAP, STOPS AND SUPPLIES WITH MCGUIRE PROWRAP INSULATOR KIT AND INSTALL WITH RIM AT 34" ABOVE FINISHED FLOOR. PROVIDE WATTS LFUSG-B-M2-SC THERMOSTATIC MIXING VALVE (ASSE 1070) WITH OUTLET TEMPERATURE SET AT 105°F. MUST BE ADA COMPLIANT.
L-3	LAVATORY, JUVENILE	2"	2"	1/2"	1/2"	WALL HUNG - AMERICAN STANDARD, 8024 001EC, CENTER HOLE ONLY, COMPLETE, SLOAN OPTIMA #ET-40-80X-ADM-CP-3 SOPA-M4-M4-C7 SINGLE HOLE FAUCET, HARDWIRED, SENSOR OPERATED, POLISHED CHROME FINISH, MCGUIRE 155A OUTLET WITH TAILPIECE, JR SMITH #700-M31 FIXTURE SUPPORT, MCGUIRE LFH2165 STOPS AND SUPPLIES, MCGUIRE 8872C P-TRAP WITH CLEANOUT PLUG. INSULATE P-TRAP, STOPS AND SUPPLIES WITH MCGUIRE PROWRAP INSULATOR KIT AND INSTALL WITH RIM AT 34" ABOVE FINISHED FLOOR. PROVIDE WATTS LFUSG-B-M2-SC THERMOSTATIC MIXING VALVE (ASSE 1070) WITH OUTLET TEMPERATURE SET AT 109°F.
SK-1	SINK	2"	2"	1/2"	1/2"	COUNTER SET - ELKAY #LR2219, STAINLESS STEEL SINGLE BOWL SINK COMPLETE. KOHLER K-596 FAUCET WITH LK-35 BASINET AND STRAINER, REENEY MCGUIRE 8812C P-TRAP WITH CLEANOUT PLUG, MCGUIRE LFH165 STOP AND SUPPLY (AND WATTS LFUSG-B-M5-SC THERMOSTATIC MIXING VALVE (ASSE 1070) WITH OUTLET TEMPERATURE SET AT 109°F).
SK-2	SINK	2"	2"	1/2"	1/2"	ELKAY DAYTON SINGLE COMPARTMENT DROP-IN, 22 GAUGE STAINLESS STEEL SINK WITH LK-35 WASTE STRAINER, MCGUIRE 165 STOPS/SUPPLIES AND 8912 P-TRAP. PROVIDE ZURN Z83184-XL-17F LEAD FREE GOOSENECK FAUCET WITH WRIST BLADE HANDLES, 1.5 GPM. W ATTS LFUSG-B-M5-SC THERMOSTATIC MIXING VALVE (ASSE 1070) WITH OUTLET TEMPERATURE SET AT 105°F.
SK-3	SINK	2"	2"	1/2"	1/2"	TBD - SINK WITH LK-35 WASTE STRAINER, MCGUIRE 165 STOPS/SUPPLIES AND 8912 P-TRAP. PROVIDE ZURN Z83184-XL-17F LEAD FREE GOOSENECK FAUCET WITH WRIST BLADE HANDLES, 1.5 GPM. W ATTS LFUSG-B-M5-SC THERMOSTATIC MIXING VALVE (ASSE 1070) WITH OUTLET TEMPERATURE SET AT 105°F.
SH-1	SHOWER, ADA	2"	2"	1/2"	1/2"	SHOWER SURROUND TILED BY GC. LEONARD #S-7600 THERMOSTATIC AND PRESSURE BALANCED SHOWER CONTROL VALVE, LEONARD #82001 HAND WAND, 24" GRAB BAR, INLINE BACKFLOW PREVENTER, BRAIDED STAINLESS STEEL FLEXIBLE HOSE, PROFLOW #PF101PNC SHOWER DRAIN IN CENTER OF STALL. ZURN #Z894 TRENCH DRAIN ALONG SHOWER.
EW-1	ELECTRIC WATER COOLER	2"	2"	1/2"	-	ELKAY #E23TLRWSSK B-ELEVEL FILTERED ADA COOLER WITH SENSOR ACTIVATED BOTTLE FILLING STATION, ALL STAINLESS STEEL CABINET AND WATER WAYS MANUFACTURED OF MATERIALS THAT ARE 100% LEAD FREE, MCGUIRE 8872C P-TRAP WITH CLEANOUT PLUG, MCGUIRE LFH2165 STOP AND SUPPLY AND J.R. SMITH #840 FIXTURE SUPPORT. FULLY INSULATE P-TRAP WITH MCGUIRE PROWRAP INSULATOR KIT. INSTALL WITH OUTLET AT 40" ABOVE FINISHED FLOOR.
MB-1	MOP BASIN	3"	2"	3/4"	3/4"	FIAT #T5BC1611 TERRAZO NEO-CORNER (32"x32"x12" WITH 6" DROP FRONT) MOP SERVICE BASIN COMPLETE. STAINLESS STEEL WALL GUARDS, HOSE AND HOSE BRACKET, DRAIN GASKET, AND CHICAGO FAUCETS #89TCCP FAUCET WITH INTEGRAL STOPS AND SPRING CHECK.
UB-1	UTILITY BOX	2"	2"	1/2"	1/2"	GLY GRAY #MB148AB WHITE POWDER COATED WALL SUPPLY BOX WITH LEAD FREE QUARTER TURN BALL VALVE AND WATER HAMMER ARRESTOR. PROVIDE 12'-0" OF SOFT TEMPER COPPER FOR CONNECTION TO EQUIPMENT.
UB-2	UTILITY BOX	-	-	1/2"	-	GLY GRAY #RMDW1AB WHITE POWDER COATED WALL SUPPLY BOX WITH QUARTER TURN BALL VALVE AND WATER HAMMER ARRESTOR. PROVIDE 12'-0" OF SOFT TEMPER COPPER FOR CONNECTION TO EQUIPMENT.

- PLUMBING FIXTURE CONNECTION SCHEDULE NOTES
1. SIZES NOTED ABOVE ARE FOR FIXTURE ROUGH-IN.
2. ALL LAVATORIES AND SINKS SHALL BE PROVIDED WITH THERMOSTATIC MIXING VALVE, CONFORMING TO ASSE 1070, WATTS LFUSG-B-M5-SC. SET OUTLET TO 109 DEG F.
3. PROVIDE QUARTER TURN BALL VALVE ABOVE CEILING IN BRANCH PIPING TO FIXTURE OR GROUP OF FIXTURES.
4. STOP VALVES WITH PLASTIC COMPONENTS ARE NOT ACCEPTABLE.

PLUMBING FIXTURES - APPROVED EQUALS
WATER CLOSET, URINAL, LAVATORY - KOHLER, ZURN, AMERICAN STANDARD, TOTO
ELECTRIC WATER COOLER - ELKAY, OASIS, HALSEY TAYLOR
STAINLESS STEEL SINKS - ELKAY, AMERICAN STANDARD, ZURN, JUST
JANITORS RECEPTOR - FIAT, STERN WILLIAMS, MUSTEE
FLUSH VALVE - SLOAN, ZURN, AMERICAN STANDARD, TOTO
LAVATORY FAUCET - KOHLER, DELTA, AMERICAN STANDARD, SLOAN, ZURN, MOEN
THERMOSTATIC MIXING VALVE, ASSE 1070 - WATTS, SYMMONS, POWERS, ZURN
SINK FAUCET - ZURN, SYMMONS, TS BRASS, DELTA, MOEN
SERVICE FAUCET - CHICAGO, DEARBORN BRASS
WALL SUPPLY BOX - GUY GRAY, SIOUX CHIEF

GAS WATER HEATER SCHEDULE

MARK	LOCATION	MANUFACTURER	MODEL #	CW	HW	STOR.	SET POINT @ 90° AT	RECOVERY @ 90° AT	FLUEVENT SIZE	NATURAL GAS CFH	ELECTRICAL IN WC	VOLTS	PHASE	REMARKS
GWH-1	JANITOR C104	LOCHINVAR	SWR150N	1-1/2"	1-1/2"	90	130°F	190 GPH	4"	150	7-11	120	1	SEE NOTES BELOW
GWH-2	JANITOR C115	A.O. SMITH	POLARIS BSS130	1"	1"	34	130°F	165 GPH	4"	130	7-11	120	1	SEE NOTES BELOW
GWH-3	JANITOR C110	A.O. SMITH	POLARIS BSS130	1"	1"	34	130°F	165 GPH	4"	130	7-11	120	1	SEE NOTES BELOW

GAS WATER HEATER SCHEDULE NOTES:

1. BASIS OF DESIGN IS AMTROL, ELBI AND WATTS ARE APPROVED EQUALS.

2. ALL WATER HEATERS SHALL BE PROVIDED WITH METAL DRAIN PANS.

3. ALL WATER HEATERS SHALL BE PROVIDED WITH EXPANSION TANKS AND VACUUM BREAKERS ON THE CW SUPPLY.

4. ALL WATER HEATERS SHALL BE PROVIDED WITH CONDENSATE NEUTRALIZATION KITS AS RECOMMENDED BY MANUFACTURER.

EXPANSION TANK SCHEDULE

MARK	LOCATION	MODEL	VOLUME (GALLONS)	ACCEPT. (GALLONS)	WATER HEATER	CONN. SIZE	ASME RATED	REMARKS
ET-1	JANITOR C104	ST-12	6.4	3.2	GWH-1	3/4"	NO	
ET-2	JANITOR C115	ST-5	2.0	0.9	GWH-2	3/4"	NO	
ET-3	JANITOR C110	ST-5	2.0	0.9	GWH-3	3/4"	NO	

- EXPANSION TANK SCHEDULE NOTES :
1. BASIS OF DESIGN IS AMTROL. ELBI AND WATTS ARE APPROVED EQUALS.

PUMP SCHEDULE

MARK	LOCATION	MODEL #	SYSTEM TYPE	TYPE	PERFORMANCE PSI	FLOW	FT. HD.	RPM	ELECTRICAL POWER	VOLTS	PHASE	FLA	REMARKS
RCP-1	JANITORS C104	ASTRO 225SS	RECIRC.	IN-LINE	-	2	18		117 W	115	1	0.98	SEE NOTES BELOW
RCP-2	JANITORS C115	ASTRO 225SS	RECIRC.	IN-LINE	-	1	7		83 W	115	1	0.43	SEE NOTES BELOW
RCP-3	JANITORS C105	ASTRO 225SS	RECIRC.	IN-LINE	-	1	7		83 W	115	1	0.43	SEE NOTES BELOW

- CP (CIRCULATING PUMP) NOTES:
1. RECIRCULATION PUMP BASIS OF DESIGN IS ARMSTRONG. BELL & GOSSETT AND GRUNDFOS ARE APPROVED EQUALS.
2. ALL WETTED PARTS TO BE STAINLESS STEEL, LEAD FREE BRONZE OR LEAD FREE BRASS.
3. PROVIDE 7-DAY PROGRAMMABLE TIME CLOCK.

ELEVATOR SUMP SYSTEM SCHEDULE

SYSTEM MODEL			SEPARATOR DATA				SUBMERSIBLE PUMP DATA								
SYMBOL	SIZE	MANUF.	MODEL	GPM	TOTAL CAPACITY	OIL SPILL CAPACITY	FLOW CAPACITY	HEAD (FT)	DISCHARGE SIZE	RPM	ELECTRICAL DATA				PUMP
											H.P.	VOLTS	PH	HZ	
SP-1	ELVC-100	PARK USA	ES-100	50	100 GAL	50 GAL	50 GPM	15'	1-1/4"	1750	0.5	115	1	60	LIBERTY #280
SP-2	ELVC-100	PARK USA	ES-100	50	100 GAL	50 GAL	50 GPM	15'	1-1/4"	1750	0.5	115	1	60	LIBERTY #280
SP (SUMP PUMP) NOTES:															
1. ELEVATOR SUMP PUMP BASIS OF DESIGN IS PARK USA. LIBERTY, STANCOR, WEIL ARE APPROVED EQUALS.															
2. COORDINATE LOCATION OF SUMP PIT WITH STRUCTURAL AND ELEVATOR MANUFACTURER. SUMP PIT TO BE MINIMUM 24"x24"x36".															
3. PROVIDE 90 GALLON FIBERGLASS SUMP BASIN WITH ANTI FLOTATION FLANGE.															
4. PROVIDE LIFTING RAIL AND CHAIN.															