PIPING SYSTEMS LEGEND

NOTE: NOT ALL ITEMS USED THIS PROJECT

(Refer to Project Specifications for Material specifications)

WATER & GAS PIPING	
140° H	Domestic Hot Water (140 Deg.F)
140° R	Domestic Hot Water Return (140 Deg.F)
C / CW	Domestic Cold Water
CA	Compressed Air
G	Gas
H / HW	Domestic Hot Water (110-120 deg.F)
R / HWR	Domestic Hot Water Return (110-120 deg.F)
T	Tempered Water (85-110 deg.F)
DRAIN & VENT PIPING	
AS	Acid Sanitary (Below Slab/Grade)
AV	Acid Vent
AW	Acid Waste (Above Slab/Grade)
CD	Condensate Drain
ERW	Emergency Rainwater
FM	Forced Main/Pumped Drain
GW	Grease Waste
GSAN	Grease Sanitary (Below Slab/Grade)
SAN	Sanitary (Below Slab/Grade)
ST	Storm (Below Slab/Grade)
REP	Radon Evacuation Piping
RW	Rain Water (Above Slab/Grade)
V	Vent
W	Waste (Above Slab/Grade)

PLUMBING MISC. PIPING LEGEND

	FLOW ARROWS
	CONTINUATION
	PIPE CAP
	PIPE CROSS
	PIPE DROP
	PIPE RISE
	PIPE STACK
	PIPE TEE RISE
	PIPE TEE DROP

PLUMBING TAG LEGEND

	ADA SYMBOL
	CONNECT TO EXISTING
	DEMOLITION SYMBOL
# / DWG##	CALLOUT TAG
???.#### INV	INVERT ELEVATION TAG
#	PLUMBING DRAWING NOTE TAG
#	DEMOLITION NOTE TAG
#	CONSTRUCTION REVISION ITEM TAG
#	CONSTRUCTION REVISION ITEM TAG
#	ADDENDA REVISION ITEM TAG
FIXT	PLUMBING FIXTURE TAG

PLUMBING ABBREVIATION LEGEND

AAC	Above Accessible Ceiling	G	Gas
AFF	Above Finished Floor	G.C.	General Contractor
AFG	Above Finished Grade	G.I.	Grease Interceptor
AB	Above	GSAN	Grease Sanitary
AD	Area Drain	GV	Gas Valve
Arch	Architecturals	GW	Grease Waste
ASAN	Acid Sanitary	H / HW	Hot Water
AV	Acid Vent	H.C.	Heating Contractor
AW	Acid Waste	HB	Hose Bibb
AWC	Automatic Washer Connection	HR	Hose Reel
BF	Below Floor	HWH	Hot Water Heater
BFG	Below Finished Grade	HWR / R	Hot Water Return
BFP	Backflow Preventer	I.E. / Inv.	Invert Elevation
BV	Balancing Valve	IG	Interruptible Gas
C / CW	Cold Water	IWH	Instantaneous Water Heater
C.I.	Cast Iron	JAN	Janitor
C.O.	Clean Out	KD	Kitchen Drain
CA	Compressed Air	KS	Kitchen Sanitary
CD	Condensate Drain	KW	Kitchen Waste
CFH	Cubic Feet per Hour	LAV	Lavatory
CLG.	Ceiling	LPG	Liquid Petroleum Gas/Propane
Conn.	Connection	LT	Laundry Tub
Coord.	Coordinate	MAX	Maximum
CTE	Connect To Existing	MIN	Minimum
CTG	Clean Out To Grade	MR	Mop Receptor
CV	Circuit Vent	MTD	Mounted
CWV	Combination Waste & Vent	MU	Make-up Water
D	Drain	NFWH	Non-Freeze Wall Hydrant
DBF	Down Below Floor	NG	Natural Gas
DF	Drinking Fountain	NT	Neutralizing Tank
DFU	Drainage Fixture Units	OS	Oil Sanitary
DN	Down	P.C.	Plumbing Contractor
DWG	Drawing	PIV	Post Indicating Valve
DWH	Domestic Water Heater	PRV	Pressure Reducing Valve
E.C.	Electrical Contractor	PSI	Pounds per Square Inch
E.T.R.	Existing To Remain	PT	Plaster Trap
Ea.	Each	R	Return Piping (Hot Water)
EEW	Emerg. Eyewash	RCP	Re-circulating Pump
ER / ERC	Emerg. Rainwater Conductor	RD	Roof Drain
ERD	Emerg. Roof Drain	RW	Rain Water
ESEW	Emerg. Shower / Eyewash	RWC	Rainwater Conductor
ES	Emerg. Station	RWS	Rain Water Stack
ETV	Emerg. Tempering Valve	S.F./Sq. Ft.	Square Foot
EWC	Electric Water Cooler	SA	Shock Absorber
Ext.	Exterior	SAN	Sanitary
F.F.	Finished Floor	SAN I.E.	Sanitary Invert Elevation
F.P.C.	Fire Protection Contractor	ST	Storm
FAI	Fresh Air Inlet	T	Tempered Water
FCO	Floor Cleanout	T&P	Temperature and Pressure
FD	Floor Drain	T.B.R.	To Be Removed
FH	Fire Hydrant	TV	Tempering Valve
FHC	Fire Hose Cabinet	TYP.	Typical
Fin. Flr.	Finished Floor	UR	Urinal
Flr.	Floor	V	Vent
FM	Forced Main	V.I.F.	Verify In Field
FP	Fire Protection	V.T.R.	Vent Through Roof
FPZ	Fire Protection Zone	VS	Vent Stack
FS	Floor Sink	W	Waste
FSC	Food Service Contractor	WF	Wash Fountains
FVC	Fire Valve Cabinet	WB	Wash Box (Toilet Rooms)
		WC	Water Closet
		WCO	Wall Cleanout
		WSFU	Water Supply Fixture Units
		WSV	Waste Stack Vent

PLUMBING MISCELLANEOUS LEGEND

NOTE: NOT ALL ITEMS USED THIS PROJECT

	FLOW ARROWS
	PIPE CAP
	CLEANOUT ABOVE CEILING
	CLEANOUT TO GRADE
	EXPANSION LOOPS
	PIPE CROSS
	PIPE DROP
	PIPE RISE
	PIPE STACK
	PIPE TEE DROP/RISE
	VALVE IN PIPE DROP
	VENT THRU ROOF - TYPICAL
	VENT THRU ROOF - ACID
WCO	WALL CLEANOUT - TYPICAL

PLUMBING DRAIN LEGEND

NOTE: NOT ALL ITEMS USED THIS PROJECT

	AIR GAP FITTING
	EMERGENCY RAIN WATER OUTLET
	FLOOR CLEANOUT
	FLOOR DRAIN - FUNNEL
	FLOOR DRAIN - INDIRECT
	FLOOR DRAIN - ROUND
	FLOOR DRAIN - SQUARE
	FLOOR SINK - FULL GRATE
	FLOOR SINK - HALF GRATE
	FLOOR SINK - NO GRATE
	FLOOR SINK - ⅔ GRATE
	ROOF DRAIN - TYPICAL
	ROOF DRAIN - EMERGENCY

PLUMBING VALVE LEGEND

NOTE: NOT ALL ITEMS USED THIS PROJECT

	ANCHOR - PIPE
	BALL VALVE - TYPICAL
	BUTTERFLY VALVE
	CHECK VALVE
	CIRCUIT SETTER VALVE
	COMPRESSED AIR OUTLET
	GAS COCK
	GAS REGULATOR
	GATE VALVE
	GAUGE VALVE
	GLOBE VALVE
	GUIDE, PIPE
	HOSE BIBB
	MANUAL BALANCING VALVE
	NON FREEZE WALL HYDRANT
	OS&Y VALVE
	PRESSURE REDUCING VALVE
	RECIRCULATING PUMP
	REDUCE PRESSURE BACKFLOW PREVENTER
	SHOCK ABSORBER
	SOLENOID VALVE
	STRAINER
	TEMPERING VALVE
	THERMOMETER
	UNION, PIPE

PLUMBING TAG LEGEND

NOTE: NOT ALL ITEMS USED THIS PROJECT

	ADA SYMBOL
	CONNECT TO EXISTING
	DEMOLITION SYMBOL
DWG## / NOTE##	DRAWING TAG
???.#### INV	INVERT ELEVATION TAG
	LIMIT OF DEMOLITION
#	NOTE TAG - CIRCLE
#	NOTE TAG - DEMOLITION
#	NOTE TAG - HEXAGONAL
#	NOTE TAG - RENOVATION
	NOTE TAG - SQUARE
#	NOTE TAG - TO BE REMOVED
FIXT	PLUMBING FIXTURE TAG
#	TITLE REVISION TAG

PLUMBING DRAIN & VENT LEGEND

	AIR GAP FITTING
	CLEANOUT - FLOOR CLEANOUT
	CLEANOUT - AB. CEILING CLEANOUT
WCO	CLEANOUT - WALL CLEANOUT
	EMERGENCY RAIN WATER OUTLET
	FLOOR DRAIN - FUNNEL
	FLOOR DRAIN - INDIRECT
	FLOOR DRAIN - ROUND
	FLOOR DRAIN - SQUARE
	FLOOR SINK - FULL GRATE
	FLOOR SINK - HALF GRATE
	FLOOR SINK - NO GRATE
	FLOOR SINK - ⅔ GRATE
RD	ROOF DRAIN - TYPICAL
RD	ROOF DRAIN - EMERGENCY
	VENT THRU ROOF - TYPICAL
	VENT THRU ROOF - ACID

PLUMBING DEMOLITION - GENERAL NOTES

1. Existing piping which is removed from service, shall be removed in its entirety, as indicated by plans or required by scope of work. Verify exact location of all branch piping in field. removals shall not be limited to only the piping on the demolition plans. Verify all conditions and notify Architect / Engineer of any piping not shown on removals prior to any demolition. No demolition shown on this plan shall be performed until all required new piping, equipment, and etc. or necessary temporary connections, are installed and operational.
2. Equipment and piping locations, quantity and conditions are approximate. Field verify all conditions, locations and quantities prior to bid. The demolition drawings are intended to convey the basics of the existing system components. Not all conditions and components have been identified on these drawings.
3. In general where existing fixtures, equipment, pipe risers and drops etc. occur at / in existing walls to be removed, the existing fixture and related piping shall be removed and related piping capped or plugged at mains. Piping within walls that are to remain, shall be capped or plugged within the existing construction and abandoned. Sanitary piping shall be capped below the floor slab and abandoned unless noted otherwise. Patch any affected construction to match existing adjacent finished surface.
4. All existing systems shall remain functional for as long as required, until replacement with new or reworked as required (see new work plans and phasing plans). Provide temporary connections to keep systems functioning properly as required. Some additional work may be required to be performed after hours, weekends, or during vacation breaks. All demolition work shall in no way inconvenience or interrupt the normal workday schedule for this facility (coordinate with Architect/Owner). Any demolition work done which affects the operation of this facility shall be replaced with new, repaired to original conditions or replaced by temporary means for however long as required at no cost to the Owner.
5. Coordinate all demolition and new work. Demolition work shall be coordinated so that no existing systems are demolished out-of-phase or ahead of the new piping system replacement schedule. Provide necessary temporary system connections as required to maintain all existing systems until which time the new systems area installed (during its proper phase) or until new mains can be extended and reconnected to existing. Verify in field. All temporary connections required to maintain existing systems or to replace existing connection terminated out-of-phase shall be installed immediately and at no additional cost to the owner.
6. Remove/Rework existing work, materials, etc. in the way of any new work, even if not indicated to be removed on the demolition plans.
7. Protect existing materials, equipment and finishes that are to remain. any damage caused by this contractor shall be repaired/replaced as necessary by this contractor.
8. Remove all items that are to remain but conflict with the installation of any new work. Re-install the same items (or new if damaged during this task) once new work is completed.
9. P.C. is responsible for all plumbing demo work. In all areas where patching is required, the plumbing contractor shall patch the sub-surface where the new surface is to be finished by the General Contractor. This sub-surface must be provided so that it does not inhibit the installation of or affect the appearance of the new finish. If a new finish will not be provided by the General Contractor, the Plumbing Contractor is responsible to patch the surrounding finished surface to match existing. Patch existing openings from demolished piping in fire rated floors and walls as required to maintain fire rating. Refer to the specifications for additional information and coordinate all work in field.
10. Existing materials scheduled to remain may be required to be temporarily removed, to allow installation of new materials, finishes, etc. These materials must be re-installed in their previous locations in equal or better condition.
11. At all locations where existing below slab drainage piping is indicated to be demolished, the piping shall be permanently capped and abandoned below floor slab. Any existing abandoned mains below floor which are encountered and conflict with new underground utilities shall be cut off with ample space on both sides of new main and both ends of existing sealed permanently as noted above. All pipe caps/plugs of removed floor penetration piping shall be at elevation that allows patching and restoration of existing floor with new finish materials.(Coordinate with General Contractor in field)
12. Remove existing ceiling tiles and grids as required to obtain access to ceiling space for the installation of new piping above ceiling. Store the existing ceiling tiles and grids in a safe location and re-install the same once his work is completed and inspected. Provide additional temporary hangers/cables required to support remaining ceiling structure, light fixtures, ceiling devices, etc. during this contractor's work. remove all temporary facilities once work is completed.
13. Upon reactivation of existing systems following temporary shutdowns, P.C. shall verify proper functioning of all connected fixtures and equipment. All system outlets, stops, and equipment shutoffs shall be returned to normal operating positions.

PLUMBING/FIRE PROTECTION PIPING SPECIALTIES LEGEND

	ANCHOR - PIPE
	BACKFLOW PREVENTER DOUBLE CHECK ASSEMBLY
	BACKFLOW PREVENTER REDUCED PRESSURE ZONE
	COMPRESSED AIR OUTLET
	EXPANSION FITTINGS
	GAS REGULATOR
	PRESSURE GAUGE W/VALVE
	GUIDE, PIPE
	HOSE BIBB
	MANUAL BALANCING VALVE
	NON FREEZE WALL HYDRANT
	PRESSURE REGULATOR
	RECIRCULATING PUMP
	SHOCK ABSORBER
	STRAINER
	TEMPERING VALVE
	THERMOMETER
	UNION, PIPE
	VALVE - BALL VALVE - NORMALLY OPEN
	VALVE - BALL VALVE - NORMALLY CLOSED
	VALVE - BUTTERFLY VALVE
	VALVE - CHECK VALVE
	VALVE - CIRCUIT SETTER VALVE
	VALVE - GAS COCK
	VALVE - GATE VALVE
	VALVE - GLOBE VALVE
	VALVE - OS&Y VALVE
	VALVE - SOLENOID VALVE
	VALVE IN VERTICAL PIPING

PLUMBING GENERAL NOTES

1. Provide all labor, material, and equipment required for the completion and operation of all systems specified within the Division 22 specification sections and Plumbing drawings of work in accordance with all applicable codes including but not limited to PA Uniform Construction Code (PA-UCC), International Plumbing Code (IPC), ICC/ANSI A117.1 - Accessible and Usable Buildings and Facilities, International Building Code (IBC), International Fuel Gas Code (IFGC). Verify the latest adopted code editions and any additional adopted amendments with the Local Authority Having Jurisdiction(AHJ) Prior to beginning work.
2. Coordinate connection of all Water, Sewer, and Gas utility services with the associated Utility provider. Coordination includes but is not limited to: pre-installation verification of all required connection/ valving details, arrangements and performing of all required tests and inspections, supports/base pads for meter installation, and final service activation.
3. Provide a complete domestic water, gas and waste/vent systems to all fixtures and or equipment requiring such. verify all rough-in locations and coordinate piping locations with work under other divisions of the specifications to avoid conflicts.
4. Provide all plumbing fixtures and appliances complete with all required supplies, stops, valves, faucets, drains, traps, tail pieces, escutcheons, etc. All fixture traps shall be semi-cast style, removable and/or provided with access for cleanout. All stops and shutoff valves shall be quarter turn style and installed in a readily accessible locations.
5. All plumbing fixtures, equipment, and materials shall be new and shall fit the space available. Verify dimensions at site are adequate prior to order of any materials.
6. All piping, apparatus, equipment, etc. shall be properly supported, braced vertically and horizontally in accordance with applicable codes and as required to prevent excessive movement during seismic conditions.
7. Do not scale the plans. See architectural plans for exact location of doors, windows, fixtures, wall dimensions, equipment, devices, etc. Coordinate exact locations of fixtures, equipment, specialties, and piping in field prior to rough-in.
8. All valves, cleanouts, plumbing specialties, etc., shall be so located and installed to permit access for service without damage to building or finished materials.
9. In addition to cleanouts indicated on the plumbing drawings, provide cleanouts at base of all waste and rainwater stacks, at all changes in direction of piping in excess of 45 degrees and every 50 feet. Floor cleanouts shall be installed flush with finished floor. All cleanouts shall be so located and installed to permit access for service without damage to building or finished materials, wall cleanouts shall be minimum 18" A.F.F. Wall cleanouts covers shall be stainless steel or where directed by architect provide primer painted steel cover plates to receive final painted finish, same as wall finish. (final paint by G.C.)
10. All exposed supply and waste piping in rest room areas shall be min. 17 ga. thick or semi-cast chrome plated brass, with matching stops and escutcheons.
11. Drainage and vent piping systems, and water distribution piping systems shall be tested with air or water in accordance with IPC Section 312. Coordinate and schedule all required testing with local A.H.J. prior to testing.
12. Sanitize domestic water piping in accordance with IPC requirements, Local Health Department, and American Water Works Association's (AWWA) specifications. Provide Final reports and test results to Owner.
13. All domestic water piping shall be hung level without pitch unless noted otherwise on plans.
14. Protect copper piping against contact with dissimilar metals. All hangers, supports, anchors, and clips shall be copper or copper plated. Where copper piping is carried on iron trapeze hangers with other piping, satisfactory and permanent electrolytic isolation material shall prevent contact with other metals.
15. Protect copper piping against contact with all masonry. Where copper is sleeved through masonry, copper or red brass sleeves shall be used. Where copper must be concealed in or against masonry partitions, contact shall be prevented by coating the copper heavily with asphaltic enamel and #15 asphalt saturated felt between the pipe and the masonry partition.
16. Install piping in areas not subject to freezing temperatures. Water piping in exterior walls shall be installed on conditioned side of the wall insulation.
17. Provide shock absorbers, supplies and stops at each fixture as required by IPC and additionally as noted on the plans. Exposed stops shall be chrome plated.
18. Provide drain valves at all low points of domestic water piping systems for complete drainage and indicate location of same on record drawings.
19. Provide vacuum breakers as required by code.
20. Vent all plumbing fixture drains in accordance with all applicable codes.
21. Verify all fixture mounting heights with architectural interior elevations, schedules, etc. prior to fixture installation. Verify locations of Accessible fixtures and install in strict accordance with ICC/ANSI A117.1 requirements.
22. Provide sleeves at all wall/floor penetrations. Coordinate sleeves with GC for installation in wall/floor construction. In exposed areas provide chrome plated escutcheons at pipe penetrations.
Seal all fire rated floor and wall penetrations with fire stopping materials as specified in the Div. 7 specifications. Where firestopping materials are not specified in Div. 7, provide firestopping materials U.L. listed for use and as manufactured by 3m or equal.
23. Install ball style shutoff valves on the entire domestic water system. Ball valves shall be furnished with blowout proof stem, insulated extension handles, and chrome plated ball.
24. Insulate all domestic water piping as noted in Div. 22 specifications and in accordance with minimum thickness specified in IECC Section C404 and Table C403.11.3. Insulate all vertical and horizontal above slab rainwater and emergency rainwater piping as noted in Div. 22 specifications.
25. Seal all fixtures to walls, floor, counters, etc. using a sanitary-type one-part, mildew resistant, silicone sealant. match sealant color to fixture color.
26. Install all underground sanitary/storm piping at 2% slope unless noted otherwise).
27. Install all above ground waste, rainwater, emergency rainwater piping at 2% slope (unless noted otherwise).
28. Install all above ground vent piping at 1% slope (unless noted otherwise).
29. Install all above ceiling cleanouts in locations above accessible ceiling construction. Coordinate exact locations in field. No cleanouts shall be installed within plenum ceilings.
30. Coordinate all equipment floor drain and floor sink locations with the work of all other trades and with associated equipment in filed prior to rough in. Coordinate all general area floor drains with architectural plans and with G.C. in field prior to rough-in.
31. Provide all floor drains with deep seal traps (unless noted otherwise) and trap seal protection.
32. Install cleanouts to grade at all locations where storm and sanitary laterals exit building. Contractor shall coordinate required invert elevations with site contractor prior to installation, and make final connection to site Sanitary/Storm piping with all required fittings.
33. Verify all "Accessible" toilet locations on Architectural plans. Installation of flushing lever actuator shall comply with ANSI A117.1 and shall be mounted on the accessible (wide) side of toilet areas no more than 44 inches above the finished floor. Coordinate rough-ins of all supplies, flush valves, sensors, etc., to avoid conflict with grab bars or other toilet accessories.
34. All piping located in return air plenums shall conform to the flame spread and smoke developed limits of ASTM E84 or must be wrapped with U.L. approved plenum rated material.
35. In finished spaces with exposed structure, provide and install 1" thick "fiberglass insulation with all-service jacket" in lieu of insulation specified. Prep and paint pipe insulation in color selected by Architect. In finish spaces with exposed vertical insulated piping, provide stainless steel protective jacket to minimum 10ft. above finish floor.
36. All fixture trim, including faucets, strainers, escutcheons, stops, waste traps, visible waste piping or visible hangers shall be made of brass and shall be polished chrome plated. Plastic, zinc or white metal will not be acceptable.
37. Install all exposed horizontal and vertical piping in a neat arrangement in locations which are the most inconspicuous. Vertical piping drops shall be coordinated and installed within chases, walls, soffits and coordinated with other mechanical / electrical feeds. All such locations are to be coordinated between all trades prior to installation. Locations requiring piping to be installed exposed in finished spaces shall be reviewed with the Owner Representative and Architect in field prior to installation.
38. Provide domestic water heater temperature / pressure relief valves with discharge piped full size to the nearest approved floor drain or waste receptor.
39. Provide flexible expansion joints in piping systems at all locations where piping crosses horizontal / vertical building expansion joints. Refer to specifications for expansion joint information and refer to architectural dwgs. for horizontal / vertical expansion joint locations.
40. At all locations where indirect/special waste connections are indicted or called for by the plumbing drawings, the installation of such connections shall be in strict compliance with IPC 2015 Chapter 8.
41. At all locations associated with fixtures, equipment, etc. which could discharge waste water in excess of 140F (Boiler Rooms, Commercial Kitchens, etc.), provide cast iron waste / sanitary piping (hub and spigot if below grade and no-hub if located above grade). Cast iron piping shall be installed minimum 25 ft. beyond the most downstream fixture connection.
42. Provide cast iron piping for all below floor kitchen waste / kitchen sanitary piping (hub and spigot if below grade and no-hub if located above grade) at all locations associated with kitchen and warewashing areas and similar spaces. Exposed kitchen waste piping above floor shall be Stainless Steel as specified.
43. All rainwater and waste piping drops to below grade within the building shall start at minimum (-) 1'0" below finished floor elevation with the first elbow connection below bottom of floor slab (unless noted otherwise). Where floor cleanouts are provided minimum starting pipe elevation shall be (-) 1'6" (unless noted otherwise).
44. Provide thermal expansion control equipment/specialties on all segments of hot water and hot water return piping exceeding 50ft, and at intervals not to exceed 100ft. Thermal expansion control equipment shall include pipe anchors, pipe guides, and expansion loops. Expansion loops shall be provided as specified and verified by manufacturer's calculation to be adequate to accommodate thermal expansion of the applicable piping system.
45. All piping penetrations through exterior wall shall be sealed weathertight. Piping penetrations through foundation walls shall be sleeved and provided with Link Seal Thunderline annular space seals.
46. Provide corrosion inhibiting epoxy paint and primer on all exterior gas piping. Clean and prep piping surface and verify color to be used with architect prior to application.
47. Provide emergency eyewash EEW-1 w/emergency tempering valve, and cold water hose bibb connection with all associated supply piping at all MR-1 mop receptor locations. For additional information refer to "Mop Receptor and Accessories Detail" on plumbing details drawings. Coordinate exact location of accessories in field with owner representative prior to rough in of accessories/fixtures.
48. All piping drops to fixtures, shall be concealed within wall or chase construction, unless noted otherwise.
49. Where Connection is made to existing below slab sanitary and storm sewer mains/laterals, provide high pressure hydro-flushing (similar to service provided by Mr. Rooter Hydro Scrubber 4000 machine) from point of connection to building exterior. Notify owners representative at the time the process is started. Keep detailed drawings of work completed, indicating areas of difficulty or concern. Provide owners representative with complete and detailed drawings/documentation of this entire process once work is completed.

PLUMBING FIXTURE LIST

**********Note: Refer to Specification Sections 22 1006 and 22 4000 for complete fixture specifications.**********

FIXTURE TAG	FIXTURE DESCRIPTION	FIXTURE SPECIFICATIONS	DRAIN ROUGH IN CONNECTION	WATER ROUGH IN CONNECTION HOT	WATER ROUGH IN CONNECTION COLD
FD-1	Floor Drain General Purpose	Floor Drain - Cast iron body with flashing clamp - 5" Nickel Bronze strainer - Deep Seal P-Trap w/ProSet Trap Guard seal protection. **Basis of Design: J.R. Smith 2005**	Refer to Plans	----	----
FD-2	Floor Drain Filter Room	Floor Drain - Cast iron body with flashing clamp - 6" Stainless Steel Strainer - Deep Seal P-Trap w/ProSet Trap Guard seal protection. **Basis of Design: J.R. Smith 2005-SS**	Refer to Plans	----	----
HB-1	Hose Bibb	Hose bibb/wall hydrant - Chrome plated, Half turn operation w/Interchangeable Wheel handle/Loose Key operation - Anti-Siphon Vacuum Breaker (ASSE 1011 compliant) **Basis of Design: Woodford 40HT**	-----	-----	1/2"
LAV-1	Lavatory Wall Hung Manual Faucet (Toilet Rooms)	Basin: - Wall Hung, Vitreous China, ADA/ANSI A117.1 compliant **Basis of Design: Kohler** Faucet: - Chrome Plated Cast Brass, Manual Faucet with .5 gpm Vandal Resistant aerator. **Basis of Design: Moen** Carrier: - Dura-Coated Steel Stanchions with welded feet - Adjustable Supports with Plates & Mounting Bolts and Trim Accessories: - 17 Gauge Chrome P-plated P-trap w/ cleanout Plug and arm w/ escutcheon. - Below deck ASSE-1070 compliant mixing valve - Truebro Lav Shield Drain & Supply shield - Manufactured for Commercial Construction, Loose Key/Screwdriver operated, 1/4 turn, chrome plated angle stops - Flexible Chrome plated copper supplies	1-1/2"	1/2"	1/2"
SH-1	Lavatory Wall Hung Manual Faucet (Toilet Rooms)	Shower: - Shower Basin, Grab bars by G.C. Shower Valve: - Modular Shower Panel **Basis of Design: Powers** Drain: Provide FD-1 with Sediment Bucket			
UR-1	Urinal Wall Hung Manual Flush Valve (Toilet Rooms)	Bowl: - ICC/ANSI A117.1 & ASME A112.19 compliant - Wall Hung, Vitreous China, white w/ antimicrobial finish **Basis of Design: Kohler** Carrier: - Compatible adjustable closet carrier, heavy duty with rear anchor tie down - Fixture Bolts, Trim and Stud Protectors Flush Valve: - 1.0 gpf, Exposed chrome plated cast brass,w/integral angle stop - Manual **Basis of Design: Sloan Royal**	2"	----	3/4"
WC-1	Water Closet Wall Hung Electronic Sensor Hard Wired Flush Valve (Gang Toilet Rooms)	Bowl: - ICC/ANSI A117.1 & ASME A112.19 compliant - Wall Hung, Vitreous China, white w/ antimicrobial finish **Basis of Design: Kohler** Carrier: - Compatible adjustable closet carrier, heavy duty with rear anchor tie down - Fixture Bolts, Trim and Stud Protectors Seat: Plastic Open Front Seat, white, with self sustaining check hinge and antimicrobial finish **Basis of Design: Bemis Commercial: 2155SSCT** Flush Valve: - 1.28 gpf, Exposed chrome plated cast brass,w/integral angle stop - Manual **Basis of Design: Sloan Royal**	4"	----	1"

NOTES:
1. P.C. shall coordinate all "Accessible" fixture locations with Architectural plans prior to rough in.
2. Refer to Architectural drawings for all fixture mounting heights.
3. At all "Accessible" water closet compartments, installation of flush controls shall comply with ANSI 117.1. Flush controls shall be mounted on the wide/accessible side of toilet compartments, no more than 44 inches above the floor. Where sensor operated flush controls are provided, the rough in of the flush control shall be opposite the wide/accessible side of the compartment to permit conversion to manual controls installed in accordance with the above requirements.
4. Provide deep seal trap and Proset Trapguard trap seal protection in all floor drains. Refer to plans for outlet size/trap size.

DESIGN CODE REFERENCES

PA - UCC	PENNSYLVANIA UNIFORM CONSTRUCTION CODE;
IBC	ICC - INTERNATIONAL BUILDING CODE; 2018
IFGC	ICC - INTERNATIONAL FUEL GAS CODE; 2018 (LPG REQUIREMENTS SUPERCEDED BY THE REQUIREMENTS OF PENNSYLVANIA'S PROPANE AND LIQUEFIED PETROLEUM GAS ACT)
IMC	ICC - INTERNATIONAL MECHANICAL CODE; 2018
IPC	ICC - INTERNATIONAL PLUMBING CODE; 2018
IFC	ICC - INTERNATIONAL FIRE CODE; 2018 (AS REFERENCED IN INTERNATIONAL BUILDING CODE)
IECC	ICC - INTERNATIONAL ENERGY CONSERVATION CODE; 2018
FGI	THE FACILITY GUIDELINES INSTITUTE - GUIDELINES FOR DESIGN AND CONSTRUCTION OF HOSPITALS; 2018

REFERENCED DESIGN STANDARDS

NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA 13	NATIONAL FIRE PROTECTION ASSOCIATION - STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS; 2013 EDITION OR MOST RECENT EDITION ADOPTED BY AUTHORITY HAVING JURISDICTION, INCLUDING ALL APPLICABLE AMENDMENTS AND SUPPLEMENTS.
NFPA 99	NATIONAL FIRE PROTECTION ASSOCIATION - HEALTH CARE FACILITIES CODE; 2015 EDITION OR MOST RECENT EDITION ADOPTED BY AUTHORITY HAVING JURISDICTION, INCLUDING ALL APPLICABLE AMENDMENTS AND SUPPLEMENTS.
NFPA 101	NATIONAL FIRE PROTECTION ASSOCIATION - CODE FOR SAFETY TO LIFE FROM FIRE IN BUILDINGS AND STRUCTURES; 2015 EDITION OR MOST RECENT EDITION ADOPTED BY AUTHORITY HAVING JURISDICTION, INCLUDING ALL APPLICABLE AMENDMENTS AND SUPPLEMENTS.

SHOCK ABSORBER SCHEDULE SIOUX CHIEF

PDI RATING	FIXTURE UNITS	MODEL NUMBER
AA	1-3	660 Series
A	4 - 11	652-A / 6520-AS
B	12 - 32	653-B / 653-BS
C	33 - 60	654-C / 654-CS
D	61 - 113	655-D / 655-DS
E	114 - 154	656-E / 656-ES
F	155 - 330	657-F / 657-FS

SHOCK ABSORBER SCHEDULE J.R. SMITH

PDI RATING	FIXTURE UNITS	MODEL NUMBER
A	1 - 11	5005
B	12 - 32	5010
C	33 - 60	5020
D	61 - 113	5030
E	114 - 154	5040
F	155 - 330	5050

SHOCK ABSORBER SCHEDULE ZURN

PDI RATING	FIXTURE UNITS	MODEL NUMBER
A	1 - 11	10
B	12 - 32	200
C	33 - 60	300
D	61 - 113	400
E	114 - 154	500
F	155 - 330	600

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Hampden Township Aquatics Center Improvements

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REVISIONS

05.19.23 - Issued for Permit

No.	Date	Description

DRAWING TITLE

COVER SHEET - PLUMBING

PROJECT NUMBER 22.226

DRAWN BY Author

SCALE

DATE 05/19/2023

DRAWING NUMBER

P000

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