

**PART 1      General**

**1.1            GENERAL REQUIREMENTS**

- .1      Comply with the requirements of Section 21 05 01, Mechanical General Provisions.
- .2      Comply with the requirements of Section 21 05 05, Basic Materials and Methods.
- .3      Comply with the requirements of Sections 22 06 01 and 23 06 01, Approved Substitute schedules.

**1.2            WORK PERFORMED UNDER THIS SECTION**

- .1      As indicated on the Drawings and in the Specifications, provide complete plumbing systems with all necessary appurtenances, trim and piping, including, but not limited to:
  - .1      Plumbing fixtures and trim;
  - .2      Domestic cold water piping;
  - .3      Domestic hot and recirculation water piping;
  - .4      Sanitary drainage and venting piping;
- .2      Provide equipment, personnel and material necessary to assist with pipe cleaning and chemical treatment.

**1.3            START-UP AND COMMISSIONING**

- .1      Start-up and commissioning shall be undertaken prior to the occupancy stage of each construction phase.
- .2      Provide the equipment, personnel and material necessary to put the plumbing systems into operation.
- .3      Provide the equipment, personnel, material and information necessary to assist the mechanical Subcontractor in completing the commissioning process.

**1.4            QUALITY ASSURANCE**

- .1      Qualifications: execute work of this section by skilled tradesmen regularly employed in the installation of plumbing and drainage systems.

**1.5            SUBMITTALS**

- .1      Submit shop drawings on plumbing fixtures/trim, drains and associated accessories; and humidifiers and accessories.

**PART 2      Products And Materials**

**2.1            PLUMBING FIXTURES AND BRASS**

- .1 Provide fixtures complete with all required trim. Fixtures shall be free from flaws or blemishes. Surfaces shall be clear, smooth and bright and have dimensional stability.
- .2 Exposed visible parts of the fixture supply trim shall be chrome-plated, fixtures to be white unless otherwise noted.
- .3 All fixtures shall bear C.S.A. approval.
- .4 Provide individual stops on each fixture water supply. Exposed stops to be screw-driver type. Concealed stops to be wheel handle type.
- .5 Provide C.S.A. traps in required sizes with cleanout.
- .6 All supplies to be flexible type.
- .7 Fixture Schedule – refer to plumbing fixture schedule in this specification.
- .8 All fixtures and equipment for handicapped use shall be in complete accordance with all applicable codes and regulations.

## **2.2 SHOCK ABSORBERS**

- .1 Provide pre-manufactured shock absorbers equal to Zurn Z-1700. Fabricated pipe type shock absorbers will not be allowed.
- .2 Shock absorbers shall be installed in the following locations and where indicated on the drawings:
  - .1 Top of each riser in buildings over one story.
  - .2 End of horizontal runs except where such runs end with a riser over one story.
  - .3 Fixture groupings not serviced by the above.
  - .4 At fast closing valves (flush valve water closets and sinks).

## **2.3 PRESSURE RELIEF AND REGULATING VALVES AND BACKFLOW PREVENTERS**

- .1 Where indicated or performance specified on the drawings, and where required by Authorities, provide pressure relief and regulating valves and backflow preventers as required.
- .2 Backflow preventers shall be of a type and size as required by the Authority Having Jurisdiction.

## **2.4 CLEANOUTS AND ACCESS COVERS**

- .1 All cleanouts and access covers shall be suitable for heavy duty traffic.
- .2 Provide cleanouts and access covers suitable for the specified floor finish.
- .3 All floor access covers shall be set flush with the finished floor.

- .4 Access covers shall be polished nickel bronze with V.P. screws.
- .5 Exposed cleanouts shall be standard M.J. or Bell and Spigot cleanout plugs with no access cover.
- .6 Cleanouts concealed behind walls or above non-removable ceilings shall be standard M.J. or Bell & Spigot cleanout plugs with suitable access doors.
- .7 Cleanouts in finished floors shall be standard M.J. or Bell & Spigot cleanout plugs with manufactured covers to suit the floor finish. Access covers equal to Ancon or Zurn will be acceptable. Access covers shall have recessed pans for accepting the floor finish (carpet or tile) in finished areas with flooring.

### **PART 3 Installation And Execution**

#### **3.1 GENERAL**

- .1 Install all fixtures, drains, cleanouts, equipment, etc., as per manufacturer's requirements.
- .2 For sanitary pipe 100mm $\emptyset$  (4" $\emptyset$ ) and up, the pipe is to slope 1% unless otherwise noted. For sanitary pipe less than 100mm $\emptyset$  (4" $\emptyset$ ) the pipe shall slope @ 2%. If low flow toilets with less than 6L (1.59 Gal) per flush are installed within this facility, all piping carrying sanitary waste from a toilet to the building clean out & building discharge location shall slope at a minimum 2%.

#### **3.2 FIXTURE INSTALLATION**

- .1 Connect fixtures, complete with supplies and drains, separately trapped, supported level and square.
- .2 Provide supports required to set fixtures square and level.
- .3 Mount wall hung water closets with rim at 425mm (17") A.F.F.

#### **3.3 SPECIALTIES INSTALLATION**

- .1 Non-freeze wall hydrants:
  - .1 Install 600 mm (24") above finished grade unless otherwise noted
  - .2 Provide inside shut-off valve.
- .2 Cleanouts:
  - .1 Install accessible cleanouts at traps where required.
- .3 Backflow Preventers:
  - .1 Provide drain to nearest floor funnel drain.

- .4 Pressure/Temperature Relief Valves:
  - .1 Provide drain to +/- 100mm (4") above finished floor.

### **3.4 EQUIPMENT INSTALLATION**

- .1 Provide all necessary indirect drains from all equipment, whether provided by this Contractor or not, including but not limited to:
  - .1 Drain pans and/or condensate drain lines.
  - .2 Furnace & Air Handling Unit (AHU) condensate drain lines.
- .2 Indirect drains shall be piped to the nearest floor drain, floor sink, or other suitable location.

### **3.5 TESTING**

- .1 Test piping in accordance with the procedures outlined in Section 21 05 05.
- .2 Ensure that insulated piping and equipment installed in concealed places is tested and inspected prior to permanent concealment.

### **3.6 START-UP AND COMMISSIONING**

- .1 Prior to the Occupancy Stage of each Construction Phase:
  - .1 Start up the equipment and systems.
  - .2 Calibrate and adjust all items provided under this contract.
  - .3 Assist in the commissioning process as required.
  - .4 Provide instructions to the City of Winnipeg as required. Refer to Specification section 21 05 01.

END OF SECTION 22 05 05

## 1.1 GENERAL REQUIREMENTS

- .1 Comply with the requirements of Section 21 05 01, Mechanical General Provisions.
- .2 Comply with the requirements of Section 21 05 05, Basic Materials and Methods.

## 1.2 APPROVED 'SUBSTITUTES' AND 'ALTERNATES'

- .1 Where a manufacturer's name, make, model, and/or size is specified, it is for the purpose of setting a standard of quality, performance, capacity, appearance and/or serviceability, and is acceptable without qualification. Manufacturers listed as acceptable 'Substitutes' have been deemed by the Contract Administrator as capable of producing equipment and/or material of comparable quality, performance and approximate dimensions, and can be used in the preparation of the tender. Where no substitutes are indicated, provide the exact make specified or provide the necessary documents for review.
- .2 'Substitute' equipment and material is deemed to be interchangeable with that specified, with little or no revisions required to the design intent and/or other items, equipment or connections.
- .3 'Alternate' equipment and material is deemed to be acceptable but which will require major revisions to the design intent and/or other items, equipment or connections.
- .4 Requests for approval of additional 'Substitutes' or 'Alternates' must be done in accordance with B7.
- .5 Assume full responsibility for ensuring that, when providing accepted 'Substitutes' and/or 'Alternates', all space, weight, connections, power and wiring requirements, etc. are considered and adjusted costs are included in the tender. The mechanical systems have been designed based on the equipment/materials of the specified manufacturer(s). The onus shall be on the Subcontractor (along with his sub-sub-contractor and the supplier) to ensure that 'Substitute' or 'Alternate' equipment/materials will meet the required performance and electrical characteristics, as well as fit properly into the allotted space, including allowance for required access and servicing. Any additional costs incurred as a result of modifications to the system(s) or the room layout, or modifications required by other trades, shall be borne by the Subcontractor (along with his sub-sub-contractor and the supplier) and shall be deemed to be included in the tender price.

## 1.3 APPROVED 'SUBSTITUTES'

- .1 The following is the list of pre-approved 'Substitutes':
  - .1 Access Doors: Lehage; Milcor; Acudor; Mifab;
  - .2 Air Vents: Hamlet and Garneau; Bell and Gossett; Dole; Maid-O-Mist; Armstrong; Braukman;
  - .3 Back Flow Preventors: Conbraco; Beeco; Febco; Watts; Kunkle; Taylor; Consolidated;

		Fisher; Boylston; Wilkins	Singer; Lonergan;	Crosby-Ashton; Masoneilan;
.4	Chemical Treatment:	Bird Archer; Dearborne;	Calgon; Mogul;	Drew Chemical;
.5	Cleanouts:	Ancon;	Smith;	Zurn; Mifab;
.6	Domestic Water Heaters (Tank type):	Ruud/Rheem; John Woods;	AO Smith; Jetglass/BradfordWhite;	
.7	Insulation (General):	Fibreglas;	Manson;	Knauf;
.8	Insulation (Traps):	TrapWrap (Brocar);	LavGuard (TrueBro);	
.9	Level and Flow Switches:	Magnetrol;		
.10	Plumbing Fixtures, Drains and Brass:			
.1	Drinking Fountains:	Oasis; Crane;	Haws; Franke;	Halsey Taylor; Sunroc;
.2	Electronic Faucets:	Cambridge; Zurn;	Kohler; Chicago;	DMP Electronics; Delta; Moen;
.3	Floor Drains, and Fixture Carriers:	Ancon; Mifab;	Smith; WADE;	Zurn;
.4	Plumbing Brass:	Delta; Waltec; Zurn; Emco; Leonard;	Symmons; Sloan; Mifab; Smith; Cambridge; Powers;	Crane; PricePfister; Moen;
.5	Plumbing Fixtures (General):	Crane;	Kohler;	American Standard;
.6	Plumbing Fixtures (Specialty):	Fiat;	Bradley;	Metcraft;
.7	Stainless Steel Sinks:		Steel Queen; KIL/Aristaline(Franke);	Architectural Metals;
.8	Toilet Seats;	Olsonite;	Centoco;	Bemis;
.11	Pressure Gauges:	Taylor; Ashcroft;	Weiss; Duro;	Marshalltown; Lunkenheimer; Teric;Ametek; Marsh; Winters;

- .12 Pressure Relief Valves,  
Pressure Regulating Valves: Conbraco; Beeco; Febco; Watts;  
Kunkle; Taylor; Consolidated;  
Fisher; Singer; Crosby-Ashton;  
Boylston; Loneragan; Masoneilan; Wilkins
- .13 Pumps (Circulating): Armstrong; Grundfos; Bell and Gossett;  
Darling; Taco;
- .14 Pumps (Domestic): Armstrong; Grundfos; Bell and  
Gossett;
- .15 Pumps (Sump and Sewage): Armstrong; Grundfos; Bell and  
Gossett; Grinder; Myers;  
Hydromatic; Goulds; Liberty;
- .16 Shock Absorbers: Smith; Zurn;
- .17 Sound and Vibration  
Isolation: Vibron; Airmaster; Amber-Booth;  
Kinetics; Vibro-Acoustics; SVC Ind.;
- .18 Strainers: Armstrong; Crane; Mueller; Sarco;  
Streamflo; Kitz; Toyo
- .19 Thermometers: Taylor; Weiss; Marshalltown;  
Ashcroft; Duro; Lunkenheimer;  
Trerice; Ametek; Marsh; Winters;
- .20 Trap Primers: Mifab; Smith; Zurn;
- .21 Vacuum Breakers: Febco; Watts; Wilkins;
- .22 Valves (General): Crane; Kitz; Apollo; Newman-Hattersley;  
Nibco; Toyo; Jenkins; American Valve;
- .23 Valves (Butterfly): Kitz; Nibco; Jenkins; Newman-  
Hattersley; Apollo; Dezurik; Crane
- .24 Valves (Check): Centerline; Hagen; Mueller;  
Singer; Dezurik; Crane

END OF SECTION 22 06 01

**PART 1 General**

**1.1 GENERAL REQUIREMENTS**

- .1 Provide fixtures complete with all required trim.
- .2 All exposed trim to be chrome plated, fixtures to be white.
- .3 Provide individual stops on each fixture water supply. Exposed stops to be screw-driver type. Concealed stops to be wheel handle type.
- .4 Provide C.S.A. traps in required sizes with cleanouts.
- .5 All supplies to be flexible type.
- .6 All mounting heights & installation clearances shall be as directed by the Contract Administrator
- .7 Make provisions to supply & install all low voltage wiring required for all hands free electronic devices such as: flush valves, faucets, etc... Coordinate voltage requirements & transformer locations with division 26 00 00.

**PART 2 Products and Materials**

**2.1 PLUMBING FIXTURES AND EQUIPMENT LIST**

**.1 WC-1 - FLOOR MOUNTED - VITREOUS CHINA – TANK TOILET**

**American Standard Cadet Pro Elongated #215CA.074 Toilet**, 381 mm high, vitreous china with EverClean antimicrobial surface which inhibits the growth of stain and odor causing bacteria mold and mildew, Floor Mounted, cadet flushing system with PowerWash rim siphon flushing system which scrubs bowl with every flush, 6 L (1.6 US Gal) per flush, raised sanitary bar and four (4) points tank stabilization, 229 mm x 203 mm (9" x 8") water surface area, two piece, 'Speed Connect' tank assembly, lined tank, bolted tank cover, oversized 76 mm (3") flush valve with flapper, Metal shank fill valve, 305 mm (12") rough-in, elongated bowl, 54 mm (2-1/8") fully glazed internal trapway, floor outlet, bolt caps. **Centoco #500STSCC.001 toilet seat**, heavy duty, for elongated bowl open front, white solid plastic, less cover, reinforced stainless steel check hinges, metal flat washers stainless steel posts and nuts. **McGuire #LFH166N3RB, Toilet Supply**, chrome plated polished brass, heavy duty angle stops, 13 mm (1/2") I.P.S. Inlet x 76 mm (3") long rigid horizontal nipples, wheel handles, escutcheons and stainless steel braided flexible riser. **Provide Floor Flange**, (same material as the connecting pipe drain), with all brass bolts and with rubber gasket.

**.2 WC-2 - FLOOR MOUNTED - VITREOUS CHINA –TANK TOILET – EASY HEIGHT (BARRIER FREE DESIGN/ RIM HEIGHT)**



**American Standard Cadet Pro Right Height Elongated #215AA.074 Toilet**, 419 mm high, vitreous china with EverClean antimicrobial surface which inhibits the growth of stain and odor causing bacteria mold and mildew, Floor Mounted, cadet flushing system with PowerWash rim siphon flushing system which scrubs bowl with every flush, 6 L (1.6 US Gal) per flush, raised sanitary bar and four (4) points tank stabilization, 229 mm x 203 mm (9" x 8") water surface area, two piece, 'Speed Connect' tank assembly, lined tank, bolted tank cover, oversized 76 mm (3") flush valve with flapper, Metal shank fill valve, 305 mm (12") rough-in, elongated bowl, 54 mm (2-1/8") fully glazed internal trapway, floor outlet, bolt caps. Provide bolted tank cover if required - to meet local codes. Provide trip lever on open side of Toilet (wide side) if required - to meet local codes. **Centoco #820STS.001 toilet seat**, heavy duty, for elongated bowl open front, white solid plastic, with cover, reinforced stainless steel check hinges, metal flat washers stainless steel posts and nuts. **McGuire #LFH166N3RB, Toilet Supply**, chrome plated polished brass, heavy duty angle stops, 13 mm (1/2") I.P.S. Inlet x 76 mm (3") long rigid horizontal nipples, wheel handles, escutcheons and stainless steel braided flexible riser. **Provide Floor Flange**, (same material as the connecting pipe drain), with all brass bolts and with rubber gasket.

### **.3 UR-1 – WALL HUNG URINAL–MANUAL FLUSH VALVE**

**American Standard Washbrook Flowise #6590.001 Urinal**, vitreous china, operates in the range of 0.5 L to 3.8 L (0.125 US Gal to 1.0 US Gal) per flush, Wall Hung, extended sides for privacy, washdown action, flushing rim, 19 mm (3/4") dia. Top spud, elongated rim, integral P-trap, outlet connection 51 mm (2"), 2 wall hangers, #7301242-100 stainless steel strainer. **Sloan Royal #186-0.13-CP, Exposed Manual Flushometer** for Top Spud urinal, chrome plated, 0.5 L (0.125 US Gal) factory set flow, quiet action 'PERMEX' diaphragm type with dual filter by-pass, non-hold open feature, A.D.A triple seal oscillating handle, V.P. Smooth design stop cap on back-check angle stop (screwdriver operated), flush tube for 292 mm (11-1/2") rough-in, high pressure vacuum breaker. **Watts #CA-321, Urinal Carrier**, mounted on concrete floor, epoxy coated with heavy gauge steel uprights with welded feet supports and with top and bottom universal steel hanger plates with plated hardware, heavy gauge epoxy coated steel offset uprights. For one unit: 102 mm (4") for two to six units in a row: 152 mm (6") finished metal stud wall to back of pipe space. **Watts #WU-CO Urinal Wall Access Cleanout**, two piece expandable plug with 102mm (4") diameter stainless steel access cover and secured with vandal proof stainless steel screw.

### **.4 UR-2 – WALL HUNG URINAL–MANUAL FLUSH VALVE – EASY HEIGHT (BARRIER FREE DESIGN/ RIM HEIGHT)**

**American Standard Washbrook Flowise #6590.001 Urinal**, vitreous china, operates in the range of 0.5 L to 3.8 L (0.125 US Gal to 1.0 US Gal) per flush, Wall Hung, extended sides for privacy, washdown action, flushing rim, 19 mm (3/4") dia. Top spud, elongated rim, integral P-trap, outlet connection 51 mm (2"), 2 wall hangers, #7301242-100 stainless steel strainer. **Sloan Royal #186-0.13-CP, Exposed Manual Flushometer** for Top Spud urinal, chrome plated, 0.5 L (0.125 US Gal) factory set flow, quiet action 'PERMEX' diaphragm type with dual filter by-pass, non-hold open feature, A.D.A triple seal oscillating handle, V.P. Smooth design stop cap on back-check angle stop (screwdriver operated), flush tube for 292 mm (11-

1/2") rough-in, high pressure vacuum breaker. **Watts #CA-321, Urinal Carrier**, mounted on concrete floor, epoxy coated with heavy gauge steel uprights with welded feet supports and with top and bottom universal steel hanger plates with plated hardware, heavy gauge epoxy coated steel offset uprights. For one unit: 102 mm (4") for two to six units in a row: 152 mm (6") finished metal stud wall to back of pipe space. **Watts #WU-CO Urinal Wall Access Cleanout**, two piece expandable plug with 102mm (4") diameter stainless steel access cover and secured with vandal proof stainless steel screw.

**.5 LAV-1 – COUNTER MOUNTED- DROP-IN BASIN - VITREOUS CHINA – BATTERY OPERATED ELECTRONIC 'NO-TOUCH' FAUCET**

**American Standard Cadet Universal Access #9494.001 Basin**, 533 mm x 445 mm x 175 mm (21" x 17-1/2" x 6-7/8") deep, oval, vitreous china, self-rimming - drop-in, side rear overflow, faucet ledge. Provide basin rim sealant. **Sloan. #SF-2350-VPB-SL-BDT-LF/SFP-46 Electronic Faucet**, chrome plated, 4" (102mm) centerset, brass, 162 mm (6-3/8") projection reach, with Vandal Resistant 1.9 LPM (0.5 GPM), non-aerating multi-laminar flow spray outlet, infrared sensor with screw adjustable range, undercounter filtered solenoid valve with serviceable strainer filter, module control assembly with splashproof junction box and mounting kit, four AA-size alkaline batteries (included), 12" (305mm) sq. Recessed metal box with 13"(330mm) sq. V.P. S.S face, located in wall under basin. Flexible copper supply, Below Deck lead free Thermostatic Mixing Valve, nickel plated bronze body, temperature adjusting spindle, 10 mm (3/8") inlet and outlet FNPT connection, integral checks, offer temperature range between 95 C (203 F) and 46 C (114.8 F). Set valve temperature at 46 C (114.8 F). **McGuire #155WCC Offset Open Grid Drain**, chrome plated cast brass one piece top, 17 GA. (1.5mm) mm tubular 32 mm (1-1/4") tailpiece. **McGuire #8872C P-Trap**, heavy cast brass adjustable body, with slip nut, 32 mm (1-1/4") size, shallow wall flange and seamless tubular wall bend. **McGuire PROWRAP #PW2000WC Sanitary Covering vandal-resistant**, flexible seamless moulded closed-cell PVC resin, formulated with anti-microbial additive to limit the growth of fungus and bacteria, to exposed piping (to protect against heat/contusions) as per local codes.

**.6 LAV-2 – BASIN - WALL HUNG - VITREOUS CHINA – BATTERY OPERATED ELECTRONIC 'NO-TOUCH' FAUCET (BARRIER FREE DESIGN)**

**American Standard Murro with Everclean #0954.004EC/0059.020EC Basin**, 540 mm x 520 mm x 165 mm (21-1/4" x 20-1/2" x 6-1/2") deep, vitreous china, for carrier with concealed arms, rear overflow, recessed self-draining faucet ledge, **semi-pedestal P-trap cover**. **Sloan. #SF-2350-VPB-SL-BDT-LF/SFP-46 Electronic Faucet**, chrome plated, 4" (102mm) centerset, brass, 162 mm (6-3/8") projection reach, with Vandal Resistant 1.9 LPM (0.5 GPM), non-aerating multi-laminar flow spray outlet, infrared sensor with screw adjustable range, undercounter filtered solenoid valve with serviceable strainer filter, module control assembly with splashproof junction box and mounting kit, four AA-size alkaline batteries (included), 12" (305mm) sq. Recessed metal box with 13"(330mm) sq. V.P. S.S face, located in wall under basin. Flexible copper supply, Below Deck lead free Thermostatic Mixing Valve, nickel plated bronze body, temperature adjusting spindle, 10 mm (3/8") inlet and outlet FNPT connection, integral checks, offer temperature range between 95 C (203 F) and 46 C (114.8 F). Set valve temperature at 46 C (114.8 F). **McGuire**

**#155AC Open Grid Drain**, chrome plated cast brass one piece top, 17 GA. (1.5mm) tubular 32 mm (1-1/4") tailpiece. **McGuire #8872C P-Trap**, heavy cast brass adjustable body, with slip nut, 32 mm (1-1/4") size, shallow wall flange and seamless tubular wall bend. **Watts #WCA-411-CA-481, Basin Carrier**, concealed arms, wall flanges to attach to backing plate secured in wall with locking device and levelling screws, heavy gauge steel uprights with integral welded feet. For one unit: 102 mm (4") for two to six units in a row: 152 mm (6") finished metal stud wall to back of pipe space.

**.7 SK-1 - SINGLE BOWL SINK - COUNTERTOP WITH LEDGEBACK - STANDARD USE - 302/304 STAINLESS STEEL – SINGLE LEVER FAUCET**

**Franke Commercial #LBS4608P-1/1 Single bowl Countertop Mount Sink**, 1 hole, 478 mm (18-13/16") x 460 mm (18-1/8") x 203 mm (8") deep, counter mounted, backledge, 18-10 type 304 18 GA. (1.2mm) stainless steel, self-rimming, satin finish rim and bowls, mounting kit provided, fully undercoated to reduce condensation and resonance, factory applied rim seal, 3-1/2" (89mm) crumb cup waste assembly with 1-1/2" (38 mm) tailpiece. **Chicago Faucets #430-ABCP-E34VP Single Lever Faucet**, chrome plated, center hole only, lead free cast brass body, long cast spout 229 mm (9") projection reach, with Vandal Resistant 5.7 LPM (1.5 GPM), aerator outlet, lever handle, adjustable volume control, adjustable hot limit stop. **Supply Provide Faucet Supplies**, chrome plated all metal construction, light duty residential angle stops, escutcheons and flexible metal risers, **low lead. Provide P-Trap**, adjustable all metal construction, 38 mm (1-1/2") size, and escutcheon.

**.8 SK-2 - TRIPLE BOWL SINK - COUNTERTOP WITH LEDGEBACK - STANDARD USE - 302/304 STAINLESS STEEL – TWO HANDLE FAUCET**

**Franke Commercial LBT6410P-1/4 S.S. Sink**, 4 hole, 8" (102mm) centers, 20-9/16" x 46-3/8" x 10" (524mm x 1178mm x 254mm) deep, counter mounted, back ledge, grade 18-10, 18 GA. (1.2mm) type 304 stainless steel, triple compartment, satin finished rim and bowl, self rimming, sound deadening and mounting kit, 3-1/2" (89mm) crumb cup strainer with 1-1/2" (38mm) tail piece. **Chicago Faucets #1102-V-L12-XK Faucet**, C.P. 8" (203mm) C.C., deck mounted, solid cast brass lead-free body, 1/4 turn ceramic disc valve cartridges, 12" (304mm) long swing spout with vandal-resistant 8.3LPM (2.2 GPM) max. flow pressure compensating aerator outlet and cast brass hooded lever handles with side spray. Provide **Supplies**, C.P. with metal angle stops, adaptors, escutcheons and metal flexible risers. Provide **'p' Trap**, cast brass 2" (50mm) with cleanout, union and escutcheon.

**.9 SK-3 – SERVICE / MOP SINK - FLOOR MOUNTED - MANUAL FAUCET**

**FIAT #MSB2424 square Service / Mop sink**, 610 mm (24") x 610 mm (24") x 254 mm (10") deep, Floor Mounted, molded stone, plain curbs, stainless steel drain with strainer, 3" (76mm) outlet. **Chicago Faucets #897-369VP-XK wall mounted Two Handle Manual Faucet**, chrome plated, 8" (203mm) centerset, solid brass exposed body, ceramic 1/4 turn cartridges, unrestricted hose end outlet, 200 mm (7-7/8") from wall to outlet reach, integral atmospheric vacuum breaker, metal red and blue index buttons 60 mm (2-3/8") long lever handles with vandal resistant screw. Wall brace support. **FIAT E88AA24000 Bumper Guard** 610 mm (24") stainless steel. Existing mop hanger, hoses, etc... shall be relocated & reused from previously installed

janitor sink (refer to drawings for further information.) **FIAT MSG24000 Back Splash Panel** stainless steel. **Provide P-Trap**, same material as the connecting pipe drain.

**.10 DF-1 – FOUNTAIN COOLER - STAINLESS STEEL RECEPTOR GALVANIZED STEEL CABINET - WALL MOUNTED (Barrier Free)**

**Sunroc #ADA8AC Fountain Cooler**, wall hung, stainless steel, 22 ga. (0.8mm) with #4 satin finish receptor and powder-coated galvanized steel cabinet, lead-free, self-closing push dual pad activation (4 manual push pads), flexible bubbler head, volume regulator, 100 micron in-line filter, vandal-resistant open grid strainer, tailpiece, capacity of 30.3 LPH (8 GPH), S.S. cooling tank, reciprocating compressor, R134A refrigerant, fan cooled, louvered access panel, 1/4 H.P. 115 V. single phase A.C. 4.6 AMPS - with insulated power cable and 3 prong moulded plug. **McGuire #HST11BV Fountain Supplies**, C.P. polished brass straight 1/4 turn all brass ball valve stops with V.P. loose key handles. Pair required for dual fountain. **McGuire #8872C 'p' Trap**, C.P., polished, cast brass adjustable body, 1-1/4" (32mm) with cleanout plug, seamless brass wall bend and escutcheon. **(Provide mounting suitable for installation in block wall to match existing conditions on site. Provide heavy gauge steel Water Cooler Carrier; c/w steel pre-drilled and threaded universal hanger support plate along with all threaded studs, nuts and washers.)** Provide electrical duplex box with GFCI. 120V Receptacle with Ground Fault Circuit Interrupter.

**.11 FD-1 - FLOOR DRAIN FOR FINISHED AREAS**

- .1 Provide cast iron body floor drains with nickel bronze strainers, clamping ring, drainage flange, weep holes, and reversible collars.
- .2 **Ancon** FD-100-FC, **Zurn** ZN-211R.

**.12 WH-1 - EXTERIOR NON-FREEZE HOSE BIBB/WALL HYDRANT**

- .1 Provide 20 mm (3/4") non freeze wall faucet with nickel bronze face (and box), adjustable wall flange, wall clamp, integral vacuum breaker and operating key. Length to suit wall thickness.
- .2 Standard of Acceptance:
  - .1 With Box: **Ancon** HY-700-VB; **Zurn** Z-1300-WC

END OF SECTION 22 06 40.13