

1 General

1.1 SECTION INCLUDES

- .1 Materials and installation for copper domestic water service used in the following:
 - .1 Hard drawn copper domestic hot and cold water services inside building
- .2 Sustainable requirements for construction, verification and operation.

1.2 RELATED SECTIONS

- .1 Section 01 33 00 - Submittal Procedures.
- .2 Section 23 05 05 - Installation of Pipework.
- .3 Conform to other Sections in Division 01, as applicable.

1.3 REFERENCES

- .1 American National Standards Institute (ANSI)/American Society of Mechanical Engineers International (ASME).
 - .1 ANSI/ASME B16.15-02, Cast Bronze Threaded Fittings, Classes 125 and 250.
 - .2 ANSI/ASME B16.18-01, Cast Copper Alloy Solder Joint Pressure Fittings.
 - .3 ANSI/ASME B16.22-01, Wrought Copper and Copper Alloy Solder Joint Pressure Fittings.
 - .4 ANSI/ASME B16.24-01, Cast Copper Alloy Pipe Flanges and Flanged Fittings, Class 150, 300, 400, 600, 900, 1500 and 2500.
- .2 American Society for Testing and Materials International, (ASTM).
 - .1 ASTM A307-03, Standard Specification for Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength.
 - .2 ASTM B88M-03, Standard Specification for Seamless Copper Water Tube (Metric).
 - .3 ASTM F492-95, Standard Specification for Propylene and Polypropylene (PP) Plastic-Lined Ferrous Metal Pipe and Fittings.
- .3 American Water Works Association (AWWA).
 - .1 AWWA C111-00, Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.
- .4 Canadian Standards Association (CSA International).
 - .1 CSA B242-M1980 (R1998), Groove and Shoulder Type Mechanical Pipe Couplings.
- .5 Department of Justice Canada (Jus).
 - .1 Canadian Environmental Protection Act, 1999, c. 33 (CEPA).

- .6 Health Canada/Workplace Hazardous Materials Information System (WHMIS).
 - .1 Material Safety Data Sheets (MSDS).
- .7 Manufacturer's Standardization Society of the Valve and Fittings Industry (MSS).
 - .1 MSS-SP-67-02, Butterfly Valves.
 - .2 MSS-SP-70-98, Cast Iron Gate Valves, Flanged and Threaded Ends.
 - .3 MSS-SP-71-97, Cast Iron Swing Check Valves, Flanged and Threaded Ends.
 - .4 MSS-SP-80-03, Bronze Gate, Globe, Angle and Check Valves.
- .8 National Research Council (NRC)/Institute for Research in Construction.
 - .1 NRCC 38728, National Plumbing Code of Canada (NPC) - 1995.
- .9 Transport Canada (TC).
 - .1 Transportation of Dangerous Goods Act, 1992, c. 34 (TDGA).

1.4 SUBMITTALS

- .1 Submittals, product data and shop drawings to be in accordance with Section 01 33 00 – Submittal Procedures. Include product characteristics, performance criteria, and limitations.
- .2 Provide maintenance data for incorporation into manual specified in Section 01 78 00 – Closeout Submittals.
- .3 Submit WHMIS MSDS - Material Safety Data Sheets where applicable.

1.5 HEALTH AND SAFETY

- .1 Do construction in accordance with occupational health and safety specifications.

1.6 STORAGE AND HANDLING

- .1 Store and manage hazardous materials in accordance with specifications.

2 Products

2.1 PIPING

- .1 Domestic hot and cold water systems within building.
 - .1 Above ground: copper tube, hard drawn, type M to ASTM B88M.
- .2 Domestic cold water piping underground and/or outside building: See Design Drawings and applicable codes.

2.2 FITTINGS

- .1 Bronze pipe flanges and flanged fittings, Class 150 and 300: to ANSI/ASME B16.24.

- .2 Cast bronze threaded fittings, Class 125 and 250: to ANSI/ASME B16.15.
- .3 Cast copper, solder type: to ANSI/ASME B16.18.
- .4 Wrought copper and copper alloy, solder type: to ANSI/ASME B16.22.

2.3 JOINTS

- .1 Rubber gaskets, latex-free 1.6 mm thick: to AWWA C111.
- .2 Bolts, nuts, hex head and washers: to ASTM A307, heavy series.
- .3 Solder: Lead-free, Canfield Watersafe or equal.
- .4 Teflon tape: Use for threaded joints.
- .5 Grooved couplings: designed with angle bolt pads to provide rigid joint, complete with EPDM flush seal gasket.
- .6 Dielectric connections between dissimilar metals: dielectric fitting to ASTM F492, complete with thermoplastic liner.

2.4 BALL VALVES

- .1 NPS 2 and under, screwed:
 - .1 Class 150.
 - .2 Bronze body, chrome plated brass stainless steel ball, PTFE adjustable packing, brass gland and PTFE seat, steel lever handle.
- .2 NPS 2 and under, soldered:
 - .1 To ANSI/ASME B16.18, Class 150.
 - .2 Bronze body, chrome plated brass stainless steel ball, PTFE adjustable packing, brass gland and PTFE seat, steel lever handle, with NPT to copper adaptors.

3 Execution

3.1 INSTALLATION

- .1 Install in accordance with Provincial Plumbing Code and local authority having jurisdiction.
- .2 Install pipework in accordance with Section 23 05 01 - Installation of Pipework and supplemented as specified herein.
- .3 Assemble piping using fittings manufactured to ANSI standards.
- .4 Install CW and HW piping as indicated on drawings to maintain as maximum working clearance.

- .5 Connect to fixtures and equipment in accordance with manufacturer's written instructions unless otherwise indicated.
- .6 Buried tubing:
 - .1 Lay in well compacted, washed sand in accordance with AWWA Class B bedding, or as indicated on Design Drawings.
 - .2 Bend tubing without crimping or constriction. Minimize use of fittings.

3.2 VALVES

- .1 Isolate equipment, fixtures and branches with ball valves.
- .2 Balance recirculation system using circuit balance valves. Mark settings and record on as-built drawings on completion.

3.3 PRESSURE TESTS

- .1 Test pressure: greater of 1-1/2 times maximum system operating pressure or 860 kPa.

3.4 FLUSHING AND CLEANING

- .1 Flush, disinfect, rinse and test entire system as per requirements of local authorities.

3.5 PRE-START-UP INSPECTIONS

- .1 Systems to be complete, prior to flushing, testing and start-up.
- .2 Verify that system can be completely drained.
- .3 Ensure that air chambers, expansion compensators are installed properly.

3.6 DISINFECTION

- .1 Flush, disinfect, rinse and test entire system as per requirements of local authorities.

3.7 START-UP

- .1 Timing: Start up after:
 - .1 Pressure tests have been completed.
 - .2 Disinfection procedures have been completed.
- .2 Provide continuous supervision during start-up.
- .3 Start-up procedures:
 - .1 Establish circulation and ensure that air is eliminated.
 - .2 Check pressurization to ensure proper operation and to prevent water hammer, flashing and/or cavitation.
 - .3 Monitor piping systems for freedom of movement, pipe expansion as designed.

- .4 Rectify start-up deficiencies.

3.8 PERFORMANCE VERIFICATION

- .1 Timing:
 - .1 After pressure and leakage tests and disinfection completed, and certificate of completion has been issued by authority having jurisdiction.
- .2 Procedures:
 - .1 Verify that flow rate and pressure meet Design Criteria.
 - .2 Verify compliance with safety and health requirements.
 - .3 Confirm water quality consistent with supply standards, verifying that no residuals remain as a result of flushing and/or cleaning.
- .3 Reports:
 - .1 In accordance with Commissioning requirements, using report forms as specified.

3.9 OPERATION REQUIREMENTS

- .1 Operational requirements in accordance with specifications, include:
 - .1 Cleaning materials and schedules.
 - .2 Repair and maintenance materials and instructions.

END OF SECTION

1 General

1.1 SUMMARY

- .1 Section Includes:
 - .1 The installation of plastic drainage, waste and vent (DWV) piping.
- .2 Related Sections:
 - .1 Section 23 05 05 - Installation of Pipework.
 - .2 Conform to Sections in Division 01, as applicable.

1.2 REFERENCES

- .1 American Society for Testing and Materials International, (ASTM).
 - .1 ASTM D2235-[01], Specification for Solvent Cement for Acrylonitrille-Butadiene-Styrene (ABS) Plastic Pipe and Fittings.
 - .2 ASTM D2564-[02], Specification for Solvent Cements for Poly(Vinyl-Chloride) (PVC) Plastic Piping Systems.
- .2 Canadian Standards Association (CSA International).
 - .1 CSA-Series B1800-[02], Plastic Nonpressure Pipe Compendium.
 - .2 CSA-B181.2-[02], PVC Drain, Waste and Vent Pipe and Pipe Fittings.
 - .3 CSA-B182.1-[02], Plastic Drain and Sewer Pipe and Pipe Fittings.
 - .4 CSA-B181.3-Polyolefin Laboratory Drainage System

2 Products

2.1 MATERIAL

- .1 For above ground and underground DWV piping:
 - .1 Schedule 40 CPVC piping to CSA-B181.2.

2.2 JOINTS

- .1 Solvent weld for CPVC: to CSA-B181.2.

3 Execution

3.1 INSTALLATION

- .1 In accordance with Section 23 05 05 - Installation of Pipework.
- .2 Install in accordance with Provincial Building Code and local authority having jurisdiction.

3.2 TESTING

- .1 Test to verify grades (if applicable) and freedom from obstructions.

3.3 PERFORMANCE VERIFICATION

- .1 Cleanouts:
 - .1 Ensure accessible and that access doors are correctly located.
 - .2 Open, cover and re-seal.
 - .3 Verify cleanout rods can probe as far as the next cleanout, at least.
- .2 Test to ensure traps are fully and permanently primed.
- .3 Ensure fixtures are properly anchored, connected to system and effectively vented.
- .4 Affix applicable label (drain, vent, etc.) c/w directional arrows every floor or 4.5 m (whichever is less).

END OF SECTION

1 General

1.1 Conform to Sections of Division 01, as applicable.

1.2 REFERENCES

.1 Canadian Gas Association (CGA)

.1 CSA-B149.1-00, Natural Gas and Propane Installation Code.

1.3 SHOP DRAWINGS

.1 Submit shop drawings in accordance with 01 33 00 - Submittal Procedures.

.2 Indicate:

.1 Equipment, including capacities, dimensions, connections, fittings, control assemblies and ancillaries, identifying factory and field assembled.

1.4 CLOSEOUT SUBMITTALS

.1 Provide maintenance and engineering data for incorporation into manual specified in Section 01 78 00 – Closeout Submittals.

2 Products

2.1 DOMESTIC HOT WATER HEATER

.1 WH-1: Natural gas-fired, tankless, wall-mounted condensing instantaneous water heater.

.1 Acceptable Model: Navien NPE-240A instantaneous water heater.

.2 Construction: Steel case, dual stainless steel heat exchangers, eco premixed burner, negative pressure gas valve, condensate collector, and internal circulation pump and buffer tank.

.3 Piping: Lead-free plumbing, easy valve set, pressure relief valve.

.4 Connections: 19mm (3/4") diameter NPT cold/hot/recirculation and gas connections, 12mm (1/2") diameter condensate drain connection, 50mm (2") diameter PVC intake and exhaust connections.

.1 NOTE: Include propane conversion kit.

.5 Controls: Temperature lockout, ready-link communication cable, internal circuit board, flame sensor system, air proving switch, ignition operation detector, water temperature high limit switch, exhaust temperature high limit sensor, power surge fuse, overheat prevention device, freeze protection mode, and fan motor rotation detector.

.6 Input Capacity: 5.5 kW to 58.5 kW (19,000 BTU/h to 199,000 BTU/h).

.7 Electrical power: 120/1/60.

2.2 ANCHOR BOLTS AND TEMPLATES

- .1 Supply for installation by other Divisions.

3 Execution

3.1 INSTALLATION

- .1 Install in accordance with manufacturer's recommendations and authority having jurisdiction.
- .2 Provide structural steel for horizontal mounted tanks and for instantaneous heaters.
- .3 Provide insulation between tank and supports as required.
- .4 Install natural gas fired domestic water heaters in accordance with CSA-B149.1.

3.2 FIELD QUALITY CONTROL

- .1 Manufacturer's factory trained, certified Engineer to start up and commission DHW heaters.

END OF SECTION

1 General

1.1 SECTION INCLUDES

- .1 Materials and installation for plumbing specialties and accessories.

1.2 REFERENCES

- .1 American Society for Testing and Materials International (ASTM).
 - .1 ASTM A126-95(2001), Specification for Gray Iron Castings for Valves, Flanges and Pipe Fittings.
 - .2 ASTM B62-02, Specification for Composition Bronze or Ounce Metal Castings.
- .2 American Water Works Association (AWWA).
 - .1 AWWA C700-02, Cold Water Meters-Displacement Type, Bronze Main Case.
 - .2 AWWA C701-02, Cold Water Meters-Turbine Type for Customer Service.
 - .3 AWWA C702-1-01, Cold Water Meters-Compound Type.
- .3 Canadian Standards Association (CSA International).
 - .1 CSA-B64 Series-01, Backflow Preventers and Vacuum Breakers.
 - .2 CSA-B79-94(R2000), Floor, Area and Shower Drains, and Cleanouts for Residential Construction.
 - .3 CSA-B356-00, Water Pressure Reducing Valves for Domestic Water Supply Systems.
- .4 Plumbing and Drainage Institute (PDI).
 - .1 PDI-G101-96, Testing and Rating Procedure for Grease Interceptors with Appendix of Sizing and Installation Data.
 - .2 PDI-WH201-92, Water Hammer Arresters Standard.

1.3 SHOP DRAWINGS

- .1 Submit shop drawings in accordance with 01 33 00 - Submittal Procedures.
- .2 Indicate:
 - .1 Equipment, including material used, connections, fittings, control assemblies and ancillaries, identifying factory and field assembled.

1.4 CLOSEOUT SUBMITTALS

- .1 Provide maintenance and engineering data for incorporation into manual specified in Section 01 78 00 – Closeout Submittals.

2 Products

2.1 MATERIALS

- .1 Materials and resources in accordance with applicable sustainability requirements.

2.2 BACKFLOW PREVENTERS

- .1 BFP-1: Provide Watts Model LF007M1QT-S-LF double check valve-type backflow preventer.
 - .1 Supply complete with lead-free cast copper silicon allot body construction.
 - .2 Include two positive seating check modules with captured springs and replaceable rubber seat discs.
 - .3 Include top mounted lead-free ball valve test cocks and a lead-free inlet strainer.
 - .4 25mm (1") diameter FNPT connections.
 - .5 Install as per manufacturer's recommendations.

2.3 PRESSURE-REDUCING VALVES

- .1 PRV: Provide Watts Model LF223 lead-free, high capacity water pressure reducing valve.
 - .1 Supply complete with lead-free brass body construction, enlarged diaphragm, spring cage and seat orifice, sealed spring cage, replaceable stainless steel seat.
 - .2 172-517 kPa (25-75 PSI) adjustment range, factory set at 375 kPa (50 PSI).
 - .3 Install as per manufacturer's recommendations.

2.4 HOSE BIBBS

- .1 HB1: Provide Mifab model MHY-20 non-freeze, self-draining wall hydrant.
 - .1 Supply complete with vacuum breaker, 19mm inlet and hose connections.
 - .2 Max pressure: 862 kPa, Max temperature: 49 degrees C.
 - .3 Field verify wall thickness before ordering and installation.
 - .4 Install as per manufacturer's recommendations.

2.5 TRAP SEAL PRIMER MANIFOLDS

- .1 TSP: Provide Precision Plumbing Model PT-1320-4 Prime-time trap seal primer manifold.
 - .1 Supply complete with 16-gauge flush-mounted cabinet, stainless steel access door with ring pull and screw driver access door latch, anti-siphon atmospheric vacuum breaker, pre-set 24 hour adjustable timer, manual override switch, 120V solenoid valve, single-point power connection, four opening calibrated manifold, 19mm FNPT connection with isolation valve, 4-16mm outlet compression fittings for 12mm TSP line and 120V power..
 - .2 Install as per manufacturer's recommendations.

2.6 EXPANSION TANKS

- .1 EXP-1: Provide Amtrol Therm-X-trol Model ST-5 expansion tank with deep-drawl steel construction, heavy butyl rubber diaphragm, polypropylene liner material, 275 kPa (40

psig) factory pre-charge, polypropylene liner, 19mm diameter NPTM stainless steel connection, 7.6 L tank volume, 3.4 L acceptance volume.

3 Execution

3.1 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and data sheet.

3.2 INSTALLATION

- .1 Install in accordance with National Plumbing Code of Canada and local authority having jurisdiction.
- .2 Install in accordance with manufacturer's instructions and as specified, even if not specified in sections below.

3.3 CLEANOUTS

- .1 Install cleanouts at base of soil and waste stacks, and rainwater leaders, at locations required code, and as indicated.
- .2 Bring cleanouts to wall or finished floor unless serviceable from below floor.
- .3 Building drain cleanout and stack base cleanouts: line size to maximum NPS4.

3.4 NON-FREEZE WALL HYDRANTS

- .1 Install 600 mm above finished grade unless otherwise indicated.

3.5 BACK FLOW PREVENTERS

- .1 Install in accordance with CSA-B64 Series, where indicated and elsewhere as required by code.
- .2 Pipe discharge to terminate over nearest drain and/or service sink.

3.6 HOSE BIBBS AND SEDIMENT FAUCETS

- .1 Install at bottom of risers, at low points to drain systems, and as indicated.

3.7 TRAP SEAL PRIMERS

- .1 Install for floor drains and elsewhere, as indicated.
- .2 Install on cold water supply to nearest frequently used plumbing fixture, in concealed space, to approval of Consultant.

3.8 WATER METERS

- .1 Install water meter provided by local water authority.
- .2 Install water meter as indicated.

3.9 START-UP

- .1 General:
 - .1 In accordance with Sections of Division 01, as applicable.
- .2 Timing: start-up only after:
 - .1 Pressure tests have been completed.
 - .2 Disinfection procedures have been completed.
 - .3 Certificate of static completion has been issued.
 - .4 Water treatment systems operational.
- .3 Provide continuous supervision during start-up.

3.10 TESTING AND ADJUSTING

- .1 Application tolerances:
 - .1 Pressure at fixtures: +/- 70 kPa.
 - .2 Flow rate at fixtures: +/- 20%.
- .2 Adjustments:
 - .1 Verify that flow rate and pressure meet design criteria.
 - .2 Make adjustments while flow rate or withdrawal is (1) maximum and (2) 25% of maximum and while pressure is (1) maximum and (2) minimum.
- .3 Floor drains:
 - .1 Verify operation of trap seal primer.
 - .2 Prime, using trap primer. Adjust flow rate to suit site conditions.
 - .3 Check operations of flushing features.
 - .4 Check security, accessibility, removeability of strainer.
 - .5 Clean out baskets.
- .4 Vacuum breakers, backflow preventers, backwater valves:
 - .1 Test tightness, accessibility for O&M of cover and of valve.
 - .2 Simulate reverse flow and back-pressure conditions to test operation of vacuum breakers, backflow preventers.
 - .3 Verify visibility of discharge from open ports.
- .5 Roof drains:
 - .1 Check location at low points in roof.
 - .2 Check security, removeability of dome.

- .3 Adjust weirs to suit actual roof slopes, meet requirements of design.
- .4 Clean out sumps.
- .5 Verify provisions for movement of roof systems.
- .6 Access doors:
 - .1 Verify size and location relative to items to be accessed.
- .7 Cleanouts:
 - .1 Verify covers are gas-tight, secure, yet readily removable.
- .8 Water hammer arrestors:
 - .1 Verify proper installation of correct type of water hammer arrester.
- .9 Wall, Ground hydrants:
 - .1 Verify complete drainage, freeze protection.
 - .2 Verify operation of vacuum breakers.
- .10 Pressure regulators, PRV assemblies:
 - .1 Adjust settings to suit locations, flow rates, pressure conditions.
- .11 Strainers:
 - .1 Clean out repeatedly until clear.
 - .2 Verify accessibility of cleanout plug and basket.
 - .3 Verify that cleanout plug does not leak.
- .12 Grease interceptors:
 - .1 Activate, using manufacturer's recommended procedures and materials.

END OF SECTION

1 General

1.1 SUMMARY

- .1 Section Includes:
 - .1 The supply and installation of Plumbing Fixtures and Trim.
- .2 Products installed but not supplied under this Section:
 - .1 Install rough-in for equipment supplied by others, complete with valves on hot and cold water supplies, waste and vent.
 - .2 Equipment installed by others.
 - .1 Connect with unions.
 - .3 Equipment not installed.
 - .1 Capped for future connection by others.
- .3 Conform to Sections of Division 01, as applicable.

1.2 REFERENCES

- .1 Canadian Standards Association (CSA International).
 - .1 CAN/CSA-B45 Series-02, Plumbing Fixtures.
 - .2 CAN/CSA-B125-01, Plumbing Fittings.
 - .3 CAN/CSA-B651-95(R2001), Barrier-Free Design.

1.3 SHOP DRAWINGS

- .1 Submit shop drawings in accordance with 01 33 00 - Submittal Procedures.
- .2 Indicate: Equipment, including connections, fittings, control assemblies and ancillaries, identifying factory and field assembled.

1.4 CLOSEOUT SUBMITTALS

- .1 Provide maintenance and engineering data for incorporation into manual specified in Section 01 78 00 – Closeout Submittals.

2 Products

2.1 MANUFACTURED UNITS

- .1 Fixtures: manufacture in accordance with CAN/CSA-B45 series.
- .2 Trim, fittings: manufacture in accordance with CAN/CSA-B125.
- .3 Exposed plumbing brass to be chrome plated, unless otherwise indicated.

- .4 Number, locations: architectural drawings to govern.
- .5 Fixtures in any one location to be product of one manufacturer and of same type.
- .6 Trim in any one location to be product of one manufacturer and of same type.
- .7 Lavatories:
 - .1 L1: Provide American Standard Model 0355.012 wall-hung sink.
 - .2 Supply complete with vitreous china and wall hanger.
 - .3 Provide open grid strainer, lavatory riser, escutcheon plate, and P-trap with cleanout.
 - .4 Faucet: Delta Model 22C101 lavatory faucet supplied complete with cast brass construction, polished chrome plated finish, single control lever handle with 102mm centerset, ceramic cartridge with rotational limit stop, metal hold down package, vandal resistant 5.7 L/min (1.5 USGPM), flex supply lines and angle stops.
 - .5 Colour: white.
- .8 Water Closets:
 - .1 WC1: Provide American Standard model 2467.100 Cadet Flowise Right Height vitreous china elongated pressure-assisted floor mounted flush tank water closet.
 - .2 Supply complete with everclean surface, fully glazed 54mm (2-1/8") trapway, high efficiency, ultra low consumption (4.2 LPF, 1.1 GPF), flex supply, angle stop and open front seat without cover.
 - .3 Water closet and seat colour to be white.
- .9 Eyewash Stations
 - .1 EW1: Provide Bradley Model S19224PT Wall-Mounted Halo Eyewash Station.
 - .1 Supply complete with yellow impact-resistant plastic bowl with integral strainer, impact-resistant ABS plastic sprayheads, type 304 highly visible stainless steel push handle, 0.32L/s (5.1 USGPM) control valve, 12mm (1/2") diameter stay-open eye wash valve, type 304 stainless steel pull rod and handle, 12mm (1/2") diameter NPT water inlet, galvanized steel with yellow coating 32mm (1-1/4") diameter NPT drain outlet.
 - .2 Include Navigator Model S19-2000-RE emergency thermostatic mixing valve supplied complete with integral strainer checkstops, adjustable setpoint with temperature range, cold water bypass, positive hot water shutoff, dial thermostat, 18-gauge.
 - .3 Construction: Recessed cabinet body and door, left hand hinge, cylinder lock, inlet/outlet knock-out holes and baked white enamel finish.

- .10 Fixture piping:
 - .1 Hot and cold water supplies to each fixture:
 - .1 Chrome plated supply pipes each with screwdriver stop, reducers, escutcheon plate over visible wall penetrations.
 - .2 Waste:
 - .1 Brass P-trap with cleanout on each fixture not having integral trap.
 - .2 Chrome plated in all exposed places.

3 Execution

3.1 INSTALLATION

- .1 Mounting heights:
 - .1 Standard: to comply with ADA standards and manufacturer's recommendations where applicable.
 - .2 Wall-hung fixtures: as indicated, measured from finished floor.

3.2 ADJUSTING

- .1 Conform to water conservation requirements specified this section.
- .2 Adjustments:
 - .1 Adjust water flow rate to design flow rates.
 - .2 Adjust pressure to fixtures to ensure no splashing at maximum pressures.
- .3 Checks:
 - .1 Aerators: operation, cleanliness.
 - .2 Vacuum breakers, backflow preventers: operation under all conditions.
- .4 Thermostatic controls:
 - .1 Verify temperature settings, operation of control, limit and safety controls.

END OF SECTION