



12 February 2021

ADDENDUM NO: TWO

TO ALL BIDDERS:

REFERENCE: IFB No: 2021-064-IFB-03093
Commodity: Agnor-Hurt and Greer Elementary Schools Restroom Finishes
Upgrades
IFB Closing On: March 9, 2021

1. Please note the questions and answers for clarification.
2. All other terms and conditions of the solicitation remain unchanged. Sealed bids must be received in accordance with the solicitation requirements by **3:00 PM** EDT on **March 9, 2021**. Late bids will not be considered.
3. A signed acknowledgement of this addendum must be received by this office attached to your bid. Signature on this addendum does not constitute your signature on the original bid document. The original bid document must be signed also.

Sincerely,

Lisa Thomas

Lisa Thomas, VCO
Buyer II
Phone: (434) 296-5854

Name of Firm

Signature/Title

Date

Printed Name



12 February 2021

ADDENDUM 002

PROJECT: Agnor Hurt and Greer Elementary Schools Restroom Finishes Upgrades
IFB No. 2021-064-IFB-03093

The following items represent changes, modifications and/or clarifications to the Contract Documents for this project. This Addendum shall become a part of the Contract Documents and all Bidders shall acknowledge its inclusion in their bid.

This Addendum consists of the following:

- 1 typed pages (Addendum Revisions)
- 12 typed pages (Specification Sections)

Revisions to the Project Manual:

- 1. **ADD:** (3) three Division 22 Specification Sections to the Project Manual. These sections are each listed in the Table of Contents and were inadvertently omitted from the originally posted Bid Documents:

- 221116 – Water Distribution Piping
- 221316 – Drainage and Vent Systems
- 224000 – Plumbing Fixtures

Responses to Bidder Questions:

- 1. **QUESTION:** The Table of Contents lists Division 22 – Plumbing with three subsections. The digital Specifications do not have Division 22.
ANSWER: Refer to the Division 22 specifications included in this Addendum.

END OF ADDENDUM 002

SECTION 221116 - WATER DISTRIBUTION PIPING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section specifies water distribution piping system, including potable cold, hot, and recirculated hot water piping, fittings, and specialties within the building as indicated.

1.2 EXTRA STOCK

- A. Maintenance Stock: Furnish to Owner one valve key for each key operated fixture supply or faucet installed.

PART 2 - PRODUCTS

2.1 PIPE AND FITTINGS

- A. Pipe within Building (except below slab):
 - 1. Pipe Sizes 4" and Smaller: Copper tubing. Conform to ASTM B88, Type L, hard temper copper tube; ANSI B16.22 streamlined pattern wrought-copper fittings, with soldered joints using lead-free solder or wrought copper and bronze grooved-end fittings, piping 2-1/2" to 6"; ASTM B75 tube and ASTM B584 bronze castings.

2.2 VALVES

- A. Shut Off Duty; Ball-Milwaukee UPBA450 or equal, 2 piece, Bronze, rated for potable water.
- B. Water Tempering Valve: (Public Handwashing Lavatories): Valve body construction shall be brass and bronze with brass and stainless steel flow control components; 360° handle adjustment for temperature selection; vandal resistant lockable handle; unit shall be complete with separate check valves and thermometer. Discharge temperature shall be adjustable to within 10° F. of inlet water temperature at 0.5 minimum flow. Unit shall be certified to ASSE 1070 and meet the anti-scald requirements of ASSE 1016. Symmons Maxiline Model 7-210 for (1) lavatory and Model 7-225 for (2) to (14) lavatories or approved equal.

2.3 PIPING SPECIALTIES

- A. Water Hammer Arresters: Brass piston and cap with EPDM "O" ring seals and hard drawn copper body and pre-charged air chamber, working pressure of 150 psi, approved and certified in accordance with PDI Standard WH-201.

PART 3 - EXECUTION

3.1 JOINING PIPES AND FITTINGS

- A. Copper Tubing: Solder joints in accordance with the procedures specified in ANSI B9.1 for piping or in sizes 2-1/2" to 6", above ground, within building, tubing with roll-grooved ends and mechanical couplings.

3.2 PIPING INSTALLATION

- A. Install piping with 1/32" per foot (1/4 percent) downward slope towards drain point.

3.3 INSTALLATION OF VALVES

- A. Shutoff Valves: Install shutoff valves on inlet of each plumbing equipment item, and on inlet of each plumbing fixture, and elsewhere as indicated. For shutoff valves 2" and smaller, use ball valves; for shutoff valves 2-1/2" and larger, use butterfly valves.
- B. Drain Valves: Install drain valves on each plumbing equipment item, located to completely drain equipment for service or repair, at the base of each riser, at low points of horizontal runs, and elsewhere as required to completely drain distribution piping system. Drain consists of a tee fitting, 3/4" ball valve and short 3/4" threaded nipple and cap with chain; Nibco T-585-70-HC or approved equal.
- C. Water Tempering Valves: Install on piping where indicated and as per manufacturer's instructions.

3.4 INSTALLATION OF PIPING SPECIALTIES

- A. Water Hammer Arresters: Install on piping where indicated and as per manufacturer's instructions.

3.5 EQUIPMENT CONNECTIONS

- A. Piping Runouts to Fixtures: Provide hot and cold water piping runouts to fixtures of sizes indicated, but in no case smaller than required by Virginia Uniform Statewide Building Code.

3.6 FIELD QUALITY CONTROL

- A. Inspections:
 - 1. Do not enclose, cover, or put into operation water distribution piping system until it has been inspected and approved by the authority having jurisdiction (AHJ).
 - 2. Rough-in Inspection: Arrange for inspection of the piping system before concealed or closed-in after system is roughed-in, and prior to setting fixtures.
 - 3. Final Inspection: Arrange for a final inspection by the plumbing official to observe the tests specified below and to ensure compliance with the requirements of the plumbing code.
 - 4. Reports: Prepare inspection reports, signed by the plumbing official.
- B. Piping System Test:
 - 1. Test for leaks and defects in all new water distribution piping systems and parts of existing systems, which have been altered, extended or repaired. If testing is performed in segments, submit a separate report for each test, complete with a diagram of the portion of the system tested.

2. Cap and subject the piping system to a static water pressure of 125 psig without exceeding the pressure rating of the piping system materials. Isolate the test source and allow to stand for a period of 4 hours. Leaks and loss in test pressure constitute defects which must be repaired.
3. Prepare reports for all tests and required corrective action.

3.7 ADJUSTING AND CLEANING

A. Cleaning and Disinfecting:

1. Purge all new water distribution piping systems and parts of existing systems, which have been altered, extended, or repaired prior to use.
2. Use the purging and disinfecting procedure as described below:
 - a. Flush the piping system with clean, potable water until dirty water does not appear at the points of outlet.
 - b. Disinfecting of potable water systems as per method described by VUSB Code.
3. Prepare reports for all purging and disinfecting activities.

END OF SECTION 221116

SECTION 221316 - DRAINAGE AND VENT SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section specifies soil, waste and vent systems; storm drainage systems; and related specialties within the building.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Cast Iron Soil Pipe: ASTM A74, bearing the CI collective trademark and listed by NSF International.
- B. Manufacturer: Subject to compliance with requirements, provide drainage and vent systems from one of the following:
 - 1. Drainage Piping Specialties, including cleanouts and drains: Josam Mfg. Co.; Smith Mfg. Co.; Zurn Industries Inc.

2.2 ABOVE GROUND DRAINAGE AND VENT PIPE AND FITTINGS

- A. Cast iron soil pipe: Conform to ASTM A74, for service weight, hub-and-spigot soil pipe and fittings, bearing the CI collective trademark, and listed by NSF International, with neoprene compression gasket joints conforming to ASTM C1277 and CISPI 310 and listing by NSF International.
- B. Hubless cast iron soil pipe: Conform to ASTM Standard A888 and CISPI 301, bearing the CI collective trademark, and listed by the NSF International, cast iron soil pipe and fittings, stainless steel shield-clamp assembly with neoprene sleeve conforming to CISPI Standard 310 and listed by NSF International.

2.3 UNDERGROUND BUILDING DRAINAGE PIPE AND FITTINGS

- A. Solid Wall, PVC, Type DWV Plastic Pipe: Pipe and fittings shall be manufactured from PVC compound with a cell class of 12454 per ASTM D 1784 and conform with NSF/ANSI Standard 14. Pipe shall be iron pipe size (IPS) conforming to ASTM D 1785 and ASTM D 2665. Fittings shall conform to ASTM D 2665 and be of a one-piece molded construction. Solvent cements shall conform to ASTM D 2564, primer shall conform to ASTM F 656.

2.4 DRAINAGE PIPING SPECIALTIES

- A. Cleanout Plugs: Cast bronze or brass, threads complying with ANSI B2.1, countersunk head.
- B. Floor Cleanouts: Cast iron body and frame, with cast bronze or brass cleanout plug and adj. round top as follows:
 - 1. Nickel-Bronze Top (Finished Areas): Manufacturer's standard cast unit with the following patterns: Exposed flush type, standard non-slip scored finish. Note: For carpeted floors, provide (suffix "X" carpet clamping frame). Josam 56010-22; Smith 4023; Zurn 1400-2.

2. Cast iron Top (Unfinished Areas): Manufacturer's standard (heavy duty) cast unit with the following patterns: Exposed flush type, standard non-slip scored finish; Josam 56070-22; Smith 4223; Zurn 1420-25.
- C. Wall Cleanouts: Cast iron body adaptable to pipe with cast bronze or brass cleanout plug; stainless steel cover including S.S. screws; Josam 58790-22; Smith 4532; Zurn 1445-1.

PART 3 - EXECUTION

3.1 TRENCHING, BEDDING AND BACKFILLING

- A. Trench excavation: Trenching shall be in accordance with VUSB Code. Care shall be taken not to over excavate. Any portion of trench that is overexcavated shall be refilled to proper grade with crushed stone or sand as specified for bedding below. Excavation involving thermoplastic pipe shall be done in accordance with ASTM D2321.
- B. Pipe Bedding: Where trenches are excavated below grade such that the bottom of trench does not form the bed for the pipe, the trench shall be backfilled to grade with clean sand or VDOT size 68 or 78 crushed stone and hand tamped to 95% compaction. Backfill around sewer piping and to depth of at least 6" over the top of pipe with clean sand or VDOT size 68 or 78 crushed stone. Backfill shall be carefully and completely hand tamped to 95% compaction when tested in accordance with ASTM D-698. Pipe bedding involving thermoplastic pipe shall be done in accordance with ASTM D2321.
- C. Backfilling: Backfill sewer piping to 12" over top of pipe with clean sand or VDOT size 68 or 78 crushed stone and hand tamp to 95% compaction. Complete backfilling of trench using earth free from stones and debris and compact in layers not exceeding 6" in thickness. Compact the remainder of the trench thoroughly with tampers. Backfilling involving thermoplastic pipe shall be done in accordance with ASTM D2321.

3.2 JOINING PIPES AND FITTINGS

- A. Cast Iron Soil Pipe: Make compression joints, and hubless joints in accordance with the recommendations in the CISPI Cast Iron Soil Pipe and Fittings Handbook, Chapter IV. All couplings for hubless cast iron soil pipe shall conform to CISPI 310 and be certified by NSF International.
- B. PVC DWV Pipe: Joining and installation of PVC drainage pipe and fittings shall conform to ASTM D2665.

3.3 INSTALLATION

- A. Install supports and anchors in accordance with Division- 23 Basic Mechanical Materials and Methods section "Supports and Anchors".
- B. General Locations and Arrangements: Drawings (plans, schematics, and diagrams) indicate the general location and arrangement of the piping systems. Location and arrangement of piping layout take into account many design considerations. So far as practical, install piping as indicated.
- C. Make changes in direction for drainage and vent piping using appropriate 45-degree wyes, half-wyes, or long sweep quarter, sixth, eighth, or sixteenth bends. Sanitary tees or short quarter bends may be used on vertical stacks of drainage lines where the change in direction of flow is from horizontal to vertical, except use long-turn tees where two fixtures are installed back to

back and have a common drain. Straight tees, elbows, and crosses may be used on vent lines. No change in direction of flow greater than 90 degrees shall be made. Where different sizes of drainage pipes and fittings are connected, use proper size, standard increasers and reducers. Reduction of the size of drainage piping in the direction of flow is prohibited.

- D. Install underground building drains to conform with the plumbing code, and in accordance with ASTM D2321 for plastic drainage piping or with the Cast Iron Soil Pipe Institute Cast Iron Soil Pipe and Fittings Handbook. Lay underground building drains beginning at low point of systems, true to grades and alignment indicated with unbroken continuity of invert. Place bell ends of piping facing upstream. Install required gaskets in accordance with manufacturer's recommendations for use of lubricants, cements, and other special installation requirements. Maintain swab or drag in lines and pull past each joint as it is completed.
- E. Install building drain pitched down at minimum slope of 1/4" per foot (2 percent) for piping (2-1/2") and smaller, and 1/8" per foot (1 percent) for piping 3" and larger.
- F. Extend building drain to connect to sewer piping, of size and in location indicated for service entrance to building.

3.4 COMPACTION

- A. Percentage of Maximum Dry Density Requirements: Compact soil to not less than the following percentages of maximum dry density according to ASTM D-698 Standard Proctor.
 - 1. Under structures, building slabs and steps: Compact top 12" of subgrade to 100% and extending 10' outside the structure. Backfill and fill material below the top 12" layer shall be compacted to 95%.

3.5 INSTALLATION OF PIPING SPECIALTIES

- A. Above Ground Cleanouts: Install in above ground piping and building drain piping as indicated, and as required by plumbing code; at each change in direction of piping greater than 45 degrees; at minimum intervals of 100'; at base of each vertical soil or waste stack.
- B. Cleanouts Covers: Install wall cleanout covers for concealed piping.

3.6 CONNECTIONS

- A. Piping Runouts to Fixtures: Provide drainage and vent piping runouts to plumbing fixtures and drains, with approved trap, of sizes indicated; but in no case smaller than required by the plumbing code.
- B. Locate piping runouts as close as possible to bottom of floor slab supporting fixtures or drains.

3.7 FIELD QUALITY CONTROL

- A. Inspections:
 - 1. Do not enclose, cover, or put into operation drainage and vent piping system until it has been inspected and approved by the authority having jurisdiction.
 - 2. Rough-in Inspection: Arrange for inspection of the piping system before concealed or closed-in after system is roughed-in, and prior to setting fixtures.

3. Final Inspection: Arrange for a final inspection by the plumbing official to observe the tests specified below and to ensure compliance with the requirements of the plumbing code.
 4. Reports: Prepare inspection reports, signed by the plumbing official.
- B. Piping System Test:
1. Test for leaks and defects in all new drainage and vent piping systems and parts of existing systems, which have been altered, extended or repaired. If testing is performed in segments, submit a separate report for each test, complete with a diagram of the portion of the system tested.
 2. Drainage and Vent System Testing Procedures shall be in accordance with VUSB Code.
 3. Prepare reports for all tests and required corrective action.

3.8 ADJUSTING AND CLEANING

- A. Clean interior of piping. Remove dirt and debris as work progresses.
- B. Clean drain strainers, domes, and traps. Remove dirt and debris.

3.9 PROTECTION

- A. Protect drains during remainder of construction period, to avoid clogging with dirt and debris, and to prevent damage from traffic and construction work.
- B. Place plugs in ends of uncompleted piping at end of day or whenever work stops.

END OF SECTION 221316

SECTION 224000 - PLUMBING FIXTURES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section specifies plumbing fixtures and trim. The types of fixtures specified include the following:
 - 1. Lavatories (including handicap type);
 - 2. Water Closets (including handicap type);
 - 4. Lavatory (including handicap type);
 - 5. Faucets;
 - 6. Flush Valves;
 - 7. Fixture Supports;
 - 8. Toilet Seats;
 - 9. Fittings, Trim, and Accessories.

1.2 RELATED DOCUMENTS

- A. Related Sections:
 - 1. Separate grab bars and toilet accessories not an integral part of plumbing fixtures are specified in Division 10.

1.3 QUALITY ASSURANCE

- A. Codes and Standards:
 - 1. ICC/ANSI Standard A117.1-2009: "Accessible and Usable Buildings and Facilities".

1.4 SUBMITTALS

- A. Where shop drawings are transmitted electronically, provide one bound hardcopy for the engineer of record. The shop drawings may be bound by staples, the submittals, and calculations shall be bound in a report folder or similar binder.
- B. Shop Drawings: Submit rough-in drawings. Detail dimensions, rough-in requirements, required clearances, and methods of assembly of components and anchorages. Coordinate requirements with Architectural Woodwork shop drawings specified in Division 6 for fixtures installed in countertops and cabinets.
- C. Color Charts: Submit manufacturer's standard color charts for cabinet finishes and fixture colors.
- D. Quality Control Submittals:
 - 1. Submit certification of compliance with performance verification requirements specified in this Section.

1.5 MAINTENANCE

- A. Extra Stock:

1. Furnish special wrenches and other devices necessary for servicing plumbing fixtures and trim to Owner with receipt in a quantity of one device for each 10 fixtures.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturer uniformity shall be as specified in Section 230000: Basic Mechanical Requirements under Product Options.
- B. Subject to compliance with specified requirements, provide plumbing fixtures of one of the following:
 1. Lavatories, Water Closets: American Standard Inc.; Kohler Co.; Sloan.
 2. Faucets: Chicago Faucet Co.; Zurn, Speakman Co.; T&S Brass and Bronze Works; Sloan.
 3. Flush Valves: Coyne & Delany Co.; Sloan Valve Co.; Zurn Industries, Inc.
 4. Water Closet Seats: Bemis Mfg. Co.; Beneke Corp.; Church Seat Co.
 5. Fixture Supports: Josam Mfg. Co.; Smith Mfg. Co.; Zurn Industries, Inc.

2.2 FIXTURES

- P-1 Water Closets: Existing to be reused. Provide mounting bolt covers, floor flange and gasket seal.
- P-2 Water Closets, (Handicap): 17-1/4"-17-1/2" high, floor to rim, vitreous china, bottom outlet, floor mounted, 1.6 gal./flush, siphon action elongated closet bowl with 1-1/2" top spud; quiet flushing action with self-draining jets and large passageway. Provide mounting bolt covers, floor flange and gasket seal. Provide seat, and flush valve Type "FV-1" as specified in the Articles below; A-S 3043.001; Sloan ST-2029 or Kohler K-4405. NOTE: Controls for flush valves shall be mounted on the wide side of toilet areas, to comply with ADA Standards.
- P-3 Urinals: Existing to be reused. Provide new carrier.
- P-4 Lavatory: 20" x 18" vitreous china wall hung lavatory, with "D" shaped basin with front overflow, faucet ledge, bottom shroud, self draining deck area with 4" to 5" high contoured back, and side splash shields and fabricated for concealed arm supports. Drill lavatories for faucet holes on 4" centers. Provide concealed arm wall/floor fixture supports, "Type-A" faucet, trap, drain, supplies and stops as specified in the Articles below; A-S 0355.012; Sloan SS-3003 or Kohler K-2005.

2.4 FAUCETS

- A. Lavatory Faucet (Type-A): Provide (Zurn, Model Z86500-XL-IN) polished C.P. cast metal body, 4" center set faucet with ceramic control components, spout with C.P. 0.5 gpm flow aerator, slow closing metering cartridges indexed "HOT" and "COLD", and C.P. cast brass grid drain plug with strainer and with 1 1/4" x 6" C.P. 17 ga. tailpiece. Faucets shall have ANSI/NSF Certification of Compliance to Section 9 of Standard 61, Drinking Water Systems Components. Note: Provide off-set grid drain plug and 17 ga. C.P. tailpiece at Handicapped Lavatories.

2.5 FLUSH VALVES

- A. Provide quiet, exposed "low consumption" C.P. manual flush valve with no external vol. adj., metal oscillation non-hold-open handle, I.P.S. screw driver operated combo angle check and stop valve with protective cap, adj. tailpiece, vacuum breaker flush connection and spud coupling for top spud flanges. NOTE: Controls for flush valves shall be mounted on the wide side of toilet areas.
- B. Valve body, cover, tailpiece and control stop shall be in conformance with ASTM alloy classification for red brass or semi-red brass. Valve shall be in compliance with Fed. Spec. WWP-541, Mil Spec. V-29193, ANSI 112.19.6 and ASSE 1037.
- C. Flush Valve (FV-2): Provide 3/4" I.P.S. urinal flush valve for 3/4" top spud flanges. Sloan 186-1.

2.6 FIXTURE SUPPORTS

- A. Lavatory Supports (If existing are not suitable): cast iron supports, having tubular steel uprights with concealed arms and sleeves, mounted on adj. headers with escutcheons, and complete with heavy cast iron short feet, alignment trusses, and mounting fasteners for narrow wall installation. (Refer to Smith Fig. No. 752-M30 lavatory support.)
- B. Urinal Supports (If existing are not suitable): concealed wall supports for urinals shall have steel top and bottom plates with bolts to support fixture independently from the wall; adj. sleeves, steel tubular uprights and alignment trusses complete with heavy cast iron short feet, steel plates with adj. holes, bolts, nuts, and C.P. cap nuts and washers. Top supporting plates shall have cutouts when used with back inlet urinals, for narrow wall installation.

2.7 FITTINGS, TRIM, AND ACCESSORIES

- A. Toilet Seats: elongated, solid white commercial weight plastic, closed profile back/open front, less cover, and having S.S. posts, washers, nuts & self-sustaining feature, check hinges and integral bumpers.
- B. Supplies and Stops for Lavatories and Sinks: polished C.P., loose-keyed ball valve angle stop having 1/2" inlet and 3/8" O.D. x 12" long annealed copper vertical tubing outlet, 1/2" x 5" C.P. threaded brass nipples or 1/2" nom. x 5" C.P. swt. copper tube, and wall flange or escutcheon.
- C. Continuous Waste for Sinks: polished C.P., tubular brass, 17 ga., with brass nuts on slip inlets and of configurations indicated.
- D. Traps for Lavatories and Sinks: semi-cast brass, 17 ga. polished C.P., adj. "P" trap with cleanout and waste to wall. Trap size as per rough-in schedule.
- E. Escutcheons: C.P. one piece sheet steel with friction clips.
- F. Insulation Kit: Handicap lavatory and sink insulation system for P-trap and angle valve assemblies shall be insulated with the fully molded closed cell vinyl, TRUEBRO light gray color insulation kit, Model #102 with 3-piece interlocking trap assembly and 2-piece interlocking angle valve assemblies; Pro-Wrap; or Plumberex. Fasteners shall be nylon-type supplied with kit. Burning characteristics conform to ASTM D635 and thermal conductivity conforms to ASTM C 177. Note: Not required where Architect is providing removable shielding panels.
- G. Water-less, Barrier-Style Trap Seal Device: Provide a trap seal device for each existing floor drain. Provide Zurn Z1072 or equal in appropriate size for each drain.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify all dimensions by field measurements. Verify that all plumbing fixtures may be installed in accordance with pertinent codes and regulations, the original design, and the referenced standards.
- B. Examine rough-in for potable water and waste piping systems to verify actual locations of piping connections prior to installing fixtures.
- C. Examine walls, floors, and cabinets for suitable conditions where fixtures are to be installed.
- D. Do not proceed until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install plumbing fixtures level and plumb, in accordance with fixture manufacturer's written instructions, rough-in drawings, and pertinent codes and regulations, the original design, and the referenced standards.
- B. Comply with the installation requirements of ICC/ANSI A117.1 with respect to plumbing fixtures for the physically handicapped.
- C. Fasten plumbing fixtures securely to supports or building structure. Secure supplies behind or within wall construction to provide rigid installation.
- D. Floor outlet fixtures shall be secured to floor flanges by screws or bolts of corrosion - resistant material.
- F. Install a stop valve in an accessible location in the water connection to each fixture.
- G. Install escutcheons at each wall, floor, and ceiling penetration in exposed finished locations and within cabinets and millwork.
- H. Seal fixtures to walls and floors using silicone sealant as specified in Section 07900. Match sealant color to fixture color.

3.3 FIELD QUALITY CONTROL

- A. Test fixtures to demonstrate proper operation upon completion of installation and after units are water pressurized. Replace malfunctioning units, then retest.
- B. Inspect each installed unit for damage. Replace damaged fixtures.

3.4 ADJUSTING

- A. Replace washers of leaking or dripping faucets and stops.

3.5 CLEANING

- A. Clean fixtures, trim, and strainers using manufacturer's recommended cleaning methods and materials.

3.6 PROTECTION

- A. Provide protective covering for installed fixtures, water coolers, and trim.
- B. Do not allow use of fixtures for temporary facilities unless expressly approved in writing by the Owner.

END OF SECTION 224000