

SECTION 001113 – NOTICE TO BIDDERS

Notice is hereby given that sealed bids will be received:

BY THE OWNER: Charter Township of West Bloomfield
4550 Walnut Lake Road
West Bloomfield, MI 48323

FOR: West Bloomfield Township Civic Center Restrooms Renovation

AT: West Bloomfield Township Civic Center
4550 Walnut Lake Road
West Bloomfield, MI 48323

UNTIL: **22nd day, September 2020 at 2:00 PM local time,**
Bids received after that time will be returned unopened.

BID OPENING: The sealed Bids will be publicly opened and read aloud immediately following end of bid period.

WORK SUMMARY: Project scope entails a complete renovation of (4) separate restrooms to bring spaces up to ADA compliancy as well as to upgrade MEP systems and interior finishes. Phasing as indicated in the drawing set will need to be taken inconsideration and coordinated with Owner's requirements.

All work for the complete construction of the project will be under a single prime contract with the Owner based on bids received and awarded.

The Owner reserves the right to accept or reject any bid and to waive any irregularities in bidding. No bidder may withdraw his bid for a period of ninety (90) calendar days after the date set for bid opening.

Construction shall be in full accordance with the Bidding and Contract Documents which are on file with the Owner and may be examined by prospective bidders at the following locations:

OFFICE OF THE ARCHITECT: DLZ Michigan, Inc.
607 Shelby St.
Suite 650
Contact: Laurie Frey
Project Manager
Email: lafrey@dlz.com
Fax: (313) 961-4086

Bid Documents (Plans and Specifications) are available on a non-refundable basis for the cost of reproduction. The Bid Documents are available from **ARC, 500 Griswold St. #220, Detroit, Michigan 48226; phone, (313) 961-4444; e-arc.com/location/Detroit**. Purchase of the Bid Documents is to be done directly with the printer. The bidder shall obtain and utilize the full set of Bid Documents since these documents were developed as a system and individual plans or specifications may not be all inclusive of the bid scope or requirements. Only full sets will be distributed.

Bid security in the amount of five percent (5%) of the bid must accompany each bid in accordance with the Instructions to Bidders. Bid security shall be a certified check or bid bond. All bid bonds shall be made payable to the **Charter Township of West Bloomfield.**

The successful bidders will be required to furnish Contract Performance and Payment Bonds for 100% of their contract amount prior to execution of contracts. Bonds shall be maintained in accordance with Michigan Law. Bonds shall be in full force and effect for a period of at least two (2) years after the date of final completion of the Contract. Should the contractor's bonding company give notice of cancellation; the contractor will be responsible for securing new bonds prior to termination.

Bid proposals shall be properly and completely executed on the bid form provided in Section 00 41 13, Bid Form.

A Pre-Bid Meeting will be held on the 9th day, September 2020 at 10:00 AM local time at the West Bloomfield Township Civic Center – 4550 Walnut Lake Rd., West Bloomfield, MI 48323. Representatives of the Owner and Architect/Engineer will be present to discuss the project, bidding requirements and information, contractor work and storage areas, and requirements for contractor's personnel. All prospective bidders are highly recommended to attend.

All questions shall be submitted, in writing, not later than the **18th day, September 2020 at 4:00 PM** local time. Submit all questions in writing to:

Laurie Frey
Project Manager
lafrey@dlz.com

END OF SECTION 001113

SECTION 01 21 16 – ALLOWANCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements governing allowances.
 - 1. Selected materials and equipment are specified in the Contract Documents by allowance. This allowance includes installation. The allowance has been established in lieu of additional requirements and to repair of actual materials and equipment to a later date when additional information is available for evaluation. If necessary, additional requirements will be issued by Change Order.
 - 2. The Architect shall provide the Contractor with a written description prior to the use of the allowance.
 - 3. The Contractor shall not use the allowance without written instruction by the Architect and approved by the Owner.

1.3 ALLOWANCE ADJUSTMENT AMOUNTS

- A. Upon acceptance of the Proposal Request, an Allowance Adjustment will be issued for execution by the Owner and Contractor.
- B. Allowance Adjustments shall increase or decrease general construction contingency allowance amounts
- C. Allowance Adjustments shall not change the Contract amount.
- D. Contractor shall exclude bonds, overhead and profit for work performed by Contractor's own forces. Work performed by subcontractors may increase material and labor amount by five (5%) percent.
- E. Contractor shall include each Allowance on the Schedule of Values.
 - 1. Upon approval of Allowance Adjustment(s), Contractor to update Schedule of Values and Application for Payment to record each Allowance Adjustment as a separate line item.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALLOWANCES

- A. **Allowance No. 1:** Contingency Allowance: Amount equal to a lump sum amount of Ten Thousand Dollars (\$10,000.00), to be included within the **Base Bid**, to be used by Owner if the Contractor encounters unforeseen conditions on site during construction activities that need to be addressed.

END OF SECTION 01 21 16

SECTION 093011 - TILING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

1. Porcelain wall tile.
2. Glass tile
3. Stone tile
4. Crack isolation membrane.
5. Metal edge strips.

- B. Related Requirements:

1. Section 079200 "Joint Sealants" for sealing of expansion, contraction, control, and isolation joints in tile surfaces.
2. Section 092900 "Gypsum Board" for cementitious backer units.

1.3 DEFINITIONS

- A. General: Definitions in the ANSI A108 series of tile installation standards and in ANSI A137.1 apply to Work of this Section unless otherwise specified.
- B. ANSI A108 Series: ANSI A108.01, ANSI A108.02, ANSI A108.1A, ANSI A108.1B, ANSI A108.1C, ANSI A108.4, ANSI A108.5, ANSI A108.6, ANSI A108.8, ANSI A108.9, ANSI A108.10, ANSI A108.11, ANSI A108.12, ANSI A108.13, ANSI A108.14, ANSI A108.15, ANSI A108.16, and ANSI A108.17, which are contained in its "Specifications for Installation of Ceramic Tile."
- C. Module Size: Actual tile size plus joint width indicated.
- D. Face Size: Actual tile size, excluding spacer lugs.
- E. Honed Finish: Smooth, nonreflective surface similar to that produced by grinding with a 400- to 1200-grit abrasive; with a gap not exceeding 0.005 inch when faces are tested for flatness with a 24-inch straightedge.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Review requirements in ANSI A108.01 for substrates and for preparation by other trades.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Show locations of each type of tile and tile pattern. Show widths, details, and locations of expansion, contraction, control, and isolation joints in tile substrates and finished tile surfaces.
- C. Samples for Initial Selection: For tile, grout, and accessories involving color selection.
- D. Samples for Verification:
 - 1. Assembled samples mounted on a rigid panel, with grouted joints, for each type and composition of tile and for each color and finish required. Make samples at least 36 inches square, but not fewer than four tiles. Use grout of type and in color or colors approved for completed Work.
 - 2. Full-size units of each type of trim and accessory.
 - 3. Metal edge strips in 6-inch lengths.
- E. Buy America Statement of Compliance: For all iron, steel, and manufactured products used, Contractor shall submit a statement of compliance with 49 C.F.R. Part 661—Buy America Requirements—Surface Transportation Assistance Act Of 1982, As Amended.
 - 1. All iron, steel, and manufactured products shall be produced in the United States; no exceptions permitted.
 - 2. The Contractor is solely responsible for certification of compliance with this requirement for all products used.
 - 3. Products are listed in the Contract Documents to convey the design intent, however some products listed may not be compliant with Buy America; inclusion of products in the specifications does not imply that the specified products are necessarily compliant with Buy America. Contractor remains responsible to verify and document compliance of all products used.
 - 4. If Contractor determines that a specified product does not comply with Buy America, the Contractor remains responsible to provide a comparable product at no additional cost, as required to complete the Work. Such products remain subject to compliance with all other requirements and specified performance criteria and are subject to review and approval by the Architect and Owner through the proper product substitution procedures.

1.6 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match and are from same production runs as products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Tile and Trim Units: Furnish quantity of full-size units equal to 3 percent of amount installed for each type, composition, color, pattern, and size indicated.
2. Grout: Furnish quantity of grout equal to 3 percent of amount installed for each type, composition, and color indicated.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use. Comply with requirements in ANSI A137.1 for labeling tile packages.
- B. Store tile and cementitious materials on elevated platforms, under cover, and in a dry location.
- C. Store aggregates where grading and other required characteristics can be maintained and contamination can be avoided.
- D. Store liquid materials in unopened containers and protected from freezing.

1.8 FIELD CONDITIONS

- A. Environmental Limitations: Do not install tile until construction in spaces is complete and ambient temperature and humidity conditions are maintained at the levels indicated in referenced standards and manufacturer's written instructions.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations for Tile: Obtain tile of each type from single source or producer.
 1. Obtain tile of each type and color or finish from same production run and of consistent quality in appearance and physical properties for each contiguous area.
- B. Source Limitations for Setting and Grouting Materials: Obtain ingredients of a uniform quality for each mortar, adhesive, and grout component from single manufacturer and each aggregate from single source or producer.
 1. Obtain setting and grouting materials, except for unmodified Portland cement and aggregate, from single manufacturer.
 2. Obtain crack isolation membrane, except for sheet products, from manufacturer of setting and grouting materials.

2.2 PRODUCTS, GENERAL

- A. Factory Blending: For tile exhibiting color variations within ranges, blend tile in factory and package so tile units taken from one package show same range in colors as those taken from other packages and match approved Samples.
- B. Mounting: For factory-mounted tile, provide back- or edge-mounted tile assemblies as standard with manufacturer unless otherwise indicated.

2.3 TILE PRODUCTS

A. Ceramic Tile Type CT-1: Porcelain Floor tile.

- 1. Basis-of-Design Product: Subject to compliance with requirements, provide Soul Coffee by Landmark Ceramics or comparable product by one of the following:
 - a. American Marazzi Tile, Inc.
 - b. Crossville, Inc.
 - c. Dal-Tile Corporation.
 - d. Florida Tile, Inc.
 - e. Florim USA.
- 2. Certification: Tile certified by the Porcelain Tile Certification Agency.
- 3. Face Size: 12"x24"
- 4. Face Size Variation: Rectified.
- 5. Thickness: 0.35"
- 6. Face: Plain with square edges.
- 7. Dynamic Coefficient of Friction: Not less than 0.42.
- 8. Tile Color, Glaze: Coffee
- 9. Grout Color: As selected by Architect from manufacturer's full range.

B. Ceramic Tile Type CT-2: Porcelain Floor tile.

- 1. Basis-of-Design Product: Subject to compliance with requirements, provide Soul Dark by Landmark Ceramics or comparable product by one of the following:
 - a. American Marazzi Tile, Inc.
 - b. Crossville, Inc.
 - c. Dal-Tile Corporation.
 - d. Florida Tile, Inc.
 - e. Florim USA.
- 2. Certification: Tile certified by the Porcelain Tile Certification Agency.
- 3. Face Size: 6"x24"
- 4. Face Size Variation: Rectified.
- 5. Thickness: 0.35"
- 6. Face: Plain with square edges.
- 7. Dynamic Coefficient of Friction: Not less than 0.42.
- 8. Tile Color, Glaze: Dark

9. Grout Color: As selected by Architect from manufacturer's full range.

C. Ceramic Tile Type CTW-1: Porcelain Wall tile.

1. Basis-of-Design Product: Subject to compliance with requirements, provide Nihon Bamboo “ISHI” by Finandre USA or comparable product by one of the following:
 - a. American Marazzi Tile, Inc.
 - b. Crossville, Inc.
 - c. Dal-Tile Corporation.
 - d. Florida Tile, Inc.
 - e. Florim USA.
2. Certification: Tile certified by the Porcelain Tile Certification Agency.
3. Face Size: 12”x24”
4. Face Size Variation: Calibrated
5. Thickness: 0.32”
6. Face: Honed
7. Dynamic Coefficient of Friction: Not less than 0.42.
8. Tile Color, Glaze: ISHI
9. Grout Color: As selected by Architect from manufacturer's full range.

D. Ceramic Tile Type CTW-2: Porcelain Wall tile.

1. Basis-of-Design Product: Subject to compliance with requirements, provide Zebrino “Michelangelo” by Stone Peak or comparable product by one of the following:
 - a. American Marazzi Tile, Inc.
 - b. Crossville, Inc.
 - c. Dal-Tile Corporation.
 - d. Florida Tile, Inc.
 - e. Florim USA.
2. Certification: Tile certified by the Porcelain Tile Certification Agency.
3. Face Size: 6”x12”
4. Face Size Variation: Rectified.
5. Thickness: 0.32”
6. Face: Honed
7. Dynamic Coefficient of Friction: Not less than 0.42.
8. Tile Color, Glaze: Michelangelo
9. Grout Color: As selected by Architect from manufacturer's full range.

E. Ceramic Tile Type CTW-3: Porcelain Wall tile.

1. Basis-of-Design Product: Subject to compliance with requirements, provide Soul Dark by Landmark Ceramics or comparable product by one of the following:
 - a. American Marazzi Tile, Inc.
 - b. Crossville, Inc.

- c. Dal-Tile Corporation.
 - d. Florida Tile, Inc.
 - e. Florim USA.
2. Certification: Tile certified by the Porcelain Tile Certification Agency.
 3. Face Size: 12"x24"
 4. Face Size Variation: Rectified.
 5. Thickness: 0.35"
 6. Face: Plain with square edges.
 7. Dynamic Coefficient of Friction: Not less than 0.42.
 8. Tile Color, Glaze: Dark
 9. Grout Color: As selected by Architect from manufacturer's full range.

2.4 CRACK ISOLATION MEMBRANE

- A. Polyethylene Sheet: Polyethylene faced on both sides with fleece webbing; 0.008-inch nominal thickness.
 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Schluter Systems L.P.; KERDI.
 - b. Shonox Systems; Schonox AB

2.5 SETTING MATERIALS

- A. Latex-Portland Cement Mortar (Thinset): ANSI A118.4.
 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Bonsal American; an Oldcastle company.
 - b. Bostik, Inc.
 - c. Laticrete International, Inc.
 - d. MAPEI Corporation.
 - e. Merkrete Systems; Parex USA, Inc.
 2. Provide prepackaged, dry-mortar mix containing dry, redispersible, vinyl acetate or acrylic additive to which only water must be added at Project site.
 3. For wall applications, provide mortar that complies with requirements for nonsagging mortar in addition to the other requirements in ANSI A118.4.

2.6 GROUT MATERIALS

- A. Sand-Portland Cement Grout: ANSI A108.10, consisting of white or gray cement and white or colored aggregate as required to produce color indicated.
- B. Standard Cement Grout: ANSI A118.6.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Bonsal American; an Oldcastle company.
 - b. Bostik, Inc.
 - c. Laticrete International, Inc.
 - d. MAPEI Corporation.

2.7 MISCELLANEOUS MATERIALS

- A. Trowelable Underlayments and Patching Compounds: Latex-modified, portland cement-based formulation provided or approved by manufacturer of tile-setting materials for installations indicated.
- B. Metal Edge Strips: Angle or L-shaped, height to match tile and setting-bed thickness, designed specifically for tiling applications; stainless-steel, ASTM A 666, 300 Series exposed-edge material.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Schiene by Schluter or comparable product by one of the following:
 - a. Blanke Corporation.
 - b. Ceramic Tool Company, Inc.
 - c. Schluter Systems L.P.

- C. Tile Cleaner: A neutral cleaner capable of removing soil and residue without harming tile and grout surfaces, specifically approved for materials and installations indicated by tile and grout manufacturers.
- D. Grout Sealer: Manufacturer's standard product for sealing grout joints and that does not change color or appearance of grout.

2.8 MIXING MORTARS AND GROUT

- A. Mix mortars and grouts to comply with referenced standards and mortar and grout manufacturers' written instructions.
- B. Add materials, water, and additives in accurate proportions.

- C. Obtain and use type of mixing equipment, mixer speeds, mixing containers, mixing time, and other procedures to produce mortars and grouts of uniform quality with optimum performance characteristics for installations indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions where tile will be installed, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
 - 1. Verify that substrates for setting tile are firm; dry; clean; free of coatings that are incompatible with tile-setting materials, including curing compounds and other substances that contain soap, wax, oil, or silicone; and comply with flatness tolerances required by ANSI A108.01 for installations indicated.
 - 2. Verify that concrete substrates for tile floors installed with thinset mortar comply with surface finish requirements in ANSI A108.01 for installations indicated.
 - 3. Verify that installation of grounds, anchors, recessed frames, electrical and mechanical units of work, and similar items located in or behind tile has been completed.
 - 4. Verify that joints and cracks in tile substrates are coordinated with tile joint locations; if not coordinated, adjust joint locations in consultation with Architect.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Fill cracks, holes, and depressions in concrete substrates for tile floors installed with thinset mortar with trowelable leveling and patching compound specifically recommended by tile-setting material manufacturer.
- B. Where indicated, prepare substrates to receive waterproofing by applying a reinforced mortar bed that complies with ANSI A108.1A and is sloped 1/4 inch per foot toward drains.
- C. Blending: For tile exhibiting color variations, verify that tile has been factory blended and packaged so tile units taken from one package show same range of colors as those taken from other packages and match approved Samples. If not factory blended, either return to manufacturer or blend tiles at Project site before installing.

3.3 CERAMIC TILE INSTALLATION

- A. Comply with TCNA's "Handbook for Ceramic, Glass, and Stone Tile Installation" for TCNA installation methods specified in tile installation schedules. Comply with parts of the ANSI A108 series "Specifications for Installation of Ceramic Tile" that are referenced in TCNA installation methods, specified in tile installation schedules, and apply to types of setting and grouting materials used.

1. For the following installations, follow procedures in the ANSI A108 series of tile installation standards for providing 95 percent mortar coverage:
 - a. Exterior tile floors.
 - b. Tile floors in wet areas.
 - c. Tile swimming pool decks.
 - d. Tile floors in laundries.
 - e. Tile floors consisting of tiles 8 by 8 inches or larger.
 - f. Tile floors consisting of rib-backed tiles.

- B. Extend tile work into recesses and under or behind equipment and fixtures to form complete covering without interruptions unless otherwise indicated. Terminate work neatly at obstructions, edges, and corners without disrupting pattern or joint alignments.

- C. Accurately form intersections and returns. Perform cutting and drilling of tile without marring visible surfaces. Carefully grind cut edges of tile abutting trim, finish, or built-in items for straight aligned joints. Fit tile closely to electrical outlets, piping, fixtures, and other penetrations so plates, collars, or covers overlap tile.

- D. Provide manufacturer's standard trim shapes where necessary to eliminate exposed tile edges.

- E. Jointing Pattern: Lay tile in grid pattern unless otherwise indicated. Lay out tile work and center tile fields in both directions in each space or on each wall area. Lay out tile work to minimize the use of pieces that are less than half of a tile. Provide uniform joint widths unless otherwise indicated.

- F. Joint Widths: Unless otherwise indicated, install tile with the following joint widths:
 1. Glazed Wall Tile: 1/8 inch.

- G. Metal Edge Strips: Install at exposed edges of tiles.

- H. Grout Sealer: Apply grout sealer to grout joints according to grout-sealer manufacturer's written instructions. As soon as grout sealer has penetrated grout joints, remove excess sealer and sealer from tile faces by wiping with soft cloth.

3.4 GLASS TILE INSTALLATION

- A. Comply with TCNA's "Handbook for Ceramic, Glass, and Stone Tile Installation" for TCNA installation methods specified in tile installation schedules. Comply with parts of the ANSI A108 series "Specifications for Installation of Ceramic Tile" that are referenced in TCNA installation methods, specified in tile installation schedules, and apply to types of setting and grouting materials used.

- B. Extend tile work into recesses and under or behind equipment and fixtures to form complete covering without interruptions unless otherwise indicated. Terminate work neatly at obstructions, edges, and corners without disrupting pattern or joint alignments.

- C. Accurately form intersections and returns. Perform cutting and drilling of tile without marring visible surfaces. Carefully grind cut edges of tile abutting trim, finish, or built-in items for straight aligned joints. Fit tile closely to electrical outlets, piping, fixtures, and other penetrations so plates, collars, or covers overlap tile.
- D. Where accent tile differs in thickness from field tile, vary setting-bed thickness so that tiles are flush.
- E. Jointing Pattern: Lay tile in grid pattern unless otherwise indicated. Lay out tile work and center tile fields in both directions in each space or on each wall area. Lay out tile work to minimize the use of pieces that are less than half of a tile. Provide uniform joint widths unless otherwise indicated.
 - 1. For tile mounted in sheets, make joints between tile sheets same width as joints within tile sheets so joints between sheets are not apparent in finished work.
- F. Joint Widths: Unless otherwise indicated, install tile with the following joint widths:
 - 1. Miniature Mosaic Glass Tile: 1/8 inch.
- G. Metal Edge Strips: Install at locations indicated.
- H. Grout Sealer: Apply grout sealer to grout joints according to grout-sealer manufacturer's written instructions. As soon as grout sealer has penetrated grout joints, remove excess sealer and sealer from tile faces by wiping with soft cloth.

3.5 STONE TILE INSTALLATION

- A. Comply with TCNA's "Handbook for Ceramic, Glass, and Stone Tile Installation" for TCNA installation methods specified in stone tile installation schedules. Comply with parts of the ANSI A108 series "Specifications for Installation of Ceramic Tile" that are referenced in TCNA installation methods specified in stone tile installation schedules, and apply to types of setting and grouting materials used.
 - 1. For the following installations, follow procedures in the ANSI A108 series of tile installation standards for providing 95 percent mortar coverage:
 - a. Stone tile floors in wet areas.
- B. Extend stone tile work into recesses and under or behind equipment and fixtures to form complete covering without interruptions unless otherwise indicated. Terminate work neatly at obstructions, edges, and corners without disrupting pattern or joint alignments.
- C. Accurately form intersections and returns. Perform cutting and drilling of stone tile without marring visible surfaces. Carefully grind cut edges of stone tile abutting trim, finish, or built-in items for straight aligned joints. Fit stone tile closely to electrical outlets, piping, fixtures, and other penetrations so plates, collars, or covers overlap stone tile.

- D. Finish cut stone tile edges that will not be concealed by other construction by grinding and honing cut surfaces.
- E. Lay out stone tile wainscots to dimensions indicated or to next full tile beyond dimensions indicated.
- F. Mix stone tiles to achieve a uniformly random distribution of color shadings and patterns.
- G. Expansion Joints: Provide expansion joints and other sealant-filled joints, including control, contraction, and isolation joints, where indicated. Form joints during installation of setting materials, mortar beds, and stone tile. Do not saw-cut joints after installing stone tiles.
 - 1. Where joints occur in concrete substrates, locate joints in stone tile surfaces directly above them.
- H. Metal Edge Strips: Install at all flooring transitions.

3.6 CRACK ISOLATION MEMBRANE INSTALLATION

- A. Install crack isolation membrane to comply with ANSI A108.17 and manufacturer's written instructions to produce membrane of uniform thickness that is bonded securely to substrate.
- B. Allow crack isolation membrane to cure before installing tile or setting materials over it.

3.7 ADJUSTING AND CLEANING

- A. Remove and replace tile that is damaged or that does not match adjoining tile. Provide new matching units, installed as specified and in a manner to eliminate evidence of replacement.
- B. Cleaning: On completion of placement and grouting, clean all ceramic tile surfaces so they are free of foreign matter.
 - 1. Remove grout residue from tile as soon as possible.
 - 2. Clean grout smears and haze from tile according to tile and grout manufacturer's written instructions but no sooner than 10 days after installation. Use only cleaners recommended by tile and grout manufacturers and only after determining that cleaners are safe to use by testing on samples of tile and other surfaces to be cleaned. Protect metal surfaces and plumbing fixtures from effects of cleaning. Flush surfaces with clean water before and after cleaning.

3.8 PROTECTION

- A. Protect installed tile work with kraft paper or other heavy covering during construction period to prevent staining, damage, and wear. If recommended by tile manufacturer, apply coat of neutral protective cleaner to completed tile walls and floors.

- B. Prohibit foot and wheel traffic from tiled floors for at least seven days after grouting is completed.
- C. Before final inspection, remove protective coverings and rinse neutral protective cleaner from tile surfaces.

END OF SECTION 093011

PART 1 - SECTION 102113.14 – STAINLESS-STEEL TOILET COMPARTMENTS GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

- 1. Stainless steel toilet compartments configured as toilet enclosures and urinal screens.

B. Related Requirements:

- 1. Section 061053 "Miscellaneous Rough Carpentry" for blocking and overhead support of floor-and-ceiling-anchored compartments
- 2. Section 102800 "Toilet, Bath, and Laundry Accessories" for toilet tissue dispensers, grab bars, purse shelves, and similar accessories mounted on toilet compartments.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

- 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for toilet compartments.

B. Sustainable Design Submittals:

C. Shop Drawings: For toilet compartments.

- 1. Include plans, elevations, sections, details, and attachment details.
- 2. Show locations of cutouts for compartment-mounted toilet accessories.
- 3. Show locations of reinforcements for compartment-mounted grab bars and locations of blocking for surface-mounted toilet accessories.
- 4. Show locations of centerlines of toilet fixtures.
- 5. Show locations of floor drains.
- 6. Show ceiling grid, ceiling-mounted items, and overhead support or bracing locations.

D. Samples for Initial Selection: For each type of toilet compartment material indicated.

1. Include Samples of hardware and accessories involving material and color selection.
- E. Samples for Verification: For the following products, in manufacturer's standard sizes unless otherwise indicated:
 1. Each type of material, color, and finish required for toilet compartments, prepared on 6-inch- (152-mm-) square Samples of same thickness and material indicated for Work.
 2. Each type of hardware and accessory.
- F. Product Schedule: For toilet compartments, prepared by or under the supervision of supplier, detailing location and selected colors for toilet compartment material.

1.4 INFORMATIONAL SUBMITTALS

- A. Product Certificates: For each type of toilet compartment.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For toilet compartments to include in maintenance manuals.

1.6 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 1. Door Hinges: Four hinge(s) with associated fasteners.
 2. Latch and Keeper: Four latch(es) and keeper(s) with associated fasteners.
 3. Door Bumper: Four door bumper(s) with associated fasteners.
 4. Door Pull: Four door pull(s) with associated fasteners.
 5. Fasteners: Ten fasteners of each size and type.

1.7 PROJECT CONDITIONS

- A. Field Measurements: Verify actual locations of toilet fixtures, walls, columns, ceilings, and other construction contiguous with toilet compartments by field measurements before fabrication..

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with applicable provisions in ICC A117.1 for toilet compartments designated as accessible.

2.2 STAINLESS STEEL TOILET COMPARTMENTS 102101

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
1. Bradley Corporation.
 2. Global Partitions Corp., an ASI Group Company.
 3. ASI Group Accurate Partitions.
- B. Toilet-Enclosure Style: Overhead braced and Floor and ceiling anchored.
- C. Urinal-Screen Style: Wall hung flat panel.
- D. Door, Panel, and Pilaster Construction: Seamless, metal facing sheets pressure laminated to core material; with continuous, interlocking molding strip or lapped-and-formed edge closures; corners secured by welding or clips and exposed welds ground smooth. Exposed surfaces shall be free of pitting, seam marks, roller marks, stains, discolorations, telegraphing of core material, or other imperfections.
1. Core Material: Manufacturer's standard sound-deadening honeycomb of resin-impregnated kraft paper in thickness required to provide finished thickness of 1 inch (25 mm) for doors and panels and 1-1/4 inches (32 mm) for pilasters.
 2. Grab-Bar Reinforcement: Provide concealed internal reinforcement for grab bars mounted on units of size and material adequate for panel to withstand applied downward load on grab bar of at least 250 lbf (1112 N), when tested according to ASTM F446, without deformation of panel.
 3. Tapping Reinforcement: Provide concealed reinforcement for tapping (threading) at locations where machine screws are used for attaching items to units.
- E. Urinal-Screen Construction:
1. Flat-Panel Urinal Screen: Matching panel construction.
- F. Facing Sheets and Closures: Stainless-steel sheet of nominal thicknesses as follows:
1. Pilasters, Braced at Both Ends: Manufacturer's standard thickness, but not less than 0.038 inch (0.95 mm).
 2. Pilasters, Unbraced at One End: Manufacturer's standard thickness, but not less than 0.050 inch (1.27 mm).
 3. Panels: Manufacturer's standard thickness, but not less than 0.031 inch (0.79 mm)
 4. Doors: Manufacturer's standard thickness, but not less than 0.031 inch (0.79 mm).
 5. Flat-Panel Urinal Screens: Thickness matching the panels.
- G. Pilaster Shoes and Sleeves (Caps): Stainless steel sheet, not less than 0.031-inch (0.79-mm) nominal thickness and 3 inches (76 mm) high, finished to match hardware.
- H. Brackets (Fittings):

1. Stirrup Type: Ear or U-brackets; stainless steel.
 2. Full-Height (Continuous) Type: Manufacturer's standard design; stainless steel.
- I. Stainless Steel Finish: ASTM A480/A480M No. 4 bright, directional polish exposed faces. Protect exposed surfaces from damage by application of strippable, temporary protective covering before shipment.

2.3 HARDWARE AND ACCESSORIES

- A. Hardware and Accessories: Manufacturer's standard operating hardware and accessories.
1. Material: Stainless steel.
 2. Hinges: Manufacturer's standard paired, self-closing type that can be adjusted to hold doors open at any angle up to 90 degrees, allowing emergency access by lifting door.
 3. Latch and Keeper: Manufacturer's standard surface-mounted latch unit designed for emergency access and with combination rubber-faced door strike and keeper. Provide units that comply with regulatory requirements for accessibility at compartments designated as accessible.
 4. Coat Hook: Manufacturer's standard combination hook and rubber-tipped bumper, sized to prevent in-swinging door from hitting compartment-mounted accessories.
 5. Door Bumper: Manufacturer's standard rubber-tipped bumper at out-swinging doors
 6. Door Pull: Manufacturer's standard unit at out-swinging doors that complies with regulatory requirements for accessibility. Provide units on both sides of doors at compartments designated as accessible.
- B. Hardware and Accessories: Manufacturer's heavy-duty operating hardware and accessories.
1. Hinges: Manufacturer's minimum 0.062-inch- (1.59-mm-) thick stainless steel paired, self-closing type that can be adjusted to hold doors open at any angle up to 90 degrees, allowing emergency access by lifting door. Mount with through-bolts.
 2. Latch and Keeper: Manufacturer's heavy-duty surface-mounted cast-stainless steel latch unit designed to resist damage due to slamming, with combination rubber-faced door strike and keeper, and with provision for emergency access. Provide units that comply with regulatory requirements for accessibility at compartments designated as accessible. Mount with through-bolts.
 3. Coat Hook: Manufacturer's heavy-duty combination cast-stainless steel hook and rubber-tipped bumper, sized to prevent in-swinging door from hitting compartment-mounted accessories. Mount with through-bolts.
 4. Door Bumper: Manufacturer's heavy-duty rubber-tipped cast-stainless steel bumper at out-swinging doors[and entrance-screen doors]. Mount with through-bolts.
 5. Door Pull: Manufacturer's heavy-duty cast-stainless steel pull at out-swinging doors that complies with regulatory requirements for accessibility. Provide units on both sides of doors at compartments designated as accessible. Mount with through-bolts.
- C. Overhead Bracing: Manufacturer's standard continuous, extruded-aluminum head rail with antigrip profile and in manufacturer's standard finish.

Revise "Anchorages and Fasteners" Paragraph below to suit Project.

- D. Anchorages and Fasteners: Manufacturer's standard exposed fasteners of stainless steel, finished to match the items they are securing, with theft-resistant-type heads. Provide sex-type bolts for through-bolt applications. For concealed anchors, use stainless steel, hot-dip galvanized-steel, or other rust-resistant, protective-coated steel anchors compatible with related materials.

2.4 MATERIALS

In this article, retain only materials that are referenced in other articles under specific units and accessories required.

- A. Aluminum Castings: ASTM B26/B26M.
- B. Aluminum Extrusions: ASTM B221 (ASTM B221M).
- C. Stainless Steel Sheet: ASTM A240/A240M or ASTM A666, Type 304, stretcher-leveled standard of flatness.
- D. Stainless Steel Castings: ASTM A743/A743M.

2.5 FABRICATION

- A. Fabrication, General: Fabricate toilet compartment components to sizes indicated. Coordinate requirements and provide cutouts for through-partition toilet accessories and solid blocking within panel where required for attachment of toilet accessories.
- B. Overhead-Braced Units: Provide manufacturer's standard corrosion-resistant supports, leveling mechanism, and anchors at pilasters to suit floor conditions. Provide shoes at pilasters to conceal supports and leveling mechanism.
- C. Floor-Anchored Units: Provide manufacturer's standard corrosion-resistant anchoring assemblies with leveling adjustment nuts at pilasters for structural connection to floor. Provide shoes at pilasters to conceal anchorage.
- D. Ceiling-Hung Units: Provide manufacturer's standard corrosion-resistant anchoring assemblies with leveling adjustment nuts at pilasters for connection to structural support above finished ceiling. Provide assemblies that support pilasters from structure without transmitting load to finished ceiling. Provide sleeves (caps) at tops of pilasters to conceal anchorage.
- E. Floor-and-Ceiling-Anchored Units: Provide manufacturer's standard corrosion-resistant anchoring assemblies with leveling adjustment nuts at tops and bottoms of pilasters. Provide shoes and sleeves (caps) at pilasters to conceal anchorage.
- F. Door Size and Swings: Unless otherwise indicated, provide 24-inch- (610-mm-) wide in-swinging doors for standard toilet compartments and 36-inch- (914-mm-) wide out-swinging

doors with a minimum 32-inch- (813-mm-) wide clear opening for compartments designated as accessible.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for fastening, support, alignment, operating clearances, and other conditions affecting performance of the Work.
 - 1. Confirm location and adequacy of blocking and supports required for installation.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. General: Comply with manufacturer's written installation instructions. Install units rigid, straight, level, and plumb. Secure units in position with manufacturer's recommended anchoring devices.
 - 1. Maximum Clearances:
 - a. Pilasters and Panels: 1/2 inch (13 mm).
 - b. Panels and Walls: 1 inch (25 mm).
 - 2. Stirrup Brackets: Secure panels to walls and to pilasters with no fewer than three brackets attached at midpoint and near top and bottom of panel.
 - a. Locate wall brackets so holes for wall anchors occur in masonry or tile joints.
 - b. Align brackets at pilasters with brackets at walls.
 - 3. Full-Height (Continuous) Brackets: Secure panels to walls and to pilasters with full-height brackets.
 - a. Locate bracket fasteners so holes for wall anchors occur in masonry or tile joints.
 - b. Align brackets at pilasters with brackets at walls.
- B. Overhead-Braced Units: Secure pilasters to floor and level, plumb, and tighten. Set pilasters with anchors penetrating not less than 1-3/4 inches (44 mm) into structural floor unless otherwise indicated in manufacturer's written instructions. Secure continuous head rail to each pilaster with no fewer than two fasteners. Hang doors to align tops of doors with tops of panels, and adjust so tops of doors are parallel with overhead brace when doors are in closed position.
- C. Floor-Anchored Units: Set pilasters with anchors penetrating not less than 2 inches (51 mm) into structural floor unless otherwise indicated in manufacturer's written instructions. Level,

plumb, and tighten pilasters. Hang doors and adjust so tops of doors are level with tops of pilasters when doors are in closed position.

- D. Ceiling-Hung Units: Secure pilasters to supporting structure and level, plumb, and tighten. Hang doors and adjust so bottoms of doors are level with bottoms of pilasters when doors are in closed position.
- E. Floor-and-Ceiling-Anchored Units: Secure pilasters to supporting construction and level, plumb, and tighten. Hang doors and adjust so doors are level and aligned with panels when doors are in closed position.
- F. Urinal Screens: Attach with anchoring devices to suit supporting structure. Set units level and plumb, rigid, and secured to resist lateral impact.

3.3 ADJUSTING

- A. Hardware Adjustment: Adjust and lubricate hardware according to hardware manufacturer's written instructions for proper operation. Set hinges on in-swinging doors to hold doors open approximately 30 degrees from closed position when unlatched. Set hinges on out-swinging doorstop return doors to fully closed position.

END OF SECTION 102113.14