ADDENDUM NO. 02

PROJECT: FAIRFIELD COUNTY AUDITOR’S OFFICE
108 North High Street
Lancaster, Ohio 43130

TO: All Prospective Bidders and others to whom Plans and Specifications for the above referenced Project have been issued.

OWNER: FAIRFIELD COUNTY COMMISSIONERS
210 East Main Street
Lancaster, Ohio 43130

ARCHITECT: DLZ OHIO, Inc.
6121 Huntly Road
Columbus, Ohio 43229
DLZ Project Number: 1821-7001-50

DATE: December 27, 2018

The items included in this Addendum are to become a part of the original Contract Documents including Drawings and Project Manual dated December 6, 2018 as if included herein. Only these items are to be altered. The remainder of the original Drawings and Project Manual remain valid in their entirety. Bidders must acknowledge receipt of this Addendum in the space provided on the Proposal Form. Failure to do so may subject the Bidder to disqualification.

PROJECT MANUAL

ITEM NO. 1. SECTION 08 14 16 – FLUSH WOOD DOORS
   a. Specification section added.

ITEM NO. 2. SECTION 09 30 00 – TILE
   a. Specification section added.

ITEM NO. 3. SECTION 09 91 23 – PAINTING
   a. Revised 3.8 - Painting Schedule

DRAWINGS

ITEM NO. 4. DRAWING AD2.1 – REMOVAL PLANS
   a. Revisions to 2/AD2.1 showing temporary work required for new foundations within the existing building footprint.
ITEM NO. 5. DRAWING A2.1 – FIRST FLOOR INSTALLATION PLAN
   a. Revisions to 1 & 2/A2.1 showing temporary work required for new foundations within the existing building footprint.
   b. Revised column location detailed at 2/A3.2

ITEM NO. 6. DRAWING A3.1 – ROOM FINISH & PARTITION SCHEDULES
   a. Revised Abbreviation List and associated finishes

ITEM NO. 7. DRAWING A3.2 – DOOR & WINDOW DETAILS
   a. Revised column location at detail 2/A3.2
   b. Revised note for expansion joint material

ITEM NO. 8. DRAWING A7.1 – WALL SECTIONS
   a. Revised base condition at Wall Section 4/A7.1

ITEM NO. 9. DRAWING A7.2 – SECTION DETAILS
   a. Revised base condition at Wall Base Detail 5/A7.2
   b. Revised flooring condition at Section 14/A7.2
   c. Revised size of Installation Keynotes to fit on page

ITEM NO. 10. DRAWING A9.1 – INTERIOR ELEVATIONS
   a. Revised Restroom Elevations 1 & 2/A9.1

ITEM NO. 11. DRAWING A12.1 – ENLARGED STAIR PLANS, SECTIONS, & DETAILS
   a. Added detail for Exterior Guardrail – 12/A12.1
ATTACHMENTS:

PROJECT MANUAL

- SECTION 08 14 16 – FLUSH WOOD DOORS
- SECTION 09 30 00 – TILE
- SECTION 09 91 23 - PAINTING

DRAWINGS

- DRAWING AD2.1 – REMOVAL PLANS
- DRAWING A2.1 – FIRST FLOOR INSTALLATION PLAN
- DRAWING A3.1 – ROOM FINISH & PARTITION SCHEDULES
- DRAWING A3.2 – DOOR & WINDOW DETAILS
- DRAWING A7.1 – WALL SECTIONS
- DRAWING A7.2 – SECTION DETAILS
- DRAWING A9.1 – INTERIOR ELEVATIONS
- DRAWING A12.1 – ENLARGED STAIR PLANS, SECTIONS, & DETAILS

PREBID MEETING

- PREBID MEETING ATTENDANCE LIST

END OF ADDENDUM NO. 01
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. Solid-core five-ply, doors with wood-veneer faces.

B. Related Requirements:

1. Section 081113 “Hollow Metal Door and Frames” for wood doors in hollow metal frames.

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of door. Include details of core and edge construction and trim for openings. Include factory-finishing specifications.

B. Shop Drawings: Indicate location, size, and hand of each door; elevation of each kind of door; construction details not covered in Product Data; and the following:

1. Dimensions and locations of blocking.
2. Dimensions and locations of mortises and holes for hardware.
3. Dimensions and locations of cutouts.
4. Undercuts.
5. Requirements for veneer matching.
6. Doors to be factory finished and finish requirements.
7. Fire-protection ratings for fire-rated doors.

C. Samples for Verification:
1. Factory finishes applied to actual door face materials, approximately 8 by 10-inches, for each material and finish. For each wood species and transparent finish, provide set of three Samples showing typical range of color and grain to be expected in finished Work.

2. Corner sections of doors, approximately 8 by 10-inches, with door faces and edges representing actual materials to be used.
   a. Provide Samples for each species of veneer and solid lumber required.
   b. Provide Samples for each color, texture, and pattern of plastic laminate required.
   c. Finish veneer-faced door Samples with same materials proposed for factory-finished doors.

1.5 INFORMATIONAL SUBMITTALS

A. Sample Warranty: For special warranty.

B. Quality Standard Compliance Certificates: AWI Quality Certification Program certificates.

1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications: A qualified manufacturer that is certified for chain of custody by an FSC-accredited certification body.

B. LEED Requirements:
   1. Refer to Section 01 81 13 LEED v2009 REQUIREMENTS for additional contract compliance requirements, including but not limited to, performance and submittal requirements that may apply to any product herein specified.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Comply with requirements of referenced standard and manufacturer’s written instructions.

B. Package doors individually in plastic bags or cardboard cartons and wrap bundles of doors in plastic sheeting.

C. Mark each door on top and bottom rail with opening number used on Shop Drawings.

1.8 FIELD CONDITIONS

A. Environmental Limitations: Do not deliver or install doors until spaces are enclosed and weathertight, wet work in spaces is complete and dry, and HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during remainder of construction period.

B. Environmental Limitations: Do not deliver or install doors until spaces are enclosed and weathertight, wet work in spaces is complete and dry, and HVAC system is operating and
maintaining temperature between 60 and 90 deg F and relative humidity between 25 and 55 percent during remainder of construction period.

1.9 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace doors that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:
   a. Warping (bow, cup, or twist) more than 1/4-inch in a 42-by-84-inch section.
   b. Telegraphing of core construction in face veneers exceeding 0.01-inch in a 3-inch span.

2. Warranty shall also include installation and finishing that may be required due to repair or replacement of defective doors.


PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Algoma Hardwoods, Inc.
2. Eggers Industries.
3. Graham Wood Doors; ASSA ABLOY Group company.
5. Marshfield DoorSystems, Inc.
6. VT Industries Inc.

B. Source Limitations: Obtain flush wood doors indicated to be blueprint matched with paneling and wood paneling from single manufacturer.

2.2 FLUSH WOOD DOORS, GENERAL

A. Quality Standard: In addition to requirements specified, comply with premium grade WDMA I.S.1-A, "Architectural Wood Flush Doors."

1. Provide AWI Quality Certification or WI Certified Compliance Labels indicating that doors comply with requirements of grades specified.
2. Contract Documents contain selections chosen from options in quality standard and additional requirements beyond those of quality standard. Comply with those selections and requirements in addition to quality standard.
B. Regional Materials: Wood doors shall be manufactured within 500 miles of Project site from materials that have been extracted, harvested, or recovered, as well as manufactured, within 500 miles of Project site.

C. Certified Wood: Wood doors shall be certified as "FSC Pure" or "FSC Mixed Credit" according to FSC STD-01-00 and FSC STD-40-004.

D. WDMA I.S.1-A Performance Grade: Extra Heavy Duty

E. WDMA I.S.1-A Performance Grade:

F. Particleboard-Core Doors:
   2. Blocking: Provide wood blocking in particleboard-core doors as follows:
      a. 5-inch top-rail blocking, in doors indicated to have closers.
      b. 5-inch bottom-rail blocking, in exterior doors and doors indicated to have kick, mop, or armor plates.

2.3 VENEER-FACED DOORS FOR TRANSPARENT FINISH

A. Interior Solid-Core Doors:
   1. Grade: Premium, with Grade AA faces
   2. Species: Select white birch.
   3. Cut: Plain sliced
   5. Assembly of Veneer Leaves on Door Faces: Center-balance match.
   6. Room Match: Match door faces within each separate room or area of building.
   7. Exposed Vertical and Top Edges: Matching hardwood factory finished
   8. Core: Particleboard
   9. Construction: Five plies. Stiles and rails are bonded to core; then entire unit is abrasive planed before veneering.

2.4 FABRICATION

A. Factory fit doors to suit frame-opening sizes indicated. Comply with clearance requirements of referenced quality standard for fitting unless otherwise indicated.

   1. Comply with NFPA 80 requirements for fire-rated doors.
B. Factory machine doors for hardware that is not surface applied. Locate hardware to comply with DHI-WDHS-3. Comply with final hardware schedules, door frame Shop Drawings, BHMA-156.115-W, and hardware templates.

1. Coordinate with hardware mortises in metal frames to verify dimensions and alignment before factory machining.
2. Metal Astragals: Factory machine astragals and formed-steel edges for hardware for pairs of fire-rated doors.

C. Openings: Factory cut and trim openings through doors.

1. Light Openings: Trim openings with moldings of material and profile indicated.
2. Glazing: Factory install glazing in doors indicated to be factory finished. Comply with applicable requirements in Section 088000 "Glazing."

2.5 FACTORY FINISHING

A. General: Comply with referenced quality standard for factory finishing. Complete fabrication, including fitting doors for openings and machining for hardware that is not surface applied, before finishing.

1. Finish faces, all four edges, edges of cutouts, and mortises. Stains and fillers may be omitted on top and bottom edges, edges of cutouts, and mortises.

B. Factory finish doors.

C. Transparent Finish:

1. Grade: Premium.
2. Finish: WDMA TR-8 UV cured urethane
3. Staining: As selected by Architect from manufacturer's full range.
4. Effect: Filled finish
5. Sheen: Satin.
6. Top and Bottom Rails: Factory sealed.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine doors and installed door frames, with Installer present, before hanging doors.

1. Verify that installed frames comply with indicated requirements for type, size, location, and swing characteristics and have been installed with level heads and plumb jambs.
2. Reject doors with defects.
B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Hardware: For installation, see Section 087100 "Door Hardware."

B. Allow doors to become acclimated to building temperature and relative humidity for a minimum of 24 hours before installation.

C. Installation Instructions: Install doors to comply with manufacturer's written instructions and referenced quality standard, and as indicated.

1. Install fire-rated doors according to NFPA 80.
2. Install smoke- and draft-control doors according to NFPA 105.

D. Job-Fitted Doors: Align and fit doors in frames with uniform clearances and bevels as indicated below; do not trim stiles and rails more than limits set by manufacturer or permitted for fire-rated doors. Machine doors for hardware. Seal edges of doors, edges of cutouts, and mortises after fitting and machining.

1. Clearances: Provide 1/8-inch at heads, jambs, and between pairs of doors. Provide 1/8-inch from bottom of door to top of decorative floor finish or covering unless otherwise indicated. Where threshold is shown, or scheduled, provide 1/4-inch from bottom of door to top of threshold unless otherwise indicated.
   a. Comply with NFPA 80 for fire-rated doors.
   b. Bevel non-fire-rated doors 1/8-inch in 2-inches at lock and hinge edges.

2. Bevel fire-rated doors 1/8-inch in 2-inches at lock edge; trim stiles and rails only to extent permitted by labeling agency.

E. Factory-Fitted Doors: Align in frames for uniform clearance at each edge.

F. Factory-Finished Doors: Restore finish before installation if fitting or machining is required at Project site.

3.3 ADJUSTING

A. Operation: Rehang or replace doors that do not swing or operate freely.

B. Finished Doors: Replace doors that are damaged or that do not comply with requirements. Doors may be repaired or refinished if Work complies with requirements and shows no evidence of repair or refinishing.

END OF SECTION 081416

FLUSH WOOD DOORS
SECTION 093000 – TILE

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 the Section.

1.2 SUMMARY
A. Furnish labor, materials, tools, equipment, and services for Tile, as indicated, in accordance with provisions of Contract Documents.
B. Completely coordinate with work of other trades.

1.3 QUALITY ASSURANCE
A. Manufacturer Qualifications:
   1. Minimum ten (10) years experience in manufacture of tile, setting and grout materials.

B. Installer Qualifications:
   1. Specializing in tile work having minimum of five (5) years successful documented experience with work comparable to that required for this Project.

C. Single Source Responsibility:
   1. Obtain each type and color tile material required from single source.
   2. Provide compatible materials for tile system.

D. Certifications:
   1. Submit Master Grade Certificate for each type of ceramic, quarry, and paver tile in accordance with requirements of ANSI A137.1.
   2. Submit manufacturer's certifications that mortars, adhesives, and grouts are suitable for intended use.

E. Tile Council of North America (TCNA):

F. Ceramic Tile Institute of America (CTIOA).

G. ASTM International (ASTM):
   1. ASTM C373 Water Absorption, Bulk Density, Apparent Porosity, and Apparent Specific Gravity of Fired Whiteware Products.
   2. ASTM C623 Young’s Modulus, Shear Modulus, and Poisson’s Ratio for Glass and Glass-Ceramics by Resonance.
   3. ASTM C627 Robinson Floor Test for Tile Service Level.
   6. ASTM E90 and ASTM E413 for STC (Sound Transmission Class).
7. ASTM E492 and ASTM E989 for IIC (Impact Insulation Class) – Sound Deadening Underlayments.

H. American National Standards Institute (ANSI):
   1. ANSI A108.5 Installation of Ceramic tile with Dry-Set Portland Cement or Latex-Portland Cement.
   2. ANSI A108.10 Installation of Grout in Tilework.
   3. ANSI A108.13 Installation of Membranes for Thin-Set Ceramic Tile.
   5. ANSI A118.1 Standard Dry-Set Cement Mortars.
   6. ANSI A118.3 Chemical Resistant, Water-Cleanable, Tile-Setting and Grouting Epoxy and Water-Cleanable Tile-Setting Epoxy Adhesive.
   7. ANSI A118.4 Modified Dry-Set Cement Mortar.
   8. ANSI A118.7 High Performance Cement Grouts.
   9. ANSI A118.10 Load-Bearing, Bonded Waterproofing Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation.
  10. ANSI A118.12 Crack Isolation Membranes for Thin-set Ceramic Tile and Dimension Stone Installation.
  11. ANSI A118.15 Improved Modified Dry-Set Cement Mortars.
  12. ANSI A136.1 Organic Adhesives for Installation of Ceramic Tile.
  13. ANSI A137.1 Ceramic Tile.

I. LEED Requirements:
   1. Refer to Section 01 81 13 LEED v2009 REQUIREMENTS for additional contract compliance requirements, including but not limited to, performance and submittal requirements that may apply to any product herein specified.

1.4 ACTION SUBMITTALS

A. Shop Drawings:
   1. Indicate tile layout, patterns, color arrangement, perimeter conditions, junctions with dissimilar materials, movement joints, thresholds, ceramic accessories, and setting methods and details.

B. Samples:
   1. Three full size samples of each tile specified in Drawing I-001 Interior Notes and Finish Legend.
   2. Grout: Submit manufacturer's full range of standard and designated color samples for each type for Architect's selection.
   3. Membrane: Submit 12 x 12 IN 300 x 300 MM sample of each type.
   4. Trim: Submit sample of each type and color.
   5. Transition and Edge Protection Profiles: Submit sample of each type and color.
   6. Edging and Finishing profiles: Submit sample of each type and color.

C. Project Information:
   1. Installation methods.
   2. Manufacturer's Certificate: For each shipment, type and composition of tile provide a Master Grade Certificate signed by manufacturer and installer certifying products meet or exceed specified requirements of ANSI A137.1-2012.

D. Contract Closeout Information:
1. Maintenance Data:
   a. Include recommended cleaning methods, cleaning materials, stain removal methods, and polishes and waxes.
   b. See Section 01 78 23.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Ceramic Tile (CT):
   1. Basis of Design: Stonepeak Ceramics or comparable product by one of the following:
      a. Florida tile
      b. Crossville Tile

B. Porcelain Tile (PT):
   1. Basis of Design: Stonepeak Ceramics or comparable product by one of the following:
      a. Florida Tile
      b. Crossville Tile

C. Accessories:
   1. Base:
      a. Schluter Systems LP.
   2. Option:
      a. Custom Building Products.

2.2 DESIGN CRITERIA

A. Ceramic Tile:
   1. Comply with ANSI A137.1 American National Standard Specifications for Ceramic Tile for types, compositions, and grades of tile indicated.
   2. Furnish tile complying with Standard Grade requirements unless otherwise indicated.
   3. ANSI Standard for Tile Installation Materials: Comply with ANSI standard referenced with products and materials indicated for setting and grouting.

B. Colors, Textures, and Patterns:
   1. Where manufacturer's standard products are indicated for tile, grout, and other products requiring selection of colors, surface textures, patterns, and other appearance characteristics, provide specific products or materials complying with following requirements:

C. Factory Mounting:
   1. Provide back face or edge mounted tile assemblies as standard with manufacturer unless another mounting method is indicated.
   2. Do not use back mounted or edge mounted tile assemblies for swimming pools, exterior applications or wet areas.

D. Grout Release:
1. Factory applied temporary protective coating.
2. Provide where indicated under tile type, protect exposed surfaces of tile against adherence of mortar and grout by pre-coating with a continuous film of petroleum paraffin wax, applied hot.
3. Do not coat unexposed tile surfaces.

2.3 MATERIALS

A. **CTW-1**: Ceramic Wall Tile:
   1. Grade: ANSI A137.1; 5.0 to 10.0 PCT water absorption.
   2. Size: 12 x 24
   3. Edge: Cushioned.
   5. Style/Pattern, Color: Dymo Stripe White Glossy.
   6. Grout thickness: As recommended by manufacturer.

B. **PFT-1**: Porcelain Floor Tile:
   1. Grade: ANSI/A137.1.
   2. Size: 12 x 12 x 5/16 IN 300 x 300 x 8 MM (nominal).
   3. Shape: Square.
   4. Edge: Rectified
   5. Dynamic Coefficient of Friction: > 0.42 per ANSI 137.1.
   7. Grout thickness: 1/16 IN.
   8. **PTB-1**: Base: Matching cove base, 6 x 12 IN.

C. Thresholds:
   1. See Section E. Trim below.

D. Trim:
   1. Provide necessary caps, stops, returns, trimmers and other shapes to complete installation.
   2. Color and finish to match adjacent tile unless shown otherwise.

E. Mortar, Grout, and Adhesive Manufacturer:

F. Mortar – Thin Set:
   1. Portland Cement with Latex Additive:
      a. Latex additive and site mixed Cement mortar.
      b. Comply with ANSI-A118.4.
      c. Thin set additive shall have a VOC content no greater than 70 g/L.
      d. Acceptable Products:
         1) CustomCrete Latex Mortar Admix with site mixed mortar by Custom Building Products.
         2) Keracrete System consisting of KER 303 Latex mixed with 1:1 sand/cement blend by Mapei.

G. Unsanded Urethane Grout:
1. Description: Pre-mixed non-cementitious urethane, factory blended, antimicrobial, mildew resistant, non-sanded, grout; complying with ANSI A118.3-UG.

2. Color: To be selected.

3. Acceptable Products:
   a. QuartzLock2 by Bostik.

H. Waterproofing Membrane:
1. Description: Trowel applied elastomeric compound.
2. Acceptable Products:
   a. Mapelastic 315 by Mapei.
3. Accessories:
   a. Preformed fiberglass mesh coving, inside and outside corners, and drain fittings.
   b. Preformed expansion joint flashing.

I. Crack Isolation Membrane:
1. Description: Trowel applied elastomeric compound.
2. Acceptable Products:
   a. PRP 315 by Mapei.

J. Tile Backer Board:
1. Moisture-resistant treated gypsum core, glass mats both sides, and vinyl, water barrier coating on finished side.
   a. Conventional cement-board and green-board products are not acceptable.
2. Thickness: 1/2 IN 13 MM.
3. Mold-resistance score: 10 per ASTM D3273.
   a. Include Level 5 finish at non-tiled portions.
5. Optional Products:
   a. Fiberock Interior Panel, Aqua-Tough by USG.
   b. GlasRoc Tile Backer by Certainteed.
6. TBB wallboard scheduled in Fire Rated Walls:
   a. Approved fire resistive products with comparable moisture-resistance.

K. Accessories:
1. Fasteners: Corrosion resistant type required by board manufacturer for securing units.
2. Joint Reinforcement Tape: As recommended by board manufacturer.

L. Joint Backing:
1. Closed cell foam polyethylene.

M. Exp
1.

N. Corner Joints:
1. Extruded rigid coved wall corner, with integral perforated anchoring legs.
2. Floor leg height: As required to suit application.
3. Wall leg height: As required to suit application.
5. Schlüter - DILEX-HK

O. Corner Movement Joints:
   1. Roll formed stainless steel inside corner, cove-shaped 2-piece joint profile joined by soft thermoplastic rubber movement zone and with perforated anchoring.
   2. Floor leg height: As required to suit application.
   3. Wall leg height: As required to suit application.
   5. Acceptable Products:
      a. Schlüter - DILEX-HKW

P. Transition Joint Strips:
   1. Extruded aluminum transition strips; profile and height as indicated; with integral perforated anchoring leg for setting strip into setting material.
   2. Transition strip profile:
      a. Sloped, variable height: where adjacent flooring level is different than tile.
         1) Schluter-RENO-V.
      b. Flat, smooth profile: Where adjacent flooring level is same as tile.
         1) Schluter: 5/16 IN AE-80.
      c. Sloped, narrow profile: Where adjacent flooring level is lower than tile.
         1) Schlüter - RENO-U.
   3. Height:

Q. Decorative Wall Corner Trim:
   1. Wide profile, decorative outside wall corner trim, with integral perforated anchoring leg.
   2. Height: As required to suit application.
   3. Material:
      a. Aluminum.
   4. Acceptable Products:
      1) Schlüter – QUADEC

R. Edge and Transition Strips:
   1. Extruded aluminum, or roll-formed stainless steel edge strips, 1/8 IN 3 MM wide at top edge; height as indicated.
   2. Height: As required to suit application.
   3. Finish:
      a. Aluminum.
   4. Schlüter - SCHIENE AE

S. Grout Release Agents:
   1. Protect exposed surfaces of tile against adherence of mortar and grout.
   2. Compatible with tile, mortar and grout.
   3. Petroleum-Paraffin Wax:
      a. Fully refined, tasteless, odorless, containing at least 0.5 PCT oil with a melting point of 120 to 140 DEGF 49 to 60 DEGC per ASTM D87.
   4. Manufacturer’s standard proprietary liquid coating specially formulated and recommended for use as temporary protective coating for tile.
5. Grout Release agent shall have VOC content no greater than 100 g/L.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Comply with requirements of referenced standards and recommendations of material manufacturers for environmental conditions before, during, and after installation.

B. Verify concrete floor surfaces are suitable for tile installation.
   1. Firm, dry, clean and free of oily or waxy films, mortar and soil.
   2. Grounds, anchors, plugs, hangers, bucks, electrical and mechanical work in or behind tile installed.
   3. Coordinate installation with requirements of Section 07 16 04 Concrete Floor Moisture Testing, and Section 07 16 05 Water Vapor Emission Control System.
   4. Verify limits of moisture and alkalinity are within levels tolerated by Tile manufacturer and setting materials manufacturer.
   5. Verify areas to receive tile installed by thin bed method have wood float finish, are true within 1/4 IN in 10 FT 6 MM in 3 M and are pitched to drains where required.

C. Correct unsatisfactory conditions and proceed with installation only after substrate deficiencies have been corrected and surfaces are acceptable.

D. Start of work constitutes acceptance of surfaces, and waiver of claim that surfaces are unsuitable.

3.2 PREPARATION

A. Prepare surfaces in accordance with manufacturers’ instructions for setting materials or additives used.

B. Acid based cleaners are not permitted.

C. Completely remove curing compounds or other substances that would interfere with proper bond of setting materials.

D. Do not seal substrate unless required by manufacturer.

E. Prime substrate when required by manufacturer.

F. Factory Blending:
   1. Blend tile in factory and package accordingly so tile are uniform in color range as those throughout packaging and match approved samples.
   2. If not factory blended, return to manufacturer or blend tiles at project site before installing.

3.3 INSTALLATION

A. Tile Backer Board:
   1. Place and fasten with galvanized or resin coated gypsum board screws at 8 IN 200 MM OC in field of panel and 6 IN 150 MM OC at edges.
   2. Provide 1/4 IN 6 MM gap above floor or fixture lip for installation of flexible calking.
   3. Maintain manufacturer’s required space between board edges.
   4. Fill joints by applying tile setting material and joint reinforcement.
B. Membrane:
   1. Install membrane with products or methods approved in writing by membrane manufacturer.
   2. Flash membrane to cure prior to setting tile.
   3. Do not allow construction traffic on membrane.

C. Waterproofing:
   1. Install waterproofing in accordance with manufacturer’s instructions.
   2. Return waterproofing vertically at adjacent walls in accordance with manufacturer details, to minimum height of 4 IN 100 MM.
   3. Flood test waterproof membranes after fully cured.
   4. Field Quality Control water test when required.

D. Tile Installation, General:
   1. Install tile materials in accordance with ANSI A137.1-2012, ANSI and TCNA specifications, and TCNA Handbook for Ceramic Tile Installation, with exception of more stringent requirements of manufacturer or these Specifications.
   2. Cut and fit tile tight to penetrations, protrusions and vertical interruptions and seal.
      a. See Section 07 92 16.
   3. Form corners and bases neatly.
   4. Install ceramic cove base in accordance with TCNA “Flush” style.
      a. TCNA “Thin-Lip” style installation is not allowed.
   5. Work tile joints uniform in width, subject to variance in tolerance allowed in tile size.
   6. Make joint watertight, without voids, cracks, excess mortar, or grout.
   7. Prepare surface, fit, set, bond, grout and clean in accordance with applicable requirements of ANSI standards and Tile Council of North America.
   8. Where accent tiles are of a lesser thickness than surrounding field tiles, increase bedding thickness as required to achieve flush alignment between finished faces of accent tiles and adjacent field tiles.

E. Layout:
   1. Lay out work to pattern indicated so full tile or joint is centered on each wall.
      a. Lay out tile to minimize cutting and to avoid tile less than half size.
   2. Continue pattern through openings.
   3. For heights stated in feet and inches, use courses of full tile to produce nearest attainable heights without cutting tile.
   4. Align joints in tile in both directions.
   5. Align joints between wall, floor and base tile.
   6. Make joints between sheets of tile same width as joints within sheet.
   7. File edges of cut tile smooth and even.
   8. Cut and fit tile at penetrations through tile.
  10. Fit tile at outlets, piping and other penetrations so plates, collars, or covers overlap tile.
  11. Extend tile work into recesses and under or behind equipment and fixtures, to form complete covering without interruption, except as otherwise indicated.
  12. Accurately form intersections and returns.
13. Form internal corners and external corners square.

F. Thin Set Method, Floors and Walls:
1. Apply mortar or adhesive with notched trowel using scraping motion to work material into contact with surface to be covered.
   a. Maintain 90 PCT coverage on back of tile and fully bed corners.
2. Apply only as much mortar or adhesive as can be covered within time recommended by mortar or adhesive manufacturer.
3. When installing large tiles, ceramics or mosaics, trowel small quantity of mortar or adhesive onto back of each tile or sheet of tiles.
4. Set tiles in place and level surface of tile.
5. Align tile to show uniform joints and set until firm.
6. Clean excess mortar or adhesive from surface of tile while mortar is fresh.
7. Sound tile after setting. Replace hollow sounding tiles.

G. Grouting:
1. Allow tiles to set before grouting.
2. Install in accordance with grout manufacturer's recommendations and ANSI A108.10.
3. Clean excess grout from surface as work progresses.
4. Cure after grouting by covering with kraft or construction paper for 72 HRS.
5. Install sealant in vertical wall joints at interior corners.

H. Movement Joints:
1. Comply with TCNA EJ171.
2. Coordinate with Drawings.
3. Locate movement joints where indicated.
4. Where not indicated, locate movement joints directly over following substrate conditions:
   a. Changes in substrate material.
   b. Over control joints, expansion joints and seismic joints in substrate.
   c. Over construction joints in substrate.
   d. At junctures where floors meet walls and other restraining elements such as curbs, columns, bases, and wall corners.
   e. At other locations recommended by TCNA EJ171 Movement Joint requirements.
5. Locate additional movement joints per following:
   a. Exterior: 12 FT 3.66 m.
   b. Interior: 25 FT 7.6 m.
   c. Interior, where exposed to direct sunlight or moisture: 12 FT 3.66 m.
6. Joint Width: In accordance with TCNA EJ171.
7. Rake or cut control joints through setting bed to supporting slab or structure.
8. Maintain joints free of mortar.
9. Fill joints with self-leveling polyurethane sealant and backing material.
   a. See Section 07 92 16.
10. Provide sealant material at items penetrating tile work, unless otherwise indicated.
11. Apply sealant to junction of tile and dissimilar materials and junction of dissimilar planes.
a. Seal tile to outlets, piping and other penetrations.
12. Fill joints around water closets with white silicone sealant.
   a. See Section 07 92 16.
13. Use manufacturer’s expansion joint flashing when covering expansion joints with waterproof or crack isolation membranes.

I. Penetrating Sealer:
   1. Surface Preparation:
      a. Verify tile and grout are fully cured.
      b. Verify surfaces are dry, clean and free of waxes, sealers and finishes.
      c. Test product in obscure area to produce desirable results.
   2. Apply Penetrating Sealer to tiled surfaces, unless otherwise noted.
      a. Application of penetrating sealer is not necessary where epoxy grouts are used.
      b. Apply in accordance with Manufacturer’s instructions.
   3. Test after 2 HRS by applying drops of water on surface.
      a. If water penetrates, apply an additional coat of sealer.
   4. Remove visible residue within 60 minutes after application.

3.4 CLEANING
   A. Perform cleaning while mortar is fresh before hardening on surfaces.
   B. Wash tile diagonally across joints.
   C. Polish with clean dry cloth.
   D. Remove grout haze following recommendation of mortar additive manufacturer.
   E. Remove residual waxes or grout release agent, temporary protective coatings, by method recommended by coating manufacturer.
      1. Confirm acceptability with brick and grout manufacturer.
      2. Trap and remove coating to prevent it from clogging floor drains.

3.5 PROTECTION AND REPAIR
   A. Prohibit traffic on floor finish for 72 HRS after installation.
   B. Where temporary use of new floors is unavoidable, supply large, flat boards or plywood panels for walkways over kraft paper.
   C. Replace broken, cracked, chipped, stained, or damaged tile.

END OF SECTION 093000
SECTION 09 91 23 – PAINTING

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. This Section includes surface preparation and the application of paint systems of exposed exterior and interior items and surfaces, of the following substrates:
   1. Concrete.
   2. Concrete masonry units (CMU).
   3. Steel.

B. Surface preparation, priming, and finish coats specified in this Section are in addition to shop priming and surface treatment specified in other Sections.

C. Paint exposed surfaces, except where these Specifications indicate that the surface or material is not to be painted or is to remain natural. If an item or a surface is not specifically mentioned, paint the item or surface the same as similar adjacent materials or surfaces. If a color of finish is not indicated, Architect will select from standard colors and finishes available.

D. Do not paint prefinished items, concealed surfaces, finished metal surfaces, operating parts, and labels, unless noted otherwise.

E. Related Sections include the following:
   1. Division 09 Section "Material Finish Schedule" for additional product information and Basis-of-Design designations.

1.3 DEFINITIONS

A. General: Standard coating terms defined in ASTM D 16 apply to this Section.
   1. Flat refers to a lusterless or matte finish with a gloss range below 15 when measured at an 85-degree meter.
   2. Eggshell refers to low-sheen finish with a gloss range between 5 and 20 when measured at a 60-degree meter.
   3. Satin refers to low-sheen finish with a gloss range between 15 to 35 when measured at a 60-degree meter.
4. Semigloss refers to medium-sheen finish with a gloss range between 30 and 65 when measured at a 60-degree meter.
5. Full gloss refers to high-sheen finish with a gloss range more than 65 when measured at a 60-degree meter.

1.4 SUBMITTALS

A. Product Data: For each paint system indicated. Include block fillers and primers.
   1. Material List: An inclusive list of required coating materials. Indicate each material and cross-reference specific coating, finish system, and application. Identify each material by manufacturer's catalog number and general classification.
   2. Manufacturer's Information: Manufacturer's technical information, including label analysis and instructions for handling, storing, and applying each coating material.

B. Samples for Initial Selection: For each type of finish-coat material indicated.

C. Qualification Data: For Applicator.

1.5 QUALITY ASSURANCE

A. MPI Standards:
   1. Products: Complying with MPI standards indicated and listed in “MPI Approved Product List.”
   2. Preparation and Workmanship: Comply with requirements in “MPI Architectural Painting Specification Manual” for products and paint systems indicated.

B. Applicator Qualifications: A firm or individual experienced in applying paints and coatings similar in material, design, and extent to those indicated for this Project, whose work has resulted in applications with a record of successful in-service performance.
   1. Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and methods needed for proper performance of the work of this Section.

C. Volatile Organic Compound content of materials shall be compliant with requirements of the governmental agency having jurisdiction. Painting materials shall have identifying labels.

D. Paint Coordination:
   1. Provide finish coats which are compatible with the prime coats used.
   2. Provide barrier coats over incompatible primers or remove the primer and re-prime as required.
   3. Notify General Contractor, in writing, of anticipated problems in using the specified coating systems over prime coatings supplied under other sections.

E. Source Limitations: Obtain block fillers and primers for each coating system from the same manufacturer as the finish coats.
F. Benchmark Samples (Mockups): Provide a full-coat benchmark finish sample for each type of coating and substrate required, to verify preliminary selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution. Duplicate finish of approved sample Submittals.

1. Architect will select one room or surface to represent surfaces and conditions for application of each type of coating and substrate.
   a. Wall Surfaces: Provide samples on at least 100 sq. ft.
   b. Small Areas and Items: Architect will designate items or areas required.

2. Apply benchmark samples, according to requirements for the completed Work, after permanent lighting and other environmental services have been activated. Provide required sheen, color, and texture on each surface.
   a. After finishes are accepted, Architect will use the room or surface to evaluate coating systems of a similar nature.

3. Final approval of colors will be from benchmark samples.
   a. If preliminary color selections are not approved, apply additional benchmark samples of additional colors selected by Architect at no added cost to the Owner.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to Project site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label and the following information:

1. Product name or title of material.
2. Product description (generic classification or binder type).
3. Manufacturer's stock number and date of manufacture.
4. Contents by volume, for pigment and vehicle constituents.
5. Thinning instructions.
6. Application instructions.
7. Color name and number.
8. VOC content.

B. Store materials not in use in tightly covered containers in a well-ventilated area at a minimum ambient temperature of 45 deg F (7 deg C). Maintain storage containers in a clean condition, free of foreign materials and residue.

1. Protect from freezing. Keep storage area neat and orderly. Remove oily rags and waste daily.

1.7 PROJECT CONDITIONS
A. Apply waterborne paints only when temperatures of surfaces to be painted and surrounding air are between 50 and 90 deg F (10 and 32 deg C).

B. Apply solvent-thinned paints only when temperatures of surfaces to be painted and surrounding air are between 45 and 95 deg F (7 and 35 deg C).

C. Do not apply paint in snow, rain, fog, or mist; or when relative humidity exceeds 85 percent; or at temperatures less than 5 deg F (3 deg C) above the dew point; or to damp or wet surfaces.

1.8 EXTRA MATERIALS

A. Furnish extra paint materials from the same production run as the materials applied and in the quantities described below. Package with protective covering for storage and identify with labels describing contents. Deliver extra materials to Owner.

1. Quantity: Furnish Owner with an additional 5 percent, but not less than one gallon of each material, color, and sheen applied.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Basis-of-Design Products: Subject to compliance with requirements, provide the products listed in Section 091000 “Material Finish Schedule” or comparable products by one of the following:

1. Benjamin Moore & Co.
2. Duron, Inc.
3. ICI Paints.
5. PPG Architectural Finishes, Inc.

2.2 PAINT MATERIALS, GENERAL

A. Material Compatibility:
1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.

B. Material Quality: Provide manufacturer's best-quality paint material of the various coating types specified that are factory formulated and recommended by manufacturer for application
indicated. Paint-material containers not displaying manufacturer’s product identification will not be acceptable.

1. Proprietary Names: Use of manufacturer’s proprietary product names to designate colors or materials is not intended to imply that products named are required to be used to the exclusion of equivalent products of other manufacturers. Furnish manufacturer’s material data and certificates of performance for proposed substitutions.

C. Colors: Match colors indicated in Section 091000 “Material Finish Schedule”.

D. Chemical Components of Field-Applied Interior Paints and Coatings: Provide topcoat paints and anti-corrosive and anti-rust paints applied to ferrous metals that comply with the following chemical restrictions; these requirements do not apply to paints and coatings that are applied in a fabrication or finishing shop:
1. Aromatic Compounds: Paints and coatings shall not contain more than 1.0 percent by weight of total aromatic compounds (hydrocarbon compounds containing one or more benzene rings).
2. Restricted Components: Paints and coatings shall not contain any of the following:
   a. Acrolein.
   b. Acrylonitrile.
   c. Antimony.
   d. Benzene.
   e. Butyl benzyl phthalate.
   f. Cadmium.
   g. Di (2-ethylhexyl) phthalate.
   h. Di-n-butyl phthalate.
   i. Di-n-octyl phthalate.
   j. 1,2-dichlorobenzene.
   k. Diethyl phthalate.
   l. Dimethyl phthalate.
   m. Ethylbenzene.
   n. Formaldehyde.
   o. Hexavalent chromium.
   p. Isophorone.
   q. Lead.
   r. Mercury.
   s. Methyl ethyl ketone.
   t. Methyl isobutyl ketone.
   u. Methylene chloride.
   v. Naphthalene.
   w. Toluene (methylbenzene).
   x. 1,1,1-trichloroethane.
   y. Vinyl chloride.

PART 3 - EXECUTION
3.1 EXAMINATION

A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of work.

B. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.

C. Begin coating application only after unsatisfactory conditions have been corrected and surfaces are dry.
   1. Beginning coating application constitutes Contractor's acceptance of substrates and conditions.

D. Coordination of Work: Review other Sections in which primers are provided to ensure compatibility of the total system for various substrates. On request, furnish information on characteristics of finish materials to ensure use of compatible primers.
   1. Notify Architect about anticipated problems when using the materials specified over substrates primed by others.

E. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
   1. Concrete: 12 percent.
   2. Masonry: 12 percent.
   3. Gypsum Board: 12 percent.

3.2 PREPARATION

A. Comply with manufacturer’s written instructions and recommendations in “MPI Architectural Painting Specification Manual” applicable to substrates indicated.

B. General: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and similar items already installed that are not to be painted. If removal is impractical or impossible because of size or weight of the item, provide surface-applied protection before surface preparation and painting.
   1. After completing painting operations in each space or area, reinstall items removed using workers skilled in the trades involved.
   2. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.

C. Cleaning: Before applying paint or other surface treatments, clean substrates of substances that could impair bond of the various coatings. Remove oil and grease before cleaning.
   1. Schedule cleaning and painting so dust and other contaminants from the cleaning process will not fall on wet, newly painted surfaces.
2. Remove incompatible primers and reprime substrate with compatible primers as required to produce paint systems indicated.

D. Surface Preparation: Clean and prepare surfaces to be painted according to manufacturer's written instructions for each particular substrate condition and as specified. Refer also to the paint Schedule, Article 3.8.

1. Provide barrier coats over incompatible primers or remove and reprime.
2. Cementitious Materials: Prepare concrete, concrete unit masonry, cement plaster, and mineral-fiber-reinforced cement panel surfaces to be painted. Remove efflorescence, chalk, dust, dirt, grease, oils, and release agents. Roughen as required to remove glaze. If hardeners or sealers have been used to improve curing, use mechanical methods of surface preparation.
   a. Use abrasive blast-cleaning methods if recommended by paint manufacturer.
   b. Determine alkalinity and moisture content of surfaces by performing appropriate tests. If surfaces are sufficiently alkaline to cause the finish paint to blister and burn, correct this condition before application. Do not paint surfaces if moisture content exceeds that permitted in manufacturer's written instructions.

3. Concrete Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.

4. Concrete Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.

5. Ferrous Metals: Clean ungalvanized ferrous-metal surfaces that have not been shop coated; remove oil, grease, dirt, loose mill scale, and other foreign substances. Use solvent or mechanical cleaning methods that comply with SSPC's recommendations.
   a. Blast steel surfaces clean as recommended by paint system manufacturer and according to SSPC-SP 6.
   b. Treat bare and sandblasted or pickled clean metal with a metal treatment wash coat before priming.
   c. Touch up bare areas and shop-applied prime coats that have been damaged. Wire-brush, clean with solvents recommended by paint manufacturer, and touch up with same primer as the shop coat.

6. Steel Substrates: Remove rust and loose mill scale. Clean using methods recommended in writing by paint manufacturer.

E. Material Preparation: Mix and prepare paint materials according to manufacturer's written instructions.

1. Maintain containers used in mixing and applying paint in a clean condition, free of foreign materials and residue.
2. Stir material before application to produce a mixture of uniform density. Stir as required during application. Do not stir surface film into material. If necessary, remove surface film and strain material before using.
3. Use only thinners approved by paint manufacturer and only within recommended limits.

F. Tinting: Tint each undercoat a lighter shade to simplify identification of each coat when multiple coats of same material are applied. Tint undercoats to match the color of the finish coat, but provide sufficient differences in shade of undercoats to distinguish each separate coat.

3.3 APPLICATION

A. General: Apply paint according to manufacturer’s written instructions. Use applicators and techniques best suited for substrate and type of material being applied.

1. Paint colors, surface treatments, and finishes are indicated in the paint schedules.
2. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
3. Provide finish coats that are compatible with primers used.
4. The term "exposed surfaces" includes areas visible when permanent or built-in fixtures, grilles, convector covers, covers for finned-tube radiation, and similar components are in place. Extend coatings in these areas, as required, to maintain system integrity and provide desired protection.
5. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces. Before final installation of equipment, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
6. Paint interior surfaces of ducts with a flat, nonspecular black paint where visible through registers or grilles.
7. Paint back sides of access panels and removable or hinged covers to match exposed surfaces.
8. Finish exterior doors on tops, bottoms, and side edges the same as exterior faces.
9. Finish interior of wall and base cabinets and similar field-finished casework to match exterior.

B. Scheduling Painting: Apply first coat to surfaces that have been cleaned, pretreated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.

1. The number of coats and film thickness required are the same regardless of application method. Do not apply succeeding coats until previous coat has cured as recommended by manufacturer. If sanding is required to produce a smooth, even surface according to manufacturer's written instructions, sand between applications.
2. Omit primer over metal surfaces that have been shop primed and touchup painted.
3. If undercoats, stains, or other conditions show through final coat of paint, apply additional coats until paint film is of uniform finish, color, and appearance. Give special attention to ensure that edges, corners, crevices, welds, and exposed fasteners receive a dry film thickness equivalent to that of flat surfaces.
4. Allow sufficient time between successive coats to permit proper drying. Do not recoat surfaces until paint has dried to where it feels firm, and does not deform or feel sticky under moderate thumb pressure, and until application of another coat of paint does not cause undercoat to lift or lose adhesion.

C. Application Procedures: Apply paints and coatings by brush, roller, spray, or other applicators according to manufacturer’s written instructions.

1. Brushes: Use brushes best suited for type of material applied. Use brush of appropriate size for surface or item being painted.
2. Rollers: Use rollers of carpet, velvet-back, or high-pile sheep's wool as recommended by manufacturer for material and texture required.
3. Spray Equipment: Use airless spray equipment with orifice size as recommended by manufacturer for material and texture required.

D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

E. Minimum Coating Thickness: Apply paint materials no thinner than manufacturer’s recommended spreading rate to achieve dry film thickness indicated. Provide total dry film thickness of the entire system as recommended by manufacturer.

F. Mechanical and Electrical Work: Painting of mechanical and electrical work is limited to items exposed in equipment rooms and occupied spaces.

G. Block Fillers: Apply block fillers to concrete masonry block at a rate to ensure complete coverage with pores filled.

H. Prime Coats: Before applying finish coats, apply a prime coat, as recommended by manufacturer, to material that is required to be painted or finished and that has not been prime coated by others. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects due to insufficient sealing.

I. Pigmented (Opaque) Finishes: Completely cover surfaces as necessary to provide a smooth, opaque surface of uniform finish, color, appearance, and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections will not be acceptable.

J. Completed Work: Match approved samples for color, texture, and coverage. Remove, refinish, or repaint work not complying with requirements.

3.4 FIELD QUALITY CONTROL

A. Owner reserves the right to invoke the following test procedure at any time and as often as Owner deems necessary during the period when paint is being applied:
1. Owner may engage the services of a qualified testing agency to sample paint materials being used. Testing agency may perform tests for compliance with product requirements.

2. Testing may include verification of dry film thickness of applied paint systems.

3. Owner may direct Contractor to stop painting if test results show material being used does not comply with specified requirements. Contractor shall remove noncomplying paint from Project site, pay for testing, and repaint surfaces previously coated with the noncomplying paint. If necessary, Contractor may be required to remove noncomplying paint from previously painted surfaces if, on repainting with specified paint, the two coatings are incompatible.

3.5 CLEANING

A. Cleanup: At the end of each workday, remove empty cans, rags, rubbish, and other discarded paint materials from Project site.

   1. After completing painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing and scraping without scratching or damaging adjacent finished surfaces.

   2. After completion of work, remove all staging scaffolding and containers from site.

3.6 PROTECTION

A. Protect work of other trades, whether being painted or not, against damage from painting. Correct damage by cleaning, repairing or replacing, and repainting, as approved by Architect.

B. Provide "Wet Paint" signs to protect newly painted finishes. After completing painting operations, remove temporary protective wrappings provided by others to protect their work.

   1. After work of other trades is complete, touch up and restore damaged or defaced painted surfaces.

3.7 APPLICATION

A. All work shall be done by skilled mechanics in a manner applied so as to be free from sags, runs, crawls or other defects.

B. When materials are brush applied, apply evenly with clean brushes, best suited for the type of material being applied. When using a roller, use type of cover best suited for materials used and surface texture.
C. Thoroughly mix all paints, especially heavily pigmented paints, before application and at regular intervals during application to insure uniform distribution of pigment throughout application and consistent appearance and performance of finished surfaces.

D. Before applying succeeding coats, make sure primers and undercoats are dry and performing the function for which they are intended.

E. Hardware:
   1. Coordinate painting and finishing with carpenter’s work so that final finish is applied before final placement of finish hardware.
   2. Hardware already in place which needs to be removed to allow finishing will be responsibility of Contractor who installed hardware.

F. Verify with Architect all stopping and starting points for colors and finishes before work proceeds and paints are ordered.

G. Field finish all metals, including grilles, louvers and vents to match wall color or ceiling color on which they occur, unless otherwise noted in “Material Finish Schedule”.

H. “Exposed surfaces” means all areas visible when all permanent fixtures are in place in rooms or areas scheduled to be painted.

I. Fixtures, Covers, Grilles
   1. Coordinate painting and finishing work with that of other trades in order to complete painting of areas affected before final placement of fixtures, grilles and other finish covers.
   2. Removal or replacement of such items already installed to allow for proper finishing will be responsibility of Contractor who installed them.

3.8 PAINTING SCHEDULE

A. Gypsum Board Substrates:
   1. High-Performance Architectural Latex System (PT-1 & PT-2):
      a. Prime Coat: Primer sealer, latex, interior, MPI #50.
      c. Topcoat: Latex, interior, high performance architectural, (Gloss Level 3), MPI #139.

B. Galvanized-Metal Substrates:
   1. Urethane Alkyd Enamel over Metal Primer System (PT-3):
      b. Topcoat: 2 Coats Sherwin Williams Urethane Alkyd Enamel B54W00151 or approved equal.
      c. Color: T.B.D.
C. **Steel Substrates, Vertical (Hollow Metal Door/Window Frames):**

1. **Urethane Alkyd Enamel over Metal Primer System (PT-4):** MPI INT 5.1Q.
   a. **Surface Preparation for existing substrates to be repainted:** Refer to attached Exhibit 09 91 23B.
   b. **Prime Coat:** Sherwin Williams Kem-Bond High Solids Universal Metal Primer.
   c. **Topcoat:** 2 Coats Sherwin Williams Urethane Alkyd Enamel B54-150 or approved equal.
   d. **Color:** T.B.D.

D. **Exterior Trim - Architectural Plastic Substrates**

1. **Acrylic over Latex Primer (PT-5):**
   a. **Prime Coat:** Primer, PrepRite ProBlock Interior/Exterior Latex Primer/Sealer.
   b. **Topcoat:** Sher-Cryl HPA High Performance Acrylic Semi-Gloss Coating
GENERAL NOTES:

1. REMOVE EXISTING RETAINING WALL. SEE CIVIL.
2. REMOVE CONCRETE STEPS & LANDINGS. SEE CIVIL.
3. REMOVE STEEL & WOOD HANDRAIL & GUARDRAIL.
4. REMOVE FAUCET & FITTINGS. SEE PLUMBING. REMOVE SUPPORTS, LATTICE, AND ALL ASSOCIATED COMPONENTS.
5. REMOVE DOOR & CASING.
6. REMOVE WALL MOUNTS.
7. REMOVE GLASS DOORS AND ASSOCIATED INTERIOR/EXTERIOR TRIM.
8. REMOVE PORTION OF WALL AS REQUIRED FOR MECHANICAL.
9. REMOVE PORCH FLOOR AND ALL ASSOCIATED COMPONENTS.
10. REMOVE CASEWORK IN ENTIRETY.
11. REMOVE RADIANT HEATER. SEE MECHANICAL.
12. REMOVE DECK/FRAMING AND FOUNDATIONS. SEE STRUCTURAL.
13. REMOVE RAMP.
14. REMOVE STAIR TO LOWER LEVEL IN ENTIRETY.
15. REMOVE FLOOR, FRAMING, AND FOUNDATIONS. SEE STRUCTURAL.
16. REMOVE RAMP.
17. REMOVE FLOOR, FRAMING, AND FOUNDATIONS. SEE STRUCTURAL.
18. REMOVE CARPET AND ADHESIVE AS REQUIRED FOR FOR NEW WORK.
19. REMOVE STAIR TO LOWER LEVEL IN ENTIRETY.
20. REMOVE ROOF IN ENTIRETY.
21. REMOVE BUILT-IN FURNITURE.
22. REMOVE CASEWORK AND ASSOCIATED DUCTWORK. SEE MECHANICAL.
23. REMOVE FIREPLACE AND ALL ASSOCIATED COMPONENTS.
24. REMOVE TOPICAL CEILING AND WALL FINISH.
25. REMOVE EXCESSIVE CEILING AND WALL INSULATION.
26. REMOVE INTERIOR DOORS AND ASSOCIATED TRIM.
27. REMOVE PLUMBING FIXTURE. SEE PLUMBING.
28. REMOVE WINDOW UNIT AND ASSOCIATED INTERIOR/EXTERIOR TRIM.
29. REMOVE DOOR AND CASING. SEE STRUCTURAL.
30. REMOVE WOOD STEPS, LANDINGS, RAILINGS, SUPPORTS, AND ALL ASSOCIATED COMPONENTS.
31. REMOVE TUBE STEEL HANDRAIL & GUARDRAIL.
32. REMOVE CONCRETE STEPS AND LANDING. SEE CIVIL.
33. REMOVE EXISTING RETAINING WALL. SEE CIVIL.
34. REMOVE CONCRETE STEPS & LANDINGS. SEE CIVIL.
35. REMOVE STEEL & WOOD HANDRAIL & GUARDRAIL.
36. REMOVE DOOR & CASING.
37. REMOVE WALL MOUNTS.
38. REMOVE GLASS DOORS AND ASSOCIATED INTERIOR/EXTERIOR TRIM.
39. REMOVE PORTION OF WALL AS REQUIRED FOR MECHANICAL.
40. REMOVE PORTION OF FLOOR FOR MECHANICAL CHASE. SEE MECHANICAL.
41. REMOVE ELECTRICAL/COMMUNICATIONS/DATA DEVICE. SEE ELECTRICAL.
42. REMOVE HVAC EQUIPMENT OR DEVICE. SEE MECHANICAL.
DOOR AND FRAME SCHEDULE

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SCOPE OF WORK FOR EXISTING WINDOWS

• ALUMINUM
• WOOD

5.
3.
1.

WINDOW ELEVATIONS

INTERIOR SIDE

HEADS, BRACKETS, ETC.

SASHES SHALL BE SEALED IN CLOSED POSITION WITH REPAIR EPOXY

REMOVED LOOSE PAINT FROM ALL SASHES, FRAMES, SILLS, TEMPERED GLASS (SILICONE GLAZED)

SCALE: 1/4" = 1'-0" A3.2

a. (OR ARCHITECT APPROVED EQUAL)

PURPOSES

3' - 6" +/- 2' - 7" +/-

DOOR FRAME

NOTES:

FOR DOOR HARDWARE, REFER TO PROJECT MANUAL SECTION 08 71 00

GLAZING

DOOR AND FRAME SCHEDULE

SCALE: 1" = 1'-0" A3.2

GENERAL NOTES:

A. REFER TO IT FOR ADDITIONAL GENERAL NOTES AND INFORMATION.

B. ALL HOLLOW METAL DOORS AND FRAMES ARE TO BE PAINTED.

C. EXTERIOR HOLLOW METAL DOORS AND FRAMES ARE TO BE CLEATED.

D. ALL EXTERIOR DOORS SHALL BE PAINTED.

E. COORDINATE DOOR AND FRAME OPENING WITH ACCESS AND CODE REQUIREMENTS. CURB TO BE DETAILED TO MATCH TO THE EXISTING FINISH.

F. GLAZED CAST IRON DOORS WITH MATCHING REMAINING GLAZING.

G. PROVIDE ROLLER SHADES AT ALL EXTERIOR WINDOWS.

H. PROVIDE PANEL SIGNS TO BE ON THE WALL ADJACENT TO THE DOOR WHERE APPLICABLE. FINAL ROOM NAMES, ROOM NUMBERS, AND DOOR LOCATION, INCLUDING MALE/FEMALE AND ADA GRAPHICS PROVIDE A ROOM IDENTIFICATION PANEL SIGN FOR EACH INTERIOR DOOR. MULTIPLE ROOM IDENTIFICATION PANEL SIGNS TO BE PROVIDED FOR LONG HALLS AND CONDUCIT SLEEVE TO AN ACCESSIBLE CEILING AS INDICATED ON SYSTEM. ELECTRICAL CONTRACTOR SHALL PROVIDE DEVICE BACKBOX TRAINING FOR ACCESS CONTROL SYSTEMS, INCLUDING SOFTWARE INSTALLATION KEYNOTES

1. ALUMINUM CURTAINWALL SYSTEM (2 1/2" x 6" THERMALLY BROKEN)

2. ALUMINUM CURTAINWALL SYSTEM (2 1/2" x 6" THERMALLY BROKEN)

3. ALUMINUM CURTAINWALL SYSTEM (2 1/2" x 6" THERMALLY BROKEN)

4. GLAZING REFER TO ALUMINUM SOURCES

5. EXPOSED STRUCTURAL, FORGED

6. TRIM UHPC NAILHEAD

7. GLAZING CURTAINWALL SYSTEM (2 1/2" x 6" THERMALLY BROKEN)

8. SOLID SURFACE MATERIAL WINDOW SILL

9. POLYURETHANE WINDOW CROSSHEAD, EKENA MILLWORK ITEM #
# ATTENDANCE SHEET

**Meeting:** Pre-Bid Mtg for Auditor’s Real Estate Building Renovation Project  
**Date:** December 14, 2018 @ 11:00 AM

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<tr>
<td>1</td>
<td>Dennis Keller</td>
<td>Fairfield County Facilities Mgr</td>
<td>210 E. Main, Lancaster</td>
<td>740-652-7097</td>
<td><a href="mailto:dennis.keller@fairfieldcountyohio.gov">dennis.keller@fairfieldcountyohio.gov</a></td>
</tr>
<tr>
<td>2</td>
<td>Judson Brown</td>
<td>Thyssenkrupp Elevator</td>
<td></td>
<td>614 564-0270</td>
<td><a href="mailto:judson.brown@thyssenkrupp.com">judson.brown@thyssenkrupp.com</a></td>
</tr>
<tr>
<td>3</td>
<td>Shawn P. McCall</td>
<td>Flecto Construction</td>
<td>Zanesville OH</td>
<td>740-764-4782</td>
<td><a href="mailto:Tom@flectoconstruction.com">Tom@flectoconstruction.com</a></td>
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<tr>
<td>4</td>
<td>Henry W. Stetina</td>
<td>DLZ</td>
<td>Help Plz 111</td>
<td>614</td>
<td><a href="mailto:hstetinae@dlz.com">hstetinae@dlz.com</a></td>
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<tr>
<td>5</td>
<td>Doug Moody</td>
<td>DLZ</td>
<td>Columbus OH</td>
<td>614</td>
<td><a href="mailto:dmoody@dlz.com">dmoody@dlz.com</a></td>
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<tr>
<td>6</td>
<td>Roger Morris</td>
<td>Altman</td>
<td>Columbus Ohio</td>
<td>614 253 6611</td>
<td><a href="mailto:mail@altmanqc.com">mail@altmanqc.com</a></td>
</tr>
<tr>
<td>7</td>
<td>Aaron Ulrey</td>
<td>Elfard</td>
<td>Columbus, OH</td>
<td>614 373 4094</td>
<td><a href="mailto:aclerman@elfard.com">aclerman@elfard.com</a></td>
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<tr>
<td>8</td>
<td>Jeff Lutz</td>
<td>Setterlin</td>
<td>SouthAmmon Ave.</td>
<td>614 705 9774</td>
<td><a href="mailto:j.lutz@setterlin.com">j.lutz@setterlin.com</a></td>
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<tr>
<td>9</td>
<td>Paul J. Boster</td>
<td>Charter Hill Castle</td>
<td>10200 Busq Rd</td>
<td>862-1512</td>
<td><a href="mailto:charterhill@cyahom.com">charterhill@cyahom.com</a></td>
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