

ADDENDUM 01

DATE: OCTOBER 1, 2021

PROJECT: LIBRARY OF MICHIGAN AND HISTORICAL CENTER
UPGRADE ELEVATORS AND CONTROLS

DTMB FILE: 171/20106.TYC

H+B PROJECT: 21302

This Addendum is issued for the purpose of modifying and/or clarifying the original drawings and specifications and shall take precedence over them.

All work included herein shall be in accordance with the original drawings and specifications except as specifically noted herein. All incidental items required to provide the following modifications shall be included even though not specifically described.

This Addendum is being sent to all bidders receiving plans and specifications. Receipt of this Addendum shall be noted on Proposal Form in appropriate locations.

GENERAL

1. PreBid Meeting Attendance and Minutes are attached as part of this Addendum.
2. Elevator replacement to be performed in three phases. Phase 1: Elevators 1 (Freight), 4, and 6; Phase 2: Elevators 2 and 7; Phase 3: Elevators 3 and 5. The Platform Lift Elevator 8 replacement may be performed in any one of the three phases. Phasing to be outlined in Section 500 Agreement prior to contracting.
3. Elevator 4 was not accessible during the building walk through. Refer to Car 4 photos attached to this addendum.

SPECIFICATIONS

1. Table of Contents (not reissued)
 - a. Add Section 081113 Hollow Metal Doors and Frames to the Table of Contents.
2. MichSpec Section 500 Agreement (not reissued)
 - a. Article 4 Contract Time; Liquidated Damages: Liquidated Damages shall be \$750, and contradicting amounts shall be revised prior to contracting.
3. Section 081113 Hollow Metal Doors and Frames (issued)
 - a. Add new section in its entirety.
4. Section 099123 Interior Painting (reissued)
 - a. Added Paragraph 3.5 E for painting of steel substrates.
5. Section 142500 Hydraulic Elevator Modernization (not reissued)
 - a. Under Article 1.12, MAINTENANCE, paragraph A, please note the following revision.
If Contractor currently providing equipment maintenance under contract with Purchaser is included on the list of invited Contractors for this Contract, Contractor acknowledges and agrees that said contract shall be immediately null and void upon award of this Contract to Contractor or alternate invited Contractor.

Further, if present Maintenance Contractor is not the successful firm in regard to this Contract, Maintenance Contractor agrees to deliver existing as modified control wiring diagrams to Purchaser and immediately remove its equipment and materials from the premises with the Purchaser or Purchasers' representative present. Purchaser shall withhold final maintenance payment due until Maintenance Contractor is in compliance with this requirement **should be changed to:**

"If Contractor currently providing equipment maintenance under contract with Purchaser is included on the list of invited Contractors for this Contract, Contractor acknowledges and agrees that said contract shall be null and void, if award of this Contract to Contractor or alternate invited Contractor, at a date as determined by the Purchaser. Further, if present Maintenance Contractor is not the successful firm Contractor agrees to deliver existing as modified control wiring diagrams to Purchaser and remove its equipment and materials from the premises with the Purchaser or Purchasers' representative present. Purchaser shall withhold final maintenance payment due until Maintenance Contractor is in compliance with this requirement."

- b. Under PART 2 PRODUCT, Article 2.01, SUMMARY, please note the following revision for Car #4.
Machine Location: Floor 5 **should be changed to:**

"Machine Location: Floor 2M"

- c. Under Article 2.07, HOISTWAY EQUIPMENT, paragraph J, please note the following revision.

Freight Car 1 Entrance Equipment:

1. Door Guide Tracks: Retain existing. Remove lubrication and thoroughly clean. Remove all rust and apply new lubrication.
2. Door Guide Shoes: Machined iron shoes. Four shoes per door panel, with not less than 2½" lateral contact per shoe.
3. Door Interlocks: Operable without retiring cam **should be changed to:**

"Freight Car 1 Entrance Equipment:

1. Door Guide Tracks: Retain existing. Remove lubrication and thoroughly clean. Remove all rust and apply new lubrication.
2. Door Guide Shoes: New machined iron shoes. Four shoes per door panel, with not less than 2½" lateral contact per shoe.
3. Door Interlocks: New. Operable without retiring cam."

- d. Under Article 2.09, CAR EQUIPMENT, paragraph J, please note the following revision.

Doors, Cars 2-6: New 16 gauge steel, sandwich construction without binder angles. Provide a minimum of two (2) gibs per panel, one at leading and one at trailing edge with gibs in the sill groove entire length of door travel. Construct door panels with interlocking, stiffening ribs. Antique bronze finish **should be changed to:**

"Car Doors, Cars 2-6: New 16 gauge steel, sandwich construction without binder angles. Provide a minimum of two (2) gibs per panel, one at leading and one at trailing edge with gibs in the sill groove entire length of door travel. Construct door panels with interlocking, stiffening ribs. Antique bronze finish for Cars 2, 3, 5, and 6. Car 4 will have a white baked enamel finish as selected by Architect."

- e. Under Article 2.09, CAR EQUIPMENT, paragraph T, please note the following revision.
Power Freight Door and Gate Operator, Car 1: Retain existing. Check and tighten all fastenings of operators, tracks, interlocks, etc. **should be changed to:**
- “Power Freight Gate Operator: Power gate operation. Provide means to open gate from inside of car in the event of power failure. Closing Speed: Minimum of 1.6 fps; maximum of 2.0 fps.”
- f. Under Article 2.09, CAR EQUIPMENT, paragraph U, please note the following revision.
Car Gate, Car 1: Retain existing. Check and tighten all fastenings of gate, tracks, operator, gate contact, etc. **should be changed to:**
- “Car Gate Car 1: New power-operated, vertical rise, single-section minimum 6'-0" high, constructed of 12-gauge welded wire mesh welded into frame angles. Provide new tracks, operator, gate contact, etc.”
- g. Under Article 2.10, CAR ENCLOSURE, paragraph A.5, please note the following revision.
Front Return panels and Integral Entrance Columns: New reinforced 14 gauge antique bronze finish with cutouts for car operating panel and other equipment **should be changed to:**
- “Front Return panels and Integral Entrance Columns: New reinforced 14 gauge antique bronze finish for Cars 2, 3, 5, and 6 and white baked enamel finish, as selected by the Architect, for Car 4 with cutouts for car operating panels and other equipment.”

DRAWINGS

1. Drawing Sheet, A-001 (reissued)
 - a. Revised General Notes as indicated.
2. Drawing Sheet, A-101 (reissued)
 - a. Existing doors and hollow metal door frames from Mechanical Room near Elevators 2 and 3 shall be removed and replaced with new, as indicated on reissued Drawing Sheet A-101.
3. Drawing Sheet, A-103 (reissued)
 - a. Revised drawing sheet to show enlarged plan C5/A-103, as indicated on reissued Drawing Sheet A-101.
4. Drawing Sheet, E-303 (reissued)
 - a. Modify Electrical Demolition notes, as indicated on reissued Drawing Sheet E-303.
5. Drawing Sheet, E-305 (reissued)
 - a. Modify Electrical Demolition notes, as indicated on reissued Drawing Sheet E-305
6. Drawing Sheet, E-500 (reissued)
 - a. Modify Electrical Power Plan to include voltage and horsepower, as indicated on reissued Drawing Sheet E-500.

PreBid Meeting Attendance and Minutes; Car 4 Photos; Specification Sections 081113 and 099123; and Drawing Sheets A-001, A-101, A-103, E-303, E-305 and E-500 are included as part of this Addendum.

END OF ADDENDUM

JDM/ame

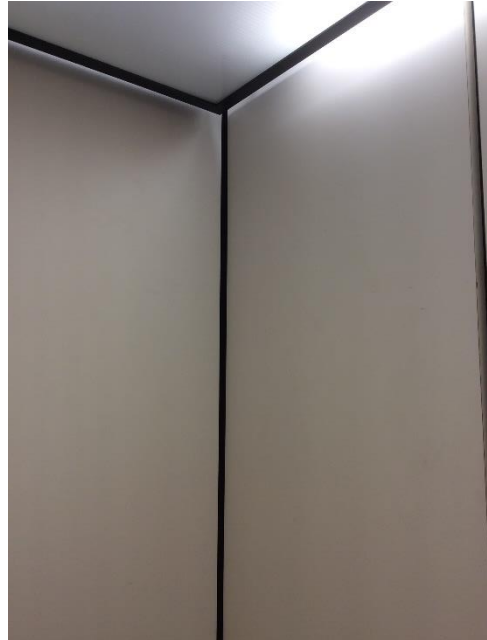
Enclosure

Cc: All Plan Holders, via SIGMA

CAR 4 PHOTOS



Car 4 control panel



Car 4 corner



Car 4 rear corner



Car 4 rear wall

MEETING MINUTES

DATE/TIME: September 24, 2021/ 9:30 AM

LOCATION: LIBRARY OF MICHIGAN AND HISTORICAL CENTER
702 W Kalamazoo St, Lansing, MI

PROJECT: Department of Technology, Management and Budget
LIBRARY OF MICHIGAN AND HISTORICAL CENTER
UPGRADE ELEVATORS AND CONTROLS

FILE NUMBER: 171/20106.TYC

PROJECT #:20-306.00

Pre-Bid Meeting

-
- I. Purpose
 - A. Pre-bid contractor meeting
 - II. Documents are available through SIGMA's website, see link below:
 - A. <https://sigma.michigan.gov/webapp/PRDVSS2X1/AltSelfService>
 - III. Electronic Bid Due Date: October 6, 2021 at 2:00 pm
 - A. Bids must be uploaded to SIGMA VSS by bid due date and time.
 - IV. Review of scope of project
 - A. Modernization of exiting elevators in existing elevator shafts
 - B. Electrical requirements
 1. Upgrade fire alarm system for elevators to meet current code.
 2. Provide new lighting in elevator pits
 3. Provide circuiting and connection to new sump pumps
 - C. Plumbing Requirements
 1. Plumbing sump pump / pits and piping items are included in project.
 2. Installation of floor sinks and oil separators in mechanical spaces.
 - D. Project to be a phased project. See Addendum 1 for phasing clarification.
 - V. Tour of facility
 - A. Contractors were able to go to all the elevator equipment rooms to see the existing equipment.
 - B. All elevator cars were accessible except for Elevator 4. Pictures of the interior of car 4 will be issued with Addendum 1.
 - VI. All questions to be directed to Hobbs+Black Architects
 - A. Attention: John Mortimore, Email: jmortimore@hobbs-black.com
 - VII. Conclusions
 - A. Addendum 1 to be issued with Pre-bid sign-in sheet.

JM:jdm

Distribution via Addendum 01/SIGMA

NAME	COMPANY	EMAIL	PHONE
1. JOHN MORTIMORE	H+B	Jmortimore@HOBBS-BLACK.com	517 484 4870
2. Brian Robson	Centennial Elec.	brian@centennial-electric.com	517/545-9900
3. Jose Silva	Centennial Elec.	joses@centennial-electric.com	517/862-4878
4. Nick Rodgers	Gunthorpe plumbing	Nirodgers@gunthorpeplumbing.com	517-281-4623
5. Ted Smith	Daniels Building Co	TSmith@Daniels Building Company, Inc	248-914-7861
6. Michael Hull	Superior Electric Lansing	m.hull@superiorelectricinc.com	517-485-7129
7. DALE LEUTZ	Antler Construction	LEUTZDALE@yahoo.com	234-404-6459
8. Chris Churchill	Johnson & Wood	chrisc@johnsonwoodllc.com	517-290-4726
9. Gil DeVries	Elevator Service	gdevries@esigr.com	616 299 8852
10. CHAD DEVEREAUX	DTMB	DEVEREAUX@MICHIGAN.GOV	517 204 3622
11. Brett Cone	- Elevator Service -	brett.cone@esigr.com	- 517-285-5271
12. ALAN PAWLOWSKI	- SCHINDLER -	ALAN.PAWLOWSKI@SCHINDLER.COM	517 219 5518
13. Rick Shea	RM Electric	rick@rmelectric.net	517.323.7580
14. Doman Guelte	- Cross Construction group	doman@crossconstructiongroup.com	734-521-5845
15. Matt Riggins	- Nielsen Commercial construction	mriggins@nielsenconstructioninc.com	517-694-2101
16. Dale LaMarche	IMS Contracting	dlmarche@imscontracting.com	906-789-9021
17. Carter Vandlen	RAS Contracting LLC	info@rascontractinginc.com	517-525-6343
18. Jett Moore	Moore Trospen	info@mooretrospen.com	517-694-6310
19. Michael MICHAEL HANSON	LEVCH BATES	Michael.hanson@levchbates.com	312-339-4895
20. Scott Spitzley	Matrix Consulting Engineers	sspitzley@matrixceinc.com	517.526.267
21. Brett Thelen	Matrix Consulting	bthelen@matrixceinc.com	517-487-2511
22. Todd Cordill	DTMB	cordillt1@michigan.gov	517-897-7017

HOBBS + BLACK ARCHITECTS

WWW.HOBBS-BLACK.COM

PROJECT NAME	TITLE
PROJECT NUMBER	SCALE
DATE	NOTES

**SECTION 081113
HOLLOW METAL DOORS AND FRAMES**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes hollow-metal work.
- B. Coordinate with Section 14 2160 Vertical Platform Lift Modernization.

1.2 DEFINITIONS

- A. Minimum Thickness: Minimum thickness of base metal without coatings according to NAAMM-HMMA 803 or SDI A250.8.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Include elevations, door edge details, frame profiles, metal thicknesses, preparations for hardware, and other details.
- C. Schedule: Prepared by or under the supervision of supplier, using same reference numbers for details and openings as those on Drawings.

1.4 INFORMATIONAL SUBMITTALS

- A. Product test reports.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- 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. Amweld International, LLC.
 - 2. Apex Industries, Inc.
 - 3. Ceco Door Products; an Assa Abloy Group company.
 - 4. LaForce, Inc.
 - 5. National Custom Hollow Metal.
 - 6. Republic Doors and Frames.
 - 7. Steelcraft; an Ingersoll-Rand company.

2.2 REGULATORY REQUIREMENTS

- A. Fire-Rated Assemblies: Complying with NFPA 80 and listed and labeled by a qualified testing agency acceptable to authorities having jurisdiction for fire-protection ratings indicated, based on testing at positive pressure according to NFPA 252 or UL 10C.
 - 1. Smoke- and Draft-Control Assemblies: Provide an assembly with gaskets listed and labeled for smoke and draft control by a qualified testing agency acceptable to authorities having jurisdiction, based on testing according to UL 1784 and installed in compliance with NFPA 105.

2.3 INTERIOR DOORS AND FRAMES

- A. Standard-Duty Doors and Frames: SDI A250.8, Level 1. At all locations.
 - 1. Physical Performance: Level C according to SDI A250.4.
 - 2. Doors:
 - a. Type: As indicated on drawings.
 - b. Thickness: 1-3/4 inches.
 - c. Face: Uncoated, cold-rolled steel sheet, minimum thickness of 0.032 inch.
 - d. Edge Construction: Model 1, Full Flush.
 - e. Core: Manufacturer's standard kraft-paper honeycomb, polystyrene, polyurethane, polyisocyanurate, mineral-board, or vertical steel-stiffener core.
 - 3. Frames:
 - a. Materials: Uncoated, cold-rolled steel sheet, minimum thickness of.
 - b. Construction: Full profile welded.
 - 4. Exposed Finish: Prime.

2.4 FRAME ANCHORS

- A. Jamb Anchors:
 - 1. Stud-Wall Type: Designed to engage stud, welded to back of frames; not less than 0.042 inch thick.
 - 2. Postinstalled Expansion Type for In-Place Concrete or Masonry: Minimum 3/8-inch diameter bolts with expansion shields or inserts. Provide pipe spacer from frame to wall, with throat reinforcement plate, welded to frame at each anchor location.
- B. Floor Anchors: Formed from same material as frames, minimum thickness of 0.042 inch, and as follows:
 - 1. Monolithic Concrete Slabs: Clip-type anchors, with two holes to receive fasteners.

2.5 MATERIALS

- A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B; suitable for exposed applications.
- B. Hot-Rolled Steel Sheet: ASTM A 1011/A 1011M, Commercial Steel (CS), Type B; free of scale, pitting, or surface defects; pickled and oiled.
- C. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Commercial Steel (CS), Type B.
- D. Frame Anchors: ASTM A 879/A 879M, Commercial Steel (CS), 04Zcoating designation; mill phosphatized.
- E. Inserts, Bolts, and Fasteners: Hot-dip galvanized according to ASTM A 153/A 153M.

2.6 FABRICATION

- A. Fabricate hollow-metal work to be rigid and free of defects, warp, or buckle. Accurately form metal to required sizes and profiles, with minimum radius for metal thickness. Where practical, fit and assemble units in manufacturer's plant. To ensure proper assembly at Project site, clearly identify work that cannot be permanently factory assembled before shipment.
- B. Hollow-Metal Frames: Where frames are fabricated in sections due to shipping or handling limitations, provide alignment plates or angles at each joint, fabricated of same thickness metal as frames.
 - 1. Provide countersunk, flat- or oval-head exposed screws and bolts for exposed fasteners unless otherwise indicated.
 - 2. Floor Anchors: Weld anchors to bottoms of jambs with at least four spot welds per anchor; however, for slip-on drywall frames, provide anchor clips or countersunk holes at bottoms of jambs.
 - 3. Jamb Anchors: Provide number and spacing of anchors as follows:
 - a. Stud-Wall Type: Locate anchors not more than 18 inches from top and bottom of frame. Space anchors not more than 32 inches o.c. and as follows:
 - 1) Three anchors per jamb up to 60 inches high.
 - 2) Four anchors per jamb from 60 to 90 inches high.
 - 3) Five anchors per jamb from 90 to 96 inches high.
 - b. Compression Type: Not less than two anchors in each frame.
 - c. Postinstalled Expansion Type: Locate anchors not more than 6 inches from top and bottom of frame. Space anchors not more than 26 inches o.c.
 - 4. Door Silencers: Except on weather-stripped frames, drill stops to receive door silencers.
 - a. Single-Door Frames: Drill stop in strike jamb to receive three door silencers.
 - b. Double-Door Frames: Drill stop in head jamb to receive two door silencers.
- C. Hardware Preparation: Factory prepare hollow-metal work to receive templated mortised hardware; include cutouts, reinforcement, mortising, drilling, and tapping according to SDI A250.6, the Door Hardware Schedule, and templates.
 - 1. Reinforce doors and frames to receive nontemplated, mortised, and surface-mounted door hardware.
 - 2. Comply with applicable requirements in SDI A250.6 and BHMA A156.115 for preparation of hollow-metal work for hardware.

2.7 STEEL FINISHES

- A. Prime Finish: Clean, pretreat, and apply manufacturer's standard primer.
 - 1. Shop Primer: SDI A250.10.

2.8 ACCESSORIES

- A. Hardware to be relocated from existing doors being removed or relocated.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Hollow-Metal Frames: Install hollow-metal frames of size and profile indicated. Comply with SDI A250.11 or NAAMM-HMMA 840 as required by standards specified.
 - 1. Set frames accurately in position; plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces, leaving surfaces smooth and undamaged.
 - a. At fire-rated openings, install frames according to NFPA 80.
 - b. Install door silencers in frames before grouting.
 - c. Remove temporary braces necessary for installation only after frames have been properly set and secured.
 - d. Check plumb, square, and twist of frames as walls are constructed. Shim as necessary to comply with installation tolerances.
 - 2. Floor Anchors: Provide floor anchors for each jamb and mullion that extends to floor, and secure with postinstalled expansion anchors.
 - a. Floor anchors may be set with power-actuated fasteners instead of postinstalled expansion anchors if so indicated and approved on Shop Drawings.
 - 3. Metal-Stud Partitions: Solidly pack mineral-fiber insulation inside frames.
 - 4. Installation Tolerances: Adjust hollow-metal door frames for squareness, alignment, twist, and plumb to the following tolerances:
 - a. Squareness: Plus or minus 1/16 inch, measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
 - b. Alignment: Plus or minus 1/16 inch, measured at jambs on a horizontal line parallel to plane of wall.
 - c. Twist: Plus or minus 1/16 inch, measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
 - d. Plumbness: Plus or minus 1/16 inch, measured at jambs at floor.

- B. Hollow-Metal Doors: Fit hollow-metal doors accurately in frames, within clearances specified below. Shim as necessary.
 - 1. Non-Fire-Rated Steel Doors:
 - a. Between Door and Frame Jambs and Head: 1/8 inch plus or minus 1/32 inch.
 - b. Between Edges of Pairs of Doors: 1/8 inch to 1/4 inch plus or minus 1/32 inch.
 - c. At Bottom of Door: 3/4 inch plus or minus 1/32 inch.
 - d. Between Door Face and Stop: 1/16 inch to 1/8 inch plus or minus 1/32 inch.
 - 2. Fire-Rated Doors: Install doors with clearances according to NFPA 80.
 - 3. Secure stops with countersunk flat- or oval-head machine screws spaced uniformly not more than 9 inches o.c. and not more than 2 inches o.c. from each corner.
- 3.2 ADJUSTING AND CLEANING
- A. Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and replace defective work, including hollow-metal work that is warped, bowed, or otherwise unacceptable.
 - B. Remove grout and other bonding material from hollow-metal work immediately after installation.
 - C. Prime-Coat Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible air-drying, rust-inhibitive primer.
 - D. Metallic-Coated Surface Touchup: Clean abraded areas and repair with galvanizing repair paint according to manufacturer's written instructions.

END OF SECTION 08 1113

SECTION 099123 - INTERIOR PAINTING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes surface preparation and the application of paint systems on interior substrates.
 - 1. Concrete.
 - 2. Concrete masonry units (CMU).
 - 3. Steel.
 - 4. Gypsum board.
 - 5. Plaster.

1.2 DEFINITIONS

- A. Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D 523.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
- B. Samples: For each type of paint system and in each color and gloss of topcoat.
- C. Product List: For each product indicated. Include printout for each product category specified in Part 2, with the proposed product highlighted.

1.4 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Paint: 5 percent, but not less than 1 gal. of each material and color applied.

1.5 QUALITY ASSURANCE

- A. Mockups: Apply mockups of each paint system indicated and each color and finish selected to verify preliminary selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
 - 1. Architect will select one surface to represent surfaces and conditions for application of each paint system specified in Part 3.
 - a. Vertical and Horizontal Surfaces: Provide samples of at least 10 sq. ft.
 - b. Other Items: Architect will designate items or areas required.
 - 2. Final approval of color selections will be based on mockups.
 - a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to Owner.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Products: Subject to compliance with requirements, provide product listed in other Part 2 articles for the paint category indicated.

2.2 PAINT, GENERAL

- A. Provide products that are indicated or that are equal to the ones listed in the Products List."
- B. 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.
- C. VOC Content: Products shall comply with VOC limits of authorities having jurisdiction.
 - 1. Flat Paints and Coatings: 50 g/L.
 - 2. Nonflat Paints and Coatings: 150 g/L.
 - 3. Primers, Sealers, and Undercoaters: 200 g/L.
 - 4. Anticorrosive and Antirust Paints Applied to Ferrous Metals: 250 g/L.
 - 5. Zinc-Rich Industrial Maintenance Primers: 340 g/L.
 - 6. Pretreatment Wash Primers: 420 g/L.
- D. Low-Emitting Materials: Interior paints and coatings shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
- E. Colors: As selected by Architect from manufacturer's full range.

2.3 PRIMERS/SEALERS

- A. Primer Sealer, Latex, InteriorPro Prime Hi-Hide Drywall Primer/sealer Interior Acrylic 4190 line as manufactured by O'Leary Paint.

2.4 METAL PRIMERS

- A. Primer, Rust-Inhibitive, Direct to metal
 - 1. To be used on bare metal - Pitt-Tech Plus 4020 PF/Devflex 4020 PF as manufactured by PPG Protective Coatings, or approved substitution.

2.5 WATER-BASED PAINTS

- A. Acrylic, Interior, Semi-Gloss, (Gloss Level 5):
1. Duracat Pre-Catalyzed water based epoxy 3543 line as manufactured Oleary Paint
 2. Pitt-Tech Plus 4216 HP/Devflex 4216 HP as manufactured by PPG
 3. Approved substitution.

2.6 FLOOR COATINGS

- A. Floor Paint Interior, for Concrete Floors.
1. Hydroxy 142 Line as manufactured by O'leary Paint or approved substitution.

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 the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
1. Concrete: 12 percent.
 2. Masonry (Clay and CMU): 12 percent.
 3. Wood: 15 percent.
 4. Gypsum Board: 12 percent.
 5. Plaster: 12 percent.
- C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
1. Abrade existing painted surface of glaze or gloss of existing surfaces to be painted as recommended by paint manufacturer. Clean and prep surfaces to assure adhesion of paint
- D. Proceed with coating application only after unsatisfactory conditions have been corrected.
1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations for applicable to substrates indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.

- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
 - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.

3.3 APPLICATION

- A. Apply paints according to manufacturer's written instructions.
- B. 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.

3.4 CLEANING AND PROTECTION

- A. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- B. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.5 INTERIOR PAINTING SCHEDULE

- A. Concrete Substrates, Nontraffic Surfaces:
 - 1. Acrylic System:
 - a. Intermediate Coat: Acrylic, interior, matching topcoat.
 - b. Topcoat: Acrylic, interior, semi-gloss, (Gloss Level 5)
- B. Concrete Substrates, Traffic Surfaces:
 - 1. Epoxy Floor System:
 - a. Topcoat: Floor paint, acrylic, low gloss (maximum Gloss Level 3)
- C. Existing CMU Substrates:
 - 1. Acrylic System:
 - a. Intermediate Coat: Acrylic, interior, matching topcoat.
 - b. Topcoat: Acrylic, interior, semi-gloss, (Gloss Level 5)[, **MPI #54**].
- D. Gypsum Board or Plaster Substrates:
 - 1. Acrylic System:
 - a. Prime Coat: Primer sealer, acrylic, interior
 - b. Prime Coat: Acrylic, interior, matching topcoat.
 - c. Topcoat: Acrylic, interior, semi-gloss, (Gloss Level 5)
- E. *Steel Substrates:*
 - 1. *Latex Over Alkyd Primer System:*
 - a. *Prime Coat: Shop primer specified in Section where substrate is specified.*
 - b. *Intermediate Coat: Latex, interior, matching topcoat.*
 - c. *Topcoat: Latex, interior, semi-gloss, (Gloss Level 5), MPI #153.*
 - 1) *Hollow metal frames and doors.*

END OF SECTION 099123