

Project: 4J Security Improvements Projects (2207)
Title: Addendum No. 004
Date: April 11, 2023
From: KC Eck, PIVOT Architecture
To: Interested Bidders

1. General Information

1. Bid Closing date is EXTENDED to April 20, 2023.
2. Substantial Completion date is EXTENDED to August 18, 2023.

2. Response to Bidder Questions

Sheldon High School-

1. At door opening SH1 hardware set # 02 is specified but this is incorrect (hardware listed is for single door opening and this is a pair). Please specify correct hardware group.
Use Hardware Group 03
2. In reviewing Addendum 3, besides asking about the perforated panel cover for the gates on question #4, I forgot to ask what finish is intended for the gates. Paint? Powder coat?
All steel fabrications will be finished with High Performance Coatings. See Specification Section 09 9600 in this Addendum. Color to be selected by Owner.
3. PSI for concrete is not specified in Section 03 30 00. Please advise.
For Normal Weight Concrete, use 3,000 lb compressive strength at 28 days per ASTM C39/C39M.
4. Existing doors at opening SH1 operate with a cast-in-place closer/pivot at the floor. In the past we have either ground the pivot flush with finish floor or removed the hardware from the case and filled with grout. Please advise.
Remove hardware from case and grout smooth flush to floor.
5. Addendum 3 added Detail 10/A03-A to attach fence posts to the breezeway ceiling. I have been told the ceiling structure is not wood framed as shown in the drawing and I confirmed on site that the ceiling finish is plaster. Please advise.
Existing plans indicate the ceiling joists are 5-1/4" x 11-1/4" Glu-lam beams at 8'-0" OC. Frame between these joists with the 2x members called out on Detail 10/A03-A. It is anticipated that the blocking can be installed from above, leaving the surface finishes intact. Install bracket on existing finishes.

6. Opening SH3 = 3670, hardware set specified is 3 at Sheldon. This hardware group is for a pair of doors not a single. Please specify correct hardware group.
Use Hardware Group 01
7. What is the Strobe light part number? We found the emergency buttons part number on the plans but we could not find the Strobe Light Part number.
LD/LO Strobe light spec number is Federal Signal SLM1450. Programmed such that when in LD strobe is Blue, LO (Secure) strobe is Red.
3. Approved Substitution Request
 1. N/A
4. Alternates
 1. N/A
5. Changes to the Project Manual
 1. ADD Section 09 9600 High Performance Coatings.
6. Changes to the Drawings
 1. N/A

End of Addendum # 004

SECTION 09 9600
HIGH-PERFORMANCE COATINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. High performance coatings ("HP-#" on Drawings) for the following conditions:
 - 1. Exterior galvanized and non-galvanized ferrous metals
 - 2. Interior galvanized and non-galvanized ferrous metals in reach of occupants.
- B. Surface preparation.

1.02 RELATED REQUIREMENTS

- A. Section 01 6116 - Volatile Organic Compound (VOC) Content Restrictions.
- B. Section 05 1200 - Structural Steel Framing: Shop priming of metal substrates with primers specified in this Section.
- C. Section 05 5000 - Metal Fabrication: Shop priming of metal substrates with primers specified in this Section.
- D. Section 05 5100 - Metal Stairs: Shop priming of metal substrates with primers specified in this section.
- E. Section 08 11 13 - Hollow Metal Doors and Frames: Shop priming of metal substrates with primers compatible with primers specified in this Section.
- F. Section 09 9000 - Painting and Coating.

1.03 REFERENCE STANDARDS

- A. 40 CFR 59, Subpart D - National Volatile Organic Compound Emission Standards for Architectural Coatings; U.S. Environmental Protection Agency; current edition.
- B. MPI (APL) - Master Painters Institute Approved Products List; Master Painters and Decorators Association; Current Edition.
- C. MPI (APSM) - Master Painters Institute Architectural Painting Specification Manual; Current Edition.
- D. SSPC V1 (PM1) - Good Painting Practice: Painting Manual, Volume 1; 2016.
- E. SSPC V2 (PM2) - Systems and Specifications: Steel Structures Painting Manual, Volume 2; 2015.
- F. SSPC-PA 1 - Shop, Field, and Maintenance Painting of Steel; 2016.
- G. SSPC-PA 2 - Procedure For Determining Conformance To Dry Coating Thickness Requirements; 2015, with Editorial Revision (2018).

1.04 SUBMITTALS

- A. See Section 01 3000 - Administrative Requirements for submittal procedures.
- B. Product Data: Provide complete list of all products to be used, with the following information for each:
 - 1. Manufacturer's name, product name and/or catalog number, and general product category (e.g. "alkyd enamel").
 - 2. MPI product number (e.g. MPI #47).
 - 3. Cross-reference to specified coating system(s) product is to be used in; include description of each system.
- C. Samples: Submit two samples 8 by 8 inch in size illustrating colors available for selection.
- D. Manufacturer's Installation Instructions: Indicate special procedures and perimeter conditions requiring special attention.
- E. Maintenance Data: Include cleaning procedures and repair and patching techniques.
- F. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.

1. Extra Coating Materials: 1 gallon of each type and color.
2. Label each container with manufacturer's name, product number, color number, and room names and numbers where used.

1.05 PRE-INSTALLATION CONFERENCE

- A. Preinstallation Conference: Convene a preinstallation meeting one week before starting work of this section; require attendance by all relevant installers. Agenda items will include field conditions, substrate conditions, coordination of shop applied primers with finish coatings, application methods, and field quality control testing and inspection.
 1. Bring copies of reviewed color draw-downs for all required colors

1.06 QUALITY ASSURANCE

- A. Master Painters Institute (MPI) Standards:
 1. Preparation and Workmanship: Comply with requirements in "MPI Architectural Painting Specification Manual" for products and coating systems indicated.
- B. Surface Preparation: Obtain written confirmation of the specific surface preparation procedures and primers used for all fabricated steel items from the fabricator(s) to ascertain appropriate and manufacturer compatible finish coat materials to be used before painting any such work.
- C. Comply with requirements of SSPC-PA 2 for measurement of coating thickness.

1.07 FIELD CONDITIONS

- A. Do not install materials when temperature is below 55 degrees F or above 90 degrees F.
- B. Maintain this temperature range, 24 hours before, during, and 72 hours after installation of coating.
- C. Provide lighting level of 80 ft candles measured mid-height at substrate surface.
- D. Restrict traffic from area where coating is being applied or is curing.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Only materials (primers, coatings, etc.) listed in the latest edition of the MPI Approved Product List (APL) are acceptable for use on this project.
- B. Provide high performance coating products from the same manufacturer to the greatest extent possible.
- C. High-Performance Coatings Manufacturers:
 1. Carboline Company (Carboline)
 2. Corotech
 3. ICI Devoe
 4. Kelly-Moore Paints
 5. Miller Paint Co.
 6. Benjamin Moore & Co.
 7. PPG Industries, Inc.
 8. Rodda Paint / Cloverdale Paint Co.
 9. Sherwin-Williams Co.
 10. Tnemec Company, Inc.
 11. Substitutions: Section 01 6000 - Product Requirements.

2.02 MATERIALS

- A. Coatings - General: Provide complete multi-coat systems formulated and recommended by manufacturer for the applications indicated, in the thicknesses indicated; number of coats specified does not include primer or filler coat.
- B. Material Compatibility: Provide materials for use within each coating 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.

- C. Volatile Organic Compound (VOC) Content:
 - 1. Provide coatings that comply with the most stringent requirements specified in the following:
 - a. 40 CFR 59, Subpart D--National Volatile Organic Compound Emission Standards Architectural Coatings.
 - 1) Anti-Corrosive and Anti-Rust Paints Applied to Ferrous Metals: VOC not more than 250 g/L.
 - 2. Determination of VOC Content: Testing and calculation in accordance with 40 CFR 59, Subpart D (EPA Method 24), exclusive of colorants added to a tint base and water add at project site; or other method acceptable to authorities having jurisdiction.
- D. Chemical Content: The following compounds are prohibited at interior applications:
 - 1. Aromatic Compounds: In excess of 1.0 percent by weight of total aromatic compounds (hydrocarbon compounds containing one or more benzene rings).
 - 2. Acrolein, acrylonitrile, antimony, benzene, butyl benzyl phthalate, cadmium, di(2-ethylhexyl) phthalate, di-n-butyl phthalate, di-n-octyl phthalate, 1,2-dichlorobenzene, diethyl phthalate, dimethyl phthalate, ethylbenzene, formaldehyde, hexavalent chromiuisophorone, lead, mercury, methyl ethyl ketone, methyl isobutyl ketone, methylene chloride, naphthalene, toluene (methylbenzene), 1,1,1-trichloroethane, vinyl chloride.

2.03 EXTERIOR HIGH-PERFORMANCE COATINGS

- A. Ferrous Metal: Provide the following finish systems over exterior ferrous metal. Primer is not required on appropriately shop-primed items. ("HP-#" on Drawings)
 - 1. Zinc-rich primer, MPI #19, applied to 2.5 to 3.5 dry film thickness.
 - 2. Polyamide Epoxy, MPI #108, applied 3.0 to 5.0 mils dry film thickness.
 - 3. Aliphatic Acrylic polyurethane Coating: MPI #83, applied to 2.0 to 3.0 mils dry film thickness.
- B. Galvanized Ferrous Metals:
 - 1. Primer, Epoxy, Anti-Corrosive, for Metal, MPI #101; one coat.
 - 2. Light Industrial Coating, Exterior, Water Based, MPI #161; one coat.
 - 3. Aliphatic Acrylic Polyurethane Coating, MPI #83, two coats.

2.04 INTERIOR HIGH-PERFORMANCE COATINGS

- A. Ferrous Metal: Provide the following finish systems over exterior ferrous metal. Primer is not required on appropriately shop-primed items. ("HP-#" on Drawings)
 - 1. Low-VOC High-Build Epoxy:
 - a. Zinc-rich primer, MPI #19; one coat.
 - b. Polyamide epoxy, MPI #108; coats as required for coverage.
 - c. Aliphatic Acrylic polyurethane Coating, MPI #83, coats as required for coverage.
- B. Galvanized Ferrous Metals:
 - 1. Primer, Epoxy, Anti-Corrosive, for Metal, MPI #101; one coat.
 - 2. Light Industrial Coating, Exterior, Water Based, MPI #161; one coat.
 - 3. Aliphatic Acrylic Polyurethane Coating, MPI #83, two coats.
- C. Shellac: Pure, white type.

2.05 ACCESSORY MATERIALS

- A. Accessory Materials: Provide primers, sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials as required for final completion of coated surfaces.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Do not begin application of coatings until substrates have been properly prepared.

- C. Verify that substrate surfaces are ready to receive work as instructed by the coating manufacturer. Obtain and follow manufacturer's instructions for examination and testing of substrates.
- D. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.

3.02 PREPARATION

- A. Clean surfaces of loose foreign matter.
- B. Remove substances that would bleed through finished coatings. If unremovable, seal surface with shellac.
- C. Remove finish hardware, fixture covers, and accessories and store.
- D. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates indicated.
- E. Remove plates, machined surfaces, and similar items already in place that are not to be coated. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and coating.
 - 1. After completing coating operations, reinstall items that were removed; use workers skilled in the trades involved.
- F. Clean substrates of substances that could impair bond of coatings, including dirt, oil, grease, and incompatible paints and encapsulants.
 - 1. Remove incompatible primers and reprime substrate with compatible primers as required to produce coating systems indicated.
 - 2. At interior steel abrade the top layer of primer, unless otherwise required by coating manufacturer.
 - 3. At exterior steel, provide surface preparation equivalent to SSPC-SP 6 "Commercial Blast Cleaning."
- G. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal fabricated from coil stock by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied coatings.
- H. Remove finish hardware, fixture covers, and accessories and store.
- I. Protect adjacent surfaces and materials not receiving coating from spatter and overspray; mask if necessary to provide adequate protection. Repair damage.
- J. Protect adjacent surfaces and materials not receiving coating from spatter and overspray; mask if necessary to provide adequate protection. Repair damage.

3.03 PRIMING

- A. Apply primer to all surfaces, unless specifically not required by coating manufacturer. Apply in accordance with coating manufacturer's instructions.

3.04 COATING APPLICATION

- A. Apply coatings in accordance with manufacturer's written instructions, to thicknesses specified and recommendations in MPI - Architectural Painting and Specification Manual.
- B. Apply in uniform thickness coats, without runs, drips, pinholes, brush marks, or variations in color, texture, or finish. Finish edges, crevices, corners, and other changes in dimension with full coating thickness.
- C. If undercoats or other conditions show through final coat, apply additional coats until cured film has a uniform coating finish, color and appearance.
- D. When the color of a door frame changes from side to side, the change shall be made at the edge of the stop, where the transition is not visible when the door is in a closed position.

3.05 FIELD QUALITY CONTROL

- A. See Section 01 4000 - Quality Requirements for general requirements for field inspection.

- B. Painted surfaces shall be considered to lack uniformity and soundness if any of the following defects are apparent to Architect.
 - 1. Brush/roller marks, streaks, laps, runs, sags, drips, heavy stippling, hiding or shadowing by inefficient application methods, skipped or missed areas, or foreign materials in paint coatings.
 - 2. Evidence of poor coverage at rivet heads, plate edges, lap joints, crevices, pockets, corners, reentrant angles or similar conditions.
 - 3. Damage due to touching before paint is sufficiently dry or any other contributory cause.
 - 4. Damage due to application on moist surfaces or caused by inadequate protection from the weather.
 - 5. Damage and/or contamination of paint due to blown contaminants (dust, spray paint, etc.).
- C. Painted surfaces shall be considered unacceptable if any of the following are evident under natural lighting source for exterior surfaces:
 - 1. Visible defects are evident on vertical or horizontal surfaces when viewed at normal viewing angles from a distance of not less than 39 inches.
 - 2. Visible defects are evident on ceilings, soffits and other overhead surfaces when viewed at normal viewing angles.
 - 3. When the final coat on any surface exhibits a lack of uniformity of color, sheen texture and hiding across full surface area.
 - 4. Dry mil thicknesses do not meet manufacturer's recommended thickness or specified thickness.
 - 5. Lack of adhesion. Test surfaces indicating lack of adhesion in accordance with ASTM D3359 or as recommended by coating manufacturer.
- D. Owner will provide field inspection and testing.
 - 1. Painted surfaces will be tested for dry mil thickness for each coat.
 - 2. Shop primers and painted surfaces will be tested for adhesion.
 - 3. Surfaces will be tested at frequency discussed in the preinstallation conference and as deemed appropriate by Owner

3.06 CLEANING

- A. Collect waste material that could constitute a fire hazard, place in closed metal containers, and remove daily from site.
- B. Clean surfaces immediately of overspray, splatter, and excess material.
- C. After coating has cured, clean and replace finish hardware, fixtures, and fittings previously removed.

3.07 PROTECTION

- A. Protect finished work from damage.

END OF SECTION 09 9600

