Crossroads I and II
Wake County Public School System
Cary, NC

PART 1 – GENERAL

1.1 Description:

A. General scope shall include, but not necessarily be limited to, surface preparation of substrates as required for acceptance of painting, including cleaning, small crack repair, patching, caulking, and priming.

B. Painting Contractor to provide all labor, materials, tools and other equipment, services and supervision required to complete all exterior and interior painting and decorating work as indicated on finish schedules and to the full extent of the drawings and specifications.

C. Specific scope to be defined by the Owner, Architect, Engineer, and/or Construction Manager.

1.2 Quality Assurance:

A. This Contractor shall have a minimum of five (5) years proven satisfactory experience and shall maintain a qualified crew of painters throughout the duration of the work.

B. Only qualified journeymen, as defined by local jurisdiction shall be engaged in painting and decorating work. Apprentices may be employed provided they work under the direct supervision of a qualified journeyman in accordance with trade regulations.

C. All materials, preparation and workmanship shall conform to requirements of the Painting and Decorating Contractors or America (PDCA).

D. All paint manufacturers and products used shall be as listed under the Approved Product List section of the Master Painters Institute (MPI) Painting Manual.

1.3 Regulatory Requirements:

A. Conform to work place safety regulations and requirements of those authorities having jurisdiction for storage, mixing, application and disposal of all paint and related hazardous materials.

1.4 Submittals / Mock-Up:

A. Submit Technical Datasheets and Material Safety Data Sheets (MSDS) prior to commencement of work for review and for posting at job site as required.

B. At project completion provide an itemized list complete with manufacturer, paint type and color-coding for all colors used for Owner's later use in maintenance.

C. When predetermined by the Owner, Architect, Engineer, and/or Construction Manager, prepare and paint a designated surface, area, room, or item to requirements specified herein, with specified paint or coating showing selected colors, gloss/sheen, textures and workmanship for review and approval. When approved, surface, area, room and/or items shall become acceptable standard of finish quality and workmanship for similar on-site work.

1.5 Product Delivery, Storage, and Handling:

A. Deliver and store all painting materials in sealed, original labeled containers bearing manufacturer's name, brand name, type of paint or coating and color designation, standard compliance, materials content as well as mixing and/or reducing and application requirements in strict accordance with manufacturer's requirements.

1.6 Environmental, Waste Management and Disposal Requirements:

A. Perform no painting or decorating work when the ambient air and substrate temperatures, relative humidity and dew point and substrate moisture content is below or above requirements for both interior and exterior work.

B. Apply paint only to dry, clean, properly cured and adequately prepared surfaces in areas where dust is no longer generated by construction activities such that airborne particles will not affect the quality of finished surfaces.

C. Ensure adequate continuous ventilation and sufficient heating and lighting is in place.

D. Paint, stain and wood preservative finishes and related materials (thinners, solvents, caulking, empty paint cans, cleaning rags, etc.) shall be regarded as hazardous products. Recycle and dispose of same subject to regulations of applicable authorities having jurisdiction.

E. To reduce the amount of contaminants entering waterways, sanitary/storm drain systems or into the ground retain cleaning water and filter out and properly dispose of sediments.

F. Set aside and protect surplus and uncontaminated finish materials not required by the Owner and deliver or arrange collection for verifiable re-use or re-manufacturing.

1.7 Protection and Clean-Up:

A. Protect all newly painted exterior surfaces from elements condensation and contamination until paint coatings are completely dry. Erect barriers or screens and post signs to warn of or limit or direct traffic.

B. Remove all spilled, splashed, splattered or over sprayed paint as work progresses, remove waste materials and keep area free from an unnecessary accumulation of tools, equipment, surplus materials and debris.

PART 2 - PRODUCTS

2.1 Materials:

A. Only materials (primers, paints, coatings, varnishes, stains, lacquers, fillers, etc.) listed in this specification are acceptable for use on this project unless additional submittals are submitted and approved prior to use. All materials shall be from a single manufacturer for each system used.

B. Other materials such as linseed oil, shellac, thinners, solvents, etc. shall be the highest quality product of an approved manufacturer and shall be compatible with paint materials being used as required.

C. As a general practice, make every effort to use materials with low VOCs with an EPA Method 24 Rating of E1, E2, or E3.

D. Where required to meet LEED (Leadership in Energy and Environmental Design) program requirements, use only MPI listed materials having an E3 Rating. LEED projects must be defined as such prior to the project bidding and material submittal process.

2.2 Mixing and Tinting:

A. Unless otherwise specified herein or pre-approved, all paint shall be ready-mixed and pre-tinted. Re-mix all paint in containers prior to and during application to ensure break-up of lumps, complete dispersion of settled pigment, and color and gloss uniformity. Where thinner is used, addition shall not exceed paint manufacturer's recommendations.

2.3 Finish, Color, Gloss / Sheen:

A. Colors shall be as selected by the Owner or its designated representative from a manufacturer's full range of colors. Color selection will be based on one (1) base color and a maximum of two (2) deep tone or bright accent colors. Note that this does not include color coded items, e.g., sprinkler pipes, gas lines, mechanical piping, guard rails, trip hazards, etc., or pre-finished items by others, e.g., flashings, windows, conduit, etc.

B. Gloss level ratings of all painted surfaces shall be as noted on the finish schedule. Refer to MPI Standards for gloss level definitions and requirements.

PART 3 - EXECUTION

3.1 Condition and Preparation of Surfaces:

A. The condition and preparation requirements for all surfaces shall be in accordance with PDCA Standards and the National Association of Corrosion Engineers (NACE).

3.2 Application:

A. Do not paint unless substrates are acceptable and/or until all environmental conditions (heating, ventilation, lighting and completion of other trade work) are acceptable for applications of products.

B. Apply paint or coatings in accordance with manufacturer's requirements and the PDCA Standards.

C. Painting coats specified are intended to cover surfaces satisfactorily when applied at proper consistency and in accordance with manufacturer's recommendations. Apply a minimum of three coats of paint where deep or bright colors are used to achieve satisfactory results.

3.3 Manufacturers

A. Basis-of-Design Product: Subject to compliance with requirements, provide the products indicated from Sherwin-Williams Paint Company or a comparable product by one of the following:

1. ICI Paints
2. Duron Paints
3. PPG / Porter

3.4 Exterior Coating Systems:

A. Concrete Vertical Surfaces:

1. High Performance Waterbased System MPI EXT 3.1C

a. Prime Coat: Loxon Acrylic Concrete Primer A24W300
b. Intermediate Coat: Sher-Cryl HPA B66-350 Series
c. Topcoat: Sher-Cryl HPA B66-350 Series

B. Concrete Masonry Units:

1. High Performance Waterbased System MPI EXT 4.2C

a. Prime Coat: PrepRite Block Filler Interior/Exterior B25W25
b. Intermediate Coat: Sher-Cryl HPA B66-350 Series
c. Topcoat: Sher-Cryl HPA B66-350 Series

C. Structural Steel:

1. High Performance Waterbased System over Alkyd Primer MPI EXT 5.1C

a. Prime Coat: Kem Kromik Universal Metal Primer B50 Series (Non-Factory Primed)
b. Intermediate Coat: Sher-Cryl HPA B66-350 Series
c. Topcoat: Sher-Cryl HPA B66-350 Series

D. Metal Fabrications (Guardrails, Ladders, Bollards):

1. Industrial Enamel Safety Yellow over Alkyd Primer MPI #81

a. Prime Coat: Kem Kromik Universal Metal Primer B50 Series (Non-Factory Primed)
b. Intermediate Coat: Industrial Enamel B54 Series (Safety Yellow)
c. Topcoat: Industrial Enamel B54 Series (Safety Yellow)

E. Galvanized Metal: (not chromate passivated):

1. High Performance Waterbased System over DTM Acrylic Primer MPI EXT 5.3J

a. Prime Coat: DTM Acrylic Primer/Finisher B66W1
b. Intermediate Coat: Sher-Cryl HPA B66-350 Series
c. Topcoat: Sher-Cryl HPA B66-350 Series

F. Plastic:

1. High Performance Waterbased System over Adhesion Primer MPI EXT 6.8C

a. Prime Coat: Adhesion Primer by Sherwin-Williams B51W8050
b. Intermediate Coat: Sher-Cryl HPA B66-350 Series
c. Topcoat: Sher-Cryl HPA B66-350 Series

3.5 Interior Coating Systems:

A. Concrete Vertical Surfaces:

1. Epoxy Modified Waterbased Semi-Gloss Finish MPI INT 3.1G

a. Prime Coat: Loxon Acrylic Concrete Primer A24W300
b. Intermediate Coat: Pro Industrial Pre-Catalyzed Waterbased Epoxy K46 Series
c. Topcoat: Pro Industrial Pre-Catalyzed Waterbased Epoxy K46 Series

B. Concrete Horizontal Surfaces:

1. Solvent Based Aliphatic Polyurethane Clear Coating MPI INT 3.2K

a. Prime Coat: Self Priming
b. Intermediate Coat: Armorseal Rexthane I Floor Coating
c. Topcoat: Armorseal Rexthane I Floor Coating

C. Concrete Masonry Units:

1. Epoxy Modified Waterbased Semi-Gloss Finish MPI INT 4.2J

a. Prime Coat: PrepRite Block Filler Interior/Exterior B25W25
b. Intermediate Coat: Pro Industrial Pre-Catalyzed Waterbased Epoxy K46 Series
c. Topcoat: Pro Industrial Pre-Catalyzed Waterbased Epoxy K46 Series

D. Gypsum Board:

1. Interior Latex Egg-Shell Finish over High Build Primer MPI INT 9.2A

a. Prime Coat: PrepRite Interior Latex High Build Primer/Surfacer B28W601
b. Intermediate Coat: ProGreen Low VOC 200 Interior Latex Egg-Shell B20-600
c. Topcoat: ProGreen 200 Low VOC Interior Latex Egg-Shell B20-600

E. Structural Steel:

1. Epoxy Modified Waterbased Semi-Gloss Finish MPI INT 5.1K

a. Prime Coat: Pro-Cryl Universal Primer B66-310 Series (Non-Factory Primed)
-or- Kem Kromik Universal Metal Primer B50 Series
b. Intermediate Pro Industrial Pre-Catalyzed Waterbased Epoxy K46 Series
c. Topcoat: Pro Industrial Pre-Catalyzed Waterbased Epoxy K46 Series

F. Metal Fabrications (Ferrous Metals and Pre-Painted):

1. Direct-to-Metal Acrylic over Alkyd Primer MPI INT 5.1B

a. Prime Coat: Kem Kromik Universal Metal Primer B50 Series
(If Not Pre-Painted or Factory Primed)
b. Intermediate Coat: Pre-Catalyzed Waterbased Epoxy K46 Series
c. Topcoat: Pre-Catalyzed Waterbased Epoxy K46 Series

G. Metal Fabrications – Other (Guardrails, Ladders, Bollards):

1. Industrial Enamel Safety Yellow over Alkyd Primer MPI #81

   a. Prime Coat: Kem Kromik Universal Metal Primer B50 Series (Non-Factory Primed)
   b. Intermediate Coat: Industrial Enamel B54 Series (Safety Yellow)
   c. Topcoat: Industrial Enamel B54 Series (Safety Yellow)

H. Galvanized Metal: (not chromate passivated):

1. Epoxy Modified Waterbased Semi-Gloss Finish over DTM Acrylic Primer MPI INT 5.3K

   a. Prime Coat: DTM Acrylic Primer/Finisher B66W1
   b. Intermediate Coat: Pro Industrial Pre-Catalyzed Waterbased Epoxy K46 Series
   c. Topcoat: Pro Industrial Pre-Catalyzed Waterbased Epoxy K46 Series

I. Plastic:

1. Epoxy Modified Waterbased Semi-Gloss Finish over Adhesion Primer MPI INT 6.8C

   a. Prime Coat: Adhesion Primer by Sherwin-Williams B51W8050
   b. Intermediate Coat: Pro Industrial Pre-Catalyzed Waterbased Epoxy K46 Series
   c. Topcoat: Pro Industrial Pre-Catalyzed Waterbased Epoxy K46 Series

END OF SECTION