PART 1 - GENERAL

1.1 References

- .1 Master Painters Institute (MPI)
 - 1 Architectural Painting Specifications Manual.
- .2 Society for Protective Coatings (SSPC)
 - .1 Systems and Specifications Manual, SSPC Painting Manual, Volume Two.
- .3 National Fire Code of Canada

1.2 Quality Assurance

.1 Conform to latest MPI requirements for painting Work including preparation and priming.

1.3 Delivery, Handling and Storage

- Deliver, store materials in original containers with labels intact. Observe manufacturer's recommendations for storage and handling.
- .2 Comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling storage, and disposal of hazardous materials.

1.4 Site Requirements

- .1 Unless specifically pre-approved by product manufacturer, perform no painting Work when:
 - .1 Substrate and ambient air temperatures are expected to fall outside MPI or paint manufacturer's prescribed limits.
 - .2 Rain or snow is forecast to occur before paint has thoroughly cured or when it is foggy, misty, raining or snowing at Site.
 - .3 The maximum moisture content of the substrate exceeds MPI or paint manufacturer's prescribed limits
- .2 Apply paint finish only:
 - In areas where dust is no longer being generated by related construction operations or when wind or ventilation conditions are such that airborne particles will not affect quality of finished surface.
 - .2 Apply paint only to adequately prepared surfaces and to surfaces within moisture limits noted herein.
 - .3 Apply paint only when previous coat of paint is dry or adequately cured.

PART 2 - PRODUCTS

2.1 Materials

- .1 Only paint materials listed in the MPI Approved Products List (APL) are acceptable for use on this project.
- .2 Paint materials for paint systems shall be products of a single manufacturer.
- .3 Contract Administrator will select colors and determine total number of colors to be used on project and their locations:
 - .1 Interior plywood walls and ceilings, concrete floor GP CL3173M Excalibur
 - .2 Exterior door, louvers & other appurtenances GP CLC 1202W Renovation
 - .3 Interior handrail & exposed piping Blue to match existing
 - .4 Monorail Beam Safety yellow
 - .5 Exterior Handrail Galvanized finish

2.2 Gloss/Sheen Ratings

- .1 Paint gloss shall be as defined in MPI Architectural Painting Specifications Manual.
- .2 Gloss level ratings of painted surfaces shall be as specified herein.

2.3 Painting Systems

- .1 Shop primed steel:
 - .1 MPI EXT 5.1D Alkyd G5 semi-gloss finish premium grade.
- .2 Galvanized metal:
 - MPI EXT 5.3B Alkyd G5 semi-gloss finish premium grade.
- .3 Plywood paneling:
 - .1 MPI EXT 6.4B Alkyd GR semi-gloss finish premium grade.
- .4 Concrete floors:
 - .1 MPI EXT 3.2D Alkyd floor enamel #59 low gloss finish premium grade.

 Sprinkle with clean silica sand to provide slip resistant surface.

PART 3 - EXECUTION

3.1 General

- .1 Perform preparation and operations for painting in accordance with MPI Painting Specifications Manual except where specified otherwise.
- .2 Do repainting of previously painted surfaces in accordance with MPI Maintenance Repainting Manual, except where specified otherwise.
- .3 Apply paint materials in accordance with paint manufacturers' written application instructions.
- .4 Paint all new Work, except prefinished items or where indicated otherwise.
- .5 Do not paint galvanized steel, aluminum fabrications, mechanical and electrical equipment unless noted otherwise.

3.2 Existing Conditions

- Investigate existing substrates for problems related to proper and complete preparation of surfaces to be painted. Repair damages, defects, unsatisfactory or unfavorable conditions before proceeding with Work.
- .2 Conduct moisture testing of surfaces to be painted using a properly calibrated electronic moisture meter and report findings to Contract Administrator. Do not proceed with Work until conditions fall within acceptable range as recommended by manufacturer.

3.3 Protection

- .1 Protect existing building surfaces and adjacent structures from paint spatters, markings and other damage by suitable non-staining covers or masking. If damaged, clean and restore such surfaces as directed by Contract Administrator.
- .2 Protect items that are permanently attached such as Fire Labels on doors and frames.
- .3 Protect factory finished products and equipment.
- .4 Protect passing pedestrians and general public in and about the building.
- .5 Remove electrical cover plates, light fixtures, surface hardware on doors, and other surface mounted equipment, fittings and fastenings prior to undertaking any painting operations. Store securely store items and re-installed after painting is completed.

3.4 Cleaning and Preparation

- .1 Clean and prepare surfaces in accordance with MPI Painting Specification Manual requirements. Refer to MPI Manual in regard to specific requirements.
- .2 Sand and dust between coats as required to provide adequate adhesion for next coat and to remove defects visible from a distance up to 1000 mm.
- .3 Clean metal surfaces to be painted by removing rust, loose mill scale, welding slag, dirt, oil, grease and other foreign substances in accordance with MPI requirements. Remove traces of blast products from surfaces, pockets and corners to be painted.
- .4 Touch up of shop primers with primer as specified in applicable section. Major touch-up including cleaning and painting of field connections, welds, rivets, nuts, washers, bolts,

- and damaged or defective paint and rusted areas, shall be by supplier of fabricated
- .5 Clean and roughen existing concrete floor surface using abrasive blasting (sandblasting or light brush shotblast). Sweep and pressure wash surface after blasting to remove dust and debris. Patch holes and cracks with filler. Surface should be free from moisture before application of paint.

3.5 Application

- Apply paint by brush, roller, airless sprayer. Conform to manufacturer's application instructions unless specified otherwise.
- .2 Apply coats of paint as a continuous film of uniform thickness. Repaint thin spots or bare areas before next coat of paint is applied.
- .3 Painting coats specified are intended to cover surface completely. If necessary apply additional coats until satisfactory coverage is obtained. Provide additional coats at not additional cost to Contract.
- .4 Allow surfaces to dry and properly cure after cleaning and between subsequent coats for minimum time period as recommended by manufacturer.
- .5 Sand and dust between coats to remove visible defects.
- .6 Finish surfaces both above and below sight lines as specified for surrounding surfaces, including such surfaces as tops of interior cupboards and cabinets and projecting ledges.
- .7 Do not paint door and miscellaneous hardware, unless indicated otherwise.
- .8 Do not paint nameplates, signage, fire labels, or other markers or signs indicated to remain.
- .9 Do not paint copper, bronze, chromium plate, nickel, stainless steel, aluminum, lead and other bright metals, unless specified otherwise.
- .10 Clean shop applied paint surfaces that become marked. Touch up with primer and paint as required.

3.6 Mechanical/Electrical Equipment

.1 Do not paint conduits, piping, hangers, ductwork and other mechanical and electrical equipment unless noted otherwise. Leave in original finish.

3.7 Restoration

- .1 Clean and re-install all hardware items removed before undertaken painting operations.
- .2 Remove protective coverings and warning signs as soon as practical after operations cease.
- .3 Remove paint splashings on exposed surfaces that were not painted. Remove smears and spatter immediately as operations progress, using compatible solvent.
- .4 Protect freshly completed surfaces from paint droppings and dust. Avoid scuffing newly applied paint.
- .5 Restore areas used for storage, cleaning, mixing and handling of paint to clean condition.

PART 4 - MEASUREMENT AND PAYMENT

4.1 Method of Measurement and Payment

- .1 Painting
 - .1 Painting will be measured and paid for at the Contract Lump Sum Price for "Finishes", which price shall be payment in full for supplying all materials and for performing all operations herein described and all other items incidental to the work included in this Specification.

PART 1 - GENERAL

1.1 Product Data

.1 Submit manufacturer's printed product literature, specifications and application instructions to Contract Administrator before commencing application.

1.2 Environmental Conditions

.1 Maintain ambient and structural base temperature at installation area within limits specified by coating manufacturer. Apply coating during dry weather. Do not apply coating to wet or damp surfaces.

1.3 Protection

.1 Protect plants and vegetation that might be damaged by coating. Protect surfaces not intended to have application of 1coatings. Provide adequate ventilation or isolation measures to protect against toxic fumes.

PART 2 - PRODUCTS

2.1 Materials

- .1 Graffiti-resistant coating: one component, water based, non-sacrificial, clear penetrating sealer and liquid repellent.
 - .1 Acceptable products: Fabrikem Fabrishield Paint Repellent PR-60 for precast concrete and PR-61 for clay brick.

PART 3 - EXECUTION

3.1 Preparation

- .1 Prepare and clean substrate surfaces in accordance with coating manufacturer's instructions.
- .2 Mix and prepare coatings to manufacturer's instructions.
- .3 Take moisture tests on substrates to receive coating to ensure moisture levels are within limits specified by coating manufacturer.

3.2 Application

- .1 Apply coating using low pressure spraying apparatus, at recommended coverage rate for product and substrate.
- .2 Apply in uniform, even coat to fully wet substrate, without flooding or rundowns.
- .3 Allow area to dry completely before applying additional coats.

3.3 Schedule

.1 Apply graffiti-resistant coating to clay brick and architectural precast concrete units.

PART 4 - MEASUREMENT AND PAYMENT

4.1 Method of Measurement and Payment

- .1 Graffiti-Resistant Coatings
 - The supply and installation of graffiti-resistant coatings shall be considered incidental to the Contract Lump Sum Price for "Finishes".