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SECTION 09801

CONCRETE PROTECTIVE COATING

PART 1 - GENERAL

1.01 SCOPE

The Contractor shall furnish all labor, material, equipment and appurtenances necessary for the installation of a concrete protective coating in the precast concrete structure, as shown on the approved plans, in accordance with these specifications.

1.02 RELATED SECTIONS

Section 09900 - Painting (Short) Section UC-570 - Installation of Pump Station

PART 2 - PRODUCTS

2.01 PROTECTIVE COATING

All interior concrete surfaces of the wet well shall be coated with the PPC Coating System WW-200-1a/Damp Concrete, as manufactured by Polymorphic Polymers Corporation or approved equal. The manufacturer's application procedures shall be strictly followed and may only be applied by factory-trained application technicians.

PART 3 - EXECUTION

3.01 APPLICATION

Application procedure for PPC Coating System WW-200-1a/Damp Concrete shall be as follows:

A. Surface preparation

Surface preparation shall be to obtain a clean, sound concrete surface. All loose spalled concrete shall be removed. The exposed surface shall be free of dust, dirt, grease, oil, fats, concrete sealing or hardening chemicals, form release agents or other contaminants. Thoroughly wire brush to remove any loose rust on steel reinforcement.

B. Waterproofing Coat

- 1. With clean water, dampen concrete to a dull gray finish (no standing water). Maintain substrate dampness throughout the application of the first coat.
- 2. Apply with brush or spray one (1) coat PC-100-8 waterproofing mix. Allow to cure until dry to the touch (1-2 hrs). Apply second coat of waterproofing mix and allow to cure a minimum

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of 24 hours.

3. Application thickness: 20 mils

C. Prime Coat

1. Before applying Prime Coat, check pH of concrete, it must be within the range of <u>5.5 to 8.0</u> before Prime Coat is applied.

- 2. All surfaces must be thoroughly coated with PC-Prime Coat having a totally "wetted" appearance after cure.
- 3. Application thickness: 7-10 mils.

D. Spalled Areas

After Prime Coat has set, all spalled areas must be filled with aggregate filled PPC Spall Grout, thereby returning the areas to a uniform contour. Exposed rebar (reinforcing steel) should be troweled to a minimum thickness of ½ inch.

E. Intermediate Coat

- 1. This coat shall consist of IC-Q Lining Coat an integral part of PPC Coatings. This filled, antipinholing material should be applied to a thickness of 20-30 mils.
- 2. Application thickness: 20-30 mils.

F. Final Coat

- 1. FC-Final Coat is applied after the Intermediate Coat has set. Final Coat has pigment and special additives to improve abrasion and chemical resistance.
- 2. Application thickness: 10-12 mils.

END OF SECTION

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