SPECIFICATIONS FOR WATER STORAGE TANK REPAINTING

150 MG WATERSPHERE

PRESTWICK WATER TOWER

FRANKFORT, ILLINOIS

GENERAL OBJECTIVE:

The object of these specifications is to provide the material and workmanship necessary to produce a quality coating system. All painting work shall be implemented in strict accordance with the manufacturer's instructions and shall be performed in a manner satisfactory to the Owner.

QUALITY OF PAINT:

The paint products mentioned in the following specifications are set up as standards of quality. The standard "or equal" clause shall apply. No substitution will be considered unless a written request for approval has been received by the Owner at least 10 days prior to the date for receipt of bids. Each such request shall include the name of the specified material for which a substitute is being requested; the name of the proposed substitute material; and a complete description of the proposed substitute including performance and test data and any other information necessary for an evaluation. The burden of proof of the merit of the proposed substitute is upon the proposer. The decision of the Owner regarding approval or disapproval of the proposed substitution shall be final.

All material shall be brought to the job site in the original sealed and labeled containers of the paint manufacturer and shall be subject to inspection by the Owner. Colors, where not specified, shall be selected by the Owner.

The Contractor shall submit to the Owner, immediately upon completion of the job, certification from the paint manufacturer indicating that the quantity of each coating purchased was sufficient to coat all surfaces in accordance with the specifications and manufacturer's recommendations.

APPLICATION OF PAINT:

The Contractor shall apply each coating in accordance with these specifications and the paint manufacturer's recommendations. The coating shall be applied at the specified
thickness. If the specified thickness is not obtained, an additional coat(s) of paint shall be applied.

All paint shall be applied in strict accordance with the applicable manufacturer’s printed data sheet and container label outlining recommended minimum and maximum surface and air temperatures required for application. Paint shall not be applied to wet or damp surfaces and shall not be applied in rain, snow, fog or mist, or when the relative humidity exceeds 85%.

No paint shall be applied when it is expected that the relative humidity will exceed 85% and/or the air temperature will drop below recommended levels within 12 hours after paint application. Dew or moisture condensation should be anticipated, and if such conditions are prevalent, painting shall be delayed until certain that the surfaces are dry. Painting should be completed well in advance of the probable time of day when condensation will occur in order to permit the film an appropriate drying time prior to the formation of moisture on the surface.

**DRY FILM THICKNESS:**

Dry film thickness shall be measured in accordance with current SSPC PA2, "Dry Paint Thickness with Magnetic Gauges".

**TANK PAINTING CONTRACTOR QUALIFICATIONS** Bidder shall submit with the bid:

1) A list of ten (minimum) tanks of like size and painting requirements completed by the bidder within the last three years in the State of Illinois.

2) Documentation pertaining to tank painting work performed in the last five years in the State of Illinois.


5) As a prerequisite to award of the contract, the contractor shall provide proof of participation in apprenticeship and training programs approved and registered with the United States Department of Labor’s Bureau of Apprenticeship and Training for all construction contracts in excess of $25,000.
BID WILL BE CONSIDERED "NON RESPONSIVE" IF THESE REQUIREMENTS ARE NOT FULFILLED.

Existing paint systems containing lead and/or other heavy metals may require compliance with certain environmental safety and health regulations during surface procedures. Always reference applicable federal, state and local regulations prior to proceeding.

CONTAINMENT / DISPOSAL REQUIREMENTS:

When required by federal, state or local regulation, the entire tank and structure shall be enclosed and surface preparation debris contained. Refer to SSPC-GUIDE 6 (CON), "Guide for Containing Debris Generated During Paint Removal Operations".

Refer to SSPC-GUIDE 7 (DIS). NOTE: All surface preparation debris must be disposed of in accordance with applicable federal, state and local regulations.

The owner is the generator of and is responsible for the proper containment and disposal of all waste resulting from the surface preparation of this tank(s). As part of this contract, the contractor shall arrange and pay for all containment, tests, permits, transportation and disposal of all waste resulting from the surface preparation of this tank(s) in strict accordance with Illinois EPA regulations. Copies of all documentation required by Illinois EPA regulations shall be submitted to the owner for verification prior to the submission of the contractor's request for final payment.

The painting contractor shall cut and grind flush all exterior containment structure lugs and prepare and paint areas as described in the exterior painting section of these specifications.

Upon removal of the exterior lugs, the painting contractor shall also repair any damaged interior coating by methods described in the interior painting section of these specifications. Abrasive blasting to bare metal (SSPC-SP10) will be required in the damaged areas.

DISINFECTION AND FILLING OF THE TANK:

Adequate ventilation that will effectively remove solvent vapors shall be provided for proper drying of paint on interior surfaces. Following final coat application, the tank shall not be disinfected or filled until the coating system is fully cured. Refer to applicable product data sheet(s) for dry time/temperature requirements. Disinfection shall be done in accordance with the current American Water Works Association standard, AWWA C652, or as instructed by the Owner.
AMERICAN WATER WORKS ASSOCIATION:

All work shall be implemented in accordance with the American Water Works Association’s Standard D102-011.

NSF CERTIFICATION:

All coatings in contact with potable water or applied to the inside wet area of the tank shall be listed by NSF International or UL under ANSI/NSF Standard 61, Section 5, Protective (Barrier) Materials, Potable Water Tank Coatings.

FIRST ANNIVERSARY INSPECTION:

Approximately 11 months after the completion of the work, the CONTRACTOR and CITY and or the CITY’S representative shall inspect the inside and outside surfaces of the tank, in accordance with Section 5.2 of AWWA Standard D102 to determine whether any repair work is necessary.

GUARANTEE:

The Bid shall be construed to contain a guarantee for a minimum of one (1) year for all materials and workmanship.

Any work proving defective within one year for the date of acceptance shall be redone without additional expense to the CITY or for labor or materials.

EXTERIOR COATING SYSTEM – Base Bid

SURFACE PREPARATION:

Remove all oil and grease from the surface prior to blast cleaning. All exterior surfaces shall be abrasive blast cleaned to a Commercial Finish, removing all existing paint, rust, dirt, mill scale and foreign matter by the recommended methods outlined in the SSPC Society of Protective Coating’s Specification SP-6. A minimum angular blast profile of 2.0 mils is required.

PRIME COAT:

Immediately after blasting and before any rusting occurs (within 12 hours maximum), apply one coat of Tnemec Series 91-H2O Hydro-Zinc to all bare steel surfaces. This coating shall be applied at a dry film thickness of 2.5 - 3.5 mils.

INTERMEDIATE COAT:
Apply one complete coat of Tnemec Series N69-color Hi-Build Epoxoline II at a dry film thickness of 2.0 - 3.0 mils.

FIRST FINISH COAT:

Apply one complete coat of Tnemec Series 1075 -color* Endura-Shield II at a dry film thickness of 2.0 - 3.0 mils

* 15BL Tank White & 84GN Old Plantation

SECOND FINISH COAT:

Apply two-tone color scheme with one complete coat complete coat of Tnemec Series 1074U-PL20 Hunter Green Endura-Shield II and 1074U-11WH Tnemec White Endura-Shield at a dry film thickness of 2.0 - 3.0 mils.

INTERIOR (WET) COATING SYSTEM

SURFACE PREPARATION:

The entire surface shall be abrasive blast cleaned to a Near White Finish, removing all existing paint, rust, dirt, mill scale and foreign matter by the recommended methods outlined in the SSPC Society of Protective Coating's Specification SP-10. A minimum angular anchor profile of 2.0 mils is required.

PRIME COAT:

Immediately after blasting and before any rusting occurs (within 12 hours maximum), apply one coat of Tnemec Series 91-H2O Hydro-Zinc to all bare steel surfaces. This coating shall be applied at a dry film thickness of 2.5 - 3.5 mils.

STRIPE COAT:

After the primer has cured in accordance with the manufacturer's recommendations, apply one stripe coat, by brush only, of Tnemec Series N140-39BL Delft Blue Pota-Pox Plus to all weld seams, edges of unseal welded roof plates, angles, and sharp edges.

INTERMEDIATE COAT:

Apply one complete coat of Tnemec Series N140-1255 Chicago Beige Pota-Pox Plus to all surfaces. This coating shall be applied at a dry film thickness of 4.0 - 6.0 mils.

FINISH COAT:
Apply one complete coat of Tnemec Series N140-15BL Tank White Pota-Pox Plus at a dry film thickness of 4.0 - 6.0 mils.

INTERIOR (DRY AREA) COATING SYSTEM

SURFACE PREPARATION:

1. The topside of the upper platform and 1’ up the riser wall, the topside of the lower condensate plate and 1’ up the riser wall and the access tube, and the belly of the tank shall be abrasive blast cleaned to a Commercial Blast Finish removing all existing paint, rust, dirt, mill scale and foreign matter by the recommended methods outlined in the SSPC Society of Protective Coating's Specification SP-6. A blast profile of 1.5 mils is required.
2. All other rusted and failed surfaces on the interior dry shall be spot abrasive blast clean to a Commercial Finish, SSPC SP-6.
3. Feather edges to form a smooth transition to tight existing paint.

PRIME COAT:

Immediately after blasting and before any rusting occurs (within 12 hours maximum), apply one coat of Tnemec Series N140-1255 Chicago Beige Pota-Pox Plus to all bare steel surfaces. This coating shall be applied at a dry film thickness of 3.0 - 5.0 mils.

FINISH COAT:

Apply one complete coat of N140-15BL Tank White Pota-Pox Plus to all bare steel surfaces. This coating shall be applied at a dry film thickness of 4.0 - 6.0 mils.

SCHEDULE OF PRICES

EXTERIOR PAINTING (Base Bid) $_______________________

INTERIOR "WET" PAINTING $_______________________

INTERIOR “DRY” PAINTING $_______________________
LETTERING / LOGO $_______________________

CONTAINMENT / DISPOSAL $_______________________

TOTAL PROJECT $_______________________

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HOURLY RATE (PER MAN HOUR) FOR REPAIRS

$_______________________

INSTAL SEAM SEALER TO ALL ROOF RAFTERS & TO ALL UN-SEAL WELDED ROOF SEAMS, SIKA FLEX 1A, OR EQUAL

$_______________________

EXTERIOR COATING SYSTEM – Alternate Bid #1

Surface Preparation: - Same as Base bid

Prime Coat: - Same as Base Bid

ADDITIONAL PRIME COAT:

Apply by brush only, one additional spot prime coat to all inaccessible and hard to reach areas, such as the inside of anchor bolt chairs, vent, manways, tie rods, turnbuckles, and accessories, with one coat of Tnemec Series 135-color Chembuild.

INTERMEDIATE COAT:

Apply one complete coat of Tnemec Series 73-color*
Endura-Shield at a dry film thickness of 2.0 - 3.0 mils.

* 73-15BL Tank White & 73-84GN Old Plantation
FINISH COAT:

Apply two-tone color scheme with one complete coat of Tnemec Series V700-PL20 Hunter Green HydroFlon and V700-11WH Tnemec White at a dry film thickness of 2.0 - 3.0 mils.

LETTERING / LOGO PAINTING: - Same as Base Bid

ADD or (DEDUCT) from TOTAL PROJECT $_______________________