Goodwyn Mills Cawood
11 N. Water Street, Suite 19290
Mobile, AL 36602
T 251.460.4006

TRANSMITTAL COVER SHEET

DATE: **JUNE 16, 2025**

TO: **ALL CONTRACTORS**

FROM: **WHEELER CROOK**

PROJECT: **TANK FARM POTABLE WATER STORAGE REHABILITATIONS**
WETUMPKA WATER WORKS & SEWER BOARD
GMC PROJECT NO. CMGM240092

RE: **ADDENDUM #2**

PLEASE COMPLETE BELOW AND RETURN IMMEDIATELY.

Ashley Morris
Email: ashley.morris@gmcnetwork.com

I, the undersigned, hereby acknowledge receipt of this Addendum #2.

_____ _____
Authorized Representative of Contractor Date

_____ _____
Company Name Telephone

_____
Contractor's License Number (if applicable)

ADDENDUM NUMBER 2

TANK FARM POTABLE WATER STORAGE REHABILITATIONS

FOR

WETUMPKA WATER WORKS & SEWER BOARD

GMC PROJECT NO. CMGM240092

1. Revisions to Project Manual

1.1 The following revisions are hereby added as Addendum No. 2 to the referenced Project Manual and Plans and shall be considered when preparing bids.

1.2 The following Specifications are included in this Addendum:

- 01 03 00 - Special Project Provisions
- 17 9590 - Surface Preparation & Coating

2. Acknowledgement of Receipt

2.1 Receipt of Addendum No. 2 shall be acknowledged in two ways:

2.1.1 Note on the bid form where it's indicated – Bidder acknowledges receipt of "Addendum No. 2" and date of "June 16, 2025".

AND

2.1.2 EMAIL the signed transmittal sheet to ashley.morris@gmcnetwork.com to confirm the addendum has been received and is legible.

3. Conclusion

3.1 This is the end of Addendum Number 2, dated Monday, June 16, 2025.

SECTION 01 03 00 – SPECIAL PROJECT PROVISIONS

PART 1 - GENERAL

1.1 GENERAL:

A. The Contractor shall obtain the licenses and pay any building fees as required by applicable agencies for the completion of this construction.

B. Bidders shall refer to the Supplementary Conditions for instructions regarding all sales and use taxes for this project.

C. In the event that bids exceed the funds available, the Owner reserves the right to exercise all or any combination of deleting sections or parts thereof to bring the construction cost within the funds available.

D. All work shall be done in accordance with Wetumpka WW&SB Rules and Regulations, the latest, AWWA, ADEM and EPA guidelines, and the latest ALDOT standard specifications and guidelines (when working within the ALDOT ROW). The amount bid for this Contract shall include all costs related to erosion control procedures, compliance with all current OSHA regulations, and building construction permits.

E. The work covered by this contract consists of furnishing all materials, labor, equipment, tools, supplies and appurtenances necessary for the rehabilitation of potable water tanks and related appurtenances as detailed, and as directed by the Engineer and Owner. All equipment, materials and methods of construction shall be subject to the approval of the Engineer. The Contractor shall comply with OSHA regulations on confined space entry, as published CFR on April 14, 1993.

F. All Special Provisions as detailed herein are intended to amend and/or clarify the other Specifications as noted.

G. **The Contractor is cautioned that there is limited working room and limited access at the tank site. The contractor shall limit the number of vehicles on site and may have to shuttle employees to the site. There is minimal storage space, and the contractor may be required to store equipment and materials off-site while not in use.**

H. Work hour restrictions are as follows. The contractor shall begin work no earlier than 7:00 AM and be completed by no later than 5:00 PM (Monday thru Friday). Weekend work must be pre-approved by the Owner.

I. The contractor shall utilize as needed sound attenuation devices on all equipment to reduce noise pollution to the homes that are directly adjacent to the project site.

J. In the event that bids exceed the funds available, the Owner reserves the right to exercise all or any combination of deleting entire sections or parts thereof to bring the construction cost within the funds available.

K. Included as a part of this proposal, the Contractor shall provide a complete list of all equipment, materials and subcontractors to be used. Also included shall be names and biographical

background information of the assigned project superintendent and all technical personnel highlighting training and work experience.

L. The contractor shall maintain a competent, fluent speaking English superintendent / foreman as deemed by the Engineer onsite at all times that work is being performed.

M. The work covered by this contract consists of furnishing all labor, materials, equipment and supplies necessary for the construction and testing of the project as specified in the project manual, and as directed by the Engineer. The Contractor shall comply with all OSHA regulations including confined space entry.

N. During surface preparation, airborne particulate and debris from the removal of paint shall not be permitted to contaminate the air, soil and water surrounding the work site. The contractor will be required to perform any site remediation required due to improper collection and disposal of paint removal debris.

O. The Contractor shall submit an applicable color chart for review. Tank colors for the exterior intermediate, finish coat color and level indicator lettering shall be selected by the Owner.

P. The pay item "Unidentified Repair Allowance" is intended for use should any unforeseen repairs arise during the rehabilitation of the tank. The incorporation of unidentified repairs shall be approved prior to the incorporation into the project. Any unused portion of the allowance at the end of the contract shall be credited back to the owner.

Q. All debris, rubbish, spent blasting debris, paint cans, etc. shall be removed from the site and the site left in pre-construction condition.

R. All pipe openings shall be covered during all surface preparations and cleaning procedures to prevent debris from entering pipes.

S. All bidders shall visit the tank site prior to preparing their bid to assure themselves that the sites are satisfactory from the standpoint of performing all work as required. Access times to the tank sites may be arranged by contacting Mr. Michael Digmon - Wetumpka WW&SB at (334) 567-8404. The bidder must contact the Owner to set up a site visit time prior to the actual visit. Any necessary measurements for the purpose of rehabilitating the tanks may be taken at this time.

T. The Contractor shall allow to remain and/or remove and relocate prior to rehabilitation and reinstall thereafter all active/inactive antenna devices, accessories etc. during the rehabilitation of the tank.

U. The tank nameplate, etc., shall be removed and protected during construction and re-installed upon completion of the project.

V. The water for flushing and disinfection shall be supplied by the Owner at no cost to the Contractor.

W. The contractor shall complete the rehabilitation, disinfection and sampling of the steel GST and place it back into service prior to taking the concrete GST out of service for rehabilitation.

X. The existing GST's proposed for dismantling and removal are located in a confined working area and the tank cannot be cut and toppled. It shall be the sole responsibility of the contractor for developing and implementing a site safety and security plan for this portion of the job.

Y. The contractor shall be solely responsible for any/all lead paint abatement required during the dismantling of the tank in accordance with all applicable state and federal regulations.

Z.The tank demolition shall be performed by a reputable and experienced contractor providing similar experience qualifications as outlined in these specifications.

AA.The bid Item "Dismantle and Dispose of Ex. GST" shall include all labor, equipment, and supplies needed to fully dismantle and dispose of the existing 500,000 gallon ground storage tanks, includes the existing internal fill contents (up to 3' depth) of the ring wall foundations (contents shall be properly tested, disposed per state and federal regulations and documentation of disposal shall be furnished to the Owner for their records. The contractor shall furnish, install and compact borrow excavation to replace the removed internal ring wall fill contents. The scope excludes the removal of the foundations / footings). All disturbed areas shall be seeded and mulched. Also, included shall be cost for site security and proper removal and disposal of the existing tanks.

BB. The site shall be grassed with mulch installed and all trash/debris removed. The contractor shall include all cost associated with the bid item.

1.2 GENERAL CONTRACTOR REQUIREMENTS:

A. All Bidders shall be prepared to submit a satisfactory qualification and experience record, as outlined in this specification, at the request of the Owner.

B. The Contractor shall have an adequate number of experienced personnel and available equipment to place on the project to successfully perform the work within the completion period.

C. The Bidder shall have successfully completed construction of at least Ten (10) comparable projects similar in scope and size. Comparable projects should also include projects similar in nature.

D. Subcontractors shall have no less than 5-years verifiable experience in their trade and no less that 5-years verifiable experience in their business enterprise contracting for work under this project. The type of work subcontracted for this project shall be the principal business of the Subcontractor.

E. Superintendents and foremen, or other individual in the lead or supervisory position for any portion of the Work under this Contract shall have no less than 7-years verifiable experience in performing the type of work they are responsible for.

   1. The Contractor shall submit resumes of work and project experience for their Superintendent and foremen, as soon as possible and at least within five calendar days of receipt of the Contract to be executed for the Work, for review and acceptance by the Owner and Engineer.

F. The Owner anticipates and desires to award the project shortly after the bid opening. Therefore, it is imperative that the Bidder be prepared to submit all required qualification information to the Engineer soon after the bid opening. The Bidder may submit this information with their bid.

G. Applicants may not be deemed qualified if:

1. The Applicant fails to submit an adequate Qualification Statement, including failing to provide all required documentation, when requested by the Engineer;
2. The Applicant fails to meet the Technical and Corporate Experience Requirements;
3. Reasonable grounds exist that Applicant is involved in collusion among other applicants.
4. The Applicant, or any of its principals, is currently disbarred from bidding on public entity work in any State.

H. Final determination of Applicant's qualification status rests solely with the Owner.

I. QUALIFICATION STATEMENT: Bidders shall be prepared to submit the following information with the bid in order for the Owner to evaluate the Bidders' qualifications during the evaluation of the bids:

1. Firm name, address, number, contact.
2. Legal form of business (Corp, etc.) and date started.
3. Name of parent company, sister company, etc.
4. List name and residence (City and State) of all officers, owners, partners and principals. Identify relationship of each to the firm and if active in the firm.
5. Current State of Alabama Contractor's License – License Number, Bid Limit, Classification.
6. Provide a statement that Applicant has not defaulted on a project nor failed to complete a project within the past ten years. If this is not the case, explain and provide project contact information.
7. Provide a statement that Applicant has not filed for bankruptcy or been judged bankrupt at any time over the past nine years. If this is not the case, explain. Provide a document signed and notarized by a Company officer.
8. Provide a statement that Applicant has not been involved in liquidated damages in the past five years. If this is not the case, explain and provide contact information.
9. Provide a list of all projects under contract over the last five years, with a construction contract amount in excess of $500,000.
10. Provide a statement that the Applicant has never abandoned a project, even temporarily, during a dispute. If this is not the case, please explain and provide contact information.
11. Provide a statement whether Applicant has or has not been involved in litigation as a plaintiff against an Owner, Design Firm or Construction Contract Administration Firm, or served the Owner with a claim for additional compensation prepared by an attorney or a claims consultant, excluding routine change order requests, in the past five years. If Applicant has, explain and provide contact information. List any lawsuits or administrative actions to which the Applicant is currently a party or has been a party (either as a plaintiff or defendant) during the past ten years. For each suit, list all parties and indicate whether any party was a bonding company, insurance company, an Owner or other. Identify the project giving rise to the suit or administrative action, explain the basis of the claim, and whether a settlement was reached or a judgment entered into for or against the Applicant or the Applicant's bonding company or insurance company.

12. Provide a statement that the Applicant, as well as all of its affiliated companies, is not involved in any dispute, formal claim, or litigation with the Owner, nor any authority or organization with which the Owner has a vested interest. If this is not the case, please explain.
13. List all other projects currently under contract in the United States, the current contract amounts and scheduled completion dates.
14. State percentage of contract amount that bidder will perform with its own forces.
15. List possible subcontractors that may be utilized on the project and the work each subcontractor will perform.
16. In reference to the Similar Projects in Paragraph 1.2.C, provide the following compete description of each project, with Owner, Engineer and Contractor's project manager/superintendent information; the date completed; bid amount and final contract amount, with change order amounts and explanation; contract completion period versus actual completion time and explanation; any claims, disputes or litigation by or against the Contractor.
17. List all potable water tank rehabilitation projects completed within the past two years with a brief project description and Owner contact information.
18. List all current potable water tank rehabilitation projects and the Owner contact information.
19. Provide a list of project staff including superintendents or foreman and provide a statement of the number of complete pipeline crews assigned to the Project.
20. Provide the following information regarding completion of past work:
    a. Within the last five years, has your firm failed to complete any work awarded to it? (If Yes, attach a written explanation.)
    b. Within the last five years, has applicant been involved in liquidated damages or has a claim prepared by an attorney or claims consultants, excluding routine change orders? (If Yes, attach a written explanation.)
    c. Within the last five years, has applicant been involved in litigation against Owner or Engineering firms? (If Yes, attach a written explanation.)
    d. Are there any judgments, claims, arbitration proceedings or suits pending or outstanding against your organization or its officers or Owners? (If Yes, attach a written explanation.)

1.3 TIME FOR COMPLETION OF WORK:

A. The Contractor may proceed to award the sub-contracts, assemble materials, etc., at any time after award of Contract and Notice to Proceed with Work is given. For purposes of liquidated damages, the Contractor's official time for construction to start on work shall be the date of Notice to Proceed with Work, and completion of same shall be within the number of consecutive calendar days indicated in the Contract Documents.

B. Acceptance of the completed Work of this Contract will be at a single date after all work is completed, and not in Phases.

C. Nothing in the Contract Documents shall permit or be construed to permit payment to the Contractor for any extended overhead or profit due to completion of the project extending beyond

the Contractual completion date. In no event shall the Owner or Engineer be liable to the Contractor for damage due to any delay to any portion of the work of this Contract.

D. Delays due to inclement weather will not be considered on this project with the exception of a tropical event.

1.4 CONTRACTOR'S USE AND LIMITATIONS OF THE SITE:

A. All work shown will be performed within the areas outlined on the plans. Should the Contractor need temporary construction easements, then the Contractor shall be responsible for securing them from the landowner(s). All Bidders are hereby advised that ALDOT standards must be adhered to during any construction within ALDOT right-of-way.

B. The Contractor shall limit the number of vehicles on the job site by shuttling work crews. No excessive construction equipment will be allowed.

C. The Contractor shall take the necessary precautions to ensure that no part of the existing public works (streets, storm drains and other utilities) is damaged as a result of his operations. Any damage that does occur shall be promptly repaired by the Contractor at his expense. The Owner urges the Contractor to use rubber-tired equipment when operation on the Highway in order to prevent damage to the asphalt. The Contractor may use a layer of heavy neoprene to protect the roadway.

D. In the event that a hurricane or tropical storm approaches the area, the Contractor shall secure all equipment, move all materials and prepare the construction site accordingly.

E. The Contractor shall return all areas to pre-construction condition upon completion of work, at a minimum.

1.5 CONSTRUCTION SCHEDULE AND INSTALLATION PLAN:

A. In addition to the construction schedule requirements stated in General and Supplemental General Conditions, the Contractor shall prepare a detailed installation plan for the work for approval by the Engineer and shall submit the plan to the Engineer for review prior to the preconstruction conference.

B. The Contractor's Installation Plan must consider the following criteria:

1. Equipment storage
2. Repairs, Media Blasting & Coating System Installation
3. Cleanup and Site Restoration

C. Upon award of the project, the Contractor shall work with the Owner and Engineer to have the contracts executed immediately.

1.6 ACCEPTABLE INCLEMENT WEATHER DAYS:

A. Delays due to rain will be considered, only if the number of rain days is in excess of the average of days with precipitation of 0.01 inch or more for a city within a 100-mile radius of the project's location. This information can be found at www.climate-zone.com.

B. If the radius overlaps with a nearby by city, then the city with the shortest radius from the project location shall be used.

C. If the project location does not fall within a 100-mile radius, the following schedule shall be used as the default.

Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
11	9	10	8	8	9	12	9	8	6	8	10

D. If admissible rain delay days occur, inclement weather delays may also be applicable. Inclement weather may include, in addition to rain delay days, "dry-out" days at a rate no greater than 1 make-up day for each day or consecutive days of precipitation that total 1.0 inch or more.

E. On-site records of daily rain and/or temperature readings shall be kept by the Contractor and may be accepted to verify weather and/or temperature variations which prevent earthwork, foundation and slabs, and/or roofing materials installation. The Inspector will also be required to maintain on-site records of daily rain and/or temperature.

F. Cold Weather concreting shall be per ACI 306. The Contractor shall have a calibrated thermometer on site which is logged by the inspector and contractor prior to any concrete pours during cold weather.

G. Notice of inclement weather delay days must be submitted by the Contractor to the Inspector for review on the first day of every month.

1.7 MOBILIZATION, GENERAL CONDITIONS, FEES, PERMITS:

A. Included in the Proposal is a pay item to cover all costs related to mobilizing, obtaining permits, license, bonds and insurance for this project. The Contractor shall include in the amount bid for this item all costs related to providing bonds, insurance, and other security, permits and permitting costs as required under this contract. The bidder shall limit this pay item to no more than three (3) percent of the total base bid. Any additional cost related to this item shall be included in the other various bid items.

B. The Contractor is required to obtain all city licenses, building permits, and fees from the appropriate regulatory bodies. The Contractor is responsible for all fees associated with hauling off and proper disposal of all debris and construction spoils.

1.8 PROTECTION OF WORK, PROPERTY AND PERSONS:

A. The Contractor shall thoroughly document the existing condition of all structures, landscaping and improvements in all areas where the construction work may result in actual damage or in damage claims. All costs associated with photographs, videotapes and other similar documentation shall be included in the bid prices. The method of providing this documentation of existing conditions shall be acceptable to the Engineer, and a complete set of the documentation shall be available to the Owner and the Engineer to help settle any disputes which may arise concerning what work is required to return property to its original condition or concerning property damage.

1.9 TRAFFIC CONTROL:

A. It shall be the responsibility of the Contractor for all traffic control along any portion of the project. Where required, all necessary flagmen, traffic cones and drums, and traffic control plans shall be in place on both City roads and State Highways to meet the governing department's specifications.

B. The Traffic Control Plan shall be in conformance with the Latest Edition of the Manual on Uniform Traffic Control Devices.

C. The Contractor should consider the prices for traffic control measures when preparing bids for this project.

1.10 OBSTRUCTIONS AND EXISTING UTILITIES:

A. The Contractor is cautioned that several underground utilities exist within the existing Right-of-Way and along much of the pipeline routes. These utilities may include gas, water, sewer, power, fiber, telephone, etc.. Some utilities may not be shown on the plans. The Contractor shall be responsible for locating and protecting all existing utilities, whether shown on the plans or not.

B. All existing utilities and structures shown on the plans are for reference only. The Contractor is responsible for verifying all locations prior to beginning work.

C. The site of the proposed work will be on the site of existing water infrastructure and other utilities. Any damage to any of the objects on site, both in service or out of service, shall be repaired or replaced to existing condition of better.

D. These repairs shall be conducted at no additional expense to the owner and shall be considered a subsidiary obligation of the various bid items.

E. This includes but not limited to the existing water mains, valves, valve markers, meters, service tubing, etc.

F. All costs associated with locating existing utilities and working around them shall be included in the total price bid. The Contractor shall conduct a thorough and complete investigation to determine the exact location of all existing utilities before beginning work. It is imperative that the Contractor determine the horizontal and vertical location of utilities in advance in order for adjustments to be made to the existing utilities. If at any time the existing utilities come in conflict with the proposed work (i.e. proposed line intersects an existing utility), all work in that area shall stop and the Contractor and/or his agent shall notify the Engineer immediately. Neither the Contractor nor his agents shall take it upon themselves to adjust or relocate existing utilities.

G. The Contractor is to use extreme care in protection of all utilities and drainage structures throughout the work process.

H. It shall be the Contractor's responsibility to contact utility companies 48 hours before starting construction so maintenance personnel can locate and protect facilities, if required by the utility company.

I. It is the responsibility of the Contractor to ensure that all utility or other poles, the stability of which may be endangered by the proximity of excavation, are temporarily stayed in position

while work proceeds in the vicinity of the pole and that the utility or other companies concerned be given reasonable advance notice of any such excavation by the Contractor.

1.11 WARRANTIES:

A. All equipment supplied under these Specifications shall be warranted by the Contractor and the equipment manufacturers for a period of Two (2) years. Warranty period shall commence on the date of Owner acceptance and the Final Inspection.

B. The equipment shall be warranted to be free from defects in workmanship, design and materials. If any part of the equipment should fail during the warranty period, it shall be replaced in the machine(s) and the unit(s) restored to service at no expense to the Owner.

C. The manufacturer's warranty period shall run concurrently with the Contractors warranty or guarantee period. No exception to this provision shall be allowed. The Contractor shall be responsible for obtaining equipment warranties from each of the respective suppliers or manufacturers for all the equipment specified.

D. In the event that the manufacturer is unwilling to provide a one (1) year warranty commencing at the time of the Owner acceptance, the Contractor shall obtain from the manufacturer a two (2) year warranty starting at the time of equipment delivery to the job site. This two-year warranty shall not relieve the Contractor of the one-year warranty starting at the time of Owner acceptance of the equipment.

1.12 PLANS & SPECIFICATIONS:

A. The Contractor will be furnished with three (3) complete sets of Project Manuals. Any additional sets required can be purchased for the payment fee as stipulated in the Advertisement for Bids.

1.13 CONCLUSION:

A. The preceding specifications, together with the plans are intended to provide the Owner with a complete and workable system for the amounts bid in the Proposal. These prices shall therefore include all minor items which are not specified in detail but which would normally be provided.

B. The foregoing clause is intended to cover minor items. Any bidder or manufacturer of equipment who should discover a major omission in the plans and specifications is requested to so notify the Engineer before bids are received in order that a suitable addendum may be issued.

PART 2 – PRODUCTS (not used)

PART 3 – EXECUTION (not used)

END OF SECTION 01 03 00

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SECTION 17 9590 - SURFACE PREPARATION & COATING OF EXISTING POTABLE WATER STORAGE TANK

PART 1: GENERAL

1.01 Scope

A. This specification covers repairs, preparation of surfaces, performance and completion of painting of all surfaces specified on the following structures:

- Tank Farm Steel – Ground Storage Tank – 750,000 Gallon Capacity – Interior and Exterior Surfaces w/Repairs –Approx. Nominal Height – +/- 31'-0" / Diameter – +/- 64'-4"
- Tank Farm Concrete – Ground Storage Tank – 2,500,000 Gallon Capacity – Interior and Exterior Surfaces w/Repairs – Erected 1995 –Approx. Nom. Height – +/-31'-0" / Diameter – +/- 117'-6"

B. The Contractor shall be responsible for all costs associated with blasting debris sampling and testing, soil sampling and testing (pre-work and post-work), worker protection, environmental pollution control, handling of debris, laboratory analysis and waste disposal

1.02 Work Included

A. Preparation of surfaces which are to receive finishes.
~~B. Containment~~
C. Disposal of blasting debris
D. Tank repairs
E. Finish surfaces
F. Testing and cleaning

1.03 Related Work and Applicable Requirements Specified Elsewhere

A. BIDDING REQUIREMENTS, CONTRACT FORM AND CONDITIONS OF THE CONTRACT AND GENERAL REQUIREMENTS shall apply to all work included in this section.

1.04 Documents and Standards

A. Coating manufacturer's printed instructions.

B. American Society of Testing Materials

1. ASTM B117 **Salt Spray (Fog)**
2. ASTM D149 **Dielectric Strength**
3. ASTM D4060 **Abrasion**

4. ASTM D4541 **Adhesion**
5. ASTM D4585 **Humidity**
6. ASTM G53 **QUV Exposure**
7. ASTM D 4141 **Exterior Exposure (EMMAQUA)**
8. AAMA 2605 **Exterior Exposure**

C. American National Standards Institute/National Sanitation Foundation

1. ANSI/NSF Standard 61 **Listed Drinking Water System Components - Health Effects**

D. American Water Works Association

1. AWWA Standard C652 Disinfection **(Latest Edition)**

2. AWWA Standard D100-84 **Welded Steel Tanks for Water Storage**

3. AWWA Standard D102-24 **Painting Steel Water Storage Tanks**

E. Code of Federal Regulations as the apply to the project

1. 29 CFR 1910 Occupational **Safety and Health Standards** (General Industry Standards)

2. 29 CFR 1910.134 Respiratory **Protection**

3. 29 CFR 1910.1020 Access **to Employee Exposure and Medical Records**

4. 29 CFR 1910.1200 Hazard **Communication**

5. 29 CFR 1926 Safety **and Health Regulations for Construction** (Construction Industry Standards)

6. 40 CFR 50 National **Primary and Secondary Ambient Air Quality Standards**

7. 40 CFR 261 **Identification and Listing of Hazardous Waste**

8. 40 CFR 268 **Land Disposal Restrictions**

9. All other Applicable State and Federal Regulations

F. National Institute for Occupational Health and Safety

1. All Applicable Regulations

G. Occupational Safety and Health Administration

1. All Applicable Regulations

H. Steel Structures Painting Council (SSPC)

1. SSPC-SP 1 **Solvent Cleaning**
2. SSPC-SP 2 **Hand Tool Cleaning**
3. SSPC-SP 3 **Power Tool Cleaning**
4. SSPC-SP 6 **Commercial Blast Cleaning**
5. SSPC-SP 10-63 **Near White Blast Cleaning**
6. SSPC – SP 11 **Power Tool Cleaning to Bare Metal**
7. SSPC Guide 6 **Guide for Containing Debris Generated During Paint Removal Operations**

1.05 Quality Assurance

A. Qualifications:

1. Provide products from a company specializing in the manufacture of high-performance coatings with a minimum of 10 years' experience.

2. Applicator shall be trained in application techniques and procedures of coating materials and shall demonstrate a minimum of 5 years successful experience in such application.
   a. Maintain, throughout duration of application, a crew of painters who are fully qualified to satisfy specified qualifications.

3. Single Source Responsibility:
   a. Materials shall be products of a single manufacturer or items standard with manufacturer of specified coating materials.
   b. Provide secondary materials which are produced or are specifically recommended by coating system manufacturers to ensure compatibility of system.

B. Regulatory Requirements:

1. Conform to applicable codes and ordinances for flame, fuel, smoke, and volatile organic compound (VOC) ratings requirements for finishes at time of application.

C. Pre-Installation Meeting:

1. Schedule a conference and inspection to be held on-site before field application of coating systems begins.

2. Conference shall be attended by Contractor, Owner's representative, Engineer, coating applicators, and a representative of coating material manufacturer.

3. Topics to be discussed at meeting shall include:
   a. A review of Contract Documents and accepted shop drawings shall be made and deviations or differences shall be resolved.
   b. Review items such as environmental conditions, surface conditions, surface preparation, application procedures, and protection following application. A surface mock-up of the surface preparation requirements for the project, both interior and exterior, shall be prepared by the Contractor. All parties shall agree to the degree of cleanliness and the mock-up shall be preserved for the duration of the project.
   c. Establish which areas on-site will be available for use as storage areas and working area

4. Pre-construction conference and inspection shall serve to clarify Contract Documents; application requirements and what work should be completed before coating application can begin.

5. Prepare and submit to parties in attendance, a written report of pre-installation conference. Report shall be submitted within 3 days following conference.

PART 2: MATERIALS

2.01 Quality of Coatings

The paints and paint products of the *Tnemec Company, Inc.,* mentioned in the following specifications are set up as standards of quality. The usual "or equal" clause shall apply. No request for substitution will be considered which decreases the film thickness and/or the number of coats to be applied, or which offers a change from the generic type of coating specified. Request for substitution shall contain the following:

A. FULL NAME OF EACH PRODUCT
B. DESCRIPTIVE LITERATURE
C. DIRECTIONS FOR USE
D. GENERIC TYPE
E. NON-VOLATILE CONTENT BY VOLUME
F. PERFORMANCE DATA LISTED IN SECTION 9.

Bidders desiring to use paints other than those specified shall submit their proposal based on the specified materials. Submittals shall include a side-by-side comparison of the performance attributes of the proposed materials as compared to the specified coatings. In no case will the request be considered unless all information is received, in writing, ten days prior to the bid opening date.

Technical information may be obtained from the following:

SteelCon Coating Systems, Inc.
2100 3rd Ave South
Irondale, AL 35210
Phone: 205-951-2086
E Mail: crumbaugh@steelconcoatings.com

2.02 Certifications

Protective coatings for interior wet application shall be listed by NSF International as approved for potable water contact in accordance with ANSI/NSF Std. 61, Section 5 Protective (Barrier) Materials.

2.03 Shipping, Storage and Handling

All paints shall be properly prepared by the manufacturer and delivered to the site for field painting in the original unbroken containers with manufacturer's label plainly printed thereon. Type of material to be applied at each location shall be submitted to the Engineer with the manufacturer's written recommendation of the type paint for each item to be painted.

All coatings shall be stored in an enclosed structure to protect them from weather and excessive heat or cold. Flammable coatings must be stored to conform to City, County, State and Federal safety codes for flammable coatings or paint materials. At all times coatings shall be protected from freezing.

PART 3: APPLICATION

3.01 General

A. Prepare surface and touch-up welds, burned and abraded areas on primed steel with specified primer before applying field coats.

B. The painter shall mix, thin and apply each coating at the rate and manner specified by the manufacturer's printed instructions. Deficiencies in film thickness shall be corrected by the application of an additional coat(s) of paint.

C. All coatings shall be applied in strict accordance with the applicable manufacturer's current printed product data sheet(s) and container labels. Coatings shall not be applied above or below the minimum and/or maximum surface temperatures as stated on the product data sheet(s) and shall not be applied to wet or damp surfaces, in rain, snow, fog or mist. Surface temperature must be at least 5°F above the dew point.

D. Painting shall be completed well in advance of the probable time of day when condensation will occur and/or the surface temperature is expected to drop below the minimum listed on the applicable product data sheet(s).

E. Finish coats shall be uniform in color and sheen without streaks, laps, runs, sags or missed areas.

F. The manufacturer's recommended curing time shall elapse before the next coat is applied. Adequate ventilation shall be provided for proper drying of paints on interior tank surfaces. A minimum of 7 days following the application of the final coat on the interior surfaces shall be allowed before the tank is flushed, disinfected, tested and filled with water. **Contractor shall be required to obtain water samples and furnish bacteriological testing results prior to placing each tank back into service.**

G. The contractor will only be allowed to take one tank out of service at a time. The 750,000 gallon steel ground storage tank shall receive rehabilitation first. Prior to taking the next tank out of service, the contractor shall furnish clear bacteriological sample results.

H. Clean-Up: All cloths and waste that might constitute a fire hazard shall be placed in closed metal containers or destroyed at the end of each day. Upon completion of the work, all staging, scaffolding, and containers shall be removed from the site and/or destroyed in an approved and legal manner. Paint spots, oil, or stains upon adjacent surfaces and floors shall be completely removed, and the entire job left clean and acceptable to the Engineer.

3.02 Existing Utilities, Structures and Properties

It shall be the responsibility of the contractor to locate and avoid damage to any and all existing water, gas, sewer, electric, telephone, and other utilities, structures, or appurtenances. The Contractor shall repair or pay for all damages caused by his operations or his personnel to existing utilities, structures, appurtenances, or properties, either below ground or above ground and shall settle in full all damage suites which may arise as a result of his operations.

3.03 Ventilation

It is essential that the solvent vapors released during and after application of coatings be removed from the tank. During coating application, the capacity of ventilating fans shall be at minimum of 300 cfm per gallon of coating applied per hour. Continuous forced ventilation at a rate of at least one complete air change per 4 hours shall be provided for at least 7 days after coating application is completed. Air shall be exhausted from the lowest portions of the tank with the top openings kept open and clear. A minimum of seven days (manufacturers printed instructions shall be followed for cure times at various temperatures) following application of the final coat on the interior shall be allowed before the tank is sterilized or filled with water.

PART 4: PAINTERS LOG AND TESTING EQUIPMENT:

4.01 Daily Log

The Contractor shall keep a daily log in which the following information shall be recorded: The a copy of the daily logs shall be furnished to the Engineer and Owner upon completion of the project.

A. Air Temperature: Air temperature readings shall be taken at intervals throughout the day's work. Readings shall be taken at the start of the mornings work, mid-day and afternoon. Should environmental conditions change, additional reading shall be taken to assure that coatings are being applied under the conditions as outlined by the coatings manufacturer.

B. Surface Temperature: Surface temperatures shall be taken in areas where work is being performed. Surface temperature shall be that as specified by the coatings manufacturer.

C. Material Temperature: Material temperature reading shall be taken prior to the application of the paint.

D. Batch Number: Batch numbers for each material used during the days painting operation shall be recorded.

E. Relative Humidity: Relative humidity readings shall be taken at intervals throughout the day's work. Readings shall be taken at the start of the mornings work, mid-day and afternoon. Should environmental conditions change, additional reading shall be taken to assure that coatings are being applied under the conditions as outlined by the coatings manufacturer.

F. Dew Point: Dew point readings shall be taken at intervals throughout the day's work. Readings shall be taken at the start of the mornings work, mid-day and afternoon. Should environmental conditions change, additional reading shall be taken to assure that coatings are being applied under the conditions as outlined by the coatings manufacturer.

G. Blast Profile: Following blasting operations on the interior, the Contractor shall take and record the depth of the blast profile. Blast profile measurements shall be taken using Testex X Course Replica Tape. Replica Tape shall be included in the daily log.

H. Detail or Work Performed during the Day: Area where work was performed and the extent of the work performed shall be included in the daily log.

4.02 Testing Equipment

In addition to the equipment required to take measurements which will be included in the daily log, The Contractor shall have on the project site the following testing equipment. Equipment shall be in calibration and proper working order.

A. Dry Film Thickness Measurements Gauge: Dry film thickness reading shall be taken with a properly calibrated (per the manufacturer's instructions) Type 1 (magnetic) or Type 2 (electromagnetic) instrument. Dry film thickness reading will be taken and recorded in a frequency and manner as dictated by the Owner.

B. Low Voltage Holiday Detection Equipment: Interior surfaces, following a minimum of 96 hours cure, shall be holiday detected in accordance with ASTM G 62 low voltage holiday detection. Holiday detector shall be a Tinker & Rasor Model M-1 or equal. Areas found to have holidays shall be marked and repaired in accordance with the paint manufacturer's instructions. The Owner / Engineer shall be notified of time of testing so that he might be present to witness testing.

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PART 5: SURFACE PREPARATION & PAINTING:

5.01 Exterior Surface Preparation: (750,000 GAL STEEL GST) Prior to surface preparation, all surfaces shall be cleaned in accordance with SSPC-SP 1 Solvent Cleaning. All exterior surfaces shall be high pressure water washed (minimum 4,000 psi @ nozzle tip – utilizing a rotating nozzle) to remove chalk, loose paint, dust, mildew, and any other foreign matter. The contractor shall utilize a detergent equivalent to *Great Lakes Extra Muscle Pre-Paint Cleaner* to aid in cleaning the surfaces. All corroded areas and areas of loose and/or failing paint shall be cleaned in accordance with *SSPC-SP 11 Power Tool Cleaning to Bare Metal*. All edges shall be feathered. The contractor shall take all necessary precautions to prevent nuisance dust from interfering with adjacent properties.

5.02 Exterior Surface Preparation (2,500,000 GAL CONCRETE GST) All surfaces shall be pre-wetted and then treated with a solution of trisodium phosphate/water solution (0.25lbs. of TSP per gallon of water) that will effectively kill visible mold and mildew as well as any residual spores then rinsed with clean potable water. After the surface has dried, it shall be wetted with a COLD solution of water containing 200-ppm, household bleach, then all exterior surfaces shall be pressure water washed (minimum 2,500 psi @ nozzle tip – utilize 30° fan tip) to remove dirt, dust, mildew, and all other foreign matter.

5.03 Interior Surface Preparation: (750,000 GAL STEEL GST) Prior to surface preparation, all surfaces shall be cleaned of all oil and grease in accordance with SSPC-SP 1 Solvent Cleaning. All interior surfaces shall be high pressure water washed (minimum 3,500 psi @ nozzle tip – utilize rotating nozzle) to remove loose paint and any other foreign matter. The contractor shall utilize a detergent equivalent to *Great Lakes Extra Muscle Pre-Paint Cleaner* to aid in cleaning the surface. All interior surfaces shall be abrasive blasted to remove all paint, rust and scale, as well as all other foreign matter and shall result in a surface preparation equal to that of SSPC-SP 10 Near White Blast Cleaned Surface. Surface profile shall be 1.5 - 2.5 mils. Contractor shall take necessary precautions to prevent

nuisance dust and debris from leaving the project area and from interfering with adjacent properties. All surfaces shall be clean, dry and in suitable condition to receive the coating system specified.

5.04 **Interior Surface Preparation (2,500,000 GAL CONCRETE GST)** All interior surfaces shall be cleaned of all oil, grease and sediment in accordance with SSPC-SP 1 Solvent Cleaning. All interior surfaces shall be high pressure water washed (minimum 2,500 psi @ nozzle tip – utilize 30° fan tip) to remove sediment and any other foreign matter.

5.05 DEBRIS CONTAINMENT AND DISPOSAL DURING PAINT REMOVAL OPERATIONS

A. ~~The Contractor will be required to contain all blasting debris as well as paint overspray~~ and/~~or roller spatter, generated during the performance of the work. During surface preparation, airborne particulate and debris from the removal of the paint shall not be permitted to contaminate the air, soil or water surrounding the work site. The contractor will be required to perform any site remediation required due to improper collection and disposal of paint removal debris. The Contractor shall develop a debris containment and disposal plan in accordance with these specifications and federal and state requirements. The Contractor shall submit their plan to the Engineer for written approval prior to starting work.~~

B. ~~Containment System: The Contractor shall install a containment system prior to any media blasting meeting the requirements of **Class 3** as specified in the SSPC Guide 6 (95) "Guide for Containing Debris Generated During Paint Removal Operations". Assessment of the containment system will be conducted in accordance with SSPC Guide 6 Section 5.5. All testing required will be paid by the Contractor. The standards and references listed in Section 3A of SSPC Guide 6 (95) shall form and be part of these specifications. The Contractors shall utilize SSPC Guide 6 for the development of the containment system. All workers shall be protected in accordance with all applicable OSHA Standards.~~

C. ~~Disposal of Debris: Until testing demonstrates otherwise, all debris collected by the containment system will be considered hazardous waste and shall be handled and disposed of in accordance with federal and state regulations. SSPC Guide 7 "Guide for Disposal of Lead Contaminated Surface Preparation Debris" shall be considered as part of this specification. The Contractor shall pay for all testing required to determine if the collected material is hazardous.~~

5.06 **Disposal of Debris:** All debris / blast media, etc. shall be disposed of offsite in a proper land fill.

5.07 **Coating System:** Following surface preparation, all interior and exterior surfaces shall be coated as hereinafter specified. The primer shall be applied in accordance with the recommendations of the manufacturer and not more than eight hours after surface preparation.

A. EXTERIOR SURFACES: (750,000 GAL STEEL GST & 2,500,000 GAL CONCRETE GST SCREENS & EXTERNAL OVERFLOW PIPE)

1. Spot Prime: All bare metal surfaces shall receive a spot prime coat of *Tnemec Series 135 Chembuild* applied at a rate to achieve 3.0 – 5.0 mils DFT.
2. Full Prime: After the spot prime coat has been properly installed, all exterior surfaces shall receive one full prime coat of *Tnemec Series 135 Chembuild* applied at a rate of 2.0 – 3.0 DFT.
3. Finish: Following the full prime coat, all exterior surfaces shall receive one full finish coat of *Tnemec Series 1094 Endura-Shield* applied at a rate to achieve 2.0 – 3.0 mils DFT.
4. Lettering /Markings: All lettering, level indicator / target markings shall be applied utilizing two coats of *Tnemec Series 1094 Endura-Shield* applied at a rate to achieve 2.0 – 3.0 mils DFT per coat.
5. Concrete Foundation (Steel Tank Only): All concrete foundation surfaces shall receive two coats of *Tnemec Series 156 Enviro-Crete* applied at a rate of 4.0 – 6.0 mils DFT per coat.

B. INTERIOR SURFACES: (750,000 GAL STEEL GST)

1. Prime: All interior surfaces shall receive one full prime coat of *Tnemec Series 91 H20 Hydro-Zinc, or 93 H20 Hydro-Zinc* applied at a rate to achieve 2.5 – 3.5 mils DFT.
2. Seam Treatment: Following the prime coat, all weld seams, ladders, sharp edges, and any other difficult to coat areas shall receive one coat of *Tnemec Series N140-1255 Pota-Pox Plus* applied, *by brush*, at a rate to achieve 2.0 – 4.0 mils DFT.
3. Pit Filler: All pits requiring filler shall be filled with *Tnemec Series 215 Surfacing Epoxy*. Contractor shall include five gallons of pit filler in the base price (material and application).
4. Intermediate: All interior surfaces shall receive an intermediate coat, of *Tnemec Series 21-1255 Epoxoline* applied at a rate to achieve 4.0 – 6.0 mils DFT.
5. Finish: After proper cure of the intermediate coat, all interior surfaces shall receive one full finish coat of *Tnemec Series 21-WH16 Epoxoline* applied at a rate to achieve 10.0 – 12.0 mils DFT.
6. Caulk: Caulk all skip welded areas, lap seams, roof beams in roof of tank and other difficult to coat areas using *Sikaflex 1A*. Caulk joint intersection of shell wall and roof assembly.

   THE INTERIOR COATING SYSTEMS SHALL HAVE A TOTAL DRY FILM THICKNESS OF NOT LESS THAN 16.5 MILS DFT.

C. INTERIOR SURFACES: (2,500,000 GAL CONCRETE GST INTERNAL DI PIPING & BRACKETS)

1. Prime: All surfaces scheduled to be painted shall receive one prime coat of Tnemec Series 21-39BL Epoxoline applied, by roller, at a rate to achieve 4.0 – 6.0

mils DFT.

2. Seam Treatment: Following the prime coat, all weld seams, bolted connections, and any other difficult to coat areas shall receive one coat of *Tnemec Series 21-1255 Epoxoline* applied, *by brush*, at a rate to achieve 2.0 – 4.0 mils DFT.
3. Intermediate: All interior surfaces shall receive an intermediate coat, of *Tnemec Series 21-1255 Epoxoline* applied at a rate to achieve 4.0 – 6.0 mils DFT.
4. Finish: After proper cure of the intermediate coat, all interior surfaces shall receive one full finish coat of *Tnemec Series 21-WH16 Epoxoline* applied at a rate to achieve 10.0 – 12.0 mils DFT.

   THE INTERIOR COATING SYSTEMS SHALL HAVE A TOTAL DRY FILM THICKNESS OF NOT LESS THAN 18.0 MILS DFT.

PART 6: TANK REPAIRS: *(ALL REPAIRS IDENTIFIED BELOW THAT REQUIRE WELDING SHALL BE PERFORMED PRIOR TO MEDIA BLASTING)*

6.1 Tank Farm Steel GST (750K)

A. Remove the existing roof vent and furnish and install a new vent neck and 24" Aluminum vent with # 20 mesh SS screen.

B. Furnish & install new level indicator components, including a new non-corrosive (SS / PVC) float, indicator board with hardware, target and stainless-steel level indicator / guide cables and stainless-steel hardware.

C. Furnish and install 3/8" thick, 6" x 6" square patch plates. Patch plates shall be fully seal welded in the interior of the tank. (To be used only if required).

D. Furnish and install new shell wall manway gaskets with new galvanized nuts and bolts.

E. Furnish and install an overflow discharge pipe # 20 mesh SS screen.

F. Furnish and install an Aluminum (Lockable) Anti-Climb gate on the exterior ladder.

G. Remove and replace the roof hatch locking hasp.

H. Furnish and install a 1" coupling along with the Morrison Brothers Model FIG128 frost proof hose bid for sampling in the riser shell as directed. (3' above the tank foundation). Location to be pre-approved by the Engineer / Owner prior to installation.

I. Furnish and install a 3" roof coupling with plug within 1' of the roof hatch for future cable entry.

J. Remove the existing pipe style safety climb devices on all ladders and install a new SS (Interior) / Galvanized (Exterior) cable type safety climb device w/ hardware on all ladders.

K. Remove and replace foundation / base plate grout and install backer rod with non-shrink caulk (Sika) prior to installing the foundation coating system.

L. Remove, clean and re-install the tank data plate.

6.2 Tank Farm Concrete GST (2.5MG)

M. Furnish and install a new appropriately sized # 20 mesh SS screen at the 12" overflow pipe discharge flap gate.

N. Remove the existing roof vent screen and install a new # 20 mesh SS screen.

O. Furnish & install new level indicator components, including a new non-corrosive float (SS or PVC), pulleys and stainless-steel level indicator / guide cables and stainless-steel hardware. Level Indicator board to remain. (CROM)

P. Remove and replace the overflow discharge pipe link-seal. (CROM)

Q. Furnish and install a new # 20 mesh SS screen at the overflow pipe discharge. (between the pipe flange and flap valve flange) (CROM)

R. Furnish and install new access port gasket. (CROM)

S. Perform level 2 dry inspection with report. Scope below. (CROM)

- On-site visual inspection and evaluation of the interior and exterior of the ground storage tank including:

    i. Foundation and Wall Exterior:
        1. Wall foundation or footing, if exposed (dips, damp spots, bearing and/or joint filler pads, if present, and gap between wall and subgrade or wall and footing)
        2. Check for cracks
        3. Check architectural finish coating (paint)
        4. Manhole (cover, frame, bolts, and gasket)
        5. Pipe sleeves, if present (frame and seal by modular, mechanical type, interlocking, synthetic rubber "link" units)
        6. Ladder (risers, rungs, wall brackets, all connections including welds, fasteners, and safety rail)
        7. Liquid level indicator, if present (fiberglass board, target, wall brackets, connections, fasteners, cables, float, pulleys, and mechanism)

    ii. Dome Exterior:
        1. Check for cracks and hollows
        2. Check architectural finish coating (paint)
        3. Ventilator if present (screens, fasteners, and caulking)
        4. Handrail, if present (rails, posts, toe-boards, flanges, brackets, all connections including welds, and fasteners)
        5. Hatch, if present (precast concrete curb, fiberglass cover, insect barriers, hasp, fasteners, and mechanism)
        6. Aerator, if present (screens, fiberglass, bolts)

7. Overflows, if present (precast concrete, screens, fasteners, and caulking)
8. Pipe penetrations, if present (frame and seal by modular, mechanical type, interlocking, synthetic rubber "link" units)

iii. Wall Interior:
1. Check for cracks
2. Ladder (risers, rungs, wall and base brackets, braces, connections, fasteners, and safety rail)
3. Baffle walls/curtains, if present

iv. Floor Interior:
1. Check for cracks (note size and length)
2. Pipes (encasements, coatings, support brackets, and bolts)
3. Waterstop, if applicable (irregularities, holes, encasement)
4. Gap between wall and waterstop, if applicable

v. Dome Interior:
1. Check for damage from hydrogen sulfide attack.
2. Check for cracks (note size and length)

T. Remove and replace exterior foundation / shell wall grout / shotcrete and install a high-performance. moisture cure, single component, polyurethane-based, non-sag elastomeric sealant to the bearing pad creating a seal between the tank wall and footer per the manufacturer's recommendation. Includes cutting and removing exposed bearing pad flush with the edge of the tank. (CROM)

U. Repair internal foundation / shell wall leaks around the entire perimeter of the tank per manufactures recommended procedure. (CROM) The Contractor, in conjunction with the Engineer and Owner, shall determine the extent of the cracked or deteriorated concrete to be rehabilitated and/or resurfaced. A summary of the work shall be approved by the Engineer and Owner prior to the commencement of any work.

CROM information may be obtained from the following:

CROM CORP
Tod Green
Phone: (352) 372-3436
Cell: (352) 339-5772

E Mail: tgreen@cromcorp.com

PART 7: ACCEPTANCE OF WORK:

7.01 Damaged coatings, pinholes, and holidays shall have edges feathered and repaired in accordance with the recommendations of the manufacturer, as approved by the Owner.

7.02 All finish coats, including touch up and damage-repair coats shall be applied in a manner which will present a uniform texture and color-match appearance.

7.03 If the item has an improper finish, color, or insufficient film thickness, the surface shall be cleaned and top coated with the specified material to obtain the specified color and coverage. Specific surface preparation information to be secured from the coatings manufacturer and the Owner.

7.04 All visible areas of chipped, peeled, or abraded paint shall be hand or power-sanded, feathering the edges. The areas shall then be primed, and finish coated in accordance with the specifications.

7.05 Work shall be free of runs, bridges, shiners, laps, or other imperfections. Evidence of these conditions shall be cause for rejection.

7.06 Any defects in the coating system shall be repaired by the Contractor per written recommendations of the coating manufacturer.

7.07 Prior to placing the tank back into service, the Contractor shall disinfect the tank, take Two (2) samples and provide bacteriological tests results from an independent testing lab approved by the Owner. Test results must meet standards set by the Alabama Department of Environmental Management. The disinfection method selected shall comply with AWWA C652 (latest edition) for Disinfection of Water-Storage Facilities. After the storage tank has been properly disinfected and refilled to an acceptable disinfectant residual in accordance with ADEM Admin. Code r. 335-7-10-.04, two consecutive bacteriological samples shall be collected not less than 30 minutes apart and analyzed to be absent of total coliform before the storage tank may be returned to service.

PART 8: GUARANTEE:

8.01 **Guarantee:** All work shall be warranted for the period of **Two (2)** years from the entire project date of completion.

8.02 **Material Certification**: Upon completion of the project the Contractor shall supply the Owner with a written statement from the coating manufacturer that sufficient materials were purchased to complete the painting project as specified. Certification shall include the number of gallons required per coat as well as the number of gallons purchased of each product.

PART 9: PRODUCT PERFORMANCE CRITERIA:

Provide the following product information and **manufacturers published performance** data should coatings or coating system be submitted in lieu of the standard of quality established in the project documents. Should the data not be available in a published format, or if the duration

of the test does not meet the specified requirement, please respond in the appropriate space with NT (Not Tested).

9.01 Organic Zinc Rich Urethane Primer (Interior Steel Primer)

A. Generic Type: Organic Zinc Rich Urethane Primer
B. Special Qualifications: Certified by NSF International in accordance with NSF/ANSI/CAN Std. 61 and the extraction requirements of NSF/ANSI/CAN 600 and is qualified for use on interior potable water tanks
C. Solids by Volume: 63%
D. Zinc Content: 83% by weight. ASTM D 520 Type III Zinc Dust

E. Test Criteria:

Test Criteria	Test Duration	Proposed Product Test Results
ASTM B 117 Salt Spray (Fog)	50,000 hours (Scribed Panel)	Rust @ Scribe: Plane Rust: Blisters:
ASTM G 85 Prohesion	15,000 Hours	Rust @ Scribe: Plane Rust: Blisters:
ASTM D 4585 Humidity	4,000 hours	Rusting: Blistering:
ASTM 4541 Adhesion	Average of Three Tests	Adhesion PSI:
ASTM G8 Cathodic Disbondment	30 Days Exposure	
Immersion Service (Potable Water)	7 years – No Failure	

9.02 NSF Approved Epoxy (Interior Intermediate & Finish)

A. Generic Type: Phanalkamine Epoxy
B. Special Qualifications: Certified by NSF International in accordance with NSF/ANSI/CAN Std. 61 and the extraction requirements of NSF/ANSI/CAN 600 and is qualified for use on interior potable water tanks.
C. Solids By Volume: 82%.
D. Test Criteria:

Test Criteria	Test Duration	Proposed Product Test Results
ASTM B 117 Salt Spray (Fog)	10,000 hours (Scribed Panel)	Rust @ Scribe: Plane Rust:

		Blisters:
ASTM D 5894 Cyclic Salt Fog/UV	9,744 Hours	Rust @ Scribe: Plane Rust: Blisters:
ASTM G 85 Prohesion	10,000 Hours	Rust @ Scribe: Plane Rust: Blisters:
ASTM D 4585 Humidity	2,000 hours	Rusting: Blistering:
ASTM D 4060 Abrasion	CS-17 Wheel 1,000 Gram Load 1,000 Cycles	Report mg Loss / Average of three tests
ASTM D 4541 Adhesion	Average of Three Tests	Adhesion PSI:
ASTM D 149 Dialectric Strength	Average of 5 Test	Volts Per Mil:

9.04 Exterior Finish Coat

A. Generic Type: Aliphatic Acrylic Polyurethane
B. Solids By Volume: 60%.
C. Test Criteria:

Test Criteria	Test Duration	Proposed Product Test Results
ASTM D 5894 Cyclic Salt Fog/UV	5,000 hours	Cracking: Plane Rust: Blisters:
ASTM B 117 Salt Spray (Fog)	5,000 hours	Plane Rust: Blisters:
ASTM 4587 QUV	4,000 hours	% Gloss Retention DECIE Color Change
ASTM G 85 Prohesion	3,000 Hours	Rust @ Scribe: Plane Rust: Blisters:
ASTM D 4585 Humidity	5,000 hours	Rusting: Blistering:
ASTM D 4060 Abrasion	CS-17 Wheel 1,000 Gram Load 1,000 Cycles	Report mg Loss / Average of three tests
ASTM 4541 Adhesion	Average of Three Tests	Report PSI
ASTM D 522 Flexibility	Method A Conical Mandrel	% Elongation:
ASTM D 2794	Direct Impact	Report in/lbs:

Impact		

END OF SECTION 17 9590