00 91 00 – ADDENDUM NO. 1

Issued to All Bid Document Holders of Record

Date: March 23, 2017
Project Name: Campbell and Maplewood Elevated Tank Coating and Structural Rehabilitations
Project No.: 93196

This Addendum forms a part of the Contract described above. The original Contract Documents and any prior Addenda remain in full force and effect except as modified by the following which shall take precedence over any contrary provisions in the prior documents.

SPECIFICATIONS:

1. Document 00 40 00 – Bid Form, Article 4-Bid Price
    a. Section 00 40 00, Article 4 has been removed and replaced with Article 4 A1-Bid Price. Bidders are advised that Article 4 A1-Bid Price is the document that should be submitted with their bid.

2. Section 01 20 00 – Measurement and Payment
    a. This section has been removed and replaced with section 01 20 01. Please see this new section.

3. Section 09 90 00 – Protective Coatings
    a. This section has been removed and replaced with section 09 90 01. Please see this new section.

Each Bidder shall acknowledge receipt of this Addendum by affixing their signature below, by noting this Addendum on their Bid Form, and by attaching this Addendum to their Bid.

Burns & McDonnell Engineering Company
1431 Opus Place, Suite 400
Downers Grove, Illinois 60515

ACKNOWLEDGEMENT

The undersigned acknowledges receipt of this Addendum and the Bid submitted is in accordance with information, instructions and stipulations set forth herein.

Bidder: _____

By: _____

Date: _____

END OF 00 91 00

ARTICLE 4 A1 - BID PRICE

4.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

A. UNIT PRICE SCHEDULE:

1. Complete Bid Table as Indicated:

Item No.	Item & Description	Unit	Approximate Number of Units	Price Per Unit $	Extension $
1	**Campbell Elevated Tank (One Million Gallon Tank)**				
1.a	Mobilization	Each	1		
1.b	Steel Work	Lump Sum	1		
1.c	Interior Wet Coating Repair, Spot Blast and spot prime all failed areas, brush off blast clean and recoat all surfaces	Lump Sum	1		
1.d	Interior Dry complete blast and recoat with three–coat zinc/epoxy system	Lump Sum	1		
1.e	Exterior Coating and Village Logo w/ fluoropolymer polyurethane finish coat	Lump Sum	1		
				Item No. 1 Total =	
2	**Maplewood Elevated Tank (Five-hundred Thousand Gallon Tank)**				
2.a	Mobilization	Each	1		
2.b	Steel Work w/ Coating Repair	Lump Sum	1		
2.c	Interior Wet Coating Repair, Spot Blast and spot prime all failed areas, brush off blast clean and recoat all surfaces	Lump Sum	1		
				Item No. 2 Total =	
				SUM OF BID ITEM NOS. 1 AND 2 PRICES =	

Bid Item Nos. 1 and 2 Total Price -

_____

_____ dollars ($_____).

2. The Owner has the ability to add any or all of the following alternates to the Total Bid, or award each Bid Item above independently. Complete Alternate Bid Items Table as Indicated:

Item No.	Item & Description	Unit	Approximate Number of Units	Price Per Unit $	Extension $
1	**Campbell Elevated Tank (One Million Gallon Tank)**				
1.a	Exterior coating with acrylic polyurethane finish coat: add or deduct from base bid 1.e	Lump Sum	1		
1.b	Interior wet complete blast and recoat with three-coat zinc/epoxy system: add to base bid 1.c	Lump Sum	1		
1.c	Exterior complete blast and recoat with three-coat zinc, polyurethane, fluoropolymer polyurethane system: add to base bid 1.e	Lump Sum	1		
2	**Maplewood Elevated Tank (Five-hundred Thousand Gallon Tank)**				
2.a	Exterior overcoat with fluoropolymer polyurethane finish coat: add to base bid Item No. 2	Lump Sum	1		
2.b	Exterior overcoat with acrylic polyurethane finish coat: add to base bid Item No. 2	Lump Sum	1		

B. SUBCONTRACTORS: This Bid is based upon use of the following Subcontractors:

No.	Trade	Subcontractor
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____

SECTION 01 20 01 – MEASUREMENT AND PAYMENT

PART 1 - GENERAL INFORMATION

1.01 MEASUREMENT AND PAYMENT:

A. This Section describes the measurement and payment for the Work to be done under the items included in this Contract.

B. Each unit or lump-sum price stated in the Bid shall constitute full compensation as herein specified for each item of work completed in accordance with the Contract Documents. The price shall be full compensation for furnishing all materials and for all labor, equipment, fees, tools and incidentals necessary to complete the item as included in the Contract Documents.

C. No separate measurement and payment shall be made for Work not specifically listed in this Section. It shall be understood that all Work necessary to complete the Contract as included in the Contract Documents shall be included in cost of the unit and lump sum items included in the Contract.

D. Pay Item 1 of the Bid Form Section 004000 includes all work to be completed for the Campbell one-million gallon elevated tank. Pay Item 2 of the Bid Form Section 004000 includes all work to be completed for the Maplewood five-hundred thousand gallon elevated tank. Alternate bid items for each tank are included in the Bid Form and may be added to the bid by the Owner. Descriptions of sub-pay items and alternates are provided below.

1.02 CAMPBELL ELEVATED TANK – PAY ITEM NO. 1:

A. Mobilization

1. Mobilization will be paid for at the contract price per each for the mobilization and demobilization of all equipment to and from the site in accordance with Article 671 of the IDOT Standard Specifications for Road and Bridge Construction and the restoration of the project site including lawn restoration and tank disinfection. The unit price for this item shall constitute full compensation for all equipment, materials, labor, fees, tools and incidentals necessary to complete this item for the Campbell Tank. No additional compensation will be given for re-mobilization to and from the site due to any reason.

B. Steel Work

1. Steel Work will be paid for at the contract lump sum price. This work shall include all equipment, materials, labor, fees, tools and incidentals required to complete the structural work and miscellaneous work in the Campbell Tank as specified and indicated in the construction drawings.

C. Interior Wet Coating Repair, Spot Blast and spot prime all failed areas, brush off blast clean and recoat all surfaces

1. This item will be paid for at the contract lump sum price. This work shall include all equipment, materials, labor, fees, tools and incidentals required to complete the appropriate surface preparation and recoat of the wet interior of the Campbell Tank as specified. This work shall also include all equipment, materials, labor, fees, tools and incidentals required to disinfect and test the Campbell Tank as specified.

D. Interior Dry complete blast and recoat with three-coat zinc / epoxy system

1. This item will be paid for at the contract lump sum price. This work shall include all equipment, materials, labor, fees, tools and incidentals required to complete the appropriate surface preparation and complete recoat of the dry interior of the Campbell Tank as specified.

E. Exterior Coating and Village Logo w/ fluoropolymer polyurethane finish coat

1. This item will be paid for at the contract lump sum price. This work shall include all equipment, materials, labor, fees, tools and incidentals required to complete the proper surface preparation, spot prime, and over-coat the exterior of the Campbell Tank per the

shop drawings of the logo selected by the Owner as specified. Submit shop drawings of the Village logo per Section 013300 and Section 099001 of the Specifications.

1.03 MAPLEWOOD ELEVATED TANK – PAY ITEM NO. 2

A. Mobilization
   1. Mobilization will be paid for at the contract price per each for the mobilization and demobilization of all equipment to and from the site in accordance with Article 671 of the IDOT Standard Specifications for Road and Bridge Construction and the restoration of the project site including lawn restoration and tank disinfection. The unit price for this item shall constitute full compensation for all equipment, materials, labor, fees, tools and incidentals necessary to complete this item for the Maplewood Tank. No additional compensation will be given for re-mobilization to and from the site due to any reason.

B. Steel Work w/ Coating Repair
   1. Steel Work will be paid for at the contract lump sum price. This work shall include all equipment, materials, labor, fees, tools and incidentals required to complete the structural work and miscellaneous work in the Maplewood Tank as specified and indicated in the construction drawings.

C. Interior Wet Coating Repair, Spot Blast and spot prime all failed areas, brush off blast clean and recoat all surfaces
   1. This item will be paid for at the contract lump sum price. This work shall include all equipment, materials, labor, fees, tools and incidentals required to complete the appropriate surface preparation and recoat of the wet interior of the Maplewood Tank. This work shall also include all equipment, materials, labor, fees, tools and incidentals required to disinfect and test the Maplewood Tank as specified.

1.04 CAMPBELL ELEVATED TANK ALTERNATE BID PAY ITEMS

A. Exterior Coating with acrylic polyurethane finish coat
   1. This item will be paid for at the contract lump sum price as an addition or deduct to the cost of Bid Item 1.e. This work shall include all equipment, materials, labor, fees, tools and incidentals required to complete the appropriate surface preparation and overcoat the exterior of the Campbell Tank.

B. Interior Wet complete blast and recoat with three-coat zinc / epoxy system
   1. This item will be paid for at the contract lump sum price as an addition to the cost of Bid Item 1.c. This work shall include all equipment, materials, labor, fees, tools and incidentals required to complete the appropriate surface preparation and recoat the interior wet of the Campbell Tank.

C. Exterior Coating w/ Full Blast and recoat with three-coat zinc, polyurethane, fluoropolymer polyurethane system
   1. This item will be paid for at the contract lump sum price as an addition to the cost of Bid Item 1.e. This work shall include all equipment, materials, labor, fees, tools and incidentals required to complete the appropriate surface preparation and recoat of the exterior of the Campbell Tank.

1.05 MAPLEWOOD TANK ALTERNATE BID PAY ITEMS

A. Exterior overcoat with fluoropolymer polyurethane finish coat

1. This item will be paid for at the contract lump sum price as an addition to base Bid Item No. 2. This work shall include all equipment, materials, labor, fees, tools and incidentals required to complete the appropriate surface preparation, spot prime and over-coat the exterior of the Maplewood Tank.

B. Exterior overcoat with acrylic polyurethane finish coat

1. This item will be paid for at the contract lump sum price as an addition to base Bid Item No. 2. This work shall include all equipment, materials, labor, fees, tools and incidentals required to complete the appropriate surface preparation, spot prime and over-coat the exterior of the Maplewood Tank.

END OF SECTION 01 20 01

SECTION 09 90 01 - PROTECTIVE COATINGS

PART 1 - GENERAL

1.01 SUMMARY:

A. The work covered by this section shall be included in the Contractor's bid for the complete exterior, dry interior, and wet interior coating rehabilitation of the Campbell one-million gallon waterspheroid, the Village logo application to two sides of the exterior of the Campbell waterspheroid, and the complete wet interior coating rehabilitation of the Maplewood five-hundred-thousand-gallon tank.

B. This Section includes the coating of exterior and interior surfaces throughout the Project.

C. Coating systems include surface preparation, prime coat (first coat), finish coats (second and third coats), inspection, cleaning, and touch-up of surfaces and equipment. Shop preparation, prime coat, and finish coats to be shop-applied, may be specified elsewhere or referenced to this Section so that a complete system is specified and coordinated.

1. Where surface preparation and first (prime) coat are specified in other Sections to be shop-applied, such as for structural steel, hollow metal doors or equipment, only the touch-up and finish coats are a part of field painting. Surface preparation is the required degree of preparation prior to application of first (prime) coat regardless if done in shop or field.
2. If materials are provided without shop primer such as miscellaneous steel or sheet metal, then surface preparation, first, second, and third coats are a part of field painting.
3. Concealed surfaces are generally not required to have finish-coats unless otherwise specified, but prime coat should be applied and touched up prior to concealment.
4. Where Equipment and Materials are provided with shop-applied finished coating system, touch-up and finish coats are a part of field painting.
5. Refer to applicable Sections to determine whether surface preparation and first coat, or complete coating system, is to be shop-applied.

D. Related Work Specified Elsewhere:

1. Shop Painting and Coatings: All applicable Divisions.
2. Factory Prefinished Items: All applicable Divisions.

E. Colors:

1. Coating color shall be submitted for Engineer/Owner approval.
2. Color of finish coatings shall match accepted color Samples.
3. When second and finish coats of a system are of same type or tint, use an alternate color on second coat to enable visual coverage inspection of the third coat. When first and second coats only are specified and are of same or different types or tint, use an alternate color on first coat to enable visual coverage inspection of the second coat.

F. The existing paint systems are as follows:

1. Campbell Tank
   a. Exterior Coating: epoxy urethane coating system ranging in thicknes from 6-10 mils
   b. Wet Interior Coating: presumed to be a multi coat epoxy system
   c. Dry Interior Coating: aluminum epoxy system ranging in thickness from 6-10 mils on the stem above the top platform, 10-12 mils on the access tube; lead bearing
2. Maplewood Tank
   a. Exterior Coating:polyurethane coating system
   b. Wet Interior Coating: epoxy coating system

1.02 REFERENCES:

A. Applicable Standards:

1. American National Standards Institute (ANSI):
   a. A13.1 - Scheme for the Identification of Piping Systems.
   b. Z53.1 - Safety Color Code for Marking Physical Hazards.
2. American Society for Testing and Materials (ASTM):
   a. D2092 – Guide for Treatment of Zinc-Coated (Galvanized) Steel Surfaces for Painting.
   b. D4258 - Surface Cleaning Concrete for Coating.
   c. D4259 - Abrading Concrete.
   d. D4260 - Acid Etching Concrete.
   e. D4261 - Surface Cleaning Concrete Unit Masonry for Coating.
3. Society for Protective Coatings (SSPC) Surface Preparation Specifications:
   a. Guide 7 – Guide to the Disposal of Lead-Contaminated Surfaces
   b. SP1 - Solvent Cleaning: Removes oil, grease, soil, drawing and cutting compounds, and other soluble contaminants.
   c. SP2 - Hand Tool Cleaning: Remove loose material. Not intended to remove adherent mill scale, rust, and paint.
   d. SP3 - Power Tool Cleaning: Removes loose material. Not intended to remove all scale or rust.
   e. SP5 - White Metal Blast Cleaning: Removes all scale, rust, foreign matter. Leaves surface gray-white uniform metallic color.
   f. SP6 - Commercial Blast Cleaning: Two-thirds of every nine square inches free of all visible residues; remainder only light discoloration.
   g. SP7 - Brush-Off Blast Cleaning: Removes only loose material, remaining surface tight and abraded to give anchor pattern.
   h. SP10 - Near-White Blast Cleaning: At least 95% of every nine square inches shall be free of all visible residues.
   i. SP11 - Power Tool Cleaning to Bare Metal.
   j. SP12 – Surface Preparation and Cleaning of Steel and Other Hard Materials by High and Ultrahigh Pressure Water Jetting Prior to Recoating.
   k. SP13 – Surface Preparation of Concrete.
4. National Sanitation Foundation (NSF):
   a. 61 - Drinking Water Treatment Chemicals – Health Effects.
5. Code of Federal Regulations (CFR)
   a. OSHA Construction Standard 29 CFR 1926.62 – Lead
   b. 40 CFR 262 – Standards Applicable to Generators of Hazardous Waste
   c. 40 CFR 265 – Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities

1.03 SUBMITTALS:

A. Submit as specified in DIVISION 1.

B. Includes, but not limited to, the following:

1. Schedule of products and paint systems to be used. Schedule shall include the following information:
   a. Surfaces for system to be applied.
   b. Surface preparation method and degree of cleanliness.
   c. Product manufacturer, name, and number.
   d. Method of application.

e. Dry film mil thickness per coat of coating to be applied.

2. Color charts for selection and acceptance by Engineer/Owner.
3. Technical and material safety data sheets.
4. Certification(s) by coating manufacturer(s) that all coatings are suitable for service intended as stated on each coating system sheet. If manufacturer has an equivalent product as that specified, and it is suitable for the intended purpose, Contractor shall submit the recommended product for approval at no increase in cost, and state reasons for substitution.
5. Contractor shall certify in writing to the Engineer/Architect that applicators have previously applied all the systems in this Specification and have the ability and equipment to prepare the surfaces and apply the coatings correctly.

C. Design/Shop Drawings
1. For the Campbell one-million gallon waterspheroid, Contractor shall submit shop drawings of the coating scheme in a three-dimensional rendering for approval by the Engineer/Owner. Two options for the proposed coating scheme are included at the back of this Project Manual.

D. Submittals for industrial maintenance coatings shall be prepared by, or have assistance in preparation of, a corrosion engineer or industrial coatings technical representative of the coating manufacturer.

1.04 QUALITY ASSURANCE:

A. Certification: Coating work shall be performed by an SSPC certified contractor.
B. Include on label of container:
1. Manufacturer's name, product name, and number.
2. Type of paint and generic name.
3. Color name and number.
4. Storage and temperature limits.
5. Mixing and application instructions, including requirements for precautions which must be taken.
6. Drying, recoat, or curing time.

C. A coating report shall be completed daily by Contractor at each phase of the coating system starting with surface preparation. These shall be submitted on the form attached at end of this Section.
D. In the event a problem occurs with coating system, surface preparation, or application, Contractor shall require coating applicator and coating manufacturer's technical representative to promptly investigate the problem and submit results to Engineer/Architect.
E. Specified VOC shall mean unthinned maximum VOC certified by manufacturer. VOC content as a result of thinning shall not exceed that allowed by federal or local environmental regulations.

1.05 GUARANTEE:

A. The Contractor shall protect and be responsible for their work at all times and shall perform any touch-up work as required by these specifications and as directed by the Owner. Workmanship and materials shall be guaranteed for one year after the date of final Owner acceptance.
B. Any defective work shall be documented and the Contractor shall be notified of necessary repair (method and extent). The cost of warranty inspection by the Engineer will be the responsibility of the Owner.

1.06 DELIVERY, STORAGE, AND HANDLING:

A. Delivery of Materials:
   1. Deliver in sealed containers with labels and information legible and intact. Containers shall also have correct labels with required information.
   2. Allow sufficient time for testing if required.

B. Storage of Materials:
   1. Store only acceptable materials on Project Site.
   2. Provide separate area and suitable containers for storage of coatings and related coating equipment.
   3. Dispose of used or leftover containers, thinners, rags, brushes, and rollers in accordance with applicable regulations.

1.07 REGULATORY REQUIREMENTS:

A. In addition to requirements specified elsewhere for environmental protection, provide coating materials that conform to the restrictions of the U.S. EPA and the local and regional jurisdictions. Notify Engineer/Architect of any coating specified herein that fails to conform to the requirements for the location of the Project or location of application.

B. Lead Content: Use only coatings that are totally lead free.

C. Chromate Content: Do not use coatings containing zinc-chromate or strontium chromate.

D. Asbestos Content: Materials shall not contain asbestos.

E. Mercury Content: Materials shall not contain mercury or mercury compounds.

F. Exterior coating to be removed during the surface preparation procedures on this project have been assessed in accordance with State and Federal standards and do not contain lead and chromium contents above the Federal Action Level. Lead and chromium containing paint may be present on additional structures and other sources not identified by the primary screening procedures. The contractor shall be responsible to protect his workers, the Owner, and other project personnel from exposure to lead and chromium resulting from work on the project.

G. Interior coating to be removed during surface preparation procedures on this project have been assessed in accordance with State and Federal standards. Coating on the Campbell tank dry interior contains lead above the Federal Action Level. Lead and chromium containing paint may be present on additional structures and other sources not identified by the primary screening procedures. The contractor shall be responsible to protect his workers, the Owner, and other project personnel from exposure to lead and chromium resulting from work on the project.

H. The Contractor shall be responsible for worker and environmental controls for lead and chromium paint removal and disposal in accordance with the OSHA construction standard 29 CFR 1926.62 and the most recent applicable federal, state, and local regulations.

I. The Contractor shall not endanger any work by blasting or alter the work of any other trade save with the consent of the Owner. Any cost caused by defective or ill-timed work shall be borne by the party responsible.

J. Handling, Disposal and Analysis of Blasting Debris is the responsibility of the Contractor, who shall provide a written plan that addresses the handling and site storage of lead containing debris in accordance with the requirements of 40 CFR 262 and 40 CFR 265. The Contractor shall provide the storage containers, EPA identification number, transportation and disposal of the debris.

1.08 PROJECT CONDITIONS:

A. This Project contains some structures of a height in which drifting coatings, if spray-applied, could contaminate adjacent building surfaces or vehicles on nearby roadways. All containment

precautions and application methods shall be taken into consideration and implemented to prevent the above from occurring.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS:

A. Proprietary names and product numbers are specified in most systems for material identification from these acceptable manufacturers:
   1. Tnemec Company, Inc.
   2. Carboline
   3. Sherwin-Williams

2.02 GENERAL:

A. Materials furnished for each coating system must be compatible to the substrate.
B. When unprimed surfaces are to be coated, entire coating system shall be by the same coating manufacturer to assure compatibility of coatings.
C. When shop-painted surfaces are to be coated, ascertain whether finish materials will be compatible with shop coating. Inform Engineer/Architect of any unsuitable substrate or coating conditions.

2.03 COATING SYSTEMS:

A. Base Bid
   1. Item 1.c and 2.c - Campbell & Maplewood Elevated Tanks: Interior wet coating repair, Spot Blast and Spot Prime all failed areas, Brush Off Blast Clean and recoat all surfaces as specified.
   2. Item 1.d – Campbell Elevated Tank: Interior Dry Complete Blast and recoat with three-coat zinc / epoxy system.
   3. Item 1.e – Campbell Elevated Tank: Exterior overcoat with Fluoropolymer Polyurethane finish coat.
B. Alternate Bid Items
   1. Alternate Bid Item 1.a - Campbell Elevated Tank: Exterior overcoat with Acrylic Polyurethane finish coat.
   2. Alternate Bid Item 1.b – Campbell Elevated Tank: Interior wet complete blast and recoat with three-coat zinc / epoxy system.
   3. Alternate Bid Item 1.c – Campbell Elevated Tank: Exterior complete blast and recoat with a three-coat zinc, polyurethane, fluoropolymer polyurethane system.
   4. Alternate Bid Item 2.a – Maplewood Elevated Tank: Exterior overcoat with fluropolyumer polyurethane finish coat.
   5. Alternate Bid Item 2.b – Maplewood Elevated Tank: Exterior overcoat with acrylic polyurethane finish coat.

PART 3 - EXECUTION

3.01 SURFACE PREPARATION:

A. Prepare surfaces for each coating system conforming to SSPC or ASTM surface preparation specifications listed.
   1. If grease or oils are present, SSPC-SP1 shall precede any other method specified for metal substrates.

2. Remove surface irregularities such as weld spatter, burrs, or sharp edges prior to specified surface preparation.
3. Thoroughly abrade any area where new coating will overlap tightly adhered existing coating.

B. Depth of profile will be as specified or as recommended by the manufacturer for each system, but in no instance, shall it exceed one-third of the total dry film thickness of complete system.

C. Prepare only those areas which will receive the first coat of the system on the same day.
1. On steel substrates, apply coating before rust bloom forms.

D. Concrete and masonry surfaces shall be adequately cured prior to coating application.
1. Use surface cleaning methods, followed by mechanical or chemical surface preparation as specified in SSPC SP13.
a. Acid etching (ASTM D 4260) shall not be used for vertical surfaces.
b. Acid etching shall only be used where:
(1) Procedures are in place for removal of acid residues and the handling, containment, and disposal of hazardous materials.
(2) Measures for protection of worker health and safety are provided.

3.02 APPLICATION:

A. Apply coatings in accordance with coating manufacturer's recommendations.

B. Use properly designed brushes, rollers, and spray equipment for all applications.

C. On unprimed surfaces apply first coat of the system the same day as surface preparation.

D. Dry film thickness of each system shall meet the minimum specified. Maximum dry film thickness shall not exceed the minimum more than 20% or coating manufacturer's requirements if less. Where a dry film thickness range is specified, the range shall not be less than or exceeded.

E. Shop and field painting shall remain 3 inches away from unprepared surface of any substrate such as areas to be welded or bolted.

F. Environmental Conditions:
1. Atmospheric temperature must be 50°F or higher during application, unless otherwise approved by coating manufacturer. Do not apply coatings when inclement weather or freezing temperature may occur within coating recoat cure times.
2. Wind velocities for exterior applications shall be at a minimum to prevent overspray or fallout and not greater than coating manufacturer's limits.
3. Relative humidity must be less than 85%. The ambient temperature and the temperature of the surface to be painted must be at least 5°F above the dew point.
4. Provide adequate ventilation in all areas of application to ensure that at no time does the content of air exceed the Threshold Limit Value given on the manufacturer's Material Safety Data Sheets for the specific coatings being applied.

G. Recoat Time: In the event a coating, such as an epoxy, has exceeded its recoat time limit, prepare the applied coating in accordance with manufacturer's recommendations.

H. Protection:
1. Cover or otherwise protect surfaces not to be painted. Remove protective materials when appropriate.
2. Mask, remove, or otherwise protect finish hardware, machined surfaces, grilles, lighting fixtures, and prefinished units as necessary.
3. Provide cover or shields to prevent surface preparation media and coatings from entering orifices in electrical or mechanical Equipment. Where ventilation systems must be kept in operation at time of surface preparation, take precautions to shield intakes and exhausts to prevent the materials from entering system or being dispersed.

4. Provide signs to indicate fresh paint areas.
5. Provide daily cleanup of both storage and working areas and removal of all paint refuse, trash, rags, and thinners. Dispose of leftover containers, thinners, rags, brushes, and rollers which cannot be reused in accordance with applicable regulations.
6. Do not remove or paint over Equipment data plates, code stamps on piping, or UL fire-rating labels.

3.03 INSPECTION

A. Contractor shall provide and use wet film gauges to check each application approximately every 15 minutes in order to immediately correct film thickness under or over that specified.
B. Contractor shall provide and use a dry film gauge to check each coat mil thickness when dry, and the total system mil thickness when completed.
C. Use holiday or pinhole detector on systems over metal substrates to detect and correct voids when indicated on system sheet.
D. Furnish a sling psychrometer and perform periodic checks on both relative humidity and temperature limits.
E. Check air temperature and temperature of the substrate at regular intervals to be certain surface is 5^{o}F or more above the dew point.

3.04 CLEANING AND REPAIRS:

A. Remove spilled, dripped, or splattered paint from surfaces.
B. Touch up and restore damaged finishes to original condition. This includes surface preparation and application of coatings specified.

3.05 EXTERIOR SURFACES

A. Campbell Elevated Tank:
   1. Surface Preparation
      a. All surfaces shall be clean and free of all dust, dirt, grease, oil and foreign matter prior to painting.
      b. Power wash all surfaces in accordance with SSPC SP-12 (min. 5,000 p.s.i.) with a solution of one part household bleach to three parts water to kill all mold and mildew present on the surface.
      c. Rinse all surfaces with clean water prior to power tool cleaning.
      d. All rusted and abraded surfaces along with any areas of loose paint shall be Power Tool Cleaned to bare steel in accordance with the SSPC Society of Protective Coatings Specification SP-11. A surface profile of 1.0 mil is required.
      e. Feather edges to form a smooth transition to tight existing paint.
      f. Uniformly and thoroughly scarify all glossy and clear coated surfaces.
   2. Spot Prime Coat: Before any rusting occurs, (within 12 hours maximum of cleaning) apply one spot prime coat of Tnemec Series 135-1255 Chicago Beige Chembuild primer or equal to all bare steel surfaces. This coating shall be applied at a dry film thickness of 3.0-4.0 mils.
   3. Full Intermediate Coat: Apply one complete coat of Tnemec Series 73-color Endura-Shield or equal to all surfaces. This coating shall be applied at a dry film thickness of 2.0-3.0 mils.
   4. Full Finish Coat: Apply one complete coat of Tnemec Series V700-color HydroFlon or equal. This coating shall be applied at a dry film thickness of 2.0-3.0 mils.

5. Village Logo Application: The Village Logo shall be applied on two sides of the Campbell Elevated Tank. The Contractor shall submit shop drawings which include three-dimensional renderings of proposed coating schemes. Two proposed coating schemes are included at the back of this Project Manual. Shop drawings shall be submitted per Section 013300. Contractor shall coat the exterior of the Campbell Tank according to the shop drawings of the coating selected by the Owner. Use two coats of Tnemec Series V700-color HydroFlon or equal at a dry film thickness of 2.0-3.0 mils per coat where needed.

3.06 DRY INTERIOR SURFACES

A. Campbell Elevated Tank:
   1. Surface Preparation
      a. 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 Specifications SP-10. A minimum angular anchor profile of 2.0 mils is required.
      b. Dispose of spent abrasive and debris per SSPC-Guide 7 if lead is detected in the existing coating.
   2. Immediately after blasting and before any rusting occurs (within 12 hours maximum), apply one coat of Tnemec Series 91-H_2O Hydro-Zinc or equal to all bare steel surfaces. This coating shall be applied at a dry film thickness of 2.5-3.5 mils.
   3. Intermediate Coat: Apply one coat of Tnemec Series N140-1255 Chicago Beige Pota-Pox Plus or equal to all surfaces. This coating shall be applied at a dry film thickness of 4.0-6.0 mils.
   4. Finish Coat: Apply one complete coat of Tnemec Series N140-15BL Tank White Pota-Pox Plus or equal at a dry film thickness of 4.0-6.0 mils.

3.07 WET INTERIOR SURFACES

A. Campbell Elevated Tank and Maplewood Elevated Tank
   1. Surface Preparation
      a. All rusted surfaces shall be blast cleaned to a Near White Finish, removing all mill scale, rust, loose paint and foreign matter by any of the recommended methods outlined in the SSPC Society of Protective Coating's Specifications SP-10.
      b. All other surfaces shall receive a Brush Blast in accordance with the recommended methods outlined in the SSPC Society of Protective Coating's Specifications SP-7.
   2. Spot 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 primer or equal to all bare steel surfaces. This coating shall be applied at a dry film thickness of 3.0-4.0 mils.
   3. Finish Coat: Apply one complete coat of Tnemec Series N140-15BL Tank White Pota-Pox Plus or equal at a dry film thickness of 5.0-6.0 mils to all surfaces.
   4. Perform sterilization per AWWA C652 – Method 3 with sampling by Owner.

3.08 ALTERNATE ITEMS

A. Campbell Elevated Tank Exterior Surface – Alternate Bid No. 1.a
   1. Surface Preparation
      a. All surfaces shall be clean and free of all dust, dirt, grease, oil and foreign matter prior to painting.

b. Power wash all surfaces in accordance with SSPC SP-12 (min 5,000 p.s.i.) with a solution of one part household bleach to three parts water to kill all mold and mildew present on the surface.
c. Rinse all surfaces with clean water prior to power tool cleaning.
d. All rusted and abraded surfaces along with any areas of loose paint shall be Power Tool Cleaned to bare steel in accordance with the SSPC Society of Protective Coating's Specifications SP-11. A surface profile of 1.0 mil is required.
e. Feather edges to form a smooth transition to tight existing paint.
f. Uniformly and thoroughly scarify all glossy and clear coated surfaces.

2. Spot Prime Coat: Before any rusting occurs (within 12 hours maximum of cleaning), apply one spot prime coat of Tnemec Series 135-1255 Chicago Beige Chembuild primer or equal to all bare steel surfaces. This coating shall be applied at a dry film thickness of 3.0-4.0 mils.
3. Full Intermediate Coat: Apply one complete coat of Tnemec Series 27 FC Typoxy or equal to all surfaces. This coating shall be applied at a dry film thickness of 2.0-3.0 mils.
4. Full Finish Coat: Apply one complete coat of Tnemec Series 1074U Endura-Shield or equal. This coating shall be applied at a dry film thickness of 2.0-3.0 mils. Color shall be selected bo the Engineer/Owner.
5. Village Logo Application: The Village Logo shall be applied on two sides of the Campbell Elevated Tank. The Contractor shall submit shop drawings which include three-dimensional renderings of proposed coating schemes. Two proposed coating schemes are included at the back of this Project Manual. Shop drawings shall be submitted per Section 013300. Contractor shall coat the exterior of the Campbell Tank according to the shop drawings of the coating scheme selected by the Owner. Use two coats of Tnemec Series 1074U or equal at a dry film thickness of 2.0-3.0 mils per coat where needed.

B. Campbell Elevated Tank Interior Wet Surface – Alternate Bid No. 1.b
1. Surface Preparation
a. 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.
2. Prime Coat: Immediately after blasting and before any rusting occurs (within 12 hours maximum), apply one coat of Tnemec Series 91-H_2O Hydro-Zinc or equal to all bare steel surfaces. This coating shall be applied at a dry film thickness of 2.5-3.5 mils.
3. Stripe Coat: After the primer has cured in accordance with the manurfacturer's recommendations, apply one strip coat, by brush only, of Tnemec Series N140-15BL Tank White Pota-Pox Plus or equal to all weld seams, edges of unseal welded roof plates, angles, and sharp edges.
4. Intermediate Coat: Apply one complete coat of Tnemec Series N140-1255 Chicago Beige Pota-Pox Plus or equal to all surfaces. This coating shall be applied at a dry film thickness of 4.0-6.0 mils.
5. Finish Coat: Apply one complete coat of Tnemec Series N140-15BL Tank White Pota-Pox Plus or equal at a dry film thickness of 4.0-6.0 mils.

C. Campbell Elevated Tank Exterior Surface – Alternate Bid No. 1.c
1. Surface Preparation
a. 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.

b. Dispose of spent abrasive and debris per SSPC-Guide 7 if lead is detected in the existing coating.

2. Prime Coat: Immediately after blasting and before any rusting occurs (within 12 hours maximum), apply one coat of Tnemec Series 91-H_2O Hydro-Zinc or equal to al bare steel surfaces. This coating shall be applied at a dry film thickness of 2.5-3.5 mils.
3. 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, tornbuckles, and accessories, with one coat of Tnemec Series 135-color Chembuild or equal.
4. Intermediate Coat: Apply one complete coat of Tnemec Series 73-color Endura-Shield or equal at a dry film thickness of 2.0-3.0 mils.
5. Apply one complete coat of Tnemec Series V700-color HydroFlon or equal at a dry film thickness of 2.0-3.0 mils.
6. Village Logo Application: The Village Logo shall be applied on two sides of the Campbell Elevated Tank. The Contractor shall submit shop drawings which include three-dimensional renderings of proposed coating schemes. Two proposed coating schemes are included at the back of this Project Manual. Shop drawings shall be submitted per Section 013300. Contractor shall coat the exterior of the Campbell Tank according to the shop drawings of the coating scheme selected by the Owner. Use two coats of Series V700-color HydroFlon or equal at a dry film thickness of 2.0-3.0 mils per coat where needed.

D. Maplewood Elevated Tank Exterior Surface – Alternate Bid No. 2.a
1. Surface Preparation
   a. All surfaces shall be clean and free of all dust, dirt, grease, oil, and foreign matter prior to painting.
   b. Power wash all surfaces in accordance with SSPC SP-12 (min 5,000 p.s.i.) with a solution of one part household bleach to three parts water to kill all mold and mildew present on the surface.
   c. Rinse all surfaces with clean water prior to power tool cleaning.
   d. All rusted and abraded surfaces along with any areas of loose paint shall be Power Tool Cleaned to bare steel in accordance with the SSPC Socity of Protective Coating's Specification SP-11. A surface profile of 1.0 mil is required.
   e. Feather edges to form a smooth transition to tight existing paint.
   f. Uniformly and thoroughly scarify all glossy and clear coated surfaces.
2. Spot Prime Coat: Before any rusting occurs (within 12 hours maximum of cleaning), apply one spot prime coat of Tnemec Series 135-1255 Chicago Beige Chembuild primer or equal to all bare steel surfaces. This coating shall be applied at a dry film thickness of 3.0-4.0 mils.
3. Full Intermediate Coat: Apply one complete coat of Tnemec Series 73-color Endura-Shield or equal to all surfaces. This coating shall be applied at a dry film thickness of 2.0-3.0 mils.
4. Full finish Coat: Apply one complete coat of Tnemec Series V700-color HydroFlon or equal. This coating shall be applied at a dry film thickness of 2.0-3.0 mils. Color shall be selected by the Engineer/Owner.

E. Maplewood Elevated Tank Exterior Surface – Alternate Bid No. 2.b
1. Surface Preparation

a. All surfaces shall be clean and free of all dust, dirt, grease, oil, and foreign matter prior to painting.
b. Power wash all surfaces in accordance with SSP SP-12 (min 5,000 p.s.i.) with a solution of one part household bleach to three parts water to kill all mold and mildew present on the surface.
c. Rinse all surfaces with clean water prior to power tool cleaning.
d. All rusted and abraded surfaces along with any areas of loose paint shall be Power Tool Cleaned to bare steel in accordance with the SSPC Society of Protective Coating's Specification SP-11. A surface profile of 1.0 mil is required.
e. Feather edges to form a smooth transition to tight existing paint.
f. Uniformly and thoroughly scarify all glosy and clear coated surfaces.

2. Spot Prime Coat: Before any rusting occurs (within 12 hours maximum of cleaning), apply one spot prime coat of Tnemec Series 135-1255 Chicago Beige Chembuild primer or equal to all bare steel surfaces. This coating shall be applied at a dry film thickness of 3.0-4.0 mils.
3. Full Intermediate Coat: Apply one complete coat of Tnemec Series 27 FC Typoxy or equal to all surfaces. This coating shall be applied at a dry film thickness of 2.0-3.0 mils.
4. Full Furnish Coat: Apply one complete coat of Tnemec Series 1074U Endura Shield or equal. This coating shall be applied at a dry film thickness of 2.0-3.0 mils. Color shall be selected by the Engineer/Owner.

3.09 WELDED AREAS

A. Areas that are impacted by welding shall be power tool cleaned to bare metal per SSPC-SP11.
B. All remaining areas shall be brush-off blasted to SSPC-SP7.
C. Spot coat the impacted areas with the appropriate coating system selected by the Owner.

END OF SECTION 099001