

## CHANGE ORDER NO.: 03

Owner: City of Jackson, Missouri  
Engineer: Horner & Shifrin, Inc. Engineer's Project No.: 2103602  
Contractor: RIHC Contracting  
Project: Jackson Water Plan Improvements Project, Phase 2, Project 2D

Date Issued: July 24, 2024 Effective Date of Change Order: July 24, 2024

The Contract is modified as follows upon execution of this Change Order No. 03 **CO 03 REV 00**

**Description:** See attached Table No.01

- 1.) Add chemical resistant coatings for chemical feed room applications per coatings representative recommendations coordinated during Shop Drawing review.
- 2.) Remove new windowed exterior door from WTP #2 Chlorine Room and install solid, metal door. Exterior windows are not recommended for gaseous chemical feed rooms as sunlight can heat gas cylinders and uncalibrated feed rates.

The total of the Contractor's Contract Price adjustment for the above-stated Work results in a total Contract Price ADDER. See TABLE 01, attached, for further detail.

**Attachments:**

- 1.) Table No. 01 – Description of Change Order No. 03 REV\_00
- 2.) Request for Proposal No. 06 REV\_00
  - a. Contractor's Change Order Request #007 (COR\_007)
- 3.) Email from Contractor dated 06/26/2024

*(Continued on following page)*

**Change in Contract Times**  
**[State Contract Times as either a specific date or a number of days]**

<b>Change in Contract Price</b>	
Original Contract Price: \$ <u>1,269,000.00</u>	Original Contract Times: Substantial Completion: <u>February 18, 2024</u> Ready for final payment: <u>March 19, 2024</u>
<b>Increase</b> from previously approved Change Orders No.03 \$ <u>\$12,015.94</u>	<b>Increase [days]</b> from previously approved Change Orders No.02 Substantial Completion: <u>277 days</u> Ready for final payment: <u>277 days</u>
Contract Price prior to this Change Order: \$ <u>1,272,105.91</u>	Contract Times prior to this Change Order: Substantial Completion: <u>November 21, 2024</u> Ready for final payment: <u>December 21, 2024</u>
<b>Increase</b> this Change Order: \$ <u>\$12,015.94</u>	<b>No Change [days]</b> this Change Order: Substantial Completion: <u>0 days</u> Ready for final payment: <u>0 days</u>
Contract Price incorporating this Change Order: \$ <u>1,284,121.85</u>	Contract Times with all approved Change Orders: Substantial Completion: <u>November 21, 2024</u> Ready for final payment: <u>December 21, 2024</u>

Recommended by Engineer (if required)

Authorized by Owner

By: <u>Lisa Fennewald, P.E. <i>Lisa E Fennewald</i></u> Title: <u>Senior Project Manager, H&amp;S</u> Date: <u>July 24, 2024</u> <u>Accepted by Contactor</u>	<u>Mayor, City of Jackson</u>    
By: _____ Title: _____ Date: _____	_____ _____ _____

**Table No. 1 - Description of Change Order No. 03 REV 00****Jackson Water Plant Improvements, Phase 2, Project 2D  
City of Jackson, Missouri**

Item No.	Description	Attached Reference Exhibit	Increase (Decrease) in Contract Price	Increase (Decrease) in Contract Time	Explanation/Comments
1	<u>09 96 00 - Protective Coatings</u>  Revise product specifications for chemical resistance in chemical room applications.	RFP_06_REV_00; G.C. COR #007	\$10,694.25	0 DAYS	Structural/Architectural coatings were not specified for chemical room applications. Contractor submitted Shop Drawing for 09 96 00 – Protective Coatings. Shop Drawing was sent to manufacturer's representative for QA check. Representative confirmed coatings as specified/submitted are not recommended for chemical feed rooms. Representative sent recommended coating systems which were compiled in an RFP (RFP_06_REV_00) and sent to Contractor.
2	<u>08 54 13 - Doors</u>  Remove & replace windowed door with solid door for gas feed rooms	n/a	\$1,321.69	0 DAYS	Chlorine room exterior door was submitted and installed with 22"x33" window. General practice is to avoid exterior windows in gas feed rooms. Western exposure receives higher solar load during afternoon Spring & Summer months. Cost is to remove the new door currently installed and replace with new solid hollow-metal exterior door.
4	[RESERVED]				
5	[RESERVED]				
6	[RESERVED]				
<b>TOTAL [Increase, (Decrease)]</b>			<b>\$12,015.94</b>	<b>0 DAYS</b>	



THE POWER HOUSE AT UNION STATION • 401 S. 18<sup>th</sup> ST., STE. 400 • SAINT LOUIS, MISSOURI 63103-2296  
314-531-4321 • FAX 314-531-6966 • www.HornerShifrin.com

## REQUEST FOR PROPOSAL

OWNER: City of Jackson, MO RFP NO: 06  
PROJECT: Jackson Water Plant Improvements H&S NO: 2103602  
Phase 2, Project 2D  
TO: Ms./Mrs. Susan Verseman DATE: 05/13/2024  
RHIC Contracting  
2411 Walters Lane  
Perryville, MO 63775

SUBJECT: WTP#2 Chemical Room(s) Protective Coatings

Please submit an itemized quotation for changes in the Contract Sum and/or Time incidental to proposed modifications to the Contract Documents described herein. This is not a change order nor a direction to proceed with the work described herein.

**Description of proposed change:**

Provide an amount to modify the Scope of Work as stated, below. Contractor's response shall include, without limitation, description of impacts of RFP\_06\_REV\_00 on total Contract price and construction schedule to completion.

- 1.) Furnish and install protective coatings at WTP#02 per the updated technical specification Section 09 96 00, attached, and per the finish schedule, attached as FIG-01 to this RFP.
- 2.) The Contractor's response to this RFP shall only account for Scope items BEYOND those scheduled for the project Base Bid Scope of Work.

**This RFP No.05 affects Specifications:**

09 96 00 – PROTECTIVE COATINGS

**Attachments:**

Technical Specification Section 09 96 00, revised per this RFP\_06\_REV\_00  
RFP\_06\_REV\_00 FIG-01

Prepared by: Spencer J. Fitzgerald  
Horner & Shifrin, Inc.

Date: 05/13/2024

Copies: Janet Sanders, Brad Noel, Keith Smith, Lisa Fennewald, File.

# Robinson Mechanical Contractors

DBA:Robinson Construction Company

2411 Walters Lane

Perryville, MO 63775

Ph : (573)547-8397

## Change Order Request

**To:** Spencer Fitzgerald

Horner & Shifrin, Inc

401 S 18th Street

Suite 400

St. Louis, MO 63103-2296

Ph: (314)531-4321 Fax: (314)531-6966

**Number:** 007

**Date:** 5/29/24

**Job:** 53-616 Jackson-Jackson,MO-Water Plant

**Phone:**

**Response Due:**

**Urgency:** Normal

**Description:** RFP 06 WTP #2 Chemical Room Protective Coatings

### Scope of Work:

This COR includes additional costs per the RFP 06 revised finish schedule. The request is for changes beyond those for the project Base Bid Scope of Work and are broken down as follows:

System 17 This area originally figured as system 13. Also added ceiling in room 103. Coating went from two coats to three. Cost of material increase \$ 1,795.50 and labor increase of \$ 1,118.25.

System 18 Originally figured as system 17. Material cost increase \$ 367.50

System 19 Originally two coat system changed to three coat. Material cost increase \$ 288.75

System 20 Originally figured as system 9. Changed to epoxy primer and urethane finish. Material increase \$ 341.25

System 21 Originally figured as system 9. Changed to epoxy primer and epoxy finish. Material increase \$ 315.00.

System 22 Originally figured as system 12 which was a two coat system. Changed to 3 coat system with additional prep work. Material increase \$ 2,415.00 labor increase \$ 2,793.00 and equipment \$ 1,260.00

System 23 Originally figured as system 17. No price change.

The total amount to provide this work is ..... \$10,694.25

If you have any questions, please contact me at (573)547-8397.

Submitted by:



Susan Verseman

Robinson Construction Company

Approved by:

Date:

ROOM No.	ROOM NAME	FLOOR			DOORS			INT. WALLS			EXT. WALLS			CEILINGS		MISC. STEEL	
		SYSTEM 11	SYSTEM 12	SYSTEM 22	SYSTEM 9	SYSTEM 20	SYSTEM 21	SYSTEM 9	SYSTEM 17	SYSTEM 18	SYSTEM 9-13	SYSTEM 23	[RESERVED]	SYSTEM 17	CEILING HEIGHT	SYSTEM 4	SYSTEM 19
101	WTP #2 EXISTING	●			●			X	X	X	X	X	X		10'-4"		
102	CHLORINE FEED ROOM			●		●	●	X	●	●	X	●	X		10'-4"		●
103	FLUOSILICIC ACID FEED ROOM			●		●	●	X	●	●	X	●	X	●	9'-5"		●
ROOM No.	ROOM NAME	REMARKS															
		<i>Note: All finish specifications listed are in reference to system designations as specified in Technical Specification #09 96 00</i>															
101	WTP #2 EXISTING	Coating of existing concrete floor in WTP#02 is limited to the new conc. flooring installed in place of the existing gravity filters per this Project.															
102	CHLORINE FEED ROOM	Scope of coating within ex. Chlorine Feed Room is limited to new surfaces or existing surfaces disturbed during this Construction.															
103	FLUOSILICIC ACID FEED ROOM																



**CITY OF JACKSON, MISSOURI**  
**WATER TREATMENT PLANT IMPROVEMENTS**

**RFP NO.06 REV\_00**  
**WTP NO.2 PROTECTIVE COATINGS**

**RFP\_06 FIG-01**  
**SHEET 1 OF 1**

DATE: **05/13/2024**

PROJECT: 2103602

**DIVISION 9 - FINISHES**  
**SECTION 09 96 00**  
**PROTECTIVE COATINGS**  
**REVISED FOR RFP\_06\_REV\_00**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specifications Sections, apply to this Section.
- B. Related Technical Specifications:
  - 1. All applicable Sections of Division 3 – Concrete.
  - 2. All applicable Sections of Division 4 – Masonry.
  - 3. All applicable Sections of Division 5 – Metals.
  - 4. All applicable Sections of Division 7 – Thermal and Moisture Protection.
  - 5. All applicable Sections of Division 8 – Openings.
  - 6. All applicable Sections of Division 11 – Equipment.
  - 7. All applicable Sections of Division 22 – Plumbing.
  - 8. All applicable Sections of Division 23 – Heating, Ventilating and Air Conditioning
  - 9. All applicable Sections of Division 40 – Process Interconnections

**1.2 SUMMARY**

- A. This Section includes the furnishing and application of coatings to exterior and interior surfaces throughout the Project and as listed in PART 2 of this Specification Section. Concealed surfaces are generally not required to be finish-painted, unless otherwise specified or indicated on the Contract Drawings.
- B. Coating systems include surface preparation, prime coat (first coat), intermediate and 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 Equipment is provided with shop-applied finished coating system, only touch-up is a part of field painting.
  - 2. Refer to applicable Sections to determine whether surface preparation and first coat, or complete coating system, is to be shop-applied.

C. Colors:

1. Color of finish coatings shall match accepted color Samples.
2. When intermediate and finish coats of a system are of same type, tint or use an alternate color on intermediate coat to enable visual coverage inspection of the third coat. When prime and finish coats only are specified and are of same or different types, tint or use an alternate color on prime coat to enable visual coverage inspection of the finish coat.

1.3 SUBMITTALS

A. Submit items as specified herein, in accordance with the requirements in Division 1.

B. Items include, but are 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.
3. Technical and material safety data sheets.
4. Certification by coating manufacturer(s) that all coatings are suitable for service intended as stated on each coating system sheet.

1.4 APPLICABLE CODES AND STANDARDS:

A. American National Standards Institute (ANSI)

1. A 13.1 - Scheme for the Identification of Piping Systems.
2. Z 53.1 - Safety Color Code for Marking Physical Hazards.

B. American Society for Testing and Materials (ASTM):

1. D4258 Surface Cleaning Concrete for Coating.
2. DH259 Abrading Concrete.
3. D4260 Acid Etching Concrete.
4. D4261 Surface Cleaning Concrete Unit Masonry for Coating.



- C. Steel Structures Painting Council (SSPC) surface Preparation Specifications:
1. SP 1 - Solvent Cleaning: Removes oil, grease, soil, drawing and cutting compounds, and other soluble contaminants.
  2. SP 3 - Power Tool Cleaning: Removes loose material. Not intended to remove all scale or rust.
  3. SP 5 - White Metal Blast Cleaning: Removes all scale, rust, foreign matter. Leaves surface gray-white uniform metallic color.
  4. SP 6 - Commercial Blast Cleaning: Two-thirds of each square inch free of all visible residues; remainder only light discoloration.
  5. SP 7 - Brush-Off Blast Cleaning: Removes only loose material, remaining surface tight and abraded to give anchor pattern.
  6. SP 10 - Near-White Blast Cleaning: At least 95% of each square inch shall be free of all visible residues.
  7. SP 11 - Power Tool Cleaning to Bare Metal.
- D. National Association of Pipe Fabricators (NAPF) surface preparation specifications
1. NAPF 500-03-01: Solvent Cleaning
  2. NAPF 500-03-02: Hand Tool Cleaning
  3. NAPF 500-03-03: Power Tool Cleaning
  4. NAPF 500-03-04: Abrasive Blast Cleaning for Ductile Iron Pipe
  5. NAPF 500-03-05: Abrasive Blast Cleaning for Cast Ductile Iron Fittings
- E. National Sanitation Foundation (NSF):
1. 61 - Drinking Water Treatment Chemicals - Health Effects.

1.5 QUALITY ASSURANCE:

- A. All equipment, materials and work shall be provided in accordance with the requirements of Division 1.
- 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 or curing time.
- C. In the event a problem occurs with coating system, surface preparation, or application, coating applicator and coating manufacturer's technical representative shall promptly investigate the problem and submit results to Engineer.

#### 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store and handle all equipment and materials in a manner to ensure installation in sound and undamaged condition, to prevent damage from exposure to the elements, and in accordance with the requirements in Division 1.
- B. Deliver in sealed containers with labels and information legible and intact. Containers shall also have correct labels stating product name, series number, color, sheen, and other applicable information.
- C. Store only acceptable materials on Project site.
- D. Provide separate area and suitable containers for storage of coatings and related coating equipment.
- E. Dispose of used or leftover containers, thinners, rags, brushes, and rollers in accordance with applicable regulations.

### PART 2 - PRODUCTS

#### 2.1 ACCEPTABLE MANUFACTURERS

- A. Products shall be those listed, as manufactured by the Tnemec Company, Inc., the Sherwin-Williams Company, PPG/Ameron or Engineer-approved equal. All field-applied coating systems shall use products of the same manufacturer.

#### 2.2 GENERAL

- A. Materials furnished for each coating system must be compatible with 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 of any unsuitable substrate or coating conditions.

(Continued on following page)

## 2.3 SURFACES TO BE COATED:

- A. System 1: ~~All submerged steel and cast iron surfaces exposed to potable water, excluding stainless steel (Not Used)~~
- B. System 2: ~~All submerged ductile iron pipe and fittings exposed to potable water (Not Used)~~
- C. System 3: All exposed ductile iron pipe or fittings and valves not listed under other systems.
- D. System 4: All miscellaneous and structural steel, not listed under other systems.
- E. System 5: All shop-primed miscellaneous equipment.
- F. System 6: ~~Interior poured and precast concrete in non-immersed applications. (Not Used)~~
- G. System 7: ~~Exterior Concrete block wall. (Not Used)~~
- H. System 8: Factory-primed structural steel.
- I. System 9: Hollow metal frames and doors.
- J. System 10: ~~Exterior surfaces of below grade concrete and pre-cast concrete structures. (Not Used)~~
- K. System 11: Extra-abrasion resistant, aesthetically pleasing, interior concrete floor system.
- L. System 12: Clear coating for interior concrete floors.
- M. System 13: Interior CMU Walls.
- N. System 14: ~~Steel Elevated Storage Tank Exterior (Not Used)~~
- O. System 15: ~~Steel Elevated Storage Tank Interior (Not Used)~~
- P. System 16: ~~Submerged Concrete Surfaces Exposed to Chemicals (Not Used)~~
- Q. System 17: Interior bare CMU walls for corrosive chemical feed facilities.
- R. System 18: Interior clay brick masonry for corrosive chemical feed facilities.
- S. System 19: Miscellaneous steel for corrosive chemical feed facilities.
- T. System 20: Exterior hollow metal doors and frames (factory-primed) for corrosive chemical feed facilities.
- U. System 21: Interior hollow metal doors and frames (factory-primed) for corrosive chemical feed facilities.
- V. System 22: Concrete flooring system for corrosive chemical feed facilities (non-secondary containment).
- W. System 23: Interior clay block masonry units (general service).

## 2.4 COATING SYSTEMS

### A. System 1:

Surface Preparation: All surfaces shall be cleaned in accordance with SSPC-SP10 Near-White-Metal Blast Cleaning, minimum 3 mil anchor profile. All surfaces shall be clean, dry and free of contaminants.

Prime Coat: Apply one full coat of Tnemec Series N140-1211 Pota-Pox at 4.0 – 6.0 mils DFT, PPG Amercoat Amerlock 2 at 4.0 - 6.0 mils DFT or Engineer-approved equal.

Finish Coat: Apply one full coat of Tnemec Series N140-1211 Pota-Pox at 4.0 – 6.0 mils DFT, PPG Amercoat Amerlock 2 at 4.0 - 6.0 mils DFT or Engineer-approved equal.

### B. System 2:

Surface Preparation: All surfaces shall be cleaned in accordance with NAPF 500-03-04 Abrasive Blast Cleaning for Ductile Iron Pipe & NAPF 500-03-05 Abrasive Blast Cleaning for Ductile Iron Fittings. All surfaces shall be clean, dry and free of contaminants.

Prime Coat: Apply one full coat of Tnemec Series N140-1211 Pota-Pox at 4.0 – 6.0 mils DFT, PPG Amercoat Amerlock 2 at 4.0 - 6.0 mils DFT or Engineer-approved equal.

Finish Coat: Apply one full coat of Tnemec Series N140-1211 Pota-Pox at 4.0 – 6.0 mils DFT, PPG Amercoat Amerlock 2 at 4.0 - 6.0 mils DFT or Engineer-approved equal.

### C. System 3:

Surface Preparation: SSPC-SP3, power tool clean.

Shop Prime Coat: Apply one full coat of Tnemec Series 1 Omnithane at 2.5 to 3.5 mils DFT, Sherwin-Williams Corothane I Mio-Aluminum at 2.0 – 3.0 mils DFT or PPG Amercoat 240 at 6-8 mils DFT, or Engineer approved equal.

Field Finish Coat: Apply one full coat of Tnemec Series 66 HB Epoxoline at 4.0 to 6.0 mils DFT, or Sherwin-Williams Macropoxy 646 FC at 4.0 – 6.0 mils DFT or PPG Amercoat 240 at 6-8 mils DFT, or Engineer approved equal.

### D. System 4:

Surface Preparation:

Non-Immersion: All surfaces shall be cleaned in accordance with SSPCSP6 Commercial Blast Cleaning. All surfaces shall be clean, dry and free of contaminants.

Prime Coat: Apply one full coat of Tnemec Series 66 HB Epoxoline at 4.0 to 6.0 mils DFT, Sherwin-Williams Macropoxy 646 FC at 4.0 – 6.0 mils DFT, PPG Amercoat 240 at 6-8 mils DFT, or Engineer approved equal.

Finish Coat: Apply one full coat of Tnemec Series 73 Endura-Shield at 2.0 to 3.0 mils DFT, Sherwin-Williams HS Polyurethane at 3.0 – 4.0 mils DFT, PPG Amercoat 450 HSG at 2-3 mils DFT, or Engineer-approved equal.

E. System 5:

Surface Preparation: All surfaces shall be clean, dry and free of contaminants.

Barrier Coat: Apply one full coat of Tnemec Series 530 Omnithane at 2.0 to 3.0 mils DFT, Sherwin-Williams Corothane I Mio-Aluminum at 2.0 – 3.0 mils DFT, PPG Amercoat 240 at 4 mils DFT, or Engineer-approved equal.

Finish Coat: Apply one full coat of Tnemec Series 73 Endura-Shield at 2.0 to 3.0 mils DFT, Sherwin-Williams HS Polyurethane at 3.0 – 4.0 mils DFT, PPG Amercoat 450 HSG at 2-3 mils DFT, or Engineer-approved equal.

F. System 6:

Surface Preparation: All interior surface, abrasive blast clean per SSPC-SP13.

Prime Coat: Apply one full coat of Tnemec Series 84 Ceramalon Env at 6.0 to 10.0 mils DFT, Sherwin-Williams Sher-Tile Epoxy at 5.0 – 10.0 mils DFT, PPG Amerlock 400 (or 400BF Block Filler) at 6 mils DFT (or 75-100 sq.ft. per gallon) or Engineer-approved equal.

Finish Coat: Apply one full coat of Tnemec Series 84 Ceramalon Env 6.0 to 10.0 mils DFT, Sherwin-Williams Sher-Tile Epoxy at 5.0 – 10.0 mils DFT, PPG Amerlock 400 at 6 to 8 mils DFT or Engineer-approved equal.

G. System 7:

Surface Preparation: All surfaces shall be clean, dry and free of contaminants.

Block Filler: Apply one full coat of Tnemec Series 130 Envirofill at 80-100 sq. ft. per gallon, Sherwin-Williams Heavy Duty Block Filler at 55 – 100 sq. ft. per gallon, PPG Amerlock 400BF at 75-100 sq. ft. per gallon, or Engineer-approval equal.

Primer Coat: Apply one full rolled coat of Tnemec Series 113 Tufcoat at 3.0 to 5.0 mils DFT per coat, Sherwin-Williams Epo-Plex Multi-Mil WB Epoxy at 4.0 – 6.0 mils DFT per coat, PPG Amercoat 335 at 4-6 mils DFT or Engineer-approved equal.

Finish Coat: Apply one full rolled coat of Tnemec Series 113 Tufcoat at 4.0 to 6.0 mils DFT per coat, Sherwin-Williams Epo-Plex Multi-Mil WB Epoxy at 3.0 – 5.0 mils DFT per coat, PPG Amercoat 335 at 4-6 mils DFT Or Engineer-approved equal.

H. System 8:

Surface Preparation: All surfaces shall be clean, dry and free of contaminants.

Prime Coat: Apply one full coat of Tnemec Series 115 Uni-Bond of at 2.0 to 4.0 mils DFT, Sherwin-Williams Water-Based Acrylic Dryfall at 2.0 – 4.0 mils DFT or PPG 90-812 Pitt-Tech EDF at 3 mils DFT, or Engineer approved equal.

Finish Coat: Apply one full coat of Tnemec Series 115 HB Uni-Bond of at 2.0 to 4.0 mils DFT, Sherwin-Williams Water-Based Acrylic Dryfall at 2.0 – 4.0 mils DFT or PPG 90-812 Pitt-Tech EDF at 3 mils DFT, or Engineer Approval Equal.

I. System 9:

Surface Preparation: All surfaces shall be clean, dry and free of contaminants.

J. System 9a Exterior:

Semi-Gloss Finish (Water Based)

1<sup>st</sup> Coat: Sherwin-Williams Pro-Cryl Universal W-8 Primer, B66-310 Series at 5 to 10 mils wet, 2 to 4 mils dry, or Engineer approved equal.

2<sup>nd</sup> Coat: Sherwin-Williams Sher-Cryl HPA High Performance Acrylic, B66-350 Series, or Engineer approved equal.

3<sup>rd</sup> Coat: Sherwin-Williams Sher-Cryl HPA High Performance Acrylic, B66-350 Series at 2.5 to 4 mils dry per coat, or Engineer approved equal.

K. System 9b Interior:

Semi-Gloss Finish

1<sup>st</sup> Coat: Sherwin-Williams DTM Acrylic Primer/Finish B66W1 at 2.5 to 4 mils dry per coat, or Engineer approved equal.

2<sup>nd</sup> Coat: Sherwin-Williams Pro-Green 200 Interior Latex, Semi-Gloss B31-600 Series, or Engineer approved equal.

3<sup>rd</sup> Coat: Sherwin-Williams Pro-Green 200 Interior Latex, Semi-Gloss B31-600 Series at 4 mils wet and 1.6 mils dry per coat, or Engineer approved equal.

L. System 10:

Surface Preparation: Allow 28 days cure time. All surfaces shall be clean, dry and free of contaminants.

Primer Coat: Apply one full coat of Tnemec Series 46-465 HP Tnemecol at 8.0 to 12.0 mils DFT, Sherwin-Williams Tar Guard Epoxy at 8 to 12 mils DFT, or Engineer-approved equal.

Finish Coat: Apply one full coat of Tnemec Series 46-465 HB Tnemecol at 8.0 to 12.0 mils DFT, Sherwin-Williams Tar Guard Epoxy at 8 to 12 mils DFT or Engineer-approved equal.

M. System 11:

Surface Preparation: SSPC-SP 13/NACE 6. Shot blast or mechanically abrade. Cure new concrete 28 days.

Primer/Broadcast Coat: Tnemec Series 237 Power-Tread, double broadcast to 1/8 inch DFT or Sherwin-Williams GP 3744G or PPG Mega Seal 99-127, or Engineer approved equal.

Intermediate Coat: Tnemec Series 237 Power-Tread at 8.0 to 12.0 mils DFT, Sherwin-Williams GP3744 or PPG Mega Seal 99-127 at 8-12 mils DFT, or Engineer approved equal.

Finish Coat: Tnemec Series 291 CRU at 2.0 to 3.0 mils DFT, Sherwin-Williams General Polymers 4638 at 3 to 4 mils DFT or PPG Amershield at 3-4 Mils DFT, or Engineer approved equal.

Provide 12" x 12" mockup for Owner's Representative for approval.

Total DFT: 1/8 inch for system.

Finish Color: As selected by Engineer from manufacturer's standard colors.

N. System 12:

Surface Preparation: Cure new concrete long enough to walk on. Clean cured concrete subject to construction in traffic prior to sealing by pressure washing. Surface should show no signs of water beading. Dampen surface at time of application with potable water.

Prime Coat: Apply one full coat of Tnemec Series 61-5002 (Beige) Tneme-Liner at 8.0-10.0 mils DFT. Apply per manufacturer's instructions.

Finish Coat: Apply one full coat of Tnemec Series 61-5001 (Gray) Tneme-Liner at 8.0-10.0 mils DFT. Apply per manufacturer's instructions.

O. System 13:

Surface Preparation: Allow mortar of block walls to cure 14 days at 75°F. Level all protrusions and mortar splatter in block walls. All surfaces shall be clean, dry and free of contaminants.

Prime Coat: Apply one full coat of Tnemec Series 66 HB Epoxoline at 4.0-6.0 mils DFT.

Finish Coat: Apply one full coat of Tnemec Series 66 HB Epoxoline at 4.0-6.0 mils DFT.

P. System 14:

Surface preparation: Steel plate shall be cleaned in accordance with SSPC-SP10. Exterior welds shall be cleaned in accordance with SSPC SP-23; power tool clean to bare metal to achieve 2 mil profile. All surfaces shall be clean, dry and free of contaminants.

Prime Coat: Tnemec 91 H2O Hydro-Zinc Primer at 2.5-3.5 mils thickness or engineer approved equal.

Intermediate Coat: Tnemec Series 135 Epoxy at 4-6 mils thickness or engineer approved equal.

Finish Coat: Tnemec Series 1029 acrylic or engineer approved equal. Tint top coat to match existing finish on tank.

Q. System 15:

Surface preparation: Steel plate shall be cleaned in accordance with SSPC-SP10. Exposed welds on the interior of the tank shall be cleaned in accordance with SSPC SP-11. All surfaces shall be clean, dry and free of contaminants.

Prime Coat: Tnemec 91 H2O Hydro-Zinc Primer at 2.5-3.5 mils thickness or engineer approved equal.

Finish Coat: Tnemec FC-22 Touch-Up Kit or engineer approved equal.

R. System 16:

Surface Preparation (Walls): Allow new concrete to cure for a minimum of 28 days. Test concrete for moisture following the 28 day curing period in accordance with ASTM D4263 and/or F1869. Concrete surfaces shall be prepared in accordance with SSPC-SP13/NACE No. 6, Severe Service, and shall produce a minimum surface profile of a CSP-5 as noted in SSPC-SP13/NACE No. 6 and ICRI Guideline 03732.

Surface Preparation (floors): Allow new concrete to cure for 28 days at 75 degrees F. Verify concrete dryness and prepare concrete surfaces in accordance with NACE No. 6/SSPC-SP13 Joint Surface Preparation Standards and ICRI Technical Guidelines. Moisture vapor transmission should not exceed three lbs per 1000 sq.ft. in a 24 hour period (reference ASTM F 1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.") Relative Humidity should not exceed 80%. (Reference ASTM F2170 "Standard Test Method for Determining Relative Humidity in Concrete using in situ Probes.")

Mechanically abrade by means of diamond grinding, to remove all laitance and surface contaminants and provide a minimum profile similar to 40-60 grit sandpaper. (Reference, ICRI CSP 2).

Prime Coat/Surface Filler (Walls): Series 218 Mortarclad applied evenly at a minimum 1/16" thickness to provide a continuous, void-free film. The surfaces should be "pre-wet" or dampened with potable water to a saturated surface dry (SSD) condition; the concrete is darkened by water but there is no pooling of water on the concrete. Do not over saturate the surface. (Note: Saw-cut the concrete at the termination points as recommended by Manufacturer.)

Primer (walls & floors): Series 201 Epoxoprime or approved equal shall be mechanically mixed and applied in accordance with manufacturer's printed instructions and applied uniformly at a film thickness of 6 to 8 dry mils. Topcoat after 2 hours and within 16 hours.

Intermediate Coat (walls & floors): Series 280 Tneme-Glaze or approved equal shall be mechanically mixed in accordance with manufacturer's printed instructions and applied at a film thickness of 6 to 8 dry mils. Topcoat after 8 hours but before 24 hours.

Topcoat (floors & walls): Series 280 Tneme-Glaze or approved equal shall be mechanically mixed in accordance with manufacturer's printed instructions and applied at a film thickness of 6 to 8 dry mils.



S. System 17:

Surface Preparation: Allow mortar to cure for 14 days. Level protrusions and mortar spatter.

Block Filler: Tnemec Series 130 Envirofill applied at 80-100 sq.ft. per gallon, or Engineer Approved Equal.

Intermediate: Tnemec Series 104 H.S. Epoxy (color) applied at 4.0-6.0 mils DFT, or Engineer Approved Equal.

Finish: Tnemec Series 104 H.S. Epoxy (color) applied at 4.0-6.0 mils DFT, , or Engineer Approved Equal.

T. System 18:

Surface Preparation: Power wash and/or hand clean to remove all surface contaminants, chalk, dirt, or any foreign material. Hand tool, scrape, or power tool to remove all loose, non-adherent coatings. All surfaces shall be clean, dry, and free of contaminants.

Primer: Series 108 Probond applied at 1.5-2.0 mils DFT, or Engineer Approved Equal.

Intermediate: Series 104 H.S. Epoxy (color) applied at 4.0-6.0 mils DFT, or Engineer Approved Equal.

Finish: Series 104 H.S. Epoxy (color) applied at 4.0-6.0 mils DFT, or Engineer Approved Equal.

U. System 19:

Surface Preparation: Prepare in accordance with SSPC-SP2-3 Hand and Power Tool Cleaning. Paint only clean and dry surfaces.

Block Filler: Series 132 ProTuff Mastic applied at 4.0-6.0 mils DFT, or Engineer Approved Equal.

Intermediate: Series 104 H.S. Epoxy (color) applied at 4.0-6.0 mils DFT, or Engineer Approved Equal.

Finish: Series 104 H.S. Epoxy (color) applied at 4.0-6.0 mils DFT, or Engineer Approved Equal.

V. System 20:

Surface Preparation: Prepare any rusted areas in accordance with SSPC-SP2-3 Hand and Power Tool Cleaning. Paint only clean and dry surfaces.

Intermediate: Series 27 F.C. Typoxy applied at 2.0-3.0 mils DFT, or Engineer Approved Equal.

Finish: Series 1095 Endura-Shield applied at 2.0-3.0 mils DFT, or Engineer Approved Equal.

W. System 21

Surface Preparation: Prepare any rusted areas in accordance with SSPC-SP2-3 Hand and Power Tool Cleaning. Paint only clean and dry surfaces.

Intermediate: Series 27 F.C. Typoxy applied at 2.0-3.0 mils DFT, or Engineer Approved Equal.

Finish: Series 290 CRU applied at 2.0-3.0 mils DFT, or Engineer Approved Equal.

X. System 22:

Surface Preparation: All concrete to be coated shall be cleaned prior to any aggressive surface preparation to assure all grease, oils or other contaminants are removed. Mechanically abrade by means of diamond grinding to remove laitance, curing compounds, hardeners, sealers, and other contaminants and to provide an ICRI-CSP 3-4 surface profile.

Primer: Series 201 Epoxoprime (clear) applied at 6.0-8.0 mils DFT, or Engineer Approved Equal.

Primer: Series 239 Chemtread (color) applied at 6.0-8.0 mils DFT, or Engineer Approved Equal.

Finish: Series 282 Tneme-Glaze applied at 6.0-8.0 mils DFT, or Engineer Approved Equal.  
Note: Micronized Polypropylene may be added to the finish coat for additional slip resistance.

Y. System 23:

Surface Preparation: Remove old paint not tightly bonded to the surface. Must be clean, dry and free of oil, grease and other contaminants. Care must be taken not to damage existing clay masonry and/or mortar joints. Reference SSPC-SP13/NACE 6.

NOTE: A test patch is recommended to determine compatibility of the specified Prime Coat over unknown previously applied coatings.

Prime Coat: Tnemec Series 151-1051 Elasto-Grip FC applied at 1.0-2.0 mils DFT or Engineer Approved Equal.

Intermediate Coat: Tnemec Series 113 H.B. Tneme-Tufcoat applied at 4.0-6.0 mils DFT or Engineer Approved Equal.

Finish Coat: Tnemec Series 113 H.B. Tneme-Tufcoat applied at 4.0-6.0 mils DFT or Engineer Approved Equal.

2.5 SURFACES NOT TO BE COATED

A. Surfaces which shall not be coated include:

1. Aluminum conduits.
2. PVC pipe and conduits.
3. Stainless steel or aluminum surfaces not specifically listed in coating system.

2.6 COLOR CODING OF PIPING AND PHYSICAL HAZARDS

A. Color coding of piping shall be in accordance with the color schedule included in Section 10445 of this Specification.

1. Identify piping with legend and arrows as specified in Section 10445 and apply after completion of finish coating.
  - B. Color Coding Physical Hazards: Exterior and interior.
- 2.7 General:
- A. Paint areas indicated to identify physical hazard areas as required by ANSI Z53.1.
  - B. All colors shall conform to Federal Safety Color Code requirements.

### PART 3 - EXECUTION

#### 3.1 SURFACE PREPARATION

- A. Prepare surfaces for each coating system conforming to SSPC or ASTM surface preparations specifications listed.
  1. If grease or oils are present, SSPC-SP1 must precede any other method specified.
  2. Remove surface irregularities such as weld spatter, burrs, or sharp edges, prior to specified surface preparation
- B. Depth of profile will be as specified for each system, but in no instance shall it exceed one-third of the first coating dry-film thickness.
- C. Prepare only those areas which will receive the first coat of the system on the same day.

#### 3.2 APPLICATION

- A. Apply coatings in accordance with coating manufacturer's written instructions or recommendations.
- B. Use properly designed brushes, rollers, and splay equipment for all applications.
- C. Dry-film thickness of each system shall meet the minimum specified but not exceed it more than 20% or coating manufacturer's requirements if less.
- D. On unprimed surfaces. apply first coat of the system the same day as surface preparation.
- E. 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 approved by coating manufacturer. Do not apply coatings when inclement weather or freezing temperature may occur within coating curing time requirements.
  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% 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. 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 to prevent paints from entering orifices in electrical or mechanical equipment.
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 or equipment data plates, code stamps on piping, or UL fire-rating labels.

### 3.3 INSPECTION

- A. Contractor shall provide and use a 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.

### 3.4 CLEANING AND REPAIRS

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

**END OF SECTION 099600**

**REVISED FOR RFP\_06\_REV\_00**

## Spencer J. Fitzgerald

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**From:** Susan Verseman <SVerseman@rcco.com>  
**Sent:** Wednesday, June 26, 2024 4:49 PM  
**To:** Spencer J. Fitzgerald  
**Cc:** Lisa Fennewald  
**Subject:** RE: 2103602\_JacksonWaterPh2Proj2D - Progress Questions Architectural

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Spencer - See my answers below in red. Let me know if you want to discuss further.

### SUSAN VERSEMAN PE,PMP Project Manager

o [573.547.8397](tel:573.547.8397) d [573.517.5111](tel:573.517.5111) m [573.768.0625](tel:573.768.0625)

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**From:** Spencer J. Fitzgerald <sjfitzgerald@hornersshifrin.com>  
**Sent:** Tuesday, June 25, 2024 11:34 AM  
**To:** Susan Verseman <SVerseman@rcco.com>  
**Cc:** Lisa Fennewald <lefennewald@hornersshifrin.com>  
**Subject:** 2103602\_JacksonWaterPh2Proj2D - Progress Questions Architectural

Susan,

Just a follow up from our convo last week, please forward:

- 1.) Details of fluoride room ceiling installation @ WTP#2; **Photos and descriptions sent via separate email**
- 2.) Options to field modify 48" nominal double-rabbit door frame @ WTP#2 to a 48" CLEAR opening width.
  - **Cost to remove and replace the existing frame with a hollow metal cased frame**
    - **Total \$1,433.32** (Lab = \$872.12, Mat = \$561.20)
  - **We could consider removing the frame and placing an 8" x 2" Tube steel in the opening as the frame. It might be sturdier and less resistance to damage. I'm waiting on a material cost on this but labor would be about the same since you'd likely want to cut to fit in the field, and weld in place.**
  - **The supplier didn't feel removing the stop was a workable solution.**
- 3.) Options to return exterior door at fluoride room and/or at chlorine room.
  - **Supplier will not allow a return since these have been installed and in use for a while**
  - **Remove and Replace the ½ glass in the two doors with Aluminum Panels - \$427.35**
  - **Remove Doors with Glass, Install two new solid doors and relocate panic bar/hardware from existing to new doors**
    - **Total \$2,643.37** (Lab = \$581.42, Mat = \$2,061.95)

Thanks,