

REQUEST FOR PROPOSALS (RFP)  
FOR  
DESIGN AND ENGINEERING SERVICES FOR  
THE 2022/2023 WATER STORAGE TANK  
RECOATING, PAINTING AND  
REHABILITATION PROJECTS



Beaumont-Cherry Valley Water District  
Attn: James Bean, Director of Operations  
560 Magnolia Avenue  
Beaumont, CA 92223  
[james.bean@bcvwd.org](mailto:james.bean@bcvwd.org)

Approved for Release:

James Bean, Director of Operations  
Beaumont-Cherry Valley Water District

**KEY RFP DATES (Subject to change at discretion of District):**

Issue Date:	April 28, 2022
District Project Manager:	James Bean, Director of Operations
Pre-Proposal Meeting (optional):	May 9, 2022
Deadline for Requests for Information:	May 17, 2022
Proposal Due Date:	<b>May 26, 2022</b>
Presentation/interviews (optional):	Will be notified if applicable
Anticipated Project Award Date:	June 30, 2022
Anticipated Project Design Completion:	September 29, 2022

**ATTENTION: CONTRACTORS AND SUBCONTRACTORS MANDATORY  
REQUIREMENT FOR  
DEPARTMENT OF INDUSTRIAL RELATIONS REGISTRATION**

**Contractors and subcontractors are required to be registered with the Department of Industrial Relations in order to 1) submit a bid or be listed on a bid for a public works project, or 2) work on a public works project awarded on or after April 1, 2018.**

**Application Process**

Registration and renewal costs with DIR are \$400 and covers the fiscal year (July 1st – June 30th). Credit card payments can be processed within 24 hours, while other forms of payment may delay registration for up to eight weeks.

It is the Contractors responsibility to keep registration current with DIR. If the contractor is found to be out of compliance with DIR, it is at BCVWD's discretion.

- **Activate or renew your contractor registration.**
  - [Instructions for completing the contractor registration and renewal application](#)
  - [Contractor Registration Assistance](#)
  
- [Frequently Asked Questions](#)

*Who is required to register?* Any Contractor or Subcontractor who bids on or performs work that requires the payment of prevailing wages under state law must be registered with DIR. This includes not only work performed by the building and construction trades, but also other types of work, including trucking, surveying, and testing, if that work is subject to prevailing wage requirements.

To be eligible Contractors and Subcontractors must:

- Be in good legal standing with no outstanding judgments or liens owed to workers or to the State of California.
- Not be [debarred from doing public works](#) by the United States Department of Labor or any state that has public works debarment laws.
- Have a California Contractors State License if one is required (non-construction contractors must provide their professional license number if one exists for their profession).
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To learn more about Public Works Contractor Registration, please read the [Public Works Reforms \(SB 854\) fact sheet](#) and the [frequently asked questions](#). If you have additional questions about contractor registration, please [contact DIR](#) for assistance.



## NOTICE INVITING PROPOSALS

NOTICE IS HEREBY GIVEN that proposals will be received from qualified firms for Design and Engineering Services for the 2022/2023 Water Storage Tank Recoating, Painting and Rehabilitation Projects.

Responses to this Request for Proposal (RFP) will be accepted until **May 26, 2022** at 3:00 p.m. Proposals received after this date/time will not be considered and will be considered nonresponsive and will not be evaluated. It is the responsibility of the proposer to ensure that any proposals submitted have sufficient time to be received by the Beaumont-Cherry Valley Water District (BCVWD) prior to this proposal due date and time.

Proposals shall be enclosed in a sealed envelope and marked clearly with following information, formatted as follows:

"SEALED PROPOSAL FOR

**DESIGN AND ENGINEERING SERVICES FOR THE 2022/2023 WATER STORAGE TANK  
RECOATING, PAINTING AND REHABILITATION PROJECTS**

DO NOT OPEN WITH REGULAR MAIL."

Beaumont-Cherry Valley Water District

Attn: James Bean, Director of Operations.

560 Magnolia Avenue

Beaumont, CA 92223

Proposals shall be mailed, hand delivered, or sent by courier service.

**Proposals shall NOT be sent via telegraphic message, electronic mail or facsimile.**

All notifications, updates and addenda will be posted on the District's "Current Solicitations" page at <https://bcvwd.org/current-solicitations/> Proposers shall be responsible for monitoring the site to obtain information regarding this solicitation. Failure to respond to required updates may result in a determination of a nonresponsive proposal.

BCVWD's regular office hours are 8 a.m. to 5 p.m., Monday – Thursday.

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**BEAUMONT-CHERRY VALLEY  
WATER DISTRICT**

**REQUEST FOR PROPOSAL  
DESIGN AND ENGINEERING SERVICES FOR 2022/2023 WATER STORAGE TANK  
RECOATING, PAINTING AND REHABILITATION PROJECTS**

**NOTICE TO PROPOSERS / PROPOSAL SUBMITTAL  
INSTRUCTIONS**

1. **DUE DATE AND TIME:** Proposals for design and engineering services for the recoating, painting and rehabilitation of BCVWD owned Cherry Tank I, Cherry Tank II, Vineland Tank I and Lower Edgar Tank as described herein, will be received by the District until date and time shown on “Notice of Inviting Proposals.” Any changes to this RFP are invalid unless specifically modified by District and issued as a separate addendum document. Should there be any question as to changes to the content of this document; the District’s copy shall prevail. It is the Proposer’s sole responsibility to ensure that their proposal, inclusive of any or all addenda, is received by the District at the stated time and place. Any proposal received after the scheduled closing time for receipt of proposals will not be considered and will remain unopened.
2. Proposals must be submitted to the District as set forth in this Request for Proposal document. Unless otherwise specified, proposals submitted by any other method than that set forth herein will be disqualified.

## SECTION I – PROJECT INTRODUCTION AND OVERVIEW

### A. **General Overview:**

The District was formed in 1919 as an Irrigation District under California Water Code §20500 et seq. to provide domestic and irrigation water to the City of Beaumont, the community of Cherry Valley, and surrounding area. The service area of the District covers approximately 28 square miles, and the District’s sphere of influence covers approximately 37.5 square miles, virtually all of which is located within the County of Riverside, and includes the community of Cherry Valley, the City of Beaumont, and small portions of the City of Calimesa.

In December 2021 the District adopted the 2022-2026 Capital Improvement Budget that has forecasted various infrastructure rehabilitation activities to be performed over the next four (4) years. For the 2022 calendar year, the District has identified three (3) one million gallon water storage tanks that require exterior painting and one (1) one million gallon water storage tank that requires interior coating, exterior painting and rehabilitation within its service area.

### B. **Purpose of Request For Proposal:**

The District is currently seeking proposals from qualified engineering consulting firms for preparation of and design of a coating and painting and tank rehabilitation bid package (specifications and drawings), bid phase support, construction support services, and environmental services (as necessary) to provide for coating painting and structural rehabilitation of four District reservoirs . The services would include the work described hereafter and detailed in Section III: Scope of Work and Technical Specifications.

The District has currently budgeted for coating, painting and rehabilitation of four (4) one million gallon water storage tanks and the intent of this proposal is to provide engineering and environmental services related to the four (4) budgeted tank rehabilitation projects.

The four (4) one million gallon water storage tank coating painting and structural rehabilitation design, bid phase and construction services project identified within this Request for Proposal (RFP) will be designed in an effort to minimize the current attention demanded of the District’s staff.

Residential homes are in close proximity to the boundary of the parcels and noise and other considerations will need to be addressed during construction.

The District will select a qualified consulting firm for professional engineering and environmental services for preliminary and final design including preparation of contract documents and specifications, provision of bid phase services, construction phase services, and inspection services necessary to complete the painting, coating and structural rehabilitation project sections identified under the Scope of Work. Services shall include:

1. Project Management
2. Data Gathering

3. Coating System Specification
4. Structural Repair Requirements (in particular Lower Edgar Tank)
5. Design of Temporary Water Service System (Lower Edgar Tank in particular) including but not limited to Temporary Piping, Pumping, Storage Tanks, etc.)
6. Preliminary Design
7. Preparation of Contract Documents
8. Preparation of Construction Cost Estimate
9. Investigations
10. CEQA Compliance and Permit Acquisition
11. Services During Bidding
12. Services During Construction including but not limited to Construction Administration and Coating Inspection Services
13. Project Close-out Service

The consultant is encouraged to expand the scope to include optional tasks, if deemed necessary for completion of the Project. The above are specific tasks to be included in the proposed scope of work, as a minimum.

It is the intent of the District to receive responses to the RFP and, if appropriate, conduct individual interviews in order to select a firm which, in the opinion of the District, is best suited to perform the required services. The purpose of this Proposal, therefore, is to provide the District with the information necessary to select the most qualified firm while obtaining the best fee for the requested services.

**C. Project Specific Dates:**

Table 1 hereafter identifies the project specific estimated dates/time frame for receipt, evaluation, and award of the work specified in this RFP. Please note the following key dates, which are referenced on the cover page, when preparing your response to this RFP.

**Table 1 – Project Specific Dates**

Description	Date
Release of RFP to Firms	4/28/2022
Pre-Proposal Meeting (Optional)	5/9/2022
Response to Written Questions Regarding RFP	5/17/2022
<b>Proposal Due Date</b>	<b>5/26/2022</b>
Proposal Review (and Possible Short List)	To Be Determined
Firm Recommendations	6/8/2021
Contract Approval and Approximate Start Date	6/30/2021

**D. Selection Criteria:**

The Criteria for firm selection will be based on, but not limited to, the following:

1. Firm’s Qualifications and Experience with design and preparation of potable water storage tank coating, painting and structural rehabilitation work described herein.
2. Ability of the firm to complete the project within the proposed time frame.
3. Technical approach and understanding, preparation of project specific plans and specifications for potable water storage tank coating, painting and structural rehabilitation work described herein and in accordance with State of California Requirements as well as District Standard Specifications.
4. Fee and Payment Terms.
5. Exceptions Taken to RFP and Sample Agreement (attached).
6. Location of Consultant (i.e. proximity to District Sphere of Influence).

**E. Evaluation and Selection Process:**

1. Submittal Review: A committee will review and evaluate each submittal to determine if it meets the RFP requirements. Failure to meet the requirements set forth in the RFP will be cause for eliminating the proposer from further consideration.
2. The technical proposals will be evaluated and ranked by the selection committee. The selection committee will establish the ranking order. The selection committee will then evaluate the Proposal Fee for total cost. The District will negotiate with the top ranked firm which will be determined by a weighted average of points earned from the evaluation process using 80% as a weighting factor for the Technical Proposal and 20% for the Fee Proposal. If agreement cannot be reached with the number one ranked firm, then the negotiations will be terminated, and the firm will be informed in writing. The number two ranked firm will then be invited to enter into the negotiations process.
3. The committee may interview the top ranking proposer. The District reserves the right to begin negotiations and enter into an agreement without interview or further discussions. The Technical Proposal evaluation criteria and weighting are as follows:

Technical Proposal Evaluation Criteria	Weight of Score
Past performance and qualifications of the team members on similar projects.	25%
Familiarity with and capacity to handle all aspects of the work.	20%
Ability to complete the project within the proposed time frame.	15%
The proposed project approach, scope, manner, and thoroughness in which it is presented in the proposal.	20%
Firm’s experience, staff availability, stability, financial responsibility, and past performance on similar projects.	20%



4. The Fee Proposal shall be a weighted percentage of the lowest fee proposal divided by the proposal fee being evaluated.
5. Short List: At the District's option, the selected candidates may be short listed and interviewed to further refine the selection process.
6. The District reserves the right to, at their sole discretion, qualify and select the most qualified firm during the selection process or alternatively through the short list and interview process.

## SECTION II – PROPOSAL REQUIREMENTS

The proposal should respond to the requirements set forth herein. In addition, proposers need to demonstrate their capabilities, background, expertise, etc. in order for the District to effectively evaluate the proposals, and award to the company that provides the best value to the District based on the selection criteria in Section I. The Proposal should include, at a minimum, the following information:

**A.** Cover Letter

**B.** Executive Summary: to include a brief summary of the firm’s origin, background, and size of the company, an overall organizational chart, the overall capabilities of the organization, appropriate licenses and certifications, and proximity of company’s resources to the District’s offices and facilities.

**C.** General Requirements:

The proposal should include the following:

1. An understanding of the Project and approach to accomplish the work in a timely and acceptable manner.
2. A detailed description of the services to be provided based on the consultant’s understanding of the Project Scope; include a list of anticipated drawings.
3. Identification of the individual who will have overall responsibility for the Project and qualifications (e.g. Registered Civil Engineer in the State of California, NACE certifications, etc.).
4. A resume of the key staff who will be working on this Project, including specific experience on similar projects. Project team members should have NACE certifications and experience related to specific project components.
5. The proposal shall have a page limit of 30 pages including appendices, tabs, and cover.
6. A not-to-exceed fee based on the services outlined in the Scope of Work which **MUST** be submitted as a hard copy and an electronic copy (smart pdf and excel formats on CD) in a **SEPARATE SEALED ENVELOPE**.
7. Six (6) hardcopies and one (1) electronic copy (smart pdf on CD) of the proposal shall be submitted to the District.

**D. Statement of Qualifications:**

1. Qualifications and Experience (Firm and Personnel) – a description of the company’s expertise related to services requested and a full discussion of the company’s recent experience directly related to potable water storage tank coating, painting and structural rehabilitation and modifications. Provide resumes of key people that address experience and qualifications, educational background, and skills.
2. Availability – Briefly describe your firm’s and personnel’s ability to meet the District’s needs in a consistent and timely manner.
3. References (Exhibit A) – list three (3) former municipal (preferred) or private clients for whom comparable services have been performed within the last five (5) years. Include the name, mailing address, telephone number, and email address of each client’s principal representative.
4. List of Subcontractors (Exhibit B) – a description of any subcontract arrangements that would be utilized for this Project. Include a full description of the subcontractor’s experience and personnel.
5. Firm’s Business Information (Exhibit C)
6. Additions, Deletions and/or Exceptions (Exhibit D): compliance with the District’s contractual terms in the sample agreement and/or RFP requirements. The Proposer shall note any additions, deletions and/or exceptions to the contractual terms and/or RFP requirements. If there are no exceptions taken, please note in Exhibit D: “There are none”.
7. **Project Fee Proposal (Included in a separate sealed envelope clearly labeled “Project Fee Proposal”)** – said fee schedule shall include hourly rates; fees for all sub-consultants, and percentage markup of reimbursable expenses, if any shall be included. The rates shall be valid for the term of the contract. In the Project Fee Proposal, include the following information:
  - a. A detailed personnel-hour estimate by personnel classification for the major portions of the work broken down for each task, milestone report and/or plan deliverable.
  - b. Fees for any subcontractors.
  - c. A total not-to-exceed fee estimate based on services outlined in Scope of Work.
  - d. The method of compensation shall be based on a time and expense basis subject to a not-to-exceed amount to complete the project.

- E.** The District reserves the right to withhold award of contract for a period of ninety (90) days following RFP opening. All proposals received are considered firm for that 90-day period.
- F.** A contract incorporating the terms and conditions contained herein will be sent to the successful Proposer. Any additional terms and conditions requested or comments by Proposer must be submitted with the proposal (Section II.D.6.: Additions, Deletions and/or Exceptions) and will be considered as part of the selection/negotiation process.
- G.** Any questions as to the meaning of the scope of work and/or technical specifications or other pre-proposal documents must be submitted in writing by the deadline for Request for Information dated listed herein and shall be directed to James Bean at (951) 845-9581, Ext. 263, james.bean@bcvwd.org, who will provide instructions for submitting requests. Any and all such interpretations and any supplemental instructions will be sent to all prospective Proposers not later than that date set forth on Section I.C. "Project Specific Dates". All addenda so issued shall become part of the contract documents. Under no circumstances may the Proposer contact any other department or individual for clarification or interpretation of any requirements herein.
- H.** The District reserves the right to reject any or all proposals, either separately or as a whole, and to waive any informality in a proposal or to accept any proposal presented which it deems best suited to the interest of the District and is not to be bound to accept the lowest price.
- I.** The cost for developing the proposal is the sole responsibility of the Proposer. All proposals submitted become the property of the District. If any pages are deemed as confidential or proprietary those pages should be individually marked confidential or proprietary.
- J.** At the time of the opening of proposals each Proposer shall be presumed to have read and be thoroughly familiar with the RFP and proposal requirements (including all Addenda).
- K.** Be advised that all information contained in proposals submitted in response to this solicitation may be subject to the California Public Records Act (Government Code Section 6250 et seq.), and information's use and disclosure are governed by this Act.

## SECTION III – SCOPE OF WORK AND TECHNICAL SPECIFICATIONS

### A. Project Coordination:

1. Project kick-off meeting with District (one meeting at design stage and one meeting at construction stage – two (2) meetings total).
2. Coordination meetings with District as needed.
3. Weekly project updates via email and/or telephone to discuss budget, schedule and project issues (through bid phase services).
4. Coordination meetings with other project stake holders and agencies as needed.
5. Monthly report summarizing project budget and schedule. Provide one (1) hard copy and one (1) electronic copy (smart pdf), submit with invoice.
6. All correspondence, submittals, and deliverables (preliminary and final) shall be submitted to the District both via hard copy and electronically (CAD, smart pdf, word, excel, and original file formats on CD) at project close-out.

### B. Preliminary Engineering Evaluation and Design:

Prepare an evaluation of the four (4) potable water storage tanks, coating, painting and structural rehabilitation requirements and structural modification recommendations for the four tanks as generally described.

1. Cherry Tank 1 (See Figure 2)

Painting the exterior of an existing one (1) million gallon potable water storage tank and associated appurtenances (i.e. attached ladder, cage and rails).

Cherry Tank 1 is a welded steel tank, constructed in 1963, with a height of 33' and a diameter of 75'. Cherry Tank I is one of three potable water storage facilities located at 11083 Cherry Avenue, Cherry Valley CA, 92223.

2. Cherry Tank 2 (See Figure 2)

Painting the exterior of an existing one (1.1) million gallon potable water storage tank and associated appurtenances (i.e. attached ladder, cage and rails).

Cherry Tank 2 is a welded steel tank, constructed in 1965, with a height of 32' and a diameter of 78'. Cherry Tank II is one of three potable water storage facilities located at 11083 Cherry Avenue, Cherry Valley CA, 92223.

3. Vineland Tank 1 (See Figure 3)

Painting the exterior of an existing one (1) million gallon potable water storage tank and associated appurtenances (i.e. attached ladder, cage and rails).

Vineland Tank 1 is a welded steel tank, constructed in 1990, with a height of 32' and a diameter of 73'. Vineland Tank I is one of three potable water storage facilities located at 39657 Vineland Street, Cherry Valley CA, 92223.

4. Lower Edgar Tank (See Figure 3)

Painting the exterior of an existing one (1) million gallon potable water storage tank and associated appurtenances (i.e. attached ladder, cage and rails). Lower Edgar Tank is a welded steel tank, constructed in 1973, with a height of 36' and a diameter of 70'.

Lower Edgar Tank is located within District owned Edgar Canyon. Access to this facility is via a dirt road beginning at 9871 Avenida Miravilla. Recent inspection of this facility has identified the need for internal rehabilitation, coating and exterior paint as well as structural rehabilitation of roof structural support system. The District is also interested in consultant's recommendations which may be necessary to provide for structural modifications necessary to provide additional seismic upgrades based upon consultant's recommendations (i.e. seismic anchoring, reconfiguration of inlet/outlet and drain piping connections, etc. ).

## SCOPE OF SERVICES

Consultant shall develop coating and painting and structural rehabilitation and structural modification technical specifications for the listed potable water storage tanks and ensure that said technical specifications comply with all current regulatory agency requirements.

Interior Tank Recoating and repairs may include the following tasks:

- Preparation of specifications detailing removal and/or encapsulation of existing tank coating and painting systems (e.g. lead paint, etc.)
- Coating design will include proper coating selections to meet current NACE coating standards, including cost estimates.
  - Epoxy coating selection (interior)
  - Interior repairs caused by corrosion related items
  - Scaffolding, and man lift
  - Paint removal and disposal incorporating current hazardous waste requirements
  - Welding work for cutting access for equipment
  - Cleaning and disposal of sediment
  - Design Engineer to either provide (on staff) or hire a third party inspection firm that is SSPC-QP 5 certified Coating Specialists and Inspection Services Contractor for QAQC – This staff member and/or subcontractor will inspect all phases of surface preparation, application and inspection throughout the duration of the project.

- Preparation of bid documents and specifications in conformance with current NACE standard, ASTM standards and SSPC standards.
- Preparation of BMP's and safety plans.
- Preparation of applicable CEQA Documentation (typically NOE, however will be based on actual project);
- Bidding Support – including answering bidder questions, pre-bid meeting, preparation of addenda, bid review with summary spreadsheet and preparation of recommendation for award letter;
- Meeting and Coordination – including kick-off and any design review meetings.
- Construction Support - including construction administrative services including project oversight and management (on behalf of the District), responses to RFI's review and approval of submittals, revisions to plans and technical specification, construction inspection activities, and preparing documents of record.

Exterior Tank Painting may include the following tasks:

- Exterior painting design will include proper painting selection to meet current NACE painting standards, including cost estimates.
  - Epoxy paint selection (exterior)
  - Paint removal and disposal incorporating current hazardous waste requirements
- Design Engineer to either provide (on staff) or hire a third party inspection firm that is SSPC-QP 5 certified Coating Specialists and Inspection Services Contractor for QAQC – This staff member and/or subcontractor will inspect all phases of surface preparation, application and inspection throughout the duration of the project.
- Preparation of bid documents and specifications in conformance with current NACE standards, ASTM standards and SSPC standards.
- Preparation of BMP's and safety plans.
- Preparation of applicable CEQA Documentation (typically NOE, however, will be based on actual project);
- Bidding Support – including answering bidder questions, pre-bid meeting, preparation of addenda, bid review with summary spreadsheet and preparation of recommendation for award letter.
- Meeting and Coordination – including kick-off and any design review meetings.
- Construction Support - including construction administrative services including project oversight and management (on behalf of the District), responses to RFI's review and approval of submittals, revisions to plans and technical specification, construction inspection activities, and preparing documents of record.

**C. Environmental:**

The preparation of environmental documentation shall follow California Environmental Quality Act (CEQA) Guidelines and shall include the following:

- 1) District staff identifies that the coating, painting and structural rehabilitation and structural modifications of existing water storage tanks will most likely warrant a Notice of Exemption due to the nature of the project. However, the requirements set forth below shall be evaluated and considered.
- 2) Complete Initial Study Checklist, review pertinent environmental records and technical reports.
  - a) Summarize the adopted/completed reports and studies where relevant to the project's environmental analysis, and determine the required additional studies, surveys and/or technical reports.
  - b) Evaluation of the following environmental activities that may pertain to the project may include (but not limited to): aesthetics, site biological/cultural/historic resources, air quality, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise/vibration, population/housing, public services, recreation, transportation/traffic, tribal cultural resources, and utilities and service systems.
- 3) Determine (as appropriate) if the project warrants a Categorical Exemption (CE), Negative Declaration (ND), or Mitigated Negative Declaration (MND) based on the above findings.
- 4) If necessary, prepare an Administrative Draft IS/MND or CE as appropriate and submit to the District for review.
- 5) If necessary, evaluate the need to prepare any or all the following:
  - a) Mitigation Monitoring or Reporting Program (MMRP).
  - b) Complete a biological resources assessment.
  - c) Complete a cultural resources assessment.
- 6) If necessary, submit a draft MND for public circulation.
- 7) If necessary, respond to comments received on the draft MND.
- 8) If necessary, attend the public meeting for adoption of the MND. Meeting shall be scheduled, coordinated, and directed by the District.
- 9) As necessary, file Notice of Determination (NOD) with the County of Riverside and the State Clearing House; or file NOE.

**Deliverable:** District anticipates a Notice of Exemption will most likely be required. Provide a baseline cost that represents this assumption with an added cost to perform items 4 through 8. Consultant shall prepare a Mitigated Negative Declaration for the Project, if needed. Consultant shall provide a separate line item cost for Mitigated Negative Declaration. Work activities listed under Items 3 through 8 above which may or may not be included by the District during consideration of award based on the criteria identified in this Request for Proposal. The Initial Study and Mitigated Negative Declaration (if needed) shall **cover all four (4) of the potable water storage tanks identified in the 2022/2023 Water Storage Tank Recoating, Painting and**



**rehabilitation Projects in a single document.** Three (3) copies and one (1) electronic copy of the draft MND shall be submitted for review. District comments shall be incorporated and three (3) copies and one (1) electronic (searchable .PDF) copy of the final MND shall be submitted. The final submittal shall include the NOI, MMRP, NOD, and public review comments. If Consultant deems that an MND is not required, and the Project can fall under a NOE, then the Consultant shall prepare the appropriate supporting documents for the NOE and file as necessary. The District will pay the appropriate fees associated with filing.

**D. Permit Compliance:**

Consultant shall identify any permit requirements that will be required for the project and submit permit applications on the District's behalf to each permitting agency. The District will pay permit fees as required. Consultant shall incorporate comments from the Agencies and revise the Contract Documents, as necessary. Anticipated permits that the Consultant shall obtain for this project may include, but are not limited to, the following:

1. Air Quality Management District (AQMD)
2. California State Water Resources Control Board, Division of Drinking Water (SWRCB DDW) – review of proposed Tank modifications for current and/or future recommended improvements (i.e. structural seismic anchorage, addition of additional inlet/outlet piping and/or tank drain locations, etc.).
3. California State Water Resources Control Board – Compliance with the waste discharge permit and Storm Water Pollution Prevention Plan in accordance with the NPDES General Permit for Storm Water Discharges (Construction Activities).

**E. Preparation of Final Plans and Specifications**

1. Prepare a single set of plans for all the pipelines identified herein. Provide a single set of project specifications that covers all four (4) tank painting, coating, and structural rehabilitation and structural modification projects and a single set of contract documents. The contract documents shall have a separate bid form for each tank project. The project specifications shall address tank out of service sequencing when there are two tanks located on one site or within one pressure zone, and shall also address equipment and sequencing necessary to provide service to zones with single tank source of supplies (i.e. Lower Edgar Tank location) where interruption of service to local area residences must not occur. The District reserves the right to bid and award separate contracts or any combination which best meets the needs of the District. Plans shall be prepared in AutoCAD, Consultant may use its own line and layering scheme, but shall obtain BCVWD approval for use of it first. Plan, contract document and specification formats, templates and standards will be provided by BCVWD. Plan template shall conform to BCVWD. Plans shall be 24" x 36".
2. Plans shall include profiles with details of all tie-ins. Service lines shall be shown on the plans; details shall be provided if relocation on private property is required. Consultant shall perform complete utility search and all known and abandoned utilities shall be shown on the plans. Consultant shall coordinate any potholing with the utility companies,

BCVWD, Jurisdictional Agencies, and consultants' potholing contractor. Submit final plans to utility companies and secure a final letter or other method of approval from the utility company.

3. Plan cover sheet shall include a detailed project scope of services and estimated structural repair and/or structural modifications and detailed materials list.
4. Provide a plan and narrative construction sequencing that will minimize water system (and thereby customer) outages. Customers shall not be out of water overnight, on weekends and holidays, or for more than four (4) hours (total) on any day. Plan shall be submitted to BCVWD for review and comment.
5. Four (4) submittals are required: 65%, 95%, 100% complete, and mylars. The 65% submittal shall include as a minimum: cover sheet, plan and profile sheets with all utilities and a detailed cost estimate. The 95% submittal shall be a complete submittal including all plans, and the single volume of specifications and contract documents and updated detailed cost estimate. The District will review the submittals and provide comments. The Consultant shall incorporate all comments and provide a final 100% complete set, signed by the licensed civil engineer in charge of the project.

**Deliverable:**

- 65% Submittal:
  - Two (2) full size (24"x36") Structural Rehabilitation and Modification Plans
  - One (1) Preliminary Engineers Cost Estimate
  - One (1) Electronic Copy of the above items, in PDF format (searchable).
- 95% Submittal:
  - Two (2) full size (24"x36") Structural Rehabilitation and Modification Plans
  - Two (2) copies of the Specifications and Contract Documents
  - One (1) Preliminary Engineers Cost Estimate
  - One (1) Electronic Copy of the above items, in PDF format (searchable).
- 100% Submittal:
  - Two (2) full size (24"x36") Structural Rehabilitation and Modification Plans
  - Two (2) copies of the Specifications and Contract Documents
  - One (1) Preliminary Engineers Cost Estimate
  - One (1) Electronic Copy of the above items, in PDF format (searchable).
- Mylar Submittal for District Approval:
  - One (1) Final Mylar of the Structural Rehabilitation and Modification Plans Signed by Engineer of Record
  - One (1) Final copy of the Specifications and Contract Documents
  - One (1) Final Engineers Cost Estimate
  - One (1) Electronic Copy of the above items, in PDF format (searchable).

**F. Bid Phase Services**

Consultant shall perform the following bidding services:

1. Consultant shall attend the construction pre-bid meeting and provide technical support to

District staff relative to immediate contractor questions. Provide minutes of the meeting, attendee sign in sheet, list of attendees, and questions and responses.

2. Consultant shall respond to any questions from the contractor during the bidding period. Consultant shall maintain a log and notes on contact and responses.
3. Consultant shall prepare up to two (2) addenda which will be distributed by the District.
4. Consultant shall attend the bid opening and tabulate the bid results for comparison.
5. Consultant shall assist the District in review of the bids and in bid evaluation to recommend the lowest, responsive, responsible bidder as the construction contractor.

**Deliverable:** Provide three (3) copies of construction pre-bid meeting minutes and responses and one electronic version (searchable pdf). Provide three (3) copies of all addenda, logs of contacts during the bid period, bid tabulations and bid evaluation letter, including one electronic copy (searchable pdf).

**G. Construction Phase Services:**

Consultant shall provide separate construction administration and inspection services cost to provide anticipated construction support services and inspection services necessary to provide for a complete and successful project.

Consultant shall provide separate cost line items necessary to perform Construction Administration Services, Project inspection Services, submittal and payment request review, perform final inspections and file Notice of Completion. If there are any questions in the review by the Consultant, BCVWD will discuss with the Consultant. Consultant shall assist the District during the construction project. Work shall also include:

Response to Requests for Information (RFIs) from contractor(s) or permit agencies.

1. Preparation of change order or clarification drawings, prepare an estimate of the cost of the change order, and assist BCVWD in negotiation of the change order. Maintain drawing revisions in AutoCAD.

**Deliverable:**

1. Contract work activities as described above
2. As required, provide three (3) copies of reduced (11' x 17') plans for each changed drawing plus one electronic copy of the changed drawing.

**H. Project Close-out Services:**

BCVWD will submit hard copies of the project record drawings and field notes to the Consultant. Consultant shall incorporate the project record changes and notes into the final AutoCAD drawings, note the "Project Record Drawing" and date in the revision block with the revision number. Each change shall be noted with the revision number.

**Deliverables:** provide two (2) copies of full-size (24"x36") Project Record Drawings. Provide Project Record AutoCAD drawing files electronically. Include any special formats, fonts, etc. to ensure the drawing files can be printed.

**I. Project Management and Administration**

Consultant shall provide the following project management and administration processes for the duration of the project:

1. Project kick-off meeting with District.
2. Monthly coordination meetings with District through the bidding phase. Thereafter meetings will be as necessary.
3. Bi-weekly project updates via email or telephone to discuss budget, schedule and project issues through completion of the plans and specifications. Thereafter, updates will be as necessary.
4. Coordination meetings with other agencies and property owners as required (assume up to two [2] for proposal purposes).

See above Scope of Work elements for other meetings and deliverables.

## FIGURES

FIGURE 1  
DISTRICT SERVICE BOUNDARY

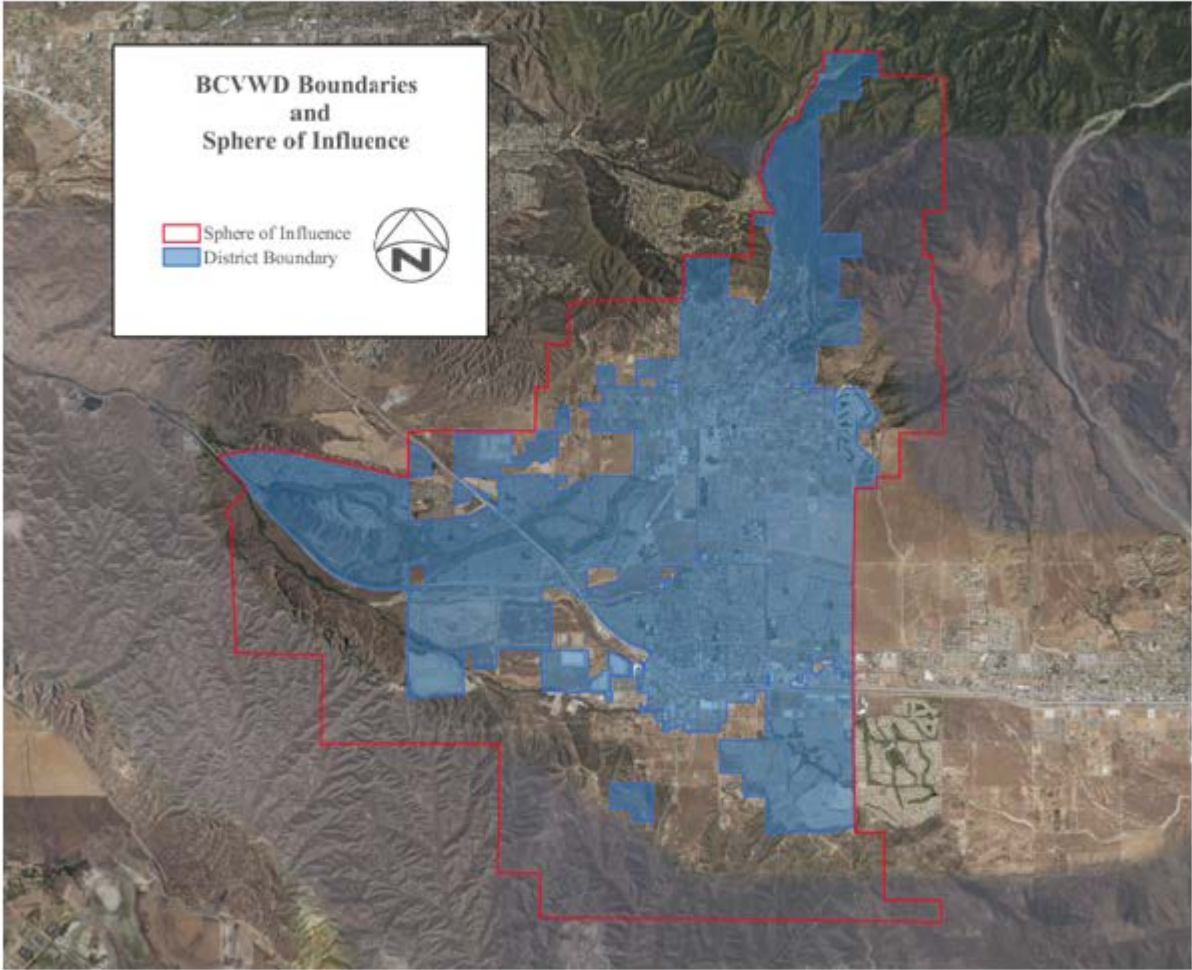


FIGURE 2  
CHERRY TANK 1 AND CHERRY TANK 2



FIGURE 3  
VINELAND TANK 1





FIGURE 4  
LOWER EDGAR TANK



**EXHIBITS**

**EXHIBIT A: REFERENCES**

**Proposer shall provide a minimum of three (3) Customer References, preferably municipalities within 5 years or. Local and similar size contracts references are preferred.**

<b>REFERENCE #1</b>	
NAME OF FIRM	
ADDRESS	
CITY, STATE, ZIP CODE	
TELEPHONE #	(    )
CONTACT	
PROJECT NAME	
COMPLETION DATE	
APPROX. COST	
<b>REFERENCE #2</b>	
NAME OF FIRM	
ADDRESS	
CITY, STATE, ZIP CODE	
TELEPHONE #	(    )
CONTACT	
PROJECT NAME	
COMPLETION DATE	
APPROX. COST	
<b>REFERENCE #3</b>	
NAME OF FIRM	
ADDRESS	
CITY, STATE, ZIP CODE	
TELEPHONE #	(    )
CONTACT	
PROJECT NAME	
COMPLETION DATE	
APPROX. COST	

**EXHIBIT A: REFERENCES**

<b>REFERENCE #4</b>	
NAME OF FIRM	
ADDRESS	
CITY, STATE, ZIP CODE	
TELEPHONE #	(    )
CONTACT	
PROJECT NAME	
COMPLETION DATE	
APPROX. COST	
<b>REFERENCE #5</b>	
NAME OF FIRM	
ADDRESS	
CITY, STATE, ZIP CODE	
TELEPHONE #	(    )
CONTACT	
PROJECT NAME	
COMPLETION DATE	
APPROX. COST	
<b>REFERENCE #6</b>	
NAME OF FIRM	
ADDRESS	
CITY, STATE, ZIP CODE	
TELEPHONE #	(    )
CONTACT	
PROJECT NAME	
COMPLETION DATE	
APPROX. COST	



**EXHIBIT C: PROPOSER'S BUSINESS INFORMATION**

All proposers shall submit the information as requested below.

1. Length of time your firm has been in business: \_\_\_\_\_

2. Length of time at current location: \_\_\_\_\_

3. List types and business license number(s): \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

4. California State Contractor's License number: \_\_\_\_\_

5. Names and titles of all officers of the firm: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. Is your firm a sole proprietorship doing business under a different name?  
YES  or NO

7. If yes, please indicate sole proprietorship name and the name you are doing  
business under: \_\_\_\_\_

\_\_\_\_\_

8. Please indicate your Federal Tax Number: \_\_\_\_\_

9. Is your firm incorporated? YES  or NO

10. Name and remittance address that will appear on invoices: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

11. Physical Address \_\_\_\_\_

\_\_\_\_\_



**EXHIBIT E: SAMPLE AGREEMENT**

**BEAUMONT-CHERRY VALLEY WATER DISTRICT  
PROFESSIONAL SERVICES AGREEMENT**

This Agreement is made and entered into as of \_\_\_\_\_, 20\_\_\_\_ by and between the Beaumont-Cherry Valley Water District, a California Irrigation District (“District”), and [\*\*\*INSERT NAME\*\*\*], a [\*\*\*INSERT TYPE OF ENTITY - CORPORATION, PARTNERSHIP, SOLE PROPRIETORSHIP OR OTHER LEGAL ENTITY\*\*\*] (“Consultant”). District and Consultant are sometimes individually referred to as “Party” and collectively as “Parties” in this Agreement.

**A. RECITALS**

(i) District requires provision of the following professional services: \_\_\_\_\_, all as more fully set forth and described in this Agreement.

(ii) Consultant is duly licensed and/or otherwise fully authorized by law, and has the necessary experience and qualifications, to provide such services. District enters this Agreement in substantial reliance on such experience and qualifications.

(iii) The Parties enter this Agreement in order to set forth terms and conditions governing Consultant’s performance of the services described herein.

**B. AGREEMENT**

**NOW, THEREFORE, IT IS AGREED AS FOLLOWS:**

1. Scope of Services.

Consultant shall furnish all labor, materials, equipment, and supplies necessary or incidental to performing the services generally described in the Scope of Services attached hereto as Exhibit “A”, any applicable request for proposals issued by the District, and as otherwise required by this Agreement, all to District’s satisfaction (collectively, “Services”). **[Exh A can be the consultant’s proposal if desired]**

2. Compensation.

a. Subject to Section 2.b, below, the District shall pay for the Services satisfactorily performed, in accordance with the Schedule of Rates/Payments set forth in Exhibit “B”, attached hereto. **[this can be the consultant’s proposal if desired]**



b. In no event shall the total amount paid for services rendered by Consultant during the term of this Agreement exceed the sum of \$\_\_\_\_\_. This amount covers and is inclusive of all labor, materials, and any and all other costs incurred by Consultant in performing the Services, unless otherwise agreed upon in writing. Consultant shall be deemed to have made all necessary inquiries and site inspections prior to agreeing to perform the Services. Unless the Parties have agreed on a one-time flat fee, periodic payments for undisputed work shall be made within thirty (30) days of receipt of an invoice which includes a detailed description of the work performed. Payments to Consultant for work performed will be made on a monthly billing basis.

3. Additional Work.

The Parties may agree on additional work to be provided as part of the Services. The District General Manager is authorized to approve additional work not exceeding \_\_\_\_\_ Dollars (\$\_\_\_\_\_) [**or “X” percent of the contract price**] by written memo signed by the parties. Otherwise, an amendment to this Agreement shall be prepared by the District and executed by both Parties authorizing such additional work and compensation therefor, prior to such work being performed.

4. Maintenance of Records.

Books, documents, papers, accounting records, and other evidence pertaining to costs incurred and work performed shall be maintained by Consultant and made available for review by the District at all reasonable times during the term of this Agreement and for four (4) years from the date of final payment by District.

5. Term; Time of Performance.

The term of this Agreement shall commence on the date first set forth above and shall expire at the end of business on [**Insert end date**], unless extended or earlier terminated as provided herein. Consultant shall complete the Services within the term of this Agreement, and shall meet any other milestones, schedules and deadlines agreed upon in writing. **Consultant shall commence work within three (3) business days of receiving District’s verbal or written notice to proceed.** Consultant represents that it has the professional and technical personnel required to satisfactorily perform the Services as required by this Agreement. All indemnification provisions of this Agreement shall survive and remain in effect following the termination of this Agreement. The Parties may agree in writing to extend the term of this Agreement if necessary to complete the Services, or when deemed to be in the District’s best interest.

6. Delays in Performance.

a. Force Majeure. Neither District nor Consultant shall be considered in default of this Agreement for delays in performance caused by force majeure events. Force majeure events mean and refer to circumstances beyond the reasonable control of the non-performing Party including, but not limited to, abnormal weather conditions; floods; earthquakes; fire; epidemics resulting in “stay at home” or similar binding governmental orders; war; riots and other civil disturbances; strikes, lockouts, work slowdowns, and other labor disturbances; sabotage or judicial restraint. Consultant’s lack of financial capability, in the absence of any of the foregoing events, shall not constitute a force majeure event.

b. Should a force majeure event occur, the non-performing Party shall promptly, upon becoming aware of its inability to perform, give written notice to the other Party describing the circumstances preventing continued performance and the efforts being made to resume performance of this Agreement.

7. Compliance with Law.

a. Consultant shall comply with all applicable laws, ordinances, statutes, codes and regulations of the federal, state and local government, including Cal/OSHA requirements.

b. District may, but is not required, to assist Consultant in obtaining and maintaining all permits required of Consultant by federal, state and/or local regulatory agencies.

c. If applicable, and unless otherwise provided in the Scope of Services, Consultant is responsible for all costs of clean up and/or removal of hazardous and toxic substances spilled as a result of Consultant’s services or operations performed under this Agreement.

8. Standard of Care.

Consultant’s Services shall be performed in accordance with the generally accepted professional standards of practice and principles and in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently performing similar services under similar conditions. Consultant shall, at all times herein, possess any and all State of California and/or federal professional licenses and certifications, as applicable, required to lawfully perform the Services.

9. Assignment and Subcontracting.

Consultant shall not assign or transfer this Agreement or any rights or obligations under, or any interest in this Agreement, or subcontract any required performance hereunder, without the prior written consent of the District, which may be withheld for any reason. The Services required to be performed by the Consultant are personal to the Consultant. Any attempt to so assign, transfer, or subcontract without such consent shall be void and without legal effect and

shall constitute grounds for termination. Authorized subcontracts, if any, shall contain a provision making the subcontractor subject to all requirements of this Agreement.

10. Independent Contractor.

Consultant is retained as an independent contractor and is not an employee of District. No employee or agent of Consultant is or shall become an employee of District. The work to be performed shall be in accordance with the Scope of Services described in this Agreement, subject to such directions and amendments from District as herein provided.

a. All work and other Services provided pursuant to this Agreement shall be performed by Consultant or by Consultant's employees or other personnel under Consultant's supervision, and Consultant and all of Consultant's personnel shall possess the qualifications, permits, and licenses required by State and local law to perform the Services, including, without limitation, a City of Beaumont business license. Consultant will determine the means, methods, and details by which Consultant's personnel will perform the Services. Consultant shall be solely responsible for the satisfactory work performance of all personnel engaged in performing the Services and compliance with the customary professional standards.

b. All of Consultant's employees and other personnel performing any of the Services under this Agreement on behalf of Consultant shall also not be employees of District and shall at all times be under Consultant's exclusive direction and control. Consultant and Consultant's personnel shall not supervise any of District's employees; and District's employees shall not supervise Consultant's personnel. Consultant's personnel shall not wear or display any District uniform, badge, identification number, or other information identifying such individual as an employee of District; and Consultant's personnel shall not use any District e-mail address or District telephone number in the performance of any of the Services under this Agreement. Consultant shall acquire and maintain at its sole cost and expense such vehicles, equipment and supplies as Consultant's personnel require to perform any of the Services required by this Agreement. Consultant shall perform all Services off of District premises at locations of Consultant's choice, except as otherwise may from time to time be necessary in order for Consultant's personnel to receive projects from District, review plans on file at District, pick up or deliver any work product related to Consultant's performance of any Services under this Agreement, or as may be necessary to inspect or visit District locations and/or private property to perform such Services. District may make a computer available to Consultant from time to time for Consultant's personnel to obtain information about or to check on the status of projects pertaining to the Services under this Agreement.

c. Consultant shall be responsible for and shall pay all wages, salaries, benefits and other amounts due to Consultant's personnel in connection with their performance of any Services under this Agreement and as required by law. Consultant shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: Social Security taxes, other retirement or pension benefits, income tax withholding, unemployment insurance, disability insurance, and workers' compensation insurance.

Notwithstanding any other agency, State, or federal policy, rule, regulation, statute or ordinance to the contrary, Consultant and its officers, employees, agents, and subcontractors providing any of the Services under this Agreement shall not become entitled to, and hereby waive any claims to, any wages, salaries, compensation, benefit or any incident of employment by District, including but not limited to, eligibility to enroll in, or reinstate to membership in, the California Public Employees Retirement System (“PERS”) or any other retirement program, as an employee of District, and entitlement to any contribution to be paid by District for employer contributions or employee contributions for PERS benefits or any other retirement benefits.

11. PERS Compliance.

The Parties acknowledge that District is a local agency member of PERS, and as such has certain pension reporting and contribution obligations to PERS on behalf of qualifying employees. Consultant agrees that, in providing its employees and any other personnel to District to perform any work or other Services under this Agreement, Consultant shall assure compliance with the Public Employees’ Retirement Law, commencing at Government Code § 20000, the regulations of PERS, and the Public Employees’ Pension Reform Act of 2013, as amended. Without limitation to the foregoing, Consultant shall assure compliance with regard to personnel who have active or inactive membership in PERS and to those who are retired annuitants and in performing this Agreement shall not assign or utilize any of its personnel in a manner that will cause District to be in violation of the applicable retirement laws and regulations.

12. Insurance. Unless otherwise permitted in writing by District’s Risk Manager, Consultant shall not commence work for the District until it has secured all insurance required under this section and provided evidence thereof that is acceptable to the District. In addition, Consultant shall not allow any subcontractor to commence work on any subcontract until it has secured all insurance required under this section.

a. Commercial General Liability

(i) Consultant shall take out and maintain, during the performance of all work under this Agreement, in amounts not less than specified herein, Commercial General Liability Insurance, in a form and with insurance companies acceptable to the District.

(ii) Coverage for Commercial General Liability insurance shall be at least as broad as the following:

(1) Insurance Services Office Commercial General Liability coverage (Occurrence Form CG 00 01) or exact equivalent.

(iii) Commercial General Liability Insurance must include coverage for the following:

(1) Bodily Injury and Property Damage

- (2) Personal Injury/Advertising Injury
- (3) Premises/Operations Liability
- (4) Products/Completed Operations Liability
- (5) Aggregate Limits that Apply per Project
- (6) Explosion, Collapse and Underground (UCX) (by deletion of this exclusion)
- (7) Contractual Liability with respect to this Agreement
- (8) Broad Form Property Damage
- (9) Independent Consultants Coverage

(iv) The policy shall contain no endorsements or provisions limiting coverage for (1) contractual liability; (2) cross liability exclusion for claims or suits by one insured against another; (3) products/completed operations liability; or (4) contain any other exclusion contrary to the Agreement.

(v) The policy shall be endorsed to name the District, its elected and appointed officials, officers, employees, agents, servants, designated volunteers and agents serving as independent contractors in the role of District officials, as additional insureds using ISO endorsement forms CG 20 10 10 01 and 20 37 10 01, or endorsements providing the exact same coverage.

(vi) Subject to the District's written approval, the general liability coverage may utilize deductibles or provide coverage excess of a self-insured retention, provided that such deductibles shall not apply to coverage of the Additional Insureds.

b. Automobile Liability

(i) At all times during the performance of the work under this Agreement, Consultant shall maintain Automobile Liability Insurance for bodily injury and property damage including coverage for owned, non-owned and hired vehicles, in a form and with insurance companies acceptable to the District.

(ii) Coverage for automobile liability insurance shall be at least as broad as Insurance Services Office Form Number CA 00 01 covering automobile liability (Coverage Symbol 1, any auto).

(iii) The policy shall be endorsed to name the District, its officials, officers, employees, agents and District designated volunteers as additional insureds.

(iv) Subject to the District’s written approval, the automobile liability coverage may utilize deductibles or provide coverage excess of a self-insured retention, provided that such deductibles shall not apply to coverage of the Additional Insureds.

c. Workers’ Compensation/Employer’s Liability

(i) Consultant certifies that Consultant is aware of the provisions of Section 3700 of the California Labor Code which requires every employer to be insured against liability for workers’ compensation or to undertake self-insurance in accordance with the provisions of that code, and he/she/it will comply with such provisions before commencing work under this Agreement.

(ii) To the extent Consultant has employees at any time during the term of this Agreement, at all times during the performance of the work under this Agreement, Consultant shall maintain full compensation insurance for all persons employed directly by him/her to carry out the work contemplated under this Agreement, all in accordance with the “Workers’ Compensation and Insurance Act,” Division IV of the Labor Code of the State of California and any acts amendatory thereof, and Employer’s Liability Coverage in amounts indicated herein. Consultant shall require all subcontractors to obtain and maintain, for the period required by this Agreement, workers’ compensation coverage of the same type and limits as specified in this section.

d. Professional Liability (Errors and Omissions) (unless waived in writing by the District’s risk manager)

At all times during the performance of the work under this Agreement the Consultant shall maintain professional liability or Errors and Omissions insurance appropriate to its profession, in a form and with insurance companies acceptable to the District and with the limits required herein. This insurance shall be endorsed to include contractual liability applicable to this Agreement and shall be written on a policy coverage form specifically designed to protect against acts, errors or omissions of the Consultant in the performance of professional services. “Covered Professional Services” as designated in the policy must specifically include work performed under this Agreement. The policy must “pay on behalf of” the insured and must include a provision establishing the insurer’s duty to defend.

e. [\*\*\*\*INSERT\*\*\*\*] Liability Insurance [CHECK WITH RISK MANAGER AND SIR ADMINISTRATOR TO DETERMINE IF ADDITIONAL LIABILITY INSURANCE SHOULD BE REQUIRED FOR A PARTICULAR PROFESSIONAL SERVICES AGREEMENT, SUCH AS CYBER LIABILITY, ETC.]

f. Minimum Policy Limits Required

(i) The following insurance limits are required for the Agreement:

Combined Single Limit

Commercial General Liability	\$1,000,000 per occurrence/ \$2,000,000 aggregate for bodily injury, personal injury, and property damage
Automobile Liability	\$1,000,000 per occurrence (any auto) for bodily injury and property damage
Workers' Compensation	In the amount required by California law.
Employer's Liability	\$1,000,000 per occurrence
Professional Liability	\$1,000,000 per claim and aggregate (errors and omissions) {unless waived by risk manager}
[***INSERT OTHER LIABILITY***]	\$_____ [if applicable]

(ii) Defense costs shall be payable in addition to the limits.

(iii) Requirements of specific coverage or limits contained in this section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. Any available coverage shall be provided to the parties required to be named as Additional Insured pursuant to this Agreement.

g. Evidence Required

Prior to execution of the Agreement, Consultant shall file with the District evidence of insurance from an insurer or insurers certifying to the coverage of all insurance required herein. Such evidence shall include original copies of the ISO CG 00 01 (or insurer's equivalent) signed by the insurer's representative and Certificate of Insurance (Acord Form 25-S or equivalent), together with required endorsements. All evidence of insurance shall be signed by a properly authorized officer, agent, or qualified representative of the insurer and shall certify the names of the insured, any additional insureds, where appropriate, the type and amount of the insurance, the location and operations to which the insurance applies, and the expiration date of such insurance.

h. Policy Provisions Required

(i) Consultant shall provide the District at least thirty (30) days prior written notice of cancellation of any policy required by this Agreement, except that the Consultant shall provide at least ten (10) days prior written notice of cancellation of any such policy due to non-payment of premium. If any of the required coverage is cancelled or expires during the term of this Agreement, Consultant shall deliver renewal certificate(s) including the required Additional Insured endorsement to the District at least ten (10) days prior to the effective date of cancellation or expiration.

(ii) The Commercial General Liability Policy and Automobile Liability Policy shall each contain a provision stating that Consultant's policy is primary insurance and that any insurance, self-insurance or other coverage maintained by the District or any additional insureds shall not be called upon to contribute to any loss.

(iii) The retroactive date (if any) of each policy is to be no later than the effective date of this Agreement. If a "claims-made" professional liability policy is provided, it shall include an extended reporting period of not less than three (3) years.

(iv) All required insurance coverages, except for the professional liability coverage, shall contain or be endorsed to provide a waiver of subrogation in favor of the District, its elected and appointed officials, officers, employees, agents, servants, designated volunteers and agents serving as independent contractors in the role of District officials, or shall specifically allow Consultant or others providing insurance evidence in compliance with these specifications to waive their right of recovery prior to a loss. Consultant hereby waives its own right of recovery against District, and shall require similar written express waivers and insurance clauses from each of its subcontractors.

(v) The limits set forth herein shall apply separately to each insured against whom claims are made or suits are brought, except with respect to the limits of liability. Further the limits set forth herein shall not be construed to relieve the Consultant from liability in excess of such coverage, nor shall it limit the Consultant's indemnification obligations to the District and shall not preclude the District from taking such other actions available to the District under other provisions of the Agreement or law.

i. Each policy of insurance required herein shall be from a company or companies having a current A.M. Best's rating of no less than A:VII and admitted and authorized to transact the business of insurance in the State of California.

j. Additional Insurance Provisions

(i) The foregoing requirements as to the types and limits of insurance coverage to be maintained by Consultant, and any approval of said insurance by the District, is not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by Consultant pursuant to this Agreement, including but not limited to, the provisions concerning indemnification.

(ii) If at any time during the life of the Agreement, any policy of insurance required under this Agreement does not comply with these specifications or is



canceled and not replaced, District has the right but not the duty to obtain the insurance it deems necessary and any premium paid by District will be promptly reimbursed by Consultant or District will withhold amounts sufficient to pay premium from Consultant payments. In the alternative, District may terminate this Agreement for cause.

(iii) District may require Consultant to provide for inspection by District, complete copies of all insurance policies in effect for the duration of the Agreement.

(iv) No District elected or appointed official, officer, employee, agent or volunteer shall be personally responsible for any liability arising under or by virtue of this Agreement.

(v) The insurance obligations under this Agreement shall be: (1) all the insurance coverage and/or limits carried by or available to Consultant; or (2) the minimum insurance coverage requirements and/or limits shown in this Agreement; whichever is greater. Any insurance proceeds in excess of or broader than the minimum required coverage and/or minimum required limits, which are applicable to a given loss, shall be available to District. No representation is made that the minimum insurance requirements of this Agreement are sufficient to cover the obligations of Consultant under this Agreement.

k. Subcontractor Insurance Requirements

Consultant shall not allow any subcontractor to commence work on any subcontract until it has provided evidence satisfactory to the District that it has secured all insurance required under this section. Policies of commercial general liability insurance provided by such subcontractors shall be endorsed to name the District, its elected and appointed officials, officers, employees, agents, servants, designated volunteers and agents serving as independent contractors in the role of District officials as additional insureds, using ISO form CG 20 38 04 13 or an endorsement providing the exact same coverage. If requested by Consultant, District may approve different scopes or minimum limits of insurance for particular subcontractors.

13. Indemnification.

a. To the fullest extent permitted by law, Consultant shall defend (with counsel reasonably approved by District), indemnify and hold the District, its elected and appointed officials, officers, attorneys, agents, employees, servants, designated volunteers, successors, assigns and those District agents serving as independent contractors in the role of District officials (collectively “Indemnitees” in this Section 13) free and harmless with respect to any and all claims, demands, causes of action, costs, expenses, liabilities, losses, damages, stop notices and/or injury of any kind, in law or equity, to property or persons, including bodily injury, wrongful death, personal injury and property damage, in any manner arising out of, pertaining to, or incidental to any acts, errors, omissions, or willful misconduct of Consultant, its owners, officials, officers, employees, servants, subcontractors, consultants or agents in connection with the performance of the Consultant’s Services, and/or this Agreement, including without limitation the payment of all damages, expert witness fees and attorney’s fees and other related costs and expenses.

Consultant's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by Consultant, or by the District or any of the other Indemnitees.

b. For Design Professional Services. For Consultant's Services hereunder that include the performance of design professional services by a "design professional" (as defined below), then to the extent permitted by law, Consultant shall, at its sole cost and expense, indemnify and hold the District and other Indemnitees, and each of them, harmless with respect to any and all damages, costs, expenses, liabilities, claims, demands, causes of action, proceedings, judgments, penalties, liens, and losses of any nature whatsoever, including fees of accountants and other professionals, and all costs associated therewith, and reimbursement of attorneys' fees and costs of defense, to the extent arising out of, pertaining to, or relating to the negligence, recklessness, or willful misconduct of the Consultant, and/or its officers, agents, employees, servants, subcontractors, contractors or their officers, agents, employees, servants, contractors or subcontractors (or any entity or individual for whom the Consultant shall bear legal liability) in the performance of design professional services under this Agreement. Notwithstanding the foregoing and as required by Civil Code Section 2782.8(a), in no event shall the cost to defend the Indemnitees that is charged to Consultant, exceed the Consultant's proportionate percentage of fault.

For purposes of this Section 13.b, and in accordance with Civil Code Section 2782.8(c), "design professional" means only the following and only while performing professional design services: (i) an individual licensed as an architect pursuant to Business and Professions Code Section 5500, et seq., and a business entity offering architectural services in accordance with that Code section; (ii) an individual licensed as a landscape architect pursuant to Business and Professions Code Section 5615, et seq., and a business entity offering landscape architectural services in accordance with that Code section; (iii) an individual registered as a professional engineer pursuant to Business and Professions Code Section 6700, et seq., and a business entity offering professional engineering services in accordance with that Code section; and (iv) an individual licensed as a professional land surveyor pursuant to Business and Professions Code Section 8700, et seq., and a business entity offering professional land surveying services in accordance with that Code section.

c. The provisions of this Section 13 shall survive the termination of this Agreement.

#### 14. Termination.

a. District has the right to terminate any portion or all of the Services under this Agreement with or without cause, by giving ten (10) calendar days' prior, written notice to Consultant. In such event, District shall be immediately given title to and possession of all Work Product and original field notes, drawings and specifications, written reports and all other documents produced or developed pursuant to this Agreement. Provided Consultant is not then in breach, District shall pay Consultant for that portion of the Services satisfactorily completed

prior to termination. If said termination occurs prior to completion of any specific task for which a payment request has not been received, the charge for Services performed shall be the reasonable value of such Services, based on an amount agreed to by District and Consultant. District shall not be liable for any costs other than the charges or portions thereof which are specified herein. Consultant shall not be entitled to payment for unperformed services or services within the Scope Services performed prior to the effective date of this Agreement, and shall not be entitled to damages or compensation resulting from termination of this Agreement.

b. Consultant may terminate this Agreement for cause by serving written notice of termination to the District, provided Consultant has first served the District with a written notice of default and demand to cure, and District has failed to cure such default within thirty (30) days of receipt of such notice.

15. Ownership of Work Product.

a. Except as otherwise provided in Section 14, "Termination", above, and unless otherwise agreed upon in writing, all draft and final reports, documents, and other written material, and any and all images, ideas, concepts, designs including website designs, source code, object code, electronic data and files, and/or other media whatsoever created or developed by Consultant for the District in the performance of this Agreement (collectively, "Work Product") shall be considered to be "works made for hire" for the benefit of District. All Work Product and any and all intellectual property rights arising from their creation, including, but not limited to, all copyrights and other proprietary rights, shall be and remain the property of District without restriction or limitation upon their use, duplication or dissemination by District upon final payment being made provided that any such use shall be at District's sole risk. Consultant shall not obtain or attempt to obtain copyright protection as to any of the Work Product.

b. Consultant hereby assigns to District all rights of ownership to the Work Product, including any and all related intellectual property and proprietary rights that are not otherwise vested in the District pursuant to subsection (a), above.

c. Consultant warrants and represents that it has secured all necessary licenses, consents or approvals necessary to the production of the Work Product, and that upon final payment or Consultant's default, District shall have full legal title to the Work Product, and full legal authority and the right to use and reproduce the Work Product for any purpose. Consultant shall defend, indemnify and hold District, and the other Indemnitees (as defined in Section 13(a), above) harmless from any and all loss, claim or liability in any way related to a claim that District's use of any of the Work Product violates federal, state or local laws, or any contractual provisions, or any rights or laws relating to trade names, licenses, franchises, copyrights, patents or other means of protecting intellectual property rights and/or interests in products, ideas or inventions. Consultant shall bear all costs arising from the use of patented, copyrighted, trade secret or trademarked documents, materials, equipment, devices or processes in connection with its provision of the Work Product produced under this Agreement. In the event the use of any of the Work Product or other deliverables hereunder by District is held to constitute an infringement and the use of any of the same is enjoined, Consultant, at its expense, shall: (a)

secure for District the right to continue using the Work Product and other deliverables by suspension of any injunction, or by procuring a license or licenses for District; or (b) modify the Work Product and other deliverables so that they become non-infringing while remaining in compliance with the requirements of this Agreement. This covenant shall survive the termination of this Agreement.

16. Party Representatives.

Consultant hereby designates \_\_\_\_\_, or his or her designee, as Consultant's Representative for this Agreement, unless and until written notice of a new representative acceptable to District is provided to District. District hereby designates \_\_\_\_\_, or his or her designee, as District's Representative for this Agreement. The foregoing Representatives shall be authorized to approve non-monetary revisions to this Agreement, provide consent where required herein, and to make other administrative decisions that will be binding on their respective Party, except as otherwise specifically required herein.

17. Notices.

Any notice or instrument required to be given or delivered by this Agreement may be given or delivered by depositing the same in any United States Post Office, certified mail, return receipt requested, postage prepaid, addressed to:

DISTRICT:

Beaumont-Cherry Valley Water District  
P.O. Box 2037560 Magnolia Avenue  
Beaumont, CA 92223

Fax: (951) 845 0159

Attention: Dan Jagers, General Manager

CONSULTANT:

[\*\*\*INSERT NAME, ADDRESS & CONTACT  
PERSON\*\*\*]

and shall be effective upon receipt thereof.

18. Third Party Rights.

Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than the District and the Consultant.

19. Equal Opportunity Employment.

Consultant represents that it is an equal opportunity employer and that it shall not discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, sex, age or other interests protected by the State or Federal Constitutions. Such non-discrimination shall include, but not be limited to, all activities related to

initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination.

20. Entire Agreement.

This Agreement, with its exhibits, all of which are incorporated by reference herein, and all documents incorporated by reference, represents the entire understanding of District and Consultant as to those matters contained herein, and supersedes and cancels any prior or contemporaneous oral or written understanding, promises or representations with respect to those matters covered hereunder. Each Party acknowledges that no representations, inducements, promises or agreements have been made by any person which are not incorporated herein, and that any other agreements shall be void. This Agreement may not be modified or altered except in writing signed by both Parties hereto. This is an integrated Agreement. In the event of any conflict or inconsistency between the provisions of this Agreement and any exhibit hereto or document incorporated by reference herein, the provisions of this Agreement, then the District's RFP, if any, shall govern.

21. Severability.

The unenforceability, invalidity or illegality of any provision(s) of this Agreement shall not render the remaining provisions unenforceable, invalid or illegal.

22. Successors and Assigns.

This Agreement shall be binding upon and shall inure to the benefit of the successors in interest, executors, administrators and authorized assigns of each Party to this Agreement.

23. Non-Waiver.

None of the provisions of this Agreement shall be considered waived by either Party, unless such waiver is specified in writing, and any such waiver shall be limited to that set of circumstances and not to any future circumstances unless another written waiver is executed.

24. Time of Essence.

Time is of the essence in each and every provision of this Agreement.

25. District's Right to Employ Other Consultants.

District reserves its right to employ other consultants to provide the Services or similar services to the District.

26. Interest of Consultant.

Consultant covenants that it presently has no interest, and shall not acquire any interest, direct or indirect, financial or otherwise, which would conflict in any manner or degree with the performance of the Services under this Agreement. Consultant certifies that no one who has or will have any financial interest under this Agreement is an officer or employee of the District.

27. Governing Law and Venue.

This Agreement shall be interpreted in accordance with the laws of the State of California without regard for change of venue laws. If any action is brought to interpret or enforce any term of this Agreement, the action shall be brought in a state or federal court situated in the County of Riverside, State of California. Consultant must comply with the claim procedures set forth in Government Code section 900, et seq. prior to filing any lawsuit against the District.

28. Attorneys' Fees. The prevailing Party in any legal action brought for breach or to compel performance, shall be entitled to recover their reasonable attorneys fees and costs.

29. Interest of Subcontractors.

Consultant further covenants that, in the performance of this Agreement, no subcontractor or person having any interest, direct or indirect, financial or otherwise, which would conflict in any manner or degree with the performance of the Services under this Agreement shall be employed. Consultant has provided District with a list of all subcontractors and the key personnel for such subcontractors that are retained or to be retained by Consultant in connection with the performance of the Services, to assist the District in affirming compliance with this Section.

30. Prohibited Interests.

Consultant maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement. Further, Consultant warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Consultant, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. If required, Consultant further agrees to file, or shall cause its employees or subcontractors to file, a Statement of Economic Interest with the District's Filing Officer as required under state law in the performance of the Services. For breach or violation of this warranty, District shall have the right to rescind this Agreement without liability. For the term of this Agreement, no director, official, officer or employee of District, during the term of his or her service with District, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

**IN WITNESS WHEREOF**, the Parties have executed this Agreement as of the date first written above.

BEAUMONT-CHERRY VALLEY  
WATER DISTRICT

[INSERT NAME OF CONSULTANT]

By: \_\_\_\_\_  
Dan Jagers  
General Manager

By: \_\_\_\_\_  
Its: \_\_\_\_\_

Printed Name: \_\_\_\_\_

By: \_\_\_\_\_

Its: \_\_\_\_\_

Printed Name: \_\_\_\_\_

(Two signatures required for corporations pursuant to California Corporations Code Section 313, unless corporate documents authorize only one person to sign this Agreement on behalf of the corporation.)

ATTEST:

By: \_\_\_\_\_  
Secretary David Hoffman

EXHIBIT A  
Scope of Services

Exhibit A



EXHIBIT B

Schedule of Rates/Payments

Consultant will invoice District on a monthly cycle, or otherwise as expressly provided in this Agreement. Consultant will include with each invoice a detailed progress report that indicates the amount of budget spent on each task, as applicable. Consultant will inform District regarding any out-of-scope work being performed by Consultant. Any other terms and conditions relating to the amount of compensation to be paid to Consultant are as follows:

**[Insert hourly rates or flat fee, as applicable, and rates for any other charges to be made by Consultant]**

## **ATTACHMENTS**



ATTACHMENT 1

# BEAUMONT CHERRY VALLEY WATER DISTRICT

Cherry Reservoir No. 1 Inspection Report

January 5, 2022



## **Standards**

The inspection report of this tank was performed by H2O Solutions, LLC using surface supplied air, totally encapsulated in a sealed dry suit mated to a sealed dry divers hard hat and conducted in accordance with all applicable OSHA, EPA, AWWA, NACE, SSPC and ADC Requirements and recommendations.

The inspection consisted of a visual observation of the tanks exterior and interior components and coating system. The tank was not drained for the inspection and all interior assessment data was recorded using real time video with live voice narration as well as still photographs.

## **Condition Observations**

Conditions noted during the inspection are documented in the following pages and are supplemented with color photographs. Condition ratings used to describe the inspection findings are annotated as follows:

Excellent: No deficiencies noted.

Good: Minor deficiencies noted. Item is functioning as designed.

Fair: Major deficiencies noted. Item is in need of repairs to continue functioning as designed.

Poor: Repair or replacement required immediately. Item may no longer function as designed.



Date of Cleaning & Inspection :	January 5, 2022
Water Loss from Cleaning:	<b>30,000 Gallons</b>
Construction Type:	Steel
Capacity(gal):	1,000,000

Tank Name :	Cherry Reservoir No. 1
Height :	36'
Diameter or L x W :	73'
Year Built :	1963

# Exterior Wall

## Description

Appeared to be in good condition with spots of corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

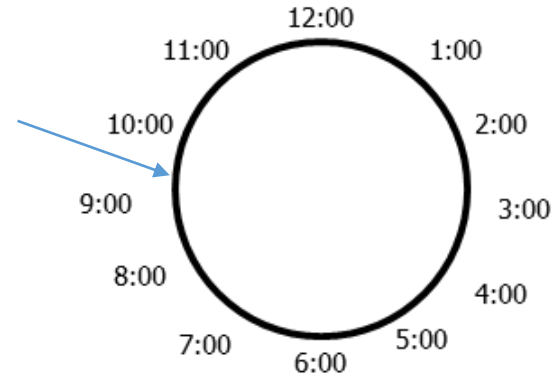
Appeared to be in good condition with spots of delamination and rust staining.

## Coating Failure

5%

## Recommendations

None at this time.



# Exterior Wall

## Description

Appeared to be in good condition with spots of corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

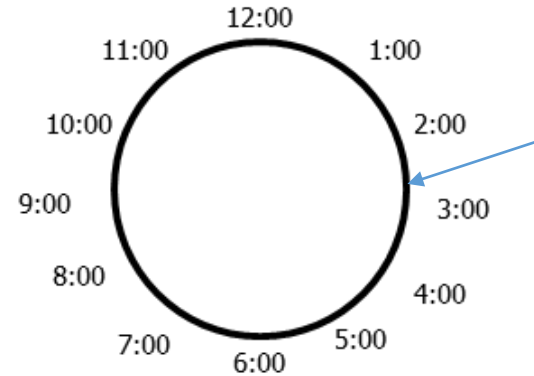
Appeared to be in good condition with spots of delamination and rust staining.

## Coating Failure

5%

## Recommendations

None at this time.





# Exterior Inlet/Outlet

## Description

Appeared to be in good condition with surface corrosion present.

## Corrosion Present

5%

## Rust Grade

5

## Coating System

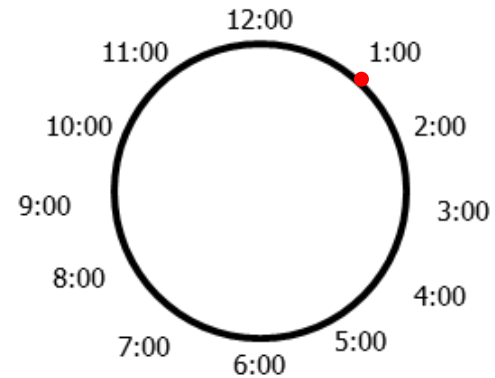
Appeared to be in good condition with spots of delamination and rust staining.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Inlet/Outlet

## Description

Appeared to be in good condition with surface corrosion present.

## Corrosion Present

5%

## Rust Grade

5

## Coating System

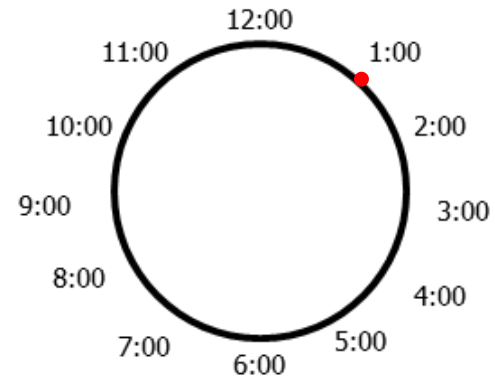
Appeared to be in good condition with spots of delamination and rust staining.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Inlet/Outlet

## Description

Appeared to be in good condition with surface corrosion present.

## Corrosion Present

5%

## Rust Grade

5

## Coating System

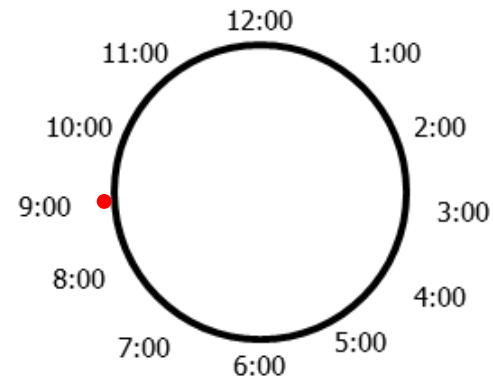
Appeared to be in good condition with spots of delamination and rust staining.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Inlet/Outlet

## Description

Appeared to be in good condition with surface corrosion present.

## Corrosion Present

5%

## Rust Grade

5

## Coating System

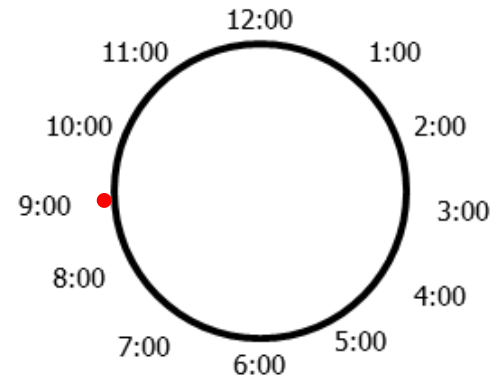
Appeared to be in good condition with spots of delamination and rust staining.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Overflow

## Description

Appeared to be in good working condition with spots of minor corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

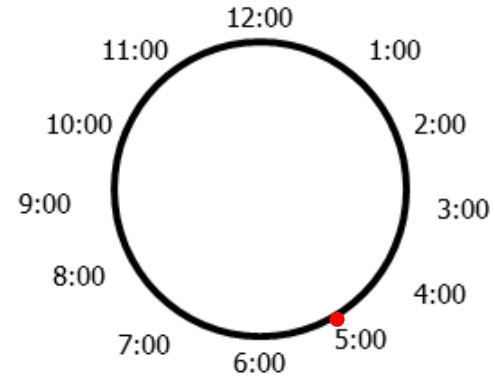
Appeared to be in good condition with light staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Overflow

## Description

Appeared to be in good working condition with spots of minor corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

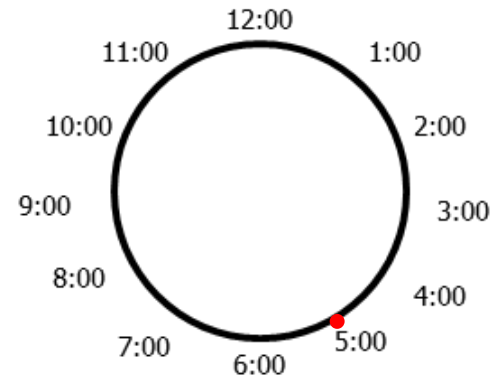
Appeared to be in good condition with light staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Manway

## Description

Appeared to be in good working condition with corrosion present.

## Corrosion Present

10%

## Rust Grade

4

## Coating System

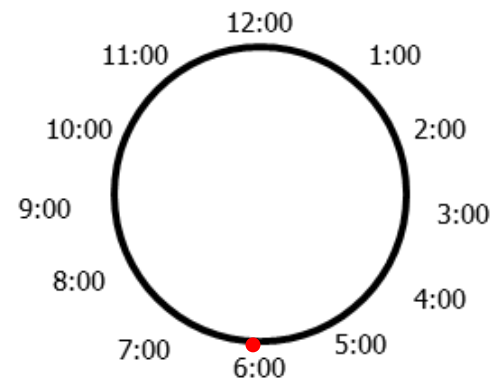
Appeared to be in good condition with rust staining and spots of delamination.

## Coating Failure

5%

## Recommendations

None at this time.



# Exterior Ladder

## Description

Appeared to be structurally sound and in good condition with spots of minor corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

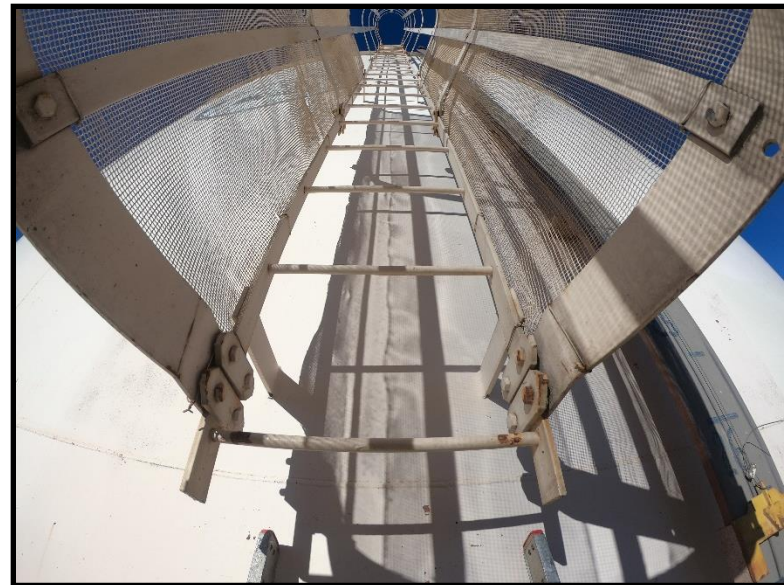
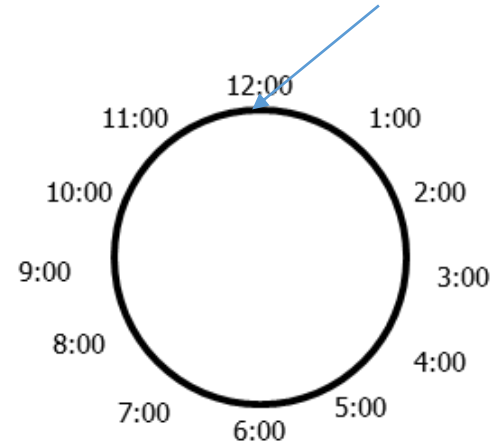
Appeared to be in good condition with spots of minor delamination present.

## Coating Failure

< 5%

## Recommendations

None at this time.





# Exterior Safety Rail

## Description

Appeared to be structurally sound and in good condition with spots of minor corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

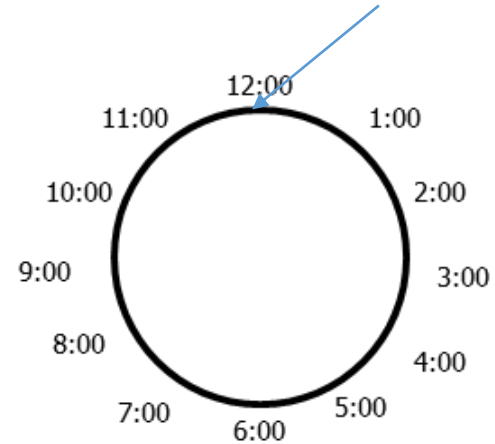
Appeared to be in good condition with spots of minor delamination present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Hatch

## Description

Appeared to be in good condition with corrosion present.

## Corrosion Present

10%

## Rust Grade

4

## Coating System

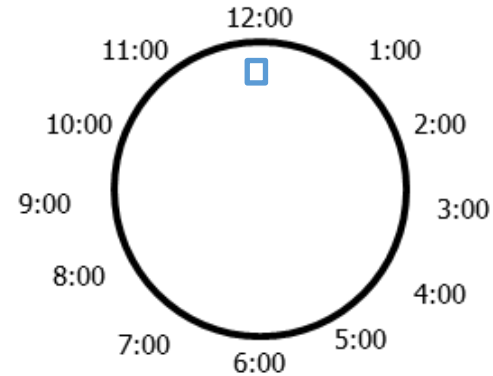
Appeared to be in good condition with delamination and staining present.

## Coating Failure

10%

## Recommendations

Install gasket to prevent insects/debris.



# Exterior Hatch Lid

## Description

Appeared to be in good working condition with corrosion present.

## Corrosion Present

10%

## Rust Grade

4

## Coating System

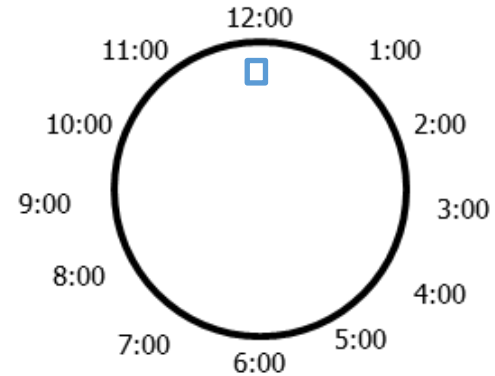
Appeared to be in good condition with delamination and staining present.

## Coating Failure

10%

## Recommendations

Install gasket to prevent insects/debris.



# Exterior Roof

## Description

Appeared to be in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

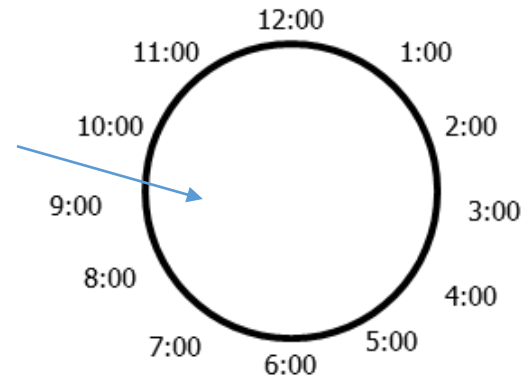
Appeared to be in good condition with signs of staining.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Roof

## Description

Appeared to be in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

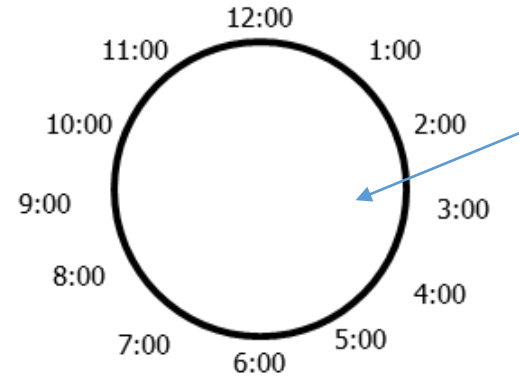
Appeared to be in good condition with signs of staining.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Vent

## Description

Appeared to be in good working condition with corrosion present.

## Corrosion Present

5%

## Rust Grade

5

## Coating System

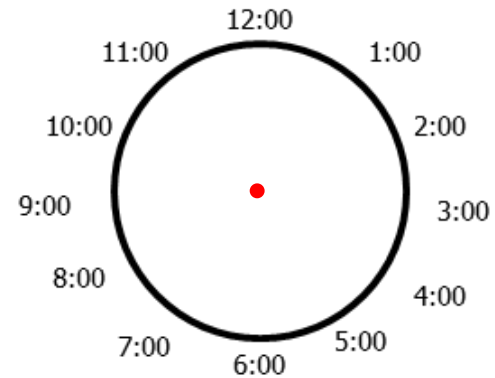
Appeared to be in good condition with light rust staining.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Vent Screen

## Description

Appeared to be fully intact and in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

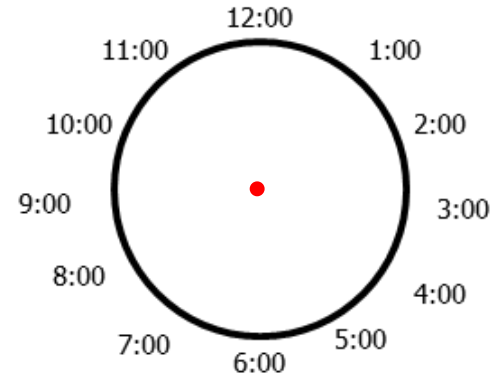
N/A

## Coating Failure

N/A

## Recommendations

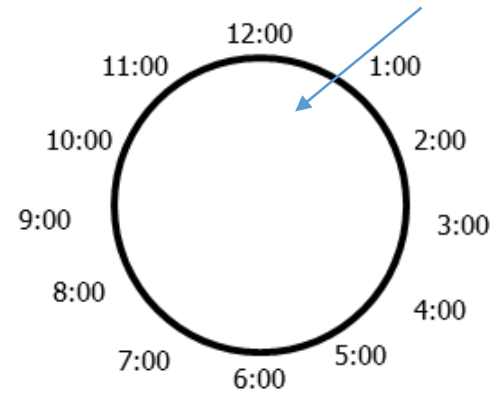
None at this time.



# Interior Sediment

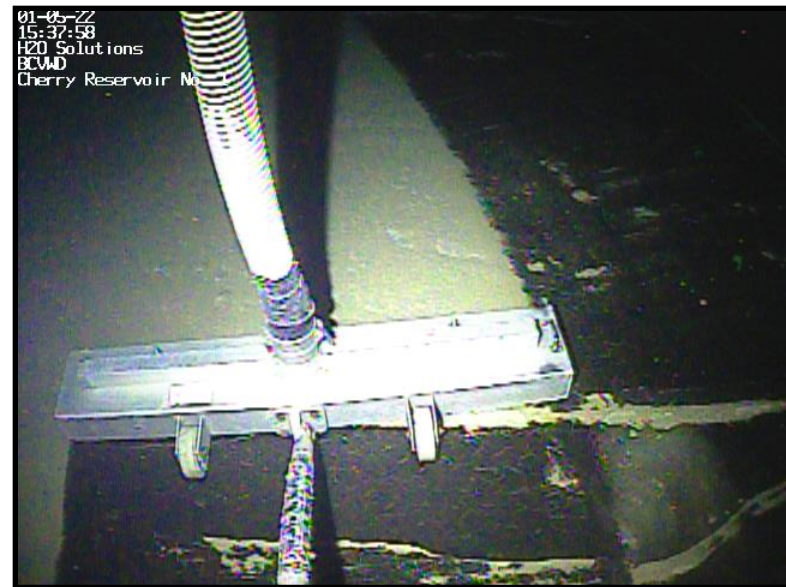
## Description

¼" – 3" of sediment.



## Recommendations

None at this time.





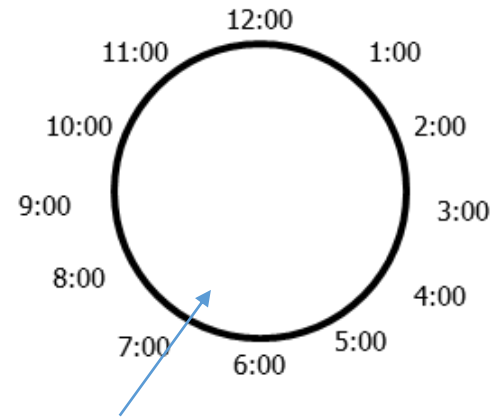
# Interior Sediment

## Description

¼" – 3" of sediment.

## Recommendations

None at this time.



# Interior Ladder

## Description

Appeared to be structurally sound and in good condition with pump oil staining and no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

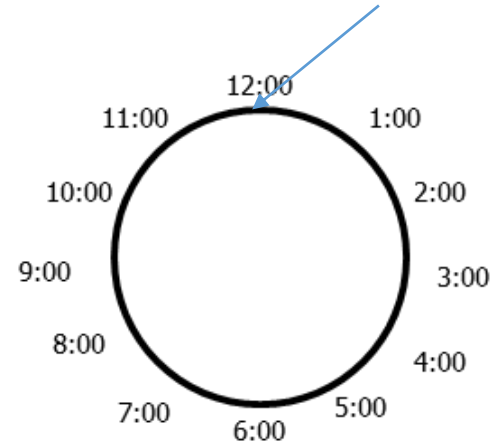
N/A

## Coating Failure

N/A

## Recommendations

None at this time.



# Interior Ladder

## Description

Appeared to be structurally sound and in good condition with pump oil staining and no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

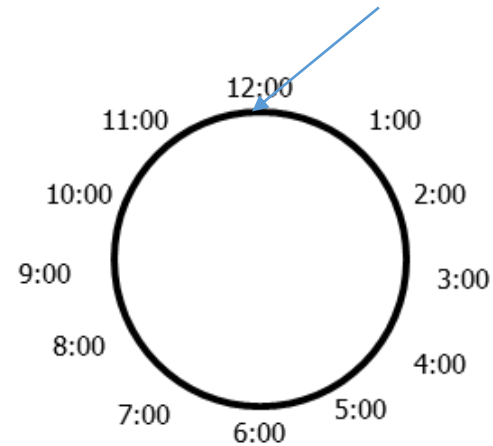
N/A

## Coating Failure

N/A

## Recommendations

None at this time.



# Interior Inlet/Outlet

## Description

Appeared to be in good working condition with light staining and spots of minor corrosion.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

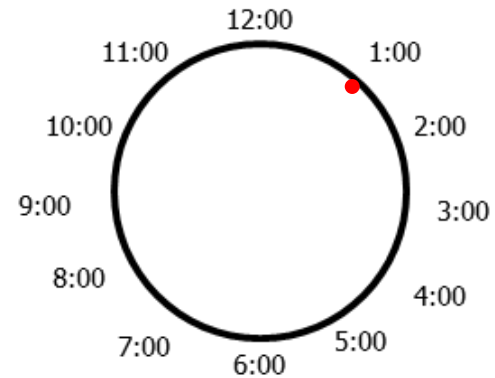
N/A

## Coating Failure

N/A

## Recommendations

None at this time.



# Interior Inlet/Outlet

## Description

Appeared to be in good working condition with light staining and spots of minor corrosion.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

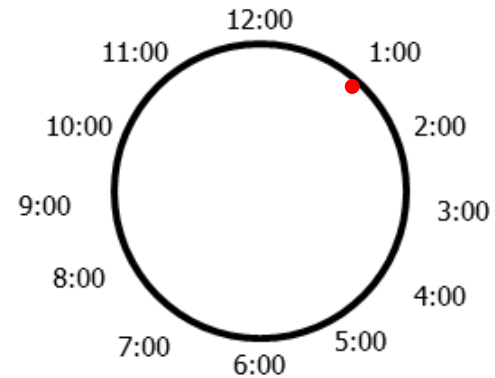
N/A

## Coating Failure

N/A

## Recommendations

None at this time.



# Interior Inlet/Outlet

## Description

Appeared to be in good working condition with light staining and spots of minor corrosion.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

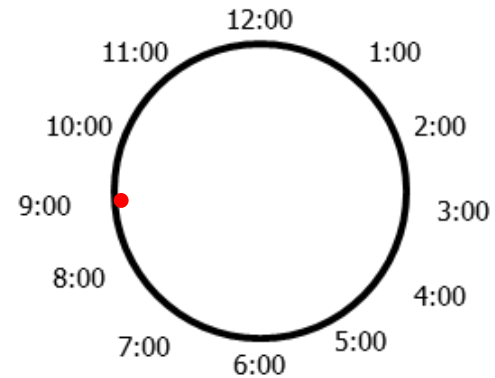
N/A

## Coating Failure

N/A

## Recommendations

None at this time.



# Interior Inlet/Outlet

## Description

Appeared to be in good working condition with light staining and spots of minor corrosion.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

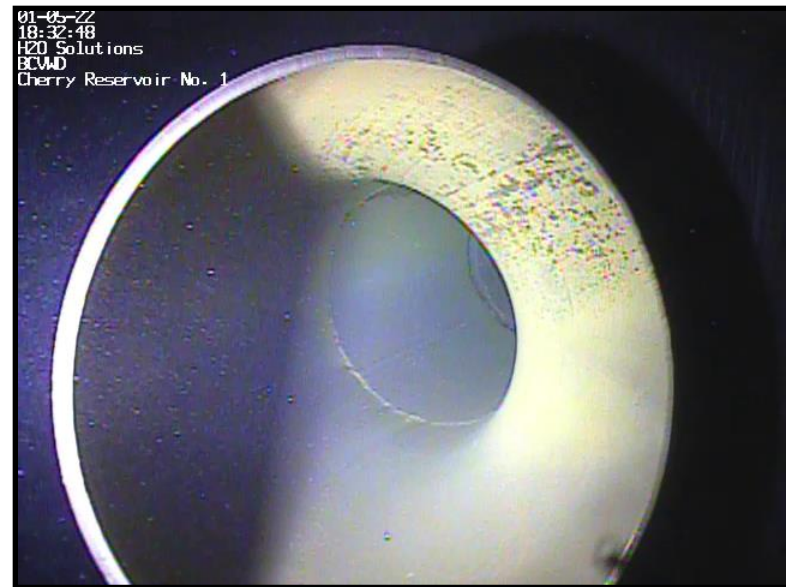
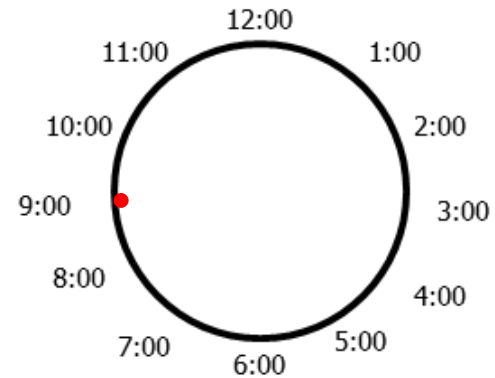
N/A

## Coating Failure

N/A

## Recommendations

None at this time.



# Interior Drain

## Description

Appeared to be in good working condition with minor corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

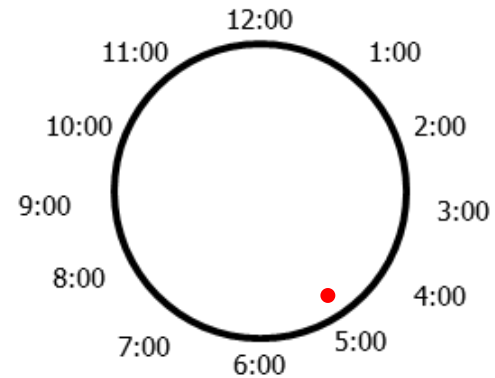
Appeared to be in good condition with staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.





# Interior Drain

## Description

Appeared to be in good working condition with minor corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

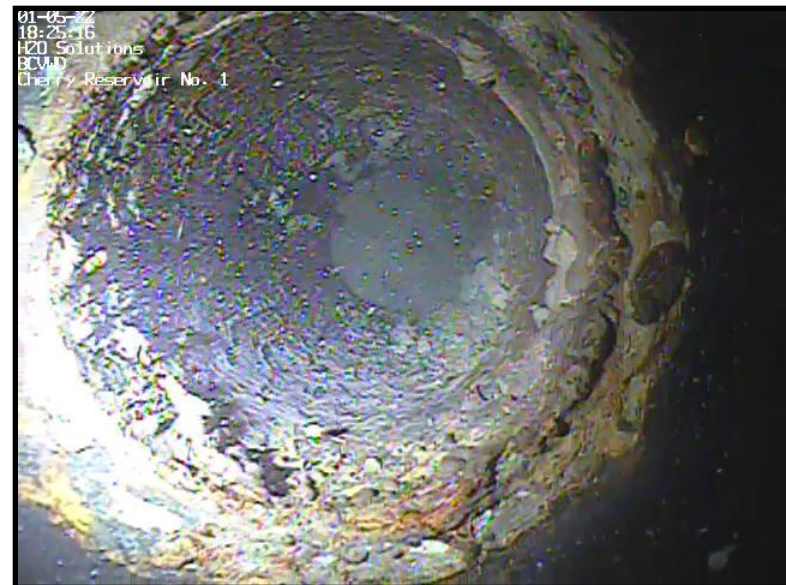
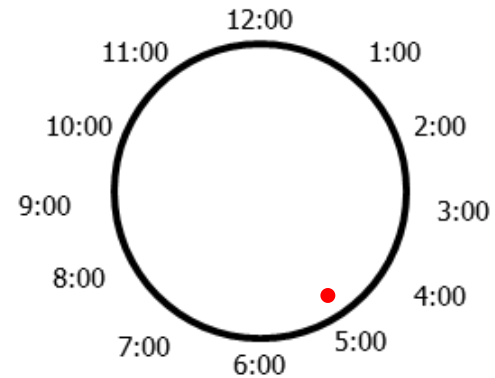
Appeared to be in good condition with staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Overflow

## Description

Appeared to be in good working condition with minor corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

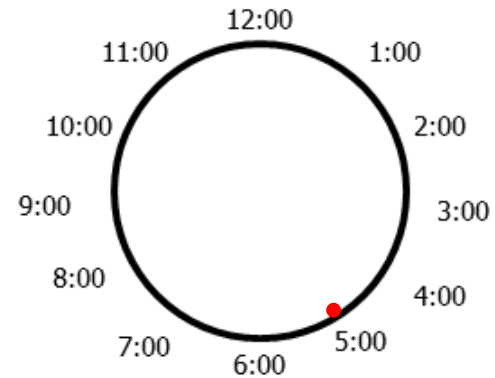
Appeared to be in good condition with pump oil staining.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Manway

## Description

Appeared to be in good working condition with corrosion present.

## Corrosion Present

10%

## Rust Grade

4

## Coating System

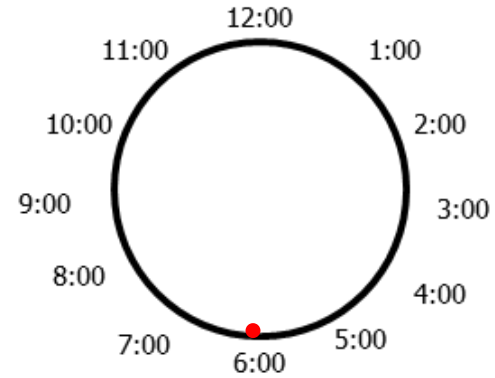
Appeared to be in good condition with spots of delamination and rust staining.

## Coating Failure

5%

## Recommendations

None at this time.



# Interior Column Base

## Description

Appeared to be structurally sound and in good condition with minor corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

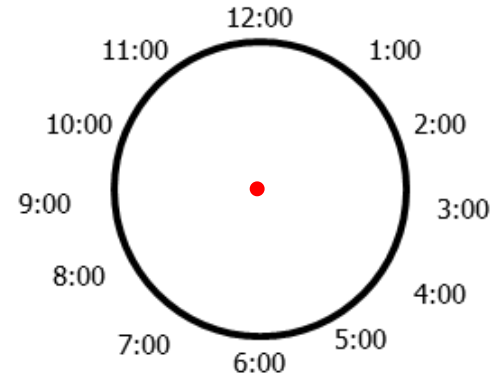
Appeared to be in good condition with light staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Column

## Description

Appeared to be structurally sound and in good condition with minor corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

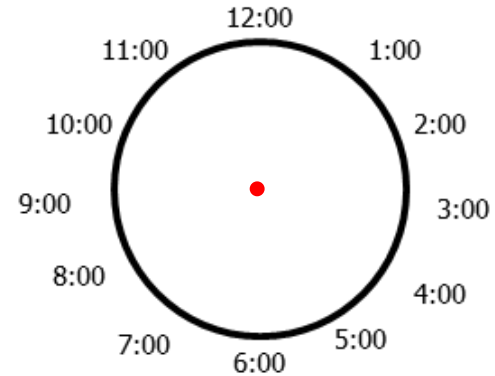
Appeared to be in good condition with light staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Column Base

## Description

Appeared to be structurally sound and in good condition with minor corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

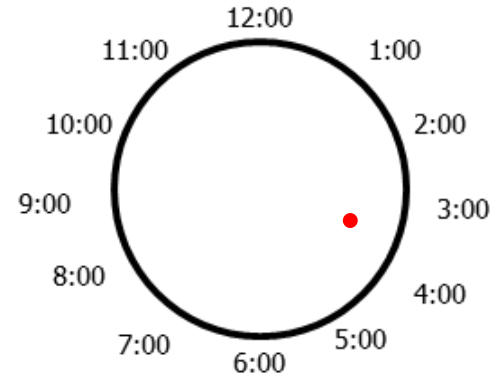
Appeared to be in good condition with light staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Column

## Description

Appeared to be structurally sound and in good condition with minor corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

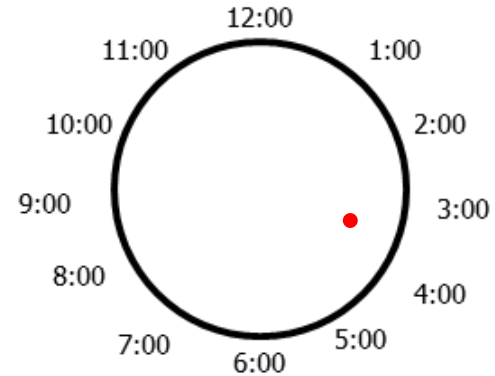
Appeared to be in good condition with light staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Column Base

## Description

Appeared to be structurally sound and in good condition with minor corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

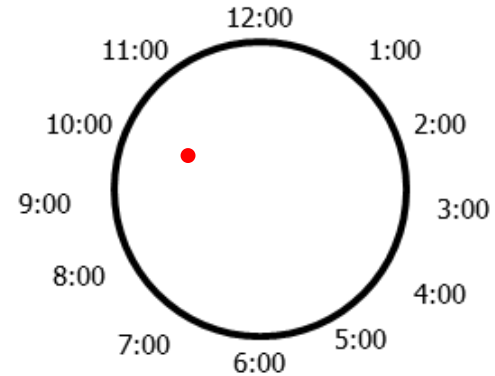
Appeared to be in good condition with light staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.





# Interior Column

## Description

Appeared to be structurally sound and in good condition with minor corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

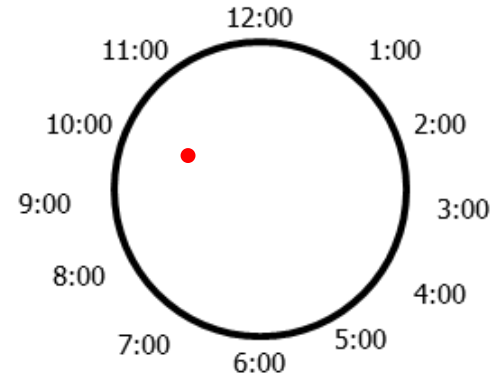
Appeared to be in good condition with light staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Ceiling

## Description

Appeared to be in good condition with minor corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

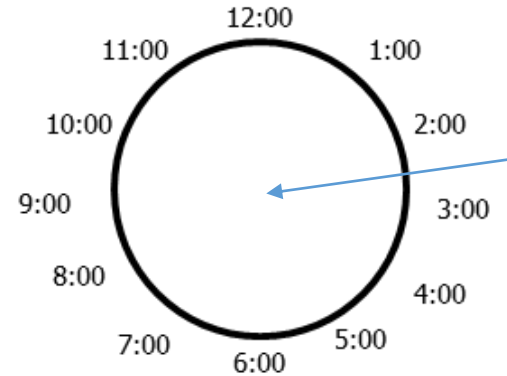
Appeared to be in good condition with light staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Ceiling

## Description

Appeared to be in good condition with minor corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

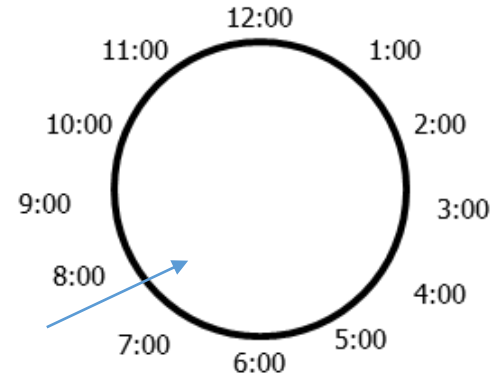
Appeared to be in good condition with light staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Ceiling

## Description

Appeared to be in good condition with minor corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

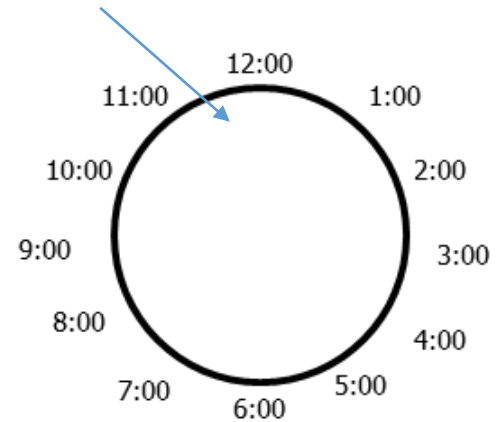
Appeared to be in good condition with light staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Wall

## Description

Appeared to be in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

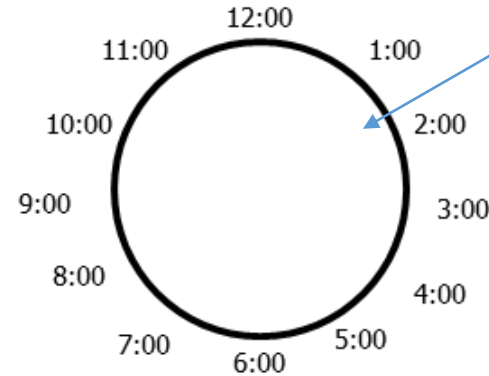
Appeared to be in good condition with staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Wall

## Description

Appeared to be in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

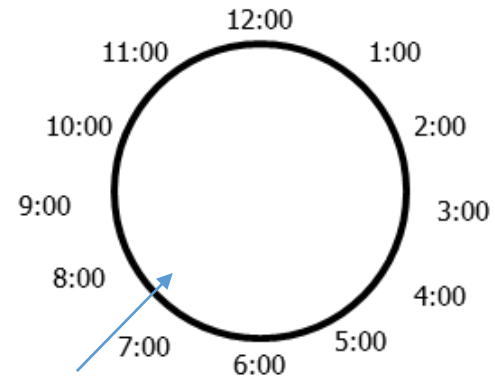
Appeared to be in good condition with staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Wall

## Description

Appeared to be in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

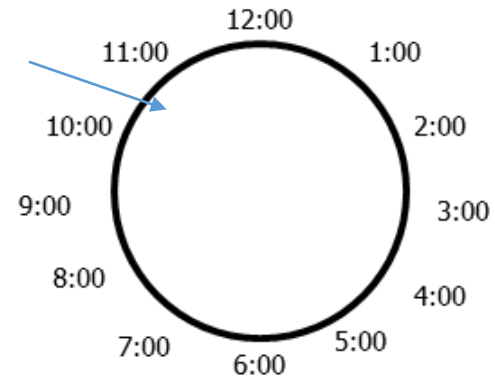
Appeared to be in good condition with staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Floor

## Description

Appeared to be in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

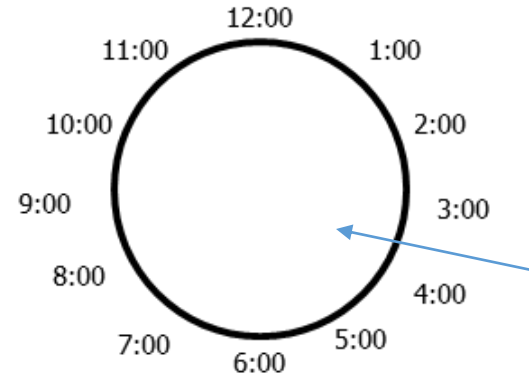
Appeared to be in good condition with signs of staining and light cracking.

## Coating Failure

< 5%

## Recommendations

None at this time.





# Interior Floor

## Description

Appeared to be in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

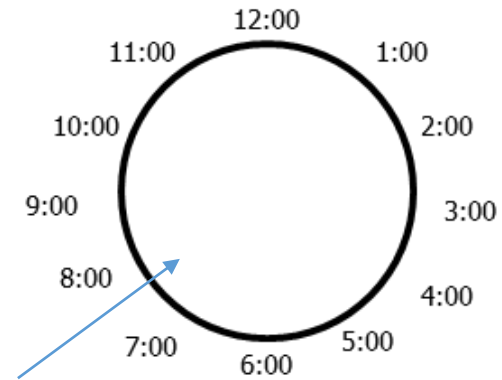
Appeared to be in good condition with signs of staining and light cracking.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Floor

## Description

Appeared to be in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

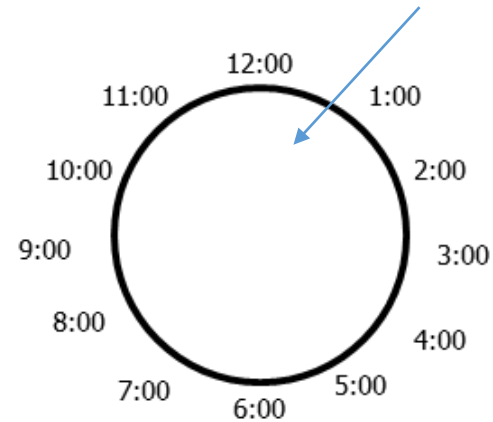
Appeared to be in good condition with signs of staining and light cracking.

## Coating Failure

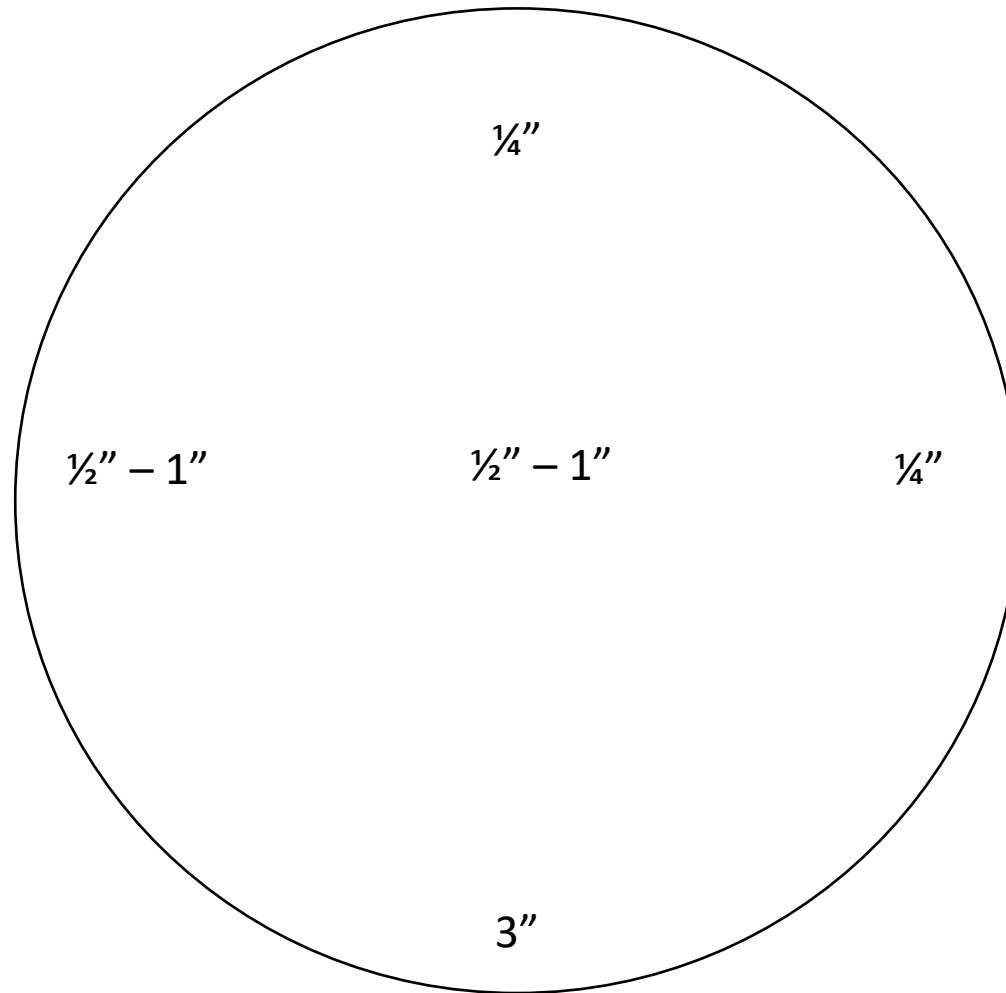
< 5%

## Recommendations

None at this time.



# Sediment Depth






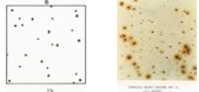





# References

## Standard Method of Evaluating Degree of Rusting on Painted Steel Surfaces – SSPC-Vis 2-82 & ASTM D 610-85 (1989)

The graphical representations show examples of area percentages, which may be helpful in rust grading. The use of photographic reference standards requires the following precautions:

- ❖ Some finishes are stained by rust. This staining must not be confused with the actual rusting involved.
- ❖ Accumulated dirt or other material may make accurate determination of the degree of rusting difficult.
- ❖ Certain types of deposited dirt that contain iron or iron compounds may cause surface discoloration that should not be mistaken for corrosion.
- ❖ It must be realized that failure may vary over a given area and discretion must therefore be used in applying these reference standards.
- ❖ In evaluating surfaces, consideration shall be given to the color of the finish coating, since failures will be more apparent on a finish that shows color contrast with rust, such as white, than on a similar color, such as iron oxide finish.
- ❖ The photographic reference standards are not required for use of the rust-grade scale since the scale is based upon the percent of the area rusted and any method of assessing area rusted may be used to determine the rust grade.

A	Similar to European Scale of Degree of rusting for Anti-Corrosive Paints (1961) (Black & White)
B	Corresponds to SSPC Initial Surface Conditions E (0 - 0.1%) and BISRA (British Iron and Steel Research Association) 0.1%
C	Corresponds to SSPC Initial Surface Conditions F (0.1%-1%) and BISRA 1%
D	Corresponds to SSPC Initial Surface Conditions G (1 - 10%)
E	Rust grades below 4 are of no practical importance in grading performance of paints
F	Corresponds to SSPC Initial Surface Condition H (50 - 100%)

Rust Grades A	Description	Graphical Representation
10	No rusting or less than 0.01% of surface rusted	Unnecessary
9	Minute rusting less than 0.03% of surface rusted	
8B	Few isolated rust spots less than 0.1% of surface rusted	
7	Less than 0.3% of surface rusted	
6C	Extensive rust spots but less than 1% of surface rusted	
5	Rusting to the extent of 3% of surface rusted	
4D	Rusting to the extent of 10% of surface rusted	
3E	Approximately one sixth of the surface rusted 16%	
2	Approximately one third of the surface rusted 33%	
1	Approximately one half of the surface rusted 50%	

ATTACHMENT 2

# BEAUMONT-CHERRY VALLEY WATER DISTRICT

**Cherry No. 2 Tank Inspection Report**

January 18, 2019



## **Standards**

The inspection report of this tank was performed by H2O Solutions, LLC using surface supplied air, totally encapsulated in a sealed dry suit mated to a sealed dry divers hard hat and conducted in accordance with all applicable OSHA, EPA, AWWA, NACE, SSPC and ADC Requirements and recommendations.

The inspection consisted of a visual observation of the tanks exterior and interior components and coating system. The tank was not drained for the inspection and all interior assessment data was recorded using real time video with live voice narration as well as still photographs.

## **Condition Observations**

Conditions noted during the inspection are documented in the following pages and are supplemented with color photographs. Condition ratings used to describe the inspection findings are annotated as follows:

Excellent: No deficiencies noted.

Good: Minor deficiencies noted. Item is functioning as designed.

Fair: Major deficiencies noted. Item is in need of repairs to continue functioning as designed.

Poor: Repair or replacement required immediately. Item may no longer function as designed.



Date of Cleaning & Inspection : January 18, 2019

Water Loss from Cleaning: 48,000 Gallons

Construction Type: Steel

Capacity(gal): 1,100,000

Tank Name : Cherry No. 2

Height : 32'

Diameter or L x W : 78'

Year Built : 1965

# Exterior Wall

## Description

Appeared to be in good condition with areas of minor surface corrosion.

## Corrosion Present

5%

## Rust Grade

4

## Coating System

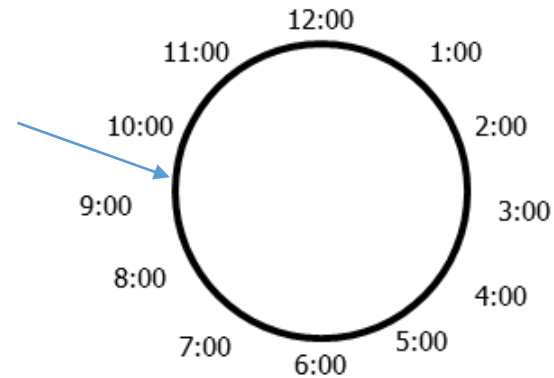
Appeared to be in good condition with areas of delamination, fading and chalking.

## Failure

25%

## Recommendations

None at this time.





# Exterior Wall

## Description

Appeared to be in good condition with areas of minor surface corrosion.

## Corrosion Present

5%

## Rust Grade

4

## Coating System

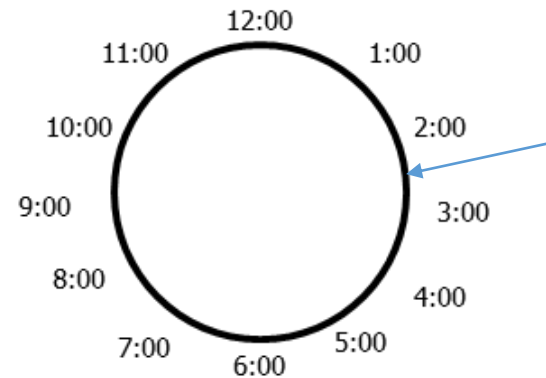
Appeared to be in good condition with areas of delamination, fading and chalking.

## Failure

25%

## Recommendations

None at this time.



# Exterior Wall

## Description

Appeared to be in good condition with areas of surface corrosion.

## Corrosion Present

15%

## Rust Grade

3

## Coating System

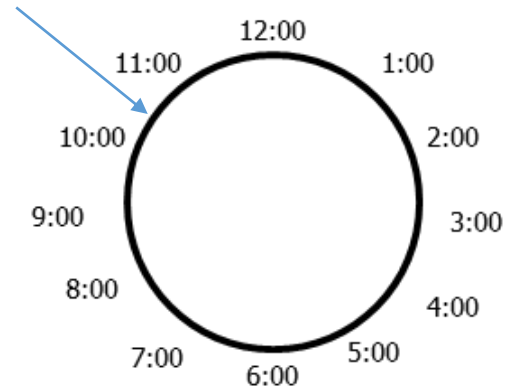
Appeared to be in good condition with areas of delamination, fading and chalking.

## Failure

25%

## Recommendations

None at this time.



# Exterior Ladder

## Description

Structurally sound and in good condition. Areas of minor surface corrosion.

## Corrosion Present

5%

## Rust Grade

4

## Coating System

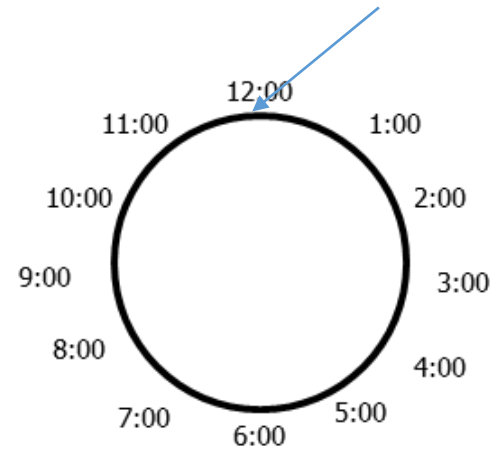
Appeared to be in good condition with areas of chipping and chalking.

## Failure

10%

## Recommendations

None at this time.



# Exterior Manway

## Description

Appeared to be in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

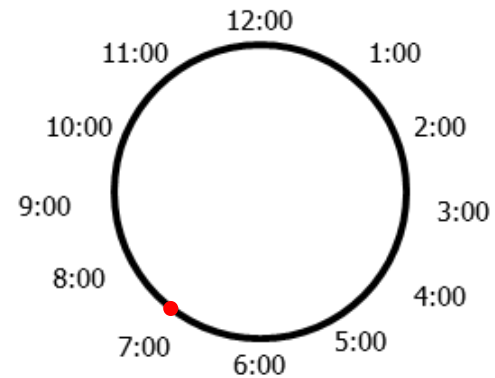
Appeared to be in good condition with areas of delamination, fading and chalking.

## Failure

20%

## Recommendations

None at this time.



# Exterior Hatch Lid

## Description

Appeared to be in good condition with areas of surface corrosion.

## Corrosion Present

5%

## Rust Grade

4

## Coating System

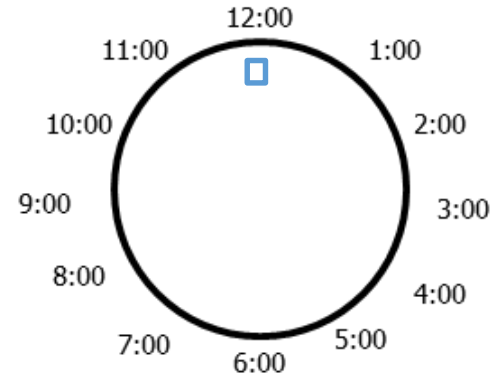
Appeared to be in fair condition with areas of cracking.

## Failure

20%

## Recommendations

None at this time.



# Exterior Hatch

## Description

Appeared to be in good condition with areas of surface corrosion.

## Corrosion Present

5%

## Rust Grade

4

## Coating System

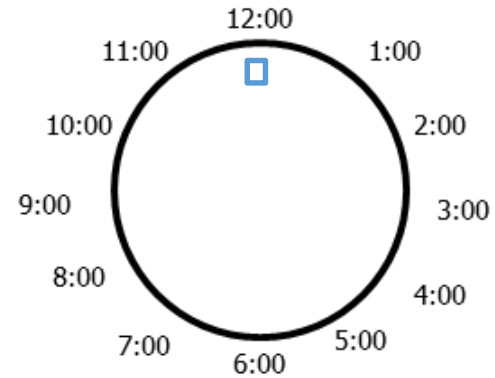
Appeared to be in fair condition with areas of cracking.

## Failure

10%

## Recommendations

None at this time.



# Exterior MLI

## Description

Disabled – missing level indicator marker and float.

## Corrosion Present

70%

## Rust Grade

1

## Coating System

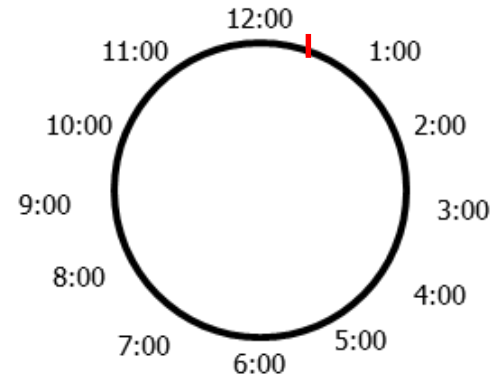
Heavy fading

## Failure

100%

## Recommendations

None at this time.



# Exterior Roof

## Description

Appeared to be in good condition with areas of minor surface corrosion.

## Corrosion Present

5%

## Rust Grade

4

## Coating System

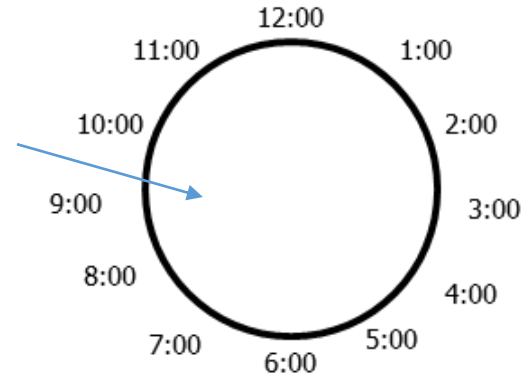
Appeared to be in good condition with areas of delamination, fading and chalking.

## Failure

25%

## Recommendations

None at this time.





# Exterior Roof

## Description

Appeared to be in good condition with areas of minor surface corrosion.

## Corrosion Present

5%

## Rust Grade

4

## Coating System

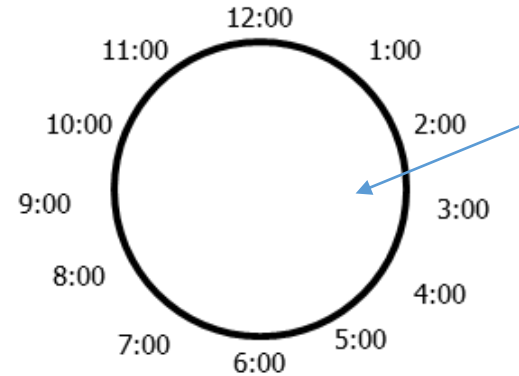
Appeared to be in good condition with areas of delamination, fading and chalking.

## Failure

25%

## Recommendations

None at this time.



# Exterior Vent

## Description

Appeared to be in good condition with areas of surface corrosion.

## Corrosion Present

10%

## Rust Grade

3

## Coating System

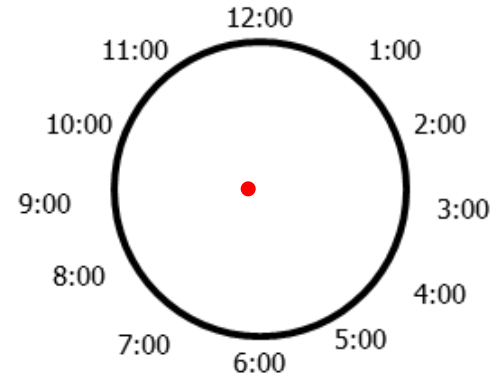
Appeared to be in fair condition with chalking and fading.

## Failure

25%

## Recommendations

None at this time.



# Exterior Vent Screen

## Description

Appeared to be in good condition.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

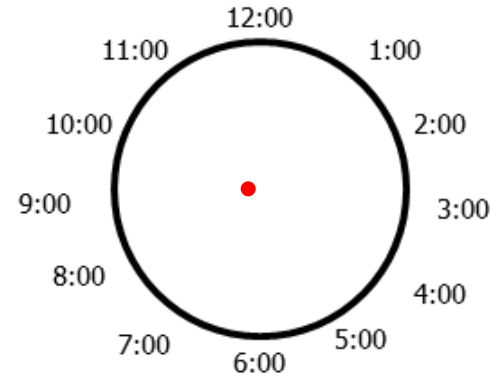
N/A

## Failure

0%

## Recommendations

None at this time.



# Exterior Inlet

## Description

Appeared to be in good working condition with a few spots surface corrosion.

## Corrosion Present

5%

## Rust Grade

4

## Coating System

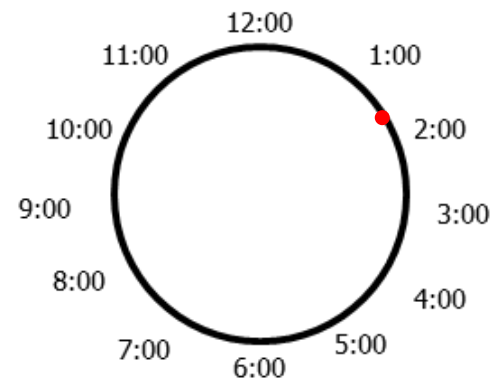
Appeared to be in fair condition with chalking and fading.

## Failure

20%

## Recommendations

None at this time.



# Exterior Outlet

## Description

Appeared to be in good working condition with a few spots surface corrosion.

## Corrosion Present

5%

## Rust Grade

4

## Coating System

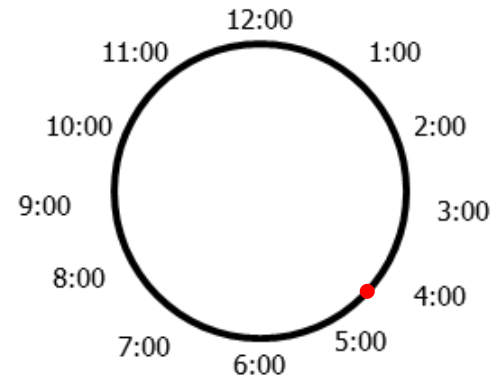
Appeared to be in fair condition with chalking and fading.

## Failure

20%

## Recommendations

None at this time.



# Exterior Overflow

## Description

Appeared to be in good working condition with a few spots surface corrosion.

## Corrosion Present

5%

## Rust Grade

4

## Coating System

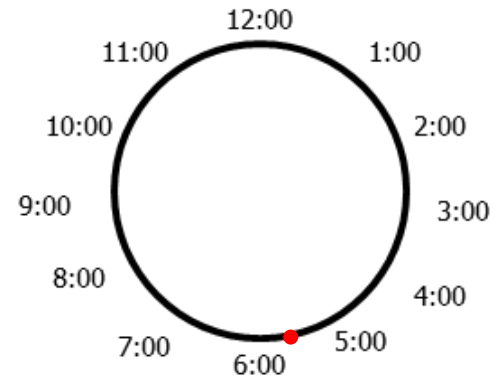
Appeared to be in fair condition with chalking and fading.

## Failure

20%

## Recommendations

None at this time.



# Exterior Capped Pipe

## Description

Appeared to be in good condition with a few spots of minor surface corrosion.

## Corrosion Present

< 5%

## Rust Grade

6

## Coating System

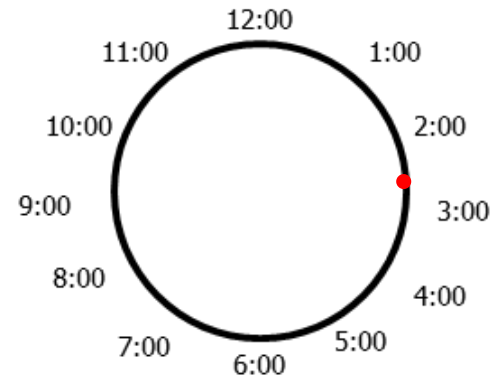
Appeared to be in good condition with chalking and fading.

## Failure

5%

## Recommendations

None at this time.



# Exterior Capped Pipe

## Description

Appeared to be in good condition with a few spots of minor surface corrosion.

## Corrosion Present

< 5%

## Rust Grade

6

## Coating System

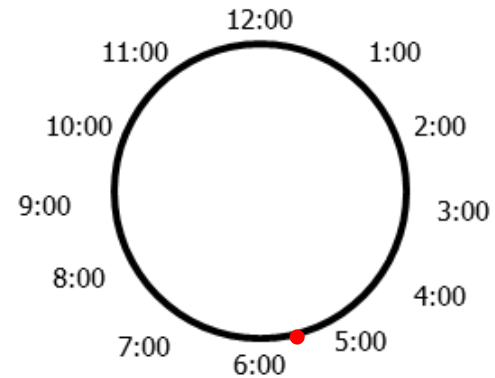
Appeared to be in good condition with chalking and fading.

## Failure

5%

## Recommendations

None at this time.





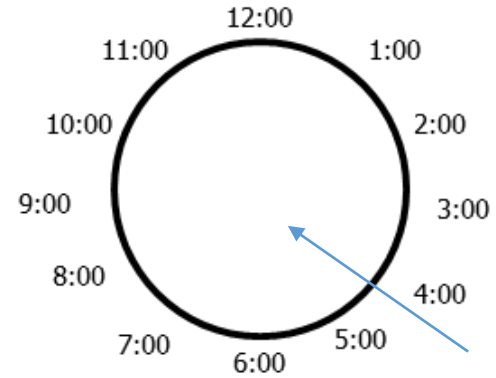
# Interior Sediment

## Description

¼ " of sediment

## Recommendations

None at this time



# Interior Ladder

## Description

Structurally sound and in good condition with areas of moderate corrosion.

## Corrosion Present

25%

## Rust Grade

2

## Coating System

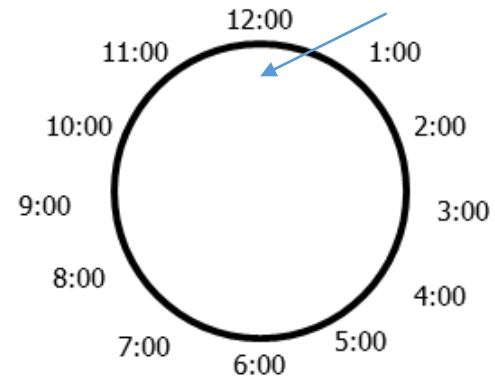
Appeared to in poor condition with numerous areas of cracking.

## Failure

50%

## Recommendations

Replace the exiting coating system



# Interior Wall

## Description

Appeared to be in good condition with areas of surface corrosion.

## Corrosion Present

25%

## Rust Grade

3

## Coating System

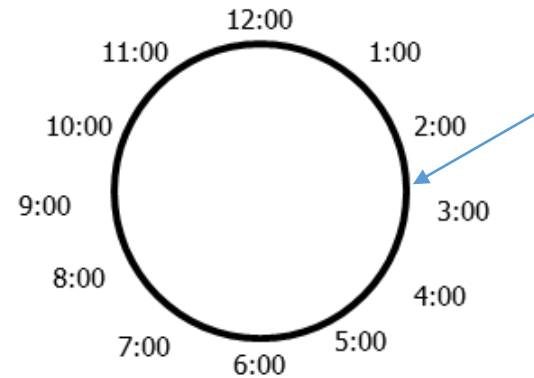
Appeared to be in poor condition with numerous areas of cracking.

## Failure

50%

## Recommendations

Replace the existing coating system



# Interior Wall

## Description

Appeared to be in good condition with areas of surface corrosion.

## Corrosion Present

25%

## Rust Grade

2

## Coating System

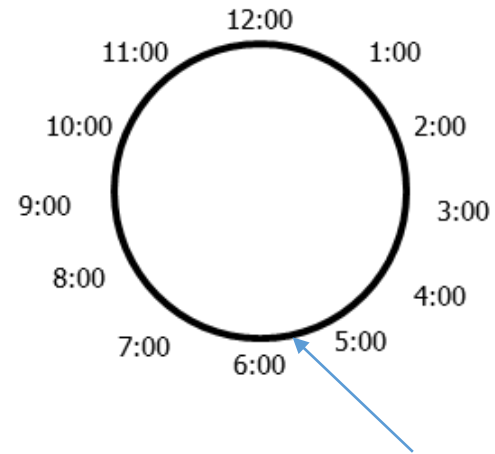
Appeared to be in poor condition with numerous areas of cracking.

## Failure

50%

## Recommendations

Replace the existing coating system



# Interior Wall

## Description

Appeared to be in good condition with areas of surface corrosion.

## Corrosion Present

25%

## Rust Grade

2

## Coating System

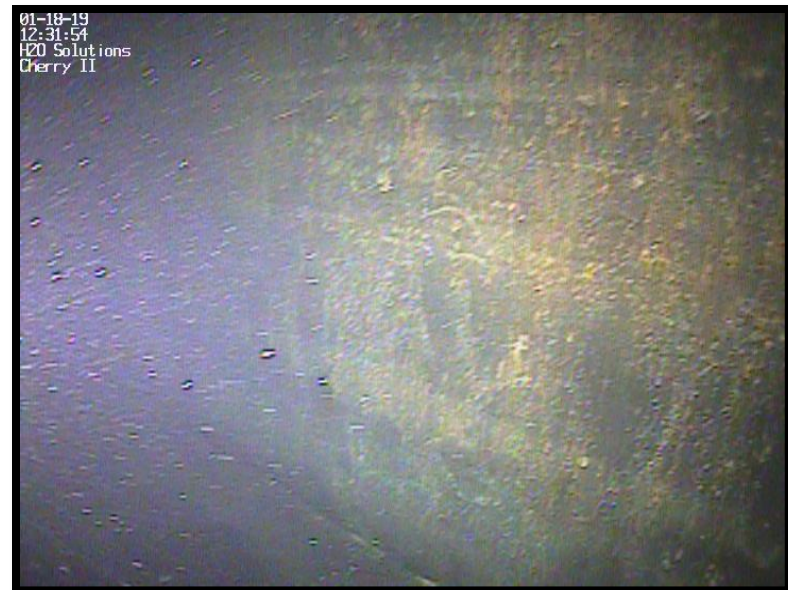
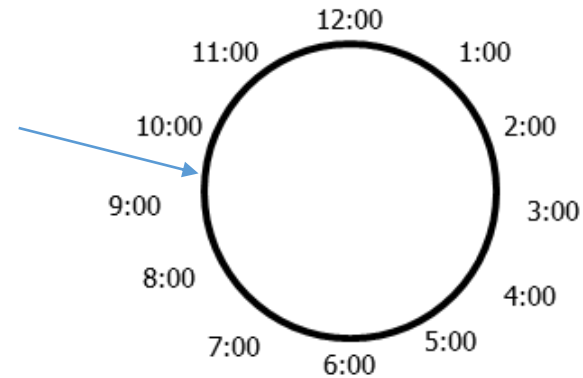
Appeared to be in poor condition with numerous areas of cracking.

## Failure

50%

## Recommendations

Replace the existing coating system



# Interior Overflow

## Description

Appeared to be in good working condition with areas of surface corrosion.

## Corrosion Present

15%

## Rust Grade

3

## Coating System

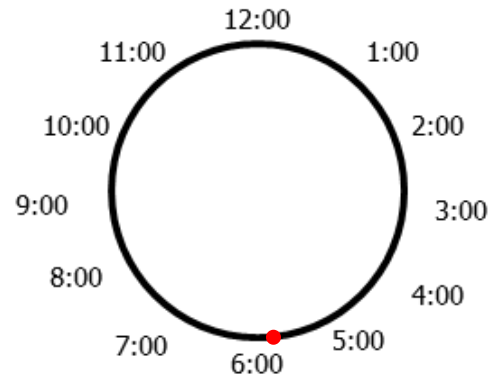
Appeared to be in fair condition with areas of wear.

## Failure

10%

## Recommendations

Replace the existing coating system



# Interior Drain

## Description

Appeared to be in good working condition with areas of surface corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

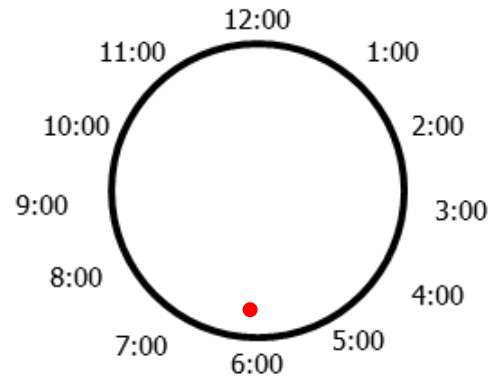
Appeared to be in poor condition with areas of cracking.

## Failure

10%

## Recommendations

None at this time.



# Interior Capped Pipe

## Description

Appeared to be in good condition with areas of surface corrosion.

## Corrosion Present

25%

## Rust Grade

2

## Coating System

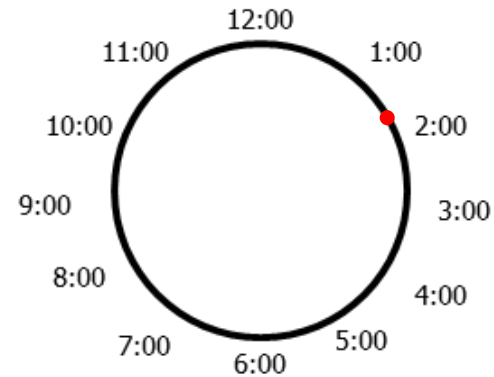
Appeared to be in poor condition with numerous areas of cracking.

## Failure

50%

## Recommendations

Replace the existing coating system





# Interior Capped Pipe

## Description

Appeared to be in good condition with areas of surface corrosion.

## Corrosion Present

25%

## Rust Grade

2

## Coating System

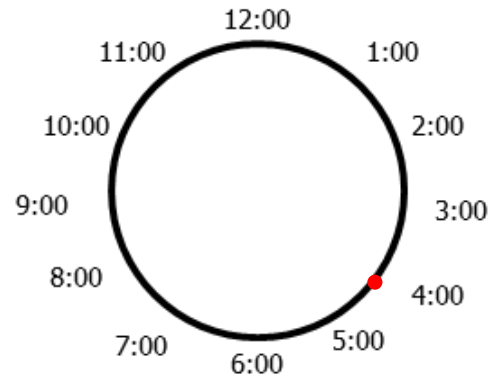
Appeared to be in poor condition with numerous areas of cracking.

## Failure

50%

## Recommendations

Replace the existing coating system



# Interior Inlet

## Description

Appeared to be in good working condition with areas of minor corrosion.

## Corrosion Present

5%

## Rust Grade

4

## Coating System

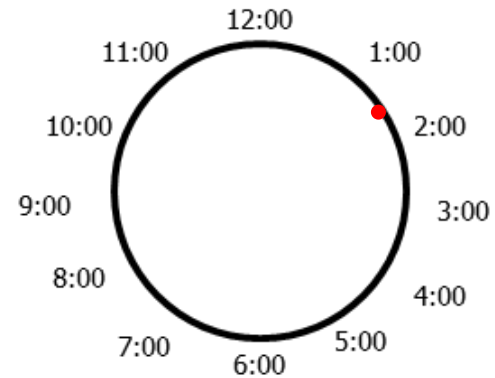
Appeared to be in good condition with areas of chipping and staining.

## Failure

10%

## Recommendations

None at this time.



# Interior Outlet

## Description

Appeared to be in good working condition with areas of minor corrosion.

## Corrosion Present

5%

## Rust Grade

4

## Coating System

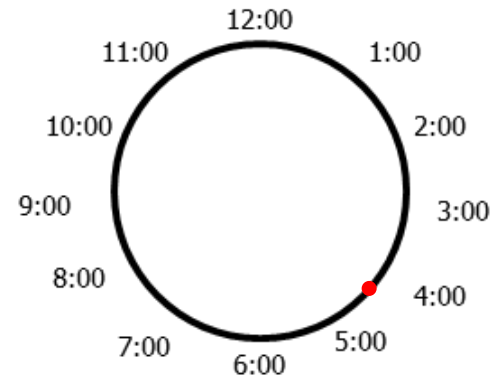
Appeared to be in good condition with areas of chipping and staining.

## Failure

10%

## Recommendations

None at this time.



# Interior Manway

## Description

Appeared to be in good working condition with areas of corrosion. The gasket is in good condition.

## Corrosion Present

25%

## Rust Grade

2

## Coating System

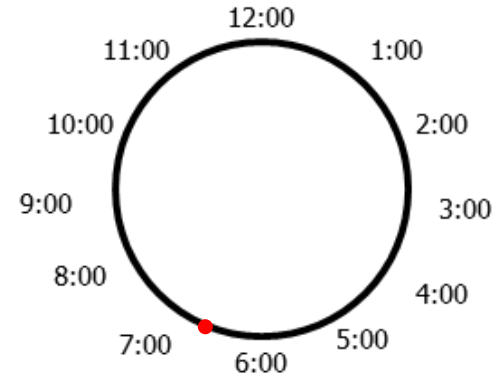
Appeared to be in poor condition with numerous areas of cracking.

## Failure

50%

## Recommendations

Replace the existing coating system



# Interior Column

## Description

Appeared to be in good condition with areas of surface corrosion.

## Corrosion Present

25%

## Rust Grade

2

## Coating System

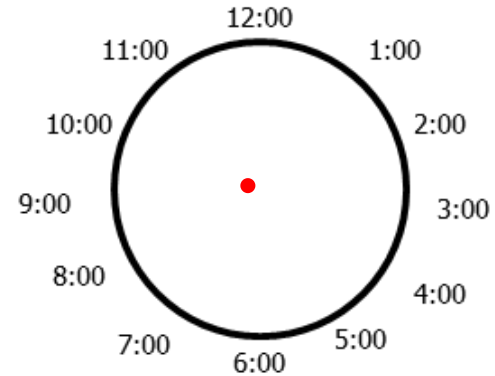
Appeared to be in poor condition with numerous areas of cracking.

## Failure

50%

## Recommendations

Replace the existing coating system



# Interior Column

## Description

Appeared to be in good condition with areas of surface corrosion.

## Corrosion Present

25%

## Rust Grade

2

## Coating System

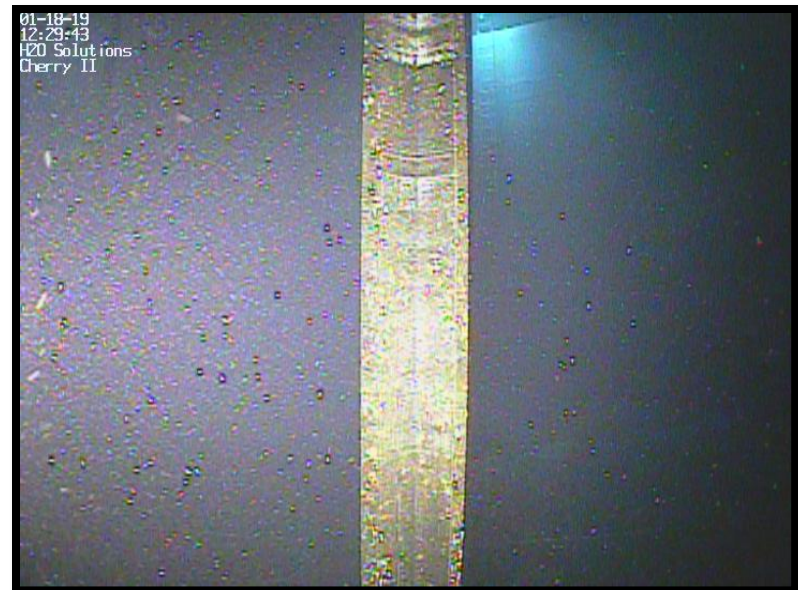
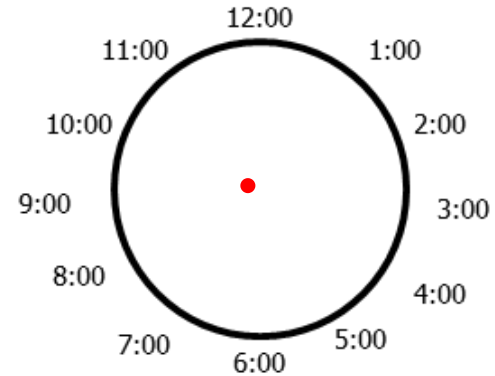
Appeared to be in poor condition with numerous areas of cracking.

## Failure

50%

## Recommendations

Replace the existing coating system



# Interior Ceiling

## Description

Appeared to be in good condition with areas of surface corrosion.

## Corrosion Present

15%

## Rust Grade

3

## Coating System

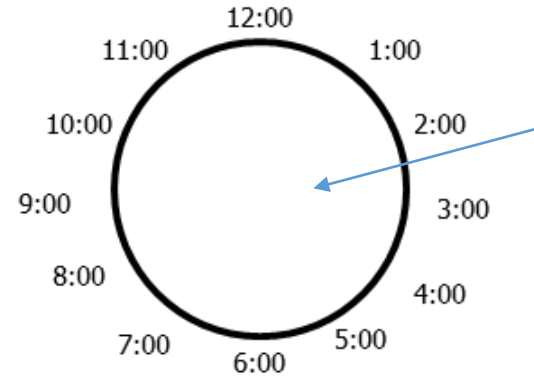
Appeared to be in poor condition with numerous areas of cracking.

## Failure

30%

## Recommendations

Replace the existing coating system



# Interior Ceiling

## Description

Appeared to be in good condition with areas of surface corrosion.

## Corrosion Present

15%

## Rust Grade

3

## Coating System

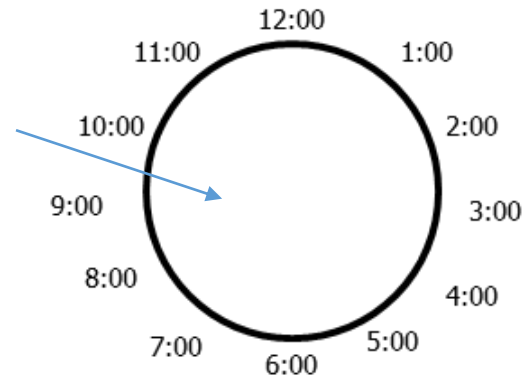
Appeared to be in poor condition with numerous areas of cracking and delamination.

## Failure

30%

## Recommendations

Replace the existing coating system





# Interior Ceiling

## Description

Appeared to be in good condition with areas of surface corrosion.

## Corrosion Present

15%

## Rust Grade

3

## Coating System

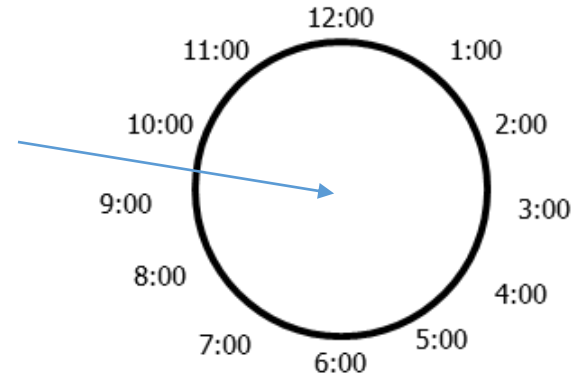
Appeared to be in poor condition with numerous areas of cracking.

## Failure

30%

## Recommendations

Replace the existing coating system



# Interior Floor

## Description

Appeared to be in good condition with areas of surface corrosion.

## Corrosion Present

15%

## Rust Grade

3

## Coating System

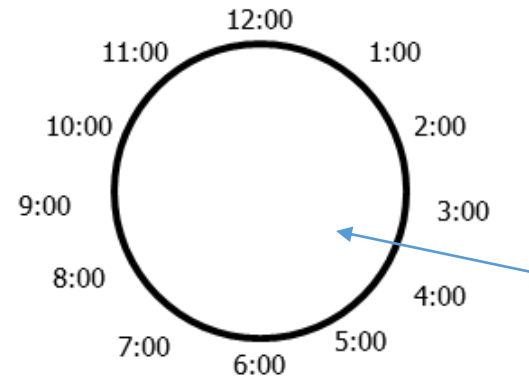
Appeared to be in poor condition with numerous areas of cracking.

## Failure

50%

## Recommendations

Replace the existing coating system



# Interior Floor

## Description

Appeared to be in good condition with areas of surface corrosion.

## Corrosion Present

15%

## Rust Grade

3

## Coating System

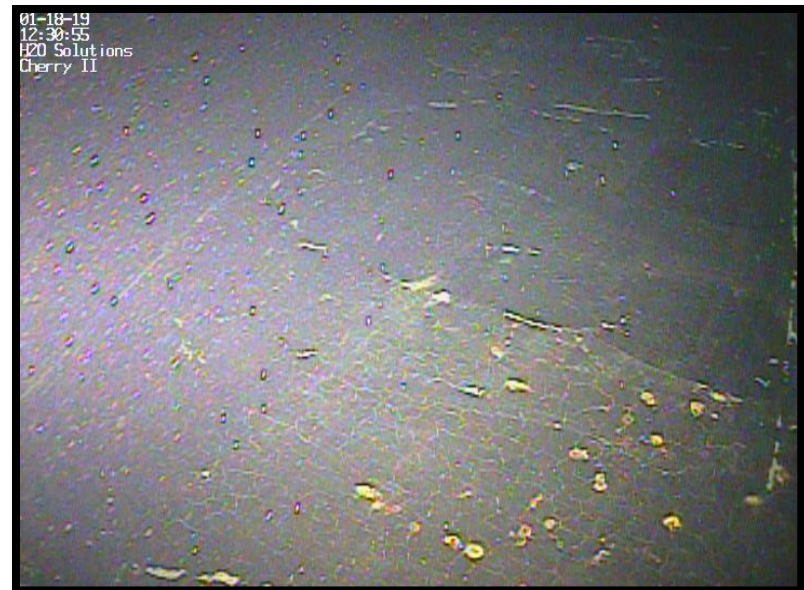
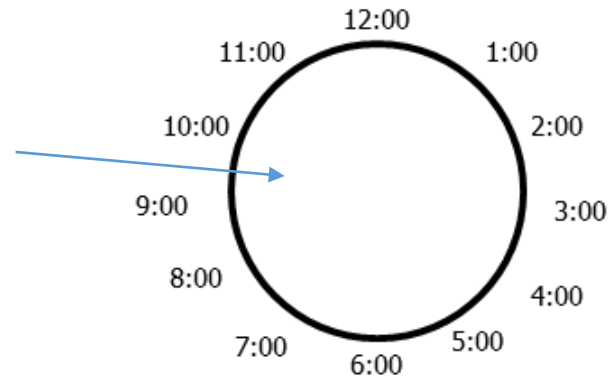
Appeared to be in poor condition with numerous areas of cracking.

## Failure

50%

## Recommendations

Replace the existing coating system



# Interior Floor

## Description

Appeared to be in good condition with areas of surface corrosion.

## Corrosion Present

15%

## Rust Grade

3

## Coating System

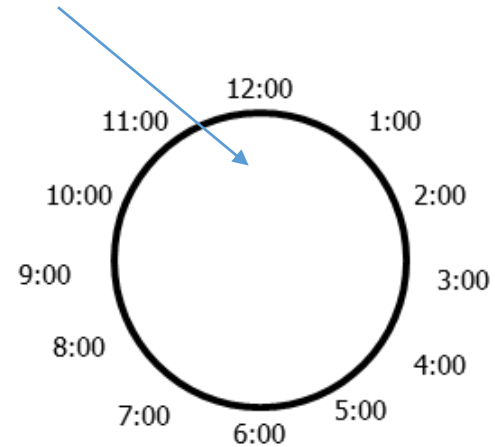
Appeared to be in poor condition with numerous areas of cracking.

## Failure

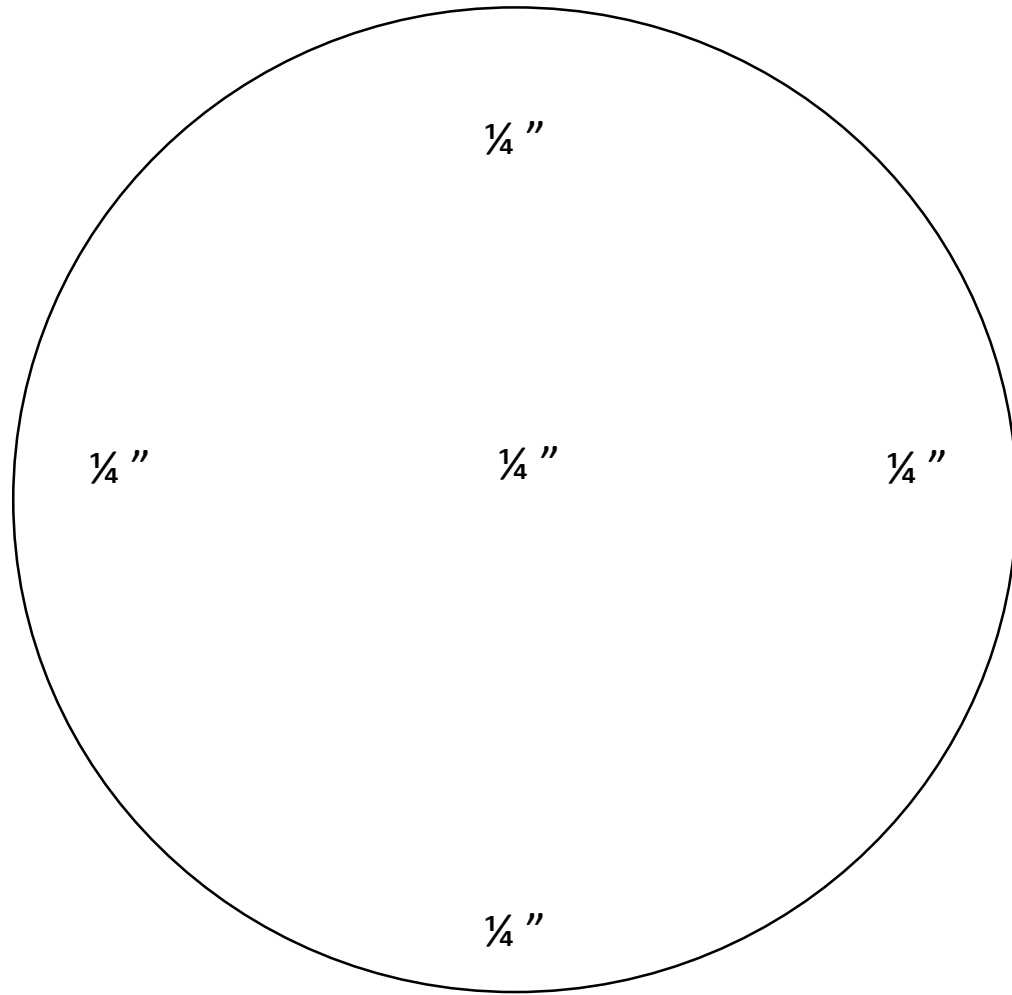
50%

## Recommendations

Replace the existing coating system



# Sediment Depth



# References

## Standard Method of Evaluating Degree of Rusting on Painted Steel Surfaces – SSPC-Vis 2-82 & ASTM D 610-85 (1989)

The graphical representations show examples of area percentages, which may be helpful in rust grading. The use of photographic reference standards requires the following precautions:

- ❖ Some finishes are stained by rust. This staining must not be confused with the actual rusting involved.
- ❖ Accumulated dirt or other material may make accurate determination of the degree of rusting difficult.
- ❖ Certain types of deposited dirt that contain iron or iron compounds may cause surface discoloration that should not be mistaken for corrosion.
- ❖ It must be realized that failure may vary over a given area and discretion must therefore be used in applying these reference standards.
- ❖ In evaluating surfaces, consideration shall be given to the color of the finish coating, since failures will be more apparent on a finish that shows color contrast with rust, such as white, than on a similar color, such as iron oxide finish.
- ❖ The photographic reference standards are not required for use of the rust-grade scale since the scale is based upon the percent of the area rusted and any method of assessing area rusted may be used to determine the rust grade.

A	Similar to European Scale of Degree of rusting for Anti-Corrosive Paints (1961) (Black & White)
B	Corresponds to SSPC Initial Surface Conditions E (0 - 0.1%) and BISRA (British Iron and Steel Research Association) 0.1%
C	Corresponds to SSPC Initial Surface Conditions F (0.1%-1%) and BISRA 1%
D	Corresponds to SSPC Initial Surface Conditions G (1 - 10%)
E	Rust grades below 4 are of no practical importance in grading performance of paints
F	Corresponds to SSPC Initial Surface Condition H (50 - 100%)

Rust Grades A	Description	Graphical Representation
10	No rusting or less than 0.01% of surface rusted	Unnecessary
9	Minute rusting less than 0.03% of surface rusted	
8B	Few isolated rust spots less than 0.1% of surface rusted	
7	Less than 0.3% of surface rusted	
6C	Extensive rust spots but less than 1% of surface rusted	
5	Rusting to the extent of 3% of surface rusted	
4D	Rusting to the extent of 10% of surface rusted	
3E	Approximately on sixth of the surface rusted 16%	
2	Approximately one third of the surface rusted 33%	
1	Approximately one half of the surface rusted 50%	

ATTACHMENT 3

# BEAUMONT CHERRY VALLEY WATER DISTRICT

**Vineland Reservoir No. 1 Inspection Report**

January 6, 2022



## **Standards**

The inspection report of this tank was performed by H2O Solutions, LLC using surface supplied air, totally encapsulated in a sealed dry suit mated to a sealed dry divers hard hat and conducted in accordance with all applicable OSHA, EPA, AWWA, NACE, SSPC and ADC Requirements and recommendations.

The inspection consisted of a visual observation of the tanks exterior and interior components and coating system. The tank was not drained for the inspection and all interior assessment data was recorded using real time video with live voice narration as well as still photographs.

## **Condition Observations**

Conditions noted during the inspection are documented in the following pages and are supplemented with color photographs. Condition ratings used to describe the inspection findings are annotated as follows:

Excellent: No deficiencies noted.

Good: Minor deficiencies noted. Item is functioning as designed.

Fair: Major deficiencies noted. Item is in need of repairs to continue functioning as designed.

Poor: Repair or replacement required immediately. Item may no longer function as designed.





Date of Cleaning & Inspection : January 6, 2022

Water Loss from Cleaning: 15,000 Gallons

Construction Type: Steel

Capacity(gal): 1,000,000

Tank Name : Vineland Reservoir No. 1

Height : 36'

Diameter or L x W : 73'

Year Built : 1990

# Exterior Wall

## Description

Appeared to be in good condition with spots of corrosion present.

## Corrosion Present

10%

## Rust Grade

4

## Coating System

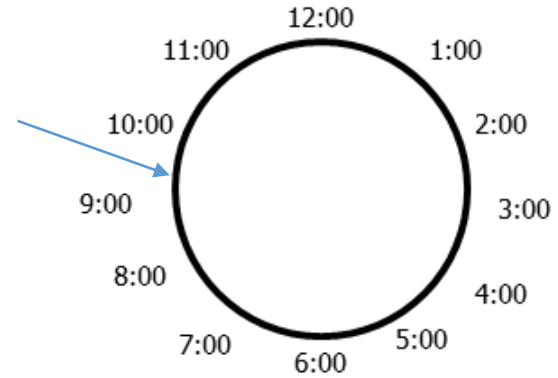
Appeared to be in good condition with spots of delamination and rust staining.

## Coating Failure

5%

## Recommendations

None at this time.



# Exterior Wall

## Description

Appeared to be in good condition with spots of corrosion present.

## Corrosion Present

10%

## Rust Grade

4

## Coating System

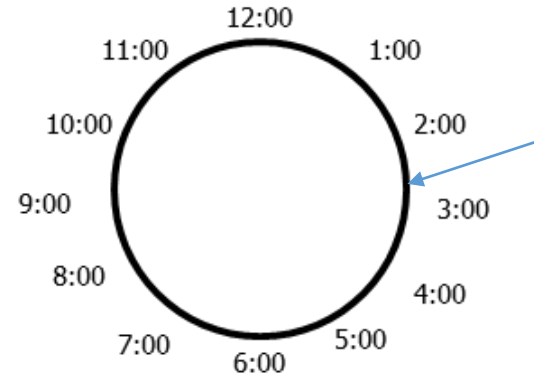
Appeared to be in good condition with spots of delamination and rust staining.

## Coating Failure

5%

## Recommendations

None at this time.



# Exterior Inlet/Outlet

## Description

Appeared to be in good working condition with corrosion present.

## Corrosion Present

5%

## Rust Grade

5

## Coating System

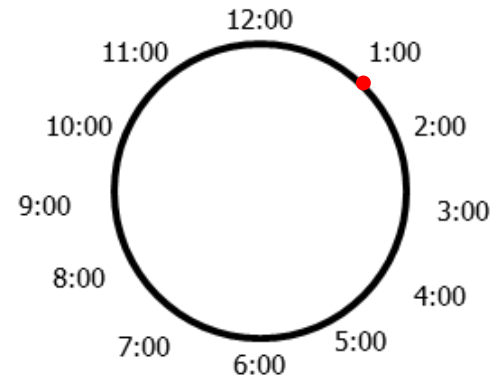
Appeared to be in good condition with spots of delamination and rust staining.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Inlet/Outlet

## Description

Appeared to be in good working condition with corrosion present.

## Corrosion Present

5%

## Rust Grade

5

## Coating System

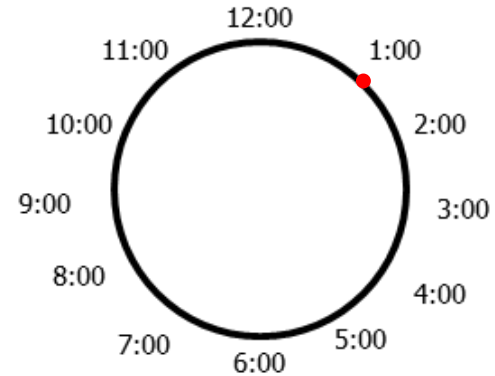
Appeared to be in good condition with spots of delamination and rust staining.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Inlet/Outlet

## Description

Appeared to be in good working condition with corrosion present.

## Corrosion Present

5%

## Rust Grade

5

## Coating System

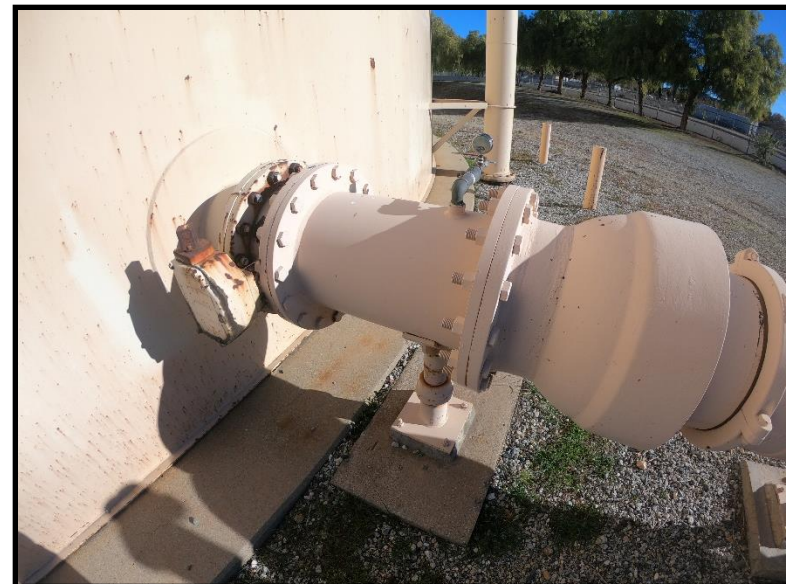
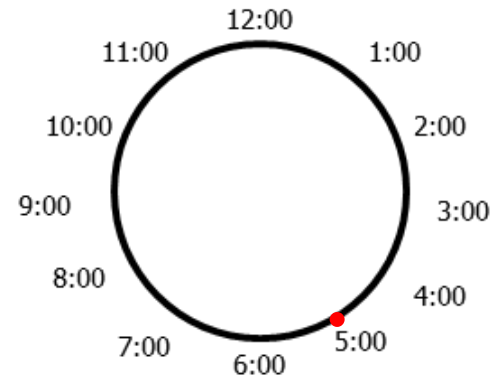
Appeared to be in good condition with spots of delamination and rust staining.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Inlet/Outlet

## Description

Appeared to be in good working condition with corrosion present.

## Corrosion Present

5%

## Rust Grade

5

## Coating System

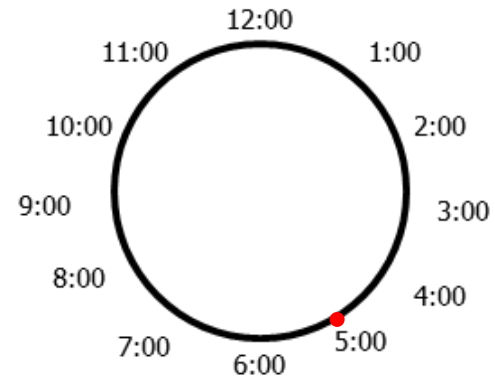
Appeared to be in good condition with spots of delamination and rust staining.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Drain

## Description

Appeared to be in good working condition with corrosion present.

## Corrosion Present

5%

## Rust Grade

5

## Coating System

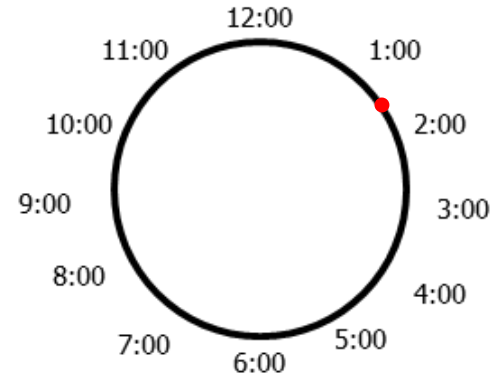
Appeared to be in good condition with spots of delamination and rust staining.

## Coating Failure

< 5%

## Recommendations

None at this time.





# Exterior Overflow

## Description

Appeared to be in good working condition with corrosion present.

## Corrosion Present

5%

## Rust Grade

5

## Coating System

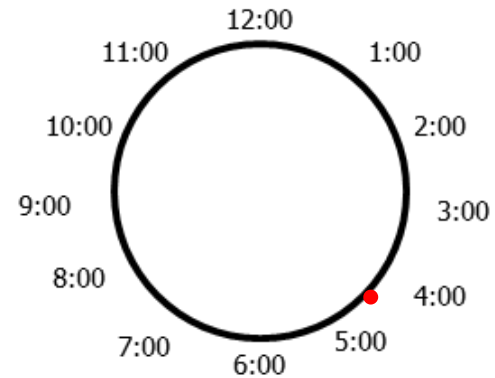
Appeared to be in good condition with spots of delamination and rust staining.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Overflow

## Description

Appeared to be in good working condition with corrosion present.

## Corrosion Present

5%

## Rust Grade

5

## Coating System

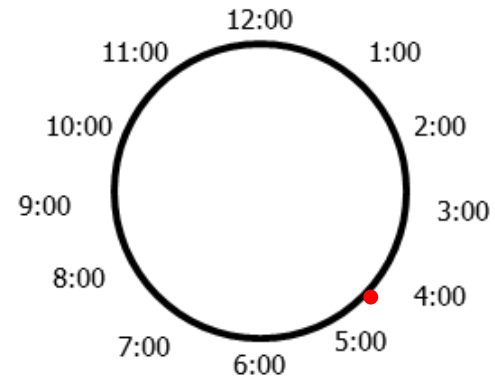
Appeared to be in good condition with spots of delamination and rust staining.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Manway

## Description

Appeared to be in good working condition with corrosion present.

## Corrosion Present

5%

## Rust Grade

5

## Coating System

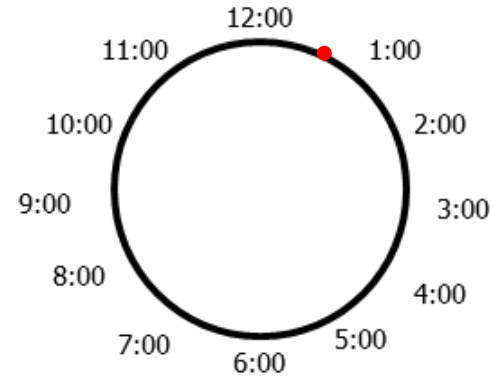
Appeared to be in good condition with spots of delamination and rust staining.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Manway

## Description

Appeared to be in good working condition with corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

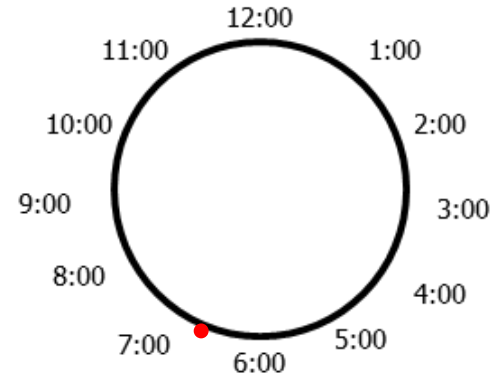
Appeared to be in good condition with spots of delamination and rust staining.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Ladder

## Description

Appeared to be structurally sound and in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

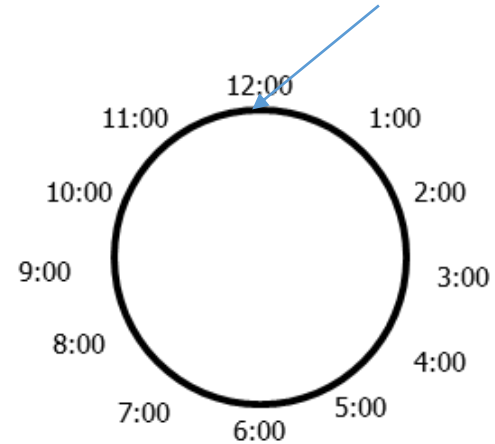
Appeared to be in good condition with no visible discrepancies.

## Coating Failure

0%

## Recommendations

None at this time.



# Exterior Ladder

## Description

Appeared to be structurally sound and in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

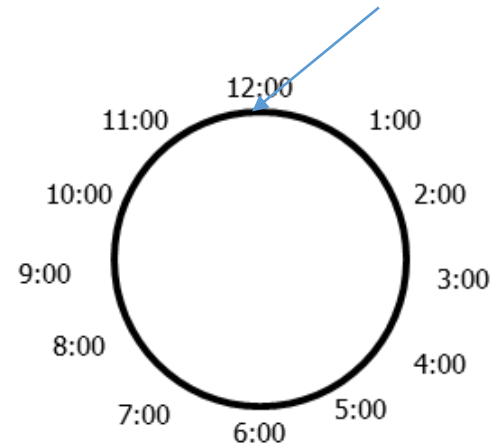
Appeared to be in good condition with no visible discrepancies.

## Coating Failure

0%

## Recommendations

None at this time.



# Exterior Safety Rail

## Description

Appeared to be structurally sound and in good condition with spots of surface corrosion present.

## Corrosion Present

5%

## Rust Grade

5

## Coating System

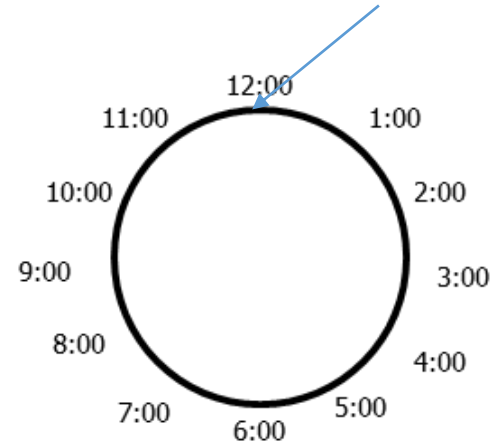
Appeared to be in good condition with spots of rust staining.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Hatch

## Description

Appeared to be in good condition with corrosion present.

## Corrosion Present

10%

## Rust Grade

4

## Coating System

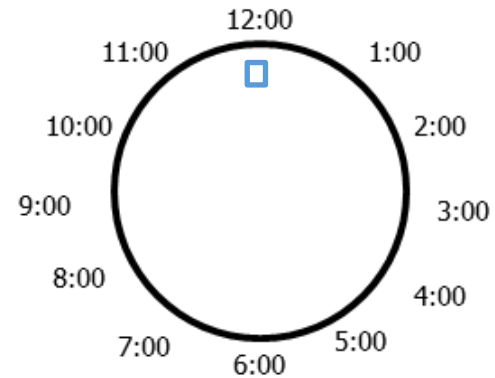
Appeared to be in good condition with rust staining present.

## Coating Failure

< 5%

## Recommendations

Install gasket to prevent insects/debris.





# Exterior Hatch Lid

## Description

Appeared to be in good working condition with corrosion present.

## Corrosion Present

10%

## Rust Grade

4

## Coating System

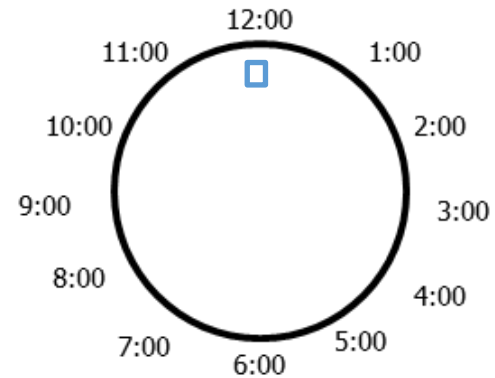
Appeared to be in good condition with delamination and rust staining present.

## Coating Failure

10%

## Recommendations

Install gasket to prevent insects/debris.



# Exterior Roof

## Description

Appeared to be in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

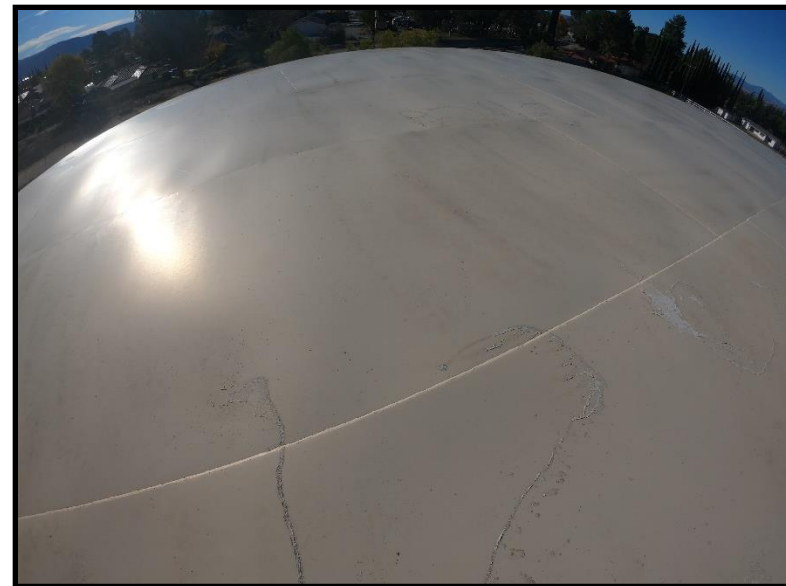
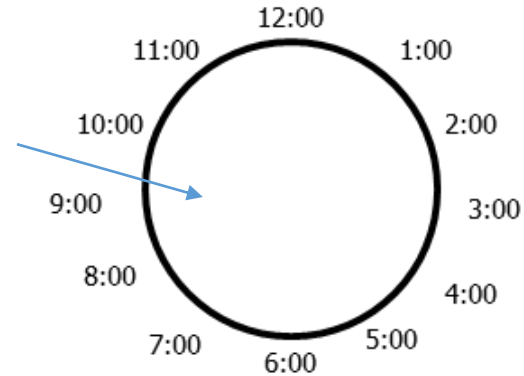
Appeared to be in good condition with signs of light staining.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Roof

## Description

Appeared to be in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

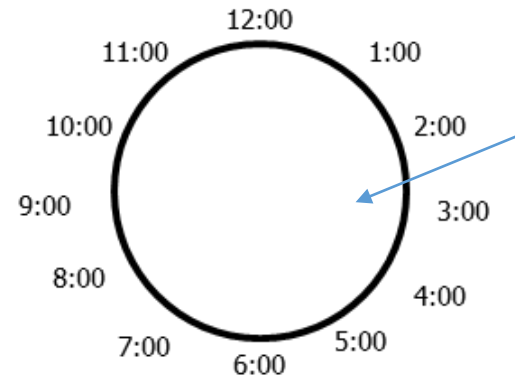
Appeared to be in good condition with signs of light staining.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Exterior Vent

## Description

Appeared to be in good working condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

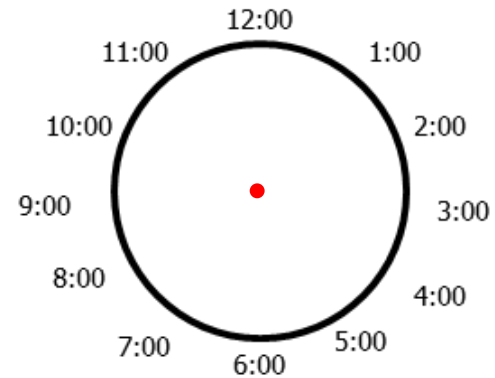
Appeared to be in good condition with no visible discrepancies.

## Coating Failure

0%

## Recommendations

None at this time.



# Exterior Vent Screen

## Description

Appeared to be fully intact and in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

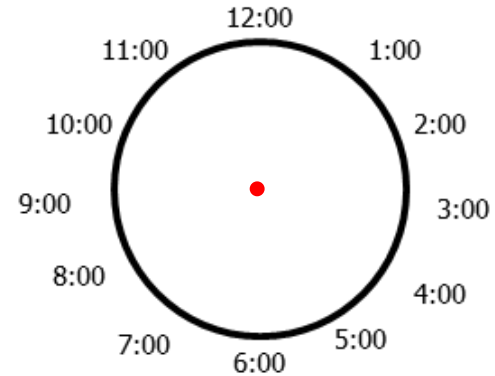
N/A

## Coating Failure

N/A

## Recommendations

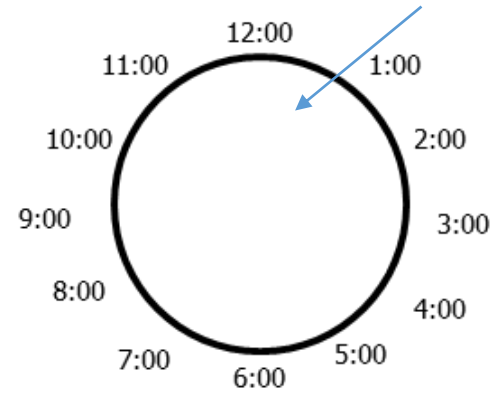
None at this time.



# Interior Sediment

## Description

¼" of sediment.



## Recommendations

None at this time.



# Interior Ladder

## Description

Appeared to be structurally sound and in good condition with light staining and no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

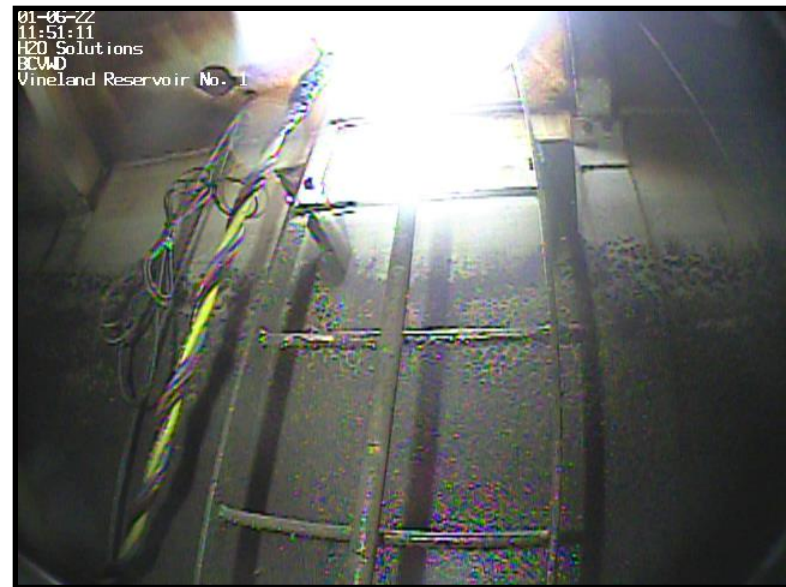
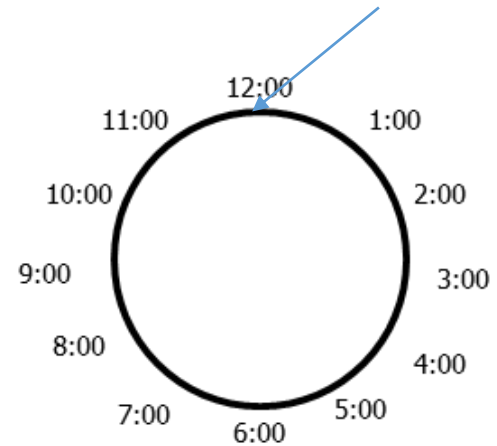
N/A

## Coating Failure

N/A

## Recommendations

None at this time.



# Interior Ladder

## Description

Appeared to be structurally sound and in good condition with light staining and no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

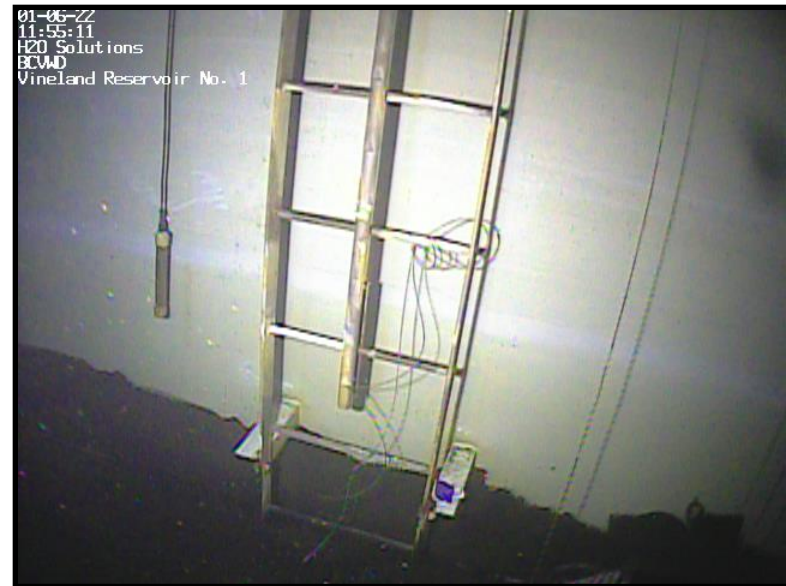
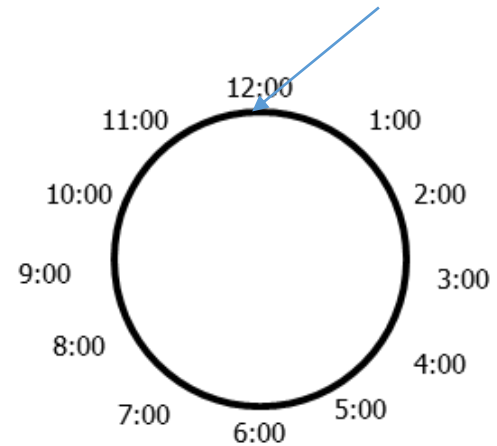
N/A

## Coating Failure

N/A

## Recommendations

None at this time.





# Interior Inlet/Outlet

## Description

Appeared to be in good working condition with minor corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

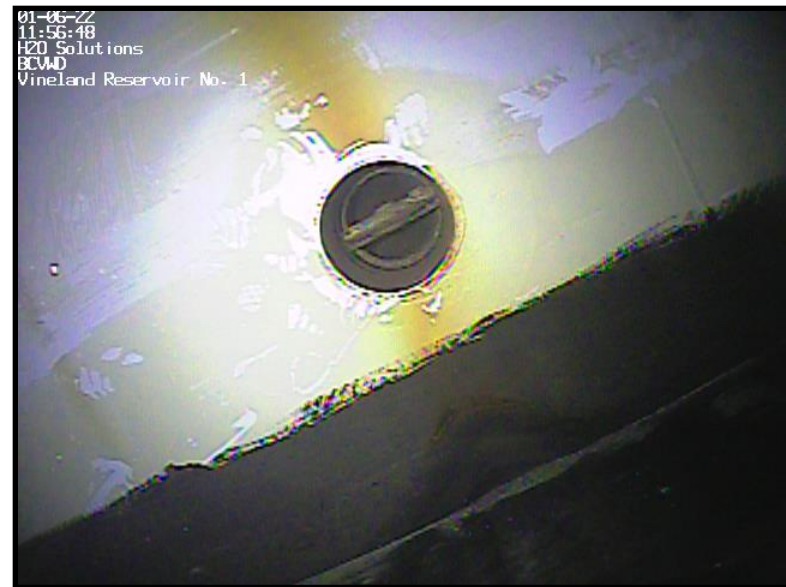
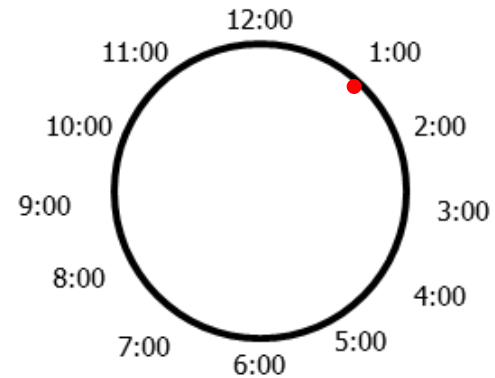
Appeared to be in good condition with staining present.

## Coating Failure

5%

## Recommendations

None at this time.



# Interior Inlet/Outlet

## Description

Appeared to be in good working condition with minor corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

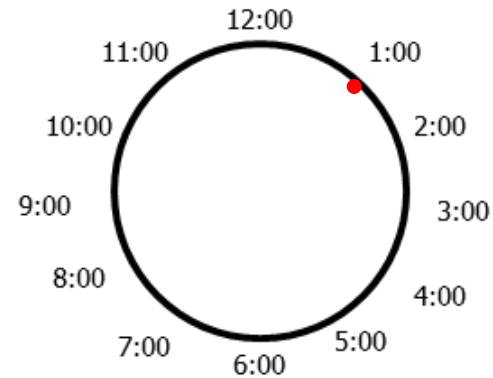
Appeared to be in good condition with staining present.

## Coating Failure

5%

## Recommendations

None at this time.



# Interior Inlet/Outlet

## Description

Appeared to be in good working condition with minor corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

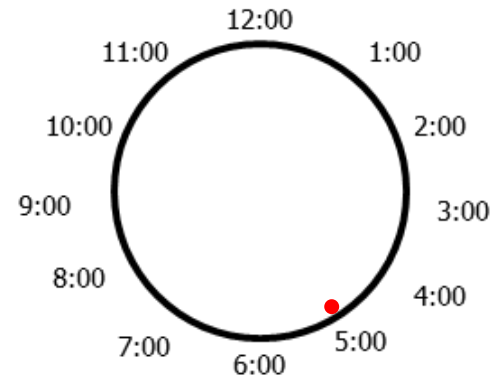
Appeared to be in good condition with staining present.

## Coating Failure

5%

## Recommendations

None at this time.



# Interior Inlet/Outlet

## Description

Appeared to be in good working condition with minor corrosion present.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

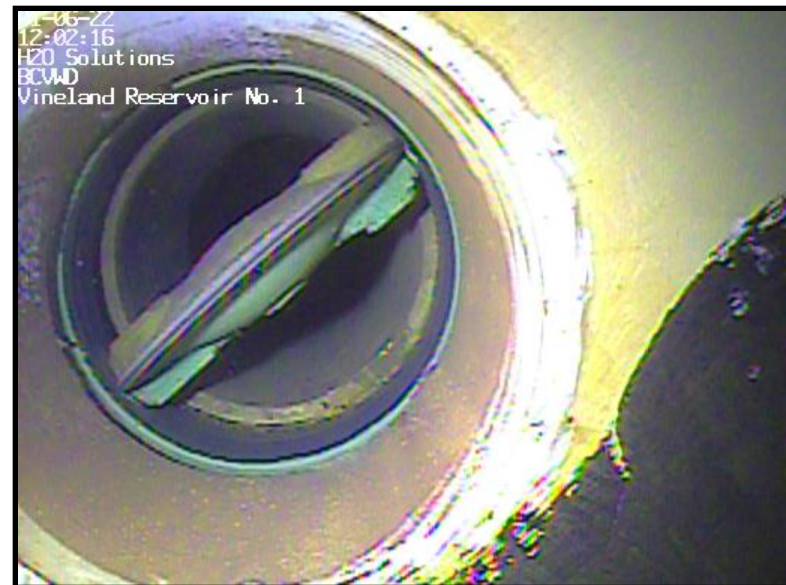
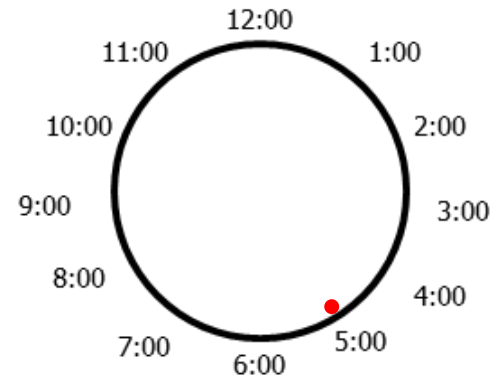
Appeared to be in good condition with staining present.

## Coating Failure

5%

## Recommendations

None at this time.



# Interior Drain

## Description

Appeared to be in good working condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

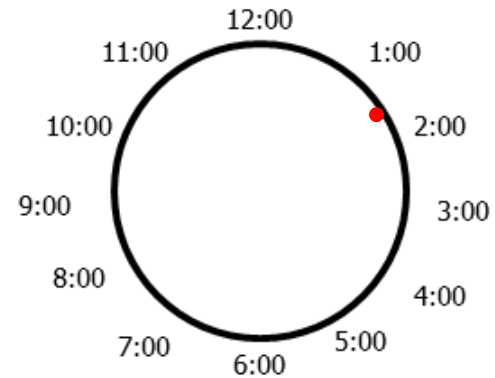
Appeared to be in good condition with staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Drain

## Description

Appeared to be in good working condition with a rip/tear in the screen and no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

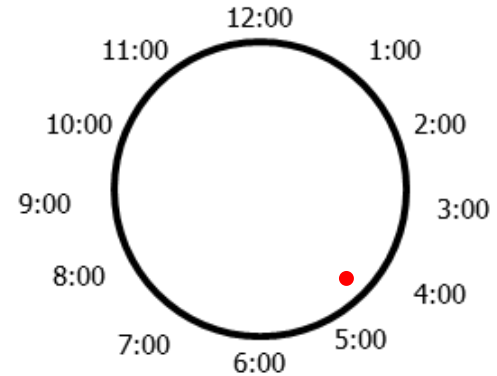
N/A

## Coating Failure

N/A

## Recommendations

None at this time.



# Interior Drain

## Description

Appeared to be in good working condition with a rip/tear in the screen and no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

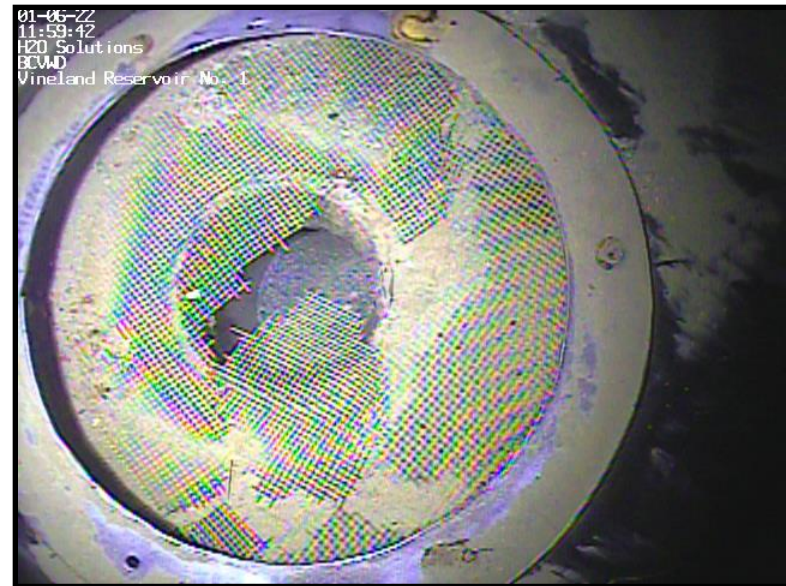
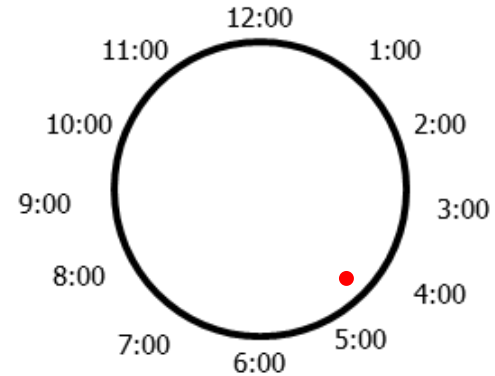
N/A

## Coating Failure

N/A

## Recommendations

None at this time.



# Interior Overflow

## Description

Appeared to be in good working condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

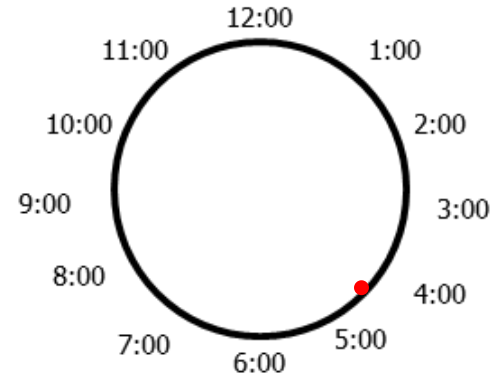
Appeared to be in good condition with heavy staining present.

## Coating Failure

5%

## Recommendations

None at this time.





# Interior Manway

## Description

Appeared to be in good working condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

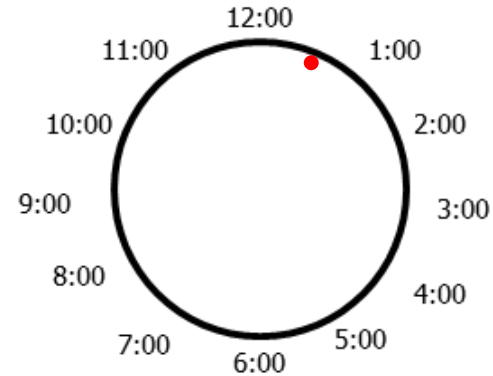
Appeared to be in good condition with staining and chalking.

## Coating Failure

5%

## Recommendations

None at this time.



# Interior Manway

## Description

Appeared to be in good working condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

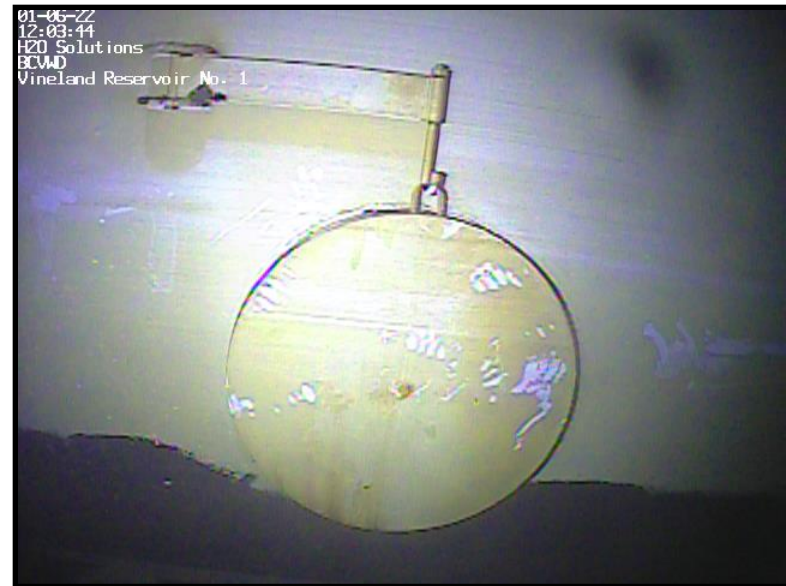
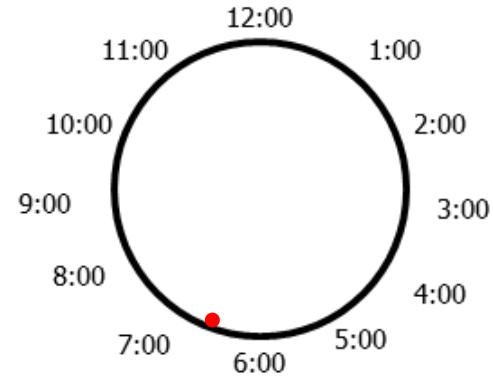
Appeared to be in good condition with staining and chalking.

## Coating Failure

5%

## Recommendations

None at this time.



# Interior Column Base

## Description

Appeared to be structurally sound and in good condition with spots of minor corrosion.

## Corrosion Present

< 5%

## Rust Grade

5

## Coating System

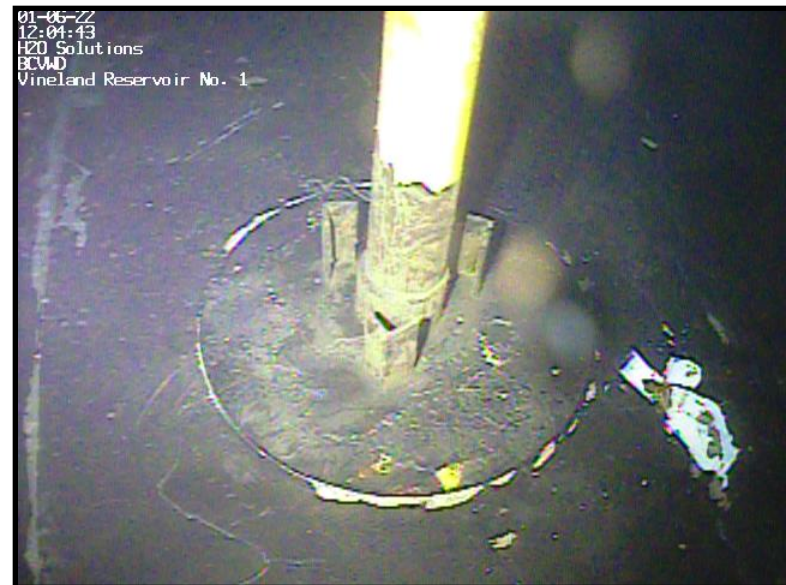
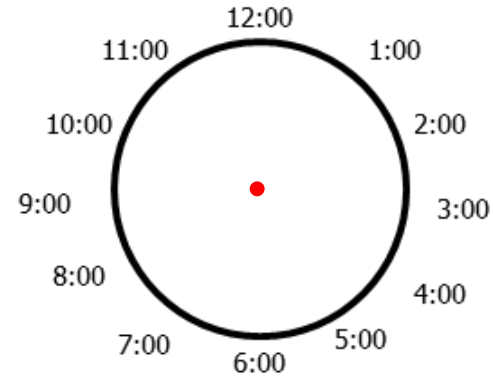
Appeared to be in good condition with staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Column

## Description

Appeared to be structurally sound and in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

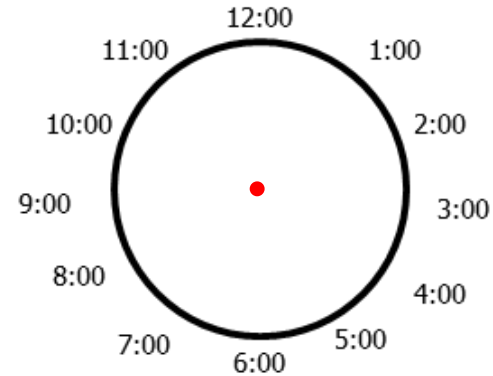
Appeared to be in good condition with staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Ceiling

## Description

Appeared to be in fair condition with surface corrosion present.

## Corrosion Present

15%

## Rust Grade

4

## Coating System

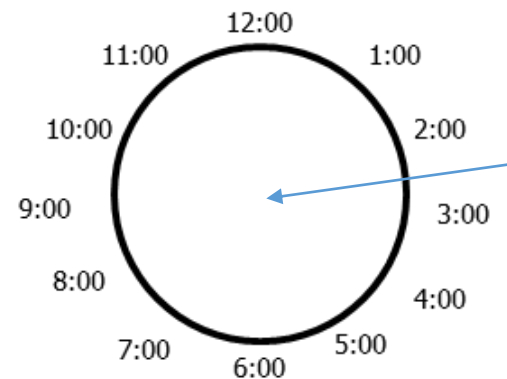
Appeared to be in fair condition with rust staining present.

## Coating Failure

15%

## Recommendations

None at this time.



# Interior Ceiling

## Description

Appeared to be in fair condition with surface corrosion present.

## Corrosion Present

15%

## Rust Grade

4

## Coating System

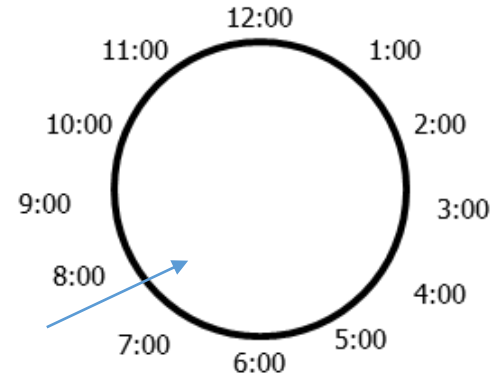
Appeared to be in fair condition with rust staining present.

## Coating Failure

15%

## Recommendations

None at this time.



# Interior Ceiling

## Description

Appeared to be in fair condition with surface corrosion present.

## Corrosion Present

15%

## Rust Grade

4

## Coating System

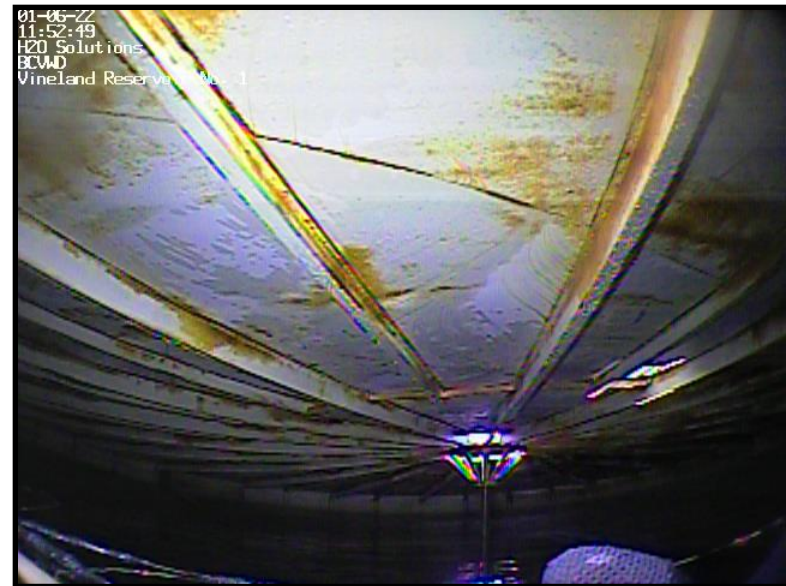
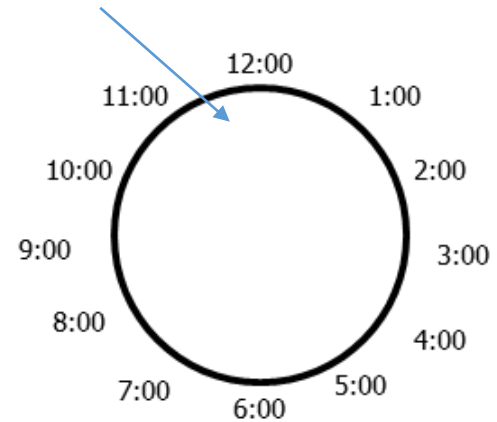
Appeared to be in fair condition with rust staining present.

## Coating Failure

15%

## Recommendations

None at this time.



# Interior Wall

## Description

Appeared to be in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

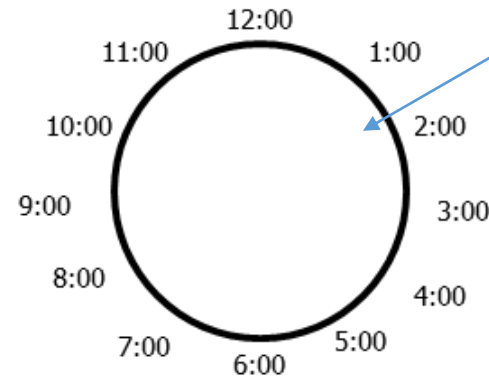
Appeared to be in good condition with staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.





# Interior Wall

## Description

Appeared to be in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

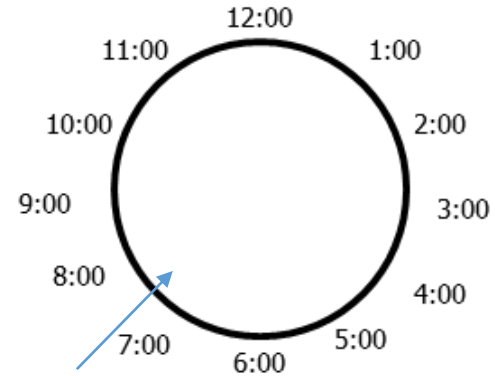
Appeared to be in good condition with staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Wall

## Description

Appeared to be in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

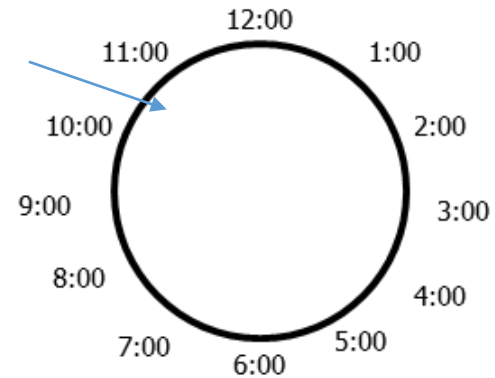
Appeared to be in good condition with staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Floor

## Description

Appeared to be in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

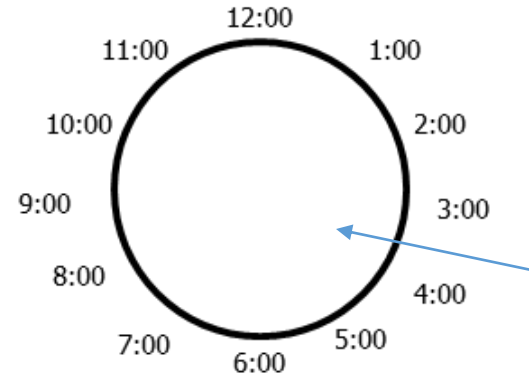
Appeared to be in good condition with areas of staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Floor

## Description

Appeared to be in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

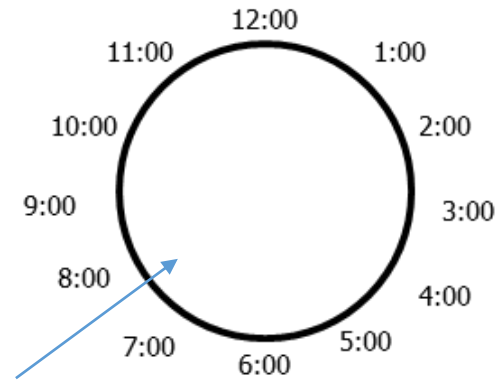
Appeared to be in good condition with areas of staining present.

## Coating Failure

< 5%

## Recommendations

None at this time.



# Interior Floor

## Description

Appeared to be in good condition with no visible signs of corrosion.

## Corrosion Present

0%

## Rust Grade

10

## Coating System

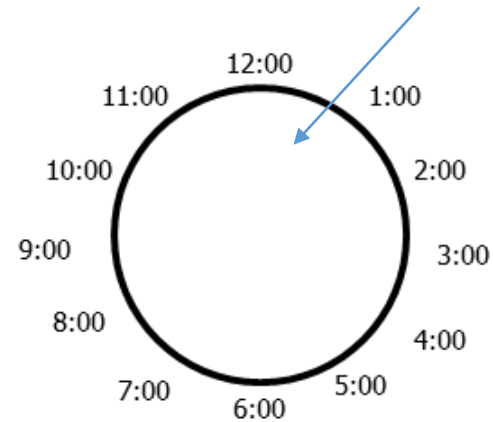
Appeared to be in good condition with areas of staining present.

## Coating Failure

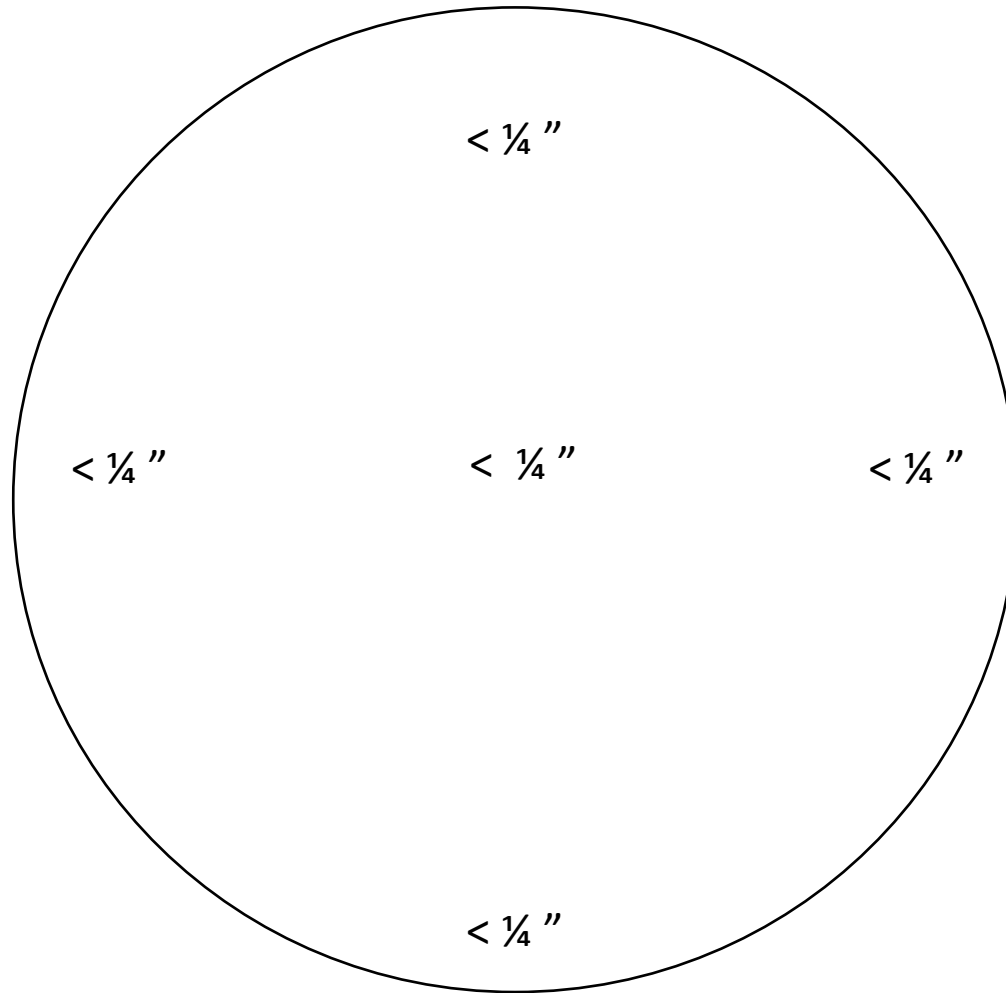
< 5%

## Recommendations

None at this time.



# Sediment Depth






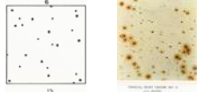





# References

## Standard Method of Evaluating Degree of Rusting on Painted Steel Surfaces – SSPC-Vis 2-82 & ASTM D 610-85 (1989)

The graphical representations show examples of area percentages, which may be helpful in rust grading. The use of photographic reference standards requires the following precautions:

- ❖ Some finishes are stained by rust. This staining must not be confused with the actual rusting involved.
- ❖ Accumulated dirt or other material may make accurate determination of the degree of rusting difficult.
- ❖ Certain types of deposited dirt that contain iron or iron compounds may cause surface discoloration that should not be mistaken for corrosion.
- ❖ It must be realized that failure may vary over a given area and discretion must therefore be used in applying these reference standards.
- ❖ In evaluating surfaces, consideration shall be given to the color of the finish coating, since failures will be more apparent on a finish that shows color contrast with rust, such as white, than on a similar color, such as iron oxide finish.
- ❖ The photographic reference standards are not required for use of the rust-grade scale since the scale is based upon the percent of the area rusted and any method of assessing area rusted may be used to determine the rust grade.

A	Similar to European Scale of Degree of rusting for Anti-Corrosive Paints (1961) (Black & White)
B	Corresponds to SSPC Initial Surface Conditions E (0 - 0.1%) and BISRA (British Iron and Steel Research Association) 0.1%
C	Corresponds to SSPC Initial Surface Conditions F (0.1%-1%) and BISRA 1%
D	Corresponds to SSPC Initial Surface Conditions G (1 - 10%)
E	Rust grades below 4 are of no practical importance in grading performance of paints
F	Corresponds to SSPC Initial Surface Condition H (50 - 100%)

Rust Grades A	Description	Graphical Representation
10	No rusting or less than 0.01% of surface rusted	Unnecessary
9	Minute rusting less than 0.03% of surface rusted	
8B	Few isolated rust spots less than 0.1% of surface rusted	
7	Less than 0.3% of surface rusted	
6C	Extensive rust spots but less than 1% of surface rusted	
5	Rusting to the extent of 3% of surface rusted	
4D	Rusting to the extent of 10% of surface rusted	
3E	Approximately one sixth of the surface rusted 16%	
2	Approximately one third of the surface rusted 33%	
1	Approximately one half of the surface rusted 50%	

INSPECTION REPORT

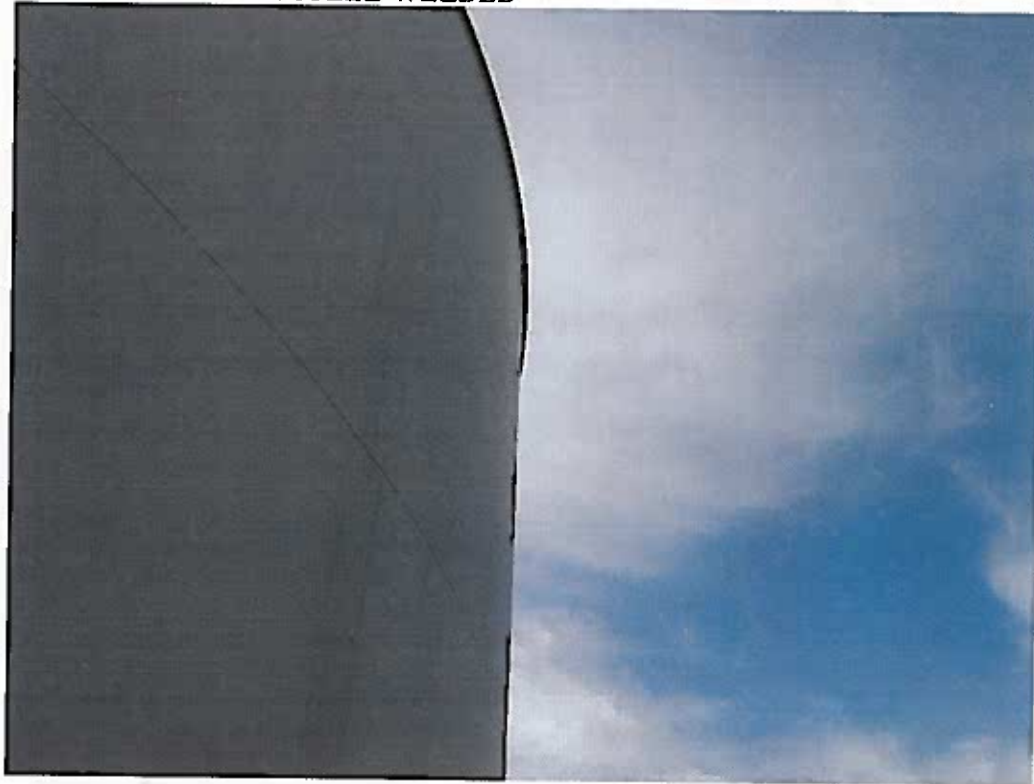
June 2, 2020

**Beaumont-Cherry Valley Water District**  
560 Magnolia Avenue  
Beaumont, CA 92223

# DIVER INSPECTION REPORT

## Lower Edgar

1 MG ON-GRADE STEEL-WELDED



Les, 7/9/2020, 3:02:51 PM

Summary of Contents:

- Written Report with Recommendations
- Repair Cost Estimates
- Diver Inspection DVD
- Photo CD



2948 E Badger Way, New Harmony UT 84757 1-866-237-3483



# INSPECTION REPORT

## Lower Edgar 1,000,000 Gallon On-Grade Steel-Welded

Dimensions: 70' Dia. x 36'H  
Inspection Date: 06-02-2020

### Section A-1: General

An inspection and cleaning of the ground level water tank was conducted by Advanced Diving Services Inc. on according to contract number BCVWD-S-2020-001

The inspection was conducted by certified dive personnel. A DVD is included with this report to provide video documentation of the inspection and cleaning work completed.

### **Sec. A-1.1 Scope**

Every steel water storage tank, standpipe, or reservoir should be carefully inspected prior to repair and/or repainting and at any time when leakage or some other apparent deterioration is observed. In any event, **all water tanks should be thoroughly inspected at intervals of not more than five years** (*American Water Works Association*, M42 1998, p 132).

### **Sec. A-1.2 Inspection Service**

*Advanced Diving Services Incorporated (ADS)* began commercially inspecting water storage tanks in April, 2000. ADS is certified in Commercial Diving, Offshore Safety & Survival, Red Cross CPR and First Aid, Hazardous Materials Incident, Response Operations, YMCA Advanced Scuba, Liquid Penetrant - Levels I & II, Magnetic Particle - Levels I & II, Ultrasonic - Levels I & II, Rope Access Technician - Level I, Chevron Riggers Endorsement and Nuclear Quality Assurance.

ADS adhere to American Water Works Association standards for inspecting and repairing water tanks, AWWA D101-53. All Dive Maintenance Technicians and associated in-tank equipment are fully disinfected according to AWWA Standard C652-92 before entering potable water. All ADS operations pertaining to Diving and Confined Space, conducted on your system are in compliance with all applicable OSHA, AWWA, and ADCI standards, procedures, and regulations (including 1910.401 thru 1910.441). All inspection personnel are fully qualified commercial dive maintenance technicians certified in ASNT Non-Destructive testing. All of our repair, sealing and coating materials meet or exceed NSF 60 & 61 standards.

### **Sec. A-1.3 Responsibility**

*Advanced Diving Services (ADS)*, is fully licensed and insured to provide commercial diving services. ADS carries property damage and liability insurance with a combined single limit per occurrence of \$2,000,000, aggregate \$2,000,000. ADS reasonably protect the tank/reservoir owner/agent against claims arising out of the inspection or cleaning work we provide.

### **Sec. A-1.4 Draining of Tank**

During inspection and or cleaning, reservoir water levels must be kept at or near full capacity unless noted otherwise. On the date of inspection water level was near full capacity.

### **Sec. A-1.5 Work Included**

Inspections include field examination of the tank exterior and a full color video report of the tank interior conducted by certified dive personnel. Inspection work does not include repairs, except that, if vent screens, cotter pins or nut pins are found to be missing, they may be replaced at once, or reported promptly to the tank/reservoir owner/agent for replacement.

## **Section A-2:** **Executive Report Summary**

### **Sec. A-2.1 Condition of Paint**

#### *Exterior Paint*

Cross-cut tape test results were 1B with 35% to 65% loss of paint adhesion. This indicates that the coating is reaching the end of its lifecycle. **Recommend recoating tank exterior.**

#### *Interior Walls*

Rust nodules can be found on weld seams and encircling the tank near the floor (see pictures #16-18,23-25). Cracking and delamination is present near waterline. **Recommend recoating interior of tank.**

#### *Central Support Column*

There are rust nodules on column base and column. The column has extensive delamination, but is still structurally sound (see pictures #29-31). **Recommend recoating.**

#### *Interior Ceiling*

Roof is no longer structurally sound due to detached rafters from bracket corrosion and subsident failure. There is extensive delamination, and coating failure (see pictures #13,30-34). **Recommend replacing broken rafters/brackets to ensure structural integrity and recoat ceiling.**

#### *Tank Floor*

Floor has nodules in weld seams, staining, and areas of coating failure (see pictures #21,23-26).

### **Sec. A-2.2 Pitting**

No pitting was observed. Pitting may be found under rust nodules located on floor, walls, ceiling and interior plumbing.

### **Sec. A-2.3 General Tank Condition**

#### *Sanitary/Security Survey*

No perimeter fence is present. **Recommend installing perimeter fence to prevent unauthorized access.**

#### *Access Hatch*

Hatch is in fair condition. **Recommend replacing gasket to meet Cal Code 22, § 64585.**

#### *Vents and Screens*

The roof vent is in good condition. **Screens need to be replaced.**

#### *Exterior Ladder*

Ladder is in good condition. **Recommend replacing cage with fall prevention cable as per new OSHA regulations see page 22.**

#### *Interior Ladder*

Ladder rungs, safety climb, and brackets have nodules and coating failure (see pictures #13-15). **Recommend removing corroded safety climb rail apparatus.**

#### *Overflow*

External overflow is in good condition, while the interior pipe is in fair condition.

#### *Interior Plumbing*

The interior plumbing is in fair condition, with stains and nodules (see pictures #23-25,28).

#### *Manways*

Manways and gaskets are in fair condition. Coat is runny on seal, and nodules are on the face and hardware (see pictures #21-22,26-27).

#### *Float*

The floor guidewire attachment has heavy corrosion. Float was repaired following inspection (see pictures #17,35).

#### *Water Condition*

Water visibility was good with only light particulates, and no oil was found on the surface.

#### *OSHA Safety*

**Recommend installing OSHA confined space entry placards at reservoir access/entry.**

#### *Sediment*

Average sediment was 1/16".

#### *Sediment and Paint Sample Lab Analysis*

A sample of sediment suspended in water was collected from the reservoir floor by divers, as well as interior and exterior paint samples, and were sent to Babcock Labs in Riverside, California. Test results showed lead content above acceptable EPA MCL standards for drinking water (see page 20-21 for details).

**Lead mitigation is an immediate concern.**

#### *Ultrasonic Material Test Results pg. 10, 16-17*

### **Sec. A-2.4 Repair Work Performed**

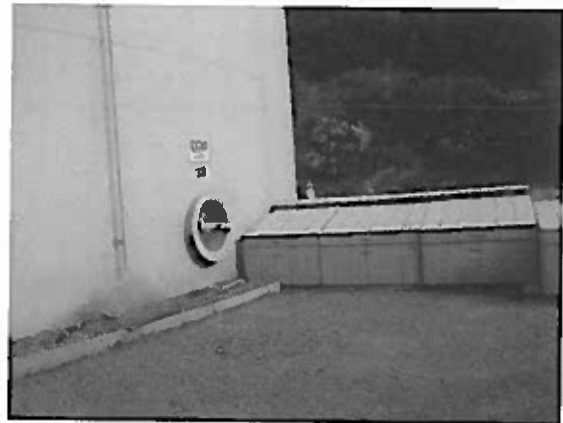
Cleaning/removal of sediment and loose floor debris were performed. Water float was repaired following inspection

### **Sec. A-2.5 Recommendations**

See page 21 for a complete list of recommendations.



**(#1) Pump House**



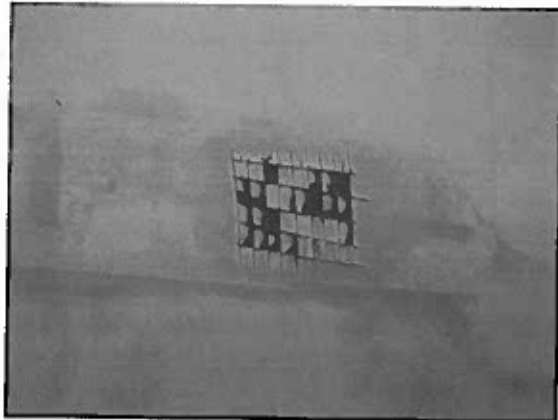
**(#4) Manway 1 and Vault Boxes**



**(#2) Foundation**



**(#5) External Plumbing**



**(#3) Cross Cut Tape Test**



**(#6) External Plumbing**



**(#7) External Plumbing**



**(#10) Exterior Ladder**



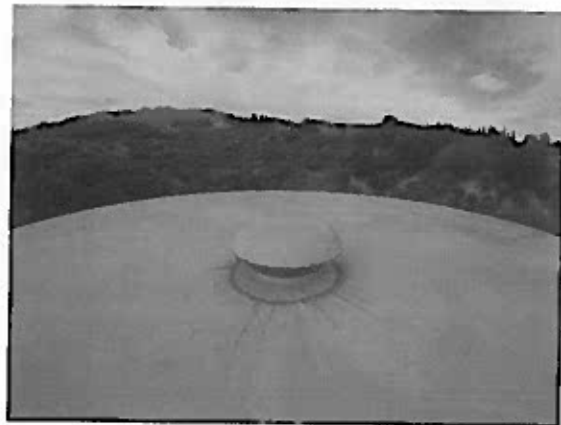
**(#8) Manway 2**



**(#11) Roof Access Guardrail**



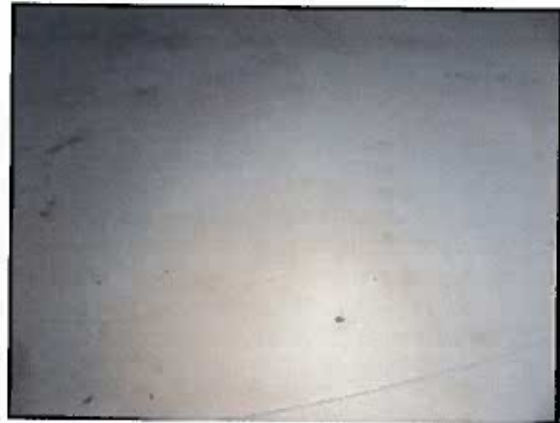
**(#9) Storyboard**



**(#12) Roof**



**(#13) Hatch interior**



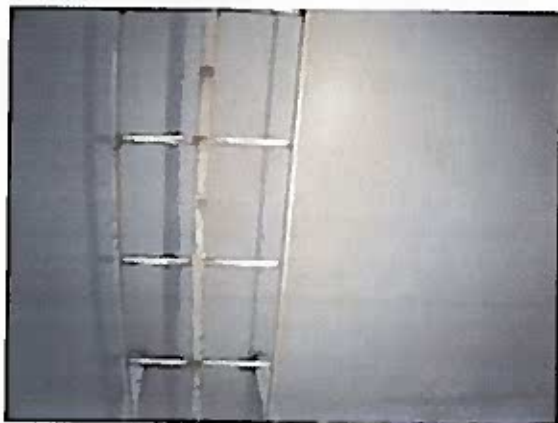
**(#16) Floor**



**(#14) Interior Ladder Safety Climb**



**(#17) Float Guidewires**



**(#15) Interior Ladder Base**



**(#18) Floor Wall Seam**



**(#19) Wall Horizontal Weld Seam**



**(#22) Manway 1 Seal**



**(#20) Wall Rust Nodules**



**(#23) Drain**



**(#21) Manway 1**



**(#24) Plumbing 2**



(#25) Plumbing 3 and 4



(#28) Plumbing 5



(#26) Manway 2



(#29) Center Column Base



(#27) Manway 2 Seal



(#30) Center Column



**(#31) Center Column Top**



**(#34) Ceiling 9 O'clock**



**(#32) Ceiling 1 O'clock**



**(#35) Float Repair**



**(#33) Ceiling 6 O'clock**



**(#36) Sediment Removal**





(#37) UT Readings Floor Quadrant 1



(#40) UT Readings Wall Quadrant 1



(#38) UT Readings Floor Quadrant 2



(#41) UT Readings Wall Quadrant 4

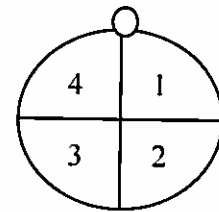


(#39) UT Readings Wall Course 2 Quadrant 4



(#42) UT Readings Wall Course 3 Quadrant 4

Tank Quadrants:  
 Access Hatch O = Origin  
 Q1 12:00-3:00  
 Q2 3:00-6:00  
 Q3 6:00-9:00  
 Q4 9:00-12:00



**Section A-3: Detailed Report of Inspection**

**INSPECTION AND RESERVOIR DATA**

<b>Customer Name:</b>	Beaumont-Cherry Valley Water	<b>Reservoir Name:</b>	Lower Edgar
<b>Contact Person:</b>	District	<b>Location:</b>	Beaumont, CA
<b>Contact Phone:</b>	James Bean	<b>Type:</b>	On-Grade
<b>Job Number:</b>	(951) 845-0159	<b>Material:</b>	Steel-Welded
<b>Inspection Date:</b>	Proposal BCVWD-S-2020-001	<b>Capacity:</b>	1 MG
<b>Dive Supervisor:</b>	06/02/2020	<b>Diameter:</b>	70'
<b>Diver:</b>	Jim Nilsson	<b>Height:</b>	36'
<b>Tender:</b>	Kelly Allen	<b>Floor S.F.:</b>	
<b>Last Inspection:</b>	Eduardo Barnett	<b>Built By:</b>	
<b>Last Cleaned By:</b>	n/a	<b>Built Date:</b>	1973
	n/a	<b>Courses</b>	4

**A-3.2 TANK EXTERIOR**

**Key: N/A-** Not Applicable, **Excellent (EX)-** like new condition, no repairs needed. **Good-** Cosmetic problems only, repair if wanted. **Fair-** Minor problems, repairs needed, not immediate. **Poor-** major problems, structural or like, immediate repairs needed.

Reservoir Exterior	Condition					Pictures #s	Comments
	NA	Ex	Good	Fair	Poor		
Site Security							
Protective Fence	X						Install fence
Lock on Gate/Ladder			X				
Out Building(s)			X				Pump House
Exterior Ladder			X				Remove cage install rail/cable
<b>Foundation</b>							
Concrete			X				
Anchor Bolts	X						
Column Shoes	X						
Tower Posts	X						
Cotter Pins	X						
Riser Pipe	X						
Vertical Condition	X						
Stay Rods	X						

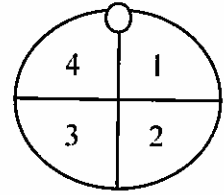
Continued

**TANK EXTERIOR (Continued)**

Key: N/A- Not Applicable, Excellent (EX)- like new condition, no repairs needed. Good- Cosmetic problems only, repair if wanted. Fair- Minor problems, repairs needed, not immediate. Poor- major problems, structural or like, immediate repairs needed.

Reservoir Exterior Component	Condition					Pictures #'s	Comments
	NA	Ex	Good	Fair	Poor		
Indications of Leakage		X					
Riser Pipe	X						
Expansion joints	X						
Balcony	X						
Balcony Floor	X						
<b>Reservoir Exterior</b>							
Course 1				X			
Course 2				X			
Course 3				X			
Course 4				X			
<b>Exterior Roof</b>							
Quadrant 1			X				
Quadrant 2			X				
Quadrant 3			X				
Quadrant 4			X				
<b>Vents (1)</b>							
Roof Vents			X				
Side Vents	X						
Vent Screen(s)				X			Install secondary screen
Telemetry	X						
Liquid Level Indicator			X				
<b>Manway Access</b>							
Manway 1			X				
Manway 2			X				
Antenna			X				
Access Hatch				X			Replace gasket
<b>Plumbing</b>							
Inlet			X				
Overflow			X				
Other			X				
<b>Exterior Paint Condition</b>							
Tank Sides				X			
Tank Roof			X				Staining around vent
<b>Overall Ext. Condition</b>			X				

Tank Quadrants:  
 Access Hatch O = Origin  
 Q1 12:00-3:00  
 Q2 3:00-6:00  
 Q3 6:00-9:00  
 Q4 9:00-12:00



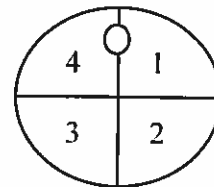
**A-3.3 TANK INTERIOR**

**Key:** N/A- Not Applicable, **Excellent (EX)**- like new condition, no repairs needed. **Good**- Cosmetic problems only, repair if wanted. **Fair**- Minor problems, repairs needed, not immediate. **Poor**- major problems, structural or like, immediate repairs needed.

Reservoir Interior Component	Condition					Pictures #s	Comments
	NA	Ex	Good	Fair	Poor		
<b>Access</b>							
Ladder					X	13-15	Rust nodules, delamination,
Access Hatch (1)			X				Replace gasket
<b>Plumbing</b>							
Inlet				X			Staining, rust nodules
Outlet				X			Staining, rust nodules
Overflow				X			Staining, rust nodules
Other				X			Staining, rust nodules
Drain				X		23	Staining, rust nodules
<b>Columns</b>							
Center Support Column					X	29-31	Delamination, coating fail,
Satellite Columns	X						
<b>Manway Access</b>							
Manway 1				X		21,22	Staining, rust nodules
Manway 2				X		26,27	Staining, rust nodules
<b>Water Float</b>				X		17,35	Corrosion, Float repaired
<b>Cathodic Protection</b>							
Assembly	X						
Float	X						
Anodes	X						
<b>Telemetry</b>	X						
<b>Ceiling</b>							
Quadrant 1					X	13,30-33	Broken rafters, delamination
Quadrant 2					X	30,31,33	Delamination
Quadrant 3					X	30,31,33,34	
Quadrant 4					X	30,31,33,34	
<b>Floor</b>							
Quadrant 1				X		17	Coating Failure
Quadrant 2				X			Coating Failure
Quadrant 3				X		23	Coating Failure
Quadrant 4				X		24,25	Coating Failure

(Continued)

Tank Quadrants:  
 Access Hatch O = Origin  
 Q1 12:00-3:00  
 Q2 3:00-6:00  
 Q3 6:00-9:00  
 Q4 9:00-12:00



TANK INTERIOR (continued)

**Key: N/A- Not Applicable, Excellent (EX)- like new condition, no repairs needed. Good- Cosmetic problems only, repair if wanted. Fair- Minor problems, repairs needed, not immediate. Poor- major problems, structural or like, immediate repairs needed.**

Reservoir Interior Componet	Condition					Pictures #s	Comments
	NA	Ex	Good	Fair	Poor		
<b>Wall</b>							
<b>Quadrant 1</b>							
Course 1 (Lowest)					X	18	Staining, rust nodules
Course 2					X	19,20	Staining, coating failure
Course 3				X			Staining, rust nodules
Course 4					X	13,32,35	Staining, coating failure
<b>Quadrant 2</b>							
Course 1 (Lowest)					X	18,21	Staining, rust nodules
Course 2				X			Staining
Course 3				X			Staining
Course 4					X	34	Staining, coating failure
<b>Quadrant 3</b>							
Course 1 (Lowest)					X		Staining, rust nodules
Course 2				X			Staining
Course 3				X			Staining
Course 4					X		Staining, coating failure
<b>Quadrant 4</b>							
Course 1 (Lowest)					X	26,28	Staining, rust nodules
Course 2				X			Staining
Course 3				X			Staining
Course 4					X	34	Staining, coating failure
<b>Sediment</b>							Compacted silt and debris
Quadrant 1			X				1/16", 1/16"
Quadrant 2			X				1/16", 1/16"
Quadrant 3			X				1/16", 1/16"
Quadrant 4			X				1/16", 1/16"
<b>Water Condition</b>			X				No oil on surface
Particulates		X					Light
Visibility			X				Good
Temperature			X				Cold
<b>Overall Interior Condition</b>					X		

## A-3.4 Tank Technical Testing

### Dry-Film Thickness

Dry-film thickness (DFT) is the thickness of a coating after it has cured. DFT measurements on the tank were taken. DFT measurements are recorded using a PosiTest Model FM Coating Thickness Gage developed for the non-destructive measurement of non-magnetic coatings on ferrous surfaces. The PosiTest® FM Coating Thickness Gage is a magnetic pull-off thickness gage. Testing with magnetic gages is sensitive to surface roughness, curvature, substrate thickness, and the make-up of the metal alloy. Typical tolerance is  $\pm 5\%$ .

*Advanced Diving Services* employs this test method to allow us to test both interior and exterior tank surfaces.

The readings were taken from various spots of the tank exterior.

DFT readings were as follows:

#### Sidewall DFT Results

EXTERIOR DRY FILM THICKNESS IN MILS				
DFT Reading	Quadrant #1	Quadrant #2	Quadrant #3	Quadrant #4
1	10	8	9	9
2	10	11	10	9
3	11	9	10	11
Minimum	10	8	9	9
Maximum	11	11	10	11
Average	10.3	9.3	9.7	9.7
Average of 12 readings = 9.75 mils				

#### Ceiling DFT Results

EXTERIOR DRY FILM THICKNESS IN MILS				
DFT Reading	Quadrant #1	Quadrant #2	Quadrant #3	Quadrant #4
1	6	4	4	4
2	4	4.5	4.5	3.5
3	3.5	5	5	3
Minimum	3.5	4	4	3
Maximum	6	5	5	4
Average	4.5	4.5	4.5	3.5
Average of 12 readings = 4.25 mils				

### Cross-Cut Tape Test

ADS conducted an ASTM D-3359 coating adhesion and flexibility test on the exterior of the water tank.

**Cross-cut tape test result: 1B 35% to 65%**

Classification of Results		Surface of crosscut area (six each horizontal and vertical parallel cuts) where flaking has occurred; adhesion range by percent.
5B	0% None	
4B	Less than 5%	
3B	5% to 15%	
2B	15% to 35%	
1B	35% to 65%	
0B	Greater than 65%	

\*For illustration purposes only.

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# Ultrasonic Testing INSPECTION REPORT

June 2, 2020

Advanced Diving Services Incorporated employs a Cygnus Instruments Dive, digital ultrasonic multiple-echo thickness gauge to provide accurate measurement(s) of metal thickness.



The gauge was last calibrated by *Cygnus* on XXXX. *Cygnus Instruments* declares accuracy of 0.1 mm when calibrated in accordance with *Cygnus Instruments* calibration procedures.

UT Readings were requested with this inspection:

## Ultrasonic Testing Field Data

### Floor

ULTRASONIC TESTING THICKNESS IN MILS				
Probe Type 2.25 MHz 13mm				
UT Reading	Quadrant #1	Quadrant #2	Quadrant #3	Quadrant #4
1	0.250	0.245	0.245	0.260
2	0.250	0.240	0.240	0.210
3	0.265	0.250	0.250	0.250
4	0.265	0.250	0.250	0.250
5	0.260	0.320	0.245	0.250
6	0.260	0.315	0.250	0.250
7	0.245	0.320	0.245	0.250
8	0.255	0.255	0.260	0.245
9	0.255	0.255	0.325	0.250
10	0.335	0.255	0.325	0.245
Minimum	0.245	0.240	0.240	0.210
Maximum	0.335	0.320	0.325	0.260
Average	0.264	0.271	0.264	0.246

Average of 40 readings = 0.261 mils

### Sidewalls

ULTRASONIC TESTING THICKNESS IN MILS				
Probe Type 2.25 MHz 13mm				
UT Reading	Quadrant #1	Quadrant #2	Quadrant #3	Quadrant #4
1	0.325	0.345	0.330	0.325
2	0.315	0.340	0.325	0.330
3	0.325	0.340	0.330	0.315
4	0.325	0.345	0.315	0.330
5	0.330	0.340	0.330	0.330
6	0.320	0.395	0.320	0.330
7	0.325	0.325	0.325	0.330
8	0.325	0.320	0.320	0.330
9	0.320	0.330	0.325	0.320
10	0.325	0.325	0.330	0.325
Minimum	0.315	0.320	0.315	0.315
Maximum	0.330	0.395	0.330	0.330
Average	0.324	0.341	0.325	0.327

Average of 40 readings = 0.329 mils

### Ladder Sidewall

ULTRASONIC TESTING THICKNESS IN MILS				
Probe Type 2.25 MHz 13mm				
UT Reading	Quadrant #4	Quadrant #1	Average	Difference
1	0.240	0.250	0.245	-0.010
2	0.245	0.250	0.248	-0.005
3	0.255	0.240	0.248	0.015
4	0.245	0.255	0.250	-0.010
5	0.250	0.250	0.250	0.000
6	0.245	0.245	0.245	0.000
7	0.235	0.275	0.255	-0.040
8	0.275	0.275	0.275	0.000
Minimum	0.235	0.240		
Maximum	0.275	0.275		
Average	0.199	0.204		

Average of 16 readings = 0.252 mils

**Roof**

ULTRASONIC TESTING THICKNESS IN MILS				
Probe Type 2.25 MHz 13mm				
UT Reading	Quadrant #1	Quadrant #2	Quadrant #3	Quadrant #4
1	0.130	0.180	0.180	0.180
2	0.250	0.175	0.185	0.180
3	0.180	0.175	0.185	0.185
4	0.180	0.185	0.185	0.180
5	0.180	0.180	0.185	0.180
6	0.185	0.185	0.180	0.175
7	0.185	0.185	0.180	0.180
8	0.185	0.180	0.180	0.185
9	0.180	0.175	0.180	0.185
10	0.185	0.180	0.180	0.185
11	0.180	0.180	0.185	0.180
12	0.185	0.185	0.180	0.185
13	0.180	0.180	0.185	0.185
14	0.180	0.185	0.180	0.180
15	0.180	0.185	0.180	0.180
16	0.180	0.180	0.175	0.182
Minimum	0.130	0.175	0.175	0.175
Maximum	0.250	0.185	0.185	0.185
Average	0.183	0.181	0.182	0.182

Average of 64 readings = 0.182 mils

**Corrosion Evaluation**
















The tank interior showed moderate corrosion. Corrosion density was between 2 and 3 on the ASTM standard rating chart.

The interior ceiling showed heavy corrosion. Corrosion density was between 4 and 5 on the ASTM standard rating chart.

The interior floor showed moderate corrosion. Corrosion density was between 2 and 3 on the ASTM standard rating chart.

The interior corrosion was not pervasive, and the areas effected varied by size. The depth of corrosion was not measured.

STANDARD RATING CHART FOR PITS

	A	B	C
	Density	Size	Depth
1	 $2.5 \times 10^0/m^2$	 0.5 mm <sup>2</sup>	 0.4 mm
2	 $1 \times 10^1/m^2$	 2.0 mm <sup>2</sup>	 0.8 mm
3	 $5 \times 10^1/m^2$	 8.0 mm <sup>2</sup>	 1.6 mm
4	 $1 \times 10^2/m^2$	 12.5 mm <sup>2</sup>	 3.2 mm
5	 $5 \times 10^2/m^2$	 24.5 mm <sup>2</sup>	 6.4 mm

Source: ASTM, G 46, Fig. 2 (2000 Edition). Reprinted, with permission, copyright ASTM.



**Paint Samples**

Internal and external paint chip samples were collected and sent to Babcock Laboratories for metal analysis. **Lead is present in the paint samples of the reservoir.** Laboratory analysis as follows:



**BABCOCK Laboratories, Inc.**  
*The Standard of Excellence for Over 100 Years*

Client Name: Advanced Diving Services  
 Contact: Advanced Diving Services  
 Address: 2948 East Badger Way  
 New Harmony, UT 84757

Analytical Report: Page 7 of 9  
 Project Name: No Project  
 Project Number: No Project

Report Date: 01-Jul-2020

Work Order Number: C0F1285  
 Received on Ice (Y/N) No Temp 30 °C

Laboratory Reference Number  
**C0F1285-08**

<u>Sample Description</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>	<u>Received Date/Time</u>
Lower Edger Paint Chip	Solid	06/01/20 08:30	06/09/20 16:20

<u>Analyte(s)</u>	<u>Result</u>	<u>RDL</u>	<u>Units</u>	<u>Method</u>	<u>Analysis Date</u>	<u>Analyst</u>	<u>Flag</u>
<b>Metals and Metalloids: EPA SW846 Series</b>							
Total Chromium	4.6	1.0	mg/kg	EPA 6020	06/18/20 17:41	AP	
Lead	7.2	2.0	mg/kg	EPA 6020	06/18/20 17:41	AP	
Zinc	58	1.0	mg/kg	EPA 6020	06/18/20 17:41	AP	

**Sediment Sample Metal Analysis**

Sediment samples suspended in water were collected from the reservoir floor by an ADS diver on June 2, 2020 and sent to Babcock Laboratories in Riverside California for chromium, lead and zinc metal analysis. The results for all tested metals were at or above the maximum contaminate level for drinking water established by the EPA. **Lead levels are the significant contaminate in this reservoir.**

Total Chromium was .100 mg/L whereas the CAL EPA maximum level is .1 mg/L.

Total Lead was .460 mg/l whereas the CAL EPA maximum level is .015 mg/L.

Total Zinc was .800 mg/l whereas the CAL EPA maximum level is .5 mg/L



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*The Standard of Excellence for Over 100 Years*

Client Name: Advanced Diving Services  
 Contact: Advanced Diving Services  
 Address: 2948 East Badger Way  
 New Harmony, UT 84757

Analytical Report: Page 4 of 9  
 Project Name: No Project  
 Project Number: No Project

Report Date: 01-Jul-2020

Work Order Number: C0F1285

Received on Ice (Y/N): No Temp: 30 °C

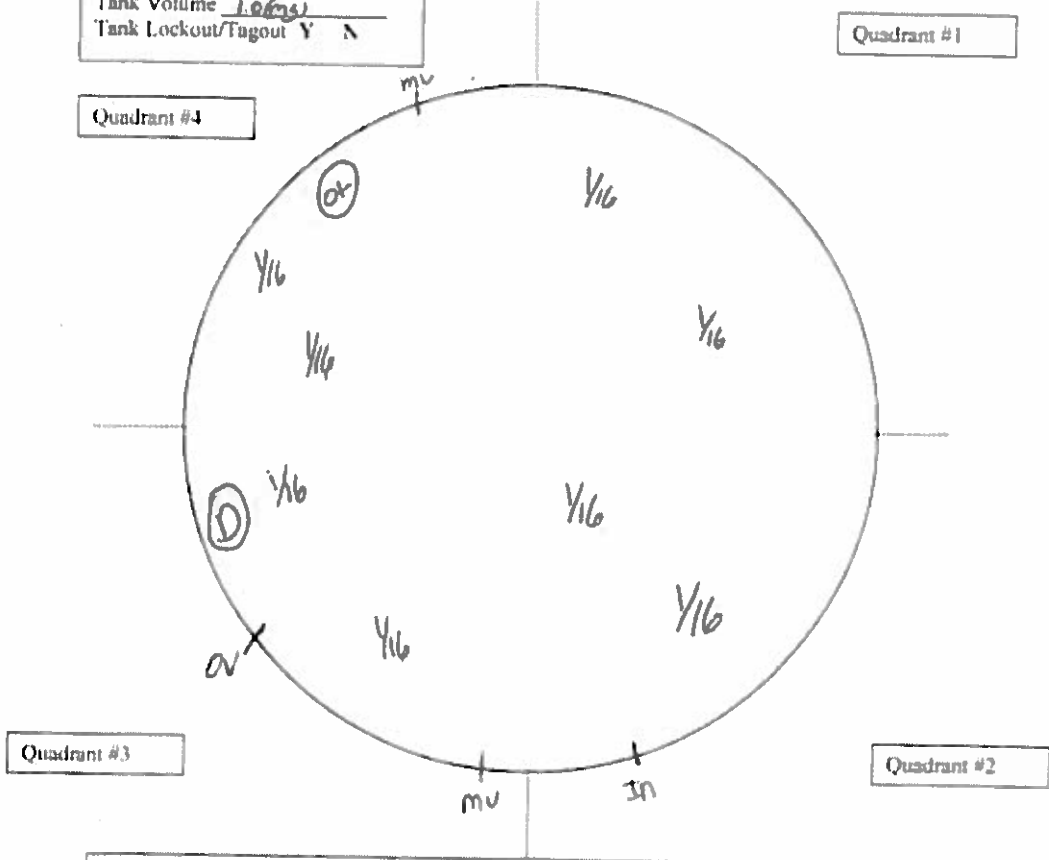
Laboratory Reference Number  
**C0F1285-03**

Sample Description                      Matrix                      Sampled Date/Time                      Received Date/Time  
 Lower Edger                                  Water                                  06/02/20 09:00                                  06/09/20 18:20

Analyte(s)	Result	RDL	Units	Method	Analysis Date	Analyst	Flag
<b>Metals and Metalloids</b>							
Total Chromium	100	1.0	ug/L	EPA 200.8	08/18/20 18:14	AP	
Lead	460	10	ug/L	EPA 200.8	08/17/20 18:10	KRV	MCNotify
Zinc	800	100	ug/L	EPA 200.8	08/17/20 18:10	KRV	

**Tank Interior Sketch**

**Tank Diagram**  
 Tank Name: Lower Edgar  
 Tank Diameter: 70  
 Tank Height: 36  
 Tank Volume: 1.06mg  
 Tank Lockout/Tagout: Y N



- Mark the location and size of:**
- |   |   |
|---|---|
| 1. V = Roof Vents <b>DIAMETER NEEDED</b>  | 10. ST = Sampling Tap                               |
| 2. IN = Inlet (s) <b>DIAMETER NEEDED</b>  | 11. MW = Manway Access Hatch (s)                    |
| 3. OT = Outlet (s) <b>DIAMETER NEEDED</b> | 12. OP = Other pipe penetrations                    |
| 4. D = Drain <b>DIAMETER NEEDED</b>       | 13. Z = Vandalism                                   |
| 5. C = Support Columns                    | 14. CF = Exterior Coating Failure Area(s)           |
| 6. OV = Overflow Pipe                     | 15. IF = Interior Coating Failure Area(s)           |
| 7. F = Float                              | 16. RN = Significant Rust Nodules                   |
| 8. CP = Cathodic Protection               | 17. H = Second Roof Access Hatch <b>DIA. NEEDED</b> |
| 9. D = Tank Debris                        | 18. L = Leak in tank                                |

ADS, Inspection Report, p. 2

**Conclusion and Recommendations**

**Tank Condition**

EXTERIOR: FAIR  
INTERIOR: FAIR

**Recommendations**

*Immediate*

1. Replace roof vent screen and install secondary screen.
2. Replace access hatch gasket.
3. Replace interior ladder.
4. Replace broken rafters and support brackets and recoat ceiling.
5. Recoat interior when budget permits.
6. Install (2) confined space entry placards to be placed at base of ladder, and at roof access hatch.
7. Lead contaminate levels are present and need immediate attention and remedy (see page 18-19).

*Ongoing Maintenance*

- Inspection and cleaning every 3-5 year



Talk to a Fall Protection  
Compliance Expert  
1-800-504-4016

## New OSHA Regs and Ladder Cages

[fallprotect.com/techtalk/new-osha-regs-and-ladder-cages](https://www.fallprotect.com/techtalk/new-osha-regs-and-ladder-cages)

The new OSHA General Industry fall protection regulations that went into effect in 2017 are prompting a slew of questions on fixed ladders. If you are wondering when a fixed ladder requires fall protection, which forms of ladder fall protection are OSHA compliant, or if ladder cages still comply with OSHA's revised ruling, we have just the post for you....

If you carefully examine the new ruling, you'll note that OSHA 1910.28(b)(9) requires General Industry employers to provide fall protection on fixed ladders more than 24' above a lower level. This new requirement is important for a number of reasons. For starters, prior to the new ruling, the only real guidance on fixed ladders came from the Construction Standards- OSHA more (1926.1053(a)(18) required the use of cages, wells, ladder safety devices, or self-retracting lifelines for fixed ladders of 24 feet or more. OSHA's new ruling was designed, in part, to create more uniformity between the General Industry and Construction standards. That said, the revised ruling also breaks new ground by creating a framework to phase out the use of ladder wells and cages.

From a best practices standpoint, we have never been fans of ladder cages because they don't arrest falls. You can strike your head during a fall, lose consciousness, and create an extremely difficult rescue scenario for first responders. There are also cases of gruesome entanglements where falling workers tear off body parts during a rapid, uncontrolled descent.

The revised ruling establishes a phase out of ladder wells and cages over the next 20 years per OSHA 1910.28(b)(9)(i). Here are the implementation details:

- For caged, fixed ladders erected before November 19, 2018, employers have up to 20 years to install ladder safety or personal fall arrest systems (1910.28(b)(9)(i)(A))
- For new fixed ladders erected on or after November 19, 2018, the employer must equip the ladder with a ladder safety or personal fall arrest system (1910.28(b)(9)(i)(B))
- For ladder repairs and replacements, when an employer replaces any portion of a fixed ladder, the replacement must be equipped with a ladder safety or personal fall arrest system (1910.28(b)(9)(i)(C))
- After November 18, 2036 all fixed ladders must be equipped with a ladder safety or personal fall arrest system (1910.28(b)(9)(i)(D))

**Important Note:** The revised ruling doesn't require removal of ladder cages and wells prior to the final deadline (as long as their presence doesn't interfere with the use of a ladder safety system or personal fall arrest system), but stipulates after the phase-out period, alternative forms of ladder fall protection are required to ensure compliance.

We dedicated this post to a discussion of how the new OSHA regulations effect fixed ladder fall protection options, but the revised Walking Working Surfaces ruling is over 500 pages in length and covers a wide range of additional topics relating to ladders. If you are looking for a summary of the new fall protection regulations, we suggest downloading our e-book on this subject, or contact the safety professionals at Diversified Fall Protection for further assistance.

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All surface and underwater repairs and recommendations, except sandblasting, can be performed by Advanced Diving Services, Inc. with the reservoir remaining in service.

*ADVANCED DIVING SERVICES, INC. ®*



*James M. Nilsson, Director*  
*NACE Level I and II Certified Coating Inspector #46026*