

Smithfield, RI

Clean Water Infrastructure Replacement Plan

Town of Smithfield Water Supply Board

December 2025

Revised May 2026

CWIRP



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Prepared by: BETA GROUP, INC.

Prepared for: Town of Smithfield Water Supply Board

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1.0 CLEAN WATER INFRASTRUCTURE REPLACEMENT PLANS

The Rhode Island Regulations of 216-RICR-50-05-7 recognize the need to ensure the availability of safe potable drinking water. To accomplish this, the regulations outline Clean Water Infrastructure Improvement Plans (CWIRPs), which act as planning and funding mechanisms designed to prevent the erosion of drinking water infrastructure. These goals and policies are consistent with the broader provisions of the Clean Water Infrastructure Act, Chapter 46-15.6 of the General Laws of Rhode Island, as amended.

Per these regulations, the Rhode Island Department of Health (RIDOH) is designated as the primary agency to administer CWIRP programs for “All water suppliers which supply, obtain, transport, distribute, purchase, and/or sell on a wholesale or retail basis, more than fifty million (50,000,000) gallons of water per year”. These plans must detail funding mechanisms to rehabilitate or replace infrastructure, and lay out the management of existing infrastructure.

BETA Group, Inc. created this CWIRP (Plan) for the Smithfield Water Supply Board (SWSB) in accordance with Federal Laws such as the Safe Drinking Water Act, RI State laws such as those described above, and the Municipal laws of Smithfield. This plan was created in conjunction with the SWSB to align with the goals, policies, and planning documents of the Town and the Smithfield Water Supply Board. The Plan is expected to serve as a guidance document for the Town, allowing them to best plan and manage the system, as well as to allocate funding and prioritize the needs of the system.

2.0 INTRODUCTION

2.1 TOWN OF SMITHFIELD

Historically, Smithfield was a rural community with a focus on farming and agriculture. In the 19th century, the Town’s industry and manufacturing capability rapidly expanded. This resulted in further population booms, which have since transitioned the Town into that of a suburban focused community. Smithfield’s current population is approximately 22,075 and is expected to rise to 25,105 by 2040 (estimated by the State of RI).

Town residents are served by one of three public water suppliers: The Smithfield Water Supply Board, the Providence Water Supply Board (formerly the East Smithfield Water District), and the Greenville Water District. The Smithfield Water Supply Board (SWSB) supplies approximately 9,460 residents within the district.

2.2 SMITHFIELD WATER SUPPLY BOARD STRUCTURE

The SWSB’s Board of Water Commissioners are comprised of the Town Council, with the management and operations of the system being the responsibility of the Water Commissioner and SWSB staff. Subsequent to the previous iteration of the CWIRP, the SWSB hired a new full-time employee for succession planning and to perform duties involved in the operation of the system. As such, the SWSB staff consists of the Water Commissioner, one foreman/ safety compliance officer, and two field assistants/ drivers. Non-operational duties are performed by the Public Works Department’s Deputy Director, the town treasurer, and the Public Works and Finance Departments. Staff members undergo training to operate the system, perform repairs, and maintain the water distribution system.

In addition to the SWSB Staff, the SWSB Advisory Commission is a five-member volunteer body that advises the SWSB on policies and investments. Advisory Commission members are appointed by the Town

Council and serve three-year terms. Alongside the five members appointed by the Town Council, the Town Manager and Water Commissioner serve in nonvoting, ex officio capacities on the SWSB Advisory Commission.

3.0 SMITHFIELD WATER SYSTEM

3.1 SYSTEM OVERVIEW

As noted above, the SWSB is one of the three suppliers in the Town. Its service area covers approximately 16 square miles, containing approximately 1,689 customer connections. Of these connections, 1,550 are residential, which accounts for approximately 39% of water use in the SWSB system. Of the SWSB's users, there are eight major users that account for an estimated 30% of total water use (Bryant University, Fidelity Investments, Providence Water, Shorewood Apartments, Excel Holdings, Brentwood Apartments, Lincolnwood Rehab & Healthcare Center, and North Providence Housing Authority). While the majority of these users consume 3 to 10 MG per year, Bryant University's use is historically greater than 50 MG per year. The SWSB's service area is primarily situated within Smithfield but also includes a portion of North Providence. Refer to Appendix A for a map of the system.

In preparation of this CWIRP, BETA visited the major system components with SWSB staff, interviewed SWSB staff, and reviewed existing documentation. This formed the basis for the noted component integrity, status, and expected remaining useful life of the system. It is noted that proper maintenance, operational procedures, and replacement of individual components, or the absence of these, plays a significant role in infrastructure lifespan. It is therefore important that the SWSB continue implementing these practices as part of ongoing system operation. Further details and photographs are located within the appendices of this report.

3.2 WATER SOURCE

The SWSB obtains all of its water from Providence Water Supply Board (Providence Water) at the Longview Reservoir on Smithfield Road to meet the SWSB's demand (typical ADD of approximately 0.7 MGD). The purchased water enters the Town from the Longview Reservoir Pump Station. This station is located in North Providence and is operated by SWSB staff.

3.3 DISTRIBUTION SYSTEM

3.3.1 INTERCONNECTIONS WITH OTHER SUPPLIERS

Originally, the SWSB's only connection to outside water suppliers was on Smithfield Road from Providence Water. As the system expanded, new interconnections were added, with the most recent being its emergency connection to the Greenville Water District.

Table 1 below outlines these interconnections between the SWSB and adjacent water suppliers. The majority of these interconnections are physically closed/ inactive, with the ability to temporarily reinstate an interconnection during an emergency scenario. Of the two active/metered interconnections, the largest is the incoming flow at the interconnection on Smithfield Road, the source of the SWSB's finished water. The second is the one-way flow into Providence Water Supply Board's service area (formerly the East Smithfield Water District), which receives approximately 27,000 gpd.

Table 1: Interconnections with Adjacent Suppliers

Other Supplier	Location	Status
Providence Water	Smithfield Rd @ Longview Reservoir	Active & Metered
Providence Water	Bicentennial Way @ Locust Ave	Inactive/ Emergency Only
Providence Water	Hawthorne St @ Primrose Ln	Inactive/ Emergency Only
Former East Smithfield Water District	Ridge Road @ Partridge Ln	Active & Metered; one-way into ESWD
Former East Smithfield Water District	Meadow View Dr @ Sunset Dr	Inactive/ Emergency Only; one-way into ESWD
Greenville Water District	Burlingame Tank/Reservoir	Inactive/ Emergency Only
Lincoln Water Commission	Twin River Road	Inactive/ Emergency Only

In addition to those listed above, an additional interconnection to the Lincoln Water Commission was previously planned. As part of that project, Smithfield extended a water main to the Lincoln town line along RI Route 116. The project was subsequently cancelled, and the Lincoln portion of the main was not constructed.

It is further noted that the Town is exploring the possibility of transferring existing customers in the vicinity of the Burlingame Storage Tank to the Greenville Water District's distribution system. This area is a remote portion of SWSB's system, and Smithfield's Burlingame Tank is directly adjacent to a tank operated by the Greenville Water District as part of their own system. If this transfer is approved and completed, the Burlingame Tank would be abandoned. For purposes of planning and allocating funding, this CWIRP assumes that this transfer will not occur, and that operational and maintenance costs associated with the Burlingame Tank will continue over the duration of the planning period.

3.3.2 WATER MAIN PIPING

Construction of the water system piping began in the early 1960s. At the time, this network conveyed water from Providence Water to the Rocky Hill Storage Tank. The oldest mains still in service (1964) are along this route. Over the years, the system has expanded to include new components, infrastructure and service areas, and to replace older components of the system. Among these expansions were a series of projects completed in the 1980s and 1990s to adhere to directives from the US EPA and provide safe water to residents impacted by the Davis Liquid Waste Superfund Site. This expansion included the construction of the Island Woods Tank, the Burlingame Tank, the Limerock Pump Station, the Davis Pump Station, and rehabilitation of the existing Rocky Hill Tank and Longview Reservoir Station.

Presently, the SWSB's system consists of approximately 40 miles of piping, which ranges from 6" - 16" depending on location and function (Distribution/Transmission). The transmission mains are large capacity pipes that connect the various regions of the system, primarily points of interest such as interconnections, storage tanks, and pump stations. Smithfield's system contains fifteen transmission mains, which consist of 12" and 16" piping made primarily of cement lined cast iron (CLCI) or cement lined ductile iron (DI). The distribution mains then feed off the transmission mains to supply individual neighborhoods and properties with water. Table 2 below outlines the SWSB's transmission mains.

Table 2: Transmission Mains

Street Name	Diameter (in)	Material	Year Installed	Total Length (ft.)
Smithfield Road & Ridge Road (from Longview P.S. to Jefferson Street)	12	CLCI	1964	7185
Ridge Road, Carolann Avenue, & Whipple Road (from Jefferson Street to Douglas Pike)	12	CLCI	1964	7296
Jefferson Street (from Ridge Road to Douglas Pike)	12	DI	1975	1918
Douglas Pike (from Jefferson Street to Whipple Road)	12	DI	1990	5837
Douglas Pike (from Whipple Road to Limerock Pump Station)	12	CLCI	1964	6114
Douglas Pike (from Limerock P.S. to George Washington Highway)	12 & 16	CLCI & DI	1964 (CLCI) & 1997 (DI)	7165 (2,110 CLCI; 5,055 DI)
George Washington Highway, Auxiliary Road, & Rocky Hill Road (from Douglas Pike to Rocky Hill Road Tank)	12	CLCI	1964	8685
Rocky Hill Road & George Washington Highway (from Auxiliary Road to dead end at Lincoln Town Line)	12	CLCI	1964 & 1969	4159
Douglas Pike (from George Washington Highway to Alpha Road)	16	DI	1997	4338
Salem Street & Technology Way (from Douglas Pike to Island Woods Tank)	12 & 16	DI	1994	2696
Douglas Pike (from Alpha Road to Branch Pike)	16	DI	1997	2971
Rogler Farm Road (from Douglas Pike to Farnum Pike)	12	DI	1978	3588
Farnum Pike (from Rogler Farm Road to dead-end at Woonasquatucket River)	12	PVC	1987	6173
Old Forge Road & Log Road (from Farnum Pike to Davis P.S.)	12	DI	1990	4761
Burlingame Road (from Davis P.S. to Burlingame Tank)	12	DI	1990	8222

The majority of the Town's overall piping is ductile iron or cast iron, with the full breakdown as indicated in Table 3 below. In general, the oldest piping in the system is cast iron or asbestos cement, with the newest piping being ductile iron.

Table 3: System Material

Material	Length (mi)	Percent
DI	17.1	42.4%
CI	8.2	20.3%
PVC	5.7	14.2%
AC (200)	8.5	20.9%
AC (150)	0.9	2.2%
Total	40.4	100.0%

The oldest piping in the system is from 1964 (system average of 1983). In comparison, the estimated useful life of DI and PVC pipe is 75 years or better, and the estimated useful life of lined CI mains is 50 years or better. As a result, the overall system is not expected to need replacement. The oldest mains in the system with these materials should be reevaluated for replacement on a case-by-case basis over the course of the planning period to confirm their integrity and evaluate the need for replacement. Some of these older mains may need to be replaced near the end of the planning period.

The SWSB has completed several projects involving the replacement of AC pipe to remove it from their system. The AC pipe currently remaining is almost entirely the more durable, class 200, type. While AC pipe projects will continue, the SWSB reports that their AC pipe has been structurally sound, and that past projects are not indicative of AC pipe failure.

For planning purposes, each main in the distribution system was ranked based on its physical characteristics, and criticality of its operation for distributing water within the system. This ranking serves as a priority list for which mains the SWSB should target for replacement or rehabilitation. The pipe ranking database is included as Appendix B of this Plan. It is recommended that the Town pursue yearly watermain rehabilitation projects, with the goal of ultimately replacing the oldest and most critical components in their system.

The SWSB monitors and compares water usage to billed and non-billed flows to estimate potential leaks. They have previously hired firms to perform acoustic surveys of the entire system to locate leaks, however more recently the SWSB has performed their own leak detection surveys. System data indicates leakage in the system is relatively low (approximately 3.6%). The SWSB will pursue further investigations if estimated leakage increases and approaches the State's actionable level (10%).

3.3.3 VALVES

Valves within the SWSB's system are primarily buried single disk and resilient seated, wedge-style gate valves. Excluding hydrant valves, there are approximately 569 valves in the system, and they are exercised annually to ensure operation in an emergency scenario/ preventative maintenance. Damaged or inoperable valves are replaced, and the replacement costs are included in the general maintenance budgets.

The estimated useful life expectancy of a valve tends to approximate that of the pipe it is connected to. Given that the ages of the valves generally match those of the associated pipe, large-scale valve

replacements are often included as part of pipe replacement projects. Likewise, hydrant valves are often replaced along with the hydrant itself. Given the age of Smithfield's system, an in-depth valve replacement program is not required at this time. Instead, Smithfield should continue water main replacement projects and replace associated valving at the same time. Individual valves that need to be replaced or repaired should be addressed on a case-by-case basis as the need arises.

3.3.4 HYDRANTS

There are approximately 450 fire hydrants associated with the SWSB system. Of these, the SWSB is responsible for approximately 350 hydrants that are directly associated with the distribution system. The SWSB performs inspections and maintenance activities in accordance with the Town's and SWSB's ordinances and maintains logs detailing inspections and maintenance. Example maintenance activities include flushing, loosening caps, greasing ports, exercising hydrant valves, painting, etc. A further approximate 100 hydrants are privately owned and are maintained directly by their owners. These hydrants are annually inspected by the owners in accordance with the Town's and SWSB's ordinances, and the owners maintain logs detailing inspections and maintenance. Private owners are required to coordinate with the SWSB prior to any work on hydrants or mains on their property. Owners who fail to perform these maintenance duties are billed by the SWSB for needing to perform this role in their stead.

Hydrant replacement is categorized under maintenance and is funded from the general maintenance budget. The SWSB estimates they can rebuild/replace six hydrants a year on average; Approximately nine hydrants were replaced within the past year, including at the Davis Pump Station. Any new hydrants/hydrant replacements are coordinated with the Smithfield Fire department. Typically, hydrants are the same age as the piping they are connected to, with the oldest hydrants in the system dating back to 1963. Generally, the hydrants in the system are approximately 40-50 years old. Given that the useful life of a hydrant assembly is estimated as 60-75 years, the oldest hydrants in the system should be reevaluated for replacement near the end of the planning period. Hydrants should be replaced on an as needed basis in the interim.

3.3.5 METERS AND SERVICES

The customers of the SWSB are each provided with a water meter, resulting in a total of 100% distribution metering. Pricing of water is dictated by a three-tier block structure, with users that consume more water being charged higher rates. A service charge based on meter size is then applied, which covers meter maintenance, administration, and billing. Quarterly billing is utilized for residential customers and small non-residential customers, whereas large non-residential customers are billed monthly. The SWSB's preference is to avoid funding infrastructure projects through billing, as doing so would result in rate increases. Instead, they prioritize alternate funding sources when economically feasible for the project (Refer to Section 5 of this Plan for further information on these options).

Within the previous five-year planning cycle, the meter reading software's provider ended support for the version of equipment and software the Town had been using. As a result, the SWSB migrated to a newer version such that they could maintain their ability to read meters. Specifically, the Town currently uses the Beacon/Badger System for this.

Nearly all of the Town's meters are of the automatic-read type. As part of maintaining the Town's water system, the SWSB periodically replaces customers' meters. These efforts have been largely focused on replacing the older direct-read type meters with radio-read type meters, to facilitate the collection of water use data. These replacements are expected to continue to both fully transition away from the older models, and to swap out meters at the end of their expected useful life. It is expected that a large portion of the currently in-service meters (especially the larger meters) will have reached the end of their useful

life expectancy by the end of the planning period. The replacement projects have historically been funded by the Rhode Island Infrastructure Bank.

In addition to the meter/meter assembly, customer service connections also include a service line and curb stop. The SWSB is responsible for the portion of the service line within the right of way up to the curb stop valve. For the portion outside of the right of way from the curb stop valve to the internal plumbing system, the customers are responsible.

SWSB standards specify services be type “K” extra heavy, soft temper cold drawn, seamless, deoxidized copper tubing, having a minimum ultimate tensile strength of 30,000 psi for all service lines up to and including 2-inch diameter. Service lines four (4) inches through twelve (12) inches in diameter are typically Class 52 cement lined ductile iron pipe (AWWA C151-71) or PVC pipe (AWWA C900). Plastic (PE) service lines are typically only allowed after a meter pit when the house or building is more than one hundred (100) feet away from the curb stop.

The master meter for the system is located within the Longview Reservoir Pumping Station. The station is operated by the SWSB, and the meter is read by both the SWSB and Providence Water. This is tested and calibrated annually and read monthly to determine the water use billing for the previous month. The SWSB also meters the connection into the former East Smithfield Water District. This meter is the responsibility of Providence Water rather than the SWSB.

3.4 WATER STORAGE TANKS

The SWSB is responsible for the operation of three water storage tanks within its system: The Rocky Hill Road Tank, the Island Woods Tank (Alpha Tank) and the Burlingame Tank. The SWSB’s storage tanks are located within locked/ secured, Town-owned, parcels to prevent access from unauthorized parties.

3.4.1 ROCKY HILL ROAD TANK

The Rocky Hill Tank is the oldest of Smithfield’s storage tanks and was constructed in 1964 with the original water system. It consists of a welded steel body with eight shell rings, a self-supporting dome and a concrete ring wall foundation. It is a reservoir style tank with a nominal capacity of one (1) million gallons, a diameter of 66 feet, and a height to overflow of 40 feet. The overflow elevation of the tank is 521 feet MSL.

The tank is in the northeast corner of Smithfield within a fenced parcel. The tank site is primarily covered with crushed stone/gravel, with the tank itself sitting at the top of the site. Site maintenance, such as the removal of weeds, is completed by the SWSB as needed. The parcel also houses a natural gas generator, and a small shed with a heating system to protect the pH meter and electrical disconnect panels from inclement weather. Tank level and pH readings are transmitted from this site to the Longview Reservoir Pump Station, and then onto the DPW building. The tank site, shed, and fence are in good condition.

The SWSB contracts with Aqueous Infrastructure Management (Formerly Underwater Solutions, Inc.) to inspect the tanks and remove any accumulated sediment. Based on the results of the 2015 inspection, the interior and exterior coatings and the tanks’ sealant to the foundation had degraded, and minor biofilm staining and mild corrosion were identified. The tank rehabilitation was completed in 2020. During the one-year post-rehabilitation inspection (2022), areas of minor delamination of the interior coating were identified and subsequently repaired. (Refer to Appendix C for a copy of the 2022 inspection report.) The Tnemec Company, Inc., the coating manufacturer, certified the successful repair of the deficiencies and noted that the associated warranties remain in good standing.

In addition to the remediation actions raised from the inspections, the SWSB has also increased the electrical grounding of the tank, providing additional avenues for dissipation in the event of an electrical charge, and installed a new check valve on the overflow discharge pipe.

The tank rehabilitation project that was completed in 2020 also included the installation of a rooftop-mounted aerator, an interior floor-mounted mixer, and pH monitoring system to address historical TTHM exceedances (discussed in more detail in Section 4.3). The installed equipment was identified to be in good working condition in the 2022 tank inspection report. Replacement of this equipment is included in a future tank rehabilitation project.

It is recommended that the tank's exterior be power washed to remove the buildup of mildew and for tank inspections to continue. Table 4 below outlines the components of this tank and their expected remaining useful life expectancy. Table 5 estimates costs associated with future repairs, rehabilitation and maintenance.

Table 4: Rocky Hill Road Tank Component Condition

Component	General Condition (according to 2022 inspection report)	Remaining Life Expectancy
Fencing	Good	15 years
Exterior Coating	Good, no visible deficiencies	15 Years
Exterior Structure	Good, no exposed steel	15 years
Exterior Welds	Good, no sign of leakage	15 years
Foundation	Good, no signs of failure or fatigue	15 years
Interior Coating	Good, no biofilm or staining	15 Years
Interior Structure	Good, small section of exposed steel/corrosion on lower section of east wall addressed in 2023	15 years
Interior Welds	Good, no sign of leakage	15 years
Interior Floor	Good, mild biofilm/staining	15 years
On-Site Piping	Good, per SWSB	20+ years
Aeration/Mixing Equipment	Good	20 years

Table 5: Rocky Hill Road Tank Recommended Rehabilitation/Replacement Schedule

Time Interval	Description	Opinion of Probable Cost
5-year	Perform tank inspection	\$5,000
	Tank washing	\$5,000
10-year	Perform tank inspection	\$5,000
15-year	Perform tank inspection	\$5,000
	Repair chain link fence	\$10,000
	Perform minor tank repairs, as required	\$10,000
20-year	Perform tank inspection	\$5,000
	Tank rehabilitation	\$1,600,000

3.4.2 ISLAND WOODS TANK (ALPHA TANK)

The Island Woods Tank, or The Alpha Tank, was constructed in 1991 during an expansion of the water distribution system. It consists of a welded steel body with eight shell rings, a self-supporting dome and a concrete ring wall foundation. It is a reservoir-style tank with a nominal capacity of four (4) million gallons, a diameter of 105 feet, and a height to overflow of 62 feet. The overflow elevation of the tank is equal to 521 feet MSL.

This tank is in North-Central Smithfield within a fenced parcel. The parcel also houses a natural gas generator, and a small shed with a heating system to protect the pH meter and disconnect panels from inclement weather. Tank level and pH readings are transmitted from this site to the Longview Reservoir Pump Station, and then onto the DPW building. The tank site, shed, and fence are in good condition.

During the 2015 inspection by Robert L. Merithew, Inc., paint chipping was identified that needed to be addressed. The subsequent 2015 inspection by Underwater Solutions, Inc. noted further deterioration, which included weathering of exterior coatings, failure of interior coatings, exposed steel, pitting, and mild to severe corrosion of the interior. These deficiencies were bundled together to be resolved in a tank rehabilitation project, which was completed in 2020. During the one-year post-rehabilitation inspection (2022), areas of minor delamination of the interior coating were identified and subsequently repaired. (Refer to Appendix C for a copy of the 2022 inspection report.) The Tnemec Company, Inc., the coating manufacturer, certified the successful repair of the deficiencies and noted that the associated warranties remain in good standing.

The tank rehabilitation project that was completed in 2020 also included the installation of a rooftop-mounted aerator, an interior floor-mounted mixer, and pH monitoring system to address historical TTHM exceedances (discussed in more detail in Section 4.3). The installed equipment was identified to be in good working condition in the 2022 tank inspection report. Replacement of this equipment is included in a future tank rehabilitation project.

In addition to the remediation actions raised from the inspection, the SWSB has also installed a new check valve on the overflow discharge pipe. Table 6 below outlines the components of this tank and their expected remaining useful life expectancy. Table 7 estimates costs associated with future repairs, rehabilitation and maintenance.

Table 6: Island Woods (Alpha) Tank Component Condition

Component	General Condition (according to 2022 inspection report)	Remaining Life Expectancy
Fencing	Fair	15 years
Exterior Coating	Good, no visible deficiencies	15 years
Exterior Structure	Good, no exposed steel	15 years
Exterior Welds	Good, no sign of leakage	15 years
Foundation	Good, no signs of failure or fatigue	15 years
Interior Coating	Good, no biofilm or staining	15 years
Interior Structure	Good, small section of exposed steel/corrosion on lower section of east wall addressed in 2023	15 years
Interior Welds	Good, no sign of leakage	15 years
Interior Floor	Good, mild biofilm/staining	15 years
On-Site Piping	Good, per SWSB, DI ~35 years old	20+ years
Aeration/Mixing Equipment	Good	20 years

Table 7: Island Woods (Alpha) Tank Recommended Rehabilitation/Replacement Schedule

Time Interval	Description	Opinion of Probable Cost
5-year	Perform tank Inspection	\$5,000
	Repair/replace altitude valve/piping and vault	\$75,000
10-year	Perform tank inspection	\$5,000
15-year	Perform tank inspection	\$5,000
	Repair chain link fence	\$10,000
	Perform minor tank repairs, as required	\$10,000
20-year	Perform tank inspection	\$5,000
	Tank rehabilitation	\$2,300,000

3.4.3 BURLINGAME TANK

The Burlingame Tank, was constructed in 1988 during an expansion of the water distribution system, and put into service in 1997. It consists of a welded steel body with a self-supporting dome roof and concrete ring wall foundation. It is a reservoir style tank with a nominal capacity of 300,000 gallons, a diameter of 40 feet, and a height to overflow of 32 feet. The overflow elevation of the tank is equal to 577 feet MSL.

During its 2015 Underwater Solutions, Inc. inspection, the tank was found to have weathering of exterior coatings, failure of interior coatings, exposed steel, pitting, corrosion of the interior, spalling sealant at the tank's base and mildew coating on the exterior. The Burlingame Tank was not rehabilitated at the same time as the Rocky Hill Tank and Island Woods Tank.

The Burlingame Tank's site, shed, and fence are in good condition. During the 6/30/25 inspection, by Aqueous Infrastructure Management (Formerly Underwater Solutions, Inc.), additional items were flagged for remediation, the majority of which the SWSB has since addressed. Remaining remediation work will include the cleaning spot coating of the portions of the interior showing evidence of weathering. Refer to Appendix C for a copy of the 2025 inspection report. Additionally, it is recommended that the SWSB install a pH meter for the tank. pH meters have already been installed at the other two storage tanks, and a meter at this location will allow for better monitoring of conditions within the system. Furthermore, the SWSB is also replacing the tank overflow. The termination of this was previously at the top of the tank, but was recently lowered to terminate near the ground. The SWSB will next install a flapper valve at this termination and upgrade the discharge area. These recent/upcoming modifications have already been completed at the other two storage tanks and will likewise align the Burlingame Tank with the "Recommended Standards for Water Works".

The Burlingame Tank is in western Smithfield, located in a remote portion of the SWSB's distribution system and on the border with the Greenville Water District. The Greenville Water District is responsible for the operation of a storage tank which sits directly adjacent to the Burlingame Tank. There is interconnection between the suppliers at this site, which is normally closed but can be opened in an emergency scenario. Given the Burlingame Tank's location, and the relatively small number of customers serviced, the SWSB is currently working with the Greenville Water District to transfer these customers to Greenville's system. If this transfer is approved, the Burlingame tank would become redundant and abandoned. Table 8 below outlines the components of this tank and their expected remaining useful life expectancy. Table 9 estimates costs associated with future repairs, rehabilitation and maintenance should an agreement between SWSB and Greenville Water District not be reached and the tank remains part of SWSB's system.

Table 8: Burlingame Tank Component Condition

Component	General Condition (according to 2025 inspection report)	Remaining Life Expectancy
Fencing	Good	10 years
Exterior Coating	Fair, presence of mildew all around, coating is good on south and west walls and in decline/thinning on north and east walls	5 years
Exterior Structure	Good, some exposed steel on North and South walls (<5%)	20 years
Exterior Welds	Good, no sign of leakage	20 years
Foundation	Good, <5% cracks, moderate mildew staining	15 years
Interior Coating	Fair, mild biofilm on all walls, coating is in decline/thinning on all walls, evidence of peeling/blistering on North wall	5 years
Interior Structure	Good, small sections of exposed steel/corrosion on lower section of North wall and middle section of South wall	20 years
Interior Welds	Good, no sign of leakage	20 years
Interior Floor	Fair, mild biofilm/staining, coating is in decline/thinning	5 years
On-Site Piping	Good, per SWSB, DI ~35 years old	20+ years

Table 9: Burlingame Tank Recommended Rehabilitation/Replacement Schedule

Time Interval	Description	Opinion of Probable Cost
5-year	Perform tank inspection	\$5,000
	Tank rehabilitation	\$500,000
	Repair gravel access roadway, as required	\$10,000
10-year	Perform tank inspection	\$5,000
	Repair chain link fence	\$10,000
15-year	Perform tank inspection	\$5,000
	Perform minor tank repairs, as required	\$10,000
20-year	Perform tank inspection	\$5,000

3.5 PUMP STATIONS/ BOOSTER STATIONS

The SWSB is responsible for the operation of three pump stations/ booster stations within the distribution system: The Longview Reservoir Pump Station, the Limerock Pump Station, and the Davis Pump Station. Of these, only the Limerock Pump Station and the Davis Pump Station are located within the Town limits. All pumping stations are located within locked/ secured, Town-owned (or Providence Water-owned), parcels to prevent access from unauthorized parties. Security alarm systems are routinely tested.

3.5.1 LONGVIEW RESERVOIR PUMP STATION

The Longview Reservoir Pump Station is the only station located outside of Smithfield. (527 Smithfield Road in North Providence, near the Smithfield border.) It is the oldest station within the system, and dates back to the original construction in 1964. Providence Water, the supplier of Smithfield's water, owns the parcel containing this station. As previously noted, all of the water that the SWSB purchases for its main distribution system enters the Town through this station. The purchased water arrives at approximately 13 psi, and the station is used to increase the pressure to 120 psi (approximately equivalent to 544 feet of head). This station is operated by the SWSB but is accessed by both Providence Water and the SWSB to check meter readings.

The upper (ground) level of the station houses the variable frequency drives (VFD) and Motor Control Centers (MCC) that control the operation of the station. The station's lower level contains three VFD controlled pumps that can operate in parallel for a maximum capacity of 1,366 gpm (1.965 MGD). However, typical operating procedure for the station utilizes only two pumps at any given time, with the third pump acting as a redundant spare. The pumps automatically rotate which of the three is the spare. The current pumps and motors were installed approximately 10-15 years ago and rebuilt in 2017. The instrumentation and electrical components were replaced between 2016 and 2018. The station is equipped with two digital tank water level indicators, a circular chart with digital indicator and totalizer for pump station flow, and a digital pump discharge pressure indicator.

Recent upgrades/replacements to the station's equipment include the lighting panel, the emergency eyewash station, fire alarm system, heating system, building roof, and building windows. Furthermore, preparations were made for the future installation of a chlorination system at this site, modeled after the

chlorination system at the Limerock Pump Station. This system will measure the influent chlorine residual concentration at the wholesale connection and provide supplemental chlorine addition on an as-needed basis at the connection. This system shall be used to boost the chlorine residual in the event that emergency disinfection is required. (It is not expected that this system would be run permanently on a continuous basis.) In addition to replacing/upgrading components, the SWSB should continue its regiment of preventive maintenance and repairs to extend the life of its infrastructure

In the event of power loss, the system automatically switches over to the onsite natural gas generator, which has the capacity to keep the station powered for extended periods. The generator is manually tested one to two times a month. The generator is located within a dedicated enclosure. This, along with the building itself, is located within a locked barbed wire, chain link fence, for security purposes. The building's site, and fence are in good condition. Table 10 below outlines the components of this station and their expected remaining useful life expectancy. Table 11 estimates costs associated with future repairs, rehabilitation and maintenance.

Table 10: Longview Reservoir Pump Station Component Condition

Component	General Condition	Remaining Life Expectancy
Building Structure and Foundation	Good, per visual observation	10 years
Roof	Good, per visual observation, replaced in 2007	10 years
Mechanical Equipment	Good, per SWSB	10 years
Electrical	Good, replaced 2016-2018	20 years
Instrumentation & Controls	Good, replaced 2017	15 years
Generator	Good, per SWSB and visual observation	10 years
Chlorine Injection System	Excellent, brand new, installed in late 2025	20+ Years

Table 11: Longview Reservoir Pump Station Recommended Rehab./Replacement Schedule

Time Interval	Description	Opinion of Probable Cost
5-year	Continue routine maintenance & inspections	\$10,000
10-year	Continue routine maintenance & inspections	\$10,000
	Repairs to pump station structure/foundation	\$50,000
	Replace asphalt shingles on roof	\$15,000
	Replace emergency generator	\$75,000
	Replace pumps/interior piping	\$250,000
15-year	Continue routine maintenance & inspections	\$10,000
	Replace electrical/instrumentation components	\$40,000
	Repair chain link fence	\$10,000
20-year	Continue routine maintenance & inspections	\$10,000

3.5.2 LIMEROCK PUMP STATION

The Town's second station, the Limerock Pump Station, is located at 621 Douglas Pike Road, and constructed in 1997 during the aforementioned EPA improvements to the water system. As was the case for the Longview Reservoir Pump Station, the Limerock Pump Station features three VFD controlled pumps that run in parallel, with one serving as a standby spare at any given time. These pumps rotate the spare between them to ensure even wear. The VFDs also allow for simultaneous or independent operation with the upstream Longview Reservoir Pump Station to control the pressure in the system relative to tank levels. The Limerock station receives water from the Longview Station and boosts it to approximately 516-520 feet (HGL). The Limerock Station is also equipped with a Pressure Reducing Valve (PRV), such that when the pumps are off, the PRV opens to allow flow from the storage tanks to supply both the Limerock and the Longview Station, service areas. The PRV's control operation is designed to prevent the valve from opening when one of Limerock's pumps is actively running.

The station itself is within a locked barbed wire, chain link fence for security purposes. The building's site, and fence are in good condition. A pair of fire hydrants are also located within the fence. The building is divided into 3 regions. The main portion of the upper (ground) level contains the VFDs, pumps, and chlorination system. The chlorination system was installed in 2011 to raise the chlorine residual in the portions of the overall distribution system furthest from the point of entry into the Town. It includes two small chlorine feed pumps, instrumentation/panels, and the container of chlorine feed. This container is stored within appropriate spill containment measures. This system is not intended for continuous/permanent operation, rather it can be put online if needed based on water quality data. A new heating

system was recently installed at this pump station, and it remains in excellent condition. There is also a plan rack in the corner houses record drawings. The side room of the building is designed to house the natural gas generator associated with the station. Shelving in this room is used for the storage of spare valves, pipe clamps, and other similar parts. The third region is the lower level, beneath the station. The station is equipped with a digital tank level indicator, a circular recorder with digital indicator for suction pressure, and a circular recorder with digital indicator and totalizer for pump station flow.

Given the current condition of the building, it is anticipated that building repairs will need to be completed prior to the end of the planning period. The building roof is original to the building (approximately 28 years old). Additionally, one of the roof vents is especially weathered, and has developed a hole in the exhaust. Other building features such as the windows should be reevaluated during the planning period to determine a replacement schedule. Table 12 below outlines the components of this station and their expected remaining useful life expectancy. Table 13 estimates costs associated with future repairs, rehabilitation and maintenance.

Table 12: Limerock Pump Station Component Condition

Component	General Condition	Remaining Life Expectancy
Building Structure and Foundation	Good, per visual observation	30+ years
Roof	Fair, original to the facility (~25 years old), needs replacement	5 years
Mechanical Equipment	Good, per SWSB	10 years
Electrical	Good, replaced in 2017-2018	20 years
Instrumentation & Controls	Good, replaced 2017	15 years
Generator	Good, per SWSB and visual observation	10 years
Chlorine Injection System	Good, installed in 2010	10+ years

Table 13: Limerock Pump Station Recommended Rehabilitation/Replacement Schedule

Time Interval	Description	Opinion of Probable Cost
5-year	Continue routine maintenance & inspections	\$10,000
	Replace asphalt shingles on roof	\$15,000
	Replace vent	\$5,000
	Replace PRV outside pump station	\$15,000
10-year	Continue routine maintenance & inspections	\$10,000
	Replace emergency generator	\$75,000
15-year	Continue routine maintenance & inspections	\$10,000
	Replace pumps/interior piping	\$75,000
	Replace electrical/instrumentation components	\$40,000
	Repair chain link fence	\$10,000
20-year	Continue routine maintenance & inspections	\$10,000

3.5.3 DAVIS PUMP STATION (LOG ROAD BOOSTER PUMP STATION)

The Town's third station, the Davis Pump Station, or the Log Road Booster Pump Station, is located at 315 Log Road, and it was constructed in 1997 along with Limerock Pump Station during the aforementioned EPA improvements to the water system. Unlike the other stations, the Davis Pump Station operates with two constant speed pumps. During normal operation, both pumps are online and boost water up to 577 feet of head. This station is also equipped with a digital tank level indicator and circular recorder with digital indicator and totalizer for station flow.

The Pump Station Building is arranged the same as the Limerock station with three areas. The main portion of the upper (ground) level contains the MCCs and pumps. The side room of the building is designed to house the propane powered generator associated with the station. The third region is the lower level, beneath the station. The station is equipped with a digital tank level indicator, a circular recorder with digital indicator for suction pressure, and a circular recorder with digital indicator and totalizer for pump station flow.

The building itself is currently in good shape, but it is anticipated that repairs/replacement of components will be needed by the end of the planning period. The building roof is original to the building (approximately 28 years old) with a small number of shingles peeling up. The heating system is also dated and should be replaced during the planning period as they are past the end of their expected useful life, and are energy inefficient models.

This station is also located within a locked barbed wire, chain link, fence. The fence is currently in acceptable condition, however peeling paint and corroded metal are present. The fenced region also includes a propane tank for the generator. The station's fire hydrants are in good condition, and they were replaced recently. Table 14 below outlines the components of this station and their expected remaining useful life expectancy. Table 15 estimates costs associated with future repairs, rehabilitation and maintenance.

Table 14: Davis Pump Station Component Condition

Component	General Condition	Remaining Life Expectancy
Building Structure and Foundation	Good, per visual observation	30+ years
Roof	Good, original to facility	5 years
Mechanical Equipment	Good, per SWSB and visual observation	5 years
Electrical	Good, per SWSB and visual observation	10 years
Instrumentation & Controls	Good, per SWSB and visual observation	15 years
Generator	Good, per SWSB and visual observation	10 years

Table 15: Davis Pump Station Recommended Rehabilitation/Replacement Schedule

Time Interval	Description	Opinion of Probable Cost
5-year	Continue routine maintenance & inspections	\$10,000
	Replace heaters	\$15,000
	Replace asphalt shingles on roof	\$15,000
	Repair asphalt driveway	\$10,000
	Replace pumps/interior piping	\$40,000
10-year	Continue routine maintenance & inspections	\$10,000
	Replace emergency generator	\$75,000
15-year	Continue routine maintenance & inspections	\$10,000
	Replace electrical/instrumentation components	\$40,000
	Repair chain link fence	\$10,000
20-year	Continue routine maintenance & inspections	\$10,000

3.6 MISCELLANEOUS INFRASTRUCTURE AND EQUIPMENT

3.6.1 BUILDINGS

The majority of the buildings utilized by the SWSB are located at the pumping stations and storage tanks to house equipment associated with that site. Refer to Sections 3.4 and 3.5 for further information on these buildings.

For duties not tied to one of these specific sites, the SWSB utilizes the Smithfield Department of Public Works Building, which is located at 3 Spragueville Rd, Smithfield. Administration, billing, customer service, and other miscellaneous tasks are performed here. Additionally, it contains storage space utilized for SWSB's spare system components. In addition to duties associated with the SWSB, the Smithfield DPW operates out of this building.

Records indicate that the building has no known defects and is not approaching its end of life. Staff perform routine maintenance on the building as needed, which is anticipated to be sufficient for the duration of the planning period.

3.6.2 VEHICLES

Of the Town owned vehicles, the SWSB utilizes three trucks for its operations, which includes transport between pumping stations/tanks, water service calls, and inspections. The newest of these was purchased in 2023, following the hiring of a new staff member. The two older trucks were purchased in 2009 and 2015. It is expected that they will be replaced by the end of their planning period. Refer to Table 16 below

for further information regarding these vehicles. It is expected that two new vehicles will cost a total of \$100,000.

Table 16: Smithfield SWSB Vehicles

Year Purchased	Make	Description	Current Mileage	Yearly Mileage
2009	Ford	F-350	161,523	10,100
2015	Ford	F-350	98,972	9,900
2023	Ford	F-350 Utility Service	17,483	8,750

3.6.3 COMPUTER EQUIPMENT, BILLING SOFTWARE, AND TELEMETRY

The SWSB maintains four administrative computers for duties associated with the management of the system, such as customer billing. These were replaced within the past fiscal year. They also maintain three iPads, which are used in the field by operators to track/record system information, assist in inspections, etc. These were replaced in 2024.

The SWSB utilizes dedicated computer software for their billing needs. The provider for this is Continental Utility Solutions, Inc. SWSB staff are trained in its use and integration with the SWSB's water meters. The software itself receives periodic updates.

Smithfield uses a sophisticated telemetry system to control the operation of its infrastructure and to transmit status information to other sites. This includes the ability to view tank water levels and other parameters at the pump stations and at the Department of Public Works Building. Readings at the DPW building are then compiled onto continuous circular chart recorders, which are saved with other records/system data.

Tank level information for the Rocky Hill and Island Woods Storage Tanks are sent through the Longview Reservoir Pump Station, displayed on site, and then transmitted to the Limerock Pump Station. Additionally, the Longview Station's controls allow operators to select either the Rocky Hill or Island Woods Tank to operate the stations. Water level information/status signals from the third tank, the Burlingame Tank, are sent to the Davis Pump Station, and then on to the Longview Station. Information from all three tanks is sent from the Longview Station to the DPW building as noted above. The SWSB maintains the telemetry system on an as needed basis.

The system's telemetry and SCADA was installed in 2016-2017, with software upgrades performed as needed. The typical useful life for a PLC/SCADA upgrade project is 15 years. The PLCs and controllers remain functional, however they are past the end of their useful lives. In particular, the controllers for the water storage tanks are discontinued/ no longer supported; The controllers for the MTU and pump stations are currently supported, but newer products are available. It is therefore recommended that the Town pursues upgrades/replacements for the PLC system during the planning period to ensure continued support and the availability of replacement parts. It is recommended that regular preventive maintenance of these systems continue, as they ensure control of water in the system and the ability to transmit this water to customers on demand. A PLC/SCADA upgrade project has been included in the SWSB's short term (5-year) plan with an estimated cost of \$200,000.

The fire alarm systems at the pump stations were recently replaced and are in excellent condition. The SWSB regularly tests the fire alarms and the security alarms located at the tank/ pump station sites to ensure their functionality in an emergency scenario.

4.0 WATER QUALITY AND REGULATORY COMPLIANCE

4.1 DRINKING WATER REGULATIONS AND REGULATORS

As a public water distribution system, the SWSB is subject to not only Federal regulations such as the Safe Drinking Water Act, but also, State, and Local regulations designed to promote safe drinking water and its conveyance within the distribution system.

Given that Smithfield buys only finished water (from Providence Water), the SWSB largely relies on Providence Water to achieve safe levels of analytes within the water. Therefore, Smithfield's role within this regulatory framework is to maintain these safe levels within its system, and to sample its system to ensure that analytes remain within acceptable ranges. To accomplish this, Smithfield must both perform needed maintenance and improvement projects, and plan for these efforts in advance, minimizing the risk of interruption to water distribution.

The CWIRP itself, falls under the purview of the Rhode Island Regulations of 216-RICR-50-05-7, which outlines these plans, and the need to implement funding and planning mechanisms. This is done to promote the availability of safe drinking water and prevent the degradation of infrastructure from interfering with this mission. The SWSB must plan for, and complete, projects and maintenance that ensure the continued distribution of safe potable drinking water.

Per these regulations, the Rhode Island Department of Health (RIDOH) is designated as the primary agency to administer CWIRP programs for "All water suppliers which supply, obtain, transport, distribute, purchase, and/or sell on a wholesale or retail basis, more than fifty million (50,000,000) gallons of water per year". These plans must detail funding mechanisms to rehabilitate or replace infrastructure and lay out the management of existing infrastructure.

4.2 SAMPLING WITHIN SMITHFIELD

To adhere to regulatory testing requirements, the SWSB samples water from their system at four locations: Bryant University, Log Road Booster Pump Station, Heritage Hills, and Lincolnwood Health Center (Hopkins Manor). These can be seen visually in Appendix A. These constitute representative water from the system. Samples from each location are collected each month and are analyzed in accordance with their sampling program's schedule for analytes including total coliform, fecal coliform, standard residual chlorine, total trihalomethanes, and Total Haloacetic Acids. These are analyzed by Rhode Island Analytical Laboratories, and the results are reported to regulatory agencies as appropriate. The SWSB also publishes these sampling results, along with other testing results, in their publicly available yearly Consumer Confidence Reports.

4.3 HISTORICAL EXCEEDANCES

Historically, the sampling programs indicate high quality water within the distribution system. This water is purchased in a finished state from Providence Water, without additional treatment plants in Smithfield. There have been a small number of exceedances for total trihalomethanes (TTHM), with the most recent being in 2018. In response to these exceedances, the SWSB pursued upgrades to the water storage tanks in 2020 which included TTHM removal systems, aeration mixers, pH monitoring systems, and new AWWA-approved vents. Subsequent to these upgrades, there were no further TTHM violations. Historical data indicated that these upgrades were responsible for a 66% reduction of TTHMs.

Additionally, there were two violations for total coliform in 2025. In response to these violations, the SWSB completed assessment reports and incorporated an in-depth Emergency Disinfection Procedure

into their Emergency Response Plan. Prior to these exceedances, the Town had installed a chlorine injection system at the Limerock Station to control residuals in the most remote portions of the distribution system. In light of these exceedances, the SWSB is making additional provisions at the Longview Pumping Station (the entry point of water into the system), to measure the influent chlorine residual concentration at the wholesale connection and provide supplemental chlorine addition on an as-needed basis at the connection. This system shall be used to boost the chlorine residual in the event that emergency disinfection is required and allow for chlorination independent of Providence Water. Additionally, the SWSB has reinforced to customers that any work on private hydrants/mains must be coordinated with the SWSB prior to the work. There have been no coliform violations subsequent to the two instances that triggered these upgrades. Refer to Table 17 for a listing of past exceedances within the past 10 years.

Table 17: Historical Exceedances

Date	Violation	Analyte	Returned to Compliance?
12/19/2017	MCL, LRAA	TTHM	Yes
4/3/2018	MCL, LRAA	TTHM	Yes
8/23/2018	MCL, LRAA	TTHM	Yes
7/15/2025	MCL	Total Coliform	Yes
8/26/2025	MCL	Total Coliform	Yes

4.4 WATER QUALITY FROM PROVIDENCE WATER

As noted above, the SWSB is largely dependent on Providence Water to control the finished water that they sell to Smithfield and other communities in Northern Rhode Island. This water is largely of acceptable quality, and the sold finished water does not have exceedances for monitored contaminants. However, it is noted that the pH levels are significantly higher than typical distribution systems, on the order of 10.1. The distribution systems that rely on Providence Water are conditioned to this higher range, and there are no current plans to lower it. However, the high pH has led to issues, such as the higher than normal TTHMs in Smithfield's distribution system. Additionally, Providence Water's documentation indicates that they provide water to Smithfield in the range of 14 psi to 17 psi, rather than the proper distribution pressure of at least 20 psi. The SWSB boosts this pressure immediately upon its entry into their system, and utilizes backflow prevent devices installed at the Longview Pump Station and the Station's pumps. Per RIDOH's recommendations, the SWSB asked Providence Water to increase the supplied water's pressure, however Providence Water is unable to do so based on their current infrastructure configuration.

5.0 INFRASTRUCTURE REPLACEMENT PLANNING AND FUNDING

This CWIRP targets two periods for its financial analysis: a short-term planning period (the next five years) and a long-term planning period (5 to 20 years from the present). This allows the plan to focus on, and prepare funding for, higher priority items, as well as items expected to become higher priority during the overall planning period. This planning of maintenance, repairs, and funding, as well as the implementation of these by the SWSB is therefore in accordance with the requirements of the applicable regulations. Refer to Sections 5.1 and 5.2 for further information on anticipated items.

In general, a higher priority was assigned to items closer to the ends of their useful lives, items that are known to need addressing, and items that are critical to the operation of the system/ items whose failure could lead to significant impacts on system reliability. When evaluating these items, consideration was given to the costs/reliability of maintaining a given item versus replacing it, relative to its historical performance and expected end of useful life.

This Plan outlines anticipated future capital spending to allow the SWSB to plan for improvements and maintenance in advance. Given that some items cannot reasonably be predicted, and that the SWSB's priorities may change over the planning period depending on factors such as changes in regulations, system performance or funding availability, it is recommended that the SWSB reviews this Plan on an annual basis to ensure that it continues to remain aligned with the Town's goals and needs. New/updated items should be addressed at the time, or added to the CWIRP during the 2030 revisions, depending on the urgency of needs. Additionally, it is noted that inclusion or exclusion of items from this Plan is not a replacement for general/preventative maintenance. Infrastructure maintenance serves to extend the useful life expectancy of components, and reduces the risk of component failure.

The opinions of probable costs presented in the short-term and long-term plan are consistent with a Class 5 level estimate based on the Association for the Advancement of Cost Engineering (AACE) 18R-97 cost estimate classification system. A Class 5 estimate is typically used for conceptual screening when the project definition is in the range of 0 to 2%. Class 5 level estimates have an accuracy range of -50% to +100%.

5.1 SHORT TERM PLANNING (NEXT 5 YEARS)

Table 18 below highlights items associated with the short-term planning period. These are the higher priority items to be addressed in the next five years. The most notable of these items is an upcoming water main project that will create a system loop at Farnum Pike and George Washington Highway. The design of this project is divided into 3 phases, the first of which includes a water main extension along George Washington Highway and Farnum Pike and an emergency interconnection with Greenville Water District at Pleasant View Ave. This design is currently ongoing and scheduled for construction next year. Phases 2 and 3 include additional water main extensions along Farnum Pike and George Washington Highway, respectively. These phases will follow sequentially. Table 18 also includes a project to address the SWSB's aging SCADA/PLC infrastructure, which has reached, or passed its expected useful life. Costs within the table are in terms of present worth.

Table 18: Short Term (5 Year) Planning

Project	Estimated Cost	Year Start	Year Complete	Comments
Perform routine inspections/maintenance at the three pump stations	\$30,000	2026	2030	\$2,000 per year per pump station for 5 years
Perform storage tank inspections	\$15,000	2027	2027	\$5,000 per tank once every 5 years
Tank washing – Rocky Hill Tank	\$5,000	2026	2026	Rocky Hill Tank – identified during site inspection
Repair/replace altitude valve/piping and vault at Island Woods Tank	\$75,000	2026	2030	Island Woods Tank
Tank rehabilitation	\$500,000	2027	2029	Burlingame Tank – estimated based on 2020 CWIRP cost with 3% annual escalation
Repair gravel access roadway, as required	\$10,000	2026	2030	Burlingame Tank
Replace asphalt shingles on roof	\$30,000	2026	2030	Limerock Pump Station and Davis Pump Station
Replace vent	\$5,000	2026	2030	Limerock Pump Station
Replace PRV outside pump station	\$15,000	2026	2030	Limerock Pump Station
Replace heaters	\$15,000	2026	2030	Davis Pump Station
Repair asphalt driveway	\$10,000	2026	2030	Davis Pump Station
Replace pumps/interior piping	\$40,000	2026	2030	Davis Pump Station
Purchase new utility trucks	\$100,000	2026	2026	Replace 2009 and 2015 Ford F-350 trucks
SCADA & PLC Upgrades	\$200,000	2026	2030	SCADA and PLC Systems are at or will pass their expected useful life during this period.
Water Main Project	\$3,000,000	2026	2027	Farnum Pike and GW Highway – Phase 1. Currently in design for Summer 2026 construction
Water Main Project	\$1,600,000	2026	2028	Farnum Pike and GW Highway – Phase 2.
Water Main Project	\$2,600,000	2027	2029	Farnum Pike and GW Highway – Phase 3.

Water Main Project*	\$0	2026	2026	Log Road Water Main Extension *Project to be funded exclusively by grant from RIIB so no planning costs are included.
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5.2 LONG TERM PLANNING (5 TO 20 YEARS)

Table 19 below highlights items associated with the long-term planning period. These are items that are, or will be, priorities, but to a lesser degree than the short-term projects. They include rehabilitation of system components that are acceptable in the present, but expected become priorities as they age over time. Notable examples of these include electrical and mechanical equipment at the pump stations. Further water main work during this period will expand and rehabilitate the distribution system. Costs within the table are in terms of present worth.

Table 19: Long Term (5 to 20 Year) Planning

Project	Estimated Cost	Year Start	Year Complete	Comments
Perform routine inspections/ maintenance at the three pump stations	\$90,000	2031	2045	\$2,000 per year per pump station for 15 years
Perform storage tank inspections	\$45,000	2031	2045	\$5,000 per tank once every 5 years
Perform minor tank repairs, as required	\$30,000	2036	2040	\$10,000 allowance per tank
Chain link fence repairs	\$60,000	2031	2040	\$10,000 allowance per facility (3 tanks; 3 pump stations)
Tank rehabilitation	\$1,600,000	2045	2045	Rocky Hill Tank – cost based on 2020 rehab cost with 3% annual escalation
Tank rehabilitation	\$2,300,000	2045	2045	Island Woods Tank – cost based on 2020 rehab cost with 3% annual escalation
Repairs to pump station structure/foundation	\$50,000	2031	2035	Longview Reservoir Pump Station
Replace asphalt shingles on roof	\$15,000	2031	2035	Longview Reservoir Pump Station
Replace emergency generator	\$225,000	2031	2035	\$75,000 allowance per pump station
Replace pumps/interior piping	\$100,000	2031	2035	Longview Reservoir Pump Station
Replace pumps/interior piping	\$75,000	2036	2040	Limerock Pump Station
Replace electrical/ instrumentation components	\$120,000	2036	2040	\$40,000 allowance per pump station
Water Main Projects	\$3,560,000	2030	2045	New 12-inch diameter pipe on Harris Road between Douglas Pike and GW Highway
Water Main Projects	\$3,100,000	2030	2045	Replacement of 12-inch pipe on Smithfield Road with new 16-inch pipe between Longview Reservoir PS and Jefferson Street
Water Meter Replacement	\$850,000	2030	2035	Current meters ~9 years old

5.3 ENTERPRISE FUND

The SWSB is funded through their Enterprise Fund Agency through the municipal corporation of the Town of Smithfield. The enterprise fund is overseen by the five elected members of the Town Council, who are responsible for its overall management and policy. Additionally, the Town Council appoints the five members of the SWSB Advisory Commission, whose role is to advise the SWSB on policies and investments. The Town Manager and Water Commissioner serve in non-voting, ex officio capacities within this commission.

Financing of the enterprise fund/ the inflow of cash is generated through user fees in the form of water service and tax charges. Quarterly billing is utilized for residential customers and small non-residential customers, whereas large non-residential customers are billed on a monthly basis instead. Charges and fees are evaluated by the SWSB and adjusted as appropriate to match the costs associated with supplying its customers and to maintain funding for present and future operations, debt service, and capital improvement projects associated with the water system.

These funds are further bolstered by grant, loan, and bonding programs as needed to meet the financial needs of these projects. The following sections outline currently available, alternate funding sources. These are not necessarily used on all projects, but instead are among the options the Board can use/ has used when they determine that the source is the most cost-effective and/or best suited option for a given need.

5.4 GENERAL OBLIGATION BONDS

If the Town's Finance Department and Town Council approve, the SWSB can receive financing through a Town-issued general obligation bond. The bond(s) must not exceed the total appropriated amount requested by the Town Manager and Town Council President, and the ramifications of creating this obligation debt must be considered when selecting this funding source. For further information on the mechanics of this bonding process, refer to Smithfield's Town Charter under Article II, C-345(2).

5.5 RHODE ISLAND WATER RESOURCES BOARD

The Rhode Island Water Resources Board (WRB) is an executive agency of Rhode Island's state government tasked with managing the development, utilization, and conservation of water resources in the state. As part of this mission, they offer grant and loan programs for water system projects. The WRB will finance the improvements, and then lease the system back to the indebted to recover the bonded amount.

5.6 RHODE ISLAND INFRASTRUCTURE BANK

The Rhode Island Infrastructure Bank (Formerly known as the Rhode Island Clean Water Finance Agency) is Rhode Island's revolving fund for infrastructure improvement-based projects, including drinking water. Each year, the Rhode Island Department of Health creates a Priority Project Listing from among the submitted projects. They then appropriate funds accordingly by awarding subsidized loans to the selected projects.

5.7 RURAL UTILITIES SERVICE

The Rural Utilities Service (RUS) replaced the older Rural Development Administration and Farmers Home Administration programs. RUS is administered by the USA Department of Agriculture and provides financing opportunities for infrastructure projects in rural communities. Of their offerings, Smithfield is

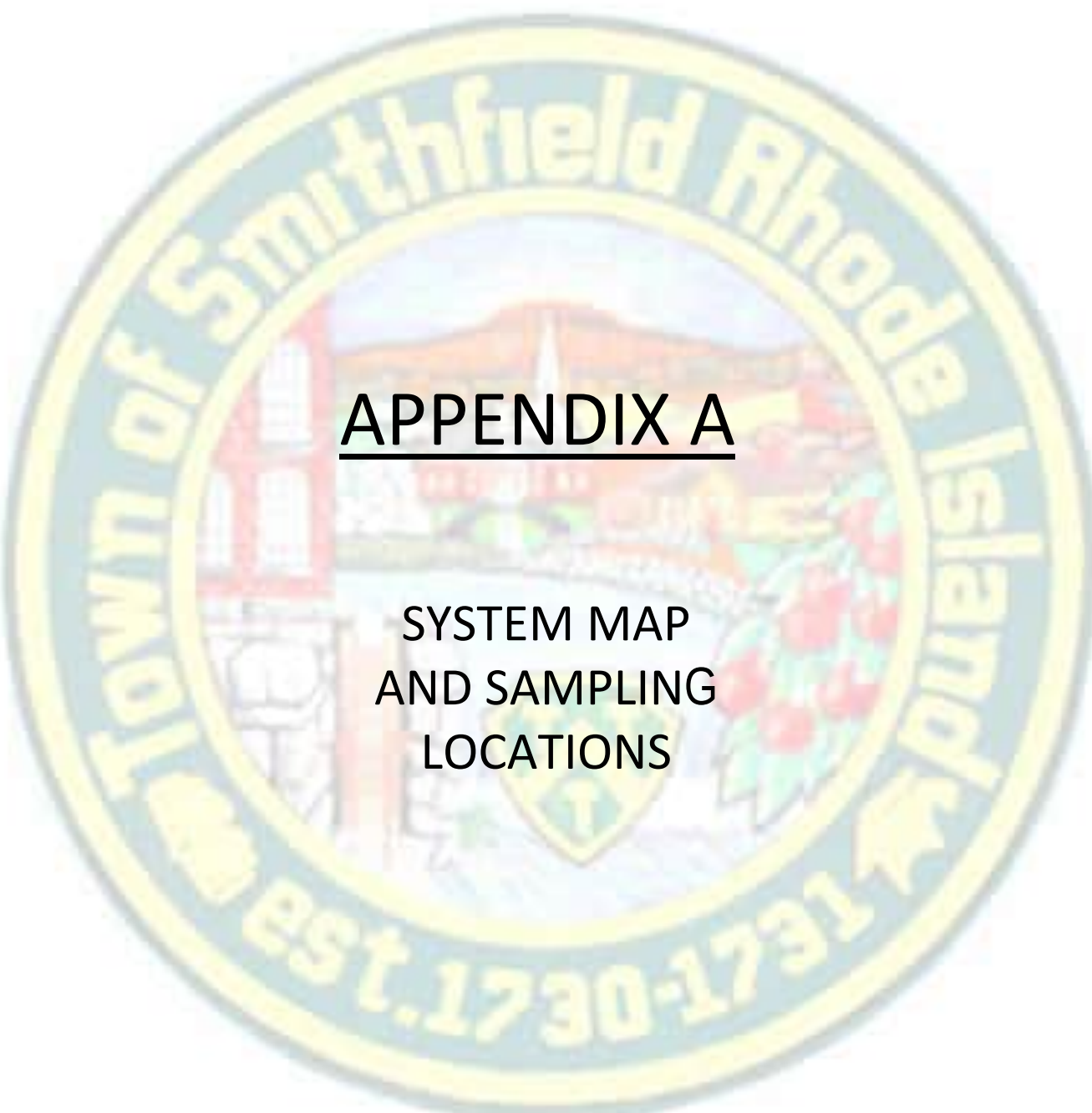
an eligible community under RUS's Water and Environmental Programs, which provide financing for rural drinking water and wastewater programs.

5.8 INFRASTRUCTURE REPLACEMENT FUND

The Town of Smithfield recently created an Infrastructure Replacement Fund (IRF) to fund future capital projects. The IRF is filled with a dedicated charges to users rate structure and placed into this dedicated fund. These funds can then be applied to dedicated infrastructure projects as needed by the Town. The funds cannot be used for other purposes, including debt service programs on the payments of bonds.

6.0 REFERENCES

- 1) Smithfield Water Supply Board | Smithfield, RI.” Smithfieldri.gov, 2025, www.smithfieldri.gov/departments/smithfield-water-district. Accessed 19 Nov. 2025 Town Website
- 2) Water Supply System Management Plan for the Smithfield Water Supply Board, January 2022, prepared by Pare Corporation
- 3) Clean Water Infrastructure Replacement Plan for the Smithfield Water Supply Board, February 2020, prepared by Pare Corporation
- 4) Underwater Solutions, Inc. Inspection and Cleaning (Sediment Removal) of the 1-Million Gallon Welded Steel Water Storage Tank, Smithfield Water Supply, Smithfield, Rhode Island, dated April 21, 2022
- 5) Underwater Solutions, Inc. Inspection and Cleaning (Sediment Removal) of the 4-Million Gallon Welded Steel Water Storage Tank, Smithfield Water Supply, Smithfield, Rhode Island, dated April 20, 2022
- 6) Underwater Solutions, Inc. Inspection and Cleaning (Sediment Removal) of the 300,000 Gallon Welded Steel Water Storage Tank, Smithfield Water Supply, Smithfield, Rhode Island, dated June 30, 2025

The seal of the Town of Smithfield, Rhode Island, is a circular emblem. It features a central shield depicting a landscape with a red-roofed building, a white steeple, and a body of water. The shield is surrounded by a blue ring containing the text "Town of Smithfield Rhode Island" in yellow. Below the ring, the text "Est. 1730-1731" is written in yellow. The entire seal is set against a white background.

APPENDIX A

SYSTEM MAP AND SAMPLING LOCATIONS

Town of Smithfield, RI
Water Supply Board
System Map and Sampling Locations
October 2025

Legend

- Hydrants
- 5 PumpStation
- StorageTank

Water Pipe

PipeSize

- <Null>
- 6
- 8
- 10
- 12
- 16

Water Supply Districts

BURLINGAME TANK
CAPACITY = 0.3 MG
DIAMETER = 40 FT
FLOOR EL = 545 FT
OVERFLOW EL = 577 FT

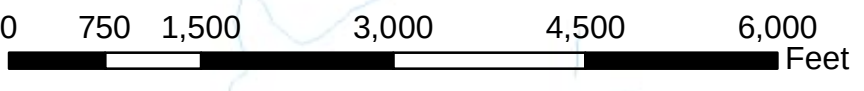
LOG ROAD/DAVIS BOOSTER PS
HGL = 577 FT

ISLAND WOODS TANK
CAPACITY = 4.0 MG
DIAMETER = 105 FT
FLOOR EL = 459 FT
OVERFLOW EL = 521 FT

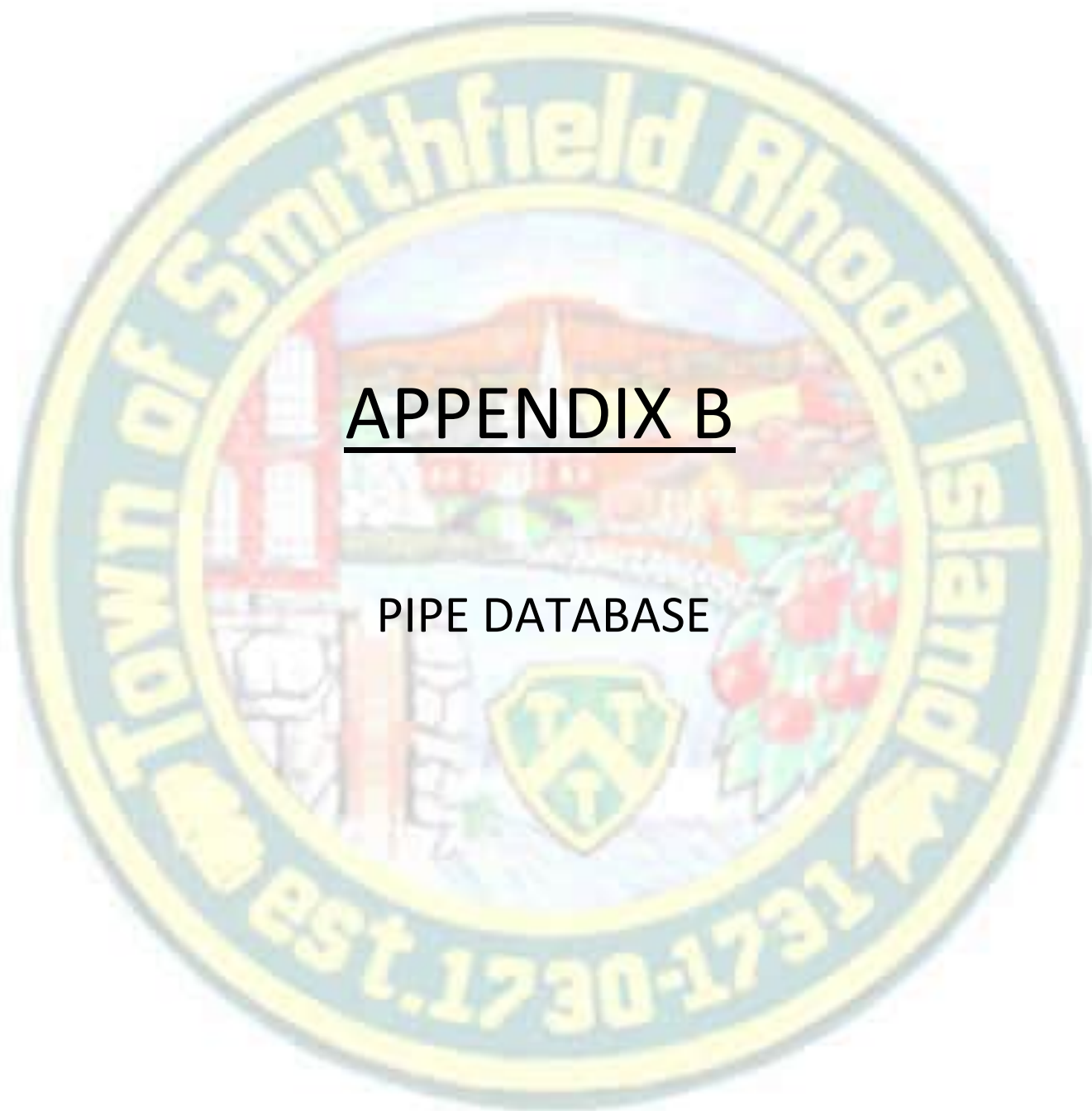
ROCKY HILL TANK
CAPACITY = 1.0 MG
DIAMETER = 66 FT
GROUND EL = 481 FT
OVERFLOW EL = 521 FT

LIMEROCK BOOSTER PS
TOTAL CAP = 1.3 MGD
HGL = 516 - 520 FT
APPROX. GRND EL = 265 FT

LONG VIEW RESERVOIR & PS
TOTAL CAP = 1,366 GPM/1,965 GPD
INCOMING WATER = 13 PSI (PROV WATER)
OUTGOING WATER = 120 PSI (MAX)
HGL = 544 FT
APPROX. GRND EL = 266 FT



This Map is Intended For General Planning & Information Purposes Only.



APPENDIX B

PIPE DATABASE

Pipe ID	Street Name	From Street	To Street	Length (ft)	Size (in)	Pipe Installation	Age	Pipe Material	Pipe Break	Pipe Setting	Break Score ¹	Setting Score ²	Age-Material Score ³	Physical Rating ⁴	Street Priority ⁵	Override? ⁶	Location Rating	Final Score ⁷	Ranking
1	DOUGLAS PIKE	THURBER BLVD	686 DOUGLAS PIKE	3,877	12	1964	61	CI	2	POOR	2.4	4	3.69	3.36	Priority 8		4	7.36	1
13	RIDGE ROAD	RIDGE VIEW COURT	HUNTERS KNOLL	1,286	12	1964	61	CI	1	POOR	0.75	4	3.69	2.81	Priority 8		4	6.81	2
6	DOUGLAS PIKE	495 DOUGLAS PIKE	MAUREEN DRIVE	516	12	1964	61	CI	1	POOR	0.75	4	3.69	2.81	Priority 8		4	6.81	3
3	DOUGLAS PIKE	686 DOUGLAS PIKE	HARRIS ROAD	370	12	1964	61	CI	1	POOR	0.75	4	3.69	2.81	Priority 8		4	6.81	4
7	DOUGLAS PIKE	MAUREEN DRIVE	WHIPPLE ROAD	2,873	12	1964	61	CI		POOR	0	4	3.69	2.56	Priority 8		4	6.56	5
17	RIDGE ROAD	DILLON LANE	RIDGE VIEW COURT	1,911	12	1964	61	CI		POOR	0	4	3.69	2.56	Priority 8		4	6.56	6
9	RIDGE ROAD	JEFFERSON STREET	TOWN LINE	1,516	12	1964	61	CI		POOR	0	4	3.69	2.56	Priority 8		4	6.56	7
10	Smithfield Road	TOWN LINE	NOTTO DRIVE	1,323	12	1964	61	CI		POOR	0	4	3.69	2.56	Priority 8		4	6.56	8
23	Smithfield Road	RAYNA ROAD	FORESTWOOD DRIVE	1,311	12	1964	61	CI		POOR	0	4	3.69	2.56	Priority 8		4	6.56	9
11	Smithfield Road	NOTTO DRIVE	CENTURY DRIVE	1,089	12	1964	61	CI		POOR	0	4	3.69	2.56	Priority 8		4	6.56	10
15	RIDGE ROAD	CAROLANN AVENUE	PARTRIDGE LEN	828	12	1964	61	CI		POOR	0	4	3.69	2.56	Priority 8		4	6.56	11
18	RIDGE ROAD	HUNTERS KNOLL	JEFFERSON ST	752	12	1964	61	CI		POOR	0	4	3.69	2.56	Priority 8		4	6.56	12
16	RIDGE ROAD	PARTRIDGE LANE	DILLON LANE	730	12	1964	61	CI		POOR	0	4	3.69	2.56	Priority 8		4	6.56	13
19	Smithfield Road	RIVERVIEW DRIVE	ST. JAMES PL	608	12	1964	61	CI		POOR	0	4	3.69	2.56	Priority 8		4	6.56	14
21	Smithfield Road	UNNAMED ROAD	RAYNA ROAD	275	12	1964	61	CI		POOR	0	4	3.69	2.56	Priority 8		4	6.56	15
12	Smithfield Road	CENTURY DRIVE	LAWNACRE DRIVE	213	12	1964	61	CI		POOR	0	4	3.69	2.56	Priority 8		4	6.56	16
20	Smithfield Road	ST. JAMES PL	UNNAMED ROAD	129	12	1964	61	CI		POOR	0	4	3.69	2.56	Priority 8		4	6.56	17
14	Smithfield Road	LAWNACRE DRIVE	RIVERVIEW DRIVE	31	12	1964	61	CI		POOR	0	4	3.69	2.56	Priority 8		4	6.56	18
272	Smithfield Road	Mineral spring ave	Longvue pump station		12	1964	61	CI		POOR	0	4	3.69	2.56	Priority 8		4	6.56	19
273	Smithfield Road	Longvue pump station	Smithfield road		12	1964	61	CI		POOR	0	4	3.69	2.56	Priority 8		4	6.56	19
157	ROCKY HILL ROAD	HARRIS ROAD	GEORGE WASHINGTON HIGHWAY	833	12	1964	61	CI	1		0.75	0	3.69	1.48	Priority 8		4	5.48	21
57	ROCKY HILL ROAD	WEST RESERVOIR ROAD	151 ROCKY HILL ROAD	1,378	12	1964	61	CI			0	0	3.69	1.23	Priority 8		4	5.23	22
378	WHIPPLE road	Douglas pike	Carol Ann avenue	791	12	1964	61	CI			0	0	3.69	1.23	Priority 8		4	5.23	23
40	DOUGLAS PIKE	LIMEROCK ROAD	LIMEROCK ROAD PUMP STATION	118	12	1964	61	CI			0	0	3.69	1.23	Priority 8		4	5.23	24
37	DOUGLAS PIKE	HOLIDAY INN	GEORGE WASHINGTON HIGHWAY	883	16	1997	28	DI	1		0.75	0	1.37	0.71	Priority 8		4	4.71	25
31	DOUGLAS PIKE	HAMPTON INN	THURBER BOULEVARD	630	16	1997	28	DI	1		0.75	0	1.37	0.71	Priority 8		4	4.71	26
374	Douglas pike				12	1997	28	DI	1		0.75	0	1.37	0.71	Priority 8		4	4.71	27
375	Douglas pike				12	1997	28	DI	1		0.75	0	1.37	0.71	Priority 8		4	4.71	27
326	THURBER BOULEVARD			2,852	8	1980	45	AC-200	7		8.4	0	4.05	4.15	Priority 3		1	4.65	29
283	Burlingame road			6,503	12	1990	35	DI			0	0	1.65	0.55	Priority 8		4	4.55	30
56	DOUGLAS PIKE	WHIPPLE ROAD	RAY DRIVE	2,744	12	1990	35	DI			0	0	1.65	0.55	Priority 8		4	4.55	31
49	DOUGLAS PIKE	RAY DRIVE	TWIN RIVER ROAD	2,529	12	1990	35	DI			0	0	1.65	0.55	Priority 8		4	4.55	32
376	Douglas pike	Jefferson street	Calvary drive	1,603	12	1990	35	DI			0	0	1.65	0.55	Priority 8		4	4.55	33
377	Douglas pike	Jefferson street	Twin river road	781	12	1990	35	DI			0	0	1.65	0.55	Priority 8		4	4.55	34
110	DECOTIS FARM ROAD			4,490	12	1997	28	DI			0	0	1.37	0.46	Priority 8		4	4.46	35
99	DOUGLAS PIKE	ROGLER FARM ROAD	SALEM STREET	2,251	12	1997	28	DI			0	0	1.37	0.46	Priority 8		4	4.46	36
140	DOUGLAS PIKE	SALEM STREET	ESSEX STREET	1,816	16	1997	28	DI			0	0	1.37	0.46	Priority 8		4	4.46	37
64	DOUGLAS PIKE	ESSEX STREET	HOLIDAY INN	1,622	16	1997	28	DI			0	0	1.37	0.46	Priority 8		4	4.46	38
32	DOUGLAS PIKE	GEORGE WASHINGTON HIGHWAY	HAMPTON INN	1,479	16	1997	28	DI			0	0	1.37	0.46	Priority 8		4	4.46	39
219	ROCKY HILL ROAD			379	12	1997	28	DI			0	0	1.37	0.46	Priority 8		4	4.46	40
336	Douglas Pike	Ridge road	Douglas pike		12	1997	28	DI			0	0	1.37	0.46	Priority 8		4	4.46	41
51	RIVERVIEW DRIVE	MEADOW VIEW BOULEVARD	LAKE DRIVE	637	8	1977	48	AC-200			0	0	4.17	1.39	Priority 7		3	4.39	42
329	WEST RESERVOIR ROAD	WEST RESEVOIR RD	HARRIS ROAD	1,183	12	1964	61	CI			0	0	3.69	1.23	Priority 7		3	4.23	43
25	CAROL ANN AVENUE			992	12	1964	61	CI			0	0	3.69	1.23	Priority 7		3	4.23	44
53	FORESTWOOD DRIVE	OAK PARK DRIVE	OAK PARK DRIVE	633	8	1987	38	PVC-WHITE			0	0	3.52	1.17	Priority 7		3	4.17	45
295	FARNUM PIKE	ROGLER FARM ROAD	BRAYTON ROAD	2,064	12	1987	38	PVC-WHITE	1		0.75	0	3.52	1.42	Priority 6		3	3.92	46
209	TANGLEWOOD LANE			216	8	1977	48	AC-200			0	0	4.17	1.39	Priority 6		3	3.89	47
180	TWIN RIVER ROAD			1,400	8	1988	37	DI	1		0.75	0	1.73	0.83	Priority 7		3	3.83	48
45	TANGLEWOOD LANE	OAK PARK CIRCLE	HERITAGE CIRCLE	579	8	1987	38	PVC-WHITE			0	0	3.52	1.17	Priority 6		3	3.67	49
294	FARNUM PIKE	BRAYTON ROAD	OLD FORGE ROAD	88	12	1987	38	PVC-WHITE			0	0	3.52	1.17	Priority 6		3	3.67	50
239	Tanglewood lane	Tanglewood lane	Primrose lane		8	1987	38	PVC-WHITE			0	0	3.52	1.17	Priority 6		3	3.67	51
280	Log Road	Old forge rd	Pump station log rd		12	1990	35	DI			0	0	1.65	0.55	Priority 7		3	3.55	52
158	GEORGE WASHINGTON HIGHWAY	BUSINESS PARK DRIVE	TOWN LINE	2,777	12	1969	56	CI	2		2.4	0	3.49	1.96	Priority 5		2	3.46	53
298	ROGLER FARM ROAD	BRAYTON ROAD	DOUGLAS PIKE	1,795	12	1997	28	DI			0	0	1.37	0.46	Priority 7		3	3.46	54
297	ROGLER FARM ROAD	FARNUM PIKE	BRAYTON ROAD	1,791	12	1997	28	DI			0	0	1.37	0.46	Priority 7		3	3.46	55
170	RIVERVIEW DRIVE	LAKE DRIVE	WEST LAKEVIEW DRIVE	555	8	1997	28	DI			0	0	1.37	0.46	Priority 7		3	3.46	56
291	OLD FORGE ROAD			3,039	12	1990	35	DI	1		0.75	0	1.65	0.80	Priority 6		3	3.30	57

Pipe ID	Street Name	From Street	To Street	Length (ft)	Size (in)	Pipe Installation	Age	Pipe Material	Pipe Break	Pipe Setting	Break Score ¹	Setting Score ²	Age-Material Score ³	Physical Rating ⁴	Street Priority ⁵	Override? ⁶	Location Rating	Final Score ⁷	Ranking
292	FARNUM PIKE	INDUSTRIAL DRIVE	326 FARNUM PIKE	2,084	12	1987	38	PVC-WHITE	4		4.8	0	3.52	2.77	Priority 6	0.25	0	3.02	58
85	MEADOW VIEW DRIVE	VALLEY WAY	SUNSET DRIVE	517	8	1970	55	AC-150	3		3.6	0	4.6	2.73	Priority 2		0	2.98	59
366	Sunset drive	Meadow view drive	Grand view drive	393	8	1970	55	AC-150	3		3.6	0	4.6	2.73	Priority 2		0	2.98	60
373	Cardinal way	WHIPPLE	Douglas pike		8	1997	28	DI			0	0	1.37	0.46	Priority 6		3	2.96	61
68	STEPHANIE DRIVE			972	8	1977	48	AC-200			0	0	4.17	1.39	Priority 5		2	2.89	62
109	MEADOW VIEW BOULEVARD	RAYNA ROAD	WENSCOTT LANE	808	8	1977	48	AC-200			0	0	4.17	1.39	Priority 5		2	2.89	63
43	WENSCOTT LANE	MEADOW VIEW BOULEVARD	TWINS LANE	725	8	1977	48	AC-200			0	0	4.17	1.39	Priority 5		2	2.89	64
34	MEADOW VIEW BOULEVARD	LAKE DRIVE	STEPHANIE DRIVE	641	8	1977	48	AC-200			0	0	4.17	1.39	Priority 5		2	2.89	65
28	MEADOW VIEW BOULEVARD	RIVERVIEW DRIVE	LAKE DRIVE	632	8	1977	48	AC-200			0	0	4.17	1.39	Priority 5		2	2.89	66
55	TWINS LANE	HICKORY DRIVE	ROBINS WAY	432	8	1977	48	AC-200			0	0	4.17	1.39	Priority 5		2	2.89	67
42	TWINS LANE	WENSCOTT LANE	HICKORY DRIVE	372	8	1977	48	AC-200			0	0	4.17	1.39	Priority 5		2	2.89	68
69	ROBINS WAY	TWINS LANE	HICKORY DRIVE	368	8	1977	48	AC-200			0	0	4.17	1.39	Priority 5		2	2.89	69
67	MEADOW VIEW BOULEVARD	STEPHANIE DRIVE	RAYNA ROAD	357	8	1977	48	AC-200			0	0	4.17	1.39	Priority 5		2	2.89	70
72	RAYNA ROAD			292	8	1977	48	AC-200			0	0	4.17	1.39	Priority 5		2	2.89	71
41	ROBINS WAY	HICKORY DRIVE	TANGLEWOOD LANE	220	8	1977	48	AC-200			0	0	4.17	1.39	Priority 5		2	2.89	72
39	MEADOW VIEW BOULEVARD	STEPHANIE DRIVE	WENSCOTT LANE	133	8	1977	48	AC-200			0	0	4.17	1.39	Priority 5		2	2.89	73
59	OAK PARK CIRCLE			625	8	1987	38	PVC-WHITE			0	0	3.52	1.17	Priority 5		2	2.67	74
368	Limerock Road	Douglas pike	Harris road	820	8	1970	55	AC-150	1		0.75	0	4.6	1.78	Priority 4		1	2.53	75
305	JAMBRAY DRIVE			1,236	8	1977	48	AC-200	2		2.4	0	4.17	2.19	Priority 2		0	2.44	76
344	Catherine road	Highview drive	Lori Ellen drive		8	1977	48	AC-200	2		2.4	0	4.17	2.19	Priority 2		0	2.44	77
349	Maureen Drive			786	8	1976	49	AC-200	1		0.75	0	4.21	1.65	Priority 4		1	2.40	78
355	Maureen Drive	Redfern drive	Karen Ann drive	1,379	8	1977	48	AC-200	1		0.75	0	4.17	1.64	Priority 4		1	2.39	79
343	Lori Ellen drive	Karen Ann drive	Clark road	1,259	8	1977	48	AC-200	1		0.75	0	4.17	1.64	Priority 4		1	2.39	80
350	Maureen Drive	High view drive	Forestwood drive	880	8	1977	48	AC-200	1		0.75	0	4.17	1.64	Priority 4		1	2.39	81
345	Lori Ellen drive	Cathrine road	Karen Ann drive	715	8	1977	48	AC-200	1		0.75	0	4.17	1.64	Priority 4		1	2.39	82
342	Clark Road	LIMEROCK road	Lori Ellen drive	485	8	1977	48	AC-200	1		0.75	0	4.17	1.64	Priority 4		1	2.39	83
357	Karen Ann drive	Price lane	Maureen drive	369	8	1977	48	AC-200	1		0.75	0	4.17	1.64	Priority 4		1	2.39	84
302	BRAYTON ROAD	ELNA DRIVE	JOHN MOWRY ROAD	274	8	1977	48	AC-200	1		0.75	0	4.17	1.64	Priority 4		1	2.39	85
335	Ridge road	67 ridge road	Ridgeland road	285	12	1964	61	DI		POOR	0	4	2.69	2.23	Priority 8	0	0	2.23	86
299	BRAYTON ROAD	ROGLER FARM ROAD	41 BRAYTON ROAD	649	8	1977	48	AC-200	2		2.4	0	4.17	2.19	Priority 4	0	0	2.19	87
306	LEVESQUE DRIVE			682	8	1977	48	AC-200	2		2.4	0	4.17	2.19	Priority 1		0	2.19	88
365	Karen Ann drive	Clark rd	Limerock road	1,304	8	1977	48	AC-200			0	0	4.17	1.39	Priority 4		1	2.14	89
300	BRAYTON ROAD	JOHN MOWRY ROAD	ROGLER FARM ROAD	1,280	8	1977	48	AC-200			0	0	4.17	1.39	Priority 4		1	2.14	90
311	LATHAM FARM ROAD	HIGHLAND TERRACE	CEDAR FOREST ROAD	1,196	8	1977	48	AC-200	1		0.75	0	4.17	1.64	Priority 3		1	2.14	91
356	Karen Ann drive	Maureen drive	Clark road	927	8	1977	48	AC-200			0	0	4.17	1.39	Priority 4		1	2.14	92
361	Maureen Drive	Karen Ann drive	Price lane	653	8	1977	48	AC-200			0	0	4.17	1.39	Priority 4		1	2.14	93
296	BRAYTON ROAD	FARNUM PIKE	DONGAY ROAD	646	8	1977	48	AC-200			0	0	4.17	1.39	Priority 4		1	2.14	94
353	Maureen Drive	Forestwood drive	Sheila lane	537	8	1977	48	AC-200			0	0	4.17	1.39	Priority 4		1	2.14	95
358	Karen Ann drive	Lori Ellen drive	Price lane	516	8	1977	48	AC-200			0	0	4.17	1.39	Priority 4		1	2.14	96
107	Clark Road	KAREN ANN DRIVE	16 CLARK ROAD	502	8	1977	48	AC-200			0	0	4.17	1.39	Priority 4		1	2.14	97
354	Maureen Drive	Sheila lane	Redfern drive	466	8	1977	48	AC-200			0	0	4.17	1.39	Priority 4		1	2.14	98
364	Clark Road	Maureen drive	Karen Ann drive	461	8	1977	48	AC-200			0	0	4.17	1.39	Priority 4		1	2.14	99
76	BRAYTON ROAD	DONGAY ROAD	ELNA DRIVE	356	8	1977	48	AC-200			0	0	4.17	1.39	Priority 4		1	2.14	100
50	LAKE DRIVE			278	8	1977	48	AC-200			0	0	4.17	1.39	Priority 4		1	2.14	101
346	Lori Ellen drive	Catherine road	End of Lori Ellen drive	254	8	1977	48	AC-200			0	0	4.17	1.39	Priority 4		1	2.14	102
362	Maureen Drive	Clark road	Price lane	229	8	1977	48	AC-200			0	0	4.17	1.39	Priority 4		1	2.14	103
89	GRAND VIEW DRIVE			457	8	1970	55	AC-150	1		0.75	0	4.6	1.78	Priority 2		0	2.03	104
83	VALLEY WAY			315	8	1970	55	AC-150			0	0	4.6	1.53	Priority 3		1	2.03	105
81	HARRIS ROAD	LIMEROCK ROAD	VALLEY WAY	200	8	1970	55	AC-150			0	0	4.6	1.53	Priority 3		1	2.03	106
48	GEORGE WASHINGTON HIGHWAY	395 GEORGE WASHINGTON HIGHWAY	HARRIS ROAD	1,380	12	1964	61	CI	2		2.4	0	3.69	2.03	Priority 5	0	0	2.03	107
307	LATHAM FARM ROAD	FARNUM PIKE	BURLINGAME ROAD	2,874	12	1977	48	DI	2		2.4	0	2.17	1.52	Priority 3		1	2.02	108
93	GEORGE WASHINGTON HIGHWAY	DOUGLAS PIKE	270 GEORGE WASHINGTON HIGHWAY	512	16	1997	28	DI			0	0	1.37	0.46	Priority 5		2	1.96	109
321	STILLWATER ROAD	HANTON CITY TRAIL	POND VIEW COURT	499	8	1988	37	PVC-WHITE	1		0.75	0	3.48	1.41	Priority 3		1	1.91	110
309	LATHAM FARM ROAD	BURLINGAME ROAD	HIGHLAND TERRACE	1,160	8	1977	48	AC-200			0	0	4.17	1.39	Priority 3		1	1.89	111
359	Price lane			1,009	8	1977	48	AC-200			0	0	4.17	1.39	Priority 3		1	1.89	112
95	BICENTENNIAL WAY	UNNAMED ROAD	LOCUST AVENUE	836	8	1977	48	AC-200			0	0	4.17	1.39	Priority 3		1	1.89	113
304	DONGAY ROAD	JAMBRAY DRIVE	LEVESQUE DRIVE	820	8	1977	48	AC-200	1		0.75	0	4.17	1.64	Priority 2		0	1.89	114
91	BICENTENNIAL WAY	UNNAMED ROAD	UNNAMED ROAD	518	8	1977	48	AC-200			0	0	4.17	1.39	Priority 3		1	1.89	115
122	BICENTENNIAL WAY	CENTURY CIRCLE	ASH LANE	363	8	1977	48	AC-200			0	0	4.17	1.39	Priority 3		1	1.89	116
313	CEDAR FOREST ROAD	LATHAM FARM ROAD	47 CEDAR FOREST ROAD	329	8	1977	48	AC-200	1		0.75	0	4.17	1.64	Priority 2		0	1.89	117

Pipe ID	Street Name	From Street	To Street	Length (ft)	Size (in)	Pipe Installation	Age	Pipe Material	Pipe Break	Pipe Setting	Break Score ¹	Setting Score ²	Age-Material Score ³	Physical Rating ⁴	Street Priority ⁵	Override? ⁶	Location Rating	Final Score ⁷	Ranking
29	BICENTENNIAL WAY	SMITHFIELD ROAD	UNNAMED ROAD	226	8	1977	48	AC-200			0	0	4.17	1.39	Priority 3		1	1.89	118
133	LATHAM FARM ROAD	CEDAR FOREST ROAD	57 LATHAM FARM ROAD	199	8	1977	48	AC-200			0	0	4.17	1.39	Priority 3		1	1.89	119
101	BICENTENNIAL WAY	LOCUST AVENUE	CENTURY CIRCLE	98	8	1977	48	AC-200			0	0	4.17	1.39	Priority 3		1	1.89	120
308	BURLINGAME ROAD	LATHAM FARM ROAD	26 BURLINGAME ROAD	1,760	8	1978	47	AC-200	1		0.75	0	4.13	1.63	Priority 8	0.25	0	1.88	121
367	Sunset drive	Grandview drive	16 sunset drive	588	8	1970	55	AC-150			0	0	4.6	1.53	Priority 2		0	1.78	122
112	MEADOW VIEW DRIVE	SUNSET DRIVE	7 MEADOW VIEW DRIVE	128	8	1970	55	AC-150			0	0	4.6	1.53	Priority 2		0	1.78	123
315	Industrial Drive			1,234	8	1982	43	PVC-WHITE	1		0.75	0	3.72	1.49	Priority 2		0	1.74	124
116	Industrial Drive	INDUSTRIAL DRIVE SOUTH	END OF INDUSTRIAL DRIVE	888	8	1982	43	PVC-WHITE	1		0.75	0	3.72	1.49	Priority 2		0	1.74	125
139	HARRIS ROAD	GEORGE WASHINGTON HIGHWAY	ROCKY HILL ROAD	837	12	1964	61	CI			0	0	3.69	1.23	Priority 3		1	1.73	126
111	MEADOW VIEW DRIVE			636	8	1974	51	AC-150			0	0	4.44	1.48	Priority 2		0	1.73	127
293	FARNUM PIKE	OLD FORGE ROAD	INDUSTRIAL DRIVE	1,937	12	1987	38	PVC-WHITE			0	0	3.52	1.17	Priority 6	0.5	1	1.67	128
146	COLLINGWOOD DRIVE			380	8	1987	38	PVC-WHITE			0	0	3.52	1.17	Priority 3		1	1.67	129
148	HAWTHORNE PLACE	MARIGOLD CIRCLE	COLLINGWOOD DRIVE	227	8	1987	38	PVC-WHITE			0	0	3.52	1.17	Priority 3		1	1.67	130
241	Hawthorne place	Hawthorne place	Hawthorne street		8	1987	38	PVC-WHITE			0	0	3.52	1.17	Priority 3		1	1.67	131
322	HANTON CITY TRAIL			986	8	1988	37	PVC-WHITE			0	0	3.48	1.16	Priority 3		1	1.66	132
324	STILLWATER ROAD	THURBER BOULEVARD	HANTON CITY TRAIL	844	8	1988	37	PVC-WHITE			0	0	3.48	1.16	Priority 3		1	1.66	133
320	STILLWATER ROAD	POND VIEW COURT	APPIAN WAY	376	8	1988	37	PVC-WHITE			0	0	3.48	1.16	Priority 3		1	1.66	134
323	HANTON CITY TRAIL				8	1988	37	PVC-WHITE			0	0	3.48	1.16	Priority 3		1	1.66	135
347	Highview drive	Sheila lane	Catherine road	1,141	8	1977	48	AC-200			0	0	4.17	1.39	Priority 2		0	1.64	136
348	Highview drive	Maureen drive	Sheila lane	995	8	1977	48	AC-200			0	0	4.17	1.39	Priority 2		0	1.64	137
312	CEDAR FOREST ROAD	LATHAM FARM ROAD	99 CEDAR FOREST ROAD	798	8	1977	48	AC-200			0	0	4.17	1.39	Priority 2		0	1.64	138
128	WENSCOTT LANE	TWINS LANE	53 WENSCOTT LANE	740	8	1977	48	AC-200			0	0	4.17	1.39	Priority 5	0.25	0	1.64	139
123	TANGLEWOOD LANE	ROBINS WAY	10 TANGLEWOOD LANE	660	8	1977	48	AC-200			0	0	4.17	1.39	Priority 6	0.25	0	1.64	140
66	HICKORY DRIVE			658	8	1977	48	AC-200			0	0	4.17	1.39	Priority 2		0	1.64	141
303	DONGAY ROAD	BRAYTON ROAD	JAMBRAY DRIVE	587	8	1977	48	AC-200			0	0	4.17	1.39	Priority 2		0	1.64	142
129	TWINS LANE	ROBINS WAY	END OF TWINS LANE	460	8	1977	48	AC-200			0	0	4.17	1.39	Priority 5	0.25	0	1.64	143
134	BURLINGAME ROAD	LATHAM FARM ROAD	2 BURLINGAME ROAD	256	8	1978	47	AC-200			0	0	4.13	1.38	Priority 8	0.25	0	1.63	144
340	Ridge View court	Ridge road		793	8	1977	48	PVC-WHITE			0	0	3.92	1.31	Priority 2		0	1.56	145
314	Industrial Drive	FARNUM PIKE	INDUSTRIAL DRIVE SOUTH	590	8	1982	43	PVC-WHITE			0	0	3.72	1.24	Priority 2		0	1.49	146
174	Limerock Road	CLARK ROAD	KAREN ANN DRIVE	458	12	1976	49	DI			0	0	2.21	0.74	Priority 4		1	1.49	147
341	Limerock Road	Karen ann			12	1976	49	DI			0	0	2.21	0.74	Priority 4		1	1.49	148
213	BRANCH PIKE			396	12	1984	41	PVC-WHITE			0	0	3.64	1.21	Priority 2		0	1.46	149
371	Business Park Drive	Washington highway	Rocky hill rd		12	1997	28	DI	1		0.75	0	1.37	0.71	Priority 4		1	1.46	150
84	NOTTO DRIVE			1,439	8	1987	38	PVC-WHITE			0	0	3.52	1.17	Priority 2		0	1.42	151
153	CAVALRY DRIVE			841	8	1987	38	PVC-WHITE			0	0	3.52	1.17	Priority 2		0	1.42	152
151	PRIMROSE LANE	CEDAR STREET	END OF PRIMROSE LANE	669	8	1987	38	PVC-WHITE			0	0	3.52	1.17	Priority 2		0	1.42	153
147	MARIGOLD CIRCLE	COLLINGWOOD DRIVE	HAWTHORNE STREET	393	8	1987	38	PVC-WHITE			0	0	3.52	1.17	Priority 2		0	1.42	154
161	COUNTRYSIDE DRIVE			260	8	1987	38	PVC-WHITE			0	0	3.52	1.17	Priority 2		0	1.42	155
270	Notto drive	Noto drive	Calvary drive		8	1987	38	PVC-WHITE			0	0	3.52	1.17	Priority 2		0	1.42	156
317	APPIAN WAY	STILLWATER ROAD	5 APPIAN WAY	1,308	8	1988	37	PVC-WHITE			0	0	3.48	1.16	Priority 2		0	1.41	157
130	TANGLEWOOD LANE #10			220	8	1977	48	AC-200			0	0	4.17	1.39	Priority 1		0	1.39	158
105	ASH LANE			216	6	1977	48	AC-200			0	0	4.17	1.39	Priority 1		0	1.39	159
104	CENTURY CIRCLE			177	6	1977	48	AC-200			0	0	4.17	1.39	Priority 1		0	1.39	160
352	Redfern drive			931	8	1990	35	PVC-WHITE			0	0	3.4	1.13	Priority 2		0	1.38	161
94	TECHNOLOGY WAY	SALEM	ESSEX	500	16	1994	31	DI			0	0	1.49	0.50	Priority 4		1	1.25	162
159	GEORGE WASHINGTON HIGHWAY	BUSINESS PARK DRIVE		230	12	1964	61	CI			0	0	3.69	1.23	Priority 5	0	0	1.23	163
214	LOCUST AVENUE			111	12	1964	61	CI			0	0	3.69	1.23	Priority 1		0	1.23	164
169	Limerock Road	ORCHARD MEADOWS DRIVE	CLARK ROAD	1,137	12	1996	29	DI			0	0	1.41	0.47	Priority 4		1	1.22	165
141	ESSEX STREET			2,103	12	1997	28	DI			0	0	1.37	0.46	Priority 4		1	1.21	166
235	Heritage circle	TANGLEWOOD	Heritage circle		8	1987	38	PVC-WHITE			0	0	3.52	1.17	Priority 1		0	1.17	167
236	Heritage circle	TANGLEWOOD	Heritage circle		8	1987	38	PVC-WHITE			0	0	3.52	1.17	Priority 1		0	1.17	167
237	Heritage circle	TANGLEWOOD	Heritage circle		8	1987	38	PVC-WHITE			0	0	3.52	1.17	Priority 1		0	1.17	167
238	Heritage circle	Tanglewood	Heritage circle		8	1987	38	PVC-WHITE			0	0	3.52	1.17	Priority 1		0	1.17	167
155	POND VIEW COURT			487	8	1988	37	PVC-WHITE			0	0	3.48	1.16	Priority 1		0	1.16	171
216	ORCHARD MEADOWS DRIVE	ORCHARD MEADOWS DRIVE	COUNTRYSIDE DRIVE	1,688	10	1987	38	PVC-BLUE			0	0	2.72	0.91	Priority 2		0	1.16	172
217	ORCHARD MEADOWS DRIVE	ORCHARD MEADOWS DRIVE	COUNTRYSIDE DRIVE	1,688	10	1987	38	PVC-BLUE			0	0	2.72	0.91	Priority 2		0	1.16	172
172	ORCHARD MEADOWS DRIVE	ORCHARD MEADOWS DRIVE	COUNTRYSIDE DRIVE	169	10	1987	38	PVC-BLUE			0	0	2.72	0.91	Priority 2		0	1.16	174
171	ORCHARD MEADOWS DRIVE			94	10	1987	38	PVC-BLUE			0	0	2.72	0.91	Priority 2		0	1.16	175
351	Forestwood drive	Maureen drive	Redfern drive	1,536	8	1990	35	PVC-WHITE			0	0	3.4	1.13	Priority 7	0	0	1.13	176
162	FORESTWOOD DRIVE	REDFERN DRIVE	END OF FORESTWOOD DRIVE	614	8	1990	35	PVC-WHITE			0	0	3.4	1.13	Priority 7	0	0	1.13	177

Pipe ID	Street Name	From Street	To Street	Length (ft)	Size (in)	Pipe Installation	Age	Pipe Material	Pipe Break	Pipe Setting	Break Score ¹	Setting Score ²	Age-Material Score ³	Physical Rating ⁴	Street Priority ⁵	Override? ⁶	Location Rating	Final Score ⁷	Ranking
184	SALEM STREET	TECHNOLOGY WAY	900 SALEM STREET	3,248	12	1994	31	DI			0	0	1.49	0.50	Priority 3		1	1.00	178
167	SALEM STREET	TECHNOLOGY WAY	TECHNOLOGY WAY	1,536	12	1994	31	DI			0	0	1.49	0.50	Priority 3		1	1.00	179
65	SALEM STREET	DOUGLAS PIKE	TECHNOLOGY WAY	581	16	1994	31	DI			0	0	1.49	0.50	Priority 3		1	1.00	180
337	Dillon lane	Ridge road	21 Dillon lane		8	1997	28	DI			0	0	1.37	0.46	Priority 3		1	0.96	181
183	LYDIA ANN ROAD			823	12	1980	45	DI			0	0	2.05	0.68	Priority 2		0	0.93	182
181	ELNA DRIVE			470	8	1986	39	DI			0	0	1.81	0.60	Priority 2		0	0.85	183
285	Log Road	Bayberry road	Burlingame road	3,469	12	1990	35	DI			0	0	1.65	0.55	Priority 7	0.25	0	0.80	184
287	Log Road	Laurel woods drive	Bayberry road	3,173	12	1990	35	DI			0	0	1.65	0.55	Priority 7	0.25	0	0.80	185
201	Log Road	TOWN LINE	LAUREL WOODS DRIVE	2,869	12	1990	35	DI			0	0	1.65	0.55	Priority 7	0.25	0	0.80	186
286	Bayberry road			2,034	8	1997	28	DI			0	0	1.37	0.46	Priority 2		0	0.71	187
334	Ridgeland road	Ridge road	Crest circle	1,341	12	1997	28	DI			0	0	1.37	0.46	Priority 2		0	0.71	188
193	DOUGLAS PIKE	BRANCH PIKE	ROGLER FARM ROAD	735	12	1997	28	DI			0	0	1.37	0.46	Priority 8	0.25	0	0.71	189
186	EAST LAKEVIEW DRIVE			730	8	1997	28	DI			0	0	1.37	0.46	Priority 2		0	0.71	190
330	Crest circle			613	12	1997	28	DI			0	0	1.37	0.46	Priority 2		0	0.71	191
332	Ridgeland road	Crest circle	Stillwater road	422	12	1997	28	DI			0	0	1.37	0.46	Priority 2		0	0.71	192
177	RIVERVIEW DRIVE	WEST LAKEVIEW DRIVE	EAST LAKEVIEW DRIVE	295	8	1997	28	DI			0	0	1.37	0.46	Priority 7	0.25	0	0.71	193
200	DOUGLAS PIKE	1262 DOUGLAS PIKE	BRANCH PIKE	156	12	1997	28	DI			0	0	1.37	0.46	Priority 8	0.25	0	0.71	194
267	West lakeview drive	Riverview drive	West lake view drive		8	1997	28	DI			0	0	1.37	0.46	Priority 2		0	0.71	195
268	West lakeview drive	Riverview drive	West lakeview drive		8	1997	28	DI			0	0	1.37	0.46	Priority 2		0	0.71	195
269	West Lakeview drive	Riverview drive	West lake view drive		8	1997	28	DI			0	0	1.37	0.46	Priority 2		0	0.71	195
331	Crest circle				12	1997	28	DI			0	0	1.37	0.46	Priority 2		0	0.71	195
187	HARRIS ROAD	MORGAN LANE	FAIRWAY DRIVE	416	12	2016	9	DI			0	0	0.61	0.20	Priority 3		1	0.70	199
369	Harris road	Douglas pike	Morgan lane	300	12	2016	9	DI			0	0	0.61	0.20	Priority 3		1	0.70	200
189	STILLWATER ROAD	THURBER BOULEVARD	295 STILLWATER ROAD	593	12	2018	7	DI			0	0	0.53	0.18	Priority 3		1	0.68	201
215	LAWNACRE DRIVE			144	8	1986	39	DI			0	0	1.81	0.60	Priority 1		0	0.60	202
288	Laurel woods drive				8	2005	20	DI			0	0	1.05	0.35	Priority 2		0	0.60	203
198	RAY STREET			464	8	1990	35	DI			0	0	1.65	0.55	Priority 1		0	0.55	204
379	HUNTERS KNOLL			686	8	1995	30	DI			0	0	1.45	0.48	Priority 1		0	0.48	205
380	Hunters knoll			686	8	1995	30	DI			0	0	1.45	0.48	Priority 1		0	0.48	205
195	HUNTERS KNOLL			568	8	1995	30	DI			0	0	1.45	0.48	Priority 1		0	0.48	207
168	Limerock Road	DOUGLAS PIKE	ORCHARD MEADOWS DRIVE	963	12	1996	29	DI			0	0	1.41	0.47	Priority 4	0	0	0.47	208
179	RIVERVIEW DRIVE	EAST LAKEVIEW DRIVE	END OF RIVERVIEW DRIVE	146	8	1997	28	DI			0	0	1.37	0.46	Priority 7	0	0	0.46	209
278	Log Road	Log rd	Log rd		12	1997	28	DI			0	0	1.37	0.46	Priority 7	0	0	0.46	210
310	HIGHLAND TERRACE			459	8	1997	28	DI			0	0	1.37	0.46	Priority 1		0	0.46	211
301	JOHN MOWRY ROAD	BRAYTON ROAD	LINE END	20	6	1997	28	DI			0	0	1.37	0.46	Priority 1		0	0.46	212
338	Nicole circle	Dillon lane	Nicole circle		8	1997	28	DI			0	0	1.37	0.46	Priority 1		0	0.46	213
339	Justin circle	Dillon lane	Justin circle		8	1997	28	DI			0	0	1.37	0.46	Priority 1		0	0.46	213
191	Morgan Lane	HARRIS ROAD	OAKS @ HARRIS	546	8	2016	9	DI			0	0	0.61	0.20	Priority 2		0	0.45	215
190	Morgan Lane	OAKS @ HARRIS	HARRIS ROAD	472	8	2016	9	DI			0	0	0.61	0.20	Priority 2		0	0.45	216
220	Morgan Lane			257	8	2016	9	DI			0	0	0.61	0.20	Priority 2		0	0.45	217
370	Fairway Drive	Harris road	Morgan lane		8	2016	9	DI			0	0	0.61	0.20	Priority 2		0	0.45	218
325	DESIREE COURT				8	2018	7	DI			0	0	0.53	0.18	Priority 2		0	0.43	219
290	Kylie circle	Kylie circle	Laurel woods		8	2005	20	DI			0	0	1.05	0.35	Priority 1		0	0.35	220

Pipe Ranking Database Notes

1) The Pipe Break Score is the first aspect of the Physical Rating, and assigned based on the number of water main breaks as follows:

# of Breaks	Score
0	0
1	0.75
2+	1.2 x (# of Breaks)

2) The Pipe Setting Score is the second aspect of the Physical Rating. Water mains with a poor pipe setting were assigned a Pipe Setting Score of 4, otherwise a score of 0.

3) The third aspect of the Physical Rating is assigned based on the pipe's material and age (in years).

Material	Material Value
AC-150	2.4
AC-200	2.25
CI	1.25
DI	0.25
PVC-BLUE	1.2
PVC-WHITE	2.0

The material value is then added to 1/25th of the pipe's age.

4) The Physical Rating is the average of the three physical aspects (Pipe Break Score, Pipe Setting Score, and Age-Material Score)

5) Each roadway within the district was assigned to a priority bracket. Each bracket was then assigned a Location Rating based on its criticality

Priority Level	Priority Rating	Typical Piping Descriptions within this Level
Priority 1	0	Short dead end mains (under 700'). These are generally 8" diameter or less.
Priority 2	0.25	Longer dead end mains, and mains that transition to dead ends
Priority 3	0.5	Mains that feed one or more dead ends but are not dead ends themselves.
Priority 4	0.75	Relatively lower importance mains (compared to higher priorities), and the connections between them
Priority 5	1.5	Medium-low importance mains, and the connections between them
Priority 6	2.5	Medium level mains and the connections between them.
Priority 7	3.0	Medium-high importance mains, and the connections between them. The majority of these pipes are 12"
Priority 8	4.0	Critical mains that connect to storage tanks, pump stations, interconnections, or cross interstates, etc. These mains are 12" or larger.

6) It is noted that in some cases, a segment of water main on a given roadway is less critical than that roadway's overall Location Rating (such as dead ends to feed a hydrant or small number of services). A small number of pipes were assigned a lower priority bracket to account for these cases.

7) The Final Pipe Score is the sum of its Physical Rating and Location Rating. This dictates the pipe's ranking.



APPENDIX C

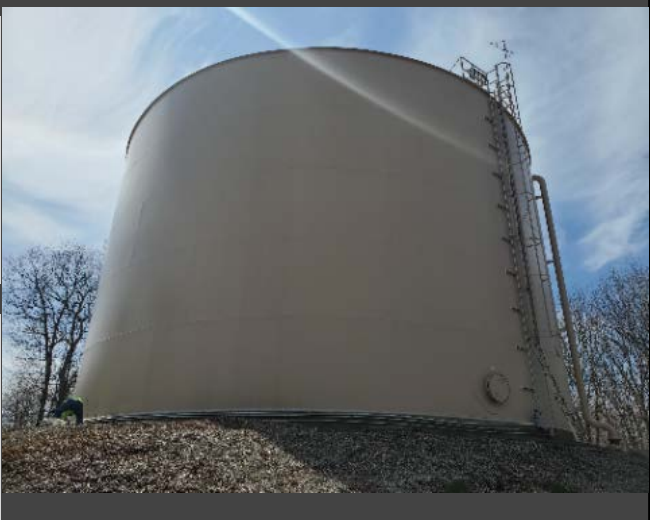
TANK INSPECTION REPORTS



Phone: 877.821.6138 | office@underwatersolutionsinc.com
Your National Water Infrastructure Specialists

Report Date: 4/21/2022

Account Overview	
Account Name:	Smithfield Water Supply
Asset Name:	Rocky Hill Tank
Type of Tank:	Finished Water 40'H x 66'D
Services:	Clean (Sediment Removal)/Inspection
Tank Identification Plate:	
Report Review & Approval	
Report Approved By:	 David Cornish, President



EXTERIOR PERIMETER OF TANK

Is this structure located within a guarded facility? **No**

GUARDED FACILITY DETAILS	
Does this structure have a fence that spans its circumference?	Yes
What is the height of the fence? (In Inches)	72
Does this fence have barbed wire?	Yes
Condition of the barbed wire	Secure and intact
What is the overall condition of the fence?	Good
Are there any deficiencies throughout the fence?	Yes
Explain deficiencies	2 broken barbed wire brackets
Are there any signs of forced entry / vandalism?	No
Is access gate functional and secured with a lock?	Yes

Security Photos



EXTERIOR WALL/SHELL

EXTERIOR WALL AESTHETICS

NORTH WALL

Aesthetics	No Visible Deficiencies
Condition of Protective Coating	Good

North Wall Exterior Aesthetics Photos



SOUTH WALL

Aesthetics	No Visible Deficiencies
Condition of Protective Coating	Good

South Wall Exterior Aesthetics Photos



EAST WALL	
Aesthetics	No Visible Deficiencies
Condition of Protective Coating	Good

East Wall Exterior Aesthetics Photos



WEST WALL	
Aesthetics	No Visible Deficiencies
Condition of Protective Coating	Good

West Wall Exterior Aesthetics Photos



EXTERIOR WALL STRUCTURAL

UPPER SECTION NORTH WALL

Is there any sign of exposed steel in this section?	No
---	----

MIDDLE SECTION NORTH WALL

Is there any sign of exposed steel in this section?	No
---	----

LOWER SECTION NORTH WALL

Is there any sign of exposed steel in this section?	No
---	----

Overall photo of entire quadrant



UPPER SECTION SOUTH WALL

Is there any sign of exposed steel in this section?	No
---	----

MIDDLE SECTION SOUTH WALL

Is there any sign of exposed steel in this section?	No
---	----

LOWER SECTION SOUTH WALL

Is there any sign of exposed steel in this section?	No
---	----

Overall photo of entire quadrant



UPPER SECTION EAST WALL

Is there any sign of exposed steel?	No
-------------------------------------	----

MIDDLE SECTION EAST WALL

Is there any sign of exposed steel?	No
-------------------------------------	----

LOWER SECTION EAST WALL

Is there any sign of exposed steel?	No
-------------------------------------	----

Overall photo of entire quadrant



UPPER SECTION WEST WALL

Is there any sign of exposed steel? No

MIDDLE SECTION WEST WALL

Is there any sign of exposed steel? No

Is there any sign of exposed steel? No

Overall photo of entire quadrant



EXTERIOR WALL WELDS

UPPER SECTION NORTH WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Upper North Wall Section- Photo of welds



MIDDLE SECTION NORTH WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Middle North Wall Section- Photo of welds



LOWER SECTION NORTH WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Lower North Wall Section- Photo of welds



UPPER SECTION SOUTH WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Upper South Wall Section- Photo of welds



MIDDLE SECTION SOUTH WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Middle South Wall Section- Photo of welds



LOWER SECTION SOUTH WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Lower South Wall Section- Photo of welds



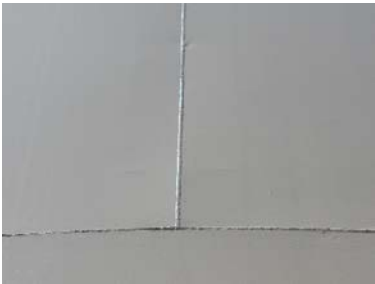
UPPER SECTION EAST WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Upper East Wall Section- Photo of welds



MIDDLE SECTION EAST WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Middle East Wall Section- Photo of welds



LOWER SECTION EAST WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Lower East Wall Section- Photo of welds



UPPER SECTION WEST WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Upper West Wall Section- Photo of welds



MIDDLE SECTION WEST WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Middle West Wall Section- Photo of welds

LOWER SECTION WEST WALL	
Do all the welds in this section appear to be sound, free of fatigue / failure?	Yes
Does there appear to be any sign of leakage?	No

Lower West Wall Section- Photo of welds

CATWALK	
Does this structure have a catwalk?	No

GROUND LEVEL ULTRA SONIC / DRY FILM THICKNESS MEASUREMENTS

EXTERIOR NORTH WALL	
Ultra Sonic Thickness Measurements (In Inches) Panel #1	.811 .808 .801 .814
Ultra Sonic Thickness Measurements (In Inches) Panel #2	.733 .709 .725 .719
Dry Film Thickness Measurements (In Mils) Panel #1	18.7 12.3 13.5 15.5
Dry Film Thickness Measurements (In Mils) Panel #2	13.2 13.8 15.2 13.3

EXTERIOR EAST WALL	
Ultra Sonic Thickness Measurements (In Inches) Panel #1	.823 .817 .809 .810
Ultra Sonic Thickness Measurements (In Inches) Panel #2	.729 .733 .737 .733
Dry Film Thickness Measurements (In Mils) Panel #1	16.3 12.3 13.6 10.0
Dry Film Thickness Measurements (In Mils) Panel #2	11.3 12.1 12.7 13.2

EXTERIOR SOUTH WALL	
Ultra Sonic Thickness Measurements (In Inches) Panel #1	.823 .822 .832 .811
Ultra Sonic Thickness Measurements (In Inches) Panel #2	.734 .729 .726 .740
Dry Film Thickness Measurements (In Mils) Panel #1	12.3 11.7 10.4 12.7
Dry Film Thickness Measurements (In Mils) Panel #2	11.2 9.0 11.2 14.6

EXTERIOR WEST WALL	
Ultra Sonic Thickness Measurements (In Inches) Panel #1	.817 .810 .809 .823
Ultra Sonic Thickness Measurements (In Inches) Panel #2	.734 .729 .733 .733
Dry Film Thickness Measurements (In Mils) Panel #1	15.2 14.2 11.2 11.7
Dry Film Thickness Measurements (In Mils) Panel #2	10.3 11.2 11.0 14.2

UPPER ELEVATIONS - ULTRA SONIC / Dry Film Thickness Measurements (In Mils)	
What wall are you completing these measurements on?	North
How many additional panels will you be measuring?	3

Panel #3	
Ultra Sonic Thickness Measurements (In Inches) Panel #3	.610 .621 .618 .611
Dry Film Thickness Measurements (In Mils) Panel #3	12.3 13.2 17.5 15.8

Panel #4	
Ultra Sonic Thickness Measurements (In Inches) Panel #4	.528 .521 .521 .530
Dry Film Thickness Measurements (In Mils) Panel #4	12.3 16.7 13.2 13.2

Panel #5	
Ultra Sonic Thickness Measurements (In Inches) Panel #5	.332 .322 .321 .319
Dry Film Thickness Measurements (In Mils) Panel #5	17.2 13.5 11.2 15.2

EXTERIOR COMPONENTS

EXTERIOR MANWAYS	
How many exterior manways does this structure have?	2

EXTERIOR MANWAY #1	
Location #1	North
Location #2	Wall
Shape	Circle
Diameter (in inches)	24
Height above the ground (in inches)	41
Is this manway secure?	Yes
Is there any sign of leakage?	No
Is this manway coated?	Yes
Condition of coating	Good
Is there any signs of metal exposure?	No
Is there any sign of corrosion?	No
Is there any sign of fatigue/pitting?	No
Dry Film Thickness Measurements (In Mils)	12.2 17.5 15.3 11.4
Ultra Sonic Thickness Measurements (In Inches)	.623 .632 .617 .621
What is the condition of the gasket?	Very good

Exterior Manway 1 Photos



EXTERIOR MANWAY #2	
Location #1	South
Location #2	Wall
Shape	Circle
Diameter (in inches)	24
Height above the ground (in inches)	50
Is this manway secure?	Yes
Is there any sign of leakage?	No
Is this manway coated?	Yes
Condition of coating	Good
Is there any signs of metal exposure?	No
Is there any sign of corrosion?	No
Is there any sign of fatigue/pitting?	No
Dry Film Thickness Measurements (In Mils)	18.2 12.3 10.2 15.7
Ultra Sonic Thickness Measurements (In Inches)	.624 .618 .613 .623
What is the condition of the gasket?	Very good

Manway 2 Photos



EXTERIOR PIPING	
Does this structure have any visible exterior pipes?	No

EXTERIOR AERATOR	
Does this structure have a rooftop aerator?	Yes
Additional Notes:	Aerator has no visible deficiencies

Aerator Photos



EXTERIOR LADDER ACCESSIBILITY AND COMPLIANCE	
Does this structure have an exterior ladder	Yes
Exterior Ladder Location #1	North
Exterior Ladder Location #2	Wall
What material is this ladder?	Steel
What is the width between side rails? (In Inches)	14
Rung Rise on center? (In Inches)	12
What is the ladder distance off wall? (In Inches)	6
How far is this ladder off the ground? (In Inches)	10
How many standoffs does this ladder have?	6
Do all welded connections seem sound?	Yes
Is this ladder coated?	Yes
Condition of coating?	Good

EXTERIOR LADDER SECURITY AND FALL PREVENTION

Does this ladder have a fall prevention device?	Yes
What type of fall prevention device is available?	Notched Tube
What is the condition of this fall prevention device?	Good
Does this ladder have a safety cage?	Yes
What is the condition of the safety cage?	Very good
Does this ladder have a ladder guard?	Yes
Is this ladder guard locked?	Yes

Exterior Ladder Photos**EXPOSED FOUNDATION**

Does this structure have an exposed foundation?	Yes
What is the height of this foundation? (In Inches)	26 to 18
What is the width of this foundation? (In Inches)	1
What is the condition of the concrete?	No obvious fatigue or failures

Exposed Foundation Photos**ANCHOR BOLTS**

Does this structure have anchor bolts?	No
--	----

EXTERIOR ROOF/SHELL

EXTERIOR ROOF AESTHETICS

NORTH ROOF QUADRANT AESTHETICS

Aesthetic Deficiencies	No Visible Deficiencies
Condition of Protective Coating	Good

North Roof Quadrant Aesthetic Photos



SOUTH ROOF QUADRANT AESTHETICS

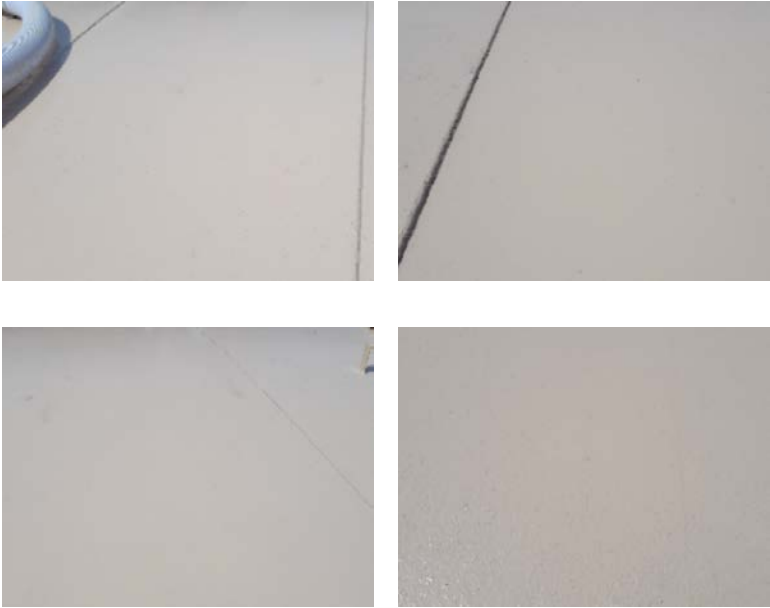
Aesthetic Deficiencies	No Visible Deficiencies
Condition of Protective Coating	Good

South Roof Quadrant Aesthetic Photos



EAST ROOF QUADRANT AESTHETICS	
Aesthetic Deficiencies	No Visible Deficiencies
Condition of Protective Coating	Good

East Roof Quadrant Aesthetics Photos



WEST ROOF QUADRANT AESTHETICS	
Aesthetic Deficiencies	No Visible Deficiencies
Condition of Protective Coating	Good

West Roof Quadrant Aesthetics Photos



EXTERIOR ROOF STRUCTURAL**NORTH ROOF STRUCTURAL**

Is there any sign of exposed steel?	No
Are all penetrations sealed?	Yes
Ultra Sonic Thickness Measurements (In Inches)	.278, .285, .271, .279
Dry Film Thickness Measurements (In Mils)	13.0, 13.2, 9.1, 10.0
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Overall photo of this quadrant



North Quadrant- Photo of welds

**SOUTH ROOF STRUCTURAL**

Is there any sign of exposed steel?	No
Are all penetrations sealed?	Yes
Ultra Sonic Thickness Measurements (In Inches)	.278, .280, .275, .283
Dry Film Thickness Measurements (In Mils)	10.6, 12.7, 9.9, 10.0
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Overall photo of this quadrant



South Quadrant- Photo of welds

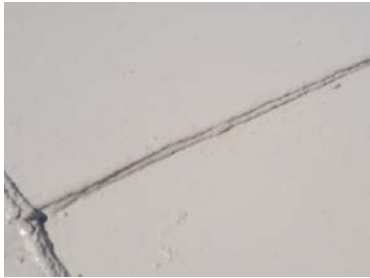


EAST ROOF STRUCTURAL	
Is there any sign of exposed steel?	No
Are all penetrations sealed?	Yes
Ultra Sonic Thickness Measurements (In Inches)	.280, .279, .284, .281
Dry Film Thickness Measurements (In Mils)	9.6, 10.1, 9.9, 11.7
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Overall photo of this quadrant



East Quadrant- Photo of welds



WEST ROOF STRUCTURAL	
Is there any sign of exposed steel?	No
Are all penetrations sealed?	Yes
Ultra Sonic Thickness Measurements (In Inches)	.293, .289, .283, .279
Dry Film Thickness Measurements (In Mils)	13.4, 12.7, 10.1, 13.0
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Overall photo of this quadrant



East Quadrant- Photo of welds



EXTERIOR COMPONENTS

EXTERIOR OVERFLOW

How many overflows does this structure have?	1
--	---

OVERFLOW #1

Location #1	Southwest
Location #2	Wall
Where does this overflow terminate?	Bottom of tank
How many inches above the ground does it terminate?	6
Does this overflow extend away from the structure?	Yes
How far away does this overflow extend away from structure?	4
Is the overflow visible for the entire distance it extends away from the structure or is it underground?	Yes
Is this overflow free of obstructions?	Yes
Is there a screen present?	Yes
What size mesh is this screen?	12
Is this screen secure?	Yes
Does this screen have any deficiencies?	No
Is this overflow protected from wind driven rain?	Yes
How is this overflow protected from wind driven rain?	Flap Valve

Overflow #1 Photo



EXTERIOR VENT	
How many vents does this structure have?	1

VENT #1	
Location #1	Center
Location #2	Roof
Is this vent coated?	No
Is this vent downturned?	Yes
Is there a solid cover down to the bottom of the screen?	Yes
Is there a screen present?	Yes
What size screen is present? (in inches)	24
Does this screen have any deficiencies?	No

Vent 1 Photos



HATCH

EXTERIOR HATCH	
How many hatches does this structure have?	2

HATCH #1	
Location #1	East
Location #2	Roof
Shape	Rectangle
Length (in inches)	36
Width (in inches)	26
Is this hatch raised at least 4" above the roof?	Yes
Does this hatch have an overlapping water tight lid?	Yes
Does this lid have a gasket?	No
Was this hatch opened during inspection?	Yes
Did this hatch function properly?	Yes
Is this hatch secured with a lock?	Yes
Is this hatch coated?	Yes

Hatch Photos



HATCH #2	
Location #1	West
Location #2	Roof
Shape	Square
Length (in inches)	24
Width (in inches)	24
Is this hatch raised at least 4" above the roof?	Yes
Does this hatch have an overlapping water tight lid?	Yes
Does this lid have a gasket?	No
Was this hatch opened during inspection?	No
Is this hatch secured with a lock?	No
Is this hatch coated?	Yes
Condition of coating on exterior	Good

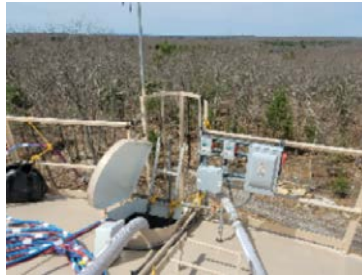
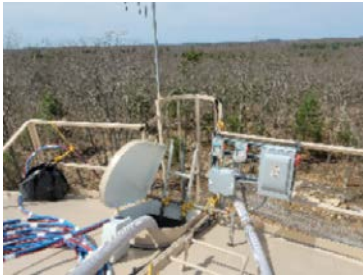
Hatch #2 Photos



SAFETY RAILINGS

EXTERIOR SAFETY RAILINGS	
Does this structure have safety railings?	Yes
What is the material of the safety railings?	Steel
Is this safety railing coated?	Yes
Condition of coating	Good
Is this safety railing at least 42" to 43" in height?	Yes
What is the diameter of the tubing? (In Inches)	2.5 x 2.5 angle iron
Does it span the circumference of the structure?	No
What is the approximate length of this railing? (In Inches)	96
Where is this safety railing located?	Around the hatch
Is this safety railing secure?	Yes
What is the overall condition of this safety railing?	Good

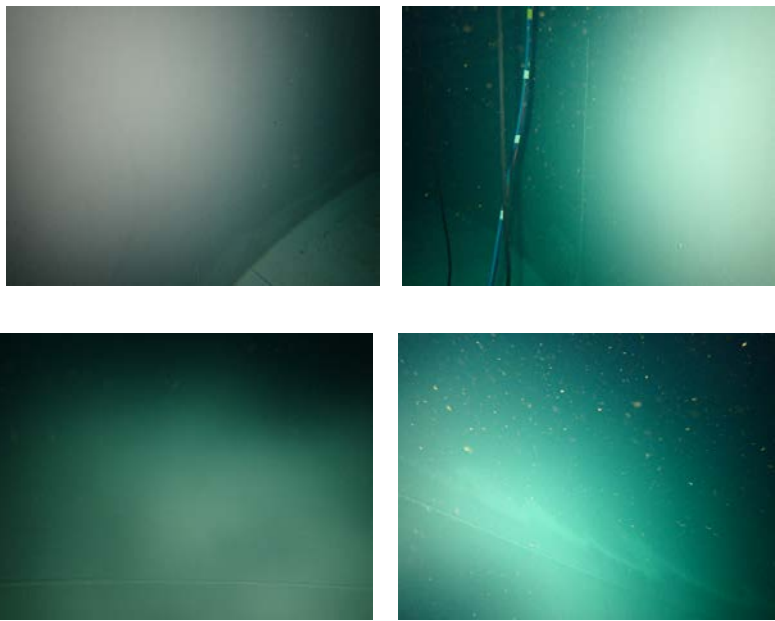
Safety Railing Photos



INTERIOR

INTERIOR WALLS AESTHETICS	
INTERIOR AESTHETICS NORTH WALL	
Is there Biofilm/Staining in this quadrant?	No
Is this quadrant coated?	Yes
Condition of Protective Coating	Good

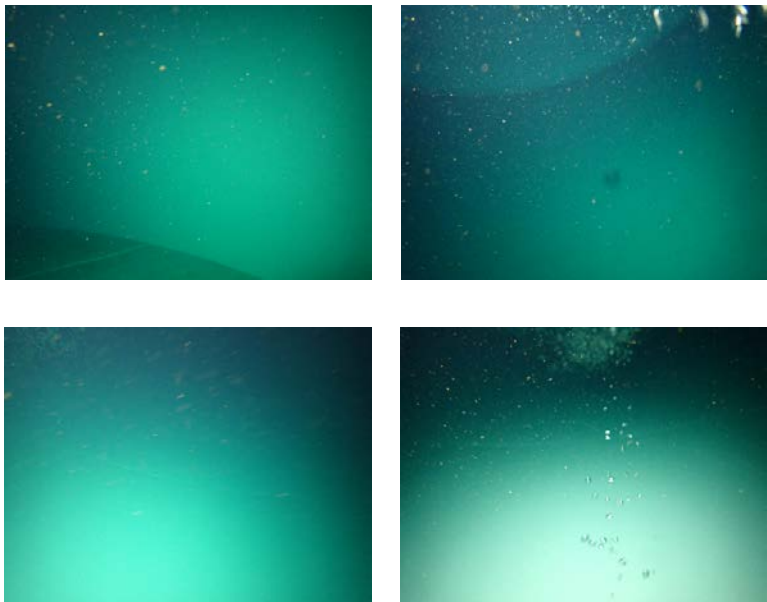
North Wall Aesthetics Photos



INTERIOR WALLS AESTHETICS

INTERIOR AESTHETICS SOUTH WALL	
Is there Biofilm/Staining in this quadrant?	No
Is this quadrant coated?	Yes
Condition of Protective Coating	Good

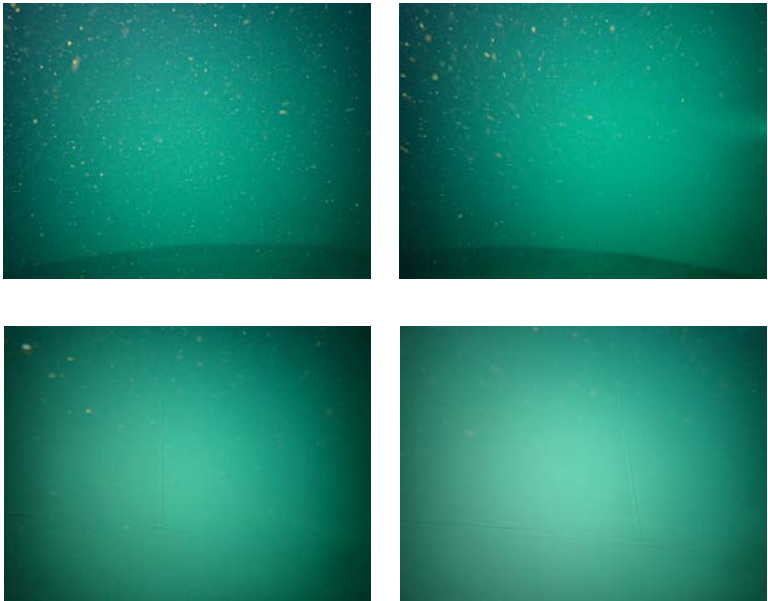
South Wall Aesthetics Photos



INTERIOR WALLS AESTHETICS

INTERIOR AESTHETICS EAST WALL	
Is there Biofilm/Staining in this quadrant?	No
Is this quadrant coated?	Yes
Condition of Protective Coating	Good

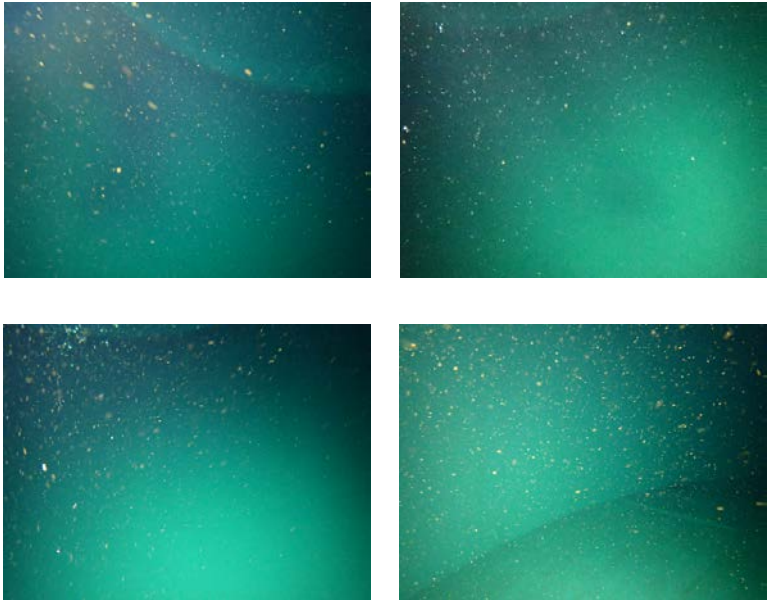
East Wall Aesthetics Photos



INTERIOR WALLS AESTHETICS

INTERIOR AESTHETICS WEST WALL	
Is there Biofilm/Staining in this quadrant?	No
Is this quadrant coated?	Yes
Condition of Protective Coating	Good

West Wall Aesthetics Photos



INTERIOR WALLS STRUCTURAL

UPPER SECTION NORTH WALL	
Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

MIDDLE SECTION NORTH WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

LOWER SECTION NORTH WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

Overall photo of entire quadrant

**INTERIOR WALLS STRUCTURAL****UPPER SECTION SOUTH WALL**

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

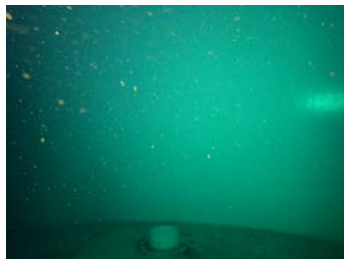
MIDDLE SECTION SOUTH WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

LOWER SECTION SOUTH WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

Overall photo of entire quadrant

**INTERIOR WALLS STRUCTURAL****UPPER SECTION EAST WALL**

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

MIDDLE SECTION EAST WALL	
Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

LOWER SECTION EAST WALL	
Is there any sign of exposed steel in this section?	Yes
Percent (%) of exposed steel in this section	Less than 5%
Is there any sign of corrosion in this section?	Yes
Percent (%) of corrosion in this section	Less than 5%
Is there any sign of pitting in this section?	No
Additional Notes	deficiency .25" in size

Interior Lower East Wall Section - Photo of exposed steel



Interior Lower East Wall Section- Photo of corrosion



Overall photo of entire quadrant



INTERIOR WALLS STRUCTURAL

UPPER SECTION WEST WALL	
Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

MIDDLE SECTION WEST WALL	
Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

LOWER SECTION WEST WALL	
Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

Overall photo of entire quadrant



ICE CAP FORMATION

INTERIOR WALLS	
Is there any damage on the interior walls / coating that could be the result of ice cap formation? i.e., ice scour	No

INTERIOR WALL WELDS

UPPER SECTION NORTH WALL	
Do all the welds in this section appear to be sound, free of fatigue / failure?	Yes
Does there appear to be any sign of leakage?	No

Upper North Wall Section- Photo of welds



MIDDLE SECTION NORTH WALL	
Do all the welds in this section appear to be sound, free of fatigue / failure?	Yes
Does there appear to be any sign of leakage?	No

Middle North Wall Section- Photo of welds



LOWER SECTION NORTH WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Lower North Wall Section- Photo of welds



UPPER SECTION SOUTH WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Upper South Wall Section- Photo of welds



MIDDLE SECTION SOUTH WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Middle South Wall Section- Photo of welds



LOWER SECTION SOUTH WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Lower South Wall Section- Photo of welds



UPPER SECTION EAST WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Upper East Wall Section- Photo of welds



MIDDLE SECTION EAST WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Middle East Wall Section- Photo of welds



LOWER SECTION EAST WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Lower East Wall Section- Photo of welds



UPPER SECTION WEST WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Upper West Wall Section- Photo of welds



MIDDLE SECTION WEST WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Middle West Wall Section- Photo of welds



LOWER SECTION WEST WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Lower West Wall Section- Photo of welds



INTERIOR FLOOR NORTH QUADRANT AESTHETICS

INTERIOR AESTHETICS NORTH FLOOR

Is there Biofilm/Staining in this quadrant?	Yes
Severity of biofilm/staining?	Mild
Is this quadrant coated?	Yes
Condition of Protective Coating	Good

North Floor Aesthetics Photos

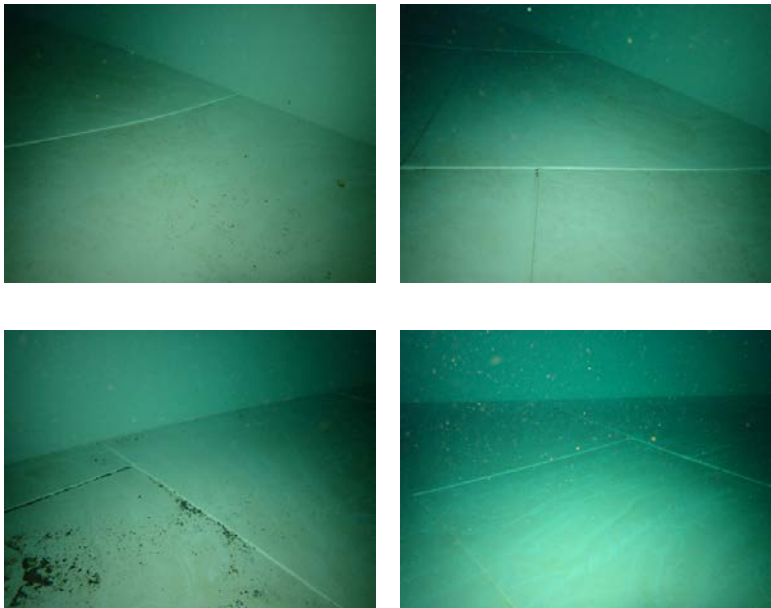


INTERIOR FLOOR SOUTH QUADRANT AESTHETICS

INTERIOR AESTHETICS SOUTH FLOOR

Is there Biofilm/Staining in this quadrant?	Yes
Severity of biofilm/staining?	Mild
Is this quadrant coated?	Yes
Condition of Protective Coating	Good

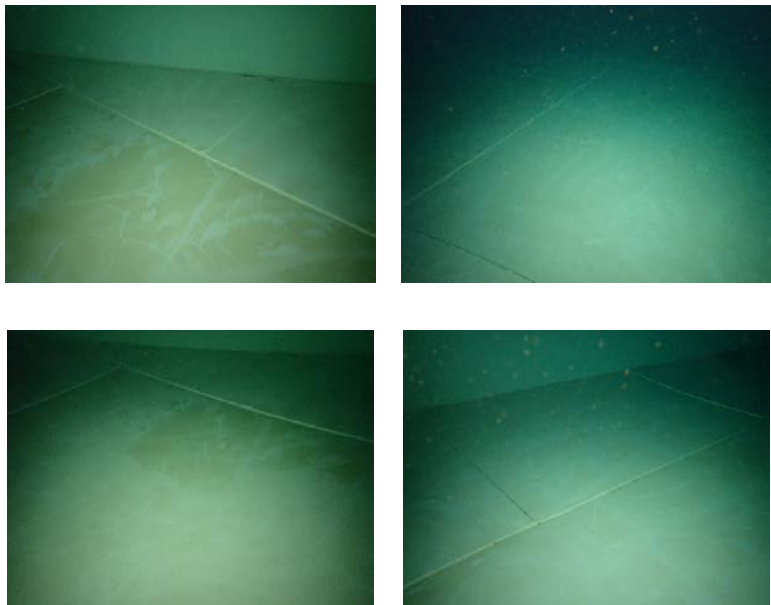
South Floor Aesthetics Photos



INTERIOR FLOOR EAST QUADRANT AESTHETICS

INTERIOR AESTHETICS EAST FLOOR	
Is there Biofilm/Staining in this quadrant?	Yes
Severity of biofilm/staining?	Mild
Is this quadrant coated?	Yes
Condition of Protective Coating	Good

East Floor Aesthetic Photos



INTERIOR FLOOR WEST QUADRANT AESTHETICS

INTERIOR AESTHETICS WEST FLOOR

Is there Biofilm/Staining in this quadrant?	Yes
Severity of biofilm/staining?	Mild
Is this quadrant coated?	Yes
Condition of Protective Coating	Good

West Floor Aesthetic Photos



INTERIOR FLOORS STRUCTURAL

INTERIOR STRUCTURAL NORTH FLOOR

Is there any sign of exposed steel?	No
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Overall Photo of Interior North Floor Quadrant



North Quadrant- Photo of welds

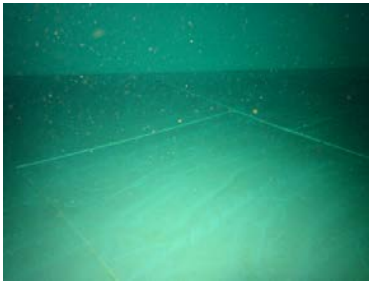


INTERIOR FLOORS STRUCTURAL

INTERIOR STRUCTURAL SOUTH FLOOR

Is there any sign of exposed steel?	No
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Overall Photo of Interior South Floor Quadrant



South Quadrant- Photo of welds



INTERIOR FLOORS STRUCTURAL

INTERIOR STRUCTURAL EAST FLOOR

Is there any sign of exposed steel?	No
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Overall Photo of Interior East Floor Quadrant



East Quadrant- Photo of welds



INTERIOR FLOORS STRUCTURAL

INTERIOR STRUCTURAL WEST FLOOR	
Is there any sign of exposed steel?	No
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Overall Photo of Interior West Floor Quadrant



West Quadrant- Photo of welds



CLEANING

SEDIMENT REMOVAL

How much sediment was found on the bottom of this structure? (In Inches)

.06

Sediment appears to be:

Iron

Was all sediment removed?

Yes

Before Sediment Removal



After Sediment Removal



Discharge Photo



INTERIOR COMPONENTS

INTERIOR MANWAY

How many interior manways does this structure have?

2

INTERIOR MANWAY #1	
Location #1	North
Location #2	Wall
Shape	Circle
Diameter	24
Height above floor (in inches)	20
Is this manway secure?	Yes
Is there any sign of leakage?	No
Is this manway coated?	No
Is there any signs of metal exposure?	Yes
Is there any sign of corrosion?	Yes
Is there any sign of fatigue/pitting?	No
What is the condition of the gasket?	Very good
Is there an access ladder for this manway?	No

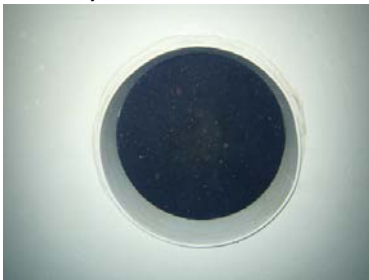
Interior Manway #1 Photo of metal exposure



Interior Manway #1 Photo of corrosion



Interior Manway Photos

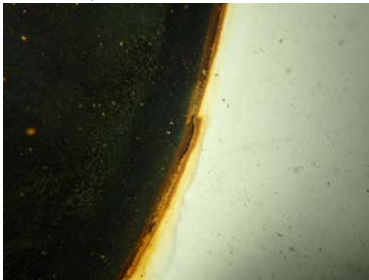


INTERIOR MANWAY #2	
Location #1	North
Location #2	Wall
Shape	Circle
Diameter	24
Height above floor (in inches)	22
Is this manway secure?	Yes
Is there any sign of leakage?	No
Is this manway coated?	Yes
Condition of coating	Good
Is there any signs of metal exposure?	Yes
Is there any sign of corrosion?	Yes
Is there any sign of fatigue/pitting?	No
What is the condition of the gasket?	Very good
Is there an access ladder for this manway?	No

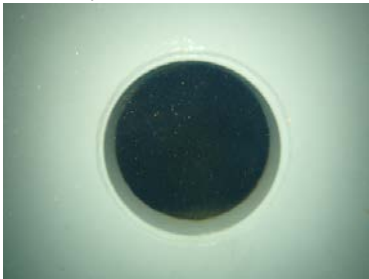
Interior Manway #2 Photo of metal exposure



Interior Manway #2 Photo of corrosion



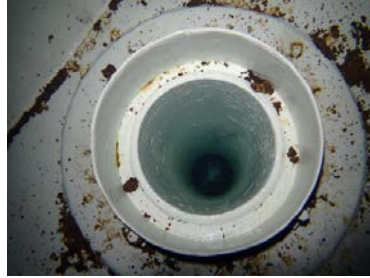
Interior Manway #2 Photos



INTERIOR PIPING	
How many pipes does this structure have?	1

PIPE #1	
Where does this pipe penetrate the structure?	Floor
Does this pipe penetrate from a sump?	No
Does this pipe terminate within a sump?	No
What is the diameter of this pipe? (in inches)	16
What is the material of this pipe?	Steel
Is this pipe obstructed?	No
Is there anything on the end of this pipe?	Nothing
Is this pipe coated?	Yes
Condition of coating	Good
Is this pipe supported?	No

Pipe #1 Photos



INTERIOR CATHODIC PROTECTION	
Does this structure have cathodic protection?	No

INTERIOR OVERFLOW	
Does this structure have an interior overflow?	Yes
How many overflows does this structure have?	1

OVERFLOW #1	
Location #1	North
Location #2	Wall
Is this overflow free of obstructions?	Yes
What is this overflow penetrating?	Wall
Where does this overflow terminate?	Approximately 12" Below overhead
Is this overflow coated?	Yes
Condition of coating	Good
Is this overflow supported?	No

Overflow #1 Photo



INTERIOR LADDER

A. LADDER ACCESSIBILITY AND COMPLIANCE	
Does this structure have an interior ladder	No

INTERIOR OVERHEAD

INTERIOR OVERHEAD AESTHETICS

NORTH OVERHEAD AESTHETICS QUADRANT

Aesthetic Deficiencies	No Visible Deficiencies
Is this quadrant coated?	Yes
Condition of Protective Coating	Decline/Thinning
Is the hatch visible in this quadrant?	Yes
Aesthetic Deficiencies	Good
Additional Notes	Rust blotching throughout less than 5%

North Overhead Aesthetics Photos



SOUTH OVERHEAD AESTHETICS QUADRANT

Aesthetic Deficiencies	No Visible Deficiencies
Is this quadrant coated?	Yes
Condition of Protective Coating	Decline/Thinning
Is the hatch visible in this quadrant?	No
Additional Notes	Rust blotches throughout less than 5%

South Overhead Aesthetics Photos





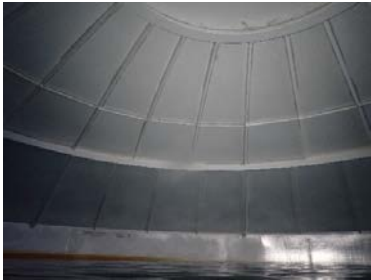
EAST OVERHEAD AESTHETICS QUADRANT	
Aesthetic Deficiencies	No Visible Deficiencies
Is this quadrant coated?	Yes
Condition of Protective Coating	Decline/Thinning
Is the hatch visible in this quadrant?	No

East Overhead Aesthetics - Photos



WEST OVERHEAD AESTHETICS QUADRANT	
Aesthetic Deficiencies	No Visible Deficiencies
Is this quadrant coated?	Yes
Condition of Protective Coating	Decline/Thinning
Is the hatch visible in this quadrant?	No

West Overhead Aesthetics Photos





OVERHEAD STRUCTURAL

NORTH OVERHEAD STRUCTURAL QUADRANT	
Is there any sign of exposed steel?	No

Overall Photo of this quadrant



OVERHEAD STRUCTURAL

SOUTH OVERHEAD STRUCTURAL QUADRANT	
Is there any sign of exposed steel?	No

Overall Photo of this quadrant



OVERHEAD STRUCTURAL

EAST OVERHEAD STRUCTURAL QUADRANT	
Is there any sign of exposed steel?	No

Overall Photo of this quadrant



OVERHEAD STRUCTURAL

WEST OVERHEAD STRUCTURAL QUADRANT

Is there any sign of exposed steel?	No
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Overall Photo of this quadrant



INTERIOR BEAMS

Does this structure have beams?	No
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WATER QUALITY

WATER QUALITY

Is there suspended particulate and/or color throughout the water column?	No
Water temperature at surface at time of inspection in fahrenheit.	50
Water temperature at bottom at time of inspection in fahrenheit.	50
Surface residual mg/L (total chlorine)	1.0
Is there a sample tap located at ground level?	No
Bottom residual mg/L (total chlorine)	1.0
Water Quality - Additional Notes	Excellent, unlimited visibility

INTERIOR MIXER

INTERIOR MIXER

Does this structure have a mixer installed?	Yes
What kind of mixer is installed?	Active
What is the brand of the mixer?	Solarbee
Type of mount?	Floor Mount
Is the mixer in operation at time of this inspection?	No
Is there any obstructions/failures?	No
Interior Mixer - Additional Notes	Aerator installed in working condition

Interior Mixer Photos



SITE SECURITY UPON COMPLETION

CLOSING FORM	
Was there a lock on the hatch upon your arrival?	Yes
Was hatch locked at the completion of services?	Yes
Did this structure have a locked access gate?	Yes
Was gate locked after completion of services?	No
Explain why gate was not locked after services	Customers still on site
Did you dive for the services completed today?	Yes

Photo of locked hatch after completion of services



Photo of locked gate after completion of services

N/A

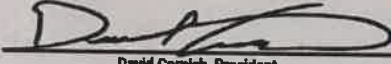
This report prepared by Underwater Solutions Inc. is based upon spot examination from readily accessible areas of the structure using visual and available non-destructive testing. Should latent defects or conditions which vary significantly from those described in this report be discovered at a later date, these conditions should be brought to the attention of Underwater Solutions Inc. or the structure manufacturer at that time. These comments should be viewed as information to be used by the Owner in determining the proper course of action and not to replace a complete set of specifications. All repairs should be done in accordance with A.W.W.A. and/or other applicable standards.

Underwater Solutions Inc.'s recommendations, remedial action and infrastructure asset management plan is being processed and will be uploaded into your platform within 45 days for your review.



Phone: 877.821.6138 | office@underwatersolutionsinc.com
Your National Water Infrastructure Specialists

Report Date: 4/20/2022

Account Overview	
Account Name:	Smithfield Water Supply
Asset Name:	Island Woods Tank
Type of Tank:	Finished Water
	70'H x 105'D
Services:	Clean (Sediment Removal)/Inspection
Tank Identification Plate:	
Report Review & Approval	
Report Approved By:	 David Cornish, President



EXTERIOR PERIMETER OF TANK

Is this structure located within a guarded facility? **No**

GUARDED FACILITY DETAILS

Does this structure have a fence that spans its circumference?	Yes
What is the height of the fence? (In Inches)	94
Does this fence have barbed wire?	Yes
Condition of the barbed wire	Intact and secure
What is the overall condition of the fence?	Fair
Are there any deficiencies throughout the fence?	Yes
Explain deficiencies	Loose hardware and bent poles
Are there any signs of forced entry / vandalism?	No
Is access gate functional and secured with a lock?	Yes

Security Photos



EXTERIOR WALL/SHELL

EXTERIOR WALL AESTHETICS

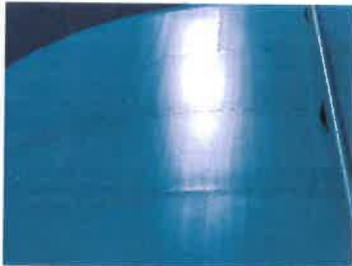
NORTH WALL	
Aesthetics	No Visible Deficiencies
Condition of Protective Coating	Good

North Wall Exterior Aesthetics Photos



SOUTH WALL	
Aesthetics	No Visible Deficiencies
Condition of Protective Coating	Good

South Wall Exterior Aesthetics Photos



EAST WALL	
Aesthetics	No Visible Deficiencies
Condition of Protective Coating	Good

East Wall Exterior Aesthetics Photos



WEST WALL	
Aesthetics	No Visible Deficiencies
Condition of Protective Coating	Good

West Wall Exterior Aesthetics Photos



EXTERIOR WALL STRUCTURAL**UPPER SECTION NORTH WALL**

Is there any sign of exposed steel in this section?

No

MIDDLE SECTION NORTH WALL

Is there any sign of exposed steel in this section?

No

LOWER SECTION NORTH WALL

Is there any sign of exposed steel in this section?

No

Overall photo of entire quadrant

**UPPER SECTION SOUTH WALL**

Is there any sign of exposed steel in this section?

No

MIDDLE SECTION SOUTH WALL

Is there any sign of exposed steel in this section?

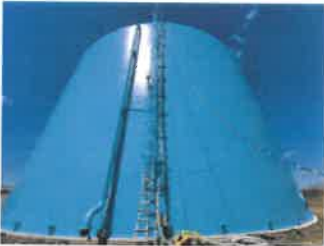
No

LOWER SECTION SOUTH WALL

Is there any sign of exposed steel in this section?

No

Overall photo of entire quadrant

**UPPER SECTION EAST WALL**

Is there any sign of exposed steel?

No

MIDDLE SECTION EAST WALL

Is there any sign of exposed steel?

No

LOWER SECTION EAST WALL

Is there any sign of exposed steel?

No

Overall photo of entire quadrant



UPPER SECTION WEST WALL

Is there any sign of exposed steel?	No
-------------------------------------	----

MIDDLE SECTION WEST WALL

Is there any sign of exposed steel?	No
-------------------------------------	----

LOWER SECTION WEST WALL

Is there any sign of exposed steel?	No
-------------------------------------	----

Overall photo of entire quadrant



EXTERIOR WALL WELDS

UPPER SECTION NORTH WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Upper North Wall Section- Photo of welds



MIDDLE SECTION NORTH WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Middle North Wall Section- Photo of welds



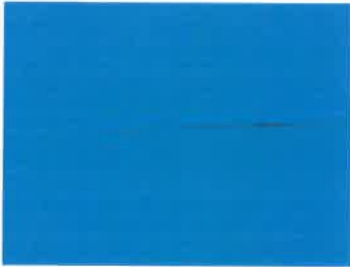
LOWER SECTION NORTH WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Lower North Wall Section- Photo of welds



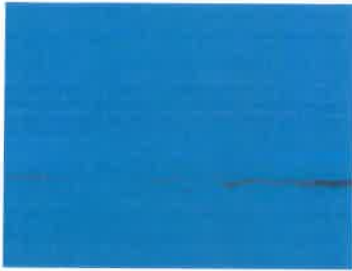
UPPER SECTION SOUTH WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Upper South Wall Section- Photo of welds



MIDDLE SECTION SOUTH WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Middle South Wall Section- Photo of welds



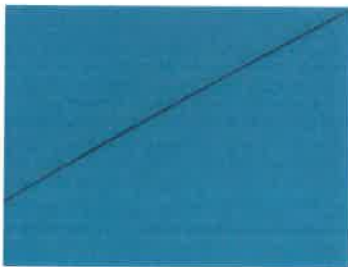
LOWER SECTION SOUTH WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Lower South Wall Section- Photo of welds



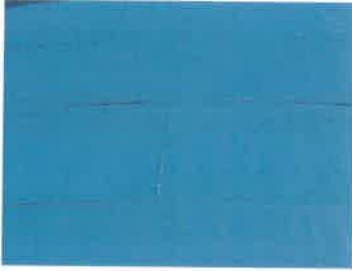
UPPER SECTION EAST WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Upper East Wall Section- Photo of welds



MIDDLE SECTION EAST WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Middle East Wall Section- Photo of welds



LOWER SECTION EAST WALL

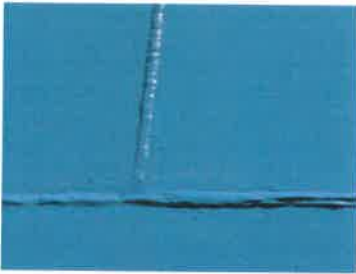
Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Lower East Wall Section- Photo of welds



UPPER SECTION WEST WALL

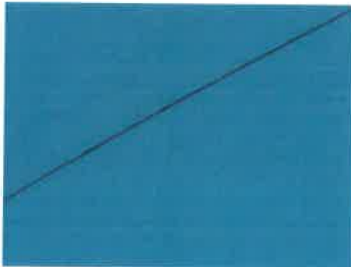
Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Upper West Wall Section- Photo of welds



MIDDLE SECTION WEST WALL

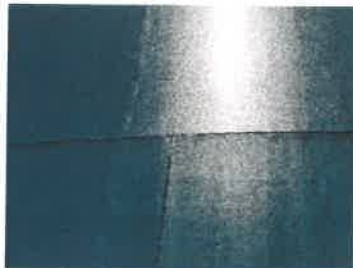
Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Middle West Wall Section- Photo of welds

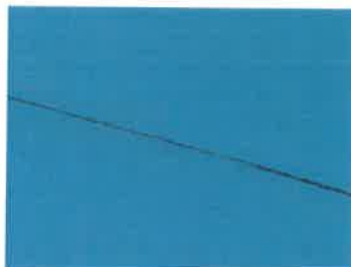


LOWER SECTION WEST WALL

Do all the welds in this section appear to be sound, free of fatigue / failure?
Does there appear to be any sign of leakage?

Yes
No

Lower West Wall Section- Photo of welds



CATWALK

Does this structure have a catwalk?

No

GROUND LEVEL ULTRA SONIC / DRY FILM THICKNESS MEASUREMENTS

EXTERIOR NORTH WALL

Ultra Sonic Thickness Measurements (In Inches) Panel #1	.811 .800
Ultra Sonic Thickness Measurements (In Inches) Panel #2	.733 .740
Dry Film Thickness Measurements (In Mils) Panel #1	15.9 8.7
Dry Film Thickness Measurements (In Mils) Panel #2	15.9 8.7

EXTERIOR EAST WALL

Ultra Sonic Thickness Measurements (In Inches) Panel #1	.799 .812
Ultra Sonic Thickness Measurements (In Inches) Panel #2	.729 .741
Dry Film Thickness Measurements (In Mils) Panel #1	13.2 9.2
Dry Film Thickness Measurements (In Mils) Panel #2	14.7 10.1

EXTERIOR SOUTH WALL

Ultra Sonic Thickness Measurements (In Inches) Panel #1	.811 .800
Ultra Sonic Thickness Measurements (In Inches) Panel #2	.729 .739
Dry Film Thickness Measurements (In Mils) Panel #1	15.3 10.2
Dry Film Thickness Measurements (In Mils) Panel #2	13.6 9.3

EXTERIOR WEST WALL

Ultra Sonic Thickness Measurements (In Inches) Panel #1	.810 .801
Ultra Sonic Thickness Measurements (In Inches) Panel #2	.733 .728
Dry Film Thickness Measurements (In Mils) Panel #1	15.3 9.5
Dry Film Thickness Measurements (In Mils) Panel #2	12.2 10.4

UPPER ELEVATIONS - ULTRA SONIC / Dry Film Thickness Measurements (In Mils)

What wall are you completing these measurements on?	South
How many additional panels will you be measuring?	5

Panel #3

Ultra Sonic Thickness Measurements (In Inches) Panel #3	.609 .620
Dry Film Thickness Measurements (In Mils) Panel #3	12.7 9.3

Panel #4

Ultra Sonic Thickness Measurements (In Inches) Panel #4	.519 .507
Dry Film Thickness Measurements (In Mils) Panel #4	10.4 12.6

Panel #5

Ultra Sonic Thickness Measurements (In Inches) Panel #5	.430 .437
Dry Film Thickness Measurements (In Mils) Panel #5	13.4 8.4

Panel #6

Ultra Sonic Thickness Measurements (In Inches) Panel #6	.352 .360
Dry Film Thickness Measurements (In Mils) Panel #6	12.7 9.5

Panel #7

Ultra Sonic Thickness Measurements (In Inches) Panel #7	.350 .358
Dry Film Thickness Measurements (In Mils) Panel #7	9.3 12.2

EXTERIOR COMPONENTS**EXTERIOR MANWAYS**

How many exterior manways does this structure have?	2
---	---

EXTERIOR MANWAY #1

Location #1	Southeast
Location #2	Wall
Shape	Circle
Diameter (in inches)	36
Height above the ground (in inches)	26
Is this manway secure?	Yes
Is there any sign of leakage?	No
Is this manway coated?	Yes
Condition of coating	Good
Is there any signs of metal exposure?	No
Is there any sign of corrosion?	No
Is there any sign of fatigue/pitting?	No
Dry Film Thickness Measurements (In Mils)	10. 8 13.4 13.7 11.2
Ultra Sonic Thickness Measurements (In Inches)	.506 .522 .526 .510
What is the condition of the gasket?	Good

Exterior Manway 1 Photos

EXTERIOR MANWAY #2	
Location #1	Northwest
Location #2	Wall
Shape	Circle
Diameter (In inches)	36
Height above the ground (In Inches)	26
Is this manway secure?	Yes
Is there any sign of leakage?	No
Is this manway coated?	Yes
Condition of coating	Good
Is there any signs of metal exposure?	No
Is there any sign of corrosion?	No
Is there any sign of fatigue/pitting?	No
Dry Film Thickness Measurements (In Mills)	13.2 12.7 10.2 11.3
Ultra Sonic Thickness Measurements (In Inches)	.515 .527 .520 .522
What is the condition of the gasket?	Good

Manway 2 Photos



EXTERIOR PIPING	
Does this structure have any visible exterior pipes?	No

EXTERIOR AERATOR	
Does this structure have a rooftop aerator?	Yes
Additional Notes	Aerator has no visible deficiencies

Aerator Photos



EXTERIOR LADDER ACCESSIBILITY AND COMPLIANCE	
Does this structure have an exterior ladder	Yes
Exterior Ladder Location #1	South
Exterior Ladder Location #2	Wall
What material is this ladder?	Steel
What is the width between side rails? (In Inches)	16
Rung Rise on center? (In Inches)	12
What is the ladder distance off wall? (In Inches)	7
How far is this ladder off the ground? (In Inches)	140
How many standoffs does this ladder have?	7
Do all welded connections seem sound?	Yes
Is this ladder coated?	Yes
Condition of coating?	Good

EXTERIOR LADDER SECURITY AND FALL PREVENTION

Does this ladder have a fall prevention device?	Yes
What type of fall prevention device is available?	Cable
What is the condition of this fall prevention device?	Very good
Does this ladder have a safety cage?	Yes
What is the condition of the safety cage?	Very good
Does this ladder have a ladder guard?	Yes
Is this ladder guard locked?	Yes

Exterior Ladder Photos**EXPOSED FOUNDATION**

Does this structure have an exposed foundation?	Yes
What is the height of this foundation? (In Inches)	4
What is the width of this foundation? (In Inches)	10
What is the condition of the concrete?	Tight surface cracks no width or depth, uncoated and free of any obvious fatigue or failures.

Exposed Foundation Photos

ANCHOR BOLTS	
How many?	40
What is the approximate height of the anchor bolts? (In Inches)	18
What is the approximate diameter of the anchor bolts? (In Inches)	1.75
Is the anchor bolts coated?	Yes
Condition of coating	Good
Is all hardware present?	Yes

EXTERIOR ROOF/SHELL

EXTERIOR ROOF AESTHETICS

NORTH ROOF QUADRANT AESTHETICS

Aesthetic Deficiencies	Mildew
Condition of Protective Coating	Good

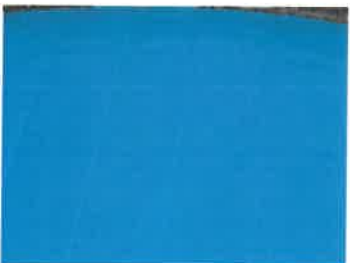
North Roof Quadrant Aesthetic Photos



SOUTH ROOF QUADRANT AESTHETICS

Aesthetic Deficiencies	Mildew
Condition of Protective Coating	Good

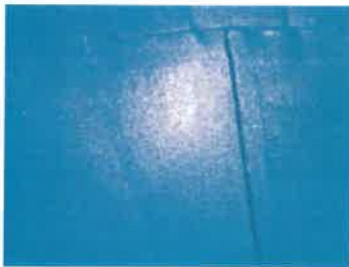
South Roof Quadrant Aesthetic Photos





EAST ROOF QUADRANT AESTHETICS	
Aesthetic Deficiencies	Mildew
Condition of Protective Coating	Good

East Roof Quadrant Aesthetics Photos



WEST ROOF QUADRANT AESTHETICS	
Aesthetic Deficiencies	Mildew
Condition of Protective Coating	Good

West Roof Quadrant Aesthetics Photos





EXTERIOR ROOF STRUCTURAL

NORTH ROOF STRUCTURAL

Is there any sign of exposed steel?	No
Are all penetrations sealed?	Yes
Ultra Sonic Thickness Measurements (In Inches)	.288, .290, .291, .294
Dry Film Thickness Measurements (In Mills)	12.2, 11.3, 10.2, 9.7
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Overall photo of this quadrant



North Quadrant- Photo of welds



SOUTH ROOF STRUCTURAL

Is there any sign of exposed steel?	No
Are all penetrations sealed?	Yes
Ultra Sonic Thickness Measurements (In Inches)	.279, .288, .290, .289
Dry Film Thickness Measurements (In Mills)	13.4, 12.6, 11.0, 10.4
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Overall photo of this quadrant



South Quadrant- Photo of welds



EAST ROOF STRUCTURAL	
Is there any sign of exposed steel?	No
Are all penetrations sealed?	Yes
Ultra Sonic Thickness Measurements (In Inches)	.298, .290, .287, .293
Dry Film Thickness Measurements (In Mils)	12.8, 11.0, 9.7, 10.1
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Overall photo of this quadrant



East Quadrant- Photo of welds



WEST ROOF STRUCTURAL	
Is there any sign of exposed steel?	No
Are all penetrations sealed?	Yes
Ultra Sonic Thickness Measurements (In Inches)	.294, .287, .291, .278
Dry Film Thickness Measurements (In Mils)	9.4, 11.7, 13.2, 10.2
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Overall photo of this quadrant



West Quadrant- Photo of welds



EXTERIOR COMPONENTS

EXTERIOR OVERFLOW	
How many overflows does this structure have?	1

OVERFLOW #1	
Location #1	South
Location #2	Wall
Where does this overflow terminate?	5ft from tank to south
How many inches above the ground does it terminate?	22
Does this overflow extend away from the structure?	Yes
How far away does this overflow extend away from structure?	5
Is the overflow visible for the entire distance it extends away from the structure or is it underground?	Yes
Is this overflow free of obstructions?	Yes
Is there a screen present?	Yes
What size mesh is this screen?	12
Is this screen secure?	Yes
Does this screen have any deficiencies?	No
Is this overflow protected from wind driven rain?	Yes
How is this overflow protected from wind driven rain?	Flap Valve

Overflow #1 Photo



EXTERIOR VENT

How many vents does this structure have?

1

VENT #1

Location #1	Center
Location #2	Roof
Is this vent coated?	No
Is this vent downturned?	Yes
Does this vent have a screen?	Yes
What size mesh screen does it have?	24
Is this screen secure?	Yes
Does this screen have any deficiencies?	No

Vent 1 Photos



HATCH

EXTERIOR HATCH

How many hatches does this structure have?

1

HATCH #1

Location #1	West
Location #2	Roof
Shape	Circle
Diameter (in inches)	24
Is this hatch raised at least 4" above the roof?	Yes
Does this hatch have an overlapping water tight lid?	Yes
Does this lid have a gasket?	No
Was this hatch opened during inspection?	Yes
Did this hatch function properly?	Yes
Is this hatch secured with a lock?	No
Is this hatch coated?	Yes
Condition of coating on exterior	Good

Hatch Photos

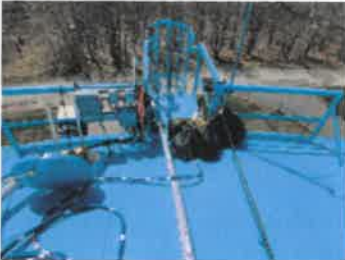


SAFETY RAILINGS

EXTERIOR SAFETY RAILINGS

Does this structure have safety railings?	Yes
What is the material of the safety railings?	Steel
Is this safety railing coated?	Yes
Condition of coating	Good
Is this safety railing at least 42" to 43" in height?	Yes
What is the diameter of the tubing? (In Inches)	Angle iron 2.5 x 2.5
Does it span the circumference of the structure?	No
What is the approximate length of this railing? (In Inches)	96
Where is this safety railing located?	Near the hatch and ladder
Is this safety railing secure?	Yes
What is the overall condition of this safety railing?	Good

Safety Railing Photos



INTERIOR

INTERIOR WALLS AESTHETICS

INTERIOR AESTHETICS NORTH WALL

Is there Biofilm/Staining in this quadrant?	No
Is this quadrant coated?	Yes
Condition of Protective Coating	Good

North Wall Aesthetics Photos





INTERIOR WALLS AESTHETICS

INTERIOR AESTHETICS SOUTH WALL	
Is there Biofilm/Staining in this quadrant?	No
Is this quadrant coated?	Yes
Condition of Protective Coating	Good

South Wall Aesthetics Photos



INTERIOR WALLS AESTHETICS

INTERIOR AESTHETICS EAST WALL	
Is there Biofilm/Staining in this quadrant?	No
Is this quadrant coated?	Yes
Condition of Protective Coating	Good

East Wall Aesthetics Photos





INTERIOR WALLS AESTHETICS

INTERIOR AESTHETICS WEST WALL

Is there Biofilm/Staining in this quadrant?	No
Is this quadrant coated?	Yes
Condition of Protective Coating	Good

West Wall Aesthetics Photos



INTERIOR WALLS STRUCTURAL

UPPER SECTION NORTH WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

MIDDLE SECTION NORTH WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

LOWER SECTION NORTH WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

Overall photo of entire quadrant



INTERIOR WALLS STRUCTURAL

UPPER SECTION SOUTH WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

MIDDLE SECTION SOUTH WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

LOWER SECTION SOUTH WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

Overall photo of entire quadrant



INTERIOR WALLS STRUCTURAL

UPPER SECTION EAST WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

MIDDLE SECTION EAST WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

LOWER SECTION EAST WALL

Is there any sign of exposed steel in this section?	Yes
Percent (%) of exposed steel in this section	Less than 5%
Is there any sign of corrosion in this section?	Yes
Percent (%) of corrosion in this section	Less than 5%
Is there any sign of pitting in this section?	No
Additional Notes	One .25" diameter with rust nodule.

Interior Lower East Wall Section - Photo of exposed steel



Overall photo of entire quadrant



INTERIOR WALLS STRUCTURAL

UPPER SECTION WEST WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

MIDDLE SECTION WEST WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

LOWER SECTION WEST WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

Overall photo of entire quadrant



ICE CAP FORMATION

INTERIOR WALLS

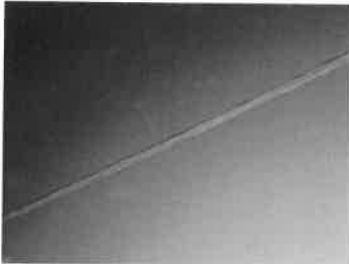
Is there any damage on the interior walls / coating that could be the result of ice cap formation? i.e., ice scour	No
--	----

INTERIOR WALL WELDS

UPPER SECTION NORTH WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

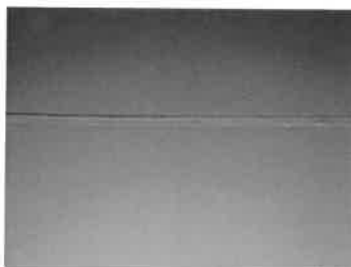
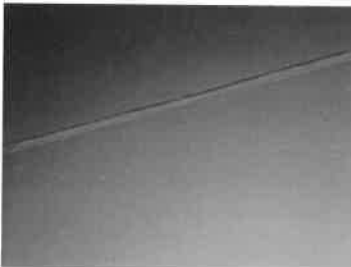
Upper North Wall Section- Photo of welds



MIDDLE SECTION NORTH WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

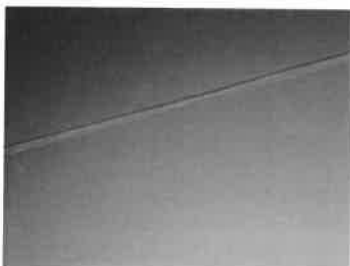
Middle North Wall Section- Photo of welds



LOWER SECTION NORTH WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

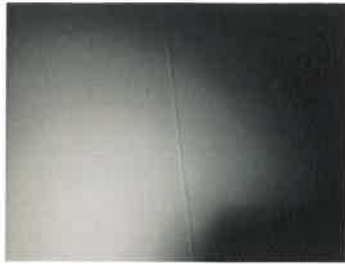
Lower North Wall Section- Photo of welds



UPPER SECTION SOUTH WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Upper South Wall Section- Photo of welds



MIDDLE SECTION SOUTH WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Middle South Wall Section- Photo of welds



LOWER SECTION SOUTH WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Lower South Wall Section- Photo of welds



UPPER SECTION EAST WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Upper East Wall Section- Photo of welds



MIDDLE SECTION EAST WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Middle East Wall Section- Photo of welds



LOWER SECTION EAST WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Lower East Wall Section- Photo of welds



UPPER SECTION WEST WALL

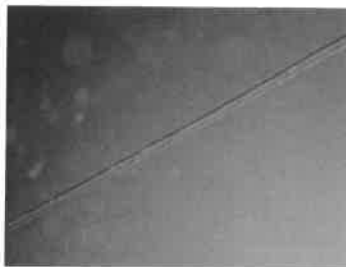
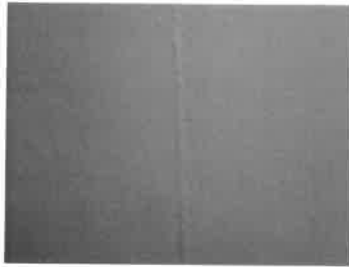
Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Upper West Wall Section- Photo of welds



MIDDLE SECTION WEST WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Middle West Wall Section- Photo of welds



LOWER SECTION WEST WALL

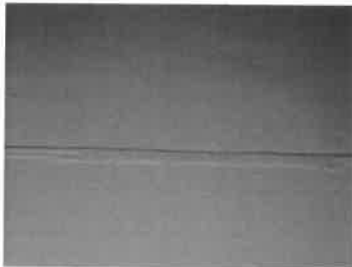
Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Lower West Wall Section- Photo of welds



INTERIOR FLOOR NORTH QUADRANT AESTHETICS

INTERIOR AESTHETICS NORTH FLOOR

Is there Biofilm/Staining in this quadrant?

Yes

Severity of biofilm/staining?

Mild

Is this quadrant coated?

Yes

Condition of Protective Coating

Good

North Floor Aesthetics Photos



INTERIOR FLOOR SOUTH QUADRANT AESTHETICS

INTERIOR AESTHETICS SOUTH FLOOR

Is there Biofilm/Staining in this quadrant?	Yes
Severity of biofilm/staining?	Mild
Is this quadrant coated?	Yes
Condition of Protective Coating	Good

South Floor Aesthetics Photos



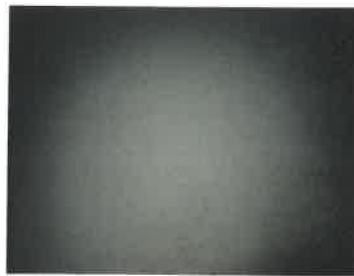
INTERIOR FLOOR EAST QUADRANT AESTHETICS**INTERIOR AESTHETICS EAST FLOOR**

Is there Biofilm/Staining in this quadrant?	Yes
Severity of biofilm/staining?	Mild
Is this quadrant coated?	Yes
Condition of Protective Coating	Good

East Floor Aesthetic Photos**INTERIOR FLOOR WEST QUADRANT AESTHETICS****INTERIOR AESTHETICS WEST FLOOR**

Is there Biofilm/Staining in this quadrant?	Yes
Severity of biofilm/staining?	Mild
Is this quadrant coated?	Yes
Condition of Protective Coating	Good

West Floor Aesthetic Photos



INTERIOR FLOORS STRUCTURAL

INTERIOR STRUCTURAL NORTH FLOOR

Is there any sign of exposed steel?	No
Do all the welds in this section appear to be sound, free of fatigue / failure?	Yes
Does there appear to be any sign of leakage?	No

Overall Photo of Interior North Floor Quadrant



North Quadrant- Photo of welds



INTERIOR FLOORS STRUCTURAL

INTERIOR STRUCTURAL SOUTH FLOOR

Is there any sign of exposed steel?	No
Do all the welds in this section appear to be sound, free of fatigue / failure?	Yes
Does there appear to be any sign of leakage?	No

Overall Photo of Interior South Floor Quadrant



South Quadrant- Photo of welds



INTERIOR FLOORS STRUCTURAL

INTERIOR STRUCTURAL EAST FLOOR

Is there any sign of exposed steel?
Do all the welds in this section appear to be sound, free of fatigue /failure?
Does there appear to be any sign of leakage?

No
Yes
No

Overall Photo of Interior East Floor Quadrant



East Quadrant- Photo of welds



INTERIOR FLOORS STRUCTURAL**INTERIOR STRUCTURAL WEST FLOOR**

Is there any sign of exposed steel?	No
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Overall Photo of Interior West Floor Quadrant**West Quadrant- Photo of welds****CLEANING****SEDIMENT REMOVAL**

How much sediment was found on the bottom of this structure? (in inches)	.06
Sediment appears to be:	Iron
Was all sediment removed?	Yes

Before Sediment Removal

After Sediment Removal



Discharge Photo



INTERIOR COMPONENTS

INTERIOR MANWAY

How many interior manways does this structure have?

2

INTERIOR MANWAY #1

Location #1	North
Location #2	Wall
Shape	Circle
Diameter	36
Height above floor (in inches)	22
Is this manway secure?	Yes
Is there any sign of leakage?	No
Is this manway coated?	Yes
Condition of coating	Good
Is there any signs of metal exposure?	No
Is there any sign of corrosion?	No
Is there any sign of fatigue/pitting?	No
What is the condition of the gasket?	Very good
Is there an access ladder for this manway?	No

Interior Manway Photos



INTERIOR MANWAY #2	
Location #1	South
Location #2	Wall
Shape	Circle
Diameter	36
Height above floor (in inches)	22
Is this manway secure?	Yes
Is there any sign of leakage?	No
Is this manway coated?	Yes
Condition of coating	Good
Is there any signs of metal exposure?	No
Is there any sign of corrosion?	No
Is there any sign of fatigue/pitting?	No
What is the condition of the gasket?	Very good
Is there an access ladder for this manway?	No

Interior Manway #2 Photos



INTERIOR PIPING	
How many pipes does this structure have?	1

PIPE #1	
Where does this pipe penetrate the structure?	Floor
Does this pipe penetrate from a sump?	No
Does this pipe terminate within a sump?	No
What is the diameter of this pipe? (in inches)	16
What is the material of this pipe?	Steel
Is this pipe obstructed?	No
Is there anything on the end of this pipe?	Nothing
Is this pipe coated?	Yes
Condition of coating	Good
Is this pipe supported?	No

Pipe #1 Photos



INTERIOR CATHODIC PROTECTION	
Does this structure have cathodic protection?	No

INTERIOR OVERFLOW	
Does this structure have an interior overflow?	Yes
How many overflows does this structure have?	1

OVERFLOW #1	
Location #1	North
Location #2	Wall
Is this overflow free of obstructions?	Yes
What is this overflow penetrating?	Wall
Where does this overflow terminate?	Approximately 12" Below roof
Is this overflow coated?	Yes
Condition of coating	Good
Is this overflow supported?	Yes
What is the condition of the supports?	Good

Overflow #1 Photo



INTERIOR LADDER

A. LADDER ACCESSIBILITY AND COMPLIANCE

Does this structure have an interior ladder	No
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INTERIOR OVERHEAD

INTERIOR OVERHEAD AESTHETICS

NORTH OVERHEAD AESTHETICS QUADRANT

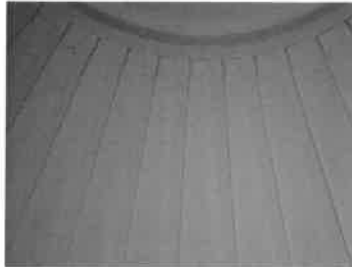
Aesthetic Deficiencies	No Visible Deficiencies
Is this quadrant coated?	Yes
Condition of Protective Coating	Good
Is the hatch visible in this quadrant?	Yes
Aesthetic Deficiencies	Good

North Overhead Aesthetics Photos



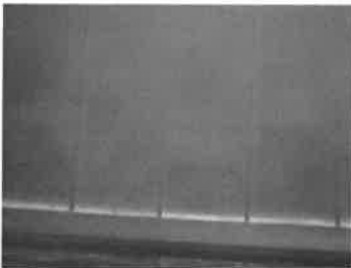
SOUTH OVERHEAD AESTHETICS QUADRANT	
Aesthetic Deficiencies	No Visible Deficiencies
Is this quadrant coated?	Yes
Condition of Protective Coating	Good
Is the hatch visible in this quadrant?	No

South Overhead Aesthetics Photos



EAST OVERHEAD AESTHETICS QUADRANT	
Aesthetic Deficiencies	No Visible Deficiencies
Is this quadrant coated?	Yes
Condition of Protective Coating	Good
Is the hatch visible in this quadrant?	No

East Overhead Aesthetics - Photos



WEST OVERHEAD AESTHETICS QUADRANT	
Aesthetic Deficiencies	No Visible Deficiencies
Is this quadrant coated?	Yes
Condition of Protective Coating	Good
Is the hatch visible in this quadrant?	No

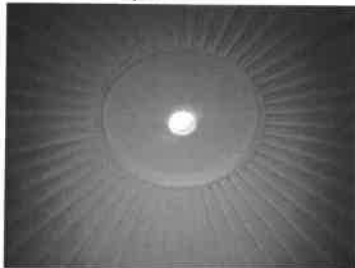
West Overhead Aesthetics Photos



OVERHEAD STRUCTURAL

NORTH OVERHEAD STRUCTURAL QUADRANT	
Is there any sign of exposed steel?	No

Overall Photo of this quadrant



OVERHEAD STRUCTURAL

SOUTH OVERHEAD STRUCTURAL QUADRANT	
Is there any sign of exposed steel?	No

Overall Photo of this quadrant



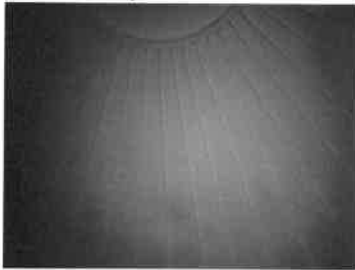
OVERHEAD STRUCTURAL

EAST OVERHEAD STRUCTURAL QUADRANT

Is there any sign of exposed steel?

No

Overall Photo of this quadrant



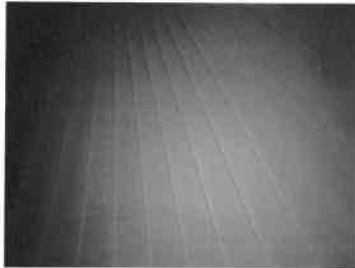
OVERHEAD STRUCTURAL

WEST OVERHEAD STRUCTURAL QUADRANT

Is there any sign of exposed steel?

No

Overall Photo of this quadrant



INTERIOR BEAMS

Does this structure have beams?

No

WATER QUALITY

WATER QUALITY	
Is there suspended particulate and/or color throughout the water column?	No
Water temperature at surface at time of inspection in fahrenheit.	50
Water temperature at bottom at time of inspection in fahrenheit.	50
Surface residual mg/L (total chlorine)	1.5
Is there a sample tap located at ground level?	No
Bottom residual mg/L (total chlorine)	1.5
Water Quality - Additional Notes	Unlimited visibility

INTERIOR MIXER

INTERIOR MIXER	
Does this structure have a mixer installed?	Yes
What kind of mixer is installed?	Active
What is the brand of the mixer?	Solarbee
Type of mount?	Floor Mount
Is the mixer in operation at time of this inspection?	Yes
Is there any obstructions/failures?	No
Interior Mixer - Additional Notes	Additional aerator in working condition

Interior Mixer Photos



SITE SECURITY UPON COMPLETION

CLOSING FORM	
Was there a lock on the hatch upon your arrival?	Yes
Was hatch locked at the completion of services?	Yes
Did this structure have a locked access gate?	Yes
Was gate locked after completion of services?	Yes
Did you dive for the services completed today?	Yes

Photo of locked hatch after completion of services



Photo of locked gate after completion of services



This report prepared by Underwater Solutions Inc. is based upon spot examination from readily accessible areas of the structure using visual and available non-destructive testing. Should latent defects or conditions which vary significantly from those described in this report be discovered at a later date, these conditions should be brought to the attention of Underwater Solutions Inc. or the structure manufacturer at that time. These comments should be viewed as information to be used by the Owner in determining the proper course of action and not to replace a complete set of specifications. All repairs should be done in accordance with A.W.W.A. and/or other applicable standards.

Underwater Solutions Inc.'s recommendations, remedial action and infrastructure asset management plan is being processed and will be uploaded into your platform within 45 days for your review.



INFRASTRUCTURE MANAGEMENT

Phone: 877.821.6138 | office@aqueousco.com

Report Date: 06/30/2025

Account Overview

Account Name: Smithfield Water Supply
Asset Name: Burlingame Tank
Type of Tank: Ground Storage Tank
Dimensions: 32'H X 40'D
Volume: 300,000
Services: Clean (Sediment Removal), Inspection
Tank Identification Plate:



Report Review & Approval

Report Approved By:

David Cornish, President

EXTERIOR PERIMETER OF TANK

Is this structure located within a guarded facility? **No**

GUARDED FACILITY DETAILS

Does this structure have a fence that spans its circumference?	Yes
What is the height of the fence? (In Inches)	82
Does this fence have barbed wire?	Yes
Condition of the barbed wire	Good
What is the overall condition of the fence?	Good
Are there any deficiencies throughout the fence?	No
Are there any signs of forced entry / vandalism?	No
Is access gate functional and secured with a lock?	Yes

Security Photos



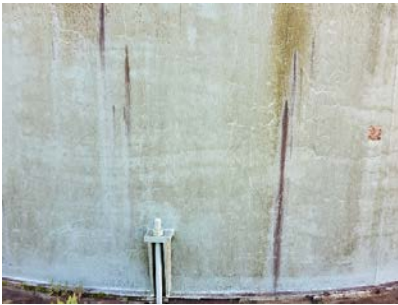
EXTERIOR WALL SURFACES

EXTERIOR WALL AESTHETICS

NORTH WALL

Aesthetics	Mildew
Condition of Protective Coating	Decline/Thinning

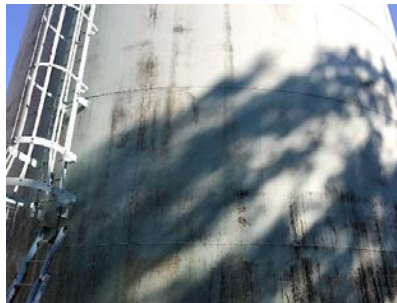
North Wall Exterior Aesthetics Photos



SOUTH WALL

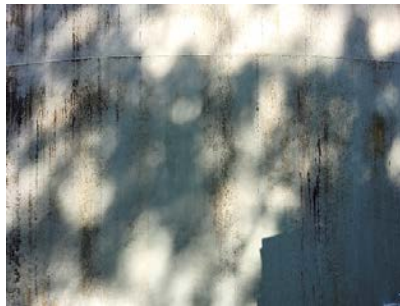
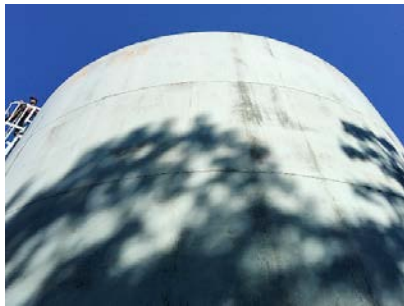
Aesthetics	Mildew
Condition of Protective Coating	Good

South Wall Exterior Aesthetics Photos



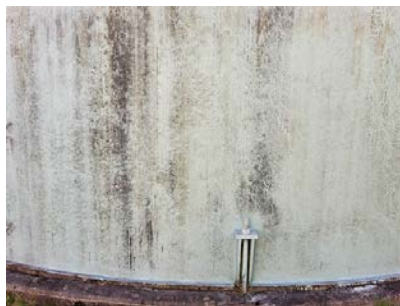
EAST WALL	
Aesthetics	Mildew
Condition of Protective Coating	Decline/Thinning

East Wall Exterior Aesthetics Photos



WEST WALL	
Aesthetics	Mildew
Condition of Protective Coating	Good

West Wall Exterior Aesthetics Photos



EXTERIOR WALL STRUCTURAL

UPPER SECTION NORTH WALL	
Is there any sign of exposed steel in this section?	No

MIDDLE SECTION NORTH WALL	
Is there any sign of exposed steel in this section?	No

LOWER SECTION NORTH WALL	
Is there any sign of exposed steel in this section?	Yes
Percent (%) of exposed steel in this section	Less than 5%
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

Exterior Lower North Wall Section - Photo of exposed steel



Overall photo of entire quadrant



UPPER SECTION SOUTH WALL	
Is there any sign of exposed steel in this section?	No

MIDDLE SECTION SOUTH WALL	
Is there any sign of exposed steel in this section?	No

LOWER SECTION SOUTH WALL	
Is there any sign of exposed steel in this section?	Yes
Percent (%) of exposed steel in this section	Less than 5%
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

Exterior Lower South Wall Section- Photo of exposed steel



Overall photo of entire quadrant

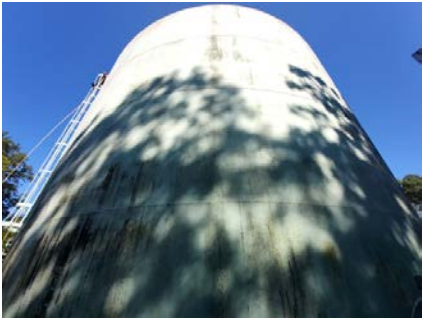


UPPER SECTION EAST WALL	
Is there any sign of exposed steel?	No

MIDDLE SECTION EAST WALL	
Is there any sign of exposed steel?	No

LOWER SECTION EAST WALL	
Is there any sign of exposed steel?	No

Overall photo of entire quadrant



UPPER SECTION WEST WALL	
Is there any sign of exposed steel?	No

MIDDLE SECTION WEST WALL	
Is there any sign of exposed steel?	No

LOWER SECTION WEST WALL	
Is there any sign of exposed steel?	No

Overall photo of entire quadrant



CATWALK	
Does this structure have a catwalk?	No

EXTERIOR WALL WELDS

UPPER SECTION NORTH WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Upper North Wall Section- Photo of welds



MIDDLE SECTION NORTH WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Middle North Wall Section- Photo of welds



LOWER SECTION NORTH WALL	
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Lower North Wall Section- Photo of welds



UPPER SECTION SOUTH WALL

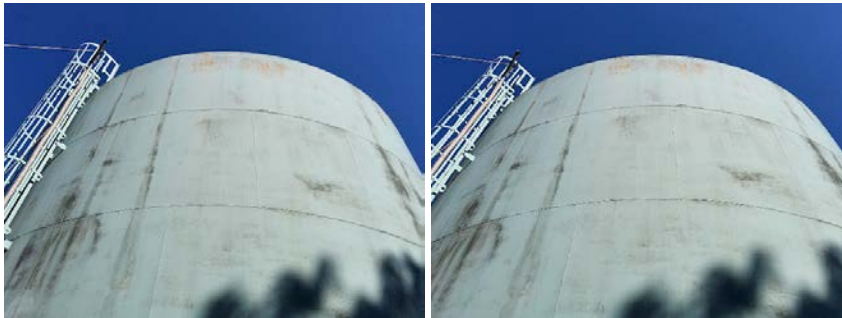
Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Upper South Wall Section- Photo of welds



MIDDLE SECTION SOUTH WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Middle South Wall Section- Photo of welds



LOWER SECTION SOUTH WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Lower South Wall Section- Photo of welds



UPPER SECTION EAST WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Upper East Wall Section- Photo of welds



MIDDLE SECTION EAST WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Middle East Wall Section- Photo of welds



LOWER SECTION EAST WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Does there appear to be any sign of leakage?

No

Lower East Wall Section- Photo of welds



UPPER SECTION WEST WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Upper West Wall Section- Photo of welds



MIDDLE SECTION WEST WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Middle West Wall Section- Photo of welds



LOWER SECTION WEST WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Lower West Wall Section- Photo of welds



GROUND LEVEL ULTRA SONIC / DRY FILM THICKNESS MEASUREMENTS

EXTERIOR NORTH WALL

Ultra Sonic Thickness Measurements Panel #1 (In Inches)	.385, .367, .384, .367
Ultra Sonic Thickness Measurements Panel #2 (In Inches)	.333, .332, .345, .333
Dry Film Thickness Measurements Panel #1 (In Mils)	3.45, 3.5, 3.67, 4.1
Dry Film Thickness Measurements Panel #2 (In Mils)	4.1, 3.9, 3.0, 2.9

EXTERIOR EAST WALL

Ultra Sonic Thickness Measurements Panel #1 (In Inches)	.381, .379, .382, .381
Ultra Sonic Thickness Measurements Panel #2 (In Inches)	.344, .345, .352, .342
Dry Film Thickness Measurements Panel #1 (In Mils)	4.1, 4.4, 3.7, 3.7
Dry Film Thickness Measurements Panel #2 (In Mils)	3.45, 3.43, 3.14, 4.1

EXTERIOR SOUTH WALL

Ultra Sonic Thickness Measurements Panel #1 (In Inches)	.367, .367, .385, .385
Ultra Sonic Thickness Measurements Panel #2 (In Inches)	.344, .333, .341, .341
Dry Film Thickness Measurements Panel #1 (In Mils)	3.45, 3.6, 4.2, 4.2
Dry Film Thickness Measurements Panel #2 (In Mils)	4.1, 4.6, 4.4, 3.8

EXTERIOR WEST WALL

Ultra Sonic Thickness Measurements Panel #1 (In Inches)	.383, .367, .367, .381
Ultra Sonic Thickness Measurements Panel #2 (In Inches)	.344, .344, .343, .330
Dry Film Thickness Measurements Panel #1 (In Mils)	4.1, 4.5, 4.3, 4.4
Dry Film Thickness Measurements Panel #2 (In Mils)	3.66, 3.45, 3.47, 3.54

EXTERIOR MANWAYS

EXTERIOR MANWAYS

How many exterior manways does this structure have?	2
---	---

EXTERIOR MANWAY #1

Location #1	West
Location #2	Wall
Shape	Circle
Diameter (in inches)	24
Height above the ground (in inches)	24
Is this manway secure?	Yes
Is there any sign of leakage?	No
Is this manway coated?	Yes
Condition of coating	Decline/Thinning, Peeling
Is there any signs of metal exposure?	Yes
Is there any sign of corrosion?	Yes
Is there any sign of fatigue/pitting?	No
What is the condition of the gasket?	Good

Photo of metal exposure



Photo of corrosion



Exterior Manway 1 Photos



EXTERIOR MANWAY #2	
Location #1	East
Location #2	Wall
Shape	Circle
Diameter (in inches)	24
Height above the ground (in inches)	24
Is this manway secure?	Yes
Is there any sign of leakage?	No
Is this manway coated?	Yes
Condition of coating	Decline/Thinning, Peeling
Is there any signs of metal exposure?	Yes
Is there any sign of corrosion?	Yes
Is there any sign of fatigue/pitting?	No
What is the condition of the gasket?	Good

Photo of metal exposure



Photo of corrosion



Manway 2 Photos



EXTERIOR PIPING

EXTERIOR PIPING

Does this structure have any visible exterior pipes?

No

EXTERIOR LADDER

EXTERIOR LADDER ACCESSIBILITY AND COMPLIANCE

Does this structure have an exterior ladder	Yes
Exterior Ladder Location #1	South
Exterior Ladder Location #2	Wall
What material is this ladder?	Steel
What is the width between side rails? (In Inches)	16
Rung Rise on center? (In Inches)	12
What is the ladder distance off wall? (In Inches)	7
How far is this ladder off the ground? (In Inches)	120
How many standoffs does this ladder have?	4
Do all welded connections seem sound?	Yes
Is this ladder coated?	Yes
Condition of coating?	Decline/Thinning

EXTERIOR LADDER SECURITY AND FALL PREVENTION	
Does this ladder have a fall prevention device?	Yes
What type of fall prevention device is available?	Notched Tube
What is the condition of this fall prevention device?	Good
Does this ladder have a safety cage?	Yes
What is the condition of the safety cage?	Good
Does this ladder have a ladder guard?	Yes
Is this ladder guard locked?	Yes

Exterior Ladder Photos



EXPOSED FOUNDATION

EXPOSED FOUNDATION	
Does this structure have an exposed foundation?	Yes
What is the height of this foundation? (In Inches)	8
What is the width of this foundation? (In Inches)	8
What is the condition of the concrete?	Uncoated concrete foundation has less than 5% cracks with no depth or width with 5-10% of those cracks having efflorescence. Moderate mildew stain found at this time.

Exposed Foundation Photos

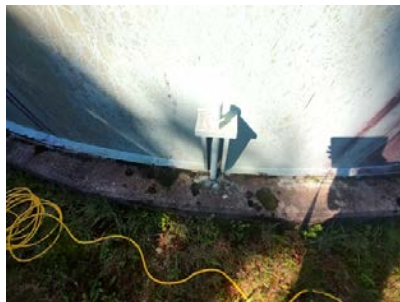
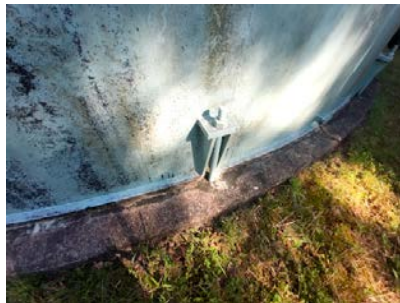




ANCHOR BOLTS

ANCHOR BOLTS	
Does this structure have anchor bolts?	Yes
How many?	16
What is the approximate height of the anchor bolts? (In Inches)	24
What is the approximate diameter of the anchor bolts? (In Inches)	1.5
Is the anchor bolts coated?	Yes
Condition of coating	Decline/Thinning
Is all hardware present?	Yes

Anchor Bolts Photos



EXTERIOR ROOF/SHELL

EXTERIOR ROOF AESTHETICS

NORTH ROOF QUADRANT AESTHETICS

Aesthetic Deficiencies	Soiling
Condition of Protective Coating	Decline/Thinning

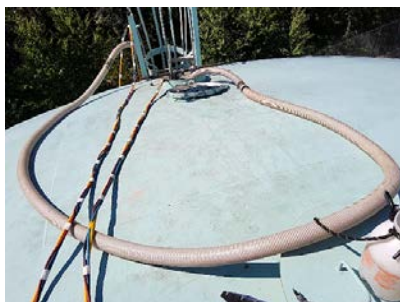
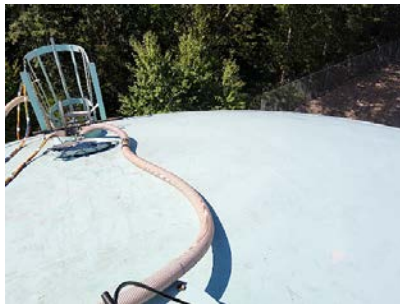
North Roof Quadrant Aesthetic Photos



SOUTH ROOF QUADRANT AESTHETICS

Aesthetic Deficiencies	Soiling
Condition of Protective Coating	Decline/Thinning

South Roof Quadrant Aesthetic Photos



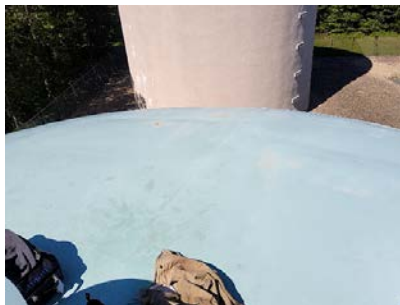
EAST ROOF QUADRANT AESTHETICS	
Aesthetic Deficiencies	Soiling
Condition of Protective Coating	Decline/Thinning

East Roof Quadrant Aesthetics Photos



WEST ROOF QUADRANT AESTHETICS	
Aesthetic Deficiencies	Soiling
Condition of Protective Coating	Decline/Thinning

West Roof Quadrant Aesthetics Photos



EXTERIOR ROOF STRUCTURAL**NORTH ROOF STRUCTURAL**

Is there any sign of exposed steel?	No
Is there any rigging hole penetrations in this quadrant?	No
Are all penetrations sealed?	Yes
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Overall photo of this quadrant

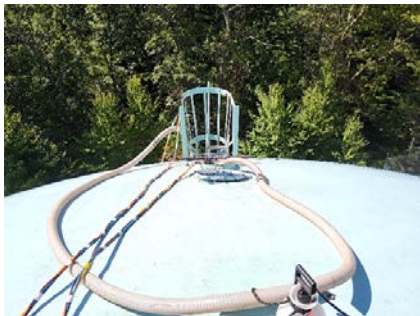


North Quadrant- Photo of welds

**SOUTH ROOF STRUCTURAL**

Is there any sign of exposed steel?	No
Is there any rigging hole penetrations in this quadrant?	No
Are all penetrations sealed?	Yes
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Overall photo of this quadrant



South Quadrant- Photo of welds



EAST ROOF STRUCTURAL	
Is there any sign of exposed steel?	No
Is there any rigging hole penetrations in this quadrant?	No
Are all penetrations sealed?	Yes
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Overall photo of this quadrant



East Quadrant- Photo of welds



WEST ROOF STRUCTURAL	
Is there any sign of exposed steel?	No
Is there any rigging hole penetrations in this quadrant?	No
Are all penetrations sealed?	Yes
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

Overall photo of this quadrant



West Quadrant- Photo of welds



CELL EQUIPMENT

CELL EQUIPMENT

Does this structure have cell equipment attached?

No

EXTERIOR OVERFLOW

EXTERIOR OVERFLOW

How many overflows does this structure have?

1

OVERFLOW #1

Location #1	West
Location #2	Wall
Where does this overflow terminate?	West side, near top of the tank.
How many inches above the ground does it terminate?	32'
Does this overflow extend away from the structure?	No
Does this overflow discharge into a sewer or storm drain?	No
What is the diameter of this overflow? (In Inches)	6
Is this overflow free of obstructions?	Yes
Is there a screen present?	Yes
What size mesh is this screen?	24
Is this screen secure?	Yes
Does this screen have any deficiencies?	No
Does the overflow have a flapper gate or a duckbill valve?	No

Overflow #1 Photo



EXTERIOR AERATOR

EXTERIOR AERATOR

Does this structure have a rooftop aerator? No

EXTERIOR VENT

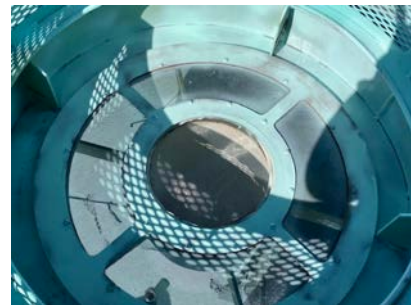
EXTERIOR VENT

How many vents does this structure have? 1

VENT #1

Location #1	Center
Location #2	Roof
Is this vent coated?	Yes
What is the condition of the coating?	Decline/Thinning
Is this vent downturned?	No
Is there a solid cover down to the bottom of the screen?	Yes
Is there a screen present?	Yes
What size screen is present? (in inches)	Expanded steel primary screen on exterior / 24-Mesh secondary screen on interior.
Is this screen at least 8" above the roof?	Yes
Does this screen have any deficiencies?	No
Is the vent a vacuum/pressure release pallet vent?	No

Vent 1 Photos



EXTERIOR HATCH

EXTERIOR HATCH

How many hatches does this structure have?

2

HATCH #1

Location #1	South
Location #2	Roof
Shape	Circle
Inside Diameter (in inches)	24
Outside Diameter (in inches)	24.5
Is this hatch raised at least 4" above the roof?	Yes
What is the height this hatch is raised above the roof? (In Inches)	4.5
Does this hatch have an overlapping water tight lid?	Yes
Does this lid measure 2" in overlap?	Yes
Does this lid have a gasket?	No
Was this hatch opened during inspection?	Yes
Did this hatch function properly?	Yes
Is this hatch secured with a lock?	Yes
Is this hatch coated?	Yes
Condition of coating on exterior	Decline/Thinning

Hatch Photos



HATCH #2

Location #1	Center
Location #2	Roof
Shape	Circle
Inside Diameter (in inches)	24
Outside Diameter (in inches)	24.5
Is this hatch raised at least 4" above the roof?	Yes
What is the height this hatch is raised above the roof? (In Inches)	5.5
Does this hatch have an overlapping water tight lid?	No
Was this hatch opened during inspection?	No
Is this hatch secured with a lock?	No
Is there a lock mechanism in place?	Yes
Is this hatch coated?	Yes
Condition of coating on exterior	Decline/Thinning

Hatch #2 Photos



SAFETY RAILINGS

EXTERIOR SAFETY RAILINGS

Does this structure have safety railings?	No
---	----

INTERIOR WALLS

INTERIOR WALLS AESTHETICS

INTERIOR AESTHETICS NORTH WALL

Is there Biofilm/Staining in this quadrant?	Yes
Severity of biofilm	Mild
Is this quadrant coated?	Yes
Condition of Protective Coating	Decline/Thinning, Peeling, Blistering

North Wall Aesthetics Photos



INTERIOR WALLS AESTHETICS

INTERIOR AESTHETICS SOUTH WALL

Is there Biofilm/Staining in this quadrant?	Yes
Severity of biofilm	Mild
Is this quadrant coated?	Yes
Condition of Protective Coating	Decline/Thinning

South Wall Aesthetics Photos

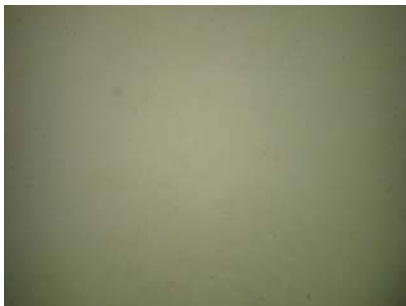




INTERIOR WALLS AESTHETICS

INTERIOR AESTHETICS EAST WALL	
Is there Biofilm/Staining in this quadrant?	Yes
Severity of biofilm	Mild
Is this quadrant coated?	Yes
Condition of Protective Coating	Decline/Thinning

East Wall Aesthetics Photos



INTERIOR WALLS AESTHETICS

INTERIOR AESTHETICS WEST WALL	
Is there Biofilm/Staining in this quadrant?	Yes
Severity of biofilm	Mild
Is this quadrant coated?	Yes
Condition of Protective Coating	Decline/Thinning

West Wall Aesthetics Photos



INTERIOR WALLS STRUCTURAL

UPPER SECTION NORTH WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

MIDDLE SECTION NORTH WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

LOWER SECTION NORTH WALL

Is there any sign of exposed steel in this section?	Yes
Percent (%) of exposed steel in this section	Less than 5%
Is there any sign of corrosion in this section?	Yes
Percent (%) of corrosion in this section	Less than 5%
Is there any sign of pitting in this section?	No

Interior Lower North Wall Section - Photo of exposed steel



Interior Lower North Wall Section- Photo of corrosion



Overall photo of entire quadrant



INTERIOR WALLS STRUCTURAL

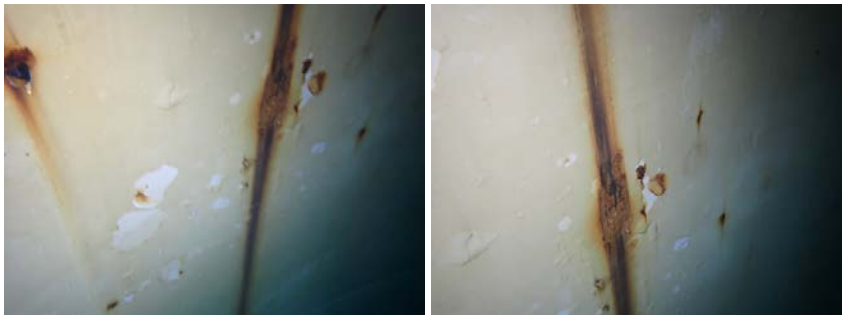
UPPER SECTION SOUTH WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

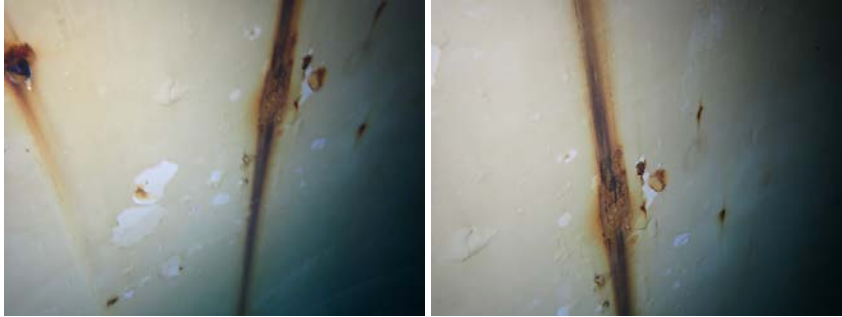
MIDDLE SECTION SOUTH WALL

Is there any sign of exposed steel in this section?	Yes
Percent (%) of exposed steel in this section	Less than 5%
Is there any sign of corrosion in this section?	Yes
Percent (%) of corrosion in this section	Less than 5%
Is there any sign of pitting in this section?	No

Interior Middle South Wall Section - Photo of exposed steel



Interior Middle South Wall Section- Photo of corrosion



LOWER SECTION SOUTH WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

Overall photo of entire quadrant



INTERIOR WALLS STRUCTURAL

UPPER SECTION EAST WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

MIDDLE SECTION EAST WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

LOWER SECTION EAST WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

Overall photo of entire quadrant



INTERIOR WALLS STRUCTURAL

UPPER SECTION WEST WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

MIDDLE SECTION WEST WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

LOWER SECTION WEST WALL

Is there any sign of exposed steel in this section?	No
Is there any sign of corrosion in this section?	No
Is there any sign of pitting in this section?	No

Overall photo of entire quadrant



ICE CAP FORMATION

INTERIOR WALLS

Is there any damage on the interior walls / coating that could be the result of ice cap formation? I.e., Ice scour	No
--	----

INTERIOR WALL WELDS

UPPER SECTION NORTH WALL

Do all the welds in this section appear to be sound, free of fatigue / failure?	Yes
---	-----

Upper North Wall Section- Photo of welds

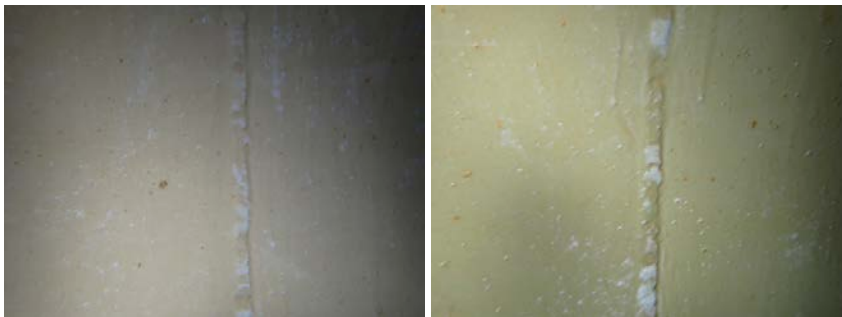


MIDDLE SECTION NORTH WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Middle North Wall Section- Photo of welds



LOWER SECTION NORTH WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Lower North Wall Section- Photo of welds



UPPER SECTION SOUTH WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Upper South Wall Section- Photo of welds



MIDDLE SECTION SOUTH WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Middle South Wall Section- Photo of welds



LOWER SECTION SOUTH WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Lower South Wall Section- Photo of welds



UPPER SECTION EAST WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Upper East Wall Section- Photo of welds



MIDDLE SECTION EAST WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Middle East Wall Section- Photo of welds



LOWER SECTION EAST WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Lower East Wall Section- Photo of welds



UPPER SECTION WEST WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Upper West Wall Section- Photo of welds



MIDDLE SECTION WEST WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Middle West Wall Section- Photo of welds

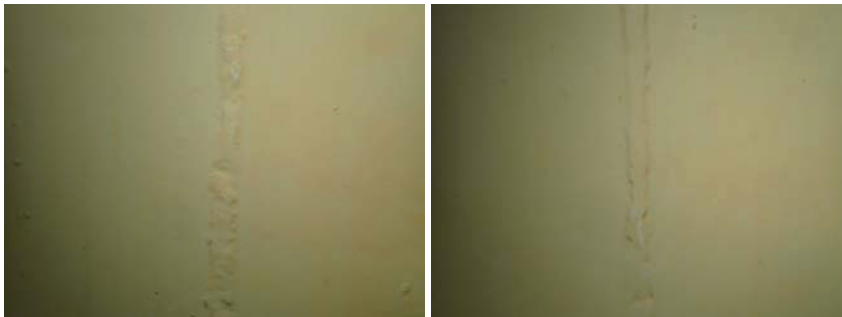


LOWER SECTION WEST WALL

Do all the welds in this section appear to be sound, free of fatigue /failure?

Yes

Lower West Wall Section- Photo of welds



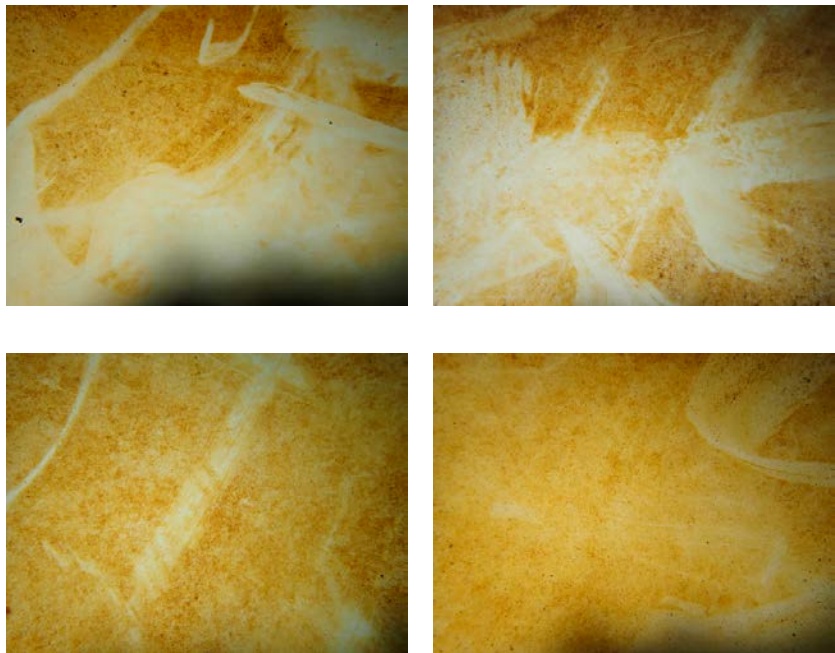
INTERIOR FLOOR

INTERIOR FLOOR NORTH QUADRANT AESTHETICS

INTERIOR AESTHETICS NORTH FLOOR

Is there Biofilm/Staining in this quadrant?	Yes
Severity of biofilm/staining?	Mild
Is this quadrant coated?	Yes
Condition of Protective Coating	Decline/Thinning

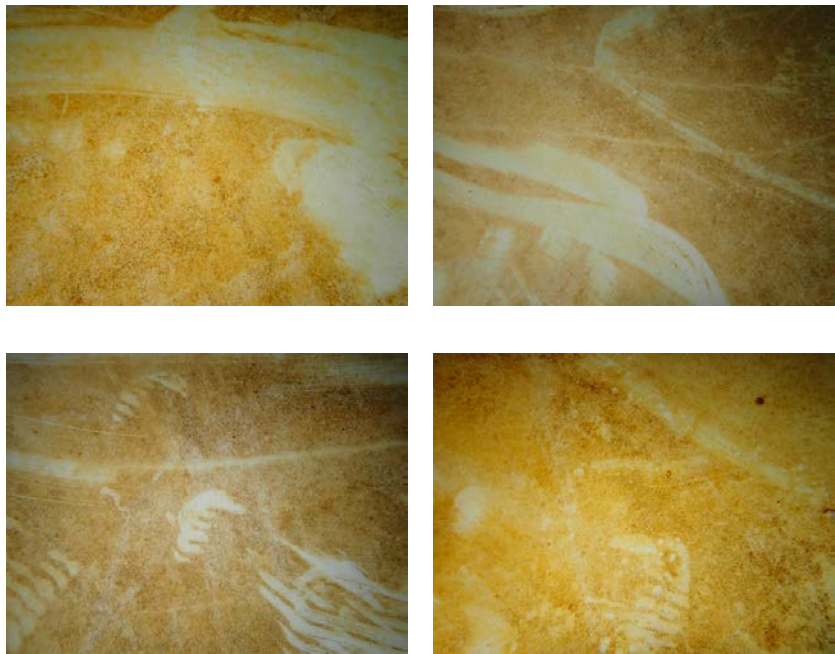
North Floor Aesthetics Photos



INTERIOR FLOOR SOUTH QUADRANT AESTHETICS

INTERIOR AESTHETICS SOUTH FLOOR	
Is there Biofilm/Staining in this quadrant?	Yes
Severity of biofilm/staining?	Mild
Is this quadrant coated?	Yes
Condition of Protective Coating	Decline/Thinning

South Floor Aesthetics Photos



INTERIOR FLOOR EAST QUADRANT AESTHETICS**INTERIOR AESTHETICS EAST FLOOR**

Is there Biofilm/Staining in this quadrant?	Yes
Severity of biofilm/staining?	Mild
Is this quadrant coated?	Yes
Condition of Protective Coating	Decline/Thinning

East Floor Aesthetic Photos**INTERIOR FLOOR WEST QUADRANT AESTHETICS****INTERIOR AESTHETICS WEST FLOOR**

Is there Biofilm/Staining in this quadrant?	Yes
Severity of biofilm/staining?	Mild
Is this quadrant coated?	Yes
Condition of Protective Coating	Decline/Thinning

West Floor Aesthetic Photos



INTERIOR FLOORS STRUCTURAL

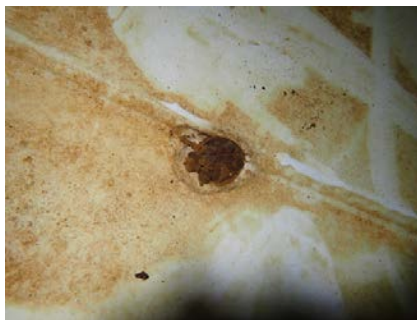
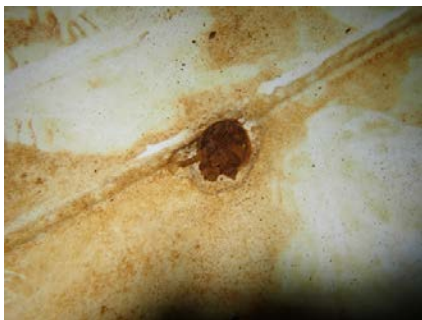
INTERIOR STRUCTURAL NORTH FLOOR

Is there any sign of exposed steel?	No
Do all the welds in this section appear to be sound, free of fatigue /failure?	No
Is there any sign of corrosion within these welds?	Yes
Percent (%) of corrosion	Less than 5%
Is there any sign of cracking within these welds?	No
Does there appear to be any sign of leakage?	No

Overall Photo of Interior North Floor Quadrant



North Quadrant- Photo of weld deficiencies



INTERIOR FLOORS STRUCTURAL

INTERIOR STRUCTURAL SOUTH FLOOR

Is there any sign of exposed steel?	Yes
Percent (%) of exposed steel in this quadrant	Less than 5%
Is there any sign of corrosion?	Yes
Percent (%) of corrosion	Less than 5%
Is there any sign of pitting?	No
Do all the welds in this section appear to be sound, free of fatigue /failure?	No
Is there any sign of corrosion within these welds?	Yes
Percent (%) of corrosion	Less than 5%
Is there any sign of cracking within these welds?	No
Does there appear to be any sign of leakage?	No

Overall Photo of Interior South Floor Quadrant



Photos of exposed steel

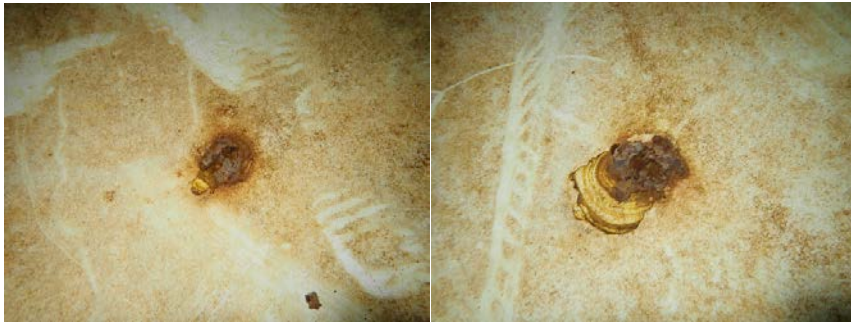
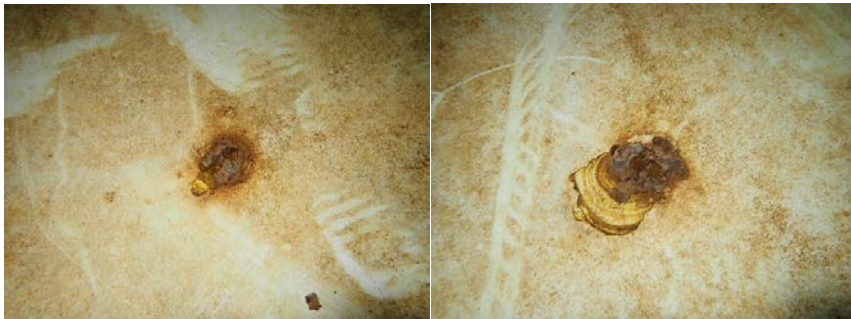
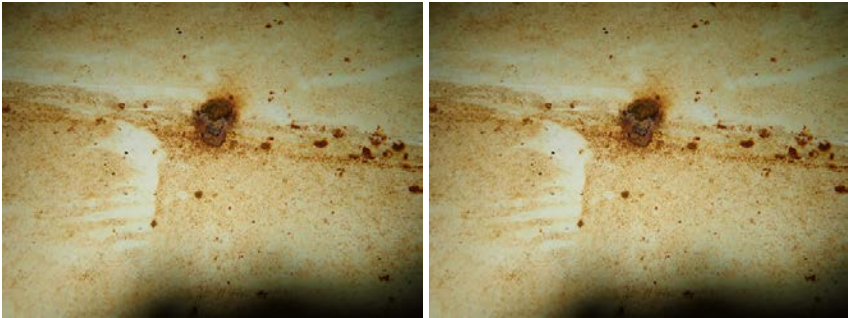


Photo of corrosion



South Quadrant- Photo of weld deficiencies



INTERIOR FLOORS STRUCTURAL

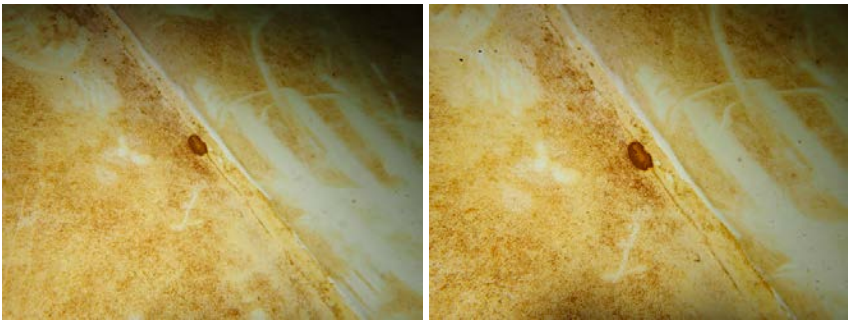
INTERIOR STRUCTURAL EAST FLOOR

Is there any sign of exposed steel?	No
Do all the welds in this section appear to be sound, free of fatigue /failure?	No
Is there any sign of corrosion within these welds?	Yes
Percent (%) of corrosion	Less than 5%
Is there any sign of cracking within these welds?	No
Does there appear to be any sign of leakage?	No

Overall Photo of Interior East Floor Quadrant



East Quadrant- Photo of weld deficiencies



INTERIOR FLOORS STRUCTURAL

INTERIOR STRUCTURAL WEST FLOOR

Is there any sign of exposed steel?	Yes
Percent (%) of exposed steel in this quadrant	Less than 5%
Is there any sign of corrosion?	Yes
Percent (%) of corrosion	Less than 5%
Is there any sign of pitting?	No
Do all the welds in this section appear to be sound, free of fatigue /failure?	Yes
Does there appear to be any sign of leakage?	No

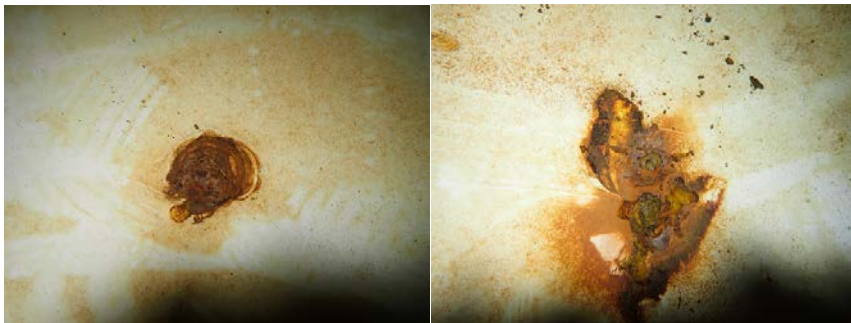
Overall Photo of Interior West Floor Quadrant



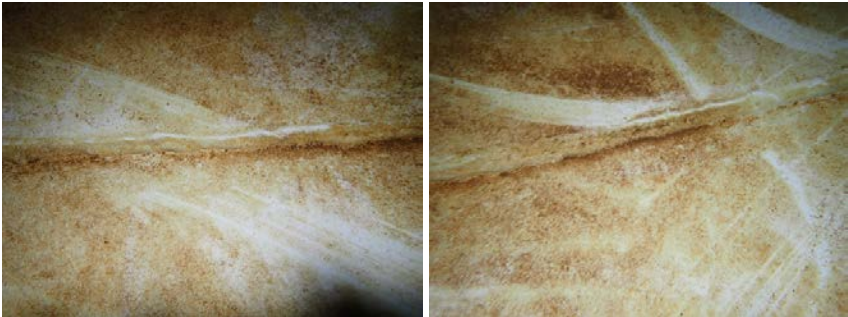
Photos of exposed steel



Photos of corrosion



West Quadrant- Photo of welds



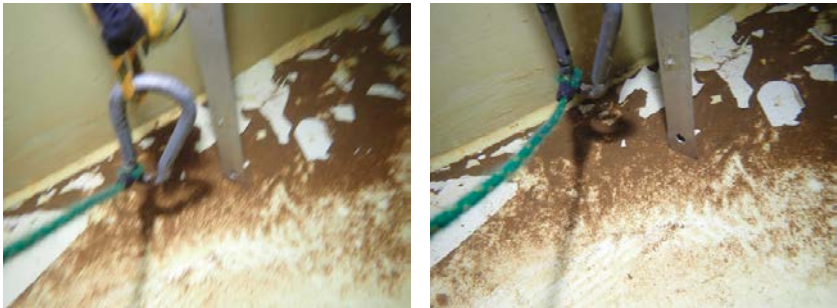
BAFFLE WALL

INTERIOR BAFFLING WALL	
Does this structure have an interior baffle wall?	No

CLEANING

SEDIMENT REMOVAL	
How much sediment was found on the bottom of this structure? (In Inches)	.03125
Sediment appears to be:	Iron manganese and paint chips
Was all sediment removed?	Yes

Before Sediment Removal



After Sediment Removal



Discharge Photo



SUPPORT Pillars

SUPPORT Pillars

Does this structure have support pillars? No

INTERIOR Manway

INTERIOR Manway

How many interior manways does this structure have? 2

INTERIOR Manway #1

Location #1	East
Location #2	Wall
Shape	Circle
Diameter	24
Height above floor (in inches)	18
Is this manway secure?	Yes
Is there any sign of leakage?	No
Is this manway coated?	Yes
Condition of coating	Decline/Thinning
Is there any signs of metal exposure?	Yes
Is there any sign of corrosion?	Yes
Is there any sign of fatigue/pitting?	No
What is the condition of the gasket?	Good
Is there an access ladder for this manway?	No

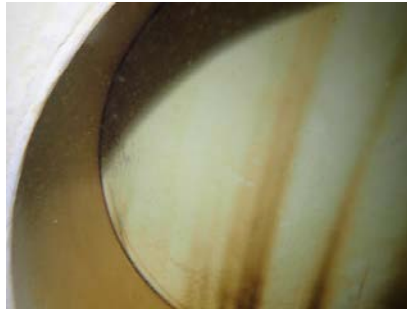
Interior Manway #1 Photo of metal exposure



Interior Manway #1 Photo of corrosion



Interior Manway Photos



INTERIOR MANWAY #2	
Location #1	West
Location #2	Wall
Shape	Circle
Diameter	24
Height above floor (in inches)	18
Is this manway secure?	Yes
Is there any sign of leakage?	No
Is this manway coated?	Yes
Condition of coating	Decline/Thinning
Is there any signs of metal exposure?	Yes
Is there any sign of corrosion?	Yes
Is there any sign of fatigue/pitting?	No
What is the condition of the gasket?	Good
Is there an access ladder for this manway?	No

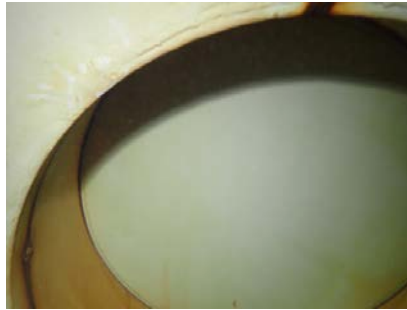
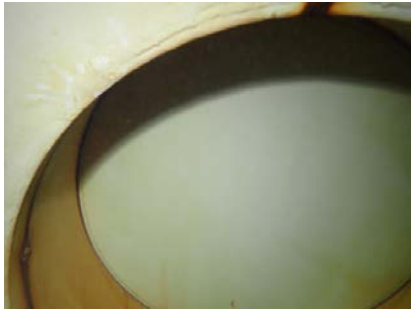
Interior Manway #2 Photo of metal exposure



Interior Manway #2 Photo of corrosion



Interior Manway #2 Photos



INTERIOR PIPING

INTERIOR PIPING

How many pipes does this structure have?	1
--	---

PIPE #1

Where does this pipe penetrate the structure?	Floor
Does this pipe extend a minimum of 6" above the structure floor?	Yes
What is the diameter of this pipe? (in inches)	12
What is the material of this pipe?	Steel
Is this pipe obstructed?	No
Is there anything on the end of this pipe?	Nothing
Is this pipe coated?	Yes
Condition of coating	Decline/Thinning
Is this pipe supported?	No

Pipe #1 Photos



INTERIOR OVERFLOW

INTERIOR OVERFLOW

Does this structure have an interior overflow?	Yes
How many overflows does this structure have?	1

OVERFLOW #1

Location #1	West
Location #2	Wall
Is this overflow free of obstructions?	Yes
What is this overflow penetrating?	Wall
Where does this overflow terminate?	6 inches from overhead
Is this overflow coated?	Yes
Condition of coating	Decline/Thinning
Is this overflow supported?	No

Overflow #1 Photo



INTERIOR LADDER

A. LADDER ACCESSIBILITY AND COMPLIANCE

Does this structure have an interior ladder	No
---	----

INTERIOR OVERHEAD

INTERIOR OVERHEAD AESTHETICS

NORTH OVERHEAD AESTHETICS QUADRANT

Aesthetic Deficiencies	Soiling
Is this quadrant coated?	Yes
Condition of Protective Coating	Decline/Thinning
Is the hatch visible in this quadrant?	No

North Overhead Aesthetics Photos





SOUTH OVERHEAD AESTHETICS QUADRANT	
Aesthetic Deficiencies	Soiling
Is this quadrant coated?	Yes
Condition of Protective Coating	Decline/Thinning
Is the hatch visible in this quadrant?	Yes
Aesthetic Deficiencies	Decline/Thinning

South Overhead Aesthetics Photos



EAST OVERHEAD AESTHETICS QUADRANT	
Aesthetic Deficiencies	Soiling
Is this quadrant coated?	Yes
Condition of Protective Coating	Decline/Thinning
Is the hatch visible in this quadrant?	No

East Overhead Aesthetics - Photos





WEST OVERHEAD AESTHETICS QUADRANT	
Aesthetic Deficiencies	Soiling
Is this quadrant coated?	Yes
Condition of Protective Coating	Decline/Thinning
Is the hatch visible in this quadrant?	No

West Overhead Aesthetics Photos



OVERHEAD STRUCTURAL

NORTH OVERHEAD STRUCTURAL QUADRANT	
Is there any sign of exposed steel?	No

Overall Photo of this quadrant



OVERHEAD STRUCTURAL

SOUTH OVERHEAD STRUCTURAL QUADRANT

Is there any sign of exposed steel?	No
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Overall Photo of this quadrant



OVERHEAD STRUCTURAL

EAST OVERHEAD STRUCTURAL QUADRANT
--

Is there any sign of exposed steel?	No
-------------------------------------	----

Overall Photo of this quadrant



OVERHEAD STRUCTURAL

WEST OVERHEAD STRUCTURAL QUADRANT
--

Is there any sign of exposed steel?	No
-------------------------------------	----

Overall Photo of this quadrant



INTERIOR BEAMS

Does this structure have beams?	No
---------------------------------	----

WATER QUALITY

WATER QUALITY

Is there suspended particulate and/or color throughout the water column?	Yes
Water temperature at surface at time of inspection in fahrenheit.	62
Water temperature at bottom at time of inspection in fahrenheit.	61
Surface residual mg/L (total chlorine)	0.0
Is there a sample tap located at ground level?	Yes
Bottom residual mg/L (total chlorine)	.3
Water Quality - Additional Notes	Water quality was good allowing up to 15' visibility.

INTERIOR MIXER

INTERIOR MIXER

Does this structure have a mixer installed?	No
---	----

SITE SECURITY UPON COMPLETION

CLOSING FORM

Was there a lock on the hatch upon your arrival?	Yes
Was hatch locked at the completion of services?	Yes
Did this structure have a locked access gate?	Yes
Was gate locked after completion of services?	No
Explain why gate was not locked after services	Gate was locked photographic evidence was not obtained.

Photo of locked hatch after completion of services

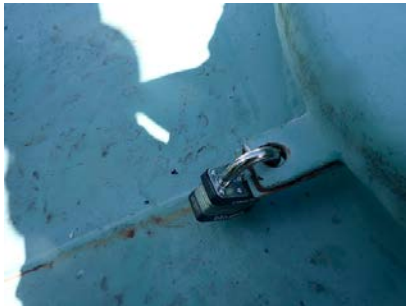
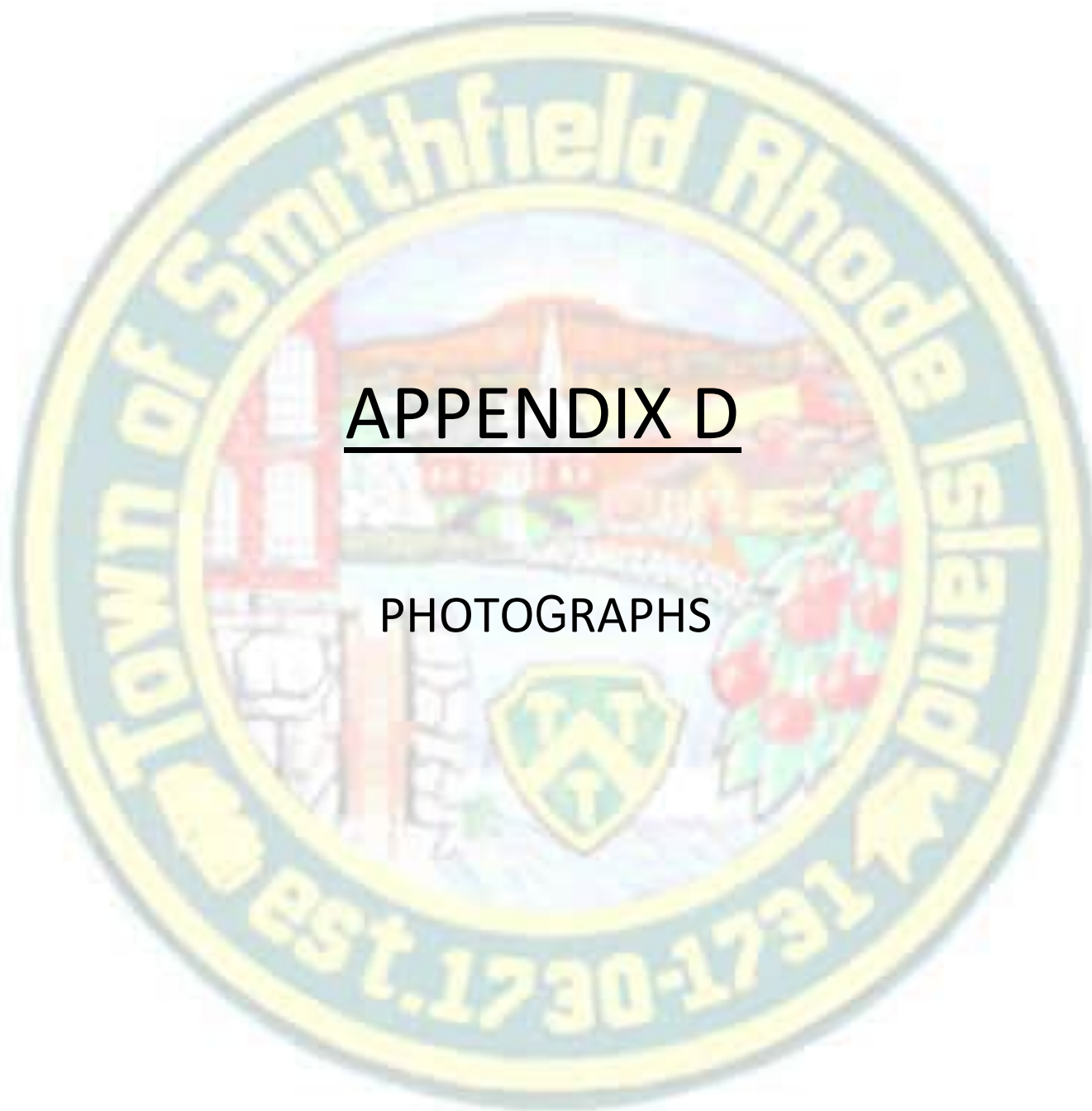


Photo of locked gate after completion of services



This report prepared by Aqueous Infrastructure Management Co. is based upon spot examination from readily accessible areas of the structure using visual and available non-destructive testing. Should latent defects or conditions which vary significantly from those described in this report be discovered at a later date, these conditions should be brought to the attention of Aqueous Infrastructure Management Co. or the structure manufacturer at that time. These comments should be viewed as information to be used by the Owner in determining the proper course of action and not to replace a complete set of specifications. All repairs should be done in accordance with A.W.W.A. and/or other applicable standards.

Aqueous Infrastructure Management Co.'s recommendations, remedial action and infrastructure asset management plan is being processed and will be uploaded into your platform within 30 days for your review.



APPENDIX D

PHOTOGRAPHS

1: Rocky Hill Road Tank



2: Island Woods Tank (Alpha Tank)



3: Island Woods Tank (Alpha Tank) Equipment Shed



4: Burlingame Tank (Left)



5: Longview Pump Station Exterior



6: Longview Pump Station MCC Room



7: Limerock Pump Station Exterior



8: Limerock Pump Station Chlorination System



9: Davis Pump Station (Log Road Pump Station) Exterior

