

CASE NO. 2018-00208
WATER SERVICE CORPORATION OF KENTUCKY
RESPONSES TO COMMISSION STAFF'S SECOND INFORMATION REQUEST

1. Refer to the Application, paragraph 10. Confirm that the referenced tariff sheet is indeed number 14. If not, then specify which tariff sheet is undergoing revision.

Response:

On Sheet No 13, the Company is proposing to add provisions to ensure that it can recover actual costs for the movement of service lines at a customer's Request.

Witness: Rob Guttormsen

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2. Refer to the Application, Exhibit 2, Tariff Sheet No. 13, items (f) and (g).
 - a. Explain why the additional tariff language was included under number 6, Street Service Connections, and not number 7, Customer's Service Pipes.
 - b. Describe the differences between having to relocate versus raising a water service line. Explain why these two items are listed separately in the revised tariff sheet.

Response:

- a. 6(f) pertains to expenses the utility would incur as a result of relocating the service. The customer would be responsible only to move their service line.
- b. Relocating a service involves moving the line, meter setting, and box a distance that would require putting in an entire new service. Alternatively, if the service were to be raised, the utility could simply splice in longer lines, to make up the distance.

Witness: Mike Miller

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3. Refer to the Application, Exhibit 2, Tariff Sheet No. 38.
 - a. For the Clinton Service Area the tariff lists two rates, one for all usage and one for all over 100,000 gallons. Reconcile this discrepancy.
 - b. Explain why Water Service Kentucky chose to keep the rates for the Middlesboro and Clinton Service Areas separate in its revised tariff sheet instead of consolidating under one rate design.
 - c. For each meter size monthly charge that increased more than 50 percent, provide a cost justification and explanation for the increase.

Response:

- a. Instead of stating "All Usage" for the Clinton Service area, the language should read "First 100,000 gallons". The Clinton Service Area rates should be the same as the Middlesboro Service Area rates.
- b. The Company designed the changed tariff pages to be transparent and to show which rates were increased or decreased. If the areas were combined in the tariff sheet, this would not be evident by service area.
- c. Per Ms. Heppenstall's direct testimony, the monthly charges were set to recover, at a minimum, customers costs including customer facilities and customer billing (including meter reading costs) and unrecovered public fire costs. In addition to these costs, the meter charges were set so that the Company could continue to collect 35% of its revenue under proposed rates from service charges. The proposed rate increase to each meter charge is shown below:

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Meter Size	Present Rate	Proposed Rate	Meter Equivalent Ratios	Percentage Increase
5/8	\$ 10.00	\$ 12.50	1.00	25.0%
3/4	10.00	12.50	1.50	25.0%
1	17.50	31.30	2.50	78.9%
1-1/2	30.00	62.50	5.00	108.3%
2	45.00	100.00	8.00	122.2%
3	85.00	187.50	15.00	120.6%
4	130.00	312.50	25.00	140.4%
6	225.00	1,000.00	80.00 *	344.4%

* An Equivalent Meter Ratio of 80 was used for the 6-inch meter charge. This should be corrected to a Meter Equivalent Rate of 50 for a proposed meter charge of \$625.00

The monthly charge for meter sizes 1 1/2-inch and larger increased by more than 50%. With the exception of the 3/4-inch customer charge, these meter charges were increased based on the AWWA Equivalent Meter Ratios, which are attached to this data request. An error was made related to the Meter Equivalent Ratio for the 6-inch meter size. This ratio should have been 50, not 80. The correct proposed customer charge for the 6-inch meter should be \$625.00. Using Equivalent Meter Ratio as a method to determine customer charges for larger meter sizes is an accepted method in the Water Industry. In fact, the State of California mandates that the customer service charges for larger meter sizes be based on Equivalent Meter Ratios. In the State of Kentucky, both the Kentucky American Water Company and the Louisville Water Company mostly use Equivalent Meter Ratios in determining the level of customer charge for the larger meter sizes. The Louisville Water Company actually uses higher meter equivalents than those recommended for meter sizes larger than 2-inch. See below.

Meter Size	Kentucky American Residential Rates	Meter Ratios Used	Louisville Water Company Rates	Meter Ratios Used
5/8	\$ 12.49	1.00	\$ 11.18	1.00
3/4	18.74	1.50	11.18	1.00
1	31.23	2.50	27.95	2.50
1-1/2	62.45	5.00	55.90	5.00
2	99.92	8.00	89.44	8.00
3	187.37	15.00	195.65	17.50
4	312.25	25.00	334.40	29.91
6	624.50	50.00	782.60	70.00
8	999.20	80.00	1,397.50	125.00

Witness – Constance Heppenstall

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4. Refer to the Application, Exhibit 2, Tariff Sheet No.39. Explain whether the Clinton municipal service area has any hydrants served by Water Service Kentucky. If so, provide the rate charged.

Response:

Yes, Clinton Service Area has public hydrants served by Water Service Corporation of Kentucky. The rate is the same as the Middlesboro Service area or \$8.10 per hydrant per month.

Witness – Constance Heppenstall

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5. Refer to the Application, Exhibit 5, Direct Testimony of Mr. Lubertozzi (Lubertozzi Testimony), pages 5 and 6 in which Mr. Lubertozzi states "Water Service Kentucky made an adjustment to remove capitalized time not associated with capital projects, as without this adjustment Water Service Kentucky was not fully recovering its annual salary expense."

a. State why Water Service Kentucky would capitalize time that was not associated with capital projects.

b. Provide a list of employees whose capitalized time was removed and the calculations of the amounts. Provide a detailed discussion of the nature of each amount and the reasons that each amount was removed from test-year operations.

c. Refer to the Uniform System of Accounts (USoA) accounting instructions 19 and 33, which state that costs such as employee wages, wage overhead charges, materials and supplies, transportation costs, etc., are costs required to be capitalized as Utility Plant in Service and depreciated over their estimated useful lives. Explain why Water Service Kentucky should be allowed to deviate from the USoA accounting instructions.

Response:

a. Capital projects are those costs which are assigned to specific projects where costs are pooled in Construction Work in Process ("CWIP") accounts until the project is complete and ready to be placed in service. All other costs booked to fixed asset accounts are recorded as incurred and not considered capital projects.

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- b. Please see the attached file “Response to PSC 2-5 (Captive GL Detail)”. Included in the file is a breakdown of the captive entries incurred during the test year. One tab shows entries directly booked to WSCK and the other shows amounts allocated from the President business unit cost center, of which WSCK is a part, and the Shared Services business unit, of which WSCK is a part. The rationale for removing the entries for these captive entries is discussed in Lubertozzi’s direct testimony.
- c. It is the Company’s position that salaries should be capitalized when employees are engaged in construction for project work. We view salaries expense as an ongoing annual expense, wherein it is more appropriate to recover an annual level of expense as an expense in the income statement. Salaries are an item that need to be fully reflected in customers rates unless the employee is engaged in construction of a capital project.

Witness – Steve Lubertozzi

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6. Refer to the Application, Exhibit 5, Lubertozi Testimony, pages 6 through 10.
 - a. For each employee listed, provide a detailed explanation of why each position was necessary.
 - b. Provide the date that each position was filled or will be filled.

Response: See response filed with the petition for confidentiality.

Witness: Steve Lubertozi

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7. Refer to the Application, Exhibit 5, Lubertozi Testimony, page 9, lines 197-198.

a. Explain how often the Automated Meters are tested.

b. Explain whether the cost of this field technician was included in the cost justification of the meters.

Response:

a. Meters that are 5/8", 3/4" and 1" are tested on a 10-year frequency, regardless if the meters are automated or manually read.

b. It is not clear what is meant by, "included in the cost justification of the meters." However, the Company has evaluated the two available options to test meters, which is required per 807 KAR 5:066 Section 16:

1. Remove the meter, drive a batch of meters to the Company's existing testing facility (approximately 400 miles r/t) or ship the batch of meters to the facility for testing, and wait several weeks for the meter testing vendor to return the meter, then replace the meter back into service. Send (drive or ship) the temporary meter back out for testing per Section 15 (2) of 807 KAR 5:066, prior to installing it as a temporary meter elsewhere in the system.

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2. Remove the meter, test the meters in house and reinstall in a day or two, to the same premise. Test the temporary meter in-house prior to placing in service on a temporary basis elsewhere.

The Company chose option 2 above because this process is much more efficient, requires less travel and freight, a much smaller supply of meters in inventory, and allows for a higher level of customer service.

Witness – Mike Miller

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8. Refer to the responses to the Commission Staff's First Request for Information, Item 12.a., Staff DR 1.12 – WSKY Capital Plan. Water Service Kentucky included in its 2018 capital budget, \$134,054 for its Middlesboro "AMI project." Explain whether Water Service of Kentucky has requested a Certificate of Public Convenience and Necessity for its AMI project and, if not, explain why.

Response:

WSCK did not file for a request for a Certificate of Public Convenience and Necessity because the Company removed this project from its forecast. In addition, the project would have been within the “ordinary course of business,” as defined by 807 KAR 5:001, Section 15.

Witness – Mike Miller, Legal

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9. Refer to the Application, Exhibit 5, the Lubertozi Testimony, page 11, lines 238-239.

a. In selecting a firm to perform a depreciation study, did Water Service Kentucky issue a request for proposal (RFP)?

b. If Water Service Kentucky issued an RFP, provide a copy of the RFP that was issued, identify the firms to which the RFP was sent, identify the firms that responded, and explain why Guastella Associates was chosen.

c. If Water Service Kentucky did not issue an RFP, explain how Water Service Kentucky choose Guastella Associates to perform the Depreciation Analysis

Response:

a. The Company reached out exclusively to Guastella Associates, LLC to perform WSCK's proposed depreciation study.

b. The Company chose to work with Guastella Associates, LLC due to Guastella's track record of providing expert level, unbiased consulting services combined with the firm's fair and reasonable rates. The Company has used Guastella's services in other jurisdictions and the cost of the firm's services were not considered unreasonable by any Commission.

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c. Please see the response to "b." above.

Witness – Rob Guttormsen

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10. Refer to the Application, Exhibit 5, the Lubertozi Testimony, page 12, lines 250-259. Explain how the consolidated consumption chargers for both Middlesboro and Clinton service areas were calculated. Provide all calculations that were used in developing these consumption charges.

Response:

The proposed rate design was developed by first determining the proposed customer charges as described in Ms. Heppenstall's direct testimony on pages 10-11. Once the customer charges were determined and the proposed revenue from these charges was calculated, the remaining revenue requirement needed to be recovered through the proposed volumetric rates. The relative increases to the tier 1 and tier 2 rates were based on judgement and cost of service principles. For example, the tier 2 rate was increased so that the Industrial class (which has much of its usage in tier 2) did not exceed its cost of service.

Witness – Constance Heppenstall

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11. Refer to the Application, Exhibit 5, the Lubertozi Testimony, page 13.

a. On December 7, 2016, the Commission-initiated Case No. 2017- 00481,¹ to investigate the effect the Tax Cuts and Jobs Act (TCJA) would have on Water Service Kentucky's rates. The Order required Water Service Kentucky to begin recording on January 1, 2018, deferred liabilities on its books to reflect the reduction in the federal corporate tax rate to 21 percent. The Order initiating Case No. 2018-00043² required Water Service Kentucky to continue to record deferred liabilities as Ordered in Case No. 2017-00481.

(1) Provide the deferred federal income tax (FIT) and the associated savings in excess deferred taxes liability that Water Service Kentucky recorded for the six-month period of January 1, 2018, through June 30, 2018 . Provide monthly updates for this tax liability. Consider this an ongoing request.

(2) Explain whether Water Service Kentucky included this deferred liability in its revenue requirement estimation.

b. Provide Water Service Kentucky's plan for returning the recorded deferred FIT liabilities to its ratepayers.

¹ Case No. 2017-00481, Electronic Investigation of the Impact of the Tax Cuts and Job Act on the Rates of Atmos Energy Corporation, Delta Natural Gas Company, Inc., Columbia Gas of Kentucky, Inc., Kentucky-American Water Company, and Water Service Corporation of Kentucky (filed Jan. 26, 2018) .

² Case No. 2018-00043 , Electronic Investigation of the Impact of the Tax Cuts and Job Act on the Rates Water Service Corporation of Kentucky (Ky. PSC Jan. 30, 2018) .

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c. Explain in detail how the inclusion of Contributions In Aid of Construction as taxable income and the elimination of bonus depreciation will affect the Water Service Kentucky ratepayers.

d. Explain how the two TCJA changes identified in a(2) have been factored into Water Service Kentucky's revenue requirement calculated in this current case.

e. Confirm that Water Service Kentucky applied all new rules and regulations regarding the TCJA.

Response:

a.

1. As indicated in the Direct Testimony of Steve Lubertozi (Case No. 2017-00481) WSK's deferred tax assets and liabilities are not included in the Company's revenue requirement. Therefore, any regulatory liability related to the excess deferred income taxes contemplated in the Commission's December 27, 2017 order can't flow back to customers, as customer can't receive the benefit of the regulatory liability if the Accumulated Deferred Income Taxes (ADIT), that generated the regulatory liability, were not included in rates.
2. WSK has included reduced corporate income tax as a component of its revenue

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- b. See response to a. 1.
- c. The inclusion of Contributions in Aid of Construction (CIAC) as taxable income should not have an impact on WSCK's customers unless WSCK is prohibited from collecting the tax gross up on CIAC. If WSCK is prohibited from collecting the tax gross up on CIAC, WSCK would have to pay the taxes, which would generate ADIT (debit balance) and increase rate base. The elimination of bonus depreciation will cause WSCK's ADIT decrease, which leads to a larger rate base, which can impact customer's rates.
- d. See response to a. 1. and a. 2.
- e. Confirmed.

Witness – Steve Lubertozzi

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12. Refer to the Application, Exhibit 5, the Lubertozi Testimony, Page 12, lines 267-270 and continuing onto page 13, Lines 271-274.

- a. Describe the initial billing process for the Ambleside area private fire hydrants. Include who currently pays for the installation and monthly charges for the Ambleside area private fire hydrants.
- b. Explain how Water Service Kentucky currently charges for the private fire hydrants.
- c. Explain why the Ambleside area fire hydrants do not qualify under the Private Hydrants charge and instead require their own charge.

Response:

- a. WSCK installed the hydrants and has always billed the developer (Ambleside LLC) for the monthly charges. However, they have not made a payment on their balance in years.
- b. WSCK continues to invoice Ambleside LLC. for the hydrants, even though payment has not been made since 11/11/2008. Since the Company does not receive payment for the hydrant charges, bad debt expense is accrued. Because bad debt expense is a component of WSCK's revenue requirement, all other customers are subsidizing the hydrant charges.

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- c. These hydrants had qualified under the Private Hydrant charge. However, there is no recourse for the Company to collect overdue balances. Therefore, WSCK has proposed to bill Ambleside resident's surcharges in an effort to place the cost with those that benefit from the hydrants.

Witness – Mike Miller

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13. Refer to the Application, Exhibit 5, the Direct Testimony of Robert Guttormsen (Guttormsen Testimony), page 5, lines 7-14.

a. Provide the referred to wage and salary analysis and report.

b. Explain whether, prior to making any adjustments to wages, salaries, benefits, and other compensation in the base rate case; Water Service Kentucky, through an outside consultant or otherwise, performed a study or survey to compare its wages, salaries, benefits and other compensation to other local or regional enterprises.

(1) If comparisons were made, provide and discuss the results of such comparisons. Include the results of the study or survey with your response, including all workpapers.

(2) If comparisons were not made, explain why such comparisons were not performed.

Response:

a. Please see the attached files, "Response to PSC DR 2-13 (Lower Cost vs Market)" and "Staff DR 2.13 (Petitioner's Exhibit AD-3 - Original)".

b. The Company performed a comparative salary analysis internally as described in Company witness Guttormsen's testimony. The comparison was to other Kentucky utilities for which public data were available. The Company decided against engaging an outside consultant to perform the salary and benefits analysis because it knew that it had the ability to perform the analysis in house because it had done so in the previous Kentucky rate case. This approach saves rate payers significant rate case expense.

Witness – Perry Brown

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14. Refer to the Application, Exhibit 5, Guttormsen Testimony, page 6, lines 7-8.
- a. Provide any other Commission approved adjustment for a projected increase of fuel when using a historical test year.
- b. Explain whether Water Service Kentucky believes this is a known and measurable expense applicable to a historical test year.

Response:

- a. The Company assumes that the request is in reference to the Kentucky PSC and is unaware of any other Kentucky Commission approved adjustment for a projected increase of fuel when using a historical test year. The Company's position is that the Kentucky Commission makes its determination in each case based on the evidence submitted in that case.
- b. Yes, the fuel cost increase is known and measurable. WSKK used actual data available up to June 30, 2018 from the U.S. Energy Information Administration to demonstrate that fuel costs have appreciated since the end of the test year. Additionally, the Company showed in its direct case that the acquisition of a more efficient service truck after the test year would save ratepayers on fuel costs and included that savings as well.

Witness – Rob Guttormsen

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15. Refer to the Application, Exhibit 5, Guttormsen Testimony, page 7, Table 2. Cite any other rate case proceeding in which the Commission has approved a rate case amortization period of fewer than three years.

Response:

The Company assumes that the Commission referenced is the Kentucky PSC and is unaware of any other Kentucky Commission approved amortization period of fewer than three years. The Company's position is that the Kentucky Commission makes its determination in each case based on the evidence submitted in that case. A 30-month period causes the Company's expenses to be more in line with its revenues since it has historically filed, and expects to continue to file rate cases approximately every two years. Below is a breakdown of the case history for the past 10 years and a calculation of the time elapsed between rate effective dates.

Case	Filing	Effective	Months Between Effective Rates		Years
2008-00563	3/5/2009	11/9/2009			
2010-00476	1/24/2011	11/23/2011	24		2.0
2013-00237	9/27/2013	7/24/2014	32		2.7
2015-00382	11/30/2015	5/31/2016	22		1.8
2018-00208	7/5/2018	1/1/2019 [1]	31		2.6
Average Months Between Effective Dates			27		2.3

[1] Projected

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Witness – Rob Guttormsen

16. Refer to the Application, Exhibit 5, Guttormsen Testimony, page 5, Lines 16-20. Mr. Guttormsen refers to two tank-painting projects for which Water Service Kentucky has received cost estimates that total \$605,000.

- a. Provide the geographic location (i.e.; street addresses or other description) of each tank that Water Service Kentucky proposes to paint.
- b. State the dates that the tanks were first placed into service.
- c. State the tanks' anticipated remaining lives.
- d. State the dates that the tanks were sandblasted and last painted.
- e. Provide copies of the advertisements for contractor bids to paint the tanks.
- f. Provide a copy of all contractor bids that were received by Water Service Kentucky in response to the bid advertisements.
- g. Indicate which contractor bids have been accepted.
- h. State the dates that the tank paintings are expected to begin and when they are expected to be completed.
- i. Provide a complete description of all the work that is necessary to be

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performed for the tank paintings and state the type of paint used for the interior and exterior paintings.

j. State the basis for the 12-year amortization period proposed for the tank-painting costs and state why this amortization period is reasonable.

k. State how often Water Service Kentucky has their tanks inspected.

Response:

- a. Both tanks are located at the WSCK (Middlesboro) Water Treatment Plant on 102 Water Plant Road, Middlesboro, KY.
- b. Tank 1# 1997 and Tank #2 1978
- c. WSCK anticipates another 40-60-year life span, assuming preventative maintenance is completed as required.
- d. Tank #1 1998 and Tank #2 2004
- e. The tanks have not gone out for bids at this point. The Company plans to advertise during the fall, in order to procure best pricing and scheduling for 2019.

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- f. Please refer to the above response.

- g. No contractor bid has been accepted.

- h. We anticipate the tank painting and refurbishing to commence in early April 2019 and will take approximately 4 months to complete.

- i. Attached is a copy of the draft bid spec that will go out later this fall to contractors, “Response to PSC DR 2-16 i. (Draft bid spec)”.

- j. We have proposed an amortization period longer than the standard 10 years due to the additional quality controls from having a 3rd party painting inspection.

- k. Consistent with the Company’s internal preventative maintenance guidelines, tanks are inspected on 5-year intervals.

Witness – Mike Miller

PSC DR 2-16i.
Draft Bid Spec

**WATER SERVICE CORPORATION OF
KENTUCKY
2 - 1,250,000 GALLON RESERVOIRS
WET INTERIOR REPAINT
AND MISCELLANEOUS REPAIRS
EXTERIOR OVERCOAT ALTERNATE
EXTERIOR REPAINT WITH CONTAINMENT
ALTERNATE**

BID DATE: _____

BID TIME: 2:00 P.M.

CONTRACT NO. 17-07-66-01/02-18

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SECTION 00 00 30
NOTICE to BIDDERS

**Water Service Corporation of Kentucky
2335 Sanders Road
Northbrook, IL 60062**

Separate sealed Bids are solicited for the following project:

Project Name: **2 – 1,250,000 Gallon Reservoirs
Wet Interior Repaint
and Miscellaneous Repairs
Exterior Overcoat Alternate
Exterior Repaint with Containment Alternate**

Note: This project name shall be understood to include the entire scope of project as defined and detailed by these specifications.

Separate sealed bids will be received by the Owner and then publicly opened and read aloud at:

Bid Opening Site: **Water Service Corporation of Kentucky, 2335 Sanders Road,
Northbrook, IL 60062**

Bid Opening Date:

Bid Opening Time: **2:00P.M (local time)**

The SPECIFICATIONS/PLANS may be examined at the following locations:

Builders Exchange	Construction Association	Central Michigan Plan Room
2300 Meadow Dr., Suite 100	43636 Woodward Ave.	2026 Independence Dr.
Louisville, KY 40215	Bloomfield Hills, MI 48302	Mt. Pleasant, MI 48858

At the OFFICE of the ENGINEER and at the OFFICE of John Norton.

Copies of the SPECIFICATIONS/PLANS and PROPOSAL FORMS may be obtained at the office of DIXON ENGINEERING, INC., 1104 Third Avenue, Lake Odessa, Michigan, 48849 upon payment of **\$60.00** (handling charge for each set). Payment for SPECIFICATIONS should be made to Dixon Engineering, Incorporated. **There will be no refund of handling charge for return of specification packages.** Each BIDDER must deposit with their BID, Security in the amount, form, and subject to the conditions provided in the INFORMATION FOR BIDDERS. The OWNER reserves the right to accept any PROPOSAL, to reject any or all PROPOSALS, and to waive any irregularities in any PROPOSAL. No BIDDER may withdraw their BID within sixty (60) days after the actual date of the opening thereof.

Note I: The Engineer assumes no responsibility to supply Builders Exchanges and similar plan

review rooms with all addenda issued. An attempt will be made to do so; however, only registered plan holders will be notified by fax or email of expected addendum with short preparation times.

Note 2: Prequalification of BIDDERS - Dixon Engineering will review qualifications of all Contractors and determine their status. Contractors will be prequalified for different sized tanks and towers based on experience, workmanship, and financial data. Any Contractor who has any projects in dispute or unfinished because of Contract problems will be considered NOT prequalified. CONTRACTORS wishing to be prequalified must submit their latest financial statement and a list of ten (10) similar sized projects using similar coating systems. Failure to submit may result in rejection of bid. A prequalification status may be upgraded or downgraded during the course of the season as a result of new data submitted, resolution or origination of project conflicts.

SECTION 00 00 40
PROJECT SUMMARY

PART 1 – GENERAL

Nothing stated in this Project Summary shall influence or override any of the conditions in the Instruction to Bidders, General Conditions, or Technical Specifications. It is included as a service to Bidders for explanation only.

1.01 SCHEDULE and LIQUIDATED DAMAGES

The Contractor shall abide by the following schedule:

Commence work on or after July 8, 2019

Substantial Completion by October 31, 2019 including cure and disinfection time.

Base bid (wet interior and repairs) - Each tank may be out-of-service a maximum of 30 days.

Bid with Alternate 1 (wet interior, repairs and exterior overcoat) - Each tank may be out-of-service a maximum of 40 days.

Bid with Alternate 2 (wet interior, repairs and exterior repaint with containment) - Each tank may be out-of-service a maximum of 55 days.

Only one tank can be out-of-service at a time. Contractor to allow 5 days for refilling Tank #1 and draining Tank #2. Exterior power washing and welding can be performed during this time.

For liquidated damages, the days out-of-service above establishes Substantial Completion date. Liquidated damages at \$750/calendar day shall apply after this date. Ready for Final Payment Date shall be thirty (30) days after date Substantial Completion was scheduled or adjusted by Change Order, or earlier if actual date. Liquidated damages after Ready for Final Payment Date of \$250/day shall apply. Liquidated damages are cumulative if damages from Substantial Completion and Ready for Final Payment overlap.

1.02 SCOPE of WORK

Tank Information:

Tank #1 (East Tank): The structure is a 1,250,000 gallon reservoir with a 75 ft. diameter and a height to high water line of 38 ft. 8 in. located at 102 Water Plant Rd. in Middlesboro, Kentucky.

Tank #2 (West Tank): The structure is a 1,250,000 gallon reservoir with a 74 ft. diameter and a height to high water line of 41 ft. located immediately next to Tank #1.

The work includes:

Tank #1

Wet Interior: Abrasive blast clean to a SSPC-SP10 near-white metal standard and apply a three (3) coat zinc epoxy system.

Exterior Alternate 1: High pressure water clean (5,000 to 10,000 psi), spot power tool clean to a SSPC-SP11 standard, and apply a three (3) coat epoxy urethane system.

Exterior Alternate 2: Abrasive blast clean to a SSPC-SP6 commercial standard with containment (the contractor has the option to use a self-contained vacuum blast unit and water dampen blast areas that cannot be reached by the unit) and apply a four (4) coat zinc epoxy urethane system.

Foundation: Water clean and apply a two (2) coat epoxy system.

Repairs:

- 1) Replace manway gaskets.
- 2) Install swing gate at the step-off platform.
- 3) Install cathodic clips and coupling.
- 4) Install roof couplings with rigging clips.
- 5) Roof stiffener replacement.
- 6) Install overflow flap gate.

Tank #2

Wet Interior: Abrasive blast clean to a SSPC-SP10 near-white metal standard and apply a three (3) coat zinc epoxy system.

Exterior Alternate 1: High pressure water clean (5,000 to 10,000 psi), spot power tool clean to a SSPC-SP11 standard, and apply a three (3) coat epoxy urethane system.

Exterior Alternate 2: Abrasive blast clean to a SSPC-SP6 commercial standard with containment (the contractor has the option to use a self-contained vacuum blast unit and water dampen blast areas that cannot be reached by the unit) and apply a four (4) coat zinc epoxy urethane system.

Foundation: Water clean and apply a two (2) coat epoxy system.

Repairs:

- 1) Replace manway gasket.
- 2) Install swing gate at the roof handrail.
- 3) Install cathodic clips and coupling.

- 4) Install roof couplings with rigging clips.
- 5) Roof stiffener replacement.
- 6) Install overflow flap gate.
- 7) Install sidewall manway.
- 8) Install roof handrail.

1.03 HOLD POINTS

- A. Stop work and schedule inspections (see GC Article 13) for the following hold points as a minimum.
- B. Schedule of Hold Points – Preliminary:
 1. Preconstruction Meeting: Until five (5) days after all required submittals are received and reviewed by the engineer and no exceptions are taken to the shop drawings.
 2. Prior to draining tank:
 - a. To ensure all Sections of 01 50 00 and 01 53 43 environmental requirements are met.
 - b. To ensure all containment, ventilation, decontamination, and blasting equipment are on-site and in working order.
- C. Scheduling of Hold Points – Section 03 01 00.01 – Concrete Foundation Repairs.
 1. Repairs:
 - a. To locate or quantify repairs as necessary.
 - b. To review surface preparation prior to concrete or grout installation, and review all products prior to installation.
 - c. After concrete or grout application is complete for quality assurance.
- D. Scheduling of Hold Points – Section 05 00 00 – Metal Repairs:
 1. Repairs:
 - a. To locate or quantify repairs as necessary.
 - b. To review surface preparation prior to welding, and review all products prior to installation.
 - c. After welding is complete for quality assurance.
- E. Scheduling of Hold Points – Sections 09 97 13 – Steel Coating and 09 97 13.10 Steel Coating Surface Preparation.
 1. Surface preparation and coating:
 - a. After completed erection of containment if applicable.
 - b. Prior to surface preparation to set the standard.
 - c. Prior to primer application to verify cleanliness, profile, thoroughness, and ambient conditions for coating application.
 - d. Prior to application of each successive coat for quality assurance and ambient conditions for the next coat.
 - e. Prior to final coat to verify all non-conformance issues have been resolved.

- f. Scheduled pre-final inspection: Allow engineer access to all locations so a complete punch list can be prepared. Final coat on ladders or other access points can be delayed until after this inspection and included as a punch list item.
 - g. Scheduled final inspection: After ALL punch list items have been completed (including painting ladders), provide access to all items on the punch list.
 - 2. Additional hold points scheduled at the preconstruction meeting or defined elsewhere in the specifications.
- F. Failure to Schedule:
 - 1. If the contractor fails to schedule hold point inspections, all work not inspected will be considered in non-conformance.
- G. Non-Conformance Work:
 - 1. Before applying a cover coat, remove failed work. Correct all non-conformance work and request an additional inspection before painting.
 - 2. Insure that all work meets contract specifications and does not fail the initial inspection. Contractor shall reimburse the owner for all additional engineering expenses resulting from extra inspection visits from failure to cancel inspections, delays from inspections scheduled before work completion, or additional time necessary to inspect failed work or work performed in non-compliance with the specifications, which causes an increase in the contract price between the engineer and owner.
 - 3. Each hold point requires an inspection. If the contractor coats over or otherwise makes the work inaccessible for inspection, paragraph GC/SC 13.04 shall apply.

SECTION 00 02 00
INSTRUCTION to BIDDERS

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ARTICLE 1 - DEFINED TERMS

1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:

- A. *Issuing Office*--The office from which the Bidding Documents are to be issued.
- B. *Owner Office*—The office where the bidding procedures are to be administered.

ARTICLE 2 - COPIES OF BIDDING DOCUMENTS

2.01 Complete sets of the Bidding Documents in the number and for the deposit sum, if any, stated in the Notice to Bidders may be obtained from the Issuing Office.

2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents. Review Bid documents for completeness; no future claims for damages will be considered based on missing pages, or incomplete documents.

2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not confer a license or grant for any other use.

2.04 Owner and Engineer, in making copies of Bidding Documents available to Plan Services, do so for the purpose of advertising. Engineer and Owner make no assertions and take no responsibility that copies made by Plan Services or provided to Plan Services are complete. Plans electronically downloaded by Bidder also are responsibility of Bidder to verify accuracy and completeness.

ARTICLE 3 - QUALIFICATIONS

3.01 *Prequalification of Bidders:*

- A. Coating projects require competent, financially solvent Contractors who complete projects on time. These projects deal with the health and safety of the public, have a short availability time, and include dangerous work; therefore, the Owner will only consider prequalified Contractors. Bidders not prequalified may be considered non-responsive and bids may be returned unopened. Bidders who are not prequalified may not be awarded the project if there is insufficient time (30 days) to complete a thorough review.
- B. Requirements for prequalification are:
 - 1. On tanks of 1,000,000 gallons or smaller, successful completion of at least ten projects of like or larger size in the last five years. On tanks larger than 1,000,000 gallons, five projects of like size shall have been successfully completed in the last five years.
 - 2. Bidders shall furnish proof that they are bondable for the size of the project they are bidding, and furnish proof of their bonding company's rating.
 - 3. All projects listed by a Bidder shall have been completed by that bidder under the company name in which they will be bidding this project. If the Bidder has completed the project(s) under a different company name, then the name under which the project(s) was completed shall be noted.
- C. Engineer will review submitted data to determine if Bidder meets prequalification requirements. QP1 or QP2 certification by Society of Protective Coatings (SSPC) is an alternate method of prequalification, except for the experience list. Any information found to be false or incorrect may be ample reason for disqualification.
- D. New Bidders can apply for prequalification; however, they must be able to prove that they are bondable, provide a certified financial statement (most recent fiscal quarter), provide a complete equipment list; and a list of manpower, including work experience and the contractor(s) for whom they have worked. From this information, an evaluation and recommendation will be made by Engineer using economic ratios and comparisons regarding project size, equipment, manpower available, and foreman's experience. A

determination will then be made by the Owner as to whether or not the Bidder is qualified to perform the Project.

- E. Any prequalified Contractor (by Engineer or SSPC) who has pending litigation against him for work not completed on a project or for failed work on a project may be subject to disqualification.
- F. In addition, the Owner may make further investigations into the Bidder's prequalification, including compliance with human resource programs, as well as OSHA and environmental histories. The Owner also may review elements of the prequalification and determine if experience is generic to and specific to the project. Furnish the Owner information, data, or certifications requested.

3.02 *Disqualification:*

- A. Prequalification status may be nullified if a Bidder is disqualified or by other means rejected from bidding in a state or subdivision of a state, or by the federal government.
- B. By submitting their bid, the Bidder certifies that he is not currently disqualified or rejected from submitting bids in the state or political subdivision of the state where the project is located.

ARTICLE 4 - EXAMINATION OF BIDDING DOCUMENTS, OTHER RELATED DATA, AND SITE

4.01 *Subsurface and Physical Conditions*

- A. The Supplementary Conditions (SC) identify:
 - 1. Those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Bidding Documents.
 - 2. Those drawings of physical conditions in or relating to existing surface and subsurface structures at or contiguous to the Site (except Underground Facilities) that Engineer has used in preparing the Bidding Documents.
- B. Copies of reports and drawings referenced in Paragraph 4.01.A, if any, will be made available by Owner to any Bidder on request. Those reports and drawings are not part of the Contract Documents, but the "technical data" contained therein upon which Bidder is entitled to rely as provided in Paragraph 4.02 of the General Conditions has been identified and established in Paragraph 4.02 of the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any "technical data" or any other data, interpretations, opinions or information contained in such reports or shown or indicated in such drawings.

4.02 *Underground Facilities (N/A unless identified further in S.C.)*

4.03 *Hazardous Environmental Condition (N/A unless identified further in S.C.)*

4.04 Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated conditions appear in Paragraphs 4.02, 4.03, and 4.04 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work appear in Paragraph 4.06 of the General Conditions.

4.05 On request, Owner will provide Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies as Bidder deems necessary for submission of a Bid. Bidder shall clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies. Bidder shall comply with all applicable Laws and Regulations relative to excavation and utility locates.

- A. The Owner will allow exterior inspection of the facility. Access to raised ladders, etc. is the responsibility of the Bidder. Availability and time restrictions will be detailed in the Project Explanation. If not detailed,

inspection is by appointment only. For security concerns, do not access the site without notice to the Owner. Do not climb the structure without authorization.

- B. If the interior is available for inspection, availability and time restrictions will be detailed in the Project Explanation.
- C. If the Bidder wishes to inspect the structure with any more than ground observation, then Bidder shall provide Owner with Certificate of Insurance meeting requirements of G.C.5.03, G.C.5.04, S.C..5.03 and S.C.5.04.

4.06 Reference is made to Article 7 of the Supplementary Conditions for the identification of the general nature of other work that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) that relates to the Work contemplated by these Bidding Documents. On request, Owner will provide to each Bidder for examination access to or copies of Contract Documents (other than portions thereof related to price) for such other work.

4.07 It is the responsibility of each Bidder before submitting a Bid to:

- A. examine and carefully study the Bidding Documents, the other related data identified in the Bidding Documents, and any Addenda;
- B. visit the Site and become familiar with and satisfy Bidder as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
- C. become familiar with and satisfy Bidder as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work;
- D. where existing, obtain and carefully study (or accept consequences of not doing so) all examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents, and safety precautions and programs incident thereto;
- E. agree at the time of submitting its Bid that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents;
- F. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
- G. correlate the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents;
- H. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder; and
- I. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work.

4.08 The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the Work required by the Bidding Documents and applying any specific means, methods, techniques, sequences, and procedures of construction that may be shown or indicated or expressly required by the Bidding Documents, that Bidder has given Engineer written notice of all conflicts, errors, ambiguities, and discrepancies that Bidder has discovered in the Bidding Documents and the written resolutions thereof by Engineer are acceptable to Bidder, and that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.

- A. The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has reviewed S.C. 4.03 Differing Physical Conditions, and acknowledges that provision.

ARTICLE 5 - PRE-BID CONFERENCE

5.01 If a Pre-Bid conference is scheduled and whether the meeting is mandatory or non-mandatory will be identified in the Project Summary – Section 00 00 40. Representatives of Owner and Engineer will be present to discuss the Project. If Pre-Bid conference is non-mandatory, Bidders are encouraged to attend and participate in the conference. Engineer will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

ARTICLE 6 - SITE AND OTHER AREAS

6.01 The Site is identified in the Bidding Documents. Easements for permanent structures or permanent changes in existing facilities are to be obtained and paid for by Owner unless otherwise provided in the Bidding Documents. All additional lands and access thereto required for temporary construction facilities, construction equipment, or storage of materials and equipment to be incorporated in the Work are to be obtained and paid for by Contractor.

ARTICLE 7 - INTERPRETATIONS AND ADDENDA

7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by Engineer as having received the Bidding Documents. Questions received less than ten days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

7.02 Addenda may be issued to clarify, correct, or change the Bidding Documents as deemed advisable by Owner or Engineer.

7.03 Addenda may be electronically issued within five days of opening of Bids if Addenda is considered clarification only.

7.04 The only Addenda issued within three days of the bid will be a notice to reschedule opening of Bids, or to cancel opening of Bids. Bids already in transit will be returned unopened, or held unopened if requested by Bidder until new date for opening of Bids.

7.05 If a Bidder does not or claims he has not received any Addenda, the Bid may be withdrawn per Paragraph 16.02.

ARTICLE 8 - BID SECURITY

8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of 10 percent of Bidder's maximum Bid price and in the form of a certified check or bank money order or a Bid bond (on the form attached), or if no form is attached, on AIA Document A310 issued by a surety meeting the requirements of Paragraphs 5.01 and 5.02 of the General Conditions.

8.02 The Bid security of the Successful Bidder will be retained until such Bidder has executed the Contract Documents, furnished the required contract security and met the other conditions of the Notice of Award, whereupon the Bid security will be returned. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 10 days after the Notice of Award, Owner may annul the Notice of Award and the Bid security of that Bidder will be forfeited. The Bid security of other Bidders whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Agreement or 61 days after the Bid opening, whereupon Bid security furnished by such Bidders will be returned.

- A. Bid security will be held on three lowest Bidders.
- B. Bid Bonds will not be returned, but allowed to expire sixty-one days after Bid opening, unless notified by Owner.

8.03 Bid security of other Bidders whom Owner believes do not have a reasonable chance of receiving the award will be returned within seven days after the Bid opening.

- A. Bid Bonds of responsive Bidders beyond the third lowest Bids will not be returned, but will be considered expired after fourteen days, unless notified by Owner.
- B. Bid Bonds of non-responsive Bidders will be considered expired upon determination by Engineer that Bid was non-responsive.

ARTICLE 9 - CONTRACT TIMES

9.01 The number of days within which, or the dates by which, the Work is to be substantially completed and ready for final payment are set forth in the Bid/Agreement and Project Summary 00 00 40.

ARTICLE 10 - LIQUIDATED DAMAGES

10.01 Provisions for liquidated damages, if any, are set forth in the Bid/Agreement and Project Summary 00 00 40.

ARTICLE 11 - SUBSTITUTE AND “OR-EQUAL” ITEMS

11.01 The Contract, if awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration of possible substitute or “or-equal” items. Whenever it is specified or described in the Bidding Documents that a substitute or “or-equal” item of material or equipment may be furnished or used by Contractor if acceptable to Engineer, application for such acceptance will not be considered by Engineer until after the Effective Date of the Agreement.

ARTICLE 12 - SUBCONTRACTORS, SUPPLIERS, AND OTHERS

12.01 If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, individuals, or entities to be submitted to Owner in advance of a specified date prior to the Effective Date of the Agreement, the apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to Owner a list of all such Subcontractors, Suppliers, individuals, or entities proposed for those portions of the Work for which such identification is required. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, individual, or entity if requested by Owner. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit a substitute, without an increase in the Bid.

12.02 If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, individuals, or entities. Declining to make requested substitutions will not constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to revocation of such acceptance after the Effective Date of the Agreement as provided in Paragraph 6.06 of the General Conditions.

12.03 Contractor shall not be required to employ any Subcontractor, Supplier, individual, or entity against whom Contractor has reasonable objection.

ARTICLE 13 - PREPARATION OF BID

13.01 The Bid/Agreement Form is included with the Bidding Documents. Additional copies may be obtained from Issuing Office.

13.02 All blanks on the Bid Form shall be completed by printing in ink or by typewriter and the Bid signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form. A Bid price shall be indicated for each section, Bid item, alternative, adjustment unit price item, and unit price item listed therein, or the words "No Bid," "No Change," or "Not Applicable" entered.

13.03 A Bid by a corporation shall be executed in the corporate name by the president or a vice-president or other corporate officer accompanied by evidence of authority to sign. The corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown below the signature.

13.04 A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown below the signature.

13.05 A Bid by a limited liability company shall be executed in the name of the firm by a member and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown below the signature.

13.06 A Bid by an individual shall show the Bidder's name and official address.

13.07 A Bid by a joint venture shall be executed by each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown below the signature.

13.08 All names shall be typed or printed in ink below the signatures.

13.09 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.

13.10 The address and telephone number for communications regarding the Bid shall be shown.

13.11 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the Contract. Bidder's state contractor license number, if any, shall also be shown on the Bid Form.

13.12 All Bid preparation expenses, including site visits, prebid meetings, etc. are the responsibility of the Bidder, whether successful or not.

ARTICLE 14 - BASIS OF BID; COMPARISON OF BIDS

14.01

- A. Bidders shall submit a Bid on a unit price basis for each line item of Work listed in the Bid schedule.
- B. The total of all estimated prices will be the sum of the products of the estimated quantity of each item and the corresponding unit price. The final quantities and Contract Price will be determined in accordance with Paragraph 11.03 of the General Conditions. Where a quantity is not specified (i.e. exterior paint), consider the quantity as one, or a lump sum line item.
- C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be

resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.

14.02 The Bid price shall include such amounts as the Bidder deems proper for overhead and profit on account of cash allowances, if any, named in the Contract Documents as provided in Paragraph 11.02 of the General Conditions.

ARTICLE 15 - SUBMITTAL OF BID

15.01 With each copy of the Bidding Documents, a Bidder is furnished one separate unbound copy of the Bid/Agreement Form, and, if required, the Bid Bond Form. The unbound copy of the Bid Form is to be completed and submitted with the Bid security:

15.02 A Bid shall be submitted no later than the date and time prescribed and at the place indicated in the Advertisement or Invitation to Bid and shall be enclosed in an opaque sealed envelope plainly marked with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate envelope plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid shall be addressed as directed in the Bid/Agreement Form.

15.03 If additional material is required to be submitted with the Bid, that material will be defined in the Project Summary – Section 00 00 40, or elsewhere in these Bid Documents.

15.04 Required Submittals with Bid Form: The bid may be rejected if the Bidder fails to submit the following submittals with the Bid/Agreement Form in the sealed, identified envelope.

A. A signed Bond for ten percent (10%) of the bid amount total, meeting requirements of the State of Kentucky codes, or a certified check payable to Owner for ten percent (10%) of the full amount of the bid.

B. Power of Attorney for agent signing the Surety.

ARTICLE 16 - MODIFICATION AND WITHDRAWAL OF BID

16.01 A Bid may be modified or withdrawn by an appropriate document duly executed in the manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids.

16.02 If within 24 hours after Bids are opened, any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

ARTICLE 17 - OPENING OF BIDS

17.01 Bids will be opened at the time and place indicated in the Advertisement or Invitation to Bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

ARTICLE 18 - BIDS TO REMAIN SUBJECT TO ACCEPTANCE

18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

ARTICLE 19 – EVALUATION OF BIDS AND AWARD OF CONTRACT

19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, non-responsive, unbalanced, or conditional Bids. Owner further reserves the right to reject the Bid of any Bidder whom it finds, after reasonable inquiry and evaluation, to not be responsible. Owner may also reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder. Owner also reserves the right to waive all informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful Bidder.

19.02 More than one Bid for the same Work from an individual or entity under the same or different names will not be considered. Reasonable grounds for believing that any Bidder has an interest in more than one Bid for the Work may be cause for disqualification of that Bidder and the rejection of all Bids in which that Bidder has an interest.

19.03 In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.

19.04 In evaluating Bidders, Owner will consider the qualifications of Bidders and may consider the qualifications and experience of Subcontractors, Suppliers, and other individuals or entities proposed for those portions of the Work for which the identity of Subcontractors, Suppliers, and other individuals or entities must be submitted as provided in the Supplementary Conditions.

19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders, proposed Subcontractors, Suppliers, individuals, or entities to perform the Work in accordance with the Contract Documents.

19.06 If the Contract is to be awarded, Owner will award the Contract to the Bidder whose Bid is in the best interests of the Project.

ARTICLE 20 - CONTRACT SECURITY AND INSURANCE

20.01 Article 5 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner's requirements as to performance, payment, and maintenance bonds and insurance. When the Successful Bidder delivers the executed Notice of Award to Engineer, it shall be accompanied by such bonds.

ARTICLE 21 - SIGNING OF AGREEMENT/TIMEFRAME

21.01 When Owner gives a Notice of Award to the Successful Bidder, within ten days thereafter, Successful Bidder shall sign and deliver the required number of Notice of Award attached documents to Engineer. Within twenty days after receipt of bonds, etc. from the Engineer, Owner will deliver one fully signed counterpart to Successful Bidder with a complete set of the Drawings with appropriate identification.

21.02 The executed copy will be accompanied by three copies of signed Notice to Proceed. Within five days of the date on the Notice to Proceed, the Bidder will sign the Notice to Proceed and return a copy to the Engineer. If the Engineer does not receive the accepted Notice to Proceed in five days, then the Notice to Proceed will be considered accepted by default. The Notice to Proceed will be dated on or around the contract date. The actual contract start date, completion date, etc. will be the same as the Effective Agreement Date.

21.03 Notice of Award; Effective Date of Award (Effective Date of Agreement): If the Contract is awarded by Owner, such award shall be effective when the Notice of Award has been delivered to the successful Bidder ("Effective Date of Award"). Owner will prepare three (3) copies of the Contract after return of Conditions Precedent. The Effective Date of Agreement is the date the Agreement is signed by the Owner.

21.04 A. Closing Date: Unless otherwise stated in the Notice of Award, the successful Bidder shall satisfactorily complete all Conditions Precedent to Closing before, and the Contract and all related documents shall be executed, submitted and exchanged by Owner and Bidder ("Closing") on, the tenth day following the Effective Date of Award or within such extended period as Owner may, in the exercise of its sole discretion, authorize in writing after issuance of the Notice of Award ("Closing Date").

B. The execution of Agreement, Notice of Award, the submittal of additional requested materials, the

Contractor's Certifications, and acceptable certificate(s) of insurance and Performance and Payment Bonds shall be considered Conditions Precedent to closing of the Contract.

- C. Failure to timely execute or submit any of the aforesaid documents shall be grounds for the imposition of liquidated damages as more specifically set forth in 21.04.B above. If the submitted documents or any of them fail to comply with these General Instructions to Bidders or the Contract or are not timely executed and submitted, Owner may, in its sole discretion, annul the award or allow the successful Bidder an opportunity to correct the deficiencies.
 - D. In no event will Owner execute the Contract until any and all such deficiencies have been cured or Owner has received adequate assurances, as determined by Owner, of complete and prompt performance.
 - E. Closing: At the Closing, and provided that all documents required to be submitted prior to or at the Closing have been reviewed and determined by Owner to be in compliance with these General Instructions to Bidders and the Agreement, or assurances of complete and prompt performance satisfactory to Owner have been received, Owner shall execute all copies of the Contract, retain one (1) copy of the completed Contract, and tender one (1) copy to the successful Bidder at the Closing.
- 21.05 A. Annulment of Award; Liquidated Damages: The failure or refusal of a successful Bidder to comply with the Conditions Precedent to Closing or to Close shall be just cause for the annulment of the award and the imposition of liquidated damages.
- B. Subsequent Awards: Upon annulment of an award, Owner may accept, and award a Contract based on, any other Bidder's Proposal as Owner, in its sole judgment, deems to be the best or may invite new Proposals or may abandon the bidding process or the Work.

ARTICLE 22 – NON-DISCRIMINATION

22.01 Non-Discrimination: Do not discriminate in employment practices.

22.02 Bidders shall, if requested, submit a compliance report concerning their employment practices and policies in order to maintain their eligibility to receive the award of the contract.

22.03 Successful Bidders shall, if requested, submit a list of all subcontractors who will perform work on the project and written signed statements from authorized agents of the labor pools with which they will or may deal for employees on the work, together with supporting information to the effect that said labor pools' practices and policies are in conformity with Equal Employment Opportunity, including latest federal and local policies. Labor pools will affirmatively cooperate in or offer no hindrance to the recruitment, employment, and equal treatment of employees seeking employment and performing work under the contract, or a certification as to what efforts have been made to secure such statements when such agents or labor pools have failed or refused to furnish same prior to award of the project.

22.04 Successful Bidders shall comply in all respects with the Labor Standards Contract Provisions regarding non-discrimination on this Project.

22.05 Bidder agrees that in the hiring of employees for the performance of work under this Agreement or any subagreement, neither the Contractor, nor any Subcontractor, nor any person acting on behalf of either, shall by reason of race, creed, or color, discriminate against any citizen in the employment of labor or workers who are qualified and available to perform the work to which the employment relates; nor shall the Contractor, or any Subcontractor, or any person acting on behalf of either, in any manner discriminate against or intimidate any employee hired for the performance of work under this Agreement on account of race, creed, or color.

ARTICLE 23 – NON-COLLUSION

23.01 Collusion between Bidders will be cause for rejection of affected bids and may be cause for rejection of all bids. Multiple bids submitted by one bidder under the same or different names, whether as individual, firm, partnership, corporation, profit or non-profit, affiliate, or association will be cause for rejection of bids. A subcontractor is not a Bidder and he may submit prices to multiple Bidders.

ARTICLE 24 – ALTERNATE BIDS OR RESTRICTIONS ON BIDS

- A. Items that affect the scope of the project and not addressed by addenda will not be accepted as an alternate bid.
- B. Alternate bids will automatically be considered non-responsive.
- C. Such bids may be examined prior to project award and may result in bid cancellation, followed by new bids, including the alternate.
- D. Discounts to the Owner for payment within a stipulated period of time will not be considered conditional or qualified bids. Discounts will be accepted, but not considered in bid price evaluation for bid award.
- E. Interest clauses will be considered a qualified bid.

SECTION 00 04 10

BID/AGREEMENT FORM

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ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

Water Service Corporation of Kentucky
2335 Sander Road
Northbrook, IL 60062

(hereinafter called Owner)

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner using this combined Bid/Agreement form to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER’S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

2.02 Bidder accepts all the terms and conditions of the combined Bid/Agreement form. (The Bid/Agreement form is an attempt to shorten the time period between submittal and award.) Bidder’s signature is an acceptance of all terms of the Agreement section and this Bid, if successful, will become an Agreement after it has been signed by an authorized representative of the Owner.

ARTICLE 3 – BIDDER’S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged.

<u>Addendum No.</u>	<u>Addendum Date</u>
_____	_____
_____	_____
_____	_____

B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress and performance of the Work.

D. Bidder has carefully studied all: (1) reports, if available.

E. Bidder has obtained and carefully studied (or accepts the consequences for not doing so) all additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents to be employed by Bidder, and safety precautions and programs incident thereto.

F. Bidder does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents.

- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents.
- I. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
- J. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.
- K. Bidder will submit written evidence of its authority to do business in the state where the Project is located not later than the date of its execution of the Agreement.
- L. All references to Bidder in this affirmation will change to the term Contractor if this Bid becomes an Agreement.

ARTICLE 4 – FURTHER REPRESENTATIONS

4.01 Bidder further represents that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over Owner.
- E. Contractor hereby represents that the only persons, firms, or corporations interested in this Contract as principals are those disclosed to Owner prior to the execution of this Contract, and that this Contract is made without collusion with any other person, firm, or corporation. If at any time it shall be found that Contractor has, in procuring this Contract, colluded with any other person, firm, or corporation, then Contractor shall be liable to Owner for all loss or damage that Owner may suffer thereby, and this Contract shall, at Owner’s option, be null and void.

4.02 Bidder further represents that:

- A. Bidder has been prequalified for projects of this design, size, and complexity.

ARTICLE 5 – BASIS OF BID

5.01 Bidder will complete the Work in accordance with the Contract Documents, including all labor and material, for the following price(s):

\$ _____

Lump Sum Prices are based on the Schedule of Values – Section 00 43 73.

Unit Prices have been computed in accordance with the General Conditions.

Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

Bidder acknowledges that Lump Sum bids are actually itemized bids based on the Schedule of Values, and further agrees and acknowledges the alternatives and conditions set forth in the Schedule of Values.

ARTICLE 6 – TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 14.07.B of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement, or in the Project Summary.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work within the Contract Times, or within Milestone dates.

ARTICLE 7 – ATTACHMENTS TO THIS BID

- 7.01 The following documents are to be attached to and made a condition of this Bid:
- A. Required 10% Bid security in the form of a bond or cash surety. Include AM Best rating of bond company.
 - B. List of Proposed Subcontractors
 - C. List of Proposed Suppliers
 - D. List of Project References
 - E. Required Bidder Qualification Statement with Supporting Data
 - F. Affidavit of Non-Collusion

ARTICLE 8 – DEFINED TERMS

- 8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and/or the Supplementary Conditions.
- 8.02 *Time Framework for Award Execution:* The Owner will open bids on the bid date. After opening, no bid may be withdrawn or altered for sixty days, unless specifically stated elsewhere. The Owner may negotiate with the low Bidder and mutually both parties may alter bid (i.e. partial award of project).

The Bidder will be notified of award within sixty days of bid date, unless stated elsewhere or mutually extended. Notice of Award form will be sent by fax or mail. Within ten business days of Notice of Award, supply the Engineer with three original sets of separate Payment and Performance Bonds. Supply three original sets of Certificates of Insurance meeting requirements of General Conditions and Supplementary Conditions 5.01 and 5.02. Insurance companies and insurance forms must be standard to the industry and acceptable to the Owner. Failure to submit bonds and/or insurance within the time frame will be considered a default, a failure to perform as required by the Bid Bond. The Owner, at his option, may waive default, delay default, or proceed with capture of the Bid Bond which will become the Owner's property.

Bonds and insurances are to be submitted to the Engineer for review. The Owner will within twenty days of receipt of approved bonds and insurances from the Engineer execute the Agreement and send a signed copy to the Contractor.

The executed copy will be accompanied by three copies of the Notice to Proceed. Within five days of the date on the Notice to Proceed, the Bidder will sign the Notice to Proceed and return a copy to the Engineer. If the Engineer does not receive the accepted Notice to Proceed in five days, then the Notice to Proceed will be considered accepted by default.

The Notice to Proceed will be dated on or around the Effective Date of Agreement.

ARTICLE 9 – BID SUBMITTAL

- 9.01 This Bid submitted by:

If Bidder is:

An Individual

Name (typed or printed): _____

By: _____ (SEAL)
(Individual's signature)

Doing business as: _____

A Partnership

Partnership Name: _____ (SEAL)

By: _____
(Signature of general partner – attach evidence of authority to sign)

Name (typed or printed): _____

A Corporation

Corporation Name: _____ (SEAL)

State of Incorporation: _____
Type (General Business, Professional, Service, Limited Liability): _____

By: _____
(Signature – attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____
(CORPORATE SEAL)

Attest: _____
(Signature of Corporate Secretary)

All Business Entities

Date of Qualification to do business in _____ [State Where Project is Located] is ____________.

Agent for service or process: _____

Address for giving Notices: _____

ARTICLE 10 – BID ACCEPTANCE

10.01 Bid Acceptance:

- A. The above Bid is accepted by the Owner, and shall become a Contract Agreement binding on all parties after signing by an authorized representative of the owner.
- B. All references in the second portion of this form are Agreement terminology. Bidder is now referred to as Contractor. Where appropriate, the term Bidder in the Bid form is changed to Contractor.

ARTICLE 11 - CONTRACT TIMES

11.01 Time is of the Essence

A. All time limits for Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

11.02 Dates for, or Days to Achieve (see paragraph 6.01) Substantial Completion and Final Payment

11.03 Liquidated Damages

A. Contractor and Owner recognize that time is of the essence of this Agreement and that Owner will suffer financial loss if the Work is not completed within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty), Contractor shall pay Owner \$750 for each day that expires after the time specified in Paragraph 6.01 for Substantial Completion until the Work is substantially complete. After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by Owner, Contractor shall pay Owner \$250 for each day that expires after the time specified in Paragraph 11.02 for completion and readiness for final payment until the Work is completed and ready for final payment.

ARTICLE 12 - CONTRACT PRICE

12.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to Article 5 Bid above.

12.02 As provided in Paragraph 11.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer as provided in Paragraph 9.07 of the General Conditions. Unit prices have been computed as provided in Paragraph 11.03 of the General Conditions.

ARTICLE 13 - PAYMENT PROCEDURES

13.01 Submittal and Processing of Payments

A. Contractor shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

13.02 Progress Payments; Retainage

A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment once each month during performance of the Work as provided in Paragraphs 13.02.A.1 through 13.02.A.7 below. All such payments will be measured by the schedule of values (or Article 5 above) established as provided in Paragraph 2.07.A of the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no schedule of values, as provided in the General Requirements:

1. On the wet interior, surface preparation by abrasive blast cleaning will be considered equal to 40 percent of the line item work and cost and each coat of paint 20 percent.
2. On the exterior, surface preparation by abrasive blast cleaning inside containment will be considered equal to 40 percent of the line item work and cost and each coat of paint 10 percent, with another 10 percent for lettering and demobilization, and 10 percent for waste disposal.
3. On the exterior, surface preparation by high pressure cleaning and power tool cleaning will be considered equal to 40 percent of the line item work and cost and each full coat of paint 15 percent. The remainder will be for lettering, demobilization and cleanup.
4. Repairs will not be broken down. 100 percent completion is required before they will be considered for payment.
5. Mobilization is included in the surface preparation allotment for items 1 above.
6. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Engineer may determine or Owner may withhold, including but not limited to liquidated damages, in accordance with Paragraph 14.02 of the General Conditions:

Retainage to be held as follows: 10% of the dollar value through 50% completion; 5% of the dollar value through 100% completion.

7. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 90 percent of the Work completed, less such amounts as Engineer shall determine in accordance with Paragraph 14.02.B.5 of the General Conditions and less 100 percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the tentative list of items to be completed or corrected attached to the certificate of Substantial Completion.

13.03 Final Payment

A. Upon final completion and acceptance of the Work in accordance with Paragraph 14.07 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer.

ARTICLE 14 - CONTRACT DOCUMENTS

14.01 Contents

A. The Contract Documents consist of the following:

1. This Bid/Agreement.
2. Performance bond.
3. Payment bond.
4. General Conditions, Supplementary Conditions, Specifications and Drawings as listed in the table of contents of the Project Manual.
5. Addenda (numbers _____ to _____, inclusive).
6. Exhibits to this Agreement (enumerated as follows):
 - a. Documentation submitted by Contractor prior to Notice of Award (pages _____ to _____, inclusive).
 - b. _____.
7. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
 - a. Notice to Proceed (pages _____ to _____, inclusive).
 - b. Work Change Directives.
 - c. Change Order(s).

B. The documents listed in Paragraph 14.01.A are attached to this Agreement (except as expressly noted otherwise above).

C. There are no Contract Documents other than those listed above in this Article 14.

D. The Contract Documents may only be amended, modified, or supplemented as provided in Paragraph 3.04 of the General Conditions.

ARTICLE 15 - MISCELLANEOUS

15.01 Assignment of Contract

A. No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be

limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

15.02 Successors and Assigns

A. Owner and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

15.03 Severability

A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

15.04 Other Provisions

A. Contractor to provide Maintenance Bond as specified, prior to receipt of final payment.

B. IN WITNESS WHEREOF, Contractor has signed this Agreement as Bidder. Owner has signed Agreement in duplicate and one counterpart each has been delivered to Owner and Contractor. All portions of the Contract Documents have been signed or identified by Owner and Contractor or on their behalf.

This Agreement will be effective on, _____, _____ (which is the Effective Date of the Agreement).

OWNER:

By: _____

Title: _____

SECTION 00 43 73
SCHEDULE of VALUES

1.01 PART 1

TANK # 1

A. Bidder agrees to perform all work in the following sections as described in the Contract Documents, including all labor and material for the following Schedule of Values – Section 03 30 53:

1. CATCH BASIN

\$ _____

B. Bidder agrees to perform all work in the following sections as described in the Contract Documents, including all labor and material for the following Schedule of Values – Section 05 00 00:

1. SWING GATE

\$ _____

2. CATHODIC CLIPS AND COUPLING

\$ _____

3. ROOF STIFFENER REPLACEMENT – TEN (10) 3 FOOT LONG SECTIONS

\$ _____

4. OVERFLOW FLAP GATE

\$ _____

TOTAL PRICE SECTION 05 00 00 INCLUDING #1 THROUGH #4:

\$ _____

C. Bidder agrees to perform all work in the following sections as described in the Contract Documents, including all labor and material for the following Schedule of Values – Section 09 97 13:

1. WET INTERIOR REPAINT

\$ _____

2. EXTERIOR OVERCOAT - ALTERNATE 1

\$ _____

3. EXTERIOR REPAINT WITH CONTAINMENT - ALTERNATE 2
_____ \$

TOTAL PRICE SECTION 09 97 13 INCLUDING #1 THROUGH #1:
_____ \$

TANK #1 TOTAL PRICE SECTION 03 30 53, 05 00 00 AND 09 97 13:

SECTION 03 30 53: \$ _____
SECTION 05 00 00: \$ _____
SECTION 09 97 13: \$ _____
TANK #1 TOTAL: \$ _____

D. ESTIMATED COST ALREADY INCLUDED IN EXTERIOR AND DRY INTERIOR PAINTING TO PROTECT AND WORK AROUND ANTENNAS AND CABLES. OWNER RESERVES THE RIGHT TO DELETE THIS AMOUNT IF THE ANTENNAS AND CABLES ARE REMOVED.
_____ \$

TANK #2

A. Bidder agrees to perform all work in the following sections as described in the Contract Documents, including all labor and material for the following Schedule of Values – Section 03 01 00 and 03 30 53:

1. SPALL REPAIR – 1 FT.
_____ \$

2. GROUT REPAIR – 80 FT.
_____ \$

3. CATCH BASIN
_____ \$

TOTAL PRICE SECTION 03 01 00 AND 03 30 53 INCLUDING #1 THROUGH #3:
_____ \$

B. Bidder agrees to perform all work in the following sections as described in the Contract Documents, including all labor and material for the following Schedule of Values – Section 05 00 00:

1. SWING GATE
_____ \$

- 2. CATHODIC CLIPS AND COUPLING

\$

- 3. ROOF STIFFENER REPLACEMENT – TEN (10) 3 FOOT LONG SECTIONS

\$

- 4. OVERFLOW FLAP GATE

\$

- 5. SIDEWALL MANWAY

\$

- 6. ROOF HANDRAIL

\$

TOTAL PRICE SECTION 05 00 00 INCLUDING #1 THROUGH #6:

\$

C. Bidder agrees to perform all work in the following sections as described in the Contract Documents, including all labor and material for the following Schedule of Values – Section 09 97 13:

- 1. WET INTERIOR REPAINT

\$

- 2. EXTERIOR OVERCOAT - ALTERNATE 1

\$

- 3. EXTERIOR REPAINT WITH CONTAINMENT - ALTERNATE 2

\$

TOTAL PRICE SECTION 09 97 13 INCLUDING #1 THROUGH #1:

\$

TANK #2 TOTAL PRICE SECTION 03 01 00 with 03 30 53, 05 00 00 AND 09 97 13:

SECTION 03 01 00 AND 03 30 53: \$ _____
SECTION 05 00 00: \$ _____
SECTION 09 97 13: \$ _____
TANK #2 TOTAL: \$ _____

TANK #1 TOTAL: \$ _____
 TANK #2 TOTAL: \$ _____
 PROJECT TOTAL: \$ _____

1.02 PART 2 - UNIT PRICES – ADJUSTMENT TO BASE BID QUANTITIES

A. Unit Price Tank #2 Spall Repair: Cost of preparation of spalled and deteriorated concrete and placement of **one (1) square foot** of cementitious patching mortar to an average of **2” thick**. Add to the base bid of **one (1) square feet**.

_____ \$ _____

B. Unit Price Tank #2 – Grout Repair: Cost of concrete preparation and placement of **five 5 lineal foot** of cementitious patching mortar. Add to or deduct from the base bid of **eighty (80) lineal feet**.

_____ \$ _____

C. Unit Price Tank #1 – Roof Stiffener Replacement: Cost of replacement of **one (1) 3 foot** section of stiffener. Add to or deduct from the base bid of **ten (10) 3 lineal foot sections**.

_____ \$ _____

D. Unit Price Tank #2 – Roof Stiffener Replacement: Cost of replacement of **one (1) 3 foot** section of stiffener. Add to or deduct from the base bid of **ten (10) 3 lineal foot sections**.

_____ \$ _____

1.03 TOTALS

- A. Total Base Bid is to match total Base Bid price supplied in Bid/Agreement form.
- B. Total Alternate Bid is to match total Alternate Bid price supplied in Bid/Agreement form Section 00 04 10.

1.04 ALTERNATE BIDS

- A. Bidders are required to bid both Base and Alternate.

1.05 BID BOND

- A. Bid Bond shall be based on 10% of the total.
- B. The Bid Bond shall be based on the larger amount including the base bid with Alternate 2.

1.06 MISTAKES

- A. Total of Schedule of Values should equal lump sum bid total. If addition of individual items does not match total, then each individual items will be proportionately changed to reflect total of values to match lump sum bid.
- B. A mistake in addition for schedule items cannot be used to increase lump sum bid. Individual items will be proportionately changed downward to reflect lump sum price.
- C. A mistake in Schedule of Values may be used as evidence of error in any request to withdraw bids because of error. Approval of request to withdraw bids is covered in the prebid information. This section is not intended to conflict any portion of the bid package. This section is only to reflect one of the reasons to withdraw bids. Approval of bid withdrawal will be based solely on the owner's interpretation of the severity of the mistake.

1.07 CHANGES in SCHEDULE of VALUES by OWNER

- A. The owner reserves the right to delete any line item except for base bid painting work, at their sole discretion for any reason, budgetary or other. All contract general costs should be evenly distributed over these items (mobilization, demobilization, bonds, etc.)
- B. The bidder/contractor is advised not to overload any specific deletable line item. It could result in loss of profit if the overload item is deleted.
- C. This deletion of items or not including alternates is an expressly stated reservation (a contractually agreed automatic negotiation. Any deletion of specific line items will be completed before selection of the lowest acceptable bidder. Change will be reflected in the Notice of Award.

1.08 NON-DELETABLE WORK

- A. Bidders are advised that all line items except for base bid painting work may be deleted from the project prior to award.
- B. Any deletion of line items or increase or decrease in unit cost items deemed necessary after the Notice of Award will be completed through the Change Order procedure. Prices used in the Schedule of Values will be used in the Change Order adjustment. If work has begun on an item after the contract is executed, but before being deleted by Change Order, the contractor is entitled to costs incurred.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by



Issued and Published Jointly by



THESE DOCUMENTS WERE MODIFIED BY DIXON ENGINEERING INC. TO
COMBINE GENERAL AND STANDARD SUPPLEMENTAL CONDITIONS.
SUPPLEMENTAL CONDITIONS ARE PROJECT SPECIFIC.
06/06/201505/26/2018

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 10. *Claim*—(a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents;

contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer has declined to address. A demand for money or services by a third party is not a Claim.

11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. (“CERCLA”); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5101 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. (“RCRA”); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material. **Lead, chrome, and other by-products of paint removal, as well as strippers, new coatings, and thinners, are to be included in this definition.**
12. *Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.
13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
20. *Engineer*—The individual or entity named as such in the Agreement.
21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
22. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that

are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.

23. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
24. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
25. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.
26. *Notice of Award*—The written notice by Owner to a Bidder of Owner’s acceptance of the Bid.
27. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
28. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
29. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor’s plan to accomplish the Work within the Contract Times.
30. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
31. *Project Manual*—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.
32. *Ready for Final Payment* – This term is used to define a time when Liquidated Damages begin, separate from but possibly in addition to Liquidated damages for failure to meet Substantial Completion Date. Ready for Final Payment Date is generally listed 30 days after Substantial Date. All punchlist items are to be completed, Site cleaned and restored, and equipment removed.
33. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or “RPR” includes any assistants or field staff of Resident Project Representative.

34. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
35. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer’s review of the submittals and the performance of related construction activities.
36. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor’s Applications for Payment. *The Schedule of Value Form is supplied in these Bidding Documents as Section 00 43 73. This Schedule is to be submitted with the Bid. Adjustment of Schedule of Values by Engineer will not change the total Bid as calculated by completing the Schedule of Values.*
37. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
38. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands furnished by Owner which are designated for the use of Contractor.
39. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
40. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
41. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof. *On tank projects, date of substantial completion is the date the tank is, or would have been returned to service, except for voluntary delay by Owner. Date of Substantial Completion is after complete cure, disinfection, and testing.*
42. *Successful Bidder*—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.
43. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions. *These EJCDC Documents have been rewritten to merge Standard Supplemental and General Conditions and are now a product of Dixon Engineering Inc. and not an EJCDC product. The terms*

Supplemental Conditions used in these General Conditions and the term Project Specific Supplemental Conditions are to be used interchangeable.

44. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
45. *Technical Data*—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.
46. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
47. *Unit Price Work*—Work to be paid for on the basis of unit prices.
48. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
49. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.
50. *Performance Specifications* —Specifications that require the manufacturer or supplier of equipment, materials, or systems to design, manufacture, deliver, and install products to achieve specific results under stipulated conditions of operation and in environments described in applicable Specification Sections.
51. *Hold Point*—A point in the construction sequence when the Contractor is required to stop work on that portion of the project until an inspection has been completed.
52. *Non-Conformance Report*—A report written by the Engineer or Resident Project Representative, to document the Contractor's Work that does not meet requirements of the specifications or contract.

53. *Bulletin*—If time permits, a Bulletin is issued prior to a Change Order. A Bulletin is an inquiry of the Contractor of the cost to complete the work described in the Bulletin. It is intended as the basis of a Change Order if all parties reach agreement. A Bulletin may be considered as the same as a Change Proposal except that a Bulletin is generated by the Engineer because it generally requires specifications to be addressed.

1.02 Terminology

- A. The words and terms discussed in the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives:*
1. The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day:*
1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective:*
1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - a. does not conform to the Contract Documents; or
 - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - c. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or 15.04).
 - d. All work completed that is rejected by an unresolved non-conformance report.
- E. *Furnish, Install, Perform, Provide:*
1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or

equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.
- F. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 – PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*

- A. Within ten (10) business days of Notice of Award, supply the Owner with three (3) original sets of separate Payment, and Performance Bonds. Maintenance Bonds may be submitted with other Bonds or prior to Final Payment. Supply three (3) original sets of Certificates of Insurance meeting requirements found herein and with the limits of insurance to be found in the Supplemental General Conditions. Failure to submit bonds and/or insurance within time frame will be considered a default, a failure to perform as required by the Bid Bond. The Owner, at his option, may waive default, delay default, or proceed with capture of the Bid Bond which will become the Owner’s property.
- B. Bonds and insurances are to be submitted to the Engineer for review. The Owner will within twenty (20) days of receipt of approved bonds and insurances from the Engineer execute the agreement and send a signed copy to the Contractor.
- C. *Evidence of Contractor’s Insurance* See Insurance Information for required limits in the Project Specific Supplemental Conditions. See General Provisions.
- D. *Evidence of Owner’s Insurance* The Owner will not provide Certificate of Insurance to the Contractor. The Owner will not name Contractor additional insured.
- E. *Correction Requirements of Bonds and Insurance:* Bonds and Certificate of Insurances that fail the initial review by a DIXON contract administrator will be returned to Contractor. All subsequent returns for insufficient material will be cause for Owner to offset DIXON recurring fees. Also failure of Bonds and Certificate of Insurance during review by Owner’s insurance consultant will be cause for offset.

2.02 *Copies of Documents*

- A. Owner shall furnish the Contractor one signed copy of the Contract Documents. Additional printed copies will be furnished upon request at the cost of reproduction.

- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications. One copy of the Contract Document will be sent to Owner in a sealed envelope. This set of Contract Documents will be the standard if a dispute occurs. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer. . This is the copy, designated to be the true original for all construction or legal disputes. This copy is to be printed at time of bidding and sealed in an envelope and retained by Owner.

2.03 *Before Starting Construction*

- A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Contract (or as otherwise specifically required by the Contract Documents), Contractor shall submit to Engineer for timely review:
1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 2. a preliminary Schedule of Submittals; and
 3. Submitted with Bid- a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. The Engineer may schedule a Preconstruction Conference to be attended by Owner, Engineer, and Contractor(s). When no organizational meeting is scheduled, the Contractor, prior to beginning any work, shall meet with the Engineer and arrange a Project Schedule and if submitted review Project Schedule for the work. Once the Work has started, the Contractor shall carry the Progress Schedule to completion without delay.
- B. Attend a preconstruction meeting that may be scheduled by the Owner at a mutually agreeable time after all contract preconditions and other requirements have been met.
- C. A corporate officer or someone with legal authority to obligate the company/corporation, project manager (if different from officer), and the intended foreman shall attend. If project foreman does not attend the meeting, it shall be the Contractor's responsibility to supply the information discussed at the meeting to the field foreman.
- D. The Owner will be represented by the project contact person, and the Engineer by the project manager, or his principal.
- E. Submit all required materials prior to the preconstruction meeting.
- F. The Preconstruction Conference will discuss all containment, personal hygiene, and lead control issues required in this contract and review. Be prepared to commit designated "competent person(s)" to responsibilities of confined space, scaffold rigging, lead, etc.

- G. At the Preconstruction Conference Owner and Contractor, each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.
- H. The Engineer may prepare and distribute Preconstruction Conference minutes to all attendees. All parties to the Preconstruction Conference will have five days from the postmarked, or email dated delivery of the minutes to protest any item of the minutes in writing. After five days the minutes will be considered not protested and will become part of the Contract documents. per established Electronic Transmittal Protocol (See Article 2.06).
- I. Preconstruction Conference minutes may serve to meet some of the “writing” requirements of this Article.

2.05 *Initial Acceptance of Schedules*

- A. All schedules are to be submitted prior to the preconstruction meeting. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.
 - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor’s full responsibility therefor. Failure to meet Milestone or significant Progress Schedule dates may be cause for rejection of prior accepted Progress schedule, and require an additional Progress meeting and new Progress Schedule to put Project back on an acceptable schedule. Cost of meeting, Owner’s and Engineer’s time will be considered the responsibility of the Contractor, subject to Setoff.
 - 2. Contractor’s Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals. All Submittals shall be included with the first submittal package and shall only be submitted by the Contractor and not by Suppliers or Subcontractors. If certain items cannot be submitted with the package, an acceptable Schedule of Submittals must be supplied to the Engineer.
 - 3. Contractor’s Schedule of Values_ (Section 00 43 73 to be completed and submitted with Bidding Documents) *will be acceptable to Engineer as to form and substance if it provides a reasonable* allocation of the Contract Price to the component parts of the Work. If the Engineer determines the Schedule of Values is not acceptable, the Engineer will use the Contractor’s Schedule to reallocate values. The Engineer’s reallocation will be to maintain sufficient funds for work completed toward the end of the project to avoid frontloading values. The Engineer will assign values high enough to bring in another Contractor to finish work in case of default. The Contractor has five (5) days to appeal this reallocated Schedule of Values. Pay Requests shall be made based on the prices in the Schedule of Values as submitted unless adjusted by the Engineer and in that case the adjusted Schedule of Values.

2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may transmit, and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to Shop Drawings and other submittals, in electronic media or digital format, either directly, or through access to a secure Project website.
- B. If the Contract does not establish protocols for electronic or digital transmittals, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all. In resolving any conflict among Contract Documents: [The Documents shall be given the following preference in order:](#)
 - 1. [Agreement.](#)
 - 2. [Addenda.](#)
 - 3. [Special Conditions.](#)
 - 4. [Supplemental Conditions.](#)
 - 5. [Technical Specifications.](#)
 - 6. [Drawings. Figure dimensions shall govern over scaled drawings.](#)
 - ~~B.7.~~ [General Conditions.](#)
- ~~C.B.~~ It is the intent of the Contract Documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the Contract Documents.
- ~~D.C.~~ Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed record version shall govern. [If there is a conflict between written copies see Article 2.02 B above.](#)
- ~~E.D.~~ The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- ~~F.E.~~ Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.

3.02 *Reference Standards*

- A. Standards Specifications, Codes, Laws and Regulations
 - 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or

association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard specification, manual, reference standard, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies:*

1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof. Contractor as Bidder was required to visit the site. Visible errors in the specifications, such as number of manholes, pits, will be the responsibility of the Bidder to report.

B. *Resolving Discrepancies:*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer

shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:

- a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
- b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media editions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.

- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

4.01 Commencement of Contract Times

- A. The contract times are defined in the Project Summary in Section 00 00 40. A Notice to Proceed will be issued thirty (30) days prior to the start date if time permits. An email or verbal notice may be used to give thirty (30) days notice until all parties can sign the Notice to Proceed.
- B. The effective start date will be indicated in the Notice to Proceed. The start date may exceed sixty (60) days after bid opening. The Contract Dates will be maximum out-of-service time AND/OR the Project Completion Date. The start date may float to give the Contractor more flexibility with scheduling. Out of Service Date starts the maximum out of service time. If the Contractor delays start so that the out of service date exceeds the Project Completion Date, the Project Completion Date becomes Primary and Out of Service Date is no longer applicable.

4.02 Starting the Work

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to such date except as recommended immediately following. Contract time is governed by out-of-service time. The Contractor is encouraged to deliver equipment to the site prior to Contract Start. The site will be available up to two (2) weeks prior to agreed drainage date.
- B. Contractor is also encouraged to rig the structure, complete containment installation, and complete weld repairs that do not affect the wet interior prior to draining of the tank. The amount of work completed shall have been approved at the preconstruction conference. Since the tank is not out of service these dates do not apply against Out of Service time.
- C. Delaying Work start until the next coating system for the convenience of the Contractor will require Owner to setoff inflation increased Engineering expenses against Contractor's Request for Payment.

4.03 Reference Points N/A

4.04 Progress Schedule

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process,

except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

- C. Notify the Owner of expected arrival a minimum of two weeks (14 days) in advance.
- D. Direct all requests for inspection to the Owner for notification of the Engineer. Forty-eight (48) hours notice of all inspection requests is required.
- E. A written schedule (strictly followed) will substitute for the forty-eight (48) hours inspection notice. However, twelve (12) hours notice is still required if rain or weather interferes with the schedule.
- F. If the inspection visit is canceled, notify the Owner to notify the Engineer to eliminate unnecessary travel time and expense. Twelve (12) hours notice is required.
- G. Be at the job site at the scheduled time of inspection if cancellation of the inspection visit is not possible.
- H. The Engineer and Owner will establish an inspection schedule with the Contractor at the Preconstruction Meeting.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times and Contract Price. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
 - 1. severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 - 2. abnormal weather conditions; Abnormal weather conditions are simply defined as weather conditions that are at variance with the routine or normal weather conditions. An example of the evaluation procedure and of the required Change Proposal follows.
 - a. Project length: 45 days
 - b. Substantial completion date: June 30th.

- c. Start date: May 16th.
- d. Three (3) years of data* ~~2015~~, 2016, 2017, 2015
- e. Average number of rain/wind days: 9
- f. Actual number rain/wind days**: 12
- g. Claim for time extension: 3 days.

*Submit weather history from nearest weather reporting station for three (3) previous years from the same time period. Submit same data for current year. Submit formal, but simple Change Proposal (use format above).

**Rain/wind day is a rain or wind day where either rain and/or wind conditions exceeded safe work conditions or were outside the parameters of good paint practices. Wind days are winds in excess of 20 mph for over four (4) hours during normal work hours, and rain days having measurable precipitation.

- h. Change Proposal Evaluation: Engineer will evaluate Change Proposal and make sole determination as to whether days meet criteria. Engineer will disallow dates where work could have been completed on the interior; dates that result from the Contractor's work practices (i.e. complete wet interior first and then move to outside). Good weather days not used will count against Change Proposal.
- i. Claimed rain/wind days that extend beyond the scheduled Substantial Completion date or the extended Substantial Completion date will not be awarded. Days past substantial completion and good weather days that were not used because of sequencing of project work by Contractor will be considered "days within the control of the Contractor."

- 3. acts or failures to act of utility owners (other than those performing other work at or adjacent to the Site by arrangement with the Owner, as contemplated in Article 8); and
- 4. acts of war or terrorism.

D. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5.

E. Paragraph 8.03 governs delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

~~F.~~ F. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor.

~~E.~~ G. Contractor must submit any Change Proposal seeking an adjustment in Contract Price or Contract Times under this paragraph within 30 days of the commencement of the delaying, disrupting, or interfering event.

- f. H. The termination of Work during the winter season ~~on account~~because of cold weather shall not be taken as entitling Contractor to any extension of Contract Time. If approved by Owner, Liquidated Damages being applied will cease through the winter and will begin again when the tank is removed from service. New Liquidated Damages are cumulative with any Liquidated Damages applied for Fall work.

ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 Availability of Lands

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.
- C. Because of the potential of damage from airborne debris and paint drift, in regard to site clean-up, the term adjacent land or areas will be interpreted to include any property affected by the Project, whether fixed or transient. If it is necessary or desirable to protect adjacent private or public property, work with the Owner and neighbor(s) to move or cover vehicles and permanent structures.

5.02 Use of Site and Other Areas

A. Limitation on Use of Site and Other Areas:

1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
2. If a damage; including car/paint damage claims, or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.12, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or at law; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and

charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. Failure to continually maintain site or to immediately clean the Site after a complaint or at project completion may result in the Owner completing the cleaning by hire or by the Owner's forces. All cleaning costs are the responsibility of the Contractor.
- E. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them. Bent rails, ladder rungs, etc. occurring as a result of construction loading, shall be restored, or negotiated with Owner.
- F. The Contractor shall provide adequate signs, barricades, red lights, and watchmen and take all necessary precautions for the protection of the work and the safety of the public. All barricades and obstructions shall be protected at night by signal from sunset-to-sunrise. Barricades shall be of suitable construction and shall be painted to increase their visibility at night. Suitable warning signs shall be so placed and illuminated at night as to show in advance where construction, barricades, or detours exist.
- G. The Contractor shall at all times so conduct his work to insure the least obstruction to traffic and inconvenience to the general public and the residences in the vicinity of the work, and to insure the protection of persons and property in a manner satisfactory to the Engineer. No road or street shall be closed to the public except with the permission of the Engineer and proper governmental authorities. The Contractor shall confer with and keep police and fire departments of the municipality fully informed as to streets or alleys which are to be closed to traffic for construction purposes. Fire hydrants on or adjacent to the work shall be kept accessible to fire fighting equipment at all times. Temporary provisions shall be made by the Contractor to insure the usability of sidewalks and the proper functioning of all gutters, sewer inlets and drainage ditches.

The Contractor shall have full charge of the premises and work under construction until completion and final acceptance of the Work under the Contract except as noted

in the Special Conditions. The Engineer and Owner shall have full access to the Site and Contractor's personnel and equipment shall be available to the Owner and Engineer/RPR to expedite inspections. The Contractor shall be responsible for all injury to work in process of construction, and for all property or materials stored at the premises that may be damaged or stolen while the work is in his care, and he shall make good all such damage or loss without expense to the Owner. The Contractor shall confine the apparatus, the storage of materials, and the operations of his ~~workmen~~workers to limits indicated by law, ordinance, permits, or direction of the Engineer, and shall not unreasonably encumber the premises with his materials.

5.03 *Physical Conditions*

~~A. Because of the nature of painting projects, delete all references to underground work or underground conditions.~~

~~B.A.~~ *Reports and Drawings*: The Supplementary Conditions identify:

1. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities); and
2. Technical Data contained in such reports and drawings.
3. Whenever practical, a physical inspection of the Project was completed prior to preparation of the specifications. During that inspection, a Field Inspection Report (FIR) was prepared. The FIR was used to produce an Engineering Report on the condition of the structure. The FIR shall not be considered Technical Data

~~C.B.~~ *Reliance by Contractor on Technical Data Authorized*: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.
4. If available, the FIR is included in these Bidding Documents. The FIR contains a statement that the author of the FIR was to conduct his investigation and report as if he was a Contractor. This approach helps with the preparation of the Engineer's report. It is included as a courtesy to the Contractor. The Contractor is not an intended third party beneficiary. The report is not intended to be technical data. See Information for Bidders, Section 00 02 00, Site Visit and Site

Inspection/Comparison with Bid Documents. It is the Contractor's responsibility to visit the Site and to be responsible to know actual Site conditions.

5.04 *Differing Physical Conditions*

~~A. Because of the nature of painting projects, delete all references to underground work or underground conditions.~~

~~B.A.~~ *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site either:

1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate; or
2. is of such a nature as to require a change in the Drawings or Specifications; or
3. differs materially from that shown or indicated in the Contract Documents; or
4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

~~C.B.~~ *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the physical condition in question; determine the necessity of Owner's obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.B above; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.

~~D.C.~~ *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.

~~E.D.~~ *Possible Price and Times Adjustments:*

1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, or both, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

- a. such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. with respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,
 - c. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise; or
 - b. the existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice as required by Paragraph 5.04.A.
 - d. Rough Surfaces in the Wet Interior: The wet interiors of steel structures are subject to corrosion. Based on the age of the tank, maintenance history of the tank, and other factors, the inside of the tank may be pitted. The degree or severity or extent of this pitting will not be considered a hidden condition. No claim of extra for blasting or coating application will be accepted or reviewed. If pit welding or pit filling is completed, that will be done at the bid unit price or a negotiated price. The Owner and Engineer will determine and authorize the extent of pit filling. There will likely be as many or more, unfilled pits than the number authorized for repair. Contractor cannot rely on pit filling to eliminate some of the application techniques needed for pitted tanks. Back rolling of a spray application may be necessary and will be considered Good Painting Practice and not a Differing Physical Condition.
 3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.
 4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

5.05 *Underground Facilities*

- A. *Contractor's Responsibilities:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or adjacent to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is

otherwise expressly provided in the Supplementary Conditions: Underground facilities primarily will be pipe pits which are accessible at Prebid Inspection, or facilities encountered when drilling anchors for containment.

1. Owner and Engineer do not warrant or guarantee the accuracy or completeness of any such information or data provided by others; and
 2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
 - a. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 - b. locating all Underground Facilities shown or indicated in the Contract Documents as being at the Site;
 - c. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 - d. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer.
- C. *Engineer's Review:* Engineer will promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the Underground Facility in question; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and advise Owner in writing of Engineer's findings, conclusions, and recommendations. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner will issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question, addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.
- E. *Possible Price and Times Adjustments:* The location of any particular utility cannot be certified as being correct. In general, location and elevation are approximate only.

Contractor shall notify each utility before digging for anchors or for any reason. Before starting, call in advance as required by the individual agencies:

Indiana: Indiana Underground 800-382-5544

Illinois: J.U.L.I.E. 800-892-0123

Michigan: Miss Dig 800-482-7171

Ohio: Ohio Utilities Protection Service 800-362-2764; outside Ohio 216-744-5191

Wisconsin: Digger's Hotline 800-242-8511; Milwaukee 414-259-1181

Virginia: Miss Utility 800-552-7001

Other States: Locate and notify appropriate agency.

5.06 *Hazardous Environmental Conditions at Site*

- A. There are no known hazardous environmental conditions on-site. No reports or drawings related to Hazardous Environmental Conditions are known to the Owner or Engineer. There is the possibility of lead in soils or other Constituents of Concern related to the coating industry from past projects. The Contractor is not responsible for cleanup of existing conditions unless their actions result in cleanup of a new waste discharge, spilt fuels, solvents, materials on equipment from another project.
- ~~B. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.~~
- ~~C.~~B. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- ~~D.~~C. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); Engineer or RPR has full authority to STOP Work until the Owner and PM are contacted, and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs. Authority to STOP Work in this instance is expanded to include potential environmental contamination.

~~E.D.~~ Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.

~~F.E.~~ If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off. If Contractor caused the delay or reason for stoppage as a result of a discharge or potential discharge then Owner may present a Setoff, but the Contractor may not submit a Change Proposal.

~~G.F.~~ If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.

~~H.G.~~ To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.~~JG~~ shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

~~I. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.~~

ARTICLE 6 – BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of all of Contractor's obligations under the Contract. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish

such other bonds as are required by the Supplementary Conditions or other specific provisions of the Contract.

- B. Supply a Maintenance Bond for two (2) years at 100% contract price to ensure any repair work required after the one (1) year warranty inspection within thirteen (13) months (unless stated elsewhere). The repair scheduling may be delayed several months for Contractor's schedule or Owner's operational requirements. This bond is to remain in effect until repairs have been completed. Per ~~contract~~Technical Specifications, if repairs exceed 10% of any area, then the warranty and bond ~~are~~shall be extended another year.
- C. All bonds shall be in the form prescribed by the Contract except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond. Use forms acceptable to AIA Industry Standards, or use forms specifically required by the Owner. Supply three (3) original signed and properly executed bonds for each type of bond.
- D. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts. Surety Companies must, in addition to State license, be incorporated and originating from within the United States. Offshore companies or internet companies are not acceptable. Supply bonds and insurance from companies with a Class A- VII rating or better (rating listed in latest edition and by A.M. Best Co.).
- E. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the bond and surety requirements above. No Pay Requests will be accepted until new Bonding is approved as acceptable per Bond Requirements and Owner's satisfaction.
- F. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- G. Upon written request, Owner will provide a copy of the payment bond to any Subcontractor, Supplier, or other person or entity claiming to have furnished labor or materials used in the performance of the Work.

6.02 Insurance—General Provisions

- A. Contractor shall obtain and maintain insurance as required in this Article and in the Supplementary Conditions.

- B. All insurance required by the Contract to be purchased and maintained by ~~Owner or~~ Contractor shall be obtained from insurance companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better. Insurance Companies must, in addition to State license, be incorporated and originating from within the United States. Offshore companies or internet companies are not acceptable.
- C. Contractor shall deliver to Owner, with copies to each named insured and additional insured, minimum three (3) copies (as identified in this Article, in the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Contractor has obtained and is maintaining the policies, coverages, and endorsements required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- D. Failure of Owner to demand such certificates or other evidence of the Contractor's full compliance with these insurance requirements, or failure of Owner to identify a deficiency in compliance from the evidence provided, shall not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- E. If Contractor does not purchase or maintain all of the insurance at the specified level by the Contract, Contractor shall notify Owner in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- F. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and/or exercise Owner's termination rights under Article 16.
- G. Without prejudice to any other right or remedy, if Contractor has failed to obtain required insurance, Owner may elect to obtain equivalent insurance to protect Owner's interests at the expense of the Contractor who was required to provide such coverage, and the Contract Price shall be adjusted accordingly with a set off.
- H. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests.
- I. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner and other individuals and entities in the Contract.

6.03 Contractor's Insurance

- A. *Workers' Compensation:* Contractor shall purchase and maintain workers' compensation and employer's liability insurance for:
 - 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts.

2. United States Longshoreman and Harbor Workers' Compensation Act and Jones Act coverage (if applicable).
 3. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees (by stop-gap endorsement in monopolist worker's compensation states).
 4. Foreign voluntary worker compensation (if applicable).
- B. *Commercial General Liability—Claims Covered:* Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against:
1. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees.
 2. claims for damages insured by reasonably available personal injury liability coverage.
 3. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
- C. *Commercial General Liability—Form and Content:* Contractor's commercial liability policy shall be written on a 1996 (or later) ISO commercial general liability form (occurrence form) and include the following coverages and endorsements:
1. Products and completed operations coverage:
 - a. Such insurance shall be maintained for three years after final payment.
 - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter. Insurance shall remain in place as specified but delivery of Certificates of Insurance submittal for three years will be specified in the Supplemental Conditions if required.
 2. Blanket contractual liability coverage, to the extent permitted by law, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
 3. Broad form property damage coverage.
 4. Severability of interest.
 5. Underground, explosion, and collapse coverage.
 6. Personal injury coverage.
 7. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together); or CG 20 10 07 04 and CG 20 37 07 04 (together); or their equivalent.
 8. For design professional additional insureds, ISO Endorsement CG 20 32 07 04, "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.

- D. *Automobile liability*: Contractor shall purchase and maintain automobile liability insurance against claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy shall be written on an occurrence basis.
- E. *Umbrella or excess liability*: Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the paragraphs above. Subject to industry-standard exclusions, the coverage afforded shall follow form as to each and every one of the underlying policies.
- F. *Additional insureds*: The Contractor's commercial general liability, automobile liability, umbrella or excess, ~~and pollution liability~~ policies shall include and list as additional insureds Owner and Engineer, and any individuals or entities identified in the Supplementary Conditions; include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds; and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis. Contractor shall obtain all necessary endorsements to support these requirements.

~~G. *Contractor's professional liability insurance: (IF Specified)*—If Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance shall provide protection against claims arising out of performance of professional design or related services, and caused by a negligent error, omission, or act for which the insured party is legally liable. It shall be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. If such professional design services are performed by a Subcontractor, and not by Contractor itself, then the requirements of this paragraph may be satisfied through the purchasing and maintenance of such insurance by such Subcontractor.~~

H.G. *General provisions*: The policies of insurance required by this Paragraph 6.03 shall:

1. include at least the specific coverages provided in this Article.
2. be written for not less than the limits of liability provided in this Article and in the Supplementary Conditions, or required by Laws or Regulations, whichever is greater.
3. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least 10 days prior written notice has been given to Contractor. Within three days of receipt of any such written notice, Contractor shall provide a copy of the notice to Owner, Engineer, and each other insured under the policy.
4. remain in effect at least until final payment (and longer if expressly required in this Article) and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract Documents.

5. be appropriate for the Work being performed and provide protection from claims that may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable.

H. The coverage requirements for specific policies of insurance must be met by such policies, and not by reference to excess or umbrella insurance provided in other policies.

6.04 *Owner's Liability Insurance*

- A. In addition to the insurance required to be provided by Contractor under Paragraph 6.03, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.
- B. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

6.05 *Property Insurance*

- A. *Builder's Risk:* Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the full insurable replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
 1. include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."
 2. be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.

3. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.
4. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).
5. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).
6. extend to cover damage or loss to insured property while in transit.
7. allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
8. allow for the waiver of the insurer's subrogation rights, as set forth below.
9. provide primary coverage for all losses and damages caused by the perils or causes of loss covered.
10. not include a co-insurance clause.
11. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.
12. include performance/hot testing and start-up.

~~13. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.~~

- B. *Notice of Cancellation or Change*: All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.
- C. *Deductibles*: The purchaser of any required builder's risk or property insurance shall pay for costs not covered because of the application of a policy deductible.
- D. *Partial Occupancy or Use by Owner*: If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide notice of such occupancy or use to the

builder's risk insurer. The builder's risk insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy; rather, those portions of the Work that are occupied or used by Owner may come off the builder's risk policy, while those portions of the Work not yet occupied or used by Owner shall remain covered by the builder's risk insurance.

- E. *Additional Insurance*: If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.05, it may do so at Contractor's expense.
- F. *Insurance of Other Property*: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment, or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such property item will be responsible for deciding whether to insure it, and if so in what amount.

6.06 Waiver of Rights

- A. All policies purchased in accordance with Paragraph 6.05, expressly including the builder's risk policy, shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors. Contractor waives all rights against Owner and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all Subcontractors, all individuals or entities identified in the Supplementary Conditions as insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by ~~Owner or~~ Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for:
 - 1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
 - 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06.

- C. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by builder's risk insurance and any other property insurance applicable to the Work.

6.07 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of insurance required by Paragraph 6.05 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.05 shall distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the money so received applied on account thereof, and the Work and the cost thereof covered by Change Order, if needed.

ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

7.01 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.
- C. Resident Superintendent shall be fluent in English to the level of competency to complete requirements of [67.01, Paragraph B](#). Superintendent shall also be fluent or have access to a translator for the primary language of the majority of workers. Degree of fluency to be sufficient so that Superintendent can adequately complete his duties under [67.01.A](#).

7.02 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.
- B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.
- C. Minimum crew size is two (2) personnel and one (1) foreman for confined space work (on tanks up to 300,000 gallons, and three [3] personnel, plus one (1) foreman over 300,000 gallons).

7.03 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.04 *"Or Equals"*

A. The majority of material or equipment furnished under these contracts are coating related, or fabricated. Engineer maintains a coating program developed and maintained by Engineer. Coatings which have met or exceeded quality and ASTM parameters are listed in the Technical Specifications. No "or equal" coating products will be reviewed as "or equal." The product manufacturer may begin submittal procedures to be included in the specifications, but that will be for projects about a year into the future, time to complete tests required to be approved.

A.B. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the Contract Price has been based upon Contractor furnishing such item as specified. ~~The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or~~

~~description contains or is followed by words reading that no like, equivalent, or “or equal” item is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment, or items from other proposed suppliers under the circumstances described below.~~

1. If Engineer in its sole discretion determines that an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer shall deem it an “or equal” item. For the purposes of this paragraph, a proposed item of material or equipment will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that:
 - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) it has a proven record of performance and availability of responsive service; and
 - 4) it is not objectionable to Owner.
 - b. Contractor certifies that, if approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

~~B. Contractor’s Expense: Contractor shall provide all data in support of any proposed “or equal” item at Contractor’s expense.~~

~~C. Engineer’s Evaluation and Determination: Engineer will be allowed a reasonable time to evaluate each “or equal” request. Engineer may require Contractor to furnish additional data about the proposed “or equal” item. Engineer will be the sole judge of acceptability. No “or equal” item will be ordered, furnished, installed, or utilized until Engineer’s review is complete and Engineer determines that the proposed item is an “or equal”, which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.~~

~~D.C. Effect of Engineer’s Determination: Neither approval nor denial of an “or-equal” request shall result in any change in Contract Price. The Engineer’s denial of an “or-equal” request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents.~~

~~E.D. Treatment as a Substitution Request: If Engineer determines that an item of material or equipment proposed by Contractor does not qualify as an “or-equal” item, Contractor may request that Engineer considered the proposed item as a substitute pursuant to Paragraph 7.05.~~

7.05 *Substitutes*

- A. Unless the specification or description of an item of material or equipment required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of material (excludes coating) or equipment under the circumstances described below. To the extent possible such requests shall be made before commencement of related construction at the Site.
1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of material or equipment from anyone other than Contractor.
 2. The requirements for review by Engineer will be as set forth in Paragraph 7.05.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
 3. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
 - a. shall certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design,
 - 2) be similar in substance to that specified, and
 - 3) be suited to the same use as that specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times,
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item, and
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from that specified, and
 - 2) available engineering, sales, maintenance, repair, and replacement services.
 - d. shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.

- e. Additional information may consist of completing Engineer's vendor checklist, field mock-ups, special samples, pilot testing, or other special requirements that Engineer determines necessary to assess —if the item of material or equipment proposed is an acceptable substitute to that named.
- B. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- ~~E. By requesting substitute material, the Contractor acknowledges the extra costs to review submittals and agrees to reimbursement of Engineer. Engineer will invoice Owner and amount will be an offset from Contractor's payment.~~
- ~~F. Engineer has reviewed coatings for performance equivalency using ASTM Standards and approved systems are listed in the specifications. Systems not specified without this letter will be considered substitutes and subject to review charge.~~
- ~~G. Prior to Engineer's review of a substitute, Engineer will prepare an Estimate of Engineer's review time and anticipated costs in reviewing Contractor's substitute. The estimate will include Engineer's opinion of the probable hours required to review the substitute. Engineer will notify Contractor if the hours listed on the Estimate are to be exceeded.~~
1. Engineer's minimum cost for reviewing a substitute will be \$240350* (2 hrs. equivalent).
 2. Engineer's hourly rate for reviewing a substitute will be \$120-175 *per hour.
- * Actual hourly rate on Schedule C-1 of Engineer/Owner contract.
- ~~H.E.~~ *Contractor's Expense:* Contractor shall provide all data in support of any proposed substitute at Contractor's expense.

F. *Effect of Engineer's Determination:* If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.05.D, by timely submittal of a Change Proposal.

7.06 *Concerning Subcontractors, Suppliers, and Others*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner.
- B. Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of designated parts of the Work if required by the Contract to do so. **This project requires prequalification. This precondition extends to Subcontractors.**
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable, during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within five days.
- E. Owner may require the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors, Suppliers, or other individuals or entities for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor, Supplier, or other individual or entity so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity.
- F. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- G. **"Subcontracting" – This project requires prequalification. This pre-qualification requirement extends to Subcontractors.**
- H. **The Contractor agrees not to sublet or assign this work without the written consent of the Owner. Violation of this condition shall be grounds for immediate dismissal of the Subcontractor or Contractor to which the work was sublet or assigned and if a satisfactory (Engineer's opinion) replacement is not on the site working within forty-eight (48) hours, the violations shall then be grounds for Contract termination and Performance Bond forfeiture.**

- I. Lump sum payments to employees instead of hourly wage will be prima facie evidence of subcontracting. The Owner reserves the right to review payroll records and pay stubs. If subcontracting is approved, no more than 30% of the project may be subcontracted.
- J. On a monthly basis Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- K. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions.
- L. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.
- M. Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.
- N. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- O. All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.
- P. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by the particular Subcontractor or Supplier.
- Q. Nothing in the Contract Documents:
 - 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier, or other individual or entity; nor
 - 2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

7.07 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent

rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.

- B. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.08 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits and licenses. Owner will assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work
- B. The only permits not included are environmental air quality, and permits from health agencies for interior painting, which the Owner will procure if needed.
- C. Display all wage requirements and other permits on a temporary board.
- D. Attach to the Resident Superintendent's copy of the specifications, copies of other permits which do not require display.

7.09 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.10 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It shall not be Contractor's responsibility to make certain that the Work described in

the Contract Documents is in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.

- C. Owner or Contractor may give notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.
- D. Claims or Change Proposals made for extra costs resulting from laws and regulations that become effective after the opening of Bids or (EDA), will be reviewed based on the exposure and publication of the law or regulation in advance. There will be no adjustment in Contract Price or Contract Time for environmental or safety regulations, or other laws and regulations with similar public notice and public hearing/review procedures. It is the Contractor's responsibility to be aware of industry specific changes in OSHA or environmental issues.
- E. Regulations dealing with labor rates have a known expiration date. Everyone can safely assume there will be a cost increase with each new issue. If these rates are scheduled to expire during Contract Time, then increase labor costs in Bid for the expected manhours by local cost-of-living factor. If rates increase more than cost-of-living, a Change Order will be reviewed for exact increase of new rate above the adjusted old rate. Copy of payroll will be used to determine increase in wage only, not associated taxes, insurance, and benefits. The Contractor is responsible for requesting extra Change Proposal and supplying documentation establishing extra. All consideration for an increase ends on Substantial Completion, either original or Change Order extended date.

7.11 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, approved Shop Drawings, and Non-Conformance Reports. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.12 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing work at or adjacent to the Site, when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions may identify any Owner's safety programs that are applicable to the Work. Failure to identify specific program does not relieve the Contractor from safety program adherence requirement. If safety requirement is for a program not identified in the Supplemental Condition and is more restrictive than OSHA and it interferes with Contractor's Methods of Operation then Contractor may submit a Change Proposal for Contract Time and/or Contract Price.
- D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
- E. All damage, injury, or loss to any property referred to in Paragraph 7.12.A.2 or 7.12.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- F. Contractor's duties and responsibilities for safety and protection shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 15.06.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).
- G. Contractor's duties and responsibilities for safety and protection shall resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

- H. Conform to the Occupational Safety and Health Standards of the United States Department of Labor and local safety agencies. This shall be made a condition of each subcontract as entered into pursuant to this contract.
- I. Lead/chrome paint removal, and painting of structures are recognized as very hazardous work, and it is further recognized that the painting industry has extensive safety training programs available.
- J. Monitor and be responsible for all safety on job site. The Engineer and Owner will not monitor safety practices, and will not assume any responsibility for safety.
- K. Contractor shall maintain an accurate record of all cases of death, occupational disease, and injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the Contract. The Contractor alone shall be responsible for the safety, efficiency, and adequacy of his plans, appliances, and methods, and for any damage which may result from their failure or their improper construction, maintenance, or operations. Submit a copy of all OSHA reportable or recordable injuries, and all OSHA citations relative to this project at project completion.
- L. The Owner and Engineer have historically followed the Contractor's safety plan when on the site. There have been occasions where the Contractor's safety plan has proven inadequate. The specifications now require safety features for the Owner and Engineer which are now the Contractor's contractual obligation to provide. These include such items as safety cables suspended from the roof for inspection of the interior roof, and safety clips on the bottom of the bowl for fall protection cables. (Legged tanks only) We encourage the Contractor to modify his fall protection plan and to provide additional cables and fall protection grabs for his personnel. Items such as roof railings are provided for the Owner's safety. Do not rig from the railings – a separate painter's rail is provided for rigging.

7.13 *Safety Representative*

- A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs. ~~(See Paragraph 2.04.F)~~(See Paragraph 2.04.F) Contractor's Safety Representative shall have the authority to supersede Contractor's foreman and shall stop work if the Work being completed is in violation of Contractor's or Owner's safety program, or OSHA.

7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the

Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

7.16 *Shop Drawings, Samples, and Other Submittals*

A. *Shop Drawing and Sample Submittal Requirements:*

1. Before submitting a Shop Drawing or Sample, Contractor shall have:
 - a. reviewed and coordinated the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - c. determined and verified the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that submittal, and that Contractor approves the submittal.
3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.

B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals. Each submittal will be identified as Engineer may require.

1. *Shop Drawings:*

- a. Contractor shall submit the number of copies required in the Specifications.
- b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.D.

2. *Samples:*

- a. Contractor shall submit the number of Samples required in the Specifications.

- b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 7.16.D.
 3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.
- C. *Other Submittals:* Contractor shall submit other submittals to Engineer in accordance with the accepted Schedule of Submittals, and pursuant to the applicable terms of the Specifications.
- D. *Engineer's Review:*
1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto.
 3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
 4. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order.
 5. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 7.16.A and B.
 6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
 7. Neither Engineer's receipt, review, acceptance or approval of a Shop Drawing, Sample, or other submittal shall result in such item becoming a Contract Document.
 8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.D.4.

E. *Resubmittal Procedures:*

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.
2. Contractor shall furnish required submittals with sufficient information and accuracy to obtain required approval of an item with no more than **two** submittals. Engineer will record Engineer's time for reviewing a **third** or subsequent submittal of a Shop Drawings, sample, or other item requiring approval, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.
4. All submittals shall be sent to the Engineer as one package (unless a separate Schedule of Submittals is included and approved by the Engineer). All required resubmittals are also to be resubmitted as one package and any delinquent resubmittal must be identified by a new Schedule of Submittals. Failure to include a Schedule of Submittals for delinquent items will be justification by Engineer to consider submittal complete. Delinquent items will be considered reviewed and rejected.
5. The Engineer's minimum cost for issuing a second request will be ~~\$240~~350* (2 hours equivalent).
6. Engineer's hourly rate after the second hour will be ~~\$120~~175. * Or rate on Exhibit C-1 of Engineer/Owner contract if higher.
7. Submit all material to Engineer's office in Lake Odessa, MI to allow fastest review time.

7.17 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on Contractor's warranty and guarantee.
- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 2. normal wear and tear under normal usage.

3. Normal wear and tear does not apply to wet interior coating below the high water line Warranty Rework. After one (1) year, zero (0) failure or deterioration is acceptable.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
1. observations by Engineer;
 2. recommendation by Engineer or payment by Owner of any progress or final payment;
 3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 4. use or occupancy of the Work or any part thereof by Owner;
 5. any review and approval of a Shop Drawing or Sample submittal;
 6. the issuance of a notice of acceptability by Engineer;
 7. any inspection, test, or approval by others; or
 8. any correction of defective Work by Owner.
- D. Except where noted in the Contract Documents, the Contractor guarantees all material and equipment furnished and all work performed for a period of one (1) year from the date of substantial completion of the Contract. This warranty will automatically be extended until weather permits the Owner to perform the warranty inspection. If the amount of rework exceeds ten percent (10%) of a portion of the project (i.e. interior painting), then the Owner reserves the right to have the warranty period extended one year for the entire portion of the work.
- E. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract shall govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable.

- B. In any and all claims against Owner or Engineer or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- ~~C. The indemnification obligations of Contractor under Paragraph 7.18.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:~~
- ~~1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, Change Orders, designs, or Specifications; or~~
 - ~~2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.~~

7.19 *Delegation of Professional Design Services*

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable Laws and Regulations.
- B. If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.
- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this paragraph, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 7.16.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria specified by Owner or Engineer.

ARTICLE 8 – OTHER WORK AT THE SITE

8.01 *Other Work*

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any utility work at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford each other contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
- D. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 8, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.
- E. If overhead power lines present an unsafe work conditions as determined by OSHA, Owner or Utility, Contractor at his expense and coordination, shall have the Utility temporarily relocate, move, or cover lines, eliminating the hazard. Experienced Contractors will determine problems with utility lines during its prebid site visit and include anticipated costs in his bid.
- F. Unless stated differently in Contract Documents, protect all antennas, controls, cables, and associated property of Owner's equipment or material on, in, or near the structure during work. Design construction procedures to maintain operation of antenna system.

8.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:

1. the identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 2. an itemization of the specific matters to be covered by such authority and responsibility; and
 3. the extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

- A. If, in the course of performing other work at or adjacent to the Site for Owner, the Owner's employees, any other contractor working for Owner, or any utility owner for whom the Owner is responsible causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor may be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment shall take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract. When applicable, any such equitable adjustment in Contract Price shall be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due to Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this paragraph.
- C. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due to Contractor.
- D. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such

other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9 – OWNER’S RESPONSIBILITIES

9.01 Communications to Contractor

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 Replacement of Resident Project Representative

- A. Owner may at its discretion replace an [Engineer’s Resident Project Representative with another of Engineer’s Resident Project Representative](#), provided Contractor makes no reasonable objection to the replacement representative. [The replacement RPR status under the Contract Documents shall be that of the former RPR.](#)

9.03 Furnish Data

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 Pay When Due

- A. Owner will make payments to Contractor when they are due as provided in the Agreement per procedure discussed at Preconstruction Meeting. Payment turn around time is per Owner’s Standard Procedure.

9.05 Lands and Easements; Reports, Tests, and Drawings

- A. Owner’s duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Article 5 refers to Owner’s identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 Change Orders

- A. Owner’s responsibilities with respect to Change Orders are set forth in Article 11.

9.07 Inspections, Tests, and Approvals

- A. Owner’s responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.08 *Limitations on Owner's Responsibilities*

- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

9.09 *Undisclosed Hazardous Environmental Condition*

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.10 *Safety Programs*

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.08. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 10.08. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent, or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

10.04 *Rejecting Defective Work*

- A. Engineer has the authority to reject Work in accordance with Article 14.
- B. Engineer/RPR shall have the authority to stop work in the event continuation of Work is under a noncompliance situation, such as incomplete containment, which may result in the violation of environmental laws; or if continuation of Work may result in the covering of defective or unaccepted work product. Authority transfer back to the Owner after the Owner has been notified and returns to the Site or issues directives.

10.05 *Shop Drawings, Change Orders and Payments*

- A. Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, are set forth in Paragraph 7.16.
- B. Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, are set forth in Paragraph 7.19.
- C. Engineer's authority as to Change Orders is set forth in Article 11.
- D. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.06 *Determinations for Unit Price Work*

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.07 *Decisions on Requirements of Contract Documents and Acceptability of Work*

- A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.08 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to

Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents. *Any plan or method of accomplishing the work suggested to the Contractor by the Engineer or other representative of the Owner, but not specified or required, may be used but shall be used at the Contractor's own risk and responsibility. The Owner and Engineer assume no responsibility.*
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 15.06.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.08 shall also apply to the Resident Project Representative, if any.

10.09 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs (if any) of which Engineer has been informed.

ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

11.01 *Amending and Supplementing Contract Documents*

- A. The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
 - 1. *Change Orders:*
 - a. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.
 - b. Owner and Contractor may amend those terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, without the

recommendation of the Engineer. Such an amendment shall be set forth in a Change Order.

2. *Work Change Directives:* A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.04 regarding change of Contract Price. Contractor must submit any Change Proposal seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive. Owner must submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.
3. *Field Orders:* Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein. *A Field Order is written by the Engineer and issued to the Contractor. Field Orders may be added to the Contract Documents if the Contractor does not object to the Field Order within three days of issuance and delivery.*

11.02 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Such changes shall be supported by Engineer's recommendation, to the extent the change involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters. Such changes may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work shall be performed under the applicable conditions of the Contract Documents. Nothing in this paragraph shall obligate Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations. Owner authorized changes in the Work that do not require review of the Engineer may be things like forgiveness of some ground level punchlist item (reseeding etc.). The Owner shall advise the Engineer of such changes, the Contractor's notification alone, is not sufficient.

11.03 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.

11.04 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment of Contract Price shall comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:
 1. where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03); or
 2. where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.04.C.2); or
 3. where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.04.C).
- C. *Contractor's Fee:* When applicable, the Contractor's fee for overhead and profit shall be determined as follows:
 1. a mutually acceptable fixed fee; or
 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. for costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee shall be 10 percent;
 - b. for costs incurred under Paragraph 13.01.B.3, the Contractor's fee shall be five percent;
 - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.04.C.2.a and 11.04.C.2.b is that the Contractor's fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of five percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted work the maximum total fee to be paid by Owner

shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;

- d. no fee shall be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
- e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
- f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 11.04.C.2.a through 11.04.C.2.e, inclusive.

11.05 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.
- B. An adjustment of the Contract Times shall be subject to the limitations set forth in Paragraph 4.05, concerning delays in Contractor's progress.
- C. *The termination of Work during the winter season because of cold weather shall not be taken as entitling Contractor to any extension of Contract Time.*

11.06 *Change Proposals*

- A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.
 - 1. *Procedures:* Contractor shall submit each Change Proposal to Engineer promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal. The supporting data shall be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event. Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal.
 - 2. *Engineer's Action:* Engineer will review each Change Proposal and, within 30 days after receipt of the Contractor's supporting data, either deny the Change

Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.

3. *Binding Decision*: Engineer's decision will be final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- B. *Resolution of Certain Change Proposals*: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice shall be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.
- C. If Owner and Contractor are unable to agree on a price for Change Order work, do not proceed with Work unless ordered in writing by the Engineer or Owner as a Work Change Directive.
- D. If work involved is not essential to the scope of the project and/or there is sufficient time, a Bulletin will be issued and recommended by the Engineer. The Bulletin will request a price for proposed work-, and/or any adjustment in Contract Times. If the price as offered or as later negotiated is acceptable, the Bulletin will become the basis of the Change Order. By Owner acceptance and signing, the Bulletin offered by the Contractor may become a combined document: Bulletin #___/Change Order #___, or a new separate Change Order may be prepared.

11.07 *Owner and Contractor shall execute appropriate Change Orders covering:*

1. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
2. changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
3. changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.02, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and
4. changes in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results under Paragraph 11.06, or Article 12.

- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Paragraph 11.07, it shall be deemed to be of full force and effect, as if fully executed.

11.08 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.
- B. Acceptance of Bonds tendered by Contractor to Owner neither creates nor does Owner accept any and all obligations that the Bonding Company may try to transfer to Owner even if specified by Bonding Company as a Condition of the Bond.

ARTICLE 12 – CLAIMS

12.01 *Claims*

- A. *Claims Process:* The following disputes between Owner and Contractor shall be submitted to the Claims process set forth in this Article:
 - 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;
 - 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and
 - 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters.
- B. *Submittal of Claim:* The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full and fair amount to which Contractor is entitled.
- C. *Review and Resolution:* The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation:*
 - 1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate shall stay the Claim submittal and response process.
 - 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process shall resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal

and decision process shall resume as of the date of the conclusion of the mediation, as determined by the mediator.

3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action shall be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim shall be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.
- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim shall be incorporated in a Change Order to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
 1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
 2. To determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 13.01.C, and shall include only the following items:
 1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and

- payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.
2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
 - a. Rentals of all construction equipment and machinery, and the parts thereof in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the work.
 - b. Costs for equipment and machinery owned by Contractor will be paid at a rate shown for such equipment. (Use rate book appropriate for the Project.) An hourly rate will be computed by dividing the monthly rates by 176. These computed rates will include all operating costs. Costs will include the time the equipment or machinery is in use on the changed work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed work. The cost of any such equipment or machinery, or parts thereof, shall cease to accrue when the use thereof is no longer necessary for the changed work. Equipment or machinery with a value of less than \$1,000 will be considered small tools.
 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
 5. Supplemental costs including the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site,

and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

- c. Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
 - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
 - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 6.05), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.
 - g. The cost of utilities, fuel, and sanitary facilities at the Site.
 - h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
 - i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.
- C. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:
- 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.

2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.
- D. *Contractor's Fee:* When the Work as a whole is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 11.04.C.
- E. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances:* Contractor agrees that:
1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- C. *Contingency Allowance:* Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item

of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.

1. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities. The Schedule of Values may refer to unknown quantities as “Dummy Figures.”
 - a. Claims made because of reduction of over 25% of estimated quantity of pit filling, or pit sealing, or roof seam sealing will be limited to reasonable (<25% cost of material) material restocking charge.
 - b. Claims made because of reduction of over 25% of estimated quantity of pit welding, seam welding, or repairs will not be accepted if mobilization of welder for other repairs was required. Claims for reduction where repair was limited to reduced item will be limited to remaining percentage of mobilization costs.
- B. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor’s overhead and profit for each separately identified item.
- C. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer’s preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer’s written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of the following paragraph.
- D. Within 30 days of Engineer’s written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price if:
 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;
 2. there is no corresponding adjustment with respect to any other item of Work; and
 3. Contractor believes that it is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price, and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

14.01 Access to Work

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide the **Owner and Engineer and**

Resident Project Representative, proper and safe conditions and equipment for such access and advise them of Contractor's safety procedures and programs so that they may comply therewith as applicable. Reasonable times means at times that would not burden the Contractor with an entire workforce, waiting to go back to work. Between job functions, at scheduled times, or Contractor breaks are reasonable times.

14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work shall be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
 1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 3. by manufacturers of equipment furnished under the Contract Documents;
 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests shall be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

E. Correction of Failed Inspections, Non-Conformance Reports

1. Non-Conformance Reports: The Engineer/RPR will issue a non-conformance report for every performance item, material, or equipment supplied, and/or environmental situation that fails to meet requirements of the specifications.
2. Correct all work in non-conformance before proceeding.
3. Immediately correct all environmental non-conformance to prevent accidents. If an incident has already occurred, contact the proper governmental environmental agency and conduct an immediate clean-up per their direction. Notify

Engineer/RPR of environmental release and of the environmental agencies requirements for cleanup.

4. If issued non-conformance reports are not corrected, the failure will be considered a breach of contract by the Contractor entitling the Owner to damages as follows:

a.—Work in non-conformance: If the Contractor refuses to correct, the bonding company will be notified to finish the project. At that point, payment to the Contractor for all completed work will stop until the bonding company authorizes payment, or payment may be made to the bonding company after they have proven assumption of the contract. This clause does not give either party rights to a greater payment than detailed elsewhere in these documents.

b-a.

b. Equipment specified but never supplied, or broken equipment not repaired or replaced: 125% of the rental value of equipment in non-conformance (i.e. non-working decontamination trailer, hand wash facilities, air filtration units, etc.). Environmental issues: 125% of the estimate of compliance. *The cost of items 4.a. above is calculated by damage estimates. The cost of equipment will be the rental charge from a reputable local dealer with 25% extra, being for operation cost. Cost of environmental compliance is the estimated cost of compliance. The extra 25% is potential risk to the Owner for non-conformance. In no situation will the Owner assume liability.

e.F. Costs of failed inspections as defined in the Technical Specifications, are the responsibility of the Contractor. Owner will recover costs by setoff to the Contractor.

f.G. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.

g.H. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense. (See Hold Points in Specifications.)

14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective. With coatings it is recognized that removing topcoat will damage underlying coats. Repair and recoat per written directive of Engineer.

- E. *Preservation of Warranties*: When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages*: In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.
- G. *Failed Inspections*: Work completed without waiting for inspections detailed as Hold Points shall be determined automatically defective.

14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the ~~covering~~coating, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of

satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.

2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, ~~replacement, and reconstruction.~~ If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

D. Article 14.05 will be used only where applicable, such as insulation over fill pipe, work that can be viewed after it is uncovered. These paragraphs do not apply to coating because "uncovering" the topcoat will subsequently damage the underlying coatings. With coating removal, all work will be considered defective and Paragraph Article 14.05.C.1 shall apply. Article 14.05.C.2 shall not be used with coating removal.

14.06 Owner, Engineer/RPR May Stop the Work

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

B. Engineer/RPR may stop work if continued Work would result in the Contractor covering defective Work, or if continued operations may result in an environmental release. Engineer/RPR's authority to stop Work ceases after notification of Owner and sufficient time for Owner to issue directives or to appear on site. (See 14.06 A) If possible Work may continue on nonaffected portions of the Project.

14.07 Owner May Correct Defective Work

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, then Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.

- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work **Engineer's fees and Owner's expenses. (Setoff)**
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 Progress Payments

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments:*
 - 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
 - 2. **Engineer will consider that material stored on-site has no value until properly applied. Engineer will not recommend payment for materials in storage.**
 - 3. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
 - 3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.
 - 4. If Contractor fails to submit required documentation material with application for payment, Engineer will notify Contractor of missing documents. If after second submittal material is still missing, Engineer may submit pay application to Owner withholding all moneys relative to missing data, or to contact Contractor again. Contractor is responsible for all increased engineering costs to the Owner **as a setoff** after second submittal.
- C. *Review of Applications:*
 - 1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.

2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work, or
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid on account of the Contract Price, or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;

- d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
- e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.
- f. Reasonable evidence that the work cannot be completed for the unpaid balance of the contract sum;
- g. Reasonable evidence that the work cannot be completed within the contract time, or;
- h. Damage to the Owner or another Contractor;
- i. Persistent failure to carry out the work in accordance with the Contract Documents;
- j. Anticipated liquidated damages;
- k. Anticipated withholding by Owner to cover additional Contractor related engineering costs;
- l. Amount withheld to complete work calculated at cost of hiring another Contractor to complete work in case of default;
- m. Retainage.
- n. Legal claims have been made, or Engineer has reasonable knowledge of;

D. *Payment Becomes Due:*

- 1. Thirty days, or Owner's normal check processing schedule, after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

E. *Reductions in Payment by Owner:*

- 1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. claims have been made against Owner on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
 - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities complete field inspections that were determined to be a failed inspection;
 - f. the Work is defective, requiring correction or replacement including additional inspection costs;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;

- h. the Contract Price has been reduced by Change Orders;
 - i. an event that would constitute a default by Contractor and therefore justify a termination for cause has occurred;
 - j. liquidated damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
 - l. there are other items entitling Owner to a set off against the amount recommended.
2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 15.01.C..

15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than seven days after the time of payment by Owner.

15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. On tank projects, date of substantial completion is the date the tank is, or would have been returned to service, except for voluntary delay by Owner. Date of Substantial Completion is after complete cure, disinfection, and testing. A voluntary delay by Owner in filling the tank does not extend the Ready for Final Payment Date.
- C. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- D. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which shall fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify

Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.

- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
 - 1. At any time Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through E for that part of the Work.
 - 2. At any time Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
 - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto. Note: If an item on the punchlist interferes with return of structure to service then the structure cannot be considered Substantially Complete.
 - 4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.05 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 Final Payment

A. Application for Payment:

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.11), and other documents, Contractor may make application for final payment.
2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
 - d. a list of all disputes that Contractor believes are unsettled; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
 - f. A complete Submittal of Application for Final Payment fulfills all requirements and terminates the Liquidated Damages that ~~May~~ be assessed against Ready for Final Payment ~~Date~~.

B. Engineer's Review of Application and Acceptance:

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the Application for Payment to Owner for payment. Such recommendation shall account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. At the same time Engineer will also give notice to Owner and Contractor that the Work is acceptable, subject to the provisions of Paragraph 15.07. Otherwise, Engineer will return the Application for Payment to Contractor, indicating the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.

D. Contractor is responsible for security, safety, etc. on the site until all his equipment is removed and all keys are returned.

E. *Payment Becomes Due:* Thirty days after the presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer (less any further sum Owner is entitled to set off against Engineer's recommendation, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions above with respect to progress payments) will become due and shall be paid by Owner to

Contractor. (Payment schedule is subject to all payment schedules set at Preconstruction meeting.)

15.07 *Waiver of Claims*

- A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work and latent defects appearing after final inspection pursuant to Paragraph 15.05, from Contractor's failure to comply with the Contract Documents or the terms of any special guarantees specified therein, from outstanding Claims by Owner, or from Contractor's continuing obligations under the Contract Documents.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted or appealed under the provisions of Article 17.
- ~~C. Because of the nature of the coating industry, Owner retains all legal remedies, as well as any negotiated or contracted warranties.~~

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents, or by any specific provision of the Contract Documents), any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such other adjacent areas;
 - 2. correct such defective Work;
 - 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others).
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

- E. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION

16.01 Owner May Suspend Work

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension. Any Change Proposal seeking such adjustments shall be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 Owner May Terminate for Cause

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
 - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule);
 - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 - 4. Contractor's repeated disregard of the authority of Owner or Engineer.
 - 5. **When, in the opinion of the Engineer, the non-conformance reports and daily reports indicate the Contractor is unable or unwilling to complete the contract within the terms of the contract.**
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) ten days written notice that Owner is considering a declaration that Contractor is in default and termination of the contract, Owner may proceed to:
 - 1. declare Contractor to be in default, and give Contractor (and any surety) notice that the Contract is terminated; and
 - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within seven days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid

to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.

- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.
- H. Because of health, safety, and security concerns, this contract requires prequalification of Contractors. Termination procedures in this General Conditions are part of this contract ~~and supersedes any requirements of bonding companies. The Owner has no direct contractual relationship with the bonding company. The bond is a contract with the Contractor guaranteeing its performance or payment.~~ The bonding surety when taking over this ~~contract~~Contract is required to complete work with another prequalified Contractor.

16.03 *Owner May Terminate For Convenience*

- A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until

payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17 – FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this Article:
1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full; and
 2. Disputes between Owner and Contractor concerning the Work or obligations under the Contract Documents, and arising after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this Article, Owner or Contractor may:
1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions; or
 2. agree with the other party to submit the dispute to another dispute resolution process; or
 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

~~C. All questions or controversies which may arise between the Contractor and the Owner, under or in reference to this contract, should be resolved to the fullest extent possible at a meeting, shall be carefully documented, and shall become final and binding on all parties concerned. However, should the Owner and Contractor be unable to agree, the interpretation of the Engineer shall be considered binding as per contract requirements. If the matter in controversy cannot be resolved at the project meeting or after the interpretation of the Engineer, then the matter shall be resolved in a Local Court of competent jurisdiction.~~

ARTICLE 18 – MISCELLANEOUS

18.01 *Giving Notice*

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
1. delivered in person, by a commercial courier service or otherwise, to the individual or to a member of the firm or to an officer of the corporation for which it is intended; or
 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the sender of the notice.
 3. e-mail notices are sufficient means of notice once it is determined the line of communication is open (i.e. responses to earlier letters). Formal failure to perform or termination or bond notice letters require notice by Paragraphs 1 or 2 after e-mail. Date of Notice is date of e-mail transmittal-verified by receipt of delivery.

18.02 *Computation of Times*

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a

Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

18.07 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

SECTION 00 73 00

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SECTION 00 73 00

SUPPLEMENTAL CONDITIONS

PROJECT SPECIFICATIONS

ARTICLE 1: SUPPLEMENTAL CONDITIONS

SC 1.00 Supplemental Conditions:

These Supplemental Conditions amend or supplement the Standard General Conditions of the Construction Contract (EJCDC C-700, 2013 Edition) and other provisions of the Contract Documents as indicated below. All provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.

The terms used in these Supplemental Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplemental Conditions have the meaning stated below, which are applicable to both the singular and plural.

SC 1.01 Definitions:

A.15 Contractor: Successful bidder awarded project.

A.19 Engineer: Dixon Engineering, Inc.

A.29 Owner: Water Service Corporation of Kentucky.

A.37 Resident Project Representative: Dixon Engineering, Inc.

A.57 Tank Terminology: See Section 09 97 13

ARTICLE 6: BONDS and INSURANCE

The Contractor shall provide proof of insurance with the limit of liability of “statutory” Workers’ Compensation. The owner and Engineer shall be named as additional insured on the certificate(s) of insurance. Limits of liability shall be: General Liability \$1,000,000; Automobile Liability \$1,000,000; Excess/Umbrella Liability \$1,000,000.

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SECTION 01 50 00

TEMPORARY CONSTRUCTION FACILITIES and UTILITIES

PART 1 – GENERAL

1.01 SUMMARY

- A. The Contractor is fully responsible to provide and maintain temporary facilities and utilities required for construction as described herein, and to remove the same upon completion of work.

1.02 QUALITY ASSURANCE

- A. Regulatory Requirements:
 - 1. National Fire Protection Association (NFPA): NFPA No. 70-93.
 - 2. National Electrical Code (NEC) and local amendments thereto.
 - 3. Comply with any and all federal, state, and local codes and regulations, and utility company requirements.

PART 2 – PRODUCTS

2.01 TEMPORARY ELECTRICITY and LIGHTING

- A. Supply temporary lighting sufficient to enable contractor to safely access all work areas.
- B. Electrical requirements shall be the responsibility of the contractor. No service available to contractor.
- C. Provide, maintain, and remove temporary electric service facilities.
- D. Facilities exposed to weather shall be weatherproof-type and electrical equipment enclosure locked to prevent access by unauthorized personnel.
- E. Contractor is to pay for and arrange for the installation of temporary services.
- F. Patch affected surfaces and structures after temporary services have been removed.
- G. Provide explosion-proof lamps, wiring, switches, sockets, and similar equipment required for temporary lighting and small power tools.

2.02 WATER for CONSTRUCTION

- A. Owner will provide water required for cleaning and other purposes.
- B. Water use shall not exceed usage that might endanger the owner's water system's integrity.

2.03 SANITARY FACILITIES

- A. Provide temporary sanitary toilet facilities conforming to state and local health and sanitation regulations, in sufficient number for use by contractor's employees.

- B. Maintain in sanitary condition and properly supply with toilet paper.
- C. Remove from site before final acceptance of work.

2.04 TEMPORARY FIRE PROTECTION

- A. Provide and maintain in working order a minimum of two (2) fire extinguishers and such other fire protective equipment and devices as would be reasonably effective in extinguishing fires.

2.05 DAMAGE to EXISTING PROPERTY

- A. Contractor is responsible for replacing or repairing damage to existing buildings, sidewalks, roads, parking lot surfacing, and other existing assets.
- B. Owner has the option of contracting for such work and having cost deducted from contract amount if the contractor is not qualified to complete repairs or fails to act in a timely manner.

2.06 SECURITY

- A. Security is not provided by owner.
- B. Contractor shall be responsible for loss or injury to persons or property where work is involved and shall provide security and take precautionary measures to protect contractor's and owner's interests.

2.07 TEMPORARY PARKING

- A. Parking for equipment and Contractor employees shall be designated and approved by owner.
- B. Make arrangements for parking area for employees' vehicles.
- C. Any costs involved in obtaining parking area shall be borne by the contractor.

PART 3 – EXECUTION

3.01 GENERAL

- A. Contractor shall maintain and operate all temporary systems to ensure continuous service.
- B. Contractor shall modify and extend systems as work progress requires.

3.02 REMOVAL

- A. Completely remove temporary material and equipment when no longer required.
- B. Clean and repair damage caused by temporary installation or use of temporary facilities.
- C. Restore existing or permanent facilities used for temporary services to specified, or original condition.

3.03 BARRIERS and ENCLOSURES

- A. The contractor shall furnish, install, and maintain as long as necessary, adequate barriers, warning signs or lights at all dangerous points throughout the work for protection of property, workers, and the public. The contractor shall hold the owner harmless from damage or claims arising out of any injury or damage that may be sustained by any person or persons as a result of the work under the contract.

SECTION 01 53 43
PROTECTION of ENVIRONMENT

PART 1 - GENERAL

1.01 SUMMARY

- A. Contractor in executing work shall maintain work areas, on-and-off site, free from environmental pollution that would be in violation of federal, state, or local regulations.
- B. The Contractor is responsible for any and all clean-up that may be necessary and all applicable costs for the same.

1.02 LAWS and REGULATIONS –

- A. Environmental regulations may be met with different available technologies. It is the Contractor's sole responsibility to comply with these and all applicable environmental regulations.
- B. If a contamination occurs work will stop until cleanup is complete.

1.03 PROTECTION of SEWERS

- A. Take adequate measures to prevent impairment of operation of existing sewer system. Prevent construction material, pavement, concrete, earth, or other debris from entering sewer or sewer structure.

1.04 PROTECTION of WATERWAYS

- A. Observe rules and regulations of local and state agencies, and agencies of U.S. government prohibiting pollution of any lake, stream, river, or wetland by dumping of refuse, rubbish, dredge material, or debris therein.
- B. Provide containment that will divert flows, including storm flows and flows created by construction activity, to prevent loss of residues and excessive silting of waterways or flooding damage to property.
- C. Comply with procedures outlined in U.S. EPA manuals entitled "Guidelines for Erosion and Sedimentation Control Planning and Implementation," Manual EPA-72-015 and "Processes, Procedures, and Methods to Control Pollution Resulting from all Construction Activity," Manual EPA 43019-73-007.

1.05 DISPOSAL of EXCESS EXCAVATED and OTHER WASTE MATERIALS

- A. Dispose waste material in accordance with federal and state codes, and local zoning ordinances.

- B. Unacceptable disposal sites include, but are not limited to, sites within wetland or critical habitat, and sites where disposal will have detrimental effect on surface water or groundwater quality.
- C. Make arrangements for disposal subject to submission of proof to engineer that owner(s) of proposed site(s) has valid fill permit issued by appropriate government agency and submission of haul route plan, including map of proposed route(s).
- D. Provide watertight conveyance for liquid, semi-liquid, or saturated solids that have potential to leak during transport. Liquid loss from transported materials is not permitted, whether being delivered to construction site or hauled away for disposal. Fluid materials hauled for disposal must be specifically acceptable at selected disposal site.
- E. Waste generated by abrasive blast cleaning is detailed in Section 09 97 13.

1.06 PROTECTION of AIR QUALITY

- A. Contain paint aerosols and VOCs by acceptable work practices.
- B. Minimize air pollution by requiring use of properly operating combustion emission control devices on construction vehicles and equipment used by contractor, and encouraging shutdown of motorized equipment not actually in use.
- C. Trash burning not permitted on construction site.
- D. If temporary heating devices are necessary for protection of work, they shall not cause air pollution.

1.07 PROTECTION from FUEL and SOLVENTS

- A. Protect the ground from spills of fuel, oils, petroleum distillates, or solvents by use of containment system.
- B. Total paint, thinner, oils, and fuel delivered to and stored on-site cannot exceed supplied capacity of spill containment provided (i.e. fuel and oil to be sized to exceed possible spill).
- C. Provide proper containment unit under fuel tank and oil reservoirs for all equipment and fuel storage tanks.
- D. Barrels of solvents, even for cleaning, are prohibited. Do not deliver paint thinners in containers greater than five (5) gallons.
- E. Disposal of waste fluids shall be in conformance with federal, state, and local laws and regulations.

1.08 USE of CHEMICALS

- A. Chemicals used during project construction or furnished for project operation, whether herbicide, pesticide, disinfectant, polymer, reactant, or of other classification, must show approval of U.S. EPA, U.S. Department of Agriculture, state, or other applicable regulatory agency.

- B. Use of such chemicals and disposal of residues shall be in conformance with manufacturer's written instructions and applicable regulatory requirements.

1.09 NOISE CONTROL

- A. Conduct operations to cause least annoyance to residents in vicinity of work, and comply with applicable local ordinances.
- B. Equip compressors, hoists, and other apparatus with mechanical devices necessary to minimize noise and dust. Equip compressors with silencers on intake lines.
- C. Equip gasoline or oil-operated equipment with silencers or mufflers on intake and exhaust lines.
- D. Route vehicles carrying materials over such streets as will cause least annoyance to public and do not operate on public streets between hours of 6:00 P.M. and 7:00 A.M., or on Saturdays, Sundays, or legal holidays unless approved by owner.

PART 2 - PRODUCTS

(Not Applicable)

PART 3 - EXECUTION

3.01 HAZARDOUS MATERIALS PROJECT PROCEDURES

- A. Applicable Regulations:
 - 1. RCRA, 1976 – Resource Conservation and Recovery Act: This federal statute regulates generation, transportation, treatment, storage and disposal of hazardous wastes nationally.
- B. Use the Uniform Hazardous Waste Manifest (shipping paper) to use an off-site hazardous waste disposal facility.
- C. Federal, State and local laws and regulations may apply to the storage, handling and disposal of hazardous materials and waste.

SECTION 03 01 00
FOUNDATION REPAIRS

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Repair of concrete foundation.
- B. Repair of grout.

1.02 REFERENCES

- A. Codes, specifications, and standards referred to by number or title shall form a part of this specification to the extent required by the references thereto. Latest revisions shall apply in all cases.
 - 1. “Building Code Requirements for Structural Concrete (ACI 318) and Commentary (ACI 318R),” American Concrete Institute.

1.03 PRODUCT DELIVERY, STORAGE and HANDLING

- A. The contractor shall be responsible for the delivery, storage, and handling of products.
- B. Deliver in accordance with ASTM C94.
- C. Promptly remove damaged or unsuitable products from the job site. Replace products with undamaged, suitable products.

1.04 WORK INCLUDED

Tank #2:

- A. Repair foundation spall.
- B. Application of grout.

1.05 UNIT PRICES

- A. Work of this Section is per unit prices specified in Section 00 43 73 Schedule of Values.
 - 1. Unit prices apply to authorized work covered by estimated quantities.
 - 2. Unit prices apply to authorized additions to and deletions from the Work as authorized by Change Orders.

1.06 ENVIRONMENTAL REQUIREMENTS

- A. Apply all repair material within manufacturer’s guidelines.

1.07 COORDINATION and SCHEDULING

- A. Contractor shall notify engineer a minimum of twenty-four hours before placing concrete or grout repair material.
- B. Do not place any repair material until surface preparation has been reviewed and approved by engineer.

1.08 SUBMITTALS

- A. Submit the following ten (10) days prior to the preconstruction meeting:
 - 1. Safety Data Sheets (SDS) and Product Data Sheets:
 - a. Furnish from all suppliers Safety Data Sheets and product data sheets for all applicable materials including, but not limited to, concrete, grouts admixtures, sealers.
 - b. Provide for employees one (1) copy of all data sheets at the job site for employee access.
 - c. Provide one (1) hard copy and an electronic copy to the engineer.
 - d. No work may commence without the complete filing. All SDS shall conform to requirements of SARA (EPCRA) Right-to-Know Act.

PART 2 – PRODUCTS

2.01 GROUT REPAIR

- A. The standard to fill holes is a grout Sika 212 Grout as manufactured by Sika Corporation.
- B. Where backer rod is required, use ITP standard closed cell polyethylene foam manufactured by Industrial Thero Polymers, Ltd., 2316 Delaware Ave., Suite 216, Buffalo, NY 14216, 1-800-387-3847.

2.02 PATCHING MORTAR – SPALL REPAIR

- A. Patching Mortar Requirements:
 - 1. Only use patching mortars that are recommended by manufacturer for each applicable horizontal, vertical, or overhead use orientation.
 - 2. Coarse Aggregate for Patching Mortar: ASTM C 33/C 33M, washed aggregate, Size No. 8, Class 5S. Add to patching-mortar mix only as permitted by patching-mortar manufacturer.
- B. Cementitious Patching Mortar: Packaged, dry mix for repair of concrete.
 - 1. Approved material is Sika Repair SHB as manufactured by Sika Corp. or approved equal.

PART 3 – EXECUTION

3.01 CONCRETE REPAIR – SPALL

- A. Remove all deteriorated concrete, dirt, oil and grease from the concrete.
- B. Remove all loose concrete by saw cutting around the perimeter of the repair area a minimum of ½ inch deep. Remove the remaining concrete out to the saw cut using hand tools.
- C. Abrasive blast clean the concrete surface to create a profile and abrasive blast clean any exposed rebar to a SSPC-SP6 commercial standard.
- D. Mix product in accordance with manufacturer’s recommendations.
- E. Apply a scrub coat or bonding agent to the surface as required by the manufacturer. Blasted rebar to receive prime coat of bonding agent.
- F. Fill all pores and voids. Force the material against the edge of the repair working toward the center. Finish to match the existing concrete.
- G. The repair area is to be cured per manufacturers recommendations.
- H. Payment is a separate line item “Spall Repair” based on the quantity of 1 cubic foot which the owner reserves the right to increase, decrease or delete.

3.02 GROUT REPAIR

- A. Remove all loose, soft, or mottled grout from the between the baseplate(s) and tops of the foundations. Removal of grout shall be hand, hammer, or chisel.
- B. Pressure wash the grout using a minimum nozzle tip pressure of 2,000 psi. All surfaces shall be free of all standing water or frost in accordance with the manufacturer’s recommendations. Surface to be Saturated Surface Dry (SSD)
- C. Properly and thoroughly mix the grout in accordance with the manufacturer’s recommendations as a dry mix.
- D. Place and tamp the grouting material between the baseplate and the foundation to ensure there are no voids. Make vertically flush with the baseplate.
- E. Payment is a separate line item “Grout Repair” based on the quantity of 80 lineal feet which the owner reserves the right to increase, decrease or delete.

SECTION 03 30 53
MISCELLANEOUS CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Surface preparation and installation of a catch basin for the overflow pipe.

1.02 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions apply to this Section.

1.03 REFERENCES

- B. Codes, specifications, and standards referred to by number or title shall form a part of this specification to the extent required by the references thereto. Latest revisions shall apply in all cases.
 - 2. “Building Code Requirements for Structural Concrete (ACI 318) and Commentary (ACI 318R),” American Concrete Institute.

1.04 WORK INCLUDED

Tank #1 and Tank #2:

- A. Install a concrete catch basin at the overflow pipe discharge.
- B. Payment is a separate line item “Catch Basin” which the owner reserves the right to delete.

1.05 SUBMITTALS

- B. Submit the following ten (10) days prior to the preconstruction meeting:
 - 2. Safety Data Sheets (SDS) and Product Data Sheets:
 - e. Furnish from all suppliers Safety Data Sheets and product data sheets for all applicable materials including, but not limited to, concrete, grouts admixtures, sealers.
 - f. Provide for employees one (1) copy of all data sheets at the job site for employee access.
 - g. Provide one (1) hard copy and an electronic copy to the engineer.
 - h. No work may commence without the complete filing. All SDS shall conform to requirements of SARA (EPCRA) Right-to-Know Act.
 - 3. Design Mixtures: For each concrete mixture.
 - 4. Concrete-Maintenance Specialist: Three similar projects including the scope and references.

1.06 QUALITY ASSURANCE

- A. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94 requirements for production facilities and equipment.
- B. Comply with the following sections of ACI 301, unless modified by requirements in the Contract Documents:
 - 1. "General Requirements."
 - 2. "Formwork and Formwork Accessories."
 - 3. "Reinforcement and Reinforcement Supports."
 - 4. "Concrete Mixtures."
 - 5. "Handling, Placing, and Constructing."
- C. Comply with ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."
- D. Concrete-Maintenance Specialist Qualifications: Installers and supervisors who are trained and approved by manufacturer to apply materials necessary to perform work of this Section. Installers shall have completed work similar in material, design, and extent to that indicated for this Project with a record of successful in-service performance. Experience in only installing or patching new concrete is insufficient experience for concrete-maintenance work.
 - 1. Field Supervision: Concrete-maintenance specialist firm shall maintain experienced full-time supervisors on Project site during times that concrete-maintenance work is in progress.

PART 2 - PRODUCTS

2.01 FORMWORK

- A. Furnish formwork and formwork accessories according to ACI 301.

2.02 STEEL REINFORCEMENT

- A. Reinforcing Bars: ASTM A 615, Grade 60, deformed.

2.03 CONCRETE MATERIALS

- A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source throughout Project:
 - 1. Portland Cement: ASTM C 150, Type I/II
 - a. Fly Ash: ASTM C 618, Class C or F.
- B. Normal-Weight Aggregate: ASTM C 33, crushed limestone, graded, 1 ½ inch nominal maximum aggregate size.
- C. Water: ASTM C 94.
- D. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and that will not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.
 - 1. Water-Reducing Admixture: ASTM C 494, Type A.
 - 2. Retarding Admixture: ASTM C 494, Type B.

3. Water-Reducing and Retarding Admixture: ASTM C 494, Type D.
4. High-Range, Water-Reducing Admixture: ASTM C 494, Type F.
5. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494, Type G.
6. Plasticizing and Retarding Admixture: ASTM C 1017, Type II.

2.04 CURING MATERIALS

- A. Absorptive Cover: AASHTO M 182, Class 3, burlap cloth or cotton mats.
- B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- C. Water: Potable.

2.05 CONCRETE MIXTURES

- A. Comply with ACI 301 requirements for concrete mixtures.
- B. Normal-Weight Concrete: Prepare design mixes, proportioned according to ACI 301, as follows:
 1. Minimum Compressive Strength: 4000 psi at 28 days.
 2. Maximum Water-Cementitious Materials Ratio: 0.50.
 3. Cementitious Materials: Use fly ash, pozzolan, ground granulated blast-furnace slag, and silica fume as needed to reduce the total amount of portland cement, which would otherwise be used, by not less than 40 percent.
 4. Air Content: Maintain within range permitted by ACI 301. Do not allow air content of trowel-finished floor slabs to exceed 3 percent.

2.06 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94, and furnish batch ticket information.
 1. When air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.

EXECUTION

3.01 GROUND PREPARATION AND DESIGN – CATCH BASIN

- A. Remove the topsoil for an area a minimum of 3 ft. wide x 4 ft. long with the width centered on the overflow pipe. Remove to a depth of 42 in. below grade.
- B. Backfill 6 in. of clean gravel.
- C. Construct a 3 ft. x 4 ft. x 4 in. thick concrete catch basin pad with the width centered under the overflow. Install reinforcement in the new concrete.
- D. Trim the existing drain line flush with the bottom of the tank. Contractor can excavate and reroute the pipe as needed with approval from the engineer/owner.
- E. Slope the floor at a ¼ inch drop for every 12 inch run towards the drain pipe.
- F. Install a grate over the top of the catch basin.
- G. Field verify size needed to accommodate the drain line, the orientation may need to differ from the drawing.
- H. See Drawing 01.

3.02 FORMWORK

A. Design, construct, erect, brace, and maintain formwork according to ACI 301.

3.03 STEEL REINFORCEMENT

A. Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.

3.04 CONCRETE PLACEMENT

A. Comply with ACI 301 for placing concrete.

B. Before test sampling and placing concrete, water may be added at Project site, subject to limitations of ACI 301.

C. Do not add water to concrete during delivery, at Project site, or during placement.

D. Consolidate concrete with mechanical vibrating equipment as needed.

3.05 FINISHING FORMED SURFACES

A. Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defective areas. Remove fins and other projections exceeding 1/8 inch.

1. Apply to all concrete surfaces.

3.06 CONCRETE PROTECTING AND CURING

A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and with ACI 301 for hot-weather protection during curing.

B. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.

C. Curing Methods: Cure formed and unformed concrete for at least seven days by one or a combination of the following methods:

1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:

a. Water.

b. Continuous water-fog spray.

c. Absorptive cover, water saturated and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.

2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive.

Cure for not less than seven days. Immediately repair any holes or tears during curing period using cover material and waterproof tape.

3.07 REPAIRS

A. Remove and replace concrete that does not comply with requirements in this Section.

SECTION 05 00 00 **METAL REPAIRS**

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Steel Repair.

1.02 REFERENCES

- A. AWWA D100 Weld Standard
- B. AWS Weld Standard
- C. API 650 Standard

1.03 OMISSIONS

- A. The specifications include all work and materials necessary for completion of the work. Any incidental item(s) of material, labor, or detail(s) required for the proper execution and completion of the work are included.

1.04 DEFINITIONS

- A. Ground Flush: Ground even with adjacent metal, no transition.
- B. Ground Smooth: Ground welds to the point that no cuts or scratches occur when rubbing your hand over the weld. Rebuild with weld any concavity discovered during grinding.

1.05 WORK INCLUDED

Tank #1:

- A. Replace manway gaskets.
- B. Install swing gate at the step-off platform.
- C. Install cathodic clips and coupling.
- D. Install roof couplings with rigging clips.
- E. Roof stiffener replacement.
- F. Install overflow flap gate.

Tank #2:

- A. Replace manway gasket.
- B. Install swing gate at the roof handrail.
- C. Install cathodic clips and coupling.
- D. Install roof couplings with rigging clips.
- E. Roof stiffener replacement.
- F. Install overflow flap gate.

- G. Install sidewall manway.
- H. Install roof handrail.

1.06 WORKMANSHIP

- A. Provide material and workmanship necessary to produce a first class job.
- B. All weld spatter is to be removed.
- C. All removed items are to be ground flush with surrounding surface. All new welds are to be ground smooth.

1.07 WELDER QUALIFICATIONS

- A. Certified for type and position of weld specified.
- B. The welder shall be specialized in industrial or heavy commercial welding, and experienced in rigging and elevated work.

1.08 SUBMITTALS

- A. Safety Data Sheets (SDS) – for all items as required by law.
- B. Welder’s certification.
- C. Submit materials at least one (1) week prior to preconstruction meeting.

1.09 WORK SEQUENCING

- A. The following is NOT a ways-and-means decision of the contractor. It is accepted and good painting practice and shall be completed by the contractor in this specified fashion:
 - 1. Complete ahead of all cutting and welding all surface preparation, such as removal of heavy metal bearing coating in the immediate area.
 - 2. Complete all welding repairs prior to commencement of any power washing or abrasive blast cleaning.
 - 3. Remove existing items that are not to be painted after water cleaning (i.e. roof vent), store in a secure location.
 - 4. Remove fall prevention devices in areas to be coated before painting, and reinstall after completion. Supply temporary fall prevention devices with steel cables during blasting and painting.

PART 2 – PRODUCTS

2.01 STEEL PLATING and OTHER STRUCTURAL SHAPES

- A. General: ASTM – A36.
- B. Rebar for ladder rungs: A706 Weldable Rebar.

2.02 BOLTS and NUTS

A. Stainless Steel

1. ASTM F594G – 316 Stainless Steel Bolts.
2. ASTM F594G – 316 Stainless Steel Nuts.

B. Galvanized Steel

1. ASTM A307 Grade A zinc coated Steel Bolts.
2. ASTM A307 Grade A zinc coated Nuts.

2.03 WELDS

A. Final – E70XX Electrodes.

B. Root – E60XX Electrodes.

C. Wire – ER70S Electrodes.

2.04 OVERFLOW SCREEN

A. Stainless steel wire mesh manufactured by McNichols Co. (800) 237-3820.

B. For overflow flapgate use twenty four (24) mesh 0.014-in. diameter or larger.

2.05 CATHODIC CLIPS and COUPLING

A. Corrpro clips and coupling for interior, buoyant-type cathodic protection system 1-866-CORRPRO.

2.06 SWING GATE

A. Universal Swing Gate as manufactured by SafeRack of Sumter, SC 866-761-7225.

PART 3 - EXECUTION

3.01 COATING REPAIRS – EXTERIOR

A. This repair is needed only if Exterior Alternate 1 or Exterior Alternate 2 is not awarded.

B. Complete all welding and cutting prior to any surface preparation for painting to avoid contamination of surfaces.

C. Remove any residue and weld smoke by solvent cleaning.

D. Power tool clean to a SSPC-SP11 finish all areas damaged by welding.

E. Use 3M Scotch-Brite Clean'n Strip Discs.

F. Feather edges of adjacent coating a minimum of ½ in. from exposed steel.

G. Apply repair system at 2.0 to 3.0 mils as follows:

<u>Manufacturer</u>	<u>System</u>
Tnemec	N69 (spot)/N69/1074/1074UV.
Induron	PE-70 (spot)/PE-70/I-6600/I-6600
PPG	Amerlock 2(spot)/Amerlock 2/Pitthane Ultra/Pitthane Ultra
Sherwin Williams	646PW(spot)/646PW/Acrolon Ultra/Acrolon Ultra

H. Contractor to follow the relevant items from Sections 09 97 13 and 09 97 13.10.

I. Cost is incidental to weld repairs.

3.02 MANWAY GASKETS – BOTH TANKS

- A. Replace the sidewall manway gaskets with new $\frac{3}{8}$ in. flat neoprene gasket material. There are two gaskets to replace on Tank #1 and one on Tank #2.
- B. Gaskets to meet ASTM D2000-86E, Type BC with a 70A durometer rating and black color.
- C. Cost is incidental to wet interior painting.

3.03 SWING GATE – BOTH TANKS

- A. Furnish and install a swing gate at the roof.
- B. The device is to be installed at the step-off platform opening on Tank #1, the device is to be installed at the existing roof handrail opening on Tank #2.
- C. Install gate per manufacturers recommendations.
- D. Install a 2 x $\frac{1}{4}$ inch tab as a catch for the swing gate as needed. Field determine length needed and weld with a $\frac{3}{16}$ inch full fillet. Round off the corners.
- E. Contactor is responsible for any installation of additional structure and welding needed for mounting. Any cutting will require approval from the engineer.
- F. Payment is a separate line item “Swing Gate” which the owner reserves the right to delete.

3.04 CATHODIC CLIPS and COUPLING – BOTH TANKS

- A. Weld clips and pressure fitting for a cathodic protection system (future installation by others).
- B. Supply recommended quantity of clips and locate as directed by the supplier.
- C. Weld clips with $\frac{1}{4}$ in. fillet welds all around. No area may be left that may be susceptible to crevice corrosion.
- D. Weld a 3,000 psi coupling inside and outside with a $\frac{1}{4}$ in. fillet weld all around, and cap fitting as directed by supplier.
- E. Surface prepare and coat in accordance with Sections 09 97 13 and 09 97 13.10.
- F. Payment is a separate line item “Cathodic Clips and Coupling” which the owner reserves the right to delete.

3.05 ROOF COUPLINGS with RIGGING CLIPS – BOTH TANKS

- A. Install extra heavy couplings with rigging clips spaced approximately every 12 ft. and located approximately 18 ft. (estimated one half tank radius) from the center of the roof. Install 10 clips.
- B. Plug each coupling with a hex head steel plug. All couplings and plugs to be threaded per NPT standard.
- C. The hole cut in the roof is to be caulked. All threaded fittings to be coated with pipe joint compound.
- D. See Drawing 02.
- E. Surface prepare and coat in accordance with Sections 09 97 13 and 09 97 13.10.
- F. Cost is incidental to wet interior painting.

3.06 ROOF STIFFENERS – BOTH TANKS

- A. Remove and replace damaged sections of the roof stiffeners as directed by the engineer after abrasive blast cleaning is completed.
- B. Contractor is to temporarily shore the roof either side of the repair area during replacement.
- C. Bevel the new section ends and cut ends and welded with a bevel groove weld. Weld the roof plate to the new section using 3/16 full fillet weld on both sides.
- D. The stiffeners on Tank #1 are 4 x 3 x 5/16 inch angles and are curved. The contractor is to field verify size.
- E. The stiffeners on Tank #2 are beams, S10x25.4. The contractor is to field verify size.
- F. See Drawing 03.
- G. Payment is a separate unit cost “Roof Stiffener Replacement”, provide unit cost based on 3 feet of replacement with 10 sections to be replaced for a total of 30 lineal feet. The owner reserves the right to decrease this amount or eliminate this item completely.

3.07 OVERFLOW FLAP GATE with SCREEN – TANK #1

- A. Construct and install a new overflow flap gate at the pipe discharge.
- B. Trim the vertical section of the pipe so there is a minimum of 12 inch air gap.
- C. Flap shall allow for closed positioning during non-flow conditions, and open operation during overflow conditions.
- D. Field verify existing overflow pipe dimensions. Lever arm configuration near hinge may vary if prior written approval is granted by the engineer.
- E. Use steel plates as weights attached to the lever arm to assure complete closure at end of cycle, number may need to be more than shown on the drawing to ensure complete closure.
- F. Use PVC or plastic washers and spacers between the hinge bolts and lever arm, use enough washers to ensure a snug fit without damaging the coating during movement.

- G. Weld a flange onto the discharge end of the overflow pipe. Use ¼” steel plate, flange size to match that of the flap gate outside diameter.
- H. Surface prepare and coat in accordance with Sections 09 97 13 and 09 97 13.10.
- I. See Drawing 04.
- J. Payment is a separate line item “Overflow Flap Gate” which the owner reserves the right to delete.

3.08 OVERFLOW FLAP GATE with SCREEN – TANK #2

- A. Construct and install a new overflow flap gate at the pipe discharge.
- B. Trim the horizontal section of the pipe and install a 45 degree elbow with a minimum ¼ inch wall thickness. Bevel the ends and attach with a bevel groove weld.
- C. Flap shall allow for closed positioning during non-flow conditions, and open operation during overflow conditions.
- D. Field verify existing overflow pipe dimensions. Lever arm configuration near hinge may vary if prior written approval is granted by the engineer.
- E. Use steel plates as weights attached to the lever arm to assure complete closure at end of cycle, number may need to be more than shown on the drawing to ensure complete closure.
- F. Use PVC or plastic washers and spacers between the hinge bolts and lever arm, use enough washers to ensure a snug fit without damaging the coating during movement.
- G. Weld a flange onto the discharge end of the overflow pipe. Use ¼” steel plate, flange size to match that of the flap gate outside diameter.
- H. Surface prepare and coat in accordance with Sections 09 97 13 and 09 97 13.10.
- I. See Drawing 05.
- J. Payment is a separate line item “Overflow Flap Gate” which the owner reserves the right to delete.

3.09 SIDEWALL MANWAY – TANK #2

- A. Install a 30 in. diameter manway in the sidewall.
- B. Install new ⅜ in. flat neoprene gasket material. Gaskets to meet ASTM D2000-86E, Type BC with a 70A durometer rating and black color.
- C. Surface prepare and coat in accordance with Sections 09 97 13 and 09 97 13.10.
- D. See Drawing 06a-06c.
- E. Payment is a separate line item “Sidewall Manway” which the owner reserves the right to delete.

3.10 ROOF HANDRAIL – TANK #2

- A. Install a railing from the existing sidewall railing up to and around the roof vent in the center of the roof.

- B. Use 2.5 in. x 2.5 in. x ¼ in. angle iron for the vertical posts, supports, top rail, and mid-rail.
- C. Use 4 in. x ¼ in. steel plate for the kick plate.
- D. Use 6 in. x 6 in. x ¼ in. steel plates for the base-plates.
- E. All welds will be $\frac{3}{16}$ in. fillet welds.
- F. Surface prepare and coat in accordance with Sections 09 97 13 and 09 97 13.10.
- G. See Drawing 07.
- H. Payment is a separate line item “Roof Handrail” which the owner reserves the right to delete.

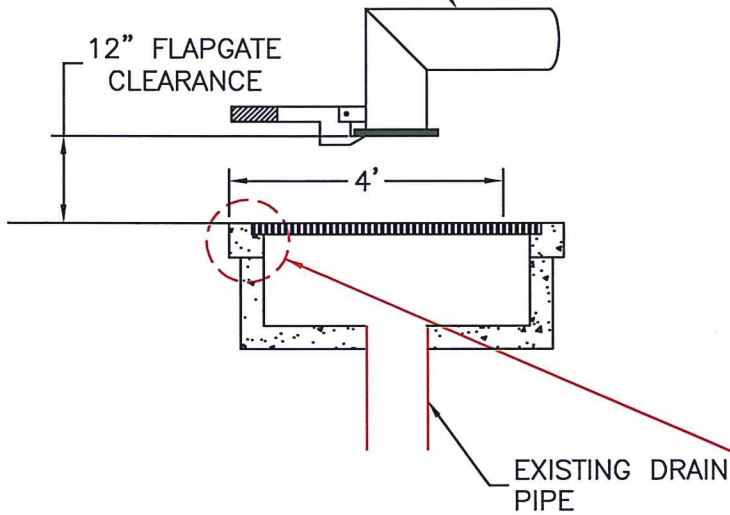
PART 4 – SPECIAL PROVISIONS

4.01 WELD PREPARATION PRIOR to COATING

- A. Prepare all new welds per NACE RPO 0178 prior to coating application. Grind welds to category D.

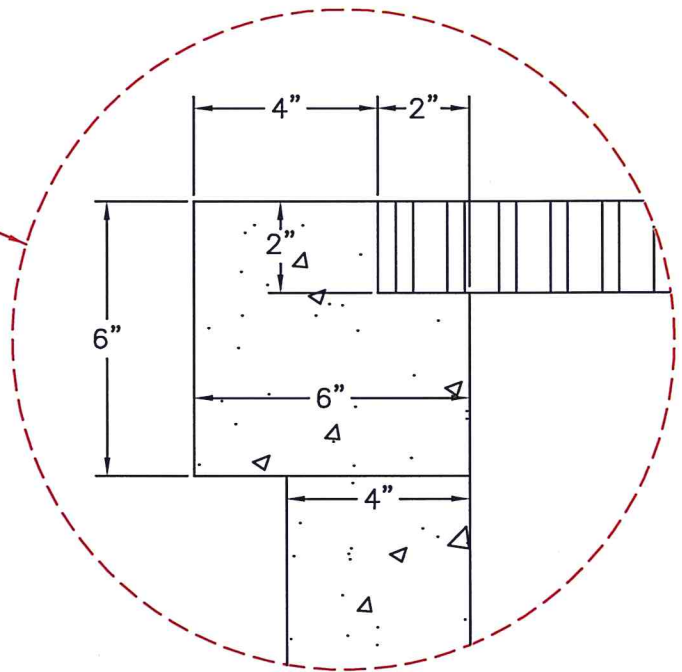
EXISTING OVERFLOW
PIPE, ORIENTATION
FOR TANK#2 WILL
VARY

12" FLAPGATE
CLEARANCE

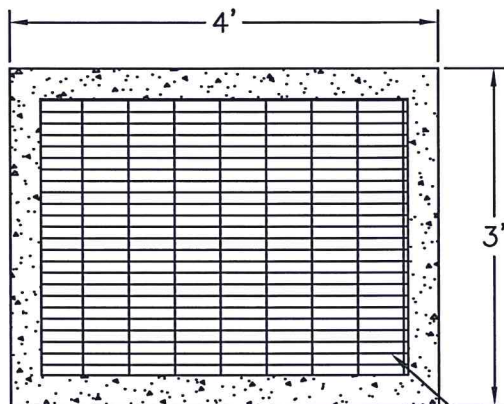


EXISTING DRAIN
PIPE

CATCH BASIN



NOTE:
1. CONTRACTOR IS TO MAINTAIN 12"
CLEARANCE BETWEEN GRATING AND OVERFLOW
FLAPGATE. THE GRATE MAY NEED TO BE LOWER
THAN SHOWN.



VIEW A-A

19-W-4 x 1 1/4"
x 3/16" GALVANIZED
GRATING

Note: Drawing Not to Scale.



Water Service Corp of Kentucky

Both Tanks

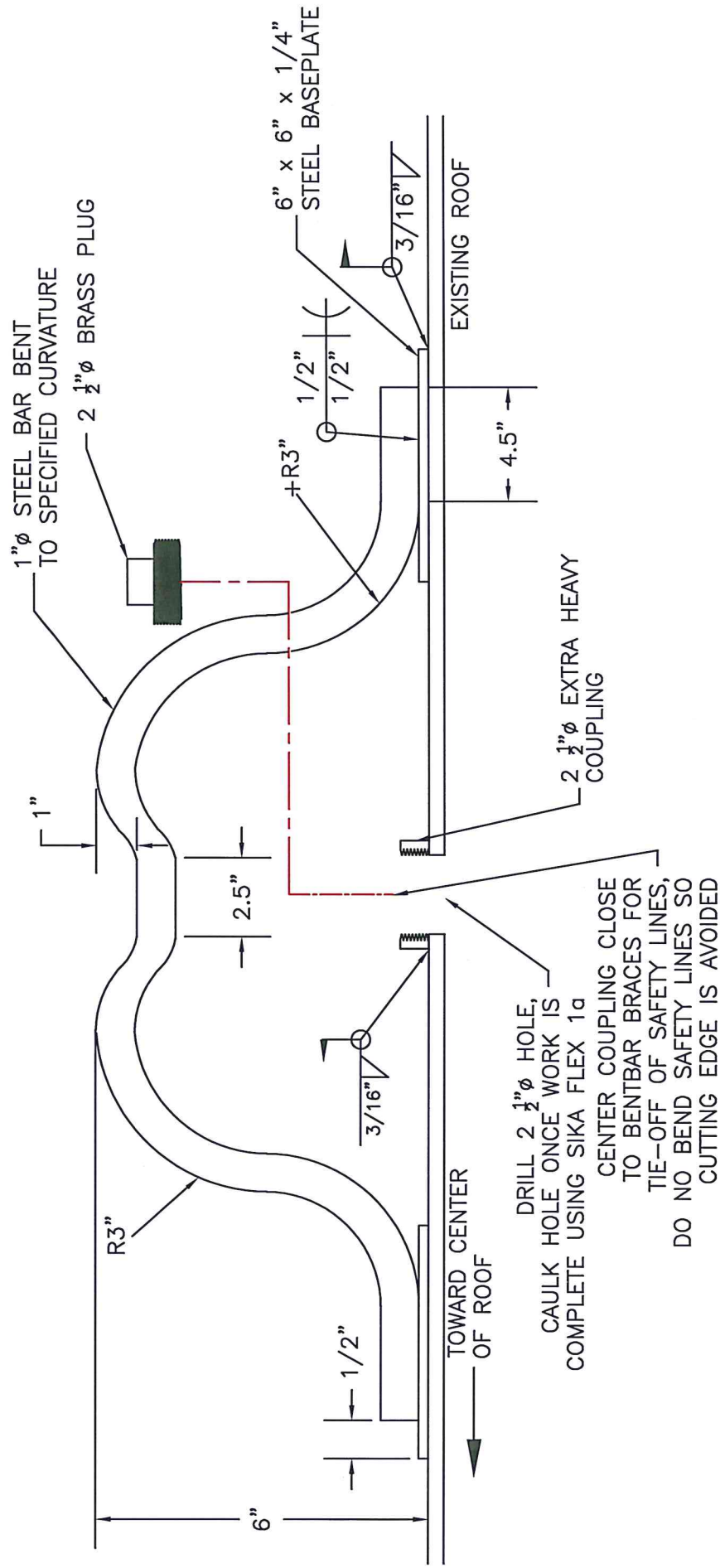
Catch Basin

Drawn By: TMF

Date: 07/25/18

Checked By: WJD

DWG: 01



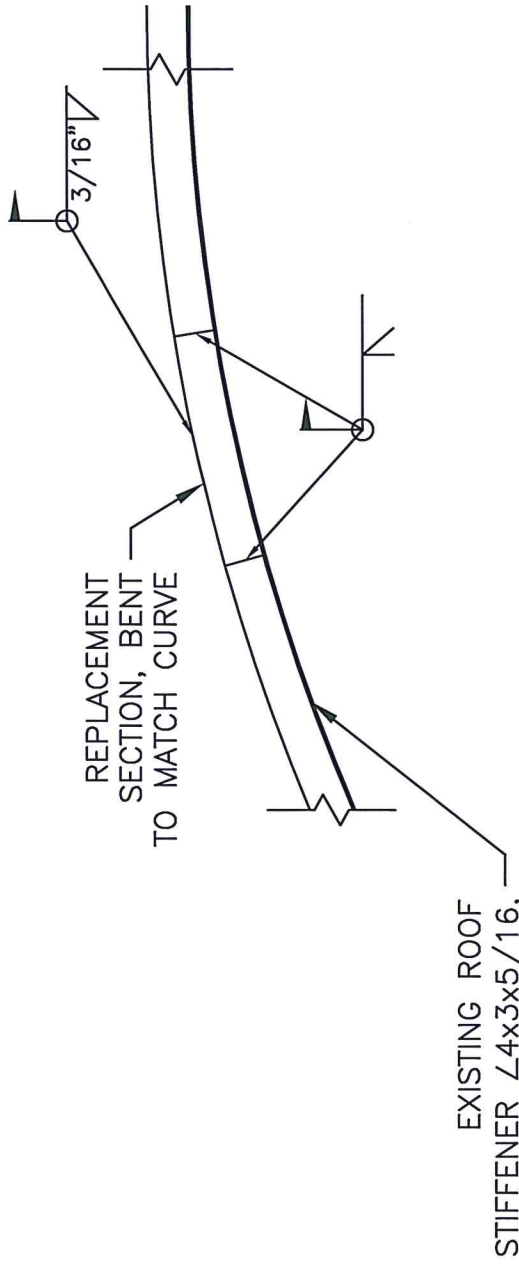
ROOF RIGGING CLIP W/ RIGGING COUPLING

NOTE:

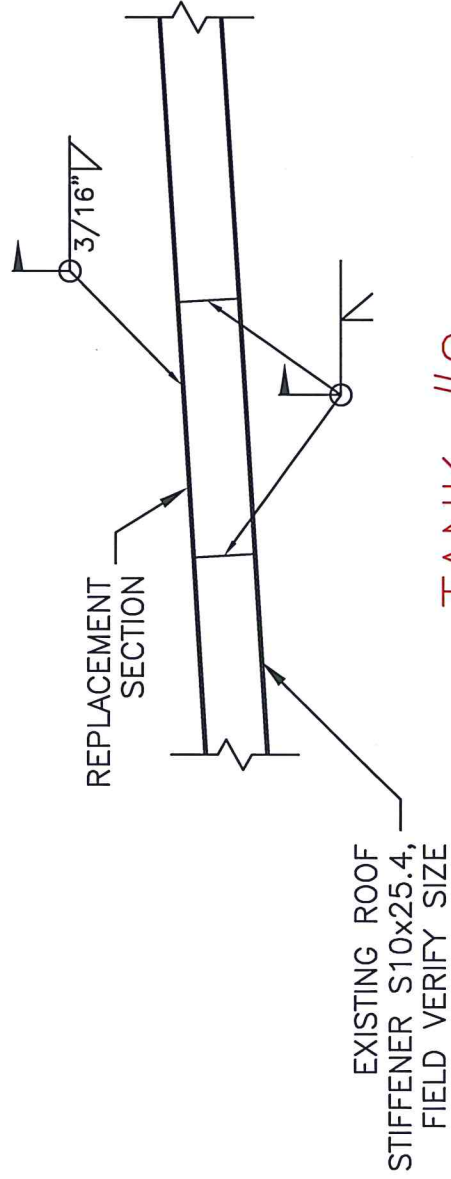
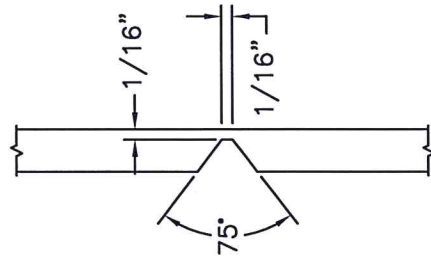
1. THREADED CONNECTIONS ARE TO BE SEALED WITH PIPE JOINT COMPOUND (OATEY GREAT WHITE OR APPROVED EQUAL).
2. CONTRACTOR TO PROVIDE CABLE SAFETY LINE WITH GRAB AT EVERY SAFETY COUPLING FOR INSPECTION OF THE WET INTERIOR.
3. DO NOT RIG EQUIPMENT OTHER THAN SAFETY LINES THROUGH THE COUPLINGS.

Note: Drawing Not to Scale.

DIXON ENGINEERING, INC.	
Water Service Corp of Kentucky	
Both Tanks	
Roof Coupling with Clip	
Drawn By: TMF	Date: 07/25/18
Checked By: WJD	DWG: 02



TANK #1

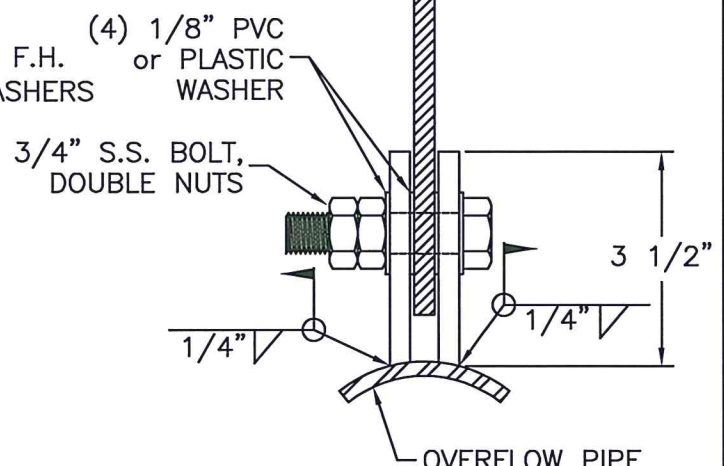
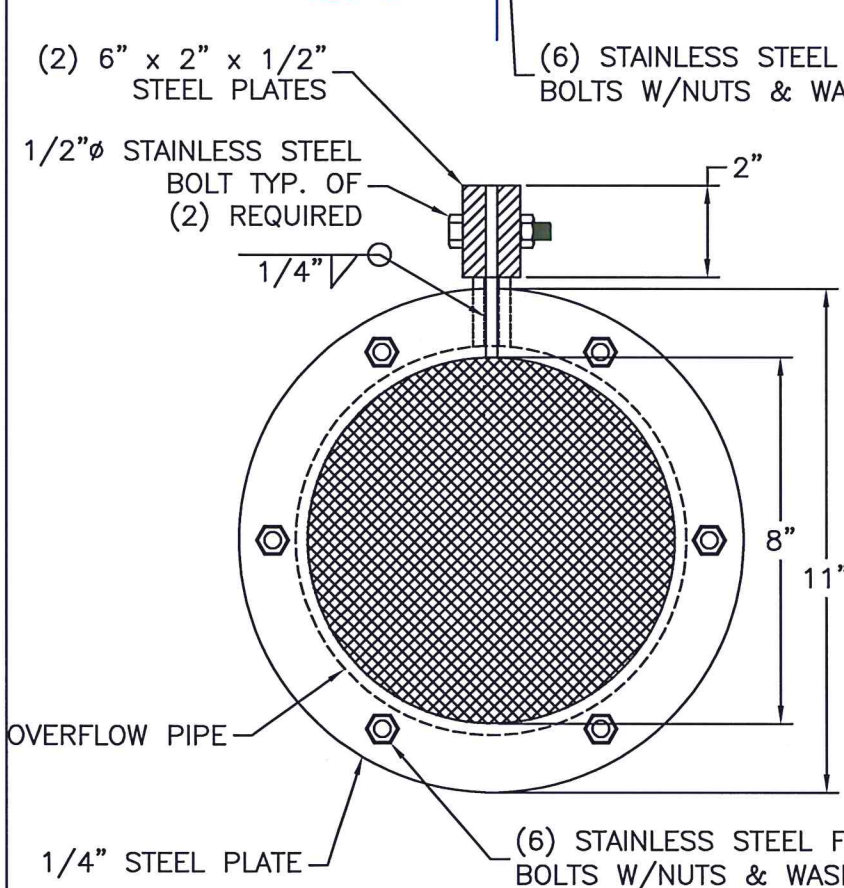
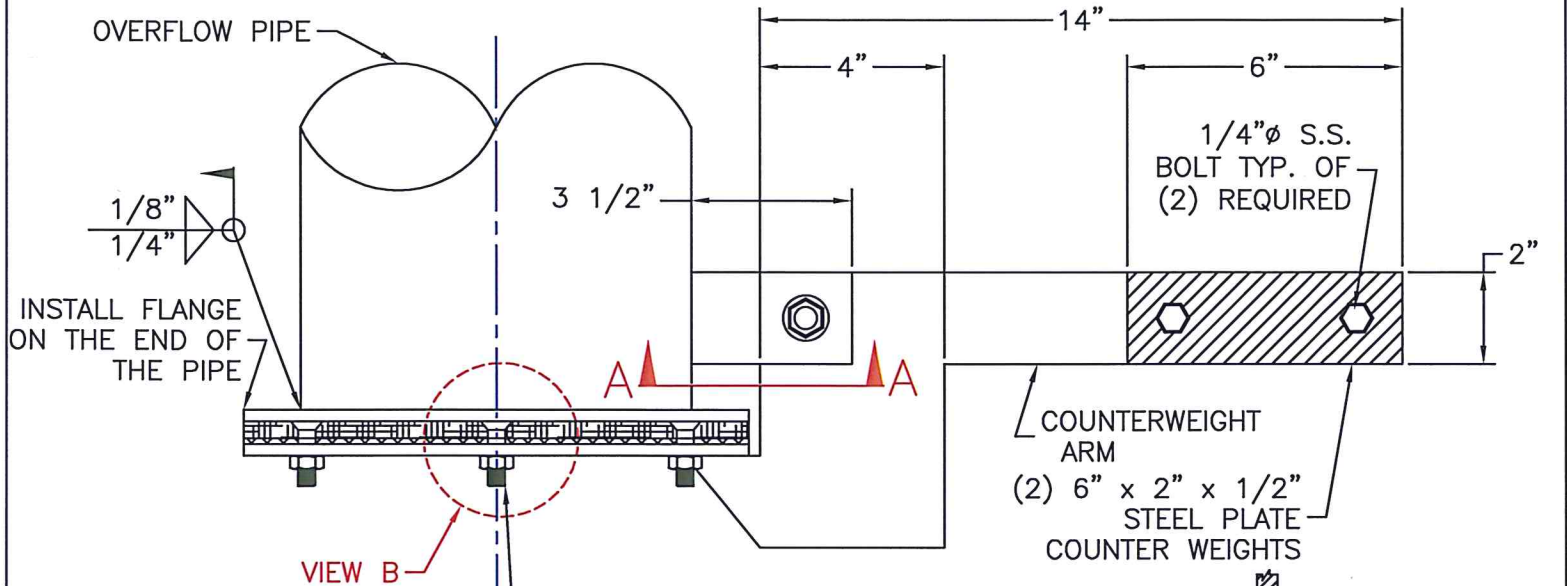


TANK #2

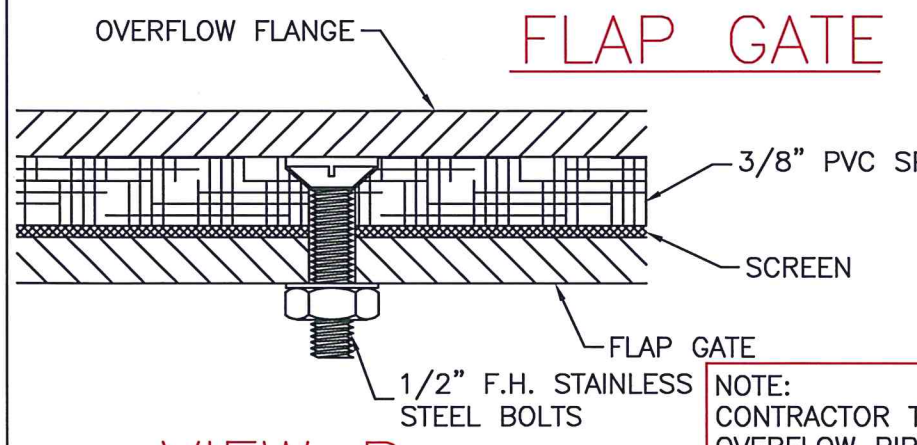
WELD DETAIL

Note: Drawing Not to Scale.

DIXON ENGINEERING, INC.	
Water Service Corp of Kentucky	
Both Tanks	
Roof Stiffeners	
Drawn By: TMF	Date: 07/25/18
Checked By: WJD	DWG: 03



SECTION A-A



VIEW B

NOTE:
CONTRACTOR TO VERIFY
OVERFLOW PIPE SIZE IS
8"φ PRIOR TO CONSTRUCTION

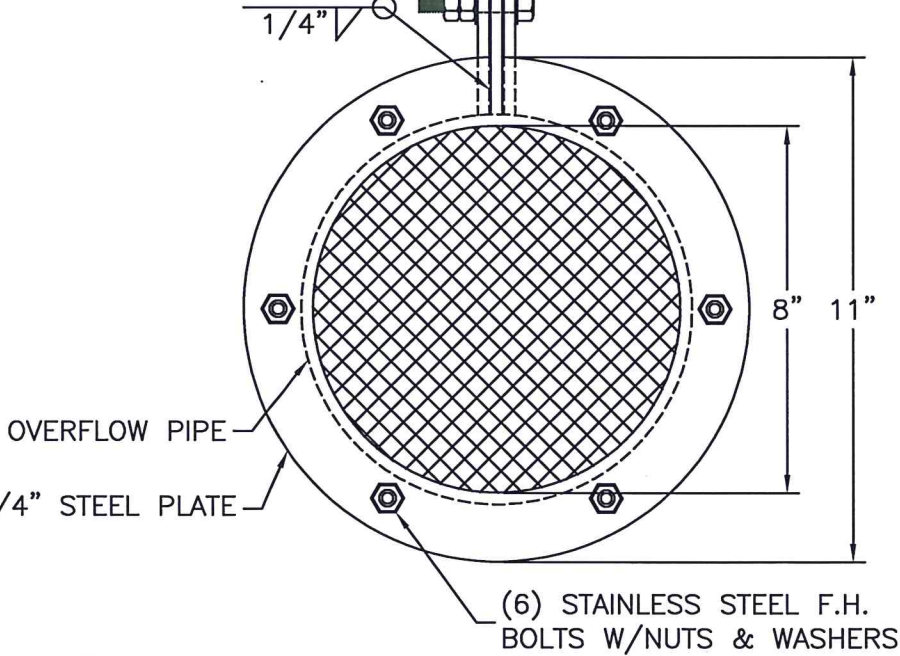
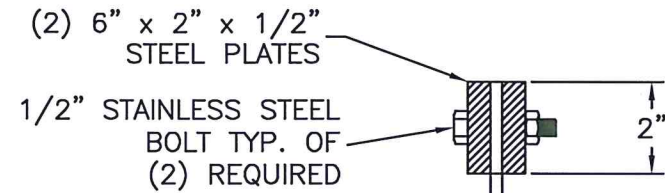
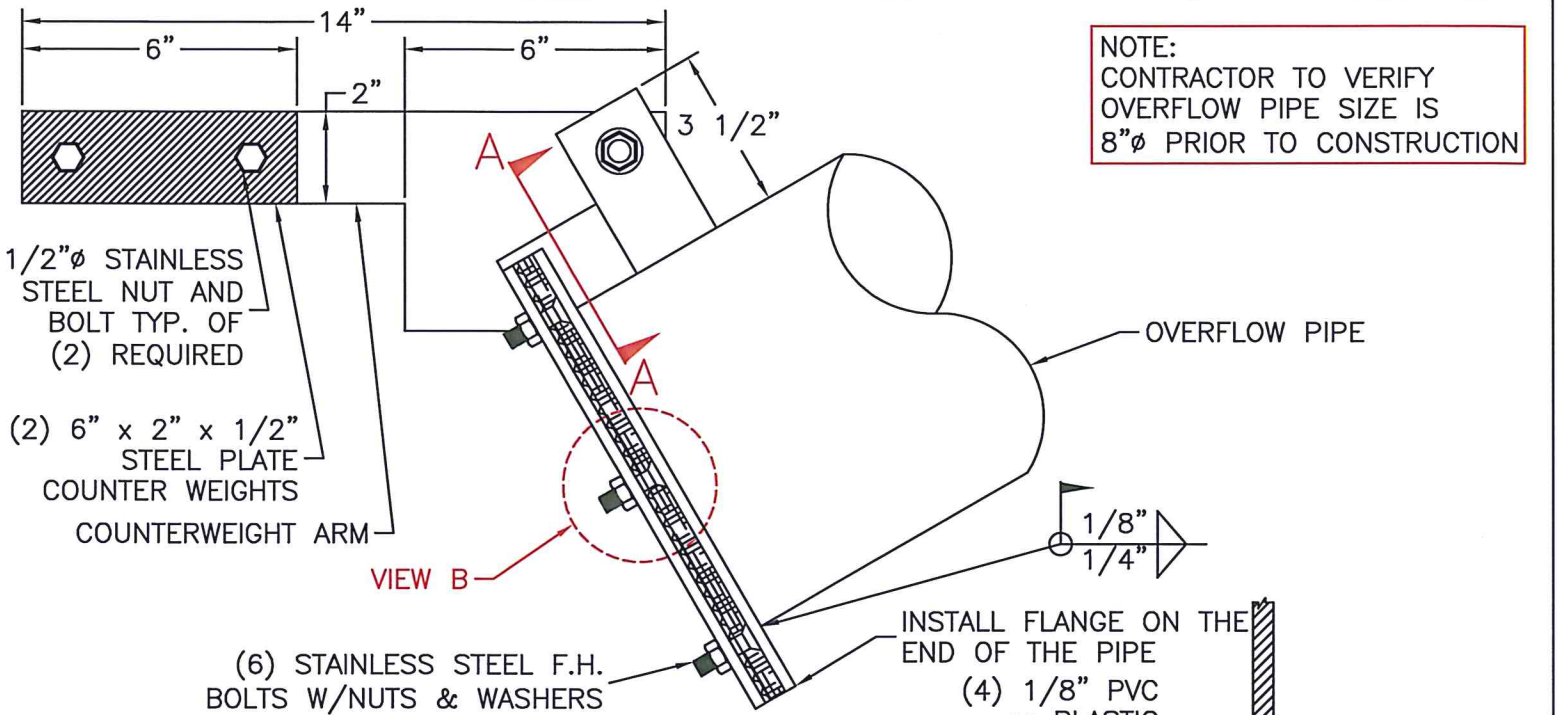


ISO VIEW

Note: Not to Scale

DIXON ENGINEERING, INC.	
Water Service Corp of Kentucky	
Tank #1	
8" Overflow Flap Gate	
Drawn By: TMF	Date: 07/25/18
Checked By: WJD	DWG: 04

NOTE:
 CONTRACTOR TO VERIFY
 OVERFLOW PIPE SIZE IS
 8"Ø PRIOR TO CONSTRUCTION



FLAP GATE



ISO VIEW

Note: Not to Scale



Water Service Corp of Kentucky

Tank #2

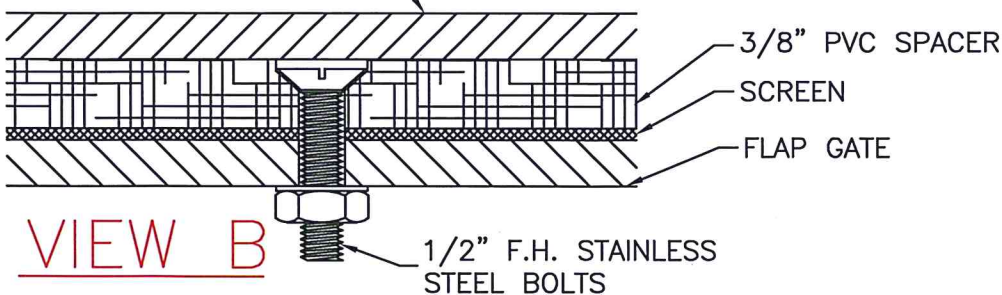
8" Overflow Flap Gate

Drawn By: TMF

Date: 07/25/18

Checked By: WJD

DWG: 05



3/4"φ (42) GALVANIZED STEEL BOLTS IN 7/8" HOLES WITH NUTS AND WASHERS ON EACH SIDE MIN. (2) THREADS EXPOSED WHEN TIGHTENED

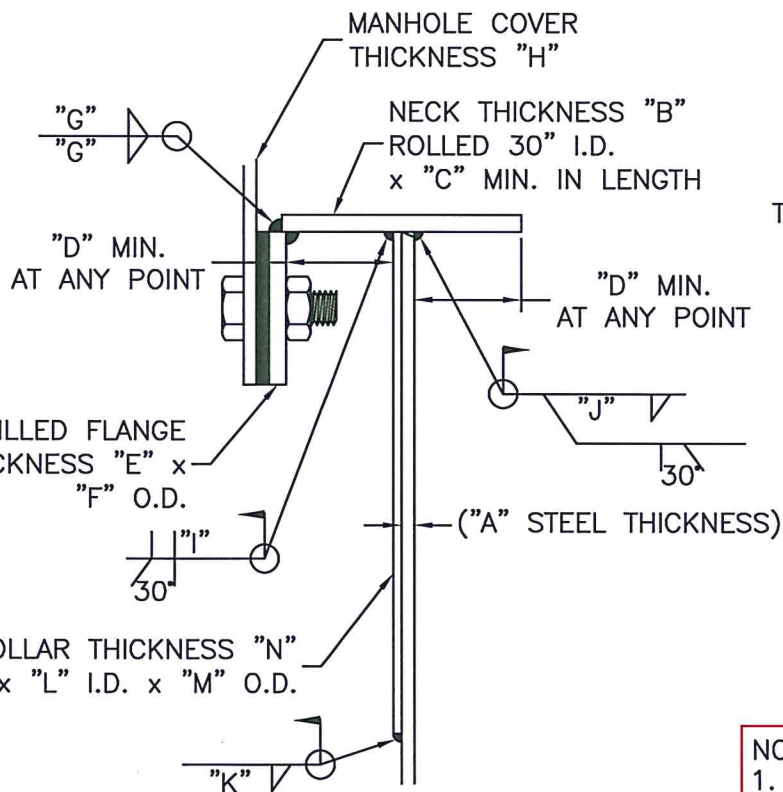
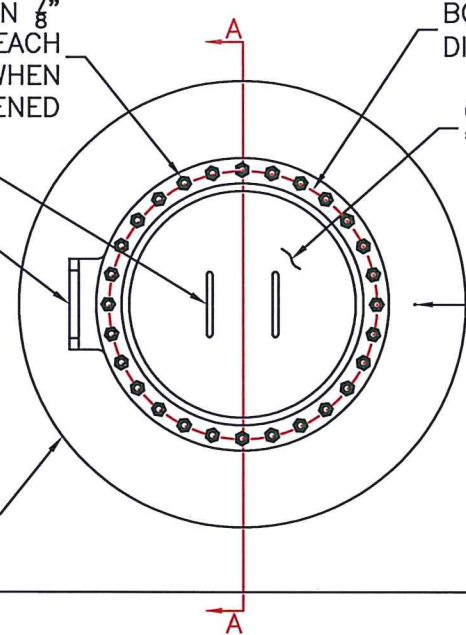
BOLT HOLE PATTERN DIAMETER IS "P"

3/4"φ HANDLE TYP OF (2) REQD.
HINGE SEE DWG. 06c

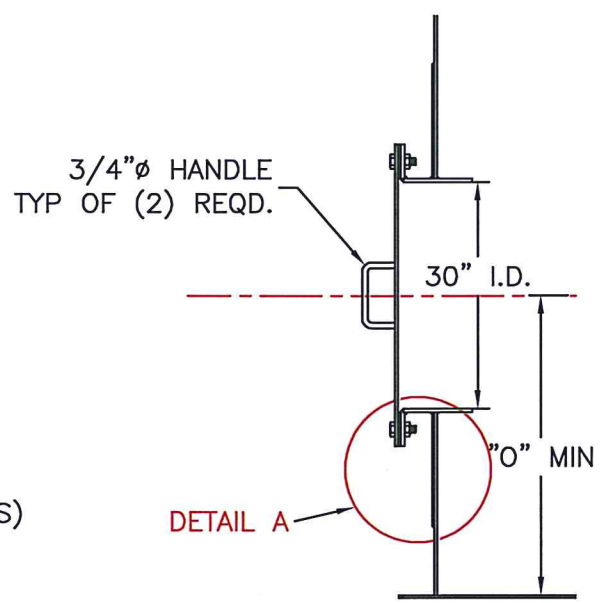
COVER PLATE THICKNESS "H" WITH "F" O.D.

ONE 1/4" TELLTALE HOLE PER SECTION IN REINFORCING PLATE ON CENTERLINE. DRILL, TAP, AND PLACE BRASS PLUG IN HOLE AFTER WELDING REINFORCING PLATE TO SHELL.

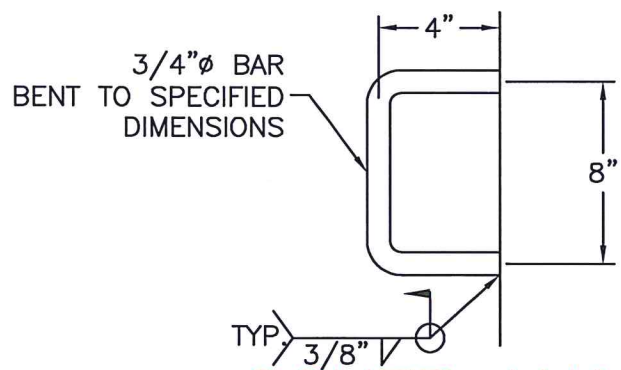
COLLAR REINFORCEMENT THICKNESS "N" WITH "L" I.D. x "M" O.D. ROLLED TO TANK RADIUS



DETAIL A



SECTION A-A



COVER HANDLE

- NOTES:
1. SEE SHEET 06b FOR SIZING TABLE
 2. 3/8" NEOPRENE GASKET MATERIAL IS REQUIRED BETWEEN BOLTED HATCH AND FLANGE.
 3. MANHOLE IS TO BE CLEAR OF TANK LAP SEAMS.
 4. ROUND AND GRIND SMOOTH ALL SHARP CORNERS.

Note: Drawing Not to Scale.



Water Service Corp of Kentucky	
Tank #2	
30" Bolted Manway	
Drawn By: TMF	Date: 07/25/18
Checked By: WJD	DWG: 06a

A B C D E F G H I J K L M N O P

	EXISTING STEEL THICKNESS	NECK THICKNESS	NECK LENGTH	NECK PROTRUSION IN & OUT	MILLED THICKNESS	FLANGE THICKNESS & COVER O.D.	FLANGE TO NECK WELD	COVER THICKNESS	NECK TO COLLAR OR OUTSIDE TANK WELD	NECK TO INSIDE TANK WELD	COLLAR O.D. WELD	COLLAR I.D.	COLLAR O.D.	COLLAR THICKNESS	EDGE TO CENTER OF MANWAY	BOLT HOLE LOCATION
1	5/8"	3/4"	13"	4"	5/8"	40"	5/8"	5/8"	1/4"	1/4"	3/8"	31 1/2"	58"	3/8"	37"	37"
2	5/8"	7/8"	15"	5"	5/8"	40"	5/8"	5/8"	1/4"	1/4"	1/4"	31 3/4"	58 1/2"	1/4"	37"	37"

NOTES:
 1. CONTRACTOR TO INDICATE WHICH ROW (1 OR 2) IS TO BE USED TO DETERMINE INSTALLED MANWAY MEASUREMENTS. ATTACH WITH SUBMITTAL PACKAGE WITH SELECTED ROW.
 2. *F.D.* (FIELD DETERMINE)

Note: Drawing Not to Scale.

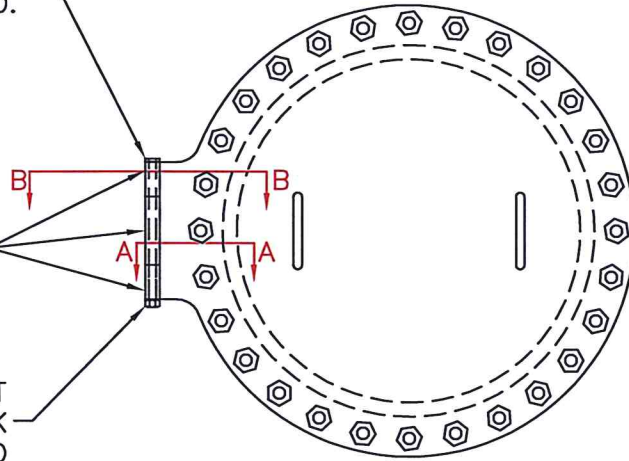


Water Service Corp of Kentucky	
Tank #2	
30" Bolted Manway Chart	
Drawn By: TMF	Date: 07/25/18
Checked By: WJD	DWG: 06b

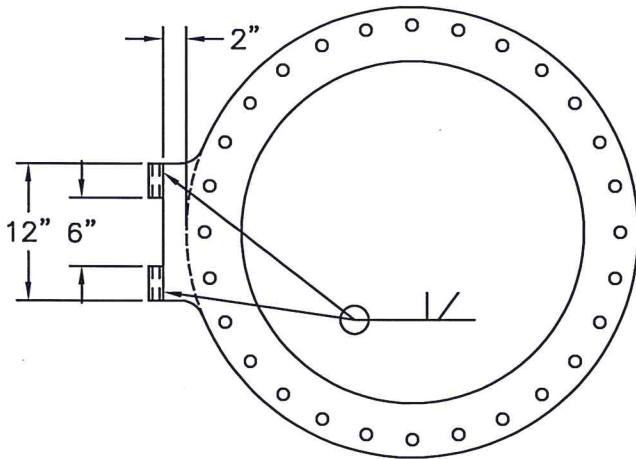
1"φ S.S. ROD X
13 1/2" LG. W/ 1/4"
S.S. PLATE WASHER
WELDED TO UPPER END.

2"φ S.S. BARS
WITH 1 1/32"φ HOLES
DRILLED & REAMED
SMOOTH, ADJUST
HOLE SIZE IF
REQUIRED

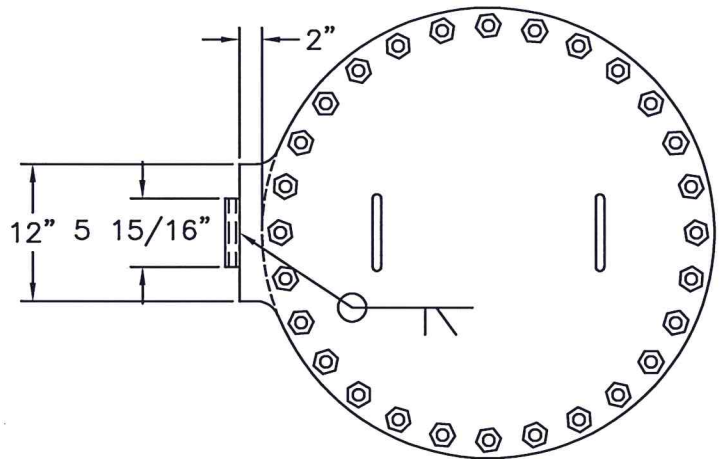
1"φ S.S. NUT
AND WASHER, TANK
WELDED IN THE FIELD



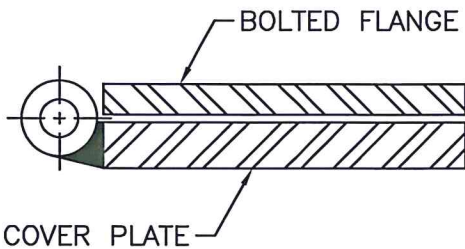
MANWAY HINGE



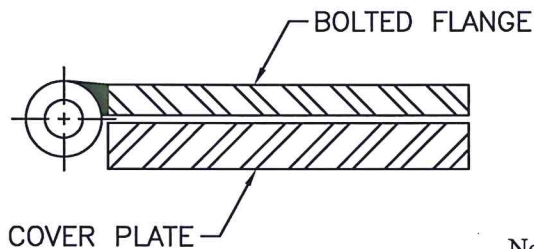
BOLTING FLANGE



COVER PLATE



SECTION A-A



SECTION B-B

NOTES:

1. GRIND SMOOTH ALL SHARP CORNERS.
2. COVER NOT TO SAG GREATER THAN 1/2" AND TO CLOSE EVENLY.

Note: Drawing Not to Scale.



Water Service Corp of Kentucky

Tank #2

Manway Hinge Details

Drawn By: TMF

Date: 07/25/18

Checked By: WJD

DWG: 06c

1" X 45°
CHAMFER

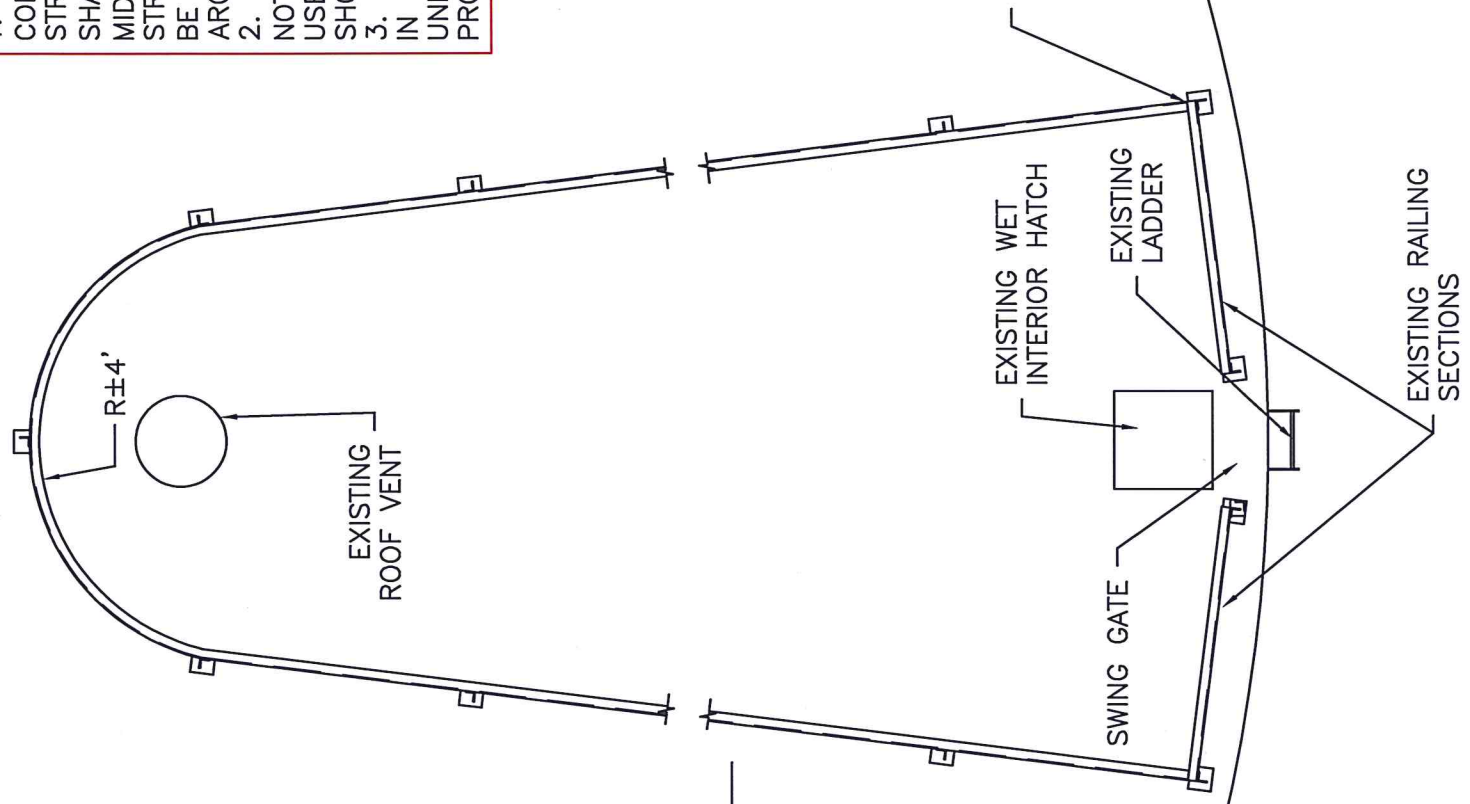
3'-6"

1'-9"

1/4"

TYP 3/16"

RAIL SECTION



KICKER TO BE REMOVED FROM THE END OF THE EXISTING SECTION (TYP. OF 2). CREATE A SMOOTH TRANSITION FROM THE EXISTING RAILING TO THE EXISTING RAILING

NOTES:

- HANDRAIL AND POSTS ARE TO BE CONSTRUCTED OF 2 1/2" x 2 1/2" x 1/4" STRUCTURAL STEEL ANGLE. POST BASE PLATES SHALL BE 6" x 6" x 1/4" PLATE STEEL. MIDRAIL SHALL BE 2 1/2" x 2 1/2" x 1/4" STRUCTURAL STEEL ANGLE. ALL WELDS SHALL BE 3/16" CONTINUOUS FILLET WELDS; ALL AROUND.
- SPACING BETWEEN MOUNTING PODS SHALL NOT EXCEED 6'. IT WILL BE NECESSARY TO USE MORE THAN THE NUMBER OF PADS SHOWN.
- CONSTRUCT, BLAST & PRIME THE HANDRAIL IN THE SHOP AND MODIFY IN THE FIELD UNLESS THERE IS EXTERIOR BLASTING ON THE PROJECT.

Note: Drawing Not to Scale.

DIXON ENGINEERING, INC.
 Water Service Corp of Kentucky
 Tank #2
 Roof Railing
 Drawn By: IMF Date: 07/25/18
 Checked By: WJD DWG: 07

SECTION 09 97 13 **STEEL COATING**

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Painting of steel structures.
- B. Interior cleaning and disinfection.

1.02 REFERENCES

- A. AWWA Standards:
 - 1. D102 – 17 Painting Steel Water Storage Tanks.
 - 2. C652 – Disinfection of Water Storage Facilities.

1.03 WORK INCLUDED

Tank #1 and Tank #2:

- A. Wet Interior: Apply a three (3) coat zinc epoxy system.
- B. Exterior Alternate 1: Apply a three (3) coat epoxy urethane system.
- C. Exterior Alternate 2: Apply a four (4) coat zinc epoxy urethane system.

1.04 EXISTING CONDITIONS

Tank #1

- A. Exterior: Urethane system applied in 2005 surface preparation is unknown but presumed to have been an overcoat. The system is known to be lead free.
- B. Wet Interior: Spot repairs performed in 2005, coating is presumed to be an epoxy system.

Tank #2

- A. Exterior: Urethane system applied in 2004, surface preparation is unknown but presumed to have been a full blast. The system is known to be lead free.
- B. Wet Interior: System is presumed to be an epoxy system that was applied in 2004.

1.05 TERMINOLOGY

- A. Wet Interior: Internal surfaces, excluding inaccessible areas, to the roof, shell, bottom, accessories, and appurtenances that are exposed to the stored water or its vapor. Examples are the interior of the roof, sidewall, floor.
- B. Exterior: External surfaces, excluding inaccessible areas, of the roof, sidewall, accessories, and appurtenances that are exposed to the elemental atmosphere.
- C. Inaccessible Areas: Areas of the finished structure that, by virtue of the configuration of the completed structure, cannot be accessed to perform surface preparation or coating application (with or without the use of scaffolding, rigging, or staging).

Inaccessible areas include such areas as the contact surfaces of roof plate lap joints, underside of roof plates where they cross supporting members, top surface of rafters directly supporting roof plates, contact surfaces of bolted connections, underside of column baseplates, contact surfaces of mating parts not intended to be removed or disassembled during routine operation or maintenance of the structure, underside of the floor plate for ground supported flat bottom tanks, and inside of risers less than a nominal 36 in. diameter.

- D. Sidewall: Vertical walls to the weld seam of the roof.
- E. Roof: Very top of the structure, including top seam of sidewall.
- F. Floor: Lower area of the tank proper shaped like a flat plate.

1.06 OMISSIONS or INCIDENTAL ITEMS

- A. It is the intent of these specifications to coat the structure for the purpose of corrosion protection on wet interior surfaces. It is the intent to coat the exterior for corrosion protection and aesthetics.
- B. Any small or incidental items not specifically detailed in the schedule, but obviously a part of the work are included in the work at no additional cost to the owner.
- C. Engineer, as interpreter of the specifications, will determine if disputed items fall under this category. Prevailing custom and trade practices will be considered in this determination.

1.07 PAINTER QUALIFICATIONS – NON-LEAD PROJECTS

- A. Contractor shall complete all coating and surface preparation.
- B. Painter shall be specialized in industrial or heavy commercial painting.
- C. ALL CONTRACTORS SHALL BE PREQUALIFIED with Dixon Engineering for projects of this size and complexity.

1.08 SUBMITTALS

- B. Submit the following with your annual prequalification:
 - 1. Occupational Safety and Health Programs and certification that all site personnel have been trained as required by law.
- C. Submit the following ten (10) days prior to the preconstruction meeting:
 - 1. Safety Data Sheets (SDS) and Product Data Sheets:
 - a. Furnish from all suppliers Safety Data Sheets and product data sheets for all applicable materials including, but not limited to, paints, thinners, cleaners, degreasers, and abrasive materials.
 - b. Provide for employees one (1) copy of all data sheets at the job site for employee access.
 - c. Provide one (1) hard copy and an electronic copy to the engineer.

- d. No work may commence without the complete filing. All SDS shall conform to requirements of SARA (EPCRA) Right-to-Know Act.
- 2. Ventilation Design Plan. Include airflow calculations and model, and number of fans.
- 3. Dehumidification/Heat Design Plan. Include airflow calculations, model, number of units used, connection details, and power source.
- 4. Fall Prevention Plan and Site Specific Fall Hazard Evaluation:
 - a. Site specific plan to contain a generic drawing of the existing structure and appurtenances of this structure and reflect safety changes specified for this project.
 - b. Certifications for all spiders, scaffolding, stages, etc. to be used on the project. All certifications to be current, less than one year old.
- D. Submit the following at the preconstruction meeting:
 - 1. Designated OSHA Competent Person and qualifications, if not previously submitted.
- E. Submit the following within two (2) weeks of project completion with final pay request:
 - 1. Waste manifest, waste hauler and disposal facility.
 - 2. Waivers of lien.
 - 3. Copies of any formal worker safety or environmental citations received on the project.

1.09 OWNER RESPONSIBILITY

- A. Drain the structure with seven (7) days notice, after contractor meets all precedent conditions of the contract.
- B. Fill the tank and draw samples and test after chlorination; responsibility of good results remains with the contractor. Poor test results could result in added costs to contractor, including rechlorination, cost of water, plus possible liquidated damages.

1.10 WARRANTY

- A. Within thirteen (13) months from the date of substantial completion, the structure will be inspected by the owner and/or their representative.
- B. The inspection will be performed in accordance with the applicable portions of AWWA D-102-17 Standard for Painting Steel Water Storage Tanks and industry standards.
- C. The owner will establish a date of inspection and shall notify the contractor ten (10) days in advance. The contractor's attendance will not be required.
- D. The owner will select a third party inspection firm (either engineer or project representative) to document inspection. Contractor shall be notified in advance by

- the Engineer, the contractor waives all rights to dispute findings if not present for the inspection.
- E. Any failed work will be documented and the contractor will be notified of necessary repair (method and extent). The owner reserves the right to require inspection of the repair work and a second warranty inspection, dependent on degree of failure.
 - F. This warranty will automatically be extended until the tank is ice-free (if applicable) and the warranty inspection can be performed. The contractor guarantees that the system is free from defects due to faulty materials or workmanship and the contractor shall make the necessary correction to correct these defects. If the amount of repair work exceeds ten percent (10%) of the quantity of any individual line item, then the owner reserves the right to have the warranty period extended one (1) year for the entire line item.
 - G. Cost for the one (1) year warranty inspection will be the responsibility of the owner.
 - H. Cost for a second warranty inspection and repair inspections will be the responsibility of the contractor and guaranteed by Contractor's Performance Bond and Maintenance Bond.
 - I. The owner retains all contractual remedies. The warranty shall not be considered an exclusive remedy.

1.11 DELIVERY and STORAGE of MATERIAL

- A. Submit manufacturer's invoice, with or without paint cost, to the engineer for review. This submittal will be used to identify the quantity of paint recommended by the manufacturer for a job of this size and design, and will be used to check the quantity actually delivered to the project.
- B. Cover bulk materials subject to deterioration because of dampness, weather, or contamination, and protect while in storage.
- C. Maintain materials in original, sealed containers, unopened and with labels plainly indicating the manufacturer's name, brand, type, grade of material, and batch numbers.
- D. Remove from the work site containers that are broken, opened, water marked, and/or contain caked, lumpy, or otherwise damaged materials. They are unacceptable.
- E. Store the material in a climate controlled designated area where the temperature will not exceed the manufacturer's storage recommendations. Heat the storage area to the manufacturer's recommended minimum mixing temperature.
- F. Keep equipment stored outdoors from contact with the ground, away from areas subject to flooding, and covered with weatherproof plastic sheeting or tarpaulins.
- G. Store all painting materials in a location outside the structure.
- H. Do not store or have on-site unapproved material, material from different manufacturers, or materials from different projects.

1.12 ACCESS and INSPECTOR SAFETY

- A. Provide access to all portions of the project where work is being completed. Access must be close enough and secure enough to allow inspector to use inspection equipment without extensions.
- B. Provide personnel to assist with access and to ensure contractor's access equipment is safely used.
- C. Provide separate fall protection devices and safety lines for the owner and inspectors. Limit fall to 5 ft. vertically.
- D. New safety tie-off points have been added as part of this project, see Section 05 00 00 Metal Repairs. Tie-off points are located on the roof for interior safety. Do not rig equipment from these points. Provide separate fall protection cables and safety grabs for each tie-off point.
- E. These specifications require the contractor to supply a separate fall protection cable and safety grab for each tie-off point for the inspector's use. The contractor is encouraged to provide a separate cable and tie-off for each worker. The cables may be connected to the same tie-off point as the inspector's, but a separate cable and safety grab are required for each user.

1.13 INSPECTION and TESTING

- A. Prior to the scheduled inspection, remove all dust, spent abrasive, and foreign material from the surface to be coated.
- B. The contractor is to furnish an instrument for measuring the wet film thickness, and also a calibrated instrument for measuring dry film thickness of each field coat of paint. The dry film thickness testing gauge shall be the magnetic type as manufactured by Elcometer Co., or the Nordson Gauge Co.; spring loaded model with two percent (2%) accuracy margin over a range of one-to-twenty-one (1-21) mils or equal.
- C. The engineer will furnish and operate inspection equipment for their own use as quality assurance.
- D. Certify to the owner that the specified paint has been applied at the paint manufacturer's recommended coverage, and to the specified thickness required. Also, certify that the paint has been applied in accordance with this contract.
- E. Take all necessary steps, including dry striping by brush or roller, to ensure a holiday-free coating system.
- F. The owner reserves the right to perform low voltage holiday tests on all areas including the exterior. The wet interior coatings are subject to low voltage holiday testing.
- G. The owner and engineer reserve the right to perform destructive testing under conditions deemed necessary. Testing may include, but is not limited to, the Tooke

thickness test and adhesion testing. Any damage caused by these tests will be corrected to specifications at the contractor's expense.

1.14 CLIMATIC CONDITIONS

- A. Do not apply paint when the temperature, as measured in the shade, is below the manufacturer's required ambient and surface temperatures.
- B. Do not apply paint to wet or damp surfaces, or during rain, snow, or fog.
- C. Do not apply paint when it is expected the relative humidity will exceed 85%, or the surface temperature is less than 5° above dew point, or the air temperature will drop below the manufacturer's requirements for proper cure. Anticipate dew or moisture condensation, and if such conditions are prevalent, delay painting until the inspector is satisfied the surfaces are dry.

1.15 APPLICATION

- A. Complete all painting and surface preparation in strict accordance with these specifications, approved paint manufacturer's specifications, and good painting practices per SSPC.
- B. Apply each coating at the rate and in the manner specified by the manufacturer. Check the wet film thickness every 200 sq. ft. to ensure each coat applied meets the dry film thickness range requirements.
- C. Allow sufficient time for each coat of paint to dry and cure. Allow a minimum of twenty-four (24) hours between coats, unless product requirements have a maximum time less than 24 hours.
- D. Apply exterior coating by brush and roller only. Spray application is not permitted without prior approval of the engineer. Even with prior approval, responsibility for damage still remains with the contractor.
- E. Painting may be delayed because of poor coverage or the potential damage from overspray and/or dry spray. In all cases, responsibility for damages rests with the contractor.
- F. The contractor is responsible for the appearance of the finished project, and is warned to prevent contact with any freshly applied coating. Removal of rigging shall be completed so not to mar or damage the coating.
- G. Coatings shall be applied using methods to eliminate roller or spray marks in the finished product on the exterior.
- H. Stripe the wet interior prior to application of final coat.
- I. Additional coats required for coverage or to eliminate roller marks, spray marks and to repair dry spray and overspray are the responsibility of the contractor at no additional cost to the owner.
- J. Use of pole extension on spray guns is prohibited for all paint application.

- K. Mixing of partial kits is not permitted. All partial cans of coating must be removed from the site.
- L. Mixing blades to be clean. The engineer has the right to reject mixing blades based on cleanliness or paint build-up. Do not use the same mixing blade for different coatings (i.e. epoxy and urethane coatings).

PART 2 – PRODUCTS

2.01 COLOR

A. Exterior Coatings:

1. Supply the engineer with a color chart to allow the owner ample time for the exterior topcoat color selection.
2. Factory tint the intermediate coat(s) for all areas of the structure if similar to the finish coat. Tinting shall be sufficient to allow visibility of the dissimilar color from 1 ft., and from 100 ft.
3. After evaluating the bids, the owner shall select the color. All bids shall be based on common “sky-blue” color. The owner recognizes the additional cost for deep color paints. After the color has been selected, document the difference in cost and quantity used for the selected color and the owner will issue a Change Order for the exact cost differential only.
4. Documentation of additional cost is the responsibility of the contractor, and must be supplied two (2) weeks before application. If necessary documentation is not supplied, any additional cost will be borne by the contractor. If selection/application time is less than two (2) weeks, then as soon as possible. The owner has the right to switch to a less expensive color; therefore, the contractor must submit cost before ordering paint.

B. Wet Interior Coatings:

1. The color is to be a different tint between coats. Tinting to be performed in the factory.

2.02 SUBSTITUTIONS

- A. All coatings specified and approved herein have met or exceeded a specified list of ASTM standards. The materials specified are the standard to which all others shall be compared.
- B. The purpose is to establish a standard of design and quality, and not to limit competition.
- C. Other manufacturers wishing to have their products approved have also had their coatings tested using the same representative of Dixon Engineering, Inc., and the same test methods.

- D. Approval by ANSI/NSF Standard 61 is also a requirement for potable water contact coatings.
- E. The selection of coatings also has taken into consideration the manufacturer's current and past performance on availability, stocking, and shipping capabilities, ability to resolve disputes, and any applicable warranties.

2.03 DEHUMIDIFICATION and HEATING – WET INTERIOR

- A. Supply dehumidification/heating units capable of maintaining dew point temperature lower than 15° below surface temperature during blasting and lower than 5° during coating application and cure, and steel temperature maintained above the manufacturer's printed requirements.
- B. Supply a dehumidifier designed with a solid desiccant having a single rotary desiccant bed capable of continuous operation, with full automatic operation. Do not use liquid desiccant, granular, or loose lithium chloride drying systems. Refrigerant systems may be used in conjunction with desiccant units.
- C. Plumbing, noise control, insulation, venting, and all incidental items needed to provide proper ambient conditions shall be included as one package.
- D. Supply and maintain a power source for the dehumidifier and heater, unless otherwise specified.

2.04 DUST COLLECTORS – AIR FILTRATION UNITS

- A. Furnish and use a dust collector during all blasting work.
- B. Units to be equal in filtration capacity to Eagle Industries dust collectors. Other units may be used, but their substitution will be evaluated on efficiency at 0.5 micron size and airflow movement.
- C. Use 40,000 CFM minimum for wet interior work.
- D. Substitution of steel grit blasting may decrease the requirements above. New requirements will be defined by the engineer based on the efficiency of the contractor's equipment.
- E. Furnish HEPA filters for dust collection.
- F. Number of dust collectors shall be sufficient to supply a 50 ft./minute downward draft at most areas. An average may be considered. Determination of actual containment plan will be the deciding factor. Calculations of airflow shall be included in the containment submittal.
- G. Use only new filters or filters certified clean.

2.05 EQUIPMENT COVERING

- A. Use material that is 8 – 10 mils thick, and 100% impermeable to all vulnerable equipment.

- B. Use material resistant to tear and/or rip by mechanical action from abrasive blasting during blasting operations.
- C. Make coverings airtight by use of duct tape at the openings, or other suitable measures.
- D. Meet with representative of equipment owner to verify covering will not damage equipment. Damage is the contractor's responsibility. This includes not only the owner's equipment, but also telecommunication antennas, cables, buildings, controls, etc.

2.06 AIR DRYER for COMPRESSOR

- A. Use air dryers sufficient to remove 98% of the moisture from the compressed air. Size the dryers on total cfm using manufacturer supplied charts. Upon request, supply charts to engineer for verification.
- B. If the dryer fan is not operable, cease all blasting until the dryer is replaced or repaired.
- C. Supply air dryer with an air draw-off valve to check air for dryness, oil contamination, and cleanliness on the outlet side of the air dryer.
- D. For cleaning operations, draw clean air from the outlet side of the air dryer.

PART 3 – EXECUTION

3.01 DISINFECTION

- A. Disinfect the completely painted structure in accordance with AWWA Standard C652 Chlorination Method No. 3.
- B. Furnish the material and labor necessary to disinfect the structure in the required manner. Assist owner during filling.
- C. Do not allow water to enter the distribution system until satisfactory bacteriological test results are received.
- D. Owner is responsible to collect two consecutive bacteriological samples, 24 hours apart, following disinfection. Satisfactory results are required before the tank can be returned to service.
- E. Water vented to waste may not contain any substances in concentrations that can adversely affect the natural environment. No total residual chlorine may be measured in water discharged to surface water.
- F. Pay all additional expenses if it is necessary to repeat the testing and disinfection procedure as a result of defective work.

3.02 PROTECTION of NON-WORK AREAS

- A. Protect all non-blasted/painted surfaces prior to all abrasive blast cleaning/painting.

- B. Thoroughly cover the fill/drain pipe, overflow pipe, and all other openings. Do not permit abrasive or paint chips to enter into the piping or distribution system. Use watertight seals on the pipes.
- C. Protect and seal all controls and electrical components (even if they are not in the immediate work area) that are in danger from the project. Coordinate with the owner so all controls are shut down and/or vented if necessary.

3.03 DEHUMIDIFICATION/HEATING

- A. Control the environment with dehumidification equipment twenty-four (24) hours a day during blast cleaning, coating operations, and 48 hours after the topcoat (including holiday touch-ups and repairs are performed) as a minimum to maintain ambient conditions until cure completion.
- B. Supply sufficient dry air to assure the air adjacent to surfaces to be abrasive blast cleaned or coated does not exceed minimum required humidity at any time during the blasting, coating, or curing cycle.
- C. Monitor and record ambient conditions twenty-four (24) hours a day throughout abrasive blast cleaning and painting work (use Polygon Exact Aire, DRYCO ClimaTrack, DH Tech HOB0U30 data logger, or approved equal). Monitor to be capable of being programmed with condition parameters and of alerting contractor, engineer and owner via phone or e-mail of condition or equipment failures.
- D. Contractor to manually test interior ambient conditions three (3) times a day, or more often with rapid weather changes. Record daily readings. Adjust or add equipment as required to maintain steel temperatures, dew point, and humidity. (This is in addition to the monitor with recorder noted above).
- E. Use a minimum 6,500 CFM dehumidification capacity for all wet interior work.
- F. The contractor may subdivide the interior into smaller sections to reduce dehumidification capacity.
- G. Surround the units with noise suppressant enclosures, unless units are sound attenuated or have noise suppressants. More extensive enclosure requirements are required in residential areas where the machines must run all night. Noise suppressant level needed will depend on the size of the dehumidification units, their efficiency, and their locations. Provide noise suppressant enclosures of sufficient height and thickness to lower noise to an acceptable level for neighbors. Also provide noise suppressant enclosures for generators.
- H. Auxiliary heaters may be necessary to maintain the surface temperature at a level acceptable to the coating manufacturer's application parameters. The auxiliary equipment must be approved for use by the manufacturer of the dehumidification equipment and shall meet the following requirements. Auxiliary ventilation equipment and/or dust collection equipment can affect the exchange rate.

1. Heaters shall be installed in the process air supply duct between the dehumidifier and the work, as close to the work as possible. Air heaters are not acceptable as a substitute for dehumidification without approval.
 2. Use only electric or indirect gas fired auxiliary heaters. No direct fired space heaters will be allowed during blasting, coating, or curing phase.
- I. Seal off the work, allowing air to escape at the bottom of the space away from the point where the dehumidified air is being introduced. Maintain a slight positive pressure in the work unless the dust from the blasting operation is hazardous.
 - J. Where necessary to filter the air escaping the space, design the filtration system to match the air volume of the dehumidification equipment in such a way that it will not interfere with the dehumidification equipment's capacity to control the space as described herein. Do not re-circulate the air from the work or from filtration equipment back through the dehumidifier when coating or solvent vapors are present. Outside air is to be used during those periods.
 - K. Securely attach duct work to the equipment and work to minimize air loss. Design hoses with sufficient capacity and minimal bends to reduce friction loss.
 - L. Dehumidification and its operating power source are incidental to the respective painting project (wet or dry interior).
 - M. Set-up and operate equipment twenty-four (24) hours (or earlier) prior to start of blasting.

3.04 DUST CONTAINMENT – INTERIOR

- A. Do everything within the contractor's power to minimize dust as a nuisance.
- B. No visible dust release is allowed from roof openings and other access openings. Seal or close all openings prior to blasting (see ventilation requirements).
- C. Connect the air filtration unit directly to a manhole extension.
- D. Design the manhole extension to allow access of hoses through a side exit that is sealable after hoses are in-place. Install the air filtration unit directly to the end of the extension.
- E. Seal of the side exit will be tested by holding a smoke agent 6 in. outside the seal with the air filtration unit operating. If smoke is drawn to the seal area, additional sealing will be necessary.
- F. The contractor may reverse this operation by connecting the air filtration unit to the roof manhole and sealing around the hose. Also seal the roof vent. A sealed semi-rigid structure also may be used where employees have access through a side door. 90% of the air draw must be from the tank proper.
- G. Construct the semi-rigid structure from 8 ft. x 8 ft. x 6 ft. high scaffold framing and cover with tarps, with all edges lapped 2 ft. minimum and an overlapped entranceway.

3.05 VENTILATION REQUIREMENTS

- A. Supply mechanical ventilation sufficient to change air in the tank six (6) times each hour.
- B. In calculating air exchange, the dust collector air capacity can be considered a part of the air being changed up to 50% of ventilation requirements.
- C. Use the roof or sidewall manways with fans to move the required air.
- D. Ventilate wet interior areas a minimum of seven (7) days after completion of painting, or longer until the wet interior coating has fully cured. Maintain ventilation at the rate of two (2) complete air changes per hour. The owner reserves the right to perform a MEK Solvent Double Rub Test per ASTM D 4752 to verify the cure of the coating film prior to returning the tank to service.
- E. Cost of ventilation is incidental to the project.
- F. Additional ventilation openings may have to be installed by the contractor. Submit size, details, and location(s) for approval by the owner prior to cutting any opening. All costs associated with repairs by a certified welder are incidental
- G. Connect the air filtration unit per this Section, Dust Containment – Interior. All fans on the roof and sidewalls must blow in. If all openings are not needed for ventilation, seal them. Zero release to the atmosphere will be permitted.

3.06 HAND WASH FACILITY

- A. Provide OSHA approved hand wash facility with running water. Hot water is not required.
- B. Stock facility with soap and towels, and keep supply replenished.
- C. Test water and dispose of properly after job is completed.

3.07 LIGHTING of WORK SPACE

- A. Provide durable lighting fixtures designed for the intended work environment for use during blasting, painting, and during all inspections.
- B. Encase portable lamps in a non-conductive, shatterproof material. Use only heavily insulated cable with an abrasive resistant casing.
- C. Install all temporary electrical items in accordance with all local, state, and federal codes, including OSHA.
- D. Protect from paint overspray and damage from abrasive materials.
- E. Measure required illumination during surface preparation and coating application at the work surface. Supply 20 ft. candles minimum illumination during blasting and painting, and 30 ft. candles minimum prior to and during inspection, per SSPC-Guide 12. Inspect the prepared surface at the higher illumination prior to calling for inspection. All work must conform to specification requirements prior to the scheduled inspection.
- F. Measure the illumination at the work surface in the plane of the work.

PART 4 – SPECIAL PROVISIONS

4.01 NAMEPLATE – BOTH TANKS

- A. Remove the existing nameplate, clean the area behind, and paint the same as the exterior system.
- B. Remove the existing coating from the nameplate without destroying lettering on the nameplate. Apply a clear coat to the nameplate using Rust-Oleum Automotive Clear Enamel Spray Paint or approved equal.
- C. Reattach with stainless steel fasteners or using the existing fasteners after painting has been completed.
- D. Cost is incidental to exterior coating.

4.02 FILL PIPE – BOTH TANKS

- A. Both tanks have a small section of the fill pipe that routes from the ground and elbows into the sidewall. The contractor is to surface prepare and coat the piping per Exterior Alternate 1 or Exterior Alternate 2 requirements if accepted.
- B. The contractor will need to dig around the pipe approximately 3 inches surface prepare and coat then backfill.
- C. Tank #1 has a section of foil lined batt insulation around the pipe. Contractor is to remove the insulation surface prepare and reinstall new insulation to match existing conditions.

4.03 SCHEDULING

- A. Complete all welding and any other work that damages the coating before paint operations begin, including surface preparation. The exception is paint removal in the weld area.
- B. If contractor wants a variance in this schedule, request the change and give reason in writing to the owner. The project manager will reply with a written Field Order if change is approved. Engineer reserves the right to put further restrictions in Field Order. If contractor objects to restrictions, he may revert to the original specifications.

4.04 GRASS RESTORATION

- A. The contractor is to report any damaged ground at the construction site in writing prior to mobilization of equipment, otherwise all repairs to the damaged ground will be the responsibility of the contractor.
- B. Refill all holes, ruts etc. with clean topsoil, and level area around the construction site to the original grade.

- C. Fill material to be clean soil, no gravel, rocks or construction debris is to be used as fill material without the owners consent.
- D. Bring soil to a friable condition by disking, harrowing, or otherwise loosening and mixing to a depth of 3 in. – 4 in. Thoroughly break all lumps and clods.
- E. Rake area to be seeded. Sow seed at a minimum rate of 220 lbs/acre. Use seed intended for the climate.
- F. Work to be completed to the owner's satisfaction.
- G. Cost is incidental to exterior painting.

SECTION 09 97 13.10

STEEL COATING SURFACE PREPARATION

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Full Field Abrasive Blasting.
- B. Power Tool Cleaning.
- C. High Pressure Water Cleaning.

1.02 REFERENCES

- A. AWWA Standards:
 - 1. D102-17 Painting Steel Water Storage Tanks.
- B. SSPC and NACE Standards:
 - 1. SP11 – Power Tool Cleaning to Bare Metal.
 - 2. SP6/NACE No. 3 – Commercial Abrasive Blast.
 - 3. SP10/NACE No. 2 – Near-White Metal Abrasive Blast.
 - 4. SP12/NACE No. 5 – High and Ultra High Pressure Water Jetting.
 - 5. VIS 1 (Visual standard for abrasive blasted metal).
 - 6. VIS 3 (Visual standard for hand and power tool cleaned metal).

1.03 WORK INCLUDED – SURFACE PREPARATION

Tank #1 and Tank #2:

- A. Wet Interior: Abrasive blast clean to a SSPC-SP10 near-white metal standard.
- B. Exterior Alternate 1: High pressure water clean (5,000 to 10,000 psi) spot power tool clean to a SSPC-SP11 standard.
- C. Exterior Alternate 2: Abrasive blast clean to a SSPC-SP6 commercial standard with containment (the contractor has the option to use a self-contained vacuum blast unit and water dampen blast areas that cannot be reached by the unit).
- D. Containment: For additional requirements see Section 09 97 13.11.01.

1.04 WASTE SAMPLING

- A. Sample waste from each portion of the project and keep waste segregated. Send to a NLLAP certified lab and test for TCLP for eight (8) metals (Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium and Silver).
- B. The owner reserves the right to collect samples and to send them to their selected lab. This will be determined at the preconstruction meeting.
- C. Pay all lab fees for eight (8) metals TCLP analysis on waste samples and any subsequent testing if clean-up is warranted.

PART 2 – PRODUCTS

2.01 EXTERIOR TANK CLEANER

- A. United 727 Weather-Zyme as manufactured by United Laboratories, 320 37th Ave., St. Charles, IL 60174 1-800-323-2594.

2.02 FLASH RUST INHIBITOR

- A. Hold-Tight 102 as manufactured by Hold-Tight Solutions, Inc., P.O. Box 77066, Houston, TX 77215 1-800-319-8802.

2.03 ABRASIVE – COAL SLAG

- A. The coal slag shall be 20-40 grade, or 30-60 grade.
- B. The abrasive shall be free of moisture, water soluble contaminants, dust, and oil.
- C. The abrasive shall be stored and covered to prevent moisture contamination.
- D. All leaking or spilling bags shall be removed, and affected areas properly cleaned.
- E. All slag abrasive shall meet the requirements of SSPC-AB1 “Mineral and Slag Abrasive” June 1, 1991-Grade 3.
- F. The use of silica sand, flint sand, and glass beads is prohibited.
- G. All abrasive and grit material used, and all equipment supplied shall be subject to approval of the engineer. The abrasive or grit shall be sharp enough and hard enough to remove the mill scale, rust, and paint.

2.04 RECYCLABLE STEEL GRIT – CONTRACTORS OPTION

- A. Use recyclable steel grit size G-25 or G-50.
- B. The abrasive is to be free of moisture, water soluble contaminants, dust, and oil.
- C. The abrasive is to be stored and covered to prevent moisture contamination.
- D. All leaking or spilling containers are to be removed, and affected areas properly cleaned.
- E. All recyclable steel grit shall meet requirements of SSPC-AB1 “Metallic Abrasive” June 1, 1991.
- F. All abrasive and grit material used, and all equipment supplied shall be subject to approval of the engineer. The abrasive or grit shall be sharp enough and hard enough to remove the mill scale, rust, and paint.

PART 3 – EXECUTION

3.01 PRE-SURFACE PREPARATION – WET INTERIOR

- A. Low pressure water clean at 4,000 psi all surfaces and appurtenances to remove sediment, minerals, soot, and other contaminants.

- B. Staining may remain in place prior to abrasive blast cleaning, engineer to approve cleanliness.

3.02 NEAR-WHITE METAL (SSPC-SP10) DRY BLAST – WET INTERIOR

- A. Abrasive blast clean all surfaces and appurtenances to a near-white metal finish (SSPC-SP10), latest edition thereof.
- B. Maintain a profile of 2.0 – 3.0 mils on abrasive blast cleaned surfaces.
- C. All interior abrasive blast cleaning is to be completed and all spent abrasive removed, and surfaces thoroughly cleaned prior to any primer application.
- D. Once an area is acceptable for painting, apply all coats and allow coating to cure to touch prior to resumption of blasting or blast the entire tank before painting, use dehumidification to hold the blast. It is the contractor's discretion and responsibility to determine if the entire tank is to be blasted, or what size is to be blasted and coated (all coats).
- E. The contractor is responsible for supplying heat and dehumidification to maintain blast conditions.

3.03 HIGH PRESSURE WATER CLEANING – EXTERIOR ALTERNATE 1

- A. Solvent clean all visible grease, oil, salt, algae, and residue in accordance with SSPC-SP1.
- B. High pressure water clean all exterior surfaces and appurtenances at 5,000 – 10,000 psi to remove all dirt, chalk, algae, other foreign material, and all brittle or loose coating, rust, and mill scale. Operational pressure will be determined by the engineer based on field conditions.
- C. Maintain a water jet nozzle distance of 2 in. – 10 in. away from the surface.
- D. Hold the water jet nozzle with 0° - 15° tip perpendicular (90°) to the surface at all times.
- E. Only use machines rated at and capable of achieving and maintaining 10,000 psi. Use of a rotating/reciprocating nozzle during water cleaning is permitted but not to increase the pressure of a washer rated lower than required.
- F. Do NOT exceed a rate of 10 sq. ft./minute.
- G. The gauge measuring time of use must be operational on the unit, if not operational the contractor may be shut down and/or deducted price for rental of an operational unit from the final payment.
- H. Feather all edges using power tools per this specification.

3.04 POWER TOOL CLEAN (SSPC-SP11) – EXTERIOR ALTERNATE 1

- A. Solvent clean all visible grease, oil, salts, and residue.
- B. Power tool clean all surfaces and appurtenances to bare metal (SP11) in areas where steel is exposed or rusted, or where coating is abraded.

- C. Retain or produce a surface profile. Surface profile shall be greater than 1.0 mil.
- D. Edges of adjacent coating shall be feathered a minimum of ½ in. from the exposed steel with 3M Scotch-Brite Clean'n Strip discs.

3.05 PRE-SURFACE PREPARATION – EXTERIOR ALTERNATE 2

- A. Low pressure water clean at 4,000 psi all surfaces and appurtenances to remove mildew, soot, and other contaminants.
- B. Use a biodegradable algicide for the exterior approved by the engineer.
- C. Hand wash with a higher concentration of algicide any mildew not removed by power washing.
- D. Mix algicide at level recommended by the manufacturer, but not at a level that could result in an environmental problem.
- E. Hold water jet nozzle using a 0° or 15° tip perpendicular (90° to surface) at all times. Maintain a water jet nozzle distance of 2 in. – 10 in. from the surface.

3.06 COMMERCIAL BLAST (SSPC-SP6) – EXTERIOR ALTERNATE 2

- A. Abrasive blast clean all surfaces and appurtenances to a commercial finish (SSPC-SP6), latest edition thereof.
- B. Maintain a profile of 1.0 – 2.0 mils on abrasive blast cleaned surfaces.

3.07 ROBOTIC VACUUM BLAST CLEANING – EXTERIOR ALTERNATE 2 - CONTRACTOR'S OPTION

- A. Abrasive blast clean all flat, accessible surfaces with a robotic vacuum blast unit.
- B. Abrasive blast clean all surfaces and appurtenances to a commercial finish (SSPC-SP6), latest edition thereof.
- C. Blast unit to be completely sealed to the surface with a mask and vacuum assembly. No external dust escape is permitted.
- D. Seal must be maintained between the blast unit and surface.
- E. Surfaces not accessible to the blast unit are to be water dampened abrasive blast cleaned using ground tarps to collect all paint chips and spent abrasive. Approved rust inhibitor to be added during water dampened blasting to resist flash rusting.
- F. Surface preparation and profile to be maintained per these specifications. Engineering controls are to be used to maintain minimal standards.

3.08 WATER DAMPENED BLAST (SSPC-SP6) – EXTERIOR ALTERNATE 2 – CONTRACTOR'S OPTION

- A. Abrasive blast clean all surfaces and appurtenances not accessible by robotic blasting to a commercial finish (SSPC-SP6), latest edition thereof.
- B. Inject water into the blasting media at the nozzle.

- C. The engineer may require adjustment of the waterflow (increase or decrease) based on the amount of dust generated. Adjust nozzle pressure to reduce ricochet of abrasive. Supply sufficient water to suppress all dust.
- D. Contain all water introduced into the tank, as well as the abrasive. The contractor is advised to use airflow and evaporation to their advantage to reduce the amount of water requiring removal.
- E. Maintain a profile of 1.0 – 2.0 mils.
- F. Furnish and use an approved rust inhibitor injected into the water. Proper mixing and application will be in the manufacturer's recommendations.
- G. Rinse all residue, abrasive, etc. from the tank each day upon completion.

3.09 WASTE DISPOSAL – NON-HAZARDOUS

- A. If after testing of the spent abrasive material the TCLP tests indicate the abrasive is not a hazardous waste, dispose the abrasive in a waste disposal facility.
- B. All waste shall be handled by a licensed hauler. Supply the owner with all proper documentation of the final disposal site. The actual bill of lading and all manifests will be required prior to any payment.
- C. Payment for non-hazardous waste disposal is incidental to interior or exterior painting.

3.10 WASTE DOCUMENTATION

- A. Supply proper documentation of storage, transportation, and treatment, or disposal of the waste to the owner. The owner will retain sufficient funds from the contractor to pay for hazardous waste transportation, treatment, and any possible fines until all documentation has been received. This retainage will be held, even if the waste has tested non-hazardous.

3.11 TESTING and CLEAN-UP of WASTE

- A. Daily collect all spent abrasive from the ground tarps and dispose in the required receptacles. Prior to receiving test results, spent abrasive shall be stored on ground tarps. The spent abrasive is to be covered and weighted down so no dust can be released.
- B. Furnish containers with proper labels for storage of the spent debris. Containers shall meet requirements of the EPA (or their local counterpart) for hazardous waste disposal. The spent abrasive will be moved directly from the tank into the waste containers. The containers will remain until final test results have been received. Furnishing containers with covers will be incidental to respective repaint, and will not be affected by the owner's final selection of respective interior or exterior disposal.
- C. Waste to remain on-site in covered receptacles until waste test results are received.

SECTION 09 97 13.11.01
CONTAINMENT – FLEXIBLE FRAME SYSTEM

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Flexible Frame Containment System Requirements.

1.02 REFERENCES

- A. SSPC Guides:
 - 1. Guide 6 – Containing Debris Generated During Paint Removal Operations.

1.03 SUBMITTALS

- A. Containment Plan.

1.04 ENVIRONMENTAL SAMPLING for EXTERIOR CONTAINMENT

- A. Collect four (4) pre-project soil samples, compile a map, and collect four (4) post-project soil samples. Send samples to a NLLAP certified lab and test for total lead and chrome.
- B. Sample waste from each portion of the project, and keep waste segregated. Send to a NLLAP certified lab and test for TCLP 8 metals.
- C. The owner reserves the right to collect samples and to send them to their selected lab. This will be determined at the preconstruction meeting.
- D. Pay all lab fees for 8 metals TCLP analysis on waste samples, total lead and chrome on soil samples, and any subsequent testing fees if clean-up is warranted.
- E. Complete all sampling in accordance with EPA protocol.

1.05 PAYMENT

- A. Payment for Section 09 97 13.11.01 Containment is incidental to exterior painting unless otherwise stated in these specifications.

PART 2 – PRODUCTS

2.01 DUST COLLECTORS – AIR FILTRATION UNITS

- A. Furnish and use a dust collector during all blasting work.
- B. Units to be equal in filtration capacity to Eagle Industries dust collectors. Other units may be used, but their substitution will be evaluated on efficiency at 0.5 micron size and airflow movement.
- C. Use 40,000 CFM minimum for containment work.

- D. Substitution of steel grit blasting may decrease the requirements of above. New requirements will be defined by the engineer based on the efficiency of the contractor's equipment.
- E. Furnish HEPA filters for dust collection.
- F. Number of dust collectors shall be sufficient to supply a 50 ft./minute downward draft at most areas. An average may be considered. Determination of actual containment plan will be the deciding factor. Calculations of airflow shall be included in the containment submittal.
- G. Use only new filters or filters certified clean.

2.02 GROUND TARPS

- A. Use impermeable ground tarps, 20 mils thick.
- B. Use ground tarps able to withstand the anticipated construction traffic without tearing or separating.

2.03 CONTAINMENT SHROUDS

- A. All shroud material and superstructure shall be non-penetrating, nylon rip-stop material manufactured by Eagle Industries, or approved equal. Approval of alternate material will be based on density, weight, support strength, stitching, reinforcement, home office experience, and staff assistance.

2.04 CONTAINMENT CONNECTIONS to TANK

- A. Steel plating and other Structural Shapes – ASTM A36.
- B. Bolts – ASTM A307.
- C. Welds – E70XX Electrodes.

PART 3 – EXECUTION

3.01 DUST CONTAINMENT – EXTERIOR

- A. Do everything within industry standards to minimize dust as a nuisance. Required procedures include: angle of abrasive impact, direction of nozzle spray, orifice pressure, and work stoppage due to wind speed or direction.
- B. Complete any additional measures required in these specifications. There will be no negotiations for extra compensation for nuisance complaints and corrective measures.
- C. Fully inspect the area, land use, and other pertinent local conditions prior to bidding exterior work.
- D. Do not permit dust, abrasive, or paint chips to fall outside the containment system perimeter or ground cover.

- E. Do not permit any visual dust release when transferring abrasive from either the interior or exterior of the structure to the dumpsters. Suppress dust with tarps or water, or other preapproved method.

3.02 CONTAINMENT during ABRASIVE BLAST CLEANING – EXTERIOR – SSPC-GUIDE 6 – CLASS 1A

- A. Furnish and install a total containment system to be used during all dust generating work.
- B. This specification is intended to be performance based. Alternative procedures to accomplish the same purpose of dust or lead elimination may be submitted for review. The final determination if the alternate performs as well as total containment will rest solely with the engineer. Printed material and test results by independent firms will be considered, but not govern. Rejection of an alternative after bid opening will not relieve the contractor of any responsibility to complete the work as bid, unless his bid states that his bid is to be withdrawn if the alternate is rejected. Submit a sketch of the alternate containment procedures with bid.
- C. Contain waste abrasive and paint chips to the area immediately under the structure. No release outside the containment system will be permitted. The shrouds will be erected on all sides of the tank for 360°.
- D. Cover the roof with containment shrouds. Separate vertical tarps from the roof or sidewalls to allow waste from the roof to slip down the inside of the shields. The vertical shrouds are to be sandwiched between two separate sections of the roof bonnet when lifted to its highest position. Overlap to be a minimum of 36 inches between the bonnet and vertical shroud.
- E. Support the containment shields by temporary braces attached to the roof and ground. Leave space to allow rigging and equipment to be used within the shields. Extend the bracing out from the structure, and secure cables to the ground by use of deadmen. Design system, bracing, deadmen, shields, etc. depending on the size of the structure, availability of space, prevailing wind forces, and local restrictions.
- F. Immediately replace/repair any damaged shrouds. Discontinue blast operations until the damaged shrouds are repaired or replaced.
- G. Use air impenetrable walls and roof with either rigid or flexible framing.
- H. Overlap all seams by 2 ft. Completely seal all seams by stitching, taping, caulking, or other sealing measures.
- I. Cost for structural reinforcement of the roof and/or any other part of the tank, to support the containment system, is incidental to exterior painting.

3.03 TANK CONNECTIONS

- A. In submittal, request approval of all welding and cutting on the structure.
- B. Cut all approved holes into the tank with rounded corners.

- C. Use a welder certified to complete the type and position weld necessary for attachment.
- D. All steel must be cleaned of lead paint by approved method before cutting or welding.

3.04 CONTAINMENT OPENINGS

- A. Design a means of ingress and egress of the containment structure. Access shall be through an overlapped door on each side of the chamber.
- B. Size of the structure shall be 8 ft. x 8 ft. x 6 ft. high. Fabricate the structure from scaffolding and cover with overlapping tarps secured in-place. Construct the chamber out of 6 ft. high scaffold sections. Install the scaffold so the majority of the scaffold is extended out from the containment. Minimum clear walking height shall be 54 in. Minimum width shall be 42 in.
- C. Fabricate the opening for exhaust air piping with a minimum 18 in. long tunnel firmly attached. Maintain the exhaust piping in as straight a line as possible to avoid restricting airflow. Exhaust air attachments may be elsewhere other than the entryway.
- D. Supply an operating HEPA vacuum in the entryway to vacuum off workers leaving the containment. Maintain the vacuum clean and serviced.

3.05 GROUND COVER

- A. Protect the ground from spent abrasive and paint chip contamination. Include the area inside the containment, and a 10 ft. diameter around the outside of the containment.
- B. Lap all ground tarps a minimum of 2 ft. Lap the inside ground tarps up 2 ft. on the outside of the vertical shrouds. Lap the outside ground tarps 2 ft. under the inside tarps with slots for cables. This will prevent loss of abrasive material between the ground and vertical shrouds.

3.06 DAILY SHUTDOWN

- A. Clean all ground tarps daily. Collect all debris and store in barrels. Roll all tarps for storage, including all tarps inside containment. The purpose is to prevent the debris from being blown off the tarps.
- B. After blasting, clean all flat surfaces daily before the containment structure is lowered. Also clean all rigging and equipment before lowering containment, or removing the roof cover.

SECTION 09 97 13.13.16

WET INTERIOR STEEL COATING – THREE COAT ZINC EPOXY

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Painting the wet interior of both tanks.

1.02 REFERENCES

- A. SSPC and NACE Standards:
 - 1. PA1 – Paint Application.
 - 2. PA2 – Measurements and Calibration.
 - 3. NACE RP 0178 Surface Finish Requirements.

1.03 WORK INCLUDED

- A. Application of a three (3) coat zinc epoxy system.

PART 2 – PRODUCTS

2.01 ZINC EPOXY – 3 COAT SYSTEM

- A. Three (3) coat zinc epoxy system meeting all National Sanitation Foundation certification standards for potable water contact.
- B. Approved suppliers and system for the roof:

<u>Manufacturer</u>	<u>System</u>
Tnemec	94H ₂ O/N140/N140(stripe)/22
- C. Approved suppliers and system for the sidewall and floor.

<u>Manufacturer</u>	<u>System</u>
Tnemec	94H ₂ O/N140/N140(stripe)/N140
Induron	PE-70/PE-70/PE-70(stripe)/PE-70

PART 3 – EXECUTION

3.01 ZINC EPOXY – 3 COAT SYSTEM

- A. Apply a three (3) coat high build epoxy paint system to all prepared surfaces.
- B. Abrasive blast cleaning and paint requirements have been previously defined in Section 09 97 13.10.

C. Apply each coat at the following rates for the roof:

<u>Coat</u>	Minimum <u>D.F.T.(mils)</u>	Maximum <u>D.F.T. (mils)</u>
Primer	2.5	3.5
Intermediate	4.0	6.0
Stripe Coat	1.5	2.5
Topcoat	<u>16.0</u>	<u>20.0</u>
Total	22.5*	29.5*

*Total does not include stripe coat.

D. Apply each coat at the following rates for the sidewall and floor.

<u>Coat</u>	Minimum <u>D.F.T. (mils)</u>	Maximum <u>D.F.T. (mils)</u>
Primer	2.5	3.5
Intermediate	4.0	6.0
Stripe Coat	1.5	2.5
Topcoat	<u>4.0</u>	<u>6.0</u>
Total	10.5*	15.5*

*Total does not include stripe coat.

- E. Stripe coat to be applied to all welds, angles, and sharp edges throughout the structure, including above the high water line and all roof beams, etc.
- F. Each full coat to be a different color from the previous coat and is to be approved by the engineer. No color bleed through should occur if proper application rates are observed.
- G. Apply all coats in uniform color and sheen without streaks, laps, runs, sags, cloudy, or missed areas. Correct all defects before application of the successive coat.
- H. Allow a minimum of twenty-four (24) hours between coats (including stripe coat). Additional time may be necessary if low temperatures require an increase in the necessary cure time.
- I. MAINTAIN FORCED VENTILATION A MINIMUM OF SEVEN (7) DAYS AFTER TOPCOAT APPLICATION, time required for cure is dependent on the coating manufacturer and temperature. Record variations of the standard procedures (roof hatch closure because of rain, etc.), and submit to the engineer. Heat is required if, in the opinion of the engineer, the integrity of the coating is endangered by cold weather, or if additional cure time will delay the project beyond the substantial completion date.

3.02 SCHEDULE of WORK

- A. Complete all exterior and interior welding prior to surface preparation.

SECTION 09 97 13.23.08

**EXTERIOR STEEL COATING – FOUR COAT ZINC EPOXY URETHANE
REPAINT**

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Painting on the exterior of both tanks – Alternate 2.

1.02 REFERENCES

A. SSPC and NACE Standards:

- 1. PA1 – Paint Application.
- 2. PA2 – Measurements and Calibration.
- 3. NACE RP 0178 Surface Finish Requirements.

1.03 WORK INCLUDED

- A. Application of a four (4) coat zinc epoxy urethane system.
- B. Application of a lettering and logo.

PART 2 – PRODUCTS

2.01 ZINC EPOXY URETHANE - 4 COAT SYSTEM

- A. The coating shall be an epoxy urethane system.
- B. The contractor is advised to follow all rules for safety while using isocyanates.
- C. Ultraviolet protection additives mixed at factory only. There will be no tinting or addition of any material other than the manufacturer’s thinners.
- D. Approved suppliers and systems:

<u>Manufacturer</u>	<u>System</u>
Tnemec	90-97/N69/1074/1074UV
Induron	Indurazinc MC-67/PE-70/I-6600 Plus/I-6600 Plus
Sherwin Williams	Corothane I galvapak/646PW/Acrolon Ultra/Acrolon Ultra
PPG	Amercoat 68HS/Amercoat 2/Pitthane Ultra/Pitthane Ultra

PART 3 – EXECUTION

3.01 ZINC EPOXY URETHANE - 4 COAT SYSTEM

- A. Apply to all prepared surfaces and appurtenances a four (4) coat zinc epoxy urethane system.
- B. Surface preparation and paint requirements have been previously defined in Section 09 97 13.10. Apply all coatings by brush and roller. Spray application is prohibited.

- | | | |
|-----------------------|----------------------|----------------------|
| C. <u>Coat</u> | Minimum | Maximum |
| | <u>D.F.T. (mils)</u> | <u>D.F.T. (mils)</u> |
| Primer | 2.5 | 3.5 |
| Epoxy Intermediate | 2.0 | 3.0 |
| Urethane Intermediate | 2.0 | 3.0 |
| Topcoat | <u>2.0</u> | <u>3.0</u> |
| Total | 8.5 | 12.5 |
- D. Each full coat to be a different color from the previous coat and is to be approved by the engineer. No color bleedthrough should occur if proper application rates are observed.
- E. Apply all coats in uniform color and sheen without streaks, laps, runs, sags, cloudy, or missed areas. Correct all defects before application of the successive coat.
- F. Allow a minimum of twenty-four (24) hours between coats. Additional time may be necessary if low temperatures require an increase in the necessary cure time.
- G. The contractor should be advised that Dixon Engineering, Inc. will take mil readings on the exterior per SSPC-PA2 which requires gauge adjustment from magnetic plane to peak plane.

3.02 LETTERING and LOGO – TANK #1

- A. Paint the name “UTILITIES INC” with a “swoop” logo in one (1) locations on the tank.
- B. Paint the lettering the same size and style as the existing lettering, and place the lettering in the same locations. Verify size and document locations for application purposes.
- C. See attached photo of the existing lettering and logo.
- D. Approved Fluorourethane coating system.

<u>Manufacturer</u>	<u>System</u>
Tnemec	V700
Induron	Perma-Gloss
Sherwin Williams	Fluorokem HS
PPG	Corafon ADS

- E. Apply lettering coating at 2.0 to 3.0 mils.
- F. Payment is incidental to exterior repainting.

3.03 SCHEDULE of WORK

- A. Complete all exterior and interior welding prior to surface preparation.

SECTION 09 97 13.24.10

EXTERIOR STEEL COATING – THREE COAT EPOXY URETHANE OVERCOAT

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Painting on the exterior.

1.02 REFERENCES

A. SSPC and NACE Standards:

- 1. PA1 – Paint Application.
- 2. NACE RP 0178 Surface Finish Requirements.

1.03 WORK INCLUDED

- A. Application of a three (3) coat epoxy urethane system.
- B. Application of a logo and lettering.

PART 2 – PRODUCTS

2.01 EPOXY URETHANE - 3 COAT OVERCOAT SYSTEM

- A. The coating shall be an epoxy urethane system.
- B. The contractor is advised to follow all requirements for safety concerning isocyanates.
- C. Ultraviolet protection additives mixed at factory only. There will be no tinting or addition of any material other than the manufacturer’s thinners.
- D. Approved suppliers and systems:

<u>Manufacturer</u>	<u>System</u>
Tnemec	N69(spot)/N69/1074/1074UV.
Induron	PE-70(spot)/PE-70/I-6600/I-6600
Sherwin Williams	646PW(spot)/646PW/Acrolon Ultra/Acrolon Ultra
PPG	Amerlock 2(spot)/Amerlock 2/Pitthane Ultra/Pitthane Ultra

PART 3 – EXECUTION

3.01 EPOXY URETHANE - 3 COAT OVERCOAT SYSTEM

- A. Apply to all prepared surfaces a three (3) coat epoxy urethane system.
- B. Surface preparation and paint requirements have been previously defined in Section 09 97 13.10. Apply all coatings by brush and roller. Spray application is prohibited.
- C. Apply each coat at the following rates:

<u>Coat</u>	<u>Minimum</u>	<u>Maximum</u>
	<u>D.F.T. (mils)</u>	<u>D.F.T. (mils)</u>
Primer (spot)	2.0	3.0
Epoxy Intermediate	2.0	3.0
Urethane Intermediate	2.0	3.0
Topcoat	<u>2.0</u>	<u>3.0</u>
Total	8.0	11.0

- D. Each full coat to be a different color from the previous coat and is to be approved by the engineer. No color bleedthrough should occur if proper application rates are observed.
- E. Apply all coats in uniform color and sheen without streaks, laps, runs, sags, cloudy, or missed areas. Correct all defects before application of the successive coat.
- F. Allow a minimum of twenty-four (24) hours between coats. Additional time may be necessary if low temperatures require an increase in the necessary cure time.

3.02 LETTERING and LOGO – TANK #1

- G. Paint the name “UTILITIES INC” with a “swoop” logo in one (1) locations on the tank.
- H. Paint the lettering the same size and style as the existing lettering, and place the lettering in the same locations. Verify size and document locations for application purposes.
- I. See attached photo of the existing lettering and logo.
- J. Approved Fluorourethane coating system.

<u>Manufacturer</u>	<u>System</u>
Tnemec	V700
Induron	Perma-Gloss
Sherwin Williams	Fluorokem HS
PPG	Corafon ADS

- K. Apply lettering coating at 2.0 to 3.0 mils.
- L. Payment is incidental to exterior repainting.

3.02 SCHEDULE of WORK

- A. Complete all exterior and interior welding prior to surface preparation.

SECTION 09 97 23.23.03

CONCRETE FOUNDATION COATING – TWO COAT EPOXY

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Painting of the concrete foundation(s).

1.02 REFERENCES

- A. SSPC and NACE Standards:
 - 1. PA1 – Paint Application.
 - 2. PA2 – Measurements and Calibration.

1.03 WORK INCLUDED

- A. Application of a two (2) coat epoxy system.

PART 2 – PRODUCTS

2.01 EPOXY – 2 COAT SYSTEM

- A. Two (2) coat epoxy system.
- B. Approved suppliers and manufacturers:

<u>Manufacturer</u>	<u>System</u>
Tnemec	N69/N69
Induron	PE-70/PE-70
PPG	Amerlock 2/Amerlock 2
Sherwin Williams	646PW/646PW
Carboline	635/635

PART 3 – EXECUTION

3.01 EPOXY – 2 COAT EPOXY

- A. Apply to all prepared areas a two (2) coat epoxy system.
- B. Remove dirt 3” below grade around the entire foundation prior to coating, backfill once topcoat is dry to the touch.
- C. Foundations to be water cleaned at 3,500 to 5,000 psi to remove all contaminants.
- D. In lieu of water cleaning contractor has the option to abrasive blast clean to a SSPC-SP13/NACE 6 Standard to create a profile per ICRI – CSP3.

E. Apply each coat at the following rates:

<u>Coat</u>	<u>Min. D.F.T. (mils)</u>	<u>Max. D.F.T. (mils)</u>
Primer	3.5	5.5
Topcoat	<u>3.5</u>	<u>5.5</u>
Total	7.0	10.0

F. Allow the manufacturer's minimum time between coatings.

G. Cost is incidental to exterior painting.

CASE NO. 2018-00208
WATER SERVICE CORPORATION OF KENTUCKY
RESPONSES TO COMMISSION STAFF'S SECOND INFORMATION REQUEST

17. Refer to the Application, Exhibit 5, Guttormsen Testimony, page 14, line 10.

Mr. Guttormsen states that Water Service Kentucky calculated its pro forma state income taxes (SIT) using the current 6 percent rate. In April 2018, the Commonwealth of Kentucky passed legislation lowering the SIT rate from 6 percent to 5 percent.

a. Provide a revised pro forma income statement and revenue requirement using the current 5 percent SIT rate.

b. Provide revised workpapers and calculations to reflect the current 5 percent state tax rate in Excel spreadsheet format with all rows and columns unprotected and accessible.

Response:

- a. Please see the attached file entitled "Response to DR 2-17 (WSC Kentucky - 2018 Historical TYE 2017 Analysis - FINAL V23 (April Tax Update))".
- b. Please see the response to "a." above.

Witness – Rob Guttormsen

CASE NO. 2018-00208
WATER SERVICE CORPORATION OF KENTUCKY
RESPONSES TO COMMISSION STAFF'S SECOND INFORMATION REQUEST

18. Refer to the Application, Exhibit 5, the Direct Testimony of Michael A. Miller (Miller Testimony), page 7, lines 7-8.

a. Provide the flushing plan that Water Service Kentucky put in place.

Compare this to the previous flushing plan and identify the more stringent procedures that were put in place.

b. Explain if there have been any further issues with the water quality.

Response:

- a. In areas of the system where there have historically been water quality complaints, WSCCK increased the flushing to 3-4 times per year instead of the normal flushing frequency of twice per year.
- b. There have been no recorded issues in these areas.

Witness – Mike Miller

CASE NO. 2018-00208
WATER SERVICE CORPORATION OF KENTUCKY
RESPONSES TO COMMISSION STAFF'S SECOND INFORMATION REQUEST

19. Refer to the Application, Exhibit 5, Miller Testimony at 7-8. Mr. Miller describes Water Service Kentucky's Geographic Information System (GIS) conversion.
- a. If Water Service Kentucky issued an RFP, provide a copy of the RFP that was issued, identify the firms to which the RFP was sent, identify the firms that responded, and identify and explain why the firm was chosen.
 - b. If Water Service Kentucky did not issue an RFP, explain in detail the bid process used by Water Service Kentucky, identify the firms that responded, and identify and explain the reason for choosing the firm.
 - c. Provide a detailed breakdown of the \$26,141 bid price and the allocated costs of \$60,900.
 - d. Identify the other operating affiliates that have incurred a GIS conversion and include an itemization of the allocated GIS costs for each affiliate.

Response:

- a. Attached as Response to PSC 2-19 b. (GIS Request for Proposals) is the current RFP that was sent out. In addition, the firms that bid were:
 - 1. RJN
 - 2. Symbiont
 - 3. Kimley-Horn

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Symbiont was selected because of being the lowest bidder.

- b. An RFP process was performed, please see the attached file “Response to PSC 2-19 b. (GIS Request for Proposals)”.

- c. Please see the attached breakdown for the GIS costs of \$26,141, “Response to PSC DR 2-19 c. (2018 GIS Project)”. Attached, “Response to PSC DR 2-19 c. (2018 OMS Project)” are the overhead cost estimates for the OMS project, along with allocated costs amongst all affiliates. Please note that the costs shown in the attached for WSCK are \$61,008, the difference may be attributed to rounding.

- d. All other areas are moving forward with GIS conversion to maximize the benefit of the OMS software. GIS costs are not allocated amongst affiliates.

Witness – Mike Miller

PSC DR 2-19b.
GIS Request for Proposals

Request for Proposals (“RFP”)

for the
Utilities Inc. (UI) for

Water Service Corporation of Kentucky

“UI GIS Conversion and Mapping Project”

Issued by:
UTILITIES INC.
2335 SANDERS ROAD, NORTHBROOK, IL 60062.

Date of Issue:
5 APRIL 2018

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2. General Information

2.1. Purpose

Utilities Inc. (“UI” or “Utility”) requests cost proposals to Provide Professional Services related to the development of UI’s water and wastewater utility Geographic Information System (GIS).

The intent of this RFP process is to identify a successful Bidder and determine which proposal provides the best overall value to UI.

2.2. Contact information

Primary Contact: Steve Oxley; GIS Analyst

Email Address: sjoxley@uiwater.com

Phone Number: Cell: (217) 703 9903

Secondary Contact: John Norton, Jr., PhD, PE; Director of Capital Planning & Asset Management

Email Address: JWNorton@uiwater.com

Phone Number: (847) 498-2172

2.3. Questions and Clarifications

Bidders are responsible for satisfying themselves as to the requirements of this RFP. All questions or requests for clarification must be directed in writing to the primary contact person identified above. Bidders should include the RFP name in the email subject line.

Inquiries will be received until the time indicated in Section 3.2 below. If determined necessary, UI will issue an addendum and circulate responses to all Bidders.

2.4. Bid Evaluation

2.4.1 Prequalification

UI follows a prequalification procedure, whereby we invite Proposals from qualified bidders. Bidders must meet our prequalification standards in order to have their Proposals fully considered.

2.4.2 Bid evaluation

After the Closing Time, UI will review and evaluate all Proposals received in accordance with the submission requirements of this RFP. Bids will not be opened publicly. Proposals will be evaluated based on the overall best value to UI.

Proposals should include the following information:

1. Experience and track record with similar work (20%)
2. Experience with private utility companies and/or small municipal systems and/or experience with Utilities, Inc. corporate GIS data standards (5%)
3. Proximity of bidder’s offices to UI’s utility systems (5%)
4. Project Approach and Understanding (35%)
5. Technical Price Proposal (35%)

2.4.3 *Bids Response*

At any time after the Closing Time and before award of the Contract, UI has in its sole discretion, the right:

- a. to invite some or all the of the Bidders to appear before Utility;
- b. to request any additional information, details or materials from a Bidder that UI requires to satisfy itself that the Bidder will be able to carry out the Work; and/or
- c. to negotiate changes to the scope of Work or any other condition with any one or more of the Bidders without having any duty or obligation to advise any other Bidder. Utility shall have no liability to any Bidder because of such negotiations or modifications.

2.4.4 *Bid acceptance and rejection*

Notwithstanding any other provision of the RFP, the Utility has in its sole discretion, the right to:

- a. accept or reject any Proposal;
- b. reject all Proposals;
- c. accept a Proposal that is not the lowest Proposal;
- d. accept a Proposal that deviates from the requirements of this RFP;
- e. reject a Proposal even if it is the only Proposal received by UI;
- f. accept all or any part of a Proposal; and
- g. split the requirements of the RFP between one or more Bidders.

The Utility may elect to disqualify any Bid which fails to meet any of the requirements of this RFP. However, the Utility in its sole discretion may waive any non-compliance with this RFP and may elect to retain for consideration Bids which are non-conforming, which do not, for example, contain the content or form required by the RFP, or which have not complied with the process for submission set out herein.

2.5. Contract award

The Contract is awarded when an authorized representative of the Utility notifies the selected Bidder via email of its acceptance of its Bid, including any mutually agreed modifications, clarifications or negotiated changes (if any).

The Bidder will prepare the Contract for execution, and the selected Bidder must, within 10 business days of receipt of notification of being selected, deliver the signed Contract to the Utility for counter signing.

Failure of the selected Bidder to execute and deliver the Contract, together with any such other documents as is required by the RFP or the Contract, within the timeline noted above, will be considered just cause for canceling the award. UI may then commence discussions with one or more of the other Bidders.

The RFP and the submission of a Proposal do not, nor does the RFP process in and of itself, or the selection or notification of a Bidder, create a legally binding contract. It is only upon the award and execution of the Contract by an authorized representative of UI that UI and selected Bidder become legally bound to the other to perform the obligations under such Contract.

2.6. Confidentiality

All information provided by or obtained from UI in any form about the RFP process, including Information about UI and its business activities, is the sole property of UI and must be treated as confidential. Such information is not to be used for any purpose other than enabling each Bidder to submit a Proposal. It must not be copied, disclosed or released without prior written approval from UI and shall be returned by Bidders to UI promptly upon the request from UI. Each Bidder agrees that this obligation of confidentiality will survive the termination of the RFP process and/or the Contract.

3. Instruction to Bidders

3.1. Definitions

In this Invitation to Bid:

- a. "Bidder" means the individual, partnership, corporation or combination thereof, including joint ventures, providing or submitting a cost proposal in response to this RFP.
- b. "Contract" means the contract to be executed between UI and the Successful Bidder that will govern the Work.
- c. "RFP" means this document, including all addenda issued by UI.
- d. "Successful Bidder" means the Bidder that enters the Contract with UI.
- e. "Work" means the scope of services to be provided by the Successful Bidder to UI pursuant to the Contract. Such services are described in Section 4 of this RFP.

3.2. Proposal Submission and Due Date

Email for delivery:	sjoxley@uiwater.com
Attention:	Steve Oxley
Due date:	Wednesday, April 25, 2018
Closing time:	5:00 pm (EST)

Questions will be received at the above email address until Thursday, April 19, 2018, at 9pm (EST). UI staff will reply to written questions to the extent possible.

3.3. Proposal Instructions

3.3.1 *Timing*

Proposals will be received up until the Closing Time. It is solely the responsibility of the Bidder to ensure that their Proposal is received by the Closing Time. Proposals received after the Closing Time may not be accepted and may be returned to the Bidder unopened.

3.3.2 *Proposal document*

Proposals shall be emailed as one complete PDF file containing all proposal elements.

3.3.3 *Proposal structure*

Proposals shall provide quoted price per business unit although bids will be awarded as a whole.

3.3.4 *Legal signing authority*

Proposals shall be executed by an officer or employee having authority to bind the Bidder to the terms and conditions of this RFP and the Contract.

3.3.5 Withdraw of proposal

Proposals may be withdrawn by written notice only, provided such notice is received prior to the Closing Time by the designated email addresses. A Bidder who has withdrawn their proposal may submit a new proposal, but only in accordance with the terms and conditions of this RFP.

3.3.6 Ownership of proposal submissions

Proposals submitted to UI in response to this RFP will become the sole property of UI. Bidders should anticipate that their proposal submissions will be used to support utility costs and expenses to the applicable State Utility Commission(s) and will thus be available for public viewing and review. At no time should Bidders expect or request "trade secrecy" or similar protections for intellectual content.

3.4. Submission Requirements

Please include the following documents, in order, saved together as one single RFP document.

3.4.1 Proposal document

Written in format appropriate to describe the overall project understanding, tasks, team/resumes, roles, timeline(s), and other necessary details. Only include those resumes of personnel who will be substantially involved with performing the project tasks.

3.4.2 Bid Form.

Attached as Section 5 to this RFP.

3.4.3 Cost Schedule

Attached as Section 6 to this RFP.

3.4.4 Exceptions

Each Bidder must clearly state in their Proposal any proposed exceptions it may have to the requirements of this RFP. For each proposed exception, Bidder shall outline the applicable document, section, the reason for the exception, and specific alternate wording. UI will, in its sole discretion, determine what constitutes an acceptable exception. Any exceptions that are not acceptable to UI may be cause for rejection of the Bidder's Proposal. If no exceptions are indicated in the Proposal, Utility will be entitled to interpret that the Bidder offers to perform the Work in full compliance with the requirements of this RFP.

3.5. Bidder costs

All costs associated with the preparation and submission of a Proposal, including any costs incurred after the Closing Time, will be borne solely by the Bidder. By submitting a Proposal, each Bidder is acknowledging and agreeing that UI will not be responsible in any way for any costs, expenses, losses, damages (including damages for loss of anticipated profit) or liabilities whatsoever incurred or suffered by the Bidder as a result of submitting its Proposal, taking part in meetings, or otherwise in any way connected with this RFP, including UI's acceptance or non-acceptance of any Proposal or any contract award not made in accordance with the express or implied terms of this RFP.

3.6. Duty to inform

3.6.1 *Limitations on information provided*

It is the sole responsibility of each Bidder before submitting a Proposal to examine, inspect and fully inform itself as to all aspects of the Work under the Contract including the requirements set out in the RFP. UI makes neither representation nor warranty in relation to any information supplied about this RFP, its adequacy, accuracy or suitability for any purpose. By submitting a Proposal, Bidder acknowledges and understands that UI is not liable for any loss or damage arising from the use of the information, however caused.

3.6.2 *Understanding of Site Conditions*

By submitting a Proposal, each Bidder will be deemed to have satisfied itself as to all matters relative to the location of the Work, including, without limitation, the form and nature of the location of the Work, details and levels of existing Work, the quantities and nature of the Work and materials necessary for the completion of the Work, the means of access to the site, and in general to have itself obtained all necessary information as to risks, and other climatic, geological, hydrological and natural conditions or such other contingencies which may influence or affect a Bidder's Proposal. No claim arising from Bidder's failure to adequately inspect and examine the location of the Work will be considered.

3.6.3 *Amendments or cancellation by UI*

Utility may in its discretion at any time and for whatever reason:

- a. Clarify, modify, amend or otherwise change the RFP by issuing a written addendum. Addenda issued by UI will form an integral part of the RFP.
- b. Alter or cancel the RFP process by issuing a written notice to Bidders.

4. Scope of Work

4.1. Introduction and purpose

This scope of work encompasses professional services related to the development of UI’s water utility Geographic Information System (GIS). Water Service Corporation of Kentucky consists of two territories (listed in Section 4.2) that serves water customers. We are hiring a contractor to convert our system information sources into an Arc GIS database.

The current linear infrastructure mapping for our systems is based on a combination of existing As-Built, CADD drawings, and paper files that require manual interpretation methods. The paper files range in size from small to large format. The data contains the majority of spatial features, but may lack exact or GPS spatial locations. UI requires these items be converted to ESRI geodatabase (GDB) format (File or Enterprise SDE only, no Shapefiles or Personal GDB) as the first step in the development of an asset management program for the utility. The utility has a standardized data model for use with the system, described in Section 4.3.3 below.

The information contained in the RFP is UI’s best understanding of the required services associated with the project. However, Utility staff will be relying on the firm to provide modifications to the scope of work, required services, and design schedule described above based on their professional expertise in this subject area. In the event the bidder identifies a possible modification to the required services, the firm may include an alternative item in their proposal.

Upon receiving deliverables from the consultant, UI may field check delivered features for accuracy. After review, any features found in error or absent shall be resolved by the consultant at their expense. Significant errors may result in the rejection or termination of the contract.

4.2. Systems part of this project

State	Co #	Co/System Name	Water Connections	Wastewater Connections	Water Mapping	Wastewater Mapping
KY	345	Clinton	608	NA	Paper	NA
KY	345	Middlesboro	5880	NA	Paper	NA

4.3. TASK 1: GIS Conversion and Database Development

The contractor shall hold one (1) on-site kick-off meeting at the UI Offices at Middlesboro prior to project initiation. All paper and CADD documents required for conversion will be provided at the closing of kick-off meeting.

GIS Conversion and Database Development Pricing is requested on a “per connection” basis, times the total number of connections.

UI will provide selected consultant with a standardized data model in ESRI File GDB format and electronic access to all required records and data for GIS conversion project. This information will be provided after award but no less than two weeks prior to on-site kick-off meeting. Consultant will review

provided data to develop estimated fees, project phasing to meet UI priorities and available funding, and a detailed project schedule for UI GIS Conversion and Mapping Project.

4.3.1 Conversion approach

The contractor shall convert the CADD and paper infrastructure system mapping to the UI standardized database schema. UI will provide the existing data e.g., CADD drawings, paper maps, as-built drawings, etc., and the standardized ESRI File Geodatabase schema to the selected bidder. All existing data shall be converted to the data schema with proper topology, network connectivity, edges and junctions snapped. GIS point features currently existing as lines and/or polygons within the CADD data shall be converted properly. Any closed polylines should be converted to polygons where applicable. Attribution, where available, shall be converted to the data schema utilizing the proper existing domains and subtypes and proper field formatting, for example, pipe sizes shall all be numerical. If attribution is not available to be documented, the necessary fields will be developed into the feature for future completion. All converted data, paper and digital, will be converted using a common projection (GCS_WGS_1984).

Data delivered should be of high enough quality to create and build geometric networks, and provide for appropriate analysis and required map viewing and production.

Contractor are preferred to have previous experience working with Water and Wastewater system design in order to spot errors during map conversion. For example, rather than a simple line conversion, they would be able to note a change of a 10" pipe to 8", and therefore place a needed fitting.

4.3.2 CADD Quality standards and approach

Consultant will review records and provided data model and make written recommendations for additional fields or other database changes, as necessary, to support future efforts such as:

- to conduct CCTV inspections,
- develop NASSCO asset prioritization,
- link to hydraulic modeling software, and
- integrate GIS with CIP planning and engineering design software.

Consultant's project team must have experienced GIS staff possessing GIS Professional credentials (GISP), knowledge and understanding of water and wastewater design, and be able to demonstrate a wealth of experience supporting projects with similar scope. Contractor shall declare their minimum quality standards in the response. UI requests "high detail" which will result in lateral lines, fittings, breaks at valves to better mirror water system design.

Consultant shall provide a review of converted data using a tool that provides a complete system for automating and simplifying data quality control and improving data integrity. The purpose of this review is to detect anomalies with features, attributes, and relationships in the finished database. Consultant shall declare their minimum quality standards in their written report summarizing the GIS conversion process and summarize next steps for UI to support future efforts to conduct CCTV inspections, develop NASSCO asset prioritization, link to hydraulic modeling software, and integrate GIS with CIP planning and design software. Consultant shall declare what corrective measures will take place in the event that quality of converted data does not meet agreed upon standards. Data delivered must

include topologically correct networks and allow UI staff to perform map viewing, spatial analysis, and map production.

4.3.3 *Data schema*

The contractor shall use the UI-adopted standard Asset ID (Unique Value) naming system, which will be used throughout the UI systems. This numbering system shall be implemented using the capabilities provided in the ESRI Attribute Assistant Add-in. The contractor shall provide training on how to continue this process when editing or adding additional asset data to UI staff.

4.3.4 *Data sources available*

Available Utility information for completion of this project includes:

- Limited GIS Data
- Employee system knowledge
- Limited CADD Files
- Limited PDF versions of drawings
- 11x17 Water Atlas maps – not comprehensive
- Limited As-builts
- Inspection Records and Drawings

Based on existing poor quality of paper maps, contractor may need to visit several properties in order to understand paper map fully. Bidder should assume each system has various standards for mapping symbology, so local operator may be needed to translate the map correctly. This cost may be presented as a line item, so as not to skew bid comparisons.

4.3.5 *Feature assets*

Feature assets that currently exist in the existing data (CADD, Microsoft Excel, and/or paper maps and hand-drawn maps, and miscellaneous formats) **may** include, but may not be limited to, the following:

Water Distribution System

- Fittings
- Hydrants
- Service Lines (Lateral)
- Main Lines
- Misc. Network Structures
- Pressure Zones
- Pump Stations
- Service Connection Points (Meter)
- Valves
- Tanks
- Wells
- Casings

Selected bidder is responsible for capturing and entering all information found on record drawings and/or contained in CADD drawings that pertain to these items. Consultant will be responsible for digitizing all physical assets that may not appear on map in order to complete water distribution system, such as fittings and lateral lines connecting hydrants and curb stops to the system main.

Information from hand-drawn notes and sketches must also be captured and noted for subsequent field verification by UI personnel.

In addition, the selected bidder will need to coordinate with the UI Asset Management team to be kept aware of changes that will affect the mapping project and standards. The selected firm may also be asked to coordinate with the UI Asset Management contractor.

4.4. TASK 2: Creation of Field Book

The contractor shall create a map book to be used by UI, staff, and others, in the field and for quick reference. The map book should be ArcGIS based and provide adequate detail of the existing water and wastewater infrastructure currently mapped. The contractor shall get approval on the scale and layout of the field book prior to its creation.

4.5. TASK 3: Staff Training:

The contractor will provide pricing and description of capabilities to deliver training on the following activities:

- ArcGIS products
- GPS data collection
- Map book creation
- Mobile data collection
- GIS and CADD data conversion
- Other GIS skills as desired

4.6. TASK 4 Preferred services

The required elements shall not limit services offered by consultant. Instead, the consultant's scope of services may include the following preferred items. Please identify if preferred items are included in the consultant's proposal. All preferred items not included in the consultant's proposal, must be itemized by asset type in the proposal. Utilities Inc. may choose to add additional preferred services to the consultant's contract as budget, schedule, and UI's priorities dictate.

- Provide rationale for using geometric networks in enterprise geodatabase and make recommendations to UI staff that detail how to use geometric networks effectively within production geodatabase when mobile data collection methods are also employed.
- Provide professional staff experienced with small systems capacity evaluations and licensed to make recommendations for capital improvement projects that will correct deficiencies identified by the asset inventory.
- Provide quality control checks against converted paper maps and other file formats into GIS for topology errors and other schema checks.
- Provide professional staff experienced in ArcGIS Online Web Map and App development to provide real-time data collection efforts.

4.7. TASK 5 Additional Services

The following optional services are not included in this project, but the consultant should explain if they are capable of providing these services. Consultant should provide examples of additional services offered and typical costs.

- Develop of workflow process for internal and/or external UI work teams and contractors.
- Mapping grade GPS location of utility assets and accurate attribution of these assets
- Incorporation of other non-asset data into the Utility's data schema.
- Provide quality control checks against collected GPS data for Horizontal and Vertical accuracies.
- Field resources (staff and equipment) to undertake mapping grade GPS location of utility assets and accurate attribution of these assets, on an as-needed basis;
- Incorporation of newly acquired data into data schema;
- Mobile-device selection and integration;
- Mobile software selection;
- Mapping grade GPS receiver selection;
- Work order posting of ongoing changes and updates
- Aerial Drone Imagery, and/or professional FAA licensed UAV pilot for data collection

5. Bid Form

Bid Name: UI Geographical Information System (GIS) Conversion Project

From (Bidder):

Full Legal Name of Bidder

Street Address

City/Town, State, Zip Code

Contact Name, Number and Email Address

1. **BIDDER ACKNOWLEDGES THAT IT HAS RECEIVED THE FOLLOWING ADDENDA AND PREPARED ITS PROPOSAL IN ACCORDANCE WITH THEM:**

Addendum _____ Dated _____

Addendum _____ Dated _____

Addendum _____ Dated _____

Addendum _____ Dated _____

2. **BIDDER ACKNOWLEDGES THAT ITS PROPOSAL COMPRISES ALL OF THE DOCUMENTS SUBMITTED WITH THIS BID FORM, INCLUDING THE DELIVERABLES DESCRIBED UNDER SECTION 3, INSTRUCTIONS TO BIDDERS.**

3. **BIDDER DECLARES AND AGREES:**

- (a) that its Proposal constitutes a legally valid and binding offer made by the Bidder to UI and shall be irrevocable and remain open for acceptance by the Utility at any time on or before 4 p.m. (CST) on the 90th day after the Closing Time;
- (b) that it possesses the experience, knowledge and skill to carry out the Work in an effective, efficient and good and workmanlike manner all in accordance with the requirements of the RFP and the Contract;
- (c) that the Bidder has examined and satisfied itself as to the nature and location of the Work, quality of materials to be used and all other matters which may in any way affect the Work under the Contract;
- (d) that, except as stated in its Proposal, it has no exceptions to the RFP; and
- (e) that it has arrived at this Proposal without collusion with any competitor.

Signed and submitted this _____ day of _____, 2017, by:

Full Legal Name of Bidder

Name of Witness

Name & Titles of Authorized Signing Officer

Signature of Witness

Signature of Authorized Signing Officer

Full Legal Name of Bidder

Name of Witness

Name & Titles of Authorized Signing Officer

Signature of Witness

Signature of Authorized Signing Officer

6. Cost Schedule

Provide a schedule of costs for services that include the following:

- **Company name and address**
- **Date that the cost schedule is valid (example: Jan. 1, 2017 – Dec. 31, 2017).**
- **Position titles**
- **Billing rate for each position**
- **Assumed staffing mix for required project elements 1-5**
- **Non-Salary Costs (e.g. travel or mileage, printing, etc.)**

PSC DR 2-19c.
2018 GIS Project

35491 UI-GIS Conversion for Water Services Corp of Kentucky

PROJECT SUMMARY						
Co/System Name	Water Connections (2 Systems)	Wastewater Connections (0 Systems)				
Clinton	608	-				
Middlesboro	5880	-				
Total	6488	0				
COST SUMMARY						
	Category	Labor Base Cost	Multiplier (Systems/Connections)	Total Labor Cost	Expenses	Total Cost
Task 1 – GIS Conversion and Database Development						
Water Systems						
Project Kick Off Meeting	Project	\$1,968	1	\$1,968	\$200	\$2,168
Project Management/Communication	Project	\$1,404	1	\$1,404	\$0	\$1,404
GBD Model Configuration/Feature Template Standardization	Project	\$1,164	1	\$1,164	\$0	\$1,164
Scanning and Source Data Management	Per System	\$582	2	\$1,164	\$200	\$1,364
Georeferencing Source Maps	Per System	\$582	2	\$1,164	\$0	\$1,164
QAQC	Per System	\$3,630	2	\$7,260	\$0	\$7,260
Heads-Up Digitizing	Per Connection	\$1.40	6488	\$9,083	\$0	\$9,083
Total (Water)						\$23,607
Wastewater Systems						
Project Kick Off Meeting	Project	\$0	0	\$0	\$0	\$0
Project Management/Communication	Project	\$0	0	\$0	\$0	\$0
GBD Model Configuration/Feature Template Standardization	Project	\$0	0	\$0	\$0	\$0
Scanning and Source Data Management	Per System	\$0	0	\$0	\$0	\$0
Georeferencing Source Maps	Per System	\$0	0	\$0	\$0	\$0
QAQC	Per System	\$0	0	\$0	\$0	\$0
Heads-Up Digitizing	Per Connection	\$0	0	\$0	\$0	\$0
Total (Wastewater)						\$0
Task 1 Total (Water and Wastewater)						\$23,607
Task 2 – Creation of Field Book						
MXD Standardization, Data Driven Pages	Per System	\$1,167	2	\$2,334	\$200	\$2,534
Task 2 Total						\$2,534
Tasks 1 & 2 Total						\$26,141

GIS LABOR RATES (If Needed for Tasks 3,4,5)				
Tasks 3, 4, and 5	Senior GIS	Utility GIS Specialist	Utility GIS Technician	Office Services
	\$165/hr.	\$81/hr.	\$70/hr.	\$70/hr.
Staff Training	If Needed	If Needed	If Needed	If Needed
Preferred Services	If Needed	If Needed	If Needed	If Needed
Additional Services	If Needed	If Needed	If Needed	If Needed

Reimbursable Expenses	Cost + 10%
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Expenses for (1 Trip) to/from UI office in Northbrook for Project Kick-Off included in cost table

Costs for scanning up to 10 large format drawings/system included in costs

If onsite field visits are required; (Transportation, Lodging, Hotel, Equipment) estimated expenses will be provided to UI prior to execution; Typical costs are provided for informational purposes only.

Transportation ~\$300-\$500/Flight; \$100-\$150 Hotel/Night; \$.54/Mile; Meals \$50/Day

*PSC DR 2-19c and d
2018 OMS Project*

WATER SERVICE CORPORATION OF KENTUCKY

Case No. 2018 - 00208

Response to PSC DR 19 c. and d.

Line	WSC OMS Project	2016042 PILOT SUBTOTAL (000's)	2018 ROLLOUT TOTAL (000's)	Total Project Total (000's)
1	Actual/Forecast			
2	Software Licenses	\$ 213	\$ 183	\$ 395
3	Hardware Purchases (tablets, mappers, computers)	\$ 94	\$ 70	\$ 164
4	Implementation - Consultants	\$ 849	\$ 322	\$ 1,171
5	Implementation - Captive	\$ 236	\$ 274	\$ 510
6	Implementation - T&L and Internal Add'l Labor	\$ 74	\$ 221	\$ 295
7	Other	\$ -	\$ -	\$ -
8	Actual/Forecast--Total	\$ 1,465	\$ 1,070	\$ 2,534
10			WSCK ERCs 7,107	
11			WSC ERCs 295,250	
12			WSCK ERC % 2.41%	\$ 61,008

Affiliate Allocation

Company	ERC	Allocation %	Allocated Capital \$
13 Apple Canyon Utility Co	2,624	0.89%	\$ 22,521
14 Camelot Utilities Inc	440	0.15%	\$ 3,777
15 Charmar Water Co	53	0.02%	\$ 455
16 Cherry Hill Water Co	259	0.09%	\$ 2,220
17 Clarendon Water Co	306	0.10%	\$ 2,622
18 Del Mar Water Co	80	0.03%	\$ 687
19 Ferson Creek Utilities Co	757	0.26%	\$ 6,498
20 Galena Territory Utilities	3,110	1.05%	\$ 26,693
21 Killarney Water Co	353	0.12%	\$ 3,026
22 Lake Holiday Utilities	2,067	0.70%	\$ 17,739
23 Lake Wildwood Utilities Co	1,402	0.47%	\$ 12,031
24 Northern Hills W & S Co	350	0.12%	\$ 3,004
25 Lake Marian Water Corp	294	0.10%	\$ 2,524
26 Wildwood Water Service Co	196	0.07%	\$ 1,682
27 Valentine Water Service	71	0.02%	\$ 609
28 Walk Up Woods Water Co	221	0.07%	\$ 1,897
29 Whispering Hills Water Co	2,349	0.80%	\$ 20,160
30 Holiday Hills Util Inc	244	0.08%	\$ 2,095
31 Medina Utilities Corp	450	0.15%	\$ 3,865
32 Westlake Utilities Inc	1,036	0.35%	\$ 8,891
33 Cedar Bluff Utilities Inc	110	0.04%	\$ 944
34 Harbor Ridge Utilities Inc	645	0.22%	\$ 5,537
35 Great Northern Utilities	360	0.12%	\$ 3,090
36 Galena Territory-Oakwood	1,344	0.46%	\$ 11,537
37 Twin Lakes Utilities Inc	6,315	2.14%	\$ 54,209
38 WSC Indiana	363	0.12%	\$ 3,113
39 Indiana Water Service Inc	1,856	0.63%	\$ 15,933
40 Hardscrabble	102	0.03%	\$ 876
41 Elk River Utilities Inc	458	0.16%	\$ 3,936
42 Carolina Water Service NC	33,458	11.33%	\$ 287,204
43 CWS Systems	13,095	4.44%	\$ 112,410
44 Carolina Trace Util Inc	3,178	1.08%	\$ 27,280
45 Transylvania Utilities Inc	3,110	1.05%	\$ 26,695
46 Bradfield Farms Water Co	2,714	0.92%	\$ 23,299
47 Cross State	169	0.06%	\$ 1,451
48 Riverbend Estates Water System	139	0.05%	\$ 1,193
49 Tennessee Water Service	145	0.05%	\$ 1,245
50 Tierra Verde Utilities Inc	2,094	0.71%	\$ 17,977
51 Lake Placid Utilities Inc	282	0.10%	\$ 2,422

WATER SERVICE CORPORATION OF KENTUCKY

Case No. 2018 - 00208

Response to PSC DR 19 c. and d.

52	Utilities Inc of Longwood	1,679	0.57%	\$	14,409
53	Cypress Lakes Util Inc	2,570	0.87%	\$	22,063
54	Utilities Inc Eagle Ridge	2,523	0.85%	\$	21,654
55	Mid-County Services Inc	3,355	1.14%	\$	28,800
56	Lake Utility Services Inc	15,730	5.33%	\$	135,028
57	Utilities Inc of Florida	9,612	3.26%	\$	82,513
58	ACME Water Supply & Mgmt	830	0.28%	\$	7,125
59	Sanlando Utilities Corp	21,620	7.32%	\$	185,593
60	Utilities Inc Sandalhaven	1,241	0.42%	\$	10,651
61	Labrador Utilities Inc	1,529	0.52%	\$	13,127
62	Utilities Inc Pennbrooke	2,741	0.93%	\$	23,529
63	Green Ridge Utilities Inc	934	0.32%	\$	8,018
64	Provinces Utilities Inc	1,493	0.51%	\$	12,816
65	Maryland Water Serv Inc	2,202	0.75%	\$	18,901
66	Montague Water & Sewer Co	1,044	0.35%	\$	8,958
67	Utilities Inc of Westgate	994	0.34%	\$	8,533
68	Util Inc of Pennsylvania	1,419	0.48%	\$	12,185
69	Penn Estates Utilities Inc	3,440	1.16%	\$	29,525
70	Colchester Utilities Inc	169	0.06%	\$	1,451
71	Massanutten Public Serv	6,013	2.04%	\$	51,613
72	Water Serv Corp Kentucky	7,107	2.41%	\$	61,008
73	Louisiana Water Serv Inc	10,411	3.53%	\$	89,373
74	Utilities Inc of Louisiana	16,193	5.48%	\$	139,002
75	Density Utilities of LA	2,438	0.83%	\$	20,927
76	WTSO	2,357	0.80%	\$	20,233
77	Utilities Inc of Georgia	10,620	3.60%	\$	91,161
78	Water Service Co Georgia	2,347	0.79%	\$	20,147
79	Utility Management of AL	821	0.28%	\$	7,043
80	Canaan Systems of AL	1,118	0.38%	\$	9,597
81	Carolina Water Service Inc	23,598	7.99%	\$	202,571
82	Util Serv South Carolina	6,890	2.33%	\$	59,146
83	Southland Utilities Inc	170	0.06%	\$	1,459
84	United Utility Companies, Inc	987	0.33%	\$	8,469
85	Bermuda Water Co	9,413	3.19%	\$	80,799
86	Utilities Inc of Nevada	3,890	1.32%	\$	33,392
87	Spring Creek Utilities Co	5,255	1.78%	\$	45,111
88	Sky Ranch Water Service	604	0.20%	\$	5,185
89	Util Inc of Central Nevada	12,965	4.39%	\$	111,296
90	CORIX UTILITIES TEXAS	9,205	3.12%	\$	79,017
91	MITCHELL COUNTY UTILITY CO	1,130	0.38%	\$	9,696
				\$	<u>2,534,473</u>

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20. Refer to the Application, Exhibit 5, Miller Testimony, page 11, lines 3-8. Explain who performed the administrative assistant position duties prior to the new hire.

Response:

Stephen Vaughn performed the administrative duties. Mr. Vaughn has since been promoted to Area Manager.

Witness – Mike Miller

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21. Refer to the Application, Exhibit 5, Miller Testimony, page 11, lines 14-16.

Provide the number of times and associated costs when Water Service Kentucky raised a service line on a customer's property from 2015 to date.

Response:

WSCK encounters approximately two per year. These range from simply raising the box up, which is limited to actual labor cost; to raising the entire meter setting. Raising the entire meter setting requires several fittings and extending the service line, plus labor and equipment expenses. Estimated cost for raising the entire meter setter ranges from \$150-\$300.

Witness – Mike Miller

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22. Refer to the Application, Exhibit 5, Miller Testimony, page 13, lines 12-15.

- a. Explain a typical situation in which encasement pipe would be required.
- b. Explain the process Water Service Kentucky will use to determine if encasement pipe is required.
- c. Provide the costs associated with the installation of the encasement pipe and list who would be covering these costs.

Response:

- a. Anytime that a customer's line is under vehicle traffic and causes additional external stress and or pressure on the pipe.
- b. Physically perform an inspection and verify where the customer is installing the water line. If its determined that circumstances could cause excessive external pressures, WSCK will require the encasement pipe.
- c. Schedule 40 PVC pipe is recommended. The current pricing is approximately \$.50 per/foot and the customer would be covering these costs.

Witness – Mike Miller

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23. Refer to the Application, Exhibit 5, Miller Testimony, Page 14, lines 3-8.
- a. Provide a detailed list explaining all the implemented cost reduction and savings each cost reduction provided for 2016 and 2017.
 - b. Provide all cost-saving actions Water Service Kentucky underwent for the ratepayers.

Response:

- a. The reduction from 2016 to 2017 was based on switching from a type of carbon, to a more effective type, thusly reducing the amount of carbon needed to reduce or remove taste and odor. WSKC's chemical expense for calendar year 2016 was \$124,423 and for 2017 was \$108,012.
- b. WSKC has optimized all chemical dosages We evaluate vehicle needs and consider more fuel-efficient vehicles when possible and are initiating an OMS system to better locate and maintain our assets. In addition, we are implementing an Asset Management Plan that will be link to our OMS and GIS and will help ensure optimal lifecycle management of physical assets.

Witness – Mike Miller

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24. Refer to the Application, Exhibit 5, Direct Testimony of John Guastella (Guastella Testimony) , Schedule JFG-1 , Calculation of Depreciation Rates, and the National Association of Regulatory Commissioners (NARUC) Depreciation Practices for Small Water Utilities, August 15, 1979, Figure 1, Typical Service Lives, Salvage Rates, and Depreciation Rates, Small Water Utilities.

a. Provide a schedule in Excel format that compares the depreciation lives in Water Service Kentucky's schedule to the average service life ranges in the NARUC survey.

b. Provide a schedule in Excel format that compares the salvage values in Water Service Kentucky's schedule to the salvage values in the NARUC survey.

c. Provide a schedule in Excel format that compares the depreciation rates in Water Service Kentucky's schedule to the depreciation rate percentage ranges in the NARUC survey.

d. Using the mid-point depreciation life of the average service life ranges and the net salvage values in the NARUC survey recalculate Water Service Kentucky's pro forma depreciation expense. Provide the recalculation of pro forma depreciation expense in an Excel spreadsheet format with all formulas unprotected and with all rows and columns accessible.

e. Account No. 309 - Supply Mains and Account 331 - T&D Mains lists average service lives of 90 years, but depreciation rates of 1.89 percent. The Commission Staff calculated a depreciation rate for a 90-year life of 1.11 percent. Provide a detailed

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explanation and calculation to support Water Service Kentucky's 1.89 percent depreciation rate.

f. In Excel spreadsheet format with formulas intact and unprotected, and all rows and columns fully accessible, provide copies of all workpapers, calculations, and assumptions used by John Guastella in developing his Depreciation Analysis

Response:

- a. Please see the attached file "Response to PSC DR 2-24 (D&A Summary)" which contains a summary of Guastella's study; see tab "D&A 24a" of that attachment.
- b. Please see the attached file "Response to PSC DR 2-24 (D&A Summary)" which contains a summary of Guastella's study; see tab "D&A 24b" of that attachment.
- c. Please see the attached file "Response to PSC DR 2-24 (D&A Summary)" which contains a summary of Guastella's study; see tab "D&A 24c" of that attachment.
- d. Please see the attached file "Response to PSC DR 2-24 (D&A Summary)" which contains a summary of Guastella's study; see tab "D&A 24d" of that attachment.
- e. The formula for calculating depreciation rates, which is consistent with the NARUC report on depreciation practices for small water utilities, is: depreciation

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rate equals 100 minus estimated net salvage percentage, divided by the estimated average service life. With respect to Account No. 309 – Supply Mains and Account No. 31 – T&D Mains, the estimated average service life of 90 years and the estimated net salvage percentage of a negative 70% (because of cost of removal), the calculation is: $100 - (-70\%)/90$. Or, 100 plus 70 equals 170, divided by 90 equals 1.89%.

- f. Guastella's study is provided as "Response to PSC DR 2-24 (D&A Summary)".

Witness – John Guastella

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25. Refer to the Application, Exhibit 5, the Guastella Testimony, page 7, lines 8-17.
- a. Describe the criteria Guastella Associates relied upon in selecting the water utilities used in the Depreciation Analysis.
 - b. Provide a comparison of Water Service Kentucky to each water utility used by Guastella Associates in its Depreciation Analysis. In this comparison, identify: customers served; sales in gallons; water produced and purchased in gallons; the date the system began operations; the miles of main; a description of the area served; and the routine maintenance practices.
 - c. Provide any other water utilities considered other than those that are identified. Provide an explanation as to why Guastella Associates did not include those utilities in its Depreciation Analysis.
 - d. Explain why Guastella Associates did not use a Kentucky water utility in its Depreciation Analysis.
 - e. Identify the method that each listed utility used in developing its depreciation lives. Provide a copy of the study or analysis used by each water utility.
 - f. For each utility, state whether Guastella Associates contacted a utility representative. Identify the utility representative(s) Guastella Associates contacted, and provide the data Guastella Associates obtained.

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g. For each utility, state whether Guastella Associates used annual report data in the survey . Identify the year of the annual report, explain how the annual report was obtained, and provide the data Guastella Associates relied upon from the annual report.

h. For each utility, state whether Guastella Associates contacted a representative of a regulatory agency. Identify the agency contacted, identify the Staff representative(s) that provided any information used in the survey, and provide the data Guastella Associates obtained.

i. Identify whether any of the utilities used in the analysis uses remaining life depreciation.

(1) Describe the effect this would have on Guastella Associates' depreciation report.

j. State whether Guastella Associates contacted a representative of either the California Public Utilities Commission (California Commission) or the Florida Public Service Commission (Florida Commission). If so, Identify the Staff representative(s) that provided any information used in the survey, and provide the data Guastella Associates obtained.

(1) Provide a copy of the California Commission Standard Practice depreciation rates.

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(2) Provide a copy(s) of the Florida Commission's rules and regulations on depreciation rates.

Response:

- a. The water utilities included in the depreciation analysis are those for which depreciation information was readily available in Guastella Associates' data base.

- b. No such document exists, to create such material would require an overly burdensome effort, and unnecessary in that it would not provide information that would reliably affect the reasonableness of the recommended depreciation rates. The NARUC USoA for water utilities adopted by the Kentucky PSC contains the following definition of depreciation, which is consistent throughout the country:

“Depreciation”, as applied to depreciable utility plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and requirements of public authorities.

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There is no statistical analysis that has correlated these causes of depreciation with the information requested in 25b.

- c. While no other utilities were specifically included in Guastella Associates' analysis, it has performed similar analyses for other clients in other jurisdictions that were approved, but the data for those studies were similar to the used in this study.
- d. Guastella Associates' data base of depreciation studies for water utilities with which Guastella is familiar does not include water utilities in Kentucky.
- e. The utilities in New York, including Utilities & Industries Corp., Long Island Water Corporation, Citizens Water Company, were based on retirement rate actuarial studies performed by or accepted by the NYPSC Water Division Staff when Guastella was Assistant Director or Director of the Water Division. Guastella Associates performed the Elizabethtown Water Company and Artesian Water Company studies on the basis of the retirement rate actuarial method. The Middlesex Water Company and American Water Company studies were based on the actuarial method performed by other consultants. The comparable data method was used for the Illinois utilities and Pennichuck Water Company, performed by Guastella Associates. While the data for each study has been compiled and saved over the years, the studies are not readily available.

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- f. The Company objects to this request because it is overly broad and would not provide information that would impact the reasonableness of the recommended depreciation rates. In addition to his personal involvement, Mr. Guastella was in contact of numerous people that were associated with these utilities.
- g. Annual report data was not used.
- h. The Company objects to this request because it is overly broad and would not provide information that would impact the reasonableness of the recommended depreciation rates. Mr. Guastella was the regulator of some of the utilities, submitted his studies to other regulatory jurisdictions, or was directly or indirectly in communication regarding depreciation issues with regulatory staff in the context of his position as Co-Chairmen of the NARUC Water Committee Staff and/or in working with the staff of many regulatory agencies during the water rate seminars that Mr. Guastella help creating since 1974 and has participated in twice annually ever since.
- i. The remaining life method was not used for depreciation rates because they would be impacted by the specific factors of the depreciation reserves that are unique to a particular utility.

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WATER SERVICE CORPORATION OF KENTUCKY
RESPONSES TO COMMISSION STAFF'S SECOND INFORMATION REQUEST

j. The Company objects to this request because it is overly broad and would not provide information that would impact the reasonableness of the recommended depreciation rates. Mr. Guastella has had countless discussions with regulatory staff of the California, Florida and most other regulatory agencies for many years, including meetings when he was a regulator, as a consultant acting on behalf of clients, annual meetings of NARUC and NAWC, the Water Rate Seminar held twice a year, and speaking engagements. Depreciation as well as every other rate-setting issue has been among the subjects of those discussions.

1. Please see the attached file “Response to PSC DR 2-25 j. (CPU Report)” which provides the cover and average service life ranges by the California Public Utilities Commission Water Division report. The full report is available online.
2. Please see the attached file “Response to PSC DR 2-25 j. (FL Avg Lives)” which provides the Florida PSC rule 25-30.140 Depreciation that contains the ranges of average service lives for large and small utilities.

Witness – John Guastella

PSC DR 2-25j
CPU Report

CALIFORNIA PUBLIC UTILITIES COMMISSION
Water Division

STANDARD PRACTICE FOR
DETERMINATION OF STRAIGHT-LINE REMAINING LIFE
DEPRECIATION ACCRUALS

Standard Practice U-4-W

SAN FRANCISCO, CALIFORNIA
Revised January 3, 1961

Ac. No.	Class of Plant	Total Service Life of an Original Group (Av. Service Life in Years) (See Notes 1, 2)	Suggested Method Estimating Remaining Life (See Note 5)
	C. Telephone Utilities		
207	Right of Way (when depreciable)	40-70	Judgment
212	Buildings	25-60	Forecast
221	Central Office Equipment	30-45	Forecast
231	Station Apparatus (fixed capital life basis)	15-25	(Various)
235	Large Private Branch Exchanges	15-40	Forecast
241	Pole Lines	20-40	Survivor Curve
242.1	Aerial Cable	20-35	Survivor Curve
242.2	Underground Cable	25-40	Judgment
243	Aerial Wire	10-25	Survivor Curve
244	Underground Conduit	50-75	Judgment
261	Furniture and Office Equipment	15-35	Judgment
264	Motor Vehicles and Other Work Equipment	5-20	Judgment
	D. Water Utilities		
	Source of Water Plant		
311	Structures and Improvements	20-60	Forecast
312	Collecting and Impounding Reservoirs	40-100	Forecast
313	Lake, River and Other Intakes	30-70	Forecast
315	Wells	20-40	Forecast
316	Supply Mains	25-100	Forecast
	Pumping Plant		
321	Structures and Improvements	20-60	Forecast
324	Pumping Equipment	15-35	Survivor Curve
325	Other Pumping Plant	15-25	Judgment
	Water Treatment Plant		
331	Structures and Improvements	20-60	Forecast
332	Water Treatment Equipment	15-40	Forecast
	Transmission and Distribution Plant		
341	Structures and Improvements	20-60	Forecast
342	Reservoirs and Tanks	25-100	Forecast
343	Transmission and Distribution Mains		
	Cast Iron and Asbestos Cement	50-100	Survivor Curve
	All Other Pipes	25-50	Survivor Curve
345	Services	20-40	Survivor Curve
346	Meters	25-40	Survivor Curve
347	Meter Installations	25-45	Survivor Curve
348	Hydrants	25-50	Survivor Curve
349	Other Transmission and Distribution Plant	15-40	Judgment
<p>Notes: 1. Plant of a particular utility may justify a service life outside of above ranges. 2. Net salvage estimates are to be separately considered. 3. Larger utilities will find more accurate methods, such as selection of a type curve or actuarial solutions, desirable. Small utilities may find only the Approximation Method or the Judgment Method applicable. For further information, see Chapter 5, Section E.</p>			

Ac. No.	Class of Plant	Total Service Life of an Original Group (Av. Service Life in Years) (See Notes 1, 2)	Suggested Method Estimating Remaining Life (See Note 5)
	General Plant		
371	Structures and Improvements	20-60	Forecast
372	Reservoirs and Tanks	5-20	Survivor Curve
373	Transportation	5-20	Judgment
374	Stores Equipment	5-25	Judgment
375	Laboratory Equipment	5-25	Judgment
377	Power Operated Equipment	5-25	Judgment
378	Tools, Shop and Garage Equipment	5-25	Survivor Curve
Notes: 1. Plant of a particular utility may justify a service life outside of above ranges. 2. Net salvage estimates are to be separately considered. 3. Larger utilities will find more accurate methods, such as selection of a type curve or actuarial solutions, desirable. Small utilities may find only the Approximation Method or the Judgment Method applicable. For further information, see Chapter 5, Section E.			

Iowa Type Survivor Curves

3. There are presented in the tables in the Appendix the portions surviving and remaining lives by ages for various average service lives for the 18 type curves developed at the Iowa State College Experiment Station. Remaining life expectancies have been computed from the data given in Bulletin 125, 155 and 156 issued by the Iowa college. These curves are referred to as "Iowa" type curves or as "Winfrey" type curves. The former designation is adopted in this practice. The latter designation refers to Professor Robley Winfrey, author of these Iowa bulletins.
4. A tabulation indicating curve types found applicable to certain classes of plant is also shown in the appendix. The indicated applicability of these curves is, of course, only general in nature and is largely based on the experience of the Iowa studies. In particular instances, the engineer may determine other type curves to be more specifically applicable than these general studies.
5. The portions surviving shown in the Iowa tables may be used to develop age distribution data as illustrated in table 5-A, and the remaining lives shown may be used to develop a composite remaining life from age distribution data as illustrated in Tables 5-A and 5-B.
6. A more complete set of Iowa type survivor and average remaining life tables has been compiled by Edison Electric Institute and American Gas Association. The tables give survivors of an original addition of 1,000 and corresponding average remaining lives to the nearest tenth of a year at half-year ages from 0.5 to 74.5, inclusive, for average lives from 5 to 100 years, inclusive. The tables were computed for the familiar mortality dispersion curves listed in the Iowa Bulletins, for dispersion intermediate to those in the bulletins and for two other type curves, SC and SQ. The curve designated SC is the Patterson C type curve, having a uniform distribution of retirement from age zero to twice average life. The designation SQ is for the square type survivor curve which has no mortality dispersion, i.e., all retirements occur at average life (at terminal life).

PSC DR 2-25j
FL Avg Lives

25-30.140 Depreciation.

(1) For the purpose of the rule, the following definitions apply:

(a) Account – Water and wastewater plant accounts are defined in the NARUC Uniform System of Accounts adopted by Rule 25-30.115, F.A.C.

(b) Amortization – The gradual extinguishment of an amount in an account by distributing such amount over a fixed period.

(c) Asset – Any owned physical object (tangible) or right (intangible) having economic value to its owner.

(d) Average Remaining Life – The future expected service in years of the surviving plant at a given age.

(e) Average Service Life – The period of service that can be reasonably expected from the plant type in question. It is measured by the period of time the subject plant and its associated investment is included on the company’s books as in service to the public. The average service life will typically be less than the potential physical life due to factors such as governmental requirements, growth or adverse operating conditions.

(f) Average Service Life Depreciation Rate - The depreciation rate based on the expected average service to be experienced by the investment or account in question.

$$\text{A.S.L. Rate} = 100\% - \frac{\text{Average Net Salvage \%}}{\text{Average Service Life}}$$

(g) Capitalization – Measures of the propriety of capitalization versus expensing as follows:

1. The addition of any retirement unit, or
2. Any replacement with a retirement unit that materially enhances the value, use, life expectancy, strength or capacity of the asset prior to replacement shall be capitalized.
3. The cost of incidental repairs that neither materially add to the value of the property nor appreciably prolong its life and that were made to keep the property in an ordinary efficient operating condition shall be accounted for as a maintenance expense.

(h) Cost of removal – The cost of demolishing, dismantling, tearing down or otherwise removing utility plant, including the cost of transportation and handling incidental thereto.

(i) Continuing Property Record (CPR) – A perpetual collection of records required by the NARUC Uniform System of Accounts showing the detailed original costs, quantities, and locations of plant in service. Generally, a CPR should contain 1) an inventory of property record units which can be readily checked for proof of physical existence, 2) the association of costs with such property record units to ensure accurate accounting for retirements, and 3) the dates of installation and removal of plant to provide data for use in connection with depreciation studies.

(j) Depreciation – As applied to depreciable utility plant, the loss in service value not restored by current maintenance incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes that are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and requirements of public authorities. The intent of depreciation per this rule is to provide for recovery of invested capital and to match this recovery as nearly as possible to the useful life of the depreciable investment.

(k) Depreciation Accounting – The process of charging the book cost of depreciable property, adjusted for net salvage, to operations over the associated useful life.

(l) Depreciation Expense – The periodic charge to expense to allocate the original cost of a depreciable group of assets over the life of those assets.

(m) Depreciable Group – A homogeneous grouping of assets expected to experience similar life and salvage patterns. Unless otherwise ordered by the Commission, depreciable groups are the accounts defined in the NARUC Uniform System of Accounts adopted by Rule 25-30.115, F.A.C.

(n) Function – defined as follows:

Water

Source of Supply

(Accounts 304 to 311 and 339)

Water Treatment Plant

(Accounts 304, 310, 311, 320, and 339)

Wastewater

Collection Plant

(Accounts 354, 355 and 360 to 367)

Pumping Plant

(Accounts 354, 355, 370, 371)

Treatment & Disposal Plant

(Accounts 354 and 380 to 389)

Transmission & Distribution Plant
(Accounts 304, 310, 311 and 330 to 339)
General Plant
(Accounts 304 and 340 to 348)

Reclaimed Water Treatment Plant
(Accounts 354, 355, 371, 374, 380, 381, 389)
Reclaimed Water Distribution Plant
(Accounts 354, 355, 366, 367, 371, 375, 389)
General Plant
(Accounts 354 and 390 to 398)

(o) Group Depreciation – An accounting procedure under which depreciation charges are accrued on the basis of the original cost of all property included in each depreciable group. Under the group concept, no attempt is made to keep track of the accumulated provision for depreciation applicable to individual assets of property, in view of the many items making up a utility system. The group approach recognizes that some assets within the group may live longer or shorter than the average life of the group but the group is expected to live the average service life. Every item in the group is assumed to be fully depreciated at retirement.

(p) Mortality Data – See plant activity data.

(q) Net Salvage – The salvage value of property retired less the cost of removal. This is expressed as a percent of retirements in the depreciation rate formula.

(r) Original Cost – The cost of acquiring an asset and placing it into service for first utility use. This includes the direct costs of acquiring the asset and the cost of labor, materials, and associated costs of installation to prepare the asset for first utility use. The cost is used in the computation of depreciation expense. In the event that an asset is acquired that is already in public service, the original historic cost of the asset should be recorded in plant in service, and the historic accumulated depreciation should be charged to the accumulated depreciation account. In the event the historic cost of an asset that is already in utility service cannot be determined, an independent engineer's evaluation based on an original cost study may be used.

(s) Plant Activity Data – Annual additions, retirements, adjustments or transfers, sales or purchases, and investment balances at end of year.

(t) Property Retired – As applied to utility plant, property that has been removed, sold, abandoned, destroyed or which has been withdrawn from service for any cause.

(u) Remaining Life Depreciation Rate – The depreciation rate based on the average remaining portion of the service life expected to be experienced by the investment or account in question and on the net unrecovered capital for that investment or account.

$$\text{R.L. Rate} = \frac{100\% - \text{Accumulated Reserve \%} - \text{Future Net Salvage \%}}{\text{Average Remaining Life}}$$

The average remaining life for an account or sub-account is a function of known planned retirement or of the average age of that account and its appropriate mortality table.

(v) Replacing or Replacement – The construction or installation of utility plant in place of property retired, together with the removal of the property retired.

(w) Reserve – The accumulated provision for depreciation. The accumulated depreciation reserve is the net of depreciation accruals (expenses) and retired investment with related gross salvage and cost of removal as well as any appropriate adjustments or transfers.

(x) Reserve Activity Data – Annual depreciation expense, retirements, transfers or adjustments, gross salvage realized, cost of removal, and end of year balance for the accumulated provision for depreciation.

(y) Retirement Units – Those items of utility plant which, when retired with or without replacement, are accounted for by crediting the book cost to the utility plant account in which it is included.

(z) Salvage Value – The amount received for property retired, less any expenses incurred in connection with the sale or in preparing the property for sale or, if retained, the amount at which the material recoverable is chargeable to materials and supplies or other appropriate account.

(aa) Straight-Line Method – A depreciation method by which the service value of a depreciable group is charged to depreciation expense (or a clearing account) and credited to the accumulated provision for depreciation account through equal annual charges over the service life of the group.

(bb) Unit Depreciation – An accounting procedure under which the original cost, depreciation expense, and accumulated provision for depreciation, and all associated activity are maintained for each individual asset. Service life and salvage parameters

are estimated for each individual asset with a depreciation rate designed to recover each asset's original cost over its related life. If the asset lives longer than its expected life, depreciation expense stops accruing when the asset is fully recovered. If the asset retires earlier than its expected service life, the associated unrecovered amount is immediately written-off as a loss.

(cc) Unrecovered Amount – Original cost less the accumulated provision for depreciation less expected net salvage.

(2) The average service life and salvage components for each class of utility are as follows:

(a) Water System Guideline Average Service Lives.

Account	Description	Large Utility (Class A&B)	Small Utility (Class C)	Small Utility Function Composite ³	Net Salvage % ⁴
1. Intangible Plant					
351	Organization	40	40		
352	Franchise Cost	40 ⁵	40 ⁵		
2. Source of Supply					
304	Structures & Improvements	32 ¹	27 ¹	28	
	Wood	28	25		
	Masonry	30	27		
	Reinforced Concrete	40	37		
	Steel Building	40	35		
	Tanks or Sheds	25	20		
	Fiberglass	20	18		
305	Collecting and Impounding Reservoirs	50	40		
306	Lake, River and Other Intakes	40	40		
307	Wells and Springs				
	Drilled & Cased Well (Floridan or Non-Corrosive)	30	27		
	Shallow Well (Sand Aquifer or Corrosive Water)	20	18		
308	Infiltration Galleries and Tunnels	40	N/A		
309	Supply Mains	35	32		
310	Power Generation Equipment	20	17		
311	Pumping Equipment	20 ¹	17 ¹		
	Pumping Equipment Electric	20	15		
	Pumping Equipment Chemical	8	6		
339	Other Miscellaneous Equipment	18	15		
3. Water Treatment Plant					
304	Structures and Improvements (see "Source of Supply" for subcategory lives)	32 ¹	27 ¹	21	
310	Power Generation Equipment	20	17		
311	Pumping Equipment	20 ¹	17 ¹		
	Pumping Equipment-Electric	20	15		
	Pumping Equipment-Chemical	8	6		
320	Water Treatment Equipment	22 ¹	17 ¹		
	Chlorination Equipment	10	7		
	Membrane Elements	5	5		

	Other Mechanical Equipment	25	20	
339	Other Miscellaneous Equipment	18	15	
4. Transmission & Distribution Plant				36
304	Structures & Improvements (See "Source of Supply" for subcategory lives)	32 ¹	27 ¹	
310	Power Generation Equipment	20	17	
311	Pumping Equipment	20 ¹	17 ¹	
	Pumping Equipment – Electric	20	15	
	Pumping Equipment – Chemical	8	6	
330	Distribution Reservoirs & Stand			
	Pipes	37 ¹	33 ¹	
	Steel Pneumatic Tank	35	30	
	Concrete Ground Storage Reservoir	40	37	
331	Transmission & Distribution Mains	43 ¹	38 ¹	
	Galvanized Steel pipe & Fittings	35	33	
	Black Steel Pipe	20	18	
	Plastic Pipe ²	45	40	
	Asbestos – Cement	40	35	
	Cast Iron or Ductile Iron	40	35	
	Valves & Valve Boxes	25	20	
	Fire Mains	33	30	
333	Services ²	40	35	
334	Meters and Meter Installations	20	17	
335	Hydrants	45	40	
336	Backflow Prevention Devices	15	10	
339	Other Plant and Miscellaneous Equipment	25	20	
5. General Plant				
304	Structures & Improvements	40 ¹	35 ¹	
	Wood Building	35	30	
	Masonry Building	40	35	
	Reinforced Concrete Building	40	37	
	Steel Building	40	35	
	Tanks or Sheds	25	20	
340	Office Furniture & Equipment	15	15	
	Computers	6	6	
341	Transportation Equipment	6	6	10
342	Stores Equipment	18	N/A	14 (composite of 342-348)
343	Tools, Shop & Garage Equipment	16	15	
344	Laboratory Equipment	15	N/A	
345	Power Operated Equipment	12	10	5
346	Communication Equipment	10	N/A	10
347	Miscellaneous Equipment	15	N/A	

348 Other Tangible Plant 10 10

(b) Wastewater System Guideline Average Services Lives.

Account	Description	Large Utility (Class A&B)	Small Utility (Class C)	Small Utility Function Composite ³	Net Salvage % ⁴
1. Intangible Plant					
351	Organization	40	40		
352	Franchise Cost	40 ⁵	40 ⁵		
2. Collection System				35	
354	Structures & Improvements Above Grade	32 ¹	27 ¹		
	Wood	28	25		
	Masonry	30	27		
	Reinforced Concrete	38	35		
	Steel Below Grade	25	22		
	Concrete	35	32		
	Steel	22	20		
	Lift Stations	25	22		
355	Power Generation Equipment	20	17		
360	Collection Sewers-Force ²	30 ¹	27 ¹		
361	Collection Sewers-Gravity ²	45	40		
	Manholes	30	27		
362	Special Collecting Structures	40	37		
363	Services to Customers ²	38	35		
364	Flow Measuring Devices	5	5		
365	Flow Measuring Installations	38	35		
389	Other Miscellaneous Equipment	18	15		
3. Pumping Plant				18	
354	Structures & Improvements	32 ¹	27 ¹		
355	Power Generating Equipment	20	17		
370	Receiving Wells	30	25		
371	Pumping Equipment	18	15		
	Pumping Equipment – Electric	18	15		
	Pumping Equipment – Chemical	7	5		
389	Other Miscellaneous Equipment	18	15		
4. Treatment and Disposal Plant				18	
354	Structures & Improvements (see “Collection System” for subcategory lives)	32 ¹	27 ¹		
355	Power Generating Equipment	20	17		
371	Pumping Equipment	18 ¹	15 ¹		
	Pumping Equipment – Electric	18	15		

	Pumping Equipment – Chemical	7	5	
380	Treatment & Disposal Equipment	18 ¹	15 ¹	
	Blowers, Motors, Pumps Electric			
	Controls	15	12	
	Chlorination Equipment	10	7	
	Other Mechanical Equipment	23	18	
381	Plant Sewers	35	32	
382	Outfall Sewer Lines	30	30	
389	Other Plant and Miscellaneous Equipment	18	15	
5. Reclaimed Water Treatment Plant				21
354	Structures & Improvements (see “Collection System” for subcategory lives)	32 ¹	27 ¹	
355	Power Generating Equipment	20	17	
371	Pumping Equipment	18 ¹	15 ¹	
	Pumping Equipment – Electric	18	15	
	Pumping Equipment – Chemical	7	5	
374	Reuse Distribution Reservoirs	37 ¹	33 ¹	
	Steel Pneumatic Tank	35	30	
	Concrete Ground Storage Reservoir	40	37	
380	Treatment & Disposal Equipment	18 ¹	15 ¹	
	Blowers, Motors, Pumps, Electric Controls	15	12	
	Chlorination Equipment	10	7	
	Other Mechanical Equipment	23	18	
381	Plant Sewers	35	32	
389	Other Plant and Miscellaneous Equipment	18	15	
6. Reclaimed Water Distribution Plant				36
354	Structures & Improvements (see “Collection System” for subcategory lives)	32 ¹	27 ¹	
355	Power Generating Equipment	20	17	
366	Reuse Services	40	35	
367	Reuse Meters and Meter Installation	20	17	
371	Pumping Equipment	18 ¹	15 ¹	
	Pumping Equipment – Electric	18 ¹	15	
	Pumping Equipment – Chemical	7	5	
375	Reuse Transmission & Distribution System	43 ¹	38 ¹	
	Plastic Pipe ²	45	40	
	Valves & Valve Boxes	25	20	
	Fire Mains	33	30	
389	Other Plant and Miscellaneous	18	15	

Equipment

7. General Plant

354	Structures & Improvements	40 ¹	35 ¹	
	Reinforced Concrete Building	45	40	
	Masonry Building	40	35	
	Wood Building	35	30	
	Steel Building	40	35	
	Tanks or Sheds	25	20	
390	Office Furniture & Equipment	15	15	
	Computers	6	6	
391	Transportation Equipment	6	6	10
392	Stores Equipment	18	N/A	14 (composite of 392-398)
393	Tools, Shop & Garage Equipment	16	15	
394	Laboratory Equipment	15	N/A	
395	Power Operated Equipment	12	10	5
396	Communication Equipment	10	N/A	10
397	Miscellaneous Equipment	15	N/A	
398	Other Tangible Plant	10	10	

(c) For the purposes of paragraphs (2)(a) and (b), the following apply:

1. ¹ Denotes composite life.
2. ² Plastic pipe footnote – assumes use of AWWA standard pipe only. Assumes AWWA DR18 used for all mains of 6" or more.
3. ³ To be used only when acceptable company plant balances are not available for developing composites using account lives.
4. ⁴ Net Salvage zero except as indicated.
5. ⁵ Franchise costs shall be amortized over a period of 40 years unless a specific time period is designated in the utility franchise agreement.

(3)(a) Average service life depreciation rates based on guideline lives and salvages shall be used in any Commission proceeding in which depreciation rates are addressed, except for those utilities using depreciation rates in accordance with the requirements listed in subsections (6) and (7) of this rule. A utility shall also implement the applicable guideline rates for any new plant to be placed in service.

(b) A utility may implement applicable guideline rates without specific approval by the Commission. Guideline rates, if implemented for any account, must be implemented for all accounts. If a utility implements applicable guideline rates outside of a rate proceeding, the utility shall provide written notification to the Director of Economics within 30 days of such implementation.

(c) If guideline depreciation rates have been implemented, the rates shall not be changed unless approved by the Commission.

(4)(a) All Class A and B utilities shall maintain depreciation rates and reserve activity data by account as prescribed by this Commission.

(b) All Class C utilities shall maintain depreciation rates and reserve activity data by total depreciable plant, function or account as prescribed by this Commission.

(5) Computation of depreciation expense. Regulatory book depreciation expense shall be computed on a monthly basis in conformity with group depreciation accounting procedures.

(6)(a) At the time a utility applies for a change in its revenue rates and charges, it may also petition for average service life depreciation rates different from those in the above schedule if it can justify the service lives that the utility is proposing in lieu of the guideline lives. That justification should be in the form of historic data, technical information or utility planning for the affected accounts or sub-accounts. Common causes of need for different depreciation rates include composition of account, adverse environmental conditions, high growth or regulatory changes.

(b) A utility filing for such a revision of depreciation rates shall submit six copies of the filing to the office of the Office of Commission Clerk.

(c) For each account or function of depreciable plant addressed in the filing, the following shall be included:

1. A comparison of current and proposed depreciation rates and service lives. The proposed effective date of the new rates shall be identified.

2. A comparison of depreciation expenses resulting from current rates with those produced by the proposed rates. Plant balances used in this calculation shall be those as of the effective date of the proposed rates.

3. A general narrative defining the service environment of the applicant utility and the factors (e.g., composition of account, growth, environmental conditions, regulatory changes) leading to the present application for a revision in rates in the affected accounts.

4. Any statistics, data, analyses or calculations used in the development of the proposed average service lives.

(7)(a) A Class A, B, or C utility may apply for guidelines for a proposal for implementation of remaining life depreciation rates if the utility has maintained both plant activity data by account and accumulated provision for depreciation (reserve) data by account, function or total depreciable plant generally in accord with the Uniform System of Accounts for either at least ten years or since the inception of the utility, whichever is less.

(b) To provide time for study development, any application for remaining life guidelines should be submitted at least six months before the filing for a test year in connection with a request for a revenue rate increase.

(8) Prior to the date of retirement of major installations, the Commission may approve capital recovery schedules to correct associated calculated deficiencies in recovery where a utility demonstrates that retirement of the installation or group of installations is prudent and the associated investment will not be recovered by the time of retirement through the normal depreciation process.

(9)(a) Beginning with the year ending December 31, 2003, all Class A and B utilities shall maintain separate sub-accounts for: (1) each type of Contributions-in-Aid-of-Construction (CIAC) charge collected including, but not limited to, plant capacity, meter installation, main extension or system capacity; (2) contributed plant; (3) contributed lines; and (4) other contributed plant not mentioned previously. Establishing balances for each new sub-account may require an allocation based upon historical balances. Each CIAC sub-account shall be amortized in the same manner that the related contributed plant is depreciated. Separate sub-accounts for accumulated amortization of CIAC shall be maintained to correspond to each sub-account for CIAC.

(b) Beginning with the year ending December 31, 2003, for Class C utilities, where adequate CIAC records are maintained in sub-accounts, by type of charge or contributed plant, CIAC amortization rates shall be applied separately to each sub-account. Where CIAC records are not kept by sub-account, a composite depreciation rate for total plant, excluding general plant, shall be applied to the entire CIAC account.

(c) Any composite rate used shall be recalculated each year based on the applicable plant balances and depreciation rates.

Rulemaking Authority 350.127(2), 367.121(1) FS. Law Implemented 350.115, 367.081(2), 367.121(1) FS. History—New 3-22-84, Formerly 25-10.32, 25-10.032, Amended 11-10-86, 5-8-88, 11-21-95, 12-4-03, 5-29-08.

CASE NO. 2018-00208
WATER SERVICE CORPORATION OF KENTUCKY
RESPONSES TO COMMISSION STAFF'S SECOND INFORMATION REQUEST

26. Refer to the Application, Exhibit 5, the Direct Testimony of Constance E. Heppenstall (Heppenstall Testimony), page 10, lines 9-11. Provide the calculations for the service charges for the larger size meters and the AWWA M1 Manual recommended equivalent meter ratios that are referenced.

Response:

Please see the response to Staff's second information request number three.

Witness – Constance Heppenstall

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WATER SERVICE CORPORATION OF KENTUCKY
RESPONSES TO COMMISSION STAFF'S SECOND INFORMATION REQUEST

27. Refer to the Application, Exhibit 5, Heppenstall Testimony, page 11, lines 15-16.

Provide a list of the customer charges charged by other water companies in Kentucky.

Response:

Please see the response to Staff's second information request number three, which shows the customer charges for Kentucky American Water Company and Louisville Water Company.

Witness – Constance Heppenstall

CASE NO. 2018-00208
WATER SERVICE CORPORATION OF KENTUCKY
RESPONSES TO COMMISSION STAFF'S SECOND INFORMATION REQUEST

28. Refer to the Application, Exhibit 5, Heppenstall Testimony, Exhibit CEH-1, Schedule A, Private Fire Service.

- a. Explain the criteria for a hydrant to be considered private.

- b. Explain whether the Ambleside Residential Area also will pay the monthly private hydrants or sprinkler system charge in addition to the surcharge.

Response:

- a. A private hydrant is a hydrant owned by private entity, not a municipality.

- b. With the implementation of the surcharge, the Ambleside area will not pay the monthly private hydrant or sprinkler charge. The surcharge will be levied as a replacement of the private fire hydrant or sprinkler rates.

Witness – Constance Heppenstall

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RESPONSES TO COMMISSION STAFF'S SECOND INFORMATION REQUEST

29. Refer to the Application, Exhibit 6.
- a. Provide justification for the 62.30 percent increase in rates for the 4" meter.
- b. Explain why this meter class has a higher percentage increase as compared to the other meter classes.

Response:

The customer charges for the larger meter sizes are based on Equivalent Meter Ratios as described in the response to Staff's second information request number three. The present 4-inch meter charge reflects a 13.0 ratio, which is much below the Equivalent Meter Ratio of 25.0. Therefore, a larger increase for this customer charge was needed to reach the Equivalent Meter Ratio of 25.0.

Witness – Constance Heppenstall

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WATER SERVICE CORPORATION OF KENTUCKY
RESPONSES TO COMMISSION STAFF'S SECOND INFORMATION REQUEST

30. Using a table format, provide the following full-year salary information for each employee, identified by employee number and job title, for the years 2013 through 2017 (in gross dollars, not hourly or monthly rates). The employee salary information should be provided in a separate table. Provide the requested tables in an Excel spreadsheet format with all columns and rows unprotected and accessible:

- a. Regular salary or pay.
- b. Overtime pay.
- c. Vacation pay.
- d. Bonus pay.
- e. Any other amounts reported on the employees' W-2 (specify).
- f. Health Benefit cost for each employee:
 - (1) Amount paid by Water Service Kentucky;
 - (2) Amount paid by each individual employee .
- g. Dental Benefits cost for each employee:
 - (1) Amount paid by Water Service Kentucky;
 - (2) Amount paid by each individual employee.
- h. Vision Benefits cost for each employee:

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- (1) Amount paid by Water Service Kentucky;
 - (2) Amount paid by each individual employee.

- i. Life Insurance cost for each employee:
 - (1) Amount paid by Water Service Kentucky;
 - (2) Amount paid by each individual employee.

- j. Accidental Death and Disability Benefits for each employee:
 - (1) Amount paid by Water Service Kentucky;
 - (2) Amount paid by each individual employee.

- k. 401 (K) Plan cost for each employee:
 - (1) Amount paid by Water Service Kentucky;
 - (2) Amount paid by each individual employee.

- l. Defined Benefit Retirement cost for each employee:
 - (1) Amount paid by Water Service Kentucky;
 - (2) Amount paid by each individual employee.

- m. Cost of any other benefit available to an employee (specify).

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Response:

- a. Please see the attached file, "Response to PSC DR 2-30 (2013-2017 WSCK Salary & Benefit)"

- b. Please see the attached file, "Response to PSC DR 2-30 (2013-2017 WSCK Salary & Benefit)"

- c. Please see the attached file, "Response to PSC DR 2-30 (2013-2017 WSCK Salary & Benefit)"

- d. Please see the attached file, "Response to PSC DR 2-30 (2013-2017 WSCK Salary & Benefit)"

- e. Please see the attached file, "Response to PSC DR 2-30 (2013-2017 WSCK Salary & Benefit)"
 - i. "Other" includes but not limited to the following
 - 1. Holiday Pay
 - 2. Sick Pay
 - 3. Bereavement Pay
 - 4. Employee Finder Fees

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- f. Please see the attached file, "Response to PSC DR 2-30 (2013-2017 WSCK Benefits Costs)"

- g. Please see the attached file, "Response to PSC DR 2-30 (2013-2017 WSCK Benefits Costs)"

- h. Please see the attached file, "Response to PSC DR 2-30 (2013-2017 WSCK Benefits Costs)"

- i. Please see the attached file, "Response to PSC DR 2-30 (2013-2017 WSCK Benefits Costs)"

- j. Please see the attached files, "Response to PSC DR 2-30 (2013-2017 WSCK Benefits Costs)" and "Response to PSC DR 2-30 (2013-2017 WSCK Salary & Benefit)". Accidental Death costs included within "2013 – 2017 WSCK Benefits Costs Final" as a part of Life Insurance (Accidental Death & Dismemberment/Basic Life Included; Disability costs are included within excel file "Staff DR 2.30 – 2013-2017 Salary and Benefits".

- k. Please see the attached file, "Response to PSC DR 2-30 (2013-2017 WSCK Benefits Costs)"

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- l. The Company does not offer defined benefit retirement plans.

- m. Please see the attached file, "Response to PSC DR 2-30 (2013-2017 WSCK Salary & Benefit)"
 - i. Cost noted are for Teladoc coverage over a 12-month period.

Witness – Perry Brown

PSC DR 2-30
2013-2017 WSCK Salary & Benefits

Water Service Corporation of Kentucky

Response to Staff DR 2.30

Salary & Benefits

2013

Employee ID	Employee Name	Job Title	Location	Allocation to WSKY	Total Salary	Regular Pay	Overtime Pay	Vacation Pay	Bonus	Other	Disability	Disability WSKY
625			IL CORPORATE OF IL	2.73%	68,006	57,865	2,819	5,398	-	1,924	159.13	4.34
760			IL CORPORATE OF IL	2.73%	54,587	46,086	83	5,084	1,300	2,034	126.74	3.46
1001			IL CORPORATE OF IL	2.73%	19,056	19,056	-	-	-	-	52.40	1.43
98872			IL CORPORATE OF IL	2.73%	49,224	41,822	436	3,702	1,060	2,203	115.01	3.14
98886			IL CORPORATE OF IL	2.73%	40,350	33,320	-	2,798	-	4,232	91.63	2.50
99191			IL CORPORATE OF IL	2.73%	46,219	40,886	54	2,075	1,000	2,204	112.44	3.07
99315			IL CORPORATE OF IL	2.73%	61,351	61,351	-	-	-	-	168.72	4.61
99427			IL CORPORATE OF IL	2.73%	33,578	29,384	-	1,674	-	2,520	80.81	2.21
99436			IL CORPORATE OF IL	2.73%	52,183	49,783	-	590	-	1,810	136.90	3.74
99538			IL CORPORATE OF IL	2.73%	25,222	24,979	-	244	-	-	68.69	1.88
99548			IL CORPORATE OF IL	2.73%	42,672	37,863	40	2,396	935	1,438	104.12	2.84
99677			IL CORPORATE OF IL	2.73%	121,411	121,411	-	-	-	-	333.88	9.11
99678			IL CORPORATE OF IL	2.73%	31,637	29,321	-	1,339	-	977	80.63	2.20
99687			IL CORPORATE OF IL	2.73%	50,433	49,329	-	-	750	354	135.65	3.70
99696			IL CORPORATE OF IL	2.73%	211,143	189,603	-	-	-	21,540	521.41	14.23
99710			IL CORPORATE OF IL	2.73%	807,042	350,748	-	-	172,397	283,898	964.56	26.33
99715			IL CORPORATE OF IL	2.73%	97,143	90,236	-	6,906	-	-	248.15	6.77
99717			IL CORPORATE OF IL	2.73%	41,574	37,465	-	2,578	250	1,282	103.03	2.81
99735			IL CORPORATE OF IL	2.73%	78,273	75,873	-	-	-	2,400	208.65	5.70
99738			IL CORPORATE OF IL	2.73%	37,382	33,587	70	2,151	-	1,574	92.36	2.52
99767			IL CORPORATE OF IL	2.73%	78,633	76,967	-	-	-	1,667	211.66	5.78
99774			IL CORPORATE OF IL	2.73%	35,308	33,641	-	1,666	-	-	92.51	2.53
99779			IL CORPORATE OF IL	2.73%	328,609	205,833	-	-	50,000	72,775	566.04	15.45
99783			IL CORPORATE OF IL	2.73%	5,361	5,361	-	-	-	-	14.74	0.40
99790			IL CORPORATE OF IL	2.73%	49,791	49,791	-	-	-	-	136.93	3.74
99803			IL CORPORATE OF IL	2.73%	62,052	62,052	-	-	-	-	170.64	4.66
99820			IL CORPORATE OF IL	2.73%	64,900	64,900	-	-	-	-	178.48	4.87
99823			IL CORPORATE OF IL	2.73%	117,467	111,425	-	-	5,000	1,042	306.42	8.37
99824			IL CORPORATE OF IL	2.73%	232,391	89,797	-	-	58,247	84,347	246.94	6.74
99827			IL CORPORATE OF IL	2.73%	109,839	109,839	-	-	-	-	302.06	8.25
99844			IL CORPORATE OF IL	2.73%	6,043	5,963	-	81	-	-	16.40	0.45
99849			IL CORPORATE OF IL	2.73%	77,383	77,383	-	-	-	-	212.80	5.81
99851			IL CORPORATE OF IL	2.73%	75,350	75,350	-	-	-	-	207.21	5.66
99855			IL CORPORATE OF IL	2.73%	393,071	244,084	-	-	60,000	88,987	671.23	18.32
99856			IL CORPORATE OF IL	2.73%	92,632	88,632	-	-	4,000	-	243.74	6.65
99875			IL CORPORATE OF IL	2.73%	123,978	123,478	-	-	500	-	339.57	9.27
99876			IL CORPORATE OF IL	2.73%	63,360	63,360	-	-	-	-	174.24	4.76
99895			IL CORPORATE OF IL	2.73%	72,246	69,246	-	-	3,000	-	190.43	5.20
99901			IL CORPORATE OF IL	2.73%	65,553	62,553	-	-	3,000	-	172.02	4.70
99907			IL CORPORATE OF IL	2.73%	369,605	239,083	-	-	58,750	71,772	657.48	17.95
99909			IL CORPORATE OF IL	2.73%	62,878	60,729	-	2,148	-	-	167.01	4.56
99914			IL CORPORATE OF IL	2.73%	105,000	102,917	-	-	-	2,083	283.02	7.73
99915			IL CORPORATE OF IL	2.73%	176,659	171,497	-	-	-	5,162	471.62	12.88
99917			IL CORPORATE OF IL	2.73%	30,087	30,087	-	-	-	-	82.74	2.26
99918			IL CORPORATE OF IL	2.73%	55,858	53,775	-	-	-	2,083	147.88	4.04
99921			IL CORPORATE OF IL	2.73%	82,775	82,775	-	-	-	-	227.63	6.21
99923			IL CORPORATE OF IL	2.73%	29,600	29,155	-	445	-	-	80.18	2.19
99924			IL CORPORATE OF IL	2.73%	46,848	46,848	-	-	-	-	128.83	3.52
99925			IL CORPORATE OF IL	2.73%	55,825	55,825	-	-	-	-	153.52	4.19
99932			IL CORPORATE OF IL	2.73%	43,103	43,103	-	-	-	-	118.53	3.24

Employee ID	Employee Name	Job Title	Location	Allocation to WSKY	Total Salary	Regular Pay	Overtime Pay	Vacation Pay	Bonus	Other	Disability	Disability WSKY
99944			IL CORPORATE OF IL	2.73%	71,313	71,313	-	-	-	-	196.11	5.35
99945			IL CORPORATE OF IL	2.73%	84,333	82,917	-	-	1,000	417	228.02	6.22
99946			IL CORPORATE OF IL	2.73%	13,247	12,980	-	184	-	84	35.69	0.97
99952			IL CORPORATE OF IL	2.73%	61,885	59,500	-	1,885	500	-	163.63	4.47
99961			IL CORPORATE OF IL	2.73%	49,125	48,625	-	-	500	-	133.72	3.65
99971			IL CORPORATE OF IL	2.73%	61,835	61,627	-	-	-	208	169.47	4.63
99980			IL CORPORATE OF IL	2.73%	32,451	32,451	-	-	-	-	89.24	2.44
99981			IL CORPORATE OF IL	2.73%	43,330	43,330	-	-	-	-	119.16	3.25
99996			IL CORPORATE OF IL	2.73%	1,928	1,928	-	-	-	-	5.30	0.14
99997			IL CORPORATE OF IL	2.73%	14,137	14,137	-	-	-	-	38.88	1.06
98821			KY COST CENTER	100%	40,601	35,787	612	2,531	-	1,671	98.42	98.42
98822			KY COST CENTER	100%	34,015	29,918	362	1,652	-	2,082	82.28	82.28
98824			KY COST CENTER	100%	47,798	40,233	1,018	4,196	-	2,351	110.64	110.64
98825			KY COST CENTER	100%	51,873	45,540	911	3,922	-	1,501	125.23	125.23
98828			KY COST CENTER	100%	42,052	36,851	1,415	2,284	-	1,501	101.34	101.34
98942			KY COST CENTER	100%	42,211	36,142	1,004	2,050	-	3,014	99.39	99.39
99394			KY COST CENTER	100%	33,560	28,659	513	1,960	-	2,429	78.81	78.81
99579			KY COST CENTER	100%	38,555	33,781	1,037	1,446	-	2,291	92.90	92.90
99689			KY COST CENTER	100%	32,171	28,243	528	1,487	-	1,914	77.67	77.67
99720			KY COST CENTER	100%	73,118	73,118	-	-	-	-	201.08	201.08
99936			KY COST CENTER	100%	29,432	26,671	1,137	494	-	1,130	73.34	73.34

Water Service Corporation of Kentucky

Response to Staff DR 2.30

Salary & Benefits

2014

Employee ID	Employee Name	Job Title	Location	Allocation to WSCKY	Total Salary	Regular Pay	Overtime Pay	Vacation Pay	Bonus	Other	Disability	Disability WSCKY
99715			IL CORPORATE OF IL	2.69%	4,005	4,005	-	-	-	-	11.01	0.30
99968			IL CORPORATE OF IL	2.69%	8,701	7,163	82	874	-	583	19.70	0.53
98821			KY COST CENTER	100.00%	43,258	33,361	2,486	3,674	-	3,737	91.74	91.74
98822			KY COST CENTER	100.00%	35,050	29,343	888	2,579	-	2,239	80.69	80.69
98824			KY COST CENTER	100.00%	49,400	39,898	3,531	3,805	-	2,166	109.72	109.72
98825			KY COST CENTER	100.00%	53,450	44,701	2,863	4,051	-	1,834	122.93	122.93
98828			KY COST CENTER	100.00%	43,560	33,588	5,217	3,426	-	1,329	92.37	92.37
98942			KY COST CENTER	100.00%	42,125	34,444	2,424	3,085	-	2,171	94.72	94.72
99394			KY COST CENTER	100.00%	34,713	25,199	2,005	1,315	-	6,194	69.30	69.30
99579			KY COST CENTER	100.00%	42,046	33,915	4,069	1,182	-	2,880	93.27	93.27
99689			KY COST CENTER	100.00%	33,082	27,819	1,522	1,701	-	2,040	76.50	76.50
99720			KY COST CENTER	100.00%	75,312	75,312	-	-	-	-	207.11	207.11
99936			KY COST CENTER	100.00%	30,443	25,131	3,483	811	-	1,018	69.11	69.11
99696			PRESIDENT-MIDWEST/MID ATLANTIC	13.78%	250,000	209,375	-	-	25,000	15,625	575.78	79.33
99767			PRESIDENT-MIDWEST/MID ATLANTIC	13.78%	86,316	86,316	-	-	-	-	237.37	32.70
99803			PRESIDENT-MIDWEST/MID ATLANTIC	13.78%	40,517	38,339	-	2,178	-	-	105.43	14.53
99901			PRESIDENT-MIDWEST/MID ATLANTIC	13.78%	79,450	78,250	-	-	1,200	-	215.19	29.65
99924			PRESIDENT-MIDWEST/MID ATLANTIC	13.78%	52,034	52,034	-	-	-	-	143.09	19.71
99944			PRESIDENT-MIDWEST/MID ATLANTIC	13.78%	54,889	54,889	-	-	-	-	150.94	20.80
99961			PRESIDENT-MIDWEST/MID ATLANTIC	13.78%	59,238	56,238	-	-	3,000	-	154.65	21.31
625			SHARED SERVICES	2.69%	68,827	52,951	7,959	5,828	-	2,090	145.62	3.92
760			SHARED SERVICES	2.69%	54,949	47,684	346	3,790	1,289	1,841	131.13	3.53
766			SHARED SERVICES	2.69%	36,428	29,684	326	2,618	-	3,801	81.63	2.20
1006			SHARED SERVICES	2.69%	25,469	22,796	261	1,388	200	823	62.69	1.69
1008			SHARED SERVICES	2.69%	25,586	22,422	95	1,331	200	1,538	61.66	1.66
1009			SHARED SERVICES	2.69%	25,389	22,354	140	1,001	200	1,695	61.47	1.66
1015			SHARED SERVICES	2.69%	36,979	36,979	-	-	-	-	101.69	2.74
1023			SHARED SERVICES	2.69%	6,172	6,044	-	128	-	-	16.62	0.45
1050			SHARED SERVICES	2.69%	8,502	7,774	78	234	-	416	21.38	0.58
1051			SHARED SERVICES	2.69%	8,507	7,956	83	156	-	312	21.88	0.59
1061			SHARED SERVICES	2.69%	6,708	6,117	77	103	-	411	16.82	0.45
1066			SHARED SERVICES	2.69%	5,513	4,896	-	206	-	411	13.46	0.36
1067			SHARED SERVICES	2.69%	3,657	3,392	-	159	-	106	9.33	0.25
1070			SHARED SERVICES	2.69%	10,222	10,222	-	-	-	-	28.11	0.76
10056			SHARED SERVICES	2.69%	85,431	85,431	-	-	-	-	234.93	6.33
98648			SHARED SERVICES	2.69%	46,148	46,148	-	-	-	-	126.91	3.42
98669			SHARED SERVICES	2.69%	31,639	27,118	256	2,085	-	2,180	74.58	2.01
98712			SHARED SERVICES	2.69%	38,829	38,829	-	-	-	-	106.78	2.88
98717			SHARED SERVICES	2.69%	49,567	49,567	-	-	-	-	136.31	3.67
98872			SHARED SERVICES	2.69%	38,305	27,490	371	2,930	1,134	6,379	75.60	2.04
98875			SHARED SERVICES	2.69%	23,611	23,316	-	294	-	-	64.12	1.73
98885			SHARED SERVICES	2.69%	57,787	49,740	-	5,448	845	1,754	136.78	3.69
98886			SHARED SERVICES	2.69%	41,630	35,947	-	3,353	-	2,330	98.86	2.66
98953			SHARED SERVICES	2.69%	37,678	36,678	-	-	-	1,000	100.87	2.72
98986			SHARED SERVICES	2.69%	33,474	29,052	325	2,245	-	1,853	79.89	2.15
98989			SHARED SERVICES	2.69%	35,632	32,351	-	2,183	-	1,098	88.96	2.40
99039			SHARED SERVICES	2.69%	35,911	31,639	-	2,403	-	1,870	87.01	2.34
99191			SHARED SERVICES	2.69%	46,951	40,385	261	2,428	1,096	2,781	111.06	2.99
99290			SHARED SERVICES	2.69%	31,684	24,914	180	1,931	-	4,660	68.51	1.85
99315			SHARED SERVICES	2.69%	63,833	63,192	-	-	500	141	173.78	4.68
99427			SHARED SERVICES	2.69%	34,667	30,621	-	1,865	-	2,182	84.21	2.27
99436			SHARED SERVICES	2.69%	57,910	52,670	-	1,620	2,000	1,620	144.84	3.90
99503			SHARED SERVICES	2.69%	40,547	40,547	-	-	-	-	111.51	3.00
99538			SHARED SERVICES	2.69%	16,461	14,615	-	1,346	500	-	40.19	1.08
99543			SHARED SERVICES	2.69%	28,736	25,890	231	1,136	-	1,479	71.20	1.92
99548			SHARED SERVICES	2.69%	42,458	33,099	152	1,646	-	7,561	91.02	2.45
99558			SHARED SERVICES	2.69%	28,846	25,440	172	1,260	-	1,974	69.96	1.88
99585			SHARED SERVICES	2.69%	34,594	34,594	-	-	-	-	95.13	2.56
99621			SHARED SERVICES	2.69%	28,603	25,403	119	1,738	-	1,342	69.86	1.88
99624			SHARED SERVICES	2.69%	15,413	13,508	-	1,170	-	735	37.15	1.00
99644			SHARED SERVICES	2.69%	28,348	26,022	-	1,156	-	1,170	71.56	1.93

Employee ID	Employee Name	Job Title	Location	Allocation to WSCKY	Total Salary	Regular Pay	Overtime Pay	Vacation Pay	Bonus	Other	Disability	Disability WSCKY
99650			SHARED SERVICES	2.69%	27,671	24,299	299	1,532	-	1,541	66.82	1.80
99651			SHARED SERVICES	2.69%	15,814	14,559	93	634	-	529	40.04	1.08
99654			SHARED SERVICES	2.69%	27,823	24,944	283	1,171	-	1,425	68.60	1.85
99660			SHARED SERVICES	2.69%	17,650	11,845	80	1,800	-	3,926	32.57	0.88
99677			SHARED SERVICES	2.69%	125,348	125,348	-	-	-	-	344.71	9.29
99678			SHARED SERVICES	2.69%	32,490	29,991	-	1,498	-	1,001	82.47	2.22
99687			SHARED SERVICES	2.69%	49,720	49,720	-	-	-	-	136.73	3.68
99694			SHARED SERVICES	2.69%	26,585	22,452	228	1,264	-	2,641	61.74	1.66
99700			SHARED SERVICES	2.69%	26,144	23,788	166	1,287	-	903	65.42	1.76
99704			SHARED SERVICES	2.69%	27,666	24,645	261	1,250	-	1,510	67.77	1.83
99707			SHARED SERVICES	2.69%	26,277	21,557	279	1,038	-	3,403	59.28	1.60
99708			SHARED SERVICES	2.69%	71,975	71,365	-	-	-	610	196.25	5.29
99709			SHARED SERVICES	2.69%	26,080	23,321	190	1,232	-	1,337	64.13	1.73
99710			SHARED SERVICES	2.69%	464,966	358,254	-	-	50,000	56,711	985.20	26.54
99714			SHARED SERVICES	2.69%	102,596	102,596	-	-	-	-	282.14	7.60
99717			SHARED SERVICES	2.69%	44,354	40,155	-	1,692	1,000	1,507	110.43	2.98
99735			SHARED SERVICES	2.69%	80,219	77,819	-	-	-	2,400	214.00	5.77
99738			SHARED SERVICES	2.69%	38,284	35,046	-	1,910	-	1,328	96.38	2.60
99760			SHARED SERVICES	2.69%	26,358	23,251	67	1,719	-	1,320	63.94	1.72
99788			SHARED SERVICES	2.69%	63,647	63,147	-	-	500	-	173.65	4.68
99820			SHARED SERVICES	2.69%	66,767	66,767	-	-	-	-	183.61	4.95
99823			SHARED SERVICES	2.69%	132,700	122,700	-	-	10,000	-	337.43	9.09
99827			SHARED SERVICES	2.69%	97,485	96,583	-	902	-	-	265.60	7.16
99849			SHARED SERVICES	2.69%	80,925	80,925	-	-	-	-	222.54	6.00
99851			SHARED SERVICES	2.69%	82,839	77,839	-	-	5,000	-	214.06	5.77
99875			SHARED SERVICES	2.69%	124,677	124,677	-	-	-	-	342.86	9.24
99895			SHARED SERVICES	2.69%	74,324	71,324	-	-	3,000	-	196.14	5.28
99907			SHARED SERVICES	2.69%	249,358	242,000	-	2,327	-	5,031	665.50	17.93
99914			SHARED SERVICES	2.69%	143,900	115,838	-	-	10,000	18,063	318.55	8.58
99915			SHARED SERVICES	2.69%	176,888	176,888	-	-	-	-	486.44	13.11
99918			SHARED SERVICES	2.69%	59,583	55,583	-	-	-	4,000	152.85	4.12
99921			SHARED SERVICES	2.69%	85,971	85,971	-	-	-	-	236.42	6.37
99925			SHARED SERVICES	2.69%	58,350	58,350	-	-	-	-	160.46	4.32
99926			SHARED SERVICES	2.69%	26,031	22,443	75	1,605	-	1,907	61.72	1.66
99942			SHARED SERVICES	2.69%	26,145	23,667	177	1,403	-	898	65.09	1.75
99946			SHARED SERVICES	2.69%	19,709	17,145	1,854	630	-	80	47.15	1.27
99950			SHARED SERVICES	2.69%	20,080	16,052	101	1,365	-	2,561	44.14	1.19
99965			SHARED SERVICES	2.69%	26,271	23,533	180	1,229	-	1,330	64.72	1.74
99967			SHARED SERVICES	2.69%	26,029	23,902	242	990	-	896	65.73	1.77
99979			SHARED SERVICES	2.69%	26,472	21,563	184	1,303	-	3,423	59.30	1.60
99980			SHARED SERVICES	2.69%	40,900	40,900	-	-	-	-	112.48	3.03
99981			SHARED SERVICES	2.69%	62,906	62,906	-	-	-	-	172.99	4.66
99993			SHARED SERVICES	2.69%	25,051	22,029	171	1,311	-	1,540	60.58	1.63
99997			SHARED SERVICES	2.69%	40,789	40,789	-	-	-	-	112.17	3.02
99737			VP-MIDWEST	20.97%	127,628	127,628	-	-	-	-	350.98	73.60

Water Service Corporation of Kentucky

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Salary & Benefits

2015

Employee ID	Employee Name	Job Title	Location	Allocation to WSKY	Total Salary	Regular Pay	Overtime Pay	Vacation Pay	Bonus	Other	Disability	Disability WSKY
1142			KY COST CENTER	100.00%	13,159	10,882	1,657	212	-	409	29.92	29.92
1167			KY COST CENTER	100.00%	2,282	2,282	-	-	-	-	6.28	6.28
1177			KY COST CENTER	100.00%	1,800	1,800	-	-	-	-	4.95	4.95
1179			KY COST CENTER	100.00%	2,293	1,922	371	-	-	-	5.28	5.28
98821			KY COST CENTER	100.00%	48,852	37,987	5,623	3,138	-	2,103	104.47	104.47
98822			KY COST CENTER	100.00%	38,835	31,633	2,619	2,468	-	2,115	86.99	86.99
98824			KY COST CENTER	100.00%	38,625	31,047	1,948	2,786	-	2,843	85.38	85.38
98825			KY COST CENTER	100.00%	61,621	48,775	6,210	3,643	-	2,992	134.13	134.13
98828			KY COST CENTER	100.00%	40,478	30,824	4,079	3,049	-	2,525	84.77	84.77
98942			KY COST CENTER	100.00%	53,839	41,391	8,148	1,387	-	2,912	113.83	113.83
99394			KY COST CENTER	100.00%	18,476	12,271	474	1,314	-	4,418	33.74	33.74
99579			KY COST CENTER	100.00%	46,919	36,430	5,786	2,188	-	2,514	100.18	100.18
99689			KY COST CENTER	100.00%	23,277	23,277	1,438	1,213	-	1,923	64.01	64.01
99720			KY COST CENTER	100.00%	78,457	77,571	-	-	500	385	213.32	213.32
99936			KY COST CENTER	100.00%	33,995	25,865	5,317	731	-	2,083	71.13	71.13
1138			PRESIDENT-MIDWEST/MID ATLANTIC	13.84%	25,686	24,844	-	831	-	11	68.32	9.46
99696			PRESIDENT-MIDWEST/MID ATLANTIC	13.84%	269,782	234,208	-	-	31,250	4,324	644.07	89.14
99737			PRESIDENT-MIDWEST/MID ATLANTIC	13.84%	139,640	133,965	-	-	5,000	675	368.40	50.98
99767			PRESIDENT-MIDWEST/MID ATLANTIC	13.84%	65,984	62,277	-	1,894	1,738	76	171.26	23.70
99901			PRESIDENT-MIDWEST/MID ATLANTIC	13.84%	119,587	99,500	-	-	20,000	87	273.63	37.87
99924			PRESIDENT-MIDWEST/MID ATLANTIC	13.84%	65,203	64,661	-	-	500	41	177.82	24.61
99961			PRESIDENT-MIDWEST/MID ATLANTIC	13.84%	57,955	57,925	-	-	-	31	159.29	22.05
625			SHARED SERVICES	2.60%	74,086	55,291	7,944	5,294	-	5,556	152.05	3.95
760			SHARED SERVICES	2.60%	60,107	48,890	2,439	4,712	1,600	2,466	134.45	3.49
766			SHARED SERVICES	2.60%	38,800	30,510	368	3,423	-	4,499	83.90	2.18
1006			SHARED SERVICES	2.60%	26,894	24,434	359	938	-	1,163	67.19	1.75
1008			SHARED SERVICES	2.60%	26,843	22,658	86	1,280	-	2,819	62.31	1.62
1009			SHARED SERVICES	2.60%	31,323	30,839	-	192	-	292	84.81	2.20
1015			SHARED SERVICES	2.60%	40,908	40,900	-	-	-	8	112.48	2.92
1023			SHARED SERVICES	2.60%	1,785	1,575	-	209	-	1	4.33	0.11
1050			SHARED SERVICES	2.60%	18,473	16,120	39	1,482	-	832	44.33	1.15
1051			SHARED SERVICES	2.60%	28,076	24,736	177	1,579	-	1,584	68.02	1.77
1061			SHARED SERVICES	2.60%	27,889	25,106	230	1,093	-	1,460	69.04	1.79
1066			SHARED SERVICES	2.60%	27,164	22,715	1,335	1,398	-	1,716	62.47	1.62
1070			SHARED SERVICES	2.60%	40,759	40,000	-	-	750	9	110.00	2.86
1085			SHARED SERVICES	2.60%	48,644	48,125	-	-	500	19	132.34	3.44
1092			SHARED SERVICES	2.60%	832	832	-	-	-	-	2.29	0.06
1093			SHARED SERVICES	2.60%	22,495	19,607	210	1,014	-	1,664	53.92	1.40
1104			SHARED SERVICES	2.60%	111,073	110,882	-	-	-	191	304.93	7.92
1115			SHARED SERVICES	2.60%	15,583	12,997	180	132	-	2,274	35.74	0.93
1116			SHARED SERVICES	2.60%	15,605	14,329	85	687	-	504	39.41	1.02
1118			SHARED SERVICES	2.60%	16,439	15,340	215	364	-	521	42.19	1.10
1121			SHARED SERVICES	2.60%	9,116	7,560	-	403	-	1,153	20.79	0.54
1139			SHARED SERVICES	2.60%	15,352	14,676	-	269	-	407	40.36	1.05
1152			SHARED SERVICES	2.60%	4,901	4,901	-	-	-	-	13.48	0.35
1160			SHARED SERVICES	2.60%	2,575	2,575	-	-	-	-	7.08	0.18
1171			SHARED SERVICES	2.60%	2,711	2,087	-	-	-	624	5.74	0.15
1172			SHARED SERVICES	2.60%	2,867	2,659	-	208	-	-	7.31	0.19
1181			SHARED SERVICES	2.60%	882	882	-	-	-	-	2.43	0.06
10056			SHARED SERVICES	2.60%	88,859	86,703	-	-	1,700	457	238.43	6.20
98648			SHARED SERVICES	2.60%	48,384	47,645	-	-	500	239	131.02	3.40
98669			SHARED SERVICES	2.60%	33,423	26,488	207	3,232	-	3,496	72.84	1.89
98712			SHARED SERVICES	2.60%	40,109	40,088	-	-	-	21	110.24	2.86
98717			SHARED SERVICES	2.60%	52,678	51,114	-	-	1,500	64	140.56	3.65
98872			SHARED SERVICES	2.60%	52,558	42,465	1,234	4,238	1,600	3,021	116.78	3.03

Employee ID	Employee Name	Job Title	Location	Allocation to WSKY	Total Salary	Regular Pay	Overtime Pay	Vacation Pay	Bonus	Other	Disability	Disability WSKY
98885			SHARED SERVICES	2.60%	62,220	50,160	-	7,260	1,700	3,100	137.94	3.58
98886			SHARED SERVICES	2.60%	44,735	37,121	-	2,650	400	4,565	102.08	2.65
98953			SHARED SERVICES	2.60%	37,896	37,868	-	-	-	28	104.14	2.71
98986			SHARED SERVICES	2.60%	35,549	30,736	203	2,795	-	1,816	84.52	2.20
98989			SHARED SERVICES	2.60%	38,194	33,720	-	2,993	-	1,481	92.73	2.41
99039			SHARED SERVICES	2.60%	38,444	34,598	-	2,156	-	1,690	95.15	2.47
99191			SHARED SERVICES	2.60%	50,132	41,755	980	3,135	1,600	2,662	114.83	2.98
99290			SHARED SERVICES	2.60%	33,814	29,014	194	1,990	-	2,616	79.79	2.07
99315			SHARED SERVICES	2.60%	65,142	65,035	-	-	54	54	178.85	4.65
99427			SHARED SERVICES	2.60%	37,933	33,470	25	2,051	-	2,386	92.04	2.39
99436			SHARED SERVICES	2.60%	56,147	56,106	-	-	-	41	154.29	4.01
99503			SHARED SERVICES	2.60%	41,787	41,764	-	-	-	24	114.85	2.98
99538			SHARED SERVICES	2.60%	16,441	14,927	-	809	500	205	41.05	1.07
99543			SHARED SERVICES	2.60%	30,587	25,114	168	1,484	-	3,821	69.06	1.79
99548			SHARED SERVICES	2.60%	45,813	41,170	64	2,692	-	1,886	113.22	2.94
99558			SHARED SERVICES	2.60%	31,960	28,520	294	2,202	-	945	78.43	2.04
99561			SHARED SERVICES	2.60%	65,422	62,360	755	-	-	2,307	171.49	4.46
99621			SHARED SERVICES	2.60%	30,604	27,155	210	1,913	-	1,325	74.68	1.94
99644			SHARED SERVICES	2.60%	30,499	27,948	85	1,185	-	1,281	76.86	2.00
99650			SHARED SERVICES	2.60%	29,217	25,929	198	1,469	-	1,621	71.31	1.85
99654			SHARED SERVICES	2.60%	29,477	25,915	224	1,775	-	1,563	71.27	1.85
99677			SHARED SERVICES	2.60%	28,459	26,306	-	1,821	-	332	72.34	1.88
99678			SHARED SERVICES	2.60%	36,112	33,330	-	1,719	-	1,062	91.66	2.38
99687			SHARED SERVICES	2.60%	56,371	55,843	-	-	500	29	153.57	3.99
99694			SHARED SERVICES	2.60%	28,030	25,096	218	1,272	-	1,445	69.01	1.79
99700			SHARED SERVICES	2.60%	27,963	24,501	183	2,143	-	1,136	67.38	1.75
99704			SHARED SERVICES	2.60%	29,481	26,988	148	1,088	-	1,257	74.22	1.93
99707			SHARED SERVICES	2.60%	29,046	22,807	160	1,333	-	4,746	62.72	1.63
99708			SHARED SERVICES	2.60%	76,391	74,888	-	-	1,000	503	205.94	5.35
99709			SHARED SERVICES	2.60%	25,041	25,041	235	1,261	-	2,243	68.86	1.79
99710			SHARED SERVICES	2.60%	537,895	368,100	-	-	93,750	76,045	1,012.28	26.30
99714			SHARED SERVICES	2.60%	107,384	105,674	-	-	1,500	209	290.60	7.55
99717			SHARED SERVICES	2.60%	47,109	42,669	-	2,419	-	2,020	117.34	3.05
99735			SHARED SERVICES	2.60%	68,929	60,529	-	2,725	2,350	3,326	166.45	4.33
99738			SHARED SERVICES	2.60%	26,324	23,781	-	1,202	500	841	65.40	1.70
99760			SHARED SERVICES	2.60%	16,116	14,650	10	627	-	829	40.29	1.05
99788			SHARED SERVICES	2.60%	74,070	73,750	-	-	250	70	202.81	5.27
99820			SHARED SERVICES	2.60%	68,941	68,770	-	-	-	170	189.12	4.91
99823			SHARED SERVICES	2.60%	133,736	127,308	-	-	6,250	178	350.10	9.10
99849			SHARED SERVICES	2.60%	913	910	-	-	-	3	2.50	0.07
99851			SHARED SERVICES	2.60%	80,249	80,174	-	-	-	75	220.48	5.73
99875			SHARED SERVICES	2.60%	126,786	125,612	-	-	-	1,174	345.43	8.98
99895			SHARED SERVICES	2.60%	73,275	72,925	-	-	-	351	200.54	5.21
99914			SHARED SERVICES	2.60%	177,709	155,929	-	-	12,500	9,279	428.81	11.14
99915			SHARED SERVICES	2.60%	203,378	182,195	-	-	-	21,184	501.03	13.02
99918			SHARED SERVICES	2.60%	66,978	62,930	-	-	-	4,048	173.06	4.50
99921			SHARED SERVICES	2.60%	44,705	44,329	-	-	-	376	121.90	3.17
99925			SHARED SERVICES	2.60%	60,493	60,242	-	-	-	252	165.67	4.30
99926			SHARED SERVICES	2.60%	28,080	25,363	211	923	-	1,582	69.75	1.81
99942			SHARED SERVICES	2.60%	27,933	24,581	130	926	-	2,296	67.60	1.76
99946			SHARED SERVICES	2.60%	25,737	23,432	1,078	678	-	549	64.44	1.67
99965			SHARED SERVICES	2.60%	28,386	25,698	182	1,147	-	1,360	70.67	1.84
99967			SHARED SERVICES	2.60%	11,269	11,286	75	705	-	502	31.04	0.81
99979			SHARED SERVICES	2.60%	3,504	2,952	-	251	-	301	8.12	0.21
99980			SHARED SERVICES	2.60%	44,308	44,290	-	-	-	18	121.80	3.17
99981			SHARED SERVICES	2.60%	82,515	77,205	-	-	5,250	60	212.31	5.52
99993			SHARED SERVICES	2.60%	27,269	24,050	141	1,370	-	1,708	66.14	1.72
99997			SHARED SERVICES	2.60%	43,789	43,775	-	-	-	14	120.38	3.13

Water Service Corporation of Kentucky

Response to Staff DR 2.30

Salary & Benefits

2016

Employee ID	Employee Name	Job Title	Location	Allocation to WSKY	Total Salary	Regular Pay	Overtime Pay	Vacation Pay	Bonus	Other	Disability	Misc. Benefit	Disability WSKY	Misc. Benefit WSKY
1001142			KY COST CENTER	100.00%	31,270	26,610	2,174	763	-	1,723	73.18	43.20	73.18	43.20
1001177			KY COST CENTER	100.00%	35,490	29,794	2,405	1,348	-	1,943	81.93	43.20	81.93	43.20
1001179			KY COST CENTER	100.00%	20,630	17,215	1,628	1,278	-	510	47.34	43.20	47.34	43.20
1001284			KY COST CENTER	100.00%	9,010	7,840	777	-	-	393	21.56	43.20	21.56	43.20
1098821			KY COST CENTER	100.00%	44,413	36,249	1,262	4,402	-	2,501	99.68	43.20	99.68	43.20
1098822			KY COST CENTER	100.00%	41,405	31,932	3,975	2,713	-	2,786	87.81	43.20	87.81	43.20
1098825			KY COST CENTER	100.00%	57,139	47,476	2,787	4,790	-	2,086	130.56	43.20	130.56	43.20
1098828			KY COST CENTER	100.00%	41,441	31,172	3,999	3,441	-	2,829	85.72	43.20	85.72	43.20
1098942			KY COST CENTER	100.00%	56,621	43,643	6,987	3,696	-	2,294	120.02	43.20	120.02	43.20
1099579			KY COST CENTER	100.00%	54,831	43,030	5,944	2,596	-	3,261	118.33	43.20	118.33	43.20
1099720			KY COST CENTER	100.00%	79,899	79,899	-	-	-	-	219.72	43.20	219.72	43.20
1099936			KY COST CENTER	100.00%	32,815	26,017	4,463	1,176	-	1,159	71.55	43.20	71.55	43.20
1001015			PRESIDENT-MIDWES	13.77%	46,771	45,646	-	-	-	1,125	125.53	43.20	17.29	5.95
1001070			PRESIDENT-MIDWES	13.77%	43,540	43,540	-	-	-	-	119.73	43.20	16.49	5.95
1001083			PRESIDENT-MIDWES	13.77%	54,490	38,510	10,199	1,890	-	3,890	105.90	43.20	14.59	5.95
1001219			PRESIDENT-MIDWES	13.77%	31,319	31,319	-	-	-	-	86.13	43.20	11.86	5.95
1001305			PRESIDENT-MIDWES	13.77%	15,897	15,897	-	-	-	-	43.72	43.20	6.02	5.95
1001365			PRESIDENT-MIDWES	13.77%	6,276	6,276	-	-	-	-	17.26	43.20	2.38	5.95
1099696			PRESIDENT-MIDWES	13.77%	382,580	255,625	-	-	111,791	15,164	702.97	43.20	96.82	5.95
1099737			PRESIDENT-MIDWES	13.77%	161,070	74,432	-	6,018	80,621	-	204.69	43.20	28.19	5.95
1099901			PRESIDENT-MIDWES	13.77%	139,969	120,786	-	-	19,183	-	332.16	43.20	45.75	5.95
1099924			PRESIDENT-MIDWES	13.77%	79,050	78,550	-	-	500	-	216.01	43.20	29.75	5.95
1099961			PRESIDENT-MIDWES	13.77%	53,609	52,777	-	832	-	-	145.14	43.20	19.99	5.95
1000625			SHARED SERVICES	2.58%	3,163	1,235	-	1,205	-	723	3.40	43.20	0.09	1.11
1000760			SHARED SERVICES	2.58%	11,751	8,912	653	1,571	-	615	24.51	43.20	0.63	1.11
1000766			SHARED SERVICES	2.58%	38,131	31,724	159	2,933	-	3,316	87.24	43.20	2.25	1.11
1001006			SHARED SERVICES	2.58%	27,063	22,656	401	1,562	-	2,444	62.30	43.20	1.61	1.11
1001008			SHARED SERVICES	2.58%	5,618	4,153	469	217	-	778	11.42	43.20	0.29	1.11
1001009			SHARED SERVICES	2.58%	9,112	9,112	-	-	-	-	25.06	43.20	0.65	1.11
1001051			SHARED SERVICES	2.58%	8,128	7,034	80	484	-	530	19.34	43.20	0.50	1.11
1001061			SHARED SERVICES	2.58%	28,591	24,988	247	1,754	-	1,601	68.72	43.20	1.77	1.11
1001066			SHARED SERVICES	2.58%	27,769	22,815	59	1,273	-	3,622	62.74	43.20	1.62	1.11
1001085			SHARED SERVICES	2.58%	56,341	56,341	-	-	-	-	154.94	43.20	3.99	1.11
1001093			SHARED SERVICES	2.58%	5,759	4,797	-	416	-	546	13.19	43.20	0.34	1.11
1001104			SHARED SERVICES	2.58%	144,200	144,200	-	-	-	-	396.55	43.20	10.22	1.11
1001115			SHARED SERVICES	2.58%	16,626	13,275	127	1,287	-	1,937	36.50	43.20	0.94	1.11
1001116			SHARED SERVICES	2.58%	26,767	23,369	188	1,320	-	1,889	64.27	43.20	1.66	1.11
1001118			SHARED SERVICES	2.58%	27,791	25,031	248	1,672	-	840	68.83	43.20	1.77	1.11
1001121			SHARED SERVICES	2.58%	3,597	2,993	302	302	-	-	8.23	43.20	0.21	1.11
1001139			SHARED SERVICES	2.58%	38,588	34,810	698	1,438	-	1,642	95.73	43.20	2.47	1.11
1001152			SHARED SERVICES	2.58%	16,037	15,206	-	835	-	(4)	41.82	43.20	1.08	1.11
1001160			SHARED SERVICES	2.58%	9,388	8,865	-	525	-	(2)	24.38	43.20	0.63	1.11
1001171			SHARED SERVICES	2.58%	4,024	3,400	-	312	-	312	9.35	43.20	0.24	1.11
1001172			SHARED SERVICES	2.58%	475	267	-	-	-	208	0.73	43.20	0.02	1.11
1001181			SHARED SERVICES	2.58%	26,356	24,169	153	1,222	-	812	66.47	43.20	1.71	1.11
1001184			SHARED SERVICES	2.58%	26,504	23,547	101	1,281	-	1,575	64.75	43.20	1.67	1.11
1001192			SHARED SERVICES	2.58%	28,505	25,466	701	1,224	-	1,114	70.03	43.20	1.81	1.11
1001193			SHARED SERVICES	2.58%	5,509	5,200	49	156	-	104	14.30	43.20	0.37	1.11
1001200			SHARED SERVICES	2.58%	10,153	8,905	234	364	-	650	24.49	43.20	0.63	1.11
1001201			SHARED SERVICES	2.58%	20,698	17,954	151	767	-	1,826	49.37	43.20	1.27	1.11
1001202			SHARED SERVICES	2.58%	1,471	1,471	-	-	-	-	4.04	43.20	0.10	1.11
1001203			SHARED SERVICES	2.58%	5,668	5,220	-	260	-	189	14.35	43.20	0.37	1.11
1001206			SHARED SERVICES	2.58%	26,962	26,962	-	-	-	-	74.15	43.20	1.91	1.11
1001210			SHARED SERVICES	2.58%	30,959	29,659	-	-	500	800	81.56	43.20	2.10	1.11
1001215			SHARED SERVICES	2.58%	70,583	70,583	-	-	-	-	194.10	43.20	5.00	1.11
1001218			SHARED SERVICES	2.58%	936	936	-	-	-	-	2.57	43.20	0.07	1.11
1001222			SHARED SERVICES	2.58%	15,184	13,947	91	626	-	520	38.35	43.20	0.99	1.11
1001223			SHARED SERVICES	2.58%	12,795	10,833	25	377	-	1,560	29.79	43.20	0.77	1.11
1001224			SHARED SERVICES	2.58%	14,931	13,468	59	988	-	416	37.04	43.20	0.95	1.11
1001225			SHARED SERVICES	2.58%	15,226	14,001	185	624	-	416	38.50	43.20	0.99	1.11
1001226			SHARED SERVICES	2.58%	4,851	4,475	63	208	-	104	12.31	43.20	0.32	1.11
1001229			SHARED SERVICES	2.58%	520	520	-	-	-	-	1.43	43.20	0.04	1.11
1001240			SHARED SERVICES	2.58%	12,589	11,694	63	520	-	312	32.16	43.20	0.83	1.11
1001249			SHARED SERVICES	2.58%	32,212	32,212	-	-	-	-	88.58	43.20	2.28	1.11
1001254			SHARED SERVICES	2.58%	10,494	8,821	49	416	-	1,209	24.26	43.20	0.63	1.11
1001265			SHARED SERVICES	2.58%	10,803	9,614	357	312	-	520	26.44	43.20	0.68	1.11
1001272			SHARED SERVICES	2.58%	12,101	11,539	48	-	-	514	31.73	43.20	0.82	1.11
1001273			SHARED SERVICES	2.58%	17,592	17,292	-	-	-	300	47.55	43.20	1.23	1.11

Employee ID	Employee Name	Job Title	Location	Allocation to WSCKY	Total Salary	Regular Pay	Overtime Pay	Vacation Pay	Bonus	Other	Disability	Misc. Benefit	Disability WSCKY	Misc. Benefit WSCKY
1001283			SHARED SERVICES	2.58%	11,835	11,100	446	-	-	288	30.53	43.20	0.79	1.11
1001290			SHARED SERVICES	2.58%	1,459	1,459	-	-	-	-	4.01	43.20	0.10	1.11
1001291			SHARED SERVICES	2.58%	6,182	5,558	-	104	-	520	15.28	43.20	0.39	1.11
1001292			SHARED SERVICES	2.58%	4,804	4,440	-	260	-	104	12.21	43.20	0.31	1.11
1001296			SHARED SERVICES	2.58%	2,184	2,132	-	52	-	-	5.86	43.20	0.15	1.11
1010056			SHARED SERVICES	2.58%	89,196	87,896	-	-	1,300	-	241.71	43.20	6.23	1.11
1098648			SHARED SERVICES	2.58%	50,730	49,830	-	-	-	900	137.03	43.20	3.53	1.11
1098669			SHARED SERVICES	2.58%	4,942	3,914	-	658	-	370	10.76	43.20	0.28	1.11
1098712			SHARED SERVICES	2.58%	43,907	42,807	-	-	-	1,100	117.72	43.20	3.03	1.11
1098717			SHARED SERVICES	2.58%	55,666	55,416	-	-	250	-	152.39	43.20	3.93	1.11
1098721			SHARED SERVICES	2.58%	63,381	63,381	-	-	-	-	174.30	43.20	4.49	1.11
1098872			SHARED SERVICES	2.58%	50,962	41,519	1,386	3,257	1,400	3,401	114.18	43.20	2.94	1.11
1098885			SHARED SERVICES	2.58%	58,524	50,329	-	5,700	500	1,994	138.41	43.20	3.57	1.11
1098886			SHARED SERVICES	2.58%	43,881	36,454	-	2,511	650	4,266	100.25	43.20	2.58	1.11
1098953			SHARED SERVICES	2.58%	25,426	24,826	-	-	-	600	68.27	43.20	1.76	1.11
1098986			SHARED SERVICES	2.58%	35,686	30,756	356	2,678	-	1,895	84.58	43.20	2.18	1.11
1098989			SHARED SERVICES	2.58%	37,884	34,042	-	2,545	-	1,296	93.62	43.20	2.41	1.11
1099039			SHARED SERVICES	2.58%	38,065	32,803	-	2,803	750	1,709	90.21	43.20	2.33	1.11
1099191			SHARED SERVICES	2.58%	47,846	40,449	686	3,396	1,400	1,916	111.23	43.20	2.87	1.11
1099290			SHARED SERVICES	2.58%	33,477	29,428	159	1,898	-	1,992	80.93	43.20	2.09	1.11
1099315			SHARED SERVICES	2.58%	32,676	30,836	-	1,840	-	-	84.80	43.20	2.19	1.11
1099427			SHARED SERVICES	2.58%	38,467	33,419	-	2,152	-	2,896	91.90	43.20	2.37	1.11
1099436			SHARED SERVICES	2.58%	59,850	59,850	-	-	-	-	164.59	43.20	4.24	1.11
1099503			SHARED SERVICES	2.58%	44,090	44,090	-	-	-	-	121.25	43.20	3.13	1.11
1099538			SHARED SERVICES	2.58%	15,925	14,079	-	1,229	500	117	38.72	43.20	1.00	1.11
1099543			SHARED SERVICES	2.58%	30,574	23,113	119	2,096	-	5,246	63.56	43.20	1.64	1.11
1099548			SHARED SERVICES	2.58%	46,206	39,795	1,113	2,543	1,400	1,356	109.44	43.20	2.82	1.11
1099558			SHARED SERVICES	2.58%	30,499	27,476	155	1,774	-	1,094	75.56	43.20	1.95	1.11
1099561			SHARED SERVICES	2.58%	50,648	50,648	-	-	-	-	139.28	43.20	3.59	1.11
1099621			SHARED SERVICES	2.58%	31,102	27,080	652	1,290	-	2,080	74.47	43.20	1.92	1.11
1099644			SHARED SERVICES	2.58%	30,689	27,781	85	1,778	-	1,045	76.40	43.20	1.97	1.11
1099650			SHARED SERVICES	2.58%	30,242	26,235	120	1,474	-	2,413	72.15	43.20	1.86	1.11
1099654			SHARED SERVICES	2.58%	20,007	17,380	85	787	-	1,755	47.80	43.20	1.23	1.11
1099678			SHARED SERVICES	2.58%	38,051	34,983	-	1,899	-	1,169	96.20	43.20	2.48	1.11
1099687			SHARED SERVICES	2.58%	61,350	61,295	-	-	-	56	168.56	43.20	4.35	1.11
1099694			SHARED SERVICES	2.58%	27,771	24,203	246	1,382	-	1,940	66.56	43.20	1.72	1.11
1099700			SHARED SERVICES	2.58%	16,389	15,269	59	754	-	308	41.99	43.20	1.08	1.11
1099704			SHARED SERVICES	2.58%	29,431	26,479	171	1,343	-	1,439	72.82	43.20	1.88	1.11
1099707			SHARED SERVICES	2.58%	29,432	25,489	167	1,412	-	2,364	70.09	43.20	1.81	1.11
1099708			SHARED SERVICES	2.58%	81,378	81,378	-	-	-	-	223.79	43.20	5.77	1.11
1099709			SHARED SERVICES	2.58%	27,920	24,180	72	1,200	-	2,468	66.49	43.20	1.71	1.11
1099710			SHARED SERVICES	2.58%	729,602	375,450	-	-	334,602	19,550	1,032.49	43.20	26.62	1.11
1099714			SHARED SERVICES	2.58%	110,643	109,643	-	-	1,000	-	301.52	43.20	7.77	1.11
1099717			SHARED SERVICES	2.58%	47,088	43,282	-	2,011	-	1,795	119.03	43.20	3.07	1.11
1099735			SHARED SERVICES	2.58%	51,434	38,816	-	5,082	-	7,535	106.74	43.20	2.75	1.11
1099788			SHARED SERVICES	2.58%	83,738	83,738	-	-	-	-	230.28	43.20	5.94	1.11
1099820			SHARED SERVICES	2.58%	70,833	70,833	-	-	-	-	194.79	43.20	5.02	1.11
1099823			SHARED SERVICES	2.58%	139,900	132,400	-	-	7,500	-	364.10	43.20	9.39	1.11
1099851			SHARED SERVICES	2.58%	85,555	85,305	-	-	250	-	234.59	43.20	6.05	1.11
1099875			SHARED SERVICES	2.58%	127,813	127,813	-	-	-	-	351.49	43.20	9.06	1.11
1099895			SHARED SERVICES	2.58%	74,933	74,933	-	-	-	-	206.06	43.20	5.31	1.11
1099914			SHARED SERVICES	2.58%	239,521	180,042	-	-	52,721	6,758	495.11	43.20	12.76	1.11
1099915			SHARED SERVICES	2.58%	207,660	187,660	-	-	20,000	-	516.07	43.20	13.30	1.11
1099918			SHARED SERVICES	2.58%	76,671	72,726	-	-	-	3,944	200.00	43.20	5.16	1.11
1099921			SHARED SERVICES	2.58%	44,615	44,615	-	-	-	-	122.69	43.20	3.16	1.11
1099925			SHARED SERVICES	2.58%	62,277	62,277	-	-	-	-	171.26	43.20	4.41	1.11
1099926			SHARED SERVICES	2.58%	27,903	24,551	120	1,724	-	1,508	67.52	43.20	1.74	1.11
1099942			SHARED SERVICES	2.58%	27,959	23,751	305	1,609	-	2,294	65.31	43.20	1.68	1.11
1099945			SHARED SERVICES	2.58%	140,641	120,736	-	2,405	17,500	-	332.02	43.20	8.56	1.11
1099946			SHARED SERVICES	2.58%	36,473	33,773	93	1,391	-	1,217	92.88	43.20	2.39	1.11
1099965			SHARED SERVICES	2.58%	29,353	25,242	308	1,242	-	2,560	69.42	43.20	1.79	1.11
1099980			SHARED SERVICES	2.58%	50,440	50,440	-	-	-	-	138.71	43.20	3.58	1.11
1099981			SHARED SERVICES	2.58%	97,937	92,937	-	-	5,000	-	255.58	43.20	6.59	1.11
1099993			SHARED SERVICES	2.58%	27,770	24,616	198	1,277	-	1,679	67.69	43.20	1.75	1.11
1099997			SHARED SERVICES	2.58%	50,821	50,821	-	-	-	-	139.76	43.20	3.60	1.11
1001360			VP-MIDWEST	20.71%	1,644	1,644	-	-	-	-	4.52	43.20	0.94	8.95
1099782			VP-MIDWEST	20.71%	52,500	52,500	-	-	-	-	144.38	43.20	29.90	8.95

Water Service Corporation of Kentucky

Response to Staff DR 2.30

Salary & Benefits

2017

Employee ID	Employee Name	Job Title	Location	Allocation to WSKY	Total Salary	Regular Pay	Overtime Pay	Vacation Pay	Bonus	Other	Disability	Misc. Benefit	Disability WSKY	Misc. Benefit WSKY
1001142			KY COST CENTER	100.00%	31,759	27,388	729	1,299	-	2,343	124.64	46.20	124.64	46.20
1001177			KY COST CENTER	100.00%	40,486	31,987	1,847	1,401	-	5,251	137.28	46.20	137.28	46.20
1001284			KY COST CENTER	100.00%	32,650	27,466	952	1,697	-	2,535	124.85	46.20	124.85	46.20
1098821			KY COST CENTER	100.00%	46,012	39,210	1,140	3,139	-	2,522	157.15	46.20	157.15	46.20
1098822			KY COST CENTER	100.00%	45,687	35,919	2,925	3,205	-	3,638	148.10	46.20	148.10	46.20
1098825			KY COST CENTER	100.00%	58,705	50,209	1,672	5,031	-	1,793	187.39	46.20	187.39	46.20
1098828			KY COST CENTER	100.00%	50,366	38,479	5,072	3,098	-	3,716	155.14	46.20	155.14	46.20
1098942			KY COST CENTER	100.00%	60,963	48,673	5,819	3,727	-	2,744	183.17	46.20	183.17	46.20
1099579			KY COST CENTER	100.00%	60,752	54,458	2,814	2,547	-	933	199.08	46.20	199.08	46.20
1099720			KY COST CENTER	100.00%	52,629	47,629	-	-	5,000	-	180.30	46.20	180.30	46.20
1099936			KY COST CENTER	100.00%	34,900	26,563	3,393	1,436	-	3,508	122.37	46.20	122.37	46.20
1001015			PRESIDENT-MIDWES	13.55%	57,737	56,949	-	788	-	-	205.93	46.20	27.90	6.26
1001070			PRESIDENT-MIDWES	13.55%	53,486	52,921	-	544	-	22	194.85	46.20	26.40	6.26
1001083			PRESIDENT-MIDWES	13.55%	69,196	60,130	5,294	1,821	-	1,950	214.68	46.20	29.08	6.26
1001219			PRESIDENT-MIDWES	13.55%	36,473	36,043	-	431	-	-	148.44	46.20	20.11	6.26
1001305			PRESIDENT-MIDWES	13.55%	111,250	110,845	-	405	-	-	354.14	46.20	47.97	6.26
1001365			PRESIDENT-MIDWES	13.55%	83,325	83,325	-	-	-	-	278.46	46.20	37.72	6.26
1001427			PRESIDENT-MIDWES	13.55%	6,109	5,963	47	-	-	100	65.72	46.20	8.90	6.26
1001432			PRESIDENT-MIDWES	13.55%	23,863	23,650	19	194	-	-	114.36	46.20	15.49	6.26
1099696			PRESIDENT-MIDWES	13.55%	486,489	282,390	-	4,835	177,431	21,834	825.89	46.20	111.88	6.26
1099901			PRESIDENT-MIDWES	13.55%	158,805	140,498	-	3,307	15,000	-	435.69	46.20	59.02	6.26
1099924			PRESIDENT-MIDWES	13.55%	92,450	89,080	-	370	3,000	-	294.29	46.20	39.87	6.26
1000766			SHARED SERVICES	2.41%	39,539	30,819	-	3,115	-	5,605	134.07	46.20	3.23	1.11
1001006			SHARED SERVICES	2.41%	27,864	22,484	131	1,253	-	3,996	111.15	46.20	2.68	1.11
1001061			SHARED SERVICES	2.41%	28,433	25,205	274	1,081	-	1,873	118.63	46.20	2.86	1.11
1001066			SHARED SERVICES	2.41%	13,040	10,510	106	929	-	1,494	78.22	46.20	1.88	1.11
1001085			SHARED SERVICES	2.41%	33,390	29,704	-	3,686	-	-	131.01	46.20	3.15	1.11
1001104			SHARED SERVICES	2.41%	149,968	149,201	-	-	-	767	459.62	46.20	11.06	1.11
1001115			SHARED SERVICES	2.41%	4,056	2,607	-	150	-	1,300	56.49	46.20	1.36	1.11
1001116			SHARED SERVICES	2.41%	28,085	24,611	160	1,313	-	2,001	117.00	46.20	2.82	1.11
1001118			SHARED SERVICES	2.41%	27,907	25,094	164	1,344	-	1,305	118.33	46.20	2.85	1.11
1001139			SHARED SERVICES	2.41%	49,839	46,020	1,440	379	2,000	-	175.87	46.20	4.23	1.11
1001152			SHARED SERVICES	2.41%	11,368	10,998	-	376	-	(6)	79.57	46.20	1.92	1.11
1001160			SHARED SERVICES	2.41%	10,134	9,582	-	555	-	(3)	75.67	46.20	1.82	1.11
1001181			SHARED SERVICES	2.41%	26,852	24,284	-	1,340	-	1,228	116.10	46.20	2.79	1.11
1001184			SHARED SERVICES	2.41%	28,640	25,211	54	1,341	-	2,035	118.65	46.20	2.86	1.11
1001192			SHARED SERVICES	2.41%	37,468	32,592	1,162	1,556	-	2,158	138.95	46.20	3.34	1.11
1001201			SHARED SERVICES	2.41%	27,112	18,473	131	1,423	-	7,085	100.12	46.20	2.41	1.11
1001206			SHARED SERVICES	2.41%	47,476	47,476	-	-	-	-	179.88	46.20	4.33	1.11
1001210			SHARED SERVICES	2.41%	46,233	44,072	-	169	-	1,992	170.52	46.20	4.10	1.11
1001215			SHARED SERVICES	2.41%	112,475	112,475	-	-	-	-	358.63	46.20	8.63	1.11
1001222			SHARED SERVICES	2.41%	28,037	25,176	261	1,411	-	1,189	118.56	46.20	2.85	1.11
1001223			SHARED SERVICES	2.41%	5,227	4,148	-	559	-	520	60.73	46.20	1.46	1.11
1001224			SHARED SERVICES	2.41%	1,768	1,456	-	-	-	312	53.32	46.20	1.28	1.11
1001225			SHARED SERVICES	2.41%	28,167	25,175	162	1,482	-	1,347	118.55	46.20	2.85	1.11
1001240			SHARED SERVICES	2.41%	28,717	26,164	178	1,319	-	1,056	121.27	46.20	2.92	1.11
1001249			SHARED SERVICES	2.41%	87,707	87,707	-	-	-	-	290.51	46.20	6.99	1.11
1001254			SHARED SERVICES	2.41%	8,255	6,559	-	494	-	1,203	67.36	46.20	1.62	1.11
1001265			SHARED SERVICES	2.41%	28,093	24,487	196	1,541	-	1,870	116.66	46.20	2.81	1.11
1001272			SHARED SERVICES	2.41%	29,422	27,266	-	1,287	-	869	124.30	46.20	2.99	1.11
1001273			SHARED SERVICES	2.41%	49,504	47,417	-	263	-	1,824	179.72	46.20	4.33	1.11
1001283			SHARED SERVICES	2.41%	38,280	35,534	55	731	-	1,960	147.04	46.20	3.54	1.11
1001291			SHARED SERVICES	2.41%	27,865	24,273	36	1,643	-	1,913	116.07	46.20	2.79	1.11
1001296			SHARED SERVICES	2.41%	13,930	12,804	406	726	-	(6)	84.53	46.20	2.03	1.11
1001314			SHARED SERVICES	2.41%	17,889	15,367	193	921	-	1,408	91.58	46.20	2.20	1.11
1001322			SHARED SERVICES	2.41%	33,926	30,643	299	1,987	-	997	133.59	46.20	3.22	1.11
1001383			SHARED SERVICES	2.41%	38,856	37,302	81	345	-	1,128	151.90	46.20	3.66	1.11
1001385			SHARED SERVICES	2.41%	9,555	9,366	-	188	-	-	75.08	46.20	1.81	1.11
1001389			SHARED SERVICES	2.41%	32,686	29,610	285	1,500	-	1,291	130.75	46.20	3.15	1.11
1001403			SHARED SERVICES	2.41%	10,634	8,774	114	780	-	966	73.45	46.20	1.77	1.11
1001405			SHARED SERVICES	2.41%	15,232	13,496	72	1,111	-	552	86.44	46.20	2.08	1.11
1001406			SHARED SERVICES	2.41%	17,696	11,940	68	966	-	4,721	82.16	46.20	1.98	1.11
1001408			SHARED SERVICES	2.41%	51,846	51,565	-	282	-	-	191.12	46.20	4.60	1.11
1001446			SHARED SERVICES	2.41%	20,228	20,066	-	162	-	-	104.50	46.20	2.52	1.11
1001447			SHARED SERVICES	2.41%	25,066	24,836	-	231	-	-	117.62	46.20	2.83	1.11
1001455			SHARED SERVICES	2.41%	10,740	9,403	105	560	-	672	75.18	46.20	1.81	1.11
1001456			SHARED SERVICES	2.41%	5,372	5,049	51	136	-	136	63.20	46.20	1.52	1.11
1001457			SHARED SERVICES	2.41%	11,067	10,528	63	140	-	336	78.27	46.20	1.88	1.11
1001458			SHARED SERVICES	2.41%	11,081	10,108	63	378	-	532	77.12	46.20	1.86	1.11
1001466			SHARED SERVICES	2.41%	7,018	6,272	74	336	-	336	66.57	46.20	1.60	1.11

Employee ID	Employee Name	Job Title	Location	Allocation to WSKY	Total Salary	Regular Pay	Overtime Pay	Vacation Pay	Bonus	Other	Disability	Misc. Benefit	Disability WSKY	Misc. Benefit WSKY
1001467			SHARED SERVICES	2.41%	7,210	6,188	-	350	-	672	66.34	46.20	1.60	1.11
1001474			SHARED SERVICES	2.41%	9,611	9,611	-	-	-	-	75.75	46.20	1.82	1.11
1001477			SHARED SERVICES	2.41%	3,351	3,351	-	-	-	-	58.54	46.20	1.41	1.11
1001486			SHARED SERVICES	2.41%	3,600	3,456	-	144	-	-	58.82	46.20	1.42	1.11
1001492			SHARED SERVICES	2.41%	4,344	4,344	-	-	-	-	61.26	46.20	1.47	1.11
1001495			SHARED SERVICES	2.41%	20,237	20,237	-	-	-	-	104.97	46.20	2.53	1.11
1001497			SHARED SERVICES	2.41%	168	168	-	-	-	-	49.78	46.20	1.20	1.11
1001499			SHARED SERVICES	2.41%	1,958	1,958	-	-	-	-	54.71	46.20	1.32	1.11
1010056			SHARED SERVICES	2.41%	90,207	87,977	-	1,803	-	426	291.26	46.20	7.01	1.11
1098648			SHARED SERVICES	2.41%	53,255	50,182	-	1,773	-	1,300	187.32	46.20	4.51	1.11
1098712			SHARED SERVICES	2.41%	50,276	48,613	-	263	-	1,400	183.01	46.20	4.41	1.11
1098717			SHARED SERVICES	2.41%	59,470	57,461	-	1,009	1,000	-	207.34	46.20	4.99	1.11
1098721			SHARED SERVICES	2.41%	70,000	68,332	-	958	-	710	237.23	46.20	5.71	1.11
1098872			SHARED SERVICES	2.41%	48,842	41,826	965	4,365	-	1,686	164.34	46.20	3.96	1.11
1098885			SHARED SERVICES	2.41%	59,849	49,886	-	6,128	875	2,961	186.51	46.20	4.49	1.11
1098886			SHARED SERVICES	2.41%	44,038	36,104	-	3,975	-	3,959	148.60	46.20	3.58	1.11
1098986			SHARED SERVICES	2.41%	36,772	29,823	1,762	2,819	-	2,368	131.33	46.20	3.16	1.11
1098989			SHARED SERVICES	2.41%	39,750	34,079	262	3,602	250	1,558	143.04	46.20	3.44	1.11
1099039			SHARED SERVICES	2.41%	38,123	33,008	-	3,193	-	1,922	140.09	46.20	3.37	1.11
1099191			SHARED SERVICES	2.41%	47,199	41,636	897	2,833	-	1,832	163.82	46.20	3.94	1.11
1099290			SHARED SERVICES	2.41%	35,084	29,995	229	2,585	-	2,276	131.81	46.20	3.17	1.11
1099427			SHARED SERVICES	2.41%	41,415	35,161	30	2,682	-	3,542	146.01	46.20	3.51	1.11
1099436			SHARED SERVICES	2.41%	63,294	62,264	-	1,030	-	-	220.55	46.20	5.31	1.11
1099503			SHARED SERVICES	2.41%	49,884	49,080	-	654	-	151	184.29	46.20	4.44	1.11
1099538			SHARED SERVICES	2.41%	15,866	14,235	-	780	500	351	88.47	46.20	2.13	1.11
1099543			SHARED SERVICES	2.41%	31,258	27,382	148	2,045	-	1,683	124.62	46.20	3.00	1.11
1099548			SHARED SERVICES	2.41%	45,117	40,353	254	2,969	-	1,541	160.29	46.20	3.86	1.11
1099558			SHARED SERVICES	2.41%	31,328	26,167	57	1,969	-	3,135	121.28	46.20	2.92	1.11
1099621			SHARED SERVICES	2.41%	28,735	18,854	66	1,202	-	8,613	101.17	46.20	2.44	1.11
1099644			SHARED SERVICES	2.41%	32,463	29,495	78	1,548	250	1,092	130.43	46.20	3.14	1.11
1099650			SHARED SERVICES	2.41%	31,611	28,021	57	1,432	-	2,101	126.38	46.20	3.04	1.11
1099678			SHARED SERVICES	2.41%	39,053	35,521	-	2,196	-	1,337	147.00	46.20	3.54	1.11
1099687			SHARED SERVICES	2.41%	68,268	67,245	-	817	150	56	234.24	46.20	5.64	1.11
1099694			SHARED SERVICES	2.41%	28,538	23,729	124	1,655	-	3,031	114.58	46.20	2.76	1.11
1099704			SHARED SERVICES	2.41%	30,430	27,518	-	1,638	-	1,274	124.99	46.20	3.01	1.11
1099707			SHARED SERVICES	2.41%	31,148	27,239	185	1,610	-	2,115	124.23	46.20	2.99	1.11
1099708			SHARED SERVICES	2.41%	85,859	84,217	-	1,642	-	-	280.92	46.20	6.76	1.11
1099709			SHARED SERVICES	2.41%	26,149	22,475	172	1,512	-	1,989	111.13	46.20	2.67	1.11
1099710			SHARED SERVICES	2.41%	934,943	378,000	-	2,313	515,533	39,097	1,088.82	46.20	26.21	1.11
1099714			SHARED SERVICES	2.41%	116,529	108,920	-	4,570	2,500	538	348.85	46.20	8.40	1.11
1099717			SHARED SERVICES	2.41%	50,080	42,804	794	2,695	-	3,788	167.03	46.20	4.02	1.11
1099735			SHARED SERVICES	2.41%	52,628	39,751	-	5,893	-	6,984	158.64	46.20	3.82	1.11
1099788			SHARED SERVICES	2.41%	86,359	85,633	-	726	-	-	284.81	46.20	6.86	1.11
1099820			SHARED SERVICES	2.41%	73,644	71,472	-	2,022	150	-	245.87	46.20	5.92	1.11
1099823			SHARED SERVICES	2.41%	152,700	139,444	-	4,796	7,500	960	432.79	46.20	10.42	1.11
1099851			SHARED SERVICES	2.41%	90,075	88,338	-	1,737	-	-	292.25	46.20	7.03	1.11
1099875			SHARED SERVICES	2.41%	133,296	131,428	-	867	1,000	-	410.75	46.20	9.89	1.11
1099895			SHARED SERVICES	2.41%	77,747	76,684	-	1,063	-	-	260.20	46.20	6.26	1.11
1099914			SHARED SERVICES	2.41%	277,185	193,898	-	5,353	75,385	2,550	582.54	46.20	14.02	1.11
1099915			SHARED SERVICES	2.41%	218,290	192,605	-	686	25,000	-	578.98	46.20	13.94	1.11
1099918			SHARED SERVICES	2.41%	89,716	86,000	-	-	-	3,716	285.82	46.20	6.88	1.11
1099921			SHARED SERVICES	2.41%	48,544	48,544	-	-	-	-	182.82	46.20	4.40	1.11
1099925			SHARED SERVICES	2.41%	64,692	63,603	-	859	-	230	224.23	46.20	5.40	1.11
1099926			SHARED SERVICES	2.41%	28,781	25,181	165	1,276	-	2,159	118.57	46.20	2.85	1.11
1099942			SHARED SERVICES	2.41%	28,918	25,946	238	1,673	-	1,062	120.67	46.20	2.90	1.11
1099945			SHARED SERVICES	2.41%	160,000	136,503	-	2,251	20,000	1,246	424.70	46.20	10.22	1.11
1099946			SHARED SERVICES	2.41%	37,974	29,875	-	2,570	-	5,529	131.48	46.20	3.16	1.11
1099965			SHARED SERVICES	2.41%	13,852	11,257	76	1,085	-	1,433	80.28	46.20	1.93	1.11
1099980			SHARED SERVICES	2.41%	54,475	53,567	-	192	-	717	196.63	46.20	4.73	1.11
1099981			SHARED SERVICES	2.41%	112,501	107,084	-	-	5,000	417	343.80	46.20	8.28	1.11
1099993			SHARED SERVICES	2.41%	11,211	9,436	-	1,005	-	770	75.27	46.20	1.81	1.11
1099997			SHARED SERVICES	2.41%	56,851	56,282	-	569	-	-	204.10	46.20	4.91	1.11
1001360			VP-MIDWEST	20.45%	39,795	36,014	562	1,405	-	1,814	148.36	46.20	30.34	9.45
1099782			VP-MIDWEST	20.45%	121,938	107,346	-	2,591	10,000	2,000	344.52	46.20	70.45	9.45

CASE NO. 2018-00208
WATER SERVICE CORPORATION OF KENTUCKY
RESPONSES TO COMMISSION STAFF'S SECOND INFORMATION REQUEST

31. For each level of health insurance coverage available to Water Service Kentucky's employees (i.e., single, family, etc.), provide the number of employees covered by Water Service Kentucky's health insurance plan, any applicable employee contribution rate, the associated premiums for the test year, and each of the plans' deductible(s) amounts.

Response:

Please see the attached file, "Response to PSC DR 2-31 (Test Year Medical Enrollments)". Also attached is the 2017 Employee Benefits Guide for reference.

Witness – Perry Brown

*Response to PSC DR 2-31
(Test Year Medical Enrollments)*

	A	B	C	D	E	F	G	H	I	J
1	LastName	FirstName	Termination	Carrier	Total Premium	ER Premium Mon	EE Premium M	Tier Level	Effective Date	Area
2			42794	Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2017	102
3				Blue Cross Blue Shield of IL	2322.87	1846.83	476.04		9/12/2010	102
4			43297	Blue Cross Blue Shield of IL	663.68	539.29	124.39		10/30/2014	700
5				Blue Cross Blue Shield of IL	663.68	539.29	124.39		6/1/2017	102
6				Blue Cross Blue Shield of IL	663.68	539.29	124.39		6/9/2016	102
7				Blue Cross Blue Shield of IL	663.68	539.29	124.39		12/13/2017	102
8				Blue Cross Blue Shield of IL	2322.87	1846.83	476.04		1/1/2010	102
9			42888	Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		1/1/2017	102
10				Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		6/7/2017	102
11				Blue Cross Blue Shield of IL	663.68	539.29	124.39		3/1/2014	700
12			42748	Blue Cross Blue Shield of IL	663.68	539.29	124.39		7/1/2016	102
13			43224	Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		1/1/2017	102
14			43007	Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/11/2017	700
15				Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2010	102
16				Blue Cross Blue Shield of IL	1173.04	932.64	240.4		1/1/2010	102
17				Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2010	102
18				Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2017	102
19				Blue Cross Blue Shield of IL	663.68	539.29	124.39		9/3/2017	102
20				Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		1/1/2010	102
21				Blue Cross Blue Shield of IL	2322.87	1846.83	476.04		1/1/2010	102
22				Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2012	102
23			43210	Blue Cross Blue Shield of IL	663.68	539.29	124.39		10/19/2011	102
24				Blue Cross Blue Shield of IL	580.71	471.26	109.45		7/6/2011	102
25				Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2010	102
26				Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		9/14/2016	102
27			43077	Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2017	102
28				Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2012	700
29				Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2010	102
30				Blue Cross Blue Shield of IL	1592.83	1266.41	326.42		10/21/2012	102
31				Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		11/25/2013	102
32				Blue Cross Blue Shield of IL	2322.87	1846.83	476.04		4/10/2015	102
33				Blue Cross Blue Shield of IL	663.68	539.29	124.39		4/17/2016	102
34				Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		1/1/2010	102
35			43203	Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		1/1/2010	102
36				Blue Cross Blue Shield of IL	2322.87	1846.83	476.04		1/1/2012	860
37				Blue Cross Blue Shield of IL	580.71	471.26	109.45		10/25/2017	102
38				Blue Cross Blue Shield of IL	663.68	539.29	124.39		12/29/2010	102

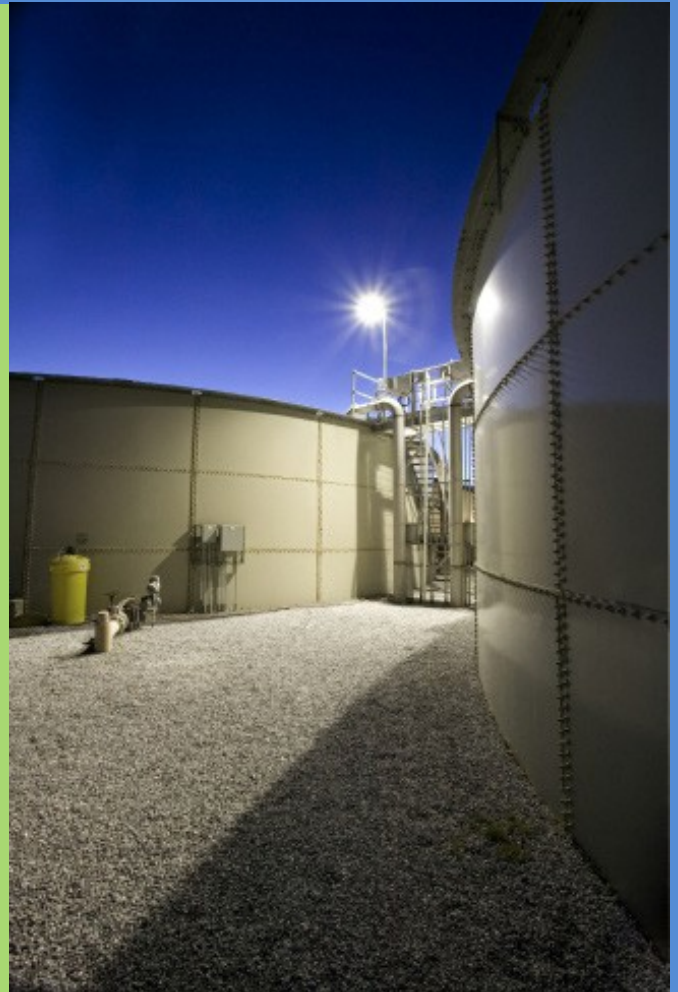
	A	B	C	D	E	F	G	H	I	J
39				Blue Cross Blue Shield of IL	2322.87	1846.83	476.04		1/1/2016	700
40				Blue Cross Blue Shield of IL	2322.87	1846.83	476.04		8/27/2015	860
41				Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2010	102
42				Blue Cross Blue Shield of IL	663.68	539.29	124.39		11/16/2017	102
43				Blue Cross Blue Shield of IL	580.71	471.26	109.45		10/28/2016	102
44				Blue Cross Blue Shield of IL	1592.83	1266.41	326.42		1/1/2010	102
45			42956	Blue Cross Blue Shield of IL	1592.83	1266.41	326.42		7/6/2016	700
46				Blue Cross Blue Shield of IL	580.71	471.26	109.45		9/30/2016	102
47			42942	Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2010	860
48			43258	Blue Cross Blue Shield of IL	580.71	471.26	109.45		6/8/2016	102
49				Blue Cross Blue Shield of IL	580.71	471.26	109.45		12/28/2017	102
50				Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		2/25/2010	700
51				Blue Cross Blue Shield of IL	1592.83	1266.41	326.42		1/1/2010	102
52			43266	Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2012	102
53			42893	Blue Cross Blue Shield of IL	580.71	471.26	109.45		1/1/2017	102
54				Blue Cross Blue Shield of IL	2322.87	1846.83	476.04		1/1/2010	102
55			43190	Blue Cross Blue Shield of IL	663.68	539.29	124.39		9/7/2016	102
56				Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/10/2016	102
57				Blue Cross Blue Shield of IL	580.71	471.26	109.45		9/2/2016	102
58				Blue Cross Blue Shield of IL	580.71	471.26	109.45		7/1/2016	102
59				Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2012	102
60				Blue Cross Blue Shield of IL	1592.83	1266.41	326.42		7/22/2016	800
61				Blue Cross Blue Shield of IL	2322.87	1846.83	476.04		1/1/2012	860
62				Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		12/1/2016	700
63				Blue Cross Blue Shield of IL	663.68	539.29	124.39		4/18/2013	102
64				Blue Cross Blue Shield of IL	663.68	539.29	124.39		8/18/2011	102
65				Blue Cross Blue Shield of IL	1393.71	1108.1	285.61		1/1/2012	860
66				Blue Cross Blue Shield of IL	2322.87	1846.83	476.04		2/3/2011	102
67				Blue Cross Blue Shield of IL	580.71	471.26	109.45		1/1/2014	102
68				Blue Cross Blue Shield of IL	1592.83	1266.41	326.42		1/1/2012	102
69				Blue Cross Blue Shield of IL	580.71	471.26	109.45		9/15/2017	700
70				Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		3/29/2011	860
71				Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2010	102
72				Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		3/22/2017	102
73			42836	Blue Cross Blue Shield of IL	663.68	539.29	124.39		9/2/2016	102
74			42986	Blue Cross Blue Shield of IL	663.68	539.29	124.39		5/26/2017	102
75				Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2010	102
76				Blue Cross Blue Shield of IL	1393.71	1108.1	285.61		10/12/2016	860

	A	B	C	D	E	F	G	H	I	J
77				Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		11/16/2012	102
78			43005	Blue Cross Blue Shield of IL	2032.51	1615.98	416.53		9/3/2017	102
79				Blue Cross Blue Shield of IL	2322.87	1846.83	476.04		1/1/2010	102
80				Blue Cross Blue Shield of IL	663.68	539.29	124.39		9/3/2017	102
81				Blue Cross Blue Shield of IL	1592.83	1266.41	326.42		1/1/2012	102
82				Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		1/1/2010	102
83				Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2013	860
84				Blue Cross Blue Shield of IL	663.68	539.29	124.39		8/23/2017	102
85				Blue Cross Blue Shield of IL	580.71	471.26	109.45		1/1/2017	102
86				Blue Cross Blue Shield of IL	2322.87	1846.83	476.04		1/1/2010	102
87				Blue Cross Blue Shield of IL	663.68	539.29	124.39		4/9/2016	102
88				Blue Cross Blue Shield of IL	1592.83	1266.41	326.42		11/5/2011	102
89				Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2017	102
90				Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		1/1/2010	102
91				Blue Cross Blue Shield of IL	1592.83	1266.41	326.42		1/7/2012	102
92				Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		1/1/2010	102
93				Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		9/13/2017	102
94				Blue Cross Blue Shield of IL	663.68	539.29	124.39		10/30/2015	700
95				Blue Cross Blue Shield of IL	2322.87	1846.83	476.04		2/4/2011	102
96				Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		7/1/2016	102
97				Blue Cross Blue Shield of IL	663.68	539.29	124.39		8/18/2010	102
98				Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		5/26/2017	102
99			43053	Blue Cross Blue Shield of IL	1592.83	1266.41	326.42		1/1/2013	102
100			42867	Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2017	102
101			42892	Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2014	102
102				Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2012	102
103				Blue Cross Blue Shield of IL	1592.83	1266.41	326.42		1/1/2011	102
104				Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/1/2011	860
105				Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		1/1/2011	102
106				Blue Cross Blue Shield of IL	663.68	539.29	124.39		10/1/2014	860
107				Blue Cross Blue Shield of IL	1592.83	1266.41	326.42		4/12/2017	102
108				Blue Cross Blue Shield of IL	663.68	539.29	124.39		1/4/2017	800
109			42926	Blue Cross Blue Shield of IL	663.68	539.29	124.39		3/19/2015	102
110				Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		1/1/2017	860
111				Blue Cross Blue Shield of IL	1340.63	1065.9	274.73		9/3/2015	102
112			43095	Blue Cross Blue Shield of IL	663.68	539.29	124.39		2/6/2016	102
113				Blue Cross Blue Shield of IL	1592.83	1266.41	326.42		1/1/2010	102

PSC DR 2-31
2017 Employee Benefits Guide



Employee Benefits Guide



2017

Plan Year - 1/01/2017 - 12/31/2017

For Full Time Employees Only
Except where noted herein

Employee Benefit Summary/Contents Page

Benefit	Description	Cost to Employee/Requirement	Eligibility	Page
Medical Insurance	Medical insurance provides cost-effective medical care through Blue Cross Blue Shield. The PPO plans feature a network of participating doctors, hospitals, and facilities to provide health care services to plan members at reduced rates.	The employee deductions vary by pay schedule. Please see page 4 for the deduction grid as well as details on how to qualify for the preventive incentive.	Enrollment is available within the first 30 days of your employment, during open enrollment, or in the first 30 days following a Qualifying Life Event (QLE). Benefit begins on the 31st day of employment, the date of a QLE or January 1st for open enrollment.	4
Dental Insurance	Dental insurance provides cost-effective dental care through Delta Dental. While there are no restrictions on your choice of dentist, using a Delta network dentist enhances your benefit.	The employee deductions vary by pay schedule. Please see page 4 for the deduction grid.	Enrollment is available within the first 30 days of your employment, during open enrollment, or in the first 30 days following a Qualifying Life Event (QLE). Benefit begins on the 31st day of employment the	6
Teladoc	Teladoc is a free (no-co-pay) convenient service that employees and eligible dependents can access for consultations and treatment (including prescriptions) for a wide range of medical conditions.	This is a company paid benefit	Automatic enrollment for Utilities, Inc. employees and their eligible dependents enrolled in the BCBS medical plan.	7
Benefits Value Advisor (BVA)	Benefits Value Advisor (BVA) is a consumer advocacy program that guides members through the universe of health care, prompting them to examine and weigh every aspect of their health care decisions. It is a one-call solution, providing members with access to specially trained advisors who can assist them.	This is a company paid benefit.	Automatic enrollment for Utilities, Inc. employees and their eligible dependents enrolled in the BCBS medical plan.	7
Flexible Spending Account (FSA)	UI provides a FSA program designed to save you money on out-of-pocket expenses incurred for health and dependent care. Employees can save up to 30% on eligible expenses by using tax-free dollars.	The annual dollar limit on employee contributions to employer-sponsored health care FSA is \$2,550 in 2016. The annual limit for dependent care FSAs is \$5,000.	Enrollment is available within the first 30 days of your employment, during open enrollment, or in the first 30 days following a Qualifying Life Event. Benefit begins on the 31st day of employment, the date of a QLE or January 1st for open enrollment.	8
Vision Insurance	Vision insurance is provided through Vision Service Plan. Many services from a network provider are covered in full after a nominal co-pay.	This is a Company paid benefit contingent upon your enrollment into a medical plan.	Benefit begins on the day Medical Insurance is effective. Automatic enrollment with enrollment into a medical plan.	8
Short-Term Disability Benefit	The short-term disability (STD) benefit provides a percentage of your pre-disability base income for up to 26 weeks if you are unable to work due to illness or injury.	This is a Company paid benefit.	Automatic enrollment after one year of employment.	9
Parental Leave	Parental Leave offers up to 6 weeks of paid time off to care for a child following birth or adoption.	This is a Company Paid benefit.	Available after 1 year of employment.	9
Long-Term Disability Benefit	The long-term disability benefit provides income to employees who are disabled beyond six months of short term disability. The benefit includes 50% of pre-disability monthly earnings less income offsets.	This is a Company paid benefit.	Automatic enrollment effective the first day of the month following 30 days of employment. Benefit has a 180 day waiting period.	10
Life and Accidental Death and Dismemberment (AD&D) Insurance	Life and AD&D insurance through MetLife provides financial aid for your family if you die or are seriously injured in an accident. The life benefit equates to 1.5 times your annual salary plus \$10,000. The AD&D benefit is the same amount.	This is a Company paid benefit.	Automatic enrollment effective the first day of the month following 30 days of employment.	10
Voluntary Life Insurance	Supplemental term life insurance offers you and your dependents the opportunity to purchase additional life insurance.	Employee costs are based upon age and the elected benefit amount.	Available the first day of the month following 30 days of employment or the receipt and acceptance of your enrollment form by MetLife at any time following your initial 30 days of employment.	10
Supplemental Travel/Accident Insurance	Supplemental travel/accident insurance through ACE American Insurance Company provides an additional amount of insurance whether on personal or work-related business.	This is a Company paid benefit.	Automatic enrollment effective the first day of the month following 30 days of employment.	11
Aflac	Aflac's voluntary payroll deduction insurance coverage pays cash benefits when a policyholder has a covered accident or illness.	Employee costs are based upon age and the elected benefit amount.	Voluntary enrollment effective the first day of the month following 30 days of employment.	11
Employee Assistance Program (EAP)	UI provides an EAP for employees and their immediate families who are dealing with personal issues.	This is a Company paid benefit.	Automatic enrollment effective the first day of the month following 30 days of employment.	13
Patient Advocacy	Provides a confidential resource to assist with claims and benefit issues, help with locating providers and scheduling procedures and appointments.	This is a Company paid benefit.	Automatic enrollment effective the first day of the month following 30 days of employment.	13
Certification/Licensing Resources & Compensation	UI offers certification pay for licenses and certifications for work related education and development based on the level of the certification.	A pre-approved list of amounts by state and cert level are listed in the Payroll folder on the WaterMain .	Requires BU Leadership approval.	14
Education Assistance	UI offers up to 90% reimbursement of tuition costs for work related courses pre-approved by the Executive Team.	Reimbursement of tuition expenses are determined by Executive Team approval, course completion, and grades.	Available after 1 year of employment with required BU Executive approvals.	14
401(k) Retirement Plan	Employee Contribution & Employer Match Employees may contribute to the 401(k) plan to save for their retirement. First 3% of deferral matched dollar for dollar. Next 2% of deferral matched at \$0.50 for each dollar up to a maximum UI Match of 4% of eligible earnings. Non Elective Company Contribution The Company will contribute 3% of your total eligible plan year wages on an annual basis.	New employees are automatically enrolled at a 3% contribution rate; these employees have the option to "opt out" of enrollment during open enrollment. All Employer contributions vest at 100%. Please refer to the Summary Plan Description for more details.	Non Elective Company Contribution After one year of service and end of the year employment. Employee Deferral & Employer Match 1 st of the month, after 30 days of service Online enrollment required at www.retirementlink.jpmorgan.com	15
Paid Time Off (PTO)	Please see the " Paid Time Off (PTO) " schedule for further details.	This is a Company paid benefit.	Employees accrue PTO dependent on their hire date. There is a 30-day waiting period after your hire date to use paid time off.	16
Holiday Pay	UI offers 8 paid holidays each year.	This is a Company paid benefit.	Eligible 30 days after your hire date.	16
Contact Information				17

Eligibility

An employee is eligible to participate in the Utilities, Inc. Benefit Programs if he/she is classified as a full-time employee scheduled to work a minimum of 30 hours per week (with the exceptions for Limited Eligibility noted below).

Temporary, seasonal and agency employees are not eligible to participate in the benefit programs offered through the Company.

Eligible full-time employees can also enroll a legal spouse and dependent child(ren) for coverage. A “dependent child” is the subscriber’s or spouse’s natural child, stepchild, foster child or legally adopted child.

Children are generally considered dependents until:

- Age 26
- Any age, if they are mentally or physically disabled, chiefly dependent on the employee for support, and not capable of self-sustaining employment.
- Age 30 if enlisted in Military



Limited Eligibility

An employee classified as part-time scheduled to work less than 30 hours per week and a minimum of 1,000 hours per calendar year qualifies for participation in the 401(k) plan.

A brief summary of the various benefits offered by Utilities, Inc. are shown in this guide. If an employee does not elect to enroll in any plan during the open enrollment period or when the employee first becomes eligible for benefits, the employee will not be allowed to enroll until the next open enrollment period unless the employee has a special enrollment event as defined by HIPAA (see “Qualifying Life Events” below).

When Coverage Begins:

Employees must enroll for medical, dental, vision, choose to participate in the reimbursement accounts, and/or elect Voluntary Life and AD&D benefits within 30 days of the employee’s initial eligibility date. Health benefits begin on the first day following the 30 day waiting period. Enrollment in employer paid benefits is automatic.

New Hires:

Eligible new hires are required to select or waive coverage within 30 days of their initial eligibility date. Employees failing to select coverage under one or more of the optional plans within this time will be deemed to have voluntarily waived eligibility for coverage for the entire plan year. Once made, selections are irrevocable and remain in effect for the plan year unless a QLE change occurs.

Qualifying Life Events

Your initial new hire eligibility period allows you thirty (30) days from your hire date to submit enrollment forms for the benefits you wish to enroll in. You are allowed to change your enrollment during the plan year only when you have a qualifying life event that significantly affects your benefit needs. Life events can include:

1. Marriage or Divorce
2. Birth or adoption of a child or placement of a child for adoption
3. Death of a child or spouse
4. Loss of or obtainment of other coverage

An employee wanting to change elections due to a qualifying life event should contact Human Resources as soon as possible following the event, but no later than 30 days following the event. Appropriate documentation will be required to substantiate a change and must be received within 30 days of the qualifying life event. Effective date for changes will be the actual date of the event. Any change reported or supporting documentation received after 30 days following the qualifying life event will not be accepted. In such an instance, the next opportunity to make a change will be during the next open enrollment period. The open enrollment period is the time employees may make changes (such as moving from one plan to another, adding dependents, etc.) Freely without supporting documentation. The next open enrollment period will be in December 2017 for plan year beginning January 1, 2018.



Medical and Dental Premiums

The employee medical and dental premiums are listed below. Utilities Inc. covers 100% of the cost for vision insurance upon enrollment to a medical plan. Utilities, Inc. also covers 100% of the cost of basic life and AD&D insurance, short term disability insurance and long term disability insurance.

	With Preventive Incentive		Without Preventive Incentive	
Medical Insurance - Platinum Plan	Hourly Employees	Salaried Employees	Hourly Employees	Salaried Employees
	(26 pays per year)	(24 pays per year)	(26 pays per year)	(24 pays per year)
Employee Only	\$53.93	\$58.43	\$129.46	\$140.25
Employee + Spouse	\$141.52	\$153.32	\$292.58	\$316.97
Employee + Child(ren)	\$119.11	\$129.04	\$194.64	\$210.86
Family	\$206.39	\$223.59	\$357.45	\$387.24
* Working Spousal Surcharge	\$129.23	\$140.00	\$129.23	\$140.00
	With Preventive Incentive		Without Preventive Incentive	
Medical Insurance - Gold Plan	Hourly Employees	Salaried Employees	Hourly Employees	Salaried Employees
	(26 pays per year)	(24 pays per year)	(26 pays per year)	(24 pays per year)
Employee Only	\$47.45	\$51.41	\$98.06	\$106.24
Employee + Spouse	\$123.83	\$134.15	\$274.89	\$297.80
Employee + Child(ren)	\$104.22	\$112.91	\$179.76	\$194.74
Family	\$180.59	\$195.64	\$331.65	\$359.29
* Working Spouse Surcharge	\$129.23	\$140.00	\$129.23	\$140.00
Dental Insurance	Hourly Employees	Salaried Employees		
	(26 pays per year)	(24 pays per year)		
Employee Only	\$4.97	\$5.37		
Employee + Spouse	\$11.08	\$12.01		
Employee + Child(ren)	\$8.32	\$9.01		
Family	\$16.54	\$17.92		

Pre-Tax/Post-Tax Contributions



Generally, the cost to participate in Utilities, Inc.' Health plan and/or reimbursement accounts is taken from the employee's paycheck on a **pre-tax basis**. This means the employee does not pay Federal Income Tax, Social Security Tax, and in most cases state/local taxes on those contributions.

*Working Spouse Surcharge

A working spouse surcharge is an additional contribution that Utilities, Inc. will charge an employee to cover a working spouse that has other health coverage available, such as through his or her own employer, and chooses not to enroll in that coverage. The spouse surcharge does not apply to spouses who are unemployed or whose employers do not offer health insurance. The surcharge is designed to encourage spouses to use the health coverage available through their own employer. The surcharge is used to contribute to the added cost of covering spouses on our plan who choose not to participate in their employer's coverage. Every employee choosing to enroll in a medical plan with UI, and is covering a spouse, must complete the Working Spouse Medical Plan Affidavit. All forms must be returned to the Human Resources Department. The surcharge will automatically be charged to all employees choosing to cover a working spouse that did not return the Working Spouse Medical Plan Affidavit with the medical enrollment form.

Preventive Incentive

In an effort to promote a healthy lifestyle, we encourage our employee's to receive a routine annual physical with blood draw at initial eligibility and at least once every three (3) years. It is important to maintain a healthy lifestyle and monitor your health on a regular basis. Having a routine preventative physical is the first step toward taking control of your health. To view a notice regarding our preventative incentive, [click here](#).

If you choose to enroll in the medical insurance and complete a routine annual physical with blood draw, you will enjoy employee premium amounts less than the standard premium as stated above.

Both medical plans offer a benefit to cover the cost of your physical and blood draw under the Preventive Care benefit. The plan will pay 100% with no co-payment. Please note the following tips to keep in mind to ensure you receive this level of benefit:

1. You must receive these services by an in-network provider
2. All services billed on the date you obtain your annual routine physical with blood draw must be billed as "preventative". Any services billed on this date of service that are not "preventative" will be subject to co-pays and deductibles.
3. You are allowed one routine annual physical per calendar year.

In order to qualify for the preventive incentive, you and your spouse, if you choose to cover your spouse, must have a routine physical with blood draw documented with a date of service within 60 days of your insurance becoming effective. A Routine Physical Verification Form must be completed for both yourself and your spouse by the physician and returned to the HR Department within the time frame. If the form is not received in that time frame, your premiums will increase on the 61st day from the effective date, to the "NON Preventive" rates (until the verification form is received by HR to reduce the rates to "Preventive.")



Medical Plans Platinum PPO & Gold PPO

Utilities, Inc. provides a choice of two PPO Medical plans to all eligible employees effective the 31st day of employment.

	Platinum Plan - Group #P17022		Gold Plan - Group #P17023	
	In-network	Non-network	In-network	Non-network
Deductible	\$400 Individual \$1,200 Family	\$800 Individual \$2,400 Family	\$1,500 Individual \$4,500 Family	\$4,500 Individual \$13,500 Family
Out-of-Pocket Maximum Includes deductibles and co-pays	\$4,000 Individual \$8,000 Family	\$8,000 Individual \$16,000 Family	\$5,000 Individual \$11,500 Family	\$15,000 Individual \$34,500 Family
Out-of-Pocket Maximum Rx includes deductibles and co-pays	\$500 Individual Rx \$1,500 Family Rx	\$500 Individual Rx \$1,500 Family Rx	\$1,000 Individual Rx \$1,700 Family Rx	\$1,000 Individual Rx \$1,700 Family Rx
Physician Office Visits One co-payment per day when you receive services from a Family Practice, Internal Medicine, OB/GYN, or Pediatrician. Surgeries, therapies and certain diagnostic procedures performed in a physician's office may be subject to the deductible and/or coinsurance, including mental health and substance abuse services.	\$15 co-pay for PCP \$25 co-pay for Specialist; then 100%	60% after deductible	\$35 co-pay for PCP \$45 co-pay for Specialist; then 100%	50% after deductible
Preventive Care Routine annual physicals, well-baby exam, annual vision and hearing exams, immunizations, and other preventive health services as determined by the USPSTF.	100%	60% after deductible	100%	50% after deductible
Maternity Services Co-payment applies to first prenatal visit. All other maternity physician covered services are paid the same as Medical/Surgical Services	\$15 co-pay for PCP \$25 co-pay for Specialist; then 100%	60% after deductible	\$35 co-pay for PCP \$45 co-pay for Specialist; then 100%	50% after deductible
Medical/Surgical Services Coverage for surgical procedures, inpatient visits, therapies, allergy injections or treatments, and certain diagnostic procedures as well as other physician services.	80% after deductible	60% after deductible	70% after deductible	50% after deductible
Hospital Admission Deductible (Maximum 3 days/calendar year)	\$100 per day	\$100 per day	\$100 per day	\$100 per day
Inpatient Hospital Services Coverage includes services received in a hospital, skilled nursing facility, coordinated home care and hospice. Room allowances based on the hospital's most common semi-private room rates.	80% after deductible	60% after deductible	70% after deductible	50% after deductible
Outpatient Hospital Services Coverage for services includes, but is not limited to outpatient or ambulatory surgical procedures, x-ray, lab tests, chemotherapy, radiation therapy, renal dialysis, and mammograms performed in a hospital or ambulatory surgical center. Routine mammograms performed in an in-network outpatient hospital setting are payable at 100%, no deductible will apply.	80% after deductible	60% after deductible	70% after deductible	50% after deductible
Outpatient Emergency Care (Accident or Illness) The co-payment applies to both in and out of network emergency room visits. The co-payment is waived if the member is admitted to the hospital.	\$100 co-pay	\$100 co-pay	\$100 co-pay	\$100 co-pay
Muscle Manipulation Services* Coverage for spinal and muscle manipulation services provided by a physician or chiropractor. Related office visits are paid the same as other Physician Office Visits. Limited to 30 visits per calendar year.	\$25 co-pay; then 100%	60% after deductible	\$45 co-pay; then 100%	50% after deductible
Therapy Services - Speech, Occupational and Physical Coverage for services provided by a physician or therapist.	80% after deductible	60% after deductible	70% after deductible	50% after deductible
Temporomandibular Joint (TMJ) Dysfunction and Related Disorders	80% after deductible	60% after deductible	70% after deductible	50% after deductible

Prescription Drug Benefit for Medical Plans Platinum & Gold

	Generic	Formulary Brand	Non-Formulary Brand
Contracting Retail Pharmacy Up to a 34-day supply. Includes diabetic supplies: blood glucose test strips, lancets, diagnostic agents used with urine testing and glucagon.	\$10	25% Minimum Co-pay \$25 Maximum Co-pay \$75	50% Minimum Co-pay \$25 Maximum Co-pay \$75
Mail Service Up to a 90-day supply.	\$20	25% Minimum Co-pay \$50 Maximum Co-pay \$150	50% Minimum Co-pay \$50 Maximum Co-pay \$150
Contraceptives Available at retail and mail service at the appropriate co-payment level based on drug classification.	As Indicated Above		
Self-Injectables Available at retail and mail service at the appropriate co-payment level.	As Indicated Above		

FREE Generic Mail Order Pharmacy Plan Option



Utilities, Inc. employees and their enrolled dependents are eligible to receive free generic maintenance medication by utilizing the Rx 'n Go mail order pharmacy service. Rx 'n Go offers a comprehensive listing of nearly 1,200 available generic maintenance medications. By filling your generic maintenance medication through Rx 'n Go, Utilities, Inc. will pay the entire cost of the medication. A ninety (90) day supply of medication will arrive directly at the member's home address or designated delivery location.

Please consult with your physician or health care provider if you are not currently taking a generic medication to determine if any of the prescriptions offered through the Rx 'n Go pharmacy may be an option.

Interested plan members are required to have their health care provider submit a completed Rx 'n Go prescription order form via e-mail or fax (or the member may mail the original order form via regular mail.) The order form is available in the Shared Services > Human Resources > Shared Services Documents > Benefits > Benefit Forms > Prescription Drug - Rx folder on the [WaterMain](#) to take to your provider's office.

Dental Plan - Delta Dental Group #20159



	PPO	Premier	Out-of-Network
Annual Maximum	\$1,500 per person		
Annual Deductible Applies only to Basic and Major Services. Charged one time per calendar year	\$25 per person, \$75 per family		
Preventative/Diagnostic Services • Oral evaluations up to two times per benefit year • X-rays (bitewings up to two per benefit year; full mouth - once every three weeks) • Prophylaxis (cleaning up to two per benefit year) • Flouride treatments up to once per benefit year for children under age 19 • Space Maintainers • Sealants	100% of reduced fee ¹ No Deductible	100% of MPA ² No Deductible	100% of MPA ³ No Deductible
Basic Services • Fillings • Oral Surgery • Endodontics • General Anesthesia in conjunction with oral surgery • Recementing of crowns and bridges	80% of reduced fee ¹ Deductible Applies	80% of MPA ² Deductible Applies	80% of MPA ³ Deductible Applies
Major Services • Crowns, jackets, cast restorations • Fixed and removable bridges • Partial and full dentures • Implants	50% of reduced fee ¹ Deductible Applies	50% of MPA ² Deductible Applies	50% of MPA ³ Deductible Applies
Child Orthodontics (19 & Under)	\$1,000 Lifetime Benefit		
	50% of reduced fee ¹ No Deductible	50% of MPA ² No Deductible	50% of MPA ³ No Deductible

¹You will not be "balance billed" for charges exceeding Delta Dental's allowed PPO Fee.

²You will not be "balance billed" for charges exceeding Delta Dental's maximum plan allowances (MPAs).

³You are responsible for charges exceeding Delta Dental's maximum plan allowances (MPAs).

Your dentist chooses the Delta Network they participate in whether it is PPO, Premier, Both or Neither. Consult your dentist to determine which network they participate in and how insurance is applied to that coverage. In the event your dentist participates in the PPO and Premier Networks, PPO becomes the default network.

The preceding information is a brief summary of the Utilities, Inc. Dental Plan and the services it covers. If you have specific questions benefit coverage, limitations or exclusions, contact Delta Dental at (800) 323-1743

Telemedicine - Teladoc™



100% Employer Paid

Utilities employees and their eligible dependents enrolled in the BCBS medical plan are now eligible for the new Teladoc medical benefit. Teladoc allows you to talk to a doctor anytime, anywhere by phone or video consult. Teladoc is a **FREE (no co-pay)** convenient service that employees and eligible dependents can access for consultations and treatment (including prescriptions) for a wide range of medical conditions.

Speak with a physician with no co-pay!

- **Feel better fast...** It's simple. Teladoc provides access to U.S. board-certified physicians who can resolve most non-emergent medical issues via phone or online video.
- **Available when you need care...** Teladoc is a convenient alternative to urgent care or ER visits. Their physicians are available anytime, anywhere.
- **An alternative you can trust...** Teladoc is the first, largest and fastest growing provider of telehealth medical consultations, serving millions nationwide.
- **With proven results...** With Teladoc, it costs less to feel better. Teladoc significantly lowers your costs and improves access to care by providing an alternative to urgent care or ER usage.

Getting started is simple:

Set Up Your Account:

1. Visit the [Teladoc website](#), and begin the registration process by clicking on "Set Up Account" to advance to the [registration page](#).
2. Enter your first name, last name, date of birth, company code, member ID or promotional code. Then click "Continue".
3. Follow the directions online to complete account setup and to provide your medical history.

Request a Consult

Once your account is set up, a doctor is always just a call or click away.

1. Visit the [Teladoc website](#) and click "Request a consult."
2. Select the type of consult you want.
3. Talk to a doctor within an hour.

Visit their website at <http://www.teladoc.com> or contact them at 1-800-Teladoc

BCBS Benefits Value Advisor (BVA)



100% Employer Paid

Benefits Value Advisor (BVA) is a consumer advocacy program that guides members through the universe of health care, prompting them to examine and weigh every aspect of their health care decisions. It is a one-call solution, providing members with access to specially trained advisors who can assist them. Want to know more? [Check out this short video on BVA from the BCBS of Illinois website.](#)

Spend your health care dollars wisely.

When you purchase big ticket items like a TV or a new washing machine you shop around for the best price, right? So why not do the same for your medical procedure. Often times your care comes with choices. The price between an MRI at two different clinics in the same town can vary by several hundred, or even thousands of dollars. A quick call to BVA will help you identify the best price and save you money! According to BCBS, 90% of member calls to BVA resulted in lower cost options for their care.

What can Benefits Value Advisor do for you?

- Assist in helping you locate doctors and treatment centers and compare costs.
- Connect you with clinical program staff and provide online educational tools to learn more about your condition.
- Coordinate pre-certification for procedures.
- Help you schedule appointments.
- Understand claims, explain coverage guidelines, order ID cards and much more...

Before your next procedure...

Call the Customer Service number on the back of your BCBS member ID card and speak with a Benefits Value Advisor!

Flexible Spending Accounts (FSA) – Discovery Benefits

Employees are eligible to participate in the Flexible Spending Account after thirty (30) days of employment. An FSA allows you to set aside pre-tax dollars from your paycheck to pay for eligible health and dependent care expenses, lowering your taxable income and increasing your take home pay. The plan year for this benefit is January 1 thru December 31.

Health Care Flexible Spending Account

A Health Care FSA reimburses you for eligible medical care expenses incurred for yourself, your spouse and your dependents. This account can be used to pay for qualified, medically necessary medical, dental or vision expenses not covered by your insurance. Physician office visit and prescription co-payments are some examples of qualified expenses. The annual dollar limit on employee contributions to employer-sponsored health care FSAs is \$2,600 for 2017.

Dependent Care Flexible Spending Account

A Dependent Care FSA helps you pay for child or elder care services so you can work. The annual limit for dependent care FSAs will remain \$5,000 for calendar year 2017.

NOTE: If you are married and file jointly, your combined contributions may not exceed \$5,000. If you are married and file separately, your individual contributions may not exceed \$2,500.

Upon enrollment to an FSA, you will elect an annual contribution amount to participate in one or both of the FSA's. This election and contribution amount is binding for the entire plan year. Only a QUALIFYING LIFE EVENT will allow you to change an FSA election. Your annual contribution amount must be used for expenses incurred within that plan year. Any dollar amount not reimbursed for expenses during the plan year will be forfeited. This is known as the "use it or lose it" rule.

- If you are enrolled in one of the Blue Cross Blue Shield medical plan options, you may elect automatic claim submission of your medical expenses not paid after a claim is filed to your healthcare FSA. Enrollment in this feature allows reimbursement for out of pocket expenses without having to submit a claim form.
- If you enroll in either the healthcare or dependent care FSA, you may also enroll in direct deposit to have your reimbursements directly deposited into the bank account of your choice.
- There is a grace period from January 1, 2018 through March 15, 2018 to incur expenses for the 2017 plan year. The deadline to submit all claims for the 2016 plan year is March 31, 2018.



Vision Benefits – Vision Service Plan (VSP) Group #12159678

100% Employer Paid

Enrollment in the vision plan through Vision Service Plan is automatic with enrollment in either of the medical plans and is effective on the 31st day of employment. Utilities, Inc. pays the entire cost of this benefit. Please note, VSP does not provide member ID cards.

	In-Network	Out-of-Network	Frequency
	Co-pay	Reimbursement	Once
Exams	\$10	Up to \$25.00	Every 12 months
Prescription Glasses (Including Lenses and Frame)	\$25		
<u>Lenses</u>			
Single vision		Up to \$30.00	
Lined Bifocal		Up to \$35.00	
Lined Trifocal		Up to \$45.00	
<u>Frames</u>		Up to \$45.00	Every 24 months
Contacts (in lieu of glasses)	\$0	Up to \$105.00	Every 12 months

Short – Term Disability Insurance

100% Employer Paid

Utilities, Inc. provides short-term disability insurance to all full-time employees. Short-term disability insurance is to provide paid leave for off- the-job sickness or injury. To qualify for this benefit, a Certification of Health Care Provider Form ([found on the WaterMain](#)) must be completed by your physician to establish a “serious health condition” for sickness or injury. At the end of your paid short- term disability, whether eligible paid time has exhausted or your medical provider’s certification period expires, you may be required to use your accrued Paid Time Off (PTO) for any additional time off. This benefit is paid according to the following schedules based on employee start date in accordance with the regular pay schedule.

Employees Hired On or After 1/1/2017

Short Term Disability Benefit
Up to 26 weeks of Short Term Disability at 60% of your weekly earnings.

Employees Hired On or Before 12/31/2016

Completed Years of Service	Short Term Disability Benefit
0 – 5 Years	Up to 26 weeks of Short Term Disability at 60% of your weekly earnings.
6 Years	Up to 26 weeks of Short Term Disability at 65% of your weekly earnings.
7 Years	Up to 26 weeks of Short Term Disability at 70% of your weekly earnings.
8 Years	Up to 26 weeks of Short Term Disability at 75% of your weekly earnings.
9 Years	Up to 26 weeks of Short Term Disability at 80% of your weekly earnings.
10 Years	Up to 26 weeks of Short Term Disability at 85% of your weekly earnings.
11 Years	Up to 26 weeks of Short Term Disability at 90% of your weekly earnings.
12 or More Years	Up to 26 weeks of Short Term Disability at 100% of your weekly earnings.

Short Term Disability Benefit Waiting Period	
STD leave for Injury or Pregnancy	0 Days
STD leave for Illness	8 Days

California employees are not eligible to receive short-term disability benefits through UI plan as stated above. All California employees will receive short-term disability coverage through the California State SDI (www.edd.ca.gov/Disability) plan at no additional cost. For more information please contact HR.

Parental Leave Benefit

100% Employer Paid

Utilities, Inc. provides up to six weeks of parental leave paid at 100% following the birth of an employee’s child or the placement of a child with an employee in connection with adoption or foster care. The purpose of paid parental leave is to enable the employee to care for and bond with a newborn or a newly adopted or newly placed child. This policy will run concurrently with Family and Medical Leave Act (FMLA) leave, as applicable. This policy will be in effect for births, adoptions or placements of foster children occurring on or after 1/1/2017.

- Parental Leave benefits are available to full-time employees after one year of service. Employees with less than one year of service are eligible for leave for medical reasons for the birth of a child as outlined under Short-Term Disability Insurance.
- In no case will an employee receive more than six weeks of paid parental leave in a rolling 12-month period, regardless of whether more than one birth, adoption or foster care placement event occurs within that 12-month time frame.
- Approved Parental Leave begins on the day the child is born or adopted and must be taken within 60 calendar days of that event.
- Parental Leave can be taken in increments of no less than one hour (for hourly employees) or (one half day for salaried employees).
- Any necessary leave required beyond the 6 weeks provided for Parental leave will be covered as outlined for medical reasons under Short-Term Disability Insurance and will require a completed Certification of Healthcare Provider Form.
- The employee will provide his or her Manager and the Human Resource department with notice of the request for leave at least 30 days prior to the proposed date of the leave (or if the leave was not foreseeable, as soon as possible). The employee must complete the necessary HR forms and provide all documentation as required by the HR department to substantiate the request.
- As is the case with all company policies, the organization has the exclusive right to interpret this policy.
- For employees on an unrelated Short-Term Disability Leave when Parental Leave would begin, the guidelines of the STD benefit supersede those for Parental Leave.

Adoption Benefit

Adoption benefits are available to full-time employees after one year of service. The adopted child must be 17 years of age or younger unless the child is physically or mentally incapable of caring for himself or herself. *Eligible adoption related expenses** will be reimbursed as they are incurred during the adoption process up to a maximum of \$5,000 perchild.

*Adoption related expenses include lawyer fees, private and/or public agency fees, foreign adoption fees, temporary foster care charges, transportation costs, counseling fees associated with placement and costs related to pre-placement visitation.

Long - Term Disability Insurance - MetLife Group #95164



100% Employer Paid

Utilities, Inc. provides long-term disability insurance to all eligible employees effective first of the month following thirty days of employment. To receive benefits under this plan, you must satisfy requirements set by MetLife during the application process. In the event of a disability, it is suggested that you begin the application process to receive benefits no later than your twelfth week of continuous disability to ensure sufficient time for review.

Benefits Begin	After 180 days of continuous disability
Monthly Benefit	50% of base pre-disability earnings
Minimum Monthly Benefit	\$100
Maximum Monthly Benefit	\$10,000

Life and AD&D Insurance - MetLife Group #95164

100% Employer Paid

Utilities, Inc. offers both Basic Life and Accidental Death and Dismemberment insurance to all eligible employees effective first of the month following thirty days of employment. The Basic Life benefit amount is equal to 1 ½ times your base annual salary plus \$10,000. The Accidental Death and Dismemberment amount is the same.

Voluntary Life Insurance - MetLife Group #95164

Utilities, Inc. offers the option of purchasing additional life insurance for yourself, your spouse and/or your child(ren). These benefits are available for purchase on a post-tax basis. Paying tax on the premiums allows benefit payments to be tax-free. The table below illustrates a summary of these benefits. Please note that MetLife requires the purchase of coverage in stated increments. Employees must purchase coverage for themselves before they are able to purchase coverage on dependents. Requests to enroll in this benefit must be made during your first 30 days with the Company to take advantage of the guarantee issue amounts. If you wish to enroll in this benefit after your new hire eligibility period, you may do so during any Open Enrollment period or within 30 days of a Qualifying Life Event as defined earlier. Enrollments in conjunction with an Open Enrollment period or Qualifying Life Event will require a Statement of Health and approval from the MetLife underwriting department before the benefit can be issued.

This benefit is portable upon termination. Requests to port this benefit must be made to HR within 30 days of your termination.

Voluntary Benefit Amounts

Employee	Sold in increments of \$10,000 Maximum issue amount = \$300,000
Spouse	Sold in increments of \$10,000 up to a maximum of \$150,000 Maximum issue amount = 100% of the voluntary employee life amount of \$150,000; whichever is less
Child(ren)	Issued as a flat amount equal to \$10,000

Guarantee Issue Amount*

Employee	\$50,000
Spouse	\$10,000
Child(ren)	Entire Benefit Amount

* Guarantee Issue refers to the amount of coverage you are eligible to purchase during your initial enrollment period without providing evidence of "good health". However, if you do not enroll when initially eligible, you will be required to provide evidence of "good health" for any amount elected by completing a Statement of Health form. The Statement of Health form will be submitted to the underwriting department at MetLife for approval before the benefit can be issued.

Monthly Premiums for Voluntary Life Insurance

	Employee Cost	Spouse Cost
Age	Per \$10,000 of Coverage	
Under 30	\$0.94	\$0.94
30 - 34	\$1.16	\$1.16
35 - 39	\$1.59	\$1.59
40 - 44	\$2.20	\$2.20
45 - 49	\$3.95	\$3.95
50 - 54	\$5.89	\$5.89
55 - 59	\$8.24	\$8.24
60 - 64	\$12.96	\$12.96
65 - 69	\$20.06	\$20.06
Over 69	\$40.00	\$40.00

Monthly Cost for the Child(ren) Life equal to \$10,000 is \$1.19



Supplemental Travel/Accident Insurance - ACE American Insurance

100% Company Paid

Plan Number: 01AH585

Policy Number: ADDN01062487

Utilities, Inc. provides travel accident insurance to further financially assist your family members in the event of loss of life while traveling for business.

The value of this benefit is based your position classification.

	Employee	Spouse	Dependents
Operations & Field	\$100,000	\$25,000	\$10,000
Office & Clerical	\$50,000	\$25,000	\$10,000



Aflac Supplemental Insurance Coverage*

Over 50 Million people worldwide have chosen Aflac supplemental insurance products because of their commitment to providing customers with the confidence that comes from knowing they have assistance in being prepared for whatever life may bring. Aflac's voluntary payroll deduction insurance coverage pays cash benefits when a policyholder has a covered accident or illness. UI offers two forms of voluntary, supplemental coverage as outlined below. Each plan offers employees the following:

- Receive cash benefits are paid directly to you, unless otherwise assigned.
- Collect paid benefits regardless of any other insurance you may have.
- Additional coverage free without deductibles or copayments.
- No provider network restrictions.
- Freedom to choose any provider.
- Ability to use the cash benefits however you want.

***NOTE: UI can only offer voluntary coverage through Aflac for either plan if the minimum enrollment of 25 employees elect coverage in given plan year.**

Aflac Accident Advantage Plus Plan

100% Voluntary

After an accident, you may have expenses you've never thought about. Can your finances handle them? It's reassuring to know that an accident insurance plan can be there for you through the many stages of care, from the initial emergency treatment or hospitalization, to follow-up treatments or physical therapy.

In addition, your regular bills, such as the mortgage or rent, car payments and utility bills, don't stop when you're injured after a covered accident. Group accident insurance from Aflac offers benefits that are paid directly to you (unless you choose otherwise), so you can use them to help with your normal bills as well.

Benefit Summary

More than 50 events that trigger benefits payments, including fractures, dislocations, medical fees, hospital admission, ambulance, and physical therapy, among others.

- Medical Fees Benefit
- Accidental-Death Benefit
- Hospital Admission Benefit
- Hospital Confinement Benefit and more
- Accidental-death coverage.
- Wellness Benefit
- Guaranteed- issue coverage with no underwriting required.
- Portable coverage that allows employees to retain coverage at the same rate if their employment status changes (with certain stipulations).

To view a detailed plan description for the Aflac Accident Advantage Plus plan on the WaterMain, [please click here](#).

Aflac Critical Illness Advantage

100% Voluntary

The Aflac group critical illness insurance plan can help with the treatment costs of covered critical illnesses, such as cancer, a heart attack, or a stroke. More importantly, the plan helps you focus on recuperation instead of the distraction and stress over the costs of medical and personal bills. With the group critical illness insurance, you receive cash benefits directly (unless otherwise assigned) - giving you the flexibility to help pay bills related to treatment or to help with everyday living expenses.

Features and Plan Provisions	
Benefit Amounts	Employee: \$5,000 - \$30,000 Spouse: \$5,000 - \$15,000 Child: Up to 50% of the employee's face amount
Spouse Coverage	Up to 50% of the face amount elected by the employee
Guaranteed Issue Amounts	Employee: Up to \$30,000 Spouse: Up to \$15,000 Participation Requirement: % Guaranteed for 2 years
Pre-existing Condition Exclusion	None
Waiting Period	None
Rate Guarantee	2 Years
Eligibility	Work Week Hours: Employee must work at least 30 hours per week. Length of Employment: 30 days. Coverage begins 1st of month after 30 days.
Waiver of Premium	After 90 days of total disability for an employee due to a covered critical illness, premiums waived for the insured and any covered dependents up to 24 months
Separation Period - Additional Diagnosis/ Reoccurrence	Additional Diagnosis: 6 consecutive months Reoccurrence: 6 consecutive months <i>(for a cancer diagnosis, treatment-free from cancer for at least 12 months and in complete remission before the date of a subsequent cancer diagnosis)</i>
Issue Ages	Employee: 18+ Spouse: 18+ Children: Under age 26

Benefit Summary

- Lump-sum benefit for a covered critical illness such as: cancer, heart attack, stroke, major organ transplant, and end-stage renal failure
- Benefit for a recurrence of the same critical illness if separated by at least 12 months or an additional occurrence of a different critical illness if separated by at least 6 months, with no lifetime maximum

Coverage Type	Covered Conditions and Additional Benefits	Benefit Amount
Base Benefits	Coronary Artery Bypass Surgery, Non-Invasive Cancer	25%
	Heart Attack, Stroke, Kidney Failure (End-Stage Renal Failure), Major Organ Transplant, Bone Marrow Transplant (Stem Cell Transplant), Sudden Cardiac Arrest, Cancer (Internal or Invasive)	100%
Skin Cancer	Skin Cancer Diagnosis	\$250 per calendar year
Health Screening Benefit	Payable for health screening tests performed as the result of preventive care. Not payable for dependent children.	\$50 per calendar year
Additional Base Benefits	Coma, Severe Burns, Paralysis, Loss of Sight, Loss of Speech, Loss of Hearing	100%

Benefits will be based on the face amount in effect on the critical illness date of diagnosis.

To view a detailed plan description for the Aflac Critical Illness Advantage plan on the WaterMain, [please click here](#).

Aflac Employee Premium Information

Aflac Accident Advantage Plus Plan

To view employee premiums for the Accident Advantage Plus Plan [click here for Bi-Weekly \(Hourly\)](#) or [click here for Semi-Monthly \(Salaried\)](#).

Aflac Critical Illness Advantage Plan

To view employee premiums for the Critical Illness Advantage Plan [click here for Bi-Weekly \(Hourly\)](#) or [click here for Semi-Monthly \(Salaried\)](#).

Employee Assistance Program (EAP) – MetLife

100% Employer Paid



The EAP is a confidential and professional service that provides information, referral services and telephonic counseling by licensed professionals to all employees and members of their immediate families who may be experiencing personal difficulties in their lives.

The EAP provides confidential services without cost to employees and their immediate family members for a variety of work/life related issues including legal and financial issues, child and elder care assistance, identity theft recovery services, relationship, marriage or family issues, and alcohol and drug dependency.

To obtain these services, you can call the confidential hot-line (800) 511-3920 24 hours a day, 7 days a week.

Patient Advocacy - Health Advocate



100% Employer Paid

Health Advocate is a company that provides employees with access to trained professionals who understand the intricacies of the healthcare system and assist you in navigating through it.

Health Advocate services are provided by professional Health Advocates, typically registered nurses, backed up by a team of medical directors and administrative experts who will help you, your spouse, dependent children, parents or parents-in-law.

You Are Already Enrolled At No Cost To You!

The Top 10 Reasons to Call Health Advocate

- **Find the best doctors**, hospitals, dentists and other leading healthcare providers anywhere in the country. This includes locating providers in the BlueCross BlueShield of Illinois network.
- **Schedule appointments** with providers including hard to reach specialists and critical care providers and arrange for specialized treatments and tests.
- **Help resolve insurance claims** and assist with negotiating billing and payment arrangements, and related administrative issues.
- **Assist with elder care** and related healthcare issues facing your parents and parents-in-law.
- **Obtain unbiased health information** to help you make an informed decision. This includes pricing for an elective procedure to ensure you are controlling your healthcare expenses.
- **Work with insurance companies** to obtain appropriate approvals for needed services and to foster communications between physicians and insurance companies.
- **Answer questions** about test results, treatment recommendations and medications recommended or prescribed by your physician.
- **Assist in the transfer of medical records**, x-rays and lab results.
- **Locate and research the newest treatments** for a medical condition.
- **Assist and initiate appeals** for denied claims, disputes and issues related to care received. Providing members with guidance in filing a grievance or complaint to the insurance company.

This service is completely confidential and no information is exchanged between Health Advocate and Utilities, Inc. Advocates are available Monday through Friday from 9 a.m. To 8 P.m. Central time. An advocate is also available 24 hours a day, seven days a week to provide assistance that needs attention during non-business hours.

Help is just a phone call or click away.

Visit their website at <http://www.healthadvocate.com> or contact them at 1-866-695-8622

Professional Certification/Licensing, Training and Education Resources

Utilities, Inc. offers an environment where employees can advance through their career and develop professionally. To support that environment, full-time employees have a variety of options for Company sponsored professional development. Whether it is through certifications, licensing or training courses, we are committed to providing the resources described below in order ensure our employees have the skills and tools they need for their job as well as advancement and development opportunities.

Professional Certifications & Licenses

Utilities, Inc. requires certain positions to have the proper license and/or certifications for certain job titles (Water/Wastewater Operators, Staff Accountants, Financial Analysts, Etc.). These requirements are listed on the job description for each position, which are [located here on the WaterMain](#). Please contact a BU Executive about approval for any professional license or certification not identified below.

Coursework & Training

Utilities, Inc. will cover 100% of the costs associated with an employee's first attempt at any job-required or job-related coursework related to obtaining a professional certification or license. This coursework must be approved by a BU Executive prior to any classes being scheduled and/or taken. Should the employee need to retake the course, the cost associated with additional attempts will be the responsibility of the employee.

Exams

Utilities, Inc. will cover 100% of the costs associated with an employee's first attempt at completing an exam required to successfully obtain a professional certification or license. Should an employee not pass the exam on their first attempt, the cost associated with additional attempts will be the responsibility of the employee.

Certification/Licensing Pay

Some certifications and/or licenses qualify for additional compensation or "Certification Pay" upon being obtained or re-certified. Certification pay is a one-time payment per qualifying event. Certification Pay amounts vary depending on the level of that certification or license and the state in which they are obtained. Specific certification pay amounts are [listed here on the WaterMain](#). In order for an employee to be compensated for their achievement, a BU executive must submit approval via a [certification pay check request](#).

CPA Review & Exam Reimbursement

Utilities, Inc., at its sole discretion, may agree to reimburse an employee for CPA Review courses and/or CPA Exam fees that are deemed to be beneficial for the employee and the Company. This reimbursement would be subject to the stipulations outlined in the CPA Review & Reimbursement Agreement, [found here on the WaterMain](#).

Continuing Education Units or Credits (CEUs or CECs)

Utilities, Inc. will cover 100% of the costs associated CEUs or CECs needed to maintain a professional license. CEUs or CECs must be approved by a BU Executive to ensure that the license meets a business need or is relevant to that employee's position with UI.

Education Assistance

Full-time employees may continue their education in a related field, and Utilities, Inc. may reimburse some of the tuition costs. All courses and costs must be pre-approved by the manager and a BU Executive before taking the class and must be completed on the employee's own time. Once the course is complete, a certified transcript of your grades and the receipts for your expenses must be submitted. Utilities, Inc. will reimburse you for the portion of the tuition that was pre-approved on the following course by course basis:

Grade	Reimbursement
A	90% of the amount that was pre-approved
B	75% of the amount that was pre-approved
C	50% of the amount that was pre-approved

In cases where classes are graded based on a pass or fail, a passing grade will be reimbursed at 90% of the amount that was pre-approved. In order to qualify for this education assistance benefit you must:

- Advise your manager, prior to enrolling for the class that you intend to take a particular course. Your manager will advise you whether the course is of a nature that Utilities, Inc. will approve for reimbursement of tuition.
- The course must be job oriented and offered by an approved education institution.
- The course and maximum reimbursement amount must be approved by a BU Executive prior to the start of the course.
- You must receive a passing grade of "C" or better.
- You must have at least one (1) full year of prior service with Utilities, Inc.
- If you are eligible to receive educational benefits from other sources, such as the Veterans Administration, Utilities, Inc. will only consider some reimbursement of the part that remains unpaid after application of those benefits for your educational expenses.
- Utilities, Inc. will require you to sign an agreement stating that if you leave the Company within 12 months of completing a class, you will repay the amount you were reimbursed.

For income tax free purposes the course must meet IRS section 127 rules that state the education is required by the employer or by law for the employee to keep his or her present salary, status, or job. The required education must serve a bona fide business purpose of the employer or the education maintains or improves skills needed in the job.

Corix Affiliated Companies (US) 401(k) Plan – JP Morgan Plan Number 168231-01



Employer Matching – You are eligible to contribute 100% of your salary up to the IRS maximum through pre-tax payroll deductions for your 401(k) Plan as long as you are at least 21 years of age and have completed one month of employment. If you are 50 years of age or older, you are allowed an additional \$6,000 in catch up contributions to the plan. If you elect to make contributions to the 401(k) Plan, the company will make a matching contribution to your 401(k) account. Prior to the beginning of each year, the Company will announce the applicable matching level and cap for that year. For 2017, the Company will match employee contributions using the following formula:

UI will match your contributions 100%, dollar for dollar, on the first 3% you contribute to the 401(k) plan. UI will make an additional matching contribution of \$.50 on every \$1.00 you contribute to the 401(k) Plan up to a maximum contribution on 5% (equal to 4%) of your base annual compensation. Matching contributions will be made in the same pay period in which you make your contributions. If you do not contribute to the 401(k) Plan you will not be eligible for a matching contribution.

Non Elective Company Contribution – A non-elective Company contribution is made annually on 3% of your eligible wages for each plan year into your 401(k) account regardless of whether you have contributed any savings of your own as eligibility requirements have been satisfied (see above).

Automatic Enrollment – As of 1/1/2017, new hires are automatically enrolled in the plan with a default deferral of 3%. A new employee may opt out or increase their deferral at the time of hire. These contributions will begin on the 1st of the month following the completion of one month of service.

Vesting – All contributions made to the 401(k) plan are vested at 100%. This includes both the Employer Matching contributions & 401(k) Non Elective Company contributions made by the Company.

To enroll in this benefit, you must login to the JP Morgan website at www.retirementlink.jpmorgan.com. To login for the first time, you will need your PIN which will be sent to you in the mail a month prior to initial eligibility to your home address. Information can be found on the Watermain in the HR/Payroll drop down under “Benefits”, “Forms” then “401(k).”

For more detailed plan and ERISA information, please refer to the Summary Plan Description. These documents can be obtained from HR, viewed on the Watermain or accessed via the JP Morgan website.

Paid Time Off (PTO)

Paid Time Off (PTO) is a time for you to rest, relax, pursue special interests, meet personal needs or care for a covered family member. The Company provides PTO to eligible employees as one of the many ways in which we show our appreciation for your loyalty and continued service. Only full-time employees and part-time employees are entitled to PTO. You are eligible to begin accruing PTO upon commencing employment and completing your first within your first completed month of service; however, you may not take PTO until you have completed 30 days of employment. View our complete PTO policy on the WaterMain.

Paid Time Off (PTO) Accrual*	Hourly Employees (Full-time)	Hourly Employees (Part-time)	Salaried Employees
First Month of Employment	If hired on or between the 1st and 15th - 8 hours	If hired on or between the 1st and 15th - 4 hours	If hired on or between the 1st and 15th - 1 day
	If hired on or between the 16th and 31st - 4 hours	If hired on or between the 16th or 31st - 2 hours	If hired on or between the 16th or 31st - 1/2 day
Less than 1 Year	8 hours for each completed calendar month of service	4 hours for each completed calendar month of service	1 day for each completed calendar month of service
1 year to less than 6 years	96 hours annually	48 hours annually	12 Days annually
6 years to less than 15 years	96 hours annually plus 8 hours for each year of service over 5 years	48 hours annually plus 4 hours for each year of service over 5 years	12 Days annually plus 1 Day for each year of service over 5 years
15 years or more	176 hours	88 hours	22 Days

* PTO Totals listed in the chart above represent annualized values, not a guaranteed amount. Employees accrue PTO on a monthly basis, for each month of service completed over the calendar year.

**Annual PTO accrual balances may not exceed a maximum total of 176 hours (22 days). Annual PTO balances including rollover (up to 5 days), may not exceed a maximum total of 216 hours. Exceptions to the maximum limit may only occur as the result of extraordinary circumstances during the plan year and require HR consultation and BU President approval.

Unused PTO Time

Employees are encouraged to use their paid time off each year. However, Utilities, Inc. does acknowledge that circumstances may arise which do not make that possible. If an employee has unused PTO time remaining at year-end, employees may carry up to 5 days (40 hours for full time/20 hours for part time), except where otherwise legally required by state or local law. Carry-over PTO must be used the following year, unless an exception is pre-approved by your manager and the HR manager. Unused roll-over PTO is not paid out upon termination.

Terminated Employees

At the time of employment termination, the amount of PTO accrued will be calculated by taking the number of full months worked during the current year times the amount of PTO time earned in one month. Any unused time will be prorated and paid upon termination. Unused PTO which rolled-over from the previous year will not be paid.

Holiday Pay

Utilities, Inc. is recognizing the following holidays: New Year's Day – Monday, January 2nd
 Memorial Day - Monday, May 29th
 Independence Day – Tuesday, July 4th
 Labor Day – Monday, September 4th
 Thanksgiving Day – Thursday, November 23th
 Day after Thanksgiving Day – Friday, November 24th
 Christmas Eve - Friday, December 22nd
 Christmas Day - Monday, December 25th

All full-time employees receive the Company selected holiday benefit. Please note that the designated holidays may change each year. Be sure to watch for a revised holiday schedule prior to each New Year.

You may take time off to observe religious holidays. If available, PTO may be used for this purpose, otherwise the time off is without pay. You must notify your manager in advance.

Only full-time employees are eligible for holiday pay. You are not eligible to receive holiday pay during the first thirty (30) days of your employment, nor are you eligible to receive holiday pay if you are a part-time employee or a temporary employee.

Holiday Policies

If a holiday occurs during your scheduled PTO, you are permitted to take an extra day of PTO. To qualify for holiday pay, you must work the scheduled workday immediately before and after the holiday. Only scheduled PTO will be considered exceptions to this policy.

Contact Information

Vendor/Resource	Telephone	Website
BlueCross BlueShield of Illinois - Medical		
Medical Claim and Benefit Information	(800) 828-3116	www.bcbsil.com
Prime Therapeutics - Prescription Drugs		
Pharmacy and Prescription Drug Inquiries	(800) 423-1973	www.myprime.com
Rx 'n Go Free Generic Mail Order Maintenance Pharmacy		
Rx 'n Go/PBM Plus	(888) 697-9646	www.rxngo.com
Teladoc	1-800-Teladoc	www.teladoc.com
Benefits Value Advisor	(800) 828-3116	
Delta Dental of Illinois - Dental		
Dental Claim and Benefit Information	(800) 323-1743	www.deltadentalil.com
VSP Vision Benefits - Vision		
Vision Claim and Benefit Information	(800) 877-7195	www.vsp.com
MetLife - Life and Accidental Death & Dismemberment		
Life and AD&D Claims and Benefit Information	(800) 638-6420	www.metlife.com
MetLife - Long-Term Disability		
Disability Claims and Benefit Information	(800) 300-4296	www.metlife.com
Discovery Benefits - Flexible Spending Accounts		
Healthcare and Dependent Day Care FSA Questions, Account Balances and Information	(866) 451-3399	www.discoverybenefits.com
Ace American Insurance - Travel Accident		
Inside the United States	(800) 243-6124	www.ACETravelAssistance.com
Outside the United States Call Collect	(202) 659-7803	
Aflac – Supplemental Accident & Critical Illness Insurance	(800) 433-3036	www.aflac.com/UI
MetLife - Employee Assistance Program		
Confidential assistance with personal, legal, financial or elder care issues.	(800) 511-3920	www.metlife.com
JP Morgan - 401(k) Retirement		
Plan Details Enrollment Account/Balance Information	(855) 576-7526	www.retirementlink.jpmorgan.com
Health Advocate - Patient Advocacy	(866) 695-8622	http://www.healthadvocate.com

This Employee Benefits Guide has been prepared to help you review and understand the key factors associated with our benefit plans. This guide does not provide all the provisions, limitations and exclusions included in our benefit plans and policies and should be considered only as a summary of our current benefits. If any differences exist between this summary and the official plan documents, the official plan documents shall control. Additionally, the benefits described herein are subject to change without notice. Neither this Employee Benefits Guide nor any of the benefits described herein constitute a contract of employment, nor should they be construed as giving you any legal rights to continue to be employed. Your employment with the Company is and will continue to be “at will.”

Rescission of Coverage

Utilities, Inc. reserves the right to terminate the health coverage of you/and your dependent(s) prospectively without notice for cause (as determined by **Utilities, Inc.**), if you and/or your dependent(s) are otherwise determined to be ineligible for coverage under the plan. In addition, if you or your dependent commits fraud or intentional misrepresentation in an application for health coverage under the plan, in connection with a benefit claim or appeal, or in response to any request for information by **Utilities, Inc.** Or its delegates (including **BlueCross BlueShield of Illinois Utilities, Inc.** may terminate your coverage retroactively upon 30 days of notice. Failure to inform **Utilities, Inc.** that you or your dependent is covered under another group health plan or knowingly providing false information to obtain coverage for an ineligible dependent are examples of actions that constitute fraud under the plan.



2335 Sanders Road, Northbrook, IL 60062-6196

CASE NO. 2018-00208
WATER SERVICE CORPORATION OF KENTUCKY
RESPONSES TO COMMISSION STAFF'S SECOND INFORMATION REQUEST

32. Pursuant to 807 KAR 5:001, Section 17, Water Service Kentucky is to post to its website a copy of the public notice and provide a hyperlink to the location of the Commission website where the case documents are available.

a. State whether Water Service Kentucky included this information on its website.

b. If Water Service Kentucky contends this information is included on its website, provide the web address and screenshots of the information along with the web address and screenshots of any hyperlink on other pages of Water Service Kentucky's website directing its customers to the notice. State when notice was posted on Water Service Kentucky's webpage and when each page containing a link to the notice was edited to include the link to the notice.

c. If the notice and link to the Commission's webpage were not included on Water Service Kentucky's webpage in a timely manner, explain why Water Service Kentucky failed to include the information on its website as required by Commission regulations.

Response:

WSCK posted copies of the public notice and a hyperlink to the location of the Commission website where the case documents are available to WSCK's website on August 14, 2018. The failure to post the required information within five days from the filing date of the application was a mere oversight. Upon receiving the Commission Staff's Second Request for Information

CASE NO. 2018-00208
WATER SERVICE CORPORATION OF KENTUCKY
RESPONSES TO COMMISSION STAFF'S SECOND INFORMATION REQUEST

on August 13, 2018, WSCK discovered the oversight and was able to have the information posted on its website on the morning of the following day.

Screenshots of the applicable webpages are attached as “Response to PSC DR 2-32 (WSCK Website Screenshot)”. Those webpages can be viewed at the following locations:

<https://www.uiwater.com/kentucky/customer-service/customer-notices>

<https://www.uiwater.com/docs/default-source/kentucky/middlesboro-rate-case-notice-2018-00208.pdf?sfvrsn=0>

<https://www.uiwater.com/docs/default-source/kentucky/clinton-rate-case-notice-2018-00208.pdf?sfvrsn=0>

Witness – Rob Guttormsen

PSC DR 2-32
WSCK Website Screenshot

Water Service Corporation of Kentucky

Superior Quality. **Efficient Operations.** Exceptional Service.

- About Us
- Customer Service**
- Education
- Water Quality Reports
- Regulations
- Cross Connection
- Contact Us



Home / Customer Service / [Customer Notices](#)

Customer Service
Understand Your Bill
Payment Options
Pay Your Bill
Customer Contact
Service Forms
Online Services
Customer Bill of Rights Links
Customer Notices
FAQ

Customer Notices

- [Middlesboro Rate Case Notice](#)
- [Clinton Rate Case Notice](#)

Visit the [Kentucky Public Service Commission](#) website to access rate case documents.

Customer Service

- [Validation Report](#)



Water Service Corporation of Kentucky

Superior Quality. **Efficient Operations.** Exceptional Service.

- About Us
- Customer Service**
- Education
- Water Quality Reports
- Regulations
- Cross Connection
- Contact Us

Customer Service

Home / Customer Service / Customer Notices

Customer Service
Understand Your Bill
Payment Options
Pay Your Bill
Customer Contact
Service Forms

Customer Notices

 [Middlesboro Rate Case Notice](#)

 [Clinton Rate Case Notice](#)

Visit the [Kentucky Public Service Commission](#) website to access rate case documents.

Customer Service

```
Elements Console Sources Network Performance Memory Application Security Audits
▼<div id="ContentPagesPlaceholder_PanelRightContent">
  ▼<div class="sfContentBlock">
    <h3>Customer Notices</h3>
    <p>...</p>
    <p>
      <strong>
        "Visit the "
        <a href="https://psc.ky.gov/PSC_WebNet/ViewCaseFilings.aspx?case=2018-00208" target="_blank">Kentucky Public Service Commission </a> == $0
        "website to access rate case documents. "
        <br>
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      </strong>
    </p>
    <p>...</p>
    <p>...</p>
  </div>
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Water Service Corporation of Kentucky

NOTICE OF PROPOSED INCREASE

Pursuant to the regulations of the Public Service Commission of Kentucky, Water Service Corporation of Kentucky gives notice to its customers in Middlesboro that it intends to adopt an increase in its water rates. The utility is requesting an increase in annual revenue totaling \$852,743, which will be a total increase of 35.29% to the utility. The rates listed below are proposed to be effective August 4, 2018.

	Present Fixed Charge	Present First 100k gal Vol Rate	Present Over 100k gal Vol Rate	Proposed Fixed Charge	Proposed First 100k gal Vol Rate	Proposed Over 100k gal Vol Rate	Current Avg Bill	Proposed Avg Bill	Dollar Increase	% Increase
Middlesboro										
5/8" and 3/4" Meter	\$ 10.00	\$ 4.06	\$ 3.13	\$ 12.50	\$ 5.57	\$ 3.92	\$ 25.00	\$ 33.07	\$ 8.07	32.28%
1" Meter	\$ 17.50	\$ 4.06	\$ 3.13	\$ 31.30	\$ 5.57	\$ 3.92	\$ 68.39	\$ 101.09	\$ 32.70	47.81%
1.5" Meter	\$ 30.00	\$ 4.06	\$ 3.13	\$ 62.50	\$ 5.57	\$ 3.92	\$ 169.83	\$ 254.26	\$ 84.43	49.71%
2" Meter	\$ 45.00	\$ 4.06	\$ 3.13	\$ 100.00	\$ 5.57	\$ 3.92	\$ 398.96	\$ 585.41	\$ 186.45	46.73%
3" Meter	\$ 85.00	\$ 4.06	\$ 3.13	\$ 187.50	\$ 5.57	\$ 3.92	\$ 872.55	\$ 1,221.65	\$ 349.10	40.01%
4" Meter	\$ 130.00	\$ 4.06	\$ 3.13	\$ 312.50	\$ 5.57	\$ 3.92	\$ 533.50	\$ 865.84	\$ 332.34	62.30%
6" Meter	\$ 255.00	\$ 4.06	\$ 3.13	\$ 1,000.00	\$ 5.57	\$ 3.92	\$ 3,599.70	\$ 5,233.64	\$ 1,633.94	45.39%
Municipally Owned Hydrants	\$ 5.40			\$ 8.10			\$ 5.40	\$ 8.10	\$ 2.70	50.00%
Private Hydrants	\$ 24.30			\$ 36.50			\$ 24.30	\$ 36.50	\$ 12.20	50.21%
Sprinkler Systems	\$ 24.30			\$ 36.50			\$ 24.30	\$ 36.50	\$ 12.20	50.21%
Ambulance Private Fire Surcharge	\$ -			\$ 3.63			\$ -	\$ 3.63	\$ 3.63	N/A

The rates contained in the notice are the rates proposed by Water Service Corporation of Kentucky on or about July 5, 2018, with the Commission but that the Public Service Commission may order rates to be charged that differ from the proposed rates contained in this notice.

A corporation, association, or person may within thirty (30) days after the initial publication or mailing of notice of the proposed rate changes, submit a written request to intervene to the Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602 that establishes the grounds for the request including the status and interest of the party. If the Commission does not receive a written request for intervention within thirty (30) days of initial publication or mailing of the notice, the Commission may take final action on the application.

A person may examine this filing and any other documents Water Service Corporation of Kentucky has filed with the Public Service Commission at the offices of Water Service Corporation of Kentucky located at 102 Water Plant Rd., Middlesboro, Kentucky 40965.

This filing and any other related documents can be examined at the Commission's offices located at 211 Sower Boulevard, Frankfort, Kentucky, Monday through Friday, 8:00 a.m. to 4:30 p.m., or found on the Public Service Commission's Web site at <http://psc.ky.gov/>. Written comments regarding the proposed rate may be submitted to the Public Service Commission by mail or through the Public Service Commission's Web site.

If you have any questions, feel free to contact us at (844) 310-5556. Please have your account number ready.

Water Service Corporation of Kentucky

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Water Service Company of Kentucky

NOTICE OF PROPOSED INCREASE

Pursuant to the regulations of the Public Service Commission of Kentucky, Water Service Corporation of Kentucky gives notice to its customers in Clinton that it intends to adopt an increase in its water rates. The utility is requesting an increase in annual revenue totaling \$852,743, which will be a total increase of 35.29% to the utility. The rates listed below are proposed to be effective August 4, 2018.

	Present Fixed Charge	Present First 100k gal Vol Rate	Present Over 100k gal Vol Rate	Proposed Fixed Charge	Proposed First 100k gal Vol Rate	Proposed Over 100k gal Vol Rate	Current Avg Bill	Proposed Avg Bill	Dollar Increase	% Increase
Clinton										
5/8" and 3/4" Meter	\$ 10.00	\$ 4.36	\$ 4.36	\$ 12.20	\$ 5.57	\$ 3.92	\$ 23.47	\$ 29.68	\$ 6.21	26.48%
1" Meter	\$ 17.50	\$ 4.36	\$ 4.36	\$ 31.30	\$ 5.57	\$ 3.92	\$ 70.08	\$ 98.38	\$ 28.30	40.38%
1.5" Meter	\$ 30.00	\$ 4.36	\$ 4.36	\$ 62.50	\$ 5.57	\$ 3.92	\$ 310.23	\$ 420.01	\$ 109.78	35.39%
2" Meter	\$ 45.00	\$ 4.36	\$ 4.36	\$ 100.00	\$ 5.57	\$ 3.92	\$ 226.42	\$ 331.45	\$ 105.03	46.39%
Municipally Owned Hydrants	\$ 5.40			\$ 8.10			\$ 5.40	\$ 8.10	\$ 2.70	50.00%
Private Hydrants	\$ 24.30			\$ 36.50			\$ 24.30	\$ 36.50	\$ 12.20	50.21%
Sprinkler Systems	\$ 24.30			\$ 36.50			\$ 24.30	\$ 36.50	\$ 12.20	50.21%

The rates contained in the notice are the rates proposed by Water Service Corporation of Kentucky on or about July 5, 2018, with the Commission but that the Public Service Commission may order rates to be charged that differ from the proposed rates contained in this notice.

A corporation, association, or person may within thirty (30) days after the initial publication or mailing of notice of the proposed rate changes, submit a written request to intervene to the Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602 that establishes the grounds for the request including the status and interest of the party. If the Commission does not receive a written request for intervention within thirty (30) days of initial publication or mailing of the notice, the Commission may take final action on the application.

A person may examine this filing and any other documents Water Service Corporation of Kentucky has filed with the Public Service Commission at the offices of Water Service Corporation of Kentucky located at 100 East Jackson Street, Clinton, Kentucky 42031.

This filing and any other related documents can be examined at the Commission's offices located at 211 Sower Boulevard, Frankfort, Kentucky, Monday through Friday, 8:00 a.m. to 4:30 p.m., or found on the Public Service Commission's Web site at <http://psc.ky.gov/>. Written comments regarding the proposed rate may be submitted to the Public Service Commission by mail or through the Public Service Commission's Web site.

If you have any questions, feel free to contact us at (844) 310-5556. Please have your account number ready.

Water Service Corporation of Kentucky



CASE NO. 2018-00208
WATER SERVICE CORPORATION OF KENTUCKY
RESPONSES TO COMMISSION STAFF'S SECOND INFORMATION REQUEST

33. Provide the average annual number of customers and annual revenue per meter size and hydrants per fire protection charge for years 2013-2017.

Response:

Water Service Corporation of Kentucky						
Staff DR 2.33						
<i>Revenue By Meter Size</i>						
Revenue						
Meter Size	2013	2014	2015	2016	2017	Average
Unmetered	5,134.14	5,419.72	5,795.63	5,319.08	5,280.96	5,389.91
1"	58,049.34	61,468.72	60,862.33	66,327.74	65,878.36	62,517.30
1.5"	48,028.18	54,664.58	55,578.69	51,897.10	57,464.05	53,526.52
2"	105,706.79	98,485.70	124,592.14	128,991.27	143,683.02	120,291.78
3"	46,390.99	46,109.89	48,487.42	82,835.84	48,385.59	54,441.95
3/4"	140,601.78	140,061.71	150,894.76	126,175.93	110,641.88	133,675.21
4"	13,256.60	11,802.28	12,782.36	15,198.65	16,070.49	13,822.08
5/8"	1,017,775.26	1,045,193.46	1,063,062.58	1,172,752.82	1,252,399.04	1,110,236.63
6"	113,113.34	88,974.86	130,345.95	139,976.92	133,815.66	121,245.35
Hydrant	26,758.98	25,718.95	27,253.00	29,309.90	33,964.11	28,600.99
Total Revenue	1,574,815.40	1,577,899.87	1,679,654.86	1,818,785.25	1,867,583.16	1,703,747.71

Water Service Corporation of Kentucky						
Staff DR 2.33						
<i>Customers By Meter Size</i>						
Customers						
Meter Size	2013	2014	2015	2016	2017	Average
1"	107	109	108	105	106	107
1.5"	29	29	27	31	33	30
2"	58	57	55	53	54	55
3"	8	8	8	8	8	8
3/4"	542	533	526	532	524	531
4"	3	3	3	3	3	3
5/8"	5,599	5,543	5,533	5,473	5,384	5,506
6"	3	3	3	3	3	3
Hydrant Customers	36	34	33	33	33	34
Total Customers	6,385	6,319	6,296	6,241	6,148	6,278

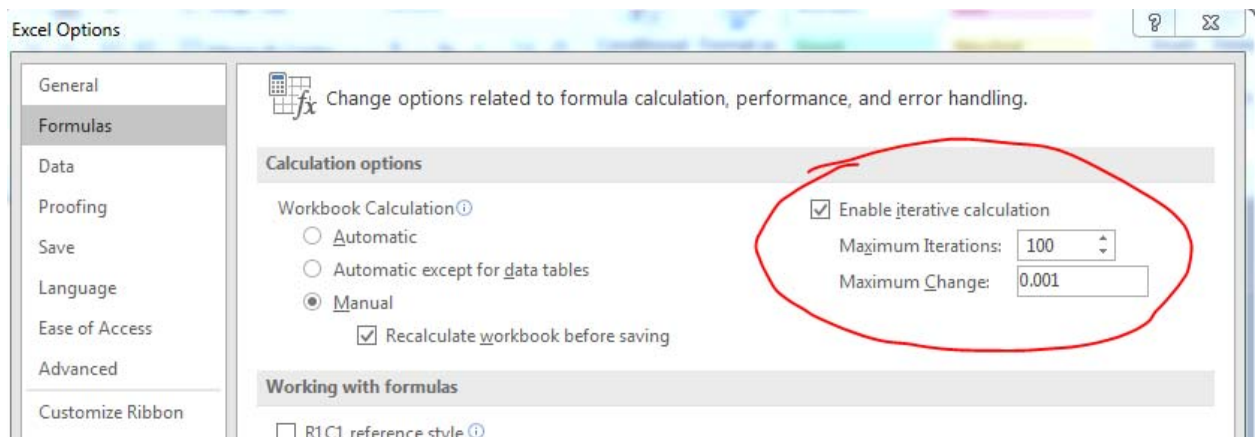
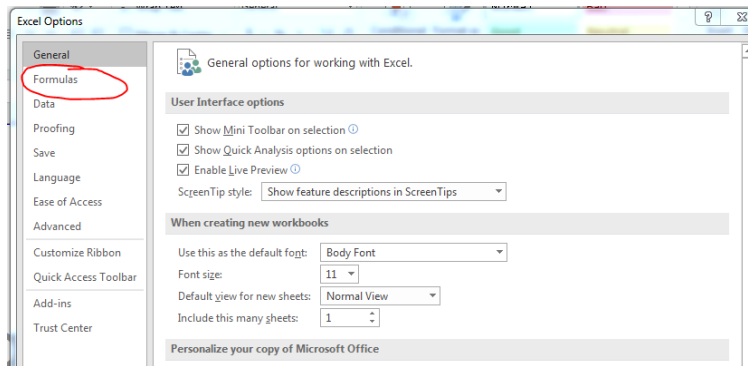
Witness – Perry Brown

CASE NO. 2018-00208
WATER SERVICE CORPORATION OF KENTUCKY
RESPONSES TO COMMISSION STAFF'S SECOND INFORMATION REQUEST

34. Refer to the responses to Commission Staff's Request for Information, Item 3, Staff DR 1.3 – Filing Template. The Excel workpaper Water Service Kentucky provided has numerous circular references. Provide a revised Excel workpaper with no circular reference errors.

Response:

The file does not have circular references. It is an iterative model. Please see excel options (File>>Options>>Formulas) and enable iterations. Below are screenshots.



Witness – Rob Guttormsen