

VILLAGE OF DOWNERS GROVE
Report for the Village
1/13/2026

SUBJECT:	SUBMITTED BY:
Award of Contract: Summit Street Water Tower Rehab (WP-019)	David Moody Director of Public Works

SYNOPSIS

A motion is requested to authorize award of a contract for the Summit Street Water Tower Rehabilitation Project (WP-019) to Era-Valdivia Contractors, Inc. of Chicago, Illinois in the amount of \$1,088,663.40, which includes a 10% contingency.

STRATEGIC PLAN ALIGNMENT

The goals for 2025-2027 include *Top Quality Infrastructure*.

FISCAL IMPACT

The FY26 budget includes \$1,300,000.00 for this work.

RECOMMENDATION

Approval on the January 13, 2026 consent agenda.

BACKGROUND

The Summit Water Tower serves the Village's water system as one of seven elevated water storage tanks. It stores 500,000 gallons of water and was constructed in 1938 by Chicago Bridge & Iron. The tower's coating system is deteriorating and there are safety-related and operational deficiencies that need to be repaired.

An evaluation of this tank was completed in April 2025. The evaluation looked at the condition of the exterior surface, as well as the interior dry and wet surfaces. At the time of the evaluation, both the exterior coating system and the interior coating were determined to be in poor condition, and were recommended to be replaced in the next one to two years. The purpose of this construction contract is to correct the current deficiencies and provide a long-lasting coating system. The improvements will include:

- Interior and exterior cleaning and re-coating for corrosion protection;
- Safety improvements including: installation of a pipe-style roof handrail conforming to OSHA regulations to enclose existing wet access manway.
- Operational improvements including: installation of a water tower tank mixing system to improve water quality and reduce the likelihood of ice formation in cold weather.

Bids were received on December 5, 2025. A synopsis of the bids is as follows:

Contractor	Base Bid	
Era-Valdivia Contractors, Inc.	\$989,694.00	low bid
Dynamic Industrial Services Inc.	\$1,198,000.00	
Neumann Co. Construction, Inc.	\$1,961,900.00	
Tecorp, Inc. of Joliet, IL	\$2,080,500.00	
Jetco, Ltd. Of Wauconda, IL	\$2,166,793.00	

Era-Valdivia successfully completed the painting of the Downers Dive water tower in 2023, and has recently completed similar projects with for the City of Naperville, Village of Burr Ridge, and the City of West Chicago. All of the aforementioned municipalities provided positive references for Era Valdivia. In addition, the Village's professional engineering consultant for this project, Christopher B. Burke Engineering, LTD., has reviewed the bids and is familiar with Era-Valdivia Contractors, Inc. They have observed projects of similar scope performed by them and provided a positive endorsement.

ATTACHMENTS

Contract Documents

Contractor Evaluation Form

VILLAGE OF DOWNERS GROVE
COUNCIL ACTION SUMMARY

INITIATED: Public Works DATE: January 13, 2026
(Name)

RECOMMENDATION FROM: _____ FILE REF: _____
(Board or Department)

NATURE OF ACTION:

STEPS NEEDED TO IMPLEMENT ACTION:

- Ordinance
- Resolution
- Motion
- Other

Motion to authorize a contract for the Summit Water Tower Rehabilitation Project to Era-Valdivia Contractors, Inc. in the amount of \$1,088,663.40, which includes a 10% contingency.



SUMMARY OF ITEM:

Adoption of this motion shall authorize a contract for the Summit Water Tower Rehabilitation Project to Era-Valdivia Contractors, Inc. in the amount of \$1,088,663.40, which includes a 10% contingency.

RECORD OF ACTION TAKEN:



CALL FOR BIDS – FIXED WORKS PROJECT

I. Name of Company Bidding: _____

II. Instructions and Specifications:

Bid No.: CFB-35-0-2025/JV
 For: Summit Water Tower Rehabilitation
 Bid Opening Date/Time: December 5, 2025 10AM
 Pre-Bid Conference Date/Time: November 14, 2025, 10AM (Mandatory)
 Location: 1037 Summit St , Downers Grove, IL 60515

III. Required of All Bidders:

- A. Bid Deposit: 10%
 B. Letter of Capability of Acquiring Performance Bond: YES

IV. Required of Awarded Contractor(s)

- A. Performance Bond or Letter of Credit: YES
 B. Certificate of Insurance: YES

Legal Advertisement Published: November 10, 2025

This document comprises 194 pages.

Return **original** copy of proposal (no staples, bindings or spines) in a **sealed envelope and USB flash drive** marked with the Proposal Name/Number as noted above to the address below
 Alternatively, proposals may be submitted through demandstar.com.

JOHN VALENTI
 ASSISTANT DIRECTOR PUBLIC WORKS - UTILITIES
 VILLAGE OF DOWNERS GROVE PUBLIC WORKS
 5101 WALNUT AVE
 DOWNERS GROVE, IL 60515
 PHONE: 630/434-5461
 FAX: 630/434-5495

www.downers.us

CALL FOR BIDS – FIXED WORKS PROJECT**Bid No.: CFB-35-0-2025/JV**

The VILLAGE OF DOWNERS GROVE will receive bids Monday through Friday, 7:30am A.M. to 4:30 P.M. at the Public Works Building, 5101 Walnut Avenue, Downers Grove, IL 60515.

The Village Council reserves the right to accept or reject any and all bids, to waive technicalities and to accept or reject any item of any Bid.

The documents constituting component parts of this Contract are the following:

- I. CALL FOR BIDS
- II. TERMS & CONDITIONS
- III. GENERAL PROVISIONS
- IV. SPECIAL PROVISIONS
- V. BID & CONTRACT FORM

All Bidders MUST submit the entire bid package, with one original Bid Form. Upon formal Award, the successful Bid will automatically convert to a Contract, and the successful Bidder will receive a copy of the executed contract upon formal award of the Bid with the Notice of Award.

DO NOT DETACH ANY PORTION OF THIS DOCUMENT. INVALIDATION COULD RESULT.

PLEASE DO NOT BIND ANY PORTION OF THE BID WITH STAPLES.

ALL PAGES OF THE BID MUST BE SUBMITTED SINGLE-SIDED.

I. CALL FOR BIDS and INSTRUCTIONS TO BIDDERS

1. GENERAL

1.1 Notice is hereby given that Village of Downers Grove will receive sealed bids up to the time and date set forth on the cover page of this Call for Bids.

1.2 Defined Terms:

1.2.1 Village – the Village of Downers Grove acting through its officers or agents.

1.2.2 Contract Documents – this document plus any drawings issued therewith, any addenda and the Bidder's completed proposal, bonds and all required certifications.

1.2.3 Bid – this document completed by an individual or entity and submitted to the Village.

1.2.4 Bidder – the individual or entity who submits or intends to submit a bid proposal to the Village.

1.2.5 Contractor – the individual or entity whose bid is selected by the Village and who enters into a contract with the Village.

1.2.6 Work – the construction or service defined herein.

1.2.7 Day – unless otherwise stated all references to day "Day" "Days", "day" or "days" shall refer to calendar days.

1.2.8 Proposal Guaranty – the required bid deposit.

1.3 Bids must be received at the Village by the time and date specified. Bids received after the specified time and date will not be accepted and will be returned unopened to the Bidder.

1.4 Bids shall be sent to the Village of Downers Grove, ATTN: John Valenti, in a sealed envelope marked "SEALED BID." The envelope shall be marked with the name of the project, date, and time set for receipt of Bids. The bid package may be submitted any time prior to the time set for receipt of Bids.

1.5 All Bids must be submitted on the forms supplied by the Village and signed by a proper official of the company submitting the Bid. Telephone, email and fax Bids will not be accepted.

1.6 Under penalty of perjury, the Bidder certifies by submitting this Bid that he has not acted in collusion with any other Bidder or potential Bidder.

2. BID PREPARATION

2.1 It is the responsibility of the Bidder to carefully examine the Contract Documents and to be familiar with all of the requirements, stipulations, provisions, and conditions surrounding the proposed Work.

2.2 The Bidder shall inspect the site of the proposed Work in detail, investigate and become familiar with all the local conditions affecting the Work and become fully acquainted with the detailed requirements of the Work. Submitting a Bid shall be a conclusive assurance and warranty that the Bidder has made these examinations and that the Bidder understands all requirements for the performance of the Work. If the Bid is accepted, the Bidder will be responsible for

all errors in the Bid resulting from his willing or neglectful failure to comply with these instructions. IN NO CASE WILL THE VILLAGE BE RESPONSIBLE FOR ANY COSTS, EXPENSES, LOSSES OR CHANGES IN ANTICIPATED MARGINS OF PROFIT RESULTING FROM THE WILLING OR NEGLECTFUL FAILURE OF THE BIDDER TO MAKE THESE EXAMINATIONS. THE VILLAGE WILL NOT BE RESPONSIBLE FOR ANY COSTS, EXPENSES, LOSSES OR CHANGES IN ANTICIPATED MARGINS OF PROFIT RESULTING FROM THE WILLING OR NEGLECTFUL FAILURE OF THE CONTRACTOR TO PROVIDE THE KNOWLEDGE, EXPERIENCE AND ABILITY TO PERFORM THE WORK REQUIRED BY THIS CONTRACT. No changes in the prices, quantities or contract provisions shall be made to accommodate the inadequacies of the Bidder, which might be discovered subsequent to award of contract. The Bidder shall take no advantage of any error or omission in the Contract Documents nor shall any error or omission in the Contract Documents serve as the basis for an adjustment of the amounts paid to the Bidder.

2.3 When the Contract Documents include information pertaining to subsurface explorations, borings, test pits, and other preliminary investigations, such information is included solely for the convenience of the Bidder. *The Village assumes no responsibility whatsoever with respect to the sufficiency of the information, and does not warrant, neither expressly nor by implication, that the conditions indicated represent those existing throughout the Work, or that unanticipated developments may not occur.*

2.4 Any information shown in the Contract Documents regarding the locations of underground utility facilities is included solely for the convenience of the Bidder. The Village assumes no responsibility whatsoever with respect to the sufficiency, accuracy or inadequacy of such information. It shall be the Bidder's responsibility to obtain detailed information from the respective utility companies relating to the location of their facilities and the work schedules of the utility companies for removing or adjusting them. Utilities whose facilities may be affected by the work include, but may not be limited to, the following: Nicor, ComEd, SBC, Comcast Cable, Downers Grove Sanitary District, and Village water, storm sewer, and street lighting systems.

2.5 No oral or telephone interpretations of specifications shall be binding upon the Village. All requests for interpretations or clarifications shall be made in writing and received by the Village at least five (5) business days prior to the date set for receipt of Bids or the pre-bid conference, if offered. The Village shall make all changes or interpretations of the Contract Documents in a written addendum and shall provide an addendum to any Bidder of record. Any and all changes to the Contract Documents are valid only if they are included by written addendum to all Bidders. Each Bidder must acknowledge receipt of any addenda by indicating same on the Bid Form. Each Bidder, by acknowledging receipt of any addenda, is responsible for the contents of the addenda and any changes to the Bid therein. Failure to acknowledge any addenda may cause the Bid to be rejected. The Village will not assume responsibility for receipt of any addenda. In all cases, it will be the Bidder's responsibility to obtain all addenda issued. Bidders will provide written acknowledgement of receipt of each addendum issued with the bid submission.

2.6 An estimate of the quantities of Work to be performed and the materials to be furnished is shown in the Bid Form. It is given as a basis for comparing the properly submitted Bids, and shall be used by the Village in awarding the Contract. The Village does not expressly warrant nor imply that the estimated quantities shown will correspond with those quantities required to perform the Work. No Bidder shall plead misunderstanding or deception because of such an

estimate of quantities, or because of the character, location or other conditions pertaining to the Work. Payment shall be based on the actual quantities of work properly performed in accordance with the Contract, at the Contract unit prices specified. The Village reserves the right to increase, decrease or omit entirely, any or all items. No allowance will be made for any change in anticipated profits due to an increase or decrease in the original estimate of quantities.

2.7 The Bid shall be executed properly, and Bids shall be made for all items indicated in the Bid Form. The Bidder shall indicate, in figures, a unit price or lump sum price for each of the separate items called for in the Bid Form. The Bidder shall show the products of the respective quantities and unit prices in the column provided for that purpose. The gross sum shown in the place indicated in the Bid Form shall be the summation of said products. All writing shall be with ink or typewriter, except the signature of the Bidder, which shall be written with ink.

2.8 In case of error in the extension of prices in the Bid, the hourly rate or unit price will govern. In case of discrepancy in the price between the written and numerical amounts, the written amount will govern.

2.9 All costs incurred in the preparation, submission, and/or presentation of any Bid including the Bidder's travel or personal expenses shall be the sole responsibility of the Bidder and will not be reimbursed by the Village.

2.10 The Bidder hereby affirms and states that the prices quoted herein constitute the total cost to the Village for all work involved in the respective items, as well as the materials to be furnished in accordance with the collective requirements of the Contract Documents. The Bidder also affirms that this cost includes all insurance, bonds, royalties, transportation charges, use of all tools and equipment, superintendence, overhead expense, profits and other work, services and conditions necessarily involved in the work to be done.

2.11 The Bidder shall complete and submit with the Bid an "Affidavit" (IDOT Form BC-57, or similar) listing all uncompleted contracts, including subcontract work; all pending low bids not yet awarded or rejected, and equipment available.

2.12 The Bidder shall complete and submit with the Bid a "Municipal Reference List" indicating other municipalities for which the Bidder has successfully performed similar work.

3. PRE-BID CONFERENCE

3.1 A pre-bid conference may be offered to provide additional information, inspection or review of current facilities or equipment, and to provide an open forum for questions from Bidders. This pre-bid conference is not mandatory (unless stated "Mandatory" on the cover of this document), but attendance by Bidders is strongly advised as this will be the last opportunity to ask questions concerning the Bid.

3.2 Questions may be posed in writing to the Village (faxed and emailed questions are acceptable), but must be received by the Village prior to the scheduled time for the pre-bid conference. Questions received will be considered at the conference. An addendum may be issued as a result of the pre-bid conference. Such an addendum is subject to the provisions for issuance of an addendum as set forth in Section 2.5 above.

3.3 No Contract Documents will be issued after a mandatory pre-bid conference except to attendees.

4. BID SUBMISSION

4.1 An original copy of the sealed bid marked as indicated in Section 1 shall be submitted to the Village. Please do not bind any portion of the bid with staples.

4.2 A bid deposit will be required, which shall not exceed ten percent (10%) of the estimated cost of the work to be furnished. Such bid deposit shall be in the form of a bid bond, certified check, cash or money order. Checks shall be drawn upon a bank of good standing payable to the order of the Village and said deposit shall be forfeited to the Village in the event the Bidder neglects or refuses to enter into a contract and bond when required, with approved sureties, to execute the Work or furnish the material for the price mentioned in his Bid and according to the plans and specifications in case the contract shall be awarded to him.

4.3 Bids shall be publicly opened at the hour and place indicated above.

5. BID MODIFICATION OR WITHDRAWAL

5.1 A Bid that is in the possession of the Village may be altered by a letter bearing the signature of the person authorized for submitting a Bid, provided that it is received prior to the time and date set for the bid opening. Telephone, email or verbal alterations of a Bid will not be accepted.

5.2 A Bid that is in the possession of the Village may be withdrawn by the Bidder, up to the time set for the bid opening, by a letter bearing the signature of the person authorized for submitting Bids. Bids may not be withdrawn after the bid opening and shall remain valid for a period of ninety (90) days from the date set for the bid opening, unless otherwise specified.

6. BID REJECTION

6.1 Bids that contain omissions, erasures, alterations, additions not called for, conditional bids or alternate bids not called for, or irregularities of any kind, shall be rejected as informal or insufficient. Bids otherwise acceptable, which are not accompanied by the proper Proposal Guaranty, shall also be rejected as informal or insufficient. The Village reserves the right however, to reject any or all Bids and to waive such technical error as may be deemed best for the interest of the Village.

7. BIDDER COMPETENCY

7.1 No Bid will be accepted from, or contract awarded to, any person, firm or corporation that is in arrears or is in default upon any debt or contract. The Bidder, if requested, must present evidence to the Village of ability and possession of necessary facilities, and financial resources to comply with the terms of the Contract Documents. Evidence must be presented within three (3) business days.

8. BIDDER DISQUALIFICATION

8.1 Any one or more of the following causes may be considered as sufficient for the disqualification of a Bidder and the rejection of their Bid.

8.1.1 More than one Bid for the same Work from an individual, firm partnership, or corporation under the same or different names.

8.1.2 Evidence of collusion among Bidders.

8.1.3 Unbalanced Bids in which the prices for some items are substantially out of proportion to the prices for other items.

- 8.1.4 Failure to submit a unit price for each item of Work listed in the Bid Form.
- 8.1.5 Lack of competency as revealed by financial statement or experience questionnaire.
- 8.1.6 Unsatisfactory performance record as shown by past work, judged from the standpoint of workmanship and progress.
- 8.1.7 Uncompleted work which, in the judgment of the Village, might hinder or prevent the prompt completion of this Work.
- 8.1.8 Failure to submit a signed Bidder's Certificate stating the following:
- 8.1.8.1 That the Bidder is not barred from bidding on this Contract as a result of a violation of Sections 720 ILCS 5/33-E3 and 720 ILCS 5/33-E4 of the Illinois Compiled Statutes; and
- 8.1.8.2 The Bidder is not delinquent in the payment of any tax administered by the Illinois Department of Revenue; and
- 8.1.8.3 The Bidder will maintain the types and levels of insurance required by the terms of this Contract; and
- 8.1.8.4 The Bidder will comply with the Illinois Prevailing Wage Act, 820 ILCS 130/1 *et seq.*

9. BASIS OF AWARD

- 9.1 The Village reserves the exclusive right to accept or reject any and all Bids or to waive sections, technicalities and irregularities, or to accept or reject any Bid or any item of any Bid.

10. AWARD OF CONTRACT

10.1 Unless the Village exercises its right to reject all Bids, the Contract will be awarded to that responsible Bidder whose Bid, conforming to the Contract Documents, will be most advantageous to the Village, price and other factors considered (the credentials, financial information, bonding capacity, insurance protection, qualifications of the labor and management of the firm, past experience, whether the Bidder participates in an apprenticeship and training program approved by and registered with the United States Department of Labor's Bureau of Apprenticeship and Training and ability to complete the project within time frame required - lowest responsible bidder).

10.2 Unless otherwise specified, if a Contract is not awarded within ninety (90) days after the opening of Bids, a Bidder may file a written request with the Village for the withdrawal of their Bid. The Village will have a maximum of ten (10) days after the receipt of such request to award the Contract or release the Bidder from further obligation by return of the Bidder's bid deposit. Any attempt or actual withdrawal or cancellation of a Bid by the awarded contractor who has been notified by the Village of the acceptance of said Bid shall be considered a breach of contract.

11. RETURN OF BID DEPOSIT

11.1 The bid deposit of all except the three (3) lowest responsive bidders on each contract will be returned within fifteen (15) days after the opening of Bids. The remaining bid deposits

of each contractor will be returned within fifteen (15) days after the Village Council has awarded the contract and the required appurtenances to the contract have been received.

12. FAILURE TO ENTER INTO CONTRACT

12.1 Failure on the part of the successful Bidder to execute a Contract and provide acceptable bonds, as provided herein, within ten (10) days from the date of receipt of the Contract and Notice of Award from the Village, will be considered as just cause for the revocation of the award. The Bidder's bid security shall then be forfeited to the Village, not as a penalty, but in payment of liquidated damages sustained as a result of such failure.

12.2 Failure on the part of the successful Bidder to provide the Village a construction schedule for approval within ten (10) calendar days from the date of receipt of the Notice of Award from the Village, and, if required, provide a modified construction schedule as requested by the Village within an additional five (5) calendar days, may be considered as just cause for the revocation of the award. In such case, the Bidder's bid security shall then be forfeited to the Village, not as a penalty, but in payment of liquidated damages sustained as a result of such failure.

12.3 The Bidder shall not be allowed to claim lack of receipt where the Contract and Notice of Award was mailed by U.S. Postal Services certified mail to the business address listed in his Bid. In case the Village does not receive evidence of receipt within ten (10) days of the date of Notice of Award, the Village may revoke the award. The Bidder shall then forfeit the bid security to the Village, not as a penalty, but in payment of liquidated damages sustained as the result of such failure to execute the Contract.

12.4 By submitting a Bid, the Bidder understands and agrees that, if his Bid is accepted, and he fails to enter into a contract forthwith, he shall be liable to the Village for any damages the Village may thereby suffer.

13. SECURITY FOR PERFORMANCE

13.1 The successful Bidder shall, within ten (10) days after acceptance of the Bidder's Bid by the Village, furnish a Performance Bond and a Materials and Labor Payment Bond acceptable to the Village in the full amount of the Bid. Said bonds shall guarantee the Bidder's performance under the Contract Documents and shall guarantee payment of all subcontractors and material suppliers. Any bond shall include a provision that guarantees faithful performance of the Illinois Prevailing Wage Act, 820 ILCS 130/1 *et seq.*

14. TAX EXEMPTION

14.1 The Village is exempt from Illinois sales or use tax for direct purchases of materials and supplies. A copy of the Illinois Sales Tax Exemption Form will be issued upon request. The Village's federal identification number will also be provided to the selected Bidder.

15. RESERVED RIGHTS

15.1 The Village reserves the right to waive sections, irregularities, technicalities and informalities to this Contract and to accept any Bid and to reject any and all Bids and to disapprove of any and all subcontractors as may be in the best interest of the Village. Time and date requirements for receipt of Bids, however, will not be waived.

16. CATALOGS AND SHOP DRAWINGS

16.1 Each Bidder shall submit catalogs, descriptive literature, and detailed drawings, where applicable, to fully illustrate and describe the work or material he proposes to furnish.

17. TRADE NAMES AND SUBSTITUTIONS

17.1 Certain materials and equipment are specified by a manufacturer or trade name to establish standards or quality and performance and not for the purpose of limiting competition. Products of other manufacturers may be substituted, if, in the opinion of the Village, they are equal to those specified in quality, performance, design, and suitability for intended use. If the Bidder proposes to furnish an "equal", the proposed "equal" item must be so indicated in the written Bid. Where two or more items are specified, the selection among those specified is the Bidder's option, or he may submit his Bid on all such items. Detail specification sheets shall be provided by Bidder for all substituted items.

II. TERMS AND CONDITIONS

18. VILLAGE ORDINANCES

18.1 The successful Bidder, now the Contractor, will strictly comply with all ordinances of the Village of Downers Grove and laws of the State of Illinois.

19. USE OF VILLAGE'S NAME

19.1 The Contractor is specifically denied the right of using in any form or medium the name of the Village for public advertising unless the Village grants express permission.

20. HOURS OF WORK

20.1 The Contractor shall do no work between the hours of 7:00 p.m. and 7:00 a.m., nor on Sundays or legal holidays. The Contractor shall do no work on Saturdays, unless otherwise approved in writing by the Village. If approved by the Village, allowed work hours on Saturdays shall be between the hours of 8:00 a.m. and 3:00 p.m. However, such work may be performed at any time if necessary, for the proper care and protection of work already performed, or in case of an emergency. All after-hour work is still subject to the permission of the Village. Any work, including the starting and/or idling of vehicles or machinery, or a congregation of workers prior to starting work, which may cause any noise level that can be heard by adjacent residents, performed outside of these hours of work and not authorized by the Village shall be subject to a fine of \$250 per day, per violation, which shall be deducted from the value of work completed.

21. PERMITS AND LICENSES

21.1 The Contractor shall obtain all necessary permits and licenses required to complete the Work. The cost of acquisition of all necessary permits, bonds, insurance and services as specified herein shall be considered INCLUDED IN THE TOTAL COST, and no additional compensation will be allowed the Contractor.

22. INSPECTION

22.1 The Village shall have a right to inspect, by its authorized representative, any material, components or workmanship as herein specified. Materials, components or workmanship that have been rejected by the Village as not in accordance with the terms of the contract specifications shall be replaced by the Contractor at no cost to the Village.

23. DELIVERIES

23.1 All materials shipped to the Village must be shipped F.O.B. designated location, Downers Grove, Illinois.

24. SPECIAL HANDLING

24.1 Prior to delivery of any product that is caustic, corrosive, flammable or dangerous to handle, the Contractor will provide written directions as to methods of handling such products, as well as the antidote or neutralizing material required for its first aid before delivery. Contractor shall also notify the Village and provide material safety data sheets for all substances used in connection with this Contract which are defined as toxic under the Illinois Toxic Substances Disclosure to Employees Act.

25. NONDISCRIMINATION

25.1 Contractor shall, as a party to a public contract:

25.1.1 Refrain from unlawful discrimination in employment and undertake affirmative action to assure equality of employment opportunity and eliminate the effects of past discrimination;

25.1.2 By submission of this Bid, the Contractor certifies that he is an "equal opportunity employer" as defined by Section 2000(e) of Chapter 21, Title 42, U.S. Code Annotated and Executive Orders #11246 and #11375, which are incorporated herein by reference. The Equal Opportunity clause, Section 6.1 of the Rules and Regulations of the Department of Human Rights of the State of Illinois, is a material part of any contract awarded on the basis of this Bid.

25.2 It is unlawful to discriminate on the basis of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental disability unrelated to ability, military status, order of protection status, sexual orientation, sexual identity, or an unfavorable discharge from military service. Contractor shall comply with standards set forth in Title VII of the Civil Rights Act of 1964, 42 U.S.C. Secs. 2000 *et seq.*, The Human Rights Act of the State of Illinois, 775 ILCS 5/1-101 *et seq.*, and The Americans with Disabilities Act, 42 U.S.C. Secs. 12101 *et seq.*

26. SEXUAL HARASSMENT POLICY

26.1 The Contractor, as a party to a public contract, shall have a written sexual harassment policy that:

26.1.1 Notes the illegality of sexual harassment;

26.1.2 Sets forth the State law definition of sexual harassment;

26.1.3 Describes sexual harassment utilizing examples;

26.1.4 Describes the Contractor's internal complaint process including penalties;

26.1.5 Describes the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Human Rights Commission and how to contact these entities; and

26.1.6 Describes the protection against retaliation afforded under the Illinois Human Rights Act.

27. EQUAL EMPLOYMENT OPPORTUNITY

27.1 In the event of the Contractor's non-compliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act or the Rules and Regulations of the Illinois Department of Human Rights ("Department"), the Contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be canceled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation. During the performance of this Contract, the Contractor agrees as follows:

27.1.1 That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental disability unrelated to ability, military status, order of protection status, sexual orientation, sexual identity, or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.

27.1.2 That, if it hires additional employees in order to perform this Contract or any portion thereof, it will determine the availability (in accordance with the Department's Rules and Regulations) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.

27.1.3 That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental disability unrelated to ability, military status, order of protection status, sexual orientation, or an unfavorable discharge from military services.

27.1.4 That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any such labor organization or representative fails or refuses to cooperate with the Contractor in its efforts to comply with such Act and Rules and Regulations, the Contractor will promptly so notify the Department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations thereunder.

27.1.5 That it will submit reports as required by the Department's Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations.

27.1.6 That it will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Department for purpose of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations.

27.1.7 That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that such provisions will be binding upon such subcontractor. In the same manner as with other provisions of this Contract, the Contractor will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the contracting agency and the Department in the event any subcontractor fails or refuses to comply therewith. In addition, the Contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivision or municipal corporations.

28. DRUG FREE WORK PLACE

28.1 Contractor, as a party to a public contract, certifies and agrees that it will provide a drug free workplace by:

28.1.1 Publishing a statement:

(1) Notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance, including cannabis, is prohibited in the Village's or Contractor's workplace.

(2) Specifying the actions that will be taken against employees for violations of such prohibition.

(3) Notifying the employee that, as a condition of employment on such contract or grant, the employee will:

(A) abide by the terms of the statement; and

(B) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.

28.1.2 Establishing a drug free awareness program to inform employees about:

(1) the dangers of drug abuse in the workplace;

(2) the Village's or Contractor's policy of maintaining a drug free workplace;

(3) any available drug counseling, rehabilitation and employee assistance programs;

(4) the penalties that may be imposed upon employees for drug violations.

28.1.3 Providing a copy of the statement required by subparagraph 1.1 to each employee engaged in the performance of the contract or grant and to post the statement in a prominent place in the workplace.

28.1.4 Notifying the contracting or granting agency within ten (10) days after receiving notice under part (3)(B) of subparagraph 1.1 above from an employee or otherwise receiving actual notice of such conviction.

28.1.5 Imposing a sanction on, or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program by, any employee who is so convicted as required by section 5 of the Drug Free Workplace Act.

28.1.6 Assisting employees in selecting a course of action in the event drug counseling, treatment and rehabilitation is required and indicating that a trained referral team is in place.

28.1.7 Making a good faith effort to continue to maintain a drug free workplace through implementation of the Drug Free Workplace Act.

29. SUBSTANCE ABUSE PREVENTION ON PUBLIC WORKS PROJECTS ACT

29.1 In the event this is a public works project as defined under the Prevailing Wage Act, 820 ILCS 130/2, Contractor agrees to comply with the Substance Abuse Prevention on Public Works Projects Act, 820 ILCS 265/1 *et seq.*, and further agrees that all of its subcontractors shall comply with such Act. As required by the Act, Contractor agrees that it will file with the Village prior to commencing work its written substance abuse prevention program and/or that of its subcontractor(s) which meet or exceed the requirements of the Act.

30. PREVAILING WAGE ACT

30.1 Contractor agrees to comply with the Illinois Prevailing Wage Act, 820 ILCS 130/1 *et seq.*, for all work completed under this Contract. Contractor agrees to pay the prevailing wage and require that all of its subcontractors pay prevailing wage to any laborers, workers or mechanics who perform work pursuant to this Contract or related subcontract. For applicable rates, go to the State of Illinois – Department of Labor website (www.state.il.us/agency/idol/rates/rates.HTM) and use the most current DuPage County rate. The Department revises the prevailing wage rates and the Contractor or subcontractor has an obligation to check the Department's website for revisions to prevailing wage rates throughout the duration of this Contract.

30.2 Contractor and each subcontractor shall keep or cause to be kept accurate records of all laborers, mechanics and other workers employed by them on the public works project, which

records must include each worker's name, address, telephone number when available, the last four digits of the worker's social security number, gender, race, ethnicity, veteran's status, skill level, classification, hourly wage paid (including itemized hourly cash and fringe benefits paid in each pay period), number of hours worked each day, the starting and ending times of work each day, the worker's hourly wage rate, the worker's hourly overtime wage rate, the worker's hourly fringe benefit rates, the name and address of each fringe benefit fund, the plan sponsor of each fringe benefit, if applicable, and the plan administrator of each fringe benefit, if applicable. These records shall be open to inspection at all reasonable hours by any representative of the Village or the Illinois Department of Labor (IDOL) and must be preserved for five (5) years from the date of the last payment on the public work.

30.3 Since this is a contract for a public works project, as defined in 820 ILCS 130/2, Contractor agrees to post at the job site in an easily accessible place, the prevailing wages for each craft or type of worker or mechanic needed to execute the contract or work to be performed.

30.4 Because this is a public works project as defined under the Prevailing Wage Act, 820 ILCS 130/2, any and all contractors and subcontractors shall submit certified payroll records to IDOL no later than the fifteenth (15th) day of each calendar month for the immediately preceding month in which construction on a public works project has occurred. Contractor shall then provide an IDOL certification and case number to the Village. WITHOUT THIS PAPERWORK, NO INVOICE SHALL BE PAID BY THE VILLAGE. Filing false records is a Class A misdemeanor.

30.5 In the event that this is a construction project where Motor Fuel tax monies or state grant monies are used in the construction, maintenance and extension of municipal streets, traffic control signals, street lighting systems, storm sewers, pedestrian subways or overhead crossings, sidewalks and off-street parking facilities, and the like, the Village will require an Apprenticeship and Training Certification, attached after the Bidder's Certification.

30.6 Any bond furnished as security for performance shall include a provision that guarantees faithful performance of the Illinois Prevailing Wage Act, 820 ILCS 130/1 *et seq.*

31. PATRIOT ACT COMPLIANCE

31.1 The Contractor represents and warrants to the Village that neither it nor any of its principals, shareholders, members, partners, or affiliates, as applicable, is a person or entity named as a Specially Designated National and Blocked Person (as defined in Presidential Executive Order 13224) and that it is not acting, directly or indirectly, for or on behalf of a Specially Designated National and Blocked Person. The Contractor further represents and warrants to the Village that the it and its principals, shareholders, members, partners, or affiliates, as applicable are not, directly or indirectly, engaged in, and are not facilitating, the transactions contemplated by this Contract on behalf of any person or entity named as a Specially Designated National and Blocked Person. The Contractor hereby agrees to defend, indemnify and hold harmless the Village, and its elected or appointed officers, employees, agents, representatives, engineers and attorneys, from and against any and all claims, damages, losses, risks, liabilities and expenses (including reasonable attorney's fees and costs) arising from or related to any breach of the foregoing representations and warranties.

32. INSURANCE REQUIREMENTS

32.1 Prior to starting the Work, Contractor and any Subcontractors shall procure, maintain and pay for such insurance as will protect against claims for bodily injury or death, or for

damage to property, including loss of use, which may arise out of operations by the Contractor or Subcontractor or any Sub-Sub Contractor or by anyone employed by any of them, or by anyone for whose acts any of them may be liable. Such insurance shall not be less than the greater of coverages and limits of liability specified below or any coverages and limits of liability specified in the Contract Documents or coverages and limits required by law unless otherwise agreed to by the Village.

Workers Compensation	\$500,000	Statutory
Employers Liability	\$1,000,000	Each Accident
	\$1,000,000	Disease Policy Limit
	\$1,000,000	Disease Each Employee
Comprehensive General Liability	\$2,000,000	Each Occurrence
	\$2,000,000	Aggregate
		<i>(Applicable on a Per Project Basis)</i>
Commercial Automobile Liability	\$1,000,000	Each Accident
Professional Errors & Omissions	\$2,000,000	Each Claim
(pursuant to section.9 below)	\$2,000,000	Annual Aggregate
Umbrella Liability	\$ 5,000,000	

32.2 Comprehensive General Liability Insurance required under this paragraph shall be written on an occurrence form and shall include coverage for Products/Completed Operations, Personal Injury with Employment Exclusion (if any) deleted, Blanket XCU and Blanket Contractual Liability insurance applicable to defense and indemnity obligations and other contractual indemnity assumed under the Contract Documents. The limit must be on a "Per Project Basis".

32.3 Commercial Automobile Liability Insurance required under this paragraph shall include coverage for all owned, hired and non-owned automobiles.

32.4 Workers Compensation coverage shall include a waiver of subrogation against the Village.

32.5 Comprehensive General Liability, Employers Liability and Commercial Automobile Liability Insurance may be arranged under single policies for full minimum limits required, or by a combination of underlying policies with the balance provided by Umbrella and/or Excess Liability policies.

32.6 Contractor and all Subcontractors shall have their respective Comprehensive General Liability (including products/completed operations coverage), Employers Liability, Commercial Automobile Liability, and Umbrella/Excess Liability policies endorsed to add the "Village of Downers, its officers, officials, employees and volunteers" as "additional insureds" with respect to liability arising out of operations performed; claims for bodily injury or death

brought against the Village by any Contractor or Subcontractor employees, or the employees of Subcontractor's subcontractors of any tier, however caused, related to the performance of operations under the Contract Documents. Such insurance afforded to the Village shall be endorsed to provide that the insurance provided under each policy shall be *Primary and Non-Contributory*.

32.7 Contractor and all Subcontractors shall maintain in effect all insurance coverages required by the Contract Documents at their sole expense and with insurance carriers licensed to do business in the State of Illinois and having a current A. M. Best rating of no less than A-VIII. In the event that the Contractor or any Subcontractor fails to procure or maintain any insurance required by the Contract Documents, the Village may, at its option, purchase such coverage and deduct the cost thereof from any monies due to the Contractor or Subcontractor, or withhold funds in an amount sufficient to protect the Village, or terminate this Contract pursuant to its terms.

32.8 All insurance policies shall contain a provision that coverages and limits afforded hereunder shall not be canceled, materially changed, non-renewed or restrictive modifications added, without thirty (30) days prior written notice to the Village. Renewal certificates shall be provided to the Village not less than five (5) days prior to the expiration date of any of the required policies. All Certificates of Insurance shall be in a form acceptable to the Village and shall provide satisfactory evidence of compliance with all insurance requirements. The Village shall not be obligated to review such certificates or other evidence of insurance, or to advise Contractor or Subcontractor of any deficiencies in such documents, and receipt thereof shall not relieve the Contractor or Subcontractor from, nor be deemed a waiver of the right to enforce the terms of the obligations hereunder. The Village shall have the right to examine any policy required and evidenced on the Certificate of Insurance.

32.9 If the Work under the Contract Documents includes design, consultation, or any other professional services, Contractor or the Subcontractor shall procure, maintain, and pay for Professional Errors and Omissions insurance with limits of not less than \$2,000,000 per claim and \$2,000,000 annual aggregate. If such insurance is written on a claim made basis, the retrospective date shall be prior to the start of the Work under the Contract Documents. Contractor and all Subcontractors agree to maintain such coverage for three (3) years after final acceptance of the Project by the Village or such longer period as the Contract Documents may require. Renewal policies during this period shall maintain the same retroactive date.

32.10 Any deductibles or selfinsured retentions shall be the sole responsibility of the Insured. At the option of the Village, either: the insurer shall reduce or eliminate such deductibles or selfinsured retentions as respects the Village, its officers, officials, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

33. INDEMNITY AND HOLD HARMLESS AGREEMENT

33.1 To the fullest extent permitted by law, the Contractor shall indemnify, keep and save harmless the Village and its agents, officers, and employees, against all injuries, deaths, strikes, losses, damages, claims, suits, liabilities, judgments, costs and expenses, which may arise directly or indirectly from any negligence or from the reckless or willful misconduct of the Contractor, its employees, or its subcontractors.

33.2 The Contractor shall, at its own expense, appear, defend and pay all charges of attorneys and all costs and other expenses arising therefrom or incurred in connection therewith, and, if

any judgment shall be rendered against the Village in any such action, the Contractor shall, at its own expense, satisfy and discharge the same. This agreement shall not be construed as requiring the Contractor to indemnify the Village for its own negligence. The Contractor shall indemnify, keep and save harmless the Village only where a loss was caused by the negligent, willful or reckless acts or omissions of the Contractor, its employees, or its subcontractors.

34. SUBLETTING OF CONTRACT

34.1 No contract awarded by the Village shall be assigned or any part subcontracted without the written consent of the Village. In no case shall such consent relieve the Contractor from his obligation or change the terms of this Contract.

All approved subcontracts shall contain language which incorporates the terms and conditions of this Contract.

35. TERMINATION OF CONTRACT

35.1 The Village reserves the right to terminate the whole or any part of this Contract, upon written notice to the Contractor, for any reason.

35.2 The Village further reserves the right to terminate the whole or any part of this Contract, upon written notice to the Contractor, in the event of default by the Contractor. Default is defined as failure of the Contractor to perform any of the provisions of this Contract or failure to make sufficient progress so as to endanger performance of this Contract in accordance with its terms. In the event that the Contractor fails to cure the default upon notice, and the Village declares default and termination, the Village may procure, upon such terms and in such manner as it may deem appropriate, supplies or services similar to those so terminated. The Village may also contact the issuer of the Performance Bond to complete the Work. The Contractor shall be liable for any excess costs for such similar supplies or services. Any such excess costs incurred by the Village may be set off against any monies due and owing by the Village to the Contractor.

36. BILLING AND PAYMENT PROCEDURES

36.1 Payment will be made upon receipt of an invoice referencing Village purchase order number. Once an invoice and receipt of materials or service have been verified, the invoice will be processed for payment in accordance with the Village's payment schedule. The Village will comply with the Local Government Prompt Payment Act, 50 ILCS 505/1 *et seq.*, in that any bill approved for payment must be paid or the payment issued to the Contractor within 60 days of receipt of a proper bill or invoice. If payment is not issued to the Contractor within this 60-day period, an interest penalty of 1.0% of any amount approved and unpaid shall be added for each month or fraction thereof after the end of this 60-day period, until final payment is made.

36.2 The Village shall review each bill or invoice in a timely manner after its receipt. If the Village determines that the bill or invoice contains a defect making it unable to process the payment request, the Village shall notify the Contractor as soon as possible after discovering the defect pursuant to rules promulgated under 50 ILCS 505/1 *et seq.* The notice shall identify the defect and any additional information necessary to correct it.

36.3 As this Contract is for work defined as a "fixed public work" project under the Illinois Prevailing Wage Act, 820 ILCS 130/2 and pursuant to section 30.4 of this Call For Bid, the Contractor shall provide an IDOL certification and case number to the Village along with the invoice. No invoice shall be paid without said records.

36.4 Please send all invoices to the attention of: Village of Downers Grove, Public Works, 5101 Walnut Ave., Downers Grove, IL 60515.

37. COMPLIANCE WITH OSHA STANDARDS

37.1 Equipment supplied to the Village must comply with all requirements and standards as specified by the Occupational Safety and Health Act. All guards and protectors as well as appropriate markings will be in place before delivery. Items not meeting any OSHA specifications will be refused.

38. CERCLA INDEMNIFICATION

38.1 The Contractor shall, to the maximum extent permitted by law, indemnify, defend, and hold harmless the Village, its officers, employees, agents, and attorneys from and against any and all liability, including without limitation, costs of response, removal, remediation, investigation, property damage, personal injury, damage to natural resources, health assessments, health settlements, attorneys' fees, and other related transaction costs arising under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, 42 U.S.C.A. Sec. 9601, *et seq.*, as amended, and all other applicable statutes, regulations, ordinances, and under common law for any release or threatened release of the waste material collected by the Contractor, both before and after its disposal.

38.2 If the Contractor encounters any waste material governed by the above Act, it shall immediately notify the Village and stop working in the area until the above requirements can be met.

39. COPYRIGHT or PATENT INFRINGEMENT

39.1 The Contractor agrees to indemnify, defend, and hold harmless the Village against any suit, claim, or proceeding brought against the Village for alleged use of any equipment, systems, or services provided by the Contractor that constitutes a misuse of any proprietary or trade secret information or an infringement of any patent or copyright.

40. BUY AMERICA

40.1 The Contractor agrees to comply with 49 U.S.C.5323(j), the Federal Transportation Administration's (FTA) Buy America regulations at 49 C.F.R. Part 661, and any amendments thereto, and any implementing guidance issued by the FTA, with respect to this Contract, when financed by Federal funds (through a grant agreement or cooperative agreement).

40.2 As a condition of responsiveness, the Contractor agrees to submit with its Bid submission, an executed Buy America Certificate, attached hereto.

41. CAMPAIGN DISCLOSURE

41.1 Any contractor, proposer, bidder or vendor who responds by submitting a bid or proposal to the Village of Downers Grove shall be required to submit with its bid submission, an executed Campaign Disclosure Certificate, attached hereto.

41.2 The Campaign Disclosure Certificate is required pursuant to the Village of Downers Grove Council Policy on Ethical Standards and is applicable to those campaign contributions made to any member of the Village Council.

41.3 Said Campaign Disclosure Certificate requires any individual or entity bidding to disclose campaign contributions, as defined in Section 9-1.4 of the Election Code (10 ILCS 5/9-

1.4), made to current members of the Village Council within the five (5) year period preceding the date of the bid or proposal release.

41.4 By signing the bid documents, contractor/proposer/bidder/vendor agrees to refrain from making any campaign contributions as defined in Section 9-1.4 of the Election Code (10 ILCS 5/9-1.4) to any Village Council member and any challengers seeking to serve as a member of the Downers Grove Village Council.

42. GUARANTEE PERIOD

42.1 The Contractor shall guarantee all work and provide a maintenance bond for the full amount of the contract, covering a minimum period of one (1) year after approval and acceptance of the Work. The bond shall be in such form as the Village may prescribe, unless otherwise noted in the Specifications, and shall be submitted before receiving final payment. If longer guarantee periods are required, they will be noted in the Special Provisions for this project.

43. SUCCESSORS AND ASSIGNS

43.1 The terms of this Contract will be binding upon and inure to the benefit of the parties and their respective successors and assigns; provided, however, that neither party will assign this Contract in whole or in part without the prior written approval of the other. The Contractor will provide a list of key staff, titles, responsibilities, and contact information to include all expected subcontractors.

44. WAIVER OF BREACH OF CONTRACT

44.1 The waiver by one party of any breach of this Contract or the failure of one party to enforce at any time, or for any period of time, any of the provisions hereof will be limited to the particular instance and will not operate or be deemed to waive any future breaches of this Contract and will not be construed to be a waiver of any provision except for the particular instance.

45. CHANGE ORDERS

45.1 The contract price is a "not-to-exceed" cost. At any time additional work is necessary or requested, and the not-to-exceed price is increased thereby, all parties must agree to any change, addition or price increase in writing.

45.2 Change orders for public works projects which authorize an increase in the contract price that is 50% or more of the original contract price or that authorize or necessitate any increase in the price of a subcontract under the contract that is 50% or more of the original subcontract price must be resubmitted for bidding in the same manner by which the original contract was bid. (50 ILCS 525/1)

46. SEVERABILITY OF INVALID PROVISIONS

46.1 If any provisions of this Contract are held to contravene or be invalid under the laws of any state, country or jurisdiction, contravention will not invalidate the entire Contract, but it will be construed as if not containing the invalid provision and the rights or obligations of the parties will be construed and enforced accordingly.

47. GOVERNING LAW AND VENUE

47.1 This Contract will be governed by and construed in accordance with the laws of the State of Illinois. Venue is proper only in the County of DuPage for state cases or the Northern District of Illinois for federal cases.

48. NOTICE

48.1 Any notice will be in writing and will be deemed to be effectively served when deposited in the mail with sufficient first class postage affixed, and addressed to the party at the party's place of business. Notices shall be addressed to the Village as follows:

**Village Manager
Village of Downers Grove
850 Curtiss St.
Downers Grove, IL 60515**

And to the Contractor as designated on the Contract Form.

49. AMENDMENT

49.1 This Contract will not be subject to amendment unless made in writing and signed by all parties.

50. COOPERATION WITH FOIA COMPLIANCE

50.1 Contractor acknowledges that the Freedom of Information Act does apply to public records in possession of the Contractor or a subcontractor. Contractor and all of its subcontractors shall cooperate with the Village in its efforts to comply with the Freedom of Information Act. 5 ILCS 140/1 *et seq.*

51. EMPLOYMENT OF ILLINOIS WORKERS ON PUBLIC WORKS ACT

51.1 If the work contemplated by this Contract is funded or financed in whole or in part with State Funds or funds administered by the State, Contractor agrees to comply with the terms of the Employment of Illinois Workers on Public Works Act by employing at least 90% Illinois laborers on the project. 30 ILCS 570/1 *et seq.* Contractor agrees further to require compliance with this Act by all of its subcontractors.

52. DISADVANTAGED BUSINESS ENTERPRISE (DBE) CERTIFICATION

52.1 Pursuant to 35 ILCS 200/18-50.2, Contractor and all subcontractors are required to complete and submit a Vendor DBE certification, regardless of DBE status. Contractor shall complete and require all its subcontractors to complete the DBE certification for this project at www.downers.us/vss. The information necessary for the Contractor and all subcontractors to complete the certification includes the following: DBE Classification (minority-owned, women-owned, persons with disabilities-owned, veteran-owned, or none); if DBE, whether the company holds a certificate or self-certifies; if self-certifying, whether the company qualifies as a small business under the U.S. Small Business Administration standards; the company's name, address, city, state and zip code; company's contact person's name, title, telephone number and email address. NO PAYMENTS WILL BE MADE TO THE CONTRACTOR BY THE VILLAGE UNLESS AND UNTIL ALL OF THE CERTIFICATIONS FOR THE CONTRACTOR AND SUBCONTRACTORS HAVE BEEN COMPLETED.

III. GENERAL PROVISIONS

1. STANDARD SPECIFICATIONS

1.1 The following standards shall govern the construction of the proposed improvements:

1.1.1 Standard Specifications for Water and Sewer Main Construction in Illinois, Seventh Edition, 2014 (the Water & Sewer Specs.); and

1.1.2 Standard Specifications for Road and Bridge Construction as adopted by the Illinois Department of Transportation, January 1, 2022; along with Supplemental Specifications and Recurring Special Provisions as adopted by the Illinois Department of Transportation, January 1, 2024 (collectively the “SSRBC”); and

1.1.3 Water Distribution Specifications, Village of Downers Grove, Illinois, revised January 2017.

1.1.4 Standard Detail Drawings, Village of Downers Grove, Illinois revised January, 2019.

1.2 These Contract Documents shall take precedence whenever there are conflicts in the wording or statements made by the above specifications and these Contract Documents.

1.3 Unless otherwise referenced herein, Division I of the Water and Sewer Specs and Section 102 and Articles 104.03, 104.07, 107.02, 107.27, 107.35, 108.10, 108.11, and 108.12 of the SSRBC are hereby ineffective and not a part of this Contract.

2. COOPERATION OF CONTRACTOR

2.1 The Contractor will be supplied with a minimum of 2 sets of approved plans and contract assemblies including Special Provisions, one set of which the Contractor shall keep available on the work site at all times. The Contractor shall give the work site constant attention necessary to facilitate the progress thereof, and shall cooperate with the Village in every way possible.

2.2 The Contractor shall assign a superintendent for the work per Sections 105.06 and 108.06 of the SSRBC and as amended herein. The Contractor’s superintendent shall be involved in the work to the extent necessary to prosecute the work per the Contract. Furthermore, the superintendent shall be required to attend weekly progress meetings, provide two-week schedules of expected construction activities, provide updated overall construction schedules and, if required by the Engineer, acknowledge and sign IDOT Form BC-239 Weekly Report of Resident. The Contractor shall not replace the superintendent without prior written notification to the Village.

3. LEGAL REGULATIONS AND RESPONSIBILITY TO THE PUBLIC

3.1 Section 107 of the SSRBC shall govern the Contractor’s legal regulations and responsibility to the public, with the following additions:

3.1.1 PROJECT SAFETY. Add the following to Article 107.28:

3.1.1.1 The Contractor shall conduct his work in such a manner as to provide an environment consistent with the safety, health and well-being of those engaged in the completion of the Work specified in this Contract.

3.1.1.2 The Contractor shall comply with all State and Federal Safety Regulations as outlined in the latest revisions of the Federal Construction Safety Standards (Series 1926) and with applicable provisions and/or regulations of the Occupation Safety and Health Administration (OSHA) and Standards of the WilliamsStelger Occupational Health Safety Act of 1970 (Revised). **SPECIAL ATTENTION SHALL BE PAID TO COMPLIANCE WITH OSHA'S SUBPART P – EXCAVATIONS STANDARD.**

3.1.1.3 The Contractor and Village shall each be responsible for their own respective agents and employees.

3.1.1.4 The Contractor shall, prior to performing any work, request information from the Village regarding any existing confined spaces owned by the Village that may be entered in the course of the work, and shall obtain all required confined space entry permits prior to entering any confined spaces. Contractor shall follow all current laws and regulations with regard to confined space entry. Contractor shall maintain and, upon request, provide full documentation of compliance with the appropriate confined space permits for each separate confined space entered on the project.

3.1.2 **BACKING PRECAUTIONS.** Pursuant to Sections 14139(b) and 14171.1 of the Downers Grove Municipal Code, any motor vehicle which has an obstructed view to the rear and is to be operated at any time in reverse gear on the public streets of the Village by the Contractor or any subcontractor shall either be equipped with a reverse signal alarm (backup alarm) audible above and distinguishable from the surrounding noise level, or shall provide an observer to signal that it is safe to back up.

3.1.3 **OVERWEIGHT, OVERWIDTH AND OVERHEIGHT PERMITS.** The Village has and supports an overweight truck enforcement program. Contractors are required to comply with weight requirements and safety requirements as established by Illinois Law or Village Ordinance, for vehicles, vehicle operators and specialty equipment. In some instances, specialty equipment for road repairs or construction projects requires the movement of overweight, overwidth, or overheight loads utilizing a Village roadway. Such movement will require obtaining a permit from the Village Police Department's Traffic Supervisor.

3.1.4 **BARRICADES AND WARNING SIGNS.** The Contractor shall provide the Village with a telephone number of a person or company who is available 24 hours per day, seven days per week, to erect additional barricades or signs. If the Village or its representative deems it necessary for the Public's safety to erect additional barricades or signs during normal working hours, the Contractor will furnish the necessary barricades or signs, and have them in place within 30 minutes. If, after normal working hours, the requested signs are not in place within three hours after the request is made, the Village reserves the right to have the barricades and signs erected. The cost of erecting the barricades and signs shall be deducted by the Village from any payments due the Contractor.

4. PROSECUTION AND PROGRESS

4.1 Section 108 of the SSRBC shall govern the prosecution and progress of the work, with the following additions:

4.1.1 The Contractor shall schedule his work such that all improvements shall be completed **180 days from the notice of award.** The completion date will remain binding throughout the duration of the Contract unless revised in writing by the Village.

4.1.2 The total duration of disturbance for work related to means of public egress through the project site or access to private property (e.g. removal and replacement of curb and gutters, sidewalks, driveway entrances, etc.) must not exceed ten (10) calendar days. The Contractor may use high-early strength concrete, meeting all specifications herein, **at his own expense** to help meet this requirement.

4.1.3 The Contractor shall also make special note of the following work schedule requirements:

8678 Rifgeland Rd

4.1.4 Should the Contractor fail to complete the work on or before the specified completion dates set forth in Sections 4.1.1, 4.1.2, 4.1.3, or within such extended time as may be allowed, the Contractor shall be liable for liquidated damages in accordance with the applicable sections of Article 108.09 of the SSRBC. In addition, the Contractor shall be liable for additional costs incurred by the Village due to the delay for construction engineering services, which shall be deducted from the value of work completed.

4.1.5 Upon substantial completion of the project, the Engineer will deliver to the Contractor a punch list as well as a due date for completion of the punch list. If the Contractor fails to complete the punch list by the stated punch list completion date, the Contractor shall be liable for liquidated damages in accordance with the applicable sections of Article 108.09 of the SSRBC.

4.1.5 Prior to commencing construction, a meeting will be held with the Contractor and the Village. Any questions concerning procedures, general conditions, special provisions, plans or specific items related to the project shall be answered and clarified. No Pre-Construction meeting shall be scheduled until submittals, performance bonds, and certificates of insurance are delivered to, and approved by, the Village.

4.1.6 Weekly progress meetings may be required by the Village. If required, the Contractor shall have a capable person, such as a site superintendent or project manager, attend such meetings and be prepared to report on the prosecution of the Work according to the progress schedule. The Village reserves the right to require adjustments to scheduling of work.

5. MEASUREMENT AND PAYMENT

5.1 Section 109 of the SSRBC shall govern measurement and payment, with the following additions:

5.1.1 Modifies Article 109.07 - Partial payments will be made per Section 36 of Part II of this document (Billing and Payment Procedures.)

5.1.2 The Village will require that partial and final affidavits for all labor, materials and equipment used on the Project and certified payroll records, be submitted with the partial and final payment requests. Such waivers shall indicate that charges for all labor, materials and equipment used on the project have been paid. Partial waivers from suppliers and subcontractors may be submitted after the first payment to the Contractor, and before the subsequent payment to that which they apply. However, partial waivers from the Contractor must accompany the invoice of the payment to which it applies. All final waivers, from all suppliers and subcontractors **MUST** accompany the Contractor's invoice upon submittal for final payment. A sworn statement by the Contractor shall accompany full waivers. Such requirement for full

waivers is solely for the benefit of the Village and shall not be construed to benefit any other person. Partial payment for work done shall in no way imply acceptance of the work to that date.

5.1.3 For each progress payment made to the Contractor prior to acceptance of the Work by the Village, the Village shall have the right to retain ten percent (10%) of the amount due to the Contractor for each such payment. The Village may, in its sole discretion, reduce the amount to be retained at any time.

Typically, upon completion of 50% of the work, as determined by the Engineer, retainage may be reduced to 5%. Upon substantial completion, as determined by the Engineer, retainage may be reduced to 2%. Additionally, the Village has the right to withhold an amount of money equivalent to complete unfinished work and/or work that may need to be redone.

6. SCOPE OF WORK

6.1 In addition to the Special Provisions in the Detailed Specifications Section below, Section 104 of the SSRBC shall govern scope of work, with the following revisions:

6.1.1 Modify Article 104.02 as follows:

104.02 Alterations, Cancellations, Extensions, Deductions, and Extra Work.

The Department reserves the right to make, in writing, at any time during work, changes in quantities, alterations in work, and the performance of extra work to satisfactorily complete the project. Such changes in quantities, alterations, and extra work shall not invalidate the contract nor release the surety, and the Contractor agrees to perform the work as altered.

If the alterations or changes in quantities significantly change the character of the work under the contract, whether or not changed by any such different quantities or alterations, an adjustment, excluding loss of anticipated profits, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the Contractor in such amount as the Engineer may determine to be fair and equitable.

If alterations or changes in quantities do not significantly change the character of the work to be performed under contract, the altered work will be paid for as provided elsewhere in the contract. The term "significant change" shall be construed to apply only when the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction.

All alterations, cancellations, extensions, and deductions shall be authorized in writing by the Engineer before work is started. Such authorizations shall set up the items of work involved and the method of payment for each item. The Contractor shall accept payment for alterations which result in an increase or decrease in the quantities of work to be performed according to the following.

(a) All increases in work of the type which appear in the contract as pay items accompanied by unit prices will, except as provided under paragraph (d) herein, be paid for at the contract unit prices. Decreases in quantities included in the contract will be deducted from the contract at the

unit bid prices. No allowance will be made for delays or anticipated profits.

(b) Major items of work for which the quantities are increased OR DECREASED will be paid for as specified in paragraph (a) above.

(c) Extra work which is not included in the contract as pay items at unit prices and is not included in other items of the contract will be paid for according to Article 109.04.

(d) Extra work for which there is a pay item at unit price in the contract which for any one or more of the following reasons materially increases or decreases the cost of the pay item as bid and which is not included in the prices bid for other items in the contract will be paid for according to Article 109.04. This includes:

(1) Work involving a substantial change of location.

(2) Work which differs in design.

(3) Work requiring a change in the type of construction.

(e) In cases where the Department cancels or alters any portion of the contract items, items which are partially completed will be paid for as specified in Article 109.06.

Claims for extra work which have not been authorized in writing by the Engineer will be rejected.

IV. SPECIAL PROVISIONS

The following Special Provisions shall modify, supersede, or supplement the Standard Specifications referred to in Section III - General Provisions.

Where any section, subsection, paragraph, or subparagraph of the Standard Specifications is *supplemented* by any of the following paragraphs, the provisions of such section, subsection, paragraph, or subparagraph shall remain in effect. The Special Provisions shall govern in addition to the particular Standard Specification so supplemented, and not in lieu thereof.

Where any section, subsection, paragraph, or subparagraph of the Standard Specifications is *amended, voided, or superseded* by any of the following paragraphs, any provision of such section, subsection, paragraph, or subparagraph standing unaffected, shall remain in effect. The Special Provisions shall govern in lieu of any particular provision of the Standard Specification so amended, voided, or superseded, and not in addition to the portion changed.

V. BID and CONTRACT FORM

*****THIS BID WHEN ACCEPTED AND SIGNED BY AN AUTHORIZED SIGNATORY OF THE VILLAGE OF DOWNERS GROVE SHALL BECOME A CONTRACT BINDING UPON BOTH PARTIES.**

Entire Form Must Be Completed If a Submitted Bid Is To Be Considered For Award

BIDDER:

Era-Valdivia Contractors, Inc.	12/5/2025
Company Name	Date
11909 South Avenue O, Chicago	gbairaktaris@eravaldivia.com
Street Address of Company	E-mail Address
Chicago, IL 60617	Greg Bairaktaris - EVC
City, State, Zip	Contact Name (Print)
773-7212-9350	Greg Bairaktaris - EVC
Business Phone	773-447-6658
	24-Hour Telephone
	
Business Fax	Signature of Officer, Partner or Sole Proprietor
	Jose G. Valdivia, President
	Print Name & Title

ATTEST: if a Corporation


Signature of Corporation Secretary

We hereby agree to furnish the Village of Downers Grove all necessary materials, equipment, labor, etc. to complete the project within the timeframe specified herein and in accordance with the provisions, instructions and specifications for the unit prices shown on the Schedule of Prices.

VILLAGE OF DOWNERS GROVE: ATTEST:

Authorized Signature

Village Clerk

Title

Date

Date

In compliance with the specifications, the above-signed offers and agrees, if this Bid is accepted within 90 calendar days from the date of opening, to furnish any or all of the services upon which prices are quoted, at the price set opposite each item, delivered at the designated point within the time specified above.

With regard to Era-Valdivia Contractors, Inc., Bidder Summit Water Tower Rehabilitation
(Name of Project) (Name of Bidder)
hereby certifies the following:

1. Bidder is not barred from bidding this Contract as a result of violations of Section 720 ILCS 5/33E-3 (Bid Rigging) or 720 ILCS 5/33E-4 (Bid-Rotating);
2. Bidder certifies that it has a written sexual harassment policy in place and full compliance with 775 ILCS 5/2-105(A)(4);
3. Bidder certifies that not less than the prevailing rate of wages as determined by the Village of Downers Grove, DuPage County or the Illinois Department of Labor shall be paid to all laborers, workers and mechanics performing work for the Village of Downers Grove. All bonds shall include a provision as will guarantee the faithful performance of such prevailing wage clause. Bidder agrees to comply with the Illinois Prevailing Wage Act, 820 ILCS 130/1 et seq., for all work completed. Bidder agrees to pay the prevailing wage and require that all of its subcontractors pay prevailing wage to any laborers, workers or mechanics who perform work pursuant to this Contract or related subcontract. Bidder and each subcontractor shall keep or cause to be kept an accurate record of each worker's name, address, telephone number when available, the last four digits of the worker's social security number, gender, race, ethnicity, veteran's status, skill level, classification, hourly wage paid (including itemized hourly cash and fringe benefits paid in each pay period), number of hours worked each day, the starting and ending times of work each day, the worker's hourly wage rate, the worker's hourly overtime wage rate, the worker's hourly fringe benefit rates, the name and address of each fringe benefit fund, the plan sponsor of each fringe benefit, if applicable, and the plan administrator of each fringe benefit, if applicable. This record shall be sent to the Illinois Department of Labor no later than the fifteenth (15th) day of each calendar month for the immediately preceding month in which construction on a public works project has occurred. Contractor shall then provide an IDOL certification and case number to the Village. The records must be preserved for five (5) years following completion of the contract. Bidder certifies that Bidder and any subcontractors working on the project are aware that filing false payroll records is a Class A misdemeanor and that the monetary penalties for violations are to be paid pursuant to law by the Bidder, contractor and subcontractor. The Village shall not be liable for any underpayments. If applicable: Since this is a contract for a fixed public works project, as defined in 820 ILCS 130/2, Contractor agrees to post at the job site in an easily accessible place, the prevailing wages for each craft or type of worker or mechanic needed to execute the contract or work to be performed;
4. Bidder certifies that it is in full compliance with the Federal Highway Administrative Rules on Controlled Substances and Alcohol Use and Testing, 49 C.F.R. Parts 40 and 382 and that all employee drivers are currently participating in a drug and alcohol testing program pursuant to the Rules;
5. Bidder further certifies that it is not delinquent in the payment of any tax administered by the Department of Revenue, or that Bidder is contesting its liability for the tax delinquency or the amount of a tax delinquency in accordance with the procedures established by the appropriate Revenue Act. Bidder further certifies that if it owes any tax payment(s) to the Department of Revenue, Bidder has entered into an agreement with the Department of Revenue for the payment of all such taxes that are due, and Bidder is in compliance with the agreement.

BY: J. G. Valdivia, Jose G. Valdivia, President
Bidder's Authorized Agent Signature

3 6 - 3 5 2 6 3 7 6

FEDERAL TAXPAYER IDENTIFICATION NUMBER

or _____
Social Security Number

Subscribed and sworn to before me

this 5th day of December, 2025

Lucia Munoz
Notary Public



(Fill Out Applicable Paragraph Below)

(a) Corporation

The Bidder is a corporation organized and existing under the laws of the State of Illinois, which operates under the Legal name of Era-Valdivia Contractors, Inc. and the full names of its Officers are as follows:

President: Jose G. Valdivia, President

Secretary: Saul Valdivia - Corp. Secretary

Treasurer: _____

and it does have a corporate seal. (In the event that this bid is executed by other than the President, attach hereto a certified copy of that section of Corporate ByLaws or other authorization by the Corporation which permits the person to execute the offer for the corporation.)

(b) Limited Liability Company (LLC)

The Bidder is a LLC organized and existing under the laws of the State of _____, which operates under the legal name of _____, and the full names of its managers or members are as follows:

Manager or Member: _____

Manager or Member: _____

Manager or Member: _____

Manager or Member: _____

BIDDER'S CERTIFICATION (page 3 of 3)

(c) Partnership

The partnership does business under the legal name of: _____,
which name is registered with the office of _____ in the State of
_____.

Names and Addresses of All Partners:

(d) Sole Proprietor

The Bidder is a Sole Proprietor whose full name is: _____;
and if operating under a trade name, said trade name is: _____,
which name is registered with the office of _____ in the State of
_____.

6. Are you willing to comply with the Village's insurance requirements within 10 days of the award of the contract? YES NO (circle one)

INSURER'S NAME: Era-Valdivia Contractors, Inc.

AGENT: Marsh & McLennan Agency, LLC

Street Address: 20 North Martingale Rd

City, State, Zip Code: Schaumburg, IL 60617

Telephone Number: 847-247-3092

I/We hereby affirm that the above certifications are true and accurate and that I/we have read and understand them.

Print Name of Company: Era-Valdivia Contractors, Inc.

Print Name and Title of Authorizing Signature: Jose G. Valdivia, President

Signature: *J. G. Valdivia*

Date: 12/5/2025

MUNICIPAL REFERENCE LIST

Municipality: Village of Downers Grove
 Address: _____
 Contact Name: Gerald Hennely - CBBE Phone #: 847-980-3691
 Name of Project: 2.0 MGL Elevated Legged Water Tower Rehabilitation
 Contract Value: \$2,622,540.00 Date of Completion: 2023

Municipality: City of Milwaukee dept. of PW - Water Utilities
 Address: _____
 Contact Name: Anthony Aquila - Project City Engineer Phone #: 414-336-9484
 Name of Project: 2.0 MGL Elevated Legged Tank - HT-22 (Hawley Tank) Rehabilitation
 Contract Value: \$2,700,277.00 Date of Completion: 9/2025

Municipality: City of Chicago - Metropolitan Water Reclamation District
 Address: _____
 Contact Name: John Harty - MWRD - Mechanical Engineer Phone #: 847-924-8610
 Name of Project: MWRD - Group E and F Water Tanks Rehabilitation
 Contract Value: \$1,878,000.00 Date of Completion: 7/2024

Municipality: Village of Glen Ellyn - Water Dept
 Address: _____
 Contact Name: Todd Schafer - Dixon Engineering Phone #: 630-376-8322
 Name of Project: Glen Ellyn 1.0 MGL GRD Reservoir Rehabilitation
 Contract Value: \$289,684.00 Date of Completion: 6/2024

Municipality: City of Park Ridge
 Address: 505 Butler Place, Park Ridge, IL 60068
 Contact Name: Gerald Hennely - CBBE Phone #: 847-980-3691
 Name of Project: 1.0 MGL Elevated Water Tank Rehabilitation (Dempster Ave. Tower)
 Contract Value: \$1,388,722.75 Date of Completion: 8/2025

SUBCONTRACTORS LIST

The Bidder hereby states the following items of work will not be performed by its organization.
(List items to be subcontracted as well as the names, addresses and phone numbers of the subcontractors.)

1) Concentric Intergration Type of Work Scada Modifications
Addr: 8678 Ridgefield City Crystal Lake State IL Zip 60012

2) Rays Welding/Zelmer-Electrical/Steel Repairs Type of Work Steel/Electrical Repairs
Addr: 1252 Paw Paw Avenue City Benton Harbor State MI Zip 49022

3) Azuria Type of Work Cathodics
Addr: 820 Lafayette Rd City Medina State OH Zip 44256

4) _____ Type of Work _____
Addr: _____ City _____ State _____ Zip _____

5) _____ Type of Work _____
Addr: _____ City _____ State _____ Zip _____

6) _____ Type of Work _____
Addr: _____ City _____ State _____ Zip _____

7) _____ Type of Work _____
Addr: _____ City _____ State _____ Zip _____

8) _____ Type of Work _____
Addr: _____ City _____ State _____ Zip _____



CERTIFICATION OF QUALIFICATIONS

Project Team

Project Manager: Gregory D. Bairaktaris - EVC Senior PM

Superintendent: Mike Agafeiti/Carlos Gonzalez

Team Member: Jesus Alvarez- EVC Safety Coordinator

Team Member: DC-30 and DC 14 Union Painters

Team Member: _____

Team Member: _____

Team Member: _____

Team Member: _____

By checking this box, the bidder hereby certifies that it complies with all requirements of SP-3 and has successfully performed under at least three (3) contracts of similar nature and scope within the last five (5) years, and can provide detailed supporting information upon request.

Signed by: J. G. Valdivia (Corporate Seal)

Title: President

Name & Address: Jose G. Valdivia, President

of Contractor Era-Valdivia Contractors, Inc.

or Vendor _____

Subscribed and sworn to before
me this 5th day of December, 2025

Lucia Munoz
Notary Public Lucia Munoz - Exp. Date: 2-27-26





The law requires that we maintain accurate taxpayer identification numbers for all individuals and partnerships to whom we make payments, because we are required to report to the I.R.S all payments of \$600 or more annually. We also follow the I.R.S. recommendation that this information be maintained for all payees including corporations.

Please complete the following substitute W-9 letter to assist us in meeting our I.R.S. reporting requirements. The information below will be used to determine whether we are required to send you a Form 1099. Please respond as soon as possible, as failure to do so will delay our payments.

BUSINESS (PLEASE PRINT OR TYPE):

NAME: Era-Valdivia Contractors, Inc.
 ADDRESS: 11909 South Avenue O
 CITY: Chicago
 STATE: Illinois
 ZIP: 60617
 PHONE: 773-721-9350 FAX: 773-721-8027

TAX ID #(TIN): 36-3526376
 (If you are supplying a social security number, please give your full name)

REMIT TO ADDRESS (IF DIFFERENT FROM ABOVE):

NAME: Same
 ADDRESS: _____
 CITY: _____
 STATE: _____ ZIP: _____

TYPE OF ENTITY (CIRCLE ONE):

- Individual
- Sole Proprietor
- Partnership
- Charitable/Nonprofit
- Limited Liability Company – Member-Managed
- Limited Liability Company- Manager-Managed
- Medical Corporation
- Government Agency

SIGNATURE: *E. Valdivia* DATE: 12-5-2025

Apprenticeship and Training Certification

Bidder certifies that it is a participant, either as an individual or as part of a group program, in the approved apprenticeship and training programs applicable to each type of work or craft that the bidder will perform with its own forces. The Bidder further certifies for work that will be performed by subcontract that each of its subcontractors submitted for approval either (a) is, at the time of such bid, participating in an approved, applicable apprenticeship and training program; or (b) will, prior to commencement of performance of work pursuant to this Contract, begin participation in an approved apprenticeship and training program applicable to the work of the subcontract. The Village of Downers Grove, at any time before or after award, may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. Applicable apprenticeship and training programs are those that have been approved and registered with the United States Department of Labor. The Bidder shall list in the space below, the official name of the program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the Bidder is a participant and that will be performed with the Bidder's forces. Types of work or craft work that will be subcontracted shall be included and listed as subcontract work. The list shall also indicate any type of work or craft job category that does not have an applicable apprenticeship or training program. **The Bidder is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project is listed below. Return this with the Bid. This Certification will be used to determine the lowest responsible bidder in accordance with the Village Council Policy regarding Purchasing Procedures.**

Painters - DC30 and DC 14 Apprenticeship Certs attached

The requirements of this certification and disclosure are a material part of the Contract, and the Contractor shall require this certification provision to be included in all approved subcontracts. In order to fulfill this requirement, it shall not be necessary that an applicable program sponsor be currently taking or that it will take applications for apprenticeship, training or employment during the performance of the work of this Contract.

<i>Certificate of Compliance</i>	
The bidder hereby certifies that it and its subcontractors participate in an applicable apprenticeship program.	
Signature	<u>✓ <i>Era Valdivia</i></u>
Company Name	<u>Era-Valdivia Contractors, Inc. *See attached DC30</u>
Title	<u>President</u>
Date	<u>12-5-2025</u>

<i>Certificate of Non-Compliance</i>	
The bidder hereby certifies that it or its subcontractors do not participate in an applicable apprenticeship program.	
Signature	_____
Company Name	_____
Title	_____
Date	_____

BUY AMERICA CERTIFICATION

Certification requirement for procurement of steel, iron, or manufactured products when Federal funds (Grant Agreement or Cooperative Agreement) are used.

Instructions:

Bidder to complete the Buy America Certification listed below. Bidder shall certify EITHER COMPLIANCE OR NON-COMPLIANCE (not both). This Certification MUST BE submitted with the Bidder's bid response.

Special Note: Make sure you have signed only one of the above statements – either Compliance OR Non-Compliance (not both).

Certificate of Compliance

The bidder or offeror hereby certifies that it will meet the requirements of 49 U.S.C. 5323(j)(1), as amended, and the applicable regulations in 49 CFR Part 661.

Signature _____

J. Valdivia

Company Name Era-Valdivia Contractors, Inc.

Title President

Date 12-5-2025

Certificate of Non-Compliance

The bidder or offeror hereby certifies that it **cannot comply** with the requirements of 49 U.S.C. 5323(j)(1), as amended, and 49 C.F.R. 661, but it may qualify for an exception pursuant to 49 U.S.C. 5323(j)(2)(A), 5323(j)(2)(B), or 5323(j)(2)(D), and 49 C.F.R. 661.7.

Signature _____

Company Name _____

Title _____

Date _____

AFTER THIS CERTIFICATE HAS BEEN EXECUTED, A BIDDER MAY NOT SEEK A WAIVER.

Note: The U.S./Canadian Free Trade Agreement does not supersede the Buy America requirement.

Suspension or Debarment Certificate

Non-Federal entities are prohibited from contracting with or making sub-awards under covered transactions to parties that are suspended or debarred or whose principals are suspended or debarred. Covered transactions include procurement for goods or services equal to or in excess of \$25,000.00. Contractors receiving individual awards for \$25,000.00 or more and all sub-recipients must certify that the organization and its principals are not suspended or debarred.

By submitting this offer and signing this certificate, the Bidder certifies to the best of its knowledge and belief, that the company and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any federal, state or local governmental entity, department or agency;
2. Have not within a three-year period preceding this Bid been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction, or convicted of or had a civil judgment against them for a violation of Federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
4. Have not within a three-year period preceding this application/proposal/contract had one or more public transactions (Federal, State or local) terminated for cause or default.

If the Bidder is unable to certify to any of the statements in this certification, Bidder shall attach an explanation to this certification.

Company Name: Era-Valdivia Contractors, Inc.

Address: 11909 South Avenue O

City: Chicago, IL Zip Code: 60617

Telephone: (773) 721-9350 Fax Number: (773) 721-8027

E-mail Address: gbairaktaris@eravaldivia.com / josevaldivia.com

Authorized Company Signature: 

Print Signature Name: Jose G. Valdivia Title of Official: President

Date: 12-5-2025

CAMPAIGN DISCLOSURE CERTIFICATE

Any contractor, proposer, bidder or vendor who responds by submitting a bid or proposal to the Village of Downers Grove shall be required to submit with its bid submission, an executed Campaign Disclosure Certificate.

The Campaign Disclosure Certificate is required pursuant to the Village of Downers Grove Council Policy on Ethical Standards and is applicable to those campaign contributions made to any member of the Village Council.

Said Campaign Disclosure Certificate requires any individual or entity bidding to disclose campaign contributions, as defined in Section 9-1.4 of the Election Code (10 ILCS 5/9-1.4), made to current members of the Village Council within the five (5) year period preceding the date of the bid or proposal release.

By signing the bid documents, contractor/proposer/bidder/vendor agrees to refrain from making any campaign contributions as defined in Section 9-1.4 of the Election Code (10 ILCS 5/9-1.4) to any Village Council member and any challengers seeking to serve as a member of the Downers Grove Village Council.

Under penalty of perjury, I declare:

Bidder/vendor has not contributed to any elected Village position within the last five (5) years.

J. G. Valdivia

Signature

Jose G. Valdivia, President

Print Name

Bidder/vendor has contributed a campaign contribution to a current member of the Village Council within the last five (5) years.

N/A

Print the following information:

Name of Contributor: _____
(company or individual)

To whom contribution was made: _____

Year contribution made: _____ Amount: \$ _____

Signature Print Name

BID SUBMITTAL CHECKLIST

Each Bidder's Bid Package must be submitted with all requisite forms properly completed, and all documentation included. The following list is not all-inclusive, but is designed to facilitate a good, competitive bidding environment.

1. Instructions to Bidders read and understood. Any questions must be asked according to the instructions.
2. Cover sheet filled-in
3. Bid Form copies filled-in. All copies must have original signatures and seals on them.
4. Bid Bond or cashier's check enclosed with bid package.
5. Schedule of Prices completed. Check your math!
6. Bidder Certifications signed and sealed.
7. Letter from Surety ensuring issuance of Performance and Labor Bonds.
8. Letter from Insurance Agent or Carrier ensuring issuance of required job coverage.
9. Municipal Reference List completed.
10. Vendor request form W-9 completed.
11. Apprenticeship and Training Certification completed.
12. Affidavit (IDOT Form BC-57, or similar).
13. Bid package properly sealed and labeled before delivery. If sending by mail or messenger, enclose in a second outer envelope or container. Project plan sheets do not have to be included with the bid package.

TECHNICAL SPECIFICATIONS

SECTION 01 01 20PART 1- GENERAL1.01 SCOPEA. Description

This Section describes the General Requirements for the Work to be performed under this Contract. The Contractor shall comply with these General Requirements and shall perform all Work in accordance with the Specifications contained in this Section, as supplemented by Specifications in related Special Provisions, and as shown on the Drawings.

1.02 QUALITY ASSURANCE

Acceptable manufacturers for various materials are specified in respective Sections of these Contract Documents. For convenience of designation in the Contract Documents, certain materials are designated by manufacturer trade name or catalog name and number. Such designation shall be deemed to be followed by the words "or equal" whether such words are shown or not. The Contractor may offer materials which are equal to that so indicated or specified at the time of Bid. The burden of proof as to comparative quality and suitability of alternatives/substitutes shall be upon the Contractor. Specified items are preferred. After acceptance of Bid, no substitutions will be allowed, except as stated in the Bid. Each such request for substitution shall include the name of the specified material for which a substitute is being requested; the name of the proposed substitute material; and a complete description of the proposed substitute including performance and test data and any other information necessary for an evaluation. The decision of the **Owner** regarding the use of the proposed substitution shall be final.

1.03 CONTAINMENT/DISPOSAL REQUIREMENTS

When required by Federal, State or local regulation, the entire **water storage tank** and structure shall be enclosed and surface preparation debris contained. Refer to SSPC-GUIDE 6 I (CON), "Guide for Containing Debris Generated During Paint Removal Operations". Also refer to SSPC-GUIDE 7 I (DIS), "Guide for Disposal of Lead-Contaminated Surface Preparation Debris".
NOTE: All surface preparation debris must be disposed

of in accordance with applicable Federal, State and local regulations. When containment structures/enclosures are used, they shall not exceed the structural capacity of the **water storage tank** nor place excessive stress on any of the **water storage tank** components. Such containment apparatus shall be designed for rapid lowering in the event of an emergency or wind storm. The enclosure shall be lowered at the end of each day's work.

The **Owner** acknowledges that they are the Generator of and are responsible for the proper containment and disposal of all waste resulting from the surface preparation of the tank. As part of this Contract, the Contractor shall arrange and pay for all containment, tests, permits, transportation and disposal of all waste resulting from the surface preparation of the **water storage tank** in strict accordance with **Illinois** EPA regulations. Copies of all documentation required by **Illinois** EPA regulations shall be submitted to the **Owner** for verification prior to the submission of the Contractor's request for Final Payment, including the properly executed Waste Manifest.

The Contractor shall cut and grind flush all exterior containment structure lugs and prepare and paint areas as specified in the exterior painting Section of these Specifications.

Upon removal of the exterior lugs, the Contractor shall also repair any damaged interior coating by methods described in the interior painting Section of these Specifications. Abrasive blasting to bare metal (SSPC-SP10) shall be required in the damaged areas.

1.04

PROTECTION OF PUBLIC AND PRIVATE PROPERTY

During surface preparation and/or painting the Contractor shall be fully responsible for all public and private property such as, but not limited to, vehicles, buildings or other such property, including any nearby water ways, that damage occurs to, or may occur to, as a direct result of the surface preparation and/or painting. The Contractor shall advise nearby businesses of the Work being performed in an effort to relocate any vehicles that could be damaged by the Contractors operations. THE USE OF SILICA SAND BASED ABRASIVE SHALL NOT BE ALLOWED FOR EXTERIOR SURFACE PREPARATION ON THIS PROJECT. The Contractor shall comply with all OSHA and any other Federal or State

safety standards.

1.05 PROPOSED SCHEDULE

The Contractor shall submit a proposed schedule of construction with his/her proposal with a specified completion date.

The Contractor's proposed schedule shall include a starting date for painting the tank, completion date of Work on the tank and the length of time necessary to shut down operation of the tank. The proposed schedule shall also show the number of days to perform interior painting work and the number of days to perform exterior painting work.

The Contractor's proposed schedule shall be used for bid comparison and shall be subject to the revisions or modifications and approval of the **Owner** prior to award of the Contract. Start date shall be as soon as possible (weather permitting) after contract award.

1.06 WATER TOWER DRAINING

The 500,000 gallon legged high tank will be completely drained by the **Owner** prior to beginning the Work of this Contract. The Contractor shall notify the **Owner** at least ten (10) working days prior to initiating any of the specified Work, to allow the **Owner** sufficient time to drain the **water storage tank**.

1.07 DISINFECTION AND FILLING OF THE WATER TOWER

Adequate ventilation that will effectively remove solvent vapors shall be provided for proper drying of paint on interior surfaces when interior surfaces of the **water storage tank** require painting. Following final coat application, the **water storage tank** shall not be disinfected or filled until the coating system is fully cured. Refer to applicable product data sheet(s) for dry time/temperature requirements. Disinfection shall be done in accordance with the current American Water Works Association standard, AWWA C652, or as instructed by the **Owner**. The disinfection process shall be repeated, as required, until water samples taken from the **water storage tank**, submitted to an approved **Illinois** EPA laboratory, show a satisfactory analysis. As a minimum, two water samples on two consecutive days shall be taken. The cost of labor, materials and samples for disinfection shall be considered incidental to the cost of this

Project.

1.08 AMERICAN WATER WORKS ASSOCIATION

All Work shall be implemented in accordance with the American Water Works Association's Standard D102-11.

1.09 NSF CERTIFICATION

All coatings in contact with potable water or applied to the inside wet area of the **water storage tank** shall be listed by NSF International under ANSI/NSF Standard 61, Section 5, Protective (Barrier) Materials, Potable Water Tank Coatings.

1.10 WORK CREW SUPERVISION

The Contractor shall provide qualified supervision of the paint crew at all times while crews are on site and performing the Work of this Contract. The Contractor's supervisor shall be capable of conversing fluently in the English language and shall be authorized by the Contractor to accept and act on requests made by the **Owner's Representative**.

PART 2- PRODUCT

(As specified in Related Work Sections of these Specifications.)

PART 3- EXECUTION

3.01 MONITORING CONSTRUCTION

A. The Contractor shall submit a monitoring plan for review by the **Owner**, which shall outline the schedule, methods, locations, etc., and shall keep a diary of the Contractor's activities. Diary entries shall include, but not be limited to:

1. Date and time.
2. Representatives name(s) visiting the work site.
3. Weather conditions, including (but not limited to): wind speed, wind direction, humidity, dew point, air temperature, and surface temperature. Inclement weather conditions (such as rain or fog) shall also be documented. **Note: Contractor shall provide and maintain on site equipment to monitor weather conditions as required.**
4. Contractor's activities.
5. Work completed since previous visit.

6. Description of observations, deficiencies and conversations with the **Owner's Representative**.
7. Upcoming work.
8. Other items including lost work days and reason for same.
9. Tests conducted (including dry film thickness testing) and the results.

- B. Copies of the diary shall be sent to the **Owner's Representative** at the end of each week.

3.02 GENERAL INSPECTIONS

While performing the Work of this Contract, the Contractor shall visually inspect all areas of the **water storage tank** to be painted for deficiencies such as, but not limited to, loose electrical conduits and wiring, faulty or broken lighting, unrestrained piping, unfastened bolts, wobbly ladder assemblies, etc. The Contractor shall report any such deficiencies discovered without delay to the **Owner**.

3.03 RELATED WORK

Additional execution requirements shall be in accordance with the applicable Related Work Sections of these Specifications.

PART 4- MEASUREMENT AND PAYMENT

Separate measurement or payment will not be made for the Work specified under this Section. All costs for such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Bid Schedule.

END OF SECTION

SECTION 01 11 00PART 1- GENERAL1.01 DESCRIPTION OF WORK

- A. General. The Work to be performed consists of furnishing labor, materials, equipment, and supervision as required by the Contract Documents for the **Rehabilitation of the 500,000 Gallon Legged High Tank** as required and as herein specified, including any and all accessories associated with the installation. The Contractor shall submit a staged construction schedule to Owner. The Work to be performed is generally summarized to include but not be limited to the following.
- B. Work is briefly summarized as follows:
1. Upgrade the general tank security condition to include installation of an electronic monitoring device on the new roof hatch with outputs to SCADA panel.
 2. Install containment curtain with bonnet to encapsulate tower.
 3. Abrasive-blast the entire exterior to a SSPC-SP6 Commercial Blast. All weld seams shall be abrasive-blasted to SSPC-SP10 near White Blast. Prime the exterior with two coats zinc-rich primer and apply a urethane intermediate coat. Follow the intermediate coat with one finish color coat. Logos shall be replaced in kind.
 4. Abrasive blast the entire interior wet coatings system by full abrasive-blast of all areas of the interior wet to SSPC-SP10 Near White. Prime surface-prepared areas with epoxy and apply two additional coats of epoxy, one stripe coat and one finish coat. Sealing along the roof beams and ceiling with caulk.
 5. Install a fail-safe painted aluminum roof vent with HDPE screen in place of the existing mushroom vent to protect against pressure/vacuum damage. This includes installing a flange on the existing vent pipe and providing a gasket between the flanges.
 6. Installation of new painter's rail, access rail, safety grabs, rigging couplings.
 7. Interior wet roof repairs, pit weld repairs and weld seam repairs.

8. Repair existing roof/sidewall ladder.
9. Remove and install new fall prevention device and guard on roof and sidewall ladders.
10. Remove existing interior wet ladder and install new wet interior ladder equipped with fall prevention device.
11. Remove and replace existing wet interior roof access hatch with new 30" hatch with alarm contact and new gasket.
12. Install new lightweight aluminum grating lockable hatch at balcony opening at ladder transition.
13. Tighten loose sway rods.
14. Repair areas of missing or damaged grout between steel baseplate and concrete foundation.
15. Recoat existing concrete foundation and leg footings, expose 4" of footings, and regrade.
16. Install new #4 and #24 screening on overflow pipe.
17. Remove and replace existing fence which is to be removed to install containment curtain with new chain link fence with slats.
18. Upgrade SCADA cabinet to include new outputs for hatch alarm, mixer operating, cathodic protection amperage and operating outputs, and electrical cable and conduit.
19. Install a new cathodic protection system as a corrosion prevention measure and connect current draw output reading to SCADA system.
20. Install a new Gridbee GS-12 mixer to thoroughly mix the entire water tank resulting in steady disinfectant residuals, even temperature profiles and uniform water age and connect control panel power on output signal to SCADA system.
21. Install new conduits and cables to the roof of high tank from the control building panels for hatch alarm, cathodic protection, mixer and SCADA outputs. Install conduits to proposed SCADA RTU cabinet from existing valve vault.

22. Remove and install new steel grating over the existing wet riser.

23. After construction is complete, restore site to preconstruction condition. This Work shall be incidental to the contract.

C. Debris Removal. Included as part of the above Work shall be the removal of Cathodic Protection System and any and all debris resulting from the Work. Such debris shall be legally and properly disposed off site. All fees for such disposal shall be the responsibility of the Contractor.

D. Painting. Paint to match existing. Paint shall be that of nationally recognized manufacturer and suitable for the application. Two coats are required. Owner to select final color of paint.

1.02 LOCATION OF THE WORK

The project work site is located at **1037 Summit Street, Downers Grove, IL.**

1.03 PHYSICAL CONDITIONS

A. General

The sites on which the Work is to be performed has limited access and boundary constraints, all of which the Contractor accepts full responsibility. Any construction easement(s) or staging area(s) required by the Contractor (other than those that may be shown on the Drawings) shall be the responsibility of the Contractor. Any specialized machinery and/or equipment as required due to the limited access/boundary constraints/type of work to be performed shall be the responsibility of the Contractor.

B. Staging Areas

Prior to staging any equipment, materials, and/or appurtenances as may be required to perform the Work, the Contractor shall obtain the permission of the Owner. Any restoration of a damaged area attributed to Contractor staging shall be the Contractor's responsibility. Any special clean up required to restore disturbed areas shall be considered incidental to the Contract.

1.04 ACCESS TO JOB SITE

Access to the project site is possible via **existing roadways.**

The Contractor shall comply with the conditions and regulations of controlling agencies of public roads, access, rights-of-way restrictions, and other limitations affecting transportation and ingress and egress at the job site.

1.05 PROJECT BOUNDARIES AND CONTRACTORS USE OF PREMISES

The area of the project is indicated by the Drawings. Subject to restrictions placed upon the Contractor by the Owner, the Contractor may locate his/her facilities within the area as will best suit his/her operations; except that at no time shall the Contractor locate his/her facilities, equipment, or materials in a manner to obstruct access or in any way interfere with the normal operation of the surrounding community and/or the existing facilities.

1.06 ADDRESSING CORRESPONDENCE

All mail pertinent to the Work shall be sent by special delivery unless delivery by regular mail can be accomplished within three days. Receipt of such mail will be promptly acknowledged when acknowledgment is requested. If acknowledgment is requested and is not received in reasonable time, duplicate copies shall be forwarded.

On all correspondence the name and official position of the signer shall be typewritten or printed immediately below the handwritten signature.

All correspondence relating to contractual matters, including prices, delivery and changes in Scope of Work, shall be directed to the Owner with two copies to the Engineer.

The address of the **Owner** is:

**Village of Downers Grove
850 Curtiss Street
Downers Grove, IL 60515**

Attention: **David Moody
Public Works Director**

PART 4- MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

Measurement will be made for the Work as indicated in the Bidding Schedule and/or as indicated herein.

4.02 PAYMENT

Payment for the Work will be made at the prices for each of the listed categories in the Bidding Schedule.

These prices shall be full compensation for furnishing all materials, equipment and labor, and for performing the Work including installation and testing and providing the required bond(s) and insurance(s) and all incidentals necessary to complete the Work, whether specified or not.

Payment will not be made for any other Items except as listed. All other costs associated with such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain.

END OF SECTION

SECTION 01 12 00PART 1- GENERAL1.01 SCOPE

This Section establishes certain minimum requirements of Contractor's responsibilities for which the Contractor shall be fully liable for during the life of the Project and for the Work of this Contract. Specific details related to the Contractor's specific responsibilities shall be in accordance with applicable requirements of other Sections of these Specifications and/or as shown on the Drawings.

1.02 RESPONSIBILITY OF CONTRACTORA. General

The Contractor shall perform all Work of this Contract as shown on the Drawings and as specified in a neat and orderly manner, consistent with the Work Schedule. The Contractor shall be responsible for coordinating all phases of his/her Work with the work of others so as not to interfere with that work being performed by others. The Contractor shall be responsible for notification(s) prior to commencement of Work and/or during construction activities. The Contractor shall be responsible for providing at the Project Site a qualified construction supervisor or Superintendent.

B. Work Schedule

Within ten (10) days after receiving the Notice to Proceed, the Contractor shall submit all items, and information required by Sections 01 31 00 and 01 33 00 including but not limited to a Work Schedule showing the progress to be made on the major portions of the Work; such Work Schedule to be designated to complete the entire Work within the Contract Time stipulated for completion. The Work Schedule shall be subject to the review of the Owner's Representative. If, at any time during the progress of Work, the Owner's Representative is of the opinion that the Contractor is not adhering to such Schedule, the Owner's Representative may request the Contractor to increase his/her force to comply with the Work Schedule. Failure of the Owner's Representative to request this shall not release the Contractor from his/her obligation to complete the Work of this Contract within the specified Contract Time.

C. Supervision and Direction

The Contractor shall supervise and direct the Work. The Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. The Contractor shall employ and maintain on the Project a qualified construction supervisor or superintendent who shall have been designated in writing by the Contractor as the Contractor's representative at the site. The supervisor or superintendent shall have full authority to act on behalf of the Contractor. All communications given to the supervisor or superintendent shall be as binding as if given to the Contractor. The supervisor or superintendent shall be present on the site at all times as required to perform adequate supervision and coordination of the Work.

D. Safety

The Contractor shall be solely responsible for the safety of persons, property or the Work at or adjacent to the construction site. All decisions relating to safe construction operations, the use and proper application of equipment and materials, and the protection of the general public from construction operations shall be the responsibility of the Contractor. The Contractor shall identify a qualified supervisor or superintendent in writing who shall have the authority to act on behalf of the Contractor relative to Project safety issues. The supervisor or superintendent shall be present on the site at all times as required to maintain safe Project operations.

In the event that the designated construction or safety supervisor or superintendent is absent from the site, the Contractor shall designate a substitute supervisor or superintendent to act in responsible charge of the Work. Any changes in the designated construction supervisor or safety supervisor or superintendent shall be documented by written statement to the Owner and the Owner's Representative at the time of the change.

E. Repair of Damaged Items

The Contractor shall be entirely responsible for damages to water lines, electric conduits and lines, existing structures, drains, sidewalks, curbs, streets, roads, fences, trees, culverts, and other structures of any kind and shall be liable for damages to public and private property. Repair of same shall be Contractor's responsibility and at Contractor's own expense, except

where such items are to be removed and replaced as shown on the Drawings, or as specified by the Contract Documents, and/or as otherwise directed by the Owner's Representative during the course of Work, in which case said replacement unit(s) will be paid for at the Contract unit price, as bid.

F. Compliance

It shall be the responsibility of the Contractor to familiarize himself/herself and comply with all applicable laws, ordinances, rules, regulations and lawful orders of all public authorities bearing on the safety of persons or property or their protection from damage, injury or loss. Further, the Contractor shall comply with all requirements of these Contract Documents, including but not limited to referenced specifications and/or standards as well as the contents of the Occupational Safety and Health Act (OSHA), all codes and ordinances adopted by and in effect by Federal, State, County, Township, and **Village** Governmental Bodies, and any other governmental agencies at any level having authoritative jurisdiction over the area of improvement and the type of Work to be performed.

G. Existing Utilities

Existing utilities are shown on the Drawing according to information obtained from utility companies and surveys. Neither the Owner nor the Engineer will guarantee the accuracy or completeness of this information. The Contractor shall be responsible to make his/her own investigation to determine the existence, nature, and location of all utility lines and appurtenances within the limits of the improvement.

The Contractor shall take due care in all phases of construction to protect any utility which may be affected by the Work of this Contract. Any damages to existing utilities shall be repaired immediately by the Contractor and at the Contractor's own expense.

The Contractor shall be required to cooperate with all utility companies involved in connection with the removal, temporary relocation, reconstruction, or abandonment by these agencies of any and all services or facilities owned or operated by them within the limits of this improvement.

Before performing any Work which may potentially damage, disturb or leave unsupported or unprotected any utility lines or appurtenances encountered, the Contractor shall notify the respective utility or Owner thereof, who will

make the necessary arrangements for relocating, adjusting, or otherwise maintaining or abandoning service lines that fall within the limits of the proposed construction. After such arrangements have been made, the Contractor shall proceed with the Work as directed by the utility involved and the Owner's Representative. When applicable, all utility lines and appurtenances which are to be abandoned shall be removed and disposed of by the Contractor, without damaging existing utilities, and with the approval of the respective utility agency involved.

No extra compensation will be allowed the Contractor for any expense incurred by complying with these requirements, or because of delays, inconvenience, or interruptions in his/her Work resulting from the failure of any utility company to remove, relocate, reconstruct or abandon their services. The responsibility for the prompt and timely removal, relocation, reconstruction or abandonment of the Contractor's own Work with that of the involved utility agencies and/or the Contractor's responsibility to coordinate with any involved utility agency so as to perform the Work of this Contract without delay because of necessary changes in the existing utilities, public or private, shall rest upon the Contractor.

H. Assignment of Contract

The Contractor shall be fully responsible for assignments of the Contract, when assignments are made by the Contractor. Furthermore, no part of the Work herein specified shall be assigned (by the Contractor) without the written consent of the Owner, and in no case shall such consent relieve the Contractor or his/her surety from the obligations herein entered into by the same or change the terms of the Contract Agreement.

I. Discrepancies

The Contractor shall not take advantage of any apparent discrepancies on or between the Drawings and/or Specifications. In the event the Contractor discovers any apparent discrepancy, the Contractor shall be responsible for immediately notifying the Owner's Representative in writing for an interpretation and/or decision; and such decision by the Owner's Representative shall be final. Should the Contractor, having knowledge of any such apparent discrepancy, proceed with the Work, such Work and/or related expenses shall be at the Contractor's own risk and cost.

PART 2- PRODUCTS

Not applicable to this Section.

PART 3- EXECUTION

Not applicable to this Section.

PART 4- MEASUREMENT AND PAYMENT

Separate measurement or payment will not be made for the Work specified in this Section. All costs of such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Schedule of Prices.

END OF SECTION

SECTION 01 31 00PART 1- GENERAL1.01 PRECONSTRUCTION CONFERENCEA. General

Within 10 days after issuance of the Notice to Proceed, a preconstruction conference will be held at the location, date, and time to be designated by the Owner.

B. Agenda

The matters to be discussed will include:

1. Construction schedule and progress reports to be submitted by the Contractor as described in Section 01 35 16. Set final completion date for the Work of this Contract in accordance with the Notice to Proceed and identify when restoration will be performed.
2. Details of construction sequence, including the bar chart submitted with the Bid, lead times of equipment procurement, as well as the date by which the Contractor must place his/her material or equipment order to complete the Work within the construction schedule time limitations set in Section 00 41 43 Paragraph 5.
3. Communication and general correspondence procedures between the involved parties. The Owner will designate his/her representative and/or Engineer at the time of this meeting.
4. The names and titles of all persons authorized by the Contractor to represent and execute documents for the Contractor.
5. The names, addresses, and telephone numbers of all those authorized by the Contractor to act for him/her in emergencies. Contractor to provide phone/fax/pager number of those individuals who will be available and responsible for the Work on a 24 hour per day basis, 7 days per week. (Contractor to submit certification as required by Section 00 62 00.)
6. Access and rights-of-way furnished by the Owner.
7. Forms and procedures for Contractor's Submittals as described in Section 01 33 00.

8. Construction equipment and methods proposed by the Contractor. The Contractor shall submit a list of equipment to be used in the Work. **The monitoring plan (as specified by Section 01 33 00) shall also be discussed.**
9. Administrative and general matters as needed, including working hours per Section 00 21 13.
10. Traffic control on existing access roads and parking areas for public and Contractor.
11. (Reserved.)
12. Site and construction/erection equipment layout. Location of Contractor's field office and/or staging plan.
13. Subcontractors.
14. Payment estimates and submittals for payment.
15. Progress meetings during the course of the Work.

1.02 WEEKLY CONSTRUCTION MEETINGS

Construction meetings shall be held at once every week or more frequently as needed or called by the Contractor or the Owner. All matters bearing on the progress and performance of the Work since the preceding progress meetings shall be discussed and resolved, including, without limitation, any previously unresolved matters, deficiencies in the Work or the methods being employed for the Work, and problems, difficulties, or delays which may be encountered, in order that the Work may be constructed on schedule and within cost.

PART 2- PRODUCT

Minutes of construction meetings shall be prepared by the Contractor subject to the review of the Owner or Owners Representative having participated in the meeting.

PART 3- EXECUTION

Minutes of construction meetings shall be submitted to the Owner or Owners Representative no later than 72 hours following the meeting.

PART 4- MEASUREMENT AND PAYMENT

Separate measurement or payment will not be made for the Work specified in this Section. All cost of such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Schedule of Prices.

END OF SECTION

SECTION 01 32 00PART 1- GENERAL1.01 CONSTRUCTION SCHEDULE

Within 10 days after issuance of the Notice to Proceed, the Contractor shall submit for review by the Owner a construction schedule. The construction schedule shall clearly identify the construction sequencing. The schedule shall be prepared by personnel experienced in construction scheduling. Every week thereafter during the course of the Work, the Contractor shall revise the construction schedule and shall resubmit it to the Owner for review. Revised schedules shall be submitted for discussion at the weekly project meetings.

The construction schedule shall clearly show each unit of Work to be performed under this Contract, and all items in the overall sequencing of the Work, including, but not limited to, tank draining, tank prepping and painting, repair work, equipment installations, and delivery of fabricated items, painting, testing, filling, final check-outs, start-up and placing into operation.

The schedule shall be prepared and maintained on a reproducible medium sufficient in size to show required data clearly for the entire duration of the Contract, and sufficient to permit reproduction for required distribution.

The construction schedule shall be arranged with notations to show how the sequence of Work is affected by Work by other contractors, work by Owner, site restrictions, purchase of materials, seasonal weather variations, and any other items deemed appropriate.

1.02 COORDINATION OF CONTRACTS

The Contractor shall be responsible for the coordination of the Contract.

The Contractor shall cooperate with other contractors and shall not hinder, delay or prevent other contractors from performing work.

1.03 REQUIRED COMPLETION DATES

All Work of this Contract shall be completed **180 consecutive calendar days** from the date of a written notice

from the Owner to proceed **or from a date mutually agreed upon between Owner and Contractor.** The herein specified completion date is intended to include painting Work and depending upon the time of year this Contract is awarded, the Contractor shall commit to either comply with the specified completion date including painting or shall provide an alternative schedule acceptable to the Owner indicating when the painting Work will be completed. For additional details refer to Section 00 52 43, Article IV.

1.04 LIQUIDATED DAMAGES

In case of failure on the part of the Contractor to meet the Contract Completion Date, or any extensions thereof, as bid under the Bid Form (Section 00 41 43), the Contractor shall pay to the Owner as fixed, agreed, and liquidated damages the sum of **\$250.00 for each calendar day** that completion is delayed. However, the total amount of liquidated damages to be assessed by the Owner in case of such delays, shall not exceed 10 percent of the original contract price.

In the event that it becomes necessary to terminate the Contractor's right to proceed with the Work under the Contract, such termination shall not relieve the Contractor of any responsibility for liquidated damages as set forth herein. If the Owner so terminates the Contractor's right to proceed, any resulting damage will include, subject to the limitation stated above, such liquidated damages as provided for herein until such reasonable time as may be required for completion of the Work by the Owner.

PART 2- PRODUCTS

Not Applicable to this Section.

PART 3- EXECUTION

Not Applicable to this Section.

PART 4- MEASUREMENT AND PAYMENT

Separate measurement or payment will not be made for the Work specified in this Section. All costs of such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Schedule of Prices.

END OF SECTION

SECTION 01 33 00PART 1- GENERAL1.01 SCOPE

- A. This Section establishes minimum requirements and procedures for Equipment Submittals made by the Contractor for materials and equipment provided for under the Work of this Contract. Specific details for additional drawings, data and information to be submitted shall be in accordance with the applicable requirements of other Sections of these Specifications.
- B. Acceptable Manufacturers and Equipment Suppliers for various items of equipment are specified in respective Sections of these Contract Documents. For convenience of designation in the Contract Documents, certain equipment, articles, materials, and processes are designated by manufacturer trade name or catalog name and number. Such designation shall be deemed to be followed by the words "or equal" whether such words are shown or not. The Contractor may offer material or processes which are equal to that so indicated or specified at the time of Bid. The burden of proof as to comparative quality and suitability of alternatives shall be upon the Contractor. Specified items are preferred.

1.02 SUBMITTAL SCHEDULE

The Contractor shall, within 10 days after receiving the Notice to proceed, prepare and submit for review a detailed list of all the submittals which he/she proposes to make to meet the requirements stated herein and those cited in other Sections of the Contract Documents including the dates on which he/she proposes to make such submittals. The list shall include Working Drawings, Field Detail Drawings, Project Record Documents, Quality Control Procedures, and all other items for which a submittal is required. The list shall include identifying references for each item to relate it to the specific item of the Contract Documents.

With each revision or certification of the Construction Schedule, the Contractor shall either revise this schedule of submittals and submit it for review or certify that the previously furnished schedule is still in effect.

After the Submittal Schedule is reviewed by the Owner's Representative, it shall become the basis for the submittal of all items by the Contractor.

1.03 SUBMITTAL REQUIREMENTS

A. General

The Contractor shall furnish for review his/her Submittals as outlined herein and in the Specifications. Submittals shall confirm compliance with the requirements of the Contract Documents. Submittals of equipment drawings shall be made prior to the fabrication of the equipment. The sequence of submission shall be such that information is available for review of each Submittal when it is received. All Submittals furnished formally shall bear an approval stamp or a certification. The stamp or certification shall be signed by an authorized representative of the Contractor. The Contractor's stamp or certification on any Submittals shall constitute a representation to the Owner that the Contractor has either determined and verified all quantities, dimensions, field construction criteria, materials, catalog numbers, and similar data, or that he/she assumes full responsibility for doing so, and that he/she has reviewed and coordinated each Submittal with the requirements of the Contract Documents. Before submitting any drawings for review, the Contractor shall obtain approval of the list of drawings he/she proposes to submit, showing sequence of submittal and submittal dates. All drawings shall be submitted in accordance with the Submittal Schedule as previously specified herein.

- B. All submittals shall be addressed to the Owner or as otherwise directed by the Owner.

C. Outline Drawings

The Contractor shall submit outline drawings of the equipment to be furnished together with estimated weights, operating forces, external forces, anchoring details, and sufficient overall dimensions, to facilitate preparation of final designs of the structures into which the equipment is to be incorporated.

D. Wiring Diagrams

The Contractor shall submit complete schematic and full-line wiring diagrams for all equipment furnished by him/her. The Contractor shall furnish drawings of switch developments for all instrument and control switches and internal connection diagrams for all instruments, relays, regulators, and other devices. One print of each wiring diagram will be returned on which will be marked the wire notations and cable numbers for outgoing circuits where this information is not otherwise available to the

Contractor. The Contractor shall add this information to his/her drawings. Adequate space shall be allowed on the wiring diagrams to accomplish this.

E. Detail Drawings and Erection Drawing

Before proceeding with fabrication or manufacture of the material and equipment designed and furnished by him/her, the Contractor shall submit the designs, design computations when requested, apparatus ratings, detailed specifications, general assembly drawings, sufficient subassembly drawings, details, and control and wiring diagrams to demonstrate fully that all parts will conform to the provisions and intent of the Contract Documents and to the requirements of their installations, operations, and maintenance. These drawings shall substantially conform to the Bid and Contract Drawings and shall show all necessary dimensions; all field joints and subassemblies in which the Contractor proposes to ship the equipment; locations and sizes of auxiliary connections for oil, grease, water and air; and the terminal boxes and wire sizes for electrical circuits. Before proceeding with fabrication or purchase, the Contractor shall submit shop drawings and/or catalog cuts as appropriate of items designed but not detailed on the Contract Drawings including, but not limited to structural steel and metal frames, covers, and gratings.

F. Field Detail Drawings

Layout drawings for any and all embedded components of the equipment such as but not limited to, piping, conduit, anchor bolts/plates, thimbles, etc. shall be submitted. These drawings shall be based on the Contract Drawings and shall contain sufficient detail for construction in the field.

G. Review of Drawings

1. The Contractor shall make all required submittals in .pdf format. All drawings submitted shall, insofar as practicable, be of one standard size, measuring approximately 24 x 36 inches. The Contractor's drawings shall have a blank area of 4 x 4 inches adjacent to the drawing title block for the review stamp of the Owner's Representative. The Contractor shall verify by inspection of sample reproductions that good legible reproductions can be obtained from the reproducible before submittal.

2. Within two weeks of receipt of shop drawings or manufacturer's data, the Owner's Representative will return one copy of each drawing and/or data sheet marked to indicate the result of the Owner's Representative's review, as follows:
 - a. "REVIEWED" - Revision of drawing or data will not be required.
 - b. "REVIEWED WITH CORRECTIONS" - Contractor shall revise the drawings or data and shall submit four print copies and one reproducible copy for Owner's Representative's records.
 - c. "REVISE AND RESUBMIT" - Contractor shall revise the drawing or data and shall resubmit the revised drawing or data to the Owner's Representative for review.
 - d. "REJECTED" - Drawings are non-conforming and do not meet intent of Specifications.
3. Copies marked "REVIEWED" or "REVIEWED WITH CORRECTIONS" authorize the Contractor to proceed with construction or fabrication covered by those drawings or data sheets with corrections, if any, incorporated.
4. Review will not relieve the Contractor of responsibility for conformity to the Contract Documents and correct detail and fit of parts when installed.
5. If minor revisions are made after a drawing has been returned to the Contractor marked "REVIEWED", the Contractor shall furnish without delay one print copy and one reproducible copy subsequent to each revision. No major revision affecting the design shall be made after a drawing has been marked "REVIEWED" without resubmitting the drawing.
6. When prints of drawings have been marked "REVIEWED WITH CORRECTIONS" or "REVISE AND RESUBMIT" the Contractor shall make the necessary corrections and submit four print copies and one paper-type reproducible. Every revision shall be shown by number, date, and subject in a revision block, and in addition, each revised drawing shall have its latest revision clearly indicated. Submitted drawings which do not illustrate these indications will be considered non-conforming.

7. The applicable parts of the requirements of the above paragraphs with reference to the drawings shall apply equally to design data, catalog cuts, illustrations, printed specifications, draft reports or any other submittals furnished for review.
8. The Contractor shall make any changes in the designs which are necessary to make the equipment conform to the provisions and intent of the Contract Documents, without additional cost to the Owner.
9. Should an error be found in a Contractor's drawing during the erection of structures or installation of equipment, the correction, including any field changes found necessary, shall be noted on the drawing, and it shall be resubmitted for review, and recorded as outlined above.

H. Record Drawings

Prior to completion of the Work under the Contract Documents, the Contractor shall furnish one complete set of full-size permanent reproducible copies of approved quality and type and 3 full size sets of prints of all Contractor's drawings and equipment as finally built, including any field changes.

I. Operating and Maintenance Instructions

1. Two hard copy sets and one .pdf version of detailed operating and maintenance instruction manuals which shall include reduced-size copies of applicable drawings, applicable parts lists and catalogs covering all equipment furnished and which may be needed or useful in operation, maintenance, repairs, dismantling or assembling, and for repair and identification of parts for ordering replacements, shall be furnished as specified.
2. Furnish operation and maintenance manuals for the various types of equipment and systems, as required by the Contract Documents. Unless otherwise indicated, a separate manual shall be furnished for each piece of equipment and/or system. The manual shall include complete information necessary to operate, maintain and repair the equipment and/or system and shall include the following specific requirements:
 - a. Table of contents and index.

- b. Brief description of the equipment/system and principal components.
 - c. Starting and stopping procedures both normal and emergency.
 - d. Installation, maintenance and overhaul instructions which shall include detailed assembly drawings with parts list and numbers, and recommended spare parts list with recommended quantity, manufacturer's price, suppliers address and telephone number.
 - e. Recommended schedule for servicing including technical data sheets that indicate weights and types of oil, grease or other lubricants recommended for use and their application procedures.
 - f. One copy of each component wiring diagram and the system wiring diagram showing wire size and identification.
 - g. One approved copy of each submittal with any changes made during construction properly noted including test certificates, characteristic curves, factory and field test results.
 - h. For electrical systems include dimensioned installation drawings, single line diagrams, control diagrams, wiring and connection diagrams, list of material for contactors, relays and controls, outline drawings showing relays and controls, outline drawings showing relays, meters, controls and indication equipment mounted on the equipment or inside cubicles, control and protective schematics and recommended relay settings.
3. Submittal Requirements: One preliminary copy of the manual in .pdf format shall be submitted no later than the date of shipment of equipment, and installation shall not begin until they are accepted by the Owner's Representative. One approved hard copy and one in .pdf format of complete manual shall be delivered to the Owner's Representative prior to Owner's Representative inspections and tests.

J. Language

All drawings, design data, reports, instructions,

catalogs, illustrations, and printed specifications shall be submitted in English.

K. System of Units of Measurement

All units of measurement used shall be in the U.S. Customary System.

PART 2- PRODUCTS

(Refer to Paragraph 1.03, Submittal Requirements, of this Section.)

PART 3- EXECUTION

(Refer to Paragraph 1.02, Submittal Schedule, of this Section.)

PART 4- MEASUREMENT AND PAYMENT

Separate measurement or payment will not be made for the Work specified in this Section. All costs of such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Schedule of Prices.

END OF SECTION

SECTION 01 60 00PART 1- GENERAL1.01 SCOPEA. Description

This Section covers minimum general requirements related to and including, but not limited to the following:

1. Products.
2. Procurement.
3. Transportation and handling.
4. Storage and protection.
5. Product options.
6. Substitutions.

B. Related Work

1. All Sections of the Contract Documents including Bidding Documents and Drawings.
2. Refer to related Specification Sections for details.

1.02 PRODUCTS

A. Products: Means new material, machinery, components, equipment, fixtures and systems forming the Work. Does not include machinery and equipment used for preparation, fabrication, conveying and erection of the Work. Products may also include existing materials or components required for reuse.

1. As soon as the Contractor receives formal Notice to Proceed, the Contractor shall submit catalog cuts for all paint materials, electrical equipment and long lead time items. Once the catalog cuts are approved, the Contractor shall procure and store these materials so they are readily available for use at the commencement of the physical work of the project. The Contractor will be allowed to submit the material invoices for payment as soon as the materials are procured.

B. Do not use materials and equipment removed from existing facilities or premises, except as specifically permitted by the Contract Documents.

C. Provide interchangeable components of the same manufacturer, for similar components.

1.03 TRANSPORTATION AND HANDLING

- A. Transport and handle products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct and products are undamaged.
- C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement or damage.

1.04 STORAGE AND PROTECTION

- A. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight, climate controlled enclosures.
- B. For exterior storage of fabricated products, place on sloped supports, above ground.
- C. Provide off-site storage and protection when site does not permit on-site storage or protection.
- D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.
- E. Store loose granular materials on solid flat surfaces in a well-drained area. Do not allow mixing with foreign matter.
- F. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- G. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged and are maintained under specified conditions.

1.05 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of manufacturers named and meeting specifications.

1.06 SUBSTITUTIONS

- A. Owner will consider requests for Substitutions only at time of Bid. Where Specifications indicate "No Substitutions

Allowed", the Contractor shall provide the designated manufacturers equipment without exception.

- B. Substitutions may be considered when a product becomes unavailable through no fault of the Contractor.
- C. Document request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- D. A request constitutes a representation that the Contractor:
 - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 - 2. Will provide the same warranty for the Substitution as for the specified product.
 - 3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Owner.
 - 4. Waives claims for additional costs or time extension which may subsequently become apparent.
 - 5. Will reimburse Owner for review or redesign services associated with re-approval by authorities.
- E. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
- F. Substitution Submittal Procedure:
 - 1. Submit three copies of request for Substitution for consideration 10 days prior to bid date. Limit each request to one proposed Substitution.
 - 2. Submit shop drawings, product data and certified test results attesting to the proposed product equivalence.
 - 3. The Owner will notify Contractor, in writing, of decision to accept or reject request.

END OF SECTION

SECTION 01 73 29PART 1- GENERAL1.01 SCOPE

This Section covers cutting and patching where required to perform the Work of these Contract Documents.

1.02 QUALITY ASSURANCE

Cutting and patching shall be performed in accordance with recognized and applicable standards of construction using materials equal to or exceeding those of the parent structure.

1.03 SUBMITTALS

- A. Before doing any cutting as required to complete the Work, submit a written notice to Owners Representative, and the Owner of the specific item involved requesting consent, including:

Description of affected work

Necessity for cutting

Scope of cutting and patching

Trades and products to be used and extent of refinishing

- B. Prior to doing cutting and patching identified in writing by Owner's Representative as additional work, submit a cost estimate.

PART 2- PRODUCT

Materials used for replacement of work removed shall be of the same type, style, size, thickness, etc. of like new materials for the type of work to be performed.

PART 3- EXECUTION3.01 GENERAL

- A. Perform all cutting and patching required to complete the Work.
- B. Cutting and patching shall include the cutting, fitting, or patching necessary to:

1. Accomplish/perform modifications to existing structures as shown on the Drawings.
 2. Remove and replace defective or deteriorated work.
 3. Remove and replace work not conforming to the Contract Documents.
- C. All Work shall be performed by skilled workers licensed to perform the Work of the trade involved and/or as may be required.

3.02 EXECUTION

- A. Protect adjacent portions of the Work and existing facilities from damage due to cutting and patching operations.
- B. Restore work which has been cut or removed. Install new products to provide completed Work meeting all requirements of the Contract Documents.
- C. Refinish entire surfaces as necessary to provide an even and uniform finish.

PART 4- MEASUREMENT AND PAYMENT

Separate measurement or payment will not be made for the Work specified in this Section. All costs of such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Schedule of Prices.

END OF SECTION

SECTION 01 74 00PART 1- GENERAL

This Section covers general maintenance of the Work Site and daily clean-up which the Contractor shall be responsible for the duration of the Project, and includes, but is not limited to storage, stockpiling and/or protection of materials and Work.

PART 2- PRODUCTS

(Not applicable to this Section.)

PART 3- EXECUTION3.00 GENERAL

Contractor shall comply with all applicable requirements specified in Section 00 72 23.

3.01 MAINTENANCE OF WORK SITE

The Contractor shall keep the site of the Work and adjacent premises as free from material, debris and rubbish as is practicable, and shall remove same from any portion of the site, if, in the opinion of the Owner's Representative, such material, debris, or rubbish constitutes a nuisance or is objectionable in any way to the public. The Contractor shall remove all machinery, materials, barricades, staging, false-work, debris and rubbish connected with, or caused by said Work, immediately upon the completion of the same and shall clean all structures and Work constructed under this Contract to the satisfaction of the Owner's Representative and leave the premises in an approved condition insofar as affected by the Work under this Contract.

3.02 DAILY CLEAN-UP

Each day before the Contractor shuts down Work operations for the day, the Contractor shall clean all areas in/around/adjacent to the Work site of all dirt, mud, debris, or other items deposited thereupon resulting from the Work.

3.03 RESPONSIBILITY FOR PROTECTION OF MATERIALS

The Contractor shall be responsible for the safe storage of all equipment and materials furnished by, or to, or accepted by the Contractor, and intended for the Work until

MAINTENANCE OF WORK SITE & DAILY CLEAN-UP

such equipment or material has been incorporated into the completed Project. Such equipment and materials as well as their related appurtenances and accessories shall, unless otherwise directed by the Owner, be unloaded at the "staging site" point of delivery, hauled to, and distributed as necessary to the specific Work site of the Project, by the Contractor. They shall at all times be handled with care to avoid damage.

All construction shall be protected by the Contractor to prevent accidental or pre-meditated damage. All cost associated with the supervision, the repair, or the replacement of damaged areas shall be considered incidental to the Contract.

3.04 STOCKPILING MATERIAL

Materials shall be so stockpiled as not to endanger the Work and so that free access may be had at any time to all parts of the Work, and shall be kept neatly piled so as not to inconvenience public travel, private property owners, or adjoining tenants.

At no time shall material be stored in the street.

END OF SECTION

SECTION 01 77 00PART 1- GENERAL

- 1.01 Upon completion of all Work specified in the Contract Documents, the Contractor shall perform final field inspections and tests to verify that the overall performance as specified have been satisfied. Acceptance tests conducted on the completed Work will be witnessed and subject to the approval of the **Owner**.
- 1.02 When all Work has been completed a thorough inspection will be made by the **Owner** in the company of the Contractor, and if the Work is found to comply with the Specifications, the Work will be formally accepted and the Contractor so notified in writing as to the Final Acceptance of the Work by the **Owner**.
- 1.03 Should any Work be found to be inadequate, faulty, or otherwise not in accordance with these Specifications, it shall be the Contractor's responsibility to correct such Work at the Contractor's own expense, prior to Final Acceptance.
- 1.04 The period of material and workmanship guarantees shall commence immediately after Final Acceptance. Upon being notified of the Final Acceptance, the Contractor shall supply, to the **Owner**, a certificate of guarantee which shall guarantee all materials and workmanship for a period of not less than one year or as otherwise specified in subsequent Sections of these Specifications.

PART 2- PRODUCT CERTIFICATION AND WASTE MANIFEST

- 2.01 The Contractor shall submit to the **Owner** immediately upon completion of all painting, a certification from the paint manufacturer indicating that the quantity of each coating purchased was sufficient to properly coat all surfaces to be painted in accordance with the Specifications and manufacturer's recommendations. This product certification must be submitted and approved by the **Owner** prior to Final Acceptance and Final Payment.
- 2.02 Provide Waste Manifest, certifying proper disposal of the collected waste in accordance with all applicable laws, filled out by the Contractor, shipper and disposal site. This Waste Manifest must be submitted and approved by the **Owner** prior to Final Acceptance and Final Payment.

PART 3- EXECUTION3.01 DRY FILM THICKNESS TESTING

Within **15 days** of completion, the Contractor shall perform dry film thickness testing in the presence of the **Owner's Representative**. Dry film thickness shall be measured in accordance with current SSPC PA2, "Dry Paint Thickness with Magnetic Gauges". Contractor shall submit the results of dry film thickness testing to the **Owner**. Test results must be submitted and approved by the **Owner** prior to Final Acceptance and Final Payment.

PART 4- MEASUREMENT AND PAYMENT

Separate measurement or payment will not be made for the Work specified under this Section. All costs for such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Schedule of Prices.

END OF SECTION

SECTION 05 50 00PART 1- GENERAL1.01 SCOPE

This Section covers miscellaneous metal repairs which may be ordered by the Owner during construction, but only after an approved Change Order has been processed. Supports, anchors and other incidentals, where required, shall be included under this Section of Work.

1.02 QUALITY ASSURANCEA. Acceptable Materials

As specified herein.

B. Applicable Standards

All Work shall conform to the applicable provisions of the codes, standards and Specifications as specified herein and as follows:

<u>Name</u>	<u>Abbreviation</u>
Welded Steel Tank for Water Storage	AWWA D-100
American Society for Testing & Materials	ASTM
Welding	ASME Sect. IX

C. Welding Qualifications

All welders shall be qualified by ASME Section IX requirements for all positions.

D. Field Verification

The Contractor shall verify field conditions and measurements so that the fabricated metals shall fit together properly and be suitable for the field conditions.

1.03 SUBMITTALS

The Contractor shall submit to the Owner's Representative for review drawings, data and information in accordance with the applicable requirements of Section 01 33 00. Submittals shall include but are not limited to drawings showing location, sizes of metal, method of assembly, hardware, fasteners, anchorage, and connection with other work. The drawings shall include a listing of metals used and governing ASTM specifications. Where structural

components are the design of the Contractor, the drawings shall bear the seal of a professional structural engineer registered in the State of Illinois.

PART 2- PRODUCT

2.01 MATERIALS

- A. Structural steel shapes, ASTM A36.
- B. Bent or cold-formed steel plates, ASTM A283, Grade C.
- C. Galvanized carbon steel sheets, ASTM A526, with 1.25 ounces commercial zinc coating, ASTM A525.
- D. Gray iron castings, ASTM A48.
- E. Bolts and nuts (for general use), Type 304 stainless steel, ASTM A320 unless otherwise specified.
- F. High strength bolts shall comply with ASTM A325 with nuts conforming to ASTM A563 and washers complying with ASTM F436.
- G. Anchor bolts and connection bolts for steel assemblies shall comply with ASTM A307.
- H. Anchor bolts and connection bolts for aluminum shall be stainless steel.
- I. Stainless steel, Type 316.
- J. (Not used.)
- K. Welding Electrodes: Filler metal for welding of structural steel shall comply with AWS D1.1, Structural Welding Code. Filler metal for welding of aluminum shall comply with AWS D1.2.
- L. Grout: Grout for bedding and grouting structural steel components shall be of non-shrink type grout.

2.02 COATINGS

Galvanizing shall be performed by the hot-dip process after fabrication in compliance with the following standards:

- A. Iron and steel hardware, ASTM A153.
- B. Rolled, pressed, and forged steel shapes, plates, bars, and strips 1/8 inch thick and heavier, ASTM A123.

- C. Assembled steel products, ASTM A386.

PART 3- EXECUTION

3.01 SHOP INSPECTION

Each item of equipment shall be shop assembled to the extent practical and shall be inspected prior to shipment. Minimum requirements for shop inspection shall be a visual exam and a dimensional check to verify that the equipment has been fabricated correctly.

3.02 FABRICATION

- A. Design and fabricate all metal parts to comply with the intent and requirements of the Drawings. Make field measurements and prepare templates as required to ensure proper fit. Assemblies shall be fitted together in the shop and delivered to the site complete and ready for installation.
- B. Miscellaneous metals shall have holes, connections, and other provisions for accommodating other work. In general, holes for bolts shall be drilled or reamed 1/17-inch larger than the diameter of the bolt. Holes for anchor bolts shall be 1-1/3-times the anchor bolt diameter.
- C. Miscellaneous metal work shall be formed to shape and size, with sharp lines and angles. Items shall be sheared and punched to obtain clean, true lines and surfaces. Permanent connections shall be welded. Screws or bolts shall not be used where avoidable, but if used, heads shall be countersunk, screwed tight, and threads nicked to prevent loosening. Curved work shall be sprung evenly.
- D. Exposed surfaces shall have smooth finish and sharp, well-defined lines and arises. Joints shall be mill machined to a close fit. Necessary rabbets, lugs, and brackets shall be provided so that work can be assembled in a neat and substantial manner. Metal thicknesses, assembly details, and supports shall provide ample strength and stiffness. Joints shall be designed to prevent trapping of moisture.
- E. Fastenings shall be concealed where practical. Metal thickness and details of assembly and supports shall be designed to provide strength and stiffness. Joints exposed to weather shall be formed to exclude water.
- F. Expansion anchor bolts shall be of the types and sizes recommended by the manufacturer for the particular application. When set in concrete or masonry, the minimum

penetration of the expansion anchor bolts shall be six times the diameter of the shank.

- G. Structural joints made using high strength bolts, hardened washers, and nuts tightened to a high bolt tension shall comply with the "Specification for Structural Joints Using ASTM A325 or A490 Bolts".
- H. Welded joints shall comply with AWS D1.1, Structural Welding Code', and AISC "Specification for the Design, Fabrication and Erection of Structural Steel for Buildings". All welds shall be made by operators who have been previously qualified as prescribed by AWS B3.0, Welding Procedure and Performance Qualification. All welds exposed to view shall be dressed smooth.
- I. Anchor holes in concrete or masonry for grouted bolts shall be a minimum of 1-1/2 times the bolt shank diameter. Anchor holes in concrete and masonry for expansion type anchor bolts shall comply with the bolt manufacturer's recommendations.
- J. Castings shall be true to pattern, smooth, straight, sound, and free from warp, holes, and other defects that impair strength or appearance.

3.03 PAINING

- A. Paint all surfaces except those which have a galvanized surface finish according to the requirements of Section 09 91 13. Prepare surfaces and prime in compliance with the manufacturer's recommendation for the specific environment to which the metal components will be subjected.
- B. Where dissimilar metals contact each other, apply alkali-resistant paint to the more active metal. Where steel work contacts aluminum, apply two coats of aluminum paint over shop coat.
- C. Metal components used for miscellaneous metal repairs may be shop or field primed and painted. Contractor shall be responsible for touch-up field painting as required.

PART 4- MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

Measurement will not be made for the Miscellaneous Metal Repair Work specified in this Section; except that measurement will be made as follows:

05 50 00/01, Pit Weld Repairs
05 50 00/02, Weld Seam Repairs
05 50 00/03, Install Rigging and Safety Grabs
05 50 00/04, Remove All Bolted Roof Framing Connections
and Seal Weld Framing Connections and Both
Sides of Stiffeners on Upper Taurus
Including Stiffener Ring

4.02 PAYMENT

- A. Payment for the Miscellaneous Metal Repair Work (which includes Continuous Seal Weld and Interior Pit Repair Work specified in this Section will be made only after an **Owner** approved Change Order has been processed for work ordered during construction.
- B. Payment for Continuous Seal Weld Repair Work specified in this Section will be made at the contract unit price for Continuous Seal Weld Repair, in the Bidding Schedule. This price shall include all labor, tools, materials and equipment for repairs as herein specified.
- C. Payment for Interior Pit Weld Repair Work specified in this Section will be made at the contract unit price for Interior Pit Weld Repair, in the Bidding Schedule. This price shall include all labor, tools, materials and equipment for repairs as herein specified.
- D. These prices shall be full compensation for furnishing all materials; and for all preparation and placing of the materials; and for all labor, equipment, tools and incidentals necessary to complete the miscellaneous metal repairs as required.
- E. Payment will not be made for any other items except as listed above. All other costs associated with such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Schedule of Prices.

END OF SECTION

SECTION 05 52 13PART 1- GENERAL1.01 SCOPEA. Description

This Section covers the rehabilitation and repairs of potable water storage tanks of the elevated or standpipe type and includes furnishing all materials, equipment, tools and labor necessary for the repair and rehabilitation of the elevated and/or standpipe water storage tanks, together with all appurtenant components and associated fittings, and miscellaneous equipment specified in other Sections of these Specifications, including necessary supports and anchors, to be designed, furnished, installed and tested as shown on the Drawings and as specified herein. All fittings, connectors, supports and anchors, where required shall be included under this Section of Work.

B. Related Work

1. Section 09 91 13.
2. Section 26 42 00.
3. Other Sections as herein specified.

1.02 QUALITY ASSURANCEA. Acceptable Manufacturers

Tank: Chicago Bridge & Iron Company or equal.

Other Items: As required.

B. Applicable Standards

All Work including materials and inspection of the elevated tank shall conform to the applicable and current provisions of the codes, standards, and Specifications, as specified herein, and the following:

<u>Name</u>	<u>Abbreviation</u>
Welded Steel Tank for Water Storage	AWWA D100
Structural Concrete for Buildings	ACI 301
Welding	ASME Sect. IX

WATER STORAGE TANK REHABILITATION AND RELATED REPAIRSC. Welding Qualifications/Supervision

All welders shall be qualified by ASME Section IX requirements for all positions. The contractor shall employ the services of a welding supervisor independent of the tank painting foreman's jurisdiction.

1.03 SUBMITTALS

- A. The Contractor shall submit to the Owner's Representative for review product specifications and description, mill certificates, inspection reports, together with instruction manuals, installation procedures, field check-out and testing procedures specified in Section 01300 of all equipment furnished.

1.04 WARRANTY

The herein specified all water storage tank repairs shall be warrantied for a period of 12 months from the date of Final Acceptance of the Work to the extent that the contractor shall be solely responsible for the repair or replacement of defective parts including but not limited to repair of any reported defects during the warranty period which may appear because of faulty workmanship or material furnished under the Specifications. Defects caused by damaging service conditions such as electrolytic, chemical, abrasive or other damaging service conditions are not intended to be covered by this warranty.

PART 2- PRODUCT2.01 GENERAL

- A. The tank and supporting structure are of all-welded steel design. Tank construction is as specified herein.
- B. The tank has a shape as shown on the Drawings.

2.02 PERTINENT DATA AND REQUIREMENTSA. Pertinent Data

1. Time of Completion - **180** calendar days. See **Instructions to Bidders** for additional information and details.
2. Location - As identified in the Bid Form.
3. Nearest Town - Downers Grove, IL.

WATER STORAGE TANK REHABILITATION AND RELATED REPAIRS

4. Railroad Siding - Burlington Northern. None immediately adjacent to or through proposed site development.
5. Compressed Air - Not available at site.
6. Corrosion Allowance - None.
7. Ladder and Safety Devices - Required in accordance with state and federal regulations. A ladder safety device meeting OSHA standards is required. Ladders and safety devices shall extend above landing platform. A minimum of two (2) safety **harnesses** shall be provided.
8. Inspection Report - An inspection report per Paragraph 11.2.1 of AWWA D100 shall be required for the 1 MG Legged Tank.

2.03 DETAILS OF CONSTRUCTION

- A. Details of tank construction (as a minimum) shall be in accordance with AWWA D100. Where contradictions occur, the more stringent shall apply.
- B. Install a fail-safe painted aluminum vent in place of the existing vent to protect against pressure/vacuum damage. This includes installing a flange on the existing vent pipe and providing a gasket between the flanges. The open area of the overflow shall not be considered as venting area. The vent screen shall be a HDPE screen and shall be designed to relieve any pressure or vacuum in the event the screen frosts over or is otherwise clogged. The vent screen shall be easily dismantled to remove the screens for cleaning.
- C. Install new roof handrail and access rail which shall include the installation and erection of a new 1 ¼" nominal O.D., 42" high x 20'-0" diameter roof handrail. The roof handrail to be centered around the roof access hatch at the roof of the tank. The proposed handrail shall be welded in place in accordance with AWWA Standard D100 and the AWWA Manual M42. Surface preparation and painting shall be in accordance with ¶1.01A(2) of this Section. The Contractor shall also modify balcony railing to be 42" high and increase toe rail to 4".
- D. Repair roof/sidewall ladder.
- E. Remove existing interior wet ladder and install a new wet interior ladder equipped with fall prevention device.

WATER STORAGE TANK REHABILITATION AND RELATED REPAIRS

- F. Replace the existing roof hatch with a 30" diameter roof hatch. Along with this work, new gaskets shall be installed on the wet interior roof hatch. All new equipment and new welded in place hinges to be repainted with same proposed coating process. The proposed hatches shall be fabricated from steel plate and specifically designed for the use with the tank.
- G. Install new lightweight aluminum grating lockable hatch at balcony opening at ladder transition and new painted steel grating on fill pipe.
- H. Tighten loose sway rods.
- I. Repair areas of missing or damaged grout between steel baseplate and concrete foundation.
- J. Recoat existing concrete foundation and leg footings, expose 4" of footings, and regrade.
- K. Install new #4 and #24 screening on overflow pipe.
- L. Remove and replace existing fence which is to be removed to install containment curtain with new chain link fence with slats.
- M. Install new SCADA input and output signals and electrical cable and conduit.
- N. Provide new Grid Bee water destratification equipment with power complete in place.
- O. Provide new cathodic protection system with power complete in place.
- P. Install new conduits and cables to the roof of high tank for hatch alarm, cathodic protection, mixer, and SCADA outputs. Install conduits and cables to existing SCADA cabinet from each individual component.

PART 3- EXECUTION3.01 FACTORY TESTING AND INSPECTION

The contractor shall inspect and test components of the tank repairs in accordance with AWWA D100. Certified copies of the shop inspections and test reports shall be furnished to the Owner's Representative.

WATER STORAGE TANK REHABILITATION AND RELATED REPAIRS3.02 INSTALLATION AND TESTING

- A. The equipment shall be installed as shown on the Drawings and in accordance with the manufacturer's instructions and recommended best practices. All necessary shims, grout, anchor bolts, and other items required for installation and testing shall be furnished. All items of equipment shall be operated, adjusted, and tested for proper performance in accordance with the manufacturer's recommended test procedure. Any and all excavation, trenching, concreting, backfilling required for the repair and rehabilitation of the Water Storage Tanks shall be performed by the Contractor at the Contractor's expense.
- B. After the Contractor has completed all repairs, including painting of the interior wet portion of the High Tank, the Contractor will make piping connections to the tank, furnish, pump and dispose of sufficient water for a single test and sterilization. While under test, the tank Contractor shall chlorinate the tank in accordance with AWWA C652 Method 3. **In addition, disinfecting of the elevated tank shall be in accordance with Section 7.0.18 of the Recommended Standards for Water Works (Latest Edition).** Any leaks which are disclosed by this test shall be repaired by gouging out defective areas and rewelding. All costs associated with such repair work including costs for additional water usage (beyond one time fill provided by the Owner) shall be the responsibility of the Contractor. No repair work shall be done on any joint unless the water in the tank is at least two feet below the point being repaired. After repair work has been completed, the tank shall be retested to verify the integrity of the repair. Any paint damaged by repairs shall be properly restored. The tank shall not be placed in service until satisfactory bacteriological tests have been provided. The Contractor shall work in cooperation with all local agencies who will be conducting the bacteriological tests.

3.03 PAINTING

Painting of the tank and its components shall be in accordance with the applicable requirements of Section 09 91 13, Painting.

PART 4- MEASUREMENT AND PAYMENT4.01 MEASUREMENT

Measurement will not be made for the Work specified in this Section.

WATER STORAGE TANK REHABILITATION AND RELATED REPAIRS4.02 PAYMENT

- A. Payment for the Work specified in this Section will be made at the lump sum prices for the below listed Items in the Schedule of Prices:
- | | |
|--------------|---|
| 05 52 13/01, | Install New Painted Aluminum Roof Vent with HDPE Screen |
| 05 52 13/02, | Remove and Replace Bolted Roof Framing Connections and Seal Weld along with Stiffeners and Ring |
| 05 52 13/03, | Remove and Replace Fill Pipe Grating |
| 05 52 13/04, | Repair Roof/Sidewall Ladder with Vertical Sidewall Ladder |
| 05 52 13/05, | Remove and Install New Fall Protection Device on Exterior Ladder |
| 05 52 13/06, | Install New Wet Interior Ladder Equipped with Fall Protection Device |
| 05 52 13/07, | Remove and Replace Wet Interior Roof Access Hatch with New 30" Hatch |
| 05 52 13/08, | Install Lightweight Lockable Hatch at Balcony Opening at Ladder Transition |
| 05 52 13/09, | Install New Gaskets on Wet Interior Roof Hatch, Shell Manway and Wet Riser Manway |
| 05 52 13/10, | Tighten Sway Rods |
| 05 52 13/11, | Caulk Roof Lap Seams |
| 05 52 13/12, | Repair Areas of Missing or Damaged Grout Between Steel Baseplate and Concrete Foundation |
| 05 52 13/13, | Expose 4" of Footings and Regrade |
| 05 52 13/14, | Install New #4 and #24 Screening on Overflow Pipe |
| 05 52 13/15, | Remove and Replace Existing Fence Removed for Construction with New Fencing |
- B. These prices shall be full compensation for furnishing all materials, equipment and labor as well as any and all incidentals necessary to complete the Items of Work.
- C. Payment will not be made for any other items except as listed above. All other costs associated with such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Schedule of Prices.
- D. Payment for other items of equipment specified in other Sections of these Specifications will be made at the prices for those respective Items in the Schedule of Prices.

END OF SECTION

SECTION 09 91 13PART 1- GENERAL1.01 SCOPEA. Description

This Section covers painting materials to be furnished and applied, including preparing surfaces and providing adequate conditions for proper workmanship, as shown on the Drawings and as specified herein.

B. Related Work

1. Sections 01 01 20, 01 11 00, 01 11 13 and 01 60 00.
2. Section 01 77 00.

1.02 QUALITY ASSURANCE

A. Acceptable Materials and Manufacturers shall conform to the herein specified material and construction standards.

B. Applicable Standards

All Work shall conform to the applicable provisions of codes, standards and Specifications, as specified herein as follows:

<u>Name</u>	<u>Abbreviation</u>
National Fire Protection Association	NFPA
Society of Protective Coatings	SSPC
Ten State Standards	--
Painting Steel Water Storage Tanks	AWWA D102

1.03 SUBMITTALS

A. The Contractor shall submit to the Owner's Representative for review product specification of paint materials and descriptions of surface preparation contemplated for the Work to illustrate compliance with applicable requirements of this Section and other Related Work Sections. Submittals shall be in accordance with Section 01 33 00 and as herein specified.

B. Submittals shall include, but not be limited to the following:

1. Project schedule not to exceed **180** consecutive calendar days; and start date not to deviate more than

2 weeks from start date indicated on the preliminary schedule submitted at the time of bid unless otherwise approved by the **Owner**.

2. Surface preparation details including containment methods when and where containments are utilized.
3. Application instructions for each type of coating to be used.
4. Maintenance recommendations for each type of coating used.
5. Color samples for selection and scheduling. (Note: Color to be selected by **Owner** if not specified; refer to Section 01 33 00, Paragraph 2.02 for additional details).
6. MSDS sheets for all products used.
7. Monitoring Plan (refer to Section 01 01 20; Paragraph 3.01), dry film thickness test results and diary of daily painting activities.
8. Product Certification and Waste Manifest in accordance with Section 01 01 20; Paragraph 1.03.

1.04 CONTRACTOR QUALIFICATIONS

A. Bidder shall submit with the bid:

1. A list of ten (minimum) tanks of like size and painting requirements completed by the bidder within the last three years in the State of Illinois.
2. Documentation pertaining to tank painting work performed in the last five years in the State of Illinois.
3. Written acknowledgment of Illinois Compiled Statutes, 1992, ACT 570 Employment Of Illinois Workers On Public Works Act.
4. Written acknowledgement of Illinois Public Act 93-0642, which amends the Illinois Procurement Code.
5. As a prerequisite to award of the contract, the contractor shall provide proof of participation in apprenticeship and training programs approved and registered with the United States Department of

Labor's Bureau of Apprenticeship and Training for all construction contracts in excess of \$25,000.

PART 2- PRODUCT

The following manufacturers are named herein (under Protective Coating Systems) and approved for use. Contractor shall use the product(s) of only one paint product manufacturer. Products listed herein are that of Tnemec Company, Inc. and are specified as a standard of quality and basis of design. The specified basis of design is intended to provide the longest service life possible, lowest life cycle cost and most sustainable solution.

2.01 CONTAINMENT

The Contractor shall provide full containment curtain for entire standpipe and include a bonnet. The Contractor shall provide shop drawings of all proposed components of containment system and rigging drawings for review and approval.

When required by federal, state or local regulation, the entire tank and structure shall be enclosed and surface preparation debris contained. Refer to SSPC-GUIDE 6 (CON), "Guide for Containing Debris Generated During Paint Removal Operations".

Refer to SSPC-GUIDE 7 (DIS). NOTE: All surface preparation debris must be disposed of in accordance with applicable federal, state and local regulations.

The owner is the generator of and is responsible for the proper containment and disposal of all waste resulting from the surface preparation of this tank(s). As part of this contract, the contractor shall arrange and pay for all containment, tests, permits, transportation and disposal of all waste resulting from the surface preparation of this tank(s) in strict accordance with Illinois EPA regulations. Copies of all documentation required by Illinois EPA regulations shall be submitted to the owner for verification prior to the submission of the contractor's request for final payment.

All lead paint wastes generated on the interior dry area of this tank shall be rendered nonhazardous by using the PreTox 2000 coating system.

Paint debris shall be classified as hazardous if after testing for toxic characteristics using the TCLP test

methods, the leachate contains any of the elements in concentrations at or greater than those listed in 40 CFR 261 or applicable state or local regulations. In any circumstance, the most stringent jurisdictional regulations governing the project location shall apply.

Coatings Systems: Coating systems shall include surface preparation and surface profile, required dry or wet film thickness, and the number of coats and application procedures of the coats as specified.

The painting contractor shall cut and grind flush all exterior containment structure lugs and prepare and paint areas as described in the exterior painting section of these specifications.

Upon removal of the exterior lugs, the painting contractor shall also repair any damaged interior coating by methods described in the interior painting section of these specifications. Abrasive blasting to bare metal (SSPC-SP10) will be required in the damaged areas.

PART 3- EXECUTION

3.01 GENERAL

- A. Do not proceed with the application of paint until the following conditions are met: Proper temperature and humidity, dust free spaces, proper surface preparation. Starting Work constitutes acceptance of conditions and substrates and full responsibility for the quality and suitability of the finished Work.
- B. Furnish inspection devices, in good working condition, for the detection of holidays and the measurement of coating film thickness (wet and dry). Inspect surfaces to be painted and conditions of the area before starting Work. Report any defects that render any area or surface unfit to receive paint.
- C. Handle and store materials in accordance with the provisions of the Flammable and Combustible Liquids Code, NFPA 30. All materials shall be handled and stored to avoid fire and explosion.
- D. Provide masks, gloves, and other protective materials or clothing and furnish special ventilation as necessary or recommended by the paint manufacturer.

- E. During surface preparation, contain and dispose of any and all paint chips/flakes in accordance with Federal, State and/or local requirements, or as otherwise specified.

3.02 DELIVERY TO SITE

All materials furnished shall be labeled. Each label shall indicate the manufacturer's name, the brand name, the type of material as specified, the class of flammability or combustibility if applicable, the color, and the mixing and application instructions. Each container shall be stenciled or embossed at the factory with the product number and name as it appears in the manufacturer's catalog. Deliver materials to the site in unbroken, unopened containers, with labels affixed on each container by the manufacturer. Containers delivered to site which are damaged shall be cause for rejection.

3.03 CONDITIONS FOR APPLYING MATERIALS

- A. Materials other than water thinned materials shall be applied only to surfaces that are free of surface moisture as determined by sight or touch.
- B. Materials shall not be applied when the temperature of the surfaces to be covered are below recommended levels, or the surrounding atmosphere is below recommended levels, or when the relative humidity exceeds 85 percent.
- C. Additional conditions to be satisfied prior to application shall be as specified in Section 01 0120.
- D. Prepare all surfaces to receive materials as required herein or as required by the coatings manufacturer. Clean surfaces to remove all foreign matter. Roughen surface as recommended by the coating manufacturer for proper adhesion of coating to the substrate.

3.04 APPLICATION

- A. Mix and apply materials in accordance with the manufacturer's printed instructions. Allow each succeeding coat to dry in accordance with manufacturer's printed instructions.
- B. Apply each coat in accordance with these Specifications and the paint manufacturer's recommendations. The coating shall be applied at the specified thickness. If the specified thickness is not obtained, an additional coat(s) of paint shall be applied at no additional cost to the **Owner**. Dry film thickness shall be measured in accordance

with current SSPC PA2, "Dry Paint Thickness with Magnetic Gauges".

- C. All paint shall be applied in strict accordance with the applicable manufacturer's printed data sheet and container label outlining recommended minimum and maximum surface and air temperatures required for application.
- D. Do not paint code required labels, (Underwriters Laboratories, Inc., Factory Mutual, or the like) or any equipment identification, performance ratings, name, or nomenclature plates. Remove any paint inadvertently or previously applied to such items.
- E. Protect adjacent surroundings against splash or overspray. Remove materials from surfaces not designated to receive such materials.
- F. Finished surfaces shall be uniformly coated with the thickness specified, free of runs, drips, sags, brush marks, holidays, or other defects. Such defects shall be corrected without change in Contract Price.
- G. Remove waste rags and coating debris on a daily basis. Keep storage spaces and work areas neat and clean.

3.05 PROTECTIVE COATING SYSTEMS

- A. General: The application of any coating or primer indicates the acceptance of and responsibility for the condition of the substrate and the primer thereon.
- B. Protect adjacent materials/surroundings/properties/etc. subject to damage by the Work to be performed under this Contract.
- C. Exterior Coating System

1. Surface Preparation

Remove all oil and grease from the surface prior to blast cleaning. All exterior surfaces shall be abrasive blast cleaned to a Commercial Finish, removing all existing paint, rust, dirt, mill scale and foreign matter by the recommended methods outlined in the SSPC Society of Protective Coating's Specification SP-10. A minimum angular blast profile of 1.5 mils is required.

2. Prime Coat

Immediately after blasting and before any rusting occurs (within 12 hours maximum), apply one coat of Tnemec Series 93-H2O Hydro-Zinc MCU or Sherwin Williams Corathane I Galvapak 2k Zinc to all bare steel surfaces. This coating shall be applied at a dry film thickness of 2.0-3.5 mils.

3. Additional Prime Coat

Apply by brush only, one additional spot prime coat to all inaccessible and hard to reach areas, such as the inside of anchor bolt chairs, vent, manways, tie rods, turnbuckles, and accessories, with one coat of Tnemec Series L140 Pota-Pox Plus.

4. Intermediate Coat

Apply one complete coat of Tnemec Series 1095* Endura-Shield or Sherwin Williams Acrolon 218HS Polyurethane at a dry film thickness of 2.0-3.0 mils.

* The color lab of Tnemec Company, Inc. will select this color.

5. Finish Coat

Apply one complete coat of Tnemec Series V700-color HydroFlon or Sherwin Williams Fluorokem HS Gloss at a dry film thickness of 2.0-3.0 mils.

6. Lettering / Logo Painting

Two coats of Tnemec Series V700 HydroFlon or Fluorokem HS Gloss shall be used for the lettering / logo. The Series V700 shall be applied at a dry film thickness of 2.0-3.0 mils per coat.

D. Interior (Wet) Coating System

1. Surface Preparation

The entire surface shall be abrasive blast cleaned to a Near White Finish, removing all existing paint, rust, dirt, mill scale and foreign matter by the recommended methods outlined in the SSPC Society of Protective Coating's Specification SP-10. A minimum angular anchor profile of 1.5 mils is required.

2. Prime Coat

Immediately after blasting and before any rusting occurs (within 12 hours maximum), apply one coat of Tnemec Series 93-H2O Hydro-Zinc MCU or Sherwin Williams Corathane I Galvapak 2K Zinc to all bare steel surfaces. This coating shall be applied at a dry film thickness of 2.5-4.0 mils.

3. Stripe Coat

After the primer has cured in accordance with the manufacturer's recommendations, apply one stripe coat, by brush only, of Tnemec Series L140-1255 Beige Pota-Pox Plus or Macropoxy 5500 LT Epoxy to all weld seams, edges of unseal welded roof plates, angles, and sharp edges.

4. Finish Coat

Apply one complete coat of Tnemec Series 21-WH16 Off-White Epoxoline Plus at a dry film thickness of 14.0 -16.0 mils or Sherwin Williams Sheraplate PW 100% Solids Epoxy at a dry film thickness of 30.0-35.0 mils.

3.06 COMPLETION OF WORK

- A. When Work is complete leave all materials properly coated to conform to the above Specifications. Remove and/or clean-up dry fall, overspray, droppings, or spatter from adjacent materials and properties. Make good damage to other work to the satisfaction of Owner's Representative.
- B. Furnish two copies and all instructions, manufacturers' certificates, and documents to Owner's Representative.

PART 4- MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

Measurement will not be made for the Work specified in this Section.

4.02 PAYMENT

- A. Payment for the Work specified in this Section will be made at the contract lump sum prices for the below listed Items in the Schedule of Prices:

- 09 91/13/01; Exterior Surfaces; all surface preparation, priming and painting, including 2 logos
- 09 91/13/02; Interior Wet Surfaces; all surface preparation, priming and painting
- 09 91 13/03; Proper and Legal Disposal of Paint Chips/Flakes and Other Debris (Resulting from Prep/Paint Work Interior Wet)
- 09 91 13/04; Full Containment As Required

- B. These prices shall be full compensation for furnishing all materials, equipment and labor, as well as any and all incidentals necessary to complete the Items.
- C. Payment will not be made for any other items except as listed above. All other costs associated with such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain.

END OF SECTION

SECTION 11 20 00PART 1- GENERAL1.01 EQUIPMENT OVERVIEW

- A. These specifications provide the requirements to furnish, install and place into operation a potable tank mixer at Summit Street 500,000 Gallon Water Tower.

1.02 REFERENCES

- A. Occupational Safety and Health Administration, OSHA
- B. Department of Transportation, DOT
- C. NSF / ANSI Standard 61
- D. Underwriters Laboratories Inc., UL 508

1.03 QUALITY ASSURANCE

- A. Continuous Operation Equipment. The mixer shall operate continuously, all day and all night, using 120 VAC as the power source.
- B. No Visual Defects. The mixer shall have no visual defects, and shall have high quality welds, assembly, and corrosion resistant finish.
- C. Qualified US Manufacturer. The manufacturer of the mixer shall have extensive experience in the production of such equipment, and the equipment shall be manufactured in the continental United States.
- D. Factory Startup Services. Delivery, installation and startup services shall be available, but not included in the bid. For factory delivery and installation, services shall be performed by full time factory employees experienced in the operation of this equipment and who have completed OSHA safety trainings applicable to this type of installation.
- E. Warranty. The mixer shall be warranted to be free of defects in materials and workmanship for a period of 5 years. This equipment warranty would run directly from the manufacturer of the equipment to the owner. The equipment warranty would not be part of the contract or any required bond.

1.04 SUBMITTALS

- A. The awarded Bidder shall provide [5] copies of the following documents. Upon acceptance of these documents

by the Engineer, the Bidder will be issued a Notice to Proceed, and may then proceed to install the equipment.

1. A qualification statement demonstrating compliance with Section 1.03.
2. Shop drawings for the mixer.
3. Manufacturer's literature, illustrations and specification sheets.

B. Final submittals shall include:

1. A complete installation, operation and maintenance manual.

1.05 FIELD SERVICES

- A. Factory Personnel. The installation and startup shall be performed by full time factory employees trained in the operation of the mixer.
- B. Safety. Installation personnel shall have received job-specific safety training on (a) Working over Water, (b) Boating Safety, (c) Disinfecting Procedures, (d) Confined Space Entry, (e) Fall Protection, and (f) DOT Compliance.

PART 2- PRODUCT SPECIFICATIONS

2.01 MANUFACTURER

- A. Specified Equipment. The mixer shall be manufactured by Medora Corporation, Inc. of Dickinson, ND, or be a pre-approved alternative.
- B. Pre-approved Alternative(s). Alternatives to the specified equipment will be considered on the following basis only.
 1. Ten (10) Days Before Bid. To offer equipment as a pre-approved alternative, written application from the alternative supplier shall be made to the Engineer at least 10 days in advance of the bid opening.
 2. No Material Difference in Quality of Equipment or in Vendor Support. The application should include:
 - a. A brief description of how the offered alternative does or does not meet each of the specifications in this document.

- b. An analysis of how acceptance of the alternative equipment would likely affect the overall water quality goals of the project.
 - c. A statement of the science and support background of the supplier of the alternative equipment, so that the benefits and costs of the alternative equipment to the Owner can be estimated by the Engineer.
3. Five (5) Days' Notice to Bidders. If the alternative equipment is accepted by the Engineer, an informational addendum to these specifications shall be distributed by the Engineer to plan holders at least 5 days in advance of the bid opening.

2.02

PERFORMANCE AND FEATURES

A. Number of Units Required: To meet the project objectives, the following number of machines are required:

Qty	Model	Tank or Reservoir
1	GridBee GS Potable Tank Mixer - GS12	Summit St. 500,000 Gallon Legged High Tank

An unobstructed hatch opening of at least 12 Inch diameter (31cm) round is required for installation of the mixer.

- B. Required Flow Rating: Upon request, the manufacturer shall provide Computational Fluid Dynamics modeling supporting the performance of the mixer, with water of 1.0000 specific gravity and similar volumetric properties to the listed tank or reservoir.
- C. Complete Mix: The manufacturer guarantees that the subject tank will be completely mixed by the mixer. In continuous operation of the mixer:
 - 1. at least once per 24 hours all water temperatures within the tank shall converge to within 0.8 degrees C, and
 - 2. at least once per 72 hours all chlorine concentrations within the tank shall converge to within 0.18 mg/l.
- D. Continuous Operation With 120VAC Power Supply. The mixer shall operate continuously during day and night while connected to electric grid power.
- E. Stainless Steel Construction. The mixer shall be constructed primarily of Type 316 stainless steel metal for strength and superior corrosion resistance.

- F. Motor. The mixer shall be mechanically operated by a submersible motor that meets the following criteria.
1. Direct Drive, with no gearbox and no lubrication maintenance required.
 2. Designed for submersible operation.
 3. Designed for Continuous Operation without overheating or compromising motor life expectancy.
 4. 120 VAC power source shall be supplied by others and not the mixer manufacturer.
 5. Provide power on output signal to existing SCADA panel on site. Contractor shall employ the use of the Village's System Integrator, Concentric, Mr. Randy Olson, Phone # Office (815) 444-3324, Cell # (312) 953-0772.
- G. SCADA and Controls. The mixer shall have the option to add an Electric Control Box including a motor current indicator in a 4-20mA analog output and remote on/off control via 24VDC relay.
1. Electrical Timer Box. The mixer equipment shall be supplied with a Control Box capable of disconnecting 120 VAC outgoing power to the mixer equipment and meeting the following criteria:
 - a. NEMA 4X enclosure shall be provided with protection against condensation and moisture in a marine environment.
 - b. Timer Box shall be UL 508 Listed for sound electrical design and safety.
 - c. Timer Box shall include exterior mounted ON/OFF switch, definite purpose contactor for mixer control, exterior mounted run indicator light, grounding lug, 120 VAC standard three-prong male molded plug, and locking latch for security.
 - d. Timer Box shall include a programmable timer with 16A Resistive, 8A FLA Rated, Single and Double Pole Contact Configuration, 8V A Power Consumption, CR2032(1.5V Lithium) with 3 years Battery Life, 8 On and Off cycles.
 - e. Timer Box requires a 120 VAC power source, Minimum 20 Amp rated service located near the final placement of the Timer Box. Others and not the mixer equipment manufacture shall supply the 120 VAC power source.

- H. Low Elevation Intake: The mixer shall be supplied with an intake capable of being positioned at the lowest elevation of the tank or reservoir floor. The intake level shall bring water into the mixer at horizontal layer within 6 inches (15 cm) of the tank or reservoir floor.
- I. Chlorine Boost Connection: The mixer shall be supplied with a connection point for injection of sodium hypochlorite. The connection point shall be compatible with a ½" (1.3 cm) diameter hose and be rated for contact with 12.5% Sodium Hypochlorite solution.
- J. The complete mixing system shall be NSF / ANSI Standard 61 and NSF Annex G listed for safe contact with potable water.
- K. Maintenance Requirements: The mixer shall operate normally with the following maintenance features.
 - 1. No scheduled lubrication is required of any system components including motor.
 - 2. No spare parts shall be required to be kept on hand.

PART 3- EXECUTION

3.01 CONTRACTOR INSTALLATION

- A. Installation, Startup, and On-Site Water Testing. Shall be provided by others and not the factory equipment manufacturer.

3.01 FACTORY INSTALLATION

For Factory Installation, Startup, and On-Site Water Testing, include the information below:

- A. The mixer manufacturer shall have capability to provide Installation, Startup, and On-Site Water Testing Services to insure (a) proper machine spatial placement in the reservoir, and (b) proper intake depth setting.
- B. The field services shall be performed by full time factory employees experienced in the operation of this equipment, and who have completed safety trainings required for this type of installation in compliance with OSHA regulations including (a) Working over Water, (b) Boating Safety, (c) Disinfecting Procedures, (d) Confined Space Entry, (e) Fall Protection, and (f) DOT Compliance.
- C. Within 30 days following installation, the manufacturer shall provide an installation report detailing as described

SECTION 26 00 10PART 1- GENERAL1.01 SCOPE

- A. This Section describes the general provisions for the Work to be performed under Division 26 - Electrical, of this Contract as well as Division 33 - Utilities, where applicable. The Contractor shall comply with these general provisions and shall perform all Work in accordance with the Specifications contained in this Section, as supplemented by Specification in related Sections, and as shown on the Drawings. Related mechanical work shall be performed in accordance with the applicable provisions of Division 33.
- B. The following specifies the minimum general requirements by which the Contractor shall furnish, fabricate, deliver, erect, install, connect and test electrical materials, equipment and systems specified in the respective Sections of Division 26 and shown on the Drawings, so as to constitute a complete and operating electrical installation.
- C. The Contractor shall provide all necessary coordination between the suppliers of the specified equipment so as to provide a well-designed and satisfactory operating facility to the Owner. The Contractor is advised that these Specifications are not intended to cover every and all details of the Work. In case(s) where details related to the specified Work are not covered by these Specifications, it shall be the responsibility of the Contractor to include and execute such coordination and Work at no additional cost to the Owner.
- D. Items of equipment furnished and installed as a part of the Work under other Sections of the Specifications shall be connected and wired as a part of the Work under this Section.
- E. All operating limits of electrical apparatus whether furnished under this Section or in other Sections of the Specifications shall be adjusted in the field to meet the operating conditions reviewed by the Owner's Representative and as required. This shall include settings of all overcurrent and trip devices, limit switches, timers, and control device adjustments, etc.

1.02 QUALITY ASSURANCE

A. Acceptable Manufacturers and Equipment Supplier

1. As shown on the Drawings and/or as specified hereinafter in subsequent Sections.
2. Acceptable manufacturers for various items of equipment are specified in respective Sections of these Contract Documents. For convenience of designation in the Contract Documents, certain equipment, articles, materials, and processes are designated by manufacturer trade name or catalog name and number. Such designation shall be deemed to be followed by the words "or approved equal" whether such words are shown or not. Contractor may offer material or processes which are equal to that so indicated or specified at the time of Bid. The burden of proof as to comparative quality and suitability of alternatives shall be upon Contractor. Specified items are preferred. After acceptance of Bid, no substitutions will be allowed, except as stated in the Bid. (Exception: Where Specifications indicate "No Substitutions Allowed" Contractor shall provide the designated manufacturers equipment without exception.)

B. Applicable Standards

1. All electrical work furnished and installed under this Section shall be in strict compliance with the ordinances and bylaws of the City, State and/or any other political subdivision thereof governing the installation of the electrical work on this Project. In the absence of other more stringent authority, the electrical work shall conform to the requirements of the National Electrical Code.
2. The Contractor shall conform to the latest safety standards as required by the Occupational Safety and Health Administration (OSHA) in all Work performed. In addition, all equipment and materials shall meet all applicable OSHA requirements.
3. All equipment shall be U.L. rated.

1.03 SUBMITTALS

- A. The Contractor shall comply with the requirements specified in Section 01 33 00 - Equipment Submittals, and as specified herein.

- B. The Contractor shall not install any electrical work for any item of equipment specified under this or other Sections of the Contract until shop drawings of such equipment, reviewed by the Owner's Representative, are made available to him/her. Any such Work installed by the Contractor prior to the Owner's Representative review will be the responsibility of the Contractor and any modification of the electrical work necessary to meet the equipment requirements shall be made without additional compensation.
- C. Before fabrication and assembly of equipment, submit the following:
1. Front and rear elevations showing dimensions and the arrangement for each cubicle.
 2. Plan and section views, including dimensions and mounting details.
 3. Details of bus, connections, terminals, etc., including the complete ground bus arrangement and enclosure ground connections.
 4. Single line diagram of equipment and control schematic diagram.
 5. Wiring Diagrams
 - a. Connection diagrams for the wiring of equipment in each cubicle.
 - b. Interconnection diagrams for the wiring to equipment in other cubicles. Clearly identify the terminal block points for the external wiring to be routed in or out of the cubicles. Provide adequate space on the wiring diagrams for additions (by the Contractor) or cable and wire designations for that external wiring to be routed in or out of the cubicles at the terminal block.
 6. Bill of Material.
 7. Factory test procedures and protocols.
- D. Prior to shipment of the equipment, submit for record and distribution:
1. All drawings as finally reviewed and corrected.

2. Recommended storage instructions.
 3. Installation instructions and operating and maintenance manuals.
 4. Spare parts bulletins.
 5. Factory test reports (certified).
 6. Booklet on maintenance procedures for circuit breakers and other equipment.
 7. Field test procedures and protocols.
- E. After final installation of the equipment the Contractor shall deliver a complete set of reproducible shop drawings of (including schematics, internal point-to-point and interconnecting) diagrams for all equipment and panels showing Work "as installed".

1.04 WARRANTY

All equipment (electrical and/or mechanical) specified by these Specifications shall be warrantied and shall be provided with such warranties covering all parts and labor for a period of one (1) year from the date of Final Acceptance.

PART 2- PRODUCTS

2.01 GENERAL

A. Standard Products

The equipment furnished shall be standard products in production by reputable companies regularly engaged in the manufacture of high-quality equipment of the type specified. Similar equipment shall have been in satisfactory and successful operation for a period of at least two years. All parts of the specified equipment shall be so designed as to be especially adapted for the service required and shall be proportioned, enclosed, or guarded as to have ample and liberal strength and stability to withstand, without damage, the stresses to which they may be subjected during erection or operation. The component parts of duplicate items shall be fabricated on a principle of interchangeability to facilitate ready replacement.

B. Materials

All material incorporated in the equipment shall be new and of first-class quality, free from injurious defects and imperfections, and of the classifications and grades designated. Materials not specifically designated herein shall be subject to the review of the Engineer and shall be suitable for the purpose intended.

2.02 RATINGS

The sizes, ratings, capacities, and performance characteristics of various specified items of equipment and devices are based on currently available standard products, which are available through United States manufacturers. In no case shall the size, rating, capacity or performance characteristic be less than that specified unless approved in writing by the Owner. Ratings and performance characteristics, where applicable, of various devices and items of equipment are specified in respective Sections of these Specifications. All electrical equipment shall be UL listed.

2.03 DETAILS OF CONSTRUCTION

- A. Electrical work shall meet requirements of these Specification, product manufacturer's instructions, recommended tolerances and recommended procedures, and as indicated by final reviewed submittals for the Work.
- B. Materials shall be of size and thickness indicated. If not indicated, size and thickness shall be selected to provide strength and durability in finished Work for intended application. Work to dimensions indicated, using proven fabrication details.
- C. Product finishes, surfaces and edges shall be smooth and free of marks, burrs, seams, roughness and like defects or conditions.
- D. Other electrical-mechanical product construction details shall be in accordance with the best engineering practices, applicable code requirements and as specified and/or other Sections of these Specifications.

PART 3- EXECUTION

3.00 GENERAL

- A. The Contract Drawings indicate the general details necessary for the complete electrical installation. It shall be the Contractor's responsibility to install all electrical work in a neat and workmanlike manner. The Contractor shall cooperate with others to permit the installation of all of the work without interferences. If changes become necessary to avoid interference between the Work installed under various Sections, the Contractor shall submit to the Owner's Representative, for review, the proposed changes and upon review by the Owner's Representative, proceed with the installation of such changes without additional cost to the Owners.
- B. The Contractor shall maintain at the site a set of black-line prints on which shall be accurately shown the actual installation of all Work done under Division 26 and any variation from the Contract Drawings as reviewed by the Owner's Representative including changes in sizes, locations, and dimensions shall be indicated thereon. At the conclusion of the Work, the Contractor shall furnish record drawings in accordance with the General Conditions and as specified herein.

3.01 FACTORY TEST AND INSPECTION

- A. All equipment shall be shop-assembled and tested in the manufacturer's shop in accordance with recognized standard practices. Factory tests and inspections shall be conducted to verify that the equipment is operating satisfactorily and in compliance with the Specifications.

3.02 INSTALLATION AND TESTING

- A. General: Examine the areas and conditions under which electrical work is to be installed or performed and remedy any conditions detrimental to the proper and timely completion of the Work. Do not proceed with the Work until unsatisfactory conditions have been corrected.
- B. Existing Facilities: Verify existence, location, and operation of existing electrical facilities to be abandoned, removed, altered, modified and/or temporarily relocated to allow activities during construction of the Work.

- C. Install electrical work. Meet requirements of these Specifications, product manufacturer's instructions, recommended tolerances, and recommended procedures and as indicated by final reviewed submittals for the Work.

3.03 PAINING

- A. All specified equipment shall be shop-primed and painted in accordance with manufacturer's standard finish.
- B. The Contractor shall be responsible for coordination of the compatibility between manufacturer's standard finish and the field paint specified.

PART 4- MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

Measurement will not be made of the Work specified in this Section.

4.02 PAYMENT

- A. Payment for the Work specified in this Section will be made at the lump sum prices for the below listed Items, in the Schedule of Prices:

26 00 10/01; Electrical Work, Complete in Place

- B. This price shall be full compensation for furnishing and installing all materials; and for all preparation; and for all labor, equipment, tools, and incidentals necessary for the Work as required by the Specifications and Drawings. Payment for excavation and backfill required for installation shall be included in the prices bid for these Items as they pertain.
- C. Payment will not be made for any other items except as listed above. All other costs associated with such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain.

END OF SECTION

SECTION 26 05 20PART 1- GENERAL1.01 SCOPEA. Description of Work

This Work shall consist of furnishing and installing all wires and cables as shown in the plans, or as directed by the Engineer. The work shall include all labor, materials, tools and equipment necessary to furnish place, and connect all wires, cables, and associated items.

B. Related Work

1. General Electric Requirements
2. Basic Electrical Materials & Methods/Requirements
3. Electric Service and Distribution
4. Underground Conduit Runs

1.02 QUALITY ASSURANCE

Comply with the provisions of the following codes:

- A. National Electric Code (NEC)
- B. NFPA 70 "National Electrical Code." Conform to applicable codes and regulations regarding toxicity of combustion products of insulating materials.
- C. UL Compliance: Provide components which are listed and labeled by UL under the following standards.

UL Std. 486A - Wire connectors and soldering lugs for use with copper conductors.
UL Std. 854 - Service entrance cable.

1.03 SUBMITTALS

The Contractor shall submit to the ENGINEER for review drawings, product specifications and descriptions, in accordance with the applicable requirements as specified in the Supplemental Conditions for all equipment furnished.

WIRES AND CABLES FOR SITE ELECTRICAL WORK1.04 REFERENCES

Except as modified herein, the Work shall conform to the applicable portions of Sections 801, 810, 820, 821, 822, and 1085 of the Standard Specifications.

1.05 QUALITY ASSURANCE

Comply with the provisions of the following codes:

- A. National Electric Code (NEC)
- B. NFPA 70 "National Electrical Code." Conform to applicable codes and regulations regarding toxicity of combustion products of insulating materials.
- C. UL Compliance: Provide components which are listed and labeled by UL under the following standards.

UL Std. 486A - Wire connectors and soldering lugs for use with copper conductors.

UL Std. 854 - Service entrance cable.

PART 2- PRODUCTS2.01 WIRES AND CABLES

The material shall meet the requirements of Articles 1085.01, 1085.02, 1085.25, 1085.26, and 1085.27 of the Standard Specifications.

- A. Conductor Material- Copper for all wires and cables.
- B. Conductor sizes indicated are based on copper.
- C. Insulation: Provide cross-linked polyethylene all on conductors.

2.02 CONNECTORS FOR CONDUCTORS

- A. Provide UL-listed factory-fabricated, solderless metal connectors of sizes, ampacity ratings, materials, types and classes for applications and for services indicated. Use connectors with temperature ratings equal to or greater than those of the wires upon which used.
- B. For each electrical connection, provide complete assembly of materials, including but not necessarily limited to, pressure connectors, terminals (lugs), electrical insulating tape, electrical solder, electrical soldering

WIRES AND CABLES FOR SITE ELECTRICAL WORK

flux, heat-shrinkable insulating tubing, cable ties, solderless wire-nuts, and other items and accessories as needed to complete splices and terminations of types indicated.

- C. Provide electrical connectors and terminals which mate and match, including sizes and ratings, with equipment terminals and are recommended by equipment manufacturer for intended applications.
- D. Provide electrical insulating tape, heat-shrinkable insulating tubing and boots, electrical solder, electrical soldering flux, wire nuts and cable ties as recommended for use by accessories manufacturers for type services indicated.

PART 3- EXECUTION

3.01 INSTALLATION REQUIREMENTS

Work under this item shall be performed in accordance with Sections 820, 821, and 822 of the Standard Specifications, except as herein modified.

- A. Install electrical cables, wires, and connectors in compliance with the NEC.
- B. Pull conductors simultaneously where more than one is being installed in same conduit.
- C. Use pulling means such as fish tape, cable, rope, and basket weave wire/cable grips which will not damage cables or conduits. Do not use rope hitches for pulling wire or cable.
- D. Keep conductor splices to a minimum.
- E. Install splice and tap connectors which are compatible with conductor material, and which possess equivalent or better mechanical strength and insulation rating than conductors being spliced.
- F. Provide a minimum of 18" of length of conductors within electrical enclosures and train the conductors to terminal points with no excess. Bundle multiple conductors, with conductors larger than No. 10 AWG cabled in individual circuits. Make terminations so there is no bare conductor at the terminal.
- G. Tighten electrical connectors and terminals, including screws and bolts, in accordance with manufacturer's

WIRES AND CABLES FOR SITE ELECTRICAL WORK

published torque tightening values. Where manufacturer's torqueing requirements are not indicated, tighten connectors and terminals to comply with tightening torques specified in UL 486A and UL 486B.

- H. Install electrical connections as indicated, in accordance with equipment manufacturer's written instructions and with recognized industry practices, and complying with applicable requirements of UL, NEC and NECA's "Standard of Installation" to ensure that products fulfill requirements.
- I. Coordinate with other work, including wires/cables, conduits and equipment installation, as necessary to properly interface installation of electrical connections for equipment with other work.
- J. Cover splices with electrical insulating material equivalent to, or of greater insulation resistivity rating, than electrical insulation rating of those conductors being spliced.
- K. Prepare cables and wires, by cutting and stripping jacket and insulation properly to ensure uniform and neat appearance where cables and wires are terminated. Exercise care to avoid cutting through tapes which will remain on conductors. Also avoid "ringing" copper conductors while skinning wire.
- L. Trim cables and wires as short as practicable and arrange routing to facilitate inspection, testing and maintenance.
- M. All wire/cable shall be installed with care to prevent damage to the cable insulation. The contractor shall check the wire/cable for defects as it is being installed. Any defects found shall be reported to the Engineer, and if they may be remedied, they shall be repaired to the satisfaction of the Engineer, or the wire/cable shall be replaced as directed.
- N. The wire/cable shall be pulled into the conduit with a minimum of dragging on the ground or pavement. This shall be accomplished by means of reels mounted on jacks or other suitable devices conveniently located for unreeling wire/cable directly into conduit in such a manner as to not damage the wire/cable.
- O. Where lubricants are necessary to facilitate installation of the wire/cable, only a vegetable based lubricant may be used for plastic coated wire/cable.

WIRES AND CABLES FOR SITE ELECTRICAL WORK

- P. Bends in the wire/cable shall conform to the recommended minimum radius as outlined in the NEC.
- Q. The wire/cable shall be color coded so that each lead of all circuits may be easily identified and lighting units connected to the proper leg as indicated on the plans and wiring diagram. The smallest conductor or equipment grounding conductor shall always be green in color.
- R. All wire or cable in the distribution and control cabinets shall be properly trained and have sufficient slack provided for any rearrangement of equipment for future additions.
- S. Any wire/cable terminations or splices, where approved, shall be made in a workmanlike manner. All connectors and insulating tapes and materials shall be approved by the Engineer. Splices and terminations shall be considered incidental to the installation of the wire/cable, and no additional payment shall be made for same.

3.02 FIELD QUALITY CONTROL

- A. Prior to energizing, check installed wires and cables with megohm meter to determine insulation resistance levels to assure requirements are fulfilled in accordance with Article 801.14 of the Standard Specifications.
- B. Prior to energizing, test wires and cables for electrical continuity and for short-circuits.
- C. Subsequent to wire and cable hook-ups, energize circuits and demonstrate proper functioning. Correct malfunctioning units, and retest to demonstrate compliance.

PART 4- MEASUREMENT AND PAYMENT4.01 METHOD OF MEASUREMENT

No separate measurement shall be made For Wires And Cables For Site Electrical Work.

4.02 BASIS OF PAYMENT

The work shall be paid as part of the Contract lump sum price for Electrical Cabinet Equipment Backboard and Installation, which shall be payment in full for the work described herein.

END OF SECTION

SECTION 26 05 43PART 1- GENERAL1.01 SCOPEA. Description of Work

This Work shall consist of constructing conduit trenches and conduit runs at the locations shown in the plans, or as directed by the Engineer. This work shall include trench and backfill, conduit runs, electrical identification, regrading, and all labor, tools, and equipment necessary to install the conduit runs to connect all components including but not limited to the SCADA system and transducer mixing system alarms, cathodic protection, and the power source, including clean-up and restoration of the locations.

B. Related Work

1. General Electric Requirements
2. Basic Electrical Materials & Methods/Requirements
3. Wire & Cables for Site Electrical Work
4. Electrical Connections for Site Equipment

1.02 STANDARDS

(Not used.)

1.03 SUBMITTALS

In accordance with the Supplemental Conditions, the Contractor shall submit to the ENGINEER for review drawings, product specifications, and description, together with installation instructions and field check-out/testing procedures for all equipment furnished.

1.04 REFERENCES

Work under this item shall be performed in accordance with Sections 801, 810, 812, 821, 868, 1003, and 1085 of the Standard Specifications, except as herein modified; as well as all applicable portions of the National Electric Code (NEC) and National Electrical Manufacturer's Association (NEMA).

1.05 GENERAL REQUIREMENTS

- A. Conduct site clearing operations to ensure minimum interference with railway, roads, streets, walks and/or adjacent facilities. Do not close traveled ways without written permission from authorities having jurisdiction.
- B. Provide protection to prevent damage to existing structures, track, roadway, sidewalk and/or other improvements on or adjacent to the job site. Restore any damaged improvement to its original condition as acceptable to parties having jurisdiction, with no additional compensation due the Contractor.

PART 2- PRODUCTS

2.01 CONDUIT BODIES

- A. General: Types, shapes, and sizes shall be as required to meet individual applications and NEC requirements.
- B. Unless otherwise noted, all conduit is to be rigid galvanized steel conforming to Articles, 1085.15 and 1085.16 of the Standard Specifications.

2.02 ELECTRICAL WARNING TAPE

The material shall meet the requirements of Article 1085.23 of the Standard Specifications.

2.03 TRENCH BACKFILL

The material shall have an FA 6 gradation conforming to Article 1003.04 of the Standard Specifications, except wet bottom boiler slag as defined in Article 1003.01 will not be permitted.

PART 3- EXECUTION

3.01 INSTALLATION REQUIREMENTS

Work under this item shall be performed in accordance with Article 810.03 of the Standard Specifications, except as herein modified.

- A. Complete installation of electrical conduits before starting installation of conductors within conduits.
- B. Prevent foreign material from entering conduits by using temporary closure protection.

- C. Protect stub-ups from damage where conduits rise from concrete foundations. Arrange so curved portion of bends is not visible above the finished slab.
- D. Make bends and offsets so the inside diameter is not effectively reduced. Unless otherwise indicated, keep the legs of a bend in the same plane and the straight legs of offsets parallel.
- E. The contractor shall exercise care in installing the conduit to ensure that it is smooth, free from sharp bends or kinks, and has the minimum practical number of bends. Crushed or deformed conduit will not be accepted. All conduit and fittings shall have the burrs and rough edges smoothed, and all conduit runs shall be cleaned and swabbed before installation of electric cables.
- F. All conduit is to contain fish tape or pull wires for wire pulls. Use no. 14 AWG zinc-coated steel or monofilament plastic line having not less than 200-lb tensile strength.
- G. Install conduit sealing fittings in accordance with the manufacturer's written instructions. Locate fittings at suitable, approved, accessible locations and fill them with UL-listed sealing compound. For concealed conduits, install each fitting in a flush galvanized steel box with a blank cover plate having a finish similar to that of adjacent plates or surfaces. Install conduits sealing fittings at the end points.
- H. Stub-up Connections: Extend conduits above concrete foundation or ground 6", unless otherwise noted on plans. Extend conductors to equipment with rigid steel conduit. Where equipment connections are not made under this contract, install screwdriver-operated threaded flush plugs flush with slab.
- I. Conceal all conduits, unless indicated otherwise. Install conduits at proper elevations.
- J. Electrical Warning Tape is to be installed in all conduit trenches, at the location shown on the Drawings.

3.02 TRENCH AND BACKFILL

Work under this item shall be performed in accordance with Article 868.03 of the Standard Specifications. Trench backfill shall be in accordance with Section 2.03 of this specification.

PART 4- MEASUREMENT AND PAYMENT

The work shall be paid as part of the Contract lump sum price for Electrical Cabinet Equipment Backboard and Installation, which shall be payment in full for the work described herein.

END OF SECTION

SECTION 26 42 00PART 1- GENERAL1.01 SCOPE

This Section covers the cathodic protection system, related electrical panels and associated accessories including but not limited to power unit, conduit, wires and cables, junction boxes, anodes and all other necessary appurtenances to be designed, furnished, installed, and tested as shown on the Drawings and as specified herein. All fittings, connectors, hangers, supports, anchors and accessories where required, not otherwise specifically provided for in these Specifications, but necessary to complete the various systems shall be included under this Section of Work. Any and all miscellaneous electrical work required for installation and to electrically connect and provide for a complete and operational system shall be included under this Section of Work.

1.02 QUALITY ASSURANCEA. Acceptable Supplier

The cathodic protection equipment supplier shall utilize personnel who have been engaged in the design and installation of impressed current corrosion control systems for five (5) or more years. The Work shall be performed under the direction of a licensed professional engineer or a person with N.A.C.E. certification who has experience in water tank cathodic protection design. Equipment shall be as manufactured by Corrpro Waterworks, Inc. (@ 330-725-6681); no exceptions allowed.

B. Applicable Standards

All Work shall conform to the applicable provisions of the codes, standards, and Specifications, as specified herein and the following:

<u>Name</u>	<u>Abbreviation</u>
American Water Works Association	AWWA D104
National Electrical Code	NEC
Underwriters Laboratories	UL
National Association of Corrosion Engineers	NACE

1.03 SUBMITTALS

- A. The Contractor shall submit to the Owner's Representative for review drawings, design details, product specifications, and description, including control schematic diagrams, wiring connection diagrams, together with instruction manuals, installation instructions, operating and maintenance manuals and field check-out, start-up and testing procedures specified in Section 01300 for all equipment furnished.
- B. Submit copy of ANSI/NSF 61 classification for all system components located within the tank.

PART 2- PRODUCT2.01 GENERAL

- A. General. All materials and equipment shall conform to the Specifications listed below. All products shall have minimum ratings as specified herein. Identification symbols and nomenclature where used in this Section are the same as those shown on the Drawings. Paragraphs of these Specifications describing the requirements of a single item of equipment shall apply equally to all identical items of equipment to be furnished.
- B. Standard Products. All materials shall be new and conform to the applicable portion of these Specifications. The materials to be furnished under these Specifications shall be the standard product of manufacturers regularly engaged in the production of such equipment and shall be the manufacturer's latest standard design.
- C. Special Products. The supplier of the power units, anodes and other special cathodic protection materials and equipment shall have a minimum of five (5) continuous years of successful experience in the manufacture, installation and service of cathodic protection systems for similar tank structures.

2.02 EQUIPMENT CRITERIA AND OPERATION

- A. Type. The proposed cathodic protection system shall be of the automatic impressed current type with IR Drop Free mode of operation to control corrosion of the submerged steel surfaces of a potable water storage tank.

- B. Design Criteria. The criteria for protection shall be based on a tank-to-water potential, IR drop free, within a range of -0.850 volts to -1.050 volts relative to a stationary copper-copper sulfate reference electrode. This potential shall be measured free of the effect of voltage gradients (IR drops). The potential shall be measured with protective current being applied as recommended in NACE Standard RPO 388-88 latest version and/or ANSI/AWWA D104-91.
- C. Design Requirements. The cathodic protection system shall be designed based upon capacity and performance requirements as follows:
1. Total submerged surface area of the tank. Total surface area includes high water level in tank and wet risers including draft tube recirculation piping, which are 30" diameter or larger.
 2. Total bare surface area to be protected will be a minimum of 25% of total surface area.
 3. Type of coating and condition of coating.
 4. Minimum current density of 0.5 MA/ft² bare surface area.
 5. Chemical analysis of water including resistivity expressed in ohm-cm.
 6. Tank being susceptible to icing.
 7. Minimum anode design life of twenty (20) years.
 8. Selection, dimensions and layout of system components specified hereinafter.
- D. Mode of Operation. The proposed power unit shall be capable of operating in the following three (3) modes with the selection of the desired operating mode made on the front panel without additional equipment or tools with access limited to authorized personnel only.
1. Manual Mode. The power unit shall operate as a constant current rectifier continuously delivering preselected current to the anodes. In this mode, the automatic control shall be locked out without affecting the preprogrammed settings. The output of the power unit shall be regulated from 0-100% of rated capacity without the use of transformer taps.

2. Auto-1 Mode. In the Auto-1 mode, the controller shall automatically and continuously monitor the potential of the structure and make necessary adjustments in the current output to maintain the structure potential at the preselected value. A single reference electrode placed within 1 to 2 cm. from the protected structure shall be used to measure the potential and control operation of the power unit.
3. Auto-2 Mode (IR Drop Free). The Auto-2 model shall function the same as Auto-1 except the potential shall be monitored against a reference electrode located some distance from the protected structure. The measured and displayed potential shall be free of IR drop error.
- E. Data. The following data shall be used as the basis for system design.

ITEM	TANK DATA
Type:	Elevated-Legged
Style:	Welded Steel
Capacity:	500,000 Gallons
Tank Height:	160' ±
Tank Diameter:	N/A
Draft Tube Mixer:	None; per Village

2.03 DETAILS OF CONSTRUCTION

- A. General. The existing anodes and suspension system will need to be removed and replaced under this contract. This Specification outlines the minimum quality required for long-term economy and reliability of the cathodic protection power unit (rectifier) which is solid state, air-cooled and consisting of the necessary potential control circuitry, transformers, rectifiers, circuit breaker, meter, wiring, terminals and appurtenances of adequate capacity to meet the requirements of the system. Multiple D.C. output circuits exist, each circuit consists of separate transformers, rectifier and control. The output of each circuit is electronically controlled in all modes of operation. The entire unit is field serviceable. The unit is designed to operate on 110 volts, 1 phase, 60 hertz, A.C.

- B. Existing Transformer. The transformer is of the separate primary and secondary type and shall withstand continuous operation 10% above rated input voltage at the maximum rated D.C. output. The transformer is designed for a maximum hot spot heat rise not to exceed 50°C.
- C. Existing Rectifiers. The rectifier unit(s) performs in accordance with ANSI/AWWA Standard D104-04 Section 4: 4.1.1.1.1, IR drop free system and include:
1. Transformer
 2. Selenium or silicon rectifying elements
 3. Circuit breaker(s)
 4. Lightning, surge and overload protection
 5. Provision for air-cooling operation
 6. Voltmeter(s) and ammeter(s)
 7. Weatherproof cabinet in accordance with NEMA 4R requirements
 8. Provision to vary current output from 0% to 100% of rated capacity
 9. Provisions for mounting, grounding and locking
 10. Provision for 110-120 volt, 60Hz, single phase AC power
 11. DC output capacity in volts and amperes in accordance with Design Criteria and Requirements specified in Paragraph 2.02
 12. Number of circuits or separate rectifiers in accordance with Design Criteria and Requirements specified in Paragraph 2.02
 13. Automatic controller is AWWA D104-04, Type A and adjusts current output to compensate for changes in water level, temperature of water, water chemistry, and cathodic polarization and shall include the following provisions:
 - a. Utilize long-life reference electrode(s) mounted in tank
 - b. Monitor the tank-to-water potential, free of IR drop
 - c. Automatically adjust the tank-to-water potential, free of IR drop, to a preset value
 - d. Operate within 25MV of preset value
 - e. Limit current to a preset value
 - f. Utilize potential meter(s) to display tank-to-water potential, free of IR drop
- D. Proposed Long Life Reference Electrode(s). The permanent reference electrode shall consist of a copper-copper sulfate electrode which shall be manufactured to remain stable (plus or minus 10 MV) for a minimum of ten (10)

years. The reference electrode to lead wire connection shall be encapsulated to prevent water migration.

The stationary reference electrode shall be positioned in the tank water to provide the most representative measurements for the submerged surface area(s).

- E. Proposed Anode Suspension System. The anode suspension system shall be designed to be resistant to ice damage and in accordance with ANSI/AWWA Standard D104-04, Section 4.2.4.1.1 Type A, Horizontal System.

The anode suspension system shall consist of a minimum 5/16" polyester cord. The cord shall be secured to steel anchors welded to the side wall of the tank bowl or to the exterior of the dry access column of spheroidal type tanks and the side wall of wet risers which are 30" diameter or larger. All cord to cord connections shall be tied and taped.

Handhole assemblies used for the installation of vertical anode suspension systems from the roof of the tank shall consist of a 6" diameter steel cover, rubber gasket and a steel bar and bolt assembly for each 5" diameter access opening.

- F. Proposed Anode Materials. The anode materials shall be selected in accordance with Design Criteria and Requirements specified in Paragraph 2.02 and shall consist of one of the following:

1. Minimum .062" diameter platinized niobium with 25 micro inches of platinum. The wire anode shall be continuous with a maximum of two (2) anode to header connections.
2. Minimum .062" diameter titanium with a precious metal oxide coating. The wire anode shall be continuous with a maximum of two (2) anode to header connections.

All anode to header cable connections shall be sealed to prevent water migration.

- G. Proposed Pressure Entrance Fitting. For icing tanks the pressure entrance fitting shall accommodate anode and reference electrode lead wires at the base of the tank. The fitting shall be manufactured to prevent leakage through the fitting and to prevent water migration through the wire insulation.

The entrance fitting shall be sized for a maximum 1.5 inch Schedule 80 steel coupling.

- H. Existing Control Circuits. The control circuits are designed to continuously monitor the potential of the structure and automatically regulate the protective current as required to maintain the potential at the preselected level. The current output of the unit is controlled to prevent overprotection.
- I. Existing Circuit Breaker. The circuit breaker shall be of the single phase, 2 pole, series trip, manually reset, magnetic type not affected by change in ambient temperature.
- J. Wiring. Wiring for the cathodic protection system and equipment shall be as follows:
1. Existing Power Unit Wiring. The wires to connect components of the power unit are stranded or solid copper meeting the requirements of the N.E.C. for allowable current carrying capacities. The D.C. output terminals are conveniently located and are sized to accommodate wires as required for safe operation of the cathodic protection system.
 2. Proposed Wiring Within Tank. All wiring within the tank shall be insulated to prevent copper conductor to water contact.
 3. Proposed Exterior Tank Wiring. All wiring on the exterior of the tank shall be insulated and run in rigid conduit.
- K. Proposed Hardware. All hardware used in conjunction with the system shall be protected against corrosion.
- L. SCADA. The contractor will need to employ the use of the Village system integrator, Automatic Controls Services, for DC output connection from proposed Cathodic Protection System to existing Village SCADA. Contact Mr. Bill Schmitz (Office) (630) 357-1780, (Cell) (630) 399-8844.
- M. ANSI/NSF 61. All materials in contact with the water, or exposed to the interior of the tank, shall be classified in accordance with ANSI/NSF 61 Drinking Water System Components@.

PART 3- EXECUTION

3.01 FACTORY TESTING

All equipment shall be inspected and tested in the manufacturer's shops. Monitoring and control devices shall be functionally tested to verify correct operation and that all component parts function properly.

3.02 INSTALLATION AND TESTING

- A. General. The equipment shall be installed as shown on the Drawings in accordance with the manufacturer's instructions and recommended best practices. All necessary items required for installation and testing shall be furnished. All items of equipment shall be operated, adjusted, and tested for proper performance in accordance with the manufacturer's recommended test procedure. All miscellaneous electrical work required for electrification of the cathodic protection system, including conduit and wiring, shall be in accordance with local codes and standards.
- B. Field Supervisory Personnel. The equipment manufacture shall provide the services of factory trained field supervisory personnel who shall perform all necessary checkouts and energize and adjust the system to operate within the specified criteria. The factory trained field supervisory personnel shall be responsible for adjusting the system to perform in accordance with specified design criteria as well as conducting potential profile measurements.
- C. Qualifications. The cathodic protection field supervisory personnel shall have a minimum of five (5) years' experience installing and servicing the types of system described by these Specifications. The system shall be installed by personnel specifically trained by the cathodic equipment manufacturer to provide all workmanship required for corrosion control performance.
- D. Performance. All work shall be in accordance with the following requirements:
1. Components of the cathodic protection system shall be installed in the manner and at the locations as shown on the design drawings prepared by the cathodic equipment manufacturer.
 2. Pressure entrance fitting shall be installed in accordance with AWWA D100-96, Section 3.13.

3. Welding, cutting and coating shall be in accordance with AWWA Standards D100, D102 and D105.
4. Welding of steel coupling and anchors for horizontal anode suspension and rectifier mounting bracket shall be coordinated and furnished by the Contractor prior to coating the tank. Cutting of 5" diameter access openings for vertical anode suspension shall be coordinated and furnished by the Contractor as required. The cathodic protection equipment manufacturer shall furnish installation drawings and materials to the Contractor prior to tank coating.
5. Electrical continuity of all section of bolted or riveted tanks shall be furnished by the Contractor.
6. Materials and equipment shall be inspected prior to installation. Any defective component shall be repaired or replaced.
7. Electrical work shall be in accordance with the National Electrical Code.
8. Lead wires shall be installed to prevent damage from abrasion.
9. Electrical connections within the tank shall be sealed to prevent water migration.
10. The rectifier is mounted at a convenient height (eye level) above grade for monitoring and service purposes.
11. AC power to the rectifier shall be provided as shown on the Drawings.
12. Disinfection of the tank shall be in accordance with the applicable requirements of Section 01012.

- E. Energizing System. After the system is installed and the tank is filled, the cathodic protection field supervisory personnel shall provide startup service which includes energizing, testing and adjusting the system for optimum performance of the cathodic protection system. This startup service shall be in accordance with ANSI/AWWA D104-04 Section 5.2 Testing, 5.2.1 Field Test for Type A, IR Drop-Free System. This startup service shall be coordinated with the Owner and/or Owner's Representative.

All tank-to-water potential measurements shall be conducted with a calibrated portable copper-copper sulfate reference electrode and a portable high impedance voltmeter. A minimum of five (5) locations shall be measured. All test data shall be reviewed and evaluated by the corrosion specialist in the regular employment of the cathodic protection equipment manufacturer.

The final test and adjustment of the system shall be conducted approximately twelve (12) months after the

startup service.

- F. Monitoring During Guarantee Period. The cathodic protection equipment manufacturer shall furnish self-addressed report cards to be completed by the Owner. Report cards received by the cathodic protection equipment manufacturer during the one-year guarantee and service period shall be evaluated for system performance.
- G. Service Agreement. The cathodic protection equipment manufacturer shall furnish a Service Agreement for the type of system installed. The Service Agreement shall include the annual service rate and a complete description of the scope of work proposed. The Service Agreement for annual inspection and potential testing shall be in accordance with AWWA D104-04 Appendix C and include as a minimum:
1. One (1) annual job site visit.
 2. Tank-to-water potential measurements conducted at representative locations within the tank. A minimum of five (5) locations shall be measured.
 3. Measurements shall be conducted with a portable high impedance voltmeter and a calibrated copper-copper sulfate reference cell.
 4. Adjustment for optimum corrosion control shall be in accordance with criteria for protection.
 5. Data recorded shall provide sufficient information to evaluate the performance of the system relating to criteria for protection.
 6. In the event additional work is required, the cathodic equipment manufacturer shall submit a report with recommendations for optimizing corrosion control.

3.03 PAINTING

All equipment specified in this Section shall be shop painted with the manufacturer's standard finish. Contractor shall be responsible for touch-up field painting as required.

PART 4- MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

Measurement will not be made for the Work specified in this Section.

4.02 PAYMENT

- A. Payment for the Work specified in this Section will be made

SECTION 27 51 25PART 1- GENERAL1.01 SCOPEA. Description

This section covers the instrumentation and control equipment upgrades, together with related accessories to be furnished, installed, programmed and tested as shown on the Drawings and as specified herein. All piping, conduits, wiring, fittings, connectors, supports and anchors, where required shall be included under this Section of Work and shall be provided by SCADA contractor.

B. Related Work

1. Division 26 - Electrical.
2. Other Sections as specified herein.

1.02 QUALITY ASSURANCEA. Acceptable Manufacturers

1. SCADA modifications shall be performed by Village's preferred System Integrator, Concentric, Contact: Randy Olson @ (815) 444-3324. No exceptions.

B. Applicable Standards, Codes and Permits

All Work performed and all materials furnished or otherwise used shall be in accordance with the National Electric Code, the National Electrical Safety Code, and applicable local regulations and ordinances. Where required by applicable codes, materials and equipment shall be listed by Underwriters' Laboratories or other testing organizations acceptable to the governing authority. The Contractor shall, at his/her own expense, arrange for and obtain all necessary permits, inspections, and approvals by the proper authorities in local jurisdiction of such Work.

C. Coordination

Instrument and control systems shall be designed and coordinated for proper operation with related equipment and materials furnished by other suppliers under other Sections of these Specifications, and where applicable, to related existing equipment. All instruments and control devices shall be applied in full conformity with the

drawings, specifications, engineering data, instructions, and recommendations of the instrument or device manufacturer and the related equipment manufacturer.

Review of drawings submitted prior to the final determination of related equipment shall not relieve the Contractor from supplying systems in full compliance with the specific requirements of the related equipment.

Related equipment and materials may include, but will not be limited to, supervisory control equipment, telemetry, flow meter, conduit, cable, and piping as described/specified in other Sections of these Specifications all as associated with this Project.

Installation drawings shall be prepared for interconnecting wiring and piping between the related equipment and the equipment furnished under this Section. All interconnecting wiring shall be appropriate for the service and shall result in a properly functioning system.

Coordination with other sub-contractors and/or Owner designated contractors, and supervision of installation shall be provided by the Contractor as required during construction.

1.03 SUBMITTALS

The Contractor shall submit to the Owner's Representative for review detailed shop drawings, product specifications and descriptions, including control schematic diagrams, internal wiring diagrams, interconnecting wiring diagrams, sample screen displays, together with instruction manuals, installation instructions, operating and maintenance manuals and field check-out, start-up and testing procedures as specified in Section 01 33 00 for all equipment furnished.

1.04 MATERIAL DELIVERY, STORAGE AND HANDLING

It is anticipated that no new equipment will be needed for this work. The work will be programming existing SCADA equipment only.

PART 2- PRODUCTS

2.01 GENERAL

- A. All materials and equipment shall conform to the specifications listed below and shall be equal to the products listed below by brand name and catalog number.

Identification symbols and nomenclature where used in this Section are the same as those shown on the Drawings. Paragraphs of these Specifications describing the requirements for a single item of equipment shall apply equally to all identical items of equipment to be furnished.

2.02 DESCRIPTION/OPERATIONAL AND PERFORMANCE REQUIREMENTS

The Village recently had a new SCADA system installed. The Contractor shall be responsible for the following:

- A. Provide new 1" RGS conduit and wiring from the valve vault piping in vault to the SCADA panel back board mounted RTU mounted to the new back board panel to monitor operating pressure at the valve. This will include all necessary asphalt removal and replacement as well as all above and below grade penetrations to the vault and dry riser.
- B. Provide new (4) ¾" RGS conduit and wiring from roof access hatch to SCADA RTU panel on the back board, for the alarm signal the power and control to cathodic protection rectifier mixer. This will include the proposed limit switch at the roof hatch and connection of this device to the SCADA panel to monitor if the roof hatch is open or closed.

2.03 INSTRUMENTATION

Instrumentation shall consist of existing primary sensing elements and transmitters for pressure sensing. Sensors and transmitters should be existing at locations indicated on the Drawings.

PART 3- EXECUTION

3.01 FACTORY TEST AND INSPECTION

Not applicable.

3.02 INSTALLATION AND TESTING

A. General

The programming shall be installed as shown on the Drawings and in accordance with the manufacturer's instructions and recommended best practices. All necessary fittings, connectors, supports, anchors and other items required for installation and testing shall be furnished. All items of equipment shall be operated, adjusted and tested for proper performance in accordance with the manufacturer's

recommended test procedure.

B. Instrumentation Installation

The instrumentation equipment shall be installed by the Contractor or his/her subcontractors. The services of the System Integrator's technical representative shall be provided as necessary to calibrate, test and advise others of procedures for installation, adjustment and operation of equipment, devices, components, etc. all in accordance with the requirements of other Sections of the Specifications. System Supplier shall be responsible for performing any and all software engineering and programming/calibrating required by these Specifications and as directed by the Owner to provide a complete and operational installation. The System Integrator's technical representative shall be factory-trained and shall perform all necessary coordination to check-out, start-up and place into operation the water works facilities as well as instruct Owner personnel in the control and operation of the herein specified equipment.

Installation of instrumentation equipment shall be in accordance with the following:

1. Field Wiring. Field wiring materials and installation shall conform to the requirements of the electrical Sections.
2. Field Piping. Field piping materials and installation shall conform to the requirements of the piping Sections.
3. Field-Mounted Instruments. Instruments shall be mounted so that they may be readily approached and easily serviced and so that all appurtenant devices may be easily operated. Installation details for some instruments are indicated on the Drawings. Unless otherwise indicated on the Drawings, instruments which include local indicators shall be mounted so that the indicator is approximately 5'-0" above the floor. Indicators shall be oriented for ease of viewing. Transmitters shall be mounted on corrosion-resistant pipe supports suitable for floor, wall or bracket mounting.
4. Field Calibration. A technical representative of the System Supplier shall calibrate each instrument and shall provide a written calibration report for each instrument indicating the results and final tuning adjustment settings. Instrument calibration shall be

accomplished prior to a checkout of the operation of the system. Field calibration work shall also include any and all necessary software modification required.

5. Systems Check. A technical representative of the System Integrator shall participate in the checkout of the control systems. If interrelated devices furnished by other suppliers, such as valve actuators, and/or motor controls, do not perform properly when placed in service, the technical representative shall use suitable test equipment to introduce a simulated signal to verify or measure signals from those devices as may be required to locate the source of trouble or malfunction. A written report stating the results of such tests shall be furnished, if requested by the Owner's Representative, as necessary to assign responsibility for corrective measures.

C. Customer Training

The Contractor shall employ the services of the Village's System Integrator, Automatic Control Services, to provide a qualified representative at the job site to train the Owner's personnel in operating and maintaining the equipment. The representative shall be a skilled, factory-trained technician capable of providing services to supervise and inspect the installation and start-up operation of all systems, as well as to instruct Owner's operating personnel in the operation and maintenance of the equipment. The training session shall include a technical explanation of the equipment and an actual hands-on demonstration. The training session shall consist of one 8 hour working day, and the schedule shall be arranged and coordinated with the Owner.

3.03 PAINTING

All equipment specified in this Section shall be shop painted with the manufacturer's standard finish.

PART 4- MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

Measurement will not be made for the Work specified in this Section.

4.02 PAYMENT

- A. Payment for the Work specified in this Section will be made at the contract lump sum prices for the below listed Items

in the Schedule of Prices:

27 51 25/01; Modifications to Existing SCADA System

- B. These prices shall be full compensation for furnishing all materials; for all preparation/installation/programming and placing of the materials; and for all labor, equipment, tools and incidentals necessary to complete these items for instrumentation equipment installation as shown on the Drawings.
- C. Payment will not be made for any other items except as listed above. All other costs associated with such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Schedule of Prices.

END OF SECTION

SECTION 33 05 50PART 1- GENERAL1.01 SCOPE

- A. This Section describes the general provisions for the Work to be performed under Division 22 - Plumbing, Division 33 - Utilities of this Contract as well as Division 26 - Electrical, where applicable. The Contractor shall comply with these general provisions and shall perform all Work in accordance with the Specifications contained in this Section, as supplemented by Specifications in related Sections, and as shown on the Drawings. Related electrical work shall be performed in accordance with the applicable provisions of Division 26.
- B. The following specifies the minimum general requirements for the furnishing, installation and testing of the materials and equipment. Additional details of items furnished, and installation and testing procedures are specified under individual Sections of the Specifications.
- C. The Contractor shall provide all necessary coordination between the suppliers of the specified equipment so as to provide a well-designed and satisfactory operating facility to the Owner. The Contractor is advised that these Specifications are not intended to cover every and all details of the Work. In case(s) where details related to the specified Work are not covered by these Specifications, it shall be the responsibility of the Contractor to include and execute such coordination and Work at no additional cost to the Owner.

1.02 QUALITY ASSURANCE

- A. Acceptable Manufacturers and Equipment Suppliers.

Acceptable manufacturers for various items of equipment are specified in respective Sections of these Contract Documents. For convenience of designation in the Contract Documents, certain equipment, articles, materials, and processes are designated by manufacturer trade name or catalog name and number. Such designation shall be deemed to be followed by the words "or equal" whether such words are shown or not. The Contractor may offer material or processes which are equal to that so indicated or specified at the time of Bid. Such offers must be in accordance with the hereinafter specified

requirements. The burden of proof as to comparative quality and suitability of alternatives shall be upon the Contractor. Specified items are preferred. After acceptance of Bid, no substitutions will be allowed, except as stated in the Bid. (Exception: Where Specifications indicate "No Substitutions Allowed" the Contractor shall provide the designated manufacturers equipment without exception.)

B. Applicable Standards

Systems as installed by the Contractor shall be in accordance with all applicable Specifications included in these Contract Documents and shall conform to State, Federal and/or Local codes and regulations. Any conflicts between Drawings or Specifications or applicable codes regulations and/or authorities having jurisdiction, shall be brought immediately to the Owner's attention. In such cases, the more stringent requirements or design practices shall govern and shall be complied with, without any extra cost to the Owner.

C. Field Verification

The Contractor shall verify field conditions, measurements and dimensions so as to assure that all items of equipment shall fit properly and be suitable for the field conditions.

D. Proposed Substitute Equipment

Comply with requirements of Section 01 33 00.

1.03 SUBMITTALS

A. General

The Contractor shall comply with the requirements specified in Section 01 33 00 - Submittals, and as specified herein.

B. Materials

1. The Contractor shall submit lists of material, equipment, apparatus, and accessories intended for use.
2. The Contractor shall include with all submittals all physical and performance data, including materials, manufacturer's names, model numbers, weights, sizes, capacities, temperatures,

pressures, flow rates, performance curves, electrical ratings, finishes, colors, dimensions, accessories, and all other data required to completely describe the equipment and to indicate compliance with the Specifications.

C. Shop Drawings and Testing Procedures

1. The Contractor shall submit for review dimensioned outline shop drawings showing the general arrangement of the equipment to be furnished, in accordance with the specified submittal schedule, and/or as otherwise specified herein.
2. Before proceeding with the manufacture of the equipment, the Contractor shall submit for review general assembly shop drawings, subassembly shop drawings, detail shop drawings, calculations, design data, catalog cuts and similar engineering documents required to demonstrate fully that all parts will conform to the provisions and intent of the Specifications and to the requirements of their installation, operation, and maintenance. These shop drawings shall show all necessary dimensions and fabrication details, including the design of welded and bolted joint connections, tolerances of fits and clearances, and all field joints and subassemblies in which the Contractor proposes to ship the equipment. Design criteria, calculations, and detailed specifications, shall be submitted for the design of all major components and for other features or details when requested.
3. All submittals by the Contractor shall be certified by the respective equipment manufacturer.
4. The Contractor shall submit complete full-line wiring diagrams covering all equipment furnished. The Contractor shall furnish shop drawings of switch developments for all instrument and control switches and internal connection diagrams for all instruments, relays, regulators, etc. The Owner's Representative will return one print of each wiring diagram on which will be marked the wire notations and cable numbers for outgoing circuits where this information is not otherwise available to the Contractor. The Contractor shall add this information to his shop drawings. Adequate space shall be allowed on the wiring diagrams to accomplish this.

5. Shop drawings shall include electrical devices, accessories and wiring furnished as component parts of mechanical equipment and shall show arrangement and dimensions.
6. The Contractor shall prepare and submit shop drawings for all work areas, indicating solutions to space problems and coordination with requirements in other Sections. These shop drawings, as a requirement of this Division, shall indicate superimposed items of all Divisions and Sections involved in congested areas, including, but not limited to, piping, structural work, electrical work and ceiling work.
7. Protocol of all shop and field testing procedures shall be submitted. In addition and prior to conducting testing activities at the site, the Contractor shall prepare a test program, showing the sequence of work required for specified tests. This program shall be in the form of a plan drawing to the extent practical and shall be exclusive of all other plans and schedules required under this Contract. This program shall be supplemental by sketches, text, bar diagrams, showing the sequence of work required for testing.

D. Operating and Maintenance Manuals

1. Upon completion of the Work, the Contractor shall furnish to the Owner six (6) complete sets of operating instructions, maintenance instructions, parts lists, and all other bulletins and brochures pertinent to the operation and maintenance of the mechanical equipment and systems provided and two (2) CDs in PDF format.
2. The operating and maintenance manuals shall be bound in durable binders, labeled to correspond with all mechanical systems shown or specified, and indexed into sections such as, but not limited to, the following:
 - a. A chart tabulating all types of pipe and pipe fittings, valves and piping specialties installed in each system.
 - b. Manufacturer's brochures, including names, addresses and telephone numbers, for all items installed in each system. Identify items by item number shown on the Contract Documents.

Reference the manufacturer's part or model number and the system in which it is installed.

- c. All major equipment such as pumps, valves, compressors and related equipment, including shop drawings.
- d. Lubrication charts for equipment requiring lubrication, listing each item of equipment, proper lubricant and dates lubricated, and a lubrication schedule.
- e. List of consumable items, parts, and supplies, with applicable price lists.

E. Certificates

At the completion of the construction, the Contractor shall submit to the Owner's Representative for review, written certification that all mechanical systems have been tested, and that the installation and performance of these systems conform to the requirements of the Specifications.

1.04 WARRANTY

All specified equipment shall be warrantied and shall be provided with such warranties covering all parts and labor for a period of one (1) year from the date of Final Acceptance unless otherwise specified in subsequent Sections of these Specifications.

PART 2- PRODUCTS

2.01 GENERAL

A. Standard Products

The equipment furnished shall be standard products in production by reputable companies regularly engaged in the manufacture of high-quality equipment of the type specified. Similar equipment shall have been in satisfactory and successful operation for a period of at least two years. All parts of the specified equipment shall be so designed as to be especially adapted for the service required and shall be proportioned, enclosed, or guarded as to have ample and liberal strength and stability to withstand, without damage, the stresses to which they may be subjected during erection or operation. The component parts of duplicate items shall

be fabricated on a principle of interchangeability to facilitate ready replacement.

B. Materials

All materials incorporated in the equipment shall be new and of first-class quality, free from injurious defects and imperfections, and of the classifications and grades designated. Materials not specifically designated herein shall be subject to the review of the Owner's Representative and shall be suitable for the purpose intended.

2.02 RATINGS

The sizes, ratings, capacities, and performance characteristics of various specified items of equipment and devices are based on currently available standard products, which are available through United States manufacturers and/or suppliers. In no case shall the size, rating, capacity or performance characteristic be less than that specified unless approved in writing by the Owner. Ratings and performance characteristics, where applicable, of various devices and items of equipment are specified in respective Sections of these Specifications. All electrical components of mechanical equipment shall be UL rated.

2.03 DETAILS OF CONSTRUCTION

A. Nameplates

Each item of manufactured equipment furnished under the Specifications shall have a permanent nameplate affixed thereto in a readily visible place, showing the serial number, the name and address of the manufacturer, rated capacity, speed, electrical characteristics, and other pertinent data, as applicable and as specified herein after. Nameplates of distributing agents alone will not be acceptable.

B. Samples

The Contractor shall furnish to the Owner's Representative for review, when requested or required by the Specifications, samples of all materials and finishes to be used in the execution of the Work. Such samples shall be submitted before the Work is commenced and in ample time to permit examination thereof. All materials furnished and finishes applied shall be fully equal to the reviewed samples found to be acceptable.

C. Loose Parts

All loose parts, spare parts, fasteners, anchor bolts and other non-attached pieces shall be properly tagged. A loose parts list shall accompany the equipment to identify loose parts.

D. Lifting Provisions

Equipment shall be equipped with adequate provisions for lifting, such as, lifting lugs, threaded holes for removable eyebolts, holes for sling passage, etc. to facilitate initial placement and future moving. All items such as, but not limited to, lifting beams, slings and other devices necessary for handling during placement and/or removal of the equipment shall be provided by the Contractor and shall remain the property of the Owner.

E. Anchor Bolts

Anchor bolts, nuts and washers shall be adequate for the intended use. Each anchor bolt shall be furnished with all required flat washers, lock washers and nuts. Anchor bolts shall be furnished by the Contractor as a part of each piece of equipment.

F. Spare Parts

(As specified in subsequent Sections of these Specifications.)

G. Guards

All rotating equipment such as but not limited to belt and chain drives, exposed gearing and shafting and flywheels, clutches, fan blades, stub shafts, couplings, etc. shall be completely guarded from all directions. Guards shall enclose the top, bottom ends, front and back of the drive assembly to prevent access to the danger zone during equipment operation. All guards shall be checked for proper running clearances and adjusted as required.

2.04 RELATED ELECTRICAL FEATURES OF MECHANICAL EQUIPMENT

A. General

Electrical equipment shall conform to NEC, UL, ANSI, and NEMA Standards. The installed equipment shall conform to ANSI-C1, "National Electrical Code", considering the

atmospheric and climatic conditions and the elevation at the project site.

B. Wiring and Conduit

Wiring of the control panels and component parts shall be in accordance with the applicable requirements of Division 26.

PART 3- EXECUTION

3.00 FABRICATION AND WORKMANSHIP

A. General

Like parts and spare parts shall be interchangeable wherever possible. Surface finish of machined parts shall be adequate for their functional requirements. Machining of fits on renewable parts shall be accurate and to specified dimensions so that replacements made to drawing sizes may be readily installed. All work shall be done by workers skilled in their various trades and completed in a thorough manner following the best modern practices.

During erection the Contractor shall take the necessary precautions to prevent foreign objects or dirt from entering piping or equipment. All openings in equipment shall remain closed and protected during installation until ready for make-up of pipe connections or matching of sectionalized equipment. Damaged covers shall be repaired or replaced immediately to protect the interior of piping or equipment against weather or other contamination.

B. Electric Welding

1. Minimum Weld Requirements

All welds shall be made continuous. The minimum size of fillet welds shall be 1/4 inch. All butt welds shall be full penetration welds welded from both sides.

2. Preparation of Base Material

Members to be joined by welding shall be cut to shape and size by mechanical means such as shearing, machining, grinding, or by gas or arc cutting, to suit the conditions. Design of welded joints and selection of weld filler metal shall

allow thorough penetration and good fusion of the weld with the base metal. The edges of surfaces to be welded shall be sound metal free of visible defects, such as lamination or defects caused by cutting operations, and free from rust, oil, grease, and other foreign matter.

3. Weld Finish

Welds shall in general be treated so that they will display good appearance and a surface suitable for painting. Structure welds shall be ground and blended to avoid stress raisers. All welds which required nondestructive examinations shall be dressed by chipping and grinding as required for good interpretation by the selected weld examination methods.

4. Welding Qualifications

The qualification of welding procedures, welders, and welding operators for all welding including weld repairs, shall conform to the AWS D1.1, "Structural Welding Code". Contractor shall furnish the facilities, all equipment, materials and other articles required to perform qualification tests of his welders and welding operators. Certificates of welders' qualifications shall be submitted when requested.

5. Technique of Welding

The technique of welding, the appearance and quality of the welds, and the methods used in correcting defective work shall conform to the AWS D1.1, "Structural Welding Code". Special care shall be taken to avoid undercuts along the seams or warping of the structure. If undercuts appear along the welds, they shall be filled using a small diameter electrode of the same composition as the original electrode.

C. Fabrication of Structural Steel

1. If straightening is necessary, it shall be done by methods that will not injure the metal. Sharp kinks or bends will be cause for rejection of the material. Shearing and cutting shall be carefully performed, and all portions of the Work which will be exposed to view after completion shall be neatly finished.

2. Design and fabrication of structural parts shall conform to the applicable provisions of the AISC "Specification for the Design, Fabrication, and Erection of Structural Steel for Buildings", of the AISC "Code of Standard Practice for Steel Buildings and Bridges".

D. Machine Work

1. General

All tolerances, allowances, and gauges for metal fits between plain (non-threaded) cylindrical parts shall conform to ANSI-B4.1, "Preferred Limits and Fits for Cylindrical Parts", for the class of fit as shown or otherwise required. Sufficient machining stock shall be allowed on parts to be machined to insure true surfaces of solid materials. Finished contact or bearing surfaces shall be true and exact to secure full contact. Journal and sliding surfaces shall be polished, and all surfaces shall be finished with sufficient smoothness and accuracy to ensure proper operation when assembled. All drilled holes for bolts which are intended to match other drilled holes shall be accurately located and drilled from templates. No machining shall be done on working surfaces of "Lubrite" bushings or washers.

2. Finished Surfaces

All surfaces that are indicated on the Drawings or those that require machining for their intended function, or those that are usually machined according to good workshop practice shall be machined. Surface finish qualities shall be adequate for the intended use and shall be indicated on the Contractor's drawings and shall be in accordance with ANSI-B46.1, "Surface Texture". Compliance with specified surface will be determined by sense of feel and by visual inspection of the Work compared to standard roughness specimens, in accordance with the provisions of ANSI B46.1.

3. Unfinished Surfaces

So far as practicable, all Work shall be laid out to secure proper matching of adjoining unfinished surfaces. Where there is a large discrepancy between adjoining unfinished surfaces they shall be

chipped and ground smooth, or machined, to secure proper alignment. Unfinished surfaces shall be true to the lines and dimensions shown on the Drawings and shall be chipped or ground free of all projections and rough spots. Depressions or holes not affecting the strength or usefulness of the parts may be filled in an approved manner. Corrosion resistant steel seal plates shall have all surfaces thoroughly cleaned and those in contact with seals shall have a smooth and even surface.

4. Pins and Pin Holes

Pin holes shall be bored true to gauges, smooth and straight, and at right angles to the axis of the member. The boring shall be done after the member is securely fastened in position.

5. Protection of Machined Surfaces

- a. Machine-finished surfaces shall be thoroughly cleaned of foreign matter. Finished surfaces of large parts and other delicate surfaces shall be protected with wooden pads or other suitable means. Unassembled pins and bolts shall be oiled and wrapped with moisture resistant paper or protected by other means in keeping with good engineering practice.
- b. Finished surfaces of ferrous metals to be in bolted contact shall be washed with a rust inhibitor and given one thin coat of Tung oil.

E. Lubrication

Solvents shall not be used on "Lubrite" bearings. Before assembly all bearing surfaces, journals, and grease and oil grooves shall be carefully cleaned and lubricated with an approved oil or grease. After assembly, each lubricating system shall be flushed and filled with an approved lubricant in accordance with the equipment manufacturer's written recommendations. "Lubrite" bearings shall not be greased and shall be assembled dry according to the manufacturer's instructions.

3.01 FACTORY TEST AND INSPECTION

- A. Test of Materials. All materials or parts used in the equipment shall be tested, unless otherwise directed, in conformity with applicable methods prescribed by the

ASTM, or such other organization as may be specifically required, and in general accordance with the best commercial methods. When requested, tests shall be made in the presence of the Owner's Representative. Stocked material may be used, provided evidence is furnished to the Owner's Representative to show that such material meets the requirements specified herein, in which case tests on stocked materials may be waived.

- B. Test Certificates. Certified material test reports shall be furnished in triplicate to the Owner's Representative as soon as possible after the tests are made. The test certificate shall identify the component for which the material is to be used and shall contain all information necessary to verify compliance with the Specifications.
- C. Shop Assembly and Tests. The shop assemblies and tests specified for the various items of equipment shall be conducted. The completed shop inspection forms shall be signed by the Contractor or his representative. Copies of all shop inspection records shall be furnished to the Owner's Representative. No equipment shall be shipped from the manufacturer's shops until it has been inspected. Prior to the major shop assemblies and tests the Contractor shall submit an outline of the procedures and test he plans to demonstrate fulfillment of the requirements specified. Where witnessing of shop testing is required by these Contract Documents, the Contractor shall give sufficient notification to the Owner's Representative (as specified) so that such factory testing may be witnessed. Costs which may be incurred by the Owner's Representative directly related to witnessing of shop tests (such as travel and lodging) will be the responsibility of the Owner. All other costs related to shop testing shall be considered incidental to the items of Work to which they pertain and shall be included in the lump sum price of the specified equipment.

3.02 INSTALLATION AND TESTING

- A. Receiving, Handling and Storage. The Contractor shall be responsible for the receiving, handling and storing of all materials and equipment required for the Work. Installation and maintenance instructions shall accompany all equipment delivered to site. All materials and equipment shall be stored to protect them from the weather and injury prior to installation. Damaged materials and equipment shall not be installed.

- B. Installation. The equipment shall be installed as shown on the Drawings and in accordance with the manufacturer's instructions and recommended best practices. All equipment shall be installed in a neat, accurate and workmanlike manner. Equipment shall be set level, true to line, at correct elevation and in proper orientation as shown on the Drawings. Equipment set on concrete foundations shall be properly grouted (with non-shrink grout) in such a manner to eliminate any voids which may be present under the base. Where shims are used and where shims are not removed after the grout sets, care shall be taken to totally cover any exposed surface areas which may result in a void. All necessary shims, grout, anchor bolts, and other items required for installation shall be furnished by the Contractor. In addition, certain anchor bolts when supplied by equipment suppliers shall be installed by the Contractor. The Contractor shall inspect all materials and equipment delivered to the site to assure compliance with the associated reviewed shop drawings. If the Contractor discovers any defect in material or equipment, he shall notify the Owner's Representative immediately. Any Work performed by the Contractor after such discovery, until authorized in writing by the Owner's Representative, will be done at the Contractor's risk and the cost of correcting such work shall be borne by the Contractor. In addition, any material or equipment installed by the Contractor prior to the completion of the Owner's Representative's review, will be done at the Contractor's risk and the cost of correcting such work shall be borne by the Contractor. Where trenching, excavation, backfilling and/or concreting is required for the equipment installation the Contractor shall perform such activities in accordance with the applicable requirements of IDOT Standard Specifications.
- C. Adjustments/Alignment/Leveling. The Contractor shall perform all adjustment, fitting, cleaning and calibration of components to be incorporated into the Work to assure correct operation and workmanlike installation. As minimum requirements, the Contractor shall provide/comply with the following:
1. Mild carbon steel leveling plates or smooth-troweled surfaces shall be provided at all anchor bolts in concrete bases as required for leveling.
 2. All equipment, unless furnished with leveling screws or otherwise specified, shall be leveled with stainless steel shims at each anchor bolt,

shim on both sides of each bolt, and at intermediate points as required to prevent distortion of the equipment. Shims shall have square cut edges, not trimmed or sheared, and shall be of varying thickness to minimize the number of shims required.

3. Rotating mechanical equipment shall be set, leveled, aligned, and inspected with precision tools such as steel straight edge, dial indicator, graduated levels, transit, etc. The alignment shall be accomplished prior to making-up any piping flange connections. After units have been aligned, the piping flange bolts shall be tightened. Sufficient alignment checks shall be made to verify that there is no load or strain on the installed equipment and that the drive shaft and the driven shaft are within the manufacturer's specified tolerances for alignment.
 4. Electric motors shall be checked for correct direction of rotation prior to connection to driven equipment.
- D. Field Testing. All necessary piping, pipe closures, gates, meters, valves, and other test equipment required for testing shall be furnished by the Contractor. All items of equipment shall be operated, adjusted and tested for proper performance in accordance with the manufacturer's recommended test procedure, and as otherwise specified herein. Before final grouting of equipment is done, after alignment is completed, and before any final performance tests are made, the Contractor shall notify the Owner's Representative so that such alignment may be inspected and tests may be witnessed by the Owner's Representative.

The Contractor shall then test, operate and calibrate as necessary to demonstrate proper performance of the equipment in the presence of the Owner's Representative. Should it become necessary for any items of equipment to be retested, the Contractor shall perform all necessary Work, including removal, repair or replacing, reinstallation and retesting of the defective equipment. The Contractor will not be reimbursed for the cost of such Work associated with the retesting of defective equipment, if the defect was due to the Contractor's negligence or lack of workmanship.

- E. Maintenance and Operation of Equipment and Materials. All equipment and appurtenances installed shall be provided with proper oil and lubricants by the

Contractor before being placed in operation. All permanent equipment furnished under these Specifications shall be properly maintained and operated by the Contractor until the Work is accepted by the Owner.

- F. Field Check-Out and Start-Up Procedure. The Contractor shall complete all new Work to the maximum extent possible before making actual tie-in and final connection to existing systems. Tie-ins requiring cutting and patching shall be performed in accordance with applicable requirements, best recommended procedures and as specified herein. No tie-in shall be made until authorized by the Owner. The Contractor shall advise the Owner in sufficient time (minimum 24 hours) to arrange for proper coordination with Existing Systems and scheduled cut-ins and tie-ins.

3.03 PAINTING

- A. All equipment shall be shop-primed and painted in accordance with Section 09 91 13 and/or as specified in subsequent Sections of these Specifications. All equipment shall be field painted in accordance with Section 09900 and/or as specified in subsequent Sections of these Specifications.
- B. The Contractor shall be responsible for coordination of the compatibility between the manufacturer's standard finish and field-paint specified.

PART 4- MEASUREMENT AND PAYMENT

Separate measurement or payment will not be made for Work specified in this Section. All costs for such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Schedule of Prices.

END OF SECTION

ADDENDUM NO. 1
November 17, 2025

To:
Contract Documents Entitled
Summit Water Tower Rehabilitation

For:
Village of Downers Grove

Prepared By:
Christopher B. Burke Engineering, Ltd.
(CBBEL Project No. 01.R250327.00000)

This Addendum forms part of the Contract Documents and modifies the original Bidding Documents as noted below.

Addendum No. 1 consists of the following changes and clarifications:

- Attached is the list of attendees of the mandatory pre-bid meeting.
- Attached is an exhibit showing the limits of construction.
- The following are contractor questions and responses.

Question 1: With this project bidding on 12/5/2025 and the 180 day completion, when should we expect NTP to be issued?

Response 1: Upon receipt of the bids, the Village will award a contract to the lowest responsive bidder typically within 30 – 45 days of the bid opening. The successful bidder will then receive a Notice to Proceed no later than March 1, 2026.

Question 2: SECTION 01 11 00 states Installation of new painter's rail, access rail, safety grabs, rigging couplings, however, it does not show up anywhere else in the specification. Please clarify.

Response 2: The line item for this work is 05 52 13/02 and is listed in the Schedule of Prices. The line item is also called out in the specification section in paragraph 2.03(C) and is now listed in the revised Part 4 – Measurement and Payment, 4.02A, Payment.

Question 3: 05 50 00/03 states to Install Rigging and Safety Grabs. Please clarify what is meant by this as there does not appear to be a description as to what this scope of work entails.

Response 3: See Section 01 11 00, Summary of Work, Part 1, 1.01(B)(6). Safety grabs are also commonly known as handholds and are to be located approximately every 10'-0" along the exterior ladder above the catwalk, 1'-0" offset from ladder.

Question 4: 05 52 13/02 on the Bid Form states, Install New Roof Handrail, however, 05 52 13/02 in SECTION 05 52 13 states, Remove and Replace Bolted Roof Framing

Signature: Jose Valdivia

Date: 12-29-25

Connections and Seal Weld along with Stiffeners and Ring. Please confirm this is to be the new roof handrail and Remove and Replace Bolted Roof Framing Connections and Seal Weld along with Stiffeners and Ring is covered by 05 50 00/04.

Response 4: They are two separate pay items for two specific items of work. See response to Question 2 above.

Question 5: 05 52 13/04 states, Repair Roof/Sidewall Ladder with Vertical Sidewall Ladder. Is there a detail of what is required for this scope of work?

Response 5: There are locations along the vertical and curvilinear ladder that need weld repairs and rungs replaced. The intent of the pre-bid meeting was for all bidders to have access to the tower for investigative purposes and to delineate the anticipated required work. No contractors traversed the tower so it was understood that all contractors understood the scope of work.

Question 6: 05 52 13/10 states to Tighten Sway Rods. What is the intent, is there a specification or torque they are to be tightened to?

Response 6: Several of the turnbuckles are loose and require tightening. The contractor shall tighten to a point which does not cause undo stress to the rods or turnbuckles.

Question 7: SECTION 05 52 13, Part 2, 2.02.A.8 - Inspection Report - An inspection report per Paragraph 11.2.1 of AWWA D100 shall be required for the 1 MG Legged Tank. This tank is 500,000 gallons, please clarify.

Response 7: The inspection report is included in the document "For Information Only". The tower is a 500,000 gallon legged tank.

Question 8: SECTION 09 91 13-2.01 - All lead paint wastes generated on the interior dry area of this tank shall be rendered nonhazardous by using the PreTox 2000 coating system. There is not an inside dry area on this tank. Please clarify.

Response 8: The KLM report shows the lead level test results. All testing completed shows no lead levels above the reporting limits. Disregard any reference to interior dry.

Question 9: The lead tests show the lead levels of the tested paint chips are extremely low, however, the pictures show a red primer under the topcoat that typically is lead based paint. Please confirm there is not led based paint on the tank.

Response 9: See Response 8 above.

END OF ADDENDUM NO. 1

GAH/pjb

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**SUMMIT WATER TOWER REHABILITATION
SIGN IN SHEET PRE-BID CFB-35-0-2025/JV**

DATE: November 14, 2025 AT 10:00am

Justin Valenti

VOBG

130-434-5461

summit@bawen.com

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Ken Brend	Jetco Ltd	847-525-6479	k.brend@jetcoltd.com

SCHEDULE OF PRICES:

Item No.	Description	Unit	Qty.	Unit Cost	Cost
05 50 00/01	Pit Weld Repairs	Each	800	10.00	8,000.00
05 50 00/02	Weld Seam Repairs	LIN. FT.	1,000	15.00	15,000.00
05 50 00/03	Install Rigging and Safety Grabs	LSUM	1	3,000.00	3,000.00
05 50 00/04	Remove All Bolted Roof Framing Connections and Seal Weld Framing Connections and Both Sides of Stiffeners on Upper Taurus Including Stiffener Ring	LSUM	1	20,000.00	20,000.00
05 52 13/01	Install New Painted Aluminum Roof Vent with HDPE Screen	LSUM	1	12,800.00	12,800.00
05 52 13/02	Install New Roof Handrail	LSUM	1		
05 52 13/03	Fill Pipe Grating	LSUM	1	6,000.00	6,000.00
05 52 13/04	Repair Roof/Sidewall Ladder	LSUM	1	1,800.00	1,800.00
05 52 13/05	Remove and Install New Fall Prevention Ladder	LSUM	1	5,000.00	5,000.00
05 52 13/06	Install New Wet Interior Ladder Equipped with Fall Prevention Device	LSUM	1	14,000.00	14,000.00
05 52 13/07	Remove and Replace Wet Interior Roof Access Hatch with New 30" Hatch	LSUM	1	5,000.00	5,000.00
05 52 13/08	Install Light Weight Lockable Hatch at Balcony Opening at Ladder Transition	LSUM	1	4,000.00	4,000.00
05 52 13/09	Install New Gaskets on Wet Interior Roof Hatch, Shell Manway and Wet Riser Manways	LSUM	1	1,000.00	1,000.00
05 52 13/10	Tighten Sway Rods	LSUM	1	1,000.00	1,000.00
05 52 13/11	Caulk Roof Lap Seams	LSUM	1	8,000.00	8,000.00
05 52 13/12	Repair Areas of Missing or Damaged Grout Between Steel Baseplate and Concrete Foundation	LSUM	1	500.00	500.00
05 52 13/13	Expose 4" of Footings and Regrade	LSUM	1	4,000.00	4,000.00
05 52 13/14	Install a New Corrosion Resistant #4 and #24 Screens on Overflow Pipe	LSUM	1	800.00	800.00
05 52 13/15	Remove and Replace Existing Fence Removed for Construction with New Fence	LSUM	1	18,000.00	18,000.00
09 91 13/01	Abrasive Blast & Paint Exterior Coating including Logos to Match Existing	LSUM	1	443,034.00	443,034.00
09 91 13/02	Abrasive Blast & Paint Wet Interior Coating	LSUM	1	155,000.00	155,000.00
09 91 13/03	Containment	LSUM	1	120,000.00	120,000.00
09 91 13/04	Proper and Legal Disposal of Paint Chips/Flakes and Other Debris	LSUM	1	5,000.00	5,000.00
09 91 13/05	Recoat Existing Concrete Foundation and Leg Footings	LSUM	1	500.00	500.00
11 20 00/01	Install Grid Bee Water Destratification Mixing System	LSUM	1	35,000.00	35,000.00
26 00 10/01	Electrical Work, Complete in Place	LSUM	1	14,000.00	14,000.00
26 42 00/01	Install New Cathodic Protection System with Clips	LSUM	1	45,000.00	45,000.00
26 42 00/02	Service Agreement	LSUM	1	900.00	900.00

Item No.	Description	Unit	Qty.	Unit Cost	Cost
27 51 25/01	SCADA System Modifications	LSUM	1	43,360.00	43,360.00
				TOTAL BID	989,694.00

WATER STORAGE TANK REHABILITATION AND RELATED REPAIRS

4.02 PAYMENT

- A. Payment for the Work specified in this Section will be made at the lump sum prices for the below listed Items in the Schedule of Prices:

05 52 13/01,	Install New Painted Aluminum Roof Vent with HDPE Screen
05 52 13/02,	Install New Roof Handrail
05 52 13/03,	Fill Pipe Grating
05 52 13/04,	Repair Roof/Sidewall Ladder
05 52 13/05,	Remove and Install New Fall Protection Ladder
05 52 13/06,	Install New Wet Interior Ladder Equipped with Fall Protection Device
05 52 13/07,	Remove and Replace Wet Interior Roof Access Hatch with New 30" Hatch
05 52 13/08,	Install Lightweight Lockable Hatch at Balcony Opening at Ladder Transition
05 52 13/09,	Install New Gaskets on Wet Interior Roof Hatch, Shell Manway and Wet Riser Manways
05 52 13/10,	Tighten Sway Rods
05 52 13/11,	Caulk Roof Lap Seams
05 52 13/12,	Repair Areas of Missing or Damaged Grout Between Steel Baseplate and Concrete Foundation
05 52 13/13,	Expose 4" of Footings and Regrade
05 52 13/14,	Install New Corrosion Resistant #4 and #24 Screens on Overflow Pipe
05 52 13/15,	Remove and Replace Existing Fence Removed for Construction with New Fence

- B. These prices shall be full compensation for furnishing all materials, equipment and labor as well as any and all incidentals necessary to complete the Items of Work.
- C. Payment will not be made for any other items except as listed above. All other costs associated with such Work shall be considered incidental and shall be included in the prices bid for the various items to which they pertain in the Schedule of Prices.
- D. Payment for other items of equipment specified in other Sections of these Specifications will be made at the prices for those respective Items in the Schedule of Prices.

END OF SECTION

Polable Tanks, Towers, and Similar Jobs **

Era Valdivia Contractors, Inc./Greg Bairaktaris - Protective Coating and Lining Work List

Date	Owner's Name & Address	Size of Project	Type of Project	SSPC Method	Contact Person & Telephone No.	Approx. Project \$ Value
2001	City of Marion IN, Water Dept/Public Works - . 2 Tanks, 500 MGL Water	.500 MGL	Plural Comp. Lining & Repairs	SP10/SP3	Ira Gabin - Dixon Engineering 616-374-3221	\$278,000
2001	Hines Veterans Admin. Hospital, 5th and Roosevelt Rd., Hines, IL 60841	1.0 MGL	Elevated Water Tank	SP 6 & 10	Sal Garcia, Eviropius, Inc., 847-475-0022	\$789,726
2001	City of Chicago, Water Dept., 1000 E. Ohio St., Chicago, IL 60611- South Water Purification Plant	Various Piping	Tank Steam Heat Piping		Scott Company Mechanical, 3300 E. Cheltenham Pl., Chicago, IL 60649, Mike Zaradi, 773-374-6700 IL OFFICE CLOSED	\$177,457
2002	Village of LaGrange, 1300 Birks Ct., LaGrange, IL 60525	2.2 MGL	Standpipe Tank	SP 10 & 11	Ken Watkins, Dir. Of Public Works, 708-579-2326 ext 2423	\$208,446
2002	Peoples Energy Co., 130 E. Randolph Dr., Chicago, IL 60601 - N. Shore Gas Facility	30'Lx6'Hx10'D	16 LPG Storage Tanks	SP 6	Frank Karlin, 312-240-4230	\$104,000
2002	Metropolitan Water Reclam. Dist. Of Greater Chicago, Stckney Plant, 6001 W. Peshing, Cicero, IL 60649	2.0 MGL 110'D	20 Water Final Settling Tanks	SP 6 & 10	Babu Patel, 312-751-5120 & Lisa Kursei 708-588-4157	\$515,000
2003	Lincoln Park Polar Bear Exhibit Lining 2001 North Clark Street, Chicago, IL	Various	Sandblast and Lining	CSP 3-5	General Contractor: Benson/Rausch JV 250 S. Northwest Hwy / 312-742-2000	\$46,750
2003	Village of Palatine, 148 W. Illinois, Palatine, IL 60067-8188	3.75 MGL	Ground Storage Tank	SP 10	Baxter & Woodman, Inc./Dixon Engineering. Jim Viceck, 847-705-5200	\$240,000
2003	Village of Lombard, 225 E. Wilson Ave., Lombard, IL 60148-3931	1.00 MGL	Spheroid Water Tank & Repairs	SP 6 & 10	Tank Industry Consultants, Inc., Lee Murphy, 317-474-7952	\$475,337
2003	Resolution Performance Products, Inc., PO Box 290, Arg, IL 60201	60'Hx14'D	2 Silo Storage Tanks	SP 10	Charles Silcox, 708-768-8629	\$75,000
2003	Same & Oak Park Hospital	8,000 GL	Surge Tank	Same	Same	\$33,000
2003	Chicago Park District/Chicago Bears - Soldier Field Complex, Chicago, IL	Various Stadium Areas	Structural Steel Field Touch-ups	SP 2 & 3	Harsfield Steel Company Inc., PO Box 3678, San Angelo, TX, Mitchell Gehring, 312-287-6634	\$1,000,000+
2004	Village of Metamora, IL Rt 116, Metamora, IL	.200 MGL	Elevated Water Tank and Repairs	SP 10	Farnsworth Group, Joe Mikulaky, 309-663-8435	\$162,000
2004	Cook County Hospital - Oak Park Campus, Purchasing Dept., Chicago, IL	.250 MGL	Elevated Water Tank	SP 6 & 10	Cecchin Plumbing & Heating, Chris Komom, 630-918-1797	\$239,720
2004	Village of Glenview, IL 1225 Waukegan Road	Various	Glenview Water Pumping Station	SP 11	Andy Resak, Village of Glenview, 847-376-0149	\$20,000
2005	Village of Crete, IL - Flourathene System	.300 MGL	Tank Painting & Repairs	SP10/SP6	Tech 3 Consulting Group, Bill Stefek - 708-672-4994	\$181,000
2005	Village of Goodfield, IL - Flourathene System	.075 MGL	Tank Painting & Repairs	SP10/SP6	Lewis, Yockey & Brown, Inc. Beckey Bengston - 309-527-2552	\$95,200
2005	Town of Griffith, IN	Two 1.0 MGL	Tank Painting & Repairs	SP 11/SP6	Town of Griffith - Public Works Tim Alger - 219-924-3838	\$93,600
2005	City of Le Roy, IL - Flourathene System	.250 MGL	Tank Painting & Repairs	SP10/SP6	City of Le Roy, Jeff Clawson - City Administrator 309-962-3031	\$146,780
2006	Village of Palos Heights, IL	.250 MGL	Tank Painting & Repairs	SP10/SP6	Village of Palos Heights, 708-361-1800	\$162,000
2006	Mooseheart, Illinois	.100 MGL	Tank Panting & Repairs	SP10/SP6	Mooseheart Child City, Mooseheart International, 630-866-2230	\$157,000
2006	Town of Kouts, IN	.200 MGL	Tank Painting & Repairs	SP10/SP6	Town of Kouts, Indiana James Maandon Town Engineer 219-781-2786	\$174,000
2007	Caterpillar, Inc. Joliet Plant-Scheduled 10/2/05	.300 MGL	Tank Painting & Repairs	SP10/SP6	Caterpillar, Inc. - Joliet Plant, Dixon Engineering, Ira Gabin 616-374-3221	\$337,000
2007	Roseland Pumping Station - 351 W. 104th	Various Piping	Pumping Station	SP6/SP11	Rossi Contractors - Girish Machhar - 773-287-7545	\$158,000
2007	Southwest Pumping Station - 8422 S. Kadvale	Various Piping	Pumping Station	SP6/SP11	Rossi Contractors - Girish Machhar - 773-287-7545	\$55,000
2007	Town of Griffith, IN	.250 MGL	Tank Painting & Repairs	SP10/SP6	Town of Griffith - Public Works Tim Alger - 219-924-3838	\$179,000
2007	City of Country Club Hills IL	.250 MGL	Tank Painting & Repairs	SP10/SP6	Country Club Hills Larry 708-473-1159	\$118,000
2007	Aqua-IL Various Tanks-University/Kankakee.*	.045 MGL	Tank Panting & Repairs	SP10/SP6	Aqua-Illinois University Park/Kankakee Div. City of North Chicago Public Work Darrell King - 847-596-8980	\$158,000
2008	Green Bay Standpipe/City of North Chicago, IL	4.5 MGL	Plural Comp. Lining & Repairs	SP10/SP6	City of North Chicago Public Work Darrell King - 847-596-8980	\$440,000
2008	Town of Winamac, IN Tank Painting	.150 MGL	Tank Painting & Repairs	SP10/SP3	Town of Winamac, IN Eric Vance Norman Noe , 317-410-5600	\$75,000
2008	Country Club Hills -183rd Pumping Street Tank	.500 MGL	Tank Painting & Repairs	SP10/SP10	City of Country Club Hill, IL Larry 708-473-1159	\$268,000
2008	University Of Notre Dame, Notre Dame, IN	.500 MGL	Tank Painting & Repairs	SP10/SP6	University of Notre Dame, IN Mark Hummel, 574-631-4452	\$699,500
2008	City of Auburn, IL	.300 MGL	Tank Painting & Repairs	SP10/SP10	City of Auburn, IL Phil Martin, 217-698-8900	\$148,000
2008	Town of Claypool, IN	0.075	Inter. Tank Painting	SP10	Town of Claypool, IN Gene Warner, 574-588-2910	\$58,000
2008	City of Decatur, IN - Tank Painting Rehabilitation - Two .500 Torolipse Tanks	.500 MGL	Tank Painting & Repairs	SP10/SP6	City of Decatur, IN Jim Inskeep 260-724-3814	\$784,000
2008	City of Huntington, IN - Briant Street Tank	1.0 MGL	Tank Painting & Repairs	SP10/SP6	City of Huntington, IN Dave Schoeff 260-358-1400	\$578,000
2008	City of Huntunton, IN - River Forks tank	.500 MGL	Tank Painting & Repairs	SP10/SP11	City of Huntington, IN Dave Schoeff 260-358-1400	\$335,000
2008	City of Huntington, IN - Commercial Street Tank	.500 MGL	Tank Painting & Repairs	SP10/SP6	City of Huntington, IN Dave Schoeff 260-358-1400	330000
2008	City of Oak Forest, IL Lockwood Tank	.500 MGL	Tank Painting & Repairs	SP10/SP11	City of Oak Forest, Raymond Koenig 708-478-2080	\$218,000
2008	City of Oak Forest, IL Kilbourn Ave. Tank	.500 MGL	Tank Painting	SP10/SP11	City of Oak Forest, Raymond Koenig 708-478-2080	\$88,000

2008	City of Chicago - Jardin Water Purification Plant, Chicago, IL	Water Plant	Polyurea Lining	SP10	Rossi Contractors - Girish Machhar - 773-287-7545	\$76,000
2008	Microsoft Data Center, Northlake, IL	12 Concrete Tanks	Polyurea Lining	SP10	The Kraz Group - Tony Lee - 312-208-1849	\$280,000
2009	Village of Schaumburg, IL	5.0 MGL & Station	Polyurea Lining	SP10/SP7	Village of Schaumburg -Dept. of Public Works - Dave Varner 847-895-7100	\$240,550
2009	Village of Huntley, IL	1.0 MGL	Tank Painting	SP10/SP6	Village of Huntley Public Works - Steve Zonta 847-515-5222	\$381,000
2009	DuPage County, Green Road Tank	.250 MGL	Tank Painting	SP6/SP10	DuPage County Purchasing - Peter Costa 630-407-6200	\$169,000
2009	Alexian Stadium - Structural Steel	Various Steel	Structural Steel	SP10/SP11	Village of Schaumburg Engineering Dept. - Mike Litwin 847-923-6654	\$485,000
2009	Village of Oak Forest, IL	.500 MGL H/P	Tank Painting	SP10/SP11	Village of Oak Forest - Baxter and Woodman Ray Koenig 815-459-1260	\$157,000
2009	Village of Lansing, IL	.750 MGL	Tank Painting/Repairs	SP10/SP6	Lansing, IL - Public Works/708-895-7190	\$378,000
2009	Ameren Absorber Tank Vessel/Structural Steel	Tank Ext. Steel 10 MGL	Tank Painting	SP6	Ameren - Duck Creek IL Power Plant - Dave Crisp 847-345-1751	\$1,160,000
2010	City of Appleton, WI Accelerator Basins	Tank Exter. Steel	Tank Painting	SP10	City of Appleton, WI - 920-837-4200	\$220,000
2010	Village of Olympia Fields - East/West Tank	1.0 and .750 MGL	Tank Painting	SP10/SP11	Village of Olympia Fields - Baxter and Woodman Ray Koenig 815-458-1260	\$519,000
2010	Village of Westmont, IL East/West 1.5 MGL	1.60 and 1.50 MGL	Tank Painting/Repairs	SP10/SP11	Village of Westmont - Baxter and Woodman Ray Koenig 815-469-1260	\$422,500
2010	City of Crystal Lake, IL - Ambulal Tank	.500 MGL	Tank Painting/Repairs	SP10/SP3	City of Crystal Lake - Dixon Engineering Tom Van Garment 414-529-1859	\$337,000
2010	Calumet City, IL State Street Reservoir	2.5 MGL	Tank Painting/Repairs	SP10/SP5	City of Calumet City - Robinson Engineering Tom Nagle 815-806-0300	\$440,000
2010	North Chicago VA - Enviroplus Tank Painting	.400 MGL	Tank Painting/Repairs	SP10/SP11	Sal Garcia - Enviroplus, Inc. 847-475-0022	\$340,000
2010	Village of Glenwood, IL Arquilla Drive Tank	.250 MGL	Tank Painting/Repairs	SP10/SP6	Village of Glenwood Robinson Engineering Jennifer Prinz 708-331-6400	\$408,986
2010	City of Ottawa North Station Standpipe	.500 MGL	Tank Painting/Repairs	SP10/SP6	City of Ottawa IL Engineering Dept. Arnie Bendstra - 815-433-0161, Ext 41	\$176,000
2010	Village of Schaumburg, IL - 2.0 Reservoir and Pump Station Well 19	2.0 MGL & Station	Polyurea & Pipes	SP13/SP10	Village of Schaumburg-Dept. of Public Works - Dave Varner 847-895-7100	\$310,420
2011	City of Milwaukee - Water Department GT-12	2.0 MGL Tank	Tank Painting /Repairs	SP10/SP6	City of Milwaukee - Mark Gremmer 414-286-5508	\$1,050,000
2011	Village of Schaumburg, IL - 6.2 MGL Tank	6.2 MGL Tank	Plural Comp. Lining and Painting/Repairs	SP10/SP6	Village of Schaumburg-Dept. of Public Works - Dave Varner 847-895-7100	\$880,000
2011	Village of Skokie, IL - 2 Tank 4.9 + MG Tank	5.2 and 4.9 MGL Tank	Tank Painting/Repairs	SP10/SP6	City of Skokie, IL - Dept. of Public Works Jean Scher - 847-833-8427	\$1,158,000.00
2012	Village of Huntley, IL 1.0 MGL Tank	1.0 MGL	Tank Painting	SP10/SP6	Steve Zonta - 847-833-7074	\$279,000
2012	Village of Montgomery - Rehabilitation Water Plant	Tanks/Claricones/Filter/ Piping /Building		SP10/Repairs	EEL - Tim Ferrell 630-466-6700	\$1,228,000
2012	City of Blue Island 2 Tanks Rehabilitation	1.0 MGL and 1.0 MGL Conc. Tank	Tank Painting/Repairs	SP10/SP6	Tom Nagle - Robinson Engineering 815-806-0300	\$1,023,251
2012	Village of Flossmoor - Melnhel Tank	.500 MGL	Tank Painting/Repairs	SP10/SP6	Tech 3 Consulting - 708-672-4994	\$296,500
2012	Village of South Holland Canal Str. Tank	1.0 MGL Tank	Tank Painting/Repairs	SP10/SP6	Tom Nagle - Robinson Engineering 815-806-0300	\$515,800
2012	Village of Riverdale Enviro - 1.0 MGL	1.0 MGL Tank	Tank Painting/Repairs	SP10/SP6	Tom Nagle - Robinson Engineering 815-806-0300	\$613,800
2012	Village of Merrionette Park .40 MGL	.400 MGL Tank	Tank Painting/Repairs	SP10/SP6	Tom Nagle - Robinson Engineering 815-806-0300	\$395,601
2012	Zion Tank - LCPWD - 1.250 MGL Tank	1.00 Tank	Tank Painting/Repairs	SP10/SP11	Dixon Engineering - Ira Gabin 616-374-3221	\$284,775
2012	Berwyn Tank - 4.0 MGL Ground Storage Tank	4.0 MGL Tank	Tank Painting/Repairs	SP10/SP6	John Keubrich - Novotney Assc. 630-887-8840	\$782,000
2012	City of Wenona - .200 MGL Spheroid Tank	.200 MGL	Tank Painting/Repairs	SP10/SP6	Adam Ossola - Chamlin Assc. 815-223-3344	\$247,484
2013	City of Ottawa - North and South Standpipes	.300 MGL EACH	Tank Painting/Repairs	SP10/SP6	City of Ottawa - Arnie Benstra 815-433-0161	\$222,800/261,000
2013	Village of Westmont - South Tank 1.0 MGL SPH	1.0 MGL Tank	Tank Painting - Extr	SP11/SP10	Village of Westmont - Baxter & Woodman Ray Koenig - 815-459-1260	\$315,000
2013	Village of Huntley - .750 Spheroid - Southwind	.750 MGL	Tank Painting	SP10/SP6	Steve Zonta - Water Super. 847-833-7074	\$288,000
2013	Village of Huntley - .400 Spheroid - Tower 5*	.400 MGL	Tank Painting	SP10/SP6	Steve Zonta - Water Super. 847-833-7074	\$283,000
2013	City of Crystal Lake - Bard Road Spheroid*	.500 MGL	Tank Painting/Repairs	SP10/SP6	Tom Van Garment- Dixon Eng. 414-529-1859	\$432,400
2013	Tinley Park Post 1 - West GS Reserv**	5.0 MGL GST Reserv	Tank Painting - Interior	SP10	Robinson Engineering	\$489,000
2014	Village of Huntley - .750 Spheroid - Tower 3	.750 MGL	Tank Painting	SP6/SP10	Steve Zonta - Water Super. 847-833-7074	\$270,000
2014	MWRDGC -13-932-22 Tanks and Deep Tunnel 3 year contract - Group A, B and C	Various Tanks/Str. Steel	Final Tanks - 18 Tanks	SP6/SP3	Edward J. Andruszkiewicz Group C, - A & B	\$1,754,760
2014	City of Aurora - IL Indian Trail Water Tank	2.0 MGL	Tank Painting/Repairs	SP10/SP6	Michele Piotrowski, P.E. EEL 630- 466-6724	\$1,343,766
2014	Village of East hazel Crest 1.0 MGL Reserv	1.0 MGL	Tank Painting	SP1/O-Coat	Jennifer Prinz - Robinson Eng. 708-210-5687	\$29,288
2014	Flagg Creek Tanks McElwain WRD	Various System Wide	Tank Painting/W - Repair	SP10	Kenneth Kendrick - PE 708-785-8320	\$585,290
2014	Chicago Heights Concrete Reservoirs	5.0/3.0/1.0 MGL	Exterior Concrete Repair	SP1/O-Coat	Jennifer Prinz - Robinson Eng. 708-210-5687	\$244,277
2014	WRDGC - Various Tanks - 3 YR Contract	18 Final Tanks	Tank Painting	SP10	Steve Nahulak - RE 708-668-3666	\$1,754,760
2015	Village of Dwight - IL RT 66 Tank	.250 MGL	Tank Painting	SP10/SP10	Gerald Hennely - PE 847-980-3691	\$202,256
2015	DuPage Water Commission - 5.0/7.5 MGL Tank 2 & 4W	5.0/7.5 MGL	Tank Painting/Repairs	SP10/SP6	Chris Bestick - 630-516-1915	\$2,997,716
2015	City of Wheaton - IL - Manchester Road Tank	1.50 MGL	Tank Painting	SP10/SP6	Brad Scholanus - Dixon Eng. 630-220-1410	\$780,050

2015 Village of Pingree Grove 1.0 MGL	1.0 MGL	Tank Painting/Repairs	SP10/SP6	Joseph Cavery - Water Super. 847-464-5533	\$484,125
2015 Village of Willowbrook - IL .500 MGL 67th street / Lake Hinsdale Drive	.500 MGL	Tank Painting	SP10/SP6	Gerald Hennely - PE 847-980-3691	\$368,200
2016 Country Club Hills - IL South Tank	.200 MGL	Tank Painting	SP10/SP6	Baxter-Woodman -Ray Koenig - 815-459-1260	\$254,000
2016 DuPage Water Commission - 5.0/7.5 MGL Tank 1 & 4E	6.0/7.5 MGL	Tank Painting/Repairs	SP10/SP6	Chris Bostick - 630-516-1915	\$29,907,580
2016 Village of Antioch - IL - Bowles Tank	.500 MGL	Tank Painting/Repairs	SP10/SP6	Brad Scholanus - Dixon Eng. 630-220-1410	\$288,500
2016 Village of Wauconda - IL Tank 1	.500 MGL	Tank Painting/Repairs	SP10/SP6	William R. Rickerl, PE RHMG Engineers, Inc. 847/362-5959	\$498,800
2016 NSMJAWA - 5.0 Standpipe West	5.0 MGL	Tank Painting/Repairs	SP10/SP6	Stephen T. Crede - 630-710-8867 Burns & McDonnell	\$1,292,000
2017 Village of Tinley Park Post 1 - East Tank	5.0 MGL	Tank Painting-Intr/Extr O	SP10/SP11	Jennifer Prinz - Robinson Eng. 708-210-5687	\$807,750
2017 DuPage Water Commission - 7.5 MGL Tank No. 3 Naperville, IL	7.5 MGL	Tank Painting/Repairs	SP10/SP6	Chris Bostick - 630-516-1915	\$1,390,000
2017 Village of Schaumburg - Pump Station 22 Tank	5.5 MGL	Tank Painting/Repairs	SP10/SP6	Michele Piotrowski, P.E. EEI 630- 466-6724	\$1,282,550
2017 City of Elgin -1.0 MGL Randall Rd Spheroid Tank	1.0 MGL	Tank Painting/Repairs	SP10/SP6	Erick Weisse, 847-544-1081	\$954,700
2017 Village of Carol Stream 3 Tank Painting/Repairs	1.0/.250/.500 MGL	Tank Painting/Repairs	SP6/Repairs	Finished	\$81,120
2017 City of LaSalle - 1.0 Hydropillar Tank	1.0 MGL	Tank Painting/Repairs	SP10/SP6	Finished	\$498,500
2017 City of El Paso .200 MGL Spheroid	.200 MGL	Tank Painting/Repairs	SP10/SP6	Finished	\$258,000
2017 City of Chenoa .200 MGL Ellipsoidal	.200 MGL	Tank Painting/Repairs	SP10,SP11	Finished	\$229,880
2017 Village of Woodridge - .500 MGL Spheroid	.500 MGL	Tank Painting/Repairs	SP10/SP11	Finished	\$306,300
2017 Aqua-IL, Inc. 1.0 MGL Bourbonnais Tank	1.0 MGL	Tank Painting/Repairs	SP11-Extr	Finished	\$142,400
2017 Aqua-IL, Inc. 3.0 MGL Bradley Tank	3.0 MGL	Tank Painting/Repairs	SP11-Extr	Finished	\$167,000
2017 Aqua-IL, Inc. .250 Spheroid Tank	.250 MGL	Tank Painting/Repairs	SP10/SP6	Finished	\$340,000
2017 Aqua-IL, Inc. 150 MGL Klemme Rd Tank	.150 MGL	Tank Painting/Repairs	SP10/SP6	Finished	\$233,000
2017 City of Addison - Chestnut 1.5 Concrete Tank	1.5 MGL	Tank Painting		Finished	\$43,200
2017 City of Chicag-Water Dept. Harrison/Dever Cribs	Extr Steel and Intr Steel	Water System Painting	SP6/SP11	Finished	\$1,350,000
2017 City of Addison - 1.5 MGL Hydropillar	1.5 MGL	Tank Painting/Repairs	SP10/SP6	Finished	\$1,148,000
2018 Village of Homewood 1.0 GST	1.0 MGL	Tank Painting	SP10/SP6	John Schafer 708-206-3470	\$354,800
2018 NSMJAWA - 5.0 Standpipe East	5.0 MGL	Tank Painting/Repairs	SP10/SP6	Paul D. May - P.E. 847-981-4083	\$1,178,000
2018 Chicago Ridge 1.0 MGL Legged Tank	1.0 MGL	Tank Painting/Repairs	SP10/SP6	Gerald Hennely - P.E. 847-980-3691	\$1,169,259
2018 Carpentersville Various Tanks	1.25 and 3.0 MGL	Tank Painting/Repairs	SP10/SP11	Baxter-Woodman -Ray Koenig - 815-459-1260	\$858,465
2018 Village of Tinley Park Post 2 Concrete Tank	6.0 MGL	Tank Painting/Repairs	SP3/SP10	Brad Scholanus - Dixon Eng. 630-220-1410	\$210,000
2018 Village of Homewood Pump Station Painting	1.0 MGL	Pump Station - Liner	SP6/ICRI 1-3	John Schafer 708-206-3470	\$308,200
2018 Nestle Waste Water Tank Lining	.050 MGL	Tank Liner	SP6-ICRI 5	Nestle Corp. Conrad J. Joanis 630-417-0193	\$170,000
2018 City of Milwaukee LS 35 6.0 MGL EGST	6.0 MGL	Tank Painting/Repairs	SP10/SP6	M.Gremmer/P.Greuel Water Dept. 414-286-3630	\$1,865,058
2018 City of Elmhurst R-0567 West Tank	.500 MGL	Tank Painting/Repairs	SP10/SP6	Rick Leber - Robinson Eng. 815-464-2693	\$604,435
2018 City of Elmhurst R-0334 North Tank	.500 MGL	Tank Painting/Repairs	SP10/SP6	Rick Leber - Robinson Eng. 815-464-2693	\$662,000
2018 Village of Tinley Park Post 1 LOGO	3.0 MGL	LOGO Painting	SP3	Brad Scholanus - Dixon Eng. 630-220-1410	\$16,000
2018 Naperville Piping Thermal Insulation	.750 MGL	Insulative Coating	SP6	Patrick O'Malley - Naperville Water	\$22,980
2018 Joliet Water Tower 12D 1.0 MGL	1.0 MGL	Tank Painting/Repairs	SP10/SP6	Nickolas C.Gornick -Joliet Water 815-405-3666	\$900,361
2019 City of Olney 1.0 MGL Sph Recoat	1.0 MGL	Tank Painting	SP11/SP10	Mike Bridges Charleston Eng. 815-843-9236	\$310,400
2019 MWRD 17-134-3M OCF Lining	Tanks	Lining	ICRI 3-4	IHC Construction Co. LLC	\$390,000
2019 Lincolnwood 1.5 MGL Standpipe	1.5 MGL	Tank Painting/Repairs	SP6/SP10	Gerald Hennely - P.E. 847-980-3691	\$880,100
2019 City of Elgin A/It Lane 1.0 MGL Sph	1.0 MGL	Tank Painting/Repairs	SP6/SP10	KLM Engineering Scott Kriese 651-773-5577	\$893,750
2019 Naperville SWET - Piping/Thermal Insul.	Water Tank Piping	Pipe Insulation	SP6	NPW - Pat O'Malley 630-768-6693	\$22,338
2019 Schaumburg Athena Concrete GST Repairs	3.0 MGL	Tank Repairs	Injection	Dixon Eng Todd Schaefer 630-376-8322	\$48,360
2019 Elgin Leo Nelson Basin Tank	3.0 MGL	Tank Painting/Repairs	SP6/SP10	Timothy Scholtz P.E. Strand 815-744-4200	\$335,650
2018 Arlington Heights Thomas Legged 1.0 MGL	1.0 MGL	Tank Painting/Repairs	SP6/SP10	Rick Leber - Robinson Eng. 815-464-2693	\$1,048,900

2019	NSSD Building 10 Piping Insulation St. Charles .300 MGL Tank Sph.	Water Piping .300 MGL	Pipe Insulation Tank Painting/Repairs	SP6 SP6/SP10	NSSD Greg Grenyo 847-623-6060 Dixon Eng Todd Schaefer 630-376-8322	\$41,760 \$521,300
2019	Wood Dale 1.25 GS Reservoir/Pupm Stn Piping	1.25 MGL	Tank/Pipe Painting	SP6/SP10	Gerald Hennely - P.E. 847-980-3691	\$498,750
2020	Village of Orland Park .300 MGL Sph	.300 MGL	Tank Painting/Repairs	SP6/SP10	Ken Dado - OP PW Water 708-403-6350	\$653,670
2020	City of Joliet .500 MGL Rock Run Sph	.500 MGL	Tank Painting/Repairs	SP6/SP10	Nickotas C.Gornick -Joliet Water 815-405-3665	\$675,750
2020	Naperville S. Water Works Pipe Insulation	Water Piping	Pipe Insulation	SP2	Dahme Mechanical/Pat O'Malley 630-768-6693	\$50,000
2020	NSSD Clavey - Digester 1/4 Lining W/Repairs	Lining	Lining	ICRI 3-4	Keno & Sons - Ted Mej 815-615-8508	\$584,700
2020	MWRD - Thermal Piping /Coating	Digesters	Tank Painting	SP6/SP11	IHC Construction Co. LLC	\$1,800,000
2020	MWRD - 17-601-31 Final Tanks	5 Waste Water Tanks	Tank Painting	SP6/SP11	CL Coatings - MWRD Contract	\$405,000
2020	Elmwood Park .250 MGL Toro	.250 MGL	Tank Painting/Repairs	SP6/SP10	Gerald Hennely - P.E. 847-980-3691	\$764,100
2020	Palos Heights 1.0 MGL GST Reservoir	1.0 MGL	Tank Painting/Repairs	SP10/SP11	Adam Jasinski - PW Water 708-238-4571	\$451,700
2020	City of Bloomington - 2.5 MGL Hydropillar	2.5 MGL	Tank Painting/Repairs	SP10/SP3	Joe Mikulackey - Farsworth Group	\$1,378,000
2020	Village of Sauk Village - .500 Water Spheroid	.500 MGL	Tank Painting/Repairs	SP6/SP10	Rick Leber - Robinson Eng. 815-464-2693	\$517,500
2020	Villa Park .500 MGL Toro - Mome Street Tank	.500 MGL	Tank Painting/Repairs	SP6/SP10	Rich Salerno - PW Asst Direct.	\$782,520
2020	Village of Lemont .750 MGL Spheroid	.750 MGL	Tank Painting/Repairs	SP6/SP10	James Cainkar - Novotney Engineering	\$670,860
2021	Village of Hinkley .300 MGL Spheroid	.300 MGL	Tank Painting/Repairs	SP6/SP10	Michele Piotrowski, P.E. EEI 630- 466-6724	\$476,043
2021	City of Des Plaines - Oakton 1.0 MGL Legged	1.0 MGL	Tank Painting/Repairs	SP10/SP11	Todd Schaffer - Dixon Eng, 630-376-8322	\$690,800
2021	Lake County Brooks Farm .400 MGL Sph.	.400 MGL	Tank Painting/Repairs	SP6/SP10	Rick Leber - Robinson Eng. 815-464-2693	\$463,300
2021	Village of Oak Brook -East & West Water Sph	Two .500 MGL	Tank Painting/Repairs	SP10/SP11	Todd Schaffer - Dixon Eng, 630-376-8322	\$757,340
2021	City of Dekalb - 2.0 MGL Hydropillar	2.0 MGL	Tank Painting/Repairs	SP6/SP10	KLM Engineering JamesCreed 651-238-4905	\$1,451,056
2021	Village of New Lenox .300 MGL Sph	.300 MGL	Tank Painting/Repairs	SP6/SP10	Todd Schaffer - Dixon Eng, 630-376-8322	\$409,795
2021	Village of Orland Park No 7 .500 MGL Sph.	.500 MGL	Tank Painting/Repairs	SP6/SP10	Timothy Scholtz P.E. Strand 815-744-4200	\$792,000
2021	City of Western Springs 1.0 MGL Legged	1.0 MGL	Tank Painting/Repairs	SP6/SP10	Todd Schaffer - Dixon Eng, 630-376-8322	\$861,846
2022	Justice Willow Springs .750 MGL Hydropillar	.750 MGL	Tank Painting/Repairs	SP6/SP10	KLM Engineering JamesCreed 651-238-4905	\$1,114,125
2022	MWRDGC - 21-662-11 Digester Cover Repaint	12 Tank 120- D Covers	Tank Painting/Repairs	SP11	Kinga Stennik - MWRD 708-256-3556	\$536,875
2022	Village of Wood Ridge 4.0 MGL Standpipe	4.0 MGL	Tank Painting/Repairs	SP6/SP10	Todd Schaffer - Dixon Eng, 630-376-8322	\$1,320,500
2022	Joliet Laraway Rd 1.0 MGL Legged Tank	1.0 MGL	Tank Painting/Repairs	SP6/SP10	KLM Engineering JamesCreed 651-238-4905	\$1,567,000
2022	City of West Chicago No 4 & 8 GSR	Two .500 MGL	Tank/Painting/Repairs	SP6/SP10	KLM Engineering JamesCreed 651-238-4905	\$1,388,650
2022	Village of Round Lake .750 MGL Sph	.750 MGL	Tank Painting/Repairs	SP6/SP10	Baxter & Woodman Eng. 8155-444-3270	\$628,800
2022	City of Markham - 1.0 MGL Sph.	1.0 MGL	Tank Painting/Repairs	SP10/SP11	Todd Clayton PW Dir. 708-906-0159	\$374,800
2022	Village of Carol Stream .500 Legged Tank	.500 MGL	Tank Painting/Repairs	SP10/SP11	Gerald Hennely - P.E. 847-980-3691	\$457,600
2022	Village of Arlington Heights 2 5.0 MGL	Two 5.0 MGL	Tank Painting/Repairs	SP10/SP6	Rick Leber - Robinson Eng. 815-464-2693	\$1,936,000
2022	Village Orland Park Tower 6 and 4	1.0 MGL & .300 MGL	Tank Painting/Repairs	SP10/SP6	Gerald Hennely - P.E. 847-980-3691	\$2,218,850
2022	City of Joliet Aux Sable Clarifier - Treat. Plant	2.0 MGL - Pump Stn	Tank Painting/Repairs	SP10/SP11	Nickolas Gornick -Joliet Water 815-405-3666	\$288,000
2022	Village of Mokena - 4.0 MGL Concrete Tank	4.0 MGL	Tank Painting/Repairs	SP-1	Kyle Vester Village Engineer 708-478-3900	\$140,500
2023	Village of Mokena - .750 MGL Sph Tank	.750 MGL	Tank Painting/Repairs	SP10/SP6	Kyle Vester Village Engineer 708-478-3900	\$916,800
2023	Village of Downers Grove - 2.0 MGL Legged	2.0 MGL	Tank Painting/Repairs	SP10/SP6	Gerald Hennely - P.E. 847-980-3691	\$2,622,540
2023	Village of Hinsdale 2.0 MGL Standpipe	2.0 MGL	Tank Painting/Repairs	SP10/SP6	Gerald Hennely - P.E. 847-980-3691	\$1,212,800
2023	City of Des Plaines - Dulle Rd 2.0 MGL Hydro	2.0 MGL	Tank Painting/Repairs	SP10/SP6	Todd Schaffer - Dixon Eng, 630-376-8322	\$1,778,000
2023	Village of Orland Park Tower 10	.500 MGL	Tank Painting/Repairs	SP10/SP6	Gerald Hennely - P.E. 847-980-3691	\$1,150,000
2023	Village of Sandwich .300 MGL Sph	.300 MGL	Tank Painting/Repairs	SP10/SP6	Todd Schaffer - Dixon Eng, 630-376-8322	\$547,000
2023	City of Naperville - 1.0 MGL Hydropillar	1.0 MGL	Tank Painting/Repairs	SP10/SP6	Patrick O'Malley - Naperville Water	\$1,421,000
2024	Village of Hazel Crest - 22-R0468 East/West	.500 MGL	Tank Painting/Repairs	SP10/SP6	Rick Leber - Robinson Eng. 815-464-2693	\$ 992,000.00
2024	MWRD - Group E and F Water Tanks	.500 MGL/.150 MGL	Tank Painting/Repairs	SP10/SP6	John Hardy RE - 847-924-8610	\$1,678,000
2024	Village of Thornton - 22-R0568.01	.500/MGL & .400 MGL	Tank Painting/Repairs	SP10/SP6	Rick Leber - Robinson Eng. 815-464-2693	\$ 873,000.00
2024						

2024	City of Galena .500 MGL Spheroid - Overcoat	.500 MGL Sph	Ext Overcoat/Repairs SP10/SP11	Dixon EngInnering - Tim Wilson 641-903-4193	\$ 294,664.00	
2024	City of West Chicago .250 MGL Legged Tank	.250 MGL	Tank Painting/Repairs SP6/SP10	KLM Engineering JamesCreed 651-238-4905	\$ 719,900.00	
2024	City of Elgin - DN Tanks 1.0 MGL Baffle Repl.	1.0 MGL	Int Painting Rf-Repair SP10/SP3	KLM Engineering JamesCreed 651-238-4905	\$ 422,000.00	
2024	City of Naperville - 2.0 MGL Northeast SlndP.	2.0 MGL	Tank Painting/Repairs SP10/SP6	Patrick O'Malley - Naperville Water 630-420-6681	\$1,632,075.00	
2024	Burr Ridge .300 MGL Spheroid	.300 MGL	Tank Painting/Repairs SP10/SP6	Claus Dunkelburg - CMT, Inc. 630-820-1022	\$ 654,000.00	
2024	City of Milwaukee - 2.0 MGL Legged HT-22	2.0 MGL	Tank Painting/Repairs SP10/SP6	Anthony Aquila 414-336-9484	2,245,800**	10/1/2025
2024	MWRD - (14) 4.0 MGL Digester Tanks	4.0 MGL	Tank Painting/Repairs SP10/SP6	MWRD - IHC Contract 18-148-3P	\$5,039,000**	12/31/2026
2024	Dahme Mech. Mt Prospect Pimp Str 5 Repair	2.0 MGL Tank/Pipe	Tank Painting/Repairs SP10/SP3	Kris Komorn - DMI 847-459-2539	\$94,000	
2024	New Lenox 5.0 MGL Concrete Reservoir Paint	5.0 MGL	Tank Exterior Repaint SP1	Todd Schaffer - Dixon Eng, 630-376-8322	\$104,800	
2024	Village of Glen Ellyn 1.0 MGL Grd Reservoir	1.0 MGL	Tank Misc. Painting SP6/SP3	Todd Schaffer - Dixon Eng, 630-376-8322	\$289,684	
2024	MWRD 19-159-3P Chemical Backup Liner	SWP - Liner	Tank Lining Coalrings CSP-3-5	MWRD - IHC Contract 19-159-3P	\$346,000	

** On going and/or completed by date Shown

PAINTERS AND ALLIED TRADES DISTRICT COUNCIL 30

Joint Apprenticeship & Training Fund

November 25, 2013

This letter is to confirm that ERA Valdivia Contractors, Inc. is a signatory contractor of Painters District Council No.30 and is participating in PDC #30's Joint Apprenticeship & Training Fund. Below is a copy of PDC #30 JATF's Apprenticeship Program Certificate of Registration with the United States Department of Labor for the trades of Painters, Glaziers and Drywall Finishers.

For Additional information please call our office at 630-966-1451.



Stephen J. Lefaver
Director of Apprenticeship & Training

*****VOID 90 DAYS FROM ISSUE DATE*****





Era-Valdivia Contractors, Inc.
of
Chicago, IL

*has met or exceeded the requirements set forth in the
AMPP QP Accreditation Program for*

**FIELD APPLICATION OF COATINGS
COMPLEX STRUCTURES
SSPC – QP1**



[Signature]
.....
Chief Product and Operations Officer, AMPP

March 31, 2025 – March 31, 2026
.....
Validation Period

Accreditation for dates listed above to Era-Valdivia Contractors, Inc. Chicago, IL.
Owners are advised to contact qpinfo@ampp.org to verify authenticity of accreditation.

Corporate Headquarters: Houston – 15835 Park Ten Place, Houston, TX 77084
Pittsburgh – 800 Trumbull Drive, Pittsburgh, PA 15205



Era-Valdivia Contractors, Inc.
of
Chicago, IL

has met or exceeded the requirements set forth in the
AMPP QP Accreditation Program for

**INDUSTRIAL HAZARDOUS
PAINT REMOVAL
SSPC – QP 2**

CATEGORY "A"



[Signature]
Chief Product and Operations Officer, AMPP

March 31, 2025 – March 31, 2026
Validation Period

Accreditation for dates listed above to Era-Valdivia Contractors, Inc. Chicago, IL
Owners are advised to contact qpinfo@ampp.org to verify authenticity of accreditation.

Corporate Headquarters: Houston – 15835 Park Ten Place, Houston, TX 77084
Pittsburgh – 800 Trumbull Drive, Pittsburgh, PA 15205



Mackayla Reilley (she/her)
Client Service Representative
Construction | Midwest Region

Marsh McLennan Agency
20 N. Martingale Road | Suite 100
Schaumburg | IL 60173
T (847) 247-3092 | F (847) 440-9124
Mackayla.Reilley@MarshMMA.com

November 18, 2025

Era-Valdivia Contractors, Inc.
11919 South Avenue "O"
Chicago, IL 60617

RE: Insurance Requirements

To whom it may concern,

Please let this letter serve as verification of our Insured, Era-Valdivia Contractors meeting the Insurance requirements for the Summit Water Tower Rehab project for the Village of Downers Grove.

If you have any questions, please do not hesitate to contact me.

Sincerely,
Mackayla Reilley
Client Service Representative

POLICY NUMBER: 41PKG1990602

COMMERCIAL GENERAL LIABILITY
CG 20 37 12 19

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location And Description Of Completed Operations
ALL PARTIES WHERE REQUIRED BY A WRITTEN CONTRACT	
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the Schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or
 2. Available under the applicable limits of insurance;
- whichever is less.

This endorsement shall not increase the applicable limits of insurance.

POLICY NUMBER: 41PKG1990602

COMMERCIAL GENERAL LIABILITY
CG 20 10 12 19

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – SCHEDULED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location(s) Of Covered Operations
ALL PARTIES WHERE REQUIRED BY A WRITTEN CONTRACT	
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

C. With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or

2. Available under the applicable limits of insurance;

whichever is less.

This endorsement shall not increase the applicable limits of insurance.

COMMERCIAL GENERAL LIABILITY
CG 20 01 12 19

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**PRIMARY AND NONCONTRIBUTORY –
OTHER INSURANCE CONDITION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

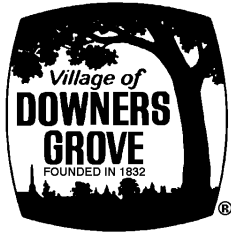
The following is added to the **Other Insurance Condition** and supersedes any provision to the contrary:

Primary And Noncontributory Insurance

This insurance is primary to and will not seek contribution from any other insurance available to an additional insured under your policy provided that:

- (1) The additional insured is a Named Insured under such other insurance; and

- (2) You have agreed in writing in a contract or agreement that this insurance would be primary and would not seek contribution from any other insurance available to the additional insured.



Village of Downers Grove

Contractor Evaluation

Contractor: Era-Valdivia Contractors, Inc.

Project: Downers Drive Water Tower Rehabilitation

Primary Contact: Greg Bairaktaris Phone: 773-447-6658

Time Period: 2023

On Schedule (allowing for uncontrollable circumstances) Yes No

Provide details if early or late completion:

Change Orders (attach information if needed): None

Difficulties / Positives:

Interaction with public:

Excellent Good Average Poor

No comments reported

General Level of Satisfaction with work:

Well Satisfied Satisfied Not Satisfied

Reviewers: John Valenti, Assistant Director of Public Works - Utilities

Date: January 8, 2026