

Georgetown Divide Public Utility District

REQUEST FOR BIDS

Recoating Garden Park Water Storage Tank

Bid Release Date: January 9, 2019

Bids Due Date: January 31, 2018

Bids shall be submitted by mail or delivered to:

Georgetown Divide Public Utility District
Attn: Operations Manager
6425 Main Street
P.O. 4240
Georgetown, CA 95634

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NOTICE TO CONTRACTORS

REQUEST FOR BIDS

FOR THE RECOATING OF THE GARDEN PARK

WATER STORAGE TANK

NOTICE IS HEREBY GIVEN that the Georgetown Divide Public Utility District ("District") will be accepting bids for the recoating of the interior and exterior of a water storage tank in Garden Valley California near Garden Park.

Bids are due no later than **January 31, 2019 at 2:00 PM** (Local Time), and may be mailed to the District Office or hand delivered at 6425 Main Street, P.O. Box 4240, Georgetown, CA 95634. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate envelope plainly marked on the outside with the notation "BID ENCLOSED." When using the mail or other delivery system, the Bidder is totally responsible for the mail or other delivery system delivering the Bid at the Place and prior to the time indicated in the Advertisement for Bid.

This is a formal bid; therefore, bids will be opened and read aloud publically on the bidding deadline.

General Work Description:

Recoating of the interior and exterior of an existing 200,000-gallon steel potable water storage tank together with testing and proper disposal of all waste materials. The project is located in northwestern El Dorado County, in the community of Garden Valley, approximately 35 miles east of Sacramento.

The Engineer's Estimate of Project Cost: \$175,000.

A mandatory Pre-Bid conference will be held on **January 17**, **2019**, **at 12:00 PM** (Local Time) at the tank site (We will meet at the District office (6425 Main Street Georgetown Ca 95634) and drive to the tank. The District will dewater the tank for inspection by potential bidders.

All bidders shall come prepared to collect their own paint samples and test adhesion of the existing interior and exterior coatings, which are believed to contain lead-based paints, for use in bidding the cost of recoating the tank. The Contactors shall also bring all proper safety equipment, including oxygen level monitor which has been recently calibrated. All persons shall provide "written proof that they have been properly trained for entering confined spaces. Any person without proper equipment or training will not be allowed to enter the tank. Bids are required for the entire work described herein. The Contractor shall possess a California C-33 license at the time the bids are received by the District.

The Contract Documents, including the Project Specifications, may be examined and obtained online at the link on the District website: www.gd-pud.org/#bids & proposals. In order to be included on the plan holders list, receive notification of addenda, and to be

eligible to submit a bid; interested parties must download the Contract Documents through the link on the District website.

Each bid must be submitted on the prescribed forms. A bid security shall be provided with each bid. Bid security shall be in the amount of ten percent (10%) of the bid amount. The bid security shall be cash, a certified check or cashier's check drawn to the order of the Georgetown Divide Public Utility District or a Bidder's Bond executed by a surety satisfactory to the Georgetown Divide Public Utility District on the form provided in the Proposal section of the Contract Documents. Bidders are solely responsible for all costs associated with the preparation of their bids.

This work is subject to the provisions of the California Labor Code, pursuant to Section 1773, the general prevailing wage rates in the County in which the work is to be done have been determined by the Director of the California Department of Industrial Relations. These wages are set forth in the General Prevailing Wage Rates for this project, available from the California Department of Industrial Relations' Internet website at http://www.dir.ca.gov. Bids may be held by the Georgetown Divide Public Utility District for a period not to exceed sixty (60) calendar days from the date of opening bids for the purpose of reviewing the bids and investigating the qualifications of bidders prior to awarding the contract. Georgetown Divide Public Utility District reserves the right to reject any or all bids or to waive any informalities in the bidding.

Questions concerning the project should be directed to the District Operations Manager, Darrell Creeks, by calling (530) 333-4356, or by sending an email to dacreeks@gd-pud.org.

DATED: January 9, 2019

Georgetown Divide Public Utility District

BY:

Steven Palmer, PE General Manager

GENERAL DESCRIPTION OF WORK

The Contractor shall provide all labor, materials, equipment and incidentals required to remove all the existing interior coatings, make required repairs as identified by the District and recoat the reservoir interior shell, rafters, floor, ladder, overflow, ceiling, roof drain piping, and all other miscellaneous steel on the interior of a 200,000 gallon 40' foot diameter by 21.5' foot tall Garden Park potable water tank. The exterior of the tank shall be prepared and receive a painted over coat.

SPECIAL NOTICE

This project includes, but is not limited to, the following special requirements:

- Bidder inquiries shall be directed to Georgetown Divide Public Utility District Operations Manager.
- Potential bidders are encouraged to review the insurance and bonding requirements included in the bid documents, including the General Provisions, with their insurance agent/broker prior to submitting a bid.
- All work shall be completed within forty (40) calendar days after the commencement date stated in the Notice to Proceed.
- The work is expected to be completed by June 1, 2019.

QUALIFICATION OF BIDDERS

It is the intention of the District to award a contract only to the bidder who furnishes satisfactory evidence that they have the required qualifications and ability and that they have sufficient resources to complete the work satisfactorily, and within the time identified in the Contract Documents.

The Contractor shall have a current California C-33 license. The Contractor shall submit five projects within the last two years using plural component equipment and NSF-61 100% solids epoxy on the interior of potable water storage tanks. The information shall include Name of project, contract amount, name and phone number of owner and Engineer.

The District may make such investigations as it deems necessary to determine the qualifications and ability of the bidder to perform the work, and the Bidder shall furnish to District all the information and data for this purpose as the District may request. The District reserves the right to reject any Bid if evidence submitted by, or investigation of such Bidder fails to satisfy the District that such Bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated herein. Conditional Bids will not be accepted.

AWARD OF CONTRACT

The District may award, after review and investigation, the contract to the lowest responsive and responsible, qualified bidder.

WAGE RATES

Pursuant to Section 1770 to 1780 inclusive, of the California Labor Code, the successful bidder shall pay not less than the prevailing rate of per diem wages as determined by the Director of the California Department of Industrial Relations. Copies of such prevailing rate of per diem wages are on file at the District office, which copies shall be made available to any interested party on request. The successful bidder shall post a copy of such determination at each job site. All subcontractors employed by the contractor shall pay not less than the specified prevailing wage rates to all workers employed in the execution of the Contract.

No contractor or subcontractor may be listed on a bid proposal for public works project unless registered with the State Department of Industrial Relations pursuant to Labor Code Section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code Section 1771.1(a)].

No contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code Section 1725.5.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. All contractors and subcontractors must furnish electronic certified payroll records directly to the Labor Commissioner (aka Division of Labor Standards Enforcement) and must make certified copies of payroll records available for inspection by the District, a requesting employee or the Division of Labor Standards Enforcement of the Department of Industrial Relations.

BID PROPOSAL

Recoating Garden Park Water Storage Tank

| NAME OF BIDDER: | | |
|--------------------------------|--------|------|
| | | |
| STREET ADDRESS: | | |
| CITY, STATE, ZIP: | | |
| PHONE NO. | FAX NO | _ |
| CONTRACTOR LICENSE TYPE & NO.: | | |

The work for which this proposal is submitted is for construction in conformance with the Special Provisions (including the payment of not less than the prevailing wage rates), the project plans, if any, described below, including any addenda thereto, the contract annexed hereto, and also in conformance with the Georgetown Divide Public Utility District specifications.

The Special Provisions for the Work to be done are dated January 31, 2019. and are entitled:

Recoating Garden Park Water Storage Tank

Bids are to be submitted for the entire work. The amount of the bid for comparison will be the total of all items.

The Bidder shall set forth, for each unit basis item of work, a unit price and a total for the item, and for each lump sum item a total for the item, all in clearly legible figures in the respective spaces provided for that purpose. In the case of unit basis items, the amount set forth under the "Item Total" column shall be the product of the unit price bid and the estimated quantity for the item.

In the case of a discrepancy between the unit price and the total set forth for a unit basis item, the unit price shall prevail, except as provided in (a) or (b), as follows:

- (a) If the amount set forth as a unit price is unreadable or otherwise unclear, or is omitted, or is the same as the amount as the entry in the item total column, then the amount set forth in the item total column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price;
- (b) (Decimal Errors) If the product of the entered unit price and the estimated quantity is exactly off by a factor of ten, one hundred, etc. or one-tenth, one-hundredth, etc. from the entered total, the discrepancy will be resolved by mutual resolution between the two parties.

If both the unit price and the item total are unreadable or otherwise unclear, or are omitted, the bid may be deemed irregular. Likewise, if the item total for a lump sum item is unreadable or otherwise unclear, or is omitted, the bid may be deemed irregular unless the project being bid has only a single item and a clear, readable total bid is provided.

Symbols such as commas and dollar signs will be ignored and have no mathematical significance in establishing any unit price or item total or lump sums. Written unit prices, item totals and lump sums will be interpreted according to the number of digits and, if applicable, decimal placement. Cents symbols also have no significance in establishing any unit price or item total since all figures are assumed to be expressed in dollars and or decimal fractions of a dollar. Bids on lump sum items shall be item totals only; if any unit price for a lump sum item is included in a bid and it differs from the item total, the item total shall prevail.

The foregoing provisions for the resolution of specific irregularities cannot be so comprehensive as to cover every omission, inconsistency, error or other irregularity which may occur in a bid. Any situation not specifically provided for will be determined in the discretion of the Georgetown Divide Public Utility District, and that discretion will be exercised in the manner deemed by the Georgetown Divide Public Utility District to best protect the public interest in the prompt and economical completion of the work. The decision of the Georgetown Divide Public Utility District respecting the amount of a bid, or the existence or treatment of an irregularity in a bid, shall be final.

If this proposal shall be accepted and the undersigned shall fail to enter into the contract and furnish the bond(s) in the sums required by the State Contract Act, with surety satisfactory to the Georgetown Divide Public Utility District, and the insurance certificates within ten (10) days, not including Saturdays, Sundays, and legal holidays, after the Bidder has received notice from the Georgetown Divide Public Utility District that the contract has been awarded, the Georgetown Divide Public Utility District may, at its option, determine that the Bidder has abandoned the contract, and thereupon this proposal and the acceptance thereof shall be null and void and the forfeiture of the security accompanying this proposal shall operate and the same shall be the property of the Georgetown Divide Public Utility District.

When submitting its bid, the Bidder shall include security in the form of cash; cashier's check made payable to the District; a certified check made payable to the District or a bidder's bond executed by an admitted surety insurer, made payable to the District. The amount of security shall be 10 percent of the amount bid. Should the Bidder be awarded the contract, but fail to execute the contract, its security shall be forfeited to the District.

The Bidder has familiarized itself with the nature and extents of the Contract Documents, the Work, the site, the locality where the Work is to be performed, the legal requirements (federal, state and local laws, ordinances, rules, and regulations), and the conditions affecting cost, progress or performance of the Work, and has made such independent investigations as Bidder deems necessary.

The undersigned, as bidder, declares that the only persons or parties interested in this proposal as principals are those named herein; that this proposal is made without collusion with any other person, firm, or corporation; that he has carefully examined the plans therein referred to; and the contractor proposes, and agrees if this proposal is accepted, that they will contract with the Georgetown Divide Public Utility District, in the form of the copy of the contract annexed hereto, to provide all necessary machinery, tools, apparatus and other means of construction, and to do all the work and furnish all the materials specified in the contract, in the manner and time therein prescribed, and according to the requirements of the District as therein set forth, and that the contractor will take in full payment therefor the following prices, to wit:

BID SCHEDULE

Georgetown Divide Public Utility District

Recoating Garden Park Water Storage Tank

| Items | Lump Sum Price | | |
|--|-----------------------|------------|----|
| Mobilization, Insurance, Bonds | | | \$ |
| Preparation and Coating Tank Exterior | | | \$ |
| Preparation and Coating Tank Interior, including climate control equipment | | | \$ |
| Laboratory Testing and Waste Removal | | | \$ |
| | Estimated Quantity | Price/Unit | Y |
| 5. Welding Repair Per Pit | 25 | | \$ |
| 6. Welding Repair Per Linear Feet | 10 Ft. | | \$ |
| 7. Seal Welded Repair 4"x4" Plate | 5 | | \$ |
| 8. Weld Grinding Per Hour | 8 | | \$ |
| TOTAL BID AMOUNT | | | \$ |

Total Amount in Words

Experience Qualifications

| Number of years Bidder has been in the contracting business, under the present business name: Years |
|---|
| Experience in work, of a nature similar to that covered in the bid extends, over a period of years. |
| Has the Bidder ever failed to satisfactorily complete a contract awarded to it. Yes No |
| If yes, please explain: |
| |
| |
| |
| |

List of Previous Contracts Completed by Contractor

| | DATE | NAME OF PROJECT | CONTRACT AMOUNT | OWNER | PHONE # |
|----|------|-----------------|--------------------|-------|---------|
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| 5. | | | | | |

Please attach separate sheet, if needed.

LIST OF SUBCONTRACTORS

The bidder shall list below the name and business address of each subcontractor who will perform work under this Contract in excess of one-half of one percent of the Contractor's total bid price, and shall also list the portion of the work which will be done by such subcontractor. After the opening of bids, no changes or substitutions will be allowed except as otherwise provided by law. The listing of more than one subcontractor for each item of work to be performed with the words "and/or" will not be permitted. All information must be provided for each subcontractor. Failure to comply with this requirement shall render the proposal (bid) non-responsive and shall cause its rejection. (Attach additional sheets if required.)

| Work to be Performed | Subcontractor License # | Percent of Total Contract | Subcontractor's Name and Address |
|----------------------|----------------------------|---------------------------------|----------------------------------|
| | | | |
| | | | 1 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | , |

ADDENDUM ACKNOWLEDGEMENT

Bidder acknowledges receipt of the following addenda, which are attached to the proposal:

| Addenda No. | Date: |
|-------------|-------|
| Addenda No. | Date: |
| Addenda No. | Date: |
| Addenda No. | Date: |

ADDENDA

This proposal is submitted with respect to the changes to the contract included in the Addenda Acknowledgement above.

To all the foregoing, and including all Bid Schedule(s), List of Subcontractor's, Worker's Compensation Certificate, and Non-Collusion Affidavit, said Bidder further agrees to complete the Work required under the Contract Documents within the Contract Time stipulated in said Contract Documents and to accept full payment therefore the Contract Price based on Lump Sum(s) and/or Unit Bid Price(s) named in the aforementioned Bid Schedule(s).

By my signature on this proposal I certify, under penalty of perjury under laws of the State of California and the United States of America, that the above is true and correct.

| Date: | | |
|---------|-------------|--|
| Bidder: | | |
| Ву: | (Signature) | |
| Title: | (Oighadaio) | |

WORKERS' COMPENSATION CERTIFICATE

Owner and Description of Contract:

Georgetown Divide Public Utility District

Recoating Garden Park Water Storage Tank

Labor Code Section 3700: Every employer, except the State and all political subdivisions or institutions thereof, shall secure the payment of compensation in one or more of the following ways:

- (a) By being insured against liability to pay compensation in one or more insurer duly authorized to write compensation insurance in this State.
- (b) By securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his employees.

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

| | Ву: | (Contractor) |
|--|-----|--|
| | Dy. | (Signature) |
| | | (Official Title) |
| (SEAL) | | |
| (Labor Code Section 1861 provides Contractor with the Owner prior to perfe | | ve certificate must be signed and filed by the ork.) |
| Georgetown Public Utility District | | Page 19 of 72 |

NON-COLLUSION AFFIDAVIT

This Affidavit to be fully executed.

| The undersigned declares: | | |
|---|--|---|
| I am the | of | , the party making the foregoing bid. |
| company, association, organization, The bidder has not directly or indirectly. The bidder has not directly or in or anyone else to put in a sham bid, directly or indirectly, sought by agree price of the bidder or any other bidder or of that of any other bidder. All state directly or indirectly, submitted his or divulged information or data related association, organization, bid depose | or corporate ctly induced directly colle or to refrair ement, comer, or to fix a tements cour her bid prive thereto, sitory, or to a | alf of, any undisclosed person, partnership, ion. The bid is genuine and not collusive or sham. or solicited any other bidder to put in a false or sham uded, conspired, connived, or agreed with any bidder in from bidding. The bidder has not in any manner, munication, or conference with anyone to fix the bid any overhead, profit, or cost element of the bid price, intained in the bid are true. The bidder has not, ice or any breakdown thereof, or the contents thereof, to any corporation, partnership, company any member or agent thereof to effectuate a collusive any person or entity for such purpose. |
| venture, limited liability company, lin | nited liability | of a bidder that is a corporation, partnership, joint partnership, or any other entity, hereby represents bes execute, this declaration on behalf of the bidder. |
| | is executed | s of the State of California that the foregoing is true d on[date], at[state]." |
| (Attach Notary Acknowledgement) | Signature: | President, Secretary, Manager, Owner, or Representative Print Name and Title below: |
| | | |

SIGNATURE SHEET

SIGNATURE NOTICE

If bidder or other person of legal interest is a corporation; state legal name of corporation, also names of the president, secretary, treasurer, and manager authorized to sign contracts; if a copartnership, state true name of firm, also names of all individual copartners composing firm authorized to sign contracts; if Bidder or other interested person is an individual, state first and last names in full.

| Provide the names of all persons of legal interest in the foregoing proposal as principals below: | | |
|---|---|--|
| | | |
| | | |
| | | |
| | | |
| | | |
| Licensed in conformance with an act provide | ding for the registration of contractors, | |
| Contractor's License No.: | Classification(s): | |

FAITHFUL PERFORMANCE BOND

(CONSTRUCTION)

| KNOW ALL PERSONS BY THESE PRESENTS, that the Georgetown Divide Public Utility District (hereinafter designated as "The District"), a Special Utility District located in the County of El Dorado, State of California, by Resolution No, has awarded a contract to and has entered into an agreement with, hereinafter designated as "Principal" whereby Principal agrees to complete the improvements more particularly described in all documents forming the complete contract entitled Recoating Garden Park Water Storage Tank which said agreement is hereby referred to and made a part hereof; and |
|---|
| WHEREAS , said Principal is required under the terms of said agreement to furnish a bond for the faithful performance of said agreement. |
| NOW, THEREFORE, we, the Principal and as Surety, which is a corporation duly authorized and admitted to transact business and issue surety bonds in the State of California, are held and firmly bound unto the District, in the penal sum of \$, lawful money of the United States, being not less than one ten percent (10%) of the estimated contract cost of the work, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, successors, executors and administrators, jointly and severally, firmly by these presents. |
| THE CONDITION OF THIS OBLIGATION IS SUCH that if the above bonded Principal, his/her/its heirs, executors, administrators, successors or assigns, or its subcontractors, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements, required, on his/her/their part, to be kept and performed at the time and in the manner therein specified, in all respects according to their true intent and meaning, and shall indemnify, defend and hold harmless the District, its officers, agents and employees, as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect. |
| AS A PART OF THE OBLIGATION secured hereby and in addition to the face amount specified therefor, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by the District in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered. |
| The surety hereby stipulated and agrees that no change, extension of time, alteration or addition to the terms of the agreement or to the work to be performed thereunder of the specifications accompanying the same shall in anyway effect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the agreement or to the work or to the specifications. |
| IN WITNESS WHEREOF, the above bounded parties have executed this instrument under their seals this day of, 20, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body. |
| NOTE: To be signed by Principal and Surety and acknowledgement and notarial seal for both attached. |
| Georgetown Public Utility District Page 25 of 72 |

| (SEAL) | | |
|---------------------------|---------------------------------------|----|
| | PRINCIPAL | |
| | Ву: | |
| | Title: | |
| | | |
| | SURETY | |
| | Ву: | |
| | Title: | |
| | | |
| | | |
| The above bond accepted a | nd approved this day of, 2018 | 3. |
| | | |
| | | |
| | | |
| | | |
| | Steven Palmer, PE | |
| | General Manager Georgetown Divide PUD | |

LABOR AND MATERIALS BOND

(CONSTRUCTION)

| KNOW ALL PERSONS BY THESE PRESENTS, that the Georgetown Divide Public Utility District, a Special Utility District located in the County of El Dorado, State of California, by Resolution No. , has awarded a contract to and has entered into an agreement with, hereinafter designated as "Principal" whereby Principal agrees to complete the improvements more particularly described in all documents forming the complete contract entitled Recoating Garden Park Water Storage Tank, which said agreement is hereby referred to and made a part hereof; and; |
|--|
| WHEREAS , said Principal is required to furnish a bond in connection and with said contract, provided that if said Principal, or any of his/her/its contractors, shall fail to pay for any materials, provisions, provender or other supplies or teams used in, upon, for or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, the Surety of this bond will pay the same to the extent hereinafter set forth. |
| NOW, THEREFORE, we the Principal and, as Surety, which is a corporation duly authorized and admitted to transact business and issue surety bonds in the State of California, are held and firmly bound unto the District in the penal sum of \$, lawful money of the United States, being not less than ten percent (10%) of the estimated contract cost of the work, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents. |
| THE CONDITION OF THIS OBLIGATION IS SUCH that if the above bonded Principal, his/her/its heirs, executors, administrators, successors or assigns, or its subcontractors, shall fail to pay any of the persons named in Section 9100 of the Civil Code, or to pay for any materials, provisions, provender, or other supplies or teams used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind or for amounts due under the Unemployment Insurance Code with respect to such work or labor, then said Surety will pay the same in, or to an amount not exceeding, the amount hereinabove set forth, and also will pay in case suit is brought upon this bond a reasonable attorney's fee in such suit, which fee shall be fixed by the Court. |

AS FURTHER TERMS OF THIS BOND, IT IS UNDERSTOOD AS FOLLOWS:

- 1. This bond and all its provisions shall inure to the benefit of all persons named in Section 9100 of the Civil Code so as to give a right of action to such persons or their assigns in any suit brought upon this bond.
- 2. This bond is given to comply with the provisions of Title, Part 6, Division 4, of the Civil Code. The liability of the Principal and Surety hereunder is governed by the provisions of said Chapter, all acts amendatory thereof, and all other statutes referred to therein. And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the

| specifications accompanying the same does hereby waive notice of any suc terms of this contract, to the work, or to | e shall in any way affect its obligations on this bond, and it the change, extension of time, alteration or addition to the or the specifications. |
|---|--|
| seals this day of , 20 ,th | unded parties have executed this instrument under their ne name and corporate seal of each corporate party being signed by its undersigned representative, pursuant to |
| NOTE: To be signed by Principal and Sure | ety and acknowledgement, and notarial seal attached. |
| (SEAL) | |
| (02/12) | PRINCIPAL |
| | By: |
| | Title: |
| | SURETY |
| | By: |
| | Title: |
| | |
| The above bond accepted and approved th | nis day of, 2018. |
| | |
| | Steven Palmer, PE General Manager Georgetown Divide Public Utility District. |

GUARANTEE

FOR

Georgetown Divide Public Utility District

Recoating Garden Park Water Storage Tank

| DATE OF ACCE | PTANCE: |
|--|--|
| with the approved Plans if any a regulations and that the work as instrepair or replace any or all of our wo work, that may prove to be defective. YEARS from the date of acceptance. | we have installed for the District has been done in accordance and Specifications as well as all applicable State and local talled will fulfill the requirements of the guarantee. We agree to rk, together with any other adjacent damages resulting from our ve in its workmanship or material within a period of TWO (2) to of the above-named work by the District without any expense wear and tear and unusual abuse or neglect excepted. |
| agree to commence and pursue wi guarantee, and to complete the wor days after commencement of the r collectively and separately, do hereb | notified in writing by the District of any defects in the work, we ith due diligence all work necessary to fulfill the terms of this rk within a reasonable period of time (not to exceed thirty (30) repair work); and in the event of our failure to so comply, we by authorize said the District to proceed to have such work done d pay the cost and charges therefor upon demand. |
| DATED: | |
| | CONTRACTOR |
| | BY: |
| | Title: |
| (To be signed and notarized before a | acceptance of project). |

INSURANCE

- 1. The Contractor shall procure and maintain for the duration of the Contract the following insurance against claims for injuries to persons or damages to property which may arise from, or in connection with, the performance of the work hereunder by the Contractor, its agents, representatives, employees or subcontractors.
- 2. Minimum Scope of Insurance. Coverage shall be at least as broad as:
 - a. Commercial general liability coverage (Insurance Services Office Commercial General Liability coverage occurrence Form CG 0001), including liability coverage for premises and operations, explosion and collapse hazard, underground hazard, products/completed operations hazard, contractual liability, use of independent contractors, and broad form property damage with completed operations.
 - b. Automobile liability coverage (Insurance Services Office Form Number CA 0001 covering Automobile Liability, Code 1 (any auto».
- 3. For any claims related to this project, the Contractor's insurance coverage shall be primary insurance as respects the District and its officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by the District and its officers, officials, employees, agents or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
- 4. Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the District and its officers, officials, employees, agents or volunteers.
- 5. The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- 6. Each insurance policy required by this section shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, or reduced in coverage or in limits except after 30 days' prior written notice by U. S. mail has been given to the District.
- 7. Course of construction policies shall contain, or be endorsed to contain, the following provisions: (a) District shall be named as loss payee; and (b) The insurer shall waive all rights of subrogation against the District.
- 8. Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A-VII or equivalent, unless otherwise approved by District.
- 9. Verification of Coverage. Prior to commencing work, Contractor shall provide to District the following proof of insurance: (a) certificate(s) of insurance on ACORD Form 25-S (or insurer's equivalent) evidencing the required insurance coverages; and (b) endorsement(s) on ISO Form CG 2010 (or insurer's equivalent), signed by a person authorized to bind coverage on behalf of the insurer(s) and certifying the additional insured coverages, or equivalent additional insured blanket endorsement. The District reserves the right to require complete copies of all required insurance policies and/or endorsements affecting required insurance coverage at any time.

- 10. Subcontractors. The Contractor shall include all actions and activities of its subcontractors as insureds under its policies, or shall require each subcontractor to provide insurance coverage consistent with the foregoing and to furnish separate endorsements or certificates to the District. All coverages for subcontractors shall be subject to all of the requirements stated in this section.
- 11. Any products/completed operations insurance coverage shall be maintained after completion of the project for the full guarantee period.
 - a. c. Workers' compensation insurance as required by the State of California and employer's liability insurance.
 - b. d. Course of construction (also known as builder's risk) insurance form providing coverage for all risks of physical loss, damage or destruction to the work, to' insure against such losses until final-acceptance of the work by the District.

MINIMUM LIMITS OF INSURANCE

The Contractor shall maintain limits no less than:

- 1. General Liability: \$2,000,000 per occurrence for bodily injury, personal injury and property damage. If commercial general liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project location or the general aggregate limit shall be twice the required occurrence limit.
- 2. Automobile Liability: \$1,000,000 per accident for bodily injury and property damage.
- 3. Employer's Liability: \$1,000,000 per accident for bodily injury or disease.
- 4. Course of Construction: Completed value of the project.
- 5. Pollution and/or Asbestos Pollution Liability and/or Errors and Omissions insurance. Coverage: \$1,000,000 each occurrence, \$2,000,000 policy aggregate.

The above insurance limits can be met through provision of umbrella or excess policy insurance coverage consistent with the provisions of this Section.

DEDUCTIBLES AND SELF-INSURED RETENTIONS.

Any deductibles or self-insured retentions must be declared to and approved by the District. At the option of the District, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the District, 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.

ADDITIONAL INSURED

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

- 1. The District and its officers, officials, employees, agents and volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of the Contractor, products and completed operations of the Contractor; premises owned, occupied or used by the Contractor; or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the District, and their officers, officials, employees, agents or volunteers. The additional insured coverage or endorsement shall comply with California Insurance Code section 11580.04.
- 2. The requirements as to the types, limits, and the District's approval of insurance coverage to be maintained by the Contractor are not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by the Contractor under the Contract.
- 3. In addition to any other remedy the District may have, if the Contractor or any of the subcontractors fails to maintain the insurance coverage as required in this section 5.50, the District may obtain such insurance coverage as is not being maintained, in form and amount substantially the same as required herein, and the District may deduct the cost of such insurance from any amounts due or which may become due the Contractor under this Contract.

INDEMNITY AND LITIGATION COST

- 1. Contractor shall protect, defend, indemnify and hold harmless the District and it's Inspector, and their respective officers, directors, agents, employees, volunteers, representatives, boards, and consultants from and against all penalties and fines imposed by law and all loss, claim, cause of action, demand, suit, judgment, cost, damage, expense, and liability (including but not limited to court or arbitration costs and reasonable attorneys' and expert witness fees) resulting from injury to or death of persons, including without limitation employees of the District, Inspector and Contractor, or damage to or loss of property, caused by, arising out of or in any way connected with the Contractor's or its subcontractors' or suppliers' performance, operations or activities under this Contract, except to the extent the sole negligence, active negligence or willful misconduct of an indemnified party proximately causes the loss, claim, demand, cost, suit, judgment, penalty, fine, cause of action, damage, expense, or liability. Upon the request of an indemnified party hereunder, Contractor shall defend any suit asserting a claim covered by this indemnity and shall pay any cost that may be incurred by an indemnified party in enforcing this indemnity. In all cases, the indemnified party shall have the right to approve counsel selected by Contractor in the defense of any legal action or with respect to any claim, which approval shall not be unreasonably withheld. In addition, the indemnified party shall have the right to participate in and be represented by counsel of its own choice and at its own expense in any legal action or with respect to any claim.
- 2. The District may withhold from payment due Contractor hereunder such amounts as, in the District's opinion, are sufficient to provide security against all loss, damage, expense, penalty, fine, cost, claim, demand, suit, cause of action, judgment, or liability covered by the foregoing indemnity provision.
- 3. In any and all claims against the District or the Inspector and his consultants, and each of their officers, directors, employees and agents by any employee of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation under this section shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone

for whose acts any of them may be liable under Worker's Compensation statutes, disability benefit statutes or other employee benefit statutes.

- 4. Neither termination of this Contract nor completion of the acts to be performed under this Contract shall release Contractor from its obligations to indemnify, so long as the event upon which the claim is predicated shall have occurred prior to the effective date of any such termination or completion and arose out of or was in any way connected with performance or operations under this Contract by Contractor, its employees, agents, suppliers or subcontractors, or the employee, agent or subcontractor of anyone of them.
- 5. Submission of insurance certificates or submission of other proof of compliance with the insurance requirements in this Contract does not relieve Contractor from liability under this indemnification and hold harmless clause. The obligations of this indemnity section shall apply whet or not such insurance policies shall have been determined to be applicable to any of such damages or claims for damages.
- 6. In accordance with California Public Contract Code section 9201(b), if District receives any written third-party claim relating to work performed under this Contract, then District agrees to promptly notify Contractor about the third-party claim.

PROTECTION OF WORK

- 1. The Contractor shall be responsible for the care of all work until its completion and final acceptance; and it shall, at its own expense, replace damaged or lost material and repair damaged parts of the work or the same may be done at its expense by the District and the Contractor and its sureties shall be liable therefor. The Contractor shall make its own provisions for properly storing and protecting all material and equipment against theft, injury, or damage from any and all causes. Damaged material and equipment shall not be used in the work. The Contractor shall take all risks from floods and casualties except as provided by law, and shall make no charge for the restoration of such portions of the work as may be destroyed or damaged by flood or other casualties or because of danger from flood or other casualties or for delays from such causes. The Contractor may, however, be allowed a reasonable extension of time on account of such delays, subject to the conditions hereinbefore specified.
- 2. The Contractor shall effectively secure and protect adjacent property and structures, livestock, crops and other vegetation. If applicable, the Contractor shall open fences on or crossing the right-of-way and install temporary gates of sound construction thereon so as to prevent the escape of livestock. Adjacent fence posts shall be adequately braced to prevent the sagging or slackening of the wire. Before such fences are opened, the Contractor shall notify the owner or tenant of the property and, we practicable, the opening of the fence shall be in accordance with the wishes of said owner or tenant. The Contractor shall be responsible that no loss or inconvenience shall accrue to the owner or tenant by virtue of its fences having been opened or the gate not having been either shut or attended at all times. We special types of fences are encountered, the Contractor shall install temporary gates made of similar materials and of suitable quality to serve the purposes of the original fences. In all cases we the Contractor removes fences to obtain work room, it shall provide and install temporary fencing as required, and on completion of construction shall restore the original fence to the satisfaction of the Inspector. All costs of providing, maintaining and restoring gates and fencing shall be borne by the Contractor. The Contractor shall provide and maintain all passageways, guard fences, lights and other facilities for protection required by public authority or local conditions.

- 3. The Contractor shall use extreme care during construction to prevent damage from dust to crops and adjacent property. The Contractor, at its own expense, shall provide adequate dust control for the right-of-way and take other preventative measures as directed by the Inspector.
- 4. The Contractor shall be responsible for all damage to any property resulting from trespass by the Contractor or its employees in the course of their employment, or subcontractors or their employees in the course of their employment, or anyone directly or indirectly employed by any of them, whet such trespass was committed with or without the consent or knowledge of the Contractor.
- 5. The Contractor shall see that the worksite is kept drained and free of all ground water and any other water which may impede the progress or execution of the Contract work.
- 6. The Contractor shall be responsible for any damage caused by drainage or water runoff from construction areas and from construction plant areas.
- 7. In an emergency affecting the safety of life, or of the work, or of adjoining property, the Contractor, without special instruction or authorization from the Inspector, is hereby permitted to act at its discretion to prevent such threatened loss or injury, and it shall so act without appeal if so instructed or authorized. Should the Inspector deem an emergency condition to exist, the Contractor shall immediately do those things and take those steps ordered by the Inspector. The decision of the Inspector in this respect shall be final and conclusive. Any claims for compensation made by the Contractor on account of emergency work shall be determined as specified under section 5.3.
- 8. Except as provided by California Government Code section 4215, the Contractor shall be responsible for the removal, relocation and protection of all public and private utilities, including irrigation facilities in the nature of utilities, located on the site of the construction project if and to the' extent that the same are identified in the Contract Documents; and the Contractor shall not be entitled to any extension of time or claim for damages for extra compensation in connection therewith. If and to the extent that such utilities or facilities are not identified in the Contract Documents, as between the Contractor and the District, the District will be responsible for the cost of their removal, relocation or protection, as the case may be, but the Contractor shall perform any such work in conformance with applicable provisions of section 5.3, if so directed by the Inspector and in such situation the Contractor shall not be responsible for delay in completion of the project caused by the failure of the District or the owner of the utility to provide for such removal or relocation. If the Contractor, while performing the Contract, discovers utility or irrigation facilities not identified by the District in the Contract Documents, it shall immediately notify the Inspector in writing.
- 9. When the work to be performed under the Contract crosses or otherwise interferes with existing streams, watercourses, canals, farm ditches, pipelines, drainage channels, or water supplies, the Contractor shall provide for such watercourse or pipelines and shall perform such construction during the progress of the work so that no damage will result to either public or private interests; and the Contractor shall be liable for all damage that may result from failure to so provide during the progress of the work.

ACCIDENTS

- 1. The Contractor shall provide and maintain, in accordance with California Labor Code section 6708 and Cal-OSHA requirements, adequate emergency first-aid treatment for its employees and anyone else who may be injured in connection with the work.
- 2. The Contractor shall promptly report in writing to the District all accidents of any nature arising out of, or in connection with, the performance of the work, on or adjacent to the site, which caused death, personal injury, or property damage, giving full details and statements of witnesses. In addition, if death, serious injury, or serious damage occurs, the Contractor shall report the accident immediately by telephone or messenger to the District and the Inspector.
- 3. If any claim is made by anyone against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the facts in writing to the District, giving full details of the claim.

NO PERSONAL LIABILITY

Neither the District, the Inspector, nor any of their officers, directors, agents, or employees shall be personally responsible for any liability arising under the Contract, except such obligations as are specifically set forth herein.

MEASUREMENTS OF QUANTITIES

Where the Contract provides for payment on a lump sum price basis, no measurement of quantity will be made. Where the Contract provides for payment on a unit price basis, the quantities of work performed will be computed by the District on the basis of measurements taken by the District, and these measurements shall be final and conclusive. All quantities of work computed under the Contract shall be based upon measurements by the District according to United States Measurements and Weights. Methods of measurement are specified herein and in the Specifications.

SCOPE OF PAYMENT

- 1. The Contractor shall accept the compensation provided in the Contract as full payment for furnishing all labor, materials, tools, equipment, and incidentals necessary to the completed work and for performing all work contemplated and embraced under the Contract; also for loss or damage arising from the nature of the work, or from the action of the elements, or from any unforeseen difficulties which may be encountered during the prosecution of the work until the acceptance by the District and for all risks of every description connected with the prosecution of the work; also for all expenses incurred in consequence of the suspension or discontinuance of the work as provided in the Contract; and for completing the work according to the Specifications and Plans. Neither the payment of any estimate nor of any retained percentage shall relieve the Contractor of any obligation to make good any defective work or material.
- 2. No compensation will be made in any case for loss of anticipated profits. Increased or decreased work involving supplemental agreements will be paid for as provided in such agreements.
- Within two weeks of receiving the Notice to Proceed, the Contactor shall submit a Schedule of Values totaling the Bid Amount of the project. The Schedule of Values shall contain sufficient information to be used by the District or Inspector in evaluating acceptability of progress payment

requests and work progress from the Contractor. The District and Inspector shall review the Schedule of Values and the Contractor shall revise until a schedule which is acceptable to the District is received.

PROGRESS ESTIMATE

For each calendar month of Contract work, the Inspector will prepare a progress estimate of all work performed under the Contract. Within the first ten (10) days of each succeeding calendar month, the Inspector will prepare in writing and certify to the District, an estimate which in his opinion is a fair approximation of the work done under the Contract based on the Schedule of Values provided by the Contractor, including any amounts due the Contractor for extra work and change orders. In arriving at the value of the work done, the Inspector will give consideration to the value of labor and materials which have been incorporated into the permanent work by the Contractor during the preceding month. Consideration will not be given to preparatory work done or for materials or equipment on hand. In order to assist the Inspector, the Contractor shall furnish the Inspector with copies of invoices for all such items delivered to the job site and incorporated into the work.

PROGRESS PAYMENTS

- 1. The District will pay the Contractor ninety (90%) percent of the amount of each properly submitted and undisputed progress payment request. Ten (10%) percent of the amount of each payment request shall be retained by the District until final completion and acceptance of all work under the Contract; provided, however, that if the District, at any time after fifty (50%) percent of the work has been completed, finds that satisfactory progress is being made, the District may pay any or all of the remaining progress payments in full.
- 2. In accordance with California Public Contract Code section 20104.50, a written payment request from the Contractor shall be reviewed by the District as soon as practicable in order to determine whether it is proper. If it is determined not to be a proper payment request suitable for payment, then the District shall return it to the Contractor with a written explanation of the deficiencies as soon as practicable, but not later than 7 days after receipt of the payment request. If the payment request is determined to be properly submitted and is undisputed, the District will certify the payment as provided above and the District shall make the payment to the Contractor within 30 days after receipt of the payment request. If a properly submitted and undisputed payment request is not paid within this 30-day period, then the District shall pay interest on the overdue amount to the Contractor at the legal rate set forth at California Code of Civil Procedure section 685.010. This section shall not apply if District funds are not available for payment of the payment request or if payment is delayed due to an audit inquiry by the financial officer of the District.
- 3. When, in the judgment of the District, the work is not proceeding in accordance with the provisions of the Contract, or when in his judgment, the total amount of the work done since the last estimate amounts to less than \$1,000, no pay estimate will be prepared and no progress payment will be made.
- 4. No progress estimate or payment shall be considered to be an approval or acceptance of any work, materials or equipment. Estimated amounts and values of work done and materials and equipment incorporated into the work will be conformed to actual amounts and values as they become available in subsequent progress estimates, progress payments and the final estimate and payment. All estimates and payments will be subject to correction in subsequent progress estimates and payments and the final estimate and payment.

- 5. It is mutually agreed between the parties to the Contract that no payments made under the Contract, including progress payments and the final payment, shall be evidence of the performance of the Contract, either wholly or in part, and no payment shall be construed to be an acceptance of any defective or incomplete work or improper materials.
- 6. District reserves the right to make payments jointly to the order of the Contractor and to any of its subcontractors or suppliers that might have a right to file a stop notice with the District. The District shall have no obligation to payor to ensure the payment of money to a subcontractor or supplier, except as may otherwise be required by law.

LIQUIDATED DAMAGES

It is agreed that CONTRACTOR'S failure to complete the work within the time allowed will result in damages being sustained by the DISTRICT. Such damages are, and will continue to be, impracticable and extremely difficult to determine. For each consecutive calendar day in excess of the time specified, as adjusted in accordance with standard specifications, for completion of the work the CONTRACTOR shall pay to the DISTRICT, or have withheld from moneys due it, the sum of \$1000 per day. Progress payments made after the scheduled completion date shall not constitute a waiver of liquidated damages

FINAL ACCEPTANCE AND DATE OF COMPLETION

Whenever the Contractor shall deem all work under this Contract to have been completed in accordance therewith, it shall so notify the District in writing, and the District shall promptly ascertain whether the work has been satisfactorily completed and, if not, shall advise the Contractor in detail and in writing of any additional work required. When all the provisions of the Contract have been fully complied with to the satisfaction of the District, he shall proceed with all reasonable diligence to determine accurately the total value of all work performed by the Contractor at the prices set forth in the Contract or fixed by Change Orders, and the total value of all extra work, all in accordance with the Contract. The District will then certify to said final estimate and to the completion of the work, and will file copies thereof with the District and the Contractor. The date of completion shall be the date upon which the District makes its formal written acceptance of the work.

FINAL PAYMENT

Within 10 days after the date of completion, the District will file in the office of the County Recorder, a Notice of Completion of the work herein agreed to be done by the Contractor. On the expiration of 60 days after the recordation of such Notice of Completion, the difference between said final estimate and all payments theretofore made to the Contractor shall be due and payable to the Contractor, subject to any requirements concerning the furnishing of a maintenance bond, and excepting only such sum or sums as may be withheld or deducted in accordance with the provisions of this Contract or as required by law. All prior certifications upon which partial payments may have been made, being merely estimates, shall be subject to correction in the final certificate. In accordance with California Public Contract Code section 7107(c), in the event of a dispute between the District and the Contractor, the District may withhold from the final payment an amount not to exceed 150% of the disputed amount.

FINAL RELEASE

Final payment to the Contractor in accordance with the final estimate is contingent upon the Contractor furnishing the District with a signed written release of all claims against the District arising

by virtue of the Contract. Disputed Contract claims in stated amounts may be specifically excluded by the Contractor from the operation of the release. The release shall be in substantially one of the following forms:

Right to Withhold Payments

In addition to all other rights and remedies of the District hereunder and by virtue of law, the District may withhold or nullify the whole or any part of any progress payment or up to 150% of the disputed amount from the final payment (see California Public Contract Code section 7107c) to such extent as may reasonably be necessary to protect the District from loss on account of:

- 1) Defective work not remedied, irrespective of when any such work be found to be defective;
- Claims or liens filed or reasonable evidence indicating probable filing of claims or liens including, but not limited to, claims under California Labor Code sections 1775, 1776, or 1777.7;
- 3) Failure of the Contractor to make payments properly for labor, materials, equipment, or other facilities, or to subcontractors and/or suppliers;
- 4) A reasonable doubt that the work can be completed for the balance then unearned;
- 5) A reasonable doubt that the Contractor will complete the work within the agreed time limits;
- 6) Costs to the District resulting from failure of the Contractor to complete the work within the proper time; or
- 7) Damage to work or property.

Whenever the District shall, in accordance herewith, withhold any monies otherwise due the Contractor, written notice of the amount withheld and the reasons therefor will be given the Contractor. After the Contractor, has corrected the enumerated deficiencies, the District will promptly pay to the Contractor the amount so withheld. When monies are withheld to protect the District against claims or liens of mechanics, suppliers, materialmen, subcontractors, etc., the District may at its discretion permit the Contractor to deliver a surety bond in terms and amount satisfactory to the District, indemnifying the District against any loss or expense, and upon acceptance thereof by the District, the District shall release to the Contractor monies so withheld.

WAIVER OF INTEREST

The District shall have no obligation to pay and the Contractor hereby waives the right to recover interest with regard to monies that the District is required to withhold by reason of judgment, order, statute or judicial process, or may withhold pursuant to the provisions of this Contract.

SATISFACTION OF CLAIMS AND LIENS

Neither the final payment nor any part of the retained percentage shall become due until the Contractor, if required, shall deliver to the District, a complete release of all liens and claims arising out of this Contract, or receipts in full in lieu thereof and, if required in either case, an affidavit that so

far as it has knowledge or information the releases and receipts include all the labor and material for which a lien or claim could be filed; but the Contractor may, if any subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the District, to indemnify the District against any lien or claim. If any lien or claim remains unsatisfied after all payments are made, the Contractor shall refund to the District all monies that the latter may be compelled to pay in discharging such a lien, or claim, including all costs and reasonable attorney's fees.

ASSIGNMENT

In accordance with California Public Contract Code section 7103.5, the Contractor hereby offers and agrees to assign to the District all rights, title, and interest in and to all causes of action it may have under section 4 of the Clayton Act (15 U.S.C. section 15) or under the Cartwright Act (Chapter 2 (commencing with section 16700) of part 2 of division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the Contract Documents. This assignment shall be made and become effective at the time the District tenders final payment to the Contractor, without further acknowledgment by the parties.

AVAILABILITY AND AUDIT OF INFORMATION

- 1. The District's duly authorized representatives shall have, during the term of the Contract and for two years thereafter, the right to inspect, copy and audit all of the Contractor's and its subcontractors' accounts and records of all description, including but not limited to source documents and computer files, and to interview personnel, pertaining to the Contract to verify or review the quantity, quality, work program and progress of the work, reimbursable costs, amounts claimed by the Contractor, estimates of cost for fixed rates including those applicable to proposed changes, and for any other reasonable purposes.
- 2. The Contractor's and its subcontractors' accounts shall be kept in accordance with generally accepted accounting principles in the particular industry and shall be kept in such a manner and in sufficient detail to clearly disclose the nature and amounts of the different items of service and cost pertaining to the Contract and the basis for charges or allocations to the Contract. The Contractor and its subcontractors shall preserve all such accounts and records for a period of two years after the term of the Contract.
- 3. The Contractor shall include the necessary provisions in its subcontracts to ensure that its subcontractors comply with this provision.
- 4. The parties acknowledge that this Contract, and performance and payments under this Contract, are subject to examination and audit by the State Auditor General for three years following final payment under this Contract pursuant to California Government Code section 8546.7.

HAZARDOUS MATERIALS

The California Health and Safety Code requires businesses to provide warnings prior to exposing individuals to materials listed by the Governor as chemicals "known to cause cancer or reproductive toxicity." The District may use chemicals on the Governor's list at many of its facilities. In addition, many of these chemicals are present at non-District-owned facilities and locations. Accordingly, in performing the work or services contemplated under this Contract, Contractor, its employees, agents, and subcontractors may be exposed to chemicals on the Governor's list. Contractor is responsible for notifying its employees, agents, and Subcontractors that work performed hereunder may result in exposures to chemicals on the Governor's list.

WAIVER

The waiver at any time by any party of its rights with respect to a default or other matter arising in connection with this Contract shall not be deemed a waiver with respect to any subsequent default or matter.

REMEDIES NOT EXCLUSIVE

The remedies provided in this Contract are cumulative and not exclusive, and are in addition to any other remedies that may be provided by law or equity. The exercise by either party of any remedy under this Contract shall be without prejudice to the enforcement of any other remedy.

SEVERABILITY

The invalidity, illegality or unenforceability of any provision of the Contract Documents shall not render the other provisions unenforceable, invalid or illegal.

GOVERNING LAW AND VENUE

Except as otherwise required by law, this Contract shall be interpreted, governed by, and construed under the laws of the State of California. The County of El Dorado shall be venue for any litigation concerning the enforcement or construction of this Contract.

NOTICES

Any notice, demand, invoice or other communication required or permitted to be given under this Contract shall be in writing and either served personally or sent by prepaid, first class U.S. Mail and addressed as follows: for the District, either to the General Manager or the District at the addresses set forth in the Invitation to Bid; for the Contractor, at the address set forth in its Bid. Any party may change its address by notifying the other party in writing of the change of address.

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GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT

Coating and Lining Specification for the

Recoating of the Exterior and Interior of Garden Park Reservoir

PART I - COATING REHABILITATION OF TANK INTERIOR

SECTION 1 - Scope of Work

- 1. The Contractor shall provide all labor, materials, equipment and incidentals required to remove all the existing interior coatings and repaint the reservoir interior shell, rafters, floor, ladder, overflow, ceiling, roof drain piping, and all other miscellaneous steel on the interior of a 200,000 gallon 40' foot diameter by 21.5' foot tall Garden Park Water Storage Tank with a NSF/UL 61 certified lining system. All rafters and shell to roof seams shall be caulked with Sika 1-A. The reservoir was last coated in 1974 during the original erection. The existing interior lining systems is an epoxy. The exterior coatings of Watson #2 reservoir and all associated piping shall be prepared as per this specification and coated with an epoxy urethane system. The exterior of the reservoir shall be over coated. The reservoir is in close proximity of homes and at no time shall dust or overspray be allowed to leave the boundaries of the site. The Compressors and generators shall be equipped with silencers. A sound barrier will be erected around the compressors and generators. The maximum sound level at the home owner's boundaries shall not exceed 50 decibels. The District will drain the reservoir. The reservoir may have up to six inches of water and silt remaining. The Contractor shall be responsible for disposing the remaining water and silt. The Contractor shall remove and replace the current cathodic protection system and have the system certified that the system has been reinstalled and operating properly. The Contractor shall remove and reinstall the gauge board after painting operations are complete.
- 2. The Contractor shall have a current California C-33 license. The Contractor shall submit five projects within the last two years using plural component equipment and NSF-61 100% solids epoxy on the interior of potable water storage tanks. The information shall include Name of project, size of project, name and phone number of owner and Engineer.
- 3. When the new interior coating has completely cured, the Contractor shall clean and disinfect the reservoir.
- 4. After filling the reservoir, the District shall test the reservoir water for bacteriologic and volatile organic contamination, and for aesthetic quality. The District shall not accept the project until the reservoir water meets California Department of Health Services (DHS) and federal drinking water standards. In addition, the tank will not be accepted until the coating system is free of taste and odor associated with the coating product and does not impart any adverse aesthetic quality to District water.
- 5. The interior roof, rafters and shell shall be completely coated, tested, repaired and caulked prior to any operations on the floor of the tank.
- 6. The Contractor shall dispose of all wastes from abrasive blasting and any other wastes or debris generated during work. The Contractor shall sample and test wastes as required by applicable regulatory agencies, and as necessary for classification of wastes prior to disposal. The

Contractor shall bear all costs for waste sampling, testing, accumulation, transport, and disposal, including the cost for wastes classified as hazardous and non-hazardous.

- 7. The Contractor should expect that the entire surface under the existing coatings to be corroded or having mill scale and shall provide for such conditions accordingly, including complete removal of such materials down to bare steel and providing "White Metal Blast Cleaning" (SSPC/SP # 5) to allow for proper adhesion of the interior coating system.
- 8. The District shall conduct a one-year anniversary inspection and the Contractor shall provide floor protection, lighting, and scaffolding during the inspection. The Contractor shall be present at the inspection and disinfect the reservoir after repairs are complete.
- 9. When considering the proposed work schedule, the Contractor shall allow three (3) consecutive working days for the District to fill the Reservoir after the coating has cured.

At least two days prior to start of work, the Contractor shall arrange with the District for a prepreparation conference at the job site to ensure that all parties are familiar with the entire project, including specifications and the manufacturer's printed application instructions.

SECTION 2 - Governing Standards

The following standards (including the most recent update or version) shall govern the work unless specified otherwise in these specifications:

| SSPC-Vol.1, | Steel Structures Painting Manual, Good Painting Practice. | |
|---|---|--|
| SSPC-Vol.2, | Steel Structures Painting Manual, Systems and Specifications. | |
| SSPC-SP 1 | Solvent Cleaning | |
| SSPC-SP 2 | Hand Tool Cleaning | |
| SSPC-SP 3 | Power Tool Cleaning | |
| SSPC-SP 5 | White Metal Blast Cleaning | |
| SSPC-SP Guide 11 | Stripe Coating | |
| SSPC-SP 7 | Brush-Off Blast Cleaning | |
| SSPC-SP 10 | Near White Blast Cleaning | |
| SSPC-SP 11 | Power Tool Cleaning to Bare Metal | |
| SSPC-AB 1 | Mineral and Slag Abrasives | |
| SSPC-PA 1 | Shop, Field and Maintenance Painting | |
| SSPS-PA Guide 3 | Guide to Safety in Paint Application | |
| SSPS-PA Guide 12 | Lighting | |
| SSPC-Guide to Vis 1-89 | Visual Standard for Abrasive Blast Cleaned Steel | |
| SSPC-V15 (3-93) | Visual Standard for Power & Hand-Tool Cleaned Steel | |
| AWWA D102-97 | Standard for Painting Steel Water-Storage Tanks | |
| AWWA C652 | Disinfection of Water Storage Facilities. | |
| ISO-8502-3 | Preparation of Steel Substrates (Class 0) | |
| All applicable State and Federal OSHA safety standards. | | |

SECTION 3 - Submittals

- 1. The Contractor shall provide a separate submittal for each material to be used in the work. At a minimum provide submittals for Abrasive materials, Paint systems, Thinners, and any other additives
- 2. The Contractor shall include the following data in the interior coating system submittal:
 - a. Weight in pounds/gallon ASTM D-2196
 - b. % solids by volume ASTM D-2369
 - c. Percent solids by weight ASTM D-2369
 - d. Air cure dry time to re-coat ASTM D-1640
 - e. Minimum adhesion to steel substrate ASTM D-4541 using a type II instrument (Minimum acceptable adhesion shall be 800 psi).
 - f. Adhesion between coats ASTM D-4541
 - g. Manufacturer's batch numbers and dates of manufacture for materials to be furnished as part of this project.
 - h. Letter from dehumidification manufacture that the equipment has been properly sized as per the specification requirements.
- 3. The Contractor shall include technical data documenting that the material to be provided complies with these specifications. Submittals will not be accepted until all requirements of this specification have been confirmed.
- 4. The Contractor shall include the following data in the manufacturer's recommended handling and installation instructions for the proposed paint system submittal:
 - a. Storage including maximum and minimum storage temperatures
 - b. Surface preparation
 - c. Coating repair
 - d. Application equipment
 - e. Mixing and application of coating system including a table of minimum and maximum time to re-coat as a function of temperature
 - f. Curing including curing time required before holiday testing, and curing time required before immersion as function of temperature and coating thickness. Minimum and maximum re-coat times.
 - g. Ventilation and Containment System
 - h. Acceptable temperatures at the time of application.

- i. Health and Safety Plan
- j. Fire Safety Plan.
- 5. The Contractor shall include the following data in the equipment submittal:
- a. Details of vacuum system for removing dust and abrasive from abrasive blast cleaned surfaces.
- b. The manufacturer's latest written operation instructions including recommendations for air filter maintenance and change interval for air compressors used for work.
- 6. The Contractor shall include the following data in the report submittal:
 - a. Actual weight of blast cleaning abrasive used for field abrasive blast cleaning, submitted within 24 hours after blasting is completed.
 - b. Quantity of coating material used for each coat, submitted within 24 hours after completion of each coat.
 - c. Name of laboratories proposed to be used to test wastes and reservoirs water prior to testing any materials.
 - d. Laboratory test results for representative waste samples prior to removing any waste materials from the job site. At a minimum, the samples shall be tested for total concentrations of the 17 metals identified in Title 22, for comparison to Total Threshold Limit Concentrations (TTLC) values. The California Waste Extraction Test (WET) shall be performed for each analyte of each sample for which the total concentration exceeds 10 times the STLC value, if any, as specified in Title 22. Toxic Characteristic Leaching Procedure (TCLP) testing shall be performed for each analyte of each sample for which the total concentration exceeds 20 times the TCLP values, if any, specified in the Federal Resource Conservation and Recovery Act. Reactivity, corrosively, and Ignitability testing shall be performed as required by Title 22 and/or the District or representative of the disposal facility.
 - e. Receipts from disposal site for all wastes. Receipts shall identify disposed material and source, show quantity of disposed material in tons or cubic yards, and show method used for final disposition as buried, incinerated, and chemically treated and/or other means.
 - f. Quantity of thinner used for each coat and total amount used.
- 7. The Contractor shall include the following data in the disposal plan submittal:
 - a. Certification that the materials disposal plan complies with all applicable requirements of: The Federal Resource Conservation and Recovery Act; Title 22 and Title 26 of the California Administrative Code; and other applicable regulations of local, state and federal agencies having jurisdiction over the disposal of spent abrasive blast media, removed coating materials, and other waste, whether hazardous or non-hazardous.
 - b. The name and Environmental Laboratory Accreditation Program Certificate number of laboratory that will sample and test spent abrasive blast media and removed coating

- materials. Include statement of the laboratory's certified testing areas and analyses that the laboratory is qualified to perform.
- c. Written permission to dispose of material from disposal site representative. Include name, address, and telephone number of disposal site and of representative.
- d. The District shall provide written acceptance of the disposal plan prior to disposal of any wastes.

SECTION 4 - Quality Assurance

- 1. The District has retained a tank and coating inspection firm to oversee all quality control related to coating operations. The inspector will report directly to the District General Manager, or his/her designee, and shall act with the District's' authority in all matters related to this project. The Inspector will be an N.A.C.E. Certified Coating Inspector, who will inspect any or all phases of work to be performed as outlined herein. The inspector shall be an addition to the District Inspector; authority shall be limited to coating related work only. The District Inspector shall remain the primary observer for all work on the project. The inspector shall work for and report to the District. The Contractor shall not rely upon the tank inspector for documentation of environmental conditions and assuring compliance with plans and specifications.
 - a. The Contractor shall notify the District General Manager, or his/her designee, in advance (48 hours minimum) of all surface preparation or paint application in order to perform a preliminary examination and provide acceptance of the surface preparation and each coat prior to application of the next coat.
 - b. The tank and coating Inspector shall examine all materials, tools, and equipment to be used in the blasting and coating operations and shall have the authority to direct the Contractor to remove, replace, or repair any materials, tools, or equipment found not to be in conformance with the Contract Documents including the approved shop drawings and manufacturer's recommendations. The Contractor shall be fully responsible for compliance with all safety measures, hazardous and toxic materials regulations, and site security. Observation of or failure to observe any safety efforts of the Contractor by the Inspector shall not relieve the Contractor of this responsibility nor shall any liability transfer from the Contractor to the District or the Inspector. The Contractor shall indemnify, defend, and save harmless the District and the coating Inspector from all liability associated therewith.
 - c. The Contractor shall provide evidence of regular engagement in application of 100% solids coatings for at least five years prior to commencement of this work on potable water storage reservoirs.
 - d. The Contractor shall certify in writing that foremen and workers on-site shall be experienced and knowledgeable in preparation for and application of high performance industrial coatings.
 - e. The Contractor's workmanship shall conform to standards and recommendations of SSPS Vol. 1, especially Chapters 5.1 and 6.
 - f. The District may use any testing method deemed necessary by the District Coating Inspector to verify quality of work. The District may, but is not required to, monitor the quality of work pursuant to this section.

- g. The Contractor shall ensure proper materials handling and use, including: all coating materials are labeled and used in accordance with SSPC-PA 1, Paragraphs 5.1.1 thru 5.1.5, except all coating system materials without a stated shelf life shall be delivered and used within six months of the date of manufacture; and certification, from any source, that the coating system materials are still suitable for use beyond the stated shelf life or beyond the six month period specified above will not be accepted. All equipment and materials shall be stored in a secured ventilated container.
- h. The Contractor shall perform the necessary quality assurance in accordance with an approved plan. The Contractor will supply all inspection equipment. The District reserves the right to use their equipment at any time.
- The Contractor shall comply with the following conditions in collection and analysis of wastes:
 - i. All testing of spent abrasive blast media and removed coating materials to classify these wastes as hazardous or non-hazardous shall be performed by a laboratory that complies with and is certified under the Environmental Laboratory Accreditation Program (ELAP) of the California Department of Health Services.
 - ii. Any Laboratory performing analysis shall provide for comparison to TTLC, STLC, TCLP limits, and RCA limits, and to all other applicable regulatory limits. Laboratory shall retain samples at least ninety (90) calendar days after all analyses are complete.
 - iii. The Contractor shall ensure collection of as many representative samples as required by the representative of the disposal facility, but not less than 4 total.
 - iv. The Contractor shall ensure the following: each sample shall have an identifying sample number assigned when the sample is taken; each sample number shall be included on the sampling chain of custody and in all reports, correspondence, and other documentation related to the sample; each sample shall have a sampling chain of custody; and, each chain of custody show the name and organization of each person having custody of the sample, and also show the sample number, job name and location, time of day and date sample was taken, material sampled, and tests to be performed.
 - v. The Contractor shall notify the District at least 24 hours prior to sampling collection for the purpose of District verification of samples collected.
 - vi. Manufacturer's Representative: The Contractor shall, at no cost to the District, provide a qualified technical representative of the coating system manufacturer at the job-site as required by the District to resolve problems related to the coating system or the application of the system.

SECTION 5 - Delivery, Storage, and Handling

- 1. The Contractor shall deliver materials as follows:
 - a. Delivery of abrasive grit shall be in original labeled moisture-proof bags or airtight bulk containers. Abrasives shall not be reused.
 - b. Delivery of coating system materials shall be in original, unopened containers with seals unbroken and labels intact. Labels shall identify type of material, color, and batch number. No material shall exceed six months from the original batch manufacturing date.
- 2. The Contractor shall store materials as follows:
 - a. Store materials in a single, approved location.
 - b. Store coating system materials in enclosed, secure, and ventilated structures, and maintain temperature inside the structure within the temperature range recommended by the manufacturer.
 - c. Keep storage location clean, neat, and free of fire hazards.
 - d. All operating equipment shall be placed into secondary containment to prevent accidental spills.
- 3. The Contractor shall handle materials as follows:
 - a. Avoid spilling thinners, solvents, paint products or other materials that contain toxic substances. All compressors and operating equipment shall be placed in secondary containment. All sewer or site drains shall be covered.
- 4. Remove discarded thinners, solvents, and paint products from the job-site daily.

SECTION 6 – Safety

The Contractor shall comply with all Federal, State, and Local applicable safety regulations and requirements. All scaffolding shall be equipped with interior stairways. No exterior ladders will be allowed.

SECTION 7 - Existing Interior Coatings

- 1. The District assumes present coating system (Epoxy) is the original coating system provided at the time of tank erection and fabrication.
- 2. The Contractor shall bear all cost associated with stripping, handling, storing, testing, transport, and disposal of all waste. It shall be the Contractors responsibility to estimate the quantity and classification of waste associated with work.

SECTION 8 – Warranty

 Anniversary inspection requirements and failure criteria shall be in accordance with AWWA D-102, Section 9, except as modified herein. The total warranty period shall be two years from the final acceptance date.

- 2. The District will conduct a first anniversary warranty inspection approximately one year following final acceptance of the work, including inspection of the interior and exterior of the tank. The District will establish the date of the inspection and will notify the Contractor at least thirty (30) calendar days in advance of the inspection.
- 3. The Contractor shall furnish ventilation, scaffolding, and lighting equipment as necessary for any warranty inspections, and shall be present for such inspections. The District will provide an inspection report to the Contractor detailing the number and types of failures observed, the percentage of surface area where failures have occurred, and the names of the persons making the inspections.
- 4. The District shall consider any location where coating has delaminated, peeled, blistered, or cracked; and any location where rusting is evident as failure of the coating system. In addition, the District shall consider photographs or reports of the coating imperfections or failures as acceptable evidence of failure.
- 5. The Contractor shall be liable for all remedial work including repair of all failures by removing the deteriorated coating, cleaning the surface, and recoating with the same system in accordance with this Section. The District may allow surface preparation of small failures (areas less than 1 sq. ft.) by cleaning to bare metal in accordance with appropriate SSPC-SP standards, however, the method of repair is at the sole discretion of the District.
- 6. The District will prepare a schedule for remedial work completion, to be no more than thirty (30) calendar days after the submittal of the inspection report to the Contractor. Upon failure of the Contractor to commence remedial work within ten calendar days after the starting date established by the District, the District may at its option, retain another Contractor to perform the remedial work. The Contractor shall be liable for actual cost of all such remedial work plus a 20 percent District administrative cost.
- 7. The Contractor shall bear the expense of all warranty inspections of the remedial work required by the District. The Contractor shall disinfect the reservoir after the inspection and repairs.

SECTION 9 – Products for Interior Coating System Materials

- 1. The Contractor shall provide the following new interior coating systems consisting of a thin film epoxy on the rafters, roof plates, and down 6" onto the shell (Devoe 233H or Sherwin Williams's tank clad B-62). The floor, shell, ladder, roof supports, and overflow shall be coated with Devoe 234P or Sherwin Williams Sherplate PW 100% solids epoxy recommended for corrosion protection of steel water storage tanks.
- 2. The Contractor shall not use or allow to come in contact with any portion of the tank interior, any coating system and/or any thinners or additives which have not been approved and listed by the National Sanitation Foundation, Standard 61 (NSF 61) for use in potable water reservoirs. Minimum adhesion value (ASTM D-4541) for the lining system using a type two instrument shall be 800 P.S.I. The interior roof, rafters, and shell shall be completely coated, caulked and tested prior to abrasive blasting on the floor plates.
- 3. The Contractor shall provide coating "certified non-lead" (less than 0.06 percent lead by weight in the dried film) as defined in Part 1303 of the Consumer Products Safety Act.

SECTION 10 - Abrasives

- 1. The Contractor shall use abrasive grit for field blast cleaning conforming to the following:
- 2. Produce a surface profile of 3.5 to 4.5 mils for the floor, shell, roof supports, ladder, and over flow.
- 3. Produce a surface profile of 1.5 to 2.5 mils for the roof plates, rafters, and down onto the shell 1.
- 4. New, clean and free of contaminants, and containing no hazardous materials.
- 5. Certified by California Air Resources Board, Executive Order G-565.
- 6. Conform to all applicable requirements of the Local Air Quality District.
- 7. Kleen Blast is approved. No sand abrasives are allowed.

SECTION 11 – Quality Control

- 1. The Contractor shall provide adequate lighting, without shadows, during all phases of work to insure that work is performed as specified and that the entire work area is illuminated.
- 2. The Contractor shall provide ground supported scaffolding and lighting (SSPC Guide12), as determined by the Inspector, to facilitate visual and instrument inspection by the Inspector of each phase of the work and of the completed work, as so placed as directed to minimize glare and shadows. Work will be rejected if proper lighting is not achieved for a proper inspection. All scaffolding shall be equipped with stairways, no exterior ladders.
- 3. The Contractor shall provide personnel to move scaffolding and furnish other assistance to District Inspectors as required.
- 4. The District Coating Inspector will examine surfaces after abrasive blast cleaning to verify that all deposits of contaminants have been removed as per surface clean as per ISO 8502 (Class 0). The Contractor shall blow down, and vacuum all surfaces prior to District inspection. Tank floors shall be vacuumed.
- 5. The Contractor shall verify at a minimum of two times daily that air supply is free of oil and moisture contamination (ASTM D-4285). The Contractor shall use effective oil and water separators in all main compressor airlines and shall be placed as close as practicable to the equipment. Prior to using compressed air, the Contractor shall test the quality of air downstream of the separators at suitable outlets by blowing the air on clean white blotter for 2 minutes to check for any contamination, oil, or moisture.
- 6. The Contractor shall perform the following daily: measure air temperature, humidity, relative humidity, and metal surface temperature, and determine dew point and relative humidity prior to abrasive blasting or painting. The Contractor shall provide portable temperature & humidity recorders to provide continuous permanent hard copy of the reservoir conditions and, repeat measurements and determination of dew point as often as the District Inspector deems necessary, but not less often than every four hours at the start of preparation operations and run constantly until final cure.

- 7. The Contractor shall maintain a written record of measurements and dew points, and time that measurements were taken, keep such record on-site, and make records available to District Inspector on request.
- 8. The Contractor shall furnish 1 roll of Testex tape 1.5 to 4.5 mils X-course prior to the start of abrasive blasting. The District Coating Inspector may evaluate surface preparation using field abrasive blasting standards, and Testex tape. Evaluation may include inspection of blasted surfaces for dust and abrasive residue, using clear adhesive coated tape. Evaluation will be made immediately prior to coating application.
- 9. The Contractor shall verify cleanliness of all spray application equipment prior to, or no later than, time of mixing coating material.
- 10. The Contractor shall measure wet film thickness during coating application of coating to ensure adequate coating thickness, taking at least one measurement for each 100 square feet of application area. The Contractor shall measure dry film thickness after each coat using a non-destructive magnetic dry film thickness gauges.
- 11. The District Coating Inspector may, but is not required to, also measure coating thickness, at random locations, after each coat. SSPC –PA 2 (Level 1) is only to be used for the calibration of dry film thickness gauges. This is a minimum maximum dry film thickness specification. Dry film thickness readings will not be averaged. All inspection equipment shall be supplied by the Contractor. All equipment shall have current calibration certificates. The District reserves the right to use their own equipment at any time.
- 12. The District Coating Inspector will evaluate cleanliness of coated surface immediately prior to application of a subsequent coat.
- 13. The Contractor shall test all coated surfaces for pinholes (NACE SPO-188) and holidays after application of the final coat in accordance with the following:
 - a. Perform test in presence of the District Coating Inspector.
 - b. Perform test after coating has cured as recommended by the manufacturer.
 - c. Use an appropriate detector, such as Elcometer #236 or as approved by the District representative.
 - d. Re-test after coating repairs.
 - e. The District may hire a third party inspector to inspect Contractor's work, but the ultimate responsibility for the quality of the Contractor's work and the performance of contractual obligations remains with the Contractor.

SECTION 12 - Limiting Environmental Conditions

- 1. The Contractor shall apply coatings only when conditions are within the limits prescribed by the manufacturer and shall not apply coatings when the following conditions exist:
 - a. Metal temperature is less than 60 degrees F.

- b. Relative humidity is greater than 45 percent.
- 2. Contractor shall not abrasive blast or apply coatings when air temperature is less than 5 degrees F above dew point.

SECTION 13 - Dehumidification

- 1. The Contractor shall provide dehumidification as required to establish and maintain the specified temperature and relative humidity inside the reservoir twenty fours a day, seven days a week until final cure. The Contractor shall complete any blasting, coating and testing operations within the duration of time as specified. The District shall not provide a time extension for weather delay. The Contractor shall bear all cost and liability for work resulting from dehumidification equipment failure, breakdown, power failure, or down time. The Contractor should be aware that homes are in close proximity of the reservoir and sound could be an issue form operating equipment. The Contractor is responsible for staying within the City and local homeowners' association sound ordinances.
- 2. The Contractor shall provide dehumidification continuously from start of white metal (SP #5) abrasive blasting, until a minimum of three (3) days after application of final coat and all repairs are completed, or for a longer period as recommended by the coating system's manufacturer. The Contractor shall submit a letter from the dehumidification manufacture that the equipment has been properly sized for this project prior to any abrasive blasting operations. A minimum of one air change per hour is required.
- 3. The Contractor shall provide dehumidification equipment consisting of a solid desiccant (not liquid, granular, or loose lithium chloride) design having a single rotary desiccant bed capable of continuous operation, fully automatic with drip-proof electrical controller. Air heaters alone are not acceptable as dehumidification units.
- 4. The Contractor shall ensure that relative humidity of processed air from dehumidification unit not exceed forty-five (45) percent.
- 5. The Contractor shall ensure dehumidification equipment provides a minimum of two complete air changes inside the reservoir every sixty minutes.
- 6. The Contractor shall ensure areas adjacent to the surface that is to be blasted and coated are not exposed to a relative humidity greater than forty-five percent at any time during blasting, cleaning, coating, or curing.
- 7. The Contractor shall ensure that during blast cleaning and coating, and for 96 hours after final coat and all repairs are completed, dehumidification units maintain an air and steel temperature of 60 degrees F minimum inside the reservoir.
- 8. The Contractor shall ensure dehumidification equipment is placed as close to reservoir manhole as possible.
- 9. The Contractor shall ensure cleaning of dehumidification filters prior to start of dehumidification and weekly cleaning thereafter.
- 10. The Contractor shall ensure dehumidification tubing is maintained as follows:

- 11. Mechanically connected and sealed with duct tape at joints.
- 12. Extended to the center of the Reservoir and attached to a diffuser that will distribute air equally throughout Reservoir.
- 13. Have no dust or other foreign matter inside tubing.
- 14. The Contractor shall provide and maintain 24-hour strip chart recorder for humidity and temperature and place humidity and temperature measuring devices inside reservoir at the start of abrasive blasting operations.

SECTION 14 - Preparation

- 1. The Contractor shall prepare surfaces to be coated in accordance with the coating manufacturer's instructions but not less than specified herein.
- 2. The Contractor shall clean surfaces including: removal of all visible oil, grease, dirt, welding residue, and other contaminants from areas to be coated (SSPC/Sp#1); inspection using a black light to locate oil and grease; and removal of slag and weld metal accumulation and splatters by chipping or grinding as required in NACE SPO-178.
- 3. The Contractor shall provide blast cleaning including: removal of existing coating, under film corrosion, corrosion, and other corrosion products from all areas to be coated; and, preparation of all surfaces to be coated by abrasive blast cleaning to SSPC-SP 5 white metal with a surface profile of 3.5 to 4.5 mils for the 100% solids epoxy and 1.5 to 2.5 mils for the thin film epoxy.
- 4. The Contractor shall ensure complete abrasive blast cleaning of metal prior to application of coating system. The Contractor will provide a hold back of 5" into the existing coating.
- 5. The Contractor shall not reuse abrasive blast media unless the media is specifically designed for reuse, if steel abrasive is used the working mixture shall be a minimum of 75% grit and 25% shot. The Contractor shall be fully aware of the different required anchor profiles that are required for different products.
- 6. The Contractor shall ensure maintenance of abrasive blasting equipment including:
 - a. Installation of an oil moisture separator in the airline between compressor and blast machine.
 - b. Installation of an air cooler/dryer in the airline between the compressor and the oil and moisture separator.
 - c. Use of venturi nozzle.
- 7. The Contractor shall ensure all surfaces to be blast cleaned are electrically grounded during blast cleaning. All air and blast lines will have cable whip checks installed.
- 8. The Contractor shall provide exhaust air dust collectors to prevent discharge of dust to outside air. No dust socks are allowed.

- 9. The Contractor shall mask-off and protect all exposed machined metal surfaces, plastic, and other surfaces not to be painted or that may be damaged by abrasive blasting or tying in to coating systems.
- 10. The Contractor shall remove all dust and abrasive from freshly blasted surfaces by use of a District approved vacuum system.
- 11. The Contractor shall dispose of abrasive blast media and other waste materials off-site and in accordance with approved material disposal plan and discard material directly from Reservoir to a portable container and remove container from site. The Contractor shall ensure media is not placed on ground or other intermediate location. No abrasives shall be reused at any time.

SECTION 15 - Application

- 1. The Contractor shall adhere to general application requirements as follows:
 - a. Mix and apply all coatings in accordance with the manufacturer's recommendations and instructions, the applicable requirements of SSPC-PA 1, and as specified herein.
 - b. Obtain Inspector's evaluation and approval of steel surface preparation immediately prior to application of first coat.
 - c. Obtain Inspector's evaluation and approval of cleanliness of previous coat immediately prior to application of a subsequent coat.
 - d. Contractor shall provide ratio testing at the beginning of each application.
 - e. Completely coat all surfaces above shell prior to coating shell. The floor will be abrasive blasted and coated after the shell, roof, roof supports and rafters are completely caulked, tested, and repaired.
 - f. For each portion of the Reservoir-shell, roof, and floor, complete application.
 - g. Apply coatings by plural component spray except:
 - i. Areas of less than 2 square inches may be brushed, or the roof and rafters.
 - ii. Required brush striping of edges, welds, nuts, bolts, rafter edges, and roof plate edges. The thin film stripe coat will be applied as a totally independent coat by brush and allowed to dry prior to application of the finish coat. The stripe coat will be the same as the system being applied. No other products shall be allowed for stripe coats.
 - h. Apply coatings at a temperature recommended by manufacturer. Prior to mixing, coating materials shall be not less than 90oF. Use explosion-proof inline heaters, as necessary.
 - i. Scaffolding or other support system shall be free of abrasive blast media, dirt, and other foreign matter prior to coating application. The Contractor should be fully aware that most 100% epoxies can produce amine blush which must be removed prior to over coating and disinfection.

- j. Finish coat shall be uniform in color and gloss over the entire surface. Finish coat shall be smooth to touch with no sags, runs, dry spray, over-spray, cracks, pinholes or other surface defects and must be even in color and appearance. When coating is applied, the previously coated area will be masked off to prevent overspray onto newly painted surfaces.
- k. Coating should not be applied closer than 6 inches from an unprepared surface.
- The Contractor shall apply a totally independent brush coat and allowed to dry to all welds, plate edges, rafter edges, nuts, bolts, and hard to reach areas prior to application of the finish coat.
- 2. The Contractor shall provide color as follows: (Thin Film Epoxy / Devoe/233H or Sherwin Williams Tank Clad)
 - a. First Coat: Buff
 - b. Second Coat: White
- 3. The Contractor shall provide color as follows: (Thick Film Epoxy/ Devoe 234P or Sherwin Williams Sherplate PW).
 - a. White
- 4. The Contractor shall provide a Dry Film Thickness (DFT) as follows: (Thin Film Epoxy)
 - a. First Coat: 8.0 mils minimum to 10.0 mils maximum
 - b. Finish Coat: 8.0 mils minimum to 10.0 mils maximum
 - -Minimum total DFT: 16.0 mils
 - -Maximum total DFT: 20.0 mils
- 5. The Contractor shall remove areas of paint in excess of allowable mils specified.
- 6. The Contractor shall provide a Dry Film Thickness (DFT) as follows: (Thick Film Epoxy)

First Coat: 25.0 mils minimum to 30.0 mils maximum

-Minimum total DFT: 25.0 mils

-Maximum total DFT: 30.0 mils

- 7. The Contractor shall provide additional coats to achieve specified minimum dry film thickness.
- 8. The Contractor shall provide application equipment as follows:
 - a. Airless spray pumps in compliance with manufacturer's requirements, having an anti-freeze device, and fluid filter.
 - b. Use fluid tip size recommended by manufacturer.
 - c. Use clean fluid lines not previously used to apply zinc-rich or water-based coating materials.
 - d. Clean equipment using only products recommended by the coating manufacturer.
 - e. Blow lines to remove all thinners prior to painting.
 - f. Barcol hardness testing is required eight hours of each application of the 10% solids epoxy.
 - g. Each application a sample shall be sprayed onto plastic and marked with the date and time of application including the batch number. This sample shall retained be given to the project Engineer.
 - h. Ratio checks will be performed prior to each application in new clean measured beakers. All plural component pump gauges shall be in working order prior to any application, if gauges are not working they shall be immediately replaced. All gauges shall be in the zero position when pump is off. If the pump error alarm goes off the Contractor shall immediately shutdown and repair the pump.
 - i. The Contractor shall provide coating repairs as follows:
 - j. Touch-up or refinish all chipped, abraded, or otherwise unsatisfactory portions of the work in accordance with the manufacturer's recommendations. The Contractor should be fully aware that high solids epoxies can amine blush.
 - k. Re-coating or touch-up of areas that have cured beyond the maximum time recommended by the manufacturer require the following special preparation.
 - I. Sweep blast area and 3-inches into the surrounding area. Sweep blast under low pressure to uniformly abrade surface and feather edges. Feather edges by sanding or other means acceptable to the Inspector.
 - m. Remove abrasive blast residue from blasted area with special attention to marginal areas of intact coating.
 - n. All repairs will be masked off.
 - Clean area with a bond solvent recommend by the manufacturer.

SECTION 16 - Interior Curing and Cleaning

1. The Contractor shall ensure curing of all coatings by forced heated air ventilation for a minimum of 72 (ventilating) hours at seventy degrees, or longer if recommended by the manufacturer after

coating application and repairs are completed. Curing shall include providing ventilation at a rate of at least one complete air change every four hours.

- 2. Equipment shall have a time recorder that provides a cumulative record of operating time.
- 3. Deliver air from ventilating fan to center of reservoir through continuous flexible duct that is not reduced in area from the fan outlet.
- 4. Prior to re-installation of roof vent covers removed during forced air ventilation, the Contractor shall ensure cleaning as follows:
- 5. Clean dust and abrasive-blasting residue from the roof ventilation screens and top of rafter lips.
- 6. The Contractor shall have the District flush the inlet line prior to cleaning operations. Thoroughly wash down with water all interior surfaces, including but not limited to, roof, rafters, walls, floor, piping and supports. All amine blush must be removed prior to putting the reservoir into service. The Contractor shall steam clean surfaces where necessary.

SECTION 17 - Shell to Roof Junction Gap and Rafter Caulking

Prior to finish coat is cured (finger nail depression test), the Contractor shall completely fill and seal the shell to roof juncture gap, rafters void and around the entryways and the floor roof pedestals with Sikaflex–1A caulking or approved substitute to provide a tightly adherent, smooth and continuous seam of caulk. This application may be performed after to the application of epoxy or as directed by the manufacture.

SECTION 18 - Manway Gasket Replacement and Vent Screens

The Contractor shall supply new manway gaskets for tank manways. The vent screens shall be replaced with new vent screens at per AWWA D-100.

SECTION 19 - Reservoir Disinfection

- 1. Upon complete curing, the Contractor shall submit in writing to the District certification that the coating is cured and ready to be placed into service for disinfection and testing. Reservoir cleaning and disinfection shall not commence without written certification. All amine blush must be removed prior to disinfection.
- 2. After all other work has been completed, the Contractor shall ensure that the interior of the Reservoir is thoroughly cleaned and disinfected in accordance with the most current edition of AWWA C652, Disinfection of Water Storage Facilities. The Contractor shall ensure the reservoir is disinfected in accordance with Chlorination Method 2, which requires spray wash of the Reservoir interior with a 200-mg/ml chlorine solution. The District will assist the Contractor in filling the Reservoir and the Contractor shall allow three (3) consecutive working days for the owner to fill the Reservoir.
- 3. The Contractor shall furnish all cleaning and disinfection materials and all equipment and labor necessary for the cleaning and disinfecting operations.
- 4. After the first 24 hours have elapsed once the tank is full, the District will take a sample of the water to be used for bacteriological contaminants. If the results of this test are negative, the tank

will be considered satisfactorily disinfected. If the results are positive, the tank shall be drawn down to that depth that will permit the addition of sodium hypochlorite to a final concentration of 10-mg/L. This depth will be determined upon an evaluation of the chlorine residual provided for in this Section of these Project Special Provisions.

5. The Contractor shall ensure that any water used in cleaning and in disinfection of the Reservoir, is discharged in a manner acceptable to the District and the appropriate water pollution control agency. The Contractor shall ensure all water discharged is de-chlorinated.

SECTION 20 - Soak Period & Testing for Volatile Organic Compounds

- 1. The Contractor shall ensure that water in the Reservoir is allowed to soak for five (5) days after the Reservoir has been filled to the over-flow level and disinfected.
- 2. After the five-day soak period the District will sample and submit a single sample to a certified laboratory to test the water for presence of organic chemical contaminants (e.g. TCE, PCE, etc.) possibly having leached from the new paint system. The sample is to be tested in accordance with EPA Method 524.2. The water sample will be collected by the District in the presence of the Contractor and should be a true representation of the water in the Reservoir at the time.
- 3. The Contractor shall be liable for all cost associated with re-testing water if reservoir water draining and refilling is necessary.
- 4. The District Engineer shall evaluate and determine acceptability of the aesthetic quality of the water as a condition of final acceptance of the work. Constituent levels found from sample results which are at or below regulated maximum contaminant levels specified by state and federal standards shall not be the sole basis for tank acceptance.

The District Engineer may reject all work or a portion thereof based on any adverse taste or odor detected or other conditions affecting the aesthetic quality of the water.

SECTION 21 - Disposal of Existing Coatings and Spent Abrasive Blast Media

- 1. The Contractor shall dispose of spent abrasive blast media and removed coating materials in accordance with a District approved disposal plan.
- 2. The Contractor shall coordinate and pay all costs for sampling and testing of spent abrasive blast media and removed coating materials in order to document waste class. Minimum sampling and testing requirements are listed previously in this Section.
- 3. Prior to removal of hazardous wastes off-site, the Contractor shall allow adequate time for District to review laboratory test results, as well as the time required to obtain a Hazardous Waste Generator's U.S. EPA ID Number, if required the District will provide the Contractor with written notice to dispose of all or a portion of the spent abrasive blast media and/or removal coating materials as hazardous waste, if so determined by the District that such disposal is required.
- 4. The Contractor shall be responsible for all costs associated with accumulating, transporting, and disposing of spent abrasive blast media and removed coating materials.

SECTION 22 - Clean-Up

- 1. Upon completion of the work, the Contractor shall make a detailed inspection of all work.
- 2. The Contractor shall be solely responsible for all paint over-spray or fugitive dust fallout claims.
- 3. The Contractor shall remove all spattering, spits, and blemishes.
- 4. Upon completion, of work, the Contractor shall remove all staging, tarps, scaffolding, and containers from the site, including but not limited to: paint and thinner containers and excess paint and thinner (to be disposed of in conformance to all current regulations); paint spots removed and the entire job site cleaned; all damage to surfaces resulting from the work from this section to be cleaned, repaired or refinished to the complete satisfaction of the District. All clean up shall be completed within 7 calendar days starting at the last day of holiday testing of the reservoir. The Contractor shall allow adequate time for District for review of laboratory test results, as well as the time required to obtain a Hazardous Waste Generator's U.S. EPA ID Number if required.
- 5. The District will provide the Contractor with written notice to dispose of all or a portion of the spent abrasive blast media and/or removed coating materials, as required.
- 6. The Contractor shall bear all costs associated with site clean-up.

SECTION 23 - Measurement and Payment

- Under this item, the Contractor shall remove all existing coatings from the inside of the tank and abrasive blast interior surfaces. The Contractor shall then recoat the tank interior using the system specified. The Contractor shall also provide the necessary environmental controls (dehumidification, heaters, enclosures, etc.) and arrange for the VOC testing, disinfecting of the tank, and arrange for bacteriological testing.
- 2. Payment will be made on a lump sum basis.

PART II -- COATING OF RESERVOIR EXTERIOR

SECTION 1 - Scope

1. The Contractor shall properly prepare all exterior surfaces of the water storage tank including, shell, roof, ladders, structural supports, bracing, piping, and appurtenances. The Contractor shall apply the coating system as indicated herein and in a manner prescribed by these specifications and the manufacturers printed application instructions. The interior coating system must be completed prior to coating work on the exterior. The existing roof anode access holes shall receive new Hand Hole Liner Grommet as manufactured by Dive Corr (562-439-8287).

Watson #2 reservoir the Contractor shall over coat the exterior coating of the reservoir and all associated piping. The exterior shall be water blasted at a minimum of 5,000 P.S.I. to remove all existing chalking. No water will be allowed to leave the boundaries of the site. The drains shall have filter fabric installed to prevent any cleaning debris from entering the site drainage system. The use of Devoe Devprep #88 or as approve equal shall be used to pre-clean the exterior. At no time will the pre cleaner be allowed to dry on the exterior surfaces. All areas of visual corrosion shall be cleaned as per SSPC/Sp#3 and SP#11. At no time shall fugitive dust or overspray be allowed beyond the site boundaries. The exterior shell to concrete chime shall be completely caulked with Sika 2-C.

2. At least two days prior to start of work, the Contractor shall arrange with the District for a prepreparation conference at the job site to ensure that all parties involved are familiar with the entire project, including all specifications, safety codes, and job site conditions

SECTION 2 - Materials

- 1. The District provides the following protective coatings manufacturer, DEVOE COATINGS, INC., and SHERWIN WILLIAMS, INC., as specified herein, as a standard of quality, or equal. All finish colors shall be colored at the factory as a dry grind only, no quick colors shall be accepted.
- Reference Standards: The Contractor shall comply with the requirements of the Steel Structures
 Painting Council Painting Manual, Volume 1 and 2, Good Painting Practices, including the
 National Association of Corrosion Engineers, American Society of Testing and Materials, and
 American Water Works Association D-102-06, for application and surface preparation, and all
 applicable OSHA and safety standards.
- 3. The Contractor shall consult the District Engineer regarding any situations not covered by the reference standards or this specification; however, it is the Contractor not the District that is ultimately responsible for proper exterior coating application.

SECTION 3 - Submittals

- 1. The Contractor shall submit the manufacturers latest written product data sheets on each product to be used, and current manufacturer's safety data sheets (M.S.D.S.) on all materials to be used in the surface and coating operations including abrasives, thinners, cleaning fluids, and solvents.
- 2. The Contractor shall submit, for the District Engineer's acceptance, a written program detailing measures for full containment, and equipment and dust and over-spray control.
- 3. The Contractor shall maintain on the job site at all times M.S.D.S. and product data sheets. The Contractor shall post required signage for lead work.
- 4. The Contractor shall include the following data in the manufacturer's recommended handling and installation instructions for the proposed paint system submittal:
 - a. Storage including maximum and minimum storage temperatures;
 - b. Surface preparation;
 - c. Coating repair;
 - d. Application equipment;
 - e. Mixing and application of coating system including a table of minimum and maximum time to re-coat as a function of temperature;
 - f. Curing Minimum and maximum re-coat times;
 - g. Acceptable temperatures at the time of application; and
 - h. The Contractor shall include the following data in the report submittal: Quantity of coating material used for each coat, submitted within 24 hours after completion of each coat.

SECTION 4 - Delivery

- 1. The Contractor shall assure that all materials delivered to the job site are in their original unopened containers.
- 2. The Contractor shall not use any product older than twelve months from the original manufacturer's factory batch date as listed on the container.

SECTION 5 - Storage

- 1. The Contractor shall submit, for the District Engineer's acceptance, a specified material storage area and store all materials in the approved location.
- 2. The Contractor shall maintain material storage areas in a clean condition, free of solvent rags, and wastepaper. The Contractor shall remove debris and other fire hazards and dispose of such items in accordance with all the applicable regulations at the end of each work day.

SECTION 6 - Safety

- 1. This project is subject to all applicable Safety and Health regulations and Industry Safety Standards.
- 2. The Contractor shall submit a notarized letter signed by a principal officer certifying the Contractor fully complies with the California Code of Safety Regulations and the Federal Code of Regulations pertaining to the scope of this project, but not limited to the following; as well as any other applicable orders, codes, ordinances, or laws, State, Federal, and Local. (GISO-General Industry Safety Orders, CSO-Construction Safety Orders, CFR-Code of Federal Regulations).

| Title | Code Regulation | Section |
|--------------------------------------|-----------------|-----------|
| Illness Injury Prevention Program | CSO/GISO | 1508-3203 |
| Hazard Communication | GISO | 5194 |
| Lead | CFR | 1926.62 |
| Safety Instructions for Employees | CSO | 1510 |
| Dust, Fumes, Mist, Vapors, and Gases | CSO | 1528 |
| Metal Scaffolding | CSO | 1644 |
| General Industry Standards | 29 CFR | 1910.1025 |
| Respiratory Protection | CSO/GISO | 1531-5144 |

SECTION 7 - Hazardous Substances

- 1. The Contractor shall exercise extreme care when handling or disposing of materials or substances listed in Section 8-339 of Division 4 (California Code of Occupational Safety and Health Regulations) of Title 26 (Toxics) of the California Code of Regulations, or as evidenced by the M.S.D.S.
- 2. The Contractor shall immediately notify the District Engineer of any spill of material that is a hazardous substance in accordance with the appropriate jurisdiction.

SECTION 8 - Dust/Over-Spray Control

- 1. The Contractor shall provide full containment for the coating and surface preparation operations to prevent damage or nuisance to property or persons.
- 2. The Contractor shall be solely responsible for all claims resulting from dust and over-spray control from the coating and surface preparation operations or any damage or nuisance to property or persons.

SECTION 9 - Workmanship

1. The Contractor shall provide written evidence to the District Engineer that workers furnished have performed quality work and possess experience and knowledge in surface preparation and the application of high performance industrial coatings.

- 2. The Contractor shall provide written evidence to the District Engineer that the Contractor has a minimum of five years' experience in the painting of water storage tanks and a current list of water tank painting projects for the past five years (five minimum).
- 3. The Contractor shall conform to all the standards of craftsmanship as discussed in the Steel Structures Painting Council's Painting Manual, Volume 1, Good Painting Practice. These techniques include, but are not limited to: multiple passes of the spray gun, with each pass overlapped 50%, and "cross hatching" successive coats of paint. A stripe (Brush coat) is required on all welds prior to the finish coat

SECTION 10 - Equipment

The Contractor shall use properly functioning equipment capable of performing the task required herein, abrasive blast to SSPC/Sp#10.

SECTION 11 - Surface Preparation

- 1. The Contractor shall prepare all exterior surfaces by abrasive blasting.
- 2. The Contractor shall schedule cleaning and painting so that detrimental amounts of dust or other contaminants do not fall on wet, or newly painted surfaces. Surfaces not to be painted shall be suitably protected from the effects of cleaning and painting operations. Prior to spot and full priming, surfaces shall be cleaned by a combination of blowing with clean dry air with a 1/2" hose with a shut off device, vacuuming, brooming, or as directed by the District Engineer.

SECTION 12 - Degree of Cleanliness

- 1. The Contractor shall water blast the exterior of the reservoir at 5, 000 P.S.I. minimum (SSPC/WJ-4) with Devoe Dev-prep #88 or Great Lakes Extra Muscle Detergent. At no time shall cleaning detergents be allowed to dry on the exterior surfaces. The Contractor shall remove all chalking with an end result equal to ASTM D-4214 result #8
- 2. The entire existing exterior coatings shall be pole sanded to remove any existing debris in the coating. The Contractor shall power tool clean all areas of visual corrosion as per SSPC/Sp# 3 with HEPA vacuum attachments and as per SSPC/Sp#11. All broken edges shall be feathered to a smooth transition.

SECTION 13 - Air Compressors

- 1. The Contractor shall remove from the work site air compressors that are undersized or will not supply sufficient air for the coating operations. All operating equipment shall be placed into secondary containment to prevent accidental spills.
- 2. The Contractor shall check air stream a minimum of twice daily for moisture and oil contamination as per ASTM D-4285. All equipment shall have moisture and oil separators.

SECTION 14 - Coating Application/ Environmental Conditions

 The Contractor shall not apply coating when any of the following conditions occur: metal temperature is less than five degrees above the dew point and on the rise for a minimum of six hours. 2. The Contractor shall measure relative humidity and dew point using a sling psychrometer in conjunction with U.S. Department of Commerce Weather Bureau Psychrometric Tables.

SECTION 15 - Application Procedures

- 1. The Contractor shall apply all coatings in accordance with the manufacturer's latest written recommendations and the best state of the art techniques that will result in a finish that is free of runs, sags, pinholes, dry spray, orange peel, be in equal in color and appearance. The exterior welds shall be stripe coated with the epoxy primer prior to the application of the urethane finish coat.
- 2. The Contractor shall bring all materials to the job site in the original factory sealed containers. The Contractor shall not use any material until the Engineer has inspected the contents and obtained the information from the containers or labels. All materials shall be mixed as full kits only. Materials shall only be thinned with the manufacturer's recommended thinners, and will be thinned as required to adjust for viscosity for temperature variations, proper atomization and flow. Thinning shall not exceed the Local, State, or Federal V.O.C. limits. Any catalyzed material remaining at the end of each day shall be properly discarded. The entire primer application shall be complete before the finish coat is applied.
- 3. In order to prevent the degradation or contamination of cleaned surfaces, the first coat of paint shall be applied immediately after the surfaces have been cleaned and approved by the Engineer. Succeeding coats shall be applied before contamination of the under surface occurs.

SECTION 16 - Curing

- 1. Each coat of paint shall be allowed to either dry or cure for the amount of time recommended by the coating manufacture before successive coats of paint are applied.
- 2. All successive coats of paint shall be applied within the re-coat threshold time as recommended by the manufacturer.

SECTION 17- Color Scheme

- 1. The exterior top coat color shall be as per the District's Engineer's instructions.
- 2. The Contractor shall submit color chips at least 3-inches by 5-inches in dimension within five (15) days prior to the start of application of the exterior top coat. The Contractor shall order final coating materials only after receiving written approval from the District Engineer. Failure to obtain the District's approval prior to ordering shall not be cause for additional compensation.

SECTION 18- Exterior Surfaces- Coating Systems

- 1. The Contractor shall full prime and finish coat all exterior surfaces including, shell, roof, ladders, railings, and all associated piping.
- 2. The following coating system is approved by the District:

DEVOE COATINGS, INC.

Spot Prime: Bar-Rust #231 at 4.0 minimum 6.0 maximum mils DFT

Full Intermediate Coat: Preprime #167 at 1.0 minimum 1.5 maximum mils DFT (24-hour Maximum recoat time)

Full Finish Coat: Devthane * #379 or #378 at 3.0 minimum 4.0 maximum mils DFT

Total System DFT: 7.0 mimimum-10.5 mils maximum

SHERWIN WILLIAMS, INC.

Spot Prime: Mastic Aluminum II (B62) at 4.0 minimum 6.0 maximum mils DFT

Full Intermediate Coat: Macropoxy 5000 at 1.0 minimum 1.5 maximum mils DFT

Full Finish Coat: HS Polylon HP at 2.0 minimum 3.0 maximum mils DFT

Total System DFT: 7.0 mimimum-10.5 mils maximum

3. The color and sheen (Gloss) shall be submitted to the District and approved in writing by the District prior to Contractor ordering material.

SECTION 19 - Film Thickness

The tank Coating Inspector shall inspect film thickness with a non-destructive dry film thickness gauge (e.g., Elcometer 456). The Contractor shall provide to the District upon request U.S. Department of Commerce, Bureau of Standards calibration plates to verify accuracy.

SECTION 20 - Coating Repairs

If it is necessary to touch-up or re-coat damaged areas after the coatings have cured beyond the maximum re-coat time, the Contractor shall prepare surfaces prior to applying touch-up paint. The Contractor shall mask off and spray designated areas only. All repairs will be masked off.

SECTION 21 - Contractor's Responsibility

- The Contractor shall dispose of any residual waste from surface preparation operations in compliance with all Federal, State, and Local regulations. The Contractor shall ensure that all openings are covered and protected to prevent over-spray from entering the Reservoir. The Contractor will be responsible for all costs in the event of contamination of the water inside the Reservoir. Site Restoration
- 2. Upon completion of the work, the Contractor shall restore the site to the original condition, including removing all trash and other debris from the site.

SECTION 22 - Clean-Up

- 1. Upon completion of the work, the Contractor shall make a detailed inspection of all work.
- 2. The Contractor shall be solely responsible for all paint over-spray or dust fallout claims.
- 3. The Contractor shall remove all spattering, spits, and blemishes.

- 4. Upon completion, of work, the Contractor shall remove all staging, tarps, scaffolding, and containers from the site, including but not limited to: paint and thinner containers and excess paint and thinner (to be disposed of in conformance to all current regulations); paint spots removed and the entire job site cleaned; all damage to surfaces resulting from the work from this section to be cleaned, repaired or refinished to the complete satisfaction of the District. All clean up shall be completed within 7 calendar days starting at the last day of holiday testing of the reservoir. No abrasive residual may be left on the ground and must be removed.
- 5. The Contractor shall bear all costs associated with site clean-up.

SECTION 23 - Steel Tank One-Year Inspection

- 1. At the time of tank acceptance for service, the District Engineer may schedule the first anniversary inspection provided for in AWWA D102-06. The inspection of the tank may be scheduled for a date between the first day of the eleventh month and the thirtieth day of the thirteenth month following acceptance. This schedule for the inspection shall be considered tentative and the Contractor will be notified of the inspection schedule no later than the first day of the tenth month following acceptance of the tank.
- 2. Upon completion of this inspection, the inspecting firm will prepare a report that includes but is not limited to, the methods used in the inspection, the equipment and personnel on hand at the time of the inspection, a summary of findings, photographs of all deficiencies found, and any other information relevant to the condition and maintenance of the tank.
- 3. The Contractor shall have a representative on site at the time of inspection to authorize any minor repairs the inspection subcontractor is willing to perform during or directly after the inspection.

SECTION 24 - Omissions

Care has been taken to delineate herein those surfaces to be coated. However, if the coating requirements have been inadvertently omitted from this section or any other section of the specifications, it is intended that all metal surfaces unless specifically exempted herein, shall receive a first class protective system equal to that given the same type surface pursuant to these specifications.

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PART III - CONTRACTOR/COATING INSPECTOR INTERACTION & COMPLIANCE

SECTION 1 - Inspection

- 1. The District has retained a coating inspection firm to oversee all quality control related to coating operations. The tank inspector will report directly to the District General Manager or his/her designee and shall act with the Engineer's authority in all matters related to tank construction. The Inspector will be an N.A.C.E. Certified Coating Inspector, who will inspect any or all phases of work to be performed as outlined herein. The tank inspector shall be an addition to the District Inspector; authority shall be limited to tank related work only. The District General Manager or his/her designee shall remain the primary observer for all work on the project. The tank inspector shall work for and report to the District. The Contractor shall not rely upon the tank inspector for documentation of environmental conditions and assuring compliance with plans and specifications.
- 2. The Contractor shall notify the District Engineer in advance (48 hours minimum) of all surface preparation or paint application in order to perform a preliminary examination and provide acceptance of the surface preparation and each coat prior to application of the next coat.
- 3. The Coating Inspector shall examine all materials, tools, and equipment to be used in the blasting and coating operations and shall have the authority to direct the Contractor to remove, replace, or repair any materials, tools, or equipment found not to be in conformance with the Contract Documents including the approved shop drawings and manufacturer's recommendations. The tank inspector will also observe the Contractor's safety activities throughout blasting and coating operations and the Contractor shall immediately rectify any deficiencies noted in that observation. The Contractor shall be fully responsible for compliance with all safety measures, hazardous and toxic materials regulations, and site security. Observation of or failure to observe any safety efforts of the Contractor by the Tank Inspector shall not relieve the Contractor of this responsibility nor shall any liability transfer from the Contractor to the District or the Tank Inspector. The Contractor shall indemnify, defend, and save harmless the District and the Tank Inspector from all liability associated therewith.
- 4. The SSPC-Vis1 pictorial surface standards along with dry film and wet film thickness gauges will be used by the Coating Inspector to determine acceptability of the paint application. The Contractor shall provide necessary testing equipment to perform the above-mentioned tests.
- 5. The Contractor shall afford the tank inspector all reasonable facilities and assistance in monitoring the coating and priming operations. The Contractor shall provide weekly copies of their daily work reports to the tank Coating Inspector. Such reports shall include, but not be limited to, the day and date of work performed, the relevant weather conditions, the type and amount of work performed, all work related to the safety of the operation, and personnel assigned to work actually performed.
- 6. To facilitate adequate inspection of all surfaces, the Contractor shall provide scaffolding or rigging necessary for the Coating Inspector to perform dry film thickness readings, and visual holiday inspection as required by these specifications and reference standards. The Contractor shall provide personnel to move scaffolding or rigging at the instructions of the Engineer.
- 7. The tank Coating Inspector shall have authority to direct the Contractor to suspend operations when environmental conditions fall outside the manufacturer's recommended parameters. The

Contractor shall comply with these directions and shall not proceed until the tank Coating Inspector determines environmental conditions are sufficient to proceed. Failure to suspend coating operations as directed or restarting work without the direction of the tank Coating Inspector shall be cause for rejection of work so performed.

8. The Contractor shall immediately remove and replace all such work in accordance with these Project Special Provisions and directions of the tank inspector. No additional compensation will be allowed for work resulting from failure to comply with the tank inspector or for surfaces not otherwise conforming to the provisions of these Project Special Provisions.

SECTION 2 - Coating Inspector Authority

- 1. The tank Coating Inspector shall have authority to direct the Contractor to suspend operations when environmental conditions fall outside the manufacturer's recommended parameters.
- The Contractor shall comply with directions and shall not proceed until the tank Coating Inspector determines environmental conditions are sufficient to proceed. Failure to suspend coating operations as directed or restarting work without the direction of the tank Coating Inspector shall be cause for rejection of work so performed.
- 3. The Contractor shall immediately remove and replace all such work in accordance with these Project Special Provisions and directions of the Coating Inspector.
- 4. No additional compensation will be allowed for work resulting from failure to comply with the tank inspector or for surfaces not otherwise conforming to the provisions of these Project Special Provisions.

SECTION 3 - Safety

- 1. The Contractor shall provide a safe work environment at all times. In the event the Coating Inspector notes any safety deficiencies, the Contractor shall immediately rectify noted deficiencies.
- 2. The Contractor shall be fully responsible for compliance with all safety measures, hazardous and toxic materials regulations, and site security. Observation of or failure to observe any safety deficiencies of the Contractor by the Coating Inspector shall not relieve the Contractor of this responsibility nor shall any liability transfer from the Contractor to the District or the Coating Inspector.
- 3. The Contractor shall save harmless the District and the Coating Inspector from all liability associated therewith.

SECTION 4 - Inspection Assistance

- 1. To facilitate adequate inspection of all surfaces, the Contractor shall provide scaffolding or rigging necessary for the Coating Inspector to perform dry film thickness readings, and visual holiday inspection as required by these specifications and reference standards.
- 2. The Contractor shall provide personnel to move scaffolding or rigging at the instructions of the Coating Inspector.

SECTION 5 - Notification

The Contractor shall notify the Coating Inspector in advance (48 hours minimum) of all surface preparation or paint application in order to perform a preliminary examination and provide acceptance of the surface preparation and each coat prior to application of the next coat.

SECTION 6 - Acceptability for Paint Application

- 1. The SSPC-Vis1 pictorial surface standards along with dry film and wet film thickness gauges will be used by the Coating Inspector to determine acceptability of the paint application.
- 2. The Contractor shall provide necessary testing equipment to perform the above-mentioned tests.

SECTION 7 - Reporting

- 1. The Contractor shall afford the Coating Inspector all reasonable facilities and assistance in monitoring the coating and priming operations.
- 2. The Contractor shall provide weekly copies of daily work reports to the tank Coating Inspector. Such reports shall include, but not be limited to, the day and date of work performed, the type and amount of work performed, all work related to the safety of the operation, and personnel assigned to work actually performed.