

**INVITATION TO BID  
TRUCKEE MEADOWS WATER AUTHORITY  
NRS 332 IN EXCESS OF \$50,000  
BLADDER-TYPE HYDROPNEUMATIC TANKS FOR THE ARROWCREEK DROUGHT  
RESPONSE PROJECT**

**TMWA PROJECT NO.: 2016-003  
TMWA CAPITAL PROJECT NO.: 10-0002**

**RANGE FOR ENGINEER'S ESTIMATE:** \$30,000.00 - \$60,000.00

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**PROJECT SCOPE:** Truckee Meadows Water Authority (TMWA) is accepting sealed bids for all labor, materials, equipment, and incidentals required for the Bladder-Type Hydropneumatic Tanks for the Arrowcreek Drought Response Project. The surge tanks will be installed by others at the Zolezzi Lane Booster Pump Station and the Arrowcreek Well #1 Booster Pump Station sites located in the South Truckee Meadows area of Reno, Nevada. The overall project involves construction of three new booster pump stations and about 3,200 feet of 10" water main on Zolezzi Lane along with miscellaneous interties and improvements. The work required under this contract is limited to the fabrication and delivery of two new bladder-type hydropneumatic tanks for vertical installation in underground vaults at the locations noted above.

**MANDATORY PRE-BID CONFERENCE:** Not Required for this Project.

**BID DOCUMENTS:** All bid documents may be downloaded from TMWA's website at [http://tmwa.com/about\\_us/doingbusinesswithtmwa](http://tmwa.com/about_us/doingbusinesswithtmwa)

**BID SUBMITTAL:** Sealed bids must be submitted to TMWA by mail to P.O. Box 30013, Reno, Nevada 89520-3013 or in person to 1355 Capital Boulevard, Reno, NV 89502, and must be **RECEIVED BY TMWA NOT LATER THAN 3:00 P.M. on August 20, 2015.** Bids received after the date and time set for receipt will be **REJECTED.**

**BID OPENING:** August 20, 2015, at 3:05 p.m. at the TMWA Conference Room, 1355 Capital Blvd., Reno, NV 89502. TMWA reserves the right to reject any or all bids, including without limitation the right to reject any or all nonconforming, non-responsive, unbalanced, or conditional bids, and to reject the bid of any bidder if TMWA believes that it would not be in the best interest of TMWA to make an award to that bidder. TMWA also reserves the right to waive informalities. Bids will be evaluated as prescribed in Nevada Revised Statute 332.

**AWARD DATE:** On or Before August 28, 2015.

**DELIVERY DATE:** Desired Eight (8) Weeks from Issuance of Purchase Order – time is of the essence.

**SHIPPING AND DELIVERY:** Total bid price shall include shipping and delivery to the TMWA warehouse corporate yard located at 1355 Capital Boulevard, Reno, Nevada.

**PLANS AND SPECIFICATIONS:**

Specification Included in Bid Documents – No Plans.

Bidders are to complete all Bid Submittal Forms, contained on pages 2-10 in the Bid Proposal Form Section of the Bid Documents. The complete Contract Documents must be submitted to comprise a responsive and responsible bid. **A bid bond will not be required for this project.** Addenda, if any, shall be posted on the TMWA web-site at [http://www.tmwa.com/about\\_us/doingbusinesswithtmwa/](http://www.tmwa.com/about_us/doingbusinesswithtmwa/) It is each bidder's sole responsibility to ensure that they have received all addenda prior to submission of their bid.

**QUESTIONS:** Questions may be submitted in writing to the Contract Administrator up to three (3) business days before Bid Opening.

Maria I. Dufur, Contract Administrator  
Truckee Meadows Water Authority  
1355 Capital Boulevard  
Reno, NV 89502  
(775) 834-8056  
Fax (775) 834-8153: e-mail: [mdufur@tmwa.com](mailto:mdufur@tmwa.com)

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- 11650 Bladder-Type Hydropneumatic Tanks

# INSTRUCTIONS TO BIDDERS

## I. BIDDING PROCEDURES

### A. Pre-bid Conference – **Not Required for this Project**

### B. Designated Contacts

The designated contact for questions pertaining to the Contract Documents, Specifications and/or Drawings is the designated Contract Administrator. All questions should be submitted in writing, and will receive a written response from the Contract Administrator.

Maria I. Dufur  
Truckee Meadows Water Authority  
P.O. Box 30013  
Reno, NV 89502  
775-834-8056  
FAX No. 775-834-8153  
E-mail: mdufur@tmwa.com

### C. Interpretations and Addenda

Bidders shall take no advantage of any apparent error or omission in the Bidding Documents. In the event a Bidder discovers such an error or omission, it shall immediately notify the Contract Administrator in writing. Truckee Meadows Water Authority will then make such corrections and interpretations as may be deemed necessary for fulfilling the intent of the Bidding Documents. Any Addendum or written clarification supplementing the Plans, Specifications, and Contract Documents issued prior to the time set for the submittal of Bid Proposal shall be made part of the Contract.

If it becomes necessary to issue a written addendum, a copy will be provided on Truckee Meadows Water Authority Web Site for free download at [http://tmwa.com/about\\_us/doingbusinesswithtmwa](http://tmwa.com/about_us/doingbusinesswithtmwa). Truckee Meadows Water Authority is not bound by any oral representations, clarifications, or changes made by employees, or representatives, unless such clarification or change is provided to all Bidders in written form. No significant Addendum shall be issued by Truckee Meadows Water Authority less than one (1) working day prior to the advertised date and time for Bid submittal unless the bid date is extended.

Prior to submission of the Bid, each Bidder shall ascertain that it has received all Addenda issued. The Bidder shall acknowledge receipt of all Addenda by completing the acknowledgment space provided on the Bid Schedule.

### D. Bid Preparation and Submission

1. Bid proposals are to be submitted on the Bid Schedule provided and must be manually signed by pen by an officer or authorized agent (with attached power of attorney) of the Bidder. All figures must be written in ink or typewritten. Figures written in pencil or erasures are not acceptable. Any interlineation or alteration must be initialed in ink by a person authorized to bind the Bidder to a Contract. If the person making said interlineation or alteration is not the same person who signs the Bid Proposal, such person must write his/her signature and print his/her name and title on each page of the Bid Proposal where initials appear. Written delegation of signature authority to an agent acting on behalf of the Bidder must accompany the sealed Bid and cannot contain any language which states the Bidder retains final approval of acceptance of any of the terms conditions, specifications and/or finalized Contract.
2. Each Bid shall be submitted in a sealed envelope and the envelope must be prominently marked on the lower left corner as follows:

**TMWA PROJECT NO.:** 2016-002

**OPENING:** August 20, 2015

**COMPANY NAME:**

Truckee Meadows Water Authority will not consider a Bid that fails to comply with the above stated requirements. Truckee Meadows Water Authority will not be responsible for the premature opening of a Bid not properly addressed or identified. All Bids must be received prior to the time and date specified in the Invitation to Bid at the following address:

**Truckee Meadows Water Authority  
P.O. Box 30013, Reno, NV 89520-3013  
or  
1355 Capital Boulevard, Reno, NV 89502**

3. If forwarded by mail, the sealed envelope containing the Bid must be enclosed in another envelope addressed as specified. Mailed Bids must be received by Truckee Meadows Water Authority prior to the closing time for receipt of Bids to receive consideration. Email or Facsimile Bids will not be accepted or considered.

**E. Documents Necessary For Submittal**

The Bid Bond and Bid Schedule Form comprise the Bid Proposal and all shall be included in the sealed envelope. Truckee Meadows Water Authority will not consider a Bid received if there is an omission or failure to complete any portion of the required documents prior to the time of Bid Opening. Do not submit the entire bid book. A separate (loose) Bid bond and Bid Schedule Form are provided in the bid document for bid submission.

**F. Bid Security – Not Required for this Project**

**G. Quantities**

The quantities given in the Contract Documents or indicated by the unit Bid items are approximate quantities and are intended to illustrate Scope of Work. The Contractor shall be responsible for verifying the exact quantities involved each month through the measurement and payment provisions of the Contract Documents.

**H. Compensation**

The Total Bid Price shall cover all Work required by the Contract Documents and necessary or reasonably inferable to achieve completion of the Work. All costs in connection with the proper and successful completion of the Work, including furnishing all materials, equipment, supplies, and appurtenances; providing all construction equipment, tools and temporary utilities; and performing all necessary labor and supervision to fully complete the Work, shall be included in the unit and lump sum prices Bid. All Work not specifically identified as a pay item in the Bid Schedule shall be considered a non-compensatory obligation of the Contractor, and all costs in connection therewith shall be deemed included in the prices otherwise Bid.

**I. Schedule of Values**

The purpose of the Schedule of Values shall serve Truckee Meadows Water Authority in two (2) distinct areas:

1. **PRIOR TO AWARD OF BIDS** - Truckee Meadows Water Authority may request a Schedule of Values for any or all item(s) included in the Bid schedule for the purpose of determining an unbalanced Bid. The analysis shall be conducted by Truckee Meadows Water Authority. All prospective Bidders may be required to prepare a Schedule of Values, and it shall be the Bidder's

responsibility to verify the quantities as shown on the Drawings before preparing his Bid. The schedule as shown in the Bid Schedule does not constitute a complete outline of the Work to be performed by the Contractor in accordance with the Contract Drawings and Specifications. This list is intended to include all major items, and the Bid computed there from will be the maximum compensation for all work and materials furnished by the Contractor in order to comply with the Contract Drawings and Specifications, whether or not indicated in the approximate quantities or pertaining to the items of Work listed therein

2. **AFTER AWARD OF BID** - Truckee Meadows Water Authority will request a Schedule of Values for any or all item(s) included in the Bid schedule for the purpose of making partial payments to the Contractor.

Under no circumstances may any Bid item reflected as LUMP SUM or otherwise be increased or decreased as a result of the Lump Sum Bid breakdown analysis.

**J. Validity of Bid**

Truckee Meadows Water Authority reserves the right to withhold award of this Contract for a period of thirty (30) days from the date of the Bid opening. The Bidder acknowledges in submitting his/her Bid that all prices listed in the Bid Proposal are valid for a period of not less than thirty (30) days from the date of the Bid Opening.

**K. Bidders Representation**

Each Bidder by submitting its Bid represents and warrants that:

1. The Bidder, by submission of his Bid, confirms it has familiarized itself with the Invitation to Bid, Plans, Specifications, and Contract Documents and has found them fit and sufficient for the purpose of preparing his Bid. Bidder agrees to all the terms and conditions of the Contract and further agrees that no claim will be made against Truckee Meadows Water Authority, the Project Representative, or the Design Consultant for any damage that he or his subcontractors may have suffered due to the inadequacy of his Bid on account of any alleged errors, omissions, or other deficiencies in the Notice To Contractors, Plans, Specifications, or Contract Documents supplied to him by Truckee Meadows Water Authority.

2. The submission of a Bid shall constitute an acknowledgment upon which Truckee Meadows Water Authority may rely that the Bidder has thoroughly examined and is familiar with the Contract Documents. The Bidder shall in no way be relieved from any obligation with respect to its proposal or to the Contract. ***No claim for additional compensation will be allowed which is based upon a lack of knowledge of the Contract Documents.***

3. The Bidder has inspected the site(s) of the Work and is fully satisfied, by personal examination or by other means, of the locations of the proposed Work, of the actual conditions, including subsurface conditions, of and at the site(s) of the Work. If, during the course of its examinations, a Bidder finds facts or conditions which appear to be in conflict with the letter or spirit of the Bidding documents before submitting his/her bid, the Bidder shall request Truckee Meadows Water Authority, in writing, to provide additional information and explanation.

4. Submission of a Bid by a Bidder shall constitute conclusive evidence that the Bidder has relied solely and exclusively on its own examination of (1) the site of the Work, (2) access to the site, (3) all other data and matters requisite to the fulfillment of the Work and on its own knowledge of existing facilities on and in the vicinity of the site of the Work to be constructed under the Contract, (4) the conditions to be encountered, (5) the character, quality and scope of the proposed Work, (6) the quality and quantity of the materials to be furnished, and (7) the requirements of the Bid, the Drawings and Specifications. The Bidder is aware that soil classifications do not represent any particular stability or drainability characteristics, and are aware that water table levels can vary. ***No claim for additional compensation will be allowed which arises because of Bidder's failure to examine or become fully aware of the items in this paragraph.***

5. The information provided by Truckee Meadows Water Authority is provided for informational purposes only, without representation or warranty of any kind with respect to its accuracy or completeness, and is not intended to and shall not be relied upon as a substitute for, or a supplement to, the independent investigation by the Bidder of site conditions.

6. The Bidder, by signing the Bid Schedule, agrees that all material and workmanship on this Project shall meet or exceed OSHA standards and NOSHA standards.

7. The Bidder is qualified and possesses, at the time of the Bid submittal, a valid contractor's license for this particular Work (both as to type and available dollar limit) issued by the Nevada State Contractor's Board. Nevada Contractor's License type, number, expiration date and dollar limit must be indicated on the Bid Schedule. The Bidder and their subcontractors shall comply with all provisions of NRS Chapter 624 and Nevada Administrative Code, Chapter 624, to the extent applicable. Truckee Meadows Water Authority will not consider any Bid that fails to comply with these requirements.

8. The Bidder has a valid Business License and shall submit a copy with the bonds and Contract after award of contract.

9. The Bidder has appropriate work experience to be qualified to construct the Work. Bidder has successfully constructed at least three similar projects of equal or greater size, scope, type, cost, and complexity within the previous seven years. A similar project is one of the same category as this Project, defined for purposes of this paragraph as Bladder-Type Hydropneumatic Tanks. Bidders must have such prior work experience in order to be deemed responsive or responsible for purposes of bid evaluations. TMWA considers it critical to public health and safety and in the best interests of TMWA that this work only be performed by contractors holding such prior experience.

a. Evidence of the Contractor's required project experience shall be provided in the reference section of the Proposal Summary section (additional sheets may be attached as necessary).

b. The requirements for submittal of required project experience also apply to proposed Subcontractors performing specialty work, including piping, control valve, electrical, power, telemetry, and equipment control work. Subcontractor experience shall be provided with submission of the final subcontractor list.

TMWA will determine in its sole and absolute discretion whether a Contractor is responsible, properly licensed, and has the requisite work experience required above to be eligible to perform this Project. Bids by Contractors that lack the proper license or requisite work experience set forth above will be rejected as non-responsive, non-responsive, and/or not in the best interests of TMWA

## **II. OPENING OF BIDS**

### **A. Opening of Bids.**

All Bids received on time and that comply with these requirements will be opened and publicly read aloud at the time and place set forth in the Invitation to Bid. Bidders, their representatives, and all other interested persons may be present at the opening and reading of Bids. Any Bids received after the time for receiving and opening Bids, as set forth in the Notice To Bidders and any Addendum, will not be considered. Any such Bids will be returned unopened to the Bidder.

### **B. Mistake In Bid**

A request for withdrawal of a Bid due to a purported error shall not be considered unless it is given in writing to the Contract Administrator by the Bidder within forty-eight (48) hours after opening of the bid. Any such request shall contain a full explanation of any purported error and shall be supported by the original calculations on which the Bid was computed, together with a certification and notarization thereon that such calculation is the original as prepared by the Bidder or his agent.



In the case of a difference between written words and figures, the amount stated in written words shall govern for a Lump Sum Bid.

In the case of a difference between Unit Price and the extended price, the Unit Price shall govern.

**C. Withdrawal of Bid**

Before Bid Opening - A Bidder may request withdrawal of his/her posted, sealed Bid prior to the scheduled Bid opening time provided the request is submitted to the Contract Administrator's Office in writing or an authorized representative must present himself with proper identification to the Contract Administrator's office and verbally request that the Bid be withdrawn.

After Bid Opening - No Bids may be withdrawn for a period of thirty (30) calendar days after the date of Bid opening, except as set forth in A above. All responsive and responsible Bids received are considered firm offers for the time period specified above and may be considered for award. The Bidder's offer will expire at the time specified above or upon acceptance by Truckee Meadows Water Authority, which occurs when the successful Bidder provides the bonds, insurance, and submits the signed Contract to Truckee Meadows Water Authority for execution and Truckee Meadows Water Authority executes the Contract.

**III. AWARD OF CONTRACT/REJECTION OF BIDS/DISQUALIFICATION OF BIDDERS**

**A. Award of Contract**

Truckee Meadows Water Authority will award the Contract pursuant to the provisions of State law including but not limited to:

- (a) Chapter 332 (Purchasing: Local Governments)
- (b) Chapter 339 (Contractor's Bonds)
- (c) Chapter 624 (Contractors).

**B. Rejection of Bids**

Truckee Meadows Water Authority reserves the right to waive any informality or irregularity in any Bid received, and to reject any or all Bids. In the case of rejection of all Bids, Truckee Meadows Water Authority reserves the right to advertise for new Bids or to proceed to do the Work otherwise if it is in the best interest of Truckee Meadows Water Authority.

**C. Irregular Bid**

A Bid shall be considered irregular for the following reasons, any one or more of which may be cause for rejection:

- 1. If the Bid Schedule furnished by Truckee Meadows Water Authority is not used or is altered.
- 2. If there are unauthorized additions, conditional or alternate Bids, or omissions or irregularities of any kind which may tend to make the Bid incomplete, indefinite or ambiguous as to its meaning, or give the Bidder submitting the same an unfair competitive advantage over other Bidders.
- 3. If the Bid submitted contains any erasure, interlineations, or other corrections unless each such correction is prepared and authenticated in acceptance with the provisions of Paragraph IB.1.E (1).

**D. Unbalanced Bid**

If the Unit Bid Item prices and/or schedule of values of a prospective Bidder's Bid are obviously unbalanced, either in excess or below the reasonable cost analysis values, the Bid may be rejected. All Bids with separately priced line items shall be analyzed to determine if the prices are unbalanced.



A bid may be rejected if Truckee Meadows Water Authority determines that the lack of balance poses an unacceptable risk to Truckee Meadows Water Authority.

A Bid with unbalanced pricing may increase performance risk and could result in payment of unreasonably high prices. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more bid items is significantly over or understated as indicated by the application of cost or price analysis techniques. The greatest risks associated with unbalanced pricing occur when:

1. Over pricing of startup work, mobilization, or early items of work (front end loading) would cause a bidder to receive substantial up-front payment;
2. Base quantities and option quantities are separate line items;
3. The quantities as bid are incorrect and the contract cost will be increased when quantities are corrected; or
4. On items where the quantities may vary, if the anticipated variation in quantity would result in the lower Bidder not remaining as the low Bidder.

**E. Disqualification of Bidders**

Any one or more of the following may be considered as sufficient for the disqualification of a prospective Bidder and the rejection of the Bid:

1. The Bidder is not responsive or responsible;
2. The quality of the services, materials, equipment or labor offered does not conform to the approved Contract plans and specifications;
3. Evidence of collusion among prospective Bidders; (Participants in such collusion will receive no recognition as Bidders)
4. Lack of contractor's license classification required by Truckee Meadows Water Authority for this Work;
5. More than one Bid for the same work from an individual, firm, or corporation under the same or different name;
6. Lack of competency, understanding of the scope of the Work, adequate machinery, plant and/or equipment as revealed by the requested experience or subcontractor information;
7. Unsatisfactory performance record as shown by past work for Truckee Meadows Water Authority, judged from the standpoint of workmanship, progress, and quality of services/goods provided;
8. Uncompleted work which, in the judgment of Truckee Meadows Water Authority, might hinder or prevent the prompt completion of additional work, if awarded;
9. Failure to pay or satisfactorily settle all bills due for labor and material on any contract(s);
10. Failure to comply with any requirements of Truckee Meadows Water Authority;
11. Failure to list, as required, all subcontractors who will be employed by the Bidder;
12. Negative actions against the Contractor's license by the Nevada State Contractor's Board; or

13. Any other reason determined, in good faith, to be in the best interest of Truckee Meadows Water Authority.

#### **IV. BID PROTESTS**

The Truckee Meadows Water Authority Contracts Division will post the recommendation for award of this Contract on the website: [http://www.tmh2o.com/about\\_us/doingbusinesswithtmwa/](http://www.tmh2o.com/about_us/doingbusinesswithtmwa/) . Any Bidder which submitted a bid to TMWA may protest the recommendation for award in accordance with the procedures set forth in NRS 338.142 as if such procedures applied to a contract awarded under NRS 332. The protest must be submitted in writing to TMWA's Purchasing and Contracts Administrator. In addition to any other information required by law, the protest shall include the following information:

1. The alleged violation(s) of: (a) Contract Documents referencing page number, item, and paragraph; (b) Nevada Revised Statutes referencing the specific chapter, section, and subsection; or (c) Local codes or ordinances referencing section number; and
2. Supporting documentation such as Nevada State Contractors Board licensing information or other detailed proof to substantiate the protest.

The Bidder filing the protest shall, at the time the protest is filed, post a bond with a good and solvent surety authorized to do business in the state of Nevada, or submit a cashier's check, money order, or certified check, to TMWA who will hold the bond or other security until a determination is made on the protest. The bond or other security submitted with the protest shall be in an amount equal to the lesser of 25 percent of the total Base Bid submitted by the Bidder filing the protest, or \$250,000.00.

If the protest is upheld, the bond or other security will be returned to the Bidder who submitted the protest. If the protest is rejected, a claim may be made by TMWA against the bond or other security in an amount equal to the expenses incurred by TMWA because of the unsuccessful protest. Any money remaining after the claim has been satisfied will be returned to the Bidder who posted the bond or submitted the security.

The protest filed in accordance with these provisions operates as a stay of action in relation to award of the Contract until a determination is made by TMWA on the protest.

An unsuccessful Bidder may not seek any type of judicial intervention until TMWA has made a determination on the protest and awarded the Contract.

TMWA will not be liable for any costs, expenses, attorney's fees, loss of income, or other damages sustained by a Bidder, whether or not the Bidder files the protest.

TMWA's Administrator of Purchasing and Contracts will promptly issue a decision in writing to the protester and any other party intervening. If the protester or any other intervening party wishes to appeal the decision rendered by TMWA's Administrator of Purchasing and Contracts to the TMWA Board, such appeal shall be made within 48 hours from receipt of the decision by submitting a notice of appeal in writing to TMWA's Administrator of Purchasing and Contracts.

An award recommendation will be made and presented to the Truckee Meadows Water Authority for a final decision. TMWA will not consider protests unless the procedures specified in this Section are followed.

#### **V. BID PREPARATION EXPENSES**

By accepting the Bid Proposal of the Bidder, Truckee Meadows Water Authority assumes no obligation to reimburse the Bidder for Bid preparation expenses. No Bidder shall have any right or

claim against Truckee Meadows Water Authority for reimbursement of Bid preparation expenses.

**VI. COLLUSION, DISCRIMINATION, AND/OR PRICE FIXING**

The Bidder certifies that any and all prices which he may charge under the terms of the Contract do not, and will not, violate any existing federal, state or municipal laws or regulations concerning discrimination and/or price fixing. The Bidder agrees to indemnify, exonerate and hold Truckee Meadows Water Authority harmless from liability for any such violation now and throughout the term of the Contract.

**VII. CONTRACT AWARD**

**A. Method of Award.** The Bid, if awarded, will be awarded to the lowest responsive and responsible Bidder. Bidder must bid all items to be responsive and considered for award.

**B. Time of Award.** The award, if made, will be within thirty (30) calendar days after the opening of Bids. Truckee Meadows Water Authority reserves the right to accept or reject any or all Bids received.

**C. Bonds. No Bonds are Required for this Project.**

The successful contractor will be required to provide the Bonds as indicated in Article 5 of the General Conditions.

**D. Insurance.** Insurance as described in the General Conditions shall be required of the Contractor not later than ten (10) calendar days after receipt of the Notice of Award. The Contractor shall procure and maintain, at its own expense, all the insurance required as stated herein, and shall submit coverage verification (certificates) for review and approval by Truckee Meadows Water Authority. A Notice to Proceed may be issued prior to receipt of the required insurance, bonds, and signed contracts starting the time for contract performance on the project, however, the Contractor will not be permitted to work prior to Truckee Meadows Water Authority's receipt and approval of the insurance, bonds and signed contract. Said certificates shall be specific to the project and all notices regarding insurances shall be delivered to:

Truckee Meadows Water Authority  
Attn: Maria Dufur, New Business Project Coordinator  
P. O. Box 30013  
Reno, NV 89520

The Notice to Proceed shall not be issued and Contractor shall not commence work, until such insurance has been approved by Truckee Meadows Water Authority. The Contractor shall not allow any subcontractors to commence work on its subcontract until all similar insurance required of the subcontractor has been obtained and verified by Contractor. Such insurance shall remain in full force and effect at all times during the execution of the Work and until the final completion and acceptance thereof and at all times thereafter as dictated in this Contract and the General Conditions.

If the Contractor fails to maintain any of the insurance coverage required herein, Truckee Meadows Water Authority will have the option to declare the Contractor in breach, or may purchase replacement insurance or pay the premiums that are due on existing policies in order that the required coverage may be maintained. The Contractor is responsible for any expenses paid by Truckee Meadows Water Authority to maintain such insurance and Truckee Meadows Water Authority may collect the same from the Contractor or deduct the amount paid from any sums due the Contractor under the Contract.

The insurance requirements specified herein do not relieve the Contractor of responsibility or limit

the amount of liability to Truckee Meadows Water Authority or other persons, and the Contractor is encouraged to purchase such additional insurance as he deems necessary.

**E. Penalty for Collusion.** If, at any time, it is found that the Contractor has, in presenting any bid or bids, colluded with any other party or parties, then the Contract shall be null and void, and the Contractor and its sureties shall be liable for loss or damage which Truckee Meadows Water Authority may suffer thereby, and Truckee Meadows Water Authority may advertise for new bids for said Work. The Contractor further certifies that any and all prices which he may charge under the terms of the Contract do not, and will not, violate any existing Federal, State or Municipal laws or regulations concerning discrimination and/or price fixing.

**F. Copeland Anti-Kickback Law.** The Contractor shall comply with the Copeland Anti-Kickback Act (19 U.S.C. 874) as supplemented in the Department of Labor Regulations (29 CFR Part 3). This act provides that each Contractor or subcontractor shall be prohibited from inducing by any means, any person employed in the construction, completion or repair of public facilities, to give up any part of the compensation to which he is otherwise entitled.

**G. Media Contact.** The Contractor shall immediately contact the TMWA Project Manager assigned to them, if they are approached by the media while working on any TNWA project.

## **END OF INSTRUCTIONS TO BIDDERS**

## BID PROPOSAL FORMS

# **BID BOND NOT REQUIRED FOR THIS PROJECT**

**KNOW ALL MEN BY THESE PRESENTS**, that I/We \_\_\_\_\_

as Principal, hereinafter called Contractor, and

a corporation duly organized or authorized to do business under the laws of the State of Nevada, as Surety, hereinafter called the Surety, are held and firmly bound unto Truckee Meadows Water Authority, a joint powers authority created pursuant to NRS Chapter 277, for the sum of

\$ \_\_\_\_\_ Dollars **NOT REQUIRED**

(state sum in words)

for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents. This bond shall be governed by the laws of the State of Nevada.

**WHEREAS**, the Principal has submitted a bid, identified as **TMWA Project No.: 2016-002** and titled "**Bladder-Type Hydropneumatic Tanks for the Arrowcreek Drought Response Project.**"

**NOW, THEREFORE** if Truckee Meadows Water Authority shall accept the bid of the Principal and the Principal shall enter into a contract with Truckee Meadows Water Authority in Accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to Truckee Meadows Water Authority the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which Truckee Meadows Water Authority may in good faith contract with another party to perform work covered by said bid or an appropriate liquidated amount as specified in the Invitation for Bids then this obligation shall be null and void, otherwise to remain in full force and effect.

Executed on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

(Signature of Principal)

**Name: NOT REQUIRED**

**Title:**

**Firm:**

**Address:**

**City/ State / Zip Code:**

**Written Name of Principal:**

(Signature of Notary)

**ATTEST NAME:**

Subscribed and sworn before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

(printed name of notary)

Notary Public for the State of \_\_\_\_\_

<b>Claims Under This Bond May Be Addressed To:</b>	
Name of Surety	<b>NOT REQUIRED</b>
Address	<b>NOT REQUIRED</b>
City	
State/Zip Code	
Name	
Title	
Phone	
Surety's Acknowledgment	

**NOTICE:** No substitution or revision to this bond form will be accepted. Sureties must be authorized to do business in and have an agent for service of process in the State of Nevada. Certified copy of Power of Attorney must be attached.

BID SCHEDULES  
(Cont)

**BID SCHEDULES**

**BID TITLE: BLADDER-TYPE HYDROPNEUMATIC TANKS FOR THE ARROWCREEK DROUGHT PROJECT**

**NOTICE:** No substitution or revision to this Bid Schedule form will be accepted. Truckee Meadows Water Authority will reject any Bid that is received that has changes or alterations to this document.

**PRICES** must be valid for 30 calendar days after the bid opening.

**COMPLETION** of this project is expected **PURSUANT TO CONTRACT DOCUMENTS**.

**BIDDER** acknowledges receipt of \_\_\_\_\_ Addendums.

Item pricing on this schedule is for use in preparing the schedule of values that will be used as a basis for partial payment during construction and for internal TMWA use. Item descriptions are not intended to be all inclusive. Bidders shall include costs for work not specifically mentioned in the most appropriate item.

Refer to Article 7 of the General Conditions (not applicable) for a list of items that may be included in the mobilization bid item.

TMWA reserves the right to perform extra work using time and expense or negotiated lump sum procedures.

The Contract Sum will be adjusted (increased or decreased) for actual quantities per unit price items. Lump sum items will not be adjusted.

Compliance with all permit and environmental requirements is incidental to the Work. No separate bid item, or additional payment provisions, shall be made for operational constraints or conditions placed on the Work by permitting agency requirements.

\_\_\_\_\_  
(signature)

**SUMMARY**

Description	Scheduled Value	Unit	Unit Price	Total Price
1. 250-Gallon Bladder-Type Hydropneumatic Surge Tank for the Zolezzi Booster Pump Station Site – including spare parts and other data required by the technical specifications	1 Each	\$		
2. 250-Gallon Bladder-Type Hydropneumatic Surge Tank for the Arrowcreek Well 1 Booster Pump Station Site – including spare parts and other data required by the technical specifications	1 Each	\$		
3. Delivery of surge tanks and appurtenances to Reno, Nevada	1	LS		
<b>Sales Tax Not to be Included in Bid</b>				
<b>TOTAL BID PRICE</b>				

**Total Bid Price Written in Words:** \_\_\_\_\_



**BID SCHEDULES**  
(Cont)

**Notes:**

1. The Total Bid Price shall be based on a Guaranteed Delivery time for the surge tanks of eight (8) weeks from date of purchase order. The eight weeks shall include one week for Owner to review and return the initial submittals. Award of the supply contract will be based on the cost for delivery within 8 weeks. The supplier may provide an additional cost as an alternative to accelerate delivery to less than 8 weeks, and the Owner reserves the right to award this as an alternative.
  
2. Time is of the essence.

**BID SCHEDULES**  
(Cont)

**BIDDER INFORMATION:**

Company Name:
Address:
City:
State / Zip Code:
Telephone Number including area code:
Fax Number including area code:
E-mail:

**LICENSING INFORMATION: (NEVADA CONTRACTORS LICENSE NOT REQUIRED FOR THIS PROJECT)**

Nevada State Contractor's License Number: <b>N/A</b>
License Classification(s):
Limitation(s) of License:
Date Issued:
Date of Expiration:
Name of Licensee:
City, State, Zip Code of Licensee:
Telephone Number of Licensee:

**LICENSING INFORMATION: (REQUIRED FOR THIS PROJECT)**

Business License Number:
Date Issued:
Date of Expiration:
Name of Licensee:
City, State, Zip Code of Licensee:
Telephone Number of Licensee:

Taxpayer Identification Number:
---------------------------------

BID SCHEDULES

(Cont)

**DISCLOSURE OF PRINCIPALS:**

**1. Individual and/or Partnership:**

Owner 1) Name:
Address:
City, State, Zip Code:
Telephone Number:
Owner 2) Name:
Address:
City, State, Zip Code:
Telephone Number:
Other 1) Title:
Name
Other 2) Title:
Name:

**2. Corporation:**

State in which Company is Incorporated:
Date Incorporated:
Name of Corporation:
Address
City, State, Zip Code:
Telephone Number:
President's Name:
Vice-President's Name:
Other 1) Name:
Title:
Other 2) Name:
Title

**BID SCHEDULES  
(Cont)**

**MANAGEMENT AND SUPERVISORY PERSONNEL:**

Persons and Positions	Years With Firm
Name	
Title	
Name	
Title	
Name	
Title	

(If additional space is needed, attach a separate page)

**REFERENCES: (NOT REQUIRED FOR THIS PROJECT)**

1. **Instructions:**

List at least three (3) contracts of a similar nature performed by your firm in the last three (3) years. If **NONE**, use your Company's letterhead (and submit with your bid proposal) a list what your qualifications are for this contract. Truckee Meadows Water Authority reserves the right to contact and verify, with any and all references listed, the quality of and the degree of satisfaction for such performance. See the Supplemental Conditions for the TMWA Project Category required for this project.

2. **Clients:** (if additional space is needed attach a separate page)

Owner's Representative :	Telephone #
Address (inc. City, State & Zip):	
Owner's Representative's E-mail:	
Superintendent:	
Amount of Contract:	Date Completed:
Project Title:	
TMWA Project Category:	
<hr/>	
Owner's Representative :	Telephone #
Address (inc. City, State & Zip):	
Owner's Representative's E-mail:	
Superintendent:	
Amount of Contract:	Date Completed:
Project Title:	
TMWA Project Category:	
<hr/>	
Owner's Representative :	Telephone #
Address (inc. City, State & Zip):	

BID SCHEDULES  
(Cont)

Owner's Representative's E-mail:	
Superintendent:	
Amount of Contract:	Date Completed:
Project Title:	
TMWA Project Category:	
Project Name:	
Owner's Representative :	Telephone #
Address (inc. City, State & Zip):	
Owner's Representative's E-mail:	
Superintendent:	
Amount of Contract:	Date Completed:
Project Title:	
TMWA Project Category:	
Project Name:	
Owner's Representative :	Telephone #
Address (inc. City, State & Zip):	
Owner's Representative's E-mail:	
Superintendent:	
Amount of Contract:	Date Completed:
Project Title:	
TMWA Project Category:	

BID SCHEDULES

(Cont)

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS PRIMARY COVERED TRANSACTIONS**

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
  - a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal, State or Local department or agency.
  - b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or Local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.
  - c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
  - d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or Local) terminated for cause or default.
2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\_\_\_\_\_  
Signature of Authorized Certifying Official

\_\_\_\_\_  
Title

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

\_\_\_\_\_  
Date

DUNS #: \_\_\_\_\_

I am unable to certify to the above statement. My explanation is attached.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**BIDDER’S SAFETY INFORMATION (NOT REQUIRED FOR THIS PROJECT)**

**Bidder’s Safety Factors:**

Year	“E-Mod” Factor <sup>1</sup>	OSHA Incident Rate <sup>2</sup>
2013		
2014		

<sup>1</sup> E-Mod (Experience Modification) Factors are issued by the National Council on Compensation Insurance (NCCI).  
<sup>2</sup> OSHA Incident Rate is the number of OSHA Recordable Accidents multiplied by 200,000 and then dividing that result by the total number of annual man-hours. Please refer to the U.S. Department of Labor Occupational Safety and Health Administration’s website for calculating worksheets and current requirements.





**“SAMPLE”**  
**BLADDER-TYPE HYDROPNEUMATIC TANKS FOR THE ARROWCREEK**  
**DROUGHT RESPONSE PROJECT**  
**PURCHASE AGREEMENT**  
**TMWA PROJECT NO.: 2016-003**  
**TMWA CAPITAL PROJECT NO.: 10-0002**  
**(NRS 332)**

THIS EQUIPMENT/PRODUCT PURCHASE AGREEMENT (also herein referred to as "Contract"), made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between the Truckee Meadows Water Authority hereinafter called "TMWA" and \_\_\_\_\_, hereinafter called the "Supplier".

WITNESSETH, that TMWA and the Supplier, for the consideration hereinafter named, agree as follows:

**Article 1      Scope of Work**

Supplier shall furnish TMWA all of the equipment and materials (“Equipment”) described in the specifications attached hereto as Exhibit “A”. All Equipment furnished shall consist of new standard equipment of proven ability, modified as required to meet the requirements of the specifications incorporated in Exhibit “A” attached hereto) (“Specifications”) and as amended by specific addenda, and Supplier shall do everything required by this Agreement in furnishing the Equipment. The bladder-type hydropneumatic tanks will be installed by others in a vertical installation in underground vaults located at the Zolezzi Lane Booster Pump Station and the Arrowcreek Well #1 Booster Pump Station sites located in the South Truckee Meadows area of Reno, Nevada

Supplier shall deliver the Equipment to TMWA’s Warehouse at its Corporate Boulevard Yard located at 1355 Capital Boulevard, Reno, Nevada. Supplier shall notify Steve Baker at (775) 834-8210 at least two days prior to shipping the Equipment. Depending on availability, job-site delivery may be requested.

**Article 2      Contract Time, Guaranteed Delivery Date, and Liquidated Damages**

Supplier agrees to deliver the Equipment in a good and satisfactory condition pursuant to the Specifications to the TMWA Warehouse located at its Corporate Boulevard Yard site located at 1355 Capital Avenue, Reno, Nevada no later than **Eight (8) Weeks following the issuance of the Purchase Order, which is the Guaranteed Delivery Time as defined in the bid package unless otherwise agreed to between the parties.**

TMWA and Supplier recognize that time is of the essence of this Agreement and that TMWA will suffer financial loss and sustain extensive damages if the Equipment is not delivered by the Guaranteed Delivery Date, as may be extended in accordance with the Specifications. The exact amount of such damages will be extremely difficult to ascertain.

Accordingly, TMWA and Supplier agree that if Supplier fails to deliver the Equipment by the Guaranteed Delivery Date in accordance with this Agreement for any reason whatsoever TMWA shall be entitled to retain or recover from Supplier, as liquidated damages for delay (but not as a penalty), the sum of **\$250.00 (Two Hundred Fifty Dollars)** per day.

### **Article 3      The Contract Sum**

TMWA shall pay Supplier, as full compensation for furnishing the Equipment, services, and other specified items in accordance with the Specifications and Contract Documents and to the satisfaction of TMWA, the lump sum amount of: \_\_\_\_\_ **Dollars (\$0.00)**.

### **Article 4      Payment**

Payment for the Equipment will be made within 30 days of the later of: i) inspection by and acceptance of delivery by TMWA of the Equipment; or ii) receipt of an invoice for the Equipment.

### **Article 5      Acceptance and Final Payment**

Testing and acceptance of the Equipment shall be as specified in the Specifications, Bid and Contract Documents. Final payment is further subject to TMWA's prior receipt of all certifications, maintenance manuals, operating instructions, written guarantees, warranties and bonds relating to the Equipment, and assignments of all guarantees and warranties from suppliers or Suppliers of the Equipment, if any, to the extent required in the Specifications. Acceptance of final payment by the Supplier shall constitute a full waiver and release by the Supplier of all claims against TMWA arising out of or relating to this Agreement.

### **Article 6      The Contract Documents**

The following is an enumeration of the Contract Documents that are fully a part of the Contract as if herein repeated:

1. Bid Documents and Bid Form
2. Agreement
3. Specifications
4. Addenda

### **Article 7      Warranty**

Supplier warrants that the Equipment furnished under the Contract will be of good quality and new and that the Equipment will be free from defects and will conform with the requirements of the Specifications, Bid and Contract Documents. Supplier warrants that the Equipment purchased under this Agreement shall be free from defects in material and workmanship for a period of one (1) year from the date of installation and acceptance by the

TMWA. Supplier warrants that Equipment purchased under this Agreement not requiring installation will be free from defects in workmanship and materials for one (1) year following the date of shipment. Supplier's obligation for a breach of these warranties shall be, at Supplier's sole cost, to repair and replace the Equipment, including costs for removal, shipping costs, and the cost to reinstall the repaired Equipment. This warranty shall not be limited by hours of running time.

**Article 8 Indemnification/Hold Harmless**

Supplier shall indemnify and hold TMWA harmless from any and all claims arising from Supplier's breach of this Agreement or failure to deliver Equipment by the Guaranteed Delivery Date. Notwithstanding any provision to the contrary in the Contract Documents, TMWA waives any requirement that the Supplier on this bid provide insurance (other than property insurance insuring risk of loss until delivery and acceptance by TMWA) in connection with the delivery of the Equipment.

**Article 9 Performance Bond (Not Required)**

**Article 10 Termination**

In addition to other provisions of this Agreement, TMWA may terminate the Agreement in accordance with the procedures specified in the Bid Documents, Bid Form, and Specifications upon giving Supplier seven days' notice in writing.

**Article 12 Governing Law**

This Agreement shall be governed by, interpreted under and construed and enforced in accordance with the laws of the State of Nevada, with venue in the County of Washoe. Each of the parties hereto acknowledge and agree that the laws of the State of Nevada and the selection of venue in the County of Washoe were freely chosen by the parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first above written.

TRUCKEE MEADOWS WATER AUTHORITY

Dated: \_\_\_\_\_, 20\_\_\_\_ By: \_\_\_\_\_  
General Manager

ATTEST: \_\_\_\_\_  
TMWA Clerk

Dated: \_\_\_\_\_, 20\_\_ Supplier: \_\_\_\_\_

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

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

Title: \_\_\_\_\_

STATE OF NEVADA        )  
  ) ss:  
COUNTY OF WASHOE    )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, personally appeared before me, a Notary Public, \_\_\_\_\_, who acknowledged to me that he/she executed the foregoing Agreement for Equipment/Product as the authorized representative of the Supplier.

\_\_\_\_\_  
Notary Public

**ATTACHMENT "A"**

## SECTION 11650

### BLADDER-TYPE HYDROPNEUMATIC TANKS

#### PART 1 GENERAL

##### 1.1 SCOPE

This specification describes the requirements for the bladder type hydropneumatic tanks. The following sites shall have a bladder-type hydropneumatic tank:

1. Zolezzi Booster Pump Station
  - a. 250 minimum nominal capacity gallons
2. ArrowCreek Well 1 Booster Pump Station
  - a. 250 minimum nominal capacity gallons (suction side)

Each Pump Station site will have one bladder type hydropneumatic tank for surge suppression.

##### 1.2 GENERAL REQUIREMENTS

- A. Accepted Manufacturers. Bladder type surge tanks are to be supplied by Hanson Tank of Los Angeles, CA; AA Tanks of Sherwood MI; Young Engineering, San Dimas, CA; Pulsco Inc. Irvine, Ca.; or equal.
- B. The supplier must have a minimum of five years experience, designing, supplying and startup of bladder type surge tanks.
- C. Tank shall be of the type where the bladder contains the gas precharge, and the water is outside the bladder inside the tank. The bladder shall be accessible for removal and replacement by opening the top flange of the tank only, and tanks that require bladder connections at both the top and bottom flanges are not acceptable.
- D. Zolezzi Surge Tank shall be rated for a minimum service pressure of 350 psi. Arrow Creek Surge Tank shall be rated for a minimum service pressure of 250 psi.

##### 1.3 REFERENCE SPECIFICATIONS, CODES AND STANDARDS

- A. Pressure vessels shall be in accordance with the latest revision of the American Society of Mechanical Engineers (ASME) Code for Unfired Pressure Vessels, Section VIII, Division 1.
- B. All local Plumbing Codes shall be met.
- C. The system and anchorage of the tank shall conform to the Uniform Building Code (UBC).

##### 1.4 SUBMITTALS

Submit the following information for the surge control system at the wellhouses, in accordance with Section 01300:

- A. Shop Drawings: Detailed tank fabrication drawings, system assembly and installation drawings.
- B. Product Data: Specifications for system components, accessories and protective coatings.

- C. Design Data: ASME code calculations.
- D. Shop Testing: Tank ASME Form U-1A. Provide with O & M manuals.
- E. Structural certification and anchor bolt recommendations of bracket support for applicable seismic forces. Calculations shall be prepared and stamped by a structural engineer with Nevada registration.
- F. Form U-1A "Manufacturers' Data Report for Unfired Pressure Vessels" prepared by the tank manufacturer to certify that the tank was built in accordance with ASME Code Rules for the Construction of Unfired Pressure Vessels and inspected by a certified inspector. Copies of this form shall be included in the Operation and Maintenance Manual.

#### 1.5 WARRANTY:

The bladder type tanks shall carry a warranty of one year from initial operation.

### PART 2 MATERIALS

#### 2.1 BLADDER TYPE STORAGE TANKS

- A. Storage Tanks shall be a standard hydropneumatic bladder-type design, equipped with a top cover device for on-site removal and installation of the bladder and bottom inlet/outlet nozzle assembly. Water-air separation, to prevent air absorption by the water, shall be achieved by the means of a replaceable heavy-duty rubber bladder.
- B. Clean compressed air or nitrogen shall be used for the gas charge. Initial air precharge shall be 120 PSI, and adjusted in the field to match operating conditions.
- C. Pressure Vessel Requirements
  1. Pressure vessels shall be a minimum 250 gallons as shown on the Plans, vertical cylindrical type, approximately 36 inches outside diameter, with elliptical heads. Vessel shall be constructed of carbon steel SA-516 Gr. 70 material conforming to ASME Code Section VIII, Div. 1, and designed for a maximum allowable working pressure (MAWP) of (350 psig at 120 degrees F at Zolezzi and 250 psig at 120 degrees F at ArrowCreek). Pressure vessel shall be ASME Code Stamped.
  2. Each pressure tank assembly shall have a height no taller than 9' 6", which includes legs and all appurtenances.
  3. For bladder inspection and replacement, the pressure vessel shall have a minimum 16" diameter top access manway. The removable cover assembly must be equipped with a device that allows safe removal/installation of the bladder without removing the Surge Tank from the pipeline. The tank shall be designed in a manner so that the bladder can be removed from the top of the tank.
  4. Flanged Inlet/Outlet. The Zolezzi BPS Pressure vessels shall include ANSI 300 pound pressure class flanged connection sized with respect to maximum possible system flow rate of 1500 gpm. The ArrowCreek BPS Pressure vessels shall include ANSI 150 pound pressure class flanged connection sized with respect to maximum possible system flow rate of 1500 gpm.
  5. The manufacturer/supplier shall design/size the inlet for the surge tanks based on the flange pressure class and flow rate provided in the specifications.
  6. The Inlet/Outlet nozzle shall be designed to prevent the bladder extending through the outlet assembly.



7. Couplings: Stainless Steel couplings shall be provided as a part of the pressure vessel as follows:
  - a. 1/2" - Safety Relief Valve installed on the water side of the bladder.
  - b. 1/2" - Air precharge and pressure gauge tap.
  - c. 1/2" – Others as required.
8. Vessel shall include two lifting lugs
9. Vessel shall include four steel support legs.
10. The internal surfaces shall be sandblasted per SSPC-SP-10 and coated with two coats of NSF 61 and NSF 372 approved epoxy paint. Coating shall be applied in accordance with coating manufacturer's instructions.
11. All wetted surfaces of the tank shall be certified to comply with NSF 61 for potable water and NSF 372 for low lead content.
12. The external surfaces shall be prepared per SSPC-SP-6 and coated with one coat 2-3 Mils DFT of Red Oxide Primer. Coating shall be applied in accordance with coating manufacturer's instructions. A finish coat of polyurethane will be field applied by the Contractor.

D. Bladder

1. The size of the Bladder shall be calculated with respect to the necessary volume of water to be accepted during the pressure surge condition. The Bladder shall fit inside the tank shell and leave an acceptable gap between the bladder and inner vessel surface.
2. The bladder material shall be as recommended by the tank manufacturer, and may be butyl rubber, polyvinyl, or other material that will provide long term durability and be suitable for potable water use meeting NSF 61.
3. The supplier shall submit NSF 372 compliant bladder material, if available. If it is not available, at a minimum, the supplier shall submit a written statement/certification from the bladder supplier that the supplied material contains less than 0.25% lead.
4. Provide one spare bladder and one spare manway gasket for each size tank provided on the project.

E. Seismic Restraints

1. The tank shall be provided with either strap-type or leg reinforced seismic restraints. The seismic restraints shall be sufficient to prevent damage or overturn of the tank in the event of a seismic event. Seismic Calculations, stamped by a licensed Nevada Engineer, shall be submitted. Seismic design parameters shall be as listed below:

<b>Seismic Design Parameters (2012 IBC)</b>	<b>Arrow Creek BPS</b>	<b>Zolezzi BPS</b>
Approximate Latitude of Site	39.41838	39.4185
Approximate Longitude of Site	119.8075	119.7846
Spectral Response Acceleration at short period (0.2 sec.), $S_s$ (for Site Class B)	2.230	2.241
Spectral Response Acceleration at 1-second Period, $S_1$ (for Site Class B)	0.782	0.766
Site Class Selected for this Site	D	D
Site Coefficient $F_a$ , decimal	1.0	1.0
Site Coefficient $F_v$ , decimal	1.5	1.5
Peak Ground Acceleration-MCE <sub>R</sub> PGA <small>(ASCE 7-10 Standard)</small> <sup>1</sup>	0.892 g	0.889 g
Design Spectral Response Acceleration at Short period, $S_{Ds}$ <small>(Adjusted to Site Class D, <math>S_{Ds}</math>= 2/3 <math>S_{Ms}</math>)</small>	1.487	1.494
Design Spectral Response Acceleration at 1-second Period, $S_{D1}$ (Adjusted to Site Class D, $S_{D1}$ =2/3 $S_{M1}$ )	0.782	0.766
Notes: 1) MCE <sub>R</sub> PGA- Maximum credible earthquake geometric mean peak ground acceleration.		

F. Miscellaneous Components

1. Ball Valves. Ball valves with 600 psi WOG pressure rating for the Charging and Gauging Assembly shall be provided.
2. Safety Relief Valve. The tank shall have a safety valve sized in accordance with the ASME code to prevent over pressurizing the tank above its design pressure. Safety Valve set point shall be factory set to the maximum allowable working pressure of the tank.
3. Air Charging Valve. A Schrader type air charging valve shall be provided for tank pre-charge with compressed air or nitrogen.

2.2 SOURCE QUALITY CONTROL:

- A. The tanks shall be hydrostatically tested in accordance with ASME Code for Unfired Pressure Vessels. Provide Form U-1A "Manufacturers' Data Report for Unfired Pressure Vessels" prepared by the tank manufacturer to certify that the tank was built in accordance with ASME Code and inspected by a certified inspector. Copies of this form shall be included in the Operation and Maintenance Manual.

PART 3 INSTALLATION

3.1 INSTALLATION AND TESTING

The supplier shall provide all components and assembly instructions to the Contractor for installation.

3.2 SEISMIC RESTRAINT

The Contractor shall install the tanks in accordance with the manufacturer's recommendations and as shown on the Plans. Seismic anchors shall be installed as recommended for Zone 4 by the manufacturer and as shown on the Plans.

**END OF SECTION**

## **SPECIFICATIONS**

## SECTION 11650

### BLADDER-TYPE HYDROPNEUMATIC TANKS

#### PART 1 GENERAL

##### 1.1 SCOPE

This specification describes the requirements for the bladder type hydropneumatic tanks. The following sites shall have a bladder-type hydropneumatic tank:

1. Zolezzi Booster Pump Station
  - a. 250 minimum nominal capacity gallons
2. ArrowCreek Well 1 Booster Pump Station
  - a. 250 minimum nominal capacity gallons (suction side)

Each Pump Station site will have one bladder type hydropneumatic tank for surge suppression.

##### 1.2 GENERAL REQUIREMENTS

- A. Accepted Manufacturers. Bladder type surge tanks are to be supplied by Hanson Tank of Los Angeles, CA; AA Tanks of Sherwood MI; Young Engineering, San Dimas, CA; Pulsco Inc. Irvine, Ca.; or equal.
- B. The supplier must have a minimum of five years experience, designing, supplying and startup of bladder type surge tanks.
- C. Tank shall be of the type where the bladder contains the gas precharge, and the water is outside the bladder inside the tank. The bladder shall be accessible for removal and replacement by opening the top flange of the tank only, and tanks that require bladder connections at both the top and bottom flanges are not acceptable.
- D. Zolezzi Surge Tank shall be rated for a minimum service pressure of 350 psi. Arrow Creek Surge Tank shall be rated for a minimum service pressure of 250 psi.

##### 1.3 REFERENCE SPECIFICATIONS, CODES AND STANDARDS

- A. Pressure vessels shall be in accordance with the latest revision of the American Society of Mechanical Engineers (ASME) Code for Unfired Pressure Vessels, Section VIII, Division 1.
- B. All local Plumbing Codes shall be met.
- C. The system and anchorage of the tank shall conform to the Uniform Building Code (UBC).

##### 1.4 SUBMITTALS

Submit the following information for the surge control system at the wellhouses, in accordance with Section 01300:

- A. Shop Drawings: Detailed tank fabrication drawings, system assembly and installation drawings.
- B. Product Data: Specifications for system components, accessories and protective coatings.

- C. Design Data: ASME code calculations.
- D. Shop Testing: Tank ASME Form U-1A. Provide with O & M manuals.
- E. Structural certification and anchor bolt recommendations of bracket support for applicable seismic forces. Calculations shall be prepared and stamped by a structural engineer with Nevada registration.
- F. Form U-1A "Manufacturers' Data Report for Unfired Pressure Vessels" prepared by the tank manufacturer to certify that the tank was built in accordance with ASME Code Rules for the Construction of Unfired Pressure Vessels and inspected by a certified inspector. Copies of this form shall be included in the Operation and Maintenance Manual.

#### 1.5 WARRANTY:

The bladder type tanks shall carry a warranty of one year from initial operation.

### PART 2 MATERIALS

#### 2.1 BLADDER TYPE STORAGE TANKS

- A. Storage Tanks shall be a standard hydropneumatic bladder-type design, equipped with a top cover device for on-site removal and installation of the bladder and bottom inlet/outlet nozzle assembly. Water-air separation, to prevent air absorption by the water, shall be achieved by the means of a replaceable heavy-duty rubber bladder.
- B. Clean compressed air or nitrogen shall be used for the gas charge. Initial air precharge shall be 120 PSI, and adjusted in the field to match operating conditions.
- C. Pressure Vessel Requirements
  - 1. Pressure vessels shall be a minimum 250 gallons as shown on the Plans, vertical cylindrical type, approximately 36 inches outside diameter, with elliptical heads. Vessel shall be constructed of carbon steel SA-516 Gr. 70 material conforming to ASME Code Section VIII, Div. 1, and designed for a maximum allowable working pressure (MAWP) of (350 psig at 120 degrees F at Zolezzi and 250 psig at 120 degrees F at ArrowCreek). Pressure vessel shall be ASME Code Stamped.
  - 2. Each pressure tank assembly shall have a height no taller than 9' 6", which includes legs and all appurtenances.
  - 3. For bladder inspection and replacement, the pressure vessel shall have a minimum 16" diameter top access manway. The removable cover assembly must be equipped with a device that allows safe removal/installation of the bladder without removing the Surge Tank from the pipeline. The tank shall be designed in a manner so that the bladder can be removed from the top of the tank.
  - 4. Flanged Inlet/Outlet. The Zolezzi BPS Pressure vessels shall include ANSI 300 pound pressure class flanged connection sized with respect to maximum possible system flow rate of 1500 gpm. The ArrowCreek BPS Pressure vessels shall include ANSI 150 pound pressure class flanged connection sized with respect to maximum possible system flow rate of 1500 gpm.
  - 5. The manufacturer/supplier shall design/size the inlet for the surge tanks based on the flange pressure class and flow rate provided in the specifications.
  - 6. The Inlet/Outlet nozzle shall be designed to prevent the bladder extending through the outlet assembly.

7. Couplings: Stainless Steel couplings shall be provided as a part of the pressure vessel as follows:
  - a. 1/2" - Safety Relief Valve installed on the water side of the bladder.
  - b. 1/2" - Air precharge and pressure gauge tap.
  - c. 1/2" – Others as required.
8. Vessel shall include two lifting lugs
9. Vessel shall include four steel support legs.
10. The internal surfaces shall be sandblasted per SSPC-SP-10 and coated with two coats of NSF 61 and NSF 372 approved epoxy paint. Coating shall be applied in accordance with coating manufacturer's instructions.
11. All wetted surfaces of the tank shall be certified to comply with NSF 61 for potable water and NSF 372 for low lead content.
12. The external surfaces shall be prepared per SSPC-SP-6 and coated with one coat 2-3 Mils DFT of Red Oxide Primer. Coating shall be applied in accordance with coating manufacturer's instructions. A finish coat of polyurethane will be field applied by the Contractor.

D. Bladder

1. The size of the Bladder shall be calculated with respect to the necessary volume of water to be accepted during the pressure surge condition. The Bladder shall fit inside the tank shell and leave an acceptable gap between the bladder and inner vessel surface.
2. The bladder material shall be as recommended by the tank manufacturer, and may be butyl rubber, polyvinyl, or other material that will provide long term durability and be suitable for potable water use meeting NSF 61.
3. The supplier shall submit NSF 372 compliant bladder material, if available. If it is not available, at a minimum, the supplier shall submit a written statement/certification from the bladder supplier that the supplied material contains less than 0.25% lead.
4. Provide one spare bladder and one spare manway gasket for each size tank provided on the project.

E. Seismic Restraints

1. The tank shall be provided with either strap-type or leg reinforced seismic restraints. The seismic restraints shall be sufficient to prevent damage or overturn of the tank in the event of a seismic event. Seismic Calculations, stamped by a licensed Nevada Engineer, shall be submitted. Seismic design parameters shall be as listed below:

<b>Seismic Design Parameters (2012 IBC)</b>	<b>Arrow Creek BPS</b>	<b>Zolezzi BPS</b>
Approximate Latitude of Site	39.41838	39.4185
Approximate Longitude of Site	119.8075	119.7846
Spectral Response Acceleration at short period (0.2 sec.), $S_s$ (for Site Class B)	2.230	2.241
Spectral Response Acceleration at 1-second Period, $S_1$ (for Site Class B)	0.782	0.766
Site Class Selected for this Site	D	D
Site Coefficient $F_a$ , decimal	1.0	1.0
Site Coefficient $F_v$ , decimal	1.5	1.5
Peak Ground Acceleration-MCE <sub>R</sub> PGA <small>(ASCE 7-10 Standard)</small> <sup>1</sup>	0.892 g	0.889 g
Design Spectral Response Acceleration at Short period, $S_{Ds}$ <small>(Adjusted to Site Class D, <math>S_{Ds}</math>= 2/3 <math>S_{Ms}</math>)</small>	1.487	1.494
Design Spectral Response Acceleration at 1-second Period, $S_{D1}$ (Adjusted to Site Class D, $S_{D1}$ =2/3 $S_{M1}$ )	0.782	0.766
Notes: 1) MCE <sub>R</sub> PGA- Maximum credible earthquake geometric mean peak ground acceleration.		

F. Miscellaneous Components

1. Ball Valves. Ball valves with 600 psi WOG pressure rating for the Charging and Gauging Assembly shall be provided.
2. Safety Relief Valve. The tank shall have a safety valve sized in accordance with the ASME code to prevent over pressurizing the tank above its design pressure. Safety Valve set point shall be factory set to the maximum allowable working pressure of the tank.
3. Air Charging Valve. A Schrader type air charging valve shall be provided for tank pre-charge with compressed air or nitrogen.

2.2 SOURCE QUALITY CONTROL:

- A. The tanks shall be hydrostatically tested in accordance with ASME Code for Unfired Pressure Vessels. Provide Form U-1A "Manufacturers' Data Report for Unfired Pressure Vessels" prepared by the tank manufacturer to certify that the tank was built in accordance with ASME Code and inspected by a certified inspector. Copies of this form shall be included in the Operation and Maintenance Manual.

PART 3 INSTALLATION

3.1 INSTALLATION AND TESTING

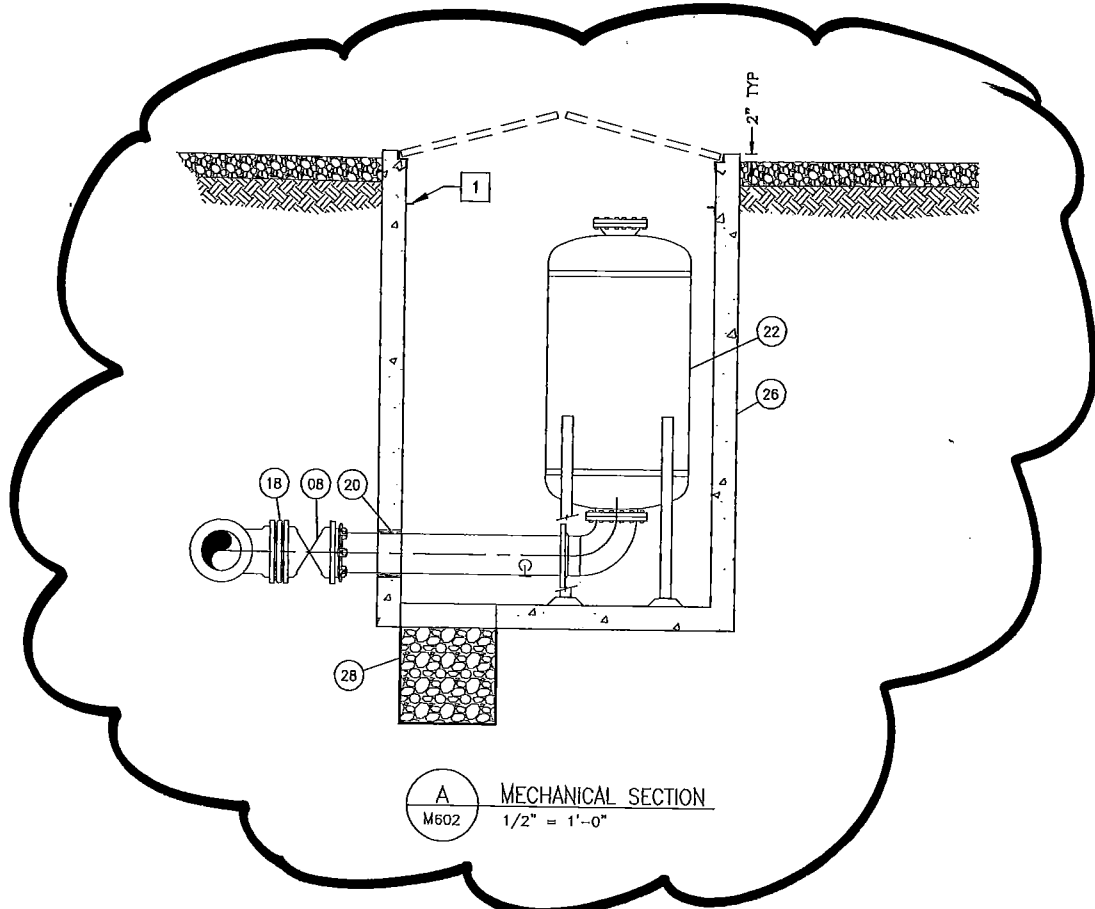
The supplier shall provide all components and assembly instructions to the Contractor for installation.



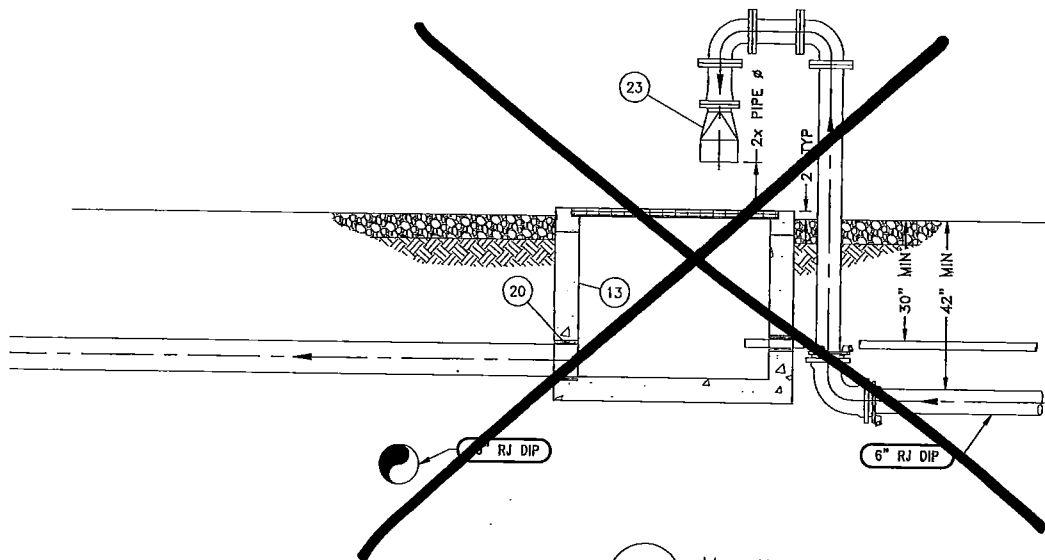
3.2 SEISMIC RESTRAINT

The Contractor shall install the tanks in accordance with the manufacturer's recommendations and as shown on the Plans. Seismic anchors shall be installed as recommended for Zone 4 by the manufacturer and as shown on the Plans.

**END OF SECTION**



**A** MECHANICAL SECTION  
 M602 1/2" = 1'-0"



**B** MECHANICAL SECTION  
 M602 1/2" = 1'-0"

DESCRIPTION	BY	APP	DATE

WORK ORDER NO. 10-0002  
 DESIGNED JPB/DAD  
 DRAWN AAA  
 DATE JULY 2015  
 CHECKED RLK  
 SUBMITTED  
 RECOMMENDED  
 APPROVED

**TRUCKEE MEADOWS WATER AUTHORITY**  
 1355 CAPITAL BLVD. / PO BOX 30013  
 RENO, NEVADA 89520-3013  
 PH 775-834-6080 / FX 775-834-8003

**NOT REPROI**  
 PROPERTY  
 TRUCKEE MEAD  
 AUTHORITY, RET  
 COMPLETION OI  
 (Per Homeland Sec