



**COUNTY OF EL PASO**  
County Purchasing Department  
800 E. Overland, Suite 300  
El Paso, Texas 79901  
(915) 546-2048  
(915) 546-8180 Fax

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### **Notice to Interested Parties**

Sealed bids will be received at the County Purchasing Department, 800 E. Overland, Suite 300, El Paso, Texas 79901 before 2:00 p.m., **Wednesday, August 31, 2011** to be opened at the County Purchasing Office the same date for **Construction Materials for Water Service in the El Paso Conquistador & Lourdes Subdivisions.**

A pre-bid conference will be held on Tuesday, August 16, 2011 at 10:00 a.m. in the Purchasing Conference Room located at 800 East Overland, Room 300, El Paso, Texas 79901.

**Bids must be in a sealed envelope and marked:**

**“Bid to be opened August 31, 2011**

**Construction Materials for Water Service in the El Paso Conquistador & Lourdes Subdivisions  
Bid #11-031”**

**Any questions or additional information required by interested vendors must be submitted in writing to the attention of the County Purchasing Agent before Tuesday, August 23, 2011, at 12:00 p.m. Questions can be faxed to (915)-546-8180.**

Said contract shall be let to the lowest responsible bidder, and the **COMMISSIONER’S COURT RESERVES THE RIGHT TO REJECT ANY AND ALL BIDS AND WAIVE TECHNICALITIES.** Only bids that conform to specifications will be considered. Faxed bids will not be accepted. Successful bidder shall not order items or services until a Purchase Order is received from the County Purchasing Office. Payment will not be made on items delivered without a Purchase Order. Contract will be awarded by lump sum or line item, whichever is in the best interest of the County.

In order to remain active on the El Paso County Vendor list, each vendor receiving this bid must respond in some form. Vendors submitting a bid must meet or exceed all specifications herein. Vendors submitting a no bid must submit their reason in writing to the El Paso County Purchasing Department.

If the bid totals more than \$100,000.00, the bidder shall furnish a certified cashier’s check made payable to the order of El Paso County or a good and sufficient bid bond in the amount of 5% of the total contract price, executed with a surety company authorized to do business in the State of Texas. The bid bond must be included with the bid at the time of the opening.

**PITI VASQUEZ**  
County Purchasing Agent

## BIDDING SCHEDULE

To: El Paso County, Texas

I or we agree to furnish the following described equipment, supplies, or services for the prices shown in accordance with specifications listed below or attached. By execution of this bid, I hereby represent and warrant to El Paso County that I have read and understood the Bid Documents and the Contract Documents and this bid is made in accordance with the Bid Documents.

Please quote prices and discounts on the following items:

F. O. B. El Paso County

<b>Description – Bid #11-031</b> <b>Construction Materials for Water Service in the El Paso Conquistador &amp; Lourdes Subdivisions</b> Vendor must meet or exceed specifications
Please do not include tax, as the County is tax-exempt. We will sign tax exemption certificates covering these items. <b>Please submit one (1) original copy and two (2) copies of your bid.</b>

\_\_\_\_\_  
Company

\_\_\_\_\_  
Mailing Address

\_\_\_\_\_  
Federal Tax Identification No.

\_\_\_\_\_  
City, State, Zip Code

\_\_\_\_\_  
CIQ Document Number

\_\_\_\_\_  
CIQ Sent Date

\_\_\_\_\_  
Representative Name & Title

\_\_\_\_\_  
Telephone

\_\_\_\_\_  
Fax Number

\_\_\_\_\_  
E-mail

\_\_\_\_\_  
Signature

**\*\*\*THIS MUST BE THE FIRST PAGE ON ALL BIDS\*\*\***

**Construction Materials for Water  
Service in the El Paso  
Conquistador & Lourdes  
Subdivisions**

**Bid #11-031**



**Opening Date  
Wednesday, August 31, 2011**

# CONSTRUCTION DOCUMENTS MANUAL AND TECHNICAL SPECIFICATIONS

**LOURDES ESTATES & EL CONQUISTADOR DEL PASO SUBDIVISIONS**  
**WATER MAIN EXTENSION FACILITIES (MATERIAL ONLY)**  
**(TEXAS DEPARTMENT OF RURAL AFFAIRS/ C.D.B.G. 710006)**

BID No.: 11-031



800 E. Overland  
El Paso, Texas 79901

COUNTY JUDGE  
Hon. Veronica Escobar

COUNTY COMMISSIONERS  
Comm. Anna Perez, Pct. 1  
Comm. Sergio Lewis, Pct. 2  
Comm. Willie Gandara, Jr., Pct. 3  
Comm. Daniel R. Haggerty, Pct. 4

ROAD AND BRIDGE  
Ernie Carrizal, Interim Director

Prepared by:



TEXAS REGISTERED ENGINEERING FIRM F-4564

engineers • architects • planners  
4712 Woodrow Bean, Ste. F El Paso, TX 79924  
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ENGINEER'S SEAL  
CEA GROUP, TEXAS FIRM REGISTRATION No. 4564

**COUNTY OF EL PASO**

**LOURDES ESTATES AND EL CONQUISTADOR DEL PASO SUBDIVISIONS  
WATER MAIN EXTENSION FACILITIES (MATERIAL ONLY)  
(TEXAS DEPARTMENT OF RURAL AFFAIRS/ C.D.B.G. 710006)**

**BID NO.: 11-031**

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## Materials/Equipment

### Advertisement and Invitation for Bids

The County of El Paso will receive bids for Lourdes Estates & El Conquistador Del Paso Subdivisions Water Main Extension Facilities until 2:00 pm on August 31, 2011 at 800 E. Overland Suite 300, El Paso Tx 79901. The bids will be publicly opened and read aloud at 2:00 pm on August 31, 2011 at 800 E. Overland Suite 300, El Paso, Tx 79901.

Bids are invited for the several items and quantities as follows (material only):

Approximately 420 LF of 6" water line (C-900 DR 18, PVC) with all accessories, approximately 200 LF of 6" water line (SDR 35, PVC) with all accessories, approximately 10,300 LF of 8" water line (C-900 DR 18, PVC) with all accessories, gate valves with accessories, 97 - ¾" residential service connection with all accessories, , backflow preventor with all accessories, bonnet boxes with accessories, detectable tape, meter box for ¾" with all accessories and fire hydrants with all accessories. All material must meet LVWD standards.

A pre-bid conference will be held on August 16, 2011 at 10:00 A.M., at the office of the County Purchasing Agent, 800 E. Overland Ave., Suite 300, El Paso, Texas. Representatives of the Owner, Program Manager and Engineer will be present to discuss the project. Bidders are encouraged to attend and participate in the conference.

A bid bond in the amount of 5 (%) percent of the bid issued by an acceptable surety may be required with each bid. A certified check or bank draft payable to the County of El Paso or negotiable U.S. Government Bonds (as par value) may be submitted in lieu of the Bid Bond.

The County of El Paso reserves the right to reject any or all bids or to waive any informalities in the bidding.

Bids may be held by County of El Paso for a period not to exceed 30 days from the date of the bid opening for the purpose of reviewing the bids and investigating the bidders' qualifications prior to the contract award.

County of El Paso (County of El Paso) (contracting officer), (title) (date)

**All contractors and/or subcontractors who are debarred, suspended or otherwise excluded from or ineligible for participation on federal assistance programs may not undertake any activity in part or in full under this project.**

## **Materials/Equipment**

### Instructions to Bidders

1. Interpretations or Addenda

No oral interpretations will be made to any bidder. Each request for an interpretation shall be made in writing to the County of El Paso no less than seven (7) days prior to the bid opening. Each interpretation made will be in the form of an Addendum to the contract documents and will be distributed to all parties holding contract documents no less than five (5) days prior to the bid opening. It is, however, the bidder's responsibility to make inquiry as to any addenda issued. All such addenda shall become part of the contract documents and all bidders shall be bound by such addenda.

2. Alternate bid items

No alternate bids or bid items will be considered unless they are specifically requested by the technical specifications.

3. Bids

- a) All bids must be submitted on the forms provided and are subject to all requirements of the Contract Documents, including the Drawings.
- b) All bids must be regular in every respect and no interlineations, excisions or special conditions may be made or included by the bidder.
- c) Bid documents, including the bid, and the bid bond shall be sealed in an envelope and clearly labeled with the words "Bid Documents", the project number, name of bidder and the date and time of bid opening.
- d) The County of El Paso may consider as irregular any bid on which there is an alteration of or departure from the bid form and, at its option, may reject any irregular bid.
- e) If a contract is awarded, it will be awarded to a responsible bidder on the basis of the lowest/best bid and the selected alternate bid items, if any.

4. Bid Modifications Prior to Bid Opening

- a) Any Bidder may modify his bid by telegraphic communication at any time prior to the scheduled closing time for receipt of bids, provided such telegraphic communication is received by the County of El Paso prior to the closing time, and provided further, the County of El Paso is satisfied that a written confirmation of the telegraphic modification over the signature of the Bidder was mailed prior to the closing time. The telegraphic communication should not reveal the bid price but should provide the addition, subtractions or other modifications so that the final prices or terms will not be known by the County of El Paso until the sealed bid is open. If written confirmation is not received within two (2) days from the closing time, no consideration will be given to the telegraphic modification.
- b) Likewise, any Bidder may modify a bid by submitting a supplemental bid in person prior to the scheduled closing time for receipt of bids. Such supplemental bid should mention only additions or subtractions to the original bid so as to not reveal the final prices or terms to the County of El Paso until the sealed bid is open.

5. Bid Bond

A bid bond in the amount of 5% of the bid issued by an acceptable surety may be required with each bid. A certified check or bank draft payable to the County of El Paso or negotiable U.S. Government Bonds (as par value) may be submitted in lieu of the Bid Bond.

6. Corrections

Erasures or other corrections in the bid must be noted over the signature of the bidder.

7. Time for Receiving Bids

Bid received prior to the advertised hour of opening shall be kept securely sealed. The officer appointed to open the bids shall decide when the specified time has arrived and no bid received thereafter will be considered.

8. Opening of Bids

The County of El Paso shall, at the time and place fixed for the opening of bids, cause each bid to be publicly opened and read aloud, irrespective of any irregularities therein.

9. Withdrawal of Bids

Bidder may withdraw the Bid before the time fixed for the opening of Bids by communicating his purpose in writing to the County of El Paso. Upon receipt of such notice, the unopened Bid will be returned to the Bidder. The bid guaranty of any bidder withdrawing his bid in accordance with the above will be returned promptly.

10. Award of Contract/Rejection of Bids

The contract will be awarded to the responsive, responsible Bidder submitting the lowest/best bid. The bidder selected will be notified at the earliest possible date. The County of El Paso reserves the right to reject any or all bids and to waive any informality in bids received where such rejection or waiver is in its interest.

11. Execution of Agreement

The failure of the successful bidder to execute the agreement and supply the required bonds within ten (10) days after the prescribed forms are presented for signature, or within such extended period as the County of El Paso may grant shall constitute a default and the County of El Paso may, at its option either award the contract to the next lowest responsible bidder, or re-advertise for bids. In either case, the County of El Paso may charge against the bidder the difference between the amount of the bid, and the amount for which a contract is subsequently executed irrespective of whether this difference exceeds the amount of the bid bond. If a more favorable bid is received through re-advertisement, the defaulting bidder shall have no claim against the County of El Paso for a refund.

12. Equal Employment Opportunity

Attention is called to the requirements for ensuring that employees and applicants for employment are not discriminated against because of their race, color, creed, sex, or national origin.

13. Pre-Bid Conference

A pre-bid conference will be held on Tuesday, August 16, 2011 at 10:00 A.M., at the office of the County Purchasing Agent, 800 E. Overland Ave., Suite 300, El Paso, Texas. Representatives of the Owner, Program Manager and Engineer will be present to discuss the project. Bidders are encouraged to attend and participate in the conference. The Engineer will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference.



**BID FORM  
UNIT PRICE CONTRACT**

Place: El Paso County, Texas

Date: \_\_\_\_\_

Project Bid No.: \_\_\_\_\_

Proposal of \_\_\_\_\_ (hereinafter called Bidder) a corporation organized under the laws of the State of \_\_\_\_\_ (OR) a partnership/an individual doing business as \_\_\_\_\_ organized under the laws of the State of \_\_\_\_\_.

To: **The County of El Paso, Texas  
c/o Commissioners' Court (hereinafter called the Owner)**

Gentlemen:

Bids are invited for the several items and quantities as follows (material only):  
Approximately 420 LF of 6" water line (C-900 DR 18, PVC) with all accessories, approximately 200 LF of 6" water line (SDR 35, PVC) with all accessories, approximately 10,300 LF of 8" water line (C-900 DR 18, PVC) with all accessories, gate valves with accessories, 97 - 3/4" residential service connection with all accessories, , backflow preventor with all accessories, bonnet boxes with accessories, detectable tape, meter box for 3/4" and 1" with all accessories and fire hydrants with all accessories. All material must meet LVWD standards.

Having examined the plans and specifications with related documents, soils investigation report, and the site of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed project, including the availability of materials and labor, hereby proposes to furnish all labor, materials and supplies, and to perform the project in accordance with the Contract Documents, within the time set forth therein, and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract documents, of which this proposal is a part.

Bidder hereby agrees to commence work under this contract on or before a date to be specified in a written "Notice to Proceed" by the Owner as stipulated in the specifications.

Bidder acknowledges receipt of the following addenda (write in any addendums issued for Project):

ADDENDUM NO.: \_\_\_\_\_ DATE ISSUED: \_\_\_\_\_.

ADDENDUM NO.: \_\_\_\_\_ DATE ISSUED: \_\_\_\_\_.

ADDENDUM NO.: \_\_\_\_\_ DATE ISSUED: \_\_\_\_\_.

ADDENDUM NO.: \_\_\_\_\_ DATE ISSUED: \_\_\_\_\_.

**NOTE:** The quantities shown in the unit price schedule are ESTIMATES ONLY. They are shown here only for the purpose of comparing bids as an expected total expenditure. The County of El Paso, at its sole discretion, will direct exactly how many actual units will be placed, and will pay for only those units that are ordered and accepted. No payments will be made regarding the estimated quantities, they are estimates only.

**UNIT PRICE SCHEDULE:**

Bidder agrees to perform all work described in the Contract Documents for the following unit prices. For changing quantities of work items from those indicated by the contract drawings upon written instructions from the engineer, the following unit prices shall prevail:

Item No.	Estimated Quantity	Unit	Brief Description of Item With Unit Bid Price in Words	Unit Bid Price In Figures	Subtotal Amount In Figures
1.	1	L.S.	Delivery of Bid Items #2 through #24  _____ Dollars and _____ Cents per lump sum.	\$ _____	\$ _____
2.	200	L.F.	6" SDR – 35 PVC Pipe; the sum of:  _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____
3.	420	L.F.	6" C-900 DR-18 PVC Pipe, the sum of:  _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____
4.	10,300	L.F.	8" C-900 DR-18 PVC Pipe, the sum of:  _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____
5.	5	E.A.	8" X 8" M.J. Tee D.I. less accessories, the sum of:  _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____
6.	2	E.A.	8" X 6" M.J. Tee D.I. less accessories, the sum of:  _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____
7.	1	E.A.	8" X 6" M.J. Reducer D.I. less accessories, the sum of:  _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____

Item No.	Estimated Quantity	Unit	Brief Description of Item With Unit Bid Price in Words	Unit Bid Price In Figures	Subtotal Amount In Figures
8.	12	E.A.	8" X 45° M.J. Bend D.I. less accessories, the sum of:  _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____
9.	4	E.A.	8" X 22.5° M.J. Bend D.I. less accessories, the sum of:  _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____
10.	10	E.A.	8" X 11.25° M.J. Bend D.I. less accessories, the sum of:  _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____
11.	29	E.A.	8" M.J. RW Gate Valve less accessories, the sum of:  _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____
12.	17	E.A.	6" M.J. RW Gate Valve less accessories, but including bonnet box w/lid, the sum of:  _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____
13.	1	E.A.	8" M.J. Cap D.I. less accessories, the sum of:  _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____
14.	15	E.A.	Fire Hydrants, 4'-6" Bury w/6" M.J. Shoe and accessories, Including 8" X 6" D.I.M.J. Tee w/Accys, retainer joint 8", retainer joint 6", 6" C-900 DR-18 PVC Pipe, 6" MJ RW Gate Valve w/Accys, retainer joint 6", Bonnet Box, Duc Lug Kits, 3/4" tie rods, and No. 5 rebar anchor and as shown on Detail 1/C5.5  _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____
15.	7	E.A.	6" Mega Lug Kits, with accessories, the sum of:  _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____

Item No.	Estimated Quantity	Unit	Brief Description of Item With Unit Bid Price in Words	Unit Bid Price In Figures	Subtotal Amount In Figures
16.	111	E.A.	8" Mega Lug kits, with accessories, the sum of: _____ _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____
17.	5	E.A.	Pipe Joint Soap ( 5 gal), the sum of: _____ _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____
18.	11	E.A.	6" X 1000' Detectable Tape water, the sum of: _____ _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____
19.	20	E.A.	Safety Hard Hat, the sum of: _____ _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____
20.	20	E.A.	Safety Vest, the sum of: _____ _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____
<b>¾ inch water services</b>					
21.	90	E.A.	¾" Water Service of 8" water line with all accessories as shown in Detail 1/C 5.3. (everything from saddle to last adapter inside the plastic box), the sum of: _____ _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____
22.	7	E.A.	¾" Water Service of 6" water line with all accessories as shown in Detail 1/C 5.3 (everything from saddle to last adapter inside the plastic box), the sum of: _____ _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____

Item No.	Estimated Quantity	Unit	Brief Description of Item With Unit Bid Price in Words	Unit Bid Price In Figures	Subtotal Amount In Figures
23.	97	E.A.	3/4" Backflow Prreventor with all accessories including, but not limited to, adapter copper 3/4" male, ball valve 3/4" Brass, Nipple 3/4" X closed Brass, Pressure Regulator 3/4" Threaded Brass, Dual Check Valve 3/4" Brass, Meter Box w/snap in Lid, the sum of: _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____
24.	16,000	L.F.	3/4" Type K Soft Copper 100' (For Yardlines), the sum of: _____ Dollars and _____ Cents per Each.	\$ _____	\$ _____
Quantities are estimates					
<b>TOTAL BID PRICE:</b>				\$ _____	Price in words _____

1. **MATERIALS TO BE INCORPORATED IN PROJECT NOT SUBJECT TO SALES TAX** \$ \_\_\_\_\_

2. **OTHER (I.E. BONDS, INSURANCE, CAPITAL EQUIPMENT, ETC.)** \$ \_\_\_\_\_

**\* TOTAL** \$ \_\_\_\_\_

\* (Total must equal total bid price for Bid)

The above unit prices shall include all labor, materials, equipment, shoring, removal, overhead, profit, clean up, insurance, etc., and any other incidental items not called for to cover the finished work of the several kinds called for. Changes shall be processed in accordance with GENERAL CONDITIONS.

BIDDER agrees that all Work will be Substantially Complete within **30** calendar days after the date when the Contract time commences to run as provided in the General Conditions. Final Completion as defined in the General Conditions will be within **60** calendar days after the date when the Contract time commences to run. BIDDER accepts the provisions of the General Conditions and the Agreement as to liquidated damages in the event of failure to complete the Work on time.

Bidder understands that Owner reserves the right to reject any or all bids and to waive any informality in the bidding. The Bidder agrees that this bid shall be good and may not be withdrawn for a period of 90 calendar days after the scheduled closing time for receiving bids.

Upon receipt of Owner's written acceptance of this bid, Bidder will execute formal contract within 10 calendar days and deliver Surety Bond as required by the GENERAL CONDITIONS.

Respectfully submitted,

By: \_\_\_\_\_  
(Name)

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

Address: \_\_\_\_\_

\_\_\_\_\_

**BID BOND**

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned \_\_\_\_\_ as PRINCIPAL, and \_\_\_\_\_ unto the County of El Paso hereinafter called the "Owner", in the penal sum of \_\_\_\_\_ Dollars, (\$ \_\_\_\_\_), lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has submitted the Accompanying Bid, dated \_\_\_\_\_, 2011 for \_\_\_\_\_.

NOW, THEREFORE, IF the Principal shall not withdraw said Bid within the period specified therein after the opening of the same, or, if no period be specified within thirty (30) days after the said opening, and shall within the period specified therefore, or if no period be specified, within ten (10) days after the prescribed forms are presented to him for signature, enter into a written Contract with the Owner in accordance with the Bid as accepted, and give bond with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such contract or in the event of the withdrawal of said Bid within the period specified, or the failure to enter into such Contract and give such bond within the time specified, if the Principal shall pay the Owner the difference between the amount specified in said Bid and the amount for which the Owner may procure the required work or supplies or both, if the latter be in excess of the former, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under their several seals this day of \_\_\_\_\_, 2011, the name and corporate seal of each corporate party being hereto affixed and these present signed by its undersigned representative pursuant to authority of its governing body.

(Forms of Bid bonds prepared to meet the requirements of Local or State Laws or the needs of the Owner should be substituted for this form when necessary.)

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

Attest:  
\_\_\_\_\_

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

Attest:  
\_\_\_\_\_

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

Attorney-in-Fact<sup>1</sup> State of \_\_\_\_\_

<sup>1</sup>Power-of-Attorney for person signing for Surety Company must be attached to bond.

**CONTRACT**

THIS AGREEMENT MADE THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 2011 between \_\_\_\_\_  
\_\_\_\_\_ A corporation organized and existing under the laws of the State  
of Texas, hereinafter called the "Contractor" and the COUNTY OF EL PASO, hereinafter called the  
"Owner."

WITNESSETH that the Contractor and the Owner for the considerations stated herein mutually agree as  
follows:

**ARTICLE 1. STATEMENT OF WORK.** The Contractor shall furnish all supervision, technical personnel,  
labor, materials, machinery, tools, equipment and services, including utility and transportation services,  
and perform and complete all work required for the construction of the improvements embraced in the  
project, namely: **Lourdes Estates and El Conquistador Del Paso Subdivisions Water Main  
Extension Facilities (Material Only) (Texas Department of Rural Affairs/ C.D.B.G. 710006)** and  
required supplemental work for this Project all in strict accordance with the Contract Documents including  
all addenda thereto, numbered, and dated \_\_\_\_\_, all as prepared by **CEA  
Group**, acting and in these contract documents preparations, referred to as the "Engineer".

**ARTICLE 2. THE CONTRACT PRICE.** The Owner will pay the Contractor for the performance of the  
Contract in current funds, for the total quantities of work performed at the contract price stipulated in the  
bid for the several respective items of work completed subject to additions and deductions as provided in  
General Conditions.

**ARTICLE 3. CONTRACT.** The executed contract documents shall consist of the following:

- |                            |                             |
|----------------------------|-----------------------------|
| a. This Agreement          | e. Signed copy of bid       |
| b. Addenda                 | f. General Conditions       |
| c. Invitation for Bids     | g. Technical Specifications |
| d. Instructions to Bidders | h. Drawings                 |

This Agreement, together with other documents enumerated in this Article 3, which said other documents  
are fully a part of the Contract as if hereto attached or herein repeated, forms the contract between the  
parties hereto. In the event that any provisions in any component part of this Contract conflicts with any  
provision of any other component part, the provisions of the component part first enumerated in this  
Article 3 shall govern, except as otherwise specifically stated.

IN WITNESS WHEREOF, the parties hereto have caused this AGREEMENT to be executed in three (3)  
original copies on the day and year first written.

COUNTY OF EL PASO  
(Public Agency)

By: \_\_\_\_\_  
Honorable Veronica Escobar

Title: County Judge

\_\_\_\_\_  
County Clerk

\_\_\_\_\_  
(Contractor)

Attest: \_\_\_\_\_

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

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

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



**Materials/Equipment**  
General Contract Conditions

1. Materials and Workmanship

- a) Unless otherwise specifically provided for in the Technical Specifications, all materials and articles utilized in the work shall be new and the best grade available. Where equipment, materials, or articles are referred to in the Technical Specifications as "equal to" any particular standard, the Engineer shall decide the question of equality.
- b) The successful bidder shall furnish to the County of El Paso for approval the manufacturer's detailed specifications for all mechanical, other special equipment and all materials or articles, together with full information as to type, performance characteristics, and all other pertinent information as required.
- c) Materials specified by reference to the number or symbol of a specific standard, shall comply with requirements in the latest revision thereof and any amendment or supplement thereto in effect on the date of the Invitation for Bids, except as limited to type, class or grade, or modified in the Technical specifications shall have full force and effect as though printed therein.

2. Samples and Tests

- a) Approval of any materials shall be general only and shall not constitute a waiver of the County of El Paso's right to demand full compliance with Contract requirements. After actual deliveries, the Engineer will have such check tests made as he deems necessary in each instance and may reject materials and equipment and accessories for cause, even though such materials and articles have been given general approval.
- b) Except as otherwise specifically stated in the Contract, the costs of sampling and testing will be divided as follows:
  - The Contractor shall furnish without extra cost, including packing and delivery charges, all samples required for testing purposes, except those samples taken on the project by the Engineer;
  - The Contractor shall assume all costs of re-testing materials which fail to meet contract requirements;
  - The Contractor shall assume all costs of testing materials offered in substitution for those found deficient; and
  - The County of El Paso will pay all other expenses.

3. Compliance with Air and Water Acts

- a) In compliance with the Clean Air Act, as amended, 41 U.S.C. 7401 et. seq., and the regulations of the Environmental Protection Agency with respect thereto the Contractor agrees that:
  - Any facility to be utilized in the performance of this contract or any subcontract shall not be a facility listed on the EPA List of Violating Facilities pursuant to 40 CFR 15.20.
  - S/he will comply with all requirements of Section 114 of the Clean Air Act, as amended.
- b) Materials shall be free of any hazardous materials, except as may be specifically provided for in the specifications.

4. Equal Employment Opportunity

- a) The Contractor will not discriminate against any employee or the applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment, promotion, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the County of El Paso.
- b) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

- c) The Contractor will cause the foregoing provisions to be inserted in all subcontracts for any work covered by this contract so that such provisions will be binding upon each subcontractor, provided that the foregoing provisions shall not apply to contracts or subcontracts for standard commercial supplies or raw materials.
- d) The Contractor shall take affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions.
- e) Contractors are encouraged to participate in voluntary associations which assist in fulfilling their affirmative action obligations.
- f) A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority.
- g) The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
- h) The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts.
- i) Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents.

5. Affirmative Action for Handicapped Workers

The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant for employment is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices such as the following: employment, promotion, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

5. Section 109 of the Housing and Community Development Act of 1974

No person in the United States shall on the ground of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available under this title.

6. The Provision of Local Training, Employment, and Business Opportunities

- a) To the greatest extent feasible opportunities for training and employment be given lower income residents of the project area and contracts for work in connection with the project be awarded to business concerns which are located in, or owned in substantial part by persons residing in the area of the project.
- b) The Contractor will include this clause in every subcontract for work in connection with the project.

7. Nonsegregated Facilities

The Contractor certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The Contractor covenants that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. As used in this paragraph the term "segregated facilities" means any waiting rooms, work areas, rest rooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise.

8. Liquidated Damages

Since the actual damages for any delay under this contract are impossible to determine, the Contractor and his Sureties shall be liable for and shall pay to the County of El Paso the sum of Two Hundred Dollars (\$ 200.00) fixed, agreed and liquidated damages for each calendar day of delay from the above stipulated time for delivery.

# TECHNICAL SPECIFICATIONS

These Technical Specifications are for the use of material estimating **ONLY**. The set of Plans accompanying these Technical Specifications are also for material estimating purposes only.

## **SECTION 02600 – SCHEDULE OF PIPE**

### **PART 1 GENERAL**

#### **1.1 SCOPE OF WORK**

- A. Furnish all labor, materials, equipment, tools, superintendence and incidentals required to install, test, and perform any other specified or drawn work required to construct and install the pipeline systems under this Contract.
- B. Only approved pipe shall be used for the construction of all pipelines and connections under this Contract. The only type of pipe that will be considered for use, and for the uses specified, are those listed in Part 2 of this Section. All pipe shall be the same type, class and manufacturer.

#### **1.2 SUBMITTALS**

- A. Before beginning fabrication of the pipe, the Contractor shall submit to the Engineer, in accordance with Section 01300, manufacturer's certification and supporting calculations that the pipe materials and thickness specified herein are adequate for the depths shown on the Drawings, and for the intended use.

### **PART 2 PRODUCTS**

#### **2.1 SCHEDULE OF PIPE**

- A. Potable Water Mains, 6" and 8" in diameter:
  - 1. PVC, AWWA C-900-07, DR 18 (Blue)
- B. PVC, SDR 35, ASTM D3034 Solid Wall Pipe

### **PART 3 EXECUTION**

NOT USED

### **PART 4 MEASUREMENT AND PAYMENT**

- 4.1 Measurement and payment for pipelines shall be in accordance with Section 01025 of these Specifications.

**END OF SECTION**

SECTION 02630 – VALVES AND FITTINGS

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. The CONTRACTOR shall furnish all valves and fittings where indicated on the Plans, as called for in these Specifications, or as required for proper operation of the equipment in general. Unless otherwise indicated on the Plans or specified in other sections of these Specifications, valves and fittings shall conform to the requirements as specified herein and shall be provided and installed in accordance with the LVWD Standards.

Where proper operation and utilization of equipment and facilities require installation of valves not indicated or specified, the CONTRACTOR shall provide and install, upon acceptance by the ENGINEER, valves similar and comparable to valves specified for similar and comparable duty in other parts of the project.

- B. Valves shall conform to American National Standards Institute / National Sanitation Foundation (ANSI/NSF) Standard 61 “Drinking Water system Components - Health Effects” and be certified by an organization accredited by ANSI. Such compliance shall be evidenced by an affidavit from the manufacturer or vendor. If the pipe does not presently conform to this standard, information from the manufacturer regarding action being taken to comply with this standard must be submitted. All valves installed in a given line shall be designed to withstand the test pressure for that particular line and shall be fabricated with ends to fit the piping.

PART 2 PRODUCTS

2.1 GENERAL

- A. All materials shall conform to the pertinent material requirements of the following Items. Complete shop drawings and specifications shall be furnished prior to acceptance and approval of the bid proposal. If requested, the valve manufacturer shall also submit a list of similar installations that have been in satisfactory operation for at least three years.

The manufacturer shall furnish a complete set of installation, operation, and maintenance instructions for each type of valve furnished. Instructions shall be bound in a cover.

1. Valves.

- a) Non-Rising Stem Double Disc Gate Valves. Non-Rising Stem Gate Valves are to be iron-body, bronze mounted, parallel seat internal wedging type with non-rising stem and designed for a gauge working pressure of 200 psig. NRS gate valves shall comply with AWWA C-509 “Gate Valves for Water and Sewage Systems”, latest revision. Valves 12-inches or smaller shall be for horizontal installation. The number of turns to open shall be a minimum of three times the valve diameter.

Acceptable manufacturers and models shall be:

American-Darling	52NRS (Flanged Ends), 55NRS (Mechanical Joint Ends)
Clow	F5065 (Mechanical Joint Ends), F5070 (Flanged Ends)
Kennedy	561X (Flanged Ends), 571X (Mechanical Joint Ends)
M&H	Style 67NRS
Mueller	A-2380-6 (Flanged), A-2380-20 (Mechanical Joint Ends)

2. **Submittals.** Submittals shall be provided for approval. Also, the manufacturer shall provide an Affidavit of Compliance in accordance with Section 1.4 of AWWA Standard C-500. Records of all tests performed in accordance with Section 2.2 and Section 5.1 of AWWA Standard C-500 shall be provided. These records will be representative test results for Section 2.2 and certificate of testing for Section 5.1 of AWWA Standard C-500. An affidavit of testing for the valve assembly as outlined in Section 3.1 of AWWA Standard C-500 300 ft-lbs shall also be provided.

**Markings.** Shall be cast on the bonnet or body of each valve. Markings shall include the manufacturer's name or mark, the year the valve casting was made, the size of the valves, and the designated working pressure.

**Valve Ends.** Valve ends shall be mechanical joint or flanged with drilling in compliance with ANSI B16.1. Valve ends and size as specified.

**Valve Body and Bonnet.** Shall be cast iron conforming to ASTM A-126 Class B, or ductile iron conforming to ASTM A-395 or ASTM A-536.

**Gate.** Shall be cast iron or Grade A bronze. Gate rings, constructed of Grade A bronze, shall be rolled, peened, or pressed into grooves machined in the discs, or may be fastened by some other accepted method.

**Body-Seat Ring.** Shall be constructed of Grade A bronze, and shall be back-faced threaded and machined screwed into the valve body.

**Wedges.** Double-disc gate valves shall be equipped with a free and positive-operating internal device that will press the disc seats firmly against the body seats when the valve is closed and release the load before the discs begin to move when the valve is opened. Wedges shall be simple and rugged in design. The wedge material shall be as specified in AWWA C-500 and contact surface shall not be iron to iron.

**Valve Stem.** Shall be constructed of low zinc bronze CDA Copper Alloy No. C99500 with a minimum yield strength of 40,000 psi and minimum elongation in 2-inches of 10%.

**Stem Seals.** Shall consist of two O-rings such that the seal above the stem collar can be replaced with the valve under pressure in the fully open position. O-rings shall meet the requirements of ASTM D-2000 and have physical properties suitable for the application.

**Valve Operator.** Shall be a cast iron, ASTM A-126 Class B, wrench nut. The nut shall have a 2-inch square base and shall be 1-15/16" square at the top and be 1-3/4 inch high and shall open counterclockwise (left). The wrench nut shall be painted black and an arrow indicating direction of opening shall be cast on the nut, according to AWWA C-509.

**Protective Coating.** An epoxy coating shall be applied to all exterior and all stationary interior ferrous surfaces including all interior openings in the valves body. The coating shall not be applied to the gasket surfaces of the end flanges.

The coating shall be applied in accordance with AWWA C-550 and the manufacturer's instructions. After the coating is completely cured, the coated surface shall be tested for porosity, holidays, and pinholes using a holiday detector. All holidays or irregularities shall be repaired and the coating again tested.

3. **Outside Screw and Yoke (OS&Y) Gate Valves.** Outside Screw and Yoke Gate Valves are to be iron-body, bronze mounted, parallel seat internal wedging type with outside screw and yoke and shall comply with AWWA C-509 "Gate Valves for Water and Sewage Systems". OS&Y Gate Valves shall be provided for the size specified.

Acceptable manufacturers and models shall be:

American Darling	52 OS&Y
Clow	F5072
Kennedy	566
M&H	STYLE 68
Mueller	A-2483-6

**Submittals.** Submittals shall be provided for approval. Also, the manufacturer shall provide an Affidavit of Compliance in accordance with AWWA Standard C-500 Section 1.4. Records of all tests performed in accordance with AWWA Standard C-500 Section 2.2 and Section 5.1 shall be provided. These records will be representative test results for AWWA Standard C-500 Section 2.2 and certificate of testing for Section 5.1. An affidavit of testing for the valve assembly as outlined in Section 3.1 of AWWA Standard C-500 300 ft-lbs, shall also be provided.

**Markings.** Shall be cast on the bonnet or body of each valve. Markings shall include the manufacture's name or mark, the year the valve casting was made, the size of the valves and the designated working pressure.

**Valve Ends.** Valves ends shall be flanged, with drilling in compliance with ANSI B16.1, or as otherwise specified.

**Valve Body and Bonnet.** Shall be cast iron conforming to ASTM A-126 Class B, or ductile iron conforming to ASTM A-395 or ASTM A-536.

**Gate.** Shall be cast iron or Grade A bronze. Gate rings, constructed of Grade A bronze, shall be rolled, peened, or pressed into grooves machined in the discs, or may be fastened by some other accepted method.

**Body-Seat Ring.** Shall be constructed of Grade A bronze, and shall be back-faced threaded and machined screwed into the valve body.

**Wedges.** Double-disc gate valves shall be equipped with a free and positive-operating internal device that will press the disc seats firmly against the body seats when the valve is closed and release the load before the discs begin to move when the valve is opened. Wedges shall be simple and rugged in design. The wedge material shall be as specified in AWWA C-500 and contact surface shall not be iron to iron.

**Valve Stem.** Shall be constructed of low zinc bronze CDA Copper Alloy No. C99500 with a minimum yield strength of 40,000 psi and minimum elongation in 2-inches of 10%. The opening through the bonnet for the stem shall be bushed with grade A, B, C, D or E bronze as defined in AWWA C-500.

**Yoke.** The yoke may be either integral or bolted on to bonnet. The design shall be such that a hand may not be jammed between the yoke and handwheel.



**Valve Operator.** Shall be a cast iron, ASTM A-126 Class B, wrench nut. The nut shall have a 2-inch square base and shall be 1-15/16" square at the top and be 1-3/4 inch high and shall open counterclockwise (left). The wrench nut shall be painted black and an arrow indicating direction of opening shall be cast on the nut, according to AWWA C-509.

**Protective Coating.** An epoxy coating shall be applied to all exterior and all stationary interior ferrous surfaces including all interior openings in the valves body. The coating shall not be applied to the gasket surfaces of the end flanges. The coating shall be applied in accordance with AWWA C-550 and the manufacturer's instructions. After the coating is completely cured, the coated surface shall be tested for porosity, holidays, and pinholes using a holiday detector. All holidays or irregularities shall be repaired and the coating again tested.

- Tapping Valves.** Tapping Valves are to be iron-body, bronze mounted, parallel seat internal wedging type with non-rising stem. Tapping Valves shall conform to AWWA C-509 "Gate Valves for Water and Sewage Systems" except that tapping valves shall have over-sized seat rings to accommodate full size cutters. Tapping Valves shall be provided for the size specified.

Acceptable manufacturers and models shall be:

American Darling	565
Clow	5093
Kennedy	950-X
M&H	STYLE 751
Mueller	H-667

The number of turns to open shall be a minimum of three times the valve diameter.

**Submittals.** Submittals shall be provided for approval. Also, the manufacturer shall provide an Affidavit of Compliance in accordance with AWWA Standard C-500 Section 1.4. Records of all tests performed in accordance with AWWA Standard C-500 Section 2.2 and Section 5.1 shall be provided. These records will be representative test results for AWWA Standard C-500 Section 2.2 and certificate of testing for Section 5.1. An affidavit of testing for the valve assembly as outlined in Section 3.1 of AWWA Standard C-500 300 ft-lbs., shall also be provided.

**Markings.** Shall be cast on the bonnet or body of each valve. Markings shall include the manufacturer's name or mark, the year the valve casting was made, the size of the valves, and the designated working pressure.

**Valve Ends.** Outlet end of the valve shall be mechanical joint or as otherwise specified.

**Valve Body and Bonnet.** Shall be cast iron conforming to ASTM A-126 Class B, or ductile iron conforming to ASTM A-395 or ASTM A-536.

**Gate.** Shall be cast iron or Grade A bronze. Gate rings, constructed of Grade A bronze, shall be rolled, peened, or pressed into grooves machined in the discs, or may be fastened by some other accepted method.

**Body-Seat Ring.** Shall be constructed of Grade A bronze, and shall be back-faced threaded and machined screwed into the valve body.

**Wedges.** Double-disc gate valves shall be equipped with a free and positive-operating internal device that will press the disc seats firmly against the body seats when the valve is closed and release the load before the discs begin to move when the valve is opened. Wedges shall be simple and rugged in design. The wedge material shall be as specified in AWWA C-500 and contact surface shall not be iron to iron.

**Valve Stem.** Shall be constructed of low zinc bronze CDA Copper Alloy no. C99500 with a minimum yield strength of 40,000 psi and minimum elongation in 2-inches of 10%.

**Stem Seals.** Shall consist of two O-rings such that the seal above the stem collar can be replaced with the valve under pressure in the fully open position. O-rings shall meet the requirements of ASTM D-2000 and have physical properties suitable for the application.

**Valve Operator.** Shall be a cast iron, ASTM A-126 Class B, wrench nut. The nut shall have a 2-inch square base and shall be 1-15/16" square at the top and be 1-3/4 inch high and shall open counterclockwise (left). The wrench nut shall be painted black and an arrow indicating direction of opening shall be cast on the nut, according to AWWA C-509.

**Protective Coating.** An epoxy coating shall be applied to all exterior and all stationary interior ferrous surfaces including all interior openings in the valves body.

The coating shall be applied in accordance with AWWA C-550 and the manufacturer's instructions. After the coating is completely cured, the coated surface shall be tested for porosity, holidays, and pinholes using a holiday detector. All holidays or irregularities shall be repaired and the coating again tested.

5. **Non-Rising Stem (NRS) Resilient-Seated Gate Valves.** Non-Rising Stem Gate Valves are to be resilient seat, non-rising stem and shall have a minimum rated gauge working pressure of 200 psig and shall comply with AWWA C-509 "Resilient-Seated Gate Valves for Water and Sewage Systems" and AWWA C-550 "Standard for Protective Coatings for Valves and Hydrants". The valves design shall not have any recesses, insets in the bottom of the waterway that would promote build-up or collection of residue and debris. Resilient Seated Gate Valves shall be provided for the size specified.

With the valve open, the valve shall provide an unobstructed waterway that has a diameter not less than the full nominal diameter of the valve. The minimum number of turns to open the valve shall be three times the valve diameter.

Acceptable manufacturers and models shall be:

American Flow Control	Series 500, Series 2500
Clow	F-6100, F-6102
Kennedy	KEN-SEAL II
M&H	3067
US Pipe	METROSEAL 250
Mueller	A-2360-20

**Submittals.** Submittals shall be provided for approval. Also, the manufacturer shall provide approved certified test data or an affidavit stating that the valve complies with AWWA C-509 Section 6.1 and the following, in accordance with AWWA C-509 Section 6.2.

**Hydrostatic Test.** The manufacturer shall pressure test one valve of each size and class with 400 psi applied to one side and zero to the other. The test shall be made in each direction across the closed gate.

**Torque Test.** The manufacturer shall over-torque a valve of each size to demonstrate that no distortion of the valve stem occurs. The applied torque shall be 250 ft-lb for a 4-inch valve and 350 ft-lb for the larger valves in both the open and closed position.

**Leakage Test.** The manufacturer shall select two valves of each size to be fully opened and closed for 500 complete cycles with a 200 psi differential pressure across the gate. The valve shall be drip tight upon completion of the test.

**Pressure Test.** One valve of each size shall be tested, with the gate fully open, to a pressure of 500 psi. There shall be no evidence of rupture or cracking of valve body, bonnet or seal plated.

**Markings.** Shall be cast on the bonnet or body of each valve. Markings shall include the manufacture's name or mark, the year the valve casting was made, the size of the valves, and the designated working pressure.

**Valve Ends.** Shall be mechanical joint or flanged ends as specified.

**Valve Body and Bonnet.** Shall be cast iron conforming to ASTM A-126, or ductile iron conforming to ASTM A-536 or A-395.

**Bolts.** All bonnet and seal plate bolts shall be factory installed and made from stainless steel ASTM A-276 with either regular-square or hexagonal heads with dimensions conforming to ANSI B18.2.1.

**Wedge.** The wedge shall be cast iron or ductile iron fully encapsulated with resilient rubber material bonded to the disc. The method for bonding the resilient material shall be confirmed by ASTM D-429 as required by AWWA C-509.

**Valve Stem.** Shall be constructed of low zinc bronze CDA Copper Alloy No. C99500 with a minimum yield strength of 40,000 psi and minimum elongation in 2-inches of 10%.

**Stem Seals.** Shall consist of two O-rings such that the seal above the stem collar can be replaced with the valve under pressure in the fully open position. O-rings shall meet the requirements of ASTM D-2000 and have physical properties suitable for the application.

**Valve Operator.** Shall be a cast iron, ASTM A-126 Class B, wrench nut. The nut shall have a 2-inch square base and shall be 1-15/16" square at the top and be 1-3/4 inch high and shall open counterclockwise (left). The wrench nut shall be painted black and an arrow indicating direction of opening shall be cast on the nut, according to AWWA C-509.

**Protective Coating.** An epoxy coating shall be applied to all exterior and all stationary interior ferrous surfaces including all interior openings in the valves body. The coating shall not be applied to the gasket surfaces of the end flanges.

The coating shall be applied in accordance with AWWA C-550 and the manufacturer's instructions. The epoxy coating shall have a minimum dry film thickness of 8 mils. After the coating is completely cured, the coated surface shall be tested for porosity, holidays, and pinholes using a holiday detector. All holidays or irregularities shall be repaired and the coating again tested.

- Butterfly Valves.** Shall be of the tight-closing, rubber-seated type for Class 150B service. Butterfly valves shall comply with the requirements of AWWA C-504, "Standard for Rubber-Seated Butterfly Valves". Butterfly valves shall be provided for the size specified.

Acceptable manufacturers and models shall be:

American-Darling	Class 150B Flanged or Mechanical Joint
M&H	450, 4500, 1450
Kennedy	30A, 30C
Mueller	Lineseal III
Pratt	Groundhog Flanged

**Submittals.** Submittals shall be provided for approval. Also, the Manufacturer shall provide approved certified test data or an affidavit stating that the valve complies with the performance tests, leakage tests, hydrostatic test and proof-of-design tests as described in Section 5.2 of AWWA C-504.

**Valve Ends.** Shall be short body flanged, mechanical joint or as otherwise specified.

**Valve Bodies.** Shall be constructed of cast iron ASTM A-126, Class B, or ASTM A-48, Class 40 or Ductile Iron, ASTM A-536, Grade 65/45/12.

**Valve Discs.** Shall be cast iron conforming to ASTM A-126, Class B or Ductile Iron conforming to ASTM A-536, Grade 65/45/12. Valve disc shall seat in a position of 90 degrees to the pipe axis and shall rotate 90 degrees between full open and tight closed position. Dimensions of clearance for valve discs are required.

**Valve Shafts,** keys, dowel pins, or taper pins used for attaching valve shaft to the valve disc shall be Type 304 or 316 Stainless Steel, conforming to ASTM A-276, or equivalent corrosion resistant material. All portions of shaft bearings shall be stainless steel or bronze. Valve shafts may consist of a one-piece unit extending completely through the valve disc, or may be of the "stub shaft" type as defined in AWWA C-504. Butterfly valves shall be provided with an extended bonnet, unless otherwise specified.

**Shaft Seals.** Shall be a Split-V or O-ring type. Replacement shall be possible without removing the valve shaft.

**Valve Seats.** Shall be new natural or synthetic rubber resilient seats to provide tight shut off at the specified pressure. Seats shall be attached to either the disc or the body. Seats shall be clamped, mechanically secured, bonded or vulcanized to either the disc or body. Seat rings shall be stainless steel and fastened by stainless steel cap screws.

**Mating Seat Surface.** Shall be ASTM A-276, stainless steel 18-8, Type 304, or have a 95% pure nickel overlay.

**Valve Bearings.** Shall be sleeve type. Bearings shall be manufactured from corrosion resistant, and "self lubricated" materials that will not damage natural or synthetic rubber.

**Valve Operators.** Shall be manual with a 2-inch square operating-nut and turn left (counterclockwise) to open. Operators shall have all gearing totally enclosed and shall be pre-lubricated or grease packed. Operators shall be of the worm gear or traveling nut and link type with field adjustable stops capable of withstanding 300 ft. lbs. input torque, as required by AWWA C-504.

**Protective Coating.** Except as otherwise specified, all interior steel or cast iron surfaces shall be shop coated in accordance with the requirements of AWWA Standard C-504. All external surfaces for buried valves shall be shop coated with two coats of asphalt varnish according to AWWA C-504.

When specified, a standard epoxy interior coating shall be applied in accordance with AWWA Standard C-550, "Standard for Protective Interior Coatings for Valves and Hydrants".

- Air Release, Air/Vacuum, and Combination Air Valves.** Air-Release, Air/Vacuum and Combination Air Valves shall comply with AWWA C-512 and the following specifications. These specifications shall apply to valve sizes 6 inch and smaller.

Air Release Valves (AR) shall be designed to automatically release accumulated air pockets within the pipeline while in operation and under pressure. Air release valves shall be APCO Model 200, Val-Matic Model 38, or Crispin Model P.

**Air/Vacuum Valves (AV)** shall be designed to allow large volumes of air to escape through the valve orifice when filling a pipeline and to close watertight once the air has been expelled. Air and vacuum valves shall also permit large volumes of air to enter through the valve orifice when the pipeline is being drained to break the vacuum. Air and vacuum valves shall be APCO Series 140, Val-Matic Series 100, or Crispin Model AL.

**Combination Air Valves (CAV)** shall be heavy-duty air and vacuum valves with air release. Combination Air Valves shall be designed to release accumulations of air at high points within a pipeline by exhausting large volumes of air as the pipeline is being filled and by releasing accumulated pockets of air while the pipeline is in operation and under pressure. Combination air valves shall also be designed to permit large volumes of air to enter the pipeline during pipeline drainage. Combination Air Valves shall be APCO, Val-Matic Series 200, or Crispin Model C.

**Submittals.** The manufacturer shall provide an affidavit stating that the valve and all materials used in its construction conform to the applicable requirements of AWWA C-512 and these specifications. When required, the manufacturer shall provide an affidavit stating that the valve has been tested and is in compliance with the requirements specified in Section 5.1 of AWWA C-512.

**Markings.** Manufacturer's name or trademark, size of valve, and the designated maximum working pressure rating shall be cast in the body or marked on a corrosion-resistant name plate.

**Body and Cover.** Each air valve shall have a cast or ductile iron body and cover. Cast iron shall comply with ASTM A-126 Class B, or ASTM A-48 Class 35. Ductile iron shall comply with the requirements of ASTM A-536, Grade 65-45-12. Bolting material shall meet or exceed the strength requirements of ASTM A-307. All internal trim shall be of stainless steel.

**Float.** Shall be stainless steel. Float shall be baffled to prevent air from blowing valve closed until air is exhausted. Valve body, float, etc., shall be designed for a working pressure equal to that of the system in which it is installed. Floats for valves with inlet sizes less than 100 mm (4 inch) shall be capable of withstanding a collapse gauge pressure of 1,000 psig. For larger inlet sizes, floats shall be capable of withstanding a collapse gauge pressure of 750 psig.

**Valve Outlet.** Shall be fitted to attach discharge pipe as indicated. Valve inlet shall be N.P.T. for 2-inch and smaller valves. Valve inlet shall be ANSI flange for 3-inch and larger valves. Flange rating shall equal or exceed the maximum working pressure of the system in which it is installed.

**Installation.** Air release and air/vacuum valves shall be installed within valve vaults, or manhole, in accordance with Utility Standard Details 263-1, 263-2, 263-3, 263-4 and plans.

**Protective Coatings.** Interior surface coatings shall not be required unless otherwise specified. External surfaces shall be coated with the manufacturer's standard primer.

8. Fittings. Fittings as specified herein shall be ductile iron (DI) for use with ductile iron and polyvinyl chloride (PVC) water pressure or transmission pipe.

All fittings shall be smooth cement lined in accordance with AWWA C-104 and shall be outside asphaltic coated per AWWA C-110. The size, body type, type of joint ends, and applicable reference standard, shall be as shown on engineering drawings or as specified.

**Standards.** Fittings shall comply with applicable requirements of the following: ANSI B16.1 “Cast Iron Pipe Flanges and Fittings”, AWWA C-104 “American National Standard for Cement-Mortar Lining for Ductile-Iron Pipe and Fittings for Water”, AWWA C-105 “Standard for Polyethylene Encasement for Ductile Iron Pipe and Fittings”, AWWA C-110 “American National Standard for Ductile-Iron and Gray-Iron Fittings, 3 In. Through 48 In., for Water and Other Liquids”, AWWA C-111 “Rubber-Gasket Joints”, AWWA C-153 “American National Standard for Ductile-Iron Compact Fittings, 3 In. Through 16 In., for Water and Other Liquids.”

**Minimum Requirements.** The following minimum requirements of TABLE A and TABLE B shall apply to the specified fittings.

All joint accessories such as gaskets, glands, bolts, and nuts shall be furnished with mechanical joints, and gaskets and lubricant shall be furnished with push-on joints in sufficient quantity for assembly of each joint.

Push-on joint fittings shall be marked with the proprietary name or trademark of the joint. Fittings shall be marked on the outside with their applicable AWWA Standard and information called for by the Standard.

Fittings shall be polyethylene wrapped in accordance with AWWA C-105.

<b>TABLE A – STANDARD SHORT-BODY FITTINGS PER AWWA C-110</b>			
TYPE OF JOINT	DIAMETER	RATED WORKING PRESSURE	MATERIAL
Mechanical (Rubber Gasket/C-111)	4 - 24 inches	350 psi	DI
Flanged	4 - 24 inches	250 psi	DI
All types	30 - 80 inches	250 psi	DI
Push-On (Rubber Gasket/C-111)	4 - 24 inches	250 psi	DI

<b>TABLE B - COMPACT SHORT-BODY FITTINGS PER AWWA C-153</b>			
TYPE OF JOINT	DIAMETER	RATED WORKING PRESSURE	MATERIAL
Mechanical or Push-On (Rubber Gasket/C-111)	4 - 24 inches	350 psi	DI

**PART 3 EXECUTION**

**3.1 INSTALLATION**

- A. Valve Installation. Carefully handle and install valves horizontally in such a manner as to prevent damage to any parts of the valves. Installation shall be in accordance with manufacturer’s instruction. Valves delivered closed to the site shall be opened by the CONTRACTOR prior to installation. The CONTRACTOR shall record the number of turns required to open the valve. This information shall be submitted to the Utility on the standard valve report.
- B. Valves shall be polyethylene-wrapped in accordance with AWWA C-105, unless otherwise specified. Thrust blocking shall be provided as specified.

3.2 TESTING

- A. Valve Testing. Upon completion of installation of the valves, an acceptance test shall be conducted to verify the satisfactory operation of the valves. The unit shall be checked for operation and leakage. The valves must perform in a manner acceptable to the ENGINEER and LVWD before the Owner makes final acceptance.

PART 4 MEASUREMENT AND PAYMENT

- 4.1 No separate measurement or payment shall be made for this work item, but it shall be included in the unit price bid for the pipeline work as noted in the proposal.

**END OF SECTION**

SECTION 02635 – FIRE HYDRANTS

Part 1 GENERAL

1.1 SCOPE

- A. Furnish labor, materials, equipment and incidentals to furnish and install fire hydrants as indicated on the drawings, in accordance with LVWD requirements and according to typical fire hydrant installation.

1.2 SUBMITTALS

- A. Submittals shall include certified drawing showing dimensions and construction details and certification from manufacturers that the products comply with appropriate AWWA Standards and these Specifications. Catalog data illustrating equipment to be furnished and a schedule of parts and materials shall be submitted.
- B. Friction loss shall be guaranteed by the manufacturer to meet the requirements of AWWA C-502.

1.3 STANDARDS

- A. Fire hydrants shall comply with requirements of AWWA C-502, Dry-Barrel Fire Hydrants, and AWWA C-550, Protective Epoxy Interior Coatings for Valves and Hydrants.

PART 2 PRODUCTS

2.1 GENERAL

- A. Fire hydrants shall be dry-barrel compression type, with the main valve opening against the pressure, in accordance with AWWA C-502. The hydrant shall be designed for a minimum working pressure of 150 psi and tested at 30 psi hydrostatic pressure.
- B. Hydrant shall have permanent markings identifying name of manufacturer, size of main valve opening and year of manufacture. Markings shall be easily located and legible after the hydrant has been installed.
- C. Hydrants shall be constructed so that the standpipe may be rotated to 8 different positions.
- D. Center of the lowest nozzle shall have a minimum ground clearance of 15 inches. Hydrants shall be supplied with extension sections in multiples of 6-inches with rod and coupling as required to increase barrel length.
- E. The fire hydrant manufacturer shall provide local representation and support services, through an established vendor, within the County of El Paso. Acceptable manufacturers and models shall be:

American Flow Control	B84B
Clow	Medallion
Kennedy	Guardian K81D
M&H	Style 129
Mueller	Super Centurion

- F. Size. Minimum inside barrel diameter shall be 7-inches. Minimum diameter of the main valve opening shall be 5-inches.



- G. Traffic Type. The barrel and operating mechanism shall be so designed that in the event of an accident, damage, or breaking of the hydrant above or near the grade level, the main valve will remain closed and reasonably tight against leakage.
- H. Manufacturer shall guarantee that the hydrant valve stem will not be bent when the hydrant is damaged or broken at or near ground level. A safety breaking flange or thimble shall be provided. Provisions shall be made in the design of the stem to disconnect the stem from the hydrant parts above the standpipe break point in the event of a traffic accident.
- I. If breakable couplings are used, the design shall be such that the barrel safety flange and stem safety collar will break before any other hydrant part in the event of an accident. Design of coupling shall be such that no part of the coupling will drop into the hydrant barrel in the event of an accident.
- J. Drain Outlet. Upper valve plate, seat ring and drain ring or shoe bushing shall be bronze, to form an all bronze drain way. The drain valve shall be provided to drain the hydrant properly by opening as soon as the main valve is closed.
- K. Inlet Connections. Shall be mechanical joint, with accessories, gland, bolts, gaskets, and a 6-inch diameter inlet connection. Main valve facing against seats shall be synthetic rubber. Top of the stem or bonnet shall be equipped with O-ring seal. Hydrant shall be oil or grease lubricated.
- L. Outlet and Pumper Nozzles. There shall be two hose outlets with two 1/2-inch nozzles with National Standard hose coupling screw threads. The outlet nozzles shall be of the caulked type or mechanically connected into the barrel with an O-ring seal and a non-corrosive locking pin to lock the nozzle to the barrel.
- M. Pumper Nozzle shall have an inner diameter of 4-inches with threads conforming to the LVWD Standards.
- N. Nozzle caps shall have one 1-inch square nut, gaskets and non-kinking chains. The operating nut and nozzle cap nuts shall be one 1-inch square at the base and tapered to 7/8-inch square at the end and not less than 1-inch deep. Nozzle caps to be provided with rubber gaskets.
- O. Hydrant Operator. Shall be 1-inch square at the base and tapered to 7/8-inch at the end and not less than 1-inch deep. Attachment of the operator nut shall not, in any way, hinder operating the hydrant with the wrench. The hydrant operator shall open by turning left (counterclockwise).
- P. Hydrants shall be designed with O-ring seals to prevent water from damaging the operating threads.
- Q. Tamper Proof Cover. The hydrant shall be equipped with a tamper proof cover, with drainage holes, that deters unauthorized operation of the hydrant. The tamper proof cover shall provide adequate wrench clearance and shall have a minimum inside diameter of 2-1/4". The height of the cover shall range from 2-1/4" to 2-1/2", measured from the base at the bonnet to the top of the collar.
- R. Painting. Barrels above ground shall be prime coated and painted with two coats of paint, color shall be "aluminum" as approved by the Water Utility.

- S. Protective Coating. All interior ferrous surfaces of shoe exposed to flow shall be epoxy coated to a minimum dry thickness of 4 mils. Epoxy coating shall be factory applied by an electrostatic or thermosetting process in accordance with manufacturer's printed instructions. Epoxy materials shall be 100 percent powder epoxy or liquid epoxy conforming to AWWA C-550 and to the current requirements of the Food and Drug Administration and the EPA for potable water.

**PART 3 EXECUTION**

- A. Hydrants shall be installed in locations as shown on the Drawings or in standard locations approved by the Water Utility. Installation shall conform to typical details of the Water Utility. Paint damaged during installation shall be touched up. Hydrants shall be disinfected with the connecting pipe in accordance with Article IX "Cleaning, Disinfection and Testing of Water System" in these Specifications. All hydrants shall be furnished and left in good working order with control valve open.

**PART 4 MEASUREMENT AND PAYMENT**

- 4.1 Measurement and payment shall be made for this work item at the unit price bid as noted in the proposal.

**END OF SECTION**

**SECTION 02640 – POLYVINYL CHLORIDE (PVC) PRESSURE PIPE AND FITTINGS FOR  
WATERLINES**

**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

- A. Scope of Work.
- B. Submittals.
- C. Reference Standards.
- D. Quality Assurance.
- E. System Description.
- F. Delivery, Storage and Handling.
- G. Polyvinyl Chloride (PVC) Pipe and Fittings.
- H. Installation of PVC Pipe and Fittings.
- I. Jointing PVC Pipe.
- J. Testing (Pressure Pipeline).

**1.2 SCOPE OF WORK**

- A. Furnish all labor, materials, equipment and incidentals required and install and test polyvinyl chloride PVC pressure pipe and fittings, complete as shown on the Drawings and as specified herein.
- B. Pipe or piping refers to all pipe, fittings, material, and appurtenances required to construct PVC waterlines complete, in place.

**1.3 SUBMITTALS**

- A. No later than 10 calendar days after the Effective Date of the Agreement, submit the name of the pipe and fitting manufacturers and a list of materials to be furnished by each manufacturer. Also, include information on local representative for each manufacturer, if product is sold through a distributor.
- B. Shop drawings including piping layouts and schedules shall include dimensioning, fittings, types and locations of valves and appurtenances, joint details, restraint joints/fittings, gasket material, grade of material, and all other pertinent technical information for all items to be furnished.
- C. Prior to shipment of pipe, certified test reports that the pipe for this Contract was manufactured and tested in accordance with the ASTM and AWWA Standards specified herein shall be submitted.

**1.4 REFERENCE STANDARDS**

- A. American Society for Testing and Materials (ASTM)

1. ASTM D1784 Standard Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds.
  2. ASTM F477 Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe.
  3. ASTM D3139 Standard Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals.
- B. American Water Works Association (AWWA)
1. AWWA C110 Ductile-Iron and Gray-Iron Fittings, 3-inches through 48-inches for Water and Other Liquids.
  2. AWWA C111 Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.
  3. AWWA C605 Underground Installation of Polyvinyl Chloride (PVC) Pressure Pipe and Fittings for Water.
  4. AWWA C905 Polyvinyl Chloride (PVC) Water Transmission Pipe, Nominal Diameters 14 in. through 36 in.
  5. AWWA C900 Polyvinyl Chloride (PVC) Water Transmission Pipe, Nominal Diameters 4 in. through 12 in, for water distribution.
- C. Texas Commission on Environmental Quality (TCEQ)
1. Chapter §290 Rules and Regulations for Public Water Systems (Rules)
- D. American National Standards Institute/National Sanitation Foundation (ANSI/NSF)
1. Standard No. 14 – Plastic Piping Components and Related Materials.
  2. Standard No. 61 – Drinking Water System Components
- E. Where reference is made to one of the above standards, the revision in effect at the time of bid opening shall apply.

## 1.5 QUALITY ASSURANCE

- A. **All PVC pipe and fittings shall be from a single manufacturer. The supplier shall be responsible for the provisions of all test requirements specified in AWWA C905 and NSF Standard No. 14, as applicable. In addition, all PVC pipe to be installed under this Contract may be inspected at the plant for compliance with the requirements specified herein by an independent testing laboratory. The Contractor shall require the manufacturer's cooperation in these inspections.**
- B. Inspections of the pipe may also be made by the Engineer or other representatives of the Owner after delivery. The pipe shall be subject to rejection at any time on account of failure to meet any of the Specification requirements, even though pipe may have been accepted as satisfactory at the place of manufacture. Pipe rejected after delivery shall be marked for identification and shall be removed from the job at once.
- C. All newly installed pipes and related products must conform to American National Standards Institute/National Sanitation Foundation (ANSI/NSF) Standard 61 and must be certified by an organization accredited by ANSI.

- D. All C900 polyvinyl chloride pipe (PVC) and fittings shall be from a single manufacturer. Each length of PVC pipe supplied for the project shall be hydrostatically tested at the point of manufacturer to four times its rating class for a duration of 5 seconds in accordance with AWWA C900. Testing may be performed prior to machining bell and spigot. Failure of polyvinyl chloride (PVC) pipe shall be defined as any rupture or bulging of the pipe wall. Certified test results shall be furnished in triplicate to the Engineer prior to time of shipment.

#### 1.6 SYSTEM DESCRIPTION

- A. The equipment and materials specified herein are intended to be of standard types suitable for use in transporting potable water.
- B. Note information given on the drawings and in this section, especially concerning pressure, minimum thickness, etc. In case of a conflict, information given in the Specification shall govern.
- C. Contractor is responsible for compatibility between pipe materials, fittings and appurtenances.
- D. Unless otherwise noted, PVC pipe for the waterlines shall be designed for the following condition(s).
  - 1. Class: AWWA C900 DR 18  
Pressure  
Operating: 150 psi  
Testing: 215 psi

#### 1.7 DELIVERY, STORAGE AND HANDLING

- A. All items shall be bundled or packaged in such a manner as to provide adequate protection of the ends during transportation to the site. Any pipe damaged in shipment shall be replaced as directed by the Engineer.
- B. PVC items deteriorate in sunlight and are slightly brittle, especially at lower temperatures, so care shall be taken in loading, transporting, and unloading items to prevent injury to the items. All items shall be examined before installation and no piece shall be installed which is found to be defective. Handling and installation of pipe and fittings shall be in accordance with the manufacturer's instructions, referenced standards, and as specified herein.
- C. Any pipe or fitting showing a crack or which has received a blow that may have caused an incident fracture, even though no such fracture can be seen, shall be marked as rejected and removed at once from the work.
- D. While stored, pipe shall be adequately supported from below at not more than 3-ft intervals to prevent deformation. The pipe shall be stored in stacks no higher than 2 rows.
- E. Pipe and fittings shall be stored in a manner, which will keep them at ambient outdoor temperatures and out of the sunlight. Temporary shading as required to meet this requirement shall be the responsibility of the Contractor. Covering of the pipe and fittings that allows direct or indirect sunlight will not be permitted.
- F. If any defective item is discovered after it has been installed, it shall be removed and replaced with an exact approved replacement item in a satisfactory manner by the Contractor, at the Contractor's own expense. All pipe and fittings shall be thoroughly cleaned before installation and the interior shall be kept clean until testing. At the end of the workday, the end of the last pipe installed shall be covered to avoid dust/solids from entering the pipe.

- G. In handling the items, use special devices and methods as required to achieve the results specified herein. No un-cushioned devices shall be used in handling the item.

## PART 2 PRODUCTS

### 2.1 POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS

- A. PVC pressure pipe shall conform to the requirements of AWWA C900. All pipes shall be Pressure Class 150 with a Dimension Ratio of 18. The pipe shall be PVC 1120 made from PVC compounds Class 12454-A or Class 12454-B as defined in ASTM D1784. Each pipe length shall be marked with the manufacturer's name or trademark, size, material code, pressure class and AWWA designation number. In addition, all pipes for use in public water systems must also bear the National Sanitation Foundation Seal of Approval (NSF-pw).
- B. PVC pipe shall have bell and spigot push-on joints. The bell shall consist of an integral wall section with a solid cross-section elastomeric gasket securely locked in place to prevent displacement during assembly. Installation of elastomeric gasketed joints and performance of the joint shall conform to ASTM F477 and ASTM D3139.
- C. All pipes and fittings shall contain no more than 8.0% lead conforming to Section §290.44(a) (2) of TCEQ Rules and Regulations for Public Water Systems.
- D. All fittings shall be cast or ductile iron conforming to AWWA C110 for mechanical joints. All adaptors, fittings and transition gaskets necessary to connect cast or ductile iron fittings to PVC shall be furnished.
- E. Mechanically restrained joints shall be used at all changes in direction and as per manufacturer's recommendations. The Contractor shall submit adequate calculations substantiating their effectiveness to withstand the anticipated test pressure.

## PART 3 EXECUTION

### 3.1 INSTALLATION OF PVC PIPE AND FITTINGS

- A. No single piece of pipe shall be laid unless it is straight. The centerline of the pipe shall not deviate from a straight line drawn between the centers of the openings at the ends of the pipe by more than  $\frac{1}{16}$ -in per foot of length. If a piece of pipe fails to meet this requirement check for straightness, it shall be rejected and removed from the site. Laying instructions of the manufacturer shall be explicitly followed.
- B. If any defective pipe is discovered after it has been installed, it shall be removed and replaced with a sound approved pipe in a satisfactory manner at no additional cost to the Owner. All pipe and fittings shall be thoroughly cleaned before installation, shall be kept clean until they are used in the work and when laid, shall conform to the lines and grades required. PVC pipe and fittings shall be installed in accordance with requirements of the manufacturer, AWWA C605 or as otherwise provided herein.

- C. As soon as the excavation is complete to normal grade of the bottom of the trench, screened gravel bedding shall be placed, compacted and graded to provide firm, uniform and continuous support for the pipe. Bell holes shall be excavated so that only the barrel of the pipe bears upon the bedding. The pipe shall be laid accurately to the lines and grades indicated on the drawings. Blocking under the pipe will not be permitted. Screened gravel shall be placed evenly on each side of the pipe to mid-diameter and hand tools shall be used to force the screened gravel under the haunches of the pipe and into the bell holes to give firm continuous support for the pipe. Screened gravel shall then be placed to 12-in above the top of the pipe. The initial 3-ft of backfill above the screened gravel backfill shall be placed in 1-ft layers and carefully compacted. Generally the compaction shall be done evenly on each side of the pipe and compaction equipment shall not be operated directly over the pipe until sufficient backfill has been placed to ensure that such compaction equipment will not have a damaging effect on the pipe. Equipment used in compacting the initial 3-ft of backfill shall be approved by the pipe manufacturer's representative prior to use.
- D. All pipe shall be sound and clean before installation. Good alignment shall be preserved during installation. The deflection at joints shall not exceed that recommended by manufacturer. Fittings, in addition to those shown on the plans, shall be provided, if required, in crossing utilities, which may be encountered upon opening the trench.
- E. When cutting pipe is required, the cutting shall be done by machine, leaving a smooth cut at right angles to the axis of the pipe. Cut ends of pipe to be used with a bell shall be beveled to conform to the manufactured spigot end.
- F. The Engineer may examine each bell and spigot end to determine whether any preformed joint has been damaged prior to installation. Any pipe having defective joint surfaces shall be rejected, marked as such, and immediately removed from the job site.
- G. Each length of the pipe shall have the assembly mark aligned with the pipe previously laid and held securely until enough backfill has been placed to hold the pipe in place. Joints shall not be "pulled" or "cramped".
- H. Before any joint is made, the pipe shall be checked to assure that a close joint with the next adjoining pipe has been maintained and that the inverts are matched and conform to the required grade. The pipe shall not be driven down to grade by striking it.
- I. Precautions shall be taken to prevent flotation of the pipe in the trench.
- J. When moveable trench bracing such as trench boxes, moveable sheeting, shoring or plates are used to support the sides of the trench, care shall be taken in placing and moving the boxes or supporting bracing to prevent movement of the pipe, or disturbance of the pipe bedding and the screened gravel backfill. Trench boxes, moveable sheeting, shoring or plates shall not be allowed to extend below the top of the pipe. As trench boxes, moveable sheeting, shoring or plates are moved, screened gravel shall be placed to fill any voids created and the screened gravel and backfill shall be recompacted to provide uniform side support for the pipe.
- L. Restrained joints shall be employed as specified herein.

### 3.2 JOINTING PVC PIPE (Push-on type)

- A. Joints shall be made in strict accordance with the manufacturer's instructions. Pipe shall be laid with bell ends looking ahead. A rubber gasket shall be inserted in the groove of the bell end of the pipe and the joint surfaces cleaned and lubricated. The plain end of the pipe to be entered shall then be inserted in alignment with the bell of the pipe to which it is to be joined and pushed home with a come-along or by other means. Check that the reference mark on the spigot end is flush with the end of the bell.

3.3 TESTING (PRESSURE PIPELINE)

A. Testing of waterlines shall be as per section 02675 of these specifications.

PART 4 MEASUREMENT AND PAYMENT

4.1 No separate measurement or payment shall be made for this work item, but it shall be included in the unit price bid for the pipeline work as noted in the proposal.

**END OF SECTION**



## **SECTION 02675 – DISINFECTION AND TESTING OF WATER LINES**

### **PART 1 GENERAL**

#### **1.1 SECTION INCLUDES**

- A. Scope of Work.
- B. References.
- C. Submittals.
- D. Scheduling.
- E. Quality Assurance.
- F. Equipment.
- G. Performance Requirements.

#### **1.2 SCOPE OF WORK**

- A. Contractor shall furnish all labor, materials, tools, equipment and related items required to test domestic water line systems.
- B. All domestic water lines installed in this Contract, including waterlines, which are installed between or connected to existing water lines, shall be tested in accordance with LVWD requirements.
- C. Work shall include furnishing all pumps, meters, gauges, and other appurtenances, including taps to expel air, required for conducting tests. The Contractor shall furnish equipment, piping and appurtenances required to transport water used in testing from source to test location.
- D. The Contractor shall provide adequate labor, tools and equipment to operate valves and to locate and repair any leaks discovered during the initial filling of a piping system and during testing.

#### **1.3 REFERENCES**

- A. American Water Works Association (AWWA).
- B. Texas Commission on Environmental Quality (TCEQ) - Rules and Regulations for Public Water Systems.

#### **1.4 SUBMITTALS**

- A. Test Reports Shall Include:
  - 1. Date of test.
  - 2. Identification of piping tested.
  - 3. Test fluid.
  - 4. Test pressure.

5. Remarks, to include such items as:
  - a. Leaks (type, location).
  - b. Repairs made on leaks.
6. Contractor's signature certifying the results.

B. Submit under provisions of Section 01300.

## 1.5 SCHEDULING

- A. Time and sequence of testing shall be scheduled by the Contractor, subject to review and approval by the Engineer, LVWD and Owner. Submit testing plan to Engineer at least 10 days before starting testing operations.
- B. Notify Engineer 24 hours in advance of testing.

## 1.6 QUALITY ASSURANCE

- A. Conduct tests on buried piping that is to be hydrostatically tested after the trench has been completely backfilled. The Contractor may, if field conditions permit and if approved by the Engineer, partially backfill the trench and leave the joints open for inspection and conduct an initial service leak test. The acceptance test shall not, however, be conducted until all backfilling has been completed.
- B. Conduct testing on exposed piping after the piping has been completely installed, including all supports, hangers, and anchors, but prior to insulation.
- C. Testing of pipe with concrete thrust blocking shall not be performed until the concrete has cured at least five days.
- D. If any pipe fails to meet the specified pressure/leakage requirements the piping shall be repaired at the expense of the Contractor, including retesting.
- E. No pipe installation will be accepted until all known leaks have been repaired whether or not leakage is within allowable limits. Locating and repairing of leaks shall be performed by the Contractor at no additional cost to the Owner.
- F. The Contractor shall certify that all required tests have been successfully completed before the piping is accepted.
- G. All pressure and leakage tests shall be observed by the Engineer's Representative.

## PART 2 PRODUCTS

### 2.1 EQUIPMENT

- A. Portable Pressure Pump System: Including pump, motor, 2 isolation valves, quick connect/disconnect fittings at pump intake and discharge and 250 pound per square inch (psi) oil damped pressure gage (reading in 5 psi increments) mounted downstream of discharge side isolation valve.
- B. Supply water tank with meter or gauge to measure water quantities used during test.

## PART 3 EXECUTION

### 3.1 GENERAL

- (1) After completion of all pipe line section, the following procedure will be used to clean, sterilize and pressure test the pipeline. The pipeline shall be filled and flushed until all evidence of dirt or debris has been washed from the pipeline. The line shall then be refilled if necessary, introducing the chlorinating material. Each valve section shall then be brought up to test pressure and the leakage test performed. After all sections have been accepted, all valves shall be cleaned and the line left full of sterilizing water.

Water for disinfection and testing of water mains will be provided at the CONTRACTOR's expense, as described in "Water for Construction".

- (2) Quality Assurance. The CONTRACTOR shall take special care to keep the interior of the pipe clean during storing, handling, and laying operations in order to reduce the need for flushing to an absolute minimum. In addition, all open ends shall be tightly covered whenever unattended to prevent small animals and dirt from entering the pipeline after it is in place. Testing firm shall be a company specializing in testing and examining potable water systems and be approved by the State of Texas. Submit bacteriologist's signature and authority associated with testing
- (3) Sterilization/Disinfection. Before acceptance for operation, each unit of completed water system shall be sterilized as specified below or as prescribed by Chapter 290 of TCEQ Rules and Regulations for Public Water Systems and AWWA Standard C-651. New mains shall be thoroughly disinfected and then flushed and sampled before being placed in service. Samples shall be collected for microbiological analysis to check the effectiveness of the disinfection procedure. Sampling shall be repeated if contamination persists. A minimum of one sample for each 1,000 feet of completed waterline will be required. The unit to be sterilized shall be thoroughly flushed with water until all entrained dirt and mud have been removed before introducing the chlorinating material. The CONTRACTOR shall provide all chlorination material for sterilization at his cost. The chlorinating material shall provide a dosage of not less than 50 parts per million and shall be introduced into the water line in an approved manner. The treated water shall be retained in the pipe long enough to destroy all nonspore-forming bacteria. Except where a shorter period is approved, the retention time shall be at least 25 hours after which the lines shall be flushed clean until the chlorine concentration in the water leaving the lines is no higher than that generally prevailing in the system, or less than 1 ppm. Chlorine solution with a higher residual may remain in the line, without flushing, if approved by the Engineer.

Procedure. During installation, the interior of all pipe, fittings and other accessories shall be kept as free as possible from dirt and foreign matter at all times. If, in the opinion of the Owner or Engineer, the pipe contains dirt or foreign matter that could not be removed during the flushing operation, the interior of the pipe shall be cleaned and swabbed with a bactericidal solution. When pipe laying is not in progress, the open ends of pipe shall be sealed with watertight plugs. If water has accumulated in the trench, the seal shall remain in place until the trench water has been removed to such an extent that it will not enter the pipe.

After the completion of hydrostatic pressure tests and prior to disinfection, the pipeline shall be flushed, as thoroughly as possible with the water pressure and outlets available. If feasible, flushing rate should develop a velocity in the pipeline of at least 2.5 fps. The minimum quantity of water used for flushing shall be in excess of the storage capacity of the pipeline, to insure that clean water has traversed the entire length of the line.

After flushing has been completed to the point that all apparent dirt and foreign matter have been removed from the pipeline, calcium hypochlorite solution shall be injected into the pipeline as provided in AWWA Standard C-651.

Following chlorination, all treated water shall be flushed from the newly laid pipeline at its extremities until the replacement water throughout its length is proved by test to be: a) comparable in quality to the potable water served from the existing water supply system, or b) as approved by the public health authority having jurisdiction. Should the initial treatment fail to achieve the satisfactory quality described above, the original chlorination procedure shall be repeated until satisfactory results are obtained.

Contractor shall not discharge water used for disinfection purposes to any waterway or water course known to support fish or wildlife, if the water contains more than 4 ppm of chlorine. Dechlorination by methods acceptable to the Owner and Engineer must be used if Contractor proposes discharge to waterways or water courses known to support fish or wildlife. Discharge to holding ponds so that evaporation or infiltration will occur, or use in obtaining optimum moisture content in trench backfill or embankments, or other approved discharge methods may be used in lieu of dechlorination.

Bacteriological report shall include, at minimum, the following information:

1. Date issued, project name, and testing laboratory name, address, and telephone number.
  2. Time and date of water sample collection.
  3. Name of person collecting samples.
  4. Test locations.
  5. Initial and 24 hour disinfectant residuals in ppm for each outlet tested.
  6. Coliform bacteria test results for each outlet tested.
- (4) Hydrostatic Pressure and Leakage Testing.** All valves and hydrants shall be checked for proper operation and pressure the pipe system shall be subjected to a hydrostatic pressure and leakage test. After completion of each valve section and following the filling and disinfection of the section, the system shall be subjected to this test. The meter, pressure gauges, pump, small piping and hose connections, and all labor necessary for conducting the test, shall be furnished by the CONTRACTOR.

After the section of pipeline has been filled, water shall be pumped into the section and the pressure raised to 150 psi. This test pressure shall be maintained for a period of at least two (2) hours. The water required to maintain this pressure shall be delivered into the pipe through the meter. The amount of water through the meter during the two-hour test period will be the total leakage. Should this leakage exceed the allowable amount, as specified herein, the CONTRACTOR shall make such repairs as may be required until the actual leakage, as determined by succeeding tests, is no greater than the allowable as determined by TCEQ Rules and Regulations for Public Water Systems Section §290.44(a)(5) or by the following formula, whichever is more stringent:

$$L = S \times D \times (P^{1/2}) / 133,200$$

L = 0 in above ground systems and otherwise  
L = Allowable Leakage in gallons/hour  
S = Length of pipe tested in feet  
D = Nominal diameter of pipe in inches  
P = Average test pressure during the test, in pounds per square inch, gage; determined by computing the weighted average of actual pressures on various portions of the section.

After all sections of the pipeline have been tested, as described above, all valves shall be closed and the line left filled with the water to be used for disinfection and testing. Under no circumstances will the Contractor be allowed to open/close existing valves on the existing potable water system.

**PART 4 MEASUREMENT AND PAYMENT**

- 4.1 No separate measurement or payment shall be made for this work item, but it shall be included in the unit price bid for the pipeline work as noted in the proposal.

**END OF SECTION**

SECTION 02700 – WATER SERVICE CONNECTIONS

PART 1 GENERAL

1.1 DESCRIPTION

- A. This Item shall govern for the construction of water service connections and fire lines. Contractor shall furnish labor, materials, equipment and incidentals necessary to install water service connections and fire lines, complete for potable water supply. New water meters, unless otherwise specified, will be furnished by the Utility when required. All other materials required, including meter boxes, shall be furnished and installed by the CONTRACTOR. Contractor shall furnish labor, materials, equipment, and incidentals to fabricate, furnish, and install pre-cast concrete meter boxes and vaults in accordance with LVWD Requirements.

PART 2 PRODUCTS

2.1 GENERAL

- A. Submittals. Submittals shall include certifications from manufacturers that the products comply with appropriate ASTM, AWWA and Utility Standards. Submit shop drawings on meter boxes and associated hardware to the ENGINEER for approval prior to fabrication.
- B. Materials.

1. Water Service Connections.

**Castings and Washer Nuts.** Shall be of certified cast bronze composition, 85-5-5-5 percent per ASTM B-62, fully formed, tapped threads meeting requirements of AWWA C-800 for underground service.

**Gaskets.** Shall be self-sealing, 100 percent neoprene or Buna-N rubber, formulated for water service.

**Service Saddles.** Shall be two or three piece all-bronze, single strap with National Coarse Class 2 thread. Saddles shall be suitable for Class 200 asbestos cement pipe, cast iron pipe and ductile iron pipe with double straps. Saddles for C-900 or C-905 polyvinyl chloride (PVC) pipe shall be single strap. Saddle body shall extend 360 degrees around pipe.

Acceptable manufacturers are as follows:

Ford Meter Box Co.

James Jones Co.

A.Y. McDonald Mfg. Co.

Mueller

**Straps.** Shall be silicon bronze, approximate tensile strength of 70,000 psi chamfered for easy nut starting and flattened to provide wide bearing surface.

**Valves.** Shall be in accordance with Utility acceptable standards and requirements for Gate Valves. Valves for copper pipe shall be bronze with minimum 85 percent copper content casting.

Corporation stops shall be as manufactured by Ford F1000-3Q or approved equal.

Angle ball meter stop with padlock wings with copper compression inlet by meter coupling, such as James Jones Company, McDonald, Ford, or approved equal, shall be

used for 3/4-inch through 1-inch meters; except that valves for 2-inch meters shall be compression/flanged ends in lieu of outlet coupling nut.

**Service Pipe.** Shall be copper Type "K" for sizes up to and including 2 inch, meeting ASTM B-88. Pipe for 3-inch services shall be 4-inch PVC per AWWA C-900, with reducers at meters. Pipe for 4-inch services and larger shall be PVC pipe per AWWA C-900. Fittings for copper pipe shall be bronze. Fittings for PVC pipe shall be ductile iron.

2. **Meter Boxes.** Concrete meter boxes shall meet the following standards:

ASTM A-27	Specifications for Steel Castings, Carbon, for General Application
ASTM A-36	Specification for Structural Steel
ASTM A-48	Specification for Gray Iron Castings
ASTM C-33	Specification for Concrete Aggregates
ASTM C-150	Specification for Portland Cement
ASTM C-309	Specification for Liquid Membrane-Forming Compounds for Curing Concrete
ASTM C-615	Specification for Granite Building Stone

Cement shall be Portland cement conforming to ASTM C-150, Type I or Type III. Concrete shall have a minimum 28-day compressive strength of 4,500 psi; a water cement ratio of 0.5 or less by weight; and a maximum 5.5 gallons water per sack cement. All concrete shall be handled from the mixer or transport vehicle to the place of final deposit in a continuous manner, as rapidly as practicable, and without segregation or loss of ingredients, until the operation is completed. Concrete shall be placed in layers not over 2-feet deep. Each layer shall be compacted by mechanical internal or external vibrating equipment. Duration of the vibration cycle shall be limited to the time necessary to produce satisfactory consolidation without causing objectionable segregation.

**Aggregates**, other than lightweight aggregates, shall conform to specifications outlined by ASTM C-33. Aggregates shall be free of deleterious substances and graded in a manner as to produce a homogeneous concrete mix. All materials are to be accurately weighed at a central batching facility for mixture.

**Curing** for the purposes of early re-use of forms, the concrete may be heated in the mold, after initial seat has taken place. The temperature shall not exceed 71.11<sup>o</sup>C (160 degrees Fahrenheit) and the temperature shall be raised from normal ambient temperatures at a rate not to exceed 4.44<sup>o</sup>C (40 degrees Fahrenheit) per hour. The cured unit shall not be removed from the forms until sufficient strength is obtained for the unit to withstand any structural strain that may be subjected during the form stripping operation. After the stripping of forms further curing by means of water spraying or a membrane curing compound may be used and shall be of a clear or white type, conforming to ASTM C-309.

**Steel Reinforcing** shall comply with ASTM A-615 Grade 60 steel,  $F_y = 60,000$  psi. Minimum concrete cove on re-bar top slab shall be 1.25" and 1.5" on re-bar for walls. Bar bending and placement to comply with latest ACI Standards. All reinforcing steel, including welded wire mesh, shall be of the size and in location as shown on the plans. All reinforcing shall be sufficiently tied to withstand displacement during the pouring operation. Lifters shall be designed to handle the imposed weights, and shall be placed as specified on the drawings or manufacturer's requirements.

**Steel Frames and Covers** shall conform to ASTM A-27, Grade 70-36. Structural welded steel shall conform to the requirements of ASTM A-36 with dimensions as specified on the drawings.

**Cast Iron Ring and Covers** shall conform to the requirements of ASTM 48, Class 30. All castings shall be of uniform quality, free from blowholes, shrinkage, distortion or other defects. They shall be smoothed and well cleaned by shot-blasting. All castings shall be manufactured true to pattern. Component parts shall fit together in a satisfactory manner. Round frames and covers shall have continuously machined bearing surfaces to prevent rocking and rattling. Tolerances shall not exceed 1/16-inch per foot. Deviation in weight shall not exceed 5 percent.

- 3. Tapping Sleeves and Pipe Couplings.** The Contractor shall furnish labor, materials, equipment and incidentals necessary to install tapping sleeves and pipe couplings as specified. All tapping sleeves and pipe couplings furnished for incorporation in the work shall be suitable for operation at pressures as specified for the pipelines in which they will be installed, including test pressures and surge allowances.

**Submittals.** The Contractor shall furnish all necessary shop drawings as required.

**Cast Tapping Sleeves.** Tapping sleeves shall be of suitable construction and reinforced to provide resistance to line pressures. They shall be designed for the pipe size and material on which they will be used. Tapping sleeves shall be built in halves for assembly around the main to be tapped. The branch outlet shall have a flanged face for bolting to the tapping valve. The inside diameter of outlet branch shall be sufficiently larger than the nominal size to provide clearance for the full size cutters of the tapping machine.

Acceptable manufacturers shall be:

Mueller Company  
Kennedy Valve Squareseal  
M&H

Type 1: Cast tapping sleeve allows water to circulate between the sleeve and the outside surface of the pipe. Gaskets of suitable material, designed for use on potable water shall form watertight joints along the entire length of the sleeve. Circumferential joints at the ends of the run of the sleeves shall be sealed by mechanical joints, conforming to AWWA C-111 as to dimensions, clearances, and materials, except that gaskets and glands form mechanical joints shall be totally confined or compressed between ridges or grooves extending continuously for the full length of both halves of the sleeve casting. Bolts shall be located close to the outside of the gaskets and spaced so as to exert sufficient pressure to form a watertight joint and withstand stresses imposed by the intended use.

Type 2: Water is confined to the immediate area of the tap opening. The outlet half of each sleeve shall be fitted with a continuous gasket of approximately circular cross section, permanently cemented into a groove surrounding the outlet opening. The back half of each sleeve shall be fitted with elastomeric pads, a metal shoe, or other device for developing adequate pressure on the gasket to prevent leakage at any pressure within the design capacity of the pipe.

**Protective Coating.** All surfaces exposed to flow shall be coated in accordance with AWWA C-550.

**Fabricated Tapping Sleeves.** Fabricated tapping sleeves shall be rated for a working pressure of 150 psi. All tapping sleeves shall meet the following requirements:

Acceptable manufacturers of fabricated tapping sleeves shall be:



Ford	FTSC
JCM	412 ESS
Romac	FTS 420

**Markings.** Each tapping sleeve shall be permanently marked to identify the outer diameter size range.

**Test Plug.** Shall be a 3/4" NPT with standard square head.

**Nuts and Bolts.** Shall be high strength, corrosion resistant 18-8 Type 304 Stainless Steel.

**4" - 12".** Tapping sleeve body and flange shall be 18-8 Type 304 Stainless Steel. The body, lug, and gasket armor plate shall be in compliance with ASTM A-240. All metal surfaces shall be passivated, in accordance with ASTM A-380, after fabrication.

**Gasket.** Shall provide a watertight sealing surface around the full circumference of the pipe. Gaskets shall be formed of natural or synthetic rubber.

**Lugs.** Shall be welded to the shell and prevent alignment problems by allowing the bolts to pass through. Bolts shall not be welded to the sleeve.

**16" and Larger.** Tapping sleeves shall have a heavy welded steel body in compliance with ASTM A-36 or ASTM A-285, Grade C.

**Gasket.** Shall be natural or synthetic rubber compounded for water use and shall provide a watertight sealing surface.

**Flange.** Shall be constructed in accordance with AWWA C-207 Class D and shall be properly recessed for aligning the sleeve and tapping valves.

**Protective Coating.** Steel tapping sleeves shall be coated with epoxy. Minimum thickness shall be 8 mils.

**Flexible Couplings.** Shall be furnished and installed where shown on the drawings, specified, or in locations, as approved by the Engineer. Flexible couplings installed underground shall be ductile iron and Type 316 Stainless Steel nuts and bolts shall be used. When flexible couplings are used as expansion joints, the pipe ends shall be separated to allow for expansion. Where indicated on the drawings or required by field conditions, flexible couplings shall be suitable for connecting pipes having different outside diameters. Flanged coupling adapters shall be restrained with tie rods.

**Protective Coating.** Entire coupling assembly shall be given a 20 mil coating of T.C. Mastic as manufactured by Tape Coat Company, Bitumastic No. 50 as manufactured by Koppers Company, or approved equal.

**Ductile Iron Pipe.** Flexible Joint Couplings shall be Dresser Style 38, Rockwell Style 411, or equal. Flanged coupling adapters for ductile iron pipe shall be Dresser Type 127, Rockwell International 112, Baker Series 600, or equal.

**Steel Pipe.** Flexible couplings shall be Dresser Style 38, Rockwell International 411, or equal, except where other styles are required for special conditions.

**Gaskets.** Shall be neoprene rubber or equal.

**Installation.** Tapping sleeves shall be installed in accordance with the manufacturer's recommendations. Tapping valves shall meet the requirements of SECTION 5.0, Gate Valves. Disc and seat ring shall be so constructed that the inside diameter of the ring is at least 3/16-inch larger than nominal size of valve. Tapping sleeve and valve assembly shall be blocked as indicated.

## PART 3 EXECUTION

### 3.1 GENERAL

- A. Service taps for 3/4-inch to 2-inch services shall be made with service saddle to be furnished and installed by the CONTRACTOR. No direct taps, i.e. without the saddle, shall be made. Taps for 3-inch and 4-inch services shall be made using 4-inch tapping sleeve and valve. Copper service pipe attached to metallic water mains shall be insulated at the corporation stop with a dielectric insulator. Installation shall comply with Utility Standards for Excavating, Backfilling and Compacting.

Multiple tapping, two or more taps on a length of pipe, shall not be on a common line parallel to the longitudinal axis of the pipe and shall be no closer than 18-inch on the longitudinal axis of the pipe.

No splices shall be allowed in any portion of the service pipe run between the main line connection and the meter assembly. No dry or direct taps are authorized.

Meter installations larger than 1-inch shall be made with a bypass meter connection according to the following schedule:

1-1/2 inch and 2-inch meters = 1-inch bypass  
3-inch and 4-inch meters = 2-inch bypass  
6-inch and 8-inch meters = 3-inch bypass

- B. Existing Services. Where existing water services are indicated on the Drawings to be replaced, relocated, or reconnected to new water lines, the CONTRACTOR shall make prior arrangements with each water customer as to the time and length of shutdown necessary. The customer shall be notified 24 hours before any connections are made. A maximum shut-off time of four (4) hours will be allowed for making connections, after which time the CONTRACTOR shall supply the customer with potable water from an approved source, at no additional cost to the Owner.
- C. Metallic Tracer Tape. For 3-inch services and larger (i.e. PVC), width shall be a minimum of 6-inch or twice the line diameter. The burial depth shall not exceed 36-inches below final grade nor be at an elevation of less than 12-inches above the utility line. Recommended burial depth shall be according to the tape manufacturer. Color of tape shall conform to American Public Works Association (APWA) color code. Acceptable manufacturer shall be THOR Enterprises, Inc., "Magnatec" or equivalent as approved.
- D. Meter Box Installation. Meter boxes shall be installed in accordance with these specifications and Utility Standard Details. Install to grade matching top of curb. Meter boxes shall not be installed under sidewalks, driveways, or proposed above-ground structures. Where no curbing exists, install boxes in accessible locations beyond limits of street surfacing, walks, and driveways.

The following standard meter boxes shall be installed for their respective meter size, unless otherwise determined and approved by the Utility.

<b>STANDARD METER BOXES</b>			
<b>METER SIZE</b>	<b>BOX TYPE</b>	<b>CONSTRUCTION</b>	<b>DIMENSIONS W x H</b>
3/4-inch	Type A	Single Unit	19.25 in. O.D. x 17 in.
1 inch	Type B	Single Unit	26 in. O.D. x 17 in.
1-1/2 in. to 2 in.	Type C	Single Unit	50 in. SQ x 24 in.
3 in. and larger	Type D	Modular	7 ft.-8 in. SQ x 4 ft.-6 in.

Where it is necessary to install Type A or B boxes for 3/4-inch or 1-inch meters under roadways or traffic bearing surfaces, boxes shall be encased in 12-inches concrete 3,000 psi minimum.

- E. Testing and Flushing Procedures. All services shall be pressure tested for leakage by opening the corporation or service valve at the main service connection point, maintaining the meter angle valve closed, and visually observing all connections and piping for leaks. If no leaks are observed, the service line shall then be flushed as follows. The angle valve is opened to "full" and then the corporation valve is slowly opened to full capacity. Water is allowed to flow until piping has been thoroughly flushed. Then the angle valve is slowly closed to prevent water hammer or shock pressure, which might rupture the main or adjacent water service connections. If no customer piping is currently connected to the meter outlet connection, a fitted plug shall be used at the end of this connection to prevent the entrance of dirt or muddy water.

**PART 4 MEASUREMENT AND PAYMENT**

- 4.1 Measurement and payment shall be made for this work item at the unit price bid for as noted in the proposal for this item.

END OF SECTION

## COUNTY OF EL PASO, TEXAS

### **CERTIFICATIONS REGARDING LOBBYING, DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS; DRUG-FREE WORKPLACE REQUIREMENTS; FEDERAL DEBT STATUS, AND NONDISCRIMINATION STATUS AND IMPLEMENTING REGULATIONS\***

#### **Instructions for the certifications:**

#### **General Requirements**

The County of El Paso, Texas is required to obtain from all applicants of federal funds or pass-through certifications regarding federal debt status, debarment and suspension, and a drug free workplace. Institutional applicants are required to certify that they will comply with the nondiscrimination statutes and implementing regulations.

Applicants should refer to the regulations cited below to determine the certifications to which they are required to attest. Signature of the form provides for compliance with certification requirements under 21 CFR part 1405, "New Restrictions on Lobbying," 21 CFR part 1414, Government wide Debarment and Suspension (Non-procurement), Certification Regarding Federal Debt Status (OMB Circular A-129), and Certification Regarding the Nondiscrimination Statutes and Implementing Regulations. The certifications shall be treated as a material representation of fact upon which reliance will be placed when the County of El Paso determines to award the covered cooperative agreement

#### 1. LOBBYING

As required by Section 1352, Title 31 of the U.S. Code, and implemented in 21 CFR part 1405, for persons entering into a cooperative agreement over \$100,000, as defined at 21 CFR Part 1405, the applicant certifies that;

- (a) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the making of any Federal grant, the entering into continuation, renewal, amendment, or modification of any Federal grant or cooperative agreement,
- (b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal Grant or cooperative agreement, the undersigned shall complete and submit Standard Form -LLL, "Disclosure of Lobbying Activities," in accordance with its instructions;
- (c) The undersigned shall require that the language of this certification be included in the award document for all sub-awards at all tiers (including sub-grants, contracts under grants and cooperative agreements, and subcontracts) and that all sub-recipients shall certify and disclose accordingly.

## 1. DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

As required by Executive Order 12549, Debarment and Suspension and implemented at 21 CFR Part 1404, for prospective participants in primary covered transactions

A. The applicant certifies that it and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, sentenced to a denial of Federal benefits by a State or Federal court, or voluntarily excluded from covered transactions by any Federal department or agency;

(b) Have not within a three-year period preceding this application been convicted of or and 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 governmental entity (Federal, State, or local) terminated for cause or default; and

B. Where the applicant is unable to certify to any of the statements in this certification, he or she shall attach an explanation to the application.

## 2. DRUG-FREE WORKPLACE

As required by the Drug Free Workplace Act of 1988, and implemented at 21 CFR Part 1404 Subpart F.

A. The applicant certifies that it will or will continue to provide a drug free workplace by:

(a). Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the applicant's workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(b) Establishing an on-going drug free awareness program to inform employees about:  
(1) The dangers of drug abuse in the workplace;  
(2) The applicant's policy of maintaining a drug free workplace;  
(3) Any available drug counseling, rehabilitation, and employee assistance programs; and  
(4) The penalties that may be imposed upon employees for drug abuse violation occurring in the workplace;

(c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph

(d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee must

(1) Abide by the terms of the statement; and  
(2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction.

(e) Notifying the agency, in writing, within 10 calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such

convictions. Employers of convicted employees must provide notice including position title, to: The County of El Paso, Texas, 500 East San Antonio Street, Suite 406, El Paso, Texas 79901. Notice shall include the identification number of each affected grant

(f) Taking one of the following actions within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted:

(1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or

(2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal State, or local health, law enforcement, or other appropriate agency

(g) Making a good faith effort to continue to maintain a drug free workplace through implementation of paragraphs (a), (b), (c), (d), (e), and (f).

3. CERTIFICATION REGARDING FEDERAL DEBT STATUS (OMB Circular A-129)

The Applicant certifies to the best of its knowledge and belief, that it is not delinquent in the repayment of any federal debt.

4. CERTIFICATION REGARDING THE NONDISCRIMINATION STATUTES AND IMPLEMENTING REGULATIONS

The applicant certifies that it will comply with the following nondiscrimination statues and their implementing regulations: (a) title VI of the Civil right Act of 1964 (42 U.S.C. 2000D et seq.) which provides that no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of or be otherwise subjected to discrimination under any program or activity for which the applicant received federal financial assistance; (b) Section 504 of the rehabilitation Act of 1973, as amended (29 U.S.C. 794), which prohibits discrimination on the basis of handicap in programs and activities receiving federal financial assistance; (c) title IX of the Education Amendments of 1972m as amended (20 U.S.C. 1981 et seq.) which prohibits discrimination on the basis of sex in education programs and activities receiving federal financial assistance; and (d) the Age Discrimination Act of 1975, and amended (42 U.S.C. 6101 ec seq.) which prohibits discrimination on the basis of age in programs and activities receiving federal financial assistance, except that actions which reasonably take age into account as a factor necessary for the normal operation or achievement of any statutory objective of the project or activity shall not violate this statute.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above certifications.

\_\_\_\_\_  
Business Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name of Authorized Representative

\_\_\_\_\_  
Signature of Authorized Representative

\*All three (3) pages of this document must be included in all responses.

# COUNTY OF EL PASO PURCHASING DEPARTMENT

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MDR BUILDING, 800 EAST OVERLAND  
ROOM 300, EL PASO, TEXAS 79901  
(915) 546-2048, FAX: (915) 546-8180

PITI VASQUEZ, PURCHASING AGENT  
JOSE LOPEZ, JR. ASST. PURCHASING AGENT  
LUCY BALDERAMA, INVENTORY BID TECHNICIAN

## **BIDDING CONDITIONS**

This is the only approved instruction for use on your invitation to bid. Items below apply to and become a part of the terms and conditions of the bid.

1. BY SUBMITTING A BID, EACH BIDDER AGREES TO WAIVE ANY AND ALL CLAIMS IT HAS OR MAY HAVE AGAINST THE COUNTY OF EL PASO, AND ITS OFFICERS, AGENTS AND EMPLOYEES, ARISING OUT OF OR IN CONNECTION WITH: THE DOCUMENTS, PROCEDURES, ADMINISTRATION, EVALUATION, OR RECOMMENDATION OF ANY BID; THE WAIVER BY EL PASO COUNTY OF ANY REQUIREMENTS UNDER THE BID DOCUMENTS OR THE CONTRACT DOCUMENTS; THE ACCEPTANCE OR REJECTION OF ANY BIDS; AND THE AWARD OF THE CONTRACT.
2. Bids must be in the Purchasing Department BEFORE the hour and date specified. Faxed bids will not be accepted.
3. Late bids properly identified will be returned to bidder unopened. Late bids will not be considered under any circumstances.
4. All bids are for new equipment or merchandise unless otherwise specified.
5. Quotes F.O.B. destination. If otherwise, show exact cost to deliver.
6. Bid unit price on quantity specified-extend and show total. In case of error in extension, unit prices shall govern. Bids subject to unlimited price increases will not be considered.
7. Bids must give full firm name and address of bidder. Failure to manually sign bid will disqualify it. Person signing should show title or authority to bind his firm in a contract.
8. No substitutions or cancellations permitted without written approval of County Purchasing Agent.
9. The County reserves the right to accept or reject all or any part of any bid, waive minor technicalities and award the bid to the lowest responsible bidder. The County of El Paso reserves the right to award by item or by total bid. Prices should be itemized.
10. Bids \$100,000.00 and over, the bidder shall furnish a certified cashiers check made payable to the County of El Paso or a good and sufficient bid bond in the amount of 5% of the total contract prices and execute with a surety company authorized to do business in the State of Texas. The bid bond must be included with the bid at the time of the opening.
11. This is a quotation inquiry only and implies no obligation of the part of the County of El Paso.
12. The County of El Paso reserves the right to reject any proposal due to failure of performance on deliveries. The County Purchasing Agent will justify this.
13. Brand names are for descriptive purposes only, not restrictive.
14. The County of El Paso is an Equal Opportunity Employer.

15. Any proposal sent via express mail or overnight delivery service must have the proposal number and title clearly marked on the outside of the express mail or overnight delivery service envelope or package. Failure to clearly identify your proposal may be cause for disqualification.
16. PURSUANT TO TEXAS GOVERNMENT CODE SECTION 2253.021, A PRIME CONTRACTOR WHO IS AWARDED A PUBLIC WORKS CONSTRUCTION CONTRACT SHALL, PRIOR TO BEGINNING THE WORK, EXECUTE TO THE COUNTY:
  - a. A PERFORMANCE BOND, IN THE FULL AMOUNT OF THE CONTRACT, IF THE CONTRACT IS IN EXCESS OF \$100,000; AND
  - b. A PAYMENT BOND, IN THE FULL AMOUNT OF THE CONTRACT, IF THE CONTRACT IS IN EXCESS OF \$25,000.
17. PURSUANT TO TEXAS LOCAL GOVERNMENT CODE SECTION 262.032(b), ANY SUCCESSFUL BIDDER WHO IS AWARDED ANY CONTRACT IN EXCESS OF \$50,000 MAY BE REQUIRED TO EXECUTE A PERFORMANCE BOND TO THE COUNTY. SAID BOND SHALL BE IN THE FULL AMOUNT OF THE CONTRACT AND MUST BE FURNISHED WITHIN 30 DAYS AFTER THE DATE A PURCHASE ORDER IS ISSUED OR THE CONTRACT IS SIGNED AND PRIOR TO COMMENCEMENT OF THE ACTUAL WORK. ANY PERFORMANCE BOND REQUIRED PURSUANT TO THIS SECTION SHALL BE NOTED IN THE ATTACHED DETAILED BID SPECIFICATIONS OR SCOPE OF WORK. THIS SECTION DOES NOT APPLY TO A PERFORMANCE BOND REQUIRED BY CHAPTER 2253, TEXAS GOVERNMENT CODE.
18. "Beginning January 1, 2006, in order to implement HB 914 (adding new Local Government Code Chapter 176), ALL VENDORS MUST SUBMIT A CONFLICT OF INTEREST QUESTIONNAIRE (Form CIQ) disclosing its affiliations and business relationships with the County's Officers (County Judge and Commissioners Court) as well as the County employees and contractors who make recommendations for the expenditure of County funds. The names of the County Officers and of the County employees and contractors making recommendations to the County Officers on this contract are listed in the Specifications.

THE CONFLICT OF INTEREST QUESTIONNAIRE MUST BE FILED WITH THE COUNTY CLERK AND A COPY OR PROOF OF FILING MUST BE ATTACHED TO THE BIDDER'S RESPONSE SUBMITTED TO THE PURCHASING DEPARTMENT.

Bidders should be aware that this bidding condition is not intended to cover or to advise you about all situations in which Local Government Code Chapter 176 would require you to file a Form CIQ. You should consult your private attorney with regard to the application of this law and your compliance requirements. Failure to comply is punishable as a Class C misdemeanor.



**NOTICE:**

ALL COMMUNICATIONS BY A VENDOR TO THE COUNTY, ITS OFFICIALS, AND DEPARTMENT HEADS REGARDING THIS PROCUREMENT SHALL BE DONE THROUGH THE EL PASO COUNTY PURCHASING DEPARTMENT. **THE EL PASO COUNTY CODE OF ETHICS PROHIBITS ALL PRIVATE COMMUNICATION BETWEEN VENDORS AND CERTAIN COUNTY OFFICIALS AND EMPLOYEES AS DESCRIBED BELOW:**

No vendor, its representative, agent, or employee shall engage in private communication with a member of the El Paso County Commissioners Court or county department heads regarding any procurement of goods or services by the County from the date that the bid, RFP, or RFQ is released. No private communication regarding the purchase shall be permitted until the procurement process is complete and a purchase order is granted or a contract is entered into. Members of the commissioners court are required to make a reasonable effort to inform themselves regarding potential procurements and have a duty to inquire of vendors, their representatives or employees, the nature of any private communication being sought prior to engaging in any communication. "Private Communication" means communication with any vendor outside of a posted meeting of the governing body, a regular meeting of a standing or appointed committee, or a negotiation with a vendor which has been specifically authorized by the governing body.

# Health Insurance Benefits Provided By Bidder

## Consideration of Health Insurance Benefits\*

1. Do you or your subcontractor(s) currently offer health insurance benefits to your employees?

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If so, please describe those health insurance benefits that you or your subcontractor(s) currently provide/offer to your employees.

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2. What percentage, if any, of your of your subcontractor's employees are currently enrolled in the health insurance benefits program?

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**El Paso County may consider provision of health insurance benefits as part of the overall "best value" determination.** Failure to provide health insurance benefits will not disqualify you from participating in this bid selection process.

\_\_\_\_\_  
Business Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name of Authorized Representative

\_\_\_\_\_  
Signature of Authorized Representative

\* This page must be included in all responses.



**COUNTY OF EL PASO**  
County Purchasing Department  
800 East Overland, Suite 300  
El Paso, Texas 79901  
(915) 546-2048  
(915) 546-8180 Fax

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RE: Bid #11-031, Construction Materials for Water Service in the El Paso Conquistador & Lourdes Subdivisions

Dear Vendor:

As of January 1, 2006, the Texas Local Government Code Chapter 176 requires all vendors and potential vendors who contract or seek to contract for the sale or purchase of property, goods, or services with any local government entity to complete and submit a Conflicts of Interest Questionnaire. A copy of the requirements regarding vendors is attached. Also attached is a copy of the Questionnaire which needs to be filed and was prepared and approved for statewide use by the Texas Ethics Commission.

In filing out the Questionnaire, the following are the County Officers that will award the bid and the employees which will make a recommendation to the Commissioners Court:

County Officers: County Judge Veronica Escobar  
Commissioner Anna Perez  
Commissioner Sergio Lewis  
Commissioner Willie Gandara Jr.  
Commissioner Dan Haggerty

County Employees: Piti Vasquez, Purchasing Agent  
Jose Lopez, Jr., Assistant Purchasing Agent  
Pete Gutierrez, Buyer II  
Linda Mena, Inventory Bid Technician  
Lucy Balderama, Inventory Bid Technician  
Munzer Alsarraj, Project Coordinator  
Gilbert Saldana P. E, Engineer, R & B Dept.  
Saul Trejo P. E Engineer, LVWD  
Fernie Sanchez, Engineering Manager, LVWD  
Able Garcia, Engineer, CEA Group

Please note that the state law requires that the Questionnaire be filed with the **COUNTY CLERK** no later than **the 7<sup>th</sup> business day after submitting an application, response to an RFP, RFQ or bid** or any other writing related to a potential agreement with the County. Failure to file the questionnaire within the time provided by the statute is a Class C misdemeanor

# CONFLICT OF INTEREST QUESTIONNAIRE

## FORM CIQ

For vendor or other person doing business with local governmental entity

This questionnaire reflects changes made to the law by H.B. 1491, 80th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code by a person who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the person meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the person becomes aware of facts that require the statement to be filed. See Section 176.006, Local Government Code.

A person commits an offense if the person knowingly violates Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor.

### OFFICE USE ONLY

Date Received

Bid #11-031

**1** Name of person who has a business relationship with local governmental entity.

**2**  Check this box if you are filing an update to a previously filed questionnaire.

(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date the originally filed questionnaire becomes incomplete or inaccurate.)

**3** Name of local government officer with whom filer has employment or business relationship.

\_\_\_\_\_  
Name of Officer

This section (item 3 including subparts A, B, C & D) must be completed for each officer with whom the filer has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the filer of the questionnaire?

Yes       No

B. Is the filer of the questionnaire receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer named in this section AND the taxable income is not received from the local governmental entity?

Yes       No

C. Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership of 10 percent or more?

Yes       No

D. Describe each employment or business relationship with the local government officer named in this section.

\_\_\_\_\_  
Signature of person doing business with the governmental entity

\_\_\_\_\_  
Date

Adopted 06/29/2007

## COUNTY OF EL PASO PURCHASING DEPARTMENT

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PITI VASQUEZ, PURCHASING AGENT  
JOSE LOPEZ, JR. ASST. PURCHASING AGENT  
LUCY BALDERAMA, INVENTORY BID TECHNICIAN

MDR BUILDING, 800 E. OVERLAND  
ROOM 300, EL PASO TEXAS 79901  
(915)546-2048, FAX (915)546-8180

### Instructions: Conflict of Interest Form (CIQ)

- **Please complete CIQ Form whether or not a conflict exists.**
- **Box #1 All Vendors** Must Print Clearly their names and company name.
- **Box #2** If the vendor has already filed a CIQ for the current year and is updating (filing a new one) due to changes on bid, please check box. If this is the first time within the current year that the vendor is submitting a CIQ, then do not check this box.
- **Box #3** If you are filing a disclosure of conflict of interest, meaning that you do have a relationship with someone listed on the page prior to the CIQ form on your BID, RFP, RFQ, or RFI, then you must print the name of the person whom you have a business relationship with.
- If you answer **yes** to any of the following: **Item A, B, C** you have a conflict and must disclose on this form.
- **Item D** List the type of relationship and what department in the local government the person you have listed in **Box #3**.
- **Box #4** Please have the person that is named on **Box# 1**, sign and date in this box. We request a contact number in case there are any questions or form is missing information. This is a courtesy to you.
- It is the vendor's responsibility to submit the CIQ document number provided by the County Clerk's to the Purchasing Department.
- Please note that the state law requires that the Questionnaire be filed with the COUNTY CLERK no later than the 7th business day after submitting an application, response to an RFP, RFQ, RFI or bid or any other writing related to a potential agreement with the County. Failure to file the questionnaire within the time provided by the statute is a Class C misdemeanor.
- File a completed Conflict of Interest Questionnaire (Form CIQ) with the El Paso County Clerk in person or by mail to 500 E. San Antonio, Suite 105, El Paso, TX 79901 or by fax to 915-543-3816 the attention of the County Clerks office.
- If filing by fax use your fax confirmation (date/time) for your records. To obtain a copy/CIQ document number go to our website at [www.epcounty.com](http://www.epcounty.com), click on public records, click on to Official Public Records - Deeds of Trust, Liens and other public documents (County Clerk), type in the name of your company, on Style: scroll to CIQ-Conflict INT. QUESTIONNAIRE, and click on Search. It will be available on the web-site approximately 5 to 10 business days. Please fax a copy of your fax confirmation (date/time) to The Purchasing Department at (915) 546-8180. If you have not yet placed it in your Bid, RFP, RFQ, RFI.
- If you have any questions, please call Lucy Balderama at 915-546-2048.

**Tex. Local Gov't Code § 176.006 (2005)**

§ 176.006. Disclosure Requirements for Vendors and Other Persons; Questionnaire

(a) A person described by Section 176.002(a) shall file a completed conflict of interest questionnaire with the appropriate records administrator not later than the seventh business day after the date that the person:

(1) begins contract discussions or negotiations with the local governmental entity; or

(2) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential agreement with the local governmental entity.

(b) The commission shall adopt a conflict of interest questionnaire for use under this section that requires disclosure of a person's affiliations or business relationships that might cause a conflict of interest with a local governmental entity.

(c) The questionnaire adopted under Subsection (b) must require, for the local governmental entity with respect to which the questionnaire is filed, that the person filing the questionnaire:

(1) describe each affiliation or business relationship the person has with each local government officer of the local governmental entity;

(2) identify each affiliation or business relationship described by Subdivision (1) with respect to which the local government officer receives, or is likely to receive, taxable income from the person filing the questionnaire;

(3) identify each affiliation or business relationship described by Subdivision (1) with respect to which the person filing the questionnaire receives, or is likely to receive, taxable income that:

(A) is received from, or at the direction of, a local government officer of the local governmental entity; and

(B) is not received from the local governmental entity;

(4) describe each affiliation or business relationship with a corporation or other business entity with respect to which a local government officer of the local governmental entity:

(A) serves as an officer or director; or

(B) holds an ownership interest of 10 percent or more;

(5) describe each affiliation or business relationship with an employee or contractor of the local governmental entity who makes recommendations to a local government officer of the local governmental entity with respect to the expenditure of money;

(6) describe each affiliation or business relationship with a person who:

(A) is a local government officer; and

(B) appoints or employs a local government officer of the local governmental entity that is the subject of the questionnaire; and

(7) describe any other affiliation or business relationship that might cause a conflict of interest.

(d) A person described by Subsection (a) shall file an updated completed questionnaire with the appropriate records administrator not later than:

(1) September 1 of each year in which an activity described by Subsection (a) is pending; and

(2) the seventh business day after the date of an event that would make a statement in the questionnaire incomplete or inaccurate.

(e) A person is not required to file an updated completed questionnaire under Subsection (d)(1) in a year if the person has filed a questionnaire under Subsection (c) or (d)(2) on or after June 1, but before September 1, of that year.

(f) A person commits an offense if the person violates this section. An offense under this subsection is a Class C misdemeanor.

(g) It is a defense to prosecution under Subsection (f) that the person filed the required questionnaire not later than the seventh business day after the date the person received notice of the violation.

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**Tex. Local Gov't Code § 176.001 (2005)**

§ 176.001. Definitions

In this chapter:

(1) "Commission" means the Texas Ethics Commission.

(2) "Family member" means a person related to another person within the first degree by consanguinity or affinity, as described by Subchapter B, Chapter 573, Government Code.

(3) "Local governmental entity" means a county, municipality, school district, junior college district, or other political subdivision of this state or a local government corporation, board, commission, district, or authority to which a member is appointed by the commissioners court of a county, the mayor of a municipality, or the governing body of a municipality. The term does not include an association, corporation, or organization of governmental entities organized to provide to its members education, assistance, products, or services or to represent its members before the legislative, administrative, or judicial branches of the state or federal government.

(4) "Local government officer" means:

(A) a member of the governing body of a local governmental entity; or

(B) a director, superintendent, administrator, president, or other person designated as the executive officer of the local governmental entity.

(5) "Records administrator" means the director, county clerk, municipal secretary, superintendent, or other person responsible for maintaining the records of the local governmental entity.

**COUNTY OF EL PASO, TEXAS**

Solicitation Check List

**Construction Materials for Water Service in the El Paso Conquistador & Lourdes Subdivisions  
Bid #11-031**

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**THIS CHECKLIST IS PROVIDED FOR YOUR CONVENIENCE**

\_\_\_\_\_ Responses should be delivered to the County Purchasing Department by 2:00 p.m., Wednesday, August 31, 2011. Did you visit our website ([www.epcounty.com](http://www.epcounty.com)) for any addendums?

\_\_\_\_\_ Did you sign the Bidding Schedule?

\_\_\_\_\_ Did you sign the “Certifications Regarding Lobbying, Debarment, Suspension and Other Responsibility Matters; Drug-Free Workplace Requirements; Federal Debt Status, and Nondiscrimination Status And Implementing Regulations” document?

\_\_\_\_\_ Did you sign the “Consideration of Insurance Benefits” form?

\_\_\_\_\_ Did you file a copy of the completed Conflict of Interest Questionnaire (Form CIQ) with the El Paso County Clerk (in person or by mail to 500 E. San Antonio, Suite 105, El Paso, TX 79901 or by fax to 915-543-3816

\_\_\_\_\_ **CIQ forms** - you must write the name of your company underneath the signature with your phone number and bid number. Please include the completed and signed form with your response whether a relationship exists or not.

If your bid totals more than \$100,000, did you include a bid bond?

Did you provide one original and two (2) copies of your response?