



Water Utility Services

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Waco, Texas 76702-2570
254-750-8005
Fax: 254-750-8074
www.waco-texas.com

Date: **03/03/2023**
RFB No: **2023-007**
Commodity: **WMARSS Aire Line Replacement Project**
Purchasing Agent: **Daryle Bullard**

Closing Time: 2:00 P.M. CST, Tuesday, March 14, 2023

Opening Time: 2:01 P.M. CST, Tuesday, March 14, 2023

RFB Opening Location: Operations Center, Purchasing Services Office, 1415 N. 4th St., Waco, TX 76707

Addendum No: 2

The above-mentioned RFB invitation has been changed in the following manner. **Sign and return addendum to the Purchasing Office by the closing time and date with your RFB response.** Returning this page signed by your authorized agent will serve to acknowledge this change. All other requirements of the invitation remain unchanged. If you have any questions, please call or stop by the Purchasing Office at the above address.

1. Note the new closing date: **2 P.M. CST, Tuesday March 14, 2023**
2. The following pages has clarifications to the specifications. Please review and note the changes.
3. A revised bid pricing sheet is attached. **USE THE ATTACHED BID SHEET**. Using the earlier version may disqualify the contractor.

Firm: _____

Address: _____

Signature of Person
Authorized to Sign Bid: _____

Signor's Name and Title
(print or type): _____

E-mail Address: _____

Date: _____ Telephone: _____ Fax: _____

Clarification of Bidding Requirements:

This addendum is to clear up any misinterpretations as to what the contractor will be providing and what the City will be providing as a part of this project.

This RFB (Request for Bids) requires two quotes from the bidding contractors. The first quote is for the contractor to supply only labor in regard to the ductile iron pipe. The City will be providing all of the pipe, and all of the associated fittings. Specifically, the City will be supplying the pipe, pipe bends, wyes, gaskets, nuts and bolts, and poly wrap. The contractor will be supplying the paint and primer for the exposed pipe. In addition, the contractor will be supplying all of the materials, supplies, and labor for all of the other tasks that are a part of the project.

For the alternative bid (2nd quote), the contractor will be supplying all of the materials, supplies, and labor for the entire project. This includes the ductile iron pipe, pipe bends, wyes, gaskets, nuts and bolts, and poly wrap. Plus, the contractor will be supplying all the materials, supplies, and labor for all the other task that are a port of this project.

Please note that the plans (that were attached to Addendum #1) for the airline to be replaced are for general knowledge, alignment, and location identification purposes only. Not taking off quantities for bidding. The City wants to replace what is currently in place. Details of what is currently in place is as follows.

NOTE: The quantities below may not be the same as what is on the bidding sheets. BID THE QUANTITIES ON THE BID SHEET

Above Ground Pipe:
(FLANGED PIPE)

Quantity	Pipe Length/Description	Pipe Size (Dia.)
2 Ea.	27-inches long-pipe	18-inch
3 Ea.	90-degree bend	18-inch
2 Ea.	Springless Check Valve	18- inch
1 Ea.	64-1/2 inches long-pipe	18-inch
1 Ea.	39-1/2 inches long-pipe	18-inch
1 Ea.	25 Linear Feet-pipe	18-inch
1Ea.	Reducer	24-inch x 18-inch
1Ea.	45-degree bend	18-inch
1Ea.	Wye	24-inch x 18-inch
1 Ea.	42-inch long-pipe	18-inch
1 Ea.	49-inch long-pipe	24-inch
1 Ea.	90-degree bend	24-inch
1 Ea.	11 Linear Feet-pipe	24-inch

- All the above ground pipe is to be flange type.
- 18-inch pipe will be Class 250.
- 24-inch pipe will be Class 200.
- The fittings (bends, wye, and reducer) are to have C110 rated flanges.

-The above ground ductile iron pipe will be unlined, and the exterior is to be uncoated so it can be primed and painted with Tnemec paint for corrosion protection.

Below Ground:

(PUSHH-ON JOINTS)

Quantity	Pipe Length/Description	Pipe Size (Dia.)
1 Ea.	8 linear Feet-pipe	24-inch
2Ea.	90-degree bend	24-inch
1 Ea.	301 Linear Feet-pipe	24-inch
2 Ea.	45-degree horizontal bend	24-inch
1 Ea.	7 Linear Feet-pipe	24-inch
1 Ea.	6 Linear Feet-pipe	24-inch

- All the underground pipe is to be push-on restrained joint type.
- 24-inch pipe will be Class 200.
- The fittings (bends, wye, and reducer) are to have C110 rated flanges.
- The underground ductile iron pipe is to be unlined, and zinc coated.
- The poly wrap for the underground section of pipe will be V-Bio type.

CITY OF WACO
OFFICIAL BID SHEET
BID INVITATION NO: RFB 2023-007
Addendum #2
WMARSS Misc. Rehabilitation Repair Project

DATE: _____

VENDOR: _____

AUTHORIZED
SIGNATURE: _____

I. Refer to "Standard Instructions for all Bids" before completing Bid Sheet.

a. Price: quote your best price, F.O.B. Destination, on each item.

II. In submitting this bid, I certify:

a. Items bid are in exact accordance with specifications, unless noted in bid.

b. That prices in this bid have been arrived at independently, without consultation or agreement with any competitor for the purpose of restricting competition.

PRICING INFORMATION				
Note: Depending on the unit prices, requirements and approved budgeted funds, quantities may be reduced or increased during the contract period				
Item No.	Description	Unit Price (A)	No. of U nits (B)	Total Price (A x B) = C
1.0	Mobilization, per the Special Project Provisions, Complete and in place		Lump Sum	
2.0	Bonds, and Insurance, per the Special Project Provisions, Complete and in place		Lump Sum	
3.0	Trench Safety Plan		Lump Sum	
4.0	Trench Safety Implementation		Lump Sum	
5.0	Remove the existing Air Line (24-inch diameter Ductile Iron Pipe)		360 LF	
6.0	Install new 24-inch Air Line (24-inch diameter Ductile Iron Pipe without interior coating)		360 LF	

Item No.	Description	Unit Price (A)	No. of Units (B)	Total Price (A x B) = C
7.0	Remove the existing Air Line (18-inch diameter Ductile Iron Pipe		50 LF	
8.0	Install new 18-inch Air Line (18-inch Ductile Iron Pipe without interior coating)		50 LF	
9.0	Remove and Replace the Existing Wall Gasket/Sealant		2 EA	
10.0	Type 'A' Pavement Repair (8-inch concrete base with 1-1/2 inches of asphalt top course)		100 SYDS	
11.0	Re-Paint all exposed 18-inch and 24-inch Ductile Iron Pipe and Pipe Supports w/ Tnemec Paint		Lump Sum	
12.0	Remove and Replace Steel Pipe Supports for 24-inch pipe		1	
13.0	Remove and Replace Pipe Supports for 18-inch pipe		4	
14.0	Erosion Control Plan		Lump Sum	
15.0	Erosion Control Implementation		Lump Sum	
16.0	Remove and Replace the Concrete Headwall		Lump Sum	
17.0	Remove and Replace 18-inch Check valve		2 EA	
18.0	Remove and Replace (Re-use) Existing Pressure Probe		2 EA	
19.0	Remove and Reinstall Light Pole Including any Necessary Wiring to have a Fully Functional Light and Pole		Lump Sum	
20.0	TOTAL PRICE			

ALTERNATE BID:

THE FOLLOWINGS PRICES ARE TO INCLUDE THE CONTRACTOR SUPPLYING THE DUCTILE IRON PIPE AND ALL FITTINGS, GASKETS, NUTS & BOLTS, ETC. TO HAVE A COMPLETE AND INSTALLED AIR LINE SYSTEM.

PRICING INFORMATION				
Note: Depending on the unit prices, requirements and approved budgeted funds, quantities may be reduced or increased during the contract period				
Item No.	Description	Unit Price (A)	No. of Units (B)	Total Price (A x B) = C
1.0A	Mobilization, per the Special Project Provisions, Complete and in place		Lump Sum	
2.0A	Bonds, and Insurance, per the Special Project Provisions, Complete and in place		Lump Sum	
3.0A	Trench Safety Plan		Lump Sum	
4.0A	Trench Safety Implementation		Lump Sum	
5.0A	Remove the existing Air Line (24-inch diameter Ductile Iron Pipe)		360 LF	
6.0A	Install new 24-inch Air Line (24-inch diameter Ductile Iron Pipe without interior coating)-Contractor to supply all the material and supplies including gaskets and nuts & bolts, etc. to make a complete and fully functioning air line system		360 LF	

Item No.	Description	Unit Price (A)	No. of Units (B)	Total Price (A x B) = C
7.0A	Remove the existing Air Line (18-inch diameter Ductile Iron Pipe		50 LF	
8.0A	Install new 18-inch Air Line (18-inch Ductile Iron Pipe without interior coating)- Contractor to supply all the material and supplies including gaskets and nuts & bolts, etc. to make a complete and fully functioning air-line system		50 LF	
9.0A	Remove and Replace the Existing Wall Gasket/Sealant-Contractor to supply all the material and supplies including gaskets and nuts & bolts, etc. to make a complete and fully functioning air line system		2 EA	
10.0A	Type 'A' Pavement Repair (8-inch concrete base with 1-1/2 inches of asphalt top course)		100 SYDS	
11.0A	Re-Paint all exposed 18-inch and 24-inch Ductile Iron Pipe and Pipe Supports w/ Tnemec Paint		Lump Sum	
12.0A	Remove and Replace Steel Pipe Supports for 24-inch pipe - Contractor to supply all the material and supplies including gaskets and nuts & bolts, etc. to make a complete and fully functioning air line system		1	
13.0A	Remove and Replace Pipe Supports for 18-inch pipe. -Contractor to supply all the material and supplies including gaskets and nuts & bolts, etc. to make a complete and fully functioning air line system - Contractor to supply the Material.		4	
14.0A	Erosion Control Plan		Lump Sum	
15.0A	Erosion Control Implementation		Lump Sum	

16.0A	Remove and Replace the Concrete Headwall		Lump Sum	
17.0A	Remove and Replace 18-inch Check valve -Contractor to supply the Material. Contractor to supply all the material and supplies including gaskets and nuts & bolts, etc. to make a complete and fully functioning air line system		2 EA	
18.0A	Remove and Replace (Re-use) Existing Pressure Probe		2 EA	
19.0A	Remove and Reinstall Light Pole Including any Necessary Wiring to have a Fully Functional Light and Pole		Lump Sum	
20.0A	TOTAL ALTERNATE BID PRICE:			

Early Payment Terms:

- II. Bidder may offer an early payment discount by filling in the blanks in section b below. City may accept an early payment discount, but in doing so, City does not waive any of its rights under Texas Government Code Section 2251 (Prompt Payment Act).
- III. Payment is due thirty (30) DAYS after acceptance of order and receipt of an original invoice, but a _____ percent early payment discount is offered for full payment made within ____ () DAYS after acceptance of order and receipt of an original invoice.

(1) COMPLETED FORM MUST BE RETURNED WITH BID

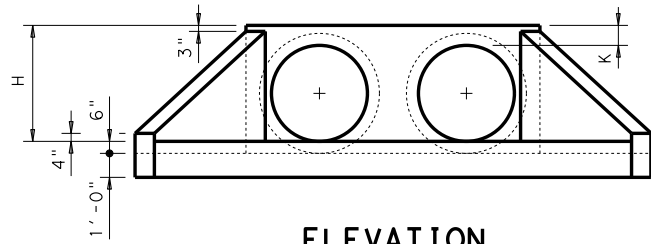
HEADWALL DETAIL

DISCLAIMER:
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

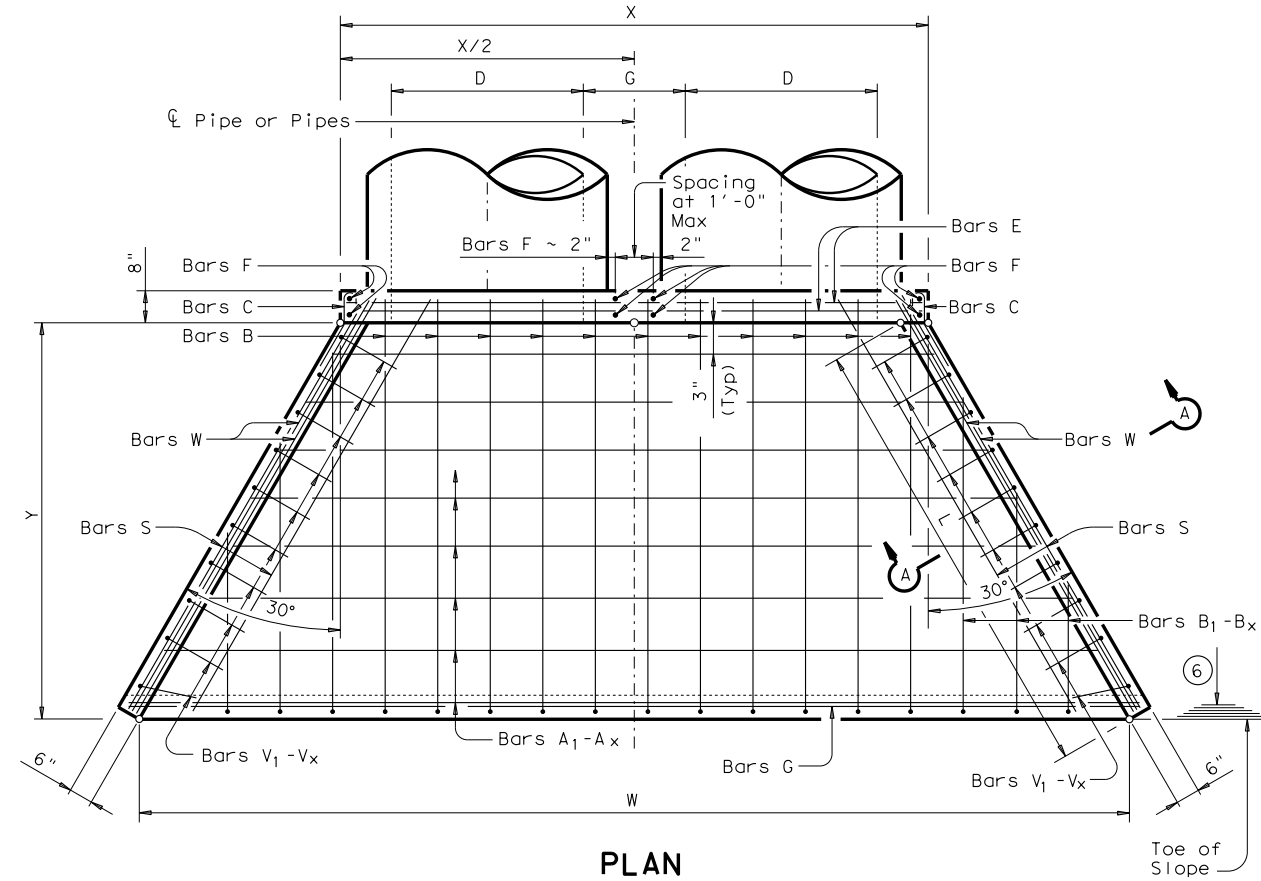
DATE:
FILE:

TABLE OF VARIABLE DIMENSIONS
AND QUANTITIES FOR ONE HEADWALL ⁽⁴⁾

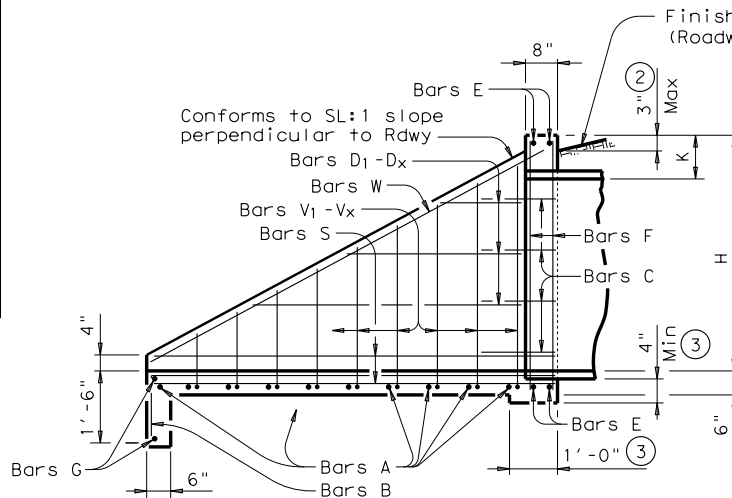
SLOPE	DIA OF PIPE, D	Values for one Pipe						Values to be added for each add'l Pipe			
		W	X	Y	L	Reinf (Lbs)	Conc (CY) (1)	X and W	Reinf (Lbs)	Conc (CY) (1)	
2:1	12"	4'- 7 1/2"	2'- 6"	2'-10"	3'- 3 1/4"	84	0.6	1'- 9"	20	0.2	
	15"	5'- 5 3/4"	2'- 9 1/2"	3'- 4"	3'-10 1/4"	99	0.7	2'- 2"	24	0.3	
	18"	6'- 4 1/4"	3'- 1"	3'-10"	4'- 5"	120	0.9	2'- 8"	32	0.3	
	21"	7'- 2 3/4"	3'- 4 1/2"	4'- 4"	5'- 0"	137	1.1	3'- 1"	43	0.4	
	24"	8'- 2 1/2"	3'- 9 1/2"	4'-10"	5'- 7"	158	1.3	3'- 7"	50	0.5	
	27"	9'- 1"	4'- 1"	5'- 4"	6'- 2"	173	1.5	3'-11"	56	0.6	
	30"	9'-11 1/2"	4'- 4 1/2"	5'-10"	6'- 8 3/4"	197	1.7	4'- 4"	65	0.8	
	33"	10'-10"	4'- 8"	6'- 4"	7'- 3 3/4"	216	2.0	4'- 8"	71	0.9	
	36"	11'- 8 1/4"	4'-11 1/2"	6'-10"	7'-10 3/4"	241	2.2	5'- 1"	81	1.0	
	42"	13'- 5 1/4"	5'- 6 1/2"	7'-10"	9'- 0 1/2"	290	2.8	5'-10"	97	1.3	
	48"	15'- 9"	6'- 1 1/2"	9'- 4"	10'- 9 1/4"	350	3.8	6'- 7"	117	1.7	
	54"	17'- 5 3/4"	6'- 8 1/2"	10'- 4"	11'-11 1/4"	415	4.5	7'- 6"	151	2.1	
	60"	19'- 2 3/4"	7'- 3 1/2"	11'- 4"	13'- 1"	469	5.3	8'- 3"	174	2.5	
	66"	20'-11 1/2"	7'-10 1/2"	12'- 4"	14'- 3"	530	6.2	8'- 9"	194	2.9	
72"	22'- 8 1/2"	8'- 5 1/2"	13'- 4"	15'- 4 3/4"	587	7.1	9'- 4"	213	3.3		
3:1	12"	6'- 3"	2'- 6"	4'- 3"	4'-11"	114	0.8	1'- 9"	22	0.2	
	15"	7'- 5"	2'- 9 1/2"	5'- 0"	5'- 9 1/4"	133	1.1	2'- 2"	28	0.3	
	18"	8'- 6 3/4"	3'- 1"	5'- 9"	6'- 7 3/4"	166	1.3	2'- 8"	37	0.5	
	21"	9'- 8 3/4"	3'- 4 1/2"	6'- 6"	7'- 6"	189	1.6	3'- 1"	48	0.6	
	24"	11'- 0"	3'- 9 1/2"	7'- 3"	8'- 4 1/2"	221	2.0	3'- 7"	58	0.7	
	27"	12'- 2"	4'- 1"	8'- 0"	9'- 2 3/4"	245	2.3	3'-11"	67	0.8	
	30"	13'- 4"	4'- 4 1/2"	8'- 9"	10'- 1 1/4"	287	2.7	4'- 4"	77	1.0	
	33"	14'- 5 3/4"	4'- 8"	9'- 6"	10'-11 3/4"	310	3.1	4'- 8"	84	1.2	
	36"	15'- 7 3/4"	4'-11 1/2"	10'- 3"	11'-10"	343	3.5	5'- 1"	96	1.4	
	42"	17'-11 1/2"	5'- 6 1/2"	11'- 9"	13'- 6 3/4"	424	4.5	5'-10"	119	1.7	
	48"	21'- 1 3/4"	6'- 1 1/2"	14'- 0"	16'- 2"	527	6.1	6'- 7"	146	2.3	
	54"	23'- 5 1/2"	6'- 8 1/2"	15'- 6"	17'-10 3/4"	618	7.3	7'- 6"	186	2.9	
	60"	25'- 9 1/4"	7'- 3 1/2"	17'- 0"	19'- 7 1/2"	707	8.7	8'- 3"	219	3.4	
	66"	28'- 1"	7'-10 1/2"	18'- 6"	21'- 4 1/4"	797	10.1	8'- 9"	242	3.9	
72"	30'- 4 3/4"	8'- 5 1/2"	20'- 0"	23'- 1 1/4"	910	11.7	9'- 4"	272	4.4		
4:1	12"	7'-10 3/4"	2'- 6"	5'- 8"	6'- 6 1/2"	144	1.1	1'- 9"	24	0.3	
	15"	9'- 4"	2'- 9 1/2"	6'- 8"	7'- 8 1/2"	177	1.5	2'- 2"	32	0.4	
	18"	10'- 9 1/2"	3'- 1"	7'- 8"	8'-10 1/4"	217	1.9	2'- 8"	42	0.5	
	21"	12'- 2 3/4"	3'- 4 1/2"	8'- 8"	10'- 0"	254	2.3	3'- 1"	57	0.7	
	24"	13'- 9 1/2"	3'- 9 1/2"	9'- 8"	11'- 2"	295	2.8	3'- 7"	67	0.9	
	27"	15'- 3"	4'- 1"	10'- 8"	12'- 3 3/4"	328	3.3	3'-11"	77	1.0	
	30"	16'- 8 1/4"	4'- 4 1/2"	11'- 8"	13'- 5 3/4"	379	3.8	4'- 4"	89	1.3	
	33"	18'- 1 3/4"	4'- 8"	12'- 8"	14'- 7 1/2"	417	4.5	4'- 8"	101	1.4	
	36"	19'- 7"	4'-11 1/2"	13'- 8"	15'- 9 1/4"	464	5.1	5'-1"	115	1.7	
	42"	22'- 5 3/4"	5'- 6 1/2"	15'- 8"	18'- 1"	575	6.5	5'-10"	141	2.1	
	48"	26'- 6 1/4"	6'- 1 1/2"	18'- 8"	21'- 6 3/4"	720	8.9	6'- 7"	175	2.8	
	54"	29'- 5"	6'- 8 1/2"	20'- 8"	23'-10 1/4"	863	10.7	7'- 6"	226	3.6	
	60"	32'- 3 3/4"	7'- 3 1/2"	22'- 8"	26'- 2"	984	12.7	8'- 3"	264	4.3	
	66"	35'- 2 1/2"	7'-10 1/2"	24'- 8"	28'- 5 3/4"	1126	14.9	8'- 9"	300	4.9	
72"	38'- 1 1/4"	8'- 5 1/2"	26'- 8"	30'- 9 1/2"	1283	17.3	9'- 4"	334	5.6		
6:1	12"	11'- 2"	2'- 6"	8'- 6"	9'- 9 3/4"	220	1.9	1'- 9"	28	0.4	
	15"	13'- 2 1/4"	2'- 9 1/2"	10'- 0"	11'- 6 1/2"	264	2.5	2'- 2"	37	0.5	
	18"	15'- 2 1/2"	3'- 1"	11'- 6"	13'- 3 1/4"	326	3.2	2'- 8"	50	0.7	
	21"	17'- 2 3/4"	3'- 4 1/2"	13'- 0"	15'- 0 1/4"	381	3.9	3'- 1"	69	0.9	
	24"	19'- 4 1/2"	3'- 9 1/2"	14'- 6"	16'- 9"	447	4.8	3'- 7"	80	1.2	
	27"	21'- 4 3/4"	4'- 1"	16'- 0"	18'- 5 3/4"	506	5.7	3'-11"	96	1.4	
	30"	23'- 5 1/4"	4'- 4 1/2"	17'- 6"	20'- 2 1/2"	587	6.7	4'- 4"	110	1.7	
	33"	25'- 5 1/2"	4'- 8"	19'- 0"	21'-11 1/4"	667	7.8	4'- 8"	127	2.0	
	36"	27'- 5 3/4"	4'-11 1/2"	20'- 6"	23'- 8"	727	9.0	5'- 1"	144	2.3	
	42"	31'- 6 1/4"	5'- 6 1/2"	23'- 6"	27'- 1 1/2"	914	11.5	5'-10"	179	3.0	
	48"	37'- 3 1/2"	6'- 1 1/2"	28'- 0"	32'- 4"	1181	15.9	6'- 7"	231	4.0	
	54"	41'- 4 1/4"	6'- 8 1/2"	31'- 0"	35'- 9 1/2"	1412	19.2	7'- 6"	300	5.0	
	60"	45'- 4 3/4"	7'- 3 1/2"	34'- 0"	39'- 3"	1619	22.9	8'- 3"	353	6.0	



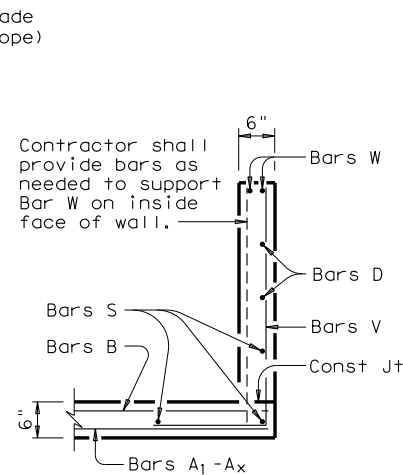
ELEVATION
Showing dimensions



PLAN



TYPICAL WING ELEVATION



SECTION A-A

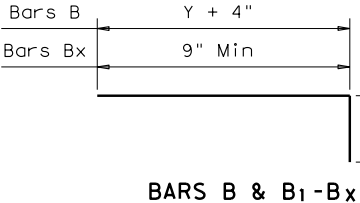
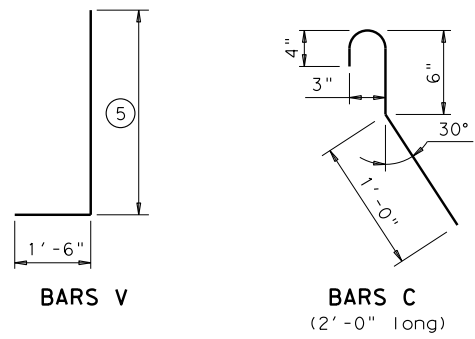
- Quantities shown are for concrete pipe and will increase slightly for metal pipe installations.
- For vehicle safety, curbs shall project no more than 3" above finished grade. Curb heights shall be reduced, if necessary, to meet these requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.
- Provide a 1'-0" footing as shown where required to maintain 4" Min cover for pipes.
- Quantities shown are for one structure end only (one headwall).
- Min Length = 6" + 3" x $\left(\frac{12 \times H - 7}{12 \times L}\right)$
Max Length = 12 x H - 3" x $\left(\frac{12 \times H - 7}{12 \times L}\right) - 1"$
- Lengths of wings based on SL:1 Slope along this line.

TABLE OF REINFORCING STEEL ⁽⁴⁾

Bar	Size	Spa	No.
A	# 4	1'-0"	~
B	# 3	1'-6"	~
C	# 4	1'-0"	~
D	# 3	1'-0"	~
E	# 5	~	4
F	# 5	~	~
G	# 3	~	2
S	# 4	~	6
V	# 4	1'-0"	~
W	# 5	~	4

TABLE OF CONSTANT DIMENSIONS

DIA OF PIPE, D	G	K	H
12"	9"	1'- 0"	2'- 0"
15"	11"	1'- 0"	2'- 3"
18"	1'- 2"	1'- 0"	2'- 6"
21"	1'- 4"	1'- 0"	2'- 9"
24"	1'- 7"	1'- 0"	3'- 0"
27"	1'- 8"	1'- 0"	3'- 3"
30"	1'-10"	1'- 0"	3'- 6"
33"	1'-11"	1'- 0"	3'- 9"
36"	2'- 1"	1'- 0"	4'- 0"
42"	2'- 4"	1'- 0"	4'- 6"
48"	2'- 7"	1'- 3"	5'- 3"
54"	3'- 0"	1'- 3"	5'- 9"
60"	3'- 3"	1'- 3"	6'- 3"
66"	3'- 3"	1'- 3"	6'- 9"
72"	3'- 4"	1'- 3"	7'- 3"



GENERAL NOTES:
Designed according to AASHTO LRFD Specifications.
Reinforcing steel shall be placed with the center of the outside layer of bars 2" from the surface of the concrete.
All reinforcing steel shall be Grade 60.
All concrete shall be Class "C" and shall have a minimum compressive strength of 3600 psi.
No bridge rails of any type may be mounted directly to these culvert headwalls.

		Bridge Division Standard	
CONCRETE HEADWALLS WITH FLARED WINGS FOR 0° SKEW PIPE CULVERTS			
CH-FW-0			
FILE: chfw00se.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT
©TxDOT February 2010	CONT	SECT	JOB
REVISIONS	DIST	COUNTY	SHEET NO.