

PROJECT LOCATION  
HUEBNER EST

REINDEER TRAIL

HUEBNER RD.

SAWYER RD.

16

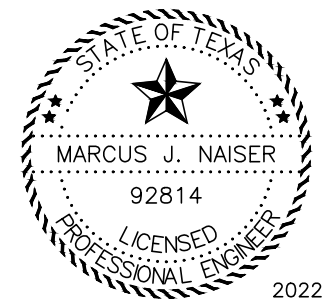
TIMBERHILL



8918 Tesoro Dr., Suite 401  
San Antonio, Texas 78217  
Phone: (210) 822-2232  
[www.Ardurra.com](http://www.Ardurra.com)

Engineering License #F-10053

Ardurra Group, Inc. (dba LNV, LLC)  
Surveying Firm 10126502



2022-09-09

Marcus Kaiser

TANK REHABILITATION GENERAL:

1.

LEON VALLEY HAS RIGHT OF FIRST REFUSAL ON ANY SALVAGED EQUIPMENT. CONTRACTOR TO COORDINATE WITH LEON VALLEY INSPECTOR ON DELIVERY OF SALVAGED EQUIPMENT TO OTHER LEON VALLEY FACILITIES. SHOULD LEON VALLEY NOT WANT TO RETAIN SALVAGED EQUIPMENT, CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL AT NO ADDITIONAL COST.
2.

CONTRACTOR TO COORDINATE WITH LEON VALLEY REPRESENTATIVE AND DELIVER ANY SALVAGEABLE MATERIAL TO A FACILITY SPECIFIED, AS REQUIRED BY LEON VALLEY INSPECTORS.
3.

CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DURING THE REMOVAL AND DELIVERY PROCESS AT CONTRACTORS EXPENSE.
4.

RESTORE ALL DISTURBED AREAS TO ORIGINAL OR BETTER CONDITION NO SEPARATE PAY ITEM. EXISTING SITE IMPROVEMENTS SHALL BE PROTECTED DURING THE TANK REHABILITATION WORK. ANY AND ALL DAMAGES SHALL BE CORRECTED AND RETURNED TO ORIGINAL (PRE-CONSTRUCTION) CONDITION TO THE APPROVAL OF LEON VALLEY AND THE ENGINEER.
5.

CONTRACTOR MUST KEEP VEHICLES AND EQUIPMENT WITHIN LIMITS OF SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY. COORDINATE WITH INSPECTOR JOHN KONZEN 512-422-7655, THE CITY OF LEON VALLEY, AND NISD.
6.

CONTRACTOR SHALL TAKE NECESSARY MEASURES TO AVOID FUGITIVE BLAST DEBRIS FROM ENTERING DRAINAGE STRUCTURES.
7.

CONTRACTOR SHALL REPLACE ALL EXISTING LABELS AND SIGNS CURRENTLY ON THE TANK AFTER PAINTING OPERATIONS ARE COMPLETE, NO SEPARATE PAY ITEM.
8.

EXISTING VALVES MAY LEAK TO INTERIOR OF TANK. CONTRACTOR SHALL REQUEST APPROVAL FROM ENGINEER AND OWNER BEFORE TAKING MEASURES TO CONTROL WATER AS REQUIRED FOR INTERIOR WORK. IF VALVE NEEDS REPLACEMENT, A CHANGE ORDER WILL BE PREPARED AT NEGOTIATED COST.
9.

CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING RESIDUAL WATER LEFT IN TANK AFTER INITIAL TANK DRAINING. NO SEPARATE PAY ITEM.
10.

CONTRACTOR SHALL DISPOSE OF ALL SEDIMENT LEFT IN TANK AFTER INITIAL TANK DRAINING AT AN APPROVED LAND FILL OR AS DIRECTED BY THE ENGINEER. NO SEPARATE PAY ITEM.
11.

REMOVE ANY EXISTING FREEZE PROTECTION ON EXTERIOR VALVES & PIPES AND REPLACE SUBSEQUENT TO EXTERIOR COATINGS. NO SEPARATE PAY ITEM.
12.

CONTRACTOR IS NOT RESPONSIBLE FOR REMOVING & REINSTALLING EXISTING ANTENNAS ON TOP OF THE EST. ANTENNAS WILL BE REMOVED BY OWNER PRIOR TO THE DESIGNATED CONSTRUCTION PERIOD.
13.

ACCESS ROAD AND DRIVEWAY DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AS DIRECTED AND APPROVED BY LEON VALLEY, NISD, AND THE ENGINEER. CONTRACTOR SHALL RESTORE SITE TO EXISTING CONDITIONS OR BETTER AND ANY AREAS STRIPPED OR WITH DAMAGED VEGETATION SHALL BE REPLACED. NO SEPARATE PAY ITEM.
14.

OWNER DOES NOT GUARANTEE WATERTIGHT SHUTDOWN FROM ALL EXISTING VALVES. CONTRACTOR IS REQUIRED TO ACCOMMODATE LEAKAGE AS NECESSARY TO PERFORM REQUIRED WORK. IF VALVE NEEDS REPLACEMENT, A CHANGE ORDER WILL BE PREPARED AT NEGOTIATED COST.
15.

PROVIDE CONDUCTOR SUPPORT FITTINGS FOR SUPPORTING OF CONDUCTORS IN VERTICAL CONDUIT OR CABLE RUNS AS PER NEC ARTICLE 300.19.
16.

CONTRACTOR SHALL REFER TO THE TECHNICAL SPECIFICATIONS FOR THE PREPARATION REHABILITATION, AND PAINTING OF THE EXTERIOR AND INTERIOR OF THE TANK AND APPURTENANCES. SEE TECHNICAL SPECIFICATION SECTION TS.

BID SCHEDULE			
ITEM NO.	ITEM DESCRIPTION	EST. QNTY.	UNIT
1	FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE AND INCIDENTAL WORK TO ABRASIVE BLAST PER SSPC-SP6, CLEAN, PRIME AND COAT WITH CONTAINMENT AND DUST COLLECTION THE EXTERIOR OF THE EXISTING 150,000-GALLON EST, ALL APPENDAGES, LADDER, VENT, HATCH, RAILING, TANK PIPING, VALVES, ETC., AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS PART 2.04.A AND PART 3.07 EXCEPT WHERE SPECIFICALLY COVERED BY OTHER BID ITEMS.	1	L.S.
2	FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE AND INCIDENTAL WORK TO SPOT BLAST FOR INSPECTION AND IDENTIFICATION OF REPAIRS, ABRASIVE BLAST PER SSPC-SP10, CLEAN, PRIME, STRIPE COAT AND COAT WITH DEHUMIDIFICATION THE INTERIOR OF THE EXISTING 150,000- GALLON EST, ALL APPENDAGES, LADDER, VENT, HATCH, WEIR BOX, ETC., AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS PART 2.04.B AND PART 3,06, EXCEPT WHERE SPECIFICALLY COVERED BY OTHER BID ITEMS.	1	L.S.
3	FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE AND INCIDENTAL WORK TO DEHUMIDIFY THE INTERIOR OF THE EXISTING 150,000-GALLON EST, DURING SURFACE PREPARATION AND COATING, INCLUDING HOSES, FILTERS, ETC., AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS PART 3.06, EXCEPT WHERE SPECIFICALLY COVERED BY OTHER BID ITEMS.	1	L.S.
4	FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE AND INCIDENTAL WORK TO PROVIDE CONTAINMENT AND DUST COLLECTION AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS PART 3.07, EXCEPT WHERE SPECIFICALLY COVERED BY OTHER BID ITEMS.	1	L.S.
5	FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE AND INCIDENTAL WORK TO PERFORM GENERAL REPAIRS; GRINDING, WELDING, REPAIR CORROSION RELATED SURFACES, REMOVE CONDUIT, ELECTRICAL CABINETS, REMOVE LIQUID LEVEL TARGET AND GENERAL WORK AS NEEDED, IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS PART 3.01.A, EXCEPT WHERE SPECIFICALLY COVERED BY OTHER BID ITEMS.	60	M.H.
6	FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE AND INCIDENTAL WORK TO INSTALL A NEW OSHA APPROVED CABLE SAFETY CLIMB TO BE A DBI-SALA GALVANIZED STEEL CABLE VERTICAL SAFETY SYSTEM OR EQUAL AND A 6" DIA. OVERFLOW F3012-T CLOW FLAP VALVE ASSEMBLY AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS PART 3.12 BID ITEM 6.	1	L.S.
7	FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE AND INCIDENTAL WORK TO PERFORM CAULKING AND OR SEAM SEALING WORK TO SEAMS AND AREAS AS DEEMED NECESSARY, AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS PART 3.01.A.2, EXCEPT WHERE SPECIFICALLY COVERED BY OTHER BID ITEMS.	20	PER TUBE

ISSUES / REVISIONS

DATE	NO.	DESCRIPTION	BY

STATE OF TEXAS

★

MARCUS J. NAISER

92814

PROFESSIONAL ENGINEER

09/09/22

ARDURRA

COLLABORATE. INNOVATE. CREATE.

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LEON VALLEY

DEEP ROOTS. BIG IDEAS.

CITY OF LEON VALLEY

HUEBNER ELEVATED STORAGE TANK

PAINTING AND REHABILITATION

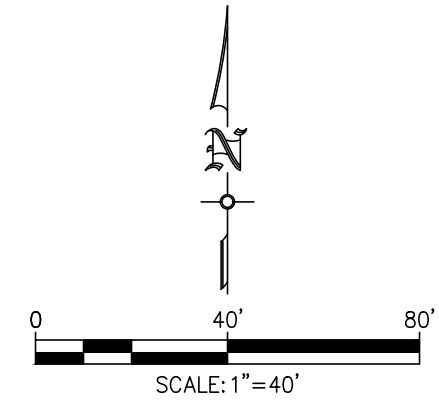
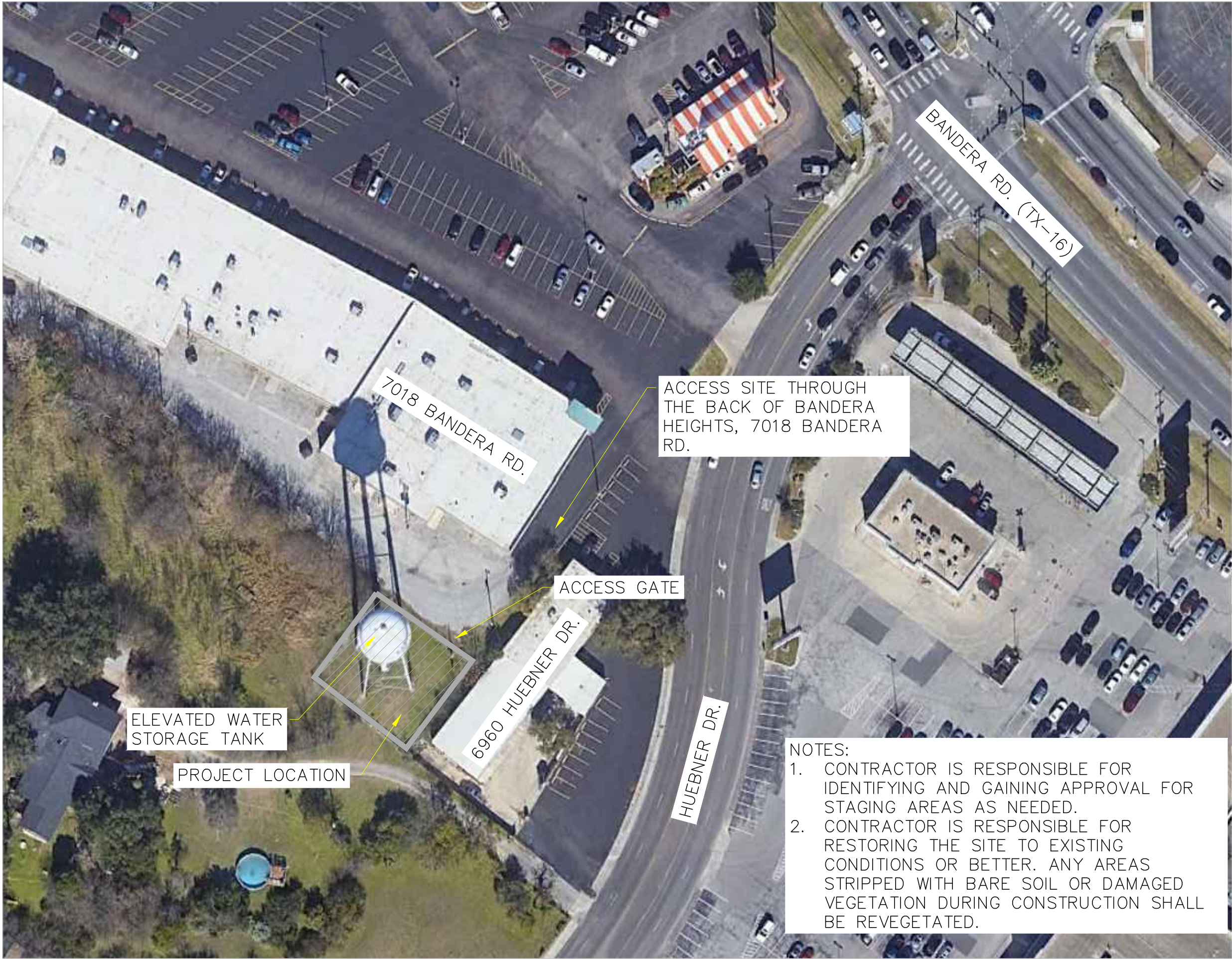
BEXAR COUNTY

GENERAL NOTES

FED RD. DIV.NO.	FEDERAL AID PROJECT	SHEET NO.
		C2
STATE	DIST.	COUNTY
TEXAS		BEXAR COUNTY
CONT.	SECT.	JOB
		HIGHWAY NO.



N:\Leon Valley\70165 Professional Eng. Site\530 Huebner EST Rehab\20-Drawings\Plans\Civil\70165.530\_OVERALL SITE.dwg  
Friday, September 09, 2022, 1:18pm



ISSUES / REVISIONS			
DATE	NO.	DESCRIPTION	BY

STATE OF TEXAS

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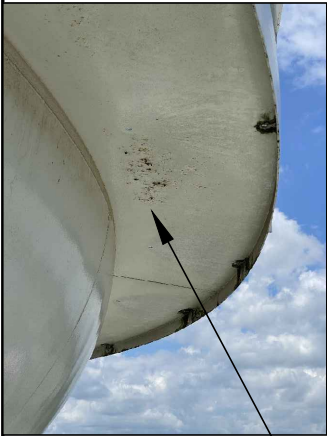


CITY OF LEON VALLEY  
HUEBNER ELEVATED STORAGE TANK  
PAINTING AND REHABILITATION  
BEXAR COUNTY

OVERALL SITE LAYOUT

FED. RD. DIV. NO.	FEDERAL AID PROJECT		SHEET NO. C3
STATE	DIST.	COUNTY	
TEXAS		BEXAR COUNTY	
CONT.	SECT.	JOB	HIGHWAY NO.





### 1 EXTERIOR CLEANING AND COATING

FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE AND INCIDENTAL WORK TO ABRASIVE BLAST PER SSPC-SP6, CLEAN, PRIME AND COAT WITH CONTAINMENT AND DUST COLLECTION THE EXTERIOR OF THE EXISTING 150,000-GALLON EST, ALL APPENDAGES, LADDER, VENT, HATCH, RAILING, TANK PIPING, VALVES, ETC., AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS PART 2.04.A AND PART 3.07 EXCEPT WHERE SPECIFICALLY COVERED BY OTHER BID ITEMS.

### 2 INTERIOR CLEANING AND COATING

FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE AND INCIDENTAL WORK TO SPOT BLAST FOR INSPECTION AND IDENTIFICATION OF REPAIRS, ABRASIVE BLAST PER SSPC-SP10, CLEAN, PRIME, STRIPE COAT AND COAT WITH DEHUMIDIFICATION THE INTERIOR OF THE EXISTING 150,000- GALLON EST, ALL APPENDAGES, LADDER, VENT, HATCH, WEIR BOX, ETC., AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS PART 2.04.B AND PART 3.06, EXCEPT WHERE SPECIFICALLY COVERED BY OTHER BID ITEMS.

### 3 DEHUMIDIFICATION

FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE AND INCIDENTAL WORK TO DEHUMIDIFY THE INTERIOR OF THE EXISTING 150,000-GALLON EST, DURING SURFACE PREPARATION AND COATING, INCLUDING HOSES, FILTERS, ETC., AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS PART 3.06, EXCEPT WHERE SPECIFICALLY COVERED BY OTHER BID ITEMS.

### 4 CONTAINMENT AND DUST COLLECTION

FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE AND INCIDENTAL WORK TO PROVIDE CONTAINMENT AND DUST COLLECTION AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS PART 3.07, EXCEPT WHERE SPECIFICALLY COVERED BY OTHER BID ITEMS.

### 5 GENERAL REPAIRS, WELDING, AND GRINDING

FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE AND INCIDENTAL WORK TO PERFORM GENERAL REPAIRS; GRINDING, WELDING, REPAIR CORROSION RELATED SURFACES, REMOVE CONDUIT, ELECTRICAL CABINETS, REMOVE LIQUID LEVEL TARGET AND GENERAL WORK AS NEEDED, IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS PART 3.01.A, EXCEPT WHERE SPECIFICALLY COVERED BY OTHER BID ITEMS.

### 6 CABLE SAFETY CLIMB AND FLAP VALVE REPLACEMENT

FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE AND INCIDENTAL WORK TO INSTALL A NEW OSHA APPROVED CABLE SAFETY CLIMB TO BE A DBI-SALA GALVANIZED STEEL CABLE VERTICAL SAFETY SYSTEM OR EQUAL AND A 6" DIA. OVERFLOW F3012-T CLOW FLAP VALVE ASSEMBLY AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS PART 3.12 BID ITEM 6.

### 7 CAULKING & SEAM SEALING

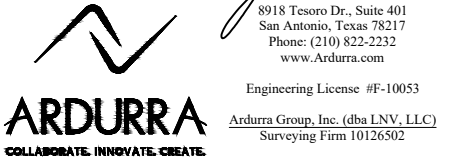
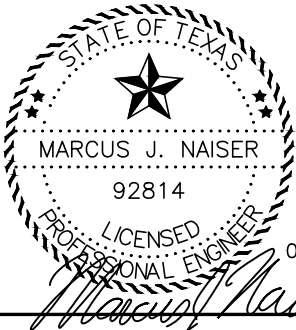
FURNISH ALL MATERIALS, EQUIPMENT, LABOR, SUPERINTENDENCE AND INCIDENTAL WORK TO PERFORM CAULKING AND OR SEAM SEALING WORK TO SEAMS AND AREAS AS DEEMED NECESSARY, AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS PART 3.01.A.2, EXCEPT WHERE SPECIFICALLY COVERED BY OTHER BID ITEMS.

#### TANK INFORMATION

NAME OF TANK: HUEBNER ELEVATED STORAGE TANK  
TANK TYPE: MULTI-COLUMN TORO-ELLIPSOIDAL ELEVATED STORAGE TANK  
TYPE OF CONSTRUCTION: STEEL WELDED  
TYPE OF COATINGS: EXTERIOR - EPOXY/URETHANE/CLEAR COAT. INTERIOR ZINC/EPOXY  
CONSTRUCTED: 1979 BY CHICAGO BRIDGE AND IRON COMPANY  
TANK VOLUME: 150,000 GALLONS  
TANK OVERALL HEIGHT: APPROX. 153'  
BCL: 120'  
TCL: 149'-10"  
HEAD RANGE: 28'  
BOWL: 32'Ø  
INTERIOR SURFACE AARE: APPROX. 5,100 SF  
EXTERIOR SURFACE AREA: APPROX. 9,900 SF

#### ISSUES / REVISIONS

DATE	NO.	DESCRIPTION	BY



CITY OF LEON VALLEY  
HUEBNER ELEVATED STORAGE TANK  
PAINTING AND REHABILITATION  
BEXAR COUNTY

TANK EXTERIOR AND  
INTERIOR UPGRADES

FED.RD. DIV.NO.	FEDERAL AID PROJECT		SHEET NO.
			C4
STATE	DIST.	COUNTY	
TEXAS	BEXAR COUNTY		
CONT.	SECT.	JOB	HIGHWAY NO.