

**CAMINO REAL REGIONAL MOBILITY AUTHORITY  
BOARD RESOLUTION**

**WHEREAS**, the Camino Real Regional Mobility Authority (CRRMA) entered into a construction contract dated October 24, 2016 (Contract) with International Eagle Enterprises, Inc. (Contractor) for the construction of the Old Hueco Tanks Road Project (Project);

**WHEREAS**, during construction, the Contractor requested the ability to install certain manholes and inlets using a pre-cast method, rather than the cast-in-place method required by the Project's plans; and

**WHEREAS**, there is no cost or time impact to the Project for the requested alternate construction method, the County of El Paso has approved this approach and the parties therefore desire to execute Change Order No. 2 to the Contract, for such change in process;

**NOW, THEREFORE, BE IT RESOLVED BY THE CAMINO REAL REGIONAL MOBILITY AUTHORITY:**

**THAT** the Executive Director be authorized to execute Change Order No. 2 with International Eagle Enterprises, Inc., to permit certain manholes and inlets to be cast-in-place on the Old Hueco Tanks Road Project.

**PASSED AND APPROVED THIS 6<sup>TH</sup> DAY OF JUNE 2017.**

**CAMINO REAL REGIONAL  
MOBILITY AUTHORITY**

\_\_\_\_\_  
Joe D. Wardy, Vice Chair

**ATTEST:**

\_\_\_\_\_  
Joe R. Fernandez, Board Secretary

**APPROVED AS TO CONTENT:**

\_\_\_\_\_  
Raymond L. Telles  
Executive Director

### CONSTRUCTION CONTRACT CHANGE ORDER NUMBER #2

1. CONTRACTOR: International Eagle Enterprises, Inc

2. Change Order Work Limits: Sta. 0+00 OHT CL to Sta. 73+66.37 OHT CL

3. Type of Change (on federal-aid non-exempt projects): Minor (Major/Minor)

4. Describe the change and the reason for the change order. When necessary, include exceptions to this agreement.

This is a no cost change order. No additional time will be added to the contract for completing the work.

Original "Storm Sewer Plan and Profile Plans" require Manholes and Inlets to be Pre-cast per TxDOT standards:

- a. PCU Standard "Precast curb inlet under roadway"
- b. PCO Standard "Precast curb inlet outside roadway"
- c. PRM Standard "Precast round manhole"
- d. PAZD Standard "Precast area zone drain"

During Construction activities, the contractor proposed a revised design to the manholes and inlets. The contractor requested a change in method of work to cast in place and submitted revised plans. See attached design drawings for cast in place.

5. New or revised plan sheet(s) are attached and numbered: New Sheets Old Hueco Tanks Rd Single Box Culverts Cast in Place

Each signatory hereby warrants that each has the authority to execute this Change Order.

CCSJ:	<u>0924-06-111</u>
Project:	<u>CS 0924 06 111</u>
Highway:	<u>Old Hueco Tanks Rd</u>
County:	<u>El Paso</u>
District:	<u>ELP</u>
Contract Number:	<u>N/A</u>

By signing this change order, the contractor agrees to waive any and all claims for additional compensation due to any and all other expenses; additional changes for time, overhead and profit; or loss of compensation as a result of this change. Further, the contractor agrees that this agreement is made in accordance with Item 4 and the Contract. Exceptions should be noted in the response for #5 above.	<b>The following information must be provided</b> Time Ext. #0 : <u>0</u> Days added on this C.O.#1: _____ Amt. added by this change order: <u>No Cost CO</u>
	THE CONTRACTOR _____ Date <u>5-12-17</u> By _____ Typed/Printed Name <u>Alfredo F Cord</u> Typed/Printed Title <u>Alfredo F Cord</u>

**CAMINO REAL REGIONAL MOBILITY AUTHORITY**

Executed for and approved by the Camino Real Regional Mobility Authority for the purpose and effect of activating and/or carrying out the orders, established policies or work programs heretofore approved and authorized by the Texas Transportation Commission.

\_\_\_\_\_  
Signature Date

\_\_\_\_\_  
Typed/Printed Name and Title

**LIST OF ATTACHMENTS**

- Attachment A Cast in Place Curb Inlet
- Attachment B Cast in Place Manholes



# CAMINO REAL REGIONAL MOBILITY AUTHORITY

CONSTRUCTION CONTRACT CHANGE ORDER NUMBER 2

## Third Party Funding Notification Sheet

This form is used when the subject change order involves funding by a source other than CRRMA, and involves third parties who are providing funding under an Advance Funding Agreement or Donation Agreement.

1. Outside funding provided by:

El Paso County  
(Outside Entity's Legal Name)

2. Type of outside funding agreement for this change:

Existing     Amended     New  
[Check one]

3. Indicate the type and amount of funding:

Fixed Price (Lump Sum) (Estimated Amount \$0.00)

Actual Cost

(a) Contract Items (Bid Items):

\_\_\_\_\_

**TOTAL**

\$0.00

CCSJ <u>0924-06-111</u>
Project: <u>Old Hueco Tanks Road</u>
Highway: <u>Old Hueco Tanks Road</u>
County: <u>El Paso</u>
District: <u>N/A</u>
Contract Number: _____

**Use as needed:**

I hereby acknowledge notification of the modifications covered by this Change Order.

Date \_\_\_\_\_

By \_\_\_\_\_

Typed/Printed Name \_\_\_\_\_

Typed/Printed Title \_\_\_\_\_

\* The percentage (%) for E&C (Engineering and Contingencies) charges varies from project to project depending on the contract amount of the project. Projects with a higher contract amount will have a lower rate of E&C charge. For a specific project, E&C rate (%) can be derived from the cost of "Engineering and Contingencies" in the "Estimated Cost" of the project.

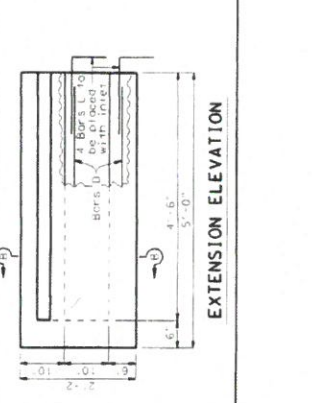
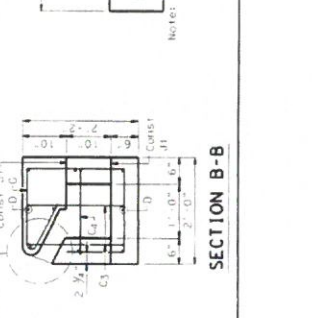
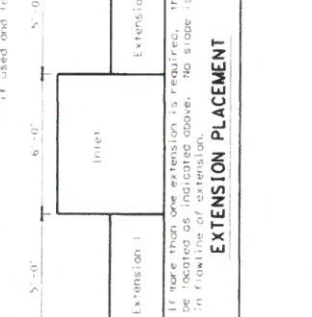
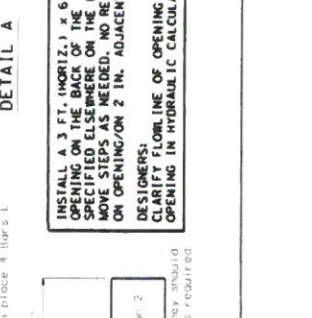
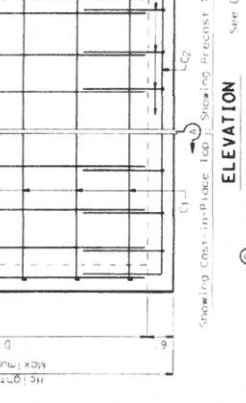
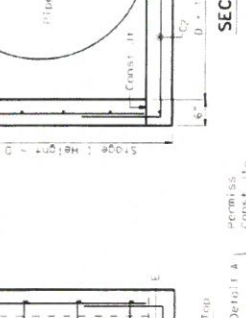
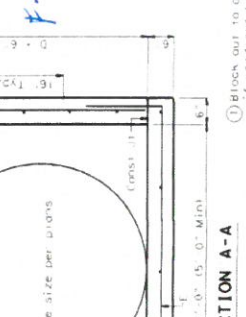
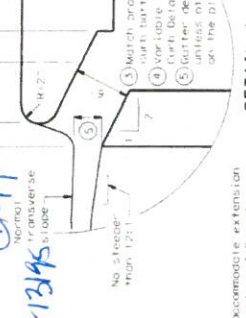
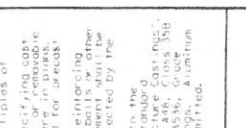
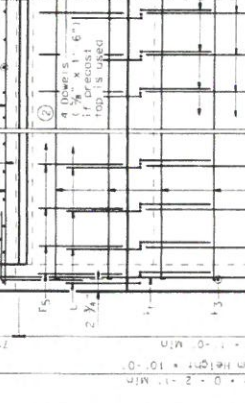
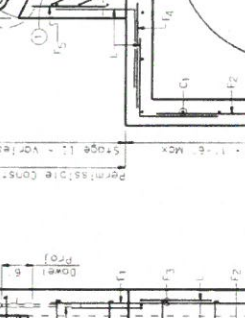
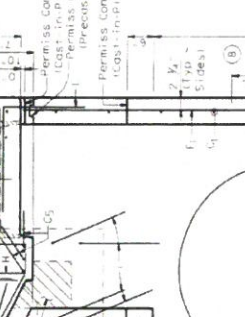
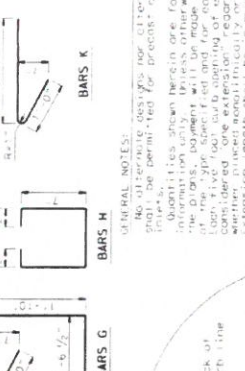
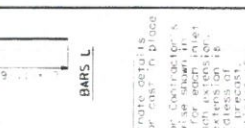
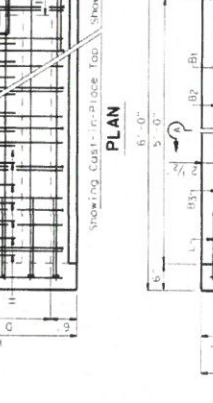
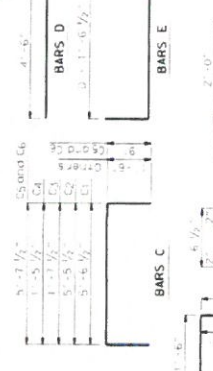
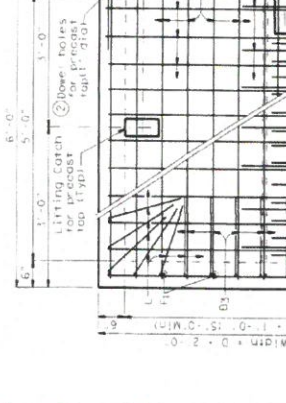
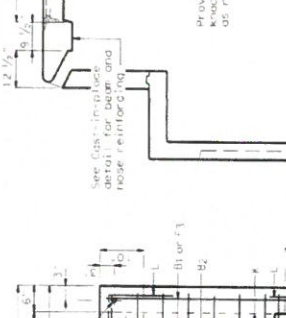
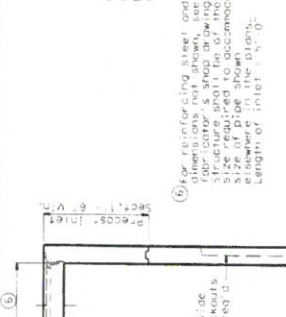
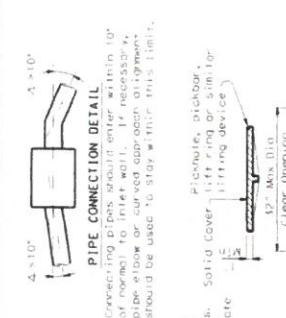
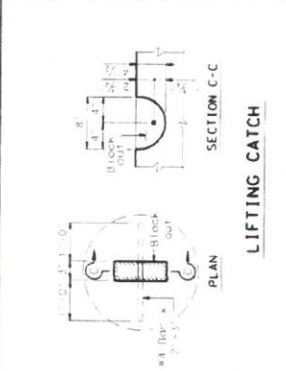
\*\* Use the statewide district rate as established by Finance Division each year. This line 3 (c) is for Service Project only, unless otherwise specified in the Advance Funding Agreement. See Stand Alone Manual Notice 98-2 for instructions.

Funding for this Change Order has been arranged:	
<u>Norma Lucio Palacios</u>	
Representative	Date
Typed/Printed Name: <u>Norma Lucio Palacios</u>	<u>6/1/2017</u>

Contact/Help



REINFORCING STEEL	BAR	SIZE	SPACING	LENGTH
1	3/4"	12"	12"	12"
2	1"	12"	12"	12"
3	1 1/4"	12"	12"	12"
4	1 1/2"	12"	12"	12"
5	1 3/4"	12"	12"	12"
6	2"	12"	12"	12"
7	2 1/4"	12"	12"	12"
8	2 1/2"	12"	12"	12"
9	2 3/4"	12"	12"	12"
10	3"	12"	12"	12"
11	3 1/4"	12"	12"	12"
12	3 1/2"	12"	12"	12"
13	3 3/4"	12"	12"	12"
14	4"	12"	12"	12"
15	4 1/4"	12"	12"	12"
16	4 1/2"	12"	12"	12"
17	4 3/4"	12"	12"	12"
18	5"	12"	12"	12"
19	5 1/4"	12"	12"	12"
20	5 1/2"	12"	12"	12"
21	5 3/4"	12"	12"	12"
22	6"	12"	12"	12"
23	6 1/4"	12"	12"	12"
24	6 1/2"	12"	12"	12"
25	6 3/4"	12"	12"	12"
26	7"	12"	12"	12"
27	7 1/4"	12"	12"	12"
28	7 1/2"	12"	12"	12"
29	7 3/4"	12"	12"	12"
30	8"	12"	12"	12"
31	8 1/4"	12"	12"	12"
32	8 1/2"	12"	12"	12"
33	8 3/4"	12"	12"	12"
34	9"	12"	12"	12"
35	9 1/4"	12"	12"	12"
36	9 1/2"	12"	12"	12"
37	9 3/4"	12"	12"	12"
38	10"	12"	12"	12"
39	10 1/4"	12"	12"	12"
40	10 1/2"	12"	12"	12"
41	10 3/4"	12"	12"	12"
42	11"	12"	12"	12"
43	11 1/4"	12"	12"	12"
44	11 1/2"	12"	12"	12"
45	11 3/4"	12"	12"	12"
46	12"	12"	12"	12"
47	12 1/4"	12"	12"	12"
48	12 1/2"	12"	12"	12"
49	12 3/4"	12"	12"	12"
50	13"	12"	12"	12"
51	13 1/4"	12"	12"	12"
52	13 1/2"	12"	12"	12"
53	13 3/4"	12"	12"	12"
54	14"	12"	12"	12"
55	14 1/4"	12"	12"	12"
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57	14 3/4"	12"	12"	12"
58	15"	12"	12"	12"
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70	18"	12"	12"	12"
71	18 1/4"	12"	12"	12"
72	18 1/2"	12"	12"	12"
73	18 3/4"	12"	12"	12"
74	19"	12"	12"	12"
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76	19 1/2"	12"	12"	12"
77	19 3/4"	12"	12"	12"
78	20"	12"	12"	12"
79	20 1/4"	12"	12"	12"
80	20 1/2"	12"	12"	12"
81	20 3/4"	12"	12"	12"
82	21"	12"	12"	12"
83	21 1/4"	12"	12"	12"
84	21 1/2"	12"	12"	12"
85	21 3/4"	12"	12"	12"
86	22"	12"	12"	12"
87	22 1/4"	12"	12"	12"
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91	23 1/4"	12"	12"	12"
92	23 1/2"	12"	12"	12"
93	23 3/4"	12"	12"	12"
94	24"	12"	12"	12"
95	24 1/4"	12"	12"	12"
96	24 1/2"	12"	12"	12"
97	24 3/4"	12"	12"	12"
98	25"	12"	12"	12"
99	25 1/4"	12"	12"	12"
100	25 1/2"	12"	12"	12"



GENERAL NOTES:  
 No alternate designs for alternate details shall be permitted for precast or cast in place quantities shown herein are for Contractor's information only. Precast concrete shall be of the type specified and for each as indicated on the drawings. The Contractor shall be responsible for providing all necessary reinforcement. Whether precast or cast in place, the reinforcement shall be in multiples of 5 feet length unless otherwise noted.  
 Engineer has the option of specifying cast in place concrete for the cover or precast concrete for the cover. The Contractor shall specify the type of concrete to be used. The Contractor shall specify the type of concrete to be used. The Contractor shall specify the type of concrete to be used.  
 In areas of conflict between reinforcing steel, blockouts, pipes, anchor bolts or other items, the Contractor shall be responsible for adjusting the reinforcement to be installed by the Engineer and cover shall conform to the specifications for precast concrete. The Contractor shall specify the type of concrete to be used. The Contractor shall specify the type of concrete to be used. The Contractor shall specify the type of concrete to be used.

INSTALL A 3 FT. HORIZ. X 6 IN. (VERT.) SPACING OF THE BACK OF THE INLET WHEN OPENING IS REQUIRED. NO REINFORCING MOVE STEPS AS NEEDED. NO REINFORCING ON OPENING/ON 2 IN. ADJACENT TO OPENING. DESIGNERS: CLARIFY FLOOR LINE OF OPENING AND INCLUDE OPENING IN HYDRAULIC CALCULATIONS.

EXTENSION PLACEMENT  
 Note: If more than one extension is required, they should be placed as shown above. NO slope is required to front line of extension.

SECTION A-A  
 (1) block out to accommodate extension if used and in place 4 Bars L

SECTION B-B  
 (2) If precast top is used, provide 4 #6 dia x 1'-6" smooth bars in inlet walls for 1'-0" dia holes

SECTION C-C  
 (3) For reinforcing steel and pipe cover, shop drawings structure and details of the size of pipe shown elsewhere in the plans. Length of inlet = 3'-0"

SECTION D-D  
 (4) Attach 1" Min. Ring and Cover necessary for connection. Permit as Const. J. Cast in Place. Precast Top. Precast in Place.

SECTION E-E  
 (5) Match proposed curb details. (6) 1/2" dia. (7) 1/2" dia. (8) 1/2" dia. (9) 1/2" dia. (10) 1/2" dia. (11) 1/2" dia. (12) 1/2" dia. (13) 1/2" dia. (14) 1/2" dia. (15) 1/2" dia. (16) 1/2" dia. (17) 1/2" dia. (18) 1/2" dia. (19) 1/2" dia. (20) 1/2" dia. (21) 1/2" dia. (22) 1/2" dia. (23) 1/2" dia. (24) 1/2" dia. (25) 1/2" dia. (26) 1/2" dia. (27) 1/2" dia. (28) 1/2" dia. (29) 1/2" dia. (30) 1/2" dia. (31) 1/2" dia. (32) 1/2" dia. (33) 1/2" dia. (34) 1/2" dia. (35) 1/2" dia. (36) 1/2" dia. (37) 1/2" dia. (38) 1/2" dia. (39) 1/2" dia. (40) 1/2" dia. (41) 1/2" dia. (42) 1/2" dia. (43) 1/2" dia. (44) 1/2" dia. (45) 1/2" dia. (46) 1/2" dia. (47) 1/2" dia. (48) 1/2" dia. (49) 1/2" dia. (50) 1/2" dia. (51) 1/2" dia. (52) 1/2" dia. (53) 1/2" dia. (54) 1/2" dia. (55) 1/2" dia. (56) 1/2" dia. (57) 1/2" dia. (58) 1/2" dia. (59) 1/2" dia. (60) 1/2" dia. (61) 1/2" dia. (62) 1/2" dia. (63) 1/2" dia. (64) 1/2" dia. (65) 1/2" dia. (66) 1/2" dia. (67) 1/2" dia. (68) 1/2" dia. (69) 1/2" dia. (70) 1/2" dia. (71) 1/2" dia. (72) 1/2" dia. (73) 1/2" dia. (74) 1/2" dia. (75) 1/2" dia. (76) 1/2" dia. (77) 1/2" dia. (78) 1/2" dia. (79) 1/2" dia. (80) 1/2" dia. (81) 1/2" dia. (82) 1/2" dia. (83) 1/2" dia. (84) 1/2" dia. (85) 1/2" dia. (86) 1/2" dia. (87) 1/2" dia. (88) 1/2" dia. (89) 1/2" dia. (90) 1/2" dia. (91) 1/2" dia. (92) 1/2" dia. (93) 1/2" dia. (94) 1/2" dia. (95) 1/2" dia. (96) 1/2" dia. (97) 1/2" dia. (98) 1/2" dia. (99) 1/2" dia. (100) 1/2" dia.

OLD HUECO TANKS  
 CURB INLET TYPE C1  
 (WITH OR WITHOUT EXTENSION)  
 HIL-C1

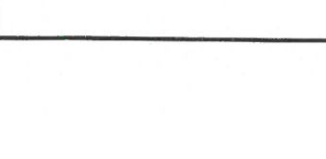
DATE: 5/30/02.DGN  
 REV: 1/10/02  
 PROJECT NO.  
 SHEET NO.  
 TOTAL SHEETS

D = Diameter  
 R = Radius



TABLE OF QUANTITIES WITH NO DEDUCTIONS FOR PIPES OR INLET OPENINGS  
BILL OF #4 REINFORCING STEEL

PIPE DIA.	CONC. REDUCTION ONE PIPE	
	C. Y.	CU. Y.
15	0.05	0.07
18	0.10	0.12
21	0.15	0.18
24	0.20	0.24
27	0.25	0.30
30	0.30	0.36
33	0.35	0.42
36	0.40	0.48
39	0.45	0.54
42	0.50	0.60
45	0.55	0.66
48	0.60	0.72
51	0.65	0.78
54	0.70	0.84
57	0.75	0.90
60	0.80	0.96
63	0.85	1.02
66	0.90	1.08
69	0.95	1.14
72	1.00	1.20



MAX. PIPE DIA.	HEIGHT STR. "A"	LENGTH OF STR. "L"	WIDTH OF STR. "M"	STEPS 12"x12"		BARS A 12"x12"		BARS B 12"x12"		BARS C 6"x6"		BARS D 12"x12"		BARS D2 12"x12"		BARS E	REINFORCING LABEL	CLASS CONC.	
				No.	Length	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length				No.
30"	3'-9"	4'-4"	3'-0"	2	2'-10"	4	7'-4"	4	4'-10"	34	6'-1"	4	4'-11"	8	5'-3"	4	3'-6"	281	2.54
																		300	2.75
																		321	2.96
																		343	3.17
																		358	3.38
																		379	3.59
																		411	3.80
																		325	2.99
																		351	3.23
																		375	3.47
																		399	3.71
																		417	3.95
																		441	4.19
																		458	4.43
																		498	4.65
																		433	4.24
																		459	4.53
																		477	4.82
																		503	5.10
																		521	5.39
																		506	5.14
																		525	5.46
																		553	5.78
																		573	6.10
																		562	5.85
																		583	6.20
																		614	6.56
																		635	6.91
																		638	6.90

NOTE:  
FOR 36" DIAMETER INLET OPENING DEDUCT 0.20 C.Y. CONCRETE.  
FOR 48" DIAMETER INLET OPENING DEDUCT 0.35 C.Y. CONCRETE.  
FOR 3' X 2' INLET OPENING DEDUCT 0.17 C.Y. CONCRETE.  
FOR 3' X 3' INLET OPENING DEDUCT 0.25 C.Y. CONCRETE.  
FOR 3' X 4' X 3' INLET OPENING DEDUCT 0.28 C.Y. CONCRETE.

GENERAL NOTES:  
1. ALL CONCRETE SHALL BE CLASS "A".  
2. DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTER OF BARS.  
3. FIELD CUT AND BEND BARS AS REQUIRED TO ACCOMMODATE PIPES AND INLET EXTENSIONS.  
4. CONSTRUCTION JOINT AT FLOW LINE MAY BE PLACED A MAXIMUM OF 6" AT OPTION OF THE CONTRACTOR, ADJUST LENGTH LAP.  
5. WHERE IT IS CONSIDERED NECESSARY, BARS CUT OUT TO PROVIDE OPENINGS FOR PIPE MAY BE BENT AND USED TO PROVIDE A BETTER TIE FOR EXTENSIONS AND PIPE AS DIRECTED BY THE ENGINEER.  
6. WHEN STRUCTURE IS COMBINED WITH UPPER STRUCTURE, THE STRUCTURE LOCATION SHOWN IN THE PLANS REFERS TO THE CONTROL POINT OF THE UPPER STRUCTURE. WHEN STRUCTURE IS NOT COMBINED WITH UPPER STRUCTURE, THE LOCATION SHOWN IN THE PLANS REFERS TO THE CONTROL POINT SHOWN ON THIS SHEET.



PLAN - TOP SLAB  
(BLOCK OUT NOT SHOWN)



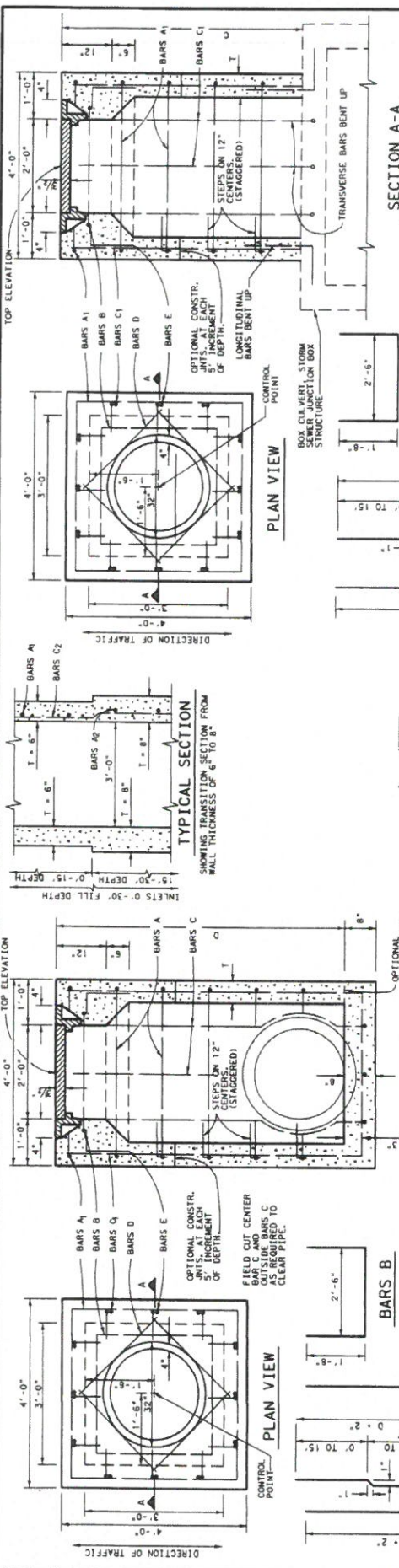
TYPICAL SECTION - LENGTH VIEW  
WIDTH VIEW SIMILAR

STATE OF TEXAS  
SEAL OF THE ENGINEER  
HECTOR M. MARTINEZ  
81849  
LICENSED PROFESSIONAL ENGINEER

DESIGN	FED. RES.	STATE	PROJ. NO.
CHECKED	TEAMS	DISTRICT	CONTROL SECTION
DATE	YEAR	COUNTY	JOB
ENGINEER	FOUR		SHEET
DRAWN			

OLD HUECO TANKS  
JUNCTION BOX STRUCTURE  
TYPE 2  
JB-2-02 (FW)





**CONCRETE QUANTITY REDUCTION TABLE**

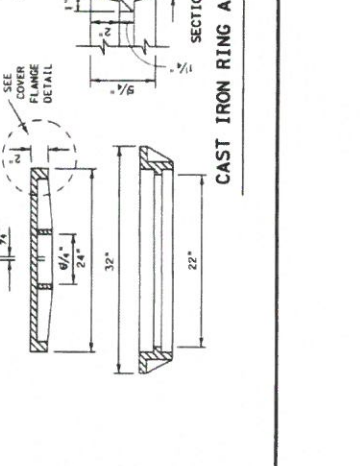
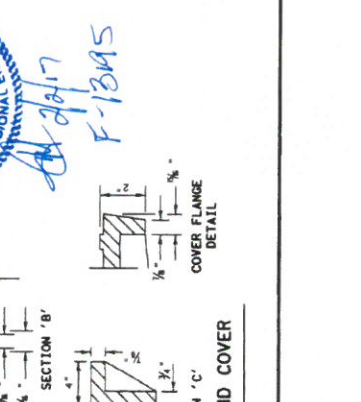
PIPE DIA.	T = 6"	T = 8"
18"	0.04	0.06
24"	0.05	0.07
30"	0.08	0.10
36"	0.11	0.13
42"	0.14	0.16
48"	0.17	0.19
54"	0.20	0.22
60"	0.23	0.25

**TABLE OF QUANTITIES-TYPE 1 MANHOLE**

BAR	SIZE	SPAC.	NO.	LNTH.	WT.	NO.	LNTH.	WT.	
A1	No. 4	12"	8	7'-10"	105	30	7'-10"	157	
A2	No. 4	12"	8	2'-10"	8	25	308	164	
B1	No. 4	12"	8	11'-3"	95	12	9'-9"	127	
B2	No. 4	12"	8	2'-6"	7	4	2'-6"	7	
C1	No. 4	12"	8	11'-3"	95	12	9'-9"	127	
C2	No. 4	12"	8	2'-6"	7	4	2'-6"	7	
D1	No. 4	12"	8	11'-3"	95	12	9'-9"	127	
D2	No. 4	12"	8	2'-6"	7	4	2'-6"	7	
E1	No. 4	12"	8	11'-3"	95	12	9'-9"	127	
E2	No. 4	12"	8	2'-6"	7	4	2'-6"	7	
TOTAL STEEL - LBS.		1,700		282		496		1,271	
CLASS "A" CONC. - CU. YDS.		1.28		3.28		10.01		10.01	
LBS. STEEL		1,700		282		496		1,271	
CU. YDS. CONC.		1.44		0.259		0.364		0.364	

**TABLE OF QUANTITIES-TYPE 1-C MANHOLE**

BAR	SIZE	SPAC.	NO.	LNTH.	WT.	NO.	LNTH.	WT.	
A1	No. 4	12"	4	7'-10"	21	20	7'-10"	57	
A2	No. 4	12"	4	2'-10"	8	25	308	164	
B1	No. 4	12"	4	11'-3"	45	12	9'-9"	127	
B2	No. 4	12"	4	2'-6"	7	4	2'-6"	7	
C1	No. 4	12"	4	11'-3"	45	12	9'-9"	127	
C2	No. 4	12"	4	2'-6"	7	4	2'-6"	7	
D1	No. 4	12"	4	11'-3"	45	12	9'-9"	127	
D2	No. 4	12"	4	2'-6"	7	4	2'-6"	7	
E1	No. 4	12"	4	11'-3"	45	12	9'-9"	127	
E2	No. 4	12"	4	2'-6"	7	4	2'-6"	7	
TOTAL STEEL - LBS.		1,700		282		496		1,271	
CLASS "A" CONC. - CU. YDS.		1.28		3.28		10.01		10.01	
LBS. STEEL		1,700		282		496		1,271	
CU. YDS. CONC.		1.44		0.259		0.364		0.364	



**OLD HUECO TANKS**  
 STORM DRAIN MANHOLE DETAILS  
 TYPES 1 & 1-C  
 MH-1-02 (FW)

REVISION	DATE	BY	CHKD.	APP'D.	NO.
DESIGN					
REVISION					
REVISION					
REVISION					
REVISION					



*Handwritten signature and date: 2/21/17 F-1305*