

**Matt Hanks, P.E., CFM**  
COUNTY ENGINEER



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ASST. COUNTY ENGINEER

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**BRAZORIA COUNTY ENGINEERING**

451 N VELASCO, SUITE 230  
ANGLETON, TEXAS 77515

Document Type: Change Order Memorandum  
Subject: Change Order 01  
Project: CR 58  
Description: Cement Stabilized Sand for Drainage Structures

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Change Order No. 1 (CO 1) provides a new work item to complete cement stabilized sand installation for drainage structures. This change order does not impact the critical path, therefore no time adjustments are made.

The contract plans, designed by Austin Mclean, P.E., of McDonough Engineering, provide for the reconstruction and widening of CR 58 from CR 48 to the Savannah Development. The Contractor, ICON, remains on-site and continues to perform the contract according to the plans and the 2014 Texas Standard Specifications. All change order work is within the project limits.

The widening of CR 58 requires installation of an underground drainage system. The specifications for underground drainage systems require that the drainage pipes and structures be backfilled with cement stabilized sand. The plans were reviewed at the start of the project and it was discovered that the quantity of cement stabilized sand was 100 Cubic Yards (CY). When the quantity of cement stabilized sand that would be needed was calculated according to the TxDOT excavation and backfill diagrams, it is approximately 1,660 CY for drainage structures. The 100 CY included in the plans is intended to be placed as driveway and cross-over base. Therefore, this change order adds 1660 CY of cement stabilized sand at a new unit price.

Since the character of the work is different than the intended use of cement stabilized sand in the contract plans, the Contractor has submitted a new unit price of \$71.19/CY. This price was compared to the current 3-month and 12-month Houston District Average Low Bid Unit Prices (ALBUP). The 3-month ALBUP is \$82.69/CY while the 12-month is \$86.69/CY. Therefore, since the Contractor's pricing is competitive for the Houston area

and compares favorably to the ALBUP, this change order pricing is considered fair and reasonable.

The total additional cost of this change order is \$118,175.40. This change order funding will utilize federal participation at the rate specified in the Advanced Funding Agreement (AFA). This agreement states that federal reimbursement rate is 80% of the cost while the local government is responsible for 20%. Therefore, the local government will be responsible for \$23,635.08 while the federal participation amount will be \$94,540.32.

This change order adds plan sheets 152A and 152B.

No amended or additional environmental clearance, permits or authorizations are required for this change order.



**Client:** Brazoria County

**Project:** CR 58 Widening From CR 48 to Sav

**Number:** C14-001-58

## Change Details

**Submitted To Name:** Winkler, Mike

**Submitted To Company:** AECOM

**Submitted By Name:** Burke, Chris

**Submitted By Company:** ICON GC, LLC

**Change ID (External #):** CHG-2024-0001

**Summary Description:** Cement Stabilized Sand for Drainage Structures

**Status of Change:** 2) RE Approved (4/3/2024 8:25 PM)

### Change Value:

**Cost:** \$118,175.40

**Schedule:** 0 day(s)

### Detailed Description of Change:

Change Order No. 1 (CO 1) provides a new work item to complete cement stabilized sand installation for drainage structures. This change order does not impact the critical path, therefore no time adjustments are made.

The widening of CR 58 requires installation of an underground drainage system. The specifications for underground drainage systems require that the drainage pipes and structures be backfilled with cement stabilized sand. The plans were reviewed at the start of the project and it was discovered that the quantity of cement stabilized sand was 100 Cubic Yards (CY). When the quantity of cement stabilized sand that would be needed was calculated according to the TxDOT excavation and backfill diagrams, it is approximately 1,660 CY for drainage structures. The 100 CY included in the plans is intended to be placed as driveway and cross-over base. Therefore, this change order adds 1660 CY of cement stabilized sand at a new unit price.

### Work Tickets

**Description:** 400-6005 CEM STABL BKFL

**Notes:**

**Qty:** 1,660

**Unit Cost:** \$71.19

**Total:** \$118,175.4

### Attachment List

No Attachments

**NOT VALID UNTIL SIGNED BY THE CONTRACTOR/OWNER/SUBCONTRACTOR**

**ACCEPTED:**

**CONTRACTOR/OWNER/SUBCONTRACTOR:**

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

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

\_\_\_\_\_  
**PRINT NAME/TITLE**

\_\_\_\_\_  
**PRINT NAME/TITLE**

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

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

# CONSTRUCTION CONTRACT CHANGE ORDER NUMBER: 001

1. CONTRACTOR: ICON, LLC

2. Change Order Work Limits: Sta. 77+40 to Sta. 106+99

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

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

The project plans did not include a quantity for cement stabilized sand to backfill the drainage structures on the project. Therefore, this change order adds item 400-6005 "CEM STABIL BKFL" at a quantity of 1660 CY to backfill the drainage structures.

**CCSJ:** 0912-31-304  
**Project:** STP 1702 (437) MM  
**Highway:** CR 58  
**County:** Brazoria  
**District:** Houston  
**Contract Number:** \_\_\_\_\_

5. New or revised plan sheet(s) are attached and numbered: 152A and 152B

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

<p>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.</p> <p>THE CONTRACTOR _____ Date _____</p> <p>By _____</p> <p>Typed/Printed Name _____</p> <p>Typed/Printed Title _____</p>	<p><b>The following information must be provided</b></p> <p>Time Ext. #: <u>N/A</u> Days added on this C.O.: <u>N/A</u></p> <p>Amt. added by this change order: <u>\$118,175.40</u></p>
	<p><b>For TxDOT use only:</b></p> <p>Days participating: _____</p> <p>Amount participating: _____</p> <p>Signature _____ Date _____</p> <p>Name/Title _____</p>

## RECOMMENDED FOR EXECUTION:

\_\_\_\_\_  
Name/Title \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_  
Name/Title \_\_\_\_\_ Date \_\_\_\_\_  
☐ APPROVED ☐ REQUEST APPROVAL

\_\_\_\_\_  
Name/Title \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_  
Name/Title \_\_\_\_\_ Date \_\_\_\_\_  
☐ APPROVED ☐ REQUEST APPROVAL

\_\_\_\_\_  
Name/Title \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_  
Name/Title \_\_\_\_\_ Date \_\_\_\_\_  
☐ APPROVED ☐ REQUEST APPROVAL

\_\_\_\_\_  
Name/Title \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_  
Name/Title \_\_\_\_\_ Date \_\_\_\_\_  
☐ APPROVED

Engineer's Seal:

ESTIMATE SUMMARY (BID PRICES)

Bid #	Client Bid#	Total	Total Cost		Balanced	Balanced Bid	Pricing	Bid	Bid
Quantity	Unit	Cost	Unit Price	Markup	Bid Total	Unit Price	Status	Price	Total
1			CEMENT STABILIZED BA	25.0%					
1.00	CY	53.39	53.39	18	71	71.19		71.190	71.19
TOTALS:		53.39		18	71				71.19

Code between Balanced Bid & Bid Price: U=Unbalanced, F=Frozen, C=Closing Biditem (item to absorb unbalancing differences).

\*\* in front of the Biditem indicates a Non-Additive item

ESTIMATE SUMMARY (BID PRICES)

Bid #	Client Bid#	Total	Total Cost		Balanced	Balanced Bid	Pricing	Bid	Bid
Quantity	Unit	Cost	Unit Price	Markup	Bid Total	Unit Price	Status	Price	Total

BID COSTS =====>	53
ACTUAL MARKUP =====>	18
TOTAL BID =====>	71

Spread Indirects on: TOTAL COST    Spread Markup on: TOTAL COST  
Default Markup %:

- Labor: 0%
- Burden: 0%
- Perm Matl: 0%
- Const Matl: 0%
- Sub: 0%
- Eqp Op Exp: 0%
- Co. Equip: 0%
- Rented Eqp: 0%
- Trucking: 0%
- Misc 2: 0%
- Misc 3: 0%

Spread Addons & Bond TOTAL COST

Bond Calculations

Selected Bond Table: B1 Description: Bond

	Contract Amount	Rate per 1000	Bond Amount
First:	\$ 100,000	25.00	\$ 1.78
Next:	\$ 400,000	15.00	\$ 0.00
Next:	\$ 2,000,000	10.00	\$ 0.00
Next:	\$ 2,500,000	7.50	\$ 0.00
Next:	\$ 2,500,000	7.00	\$ 0.00
Remainder:		6.50	\$ 0.00
Subtotal:			\$ 1.78
Time Threshold 1:	Extended Time Rate 1: %		\$ 0.00
Time Threshold 2:	Extended Time Rate 2: %		\$ 0.00
Length of Job: 1	Total Bond Amount:		1.78

----- ESTIMATE NOTES: -----

Bid Date:                      Owner:                      Engineering Firm:  
   Estimator-In-Charge:                      Desired Bid (if specified) = 0

Last Summary on 03/14/2024 at 9:34 AM.  
Last Spread on 03/14/2024 at 9:34 AM.

Cost Report

Biditem

1

CEMENT STABILIZED BACKFILL

Takeoff Qty: 1.000 CY

Bid Qty: 1.000 CY

Manhours	Unit/MH	MH/Unit	Unit/CH
0.3600	2.7778	0.3600	0.0000

Activity: 10

Install Cement Stabilized Sand

Quantity: 1.00

Unit: CY

Manhours	Unit/MH	MH/Unit
0.3600	2.7778	0.3600

Calendar: 510

5 Shifts 10 Hours per Shift

Hrs/Shift: 10

WC: 5560

Paving

Resource	Description	Pcs/Wste	Quantity	Unit
2SAND1	Cement Sand (1.5sack)	1.00	1.62	TN
UL	▫ Laborer - Utility	2.00	0.12	MH
UOP	▫ Pipe Layer	1.00	0.12	MH
UPLH	▫ Pipe Layer Helper	1.00	0.12	MH

Biditem

900000000

INDIRECTS

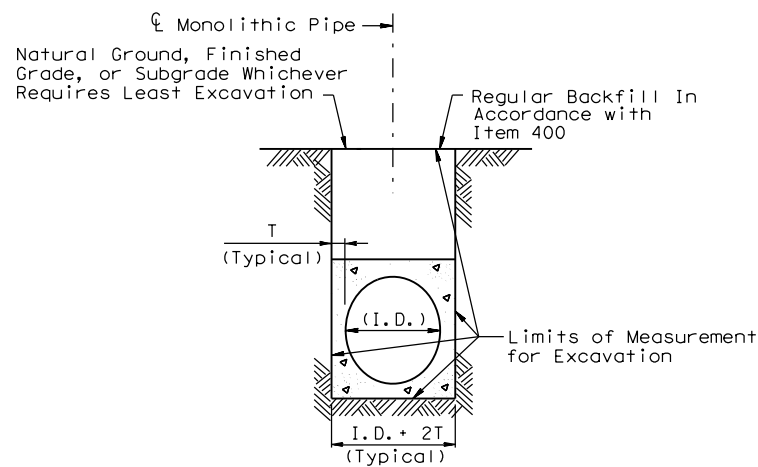
Takeoff Qty: 1.000 LS

Bid Qty: 1.000 LS

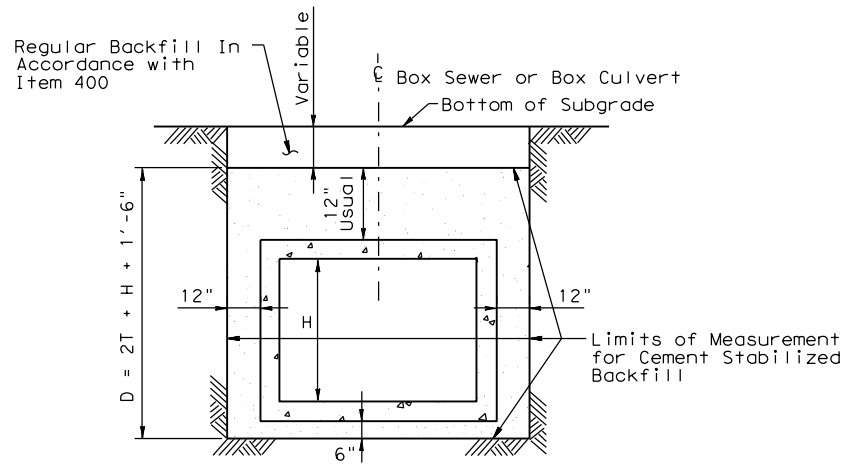
Calendars Used In Estimate

510

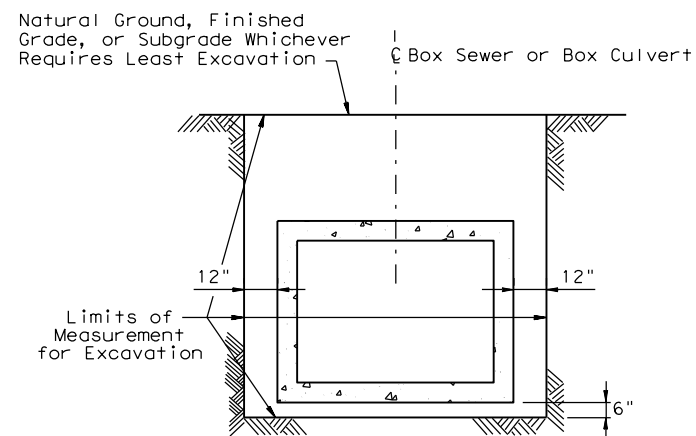
5 Shifts 10 Hours per Shift



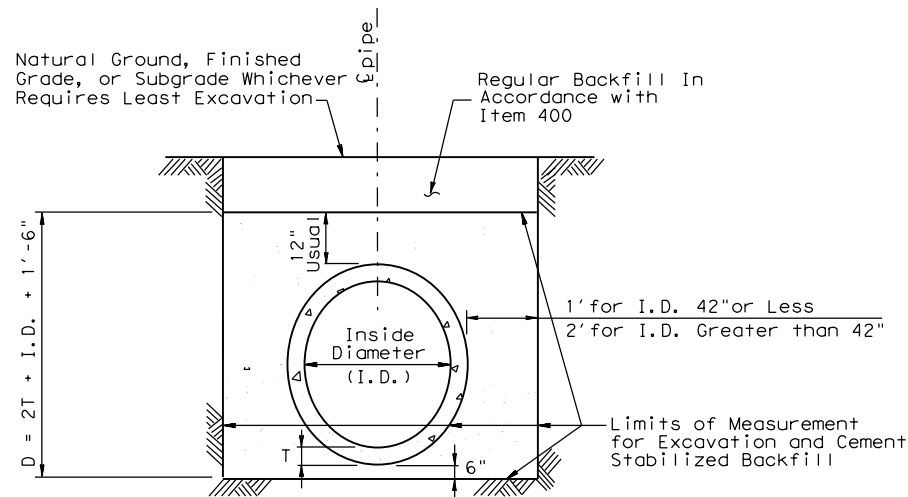
**EXCAVATION DETAIL**  
MONOLITHIC PIPE  
IN A PAVED OR GRADED AREA



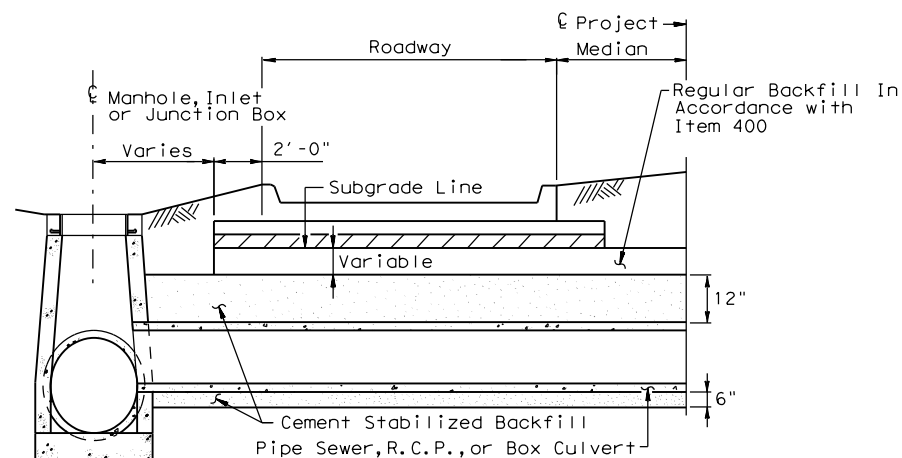
**BACKFILL DETAIL**  
BOX CULVERTS  
IN A GRADED OR PAVED AREA  
INCLUDING DETOURS \*



**EXCAVATION DETAIL**  
BOX CULVERTS  
IN A GRADED AREA



**EXCAVATION & BACKFILL DETAIL**  
REINFORCED CONCRETE PIPE  
IN A GRADED OR PAVED AREA  
INCLUDING DETOURS



**BACKFILL DETAIL**  
AT MANHOLE, INLET OR JUNCTION BOX

REINFORCED CONCRETE PIPE			
EXCAVATION AND BACKFILL QUANTITIES			
PIPE DIA. IN.	T FT.	CULVERT OR SEWER EXCAVATION IN A PAVED OR GRADED AREA	CEMENT STABILIZED BACKFILL IN A PAVED OR GRADED AREA
		C.Y. PER L.F. PER FT. OF DEPTH	C.Y. PER L.F. OF PIPE
18	0.19	0.144	0.383
24	0.23	0.165	0.478
30	0.29	0.188	0.586
36	0.33	0.210	0.692
42	0.38	0.231	0.808
48	0.42	0.327	1.394
54	0.46	0.349	1.560
60	0.50	0.370	1.731
66	0.54	0.392	1.907
72	0.58	0.414	2.088
78	0.62	0.435	2.275
84	0.67	0.457	2.474

MONOLITHIC PIPE		
EXCAVATION QUANTITIES		
PIPE DIA. IN.	T FT.	EXCAVATION C.Y. PER L.F. PER FT. OF DEPTH
36	0.417	0.142
42	0.458	0.164
48	0.458	0.182
54	0.500	0.204
60	0.583	0.228
66	0.583	0.247
72	0.625	0.269
78	0.625	0.287
84	0.625	0.306

**NOTE:**  
Cement stabilized backfill may be omitted in private driveways as indicated elsewhere in the plans.  
Rubber gaskets shall be required for all joints on proposed cross drainage, pipe culverts and proposed storm sewer systems, unless otherwise shown in the plans.  
\* Backfill with cement stabilized material will be required for all structures under detours unless noted otherwise in the General Notes.

SHEET 1 OF 2



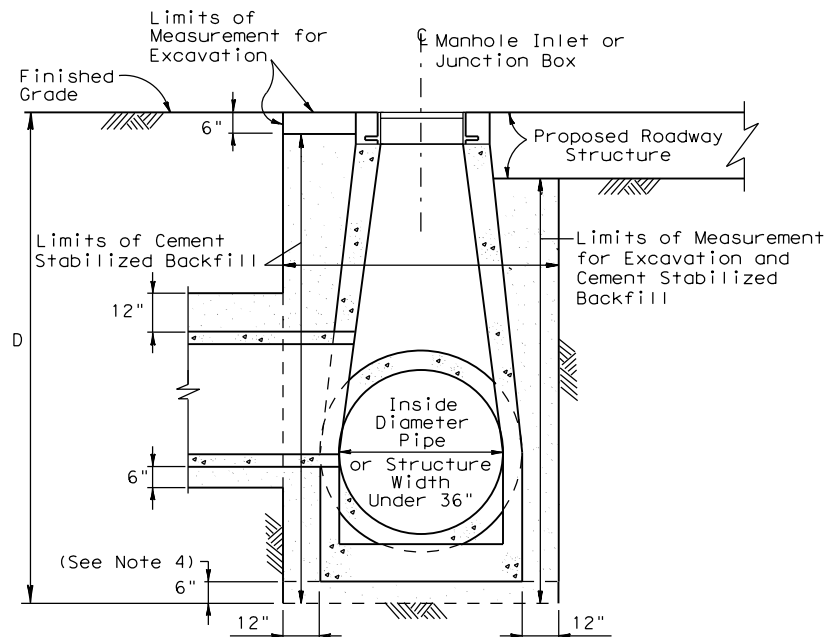
**EXCAVATION AND BACKFILL DIAGRAMS**

**E&BD**

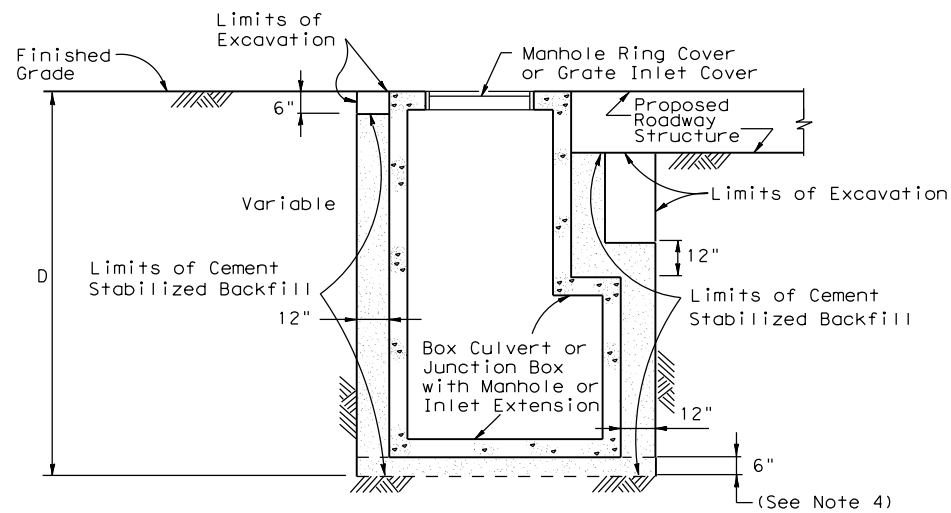
D = Depth  
H = Height  
T = Thickness  
R = Radius  
Dia = Diameter

FILE: STDE1.DGN	DN: TxDot	CK: TxDot	DW: TxDot	CR: TxDot
© TxDOT FEB 2010	DIST	FED REG	PROJECT NO.	SHEET
REVISED 11/05	HOUSTON	6	STP 1702 (437) MM	152A
REVISED 2/2010 Added note to Table 1, Sht 2 of 2.	COUNTY	CONTROL	SECT	JOB HIGHWAY
REVISED 6/12	BRAZORIA	0912	31	304CR 58

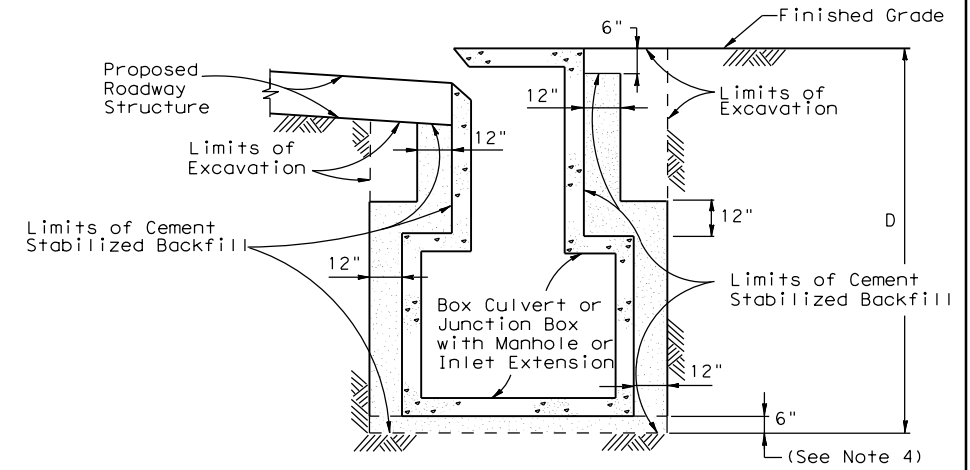




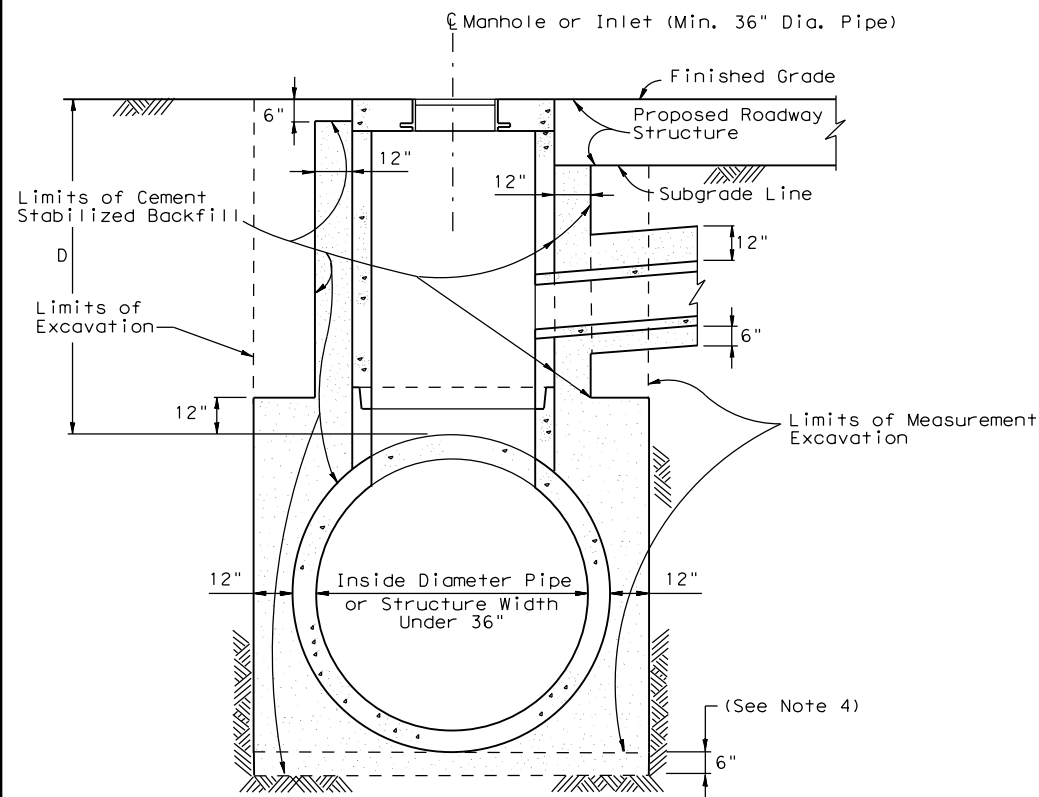
**EXCAVATION AND BACKFILL DETAIL**  
**MANHOLES SMALLER THAN 36 IN.**  
**IN A PAVED OR GRADED AREAS**  
 N. T. S.



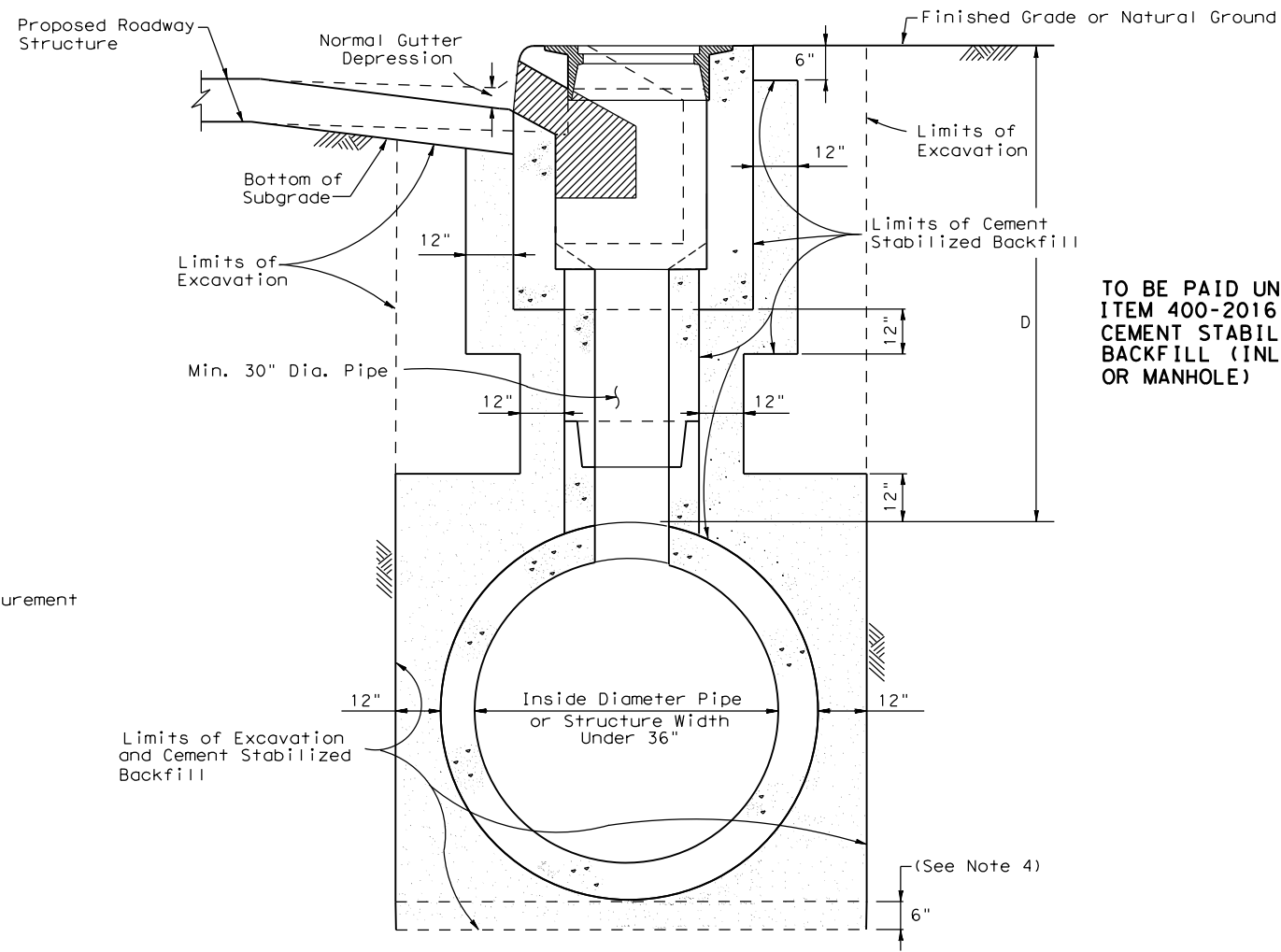
**EXCAVATION AND BACKFILL DETAIL**  
**JUNCTION BOXES IN A**  
**PAVED OR GRADED AREA**  
 N. T. S.



**EXCAVATION AND BACKFILL DETAIL**  
**INLET EXTENSIONS ON A BOX CULVERT**  
**IN A PAVED OR GRADED AREA**  
 N. T. S.



**EXCAVATION AND BACKFILL DETAIL**  
**MANHOLES 36 IN. AND GREATER**  
**IN A PAVED OR GRADED AREA**  
 N. T. S.



**EXCAVATION AND BACKFILL DETAIL**  
**CURB INLETS IN A PAVED OR GRADED AREA**  
 N. T. S.

**TO BE PAID UNDER**  
**ITEM 400-2016**  
**CEMENT STABILIZED**  
**BACKFILL (INLET**  
**OR MANHOLE)**

TABLE I	
SCHEDULE FOR PAY QUANTITIES OF CEMENT STABILIZED BACKFILL (SEE NOTE 1)	
MANHOLE OR INLET DEPTH (D) IN FEET	CEMENT STABILIZED BACKFILL IN CUBIC YARDS
0 through 5	5.75
> 5 through 10	8.25
greater than 10	12.75

- NOTES:
1. The Contractor is paid a fixed estimated amount for cement stabilized backfill based on depth (D) and Table. 1.
  2. Proposed roadway structure includes pavement, base and any subgrade.
  3. For backfill of intersecting pipes and box culverts, see "Excavation and Backfill Diagram for Pipes and Box Culverts."
  4. 6" cement stabilized backfill will be required only for precast units.

SHEET 2 OF 2

**Texas Department of Transportation**  
**Houston District**

**EXCAVATION AND BACKFILL**  
**DIAGRAMS**

**E&BD**

D = Depth  
 H = Height  
 T = Thickness  
 R = Radius  
 Dia = Diameter

FILE: STDE1.DGN	DN: TxDot	CK: TxDot	DW: TxDot	CK: TxDot
© TxDOT FEB 2010	DIST	FED REG	PROJECT NO.	SHEET
REVISED 11/05	HOUSTON	6	STP 1702 (437) MM	152B
REVISED 2/2010 Added note to Table 1.	COUNTY	CONTROL	SECT	JOB
REVISED 6/12	BRAZORIA	0912	31	304CR 58

Winkler, Michael

---

From: Wael Tabara <WaelT@brazoriacountytx.gov>  
Sent: Monday, March 25, 2024 8:40 AM  
To: Winkler, Michael; Barbara Martinez  
Cc: Cervantes, Javier; Landry, Tony  
Subject: RE: FW: CR58 - Update of Outstanding Issues

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Report Suspicious

Approved. Please submit in PM Vitals and let me know once ready for my review and approval.

Best Regards,

**Wael Tabara**, P.E., M.A.Sc., CFM, Env SP  
Assistant County Engineer



**Brazoria County Engineering**

451 N. Velasco, Suite 230, Angleton, TX 77515

O (979) 864-1265

**New email address**

E [WaelT@brazoriacountytx.gov](mailto:WaelT@brazoriacountytx.gov)

[www.brazoriacountytx.gov](http://www.brazoriacountytx.gov)

---

From: Winkler, Michael <michael.winkler@aecom.com>  
Sent: Wednesday, March 20, 2024 2:24 PM  
To: Wael Tabara <WaelT@brazoriacountytx.gov>; Barbara Martinez <BarbaraM@brazoriacountytx.gov>  
Cc: Cervantes, Javier <javier.cervantes@aecom.com>; Landry, Tony <Anthony.Landry@aecom.com>  
Subject: [EXTERNAL] FW: CR58 - Update of Outstanding Issues

Wael,

Please see attached proposal for the cement stabilized sand that was discussed in today's meeting. The contractor lowered the price to \$71.19/CY from the original \$86 or so that was listed as the current average low bid price.

Let me know if the County is ok with the proposal.

Thank you,

Mike Winkler, PE  
AECOM  
(281) 702-4247 (Cell)

---

From: Chris Burke <[chris@icontx.com](mailto:chris@icontx.com)>  
Sent: Thursday, March 14, 2024 11:51 AM  
To: Winkler, Michael <[michael.winkler@aecom.com](mailto:michael.winkler@aecom.com)>; Keith Burke <[Keith@icontx.com](mailto:Keith@icontx.com)>  
Cc: Wael Tabara <[WaelT@brazoriacountytx.gov](mailto:WaelT@brazoriacountytx.gov)>; Landry, Tony <[Anthony.Landry@aecom.com](mailto:Anthony.Landry@aecom.com)>; Nathan Burke <[Nathan@icontx.com](mailto:Nathan@icontx.com)>; Barbara Martinez <[BarbaraM@brazoriacountytx.gov](mailto:BarbaraM@brazoriacountytx.gov)>; Cervantes, Javier <[javier.cervantes@aecom.com](mailto:javier.cervantes@aecom.com)>  
Subject: Re: CR58 - Update of Outstanding Issues

Mike,

See attached breakdown for the CSS installation. We used a factor of 1.62 tons per CY. Let us know what you think.

Regards,



BUILDING THE FUTURE

**CHRIS BURKE**

📞 (832) 328-3170

COO

✉️ [Chris@iCONTX.com](mailto:Chris@iCONTX.com)

🌐 [iCONTX.com](http://iCONTX.com)

☎️ (713) 551-ICON (4266)

14115 Norhill Pointe Dr. Houston, Tx 77044

[Bid@iCONTX.com](mailto:Bid@iCONTX.com)



---

From: Winkler, Michael <[michael.winkler@aecom.com](mailto:michael.winkler@aecom.com)>  
Sent: Tuesday, March 12, 2024 12:03 PM

To: Keith Burke <[Keith@icontx.com](mailto:Keith@icontx.com)>  
Cc: Wael Tabara <[WaelT@brazoriacountytx.gov](mailto:WaelT@brazoriacountytx.gov)>; Landry, Tony <[Anthony.Landry@aecom.com](mailto:Anthony.Landry@aecom.com)>; Chris Burke <[chris@icontx.com](mailto:chris@icontx.com)>; Nathan Burke <[Nathan@icontx.com](mailto:Nathan@icontx.com)>; Cesar Hernandez <[cesar.hernandez@icontx.com](mailto:cesar.hernandez@icontx.com)>; Barbara Martinez <[BarbaraM@brazoriacountytx.gov](mailto:BarbaraM@brazoriacountytx.gov)>; Cervantes, Javier <[javier.cervantes@aecom.com](mailto:javier.cervantes@aecom.com)>  
Subject: RE: CR58 - Update of Outstanding Issues

Keith,

Received, thank you. We are working to resolve the utility issues today. Centerpoint is working today to remove all topped poles except the two with a cable on them. I am working with the County on the first three items; I have called and e-mailed the City of Pearland Engineer, but do not have a response on the casing yet.

Last, we had discussed the average low bid pricing for the cement sand. Recent County projects were bid around \$50/CY and the current average low bid for the Houston District is about \$85/CY. We were wanting to see if you can provide a labor, equipment, and materials price breakdown of the cost per CY that Icon would estimate? If this will not make a difference from the average low bid let me know.

Thank you for partnering with us on these.

Thank you,

Mike Winkler, PE  
AECOM  
(281) 702-4247 (Cell)

---

From: Keith Burke <[Keith@icontx.com](mailto:Keith@icontx.com)>  
Sent: Monday, March 11, 2024 11:19 AM  
To: Winkler, Michael <[michael.winkler@aecom.com](mailto:michael.winkler@aecom.com)>  
Cc: Wael Tabara <[WaelT@brazoriacountytx.gov](mailto:WaelT@brazoriacountytx.gov)>; Landry, Tony <[Anthony.Landry@aecom.com](mailto:Anthony.Landry@aecom.com)>; Chris Burke <[chris@icontx.com](mailto:chris@icontx.com)>; Nathan Burke <[Nathan@icontx.com](mailto:Nathan@icontx.com)>; Cesar Hernandez <[cesar.hernandez@icontx.com](mailto:cesar.hernandez@icontx.com)>  
Subject: CR58 - Update of Outstanding Issues

Michael,

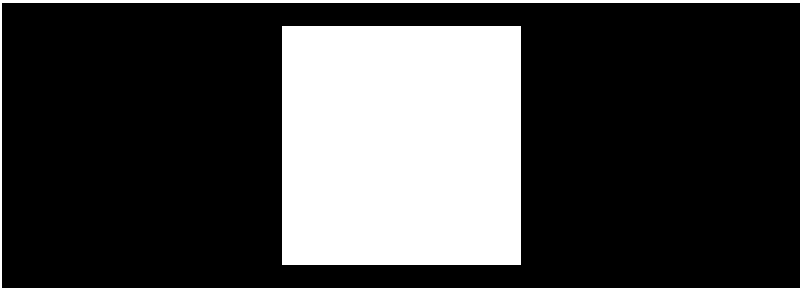
I was asked to prepare a list of the following issues outstanding at this time.

1. Tire disposal
2. Waterwells to be abandoned
3. Septic systems to be abandoned
4. ATT conflicts with storm sewer at Angelica and N Central @NE Corner
5. ATT poles to be removed all along ROW
6. Bores for Force Main.....use casing or not. If using casing which type spacers and end seals?? Poly or stainless?? 3 week lead time on stainless.
7. CO on Cement Sand.....Can we please have this processed soon so we can be compensated on March pay application??

We would sincerely appreciate your assistance with these issues at your earliest convenience.

Please call to discuss as necessary.

Regards,



BUILDING THE FUTURE

**KEITH BURKE**

CEO

☐ (713) 858-9878

☐ Keith@iCONTX.com

☐ iCONTX.com

☐ (713) 551-ICON (4266)

14115 Norhill Pointe Dr. Houston, Tx 77044

Bid@iCONTX.com



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SUMMARY OF CONTRACT MODIFICATIONS

DATE	April 03, 2024	OFFICE / LGPP PM /	BRAZORIA COUNTY / Wael Tabara, PE
CCSJ	0912-03-304	HIGHWAY	CR 58
COUNTY	BRAZORIA	CONTRACT WORK DAYS	220
CONTRACT PRICE	\$6,150,000.00	DA -- DAYS ADDED	
REVISED CONT PRICE	\$6,268,175.40	TAD -- TOTAL ADDED DAYS	
CONTRACT X 25%	\$1,537,500.00		
CONTRACT X 10%	\$615,000.00	TDA -- TOTAL DAYS ALLOWED	

COMPLETED

ACCEPTED

CO	TE	NET	CHANGE	CO TOTAL TO DATE	ABSOLUTE TOTAL TO DATE	DA	TAD	TDA	REMARKS
1			\$118,175.40	\$118,175.40	\$118,175.40	0	0	220	