

# CONSTRUCTION CONTRACT CHANGE ORDER NUMBER: 04

1. CONTRACTOR: SER Construction Partners, LLC

2. Change Order Work Limits: Sta. 10+70 to Sta. 25+00

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 original drainage outfall channel plans were created based on LIDAR survey data that indicated a 4:1 slope could be achieved. This is the maximum slope that Brazoria County Drainage District #4 (BDD4) can maintain without need for pavement. An investigation by the Engineer of Record (EOR) and CEI staff showed that field conditions did not match survey data and pavement is needed because side slopes are steeper than 4:1. A redesign was approved by BDD4 in 12/23.

**CCSJ:** 0912-31-305

**Project:** CR 59 Widening

**Highway:** CR 59

**County:** Brazoria

**District:** Houston

**Contract Number:** STP 1702(438) MM

5. New or revised plan sheet(s) are attached and numbered: 167 & 168, 190, 191, 192

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 <u>Andrew Ratliff</u></p> <p>Typed/Printed Title <u>Project Manager</u></p>	<p><b>The following information must be provided</b></p> <p>Time Ext. #: <u>0</u> Days added on this C.O.: <u>0</u></p> <p>Amt. added by this change order: <u>\$233,149.71</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>
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**RECOMMENDED FOR EXECUTION:**

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

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

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

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

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

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

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

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

Engineer's Seal:

# CONSTRUCTION CONTRACT CHANGE ORDER NUMBER: 04

Estimated Cost: \$233,149.71

CCSJ: 0912-31-305

Paid by Invoice? (  Yes  No )

**TABLE A: Force Account Work and Materials Placed into Stock**

LABOR	HOURLY RATE	EQUIPMENT	HOURLY RATE

**TABLE B: Contract Items**

ITEM	DESCRIPTION	UNIT	UNIT PRICE	ORIGINAL + PREVIOUSLY REVISED		NEW		OVERRUN/ UNDERRUN
				QUANTITY	ITEM COST	QUANTITY	ITEM COST	
<b>TOTALS</b>								

**CONSTRUCTION CONTRACT CHANGE ORDER NUMBER: 04** \_\_\_\_\_

**TABLE B: Contract Items (Continued)**

**CCSJ:** 0912-31-305

ITEM	DESCRIPTION	UNIT	UNIT PRICE	ORIGINAL + PREVIOUSLY REVISED		NEW		OVERRUN/ UNDERRUN
				QUANTITY	ITEM COST	QUANTITY	ITEM COST	
The "Totals" from Table B of the previous work sheet:								
TOTALS								

**Brazoria County Engineering  
Construction Change Order No. 4**

<p><b>PROJECT INFORMATION:</b></p> <p>PROJECT NO: 0912-31-305          AWARD AMOUNT: \$ 14,051,693.00          PROJECT: CR 59 from CR 48 to Kirby Dr.          WORK LIMITS: Drainage Outfall Channel Area          CONTRACTOR: SER Construction Partners, LLC</p> <p><b>NEW/REVISED PLAN SHEETS ATTACHED/NUMBERED:</b></p> <p style="text-align: center;">167 &amp; 168, 190 - 192</p> <p><b>CHANGE IN CONTRACT AMOUNT:</b></p> <p>PREVIOUS TOTAL CONTRACT AMT: \$ 14,078,808.24          CHANGE DUE TO THIS C.O.: \$233,149.71          TOTAL CONTRACT AMT: \$ 14,311,957.95          TOTAL CUMULATIVE % CHANGE: <b>1.85%</b></p>	<p><b>DESCRIPTION OF REVISED WORK:</b></p> <p>The original drainage outfall channel plans were created based on LIDAR survey data that indicated a 4:1 slope could be achieved. This is the maximum slope that Brazoria County Drainage District #4 (BDD4) can maintain without need for pavement. BDD4 inspection staff observed the Contractor's work in that area and noted that the grading was too steep for their staff to maintain. An investigation by the Engineer of Record (EOR) and CEI staff showed that field conditions did not match the LIDAR surey data. Subsequent analysis by the EOR showed that 4:1 slopes could not be achieved, requiring the channel to be paved with 4-inch concrete riprap on the N. side from Sta. 10+70 to Sta. 22+00 and on both sides from Sta. 22+00 to Sta. 25+00. This redesign was approved by BDD4 in December 2023.</p> <p><b>CHANGE IN CONTRACT TIME:</b></p> <p>ORIGINAL CONTRACT TIME: 0 days          PREVIOUS CUMULATIVE CHANGE: 0 days          CHANGE DUE TO THIS C.O.: 0 days          TOTAL CONTRACT TIME: 0 days</p>
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"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 and that this agreement is made in accordance with the contract involved. By signing below, each signer is acknowledging that are an authorized representative for the organization involved."

Contractor	Date	Design Engineer/Mgr	Date	County Project Mgr	Date
County Construction Mgr	Date	County Engineer	Date	County Purchasing Dir	Date

LINE #	ITEM CODE	ITEM DESCRIPTION	UNIT	UNIT PRICE	QTY TO DATE	QUANTITY THIS C.O.	NEW QUANTITY	AMOUNT THIS C.O.
		INSTALL DRAINAGE OUTFALL CHANNEL BY CHANGE ORDER	LS	\$ 233,149.71	1.00	1.00	1.00	\$ 233,149.71
							0.00	\$ -
							0.00	\$ -
							0.00	\$ -
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							0.00	\$ -
							0.00	\$ -
<b>TOTAL CHANGE ORDER AMOUNT</b>								<b>\$ 233,149.71</b>

\*New Items added by this C.O.



March 22, 2024

Mr. Brendon Bailey, P.E.  
HR Green, Inc.  
11011 Richmond Ave, Suite 200  
Houston, TX 77042

**Andrew Ratliff**  
Project Manager

281.932.4198 Cell  
713.473.7900 Office  
713.473.7919 Fax  
andrew@serconstruction.net

Reference: CR 59 Widening from Kirby Drive to CR 48  
CSJ 0912-31-305

**CHANGE ORDER REQUEST – Concrete Riprap Along Drainage Ditch (Revised)**

Dear Mr. Bailey,

Subsequent to the installation of the outfall drainage ditch, several meetings between representatives of the design engineer, Brazoria County, and SER were held to address maintenance concerns for the North slope of the drainage easement ditch, and for a section of the south slope of the ditch. As per the attached drawings, it has been determined necessary to install 4" concrete riprap with toe walls and weep holes on the subject ditch slopes. Since this work differs significantly from the original planned concrete riprap work, which consisted of roadway median riprap and soundwall riprap, SER respectfully requests revised consideration for this added work.

As per the attached price support information, the item and quantity involved are as follows:

ITEM NO	DESCRIPTION	UNIT	QUANTITY	PRICE	TOTAL
NEW	RIPRAP (CONC)(4 IN)	CY	365	\$638.77	\$233,149.71
				TOTAL	\$233,149.71

Please initiate a change order to add the subject work and forward it to me for further processing. Since the project is nearing completion, it is requested that this change order be expedited.

If there are any questions or if additional information is needed, please call me at (281) 932-4198.

Sincerely,

Andrew Ratliff  
Project Manager

RLS  
Attachments

Riprap Slope Paving		365	CY					
Description	Unit Price	Unit	Qty.	Total Hours	OT Factor	Cost & Markup	Price Summary	
<b>Labor</b>								
Foreman	\$ 50.00	HR	1	200	1	\$ 10,000.00		
Operator - Excavator	\$ 26.00	HR	2	200	1	\$ 10,400.00		
Concrete Finisher	\$ 21.00	HR	1	200	1	\$ 4,200.00		
Formsetter	\$ 21.00	HR	2	200	1	\$ 8,400.00		
General Laborer	\$ 19.00	HR	4	200	1	\$ 15,200.00		
<b>Sub-total</b>						<b>\$ 48,200.00</b>		
<b>Labor Mark-up (25%)</b>						<b>\$ 12,050.00</b>		
<b>Burden (55%)</b>						<b>\$ 26,510.00</b>		
<b>Total Labor</b>							<b>\$ 86,760.00</b>	
<b>Equipment</b>								
Pick-Up Truck	\$ 38.98	HR	1	200		\$ 7,796.00		
CAT 308 Excavator	\$ 100.34	HR	1	100		\$ 10,034.00		
CAT D3 Dozer	\$ 171.26	HR	1	100		\$ 17,126.00		
CAT 303 Excavator	\$ 52.41	HR	1	100		\$ 5,241.00		
Generator	\$ 4.42	HR	1	200		\$ 884.00		
Concrete Vibrator	\$ 1.43	HR	1	200		\$ 286.00		
<b>Sub-total Equipment</b>						<b>\$ 41,367.00</b>		
<b>Equipment Mark-up (15%)</b>						<b>\$ 6,205.05</b>		
<b>Total Equipment</b>							<b>\$ 47,572.05</b>	
<b>Material</b>								
Forms	\$ 0.70	LF	556.00			\$ 389.20		
Chairs	\$ 0.25	EA	1,604.00			\$ 401.00		
Rebar	\$ 0.78	LBS	20,475.00			\$ 15,970.50		
Concrete	\$ 144.50	CY	365.00			\$ 52,742.50		
Cure	\$ 2.29	GAL	80.00			\$ 183.20		
Weep Hole Material	\$ 25.00	EA	111.00			\$ 2,775.00		
<b>Sub-total Material</b>						<b>\$ 72,461.40</b>		
<b>Material Mark-up (25%)</b>						<b>\$ 18,115.35</b>		
<b>Total Material</b>							<b>\$ 90,576.75</b>	
<b>Subcontractor</b>								
Hauling	\$ 50.00	HR	113.00			\$ 5,650.00		
<b>Sub-total Subcontractor</b>						<b>\$ 5,650.00</b>		
<b>Subcontractor Mark-Up (5%)</b>						<b>\$ 282.50</b>		
<b>Total Subcontractor</b>							<b>\$ 5,932.50</b>	
<b>Sub-Total Cost</b>						<b>Total</b>	<b>\$ 230,841.30</b>	
<b>Bond (1%)</b>							<b>\$2,308.41</b>	
<b>Total Additional Cost</b>						<b>Total</b>	<b>\$ 233,149.71</b>	
						<b>Price per CY:</b>	<b>\$ 638.7663</b>	

**Rental Rate Blue Book®**

December 14, 2023

**Ford F-250**

On-Highway Light Duty Trucks

 Size Class:  
**300 hp & Over**  
 Weight:  
 N/A

**Configuration for F-250**

Axle Configuration	<b>4.0 X 4.0</b>	Cab Type	<b>Crew</b>
Horsepower	<b>385.0 hp</b>	Power Mode	<b>Gasoline</b>
Ton Rating	<b>3.0 / 4.0</b>		

**Blue Book Rates**

\*\* FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs			Hourly	Estimated Operating Costs	FHWA Rate**
	Monthly	Weekly	Daily		Hourly	Hourly
Published Rates	USD \$990.00	USD \$280.00	USD \$70.00	USD \$11.00	USD \$33.30	USD \$38.92
<b>Adjustments</b>						
Region ( Texas: 101%)	USD \$9.90	USD \$2.80	USD \$0.70	USD \$0.11		
Model Year (2021: 99.95%)	(USD \$0.53)	(USD \$0.15)	(USD \$0.04)	(USD \$0.01)		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)					-	
<b>Total:</b>	<b>USD \$999.37</b>	<b>USD \$282.65</b>	<b>USD \$70.66</b>	<b>USD \$11.10</b>	<b>USD \$33.30</b>	<b>USD \$38.98</b>

**Non-Active Use Rates**

Standby Rate	Hourly	USD \$4.43
Idling Rate		USD \$33.97

**Rate Element Allocation**

Element	Percentage	Value
Depreciation (ownership)	56%	USD \$554.40/mo
Overhaul (ownership)	22%	USD \$217.80/mo
CFC (ownership)	10%	USD \$99.00/mo
Indirect (ownership)	12%	USD \$118.80/mo
Fuel (operating) @ USD 3.87	84.95%	USD \$28.29/hr

Revised Date: 4th quarter 2023

These are the most accurate rates for the selected Revision Date(s). However, due to more frequent online updates, these rates may not match Rental Rate Blue Book® Print. Visit the Cost Recovery Product Guide on our Help page for more information.

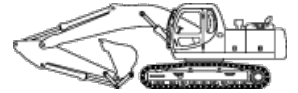
The equipment represented in this report has been exclusively prepared for Joseph Camp (joseph@serconstruction.net)

**Rental Rate Blue Book®**

December 14, 2023

**Caterpillar 308 CR**

Crawler Mounted Hydraulic Excavators


 Size Class:  
**6.5 - 8.4 mt**

 Weight:  
**N/A**
**Configuration for 308 CR**

 Operating Weight **17730.0 lbs** Power Mode **Diesel**
**Blue Book Rates**

\*\* FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs Hourly	FHWA Rate** Hourly
	Monthly	Weekly	Daily	Hourly		
Published Rates	USD \$12,015.00	USD \$3,365.00	USD \$840.00	USD \$125.00	USD \$31.98	USD \$100.25
<b>Adjustments</b>						
Region ( Texas: 100.2%)	USD \$24.03	USD \$6.73	USD \$1.68	USD \$0.25		
Model Year (2021: 99.94%)	(USD \$6.89)	(USD \$1.93)	(USD \$0.48)	(USD \$0.07)		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)					-	
<b>Total:</b>	<b>USD \$12,032.14</b>	<b>USD \$3,369.80</b>	<b>USD \$841.20</b>	<b>USD \$125.18</b>	<b>USD \$31.98</b>	<b>USD \$100.34</b>

**Non-Active Use Rates**

	Hourly
Standby Rate	USD \$38.97
Idling Rate	USD \$68.36

**Rate Element Allocation**

Element	Percentage	Value
Depreciation (ownership)	33%	USD \$3,964.95/mo
Overhaul (ownership)	43%	USD \$5,166.45/mo
CFC (ownership)	15%	USD \$1,802.25/mo
Indirect (ownership)	9%	USD \$1,081.35/mo

Fuel cost data is not available for these rates.

Revised Date: 4th quarter 2023

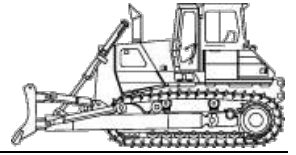
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**Rental Rate Blue Book®**
**Caterpillar D3**

Standard Crawler Dozers

 Size Class:  
**85 - 104 hp**  
 Weight:  
 N/A

**Configuration for D3**

Dozer Type	<b>Crawler</b>	Horsepower	<b>104 hp</b>
Operator Protection	<b>ROPS/FOPS</b>	Power Mode	<b>Diesel</b>

**Blue Book Rates**

\*\* FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs			Hourly	Estimated Operating Costs Hourly	FHWA Rate** Hourly
	Monthly	Weekly	Daily			
Published Rates	USD \$18,990.00	USD \$5,320.00	USD \$1,330.00	USD \$200.00	USD \$63.39	USD \$171.29
<b>Adjustments</b>						
Region ( Texas: 100.1%)	USD \$18.99	USD \$5.32	USD \$1.33	USD \$0.20		
Model Year (2020: 99.88%)	(USD \$23.65)	(USD \$6.62)	(USD \$1.66)	(USD \$0.25)		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)						
<b>Total:</b>	<b>USD \$18,985.34</b>	<b>USD \$5,318.70</b>	<b>USD \$1,329.67</b>	<b>USD \$199.95</b>	<b>USD \$63.39</b>	<b>USD \$171.26</b>

**Non-Active Use Rates**

	Hourly
Standby Rate	USD \$51.78
Idling Rate	USD \$118.89

**Rate Element Allocation**

Element	Percentage	Value
Depreciation (ownership)	24%	USD \$4,557.60/mo
Overhaul (ownership)	52%	USD \$9,874.80/mo
CFC (ownership)	14%	USD \$2,658.60/mo
Indirect (ownership)	10%	USD \$1,899.00/mo
Fuel (operating) @ USD 4.39	17.38%	USD \$11.02/hr

Revised Date: 4th quarter 2023

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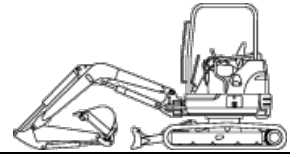
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**Rental Rate Blue Book®**

December 14, 2023

**Caterpillar 303E CR (disc. 2021)**

Crawler Mounted Compact Excavators

 Size Class:  
**3.5 - 4.4 mt**  
 Weight:  
 N/A

**Configuration for 303E CR (disc. 2021)**

Operating Weight	<b>7782 lbs</b>	Operator Protection	<b>ROPS</b>
Power Mode	<b>Diesel</b>		

**Blue Book Rates**

\*\* FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs			Hourly	Estimated Operating Costs Hourly	FHWA Rate** Hourly
	Monthly	Weekly	Daily			
Published Rates	USD \$5,410.00	USD \$1,515.00	USD \$380.00	USD \$57.00	USD \$21.58	USD \$52.32
<b>Adjustments</b>						
Region ( Texas: 100.3%)	USD \$16.23	USD \$4.55	USD \$1.14	USD \$0.17		
Model Year (2021: 100%)	-	-	-	-		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)					-	
<b>Total:</b>	<b>USD \$5,426.23</b>	<b>USD \$1,519.55</b>	<b>USD \$381.14</b>	<b>USD \$57.17</b>	<b>USD \$21.58</b>	<b>USD \$52.41</b>

**Non-Active Use Rates**

	Hourly
Standby Rate	USD \$17.88
Idling Rate	USD \$34.65

**Rate Element Allocation**

Element	Percentage	Value
Depreciation (ownership)	21%	USD \$1,136.10/mo
Overhaul (ownership)	42%	USD \$2,272.20/mo
CFC (ownership)	19%	USD \$1,027.90/mo
Indirect (ownership)	18%	USD \$973.80/mo
Fuel (operating) @ USD 4.39	17.7%	USD \$3.82/hr

Revised Date: 4th quarter 2023

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**Rental Rate Blue Book®**

December 14, 2023

**Miscellaneous 5000**
**Small Generator Sets**

 Size Class:  
**To 5,000 W**  
 Weight:  
**365 lbs**

**Blue Book Rates**

\*\* FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Hourly	Estimated Operating Costs Hourly	FHWA Rate** Hourly
	Monthly	Weekly	Daily	Hourly			
Published Rates	USD \$78.00	USD \$22.00	USD \$6.00	USD \$0.90	USD \$3.97	USD \$4.41	
<b>Adjustments</b>							
Region ( Texas: 100.8%)	USD \$0.62	USD \$0.18	USD \$0.05	USD \$0.01			
Model Year (2022: 99.91%)	(USD \$0.07)	(USD \$0.02)	(USD \$0.01)	(USD \$0.00)			
Adjusted Hourly Ownership Cost (100%)	-	-	-	-			
Hourly Operating Cost (100%)					-		
<b>Total:</b>	<b>USD \$78.56</b>	<b>USD \$22.16</b>	<b>USD \$6.04</b>	<b>USD \$0.91</b>	<b>USD \$3.97</b>	<b>USD \$4.42</b>	

**Non-Active Use Rates**

	Hourly
Standby Rate	USD \$0.37
Idling Rate	USD \$3.78

**Rate Element Allocation**

Element	Percentage	Value
Depreciation (ownership)	64%	USD \$49.92/mo
Overhaul (ownership)	18%	USD \$14.04/mo
CFC (ownership)	9%	USD \$7.02/mo
Indirect (ownership)	9%	USD \$7.02/mo
Fuel (operating) @ USD 3.87	83.88%	USD \$3.33/hr

Revised Date: 4th quarter 2023

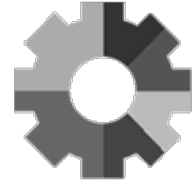
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**Rental Rate Blue Book®**

December 14, 2023

**Miscellaneous 2-7/21**
**Motor-In-Head Concrete Vibrators**

 Size Class:  
**Electric Powered**  
 Weight:  
**N/A**

**Configuration for 2-7/21**

Head Diameter	<b>2.5'</b>	Horsepower	<b>2.0</b>
Power Mode	<b>Electric</b>	Shaft Length	<b>16.0 ft</b>

**Blue Book Rates**

\*\* FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs			Hourly	Estimated Operating Costs Hourly	FHWA Rate** Hourly
	Monthly	Weekly	Daily			
Published Rates	USD \$190.00	USD \$53.00	USD \$13.00	USD \$2.00	USD \$0.35	USD \$1.43
<b>Adjustments</b>						
Region ( Texas: 100%)	-	-	-	-		
Model Year (2021: 99.81%)	(USD \$0.36)	(USD \$0.10)	(USD \$0.02)	(USD \$0.00)		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)					-	
<b>Total:</b>	<b>USD \$189.64</b>	<b>USD \$52.90</b>	<b>USD \$12.98</b>	<b>USD \$2.00</b>	<b>USD \$0.35</b>	<b>USD \$1.43</b>

**Non-Active Use Rates**

	Hourly
Standby Rate	USD \$0.84
Idling Rate	USD \$1.08

**Rate Element Allocation**

Element	Percentage	Value
Depreciation (ownership)	62%	USD \$117.80/mo
Overhaul (ownership)	22%	USD \$41.80/mo
CFC (ownership)	8%	USD \$15.20/mo
Indirect (ownership)	8%	USD \$15.20/mo

Fuel cost data is not available for these rates.

Revised Date: 4th quarter 2023

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# CART (1)

Share

Total: \$7.01

Checkout

### Quick Add

Add items to your Cart using the SKU, Item or Model number

Feedback Live Chat



What can we help you find today?

1

Pasadena 10PM

77505



### WeatherShield

2 in. x 4 in. x 10 ft. 2 Prime Ground Contact Pressure-Treated Southern Yellow Pine Lumber

\$6.48

Nominal Product Length (ft.): 10 ft

Color/Finish: **Brown**

Pickup at Pasadena

Delivering to 77505

#### Pickup

Today  
475 in stock

FREE

#### Delivery

Tomorrow  
1,457 available

Get it as soon as tomorrow. Schedule your delivery in checkout.

Quantity selector: - 1 +

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Andrew

### Customers Also Purchased...

<b>Best Seller</b>	<b>Best Seller</b>		<b>Best Seller</b>	<b>Best Seller</b>	<b>Best Seller</b>					
2 in. x 4 in. x 8 ft. 2 Ground Contact Pressure-...	2 in. x 4 in. x 8 ft. Prime Stud	<b>WeatherShield</b> 2 in. x 4 in. x 12 ft. 2 Prime Ground...	<b>Outdoor Essentials</b> 5/8 in. x 5-1/2 in. x 6 ft....	4 in. x 4 in. x 8 ft. #2 Ground Contact Pressure-...	<b>WeatherShield</b> 2 in. x 4 in. x 8 ft. 2 Prime Ground...	<b>WeatherShield</b> 2 in. x 6 in. x 12 ft. #2 Prime Pressure-...	<b>WeatherShield</b> 2 in. x 6 in. x 8 ft. No. 2 Prime Pressure-...	<b>WeatherShield</b> 2 in. x 4 in. x 16 ft. 2 Prime Ground...	<b>WeatherShield</b> 2 in. x 6 in. x 10 ft. 2 Prime Ground...	4 in. x 4 in. x 10 ft. #2 Pressure Treated.
(1417)	(4202)	(405)	(2076)	(2607)	(521)	(430)	(436)	(281)	(741)	(797)
<b>\$4<sup>18</sup></b>	<b>\$3<sup>48</sup></b>	<b>\$7<sup>68</sup></b>	<b>\$1<sup>98</sup></b>	<b>\$9<sup>58</sup></b>	<b>\$5<sup>38</sup></b>	<b>\$12<sup>18</sup></b>	<b>\$7<sup>78</sup></b>	<b>\$11<sup>28</sup></b>	<b>\$10<sup>28</sup></b>	<b>\$14<sup>48</sup></b>
<b>Add to Cart</b>	<b>Add to Cart</b>	<b>Add to Cart</b>	<b>Add to Cart</b>	<b>Add to Cart</b>	<b>Add to Cart</b>	<b>Add to Cart</b>	<b>Add to Cart</b>	<b>Add to Cart</b>	<b>Add to Cart</b>	<b>Add to Cart</b>

Live Chat

1/3 >

### Your Order

<b>Subtotal</b>	<b>\$6.48</b>
Pickup	<b>FREE</b>
Sales Tax	\$0.53
<b>Total</b>	<b>\$7.01</b>

Have a Promo Code?

PO/Job Name (optional)

Create a Quote (optional)

Quotes

Lists



405 McCarty Street  
Houston, TX 77029  
Tel: 832.701.1920  
www.fabcous.com

# Material Quote

Quote Date	Quote No.
03/12/2024	2207338-077

Page 1 of 1

Name / Address
SER Construction PO Box 5685  713.473.7900

Ship To
#598 CR 59 BRAZORIA CTY QUOTE 405 McCarty Street Houston, TX 77029 ANDREW 713.473.7900

Customer PO No.	Customer Job No.	Terms	Ship Via	Price Expiration
QUOTE	#598	Net 30 Days	WILL CALL	30 Days from Quote Date

Description	Qty	U/M	Unit Price	Extended
4IN Paving Chair Sqr Base (250/bg; 5,000/plt)	250	EA	0.2500	62.50
Fabco City White Cure--55gal	1	Drum	159.0000	159.00

Non Taxable:	221.50
Taxable:	0.00
Taxes:	0.00
<b>Total:</b>	<b>221.50</b>



it's what's **inside** that counts

**BRAZORIA COUNTY - JULY 2022  
REINFORCING STEEL QUOTATION**

CMC Steel Fabricators, Inc. dba CMC Rebar (hereafter called the Seller) proposes, subject to the terms and conditions of sales set forth below, to furnish domestic steel reinforcing bars per ASTM A615 latest edition cut to length, bent, bundled and tagged in accordance with Owner's or Buyer's bar list, including spirals where applicable for the project(s) listed below. Buyer shall furnish Seller one set of Plans. All material shall be furnished in accordance with the conditions of the Manual of Standard Practice of the Concrete Reinforcing Steel Institute.

**PRICES**

<b>Brazoria Co.</b>	<b>CR 59</b>	<b>7-18-22</b>	<b>STP 1702(438)</b>	<b>0912-31-305</b>
Reinforcing Bars for Structures (63 Tons).....				<u>\$78.00 / cwt</u>

Seller's paving price is based on furnishing longitudinal bars in 60' lengths in Buyer's specified "exact piece" bundle count (minimum bundle count as follows: #7 @ 18 pieces, #6 @ 18 pieces) and transverse bars cut to Buyer's specified length packaged in a 51-pc count bundle.

Reinforcing for terminal anchors, curb, dowels, driveways, sidewalks, riprap, and "U" bars in barrier rail are included, but at the Structures Unit Price above or current market value if not stated.

*The above quantities are approximate and do not represent a guarantee by Seller. Actual quantities as designated in Buyer's contract and mutually agreed upon by Seller will determine the maximum quantities Seller is obligated to ship under this proposal. Additional steel required is subject to price negotiation.*

*Please see the **Acceptance Clause** on page 2 of this proposal.*

**PRICE ADJUSTMENT** – The above prices are firm for shipments through 2-28-23. Add \$1.25 cwt for all shipments on or after 3-1-2023 and every three months thereafter, cumulatively.

**Seller's Price(s) Includes:**

- Reinforcing Steel for structures and paving.

**Seller's Price(s) Excludes:**

- All accessories, tie wire, anchor bolts, smooth round dowels.
- Threaded inserts, bolts, threaded rebars, multiple piece tie bars and/or mechanical splices unless specifically quoted, flat bar and welded flat bar bands, WWF, and any item not specifically mentioned.
- BIM/3D drawings (intended for other trades).

<b>Gene Boyette</b>	<b>Jim Lyons</b>	<b>Rodney Scott</b>	<b>Tully Williams</b>	<b>Reid Harmon</b>	<b>Brian Luensmann</b>
<a href="mailto:gene.bovette@cmc.com">gene.bovette@cmc.com</a>	<a href="mailto:jim.lyons@cmc.com">jim.lyons@cmc.com</a>	<a href="mailto:rodney.scott@cmc.com">rodney.scott@cmc.com</a>	<a href="mailto:tully.williams@cmc.com">tully.williams@cmc.com</a>	<a href="mailto:reid.harmon@cmc.com">reid.harmon@cmc.com</a>	<a href="mailto:brian.luensmann@cmc.com">brian.luensmann@cmc.com</a>
(214) 392-5831 c	(512) 217-8294 c	(214) 334-3743 c	(214) 803-3946 c	(972) 877-3193 c	(254)216-2543 c



7/18/2022 8:29 AM

**GENERAL INFORMATION**

<b>Account:</b>	<b>SER CONSTRUCTION LLC</b>	<b>Project:</b>	<b>Brazoria Co. CR59</b>
Account number:	3047936	Project Address:	1 CR59 & Kirby Dr.
Contact:	Jaime Rivera		Pearland Texas 77584
E-mail:	jrivera@serconstruction.net	Doc. Expiration Date:	8/17/2022
Phone:	7138189651	Price Valid from:	7/18/2022
Customer Service:	713-332-4000	Price Valid to:	
Sales Office Address:	16100 Dillard Dr, Jersey Village, TX 77040		

**MATERIAL PRICING**

Description	UoM	Price per Unit	Notes
TXDOT CLASS A	YD3	\$128.50	
TXDOT CLASS 3/8" A	YD3	\$130.50	
<b>TXDOT CLASS B</b>	<b>YD3</b>	<b>\$126.50</b>	
TXDOT CLASS P	YD3	\$132.50	
TXDOT CLASS K HES	YD3	\$155.50	

**ADDITIONAL CLAUSES**

Category	Item	Value	UoM	Comments
<b>Pricing Escalation</b>	The prices are subject to an escalation of	\$6.00	USD/Cu Yd	Effective February 1, 2023 and each 6 months thereafter
<b>Surcharges and Fees</b>	Environmental compliance fee	\$15.00	USD/Load	
	Variable Fuel surcharge	\$45.00	USD/Load	At present, subject to change
	Less than Full Load Fee (LTL)	\$150.00	USD/Load	Any orders over 10 yards, delivered in full 10 yard loads, will receive an additional kicker at no charge. Any additional loads thereafter will incur a LTL fee of \$150.
	Less than Full Load Fee (LTL)	\$1.75	USD/Cu Yd	Orders delivered in 9 yard loads will incur an additional fee of \$1.75 per yard.
	Less than Full Load Fee (LTL)	\$3.50	USD/Cu Yd	Orders delivered in 8 yard loads will incur an additional fee of \$3.50 per yard.
	Less than Full Load Fee (LTL)	TBD	USD/Cu Yd	Orders delivered in less than 8 yard loads will need approval and will incur additional fees per yard.
	Minimum Load Size: Three (3) cubic yards			
	Plant Opening fee for non-business hours	\$500.00	USD/Hour	
	Washout fee	\$50.00	USD/Load	Applies to all loads with color or other products added at jobsite
	Returned Concrete fee	\$50.00	USD/Cu Yd	Applies to deliveries that are not cancelled prior to shipping
	Cancellation Fee	\$500.00	USD per Each	Orders less than 50cy, cancelled the day before after 1:00pm
	Cancellation Fee	\$1,500.00	USD per Each	Orders greater than 50cy, cancelled the day before after 1:00pm
	Cancellation Fee	\$750.00	USD per Each	Orders Less than 50cy, cancelled the day of the order
	Cancellation Fee	\$2,250.00	USD per Each	Orders greater than 50cy, cancelled the day of the order
<b>Additional Products and Services</b>				
	+/- 500 psi or 1/2 sack (Not to exceed 5000 psi or 7.0 sack) - Add	\$4.00	USD/Cu Yd	
	Non fly ash mixes - Add	\$3.00	USD/Cu Yd	
	Small Rock Mixes (less than 1.5" coarse aggregate size, excluding 3/4") - Add	\$2.00	USD/Cu Yd	
	Mid Range Water Reducer (MRWR) pump mixes - Add	\$3.50 - \$4.50	USD/Cu Yd	
	High Range Water Reducer (HRWR) pump mixes - Add	\$6.50	USD/Cu Yd	
	Hydration stabilizer (Recover 1, 2, 3)	\$2.00 - \$6.00	USD/Cu Yd	
	Ice - when requested for temperature control	\$0.50	USD/lbs	48 hours notice required, no returns
	Quality Control and Field Service requests	\$500.00	USD per Each	

**Pricing Conditions**

All Sales are subject to CEMEX Standard terms and conditions which shall control and take precedence over any terms and conditions to the contrary in any purchase order or other document.

Customer is responsible for Applicable Sales Tax. Such taxes will appear on invoice unless Sales Tax exemption certificate is on file at CEMEX prior to shipping

• Remaining value-added products inventory, (fibers, colors, and special admixtures) ordered to meet project specifications, will be invoiced at the end of the project.

**Payment terms**

# ESTIMATE



**SEMARCK LANDSCAPE  
SERVICES, INC.**  
7827-A Harms Rd  
Houston, TX 77041

semarck@semarck-hls.com  
832-467-8000

## SER Construction:Brazoria CR 59

### Bill to

Brazoria CR 59  
3636 Pasadena Boulevard  
Pasadena, Texas 77503

### Ship to

Brazoria CR 59  
3636 Pasadena Boulevard  
Pasadena, Texas 77503

### Estimate details

Estimate no.: 164  
Estimate date: 03/01/2024

Project: CR 59

#	Date	Product or service	SKU	Qty	Rate	Amount
1.		<b>Hydromulch</b> (3-1-24) Hydromulch of Drainage Ditch Easement (Change Order) LS		1	\$3,500.00	\$3,500.00
					<b>Total</b>	<b>\$3,500.00</b>

## EXHIBIT "A"

### SUBCONTRACTOR'S SCOPE OF WORK

The Scope of work shall include but not be limited to:

Item	Contract Item	Description	Quantity	UM	Unit Price	Extended Price
1	1-0500 6001	HOURLY TRUCKING	1000.000	HR	50.00000	50000.00

**INDEX OF SHEETS**

SHEET NO. DESCRIPTION  
SEE SHEET 2 FOR INDEX OF SHEETS

REGISTERED ACCESSIBILITY (RAS)  
INSPECTION REQUIRED,  
TDLR # \_\_\_\_\_



**COUNTY JUDGE**  
L. M. "MATT" SEBESTA, JR.

**COUNTY COMMISSIONERS**  
PRECINCT 1 DONALD "DUDE" PAYNE  
PRECINCT 2 RYAN CADE  
PRECINCT 3 STACY L. ADAMS  
PRECINCT 4 DAVID LINDER

**COUNTY ENGINEER**  
MATTHEW HANKS, J.D., P.E.

**ASST. COUNTY ENGINEER**  
KAREN O. MCKINNON, P.E.

**BRAZORIA COUNTY**

**PLANS OF PROPOSED  
COUNTY ROAD IMPROVEMENT**

FEDERAL AID PROJECT NO. STP 1702(438)MM  
CSJ: 0912-31-305

**CR 59  
BRAZORIA COUNTY**

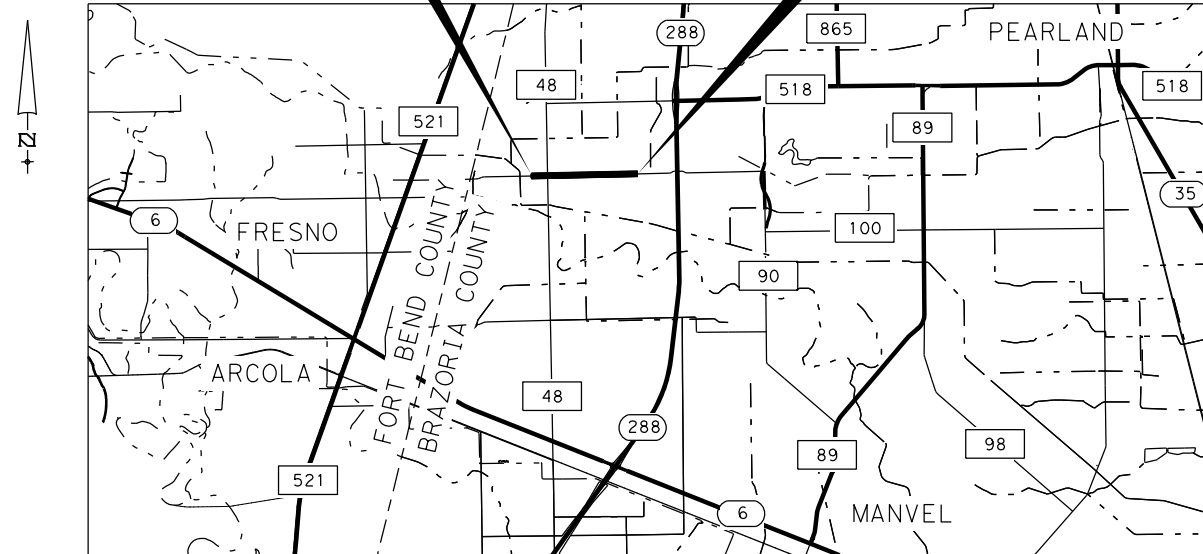
LIMITS:  
FROM: CR 48  
TO: KIRBY DR

NET LENGTH OF ROADWAY= 5,666.26 FT. = 1.07 MI.  
NET LENGTH OF BRIDGE= 0 FT. = 0 MI.  
NET LENGTH OF PROJECT= 5,666.26 FT. = 1.07 MI.

FOR THE RECONSTRUCTION AND WIDENING OF A NON-FREEWAY FACILITY CONSISTING OF GRADING, REINFORCED CONCRETE PAVEMENT, CURB AND GUTTER, SIDEWALK, DRAINAGE, DETENTION BASIN, AND SIGNING AND PAVEMENT MARKINGS.

**BEGIN PROJECT**  
BEGIN CSJ 0912-31-305  
STA 17+57.62  
N (Y) = 13,763,357.1315  
E (X) = 3,107,351.4084

**END PROJECT**  
END CSJ 0912-31-305  
STA 75+80.92  
N (Y) = 13,763,680.9866  
E (X) = 3,113,165.5465



PROJECT LAYOUT  
NTS



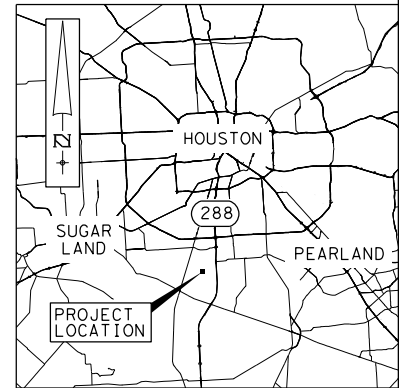
TBPE Firm Registration No. 274  
TBPLS Firm Registration No. 100467  
13430 Northwest Freeway, Suite 1100  
Houston, Texas 77040  
713.462.3242 | fax 713.462.3262  
www.cobbfendley.com

EXCEPTIONS: N/A  
EQUATIONS: N/A  
RAILROAD CROSSINGS: N/A

© 2022  
BY TEXAS DEPARTMENT OF TRANSPORTATION  
ALL RIGHTS RESERVED.

DESIGN SPEED = 45 MPH  
CR 59 ADT (2022) = 11,572  
ADT (2042) = 15,705  
FUNCTIONAL CLASSIFICATION = MAJOR COLLECTOR

FHWA TEXAS DIVISION	FEDERAL AID PROJECT NO.	SHEET NO.
	STP 1702(438)MM	1A
STATE	DISTRICT	COUNTY
TEXAS	HOU	BRAZORIA
CONTROL	SECTION	JOB
0912	31	305
		HIGHWAY NO.
		CR 59



VICINITY MAP  
NTS

BRAZORIA COUNTY  
CONCURRENCE

COUNTY ENGINEER

APPROVED BY THE BOARD OF COMMISSIONERS ON:  
BDD #4 REF ID 2024I/2I-000095

BRAZORIA DRAINAGE DISTRICT NO. 4

DISTRICT ENGINEER

THE ABOVE HAVE SIGNED THESE PLANS AND/OR PLAT BASED ON THE RECOMMENDATION OF THE DISTRICT'S ENGINEER WHO HAS REVIEWED ALL SHEETS PROVIDED AND FOUND THEM TO BE IN GENERAL COMPLIANCE WITH THE DISTRICT'S "RULES, REGULATIONS AND GUIDELINES". THIS APPROVAL IS ONLY VALID FOR THREE HUNDRED SIXTY-FIVE (365) CALENDAR DAYS. AFTER THAT TIME RE-APPROVAL IS REQUIRED. PLEASE NOTE, THIS DOES NOT NECESSARILY MEAN THAT ALL THE CALCULATIONS PROVIDED IN THESE PLANS AND/OR PLATS HAVE BEEN COMPLETELY CHECKED AND VERIFIED. IN THE EVENT OF ANY CONFLICT OR INCONSISTENCY BETWEEN THE DISTRICT'S "RULES, REGULATIONS AND GUIDELINES" AND THESE APPROVED DRAINAGE PLANS AND/OR PLAT, THE DISTRICT'S "RULES, REGULATIONS & GUIDELINES" SHALL GOVERN AND PREVAIL. ANY APPROVED VARIANCES SHALL BE ITEMIZED ON THE COVER SHEET AND PLACED ON THE APPROPRIATE SHEET WHERE APPLICABLE. PLANS SUBMITTED HAVE BEEN PREPARED, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE ENGINEERING IN THE STATE OF TEXAS AND PLAT HAS BEEN SIGNED AND SEALED BY A REGISTERED PROFESSIONAL LAND SURVEYOR LICENSED TO PRACTICE IN THE STATE OF TEXAS, WHICH CONVEYS THE ENGINEER'S AND/OR SURVEYOR'S RESPONSIBILITY AND ACCOUNTABILITY.

CONTRACTOR SHALL NOTIFY BRAZORIA DRAINAGE DISTRICT NO. 4 AT LEAST FORTY-EIGHT (48) HOURS BEFORE PLACING ANY CONCRETE FOR DRAINAGE STRUCTURES. FAILURE TO PROPERLY COORDINATE AN ON-SITE INSPECTION BEFORE CONCRETE IS POURED WILL CAUSE PORTIONS OF THE CONCRETE TO BE BROKEN OUT AT THE APPLICANT'S EXPENSE IN ORDER TO PROVE TO THE DISTRICT'S INSPECTOR THAT CONSTRUCTION COMPLIES WITH DISTRICT'S "RULES, REGULATIONS & GUIDELINES."

- BDD4 NOTES:
- BDD4 APPROVAL AND SPECIAL NOTES APPLY ONLY TO THE DETENTION POND, OUTFALL CHANNEL, AND CONNECTION TO SOUTHERN TRAILS DETENTION POND.
  - BDD4 HAS REVIEWED AND APPROVED THESE PLANS (BDD#4 REF ID 2024I/2I-000095) EFFECTIVE MARCH 8, 2022, AND FOUND THEM TO BE IN COMPLIANCE WITH THE DISTRICT'S "RULES, REGULATIONS, AND GUIDELINES."
  - VARIANCE REQUESTS WERE APPROVED BY BDD4 FOR THIS PROJECT (BDD#4 REF ID 2024I/2I-000095) ON DATE MARCH 9, 2021 FOR POND SLOPE, MAINTENANCE BERM WIDTH, AND THE EXTREME EVENT OVERFLOW SWALE, AND ON DATE JULY 13, 2021 FOR REDUCTION IN OUTFALL FLOWLINE REQUIREMENT.

4. VARIANCE REQUEST WAS APPROVED BY BDD4 FOR THIS PROJECT (BDD4 #23-000299) ON DATE NOVEMBER 14, 2023 FOR USE OF "V" BOTTOM DITCH ALONG OUTFALL CHANNEL.

ALL BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE TEXAS COORDINATE SYSTEM, SOUTH CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (2011 ADJ.), EPOCH 2010.00, CORS TXAG, TXLM, TXRS AND COH2, WERE HELD FIXED USING THEIR PUBLISHED HORIZONTAL VALUES. COORDINATE POSITIONS FOR PRIMARY CONTROL POINTS ARE BASED ON STATIC GPS OBSERVATIONS. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES AND MAY BE CONVERTED TO GRID BY DIVIDING BY THE TXDOT SURFACE ADJUSTMENT FACTOR OF 1.00013. ALL ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (ORTHOMETRIC GEOID 12A). VERTICAL CONTROL VALUES ARE BASED ON DIFFERENTIAL LEVEL LOOPS HOLDING AN ORTHOMETRICALLY DERIVED ELEVATION FOR MONUMENT H-16 OF 64.95 FEET.

SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION, NOVEMBER 1, 2014 AND SPECIFICATION ITEMS LISTED AND DATED AS FOLLOWS, SHALL GOVERN ON THIS PROJECT: REQUIRED CONTRACT PROVISIONS FOR ALL FEDERAL-AID CONSTRUCTION CONTRACTS (FORM FHWA 1273, MAY, 2012)

REV. NO.	DATE	DESCRIPTION	BY
1	11/16/23	OUTFALL CHANNEL UPDATES	MA

MODEL NAME: \$MODELNAME\$

\$PLTDRW\$. \$

11/16/2023 12:34:33 PM  
...S:\Users\General\59\_CO\ERIA.dgn

59\_CO\ERIA.dgn

INDEX OF SHEETS

SHEET NO.

DESCRIPTION

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6 - 7	TYPICAL SECTIONS
8 - 8P	GENERAL NOTES
9 -	ESTIMATE & QUANTITY SHEET
10	SUMMARY OF TRAFFIC CONTROL QUANTITIES
11	SUMMARY OF REMOVAL QUANTITIES
12	SUMMARY OF ROADWAY QUANTITIES
13	SUMMARY OF DRIVEWAY QUANTITIES
14	SUMMARY OF SOUND WALL QUANTITIES
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SHEET NO.

DESCRIPTION

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THE STANDARD SHEETS SPECIFICALLY IDENTIFIED WITH AN '\*' HAVE BEEN SELECTED BY ME OR UNDER MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT.

*W. Matthew Adams*, PE 11/16/2023  
 W. MATTHEW ADAMS (NO 105842), PE DATE

THE STANDARD SHEETS SPECIFICALLY IDENTIFIED WITH AN '\*\*' HAVE BEEN SELECTED BY ME OR UNDER MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT.

COURTNEY R. CARR (NO 123301), PE DATE



1	11/16/23	OUTFALL CHANNEL UPDATES	MA

**CobbFendley**  
 TBPE Firm Registration No. 274  
 TBPLS Firm Registration No. 100467  
 13430 Northwest Freeway, Suite 1100  
 Houston, Texas 77040  
 713.462.3242 | fax 713.462.3262  
 www.cobbfendley.com

**Brazoria County Engineering Department**

CR 59  
 INDEX OF SHEETS

FED. RD. DIV. NO.	STATE	PROJECT NO.		HIGHWAY NO.
12	TEXAS	STP 1702	(438)MM	CR 59
STATE DISTRICT	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.
HOU	BRAZORIA	0912	31	305
				SHEET NO.
				2

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SUMMARY OF DRAINAGE QUANTITIES													
ITEM NO.	DESC. CODE	BEGIN STATION	END STATION	104	110	400		402	432	432	462		464
DESCRIPTION				6015	6002	6005	6009	6001	6001	6003	6003	6006	6003
UNIT	REMOVING CONC (SIDEWALKS)	EXCAVATION (CHANNEL)	CEM STABIL BKFL	CEMENT STAB BACKFILL (INLET OR MH)	TRENCH EXCAVATION PROTECTION	RIPRAP (CONC) (4 IN)	RIPRAP (CONC) (6 IN)	CONC BOX CULV (4 FT X 2 FT)	CONC BOX CULV (5 FT X 2 FT)	RC PIPE (CL III) (18 IN)			
CSJ 0912-31-305	SY	CY	CY	CY	LF	CY	CY	LF	LF	LF			
<b>WESTBOUND DRAINAGE PLAN AND PROFILE</b>													
SHEET 1 OF 10	BEGIN PROJECT	22+00.00											
SHEET 2 OF 10	22+00.00	28+00.00		215	33	488		21		198			
SHEET 3 OF 10	28+00.00	34+00.00		317	66	602		21					
SHEET 4 OF 10	34+00.00	40+00.00		405	58	602		21					
SHEET 5 OF 10	40+00.00	46+00.00		489	25	611		11					
SHEET 6 OF 10	46+00.00	52+00.00		489	42	617		21					
SHEET 7 OF 10	52+00.00	58+00.00		445	58	639		21		25			
SHEET 8 OF 10	58+00.00	64+00.00		418	42	682		21					
SHEET 9 OF 10	64+00.00	70+00.00		308	25	607		11					
SHEET 10 OF 10	70+00.00	END PROJECT		196	25	408							
<b>EASTBOUND DRAINAGE PLAN AND PROFILE</b>													
SHEET 1 OF 10	BEGIN PROJECT	22+00.00											
SHEET 2 OF 10	22+00.00	28+00.00		203	25	266				196			
SHEET 3 OF 10	28+00.00	34+00.00		322	58	602							
SHEET 4 OF 10	34+00.00	40+00.00		607	58	679							
SHEET 5 OF 10	40+00.00	46+00.00		967	42	684							
SHEET 6 OF 10	46+00.00	52+00.00		921	42	600							
SHEET 7 OF 10	52+00.00	58+00.00		833	50	608							
SHEET 8 OF 10	58+00.00	64+00.00		551	50	650							
SHEET 9 OF 10	64+00.00	70+00.00		381	66	605							
SHEET 10 OF 10	70+00.00	END PROJECT											
<b>CULVERT LAYOUT</b>													
SHEET 1 OF 1	STA 23+58.51			287						132	132		
SHEET 1 OF 1	STA 24+72.78			297						280			
<b>DETENTION POND LAYOUT</b>													
SHEET 1 OF 2	BEGIN POND	21+00		70,571	389	50	134		483				
SHEET 2 OF 2	21+00	END POND		23,524	113	25	79		194				
<b>OUTFALL CHANNEL PLAN AND PROFILE</b>													
SHEET 1 OF 2	BEGIN OUTFALL	20+75.76		1,150	1,268	42	909		162				
SHEET 2 OF 2	20+75.76	END OUTFALL		16	383	486	33	348	152				
<b>CSJ TOTALS</b>				<b>16</b>	<b>95,628</b>	<b>10,907</b>	<b>915</b>	<b>11,420</b>	<b>314</b>	<b>825</b>	<b>412</b>	<b>132</b>	<b>419</b>



11/16/23	OUTFALL CHANNEL UPDATES	MA	
REV. NO.	DATE	DESCRIPTION	BY

**CobbFendley**  
 TBPE Firm Registration No. 274  
 TBPLS Firm Registration No. 100467  
 13430 Northwest Freeway, Suite 1100  
 Houston, Texas 77040  
 713.462.3242 | fax 713.462.3262  
 www.cobbfendley.com

 **Brazoria County**  
 Engineering Department

**CR 59**  
**SUMMARY OF DRAINAGE QUANTITIES**

FED. RD. DIV. NO.	STATE	PROJECT NO.	HIGHWAY NO.		
12	TEXAS	STP 1702 (438)MM	CR 59		
STATE DISTRICT	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
HOU	BRAZORIA	0912	31	305	15

59\_SUMDRNO1.dgn

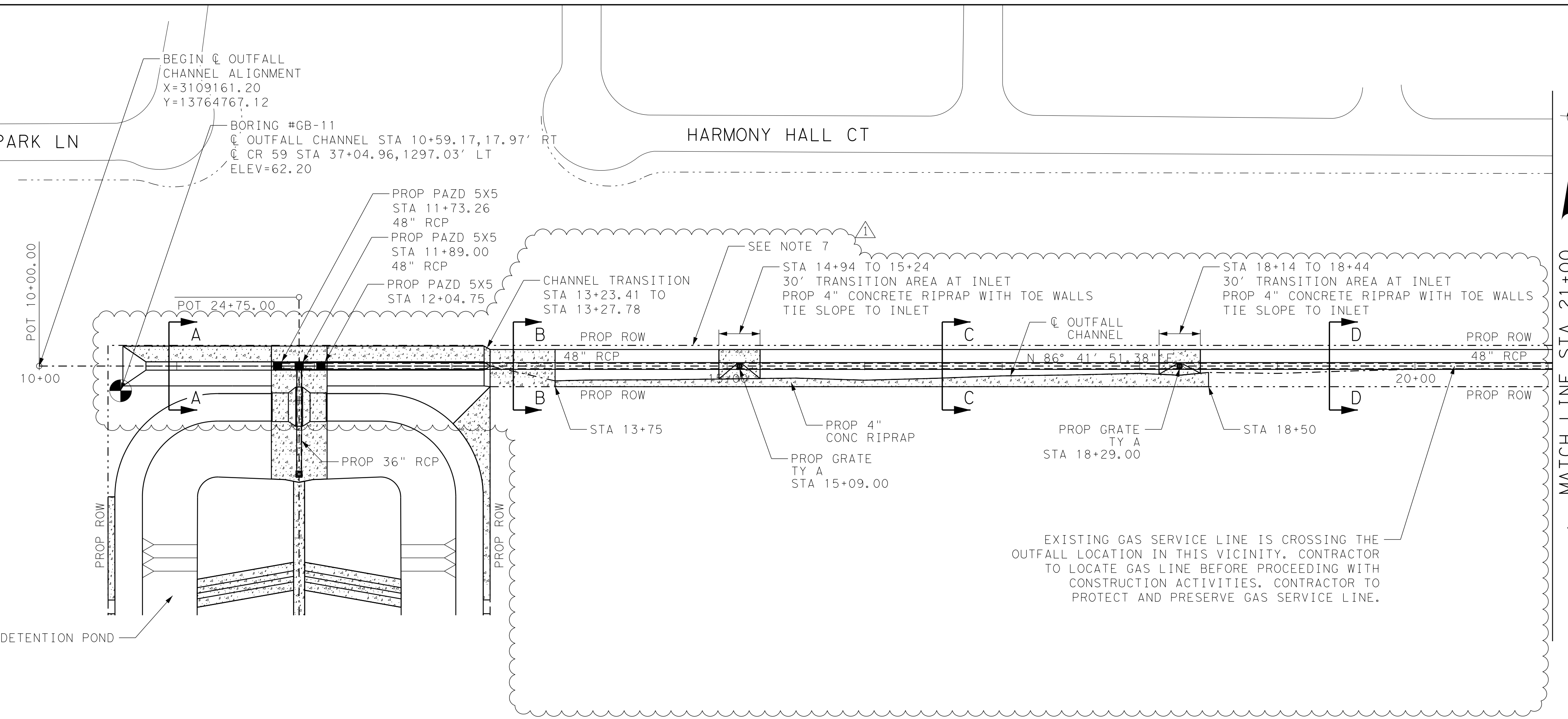
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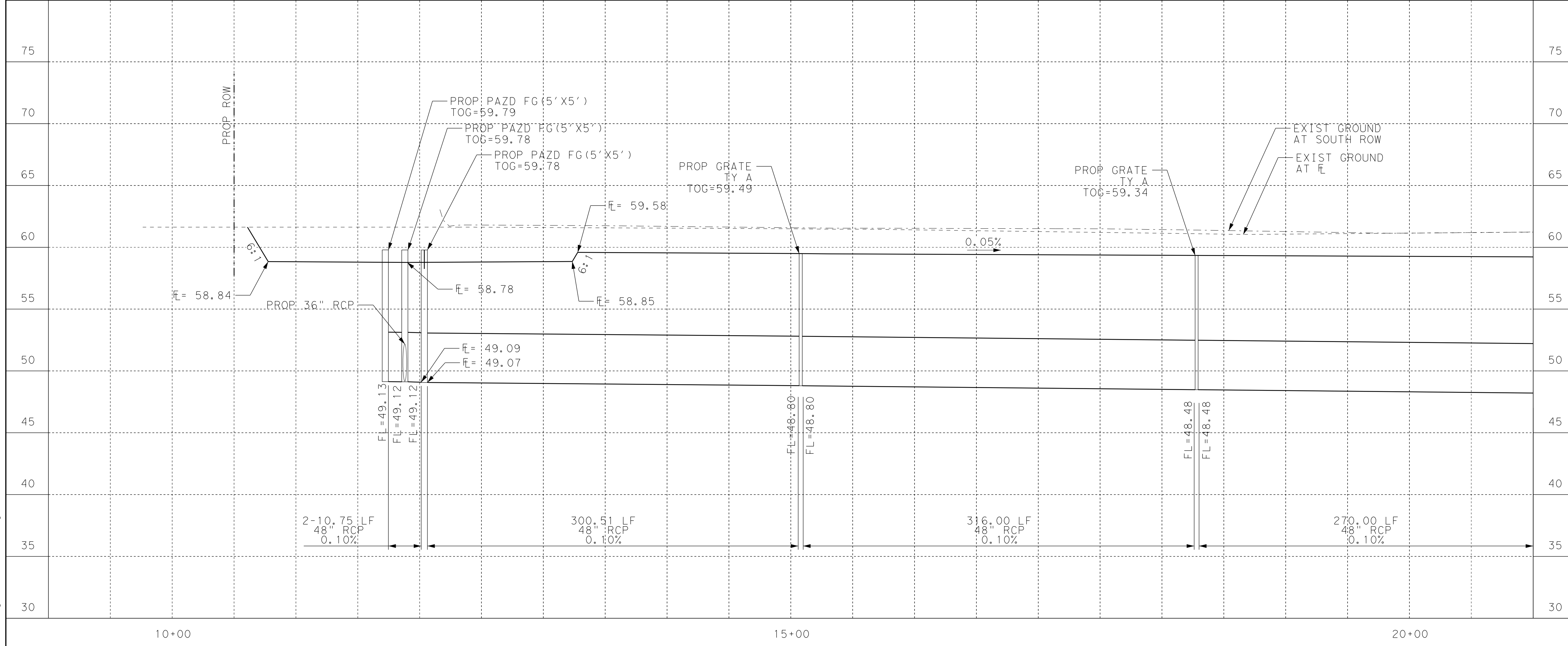
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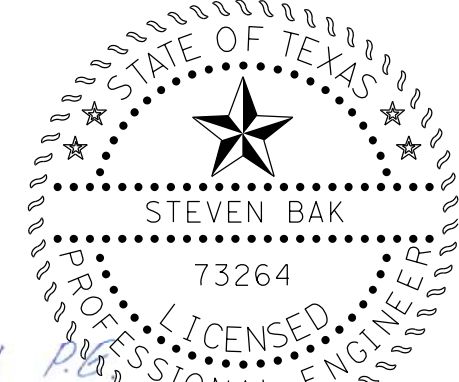
HARMONY HALL CT



NOTES:

- FOR DETENTION POND DETAILS, REFER TO DETENTION POND PLAN AND PROFILE.
- THIS ENTIRE PROJECT IS OUTSIDE THE LIMITS OF THE FLOODPLAIN.
- FOR ADDITIONAL DRAINAGE INFORMATION, REFER TO DRAINAGE STUDY ENTITLED "COUNTY ROAD 59 IMPACT STUDY FROM COUNTY ROAD 48 TO KIRBY DRIVE" DATED DECEMBER 2021.
- BDD4 HAS REVIEWED AND APPROVED THESE PLANS (BDD#4 REF ID 20241/21-000095) EFFECTIVE MARCH 8, 2022, AND FOUND THEM TO BE IN COMPLIANCE WITH THE DISTRICT'S "RULES, REGULATIONS, AND GUIDELINES."
- VARIANCE REQUESTS WERE APPROVED BY BDD4 FOR THIS PROJECT (BDD#4 REF ID 20241/21-000095) ON DATE MARCH 9, 2021 FOR POND SIDE SLOPES, MAINTENANCE BERM WIDTH, AND THE EXTREME EVENT OVERFLOW SWALE, AND ON DATE JULY 13, 2021 FOR REDUCTION IN OUTFALL FLOWLINE REQUIREMENT.
- INSTALL WEEP HOLES ALONG CHANNEL SLOPE PAVING AS SHOWN ON BRAZORIA DRAINAGE DISTRICT NO. 4 "WEEP HOLE DETAIL".
- BRAZORIA DRAINAGE DISTRICT NO. 4 WILL NOT BE RESPONSIBLE FOR MAINTENANCE, REPAIR, OR REPLACEMENT OF THE PRIVATE FENCING ALONG NORTH SIDE OF THE CHANNEL.
- CONCRETE RIPRAP ON THIS PLAN REFERS TO POURED IN PLACE REINFORCED CONCRETE SLOPE PAVEMENT.
- VARIANCE REQUEST WAS APPROVED BY BDD4 FOR THIS PROJECT (BDD#4 #23-000299) ON DATE NOVEMBER 14, 2023 FOR USE OF "V" BOTTOM DITCH ALONG OUTFALL CHANNEL.



  
 Steven Bak, P.E.  
 11/16/2023  
 0 25 10 100 (H)  
 0 5 10 (V)

11/16/23	OUTFALL CHANNEL UPDATES	MA	
REV. NO.	DATE	DESCRIPTION	BY

  
 TBPE Firm Registration No. 274  
 TBPLS Firm Registration No. 100467  
 13430 Northwest Freeway, Suite 1100  
 Houston, Texas 77040  
 713.462.3242 | fax 713.462.3262  
 www.cobbfendley.com

  
**Brazoria County**  
 Engineering Department

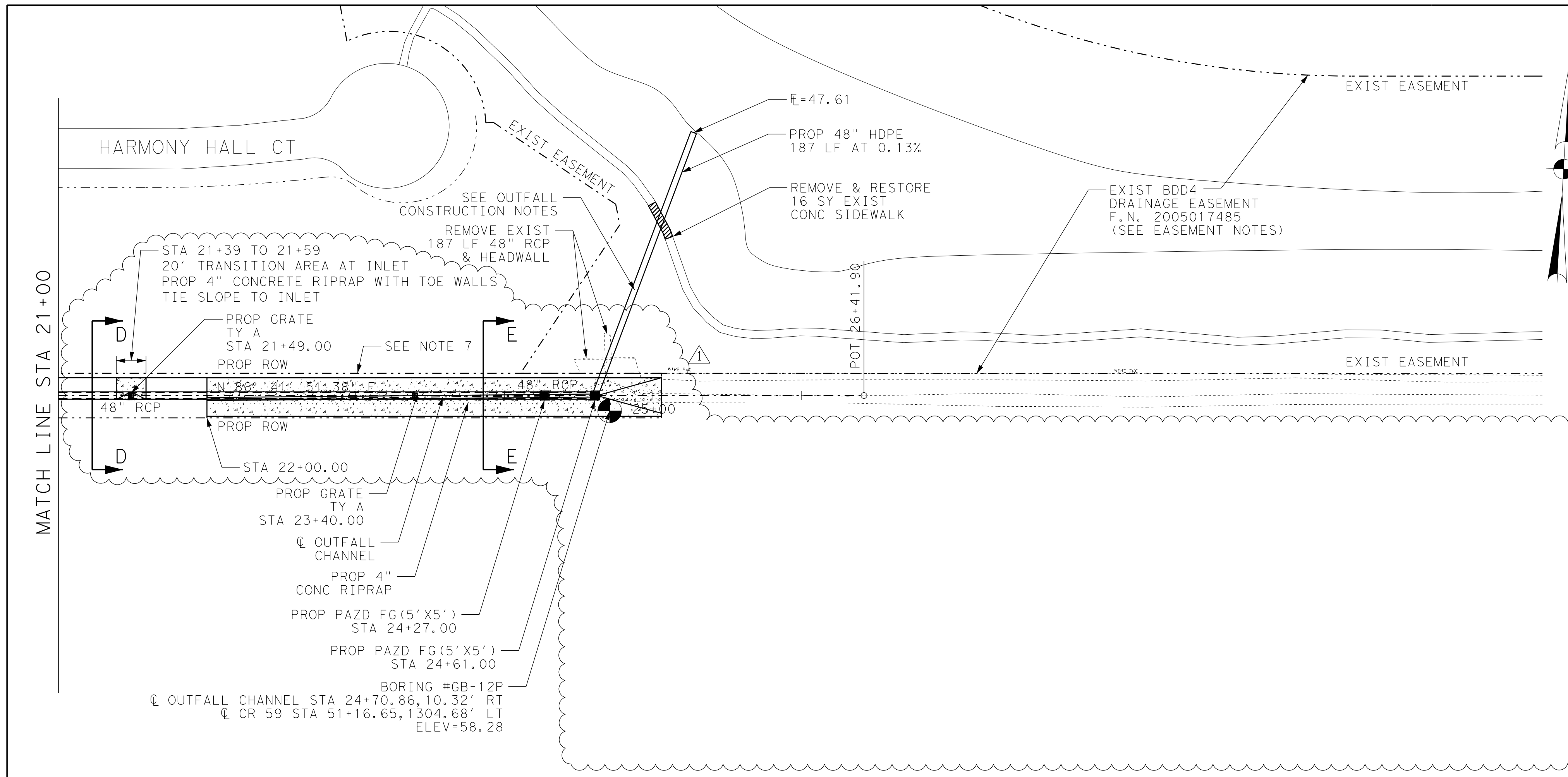
CR 59  
**OUTFALL CHANNEL**  
**PLAN AND PROFILE**  
 STA 10+00 TO 21+00

SHEET 1 OF 3			
FED. RD. DIV. NO.	STATE	PROJECT NO.	HIGHWAY NO.
12	TEXAS	STP 1702 (438)MM	CR 59
STATE DISTRICT	COUNTY	CONTROL NO.	SECTION NO.
HOU	BRAZORIA	0912	31
		JOB NO.	SHEET NO.
		305	167

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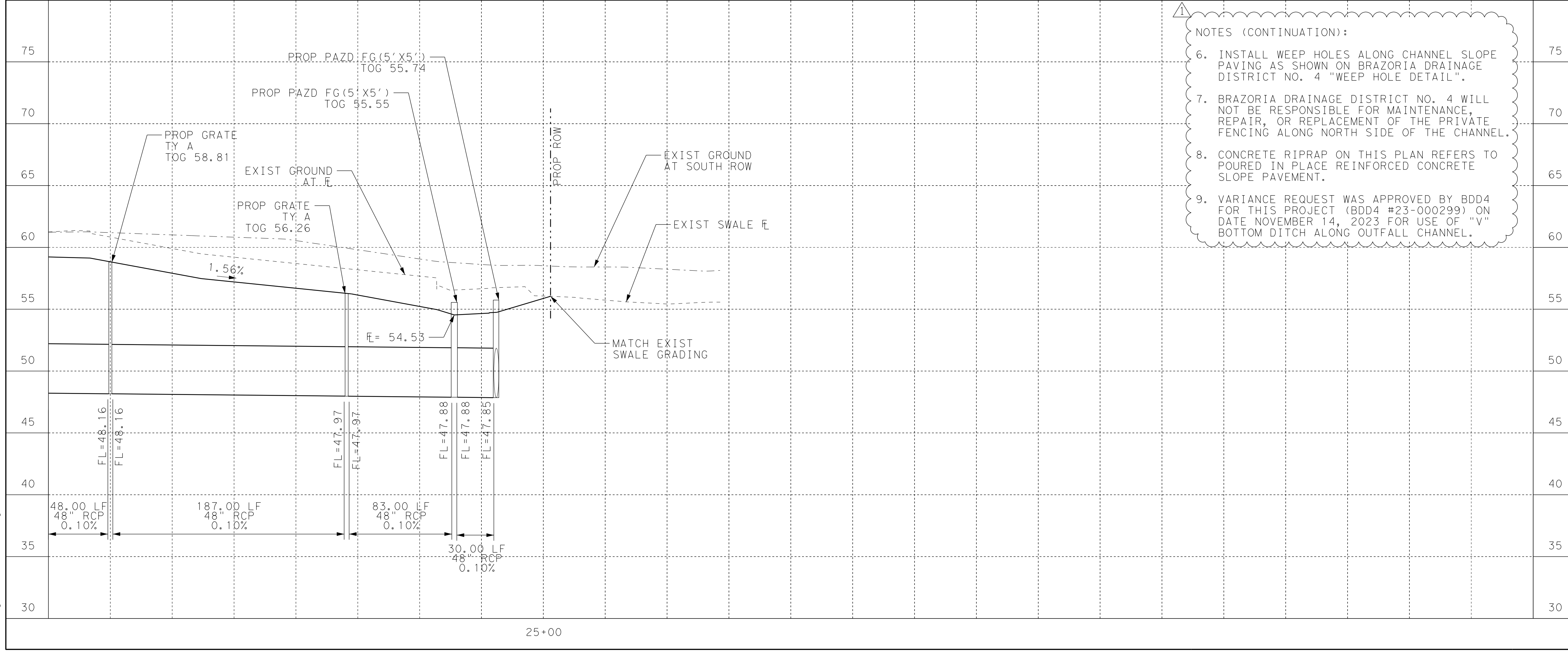
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EASEMENT NOTES:

- ASHTON SOUTHERN TRAILS JOINT VENTURE GRANTS/CONVEYS BRAZORIA DRAINAGE DISTRICT NO. 4 A NON-EXCLUSIVE EASEMENT AND RIGHT-OF-WAY FOR THE CONSTRUCTION, MAINTENANCE, REPAIR, RECONSTRUCTION, AND OPERATION OF STORM SEWER LINES AND ALL RELATED APPURTENANCES.
- ANY GOVERNMENTAL BODY FOR PURPOSES OF DRAINAGE WORK MAY USE DRAINAGE EASEMENTS AND FEE STRIPS PROVIDED THE DRAINAGE DISTRICT IS PROPERLY NOTIFIED.
- ALL FUTURE MAINTENANCE OBLIGATIONS OF THE EASEMENT SHALL BE THE RESPONSIBILITY OF BRAZORIA COUNTY MUNICIPAL UTILITY DISTRICT NO. 34.
- EXISTING DRAINAGE EASEMENT OUTLINED IN "DEVELOPMENT PLAT OF SOUTHERN TRAILS SECTION 18", DATED AUGUST 20, 2014. JOB NO. 1021-0802-310.

OUTFALL CONSTRUCTION NOTES:

- CONTRACTOR SHALL NOTIFY BRAZORIA COUNTY MUD NO. 34 (SHAYNA HELVEY, LJA ENGINEERING, 713-953-5106), A MINIMUM OF 5 DAYS PRIOR TO THE START OF CONSTRUCTION FOR ANY WORK OCCURRING WITHIN THE EXISTING DRAINAGE EASEMENT.
- CONTRACTOR SHALL PROTECT AND PRESERVE EXISTING FEATURES AND LANDSCAPING WITHIN THE EXISTING DRAINAGE EASEMENT. CONTRACTOR SHALL RESTORE THE AREAS WITHIN THE EXISTING DRAINAGE EASEMENT TO ITS ORIGINAL CONDITION UPON COMPLETION OF OUTFALL CONSTRUCTION. IMPACTS TO EXISTING FEATURES IN THE EXISTING DRAINAGE EASEMENT NOT SPECIFICALLY IDENTIFIED IN THESE PLANS ARE TO BE RESTORED AT THE CONTRACTOR'S EXPENSE, OR AS APPROVED BY THE ENGINEER.
- FUNCTIONING IRRIGATION LINES EXIST IN THE VICINITY OF THE PROPOSED 48" HDPE OUTFALL STRUCTURE. CONTRACTOR SHALL COORDINATE WITH BRAZORIA COUNTY MUD NO. 34 AND THEIR IRRIGATION CONTRACTOR PRIOR TO INITIATING CONSTRUCTION ACTIVITIES IN THIS AREA TO HAVE THE IRRIGATION LINES PROTECTED AND TEMPORARILY CAPPED, THEN REPLACED UPON COMPLETION OF OUTFALL CONSTRUCTION. WORK PERFORMED BY BRAZORIA COUNTY MUD NO. 34'S IRRIGATION CONTRACTOR WILL BE PAID FOR BY CHANGE ORDER WITHOUT MARKUP.



- NOTES (CONTINUATION):
- INSTALL WEEP HOLES ALONG CHANNEL SLOPE PAVING AS SHOWN ON BRAZORIA DRAINAGE DISTRICT NO. 4 "WEEP HOLE DETAIL".
  - BRAZORIA DRAINAGE DISTRICT NO. 4 WILL NOT BE RESPONSIBLE FOR MAINTENANCE, REPAIR, OR REPLACEMENT OF THE PRIVATE FENCING ALONG NORTH SIDE OF THE CHANNEL.
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11/16/23	OUTFALL CHANNEL UPDATES	MA
REV. NO.	DATE	DESCRIPTION

**CobbFendley**  
 TBPE Firm Registration No. 274  
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 713.462.3242 | fax 713.462.3262  
 www.cobbhendley.com

**Brazoria County  
Engineering Department**

CR 59  
 OUTFALL CHANNEL  
 PLAN AND PROFILE  
 STA 21+00 TO 26+41.90  
 SHEET 2 OF 3

FED. RD. DIV. NO.	STATE	PROJECT NO.	HIGHWAY NO.
12	TEXAS	STP 1702 (438)MM	CR 59
STATE DISTRICT	COUNTY	CONTROL NO.	SECTION NO.
HOU	BRAZORIA	0912	31
		JOB NO.	SHEET NO.
		305	168



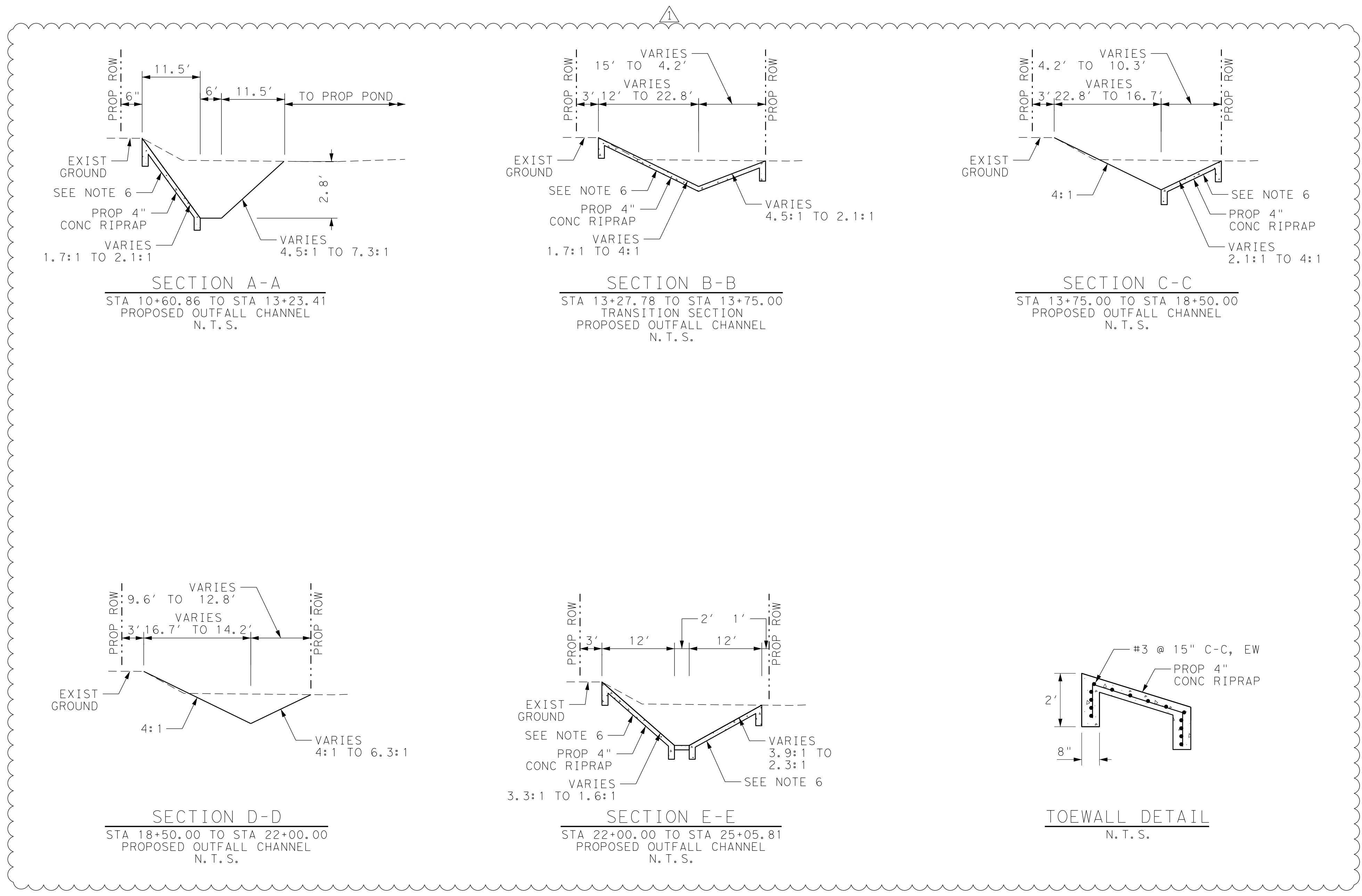
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Steven Bak, P.E.  
 11/16/2023

0 25 10 100 (H)  
 0 5 10 (V)

11/16/23	OUTFALL CHANNEL UPDATES	MA
REV. NO.	DATE	DESCRIPTION

**CobbFendley**  
 TBPE Firm Registration No. 274  
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 13430 Northwest Freeway, Suite 1100  
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 713.462.3242 | fax 713.462.3262  
 www.cobbfendley.com

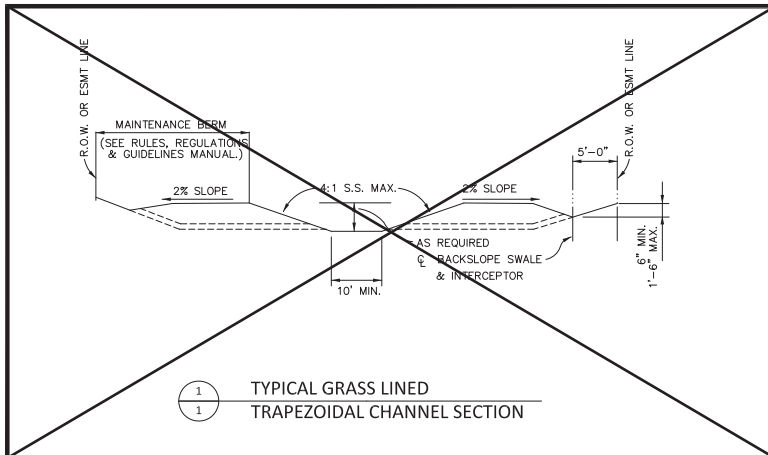
**Brazoria County**  
 Engineering Department

CR 59  
 OUTFALL CHANNEL  
 TYPICAL SECTIONS

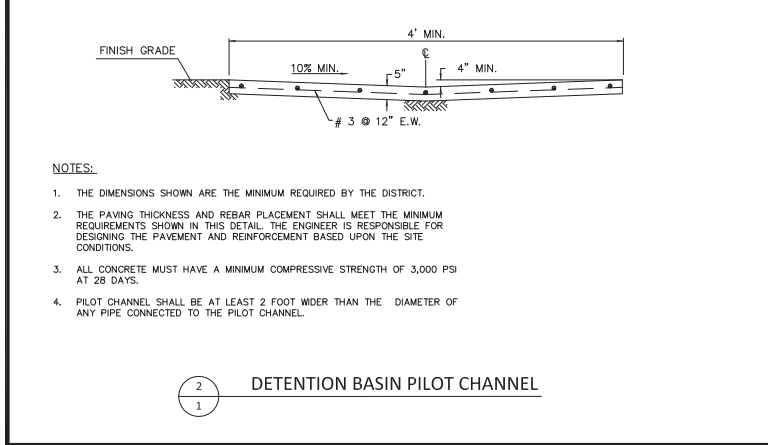
SHEET 3 OF 3

FED. RD. DIV. NO.	STATE	PROJECT NO.		SECTION NO.
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HOU	BRAZORIA	0912	31	305
				SHEET NO.
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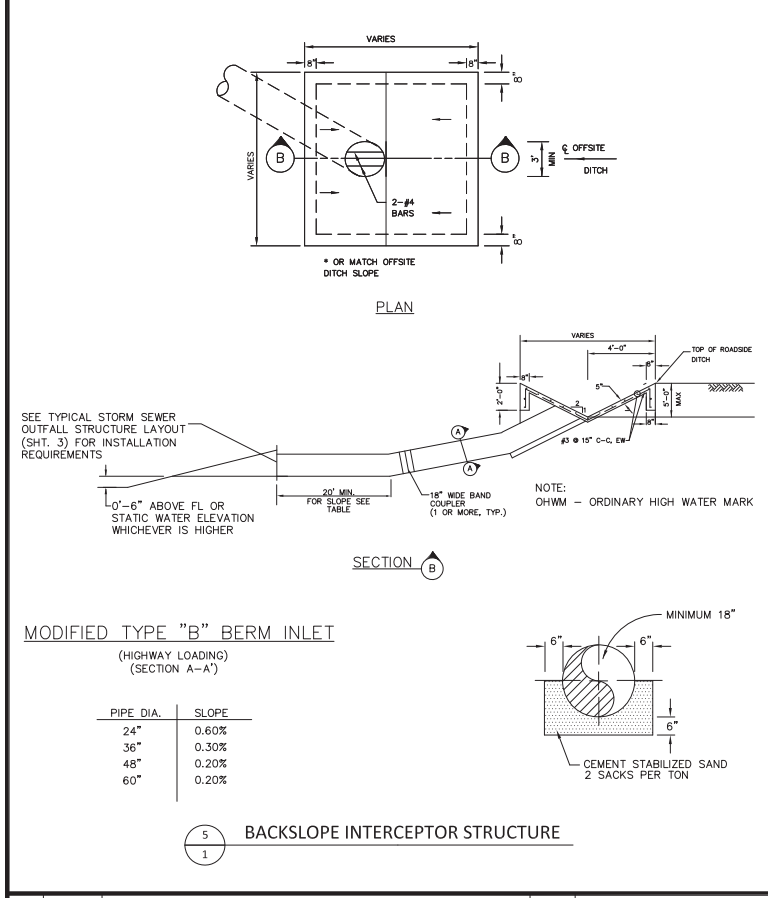
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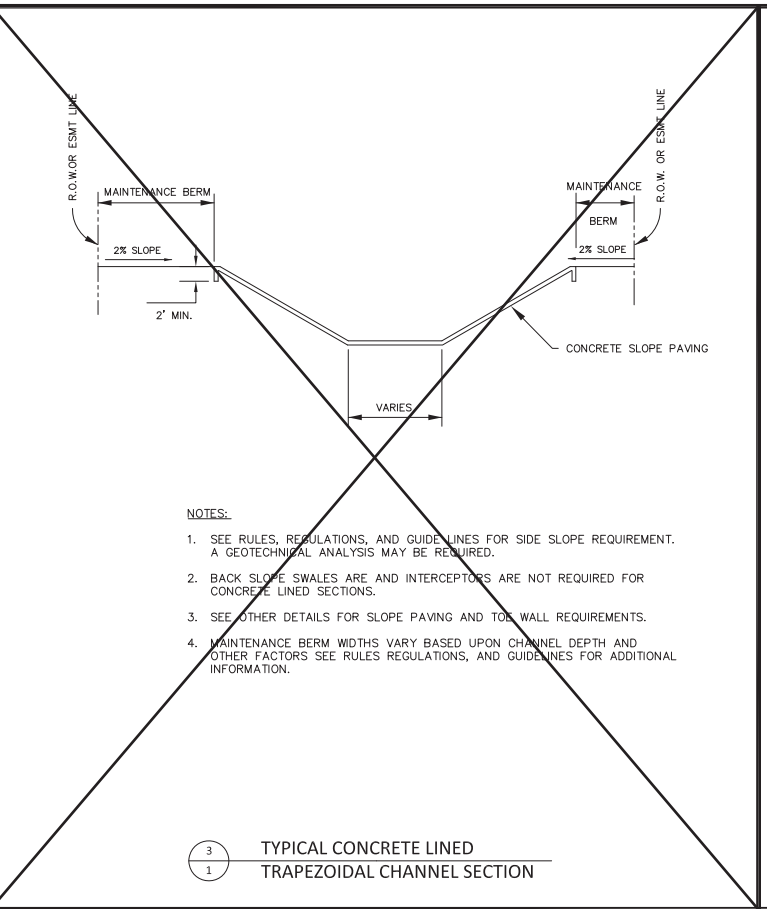
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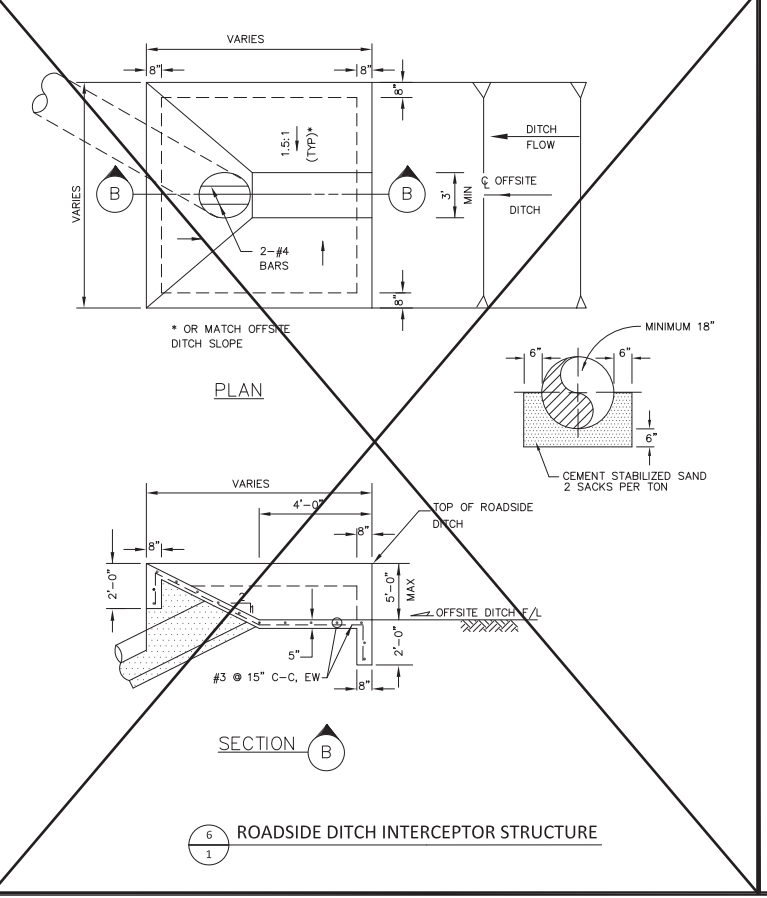
2 DETENTION BASIN PILOT CHANNEL



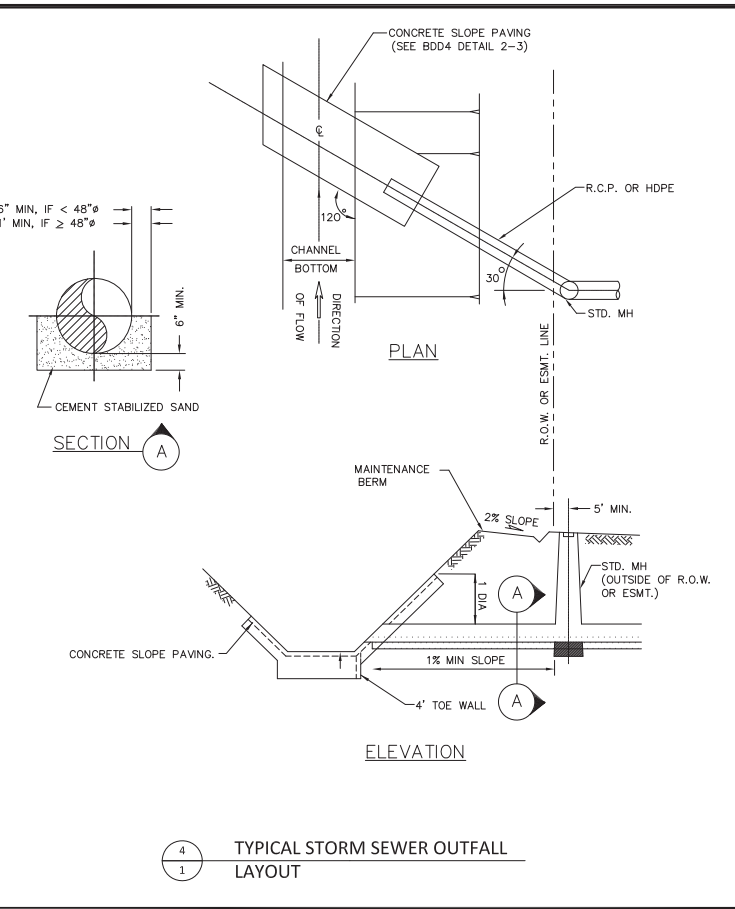
5 BACKSLOPE INTERCEPTOR STRUCTURE



3 TYPICAL CONCRETE LINED TRAPEZOIDAL CHANNEL SECTION



6 ROADSIDE DITCH INTERCEPTOR STRUCTURE



4 TYPICAL STORM SEWER OUTFALL LAYOUT

APPROVED BY THE BOARD OF COMMISSIONERS ON \_\_\_\_\_

Brazoria Drainage District No. 4

District Engineer

The above have signed these plans and/or plat based on the recommendation of the DISTRICT'S Engineer who has reviewed all sheets provided and found them to be in general compliance with the DISTRICT'S "Rules, Regulations, and Guidelines". This approval is only valid for three hundred sixty-five (365) calendar days. After that time re-approval is required. Please note, this does not necessarily mean that all the calculations provided in these plans and/or plats have been completely checked and verified. In the event of any conflict or inconsistency between the DISTRICT'S "Rules, Regulations and Guidelines" and these approved drainage plans and/or plat, the DISTRICT'S "Rules, Regulations & Guidelines" shall govern and prevail. Any approved variances shall be itemized on the cover sheet and placed on the appropriate sheet where applicable. Plans submitted have been prepared, signed and sealed by a Professional Engineer licensed to practice engineering in the State of Texas and plat has been signed and sealed by a Registered Professional Land Surveyor licensed to practice in the State of Texas, which conveys the engineer's and/or surveyor's responsibility and accountability.

BDD4Ref. ID #: \_\_\_\_\_

7 FINAL SIGNATURE BLOCK

**Section 5.H - SPECIAL NOTES**

Notes and clarifying statements shall be entered on the Drainage Plan (and Plat if required) including any deed restrictions to ensure compliance with all drainage regulations and requirements. These notes and statements are:

- Any governmental body for purposes of drainage work may use drainage easements and fee strips provided the DISTRICT is properly notified.
- Permanent structures, including fences and permanent landscaping, shall not be erected in a drainage easement, access easement, or fee strip.
- Maintenance of detention facilities is the sole responsibility of the owner of the property. The DISTRICT will provide maintenance of regional facilities owned and constructed by the DISTRICT, or sub regional facilities constructed by developer(s) for which ownership has been transferred to the DISTRICT with the DISTRICT'S approval. The DISTRICT is responsible only for the maintenance of facilities owned by the DISTRICT unless the DISTRICT specifically contracts or agrees to maintain other facilities.
- Contractor shall notify the DISTRICT'S Inspector at least forty-eight (48) hours before beginning work and twenty-four (24) hours before placing any concrete.
- The DISTRICT'S personnel shall have the right to enter upon the property for inspection at any time during construction or as may be warranted to ensure the detention facility and drainage system are operating properly.
- Appropriate cover for the side slopes, bottom, and maintenance berm shall be established prior to acceptance of the construction by the DISTRICT. At least 95% germination of the grass must be established prior to acceptance of construction by the DISTRICT.
- No building permit shall be issued for any lot within this development until the detention facility has been constructed and approved by the DISTRICT.
- The DISTRICT'S approval of the Final Drainage Plan (and Final Plat if required) does not affect the property rights of third parties. The developer is responsible for obtaining and maintaining any and all easements, fee strips, and/or any other rights-of-way across third parties' properties for purposes of moving excess runoff to the DISTRICT'S drainage facilities as contemplated by the Final Drainage Plan and Final Plat.
- Drainage Easements shall be used only for the purposes of constructing, operating, maintaining, repairing, replacing, and reconstructing of a drainage facility, and any and all related equipment and facilities together with any and all necessary incidentals and appurtenances thereto in, upon, over, across, and through the Easement Area. The DISTRICT'S successors, assigns, agents, employees, workmen, and representatives shall at all present and future times, have the right and privilege of ingress and egress in, upon, over, across, and through the Easement Area.
- Access Easements shall be used for ingress and egress to the DISTRICT'S drainage facilities and shall be kept clear of any and all obstructions.
- An As-Built Certificate and As-Built Survey are required to be submitted to the DISTRICT before a Certificate of Compliance can be issued. Contact the DISTRICT'S Inspector for further clarification.
- All drainage plans and plats shall be in conformance with the DISTRICT'S Rules, Regulations & Guidelines. Board approval of a drainage plan or plat does not constitute permission to deviate. Deviation from the DISTRICT'S Rules, Regulations & Guidelines is only authorized and allowed by a separate Request for Variance which was approved by the Board. Any Board approved variance shall be referenced on the plan cover page and on the appropriate sheet where applicable. The use of the term "Guidelines" herein does not affect the mandatory nature of these Rules, Regulations & Guidelines.

8 BRAZORIA DRAINAGE DISTRICT NO. 4 SPECIAL NOTES FOR PLATS AND DRAINAGE PLANS

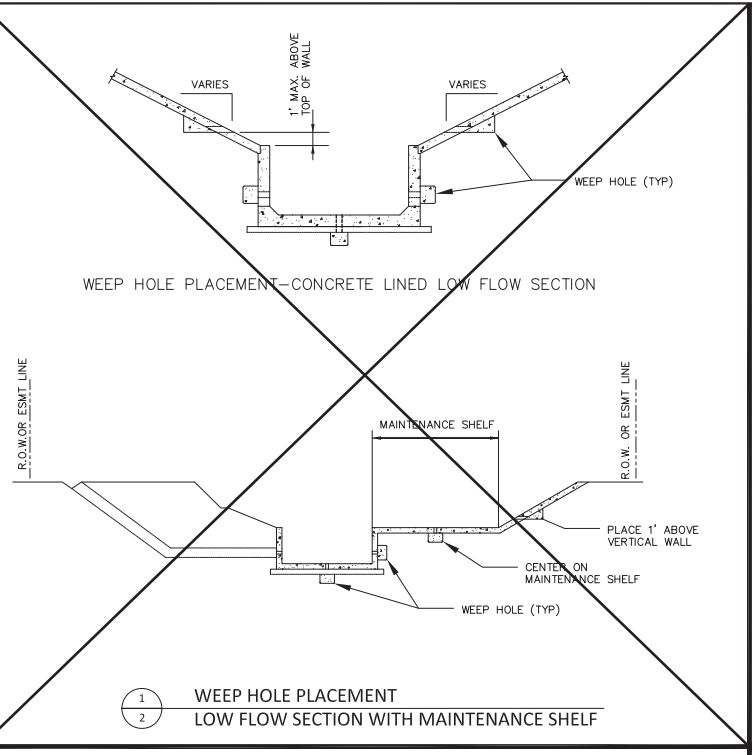
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07-13-21	EFFECTIVE	JDA	

# BRAZORIA DRAINAGE DISTRICT NO. 4

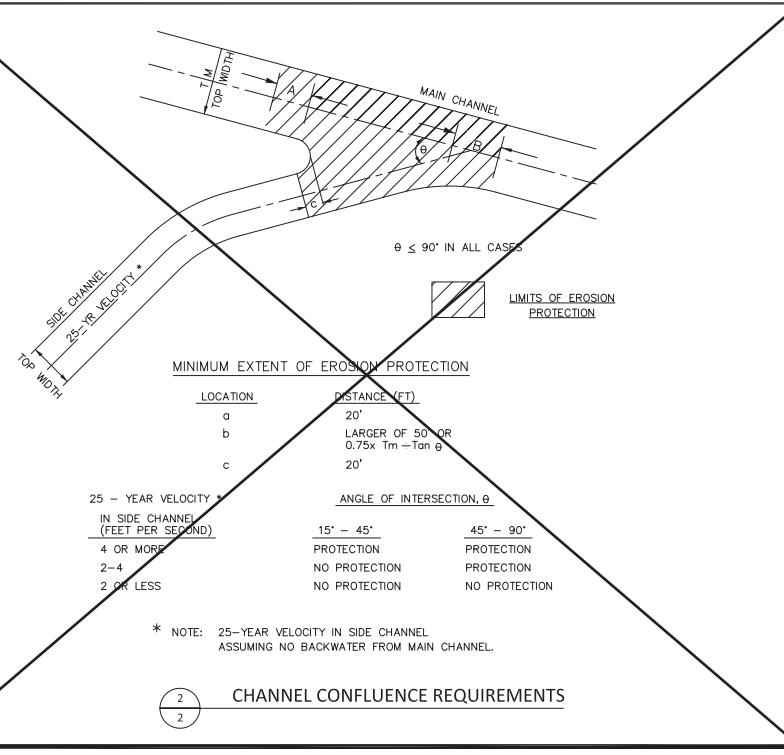


**BRAZORIA DRAINAGE DISTRICT NO. 4**  
 4813 W. BROADWAY  
 PEARLAND, TX. 77581  
 OFFICE 281-485-1434  
 FAX 281-485-0065  
 WWW.BDD4.ORG  
 INFO@BDD4.ORG

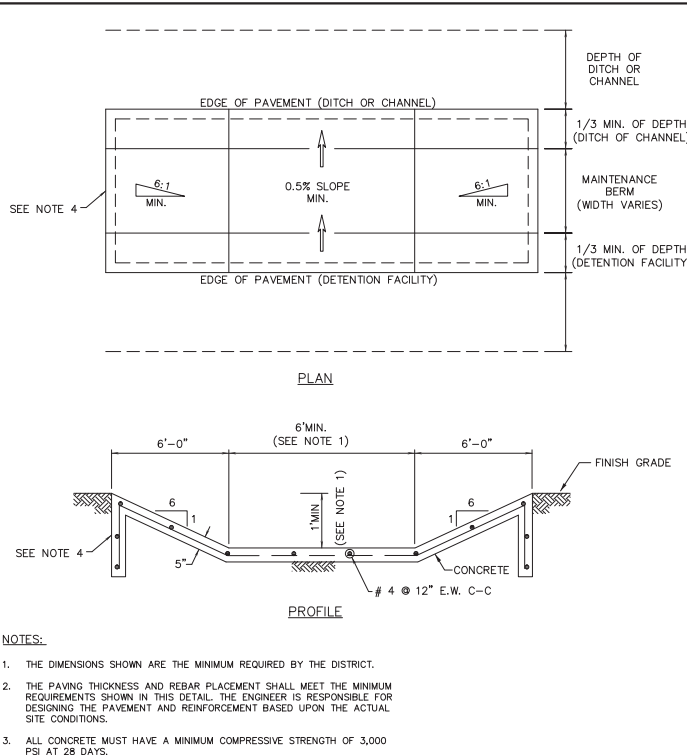
STANDARD DETAILS	
DRAWN BY: AH-TD	SCALE: NTS
DESIGNED BY: AH-TD	DATE UPDATED: 07-01-2021
APPROVED BY: JDA	SHEET NO.: 190
JOB NO.:	



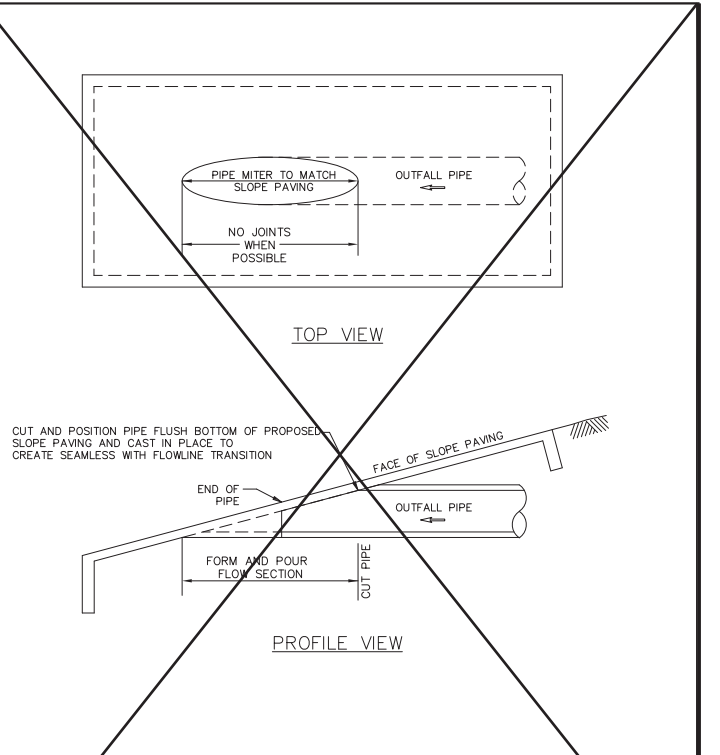
1 WEEP HOLE PLACEMENT  
2 LOW FLOW SECTION WITH MAINTENANCE SHELF



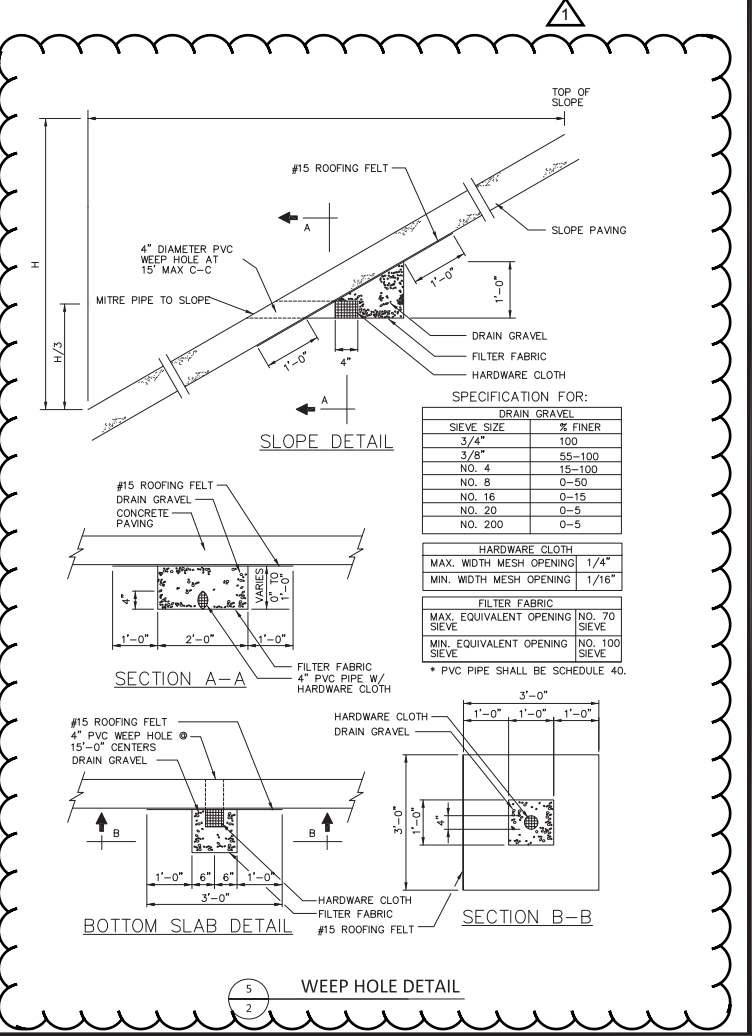
2 CHANNEL CONFLUENCE REQUIREMENTS



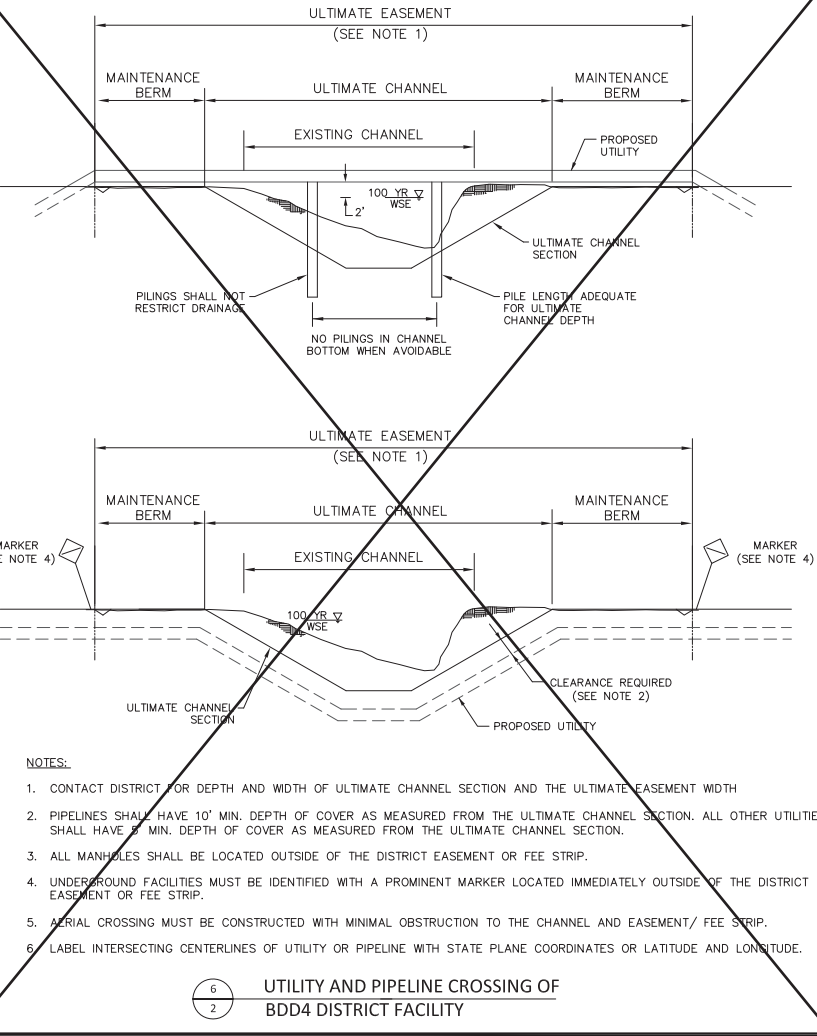
3 CONCRETE LINED EXTREME EVENT  
2 EMERGENCY OVERFLOW SWALE



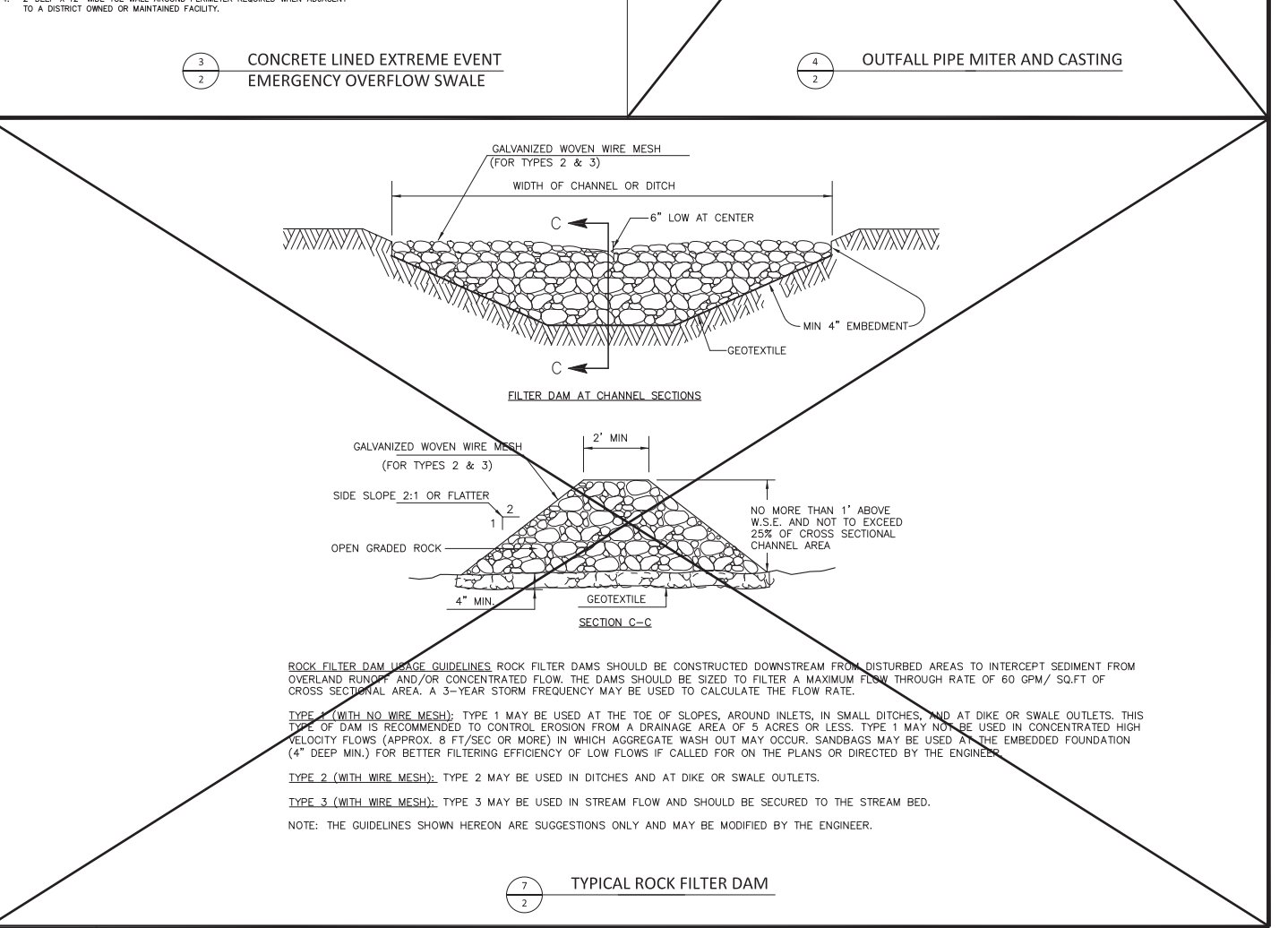
4 OUTFALL PIPE MITER AND CASTING



5 WEEP HOLE DETAIL



6 UTILITY AND PIPELINE CROSSING OF  
2 BDD4 DISTRICT FACILITY



7 TYPICAL ROCK FILTER DAM

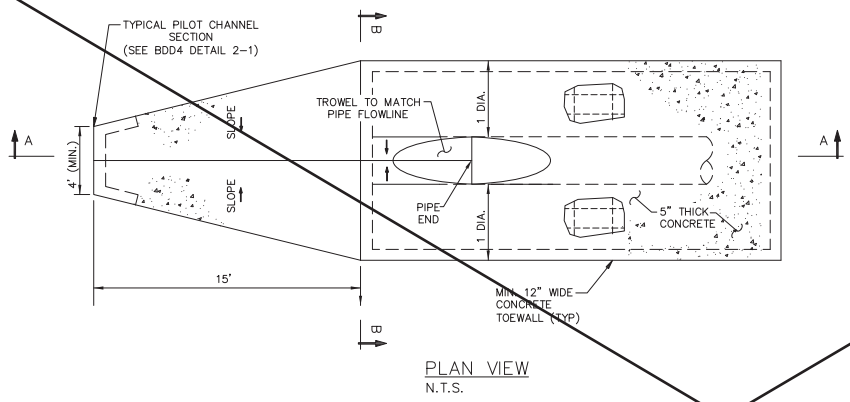
NO.	DATE	REVISIONS	APP.
07-01-21	REVISED STANDARD DETAILS	JDA	
07-13-21	EFFECTIVE	JDA	

# BRAZORIA DRAINAGE DISTRICT NO. 4

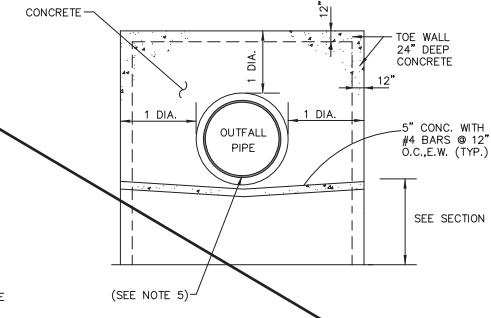
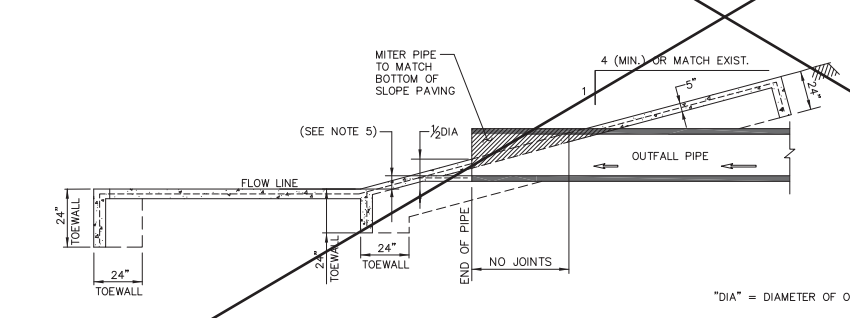


**BRAZORIA DRAINAGE DISTRICT NO. 4**  
 4813 W. BROADWAY  
 PEARLAND, TX. 77581  
 OFFICE 281-485-1434  
 FAX 281-485-0065  
 WWW.BDD4.ORG  
 INFO@BDD4.ORG

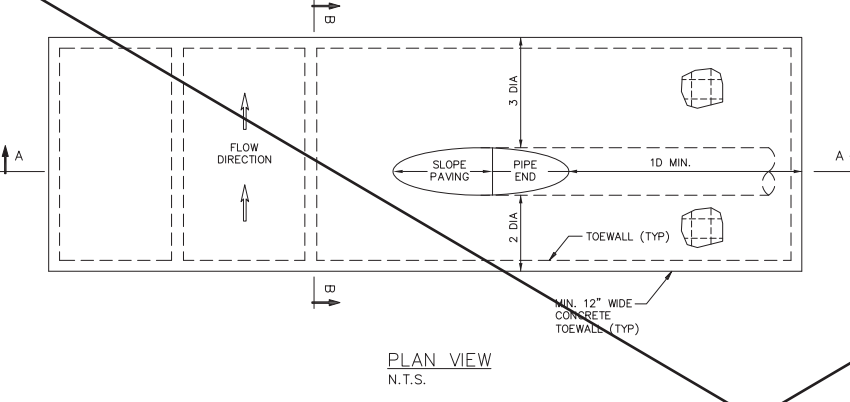
STANDARD DETAILS			
DRAWN BY:	AH-TD	SCALE:	NTS
DESIGNED BY:	AH-TD	DATE UPDATED:	07-01-2021
APPROVED BY:	JDA	SHEET NO.:	191



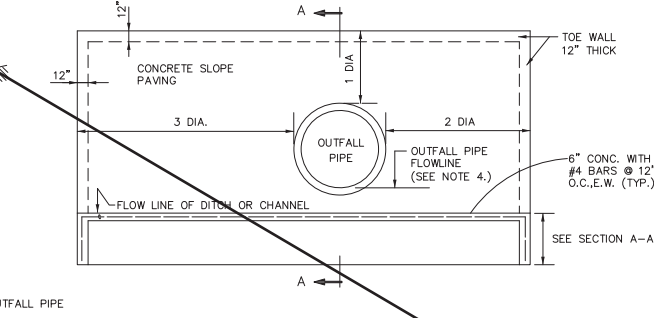
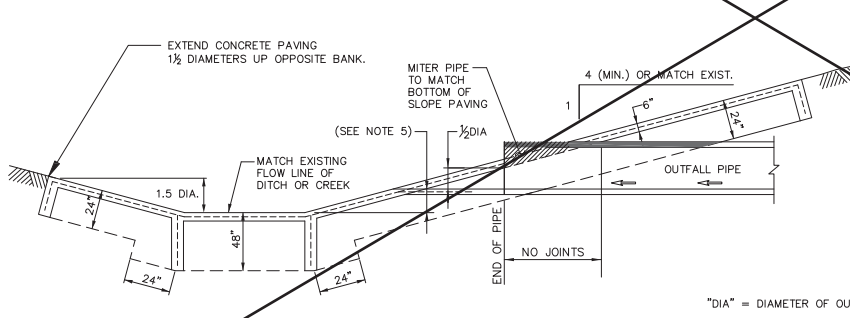
- NOTES:
1. THE DIMENSIONS SHOWN ARE THE MINIMUM REQUIRED BY THE DISTRICT.
  2. THE PAVING THICKNESS AND REBAR PLACEMENT SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THIS DETAIL.
  3. ALL CONCRETE MUST HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.
  4. MINIMUM YIELD STRENGTH OF REBAR SHALL BE #4 BARS, 60,000 PSI (GRADE 60) AND PLACED AT 12" C/C EACH WAY.
  5. THE PROPOSED FLOWLINE OF THE PIPE SHALL BE PLACED A MINIMUM OF 3" ABOVE THE EXISTING FLOW LINE OF THE DETENTION POND BOTTOM ELEVATION TO PREVENT BACKFLOW.



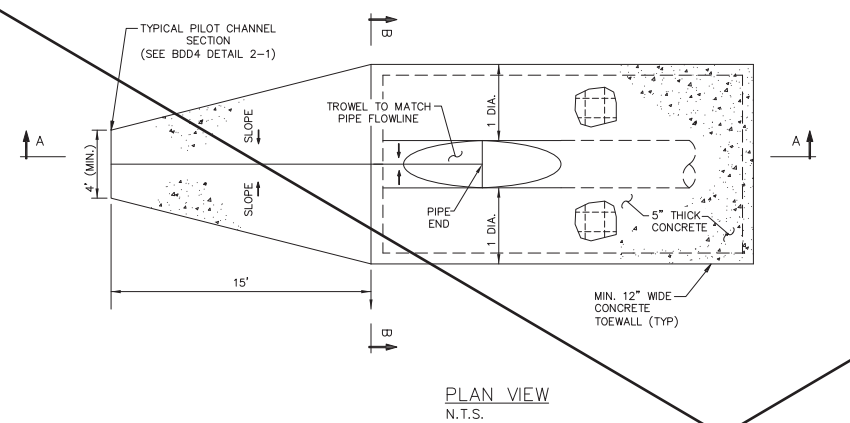
1  
3  
OUTFALL PIPE INTO DISTRICT OWNED OR PRIVATE DETENTION POND



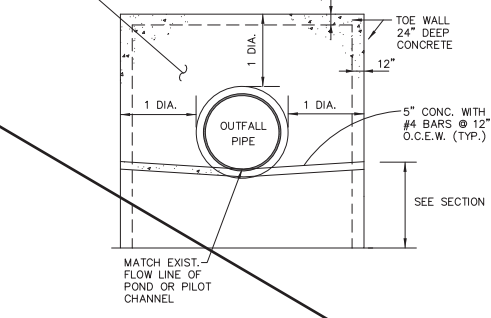
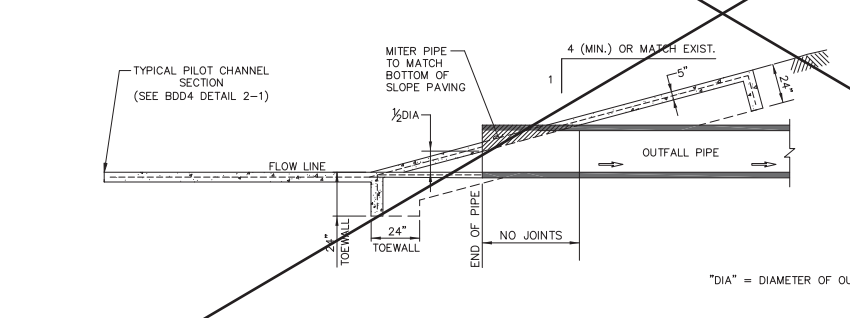
- NOTES:
1. THE DIMENSIONS SHOWN ARE THE MINIMUM REQUIRED BY THE DISTRICT.
  2. THE PAVING THICKNESS AND REBAR PLACEMENT SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THIS DETAIL. THE ENGINEER IS RESPONSIBLE FOR DESIGNING THE PAVEMENT AND REINFORCEMENT BASED UPON THE SITE CONDITIONS.
  3. ALL CONCRETE MUST HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.
  4. MINIMUM YIELD STRENGTH OF REBAR SHALL BE #4 BARS, 60,000 PSI (GRADE 60) AND PLACED AT 12" C/C EACH WAY.
  5. THE PROPOSED FLOWLINE OF THE PIPE SHALL BE PLACED A MINIMUM OF 6" ABOVE THE EXISTING FLOW LINE OF THE DITCH OR STATIC WATER SURFACE WHICHEVER IS HIGHER.



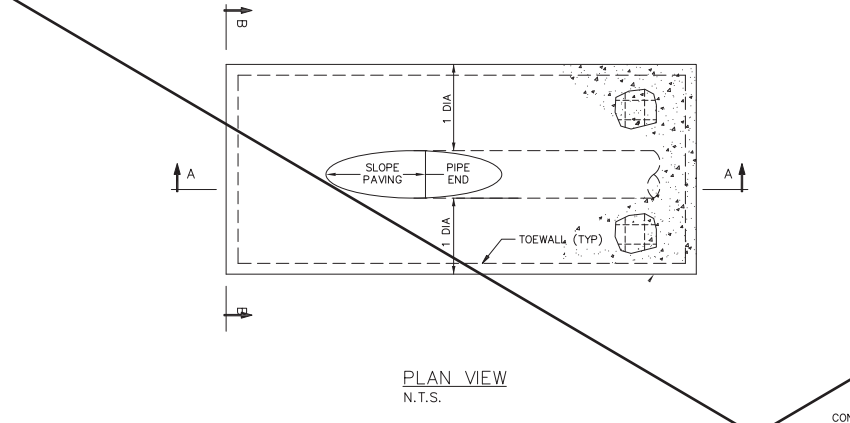
2  
3  
OUTFALL PIPE TO DISTRICT OWNED CHANNEL OR DITCH



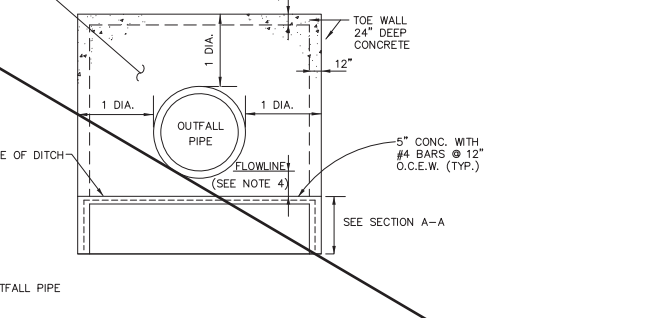
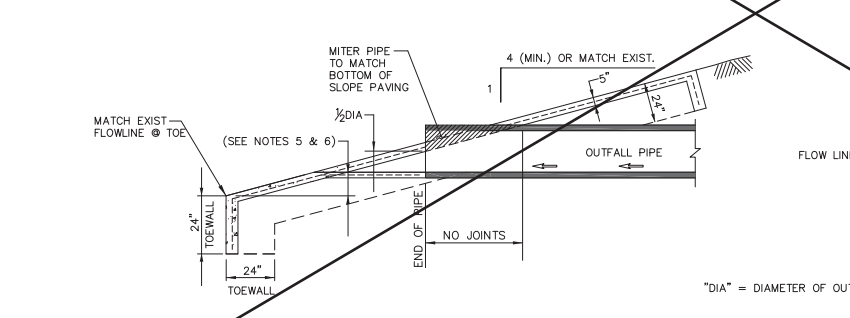
- NOTES:
1. THE DIMENSIONS SHOWN ARE THE MINIMUM REQUIRED BY THE DISTRICT.
  2. THE PAVING THICKNESS AND REBAR PLACEMENT SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THIS DETAIL.
  3. MINIMUM YIELD STRENGTH OF REBAR SHALL BE #4 BARS, 60,000 PSI (GRADE 60) AND PLACED AT 12" C/C EACH WAY.
  4. ALL CONCRETE MUST HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.



3  
3  
OUTFALL PIPE FROM A DISTRICT OWNED OR PRIVATE DETENTION POND



- NOTES:
1. THE DIMENSIONS SHOWN ARE THE MINIMUM REQUIRED BY THE DISTRICT.
  2. THE PAVING THICKNESS AND REBAR PLACEMENT SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THIS DETAIL.
  3. ALL CONCRETE MUST HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.
  4. MINIMUM YIELD STRENGTH OF REBAR SHALL BE #4 BARS, 60,000 PSI (GRADE 60) AND PLACED AT 12" C/C EACH WAY.
  5. THE PROPOSED FLOWLINE OF THE PIPE SHALL BE PLACED A MINIMUM OF 6" ABOVE THE EXISTING FLOW LINE OF THE DITCH OR STATIC WATER SURFACE WHICHEVER IS HIGHER.
  6. ENGINEER AND CONTRACTOR ARE RESPONSIBLE FOR CONTACTING THE APPROPRIATE OWNER OF THE DITCH OR CHANNEL PRIOR TO ANY CONSTRUCTION OF THE OUTFALL STRUCTURE.



4  
3  
OUTFALL PIPE TO NON-DISTRICT CHANNELS OR DITCHES

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