

CHANGE ORDER FORM
CHANGE ORDER NUMBER 03

PROJECT: CONSTRUCTION OF FM 359/FM 1093 WESTPARK EXTENSION FROM WEST OF CROSS CREEK RANCH BLVD TO EAST OF FM 1463/FM 359 CONSISTING OF GRADING, LIME TREATED SUBGRADE, PORTLAND CEMENT TREATED BASE, CONCRETE PAVEMENT, STORM SEWERS, STRUCTURES, RETAINING WALLS, ETC.

CONTRACTOR: WEBBER, LLC.

Contractor is directed to make the following changes to the Contract Documents.

DESCRIPTION OF CHANGES: Addition of 10x8 RBC from FM 1463 to Sprint Pond Outfall per TxDOT request.

ATTACHMENTS: CO 03 Justification Letter, PCO 10

CHANGE IN CONTRACT PRICE

1. Original Price: \$ 20,881,997.72
 2. Total of Prior Change Orders: \$ 872,477.91
 3. Total Price Prior to Current Change Order: \$ 21,754,475.63
 4. Total of Current Change Order: \$ 2,796,266.22
 5. New Price Resulting from Current Change Order: \$ 24,550,741.85

CHANGE IN CONTRACT TIME

Original Time: 420 DAYS
 Total of Prior Change Orders: 0 DAYS
 Total Time Prior to Current Change Order: 420 DAYS
 Total of Current Change Order: 0 DAYS
 New Time Resulting from Current Change Order: 420 DAYS

AGREED BY:

Engineer's Seal



Contractor:

Jose Coyne
DocuSigned by

8/9/2018 | 4:05 PM CDT

(Signature)

(Date)

Resident Engineer:

Rick L. Kroenke P.E.
 (Signature)

8/10/2018

(Date)

Project Manager:

[Signature]
 (Signature)

10/18/2018

(Date)

APPROVED BY:

Texas Department of Transportation:

Grady B. Mares, P.E.
 (Signature)

10/11/2018

(Date)

Fort Bend County

(Signature)

(Date)

COST REPORT

Item Number		Description	Unit	Unit Price	Authorized Quantity To Date	Change Order Quantity	Revised Quantity	Change Order Cost
Item	Desc.							
Change Order 03 - New Items								
0400	9001	CUT & RESTORE (STAB SAND & FAST TRACK)	SY	\$ 231.05	-	200.00	200.00	\$ 46,210.00
0402	9001	TRENCH EXCAV PROTECTION (CROSSING)	LF	\$ 120.80	-	100.00	100.00	\$ 12,080.00
0432	6002	RIPRAP (CONC)(5 IN)	CY	\$ 954.10	-	30.00	30.00	\$ 28,623.00
0432	6027	RIPRAP (STONE COMMON)(DRY)(24 IN)	CY	\$ 137.04	-	247.00	247.00	\$ 33,848.88
0462	6032	CONC BOX CULV (10 FT X 8 FT)	LF	\$ 790.85	-	2,936.00	2,936.00	\$ 2,321,935.60
0462	9001	CONC BOX CULV (10X8 PLUG)	EA	\$ 2,041.50	-	1.00	1.00	\$ 2,041.50
0462	9002	CONC BOX CULV (3X3 REMOVE & REPLACE)	LF	\$ 543.49	-	24.00	24.00	\$ 13,043.76
0462	9003	CONC BOX CULV (10X8 COLLAR)	EA	\$ 16,729.89	-	1.00	1.00	\$ 16,729.89
0464	9001	RC PIPE (24 IN PLUG)	EA	\$ 596.55	-	1.00	1.00	\$ 596.55
0465	9001	JCT BOX (COMPL)(SPL 1)	EA	\$ 31,505.99	-	2.00	2.00	\$ 63,011.98
0466	6212	WINGWALL (SW-0)(HW=9 FT)	EA	\$ 48,425.62	-	1.00	1.00	\$ 48,425.62
Change Order 03 - Exist Items								\$ -
0400	6005	CEM STABIL BKFL	CY	\$ 37.20	12,863.00	5,044.90	17,907.90	\$ 187,670.28
0400	6009	CEMENT STAB BACKFILL (INLET OR MH)	CY	\$ 37.20	1,020.00	50.00	1,070.00	\$ 1,860.00
0402	6001	TRENCH EXCAVATION PROTECTION	LF	\$ 0.87	19,168.00	2,836.00	22,004.00	\$ 2,467.32
0465	6167	INLET (COMPL)(TY AD)	EA	\$ 2,930.99	30.00	1.00	31.00	\$ 2,930.99
0465	6174	MANH (COMPL)(TY B)	EA	\$ 6,434.59	3.00	2.00	5.00	\$ 12,869.18
0496	6007	REMOV STR (PIPE)	LF	\$ 17.63	3,713.00	109.00	3,822.00	\$ 1,921.67
							-	\$ -
							-	\$ -
							-	\$ -
							-	\$ -
TOTAL CHANGE ORDER COST =								\$ 2,796,266.22

Fort Bend County
301 Jackson St.
Richmond, TX 77469

August 10, 2018

Mr. Grady Mapes, P.E.
Area Engineer – Fort Bend County Area Office
Texas Department of Transportation
4235 TX-36
Rosenberg, Texas 77471

RE: FM 359/FM 1093 Westpark Extension
Limits: From West of Cross Creek Ranch Blvd to East of FM 1463/359
For Construction Consisting Of Grading, Lime Treated Subgrade, Portland Cement
Treated Base, Concrete Pavement, Storm Sewers, Structures, Retaining Walls, Etc.
CHANGE ORDER 03 JUSTIFICATION

Dear Mr. Mapes:

Fort Bend County Engineering Department (FBCED), is submitting for your review and concurrence Change Order 03 for the subject project. This change order is necessary to add additional work items for the TxDOT requested additional work to install a 10x8 reinforced box culvert for future use on the FM 1463 widening.

Cost proposals from the contractor have been submitted multiple times to negotiate the cost to a level that is reasonable. Work was explored to be performed as either precast or cast-in-place, with precast ultimately being chosen for cost.

The backup for all costs was provided and through negotiations with the contractor, we feel that this price is fair and reasonable for the work that had to be performed.

This letter serves as notice that the proposed work described above will not affect any of the environmental clearances or commitments for the subject project.

If you have any questions regarding this matter, please contact me at (832) 217-6014.

Sincerely,



Richard "Rick" Kronenberger, P.E.
Resident Engineer
Attachments

cc: Project File



July 18, 2018

Mike Stone
Fort Bend County
301 Jackson St.
Richmond, TX 77469

Attn: Mike Stone

Re: REQUEST FOR CHANGE - 10X8 RCB
C/N 0543-02-063 ETC.

Project: TxDOT
FM 1093 PHASE II

Mr. Stone,

This proposal for extra work provides for new line item pricing for the proposed 10x8 RCB and related items of work for it's installation according to the released for construction drawings provided by Dannenbaum Engineering. Pricing below accounts for four day closure of the EBFR to allow for the installation and pavement restoration where the RCB crosses the EBFR.

Webber has performed a test excavation to a depth of 18' to confirm groundwater conditions immediately adjacent to the proposed 10x8 RCB and allowed the excavation to remain open overnight. The results were no groundwater infiltration into the excavation. As such, this proposal is based on installation of the proposed work in the absence of any groundwater.

No cost escalations were factored in the pricing. In order to avoid undue cost escalations, work must be directed to proceed no later than July 30, 2018. If direction is not provided by this date, Webber must be afforded the ability to review any escalations which may be required and the pricing to be adjusted accordingly.

This proposal does NOT consider any additional time that may be required to be added to the contract. Any time related impacts associated with this change shall be addressed via separate change order.

NEW ITEMS OF WORK:

DESC.	QTY	UNIT	UNIT PRICE	TOTAL
CONC BOX CULV (10X8)	2,936.00	LF	\$ 790.85	\$ 2,321,923.17
PLUG 10X8 RCB	1.00	EA	\$ 2,041.50	\$ 2,041.50
PLUG 24" RCP	1.00	EA	\$ 596.55	\$ 596.55
10X8 JCT BOX	2.00	EA	\$ 31,505.99	\$ 63,011.97
REMOVE & REPLACE 3X3 RCB	24.00	LF	\$ 543.49	\$ 13,043.82
10X8 RCB COLLAR	1.00	EA	\$ 16,729.89	\$ 16,729.89
OUTFALL	1.00	EA	\$ 48,425.62	\$ 48,425.62
5IN RIP RAP	30.00	CY	\$ 954.10	\$ 28,623.12
24IN STONE RIP RAP	247.00	CY	\$ 137.04	\$ 33,848.25
TRENCH PROTECTION - CROSSING	100.00	LF	\$ 120.80	\$ 12,079.60
CUT & RESTORE W/ STAB SAND/FST T	200.00	SY	\$ 231.05	\$ 46,210.82

EXISTING ITEMS TO OVERRUN:

DESC.	QTY	UNIT	UNIT PRICE	TOTAL
REMOVE STR (PIPE)	109.00	LF	\$	17.63 \$ 1,921.67
CEMENT STABIL BKFL	5,044.90	CY	\$	37.20 \$ 187,670.43
CEMENT STABIL BKFL (INLET OR MH)	50.00	CY	\$	37.20 \$ 1,860.00
TRENCH EXCAVATION PROTECTION	2,836.00	LF	\$	0.87 \$ 2,467.32
INLET (COMPL)(TY AD)	1.00	EA	\$	2,930.99 \$ 2,930.99
MANH TY B	2.00	EA	\$	6,434.59 \$ 12,869.18

TOTAL CHANGE ORDER

\$2,796,253.91

Please contact me if this extra work proposal is acceptable.

Sincerely,



Matthew Brangan
Project Manager



REQUEST FOR CHANGE

Fort Bend County
FM 1093 Wespark Extension Phase II

PLUG 10X8 RCB		1.00 EA		LABOR		LABOR
ADDITIONAL WWW LABOR ITEMS:		CREW	HOURS	UNIT		COST
FOREMAN		0.50 EA	10.00 \$	42.00 /EA	\$	210.00
CARPENTER		2.00 EA	10.00 \$	17.00 /EA	\$	340.00
LABORER		1.00 EA	10.00 \$	13.50 /EA	\$	135.00
					\$	-
					\$	-
SUBTOTAL WWW LABOR:					\$	685.00
BURDEN @ 55%:					\$	376.75
25% OF LABOR					\$	171.25
TOTAL WWW LABOR:					\$	1,233.00

ADDITIONAL WWW MATERIAL ITEMS:		MATERIAL	MATERIAL	MATERIAL		
		COST	UNIT	COST		
BRICK	\$	0.25 /EA	1,500.00 EA	\$	375.00	
GROUT	\$	9.35 /SK	20.00 SK	\$	187.00	
SUBTOTAL WWW MATERIAL:					\$	562.00
MATERIAL @ 25% MARK-UP:					\$	140.50
TOTAL WWW MATERIAL:					\$	702.50

ADDITIONAL WWW EQUIPMENT ITEMS:		EQUIPMENT	EQUIPMENT	EQUIPMENT	EQUIPMENT
		COST	UNIT /HR	QTY	COST
1/2 TON PICKUP TRUCK	\$	14.92 /HR	10.00	0.50	\$ 74.60
					\$ -
SUBTOTAL WWW EQUIPMENT:					\$ 74.60
EQUIPMENT @ 15% MARK-UP:					\$ 11.19
TOTAL WWW EQUIP:					\$ 85.79

ADDITIONAL SUBCONTRACTOR ITEMS:		QUANTITIES	UNIT PRICE	BID TOTALS
		-	\$ - /	\$ -
		-	\$ - /	\$ -
SUBTOTAL SUBS:				0.00
SUBS @ 5% MARK-UP:				0.00
TOTAL SUBCONTRACTOR ITEMS:				\$ -

TOTAL ADDITIONAL DAYS TO PERFORM WORK:

SUMMARY

SUBTOTAL ALL ITEMS:	\$	2,021.29
1.0% BOND:	\$	20.21
ADDITIONAL WORK TOTAL:	\$	2,041.50

TOTAL FOR ADDITIONAL WORK:

webber
REQUEST FOR CHANGE

TxDOT
US 290 HARRIS COUNTY

10X8 RCB COLLAR	1.00 EA				LABOR	LABOR
ADDITIONAL WWW LABOR ITEMS:	CREW	HOURS			UNIT	COST
FOREMAN	1.00 EA	50.00	\$	42.00 /EA	\$	2,100.00
TRACKHOE OPERATOR	1.00 EA	4.00	\$	18.00 /EA	\$	72.00
CARPENTER	3.00 EA	50.00	\$	17.00 /EA	\$	2,550.00
LABORER	2.00 EA	50.00	\$	13.50 /EA	\$	1,350.00
					\$	-
					\$	-
SUBTOTAL WWW LABOR:						\$ 6,072.00
BURDEN @ 55%:						\$ 3,339.60
25% OF LABOR						\$ 1,518.00
TOTAL WWW LABOR:						\$ 10,929.60

ADDITIONAL WWW MATERIAL ITEMS:	MATERIAL	MATERIAL			MATERIAL	
	COST	UNIT			COST	
CL C CONCRETE (20% YEILD FACTORED)	\$ 105.00 /CY	12.00 CY			\$ 1,260.00	
ENVIR FEE & FUEL SURCHARGE	\$ 35.00 /LD	3.00 LD			\$ 105.00	
SHORT LOAD CHARGE	\$ 20.00 /EA	3.00 EA			\$ 60.00	
REBAR	\$ 22.50 /CY	10.00 CY			\$ 225.00	
8X4 CDX PLYWOOD	\$ 29.23 /SHT	10.00 SHT			\$ 292.30	
4X4 #2 SYP - 16'	\$ 51.96 /EA	8.00 EA			\$ 415.68	
2X4 #2 SYP - 16'	\$ 25.98 /EA	10.00 EA			\$ 259.80	
SUBTOTAL WWW MATERIAL:						\$ 2,617.78
MATERIAL @ 25% MARK-UP:						\$ 654.45
TOTAL WWW MATERIAL:						\$ 3,272.23

ADDITIONAL WWW EQUIPMENT ITEMS:	EQUIPMENT	EQUIPMENT	EQUIPMENT	EQUIPMENT	
	COST	UNIT /HR	QTY	COST	
1/2 TON PICKUP TRUCK	\$ 14.92 /HR	50.00	1.00	\$ 746.00	
KOMATSU 490 HYDRUALIC EXCAVATOR	\$ 214.57 /HR	4.00	1.00	\$ 858.28	
5,000 WATT GENERATOR	\$ 5.00 /HR	50.00	1.00	\$ 250.00	
HAMMER DRILL	\$ 2.00 /HR	50.00	1.00	\$ 100.00	
14" CIRCULAR SAW	\$ 2.00 /HR	50.00	1.00	\$ 100.00	
				\$ -	
SUBTOTAL WWW EQUIPMENT:					\$ 2,054.28
EQUIPMENT @ 15% MARK-UP:					\$ 308.14
TOTAL WWW EQUIP:					\$ 2,362.42

ADDITIONAL SUBCONTRACTOR ITEMS:	QUANTITIES	UNIT PRICE	BID TOTALS
	-	\$ - /	\$ -
	-	\$ - /	\$ -
SUBTOTAL SUBS:			0.00
SUBS @ 5% MARK-UP:			0.00
TOTAL SUBCONTRACTOR ITEMS:			\$ -

TOTAL ADDITIONAL DAYS TO PERFORM WORK:

SUMMARY

SUBTOTAL ALL ITEMS:	\$ 16,564.25
1.0% BOND:	\$ 165.64
ADDITIONAL WORK TOTAL:	\$ 16,729.89

TOTAL FOR ADDITIONAL WORK:



REQUEST FOR CHANGE

Fort Bend County
FM 1093 Wespark Extension Phase II

PLUG 24" RCP		1.00 EA		LABOR		LABOR
ADDITIONAL WWW LABOR ITEMS:		CREW	HOURS	UNIT		COST
FOREMAN		0.50 EA	5.00 \$	42.00 /EA	\$	105.00
CARPENTER		1.00 EA	5.00 \$	17.00 /EA	\$	85.00
LABORER		1.00 EA	5.00 \$	13.50 /EA	\$	67.50
					\$	-
					\$	-
SUBTOTAL WWW LABOR:					\$	257.50
BURDEN @ 55%:					\$	141.63
25% OF LABOR					\$	64.38
TOTAL WWW LABOR:					\$	463.50

ADDITIONAL WWW MATERIAL ITEMS:		MATERIAL	MATERIAL	MATERIAL		
		COST	UNIT	COST		
BRICK	\$	0.25 /EA	120.00 EA	\$	30.00	
GROUT	\$	9.35 /SK	4.00 SK	\$	37.40	
SUBTOTAL WWW MATERIAL:					\$	67.40
MATERIAL @ 25% MARK-UP:					\$	16.85
TOTAL WWW MATERIAL:					\$	84.25

ADDITIONAL WWW EQUIPMENT ITEMS:		EQUIPMENT	EQUIPMENT	EQUIPMENT	EQUIPMENT
		COST	UNIT /HR	QTY	COST
1/2 TON PICKUP TRUCK	\$	14.92 /HR	5.00	0.50	\$ 37.30
					\$ -
SUBTOTAL WWW EQUIPMENT:					\$ 37.30
EQUIPMENT @ 15% MARK-UP:					\$ 5.60
TOTAL WWW EQUIP:					\$ 42.90

ADDITIONAL SUBCONTRACTOR ITEMS:		QUANTITIES	UNIT PRICE	BID TOTALS
		-	\$ - /	\$ -
		-	\$ - /	\$ -
SUBTOTAL SUBS:				0.00
SUBS @ 5% MARK-UP:				0.00
TOTAL SUBCONTRACTOR ITEMS:				\$ -

TOTAL ADDITIONAL DAYS TO PERFORM WORK:

SUMMARY

SUBTOTAL ALL ITEMS:	\$	590.65
1.0% BOND:	\$	5.91
ADDITIONAL WORK TOTAL:	\$	596.55

TOTAL FOR ADDITIONAL WORK:



REQUEST FOR CHANGE

Fort Bend County
FM 1093 Wespark Extension Phase II

10X8 JCT BOX	2.00 EA	@	1.00 EA/DAY		
ADDITIONAL WWW LABOR ITEMS:	CREW	HOURS	LABOR UNIT	LABOR COST	
FOREMAN	1.00 EA	20.00	\$ 42.00 /EA	\$	840.00
CRANE OPERATOR	1.00 EA	20.00	\$ 35.00 /EA	\$	700.00
TRACKHOE OPERATOR	1.00 EA	20.00	\$ 21.00 /EA	\$	420.00
LOADER OPERATOR	1.00 EA	20.00	\$ 18.00 /EA	\$	360.00
ROLLER OPERATOR	1.00 EA	20.00	\$ 16.00 /EA	\$	320.00
PIPELAYER	2.00 EA	20.00	\$ 17.00 /EA	\$	680.00
LABORER	1.00 EA	20.00	\$ 13.50 /EA	\$	270.00
SUBTOTAL WWW LABOR:				\$	3,590.00
BURDEN @ 55%:				\$	1,974.50
25% OF LABOR				\$	897.50
TOTAL WWW LABOR:				\$	6,462.00

ADDITIONAL WWW MATERIAL ITEMS:	MATERIAL COST	MATERIAL UNIT	MATERIAL COST
13'X13' JUNCTION BOX	\$ 20,918.20 /EA	1.00 EA	\$ 20,918.20
13'X6' JUNCTION BOX	\$ 11,185.00 /EA	1.00 EA	\$ 11,185.00
SUBTOTAL WWW MATERIAL:			\$ 32,103.20
MATERIAL @ 25% MARK-UP:			\$ 8,025.80
TOTAL WWW MATERIAL:			\$ 40,129.00

ADDITIONAL WWW EQUIPMENT ITEMS:	EQUIPMENT COST	EQUIPMENT UNIT /HR	EQUIPMENT QTY	EQUIPMENT COST
1/2 TON PICKUP TRUCK	\$ 14.92 /HR	20.00	1.00	\$ 298.40
100 TON CRAWLER CRANE	\$ 183.00 /HR	20.00	1.00	\$ 3,660.00
KOMATSU 490 HYDRUALIC EXCAVATOR	\$ 214.57 /HR	20.00	1.00	\$ 4,291.40
KOMATSU 360 HYDRUALIC EXCAVATOR	\$ 139.68 /HR	20.00	1.00	\$ 2,793.60
KOMATSU 380 WHEEL LOADER	\$ 68.29 /HR	20.00	1.00	\$ 1,365.80
84" PADFOOT ROLLER	\$ 56.86 /HR	20.00	1.00	\$ 1,137.20
VIBRATORY PLATE COMPACTOR	\$ 4.55 /HR	20.00	1.00	\$ 91.00
JUMPING JACK	\$ 4.96 /HR	20.00	1.00	\$ 99.20
SUBTOTAL WWW EQUIPMENT:				\$ 13,736.60
EQUIPMENT @ 15% MARK-UP:				\$ 2,060.49
TOTAL WWW EQUIP:				\$ 15,797.09

ADDITIONAL SUBCONTRACTOR ITEMS:	QUANTITIES	UNIT PRICE	BID TOTALS
	-	\$ - /	\$ -
SUBTOTAL SUBS:			0.00
SUBS @ 5% MARK-UP:			0.00
TOTAL SUBCONTRACTOR ITEMS:			\$ -

TOTAL ADDITIONAL DAYS TO PERFORM WORK:

SUMMARY

SUBTOTAL ALL ITEMS:	\$ 62,388.09
1.0% BOND:	\$ 623.88
ADDITIONAL WORK TOTAL:	\$ 63,011.97

TOTAL FOR ADDITIONAL WORK: **\$ 31,505.99 /EA**



REQUEST FOR CHANGE

Fort Bend County
FM 1093 Wespark Extension Phase II

Table with 5 columns: Item Description, Crew, Hours, Labor Unit, Labor Cost. Includes subtotals for WWW Labor and Burden.

Table with 4 columns: Item Description, Material Cost, Material Unit, Material Cost. Includes subtotals for WWW Material and Mark-up.

Table with 6 columns: Item Description, Equipment Cost, Equipment Unit/HR, Equipment Qty, Equipment Cost. Includes subtotals for WWW Equipment and Mark-up.

Table with 4 columns: Item Description, Quantities, Unit Price, Bid Totals. Includes subtotals for Subcontractor Items and Mark-up.

TOTAL ADDITIONAL DAYS TO PERFORM WORK: 0

SUMMARY

Summary table with 2 columns: Description, Amount. Includes Subtotal All Items, 1.0% Bond, and Additional Work Total.

TOTAL FOR ADDITIONAL WORK: \$ 13,043.82 LS \$ 543.49 /LF

REQUEST FOR CHANGE

Fort Bend County
FM 1093 Wespark Extension Phase II

HEADWALL - SW-O HW=9		1.00 EA			
ADDITIONAL WWW LABOR ITEMS:	CREW	HOURS	LABOR UNIT	LABOR COST	
F/P/S HEADWALL:					
FOREMAN	1.00 EA	60.00 \$	42.00 /EA	\$	2,520.00
TRACKHOE OPERATOR	1.00 EA	30.00 \$	21.00 /EA	\$	630.00
DOZER OPERATOR	1.00 EA	30.00 \$	18.00 /EA	\$	540.00
LOADER OPERATOR	1.00 EA	60.00 \$	18.00 /EA	\$	1,080.00
CARPENTER	1.00 EA	60.00 \$	18.00 /EA	\$	1,080.00
CONCRETE FINISHER	2.00 EA	60.00 \$	18.00 /EA	\$	2,160.00
LABORER	2.00 EA	60.00 \$	13.50 /EA	\$	1,620.00
			/	\$	-
			/	\$	-
SUBTOTAL WWW LABOR:				\$	9,630.00
BURDEN @ 55%:				\$	5,296.50
25% OF LABOR				\$	2,407.50
TOTAL WWW LABOR:				\$	17,334.00

ADDITIONAL WWW MATERIAL ITEMS:	MATERIAL COST	MATERIAL UNIT	MATERIAL COST
PURCHASE REBAR	\$ 117.65 /CY	34.00 CY	\$ 4,000.10
CLASS C CONCRETE (20% YIELD FACTORED)	\$ 105.00 /CY	34.00 CY	\$ 3,570.00
ENVIRONMENTAL FEE & FUEL SURCHARGE	\$ 35.00 /LD	4.00 LD	\$ 140.00
8X4 CDX PLYWOOD	\$ 29.23 /EA	50.00 EA	\$ 1,461.50
4X4 #2 SYP - 16'	\$ 51.96 /EA	20.00 EA	\$ 1,039.20
2X4 #2 SYP - 16'	\$ 25.98 /EA	96.00 EA	\$ 2,494.08
SUBTOTAL WWW MATERIAL:			\$ 12,704.88
MATERIAL @ 25% MARK-UP:			\$ 3,176.22
TOTAL WWW MATERIAL:			\$ 15,881.10

ADDITIONAL WWW EQUIPMENT ITEMS:	EQUIPMENT COST	EQUIPMENT UNIT /HR	EQUIPMENT QTY	EQUIPMENT COST
F/P/S HEADWALL:				
1/2 TON PICKUP TRUCK	\$ 14.92 /HR	60.00	1.00	\$ 895.20
DEERE 650G DOZER	\$ 53.44 /HR	30.00	1.00	\$ 1,603.20
KOMATSU PC360 EXCAVATOR	\$ 139.68 /HR	30.00	1.00	\$ 4,190.40
KOMATSU 380 WHEEL LOADER	\$ 68.29 /HR	60.00	1.00	\$ 4,097.40
84" PAD FOOT ROLLER	\$ 67.29 /HR	30.00	1.00	\$ 2,018.70
SUBTOTAL WWW EQUIPMENT:				\$ 12,804.90
EQUIPMENT @ 15% MARK-UP:				\$ 1,920.74
TOTAL WWW EQUIP:				\$ 14,725.64

ADDITIONAL SUBCONTRACTOR ITEMS:	QUANTITIES	UNIT PRICE	BID TOTALS
MESA	34.00 LBS	\$ 0.152 /LBS	\$ 5.17
		/	\$ -
		/	\$ -
SUBTOTAL SUBS:			5.17
SUBS @ 5% MARK-UP:			0.26
TOTAL SUBCONTRACTOR ITEMS:			\$ 5.43

TOTAL ADDITIONAL DAYS TO PERFORM WORK:

SUMMARY

SUBTOTAL ALL ITEMS:	\$ 47,946.16
1.0% BOND:	\$ 479.46
ADDITIONAL WORK TOTAL:	\$ 48,425.62

TOTAL FOR ADDITIONAL WORK: **\$ 48,425.62 /EA**



REQUEST FOR CHANGE

Fort Bend County
FM 1093 Wespark Extension Phase II

Table with columns: 5IN RIP RAP, 30.00 CY, ADDITIONAL WWW LABOR ITEMS, CREW, HOURS, LABOR COST, LABOR COST. Includes items like FOREMAN, CARPENTER, LOADER OPERATOR, DOZER OPERATOR, CONCRETE FINISHER, LABORER and subtotals.

Table with columns: ADDITIONAL WWW MATERIAL ITEMS, MATERIAL COST, MATERIAL QTY, MATERIAL COST. Includes items like PURCHASE REBAR, CLASS A CONCRETE, ENVIRONMENTAL FEE & FUEL SURCHARGE, 2X4 #2 SYP - 16' and subtotals.

Table with columns: ADDITIONAL WWW EQUIPMENT ITEMS, EQUIPMENT COST, EQUIPMENT UNIT /HR, EQUIPMENT QTY, EQUIPMENT COST. Includes items like CATERPILLAR 950K LOADER, DEERE 450 DOZER, 1/2 TON PICKUP TRUCK and subtotals.

Table with columns: ADDITIONAL SUBCONTRACTOR ITEMS, QUANTITIES, UNIT PRICE, BID TOTALS. Includes item MESA and subtotals.

TOTAL ADDITIONAL DAYS TO PERFORM WORK: 0

SUMMARY

Summary table with columns: SUBTOTAL ALL ITEMS, 1.0% BOND, ADDITIONAL WORK TOTAL.

Unit Price for 5" CONC RIP RAP \$ 954.10 /CY



REQUEST FOR CHANGE

Fort Bend County
FM 1093 Wespark Extension Phase II

Table with columns: 24IN STONE RIP RAP, CREW, HOURS, LABOR COST, LABOR COST. Includes labor items like Foreman, Excavator Operator, Dozer Operator, and Laborer. Subtotal WWW LABOR: \$2,835.00. TOTAL WEBBER LABOR: \$5,103.00.

Table with columns: 24" Stone Rip Rap (20% YEILD FACTORED), MATERIAL COST, MATERIAL QTY, MATERIAL COST. Subtotal WWW MATERIAL: \$16,986.19. TOTAL WEBBER MATERIAL: \$21,232.74.

Table with columns: KOMATSU PC360 EXCAVATOR, DEERE 650G DOZER, FOREMAN TRUCK, EQUIPMENT COST, EQUIPMENT UNIT /HR, EQUIPMENT QTY, EQUIPMENT COST. Subtotal WWW EQUIPMENT: \$6,241.20. TOTAL WEBBER EQUIP: \$7,177.38.

Table with columns: ADDITIONAL SUBCONTRACTOR ITEMS, QUANTITIES, UNIT PRICE, BID TOTALS. Subtotal SUBS: 0.00. TOTAL SUBCONTRACTOR ITEMS: \$-.

TOTAL ADDITIONAL DAYS TO PERFORM WORK: 0

SUMMARY

Summary table with columns: SUBTOTAL ALL ITEMS, 1.0% BOND, ADDITIONAL WORK TOTAL. Values: \$33,513.12, \$335.13, \$33,848.25.

Unit Price for 24" STONE RIP RAP at Sprint Pond \$ 137.04 /CY



REQUEST FOR CHANGE

Fort Bend County
FM 1093 Wespark Extension Phase II

Table with columns: TRENCH PROTECTION - CROSSING, 100.00 LF, ADDITIONAL WWW LABOR ITEMS, CREW, HOURS, LABOR COST, LABOR COST. Includes subtotals for WWW LABOR and WEBBER LABOR.

Table with columns: ADDITIONAL WWW MATERIAL ITEMS, MATERIAL COST, MATERIAL QTY, MATERIAL COST. Includes subtotals for WWW MATERIAL and WEBBER MATERIAL.

Table with columns: ADDITIONAL WWW EQUIPMENT ITEMS, EQUIPMENT COST, EQUIPMENT UNIT, EQUIPMENT QTY, EQUIPMENT COST. Includes item 'Trench Box (20x8 - 2EA)' and subtotals for WWW EQUIPMENT and WEBBER EQUIP.

Table with columns: ADDITIONAL SUBCONTRACTOR ITEMS, QUANTITIES, UNIT PRICE, BID TOTALS. Includes subtotals for SUBS and TOTAL SUBCONTRACTOR ITEMS.

TOTAL ADDITIONAL DAYS TO PERFORM WORK: 0

SUMMARY

Summary table with columns: SUBTOTAL ALL ITEMS, 1.0% BOND, ADDITIONAL WORK TOTAL. Values: \$ 11,960.00, \$ 119.60, \$ 12,079.60.

Unit Price for Trench Protection Crossing \$ 120.80 /LF



REQUEST FOR CHANGE

Fort Bend County
FM 1093 Westpark Extension Phase II

CUT & RESTORE W/ STAB SAND/FST TRK		200.00 SY				LABOR	LABOR
ADDITIONAL WWW LABOR ITEMS:		CREW	HOURS			UNIT	COST
TRAFFIC CONTROL							
FOREMAN		1.00 EA	6.00 \$			42.00 /EA \$	252.00
LABORER		2.00 EA	6.00 \$			13.50 /EA \$	162.00
		EA					
DEMO PAVEMENT							
FOREMAN		1.00 EA	10.00 \$			42.00 /EA \$	420.00
TRACKHOE OPERATOR		2.00 EA	10.00 \$			21.00 /EA \$	420.00
LABORER		2.00 EA	10.00 \$			13.50 /EA \$	270.00
BACKFILL STABILIZE SAND							
FOREMAN		1.00 EA	8.00 \$			42.00 /EA \$	336.00
TRACKHOE OPERATOR		1.00 EA	8.00 \$			21.00 /EA \$	168.00
LOADER OPERATOR		1.00 EA	8.00 \$			18.00 /EA \$	144.00
LABORER		2.00 EA	8.00 \$			13.50 /EA \$	216.00
FAST TRACK PAVING							
FOREMAN		1.00 EA	35.00 \$			42.00 /EA \$	1,470.00
LOADER OPERATOR		1.00 EA	35.00 \$			18.00 /EA \$	630.00
CARPENTER		3.00 EA	35.00 \$			18.00 /EA \$	1,890.00
FINISHER		2.00 EA	35.00 \$			18.00 /EA \$	1,260.00
LABORER		2.00 EA	35.00 \$			13.50 /EA \$	945.00
SUBTOTAL WWW LABOR:							\$ 8,583.00
BURDEN @ 55%:							\$ 4,720.65
25% OF LABOR							\$ 2,145.75
TOTAL WWW LABOR:							\$ 15,449.40

ADDITIONAL WWW MATERIAL ITEMS:		MATERIAL	MATERIAL			MATERIAL
		COST	UNIT			COST
CLASS P (HES) (10% YEILD FACTORED)	\$	120.00 /EA	74.00 EA			\$ 8,880.00
ENVIRONMENTAL & FUEL SURCHARGE	\$	35.00 /LD	8.00 LD			\$ 280.00
MULTI PIECE DOWEL BARS	\$	4.00 /EA	30.00 EA			\$ 120.00
EPOXY	\$	16.95 /EA	36.00 EA			\$ 610.20
REBAR	\$	13.44 /SY	200.00 SY			\$ 2,688.00
REBAR CHARIS	\$	0.12 /EA	200.00 EA			\$ 24.00
CONCRETE SAW BLADE	\$	250.00 /EA	1.00 EA			\$ 250.00
						\$ -
SUBTOTAL WWW MATERIAL:						\$ 12,852.20
MATERIAL @ 25% MARK-UP:						\$ 3,213.05
TOTAL WWW MATERIAL:						\$ 16,065.25

ADDITIONAL WWW EQUIPMENT ITEMS:		EQUIPMENT	EQUIPMENT	EQUIPMENT			EQUIPMENT
		COST	UNIT /HR	QTY			COST
1/2 TON PICKUP TRUCK	\$	14.92 /HR	59.00	1.00		\$	880.28
KOMATSU 490 HYDRUALIC EXCAVATOR	\$	214.57 /HR	10.00	1.00		\$	2,145.70
KOMATSU PC360 TRACKHOE	\$	139.68 /HR	18.00	1.00		\$	2,514.24
KOMATSU 380 LOADER	\$	69.29 /HR	43.00	1.00		\$	2,936.47
84IN SMOOTH DRUM ROLLER	\$	56.86 /HR	8.00	1.00		\$	454.88
18FT ROLLER SCREED	\$	50.00 /HR	16.00	1.00		\$	800.00
WALK BEHIND SAW	\$	50.00 /HR	2.00	1.00		\$	100.00
						\$	-
SUBTOTAL WWW EQUIPMENT:						\$ 9,831.57	
EQUIPMENT @ 15% MARK-UP:						\$ 1,474.74	
TOTAL WWW EQUIP:						\$ 11,306.31	

ADDITIONAL SUBCONTRACTOR ITEMS:	QUANTITIES	UNIT PRICE	BID TOTALS
MESA - FAST TRACK	6,400.00 LBS	\$ 0.08 /LBS	\$ 499.20
MESA - MULTI PIECE	30.00 EA	\$ 1.45 /EA	\$ 43.50
HAUL OFF CONCRETE	15.00 LD	\$ 150.00 /LD	\$ 2,250.00
SUBTOTAL SUBS:			2,792.70
SUBS @ 5% MARK-UP:			139.64
TOTAL SUBCONTRACTOR ITEMS:			\$ 2,932.34

TOTAL ADDITIONAL DAYS TO PERFORM WORK:

SUMMARY

SUBTOTAL ALL ITEMS:	\$ 45,753.29
1.0% BOND:	\$ 457.53
ADDITIONAL WORK TOTAL:	\$ 46,210.82

TOTAL FOR ADDITIONAL WORK: \$ 231.05 /SY



Forterra Pipe & Precast

Confirming Quote

REVISION No.1

Date	July 18, 2018	Bid Date	04/26/2018
Quote No.	18042517150813	Plan Date	
Project	FT. BEND CO. PURCHASING, 17/087, FM 1093 WESTPARK EXTENSION PH II CSJ -543-02-063 [CHANGE ORDER] HOUSTON, TX Fort Bend County	Engineer	Dannenbaum Engineering/Halff
Contractor	WEBBER, LLC.		

We are pleased to quote the following on the above project. Prices are committed on this project only and are subject to change after 15 days from bid date.

Reinforced Concrete Box

Description	Quantity	Unit Price	Ext Price
Item: 1 10' x 8' Precast Box Culvert per ASTM C1577 Standards. Supplied in 6', approx. 15.56 tons/section. [PRICE INCLUDES 1 EA 25° RCB BEND & 3 EA 30° RCB BENDS] [2 - 30° BENDS IN LIEU OF 1 - 60° BEND]	2,936 LF	\$465.00	\$1,365,240.00
Reinforced Concrete Box Quote Total			\$1,365,240.00

Storm Structures

Description	Quantity	Unit Price	Ext Price
Item: 1 13'x13' JUNCTION BOX [B4_D] [ALL DEPTHS] FOR 10'x8' RCB 0-90° TURN W/ TRANSITION TO 3'x3' TY A MANH TOP W/ LOOSE 32" V-1419 RING & RIBBED COVER HEAVIEST PIECE: 25.0 TONS	1 EA	\$20,918.20	\$20,918.20
Item: 2 13'x6' JUNCTION BOX [B4_H] [ALL DEPTHS] FOR 10'x8' RCB 0-180° & CONNNECTION EXISTING 3'x3' RCB W/ TRANSITION TO 3'x3' TY A MANH TOP W/ LOOSE 32" V-1419 RING & RIBBED COVER HEAVIEST PIECE: 15.5 TONS	1 EA	\$11,185.00	\$11,185.00
Storm Quote Total			\$32,103.20

Notes

EXCLUDES COATINGS, LINERS, INFLOW PROTECTORS, AND STEPS. EXCLUDES JOINT WRAP - UNLESS OTHERWISE NOTIFIED.

All quotes-All custom product is non refundable and subject to invoice and a storage fee 60 days after manufacture. Custom product attempted to be returned is subject to additional disposal and freight fees. All returned stock items are subject to a 35% restocking charge in addition to any incurred return freight. Minimum charge \$200

All quotes are based upon full truckload quantities; deliveries less than full truckload quantities are subject to additional freight charges.

All orders include initial requisite engineering and drafting support based upon details provided by the customer. Any changes to the project after initial submittals, are subject to additional engineering charges.

All quotes are based upon standard market production availability. Expedited orders will be subject to additional rush order charges.

Quote Total \$1,397,343.20

Subject to State, County & Local Taxes.
F.O.B.: Jobsite.
Above prices based on truckload quantities.

R.W. Honea
Office: (346) 814-8718
Cell: (346) 814-8718

FORTERRA PIPE AND PRECAST LLC

Accepted by Buyer

By: _____

By: _____

Title: _____

Date: _____

Rental Rate Blue Book®

May 9, 2018

Link-Belt 218 HLS

Crawler Mounted Lattice Boom Cranes


 Size Class:
81.0 - 107.9 MTons
 Weight:
192,735 lbs.
Configuration for 218 HLS

Net Horsepower	N/A	Power Mode	Diesel
Maximum Lift Capacity	99.8 mt	Boom Base Length	40 ft

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	\$22,185.00	\$6,210.00	\$1,555.00	\$235.00	\$65.75	\$191.80
Adjustments						
Region (Houston, Texas: 93.3%)	(\$1,486.39)	(\$416.07)	(\$104.18)	(\$15.74)		
Model Year (2016: 99.7%)	(\$62.10)	(\$17.38)	(\$4.35)	(\$0.66)		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)					-	
Total:	\$20,636.51	\$5,776.55	\$1,446.47	\$218.60	\$65.75	\$183.00

Non-Active Use Rates

	Hourly
Standby Rate	\$55.11
Idling Rate	\$117.25

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	30%	\$6,655.50/mo
Overhaul (ownership)	53%	\$11,758.05/mo
CFC (ownership)	6%	\$1,331.10/mo
Indirect (ownership)	11%	\$2,440.35/mo

Fuel cost data is not available for these rates.

Revised Date: 1st Half 2018

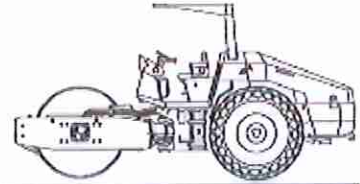
These are the most accurate rates for the selected Revision Date(s). However, due to more frequent online updates, these rates may not match Rental Rate Blue Book Print. Visit the Cost Recovery Product Guide on our Help page for more information.

The equipment represented in this report has been exclusively prepared for JAYME BEAN (jayne.bean@wwebber.com)

Rental Rate Blue Book®

March 15, 2018

Bomag BW211D-40
 Single Drum Vibratory Compactors

 Size Class:
 8.0 - 11.9 MTons
 Weight:
 22,930 lbs.

Configuration for BW211D-40

Drum Type	Smooth	Drum Width	84 In
Power Mode	Diesel	Net Horsepower	133 hp

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	\$4,785.00	\$1,340.00	\$335.00	\$50.00	\$31.90	\$59.09
Adjustments						
Region (Houston, Texas: 91.9%)	(\$387.58)	(\$108.54)	(\$27.13)	(\$4.05)		
Model Year (2017: 99.9%)	(\$4.40)	(\$1.23)	(\$0.31)	(\$0.05)		
Ownership (100%)	-	-	-	-		
Operating (100%)	-	-	-	-		
Total:	\$4,393.02	\$1,230.23	\$307.56	\$45.90	\$31.90	\$56.86

Non-Active Use Rates

	Hourly
Standby Rate	\$17.72
Idling Rate	\$33.85

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	50%	\$2,392.50/mo
Overhaul (ownership)	29%	\$1,387.65/mo
CFC (ownership)	9%	\$430.65/mo
Indirect (ownership)	12%	\$574.20/mo
Fuel (operating) @ 2.57	28%	\$8.89/hr

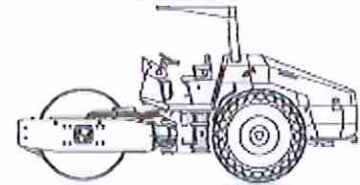
Revised Date: 1st Half 2018

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Rental Rate Blue Book®

March 15, 2018

Bomag BW213PDH-40
 Single Drum Vibratory Compactors

 Size Class:
 12.0 - 14.9 MTons
 Weight:
 27,975 lbs.

Configuration for BW213PDH-40

Drum Type	Padfoot	Drum Width	84 In
Power Mode	Diesel	Net Horsepower	160 hp

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	\$5,625.00	\$1,575.00	\$395.00	\$59.00	\$37.95	\$69.91
Adjustments						
Region (Houston, Texas: 91.9%)	(\$455.62)	(\$127.57)	(\$31.99)	(\$4.78)		
Model Year (2017: 99.9%)	(\$5.17)	(\$1.45)	(\$0.36)	(\$0.05)		
Ownership (100%)	-	-	-	-		
Operating (100%)	-	-	-	-		
Total:	\$5,164.21	\$1,445.98	\$362.65	\$54.17	\$37.95	\$67.29

Non-Active Use Rates

	Hourly
Standby Rate	\$20.83
Idling Rate	\$40.03

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	50%	\$2,812.50/mo
Overhaul (ownership)	29%	\$1,631.25/mo
CFC (ownership)	9%	\$506.25/mo
Indirect (ownership)	12%	\$675.00/mo
Fuel (operating) @ 2.57	28%	\$10.69/hr

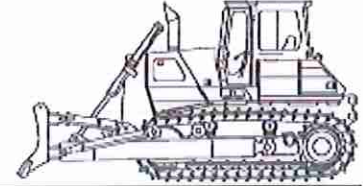
Revised Date: 1st Half 2018

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Rental Rate Blue Book®

March 1, 2018

Deere 450J LGP (disc. 2016)
 Lgp Crawler Dozers

 Size Class:
 75 - 84 HP
 Weight:
 17,525 lbs.

Configuration for 450J LGP (disc. 2016)

Dozer Type	PAT	Power Mode	Diesel
Net Horsepower	77 hp	Operator Protection	ROPS

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	\$4,830.00	\$1,350.00	\$340.00	\$51.00	\$26.80	\$54.24
Adjustments						
Region (Houston, Texas: 91.5%)	(\$410.55)	(\$114.75)	(\$28.90)	(\$4.33)		
Model Year (2016: 100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)	-	-	-	-		
Total:	\$4,419.45	\$1,235.25	\$311.10	\$46.67	\$26.80	\$51.91

Non-Active Use Rates

	Hourly
Standby Rate	\$10.80
Idling Rate	\$33.42

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	29%	\$1,400.70/mo
Overhaul (ownership)	57%	\$2,753.10/mo
CFC (ownership)	6%	\$289.80/mo
Indirect (ownership)	8%	\$386.40/mo
Fuel (operating) @ 2.57	31%	\$8.31/hr

Revised Date: 1st Half 2018

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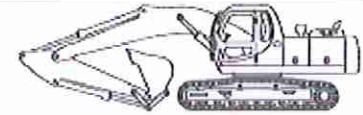
www.equipmentwatch.com

All prices shown in US\$

Rental Rate Blue Book®

November 15, 2017

Komatsu PC360LC-10
Crawler Mounted Hydraulic Excavators



Size Class:
33.1 - 40.0 MTons
Weight:
79,093 lbs.

Configuration for PC360LC-10

Operating Weight	39.64 t	Power Mode	Diesel
Net Horsepower	257 hp	Operating Weight	39.03 mt
Bucket Capacity - Heaped	1.2 cu yd	Bucket Capacity - Heaped	1 cu yd

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	\$13,400.00	\$3,750.00	\$940.00	\$140.00	\$69.10	\$145.24
Adjustments						
Region (Houston, Texas: 92.7%)	(\$978.20)	(\$273.75)	(\$68.62)	(\$10.22)		
Model Year (2017: 100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)						
Total:	\$12,421.80	\$3,476.25	\$871.38	\$129.78	\$69.10	\$139.68

Non-Active Use Rates

Hourly

Standby Rate	\$35.99
Idling Rate	\$97.89

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	36%	\$4,824.00/mo
Overhaul (ownership)	49%	\$6,566.00/mo
CFC (ownership)	7%	\$938.00/mo
Indirect (ownership)	8%	\$1,072.00/mo
Fuel (operating) @ 2.53	40%	\$27.31/hr

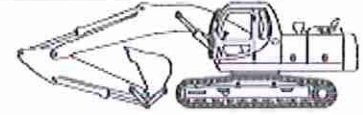
Revised Date: 2nd Half 2017

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 JAYME BEAN (jayne.bean@wwebber.com)

Rental Rate Blue Book®

March 15, 2018

Komatsu PC490LC-10
 Crawler Mounted Hydraulic Excavators

 Size Class:
 40.1 - 50.0 MTons
 Weight:
 106,880 lbs.

Configuration for PC490LC-10

Bucket Capacity - Heaped	1.5 cu yd	Net Horsepower	359 hp
Power Mode	Diesel	Operating Weight	52.35 mt

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	\$22,050.00	\$6,175.00	\$1,545.00	\$230.00	\$98.90	\$224.18
Adjustments						
Region (Houston, Texas: 92.7%)	(\$1,609.65)	(\$450.78)	(\$112.79)	(\$16.79)		
Model Year (2016: 99.6%)	(\$81.76)	(\$22.90)	(\$5.73)	(\$0.85)		
Ownership (100%)	-	-	-	-		
Operating (100%)						
Total:	\$20,358.59	\$5,701.32	\$1,426.48	\$212.36	\$98.90	\$214.57

Non-Active Use Rates

	Hourly
Standby Rate	\$57.84
Idling Rate	\$154.42

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	37%	\$8,158.50/mo
Overhaul (ownership)	50%	\$11,025.00/mo
CFC (ownership)	6%	\$1,323.00/mo
Indirect (ownership)	7%	\$1,543.50/mo
Fuel (operating) @ 2.57	39%	\$38.75/hr

Revised Date: 1st Half 2018

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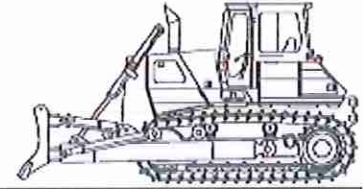
 The equipment represented in this report has been exclusively prepared for JAYME BEAN (jayme.bean@webber.com)

Rental Rate Blue Book®

April 18, 2018

Deere 650G LGP (disc. 1999)

Lgp Crawler Dozers

 Size Class:
 85 - 104 HP
 Weight:
 19,322 lbs.

Configuration for 650G LGP (disc. 1999)

Dozer Type	Power Angle Tilt	Power Mode	Diesel
Net Horsepower	90 hp	Operator Protection	ROPS

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	\$4,585.00	\$1,285.00	\$320.00	\$48.00	\$29.60	\$55.65
Adjustments						
Region (Houston, Texas: 91.5%)	(\$389.72)	(\$109.22)	(\$27.20)	(\$4.08)		
Model Year (1999: 100%)	-	-	-	-		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)					-	
Total:	\$4,195.28	\$1,175.78	\$292.80	\$43.92	\$29.60	\$53.44

Non-Active Use Rates

	Hourly
Standby Rate	\$10.25
Idling Rate	\$33.55

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	29%	\$1,329.65/mo
Overhaul (ownership)	57%	\$2,613.45/mo
CFC (ownership)	6%	\$275.10/mo
Indirect (ownership)	8%	\$366.80/mo
Fuel (operating) @ 2.57	33%	\$9.71/hr

Revised Date: 1st Half 2018

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Rental Rate Blue Book®

January 9, 2018

Komatsu WA380-7
 4-Wd Articulated Wheel Loaders

 Size Class:
 175 - 199 HP
 Weight:
 39,840 lbs.

Configuration for WA380-7

Bucket Capacity - Heaped	4.3 cu yd	Operator Protection	ROPS/FOPS
Power Mode	Diesel	Net Horsepower	191 hp

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	\$6,640.00	\$1,860.00	\$465.00	\$70.00	\$34.05	\$71.78
Adjustments						
Region (Houston, Texas: 91.5%)	(\$564.40)	(\$158.10)	(\$39.52)	(\$5.95)		
Model Year (2016: 99.2%)	(\$48.60)	(\$13.62)	(\$3.40)	(\$0.51)		
Ownership (100%)	-	-	-	-		
Operating (100%)						
Total:	\$6,027.00	\$1,688.28	\$422.08	\$63.54	\$34.05	\$68.29

Non-Active Use Rates

	Hourly
Standby Rate	\$20.55
Idling Rate	\$50.05

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	41%	\$2,722.40/mo
Overhaul (ownership)	40%	\$2,656.00/mo
CFC (ownership)	8%	\$531.20/mo
Indirect (ownership)	11%	\$730.40/mo
Fuel (operating) @ 2.57	46%	\$15.81/hr

Revised Date: 1st Half 2018

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 JAYME BEAN (jayme.bean@wwebber.com)

Rental Rate Blue Book®

November 29, 2017

Caterpillar 950K
 4-Wd Articulated Wheel Loaders

 Size Class:
 200 - 224 HP
 Weight:
 42,068 lbs.

Configuration for 950K

 Operator Protection ROPS/FOPS Power Mode Diesel
 Net Horsepower 211 hp

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	\$7,955.00	\$2,225.00	\$555.00	\$83.00	\$38.45	\$83.65
Adjustments						
Region (Houston, Texas: 91.5%)	(\$676.17)	(\$189.12)	(\$47.17)	(\$7.05)		
Model Year (2017: 100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)						
Total:	\$7,278.83	\$2,035.88	\$507.83	\$75.95	\$38.45	\$79.81

Non-Active Use Rates

	Hourly
Standby Rate	\$25.23
Idling Rate	\$58.55

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	41%	\$3,261.55/mo
Overhaul (ownership)	39%	\$3,102.45/mo
CFC (ownership)	8%	\$636.40/mo
Indirect (ownership)	12%	\$954.60/mo
Fuel (operating) @ 2.53	45%	\$17.19/hr

Revised Date: 2nd Half 2017

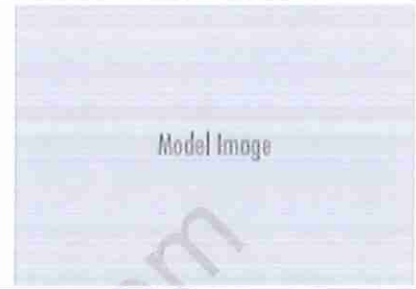
These are the most accurate rates for the selected Revision Date(s). However, due to more frequent online updates, these rates may not match Rental Rate Blue Book Print. Visit the Cost Recovery Product Guide on our Help page for more information.

The equipment represented in this report has been exclusively prepared for JAYME BEAN (jayne.bean@wwebber.com)

Rental Rate Blue Book®

October 17, 2017

Miscellaneous 4X4 1/2 191 CREW GAS
 On-Highway Light Duty Trucks

 Size Class:
100 - 199 HP
 Weight:
4,800 lbs.

Configuration for 4X4 1/2 191 CREW GAS

Cab Type	Crew	Axle Configuration	4X4
Ton Rating	1/2	Power Mode	Gasoline
Horsepower	191		

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	FHWA Rate**
	Monthly	Weekly	Daily	Hourly	Hourly	Hourly
Published Rates	\$730.00	\$205.00	\$51.00	\$8.00	\$11.05	\$15.20
Adjustments						
Region (Houston, Texas: 93.2%)	(\$49.64)	(\$13.94)	(\$3.47)	(\$0.54)		
Model Year (2017: 100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	\$680.36	\$191.06	\$47.53	\$7.46	\$11.05	\$14.92

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	56%	\$408.80/mo
Overhaul (ownership)	29%	\$211.70/mo
CFC (ownership)	5%	\$36.50/mo
Indirect (ownership)	10%	\$73.00/mo
Fuel (operating) @ 2.27	75%	\$8.24/hr

Revised Date: 2nd Half 2017

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 The equipment represented in this report has been exclusively prepared for JAYME BEAN (jayme.bean@wwebber.com)

Rental Rate Blue Book®

December 6, 2017

Miscellaneous 21"/5,200#
 Hand Held Vibratory Plate Compactors

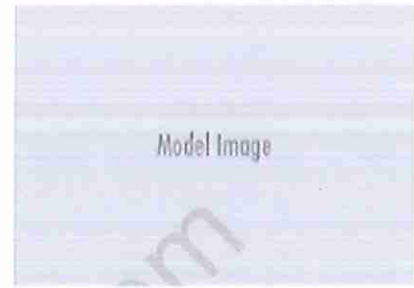
 Size Class:
 96 - 250 Kg
 Weight:
 N/A

Configuration for 21"/5,200#

Plate Width	21 in	Pounds per Blow	4000 - 5500
Power Mode	Gasoline	Horsepower	6

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	FHWA Rate**
	Monthly	Weekly	Daily	Hourly	Hourly	Hourly
Published Rates	\$355.00	\$99.00	\$25.00	\$4.00	\$2.70	\$4.72
Adjustments						
Region (Houston, Texas: 91.9%)	(\$28.75)	(\$8.02)	(\$2.02)	(\$0.32)		
Model Year (2017: 100%)	-	-	-	-		
Ownership (100%)	-	-	-	-		
Operating (100%)					-	
Total:	\$326.25	\$90.98	\$22.98	\$3.68	\$2.70	\$4.55

Non-Active Use Rates

	Hourly
Standby Rate	\$1.33
Idling Rate	\$3.08

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	60%	\$213.00/mo
Overhaul (ownership)	28%	\$99.40/mo
CFC (ownership)	4%	\$14.20/mo
Indirect (ownership)	8%	\$28.40/mo
Fuel (operating) @ 2.27	46%	\$1.23/hr

Revised Date: 2nd Half 2017

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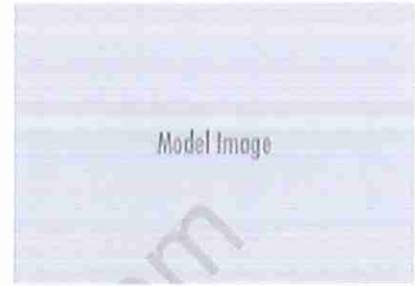
The equipment represented in this report has been exclusively prepared for JAYME BEAN (jayne.bean@wwebber.com)

Rental Rate Blue Book®

May 1, 2018

Miscellaneous STD. RAMMER

Hand Held Rammers

 Size Class:
 All
 Weight:
 N/A

Configuration for STD. RAMMER

Shoe Size	4" - 13"	Power Mode	Gasoline
Horsepower	4		

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	\$500.00	\$140.00	\$35.00	\$5.00	\$2.35	\$5.19
Adjustments						
Region (Houston, Texas: 91.9%)	(\$40.50)	(\$11.34)	(\$2.83)	(\$0.40)		
Model Year (2017: 99.9%)	(\$0.46)	(\$0.13)	(\$0.03)	-		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)					-	
Total:	\$459.04	\$128.53	\$32.14	\$4.60	\$2.35	\$4.96

Non-Active Use Rates

	Hourly
Standby Rate	\$1.85
Idling Rate	\$3.46

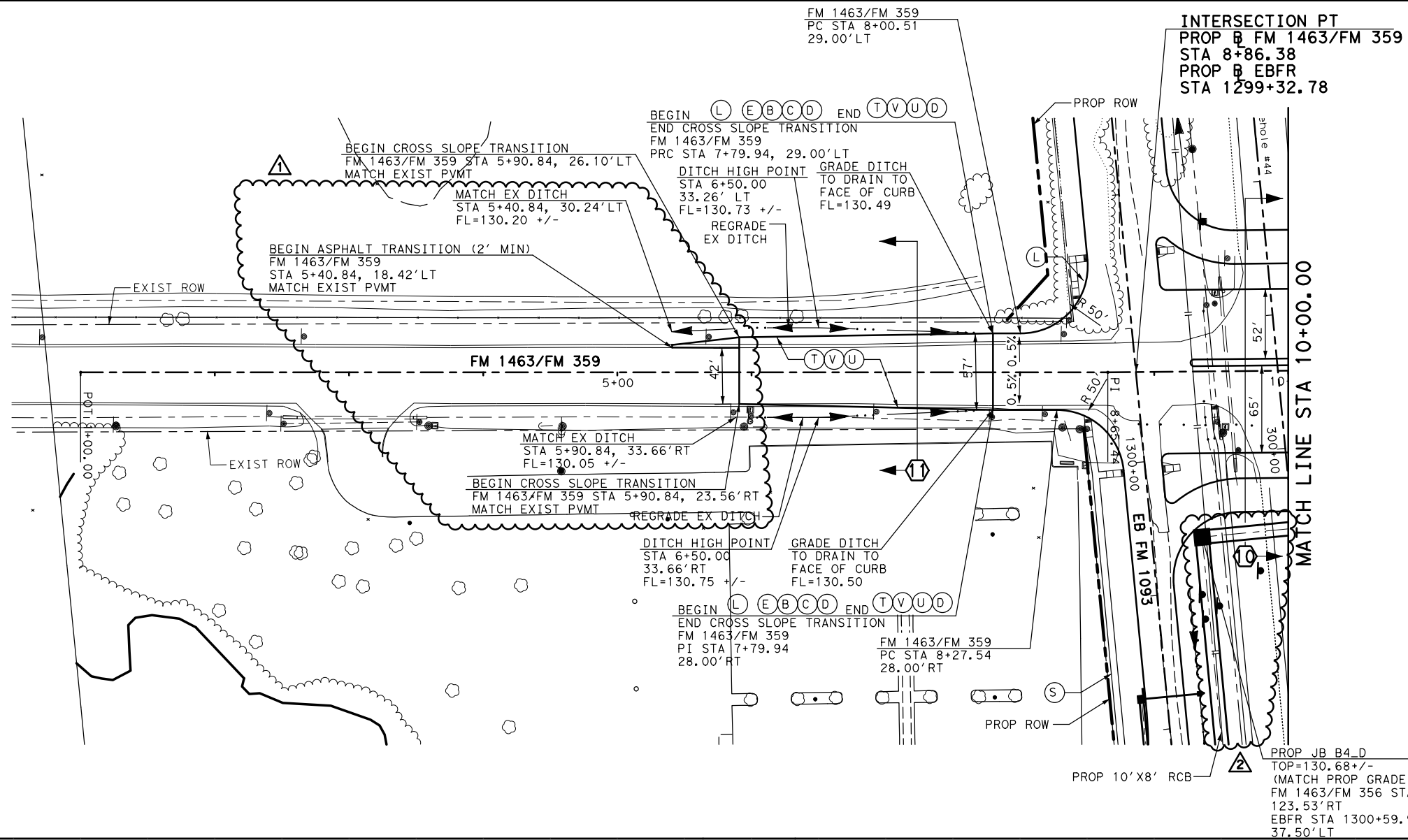
Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	56%	\$280.00/mo
Overhaul (ownership)	29%	\$145.00/mo
CFC (ownership)	3%	\$15.00/mo
Indirect (ownership)	12%	\$60.00/mo
Fuel (operating) @ 2.35	36%	\$0.85/hr

Revised Date: 1st Half 2018

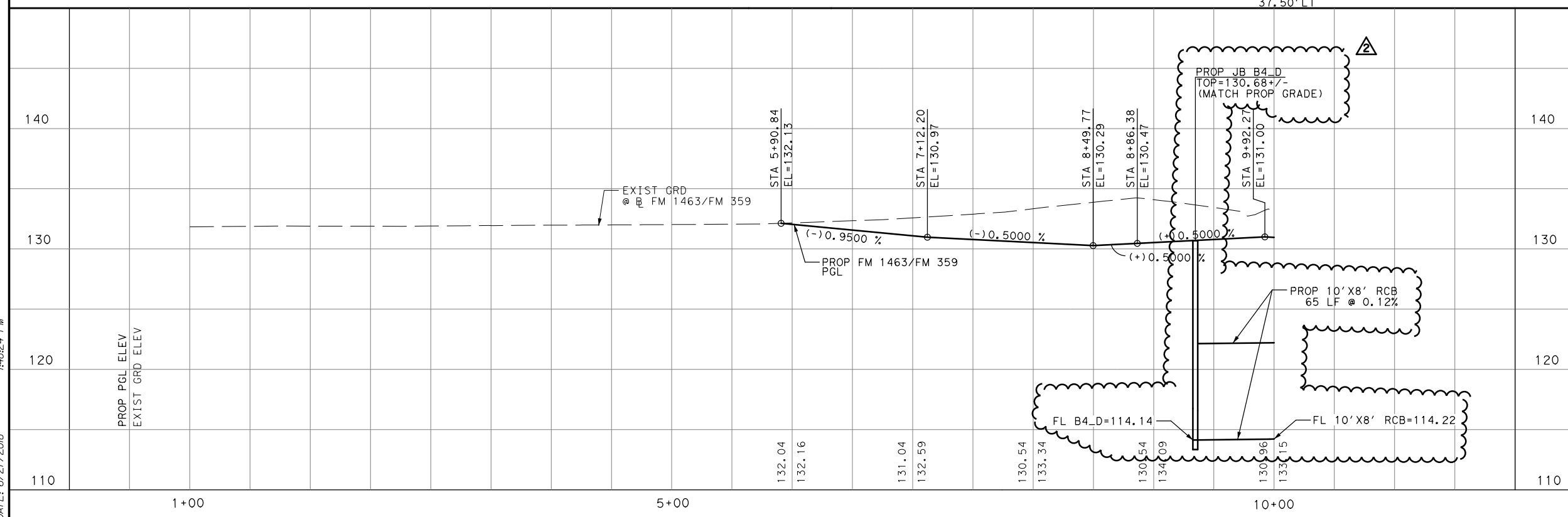
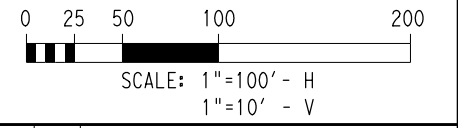
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- LEGEND**
- (A) 12" CRCP
 - (B) 1" ASB
 - (C) 6" CEMENT TREATED BASE
 - (D) 6" LTS
 - (E) 9" CRCP
 - (F) RAIL (TY SSTR) W/DRAIN SLOTS
 - (G) RAIL (TY SSTR)
 - (H) RAIL (TY SSCB) (42") (TY I)
 - (I) METAL BEAM GUARD FENCE
 - (J) 2" PVC CONDUIT (SCHD 80)
 - (K) MONO CURB (TYPE I)
 - (L) MONO CURB (TYPE II)
 - (M) 4" RIPRAP (CL B)
 - (N) REINFORCED VOLUME
 - (O) RETAINING WALL
 - (P) DRILL SEED (PERM) (WARM OR COOL)
 - (Q) BLOCK SOD (BERMUDA)
 - (R) 4" TOPSOIL
 - (S) 4" SIDEWALK (5')
 - (T) 3" HMAC
 - (U) 12" ASB
 - (V) PRIME COAT
 - (W) RAIL (PR1)
 - PROPOSED LANE
 - EXISTING LANE
 - (X) TYPICAL SECTION

NOTES:
 1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS NOTED OTHERWISE.

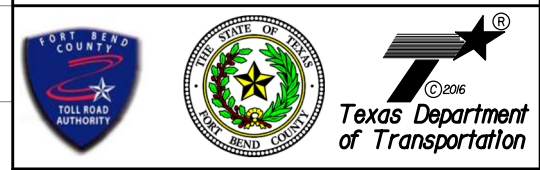


REV	DATE	BY	DESCRIPTION
1	2/28/18	MPB	REVISED ASPHALT TRANSITION LIMIT
2	6/18/18	MPB	REVISED DRAINAGE LAYOUT

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MICHAEL P. BARBIER P.E. 107133, ON JUNE 20, 2018, ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT. THE RECORD COPY OF THIS DRAWING IS ON FILE AT THE OFFICES OF HALFF ASSOCIATES, INC.

6-20-2018

MICHAEL P. BARBIER
 107133
 REGISTERED PROFESSIONAL ENGINEER



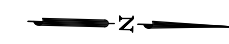
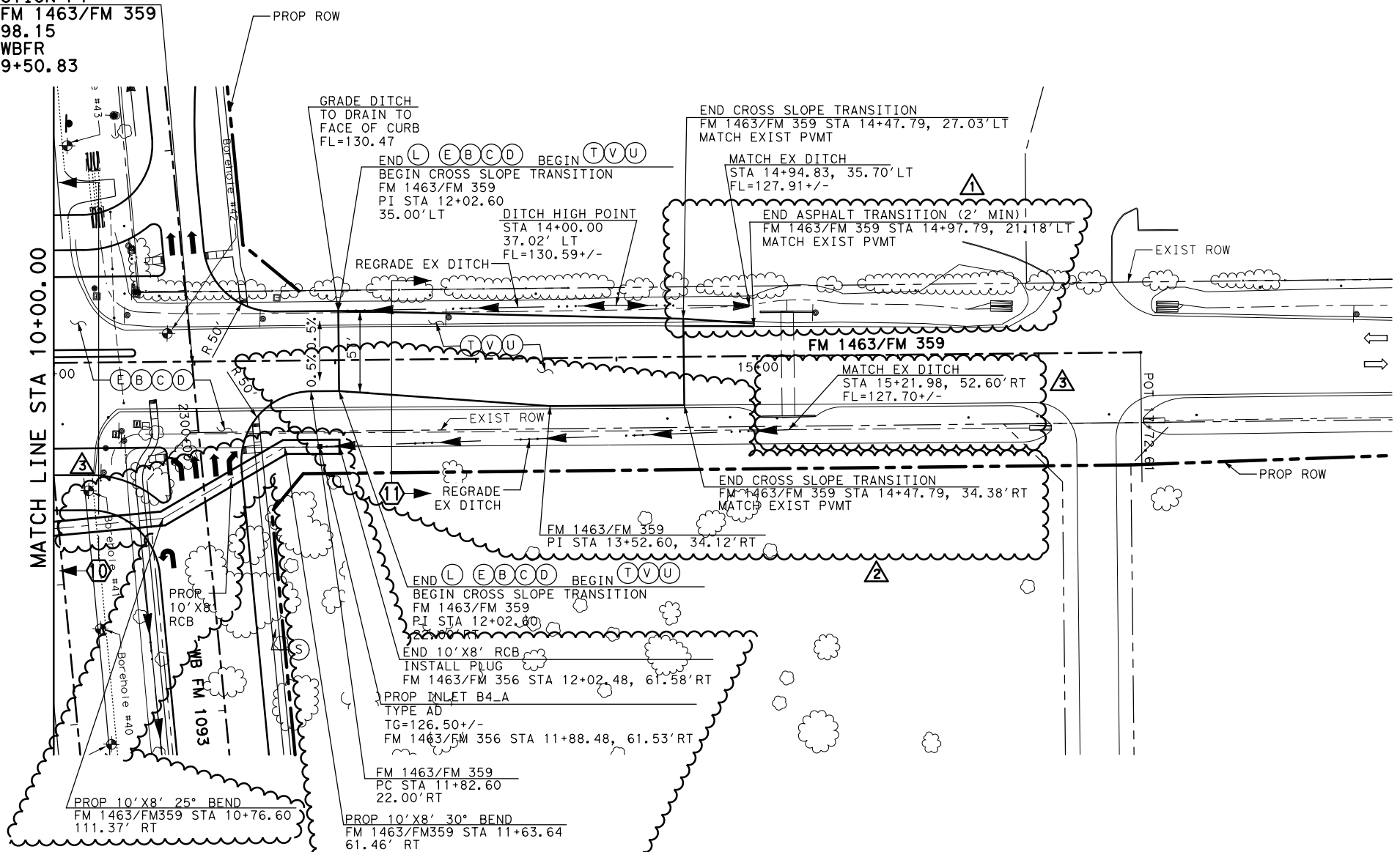
HALFF
 TBPE FIRM # F-312
 14800 ST. MARY'S LANE, SUITE 160
 HOUSTON, TEXAS 77079-2943
 TEL (713) 588-2450 FAX (281) 310-5259

FM 1093 WESTPARK EXTENSION
ROADWAY PLAN & PROFILE
FM 1463/FM 359
STA 1+00 TO STA 10+00
 SHEET 1 OF 2

DESIGNED BY:	BRC	DRAWN BY:	LDW		
CHECKED BY:	MPB	CHECKED BY:	B3		
COUNTY	CONT	SEC	JOB	HWY NO.	SHEET NO.
FORT BEND	0543	02	063, ETC	FM 1093	1167

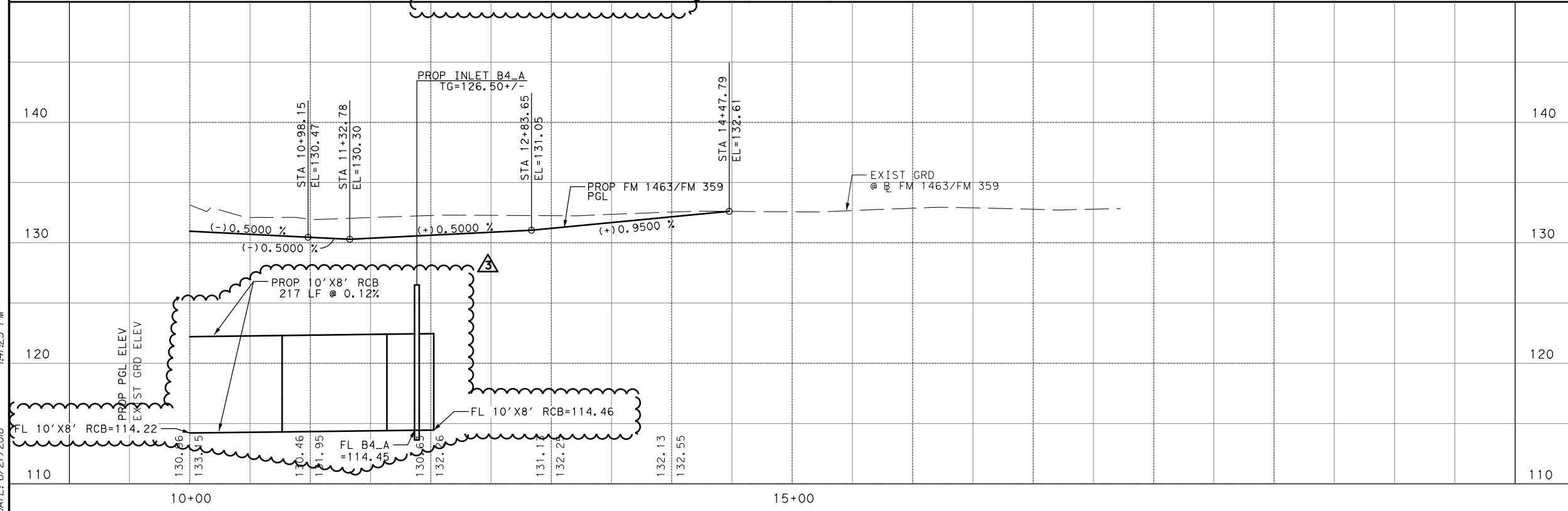
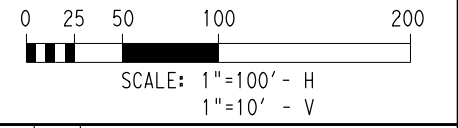
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INTERSECTION PT
 PROP B FM 1463/FM 359
 STA 10+98.15
 PROP B WBFR
 STA 2299+50.83



- LEGEND
- (A) 12" CRCP
 - (B) 1" ASB
 - (C) 6" CEMENT TREATED BASE
 - (D) 6" LTS
 - (E) 9" CRCP
 - (F) RAIL (TY SSTR) W/DRAIN SLOTS
 - (G) RAIL (TY SSTR)
 - (H) RAIL (TY SSCB) (42") (TY I)
 - (I) METAL BEAM GUARD FENCE
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 - (K) MONO CURB (TYPE I)
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 - (P) DRILL SEED (PERM) (WARM OR COOL)
 - (Q) BLOCK SOD (BERMUDA)
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 - (S) 4" SIDEWALK (5')
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 - (U) 12" ASB
 - (V) PRIME COAT
 - (W) RAIL (PR1)
 - PROPOSED LANE
 - ⇌ EXISTING LANE
 - (X) TYPICAL SECTION

NOTES:
 1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS NOTED OTHERWISE.



REV	DATE	BY	DESCRIPTION
1	2/28/18	MPB	REVISED ASPHALT TRANSITION LIMIT
2	4/13/18	MPB	REVISED PAVING LIMITS
3	6/18/18	MPB	REVISED DRAINAGE LAYOUT

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6-20-2018

MICHAEL P. BARBIER
 107133
 REGISTERED PROFESSIONAL ENGINEER

Fort Bend County
 Toll Road Authority

State of Texas
 Fort Bend County

Texas Department of Transportation

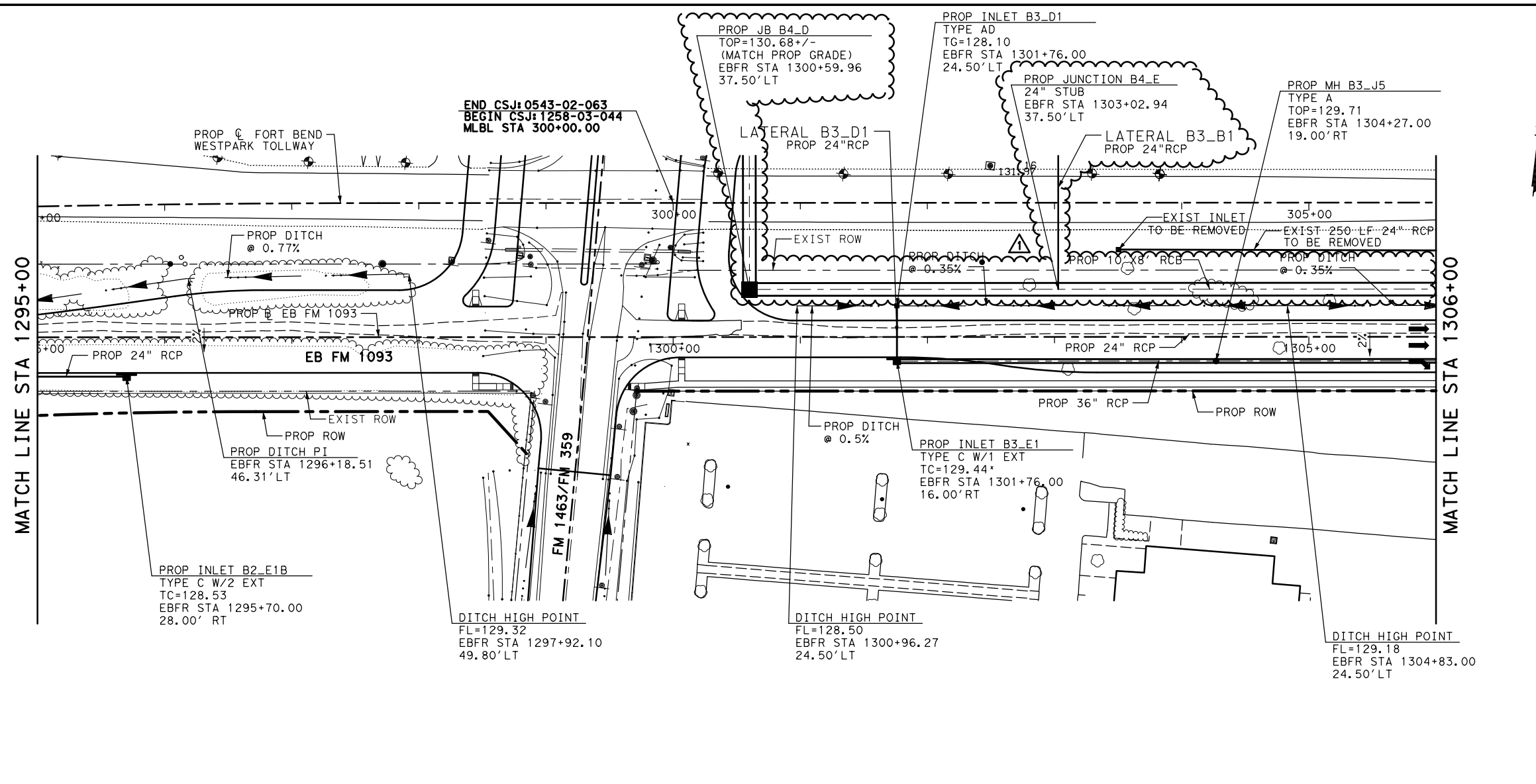
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 TBPE FIRM # F-312
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FM 1093 WESTPARK EXTENSION
ROADWAY PLAN & PROFILE
FM 1463/FM 359
STA 10+00 TO STA 17+72.61

SHEET 2 OF 2

DESIGNED BY:	BRC	DRAWN BY:	LDW		
CHECKED BY:	MPB	CHECKED BY:	B3		
COUNTY	CONT	SEC	JOB	HWY NO.	SHEET NO.
FORT BEND	0543	02	063, ETC	FM 1093	1168

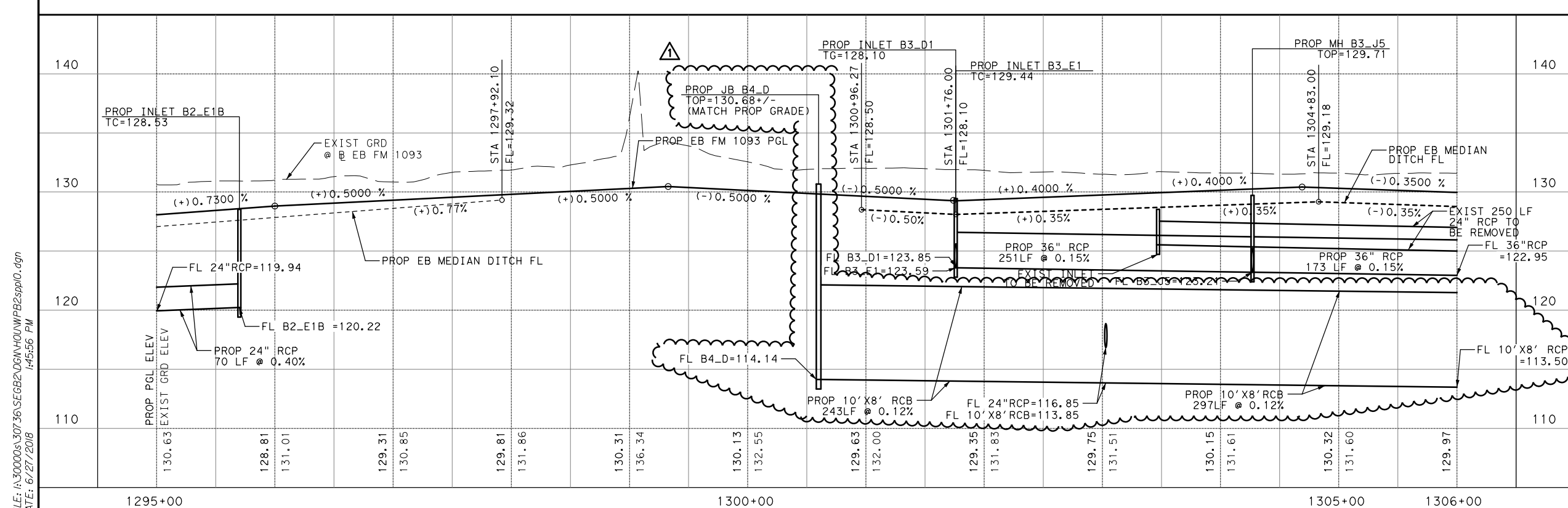
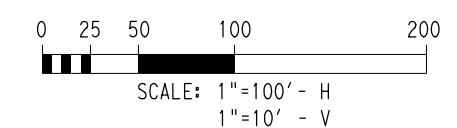
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LEGEND

- EXIST MANHOLE
- EXIST INLET
- PROP MANHOLE
- PROP AREA INLET
- ▬ PROP CURB INLET
- ▬ PROP DITCH OR SWALE
- PROP JUNCTION BOX

- NOTES:**
1. STORM SEWER LENGTH SHOWN IS CENTER TO CENTER OF STRUCTURE WHICH DIFFERS FROM PAY LENGTH IN QUANTITY SHEETS.
 2. HORIZONTAL CONTROL FOR ALL DRAINAGE STRUCTURES IS AT CENTER OF STRUCTURE.
 3. SEE STORM SEWER LATERAL SHEETS FOR MORE INFORMATION.
 4. ALL DITCHES ARE V-SHAPE UNLESS OTHERWISE NOTED



REV	DATE	BY	DESCRIPTION
1	6/18/18	MPB	REVISED DRAINAGE LAYOUT

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6-20-2018

MICHAEL P. BARBIER
107133
REGISTERED PROFESSIONAL ENGINEER

Fort Bend County
TOLL ROAD AUTHORITY

STATE OF TEXAS
FORT BEND COUNTY

Texas Department of Transportation

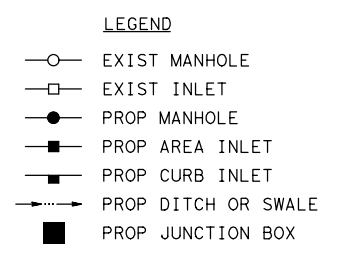
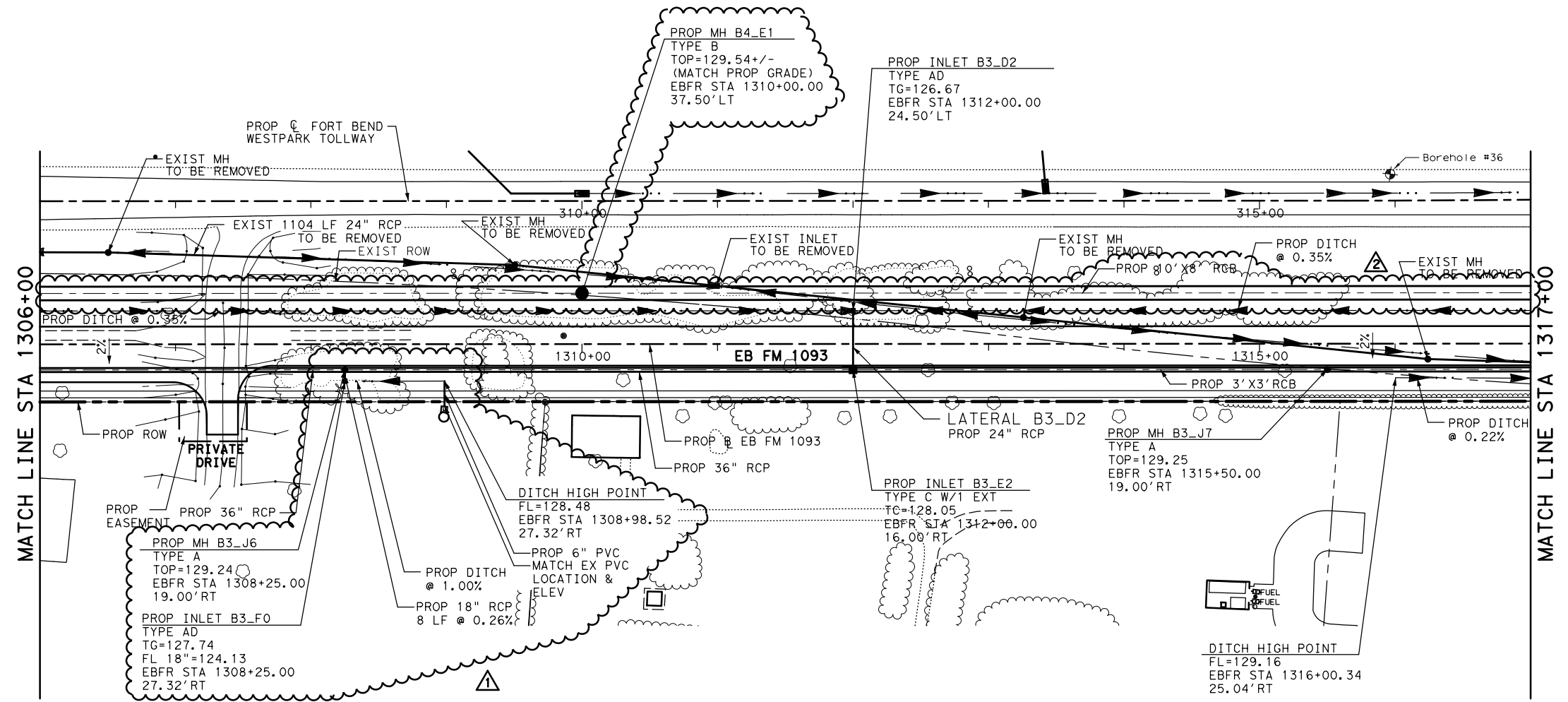
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HOUSTON, TEXAS 77079-2943
TEL (713) 588-2450 FAX (281) 310-5259

FM 1093 WESTPARK EXTENSION
STORM SEWER PLAN & PROFILE
EASTBOUND FM 1093
STA 1295+00 TO STA 1306+00

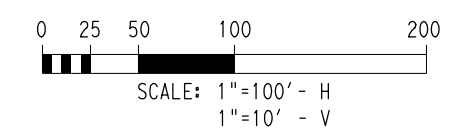
SHEET 11 OF 13

DESIGNED BY:	BRC	DRAWN BY:	LDW		
CHECKED BY:	MPB	CHECKED BY:	B3		
COUNTY	CONT	SEC	JOB	HWY NO.	SHEET NO.
FORT BEND	0543	02	063, ETC	FM 1093	1262

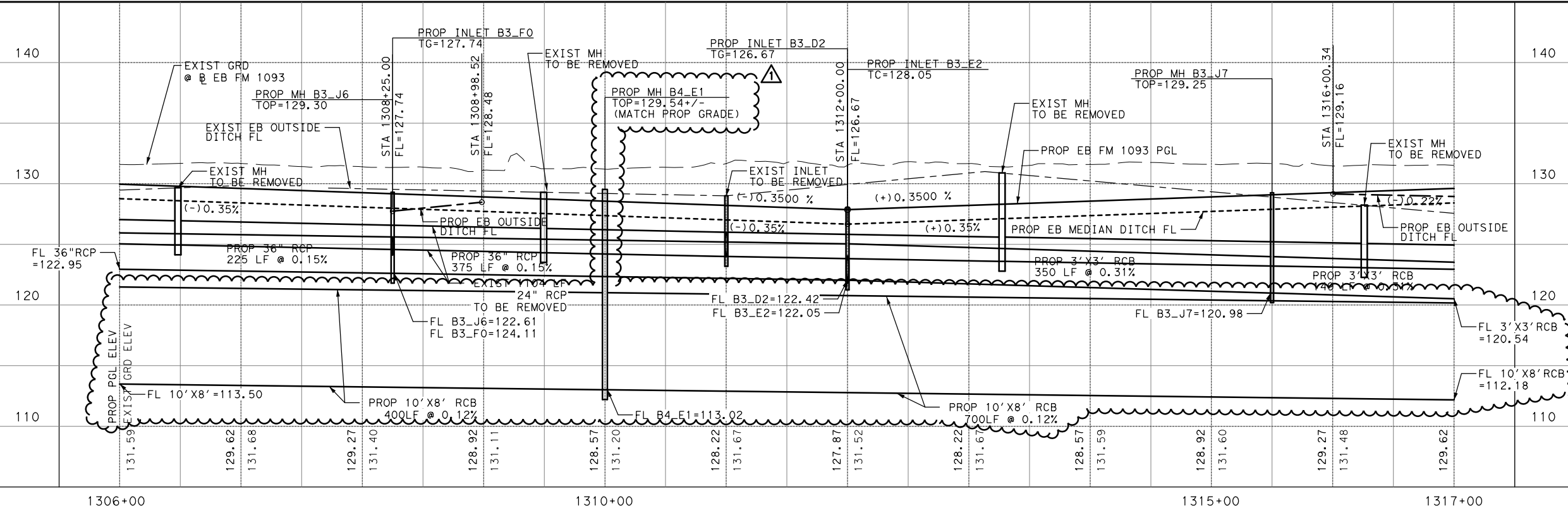
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- NOTES:
1. STORM SEWER LENGTH SHOWN IS CENTER TO CENTER OF STRUCTURE WHICH DIFFERS FROM PAY LENGTH IN QUANTITY SHEETS.
 2. HORIZONTAL CONTROL FOR ALL DRAINAGE STRUCTURES IS AT CENTER OF STRUCTURE.
 3. SEE STORM SEWER LATERAL SHEETS FOR MORE INFORMATION.
 4. ALL DITCHES ARE V-SHAPE UNLESS OTHERWISE NOTED



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REV	DATE	BY	DESCRIPTION
1	5/8/18	MPB	REVISED DRAINAGE LAYOUT
2	6/18/18	MPB	REVISED DRAINAGE LAYOUT

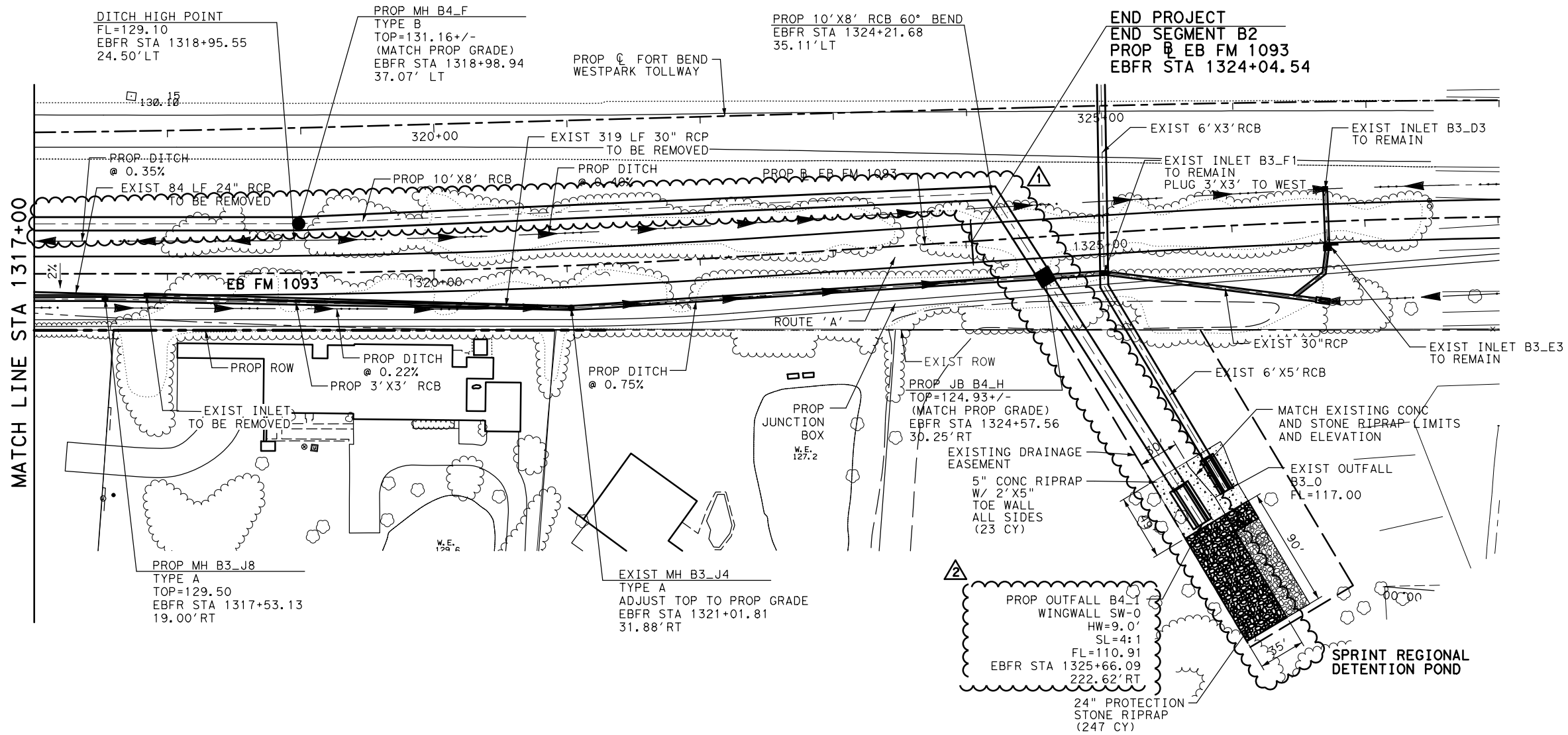
6-20-2018

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**FM 1093 WESTPARK EXTENSION
STORM SEWER PLAN & PROFILE
EASTBOUND FM 1093
STA 1306+00 TO STA 1317+00**

SHEET 12 OF 13

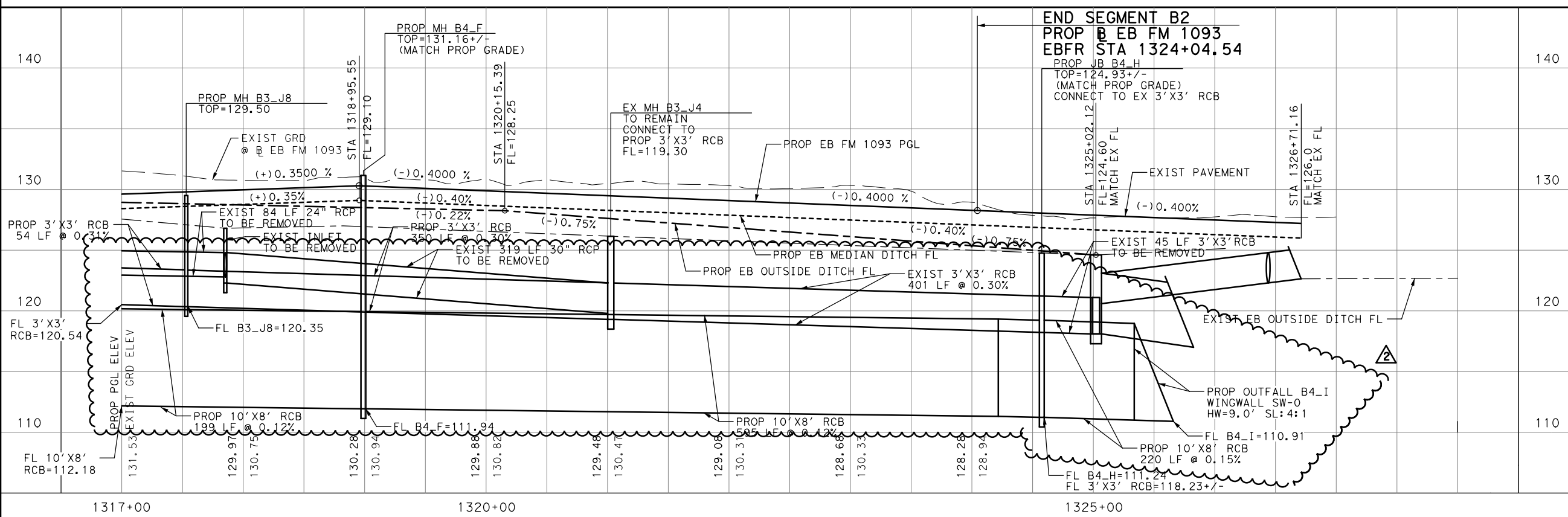
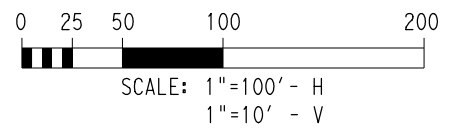
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CHECKED BY: MPB	CHECKED BY: B3
COUNTY: FORT BEND	CONT: 0543
SEC: 02	JOB: 063, ETC
HWY NO.: FM 1093	SHEET NO.: 1263



LEGEND

- EXIST MANHOLE
- EXIST INLET
- PROP MANHOLE
- PROP AREA INLET
- PROP CURB INLET
- PROP DITCH OR SWALE
- PROP JUNCTION BOX

- NOTES:**
1. STORM SEWER LENGTH SHOWN IS CENTER TO CENTER OF STRUCTURE WHICH DIFFERS FROM PAY LENGTH IN QUANTITY SHEETS.
 2. HORIZONTAL CONTROL FOR ALL DRAINAGE STRUCTURES IS AT CENTER OF STRUCTURE.
 3. SEE STORM SEWER LATERAL SHEETS FOR MORE INFORMATION.
 4. ALL DITCHES ARE V-SHAPE UNLESS OTHERWISE NOTED



REV	DATE	BY	DESCRIPTION
1	6/18/18	MPB	REVISED DRAINAGE LAYOUT
2	6/29/18	MPB	REVISED OUTFALL B4_I

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6-29-2018

MICHAEL P. BARBIER
107133
REGISTERED PROFESSIONAL ENGINEER



HALFF

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HOUSTON, TEXAS 77079-2943
TEL (713) 588-2450 FAX (281) 310-5259

FM 1093 WESTPARK EXTENSION
STORM SEWER PLAN & PROFILE
EASTBOUND FM 1093
STA 1317+00 TO STA 1324+04.54

SHEET 13 OF 13

DESIGNED BY: BRC	DRAWN BY: LDW
CHECKED BY: MPB	CHECKED BY: B3
COUNTY CONT SEC	JOB HWY NO. SHEET NO.
FORT BEND 0543 02	063, ETC FM 1093 1264

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Culvert Station and/or Creek name followed by applicable end (Lt, Rt or Both)	Description of Box Culvert No. Spans ~ Span X Height	Max Fill Height (Ft)	Applicable Box Culvert Standard (4)	Applicable Wingwall or End Treatment Standard	Skew Angle (0°, 15°, 30° or 45°)	Side Slope or Channel Slope Ratio (SL:1)	T Culvert Top Slab Thickness (In)	U Culvert Wall Thickness (In)	C Estimated Curb Height (Ft)	Hw (1) Height of Wingwall (Ft)	A Curb to End of Wingwall (Ft)	B Offset of End of Wingwall (Ft)	Lw Length of Longest Wingwall (Ft)	Ltw Culvert Toewall Length (Ft)	Atw Anchor Toewall Length (Ft)	Riprap Apron (C.Y.)	Class "C" Conc (Curb) (C.Y.) (2)	Class "C" Conc (Wingwall) (C.Y.) (3)	Total Wingwall Area (S.F.)
SEGMENT B1																			
BOX CULVERT STA 1210+66.76 (RT)	2-6'X3'	5'	SCP-6	FW-S	15°	3:1	8"	8"	0.500'	3.917'	10.750'	6.207'	12.413'	15.702'	N/A	0.0	0.3	3.9	49
BOX CULVERT STA 1254+63.60 (RT)	1-8'X3'	6'	SCP-8	FW-0	0°	4:1	8"	8"	0.500'	3.917'	14.333'	8.275'	16.551'	9.333'	N/A	0.0	0.2	5.1	70
SEGMENT B2																			
BOX CULVERT STA 1276+06.20 (RT)	2-6'X3'	10'	SCP-6	FW-0	0°	4:1	8"	8"	2.583'	6.000'	22.667'	13.087'	26.173'	15.167'	N/A	0.0	1.5	10.2	166
BOX CULVERT POND 5D	1-5'X3'	6'	SCP-5	FW-0	0°	4:1	8"	7"	2.583'	6.000'	22.667'	13.087'	26.173'	6.167'	N/A	0.0	0.6	3.8	166
OUTFALL B4-I	1-10'X8'	18'	SCP-10	SW-0	0°	4:1	10"	10"	0.500'	9.083'	N/A	N/A	35.000'	11.667'	N/A	0.2	20.9	330	

NOTES:

Skew Angle = 0° for SW-0, FW-0, SETB-CD, SETB-SW-0, and SETB-FW-0 standards.
30° Maximum for Safety End Treatment

SL:1 = Horizontal:1 Vertical
Side Slope at culvert for Flared or Straight Wingwalls. Channel Slope for Parallel Wingwalls.
Slope shall be 3:1 or flatter for Safety End Treatments.

T = Box Culvert Top Slab Thickness. Dimension can be found on the applicable Box Culvert Standard.

U = Box Culvert Wall Thickness. Dimension can be found on the applicable Box Culvert Standard.

C = Curb Height.

See applicable wing or end treatment standards for calculations of Hw, A, B, Lw, Ltw, Atw, and Total Wingwall Area.

Hw = Height of Wingwall.
A = Distance from Face of Curb to End of Wingwall (Not applicable to Parallel or Straight Wingwalls).
B = Offset of End of Wingwall (Not applicable to Parallel or Straight Wingwalls).
Lw = Length of Longest Wingwall.
Ltw = Length of Culvert Toewall (Not applicable when using Riprap Apron).
Atw = Length of Anchor Toewall (Applicable to Safety End Treatment only).
Total Wingwall Area = Wingwall area in S.F. for two wingwalls (one structure end) if Lt or Rt.
Area for four wingwalls (two structure ends) if Both.

(1) The wall heights shown will be rounded to the nearest Foot for bidding purposes.

(2) Concrete volume shown is for box culvert curb only. For curbs using the RAC standard, quantities shown must be increased by a factor of 2. If Class "S" concrete is required for the top slab of the culvert, the curb concrete shall also be Class "S". Curb concrete is considered part of the Box Culvert for payment.

(3) Concrete volume shown is total of wing, footing, culvert toewall (if any), anchor toewall (if any) and wingwall toewall. Riprap apron, culvert and curb quantities are not included.

(4) Regardless of the type of culvert shown on this sheet, the Contractor shall have the option of furnishing cast-in-place or precast culverts unless otherwise shown elsewhere on the plans. If the Contractor elects to provide culverts of a different type than those shown on this sheet, it shall be the Contractor's responsibility to make the necessary adjustments to the dimensions and quantities shown.

SPECIAL NOTE:

This sheet is a supplement to the Box Culvert standards. It is to be filled out by the culvert specifier and provides dimensions for the construction of the Box Culvert Wingwalls and Safety End Treatments.

An Excel 97 spreadsheet to assist in completing this table can be downloaded from the Bridge Standards (English) web page on the TxDOT web site. The completed sheet shall be signed, sealed, and dated by a licensed Professional Engineer.

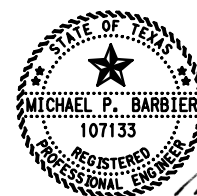


Bridge Division Standard

BOX CULVERT SUPPLEMENT WINGS AND END TREATMENTS

BCS

FILE: bcsstd01.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: GAF
©TxDOT February 2010	CONT	SECT	JOB	HIGHWAY
REVISIONS	0543	02	063.ETC	FM 1093
	DIST	COUNTY	SHEET NO.	
	HOU	FORT BEND	1315	



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6-26-2018



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MAEN A. HOURANI P.E. 88202, ON FEBRUARY 28, 2017

SEGMENT B1 ONLY

DATE: FILE: