FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		SHEET NO.
6	F 2024(766)		1
STATE	STATE DIST.	COUNTY	
TEXAS	WFS	MONTAGUE	
CONT	SECT.	JOB	HIGHWAY NO.
0044	04	048	US 82

STATE OF TEXAS
DEPARTMENT OF TRANSPORTATION

PLANS OF PROPOSED
STATE HIGHWAY IMPROVEMENT

FEDERAL PROJECT NO: F 2024(766)

CSJ: 0044-04-048 US 82 = 14,969.91 FT = 2.84 MI. [BRIDGE = 328.00 FT. = 0.06 MI. / ROADWAY = 14,969.91 FT. = 2.84 MI.]

US 81 = 5,200.00 FT = 0.99 MI. ROADWAY = 5,200.00 FT. = 0.99 MI.

TOTAL ROADWAY LENGTH = 19,839.91 FT. = 3.84 MI.

TOTAL BRIDGE LENGTH = 328.00 FT. = 0.06 MI.

MONTAGUE COUNTY
US 82

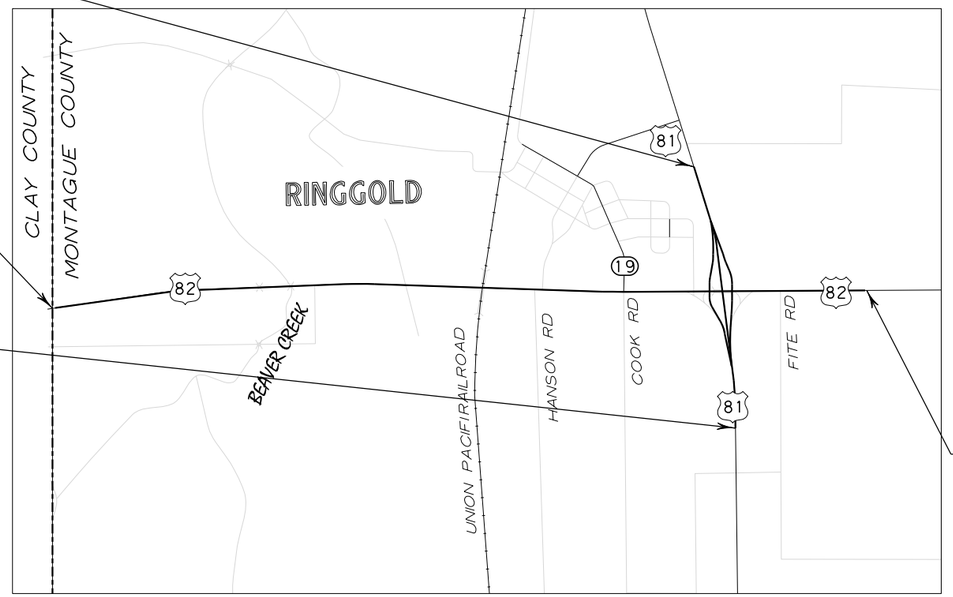
LIMITS: FROM CLAY/MONTAGUE COUNTY LINE
TO 0.5 MILES EAST OF US 81

TYPE OF WORK: FOR THE CONSTRUCTION OF UPGRADE TO A 4-LANE DIVIDED FACILITY CONSISTING OF GRADING, STRUCTURES, SIGNING AND PAVEMENT MARKINGS

STA 5055+00.00 (US 81)
END CONSTRUCTION

STA 5725+76.12 (US 82)
BEGIN PROJECT
CSJ: 0044-04-048

STA 5003+00.00 (US 81)
BEGIN CONSTRUCTION



STA 5875+46.03 (US 82)
END PROJECT
CSJ: 0044-04-048

EXCEPTIONS: NONE
EQUATIONS : NONE
RAILROADS : UPRR (DOT#598431V)

FINAL PLANS AND QUANTITIES AS CONSTRUCTTED

CONTRACTOR NAME:_____
CONTRACTOR ADDRESS:_____
LETTING DATE:_____
DATE TIME CHARGES BEGAN:_____
DATE WORK BEGAN:_____
DATE WORK COMPLETED:_____
DATE OF ACCEPTANCE:_____
FINAL CONTRACT COST: $ _____

US 82
DIVIDED SECTION (FLUSHED MEDIAN):
FUNCTIONAL CLASSIFICATION PRINCIPAL ARTERIAL
DESIGN SPEED = 60 M.P.H.
DIVIDED SECTION (DEPRESSED MEDIAN):
FUNCTIONAL CLASSIFICATION PRINCIPAL ARTERIAL
DESIGN SPEED=60 M.P.H.
A.D.T. (2022) = 3,644
A.D.T. (2042) = 5,132

US 81
UNDIVIDED SECTION (FLUSHED MEDIAN):
FUNCTIONAL CLASSIFICATION MAJOR COLLECTOR
DESIGN SPEED = 60 M.P.H.

US 81 RAMP
DESIGN SPEED=45 M.P.H.

REQUIRED SIGNS AND BARRICADES MUST BE IN ACCORDANCE WITH BC STANDARDS AND THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".

STATE OF TEXAS
FIROZE SHAMS
97215
LICENSED PROFESSIONAL ENGINEER
3/17/2024

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

SUBMITTED FOR LETTING: 03/29/2024
Byron Lawrence, P.E.
SUPERVISING DESIGN ENGINEER

APPROVED FOR LETTING:
DIRECTOR, BRIDGE DIVISION

RECOMMENDED FOR LETTING: 03/29/2024
James S Reaves P.E.
DISTRICT DIRECTOR OF TRANSPORTATION PLANNING AND DEVELOPMENT

APPROVED FOR LETTING:
DIRECTOR, TRAFFIC OPERATIONS DIVISION

RECOMMENDED FOR LETTING: 03/28/2024
Michael D Barnes P.E.
DISTRICT ENGINEER

APPROVED FOR LETTING:
DIRECTOR, DESIGN DIVISION

SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION ON 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, OCTOBER 2023).

Texas Department of Transportation

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SHEET	DESCRIPTION
	I. GENERAL
1	TITLE SHEET
2-3	INDEX OF SHEETS
4-17	TYPICAL SECTIONS
18-18E	GENERAL NOTES
19-19E	ESTIMATE & QUANTITY
20-29	QUANTITY SUMMARY
29A	ROADWAY CRASH CUSHION SUMMARY SHEET
30	DRIVEWAY AND CROSSOVER SUMMARY
	II. TRAFFIC CONTROL PLAN
31	TRAFFIC CONTROL PLAN NOTES AND SEQUENCE OF WORK NARRATIVE
32-33	ADVANCE WARNING SIGNS
34	TRAFFIC CONTROL PLAN TYPICAL SECTION PHASE 1A
35-40	TRAFFIC CONTROL PLAN PHASE 1A
41-44	TRAFFIC CONTROL PLAN TYPICAL SECTION PHASE 1B
45-65	TRAFFIC CONTROL PLAN PHASE 1B
66	TRAFFIC CONTROL PLAN CROSS STREET AND DRIVEWAY PHASING DETAIL
67	TRAFFIC CONTROL PLAN TEMPORARY LEVEL-UP DETAIL
68-72	TRAFFIC CONTROL PLAN TYPICAL SECTION PHASE 2A
73-93	TRAFFIC CONTROL PLAN PHASE 2A
94	TRAFFIC CONTROL PLAN PHASE 2A LOCAL ROAD PHASING DETAIL
95-96	TRAFFIC CONTROL PLAN PHASE 2A TEMP TRANSITION RAMP DETAIL
97-103	TRAFFIC CONTROL PLAN TYPICAL SECTION PHASE 2B
104-118	TRAFFIC CONTROL PLAN PHASE 2B
119-123	TRAFFIC CONTROL PLAN TYPICAL SECTION PHASE 2C
124-144	TRAFFIC CONTROL PLAN PHASE 2C
145	TRAFFIC CONTROL PLAN PHASE 2C INTERSECTION DETAIL
146	TRAFFIC CONTROL PLAN PHASE 2C JOINT SEAL DETAILS - EXISITNG BRIDGE
	TRAFFIC CONTROL PLAN STANDARDS
147	TREATMENT FOR VARIOUS EDGE CONDITIONS
148-159	** BC(1)-21 THRU BC(12)-21
160	** WZ (STPM)-13
161	** WZ (UL)-13
162	** WZ (RS)-22
163	** WZ (RCD)-13
164	** TCP(2-1)-18
165	** TCP(2-3)-23
166	** TCP(2-4)-18
167	** TCP(2-6)-18
168	** TCP(3-1)-13
169	** TCP(3-2)-13
170	** TCP(3-3)-14
171	** TCP(3-4)-13
171A-171B	** LPCB-13
	III. ROADWAY DETAILS
172	HORIZONTAL & VERTICAL CONTROL SHEET
173	SURVEY CONTROL INDEX SHEET
174	CROSS SLOPE DATA AND SUPERELEVATION DATA
175-185	ALIGNMENT DATA
186-189	REMOVAL LAYOUT
190-211	PLAN & PROFILE
212-213	PLAN & PROFILE - WEST TRANSITION
214	PLAN & PROFILE - HANSON RD S
215	PLAN & PROFILE - HANSON RD N
216	PLAN & PROFILE - COOK RD & SH 19 LOOP
217-219	PLAN & PROFILE - LOCAL RD
220	PLAN & PROFILE - MESQUITE ST
221	PLAN & PROFILE - FITE RD
222	INTERSECTION LAYOUT - WEST TRANSITION
223	INTERSECTION LAYOUT - TURN AROUND
224	INTERSECTION LAYOUT - HANSON RD
225	INTERSECTION LAYOUT - COOK RD / SH 19 LOOP
226	INTERSECTION LAYOUT - LOCAL RD / MESQUITE ST
227	INTERSECTION LAYOUT - US 81 WRAMP & US 82
228	INTERSECTION LAYOUT - US 81 ERAMP & US 82
229	INTERSECTION LAYOUT - FITE RD
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247	DRIVEWAY SUMMARY TABLE
248-250	ROADWAY DETAILS - RIPRAP LAYOUT
251-256	ROADWAY DETAILS - MBGF LAYOUT
257-258	ROADWAY DETAILS - TURN LANES
259-260	ROADWAY DETAILS - ACCELERATION LANES
261	ROADWAY DETAILS - CATTLE PASS LAYOUT
262	SIDEROAD DETAILS

SHEET	DESCRIPTION
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265	* TE(HMAC)-11
266	* GF(31)-19
267	* GF(31)DAT-19
268	* GF(31)MS-19
269-270	* GF(31)TR TL3-20
271	* SGT(10S)31-16
272	* SGT(11S)31-18
273	* SGT(12S)31-18
274-276	* SRG(TL-3)-21
277-278	* SD-EBR
279-280	* SSCB(2)-10 (MOD)
280A	# TAU-II-R(N)-16
280B	# TAU-II-R(W)-16
280C	# REACT(M)-21
280D	# REACT(W)-16
280E	# QGUARD(M10)(N)-20
280F	# QG(M)(W)-21
	IV. DRAINAGE DETAILS
281-286	HYDRAULIC DATA SHEET - BEAVER CREEK
287-289	DRAINAGE AREA MAP
290	RUNOFF COMPUTATIONS - MINOR CULVERTS
291-298	INTERNAL DRAINAGE AREA MAP
299	US 81 INTERNAL DRAINAGE AREA MAP
300	RUNOFF COMPUTATIONS - INTERNAL DRAINAGE AREA
301	STORM DRAIN -50YR INLET CALCULATIONS
302	STORM DRAIN -50YR LINK CALCULATIONS
303-304	US 81 DRAINAGE CALCULATIONS
305-312	CULVERT COMPUTATIONS
313-322	CULVERT LAYOUT
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326-328	US 81 STORM DRAIN PLAN & PROFILE
329	US 81 STORM DRAIN PROFILE
330-335	DITCH TABLES
	DRAINAGE STANDARDS
336	* SCC-MD
337	* SCP-MD
338	* ECD
339-340	* SCC-3&4
341-342	* SCC-5&6
343-345	* SCC-10
346	* SCP-3
347	* SCP-5
348	* SCP-10
349	* MC-MD
350-351	* MC-5-20
352-353	* MC-10-7
354	* BCS
355	* FW-0
356	* FW-S
357	* PW
358-359	* SETB-CD
360-362	* SETB-FW-S
363	* SETP-PD
364	* PSET-SP
365	* PB
366	* PDD
367	* PRM
368-369	* PSL
369A	# CUT & RESTORE DETAILS

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER

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

_____ ,P.E. 3/17/2024 DATE

IN SUNG HWANG, P.E.

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED PROFESSIONAL ENGINEER

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

M.F.Muwaquet
MARWAN F. MUWAQUET, P.E. ,P.E. 11/16/2023 DATE

STATE OF TEXAS
FIROZE SHAMS
97215
LICENSED PROFESSIONAL ENGINEER

THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE HAVE BEEN SELECTED BY ME OR UNDER MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT.

Firoze Shams
FIROZE SHAMS, P.E. ,P.E. 3/17/2024 DATE

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

INDEX OF SHEETS

SHEET 1 OF 2

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS: MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK: MFM	TEXAS	WFS	MONTAGUE	2
CHECK: FS	CONTROL	SECTION	JOB	
	0044	04	048	

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STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED
PROFESSIONAL ENGINEER

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

M.F.Muwaquet
MARWAN F. MUWAQUET, P.E. ,P.E. 11/16/2023 DATE

STATE OF TEXAS
FIROZE SHAMS
97215
LICENSED
PROFESSIONAL ENGINEER

THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE HAVE BEEN SELECTED BY ME OR UNDER MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT.

Firoze Shams
FIROZE SHAMS, P.E. ,P.E. 3/17/2024 DATE

STATE OF TEXAS
IN SUNG HWANG
13159
LICENSED
PROFESSIONAL ENGINEER

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

IN SUNG HWANG, P.E. ,P.E. 3/17/2024 DATE

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

INDEX OF SHEETS

SHEET 2 OF 2

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	3
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

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

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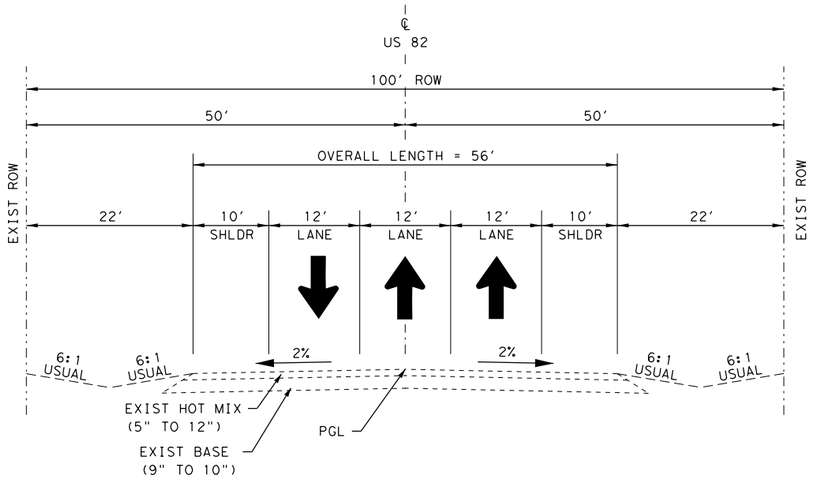
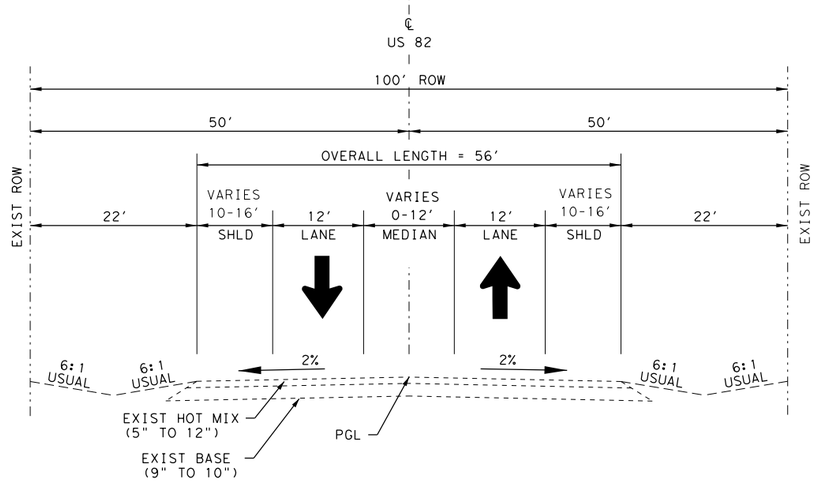


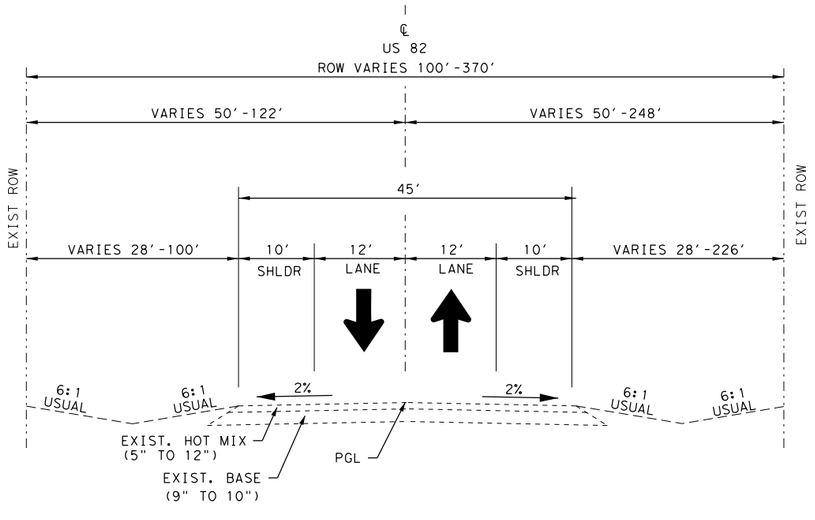
EXISITING TYPICAL SECTION

STA 5724+01.12 TO STA 5736+39.47 (EXISTING SUPER-2 SECTION)
STA 5736+39.47 TO STA 5743+52.45 (TRANSITION ZONE)



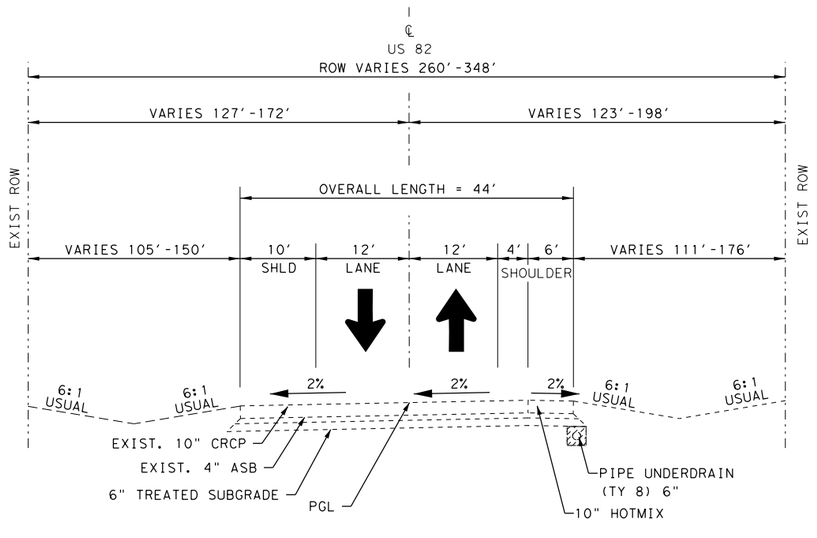
EXISITING TYPICAL SECTION

STA 5743+52.45 TO STA 5761+35.66



EXISITING TYPICAL SECTION

STA 5761+35.66 TO STA 5768+45.81
STA 5769+64.85 TO STA 5798+06.83
STA 5814+06.86 TO STA 5848+30.57
STA 5849+81.60 TO STA 5875+46.04



EXISITING TYPICAL SECTION

STA 5798+06.86 TO STA 5814+06.86
(EXISTING TO REMAIN - CONTRACTOR TO FIELD VERIFY START AND END OF EXISTING CRCP SECTION)

STATE OF TEXAS
FIROZE SHAMS
97215
LICENSED
PROFESSIONAL ENGINEER
3/27/2024

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

TYPICAL SECTIONS
US 82

SHEET 1 OF 14

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MII	TEXAS	WFS	MONTAGUE	4
CHECK MFM	CONTROL	SECTION	JOB	
CHECK FS	0044	04	048	

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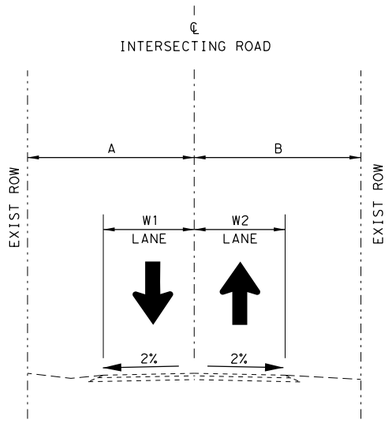
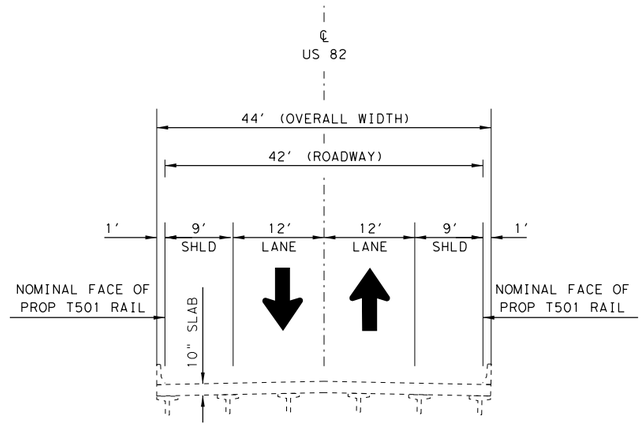


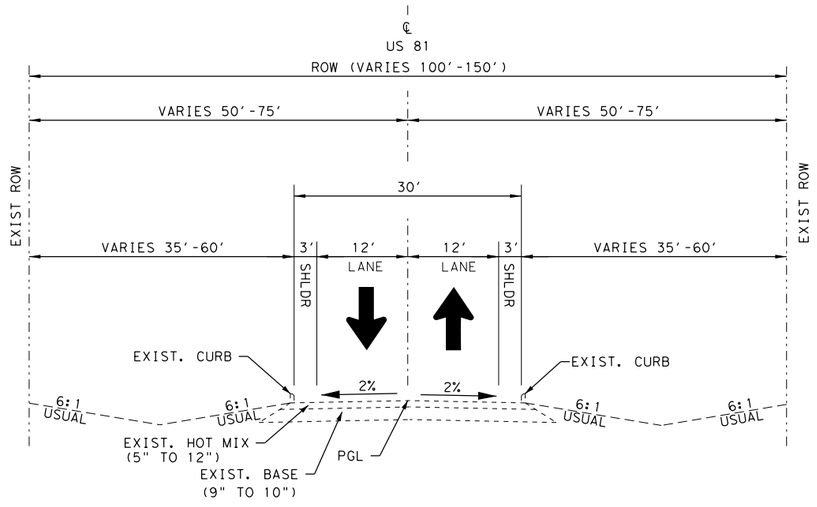
EXISITING INTERSECTING ROAD TYPICAL SECTION

INTERSECTING ROAD	US 82 STA	W1	W2	A	B
HANSEN RD NORTH	5715+83.75	8.5	8.5	52′~23.5′	68′~182′
HANSEN RD SOUTH	5815+84.29	6.75	6.75	66′~122.5′	68′~182′
SH-19 LOOP	5830+74.12	11.38	11.38	30′	30′
COOK RD	5830+74.12	8.25	8.25	31.5′	25′
MESQUITE RD	5843+62.00	7.5	7.5	22′	26′
FITE RD	5859+76.80	7.5	7.5	20′	20′



EXISITING TYPICAL SECTION

STA 5768+45.81 TO STA 5769+64.85 (EXISTING BRIDGE AT BEAVER CREEK - TO REMAIN))
STA 5748+30.57 TO STA 5849+81.60 (EXISTING BRIDGE AT US-82/81 INTERSECTION)



US 81 EXISITING TYPICAL SECTION

STA 5025+95.00 TO 5030+80.00 (UNDER THE BRIDGE W/ CURB)
STA 5003+00.00 TO 5025+95.00 W/O CURB
STA 5030+80.00 TO 5055+00.00 W/O CURB

STATE OF TEXAS
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US 82

TYPICAL SECTIONS
US 82

SHEET 2 OF 14

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	5
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

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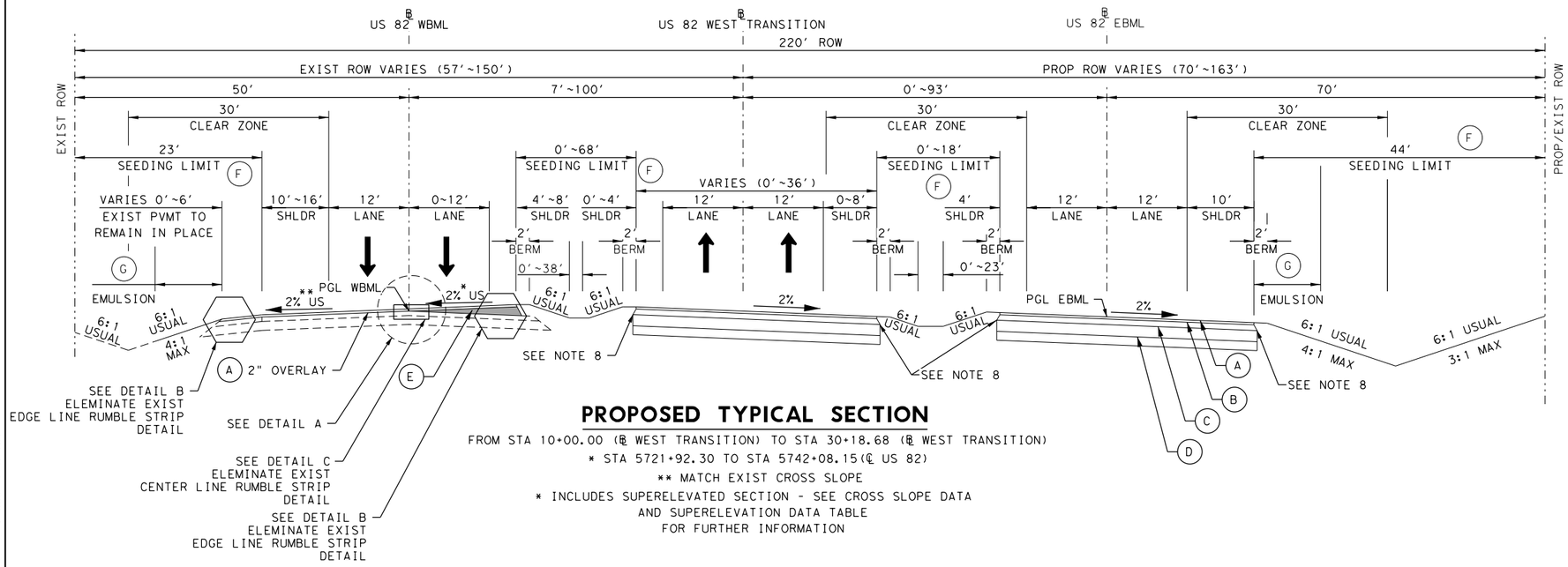
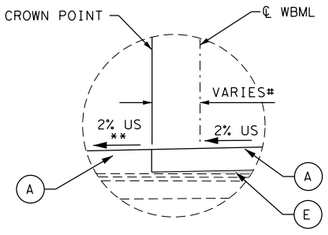


PROPOSED TYPICAL SECTION

FROM STA 10+00.00 (℄ WEST TRANSITION) TO STA 30+18.68 (℄ WEST TRANSITION)
* STA 5721+92.30 TO STA 5742+08.15(℄ US 82)
** MATCH EXIST CROSS SLOPE
* INCLUDES SUPERELEVATED SECTION - SEE CROSS SLOPE DATA AND SUPERELEVATION DATA TABLE FOR FURTHER INFORMATION

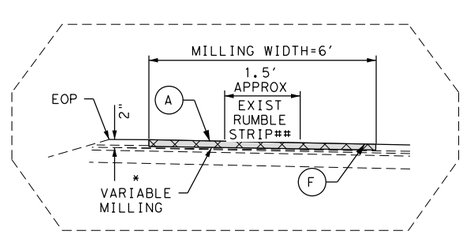
LEGEND:

- (A) 2" SUPERPAVE MIXTURES SP-C PG70-22
- (B) TACK COAT/5" SUPERPAVE MIXTURES SP-B PG70-22
- (C) PRIME COAT/10" FL BS (CMP IN PLC)(TYA GR1-2)
- (D) 8" CEMENT TREAT (SUBGRADE)
- (E) D-GR HMA TY-D PG 70-22 (LEVEL-UP)
- (F) BOND FBR MTRX SEED (PERM)(RURAL)(SAND)
- (G) EMULS ASPH (EROSN CONT)(SS-1) 10' WIDE SHOULDER TREATMENT
- (H) SEAL COAT: ASPH (AC-20-5TR)/AGGR (TY-PB GR-3 SAC-B)
- (I) 7" FL BS (CMP IN PLACE)(TY A GR1-2)



DETAIL A

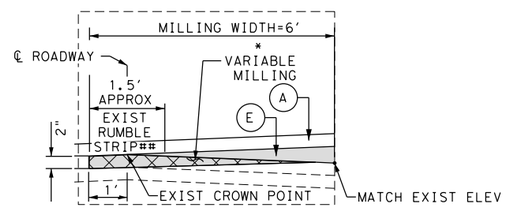
NTS
SEE NOTE 3
** MATCH EXIST CROSS SLOPE



DETAIL B

ELIMINATE EXIST EDGE LINE RUMBLE STRIP

NTS
SEE NOTE 5
* MILLING DEPTH SHOULD ALLOW FOR 2" MINIMUM OF OVERLAY PLACEMENT.



DETAIL C

ELIMINATE EXIST CENTER LINE RUMBLE STRIP

NTS
SEE NOTE 5
* MILLING DEPTH SHOULD ALLOW FOR 2" MINIMUM OF OVERLAY PLACEMENT.

NOTES:

1. SEE US 82 PLAN & PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. 2" OVERLAY TO BE PLACED ON EXISTING BRIDGE DECKS. CONTRACTOR TO CLEAN AND SEAL JOINTS PREVIOUS TO AND AFTER 2" OVERLAY PLACEMENT. SEE JOINT DETAILS EXISTING BRIDGES SHEET FOR MORE INFORMATION.
3. CONTRACTOR TO VERIFY EXISTING CROWN LOCATION IN FIELD.
4. SEE CROSS SLOPE DATA AND SUPERELEVATION DATA SHEET FOR ADDITIONAL CROSS SLOPE INFORMATION.
5. SEE REMOVAL SHEETS FOR APPROXIMATE LOCATION OF EXISTING RUMBLE STRIPS. CONTRACTOR TO VERIFY LOCATION OF EXISTING RUMBLE STRIPS IN THE FIELD. SEE NOTE 6.
6. ALL EXISTING EDGE LINE AND CENTER LINE RUMBLE STRIPS LOCATED IN OVERLAY PAVEMENT SECTIONS ARE TO BE MILLED AND FILLED AS DETAILED IN THE "DETAIL B & C - ELIMINATE EXIST EDGE LINE/ CENTER LINE RUMBLE STRIP" DETAILS.
7. SEE DITCH SUMMARY TABLE FOR ADDITIONAL INFORMATION.
8. SEE TXDOT STANDARD DETAIL TE(HMAC)-11 FOR PAVEMENT EDGE TRANSITION. FOLLOW CONDITION-4 FOR TAPERED EDGE ON NEW OR RECONSTRUCTED PAVEMENT.

3/27/2024

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

TYPICAL SECTIONS
US 82

SHEET 3 OF 14

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	6
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
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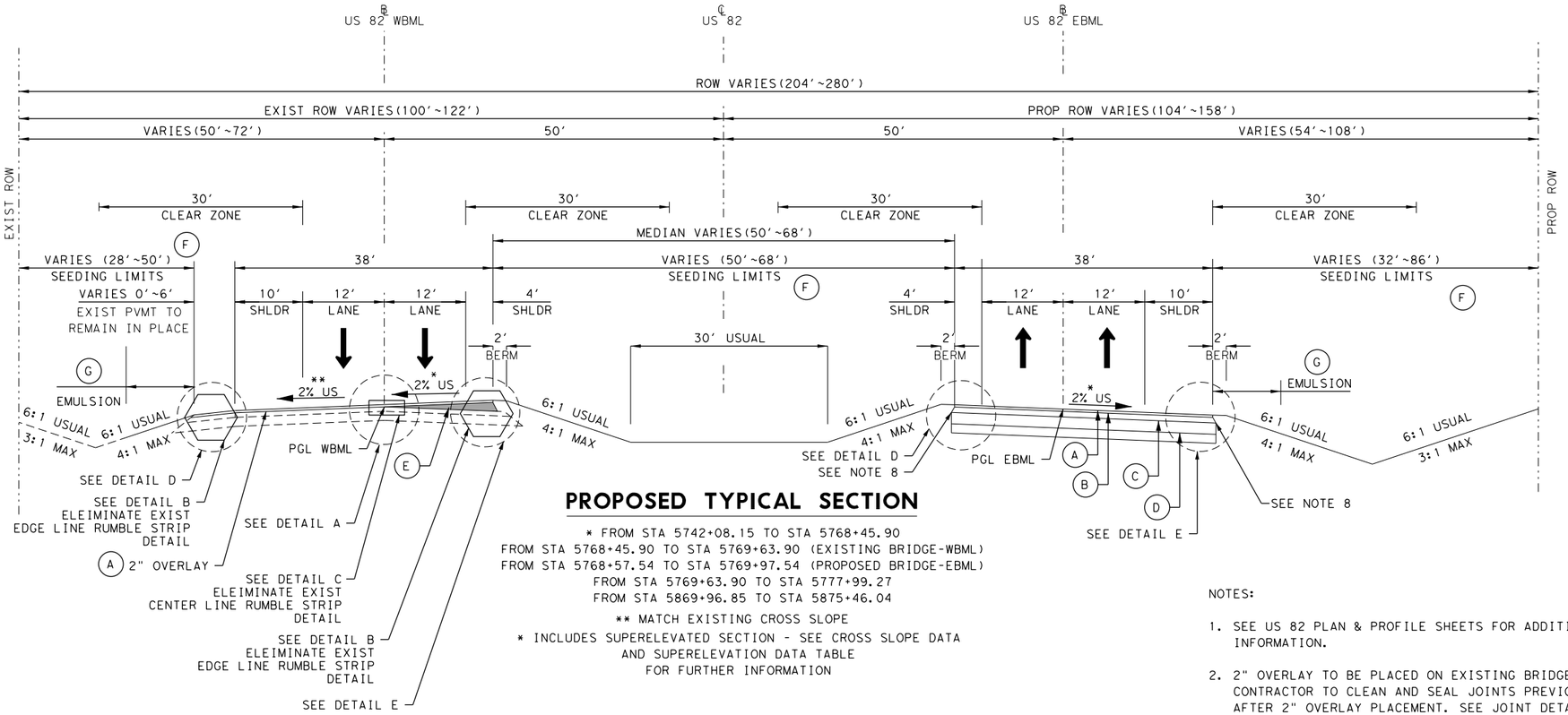
DATE: 3/27/2024 TIME: 7:14:10 PM USER: MaMar24 SCALE: 1:20



PROPOSED TYPICAL SECTION

* FROM STA 5742+08.15 TO STA 5768+45.90
FROM STA 5768+45.90 TO STA 5769+63.90 (EXISTING BRIDGE-WBML)
FROM STA 5768+57.54 TO STA 5769+97.54 (PROPOSED BRIDGE-EBML)
FROM STA 5769+63.90 TO STA 5777+99.27
FROM STA 5869+96.85 TO STA 5875+46.04

** MATCH EXISTING CROSS SLOPE

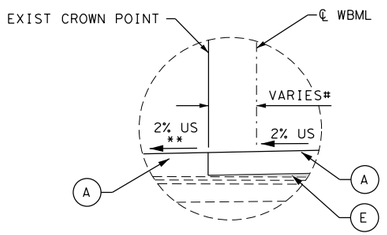
* INCLUDES SUPERELEVATED SECTION - SEE CROSS SLOPE DATA AND SUPERELEVATION DATA TABLE FOR FURTHER INFORMATION

LEGEND:

- (A) 2" SUPERPAVE MIXTURES SP-C PG70-22
- (B) TACK COAT/5" SUPERPAVE MIXTURES SP-B PG70-22
- (C) PRIME COAT/10" FL BS (CMP IN PLC)(TYA GR1-2)
- (D) 8" CEMENT TREAT (SUBGRADE)
- (E) D-GR HMA TY-D PG 70-22 (LEVEL-UP)
- (F) BOND FBR MTRX SEED (PERM)(RURAL)(SAND)
- (G) EMULS ASPH (EROSN CONT)(SS-1) 10' WIDE SHOULDER TREATMENT
- (H) SEAL COAT: ASPH (AC-20-5TR)/AGGR (TY-PB GR-3 SAC-B)
- (I) 7" FL BS (CMP IN PLACE)(TY A GR1-2)

NOTES:

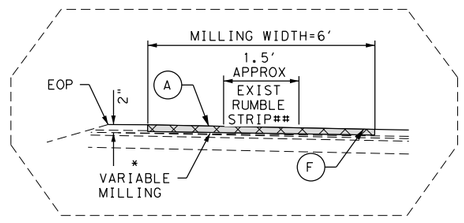
1. SEE US 82 PLAN & PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. 2" OVERLAY TO BE PLACED ON EXISTING BRIDGE DECKS. CONTRACTOR TO CLEAN AND SEAL JOINTS PREVIOUS TO AND AFTER 2" OVERLAY PLACEMENT. SEE JOINT DETAILS EXISTING BRIDGES SHEET FOR MORE INFORMATION.
3. CONTRACTOR TO VERIFY EXISTING CROSS LOCATION IN FIELD.
4. SEE CROSS SLOPE DATA AND SUPERELEVATION DATA SHEET FOR ADDITIONAL CROSS SLOPE INFORMATION.
5. SEE REMOVAL SHEETS FOR APPROXIMATE LOCATION OF EXISTING RUMBLE STRIPS. CONTRACTOR TO VERIFY LOCATION OF EXISTING RUMBLE STRIPS IN THE FIELD. SEE NOTE 6.
6. ALL EXISTING EDGE LINE AND CENTER LINE RUMBLE STRIPS LOCATED IN OVERLAY PAVEMENT SECTIONS ARE TO BE MILLED AND FILLED AS DETAILED IN THE "DETAIL B & C - ELIMINATE EXIST EDGE LINE/ CENTER LINE RUMBLE STRIP" DETAILS.
7. SEE DITCH SUMMARY TABLE FOR ADDITIONAL INFORMATION.
8. SEE TXDOT STANDARD DETAIL TE(HMAC)-11 FOR PAVEMENT EDGE TRANSITION. FOLLOW CONDITION-4 FOR TAPERED EDGE ON NEW OR RECONSTRUCTED PAVEMENT.



DETAIL A

NTS

\# SEE NOTE 3
** MATCH EXIST CROSS SLOPE

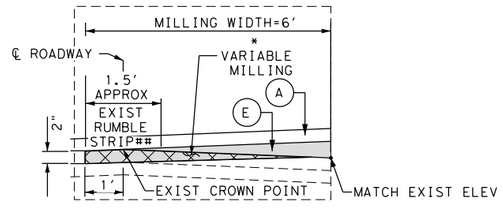


DETAIL B

ELIMINATE EXIST EDGE LINE RUMBLE STRIP

NTS

SEE NOTE 5
* MILLING DEPTH SHOULD ALLOW FOR 2" MINIMUM OF OVERLAY PLACEMENT.

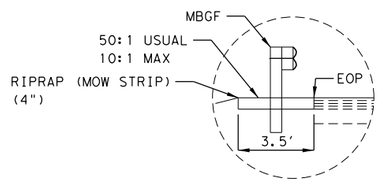


DETAIL C

ELIMINATE EXIST CENTER LINE RUMBLE STRIP

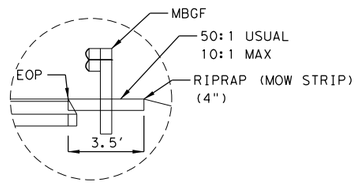
NTS

SEE NOTE 5
* MILLING DEPTH SHOULD ALLOW FOR 2" MINIMUM OF OVERLAY PLACEMENT.



DETAIL D

NTS



DETAIL E

NTS

* SEE ROADWAY PLAN PROFILE SHEETS FOR MBGF LOCATION INFORMATION

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

FIROZE SHAMS 97215 LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
3/27/2024

Texas Department of Transportation

US 82

TYPICAL SECTIONS US 82

SHEET 4 OF 14

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	7
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
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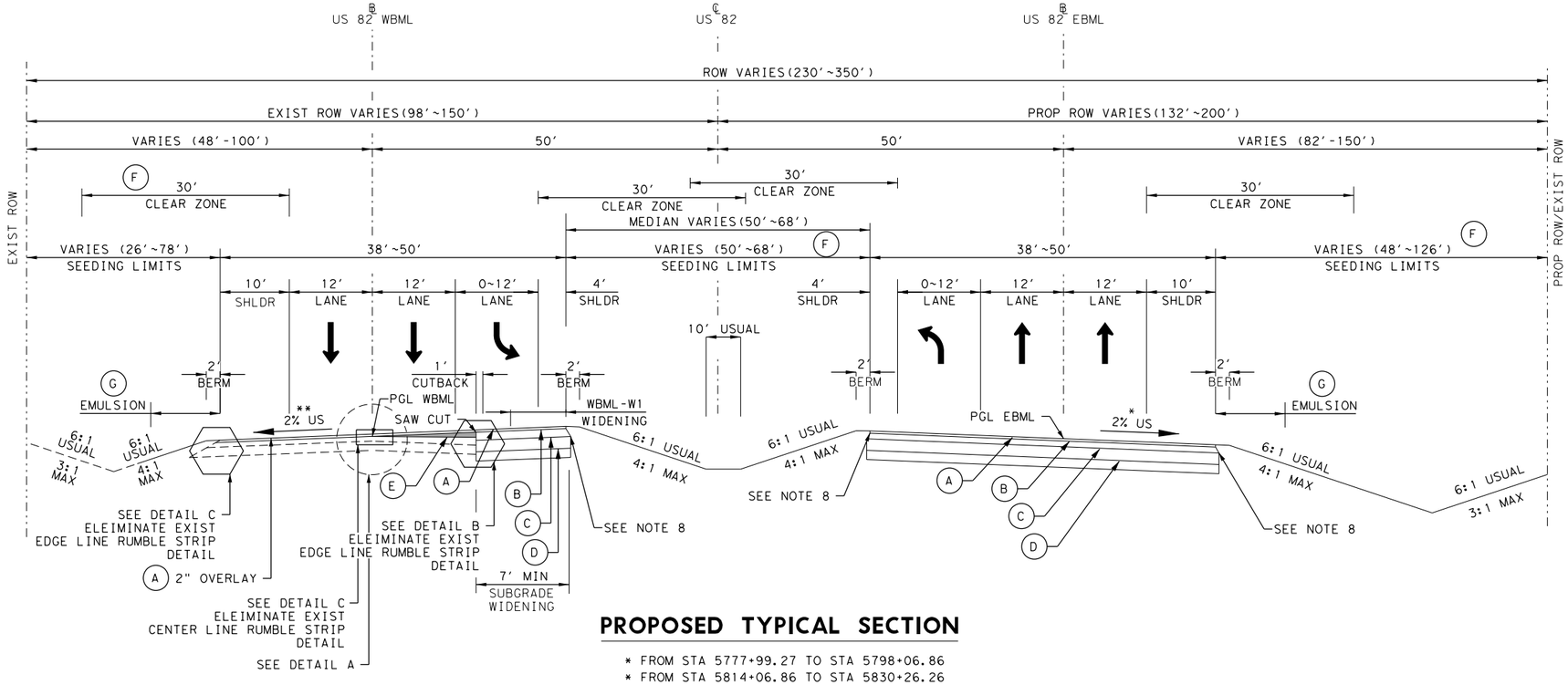
USER: MdMar24
SCALE: 1:20
DATE: 3/27/2024
TIME: 7:14:10 PM

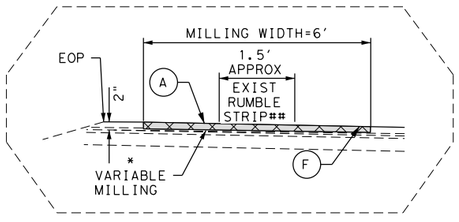


PROPOSED TYPICAL SECTION

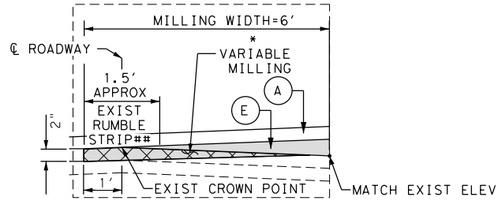
* FROM STA 5777+99.27 TO STA 5798+06.86
* FROM STA 5814+06.86 TO STA 5830+26.26
* INCLUDES SUPERELEVATED SECTION - SEE CROSS SLOPE DATA AND SUPERELEVATION DATA TABLE FOR FURTHER INFORMATION

LEGEND:

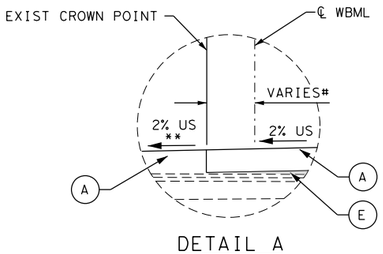
- (A) 2" SUPERPAVE MIXTURES SP-C PG70-22
- (B) TACK COAT/5" SUPERPAVE MIXTURES SP-B PG70-22
- (C) PRIME COAT/10" FL BS (CMP IN PLC)(TYA GR1-2)
- (D) 8" CEMENT TREAT (SUBGRADE)
- (E) D-GR HMA TY-D PG 70-22 (LEVEL-UP)
- (F) BOND FBR MTRX SEED (PERM)(RURAL)(SAND)
- (G) EMULS ASPH (EROSN CONT)(SS-1) 10' WIDE SHOULDER TREATMENT
- (H) SEAL COAT: ASPH (AC-20-5TR)/AGGR (TY-PB GR-3 SAC-B)
- (I) 7" FL BS (CMP IN PLACE)(TY A GR1-2)



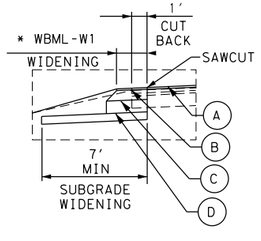
DETAIL B
ELIMINATE EXIST EDGE LINE RUMBLE STRIP
NTS
SEE NOTE 5
* MILLING DEPTH SHOULD ALLOW FOR 2" MINIMUM OF OVERLAY PLACEMENT.



DETAIL C
ELIMINATE EXIST CENTER LINE RUMBLE STRIP
NTS
SEE NOTE 5
* MILLING DEPTH SHOULD ALLOW FOR 2" MINIMUM OF OVERLAY PLACEMENT.



DETAIL A
NTS
\# SEE NOTE 3
** MATCH EXIST CROSS SLOPE



WBML-W1 WIDENING
NTS
* SEE TABLE ON SHEET 9 OF 14 FOR WIDENING WIDTH AND STATIONING

NOTES:

1. SEE US 82 PLAN & PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. 2" OVERLAY TO BE PLACED ON EXISTING BRIDGE DECKS. CONTRACTOR TO CLEAN AND SEAL JOINTS PREVIOUS TO AND AFTER 2" OVERLAY PLACEMENT. SEE JOINT DETAILS EXISTING BRIDGES SHEET FOR MORE INFORMATION.
3. CONTRACTOR TO VERIFY EXISTING CROWN LOCATION IN FIELD.
4. SEE CROSS SLOPE DATA AND SUPERELEVATION DATA SHEET FOR ADDITIONAL CROSS SLOPE INFORMATION.
5. SEE REMOVAL SHEETS FOR APPROXIMATE LOCATION OF EXISTING RUMBLE STRIPS. CONTRACTOR TO VERIFY LOCATION OF EXISTING RUMBLE STRIPS IN THE FIELD. SEE NOTE 6.
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7. SEE DITCH SUMMARY TABLE FOR ADDITIONAL INFORMATION.
8. SEE TXDOT STANDARD DETAIL TE(HMAC)-11 FOR PAVEMENT EDGE TRANSITION. FOLLOW CONDITION-4 FOR TAPERED EDGE ON NEW OR RECONSTRUCTED PAVEMENT.

STATE OF TEXAS
FIROZE SHAMS
97215
LICENSED PROFESSIONAL ENGINEER
3/27/2024

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

TYPICAL SECTIONS
US 82

SHEET 5 OF 14

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	8
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
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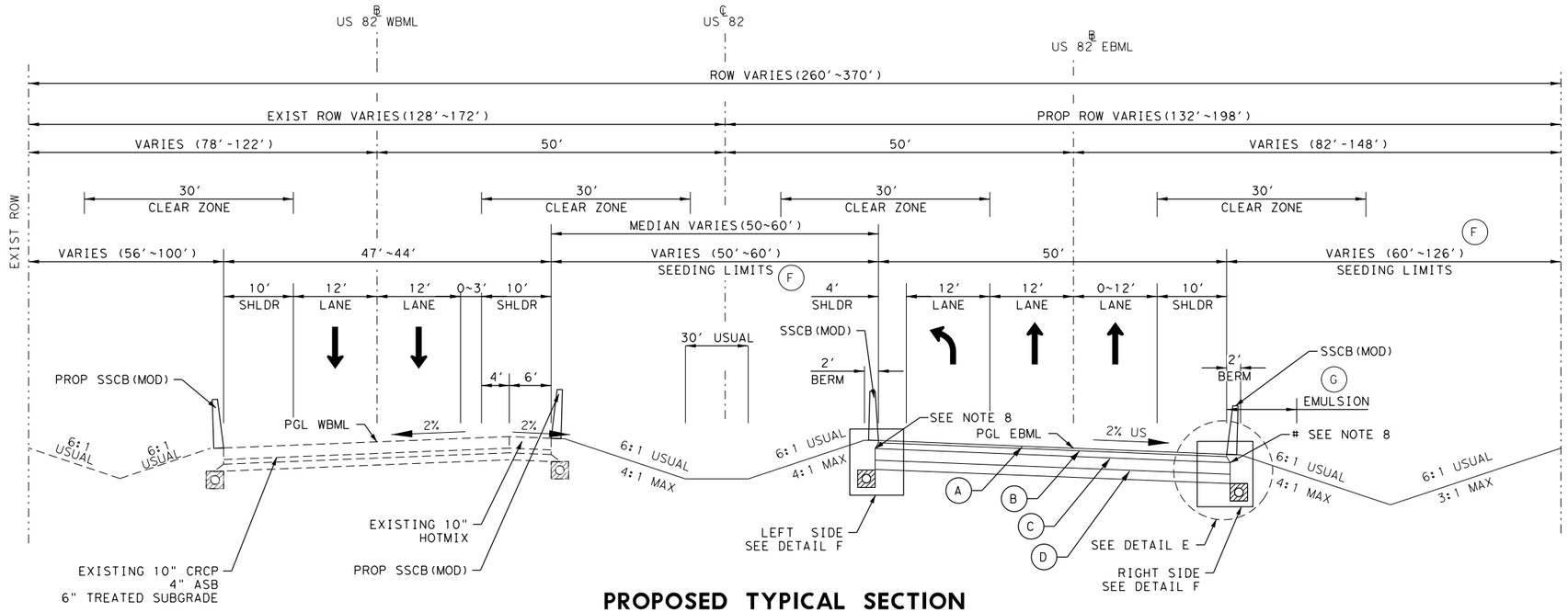
DATE: 3/27/2024 TIME: 7:14:11 PM

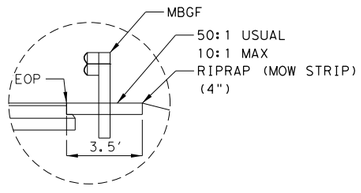


PROPOSED TYPICAL SECTION

FROM STA 5798+06.86 TO STA 5814+06.86

LEGEND:

- (A) 2" SUPERPAVE MIXTURES SP-C PG70-22
- (B) TACK COAT/5" SUPERPAVE MIXTURES SP-B PG70-22
- (C) PRIME COAT/10" FL BS (CMP IN PLC)(TYA GR1-2)
- (D) 8" CEMENT TREAT (SUBGRADE)
- (E) D-GR HMA TY-D PG 70-22 (LEVEL-UP)
- (F) BOND FBR MTRX SEED (PERM)(RURAL)(SAND)
- (G) EMULS ASPH (EROSN CONT)(SS-1) 10' WIDE SHOULDER TREATMENT
- (H) SEAL COAT: ASPH (AC-20-5TR)/AGGR (TY-PB GR-3 SAC-B)
- (I) 7" FL BS (CMP IN PLACE)(TY A GR1-2)



DETAIL E
NTS

FROM STA 5800+83.20 TO STA 5804+51.25

NOTES:

1. SEE US 82 PLAN & PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. 2" OVERLAY TO BE PLACED ON EXISTING BRIDGE DECKS. CONTRACTOR TO CLEAN AND SEAL JOINTS PREVIOUS TO AND AFTER 2" OVERLAY PLACEMENT. SEE JOINT DETAILS EXISTING BRIDGES SHEET FOR MORE INFORMATION.
3. CONTRACTOR TO VERIFY EXISTING CROWN LOCATION IN FIELD.
4. SEE CROSS SLOPE DATA AND SUPERELEVATION DATA SHEET FOR ADDITIONAL CROSS SLOPE INFORMATION.
5. SEE REMOVAL SHEETS FOR APPROXIMATE LOCATION OF EXISTING RUMBLE STRIPS. CONTRACTOR TO VERIFY LOCATION OF EXISTING RUMBLE STRIPS IN THE FIELD. SEE NOTE 6.
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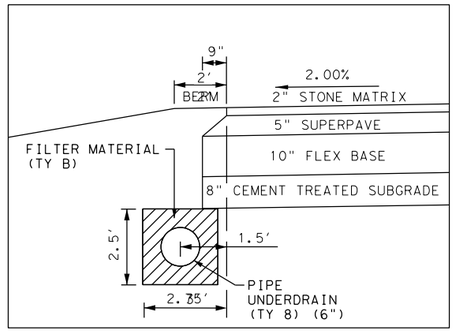

DETAIL F
NTS

FROM STA 5798+01.18 TO STA 5814+11.18 (LEFT)
FROM STA 5798+01.18 TO STA 5814+11.18 (RIGHT)

STATE OF TEXAS
FIROZE SHAMS
97215
LICENSED
PROFESSIONAL ENGINEER

3/27/2024

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

TYPICAL SECTIONS
US 82

SHEET 6 OF 14

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	9
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\General\048*US82*TYP01*100%.dgn
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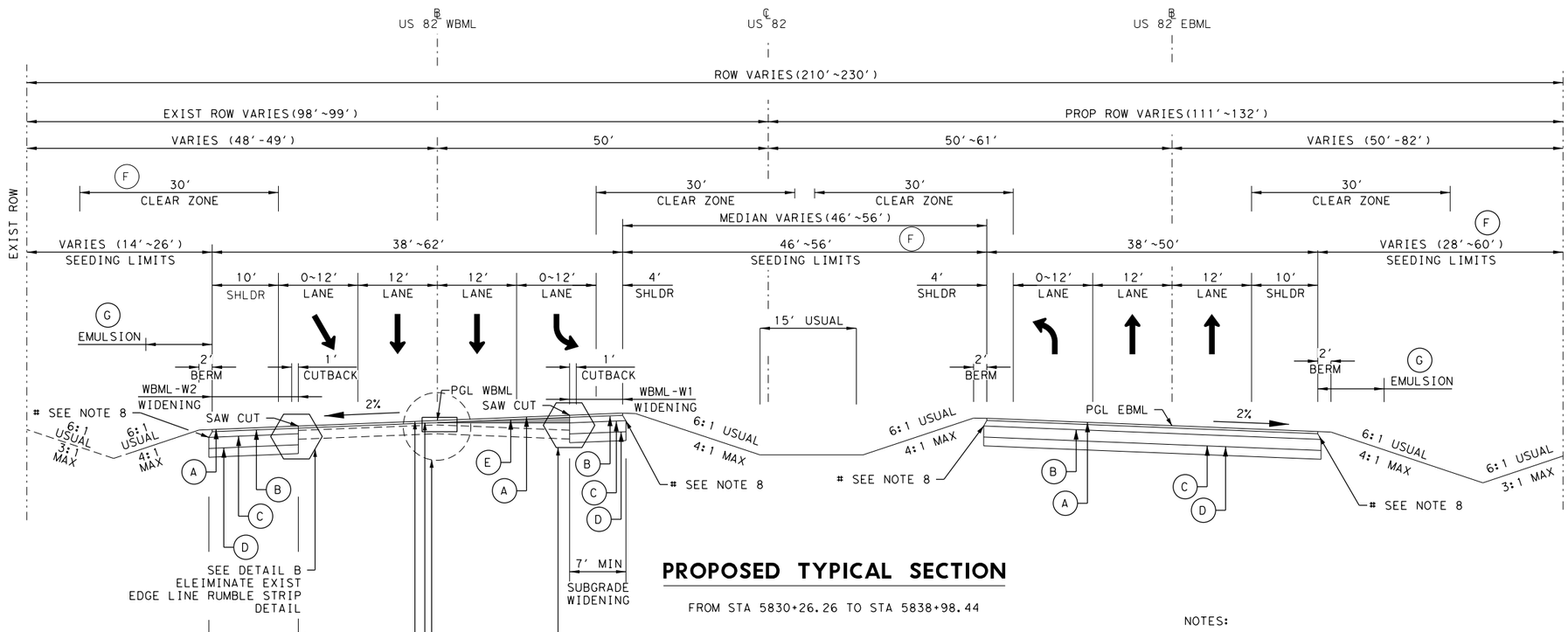
USER: MaMar24 SCALE: 1:20



PROPOSED TYPICAL SECTION

FROM STA 5830+26.26 TO STA 5838+98.44

LEGEND:

- (A) 2" SUPERPAVE MIXTURES SP-C PG70-22
- (B) TACK COAT/5" SUPERPAVE MIXTURES SP-B PG70-22
- (C) PRIME COAT/10" FL BS (CMP IN PLC)(TYA GR1-2)
- (D) 8" CEMENT TREAT (SUBGRADE)
- (E) D-GR HMA TY-D PG 70-22 (LEVEL-UP)
- (F) BOND FBR MTRX SEED (PERM)(RURAL)(SAND)
- (G) EMULS ASPH (EROSN CONT)(SS-1) 10' WIDE SHOULDER TREATMENT
- (H) SEAL COAT: ASPH (AC-20-5TR)/AGGR (TY-PB GR-3 SAC-B)
- (I) 7" FL BS (CMP IN PLACE)(TY A GR1-2)

NOTES:

1. SEE US 82 PLAN & PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. 2" OVERLAY TO BE PLACED ON EXISTING BRIDGE DECKS. CONTRACTOR TO CLEAN AND SEAL JOINTS PREVIOUS TO AND AFTER 2" OVERLAY PLACEMENT. SEE JOINT DETAILS EXISTING BRIDGES SHEET FOR MORE INFORMATION.
3. CONTRACTOR TO VERIFY EXISTING CROWN LOCATION IN FIELD.
4. SEE CROSS SLOPE DATA AND SUPERELEVATION DATA SHEET FOR ADDITIONAL CROSS SLOPE INFORMATION.
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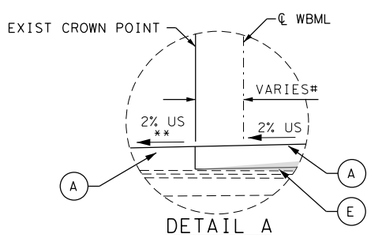
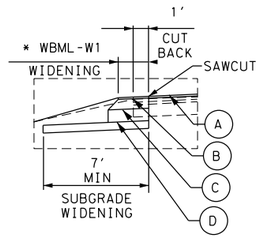
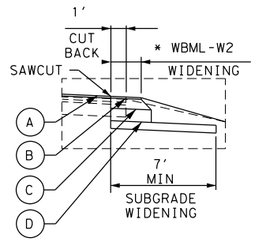
8. SEE TXDOT STANDARD DETAIL TE(HMAC)-11 FOR PAVEMENT EDGE TRANSITION. FOLLOW CONDITION-4 FOR TAPERED EDGE ON NEW OR RECONSTRUCTED PAVEMENT.



DETAIL A
NTS
SEE NOTE 3

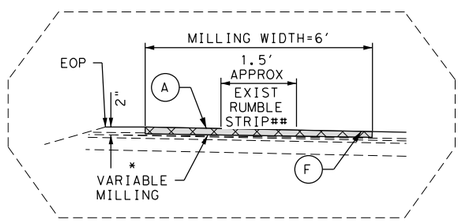


WBML-W1 WIDENING
NTS

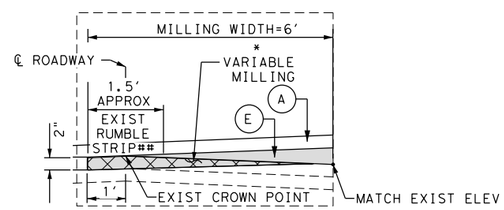


WBML-W2 WIDENING
NTS

* SEE TABLE ON SHEET 9 OF 14 FOR WIDENING WIDTH AND STATIONING



DETAIL B
ELIMINATE EXIST EDGE LINE RUMBLE STRIP
NTS
SEE NOTE 5
* MILLING DEPTH SHOULD ALLOW FOR 2" MINIMUM OF OVERLAY PLACEMENT.



DETAIL C
ELIMINATE EXIST CENTER LINE RUMBLE STRIP
NTS
SEE NOTE 5
* MILLING DEPTH SHOULD ALLOW FOR 2" MINIMUM OF OVERLAY PLACEMENT.

STATE OF TEXAS
FIROZE SHAMS
97215
LICENSED PROFESSIONAL ENGINEER
3/27/2024

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

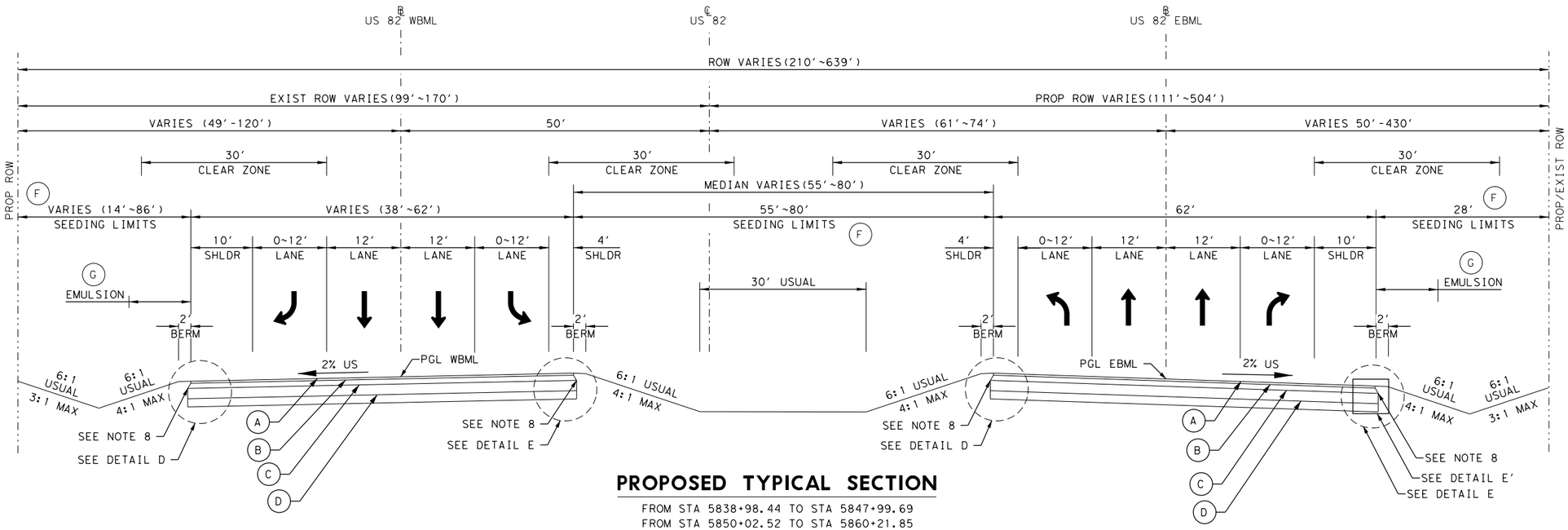
US 82

TYPICAL SECTIONS
US 82

SHEET 7 OF 14

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	10
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82+BW+HALF+PDF+LineWT+Modified.pltcfg
PENTABLE: US82+PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\General\048+US82+TYP01+100%.dgn
DATE: 3/27/2024 TIME: 7:14:11 PM
USER: MaMar24 SCALE: 1:20

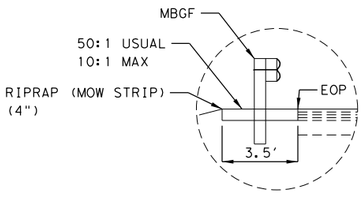


PROPOSED TYPICAL SECTION

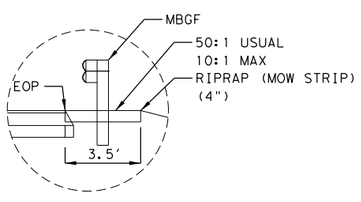
FROM STA 5838+98.44 TO STA 5847+99.69
FROM STA 5850+02.52 TO STA 5860+21.85

LEGEND:

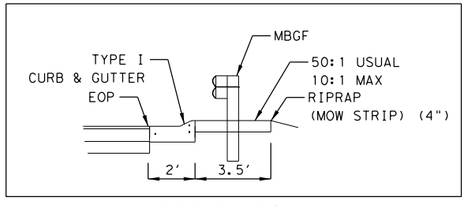
- (A) 2" SUPERPAVE MIXTURES SP-C PG70-22
- (B) TACK COAT/5" SUPERPAVE MIXTURES SP-B PG70-22
- (C) PRIME COAT/10" FL BS (CMP IN PLC)(TYA GR1-2)
- (D) 8" CEMENT TREAT (SUBGRADE)
- (E) D-GR HMA TY-D PG 70-22 (LEVEL-UP)
- (F) BOND FBR MTRX SEED (PERM)(RURAL)(SAND)
- (G) EMULS ASPH (EROSN CONT)(SS-1) 10' WIDE SHOULDER TREATMENT
- (H) SEAL COAT: ASPH (AC-20-5TR)/AGGR (TY-PB GR-3 SAC-B)
- (I) 7" FL BS (CMP IN PLACE)(TY A GR1-2)



DETAIL D
NTS



DETAIL E
NTS



DETAIL E'
NTS
FROM STA 5843+90.39 TO 5846+62.62

NOTES:

1. SEE US 82 PLAN & PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. 2" OVERLAY TO BE PLACED ON EXISTING BRIDGE DECKS. CONTRACTOR TO CLEAN AND SEAL JOINTS PREVIOUS TO AND AFTER 2" OVERLAY PLACEMENT. SEE JOINT DETAILS EXISTING BRIDGES SHEET FOR MORE INFORMATION.
3. CONTRACTOR TO VERIFY EXISTING CROWN LOCATION IN FIELD.
4. SEE CROSS SLOPE DATA AND SUPERELEVATION DATA SHEET FOR ADDITIONAL CROSS SLOPE INFORMATION.
5. SEE REMOVAL SHEETS FOR APPROXIMATE LOCATION OF EXISTING RUMBLE STRIPS. CONTRACTOR TO VERIFY LOCATION OF EXISTING RUMBLE STRIPS IN THE FIELD. SEE NOTE 6.
6. ALL EXISTING EDGE LINE AND CENTER LINE RUMBLE STRIPS LOCATED IN OVERLAY PAVEMENT SECTIONS ARE TO BE MILLED AND FILLED AS DETAILED IN THE "DETAIL B & C - ELIMINATE EXIST EDGE LINE/ CENTER LINE RUMBLE STRIP" DETAILS.
7. SEE DITCH SUMMARY TABLE FOR ADDITIONAL INFORMATION.
8. SEE TXDOT STANDARD DETAIL TE(HMAC)-11 FOR PAVEMENT EDGE TRANSITION. FOLLOW CONDITION-4 FOR TAPERED EDGE ON NEW OR RECONSTRUCTED PAVEMENT.

3/27/2024

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

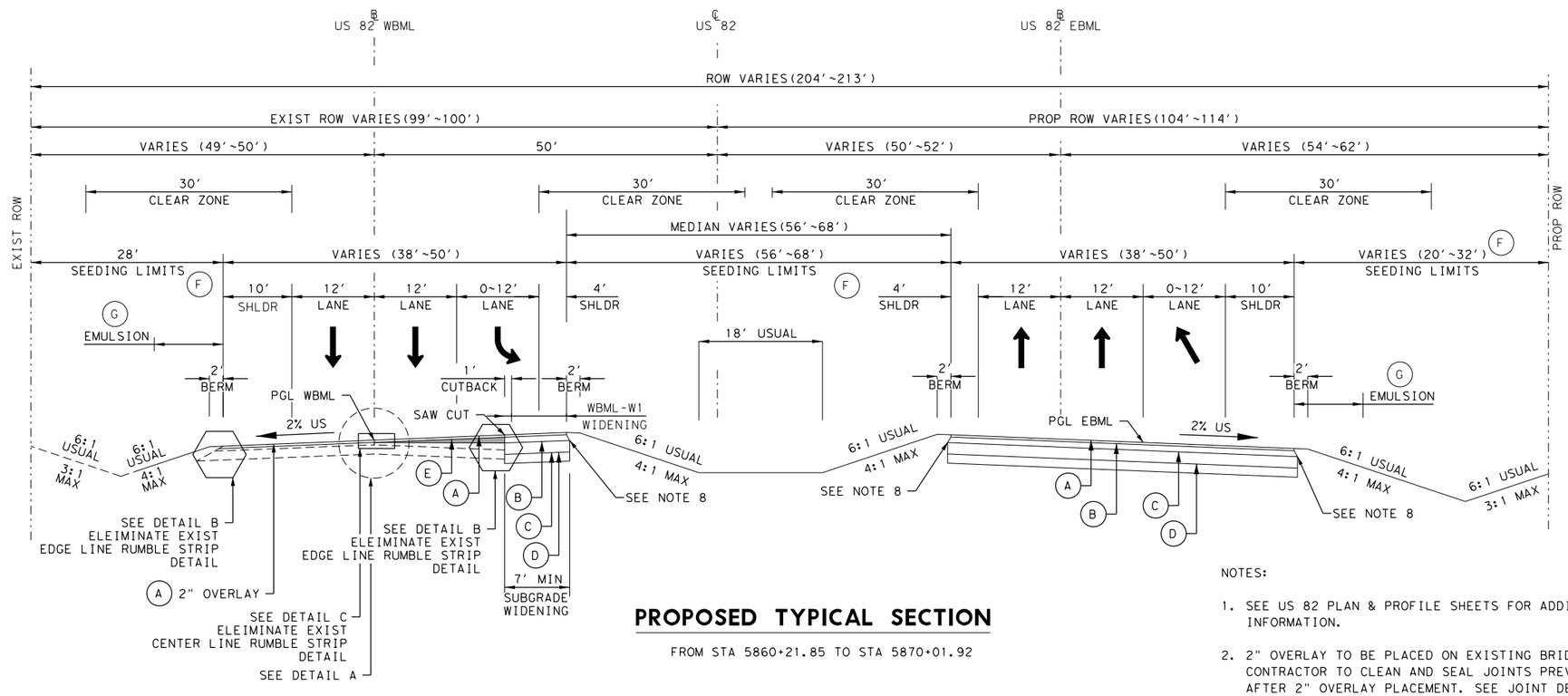
US 82

TYPICAL SECTIONS
US 82

SHEET 8 OF 14

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	11
CHECK FS	CONTROL 0044	SECTION 04	JOB 048	

PLOT DRIVER: US82+BW+HALF+PDF+LineWT+Modified.pltcfg
PENTABLE: US82+PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\General\048+US82+TYP01+100%.dgn
DATE: 3/27/2024 TIME: 7:14:12 PM
USER: MaMar24 SCALE: 1:20



PROPOSED TYPICAL SECTION

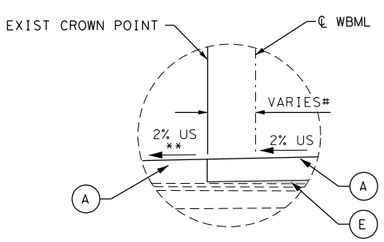
FROM STA 5860+21.85 TO STA 5870+01.92

LEGEND:

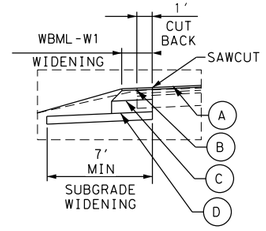
- (A) 2" SUPERPAVE MIXTURES SP-C PG70-22
- (B) TACK COAT/5" SUPERPAVE MIXTURES SP-B PG70-22
- (C) PRIME COAT/10" FL BS (CMP IN PLC)(TYA GR1-2)
- (D) 8" CEMENT TREAT (SUBGRADE)
- (E) D-GR HMA TY-D PG 70-22 (LEVEL-UP)
- (F) BOND FBR MTRX SEED (PERM)(RURAL)(SAND)
- (G) EMULS ASPH (EROSN CONT)(SS-1) 10' WIDE SHOULDER TREATMENT
- (H) SEAL COAT: ASPH (AC-20-5TR)/AGGR (TY-PB GR-3 SAC-B)
- (I) 7" FL BS (CMP IN PLACE)(TY A GR1-2)

NOTES:

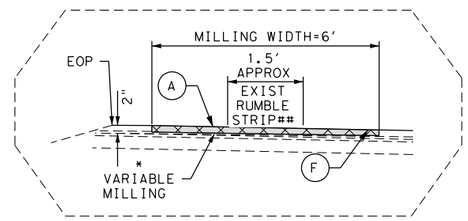
1. SEE US 82 PLAN & PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. 2" OVERLAY TO BE PLACED ON EXISTING BRIDGE DECKS. CONTRACTOR TO CLEAN AND SEAL JOINTS PREVIOUS TO AND AFTER 2" OVERLAY PLACEMENT. SEE JOINT DETAILS EXISTING BRIDGES SHEET FOR MORE INFORMATION.
3. CONTRACTOR TO VERIFY EXISTING CROWN LOCATION IN FIELD.
4. SEE CROSS SLOPE DATA AND SUPERELEVATION DATA SHEET FOR ADDITIONAL CROSS SLOPE INFORMATION.
5. SEE REMOVAL SHEETS FOR APPROXIMATE LOCATION OF EXISTING RUMBLE STRIPS. CONTRACTOR TO VERIFY LOCATION OF EXISTING RUMBLE STRIPS IN THE FIELD. SEE NOTE 6.
6. ALL EXISTING EDGE LINE AND CENTER LINE RUMBLE STRIPS LOCATED IN OVERLAY PAVEMENT SECTIONS ARE TO BE MILLED AND FILLED AS DETAILED IN THE "DETAIL B & C - ELIMINATE EXIST EDGE LINE/ CENTER LINE RUMBLE STRIP" DETAILS.
7. SEE DITCH SUMMARY TABLE FOR ADDITIONAL INFORMATION.
8. SEE TXDOT STANDARD DETAIL TE(HMAC)-11 FOR PAVEMENT EDGE TRANSITION. FOLLOW CONDITION-4 FOR TAPERED EDGE ON NEW OR RECONSTRUCTED PAVEMENT.



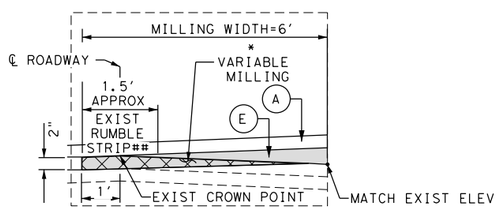
DETAIL A
NTS
SEE NOTE 3
** MATCH EXIST CROSS SLOPE



WBML-W1 WIDENING
NTS



DETAIL B
ELIMINATE EXIST EDGE LINE RUMBLE STRIP
NTS
SEE NOTE 5
* MILLING DEPTH SHOULD ALLOW FOR 2" MINIMUM OF OVERLAY PLACEMENT.



DETAIL C
ELIMINATE EXIST CENTER LINE RUMBLE STRIP
NTS
SEE NOTE 5
* MILLING DEPTH SHOULD ALLOW FOR 2" MINIMUM OF OVERLAY PLACEMENT.

WBML WIDENINING					
	START		END		
SECTION	CHAIN-US-82	CHAIN-WBML	CHAIN-US-82	CHAIN-WBML	WIDTH
WBML-W1	5788+70.90,29.00' LT	25789+74.63,21.00' RT	5797+66.76,29.00' LT	25798+70.49,21.00' RT	7'
WBML-W1	5816+31.75,30.00' LT	25817+35.48,20.00' RT	5825+34.13,30.00' LT	25826+36.43,20.00' RT	8'
WBML-W1	5831+22.12,30.00' LT	25832+23.43,20.00' RT	5838+98.69,30.00' LT	25840+00.00,20.00' RT	8'
WBML-W2	5833+09.35,73.00' LT	25834+10.76,23.00' LT	5838+98.69,73.00' LT	25840+00.00,23.00' LT	11'
WBML-W1	5860+24.85,30.00' LT	25861+26.16,20.00' RT	5869+32.44,30.00' LT	25870+33.76,20.00' RT	8'

3/27/2024

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

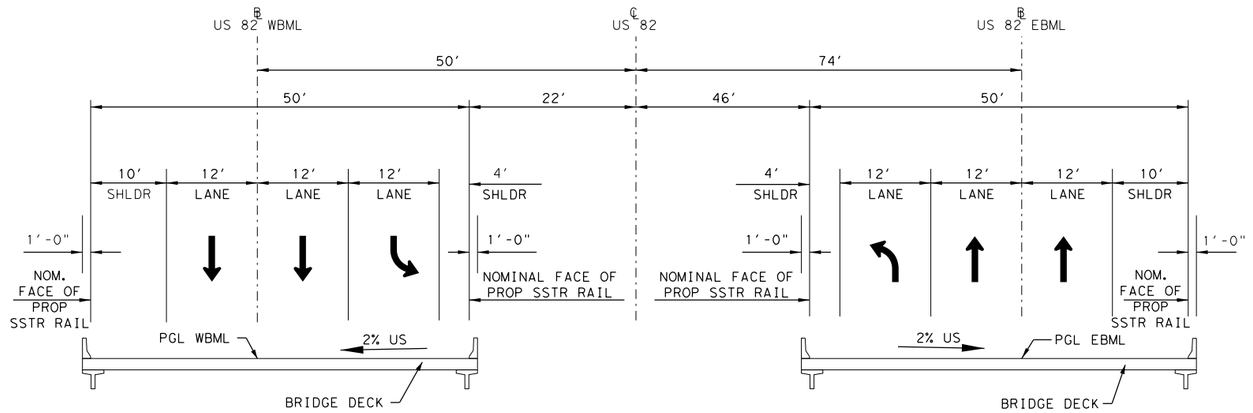
US 82

TYPICAL SECTIONS
US 82

SHEET 9 OF 14

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	12
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWt*Modified.pltcfg
PENTABLE: US82*PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\General\048*US82*TYP01*100%.dgn
DATE: 3/27/2024 TIME: 7:14:12 PM
USER: MaMar24 SCALE: 1:20



PROPOSED BRIDGE TYPICAL SECTION

FROM STA 5847+99.67 TO STA 5850+40.00

LEGEND:

- (A) 2" SUPERPAVE MIXTURES SP-C PG70-22
- (B) TACK COAT/5" SUPERPAVE MIXTURES SP-B PG70-22
- (C) PRIME COAT/10" FL BS (CMP IN PLC)(TYA GR1-2)
- (D) 8" CEMENT TREAT (SUBGRADE)
- (E) D-GR HMA TY-D PG 70-22 (LEVEL-UP)
- (F) BOND FBR MTRX SEED (PERM)(RURAL)(SAND)
- (G) EMULS ASPH (EROSN CONT)(SS-1) 10′ WIDE SHOULDER TREATMENT
- (H) SEAL COAT: ASPH (AC-20-5TR)/AGGR (TY-PB GR-3 SAC-B)
- (I) 7" FL BS (CMP IN PLACE)(TY A GR1-2)

NOTES:

1. SEE US 82 PLAN & PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. SEE CROSS SLOPE DATA AND SUPERELEVATION DATA SHEET FOR ADDITIONAL CROSS SLOPE INFORMATION.
3. SEE DITCH SUMMARY TABLE FOR ADDITIONAL INFORMATION.

STATE OF TEXAS
FIROZE SHAMS
97215
LICENSED PROFESSIONAL ENGINEER
3/27/2024

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

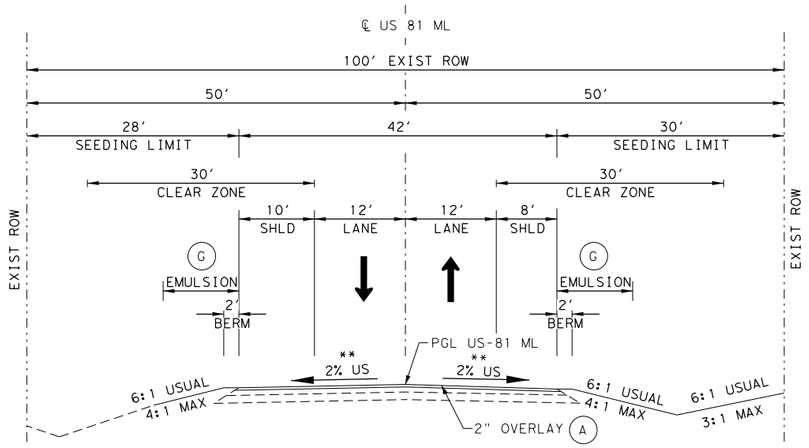
US 82

TYPICAL SECTIONS
US 82

SHEET 10 OF 14

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	13
CHECK FS	CONTROL 0044	SECTION 04	JOB 048	

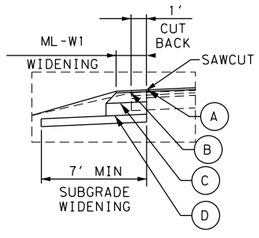
PLOT DRIVER: US82+BW+HALF+PDF+LineWT+Modified.pltcfg
PENTABLE: US82+PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\General\048+US82+TYP01+100%.dgn
DATE: 3/27/2024 TIME: 7:14:12 PM USER: MaMar24 SCALE: 1:20



PROPOSED TYPICAL SECTION

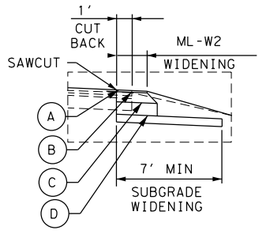
FROM STA 5003+00.00 TO 5003+37.75

** MATCH EXIST CROSS SLOPE



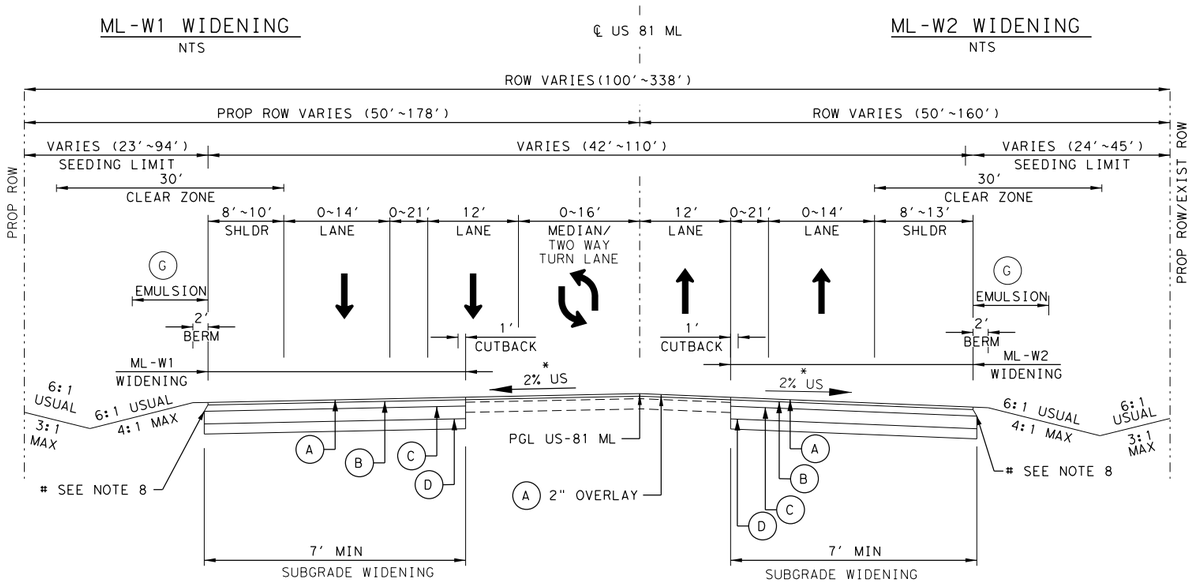
ML-W1 WIDENING

NTS



ML-W2 WIDENING

NTS



PROPOSED TYPICAL SECTION

FROM STA 5003+37.75 TO 5014+58.18 (WIDEN ON SB SIDE ONLY)
FROM STA 5014+58.18 TO 5019+95.00 (WIDEN ON BOTH SB AND NB SIDE)
FROM STA 5035+65.00 TO 5048+95.00 (WIDEN ON BOTH SB AND NB SIDE)
FROM STA 5048+95.00 TO 5055+00.00 (WIDEN ON NB SIDE ONLY)

* INCLUDES SUPERELEVATED SECTION - SEE CROSS SLOPE DATA AND SUPERELEVATION DATA TABLE FOR FURTHER INFORMATION

NOTES:

1. SEE US 81 PLAN & PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. CONTRACTOR TO VERIFY EXISTING CROWN LOCATION IN FIELD.
3. SEE CROSS SLOPE DATA AND SUPERELEVATION DATA SHEET FOR ADDITIONAL CROSS SLOPE INFORMATION.
4. SEE REMOVAL SHEETS FOR APPROXIMATE LOCATION OF EXISTING RUMBLE STRIPS. CONTRACTOR TO VERIFY LOCATION OF EXISTING RUMBLE STRIPS IN THE FIELD. SEE NOTE 6.
5. ALL EXISTING EDGE LINE AND CENTER LINE RUMBLE STRIPS LOCATED IN OVERLAY PAVEMENT SECTIONS ARE TO BE MILLED AND FILLED AS DETAILED IN THE "ELIMINATE EXIST EDGE LINE/CENTER LINE RUMBLE STRIP" DETAILS.
6. SEE DITCH SUMMARY TABLE FOR ADDITIONAL INFORMATION.
7. SEE TXDOT STANDARD DETAIL TE(HMAC)-11 FOR PAVEMENT EDGE TRANSITION. FOLLOW CONDITION-4 FOR TAPERED EDGE ON NEW OR RECONSTRUCTED PAVEMENT.

LEGEND:

- (A) 2" SUPERPAVE MIXTURES SP-C PG70-22
- (B) TACK COAT/5" SUPERPAVE MIXTURES SP-B PG70-22
- (C) PRIME COAT/10" FL BS (CMP IN PLC)(TYA GR1-2)
- (D) 8" CEMENT TREAT (SUBGRADE)
- (E) D-GR HMA TY-D PG 70-22 (LEVEL-UP)
- (F) BOND FBR MTRX SEED (PERM)(RURAL)(SAND)
- (G) EMULS ASPH (EROSN CONT)(SS-1) 10′ WIDE SHOULDER TREATMENT
- (H) SEAL COAT: ASPH (AC-20-5TR)/AGGR (TY-PB GR-3 SAC-B)
- (I) 7" FL BS (CMP IN PLACE)(TY A GR1-2)

US-81 ML WIDENING			
	CHAIN - US 81 ML		
SECTION	START	END	WIDTH
ML-W1	5003+37.81,19.00′ LT	5007+87.06,19.00′ LT	VARIES(2′~10′)
ML-W1	5007+87.06,19.00′ LT	5011+14.25,19.00′ LT	VARIES(10′~16.5′)
ML-W1	5011+14.25,19.00′ LT	5011+14.25,19.00′ LT	5011+14.25,19.00′ LT
ML-W1	5014+85.18,19.00′ LT	5019+95.00,19.00′ LT	VARIES(28.5~29′)
ML-W1	5035+65.00,13.50′ LT	5037+00.09,13.50′ LT	11′
ML-W1	5037+00.09,13.50′ LT	5039+00.00,08.50′ LT	VARIES(11′~13.5′)
ML-W1	5039+00.00,08.50′ LT	5042+00.00,10.00′ LT	VARIES(13.5′~31.5′)
ML-W1	5042+00.00,10.00′ LT	5042+99.79,12.00′ LT	VARIES(31.5′~22.25′)
ML-W1	5042+99.79,12.00′ LT	5043+99.95,13.5′ LT	VARIES(22.25′~16′)
ML-W1	5043+99.95,13.50′ LT	5046+00.00,11.00′ LT	VARIES(16′~11′)
ML-W1	5046+00.00,11.00′ LT	5048+95.00,11.00′ LT	VARIES(11′~9′)
ML-W2	5014+85.00,12.00′ RT	5019+84.21,12.00′ RT	VARIES(13.25′~31′)
ML-W2	5035+65.00,15.00′ RT	5036+99.90,15.00′ RT	7′
ML-W2	5036+99.90,15.00′ RT	5037+99.77,15.36′ RT	VARIES(6.75′~7′)
ML-W2	5037+99.77,15.36′ RT	5039+00.00,18.00′ RT	VARIES(4′~7′)
ML-W2	5039+00.00,18.00′ RT	5042+00.00,18.00′ RT	VARIES(4′~37′)
ML-W2	5042+00.00,18.00′ RT	5044+00.00,13.50′ RT	VARIES(19′~23′)
ML-W2	5044+00.00,13.50′ RT	5048+30.00,13.50′ RT	VARIES(17.5′~19′)
ML-W2	5048+30.00,13.50′ RT	5051+00.00,18.00′ RT	VARIES(8.5′~17.5′)
ML-W2	5051+00.00,18.00′ RT	5055+00.00,18.00′ RT	VARIES(8.5′~2.5′)

STATE OF TEXAS
FIROOZ SHAMS
97215
LICENSED
PROFESSIONAL ENGINEER

Firooz Shams
3/27/2024

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

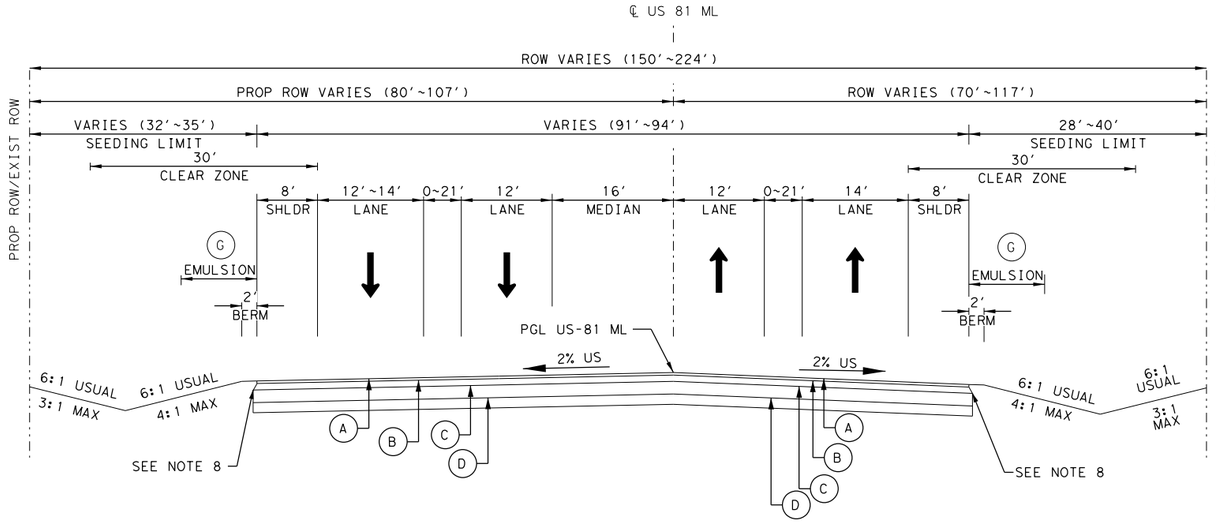
US 82

TYPICAL SECTIONS
US 81

SHEET 11 OF 14

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	14
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\General\048*US82*TYP01*002.dgn
DATE: 3/27/2024 TIME: 7:14:13 PM
USER: MaMar24 SCALE: 1:20



PROPOSED TYPICAL SECTION

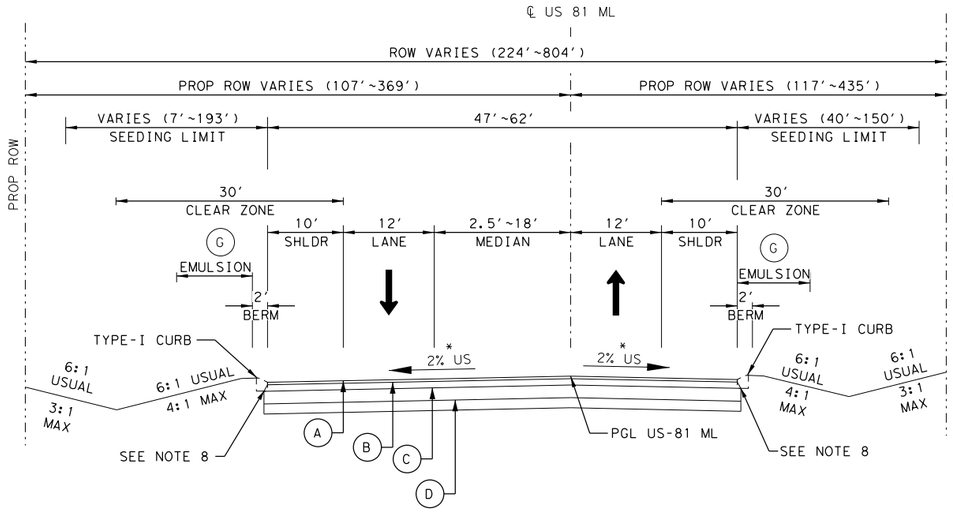
FROM 5019+95.00 TO STA 5023+02.29

NOTES:

1. SEE US 81 PLAN & PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. CONTRACTOR TO VERIFY EXISTING CROWN LOCATION IN FIELD.
3. SEE CROSS SLOPE DATA AND SUPERELEVATION DATA SHEET FOR ADDITIONAL CROSS SLOPE INFORMATION.
4. SEE REMOVAL SHEETS FOR APPROXIMATE LOCATION OF EXISTING RUMBLE STRIPS. CONTRACTOR TO VERIFY LOCATION OF EXISTING RUMBLE STRIPS IN THE FIELD. SEE NOTE 6.
5. ALL EXISTING EDGE LINE AND CENTER LINE RUMBLE STRIPS LOCATED IN OVERLAY PAVEMENT SECTIONS ARE TO BE MILLED AND FILLED AS DETAILED IN THE "ELIMINATE EXIST EDGE LINE/CENTER LINE RUMBLE STRIP" DETAILS.
6. SEE DITCH SUMMARY TABLE FOR ADDITIONAL INFORMATION.
7. SEE TXDOT STANDARD DETAIL TE(HMAC)-11 FOR PAVEMENT EDGE TRANSITION. FOLLOW CONDITION-4 FOR TAPERED EDGE ON NEW OR RECONSTRUCTED PAVEMENT.

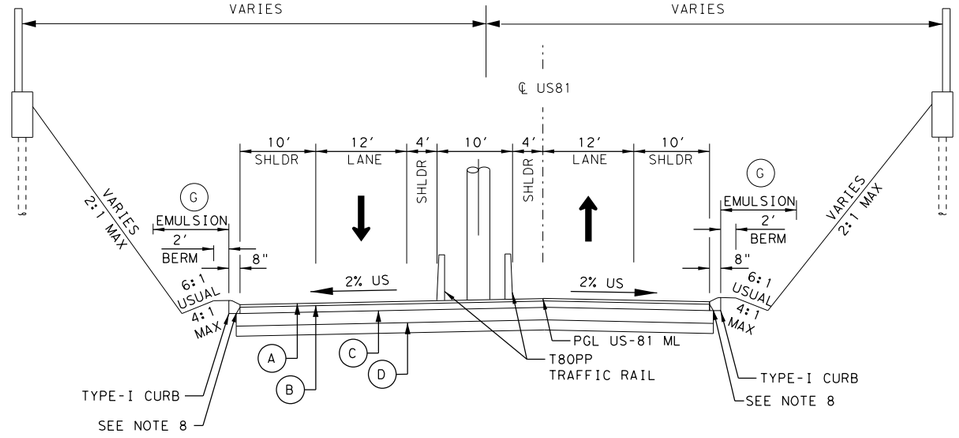
LEGEND:

- (A) 2" SUPERPAVE MIXTURES SP-C PG70-22
- (B) TACK COAT/5" SUPERPAVE MIXTURES SP-B PG70-22
- (C) PRIME COAT/10" FL BS (CMP IN PLC)(TYA GR1-2)
- (D) 8" CEMENT TREAT (SUBGRADE)
- (E) D-GR HMA TY-D PG 70-22 (LEVEL-UP)
- (F) BOND FBR MTRX SEED (PERM)(RURAL)(SAND)
- (G) EMULS ASPH (EROSN CONT)(SS-1) 10' WIDE SHOULDER TREATMENT
- (H) SEAL COAT: ASPH (AC-20-5TR)/AGGR (TY-PB GR-3 SAC-B)
- (I) 7" FL BS (CMP IN PLACE)(TY A GR1-2)



PROPOSED TYPICAL SECTION

FROM STA 5023+02.29 TO 5026+40.00
FROM STA 5026+40.00 TO 5027+80.00 (CURB SECTION)
FROM STA 5030+85.00 TO 5032+20.00 (CURB SECTION)
* FROM STA 5032+20.00 TO 5035+65.00
* INCLUDES SUPERELEVATED SECTION - SEE CROSS SLOPE DATA AND SUPERELEVATION DATA TABLE FOR FURTHER INFORMATION



PROPOSED TYPICAL SECTION

FROM STA 5027+80.00 TO 5030+85.00

STATE OF TEXAS
FIROZE SHAMS
97215
LICENSED
PROFESSIONAL ENGINEER
3/27/2024

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

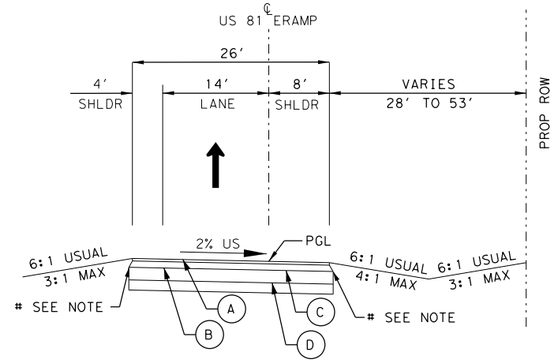
US 82

TYPICAL SECTIONS
US 81

SHEET 12 OF 14

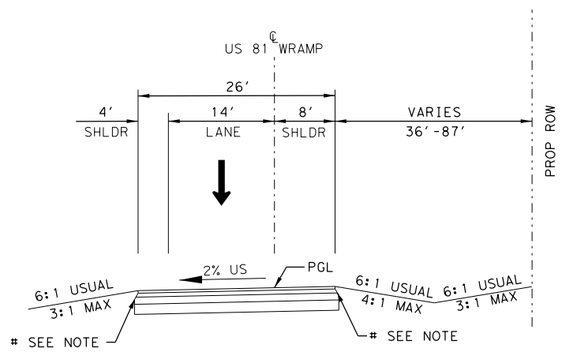
DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	15
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\General\048*US82*TYP01*100%.dgn
DATE: 3/27/2024 TIME: 7:14:13 PM
USER: MaMar24 SCALE: 1:20



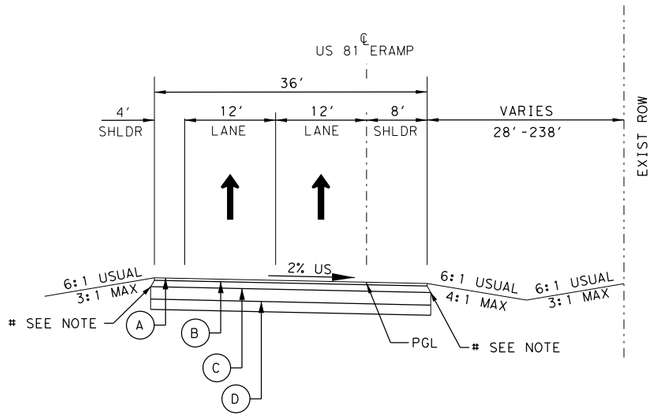
PROPOSED US 81 RAMP TYPICAL SECTION

(NB RAMP N-E CORNER)



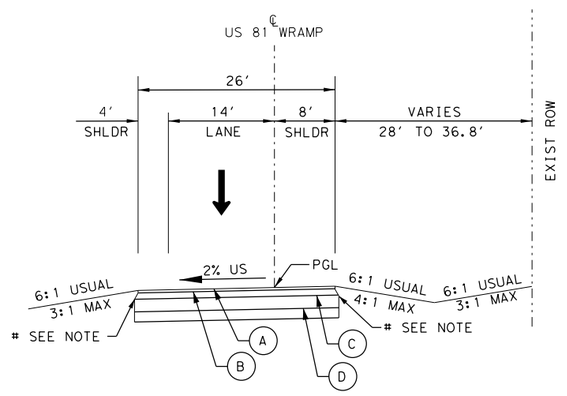
PROPOSED US 81 RAMP TYPICAL SECTION

(SB RAMP N-W CORNER)



PROPOSED US 81 RAMP TYPICAL SECTION

(NB RAMP S-E CORNER)



PROPOSED US 81 RAMP TYPICAL SECTION

(SB RAMP S-W CORNER)

LEGEND:

- (A) 2" SUPERPAVE MIXTURES SP-C PG70-22
- (B) TACK COAT/5" SUPERPAVE MIXTURES SP-B PG70-22
- (C) PRIME COAT/10" FL BS (CMP IN PLC)(TYA GR1-2)
- (D) 8" CEMENT TREAT (SUBGRADE)
- (E) D-GR HMA TY-D PG 70-22 (LEVEL-UP)
- (F) BOND FBR MTRX SEED (PERM)(RURAL)(SAND)
- (G) EMULS ASPH (EROSN CONT)(SS-1) 10' WIDE SHOULDER TREATMENT
- (H) SEAL COAT: ASPH (AC-20-5TR)/AGGR (TY-PB GR-3 SAC-B)
- (I) 7" FL BS (CMP IN PLACE)(TY A GR1-2)

NOTES:

1. SEE US 81 EAST & WEST RAMP PLAN & PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. CONTRACTOR TO VERIFY EXISTING CROWN LOCATION IN FIELD.
3. SEE CROSS SLOPE DATA AND SUPERELEVATION DATA SHEET FOR ADDITIONAL CROSS SLOPE INFORMATION.
4. SEE REMOVAL SHEETS FOR APPROXIMATE LOCATION OF EXISTING RUMBLE STRIPS. CONTRACTOR TO VERIFY LOCATION OF EXISTING RUMBLE STRIPS IN THE FIELD. SEE NOTE 6.
5. ALL EXISTING EDGE LINE AND CENTER LINE RUMBLE STRIPS LOCATED IN OVERLAY PAVEMENT SECTIONS ARE TO BE MILLED AND FILLED AS DETAILED IN THE "ELIMINATE EXIST EDGE LINE/CENTER LINE RUMBLE STRIP" DETAILS.
6. SEE DITCH SUMMARY TABLE FOR ADDITIONAL INFORMATION.
7. SEE TXDOT STANDARD DETAIL TE(HMAC)-11 FOR PAVEMENT EDGE TRANSITION. FOLLOW CONDITION-4 FOR TAPERED EDGE ON NEW OR RECONSTRUCTED PAVEMENT.

3/27/2024

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

TYPICAL SECTIONS
US 82

SHEET 13 OF 14

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	16
CHECK FS	CONTROL 0044	SECTION 04	JOB 048	

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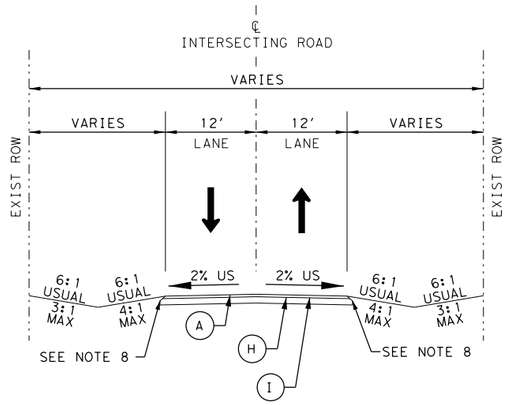
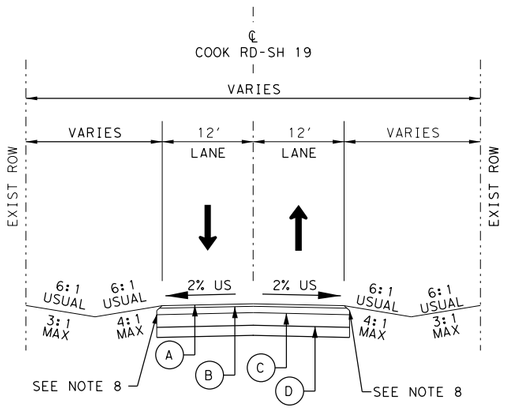
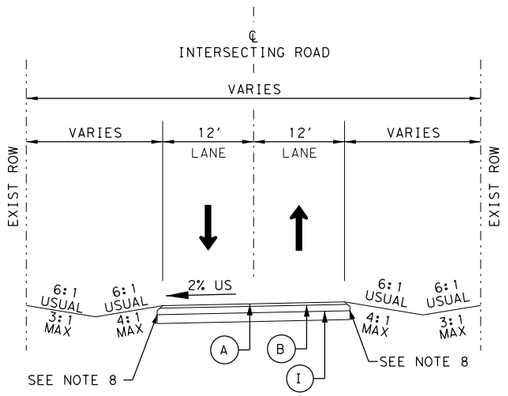


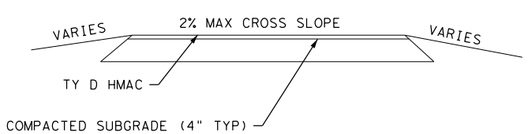
PROPOSED INTERSECTING ROAD TYPICAL SECTION



PROPOSED COOK RD-SH 19 TYPICAL SECTION



PROPOSED LOCAL ROAD TYPICAL SECTION



ACP DRIVEWAY TYPICAL SECTION

LEGEND:

- (A) 2" SUPERPAVE MIXTURES SP-C PG70-22
- (B) TACK COAT/5" SUPERPAVE MIXTURES SP-B PG70-22
- (C) PRIME COAT/10" FL BS (CMP IN PLC)(TYA GR1-2)
- (D) 8" CEMENT TREAT (SUBGRADE)
- (E) D-GR HMA TY-D PG 70-22 (LEVEL-UP)
- (F) BOND FBR MTRX SEED (PERM)(RURAL)(SAND)
- (G) EMULS ASPH (EROSN CONT)(SS-1) 10′ WIDE SHOULDER TREATMENT
- (H) SEAL COAT: ASPH (AC-20-5TR)/AGGR (TY-PB GR-3 SAC-B)
- (I) 7" FL BS (CMP IN PLACE)(TY A GR1-2)

NOTES:

1. SEE PLAN & PROFILE SHEETS FOR ROADS CROSSING US 82 FOR ADDITIONAL INFORMATION.
2. CONTRACTOR TO VERIFY EXISTING CROWN LOCATION IN FIELD.
3. SEE CROSS SLOPE DATA AND SUPERELEVATION DATA SHEET FOR ADDITIONAL CROSS SLOPE INFORMATION.
4. SEE REMOVAL SHEETS FOR APPROXIMATE LOCATION OF EXISTING RUMBLE STRIPS. CONTRACTOR TO VERIFY LOCATION OF EXISTING RUMBLE STRIPS IN THE FIELD. SEE NOTE 6.
5. ALL EXISTING EDGE LINE AND CENTER LINE RUMBLE STRIPS LOCATED IN OVERLAY PAVEMENT SECTIONS ARE TO BE MILLED AND FILLED AS DETAILED IN THE "ELIMINATE EXIST EDGE LINE/CENTER LINE RUMBLE STRIP" DETAILS.
6. SEE DITCH SUMMARY TABLE FOR ADDITIONAL INFORMATION.
7. SEE TXDOT STANDARD DETAIL TE(HMAC)-11 FOR PAVEMENT EDGE TRANSITION. FOLLOW CONDITION-4 FOR TAPERED EDGE ON NEW OR RECONSTRUCTED PAVEMENT.

STATE OF TEXAS
FIROZE SHAMS
97215
LICENSED PROFESSIONAL ENGINEER
3/27/2024

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

TYPICAL SECTIONS
US 81

SHEET 14 OF 14

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	17
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

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SCALE: 1:20
DATE: 3/27/2024
TIME: 7:14:14 PM

GENERAL NOTES

Basis of Estimate:

Item - Description	Rate*	Unit
166 - Fertilizer	100 LB/Acre Nitrogen with a 3:1:1 ratio of N, P, K	LB
168 - Vegetative Watering	1.4 GAL/SY per Application every 2 weeks for 3 months	MG
275 - Cement (8”)	3% by weight Est @ 19 LB / SY	TON
310 – Prime Coat (MC-30 or AE-P)	0.20 GAL/SY	GAL
314 – Emulsified Asphalt Treatment (Erosion Control) (MS-2 or SS-1)	0.25 GAL/SY	GAL
316 -ASPHALT RATE	0.38 GAL/SY	
316 - AGGREGATE RATE	1 CY/120 SY	
3076 –Tack Coat	0.10 Gal / SY Residual Asphalt (For New Asphalt Overlay) 0.10 Gal / SY (For Level-Up)	
3077 – Superpave Mixtures	110 LB / SY / Inch	TON
677 - Eliminating Existing Pavement Markings and Markers	25,000 LF/Day	LF

For contractor’s information only, actual production rates may vary.

General Requirements

Contractor questions on this project are to be addressed to the following individual(s):

Colby Shelton, P.E.: Colby.Shelton@txdot.gov

Questions may be submitted via the Letting Pre-Bid Q&A web page. This webpage can be accessed from the Notice to Contractors dashboard located at the following Address:

https://tableau.txdot.gov/views/ProjectInformationDashboard/NoticetoContractors

All contractor questions will be reviewed by the Engineer. All questions and any corresponding responses that are generated will be posted through the same Letting Pre-Bid Q&A web page.

The Letting Pre-Bid Q&A web page for each project can be accessed by using the dashboard to navigate to the project you are interested in by scrolling or filtering the dashboard using the controls on the left. Hover over the blue hyperlink for the project you want to view the Q&A for and click on the link in the window that pops up.

Bid Item Specific General Notes

Item 4 - Scope of Work
For the preconstruction conference submit a work schedule; temporary water pollution control plan; material sources; the person responsible for the SW3P; written utility coordination plan; certification statements; request for proposed subcontractors and letters designating the project superintendent, safety officer, and payroll officer at the preconstruction conference.

Item 5 - Control of the Work
Provide the Engineer a minimum 24 hours’ notice for work requiring inspection or testing.

When a precast or cast-in-place concrete element is included in the plans, a precast concrete alternate may be submitted in accordance with “Standard Operating Procedure for Alternate Precast Proposal Submission” found online at https://www.txdot.gov/inside-txdot/forms-publications/consultants-contractors/publications/bridge.html#design. Acceptance or denial of an alternate is at the sole discretion of the Engineer. Impacts to the project schedule and any additional costs resulting from the use of alternates are the sole responsibility of the Contractor.

Item 6 - Control of Materials
In accordance with Production Sampling for sampler will split each HMAC sample into three (3) equal portions in accordance with TEX-200-F and label these portions as “Contractor”, “Engineer”, and Referee”. Deliver Engineer and Referee samples to the Graham Area Office Laboratory for testing.

To comply with the latest provisions of Build America, Buy America Act (BABA Act) of the Bipartisan Infrastructure Law, the contractor must submit a notarized original of the TxDOT

Construction Material Buy America Certification Form for all items classified as construction materials. This form is not required for materials classified as a manufactured product.

Refer to the Buy America Material Classification Sheet for clarification on material categorization.

The Buy America Material Classification Sheet is located at the below link.

https://www.txdot.gov/business/resources/materials/buy-america-material-classification-sheet.html for clarification on material categorization.

Item 7 - Legal Relations and Responsibilities

- No significant traffic generator events identified for this project.

Use an all-weather material in conjunction with item 7.2.4. This work will not be paid for directly but will be subsidiary to various bid items.

The Contractor's responsible person as described in item 7.2.6.1 must be able to respond within 45 minutes of being notified.

Item 8 – Prosecution and Progress

For this project, contract time will be computed as described in Item 8 based on a Standard Workweek (8.3.1.4.). For this project, the schedules shall be prepared and submitted as described in Item 8 Critical Path Method (CPM) (8.5.5.2).

Item Specific

Item 100 – Preparing Right of Way

Areas of brush removal and tree trimming shown in the plans will be paid for under Item 100, Preparing Right of Way. Mulch and/or shred brush and trimmed limbs and place material on the backslope in those areas as an erosion deterrent. Follow procedures for tree trimming as shown on Maintenance Standard TRB-15(1).

Areas of fencing, retaining walls, and other such obstructions are to be removed as directed and paid for under Item 100, Preparing Right of Way.

Item 132 - Embankment

All borrow/aggregate sites shall meet the requirements of the Texas Aggregate Quarry and Pit Safety Act which can be found at www.txdot.gov/inside-txdot/division/maintenance/quarry.html This material shall consist of suitable earth material such as loam, clay or other materials that will form a stable embankment and be free from vegetation or other objectionable matter. Any embankment needed from a borrow pit must first be approved by the Engineer.

Windrow approximately 4" of existing grass and topsoil adjacent to the right of way line or vegetative buffer zone prior to beginning earthwork operations. Upon completion of earthwork

operations scarify the slopes and ditches longitudinally to a depth of approximately 4 inches and return the windrowed material to the slopes and the ditches as a permanent erosion control measure. This work will not be paid for directly but is considered subsidiary to the various bid items.

Slopes and grades shown in the typical sections may be changed in the field as directed by the Engineer to facilitate positive drainage. No direct payment shall be made for this work.

Item 164 - Seeding for Erosion Control

Temporary seeding will be required in several small areas as work progresses to comply with the storm water pollution prevention plan and may require multiple mobilizations of seeding crew. The Engineer may blend temporary and permanent seeding according to the temperatures and time of year in order to achieve maximum coverage in the least amount of time.

The contractor is responsible for the protection and maintenance of all seeded areas until final acceptance of the project. Maintenance includes:

1. Protection of seeded and mulched areas against traffic.

2. Mowing of weeds and tall vegetation, if needed, to prevent loss of soil moisture or choking out of grass seedlings. Mowing will be done as directed by the Engineer and will not be paid for directly.

Item 166 - Fertilizer

Fertilize all areas of the project that are seeded. Payment is subsidiary to Item 164.

Item 168 - Vegetative Watering

Water as directed by the Engineer all areas that receive seed to sustain grass growth to obtain a minimum 70% vegetative cover within the right of way. This may require the contractor to water the newly established grass for a period of up to three months after all other work on the contract is completed and before the project is accepted. Watering shall be done at times determined by the Engineer in order to minimize any loss due to evaporation.

Item 247 -- Flexible Base

Flexible base material shall consist of crushed limestone.

When a commercial source is utilized with a known passing triaxial test history, the triaxial requirement may be waived by the Engineer. A copy of the recent passing test results must be obtained from the Wichita Falls District Laboratory and placed in the project records.

Type A, Grade 1-2 Flexible Base will have the following grading requirements:

Retained on 2 inch Sieve	0%
Retained on 7/8 inch Sieve	10 - 35%
Retained on #4 Sieve	45 - 75%
Retained on #40 Sieve	65 - 90%

Highway: US 82 **Control:** 0044-04-048

Item 275 – Cement Treatment (Road Mixed)
Cement percentage in the Basis of Estimate are for estimating purposes only. The target range value of 150 to 200 psi Unconfined Compressive Strength is required.

Item 316—Seal Coat
Furnish crushed stone of Type PB Grade 3 of the following gradation for this item:

Retained on	Percent by mass
5/8"	0-5
1/2"	20-40
3/8"	80-100
#4	---------
#8	99-100

The target AC content for pre-coating aggregate will be 1.0%.

All sweeping is to be performed under the same traffic control as the seal coat operation. Sweep all loose aggregate and clean up stockpile locations and ditches from completed references before beginning seal coat on another reference. Sweep completed references at the direction of the Engineer as loose rock accumulates. Provide additional brooms as necessary to perform safely on completed references without causing delay to seal coat operations. Delays caused by insufficient equipment mobilization will be the responsibility of the Contractor.

Seal coat aggregate stockpiles that are determined by the Engineer to be wet will not be used until they have had adequate time to dry as determined by the Engineer.

Excess aggregate in stockpiles will remain the property of the Contractor and will be removed from the projects within 30 days of notification. Clean stockpile areas and repair damages as directed by the Engineer prior to the removal of barricades.

Contractor will be required to provide transverse variable rates as directed by the Engineer.

Do not begin asphalt shots until ALL trucks are loaded and in position behind the aggregate spreader box.

Item 354 – Planning and Texturing Pavement
Refer to the Hot Mix Longitudinal Joint Detail for all edge treatments. Edge treatments will be considered subsidiary to item 354.

Construct butt joints at all locations where planning, inlay, and overlay operations begin and end.

Separate the asphalt pavement from the base material. Stockpile the recycled asphalt pavement and flex base into separate stockpiles at US 82 and SH 59 Intersection in Saint Jo.

Contractor to verify manhole locations before milling operations begin.

Highway: US 82 **Control:** 0044-04-048

Item 400 – Excavation and Backfill for Structures
Use an approved maintenance hot mix design for restoring of the pavement structure. All hot mix testing will be waived. Compact the mixture using a vibratory steel wheel roller.

Item 402 – Trench Excavation Protection
No additional payment will be made for backfill material if the contractor elects to bench or slope for trench excavation protection.

For this project, a trench is defined as follows:

"Trench (Trench Excavation Protection)" means a narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet (4.6 m). If forms or other structures are installed or constructed in an excavation so as to reduce the dimension measured from the forms or structure to the side of the excavation to 15 feet (4.6 m) or less (measured at the bottom of the excavation), the excavation is also considered to be a trench.

Item 403– Special Shoring
The Contractor is responsible for identifying temporary special shoring areas prior to bidding the project. No additional payment will be made for quantities exceeding the engineer's plans estimate for this item.

For this project shoring (special shoring) is defined as follows:

"Shoring (Shoring system)" means a structure such as a metal hydraulic, mechanical, or timber shoring system that supports the sides of an excavation and which is designed to prevent cave-ins.

Protect trenches, vertical walls, and boring pits 5 ft. deep or deeper in accordance with OSHA Standards and Interpretations, 29 CFR 1926, Subpart P, "Excavations."

Item 432 – Riprap
The use of synthetic fiber reinforcement shall not be allowed for this item.

Item 440 – Reinforcement for Concrete
Provide reinforcing steel with epoxy coating meeting the requirements of item 440 for the following bridge components: abutments, bents, columns, approach slab, slab, concrete traffic barrier, and rail (bridge and culvert). If not otherwise shown on the plans, the lap length of coated bars must be equal to 1.3 times the lap length of non-coated bars in "Item 440".

Item 502 - Barricades, Signs, and Traffic Handling
Work vehicles within 30 feet of the traveled way shall have strobe lights or rotating beacons in use.

Work will not be permitted without adequate traffic control in place as determined by the Engineer.

Highway: US 82 **Control:** 0044-04-048

Contractor shall store all traffic control devices not currently being used at a location approved by the Engineer.

The Traffic Control Plan (TCP) for this project includes the plans, the Texas Manual on Traffic Control Devices, Barricade and Construction Standard Sheets, Standard TCP Sheets, and as otherwise required by the Engineer.

The Contractor's person responsible for TCP compliance is available by local telephone 24 hours a day and must respond to traffic control needs within 45 minutes of being notified.

Work will not be permitted without adequate traffic control devices in place. Work will only be permitted on one side of the roadway at any time.

The Contractor Force Account “Safety Contingency” that has been established for this project is intended to be utilized for work zone enhancements, to improve the effectiveness of the Traffic Control Plan, that could not be foreseen in the project planning and design stage. These enhancements will be mutually agreed upon by the Engineer and the Contractor’s Responsible Person based on weekly or more frequent traffic management reviews on the project. The Engineer may choose to use existing bid items if it does not slow the implementation of enhancement.

Wear appropriate personal protective equipment at all times while outside of vehicles and equipment on the project.

Provide adequate flagging on side roads to ensure that traffic flow is not compromised during one-way traffic control operations.

Repair barricades within 48 hours after barricade report has been delivered to the Contractor. Failure to comply will cease all work until barricades are repaired to the satisfaction of the Department. Replace all damaged traffic control devices immediately. Remove any damaged traffic control devices from the project within 24 hours.

Failure to make necessary corrections to Traffic Control items based on barricade inspections will be cause for withholding the monthly estimate until such corrections are made.

Remove from the roadway and store in a central location approved by the Engineer all temporary traffic control devices, such as cones, barrels, portable signs, vertical panels, etc., which will not be used within 24 hours. This includes removal of temporary traffic control devices from the roadway over the weekend.

Refer to the “Worksheet for Edge Condition Treatment Types” for the proper traffic control devices to be used for the various edge conditions.

Place portable CW 21-2 "FRESH OIL" signs prior to the placing of asphalt onto roadway and remove signs when they are no longer needed.

Highway: US 82 **Control:** 0044-04-048

Cover or remove portable CW 8-12 "NO CENTER STRIPE" signs immediately upon completion of striping of the roadway.

Perform all seal-coat operations in the same direction as the direction of traffic for the lane being sealed.

Law enforcement assistance will be required for this project and is expected to be required for major traffic control changes and initial lane closures. Coordinate with local law enforcement and arrange for law enforcement as directed or as agreed by the Engineer. Complete the required Form 318 and provide to the department and submit invoices that agree with the form for payment at the end of each month for approved services and as required by the engineer.

The contractor shall provide full-time off-duty uniformed certified peace officers in officially marked vehicles, as part of traffic control operations. The peace officers shall be able to show proof of certification by the Texas Commission on Law Enforcement Officers Standards. All certified peace officers shall be able to write a citation within the jurisdiction in which they are performing the traffic control.

Item 506 - Temporary Erosion, Sedimentation, and Environmental Controls

The disturbed area for this project, as shown on the plans, is 189.78 acres. The total disturbed area (TDA) will establish the required authorization for storm water discharges. The TDA of the project will be determined as described by the Environmental Permits Issues and Commitments (EPIC) sheet.

Contractor shall meet the requirements for the Project SW3P binder as described on the SW3P sheet.

The Contractor shall collect and dispose of all waste material as required by the Storm Water Pollution Prevention Plan (SW3P).

If sediment escapes the construction site, immediately stop all work on the project, remove the sediment, and modify the SW3P site plan to prevent future non-compliance issues.

The Contractor shall meet the requirements for concrete truck washouts as described in Part V of the TPDES General Permit TXR150000. This work including materials and labor will not be measured or paid for directly but will be subsidiary to Item 506.

Anticipate multiple mobilizations for SWP3 work.

Verify locations and dimensions of BMP’s and obtain the Engineer’s approval prior to placement. BMP locations indicated on the plans are approximate and may be adjusted as necessary by the Engineer.

If it is determined that other erosion control devices are needed, payment for the work will be determined in accordance with Article 4.4, "Changes in the Work".

Highway: US 82 **Control:** 0044-04-048

Item 530 - Intersections, Driveways, and Turnouts
Removal of existing asphalt and/or concrete driveways will not be paid for directly but will be considered subsidiary to this pay item.

Coordinate the replacement of driveways with the property owners prior to performing work. Driveway locations and widths will be verified by the Engineer before placement.

Saw cut existing concrete and asphaltic concrete drives to create a smooth joint with the proposed driveway or street.

When intersections of roadways are encountered extend final 2" overlay to the ROW line regardless of existing pavement structure.

Item 585 – Ride Quality for Pavement Surfaces
Use Surface Test Type B pay adjustment schedule 1 on this project

Item 618 - Conduit
Install pits for jacking and boring PVC conduit a minimum of 3 feet from the back of the curb or the outside edge of the shoulder.

Where PVC, duct cable, and HDPE conduit 1" and larger is allowed and installed as per TxDOT standards, provide a PVC elbow in place of the galvanized rigid metal elbow required by the Electrical Detail standards. Ensure the PVC elbow is of the same schedule rating as the conduit to which it is connected.

Ensure only a flat, high tensile strength polyester fiber pull tape is used for pulling conductors through the PVC conduit system. Leave one non-metallic pull string in each conduit for future use. This will be considered subsidiary to Item 618.

The location of conduits and ground boxes are diagrammatic only and may be shifted to accommodate field conditions as directed.

Secure permission and approval from the Engineer prior to cutting into or removing any sidewalks or curbs for installation of this Item.

Do not use a pneumatically driven device for punching holes beneath the pavement (commonly known as a "missile").

Use a colored cleaner-primer on all PVC to PVC joints before application of PVC cement.
Seal all conduit ends with lighting circuits with polyurethane foam approved by the Engineer that will not adversely affect other plastic materials or corrode metals.

Existing conduit shall not be reused.

Highway: US 82 **Control:** 0044-04-048

Item 620 – Electrical Conductors
Where conductors are spliced in ground boxes, provide Tyco Gel splices or equivalent, and use option 3 as shown on ED (3)-14.

Maintain conductor color continuity throughout the entire system.

Item 628 – Electrical Service
Mount service enclosures such that it faces the adjacent roadway.

Coordinate the installation of the service drop with the Wichita Falls District Traffic Office @ (940) 720-7813.

Contractor shall include an empty ½" PVC conduit in the electrical service foundations for the installation of a grounding electrode conductor to be terminated to a grounding electrode as per ED(10)-14, when required by the utility company. The additional conduit, grounding electrode conductor and grounding electrode will be considered subsidiary to Item 628.

Item 644 – Small Roadside Sign Assemblies
Contractor shall provide a DHT #162508, "Southern Plains Slipbase Housing" or equivalent as approved by the engineer. Contractor is responsible for verifying sign locations prior to final placement. Stake sign support locations for verification by the engineer and obtain approval from the engineer prior to placement of sign supports.

Contractor to stockpile signs to be relocated until they can be replaced.

Item 658 - Delineator and Object Marker Assemblies
Use wedge anchor system (WAP) for all delineators and object markers on this project.

Cast wedge anchor system for object markers into proposed headwalls as directed by the Engineer.

Item 666 - Reflectorized Pavement Markings
Contractor is responsible for verifying passing/no-passing zones for final stripe. Poly-dot the locations of the proposed reflectorized pavement markings and obtain approval from the Engineer prior to placement.

Type I striping to be placed on contract for the retracing of existing markings and may begin prior to sealcoat operations.

Use Type II beads on all striping.

Remove temporary tabs from all roads prior to striping. Removal of tabs will be subsidiary to pertinent items.

The Trail vehicle will be required for all striping operations as shown on TCP (3-2)-13.

Highway: US 82 **Control:** 0044-04-048

Item 672 - Raised Pavement Markers

Raised pavement marker adhesive will meet the requirements of Departmental Materials Specifications DMS-6130, “Bituminous Adhesive for Pavement Markers”.

The lead vehicle and trail vehicle(s) will be required for all marker installation operations as shown on TCP (3-3)-14.

Item 3077 – Superpave Mixtures

Provide of mixture SP MIXES SP-B PG70-22 using PG binder 70-22 as base course. No Substitute PG Binder will be allowed on this project.

RAP shall not include more that 1.5% deleterious material when tested in accordance with Test Method TEX 413-A.

A material transfer vehicle (MTV) will be required for all overlay operations unless otherwise directed.

The first day of production of SP MIXES SP-C PG70-22 will be limited to 1000 tons, and all production and placement test results evaluated before paving can continue. Any cost or delays associated to this requirement shall not be paid for directly but shall be considered subsidiary to this item.

The use of Recycled Asphalt Shingles (RAS) or Recycled Asphalt Pavement (RAP) will not be permitted in the surface mix for this project.

Estimate & Quantity Sheet

CONTROLLING PROJECT ID 0044-04-048 **DISTRICT** Wichita Falls **COUNTY** Montague
HIGHWAY US 82

			CONTROL SECTION JOB		**0044-04-048**	TOTAL EST.	TOTAL FINAL
			PROJECT ID		**A00069309**		
			COUNTY		**Montague**		
			HIGHWAY		**US 82**		
ALT	**BID CODE**	**DESCRIPTION**	**UNIT**	EST.	FINAL		
	100-6002	PREPARING ROW	STA	10.000		10.000	
	105-6043	REMOVING STAB BASE & ASPH PAV (0-6")	SY	2,747.000		2,747.000	
	105-6049	REMOVING STAB BASE & ASPH PAV (4"-22")	SY	32,304.000		32,304.000	
	110-6001	EXCAVATION (ROADWAY)	CY	307,512.000		307,512.000	
	110-6002	EXCAVATION (CHANNEL)	CY	3,490.000		3,490.000	
	132-6003	EMBANKMENT (FINAL)(ORD COMP)(TY B)	CY	132,466.000		132,466.000	
	160-6003	FURNISHING AND PLACING TOPSOIL (4")	SY	242,244.000		242,244.000	
	164-6054	BOND FBR MTRX SEED (PERM)(RURAL)(SAND)	SY	242,244.000		242,244.000	
	164-6055	BONDED FBR MTRX SEED (TEMP)(WARM)	SY	121,122.000		121,122.000	
	164-6056	BONDED FBR MTRX SEED (TEMP)(COOL)	SY	121,122.000		121,122.000	
	168-6001	VEGETATIVE WATERING	MG	4,070.000		4,070.000	
	247-6203	FL BS (CMP IN PLC)(RAP) (6")	SY	1,110.000		1,110.000	
	247-6229	FL BS (CMP IN PLACE)(TY A GR 1-2)(7")	SY	3,808.000		3,808.000	
	247-6231	FL BS (CMP IN PLACE)(TY A GR 1-2)(10")	SY	120,350.000		120,350.000	
	275-6001	CEMENT	TON	1,143.000		1,143.000	
	275-6010	CEMENT TREAT (SUBGRADE) (8")	SY	120,350.000		120,350.000	
	310-6027	PRIME COAT(MC-30 OR AE-P)	GAL	24,070.000		24,070.000	
	314-6010	EMULS ASPH (EROSN CONT)(SS-1)	GAL	11,307.000		11,307.000	
	316-6017	ASPH (AC-20-5TR)	GAL	733.000		733.000	
	316-6222	AGGR(TY-PB GR-3 SAC-B)	CY	16.000		16.000	
	354-6021	PLANE ASPH CONC PAV(0" TO 2")	SY	65,374.000		65,374.000	
	400-6005	CEM STABIL BKFL	CY	394.000		394.000	
	400-6008	CUT & RESTORE ASPH PAVING	SY	225.000		225.000	
	402-6001	TRENCH EXCAVATION PROTECTION	LF	4,315.000		4,315.000	
	403-6001	TEMPORARY SPL SHORING	SF	345.000		345.000	
	416-6004	DRILL SHAFT (36 IN)	LF	1,125.000		1,125.000	
	416-6029	DRILL SHAFT (RDWY ILL POLE) (30 IN)	LF	140.000		140.000	
	420-6011	CL B CONC (FLUME)	CY	11.000		11.000	
	420-6014	CL C CONC (ABUT)(HPC)	CY	175.100		175.100	
	420-6030	CL C CONC (CAP)(HPC)	CY	64.400		64.400	
	420-6038	CL C CONC (COLUMN)(HPC)	CY	51.700		51.700	
	422-6002	REINF CONC SLAB (HPC)	SF	25,152.000		25,152.000	
	422-6016	APPROACH SLAB (HPC)	CY	285.500		285.500	
	425-6035	PRESTR CONC GIRDER (TX28)	LF	694.920		694.920	
	425-6038	PRESTR CONC GIRDER (TX46)	LF	2,618.000		2,618.000	
	432-6002	RIPRAP (CONC)(5 IN)	CY	1,380.000		1,380.000	
	432-6008	RIPRAP (CONC)(CL B)(RR8&RR9)	CY	158.000		158.000	

Estimate & Quantity Sheet

CONTROLLING PROJECT ID 0044-04-048 **DISTRICT** Wichita Falls **COUNTY** Montague
HIGHWAY US 82

						TOTAL EST.	TOTAL FINAL
		CONTROL SECTION JOB		**0044-04-048**			
		PROJECT ID		**A00069309**			
		COUNTY		**Montague**			
		HIGHWAY		**US 82**			
ALT	**BID CODE**	**DESCRIPTION**	**UNIT**	EST.	FINAL		
	432-6031	RIPRAP (STONE PROTECTION)(12 IN)	CY	1,892.000		1,892.000	
	432-6035	RIPRAP (STONE PROTECTION)(24 IN)	CY	1,912.000		1,912.000	
	432-6045	RIPRAP (MOW STRIP)(4 IN)	CY	149.000		149.000	
	438-6001	CLEANING AND SEALING EXISTING JOINTS	LF	84.000		84.000	
	438-6005	CLEANING AND SEALING JOINTS	LF	84.000		84.000	
	450-6024	RAIL (TY SSTR)(HPC)	LF	832.000		832.000	
	450-6111	RAIL (TY SSTR) (W/DRAIN SLOT) (HPC)	LF	328.000		328.000	
	450-6125	RAIL (TY T80PP-TS)	LF	305.000		305.000	
	454-6018	SEALED EXPANSION JOINT (4 IN) (SEJ - M)	LF	288.000		288.000	
	462-6002	CONC BOX CULV (3 FT X 3 FT)	LF	710.000		710.000	
	462-6006	CONC BOX CULV (5 FT X 2 FT)	LF	1,043.000		1,043.000	
	462-6034	CONC BOX CULV (10 FT X 10 FT)	LF	53.000		53.000	
	462-6045	CONC BOX CULV (3 FT X 2 FT)(EXTEND)	LF	111.000		111.000	
	462-6046	CONC BOX CULV (3 FT X 3 FT)(EXTEND)	LF	105.000		105.000	
	462-6076	CONC BOX CULV (10 FT X 8 FT)(EXTEND)	LF	142.000		142.000	
	462-6078	CONC BOX CULV (10 FT X 10 FT)(EXTEND)	LF	274.000		274.000	
	464-6003	RC PIPE (CL III)(18 IN)	LF	2,137.000		2,137.000	
	464-6005	RC PIPE (CL III)(24 IN)	LF	408.000		408.000	
	464-6007	RC PIPE (CL III)(30 IN)	LF	976.000		976.000	
	464-6008	RC PIPE (CL III)(36 IN)	LF	74.000		74.000	
	464-6009	RC PIPE (CL III)(42 IN)	LF	496.000		496.000	
	464-6010	RC PIPE (CL III)(48 IN)	LF	1,049.000		1,049.000	
	464-6018	RC PIPE (CL IV)(24 IN)	LF	213.000		213.000	
	465-6002	MANH (COMPL)(PRM)(48IN)	EA	1.000		1.000	
	465-6003	MANH (COMPL)(PRM)(60IN)	EA	1.000		1.000	
	465-6016	INLET (COMPL)(PCO)(3FT)(BOTH)	EA	1.000		1.000	
	465-6126	INLET (COMPL)(PSL)(FG)(3FTX3FT-3FTX3FT)	EA	13.000		13.000	
	465-6128	INLET (COMPL)(PSL)(FG)(4FTX4FT-4FTX4FT)	EA	19.000		19.000	
	466-6143	WINGWALL (FW - 0) (HW=11 FT)	EA	2.000		2.000	
	466-6159	WINGWALL (FW - S) (HW=12 FT)	EA	1.000		1.000	
	466-6185	WINGWALL (PW - 2) (HW=10 FT)	EA	1.000		1.000	
	466-6192	WINGWALL (PW - 2) (HW=3 FT)	EA	4.000		4.000	
	466-6193	WINGWALL (PW - 2) (HW=4 FT)	EA	3.000		3.000	
	466-6194	WINGWALL (PW - 2) (HW=5 FT)	EA	1.000		1.000	
	467-6111	SET (TY I)(S=3 FT)(HW= 4 FT)(3:1)(C)	EA	2.000		2.000	
	467-6171	SET (TY I)(S= 5 FT)(HW= 3 FT)(3:1) (C)	EA	2.000		2.000	
	467-6358	SET (TY II) (18 IN) (RCP) (4: 1) (C)	EA	2.000		2.000	

Estimate & Quantity Sheet

CONTROLLING PROJECT ID 0044-04-048 **DISTRICT** Wichita Falls **COUNTY** Montague
HIGHWAY US 82

						TOTAL EST.	TOTAL FINAL
		CONTROL SECTION JOB		**0044-04-048**			
		PROJECT ID		**A00069309**			
		COUNTY		**Montague**			
		HIGHWAY		**US 82**			
ALT	**BID CODE**	**DESCRIPTION**	**UNIT**	EST.	FINAL		
	467-6359	SET (TY II) (18 IN) (RCP) (4: 1) (P)	EA	6.000		6.000	
	467-6363	SET (TY II) (18 IN) (RCP) (6: 1) (P)	EA	15.000		15.000	
	467-6395	SET (TY II) (24 IN) (RCP) (6: 1) (P)	EA	14.000		14.000	
	467-6480	SET (TY II) (48 IN) (RCP) (6: 1) (P)	EA	1.000		1.000	
	479-6003	ADJUSTING MANHOLES & INLETS	EA	4.000		4.000	
	480-6001	CLEAN EXIST CULVERTS	EA	4.000		4.000	
	496-6004	REMOV STR (SET)	EA	15.000		15.000	
	496-6005	REMOV STR (WINGWALL)	EA	4.000		4.000	
	496-6007	REMOV STR (PIPE)	LF	93.000		93.000	
	496-6008	REMOV STR (BOX CULVERT)	LF	254.000		254.000	
	496-6010	REMOV STR (BRIDGE 100 - 499 FT LENGTH)	EA	1.000		1.000	
	500-6001	MOBILIZATION	LS	1.000		1.000	
	502-6001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	32.000		32.000	
	506-6002	ROCK FILTER DAMS (INSTALL) (TY 2)	LF	1,488.000		1,488.000	
	506-6011	ROCK FILTER DAMS (REMOVE)	LF	1,488.000		1,488.000	
	506-6020	CONSTRUCTION EXITS (INSTALL) (TY 1)	SY	3,560.000		3,560.000	
	506-6024	CONSTRUCTION EXITS (REMOVE)	SY	3,560.000		3,560.000	
	506-6038	TEMP SEDMT CONT FENCE (INSTALL)	LF	6,860.000		6,860.000	
	506-6039	TEMP SEDMT CONT FENCE (REMOVE)	LF	6,860.000		6,860.000	
	506-6041	BIODEG EROSN CONT LOGS (INSTL) (12")	LF	982.000		982.000	
	506-6043	BIODEG EROSN CONT LOGS (REMOVE)	LF	982.000		982.000	
	508-6001	CONSTRUCTING DETOURS	SY	9,949.000		9,949.000	
	512-6009	PORT CTB (FUR & INST)(LOW PROF)(TY 1)	LF	300.000		300.000	
	512-6010	PORT CTB (FUR & INST)(LOW PROF)(TY 2)	LF	40.000		40.000	
	512-6057	PORT CTB (REMOVE)(LOW PROF)(TY 1)	LF	300.000		300.000	
	512-6058	PORT CTB (REMOVE)(LOW PROF)(TY 2)	LF	40.000		40.000	
	514-6036	PERM CTB (TRAN SSCB TO SSTR) (MOD)	LF	860.000		860.000	
	529-6002	CONC CURB (TY II)	LF	140.000		140.000	
	529-6007	CONC CURB & GUTTER (TY I)	LF	250.000		250.000	
	530-6004	DRIVEWAYS (CONC)	SY	153.000		153.000	
	530-6005	DRIVEWAYS (ACP)	SY	343.000		343.000	
	530-6016	DRIVEWAYS (BASE)	SY	1,492.000		1,492.000	
	533-6001	RUMBLE STRIPS (SHOULDER)	LF	67,056.000		67,056.000	
	533-6002	RUMBLE STRIPS (CENTERLINE)	LF	1,841.000		1,841.000	
	540-6001	MTL W-BEAM GD FEN (TIM POST)	LF	2,175.000		2,175.000	
	540-6005	TERMINAL ANCHOR SECTION	EA	2.000		2.000	
	540-6006	MTL BEAM GD FEN TRANS (THRIE-BEAM)	EA	16.000		16.000	

Estimate & Quantity Sheet

CONTROLLING PROJECT ID 0044-04-048 **DISTRICT** Wichita Falls **COUNTY** Montague
HIGHWAY US 82

			CONTROL SECTION JOB		**0044-04-048**	TOTAL EST.	TOTAL FINAL
			PROJECT ID		**A00069309**		
			COUNTY		**Montague**		
			HIGHWAY		**US 82**		
ALT	**BID CODE**	**DESCRIPTION**	**UNIT**	EST.	FINAL		
	540-6014	SHORT RADIUS	LF	500.000		500.000	
	540-6016	DOWNSTREAM ANCHOR TERMINAL SECTION	EA	8.000		8.000	
	542-6001	REMOVE METAL BEAM GUARD FENCE	LF	706.000		706.000	
	542-6004	RM MTL BM GD FENCE TRANS (THRIE-BEAM)	EA	8.000		8.000	
	544-6001	GUARDRAIL END TREATMENT (INSTALL)	EA	8.000		8.000	
	544-6003	GUARDRAIL END TREATMENT (REMOVE)	EA	10.000		10.000	
	545-6013	CRASH CUSH ATTEN (INSTL)(R)(N)(TL3)	EA	4.000		4.000	
	545-6016	CRASH CUSH ATTEN (INSTL)(R)(W)(TL3)	EA	2.000		2.000	
	552-6001	WIRE FENCE (TY A)	LF	504.000		504.000	
	556-6008	PIPE UNDERDRAINS (TY 8) (6")	LF	3,221.000		3,221.000	
	610-6009	REMOVE RD IL ASM (TRANS-BASE)	EA	6.000		6.000	
	610-6290	IN RD IL (TY SA) 50T-12 (400W EQ) LED	EA	12.000		12.000	
	610-6291	IN RD IL (TY SA) 50T-12-12(400W EQ)LED	EA	2.000		2.000	
	618-6023	CONDT (PVC) (SCH 40) (2")	LF	4,825.000		4,825.000	
	618-6047	CONDT (PVC) (SCH 80) (2") (BORE)	LF	940.000		940.000	
	620-6009	ELEC CONDR (NO.6) BARE	LF	5,940.000		5,940.000	
	620-6010	ELEC CONDR (NO.6) INSULATED	LF	12,680.000		12,680.000	
	624-6002	GROUND BOX TY A (122311)W/APRON	EA	21.000		21.000	
	628-6009	ELC SRV TY A 120/240 060(NS)SS(E)SP(O)	EA	1.000		1.000	
	644-6001	IN SM RD SN SUP&AM TY10BWG(1)SA(P)	EA	41.000		41.000	
	644-6004	IN SM RD SN SUP&AM TY10BWG(1)SA(T)	EA	25.000		25.000	
	644-6027	IN SM RD SN SUP&AM TYS80(1)SA(P)	EA	6.000		6.000	
	644-6030	IN SM RD SN SUP&AM TYS80(1)SA(T)	EA	19.000		19.000	
	644-6032	IN SM RD SN SUP&AM TYS80(1)SA(T-EXAL)	EA	4.000		4.000	
	644-6033	IN SM RD SN SUP&AM TYS80(1)SA(U)	EA	2.000		2.000	
	644-6050	IN SM RD SN SUP&AM TYS80(2)SA(P)	EA	2.000		2.000	
	644-6068	RELOCATE SM RD SN SUP&AM TY 10BWG	EA	33.000		33.000	
	644-6076	REMOVE SM RD SN SUP&AM	EA	39.000		39.000	
	658-6026	INSTL DEL ASSM (D-SY)SZ (BRF)CTB	EA	24.000		24.000	
	658-6064	INSTL DEL ASSM (D-SY)SZ 1(BRF)GF2	EA	28.000		28.000	
	658-6095	INSTL DEL ASSM (D-DY)SZ 1(YFLX)GND	EA	10.000		10.000	
	658-6099	INSTL OM ASSM (OM-2Z)(WFLX)GND	EA	67.000		67.000	
	662-6005	WK ZN PAV MRK NON-REMOV (W)6"(BRK)	LF	502.000		502.000	
	662-6008	WK ZN PAV MRK NON-REMOV (W)6"(SLD)	LF	58,224.000		58,224.000	
	662-6012	WK ZN PAV MRK NON-REMOV (W)8"(SLD)	LF	1,743.000		1,743.000	
	662-6016	WK ZN PAV MRK NON-REMOV (W)24"(SLD)	LF	36.000		36.000	
	662-6035	WK ZN PAV MRK NON-REMOV (Y)6"(BRK)	LF	250.000		250.000	

Estimate & Quantity Sheet

CONTROLLING PROJECT ID 0044-04-048 **DISTRICT** Wichita Falls **COUNTY** Montague
HIGHWAY US 82

						TOTAL EST.	TOTAL FINAL
		CONTROL SECTION JOB		**0044-04-048**			
		PROJECT ID		**A00069309**			
		COUNTY		**Montague**			
		HIGHWAY		**US 82**			
ALT	**BID CODE**	**DESCRIPTION**	**UNIT**	EST.	FINAL		
	662-6037	WK ZN PAV MRK NON-REMOV (Y)6"(SLD)	LF	59,970.000		59,970.000	
	662-6067	WK ZN PAV MRK REMOV (W)6"(SLD)	LF	16,506.000		16,506.000	
	662-6098	WK ZN PAV MRK REMOV (Y)6"(SLD)	LF	15,623.000		15,623.000	
	666-6036	REFL PAV MRK TY I (W)8"(SLD)(100MIL)	LF	11,913.000		11,913.000	
	666-6048	REFL PAV MRK TY I (W)24"(SLD)(100MIL)	LF	455.000		455.000	
	666-6054	REFL PAV MRK TY I (W)(ARROW)(100MIL)	EA	36.000		36.000	
	666-6057	REFL PAV MRK TY I(W)(DBL ARROW)(100MIL)	EA	3.000		3.000	
	666-6072	REFL PAV MRK TY I(W)(LNDP ARW)(100MIL)	EA	10.000		10.000	
	666-6078	REFL PAV MRK TY I (W)(WORD)(100MIL)	EA	30.000		30.000	
	666-6171	REFL PAV MRK TY II (W) 6" (BRK)	LF	7,784.000		7,784.000	
	666-6174	REFL PAV MRK TY II (W) 6" (SLD)	LF	42,240.000		42,240.000	
	666-6178	REFL PAV MRK TY II (W) 8" (SLD)	LF	11,913.000		11,913.000	
	666-6182	REFL PAV MRK TY II (W) 24" (SLD)	LF	455.000		455.000	
	666-6184	REFL PAV MRK TY II (W) (ARROW)	EA	36.000		36.000	
	666-6185	REFL PAV MRK TY II (W) (DBL ARROW)	EA	3.000		3.000	
	666-6190	REFL PAV MRK TY II (W) (LNDP ARW)	EA	10.000		10.000	
	666-6192	REFL PAV MRK TY II (W) (WORD)	EA	30.000		30.000	
	666-6208	REFL PAV MRK TY II (Y) 6" (BRK)	LF	240.000		240.000	
	666-6210	REFL PAV MRK TY II (Y) 6" (SLD)	LF	49,268.000		49,268.000	
	666-6306	RE PM W/RET REQ TY I (W)6"(BRK)(100MIL)	LF	7,784.000		7,784.000	
	666-6309	RE PM W/RET REQ TY I (W)6"(SLD)(100MIL)	LF	42,041.000		42,041.000	
	666-6318	RE PM W/RET REQ TY I (Y)6"(BRK)(100MIL)	LF	240.000		240.000	
	666-6321	RE PM W/RET REQ TY I (Y)6"(SLD)(100MIL)	LF	49,268.000		49,268.000	
	672-6009	REFL PAV MRKR TY II-A-A	EA	546.000		546.000	
	672-6010	REFL PAV MRKR TY II-C-R	EA	394.000		394.000	
	677-6001	ELIM EXT PAV MRK & MRKS (4")	LF	13,100.000		13,100.000	
	3076-6027	D-GR HMA TY-C PG70-22 (LEVEL-UP)	TON	8,690.000		8,690.000	
	3076-6066	TACK COAT	GAL	12,223.000		12,223.000	
	3077-6005	SP MIXES SP-B PG70-22	TON	20,849.000		20,849.000	
	3077-6021	SP MIXES SP-C PG70-22	TON	33,613.000		33,613.000	
	6001-6002	PORTABLE CHANGEABLE MESSAGE SIGN	EA	4.000		4.000	
	6056-6001	PREFORMED IN-LANE(TRANS) RUMBLE STRIP	LF	360.000		360.000	
	6120-6001	DEAD END ROADWAY BARRICADE	LF	110.000		110.000	
	6185-6002	TMA (STATIONARY)	DAY	330.000		330.000	
	6185-6005	TMA (MOBILE OPERATION)	DAY	50.000		50.000	
	6227-6002	SOLAR POWERED LED ROADSIDE SIGN	EA	14.000		14.000	
	18	EROSION CONTROL MAINTENANCE: CONTRACTOR FORCE ACCOUNT WORK (PART)	LS	1.000		1.000	

Estimate & Quantity Sheet

CONTROLLING PROJECT ID 0044-04-048 **DISTRICT** Wichita Falls **COUNTY** Montague
HIGHWAY US 82

		CONTROL SECTION JOB		**0044-04-048**		TOTAL EST.	TOTAL FINAL
		PROJECT ID		**A00069309**			
		COUNTY		**Montague**			
		HIGHWAY		**US 82**			
ALT	**BID CODE**	**DESCRIPTION**	**UNIT**	EST.	FINAL		
	18	SAFETY CONTINGENCY: CONTRACTOR FORCE ACCOUNT WORK (PARTICIPATING)	LS	1.000		1.000	

	SUMMARY OF WORKZONE TRAFFIC CONTROL ITEMS									
LOCATION	247 6203	438 6001	438 6005	464 6003	467 6358	467 6359	502 6001	508 6001	512 6009	512 6010
	FL BS (CMP IN PLC)(RAP) (6")	CLEANING AND SEALING EXISTING JOINTS	CLEANING AND SEALING JOINTS	RC PIPE (CL III)(18 IN)	SET (TY II) (18 IN) (RCP) (4: 1) (C)	SET (TY II) (18 IN) (RCP) (4: 1) (P)	BARRICADES, SIGNS AND TRAFFIC HANDLING	CONSTRUCTING DETOURS	PORT CTB (FUR & INST)(LOW PROF)(TY 1)	PORT CTB (FUR & INST)(LOW PROF)(TY 2)
	SY	LF	LF	LF	EA	EA	MO	SY	LF	LF
PHASE 1A										
SHEET 1 OF 6				72		6	3	1560		
SHEET 2 OF 6								157		
SHEET 3 OF 6								929		
SHEET 4 OF 6								1063		
SHEET 5 OF 6								2129		
SHEET 6 OF 6								1420		
PHASE 1A TOTALS				72		6	3	7258		
PHASE 1B										
SHEET 1 OF 21							10			
SHEET 2 OF 21										
SHEET 7 OF 21	75									
SHEET 8 OF 21										
SHEET 9 OF 21										
SHEET 10 OF 21	119									
SHEET 11 OF 21	154									
SHEET 12 OF 21	89									
SHEET 13 OF 21								1032	300	40
SHEET 14 OF 21	220									
SHEET 15 OF 21										
SHEET 16 OF 21										
SHEET 17 OF 21										
SHEET 18 OF 21										
SHEET 19 OF 21										
SHEET 20 OF 21										
SHEET 21 OF 21										
PHASE 1B TOTALS	657						10	1032	300	40
PHASE 2A										
SHEET 1 OF 21							8	44		
SHEET 2 OF 21								38		
SHEET 11 OF 21										
SHEET 12 OF 21	453			100						
SHEET 13 OF 21										
SHEET 14 OF 21										
SHEET 15 OF 21				170	2			1577		
SHEET 16 OF 21										
SHEET 17 OF 21										
SHEET 18 OF 21										
SHEET 19 OF 21										
SHEET 20 OF 21										
SHEET 21 OF 21										
PHASE 2A TOTALS	453			270	2		8	1659		
PHASE 2B										
SHEET 1 OF 15							3			
SHEET 2 OF 15										
SHEET 3 OF 15										
SHEET 4 OF 15										
SHEET 5 OF 15										
SHEET 6 OF 15										
SHEET 7 OF 15										
SHEET 8 OF 15										
SHEET 9 OF 15										
SHEET 10 OF 15										
SHEET 11 OF 15										
SHEET 12 OF 15										
SHEET 13 OF 15										
SHEET 14 OF 15										
SHEET 15 OF 15										
PHASE 2B TOTALS							3			
PHASE 2C										
SHEET 1 OF 21							8			
SHEET 5 OF 21		42	42							
SHEET 6 OF 21		42	42							
SHEET 13 OF 21										
SHEET 14 OF 21										
SHEET 15 OF 21										
SHEET 16 OF 21										
SHEET 17 OF 21										
SHEET 18 OF 21										
SHEET 19 OF 21										
SHEET 20 OF 21										
SHEET 21 OF 21										
PHASE 2C TOTALS		84	84				8			
PROJECT TOTALS	1110	84	84	342	2	6	32	9949	300	40

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

US 82

QUANTITY SUMMARY

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
SD	6	(SEE TITLE SHEET)		US 82
GRAPHICS AH	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	20
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\General\048*US82*QUANTITY*SUMMARY*01*TCP.dgn
USER: MdMar24 SCALE: 1:100
DATE: 3/19/2024 TIME: 6:53:33 PM

	SUMMARY OF WORKZONE TRAFFIC CONTROL ITEMS									
LOCATION	512 6057	512 6058	662 6005	662 6008	662 6012	662 6016	662 6035	662 6037	662 6067	662 6098
	PORT CTB (REMOVE) (LOW PROF) (TY 1)	PORT CTB (REMOVE) (LOW PROF) (TY 2)	WK ZN PAV MRK NON-REMOV (W)6" (BRK)	WK ZN PAV MRK NON-REMOV (W)6" (SLD)	WK ZN PAV MRK NON-REMOV (W)8" (SLD)	WK ZN PAV MRK NON-REMOV (W)24" (SLD)	WK ZN PAV MRK NON-REMOV (Y)6" (BRK)	WK ZN PAV MRK NON-REMOV (Y)6" (SLD)	WK ZN PAV MRK REMOV (W)6" (SLD)	WK ZN PAV MRK REMOV (Y)6" (SLD)
	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF
PHASE 1A										
SHEET 1 OF 6										
SHEET 2 OF 6										
SHEET 3 OF 6										
SHEET 4 OF 6										
SHEET 5 OF 6										
SHEET 6 OF 6										
PHASE 1A TOTALS										
PHASE 1B										
SHEET 1 OF 21			502	197				197	1222	
SHEET 2 OF 21				1326				1326		
SHEET 7 OF 21										
SHEET 8 OF 21										
SHEET 9 OF 21										
SHEET 10 OF 21										
SHEET 11 OF 21										
SHEET 12 OF 21										
SHEET 13 OF 21										
SHEET 14 OF 21										
SHEET 15 OF 21										
SHEET 16 OF 21				1602				1600	1628	1628
SHEET 17 OF 21				2200				2200		
SHEET 18 OF 21				716				508		
SHEET 19 OF 21				1822				1822		
SHEET 20 OF 21				2200				2200		
SHEET 21 OF 21				1016				1038	669	738
PHASE 1B TOTALS			502	11079				10891	3519	2366
PHASE 2A										
SHEET 1 OF 21										
SHEET 2 OF 21										
SHEET 11 OF 21										
SHEET 12 OF 21										
SHEET 13 OF 21										
SHEET 14 OF 21										
SHEET 15 OF 21										
SHEET 16 OF 21				1600				1600	1624	1624
SHEET 17 OF 21									2200	2200
SHEET 18 OF 21									1817	1748
SHEET 19 OF 21									2224	2224
SHEET 20 OF 21									2200	2200
SHEET 21 OF 21				1095				1494	400	400
PHASE 2A TOTALS				2695				3094	10465	10396
PHASE 2B										
SHEET 1 OF 15				198				198	1504	1933
SHEET 2 OF 15				2206				2206		
SHEET 3 OF 15				2194				2194		
SHEET 4 OF 15				2200				2200		
SHEET 5 OF 15				2200				2200		
SHEET 6 OF 15				2200				2200		
SHEET 7 OF 15				2200				2200		
SHEET 8 OF 15				2200				2200		
SHEET 9 OF 15				2200				2200		
SHEET 10 OF 15				1972				2064		
SHEET 11 OF 15				1912				1866		
SHEET 12 OF 15				2155				2014		
SHEET 13 OF 15	300	40		2086		36		2040		
SHEET 14 OF 15				2080				1964		
SHEET 15 OF 15				2136				2114	1018	928
PHASE 2B TOTALS	300	40		30139		36		29860	2522	2861
PHASE 2C										
SHEET 1 OF 21										
SHEET 5 OF 21										
SHEET 6 OF 21										
SHEET 13 OF 21										
SHEET 14 OF 21										
SHEET 15 OF 21										
SHEET 16 OF 21				1600				2034		
SHEET 17 OF 21				2200	445		250	2950		
SHEET 18 OF 21				3807	204			4105		
SHEET 19 OF 21				4104	600			4436		
SHEET 20 OF 21				2200	494			2200		
SHEET 21 OF 21				400				400		
PHASE 2C TOTALS				14311	1743		250	16125		
PROJECT TOTALS	300	40	502	58224	1743	36	250	59970	16506	15623

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

QUANTITY SUMMARY

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
SD	6	(SEE TITLE SHEET)		US 82
GRAPHICS AH	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	21
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\General\048*US82*QUANTITY*SUMMARY*02*TCP.dgn
USER: MoFeb24 SCALE: 1:100
DATE: 2/13/2024 TIME: 4:24:55 PM

	SUMMARY OF WORKZONE TRAFFIC CONTROL ITEMS					
LOCATION	677 6001 ELIM EXT PAV MRK & MRKS (4") LF	6001 6002 PORTABLE CHANGEABLE MESSAGE SIGN EA	6056 6001 PREFORMED IN-LANE (TRANS) RUMBLE STRIP LF	6185 6002 TMA (STATIONARY) DAY	6185 6005 TMA (MOBILE OPERATION) DAY	6227 6002 SOLAR POWERED LED ROADSIDE SIGN EA
PHASE 1A						
SHEET 1 OF 6						
SHEET 2 OF 6						
SHEET 3 OF 6						
SHEET 4 OF 6						
SHEET 5 OF 6						
SHEET 6 OF 6						
PHASE 1A TOTALS						
PHASE 1B						
SHEET 1 OF 21	1400	4		120		
SHEET 2 OF 21	2652					
SHEET 7 OF 21						
SHEET 8 OF 21						
SHEET 9 OF 21						
SHEET 10 OF 21						
SHEET 11 OF 21						
SHEET 12 OF 21						
SHEET 13 OF 21						
SHEET 14 OF 21						
SHEET 15 OF 21						
SHEET 16 OF 21	3256					
SHEET 17 OF 21						
SHEET 18 OF 21						
SHEET 19 OF 21						
SHEET 20 OF 21						
SHEET 21 OF 21	4132					
PHASE 1B TOTALS	11440	4		120		
PHASE 2A						
SHEET 1 OF 21				90		
SHEET 2 OF 21						
SHEET 11 OF 21			36			
SHEET 12 OF 21			36			
SHEET 13 OF 21			36			4
SHEET 14 OF 21			36			
SHEET 15 OF 21						
SHEET 16 OF 21						
SHEET 17 OF 21						
SHEET 18 OF 21			36			
SHEET 19 OF 21			36			
SHEET 20 OF 21						
SHEET 21 OF 21						
PHASE 2A TOTALS			216	90		4
PHASE 2B						
SHEET 1 OF 15				30		
SHEET 2 OF 15						
SHEET 3 OF 15						
SHEET 4 OF 15						
SHEET 5 OF 15						
SHEET 6 OF 15						
SHEET 7 OF 15						
SHEET 8 OF 15						
SHEET 9 OF 15						
SHEET 10 OF 15						
SHEET 11 OF 15			36			
SHEET 12 OF 15			36			
SHEET 13 OF 15			36			4
SHEET 14 OF 15			36			
SHEET 15 OF 15	1660					
PHASE 2B TOTALS	1660		144	30		4
PHASE 2C						
SHEET 1 OF 21				90		
SHEET 5 OF 21						
SHEET 6 OF 21						
SHEET 13 OF 21						6
SHEET 14 OF 21						
SHEET 15 OF 21						
SHEET 16 OF 21						
SHEET 17 OF 21						
SHEET 18 OF 21						
SHEET 19 OF 21						
SHEET 20 OF 21						
SHEET 21 OF 21						
PHASE 2C TOTALS				90		6
PROJECT TOTALS	13100	4	360	330	50	14

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
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F-12801

Texas Department of Transportation

US 82

QUANTITY SUMMARY

SHEET 3 OF 10

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
SD	6	(SEE TITLE SHEET)		US 82
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
AH	TEXAS	WFS	MONTAGUE	22
CHECK	CONTROL	SECTION	JOB	
MFM	0044	04	048	
CHECK				
FS				

PLOT DRIVER: US82*BW*HALF*PDF*LineWt*Modified.pltcfg
PENTABLE: US82*PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\General\048*US82*QUANTITY*SUMMARY*03*TCP.dgn
USER: MoFeb24
SCALE: 1:100
DATE: 2/13/2024
TIME: 4:25:39 PM

SUMMARY OF REMOVAL ITEMS

LOCATIONS	105 6043 REMOVING STAB BASE & ASPH PAV (0-6") SY	105 6049 REMOVING STAB BASE & ASPH PAV (4"-22") SY	PIPE REMOVAL (SUBSIDARY TO ITEM 464)	DRIVEWAY REMOVAL (SUBSIDARY TO ITEM 530) SY	496 6004 REMOV STR (SET) EA	496 6007 REMOV STR (PIPE) LF	496 6010 REMOV STR (BRIDGE 100 - 499 FT LENGTH) EA	542 6001 REMOVE METAL BEAM GUARD FENCE LF	542 6004 RM MTL BM GD FENCE TRANS (THRIE-BEAM) EA	544 6003 GUARDRAIL END TREATMENT (REMOVE) EA
US 82/81										
SHEET 1 OF 4		4717						265		4
SHEET 2 OF 4		1255		160	4	93		175	4	2
SHEET 3 OF 4	2150	19045		288			1	266	4	4
SHEET 4 OF 4	597	7287	33	702	4					
PROJECT TOTAL	2747	32304	33	1150	8	93	1	706	8	10

SUMMARY OF ROADWAY ITEMS

LOCATION	100 6002 * PREPARING ROW STA	110 6001 EXCAVATION (ROADWAY) CY	110 6002 EXCAVATION (CHANNEL) SY	132 6003 EMBANKMENT (FINAL) (ORD COMP) (TY B) CY	247 6229 FL BS (CMP IN PLACE) (TY A GR 1-2) (7") SY	247 6231 FL BS (CMP IN PLACE) (TY A GR 1-2) (10") SY	275 6001 CEMENT 19 LB/SY TON	275 6010 CEMENT TREAT (SUBGRADE) (8") SY	310 6027 PRIME COAT (MC-30 OR AE-P) 0.2 GAL/SY GAL	314 6010 EMULS ASPH (EROSN CONT) (SS-1) 0.25 GAL/SY GAL	316 6017 ASPH (AC-20-5TR) 0.38 GAL/SY GAL
US 82 - MAIN LANE											
CSJ 0044-04-048											
SHEET 1 OF 22		1,042		17,072		7,072	67	7,072	1,414	669	
SHEET 2 OF 22		14,105		20,234		9,680	92	9,680	1,936	1,222	
SHEET 3 OF 22		13,067	3,490	45,183		8,865	84	8,865	1,773	1,222	
SHEET 4 OF 22		65,487		3,526		11,410	108	11,410	2,282	1,222	
SHEET 5 OF 22		23,469		8,651		11,995	114	11,995	2,399	1,222	
SHEET 6 OF 22		8,050		10,957		18,822	179	18,822	3,764	1,222	
SHEET 7 OF 22		15,912		13,408		18,049	171	18,049	3,610	1,222	
SHEET 8 OF 22		4,884		508		3,157	30	3,157	631	415	
TOTAL	8	146,016	3,490	119,539	0	89,050	846	89,050	17,810	8,418	0
US 81 - MAIN LANE											
SHEET 9 OF 22		657		89		207	2	207	41	222	
SHEET 10 OF 22		3,126		300		2,889	27	2,889	578	611	
SHEET 11 OF 22		45,937		3,033		12,049	114	12,049	2,410	611	
SHEET 12 OF 22		92,018		5,830		10,456	99	10,456	2,091	611	
SHEET 13 OF 22		17,630		547		4,398	42	4,398	880	611	
SHEET 14 OF 22		130		142		242	2	242	48	222	
TOTAL	2	159,498	0	9,941	0	30,241	287	30,241	6,048	2,889	0
HANSEN RD (NORTH)											
SHEET 1 OF 1		123		16	417						158
TOTAL	0	123	0	16	417	0	0	0	0	0	158
HANSEN RD (SOUTH)											
SHEET 1 OF 1		315		14	419						159
TOTAL	0	315	0	14	419	0	0	0	0	0	159
COOK RD-SH 19											
SHEET 1 OF 1		259		701		1,059	10	1,059	212		
TOTAL	0	259		701		1,059	10	1,059	212	0	0
MESQUITE ST											
SHEET 1 OF 1		108		241	481						183
TOTAL	0	108	0	241	481	0	0	0	0	0	183
LOCAL RD											
SHEET 1 OF 3											
SHEET 2 OF 3		129		1,670	945						
SHEET 3 OF 3		245		336	934						
TOTAL	0	374	0	2,006	1,879	0	0	0	0	0	0
FITE RD											
SHEET 1 OF 1		819		8	612						232
TOTAL	0	819	0	8	612	0	0	0	0	0	232
GRAND TOTAL	10	307,512	3,490	132,466	3,808	120,350	1,143	120,350	24,070	11,307	733

* NOTE: LOCATIONS OF PREP ROW WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
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F-12801

Texas Department of Transportation

US 82

QUANTITY SUMMARY

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	23
CHECK FS	CONTROL 0044	SECTION 04	JOB 048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWt**Modified.pltcfg
PENTABLE: US82*PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\General\048*US82*QUANTITY*SUMMARY*04*REM&RDWY.dgn
USER: mamar24 SCALE: 1:100
DATE: 3/17/2024 TIME: 4:07:35 PM

SUMMARY OF ROADWAY ITEMS

LOCATION	316 6222 AGGR (TY-PB GR-3 SAC-B) 1 CY/120 SY CY	354 6021 PLANE ASPH CONC PAV (0" TO 2") SY	420 6011 CL B CONC (FLUME) CY	432 6002 RIPRAP (CONC)(5 IN) CY	432 6035 RIPRAP (STONE PROTECTION) (24 IN) CY	432 6045 RIPRAP (MOW STRIP)(4 IN) CY	450 6125 RAIL (TY T80PP-TS) LF	514 6036 PERM CTB (SSCB) (TY 1)(MOD) LF	529 6002 CONC CURB (TY II) LF	529 6007 CONC CURB & GUTTER (TY I) LF
US 82 - MAIN LANE										
CSJ 0044-04-048										
SHEET 1 OF 22		6459								
SHEET 2 OF 22		9290								
SHEET 3 OF 22		9566	11	952	1912	105				
SHEET 4 OF 22		8178								
SHEET 5 OF 22		4533		95				860		
SHEET 6 OF 22		6798								215
SHEET 7 OF 22		3611				44				35
SHEET 8 OF 22		3236								
TOTAL	0	51,671	11	1,047	1,912	149	0	860	0	250
US 81 - MAIN LANE										
SHEET 9 OF 22		1,804								
SHEET 10 OF 22		4,732								
SHEET 11 OF 22		671					120		140	
SHEET 12 OF 22		1,320		46			185			
SHEET 13 OF 22		3,431		8						
SHEET 14 OF 22		1,745								
TOTAL	0	13,703	0	54	0	0	305	0	140	0
HANSEN RD (NORTH)										
SHEET 1 OF 1	3									
TOTAL	3	0	0	0	0	0	0	0	0	0
HANSEN RD (SOUTH)										
SHEET 1 OF 1	3									
TOTAL	3	0	0	0	0	0	0	0	0	0
COOK RD-SH 19										
SHEET 1 OF 1										
TOTAL	0	0	0	0	0	0			0	0
MESQUITE ST										
SHEET 1 OF 1	4									
TOTAL	4	0	0	0	0	0	0	0	0	0
LOCAL RD										
SHEET 1 OF 3										
SHEET 2 OF 3				170						
SHEET 3 OF 3				70						
TOTAL	0	0	0	240	0	0	0	0	0	0
FITE RD										
SHEET 1 OF 1	5									
TOTAL	5	0	0	0	0	0	0	0	0	0
GRAND TOTAL	16	65,374	11	1,341	1,912	149	305	860	140	250

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

US 82

QUANTITY SUMMARY

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	24
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\General\048*US82*QUANTITY*SUMMARY*05*RDWY.dgn
DATE: 3/19/2024 TIME: 6:55:26 PM USER: MaMar24 SCALE: 1:100

SUMMARY OF ROADWAY ITEMS

LOCATION	540 6001	540 6005	540 6006	540 6014	540 6016	544 6001	545 6013	545 6016	556 6008	3076 6027	3076 6066	3077 6005	3077 6021	6120 6001
	MTL W-BEAM GD FEN (TIM POST)	TERMINAL ANCHOR SECTION	MTL BEAM GD FEN TRANS (THRIE-BEAM)	SHORT RADIUS	DOWNSTREAM ANCHOR TERMINAL SECTION	GUARDRAIL END TREATMENT (INSTALL)	CRASH CUSH ATTEN (INSTL)(R)(N)(TL3)	CRASH CUSH ATTEN (INSTL)(R)(W)(TL3)	PIPE UNDERDRAINS (TY 8) (6")	D-GR HMA TY-C PG70-22 (LEVEL-UP) 110 LB/SY/IN	TACK COAT 0.1 GAL/SY	SP MIXES SP-B PG70-22 110 LB/SY/IN	SP MIXES SP-C PG70-22 110 LB/SY/IN	DEAD END ROADWAY BARRICADE
	LF	EA	EA	LF	EA	EA	EA	EA	LF	TON	GAL	TON	TON	LF
US 82 - MAIN LANE														
CSJ 0044-04-048														
SHEET 1 OF 22										180	707	1,945	1,488	80
SHEET 2 OF 22										875	968	2,662	2,087	
SHEET 3 OF 22	1325	2	8	75	5	5				697	887	2,438	2,027	
SHEET 4 OF 22							4		800	1,093	1,141	3,138	2,155	
SHEET 5 OF 22									2421	671	1,200	3,299	1,818	
SHEET 6 OF 22										3,608	1,882	5,176	2,818	
SHEET 7 OF 22	850		8	425	3	3				1,192	1,805	4,963	2,383	
SHEET 8 OF 22										374	316	868	703	
TOTAL	2,175	2	16	500	8	8	4	0	3,221	8,690	8,905	24,489	15,479	80
US 81 - MAIN LANE														
SHEET 9 OF 22											21	57	221	
SHEET 10 OF 22											289	794	838	
SHEET 11 OF 22								1			1,205	3,313	1,399	
SHEET 12 OF 22								1			1,046	2,875	1,295	
SHEET 13 OF 22											440	1,209	861	
SHEET 14 OF 22											24	67	219	
TOTAL	0	0	0	0	0	0	0	2		0	3,024	8,316	4,834	0
HANSEN RD (NORTH)														
SHEET 1 OF 1													46	
TOTAL	0	0	0	0	0	0				0	0	0	46	0
HANSEN RD (SOUTH)														
SHEET 1 OF 1													46	
TOTAL	0	0	0	0	0	0				0	0	0	46	0
COOK RD-SH 19														
SHEET 1 OF 1											106	291	116	
TOTAL	0	0	0	0	0	0				0	106	291	116	0
MESQUITE ST														
SHEET 1 OF 1													53	
TOTAL	0	0	0	0	0	0				0	0	0	53	0
LOCAL RD														
SHEET 1 OF 3														
SHEET 2 OF 3											95	260	104	
SHEET 3 OF 3											93	257	103	30
TOTAL	0	0	0	0	0	0				0	188	517	207	30
FITE RD														
SHEET 1 OF 1													67	
TOTAL	0	0	0	0	0	0				0	0	0	67	0
GRAND TOTAL	2,175	2	16	500	8	8	4	2	3,221	8,690	12,223	33,613	20,849	110

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Texas Department of Transportation

US 82

QUANTITY SUMMARY

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	25
CHECK FS	CONTROL 0044	SECTION 04	JOB 048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\General\048*US82*QUANTITY*SUMMARY*06*RDWY-2.dgn
USER: MaMar24 SCALE: 1:100
DATE: 3/19/2024 TIME: 6:57:21 PM

SUMMARY OF DRAINAGE ITEMS

LOCATIONS	400	402	403	432	432	462	462	462	462	462	462	462	464	464	465
	6008	6001	6001	6002	6031	6002	6006	6034	6045	6046	6076	6078	6003	6018	6016
	CUT & RESTORE ASPH PAVING	TRENCH EXCAVATION PROTECTION	TEMPORARY SPL SHORING	RIPRAP (CONC) (5 IN)	RIPRAP (STONE PROTECTION) (12 IN)	CONC BOX CULV (3 FT X 3 FT)	CONC BOX CULV (5 FT X 2 FT)	CONC BOX CULV (10 FT X 10 FT)	CONC BOX CULV (3 FT X 2 FT) (EXTEND)	CONC BOX CULV (3 FT X 3 FT) (EXTEND)	CONC BOX CULV (10 FT X 8 FT) (EXTEND)	CONC BOX CULV (10 FT X 10 FT) (EXTEND)	RC PIPE (CL III) (18 IN)	RC PIPE (CL IV) (24 IN)	INLET (COMPL) (PCO) (3FT) (BOTH)
	SY	LF	SF	CY	CY	LF	LF	LF	LF	LF	LF	LF	LF	LF	EA
US 82															
C-1 STA 5729+60.02					29					105			11		
C-2 STA 5749+87.30	113				26	368							28		
BC-1 STA 5763+79.71				13	20							274	23		
BC-2 DRWY EBML-1A STA 10+79.35				24				53							
C-4 STA 5821+40.16			345								142		28		
C-5 STA 5832+46.45									111				10		
C-6 STA 5854+35.00					16		655								
C-7 STA 5860+07.19		118		2	56		388						15		
C-8 STA 5875+00.54	112	102			31	342									
STORM DRAIN PLAN & PROFILE- SHEET 1 OF 3		88												88	
STORM DRAIN PLAN & PROFILE- SHEET 2 OF 3		125												125	
STORM DRAIN PLAN & PROFILE- SHEET 3 OF 3													113		1
PROJECT TOTAL	225	433	345	39	178	710	1043	53	111	105	142	274	228	213	1

SUMMARY OF DRAINAGE ITEMS

LOCATIONS	465	466	466	466	466	466	466	467	467	467	479	480	496	496	496
	6126	6143	6159	6185	6192	6193	6194	6111	6171	6363	6003	6001	6004	6005	6008
	INLET (COMPL) (PSL) (FG) (3FTX3FT-3FTX3 FT)	WINGWALL (FW-O) (HW=11 FT)	WINGWALL (FW-S) (HW=12 FT)	WINGWALL (PW-2) (HW=10 FT)	WINGWALL (PW-2) (HW=3 FT)	WINGWALL (PW-2) (HW=4 FT)	WINGWALL (PW-2) (HW=5 FT)	SET (TY I) (S=3 FT) (HW= 4 FT) (3:1) (C)	SET (TY I) (S=5 FT) (HW= 3 FT) (3:1) (C)	SET (TY II) (18 IN) (RCP) (6: 1) (P)	ADJUSTING MANHOLES & INLETS	CLEAN EXIST CULVERTS	REMOVE STR (SET)	REMOVE STR (WINGWALL)	REMOVE STR (BOX CULVERT)
	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	LF
US 82															
C-1 STA 5729+60.02	1						1					1		1	
C-2 STA 5749+87.30	2					2							1	1	79
BC-1 STA 5763+79.71	2		1									1			
BC-2 DRWY EBML-1A STA 10+79.35		2													
C-4 STA 5821+40.16	2			1								1		1	
C-5 STA 5832+46.45	1				1							1		1	
C-6 STA 5854+35.00	1				2								2		59
C-7 STA 5860+07.19	1				1				2				2		59
C-8 STA 5875+00.54	1					1		2					2		57
STORM DRAIN PLAN & PROFILE- SHEET 1 OF 3	1										2				
STORM DRAIN PLAN & PROFILE- SHEET 2 OF 3	1										2				
STORM DRAIN PLAN & PROFILE- SHEET 3 OF 3										1					
PROJECT TOTAL	13	2	1	1	4	3	1	2	2	1	4	4	7	4	254

SUMMARY OF US81 STORM SEWER ITEMS

LOCATION	STA	STA	LENGTH (FT)	402 6001 TRENCH EXCAVATION PROTECTION (LF)	464 6003 RC PIPE (CL III) (18 IN) (LF)	464 6005 RC PIPE (CL III) (24 IN) (LF)	464 6007 RC PIPE (CL III) (30 IN) (LF)	464 6008 RC PIPE (CL III) (36 IN) (LF)	464 6009 RC PIPE (CL III) (42 IN) (LF)	464 6010 RC PIPE (CL III) (48 IN) (LF)	465 6002 MANH (COMPL) (PRM) (48IN) (EA)	465 6003 MANH (COMPL) (PRM) (60IN) (EA)	465 6128 INLET (COMPL) (PSL) (FG) (4FTX4FT-4FTX4FT) (EA)	467 6480 SET (TY II) (48 IN) (RCP) (6: 1) (P) (EA)
US 81 MAINLANE														
1 of 3	5003+00.00	5024+50.00	2150	1007	317	193	464						11	
2 of 3	5024+50.00	5034+00.00	950	1125			449	74	496	98			4	
3 of 3	5034+00.00	5045+00.00	1100	913			63			951		1	2	1
		US 81 SUBTOTAL:		3045	317	193	976	74	496	1,049		1	17	1
US 81 ERAMP														
	206+10.75	209+00.00	289											
	209+00.00	220+00.00	1100											
	220+00.00	231+00.00	1100											
	231+00.00	END												
		ERAMP SUBTOTAL:												
US81 WRAMP														
	100+00.00	107+45.00	745	528	528						1		1	
	107+45.00	117+35.00	990	309	309								1	
	117+35.00	123+92.69	657.69											
		WRAMP SUBTOTAL:		837	837						1		2	
		PROJECT TOTAL:		3882	1,154	193	976	74	496	1,049	1	1	19	1

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

QUANTITY SUMMARY

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
SD	6	(SEE TITLE SHEET)		US 82
GRAPHICS AH	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	26
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\General\048*US82*QUANTITY*SUMMARY*07*DRAINAGE-1.dgn
DATE: 2/23/2024 TIME: 3:35:40 PM USER: MoFeb24 SCALE: 1:100

SUMMARY OF STRIPING ITEMS

LOCATION	STA	STA	LENGTH (LF)	533 6001 RUMBLE STRIPS (SHOULDER) LF	533 6002 RUMBLE STRIPS (CENTERLINE) LF	658 6026 INSTL DEL ASSM (D-SY)SZ (BRF)CTB EA	658 6095 INSTL DEL ASSM (D-DY) SZ 1 (FLX) (GND) EA	658 6064 INSTL DEL ASSM (D-SY) SZ 1 (BRF) (GF2) EA	658 6099 INSTL OM ASSM (OM-2Z) (FLX) GND EA	666 6036 REFL PAV MRK TY I (W) 8" (SLD)(100 MIL) LF	666 6048 REFL PAV MRK TY I (W) 24" (SLD)(100 MIL) LF	666 6054 REFL PAV MRK TY I (W) (ARROW)(100 MIL) EA	666 6057 REFL PAV MRK TY I (W) (DBL ARROW)(100 MIL) EA	666 6072 REFL PAV MRK TY I (W) (LNDP ARROW)(100 MIL) EA	666 6078 REFL PAV MRK TY I (W) (WORD)(100 MIL) EA
US 82 - MAIN LANE															
SHEET 1 of 8	5721+92.00	5732+50.00	1058	4752	0	0	0	0	6	0	0	0	0	0	0
SHEET 2 of 8	5732+50.00	5754+50.00	2200	8801	0	0	0	0	4	330	0	0	0	2	0
SHEET 3 of 8	5754+50.00	5776+50.00	2200	8100	0	12	0	14	6	0	0	0	0	0	0
SHEET 4 of 8	5776+50.00	5798+50.00	2200	8614	0	0	2	0	1	1552	47	5	0	0	5
SHEET 5 of 8	5798+50.00	5820+50.00	2200	7523	0	0	2	0	8	1246	86	5	0	0	4
SHEET 6 of 8	5820+50.00	5842+50.00	2200	8906	0	0	2	0	9	2917	82	8	0	2	10
SHEET 7 of 8	5842+50.00	5853+50.00	1100	2050	0	12	2	14	3	2102	179	13	3	0	6
SHEET 8 of 8	5853+50.00	5875+00.00	2150	8275	0	0	2	0	10	1763	61	5	0	2	5
		US 82 SUBTOTAL:	15308	57021	0	24	10	28	47	9910	455	36	3	6	30
US 81 - MAIN LANE															
SHEET 1 of 3	5000+00.00	5023+50.00	2350	3832	0	0	0	0	10	652	0	0	0	2	0
SHEET 2 of 3	5023+50.00	5034+00.00	1050	2000	0	0	0	0	6	300	0	0	0	0	0
SHEET 3 of 3	5034+00.00	5055+00.00	2100	4203	1841	0	0	0	4	1051	0	0	0	2	0
		US 81 SUBTOTAL:	5500	10035	1841	0	0	0	20	2003	0	0	0	4	0
		PROJECT TOTALS:	20808	67056	1841	24	10	28	67	11913	455	36	3	10	30

SUMMARY OF STRIPING ITEMS

LOCATION	STA	STA	LENGTH (LF)	666 6174 REFL PAV MRK TY II (W) 6" (SLD) LF	666 6210 REFL PAV MRK TY II (Y) 6" (SLD) LF	666 6171 REFL PAV MRK TY II (W) 6" (BRK) LF	666 6208 REFL PAV MRK TY II (Y) 6" (BRK) LF	666 6178 REFL PAV MRK TY II (W) 8" (SLD) LF	666 6182 REFL PAV MRK TY II (W) 24" (SLD) LF	666 6184 REFL PAV MRK TY II (W) (ARROW) EA	666 6185 REFL PAV MRK TY II (W) (DBL ARROW) EA
US 82 - MAIN LANE											
SHEET 1 of 8	5721+92.00	5732+50.00	1058	3861	2797	191	0	0	0	0	0
SHEET 2 of 8	5732+50.00	5754+50.00	2200	5361	4466	900	0	330	0	0	0
SHEET 3 of 8	5754+50.00	5776+50.00	2200	4400	4400	1100	0	0	0	0	0
SHEET 4 of 8	5776+50.00	5798+50.00	2200	4400	4283	1100	0	1552	47	5	0
SHEET 5 of 8	5798+50.00	5820+50.00	2200	4358	4697	1100	0	1246	86	5	0
SHEET 6 of 8	5820+50.00	5842+50.00	2200	4443	4930	1210	0	2917	82	8	0
SHEET 7 of 8	5842+50.00	5853+50.00	1100	2359	3560	702	0	2102	179	13	3
SHEET 8 of 8	5853+50.00	5875+00.00	2150	4509	4570	1251	0	1763	61	5	0
		US 82 SUBTOTAL:	15308	33691	33703	7554	0	9910	455	36	3
US 81 - MAIN LANE											
SHEET 1 of 3	5000+00.00	5023+50.00	2350	4626	5777	110	240	652	0	0	0
SHEET 2 of 3	5023+50.00	5034+00.00	1050	3724	4200	0	0	300	0	0	0
SHEET 3 of 3	5034+00.00	5055+00.00	2100	0	5588	120	0	1051	0	0	0
		US 81 SUBTOTAL:	5500	8350	15565	230	240	2003	0	0	0
		PROJECT TOTALS:	20808	42041	49268	7784	240	11913	455	36	3

SUMMARY OF STRIPING ITEMS

LOCATION	STA	STA	LENGTH (LF)	666 6190 REFL PAV MRK TY II (W) (LNDP ARROW) EA	666 6192 REFL PAV MRK TY II (W) (WORD) EA	666 6306 RE PM W/RET REQ TY I (W) 6" (BRK)(100 MIL) LF	666 6309 RE PM W/RET REQ TY I (W) 5" (SLD)(100 MIL) LF	666 6318 RE PM W/RET REQ TY I (Y) 6" (BRK)(100 MIL) LF	666 6321 RE PM W/RET REQ TY I (Y) 6" (SLD)(100 MIL) LF	672 6009 REFL PAV MRKR TY II-A-A EA	672 6010 REFL PAV MRKR TY II-C-R EA
US 82 - MAIN LANE											
SHEET 1 of 8	5721+92.00	5732+50.00	1058	0	0	191	3861	0	2797	8	9
SHEET 2 of 8	5732+50.00	5754+50.00	2200	2	0	900	5361	0	4466	0	48
SHEET 3 of 8	5754+50.00	5776+50.00	2200	0	0	1100	4400	0	4400	0	55
SHEET 4 of 8	5776+50.00	5798+50.00	2200	0	5	1100	4400	0	4283	2	55
SHEET 5 of 8	5798+50.00	5820+50.00	2200	0	4	1100	4358	0	4697	13	55
SHEET 6 of 8	5820+50.00	5842+50.00	2200	2	10	1210	4443	0	4930	17	60
SHEET 7 of 8	5842+50.00	5853+50.00	1100	0	6	702	2359	0	3560	44	36
SHEET 8 of 8	5853+50.00	5875+00.00	2150	2	5	1251	4509	0	4570	12	63
		US 82 SUBTOTAL:	15308	6	30	7554	33691	0	33703	96	382
US 81 - MAIN LANE											
SHEET 1 of 3	5000+00.00	5023+50.00	2350	2	0	110	4626	240	5777	178	6
SHEET 2 of 3	5023+50.00	5034+00.00	1050	0	0	0	3724	0	4200	100	0
SHEET 3 of 3	5034+00.00	5055+00.00	2100	2	0	120	0	0	5588	172	6
		US 81 SUBTOTAL:	5500	4	0	230	8350	240	15565	450	12
		PROJECT TOTALS:	20808	10	30	7784	42041	240	49268	546	394

EJES INCORPORATED
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DALLAS, TEXAS 75243
FIRM REG F-2488
TEL: 214-343-1210 / FAX: 214-343-3885

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

QUANTITY SUMMARY

SHEET 8 OF 10

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.	HIGHWAY NO.
TT	6	(SEE TITLE SHEET)	US 82
GRAPHICS	STATE	DISTRICT	COUNTY
TT	TEXAS	WFS	MONTAGUE
CHECK	CONTROL	SECTION	JOB
PA	0044	04	048
CHECK			SHEET NO.
PA			27

100% SUBMITTAL

PLOT DRIVER: US82*BW*HALF*PDF*LineWt*Modified.pltcfg
PENTABLE: US82*PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\General\048*US82*QUANTITY*SUMMARY*08*STRP*EJES.dgn
DATE: 3/15/2024 TIME: 8:31:47 PM USER: mmar24 SCALE: 1:20.0018

100% SUBMITTAL

SUMMARY OF SIGN ASSEMBLIES

LOCATION	644	644	644	644	644	644	644	644	644
	6001	6004	6027	6030	6032	6033	6050	6068	6076
	IN SM RD SN SUP & AM TY 10 BWG (1) SA (P)	IN SM RD SN SUP & AM TY 10 BWG (1) SA (T)	IN SM RD SN SUP & AM TY S80 (1) SA (P)	IN SM RD SN SUP & AM TY S80 (1) SA (T)	IN SM RD SN SUP & AM TY S80 (1) SA (T-EXAL)	IN SM RD SN SUP & AM TY S80 (1) SA (U)	IN SM RD SN SUP & AM TY S80 (1) SA (U-EXAL)	RELOCATE SM RD SN SUP & AM TY 10 BWG	REMOVE SM RD SN SUP&AM
	EA	EA	EA	EA	EA	EA	EA	EA	EA
US 82 - MAIN LANE									
SHEET 1 of 8	3							1	1
SHEET 2 of 8	3							1	1
SHEET 3 of 8	2								1
SHEET 4 of 8	2	7		2					1
SHEET 5 of 8	4	4		4				4	2
SHEET 6 of 8	6	4		4				7	3
SHEET 7 of 8	9	4	4	4	4			3	11
SHEET 8 of 8	6	4		3				5	8
US 82 SUBTOTAL:	35	23	4	17	4			21	28
US 81 - MAIN LANE									
SHEET 1 of 3				1			1	6	4
SHEET 2 od 3	5	1	2			2		3	6
SHEET 3 of 3	1	1		1			1	3	1
US 81 SUBTOTAL:	6	2	2	2		2	2	12	11
PROJECT TOTALS:	41	25	6	19	4	2	2	33	39

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GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

US 82

QUANTITY SUMMARY

SHEET 9 OF 10

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
TT	6	(SEE TITLE SHEET)		US 82
GRAPHICS TT	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK PA	TEXAS	WFS	MONTAGUE	28
CHECK PA	CONTROL 0044	SECTION 04	JOB 048	

PLOT DRIVER: US82*BW*HALF*PDF*LineW**Modified.pltcfg
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\General\048*US82*QUANTITY*SUMMARY*09*SIGNAGE.dgn
DATE: 3/15/2024 TIME: 8:29:56 PM USER: mamar24 SCALE: 1:20.0018
PENTABLE: US82*PEN.tbl

SUMMARY OF ILLUMINATION ITEMS

LOCATION	416 6029	610 6009	610 6290	610 6291	618 6023	618 6047	620 6009	620 6010	624 6002	628 6009
	DRILL SHAFT (RDWY ILL POLE) (30 IN)	REMOVE RD IL ASM (TRANS-BASE)	IN RD IL (TY SA) 50T-12 (400W EQ) LED	IN RD IL (TY SA) 50T-12-12 (400W EQ) LED	CONDT (PVC) (SCH 40) (2")	CONDT (PVC) (SCH 40) (2") (BORE)	ELEC CONDR (NO. 6) BARE	ELEC CONDR (NO. 6) INSULATED	GROUND BOX TY A (122311) W/APRON	ELC SRV TY A 120/240 060 (NS) SS (E) SP (O)
	LF	EA	EA	EA	LF	LF	LF	LF	EA	EA
SHEET 1 OF 3	50		4	1	915	245	1205	2410	5	
SHEET 2 OF 3	40	6	4		2865	510	3455	7710	10	1
SHEET 3 OF 3	50		4	1	1045	185	1280	2560	6	
PROJECT TOTAL	140	6	12	2	4825	940	5940	12680	21	1

SUMMARY OF EROSION CONTROL ITEMS

LOCATION	160 6003	164 6054	164 6055	164 6056	168 6001	506 6002	506 6011	506 6020	506 6024	506 6038	506 6039	506 6041	506 6043
	FURNISHING AND PLACING TOPSOIL (4")	BOND FBR MTRX SEED (PERM) (RURAL) (SAND)	BONDED FBR MTRX SEED (TEMP) (WARM)	BONDED FBR MTRX SEED (TEMP) (COOL)	VEGETATIVE WATERING	ROCK FILTER DAMS (INSTALL) (TY 2)	ROCK FILTER DAMS (REMOVE)	CONSTRUCTION EXITS (INSTALL) (TY 1)	CONSTRUCTION EXITS (REMOVE)	TEMP SEDMT CONT FENCE (INSTALL)	TEMP SEDMT CONT FENCE (REMOVE)	BIODEG EROSN CONT LOGS (INSTL) (12")	BIODEG EROSN CONT LOGS (REMOVE)
	SY	SY	SY	SY	MG	LF	LF	SY	SY	LF	LF	LF	LF
SHEET 1 OF 21						48	48	178	178				
SHEET 2 OF 21	9992	9992	4996	4996	168	144	144	178	178	890	890	26	26
SHEET 3 OF 21	14498	14498	7249	7249	244	72	72	178	178				
SHEET 4 OF 21	14994	14994	7497	7497	252	96	96	178	178	884	884	52	52
SHEET 5 OF 21	13928	13928	6964	6964	234	144	144	178	178	474	474	52	52
SHEET 6 OF 21	9220	9220	4610	4610	155	168	168	178	178	216	216		
SHEET 7 OF 21	12208	12208	6104	6104	205			178	178	198	198		
SHEET 8 OF 21	20514	20514	10257	10257	345			178	178			104	104
SHEET 9 OF 21	18744	18744	9372	9372	315	24	24	178	178			130	130
SHEET 10 OF 21	14440	14440	7220	7220	243	72	72	178	178	190	190	52	52
SHEET 11 OF 21	11320	11320	5660	5660	190	72	72	178	178	1042	1042	26	26
SHEET 12 OF 21	12542	12542	6271	6271	211	144	144	178	178	1158	1158	26	26
SHEET 13 OF 21	7690	7690	3845	3845	129	48	48			634	634	26	26
SHEET 14 OF 21	10934	10934	5467	5467	184	72	72	178	178			26	26
SHEET 15 OF 21	8102	8102	4051	4051	136	48	48	178	178			26	26
SHEET 16 OF 21	2040	2040	1020	1020	34	72	72	178	178				
SHEET 17 OF 21	5072	5072	2536	2536	85	96	96	178	178			156	156
SHEET 18 OF 21	18880	18880	9440	9440	317	48	48	178	178	472	472	176	176
SHEET 19 OF 21	27804	27804	13902	13902	467	48	48	178	178	702	702	104	104
SHEET 20 OF 21	8720	8720	4360	4360	146	48	48	178	178				
SHEET 21 OF 21	602	602	301	301	10	24	24	178	178				
PROJECT TOTALS	242244	242244	121122	121122	4070	1488	1488	3560	3560	6860	6860	982	982

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

QUANTITY SUMMARY

SHEET 10 OF 10

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
SD	6	(SEE TITLE SHEET)		US 82
GRAPHICS AH	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	29
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\General\048*US82*QUANTITY*SUMMARY*10*ILLUM&ECP.dgn
DATE: 3/16/2024 TIME: 3:26:53 PM USER: mamar24 SCALE: 1:100

LOC NO.	PLAN SHEET NUMBER	LOCATION	CHAIN	STA	TEST LEVEL	DIRECTION OF TRAFFIC (UNI/BI)	FOUNDATION PAD		BACKUP SUPPORT			AVAILABLE SITE LENGTH	CRASH CUSHION									
															MOVE / RESET		L	L	R	R	S	S
							PROPOSED MATERIAL	PROPOSED THICKNESS	DESCRIPTION	WIDTH	HEIGHT		INSTALL	REMOVE	MOVE/ RESET	FROM LOC.#	N	W	N	W	N	W
01	05 OF 22	EBML	℄ US 82 EBML	15803+21.65	TL-3	UNI	CONC	6" MIN	SSCB (MOD)	2′	42"	>50′	X				X					
02	05 OF 22	EBML	℄ US 82 EBML	15803+61.21	TL-3	UNI	CONC	6" MIN	SSCB (MOD)	2′	42"	>50′	X				X					
03	05 OF 22	WBML	℄ US 82 WBML	25807+17.86	TL-3	UNI	CONC	6" MIN	SSCB (MOD)	2′	42"	>50′	X				X					
04	05 OF 22	WBML	℄ US 82 WBML	25807+28.19	TL-3	UNI	CONC	6" MIN	SSCB (MOD)	2′	42"	>50′	X				X					
05	11 OF 22	US 81 ML	℄ US 81 ML	5027+80.16	TL-5	BI	CONC	6" MIN	T80PP	8′	54"	>50′	X					X				
06	12 OF 22	US 81 ML	℄ US 81 ML	5030+84.86	TL-5	BI	CONC	6" MIN	T80PP	8′	54"	>50′	X					X				
												TOTALS	6									

LEGEND:

L=LOW MAINTENANCE
R=REUSABLE
S=SACRIFICIAL
N=NARROW
W=WIDE

FOR DEFINITIONS SEE THE "CRASH CUSHION CATEGORIZATION CHART.PDF" AT THE DESIGN DIVISION (ROADWAY STANDARDS) WEBSITE. USE QUICK LINKS TO ACCESS ATTENUATORS / CRASH CUSHIONS SECTION.
http://www.dot.state.tx.us/insdtdot/orgchart/cmd/cserve/standard/rdwylse.htm

STATE OF TEXAS
FIROZE SHAMS
97215
LICENSED
PROFESSIONAL ENGINEER

Firoze Shams
2/13/2024

CRASH CUSHION SUMMARY SHEET

FILE: ccss.dgn	DN: TxDOT	CK:	CK:	
© TxDOT	CONT	SECT	JOB	HIGHWAY
REVISIONS	0044	04	048	US 82
	DIST	COUNTY		
	WFS	MONTAGUE		
	FEDERAL AID PROJECT			SHEET NO.
				29A

100% SUBMITTAL

PLOT DRIVER: US82*BW*HALF*PDF*LineWt*Modified.pltcfg
PENTABLE: US82*PEN.tbl

USER: MaMar24 SCALE: 1:20.0028

FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\General\048*US82*QUANTITY*SUMMARY*11*DRWY&CROSSOVER SUM.dgn
DATE: 3/20/2024 TIME: 7:24:00 PM

SUMMARY OF DRIVEWAY ITEMS

LOCATION	STA	STA	LENGTH (FT)	464 6003 RC PIPE (CL III) (18 IN)	464 6005 RC PIPE (CL III) (24 IN)	467 6363 SET (TY II) (18 IN) (RCP) (6:1) (P)	467 6395 SET (TY II) (24 IN) (RCP) (6:1) (P)	530 6004 DRIVEWAYS (CONC)	530 6005 DRIVEWAYS (ACP)	530 6016 DRIVEWAYS (BASE)
				LF	LF	EA	EA	SY	SY	SY
US 82 MAINLANES										
1 of 22	5725+76.12	5736+06.13	1030							
2 of 22	5736+06.13	5758+99.91	2294							
3 of 22	5758+99.9	5780+00.00	2100				2			281
4 of 22	5780+00.00	5802+01.17	2201							85
5 of 22	5802+01.17	5824+10.00	2209		30		2			98
6 of 22	5824+10.00	5845+98.76	2189	120	60	8	4			399
7 of 22	5845+98.76	5866+96.68	2098	40		2			197	54
8 of 22	5866+96.68	5875+46.03	849							
US 82 SUBTOTAL:				160	90	10	8		197	917
US 81 MAINLANES										
9 of 22	5003+00.00	5007+00.00	400		33		2	53		
10 of 22	5007+00.00	5018+00.00	1100		92		4		99	203
11 of 22	5018+00.00	5029+00.00	1100					100	47	159
12 of 22	5029+00.00	5040+00.00	1100							
13 of 22	5040+00.00	5051+00.00	1100							
14 of 22	5051+00.00	5055+00.	400							
US 81 SUBTOTAL:					125		6	153	146	362
US 81 ERAMP										
15 of 22	206+10.75	209+00.00	289							
16 of 22	209+00.00	220+00.00	1100							
17 of 22	220+00.00	231+00.00	1100							
18 of 22	231+00.00	END								
ERAMP SUBTOTAL:										
US81 WRAMP										
19 of 22	BEGIN	100+00.00								
20 of 22	100+00.00	110+00.00	1000							
21 of 22	110+00.00	120+00.00	1000							
22 of 22	120+00.00	123+92.69	392.69							
WRAMP SUBTOTAL:										
US 82 LOCAL RD										
1 of 3	10+00.	20+50.00	1050							
2 of 3	20+50.00	23+50.00	300							61
3 of 3	23+50.00	27+48.00	398							152
LOCAL ROAD SUBTOTAL:										213
PROJECT TOTAL:				160	215	10	14	153	343	1,492

CULVERT AT CROSSOVER SUMMARY TABLE

LOCATION	CROSSOVER STA	CROSSOVER NUMBER	UPSTREAM STA	UPSTREAM OFFSET	UPSTREAM FL	DOWNSTREAM STA	DOWNSTREAM OFFSET	DOWNSTREAM FL	CULVERT DESCRIPTION	464 6003 RC PIPE (CL III) (18 IN)	467 6363 SET (TY II) (18 IN) (RCP) (6:1) (P)
US 82										LF	EA
SHEET 4 OF 22	5788+25.00	CROSSOVER-1									
SHEET 5 OF 22	5815+84.29	HANSON RD									
SHEET 6 OF 22	5830+74.13	COOK RD AND SH 19 LOOP	5831+37.18	9.80 RT	890.80	5830+07.50	8.10 LT	889.50	1-18" RCP	131	2
SHEET 6 OF 22	5843+62.00	MESQUITE ST AND LOCAL RD	5844+22.00	0 LT	908.43	5843+00.00	0 LT	905.43	1-18" RCP	122	2
SHEET 7 OF 22	5859+76.80	FITE RD									
PROJECT TOAL:										253	4

EJES INCORPORATED
12801 N. CENTRAL EXPY. STE. 700
DALLAS, TEXAS 75243
TEL: 214-343-1210 / FAX: 214-343-3885
FIRM REG F-2488

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

US 82

DRIVEWAY AND CROSSOVER SUMMARY

SHEET 1 OF 1

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
TT	6	(SEE TITLE SHEET)		US 82
GRAPHICS TT	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK PA	TEXAS	WFS	MONTAGUE	30
CHECK PA	CONTROL 0044	SECTION 04	JOB 048	

GENERAL NOTES

1. THE CONTRACTOR SHALL COORDINATE WITH THE FRANCHISE UTILITY CONTRACTORS THAT WILL BE PERFORMING UTILITY RELOCATIONS.

2. TEMPORARY PAVEMENT IS TO BE PAID FOR AS 508-6001 "CONSTRUCTING DETOURS". SEE PLANS FOR TEMPORARY PAVEMENT DETAIL.

3. ALL EXISTING SIGNS ON OPEN ROADWAYS THAT ARE NOT IN CONFLICT WITH THE CONSTRUCTION AND TRAFFIC SHALL REMAIN IN PLACE UNLESS OTHERWISE DIRECTED BY TXDOT. SIGNS THAT ARE IN CONFLICT, SHALL BE COVERED OR REMOVED, STORED AND REPLACED IN FINAL LOCATION IF NOT BEING REPLACED.

4. THE CONTRACTOR SHALL ERECT REQUIRED CONSTRUCTION AND TRAFFIC CONTROL SIGNS PRIOR TO DETOUR OF TRAFFIC.

5. THE CONTRACTOR SHALL COORDINATE PLACEMENT OF FINAL PAVEMENT MARKINGS WITH TxDOT. FINAL PAVEMENT MARKINGS SHALL BE PLACED ON THE FINAL SURFACE COURSE, WHEN APPROVED BY TxDOT.

6. THE CONTRACTOR SHALL COORDINATE WITH TxDOT FOR DRIVEWAY TIE-INS OR ANY WORK OUTSIDE THE R.O.W. A RIGHT-OF-ENTRY OR TEMPORARY CONSTRUCTION EASEMENT MAY BE REQUIRED FOR THESE CONDITIONS AND NO WORK SHALL PROCEED WITHOUT PRIOR APPROVAL FROM TxDOT.

7. THE CONTRACTOR TO REMOVE, RELOCATE, AND REPLACE MAILBOXES TO MATCH EXISTING CONDITIONS. ACCESS TO MAILBOXES MUST BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION.

8. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION AND CORRECT ANY DRAINAGE DEFICIENCIES THAT PRESENT A HAZARD TO THE TRAVELING PUBLIC.

9. TEMPORARY SW3P EROSION CONTROL MEASURES SHALL BE REMOVED IN EACH AREA WITHIN TWO WEEKS OF VEGETATION ESTABLISHMENT OR AS APPROVED BY THE ENGINEER.

10. ALL PROPOSED PAVEMENT DROP-OFFS SHALL BE BACKFILLED TO 3:1 OR FLATTER BY THE END OF THE WORK DAY.

11. ANY EXISTING PAVEMENT MARKINGS THAT ARE IN CONFLICT WITH TEMPORARY PAVEMENT MARKINGS OF THE CURRENT PHASE SHALL BE REMOVED PRIOR TO OPENING TO TRAFFIC.

12. THE CONTRACTOR MUST MAINTAIN ACCESS TO ALL SIDE STREETS, ADJACENT PROPERTIES AND DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION UNLESS OTHERWISE APPROVED BY TXDOT AND PROPERTY OWNERS. TEMPORARY GRADING AND OTHER INCIDENTALS NECESSARY TO MAINTAIN ACCESS DURING CONSTRUCTION WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED SUBSIDIARY TO CONSTRUCTION OF DRIVEWAYS AND SIDE STREETS.

13. THE CONTRACTOR SHALL PROVIDE ADVANCE WARNING SIGNS PER TxDOT BC(2)-21 STANDARD PRIOR TO BEGINNING OF WORK. SEE ADVANCE WARNING SIGN PLANS FOR ADDITIONAL INFORMATION.

14. THE CONTRACTOR SHALL MONITOR WORK SITES TO ENSURE THAT TRAFFIC CONTROL MEASURES ARE OPERATING EFFECTIVELY AND THAT ALL DEVICES USED ARE CLEARLY VISIBLE, CLEAN, AND IN GOOD CONDITION.

15. THE CONTRACTOR SHALL POSTPONE FINAL SURFACE COURSE (2" SMA) CONSTRUCTION ON PROPOSED US 82 AND US 81 UNTIL FINAL PHASE. SEE SEQUENCE OF WORK FOR ADDITIONAL INFORMATION.

16. THE PROPOSED SAFETY LIGHTING ILLUMINATION SHALL BE INSTALLED AND OPERATIONAL AT RAMP MERGING/DIVERGING LOCATIONS AND INTERSECTIONS AS EARLY AS POSSIBLE TO PROMOTE ADDITIONAL SAFETY IN TRAFFIC CONTROL PHASES.

SEQUENCE OF WORK

PHASING

INSTALL BARRICADES, SIGNS AND TRAFFIC CONTROL DEVICES AS SHOWN IN EACH PHASE.

REMOVE EXISTING PAVEMENT MARKINGS AND COVER SIGNS THAT ARE IN CONFLICT WITH THE CURRENT PHASE PRIOR TO OPENING TO TRAFFIC.

PHASE 1A

A. PLACE BARRICADES AND ADVANCE WARNING SIGNS ALONG PROJECT PRIOR TO CONSTRUCTION.
B. INSTALL WORK ZONE PAVEMENT MARKINGS, SIGNING AND CHANNELIZING DEVICES.
C. CONSTRUCT TEMPORARY PAVEMENT AS SHOWN ALONG US 81 NORTHBOUND TO WIDEN TO EAST.
D. NO WORK ON US 82.
E. BOTH US 81 AND US 82 TRAFFIC TO REMAIN ON EXISTING PAVEMENT.

PHASE 1B

A. ELIMINATE EXISTING PAVEMENT MARKINGS AS REQUIRED. PLACE WORK ZONE PAVEMENT MARKINGS, SIGNS AND CHANNELIZING DEVICES.
B. CONSTRUCT PROPOSED US 81 SB RAMPS AND NB RAMPS.
C. CONSTRUCT WEST HALF OF PROPOSED US 81 OUTSIDE OF THE US 82/81 INTERCHANGE AREA (US 81 STA 5003+37.79 TO 5023+40.36 AND STA 5038+76.34 TO 5048+94.91).
D. CONSTRUCT PROPOSED US 82 EBML, SKIPPING SECTIONS AT THE EXISTING RAMPS (US 82 STA 5843+17 TO 5846+00 AND STA 5851+64 TO 5855+00).
E. US 82 TRAFFIC TO REMAIN ON EXISTING PAVEMENT.
F. US 81 TRAFFIC TO SHIFTED TO EAST TO UTILIZE EXISTING AND TEMPORARY PAVEMENT AS SHOWN.

PHASE 2A

A. ELIMINATE EXISTING PAVEMENT MARKINGS AS REQUIRED. PLACE WORK ZONE PAVEMENT MARKINGS, SIGNS AND CHANNELIZING DEVICES.
B. US 81 TRAFFIC IS MOVED TO PROPOSED US 81 SB RAMPS, BYPASSING THE EXISTING US 82 BRIDGE. US 81 SB RAMPS WILL BE TEMPORARILY USED FOR TWO-WAY.
C. CONSTRUCT US 81 FULL WIDTH IN THE INTERCHANGE AREA LEAVING A PORTION UNDER THE EXISTING US 82 BRIDGE BEWTEEN US 81 STA 5029+40.00 TO 5030+60.00. DO NOT DISTURB EXISTING US 82 BRIDGE STRUCTURE AND SURROUNDING FILL AND RIPRAP.
D. CONSTRUCT PROPOSED US 82 EBML SECTIONS SKIPPED IN PHASE 1B (US 82 STA 5843+16.80 TO 5846+00.00 AND STA 5847+92.07 TO 5855+00.97). CONSTRUCT PROPOSED US 82 EBML BRIDGE.
E. CONSTRUCT PROPOSED US 82 EBML BRIDGE.
F. US 82 TRAFFIC TO REMAIN ON EXISTING PAVEMENT.

PHASE 2B

A. ELIMINATE EXISTING PAVEMENT MARKINGS AS REQUIRED. PLACE WORK ZONE PAVEMENT MARKINGS, SIGNS AND CHANNELIZING DEVICES.
B. US 81 TRAFFIC REMAINS ON US 81 SB RAMPS.
C. US 82 TRAFFIC IS MOVED TO PROPOSED US 82 EBML PAVEMENT.
D. CONSTRUCT PROPOSED US 82 WBML BRIDGE AND APPROACH SLAB. REMOVE EXISTING US 82 BRIDGE.

PHASE 2C

A. ELIMINATE EXISTING PAVEMENT MARKINGS AS REQUIRED. PLACE WORK ZONE PAVEMENT MARKINGS, SIGNS AND CHANNELIZING DEVICES.
B. US 81 TRAFFIC IS MOVED TO PROPOSED US 81 ROADWAY. PROPOSED US 81 SB RAMPS AND NB RAMPS ARE BOTH UTILIZED ONE-WAY.
C. US 82 TRAFFIC REMAINS ON PROPOSED US 82 EBML PAVEMENT.
D. CONSTRUCT PROPOSED US 82 WBML.

FINAL PHASE

A. PLACE WORK ZONE SIGNS AND CHANNELIZING DEVICES.
B. CONSTRUCT FINAL SEAL COAT AND SURFACE COURSE (SMA) FOR US 82 AND US 81 PER APPLICABLE TCP STANDARD.
C. PLACE PERMANENT PAVEMENT MARKINGS ON US 82 AND US 81 PER APPLICABLE TCP STANDARD.
D. PERFORM FINAL CLEAN UP AND REMOVE TRAFFIC CONTROL DEVICES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
NOTES AND SEQUENCE OF WORK
NARRATIVE

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	31
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

048_US82_OTH_TCP_SEQ_01.dgn
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10/18/2023

NOTES:

1. PLACE ADVANCE WARNING SIGNS PER BC-21 STANDARDS AND TMUTCD.
2. WORK ZONE SPEED LIMITS VARY ON US 82 NEAR RINGGOLD. SEE TCP PLAN SHEETS FOR PLACEMENT OF VARIOUS WORK ZONE SPEED LIMIT SIGNS.

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ADVANCE WARNING SIGNS

SHEET 1 OF 2

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	32
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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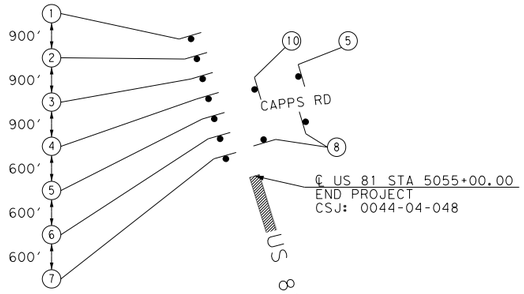
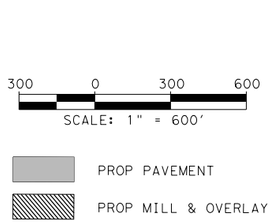
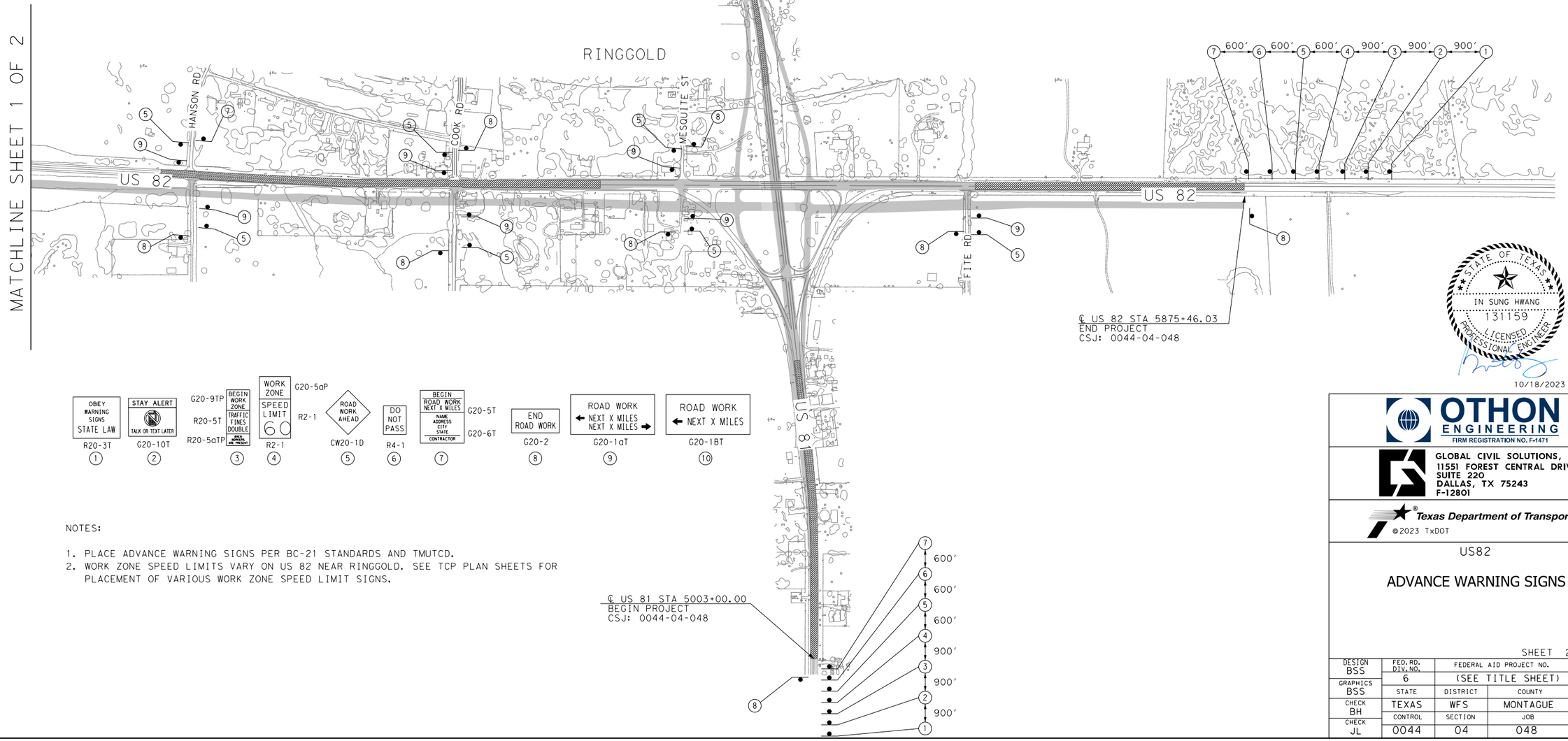




MATCHLINE SHEET 1 OF 2



NOTES:

1. PLACE ADVANCE WARNING SIGNS PER BC-21 STANDARDS AND TMUTCD.
2. WORK ZONE SPEED LIMITS VARY ON US 82 NEAR RINGGOLD. SEE TCP PLAN SHEETS FOR PLACEMENT OF VARIOUS WORK ZONE SPEED LIMIT SIGNS.

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ADVANCE WARNING SIGNS

SHEET 2 OF 2

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	33
CHECK JL	CONTROL	SECTION	JOB	
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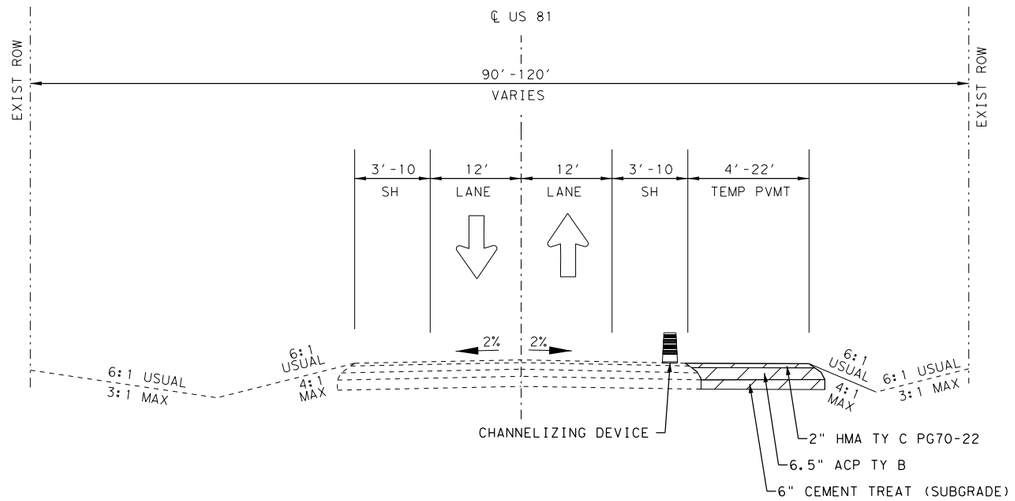

US 81 STA 4996+39.77 - 5058+75.26

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE

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US82

TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 1A

SCALE: NTS SHEET 1 OF 1

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	34
CHECK JL	CONTROL	SECTION	JOB	
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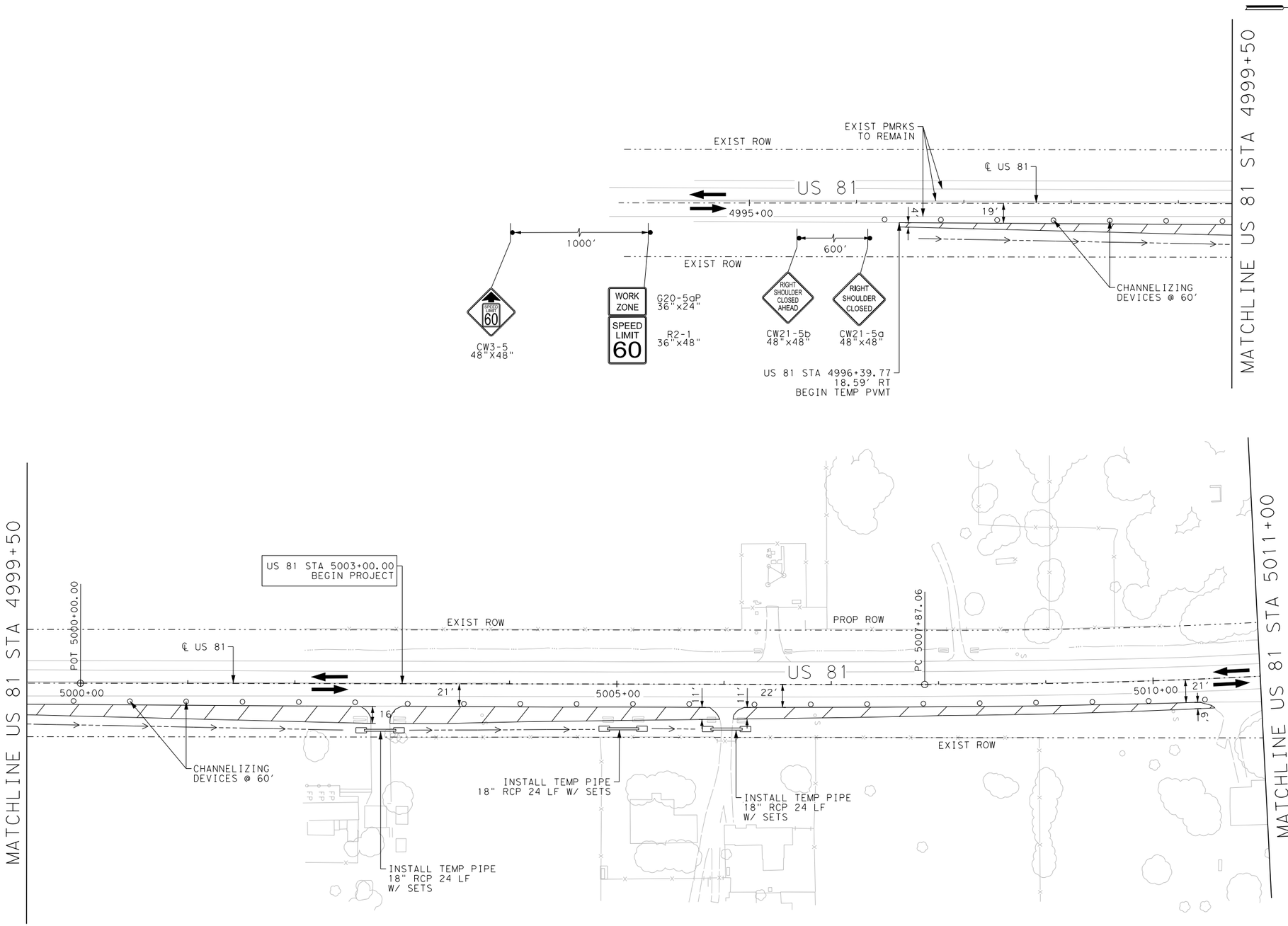

Z

50 0 50 100
SCALE: 1" = 100′

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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10/18/2023

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US82

TRAFFIC CONTROL PLAN
PHASE 1A
US 81 BEGIN PROJECT TO STA 5011+00

SHEET 1 OF 6

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	35
CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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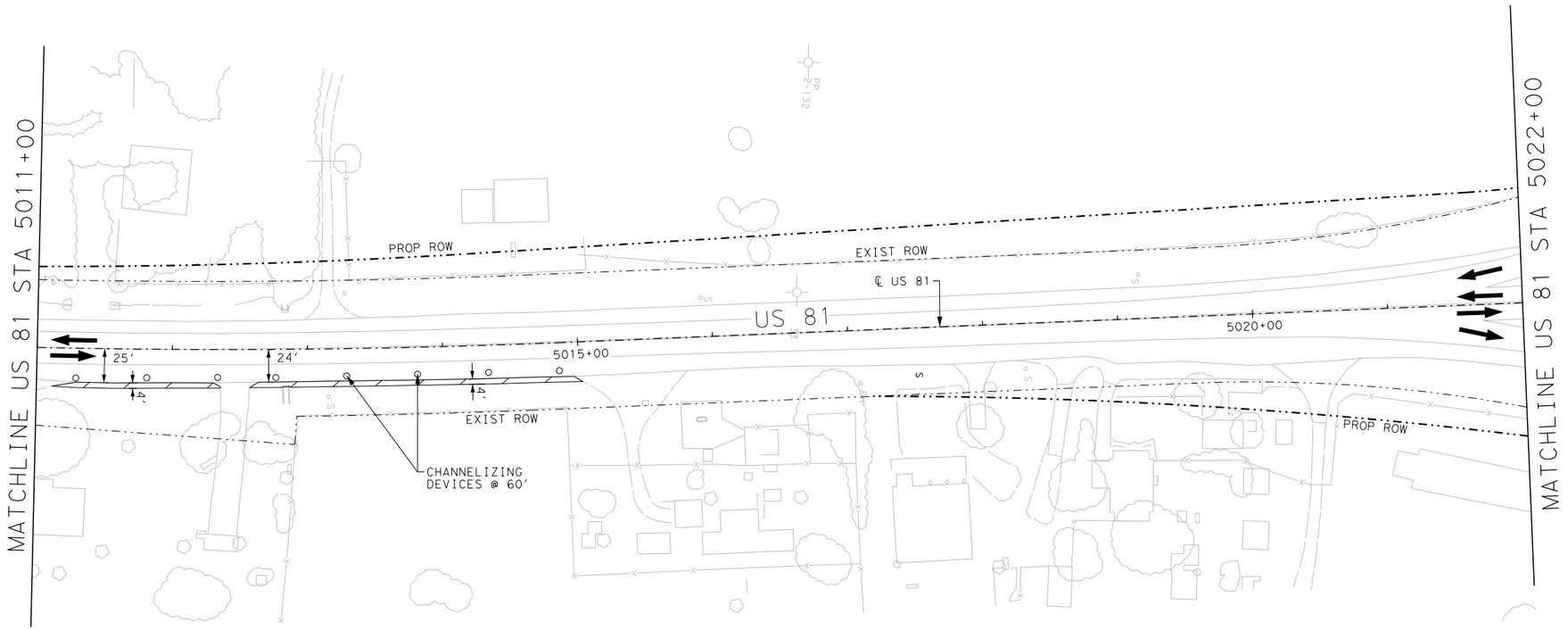

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SCALE: 1" = 100'

N

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1A
US 81 STA 5011+00 TO STA 5022+00

SHEET 2 OF 6

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	36
CHECK JL	CONTROL	SECTION	JOB	
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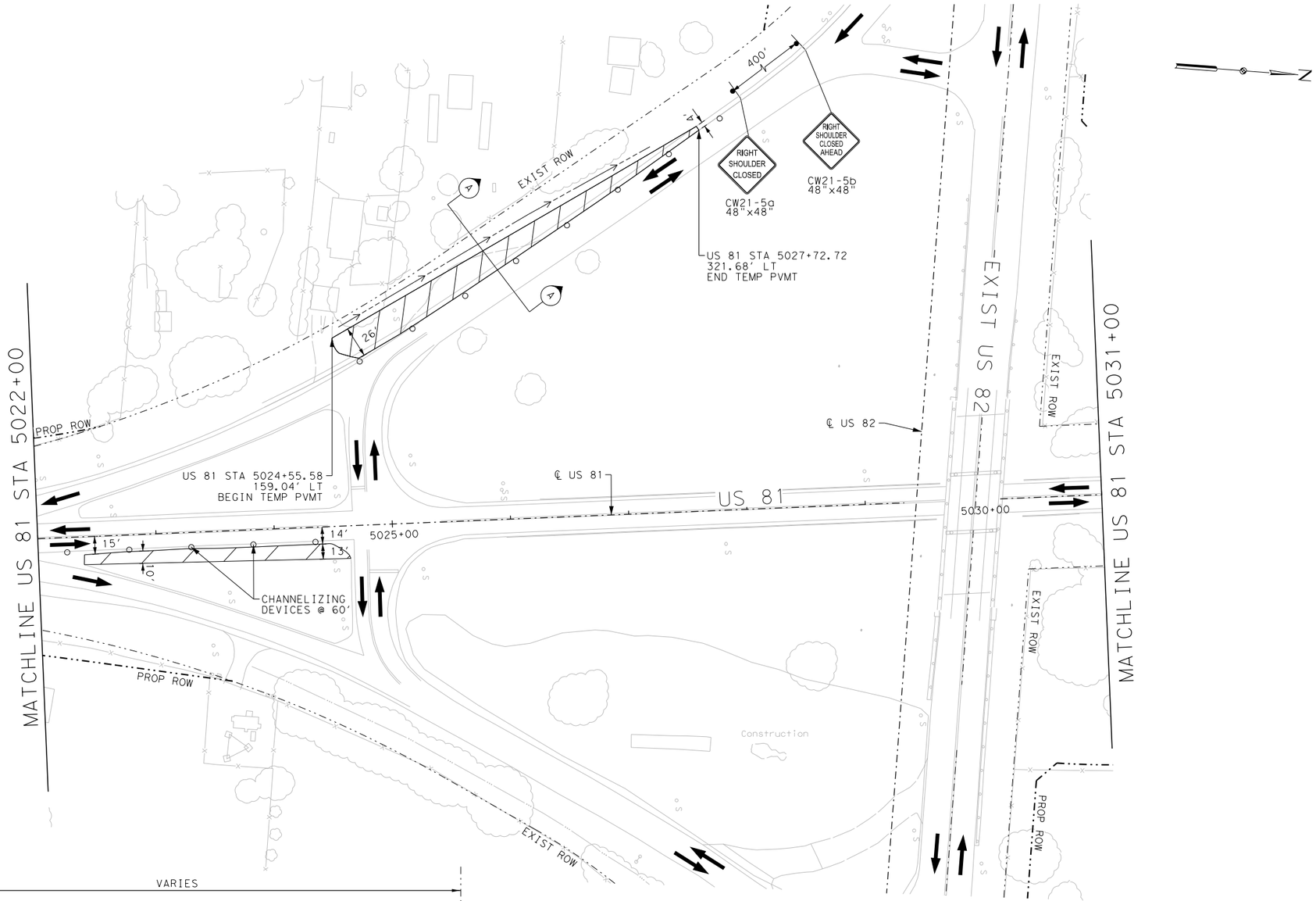

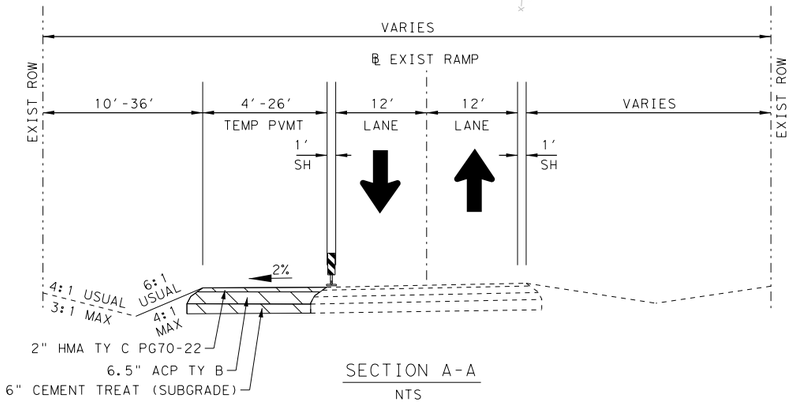

SECTION A-A
NTS

50 0 50 100
SCALE: 1" = 100'

N

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1A
US 81 STA 5022+00 TO STA 5031+00

SHEET 3 OF 6

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	37
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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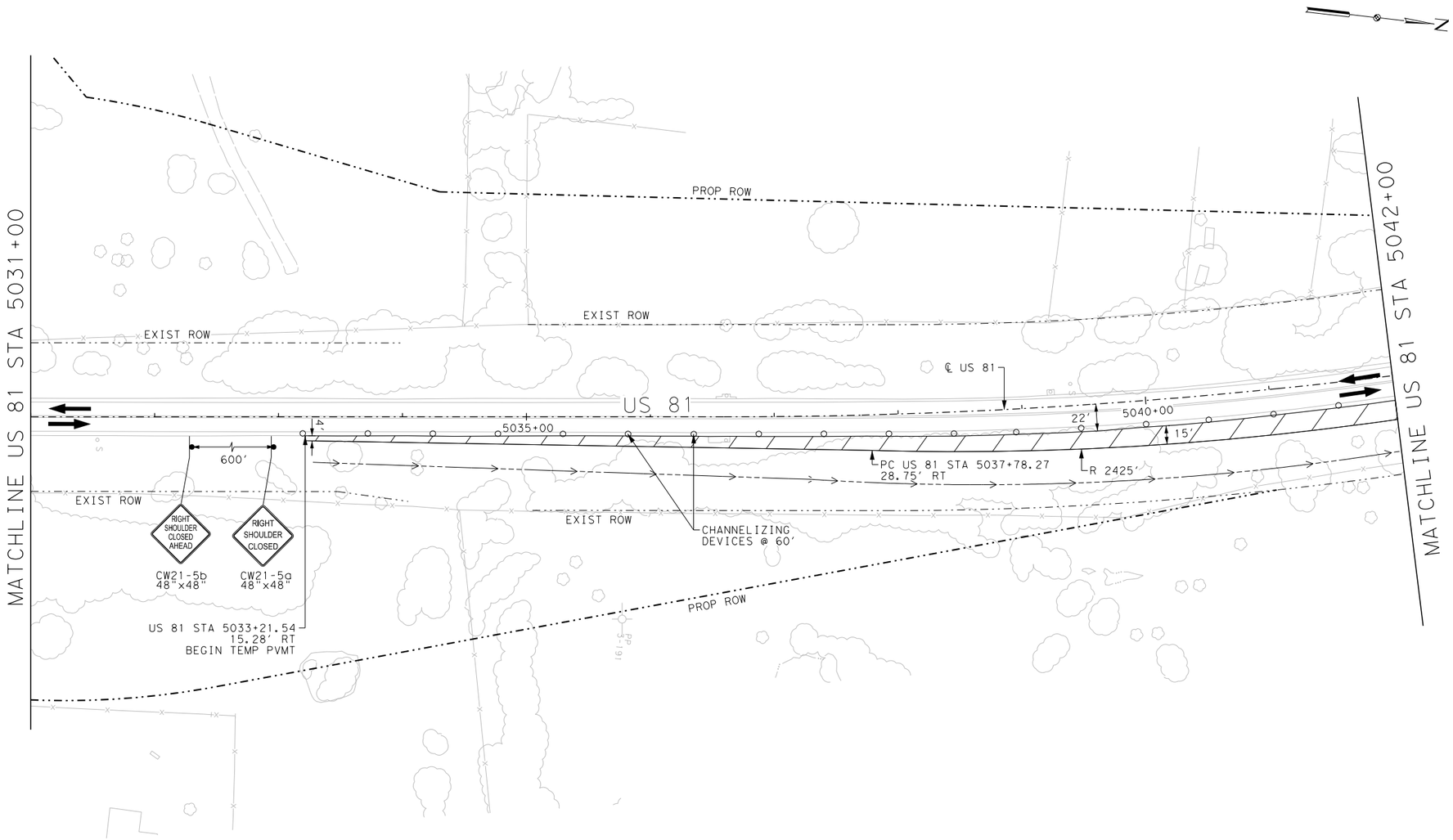

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1A
US 81 STA 5031+00 TO STA 5042+00

SHEET 4 OF 6

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	38
CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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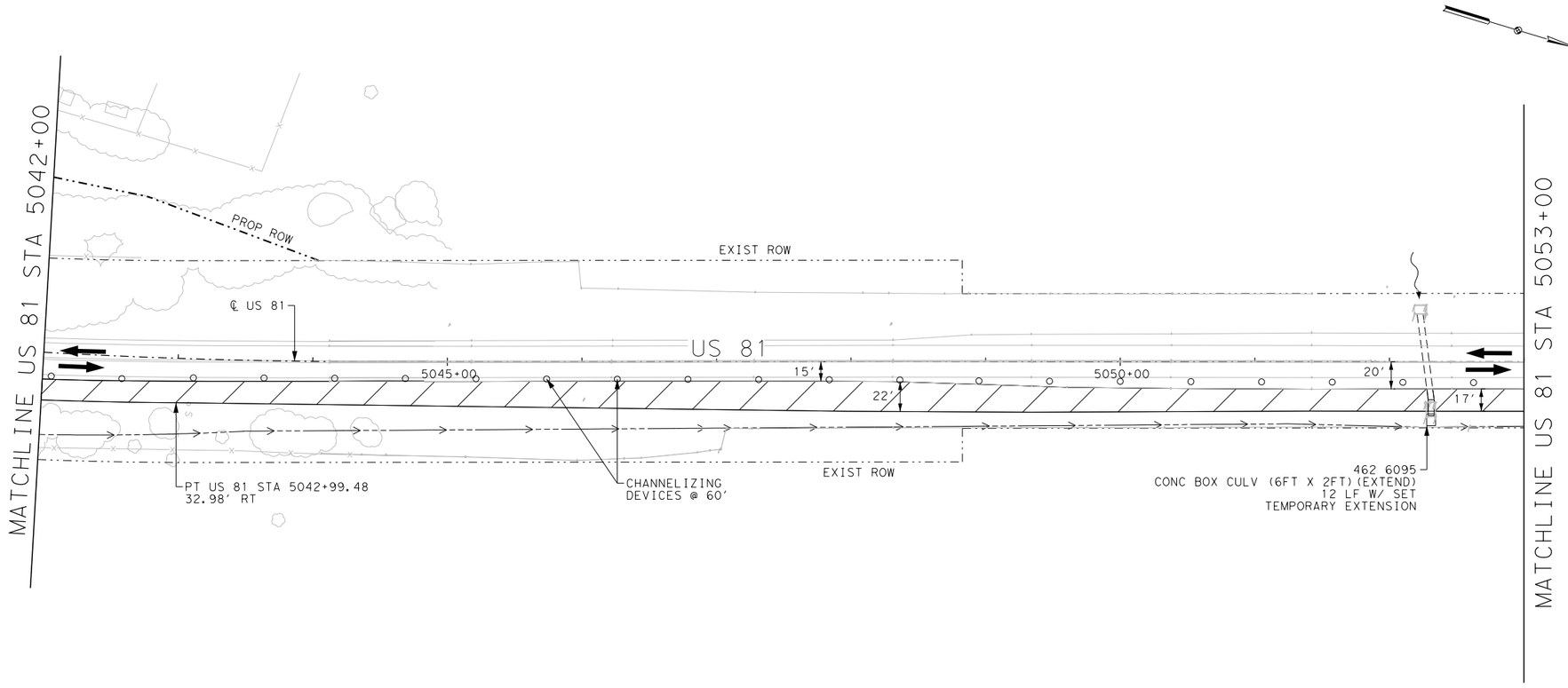

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1A
US 81 STA 5042+00 TO STA 5053+00

SHEET 5 OF 6

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	39
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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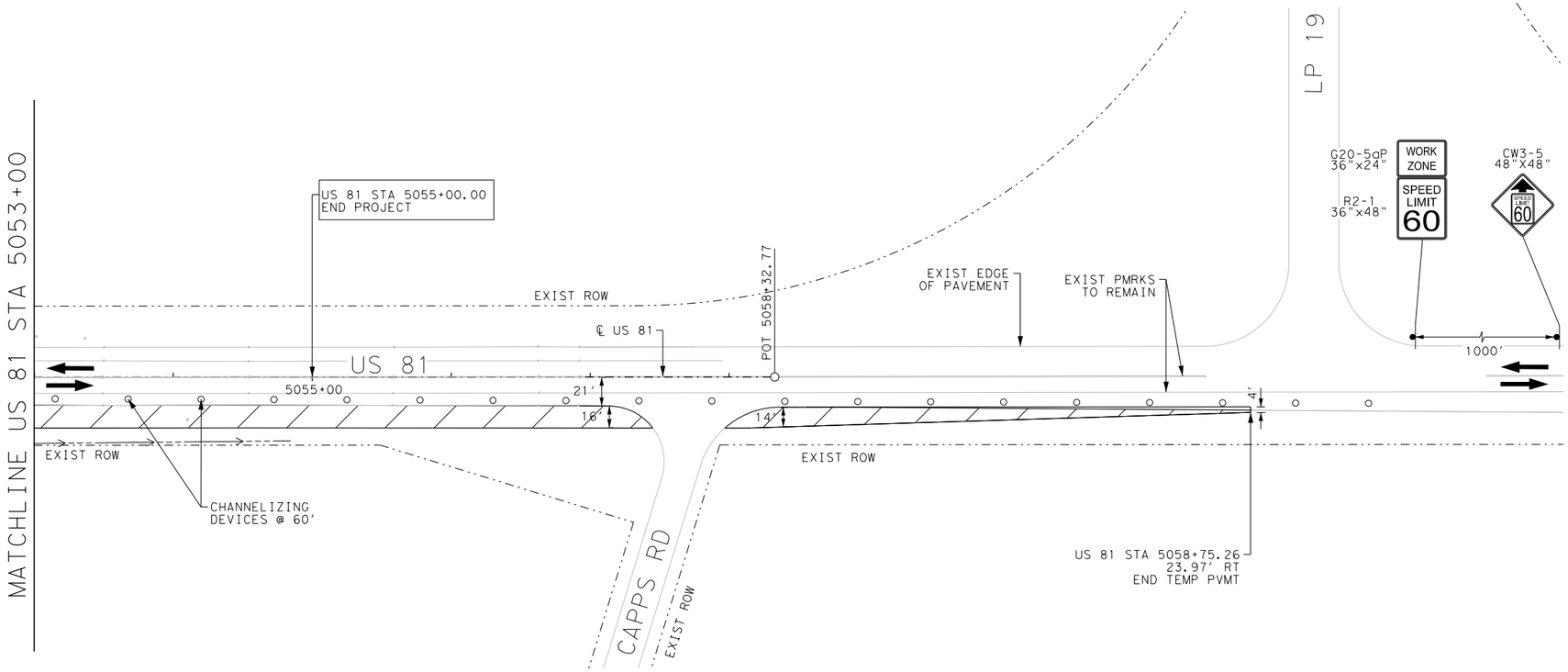

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1A
US 81 STA 5053+00 TO END PROJECT

SHEET 6 OF 6

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	40
CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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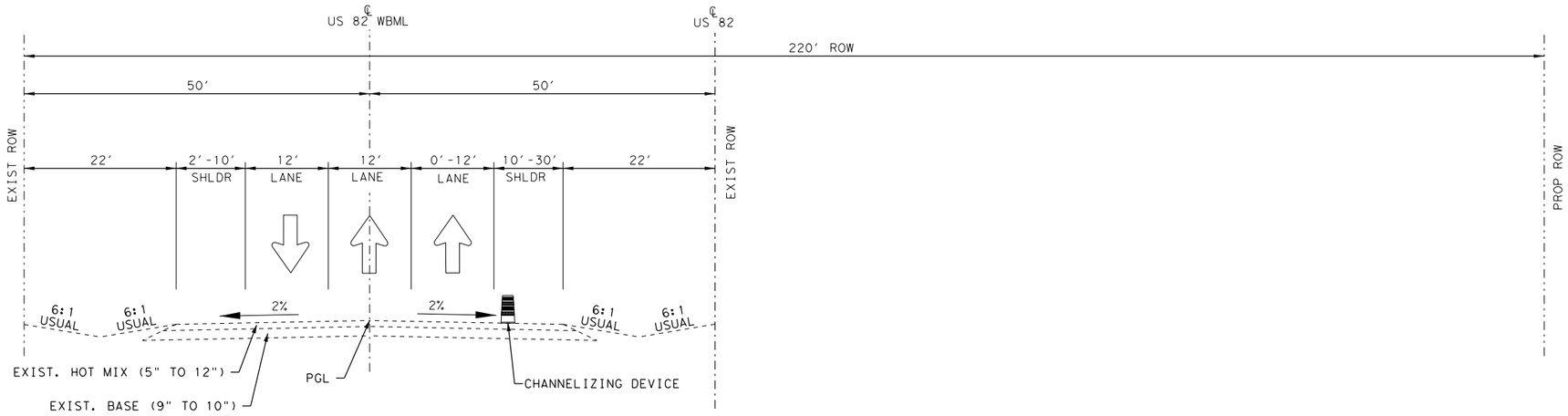
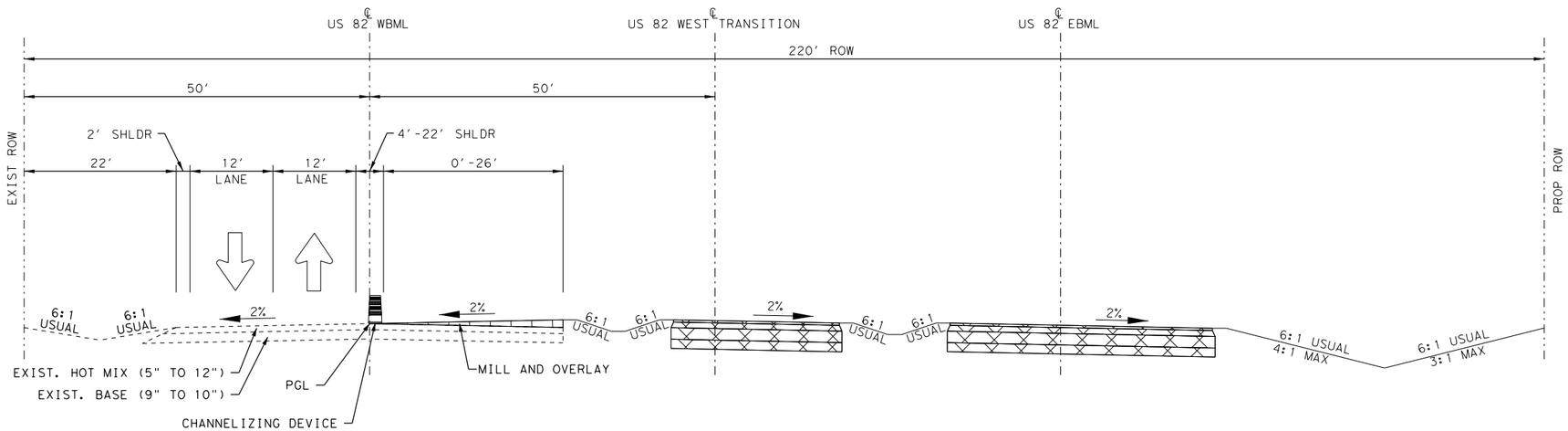


US 82 STA 5714+30.22 - STA 5724+01.13



US 82 STA 5724+01.13 - STA 5742+08.15

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

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FIRM REGISTRATION NO. F-1471

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 1B

SCALE: NTS SHEET 1 OF 4

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	41
CHECK JL	CONTROL	SECTION	JOB	
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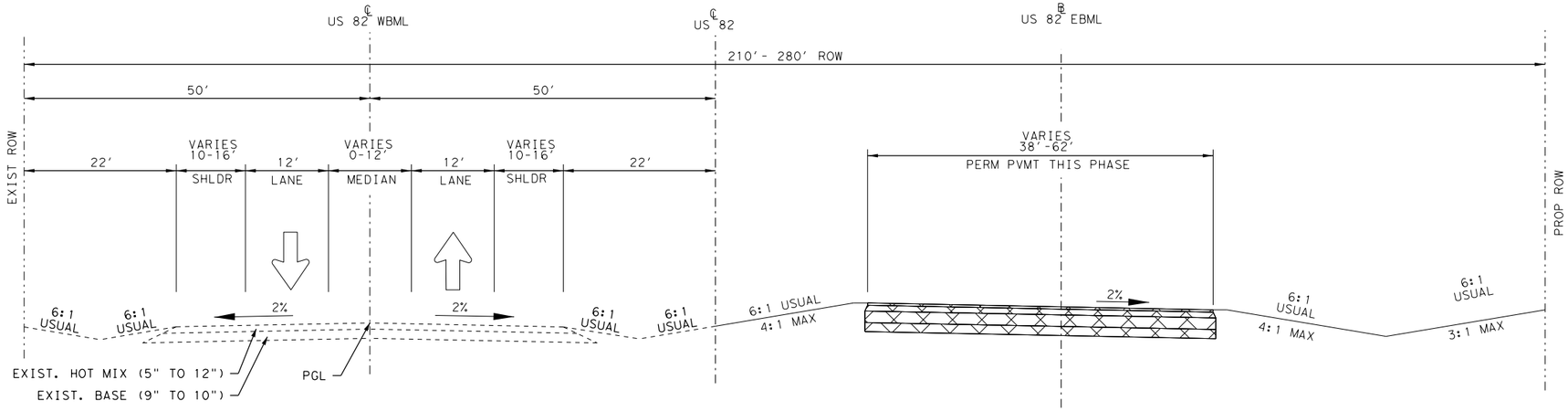
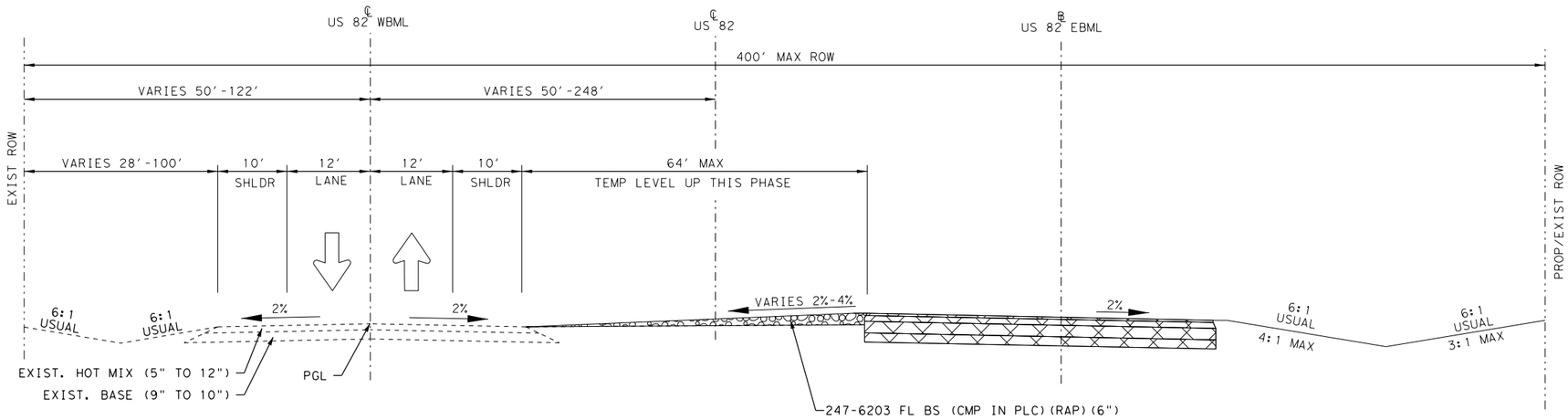


US 82 STA 5742+08.15 - STA 5788+07.43
US 82 STA 5788+42.57 - STA 5815+56.84
US 82 STA 5816+08.97 - STA 5826+20.25
US 82 STA 5826+54.67 - STA 5830+54.21
US 82 STA 5830+91.99 - STA 5837+76.45
US 82 STA 5838+25.80 - STA 5846+00.00
US 82 STA 5847+15.04 - STA 5859+30.79
US 82 STA 5859+95.72 - STA 5866+87.33
US 82 STA 5867+26.28 - STA 5875+46.03



US 82 STA 5788+07.43 - STA 5788+42.57
US 82 STA 5815+56.84 - STA 5816+08.97
US 82 STA 5826+20.25 - STA 5826+54.67
US 82 STA 5830+54.21 - STA 5830+91.99
US 82 STA 5837+76.45 - STA 5838+25.80
US 82 STA 5846+00.00 - STA 5847+15.04
US 82 STA 5859+30.79 - STA 5859+95.72
US 82 STA 5866+87.33 - STA 5867+26.28

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 1B

SCALE: NTS SHEET 2 OF 4

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	42
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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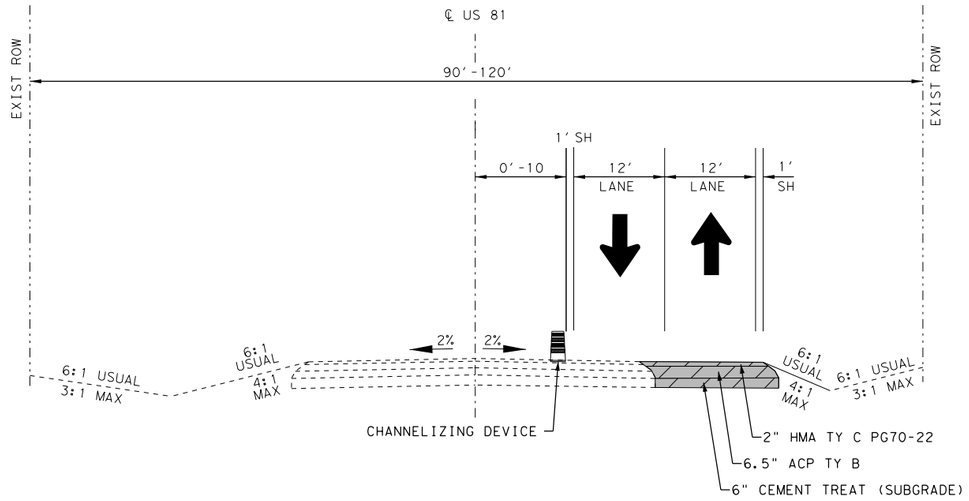
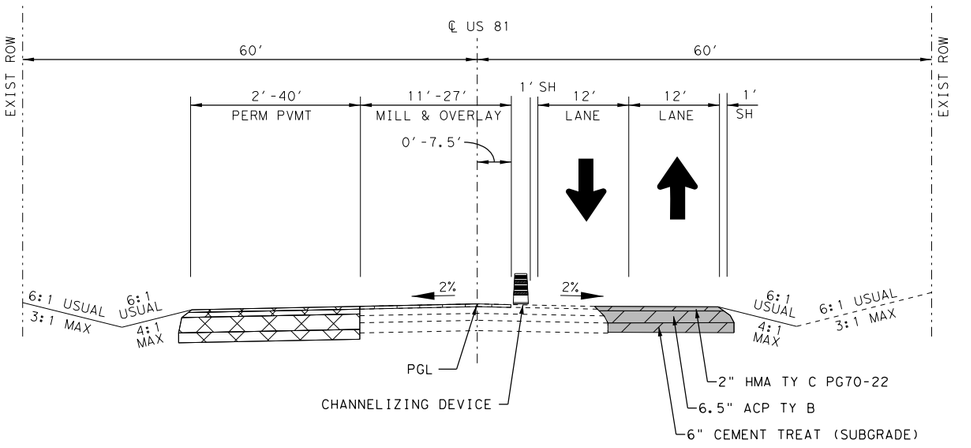


US 81 STA 4994+86.17 - 5003+00.00
US 81 STA 5033+91.35 - 5040+00.00
US 81 STA 5055+00.00 - 5065+32.97

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE



US 81 STA 5003+00.00 - 5023+40.00
US 81 STA 5040+00.00 - 5048+95.00

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED
PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 1B

SCALE: NTS SHEET 3 OF 4

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	43
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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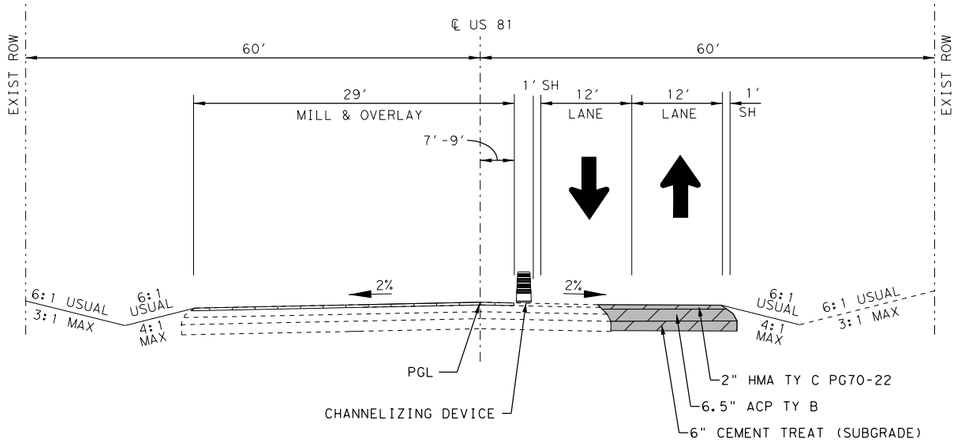

US 81 STA 5048+95.00 - 5055+00.00

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED
PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 1B

SCALE: NTS SHEET 4 OF 4

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	44
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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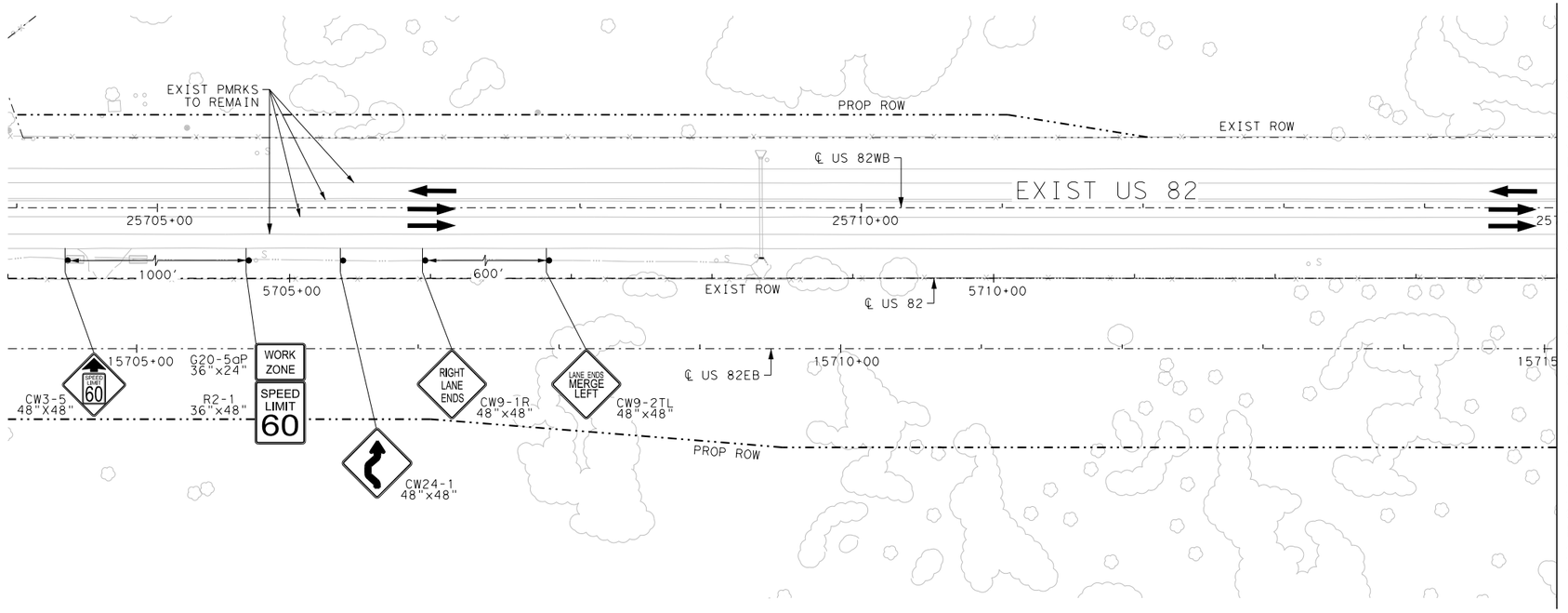

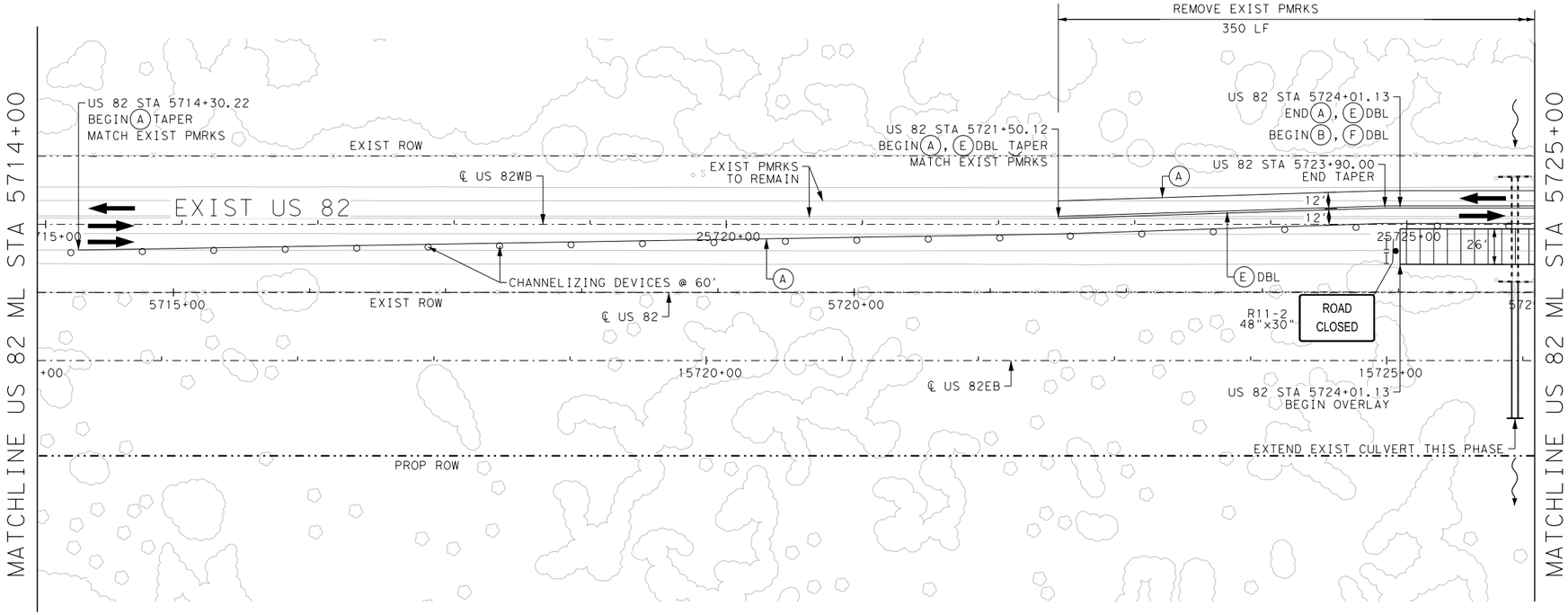

50 0 50 100
SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1B
BEGIN PROJECT TO US 82 STA 5725+00

SHEET 1 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	45
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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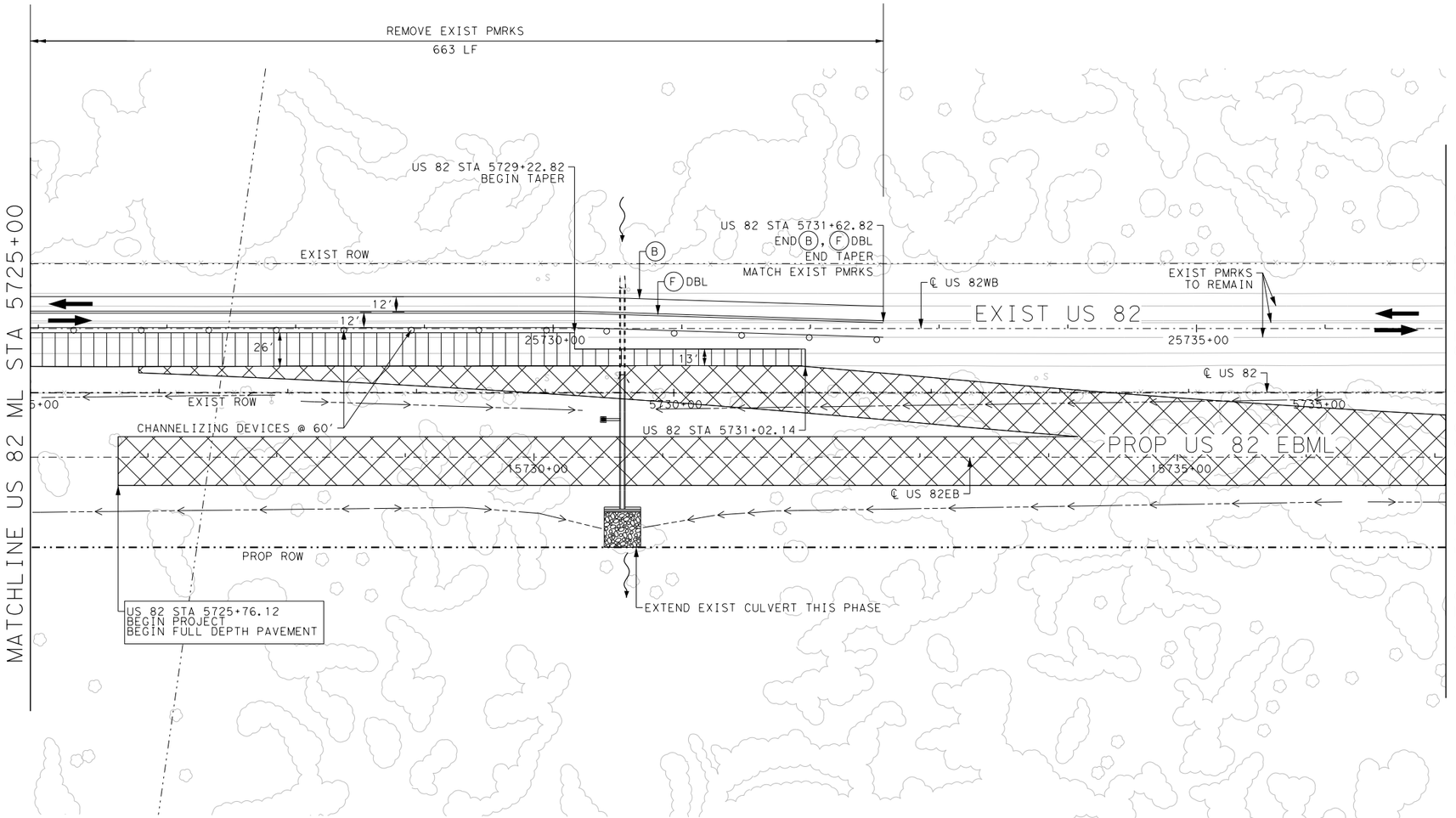

N

50 0 50 100
SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1B
US 82 STA 5725+00 TO STA 5736+00

SHEET 2 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	46
CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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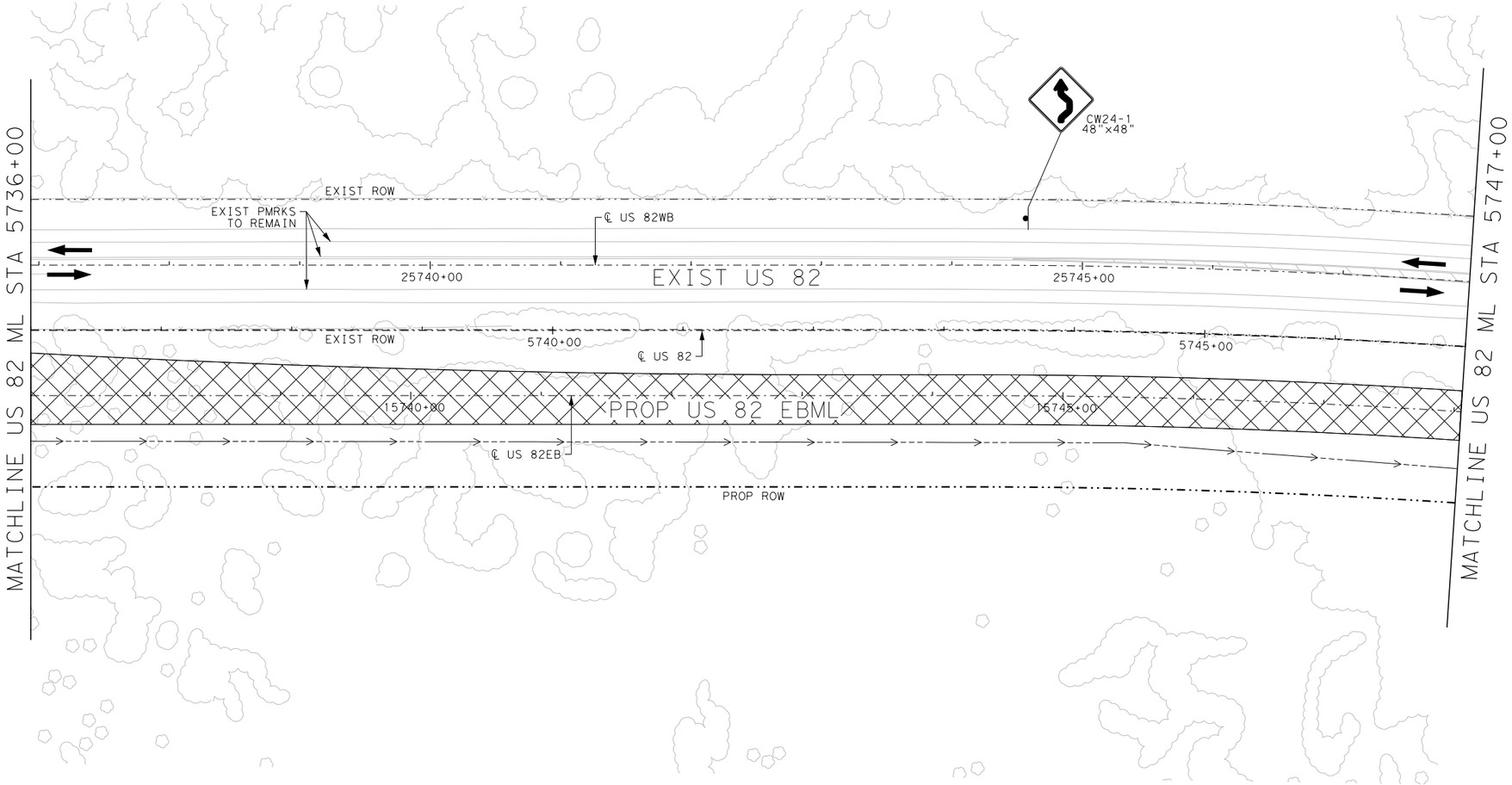

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1B
US 82 STA 5736+00 TO STA 5747+00

SHEET 3 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	47
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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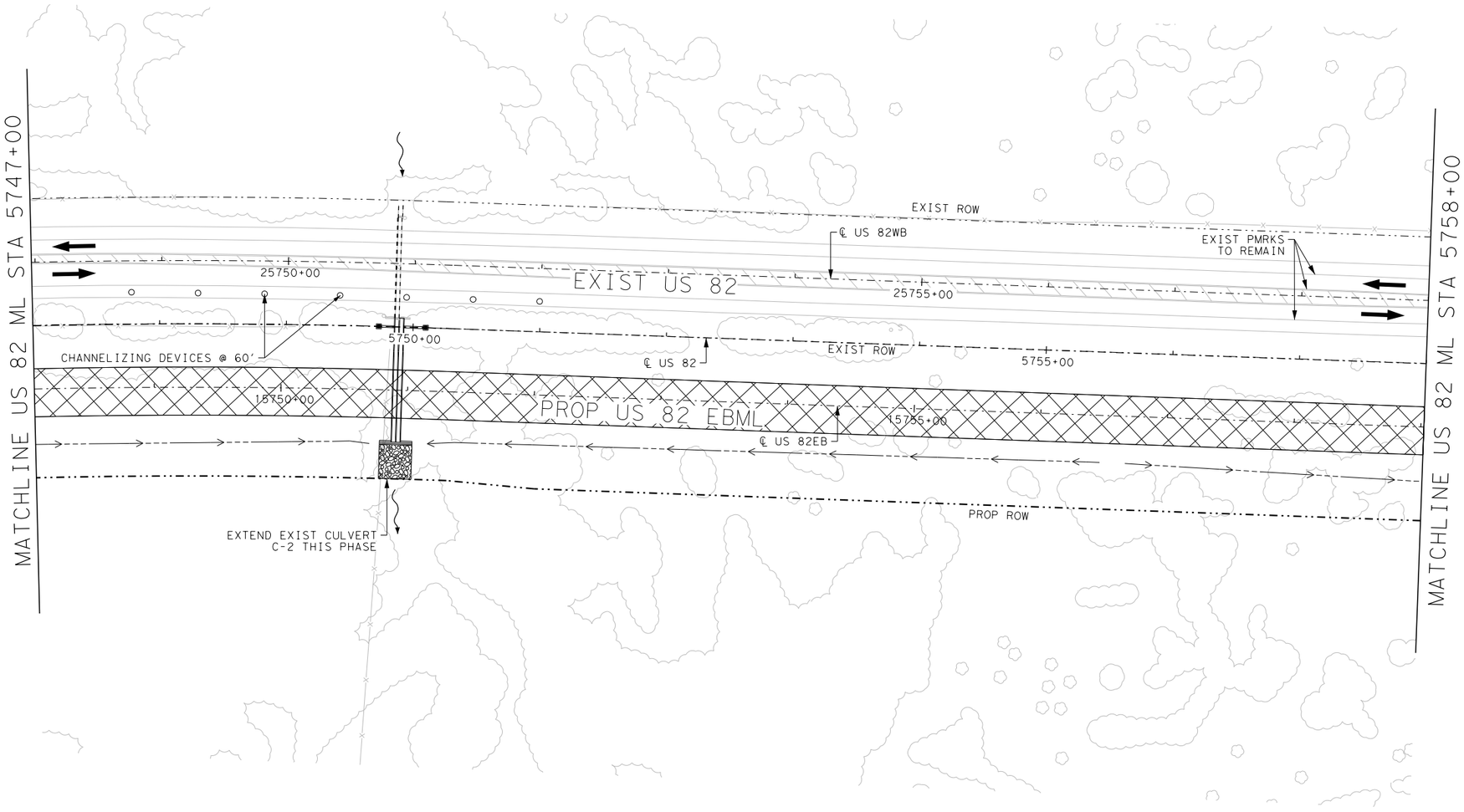
10/18/2023



N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1B
US 82 STA 5747+00 TO STA 5758+00

SHEET 4 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	48
CHECK JL	CONTROL	SECTION	JOB	
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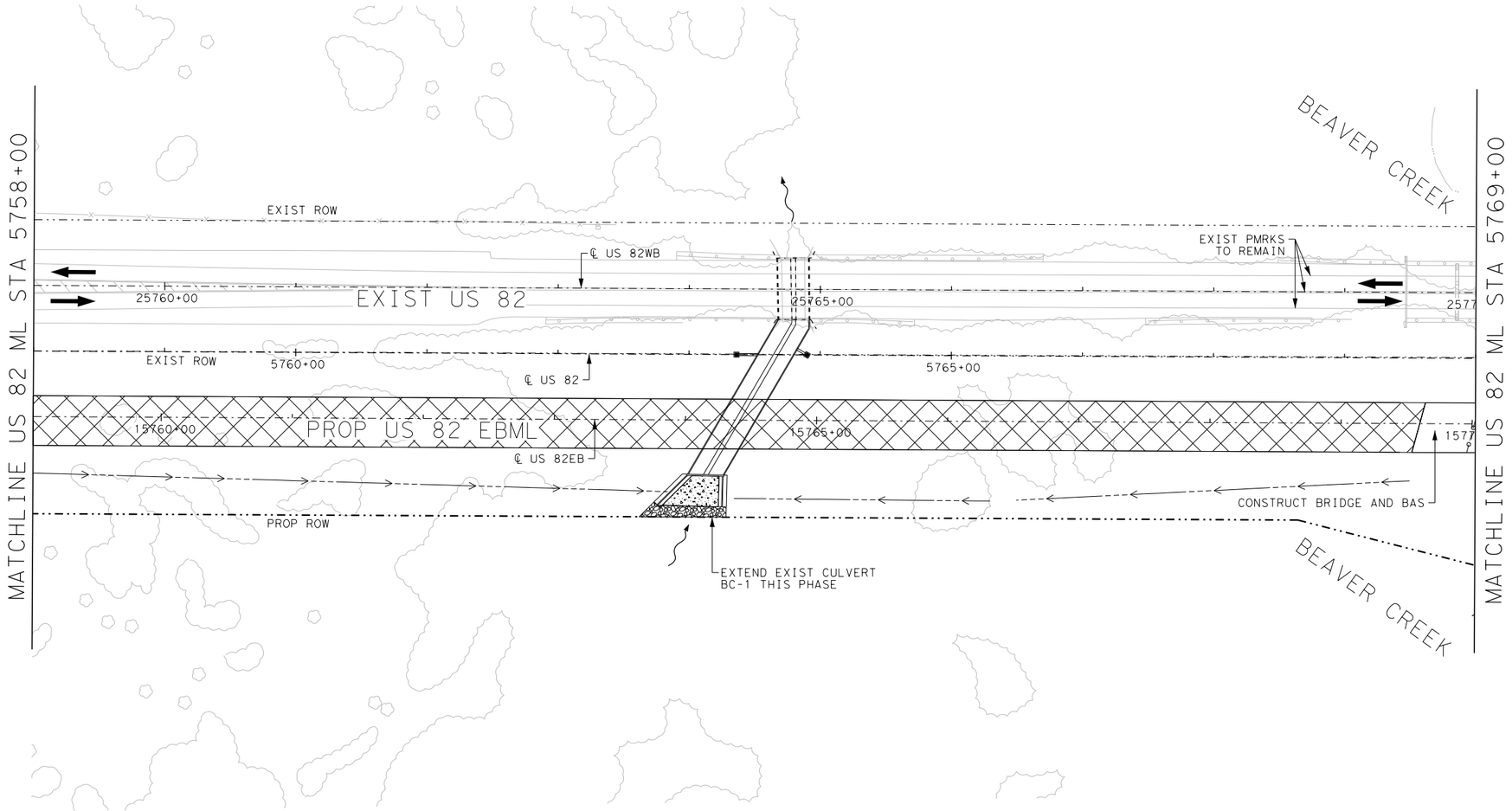

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

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LICENSED PROFESSIONAL ENGINEER

10/18/2023

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1B
US 82 STA 5758+00 TO STA 5769+00

SHEET 5 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	49
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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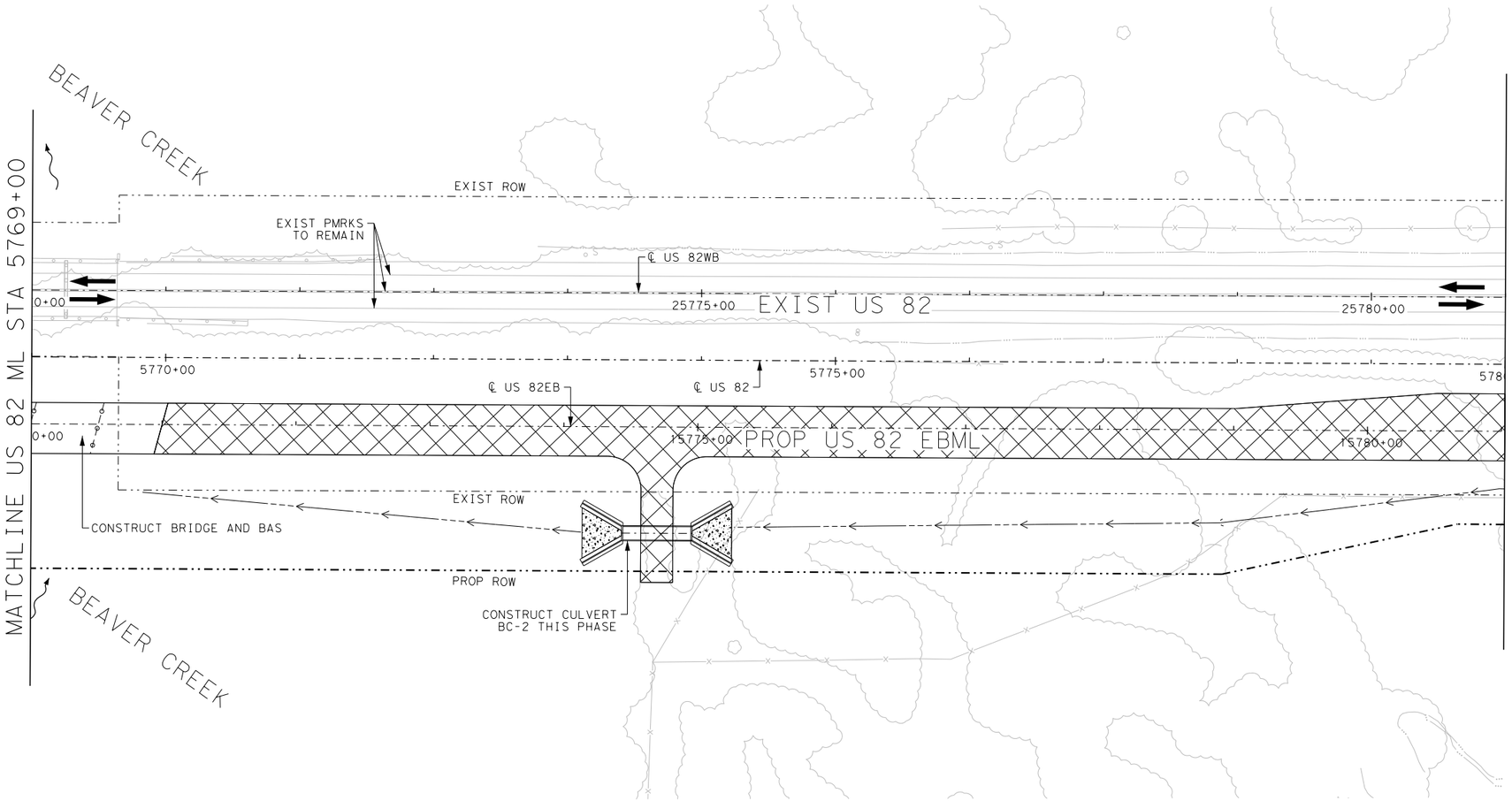

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1B
US 82 STA 5769+00 TO STA 5780+00

SHEET 6 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	50
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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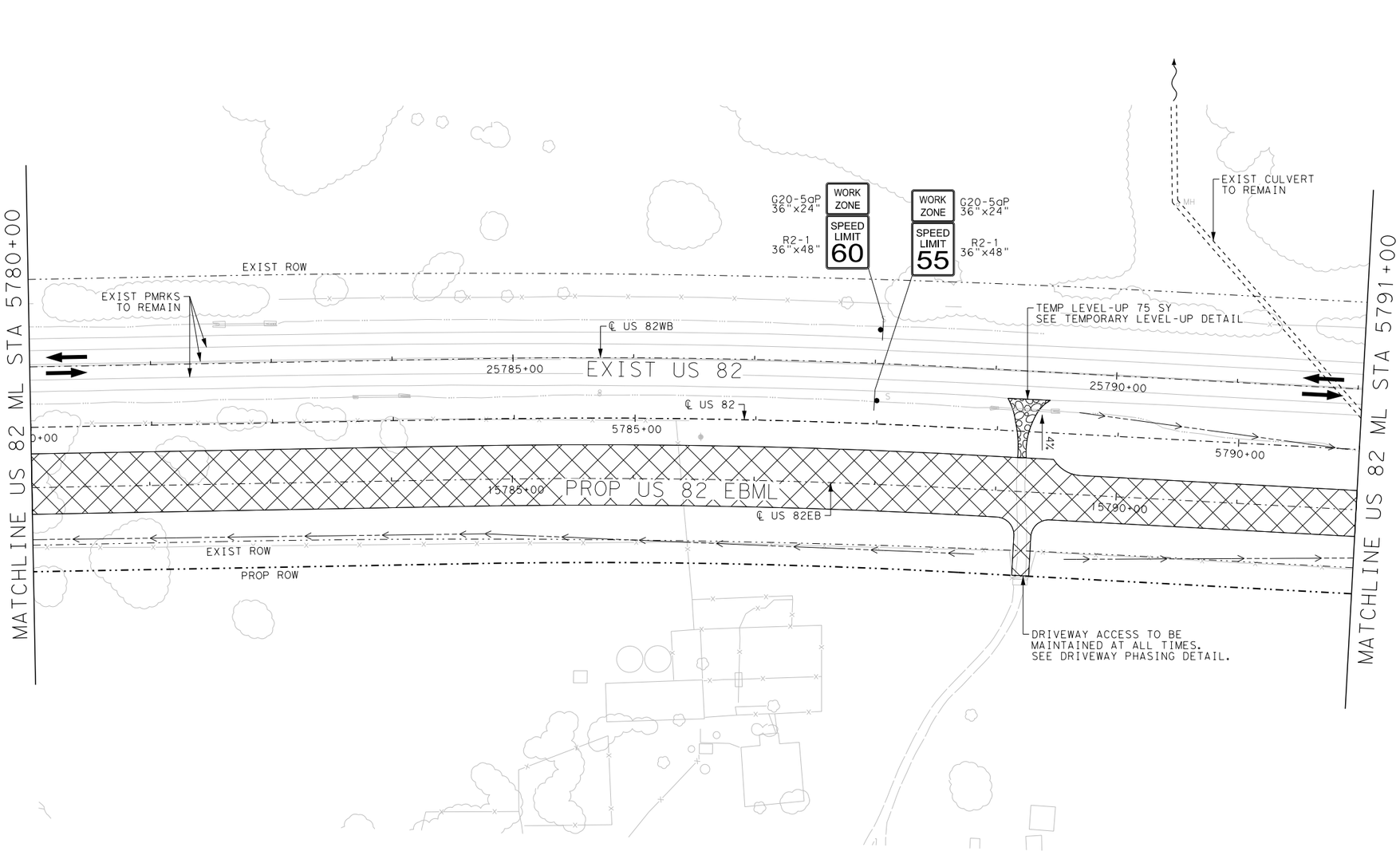

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

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F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1B
US 82 STA 5780+00 TO STA 5791+00

SHEET 7 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
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CHECK JL	CONTROL	SECTION	JOB	
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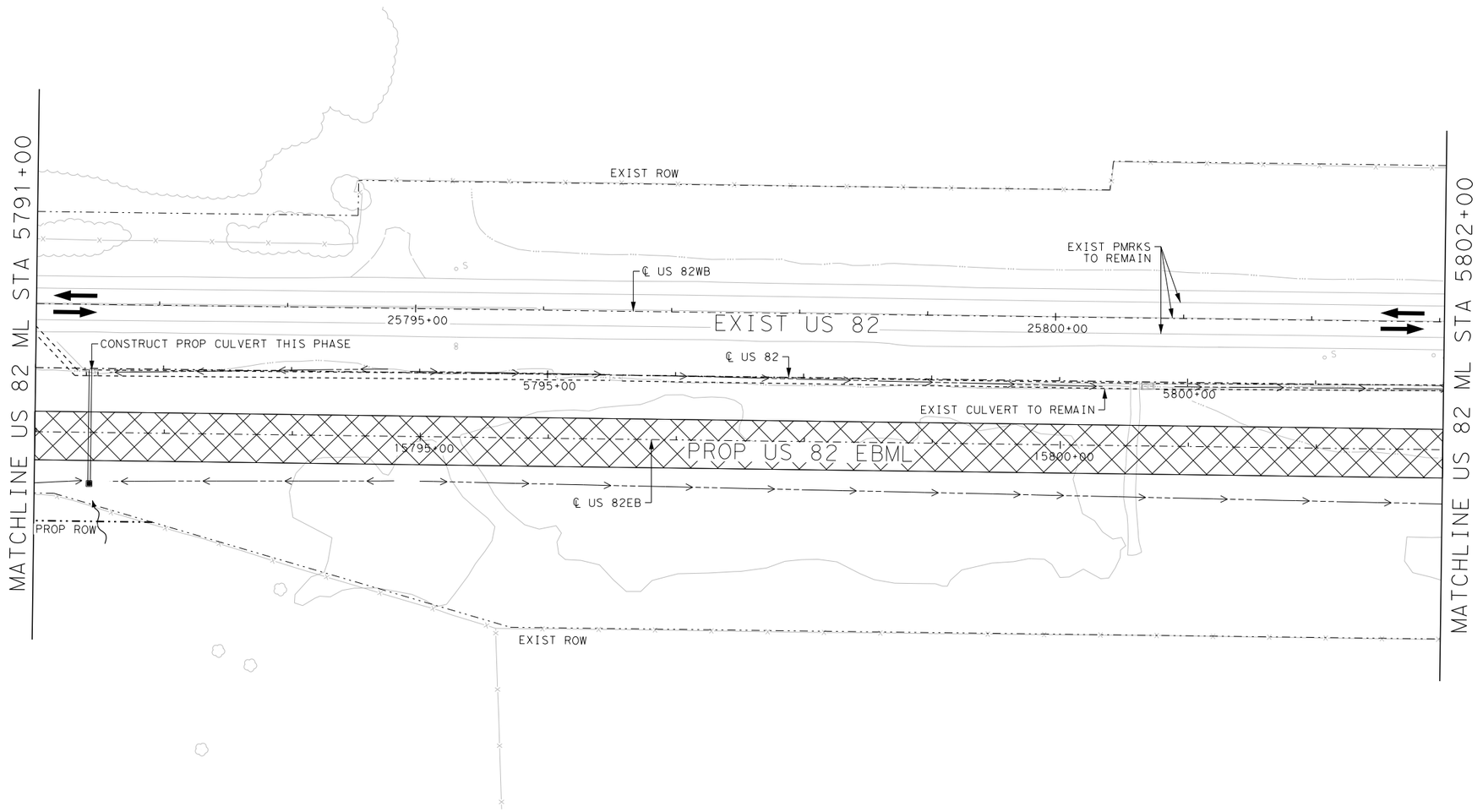

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1B
US 82 STA 5791+00 TO STA 5802+00

SHEET 8 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
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CHECK JL	CONTROL	SECTION	JOB	
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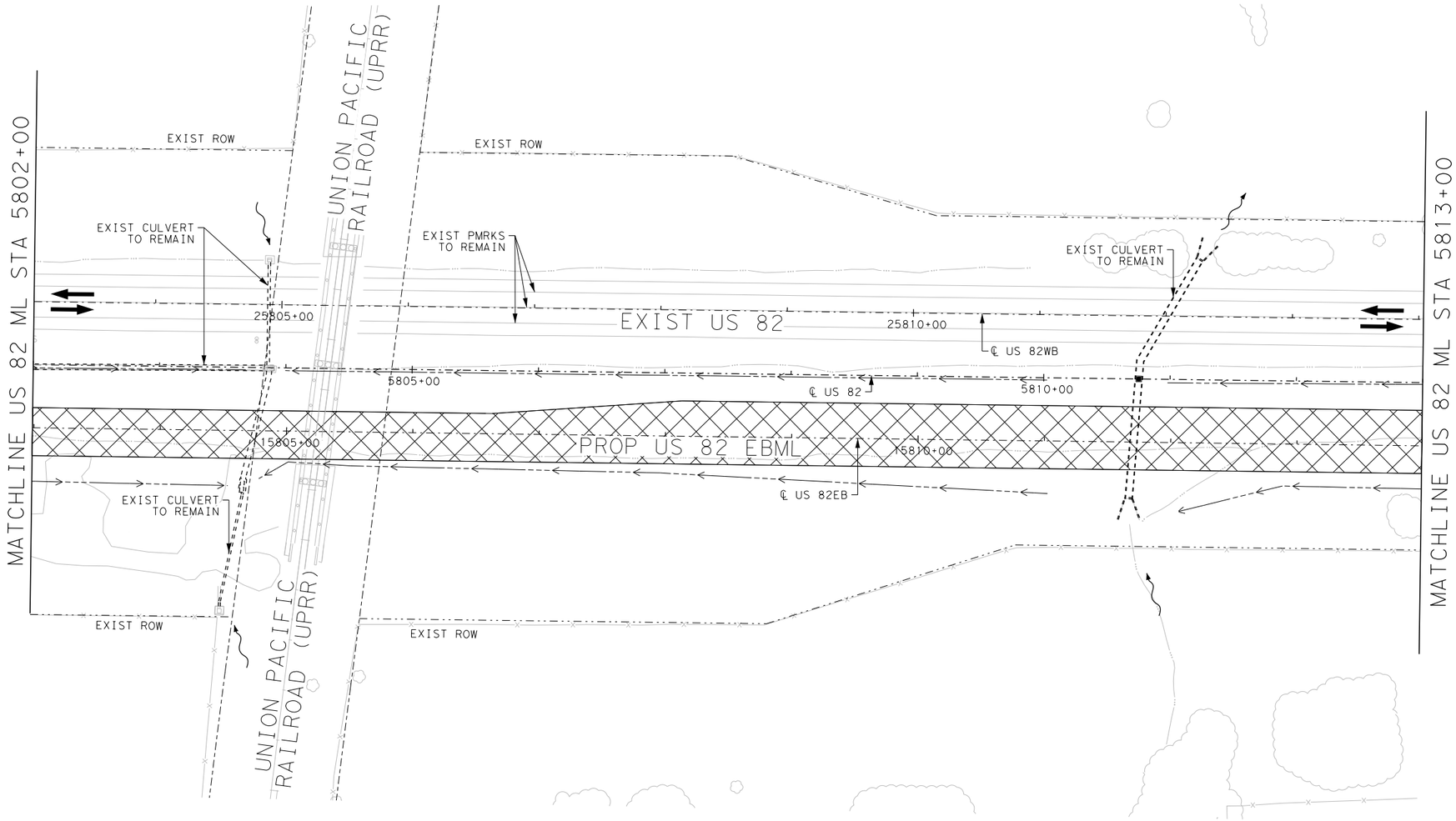

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1B
US 82 STA 5802+00 TO STA 5813+00

SHEET 9 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	53
CHECK JL	CONTROL	SECTION	JOB	
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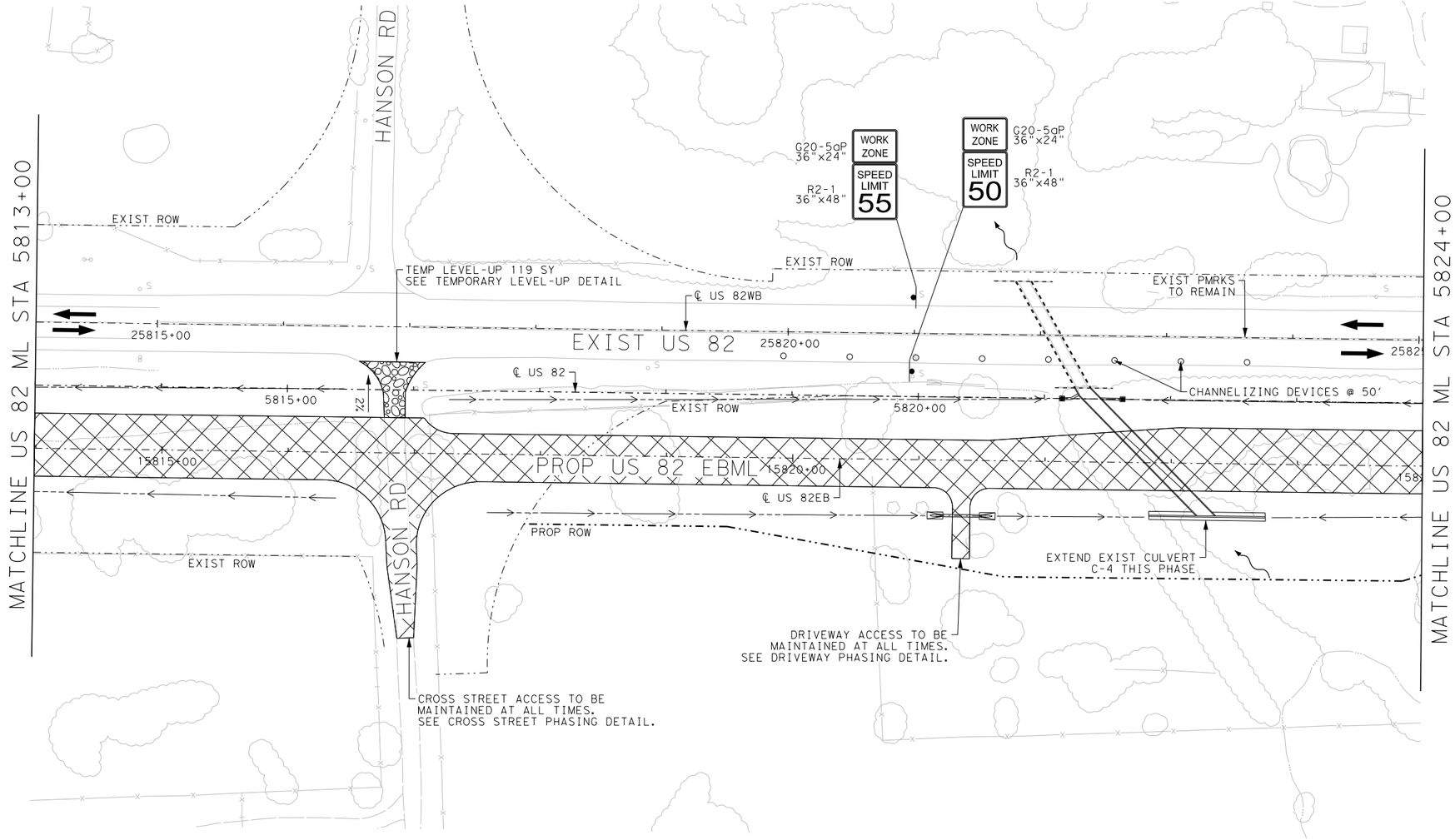

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER

10/18/2023

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1B
US 82 STA 5813+00 TO STA 5824+00

SHEET 10 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	54
CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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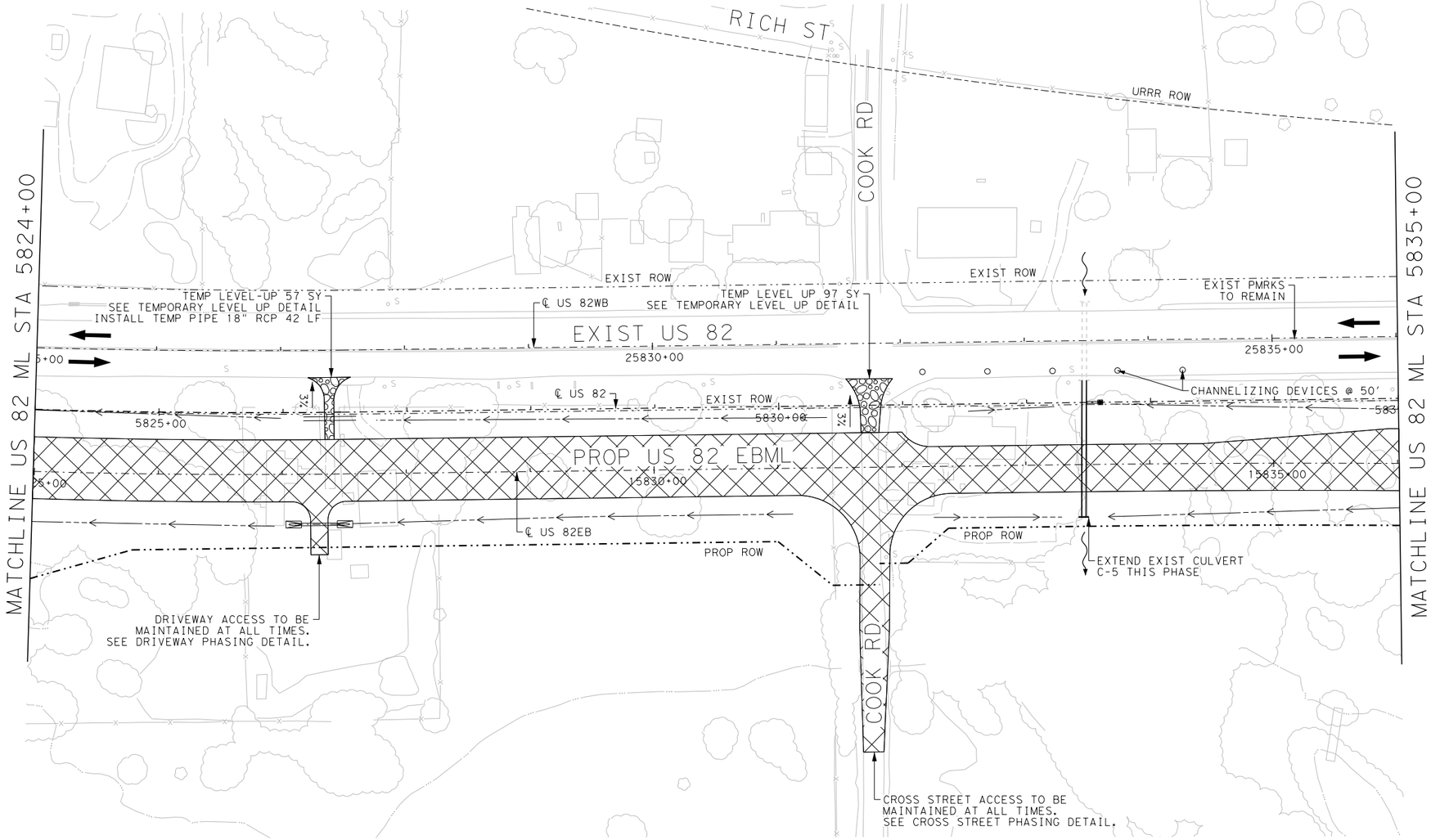

N

50 0 50 100
SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

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11551 FOREST CENTRAL DRIVE
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DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1B
US 82 STA 5824+00 TO STA 5835+00

SHEET 11 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	55
CHECK JL	CONTROL	SECTION	JOB	
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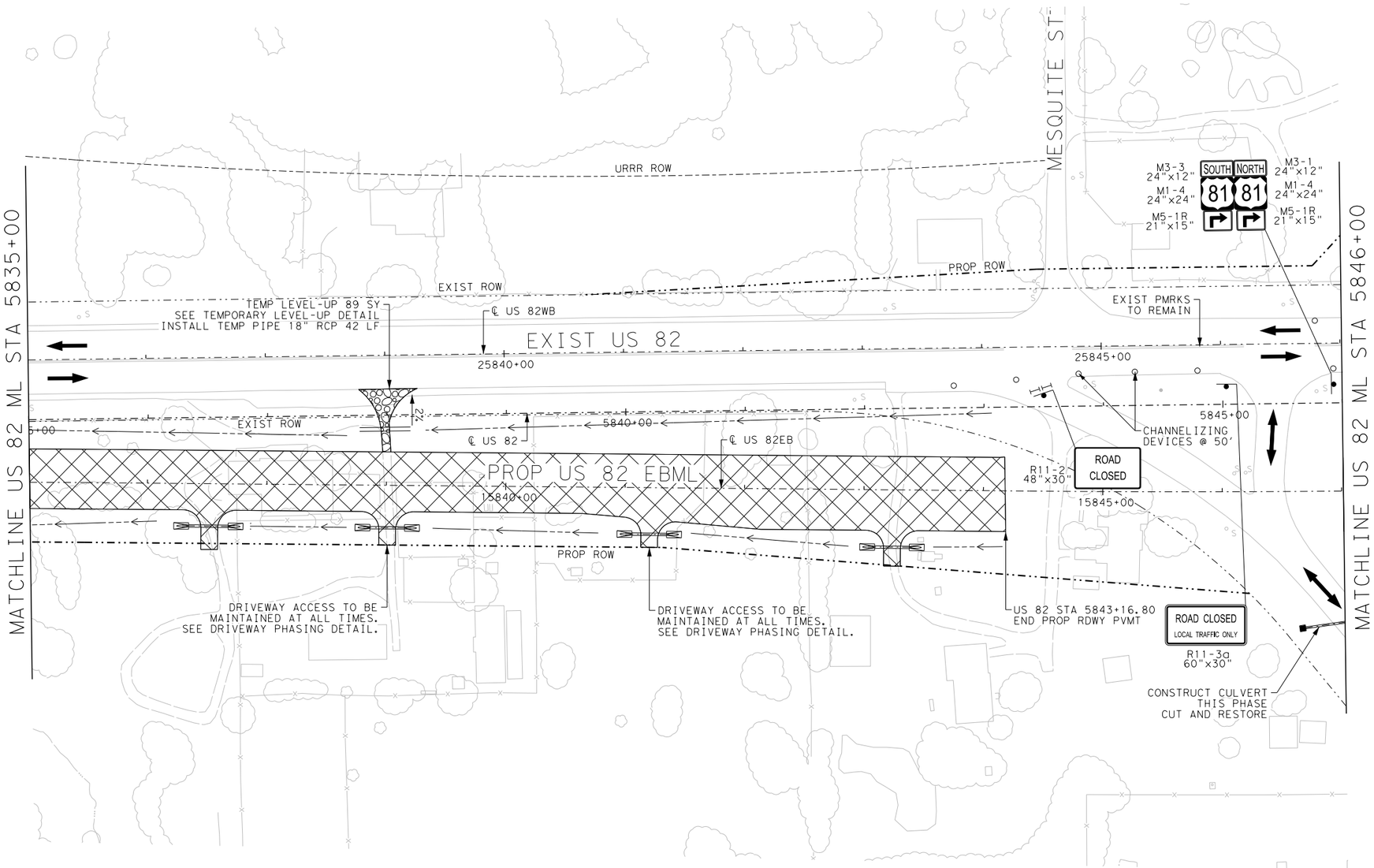

N

50 0 50 100
SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
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OTHON ENGINEERING
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SUITE 220
DALLAS, TX 75243
F-12801

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US82

TRAFFIC CONTROL PLAN
PHASE 1B
US 82 STA 5835+00 TO STA 5846+00

SHEET 12 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
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CHECK JL	CONTROL	SECTION	JOB	
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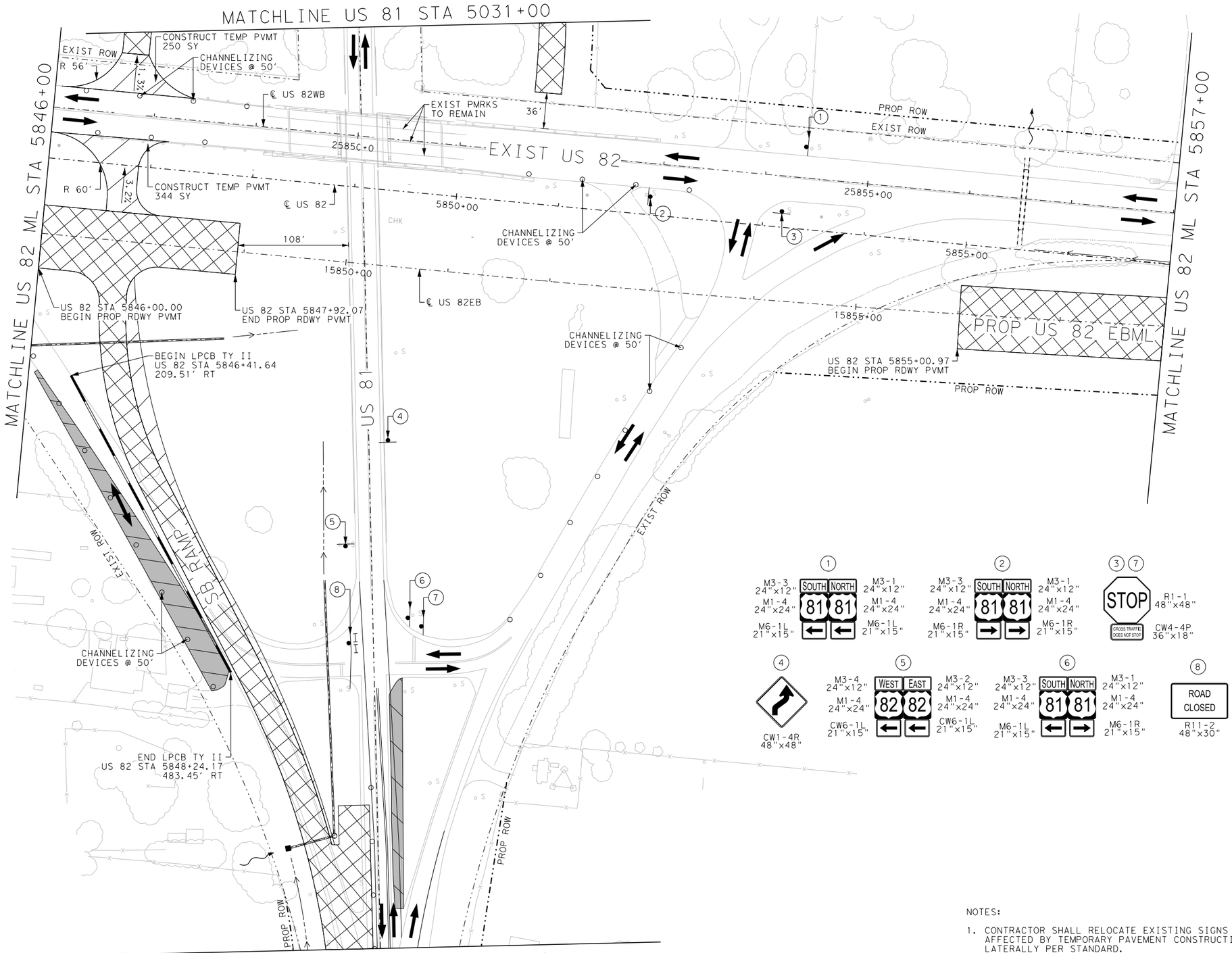

N

50 0 50 100
SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED
PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1B
US 82 STA 5846+00 TO STA 5857+00

SHEET 13 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	57
CHECK JL	CONTROL	SECTION	JOB	
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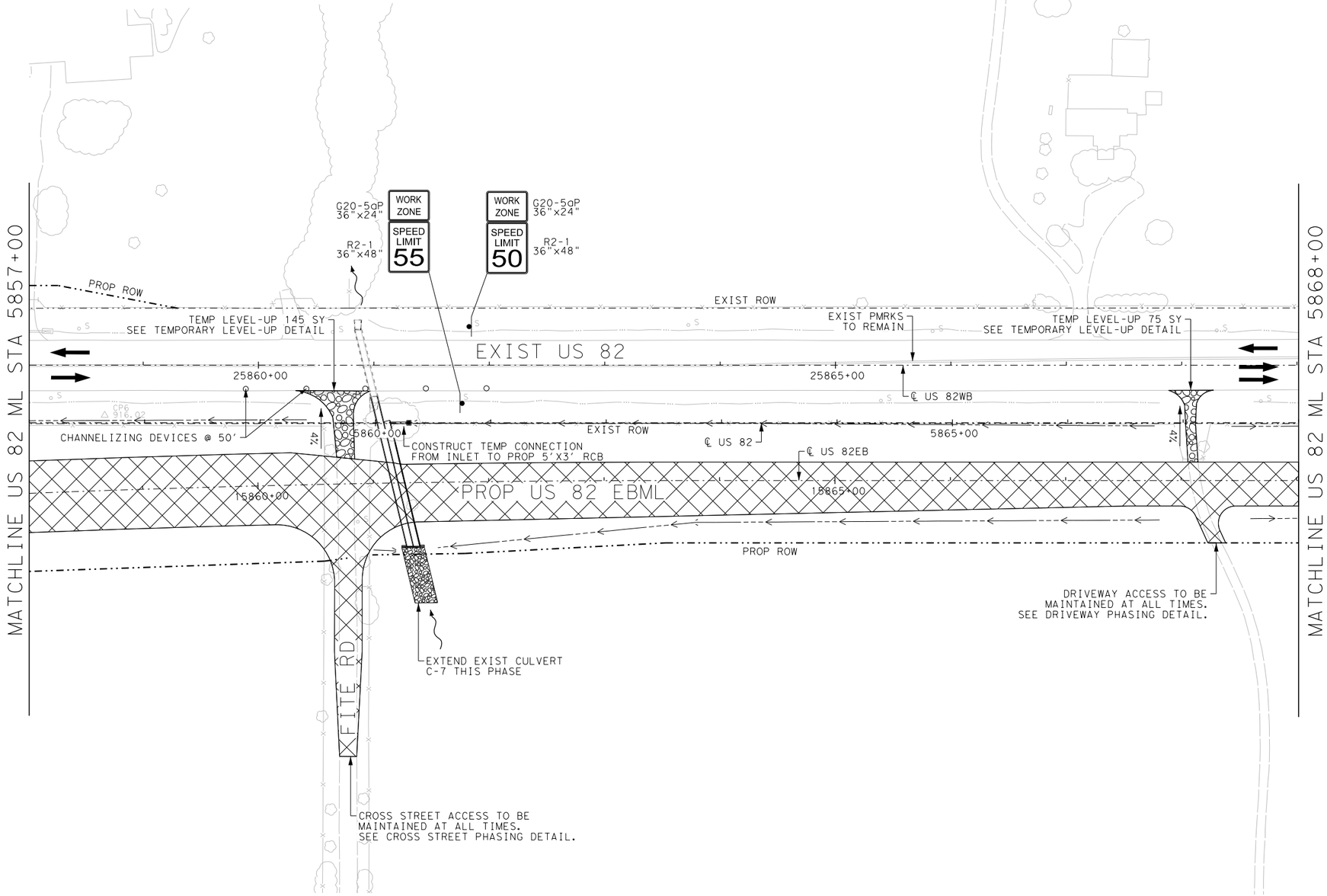

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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131159
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10/18/2023

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1B
US 82 STA 5857+00 TO STA 5868+00

SHEET 14 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	58
CHECK JL	CONTROL	SECTION	JOB	
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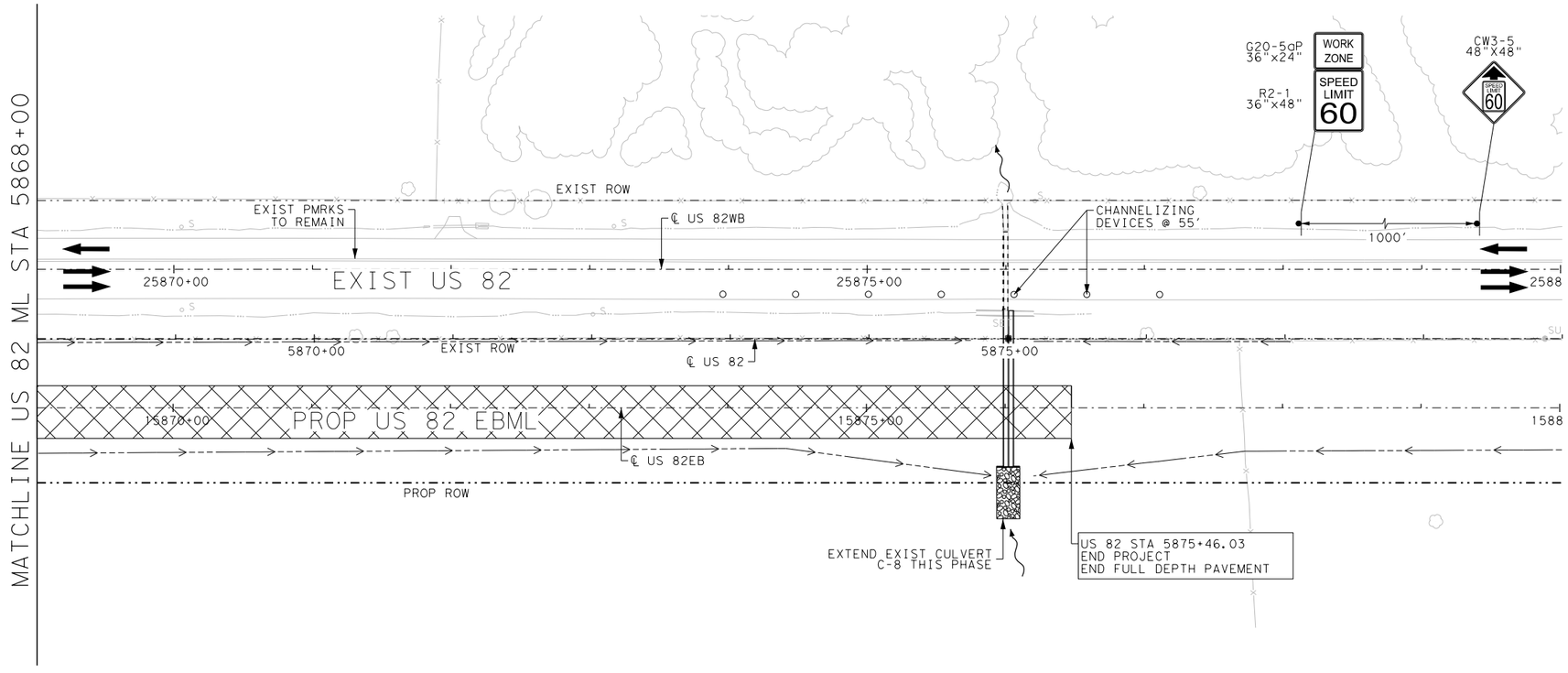

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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LICENSED PROFESSIONAL ENGINEER
10/18/2023

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GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1B
US 82 STA 5868+00 TO END PROJECT

SHEET 15 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	59
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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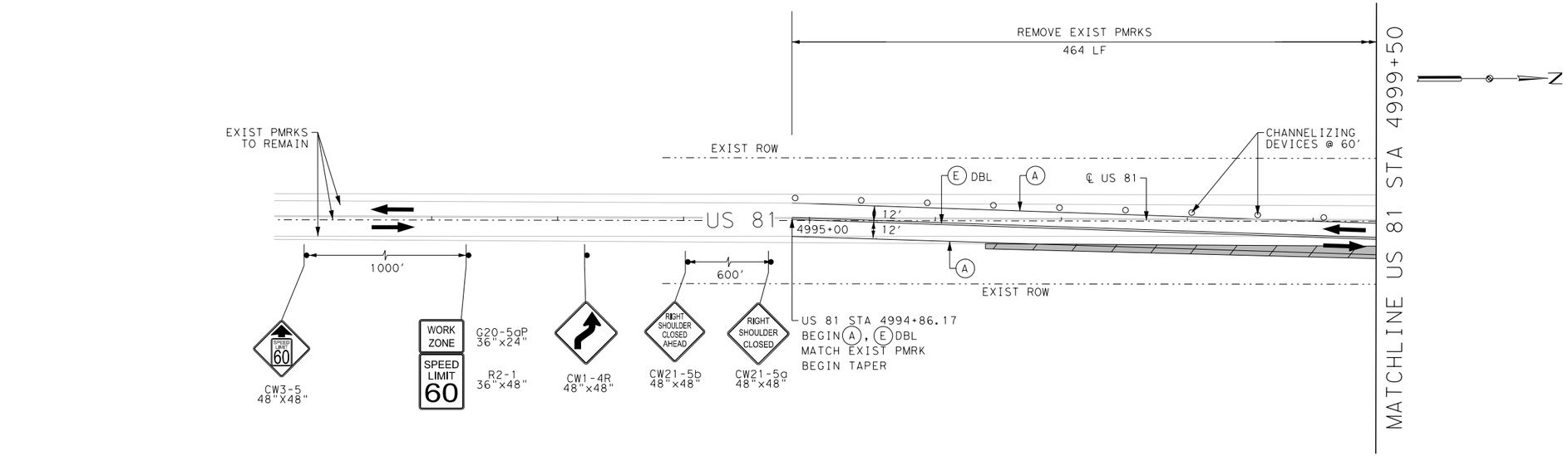

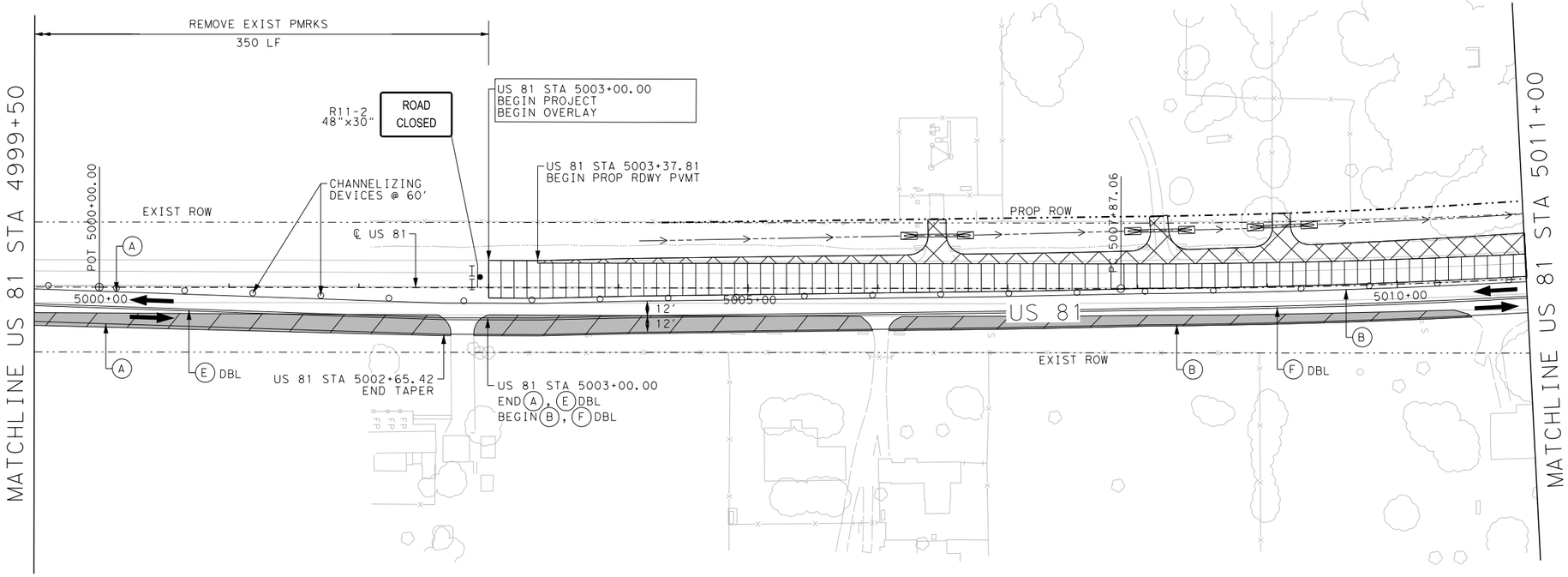

50 0 50 100
SCALE: 1" = 100'

N

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	A	B
W 6" BRK	C	D
Y 6" SLD	E	F
Y 6" BRK	G	H
W 8" SLD	I	J
W 12" SLD	K	L
W 24" SLD	M	N
Y 12" SLD	O	P

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1B
US 81 BEGIN PROJECT TO STA 5011+00

SHEET 16 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	60
CHECK JL	CONTROL	SECTION	JOB	
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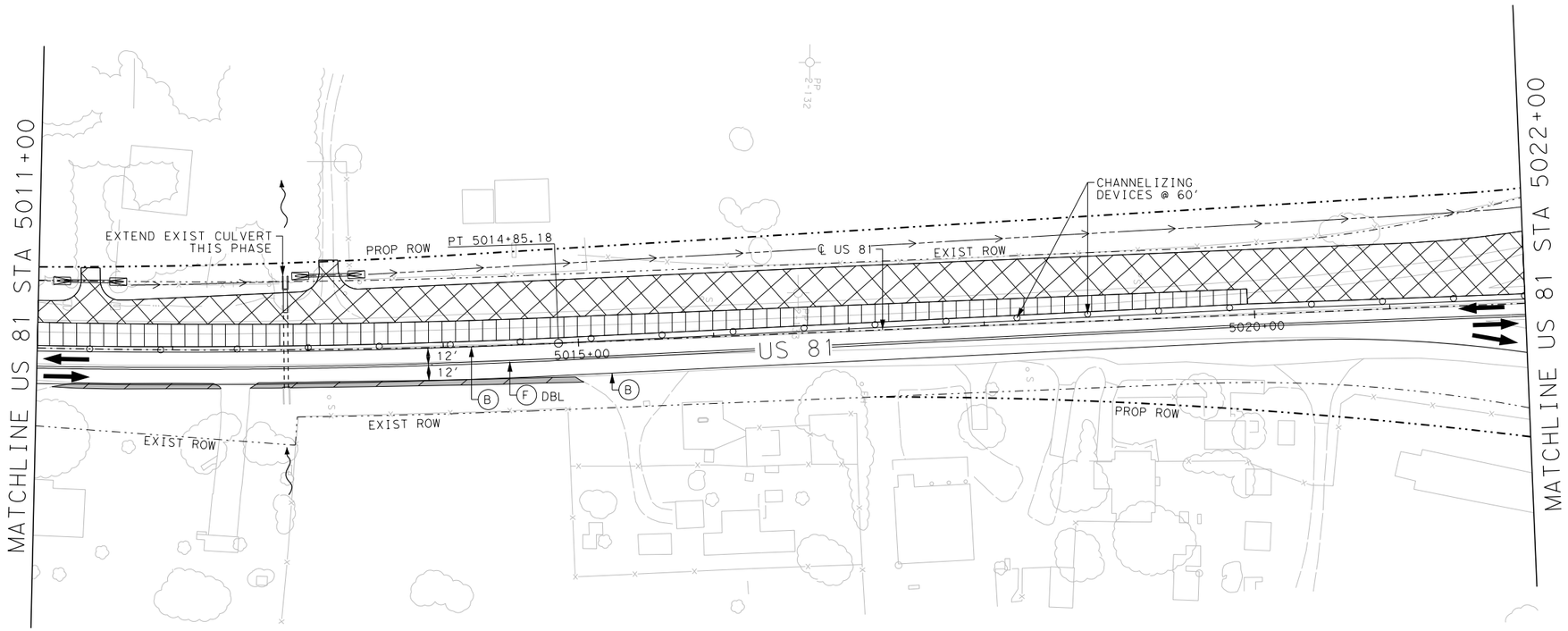

50 0 50 100
SCALE: 1" = 100'

N

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	A	B
W 6" BRK	C	D
Y 6" SLD	E	F
Y 6" BRK	G	H
W 8" SLD	I	J
W 12" SLD	K	L
W 24" SLD	M	N
Y 12" SLD	O	P

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1B
US 81 STA 5011+00 TO STA 5022+00

SHEET 17 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	61
CHECK JL	CONTROL	SECTION	JOB	
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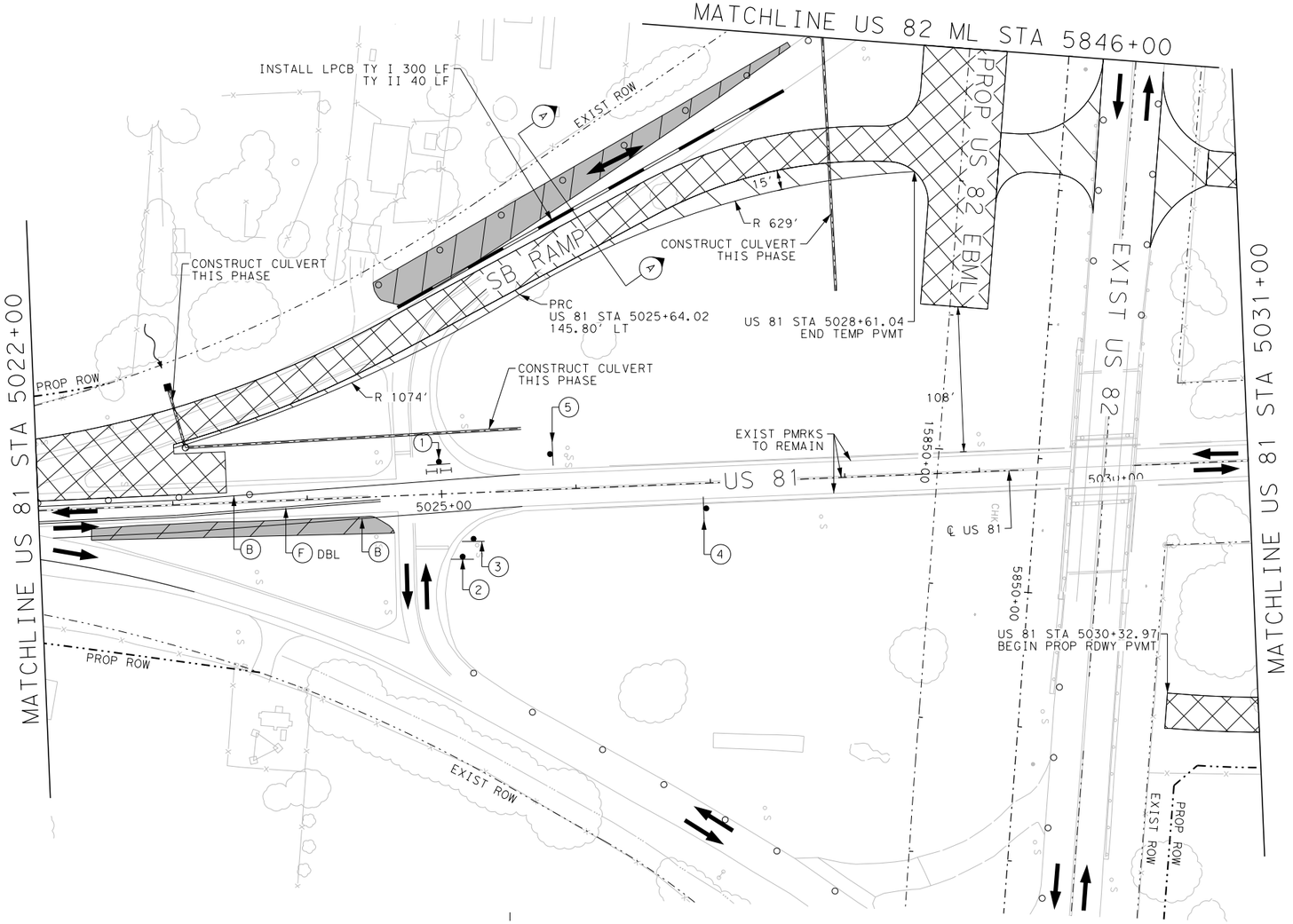

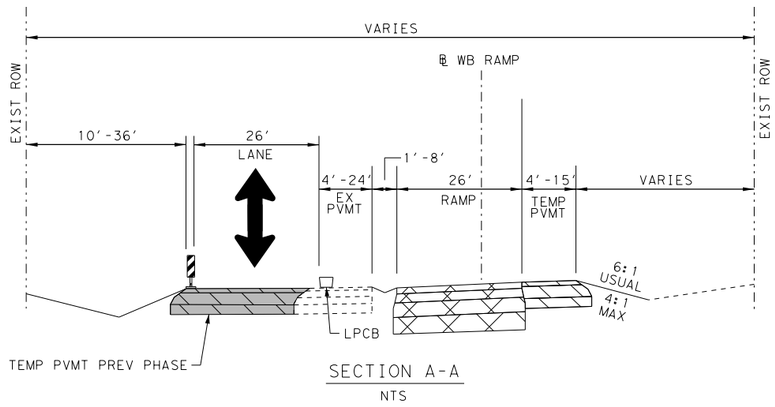

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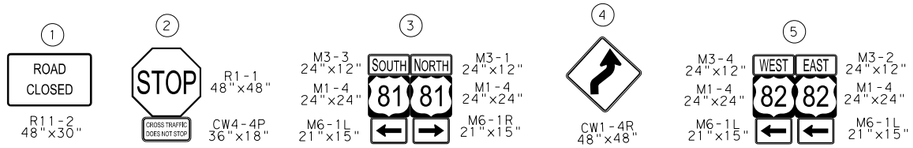

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

50 0 50 100
SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED
PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1B
US 81 STA 5022+00 TO STA 5031+00

SHEET 18 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	62
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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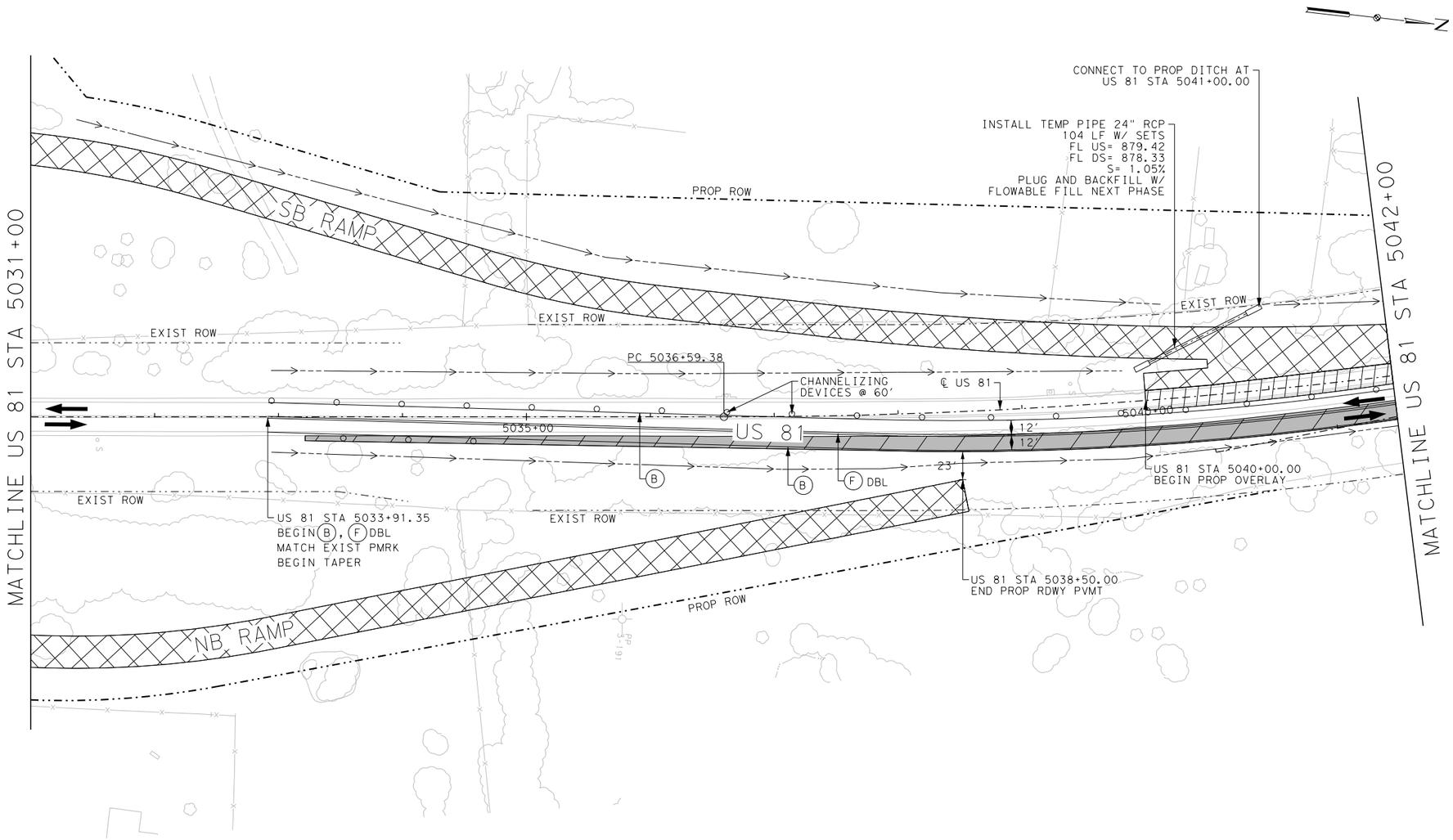

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1B
US 81 STA 5031+00 TO STA 5042+00

SHEET 19 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	63
CHECK JL	CONTROL	SECTION	JOB	
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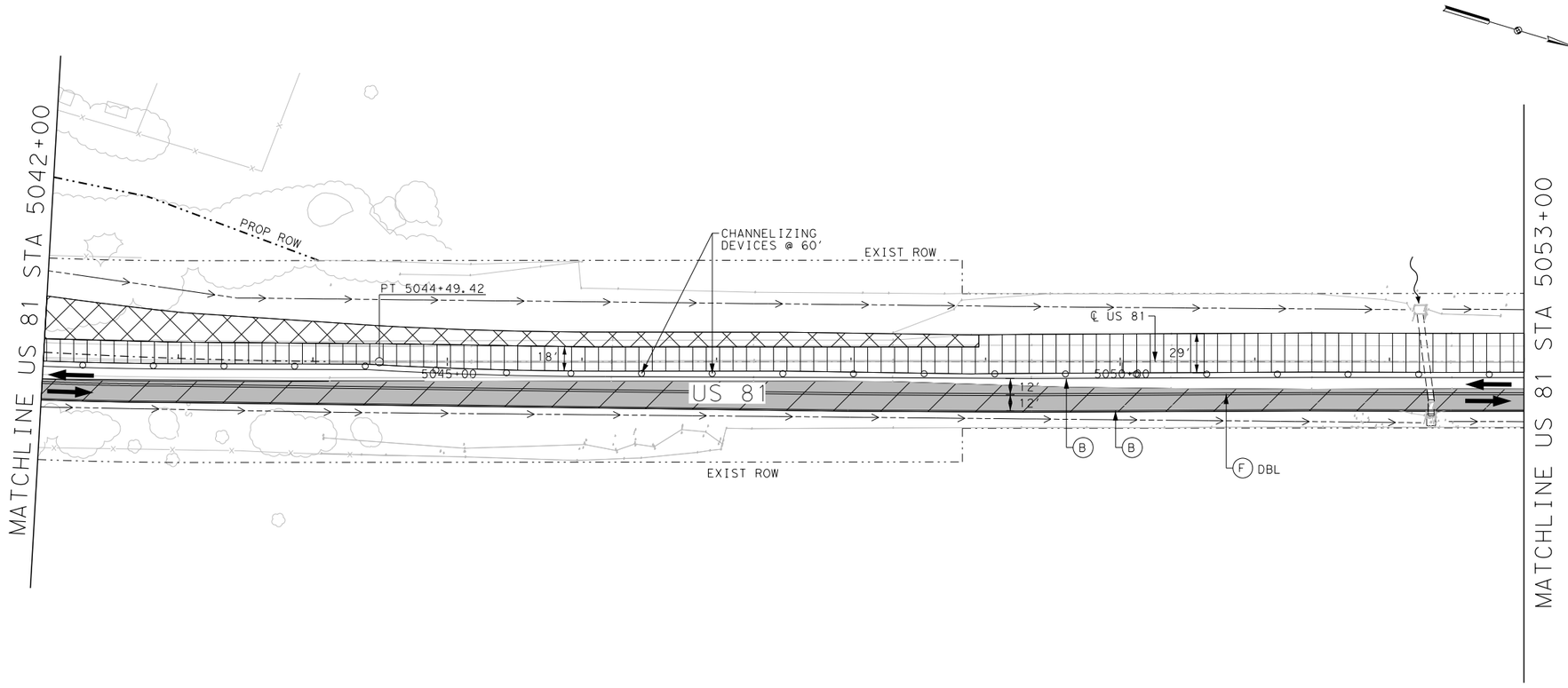

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
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OTHON ENGINEERING
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GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1B
US 81 STA 5042+00 TO STA 5053+00

SHEET 20 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	64
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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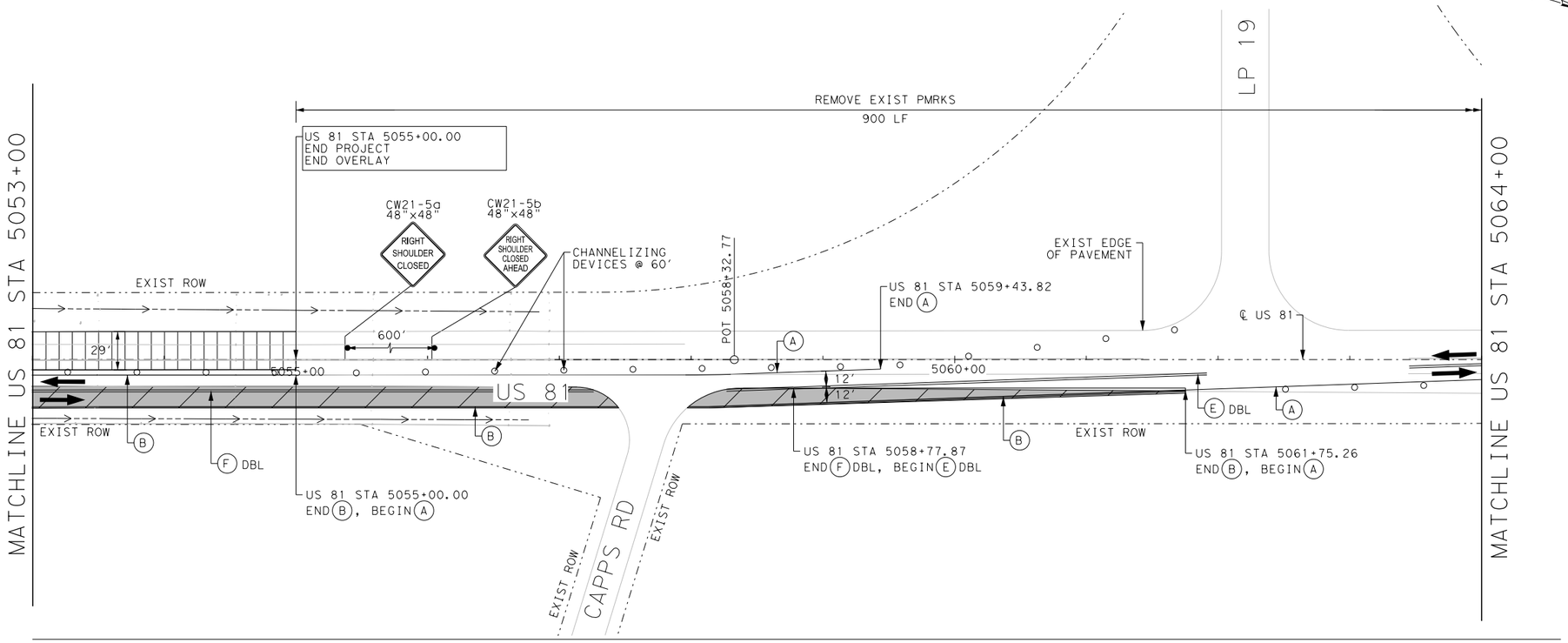

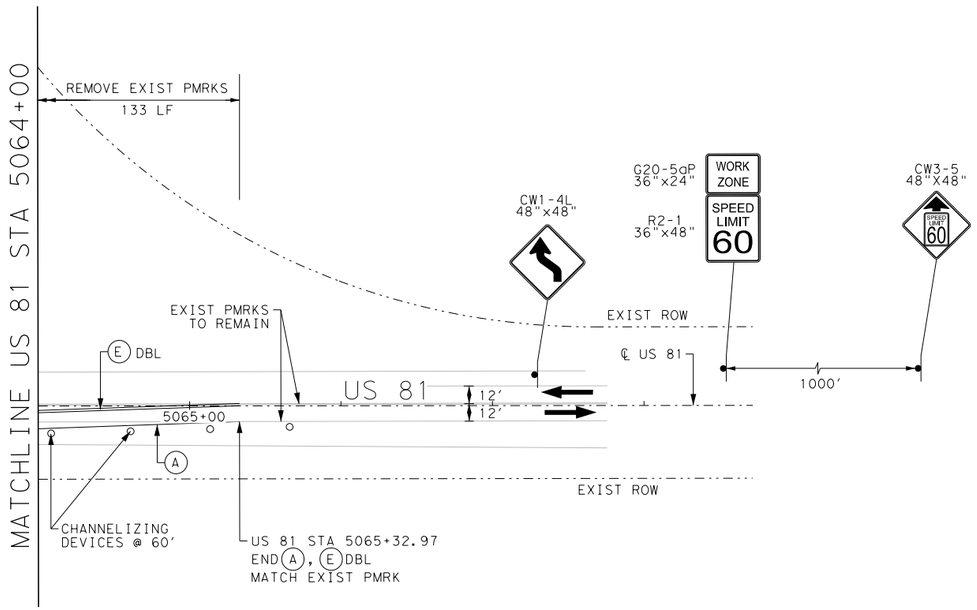

50 0 50 100
SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 1B
US 81 STA 5053+00 TO END PROJECT

SHEET 21 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	65
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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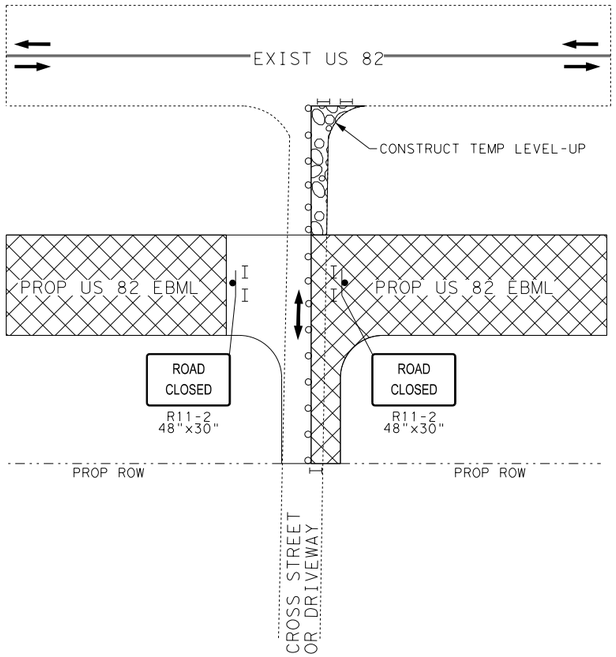
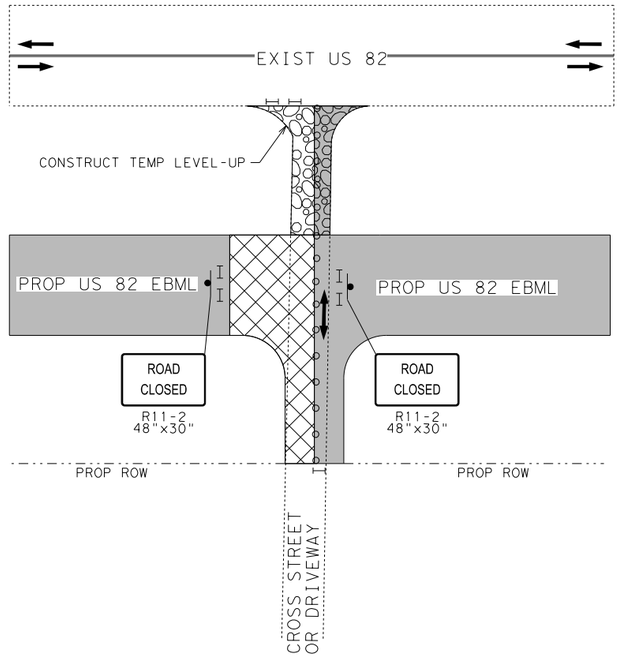
10/18/2023



STEP 1

CONSTRUCT HALF OF THE CROSS STREET OR DRIVEWAY AND TEMPORARY LEVEL UP WHILE MAINTAINING TRAFFIC ON THE EXISTING DRIVEWAY.



STEP 2

CONSTRUCT OTHER HALF OF THE DRIVEWAY AND TEMPORARY LEVEL UP WHILE MAINTAINING TRAFFIC ON THE NEWLY CONSTRUCTED DRIVEWAY.

LEGEND

- PERMANENT PAVEMENT THIS STEP
- PERMANENT PAVEMENT PREVIOUS STEP
- TEMPORARY LEVEL-UP THIS STEP
- TEMPORARY LEVEL-UP PREVIOUS STEP
- CONSTRUCTION SIGN
- I TYPE III BARRICADE
- ○ CHANNELIZING DEVICE

NOTES:

1. CONTRACTOR MUST MAINTAIN ACCESS TO ALL CROSS STREETS, ADJACENT PROPERTIES, AND DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION, UNLESS OTHERWISE NOTED IN THE PLANS.
2. THE TEMPORARY LEVEL-UP SHALL BE CONSTRUCTED TO GIVE TEMPORARY GRADE BREAK NOT TO EXCEED 6%.
3. SEE TEMPORARY LEVEL-UP DETAIL FOR ADDITIONAL INFORMATION.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
CROSS STREET AND DRIVEWAY
PHASING DETAIL

SCALE: NTS SHEET 1 OF 1

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	66
CHECK JL	CONTROL	SECTION	JOB	
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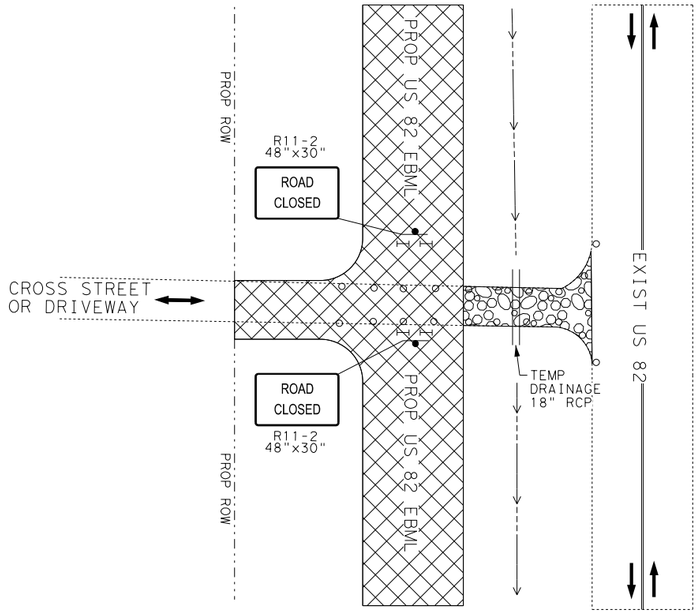
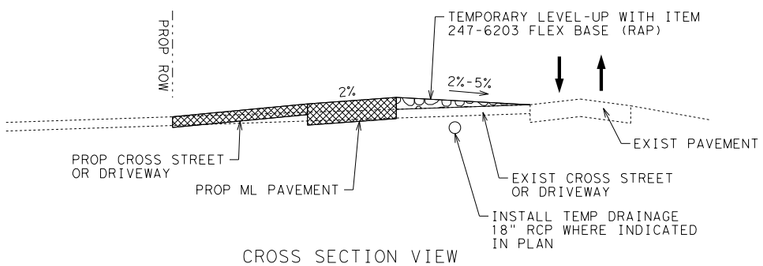


PLAN VIEW



CROSS SECTION VIEW

TEMP LEVEL-UP QUANTITY

PHASE 1A	0 SY
PHASE 1B	657 SY
PHASE 2A	453 SY
PHASE 2B	0 SY
PHASE 2C	0 SY

USE ITEM 247-6203 FL BS (CMP IN PLC)(RAP)(6")

LEGEND

- PERMANENT PAVEMENT
- TEMPORARY LEVEL-UP
- CONSTRUCTION SIGN
- TYPE III BARRICADE
- CHANNELIZING DEVICE
- TEMP DRAINAGE FLOW

NOTES:

1. CONTRACTOR MUST PROVIDE POSITIVE DRAINAGE AT ALL TIMES.
2. SEE TCP PLAN SHEETS FOR LOCATION OF THE TEMPORARY DRAINAGE PIPES.
3. SEE CROSS STREET AND DRIVEWAY PHASING DETAIL FOR ADDITIONAL INFORMATION.

STATE OF TEXAS
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LICENSED
PROFESSIONAL ENGINEER

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
TEMPORARY LEVEL-UP
DETAIL

SCALE: NTS SHEET 1 OF 1

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	67
CHECK JL	CONTROL	SECTION	JOB	
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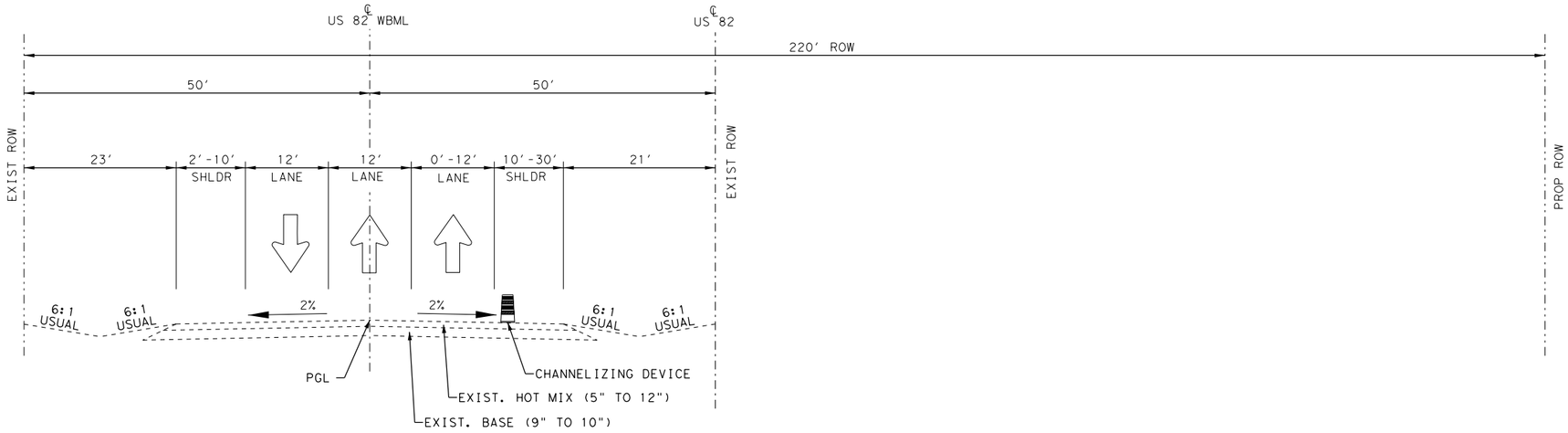
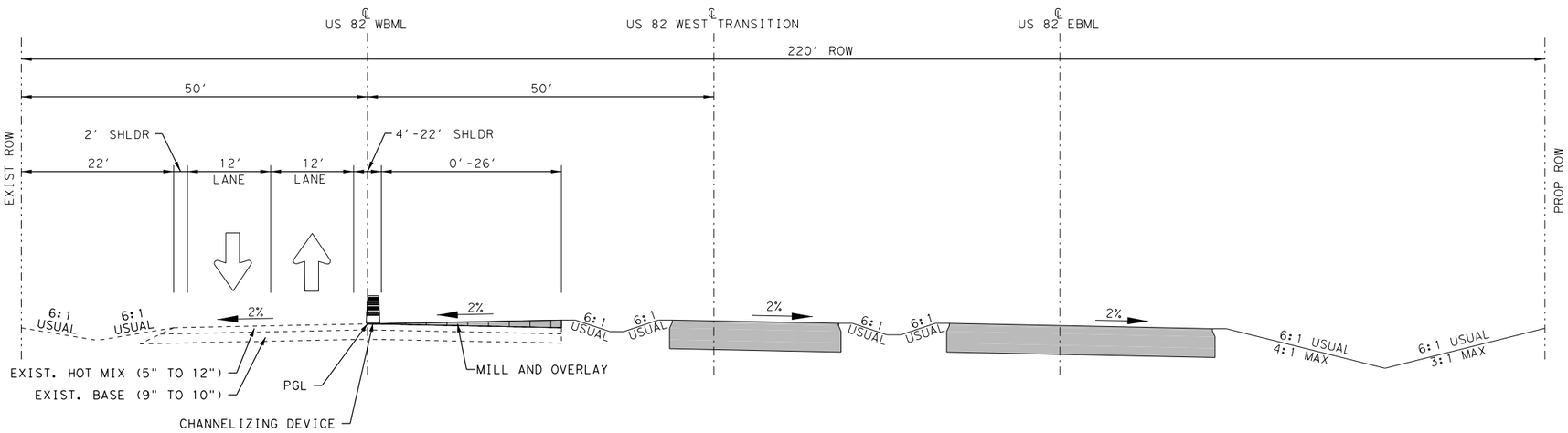


US 82 STA 5713+50.21 - STA 5724+01.13



US 82 STA 5724+01.13 - STA 5742+08.15

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 2A

SCALE: NTS SHEET 1 OF 5

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	68
CHECK JL	CONTROL	SECTION	JOB	
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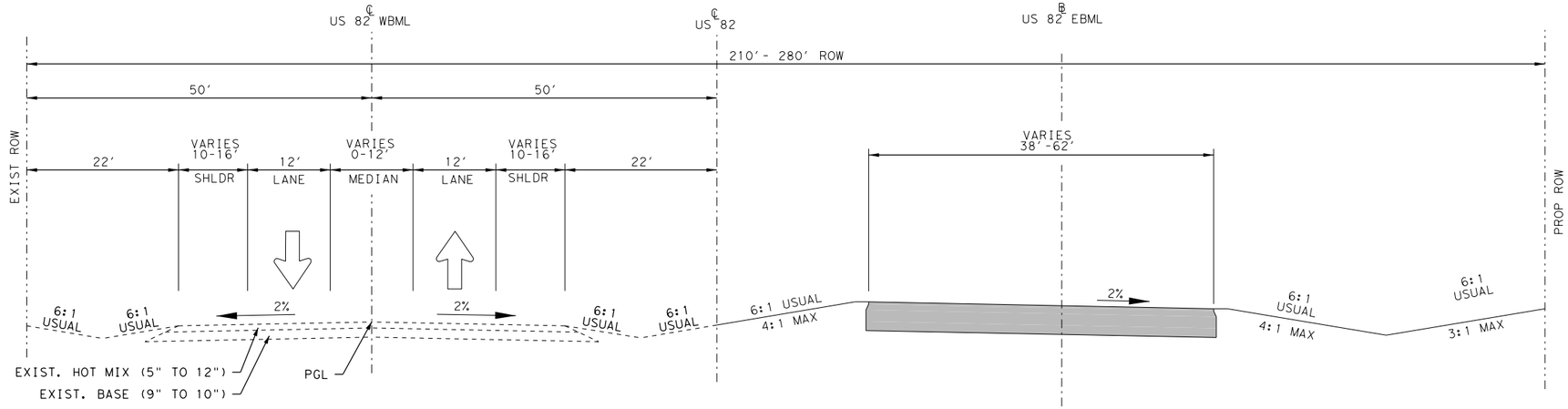
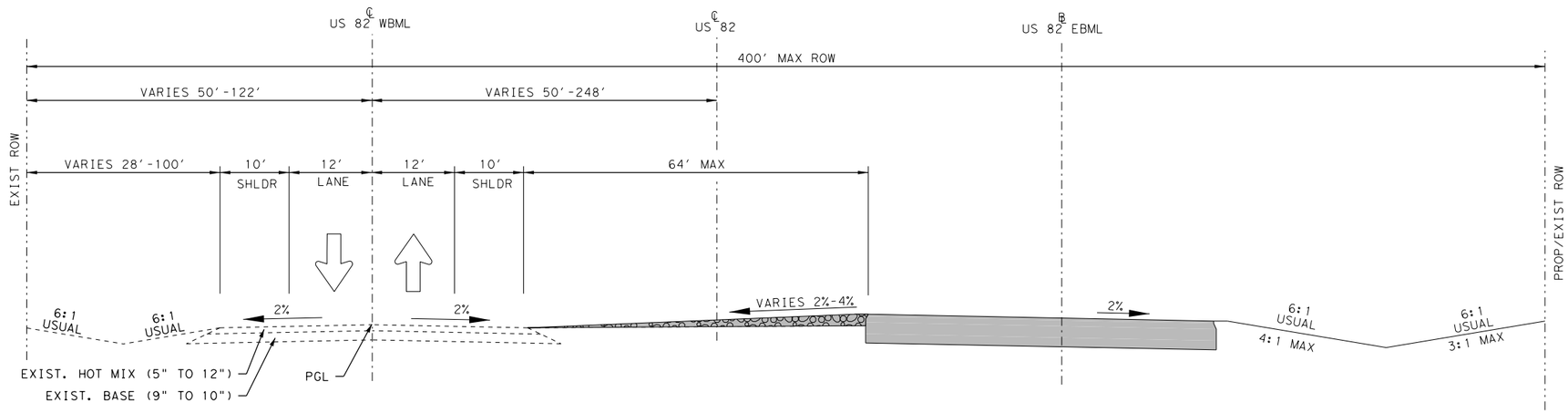


US 82 STA 5742+08.15 - STA 5788+07.43
US 82 STA 5788+42.57 - STA 5815+56.84
US 82 STA 5816+08.97 - STA 5826+20.25
US 82 STA 5826+54.67 - STA 5830+54.21
US 82 STA 5830+91.99 - STA 5837+76.45
US 82 STA 5838+25.80 - STA 5846+00.00
US 82 STA 5847+15.04 - STA 5859+30.79
US 82 STA 5859+95.72 - STA 5866+87.33
US 82 STA 5867+26.28 - STA 5875+46.03



US 82 STA 5788+07.43 - STA 5788+42.57
US 82 STA 5815+56.84 - STA 5816+08.97
US 82 STA 5826+20.25 - STA 5826+54.67
US 82 STA 5830+54.21 - STA 5830+91.99
US 82 STA 5837+76.45 - STA 5838+25.80
US 82 STA 5846+00.00 - STA 5847+15.04
US 82 STA 5859+30.79 - STA 5859+95.72
US 82 STA 5866+87.33 - STA 5867+26.28

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 2A

SCALE: NTS SHEET 2 OF 5

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	69
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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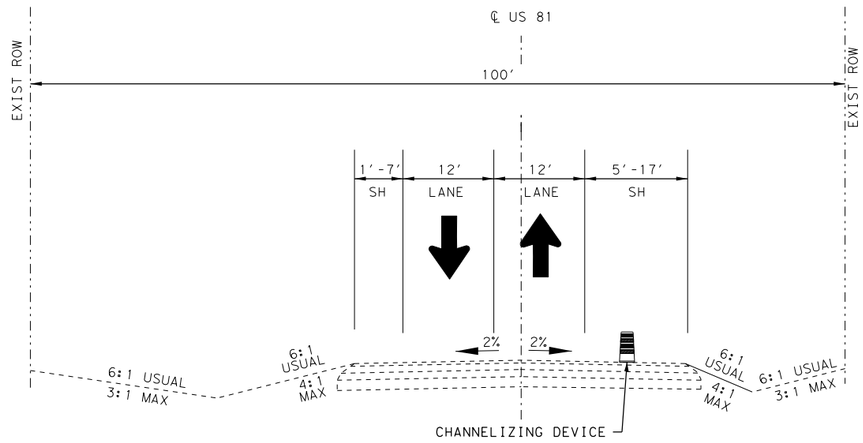
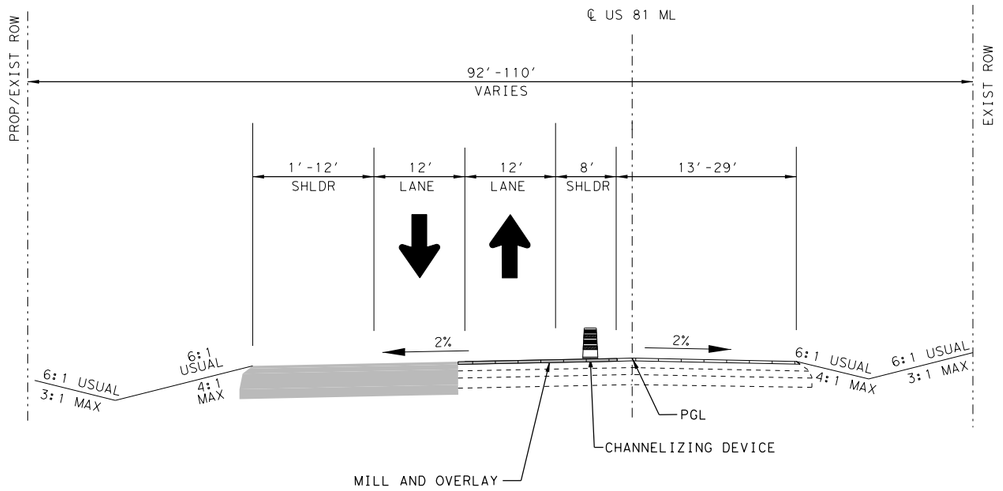


US 81 STA 4996+39.77 - 5003+00.00



US 81 STA 5003+00.00 TO 5019+95.00

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 2A

SCALE: NTS SHEET 3 OF 5

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	70
CHECK JL	CONTROL	SECTION	JOB	
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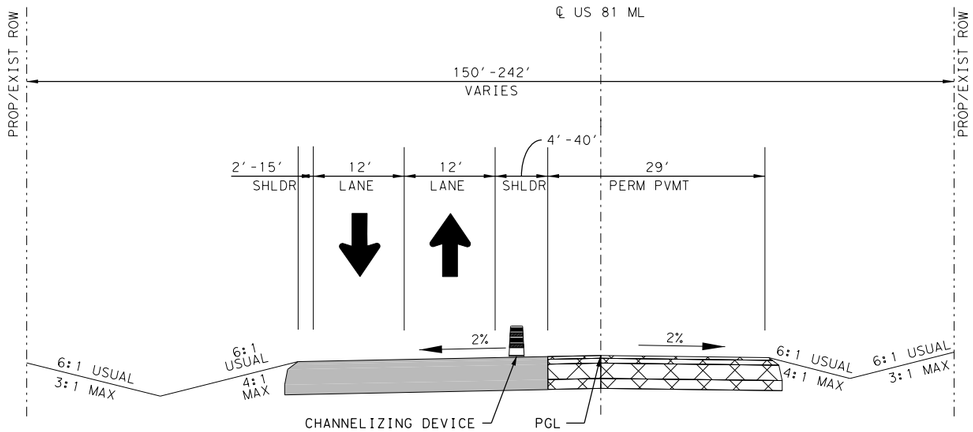
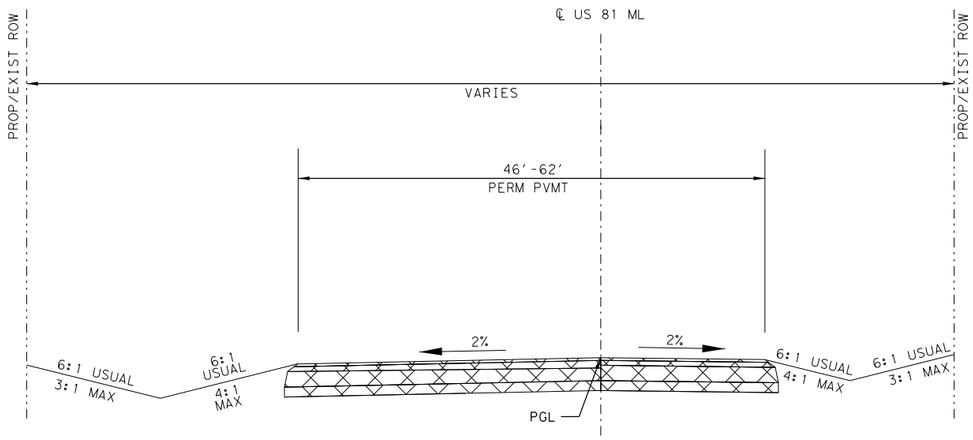


US 81 STA 5019+95.00 TO 5023+40.34



US 81 STA 5023+40.34 TO 5029+40.00
US 81 STA 5030+60.00 TO 5035+65.00

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE

STATE OF TEXAS
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131159
LICENSED
PROFESSIONAL ENGINEER
10/18/2023

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GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 2A

SCALE: NTS SHEET 4 OF 5

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	71
CHECK JL	CONTROL	SECTION	JOB	
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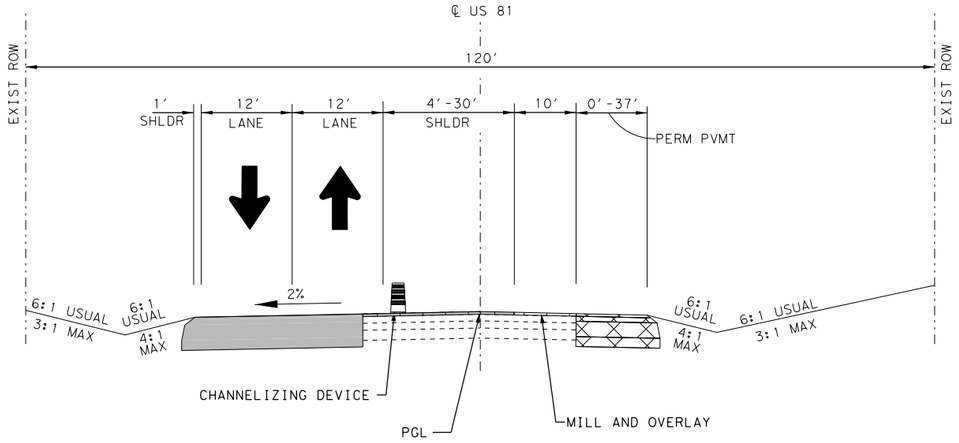
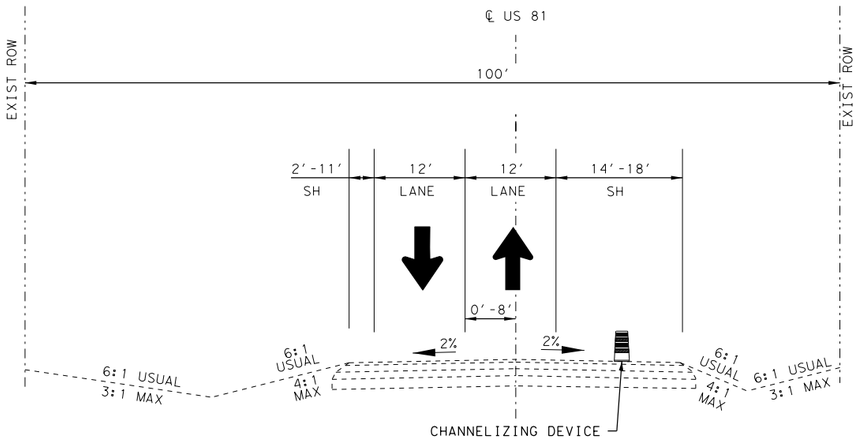


US 81 STA 5035+65.00 TO 5055+00.00

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE



US 81 STA 5055+00.00 - 5065+32.98

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 2A

SCALE: NTS SHEET 5 OF 5

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	72
CHECK JL	CONTROL	SECTION	JOB	
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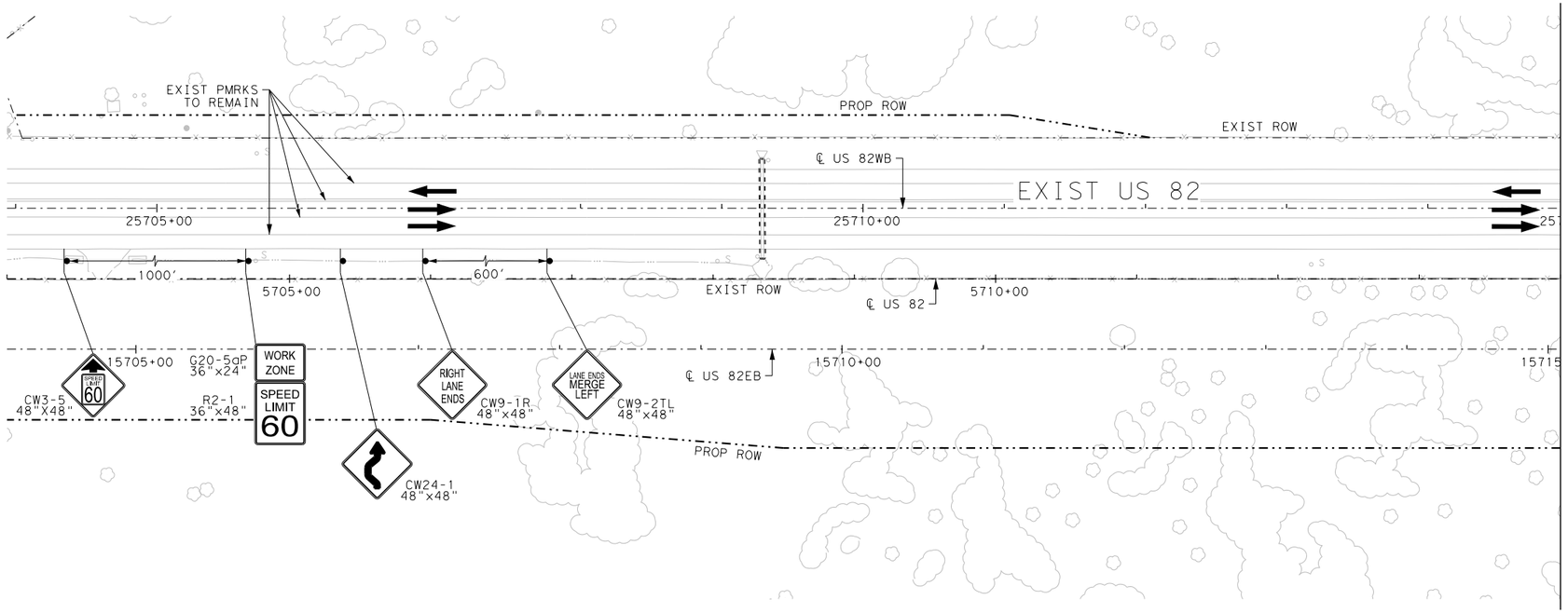

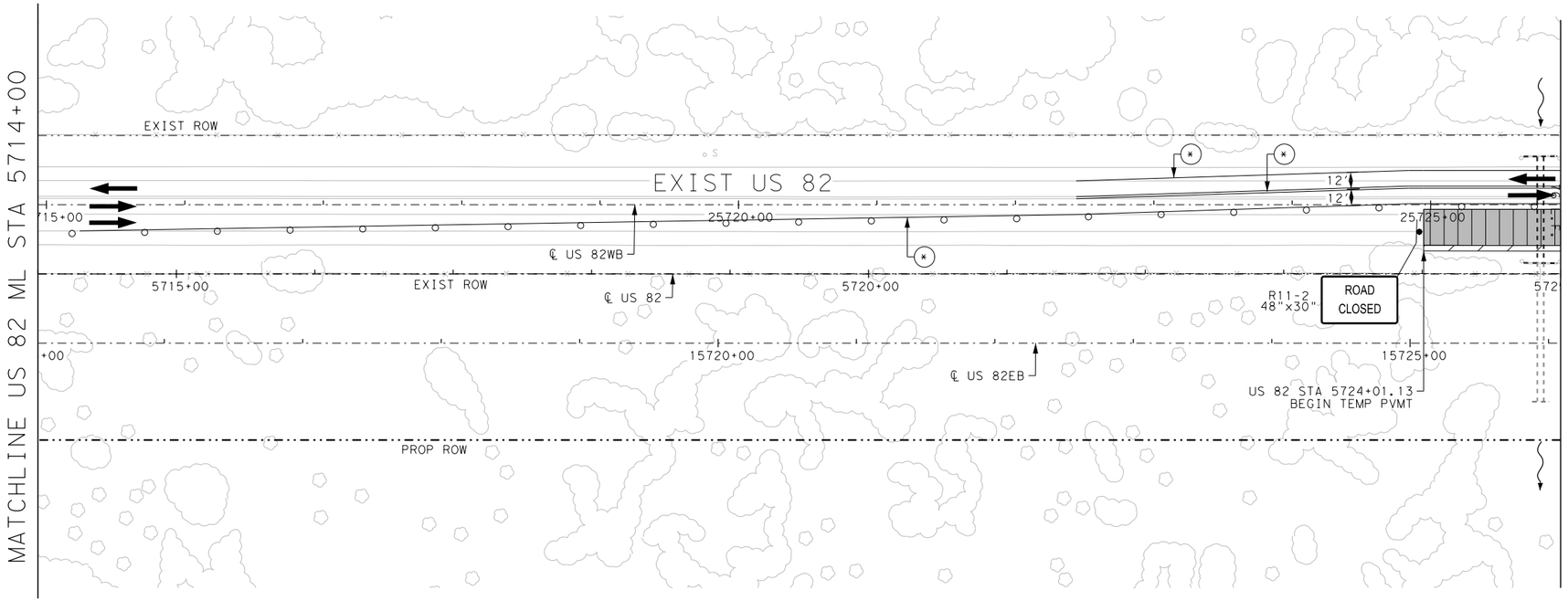

50 0 50 100
SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

US82

TRAFFIC CONTROL PLAN
PHASE 2A
BEGIN PROJECT TO US 82 STA 5725+00

SHEET 1 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	73
CHECK JL	CONTROL	SECTION	JOB	
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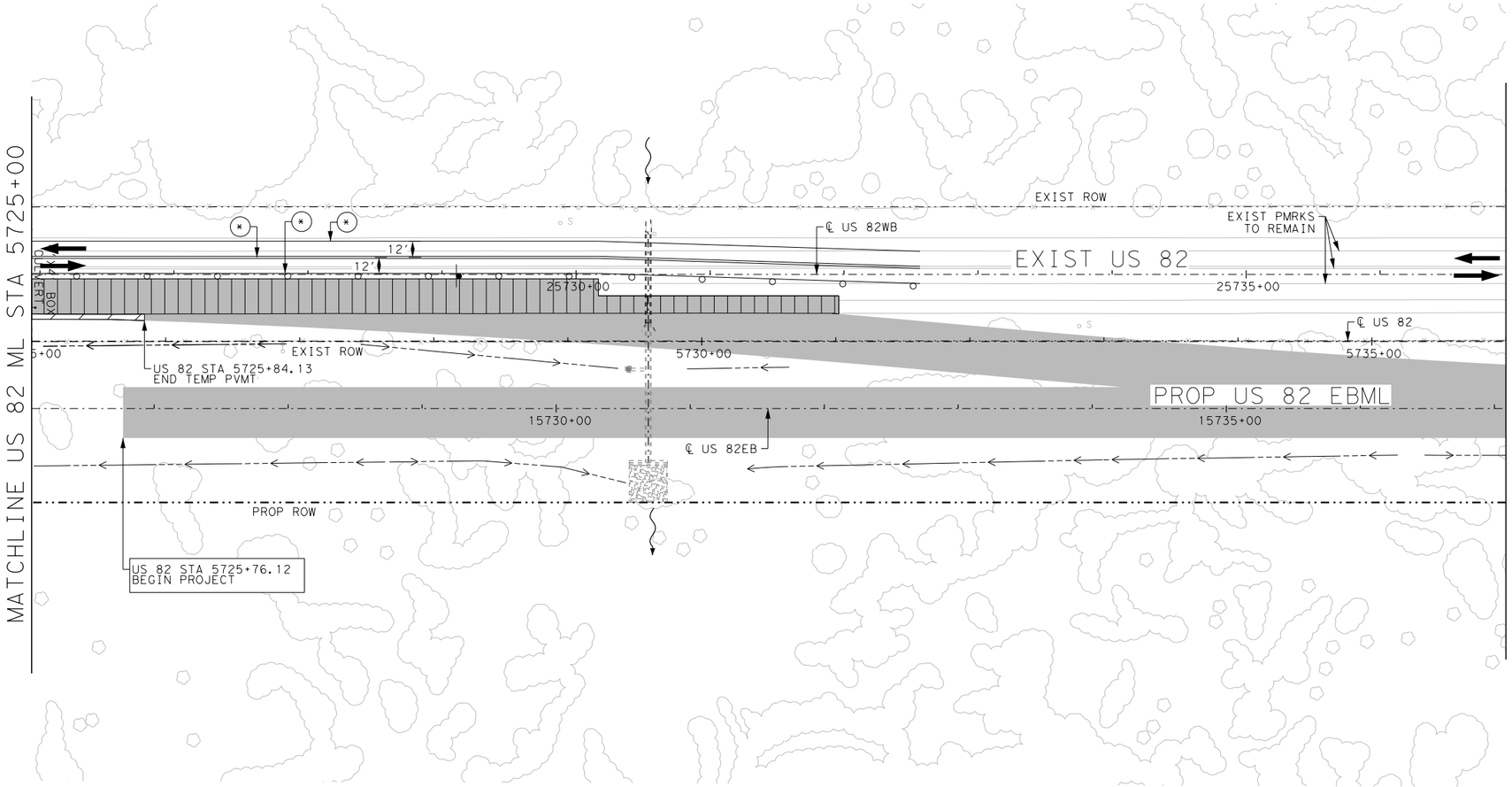

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2A
US 82 STA 5725+00 TO STA 5736+00

SHEET 2 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	74
CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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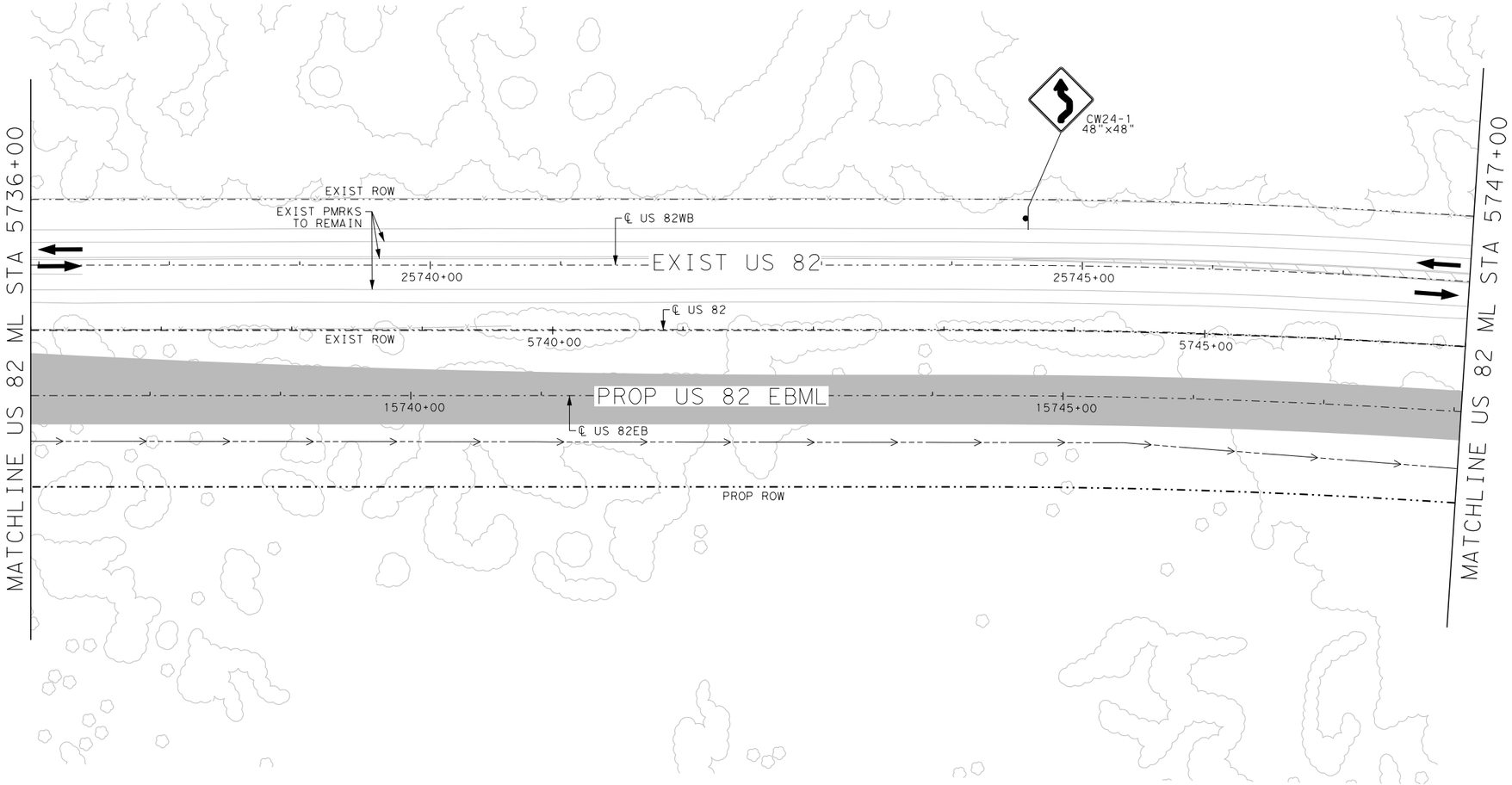

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
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LICENSED PROFESSIONAL ENGINEER

10/18/2023

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SUITE 220
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US82

TRAFFIC CONTROL PLAN
PHASE 2A
US 82 STA 5736+00 TO STA 5747+00

SHEET 3 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	75
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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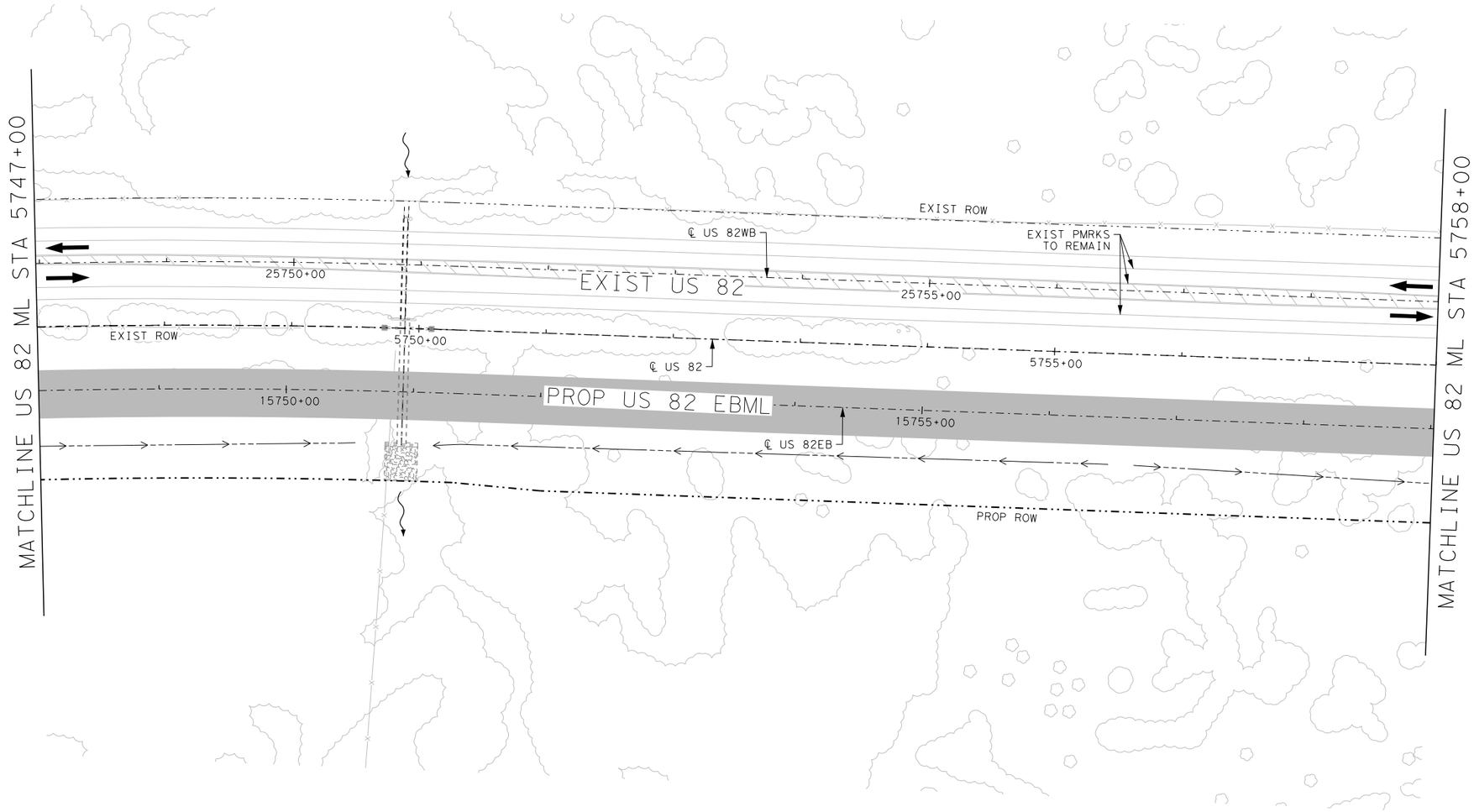

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2A
US 82 STA 5747+00 TO STA 5758+00

SHEET 4 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	76
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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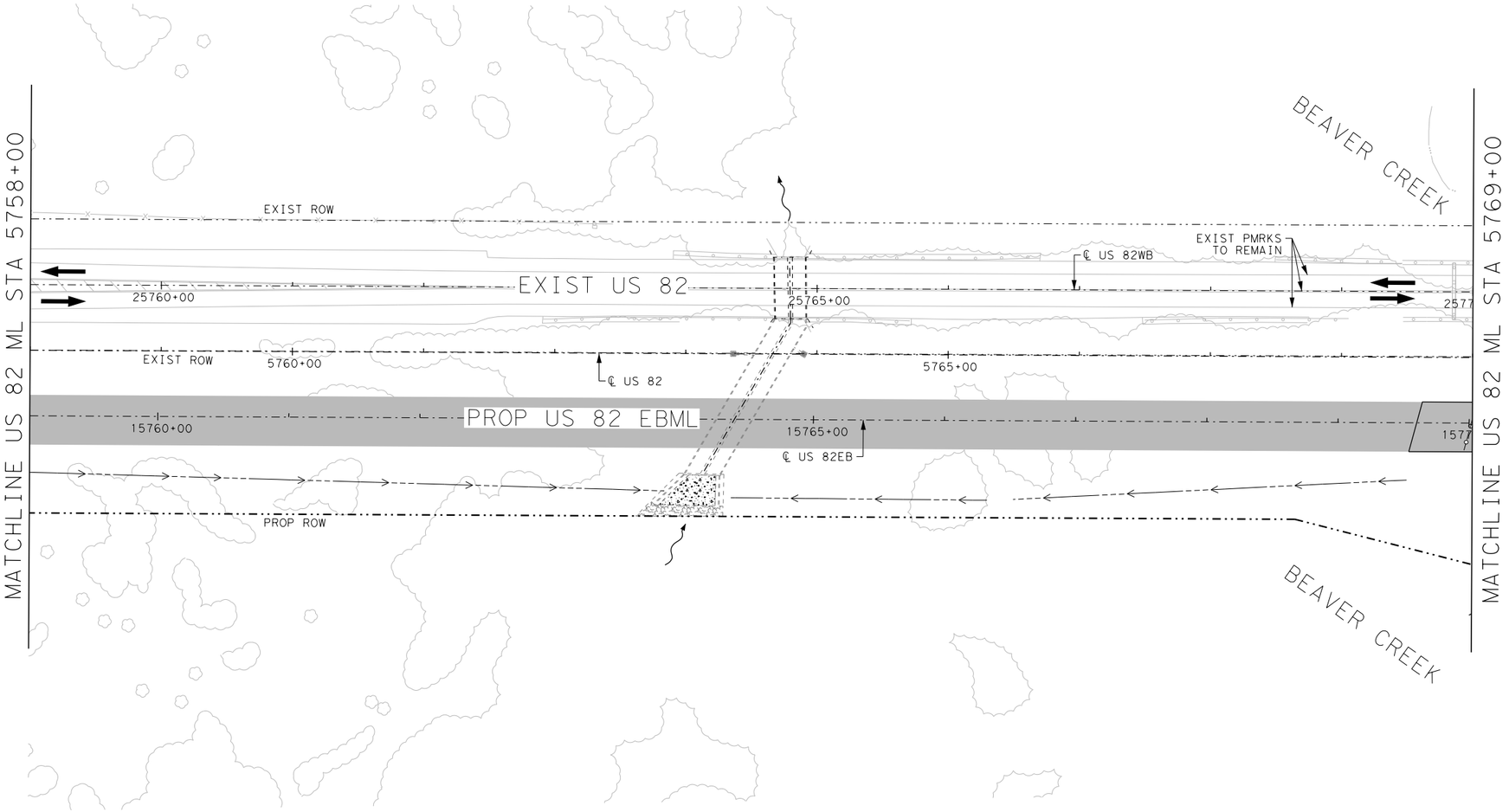

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2A
US 82 STA 5758+00 TO STA 5769+00

SHEET 5 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	77
CHECK JL	CONTROL	SECTION	JOB	
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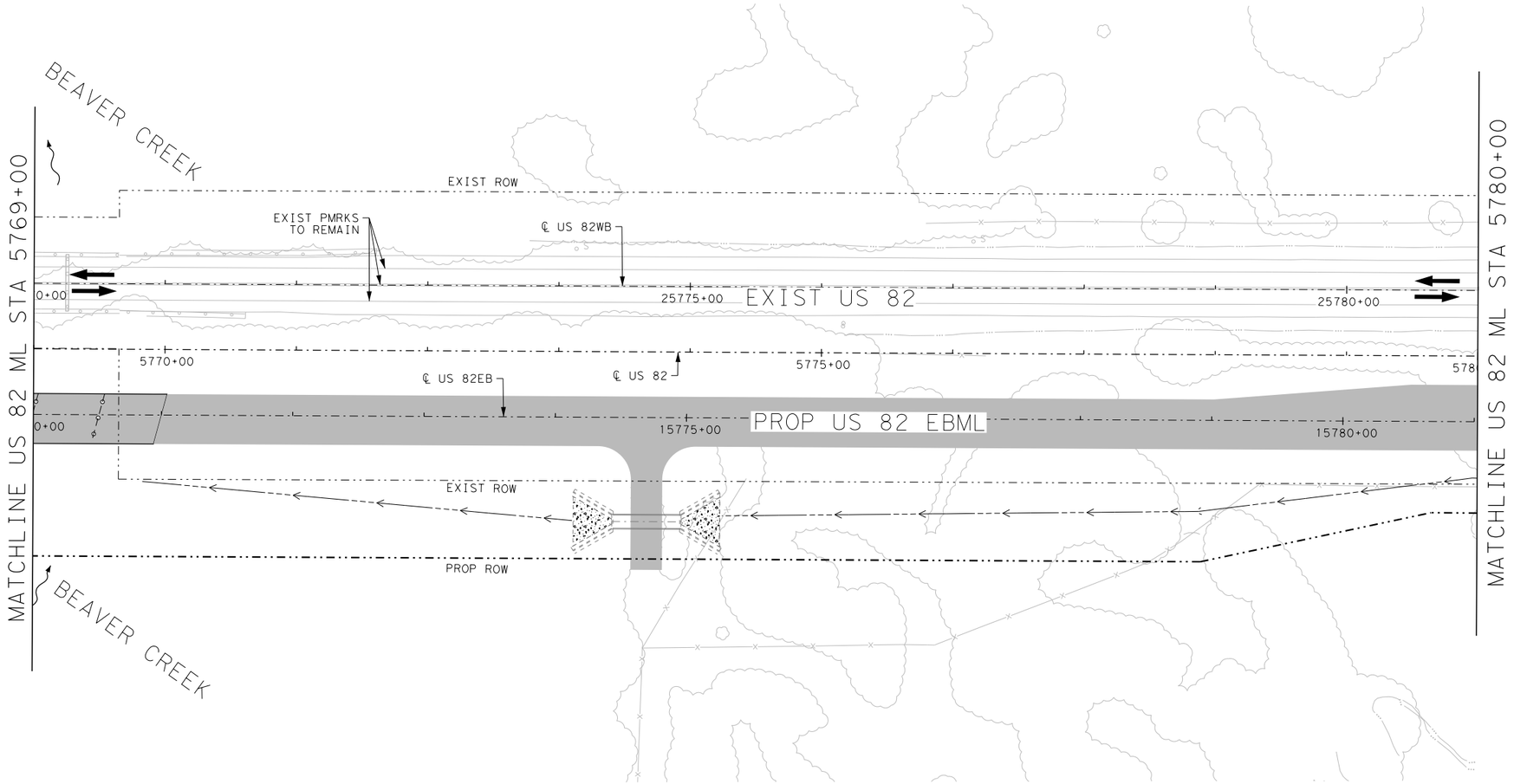

N

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SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

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LICENSED
PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2A
US 82 STA 5769+00 TO STA 5780+00

SHEET 6 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	78
CHECK JL	CONTROL	SECTION	JOB	
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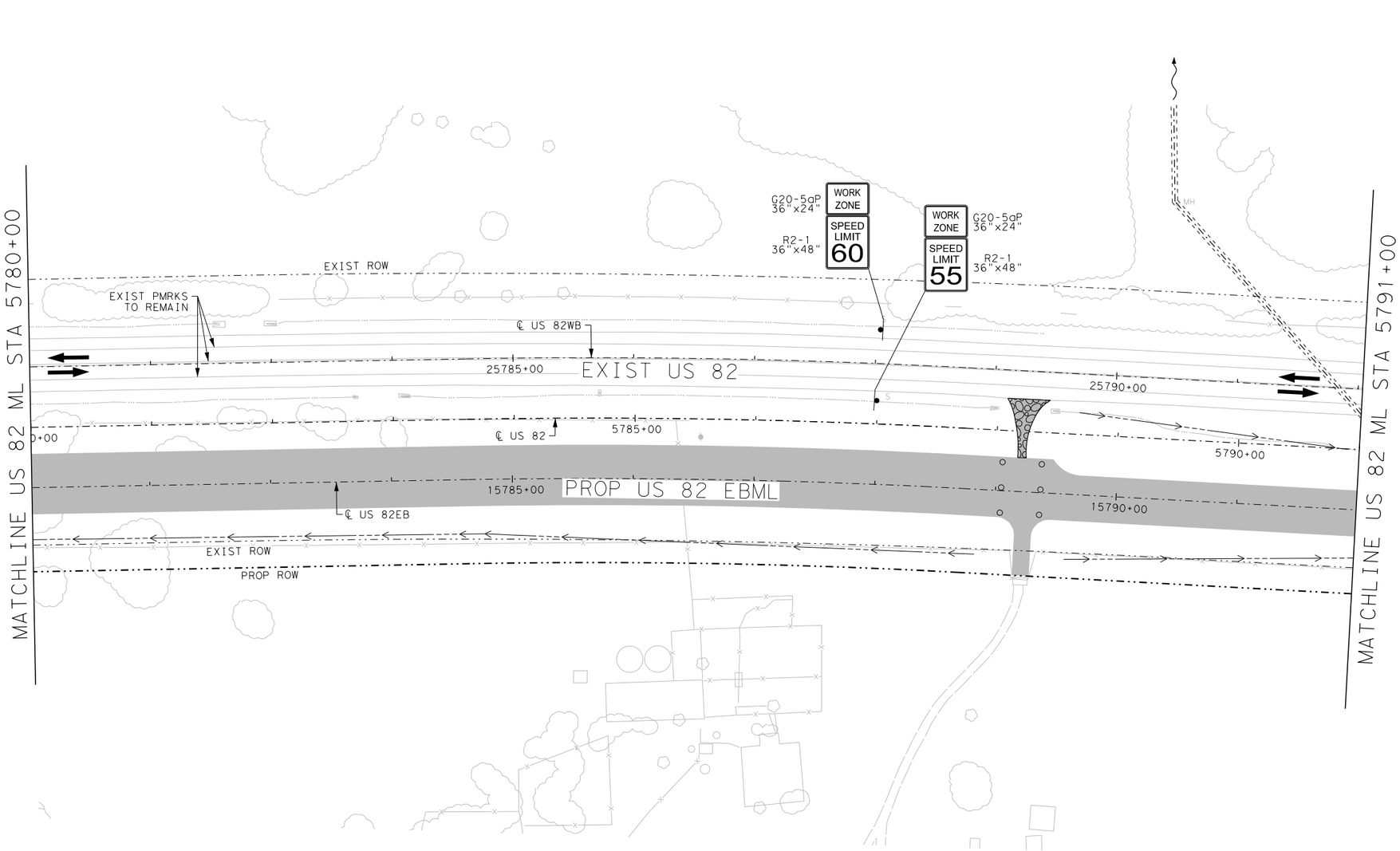

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SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

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US82

TRAFFIC CONTROL PLAN
PHASE 2A
US 82 STA 5780+00 TO STA 5791+00

SHEET 7 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
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CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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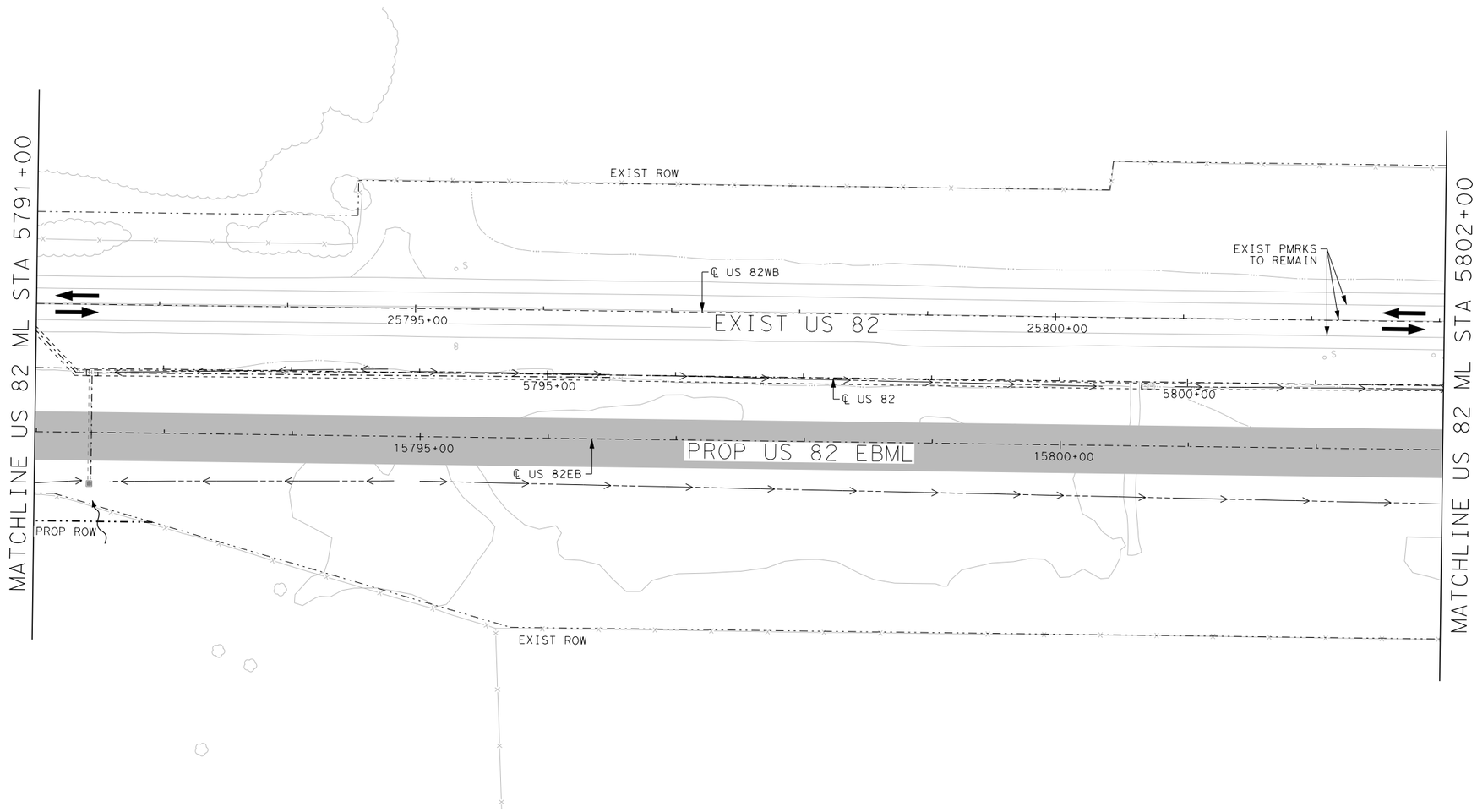

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

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LICENSED PROFESSIONAL ENGINEER
10/18/2023

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GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2A
US 82 STA 5791+00 TO STA 5802+00

SHEET 8 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
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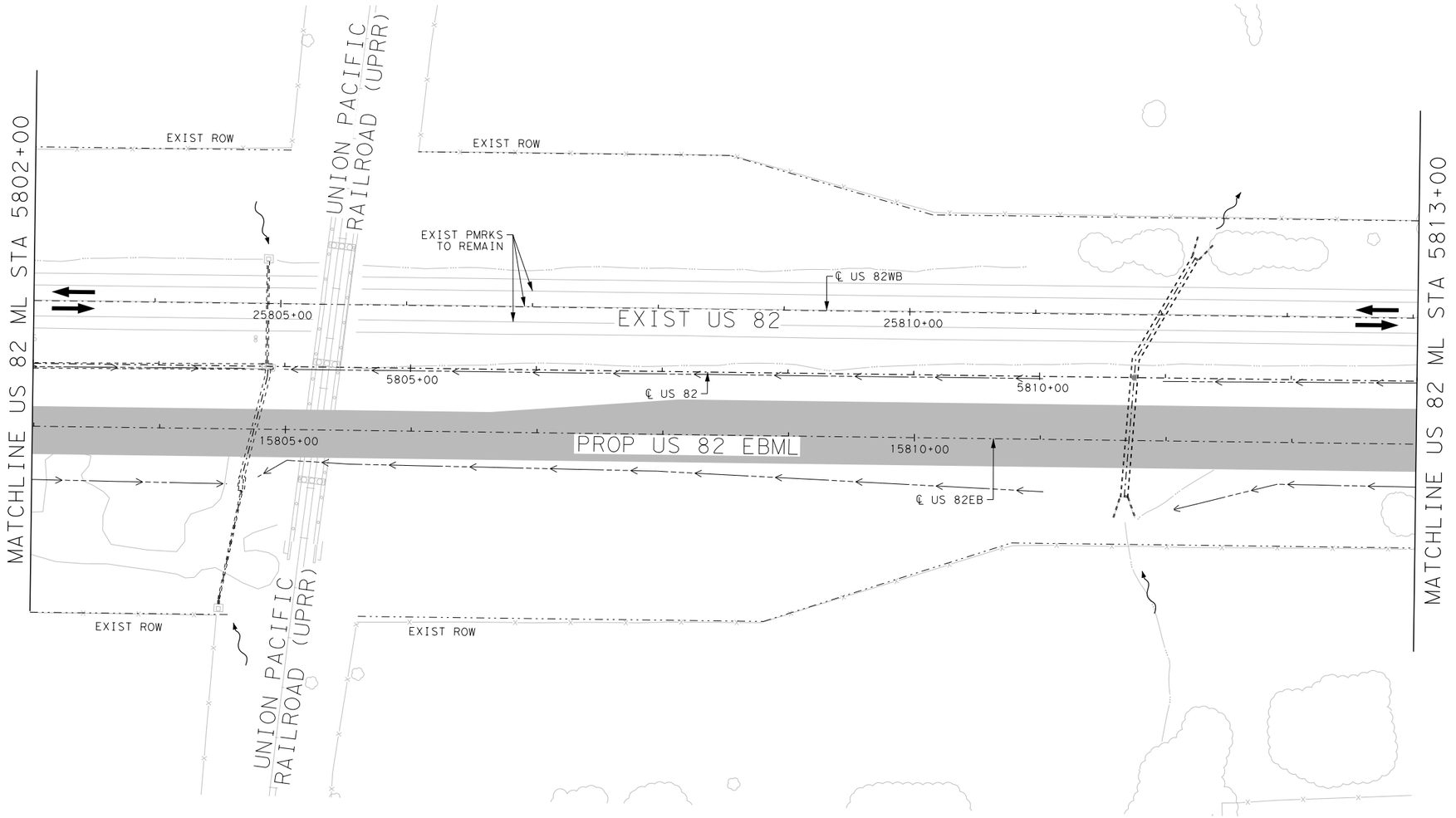

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER

10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2A
US 82 STA 5802+00 TO STA 5813+00

SHEET 9 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
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CHECK JL	CONTROL	SECTION	JOB	
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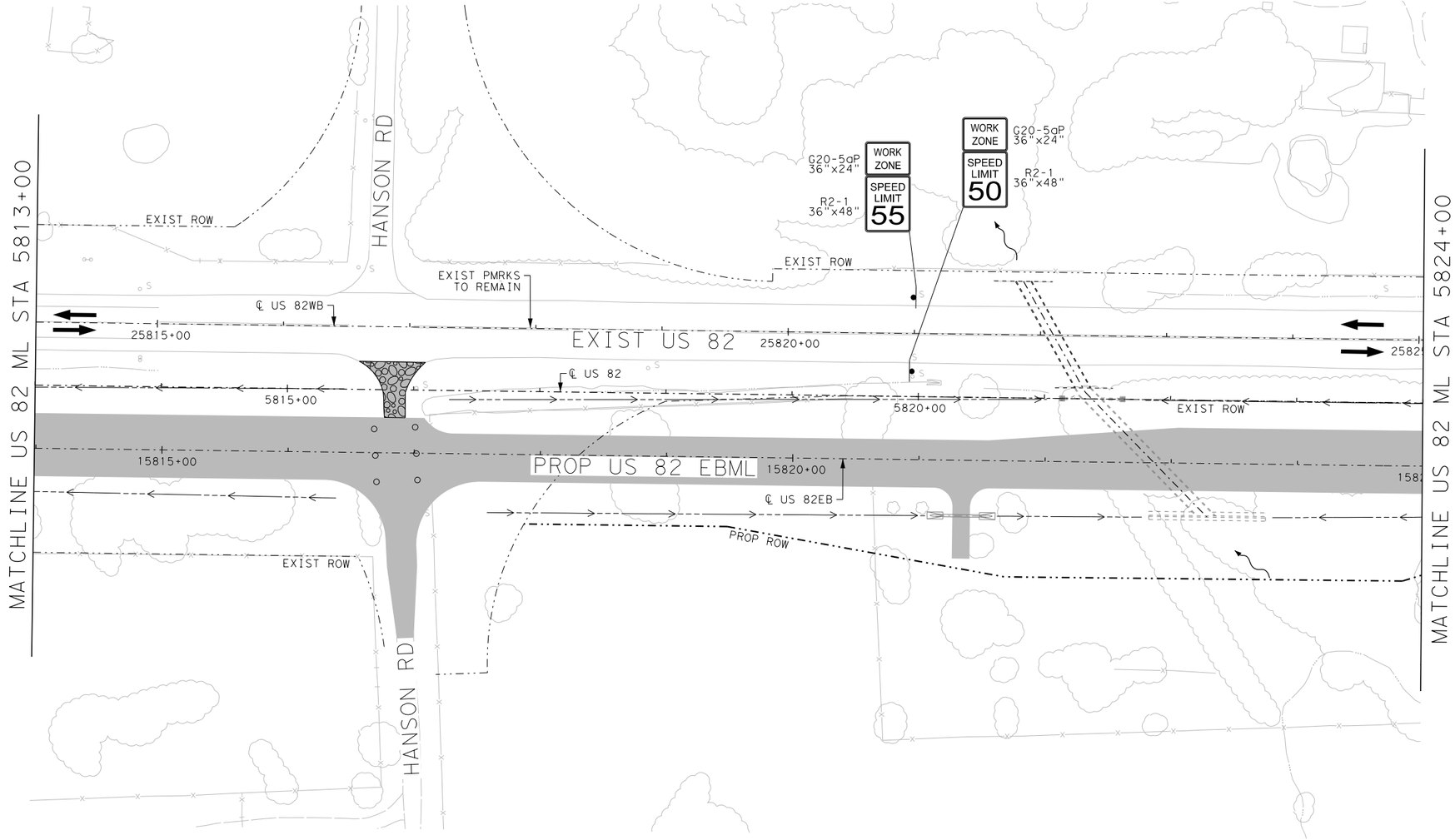

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50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2A
US 82 STA 5813+00 TO STA 5824+00

SHEET 10 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	82
CHECK JL	CONTROL	SECTION	JOB	
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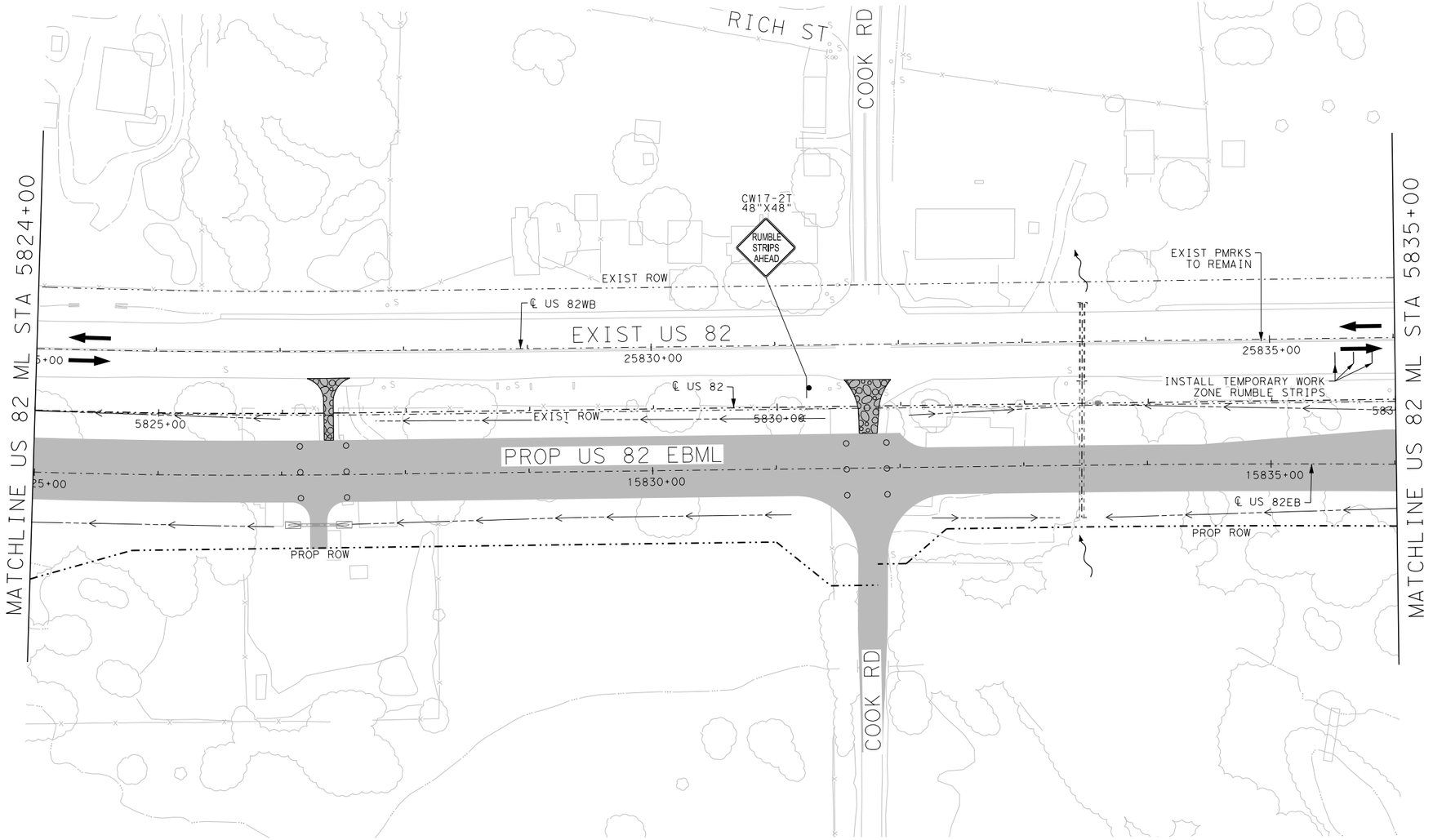

N

50 0 50 100
SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2A
US 82 STA 5824+00 TO STA 5835+00

SHEET 11 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	83
CHECK JL	CONTROL	SECTION	JOB	
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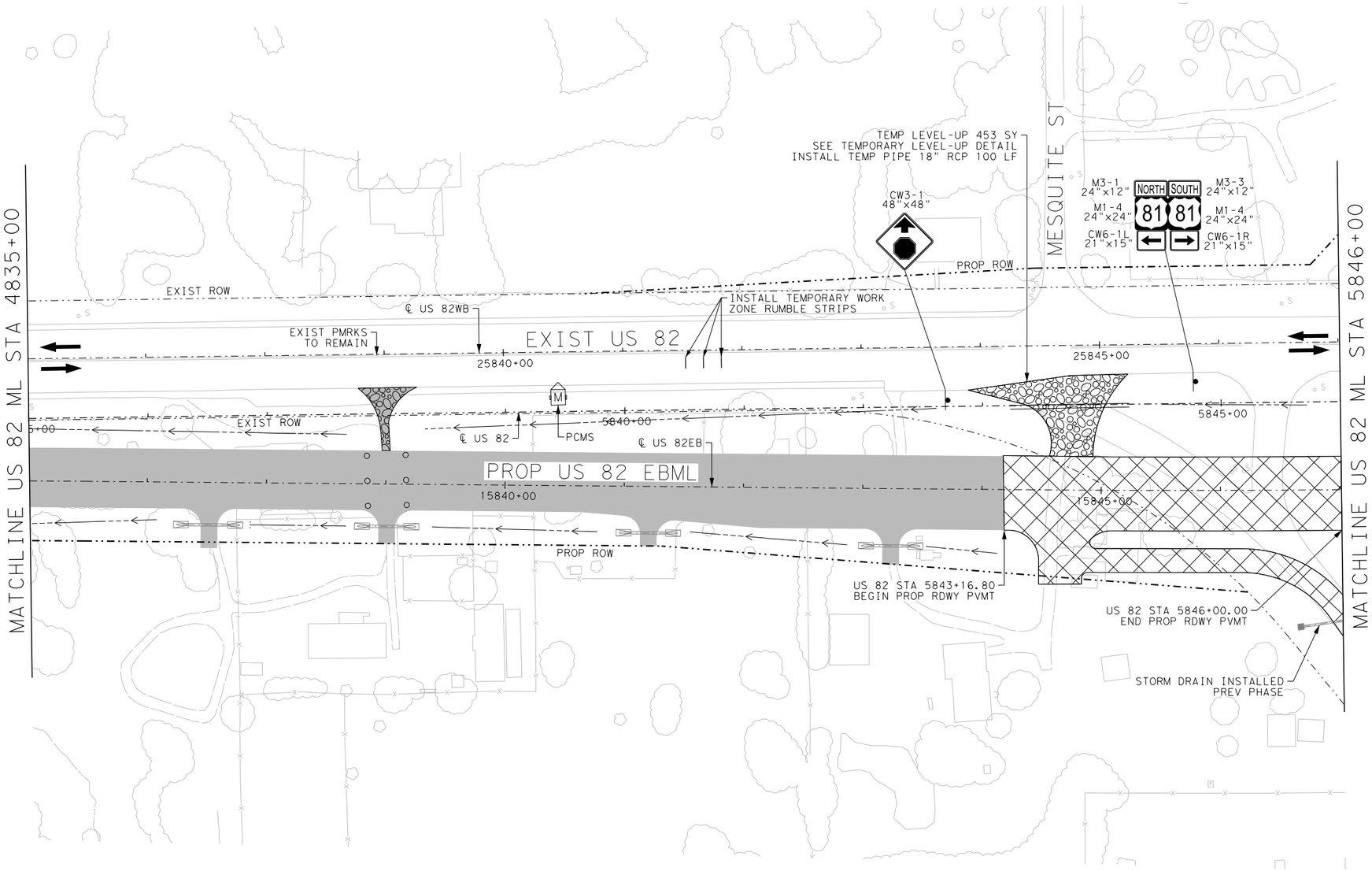

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50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.
3. REFER TO LOCAL ROAD PHASING DETAIL FOR ADDITIONAL INFORMATION.

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SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2A
US 82 STA 5835+00 TO STA 5846+00

SHEET 12 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	84
CHECK JL	CONTROL	SECTION	JOB	
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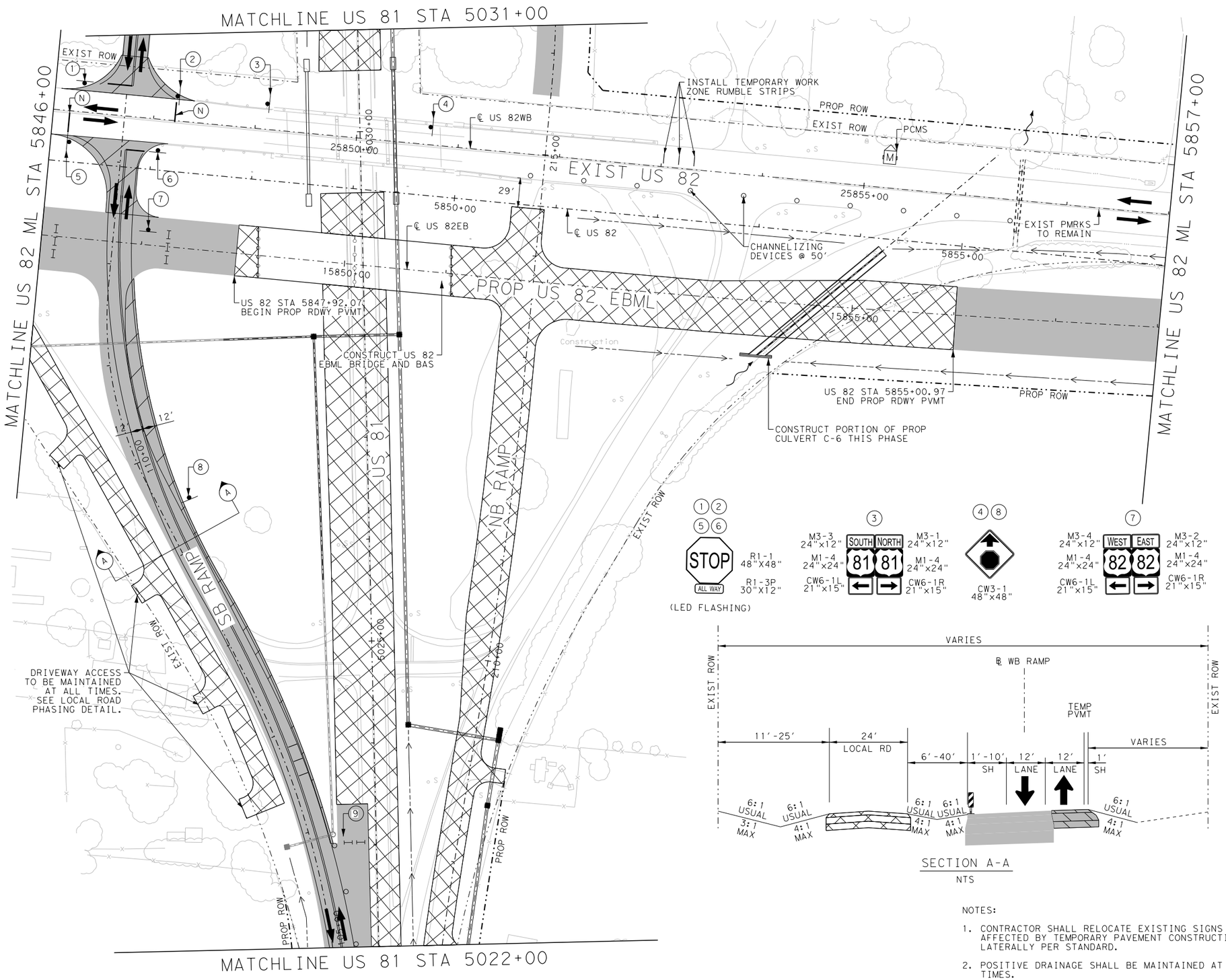

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

(1) (2) (5) (6)

R1-1 48"X48"

R1-3P 30"X12"

(LED FLASHING)

(3)

M3-3 24"x12" M1-4 24"x24" CW6-1L 21"x15"

M3-1 24"x12" M1-4 24"x24" CW6-1R 21"x15"

(4) (8)

CW3-1 48"x48"

(7)

M3-4 24"x12" M1-4 24"x24" CW6-1L 21"x15"

M3-2 24"x12" M1-4 24"x24" CW6-1R 21"x15"

(9)

ROAD CLOSED

R11-2 48"x30"

SECTION A-A

NTS

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.
3. REFER TO LOCAL ROAD PHASING DETAIL FOR ADDITIONAL INFORMATION.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER

10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2A
US 82 STA 5846+00 TO STA 5857+00

SHEET 13 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	85
CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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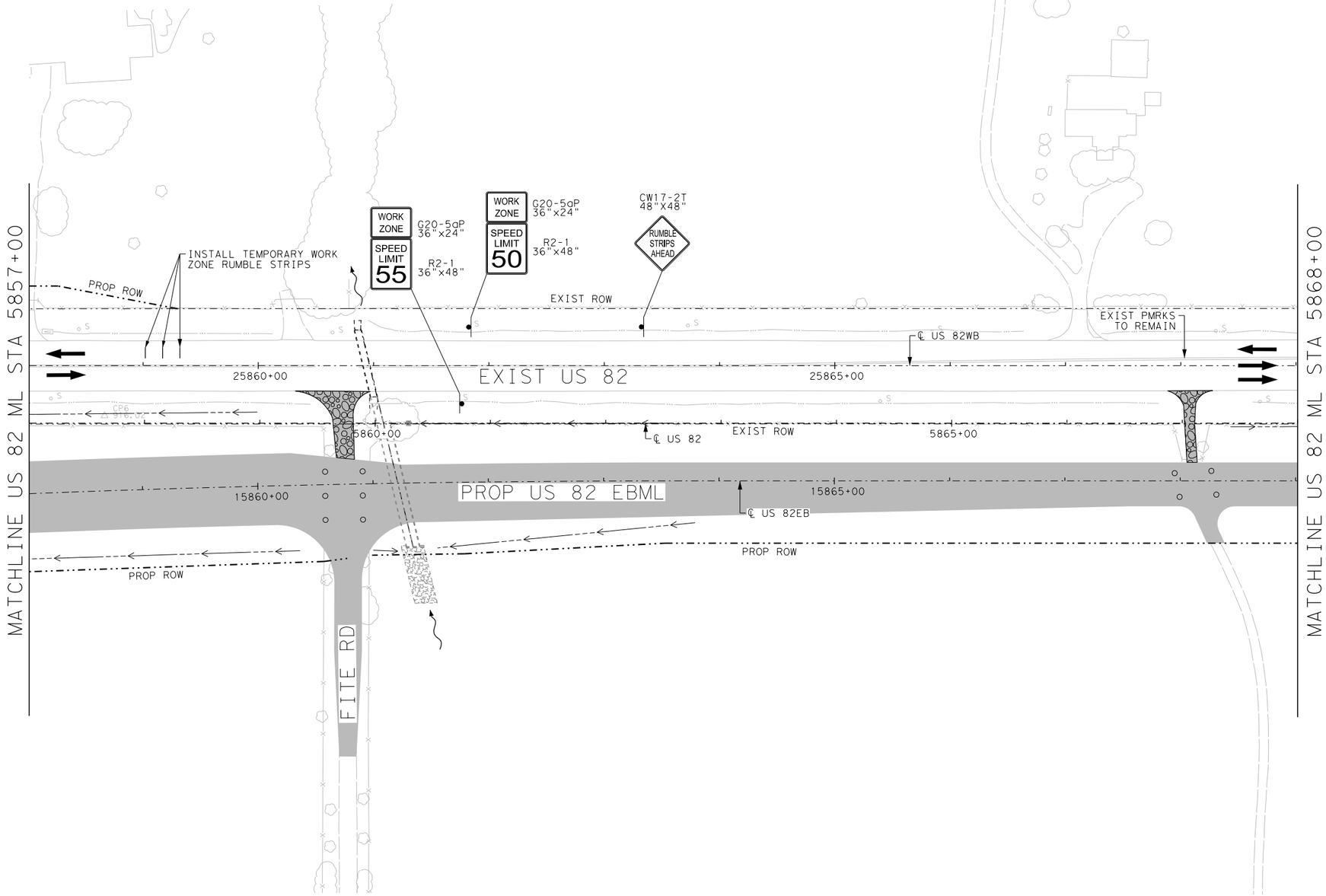

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2A
US 82 STA 5857+00 TO STA 5868+00

SHEET 14 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	86
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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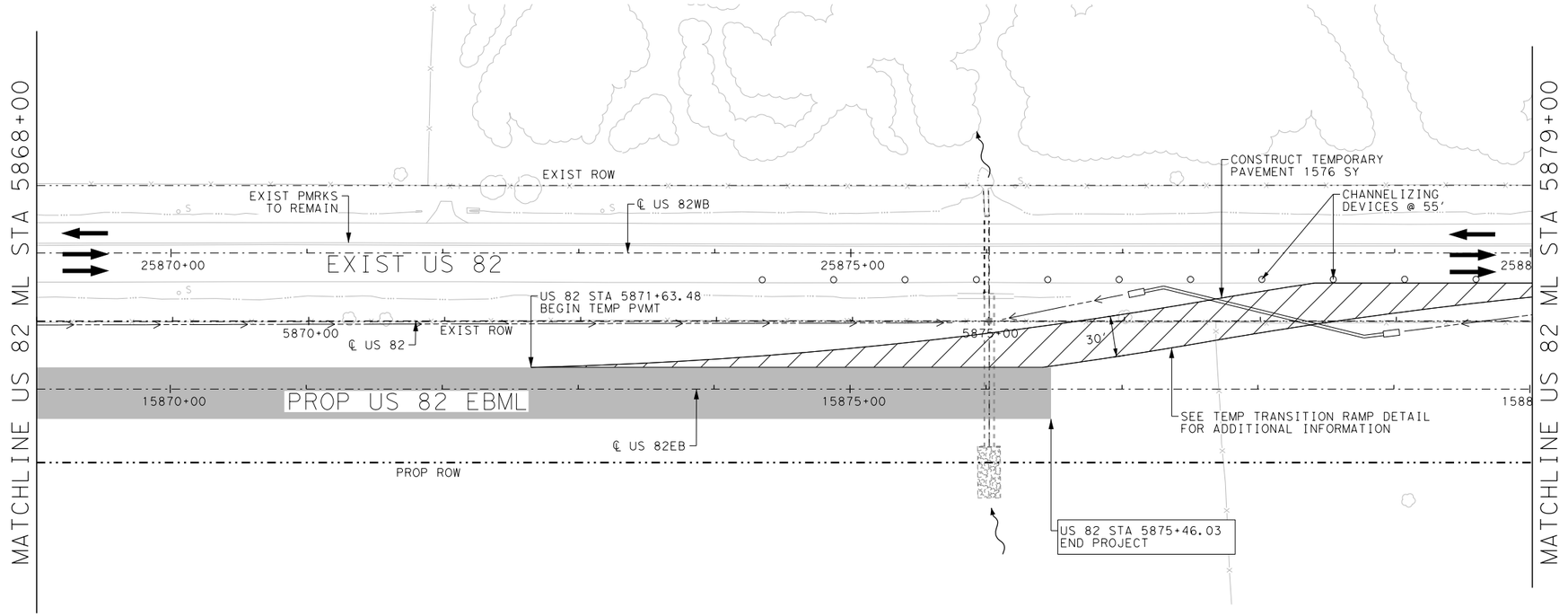

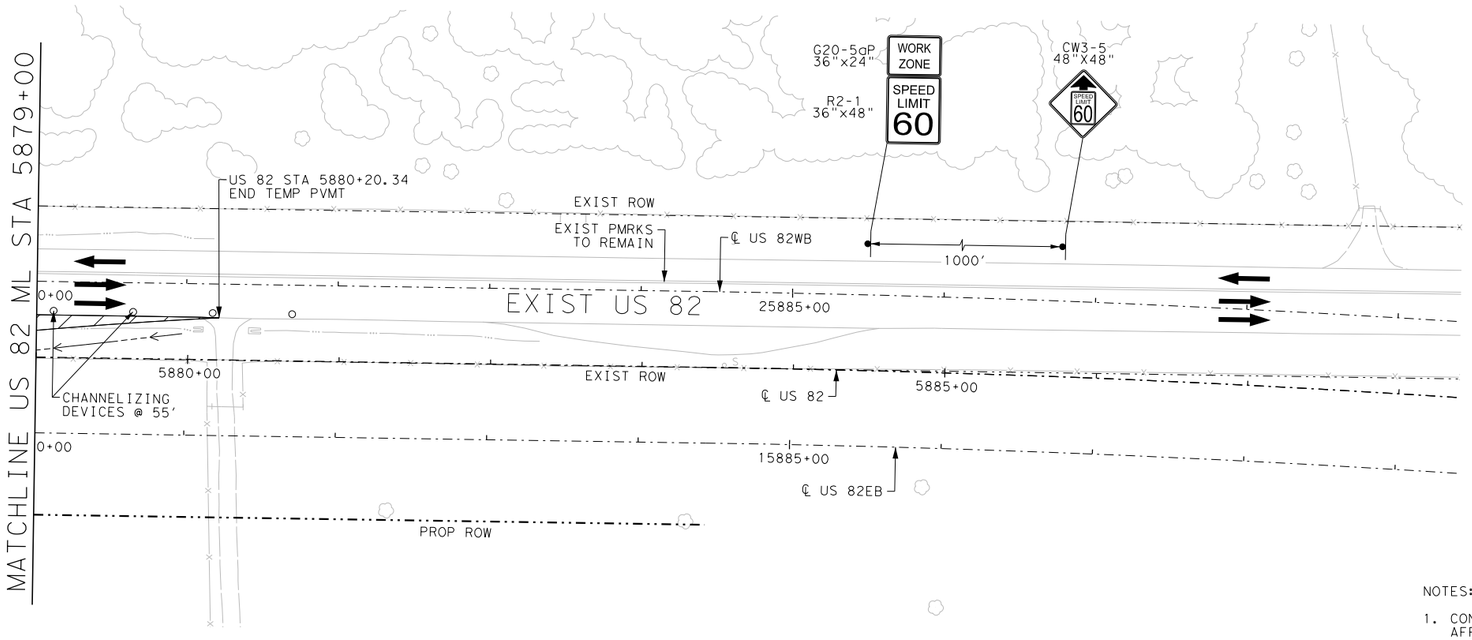

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2A
US 82 STA 5868+00 TO END PROJECT

SHEET 15 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	87
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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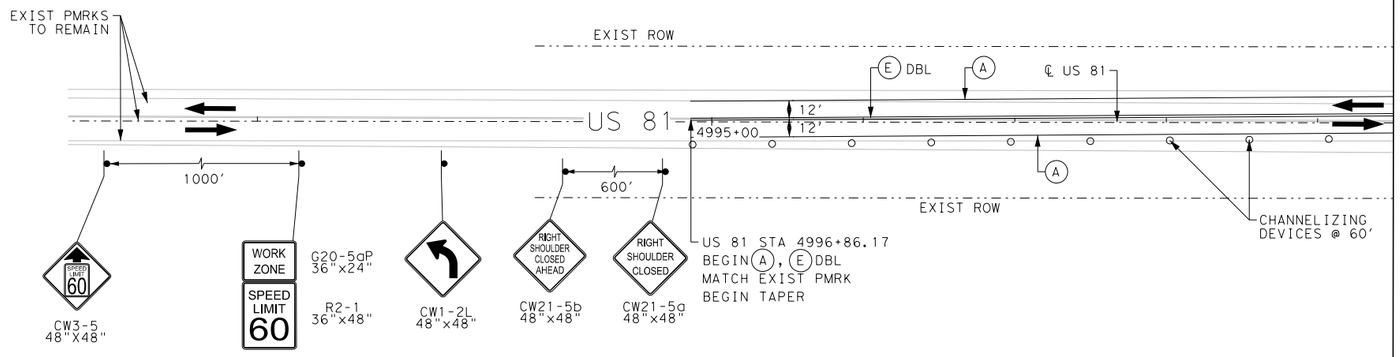
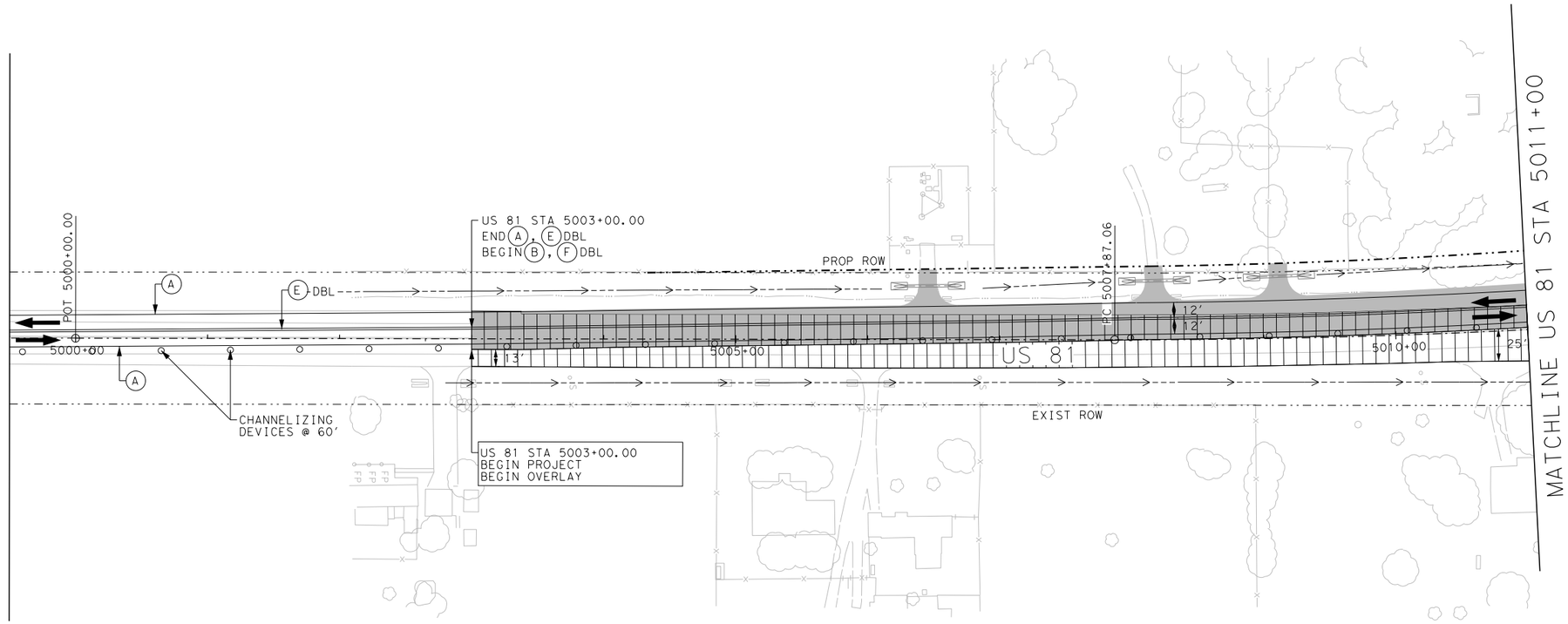


MATCHLINE US 81 STA 4999+50

MATCHLINE US 81 STA 5011+00



Z

50 0 50 100
SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	A	B
W 6" BRK	C	D
Y 6" SLD	E	F
Y 6" BRK	G	H
W 8" SLD	I	J
W 12" SLD	K	L
W 24" SLD	M	N
Y 12" SLD	O	P

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
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GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2A
US 81 BEGIN PROJECT TO STA 5011+00

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	88
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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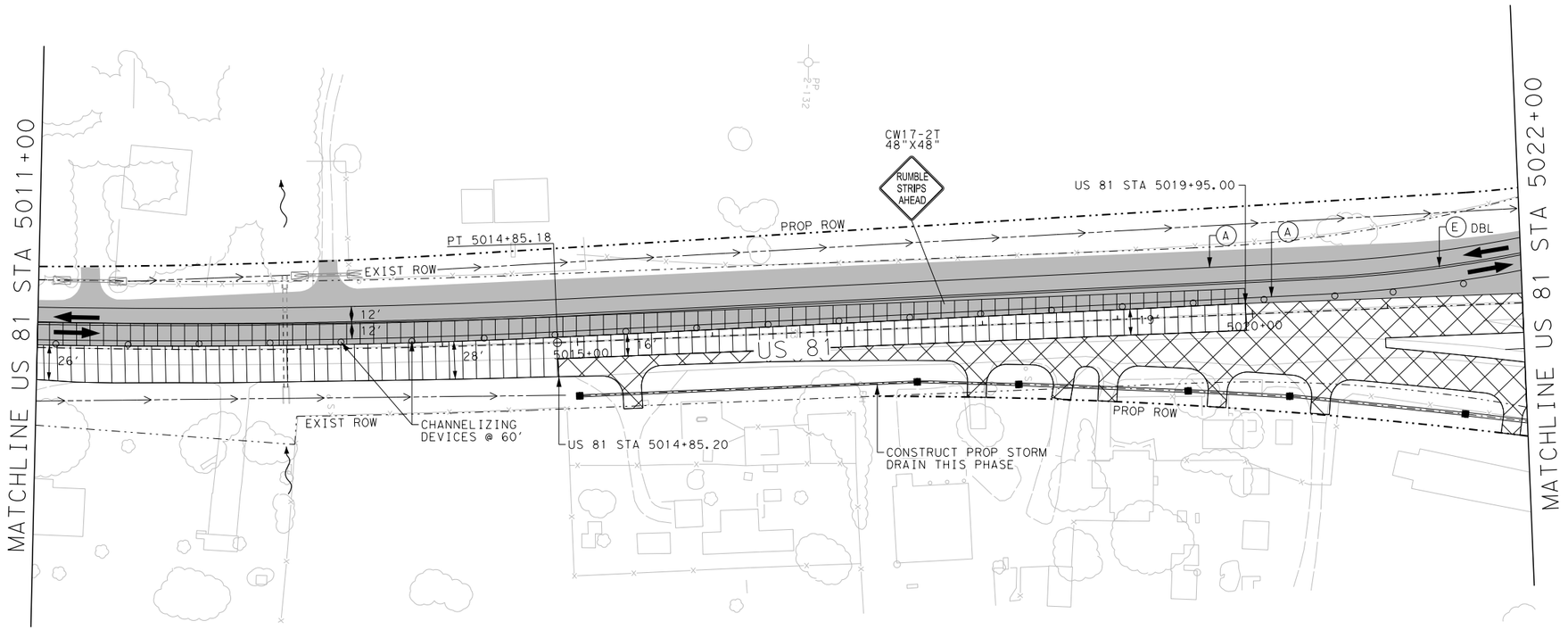

50 0 50 100
SCALE: 1" = 100'

N

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2A
US 81 STA 5011+00 TO STA 5022+00

SHEET 17 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	89
CHECK JL	CONTROL	SECTION	JOB	
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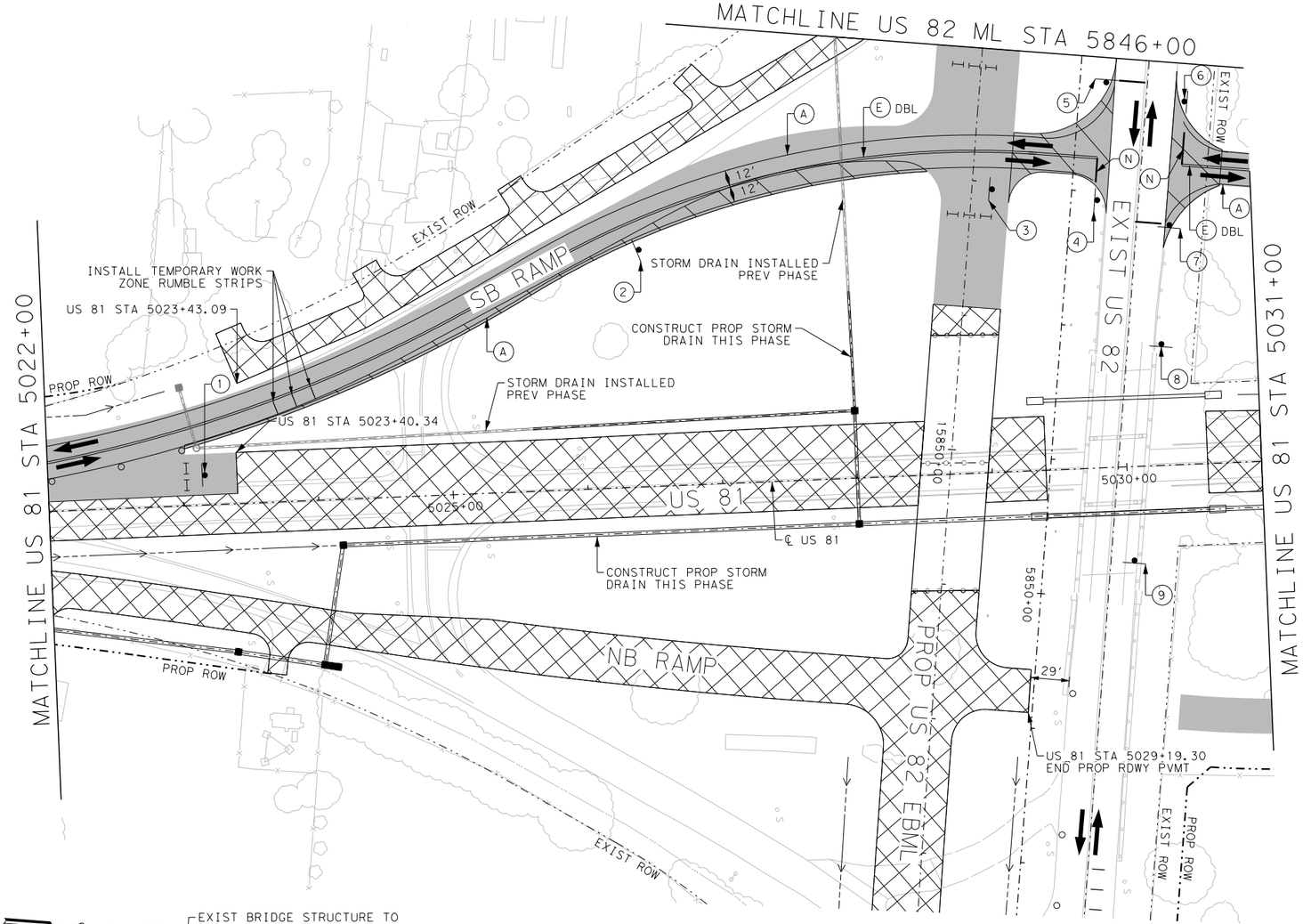
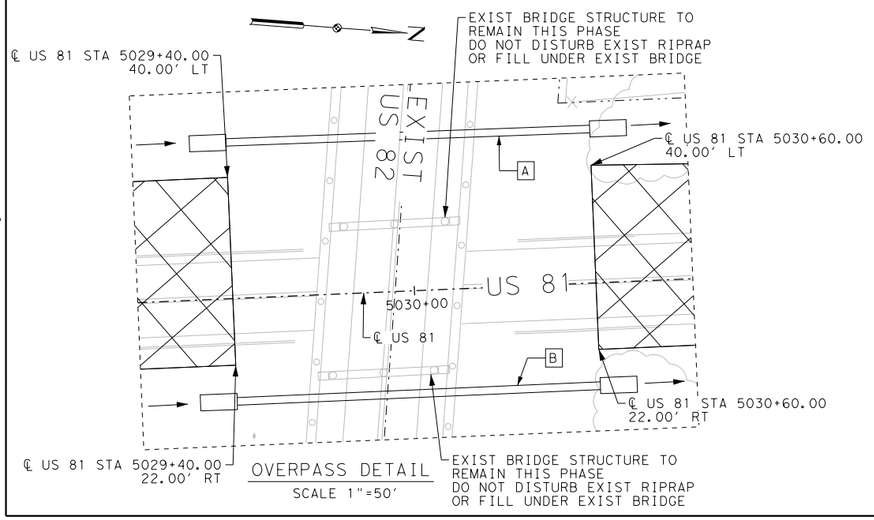
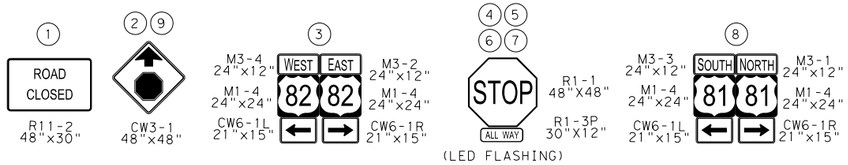




OVERPASS DETAIL
SCALE 1"=50'



A INSTALL TEMP PIPE TO CONNECT DITCH
24" RCP 120 LF
FL US= 891.18
FL DS= 888.32
S= 2.38%

B INSTALL TEMP PIPE TO CONNECT DITCH
24" RCP 120 LF
FL US= 891.52
FL DS= 890.62
S= 0.75%

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

50 0 50 100
SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	A	B
W 6" BRK	C	D
Y 6" SLD	E	F
Y 6" BRK	G	H
W 8" SLD	I	J
W 12" SLD	K	L
W 24" SLD	M	N
Y 12" SLD	O	P

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2A
US 81 STA 5022+00 TO STA 5031+00

SHEET 18 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	90
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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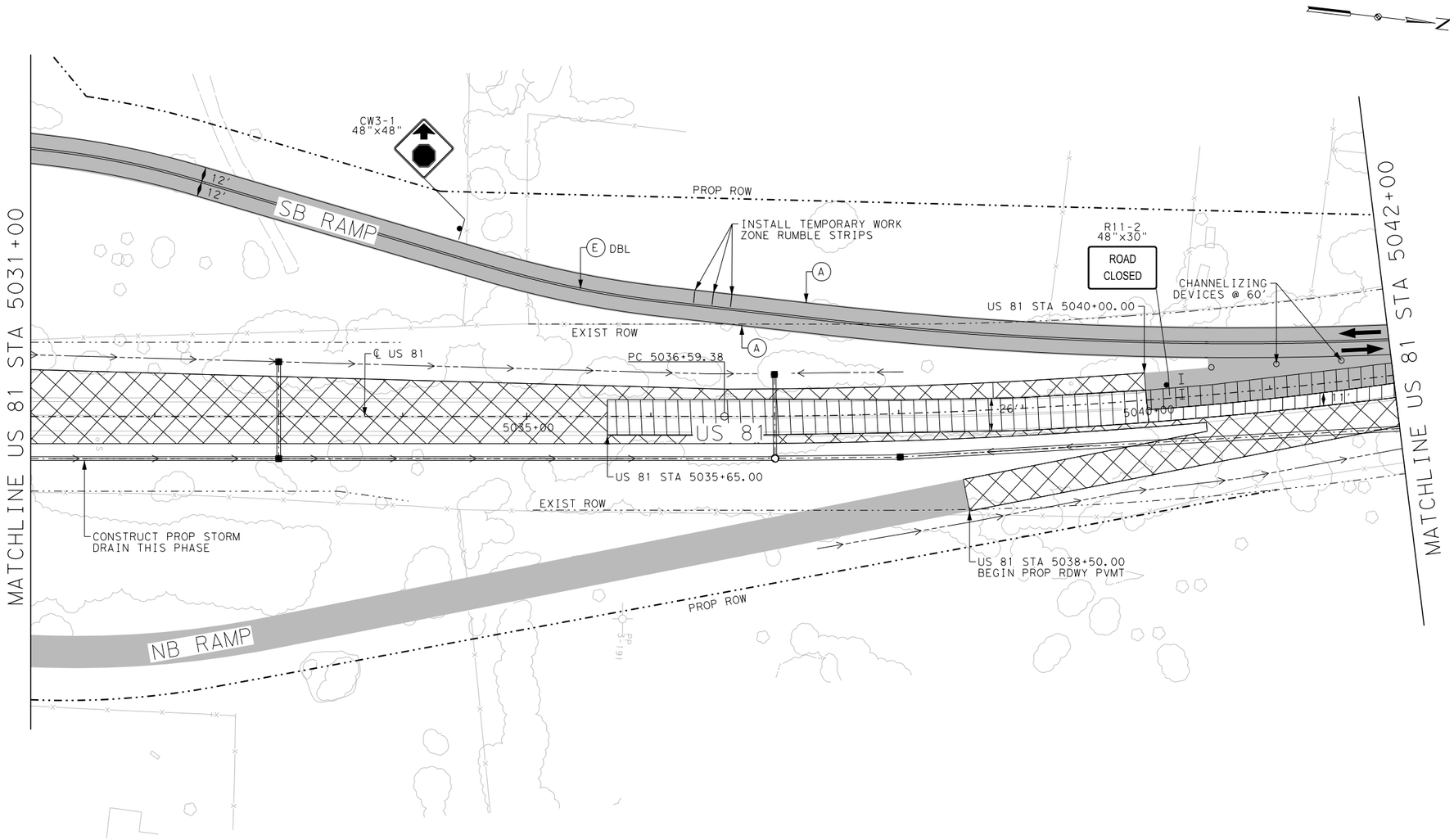

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

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LICENSED PROFESSIONAL ENGINEER
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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2A
US 81 STA 5031+00 TO STA 5042+00

SHEET 19 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	91
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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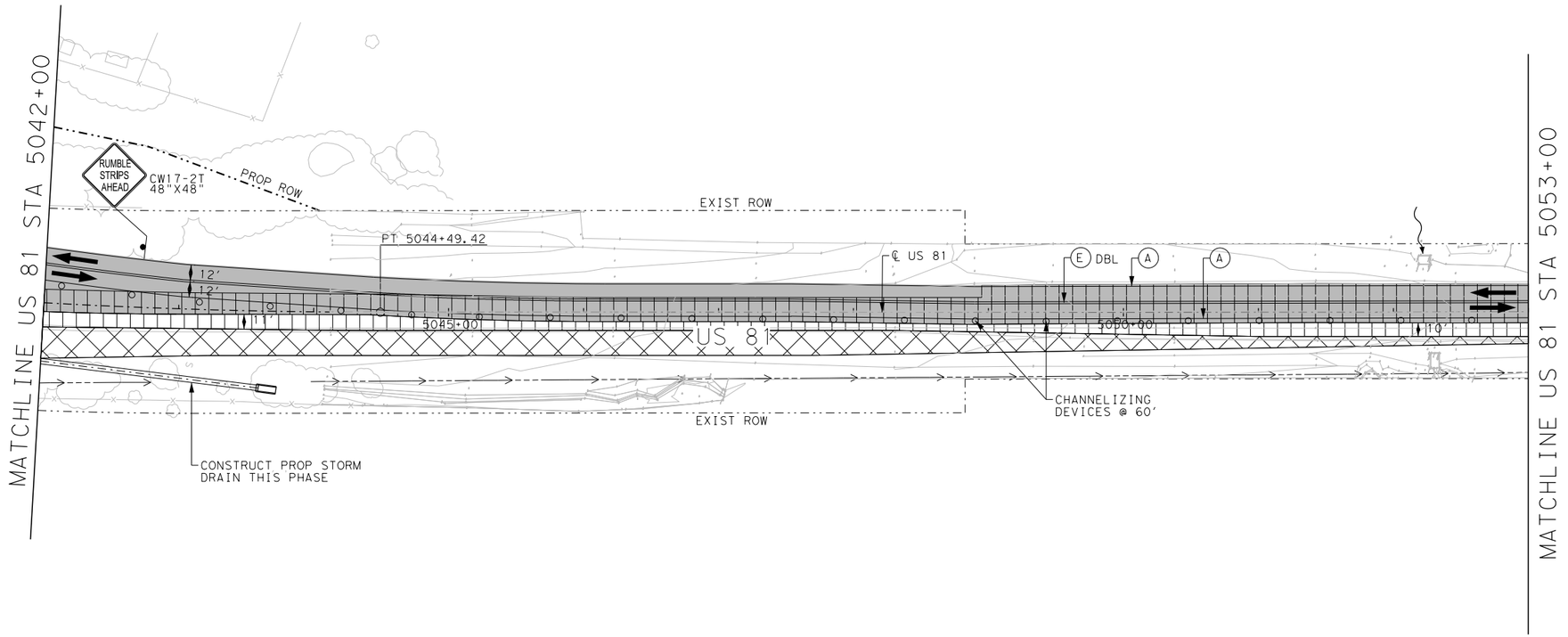

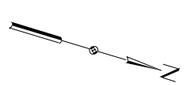

50 0 50 100
SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2A
US 81 STA 5042+00 TO STA 5053+00

SHEET 20 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	92
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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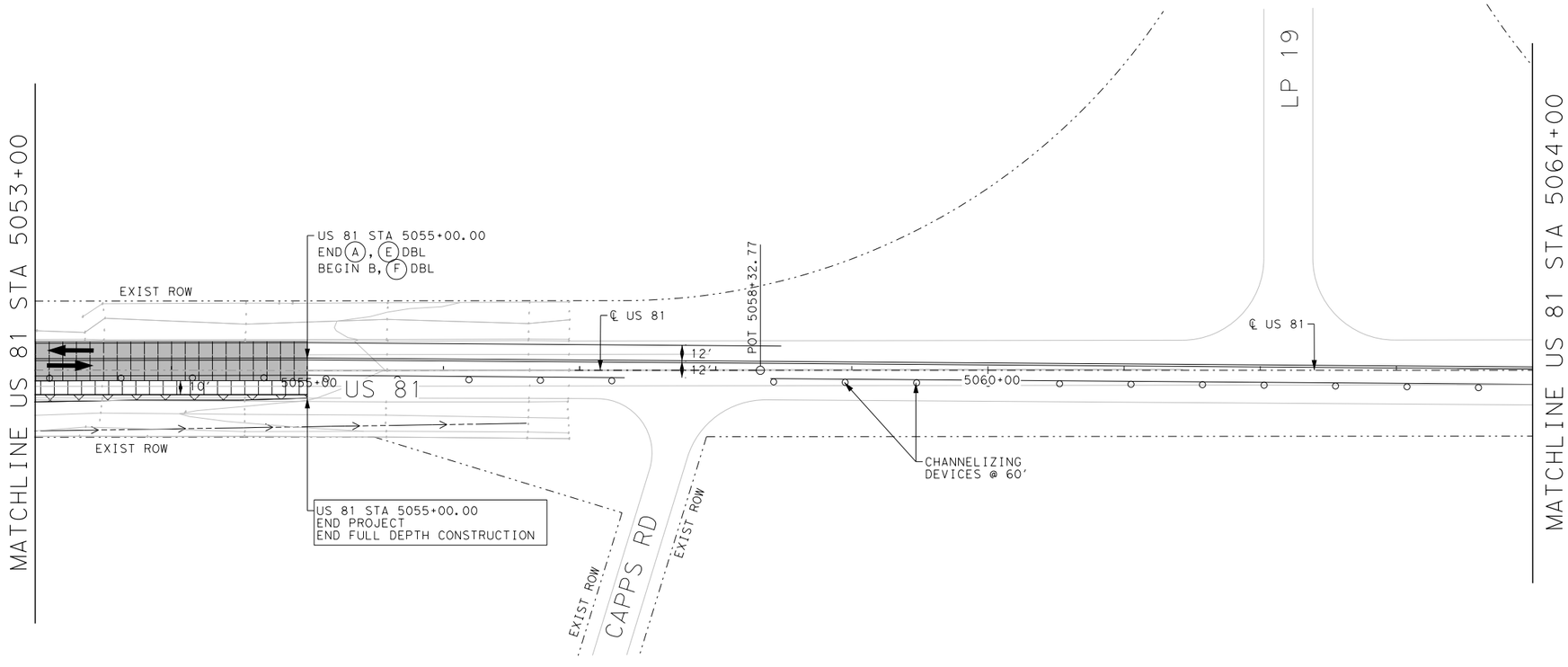

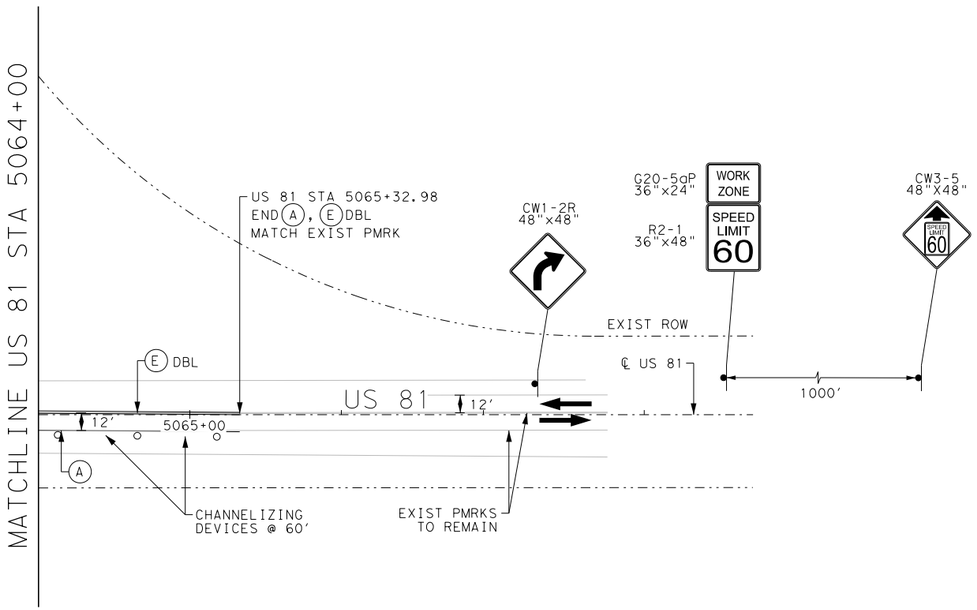

50 0 50 100
SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2A
US 81 STA 5053+00 TO END PROJECT

SHEET 21 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	93
CHECK JL	CONTROL	SECTION	JOB	
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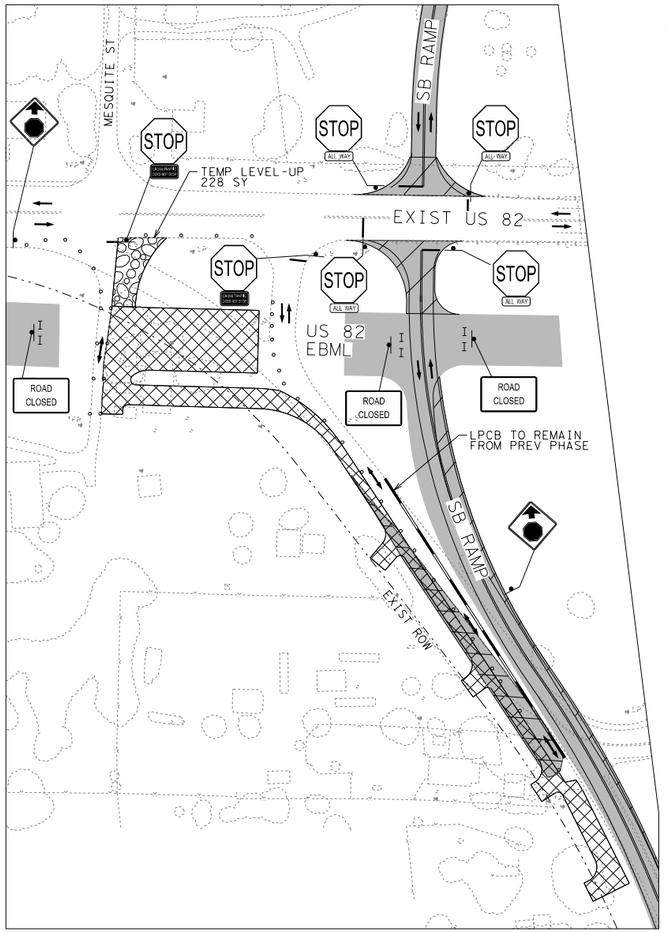

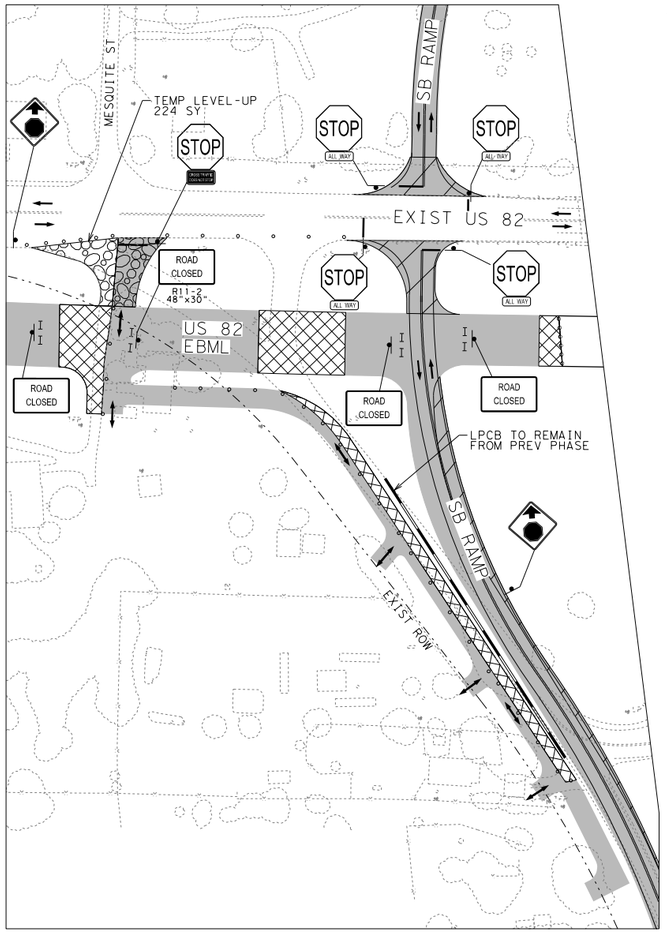

LEGEND

- PERMANENT PAVEMENT THIS PHASE/STEP
- TEMPORARY PAVEMENT THIS PHASE/STEP
- TEMPORARY LEVEL-UP THIS PHASE/STEP
- PERMANENT PAVEMENT PREV PHASE/STEP
- TEMPORARY PAVEMENT PREV PHASE/STEP
- TEMPORARY LEVEL-UP PREV PHASE/STEP
- CHANNELIZING DEVICES
- TYPE III BARRICADE

STEP 1

CONSTRUCT PARTIAL PERMANENT PAVEMENT OF PROPOSED LOCAL RD.
CONSTRUCT DRIVEWAYS.
CONSTRUCT TEMPORARY LEVEL-UP IN HALF WIDTH.
LEAVE OUT PORTION OF US 82 EBML PAVEMENT TO ALLOW ACCESS TO EXISTING LOCAL RD.
TRAFFIC REMAINS ON EXISTING LOCAL RD.

STEP 2

CONSTRUCT REMAINDER OF PERMANENT PAVEMENT OF PROPOSED LOCAL RD.
CONSTRUCT REMAINDER OF TEMPORARY LEVEL-UP.
CONSTRUCT REMAINDER OF US 82 EBML PAVEMENT.
TRAFFIC MOVES TO NEWLY CONSTRUCTED LOCAL RD.

NOTES:

1. CONSTRUCT LOCAL RD IN TCP PHASE 2A.
2. SEE TEMPORARY LEVEL-UP DETAIL FOR ADDITIONAL INFORMATION.
3. CONSTRUCT SAFETY LIGHTING PRIOR TO COMMENCEMENT OF LOCAL RD CONSTRUCTION TO PROVIDE ILLUMINATION. SEE ILLUMINATION LAYOUT FOR DETAIL.
4. MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES.
5. MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

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US82

TRAFFIC CONTROL PLAN
PHASE 2A
LOCAL ROAD PHASING DETAIL

SCALE: NTS SHEET 1 OF 1

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	94
CHECK JL	CONTROL	SECTION	JOB	
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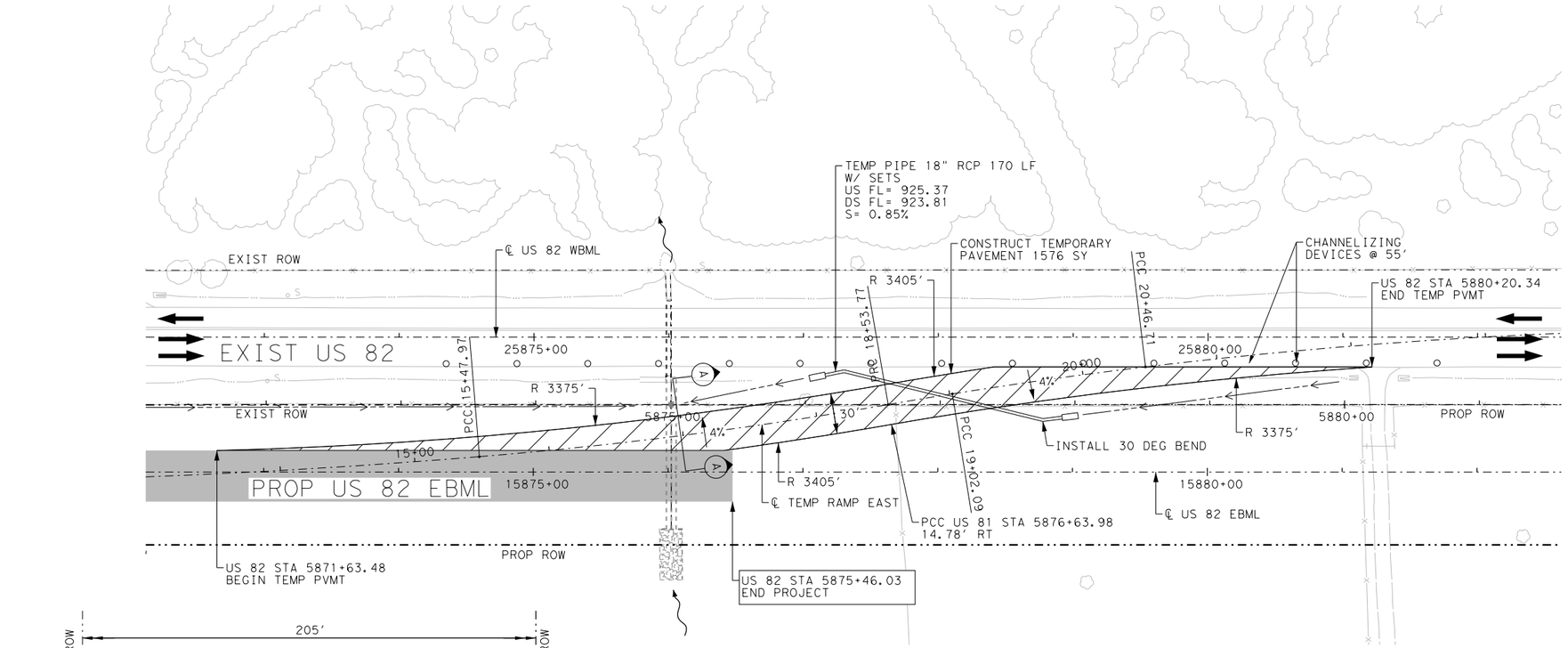
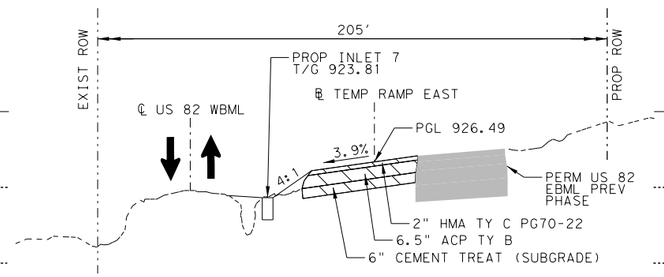
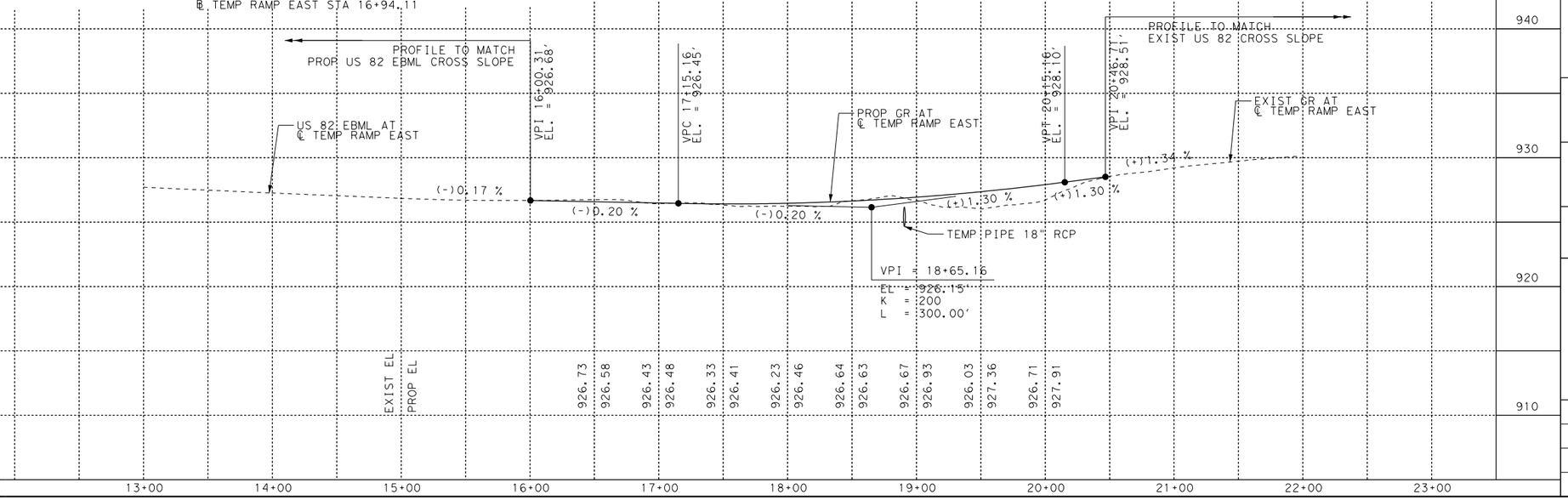




SECTION A-A

℄ TEMP RAMP EAST STA 16+94.11



TRAFFIC CONTROL PLAN LEGEND

- TEMPORARY PAVEMENT THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	A	B
W 6" BRK	C	D
Y 6" SLD	E	F
Y 6" BRK	G	H
W 8" SLD	I	J
W 12" SLD	K	L
W 24" SLD	M	N
Y 12" SLD	O	P

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LICENSED PROFESSIONAL ENGINEER
10/18/2023

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FIRM REGISTRATION NO. F-1471

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2A
TEMP TRANSITION RAMP DETAIL

SHEET 1 OF 2

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	95
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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TEMP TRANSITION RAMP ALIGNMENT DATA

Beginning chain EASTTRANS description

Point 1010 N 7,345,021.6008 E 2,141,493.5701 Sta 10+00.00

Course from 1010 to PC EASTTRANS1 N 89?56' 54.10" E Dist 96.9457

Curve Data

Curve EASTTRANS1					
P.I. Station	13+22.57	N	7,345,021.8915	E	2,141,816.1384
Delta =	4?24' 14.14" (LT)				
Degree =	0?58' 35.15"				
Tangent =	225.6228				
Length =	451.0235				
Radius =	5,867.8866				
External =	4.3360				
Long Chord =	450.9125				
Mid. Ord. =	4.3328				
P.C. Station	10+96.95	N	7,345,021.6882	E	2,141,590.5157
P.T. Station	15+47.97	N	7,345,039.4192	E	2,142,041.0794
C.C.		N	7,350,889.5724	E	2,141,585.2271
Back = N	89?56' 54.10" E				
Ahead = N	85?32' 39.96" E				
Chord Bear = N	87?44' 47.03" E				

Curve Data

Curve EASTTRANS2					
P.I. Station	17+00.97	N	7,345,051.3055	E	2,142,193.6207
Delta =	5?10' 06.42" (LT)				
Degree =	1?41' 24.51"				
Tangent =	153.0037				
Length =	305.7999				
Radius =	3,390.0000				
External =	3.4511				
Long Chord =	305.6962				
Mid. Ord. =	3.4476				
P.C. Station	15+47.97	N	7,345,039.4192	E	2,142,041.0794
P.T. Station	18+53.77	N	7,345,076.8849	E	2,142,344.4710
C.C.		N	7,348,419.1742	E	2,141,777.7241
Back = N	85?32' 39.96" E				
Ahead = N	80?22' 33.55" E				
Chord Bear = N	82?57' 36.76" E				

Curve Data

Curve EASTTRANS3					
P.I. Station	18+77.93	N	7,345,080.9244	E	2,142,368.2928
Delta =	0?49' 00.21" (RT)				
Degree =	1?41' 24.51"				
Tangent =	24.1618				
Length =	48.3229				
Radius =	3,390.0001				
External =	0.0861				
Long Chord =	48.3225				
Mid. Ord. =	0.0861				
P.C. Station	18+53.77	N	7,345,076.8849	E	2,142,344.4710
P.T. Station	19+02.09	N	7,345,084.6238	E	2,142,392.1698
C.C.		N	7,341,734.5955	E	2,142,911.2180
Back = N	80?22' 33.55" E				
Ahead = N	81?11' 33.76" E				
Chord Bear = N	80?47' 03.65" E				

Curve Data

Curve EASTTRANS4					
P.I. Station	19+74.41	N	7,345,095.6964	E	2,142,463.6340
Delta =	2?08' 51.07" (RT)				
Degree =	1?29' 05.89"				
Tangent =	72.3169				
Length =	144.6170				
Radius =	3,858.3785				
External =	0.6777				
Long Chord =	144.6085				
Mid. Ord. =	0.6775				
P.C. Station	19+02.09	N	7,345,084.6238	E	2,142,392.1698
P.T. Station	20+46.71	N	7,345,104.0832	E	2,142,535.4630
C.C.		N	7,341,271.7399	E	2,142,982.9322
Back = N	81?11' 33.76" E				
Ahead = N	83?20' 24.82" E				
Chord Bear = N	82?15' 59.29" E				

Curve Data

Curve EASTTRANS5					
P.I. Station	22+79.13	N	7,345,131.0381	E	2,142,766.3177
Delta =	6?53' 40.18" (RT)				
Degree =	1?29' 05.89"				
Tangent =	232.4230				
Length =	464.2850				
Radius =	3,858.3785				
External =	6.9941				
Long Chord =	464.0050				
Mid. Ord. =	6.9814				
P.C. Station	20+46.71	N	7,345,104.0832	E	2,142,535.4630
P.T. Station	25+10.99	N	7,345,130.0859	E	2,142,998.7368
C.C.		N	7,341,271.7398	E	2,142,982.9322
Back = N	83?20' 24.82" E				
Ahead = S	89?45' 54.99" E				
Chord Bear = N	86?47' 14.92" E				

Ending chain EASTTRANS description

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2A
TEMP TRANSITION RAMP DETAIL

SHEET 2 OF 2

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	96
CHECK JL	CONTROL	SECTION	JOB	
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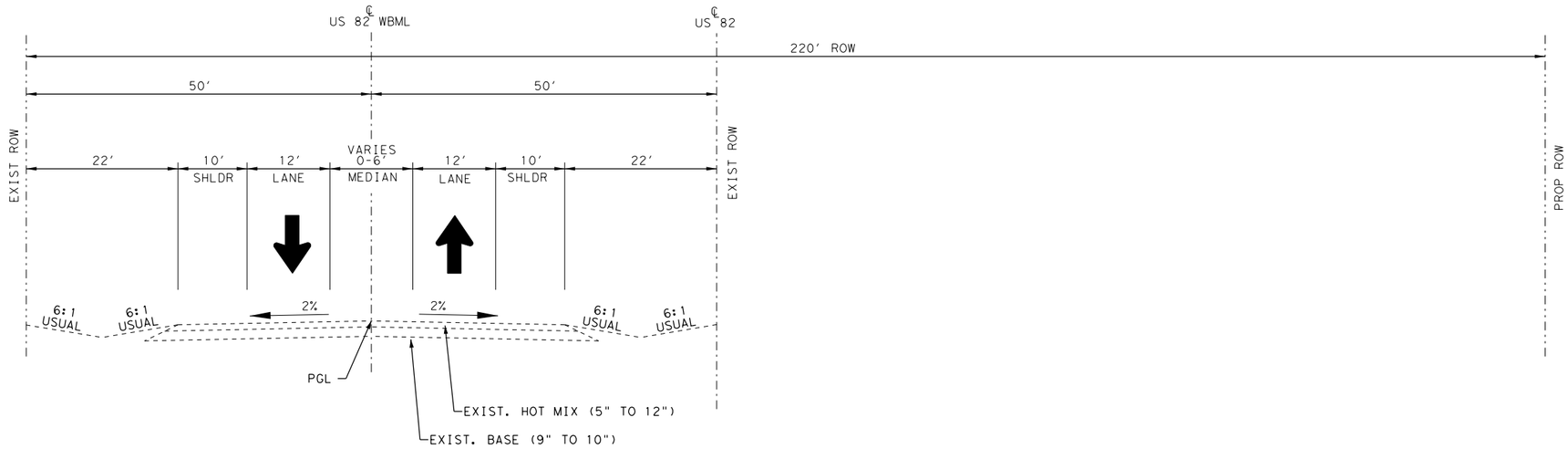
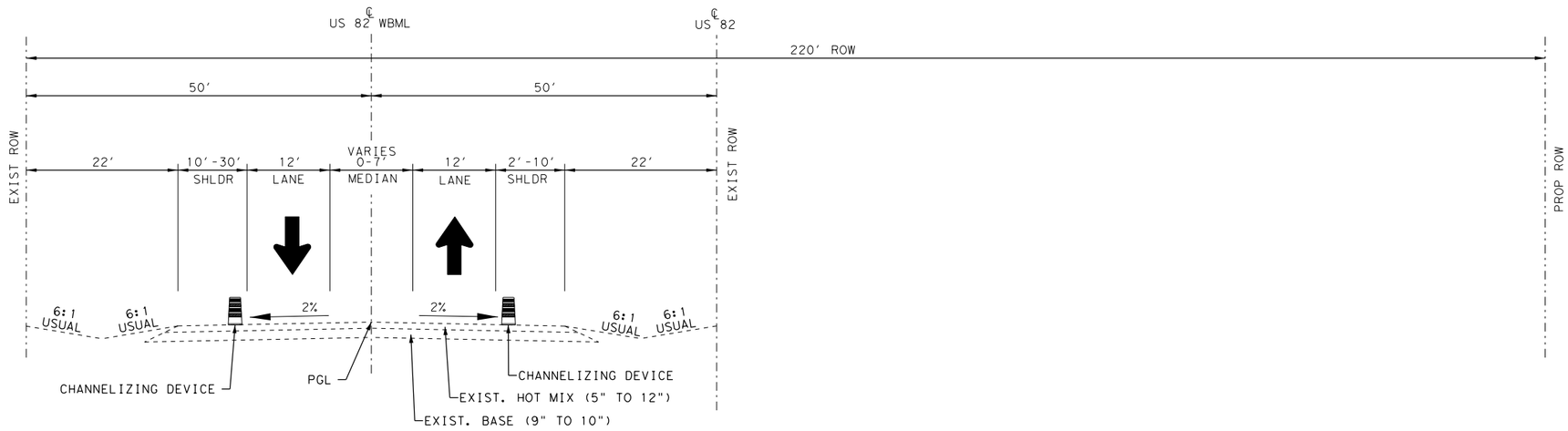


US 82 STA 5710+47.92 - STA 5714+68.98



US 82 STA 5714+68.98 - STA 5724+01.13

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 2B

SCALE: NTS SHEET 1 OF 7

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	97
CHECK JL	CONTROL	SECTION	JOB	
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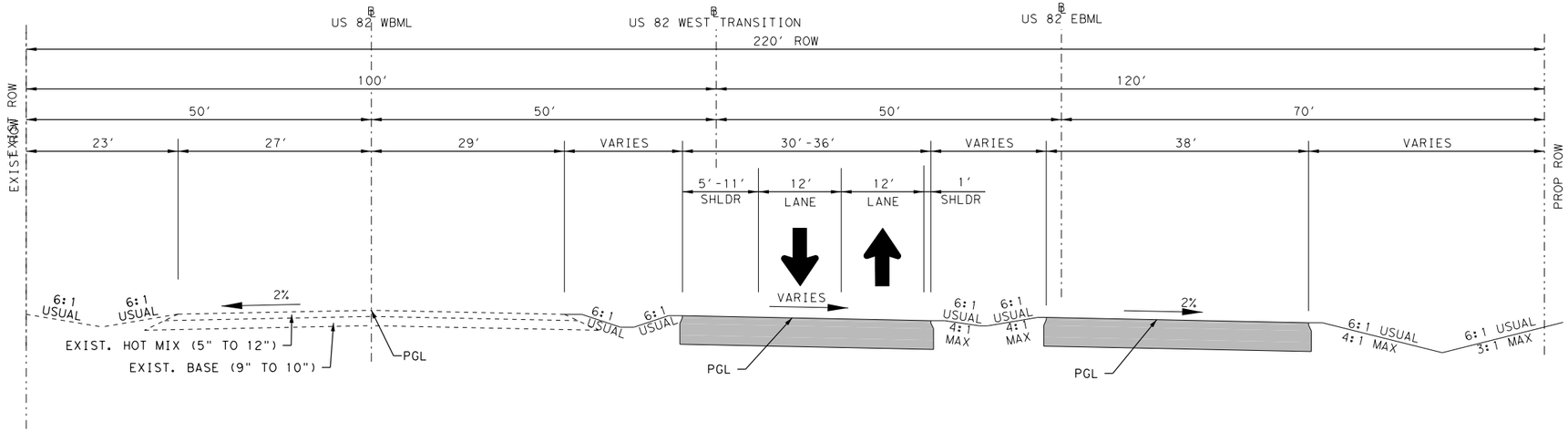

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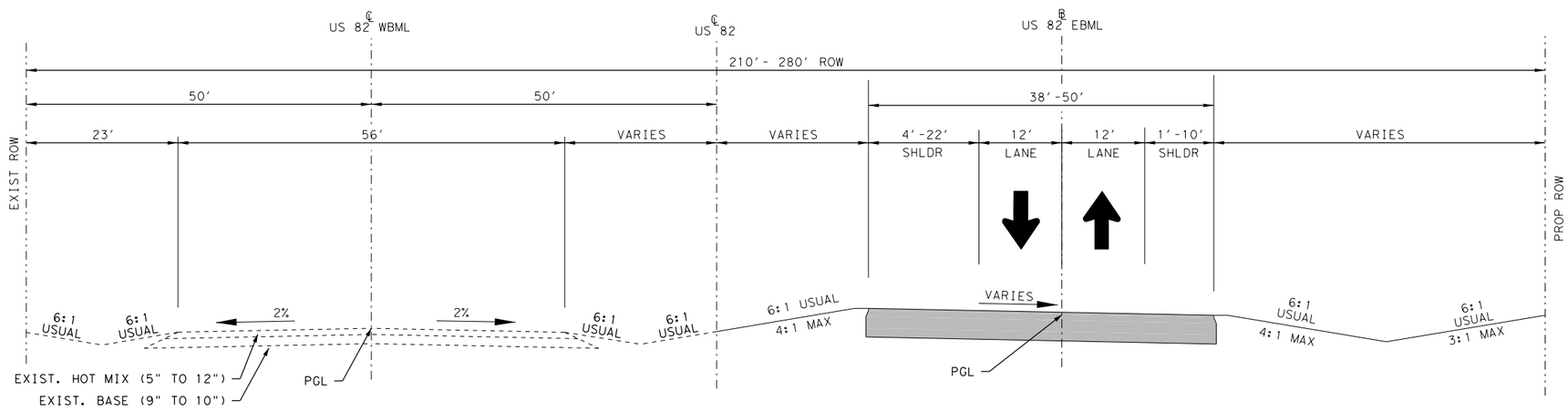

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US 82 STA 5788+42.57 - STA 5815+56.84
US 82 STA 5816+08.97 - STA 5826+20.25
US 82 STA 5826+54.67 - STA 5830+54.21
US 82 STA 5830+91.99 - STA 5837+76.45
US 82 STA 5838+25.80 - STA 5840+48.07
US 82 STA 5847+15.04 - STA 5859+30.79
US 82 STA 5859+95.72 - STA 5866+87.33
US 82 STA 5867+26.28 - STA 5869+07.68

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
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GLOBAL CIVIL SOLUTIONS, LLC
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US82

TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 2B

SCALE: NTS SHEET 2 OF 7

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	98
CHECK JL	CONTROL	SECTION	JOB	
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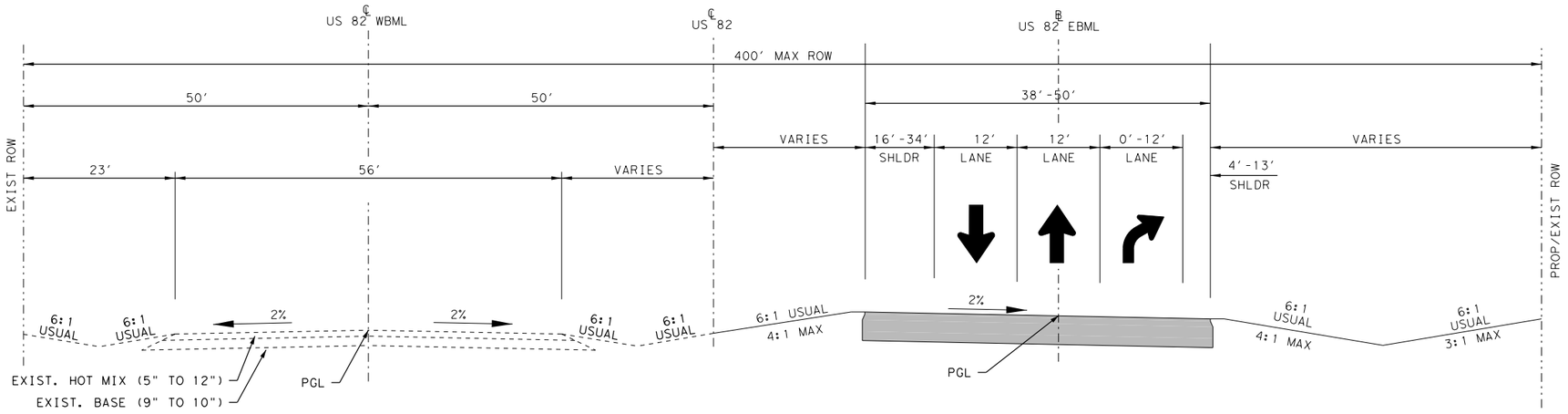

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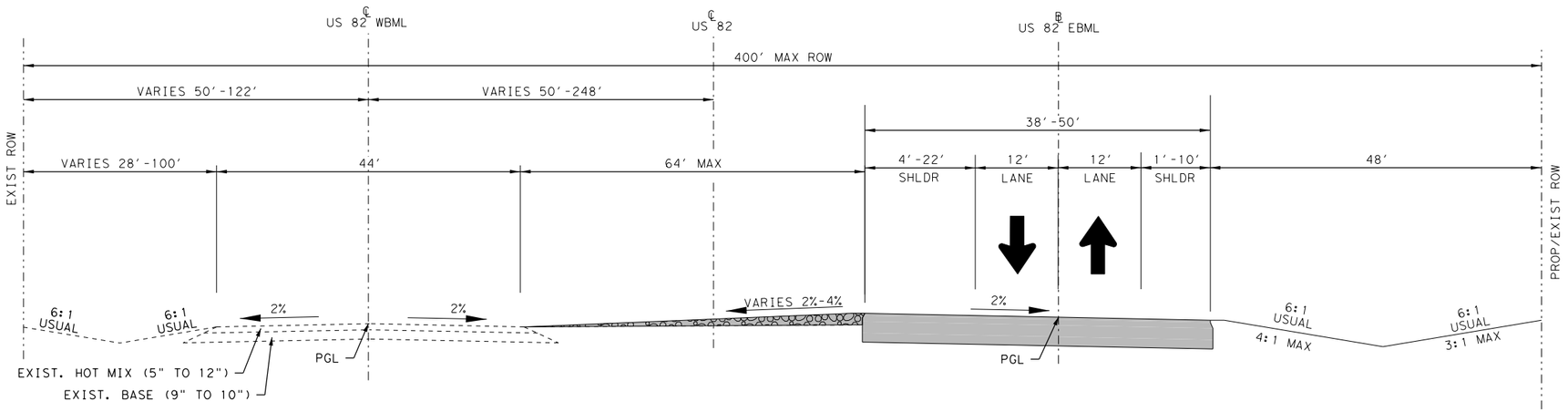

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US 82 STA 5815+56.84 - STA 5816+08.97
US 82 STA 5826+20.25 - STA 5826+54.67
US 82 STA 5830+54.21 - STA 5830+91.99
US 82 STA 5837+76.45 - STA 5838+25.80
US 82 STA 5846+43.04 - STA 5847+15.04
US 82 STA 5859+30.79 - STA 5859+95.72
US 82 STA 5866+87.33 - STA 5867+26.28

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE

STATE OF TEXAS
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TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 2B

SCALE: NTS SHEET 3 OF 7

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	99
CHECK JL	CONTROL	SECTION	JOB	
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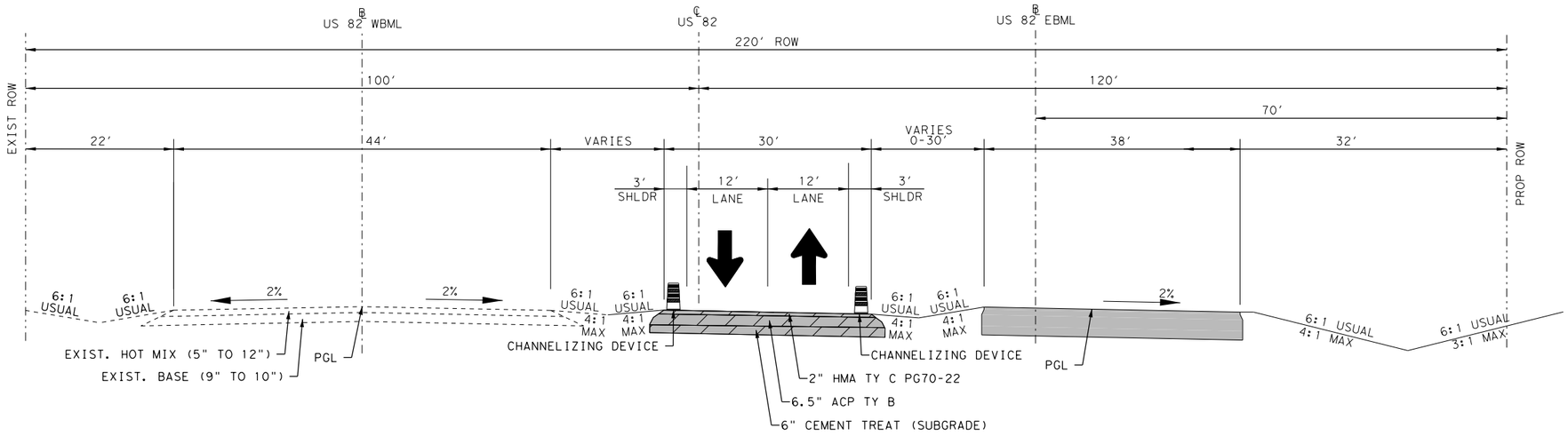

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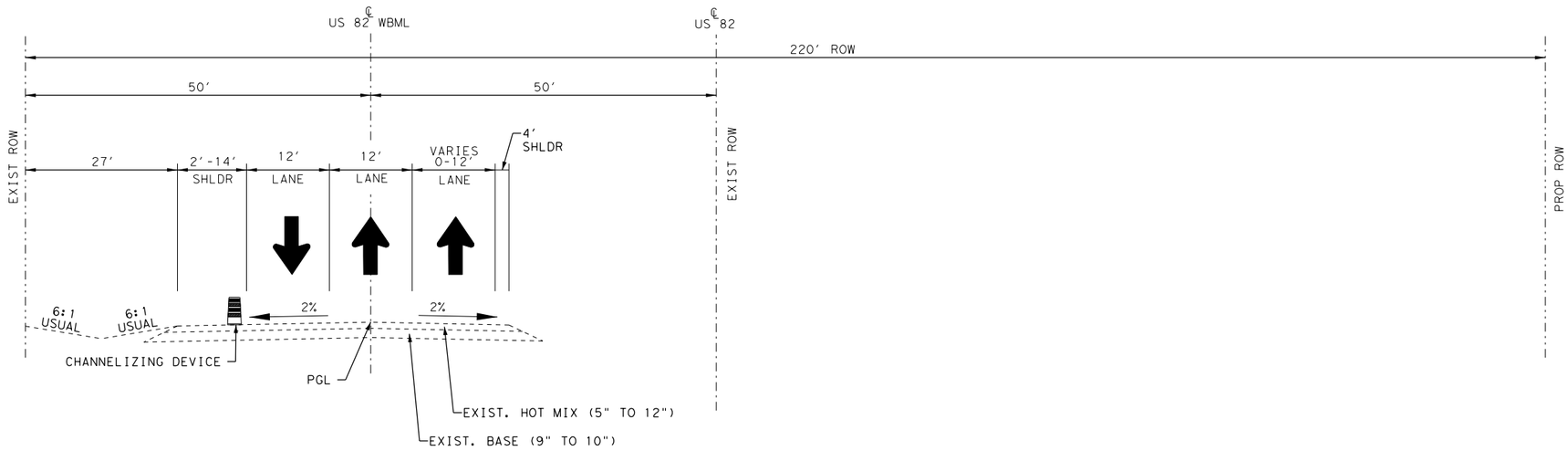

US 82 STA 5880+20.45 - STA 5883+15.46

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE

STATE OF TEXAS
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LICENSED PROFESSIONAL ENGINEER
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TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 2B

SCALE: NTS SHEET 4 OF 7

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	100
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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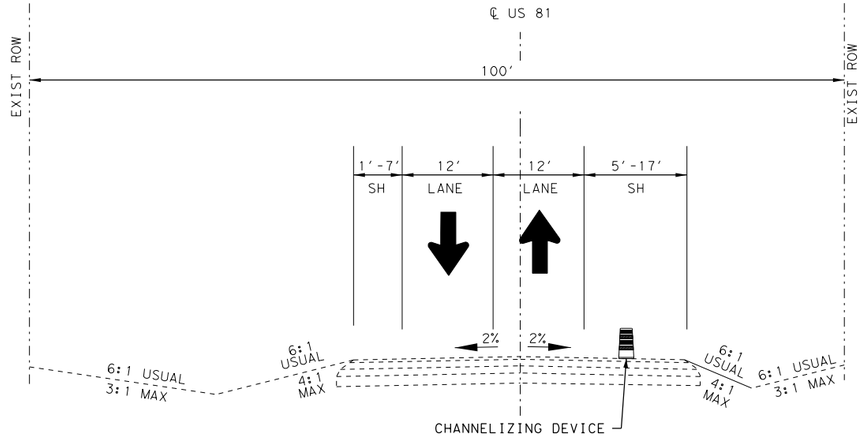
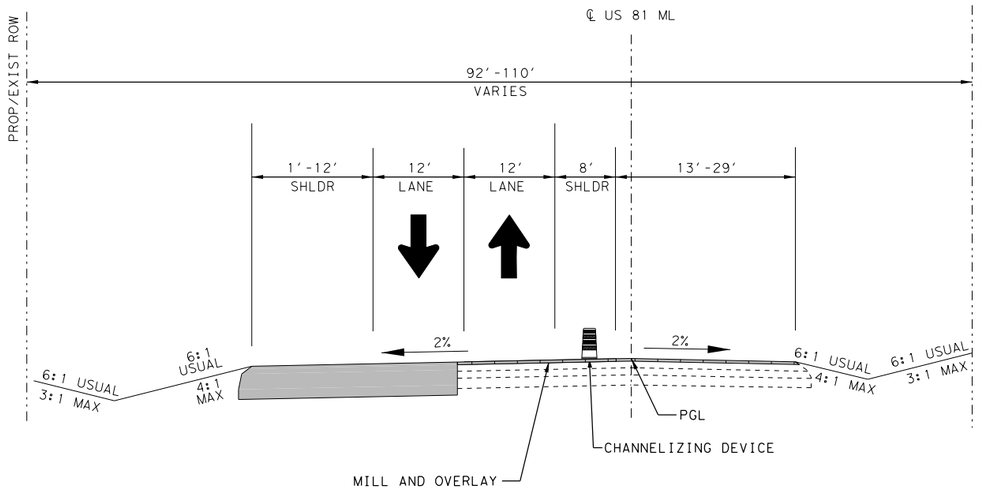


US 81 STA 4996+39.77 - 5003+00.00



US 81 STA 5003+00.00 TO 5019+95.00

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED
PROFESSIONAL ENGINEER

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OTHON ENGINEERING
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11551 FOREST CENTRAL DRIVE
SUITE 220
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US82

TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 2B

SCALE: NTS SHEET 5 OF 7

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	101
CHECK JL	CONTROL	SECTION	JOB	
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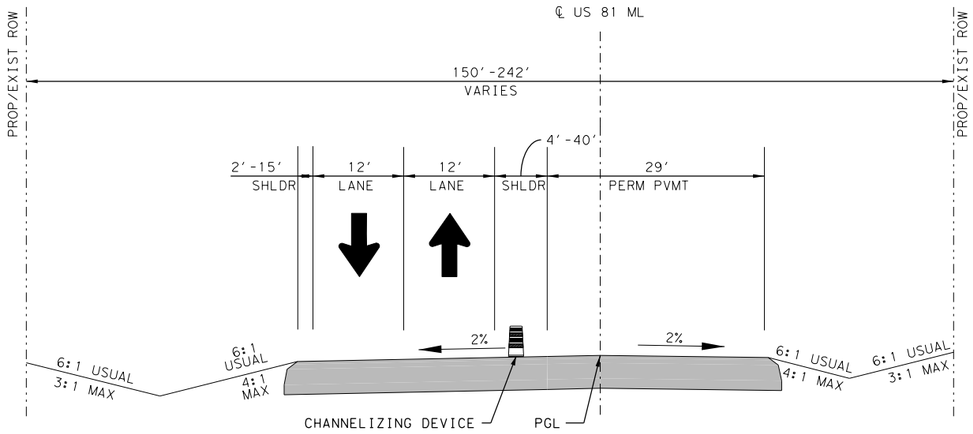

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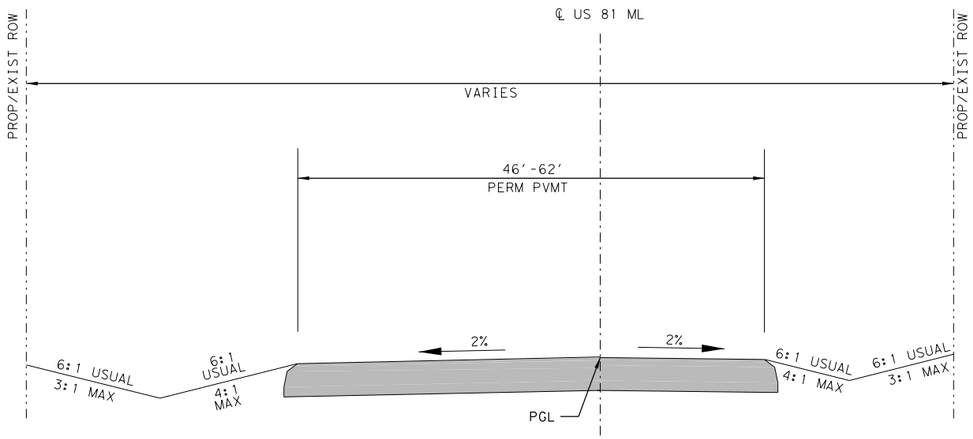

US 81 STA 5023+40.34 TO 5029+40.00
US 81 STA 5030+60.00 TO 5035+65.00

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED
PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 2B

SCALE: NTS SHEET 6 OF 7

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	102
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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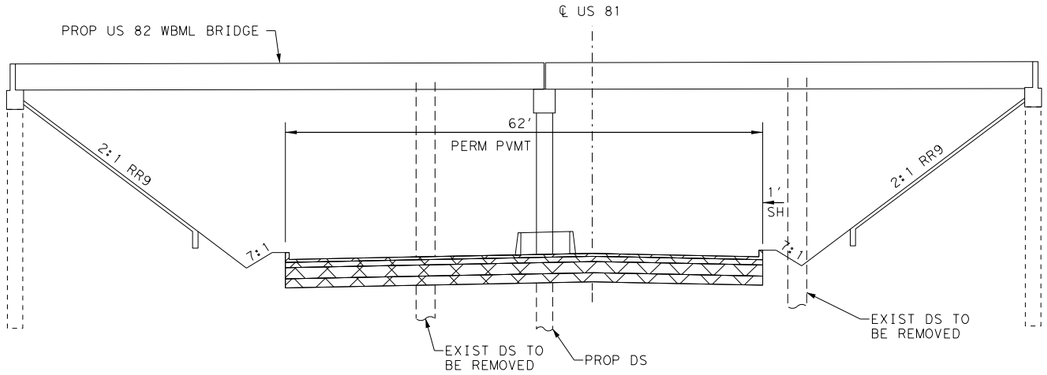
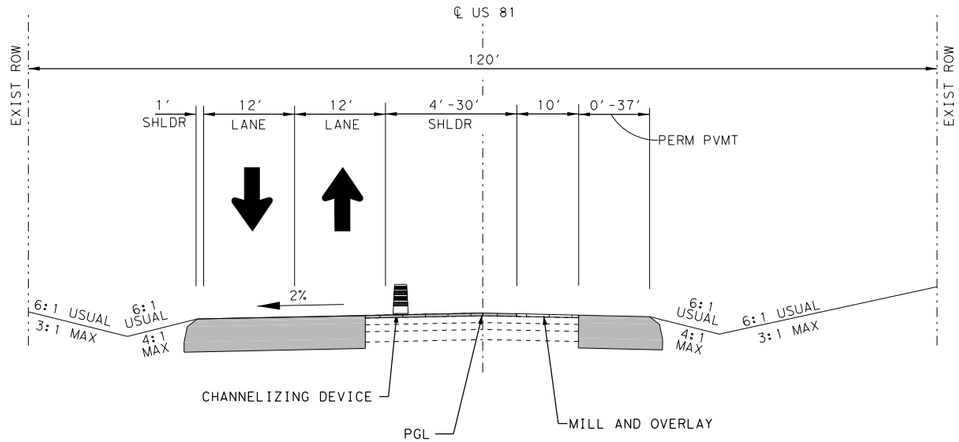
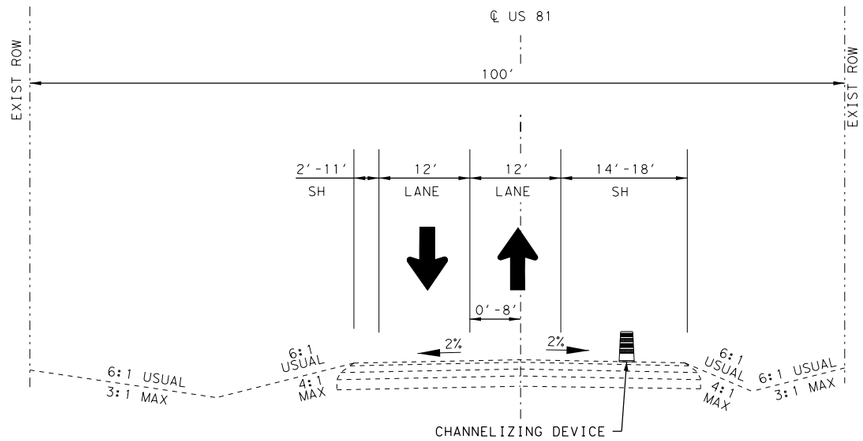


US 81 STA 5029+40.00 TO 5030+60.00
US 82 WBML BRIDGE UNDERPASS



US 81 STA 5035+65.00 TO 5055+00.00



US 81 STA 5055+00.00 - 5065+32.98

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED
PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 2B

SCALE: NTS SHEET 7 OF 7

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	103
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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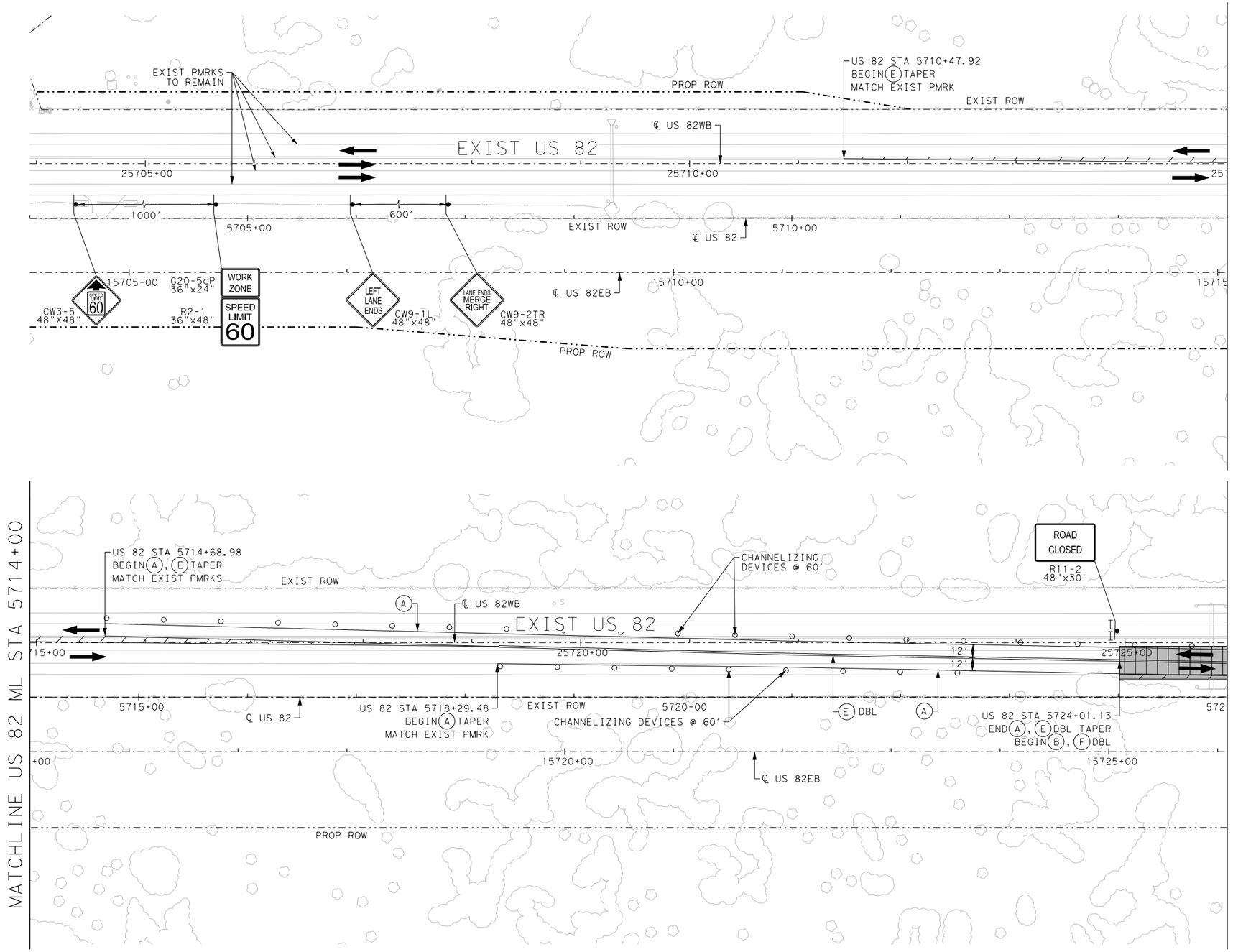

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2B
BEGIN PROJECT TO US 82 STA 5725+00

SHEET 1 OF 15

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	104
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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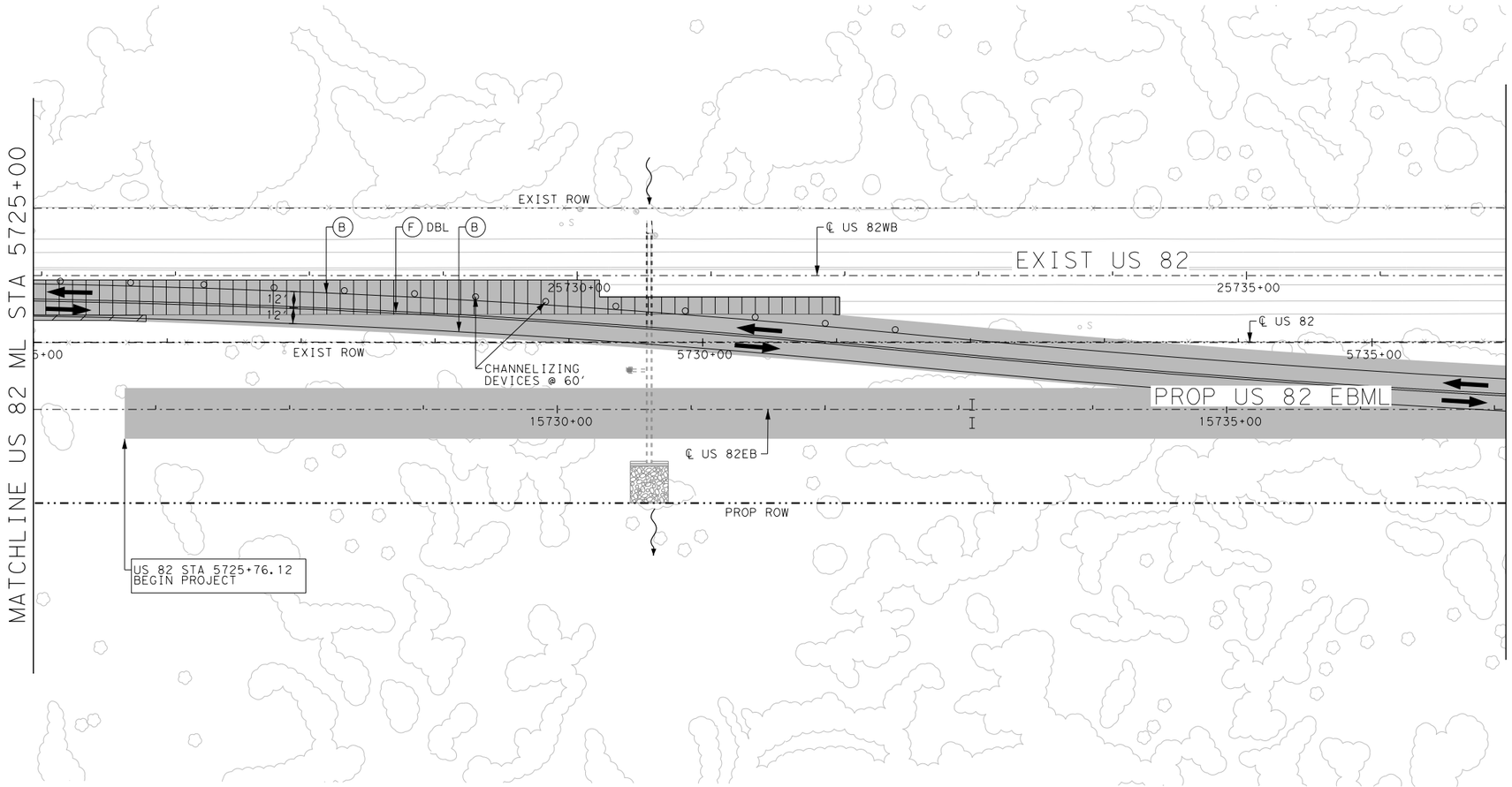

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2B
US 82 STA 5725+00 TO STA 5736+00

SHEET 2 OF 15

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	105
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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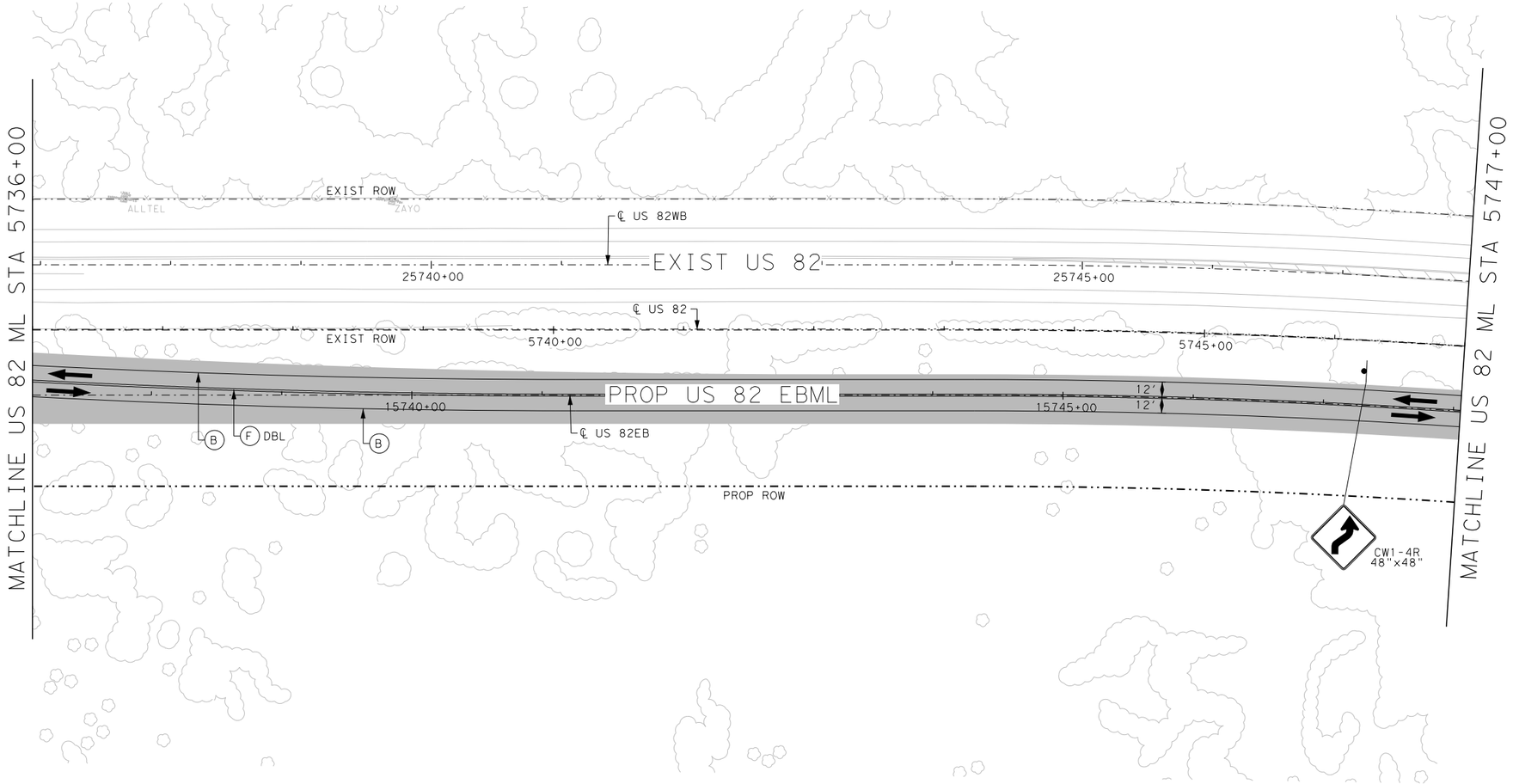

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2B
US 82 STA 5736+00 TO STA 5747+00

SHEET 3 OF 15

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	106
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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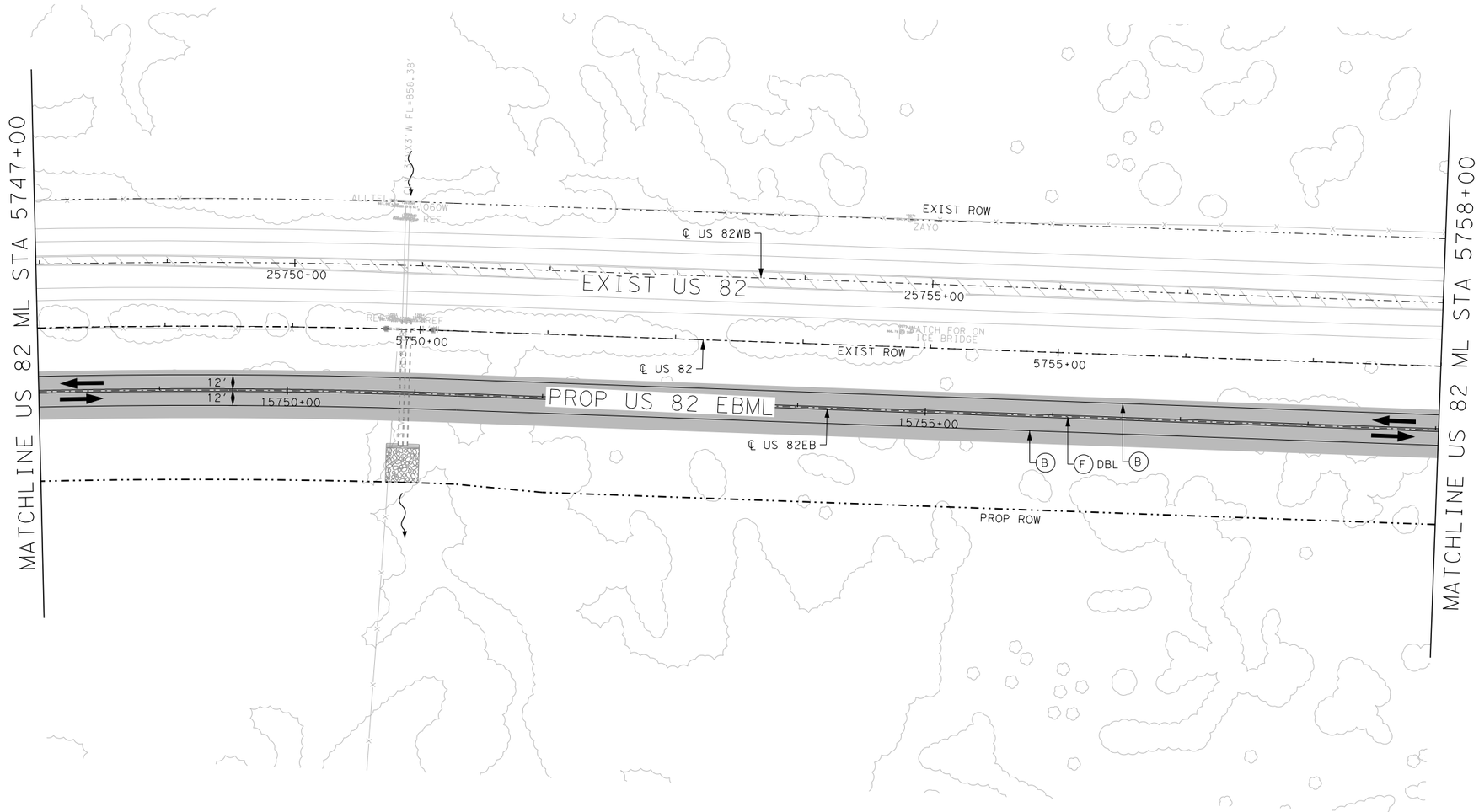

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED
PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2B
US 82 STA 5747+00 TO STA 5758+00

SHEET 4 OF 15

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	107
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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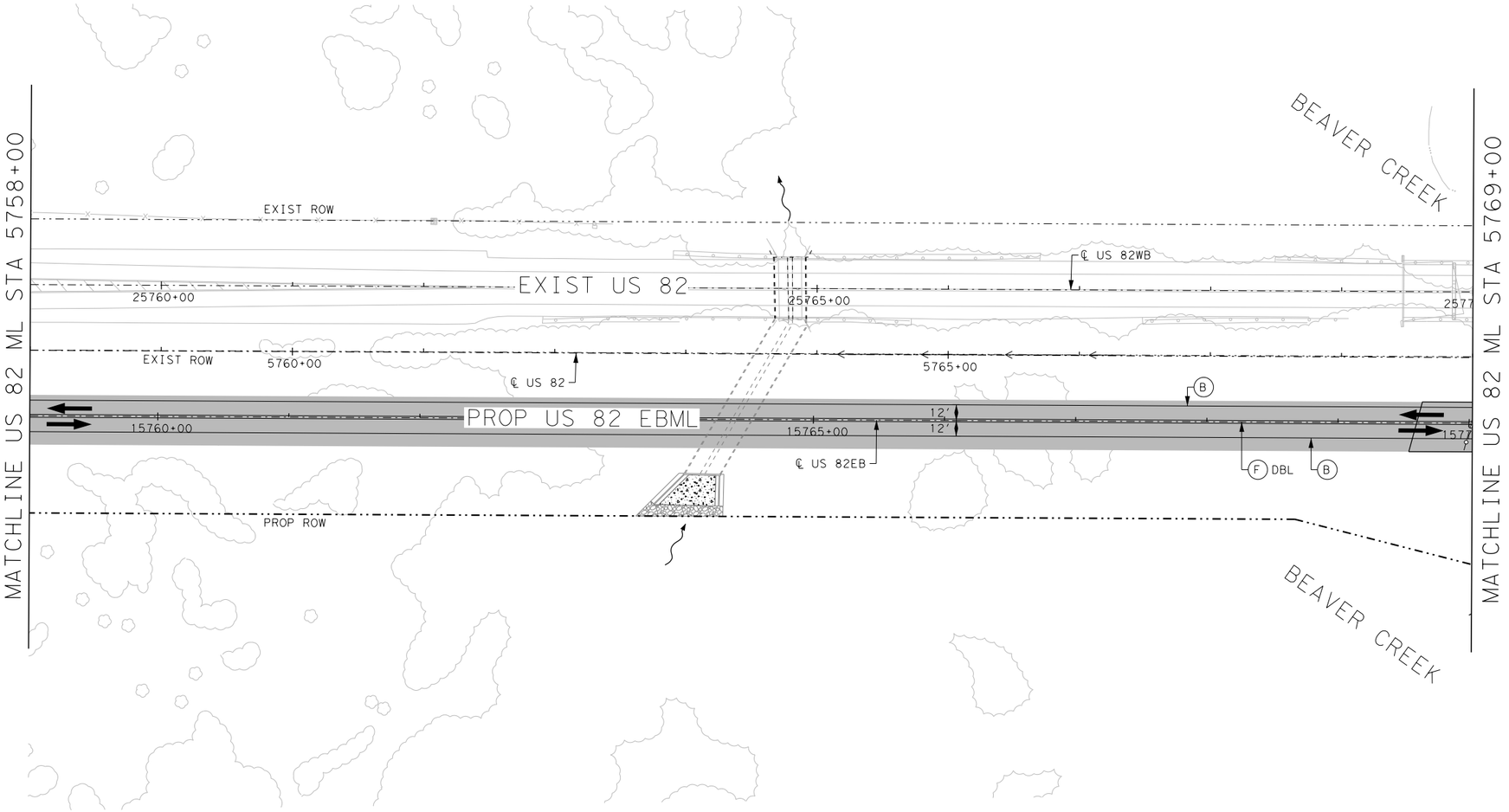

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2B
US 82 STA 5758+00 TO STA 5769+00

SHEET 5 OF 15

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	108
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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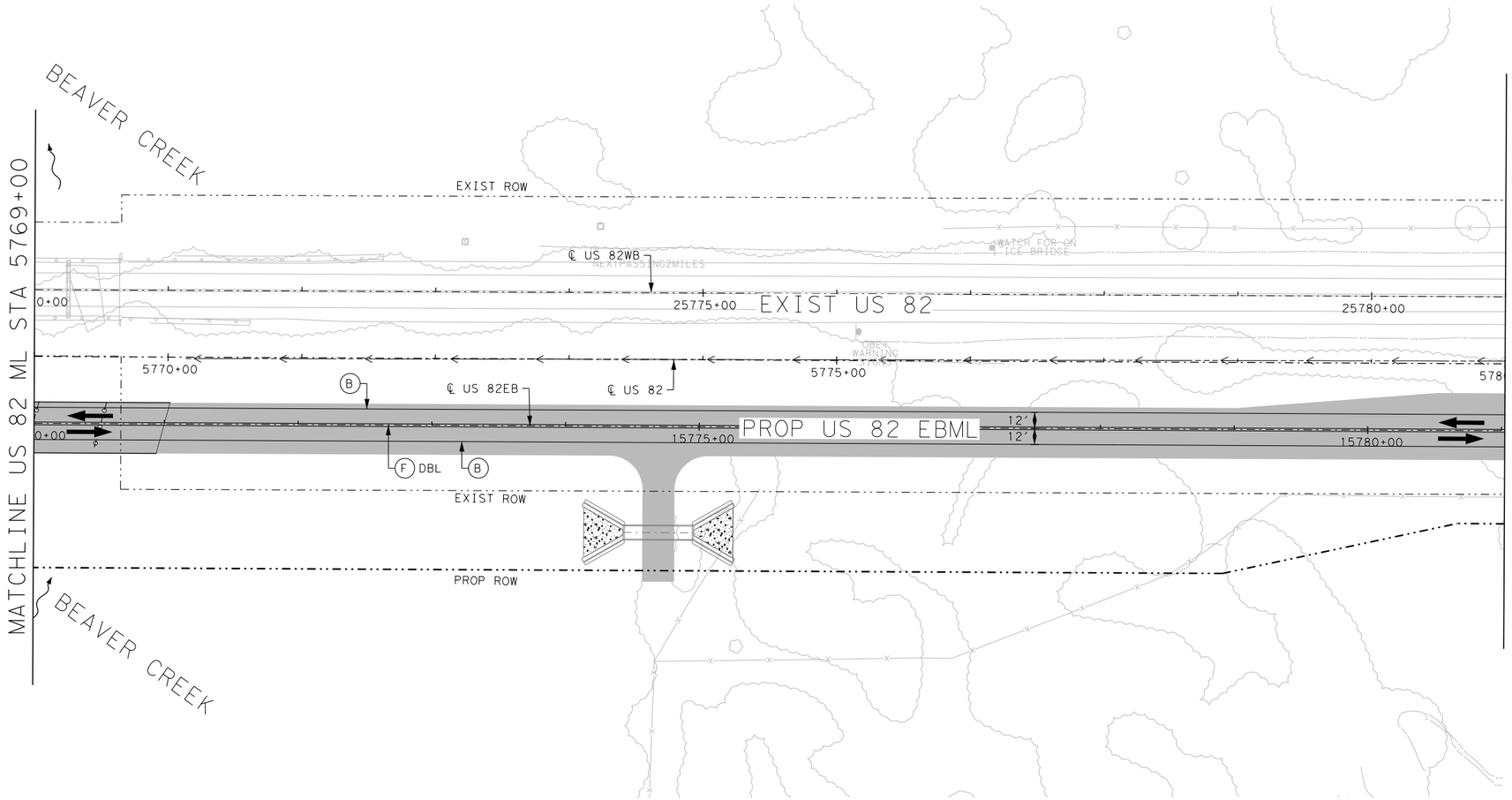

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2B
US 82 STA 5769+00 TO STA 5780+00

SHEET 6 OF 15

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	109
CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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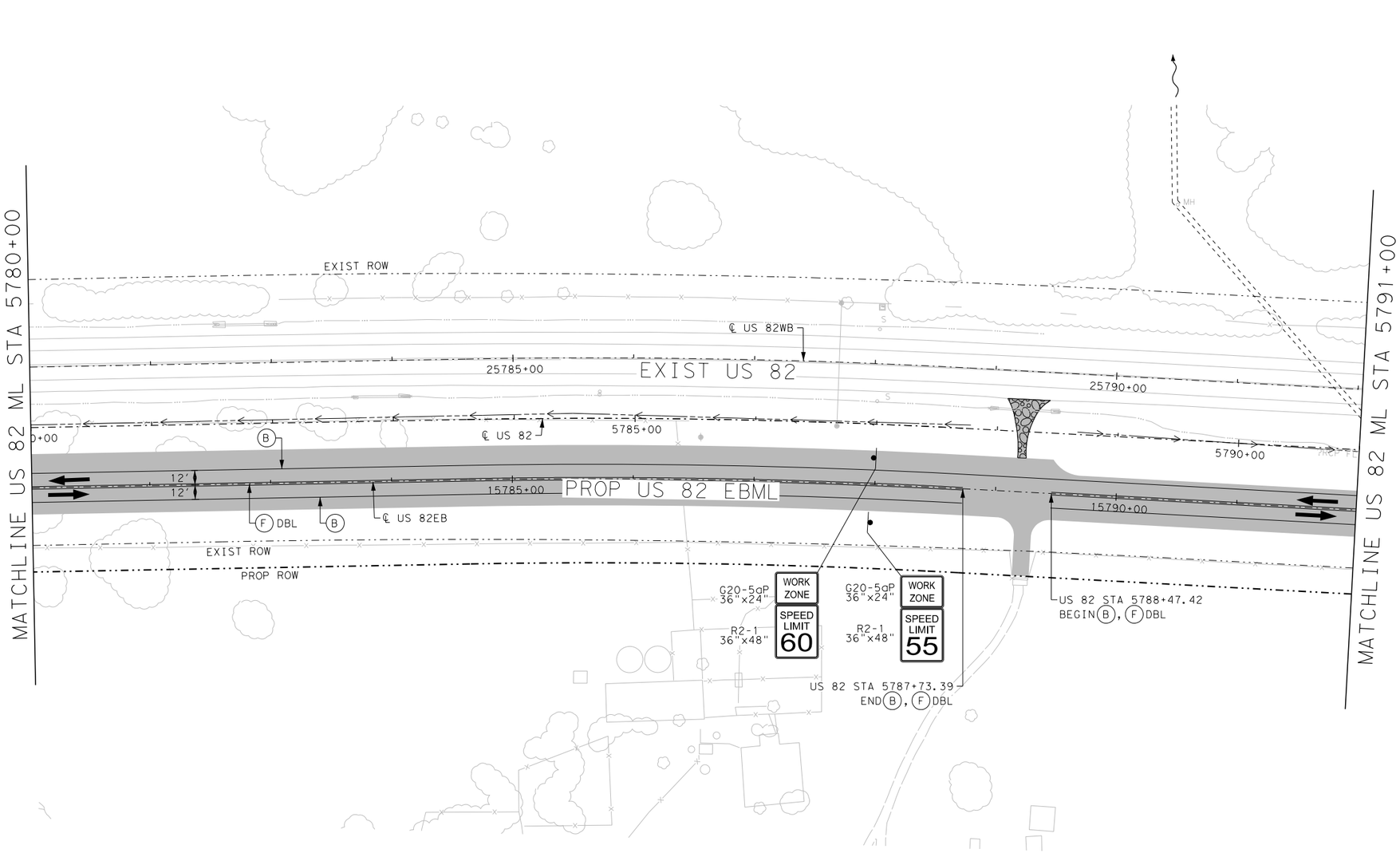

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	A	B
W 6" BRK	C	D
Y 6" SLD	E	F
Y 6" BRK	G	H
W 8" SLD	I	J
W 12" SLD	K	L
W 24" SLD	M	N
Y 12" SLD	O	P

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

US82

TRAFFIC CONTROL PLAN
PHASE 2B
US 82 STA 5780+00 TO STA 5791+00

SHEET 7 OF 15

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	110
CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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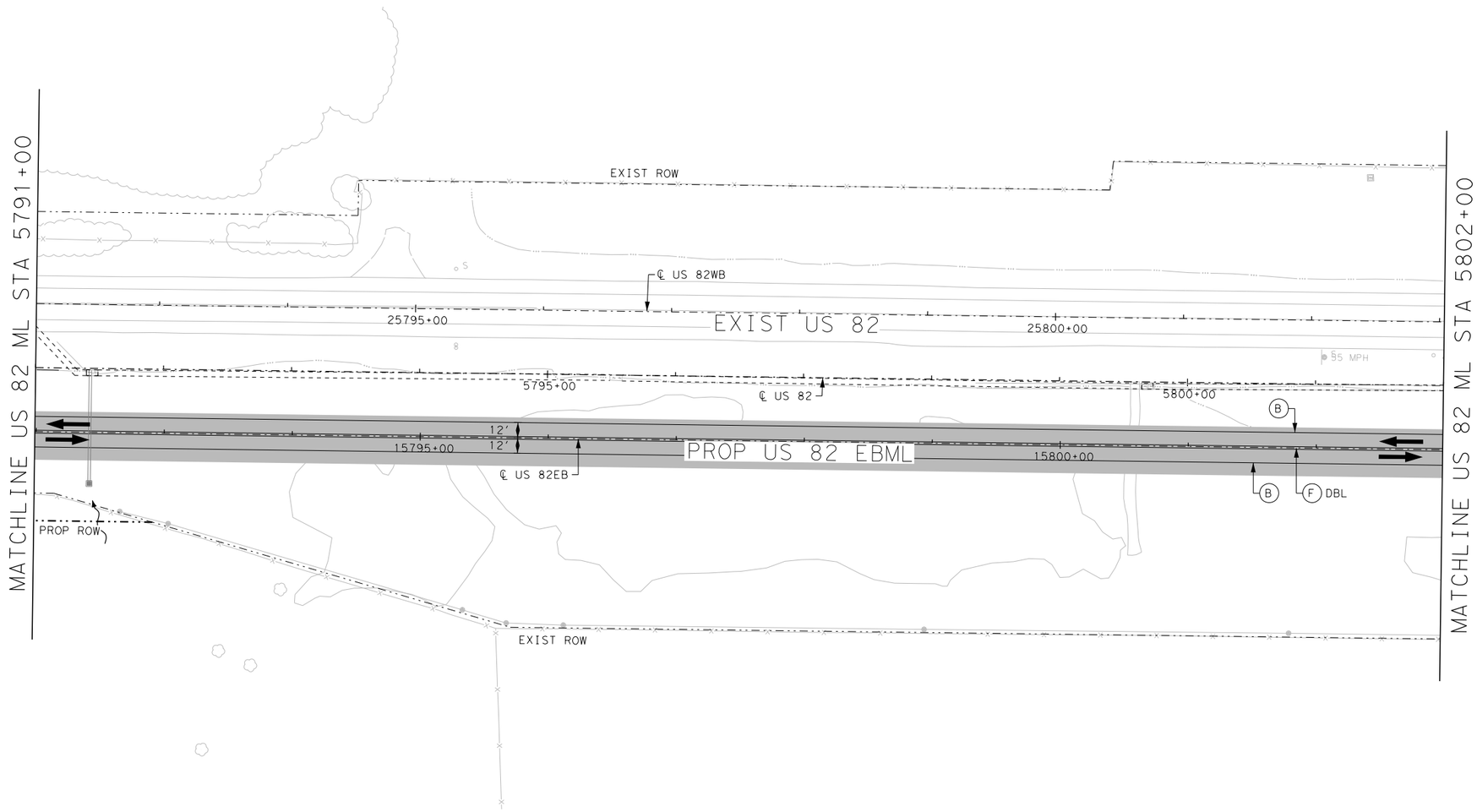

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED
PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2B
US 82 STA 5791+00 TO STA 5802+00

SHEET 8 OF 15

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	111
CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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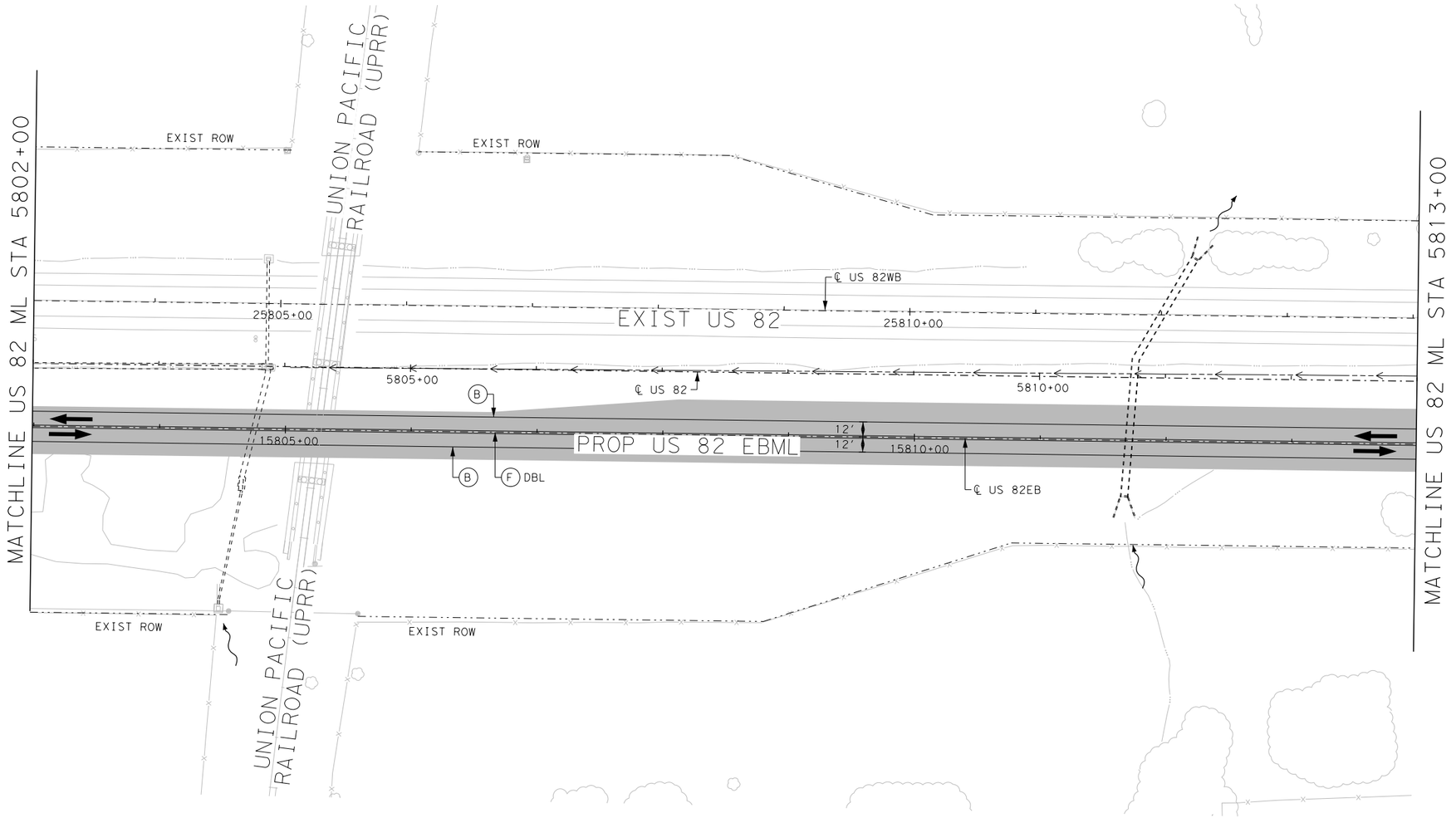

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER

10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

US82

TRAFFIC CONTROL PLAN
PHASE 2B
US 82 STA 5802+00 TO STA 5813+00

SHEET 9 OF 15

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	112
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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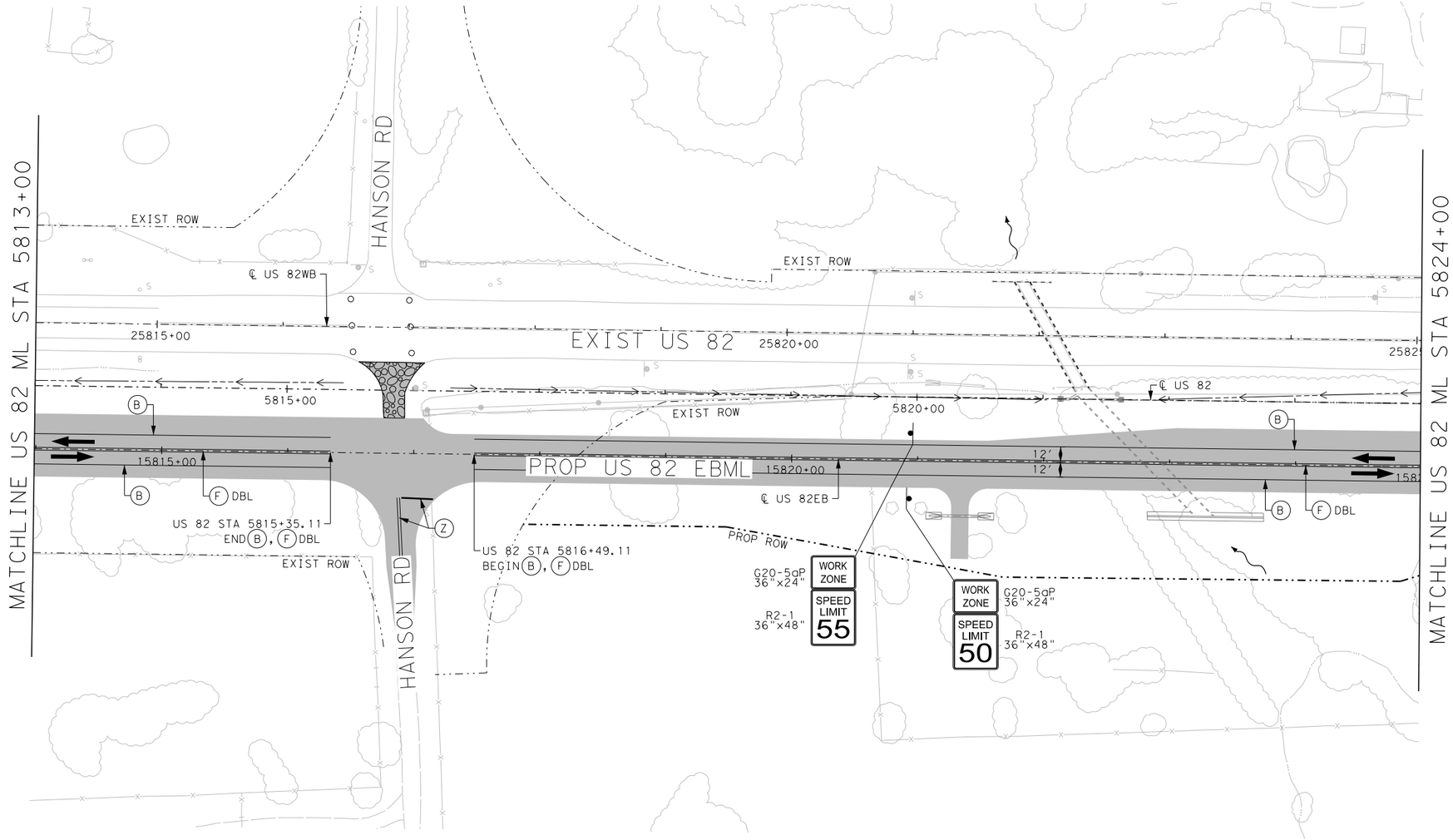

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	A	B
W 6" BRK	C	D
Y 6" SLD	E	F
Y 6" BRK	G	H
W 8" SLD	I	J
W 12" SLD	K	L
W 24" SLD	M	N
Y 12" SLD	O	P

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
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GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2B
US 82 STA 5813+00 TO STA 5824+00

SHEET 10 OF 15

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	113
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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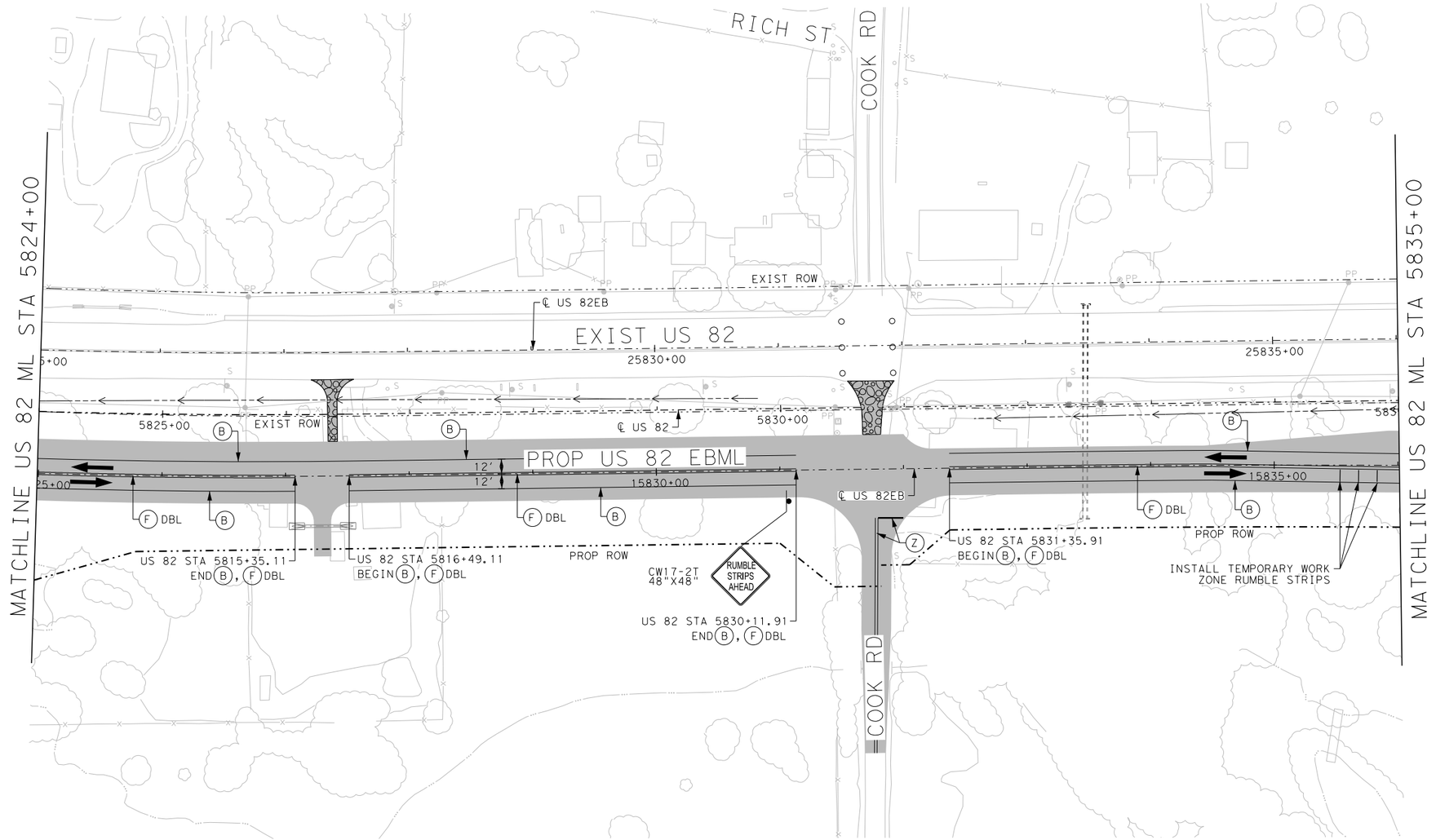

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	A	B
W 6" BRK	C	D
Y 6" SLD	E	F
Y 6" BRK	G	H
W 8" SLD	I	J
W 12" SLD	K	L
W 24" SLD	M	N
Y 12" SLD	O	P

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER

10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2B
US 82 STA 5824+00 TO STA 5835+00

SHEET 11 OF 15

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	114
CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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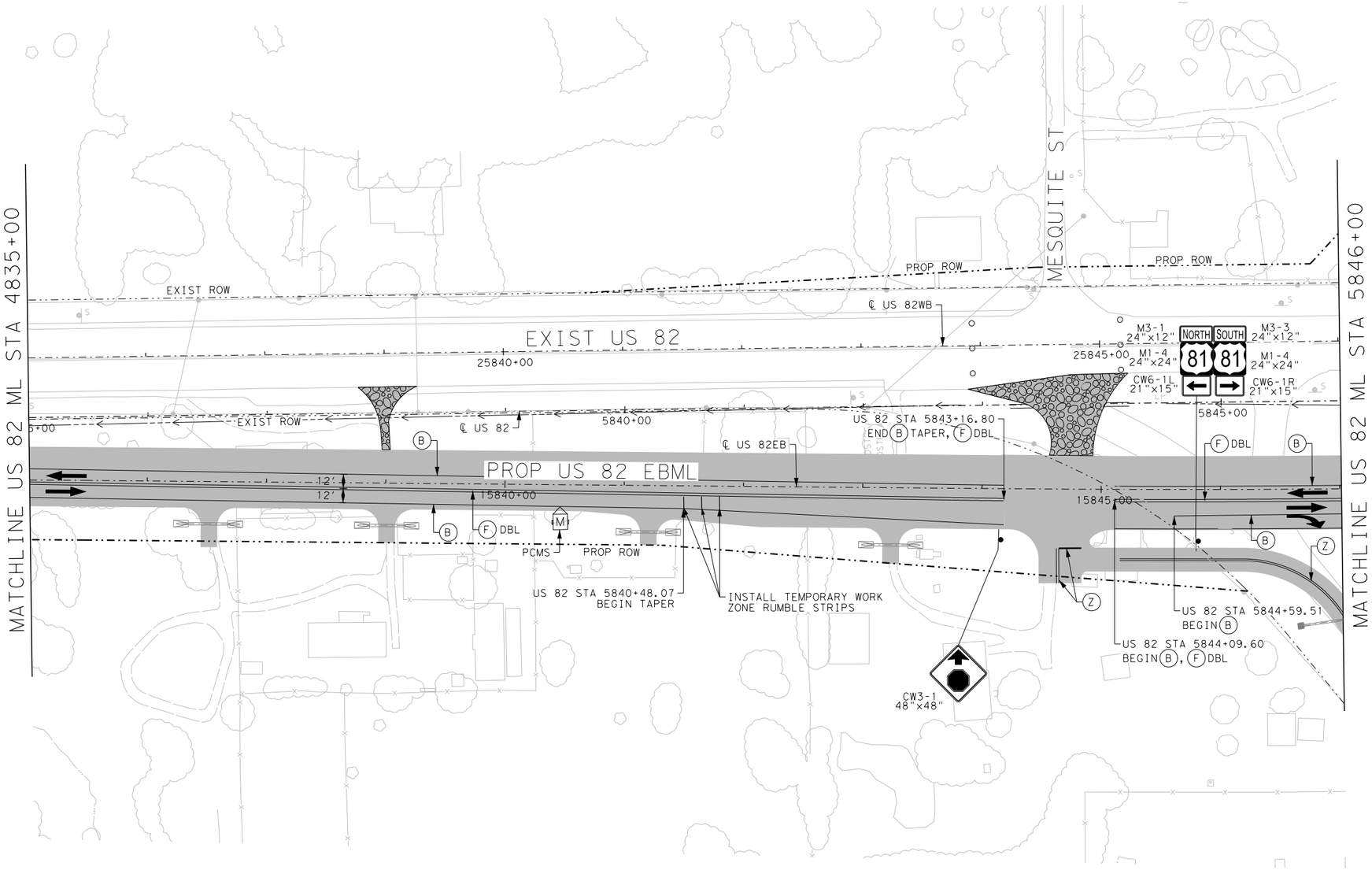

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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LICENSED
PROFESSIONAL ENGINEER

10/18/2023

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GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

US82

TRAFFIC CONTROL PLAN
PHASE 2B
US 82 STA 5835+00 TO STA 5846+00

SHEET 12 OF 15

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	115
CHECK JL	CONTROL	SECTION	JOB	
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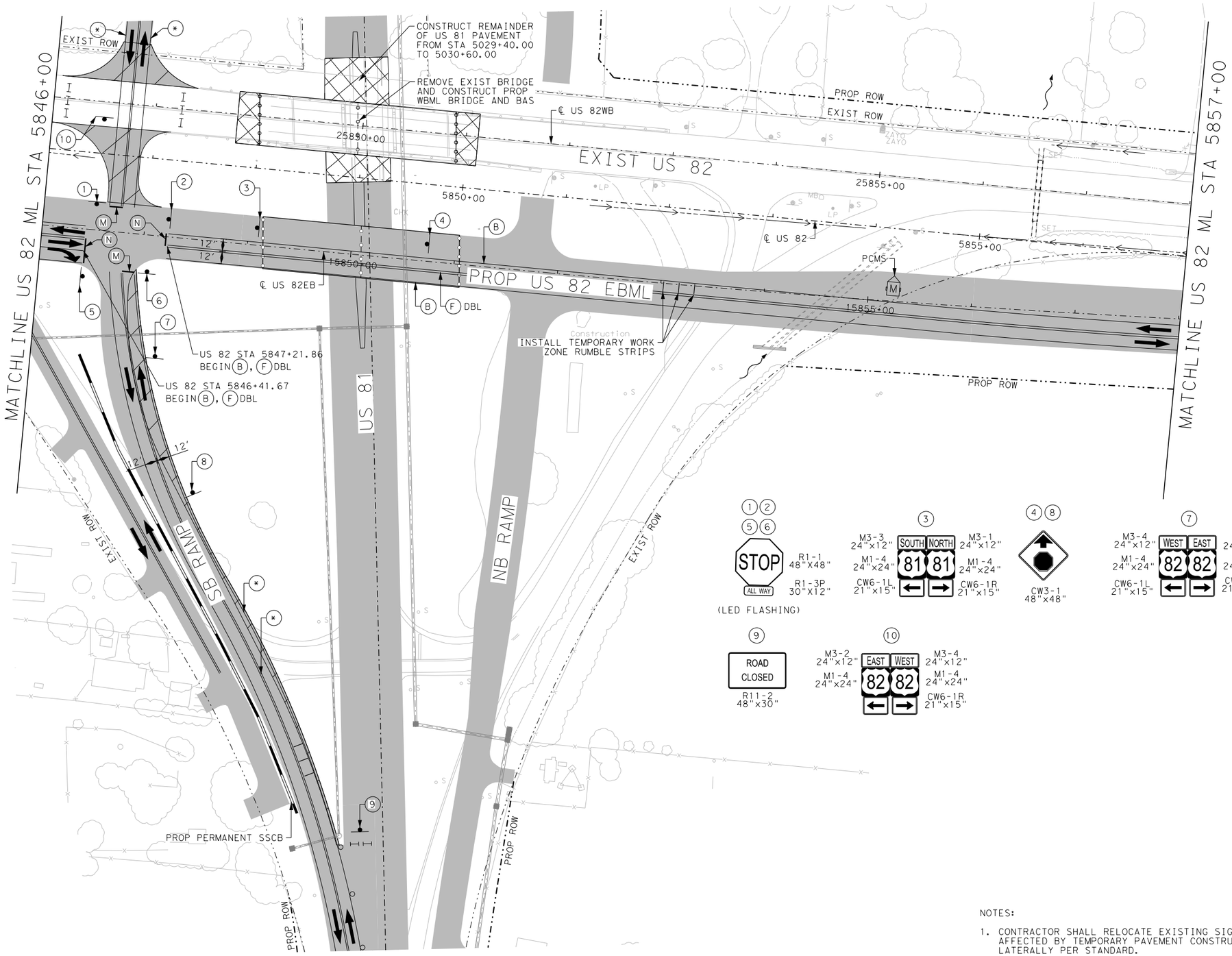

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

N

50 0 50 100
SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2B
US 82 STA 5846+00 TO STA 5857+00

SHEET 13 OF 15

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	116
CHECK JL	CONTROL	SECTION	JOB	
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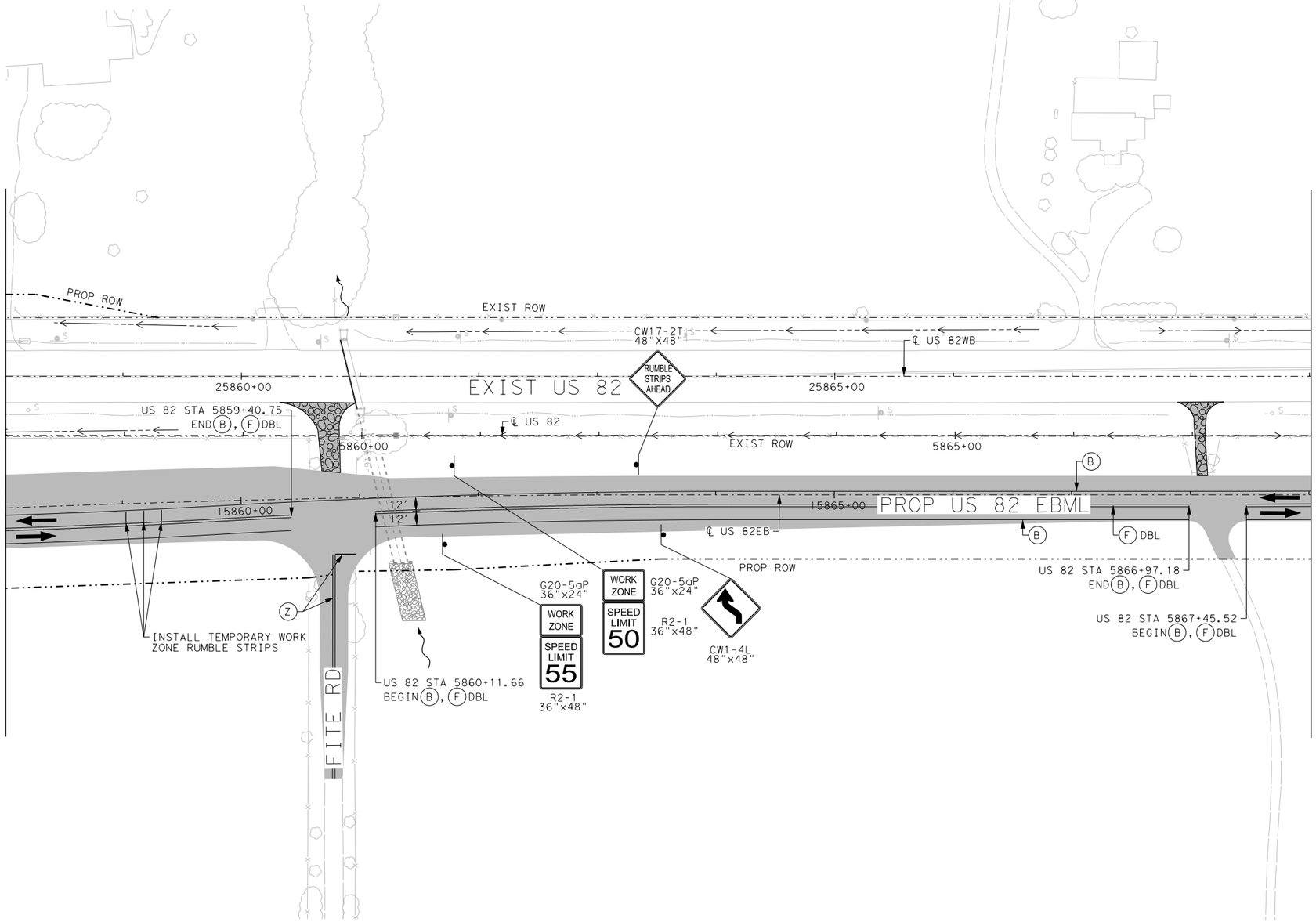

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2B
US 82 STA 5857+00 TO STA 5868+00

SHEET 14 OF 15

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	117
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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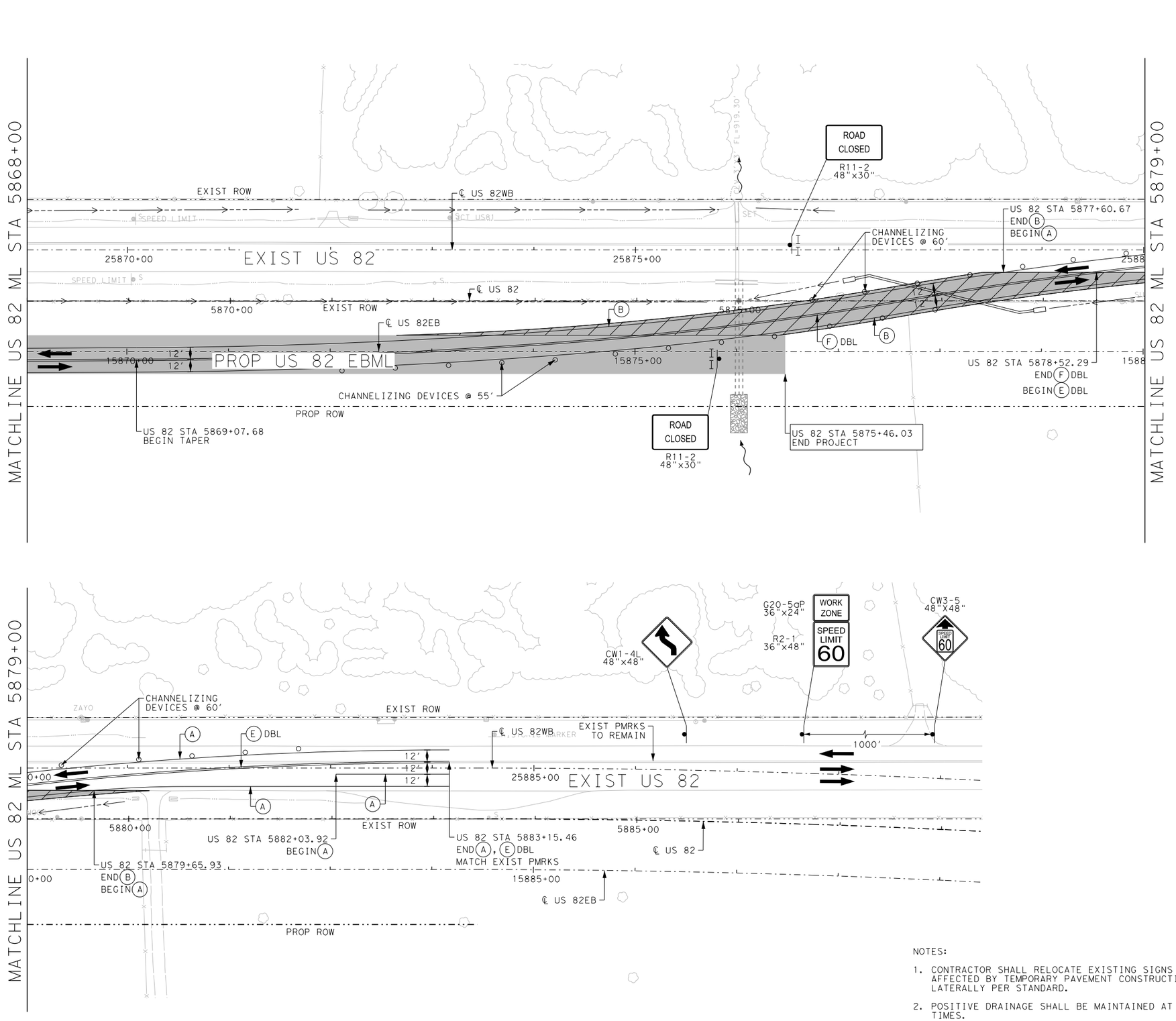

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2B
US 82 STA 5868+00 TO END PROJECT

SHEET 15 OF 15

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	118
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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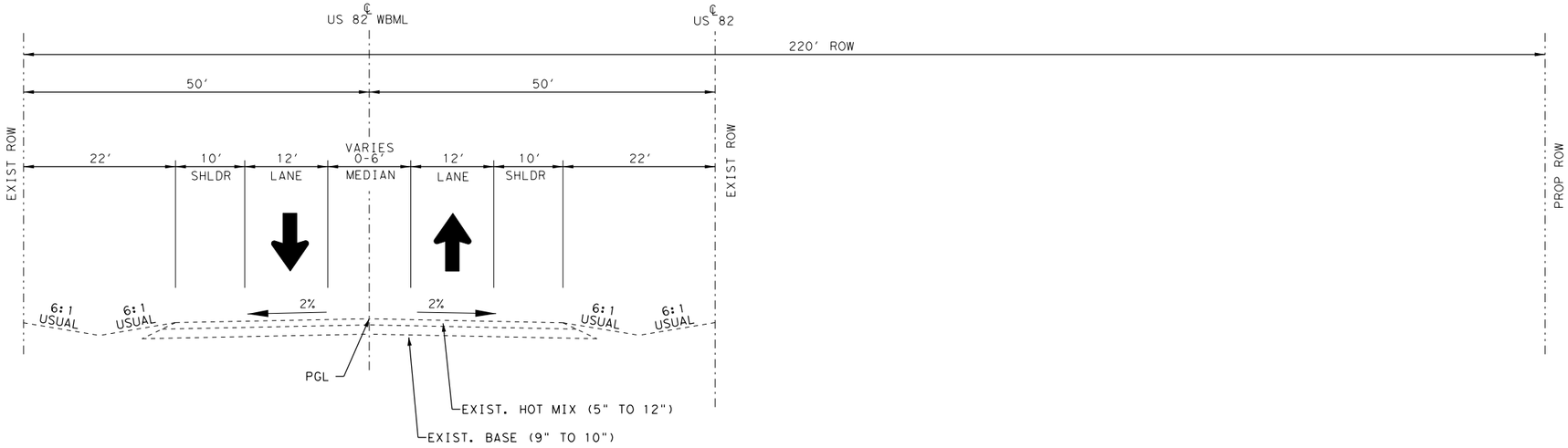
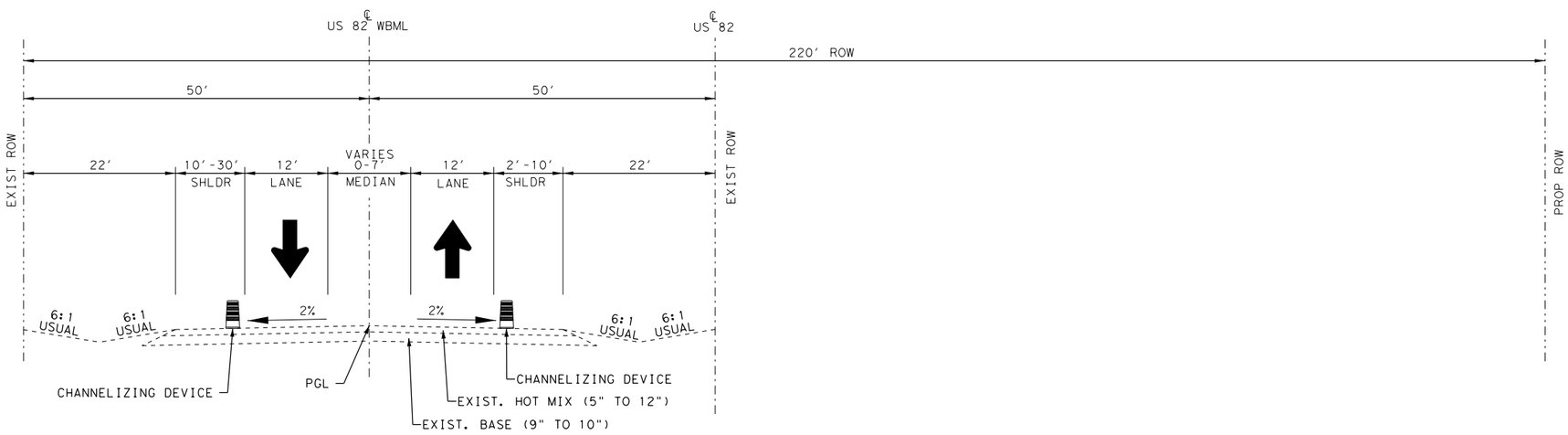


US 82 STA 5710+47.92 - STA 5714+68.98



US 82 STA 5714+68.98 - STA 5724+01.13

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE

STATE OF TEXAS
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131159
LICENSED PROFESSIONAL ENGINEER
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OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 2C

SCALE: NTS SHEET 1 OF 5

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	119
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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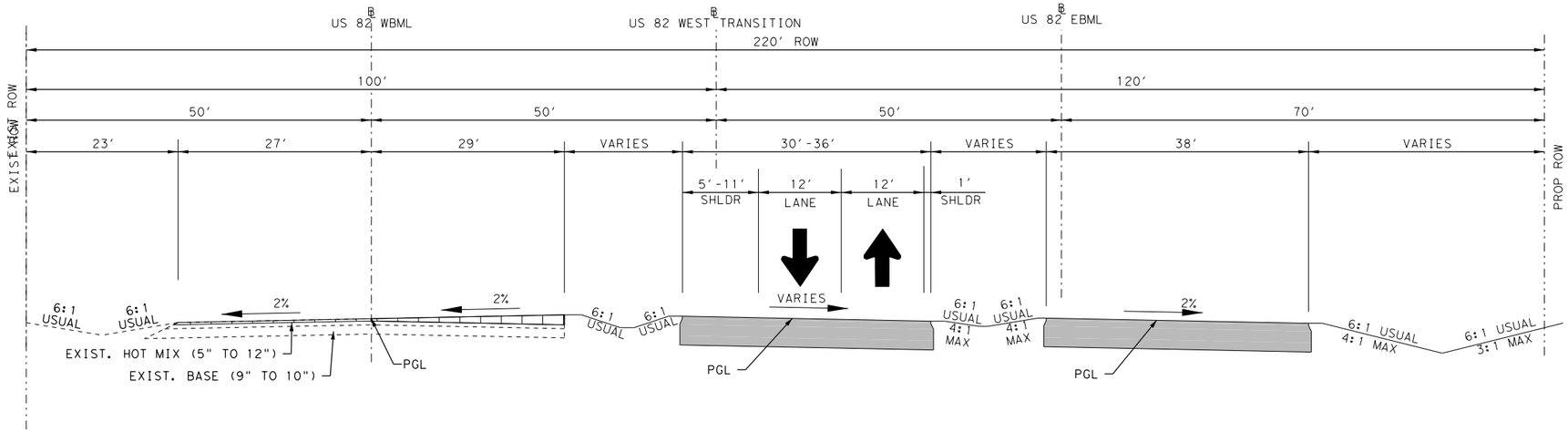
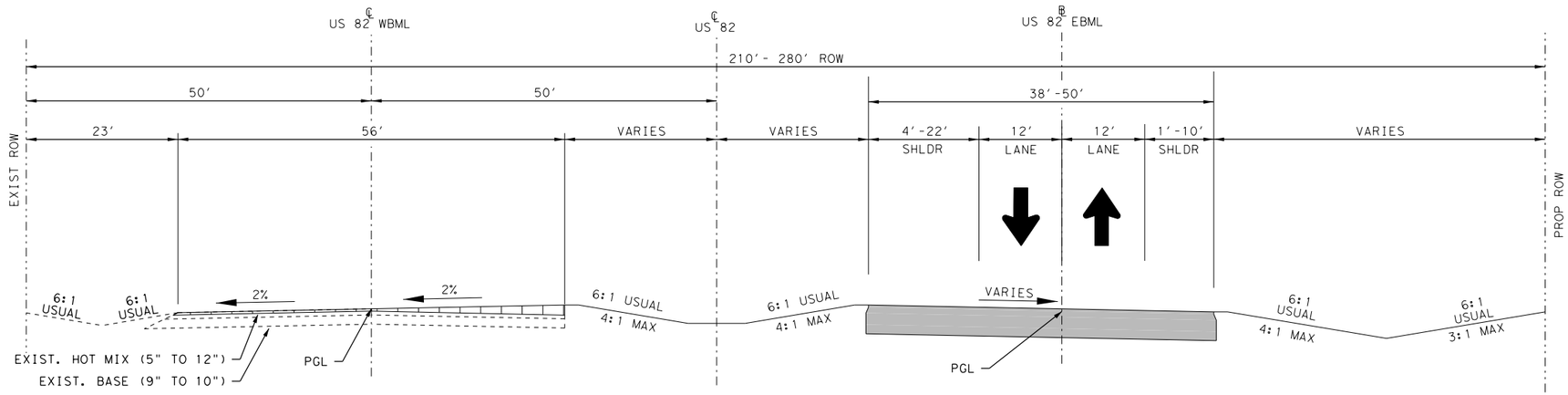


US 82 STA 5724+01.13 - STA 5733+14.09



US 82 STA 5733+14.09 - STA 5787+77.92
US 82 STA 5795+66.76 - STA 5815+09.34
US 82 STA 5825+37.58 - STA 5830+09.22

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED
PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 2C

SCALE: NTS SHEET 2 OF 5

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	120
CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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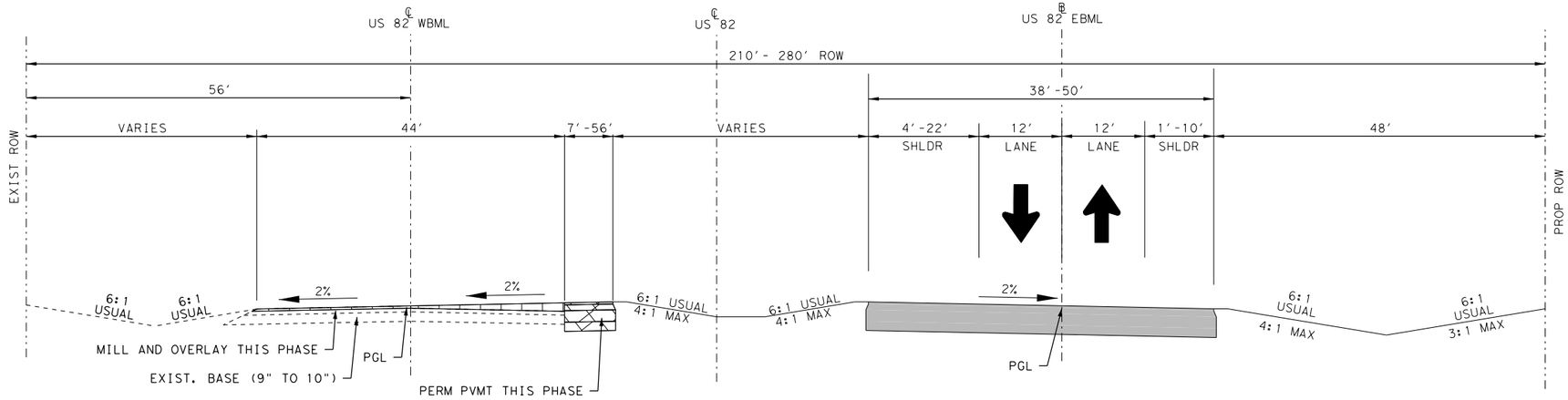
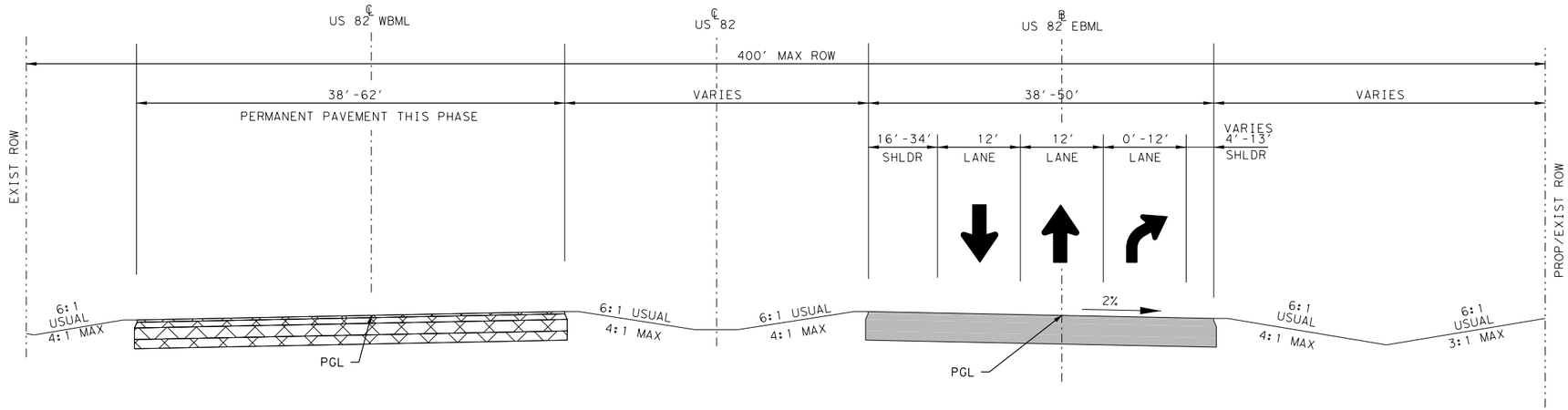


US 82 STA 5787+77.92 - STA 5795+66.76
US 82 STA 5815+09.34 - STA 5825+37.58
US 82 STA 5830+09.22 - STA 5838+98.68
US 82 STA 5860+23.69 - STA 5869+37.69

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE



US 82 STA 5838+98.68 - STA 5860+23.69

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 2C

SCALE: NTS SHEET 3 OF 5

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	121
CHECK JL	CONTROL	SECTION	JOB	
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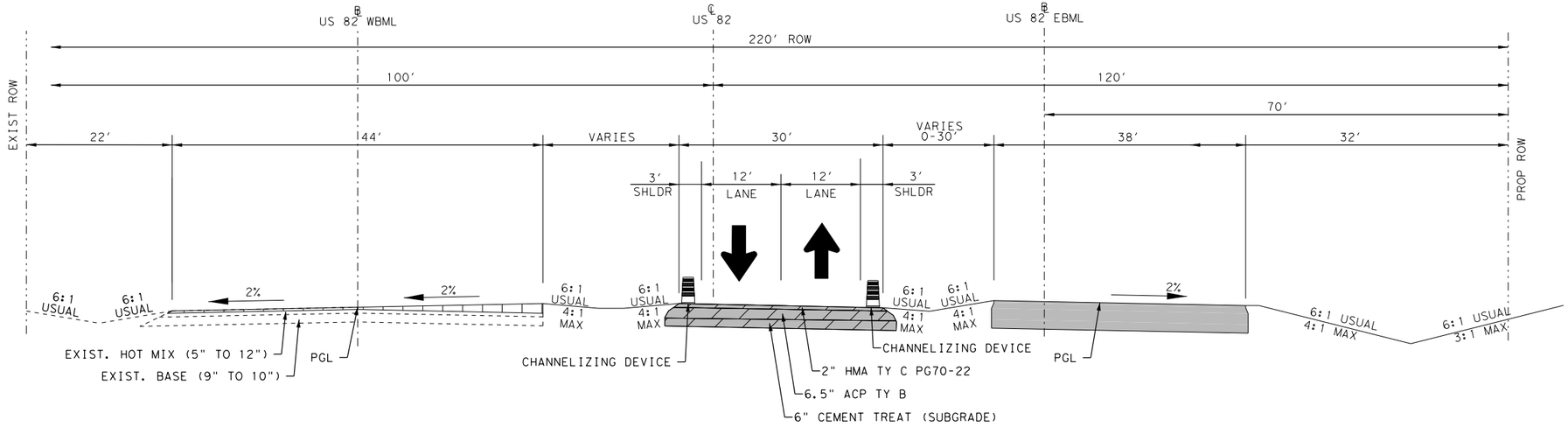
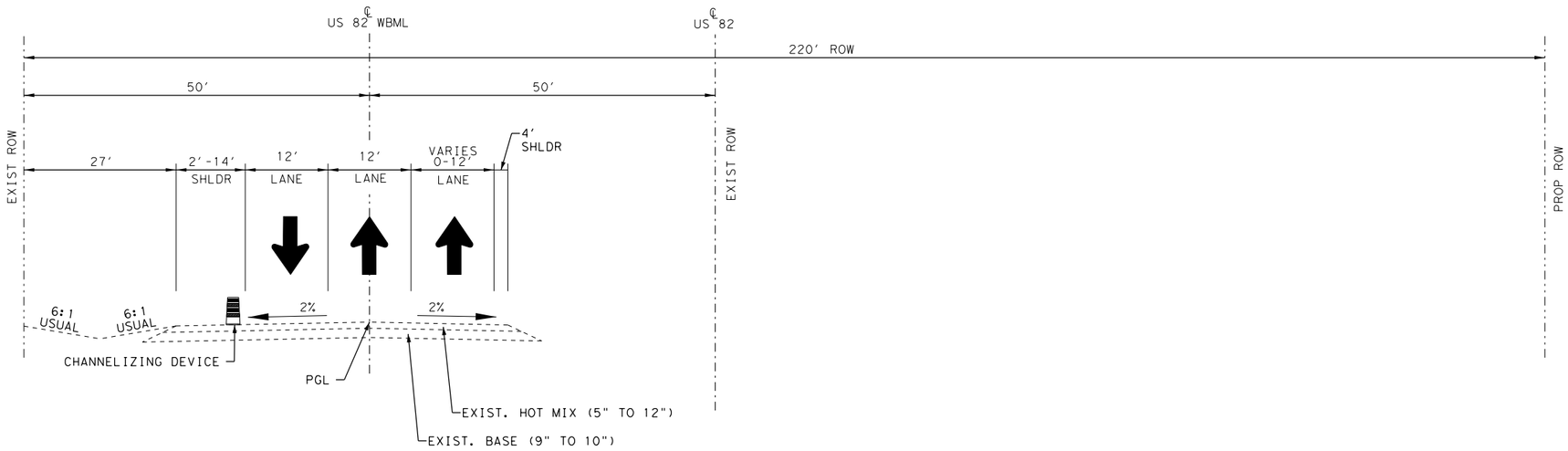


US 82 STA 5869+07.68 - STA 5880+20.45



US 82 STA 5880+20.45 - STA 5883+15.46

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 2C

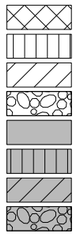
SCALE: NTS SHEET 4 OF 5

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	122
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

048_US82_OTH_TYP_P2C_04.dgn
6:17:29 AM
10/18/2023

NOTE: US 81 TRAFFIC IN PHASE 2C SHALL UTILIZE PROPOSED FINAL US 81 TRAFFIC CONFIGURATION.
SEE US 81 PROPOSED FINAL TYPICAL SECTIONS FOR US 81 PHASE 2C TYPICAL SECTIONS.
USE NON-REMOVABLE PAVEMENT MARKINGS DURING PHASE 2C.

TRAFFIC CONTROL PLAN LEGEND



- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE

10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

US82

TRAFFIC CONTROL PLAN
TYPICAL SECTION
PHASE 2C

SCALE: NTS SHEET 5 OF 5

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	123
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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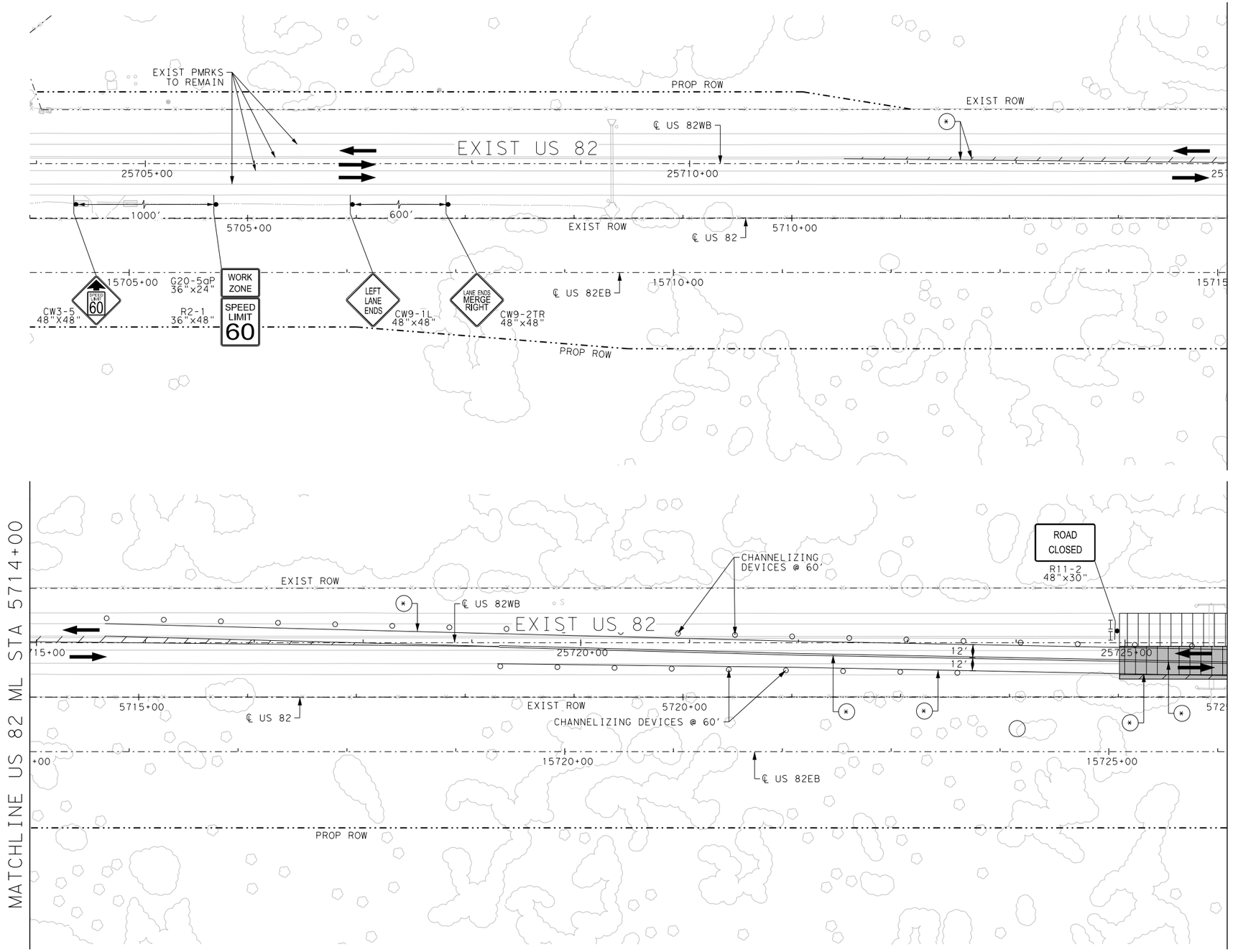

N

50 0 50 100

SCALE: 1" = 100′

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2C
BEGIN PROJECT TO US 82 STA 5725+00

SHEET 1 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	124
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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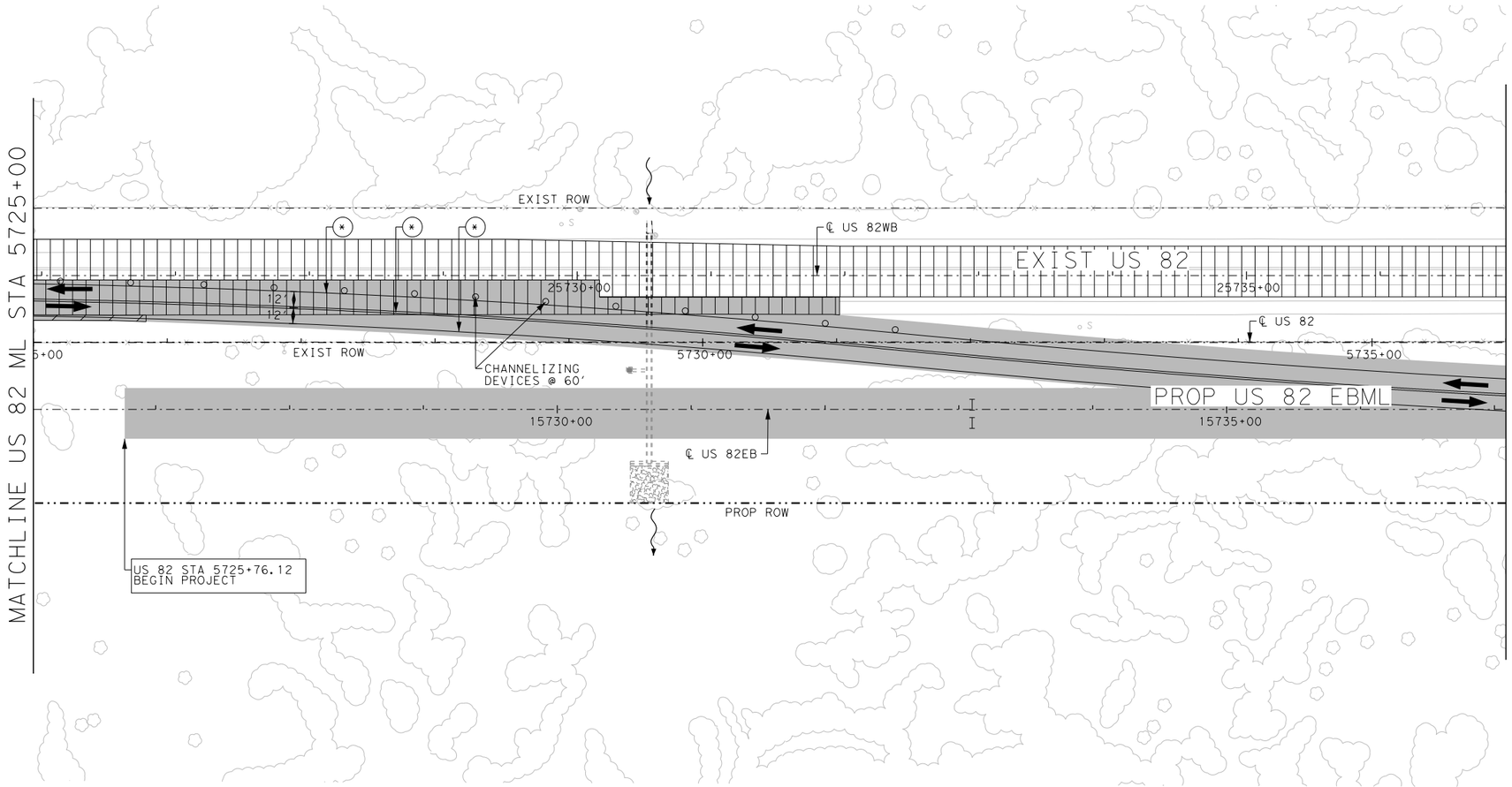

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2C
US 82 STA 5725+00 TO STA 5736+00

SHEET 2 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	125
CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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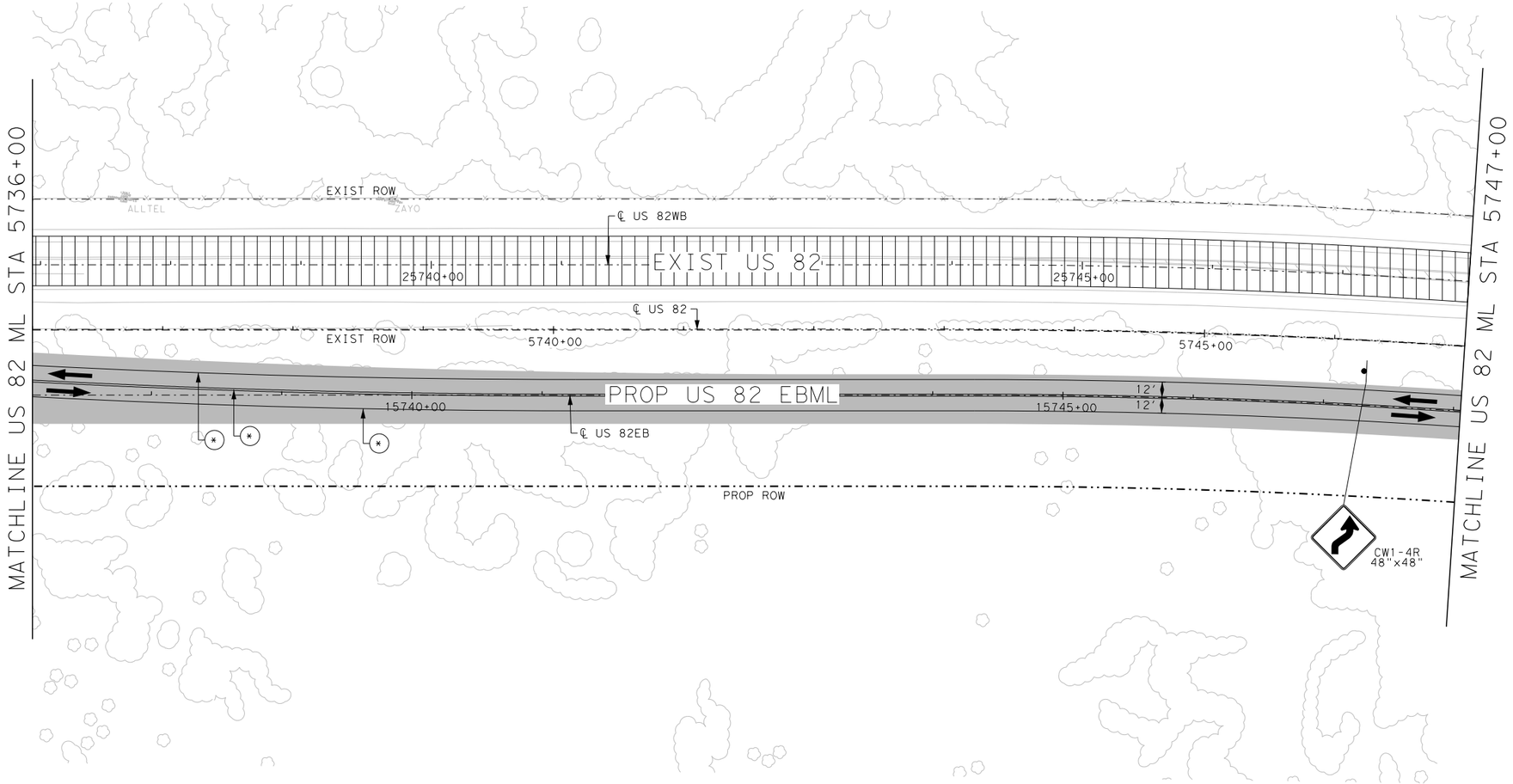

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER

10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2C
US 82 STA 5736+00 TO STA 5747+00

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	126
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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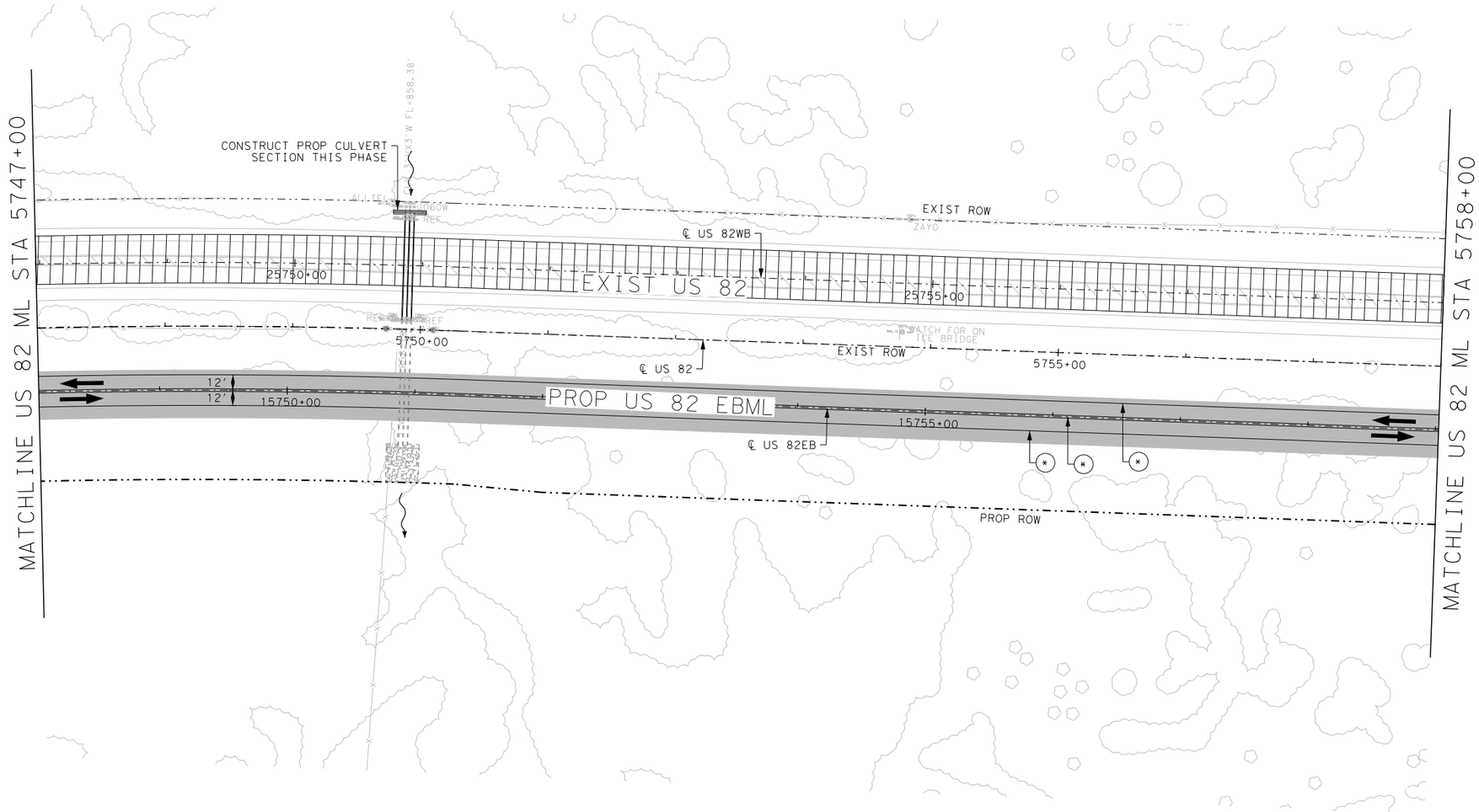

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2C
US 82 STA 5747+00 TO STA 5758+00

SHEET 4 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	127
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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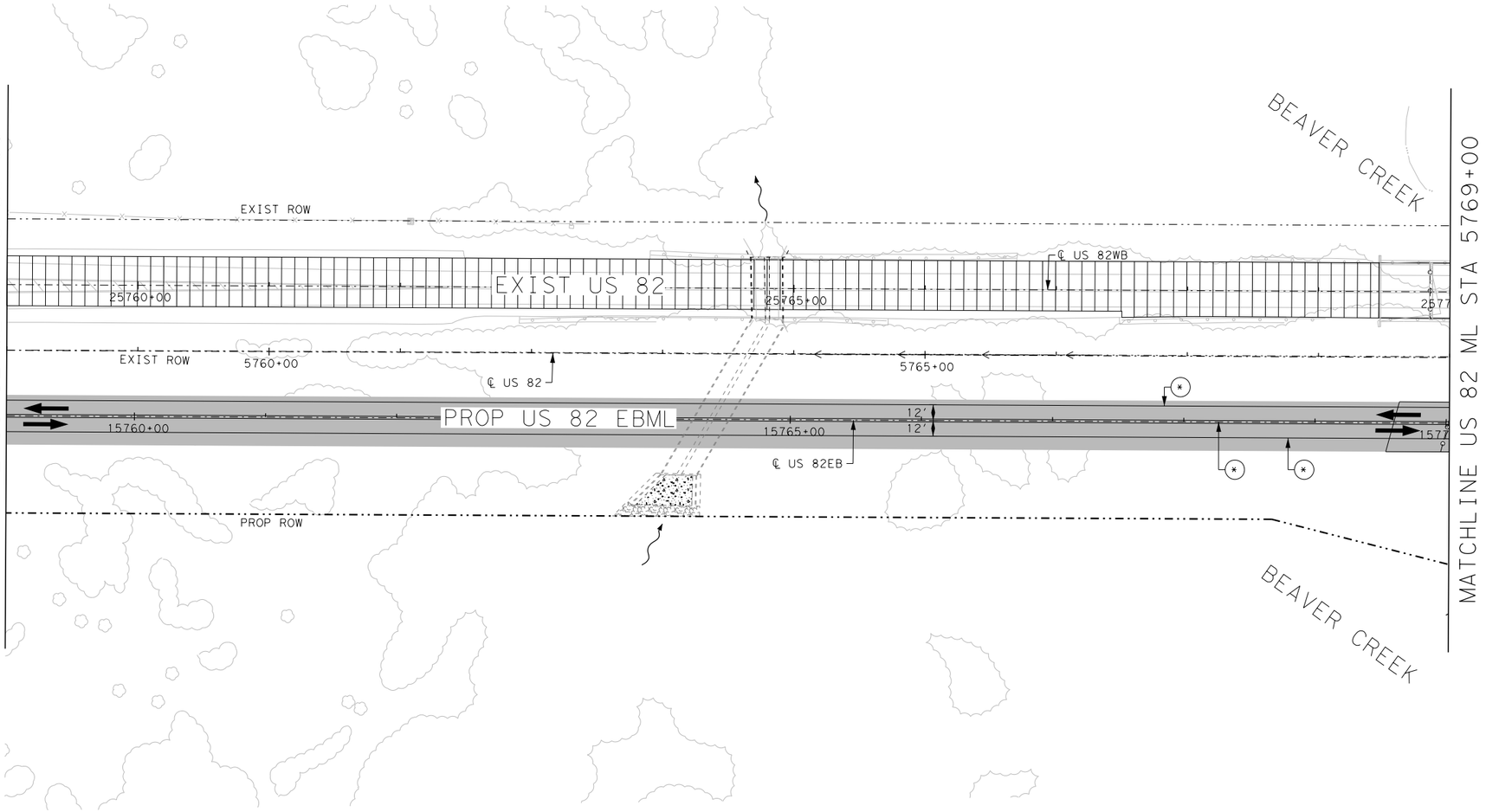

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

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GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2C
US 82 STA 5758+00 TO STA 5769+00

SHEET 5 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	128
CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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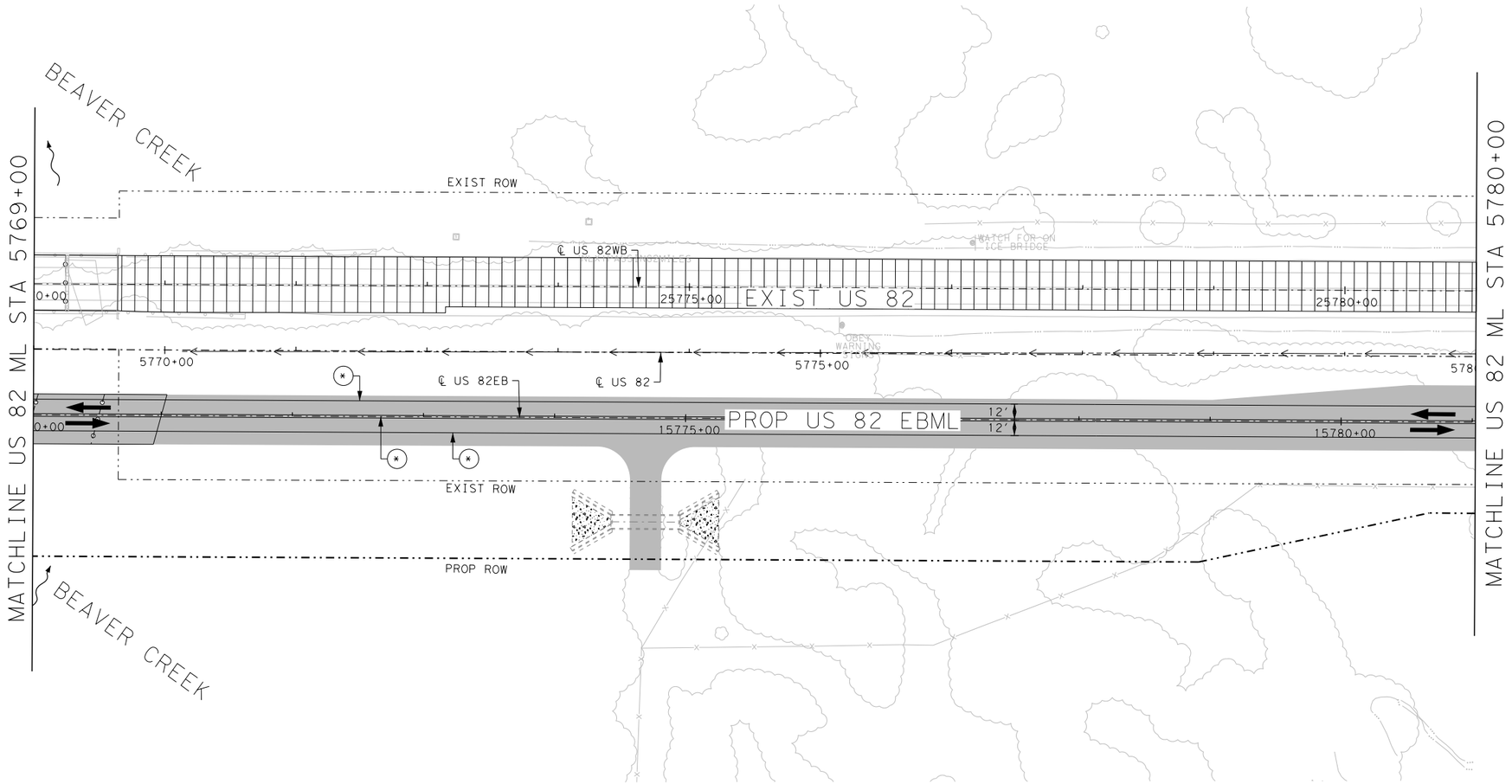

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
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SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2C
US 82 STA 5769+00 TO STA 5780+00

SHEET 6 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	129
CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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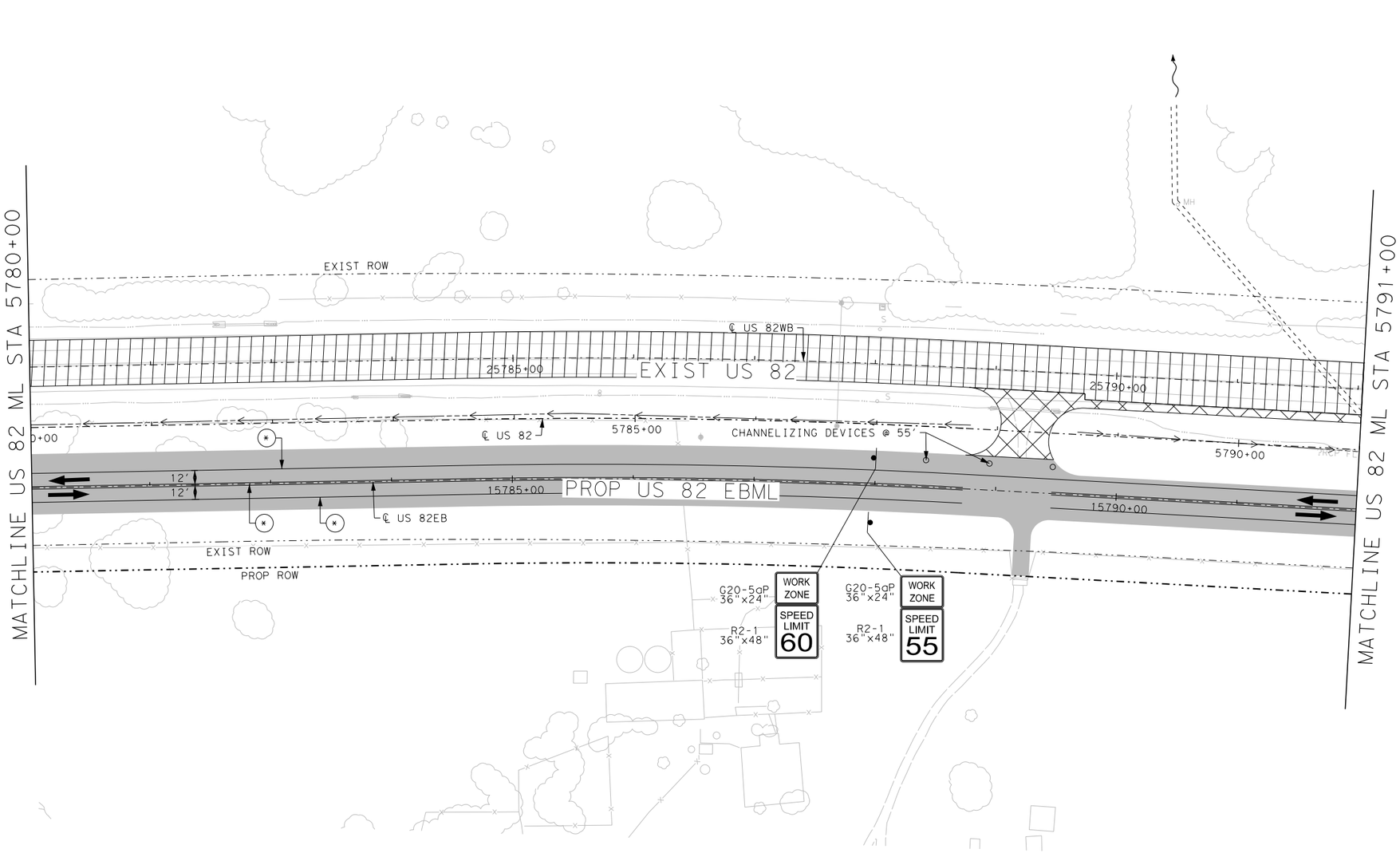

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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131159
LICENSED PROFESSIONAL ENGINEER

10/18/2023

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2C
US 82 STA 5780+00 TO STA 5791+00

SHEET 7 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	130
CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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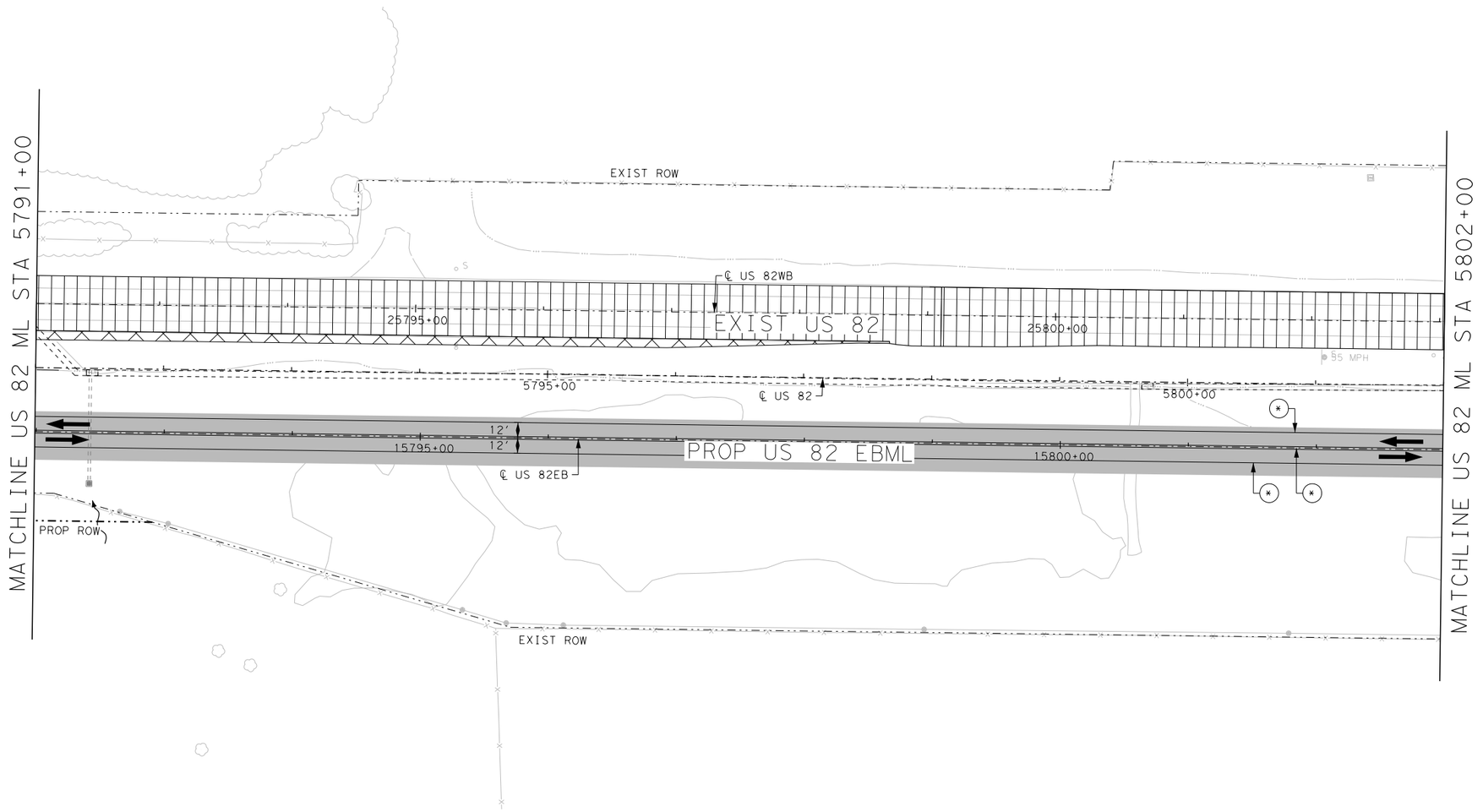

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED
PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2C
US 82 STA 5791+00 TO STA 5802+00

SHEET 8 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	131
CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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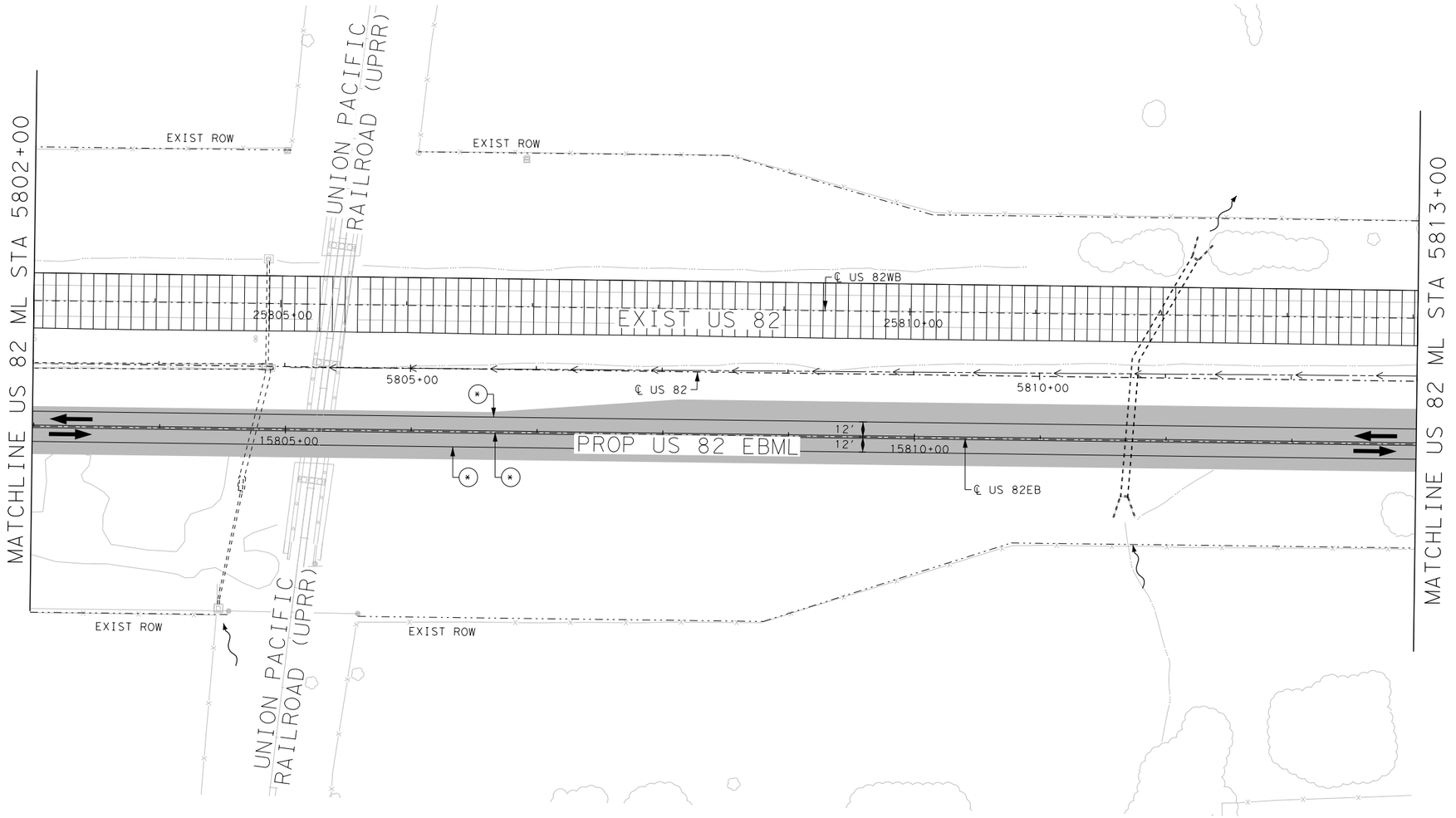
10/18/2023



N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER

10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2C
US 82 STA 5802+00 TO STA 5813+00

SHEET 9 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	132
CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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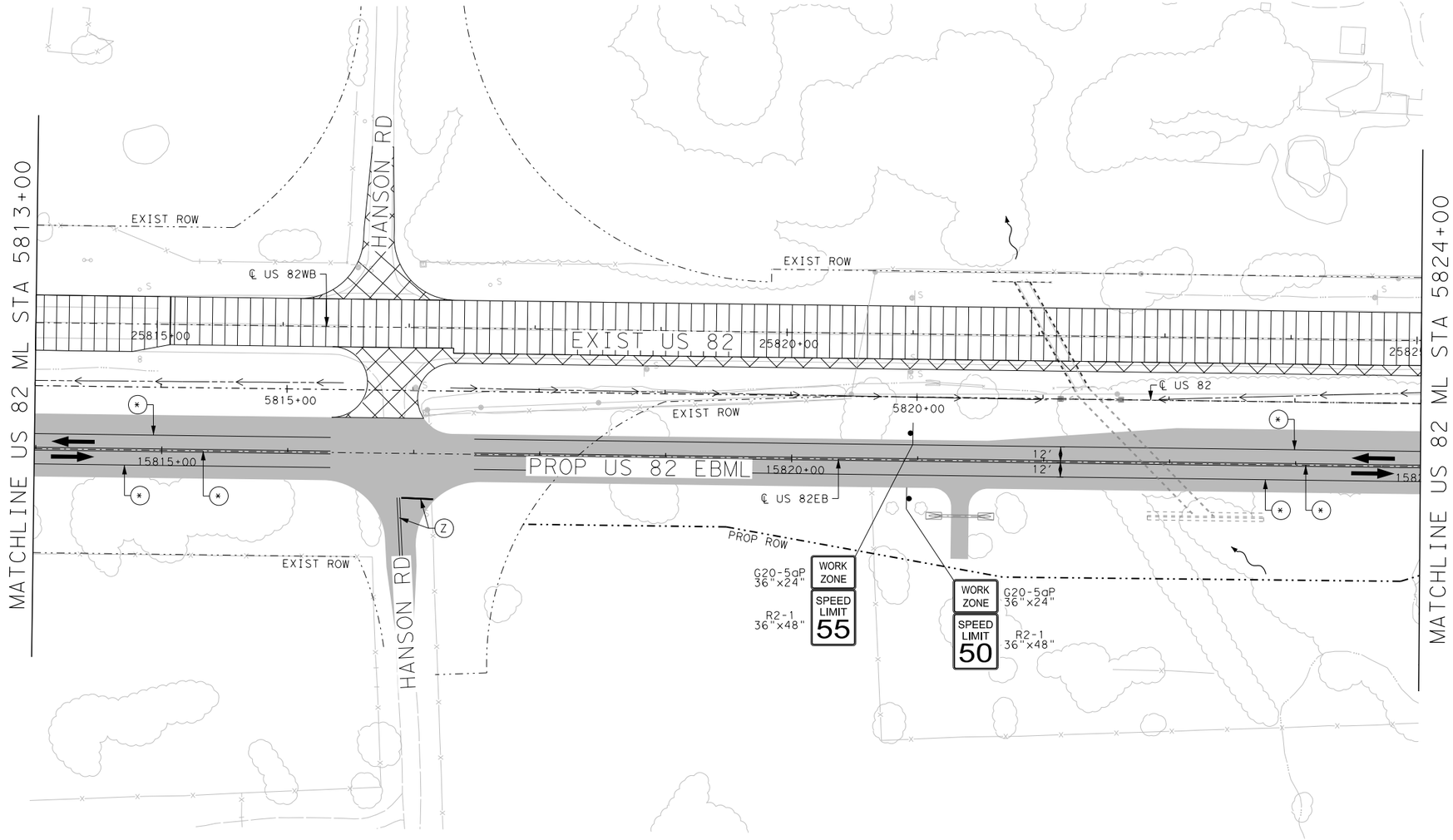

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2C
US 82 STA 5813+00 TO STA 5824+00

SHEET 10 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	133
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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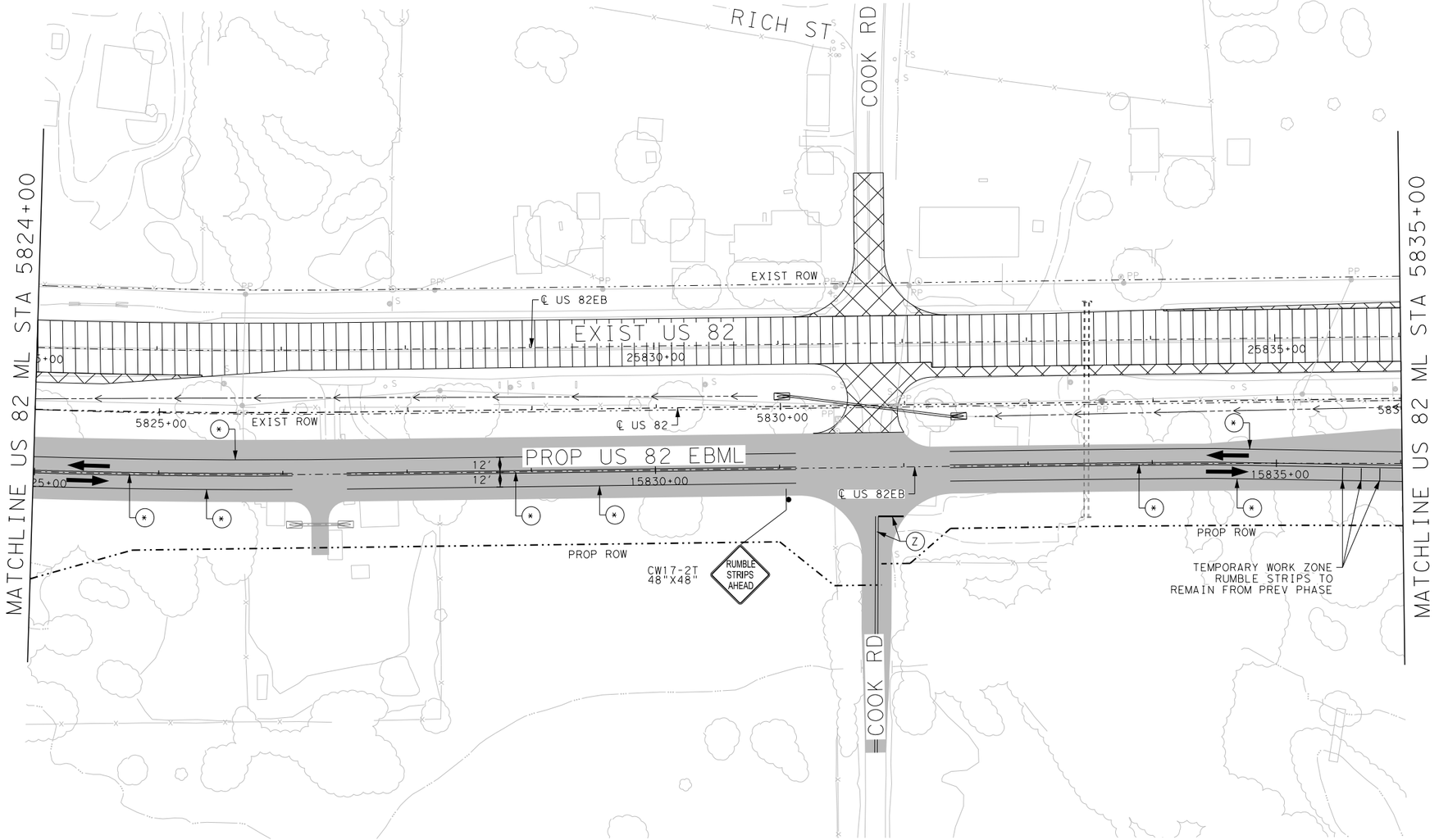

N

50 0 50 100
SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2C
US 82 STA 5824+00 TO STA 5835+00

SHEET 11 OF 21

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	134
CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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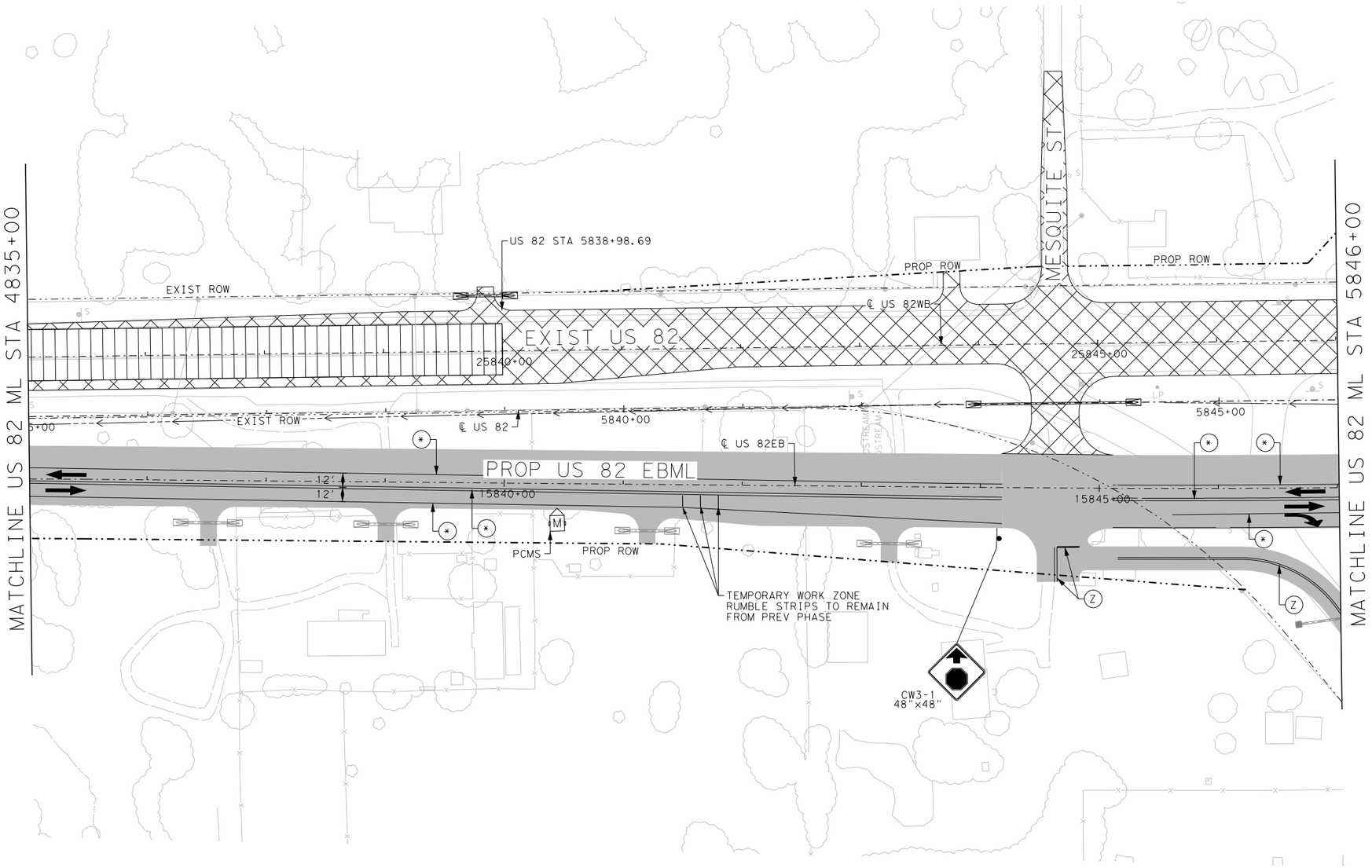

50 0 50 100
SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2C
US 82 STA 5835+00 TO STA 5846+00

SHEET 12 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	135
CHECK JL	CONTROL	SECTION	JOB	
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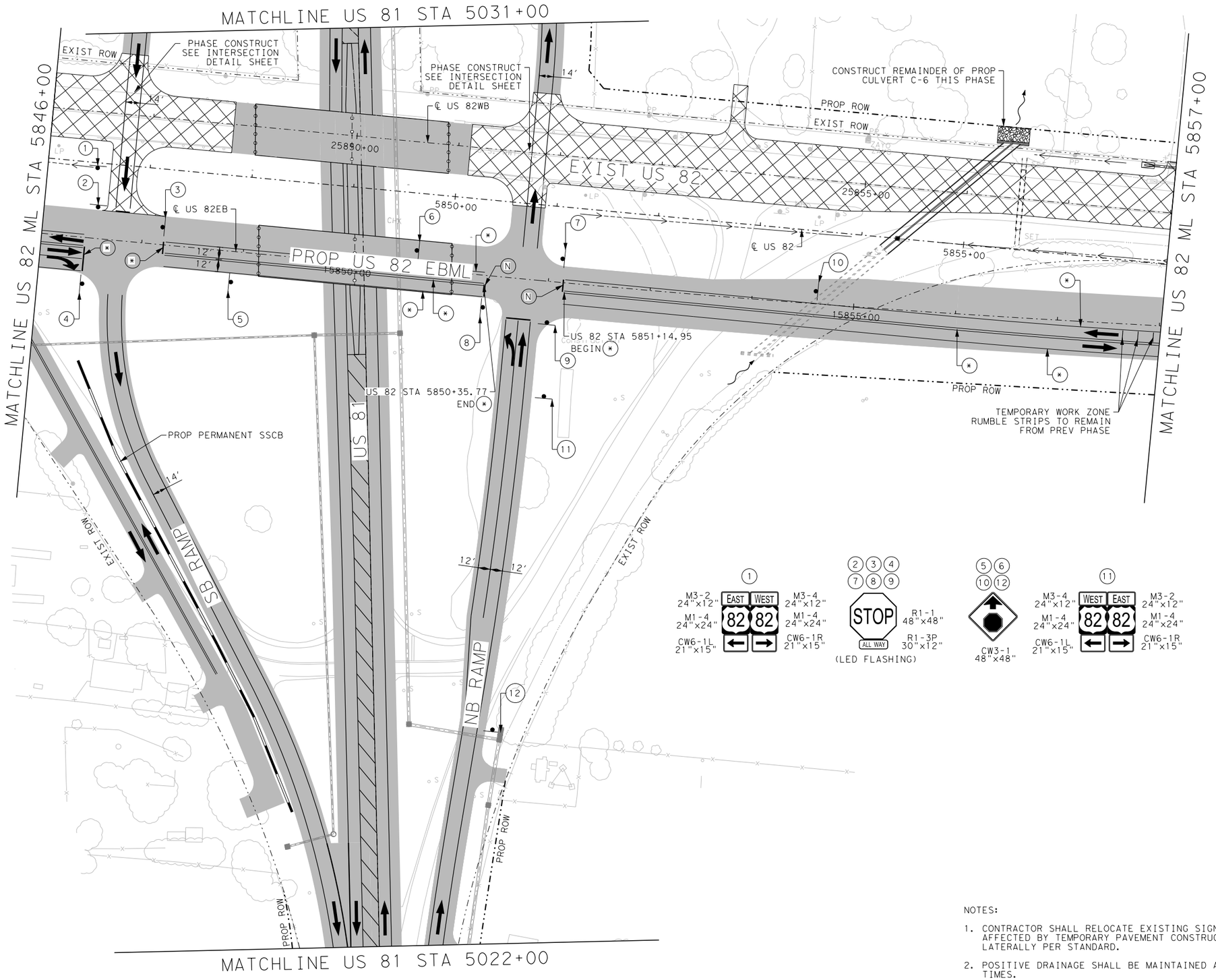

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

N

50 0 50 100
SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	A	B
W 6" BRK	C	D
Y 6" SLD	E	F
Y 6" BRK	G	H
W 8" SLD	I	J
W 12" SLD	K	L
W 24" SLD	M	N
Y 12" SLD	O	P

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2C
US 82 STA 5846+00 TO STA 5857+00

SHEET 13 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	136
CHECK JL	CONTROL	SECTION	JOB	
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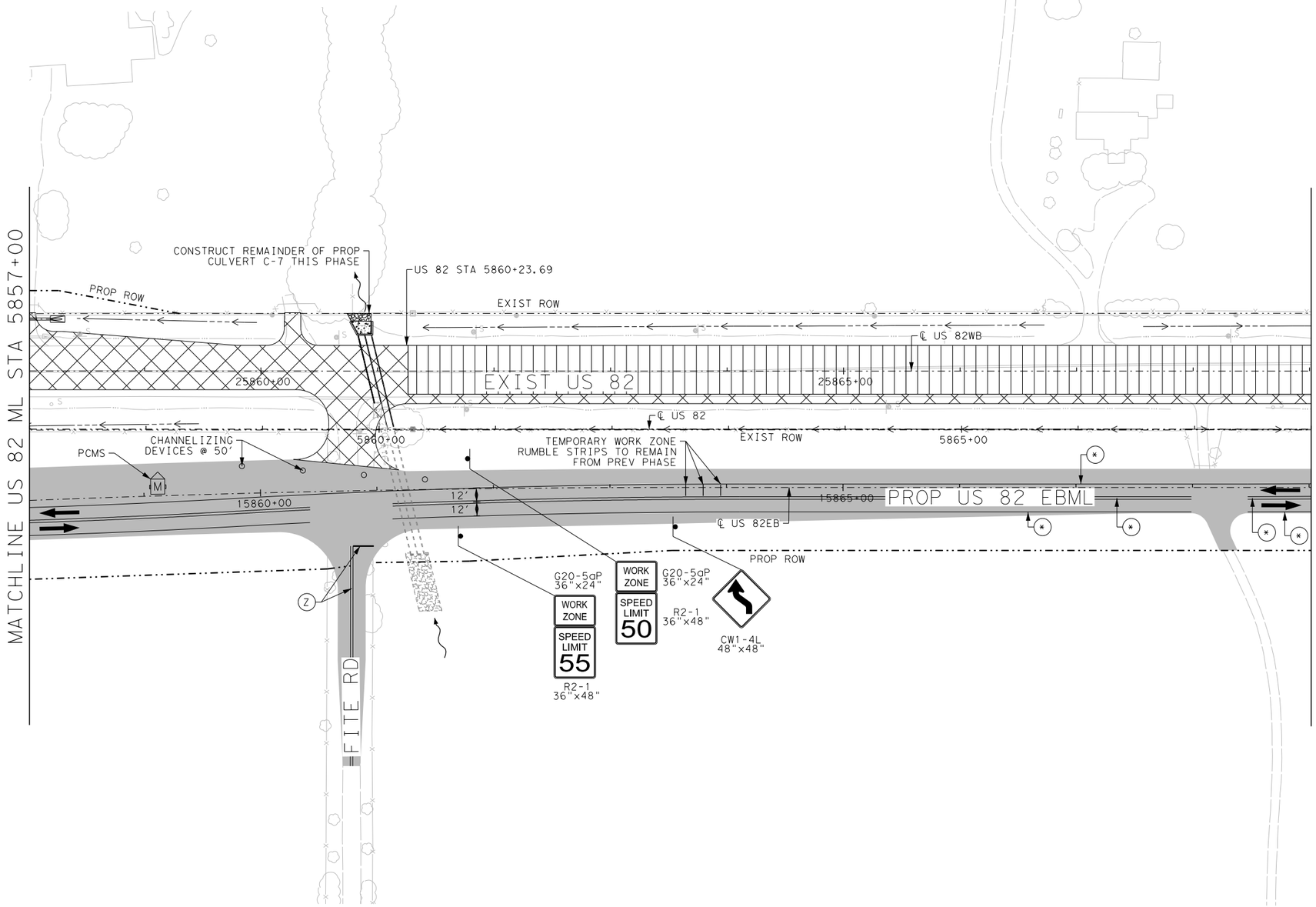

N

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2C
US 82 STA 5857+00 TO STA 5868+00

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	137
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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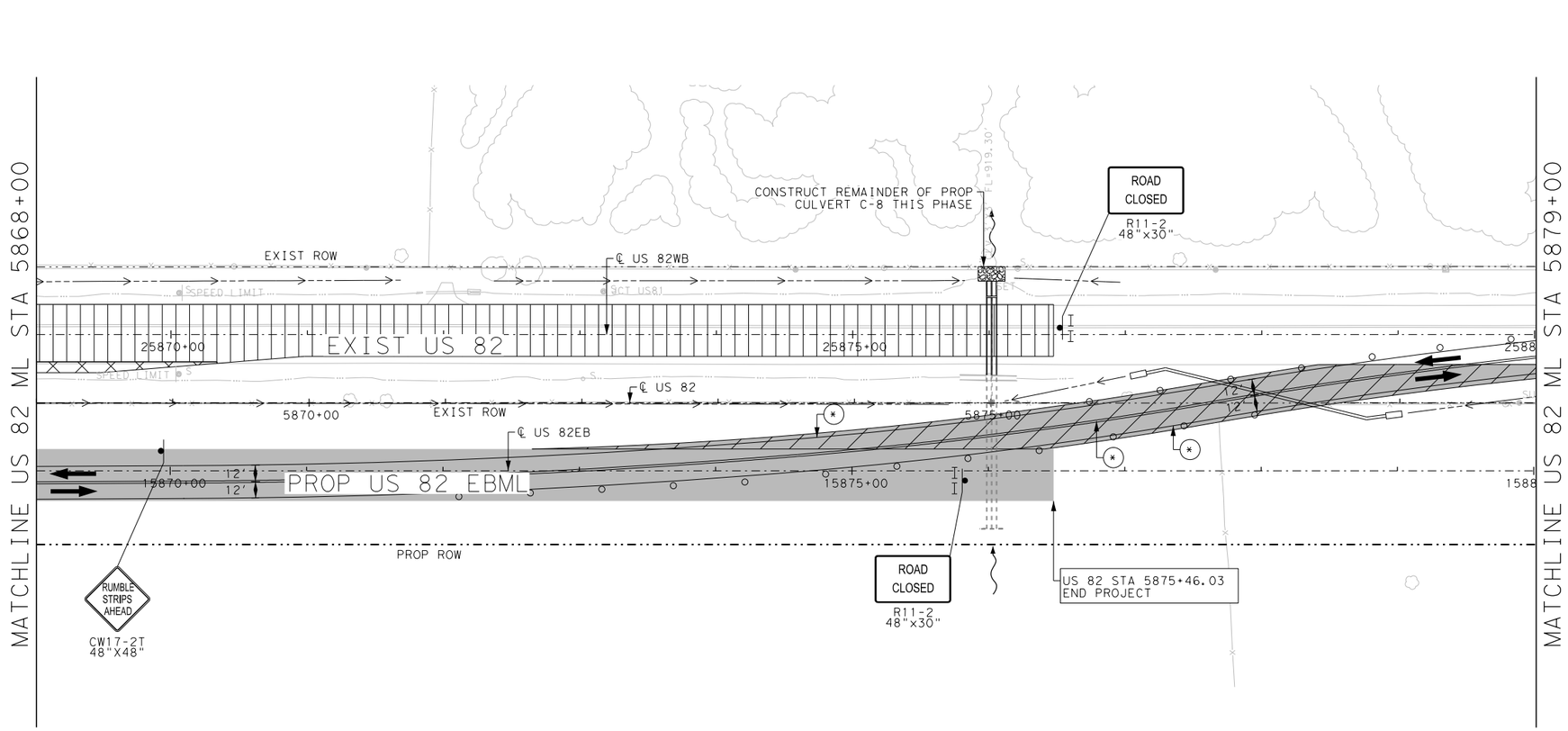


TRAFFIC CONTROL PLAN LEGEND

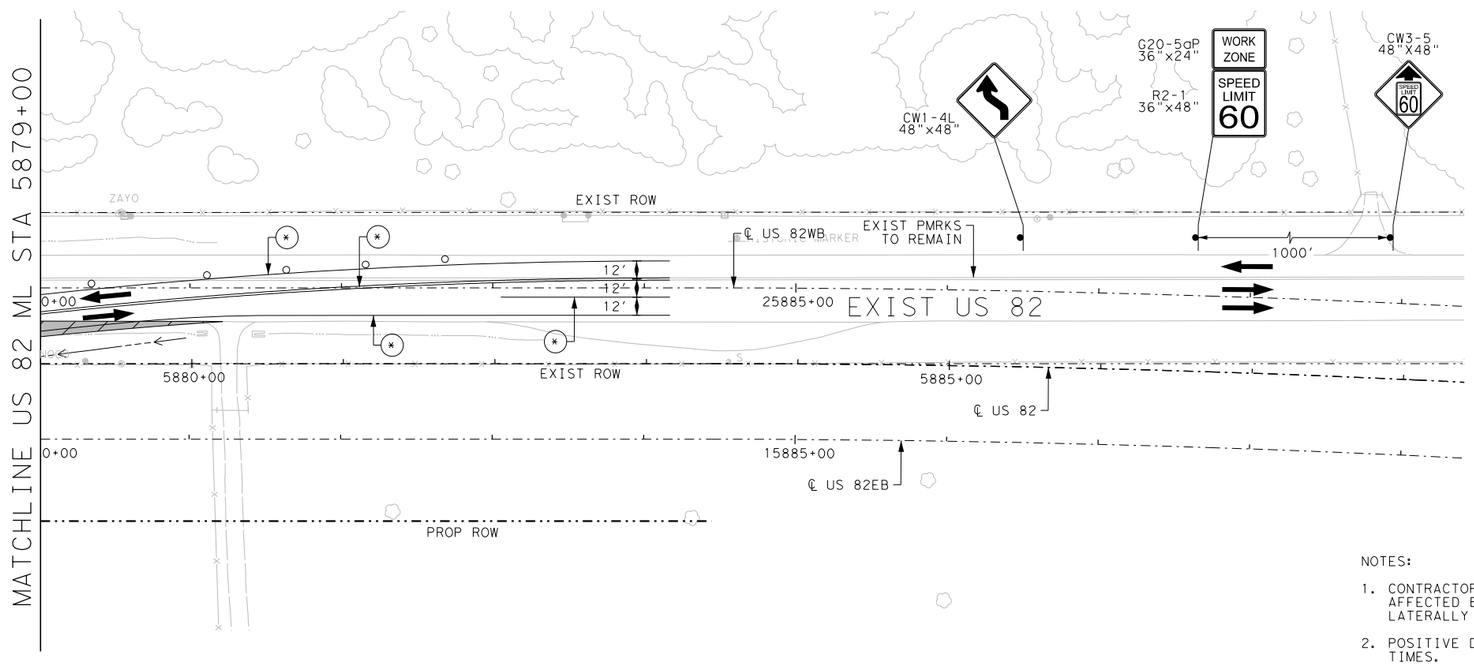
- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK SEE PAVEMENT MARKING PLAN FOR TYPE



NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2C
US 82 STA 5868+00 TO END PROJECT

SHEET 15 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	138
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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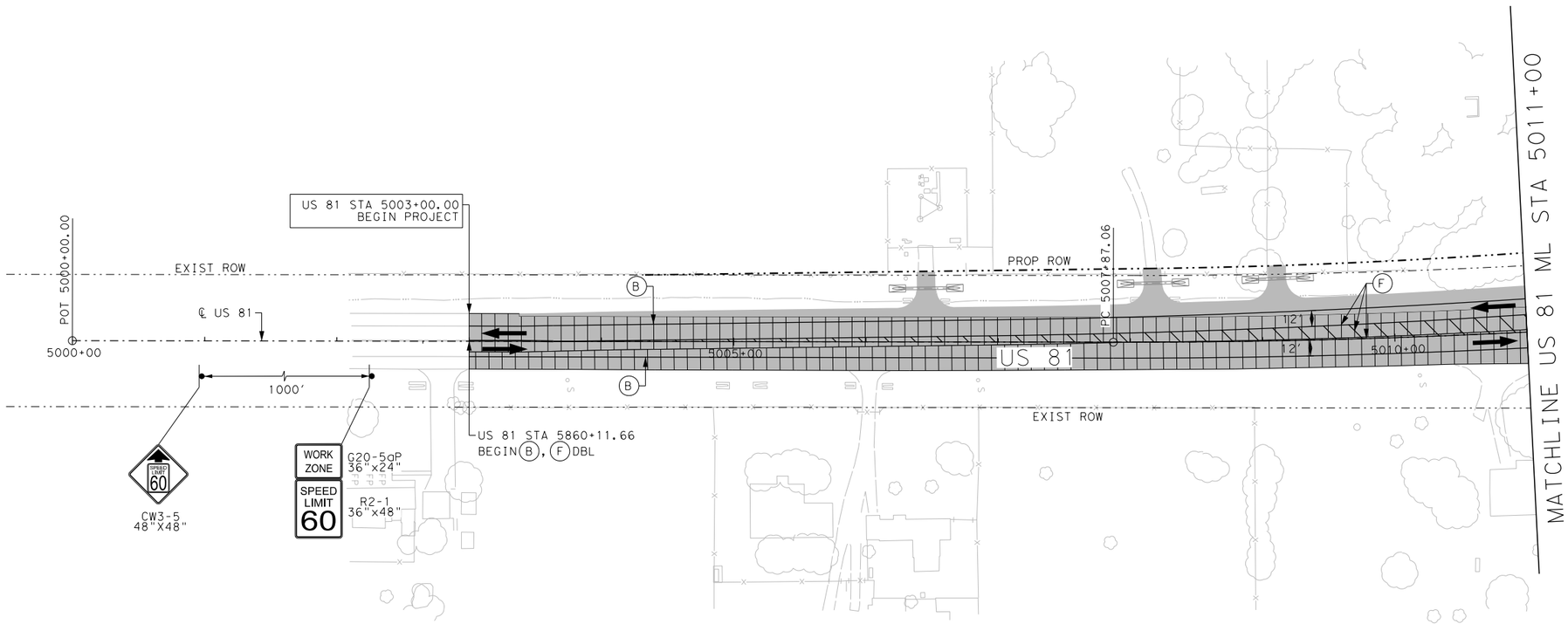

50 0 50 100
SCALE: 1" = 100'

N

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

STATE OF TEXAS
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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2C
US 81 BEGIN PROJECT TO STA 5011+00

SHEET 16 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	139
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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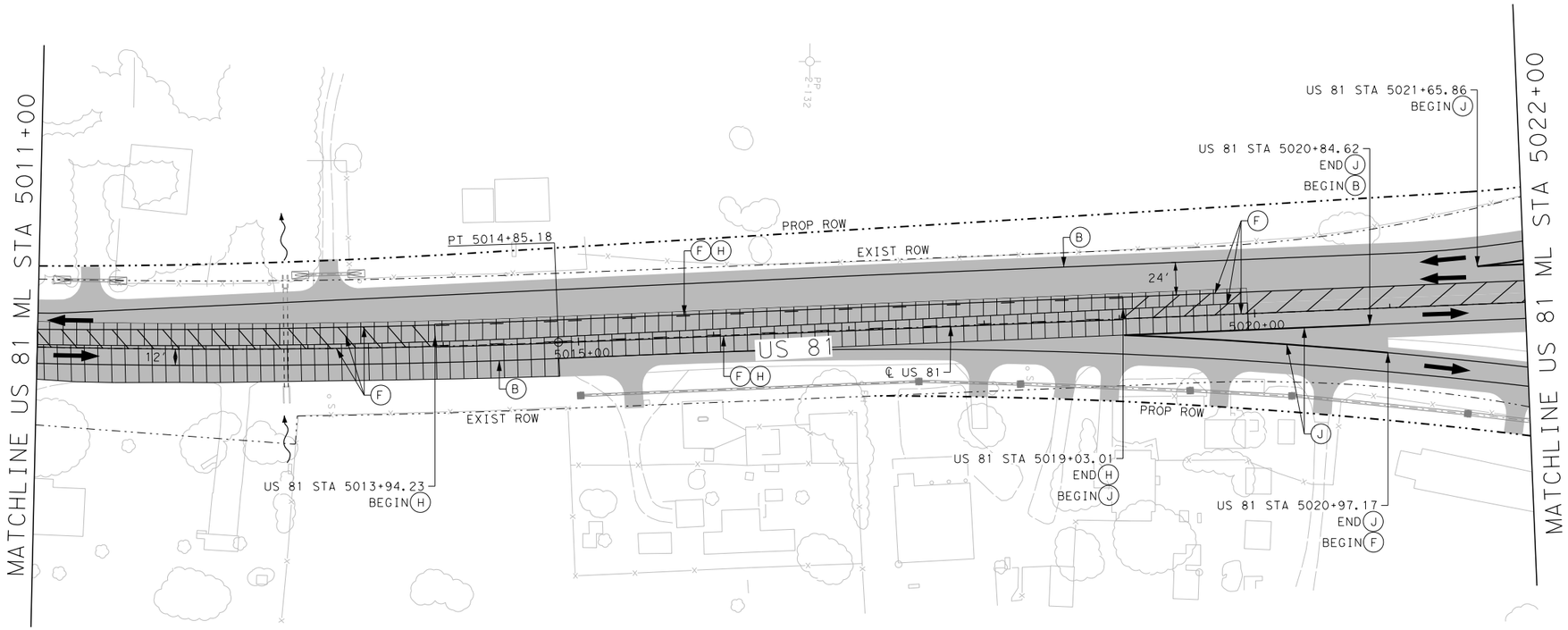

50 0 50 100
SCALE: 1" = 100'

N

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

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FIRM REGISTRATION NO. F-1471

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2C
US 81 STA 5011+00 TO STA 5022+00

SHEET 17 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	140
CHECK JL	CONTROL 0044	SECTION 04	JOB 048	

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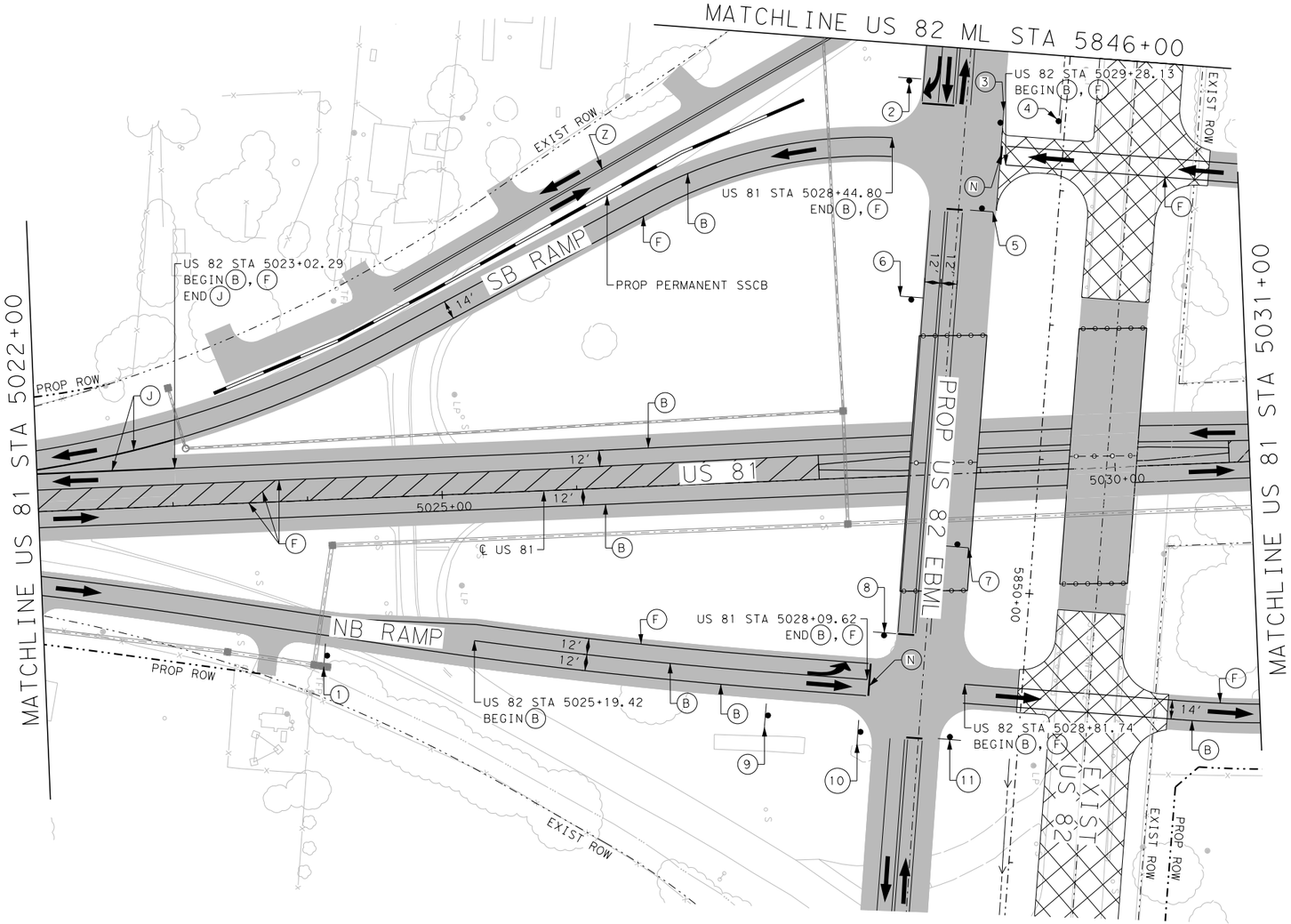

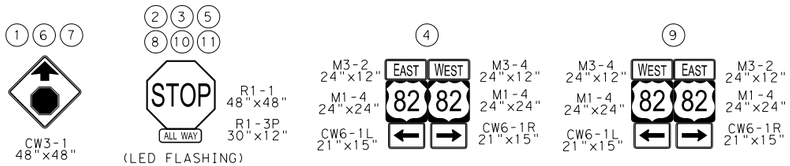

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
2. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.

50 0 50 100
SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

STATE OF TEXAS
IN SUNG HWANG
131159
LICENSED
PROFESSIONAL ENGINEER
10/18/2023

OTHON ENGINEERING
FIRM REGISTRATION NO. F-1471

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2C
US 81 STA 5022+00 TO STA 5031+00

SHEET 18 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	141
CHECK JL	CONTROL	SECTION	JOB	
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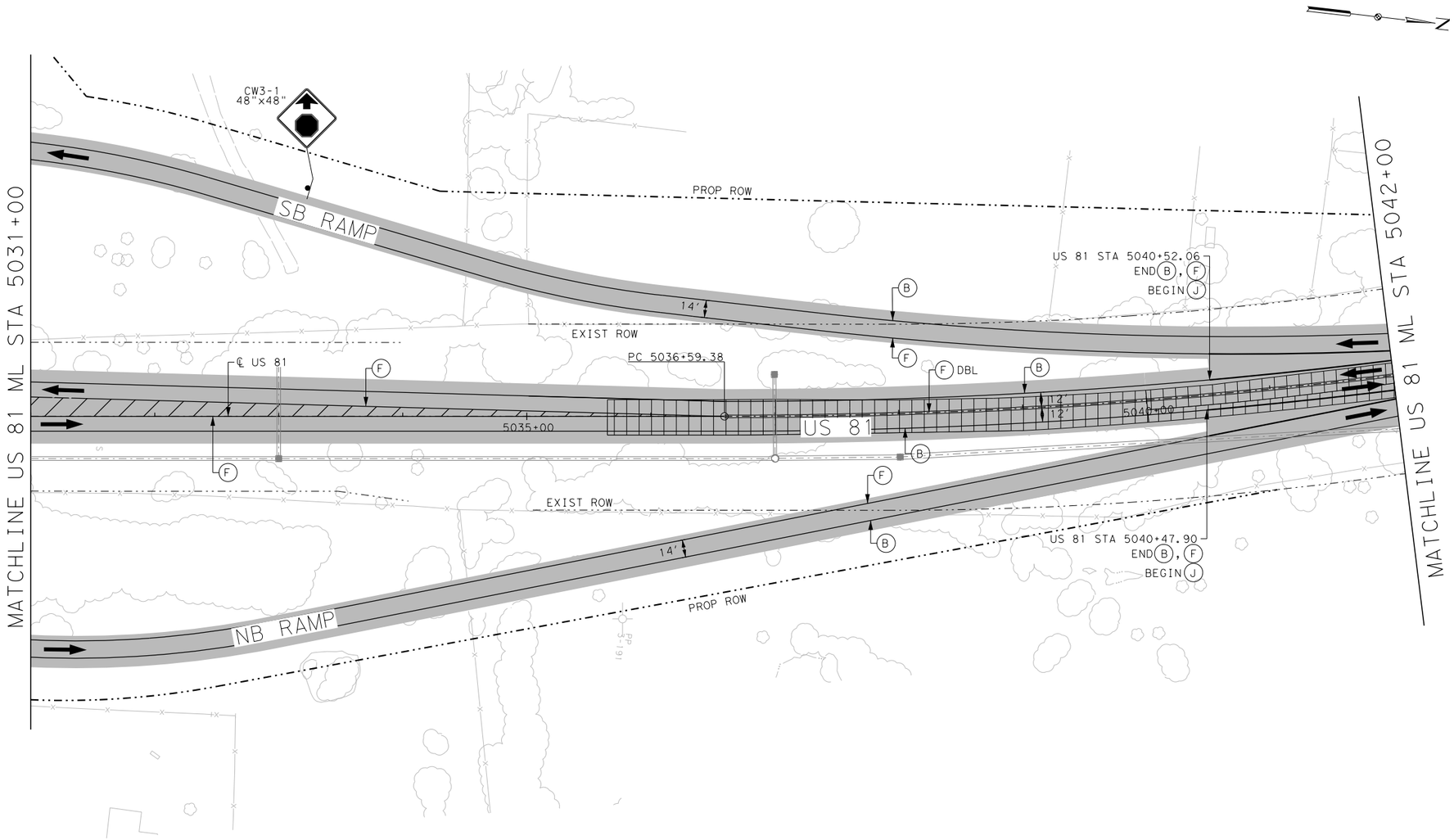
10/18/2023



50 0 50 100
SCALE: 1" = 100'

N

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
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STATE OF TEXAS
IN SUNG HWANG
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LICENSED PROFESSIONAL ENGINEER
10/18/2023

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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2C
US 81 STA 5031+00 TO STA 5042+00

SHEET 19 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	142
CHECK JL	CONTROL	SECTION	JOB	
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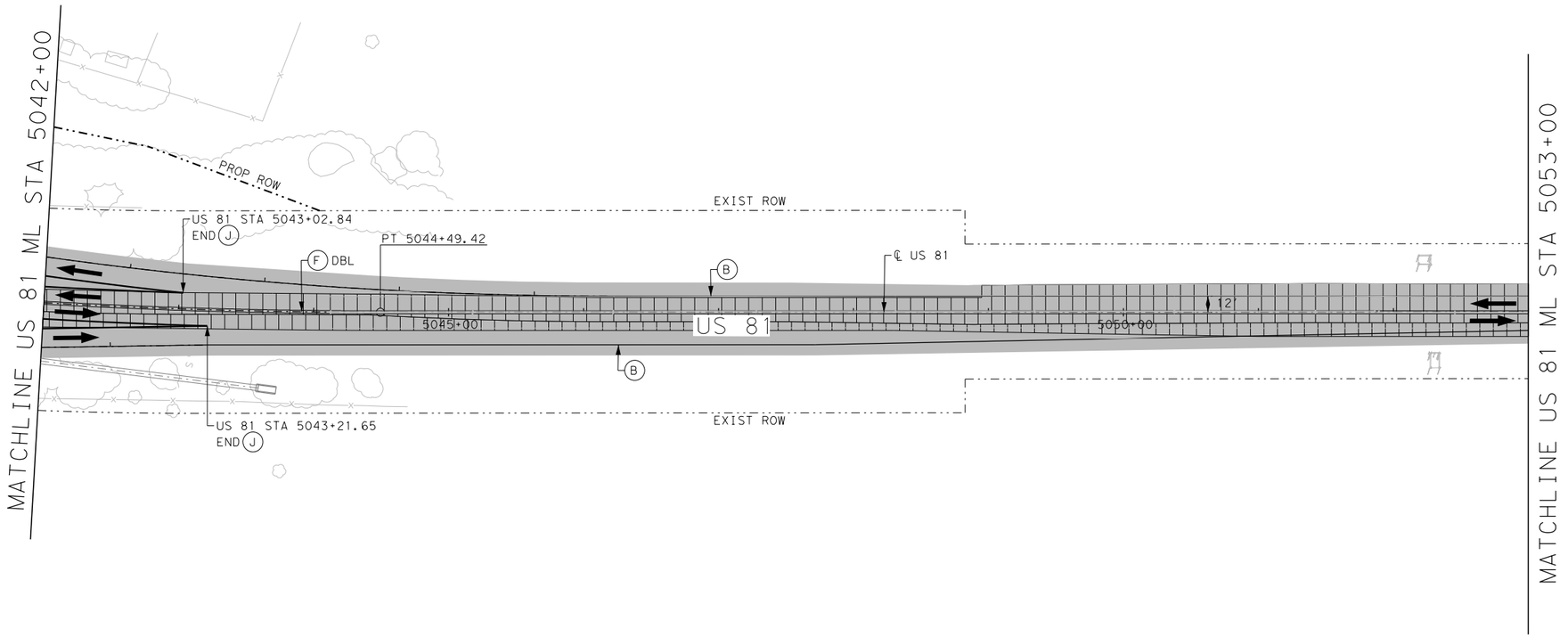

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

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Texas Department of Transportation

US82

TRAFFIC CONTROL PLAN
PHASE 2C
US 81 STA 5042+00 TO STA 5053+00

SHEET 20 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	143
CHECK JL	CONTROL	SECTION	JOB	
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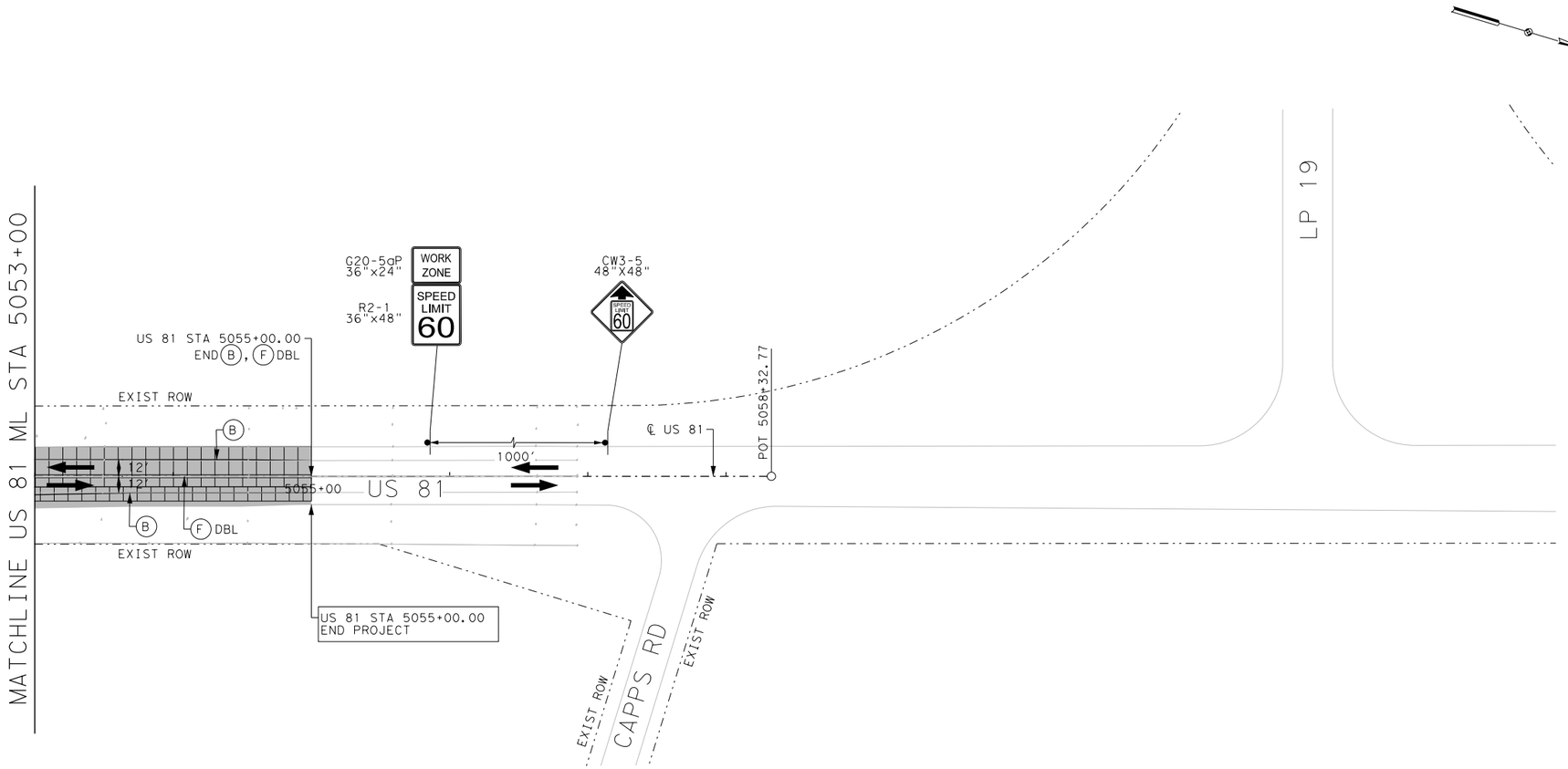

50 0 50 100

SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL, LEVEL UP & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL, LEVEL UP & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE
- DIRECTION OF TRAFFIC
- DITCH FLOW
- CHANNELIZING DEVICES
- TEMP SSCB
- CRASH CUSHION ATTENUATOR (CCA)
- TYPE III BARRICADE

INSTALL WK ZN PMRK

	REMOVABLE	NON-REMOVABLE
W 6" SLD	(A)	(B)
W 6" BRK	(C)	(D)
Y 6" SLD	(E)	(F)
Y 6" BRK	(G)	(H)
W 8" SLD	(I)	(J)
W 12" SLD	(K)	(L)
W 24" SLD	(M)	(N)
Y 12" SLD	(O)	(P)

(*) WK ZN PMRK TO REMAIN FROM PREV PHASE

(Z) INSTALL PERMANENT PMRK
SEE PAVEMENT MARKING PLAN FOR TYPE

NOTES:

1. CONTRACTOR SHALL RELOCATE EXISTING SIGNS AFFECTED BY TEMPORARY PAVEMENT CONSTRUCTION LATERALLY PER STANDARD.
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TRAFFIC CONTROL PLAN
PHASE 2C
US 81 STA 5053+00 TO END PROJECT

SHEET 21 OF 21

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	144
CHECK JL	CONTROL	SECTION	JOB	
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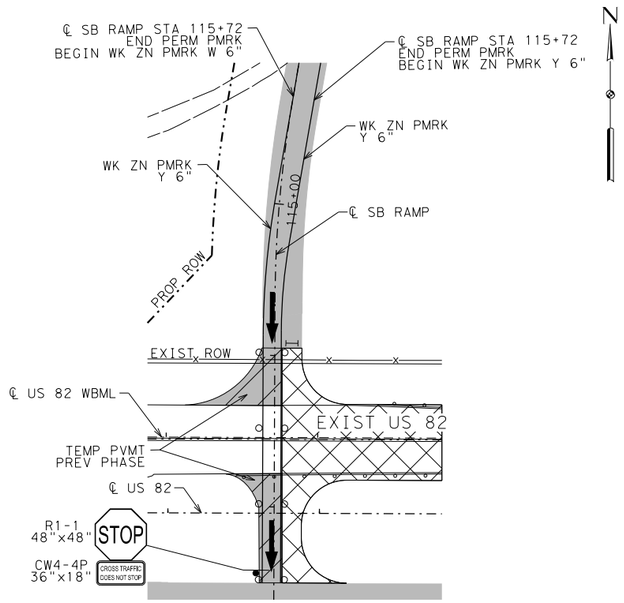
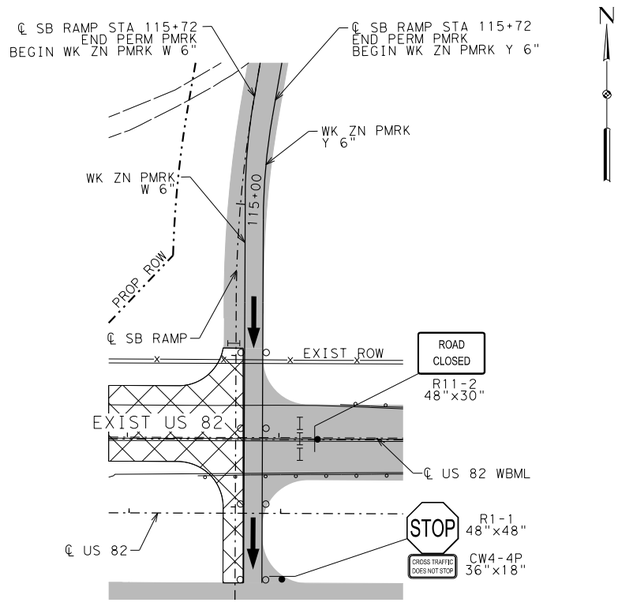
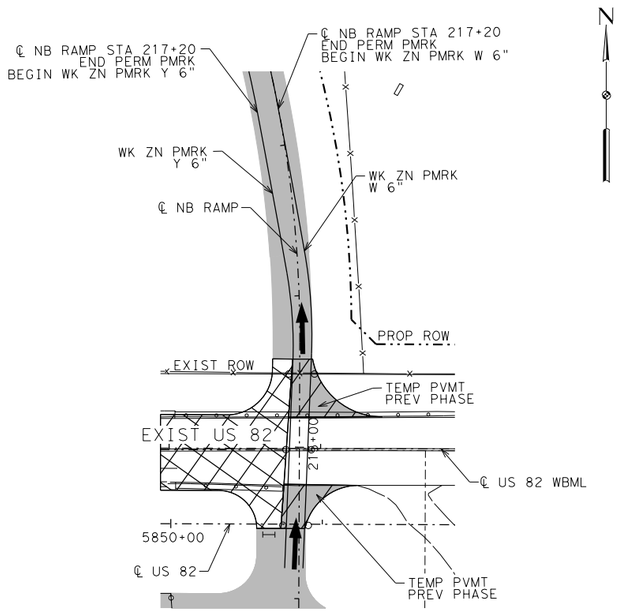


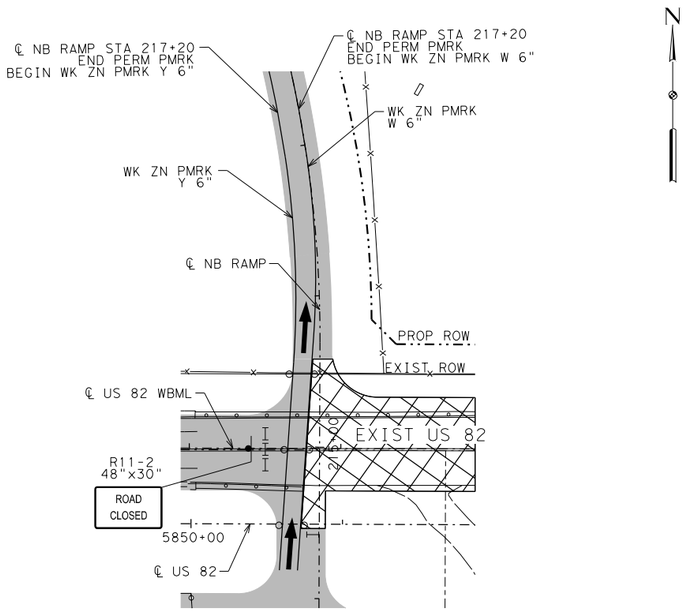
SB RAMP INTERSECTION
STEP 1



SB RAMP INTERSECTION
STEP 2



NB RAMP INTERSECTION
STEP 1



NB RAMP INTERSECTION
STEP 2

50 0 50 100
SCALE: 1" = 100'

TRAFFIC CONTROL PLAN LEGEND

- PERMANENT PAVEMENT THIS PHASE
- MILL & OVERLAY THIS PHASE
- TEMPORARY PAVEMENT THIS PHASE
- TEMPORARY LEVEL-UP THIS PHASE
- PERMANENT PAVEMENT PREV PHASE
- MILL & OVERLAY PREV PHASE
- TEMPORARY PAVEMENT PREV PHASE
- TEMPORARY LEVEL-UP PREV PHASE

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TRAFFIC CONTROL PLAN
PHASE 2C
INTERSECTION DETAIL

SCALE: 1"=100' SHEET 1 OF 1

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	145
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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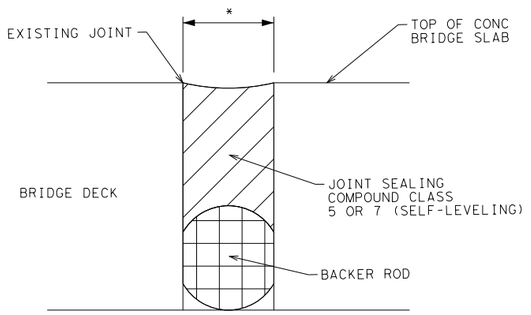
*CONTRACTOR TO VERIFY JOINT SIZES IN THE FIELD PRIOR TO ORDERING BACKER RODS AND JOINT SEALANTS.



CLEAN AND SEAL EXIST JOINTS - PHASE 2C

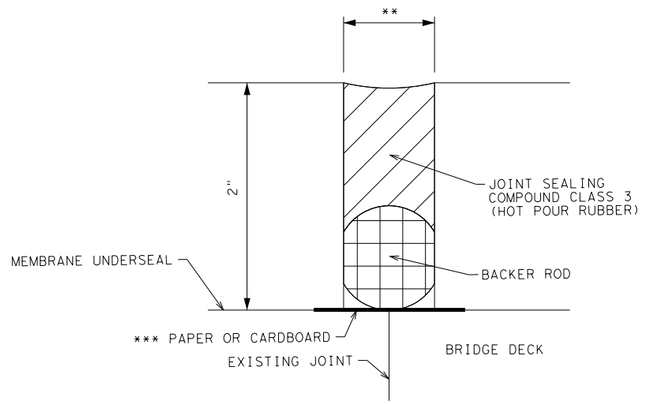
TRANSVERSE EXPANSION JOINT DETAIL
(PRIOR TO 2" OVERLAY)

NOTES:

1. THE JOINTS MUST BE CLEANED IN ACCORDANCE WITH THE ITEM 438. THE CONTRACTOR MUST SUBMIT A STATEMENT FROM THE SEALANT MANUFACTURER SHOWING THE RECOMMENDED EQUIPMENT AND INSTALLATION PROCEDURES TO BE USED.

**MATCH EXISTING JOINT SIZES AS PHASE 2C

***USE PAPER OR CARDBOARD TO SEPARATE PREVIOUS JOINT REPAIR THAT WAS DONE IN PREVIOUS STEP; AS TO NOT DAMAGE.



CLEAN AND SEAL JOINTS - PHASE 2C

TRANSVERSE OVERLAY JOINT DETAIL
(AFTER 2" OVERLAY)

NOTES:

1. SAW CUT OVERLAY TO THE TOP OF THE EXISTING BRIDGE SLAB TO EXPOSE EXISTING JOINT.
2. THE JOINTS MUST BE CLEANED IN ACCORDANCE WITH THE ITEM 438 AND, PRIOR TO BEGINNING OPERATIONS, THE CONTRACTOR MUST SUBMIT A STATEMENT FROM THE SEALANT MANUFACTURER SHOWING THE RECOMMENDED EQUIPMENT AND INSTALLATION PROCEDURES TO BE USED.

TYPICAL WATER PROOFING JOINT SEAL DETAIL

EXIST BRIDGE AT BEAVER CREEK (2 JOINTS)

CLEAN AND SEAL EXIST BRIDGE JOINTS SUMMARY		
LOCATION	438 6001	438 6005
	CLEANING AND SEALING EXISTING JOINTS	CLEANING AND SEALING JOINTS
	LF	LF
EXIST BRIDGE AT BEAVER CREEK (℄ US 82 STA 5768+45.96 TO STA 5769+63.96)	84	84

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TRAFFIC CONTROL PLAN
PHASE 2C
JOINT SEAL DETAILS
EXISTING BRIDGE

SCALE: NTS SHEET 1 OF 1

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
BSS	6	(SEE TITLE SHEET)		US 82
GRAPHICS BSS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK BH	TEXAS	WFS	MONTAGUE	146
CHECK JL	CONTROL	SECTION	JOB	
	0044	04	048	

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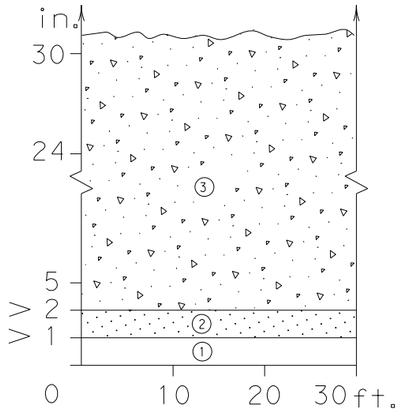
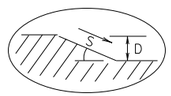
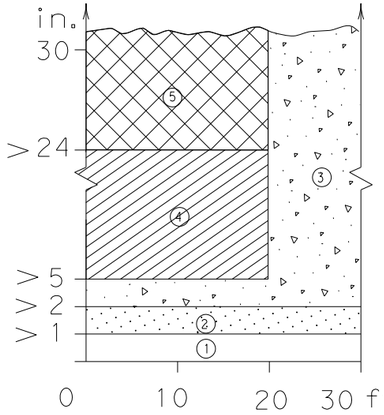
DEFINITION OF TREATMENT ZONES FOR VARIOUS EDGE CONDITIONS

Edge Height (D) in Inches versus Lateral Clearance (Y) in Feet

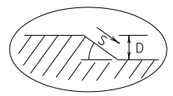


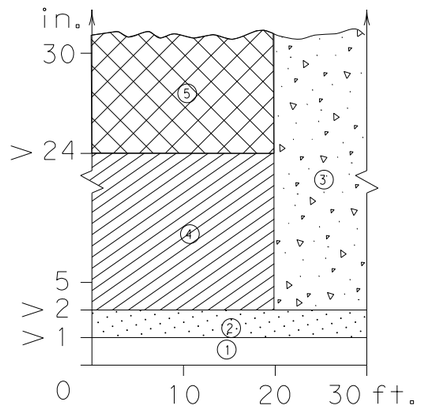
Edge Condition I
S = (3:1) (or flatter)



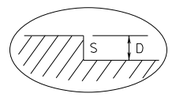


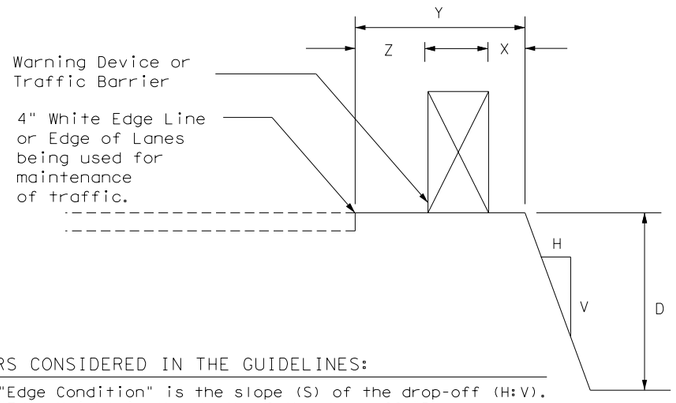
Edge Condition II
S = ((2.99):1) to (1:1)





Edge Condition III
S is steeper than (1:1)





FACTORS CONSIDERED IN THE GUIDELINES:

1. The "Edge Condition" is the slope (S) of the drop-off (H:V). The "Edge Height is the depth of the drop-off "D".

2. Distance "X" is to be the maximum practical under job conditions. Two feet minimum for high speed conditions. Distance "Y" is the lateral clearance from edge of travel lane to edge of dropoff. Distance "Z" does not have a minimum.

3. In addition to the factors considered in the guidelines, each construction zone drop-off situation should be analyzed individually, taking into account other variables, such as: traffic mix, posted speed in the construction zone, horizontal curvature, and the practicality of the treatment options.

4. The conditions for indicating the use of positive or protective barriers are given by Zone-5 and Figure-1. Traffic barriers are primarily applicable for high speed conditions. Urban areas with speeds of 30 mph or less may have a lesser need for signing, delineation, and barriers. Right-angled edges, however, with "D" greater than 2 inches and located within a lateral offset of 6 feet, may indicate a higher level of treatment.

5. If the distance "Y" must be less than 3 feet, the use of a positive barrier may not be feasible. In such a case, consider either: 1) narrowing the lanes to a desired 11 to 12 feet or 10 foot minimum (see CW20-8 sign), or 2) provide an edge slope such as Edge Condition I.

Zone	Treatment Types Guidelines:
①	No treatment
②	CW 8-11 "Uneven Lanes" signs.
③	CW 8-9a Shoulder Drop-Off" or CW 8-11 signs plus vertical panels.
④	CW8-9a or CW 8-11, signs plus drums. Where restricted space precludes the use of drums, use vertical panels. An edge slope to that of the profered Edge Condition I.
⑤	Check indications (Figure-1) for possitive barrier. Where positive barrier is not indicated, the treatment shown above for Zone-4 may be used after consideration of other applicable factors.

Edge Condition Notes:

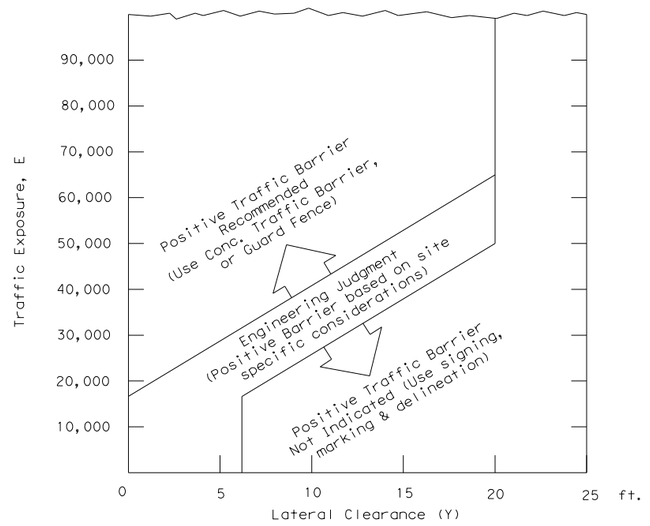
1. Edge Condition I: Most vehicles are able to traverse an edge condition with a slope rate of (3 to 1) or flatter. The slope must be constructed with a compacted material capable of supporting vehicles.

2. Edge Condition II: Most vehicles are able to traverse an edge condition with a slope between (2.99 to 1) and (1 to 1) so long as "D" does not exceed 5 inches. Under-carriage drag on most automobiles will occur when "D" exceeds 6 inches. As "D" exeeds 24 inches, the possibility for rollover is greater in most vehicles.

3. Edge Condition III: When slopes are greater than (1 to 1) and where "D" is greater than 2 inches, a more difficult control factor may exist for some vehicles, if not properly treated. For example, where "D" is greater than 2 inches and up to 24 inches different types of vehicles may experience different steering control at different edge heights. Automobiles might experience more steering control differential when "D" is greater than 2 inches and up to 5 inches. Trucks, particularly those with high loads, have more steering control differential when "D" is greater than 5 inches and up to 24 inches. When "D" exceeds 24 inches, the possibility of rollover is greater for most vehicles.

4. Milling or overlay operations that result in Edge Condition III should not be in place without appropriate warning treatments, and these conditions should not be left in place for extended periods of time.

FIGURE-1: CONDITIONS INDICATING USE OF POSITIVE BARRIER FOR ZONE 5 (▨)



1. E = ADT x T
   Where ADT is that portion of the average daily traffic volume traveling within 20 feet (generally two adjacent lanes) of the edge dropoff condition; and, T is the duration time in years of the dropoff condition.

2. Figure-1 provides a practical approach to the use of positive barriers for the protection of vehicles from pavement drop-offs. Other factors, such as the presence of heavy machinery, construction workers, or the mix and volume of traffic may make the use of positive barriers appropriate, even when the edge condition alone may not justify the use of a barrier.

3. An approved end treatment should be provided for any positive barrier end located within the clear zone.

These guidelines apply to temporary traffic control areas or work zones where continuous pavement edges or drop-offs exists parallel and adjacent to a lane used by traffic. The edge conditions may be present between shoulders and travel lanes, between adjacent or opposing travel lanes, or at intermediate points across the width of the paved surface. Due to the variability in construction operations, tolerances in the variables may be allowed by the engineer. These guidelines do not apply to short term operations. These guidelines do not constitute a rigid standard or policy; rather, they are guidance to be used in conjunction with engineering judgement. These guidelines may be updated on the Design Division's on-line manuals.

Engineer's Seal

STATE OF TEXAS
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10/18/2023

Texas Department of Transportation

Traffic Safety Division Standard

TREATMENT FOR VARIOUS EDGE CONDITIONS

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REVISIONS	0044	04	048	US 82
03-01 08-01 9-21	DIST	COUNTY		SHEET NO.
	WFS	MONTAGUE		147

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BARRICADE AND CONSTRUCTION (BC) STANDARD SHEETS GENERAL NOTES:

1. The Barricade and Construction Standard Sheets (BC sheets) are intended to show typical examples for placement of temporary traffic control devices, construction pavement markings, and typical work zone signs. The information contained in these sheets meet or exceed the requirements shown in the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).

2. The development and design of the Traffic Control Plan (TCP)is the responsibility of the Engineer.

3. The Contractor may propose changes to the TCP that are signed and sealed by a licensed professional engineer for approval. The Engineer may develop, sign and seal Contractor proposed changes.

4. The Contractor is responsible for installing and maintaining the traffic control devices as shown in the plans. The Contractor may not move or change the approximate location of any device without the approval of the Engineer.

5. Geometric design of lane shifts and detours should, when possible, meet the applicable design criteria contained in manuals such as the American Association of State Highway and Transportation Officials (AASHTO), "A Policy on Geometric Design of Highways and Streets," the TxDOT "Roadway Design Manual" or engineering judgment.

6. When projects abut, the Engineer(s) may omit the END ROAD WORK, TRAFFIC FINES DOUBLE, and other advance warning signs if the signing would be redundant and the work areas appear continuous to the motorists. If the adjacent project is completed first, the Contractor shall erect the necessary warning signs as shown on these sheets, the TCP sheets or as directed by the Engineer. The BEGIN ROAD WORK NEXT X MILES sign shall be revised to show appropriate work zone distance.

7. The Engineer may require duplicate warning signs on the median side of divided highways where median width will permit and traffic volumes justify the signing.

8. All signs shall be constructed in accordance with the details found in the "Standard Highway Sign Designs for Texas," latest edition. Sign details not shown in this manual shall be shown in the plans or the Engineer shall provide a detail to the Contractor before the sign is manufactured.

9. The temporary traffic control devices shown in the illustrations of the BC sheets are examples. As necessary, the Engineer will determine the most appropriate traffic control devices to be used.

10. Where highway construction or maintenance work is being undertaken, other than mobile operations as defined by the Texas Manual on Uniform Traffic Control Devices, CSJ limit signs are required. CSJ limit signs are shown on BC(2). The OBEY WARNING SIGNS STATE LAW sign, STAY ALERT TALK OR TEXT LATER and the WORK ZONE TRAFFIC FINES DOUBLE sign with plaque shall be erected in advance of the CSJ limits. The BEGIN ROAD WORK NEXT X MILES, CONTRACTOR and END ROAD WORK signs shall be erected at or near the CSJ limits. For mobile operations, CSJ limit signs are not required.

11. Traffic control devices should be in place only while work is actually in progress or a definite need exists.

12. The Engineer has the final decision on the location of all traffic control devices.

13. Inactive equipment and work vehicles, including workers' private vehicles must be parked away from travel lanes. They should be as close to the right-of-way line as possible, or located behind a barrier or guardrail, or as approved by the Engineer.

WORKER SAFETY NOTES:

1. Workers on foot who are exposed to traffic or to construction equipment within the right-of-way shall wear high-visibility safety apparel meeting the requirements of ISEA "American National Standard for High-Visibility Apparel," or equivalent revisions, and labeled as ANSI 107-2004 standard performance for Class 2 or 3 risk exposure. Class 3 garments should be considered for high traffic volume work areas or night time work.

2. Except in emergency situations, flagger stations shall be illuminated when flagging is used at night.

COMPLIANT WORKZONE TRAFFIC CONTROL DEVICES

1. Only pre-qualified products shall be used. The "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources.

2. Work zone traffic control devices shall be compliant with the Manual for Assessing safety Hardware (MASH).

THE DOCUMENTS BELOW CAN BE FOUND ON-LINE AT http://www.txdot.gov
COMPLIANT WORK ZONE TRAFFIC CONTROL DEVICES LIST (CWZTCD)
DEPARTMENTAL MATERIAL SPECIFICATIONS (DMS)
MATERIAL PRODUCER LIST (MPL)
ROADWAY DESIGN MANUAL - SEE "MANUALS (ONLINE MANUALS)"
STANDARD HIGHWAY SIGN DESIGNS FOR TEXAS (SHSD)
TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD)
TRAFFIC ENGINEERING STANDARD SHEETS

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION GENERAL NOTES AND REQUIREMENTS

BC(1)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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REVISIONS 4-03 7-13	0044	04	048	US 82
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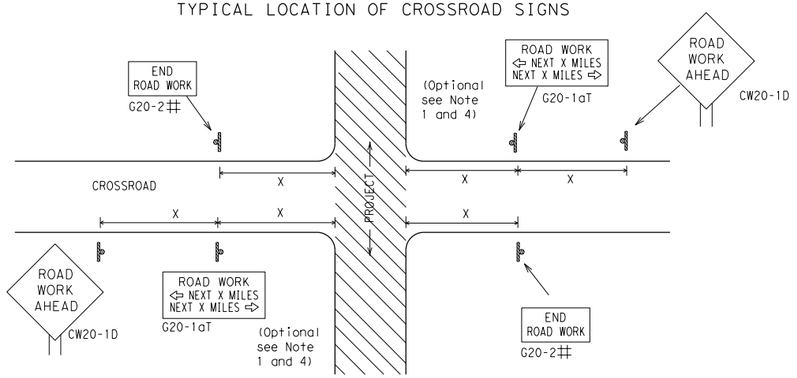
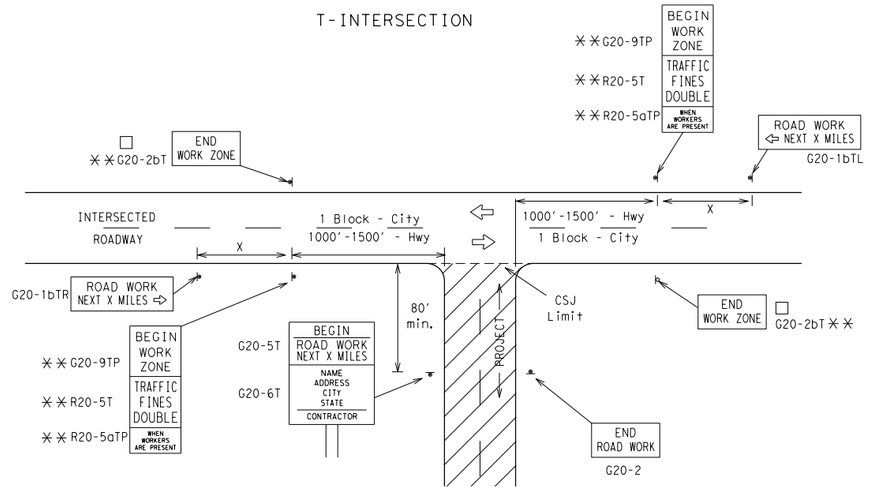
TYPICAL LOCATION OF CROSSROAD SIGNS



May be mounted on back of "ROAD WORK AHEAD"(CW20-1D) sign with approval of Engineer. (See note 2 below)

1. The typical minimum signing on a crossroad approach should be a "ROAD WORK AHEAD" (CW20-1D)sign and a (G20-2) "END ROAD WORK" sign, unless noted otherwise in plans.
2. The Engineer may use the reduced size 36" x 36" ROAD WORK AHEAD (CW20-1D) sign mounted back to back with the reduced size 36" x 18" "END ROAD WORK"(G20-2) sign on low volume crossroads (see Note 4 under "Typical Construction Warning Sign Size and Spacing"). See the "Standard Highway Sign Designs for Texas" manual for sign details. The Engineer may omit the advance warning signs on low volume crossroads. The Engineer will determine whether a road is low volume as per TMUTCD Part 5. This information shall be shown in the plans.
3. Based on existing field conditions, the Engineer/Inspector may require additional signs such as FLAGGER AHEAD, LOOSE GRAVEL, or other appropriate signs. When additional signs are required, these signs will be considered part of the minimum requirements. The Engineer/Inspector will determine the proper location and spacing of any sign not shown on the BC sheets, Traffic Control Plan sheets or the Work Zone Standard Sheets.
4. The "ROAD WORK NEXT X MILES"(G20-1aT)sign shall be required at high volume crossroads to advise motorists of the length of construction in either direction from the intersection. The Engineer will determine whether a roadway is considered high volume.
5. Additional traffic control devices may be shown elsewhere in the plans for higher volume crossroads.
6. When work occurs in the intersection area, appropriate traffic control devices, as shown elsewhere in the plans or as determined by the Engineer/Inspector, shall be in place.

T-INTERSECTION



CSJ LIMITS AT T-INTERSECTION

1. The Engineer will determine the types and location of any additional traffic control devices, such as a flagger and accompanying signs, or other signs, that should be used when work is being performed at or near an intersection.
2. If construction closes the road at a T-intersection, the Contractor shall place the "CONTRACTOR NAME"(G20-6T) sign behind the Type 3 Barricades for the road closure (see BC(10) also). The "ROAD WORK NEXT X MILES" left arrow(G20-1bTL) and "ROAD WORK NEXT X MILES" right arrow (G20-1bTR)" signs shall be replaced by the detour signing called for in the plans.

TYPICAL CONSTRUCTION WARNING SIGN SIZE AND SPACING[1,5,6]

SIZE

Sign Number or Series	Conventional Road	Expressway/ Freeway
CW20[4] CW21 CW22 CW23 CW25	48" x 48"	48" x 48"
CW1, CW2, CW7, CW8, CW9, CW11, CW14	36" x 36"	48" x 48"
CW3, CW4, CW5, CW6, CW8-3, CW10, CW12	48" x 48"	48" x 48"

SPACING

Posted Speed	Sign △ Spacing "X"
MPH	Feet (Apprx.)
30	120
35	160
40	240
45	320
50	400
55	500[2]
60	600[2]
65	700[2]
70	800[2]
75	900[2]
80	1000[2]
✳	✳[3]

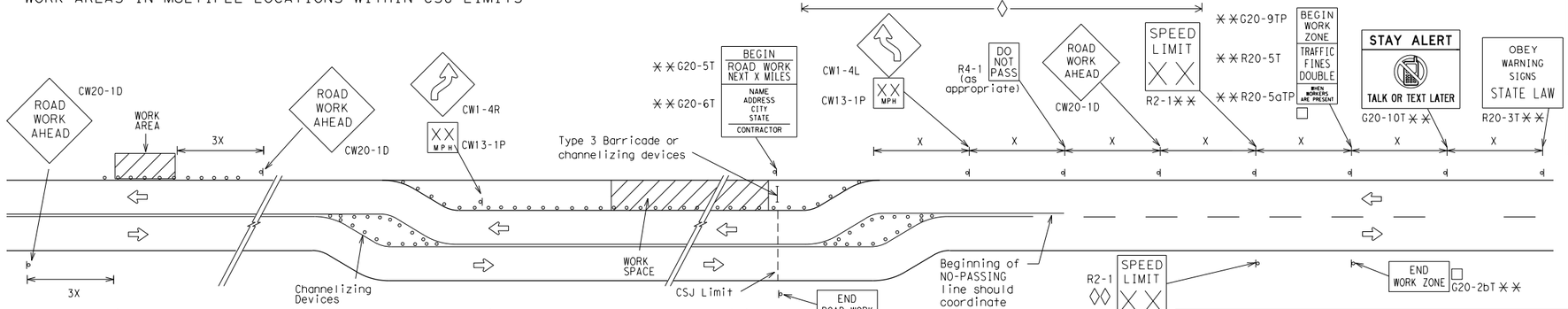
✳ For typical sign spacings on divided highways, expressways and freeways, see Part 6 of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) typical application diagrams or TCP Standard Sheets.

△ Minimum distance from work area to first Advance Warning sign nearest the work area and/or distance between each additional sign.

GENERAL NOTES

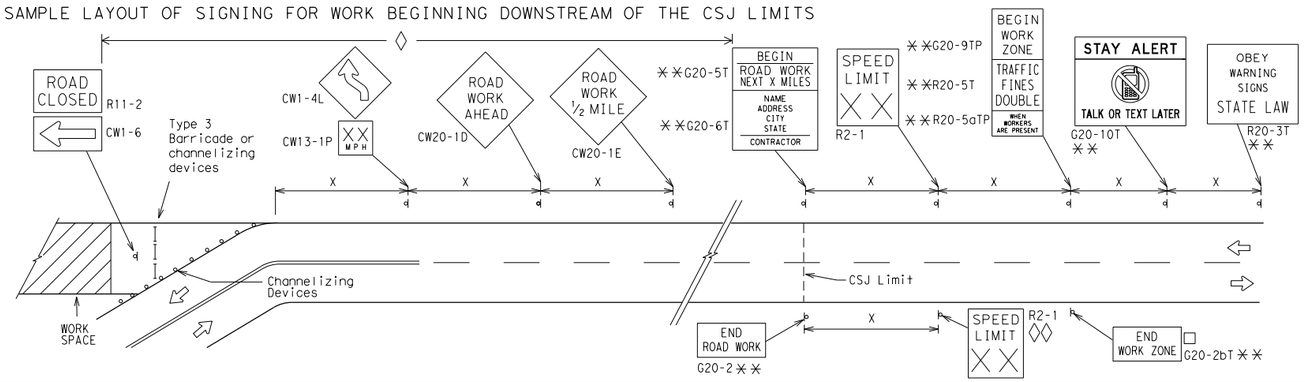
1. Special or larger size signs may be used as necessary.
2. Distance between signs should be increased as required to have 1500 feet advance warning.
3. Distance between signs should be increased as required to have 1/2 mile or more advance warning.
4. 36" x 36" "ROAD WORK AHEAD" (CW20-1D)signs may be used on low volume crossroads at the discretion of the Engineer as per TMUTCD Part 5. See Note 2 under "Typical Location of Crossroad Signs".
5. Only diamond shaped warning sign sizes are indicated.
6. See sign size listing in "TMUTCD", Sign Appendix or the "Standard Highway Sign Designs for Texas" manual for complete list of available sign design sizes.

WORK AREAS IN MULTIPLE LOCATIONS WITHIN CSJ LIMITS



When extended distances occur between minimal work spaces, the Engineer/Inspector should ensure additional "ROAD WORK AHEAD"(CW20-1D)signs are placed in advance of these work areas to remind drivers they are still within the project limits. See the applicable TCP sheets for exact location and spacing of signs and channelizing devices.

SAMPLE LAYOUT OF SIGNING FOR WORK BEGINNING DOWNSTREAM OF THE CSJ LIMITS



NOTES

The Contractor shall determine the appropriate distance to be placed on the G20-1 series signs and "BEGIN ROAD WORK NEXT X MILES"(G20-5T)sign for each specific project. This distance shall replace the "X" and shall be rounded to the nearest whole mile with the approval of the Engineer. No decimals shall be used.

□ The "BEGIN WORK ZONE"(G20-9TP) and "END WORK ZONE" (G20-2bT) shall be used as shown on the sample layout when advance signs are required outside the CSJ Limits. They inform the motorist of entering or leaving a part of the work zone lying outside the CSJ Limits where traffic fines may double if workers are present.

✳✳ CSJ limit signing is required for highway construction and maintenance work, with the exception of mobile operations.

◊ Area for placement of "ROAD WORK AHEAD" (CW20-1D)sign and other signs or devices as called for on the Traffic Control Plan.

◊◊ Contractor will install a regulatory speed limit sign at the end of the work zone.

LEGEND	
⊢⊣	Type 3 Barricade
○ ○ ○	Channelizing Devices
▬	Sign
X	See Typical Construction Warning Sign Size and Spacing chart or the TMUTCD for sign spacing requirements.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PROJECT LIMIT

BC(2)-21

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REVISIONS	0044	04	048	US 82
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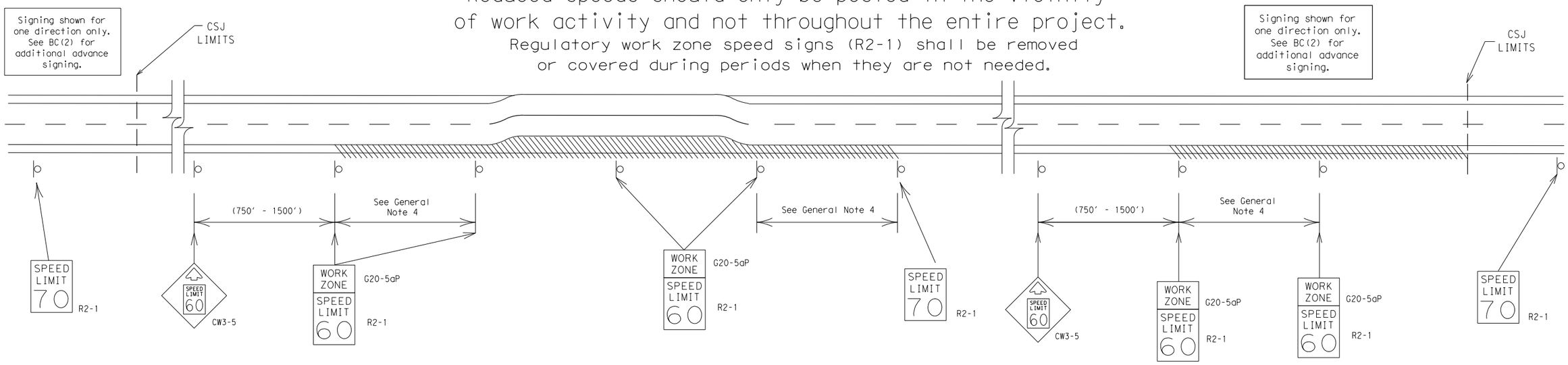
TYPICAL APPLICATION OF WORK ZONE SPEED LIMIT SIGNS

Work zone speed limits shall be regulatory, established in accordance with the "Procedures for Establishing Speed Zones," and approved by the Texas Transportation Commission, or by City Ordinance when within Incorporated City Limits.

Reduced speeds should only be posted in the vicinity of work activity and not throughout the entire project.

Regulatory work zone speed signs (R2-1) shall be removed or covered during periods when they are not needed.



GUIDANCE FOR USE:

LONG/INTERMEDIATE TERM WORK ZONE SPEED LIMITS

This type of work zone speed limit should be included on the design of the traffic control plans when restricted geometrics with a lower design speed are present in the work zone and modification of the geometrics to a higher design speed is not feasible.

Long/Intermediate Term Work Zone Speed Limit signs, when approved as described above, should be posted and visible to the motorist when work activity is present. Work activity may also be defined as a change in the roadway that requires a reduced speed for motorists to safely negotiate the work area, including:

a) rough road or damaged pavement surface
b) substantial alteration of roadway geometrics (diversions)
c) construction detours
d) grade
e) width
f) other conditions readily apparent to the driver

As long as any of these conditions exist, the work zone speed limit signs should remain in place.

SHORT TERM WORK ZONE SPEED LIMITS

This type of work zone speed limit may be included on the design of the traffic control plans when workers or equipment are not behind concrete barrier, when work activity is within 10 feet of the traveled way or actually in the traveled way.

Short Term Work Zone Speed Limit signs should be posted and visible to the motorists only when work activity is present. When work activity is not present, signs shall be removed or covered.
(See Removing or Covering on BC(4)).

GENERAL NOTES

1. Regulatory work zone speed limits should be used only for sections of construction projects where speed control is of major importance.
2. Regulatory work zone speed limit signs shall be placed on supports at a 7 foot minimum mounting height.
3. Speed zone signs are illustrated for one direction of travel and are normally posted for each direction of travel.
4. Frequency of work zone speed limit signs should be:
   40 mph and greater 0.2 to 2 miles
   35 mph and less 0.2 to 1 mile
5. Regulatory speed limit signs shall have black legend and border on a white reflective background (See "Reflective Sheeting" on BC(4)).
6. Fabrication, erection and maintenance of the"ADVANCE SPEED LIMIT"(CW3-5)sign, "WORK ZONE"(G20-5aP) plaque and the "SPEED LIMIT"(R2-1)signs shall not be paid for directly, but shall be considered subsidiary to Item 502.
7. Turning signs from view, laying signs over or down will not be allowed, unless as otherwise noted under "REMOVING OR COVERING" on BC(4).
8. Techniques that may help reduce traffic speeds include but are not limited to:
   A. Law enforcement.
   B. Flagger stationed next to sign.
   C. Portable changeable message sign (PCMS).
   D. Low-power (drone) radar transmitter.
   E. Speed monitor trailers or signs.
9. Speeds shown on details above are for illustration only. Work Zone Speed Limits should only be posted as approved for each project.
10. For more specific guidance concerning the type of work, work zone conditions and factors impacting allowable regulatory construction speed zone reduction see TxDOT form #1204 in the TxDOT e-form system.

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Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION WORK ZONE SPEED LIMIT

BC(3)-21

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	WFS	MONTAGUE		150

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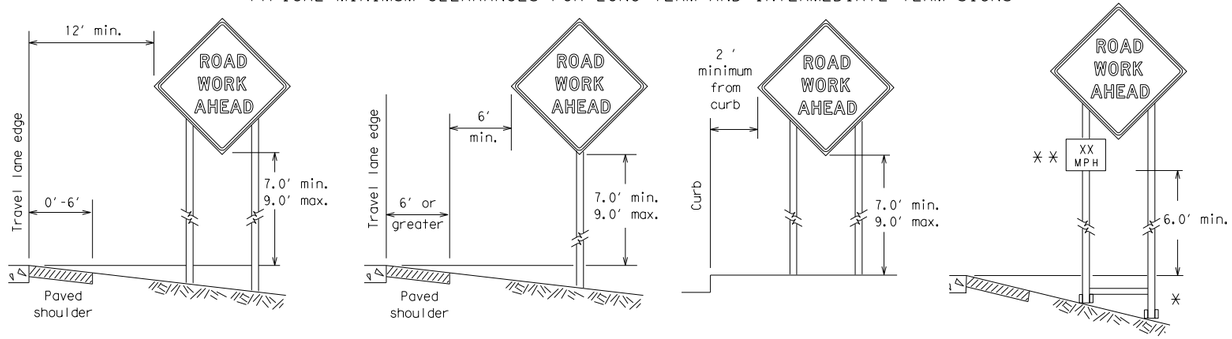
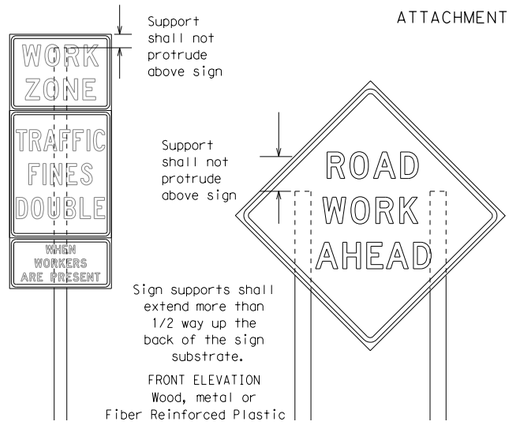
TYPICAL MINIMUM CLEARANCES FOR LONG TERM AND INTERMEDIATE TERM SIGNS

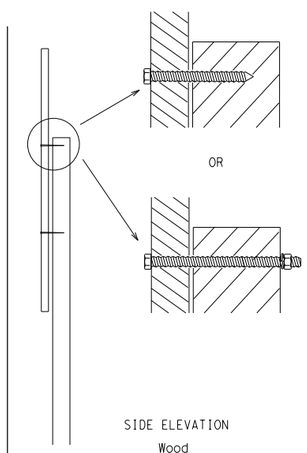


⁎ When placing skid supports on unlevel ground, the leg post lengths must be adjusted so the sign appears straight and plumb. Objects shall NOT be placed under skids as a means of leveling.

⁎⁎ When plaques are placed on dual-leg supports, they should be attached to the upright nearest the travel lane. Supplemental plaques (advisory or distance) should not cover the surface of the parent sign.

ATTACHMENT FOR SIGN SUPPORTS





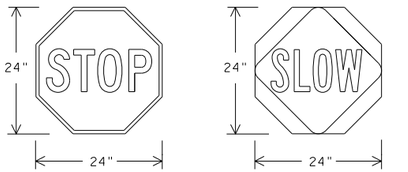
Attachment to wooden supports will be by bolts and nuts or screws. Use TxDOT's or manufacturer's recommended procedures for attaching sign substrates to other types of sign supports

Nails shall NOT be allowed. Each sign shall be attached directly to the sign support. Multiple signs shall not be joined or spliced by any means. Wood supports shall not be extended or repaired by splicing or other means.

Splicing embedded perforated square metal tubing in order to extend post height will only be allowed when the splice is made using four bolts, two above and two below the spice point. Splice must be located entirely behind the sign substrate, not near the base of the support. Splice insert lengths should be at least 5 times nominal post size, centered on the splice and of at least the same gauge material.

STOP/SLOW PADDLES

1. STOP/SLOW paddles are the primary method to control traffic by flaggers. The STOP/SLOW paddle size should be 24" x 24".
2. STOP/SLOW paddles shall be retroreflectorized when used at night.
3. STOP/SLOW paddles may be attached to a staff with a minimum length of 6' to the bottom of the sign.
4. Any lights incorporated into the STOP or SLOW paddle faces shall only be as specifically described in Section 6E.03 Hand Signaling Devices in the TMUTCD.



Background - Red
Legend & Border - White

Background - Orange
Legend & Border - Black

SHEETING REQUIREMENTS (WHEN USED AT NIGHT)		
USAGE	COLOR	SIGN FACE MATERIAL
BACKGROUND	RED	TYPE B OR C SHEETING
BACKGROUND	ORANGE	TYPE B_{FL} OR C_{FL} SHEETING
LEGEND & BORDER	WHITE	TYPE B OR C SHEETING
LEGEND & BORDER	BLACK	ACRYLIC NON-REFLECTIVE FILM

CONTRACTOR REQUIREMENTS FOR MAINTAINING PERMANENT SIGNS WITHIN THE PROJECT LIMITS

1. Permanent signs are used to give notice of traffic laws or regulations, call attention to conditions that are potentially hazardous to traffic operations, show route designations, destinations, directions, distances, services, points of interest, and other geographical, recreational, specific service (LOGO), or cultural information. Drivers proceeding through a work zone need the same, if not better route guidance as normally installed on a roadway without construction.
2. When permanent regulatory or warning signs conflict with work zone conditions, remove or cover the permanent signs until the permanent sign message matches the roadway condition. For details for covering large guide signs see the TS-CD standard.
3. When existing permanent signs are moved and relocated due to construction purposes, they shall be visible to motorists at all times.
4. If existing signs are to be relocated on their original supports, they shall be installed on crashworthy bases as shown on the SMD Standard sheets. The signs shall meet the required mounting heights shown on the BC Sheets or the SMD Standards. This work should be paid for under the appropriate pay item for relocating existing signs.
5. If permanent signs are to be removed and relocated using temporary supports, the Contractor shall use crashworthy supports as shown on the BC standard sheets, TLRS standard sheets or the CWZTCD list. The signs shall meet the required mounting heights shown on the BC, or the SMD standard sheets during construction. This work should be paid for under the appropriate pay item for relocating existing signs.
6. Any sign or traffic control device that is struck or damaged by the Contractor or his/her construction equipment shall be replaced as soon as possible by the Contractor to ensure proper guidance for the motorists. This will be subsidiary to Item 502.

GENERAL NOTES FOR WORK ZONE SIGNS

1. Contractor shall install and maintain signs in a straight and plumb condition and/or as directed by the Engineer.
2. Wooden sign posts shall be painted white.
3. Barricades shall NOT be used as sign supports.
4. All signs shall be installed in accordance with the plans or as directed by the Engineer. Signs shall be used to regulate, warn, and guide the traveling public safely through the work zone.
5. The Contractor may furnish either the sign design shown in the plans or in the "Standard Highway Sign Designs for Texas" (SHSD). The Engineer/Inspector may require the Contractor to furnish other work zone signs that are shown in the TMUTCD but may have been omitted from the plans. Any variation in the plans shall be documented by written agreement between the Engineer and the Contractor's Responsible Person. All changes must be documented in writing before being implemented. This can include documenting the changes in the Inspector's TxDOT diary and having both the Inspector and Contractor initial and date the agreed upon changes.
6. The Contractor shall furnish sign supports listed in the "Compliant Work Zone Traffic Control Device List" (CWZTCD) for small roadside signs. Supports for temporary large roadside signs shall meet the requirements detailed on the Temporary Large Roadside Signs (TLRS) standard sheets.The Contractor shall install the sign support in accordance with the manufacturer's recommendations. If there is a question regarding installation procedures, the Contractor shall furnish the Engineer a copy of the manufacturer's installation recommendations so the Engineer can verify the correct procedures are being followed.
7. The Contractor is responsible for installing signs on approved supports and replacing signs with damaged or cracked substrates and/or damaged or marred reflective sheeting as directed by the Engineer/Inspector.
8. Identification markings may be shown only on the back of the sign substrate. The maximum height of letters and/or company logos used for identification shall be 1 inch.
9. The Contractor shall replace damaged wood posts. New or damaged wood sign posts shall not be spliced.

DURATION OF WORK (as defined by the "Texas Manual on Uniform Traffic Control Devices" Part 6)

1. The types of sign supports, sign mounting height,the size of signs, and the type of sign substrates can vary based on the type of work being performed. The Engineer is responsible for selecting the appropriate size sign for the type of work being performed. The Contractor is responsible for ensuring the sign support, sign mounting height and substrate meets manufacturer's recommendations in regard to crashworthiness and duration of work requirements.
   a. Long-term stationary - work that occupies a location more than 3 days.
   b. Intermediate-term stationary - work that occupies a location more than one daylight period up to 3 days, or nighttime work lasting more than one hour.
   c. Short-term stationary - daytime work that occupies a location for more than 1 hour in a single daylight period.
   d. Short, duration - work that occupies a location up to 1 hour.
   e. Mobile - work that moves continuously or intermittently (stopping for up to approximately 15 minutes.)

SIGN MOUNTING HEIGHT

1. The bottom of Long-term/Intermediate-term signs shall be at least 7 feet, but not more than 9 feet, above the paved surface, except as shown for supplemental plaques mounted below other signs.
2. The bottom of Short-term/Short Duration signs shall be a minimum of 1 foot above the pavement surface but no more than 2 feet above the ground.
3. Long-term/Intermediate-term Signs may be used in lieu of Short-term/Short Duration signing.
4. Short-term/Short Duration signs shall be used only during daylight and shall be removed at the end of the workday or raised to appropriate Long-term/Intermediate sign height.
5. Regulatory signs shall be mounted at least 7 feet, but not more than 9 feet, above the paved surface regardless of work duration.

SIZE OF SIGNS

1. The Contractor shall furnish the sign sizes shown on BC (2) unless otherwise shown in the plans or as directed by the Engineer.

SIGN SUBSTRATES

1. The Contractor shall ensure the sign substrate is installed in accordance with the manufacturer's recommendations for the type of sign support that is being used. The CWZTCD lists each substrate that can be used on the different types and models of sign supports.
2. "Mesh" type materials are NOT an approved sign substrate, regardless of the tightness of the weave.
3. All wooden individual sign panels fabricated from 2 or more pieces shall have one or more plywood cleat, 1/2" thick by 6" wide, fastened to the back of the sign and extending fully across the sign. The cleat shall be attached to the back of the sign using wood screws that do not penetrate the face of the sign panel. The screws shall be placed on both sides of the splice and spaced at 6" centers. The Engineer may approve other methods of splicing the sign face.

REFLECTIVE SHEETING

1. All signs shall be retroreflective and constructed of sheeting meeting the color and retro-reflectivity requirements of DMS-8300 for rigid signs or DMS-8310 for roll-up signs. The web address for DMS specifications is shown on BC(1).
2. White sheeting, meeting the requirements of DMS-8300 Type A, shall be used for signs with a white background.
3. Orange sheeting, meeting the requirements of DMS-8300 Type B_{FL} or Type C_{FL}, shall be used for rigid signs with orange backgrounds.

SIGN LETTERS

1. All sign letters and numbers shall be clear, and open rounded type uppercase alphabet letters as approved by the Federal Highway Administration (FHWA) and as published in the "Standard Highway Sign Design for Texas" manual. Signs, letters and numbers shall be of first class workmanship in accordance with Department Standards and Specifications.

REMOVING OR COVERING

1. When sign messages may be confusing or do not apply, the signs shall be removed or completely covered.
2. Long-term stationary or intermediate stationary signs installed on square metal tubing may be turned away from traffic 90 degrees when the sign message is not applicable. This technique may not be used for signs installed in the median of divided highways or near any intersections where the sign may be seen from approaching traffic.
3. Signs installed on wooden skids shall not be turned at 90 degree angles to the roadway. These signs should be removed or completely covered when not required.
4. When signs are covered, the material used shall be opaque, such as heavy mil black plastic, or other materials which will cover the entire sign face and maintain their opaque properties under automobile headlights at night, without damaging the sign sheeting.
5. Burlap shall NOT be used to cover signs.
6. Duct tape or other adhesive material shall NOT be affixed to a sign face.
7. Signs and anchor stubs shall be removed and holes backfilled upon completion of work.

SIGN SUPPORT WEIGHTS

1. Where sign supports require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand should be used.
2. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight.
3. Rock, concrete, iron, steel or other solid objects shall not be permitted for use as sign support weights.
4. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs.
5. Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall NOT be used.
6. Rubber ballasts designed for channelizing devices should not be used for ballast on portable sign supports. Sign supports designed and manufactured with rubber bases may be used when shown on the CWZTCD list.
7. Sandbags shall only be placed along or laid over the base supports of the traffic control device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners. Sandbags shall be placed along the length of the skids to weigh down the sign support.
8. Sandbags shall NOT be placed under the skid and shall not be used to level sign supports placed on slopes.

FLAGS ON SIGNS

1. Flags may be used to draw attention to warning signs. When used, the flag shall be 16 inches square or larger and shall be orange or fluorescent red-orange in color. Flags shall not be allowed to cover any portion of the sign face.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION TEMPORARY SIGN NOTES

BC(4)-21

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REVISIONS	0044	04	048	US 82
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7-13 5-21	WFS	MONTAGUE		151

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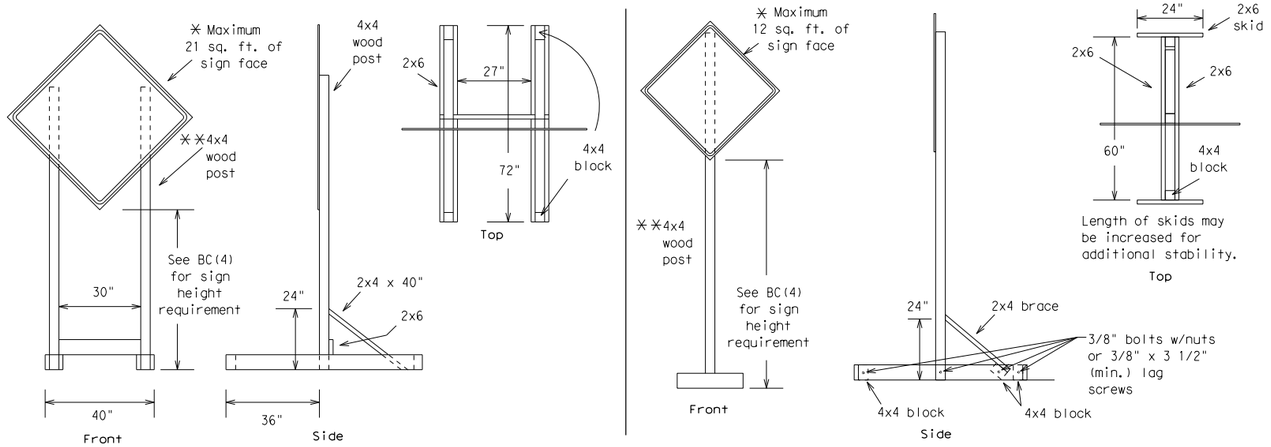
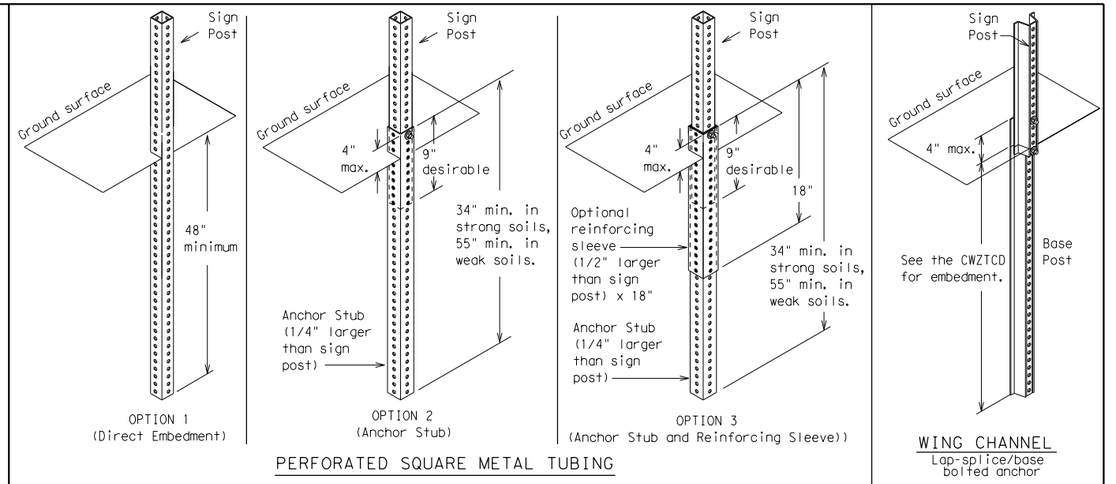


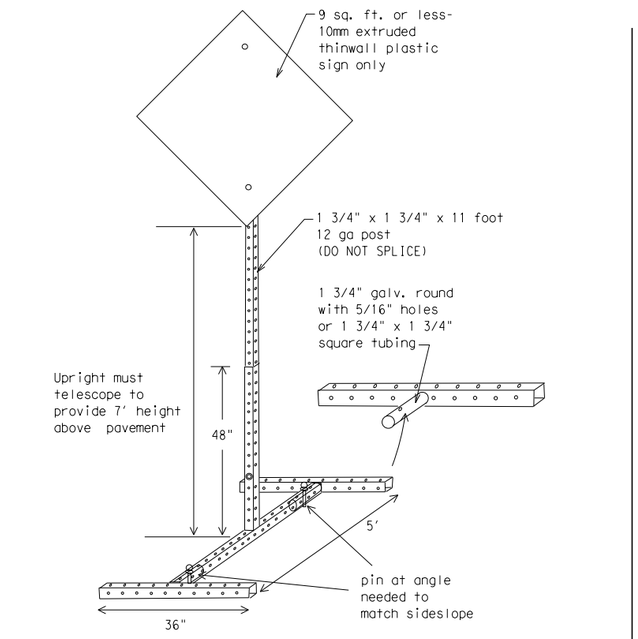
SKID MOUNTED WOOD SIGN SUPPORTS

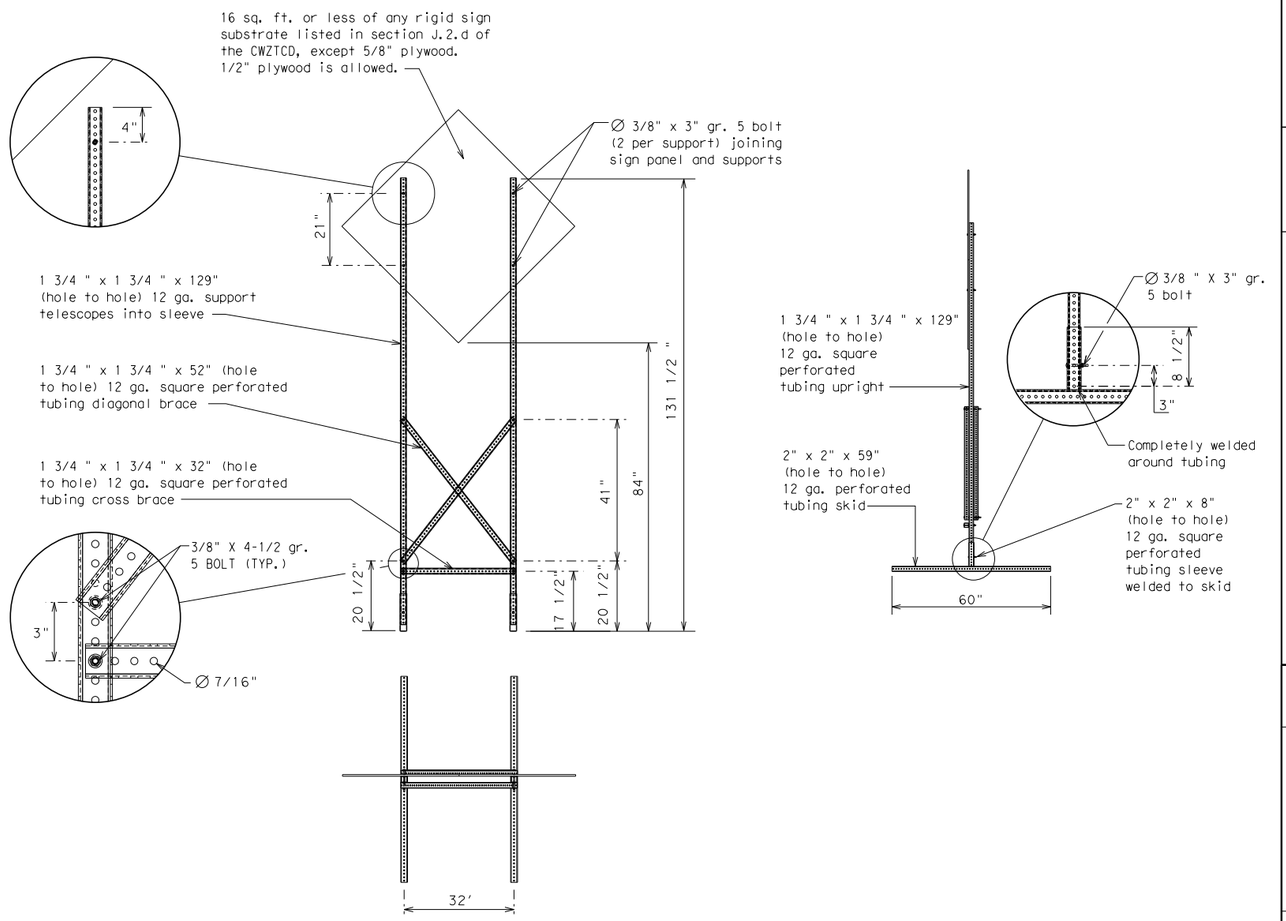
* LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS



GROUND MOUNTED SIGN SUPPORTS

Refer to the CWZTCD and the manufacturer's installation procedure for each type sign support.
The maximum sign square footage shall adhere to the manufacturer's recommendation.
Two post installations can be used for larger signs.





SKID MOUNTED PERFORATED SQUARE STEEL TUBING SIGN SUPPORTS

* LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS

WEDGE ANCHORS

Both steel and plastic Wedge Anchor Systems as shown on the SMD Standard Sheets may be used as temporary sign supports for signs up to 10 square feet of sign face. They may be set in concrete or in sturdy soils if approved by the Engineer. (See web address for "Traffic Engineering Standard Sheets" on BC(1)).

OTHER DESIGNS

MORE DETAILS OF APPROVED LONG/INTERMEDIATE AND SHORT TERM SUPPORTS CAN BE FOUND ON THE CWZTCD LIST. SEE BC(1) FOR WEBSITE LOCATION.

GENERAL NOTES

1. Nails may be used in the assembly of wooden sign supports, but 3/8" bolts with nuts or 3/8" x 3 1/2" lag screws must be used on every joint for final connection.
2. No more than 2 sign posts shall be placed within a 7 ft. circle, except for specific materials noted on the CWZTCD List.
3. When project is completed, all sign supports and foundations shall be removed from the project site. This will be considered subsidiary to Item 502.

* See BC(4) for definition of "Work Duration."

** Wood sign posts MUST be one piece. Splicing will NOT be allowed. Posts shall be painted white.

□ See the CWZTCD for the type of sign substrate that can be used for each approved sign support.

Texas Department of Transportation — Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT

BC(5)-21

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WHEN NOT IN USE, REMOVE THE PCMS FROM THE RIGHT-OF-WAY OR PLACE THE PCMS BEHIND BARRIER OR GUARDRAIL WITH SIGN PANEL TURNED PARALLEL TO TRAFFIC

PORTABLE CHANGEABLE MESSAGE SIGNS

1. The Engineer/Inspector shall approve all messages used on portable changeable message signs (PCMS).
2. Messages on PCMS should contain no more than 8 words (about four to eight characters per word), not including simple words such as "TO," "FOR," "AT," etc.
3. Messages should consist of a single phase, or two phases that alternate. Three-phase messages are not allowed. Each phase of the message should convey a single thought, and must be understood by itself.
4. Use the word "EXIT" to refer to an exit ramp on a freeway; i.e., "EXIT CLOSED." Do not use the term "RAMP."
5. Always use the route or interstate designation (IH, US, SH, FM) along with the number when referring to a roadway.
6. When in use, the bottom of a stationary PCMS message panel should be a minimum 7 feet above the roadway, where possible.
7. The message term "WEEKEND" should be used only if the work is to start on Saturday morning and end by Sunday evening at midnight. Actual days and hours of work should be displayed on the PCMS if work is to begin on Friday evening and/or continue into Monday morning.
8. The Engineer/Inspector may select one of two options which are available for displaying a two-phase message on a PCMS. Each phase may be displayed for either four seconds each or for three seconds each.
9. Do not "flash" messages or words included in a message. The message should be steady burn or continuous while displayed.
10. Do not present redundant information on a two-phase message; i.e., keeping two lines of the message the same and changing the third line.
11. Do not use the word "Danger" in message.
12. Do not display the message "LANES SHIFT LEFT" or "LANES SHIFT RIGHT" on a PCMS. Drivers do not understand the message.
13. Do not display messages that scroll horizontally or vertically across the face of the sign.
14. The following table lists abbreviated words and two-word phrases that are acceptable for use on a PCMS. Both words in a phrase must be displayed together. Words or phrases not on this list should not be abbreviated, unless shown in the TMUTCD.
15. PCMS character height should be at least 18 inches for trailer mounted units. They should be visible from at least 1/2 (.5) mile and the text should be legible from at least 600 feet at night and 800 feet in daylight. Truck mounted units must have a character height of 10 inches and must be legible from at least 400 feet.
16. Each line of text should be centered on the message board rather than left or right justified.
17. If disabled, the PCMS should default to an illegible display that will not alarm motorists and will only be used to alert workers that the PCMS has malfunctioned. A pattern such as a series of horizontal solid bars is appropriate.

WORD OR PHRASE	ABBREVIATION
Access Road	ACCS RD
Alternate	ALT
Avenue	AVE
Best Route	BEST RTE
Boulevard	BLVD
Bridge	BRDG
Cannot	CANT
Center	CTR
Construction Ahead	CONST AHD
CROSSING	XING
Detour Route	DETOUR RTE
Do Not	DONT
East	E
Eastbound	(route) E
Emergency	EMER
Emergency Vehicle	EMER VEH
Entrance, Enter	ENT
Express Lane	EXP LN
Expressway	EXPWY
XXXX Feet	XXXX FT
Fog Ahead	FOG AHD
Freeway	FRWY, FWY
Freeway Blocked	FWY BLKD
Friday	FRI
Hazardous Driving	HAZ DRIVING
Hazardous Material	HAZMAT
High-Occupancy	HOV
Vehicle Highway	HWY
Hour(s)	HR, HRS
Information	INFO
It Is	ITS
Junction	JCT
Left	LFT
Left Lane	LFT LN
Lane Closed	LN CLOSED
Lower Level	LWR LEVEL
Maintenance	MAINT

WORD OR PHRASE	ABBREVIATION
Major	MAJ
Miles	MI
Miles Per Hour	MPH
Minor	MNR
Monday	MON
Normal	NORM
North	N
Northbound	(route) N
Parking	PKING
Road	RD
Right Lane	RT LN
Saturday	SAT
Service Road	SERV RD
Shoulder	SHLDR
Slippery	SLIP
South	S
Southbound	(route) S
Speed	SPD
Street	ST
Sunday	SUN
Telephone	PHONE
Temporary	TEMP
Thursday	THURS
To Downtown	TO DWNTN
Traffic	TRAF
Travelers	TRVLRS
Tuesday	TUES
Time Minutes	TIME MIN
Upper Level	UPR LEVEL
Vehicles (s)	VEH, VEHS
Warning	WARN
Wednesday	WED
Weight Limit	WT LIMIT
West	W
Westbound	(route) W
Wet Pavement	WET PVMT
Will Not	WONT

Roadway designation ≠ IH-number, US-number, SH-number, FM-number

RECOMMENDED PHASES AND FORMATS FOR PCMS MESSAGES DURING ROADWORK ACTIVITIES

(The Engineer may approve other messages not specifically covered here.)

Phase 1: Condition Lists

Road/Lane/Ramp Closure List

FREEWAY CLOSED X MILE	FRONTAGE ROAD CLOSED
ROAD CLOSED AT SH XXX	SHOULDER CLOSED XXX FT
ROAD CLSD AT FM XXXX	RIGHT LN CLOSED XXX FT
RIGHT X LANES CLOSED	RIGHT X LANES OPEN
CENTER LANE CLOSED	DAYTIME LANE CLOSURES
NIGHT LANE CLOSURES	I-XX SOUTH EXIT CLOSED
VARIOUS LANES CLOSED	EXIT XXX CLOSED X MILE
EXIT CLOSED	RIGHT LN TO BE CLOSED
MALL DRIVEWAY CLOSED	X LANES CLOSED TUE - FRI
XXXXXXXX BLVD CLOSED	

Other Condition List

ROADWORK XXX FT	ROAD REPAIRS XXXX FT
FLAGGER XXXX FT	LANE NARROWS XXXX FT
RIGHT LN NARROWS XXXX FT	TWO-WAY TRAFFIC XX MILE
MERGING TRAFFIC XXXX FT	CONST TRAFFIC XXX FT
LOOSE GRAVEL XXXX FT	UNEVEN LANES XXXX FT
DETOUR X MILE	ROUGH ROAD XXXX FT
ROADWORK PAST SH XXXX	ROADWORK NEXT FRI-SUN
BUMP XXXX FT	US XXX EXIT X MILES
TRAFFIC SIGNAL XXXX FT	LANES SHIFT *

Phase 2: Possible Component Lists

Action to Take/Effect on Travel List		Location List	Warning List	** Advance Notice List
MERGE RIGHT	FORM X LINES RIGHT	AT FM XXXX	SPEED LIMIT XX MPH	TUE-FRI XX AM- X PM
DETOUR NEXT X EXITS	USE XXXXX RD EXIT	BEFORE RAILROAD CROSSING	MAXIMUM SPEED XX MPH	APR XX-XX X PM-X AM
USE EXIT XXX	USE EXIT I-XX NORTH	NEXT X MILES	MINIMUM SPEED XX MPH	BEGINS MONDAY
STAY ON US XXX SOUTH	USE I-XX E TO I-XX N	PAST US XXX EXIT	ADVISORY SPEED XX MPH	BEGINS MAY XX
TRUCKS USE US XXX N	WATCH FOR TRUCKS	XXXXXXX TO XXXXXXX	RIGHT LANE EXIT	MAY X-X XX PM - XX AM
WATCH FOR TRUCKS	EXPECT DELAYS	US XXX TO FM XXXX	USE CAUTION	NEXT FRI-SUN
EXPECT DELAYS	PREPARE TO STOP		DRIVE SAFELY	XX AM TO XX PM
REDUCE SPEED XXX FT	END SHOULDER USE		DRIVE WITH CARE	NEXT TUE AUG XX
USE OTHER ROUTES	WATCH FOR WORKERS			TONIGHT XX PM- XX AM
STAY IN LANE *				

* LANES SHIFT in Phase 1 must be used with STAY IN LANE in Phase 2.

** See Application Guidelines Note 6.

APPLICATION GUIDELINES

1. Only 1 or 2 phases are to be used on a PCMS.
2. The 1st phase (or both) should be selected from the "Road/Lane/Ramp Closure List" and the "Other Condition List".
3. A 2nd phase can be selected from the "Action to Take/Effect on Travel, Location, General Warning, or Advance Notice Phase Lists".
4. A Location Phase is necessary only if a distance or location is not included in the first phase selected.
5. If two PCMS are used in sequence, they must be separated by a minimum of 1000 ft. Each PCMS shall be limited to two phases, and should be understandable by themselves.
6. For advance notice, when the current date is within seven days of the actual work date, calendar days should be replaced with days of the week. Advance notification should typically be for no more than one week prior to the work.

WORDING ALTERNATIVES

1. The words RIGHT, LEFT and ALL can be interchanged as appropriate.
2. Roadway designations IH, US, SH, FM and LP can be interchanged as appropriate.
3. EAST, WEST, NORTH and SOUTH (or abbreviations E, W, N and S) can be interchanged as appropriate.
4. Highway names and numbers replaced as appropriate.
5. ROAD, HIGHWAY and FREEWAY can be interchanged as needed.
6. AHEAD may be used instead of distances if necessary.
7. FT and MI, MILE and MILES interchanged as appropriate.
8. AT, BEFORE and PAST interchanged as needed.
9. Distances or AHEAD can be eliminated from the message if a location phase is used.

PCMS SIGNS WITHIN THE R.O.W. SHALL BE BEHIND GUARDRAIL OR CONCRETE BARRIER OR SHALL HAVE A MINIMUM OF FOUR (4) PLASTIC DRUMS PLACED PERPENDICULAR TO TRAFFIC ON THE UPSTREAM SIDE OF THE PCMS, WHEN EXPOSED TO ONE DIRECTION OF TRAFFIC. WHEN EXPOSED TO TWO WAY TRAFFIC, THE FOUR DRUMS SHOULD BE PLACED WITH ONE DRUM AT EACH OF THE FOUR CORNERS OF THE UNIT.

FULL MATRIX PCMS SIGNS

1. When Full Matrix PCMS signs are used, the character height and legibility/visibility requirements shall be maintained as listed in Note 15 under "PORTABLE CHANGEABLE MESSAGE SIGNS" above.
2. When symbol signs, such as the "Flagger Symbol"(CW20-7) are represented graphically on the Full Matrix PCMS sign and, with the approval of the Engineer, it shall maintain the legibility/visibility requirement listed above.
3. When symbol signs are represented graphically on the Full Matrix PCMS, they shall only supplement the use of the static sign represented, and shall not substitute for, or replace that sign.
4. A full matrix PCMS may be used to simulate a flashing arrow board provided it meets the visibility, flash rate and dimming requirements on BC(7), for the same size arrow.

Texas Department of Transportation — Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

BC(6)-21

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REVISIONS	0044	04	048	US 82
9-07 8-14	DIST	COUNTY		SHEET NO.
7-13 5-21	WFS	MONTAGUE		153

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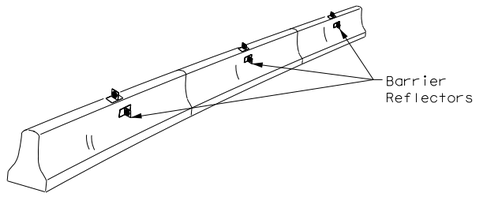
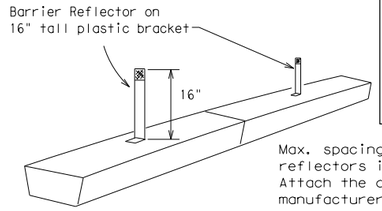
1. Barrier Reflectors shall be pre-qualified, and conform to the color and reflectivity requirements of DMS-8600. A list of prequalified Barrier Reflectors can be found at the Material Producer List web address shown on BC(1).
2. Color of Barrier Reflectors shall be as specified in the TMUTCD. The cost of the reflectors shall be considered subsidiary to Item 512.



CONCRETE TRAFFIC BARRIER (CTB)

3. Where traffic is on one side of the CTB, two (2) Barrier Reflectors shall be mounted in approximately the midsection of each section of CTB. An alternate mounting location is uniformly spaced at one end of each CTB. This will allow for attachment of a barrier grapple without damaging the reflector. The Barrier Reflector mounted on the side of the CTB shall be located directly below the reflector mounted on top of the barrier, as shown in the detail above.
4. Where CTB separates two-way traffic, three barrier reflectors shall be mounted on each section of CTB. The reflector unit on top shall have two yellow reflective faces (Bi-Directional)while the reflectors on each side of the barrier shall have one yellow reflective face, as shown in the detail above.
5. When CTB separates traffic traveling in the same direction, no barrier reflectors will be required on top of the CTB.
6. Barrier Reflector units shall be yellow or white in color to match the edgeline being supplemented.
7. Maximum spacing of Barrier Reflectors is forty (40) feet.
8. Pavement markers or temporary flexible-reflective roadway marker tabs shall NOT be used as CTB delineation.
9. Attachment of Barrier Reflectors to CTB shall be per manufacturer's recommendations.
10. Missing or damaged Barrier Reflectors shall be replaced as directed by the Engineer.
11. Single slope barriers shall be delineated as shown on the above detail.

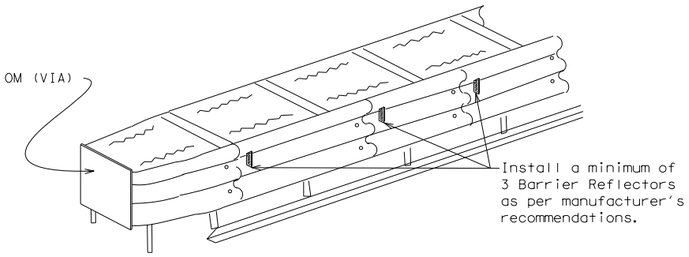


Max. spacing of barrier reflectors is 20 feet. Attach the delineators as per manufacturer's recommendations.

LOW PROFILE CONCRETE BARRIER (LPCB)

LOW PROFILE CONCRETE BARRIER (LPCB) USED IN WORK ZONES

LPCB is approved for use in work zone locations, where the posted speed is 45mph, or less. See Roadway Standard Sheet LPCB.

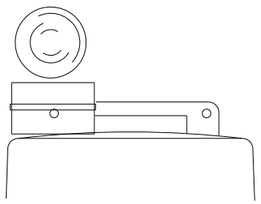


DELINEATION OF END TREATMENTS

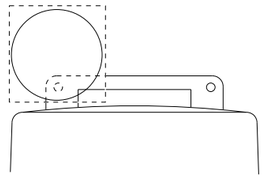
END TREATMENTS FOR CTB'S USED IN WORK ZONES

End treatments used on CTB's in work zones shall meet the apppropriate crashworthy standards as defined in the Manual for Assessing Safety Hardware (MASH). Refer to the CWZTCD List for approved end treatments and manufacturers.

BARRIER REFLECTORS FOR CONCRETE TRAFFIC BARRIER AND ATTENUATORS



Type C Warning Light or approved substitute mounted on a drum adjacent to the travel way.



Warning reflector may be round or square.Must have a yellow reflective surface area of at least 30 square inches

WARNING LIGHTS

1. Warning lights shall meet the requirements of the TMUTCD.
2. Warning lights shall NOT be installed on barricades.
3. Type A-Low Intensity Flashing Warning Lights are commonly used with drums. They are intended to warn of or mark a potentially hazardous area. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "FL". The Type A Warning Lights shall not be used with signs manufactured with Type B_{FL} or C_{FL} Sheeting meeting the requirements of Departmental Material Specification DMS-8300.
4. Type-C and Type D 360 degree Steady Burn Lights are intended to be used in a series for delineation to supplement other traffic control devices. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "SB".
5. The Engineer/Inspector or the plans shall specify the location and type of warning lights to be installed on the traffic control devices.
6. When required by the Engineer, the Contractor shall furnish a copy of the warning lights certification. The warning light manufacturer will certify the warning lights meet the requirements of the latest ITE Purchase Specifications for Flashing and Steady-Burn Warning Lights.
7. When used to delineate curves, Type-C and Type D Steady Burn Lights should only be placed on the outside of the curve, not the inside.
8. The location of warning lights and warning reflectors on drums shall be as shown elsewhere in the plans.

WARNING LIGHTS MOUNTED ON PLASTIC DRUMS

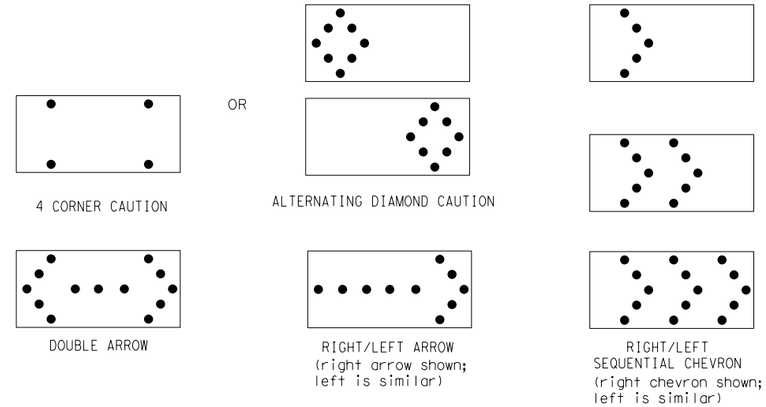
1. Type A flashing warning lights are intended to warn drivers that they are approaching or are in a potentially hazardous area.
2. Type A random flashing warning lights are not intended for delineation and shall not be used in a series.
3. A series of sequential flashing warning lights placed on channelizing devices to form a merging taper may be used for delineation. If used, the successive flashing of the sequential warning lights should occur from the beginning of the taper to the end of the merging taper in order to identify the desired vehicle path. The rate of flashing for each light shall be 65 flashes per minute, plus or minus 10 flashes.
4. Type C and D steady-burn warning lights are intended to be used in a series to delineate the edge of the travel lane on detours, on lane changes, on lane closures, and on other similar conditions.
5. Type A, Type C and Type D warning lights shall be installed at locations as detailed on other sheets in the plans.
6. Warning lights shall not be installed on a drum that has a sign, chevron or vertical panel.
7. The maximum spacing for warning lights on drums should be identical to the channelizing device spacing.

WARNING REFLECTORS MOUNTED ON PLASTIC DRUMS AS A SUBSTITUTE FOR TYPE C (STEADY BURN) WARNING LIGHTS

1. A warning reflector or approved substitute may be mounted on a plastic drum as a substitute for a Type C, steady burn warning light at the discretion of the Contractor unless otherwise noted in the plans.
2. The warning reflector shall be yellow in color and shall be manufactured using a sign substrate approved for use with plastic drums listed on the CWZTCD.
3. The warning reflector shall have a minimum retroreflective surface area (one-side) of 30 square inches.
4. Round reflectors shall be fully reflectorized, including the area where attached to the drum.
5. Square substrates must have a minimum of 30 square inches of reflectorized sheeting. They do not have to be reflectorized where it attaches to the drum.
6. The side of the warning reflector facing approaching traffic shall have sheeting meeting the color and retroreflectivity requirements for DMS 8300-Type B or Type C.
7. When used near two-way traffic, both sides of the warning reflector shall be reflectorized.
8. The warning reflector should be mounted on the side of the handle nearest approaching traffic.
9. The maximum spacing for warning reflectors should be identical to the channelizing device spacing requirements.

Arrow Boards may be located behind channelizing devices in place for a shoulder taper or merging taper, otherwise they shall be delineated with four (4) channelizing devices placed perpendicular to traffic on the upstream side of traffic.

1. The Flashing Arrow Board should be used for all lane closures on multi-lane roadways, or slow moving maintenance or construction activities on the travel lanes.
2. Flashing Arrow Boards should not be used on two-lane, two-way roadways, detours, diversions or work on shoulders unless the "CAUTION" display (see detail below) is used.
3. The Engineer/Inspector shall choose all appropriate signs, barricades and/or other traffic control devices that should be used in conjunction with the Flashing Arrow Board.
4. The Flashing Arrow Board should be able to display the following symbols:



4 CORNER CAUTION

ALTERNATING DIAMOND CAUTION

DOUBLE ARROW

RIGHT/LEFT ARROW
(right arrow shown;
left is similar)

RIGHT/LEFT
SEQUENTIAL CHEVRON
(right chevron shown;
left is similar)

5. The "CAUTION" display consists of four corner lamps flashing simultaneously, or the Alternating Diamond Caution mode as shown.
6. The straight line caution display is NOT ALLOWED.
7. The Flashing Arrow Board shall be capable of minimum 50 percent dimming from rated lamp voltage. The flashing rate of the lamps shall not be less than 25 nor more than 40 flashes per minute.
8. Minimum lamp "on time" shall be approximately 50 percent for the flashing arrow and equal intervals of 25 percent for each sequential phase of the flashing chevron.
9. The sequential arrow display is NOT ALLOWED.
10. The flashing arrow display is the TxDOT standard; however, the sequential chevron display may be used during daylight operations.
11. The Flashing Arrow Board shall be mounted on a vehicle, trailer or other suitable support.
12. A Flashing Arrow Board SHALL NOT BE USED to laterally shift traffic.
13. A full matrix PCMS may be used to simulate a Flashing Arrow Board provided it meets visibility, flash rate and dimming requirements on this sheet for the same size arrow.
14. Minimum mounting height of trailer mounted Arrow Boards should be 7 feet from roadway to bottom of panel.

REQUIREMENTS			
TYPE	MINIMUM SIZE	MINIMUM NUMBER OF PANEL LAMPS	MINIMUM VISIBILITY DISTANCE
B	30 x 60	13	3/4 mile
C	48 x 96	15	1 mile

ATTENTION

Flashing Arrow Boards shall be equipped with automatic dimming devices.

WHEN NOT IN USE, REMOVE THE ARROW BOARD FROM THE RIGHT-OF-WAY OR PLACE THE ARROW BOARD BEHIND CONCRETE TRAFFIC BARRIER OR GUARDRAIL.

FLASHING ARROW BOARDS

TRUCK-MOUNTED ATTENUATORS

1. Truck-mounted attenuators (TMA) used on TxDOT facilities must meet the requirements outlined in the Manual for Assessing Safety Hardware (MASH).
2. Refer to the CWZTCD for the requirements of Level 2 or Level 3 TMAs.
3. Refer to the CWZTCD for a list of approved TMAs.
4. TMAs are required on freeways unless otherwise noted in the plans.
5. A TMA should be used anytime that it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the work performance.
6. The only reason a TMA should not be required is when a work area is spread down the roadway and the work crew is an extended distance from the TMA.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION ARROW PANEL, REFLECTORS, WARNING LIGHTS & ATTENUATOR

BC(7)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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7-13 5-21	WFS	MONTAGUE		154

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GENERAL NOTES

1. For long term stationary work zones on freeways, drums shall be used as the primary channelizing device.
2. For intermediate term stationary work zones on freeways, drums should be used as the primary channelizing device but may be replaced in tangent sections by vertical panels, or 42" two-piece cones. In tangent sections, one-piece cones may be used with the approval of the Engineer but only if personnel are present on the project at all times to maintain the cones in proper position and location.
3. For short term stationary work zones on freeways, drums are the preferred channelizing device but may be replaced in tapers, transitions and tangent sections by vertical panels, two-piece cones or one-piece cones as approved by the Engineer.
4. Drums and all related items shall comply with the requirements of the current version of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
5. Drums, bases, and related materials shall exhibit good workmanship and shall be free from objectionable marks or defects that would adversely affect their appearance or serviceability.
6. The Contractor shall have a maximum of 24 hours to replace any plastic drums identified for replacement by the Engineer/Inspector. The replacement device must be an approved device.

GENERAL DESIGN REQUIREMENTS

Pre-qualified plastic drums shall meet the following requirements:

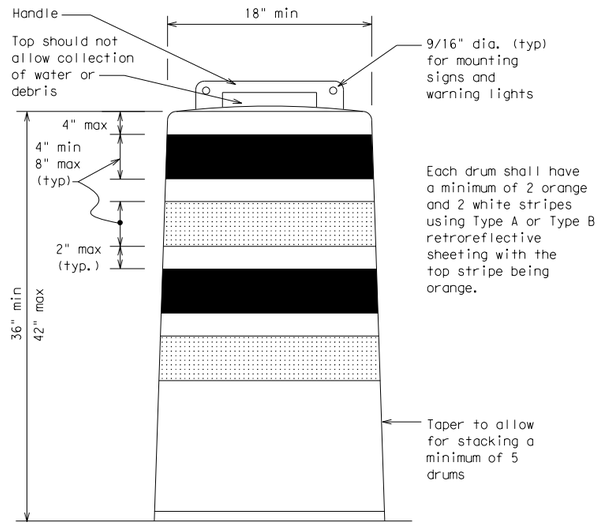
1. Plastic drums shall be a two-piece design; the "body" of the drum shall be the top portion and the "base" shall be the bottom.
2. The body and base shall lock together in such a manner that the body separates from the base when impacted by a vehicle traveling at a speed of 20 MPH or greater but prevents accidental separation due to normal handling and/or air turbulence created by passing vehicles.
3. Plastic drums shall be constructed of lightweight flexible, and deformable materials. The Contractor shall NOT use metal drums or single piece plastic drums as channelization devices or sign supports.
4. Drums shall present a profile that is a minimum of 18 inches in width at the 36 inch height when viewed from any direction. The height of drum unit (body installed on base) shall be a minimum of 36 inches and a maximum of 42 inches.
5. The top of the drum shall have a built-in handle for easy pickup and shall be designed to drain water and not collect debris. The handle shall have a minimum of two widely spaced 9/16 inch diameter holes to allow attachment of a warning light, warning reflector unit or approved compliant sign.
6. The exterior of the drum body shall have a minimum of four alternating orange and white retroreflective circumferential stripes not less than 4 inches nor greater than 8 inches in width. Any non-reflectorized space between any two adjacent stripes shall not exceed 2 inches in width.
7. Bases shall have a maximum width of 36 inches, a maximum height of 4 inches, and a minimum of two footholds of sufficient size to allow base to be held down while separating the drum body from the base.
8. Plastic drums shall be constructed of ultra-violet stabilized, orange, high-density polyethylene (HDPE) or other approved material.
9. Drum body shall have a maximum unballasted weight of 11 lbs.
10. Drum and base shall be marked with manufacturer's name and model number.

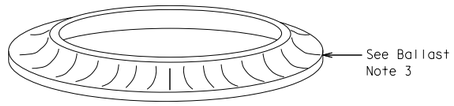
RETROREFLECTIVE SHEETING

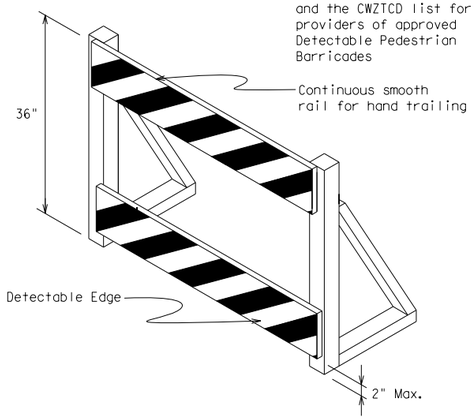
1. The stripes used on drums shall be constructed of sheeting meeting the color and retroreflectivity requirements of Departmental Materials Specification DMS-8300, "Sign Face Materials." Type A or Type B reflective sheeting shall be supplied unless otherwise specified in the plans.
2. The sheeting shall be suitable for use on and shall adhere to the drum surface such that, upon vehicular impact, the sheeting shall remain adhered in-place and exhibit no delaminating, cracking, or loss of retroreflectivity other than that loss due to abrasion of the sheeting surface.

BALLAST

1. Unballasted bases shall be large enough to hold up to 50 lbs. of sand. This base, when filled with the ballast material, should weigh between 35 lbs (minimum) and 50 lbs (maximum). The ballast may be sand in one to three sandbags separate from the base, sand in a sand-filled plastic base, or other ballasting devices as approved by the Engineer. Stacking of sandbags will be allowed, however height of sandbags above pavement surface may not exceed 12 inches.
2. Bases with built-in ballast shall weigh between 40 lbs. and 50 lbs. Built-in ballast can be constructed of an integral crumb rubber base or a solid rubber base.
3. Recycled truck tire sidewalls may be used for ballast on drums approved for this type of ballast on the CWZTCD list.
4. The ballast shall not be heavy objects, water, or any material that would become hazardous to motorists, pedestrians, or workers when the drum is struck by a vehicle.
5. When used in regions susceptible to freezing, drums shall have drainage holes in the bottoms so that water will not collect and freeze becoming a hazard when struck by a vehicle.
6. Ballast shall not be placed on top of drums.
7. Adhesives may be used to secure base of drums to pavement.

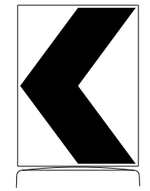




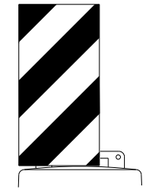


DETECTABLE PEDESTRIAN BARRICADES

1. When existing pedestrian facilities are disrupted, closed, or relocated in a TTC zone, the temporary facilities shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility. Refer to WZ(BTS-2) for Pedestrian Control requirements for Sidewalk Diversions, Sidewalk Detours and Crosswalk Closures.
2. Where pedestrians with visual disabilities normally use the closed sidewalk, a Detectable Pedestrian Barricade shall be placed across the full width of the closed sidewalk instead of a Type 3 Barricade.
3. Detectable pedestrian barricades similar to the one pictured above, longitudinal channelizing devices, some concrete barriers, and wood or chain link fencing with a continuous detectable edging can satisfactorily delineate a pedestrian path.
4. Tape, rope, or plastic chain strung between devices are not detectable, do not comply with the design standards in the "Americans with Disabilities Act Accessibility Guidelines (ADAAG)" and should not be used as a control for pedestrian movements.
5. Warning lights shall not be attached to detectable pedestrian barricades.
6. Detectable pedestrian barricades should use 8" nominal barricade rails as shown on BC(10) provided that the top rail provides a smooth continuous rail suitable for hand trailing with no splinters, burrs, or sharp edges.



18" x 24" Sign
(Maximum Sign Dimension)
Chevron CW1-8, Opposing Traffic Lane Divider, Driveway sign D70a, Keep Right R4 series or other signs as approved by Engineer



12" x 24"
Vertical Panel
mount with diagonals sloping down towards travel way

Plywood, Aluminum or Metal sign substrates shall NOT be used on plastic drums

SIGNS, CHEVRONS, AND VERTICAL PANELS MOUNTED ON PLASTIC DRUMS

1. Signs used on plastic drums shall be manufactured using substrates listed on the CWZTCD.
2. Chevrons and other work zone signs with an orange background shall be manufactured with Type B_{FL} or Type C_{FL} Orange sheeting meeting the color and retroreflectivity requirements of DMS-8300, "Sign Face Material," unless otherwise specified in the plans.
3. Vertical Panels shall be manufactured with orange and white sheeting meeting the requirements of DMS-8300 Type A or Type B. Diagonal stripes on Vertical Panels shall slope down toward the intended traveled lane.
4. Other sign messages (text or symbolic) may be used as approved by the Engineer. Sign dimensions shall not exceed 18 inches in width or 24 inches in height, except for the R9 series signs discussed in note 8 below.
5. Signs shall be installed using a 1/2 inch bolt (nominal) and nut, two washers, and one locking washer for each connection.
6. Mounting bolts and nuts shall be fully engaged and adequately torqued. Bolts should not extend more than 1/2 inch beyond nuts.
7. Chevrons may be placed on drums on the outside of curves, on merging tapers or on shifting tapers. When used in these locations, they may be placed on every drum or spaced not more than on every third drum. A minimum of three (3) should be used at each location called for in the plans.
8. R9-9, R9-10, R9-11 and R9-11a Sidewalk Closed signs which are 24 inches wide may be mounted on plastic drums, with approval of the Engineer.

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BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC(8)-21

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REVISIONS	0044	04	048	US 82
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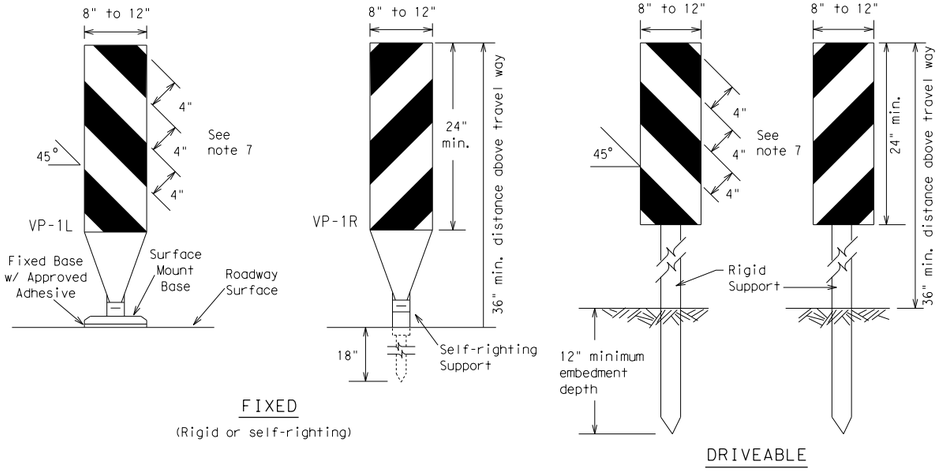
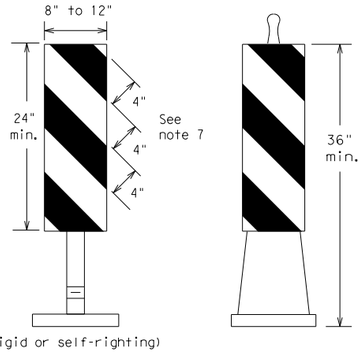


FIXED

(Rigid or self-righting)

DRIVEABLE

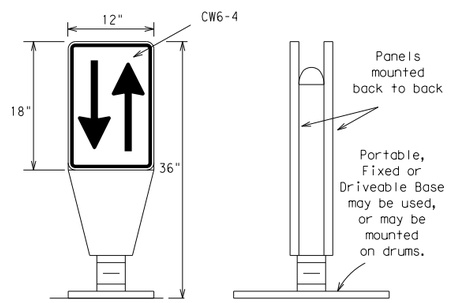


(Rigid or self-righting)

PORTABLE

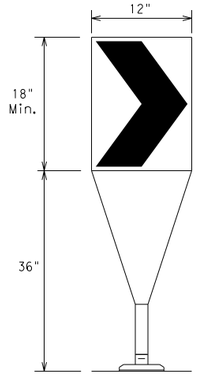
1. Vertical Panels (VP's) are normally used to channelize traffic or divide opposing lanes of traffic.
2. VP's may be used in daytime or nighttime situations. They may be used at the edge of shoulder drop-offs and other areas such as lane transitions where positive daytime and nighttime delineation is required. The Engineer/Inspector shall refer to the Roadway Design Manual for additional requirements on the use VP's for drop-offs.
3. VP's should be mounted back to back if used at the edge of cuts adjacent to two-way two lane roadways. Stripes are to be reflective orange and reflective white and should always slope downward toward the travel lane.
4. VP's used on expressways and freeways or other high speed roadways, may have more than 270 square inches of retroreflective area facing traffic.
5. Self-righting supports are available with portable base. See "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
6. Sheeting for the VP's shall be retroreflective Type A or Type B conforming to Departmental Material Specification DMS-8300, unless noted otherwise.
7. Where the height of reflective material on the vertical panel is 36 inches or greater, a panel stripe of 6 inches shall be used.

VERTICAL PANELS (VPs)



1. Opposing Traffic Lane Dividers (OTLD) are delineation devices designed to convert a normal one-way roadway section to two-way operation. OTLD's are used on temporary centerlines. The upward and downward arrows on the sign's face indicate the direction of traffic on either side of the divider. The base is secured to the pavement with an adhesive or rubber weight to minimize movement caused by a vehicle impact or wind gust.
2. The OTLD may be used in combination with 42" cones or VPs.
3. Spacing between the OTLD shall not exceed 500 feet. 42" cones or VPs placed between the OTLD's should not exceed 100 foot spacing.
4. The OTLD shall be orange with a black non-reflective legend. Sheeting for the OTLD shall be retroreflective Type B_{FL} or Type C_{FL} conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall meet the requirements of DMS-8300.

OPPOSING TRAFFIC LANE DIVIDERS (OTLD)



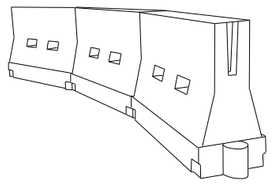
Fixed Base w/ Approved Adhesive (Driveable Base, or Flexible Support can be used)

1. The chevron shall be a vertical rectangle with a minimum size of 12 by 18 inches.
2. Chevrons are intended to give notice of a sharp change of alignment with the direction of travel and provide additional emphasis and guidance for vehicle operators with regard to changes in horizontal alignment of the roadway.
3. Chevrons, when used, shall be erected on the outside of a sharp curve or turn, or on the far side of an intersection. They shall be in line with and at right angles to approaching traffic. Spacing should be such that the motorist always has three in view, until the change in alignment eliminates its need.
4. To be effective, the chevron should be visible for at least 500 feet.
5. Chevrons shall be orange with a black nonreflective legend. Sheeting for the chevron shall be retroreflective Type B_{FL} or Type C_{FL} conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall meet the requirements of DMS-8300.
6. For Long Term Stationary use on tapers or transitions on freeways and divided highways, self-righting chevrons may be used to supplement plastic drums but not to replace plastic drums.

CHEVRONS

GENERAL NOTES

1. Work Zone channelizing devices illustrated on this sheet may be installed in close proximity to traffic and are suitable for use on high or low speed roadways. The Engineer/Inspector shall ensure that spacing and placement is uniform and in accordance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
2. Channelizing devices shown on this sheet may have a driveable, fixed or portable base. The requirement for self-righting channelizing devices must be specified in the General Notes or other plan sheets.
3. Channelizing devices on self-righting supports should be used in work zone areas where channelizing devices are frequently impacted by errant vehicles or vehicle related wind gusts making alignment of the channelizing devices difficult to maintain. Locations of these devices shall be detailed elsewhere in the plans. These devices shall conform to the TMUTCD and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
4. The Contractor shall maintain devices in a clean condition and replace damaged, nonreflective, faded, or broken devices and bases as required by the Engineer/Inspector. The Contractor shall be required to maintain proper device spacing and alignment.
5. Portable bases shall be fabricated from virgin and/or recycled rubber. The portable bases shall weigh a minimum of 30 lbs.
6. Pavement surfaces shall be prepared in a manner that ensures proper bonding between the adhesives, the fixed mount bases and the pavement surface. Adhesives shall be prepared and applied according to the manufacturer's recommendations.
7. The installation and removal of channelizing devices shall not cause detrimental effects to the final pavement surfaces, including pavement surface discoloration or surface integrity. Driveable bases shall not be permitted on final pavement surfaces. The Engineer/Inspector shall approve all application and removal procedures of fixed bases.



LONGITUDINAL CHANNELIZING DEVICES (LCD)

1. LCDs are crashworthy, lightweight, deformable devices that are highly visible, have good target value and can be connected together. They are not designed to contain or redirect a vehicle on impact.
2. LCDs may be used instead of a line of cones or drums.
3. LCDs shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
4. LCDs should not be used to provide positive protection for obstacles, pedestrians or workers.
5. LCDs shall be supplemented with retroreflective delineation as required for temporary barriers on BC(7) when placed roughly parallel to the travel lanes.
6. LCDs used as barricades placed perpendicular to traffic should have at least one row of reflective sheeting meeting the requirements for barricade rails as shown on BC(10). Place reflective sheeting near the top of the LCD along the full length of the device.

WATER BALLASTED SYSTEMS USED AS BARRIERS

1. Water ballasted systems used as barriers shall not be used solely to channelize road users, but also to protect the work space per the appropriate Manual for Assessing Safety Hardware (MASH) crashworthiness requirements based on roadway speed and barrier application.
2. Water ballasted systems used to channelize vehicular traffic shall be supplemented with retroreflective delineation or channelizing devices to improve daytime/nighttime visibility. They may also be supplemented with pavement markings.
3. Water ballasted systems used as barriers shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
4. Water ballasted systems used as barriers should not be used for a merging taper except in low speed (less than 45 MPH) urban areas. When used on a taper in a low speed urban area, the taper shall be delineated and the taper length should be designed to optimize road user operations considering the available geometric conditions.
5. When water ballasted systems used as barriers have blunt ends exposed to traffic, they should be attenuated as per manufacturer recommendations or flared to a point outside the clear zone.

If used to channelize pedestrians, longitudinal channelizing devices or water ballasted systems must have a continuous detectable bottom for users of long canes and the top of the unit shall not be less than 32 inches in height.

HOLLOW OR WATER BALLASTED SYSTEMS USED AS LONGITUDINAL CHANNELIZING DEVICES OR BARRIERS

Posted Speed	Formula	Minimum Desirable Taper Lengths ✻✻			Suggested Maximum Spacing of Channelizing Devices	
		10′ Offset	11′ Offset	12′ Offset	On a Taper	On a Tangent
30	$L = \frac{WS^2}{60}$	150′	165′	180′	30′	60′
35		205′	225′	245′	35′	70′
40		265′	295′	320′	40′	80′
45	L = WS	450′	495′	540′	45′	90′
50		500′	550′	600′	50′	100′
55		550′	605′	660′	55′	110′
60		600′	660′	720′	60′	120′
65		650′	715′	780′	65′	130′
70		700′	770′	840′	70′	140′
75		750′	825′	900′	75′	150′
80		800′	880′	960′	80′	160′

✻✻Taper lengths have been rounded off.
L=Length of Taper (FT.) W=Width of Offset (FT.)
S=Posted Speed (MPH)

SUGGESTED MAXIMUM SPACING OF CHANNELIZING DEVICES AND MINIMUM DESIRABLE TAPER LENGTHS

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BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC(9)-21

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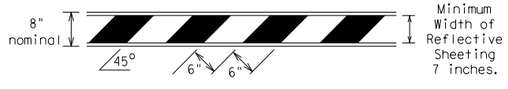
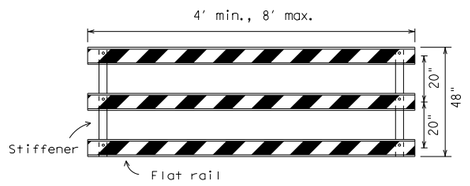
TYPE 3 BARRICADES

1. Refer to the Compliant Work Zone Traffic Control Devices List (CWZTCD) for details of the Type 3 Barricades and a list of all materials used in the construction of Type 3 Barricades.
2. Type 3 Barricades shall be used at each end of construction projects closed to all traffic.
3. Barricades extending across a roadway should have stripes that slope downward in the direction toward which traffic must turn in detouring. When both right and left turns are provided, the chevron striping may slope downward in both directions from the center of the barricade. Where no turns are provided at a closed road, striping should slope downward in both directions toward the center of roadway.
4. Striping of rails, for the right side of the roadway, should slope downward to the left. For the left side of the roadway, striping should slope downward to the right.
5. Identification markings may be shown only on the back of the barricade rails. The maximum height of letters and/or company logos used for identification shall be 1".
6. Barricades shall not be placed parallel to traffic unless an adequate clear zone is provided.
7. Warning lights shall NOT be installed on barricades.
8. Where barricades require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand is recommended. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight. Sand bags shall not be stacked in a manner that covers any portion of a barricade rails reflective sheeting. Rock, concrete, iron, steel or other solid objects will NOT be permitted. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs. Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall not be used for sandbags. Sandbags shall only be placed along or upon the base supports of the device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners.
9. Sheeting for barricades shall be retroreflective Type A or Type B conforming to Departmental Material Specification DMS-8300 unless otherwise noted.

Barricades shall NOT be used as a sign support.



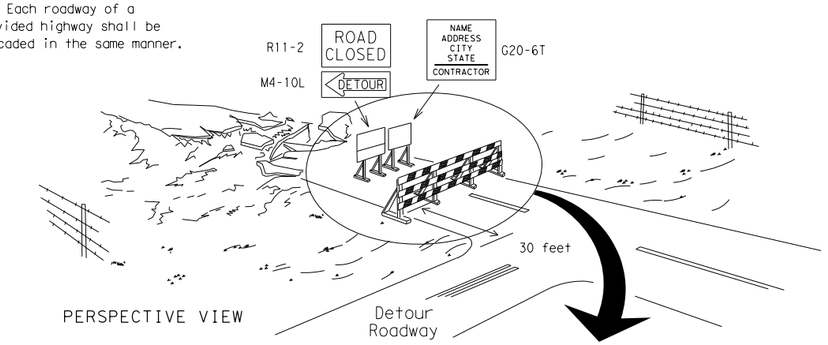
TYPICAL STRIPING DETAIL FOR BARRICADE RAIL



Stiffener may be inside or outside of support, but no more than 2 stiffeners shall be allowed on one barricade.

TYPICAL PANEL DETAIL
FOR SKID OR POST TYPE BARRICADES

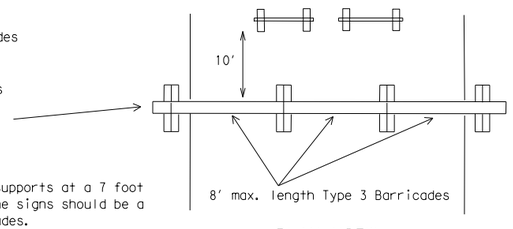
Each roadway of a divided highway shall be barricaded in the same manner.



PERSPECTIVE VIEW

The three rails on Type 3 barricades shall be reflectorized orange and reflective white stripes on one side facing one-way traffic and both sides for two-way traffic.

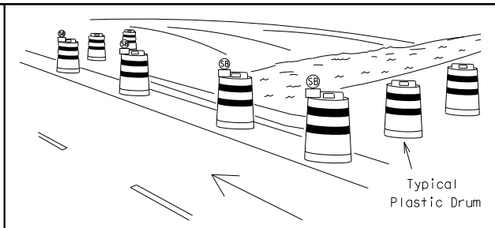
Barricade striping should slant downward in the direction of detour.



PLAN VIEW

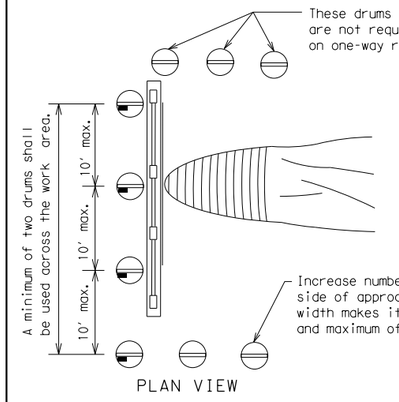
1. Signs should be mounted on independent supports at a 7 foot mounting height in center of roadway. The signs should be a minimum of 10 feet behind Type 3 Barricades.
2. Advance signing shall be as specified elsewhere in the plans.

TYPE 3 BARRICADE (POST AND SKID) TYPICAL APPLICATION



PERSPECTIVE VIEW

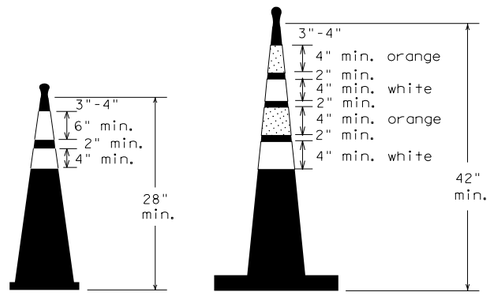
1. Where positive redirectional capability is provided, drums may be omitted.
2. Plastic construction fencing may be used with drums for safety as required in the plans.
3. Vertical Panels on flexible support may be substituted for drums when the shoulder width is less than 4 feet.
4. When the shoulder width is greater than 12 feet, steady-burn lights may be omitted if drums are used.
5. Drums must extend the length of the culvert widening.



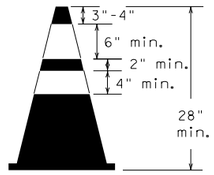
PLAN VIEW

LEGEND	
	Plastic drum
	Plastic drum with steady burn light or yellow warning reflector
SB	Steady burn warning light or yellow warning reflector

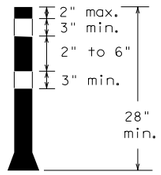
CULVERT WIDENING OR OTHER ISOLATED WORK WITHIN THE PROJECT LIMITS



Two-Piece cones



One-Piece cones

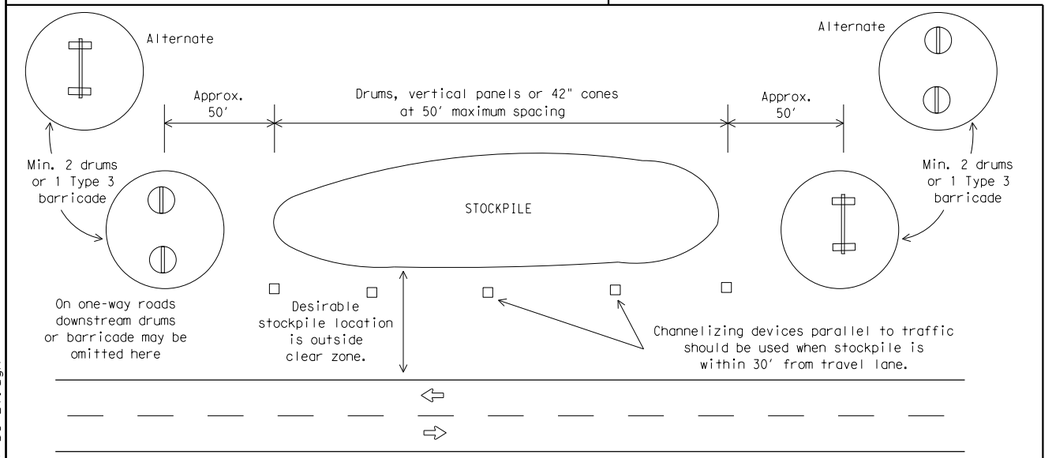


Tubular Marker

28" Cones shall have a minimum weight of 9 1/2 lbs.

42" 2-piece cones shall have a minimum weight of 30 lbs. including base.

1. Traffic cones and tubular markers shall be predominantly orange, and meet the height and weight requirements shown above.
2. One-piece cones have the body and base of the cone molded in one consolidated unit. Two-piece cones have a cone shaped body and a separate rubber base, or ballast, that is added to keep the device upright and in place.
3. Two-piece cones may have a handle or loop extending up to 8" above the minimum height shown, in order to aid in retrieving the device.
4. Cones or tubular markers shall have white or white and orange reflective bands as shown above. The reflective bands shall have a smooth, sealed outer surface and meet the requirements of Departmental Material Specification DMS-8300 Type A or Type B.
5. 28" cones and tubular markers are generally suitable for short duration and short-term stationary work as defined on BC(4). These should not be used for intermediate-term or long-term stationary work unless personnel is on-site to maintain them in their proper upright position.
6. 42" two-piece cones, vertical panels or drums are suitable for all work zone durations.
7. Cones or tubular markers used on each project should be of the same size and shape.



TRAFFIC CONTROL FOR MATERIAL STOCKPILES

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BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

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7-13 5-21	WFS	MONTAGUE		157

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WORK ZONE PAVEMENT MARKINGS

GENERAL

1. The Contractor shall be responsible for maintaining work zone and existing pavement markings, in accordance with the standard specifications and special provisions, on all roadways open to traffic within the CSJ limits unless otherwise stated in the plans.
2. Color, patterns and dimensions shall be in conformance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
3. Additional supplemental pavement marking details may be found in the plans or specifications.
4. Pavement markings shall be installed in accordance with the TMUTCD and as shown on the plans.
5. When short term markings are required on the plans, short term markings shall conform with the TMUTCD, the plans and details as shown on the Standard Plan Sheet WZ(STPM).
6. When standard pavement markings are not in place and the roadway is opened to traffic, DO NOT PASS signs shall be erected to mark the beginning of the sections where passing is prohibited and PASS WITH CARE signs at the beginning of sections where passing is permitted.
7. All work zone pavement markings shall be installed in accordance with Item 662, "Work Zone Pavement Markings."

RAISED PAVEMENT MARKERS

1. Raised pavement markers are to be placed according to the patterns on BC(12).
2. All raised pavement markers used for work zone markings shall meet the requirements of Item 672, "RAISED PAVEMENT MARKERS" and Departmental Material Specification DMS-4200 or DMS-4300.

PREFABRICATED PAVEMENT MARKINGS

1. Removable prefabricated pavement markings shall meet the requirements of DMS-8241.
2. Non-removable prefabricated pavement markings (foil back) shall meet the requirements of DMS-8240.

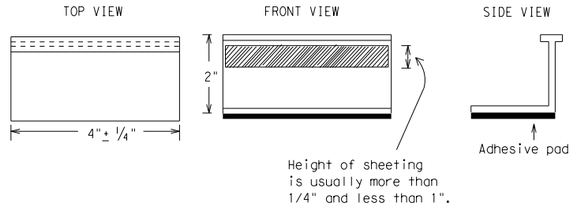
MAINTAINING WORK ZONE PAVEMENT MARKINGS

1. The Contractor will be responsible for maintaining work zone pavement markings within the work limits.
2. Work zone pavement markings shall be inspected in accordance with the frequency and reporting requirements of work zone traffic control device inspections as required by Form 599.
3. The markings should provide a visible reference for a minimum distance of 300 feet during normal daylight hours and 160 feet when illuminated by automobile low-beam headlights at night, unless sight distance is restricted by roadway geometrics.
4. Markings failing to meet this criteria within the first 30 days after placement shall be replaced at the expense of the Contractor as per Specification Item 662.

REMOVAL OF PAVEMENT MARKINGS

1. Pavement markings that are no longer applicable, could create confusion or direct a motorist toward or into the closed portion of the roadway shall be removed or obliterated before the roadway is opened to traffic.
2. The above shall not apply to detours in place for less than three days, where flaggers and/or sufficient channelizing devices are used in lieu of markings to outline the detour route.
3. Pavement markings shall be removed to the fullest extent possible, so as not to leave a discernable marking. This shall be by any method approved by TxDOT Specification Item 677 for "Eliminating Existing Pavement Markings and Markers".
4. The removal of pavement markings may require resurfacing or seal coating portions of the roadway as described in Item 677.
5. Subject to the approval of the Engineer, any method that proves to be successful on a particular type pavement may be used.
6. Blast cleaning may be used but will not be required unless specifically shown in the plans.
7. Over-painting of the markings SHALL NOT BE permitted.
8. Removal of raised pavement markers shall be as directed by the Engineer.
9. Removal of existing pavement markings and markers will be paid for directly in accordance with Item 677, "ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS," unless otherwise stated in the plans.
10. Black-out marking tape may be used to cover conflicting existing markings for periods less than two weeks when approved by the Engineer.

Temporary Flexible-Reflective Roadway Marker Tabs



STAPLES OR NAILS SHALL NOT BE USED TO SECURE TEMPORARY FLEXIBLE-REFLECTIVE ROADWAY MARKER TABS TO THE PAVEMENT SURFACE

1. Temporary flexible-reflective roadway marker tabs used as guidemarks shall meet the requirements of DMS-8242.
2. Tabs detailed on this sheet are to be inspected and accepted by the Engineer or designated representative. Sampling and testing is not normally required, however at the option of the Engineer, either "A" or "B" below may be imposed to assure quality before placement on the roadway.
   A. Select five (5) or more tabs at random from each lot or shipment and submit to the Construction Division, Materials and Pavement Section to determine specification compliance.
   B. Select five (5) tabs and perform the following test. Affix five (5) tabs at 24 inch intervals on an asphaltic pavement in a straight line. Using a medium size passenger vehicle or pickup, run over the markers with the front and rear tires at a speed of 35 to 40 miles per hour, four (4) times in each direction. No more than one (1) out of the five (5) reflective surfaces shall be lost or displaced as a result of this test.
3. Small design variances may be noted between tab manufacturers.
4. See Standard Sheet WZ(STPM) for tab placement on new pavements. See Standard Sheet TCP(7-1) for tab placement on seal coat work.

RAISED PAVEMENT MARKERS USED AS GUIDEMARKS

1. Raised pavement markers used as guidemarks shall be from the approved product list, and meet the requirements of DMS-4200.
2. All temporary construction raised pavement markers provided on a project shall be of the same manufacturer.
3. Adhesive for guidemarks shall be bituminous material hot applied or butyl rubber pad for all surfaces, or thermoplastic for concrete surfaces.

Guidemarks shall be designated as:
YELLOW - (two amber reflective surfaces with yellow body).
WHITE - (one silver reflective surface with white body).

DEPARTMENTAL MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
TRAFFIC BUTTONS	DMS-4300
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240
TEMPORARY REMOVABLE, PREFABRICATED PAVEMENT MARKINGS	DMS-8241
TEMPORARY FLEXIBLE, REFLECTIVE ROADWAY MARKER TABS	DMS-8242

A list of prequalified reflective raised pavement markers, non-reflective traffic buttons, roadway marker tabs and other pavement markings can be found at the Material Producer List web address shown on BC(1).

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PAVEMENT MARKINGS

BC(11)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT February 1998	CONT	SECT	JOB	HIGHWAY
REVISIONS	0044	04	048	US 82
2-98 9-07 5-21	DIST	COUNTY		SHEET NO.
1-02 7-13	WFS	MONTAGUE		158
11-02 8-14				

105

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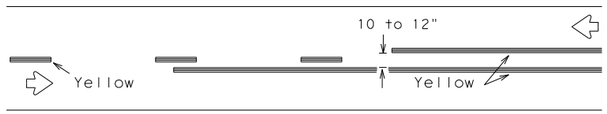
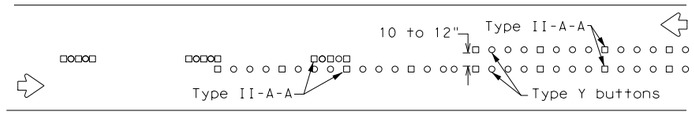
FILE: bc-21.dgn

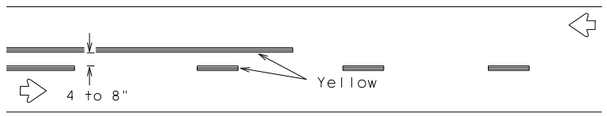
PAVEMENT MARKING PATTERNS



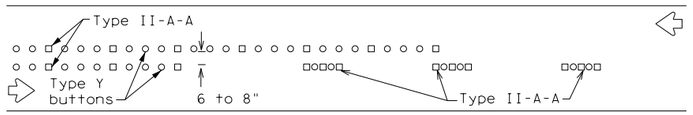
REFLECTORIZED PAVEMENT MARKINGS - PATTERN A



RAISED PAVEMENT MARKERS - PATTERN A



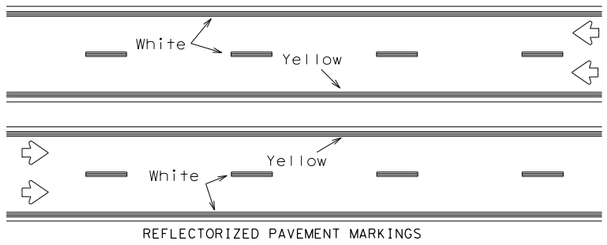
REFLECTORIZED PAVEMENT MARKINGS - PATTERN B



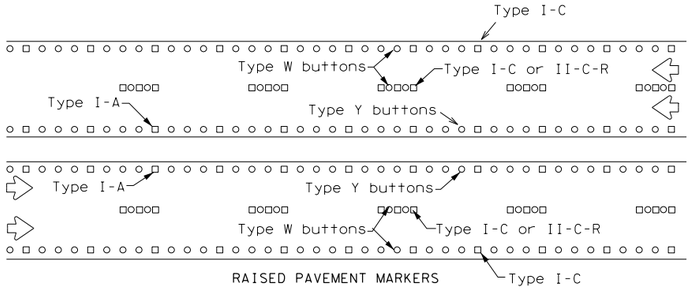
RAISED PAVEMENT MARKERS - PATTERN B

Pattern A is the TXDOT Standard, however Pattern B may be used if approved by the Engineer.
Prefabricated markings may be substituted for reflectorized pavement markings.

CENTER LINE & NO-PASSING ZONE BARRIER LINES FOR TWO-LANE, TWO-WAY HIGHWAYS



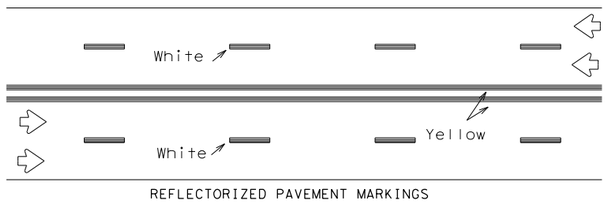
REFLECTORIZED PAVEMENT MARKINGS



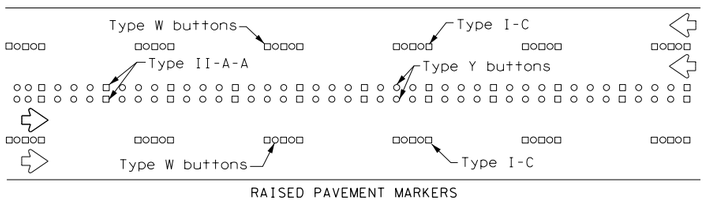
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

EDGE & LANE LINES FOR DIVIDED HIGHWAY



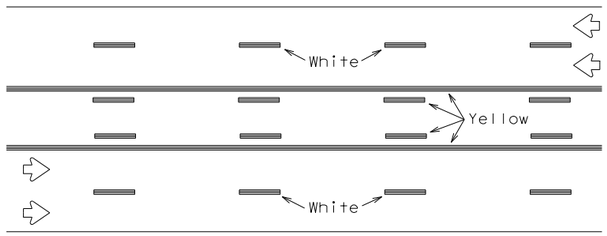
REFLECTORIZED PAVEMENT MARKINGS



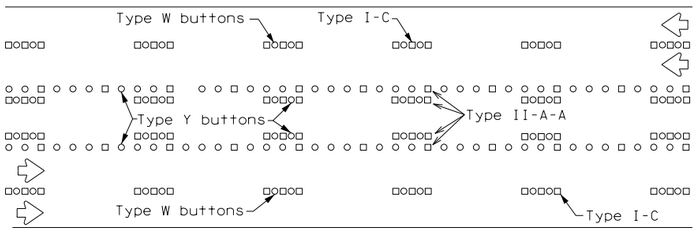
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

LANE & CENTER LINES FOR MULTILANE UNDIVIDED HIGHWAYS



REFLECTORIZED PAVEMENT MARKINGS



RAISED PAVEMENT MARKERS

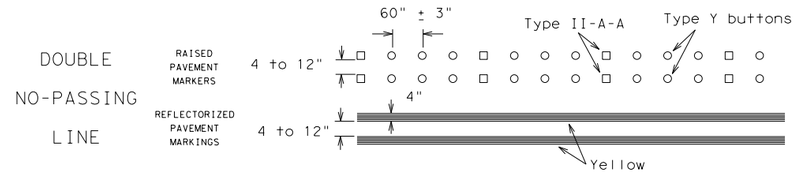
Prefabricated markings may be substituted for reflectorized pavement markings.

TWO-WAY LEFT TURN LANE

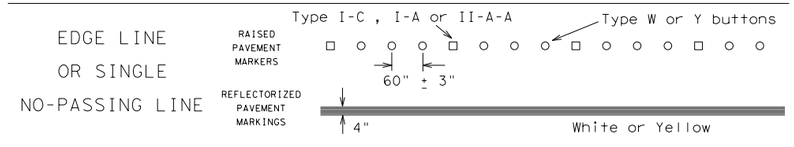
STANDARD WORK ZONE PAVEMENT MARKINGS DETAILS

SOLID LINES

DOUBLE NO-PASSING LINE

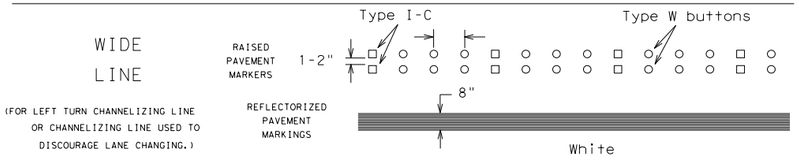


EDGE LINE OR SINGLE NO-PASSING LINE



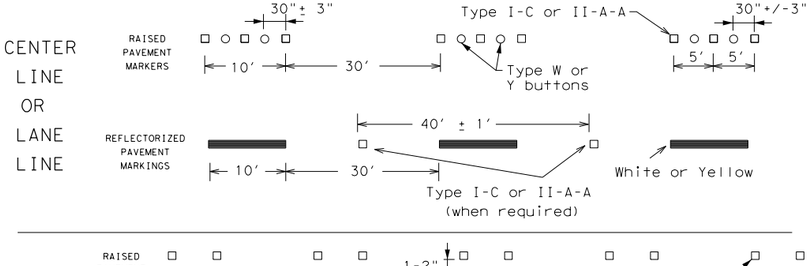
WIDE LINE

(FOR LEFT TURN CHANNELIZING LINE OR CHANNELIZING LINE USED TO DISCOURAGE LANE CHANGING.)

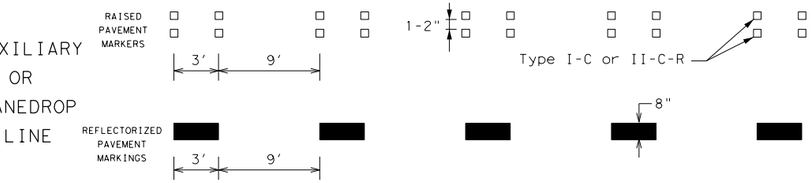


BROKEN LINES

CENTER LINE OR LANE LINE

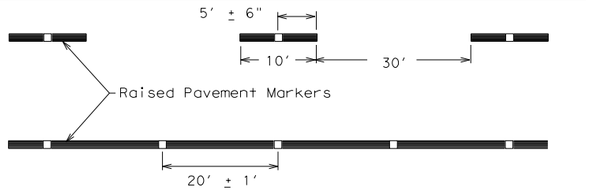


AUXILIARY OR LANEDROP LINE



REMOVABLE MARKINGS WITH RAISED PAVEMENT MARKERS

If raised pavement markers are used to supplement REMOVABLE markings, the markers shall be applied to the top of the tape at the approximate mid length of tape used for broken lines or at 20 foot spacing for solid lines. This allows an easier removal of raised pavement markers and tape.



Centerline only - not to be used on edge lines

Raised pavement markers used as standard pavement markings shall be from the approved products list and meet the requirements of Item 672 "RAISED PAVEMENT MARKERS."

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PAVEMENT MARKING PATTERNS

BC(12)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT February 1998	CONT	SECT	JOB	HIGHWAY
REVISIONS 1-97 9-07 5-21 2-98 7-13 11-02 8-14	0044	04	048	US 82
	DIST	COUNTY		SHEET NO.
	WFS	MONTAGUE		159

106

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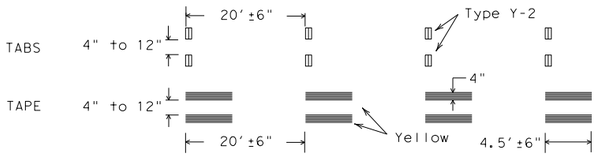
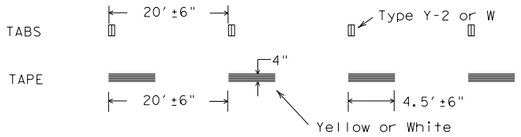
WORK ZONE SHORT TERM PAVEMENT MARKINGS DETAILS

SOLID LINES

DOUBLE NO-PASSING LINE

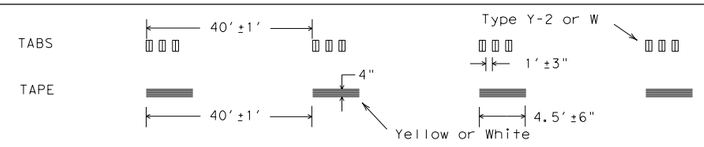


SINGLE NO-PASSING LINE or CHANNELIZATION LINE



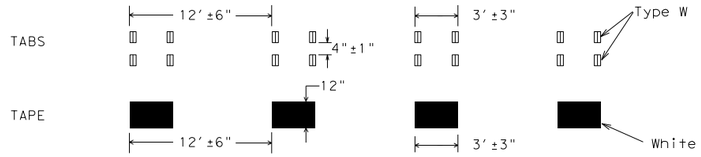
BROKEN LINES

(FOR CENTER LINE OR LANE LINE)

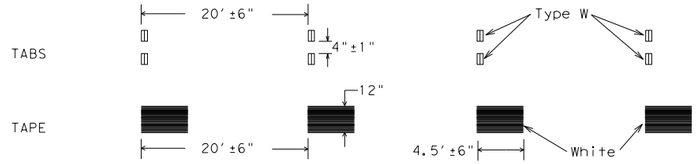


WIDE DOTTED LINES

(FOR LANE DROP LINES)



WIDE GORE MARKINGS



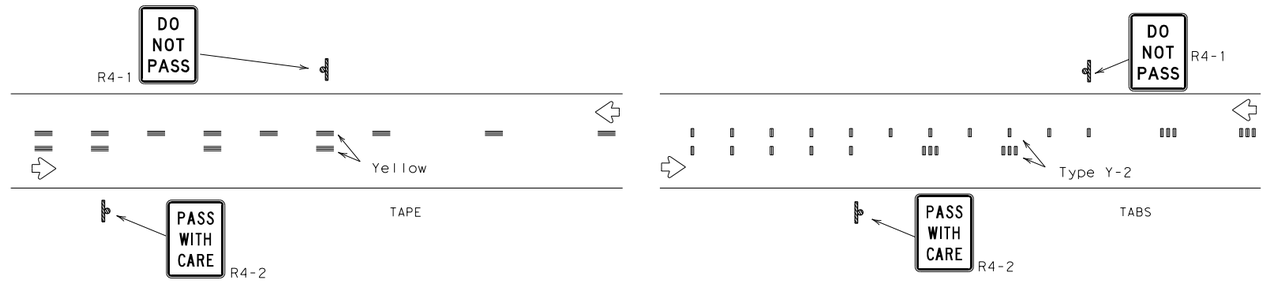
NOTES:

1. Short term pavement markings may be prefabricated markings (stick down tape) or temporary flexible-reflective roadway marker tabs unless otherwise specified elsewhere in plans.
2. Short term pavement markings shall NOT be used to simulate edge lines.
3. Dimensions indicated on this sheet are typical and approximate. Variations in size and height may occur between markers or devices made by manufacturers, by as much as 1/4 inch, unless otherwise noted.
4. Temporary flexible-reflective roadway marker tabs will require normal maintenance replacement when used on roadways with an ADT per lane of up to 7500 vehicles with no more than 10% truck mix. When roadways exceed these values, additional maintenance replacement of devices should be planned.
5. No segment of roadway open to traffic shall remain without permanent pavement markings for a period greater than 14 calendar days. The Contractor will be responsible for maintaining short term pavement markings until permanent pavement markings are in place. When the Contractor is responsible for placement of permanent pavement markings, no segment of roadway shall remain without permanent pavement markings for a period greater than 14 calendar days unless weather conditions prohibit placement. Permanent pavement markings shall be placed as soon as weather permits.
6. For two lane, two-way roadways, DO NOT PASS signs shall be erected to mark the beginning of sections where passing is prohibited and PASS WITH CARE signs shall be erected to mark the beginning of sections where passing is permitted. Signs shall be in accordance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) and may be used to indicate the limits of no-passing zones for up to 14 calendar days. Permanent pavement markings should then be placed.
7. For low volume two lane, two-way roadways of 4000 ADT or less, no-passing lines may be omitted when approved by the Engineer. DO NOT PASS and PASS WITH CARE signs shall be erected (see note 6).
8. For exit gores where a lane is being dropped place wide gore markings or retroreflective channelizing devices to guide motorist through the exit. If channelizing devices are to be used it should be noted elsewhere in the plans. One piece cones are not allowed for this purpose.

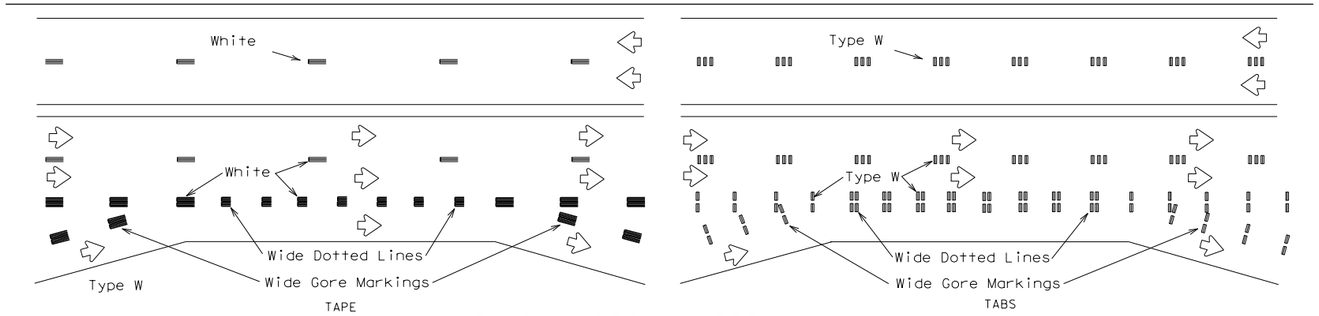
TEMPORARY FLEXIBLE, REFLECTIVE ROADWAY MARKER TABS (TABS)

1. Temporary flexible-reflective roadway marker tabs detailed on this sheet will be designated Type Y-2 (two amber reflective surfaces with yellow body); Type Y (one amber reflective surface with yellow body); and Type W (one white or silver reflective surface with white body). Additional details may be found on BC(11).
2. Tabs shall meet requirements of Departmental Material Specification DMS-8242.
3. When dry, tabs shall be visible for a minimum distance of 200 feet during normal daylight hours and when illuminated by automobile low-beam head light at night, unless sight distance is restricted by roadway geometrics.
4. No two consecutive tabs nor four tabs per 1000 feet of line shall be missing or fail to meet the visual performance requirements of Note 3.

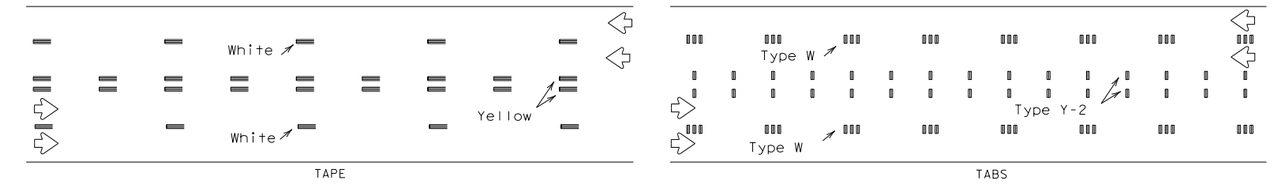
WORK ZONE SHORT TERM PAVEMENT MARKINGS PATTERNS



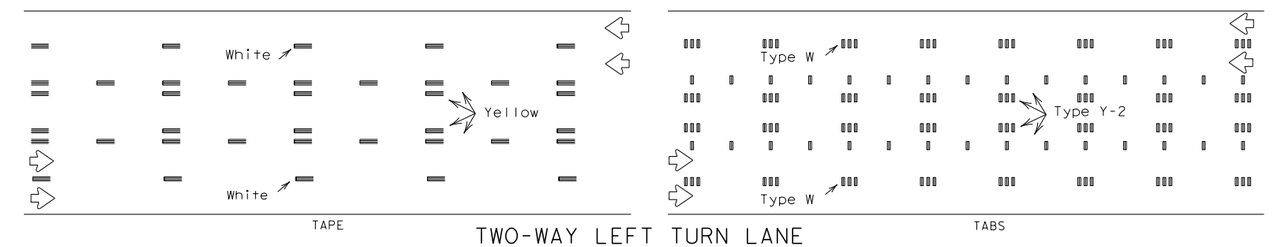
CENTER LINE & NO-PASSING ZONE BARRIER LINES FOR TWO LANE TWO-WAY HIGHWAYS



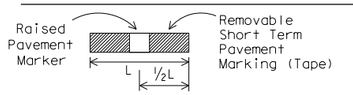
LANE LINES FOR DIVIDED HIGHWAY



LANE & CENTER LINES FOR MULTILANE UNDIVIDED HIGHWAYS



TWO-WAY LEFT TURN LANE



If raised pavement markers are used to supplement REMOVABLE short term markings, the markers shall be applied to the top of the tape at the approximate mid length of the tape. This allows an easier removal of raised markers and tape.

PREFABRICATED PAVEMENT MARKINGS

1. Temporary Removable Prefabricated Pavement Markings shall meet the requirements of DMS-8241.
2. Non-removable Prefabricated Pavement Markings shall meet the requirements of either DMS-8240 "Permanent Prefabricated Pavement Markings" or DMS-8243 "Temporary Costruction-Grade Prefabricated Pavement Markings."

RAISED PAVEMENT MARKERS

1. All raised pavement markers used for work zone markings shall meet the requirements of Item 672, "RAISED PAVEMENT MARKERS" and DMS-4200.

DEPARTMENTAL MATERIAL SPECIFICATIONS (DMS) & MATERIAL PRODUCER LISTS (MPL)

1. DMSs referenced above can be found along with embedded links to their respective MPLs at the following website:
   http://www.txdot.gov/business/contractors_consultants/material_specifications/default.htm

Texas Department of Transportation

Traffic Operations Division Standard

WORK ZONE SHORT TERM PAVEMENT MARKINGS

WZ(STPM)-13

FILE:	wzstpm-13.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT	April 1992	CONT	SECT	JOB	HIGHWAY
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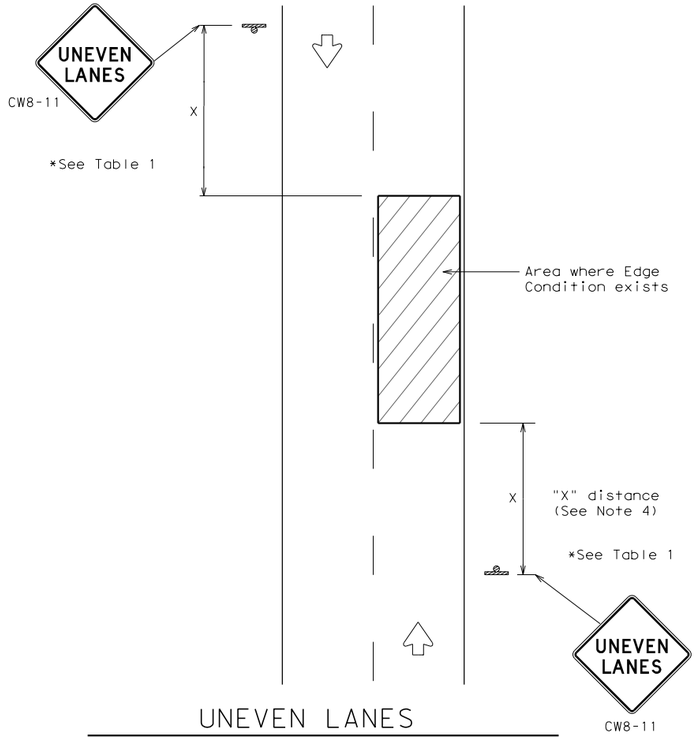
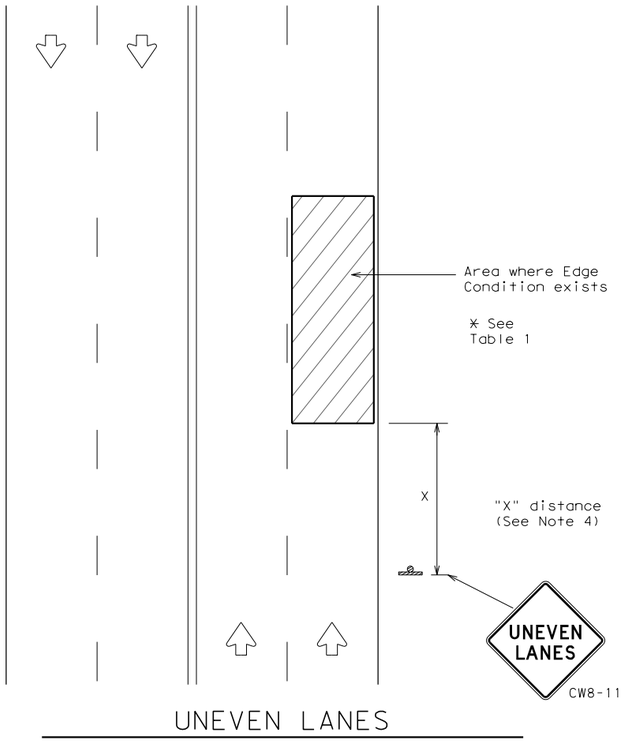
7-13					

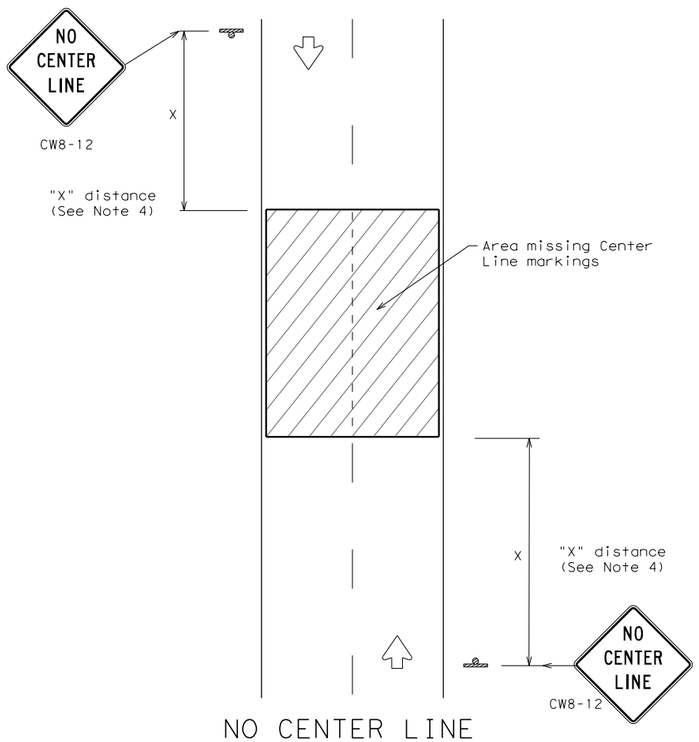
111



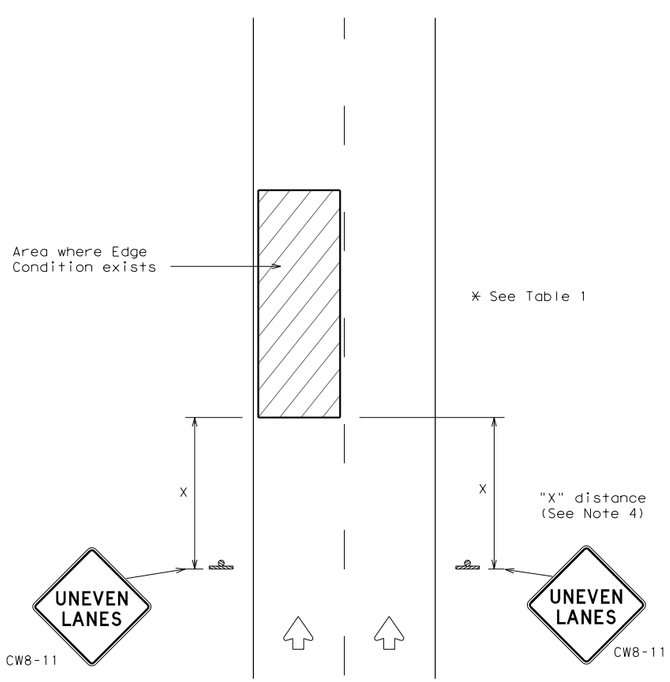
UNEVEN LANES
TWO LANE CONVENTIONAL ROAD



UNEVEN LANES
FOUR LANE CONVENTIONAL ROAD



NO CENTER LINE
TWO LANE CONVENTIONAL ROAD



UNEVEN LANES
DIVIDED ROADWAY

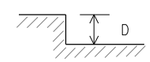
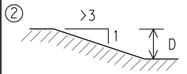
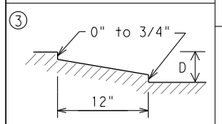
DEPARTMENTAL MATERIAL SPECIFICATIONS	
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240
TEMPORARY (REMOVABLE) PREFABRICATED PAVEMENT MARKINGS	DMS-8241
SIGN FACE MATERIALS	DMS-8300

COLOR	USAGE	SHEETING MATERIAL
ORANGE	BACKGROUND	TYPE B_{FL} OR TYPE C_{FL} SHEETING
BLACK	LEGEND & BORDERS	ACRYLIC NON-REFLECTIVE SHEETING

GENERAL NOTES

1. If spalling or holes occur, ROUGH ROAD (CW8-8) signs should be placed in advance of the condition and be repeated every two miles where the condition persists.
2. UNEVEN LANES (CW8-11) signs shall be installed in advance of the condition and repeated every mile. Signs installed along the uneven lane condition may be supplemented with the NEXT XX MILES (CW7-3aP) plaque or Advisory Speed (CW13-1P) plaque.
3. NO CENTER LINE (CW8-12) signs and temporary pavement markings as per the WZ(STPM) standard shall be installed if yellow centerlines separating two way traffic are obscured or obliterated. Repeat NO CENTER LINE signs every two miles where the center line markings are not in place. The signs and markings shall remain in place until permanent pavement markings are installed.
4. Signs shall be spaced at the distances recommended as per BC standards.
5. Additional signs may be required as directed by the Engineer. Signs shall remain in place until final surface is applied. Signs shall be considered subsidiary to Item 502 "BARRICADES, SIGNS AND TRAFFIC HANDLING."
6. Signs shall be fabricated and mounted on supports as shown on the BC standards and/or listed on the "Compliant Work Zone Traffic Control Devices" list.
7. Short term markings shall not be used to simulate edge lines.
8. All signs shall be constructed in accordance with the details found in the "Standard Highway Sign Designs for Texas," latest edition.

TABLE 1

Edge Condition	Edge Height (D)	* Warning Devices
① 	Less than or equal to: 1¼" (maximum-planing) 1½" (typical-overlay)	Sign: CW8-11
	Distance "D" may be a maximum of 1 1/4 " for planing operations and 2" for overlay operations if uneven lanes with edge condition 1 are open to traffic after work operations cease.	
② 	Less than or equal to 3"	Sign: CW8-11
③  Notched Wedge Joint	Distance "D" may be a maximum of 3" if uneven lanes with edge condition 2 or 3 are open to traffic after work operations cease. Uneven lanes should not be open to traffic when "D" is greater than 3".	

TRAFFIC CONTROL DURING PLANING, OVERLAY AND LEVELING OPERATIONS ARE SHOWN ELSEWHERE IN THE PLANS.

MINIMUM WARNING SIGN SIZE	
Conventional roads	36" x 36"
Freeways/expressways, divided roadways	48" x 48"

Texas Department of Transportation

Traffic Operations Division Standard

SIGNING FOR UNEVEN LANES

WZ(UL)-13

FILE: wzul-13.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT April 1992	CONT	SECT	JOB	HIGHWAY
REVISIONS	0044	04	048	US 82
8-95 2-98 7-13	DIST	COUNTY		SHEET NO.
1-97 3-03	WFS	MONTAGUE		161

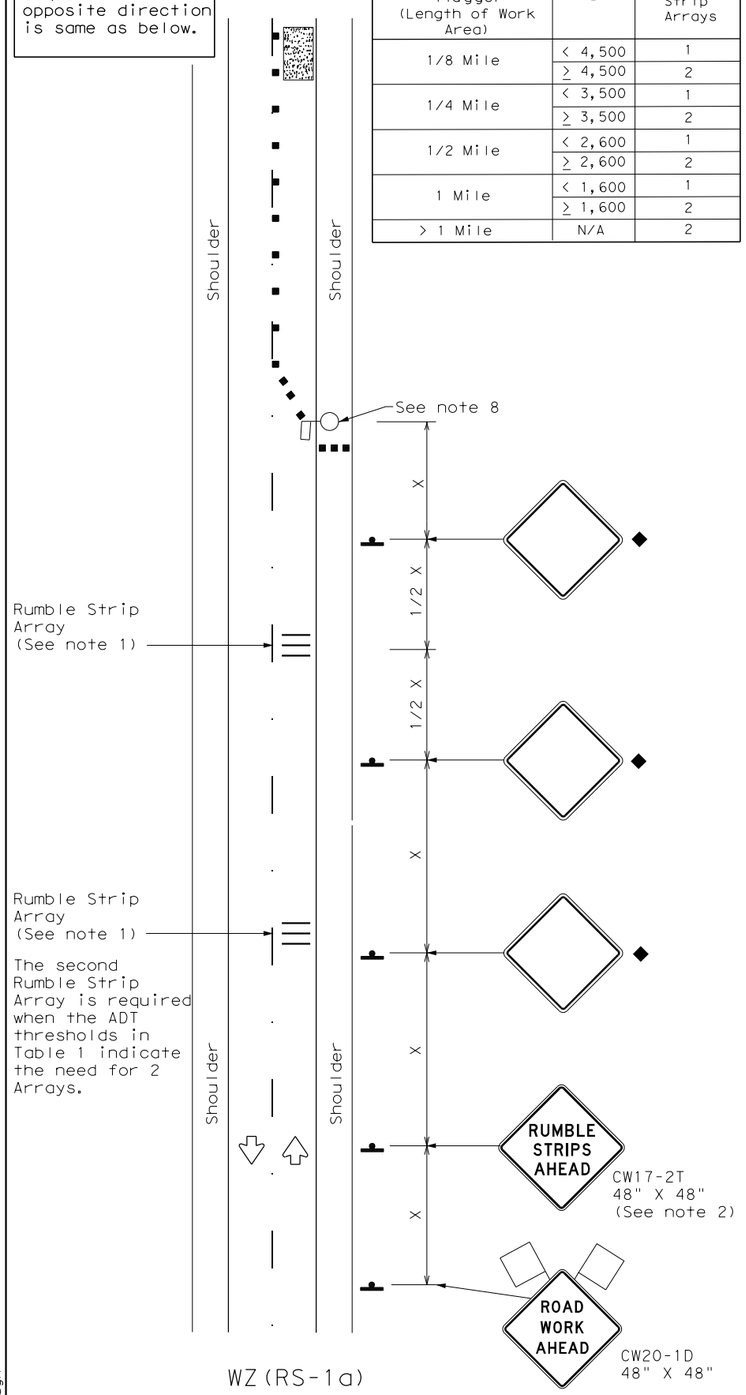
112

DATE: 10/18/2023 6:17:41 AM
FILE: wzul-13.dgn

DATE: 10/18/2023 6:17:42 AM
FILE: wzrs22.dgn

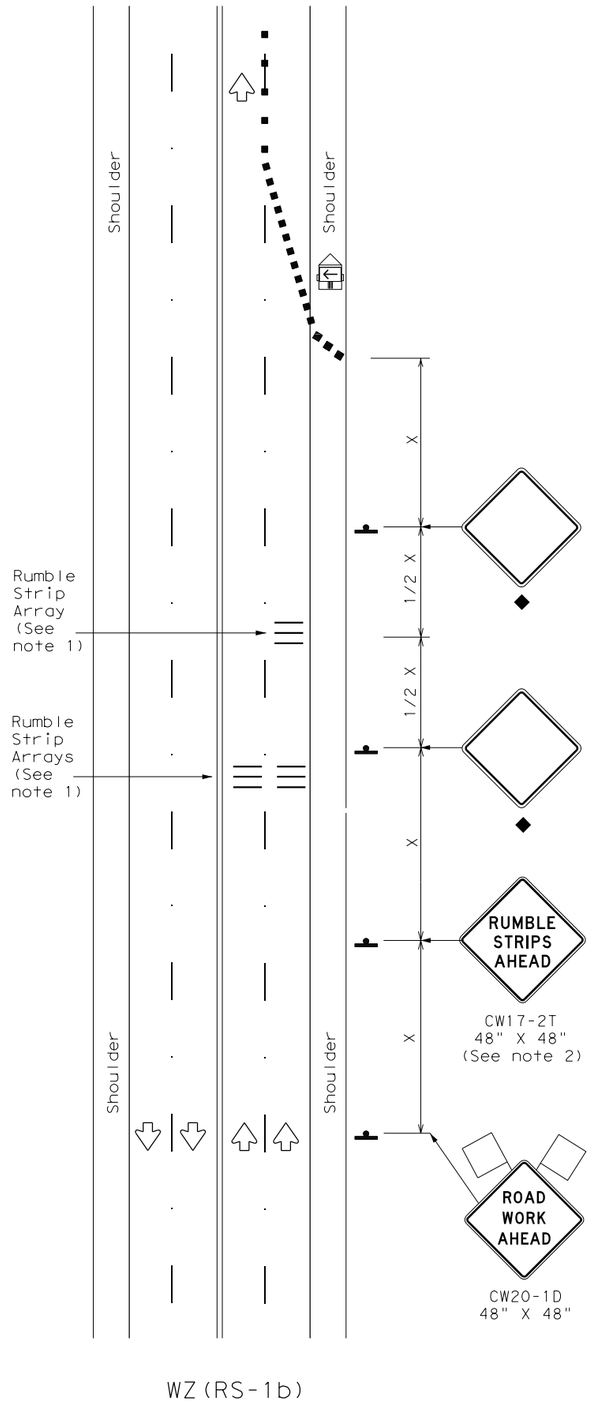
Warning sign and rumble strip sequence in opposite direction is same as below.

TABLE 1		
Flagger to Flagger (Length of Work Area)	ADT	# of Rumble Strip Arrays
1/8 Mile	< 4,500	1
	≥ 4,500	2
1/4 Mile	< 3,500	1
	≥ 3,500	2
1/2 Mile	< 2,600	1
	≥ 2,600	2
1 Mile	< 1,600	1
	≥ 1,600	2
> 1 Mile	N/A	2



WZ(RS-1a)

RUMBLE STRIPS ON ONE-LANE TWO-WAY APPLICATION



WZ(RS-1b)

RUMBLE STRIPS FOR LANE CLOSURE ON CONVENTIONAL ROADWAY

GENERAL NOTES

1. Each Rumble Strip Array should consist of three rumble strips spaced center to center at the spacing shown in Table 2, placed transverse across the lane at locations shown.
2. The CW17-2T "RUMBLE STRIPS AHEAD" sign should be located after the CW20-1D "ROAD WORK AHEAD sign and spaced as shown. If traffic is observed to be queuing, or is expected to queue beyond the Rumble Strips, the CW17-2T sign and the first Rumble Strip Array may be located upstream of the CW20-1D sign as necessary to provide needed warning.
3. Temporary Rumble Strips will be considered subsidiary to Item 502, and shall be a product listed on the Compliant Work Zone Traffic Control Devices.
4. Remove Temporary Rumble Strips before removing the advanced warning signs.
5. Temporary Rumble Strips should not be used on horizontal curves, loose gravel, soft or bleeding asphalt, heavily rutted pavements or unpaved surfaces.
6. Temporary Rumble Strips shall be installed and maintained as per manufacturer's recommendations.
7. This standard sheet shall be used in conjunction with other appropriate TCP standard, TMUTCD typical application or project specific detail for the project.
8. The one-lane two-way application may utilize a flagger, an Automated Flagger Assistance Device (AFAD) or a Portable Traffic Signal (PTS).
9. Replace defective Temporary Rumble Strips as directed by the Engineer.
10. Temporary Rumble Strips may be used on freeways or expressways based on engineering judgment and written direction from the Engineer.

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Panel	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT)
S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓		

◆ Signs are for illustrative purposes only. Signs required may vary depending on the TCP, TMUTCD Typical Application, or project specific details for the project.

* For posted speeds in excess of 65 MPH, it is recommended that spacing is increased as speed limits increase. Increasing space between rumble strips will improve effectiveness.

TABLE 2	
Speed	Approximate distance between strips in an array
≤ 40 MPH	10'
> 40 MPH & ≤ 55 MPH	15'
= 60 MPH	20'
≥ 65 MPH	* 35' +

Texas Department of Transportation

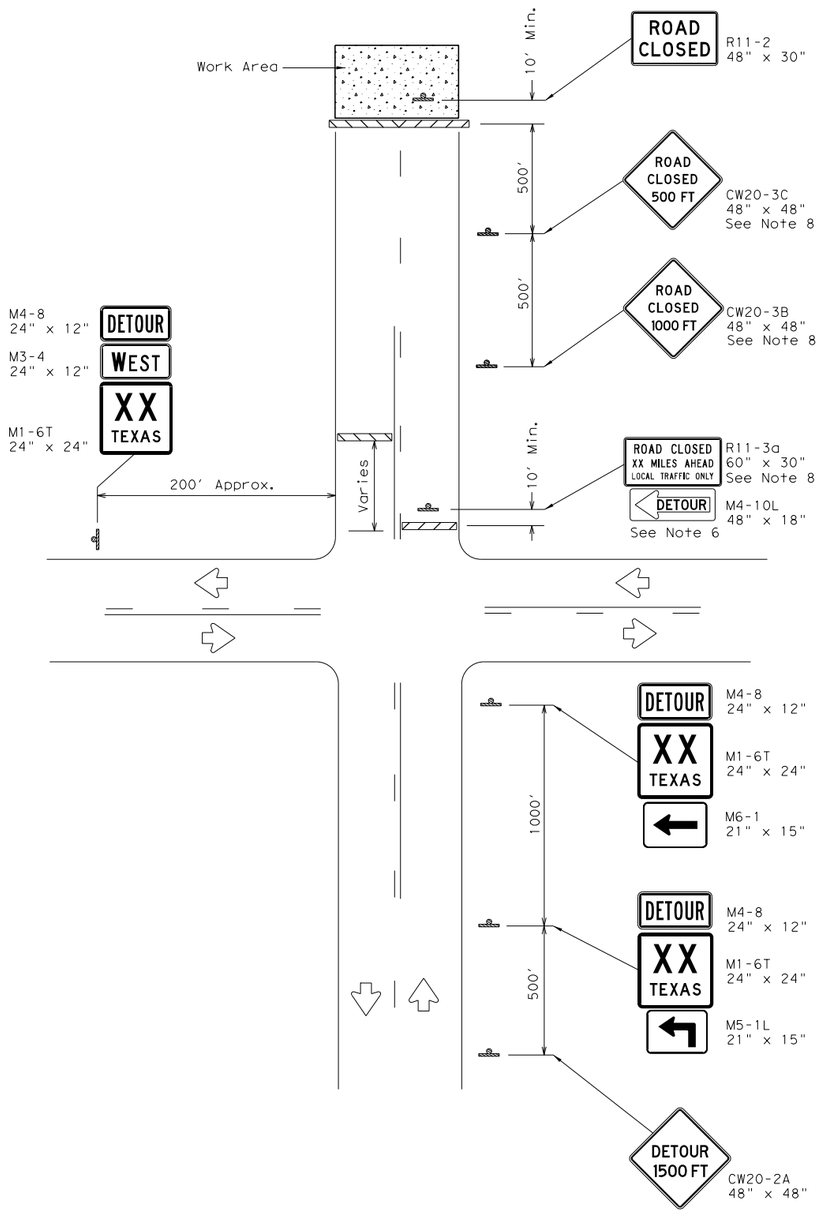
Traffic Safety Division Standard

TEMPORARY RUMBLE STRIPS

WZ(RS)-22

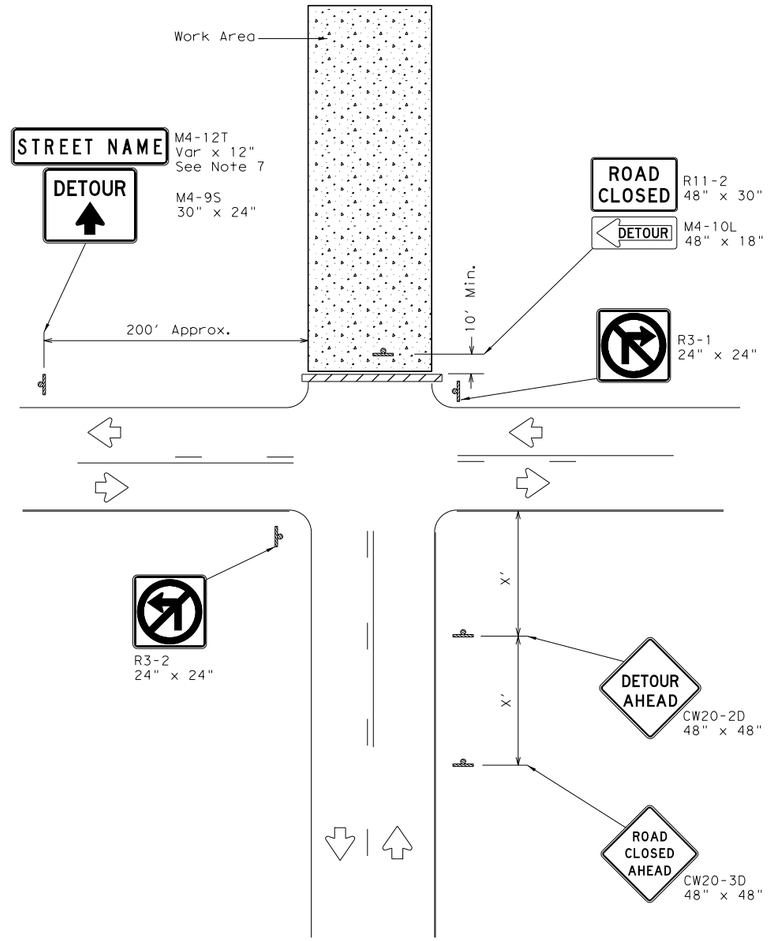
FILE: wzrs22.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT November 2012	CONT	SECT	JOB	HIGHWAY
REVISIONS 2-14 1-22 4-16	0044	04	048	US 82
	DIST	COUNTY		SHEET NO.
	WFS	MONTAGUE		162

117



ROAD CLOSURE BEYOND THE INTERSECTION

Signing for a Numbered Route with an Off-Site Detour



ROAD CLOSURE AT THE INTERSECTION

Signing for an Un-numbered Route with an Off-Site Detour

LEGEND	
	Type 3 Barricade
	Sign

Posted Speed *	Minimum Sign Spacing "X" Distance
30	120'
35	160'
40	240'
45	320'
50	400'
55	500'
60	600'
65	700'
70	800'
75	900'

* Conventional Roads Only

GENERAL NOTES

1. This sheet is intended to provide details for temporary work zone road closures. For permanent road closure details see the D&OM standards.
2. Barricades used shall meet the requirements shown on Barricade and Construction Standard BC(10) and listed on the Compliant Work Zone Traffic Control Devices list (CWZTCD).
3. Stockpiled materials shall not be placed on the traffic side of barricades.
4. Barricades at the road closure should extend from pavement edge to pavement edge.
5. Detour signing shown is intended to illustrate the type of signing that is appropriate for numbered routes or un-numbered routes as labeled. It does not indicate the full extent of detour signing required. Detour routes should be signed as shown elsewhere in the plans.
6. If the road is open for a significant distance beyond the intersection or there are significant origin/destination points beyond the intersection, the signs and barricades at this location should be located at the edge of the traveled way.
7. The Street Name (M4-12T) sign is to be placed above the DETOUR (M4-9S) sign.
8. For urban areas where there is a shorter distance between the intersection and the actual closure location, the ROAD CLOSED XX MILES AHEAD (R11-3a) sign may be replaced with a ROAD CLOSED TO THRU TRAFFIC (R11-4) sign. If adequate space does not exist between the intersection and the closure a single ROAD CLOSED AHEAD (CW20-3D) sign spaced as per the table above may replace the ROAD CLOSED 1000 FT (CW20-3B) and ROAD CLOSED 500 FT (CW20-3C) signs.
9. Signs and barricades shown shall be subsidiary to Item 502. Locations where these details will be required shall be as shown elsewhere in the plans.

Texas Department of Transportation

Traffic Operations Division Standard

WORK ZONE ROAD CLOSURE DETAILS

WZ(RCD)-13

FILE: wzrcd-13.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT August 1995	CONT	SECT	JOB	HIGHWAY
REVISIONS	0044	04	048	US 82
1-97 4-98 7-13	DIST	COUNTY		SHEET NO.
2-98 3-03	WFS	MONTAGUE		163

113

DATE: 10/18/2023 6:17:42 AM
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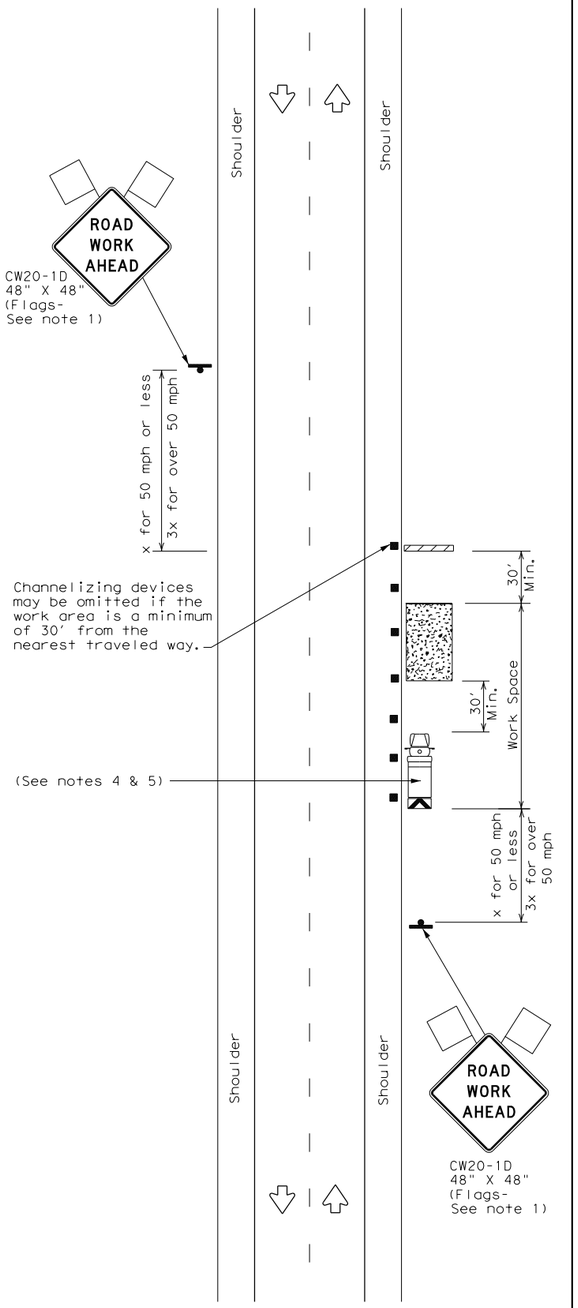
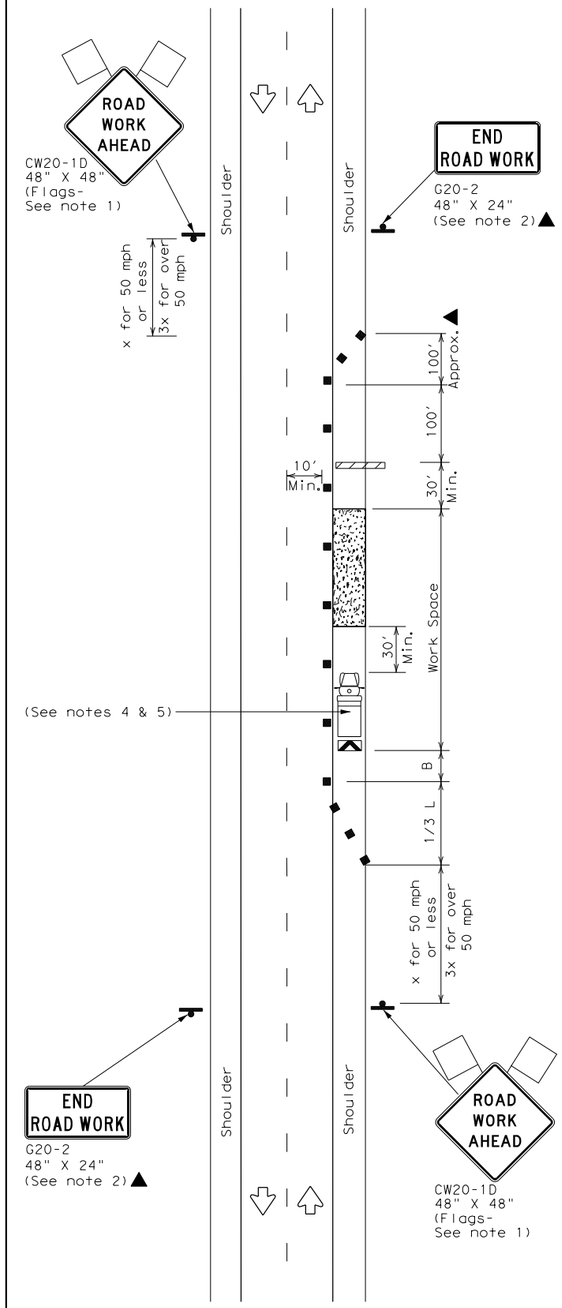


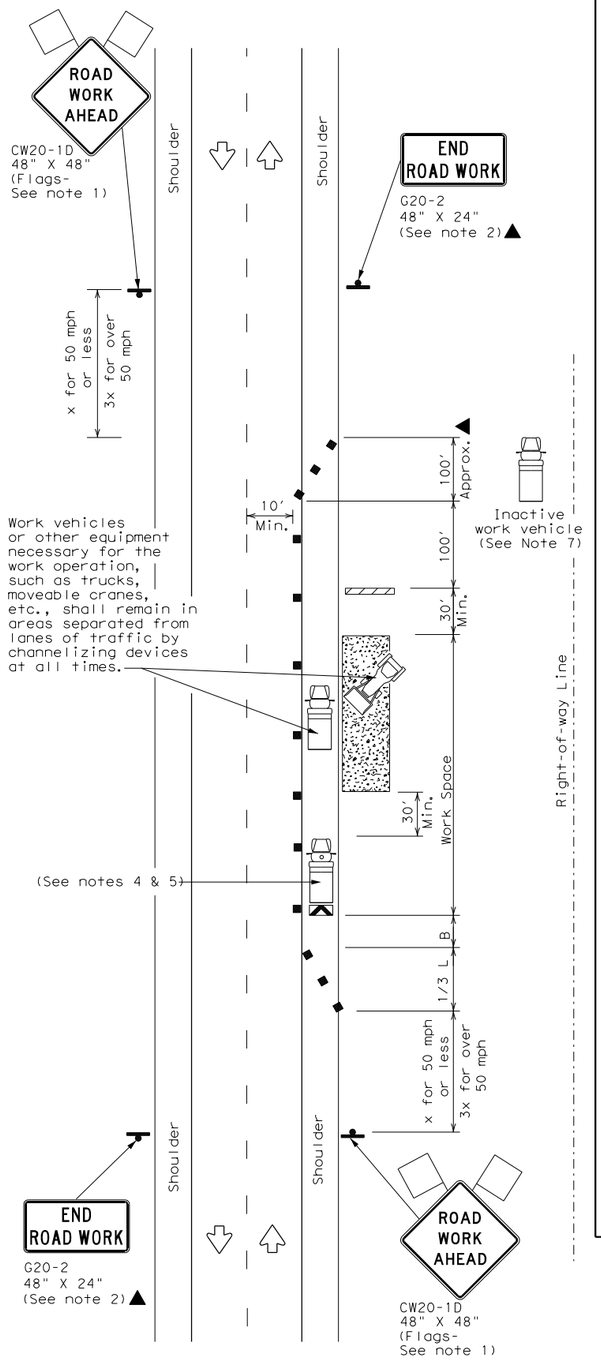
TCP (2-1a)

WORK SPACE NEAR SHOULDER
Conventional Roads



TCP (2-1b)

WORK SPACE ON SHOULDER
Conventional Roads



TCP (2-1c)

WORK VEHICLES ON SHOULDER
Conventional Roads

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	✓

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated in the plans, or for routine maintenance work, when approved by the Engineer.
3. Stockpiled material should be placed a minimum of 30 feet from nearest traveled way.
4. Shadow Vehicle with TMA and high intensity rotating, flashing, oscillating or strobe lights. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
5. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect a wider work space.
6. See TCP(5-1) for shoulder work on divided highways, expressways and freeways.
7. Inactive work vehicles or other equipment should be parked near the right-of-way line and not parked on the paved shoulder.
8. CW21-5 "SHOULDER WORK" signs may be used in place of CW20-1D "ROAD WORK AHEAD" signs for shoulder work on conventional roadways.

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN CONVENTIONAL ROAD SHOULDER WORK

TCP(2-1)-18

FILE: tcp2-1-18.dgn	DN:	CK:	DW:	CK:
© TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS	0044	04	048	US 82
2-94 4-98	DIST	COUNTY		SHEET NO.
8-95 2-12				
1-97 2-18	WFS	MONTAGUE		164

161

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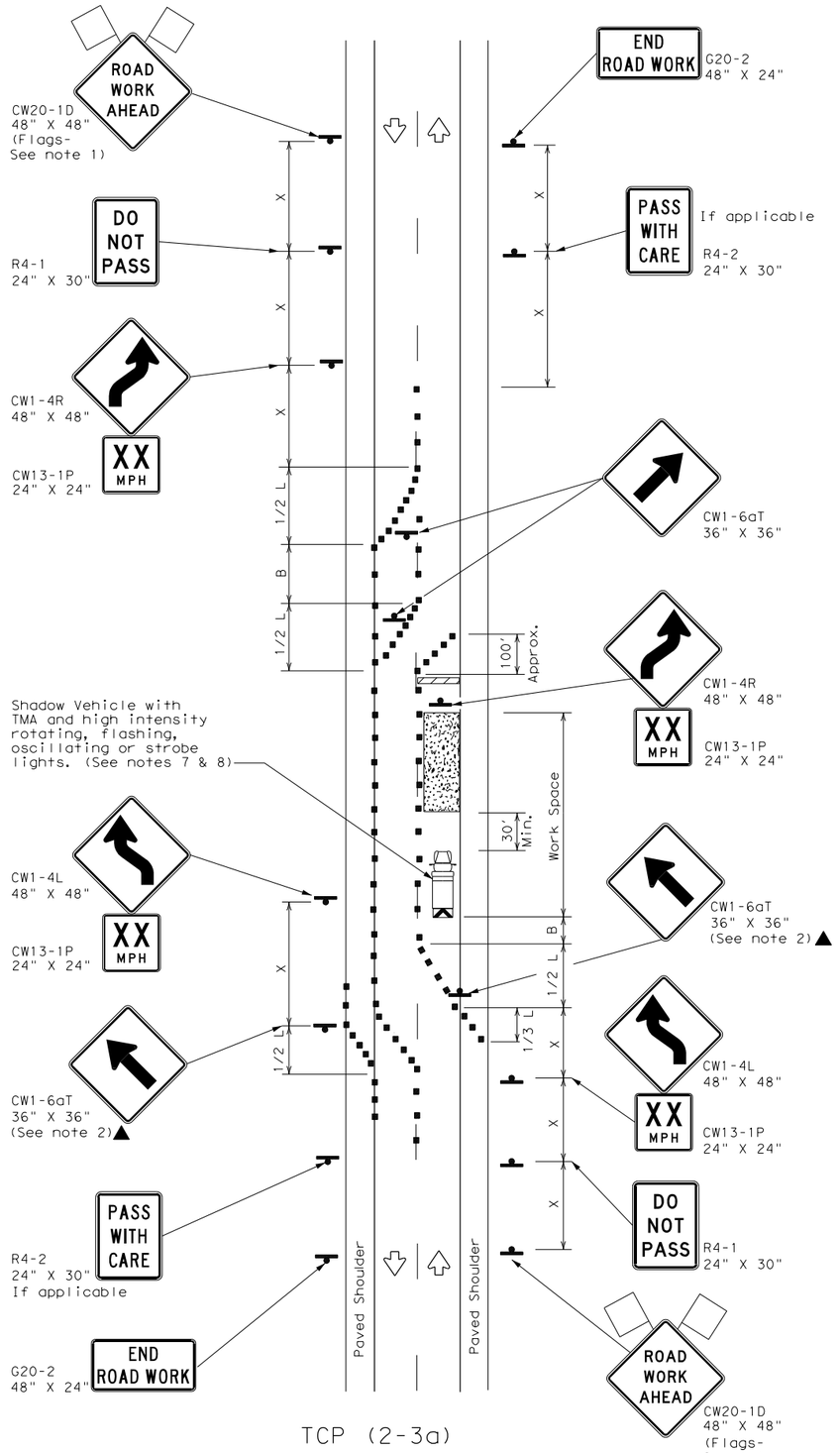
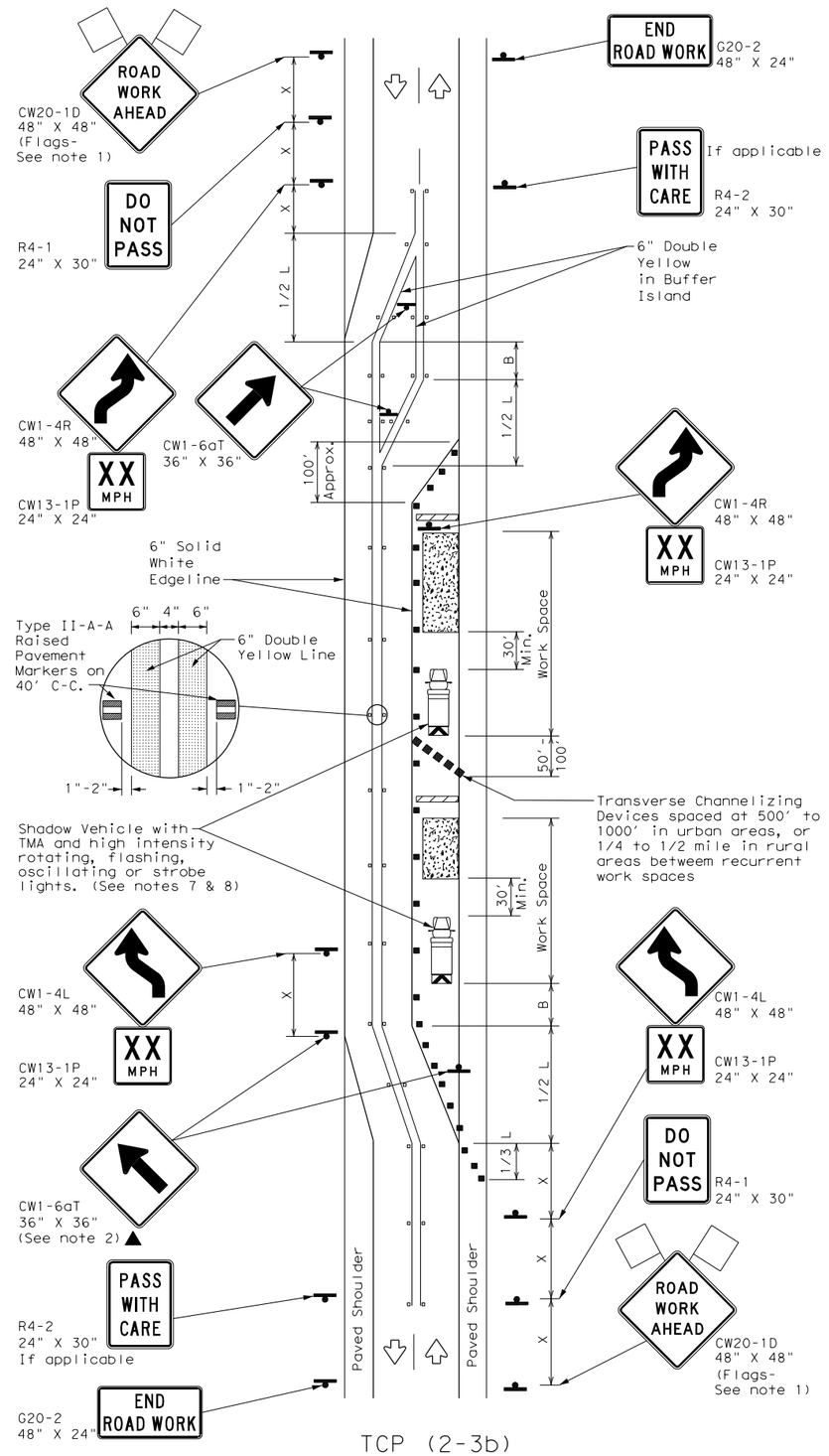


TCP (2-3a)
2-LANE ROADWAY WITH PAVED SHOULDERS

ONE LANE CLOSED
ADEQUATE FIELD OF VIEW



TCP (2-3b)
2-LANE ROADWAY WITH PAVED SHOULDERS

ONE LANE CLOSED
INADEQUATE FIELD OF VIEW

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board		Raised Pavement Markers Ty II-AA
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed ✳	Formula	Minimum Desirable Taper Lengths ✳✳ 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

✳ Conventional Roads Only

✳✳ Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
				TCP(2-3b)ONLY
			✓	✓

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. When work space will be in place less than three days existing pavement markings may remain in place. Channelizing devices shall be used to separate traffic.
4. Flagger control should NOT be used unless roadway conditions or heavy traffic volume require additional emphasis to safely control traffic. Flagger should be positioned at end of traffic queue.
5. The R4-1 "DO NOT PASS," R4-2 " PASS WITH CARE" and construction regulatory speed zone signs may be installed within CW20-1D "ROAD WORK AHEAD" signs. Proper spacing of signs shall be maintained.
6. Conflicting pavement marking shall be removed for long term projects.
7. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted.
8. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect a wider work space.

TCP (2-3a)

9. Conflicting pavement markings shall be removed for long-term projects. For shorter durations where traffic is directed over a yellow centerline, channelizing devices which separate two-way traffic should be spaced on tapers at 20' or 15' if posted speeds are 35 mph or slower, and for tangent sections, at 1/2(S) where S is the speed in mph. This tighter device spacing is intended for the area of the conflicting markings, not the entire work zone.

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TRAFFIC CONTROL PLAN TRAFFIC SHIFTS ON TWO-LANE ROADS

TCP(2-3)-23

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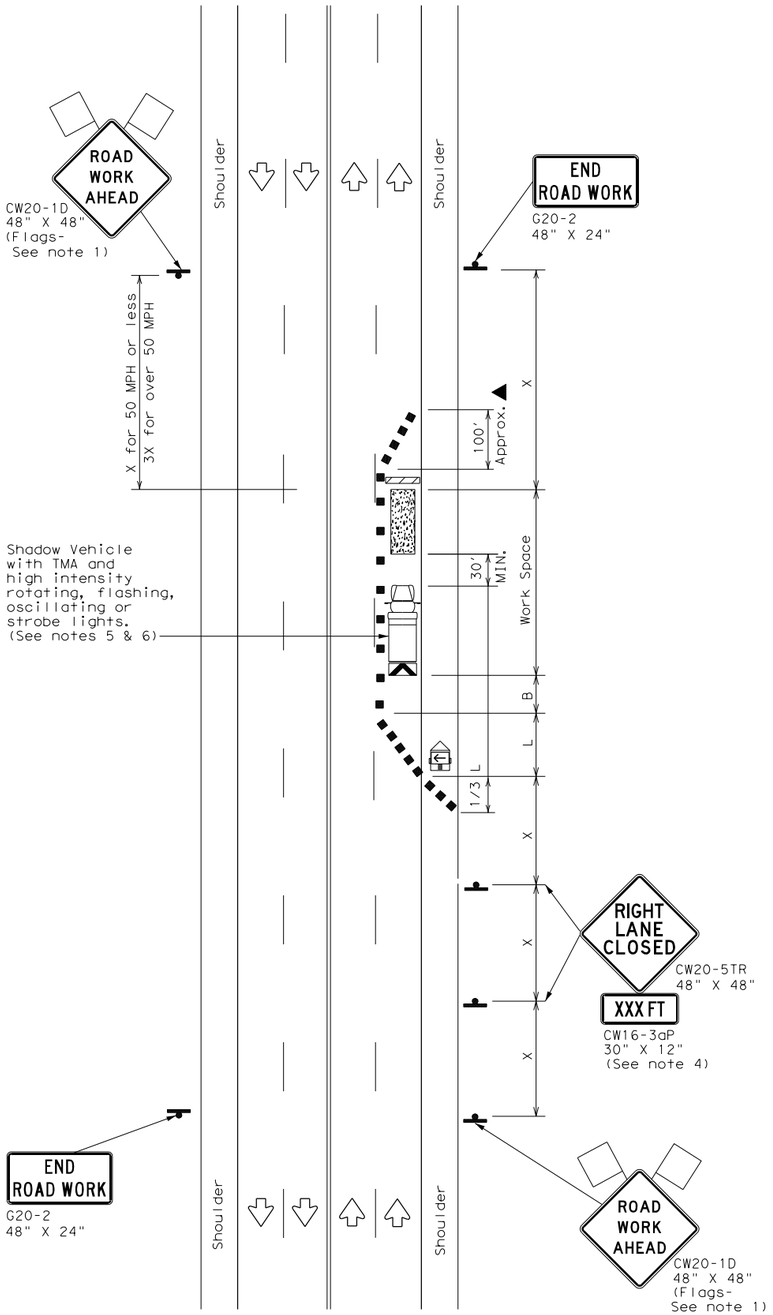
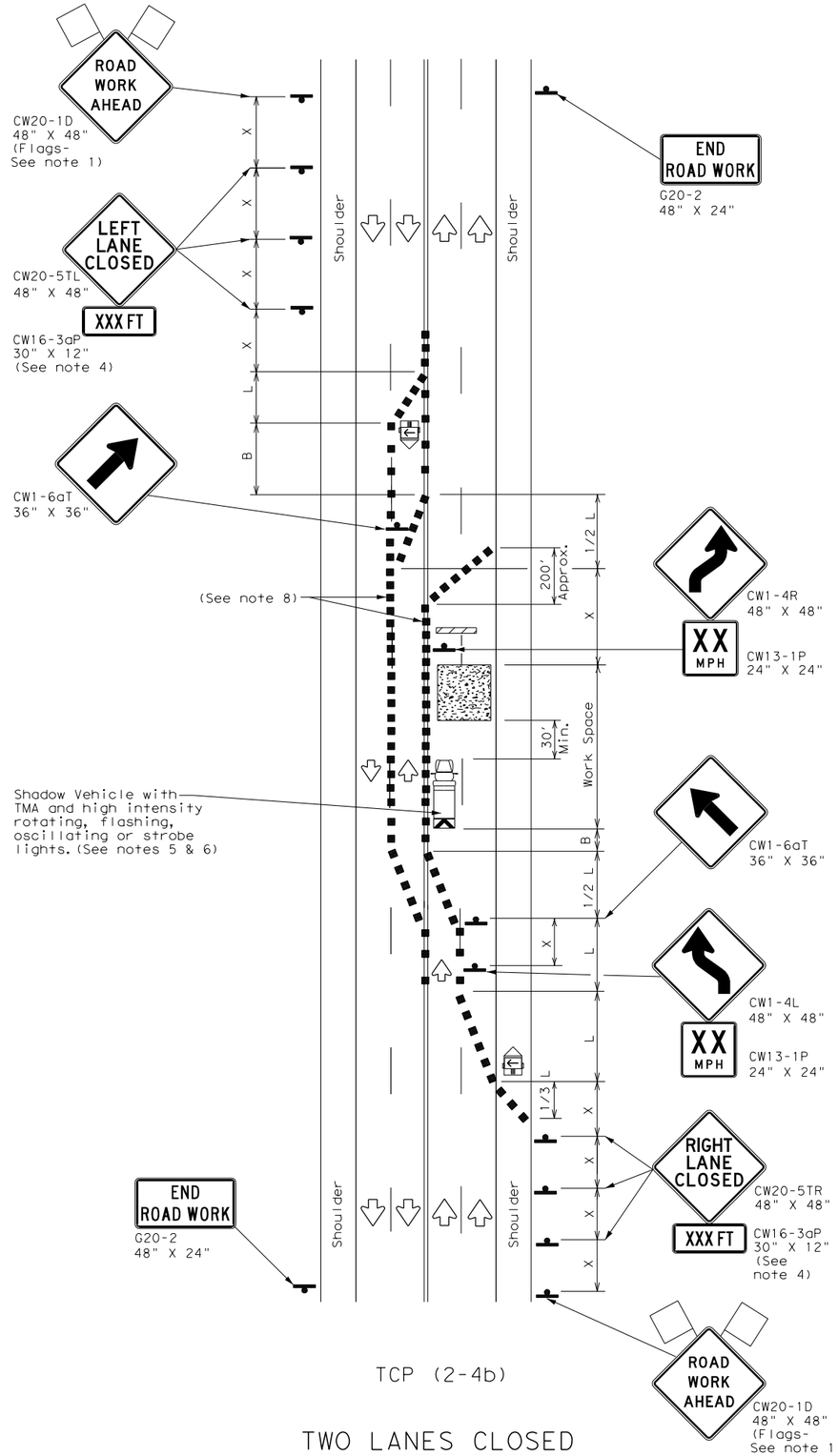
© TxDOT April 2023	CONT	SECT	JOB	HIGHWAY
REVISIONS 12-85 4-98 2-18	0044	04	048	US 82
8-95 3-03 4-23	DIST	COUNTY		SHEET NO.
1-97 2-12	WFS	MONTAGUE		165



TCP (2-4a)

ONE LANE CLOSED



TCP (2-4b)

TWO LANES CLOSED

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
		✓	✓	

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. The downstream taper is optional. When used, it should be 100 feet minimum length per lane.
4. For short term applications, when post mounted signs are not used, the distance legend may be shown on the sign face rather than on a CW16-3aP supplemental plaque.
5. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
6. Additional Shadow Vehicles with TMAs may be positioned in each closed lane, on the shoulder or off the paved surface, next to those shown in order to protect a wider work space.

TCP (2-4a)

7. If this TCP is used for a left lane closure, CW20-5TL "LEFT LANE CLOSED"signs shall be used and channelizing devices shall be placed on the centerline to protect the work space from opposing traffic with the arrow board placed in the closed lane near the end of the merging taper.

TCP (2-4b)

8. For shorter durations where traffic is directed over a yellow centerline, channelizing devices which separate two-way traffic should be spaced on tapers at 20' or 15' if posted speeds are 35 mph or slower, and for tangent sections, at 1/2(S) where S is the speed in mph. This tighter devices spacing is intended for the area of conflicting markings, not the entire work zone.

Texas Department of Transportation — Traffic Operations Division Standard

TRAFFIC CONTROL PLAN LANE CLOSURES ON MULTILANE CONVENTIONAL ROADS

TCP(2-4)-18

FILE: tcp2-4-18.dgn	DN:	CK:	DW:	CK:
© TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS 8-95 3-03	0044	04	048	US 82
1-97 2-12	DIST	COUNTY		SHEET NO.
4-98 2-18	WFS	MONTAGUE		166

164

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DATE: 10/18/2023 6:17:43 AM
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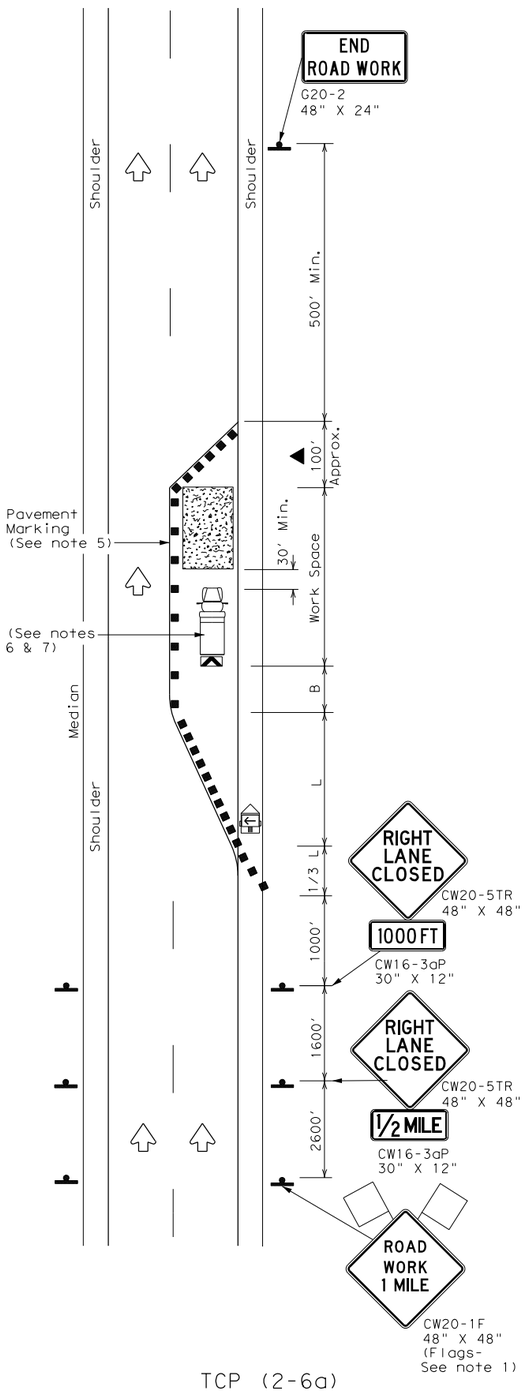
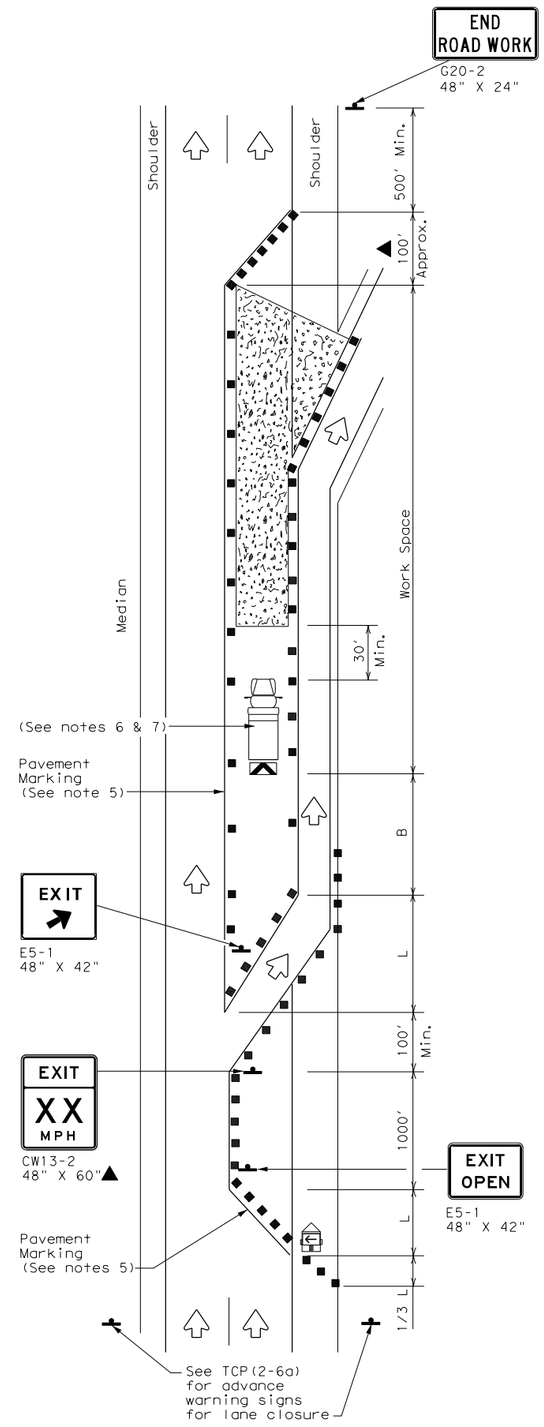


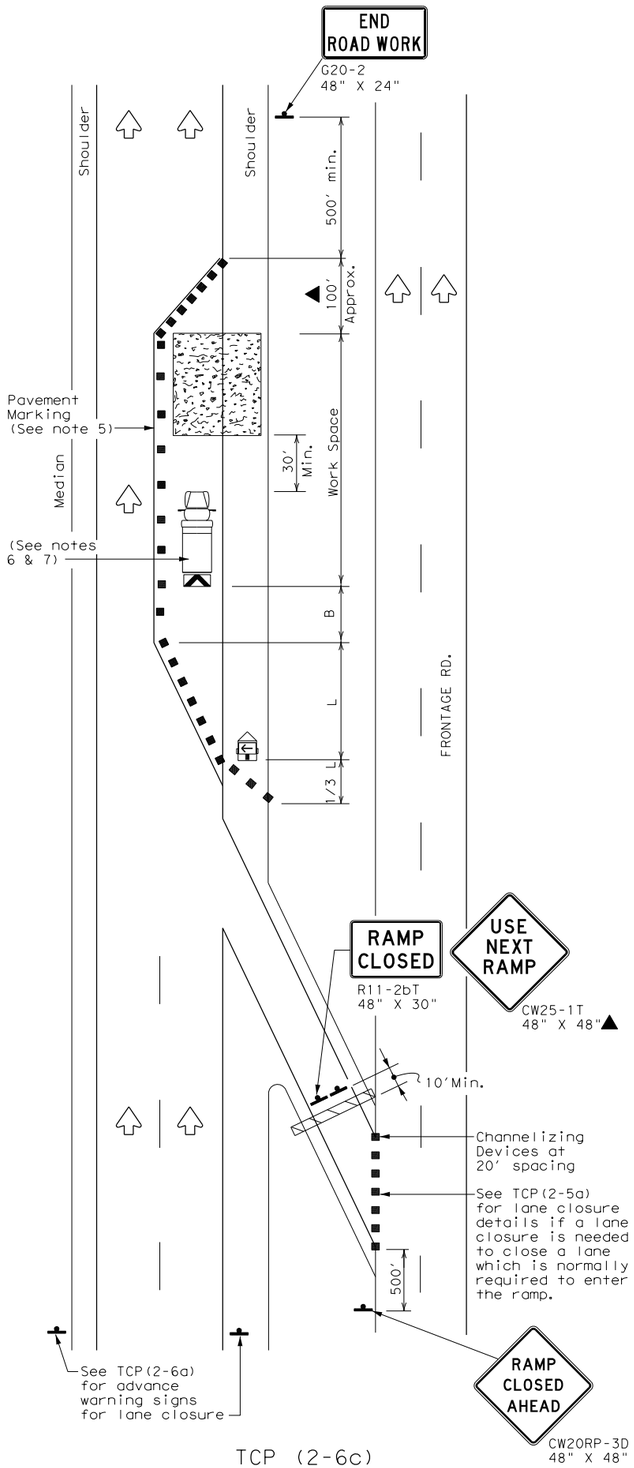
TCP (2-6a)

ONE LANE CLOSURE



TCP (2-6b)

LANE CLOSURE NEAR EXIT RAMPS



TCP (2-6c)

LANE CLOSURE NEAR ENTRANCE RAMPS

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
			✓	✓

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. Channelizing devices used to close lanes may be supplemented with the Chevron Alignment Sign placed on every other channelizing device. Chevrons may be attached to plastic drums as per BC Standards.
4. Channelizing devices used along the work space or along tangent sections may be supplemented with vertical panels (VP) placed on everyother channelizing device. If night time conditions make it difficult to see at least two VPs, the VPs may be placed on each channelizing device.
5. The placement of pavement markings may be omitted on Intermediate-term stationary work zones with the approval of the Engineer.
6. Shadow Vehicle with TMA and high intensity rotating, flashing, oscillating or strobe lights. Shadow Vehicle with TMA and high intensity rotating, flashing, oscillating or strobe lights. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
7. Additional Shadow Vehicles with TMAs may be positioned in each closed lane, on the shoulder or off the paved surface, next to those shown in order to protect a wider work space.

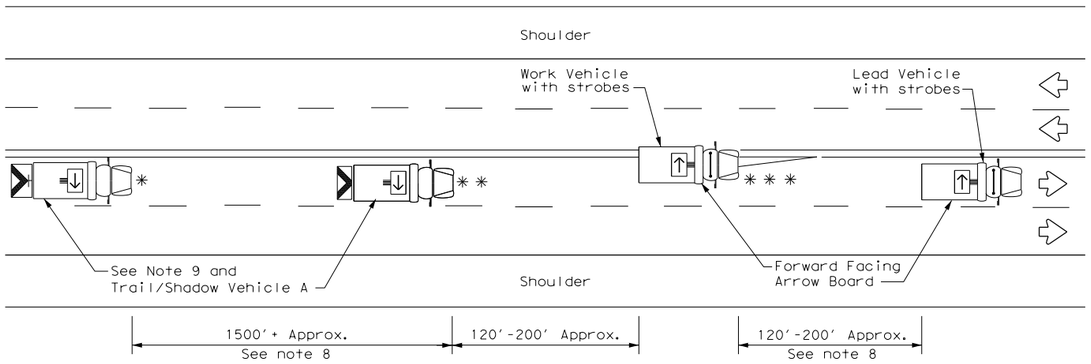
Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN LANE CLOSURES ON DIVIDED HIGHWAYS

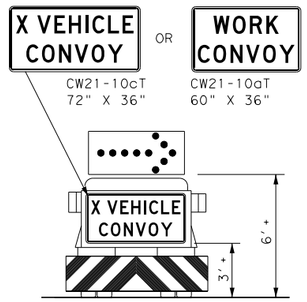
TCP(2-6)-18

FILE: tcp2-6-18.dgn	DN:	CK:	DW:	CK:
© TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS 2-94 4-98 8-95 2-12 1-97 2-18	0044	04	048	US 82
	DIST	COUNTY		SHEET NO.
	WFS	MONTAGUE		167



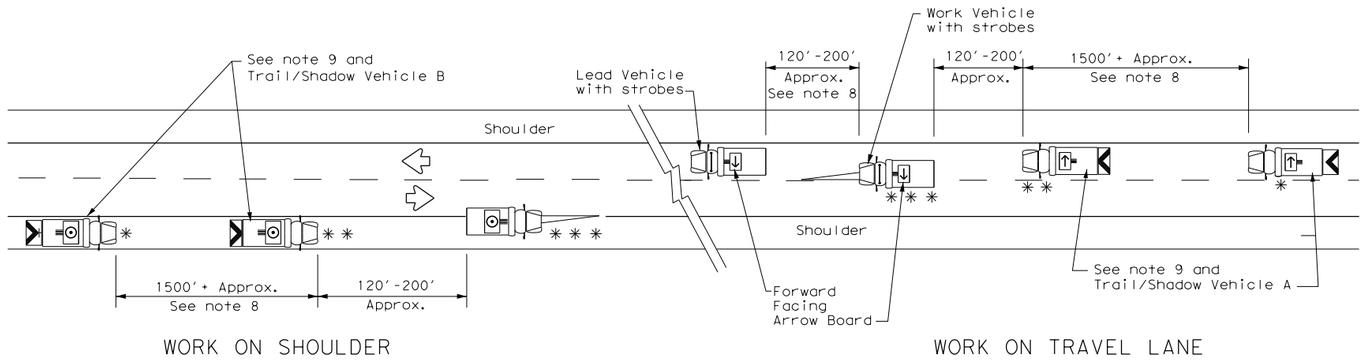
TCP (3-1a)

UNDIVIDED MULTILANE ROADWAY



TRAIL/SHADOW VEHICLE A

with RIGHT Directional display Flashing Arrow Board

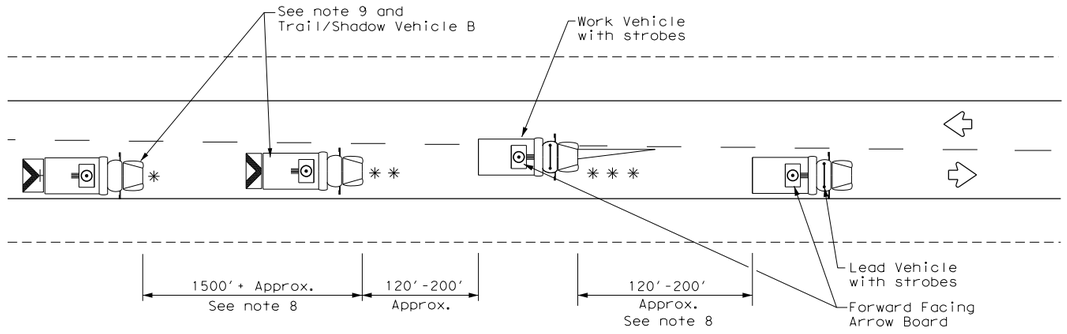


WORK ON SHOULDER

WORK ON TRAVEL LANE

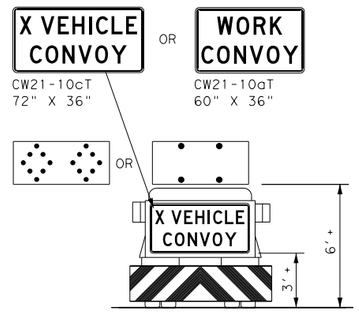
TCP (3-1b)

TWO-WAY ROADWAY WITH PAVED SHOULDERS



TCP (3-1c)

TWO-WAY ROADWAY WITHOUT PAVED SHOULDERS



TRAIL/SHADOW VEHICLE B

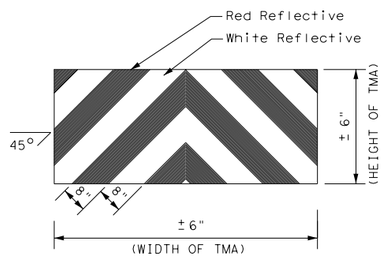
with Flashing Arrow Board in CAUTION display

LEGEND			
*	Trail Vehicle	ARROW BOARD DISPLAY	
* *	Shadow Vehicle		
* * *	Work Vehicle		RIGHT Directional
	Heavy Work Vehicle		LEFT Directional
	Truck Mounted Attenuator (TMA)		Double Arrow
	Traffic Flow		CAUTION (Alternating Diamond or 4 Corner Flash)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
✓				

GENERAL NOTES

1. TRAIL, SHADOW, and LEAD vehicles shall be equipped with arrow boards as illustrated. When a LEAD vehicle is not used the WORK vehicle must be equipped with an arrow board. The Engineer will determine if the LEAD VEHICLE and/or TRAIL VEHICLE are required based on prevailing roadway conditions, traffic volume, and sight distance restrictions.
2. The use of amber high intensity rotating, flashing, oscillating, or strobe lights on vehicles are required. Blue high intensity rotating, flashing, oscillating or strobe lights when mounted on the driver's side of the vehicle may be operated simultaneously with the amber beacons or strobe lights.
3. The use of truck mounted attenuators (TMA) on the SHADOW VEHICLE and TRAIL VEHICLE are required.
4. Reflective sheeting on the rear of the TMA shall meet or exceed the reflectivity and color requirements of DEPARTMENTAL MATERIAL SPECIFICATION DMS 8300, Type A.
5. Flashing arrow boards shall be Type B or Type C as per the Barricade and Construction (BC) standards. The board shall be controlled from inside the vehicle.
6. Each vehicle shall have two-way radio communication capability.
7. When work convoys must change lanes, the TRAIL VEHICLE should change lanes first to shadow the other convoy vehicles.
8. Vehicle spacing between the TRAIL VEHICLE and the SHADOW VEHICLE will vary depending on sight distance restrictions. Motorists approaching the work convoy should be able to see the TRAIL VEHICLE in time to slow down and/or change lanes as they approach the TRAIL VEHICLE. Vehicle spacing between the WORK VEHICLE and SHADOW VEHICLE and vehicle spacing between WORK VEHICLE and LEAD VEHICLE may vary according to terrain, work activity and other factors.
9. "X VEHICLE CONVOY" (CW21-10cT) or "WORK CONVOY" (CW21-10aT) signs shall be used on TRAIL VEHICLES and SHADOW VEHICLES as shown. As an option 48" X 48" diamond shaped "WORK CONVOY"(CW21-10T) or "X VEHICLE CONVOY" (CW21-10bT) signs may be used where adequate mounting space exists. When used, the X VEHICLE CONVOY sign shall have the number of the convoy vehicles displayed on the sign in the number designation "X" location. The "X VEHICLE CONVOY" sign shall not be used on the SHADOW VEHICLE if a TRAIL VEHICLE is used.
10. On two-lane two-way roadways, the work and protection vehicles should pull over periodically to allow motor vehicle traffic to pass. If motorists are not allowed to pass the work convoy, a "DO NOT PASS" (R4-1) sign should be placed on the back of the rearmost protection vehicle.



STRIPING FOR TMA

Texas Department of Transportation — Traffic Operations Division Standard

TRAFFIC CONTROL PLAN MOBILE OPERATIONS UNDIVIDED HIGHWAYS

TCP(3-1)-13

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©TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS 2-94 4-98 8-95 7-13 1-97	0044	04	048	US 82
	DIST	COUNTY		SHEET NO.
	WFS	MONTAGUE		168

175

DATE: 10/18/2023 6:17:43 AM
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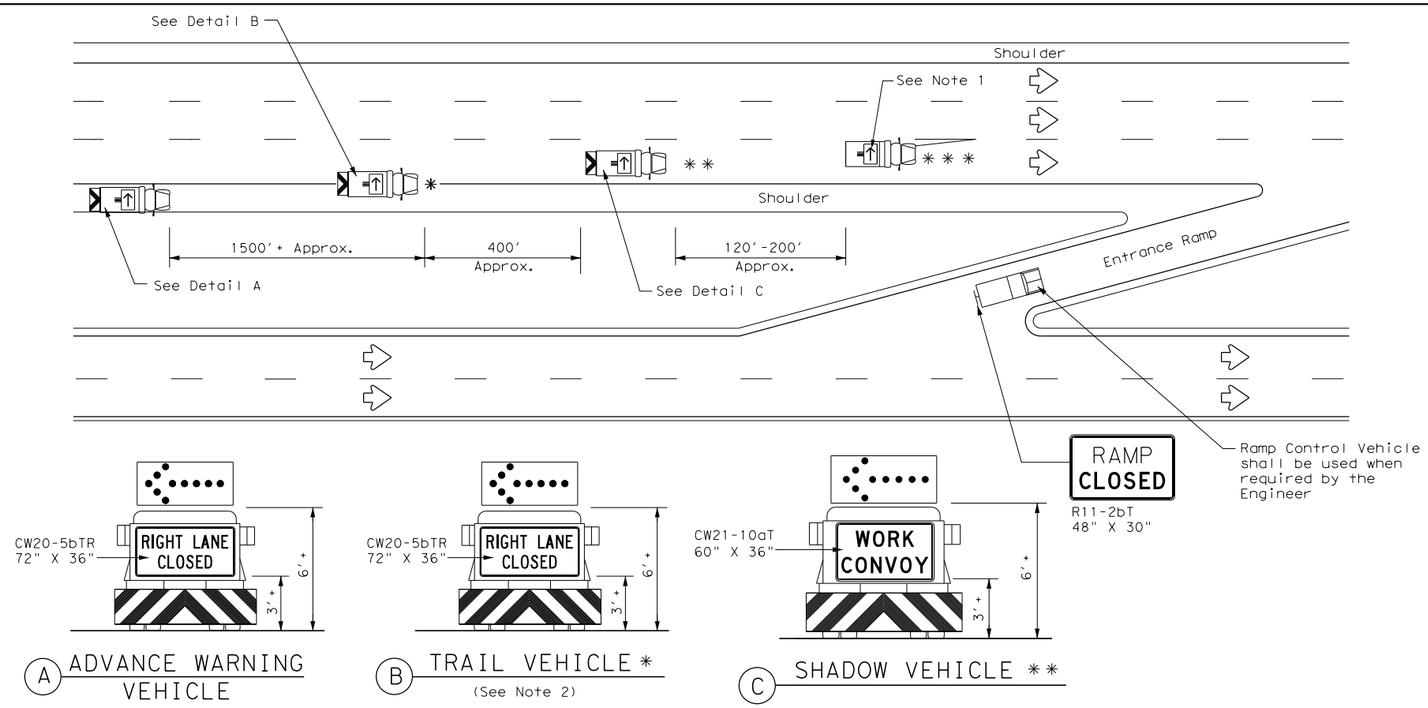
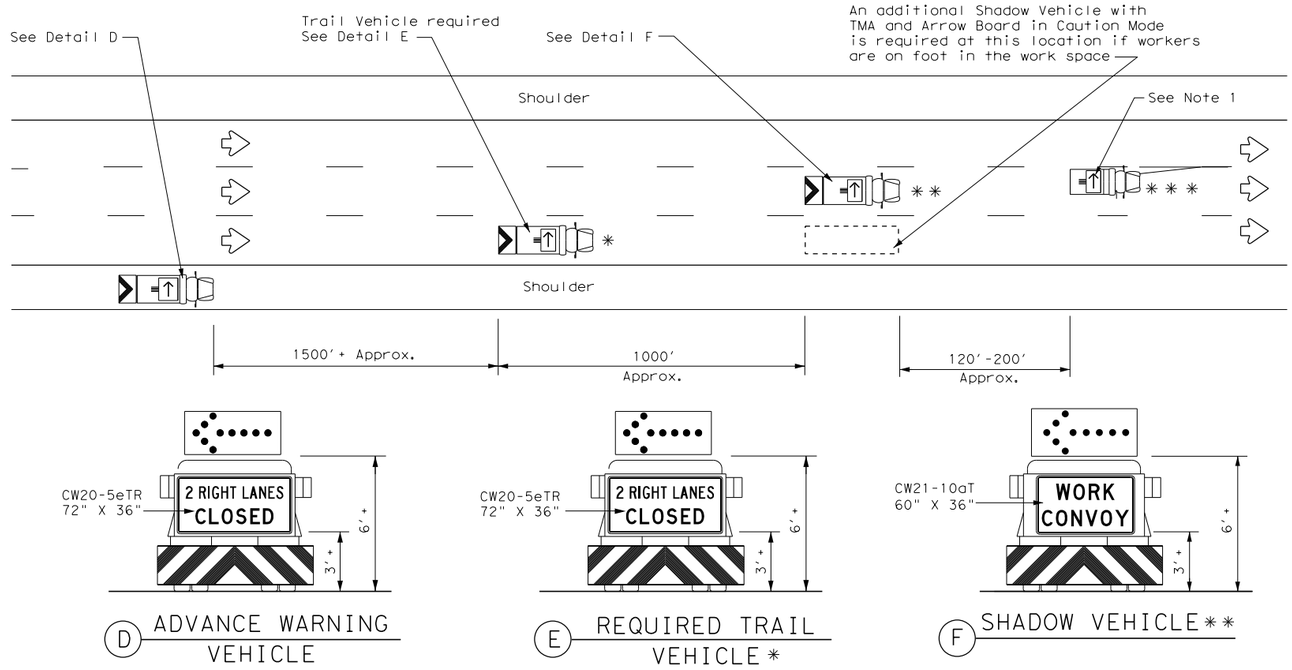


RIGHT LANE CLOSURE ON DIVIDED HIGHWAY - TCP(3-2a)



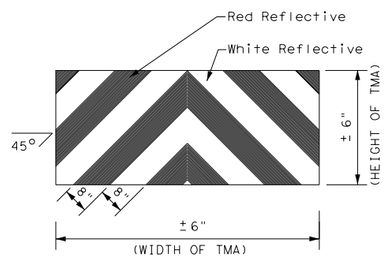
INTERIOR LANE CLOSURE ON MULTI-LANE DIVIDED HIGHWAY - TCP(3-2b)

LEGEND			
*	Trail Vehicle	ARROW BOARD DISPLAY	
**	Shadow Vehicle		
***	Work Vehicle		RIGHT Directional
	Heavy Work Vehicle		LEFT Directional
	Truck Mounted Attenuator (TMA)		Double Arrow
	Traffic Flow		CAUTION (Alternating Diamond or 4 Corner Flash)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
✓				

GENERAL NOTES

1. ADVANCE WARNING, TRAIL and SHADOW vehicles shall be equipped with Type B or Type C flashing arrow boards as per the Barricade and Construction (BC) standards. Arrow boards on WORK vehicles will be optional based on the type of work being performed. The arrow boards shall be operated from inside the vehicle.
2. For TCP(3-2a) the Engineer will determine if the TRAIL VEHICLE is required based on prevailing roadway conditions, traffic volume, and sight distance restrictions. All other vehicles shown for both TCP(3-2a) and TCP(3-2b) are required.
3. The use of amber high intensity rotating, flashing, oscillating, or strobe lights on vehicles are required. Blue high intensity rotating, flashing, oscillating or strobe lights when mounted on the driver's side of the vehicle may be operated simultaneously with the amber beacons or strobe lights.
4. The use of truck mounted attenuators (TMA) on the ADVANCE WARNING, SHADOW, and TRAIL vehicles are required.
5. Reflective sheeting on the rear of the TMA shall meet or exceed the reflectivity and color requirements of DMS 8300, Type A.
6. Each vehicle shall have two-way radio communication capability.
7. When work convoys must change lanes, the TRAIL VEHICLE should change lanes first to shadow the other convoy vehicles.
8. Vehicle spacing between the TRAIL VEHICLE and the SHADOW VEHICLE will vary depending on sight distance restrictions. Motorists approaching the work convoy should be able to see the TRAIL VEHICLE in time to slow down and/or change lanes as they approach the TRAIL VEHICLE. Vehicle spacing between the WORK VEHICLE and SHADOW VEHICLE may vary according to terrain, work activity and other factors.
9. Standard 48" X 48" diamond shaped warning signs with the same message as those shown may be used where adequate mounting space exists.
10. The signs shown should be used on the Advance Warning Vehicle. As an option, a portable changeable message sign (PCMS) or a truck mounted changeable message sign (TMCMS) with a minimum character height of 12", and displaying the same legend may be substituted for these signs. An appropriate directional arrow display, simulating the size and legibility of the flashing arrow board, must be used in the second phase of the PCMS/TMCMS message. When this is done, the arrow board will not be required on the Advance Warning Vehicle.
11. Standard diamond shape versions of the CW20-5 series signs may be used as an option if the rectangular signs shown are not available.
12. The principles on this sheet may be used to close lanes from the left side of the roadway considering the number of lanes, shoulder width, sight distance, and ramp frequency.
13. Signs and flashing arrow board modes shall be appropriately altered when implementing left lane closures or interior closures which close the left lanes.
14. The Advance Warning Vehicle may straddle the edgeline when shoulder width makes it necessary.



STRIPING FOR TMA

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN MOBILE OPERATIONS DIVIDED HIGHWAYS

TCP(3-2)-13

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©TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS 2-94 4-98 8-95 7-13 1-97	0044	04	048	US 82
	DIST	COUNTY		SHEET NO.
	WFS	MONTAGUE		169

176

DATE: 10/18/2023 6:17:43 AM
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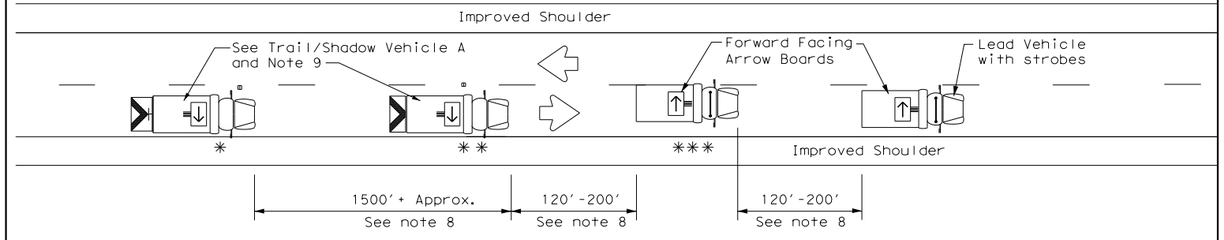
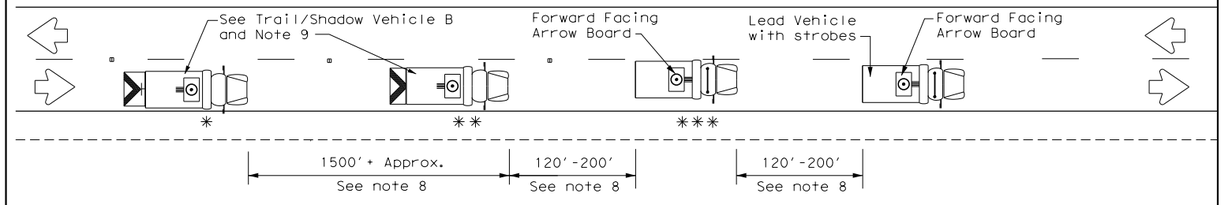


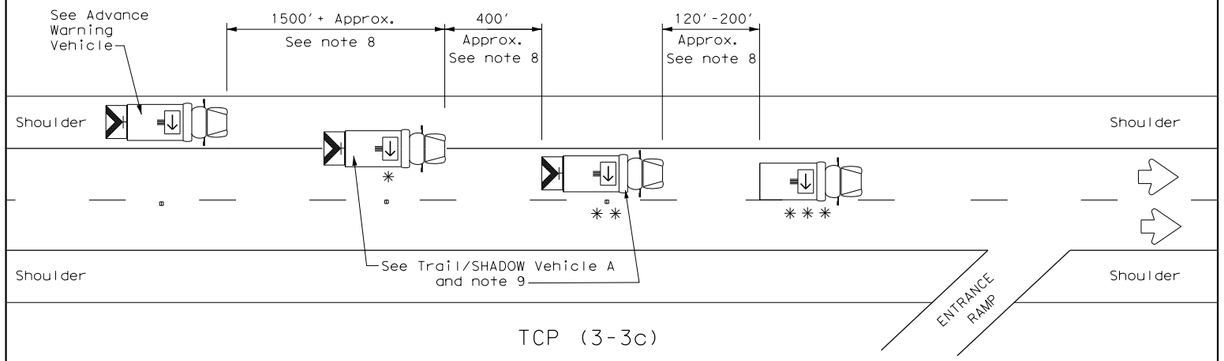
TCP (3-3a)

TWO LANE HIGHWAY WITH PAVED SHOULDERS
(WORK ON TRAVEL LANE)



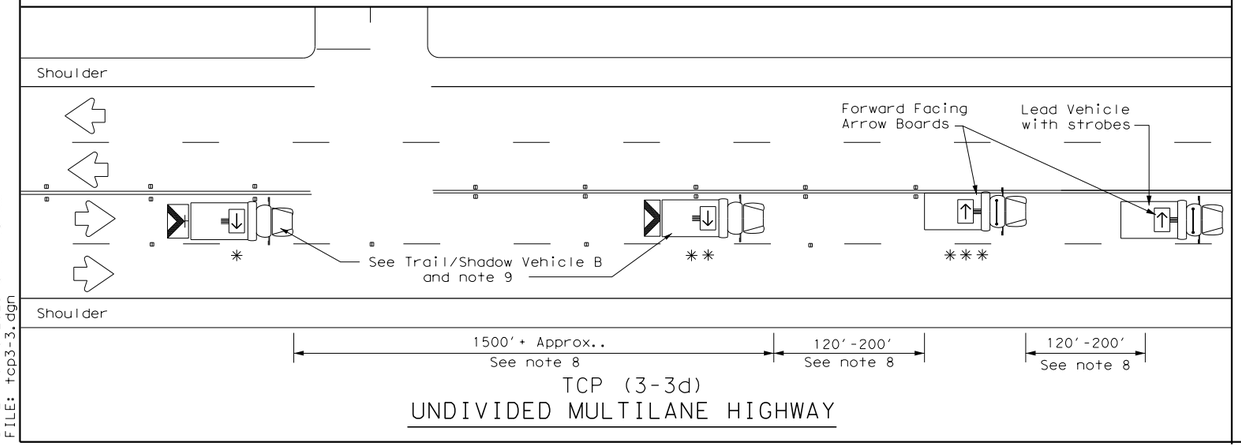
TCP (3-3b)

TWO LANE HIGHWAY WITHOUT PAVED SHOULDERS
(WORK ON TRAVEL LANE)



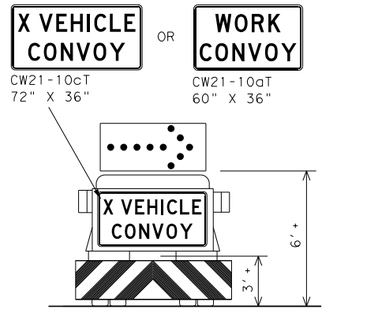
TCP (3-3c)

DIVIDED MULTILANE HIGHWAY



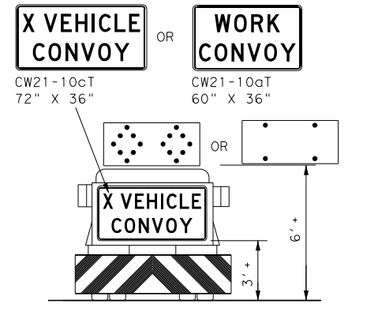
TCP (3-3d)

UNDIVIDED MULTILANE HIGHWAY



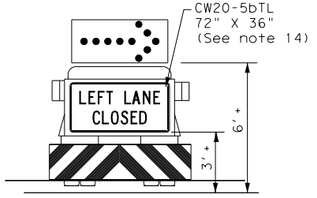
TRAIL/SHADOW VEHICLE A

with RIGHT Directional display
Flashing Arrow Board

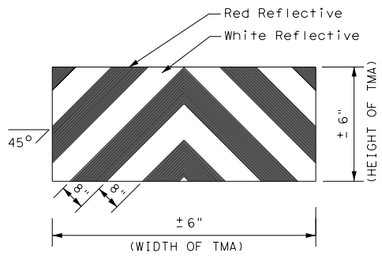


TRAIL/SHADOW VEHICLE B

with Flashing Arrow Board
in Caution Mode



ADVANCE WARNING VEHICLE



STRIPING FOR TMA

LEGEND			
*	Trail Vehicle	ARROW BOARD DISPLAY	
**	Shadow Vehicle		
***	Work Vehicle		RIGHT Directional
	Heavy Work Vehicle		LEFT Directional
	Truck Mounted Attenuator (TMA)		Double Arrow
	Traffic Flow		CAUTION (Alternating Diamond or 4 Corner Flash)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
✓				

GENERAL NOTES

1. TRAIL, SHADOW, and LEAD vehicles shall be equipped with arrow boards as illustrated. When a LEAD vehicle is not used on two way roads the WORK vehicle must have an arrow board. For divided roadways, the arrow board on the WORK vehicle is optional based on the type of work being performed. The Engineer will determine if the LEAD vehicle and/or TRAIL vehicle are required based on prevailing roadway conditions, traffic volume, and sight distance restrictions.
2. The use of amber high intensity rotating, flashing, oscillating, or strobe lights on vehicles are required. Blue high intensity rotating, flashing, oscillating, or strobe lights when mounted on the driver's side of the vehicle may be operated simultaneously with the amber beacons or strobe lights.
3. The use of truck mounted attenuators (TMA) on the SHADOW VEHICLE, ADVANCE WARNING and TRAIL VEHICLE are required.
4. Reflective sheeting on the rear of the TMA shall meet or exceed the reflectivity and color requirements of DEPARTMENTAL MATERIAL SPECIFICATION DMS 8300, Type A.
5. Flashing arrow boards shall be Type B or Type C as per the Barricade and Construction (BC) standards. The board shall be controlled from inside the vehicle.
6. Each vehicle shall have two-way radio communication capability.
7. When work convoys must change lanes, the TRAIL VEHICLE should change lanes first to shadow the other convoy vehicles.
8. Vehicle spacing between the TRAIL VEHICLE and the SHADOW VEHICLE will vary depending on sight distance restrictions. Motorists approaching the convoy should be able to see the TRAIL VEHICLE in time to slow down and/or change lanes as they approach the TRAIL VEHICLE. Vehicle spacing between the WORK VEHICLE and SHADOW VEHICLE and vehicle spacing between WORK VEHICLE and LEAD VEHICLE may vary according to terrain, work activity and other factors.
9. X VEHICLE CONVOY (CW21-10cT) or WORK CONVOY (CW21-10aT) signs shall be used on TRAIL VEHICLES and SHADOW VEHICLES as shown. As an option 48" x 48" diamond shaped WORK CONVOY (CW21-10T) or X VEHICLE CONVOY (CW21-10bT) signs may be used where adequate mounting space exists. When used, the X VEHICLE CONVOY sign shall have the number of the convoy vehicles displayed on the sign in the number designation "X" location. The X VEHICLE CONVOY sign shall not be used on the SHADOW VEHICLE if a TRAIL VEHICLE is used.
10. For divided highways with two or three lanes in one direction, the appropriate LEFT LANE CLOSED (CW20-5bTL), RIGHT LANE CLOSED (CW20-5bTR), or CENTER LANE CLOSED (CW20-5dT) sign should be used on the Advance Warning Vehicle. As an option, a portable changeable message sign (PCMS) or truck mounted changeable message sign (TMCMS) with a minimum character height of 12", and displaying the same legend may be substituted for these signs. An appropriate directional arrow display, simulating the size and legibility of the flashing arrow board may be used in the second phase of the PCMS/TMCMS message. When this is done, the arrow board will not be required on the Advance Warning Vehicle.
11. A double arrow shall not be displayed on the arrow board on the Advance Warning Vehicle.
12. For divided highways with three or four lanes in each direction, use TCP(3-2).
13. Standard diamond shape versions of the CW20-5 series signs may be used as an option if the rectangular signs shown are not available.
14. The Advance Warning Vehicle may straddle the edgeline when Shoulder width makes it necessary.
15. On two-lane two-way roadways, the work and protection vehicles should pull over periodically to allow motor vehicle traffic to pass. If motorists are not allowed to pass the work convoy, a DO NOT PASS (R4-1) sign should be placed on the back of the rearmost protection vehicle.

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN
MOBILE OPERATIONS
RAISED PAVEMENT
MARKER INSTALLATION/
REMOVAL
TCP(3-3)-14

FILE: tcp3-3.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT September 1987	CONT	SECT	JOB	HIGHWAY
REVISIONS	0044	04	048	US 82
2-94 4-98	DIST	COUNTY		SHEET NO.
8-95 7-13	WFS	MONTAGUE		170
1-97 7-14				

177

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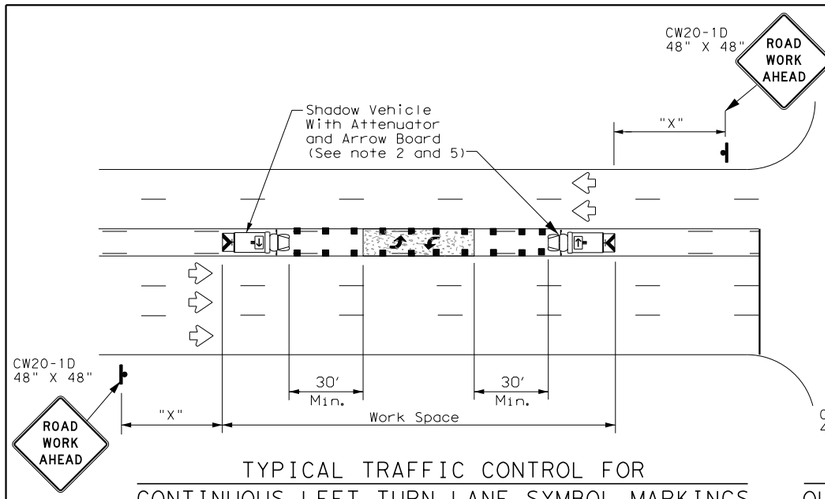
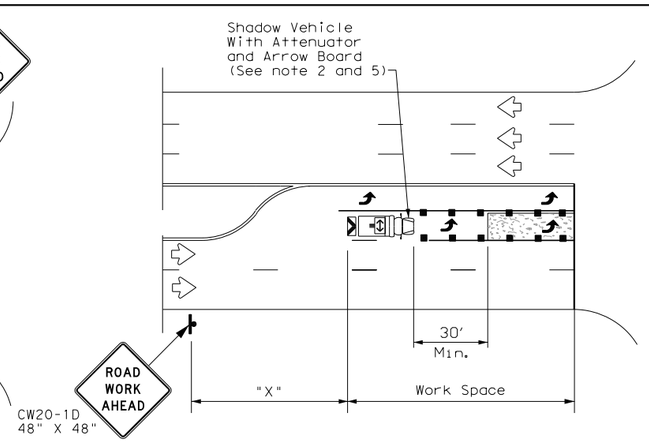
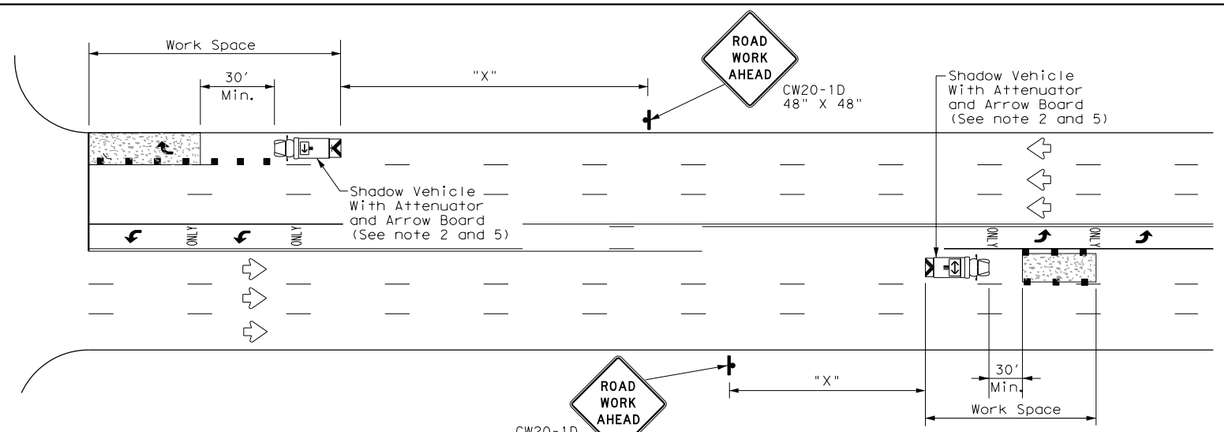


TYPICAL TRAFFIC CONTROL FOR
CONTINUOUS LEFT TURN LANE SYMBOL MARKINGS

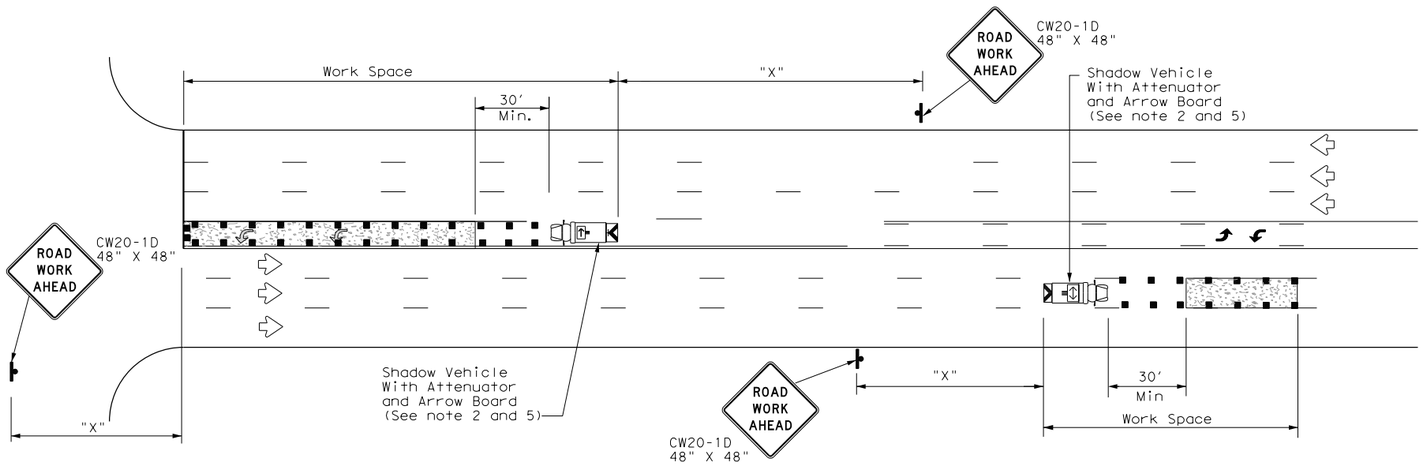


TYPICAL TRAFFIC CONTROL FOR
OUTSIDE DUAL LEFT TURN LANE SYMBOL MARKINGS



TYPICAL TRAFFIC CONTROL FOR
OUTSIDE LANE MARKINGS

TYPICAL TRAFFIC CONTROL FOR
INSIDE LANE MARKINGS



TYPICAL TRAFFIC CONTROL FOR
LEFT TURN LANE MARKINGS

TYPICAL TRAFFIC CONTROL FOR
CENTER LANE MARKINGS

LEGEND			
✳	Trail Vehicle	ARROW BOARD DISPLAY	
✳✳	Shadow Vehicle		
✳✳✳	Work Vehicle		RIGHT Directional
	Heavy Work Vehicle		LEFT Directional
	Truck Mounted Attenuator (TMA)		Double Arrow
	Traffic Flow	■ ■ ■	Channelizing Devices

Posted Speed ✳	Formula	Minimum Desirable Taper Lengths ✳✳ 10′ Offset	11′ Offset	12′ Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150′	165′	180′	30′	60′	120′	90′
35		205′	225′	245′	35′	70′	160′	120′
40		265′	295′	320′	40′	80′	240′	155′
45	L=WS	450′	495′	540′	45′	90′	320′	195′
50		500′	550′	600′	50′	100′	400′	240′
55		550′	605′	660′	55′	110′	500′	295′
60		600′	660′	720′	60′	120′	600′	350′
65		650′	715′	780′	65′	130′	700′	410′
70		700′	770′	840′	70′	140′	800′	475′
75		750′	825′	900′	75′	150′	900′	540′

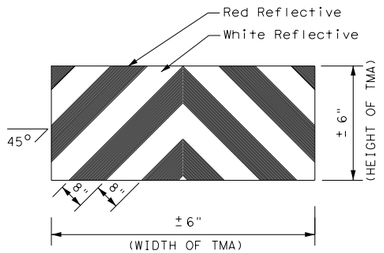
✳ Conventional Roads Only

✳✳ Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
✓				

GENERAL NOTES

1. This traffic control plan is for use on conventional roads posted at 45 mph or less and is intended for mobile operations that move continuously or intermittently (stopping up to approximately 15 minutes) such as short-line striping and in-lane rumble strips. When activities are anticipated to take longer amounts of time or traffic conditions warrant, a short duration or short-term stationary traffic control plan should be used.
2. A Truck Mounted Attenuator shall be used on Shadow Vehicle. Striping on the back panel of all truck mounted attenuators shall be 8" red and white reflective sheeting placed in an inverted "V" design. Reflective sheeting shall meet or exceed the reflectivity and color requirements of departmental material specification DMS-8300, Type A.
3. All traffic control devices shall be in accordance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD), latest edition.
4. The use of yellow rotating beacons or strobe lights on vehicles are required. Blue high intensity rotating, flashing, oscillating or strobe lights when mounted on the drivers side of the vehicle may be operated simultaneously with the amber beacons or strobe lights.
5. Flashing arrow board shall be used on Shadow Vehicle. Flashing arrow board shall be Type B or Type C as per BC Standards. The arrow board operation shall be controlled from inside the truck.



STRIPING FOR TMA

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN MOBILE OPERATIONS FOR ISOLATED WORK AREAS UNDIVIDED HIGHWAYS

TCP(3-4)-13

FILE: tcp3-4.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT July, 2013	CONT	SECT	JOB	HIGHWAY
REVISIONS	0044	04	048	US 82
	DIST	COUNTY		SHEET NO.
	WFS	MONTAGUE		171

178

DATE: 10/18/2023 6:17:44 AM
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DATE: 2/15/2024
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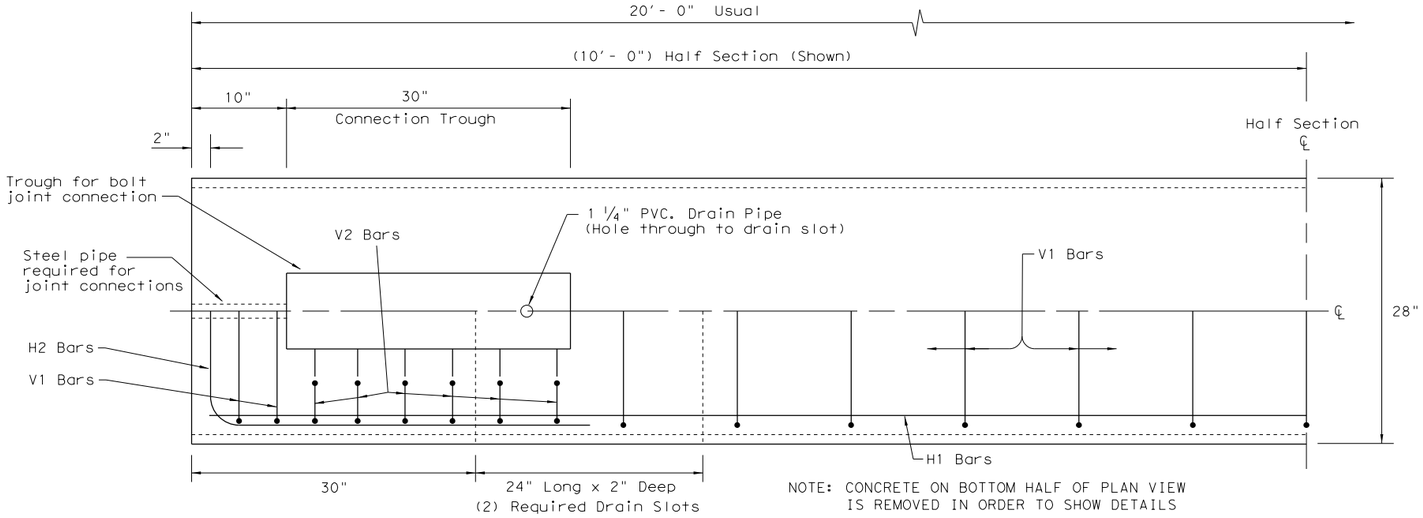
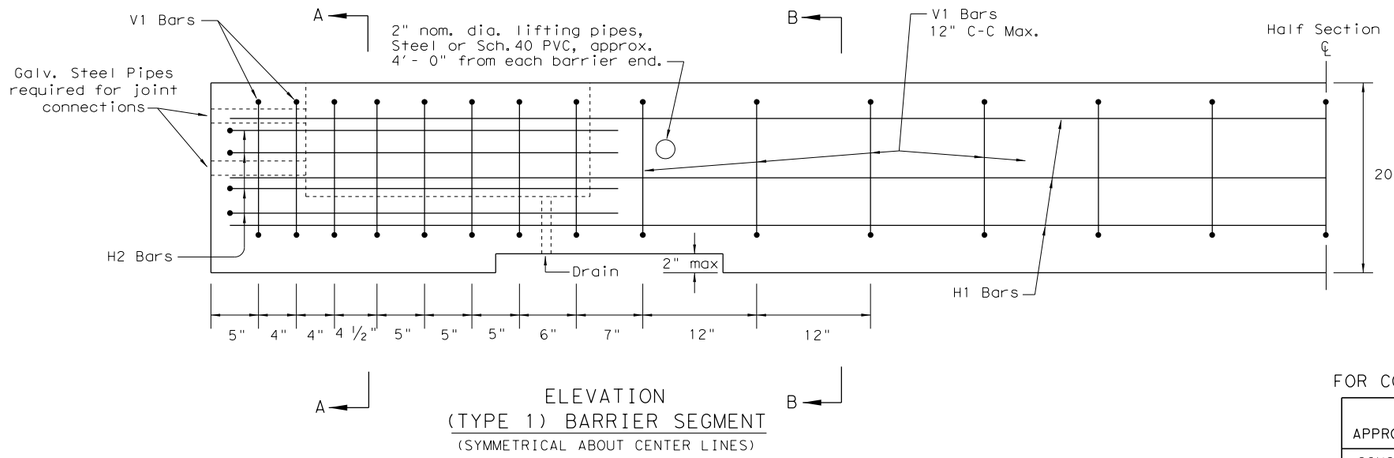
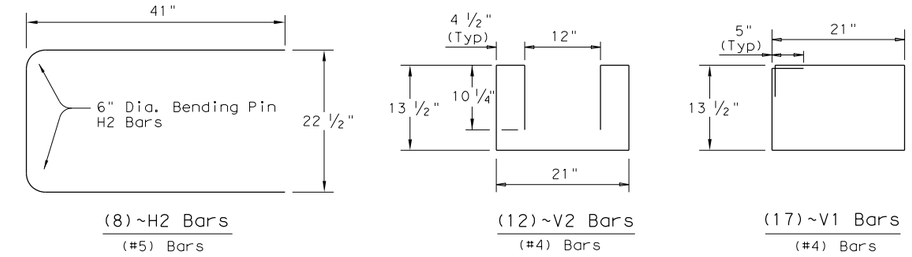


PLAN
(TYPE 1) BARRIER SEGMENT
(SYMMETRICAL ABOUT CENTER LINES)

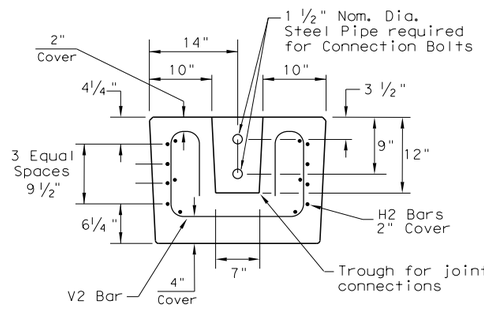


ELEVATION
(TYPE 1) BARRIER SEGMENT
(SYMMETRICAL ABOUT CENTER LINES)

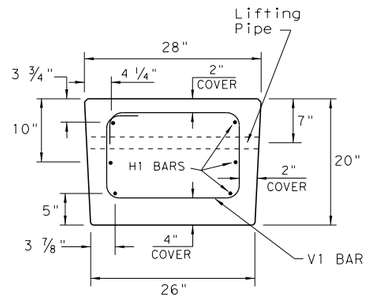


REINFORCING STEEL DETAILS
TYPE 1 - BARRIER SEGMENT

Note: Use 2" Dia. Bending Pin, unless otherwise shown



SECTION A-A



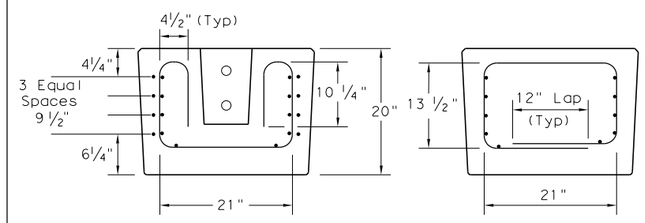
SECTION B-B

GENERAL NOTES

1. Low Profile Concrete Barrier (LPCB), is approved for use in temporary work zone locations, where the posted speed is 45 mph, or less.
2. Concrete shall be Class H for precast barrier with a minimum compressive strength of 3,600 psi.
3. Where used, rebar reinforcement shall be Grade 60 and conform to ASTM A615.
4. Precast LPCB barrier length shall be 20 ft.
5. All barrier edges shall have ¾" chamfer or a tooled radius.
6. Joint connection hardware shall be in accordance with Item 449, "Anchor Bolts." and is considered subsidiary.
7. Steel pipe required for joint connection bolts shall be galvanized in accordance with Item 445,"Galvanizing."
8. Welded wire reinforcement (WWR) may be used in lieu of conventional reinforcement for Type 1 barrier, and shall meet the requirements shown.

FOR CONTRACTORS INFORMATION ONLY

(TYPE 1) APPROX. QUANTITIES 20 FT. SECTION		
CONCRETE	CY	2.6
REINFORCING STEEL	LBS	330
TOTAL BARRIER WT.	LBS	11000



SECTION A-A SECTION B-B

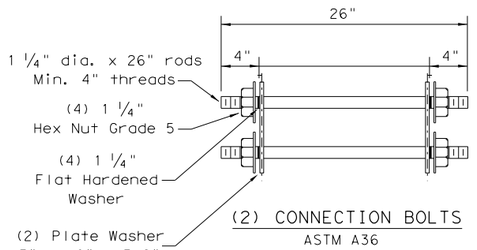
(WWR) GENERAL NOTES

1. Deformed Welded Wire Reinforcement shall conform to ASTM A497.
2. Welded wire cage may be cut or bent, if necessary, but must be approved by the Engineer.
3. Combinations of reinforcing steel and WWR are permitted, as directed by the Engineer. The dimensions from the end of the barrier section to the first wire shall not exceed 3".

REQUIRED (WWR) WIRE DESIGN

8 ~ (D31) Horizontal Wires (Equally spaced)
10 ~ (D20) Horizontal Wires (Equally spaced)
29 ~ (D20) Vertical Wires (Spaced as shown in Elevation View)

WELDED WIRE REINFORCEMENT (WWR)- OPTIONAL REINFORCING



(2) CONNECTION BOLTS
ASTM A36

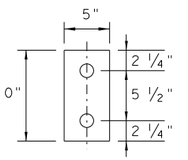


PLATE WASHER
5" x 10" x ⅜"

Note: Rods, Hex nuts and Washers shall be Galvanized.

SHEET 1 OF 2

Texas Department of Transportation — Design Division Standard

LOW PROFILE CONCRETE BARRIER
PRECAST BARRIER (TYPE 1)
LPCB-13

FILE: lpcb13.dgn	DN: TxDOT	CK: AM	DW: VP	CK:
©TxDOT December 2010	CONT	SECT	JOB	HIGHWAY
REVISIONS	0044	04	048	US 82
	DIST	COUNTY		SHEET NO.
	WFS	MONTAGUE		171A

DATE: 2/15/2024
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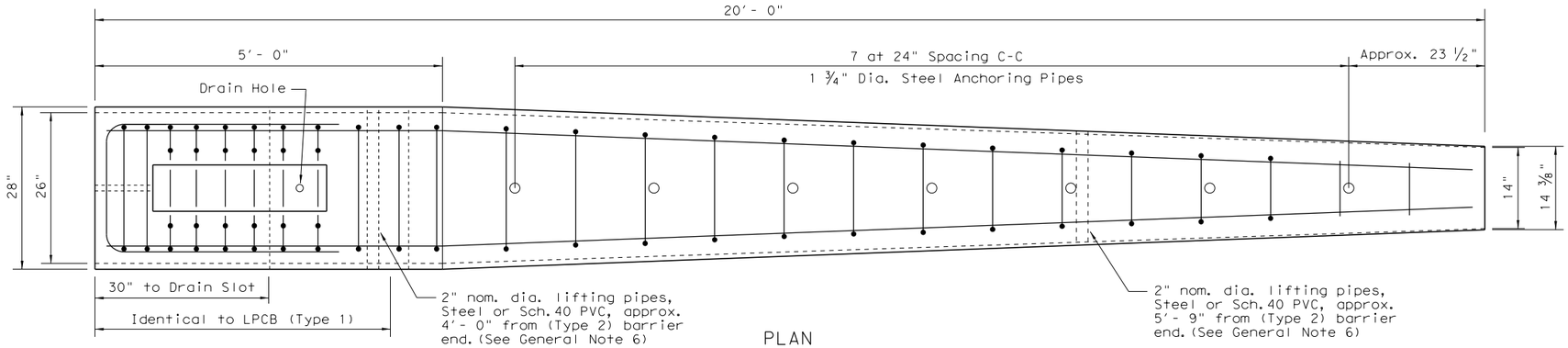
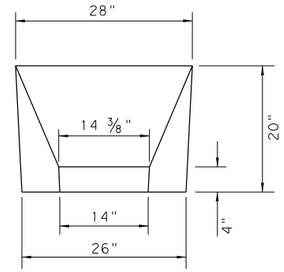
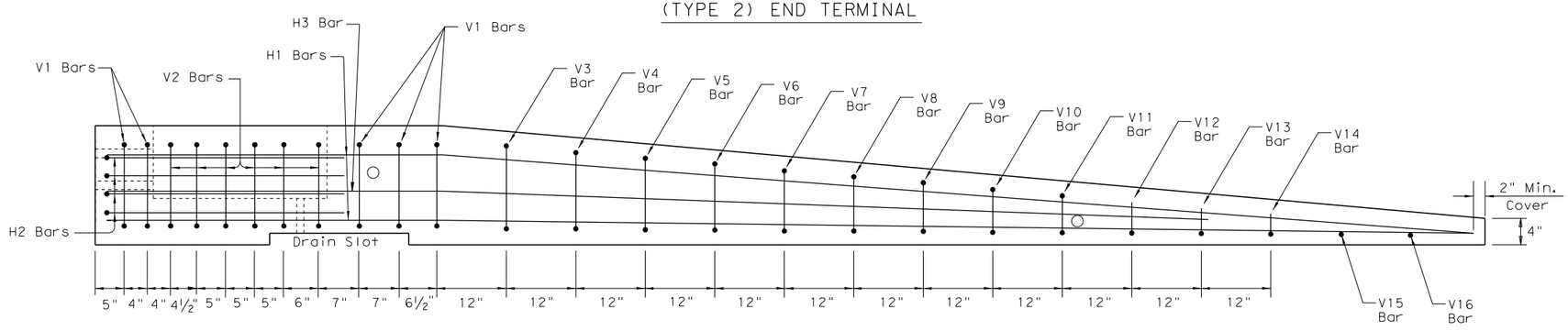


PLAN
(TYPE 2) END TERMINAL



APPROACH VIEW

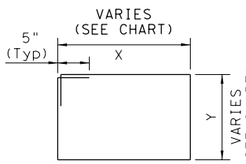


ELEVATION
(TYPE 2) END TERMINAL

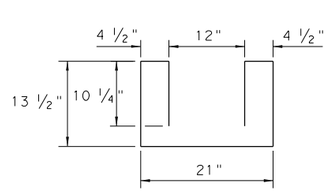
Note:
Anchoring pipes not shown in Elevation View

TYPE 2 - NOTES

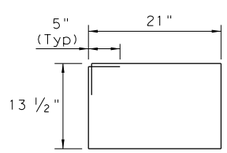
1. Welded wire reinforcment (WWR) is "not" an option for Type 2 Barrier.
2. Type 2 Barrier shall be used as an end treatment for the Type 1 barrier segments, when applicable.
3. The end treatment can be used without the anchor pins in locations that can accommodate approximately 4 ft. of lateral displacement of the end treatment. The use of non-pinned end treatment does not affect the performance or the deflection of the Low-Profile barrier system.
4. The anchor pins are all the same length and are to be driven flush with the top of the (Type 2) barrier surface.
5. The bends in the H3 and H1 bars are slight, no formal bend is necessary.
6. The Type 2 barrier segment must be lifted from the rear first, to prevent cracking of sloped section.
7. See LPCB sheet 1 for additional information.



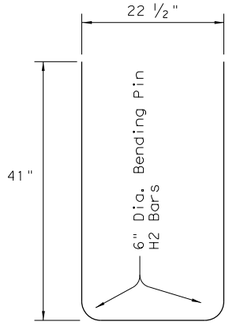
V3-V14 Bars



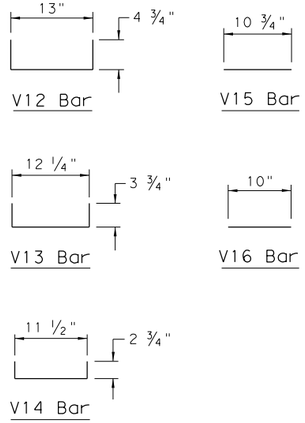
(6)~V2 Bars



(5)~V1 Bars



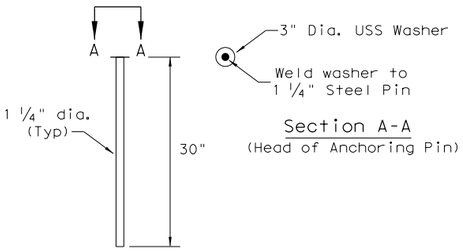
(4)~H2 Bars
(#5) Bars



Note: All V Bars are (#4)

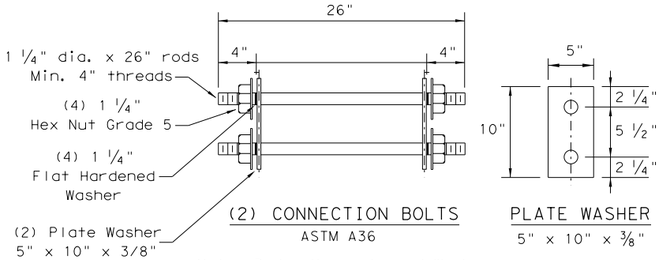
BAR(#4)	X (IN.)	Y (IN.)
V3 BAR	20 ¼	14 ½
V4 BAR	19 ½	13 ½
V5 BAR	18 ½	12 ¼
V6 BAR	17 ½	11 ¼
V7 BAR	17	10 ¼
V8 BAR	16 ¼	9
V9 BAR	15 ½	8
V10 BAR	14 ½	7
V11 BAR	13 ¾	6

REINFORCING STEEL DETAILS
TYPE 2 - END TERMINAL



Section A-A
(Head of Anchoring Pin)

(7) Anchor Pins
ASTM A36 Steel (See Note 3)

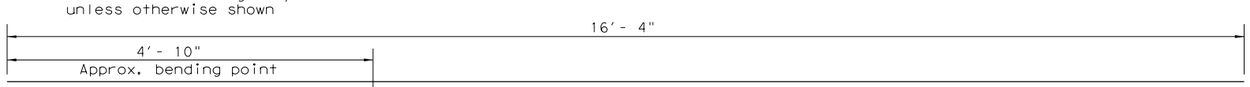


(2) CONNECTION BOLTS
ASTM A36

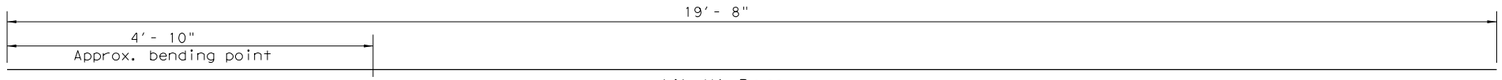
PLATE WASHER
5" x 10" x ⅜"

Note: Rods, Hex nuts and Washers shall be Galvanized.

Note: Use 2" Dia. Bending Pin, unless otherwise shown



(2)~H3 Bars
(#5) Bar



Note: Bends on H1 and H3 bars are slight and do not require formal bends.

(4)~H1 Bars
(#5) Bar

FOR CONTRACTORS INFORMATION ONLY

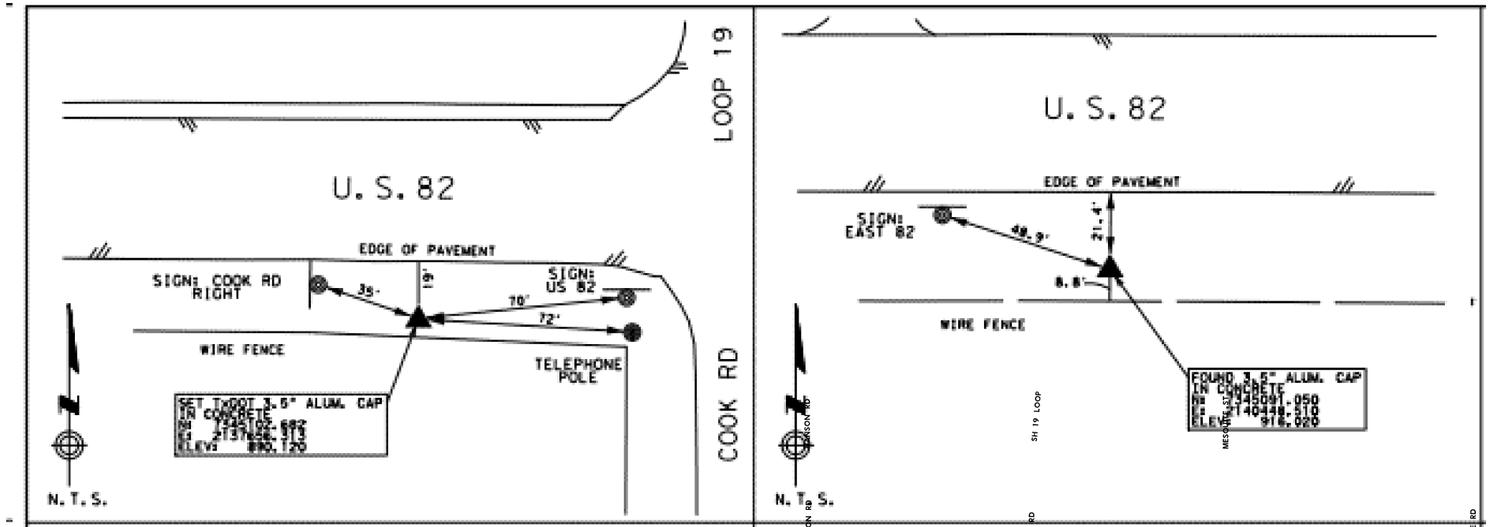
(TYPE 2) APPROX. QUANTITIES	20 FT. SECTION	
CONCRETE	CY	1.65
REINFORCING STEEL	LBS	240
TOTAL BARRIER WT.	LBS	7000

Texas Department of Transportation

Design Division Standard

LOW PROFILE CONCRETE BARRIER
PRECAST BARRIER (TYPE 2)
LPCB-13

FILE: lpcb13.dgn	DN: TxDOT	CK: AM	DW: VP	CK:
© TxDOT December 2010	CONT	SECT	JOB	HIGHWAY
REVISIONS	0044	04	048	US 82
	DIST	COUNTY		SHEET NO.
	WFS	MONTAGUE		171B



CP #11 — TxDOT 3.5" ALUMINUM CAP SET IN CONCRETE ON THE SOUTH SIDE OF U.S. 82 APPROXIMATELY 100 FEET WEST OF COOK RD

CP #6 — TxDOT 3.5" ALUMINUM CAP FOUND IN CONCRETE ON THE SOUTH SIDE OF U.S. 82 APPROXIMATELY 200 FEET WEST OF FITE RD

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED
PROFESSIONAL ENGINEER
M.F. Muwaquet
12/18/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

US 82
HORIZONTAL & VERTICAL CONTROL SHEET

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	172
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

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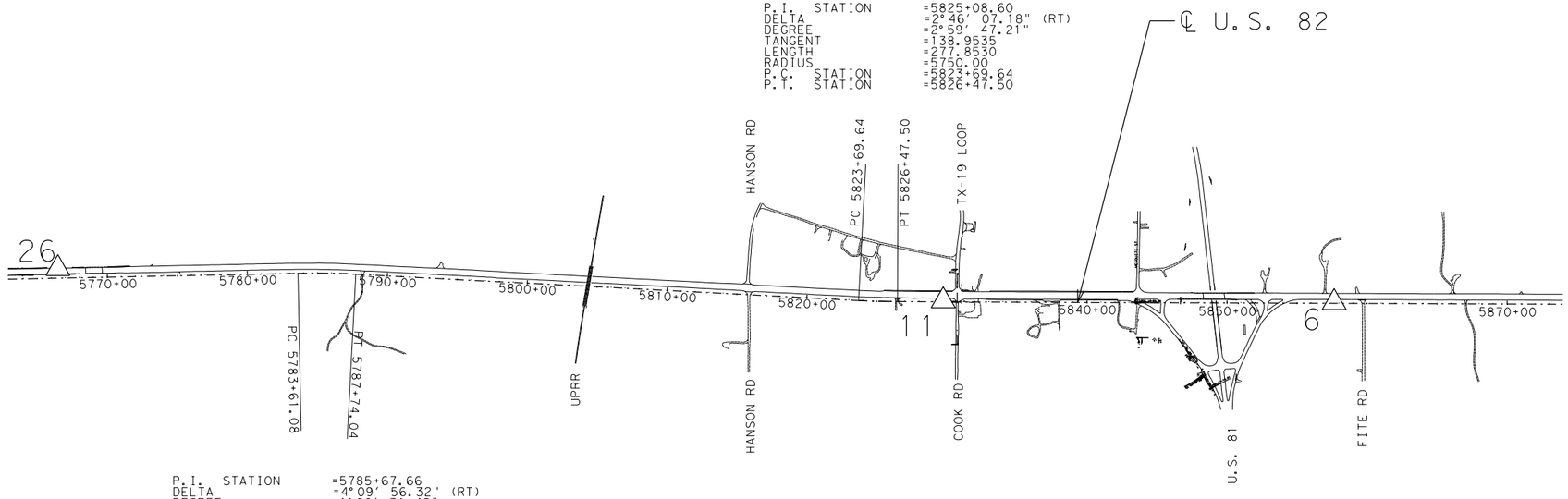

CONTROL POINT LEGEND

△ DENOTES PRIMARY CONTROL POINT (AS NOTED)

0′ 500′ 1000′
SCALE IN FEET

NOTES:

1. ALL COORDINATES SHOWN HEREON ARE BASED ON THE TEXAS COORDINATE SYSTEM, NORTH CENTRAL ZONE (4202), NORTH AMERICAN DATUM OF 1983 (2011 ADJ.; EPOCH 2010.00). BEARINGS ARE BASED ON GRID NORTH

2. HORIZONTAL COORDINATES ARE BASED ON GPS VRS OBSERVATIONS, MEASURED FROM TxDOT CORS STATION TXNO.

3. COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO NAD83 (GRID) VALUES BY APPLYING THE TxDOT SURFACE ADJUSTMENT FACTOR (SAF) OF 1.00012 USING THE FORMULA: SURFACE / SAF = GRID

HORIZONTAL / VERTICAL CONTROL

SURFACE COORDINATES

POINT	NORTHING	EASTING	ELEVATION	STATION	OFFSET	LT/RT	DESCRIPTION
26	7345332.96	2131334.72	847.560	5766+47.46	68.6′	LT	PK NAIL
11	7345102.682	2137656.313	890.120	5829+73.19	7.1′	LT	3 1/2" TxDOT ALUMINUM CAP
6	7345091.050	2140448.410	916.020	5857+65.41	6.6′	LT	3 1/2" TxDOT ALUMINUM CAP

STATE OF TEXAS
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12/18/2023

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SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

SURVEY CONTROL INDEX SHEET

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	173
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

SHEET OF

US 82 WBML SUPERELEVATION DATA

CURVE ID	PI STATION	DESIGN SPEED (MPH)	RADIUS (FT)	e MAX (%)	SUPERELEVATION (%)	LEFT SUPERELEVATION (%)	RIGHT SUPERELEVATION (%)	LENGTH OF TRANSITION (FT)	BEGIN TRANSITION	BEGIN FULL SUPERELEVATION	END FULL SUPERELEVATION	END TRANSITION
WBML-1	25747+74.43	60	5,730.00	6.0%	2.70%	2.70%	-2.70%	125	25743+15.00	25744+40.00	25751+05.00	25752+30.00
WBML-2	25786+69.57	60	5,730.00	6.0%	2.70%	2.70%	-2.70%	130	25783+20.00	25784+50.00	25788+80.00	25790+10.00
WBML-3	25826+11.11	60	5,700.00	6.0%	2.70%	-2.70%	2.70%	30	25824+43.00	25824+73.00	25827+49.00	25827+69.00

US 82 EBML SUPERELEVATION DATA

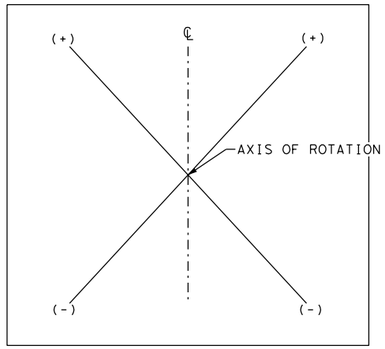
CURVE ID	PI STATION	DESIGN SPEED (MPH)	RADIUS (FT)	e MAX (%)	SUPERELEVATION (%)	LEFT SUPERELEVATION (%)	RIGHT SUPERELEVATION (%)	LENGTH OF TRANSITION (FT)	BEGIN TRANSITION	BEGIN FULL SUPERELEVATION	END FULL SUPERELEVATION	END TRANSITION
EBML-1	15747+83.01	60	5,630.00	6.0%	2.70%	2.70%	-2.70%	30	15744+02.00	15744+32.00	15751+33.00	15751+63.00
EBML-2	15786+68.30	60	5,630.00	6.0%	2.70%	2.70%	-2.70%	30	15784+33.00	15784+63.00	15788+73.00	15789+03.00
EBML-3	15826+08.63	60	5,800.00	6.0%	2.70%	-2.70%	2.70%	130	15823+38.00	15824+68.00	15827+49.00	15828+79.00

US 81 ML SUPERELEVATION DATA

CURVE ID	PI STATION	DESIGN SPEED (MPH)	RADIUS (FT)	e MAX (%)	SUPERELEVATION (%)	LEFT SUPERELEVATION (%)	RIGHT SUPERELEVATION (%)	LENGTH OF TRANSITION (FT)	BEGIN TRANSITION	BEGIN FULL SUPERELEVATION	END FULL SUPERELEVATION	END TRANSITION
ML-1	5011+36.52	60	6,000.00	6.0%	2.60%	-2.60%	2.60%	125	5006+60.00	5007+85.00	5014+85.00	5016+10.00
ML-2	5040+55.47	60	4,400.00	6.0%	3.30%	-3.30%	3.30%	141	5035+18.00	5036+59.00	5044+50.00	5045+91.00

US 81 ML CROSS SLOPE

℄ US 81 ML	LEFT SHDR	LEFT LANE	RIGHT LANE	RIGHT SHLDR
5003+00.00	MATCH EXISTING (ME)		MATCH EXISTING (ME)	
5002+00.00	-2.00%	-2.00%	-2.00%	-2.00%
5006+60.00	-2.00%	-2.00%	-2.00%	-2.00%
5007+85.00	-2.60%	-2.60%	2.60%	2.60%
5014+85.00	-2.60%	-2.60%	2.60%	2.60%
5016+10.00	-2.00%	-2.00%	-2.00%	-2.00%
5035+18.00	-2.00%	-2.00%	-2.00%	-2.00%
5036+59.00	-3.30%	-3.30%	3.30%	3.30%
5044+50.00	-3.30%	-3.30%	3.30%	3.30%
5045+91.00	-2.00%	-2.00%	-2.00%	-2.00%
5054+00.00	-2.00%	-2.00%	-2.00%	-2.00%
5055+00.00	MATCH EXISTING (ME)		MATCH EXISTING (ME)	



SUPERELEVATION ORIENTATION DETAILS*

*FOR VISUAL REFERENCE ONLY

WEST RAMP CROSS SLOPE

℄ WRAMP	RIGHT
105+82.00	-2.00% US81 ML
106+86.00	2.00%
110+55.00	2.00% START TRANSITION
111+59.00	-1.50%
111+87.86	MATCH ℄ US82 EBML EOP
112+49.86	MATCH ℄ US82 EBML EOP
113+17.86	MATCH ℄ US82 WBML EOP
113+67.86	MATCH ℄ US82 WBML EOP
114+11.00	-1.50% US81 ML
115+03.00	2.00% US81 ML
122+52.00	2.00% US81 ML START TRANSITION
123+92.00	-3.30% SEE US81 ML SUPERELEVATION TABLE

EAST RAMP CROSS SLOPE

℄ ERAMP	LEFT
206+10.75	-2.00% US81 ML
206+12.00	-2.00%
207+16.00	2.00%
212+42.00	2.00%
213+10.00	-0.50%
213+41.21	MATCH ℄ US82 EBML EOP
213+91.21	MATCH ℄ US82 EBML EOP
214+71.19	MATCH ℄ US82 WBML EOP
215+21.19	MATCH ℄ US82 WBML EOP
215+64.00	-0.50%
216+32.00	2.00%
225+57.00	2.00%
225+95.00	3.30% SEE US81 ML SUPERELEVATION TABLE

US 82 WBML CROSS SLOPE

℄ US 82 WBML	LEFT SHDR	LEFT LANE	RIGHT LANE	RIGHT SHLDR
25724+95.00	MATCH EXISTING (ME)		MATCH EXISTING (ME)	
25726+78.00	-2.00%	-1.04%	-1.27%	-1.27%
25727+68.00	-2.00%	-2.00%	2.00%	2.00%
25731+96.00	-2.00%	-2.00%	2.00%	2.00%
25743+15.00	-2.00%	-2.00%	2.00%	2.00%
25744+40.00	2.70%	2.70%	-2.70%	-2.70%
25751+05.00	2.70%	2.70%	-2.70%	-2.70%
25752+30.00	-2.00%	-2.00%	2.00%	2.00%
25783+20.00	-2.00%	-2.00%	2.00%	2.00%
25784+50.00	2.70%	2.70%	-2.70%	-2.70%
25788+80.00	2.70%	2.70%	-2.70%	-2.70%
25790+10.00	-2.00%	-2.00%	2.00%	2.00%
25798+60.59	-2.00%	-2.00%	2.00%	2.00%
25799+10.59	-2.12%	-1.85%	0.15%	-2.46%
MATCH EXISTING CROSS SLOPE AT STA 25799+10.59				
EXIST TO REMAIN IN PLACE FROM 25799+10.59 TO 25815+10.59				
MATCH EXISTING CROSS SLOPE AT STA 25815+10.59				
25815+10.59	-3.34%	-0.39%	-1.47%	-1.14%
25816+03.59	-2.00%	-2.00%	2.00%	2.00%
25824+43.00	-2.00%	-2.00%	2.00%	2.00%
25824+73.00	-2.70%	-2.70%	2.70%	2.70%
25827+49.00	-2.70%	-2.70%	2.70%	2.70%
25827+69.00	-2.00%	-2.00%	2.00%	2.00%
25876+47.35	-2.00%	-2.00%	2.00%	2.00%

HANSON RD (SOUTH)

℄ HANSON RD SOUTH	LEFT	RIGHT
10+72.00	MATCH ℄ EBML EOP	
11+22.00	-2.00%	-2.00%
12+23.44	-2.00%	-2.00%
12+73.44	MATCH ℄ HANSON RD S EOP	

HANSON RD (NORTH)

℄ HANSON RD NORTH	LEFT	RIGHT
20+72.60	MATCH ℄ WBML EOP	
21+22.60	-2.00%	-2.00%
21+29.20	-2.00%	-2.00%
21+79.20	MATCH ℄ HANSON RD N EOP	

MESQUITE ST

℄ MESQUITE ROAD	LEFT	RIGHT
20+84.00	MATCH ℄ WBML EOP	
21+34.00	-2.00%	-2.00%
22+29.00	-2.00%	-2.00%
22+79.00	MATCH ℄ MESQUITE ST EOP	

LOCAL ROAD-01

℄ LOCAL RD 01	LEFT	RIGHT
11+05.00	MATCH ℄ EBML EOP	
11+43.23	-2.00%	-2.00%
12+02.00	-2.00%	-2.00%
12+28.30	MATCH EXISTING GROUND ELEVATION	

LOCAL ROAD-02

℄ LOCAL RD 02	LEFT	RIGHT
20+32.87	MATCH ℄ LOCAL RD 01 EOP	
24+50.00	2.00%	-2.00%
25+25.00	-2.00%	2.00%
27+41.84	MATCH EXISTING GROUND ELEVATION	

COOK RD/SH19

℄ COOK RD-SH19	LEFT	RIGHT
10+22.00	MATCH ℄ EBML EOP	
10+72.00	-2.00%	-2.00%
11+79.83	-2.00%	-2.00%
12+29.83	MATCH ℄ COOK RD EOP	
13+73.83	MATCH ℄ WBML EOP	
14+23.83	-2.00%	-2.00%
14+82.90	-2.00%	-2.00%
15+32.90	MATCH ℄ SH19 EOP	

FITE ROAD

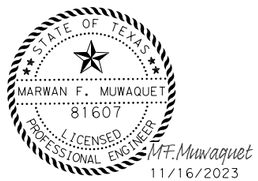
℄ FITE ROAD	LEFT	RIGHT
10+87.00	MATCH ℄ EBML EOP	
11+37.00	-2.00%	-2.00%
12+48.00	-2.00%	-2.00%
12+98.00	MATCH ℄ FITE ROAD EOP	

WEST TRANSITION

℄ WTRANS	LEFT	RIGHT
12+08.85	MATCH EXISTING CROSS SLOPE	
19+10.50	MATCH WBML CROSS SLOPE	
19+16.00	-1.92%	1.92%
19+21.00	-2.00%	2.00%
20+21.00	2.00%	-2.00%
21+26.50	2.00%	-2.00%
30+18.68	MATCH EBML CROSS SLOPE	

US 82 EBML CROSS SLOPE

℄ US 82 EBML	LEFT SHDR	LEFT LANE	RIGHT LANE	RIGHT SHLDR
15726+76.79	2.00%	2.00%	-2.00%	-2.00%
15744+02.00	2.00%	2.00%	-2.00%	-2.00%
15744+32.00	2.70%	2.70%	-2.70%	-2.70%
15751+33.00	2.70%	2.70%	-2.70%	-2.70%
15751+63.00	2.00%	2.00%	-2.00%	-2.00%
15784+33.00	2.00%	2.00%	-2.00%	-2.00%
15784+63.00	2.70%	2.70%	-2.70%	-2.70%
15788+73.00	2.70%	2.70%	-2.70%	-2.70%
15789+03.00	2.00%	2.00%	-2.00%	-2.00%
15823+38.00	2.00%	2.00%	-2.00%	-2.00%
15824+68.00	-2.70%	-2.70%	2.70%	2.70%
15827+49.00	-2.70%	-2.70%	2.70%	2.70%
15828+79.00	2.00%	2.00%	-2.00%	-2.00%
15876+47.83	2.00%	2.00%	-2.00%	-2.00%



GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

CROSS SLOPE DATA AND SUPERELEVATION DATA

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	174
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

SHEET OF

PLOT DRIVER: US82+BW+HALF+PDF+LineWT+Modified.pltcfg
PENTABLE: US82+PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\RDWY\003+048+US82+CRSS-SLP&SUP-ELEV-DATA.dgn
DATE: 11/16/2023 TIME: 1:06:30 AM
USER: MoNov23 SCALE: 1:100

CURVE US 82 EBML-1

P.I. Station			15747+83.01	N	7,345,174.2829	E 2,129,369.7341
Delta	=	7° 08′ 00.22" (RT)				
Degree	=	1° 01′ 03.67"				
Tangent	=	350.9243				
Length	=	700.9418				
Radius	=	5,630.0000				
External	=	10.9262				
Long Chord	=	700.4891				
Mid. Ord.	=	10.9050				
P.C. Station			15744+32.09	N	7,345,123.6150	E 2,129,022.4869
P.T. Station			15751+33.03	N	7,345,181.4376	E 2,129,720.5855
C.C.				N	7,339,552.6079	E 2,129,835.3706
Back	= N	81° 41′ 54.14" E				
Ahead	= N	88° 49′ 54.36" E				
Chord Bear	= N	85° 15′ 54.25" E				

Course from PT EBML-1 to PC EBML-2 N 88° 49′ 54.36" E Dist 3,330.5123

CURVE US 82 EBML-2

P.I. Station			15786+68.30	N	7,345,253.5150	E 2,133,255.1155
Delta	=	4° 09′ 56.32" (RT)				
Degree	=	1° 01′ 03.67"				
Tangent	=	204.7525				
Length	=	409.3247				
Radius	=	5,630.0000				
External	=	3.7220				
Long Chord	=	409.2345				
Mid. Ord.	=	3.7195				
P.C. Station			15784+63.54	N	7,345,249.3405	E 2,133,050.4055
P.T. Station			15788+72.87	N	7,345,242.8084	E 2,133,459.5879
C.C.				N	7,339,620.5108	E 2,133,165.1906
Back	= N	88° 49′ 54.36" E				
Ahead	= S	87° 00′ 09.33" E				
Chord Bear	= S	89° 05′ 07.48" E				

Course from PT EBML-2 to PC EBML-3 S 87° 00′ 09.33" E Dist 3,595.5985

CURVE US 82 WBML-1

P.I. Station			25747+74.43	N	7,345,274.1351	E 2,129,361.4635
Delta	=	7° 08′ 00.22" (RT)				
Degree	=	0° 59′ 59.73"				
Tangent	=	357.1574				
Length	=	713.3919				
Radius	=	5,730.0000				
External	=	11.1202				
Long Chord	=	712.9312				
Mid. Ord.	=	11.0987				
P.C. Station			25744+17.27	N	7,345,222.5672	E 2,129,008.0485
P.T. Station			25751+30.66	N	7,345,281.4168	E 2,129,718.5467
C.C.				N	7,339,552.6079	E 2,129,835.3706
Back	= N	81° 41′ 54.14" E				
Ahead	= N	88° 49′ 54.36" E				
Chord Bear	= N	85° 15′ 54.25" E				

Course from PT WBML-1 to PC WBML-2 N 88° 49′ 54.36" E Dist 3,330.5123

CURVE US 82 WBML-2

P.I. Station			25786+69.57	N	7,345,353.5684	E 2,133,256.7127
Delta	=	4° 09′ 56.32" (RT)				
Degree	=	0° 59′ 59.73"				
Tangent	=	208.3893				
Length	=	416.5951				
Radius	=	5,730.0000				
External	=	3.7881				
Long Chord	=	416.5033				
Mid. Ord.	=	3.7856				
P.C. Station			25784+61.18	N	7,345,349.3197	E 2,133,048.3667
P.T. Station			25788+77.77	N	7,345,342.6716	E 2,133,464.8170
C.C.				N	7,339,620.5108	E 2,133,165.1906
Back	= N	88° 49′ 54.36" E				
Ahead	= S	87° 00′ 09.33" E				
Chord Bear	= S	89° 05′ 07.48" E				

Course from PT WBML-2 to PC WBML-3 S 87° 00′ 09.33" E Dist 3,595.5985

CURVE US 82 ML-1

P.I. Station			5746+77.45	N	7,345,224.2090	E 2,129,365.5988
Delta	=	7° 08′ 00.22" (RT)				
Degree	=	1° 00′ 31.42"				
Tangent	=	354.0408				
Length	=	707.1668				
Radius	=	5,680.0000				
External	=	11.0232				
Long Chord	=	706.7102				
Mid. Ord.	=	11.0018				
P.C. Station			5743+23.41	N	7,345,173.0911	E 2,129,015.2677
P.T. Station			5750+30.57	N	7,345,231.4272	E 2,129,719.5661
C.C.				N	7,339,552.6079	E 2,129,835.3706
Back	= N	81° 41′ 54.14" E				
Ahead	= N	88° 49′ 54.36" E				
Chord Bear	= N	85° 15′ 54.25" E				

Course from PT US82 ML-1 to PC US82 ML-2 N 88° 49′ 54.36" E Dist 3,330.5123

CURVE US 82 ML-2

P.I. Station			5785+67.66	N	7,345,303.5417	E 2,133,255.9141
Delta	=	4° 09′ 56.32" (RT)				
Degree	=	1° 00′ 31.42"				
Tangent	=	206.5709				
Length	=	412.9599				
Radius	=	5,680.0000				
External	=	3.7551				
Long Chord	=	412.8689				
Mid. Ord.	=	3.7526				
P.C. Station			5783+61.08	N	7,345,299.3301	E 2,133,049.3861
P.T. Station			5787+74.04	N	7,345,292.7400	E 2,133,462.2024
C.C.				N	7,339,620.5108	E 2,133,165.1906
Back	= N	88° 49′ 54.36" E				
Ahead	= S	87° 00′ 09.33" E				
Chord Bear	= S	89° 05′ 07.48" E				

Course from PT US82 ML-2 to PC US82 ML-3 S 87° 00′ 09.33" E Dist 3,595.5985

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED
PROFESSIONAL ENGINEER
M.F.Muwaquet
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

ALIGNMENT DATA
HORIZONTAL ALIGNMENT

SHEET 1 OF 11

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	175
CHECK FS	CONTROL 0044	SECTION 04	JOB 048	

CURVE US 82 EBML-3

P.I. Station	15826+08.63	N	7,345,047.4625	E	2,137,190.2373
Delta =	2° 46′ 07.18" (LT)				
Degree =	0° 59′ 16.29"				
Tangent =	140.1618				
Length =	280.2691				
Radius =	5,800.0000				
External =	1.6933				
Long Chord =	280.2418				
Mid. Ord. =	1.6928				
P.C. Station	15824+68.47	N	7,345,054.7916	E	2,137,050.2672
P.T. Station	15827+48.74	N	7,345,046.9029	E	2,137,330.3980
C.C.		N	7,350,846.8566	E	2,137,353.5539
Back = S	87° 00′ 09.33" E				
Ahead = S	89° 46′ 16.51" E				
Chord Bear = S	88° 23′ 12.92" E				

Course from PT EBML-3 to PC EBML-4 S 89° 46′ 16.51" E Dist 591.0536

CURVE US 82 WBML-3

P.I. Station	25826+11.11	N	7,345,147.4520	E	2,137,193.0531
Delta =	2° 46′ 07.18" (LT)				
Degree =	1° 00′ 18.68"				
Tangent =	137.7452				
Length =	275.4369				
Radius =	5,700.0000				
External =	1.6641				
Long Chord =	275.4101				
Mid. Ord. =	1.6636				
P.C. Station	25824+73.37	N	7,345,154.6548	E	2,137,055.4963
P.T. Station	25827+48.81	N	7,345,146.9021	E	2,137,330.7973
C.C.		N	7,350,846.8566	E	2,137,353.5539
Back = S	87° 00′ 09.33" E				
Ahead = S	89° 46′ 16.51" E				
Chord Bear = S	88° 23′ 12.92" E				

Ending chain WBML description

CURVE US 82 ML-3

P.I. Station	5825+08.60	N	7,345,097.4572	E	2,137,191.6452
Delta =	2° 46′ 07.18" (LT)				
Degree =	0° 59′ 47.21"				
Tangent =	138.9535				
Length =	277.8530				
Radius =	5,750.0000				
External =	1.6787				
Long Chord =	277.8260				
Mid. Ord. =	1.6782				
P.C. Station	5823+69.64	N	7,345,104.7232	E	2,137,052.8818
P.T. Station	5826+47.50	N	7,345,096.9025	E	2,137,330.5976
C.C.		N	7,350,846.8566	E	2,137,353.5539
Back = S	87° 00′ 09.33" E				
Ahead = S	89° 46′ 16.51" E				
Chord Bear = S	88° 23′ 12.92" E				

Ending chain US 82 ML description

CURVE US 82 EBML-4

P.I. Station	15834+93.81	N	7,345,043.9282	E	2,138,075.4687
Delta =	1° 15′ 06.14" (RT)				
Degree =	0° 24′ 22.87"				
Tangent =	154.0230				
Length =	308.0337				
Radius =	14,100.0000				
External =	0.8412				
Long Chord =	308.0276				
Mid. Ord. =	0.8412				
P.C. Station	15833+39.79	N	7,345,044.5431	E	2,137,921.4469
P.T. Station	15836+47.82	N	7,345,039.9489	E	2,138,229.4403
C.C.		N	7,330,944.6555	E	2,137,865.1541
Back = S	89° 46′ 16.51" E				
Ahead = S	88° 31′ 10.37" E				
Chord Bear = S	89° 08′ 43.44" E				

Course from PT EBML-4 to PC EBML-5 S 88° 31′ 10.37" E Dist 790.6224

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED
PROFESSIONAL ENGINEER
M.F. Muwaquet
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

ALIGNMENT DATA
HORIZONTAL ALIGNMENT

SHEET 2 OF 11

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	176
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT**Modified.pltcfg
PENTABLE: US82*PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\RDWY\004*048*US82*HALGN*DATA.dgn
DATE: 11/16/2023 TIME: 1:20:18 AM USER: MoNov23 SCALE: 1:50

CURVE US 82 EBML-5

P.I. Station	15845+92.47	N	7,345,015.5431	E	2,139,173.7703
Delta =	1° 15′ 06.14" (LT)				
Degree =	0° 24′ 22.87"				
Tangent =	154.0230				
Length =	308.0337				
Radius =	14,100.0000				
External =	0.8412				
Long Chord =	308.0276				
Mid. Ord. =	0.8412				
P.C. Station	15844+38.45	N	7,345,019.5225	E	2,139,019.7988
P.T. Station	15847+46.48	N	7,345,014.9282	E	2,139,327.7921
C.C.		N	7,359,114.8159	E	2,139,384.0849
Back = S	88° 31′ 10.37" E				
Ahead = S	89° 46′ 16.51" E				
Chord Bear = S	89° 08′ 43.44" E				

Course from PT EBML-5 to PC EBML-6 S 89° 46′ 16.51" E Dist 445.1323

CURVE US 82 EBML-6

P.I. Station	15854+53.33	N	7,345,012.1062	E	2,140,034.6330
Delta =	2° 07′ 36.20" (LT)				
Degree =	0° 24′ 22.87"				
Tangent =	261.7142				
Length =	523.3683				
Radius =	14,100.0000				
External =	2.4287				
Long Chord =	523.3383				
Mid. Ord. =	2.4282				
P.C. Station	15851+91.61	N	7,345,013.1511	E	2,139,772.9209
P.T. Station	15857+14.98	N	7,345,020.7741	E	2,140,296.2037
C.C.		N	7,359,113.0387	E	2,139,829.2137
Back = S	89° 46′ 16.51" E				
Ahead = N	88° 06′ 07.29" E				
Chord Bear = N	89° 09′ 55.39" E				

Course from PT EBML-6 to PC EBML-7 N 88° 06′ 07.29" E Dist 123.3010

CURVE US 82 EBML-7

P.I. Station	15861+00.00	N	7,345,033.5258	E	2,140,681.0077
Delta =	2° 07′ 36.20" (RT)				
Degree =	0° 24′ 22.87"				
Tangent =	261.7142				
Length =	523.3683				
Radius =	14,100.0000				
External =	2.4287				
Long Chord =	523.3383				
Mid. Ord. =	2.4282				
P.C. Station	15858+38.28	N	7,345,024.8579	E	2,140,419.4370
P.T. Station	15863+61.65	N	7,345,032.4809	E	2,140,942.7198
C.C.		N	7,330,932.5933	E	2,140,886.4270
Back = N	88° 06′ 07.29" E				
Ahead = S	89° 46′ 16.51" E				
Chord Bear = N	89° 09′ 55.39" E				

Ending chain EBML description

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED
PROFESSIONAL ENGINEER
M.F. Muwaquet
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

ALIGNMENT DATA
HORIZONTAL ALIGNMENT

SHEET 3 OF 11

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	177
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82+BW+HALF+PDF+LineWT+Modified.pltcfg
PENTABLE: US82+PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\RDWY\004+048+US82+HALGN+DATA.dgn
DATE: 11/16/2023 TIME: 1:21:18 AM USER: MoNov23 SCALE: 1:50

CURVE US 81 ML-1

P.I. Station	5011+36.52	N	7,343,291.9223	E	2,139,795.6130	
Delta =	6° 39′ 59.66"	(LT)				
Degree =	0° 57′ 17.75"					
Tangent =	349.4552					
Length =	698.1217					
Radius =	6,000.0000					
External =	10.1680					
Long Chord =	697.7280					
Mid. Ord. =	10.1508					
P.C. Station	5007+87.06	N	7,342,942.4688	E	2,139,794.5524	
P.T. Station	5014+85.18	N	7,343,639.1362	E	2,139,756.0979	
C.C.		N	7,342,960.6783	E	2,133,794.5800	
Back = N	0° 10′ 26.00" E					
Ahead = N	6° 29′ 33.66" W					
Chord Bear = N	3° 09′ 33.83" W					

Course from PT US81 ML-1 to PC US81 ML-2 N 6° 29′ 33.66" W Dist 2,174.1997

CURVE US 81 ML-2

P.I. Station	5040+55.47	N	7,346,192.9356	E	2,139,465.4596	
Delta =	10° 17′ 15.78"	(LT)				
Degree =	1° 18′ 07.84"					
Tangent =	396.0847					
Length =	790.0400					
Radius =	4,400.0000					
External =	17.7917					
Long Chord =	788.9791					
Mid. Ord. =	17.7200					
P.C. Station	5036+59.38	N	7,345,799.3913	E	2,139,510.2474	
P.T. Station	5044+49.42	N	7,346,572.1544	E	2,139,351.1082	
C.C.		N	7,345,301.8555	E	2,135,138.4676	
Back = N	6° 29′ 33.66" W					
Ahead = N	16° 46′ 49.44" W					
Chord Bear = N	11° 38′ 11.55" W					

Course from PT US81 ML-2 to 45 N 16° 46′ 49.44" W Dist 1,383.3485

Point 45 N 7,347,896.5975 E 2,138,951.7296 Sta 5058+32.77

Ending chain US 81 ML description

CURVE US81 ERAMP-1

Curve US81_ERAMP1

P.I. Station	204+64.27	N	7,344,101.7890	E	2,139,715.5226	
Delta =	10° 53′ 36.96"	(RT)				
Degree =	1° 25′ 56.62"					
Tangent =	381.4080					
Length =	760.5168					
Radius =	4,000.0000					
External =	18.1429					
Long Chord =	759.3718					
Mid. Ord. =	18.0609					
P.C. Station	200+82.87	N	7,343,722.8272	E	2,139,758.6508	
P.T. Station	208+43.38	N	7,344,482.0724	E	2,139,744.7899	
C.C.		N	7,344,175.1324	E	2,143,732.9960	
Back = N	6° 29′ 33.66" W					
Ahead = N	4° 24′ 03.30" E					
Chord Bear = N	1° 02′ 45.18" W					

Course from PT US81_ERAMP1 to PC US81_ERAMP2 N 4° 24′ 03.30" E Dist 136.9696

CURVE US81 ERAMP-2

Curve US81_ERAMP2

P.I. Station	211+26.05	N	7,344,763.9091	E	2,139,766.4806	
Delta =	4° 10′ 19.81"	(LT)				
Degree =	1° 25′ 56.62"					
Tangent =	145.7006					
Length =	291.2724					
Radius =	4,000.0000					
External =	2.6527					
Long Chord =	291.2081					
Mid. Ord. =	2.6509					
P.C. Station	209+80.35	N	7,344,618.6382	E	2,139,755.3003	
P.T. Station	212+71.62	N	7,344,909.6086	E	2,139,767.0623	
C.C.		N	7,344,925.5782	E	2,135,767.0942	
Back = N	4° 24′ 03.30" E					
Ahead = N	0° 13′ 43.49" E					
Chord Bear = N	2° 18′ 53.40" E					

Course from PT US81_ERAMP2 to PC US81_ERAMP3 N 0° 13′ 43.49" E Dist 297.5700

CURVE US81 ERAMP-3

Curve US81_ERAMP3

P.I. Station	216+96.83	N	7,345,334.8122	E	2,139,768.7599	
Delta =	17° 54′ 34.83"	(LT)				
Degree =	7° 04′ 24.79"					
Tangent =	127.6370					
Length =	253.1921					
Radius =	810.0000					
External =	9.9946					
Long Chord =	252.1625					
Mid. Ord. =	9.8728					
P.C. Station	215+69.19	N	7,345,207.1762	E	2,139,768.2503	
P.T. Station	218+22.39	N	7,345,456.4199	E	2,139,729.9945	
C.C.		N	7,345,210.4101	E	2,138,958.2568	
Back = N	0° 13′ 43.49" E					
Ahead = N	17° 40′ 51.33" W					
Chord Bear = N	8° 43′ 33.92" W					

Course from PT US81_ERAMP3 to 11 N 17° 40′ 51.33" W Dist 1,049.7936

Point 11 N 7,346,456.6240 E 2,139,411.1555 Sta 228+72.18

CURVE US81 WRAMP-1

Curve US81 WRAMP1

P.I. Station	105+78.58	N	7,344,438.7320	E	2,139,624.8407	
Delta =	25° 51′ 57.29"	(LT)				
Degree =	7° 04′ 24.79"					
Tangent =	186.0052					
Length =	365.6707					
Radius =	810.0000					
External =	21.0824					
Long Chord =	362.5734					
Mid. Ord. =	20.5476					
P.C. Station	103+92.58	N	7,344,253.9198	E	2,139,645.8735	
P.T. Station	107+58.25	N	7,344,595.8534	E	2,139,525.2876	
C.C.		N	7,344,162.3280	E	2,138,841.0686	
Back = N	6° 29′ 33.66" W					
Ahead = N	32° 21′ 30.94" W					
Chord Bear = N	19° 25′ 32.30" W					

Course from PT US81 WRAMP1 to PC US81 WRAMP2 N 32° 21′ 30.94" W Dist 220.8261

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED
PROFESSIONAL ENGINEER
M.F.Muwaquet
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

ALIGNMENT DATA
HORIZONTAL ALIGNMENT

SHEET 4 OF 11

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	178
CHECK FS	CONTROL 0044	SECTION 04	JOB 048	

PLOT DRIVER: US82+BW+HALF+PDF+LineWT+Modified.pltcfg
PENTABLE: US82+PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\RDWY\004+048+US82+HALGN+DATA.dgn
USER: MoNov23
DATE: 11/16/2023 TIME: 1:22:06 AM
SCALE: 1:50

CURVE US81 WRAMP-2

```
Curve US81_WRAMP2
P.I.  Station          110+81.38  N      7,344,868.8072  E      2,139,352.3424
Delta        =      32° 35′ 14.44" (RT)
Degree       =      16° 22′ 12.80"
Tangent      =           102.3052
Length       =           199.0648
Radius       =           350.0000
External     =            14.6455
Long Chord   =           196.3925
Mid. Ord.    =            14.0573
P.C.  Station          109+79.07  N      7,344,782.3885  E      2,139,407.0979
P.T.  Station          111+78.14  N      7,344,971.1116  E      2,139,352.7509
C.C.                              N      7,344,969.7143  E      2,139,702.7481
Back         = N  32° 21′ 30.94" W
Ahead        = N   0° 13′ 43.49" E
Chord Bear   = N  16° 03′ 53.73" W

Course from PT US81_WRAMP2 to PC US81_WRAMP3 N 0° 13′ 43.49" E Dist 256.8445
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CURVE US81 WRAMP-3

```
Curve US81_WRAMP3
P.I.  Station          115+03.51  N      7,345,296.4817  E      2,139,354.0499
Delta        =       9° 40′ 18.24" (RT)
Degree       =       7° 04′ 24.79"
Tangent      =            68.5283
Length       =           136.7309
Radius       =           810.0000
External     =             2.8937
Long Chord   =           136.5686
Mid. Ord.    =             2.8834
P.C.  Station          114+34.98  N      7,345,227.9540  E      2,139,353.7763
P.T.  Station          115+71.71  N      7,345,363.9895  E      2,139,365.8324
C.C.                              N      7,345,224.7202  E      2,140,163.7698
Back         = N   0° 13′ 43.49" E
Ahead        = N   9° 54′ 01.74" E
Chord Bear   = N   5° 03′ 52.61" E

Course from PT US81_WRAMP3 to PC US81_WRAMP4 N 9° 54′ 01.74" E Dist 238.4892
```

CURVE US81 WRAMP-4

```
Curve US81_WRAMP4
P.I.  Station          118+80.64  N      7,345,668.3182  E      2,139,418.9490
Delta        =       9° 56′ 24.87" (LT)
Degree       =       7° 04′ 24.79"
Tangent      =            70.4402
Length       =           140.5268
Radius       =           810.0000
External     =             3.0571
Long Chord   =           140.3507
Mid. Ord.    =             3.0456
P.C.  Station          118+10.20  N      7,345,598.9271  E      2,139,406.8377
P.T.  Station          119+50.73  N      7,345,738.7584  E      2,139,418.9001
C.C.                              N      7,345,738.1963  E      2,138,608.9003
Back         = N   9° 54′ 01.74" E
Ahead        = N   0° 02′ 23.13" W
Chord Bear   = N   4° 55′ 49.30" E

Course from PT US81_WRAMP4 to PC US81_WRAMP5 N 0° 02′ 23.13" W Dist 126.9099
```

CURVE US81 WRAMP-5

```
Curve US81_WRAMP5
P.I.  Station          125+19.05  N      7,346,307.0818  E      2,139,418.5057
Delta        =      16° 44′ 26.31" (LT)
Degree       =       1° 54′ 35.49"
Tangent      =           441.4137
Length       =           876.5379
Radius       =         3,000.0000
External     =            32.3005
Long Chord   =           873.4234
Mid. Ord.    =            31.9564
P.C.  Station          120+77.64  N      7,345,865.6683  E      2,139,418.8120
P.T.  Station          129+54.18  N      7,345,863.5865  E      2,136,418.8127
C.C.                              N      7,345,729.6994  E      2,139,291.0677
Back         = N   0° 02′ 23.13" W
Ahead        = N  16° 46′ 49.44" W
Chord Bear   = N   8° 24′ 36.29" W
```

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED PROFESSIONAL ENGINEER
M.F.Muwaquet
11/16/2023

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SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

ALIGNMENT DATA
HORIZONTAL ALIGNMENT

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	179
CHECK FS	CONTROL 0044	SECTION 04	JOB 048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\ROWY\004*048*US82*HALGN*DATA.dgn
DATE: 11/16/2023 TIME: 1:22:42 AM USER: MoNov23 SCALE: 1:50

WEST TRANSITION

CURVE WTRANS-1

Curve WTRANS1						
P.I. Station		15+01.85	N	7,344,979.7002	E	2,127,396.9788
Delta	=	5° 10′ 38.42" (RT)				
Degree	=	0° 30′ 58.24"				
Tangent	=	501.8483				
Length	=	1,003.0136				
Radius	=	11,100.0000				
External	=	11.3389				
Long Chord	=	1,002.6724				
Mid. Ord.	=	11.3273				
P.C. Station		10+00.00	N	7,344,907.8074	E	2,126,900.3067
P.T. Station		20+03.01	N	7,345,006.4807	E	2,127,898.1121
C.C.			N	7,333,922.2967	E	2,128,490.4499
Back	= N	81° 45′ 49.29" E				
Ahead	= N	86° 56′ 27.70" E				
Chord Bear	= N	84° 21′ 08.49" E				

CURVE WTRANS-2

Curve WTRANS2						
P.I. Station		25+11.20	N	7,345,033.5996	E	2,128,405.5765
Delta	=	5° 14′ 33.56" (LT)				
Degree	=	0° 30′ 58.24"				
Tangent	=	508.1886				
Length	=	1,015.6679				
Radius	=	11,100.0000				
External	=	11.6270				
Long Chord	=	1,015.3136				
Mid. Ord.	=	11.6149				
P.C. Station		20+03.01	N	7,345,006.4807	E	2,127,898.1121
P.T. Station		30+18.68	N	7,345,106.9740	E	2,128,908.4401
C.C.			N	7,356,090.6648	E	2,127,305.7743
Back	= N	86° 56′ 27.70" E				
Ahead	= N	81° 41′ 54.14" E				
Chord Bear	= N	84° 19′ 10.92" E				

HANSON ROAD NORTH

CURVE HSN-1

Curve CL_HSN1						
P.I. Station		20+99.89	N	7,345,245.4040	E	2,136,260.2942
Delta	=	8° 54′ 09.54" (RT)				
Degree	=	16° 51′ 06.12"				
Tangent	=	26.4680				
Length	=	52.8294				
Radius	=	340.0000				
External	=	1.0287				
Long Chord	=	52.7763				
Mid. Ord.	=	1.0256				
P.C. Station		20+73.42	N	7,345,219.0163	E	2,136,262.3539
P.T. Station		21+26.25	N	7,345,271.7925	E	2,136,262.3430
C.C.			N	7,345,245.4740	E	2,136,601.3229
Back	= N	4° 27′ 47.12" W				
Ahead	= N	4° 26′ 22.42" E				
Chord Bear	= N	0° 00′ 42.35" W				

Course from PT CL_HSN1 to 89 N 4° 26′ 22.42" E Dist 148.7459

Point 89	N	7,345,420.0922	E	2,136,273.8571	Sta 22+75.00

HANSON ROAD SOUTH

Point 76	N	7,345,145.7902	E	2,136,268.5989	Sta 10+00.00

Course from 76 to 77 S 0° 25′ 25.60" E Dist 68.6004

Point 77	N	7,345,077.1916	E	2,136,269.1063	Sta 10+68.60

Course from 77 to 78 S 0° 25′ 25.60" E Dist 231.3990

Point 78	N	7,344,845.7989	E	2,136,270.8178	Sta 13+00.00

COOK ROAD - SH19

Point SC01	N	7,344,793.3750	E	2,137,756.9027	Sta 10+00.00

Course from SC01 to SC02 N 0° 03′ 42.40" E Dist 304.8244

Point SC02	N	7,345,098.1992	E	2,137,757.2314	Sta 13+04.82

Course from SC02 to SC03 N 0° 03′ 42.40" E Dist 229.1836

Point SC03	N	7,345,327.3827	E	2,137,757.4785	Sta 15+34.01

MESQUITE ST

Point 85	N	7,345,090.0574	E	2,139,045.1034	Sta 20+00.00

Course from 85 to 86 N 0° 36′ 40.38" E Dist 84.0019

Point 86	N	7,345,174.0545	E	2,139,045.9995	Sta 20+84.00

Course from 86 to 87 N 0° 36′ 40.38" E Dist 215.9981

Point 87	N	7,345,390.0404	E	2,139,048.3037	Sta 23+00.00

FITE ROAD

Point FT01	N	7,345,083.6106	E	2,140,659.8731	Sta 10+00.00

Course from FT01 to FT02 S 0° 19′ 17.51" W Dist 88.3712

Point FT02	N	7,344,995.2408	E	2,140,659.3771	Sta 10+88.37

Course from FT02 to FT03 S 0° 19′ 17.51" W Dist 261.6288

Point FT03	N	7,344,733.6161	E	2,140,657.9089	Sta 13+50.00

UPRR

Point RR01	N	7,345,722.4553	E	2,135,206.7173	Sta 10010+00.00

Course from RR01 to RR02 S 9° 38′ 36.76" W Dist 523.8700

Point RR02	N	7,345,205.9881	E	2,135,118.9596	Sta 10015+23.87

Course from RR02 to RR03 S 9° 38′ 36.76" W Dist 216.7600

Point RR03	N	7,344,992.2911	E	2,135,082.6484	Sta 10017+40.63

STATE OF TEXAS
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11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

ALIGNMENT DATA
HORIZONTAL ALIGNMENT

SHEET 6 OF 11

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	180
CHECK FS	CONTROL 0044	SECTION 04	JOB 048	

PLOT DRIVER: USB2*BW*HALF*PDF*LineWT**Modified.pltcfg
PENTABLE: USB2*PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\RDWY\004*048*US82*HALGN*DATA.dgn
DATE: 11/16/2023 TIME: 1:23:31 AM USER: MoNov23 SCALE: 1:50

LOCAL ROAD 01

Point SC01	N	7,344,793.3750	E	2,137,756.9027	Sta	10+00.00
Course from SC01 to SC02 N 0° 03′ 42.40" E Dist 304.8244						
Point SC02	N	7,345,098.1992	E	2,137,757.2314	Sta	13+04.82
Course from SC02 to SC03 N 0° 03′ 42.40" E Dist 229.1836						
Point SC03	N	7,345,327.3827	E	2,137,757.4785	Sta	15+34.01

LOCAL ROAD 02

CURVE LOCAL RD 02-1

P.I. Station		22+07.36	N	7,344,956.0572	E	2,139,251.0964
Delta	=	54° 45′ 21.45" (RT)				
Degree	=	57° 17′ 44.81"				
Tangent	=	51.7863				
Length	=	95.5672				
Radius	=	100.0000				
External	=	12.6136				
Long Chord	=	91.9717				
Mid. Ord.	=	11.2008				
P.C. Station		21+55.57	N	7,344,957.0184	E	2,139,199.3190
P.T. Station		22+51.14	N	7,344,913.2159	E	2,139,280.1901
C.C.			N	7,344,857.0357	E	2,139,197.4630
Back	= S	88° 56′ 11.39" E				
Ahead	= S	34° 10′ 49.94" E				
Chord Bear	= S	61° 33′ 30.66" E				

Course from PT CL_LRD021 to PC CL_LRD022 S 34° 10′ 49.94" E Dist 411.0110

CURVE LOCAL RD 02-2

P.I. Station		26+68.25	N	7,344,568.1535	E	2,139,514.5230
Delta	=	6° 58′ 45.30" (RT)				
Degree	=	57° 17′ 44.81"				
Tangent	=	6.0981				
Length	=	12.1811				
Radius	=	100.0000				
External	=	0.1858				
Long Chord	=	12.1736				
Mid. Ord.	=	0.1854				
P.C. Station		26+62.15	N	7,344,573.1982	E	2,139,511.0971
P.T. Station		26+74.33	N	7,344,562.7298	E	2,139,517.3105
C.C.			N	7,344,517.0180	E	2,139,428.3699
Back	= S	34° 10′ 49.94" E				
Ahead	= S	27° 12′ 04.63" E				
Chord Bear	= S	30° 41′ 27.28" E				

Course from PT CL_LRD022 to L05 S 27° 12′ 04.63" E Dist 99.6785

Point L05	N	7,344,474.0751	E	2,139,562.8754	Sta	27+74.01

STATE OF TEXAS
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Texas Department of Transportation

US 82

ALIGNMENT DATA
HORIZONTAL ALIGNMENT

SHEET 7 OF 11

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	181
CHECK FS	CONTROL 0044	SECTION 04	JOB 048	

PLOT DRIVER: US82+BW+HALF+PDF+LineWT+Modified.pltcfg
PENTABLE: US82+PEN.tbl
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DATE: 11/16/2023 TIME: 1:24:14 AM USER: MoNov23 SCALE: 1:50

US-82 EBML

		STATION	ELEV	GRADE	TOTAL L	BACK L	AHEAD L
VPI	1	25724+95.00	884.1000				
VPC		25724+95.50	884.1010	0.2048	K = 135.9	SSD = 629.7	
High Point		25725+23.33	884.1295				
VPI	2	25725+78.00	884.2700		165.0000	82.5000	82.5000
VPT		25726+60.50	883.4371	-1.0095			
VPI	3	25726+83.00	883.2100	-1.0095			
VPC		25726+95.00	883.1461	-0.5327	K = 180.8		
VPI	4	25727+90.00	882.6400		190.0000	95.0000	95.0000
Low Point		25727+91.33	882.8895				
VPT		25728+85.00	883.1321	0.5180			
VPC		25729+17.00	883.2979	0.5180	K = 394.8	SSD = 1475.9	
VPI	5	25730+12.00	883.7900		190.0000	95.0000	95.0000
VPT		25731+07.00	883.8250	0.0368			
VPC		25731+54.00	883.8423	0.0368	K = 139.7		
VPI	6	25732+49.00	883.8773		190.0000	95.0000	95.0000
VPT		25733+44.00	885.2042	1.3967			
VPC		25734+26.00	886.3495	1.3967	K = 164.6	SSD = 467.7	
High Point		25736+55.93	887.9553				
VPI	7	25737+16.00	890.4000		580.0000	290.0000	290.0000
VPT		25740+06.00	884.2332	-2.1265			
VPI	8	25743+46.15	877.0000	-2.1265			
VPC		25746+72.00	869.5934	-2.2730	K = 160.2		
VPI	9	25749+37.00	863.5700		530.0000	265.0000	265.0000
Low Point		25750+36.15	865.4549				
VPT		25752+02.00	866.3133	1.0352			
VPC		25753+93.00	868.2905	1.0352	K = 160.9	SSD = 462.5	
High Point		25755+59.61	869.1529				
VPI	10	25758+03.00	872.5348		820.0000	410.0000	410.0000
VPT		25762+13.00	855.8904	-4.0596			
VPC		25762+45.00	854.5913	-4.0596	K = 83.6		
VPI	11	25764+15.00	847.6900		340.0000	170.0000	170.0000
Low Point		25765+84.23	847.7057				
VPT		25765+85.00	847.7057	0.0093			
VPC		25775+57.00	847.7957	0.0093	K = 103.8		
VPI	12	25777+12.00	847.8100		310.0000	155.0000	155.0000
VPT		25778+67.00	852.4539	2.9960			
VPC		25784+18.00	868.9621	2.9960	K = 138.9	SSD = 430.8	
VPI	13	25786+18.00	874.9542		400.0000	200.0000	200.0000
VPT		25788+18.00	875.1875	0.1167			
VPC		25796+46.00	876.1533	0.1167	K = 301.3	SSD = 1101.1	
High Point		25796+81.15	876.1738				
VPI	14	25797+46.00	876.2700		200.0000	100.0000	100.0000
VPT		25798+46.00	875.7229	-0.5471			
VPI	15	25799+10.50	875.3700	-0.5471			
VPC		25803+80.00	871.6979	-0.7821	K = 149.0		
Low Point		25804+96.56	871.2420				
VPI	16	25805+60.00	870.2900		360.0000	180.0000	180.0000
VPT		25807+40.00	873.2304	1.6336			
VPC		25810+75.00	878.7028	1.6336	K = 256.0	SSD = 990.4	
VPI	17	25811+70.00	880.2547		190.0000	95.0000	95.0000
VPT		25812+65.00	881.1016	0.8914			
VPI	18	25815+10.50	883.2900	0.8914			
VPC		25818+94.00	883.1928	-0.0253	K = 1351.5	SSD = 5079.2	
VPI	19	25819+84.00	883.1700		180.0000	90.0000	90.0000
VPT		25820+74.00	883.0273	-0.1585			

US-82 WBML

		STATION	ELEV	GRADE	TOTAL L	BACK L	AHEAD L
VPI	1	15726+76.79	882.8536				
VPC		15734+70.00	886.8335	0.5018	K = 253.3	SSD = 580.2	
High Point		15735+97.08	887.1523				
VPI	2	15738+40.00	888.6900		740.0000	370.0000	370.0000
VPT		15742+10.00	879.7356	-2.4201			
VPC		15745+70.00	871.0233	-2.4201	K = 178.7		
VPI	3	15748+85.00	863.4000		630.0000	315.0000	315.0000
Low Point		15750+02.58	865.7888				
VPT		15752+00.00	866.8790	1.1044			
VPC		15752+08.00	866.9673	1.1044	K = 241.0	SSD = 565.9	
High Point		15754+74.13	868.4370				
VPI	4	15757+18.00	872.6000		1,020.0000	510.0000	510.0000
VPT		15762+28.00	856.6441	-3.1286			
VPC		15762+40.00	856.2687	-3.1286	K = 170.7		
VPI	5	15765+50.00	846.5700		620.0000	310.0000	310.0000
Low Point		15767+73.93	847.9163				
VPT		15768+60.00	848.1334	0.5043			
VPC		15774+45.00	851.0836	0.5043	K = 276.1		
VPI	6	15777+10.00	852.4200		530.0000	265.0000	265.0000
VPT		15779+75.00	858.8437	2.4240			
VPC		15783+32.00	867.4975	2.4240	K = 270.7	SSD = 605.9	
VPI	7	15785+92.00	873.8000		520.0000	260.0000	260.0000
VPT		15788+52.00	875.1073	0.5028			
VPC		15794+36.00	878.0438	0.5028	K = 248.2	SSD = 594.8	
High Point		15795+60.79	878.3575				
VPI	8	15796+56.00	879.1500		440.0000	220.0000	220.0000
VPT		15798+76.00	876.3559	-1.2701			
VPC		15802+16.00	872.0377	-1.2701	K = 172.3		
Low Point		15804+34.87	870.6478				
VPI	9	15804+66.00	868.8625		500.0000	250.0000	250.0000
VPT		15807+16.00	872.9408	1.6313			
VPC		15810+05.00	877.6552	1.6313	K = 309.4	SSD = 762.4	
VPI	10	15811+80.00	880.5100		350.0000	175.0000	175.0000
VPT		15813+55.00	881.3850	0.5000			
VPC		15823+23.00	886.2250	0.5000	K = 844.2		
VPI	11	15824+73.00	886.9750		300.0000	150.0000	150.0000
VPT		15826+23.00	888.2580	0.8554			
VPC		15830+37.00	891.7993	0.8554	K = 599.2		
VPI	12	15832+37.00	893.5100		400.0000	200.0000	200.0000
VPT		15834+37.00	896.5558	1.5229			
VPC		15835+72.00	898.6117	1.5229	K = 426.3	SSD = 1454.0	
VPI	13	15836+77.00	900.2108		210.0000	105.0000	105.0000
VPT		15837+82.00	901.2926	1.0303			
VPC		15841+29.00	904.8679	1.0303	K = 239.8		
VPI	14	15843+09.00	906.7225		360.0000	180.0000	180.0000
VPT		15844+89.00	911.2795	2.5317			
VPC		15845+15.00	911.9378	2.5317	K = 246.8	SSD = 572.7	
VPI	15	15849+85.00	923.8367		940.0000	470.0000	470.0000
High Point		15851+39.83	919.8472				
VPT		15854+55.00	917.8348	-1.2770			
VPC		15854+60.00	917.7710	-1.2770	K = 200.9		
Low Point		15857+16.55	916.1329				
VPI	16	15857+60.00	913.9400		600.0000	300.0000	300.0000
VPT		15860+60.00	919.0686	1.7095			
VPC		15864+04.00	924.9495	1.7095	K = 284.4	SSD = 614.8	
VPI	17	15867+24.00	930.4200		640.0000	320.0000	320.0000
High Point		15868+90.18	929.1052				
VPT		15870+44.00	928.6891	-0.5409			
VPC		15874+19.00	926.6608	-0.5409	K = 211.4		
VPI	18	15875+29.00	926.0658		220.0000	110.0000	110.0000
Low Point		15875+33.32	926.3516				
VPT		15876+39.00	926.6158	0.5000			
VPI	19	15876+47.84	926.6600	0.5000			

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED PROFESSIONAL ENGINEER
M.F. Muwaquet
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

ALIGNMENT DATA
VERTICAL ALIGNMENT

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	182
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

US-82 WBML CONTINUED

VPC		25820+98.00	882.9893	-0.1585	K = 201.9
Low Point		25821+30.00	882.9639		
VPI	20	25822+48.00	882.7515		300.0000 150.0000 150.0000
VPT		25823+98.00	884.7430	1.3277	
VPC		25827+66.00	889.6287	1.3277	K = 268.4 SSD = 1033.7
VPI	21	25828+61.00	890.8900		190.0000 95.0000 95.0000
VPT		25829+56.00	891.4788	0.6197	
VPC		25830+26.00	891.9126	0.6197	K = 361.2
VPI	22	25832+06.00	893.0281		360.0000 180.0000 180.0000
VPT		25833+86.00	895.9375	1.6163	
VPI	23	25835+45.00	898.5074	1.6163	
VPC		25835+67.00	898.8684	1.6408	K = 512.2 SSD = 1050.9
VPI	24	25837+67.00	902.1500		400.0000 200.0000 200.0000
VPT		25839+67.00	903.8698	0.8599	
VPC		25842+23.00	906.0711	0.8599	K = 165.6
VPI	25	25843+58.00	907.2319		270.0000 135.0000 135.0000
VPT		25844+93.00	910.5934	2.4900	
VPC		25845+20.00	911.2657	2.4900	K = 249.3 SSD = 575.6
VPI	26	25849+90.00	922.9687		940.0000 470.0000 470.0000
High Point		25851+40.85	918.9953		
VPT		25854+60.00	916.9527	-1.2800	
VPC		25854+64.00	916.9015	-1.2800	K = 183.7
VPI	27	25856+64.00	914.3415		400.0000 200.0000 200.0000
Low Point		25856+99.20	915.3963		
VPT		25858+64.00	916.1354	0.8969	
VPC		25860+12.00	917.4628	0.8969	K = 185.4
VPI	28	25861+02.00	918.2700		180.0000 90.0000 90.0000
VPT		25861+92.00	919.9510	1.8678	
VPC		25864+92.00	925.5544	1.8678	K = 162.4 SSD = 469.8
VPI	29	25866+92.00	929.2900		400.0000 200.0000 200.0000
High Point		25867+95.40	928.3878		
VPT		25868+92.00	928.1005	-0.5947	
VPI	30	25873+55.00	925.3470	-0.5947	
VPC		25874+32.00	924.9101	-0.5674	K = 187.3
VPI	31	25875+32.00	924.3427		200.0000 100.0000 100.0000
Low Point		25875+38.26	924.6086		
VPT		25876+32.00	924.8432	0.5005	
VPI	32	25876+47.35	924.9200	0.5005	

US-81 ML

		STATION	ELEV	GRADE	TOTAL L	BACK L	AHEAD L
VPI	1	5003+00.00	934.6300				
VPC		5003+03.00	934.6048	-0.8408	K = 284.7 SSD = 1090.7		
VPI	2	5003+98.00	933.8060		190.0000	95.0000	95.0000
VPT		5004+93.00	932.3732	-1.5082			
VPC		5007+38.00	928.6782	-1.5082	K = 463.4		
VPI	3	5008+38.00	927.1700		200.0000	100.0000	100.0000
VPT		5009+38.00	926.0934	-1.0766			
VPI	4	5017+00.00	917.8900	-1.0766			
VPC		5020+09.00	915.8180	-0.6706	K = 246.5 SSD = 572.3		
VPI	5	5023+86.00	913.2900		754.0000	377.0000	377.0000
VPT		5027+63.00	899.2288	-3.7298			
VPC		5027+63.00	899.2288	-3.7298	K = 179.6		
VPI	6	5030+53.00	888.4125		580.0000	290.0000	290.0000
VPT		5033+43.00	886.9622	-0.5001			

US-81 ML CONTINUED

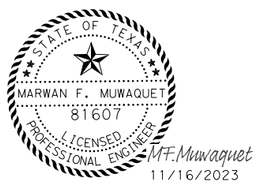
VPI	7	5035+61.00	885.8720	-0.5001	
VPC		5042+12.00	881.6961	-0.6415	K = 185.3 SSD = 715.7
VPI	8	5043+12.00	881.0546		200.0000 100.0000 100.0000
VPT		5044+12.00	879.3339	-1.7207	
VPI	9	5048+14.00	872.4168	-1.7207	
VPI	10	5050+34.00	868.8376	-1.6269	
VPI	11	5055+00.00	860.7400	-1.7377	

US-81 WEST RAMP

		STATION	ELEV	GRADE	TOTAL L	BACK L	AHEAD L
VPI	1	105+82.35	910.9700				
VPC		105+96.08	910.6396	-2.4068	K = 63.5		
VPI	2	107+36.08	907.2699		280.0048	140.0024	140.0024
Low Point		107+49.01	908.7992				
VPT		108+76.08	910.0700	2.0000			
VPC		112+50.69	917.5621	2.0000	K = 7.5 SSD = 181.1		
High Point		112+65.69	917.7121				
VPI	3	112+65.69	917.8621		30.0001	15.0000	15.0000
VPT		112+80.69	917.5621	-2.0000			
VPC		116+19.00	910.7959	-2.0000	K = 67.4 SSD = 318.4		
VPI	4	117+24.00	908.6959		210.0000	105.0000	105.0000
VPT		118+29.00	903.3258	-5.1143			
VPC		121+00.00	889.4660	-5.1143	K = 64.3		
VPI	5	122+45.00	882.0503		290.0000	145.0000	145.0000
VPT		123+90.00	881.1732	-0.6049			
VPI	6	123+92.69	881.1569	-0.6049			

US-81 EAST RAMP

		STATION	ELEV	GRADE	TOTAL L	BACK L	AHEAD L
VPI	1	206+10.75	914.1600				
VPC		207+59.00	912.6991	-0.9854	K = 127.3		
Low Point		208+84.43	912.0811				
VPI	2	209+49.00	910.8268		380.0000	190.0000	190.0000
VPT		211+39.00	914.6268	2.0000			
VPC		214+09.58	920.0384	2.0000	K = 6.7 SSD = 179.6		
High Point		214+23.08	920.1734				
VPI	3	214+23.08	920.3084		27.0000	13.5000	13.5000
VPT		214+36.58	920.0384	-2.0000			
VPC		215+33.00	918.1100	-2.0000	K = 46.0 SSD = 332.7		
VPI	4	215+88.00	917.0100		110.0000	55.0000	55.0000
VPT		216+43.00	914.5940	-4.3927			
VPC		217+02.00	912.0023	-4.3927	K = 64.3		
VPI	5	218+07.00	907.3900		210.0000	105.0000	105.0000
VPT		219+12.00	906.2089	-1.1249			
VPC		219+62.00	905.6464	-1.1249	K = 62.4 SSD = 288.0		
VPI	6	221+07.00	904.0154		290.0000	145.0000	145.0000
VPT		222+52.00	895.6471	-5.7712			
VPC		222+62.00	895.0700	-5.7712	K = 64.5		
VPI	7	224+07.00	886.7017		290.0000	145.0000	145.0000
VPT		225+52.00	884.8532	-1.2748			
VPI	8	225+96.18	884.2900	-1.2748			



GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

ALIGNMENT DATA
VERTICAL ALIGNMENT

SHEET 9 OF 11

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	183
CHECK FS	CONTROL 0044	SECTION 04	JOB 048	

PLOT DRIVER: US82+BW+HALF+PDF+LineWT+Modified.pltcfg
PENTABLE: US82+PEN.tbl
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DATE: 11/16/2023 TIME: 1:25:44 AM USER: MoNov23 SCALE: 1:50

HANSON RD NORTH

		STATION	ELEV	GRADE	TOTAL L	BACK L	AHEAD L
VPI	1	20+00.00	883.9730				
VPC		20+05.85	883.9602	-0.2192	K = 11.2	SSD = 383.1	
VPI	2	20+15.85	883.9382		20.0013	10.0007	10.0007
VPT		20+25.86	883.7382	-2.0001			
VPC		20+73.00	882.7953	-2.0001	K = 15.2	SSD = 226.4	
VPI	3	20+98.00	882.2952		50.0000	25.0000	25.0000
VPT		21+23.00	880.9704	-5.2993			
VPC		21+42.00	879.9636	-5.2993	K = 15.3		
VPI	4	21+67.00	878.6387		50.0000	25.0000	25.0000
VPT		21+92.00	878.1306	-2.0323			
VPI	5	21+94.00	878.0900	-2.0323			

HANSON RD SOUTH

		STATION	ELEV	GRADE	TOTAL L	BACK L	AHEAD L
VPI	1	10+00.00	883.9731				
VPC		10+04.46	883.9052	-1.5214	K = 41.8	SSD = 1398.4	
VPI	2	10+14.46	883.7531		20.0005	10.0003	10.0003
VPT		10+24.46	883.5531	-2.0000			
VPC		10+69.00	882.6623	-2.0000	K = 9.7		
Low Point		10+88.43	882.4679				
VPI	3	10+94.00	882.1623		50.0000	25.0000	25.0000
VPT		11+19.00	882.9488	3.1461			
VPC		11+36.00	883.4836	3.1461	K = 27.9	SSD = 395.4	
VPI	4	11+61.00	884.2701		50.0000	25.0000	25.0000
VPT		11+86.00	884.6081	1.3520			
VPI	5	11+97.00	884.7569	1.3520			

COOK RD - SH19

		STATION	ELEV	GRADE	TOTAL L	BACK L	AHEAD L
VPI	1	10+22.00	889.3893				
VPC		10+42.00	889.4152	0.1297	K = 26.7		
VPI	2	10+67.00	889.4477		50.0000	25.0000	25.0000
VPT		10+92.00	889.9477	2.0000			
VPC		12+86.88	893.8453	2.0000	K = 7.5	SSD = 181.1	
High Point		13+01.88	893.9953				
VPI	3	13+01.88	894.1453		30.0000	15.0000	15.0000
VPT		13+16.88	893.8452	-2.0000			
VPC		13+75.00	892.6828	-2.0000	K = 15.4		
VPI	4	14+00.00	892.1828		50.0000	25.0000	25.0000
Low Point		14+05.83	892.3746				
VPT		14+25.00	892.4938	1.2441			
VPC		14+32.00	892.5809	1.2441	K = 58.0	SSD = 795.2	
VPI	5	14+57.00	892.8920		50.0000	25.0000	25.0000
VPT		14+82.00	892.9873	0.3814			
VPI	6	14+89.00	893.0140	0.3814			

MESQUITE ST

		STATION	ELEV	GRADE	TOTAL L	BACK L	AHEAD L
VPI	1	20+00.00	910.8889				
VPC		21+01.00	908.8689	-2.0000	K = 51.2	SSD = 521.4	
VPI	2	21+36.00	908.1689		70.0000	35.0000	35.0000
VPT		21+71.00	906.9907	-3.3663			
VPC		21+85.00	906.5194	-3.3663	K = 16.7		
VPI	3	22+10.00	905.6778		50.0000	25.0000	25.0000
VPT		22+35.00	905.5856	-0.3689			
VPI	4	22+79.00	905.4233	-0.3689			

STATE OF TEXAS
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PROFESSIONAL ENGINEER
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11/16/2023

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SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

ALIGNMENT DATA
VERTICAL ALIGNMENT

SHEET 10 OF 11

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	184
CHECK FS	CONTROL 0044	SECTION 04	JOB 048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\RDWY\004*048*US82*HALGN*DATA.dgn
DATE: 11/16/2023 TIME: 1:27:01 AM USER: MoNov23 SCALE: 1:50

LOCAL ROAD -1

		STATION	ELEV	GRADE	TOTAL L	BACK L	AHEAD L
VPI	1	10+00.00	910.8962				
VPC		10+14.41	911.1844	2.0000	K = 7.4	SSD = 180.9	
VPI	2	10+29.18	911.4798		29.5394	14.7697	14.7697
High Point		10+29.18	911.3321				
VPT		10+43.95	911.1844	-2.0000			
VPC		11+04.30	909.9774	-2.0000	K = 2.5	SSD = 118.2	
VPI	3	11+11.80	909.8274		15.0017	7.5009	7.5009
VPT		11+19.30	909.2273	-8.0007			
VPI	4	11+50.00	906.7711	-8.0007			

FITE ROAD

		STATION	ELEV	GRADE	TOTAL L	BACK L	AHEAD L
VPI	1	10+00.00	919.2520				
VPC		10+16.44	919.6630	2.4998	K = 4.4	SSD = 157.7	
VPI	2	10+26.44	919.9129		19.9992	9.9996	9.9996
High Point		10+27.55	919.8018				
VPT		10+36.44	919.7130	-2.0000			
VPC		10+89.00	918.6617	-2.0000	K = 17.2		
VPI	3	11+19.00	918.0617		60.0000	30.0000	30.0000
Low Point		11+23.30	918.3187				
VPT		11+49.00	918.5112	1.4981			
VPI	4	12+89.00	920.6085	1.4981			

WEST TRANSITION

		STATION	ELEV	GRADE	TOTAL L	BACK L	AHEAD L
VPI	1	19+10.50	884.8304				
VPI	2	19+20.50	884.9244	0.9400			
VPC		19+47.00	885.2711	1.3084	K = 638.1	SSD = 2901.9	
VPI	3	20+22.00	886.2525		150.0000	75.0000	75.0000
VPT		20+97.00	887.0575	1.0734			
VPI	4	21+11.50	887.2131	1.0734			
VPI	5	21+26.50	887.3241	0.7400			

LOCAL ROAD -2

		STATION	ELEV	GRADE	TOTAL L	BACK L	AHEAD L
VPI	1	20+00.00	908.3583				
VPI	2	20+20.00	908.6780	1.5983			
VPC		20+29.23	908.8733	2.1164	K = 0.9	SSD = 125.6	
High Point		20+31.19	908.8941				
VPI	3	20+31.73	908.9262		4.9998	2.4999	2.4999
VPT		20+34.23	908.8443	-3.2800			
VPC		20+45.00	908.4910	-3.2800	K = 6.1		
VPI	4	20+60.00	907.9990		30.0000	15.0000	15.0000
Low Point		20+64.98	908.1634				
VPT		20+75.00	908.2459	1.6458			
VPC		21+70.00	909.8094	1.6458	K = 84.3	SSD = 667.1	
VPI	5	22+15.00	910.5500		90.0000	45.0000	45.0000
VPT		22+60.00	910.8099	0.5777			
VPC		24+23.00	911.7515	0.5777	K = 42.7	SSD = 503.4	
High Point		24+47.69	911.8228				
VPI	6	24+53.00	911.9248		60.0000	30.0000	30.0000
VPT		24+83.00	911.6770	-0.8262			
VPC		25+78.00	910.8921	-0.8262	K = 45.2		
VPI	7	26+08.00	910.6443		60.0000	30.0000	30.0000
Low Point		26+15.38	910.7377				
VPT		26+38.00	910.7943	0.5000			
VPI	8	27+71.00	911.4593	0.5000			

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED PROFESSIONAL ENGINEER
M.F.Muwaquet
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

ALIGNMENT DATA
VERTICAL ALIGNMENT

SHEET 11 OF 11

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	185
CHECK FS	CONTROL 0044	SECTION 04	JOB 048	

PLOT DRIVER: US82+BW+HALF+PDF+LineWt+Modified.pltcfg
PENTABLE: US82+PEN.tbl
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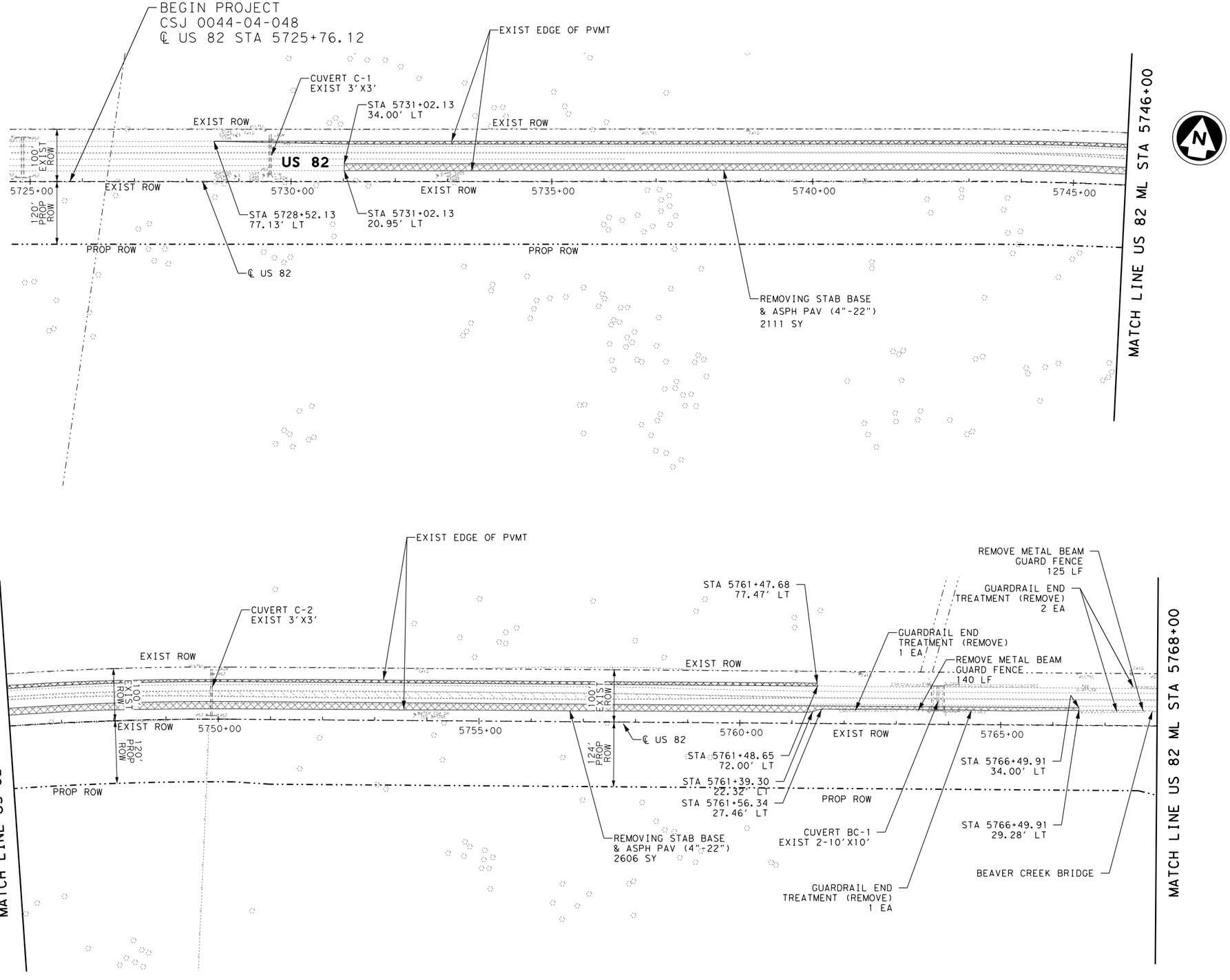


0' 100' 200'
SCALE IN FEET

LEGEND

- REMOVING STAB BASE & ASPH PAV (4"-22")
- REMOVING STAB BASE & ASPH PAV (0"-6")
- DRIVEWAY REMOVAL (SUBSIDARY TO ITEM 530)

NOTE:
1. REMOVAL OF EXISTING PIPE FOR THE PURPOSE OF CONSTRUCTING NEW DRIVEWAYS WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE SUBSIDIARY TO ITEM 464.

2. REFER TO DRAINAGE SHEETS FOR ADDITIONAL INFORMATION ON CROSS CULVERT REMOVAL STRUCTURES.

3. EXISTING RUMBLE STRIP LOCATION SHOWN IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION OF ALL EXISTING RUMBLE STRIPS.

4. ALL EXISTING EDGE LINE AND CENTER LINE RUMBLE STRIPS LOCATED IN OVERLAY PAVEMENT SECTIONS ARE TO BE MILLED AND FILLED AS DETAILED ON THE TYPICAL SECTION SHEETS. SEE ROADWAY PLAN AND PROFILE SHEETS FOR OVERLAY PAVEMENT LOCATIONS.

5. MATERIAL STOCKPILE TO BE PLACED IN ACCORDANCE WITH STANDARD BC(10)-14. ALL REMOVED STABILIZED BASE AND ASPHALTIC PAVEMENT TO BECOME PROPERTY OF THE CONTRACTOR.

6. TREE TRIMMING TO BE SUBSIDIARY TO ITEM 100.

7. BRUSH REMOVAL IN PROPOSED CONSTRUCTION EASEMENTS IS NOT TO BE PAID FOR DIRECTLY BUT IS CONSIDERED SUBSIDIARY TO ITEM 100.

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED
PROFESSIONAL ENGINEER
M.F.Muwaquet
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

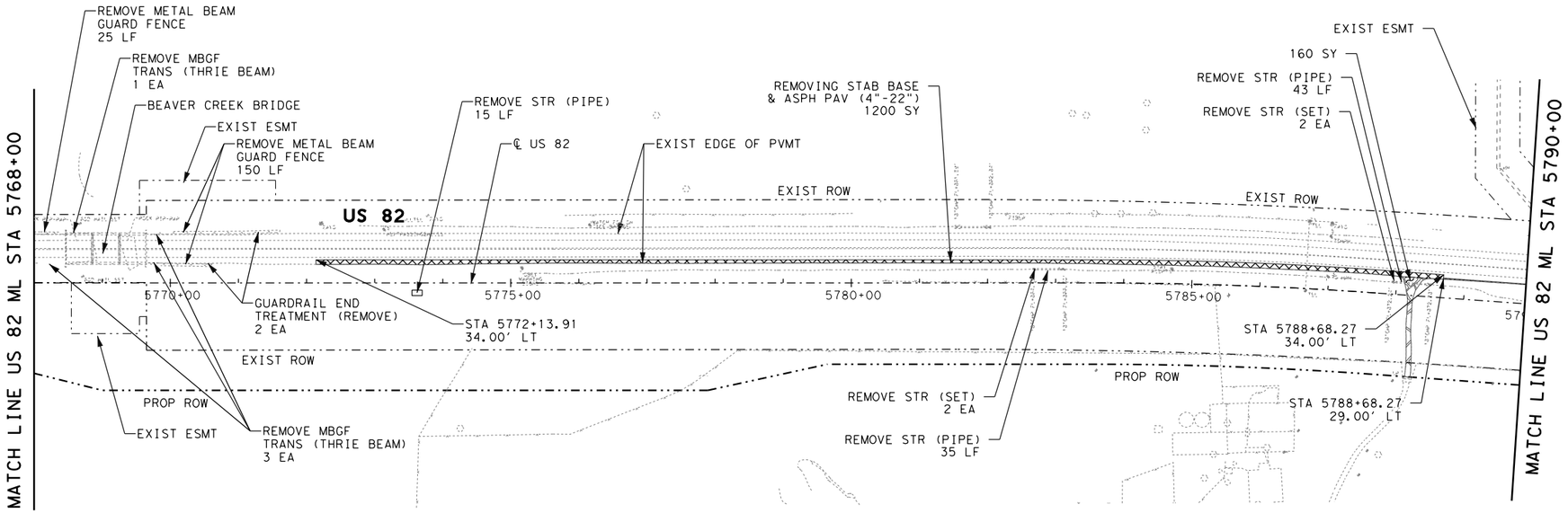
US 82

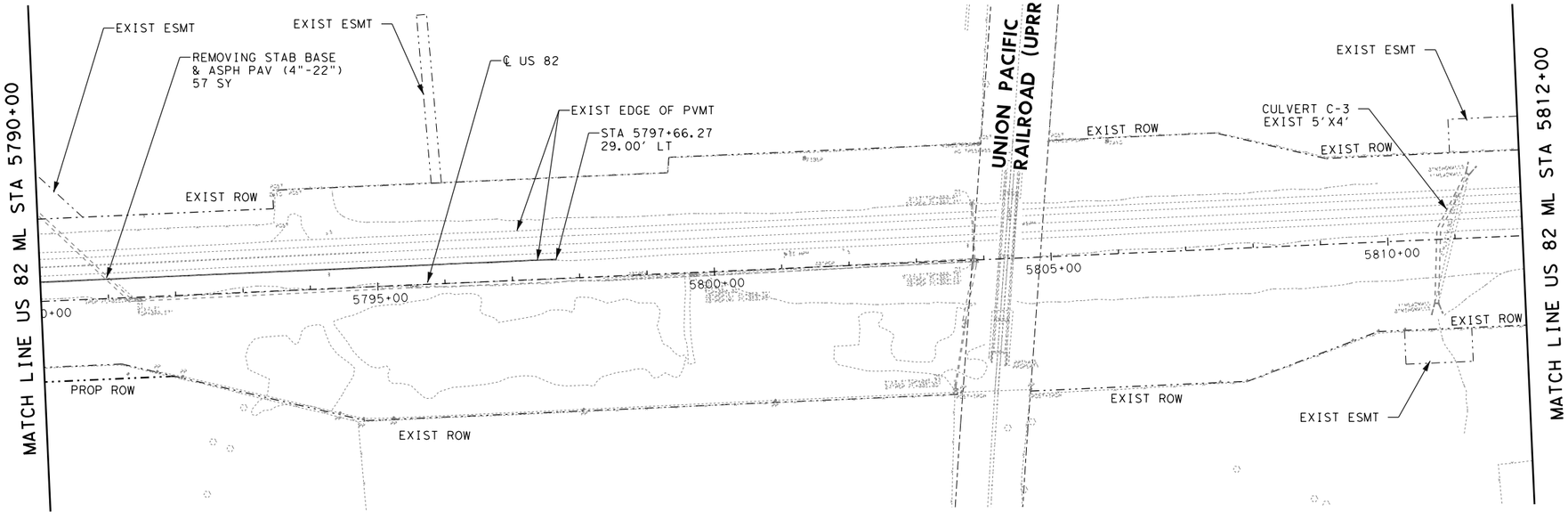
REMOVAL LAYOUT
BEGIN PROJECT TO US 82 ML STA 5768+00

SHEET 1 OF 4

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
SD	6	(SEE TITLE SHEET)		US 82
GRAPHICS AH	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	186
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\RDWY\RMVL LAYT\048*US82*REMOVAL*LAYOUT*01.dgn
DATE: 11/16/2023 TIME: 1:37:31 AM USER: MoNov23 SCALE: 1:200





0′ 100′ 200′
SCALE IN FEET

LEGEND

- REMOVING STAB BASE & ASPH PAV (4"-22")
- REMOVING STAB BASE & ASPH PAV (0"-6")
- DRIVEWAY REMOVAL (SUBSIDARY TO ITEM 530)

NOTE:
1. REMOVAL OF EXISTING PIPE FOR THE PURPOSE OF CONSTRUCTING NEW DRIVEWAYS WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE SUBSIDIARY TO ITEM 464.

2. REFER TO DRAINAGE SHEETS FOR ADDITIONAL INFORMATION ON CROSS CULVERT REMOVAL STRUCTURES.

3. EXISTING RUMBLE STRIP LOCATION SHOWN IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION OF ALL EXISTING RUMBLE STRIPS.

4. ALL EXISTING EDGE LINE AND CENTER LINE RUMBLE STRIPS LOCATED IN OVERLAY PAVEMENT SECTIONS ARE TO BE MILLED AND FILLED AS DETAILED ON THE TYPICAL SECTION SHEETS. SEE ROADWAY PLAN AND PROFILE SHEETS FOR OVERLAY PAVEMENT LOCATIONS.

5. MATERIAL STOCKPILE TO BE PLACED IN ACCORDANCE WITH STANDARD BC(10)-14. ALL REMOVED STABILIZED BASE AND ASPHALTIC PAVEMENT TO BECOME PROPERTY OF THE CONTRACTOR.

6. TREE TRIMMING TO BE SUBSIDIARY TO ITEM 100.

7. BRUSH REMOVAL IN PROPOSED CONSTRUCTION EASEMENTS IS NOT TO BE PAID FOR DIRECTLY BUT IS CONSIDERED SUBSIDIARY TO ITEM 100.

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED PROFESSIONAL ENGINEER
M.F. Muwaquet
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

REMOVAL LAYOUT
US 82 ML STA 5768+00 TO STA 5812+00

SHEET 2 OF 4

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MSDI	6	(SEE TITLE SHEET)		US 82
GRAPHICS AH	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	187
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\RDWY\RMVL LAYT\048*US82*REMOVAL*LAYOUT*02.dgn
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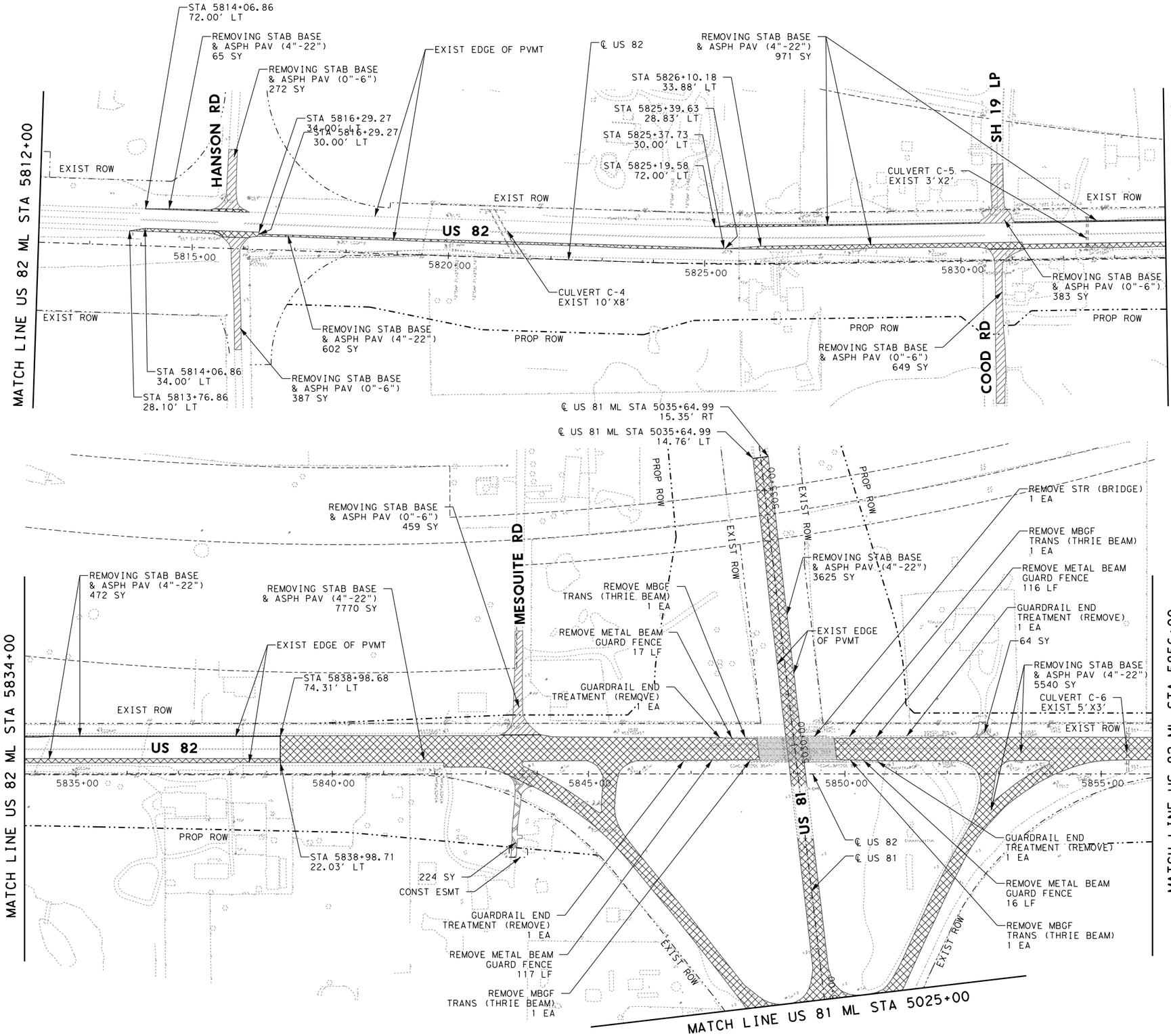

0' 100' 200'
SCALE IN FEET

LEGEND

- REMOVING STAB BASE & ASPH PAV (4"-22")
- REMOVING STAB BASE & ASPH PAV (0"-6")
- DRIVEWAY REMOVAL (SUBSIDARY TO ITEM 530)

NOTE:
1. REMOVAL OF EXISTING PIPE FOR THE PURPOSE OF CONSTRUCTING NEW DRIVEWAYS WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE SUBSIDIARY TO ITEM 464.

2. REFER TO DRAINAGE SHEETS FOR ADDITIONAL INFORMATION ON CROSS CULVERT REMOVAL STRUCTURES.

3. EXISTING RUMBLE STRIP LOCATION SHOWN IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION OF ALL EXISTING RUMBLE STRIPS.

4. ALL EXISTING EDGE LINE AND CENTER LINE RUMBLE STRIPS LOCATED IN OVERLAY PAVEMENT SECTIONS ARE TO BE MILLED AND FILLED AS DETAILED ON THE TYPICAL SECTION SHEETS. SEE ROADWAY PLAN AND PROFILE SHEETS FOR OVERLAY PAVEMENT LOCATIONS.

5. MATERIAL STOCKPILE TO BE PLACED IN ACCORDANCE WITH STANDARD BC(10)-14. ALL REMOVED STABILIZED BASE AND ASPHALTIC PAVEMENT TO BECOME PROPERTY OF THE CONTRACTOR.

6. TREE TRIMMING TO BE SUBSIDIARY TO ITEM 100.

7. BRUSH REMOVAL IN PROPOSED CONSTRUCTION EASEMENTS IS NOT TO BE PAID FOR DIRECTLY BUT IS CONSIDERED SUBSIDIARY TO ITEM 100.

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED PROFESSIONAL ENGINEER
M.F.Muwaquet
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

REMOVAL LAYOUT
US 82 ML STA 5812+00 TO STA 5856+00

SHEET 3 OF 4

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
SD	6	(SEE TITLE SHEET)		US 82
GRAPHICS AH	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	188
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82+BW+HALF+PDF+LineWT+Modified.pltcfg
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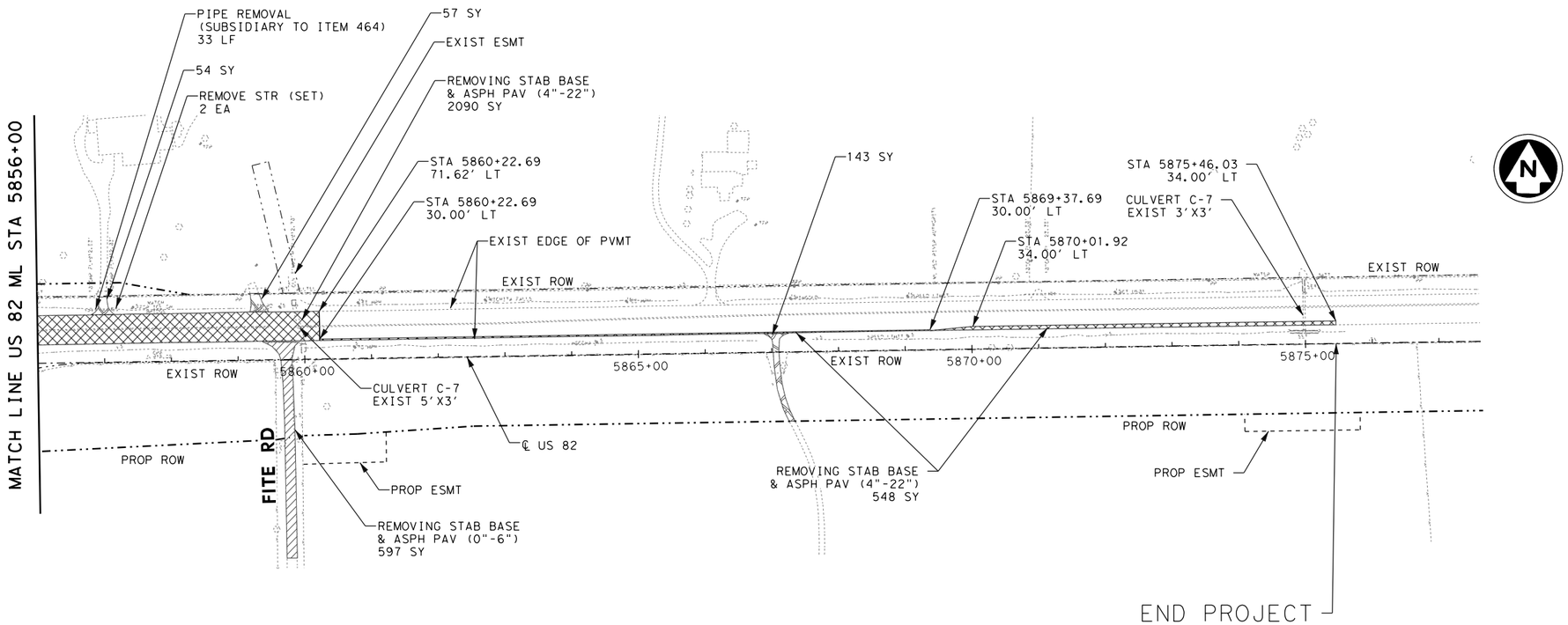
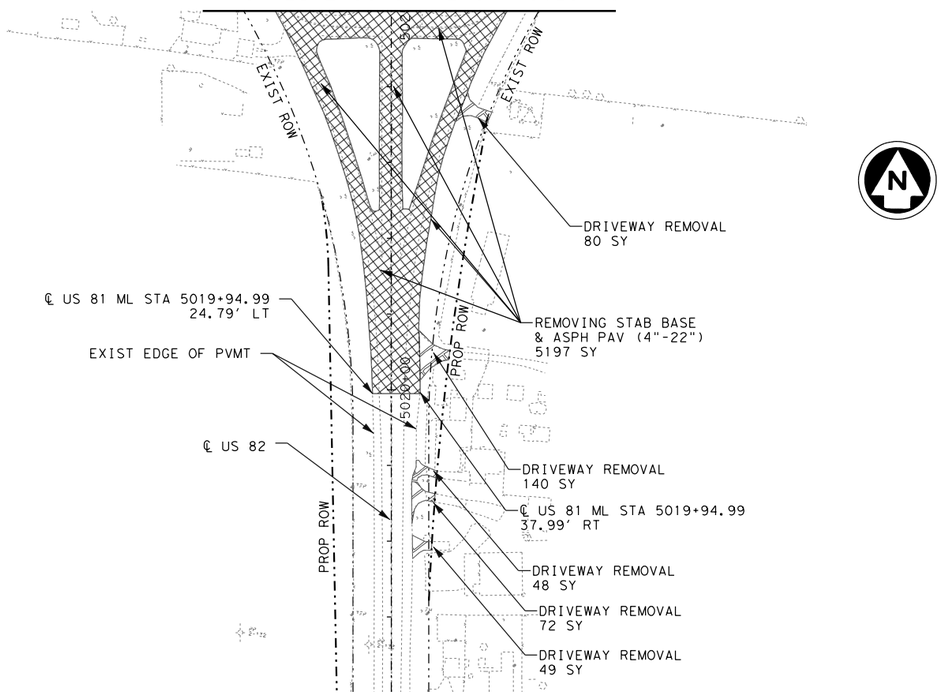


END PROJECT
END CSJ 0044-04-048
℄ US 82 STA 5875+46.03



0' 100' 200'
SCALE IN FEET

LEGEND

- REMOVING STAB BASE & ASPH PAV (4"-22")
- REMOVING STAB BASE & ASPH PAV (0"-6")
- DRIVEWAY REMOVAL (SUBSIDARY TO ITEM 530)

NOTE:
1. REMOVAL OF EXISTING PIPE FOR THE PURPOSE OF CONSTRUCTING NEW DRIVEWAYS WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE SUBSIDIARY TO ITEM 464.

2. REFER TO DRAINAGE SHEETS FOR ADDITIONAL INFORMATION ON CROSS CULVERT REMOVAL STRUCTURES.

3. EXISTING RUMBLE STRIP LOCATION SHOWN IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION OF ALL EXISTING RUMBLE STRIPS.

4. ALL EXISTING EDGE LINE AND CENTER LINE RUMBLE STRIPS LOCATED IN OVERLAY PAVEMENT SECTIONS ARE TO BE MILLED AND FILLED AS DETAILED ON THE TYPICAL SECTION SHEETS. SEE ROADWAY PLAN AND PROFILE SHEETS FOR OVERLAY PAVEMENT LOCATIONS.

5. MATERIAL STOCKPILE TO BE PLACED IN ACCORDANCE WITH STANDARD BC(10)-14. ALL REMOVED STABILIZED BASE AND ASPHALTIC PAVEMENT TO BECOME PROPERTY OF THE CONTRACTOR.

6. TREE TRIMMING TO BE SUBSIDIARY TO ITEM 100.

7. BRUSH REMOVAL IN PROPOSED CONSTRUCTION EASEMENTS IS NOT TO BE PAID FOR DIRECTLY BUT IS CONSIDERED SUBSIDIARY TO ITEM 100.

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED PROFESSIONAL ENGINEER
M.F.Muwaquet
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

REMOVAL LAYOUT
US 82 ML STA 5856+00 TO END PROJECT

SHEET 4 OF 4

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
SD	6	(SEE TITLE SHEET)		US 82
GRAPHICS AH	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	189
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82+BW+HALF+PDF+LineWT+Modified.pltcfg
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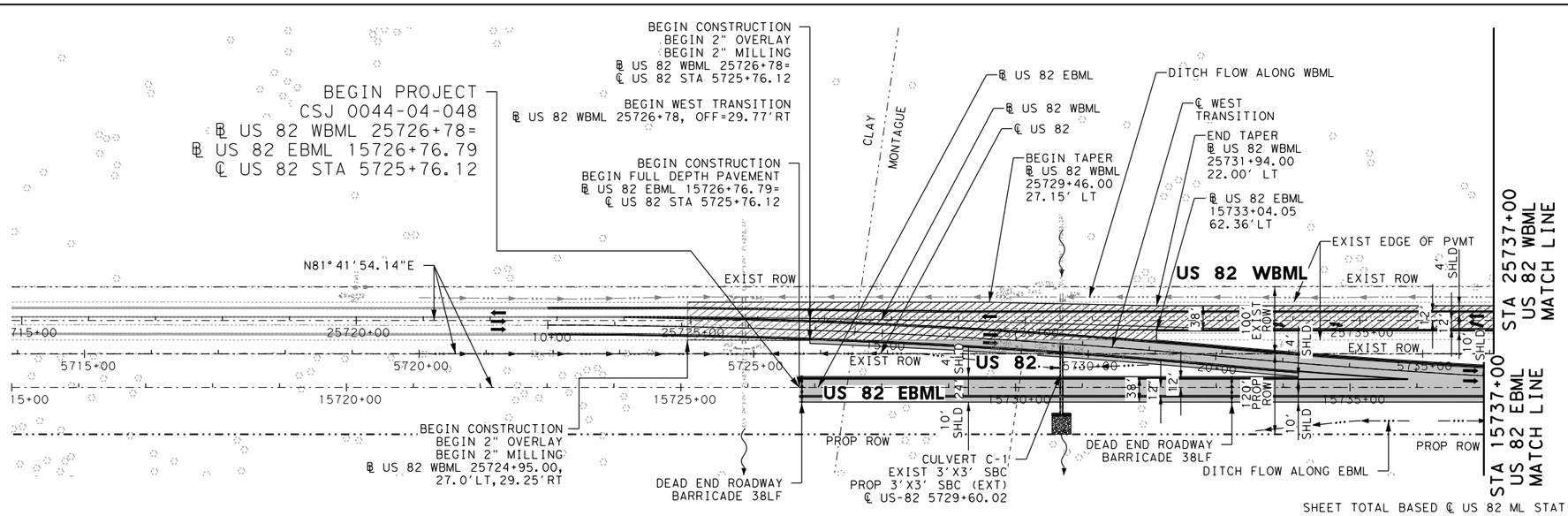


HORZ 0 100 200
VERT 0 10 20
SCALE IN FEET

LEGEND

- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

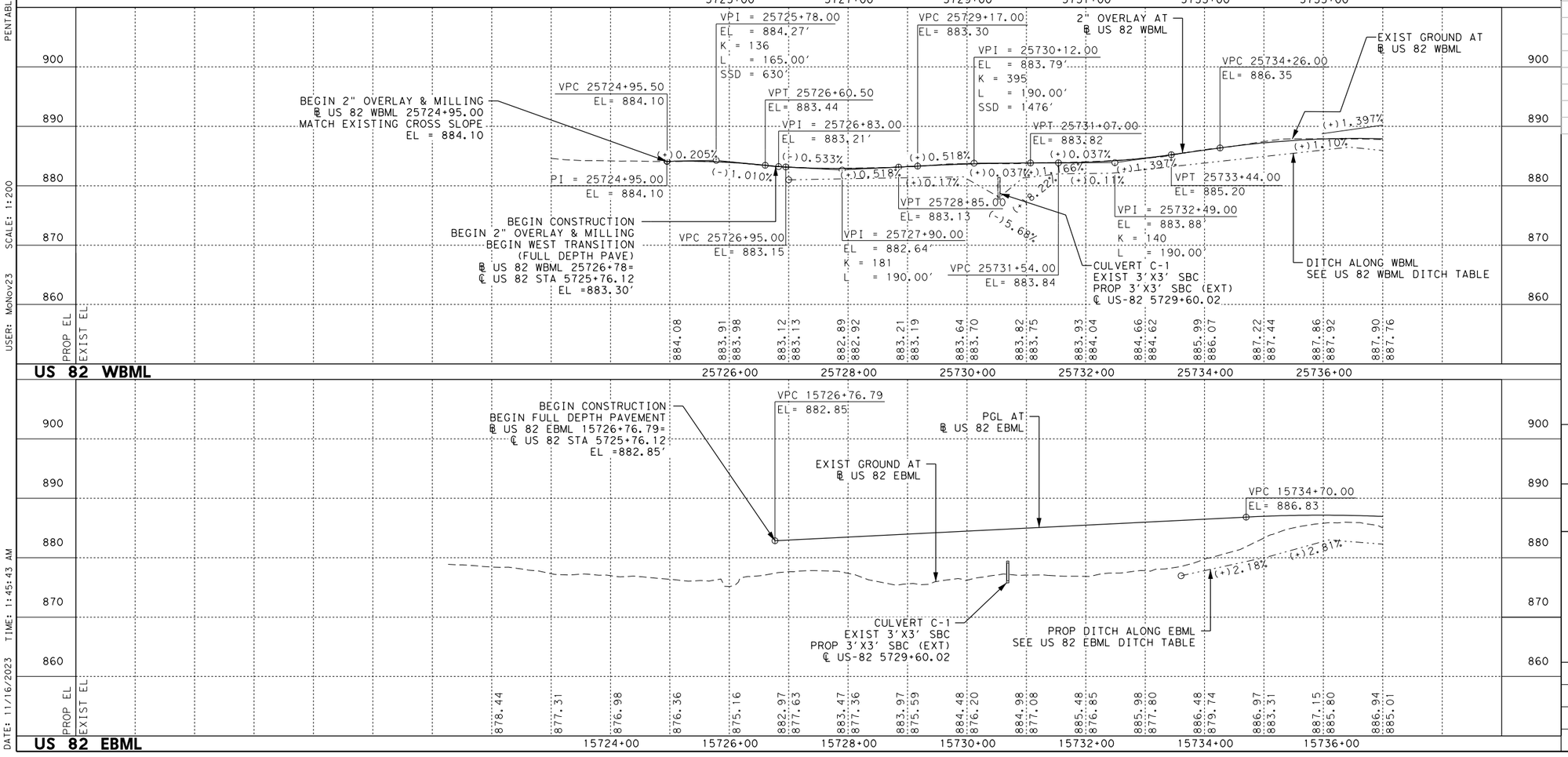
1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
7. VERTICAL ALIGNMENT DATA FOR THE 2" OVERLAY IS SHOWN FOR CONTRACTOR'S REFERENCE ONLY.

SHEET TOTAL BASED ℄ US 82 ML STATIONING*

5	10	21	17	16	10	20	17	24	108	312	482			FINAL	UNIT	DESCRIPTION
8	329	1382	2188	2370	2274	2387	2404	2170	1250	239	71			1042	CY	EXCAVATION (ROADWAY)
														17072	CY	EMBANKMENT (ORD COMP) (TY B)

SHEET TOTALS*

EST	FINAL	UNIT	DESCRIPTION



US 82 WBML

US 82 EBML

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

PLAN AND PROFILE
WBML BEGIN TO STA 25737+00
EBML BEGIN TO STA 15737+00

SHEET 1 OF 22

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MB	6	(SEE TITLE SHEET)		US 82
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	190
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
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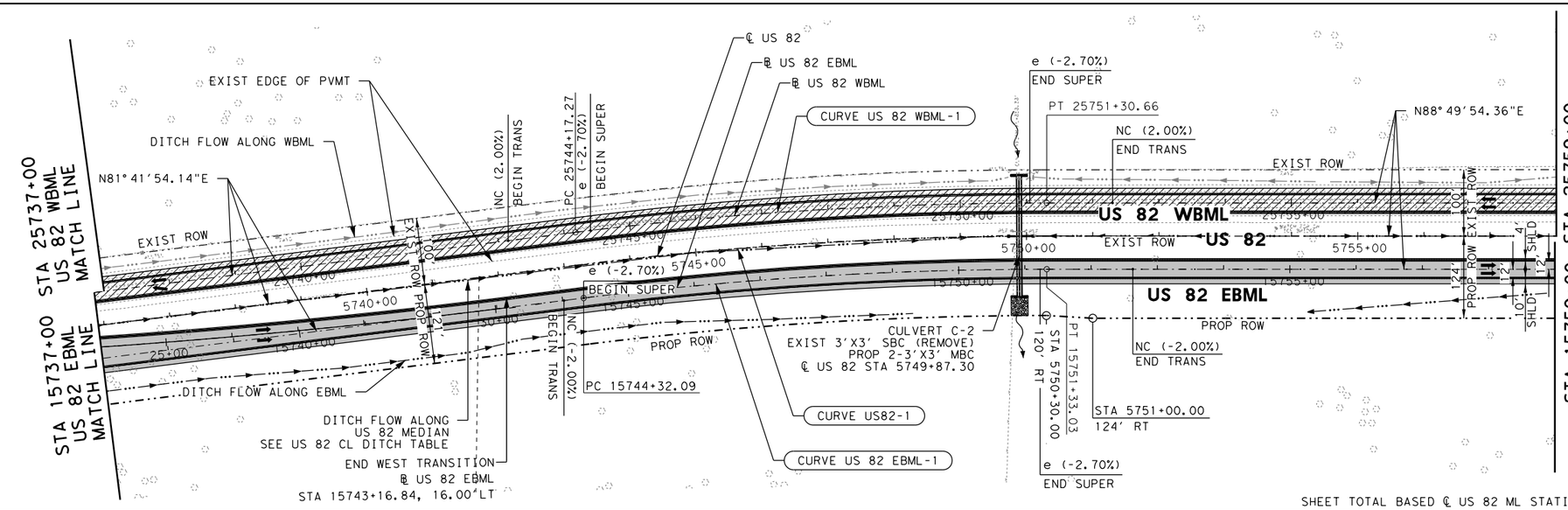


SHEET TOTAL BASED ℄ US 82 ML STATIONING*

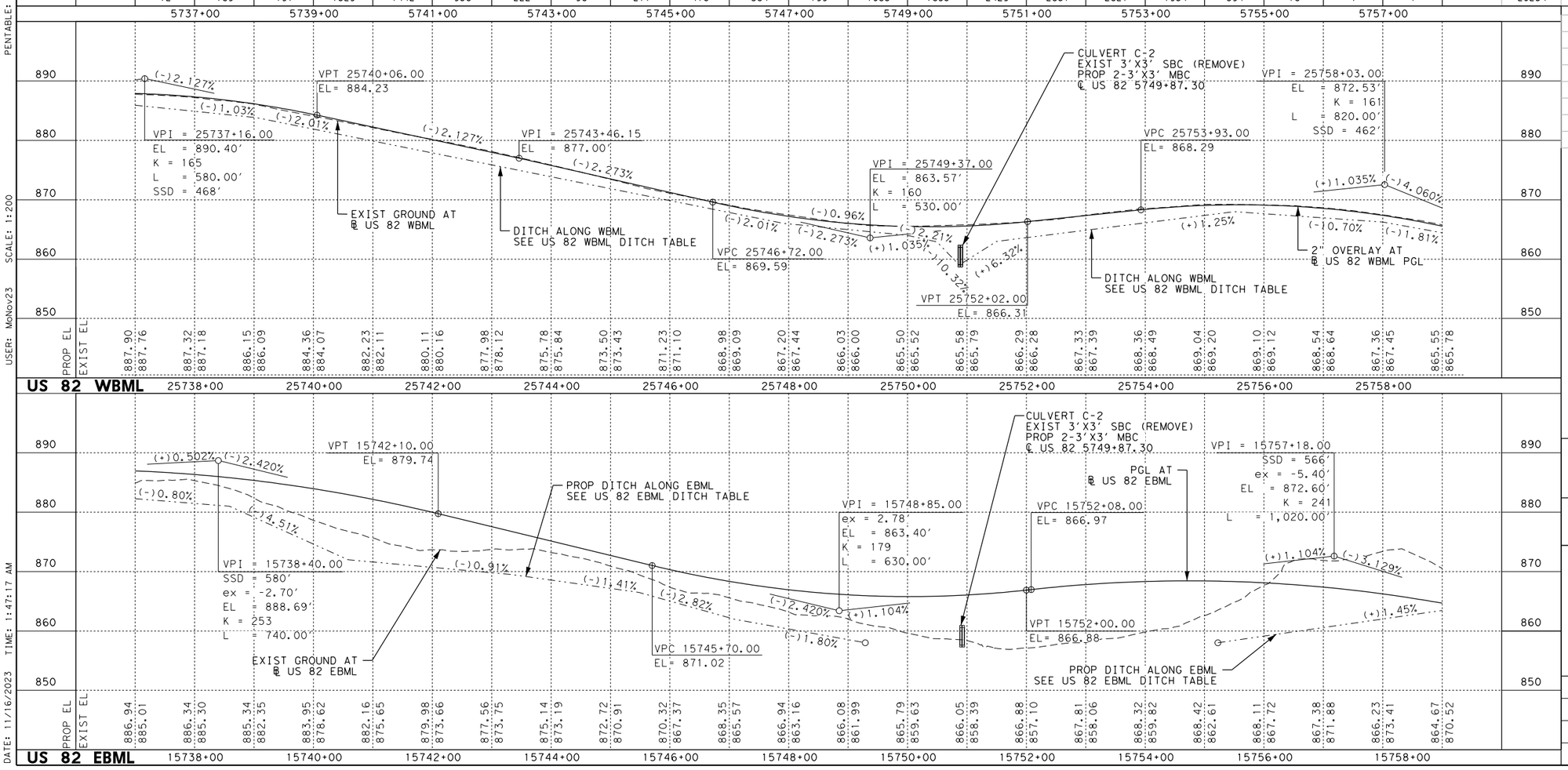
	563	464	215	180	151	249	467	521	285	159	151	119	48	80	77	44	65	88	551	2485	3462	3681			
	72	169	797	1329	1442	936	222	96	211	416	564	799	1083	1653	2429	2831	2627	1934	594	16	7	7			

SHEET TOTALS*

FINAL	UNIT	DESCRIPTION
14105	CY	EXCAVATION (ROADWAY)
20234	CY	EMBANKMENT (ORD COMP) (TY B)

SHEET TOTALS*

EST	FINAL	UNIT	DESCRIPTION



GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

PLAN AND PROFILE
WBML STA 25737+00 TO STA 25759+00
EBML STA 15737+00 TO STA 15759+00

DESIGN MB	FED.RD. DIV.NO. 6	FEDERAL AID PROJECT NO. (SEE TITLE SHEET)	HIGHWAY NO. US 82
GRAPHICS MHH	STATE TEXAS	DISTRICT WFS	COUNTY MONTAGUE
CHECK MFM	CONTROL 0044	SECTION 04	JOB 048
CHECK FS			SHEET NO. 191

PLOT DRIVER: US82+BW+HALF+PDF+LineWT+Modified.pltcfg
PENTABLE: US82+PEN.tbl
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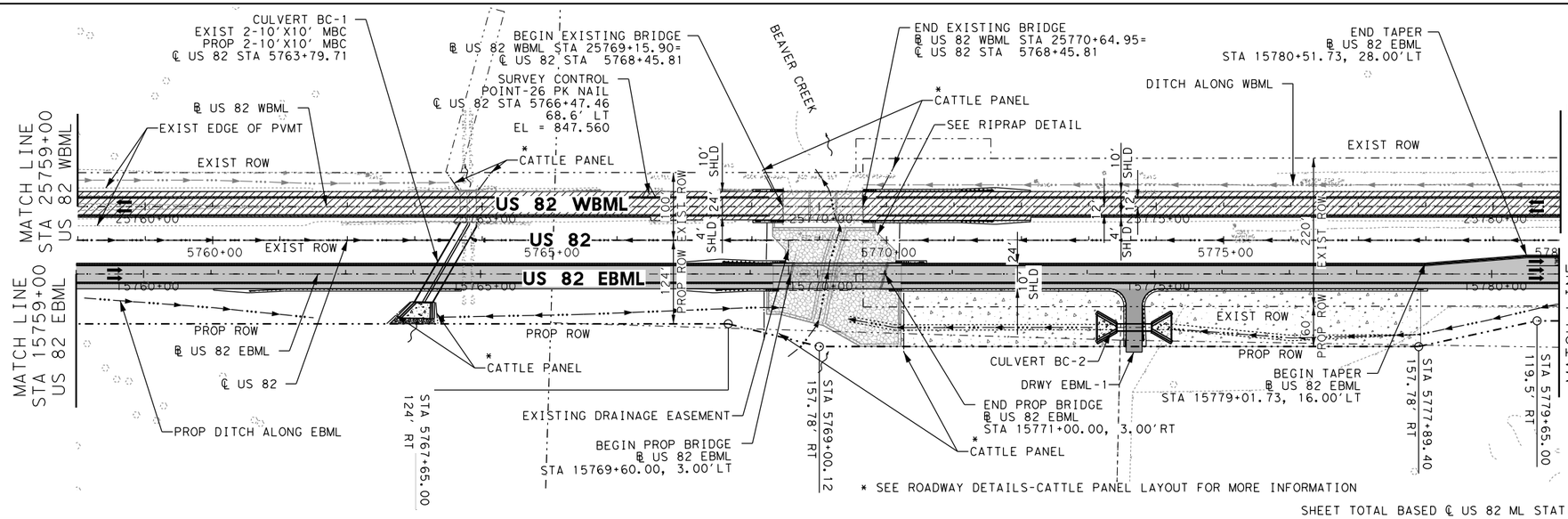


HORZ 0 100 200
VERT 0 10 20
SCALE IN FEET

LEGEND

- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

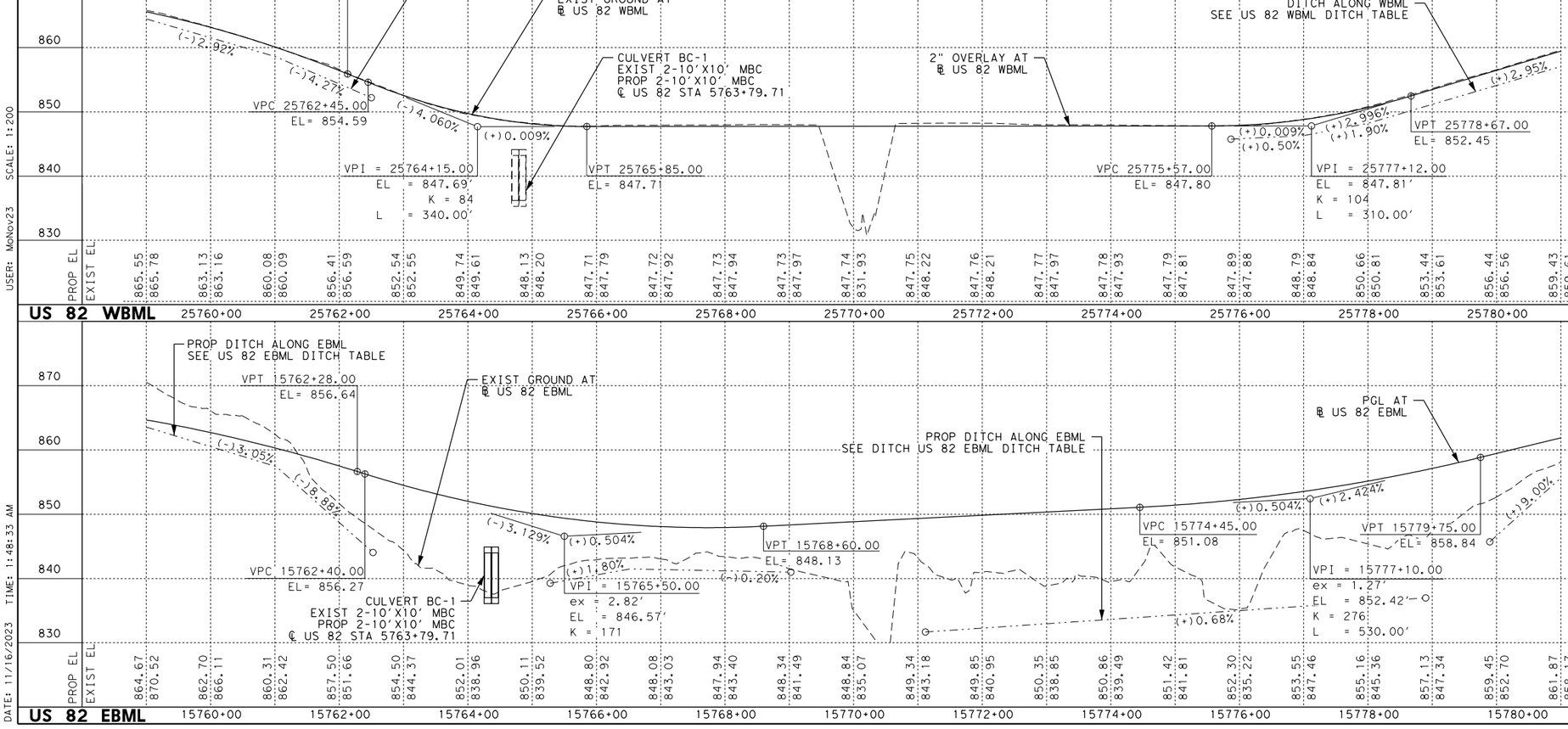
1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
7. VERTICAL ALIGNMENT DATA FOR THE 2" OVERLAY IS SHOWN FOR CONTRACTOR'S REFERENCE ONLY.

SHEET TOTAL BASED ℄ US 82 ML STATIONING*

5759+00	5761+00	5763+00	5765+00	5767+00	5769+00	5771+00	5773+00	5775+00	5777+00	5779+00
2309	1771	391	14	0	1	75	139	108	135	86	108	1199	1512	1475	634	829	461	785	486	157	392
9	12	612	2354	3651	3875	2176	1224	1076	1243	2078	446	3072	3014	3319	3119	3449	2554	2007	2774	2110	1009

SHEET TOTALS*

FINAL	UNIT	DESCRIPTION
13067	CY	EXCAVATION (ROADWAY)
45183	CY	EMBANKMENT (ORD COMP) (TY B)



SHEET TOTALS*

EST	FINAL	UNIT	DESCRIPTION

FIROZE SHAMS
97215
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

PLAN AND PROFILE
WBML STA 25759+00 TO STA 25781+00
EBML STA 15759+00 TO STA 15781+00

SHEET 3 OF 22

DESIGN	FED.RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MB	6	(SEE TITLE SHEET)		US 82
GRAPHICS MH	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	192
CHECK FS	CONTROL 0044	SECTION 04	JOB 048	

PLOT DRIVER: US82+BW+HALF+PDF+LineWT+Modified.pltcfg
PENTABLE: US82+PEN.tbl
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USER: MoNov23 SCALE: 1:200
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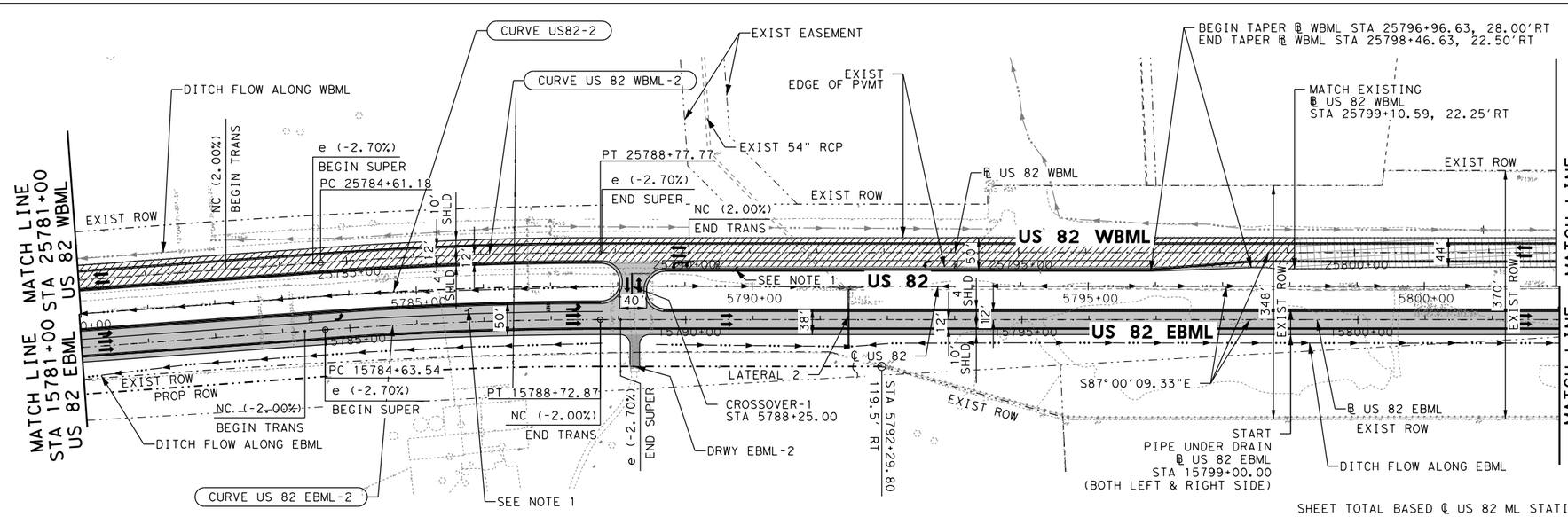


HORZ 0 100 200
VERT 0 10 20
SCALE IN FEET

LEGEND

- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

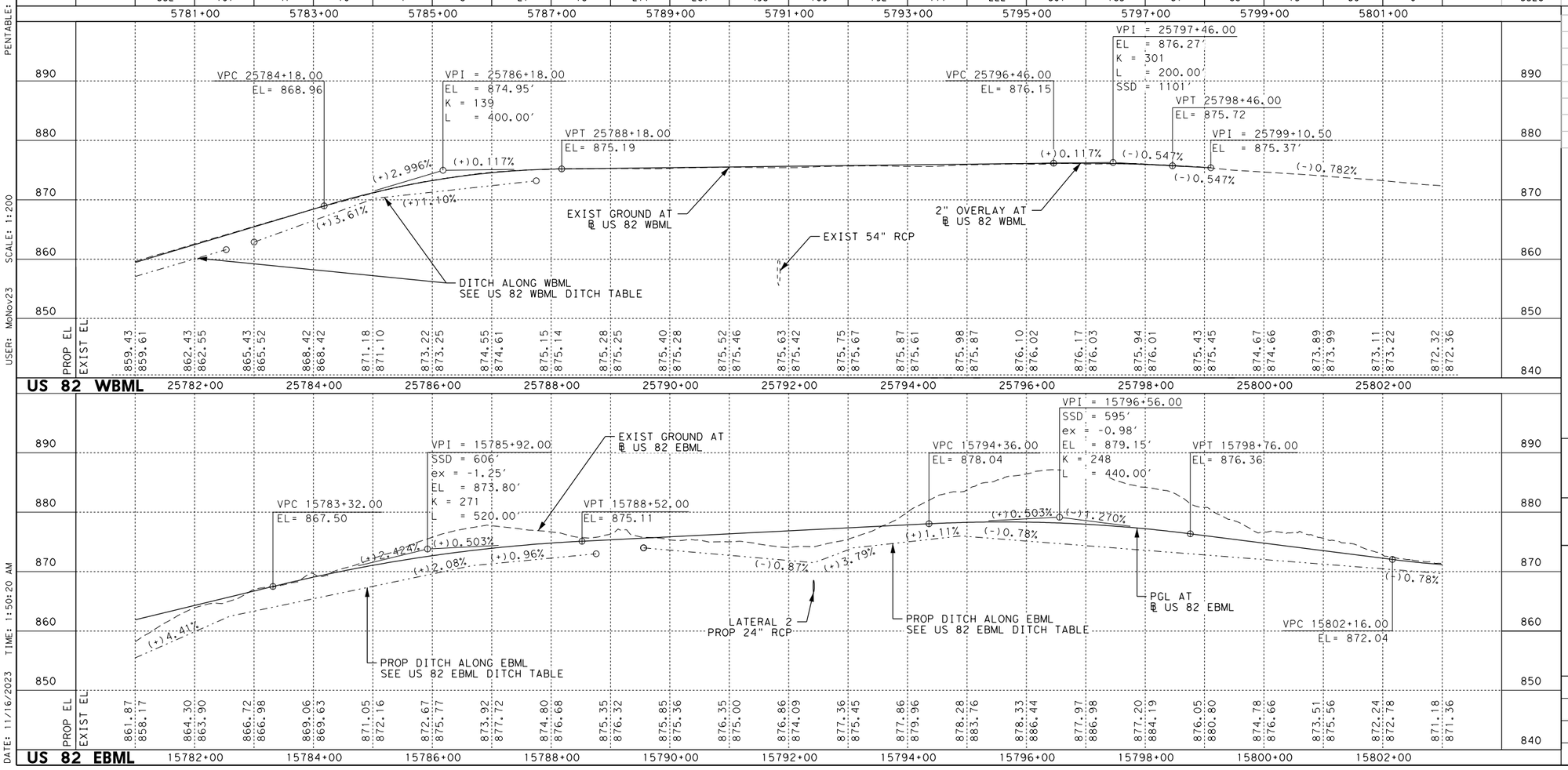
1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
7. VERTICAL ALIGNMENT DATA FOR THE 2" OVERLAY IS SHOWN FOR CONTRACTOR'S REFERENCE ONLY.

SHEET TOTAL BASED ℄ US 82 ML STATIONING*

531	782	975	1215	1717	2307	1892	1062	726	537	295	229	852	2703	6651	8155	7501	6753	5528	5097	5143	4836
352	107	47	10	7	6	21	78	217	267	498	709	192	117	222	307	165	31	68	75	30	0

SHEET TOTALS*

FINAL	UNIT	DESCRIPTION
65487	CY	EXCAVATION (ROADWAY)
3526	CY	EMBANKMENT (ORD COMP) (TY B)



SHEET TOTALS*

EST	FINAL	UNIT	DESCRIPTION

STATE OF TEXAS
FIROZE SHAMS
97215
LICENSED PROFESSIONAL ENGINEER
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

US 82

PLAN AND PROFILE

WBML STA 25781+00 TO STA 25803+00

EBML STA 15781+00 TO STA 15803+00

SHEET 4 OF 22

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MB	6	(SEE TITLE SHEET)		US 82
GRAPHICS MAH	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	193
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82+BW+HALF+PDF+LineWt+Modified.pltcfg
PENTABLE: US82+PEN.tbl
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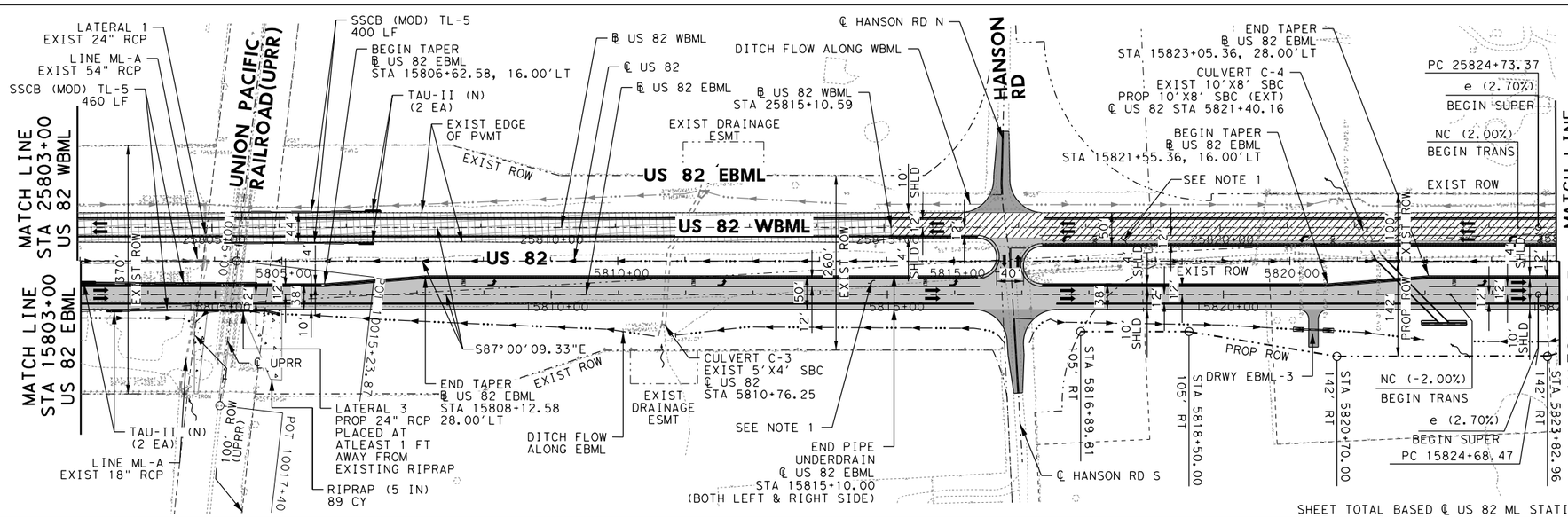
USER: MoNov23
SCALE: 1:200
DATE: 11/16/2023 TIME: 1:50:20 AM



NOTES:

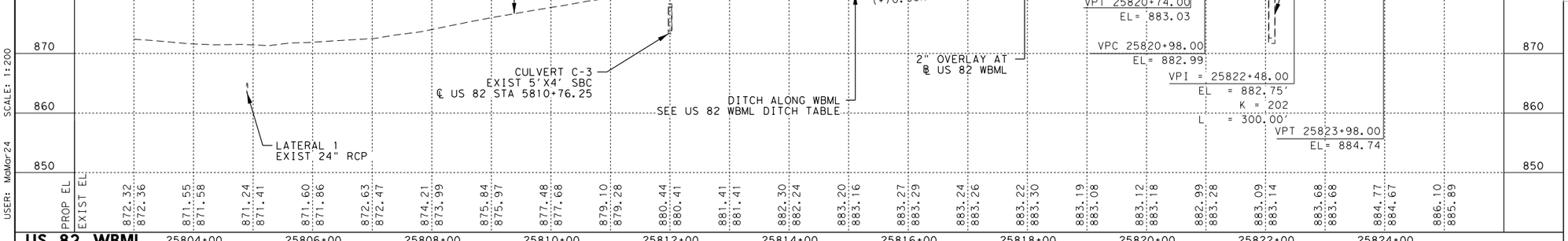
1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
7. VERTICAL ALIGNMENT DATA FOR THE 2" OVERLAY IS SHOWN FOR CONTRACTOR'S REFERENCE ONLY.

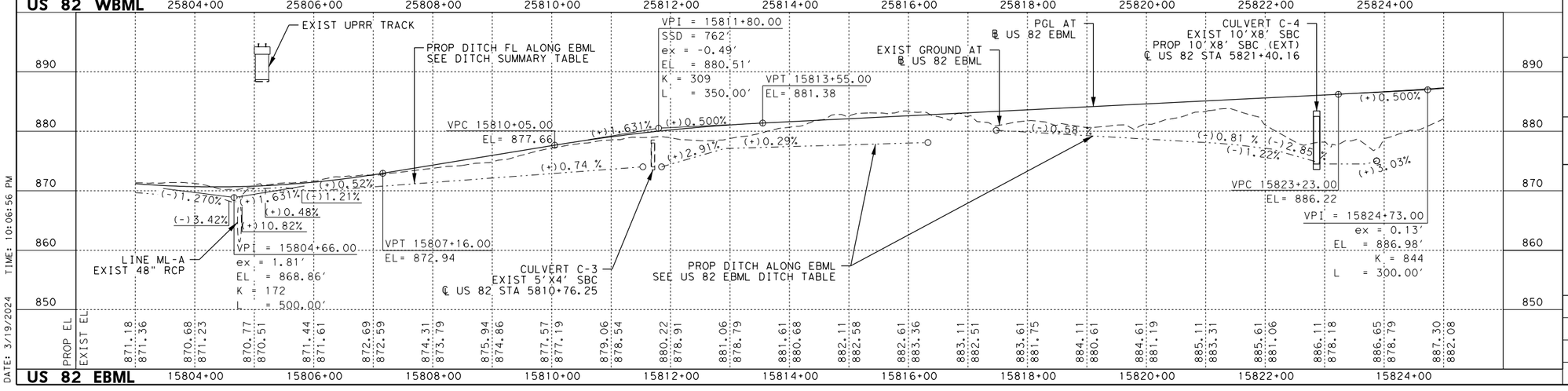
SHEET TOTAL BASED ℄ US 82 ML STATIONING*

	4252	2952	934	1727	1994	1776	1594	1448	803	487	620	896	1050	756	319	87	79	452	597	724	333	27		23469	CY	EXCAVATION (ROADWAY)
	0	2	0	2	11	30	39	46	67	107	78	100	109	165	278	440	653	370	419	1510	2402	1853		8651	CY	EMBANKMENT (ORD COMP) (TY B)

SHEET TOTALS*

EST	FINAL	UNIT	DESCRIPTION





SHEET TOTALS*

EST	FINAL	UNIT	DESCRIPTION

FIROZE SHAMS
97215
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS
3/19/2024

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

PLAN AND PROFILE
WBML STA 25803+00 TO STA 25825+00
EBML STA 15803+00 TO STA 15825+00

SHEET 5 OF 22

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MB	6	(SEE TITLE SHEET)		US 82
GRAPHICS MAH	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	194
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

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PENTABLE: US82+PEN.tbl
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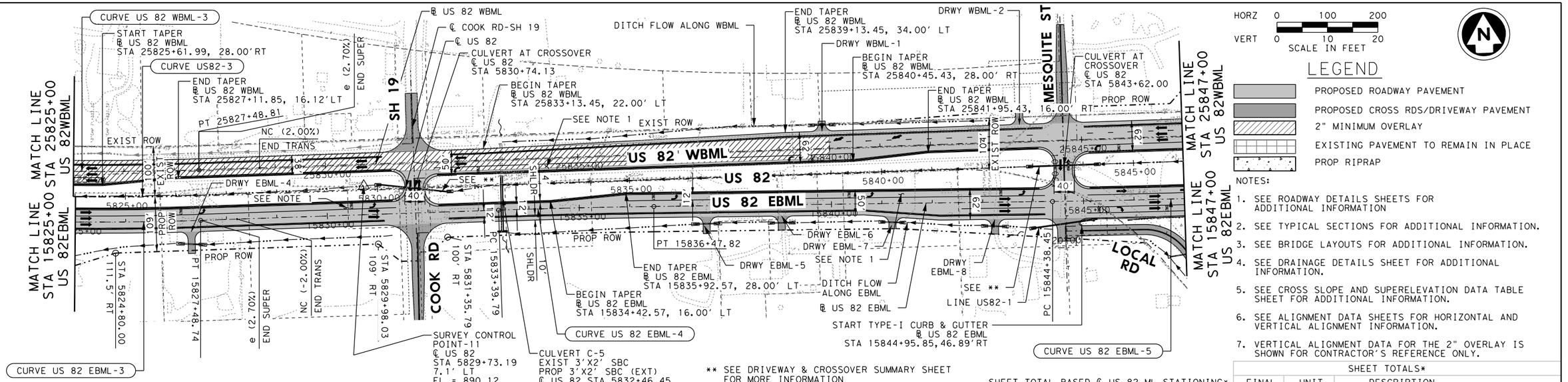
USER: MaMar24 SCALE: 1:200
DATE: 3/19/2024 TIME: 10:06:56 PM



HORZ 0 100 200
VERT 0 10 20
SCALE IN FEET

LEGEND

- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
7. VERTICAL ALIGNMENT DATA FOR THE 2" OVERLAY IS SHOWN FOR CONTRACTOR'S REFERENCE ONLY.

SHEET TOTAL BASED ℄ US 82 ML STATIONING*

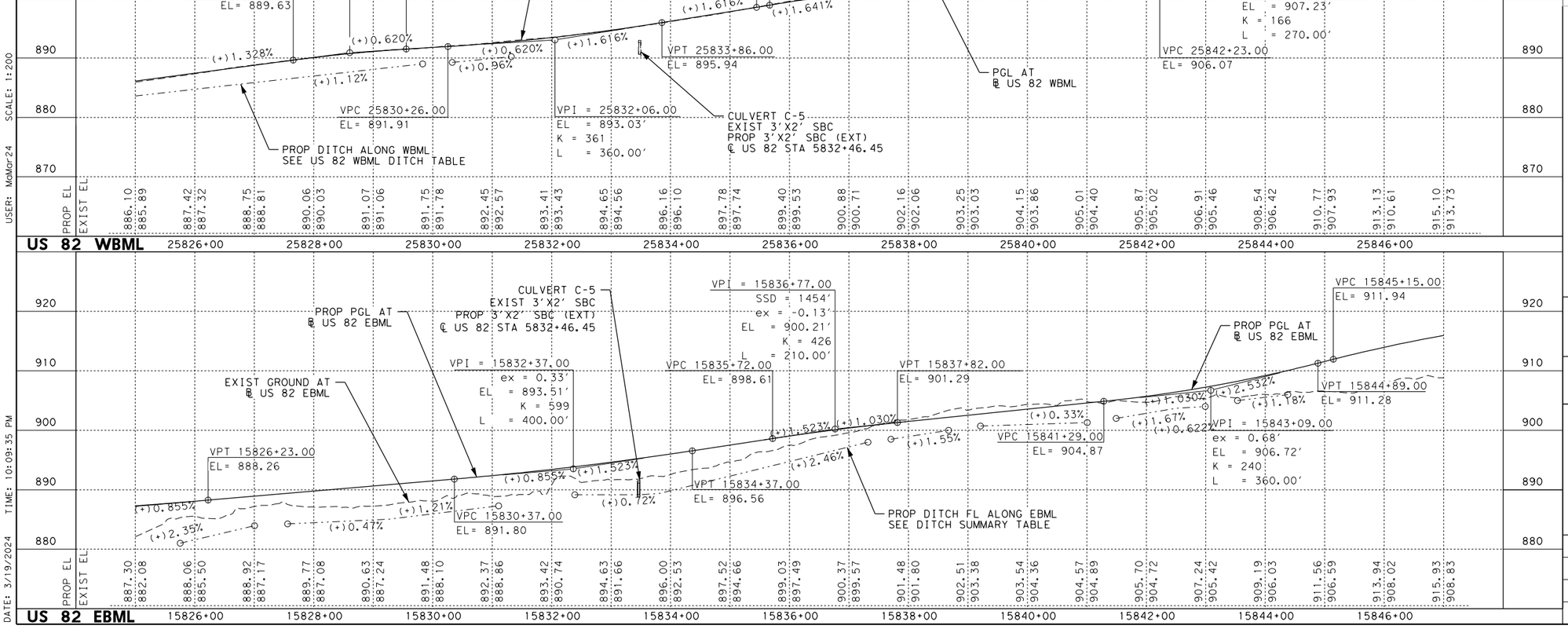
	113	292	456	226	171	154	135	157	100	148	240	497	656	889	1074	1148	931	596	119	24	4	25			
	667	267	117	382	449	398	971	521	468	429	179	62	37	35	35	42	50	87	345	1797	1871	1909			

SHEET TOTALS*

FINAL	UNIT	DESCRIPTION
8050	CY	EXCAVATION (ROADWAY)
10957	CY	EMBANKMENT (ORD COMP) (TY B)

SHEET TOTALS*

EST	FINAL	UNIT	DESCRIPTION



3/19/2024

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

PLAN AND PROFILE

WBML STA 25825+00 TO STA 25847+00

EBML STA 15825+00 TO STA 15847+00

SHEET 6 OF 22

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	6	(SEE TITLE SHEET)		US 82
CHECK	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	WFS	MONTAGUE	195
CHECK	CONTROL	SECTION	JOB	
FS	0044	04	048	

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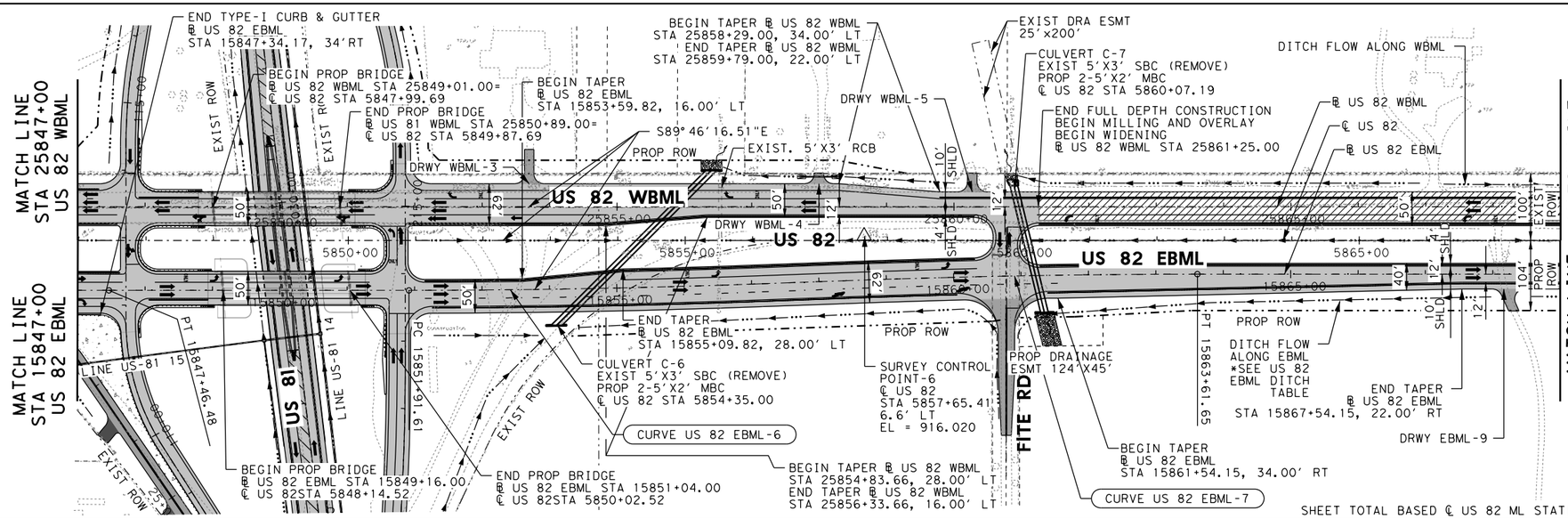


NOTES:

1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
7. VERTICAL ALIGNMENT DATA FOR THE 2" OVERLAY IS SHOWN FOR CONTRACTOR'S REFERENCE ONLY.

SHEET TOTAL BASED ℄ US 82 ML STATIONING*

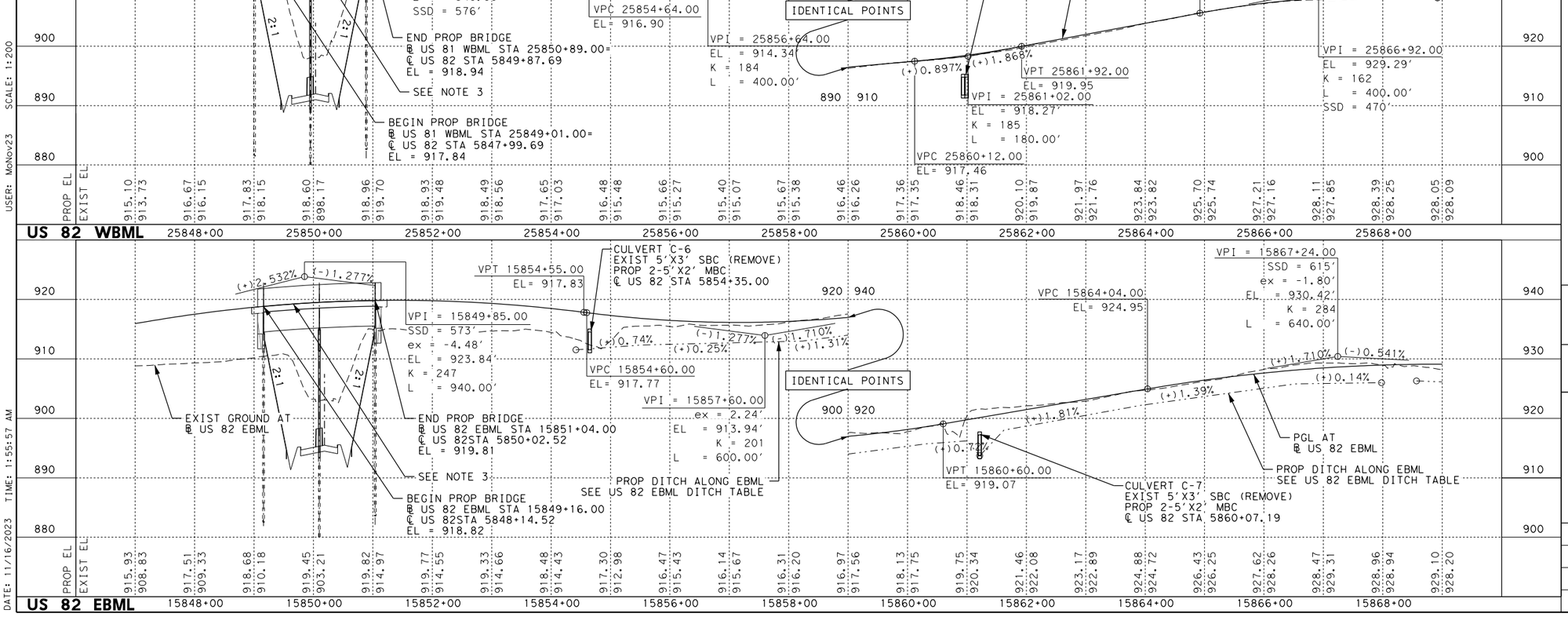
	206	318	47	168	572	452	309	238	579	926	1123	1278	1169	2411	1979	845	703	661	765	865	703	414			
	3072	2773	513	1	1512	1987	1058	952	471	264	73	59	82	94	72	63	70	65	50	55	48	82			

SHEET TOTALS*

FINAL	UNIT	DESCRIPTION
15912	CY	EXCAVATION (ROADWAY)
13408	CY	EMBANKMENT (ORD COMP) (TY B)

SHEET TOTALS*

EST	FINAL	UNIT	DESCRIPTION



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DATE: 11/16/2023 TIME: 1:55:57 AM

FIROZE SHAMS
97215
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

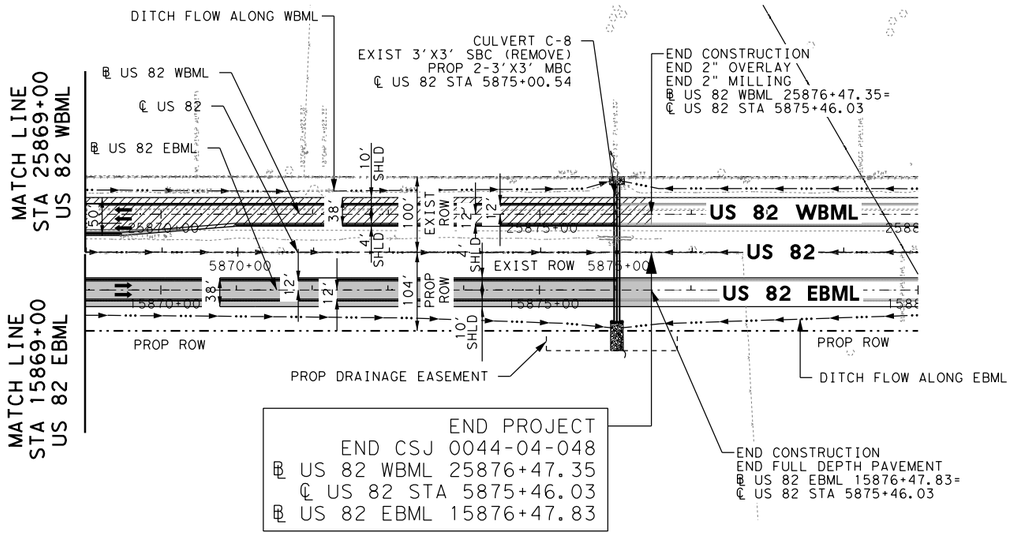
Texas Department of Transportation

US 82

PLAN AND PROFILE
WBML STA 25847+00 TO STA 25869+00
EBML STA 15847+00 TO STA 15869+00

SHEET 7 OF 22

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MB	6	(SEE TITLE SHEET)		US 82
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MH	TEXAS	WFS	MONTAGUE	196
CHECK MFM	CONTROL	SECTION	JOB	
CHECK FS	0044	04	048	



HORZ 0 100 200
VERT 0 10 20
SCALE IN FEET

N

LEGEND

- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
7. VERTICAL ALIGNMENT DATA FOR THE 2" OVERLAY IS SHOWN FOR CONTRACTOR'S REFERENCE ONLY.

SHEET TOTAL BASED ℄ US 82 ML STATIONING*

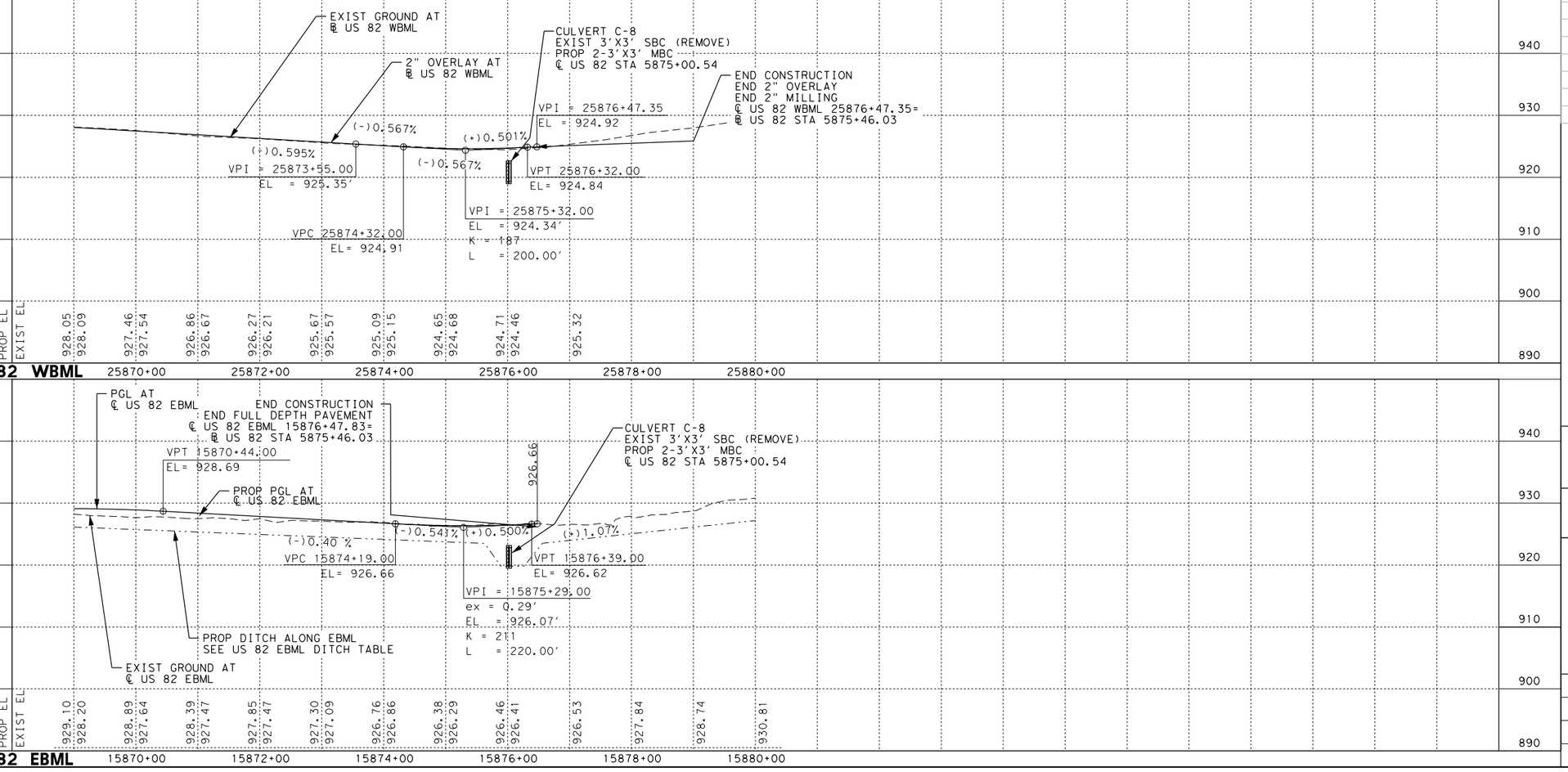
		378	381	472	626	802	892	993	340	0	0														
		109	111	90	54	31	24	60	29	0	0														

SHEET TOTALS*

FINAL	UNIT	DESCRIPTION
4884	CY	EXCAVATION (ROADWAY)
508	CY	EMBANKMENT (ORD COMP) (TY B)

SHEET TOTALS*

EST	FINAL	UNIT	DESCRIPTION



FIROZE SHAMS
97215
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

PLAN AND PROFILE
WBML STA 25869+00 TO END
EBML STA 15869+00 TO END

SHEET 8 OF 22

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MB	6	(SEE TITLE SHEET)		US 82
GRAPHICS	STATE	DISTRICT	COUNTY	SHEET NO.
MAH	TEXAS	WFS	MONTAGUE	197
CHECK MFM	CONTROL	SECTION	JOB	
CHECK FS	0044	04	048	

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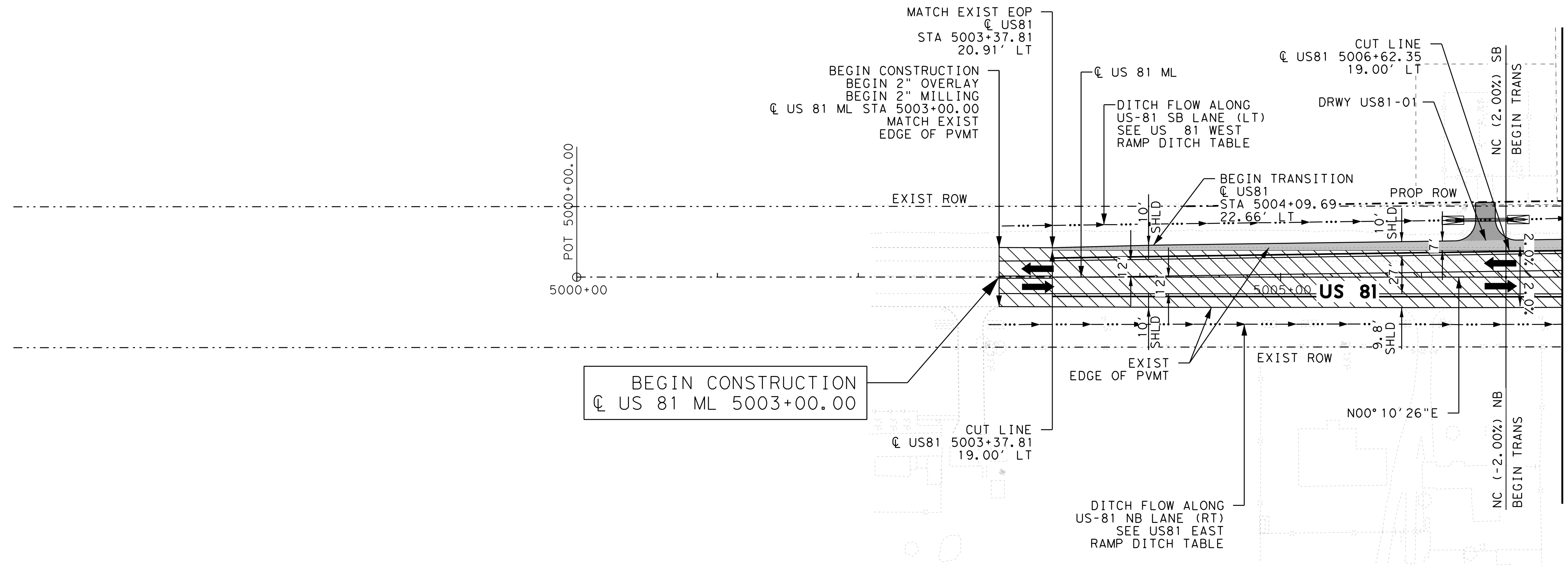
PENTABLE: US82*PEN.tbl



HORZ 0 50 100
VERT 0 5 10
SCALE IN FEET

LEGEND

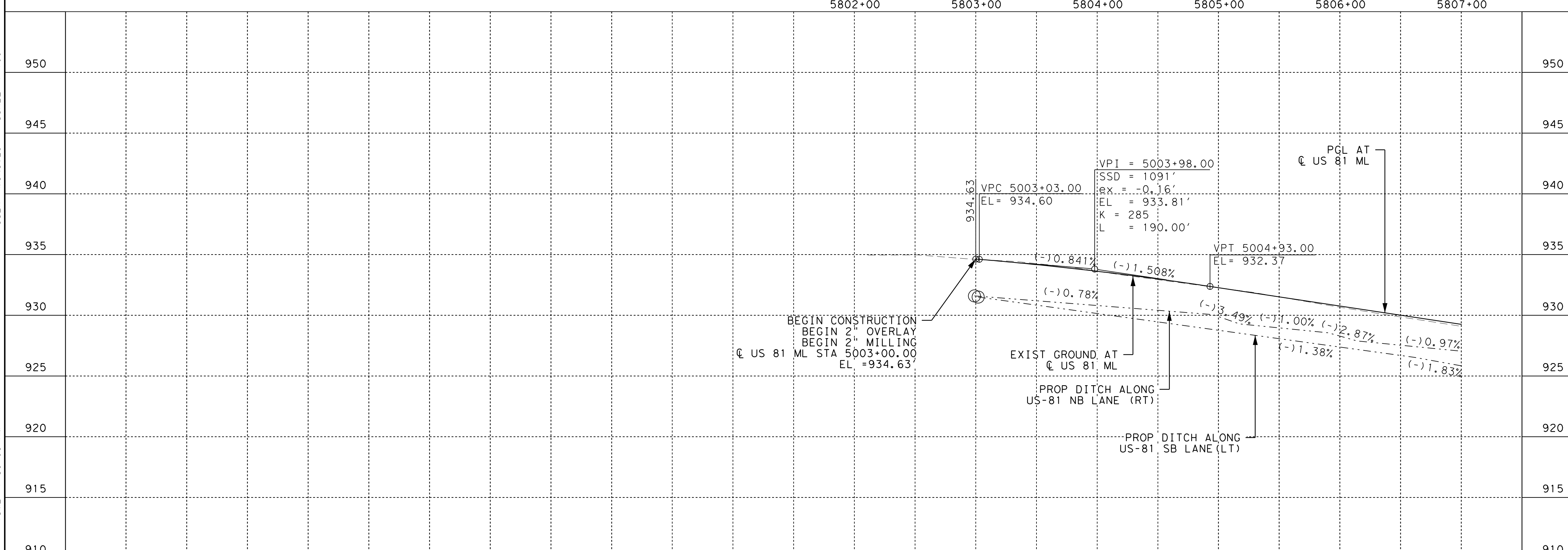
- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
7. VERTICAL ALIGNMENT DATA FOR THE 2" OVERLAY IS SHOWN FOR CONTRACTOR'S REFERENCE ONLY.

SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
657	CY	EXCAVATION (ROADWAY)
89	CY	EMBANKMENT (ORD COMP) (TY B)

	5802+00		5803+00		5804+00		5805+00		5806+00		5807+00
		8	46	78	84	94	92	94	86	75	
		1	6	9	10	9	13	16	10	15	



	5002+00	5003+00		5004+00		5005+00		5006+00		5007+00
PROP EL		934.63	934.17	933.62	932.99	932.27	931.51	930.76	930.01	929.25
EXIST EL		934.61	934.25	933.63	932.93	932.27	931.51	930.67	929.85	929.09

FIROZE SHAMS
97215
STATE OF TEXAS
LICENSED PROFESSIONAL ENGINEER
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

PLAN AND PROFILE
US 81 ML BEGIN TO STA 5007+00

SHEET 9 OF 22

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	6	(SEE TITLE SHEET)		US 82
	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	WFS	MONTAGUE	198
	CONTROL	SECTION	JOB	
CHECK	0044	04	048	

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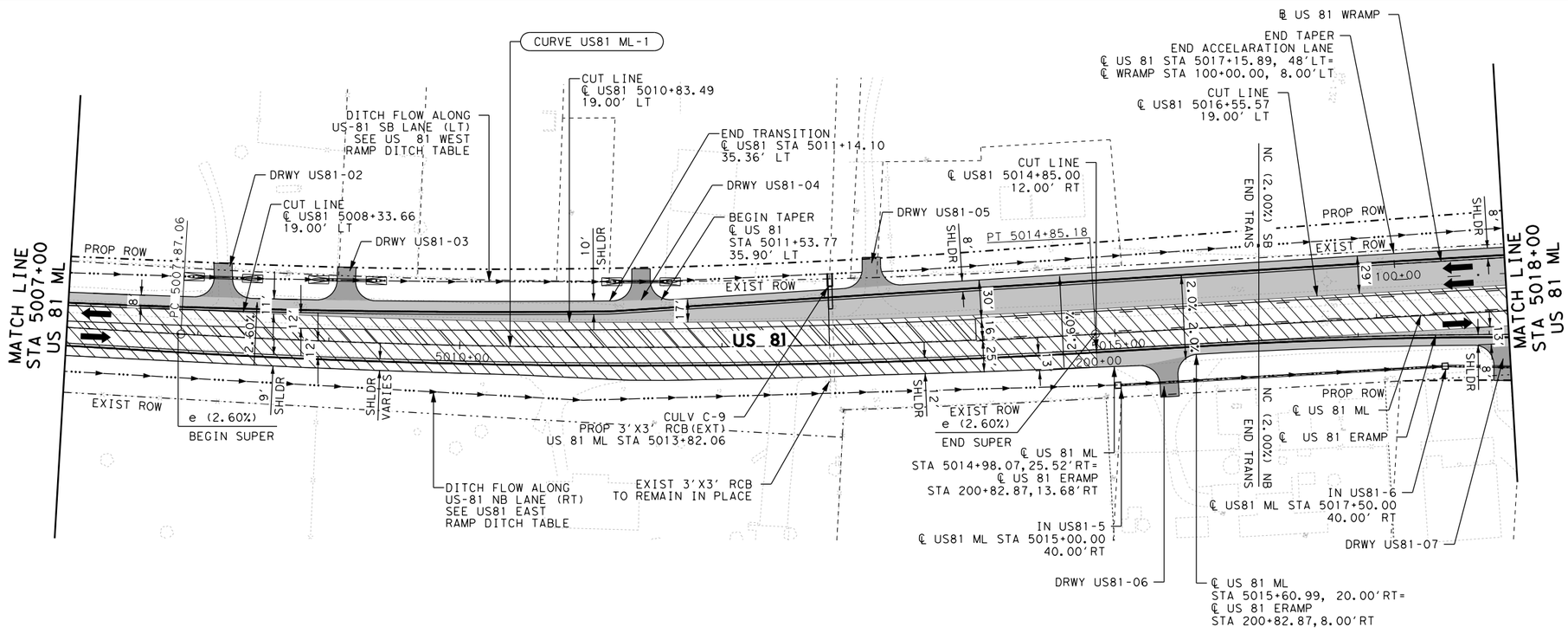


HORZ 0 50 100
VERT 0 5 10
SCALE IN FEET

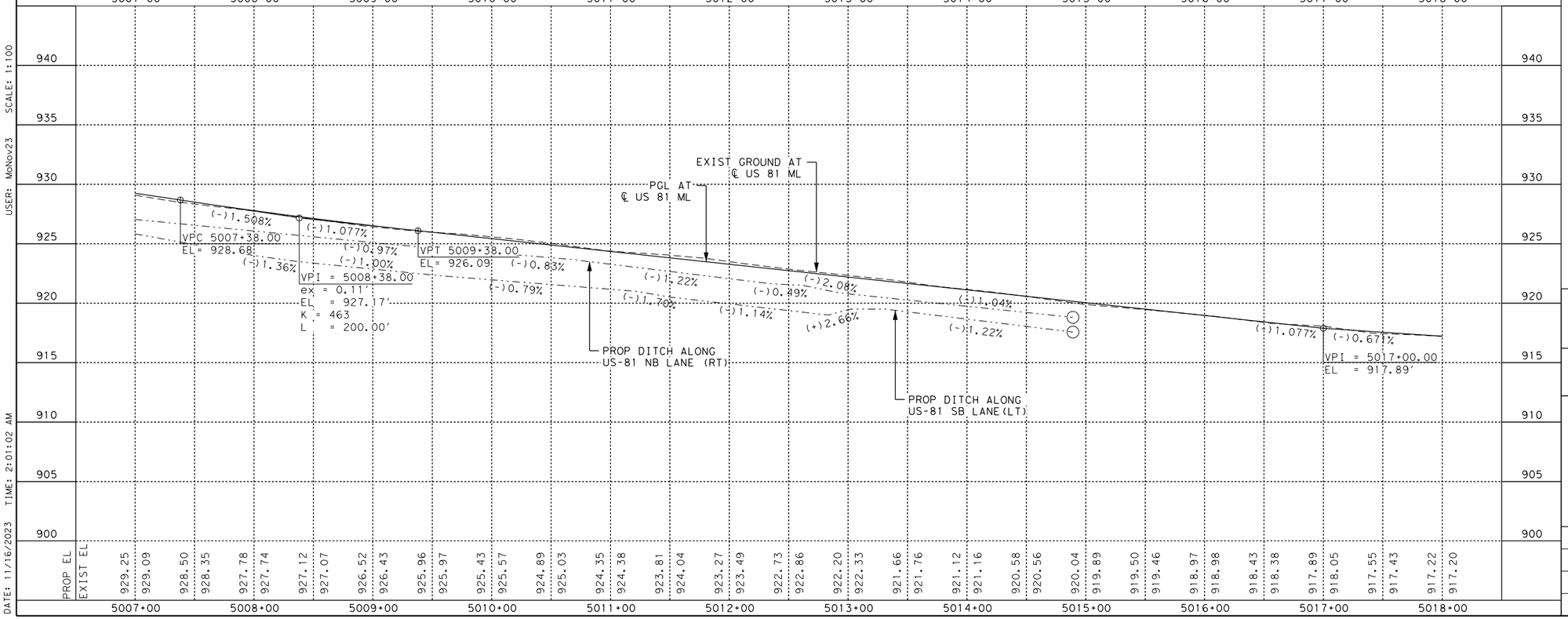
LEGEND

- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
7. VERTICAL ALIGNMENT DATA FOR THE 2" OVERLAY IS SHOWN FOR CONTRACTOR'S REFERENCE ONLY.

		91	94	106	94	88	117	117	111	96	102	122	146	172	166	163	171	168	161	179	213	226	223			
		26	31	28	20	19	20	22	19	11	8	13	10	5	7	10	16	11	6	8	5	3	2			
5007+00		5008+00		5009+00		5010+00		5011+00		5012+00		5013+00		5014+00		5015+00		5016+00		5017+00		5018+00				



PROP EL		929.25	929.09	928.50	928.35	927.78	927.74	927.12	927.07	926.52	926.43	925.96	925.97	925.43	925.57	924.89	925.03	924.35	924.38	923.81	924.04	923.27	923.49	922.73	922.86	922.20
EXIST EL		929.25	929.09	928.50	928.35	927.78	927.74	927.12	927.07	926.52	926.43	925.96	925.97	925.43	925.57	924.89	925.03	924.35	924.38	923.81	924.04	923.27	923.49	922.73	922.86	922.20
5007+00		5008+00		5009+00		5010+00		5011+00		5012+00		5013+00		5014+00		5015+00		5016+00		5017+00		5018+00				

PROP EL		922.33	921.66	921.76	921.12	921.16	920.58	920.56	920.04	919.89	919.50	919.46	918.97	918.98	918.43	918.38	917.89	918.05	917.55	917.43	917.22	917.20				
EXIST EL		922.33	921.66	921.76	921.12	921.16	920.58	920.56	920.04	919.89	919.50	919.46	918.97	918.98	918.43	918.38	917.89	918.05	917.55	917.43	917.22	917.20				
5007+00		5008+00		5009+00		5010+00		5011+00		5012+00		5013+00		5014+00		5015+00		5016+00		5017+00		5018+00				

SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
3126	CY	EXCAVATION (ROADWAY)
300	CY	EMBANKMENT (ORD COMP) (TY B)

SCALE: 1:100
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DATE: 11/16/2023 TIME: 2:01:02 AM
PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl

FIROZE SHAMS
97215
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

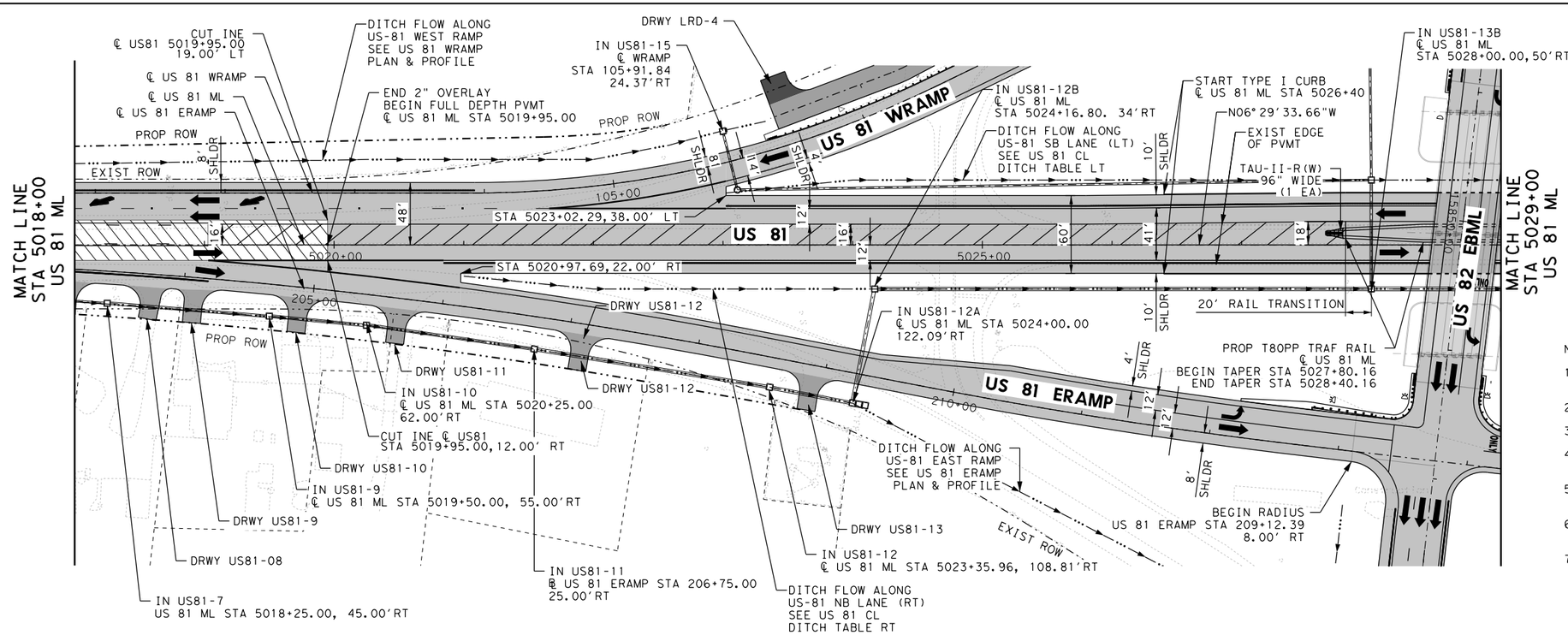
Texas Department of Transportation

US 82

PLAN AND PROFILE
US 81 ML STA 5007+00 TO STA 5018+00

SHEET 10 OF 22

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	6	(SEE TITLE SHEET)		US 82
	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	WFS	MONTAGUE	199
CHECK	CONTROL	SECTION	JOB	
	0044	04	048	

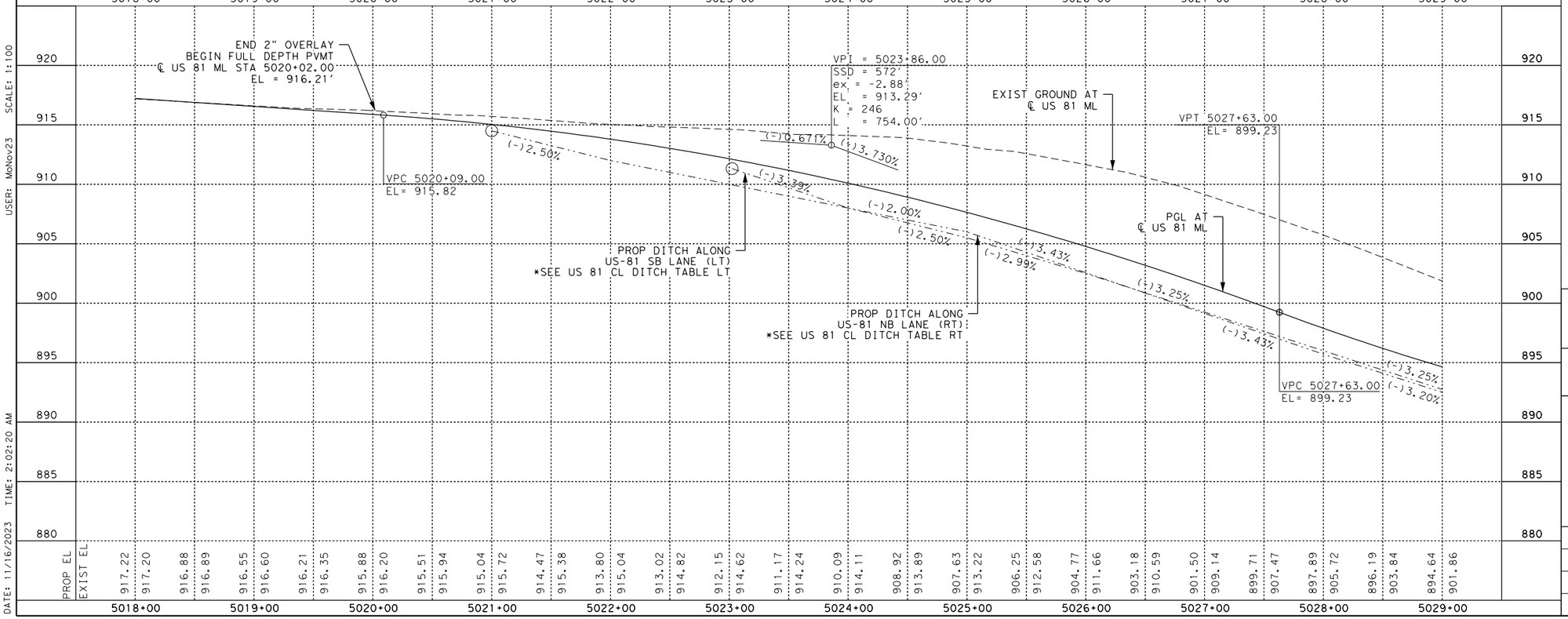


NOTES:

1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
7. VERTICAL ALIGNMENT DATA FOR THE 2" OVERLAY IS SHOWN FOR CONTRACTOR'S REFERENCE ONLY.

		223	230	280	390	493	589	711	834	1010	1311	1537	1831	2342	2748	3146	3553	3832	4101	4424	4665	4257	3430		
		0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	1	33	143	398	585	881	988		

SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
45937	CY	EXCAVATION (ROADWAY)
3033	CY	EMBANKMENT (ORD COMP) (TY B)



STATE OF TEXAS
FIROZE SHAMS
97215
LICENSED PROFESSIONAL ENGINEER
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

US 82

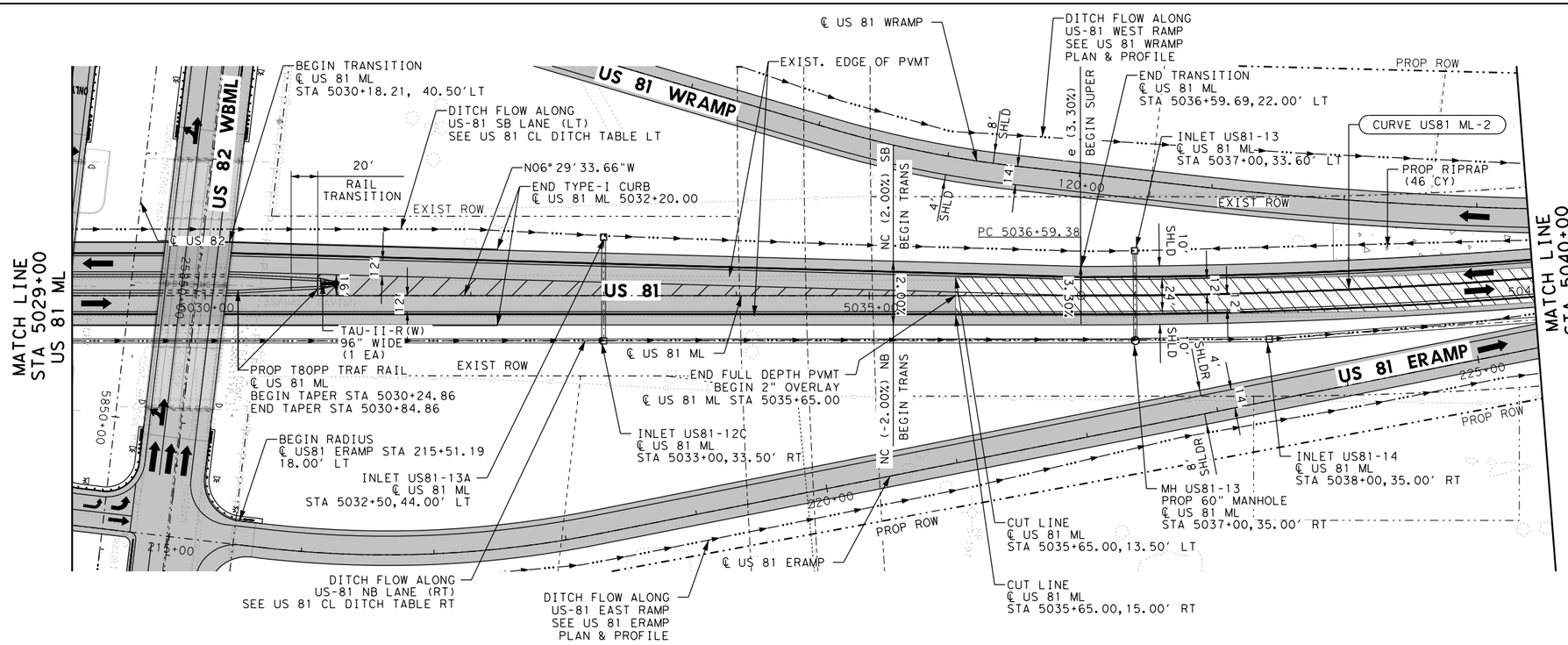
PLAN AND PROFILE

US 81 ML STA 5018+00 TO STA 5029+00

SHEET 11 OF 22

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	6	(SEE TITLE SHEET)		US 82
	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	WFS	MONTAGUE	
CHECK	CONTROL	SECTION	JOB	200
	0044	04	048	

PLOT DRIVER: US82+BW+HALF+PDF+LineWT+Modified.pltcfg
PENTABLE: US82+PEN.tbl
SCALE: 1:100
USER: MoNov23
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\RDWY\048+US82+11+US81+P&P03.dgn
DATE: 11/16/2023 TIME: 2:02:20 AM



LEGEND

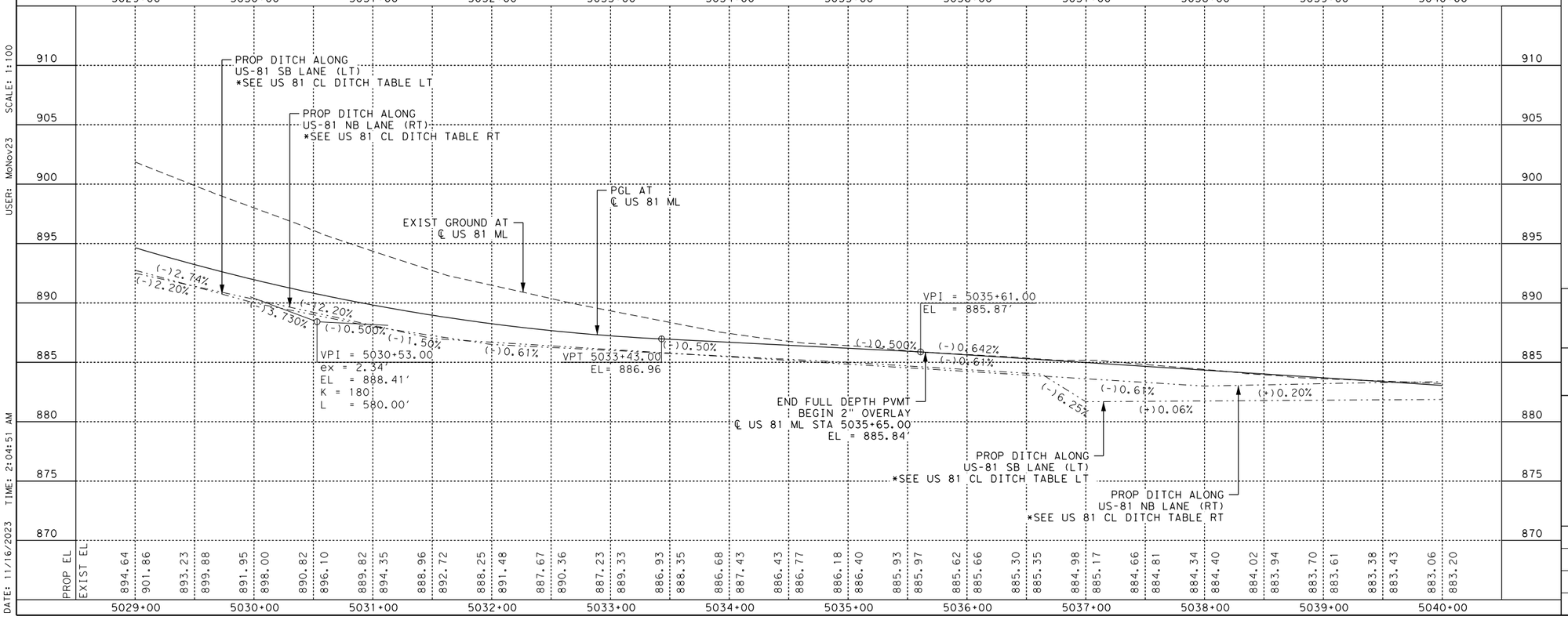
- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
7. VERTICAL ALIGNMENT DATA FOR THE 2" OVERLAY IS SHOWN FOR CONTRACTOR'S REFERENCE ONLY.

		3261	3898	4755	5231	5367	5469	5335	4994	4610	4194	3863	3773	3629	3271	3231	3465	3712	4045	4252	4195	3958	3510		
		442	38	448	1229	1370	966	624	382	197	93	31	0	0	0	0	0	0	0	0	0	0	10		

SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
92018	CY	EXCAVATION (ROADWAY)
5830	CY	EMBANKMENT (ORD COMP) (TY B)



SCALE: 1:100

USER: MoNov23

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl

FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\RDWY\048*US82*12*US81*P&P04.dgn
DATE: 11/16/2023 TIME: 2:04:51 AM

STATE OF TEXAS
FIROZE SHAMS
97215
LICENSED PROFESSIONAL ENGINEER
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

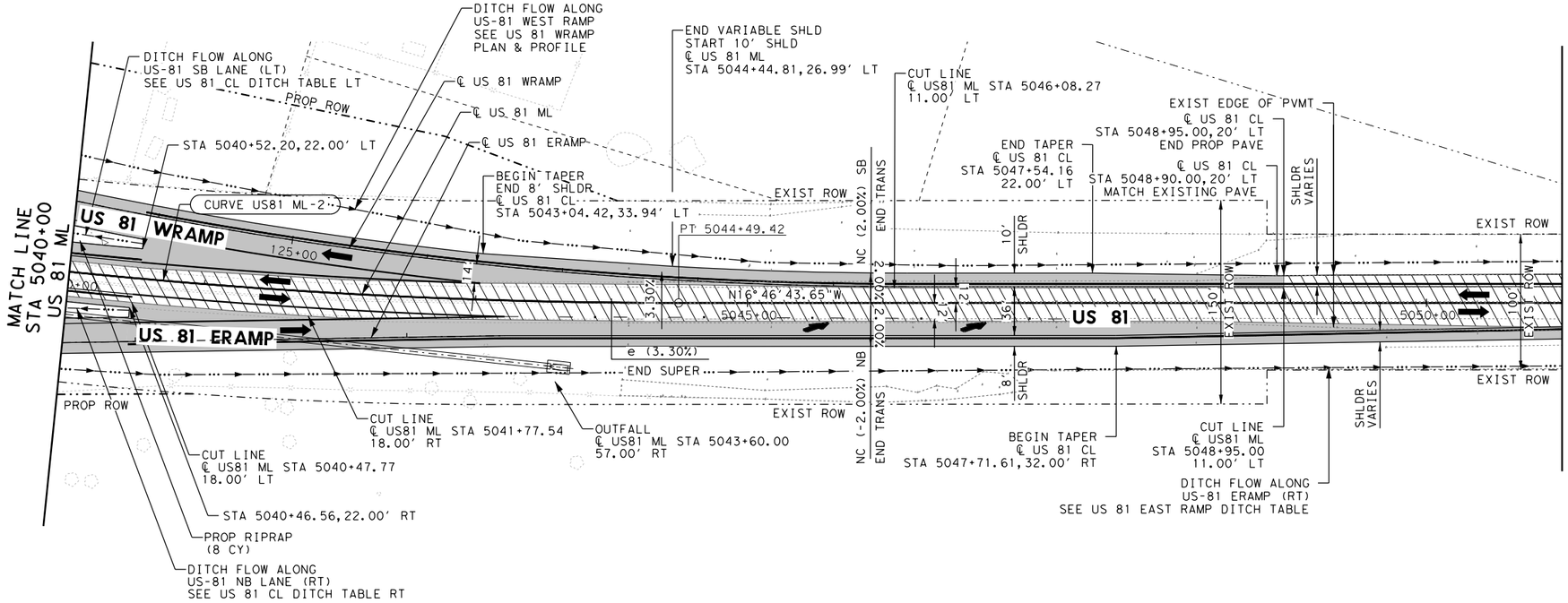
US 82

PLAN AND PROFILE

US 81 ML STA 5029+00 TO STA 5040+00

SHEET 12 OF 22

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	6	(SEE TITLE SHEET)		US 82
	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	WFS	MONTAGUE	
CHECK	CONTROL	SECTION	JOB	201
	0044	04	048	



HORZ 0 50 100
VERT 0 5 10
SCALE IN FEET

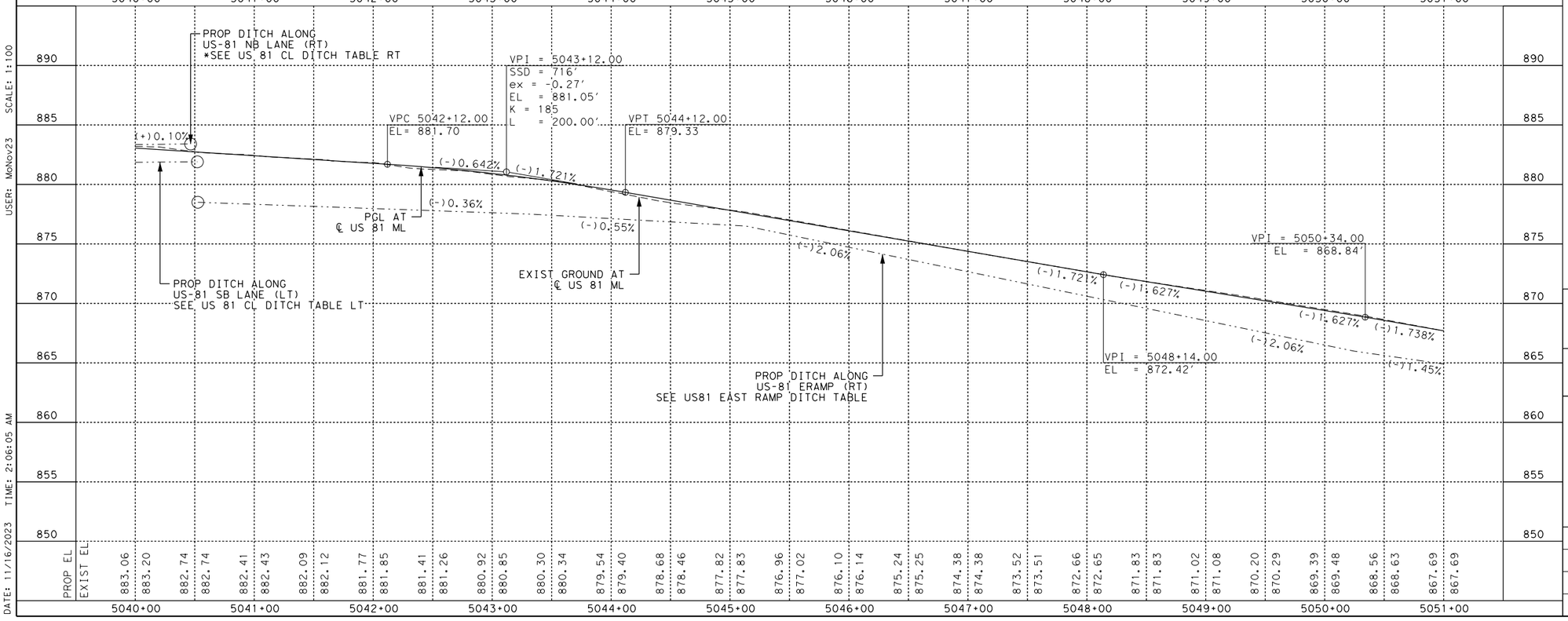
LEGEND

- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
7. VERTICAL ALIGNMENT DATA FOR THE 2" OVERLAY IS SHOWN FOR CONTRACTOR'S REFERENCE ONLY.

		3111	2764	2277	1877	1554	1286	973	675	544	451	413	413	303	209	208	188	143	85	52	43	34	27		
		52	53	31	39	43	44	50	53	39	29	16	4	2	1	1	3	5	12	13	12	19	26		
	5040+00		5041+00		5042+00		5043+00		5044+00		5045+00		5046+00		5047+00		5048+00		5049+00		5050+00		5051+00		



SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
17630	CY	EXCAVATION (ROADWAY)
547	CY	EMBANKMENT (ORD COMP) (TY B)

STATE OF TEXAS
FIROZE SHAMS
97215
LICENSED PROFESSIONAL ENGINEER
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

US 82

PLAN AND PROFILE
US 81 ML STA 5040+00 TO STA 5051+00

SHEET 13 OF 22

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	6	(SEE TITLE SHEET)		US 82
	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	WFS	MONTAGUE	
CHECK	CONTROL	SECTION	JOB	202
	0044	04	048	

PLOT DRIVER: US82+BW+HALF+PDF+LineWt+Modified.pltcfg
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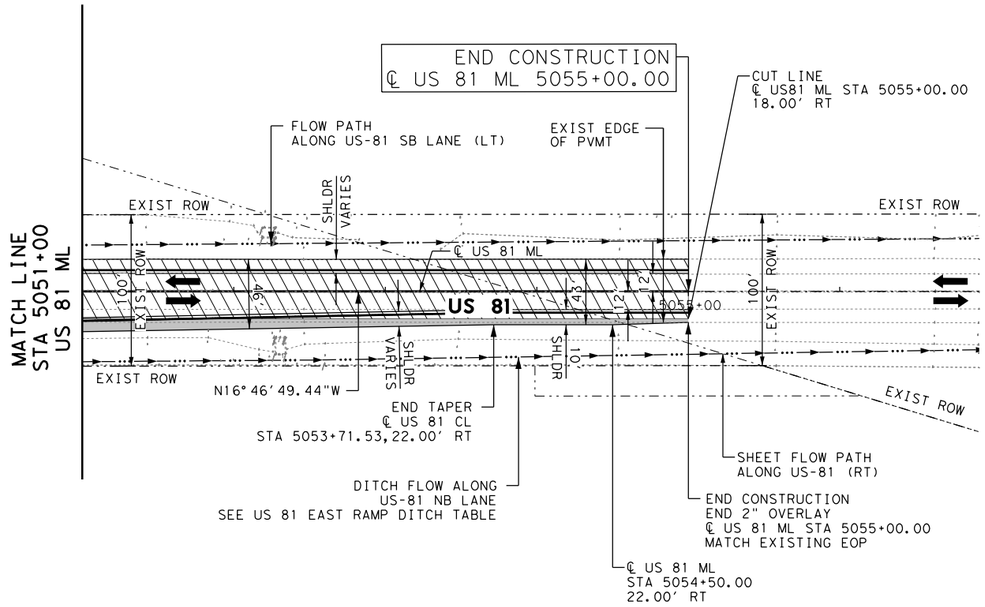
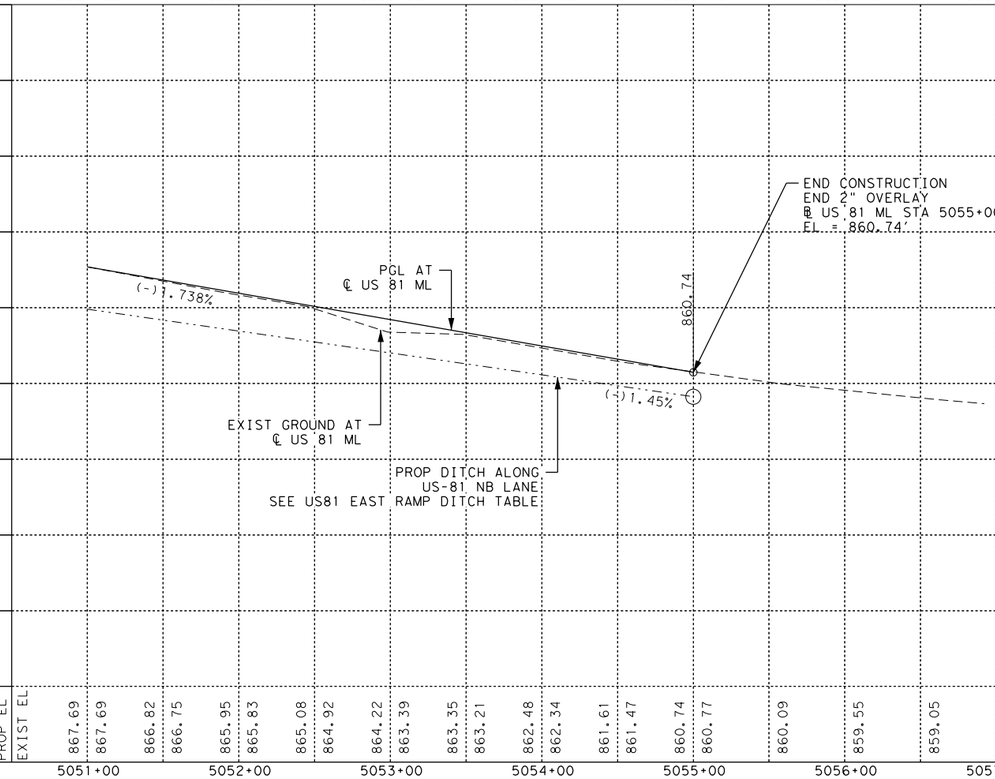
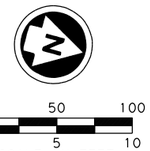
USER: MoNov23
SCALE: 1:100
DATE: 11/16/2023 TIME: 2:06:05 AM







LEGEND

- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
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SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
130	CY	EXCAVATION (ROADWAY)
142	CY	EMBANKMENT (ORD COMP) (TY B)

		23	22	22	17	12	11	14	8	1	0	0														
		32	29	22	18	16	13	9	3	0	0	0														

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

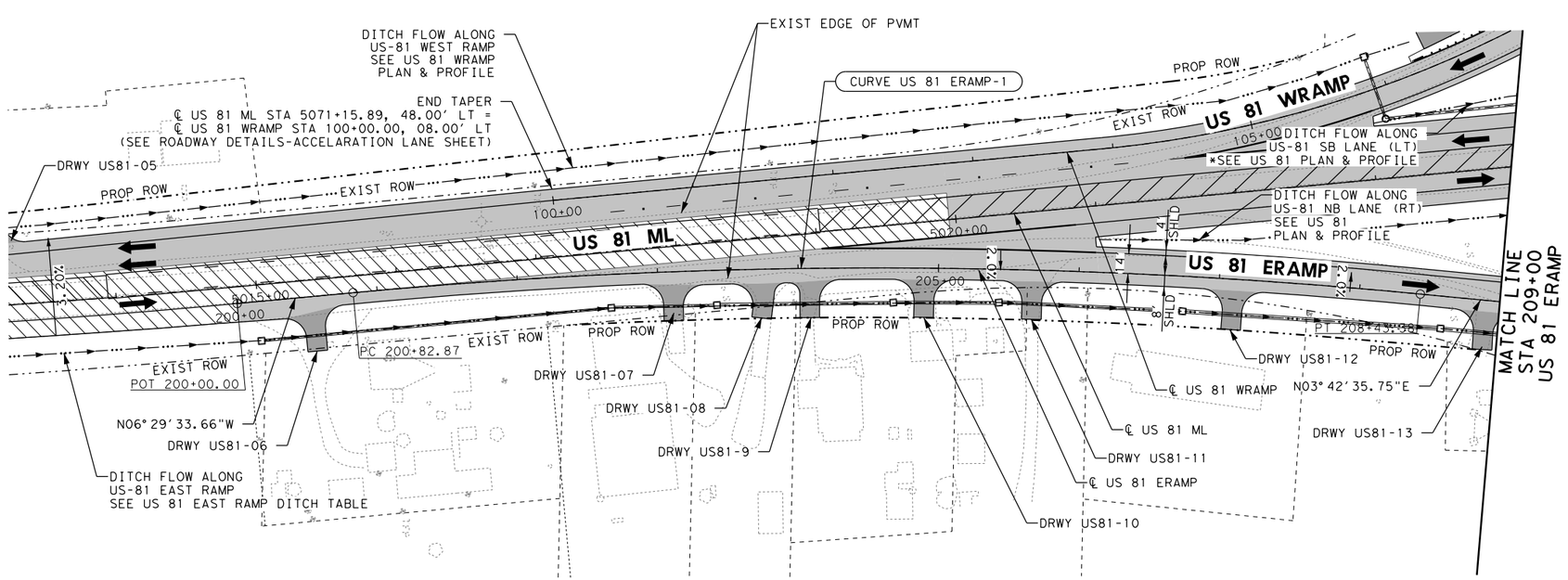
US 82

PLAN AND PROFILE
US 81 ML STA 5051+00 TO END

SHEET 14 OF 22

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	6	(SEE TITLE SHEET)		US 82
	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	WFS	MONTAGUE	
CHECK	CONTROL	SECTION	JOB	203
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
SCALE: 1:100
USER: MoNov23
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\RDWY\048*US82*14*US81*P&P06.dgn
DATE: 11/16/2023 TIME: 2:08:01 AM



HORZ 0 50 100
VERT 0 5 10
SCALE IN FEET

LEGEND

- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
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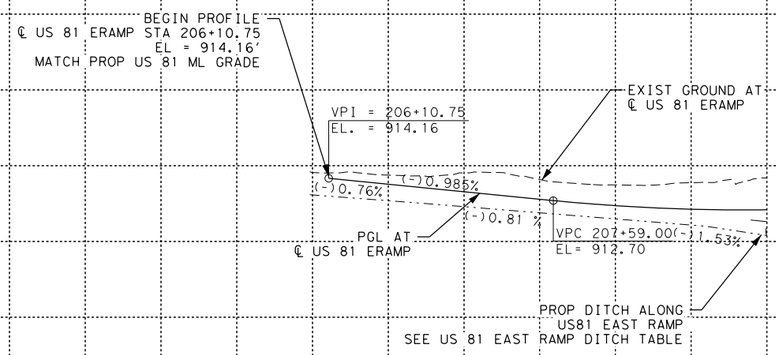
SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
	CY	EXCAVATION (ROADWAY)
	CY	EMBANKMENT (ORD COMP) (TY B)

SEE US 81 PLAN AND PROFILE SHEETS FOR EXCAVATION AND EMBANKMENT QUANTITIES



STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED PROFESSIONAL ENGINEER
M.F.Muwaquet
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

PLAN AND PROFILE
US 81 ERAMP BEGIN TO STA 209+00

SHEET 15 OF 22

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	6	(SEE TITLE SHEET)		US 82
	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	WFS	MONTAGUE	
CHECK	CONTROL	SECTION	JOB	204
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWt*Modified.pltcfg
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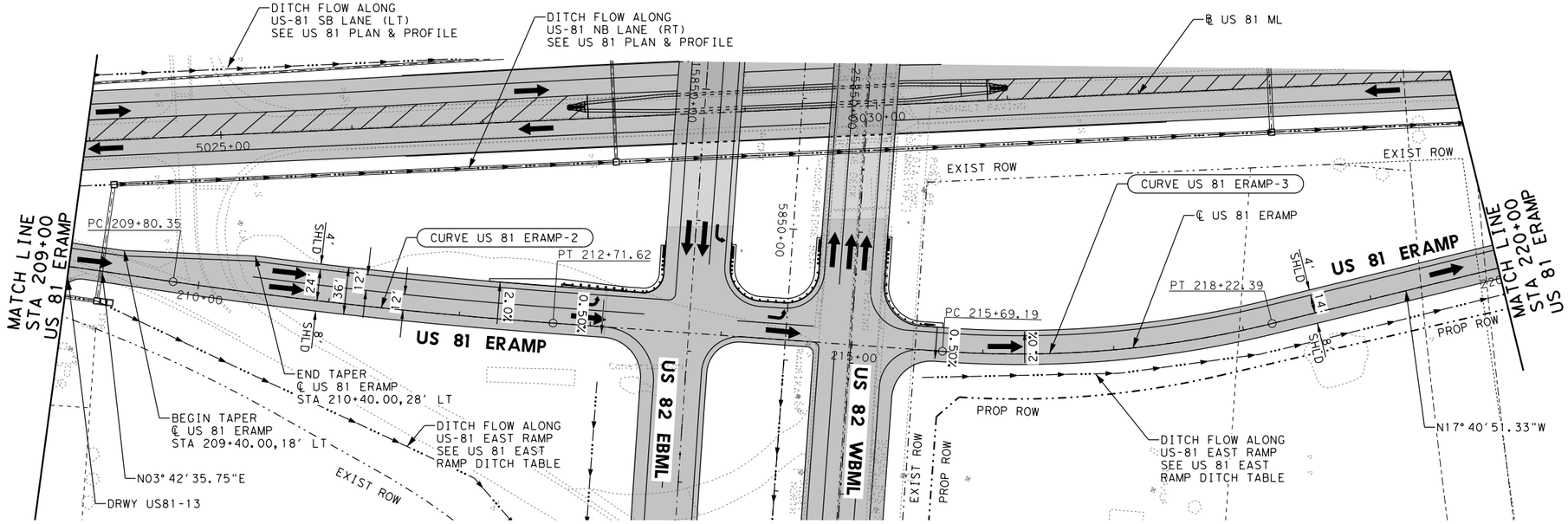

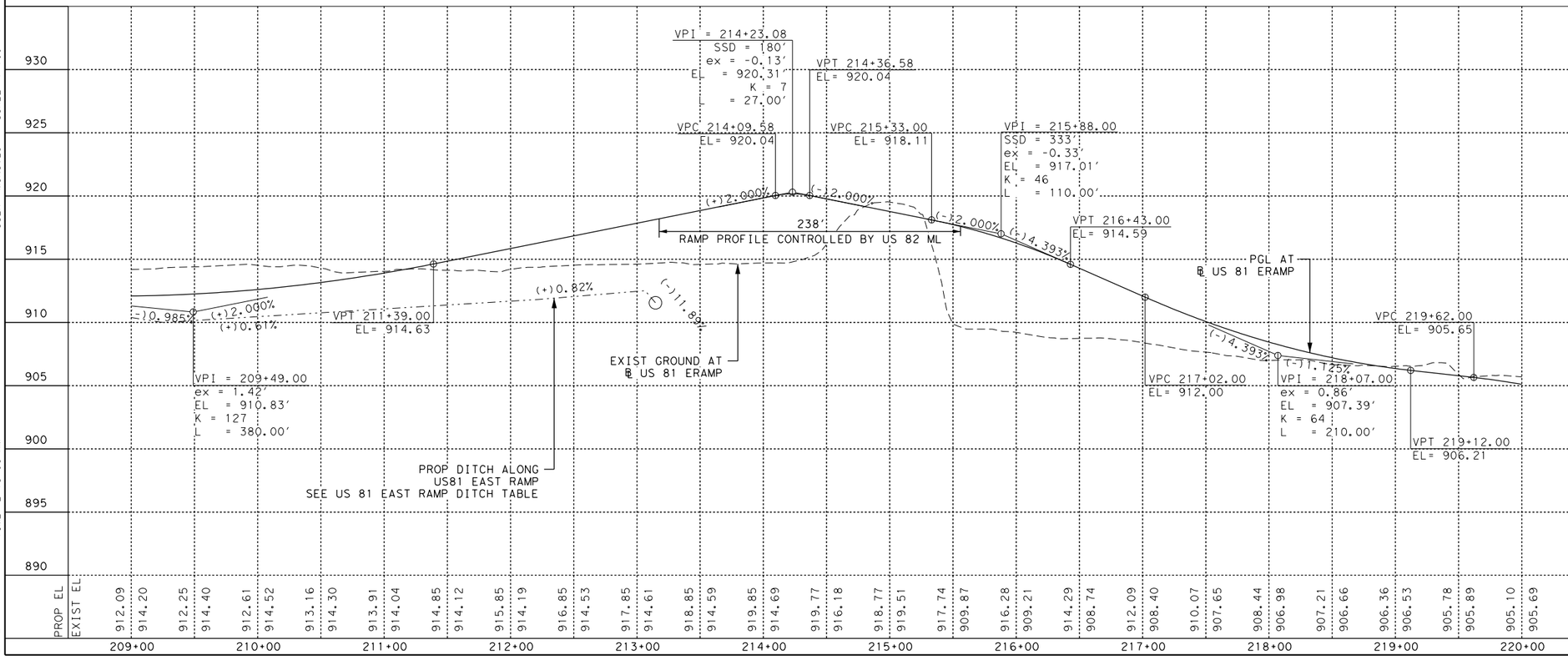

SEE US 81 PLAN AND PROFILE SHEETS FOR EXCAVATION AND EMBANKMENT QUANTITIES

SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
	CY	EXCAVATION (ROADWAY)
	CY	EMBANKMENT (ORD COMP) (TY B)

HORZ 0 50 100
VERT 0 5 10
SCALE IN FEET

LEGEND

- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
7. VERTICAL ALIGNMENT DATA FOR THE 2" OVERLAY IS SHOWN FOR CONTRACTOR'S REFERENCE ONLY.

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED PROFESSIONAL ENGINEER
M.F.Muwaquet
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

US 82

PLAN AND PROFILE
US 81 ERAMP STA 209+00 TO STA 220+00

SHEET 16 OF 22

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	6	(SEE TITLE SHEET)		US 82
	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	WFS	MONTAGUE	
CHECK	CONTROL	SECTION	JOB	205
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
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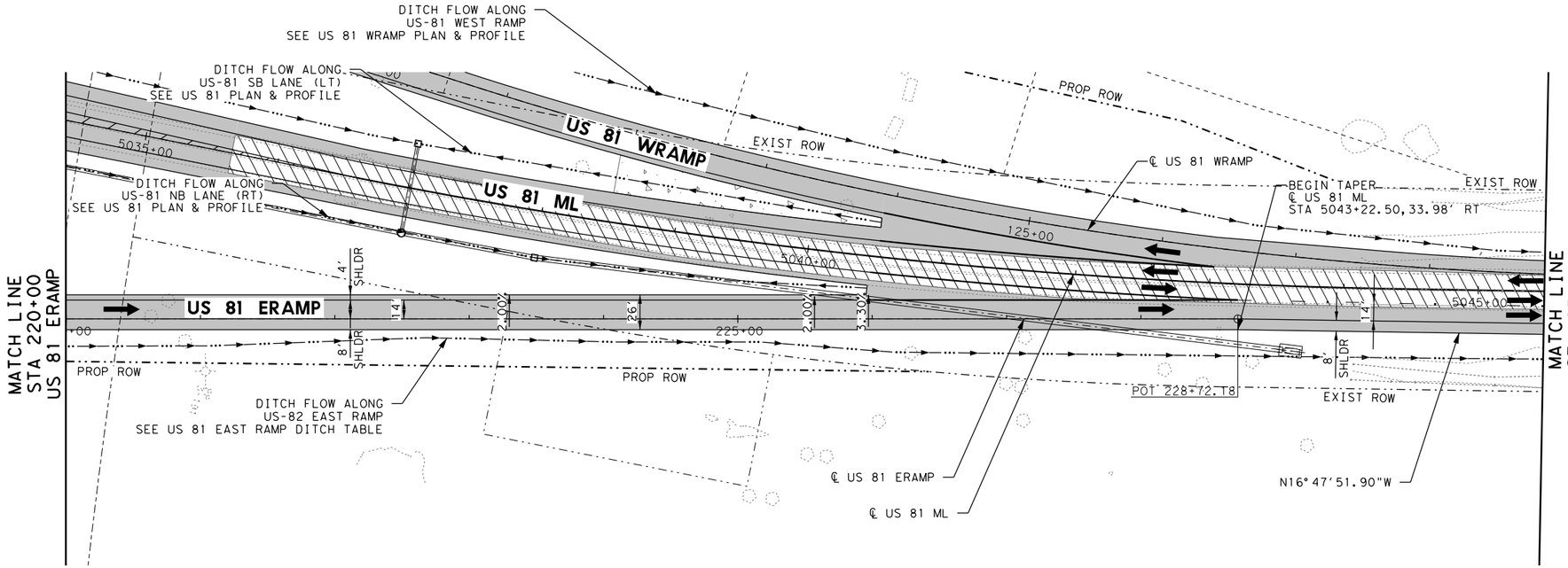
USER: MoNov23
SCALE: 1:100
DATE: 11/16/2023 TIME: 2:15:06 AM



HORZ 0 50 100
VERT 0 5 10
SCALE IN FEET

LEGEND

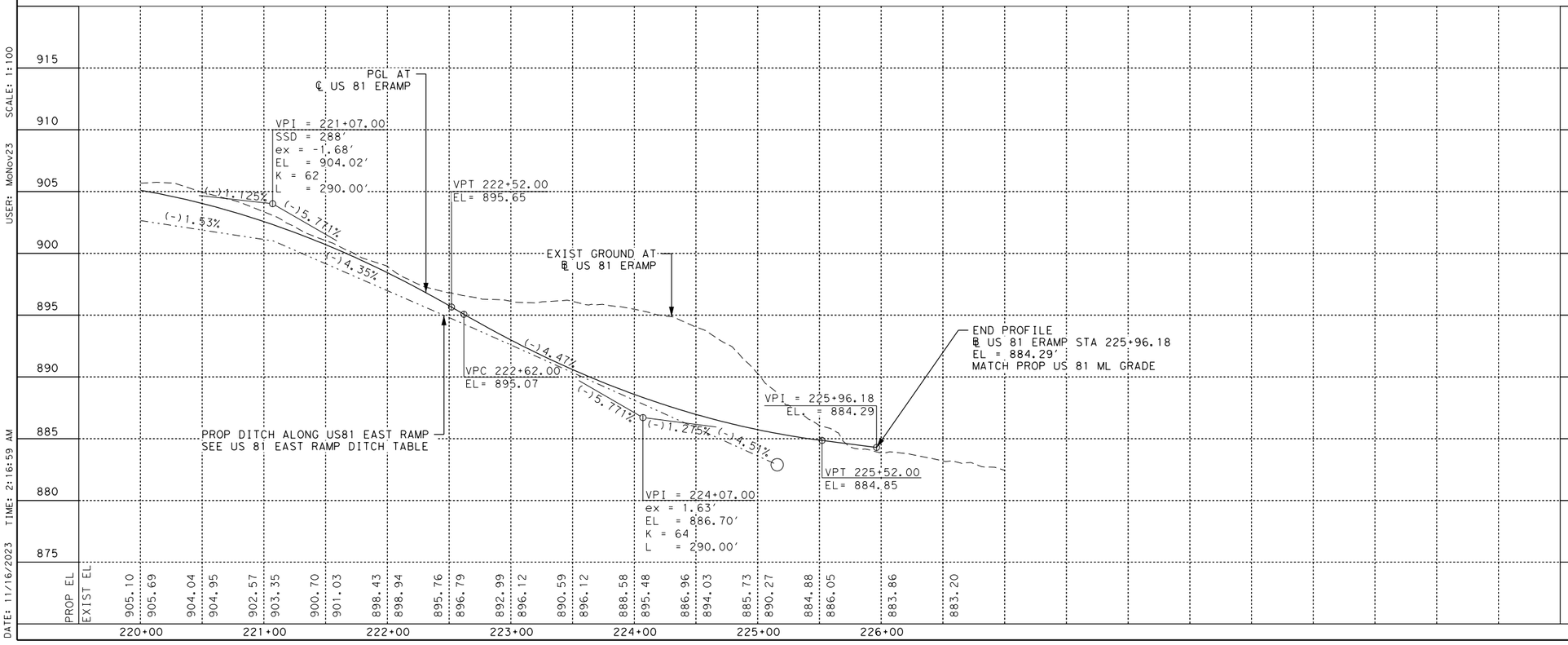
- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
7. VERTICAL ALIGNMENT DATA FOR THE 2" OVERLAY IS SHOWN FOR CONTRACTOR'S REFERENCE ONLY.

SEE US 81 PLAN AND PROFILE SHEETS FOR EXCAVATION AND EMBANKMENT QUANTITIES

SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
	CY	EXCAVATION (ROADWAY)
	CY	EMBANKMENT (ORD COMP) (TY B)



STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED
PROFESSIONAL ENGINEER
M.F.Muwaquet
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

US 82

PLAN AND PROFILE
US 81 ERAMP STA 220 TO STA 231+00

SHEET 17 OF 22

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	6	(SEE TITLE SHEET)		US 82
	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	WFS	MONTAGUE	
CHECK	CONTROL	SECTION	JOB	206
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
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USER: MoNov23
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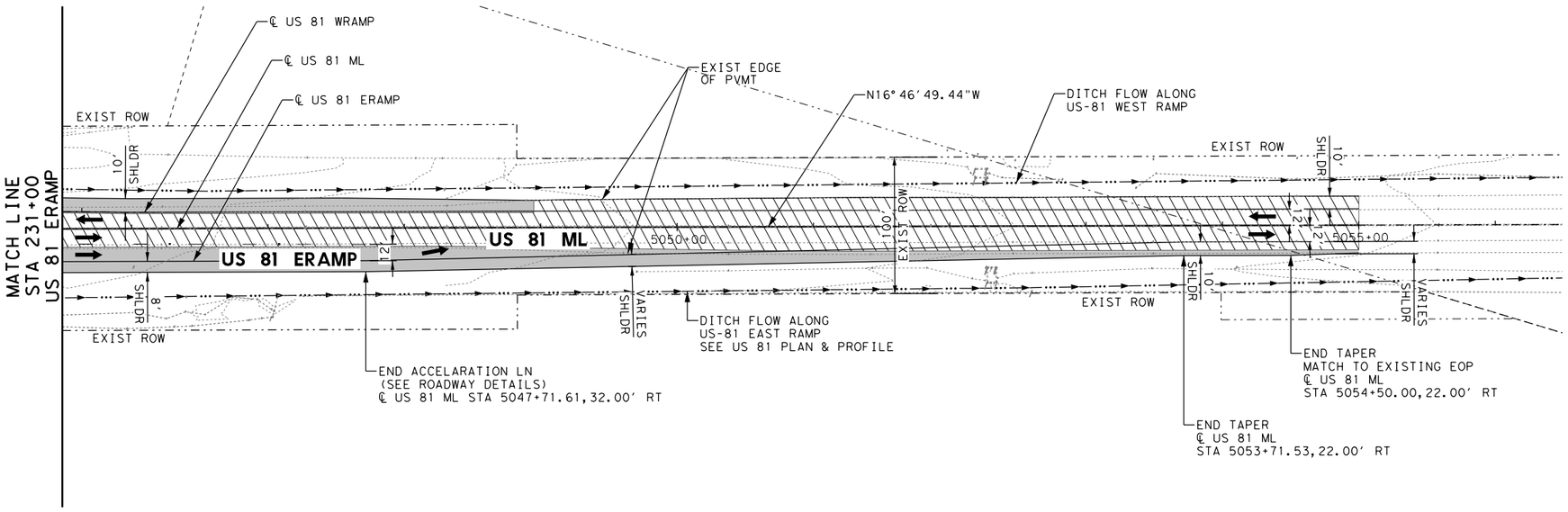

HORZ 0 100
VERT 0 10
SCALE IN FEET

LEGEND

- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
7. VERTICAL ALIGNMENT DATA FOR THE 2" OVERLAY IS SHOWN FOR CONTRACTOR'S REFERENCE ONLY.

STATE OF TEXAS
MARWAN F. MUWAQUET
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LICENSED
PROFESSIONAL ENGINEER
M.F.Muwaquet
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

PLAN
US 81 ERAMP STA 231+00 TO END

SHEET 18 OF 22

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	207
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

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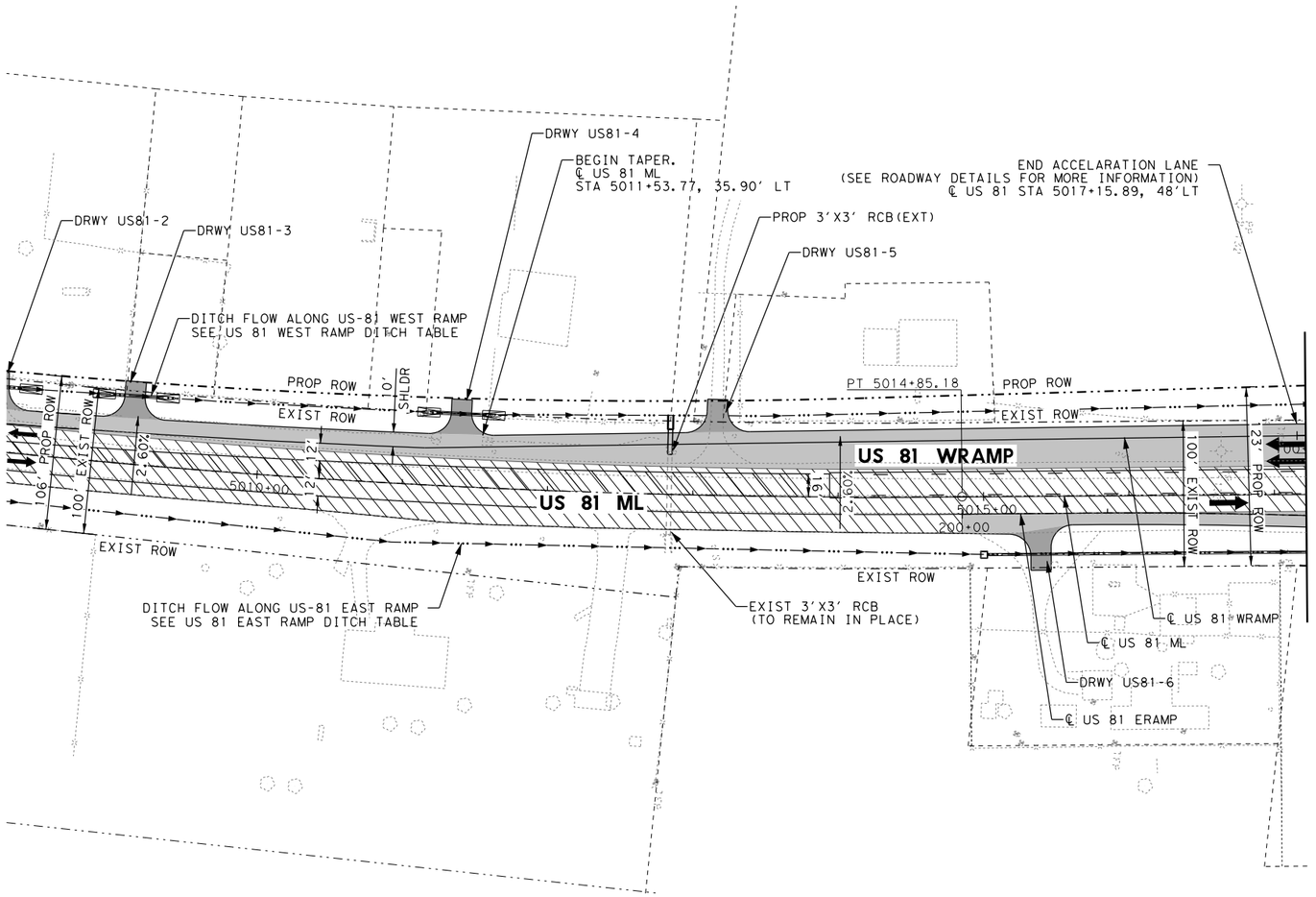

HORZ 0 50 100
VERT 0 5 10
SCALE IN FEET

LEGEND

- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
7. VERTICAL ALIGNMENT DATA FOR THE 2" OVERLAY IS SHOWN FOR CONTRACTOR'S REFERENCE ONLY.

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED PROFESSIONAL ENGINEER
M.F.Muwaquet
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

PLAN

US 81 WRAMP BEGIN TO STA 106+00

SHEET 19 OF 22

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	208
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
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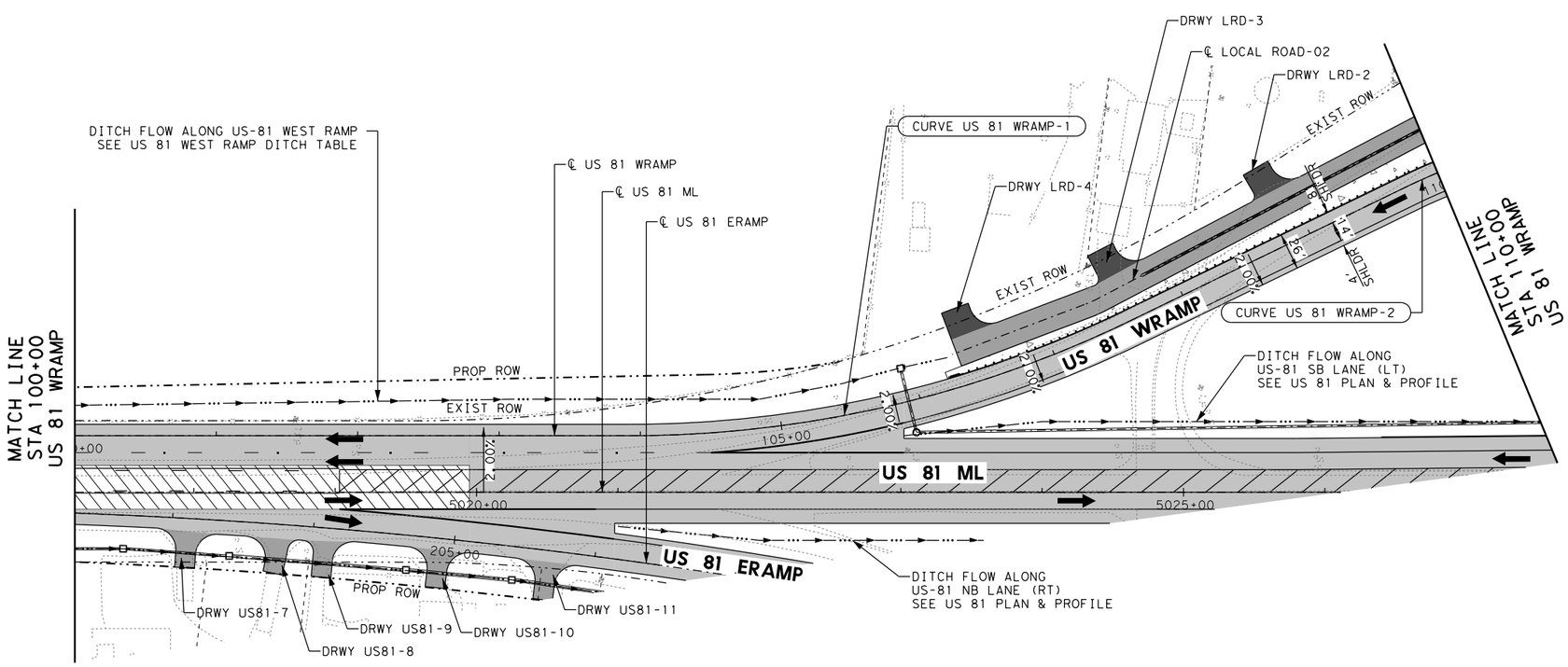
DATE: 11/16/2023 TIME: 2:20:34 AM USER: MoNov23 SCALE: 1:100



HORZ 0 50 100
VERT 0 5 10
SCALE IN FEET

LEGEND

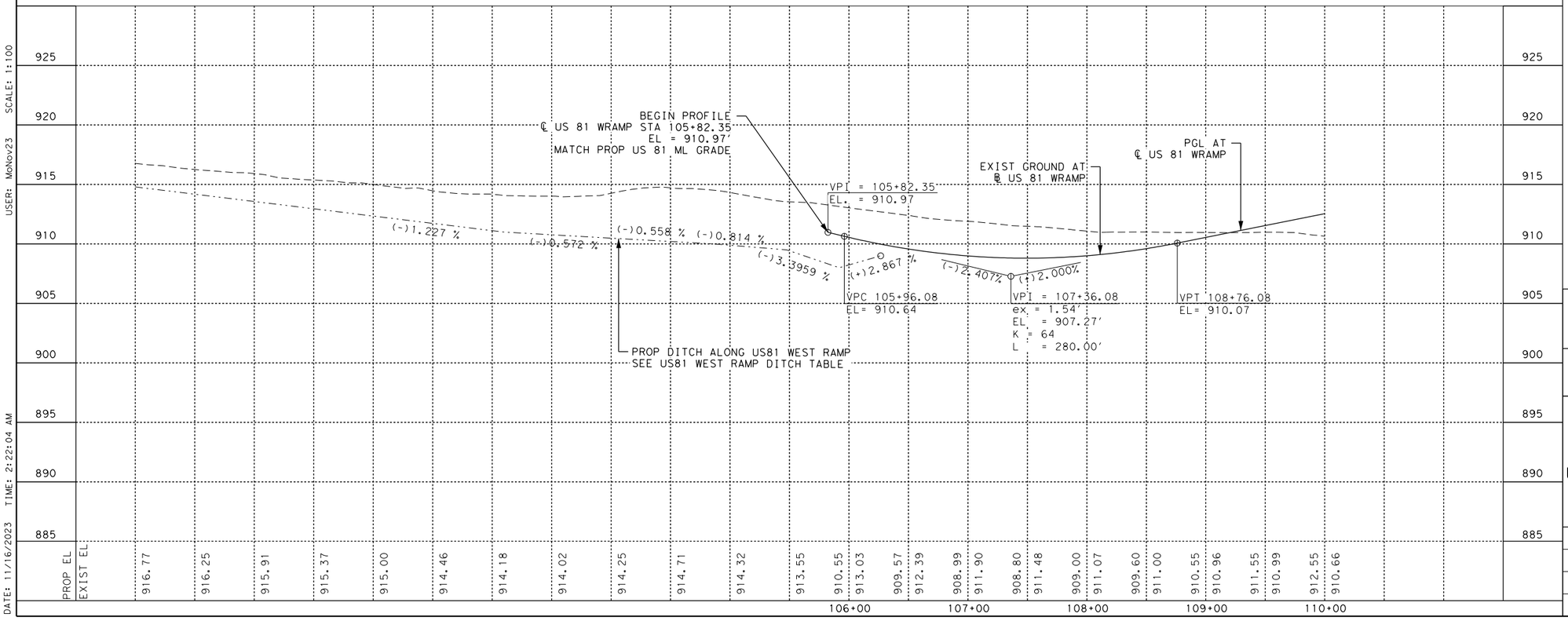
- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
7. VERTICAL ALIGNMENT DATA FOR THE 2" OVERLAY IS SHOWN FOR CONTRACTOR'S REFERENCE ONLY.

SEE US 81 PLAN AND PROFILE SHEETS FOR EXCAVATION AND EMBANKMENT QUANTITIES

SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
	CY	EXCAVATION (ROADWAY)
	CY	EMBANKMENT (ORD COMP) (TY B)



GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

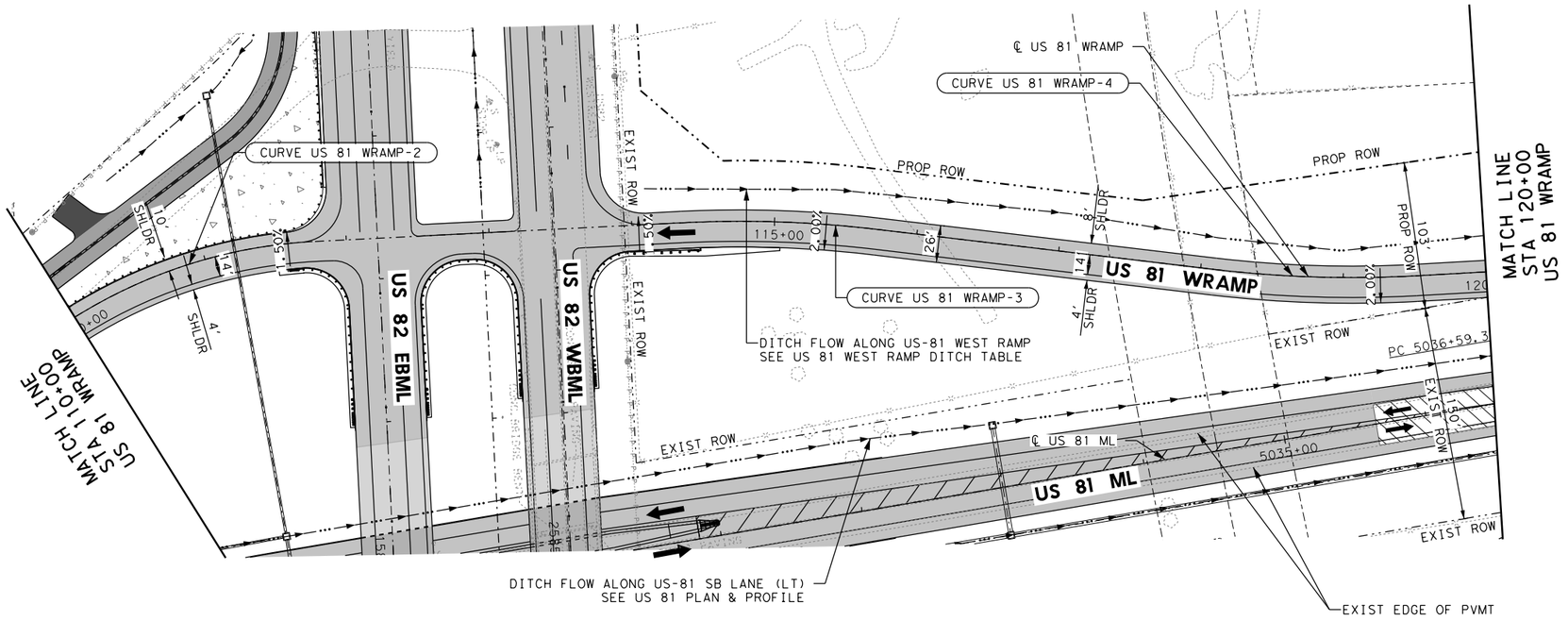
US 82

PLAN AND PROFILE

US 81 WRAMP STA 106+00 TO STA 117+00

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	6	(SEE TITLE SHEET)		US 82
	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	WFS	MONTAGUE	
CHECK	CONTROL	SECTION	JOB	209
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\RDWY\048*US82*20*WRAMP*P&P02.dgn
DATE: 11/16/2023 TIME: 2:22:04 AM
USER: MoNov23
SCALE: 1:100



HORZ 0 50 100
VERT 0 5 10
SCALE IN FEET

LEGEND

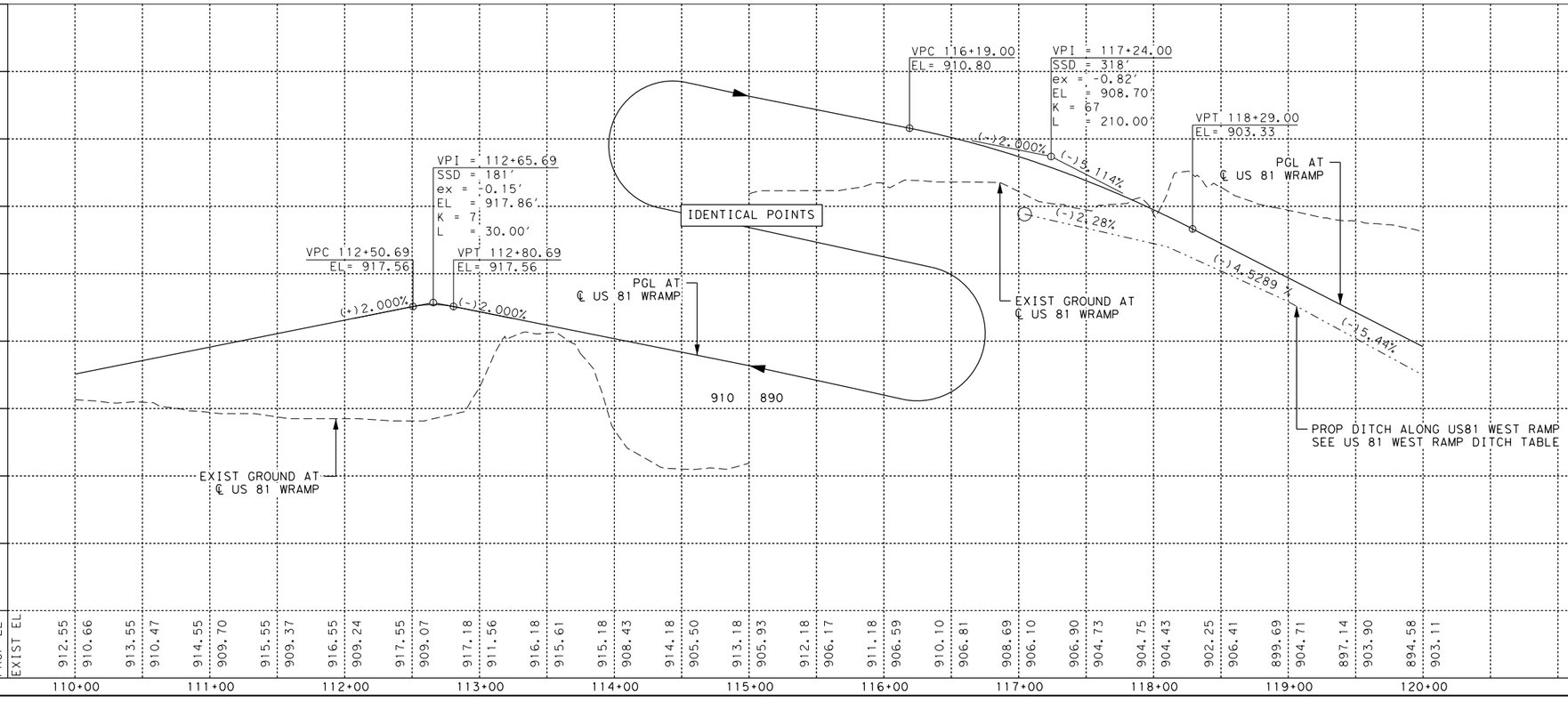
- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
7. VERTICAL ALIGNMENT DATA FOR THE 2" OVERLAY IS SHOWN FOR CONTRACTOR'S REFERENCE ONLY.

SEE US 81 PLAN AND PROFILE SHEETS FOR EXCAVATION AND EMBANKMENT QUANTITIES

SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
	CY	EXCAVATION (ROADWAY)
	CY	EMBANKMENT (ORD COMP) (TY B)



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USER: MoNov23
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DATE: 11/16/2023 TIME: 2:24:09 AM
PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl

MARWAN F. MUWAQUET
81607
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
M.F.Muwaquet
11/16/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

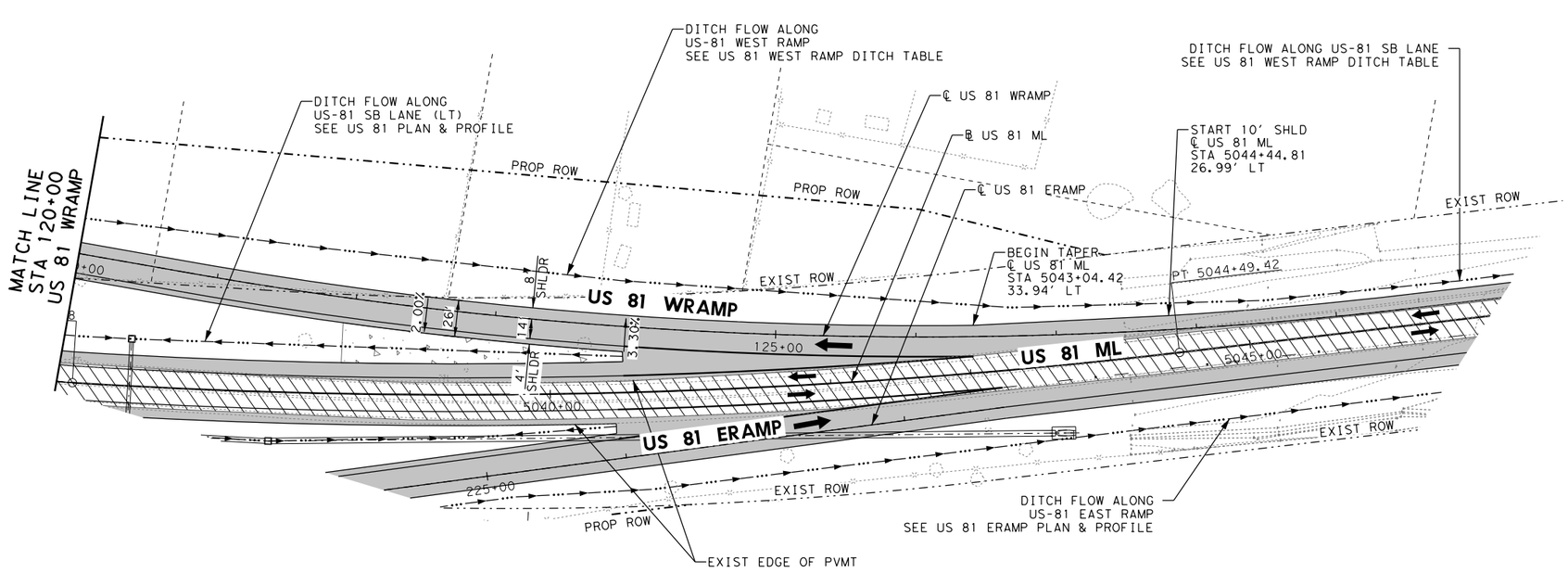
US 82

PLAN AND PROFILE

US 81 WRAMP STA 117+00 TO STA 128+00

SHEET 21 OF 22

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	6	(SEE TITLE SHEET)		US 82
	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	WFS	MONTAGUE	210
CHECK	CONTROL	SECTION	JOB	
	0044	04	048	



HORZ 0 50 100
VERT 0 5 10
SCALE IN FEET

LEGEND

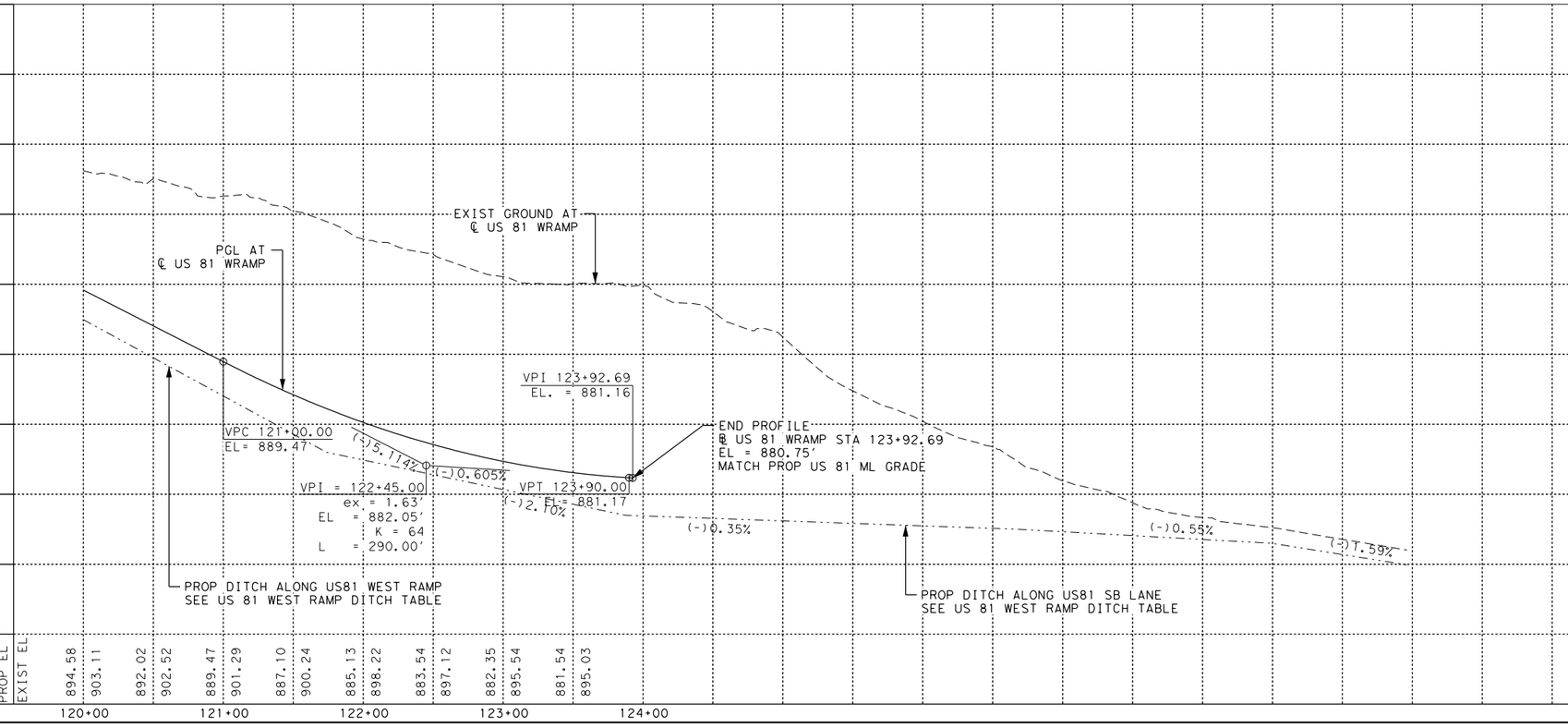
- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE ROADWAY DETAILS SHEETS FOR ADDITIONAL INFORMATION
2. SEE TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
3. SEE BRIDGE LAYOUTS FOR ADDITIONAL INFORMATION.
4. SEE DRAINAGE DETAILS SHEET FOR ADDITIONAL INFORMATION.
5. SEE CROSS SLOPE AND SUPERELEVATION DATA TABLE SHEET FOR ADDITIONAL INFORMATION.
6. SEE ALIGNMENT DATA SHEETS FOR HORIZONTAL AND VERTICAL ALIGNMENT INFORMATION.
7. VERTICAL ALIGNMENT DATA FOR THE 2" OVERLAY IS SHOWN FOR CONTRACTOR'S REFERENCE ONLY.

SEE US 81 PLAN AND PROFILE SHEETS FOR EXCAVATION AND EMBANKMENT QUANTITIES

SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
	CY	EXCAVATION (ROADWAY)
	CY	EMBANKMENT (ORD COMP) (TY B)



GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

PLAN AND PROFILE
US 81 WRAMP STA 128+00 TO END

SHEET 22 OF 22

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	6	(SEE TITLE SHEET)		US 82
	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	WFS	MONTAGUE	
CHECK	CONTROL	SECTION	JOB	211
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
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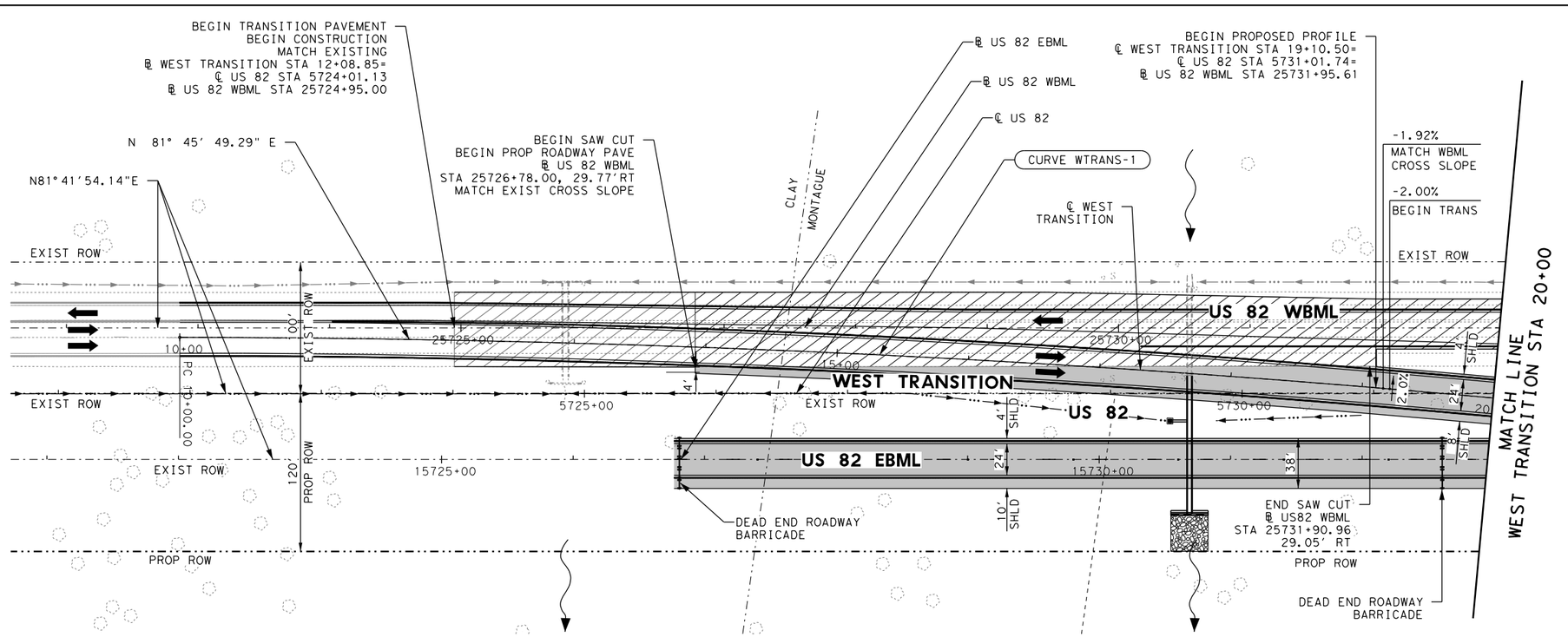


HORZ 0 50 100
VERT 0 5 10
SCALE IN FEET

LEGEND

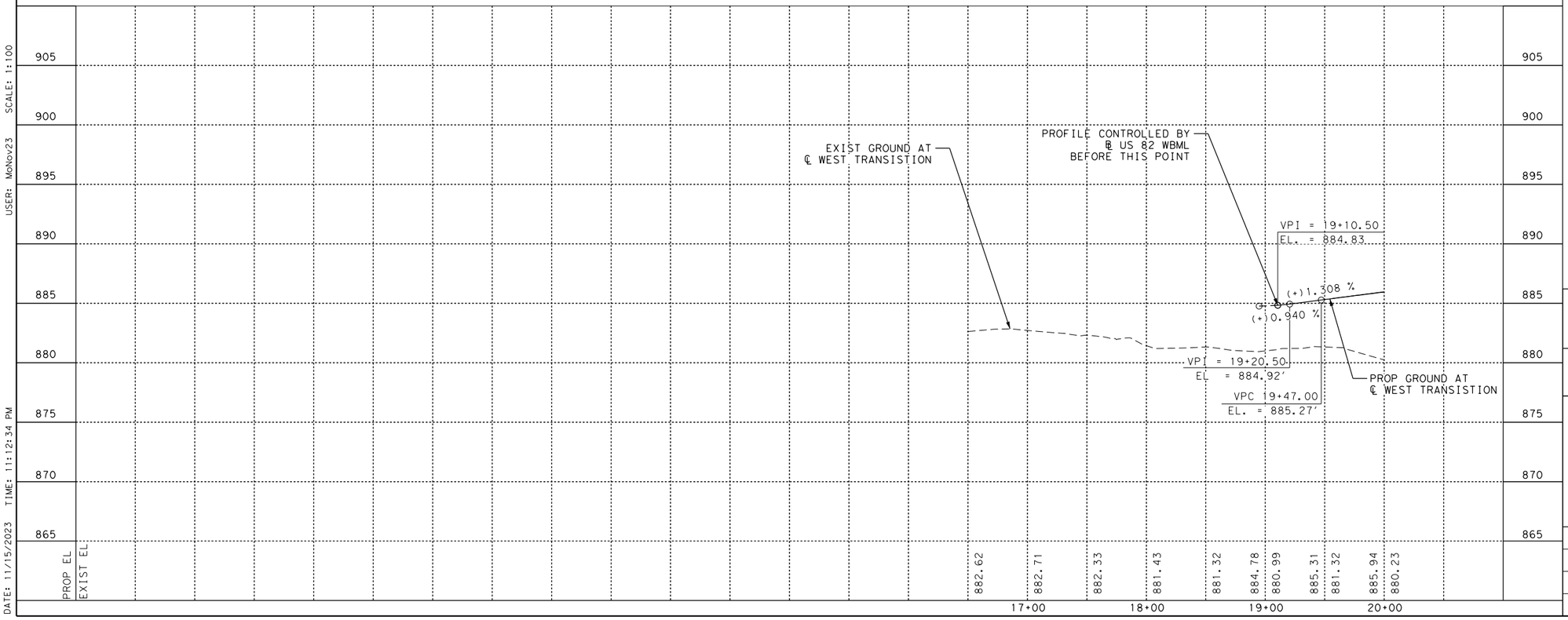
- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE MAINLANE PLAN AND PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

SEE US 82 PLAN AND PROFILE SHEET 1 OF 8 AND 2 OF 8 FOR EXCAVATION AND EMBANKMENT QUANTITIES

SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
	CY	EXCAVATION (ROADWAY)
	CY	EMBANKMENT (ORD COMP) (TY B)



STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED
PROFESSIONAL ENGINEER
M.F.Muwaquet
11/15/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

PLAN AND PROFILE
WEST TRANSITION
BEGIN TO STA 20+00

SHEET 1 OF 2

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	6	(SEE TITLE SHEET)		US 82
	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	WFS	MONTAGUE	
CHECK	CONTROL	SECTION	JOB	212
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
SCALE: 1:100
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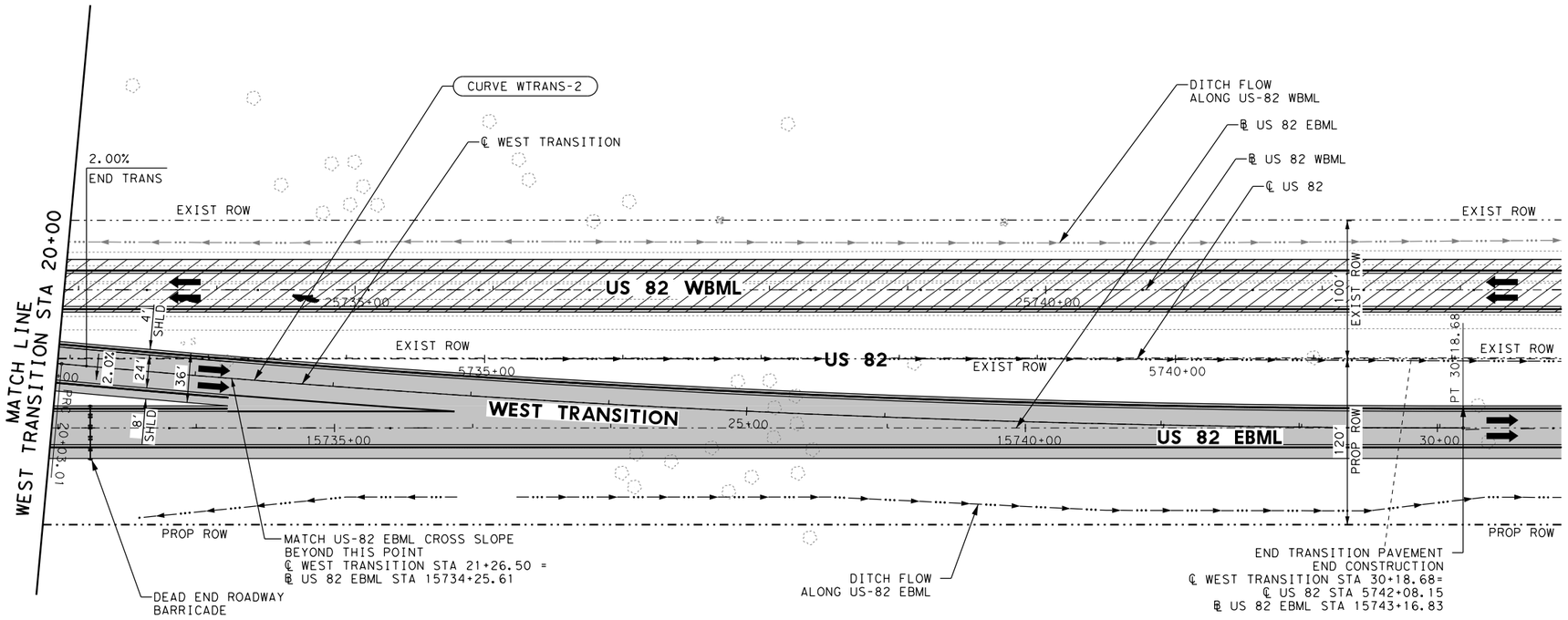


HORZ 0 50 100
VERT 0 5 10
SCALE IN FEET

LEGEND

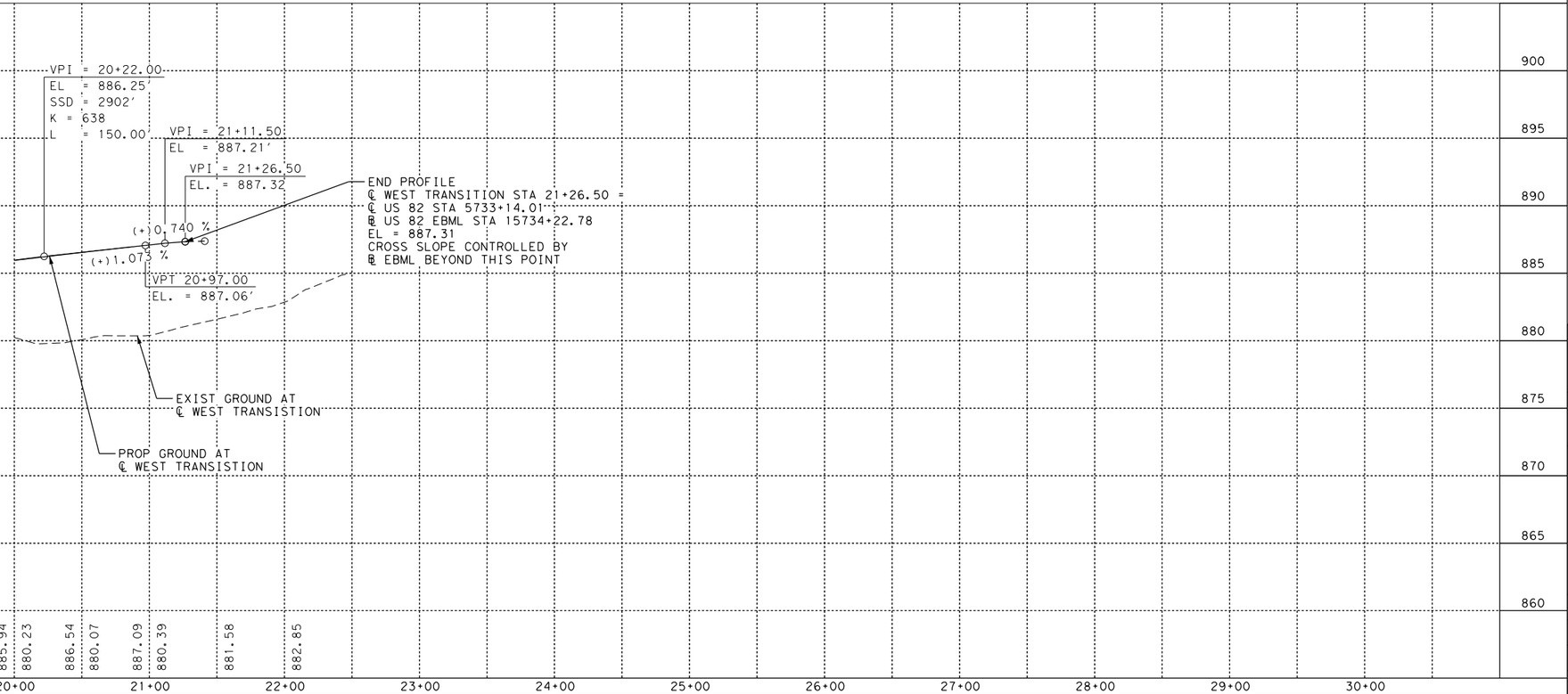
- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE MAINLANE PLAN AND PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
	CY	EXCAVATION (ROADWAY)
	CY	EMBANKMENT (ORD COMP) (TY B)

SEE US 82 PLAN AND PROFILE SHEET 1 OF 8 AND 2 OF 8 FOR EXCAVATION AND EMBANKMENT QUANTITIES



STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED
PROFESSIONAL ENGINEER
M.F. Muwaquet
11/15/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

US 82

PLAN AND PROFILE
WEST TRANSITION
STA 20+00 TO END

SHEET 2 OF 2

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
GRAPHICS	6	(SEE TITLE SHEET)		US 82
	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK	TEXAS	WFS	MONTAGUE	
CHECK	CONTROL	SECTION	JOB	213
	0044	04	048	

PLOT DRIVER: US82+BW+HALF+PDF+LineWT+Modified.pltcfg
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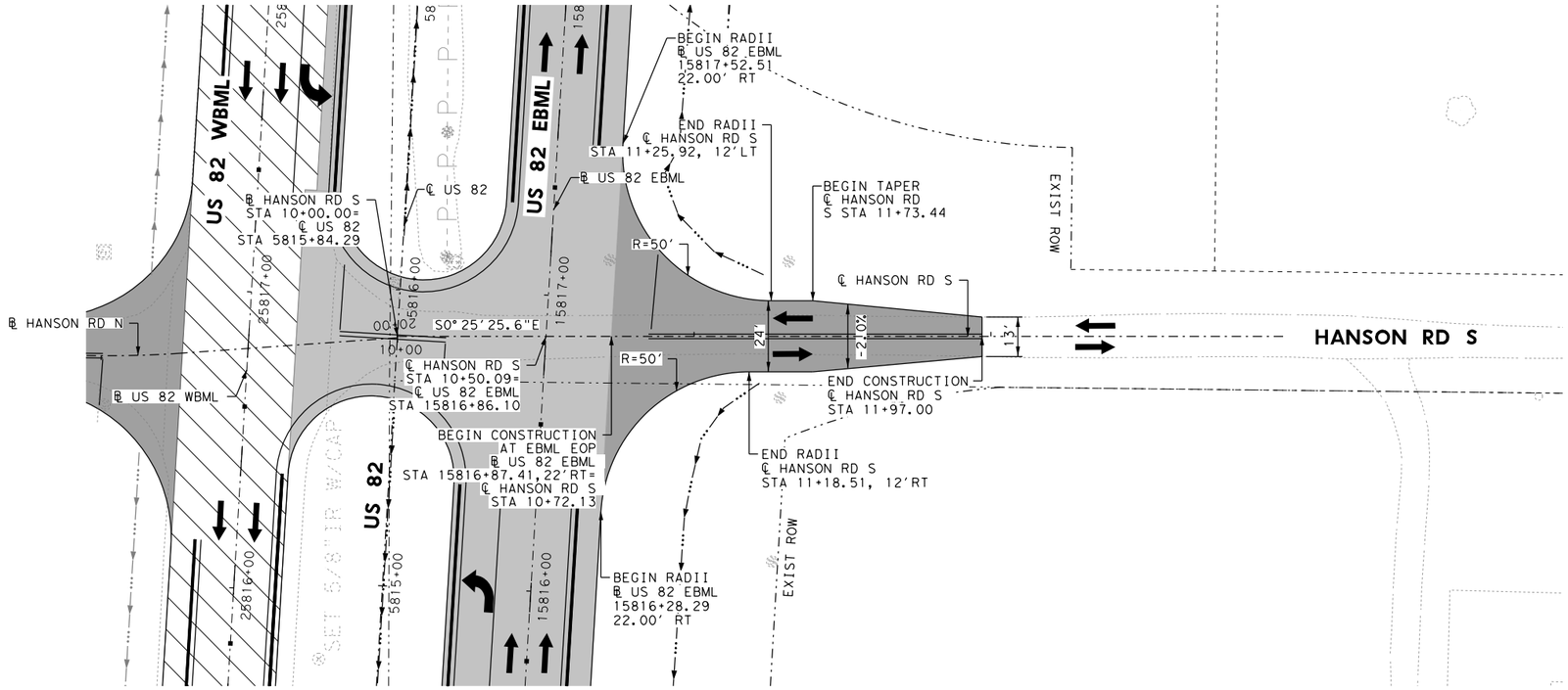

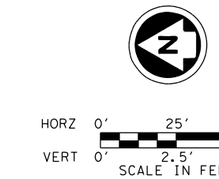

LEGEND

- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE MAINLANE PLAN AND PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

								0	0	16	127	94	37	24	16	0	0							
								0	0	0	12	0	0	0	0	0	0							
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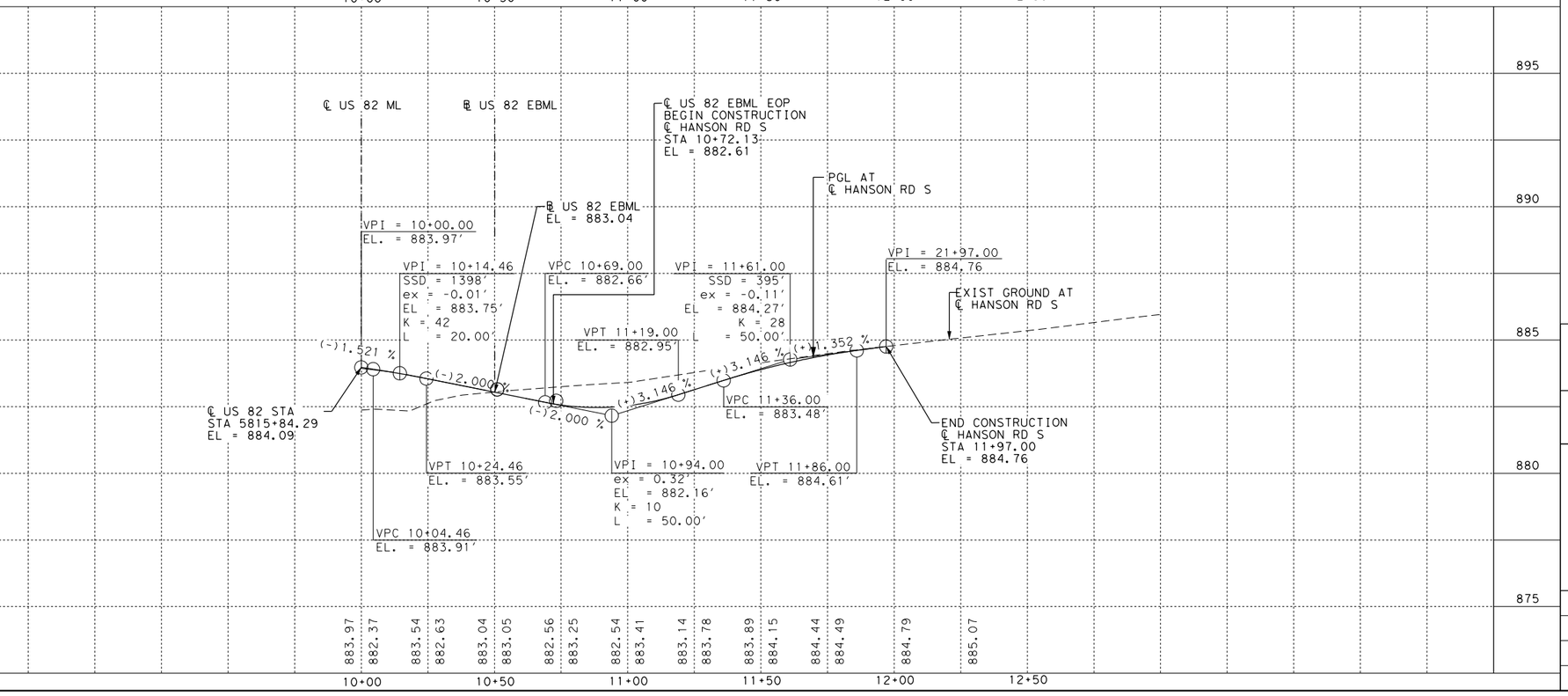


SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
315	CY	EXCAVATION (ROADWAY)
14	CY	EMBANKMENT (ORD COMP) (TY B)

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED PROFESSIONAL ENGINEER
M.F.Muwaquet
11/15/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

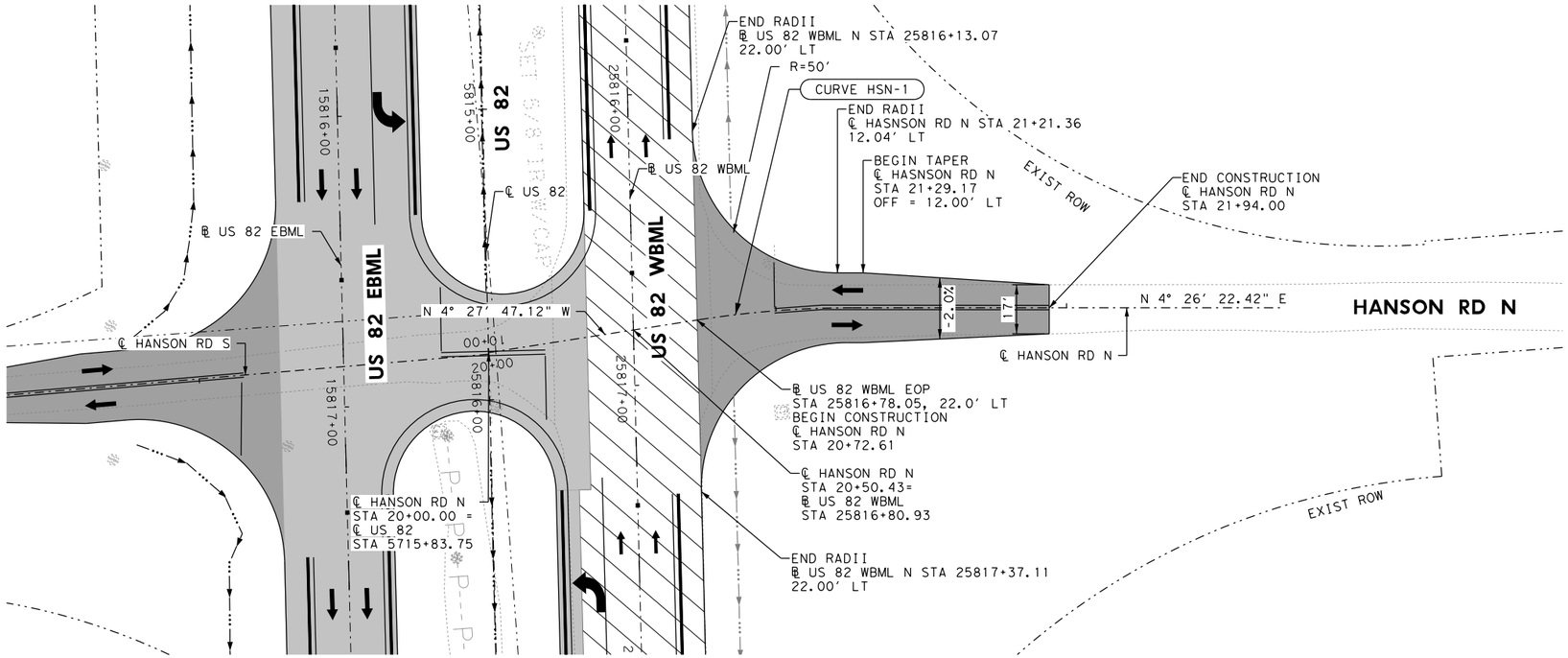
US 82

PLAN & PROFILE
HANSON RD S

SHEET 1 OF 1

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	214
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
SCALE: 1:50
USER: MoNov23
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\RDWY\048*US82*XST*01*HANSON*RD*S*P&P.dgn
DATE: 11/15/2023 TIME: 11:19:04 PM



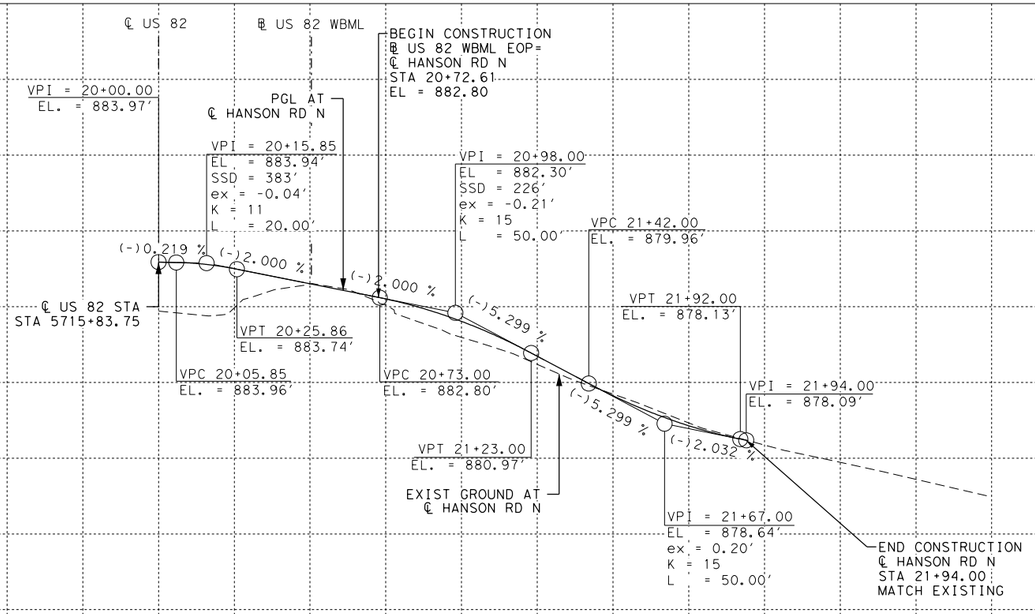
HORZ 0' 25' 50'
VERT 0' 2.5' 5'
SCALE IN FEET

LEGEND

- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE MAINLANE PLAN AND PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.



SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
123	CY	EXCAVATION (ROADWAY)
16	CY	EMBANKMENT (ORD COMP) (TY B)

									0	0	21	31	19	19	22	11							
									0	0	2	3	3	4	2	1							

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED
PROFESSIONAL ENGINEER
M.F.Muwaquet
11/15/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

PLAN & PROFILE
HANSON RD N

SHEET 1 OF 1

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	215
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82+BW+HALF+PDF+LineWT+Modified.pltcfg
PENTABLE: US82+PEN.tbl
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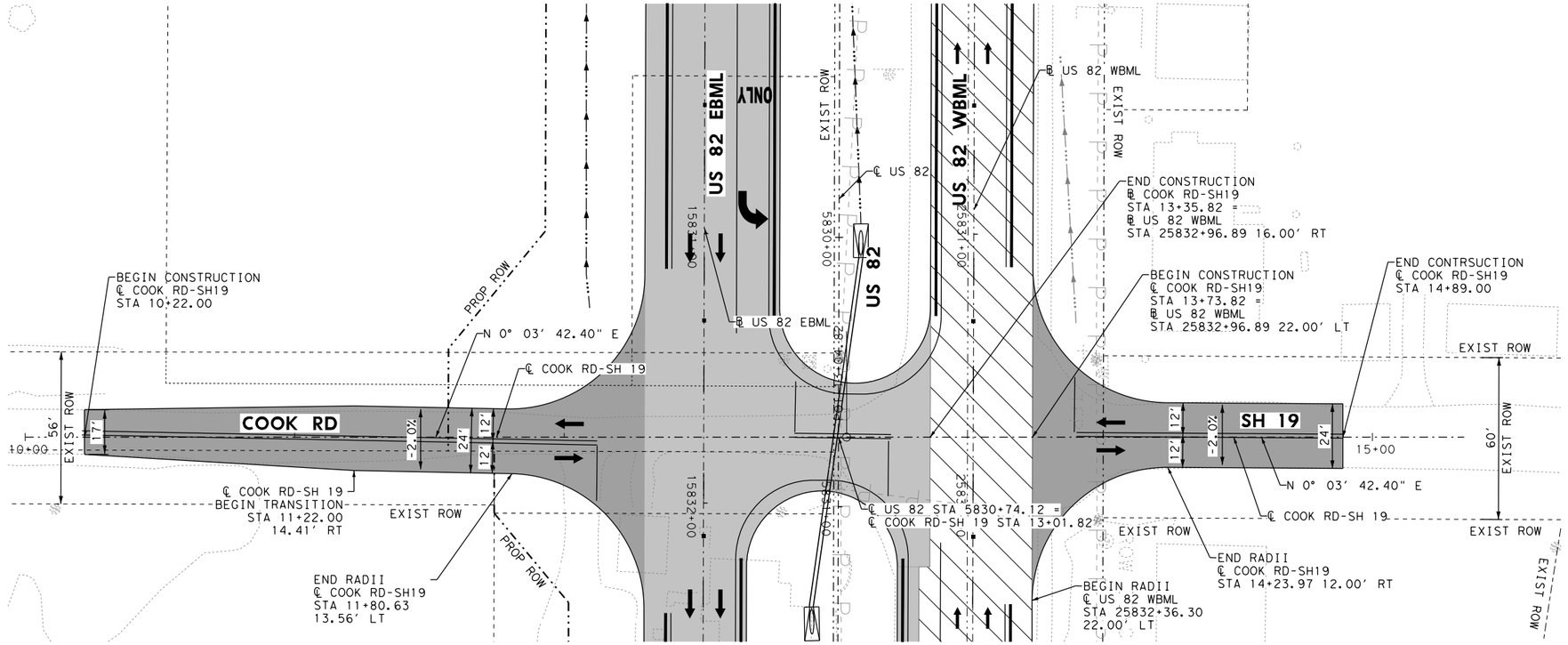
USER: MoNov23
SCALE: 1:50
DATE: 11/15/2023 TIME: 11:19:34 PM



HORZ 0′ 25′ 50′
VERT 0′ 2.5′ 5′
SCALE IN FEET

LEGEND

- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE MAINLANE PLAN AND PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

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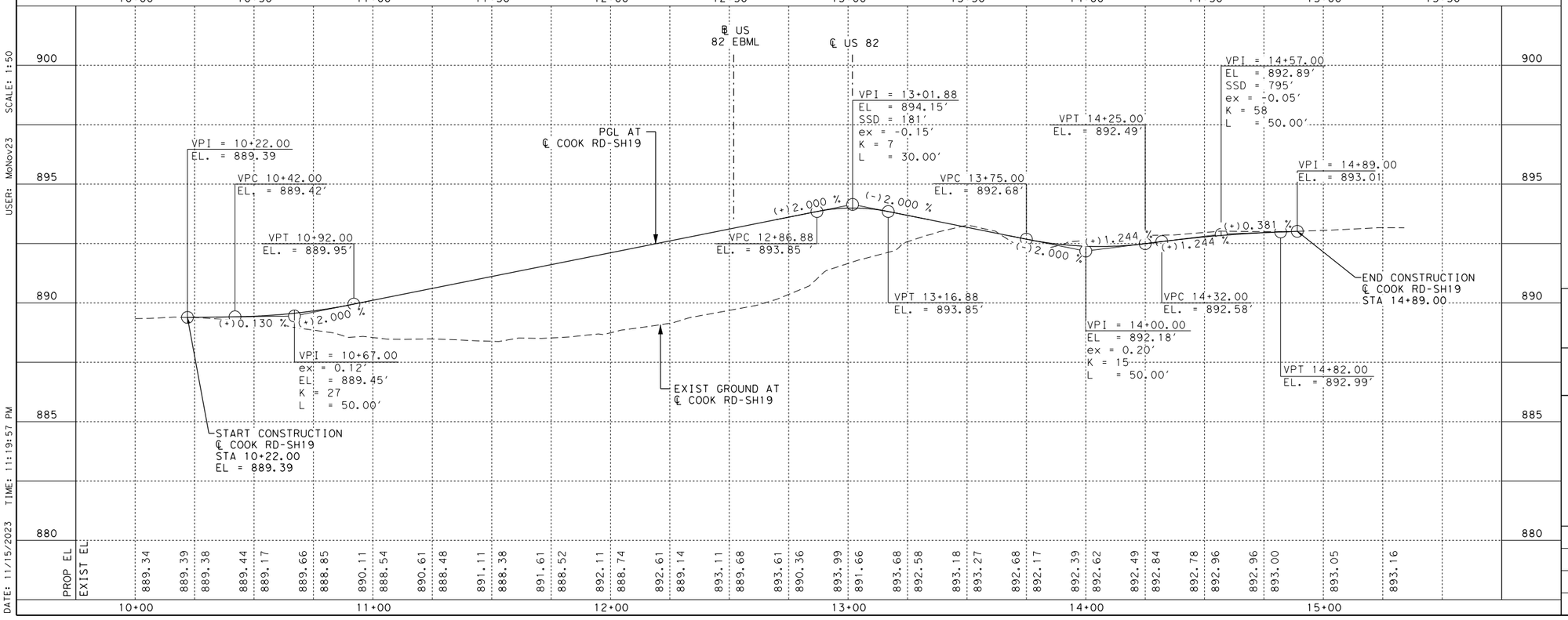
		0	1	7	33	51	61	84	108	206	144	0	0	0	0	3	3	0	0	0	0	0	0		

10+00 10+50 11+00 11+50 12+00 12+50 13+00 13+50 14+00 14+50 15+00 15+50



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EXIST EL		889.34	889.39	889.38	889.44	889.17	889.66	888.85	890.11	888.54	890.61	888.48	891.11	888.38	891.61	888.52	892.11	888.74	892.61	889.14	893.11	889.68	893.61	890.36	893.99

PROP EL	891.66	893.68	892.58	893.18	893.27	892.68	892.17	892.39	892.62	892.49	892.84	892.78	892.96	892.96	893.00	893.05	893.16								
EXIST EL	891.66	893.68	892.58	893.18	893.27	892.68	892.17	892.39	892.62	892.49	892.84	892.78	892.96	892.96	893.00	893.05	893.16								

10+00 11+00 12+00 13+00 14+00 15+00

SCALE: 1:50

SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
259	CY	EXCAVATION (ROADWAY)
701	CY	EMBANKMENT (ORD COMP) (TY B)

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED
PROFESSIONAL ENGINEER
M.F. Muwaquet
11/15/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

US 82

PLAN & PROFILE
COOK ROAD & SH 19 LOOP

SHEET 1 OF 1

DESIGN	DIV.	FED.RD. NO.	FEDERAL AID PROJECT NO.	HIGHWAY NO.
MS	8	6	(SEE TITLE SHEET)	US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	216
CHECK FS	CONTROL 0044	SECTION 04	JOB 048	

PLOT DRIVER: US82+BW+HALF+PDF+LineWT+Modified.pltcfg
PENTABLE: US82+PEN.tbl
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USER: MoNov23
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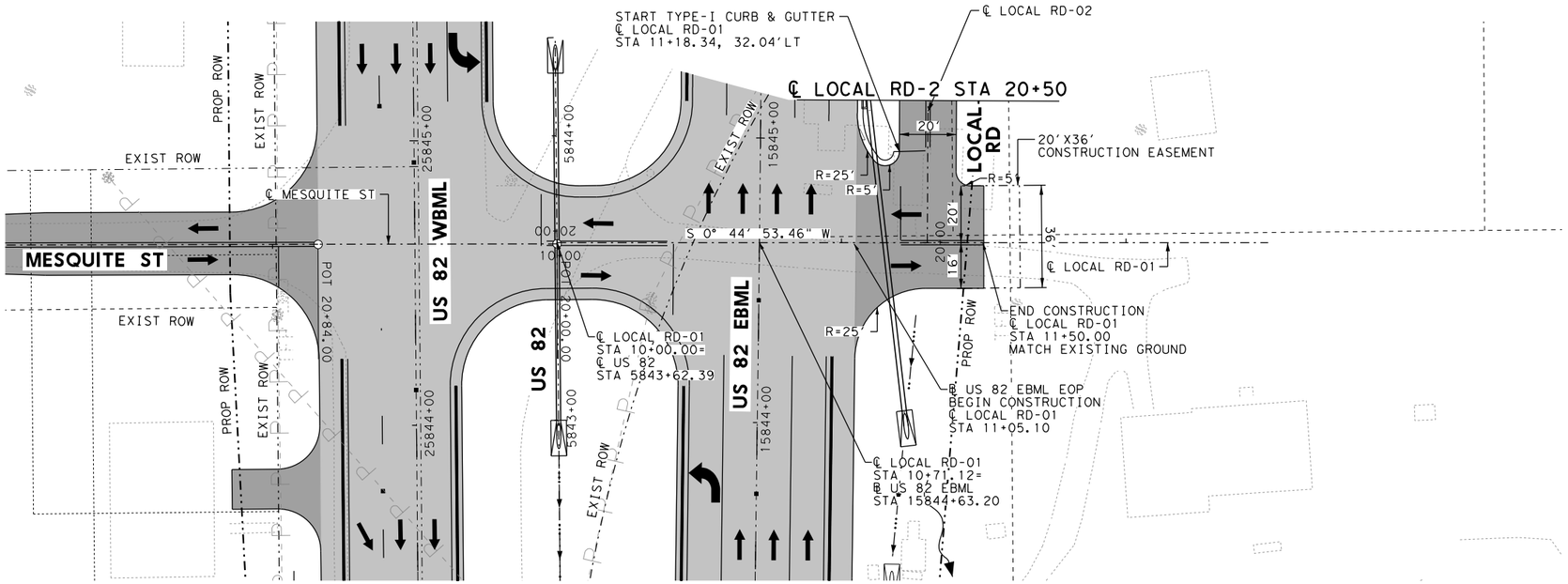


HORZ 0' 25' 50'
VERT 0' 2.5' 5'
SCALE IN FEET

LEGEND

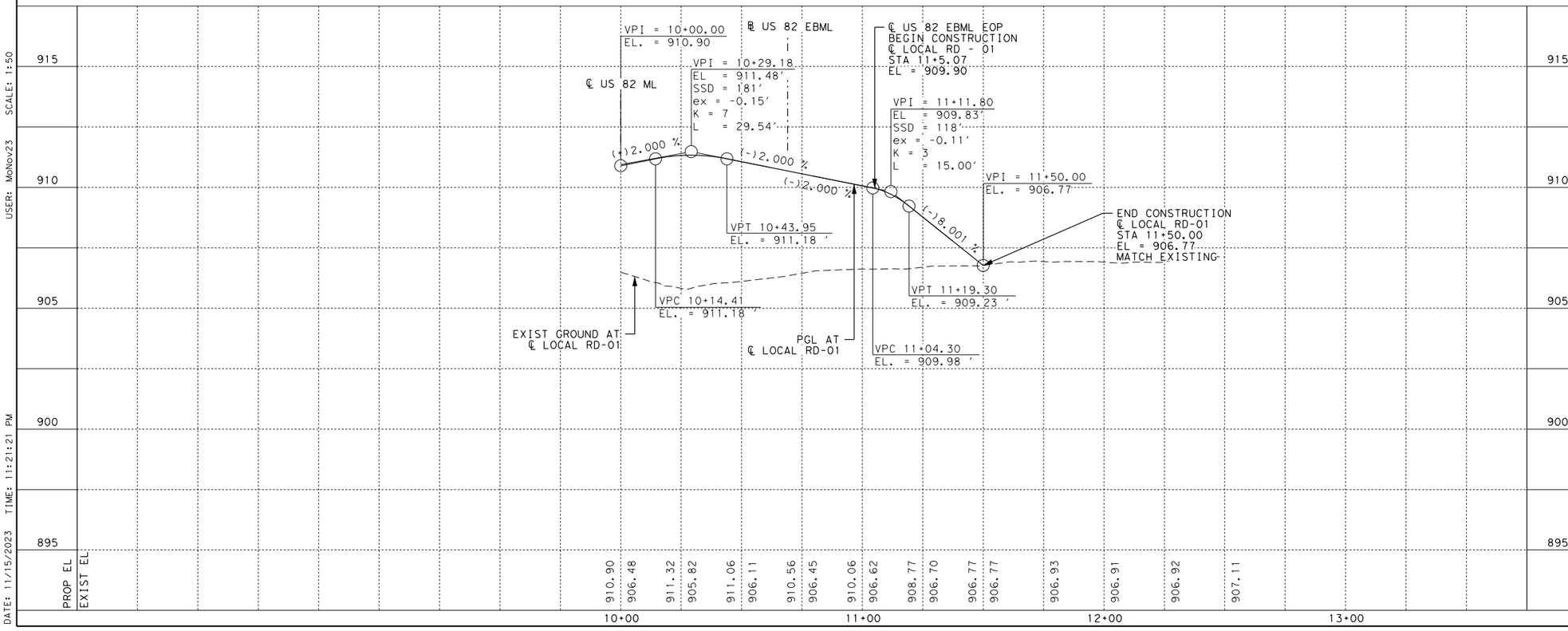
- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE MAINLANE PLAN AND PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
	CY	EXCAVATION (ROADWAY)
	CY	EMBANKMENT (ORD COMP) (TY B)

SEE US 82 PLAN AND PROFILE SHEET 6 OF 8 FOR EXCAVATION AND EMBANKMENT QUANTITIES



STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED
PROFESSIONAL ENGINEER
M.F.Muwaquet
11/15/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

PLAN & PROFILE
LOCAL RD

SHEET 1 OF 3

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	217
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
PENTABLE: US82*PEN.tbl
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USER: MoNov23 SCALE: 1:50
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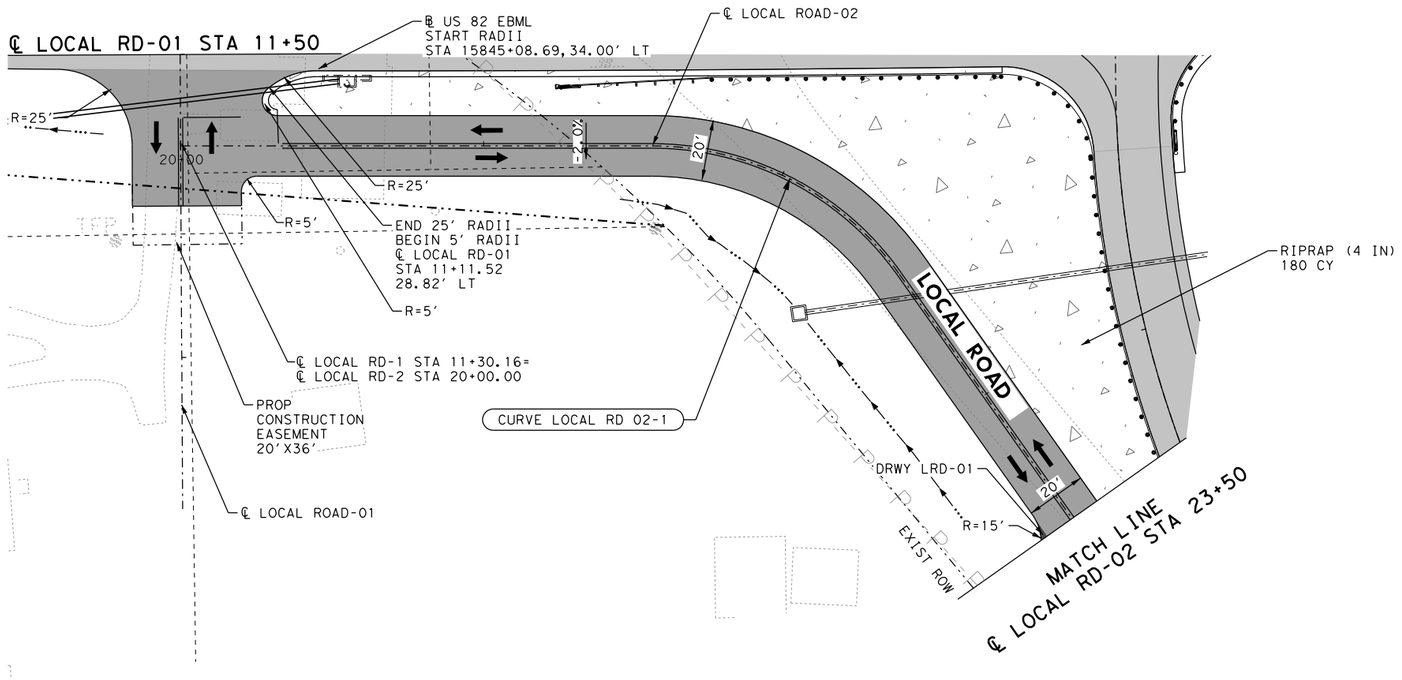
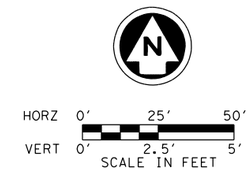




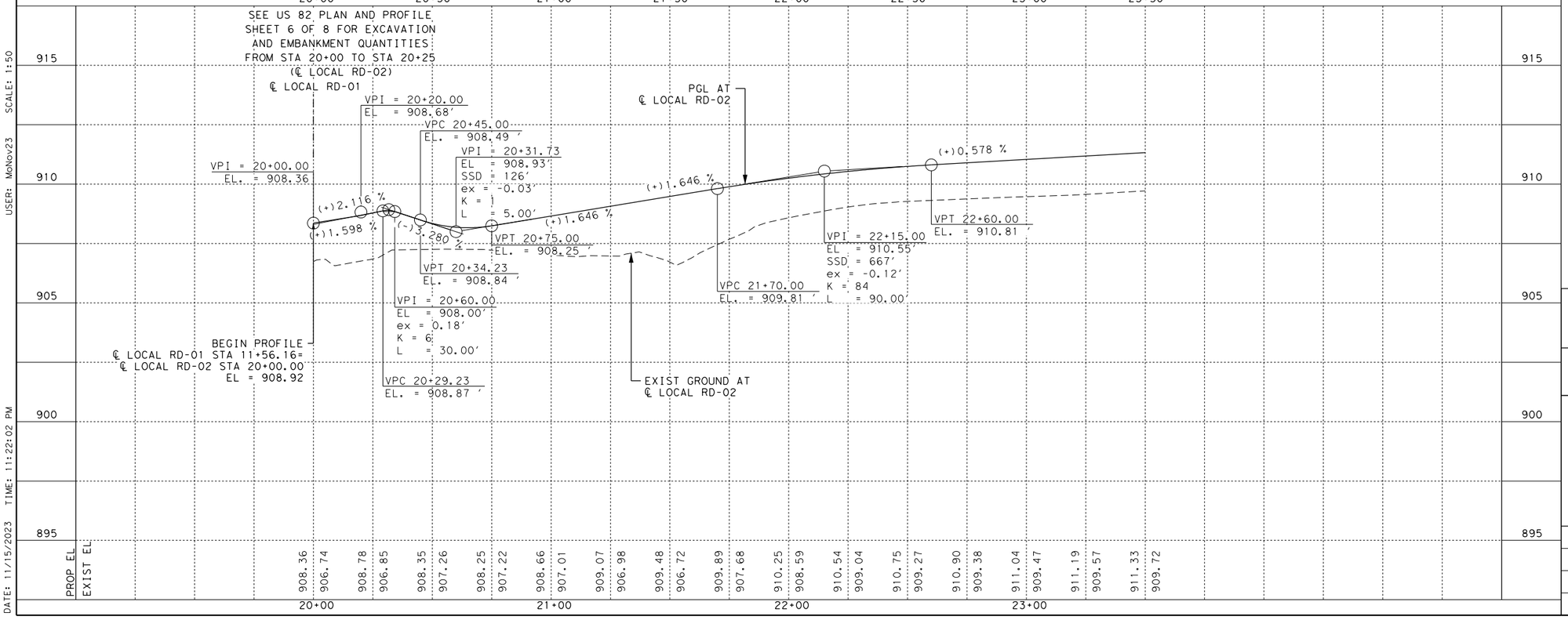
LEGEND

- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP
- SSCB

NOTES:

1. SEE MAINLANE PLAN AND PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

						2	2	1	0	0	1	2	9	21	26	25	26	14							
						72	79	62	85	100	105	119	177	246	232	171	127	95							
					20+00	20+50		21+00		21+50		22+00		22+50		23+00		23+50							



SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
129	CY	EXCAVATION (ROADWAY)
1670	CY	EMBANKMENT (ORD COMP) (TY B)

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED
PROFESSIONAL ENGINEER
M.F. Muwaquet
11/15/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

US 82

PLAN & PROFILE
LOCAL RD

SHEET 2 OF 3

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	218
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWt*Modified.pltcfg
PENTABLE: US82*PEN.tbl
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USER: MoNov23
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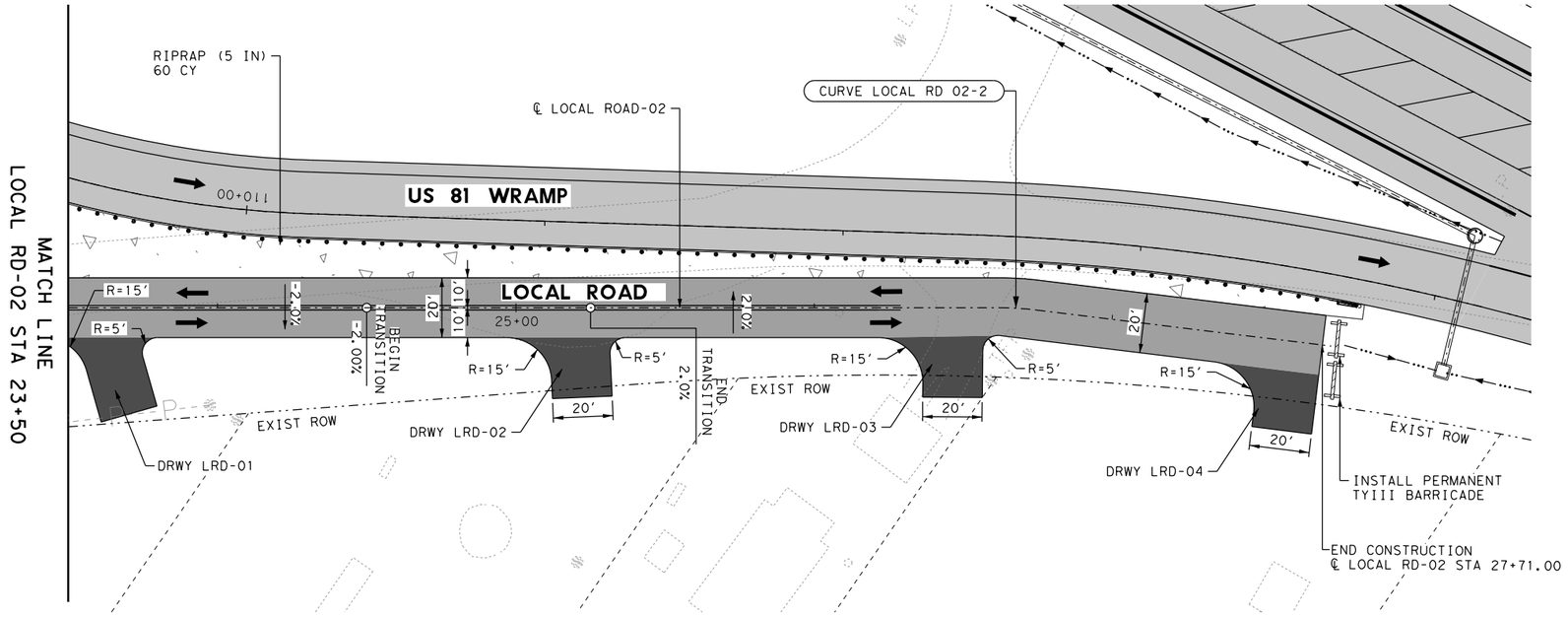
DATE: 11/15/2023 TIME: 11:22:02 PM



HORZ 0′ 25′ 50′
VERT 0′ 2.5′ 5′
SCALE IN FEET

LEGEND

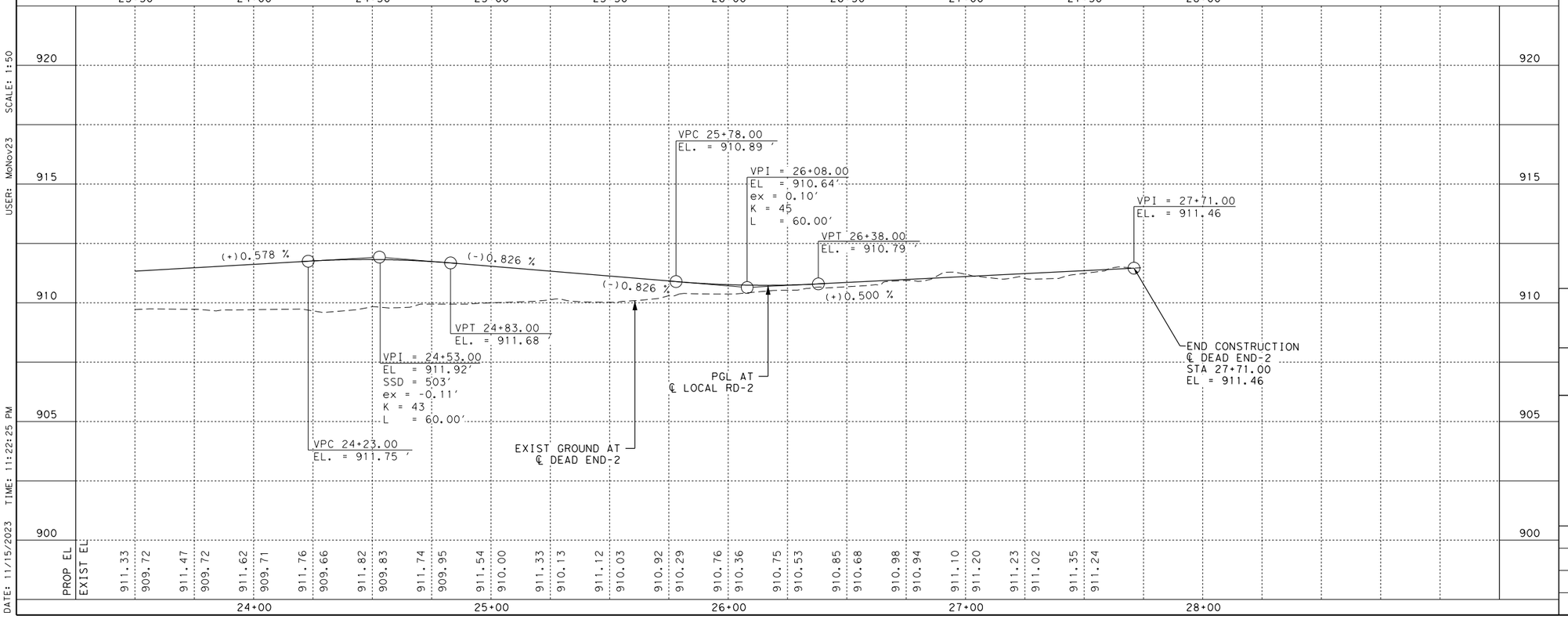
- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP
- SSCB

NOTES:

1. SEE MAINLANE PLAN AND PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

		1	1	0	0	0	0	3	6	10	16	21	30	34	34	33	32	24								
		70	59	56	48	38	27	15	8	5	4	3	1	0	0	1	1	0								

SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
245	CY	EXCAVATION (ROADWAY)
336	CY	EMBANKMENT (ORD COMP) (TY B)



STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED
PROFESSIONAL ENGINEER
M.F.Muwaquet
11/15/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

US 82

PLAN & PROFILE
LOCAL RD

SHEET 3 OF 3

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	219
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82+BW+HALF+PDF+LineWT+Modified.pltcfg
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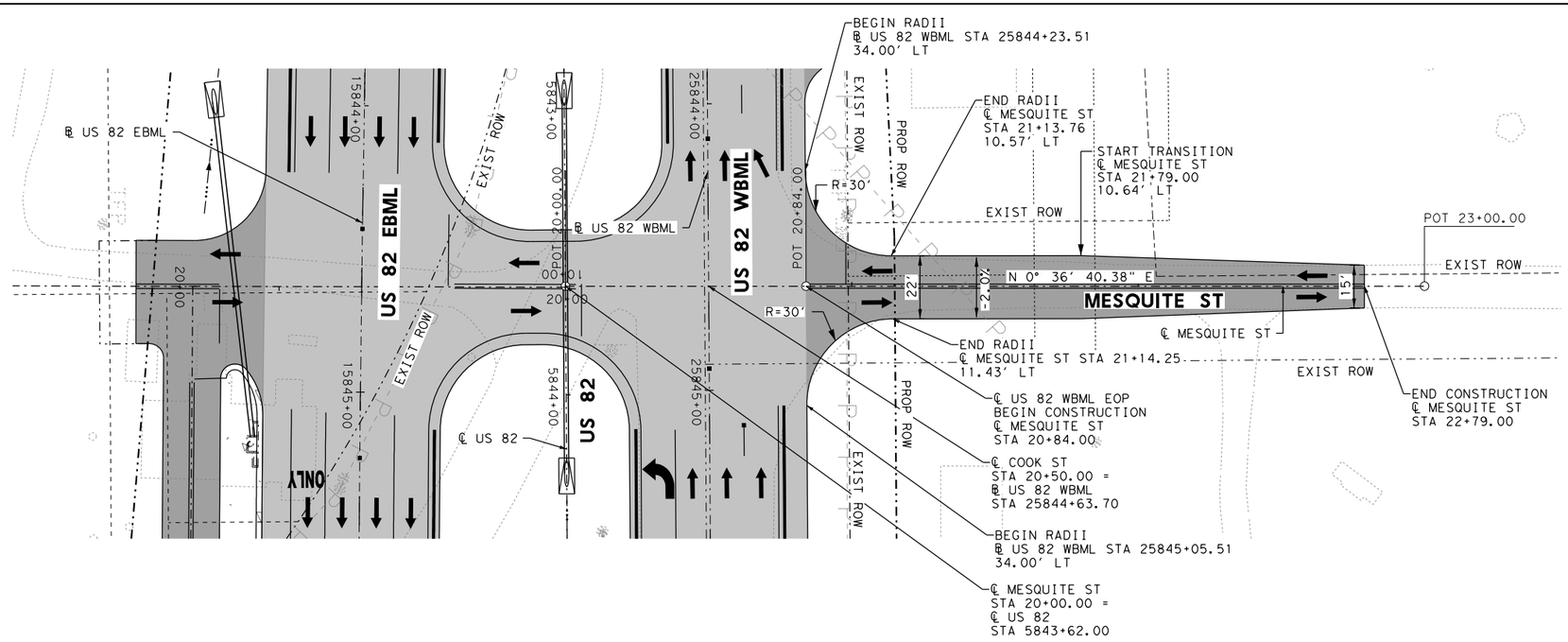


HORZ 0' 25' 50'
VERT 0' 2.5' 5'
SCALE IN FEET

LEGEND

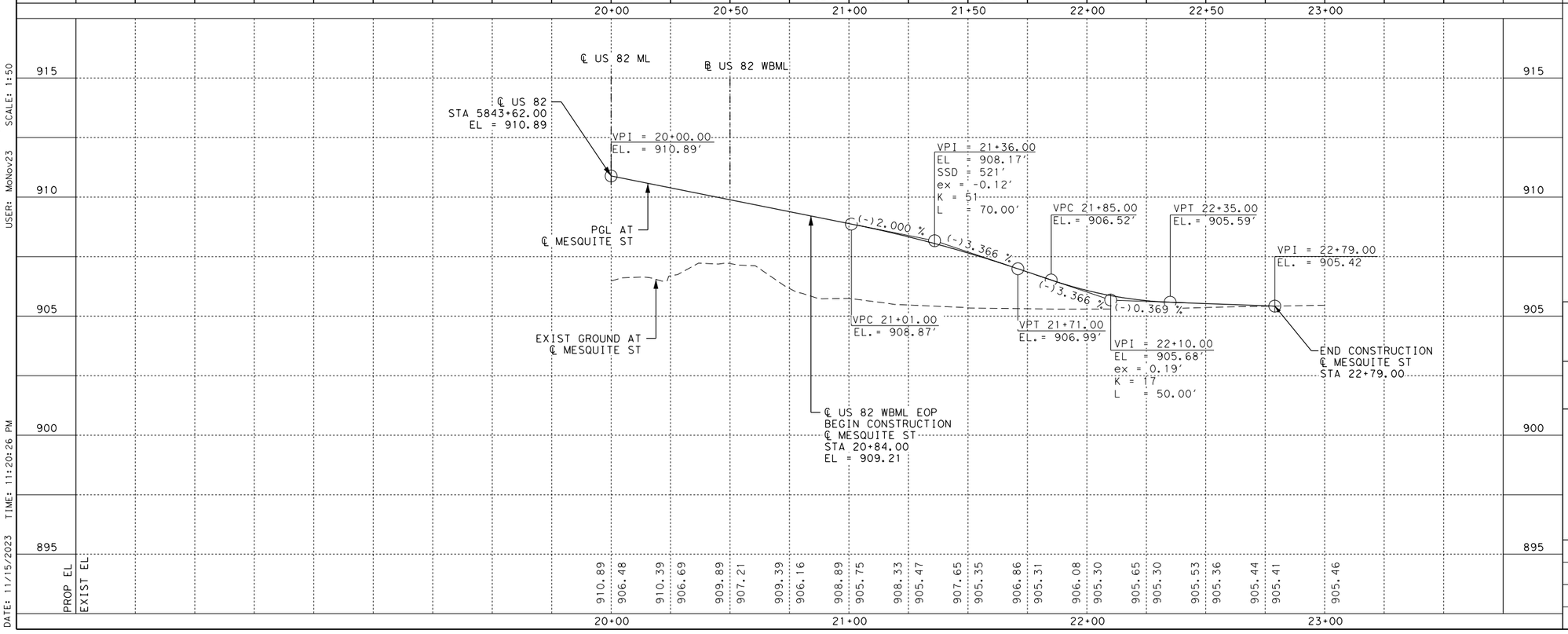
- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE MAINLANE PLAN AND PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
108	CY	EXCAVATION (ROADWAY)
241	CY	EMBANKMENT (ORD COMP) (TY B)

										0	0	0	0	0	0	4	16	27	30	23	8	
										0	0	0	62	90	45	25	11	5	2	1	0	



STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED
PROFESSIONAL ENGINEER
M.F.Muwaquet
11/15/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

US 82

PLAN & PROFILE
MESQUITE ST

SHEET 1 OF 1

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	220
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82+BW+HALF+PDF+LineWT+Modified.pltcfg
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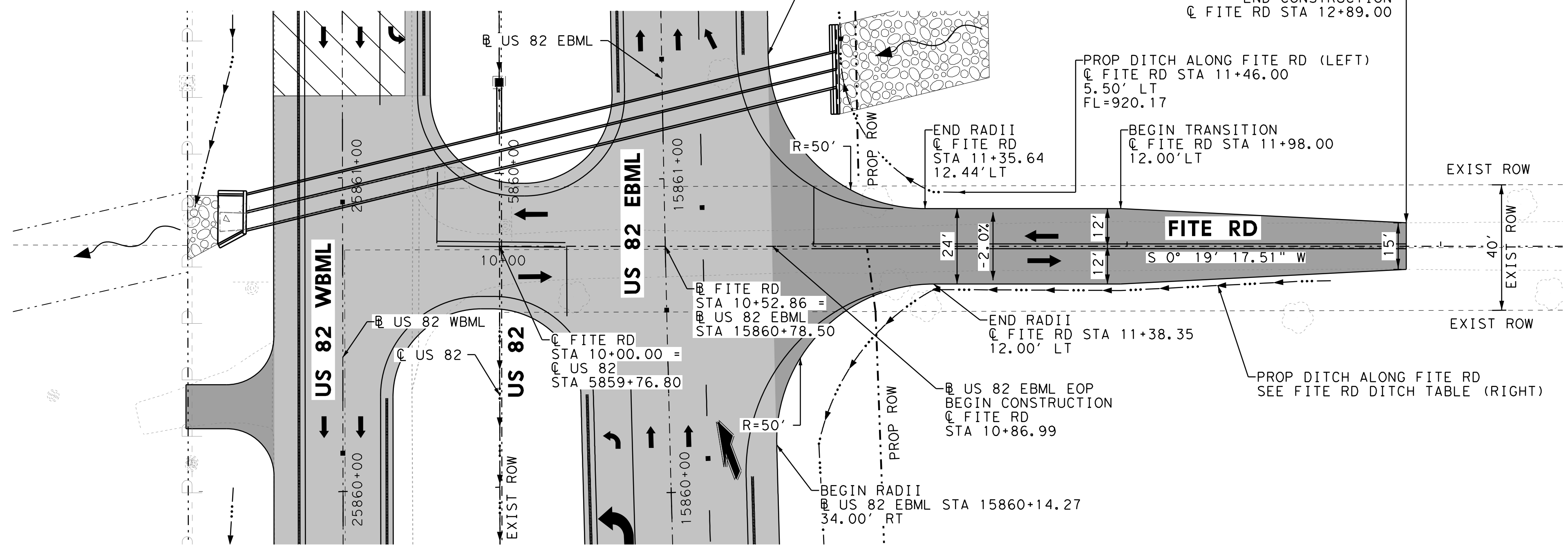


HORZ 0' 25' 50'
VERT 0' 2.5' 5'
SCALE IN FEET

LEGEND

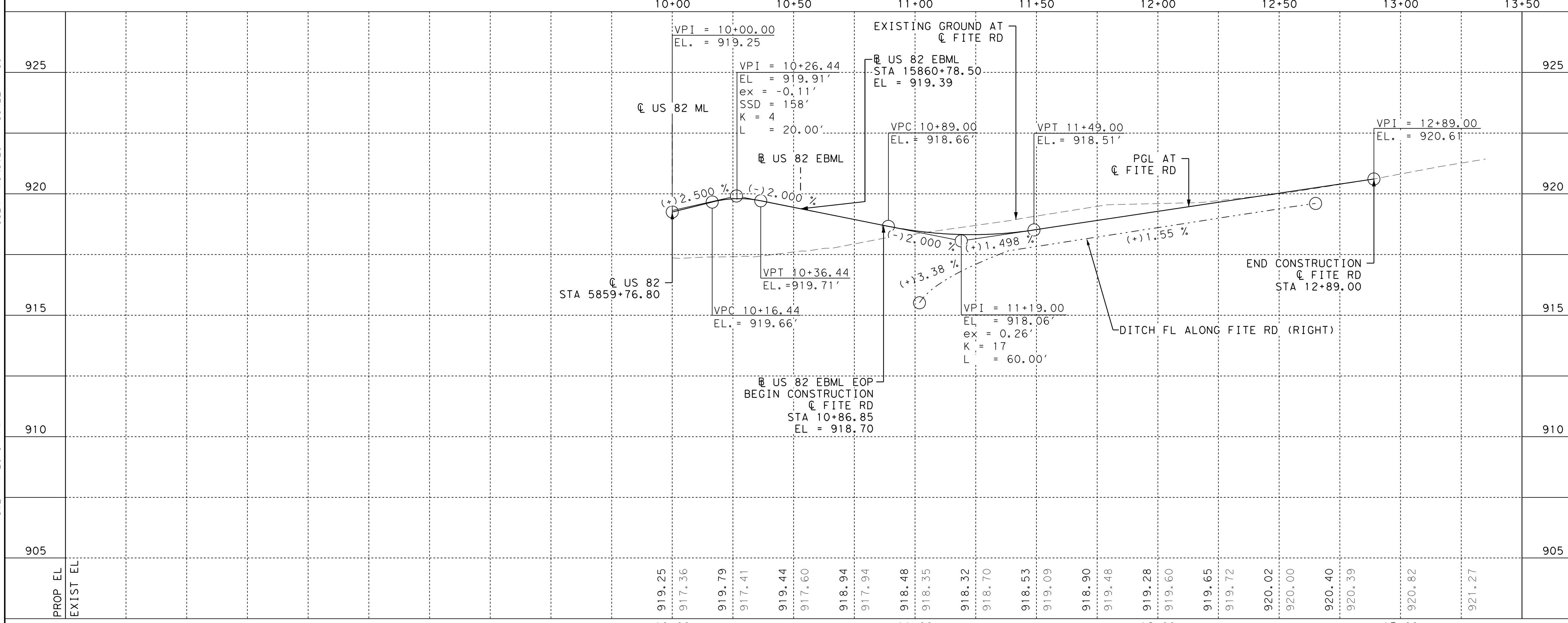
- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP

NOTES:

1. SEE MAINLANE PLAN AND PROFILE SHEETS FOR ADDITIONAL INFORMATION.
2. SEE INTERSECTION LAYOUT SHEETS FOR ADDITIONAL INFORMATION.

													0	144	254	154	75	59	50	42	32	9	0	0
													0	0	0	0	0	0	1	2	3	2	0	0

SHEET TOTALS		
FINAL	UNIT	DESCRIPTION
819	CY	EXCAVATION (ROADWAY)
8	CY	EMBANKMENT (ORD COMP) (TY B)



STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED PROFESSIONAL ENGINEER
M.F. Muwaquet
11/15/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

PLAN & PROFILE
FITE RD

SHEET 1 OF 1

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	221
CHECK FS	CONTROL 0044	SECTION 04	JOB 048	

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PENTABLE: US82*PEN.tbl

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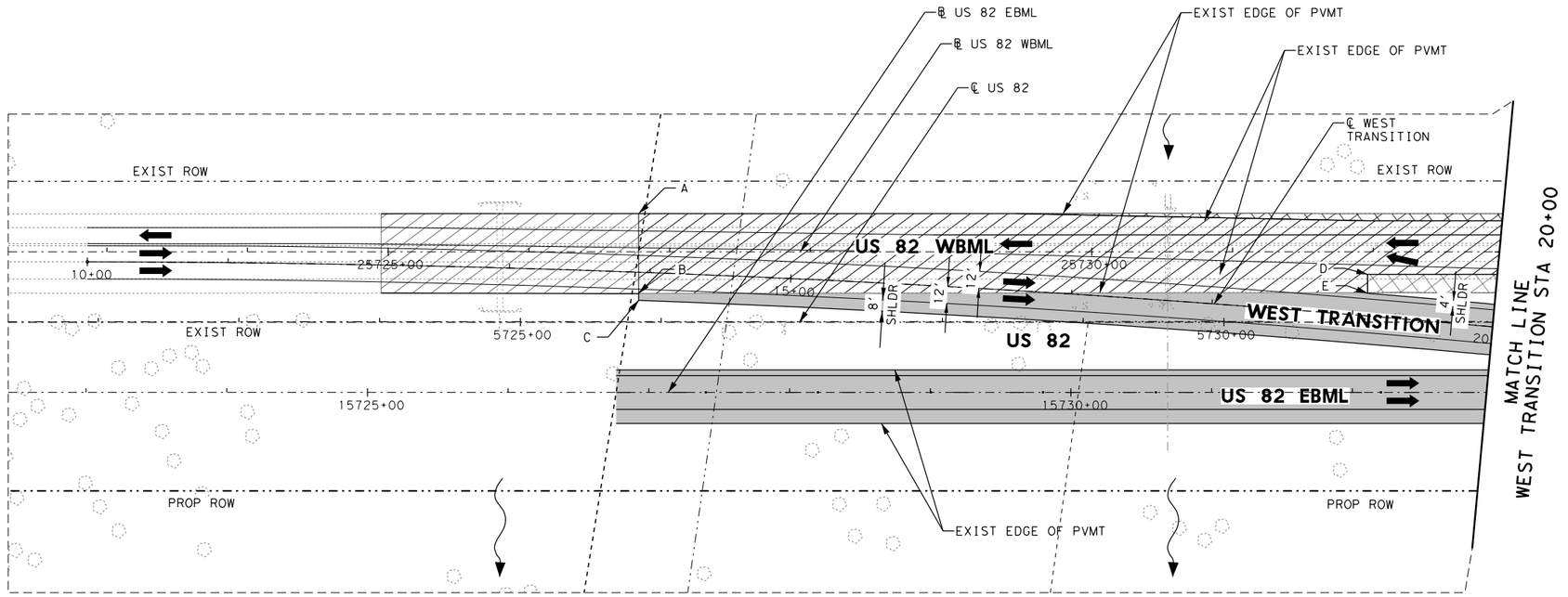

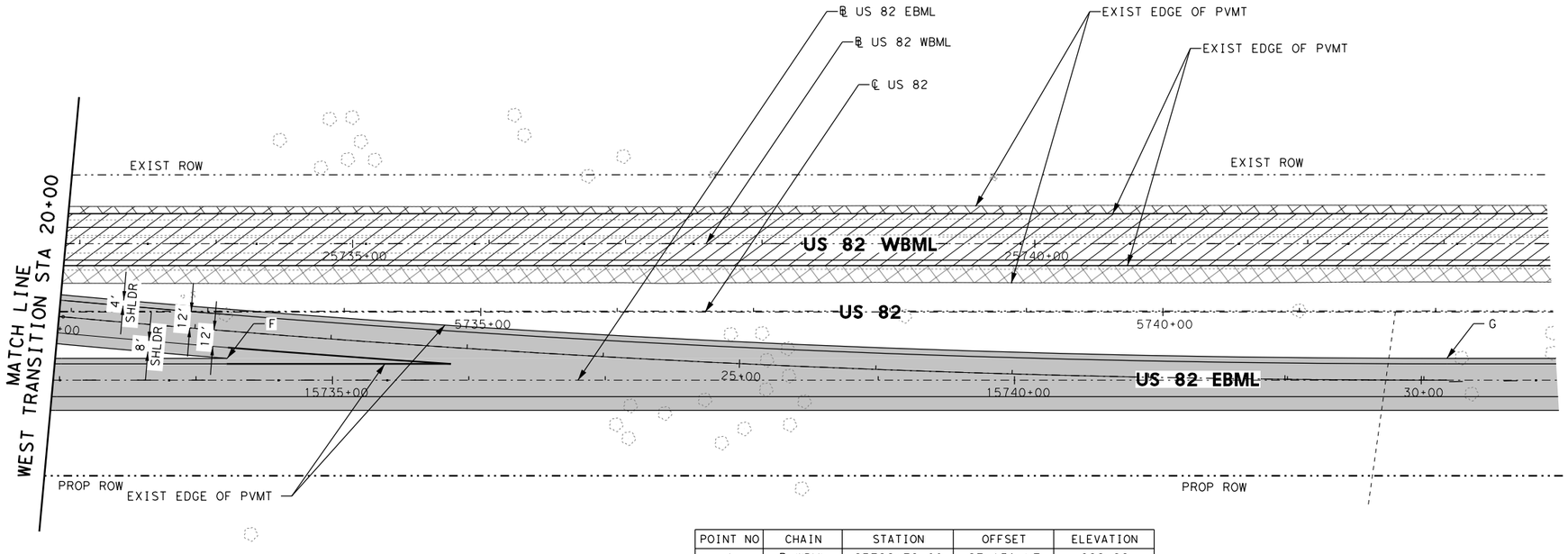

POINT NO	CHAIN	STATION	OFFSET	ELEVATION
A	℄ WBML	25726+78.00	27.13' LT	882.98
B	℄ WBML	25726+78.00	29.77' RT	882.88
C	℄ WBML	25726+78.00	34.52' RT	882.12
D	℄ WBML	25731+96.01	16.00' RT	884.24
E	℄ WBML	25732+96.01	29.47' RT	884.51
F	℄ EBML	15734+22.77	84.00' LT	886.92
G	℄ EBML	15743+16.84	16.00' LT	877.47

0' 50' 100'
SCALE IN FEET

LEGEND

- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP
- SSCB

NOTES:

1. ALL DIMENSIONS ARE TO EDGE OF TRAVEL LANE AND EDGE OF SHOULDER WHERE APPLICABLE.
2. ALL STATIONING BASED ON ℄ US 82 UNLESS OTHERWISE NOTED.
3. POINTS SHOWN ARE AT CRITICAL POINTS (P, PT, ETC.) UNLESS OTHERWISE NOTED.
4. SEE MAINLANE PLAN AND PROFILE SHEETS FOR ADDITIONAL INFORMATION.
5. SEE ROADWAY DETAILS SHEET FOR ADDITIONAL INFORMATION.
6. CROSS SLOPES AT TIE-INS TO EXISTING PAVEMENT ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED
PROFESSIONAL ENGINEER
M.F. Muwaquet
11/13/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

INTERSECTION LAYOUT
WEST TRANSITION

SHEET 1 OF 1

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	
CHECK FS	CONTROL	SECTION	JOB	222
	0044	04	048	

PLOT DRIVER: US82*BW*HALF*PDF*LineWT*Modified.pltcfg
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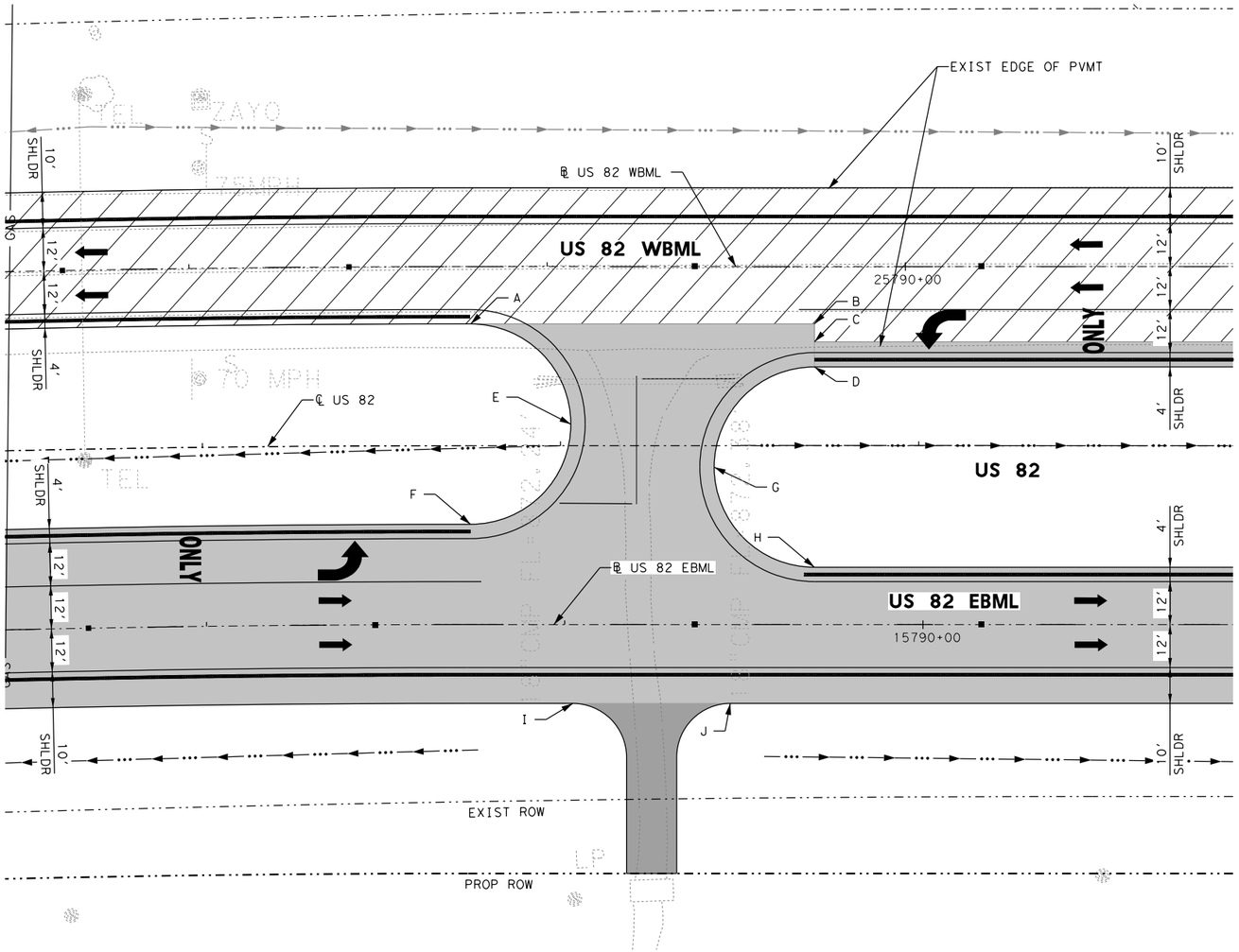
USER: MoNov23 SCALE: 1:100



POINT NO	CHAIN	STATION	OFFSET	ELEVATION
A	℄ WBML	25788+78.63	16.00' RT	874.83
B	℄ WBML	25789+74.63	16.00' RT	875.58
C	℄ WBML	25789+74.63	21.00' RT	875.64
D	℄ WBML	25789+74.63	28.00' RT	875.73
E	℄ WBML	25789+06.63	44.00' RT	875.28
F	℄ EBML	15789+41.73	44.00' LT	875.90
G	℄ EBML	15789+69.73	16.00' LT	876.02
H	℄ EBML	15789+02.24	22.00' RT	874.92
I	℄ EBML	15789+46.24	22.00' RT	875.14

N

0' 10' 20' 40'
SCALE IN FEET

LEGEND

- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP
- SSCB

NOTES:

1. ALL DIMENSIONS ARE TO EDGE OF TRAVEL LANE AND EDGE OF SHOULDER WHERE APPLICABLE.
2. ALL STATIONING BASED ON ℄ US 82 UNLESS OTHERWISE NOTED.
3. POINTS SHOWN ARE AT CRITICAL POINTS (P, PT, ETC.) UNLESS OTHERWISE NOTED.
4. SEE MAINLANE PLAN AND PROFILE SHEETS FOR ADDITIONAL INFORMATION.
5. SEE ROADWAY DETAILS SHEET FOR ADDITIONAL INFORMATION.
6. CROSS SLOPES AT TIE-INS TO EXISTING PAVEMENT ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED PROFESSIONAL ENGINEER
M.F.Muwaquet
11/13/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

INTERSECTION LAYOUT
TURN AROUND

SHEET 1 OF 1

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	223
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

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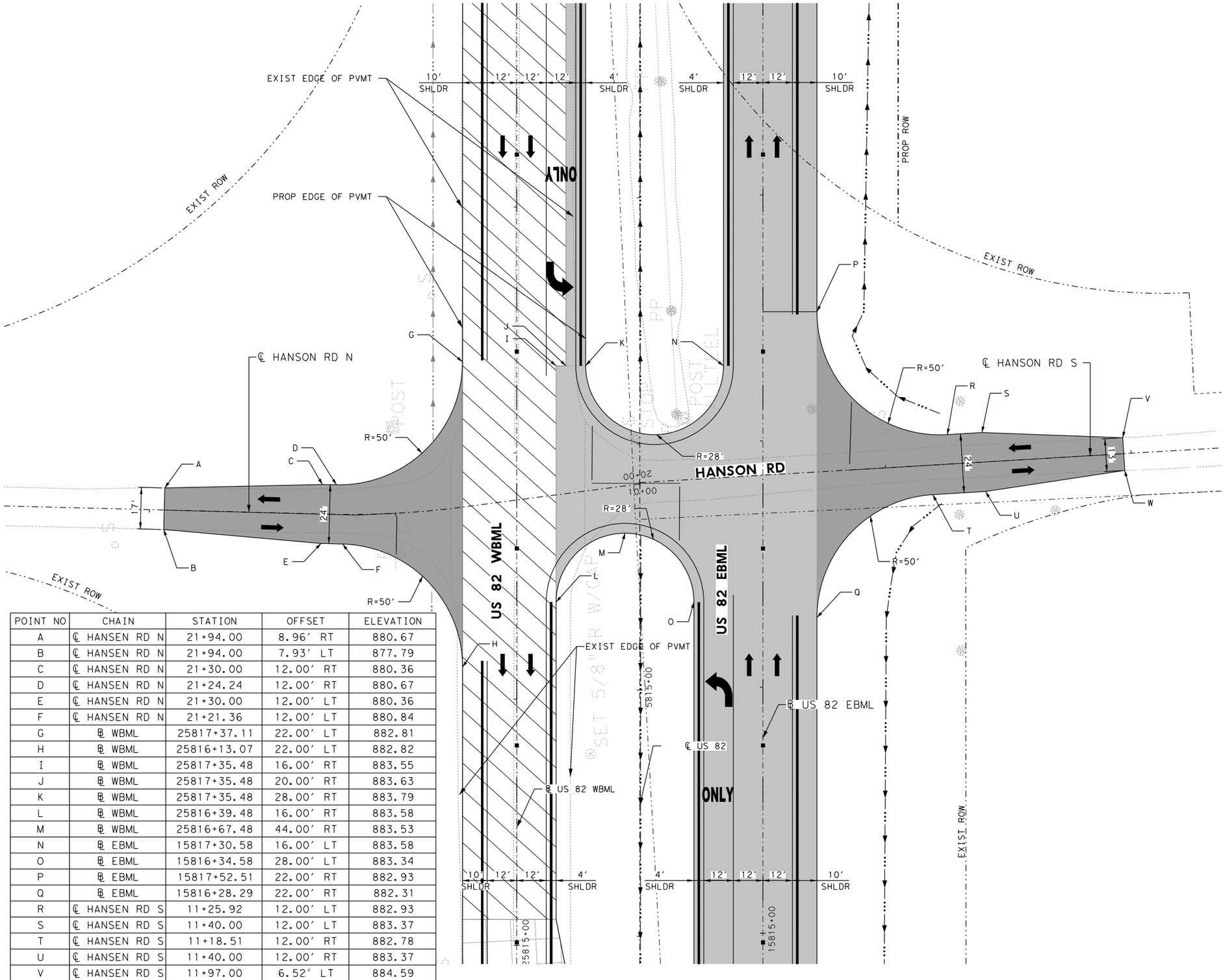
PENTABLE: US82*PEN.tbl



POINT NO	CHAIN	STATION	OFFSET	ELEVATION
A	℄ HANSEN RD N	21+94.00	8.96' RT	880.67
B	℄ HANSEN RD N	21+94.00	7.93' LT	877.79
C	℄ HANSEN RD N	21+30.00	12.00' RT	880.36
D	℄ HANSEN RD N	21+24.24	12.00' RT	880.67
E	℄ HANSEN RD N	21+30.00	12.00' LT	880.36
F	℄ HANSEN RD N	21+21.36	12.00' LT	880.84
G	℄ WBML	25817+37.11	22.00' LT	882.81
H	℄ WBML	25816+13.07	22.00' LT	882.82
I	℄ WBML	25817+35.48	16.00' RT	883.55
J	℄ WBML	25817+35.48	20.00' RT	883.63
K	℄ WBML	25817+35.48	28.00' RT	883.79
L	℄ WBML	25816+39.48	16.00' RT	883.58
M	℄ WBML	25816+67.48	44.00' RT	883.53
N	℄ EBML	15817+30.58	16.00' LT	883.58
O	℄ EBML	15816+34.58	28.00' LT	883.34
P	℄ EBML	15817+52.51	22.00' RT	882.93
Q	℄ EBML	15816+28.29	22.00' RT	882.31
R	℄ HANSEN RD S	11+25.92	12.00' LT	882.93
S	℄ HANSEN RD S	11+40.00	12.00' LT	883.37
T	℄ HANSEN RD S	11+18.51	12.00' RT	882.78
U	℄ HANSEN RD S	11+40.00	12.00' RT	883.37
V	℄ HANSEN RD S	11+97.00	6.52' LT	884.59
W	℄ HANSEN RD S	11+97.00	6.80' RT	884.64

0' 10' 20' 40'
SCALE IN FEET

LEGEND

- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP
- SSCB

NOTES:

1. ALL DIMENSIONS ARE TO EDGE OF TRAVEL LANE AND EDGE OF SHOULDER WHERE APPLICABLE.
2. ALL STATIONING BASED ON ℄ US 82 UNLESS OTHERWISE NOTED.
3. POINTS SHOWN ARE AT CRITICAL POINTS (P, PT, ETC.) UNLESS OTHERWISE NOTED.
4. SEE MAINLANE PLAN AND PROFILE SHEETS FOR ADDITIONAL INFORMATION.
5. SEE ROADWAY DETAILS SHEET FOR ADDITIONAL INFORMATION.
6. CROSS SLOPES AT TIE-INS TO EXISTING PAVEMENT ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

STATE OF TEXAS
MARWAN F. MUWAQUET
81607
LICENSED PROFESSIONAL ENGINEER
M.F.Muwaquet
11/13/2023

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

INTERSECTION LAYOUT
HANSON RD

SHEET 1 OF 1

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	224
CHECK FS	CONTROL 0044	SECTION 04	JOB 048	

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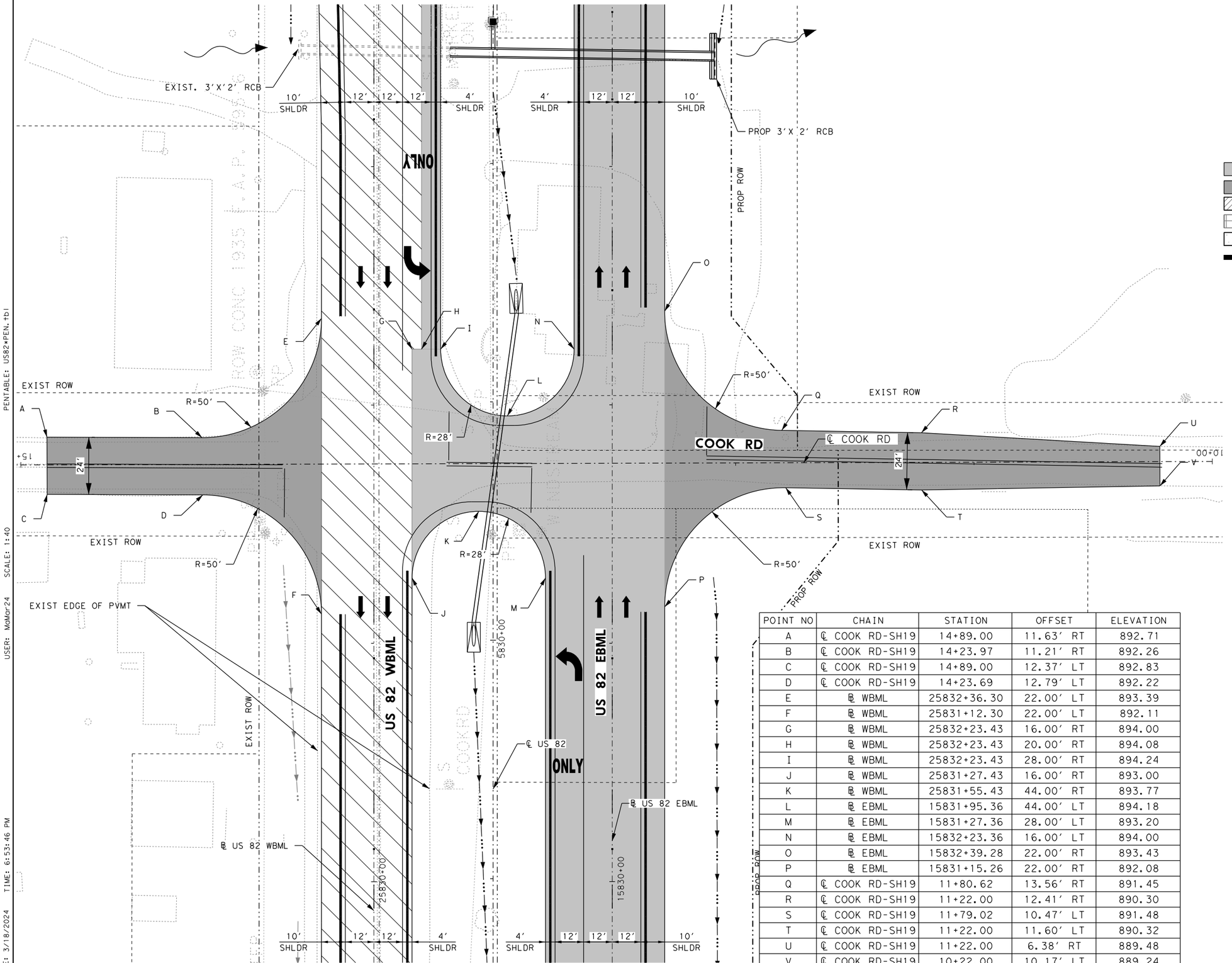
PENTABLE: US82*PEN.tbl



0' 10' 20' 40'
SCALE IN FEET

LEGEND

- PROPOSED ROADWAY PAVEMENT
- PROPOSED CROSS RDS/DRIVEWAY PAVEMENT
- 2" MINIMUM OVERLAY
- EXISTING PAVEMENT TO REMAIN IN PLACE
- PROP RIPRAP
- SSCB

NOTES:

1. ALL DIMENSIONS ARE TO EDGE OF TRAVEL LANE AND EDGE OF SHOULDER WHERE APPLICABLE.
2. ALL STATIONING BASED ON ℄ US 82 UNLESS OTHERWISE NOTED.
3. POINTS SHOWN ARE AT CRITICAL POINTS (P, PT, ETC.) UNLESS OTHERWISE NOTED.
4. SEE MAINLANE PLAN AND PROFILE SHEETS FOR ADDITIONAL INFORMATION.
5. SEE ROADWAY DETAILS SHEET FOR ADDITIONAL INFORMATION.
6. CROSS SLOPES AT TIE-INS TO EXISTING PAVEMENT ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

POINT NO	CHAIN	STATION	OFFSET	ELEVATION
A	℄ COOK RD-SH19	14+89.00	11.63' RT	892.71
B	℄ COOK RD-SH19	14+23.97	11.21' RT	892.26
C	℄ COOK RD-SH19	14+89.00	12.37' LT	892.83
D	℄ COOK RD-SH19	14+23.69	12.79' LT	892.22
E	℄ WBML	25832+36.30	22.00' LT	893.39
F	℄ WBML	25831+12.30	22.00' LT	892.11
G	℄ WBML	25832+23.43	16.00' RT	894.00
H	℄ WBML	25832+23.43	20.00' RT	894.08
I	℄ WBML	25832+23.43	28.00' RT	894.24
J	℄ WBML	25831+27.43	16.00' RT	893.00
K	℄ WBML	25831+55.43	44.00' RT	893.77
L	℄ EBML	15831+95.36	44.00' LT	894.18
M	℄ EBML	15831+27.36	28.00' LT	893.20
N	℄ EBML	15832+23.36	16.00' LT	894.00
O	℄ EBML	15832+39.28	22.00' RT	893.43
P	℄ EBML	15831+15.26	22.00' RT	892.08
Q	℄ COOK RD-SH19	11+80.62	13.56' RT	891.45
R	℄ COOK RD-SH19	11+22.00	12.41' RT	890.30
S	℄ COOK RD-SH19	11+79.02	10.47' LT	891.48
T	℄ COOK RD-SH19	11+22.00	11.60' LT	890.32
U	℄ COOK RD-SH19	11+22.00	6.38' RT	889.48
V	℄ COOK RD-SH19	10+22.00	10.17' LT	889.24

STATE OF TEXAS
FIROZE SHAMS
97215
LICENSED PROFESSIONAL ENGINEER
3/18/2024

GLOBAL CIVIL SOLUTIONS, LLC
11551 FOREST CENTRAL DRIVE
SUITE 220
DALLAS, TX 75243
F-12801

Texas Department of Transportation

US 82

INTERSECTION LAYOUT
COOK RD / SH 19 LOOP

SHEET 1 OF 1

DESIGN	FED.RD. DIV.NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
MS	6	(SEE TITLE SHEET)		US 82
GRAPHICS MII	STATE	DISTRICT	COUNTY	SHEET NO.
CHECK MFM	TEXAS	WFS	MONTAGUE	225
CHECK FS	CONTROL	SECTION	JOB	
	0044	04	048	

PLOT DRIVER: US82+BW+HALF+PDF+LineWT+Modified.pltcfg
PENTABLE: US82+PEN.tbl
SCALE: 1:40
USER: MaMar24
FILE: P:\Jobs\2020004-US82 Wichita Falls\CADD\ROWY\048+US82+INSECO4.dgn
TIME: 6:53:46 PM
DATE: 3/18/2024