009-12-073

ROCKWALL

C.O. #	DESCRIPTION	DAYS ADDED
1	ADDIT. Of SEJ-A ON SHEETS 284-A,289-A, 295-A AND 300-A	N/A
2	SIX INS RD IL AM(TY SA)40T-8 FURNISHED FOR COST SAVINGS	N/A
3	CHANGING FROM 48" TO 54" DRILL SHAFT (SIGN MNTS)	N/A
4	PARTNERING WORKSHOP FACILITATION	N/A
5	COST SAVINGS FOR FIELD OFFICE NOT NOT NEEDED.	N/A
6	NEW LOOCATION FOR CTB AND ADDIT. HARDWARE.	N/A
7	INCREASE AND DECREASE IN EMBANKMENT ITEMS	N/A
8	COST SAVINGS DUE TO CHANGE IN PROGRESS OF WORK	N/A
9	ADDITION OF CONCRETE RIPRAP FLUME	N/A
10	SHALLOW DEPTH REPAIR FOR THE RUMBLE STRIPS	5
11	OMITTED SURFACE PREP FOR STRIPING	5
12	OVERRUN OF ITEM 03602008 AND THE UNDERRUN OF ITEM 03602005	(OMITTED)
13	DAYS ADDED FOR ADDITIONAL WORK PERFORMED	43
14	TY A AND TY D SERVICE REDUCTION	N/A
15	ADDITION OF ARROWS OMITTED FROM THE PLANS.	N/A
16	DOWEL CURBE OMITTED FROM THE PLANS.	N/A
17	CTB REPAIR	N/A

ORIGINAL BID DAYS	452
TOTAL DAYS	505

FINAL PLANS

LETTING DATE: 07/07/2009

DATE CONTRACTOR BEGAN WORK: 09/13/2010

DATE WORK WAS COMPLETED & ACCEPTED: 04/11/2013 04/25/2013

FINAL CONTRACT COST: $

CONTRACTOR: ED BELL CONSTRUCTION CO.

STATE OF TEXAS
HAL THOMAS STANFORD
79792
LICENSED
PROFESSIONAL ENGINEER

WORK WAS COMPLETED ACCORDING TO THE PLANS AND CONTRACT.

Signature or Registrant & P.E. Date 11/4/13

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

ROBIN R. HANDEL, P.E. DATE 3/2/09

STATE OF TEXAS
DEPARTMENT OF TRANSPORTATION

PLANS OF PROPOSED STATE HIGHWAY IMPROVEMENT

PROJECT NO. C-9-12-73

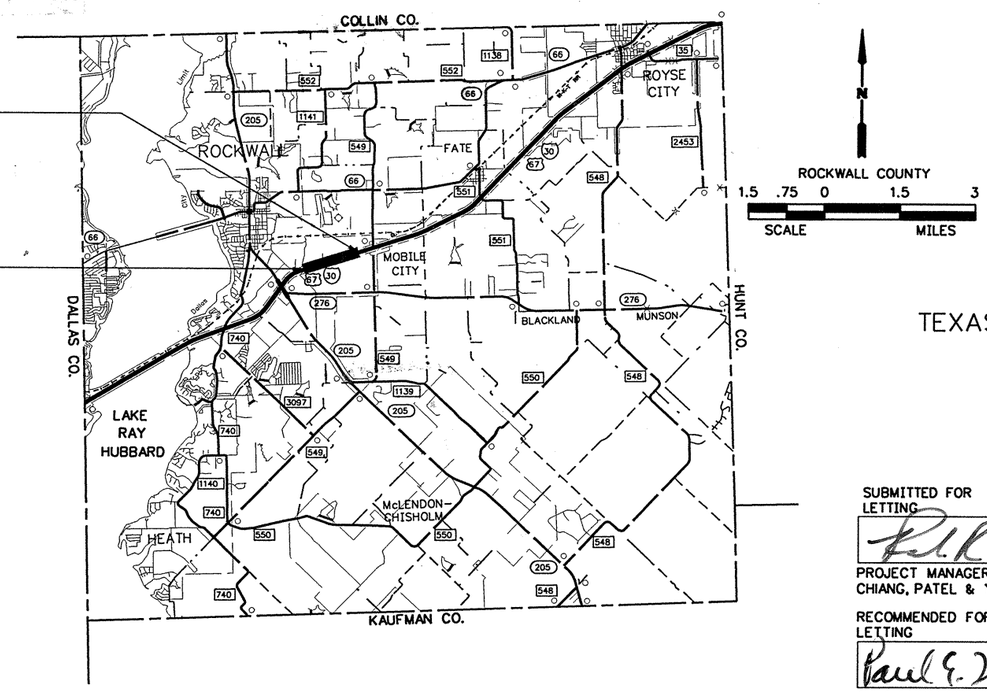
IH-30

ROCKWALL COUNTY

LIMITS: IH 30 AT JOHN KING BLVD.

NET LENGTH OF PROJECT = 5889.34 FT = 1.115 MI { ROADWAY = 8250 FT = 1.562 MI; BRIDGE = 300 FT = 0.057 MI; TOTAL = 8550 FT = 1.619 MI

FOR CONSTRUCTION OF THE WIDENING OF A FREEWAY CONSISTING OF WIDENING, GRADING, STRUCTURES, AND SURFACING.



EXCEPTIONS: NONE
EQUATIONS: NONE
RAILROADS: NONE

Texas Department of Transportation

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Designed:	JAV	FED. ROAD DIV. NO.	STATE	PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	C-9-12-73			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	1

IH 30 MAINLANES	70 MPH
JOHN KING BLVD.	45 MPH
FRONTAGE ROADS	45 MPH
IH 30 RAMPS	50 MPH
CROSS STREETS	30 MPH
IH 30 TRAFFIC PROJECTIONS (ADT):	(2015) 102,300 (2030)

NOTE:

SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION, JUNE1, 2004 AND SPECIFICATION ITEMS LISTED AND DATED AS FOLLOWS, SHALL GOVERN ON THIS PROJECT: SPECIAL LABOR PROVISIONS FOR STATE PROJECTS (000---007).

TDLR INSPECTION REQUIRED.

CONCURRENCE 2-25-09

Chuck Todd

DIRECTOR, CITY OF ROCKWALL PUBLIC WORKS

CONCURRENCE 2-26-09

COUNTY JUDGE, ROCKWALL COUNTY

TEXAS DEPARTMENT OF TRANSPORTATION

CP&Y

Chiang, Patel & Yerby, Inc.

Firm Registration Number: 1741

SUBMITTED FOR LETTING 3/2/09

PROJECT MANAGER
CHIANG, PATEL & YERBY, INC.

RECOMMENDED FOR LETTING 3-4-09

Paul E. Williams, P.E.

AREA ENGINEER

RECOMMENDED FOR LETTING 3/10/09

James K. Smith, P.E.

DIRECTOR OF TRANSPORTATION PLANNING & DEVELOPMENT

RECOMMENDED FOR LETTING 3/10/09

DISTRICT ENGINEER

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
3/10/09

APPROVED FOR LETTING 05.29.09

DIRECTOR, DESIGN DIVISION

2/25/2009 3:51:44 PM adams
p:\Active Projects\TxDOT\43\2006\43-06TA00 Plans and Drawings\8.3.0 Cut Sheets\8.3.0 Rockwall IH 30.dgn

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STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
5/21/09

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

5/21/09 . P.E.
Signature of Registrant & Date

SHEET 1 OF 1

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

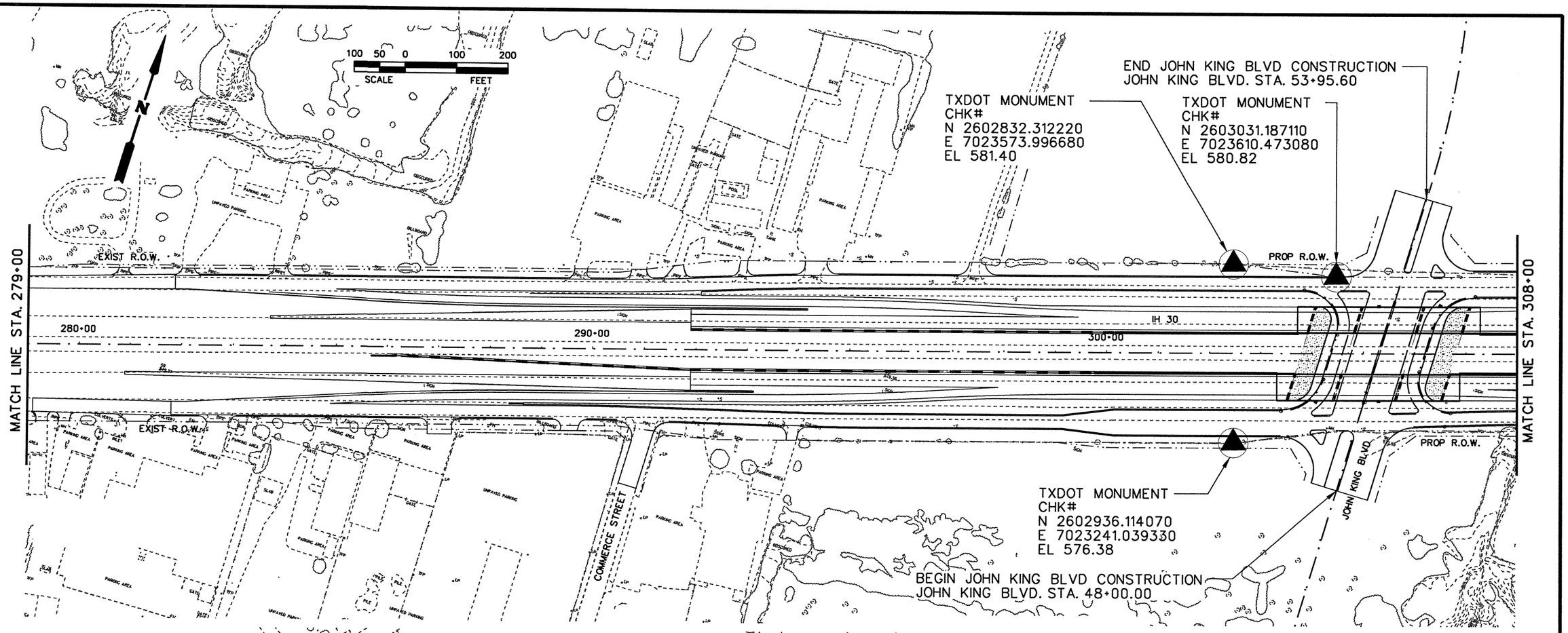
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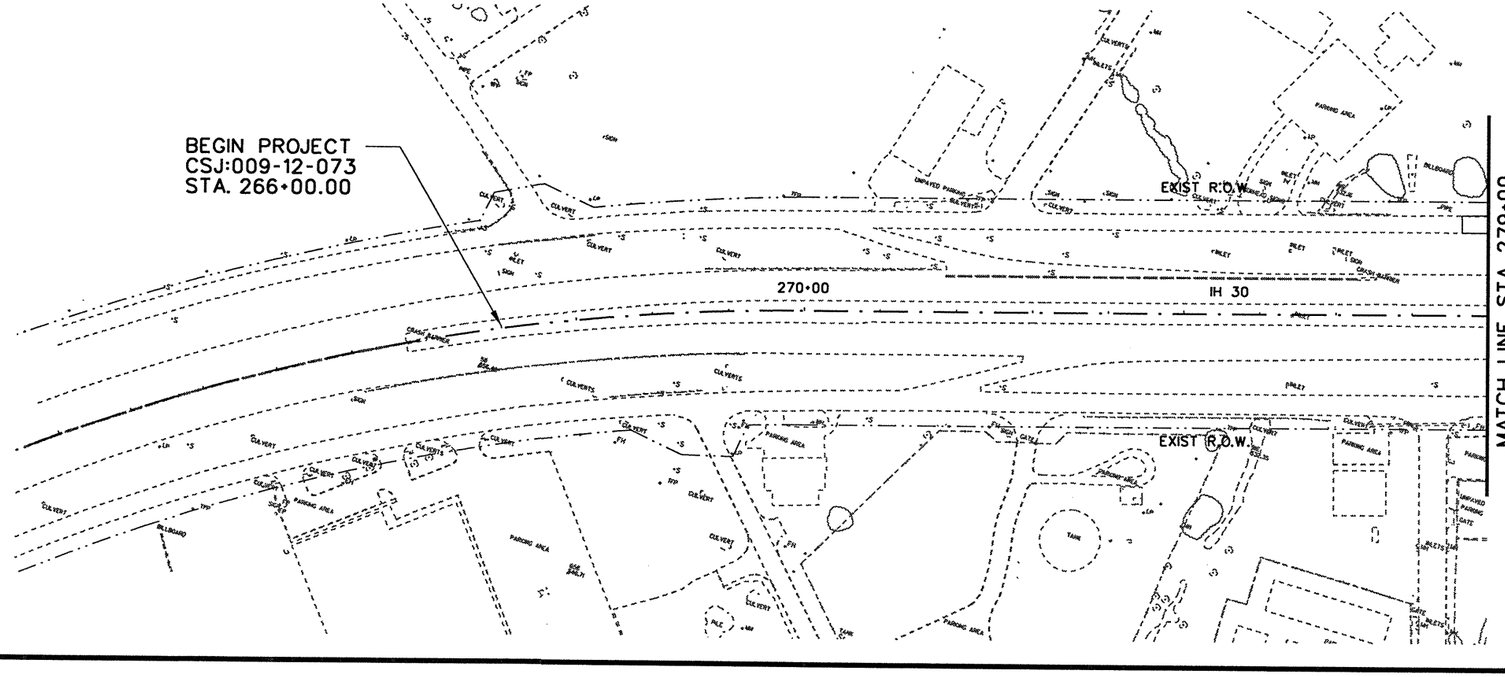
IH 30 AT JOHN KING BLVD.

INDEX OF SHEETS

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked: AJA	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073		2

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STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER

2/9/09

NO.	REVISION	BY	DATE

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Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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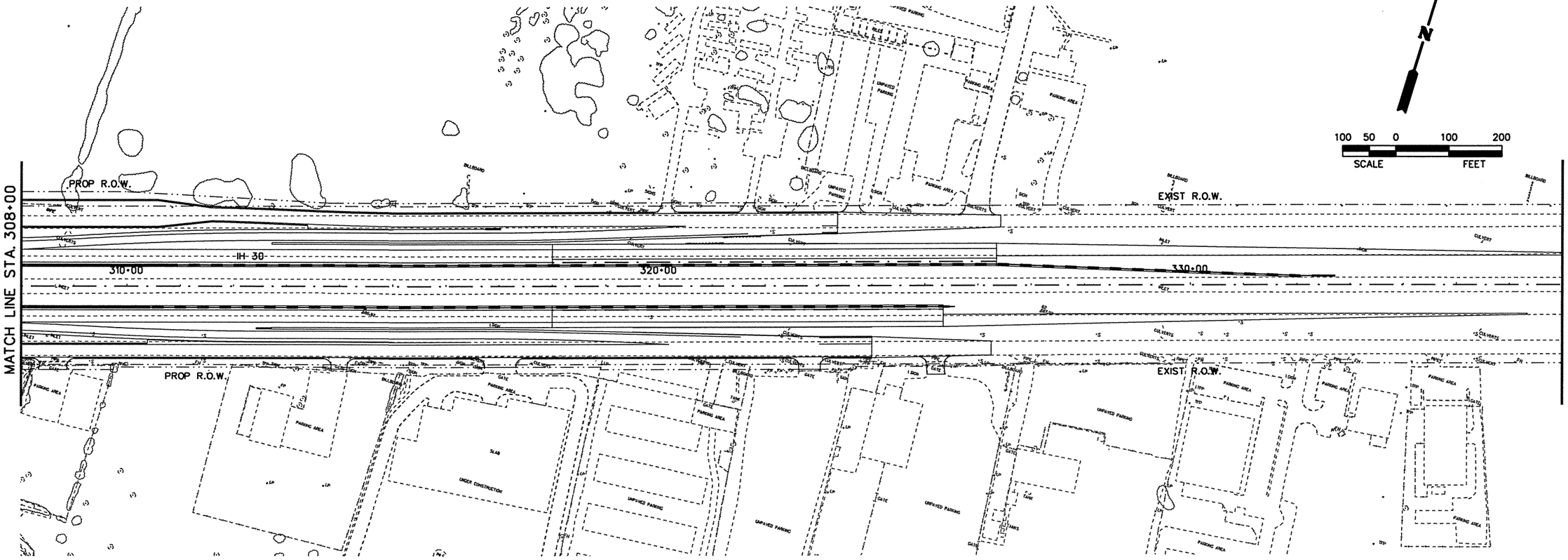
IH 30 AT JOHN KING BLVD.

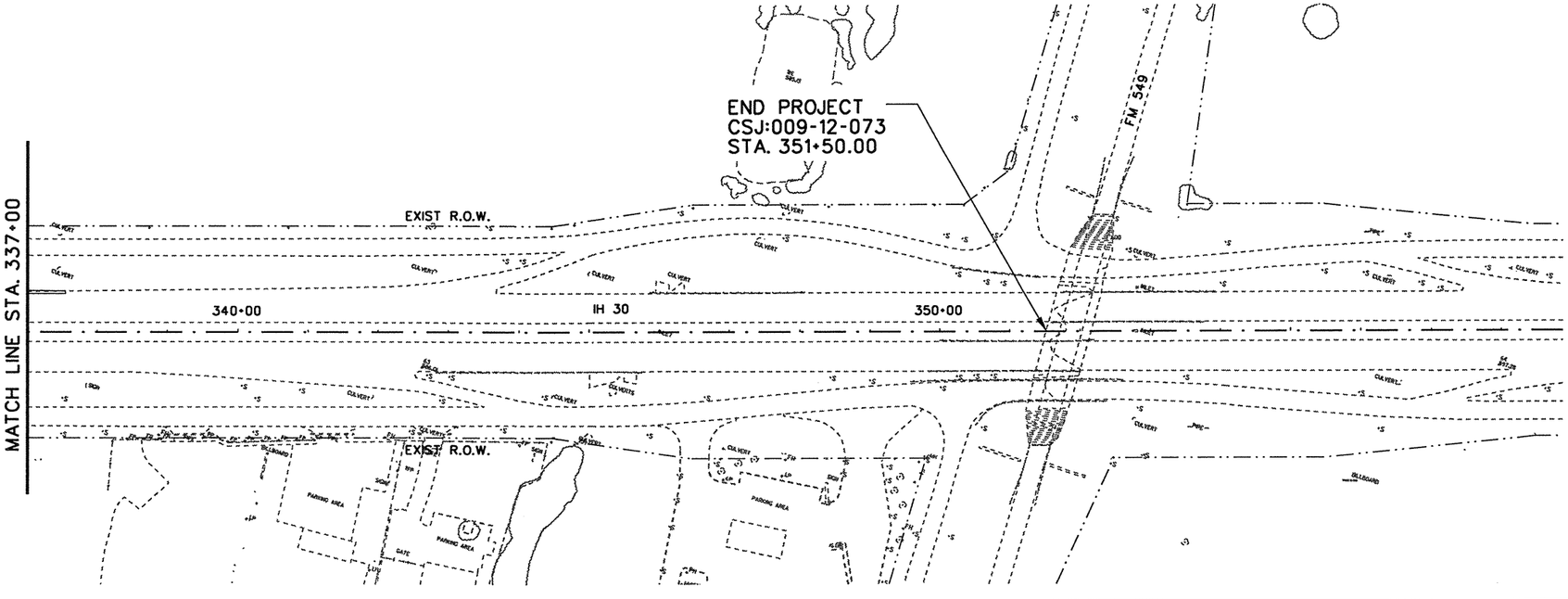
PROJECT LAYOUT

Designed: AJA	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked: AJA	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073		3

SHEET 1 OF 2

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STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER

2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

PROJECT LAYOUT

Designed: AJA	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	4

SHEET 2 OF 2

2/6/2009 12:30:57 PM AADAMS p:\Active Projects\TXD0643\TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.04 Roadway\435TML02.200

HORIZONTAL ALIGNMENT FOR ℄ IH 30

Point 100 N 7,020,041.40 E 2,597,350.72 Sta 235+00.00

Course from 100 to PC CL30-1 N 35° 20' 41.51" E Dist 1,623.28

		Curve Data
Curve CL30-1		
P.I. Station	260+93.62	
Delta	37° 25' 25.71"	(RT)
Degree	2° 00' 00.00"	
Tangent	970.34	
Length	1,871.19	
Radius	2,864.79	
External	159.87	
Long Chord	1,838.10	
Mid. Ord.	151.42	
P.C. Station	251+23.28	
P.T. Station	269+94.47	
C.C.		
Back	= N 35° 20' 41.51" E	
Ahead	= N 72° 46' 07.21" E	
Chord Bear	= N 54° 03' 24.36" E	

	N	E	
P.I. Station	7,022,156.98	E	2,598,851.12
P.C. Station	7,021,365.49	E	2,598,289.78
P.T. Station	7,022,444.42	E	2,599,777.91
C.C.	7,019,708.22	E	2,600,626.55

Course from PT CL30-1 to PC CL30-2 N 72° 46' 07.21" E Dist 13,299.95

		Curve Data
Curve CL30-2		
P.I. Station	407+44.92	
Delta	8° 59' 29.44"	(LT)
Degree	1° 00' 00.00"	
Tangent	450.50	
Length	899.15	
Radius	5,729.58	
External	17.68	
Long Chord	898.23	
Mid. Ord.	17.63	
P.C. Station	402+94.42	
P.T. Station	411+93.57	
C.C.		
Back	= N 72° 46' 07.21" E	
Ahead	= N 63° 46' 37.78" E	
Chord Bear	= N 68° 16' 22.50" E	

	N	E	
P.I. Station	7,026,517.72	E	2,612,911.20
P.C. Station	7,026,384.27	E	2,612,480.92
P.T. Station	7,026,716.78	E	2,613,315.33
C.C.	7,031,856.69	E	2,610,783.64

Course from PT CL30-2 to 101 N 63° 46' 37.78" E Dist 2,306.43

Point 101 N 7,027,735.91 E 2,615,384.39 Sta 435+00.00

HORIZONTAL ALIGNMENT FOR ℄ COMMERCE

Point 140 N 7,022,650.34 E 2,601,840.70 Sta 10+00.00

Course from 140 to 141 N 0° 51' 11.73" W Dist 300.05

Point 141 N 7,022,950.36 E 2,601,836.23 Sta 13+00.05

HORIZONTAL ALIGNMENT FOR ℄ JOHN KING BLVD.

		Curve Data
Curve CL205BY-1		
P.I. Station	26+61.61	
Delta	7° 23' 40.61"	(LT)
Degree	2° 17' 27.29"	
Tangent	161.6144	
Length	322.7799	
Radius	2,501.0000	
External	5.2163	
Long Chord	322.5560	
Mid. Ord.	5.2055	
P.C. Station	25+00.00	
P.T. Station	28+22.78	
C.C.		
Back	= N 13° 16' 22.44" W	
Ahead	= N 20° 40' 03.05" W	
Chord Bear	= N 16° 58' 12.74" W	

	N	E	
P.I. Station	7,021,156.3073	E	2,603,651.0322
P.C. Station	7,020,999.0100	E	2,603,688.1371
P.T. Station	7,021,307.5208	E	2,603,593.9913
C.C.	7,020,424.8069	E	2,601,253.9449

Course from PT CL205BY-1 to PC CL205BY-2 N 20° 40' 03.05" W Dist 878.2668

		Curve Data
Curve CL205BY-2		
P.I. Station	40+50.80	
Delta	20° 19' 44.81"	(RT)
Degree	2° 56' 13.45"	
Tangent	349.7551	
Length	692.1563	
Radius	1,950.7803	
External	31.1058	
Long Chord	688.5313	
Mid. Ord.	30.6176	
P.C. Station	37+01.05	
P.T. Station	43+93.20	
C.C.		
Back	= N 20° 40' 03.05" W	
Ahead	= N 0° 20' 18.24" W	
Chord Bear	= N 10° 30' 10.64" W	

	N	E	
P.C. Station	7,022,129.2662	E	2,603,284.0120
P.T. Station	7,022,806.2615	E	2,603,158.5022
C.C.	7,022,817.7831	E	2,605,109.2485

Course from PT CL205BY-2 to PC CL205BY-3 N 0° 20' 18.24" W Dist 1,035.0543

		Curve Data
Curve CL205BY-3		
P.I. Station	58+52.19	
Delta	27° 14' 06.23"	(LT)
Degree	3° 16' 26.56"	
Tangent	423.9364	
Length	831.8477	
Radius	1,750.0000	
External	50.6171	
Long Chord	824.0383	
Mid. Ord.	49.1942	
P.C. Station	54+28.26	
P.T. Station	62+60.11	
C.C.		
Back	= N 0° 08' 54.73" W	
Ahead	= N 27° 23' 00.96" W	
Chord Bear	= N 13° 45' 57.84" W	

	N	E	
P.I. Station	7,024,265.2328	E	2,603,151.2900
P.C. Station	7,023,841.2978	E	2,603,152.3890
P.T. Station	7,024,641.6659	E	2,602,956.3022
C.C.	7,023,836.7610	E	2,601,402.3949

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER

2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

HORIZONTAL ALIGNMENT DATA

℄ IH 30, ℄ 205BY, ℄ COMM

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	5

SHEET 1 OF 4

2/6/2009 12:30:31 PM AADAMS pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.04 Roadway/435THG01.001

HORIZONTAL ALIGNMENT FOR ℄ EBFR

Point 130 N 7,022,481.49 E 2,600,295.71 Sta 275+00.00

Course from 130 to 131 N 72° 51' 44.80" E Dist 410.90

Point 131 N 7,022,602.56 E 2,600,688.36 Sta 279+10.90

Course from 131 to 132 N 73° 54' 05.10" E Dist 270.05

Point 132 N 7,022,677.45 E 2,600,947.83 Sta 281+80.95

Course from 132 to PC BLEBFR-1 N 72° 46' 07.28" E Dist 769.32

Curve Data

Curve BLEBFR-1				
P.I. Station	290+18.81	N 7,022,925.64	E	2,601,748.07
Delta =	1° 34' 13.85" (RT)			
Degree =	1° 08' 45.30"			
Tangent =	68.53			
Length =	137.05			
Radius =	5,000.00			
External =	0.47			
Long Chord =	137.05			
Mid. Ord. =	0.47			
P.C. Station	289+50.28	N 7,022,905.34	E	2,601,682.62
P.T. Station	290+87.33	N 7,022,944.14	E	2,601,814.06
C.C.		N 7,018,129.76	E	2,603,163.77
Back = N	72° 46' 07.28" E			
Ahead = N	74° 20' 21.13" E			
Chord Bear = N	73° 33' 14.20" E			

Course from PT BLEBFR-1 to PC BLEBFR-2 N 74° 20' 21.13" E Dist 300.87

Curve Data

Curve BLEBFR-2				
P.I. Station	294+56.74	N 7,023,043.86	E	2,602,169.75
Delta =	1° 34' 14.12" (LT)			
Degree =	1° 08' 45.30"			
Tangent =	68.53			
Length =	137.06			
Radius =	5,000.00			
External =	0.47			
Long Chord =	137.06			
Mid. Ord. =	0.47			
P.C. Station	293+88.20	N 7,023,025.36	E	2,602,103.76
P.T. Station	295+25.26	N 7,023,064.16	E	2,602,235.21
C.C.		N 7,027,839.75	E	2,600,754.06
Back = N	74° 20' 21.13" E			
Ahead = N	72° 46' 07.01" E			
Chord Bear = N	73° 33' 14.07" E			

Course from PT BLEBFR-2 to PC BLEBFR-3 N 72° 46' 07.01" E Dist 769.06

Curve Data

Curve BLEBFR-3				
P.I. Station	303+64.70	N 7,023,312.83	E	2,603,036.97
Delta =	1° 36' 45.64" (LT)			
Degree =	1° 08' 45.30"			
Tangent =	70.37			
Length =	140.73			
Radius =	5,000.00			
External =	0.50			
Long Chord =	140.73			
Mid. Ord. =	0.50			
P.C. Station	302+94.32	N 7,023,291.98	E	2,602,969.76
P.T. Station	304+35.06	N 7,023,335.56	E	2,603,103.57
C.C.		N 7,028,067.57	E	2,601,488.60
Back = N	72° 46' 07.01" E			
Ahead = N	71° 09' 21.38" E			
Chord Bear = N	71° 57' 44.20" E			

Course from PT BLEBFR-3 to PC BLEBFR-4 N 71° 09' 21.38" E Dist 285.66

Curve Data

Curve BLEBFR-4				
P.I. Station	307+91.09	N 7,023,450.56	E	2,603,440.51
Delta =	1° 36' 45.92" (RT)			
Degree =	1° 08' 45.30"			
Tangent =	70.37			
Length =	140.74			
Radius =	5,000.00			
External =	0.50			
Long Chord =	140.73			
Mid. Ord. =	0.50			
P.C. Station	307+20.71	N 7,023,427.83	E	2,603,373.91
P.T. Station	308+61.45	N 7,023,471.40	E	2,603,507.73
C.C.		N 7,018,695.82	E	2,604,988.88
Back = N	71° 09' 21.38" E			
Ahead = N	72° 46' 07.29" E			
Chord Bear = N	71° 57' 44.34" E			

Course from PT BLEBFR-4 to 133 N 72° 46' 07.29" E Dist 1,539.38

Point 133 N 7,023,927.41 E 2,604,978.02 Sta 324+00.83

Course from 133 to 134 N 71° 48' 24.41" E Dist 225.03

Point 134 N 7,023,997.67 E 2,605,191.80 Sta 326+25.87

Course from 134 to 135 N 72° 44' 24.73" E Dist 1,701.11

Point 135 N 7,024,502.40 E 2,606,816.31 Sta 343+26.97

HORIZONTAL ALIGNMENT FOR ℄ WBFR

Point 120 N 7,022,709.42 E 2,600,225.01 Sta 275+00.00

Course from 120 to 121 N 72° 48' 55.89" E Dist 365.37

Point 121 N 7,022,817.37 E 2,600,574.07 Sta 278+65.37

Course from 121 to 122 N 72° 07' 10.04" E Dist 321.06

Point 122 N 7,022,915.95 E 2,600,879.62 Sta 281+86.43

Course from 122 to PC BLWBFR-1 N 72° 46' 07.88" E Dist 813.54

Curve Data

Curve BLWBFR-1				
P.I. Station	291+00.04	N 7,023,186.58	E	2,601,752.23
Delta =	2° 17' 34.98" (LT)			
Degree =	1° 08' 45.30"			
Tangent =	100.07			
Length =	200.11			
Radius =	4,999.99			
External =	1.00			
Long Chord =	200.09			
Mid. Ord. =	1.00			
P.C. Station	289+99.97	N 7,023,156.94	E	2,601,656.65
P.T. Station	292+00.08	N 7,023,220.03	E	2,601,846.54
C.C.		N 7,027,932.52	E	2,600,175.52
Back = N	72° 46' 07.88" E			
Ahead = N	70° 28' 32.90" E			
Chord Bear = N	71° 37' 20.39" E			

Course from PT BLWBFR-1 to PC BLWBFR-2 N 70° 28' 32.90" E Dist 99.86

Curve Data

Curve BLWBFR-2				
P.I. Station	294+00.00	N 7,023,286.84	E	2,602,034.97
Delta =	2° 17' 34.25" (RT)			
Degree =	1° 08' 45.30"			
Tangent =	100.06			
Length =	200.09			
Radius =	4,999.99			
External =	1.00			
Long Chord =	200.07			
Mid. Ord. =	1.00			
P.C. Station	292+99.94	N 7,023,253.40	E	2,601,940.66
P.T. Station	295+00.03	N 7,023,316.48	E	2,602,130.53
C.C.		N 7,018,540.91	E	2,603,611.68
Back = N	70° 28' 32.90" E			
Ahead = N	72° 46' 07.15" E			
Chord Bear = N	71° 37' 20.02" E			

Course from PT BLWBFR-2 to PC BLWBFR-3 N 72° 46' 07.15" E Dist 1,549.70

Curve Data

Curve BLWBFR-3				
P.I. Station	311+49.81	N 7,023,805.19	E	2,603,706.26
Delta =	2° 17' 35.13" (RT)			
Degree =	1° 08' 45.30"			
Tangent =	100.07			
Length =	200.11			
Radius =	4,999.99			
External =	1.00			
Long Chord =	200.10			
Mid. Ord. =	1.00			
P.C. Station	310+49.74	N 7,023,775.55	E	2,603,610.68
P.T. Station	312+49.85	N 7,023,830.99	E	2,603,802.94
C.C.		N 7,018,999.98	E	2,605,091.83
Back = N	72° 46' 07.15" E			
Ahead = N	75° 03' 42.27" E			
Chord Bear = N	73° 54' 54.71" E			

Course from PT BLWBFR-3 to PC BLWBFR-4 N 75° 03' 42.27" E Dist 99.81

Curve Data

Curve BLWBFR-4				
P.I. Station	314+49.73	N 7,023,882.51	E	2,603,996.07
Delta =	2° 17' 35.10" (LT)			
Degree =	1° 08' 45.30"			
Tangent =	100.07			
Length =	200.11			
Radius =	4,999.99			
External =	1.00			
Long Chord =	200.10			
Mid. Ord. =	1.00			
P.C. Station	313+49.66	N 7,023,856.72	E	2,603,899.38
P.T. Station	315+49.77	N 7,023,912.16	E	2,604,091.65
C.C.		N 7,028,687.73	E	2,602,610.50
Back = N	75° 03' 42.27" E			
Ahead = N	72° 46' 07.17" E			
Chord Bear = N	73° 54' 54.72" E			

Course from PT BLWBFR-4 to 123 N 72° 46' 07.17" E Dist 785.81

Point 123 N 7,024,144.94 E 2,604,842.19 Sta 323+35.58

Course from 123 to 124 N 73° 26' 48.39" E Dist 307.22

Point 124 N 7,024,232.47 E 2,605,136.68 Sta 326+42.80

Course from 124 to 125 N 72° 43' 17.78" E Dist 1,694.36

Point 125 N 7,024,735.72 E 2,606,754.57 Sta 343+37.16

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

HORIZONTAL ALIGNMENT DATA

℄ EBFR, ℄ WBFR

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked: AJA	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073		2

SHEET 2 OF 4

pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.04 Roadway/435THG02.001 2/6/2009 12:30:35 PM AADAMS

HORIZONTAL ALIGNMENT FOR ℄ EBON

Curve Data

Curve BLEBON-1					
P.I. Station	10+81.00	N	7,022,705.93	E	2,601,039.65
Delta =	3° 14' 20.19" (LT)				
Degree =	2° 00' 00.00"				
Tangent =	81.00				
Length =	161.95				
Radius =	2,864.79				
External =	1.14				
Long Chord =	161.93				
Mid. Ord. =	1.14				
P.C. Station	10+00.00	N	7,022,681.93	E	2,600,962.29
P.T. Station	11+61.95	N	7,022,734.25	E	2,601,115.53
C.C.		N	7,025,418.14	E	2,600,113.65
Back = N	72° 46' 07.28" E				
Ahead = N	69° 31' 47.09" E				
Chord Bear = N	71° 08' 57.18" E				

Course from PT BLEBON-1 to PC BLEBON-2 N 69° 31' 47.09" E Dist 166.80

Curve Data

Curve BLEBON-2					
P.I. Station	14+99.80	N	7,022,852.41	E	2,601,432.05
Delta =	3° 14' 20.13" (RT)				
Degree =	0° 56' 49.34"				
Tangent =	171.05				
Length =	342.01				
Radius =	6,050.00				
External =	2.42				
Long Chord =	341.96				
Mid. Ord. =	2.42				
P.C. Station	13+28.75	N	7,022,792.59	E	2,601,271.80
P.T. Station	16+70.75	N	7,022,903.08	E	2,601,595.42
C.C.		N	7,017,124.62	E	2,603,387.61
Back = N	69° 31' 47.09" E				
Ahead = N	72° 46' 07.22" E				
Chord Bear = N	71° 08' 57.15" E				

Course from PT BLEBON-2 to PC BLEBON-3 N 72° 46' 07.22" E Dist 445.00

Curve Data

Curve BLEBON-3					
P.I. Station	22+86.82	N	7,023,085.57	E	2,602,183.84
Delta =	3° 14' 21.61" (LT)				
Degree =	0° 56' 49.34"				
Tangent =	171.07				
Length =	342.05				
Radius =	6,050.00				
External =	2.42				
Long Chord =	342.00				
Mid. Ord. =	2.42				
P.C. Station	21+15.75	N	7,023,034.90	E	2,602,020.44
P.T. Station	24+57.80	N	7,023,145.40	E	2,602,344.10
C.C.		N	7,028,813.35	E	2,600,228.25
Back = N	72° 46' 07.22" E				
Ahead = N	69° 31' 45.60" E				
Chord Bear = N	71° 08' 56.41" E				

Curve Data

Curve BLEBON-4					
P.I. Station	26+28.87	N	7,023,205.23	E	2,602,504.37
Delta =	3° 14' 21.61" (RT)				
Degree =	0° 56' 49.34"				
Tangent =	171.07				
Length =	342.05				
Radius =	6,050.00				
External =	2.42				
Long Chord =	342.00				
Mid. Ord. =	2.42				
P.C. Station	24+57.80	N	7,023,145.40	E	2,602,344.10
P.T. Station	27+99.85	N	7,023,255.91	E	2,602,667.76
C.C.		N	7,017,477.45	E	2,604,459.96
Back = N	69° 31' 45.60" E				
Ahead = N	72° 46' 07.22" E				
Chord Bear = N	71° 08' 56.41" E				

HORIZONTAL ALIGNMENT FOR ℄ EBOFF

Curve Data

Curve BLEBOFF-1					
P.I. Station	11+71.07	N	7,023,482.12	E	2,603,397.14
Delta =	3° 14' 21.61" (RT)				
Degree =	0° 56' 49.34"				
Tangent =	171.07				
Length =	342.05				
Radius =	6,050.00				
External =	2.42				
Long Chord =	342.00				
Mid. Ord. =	2.42				
P.C. Station	10+00.00	N	7,023,431.45	E	2,603,233.74
P.T. Station	13+42.05	N	7,023,523.48	E	2,603,563.13
C.C.		N	7,017,652.99	E	2,605,025.94
Back = N	72° 46' 07.22" E				
Ahead = N	76° 00' 28.83" E				
Chord Bear = N	74° 23' 18.02" E				

Curve Data

Curve BLEBOFF-2					
P.I. Station	15+13.12	N	7,023,564.85	E	2,603,729.13
Delta =	3° 14' 21.61" (LT)				
Degree =	0° 56' 49.34"				
Tangent =	171.07				
Length =	342.05				
Radius =	6,050.00				
External =	2.42				
Long Chord =	342.00				
Mid. Ord. =	2.42				
P.C. Station	13+42.05	N	7,023,523.48	E	2,603,563.13
P.T. Station	16+84.10	N	7,023,615.52	E	2,603,892.52
C.C.		N	7,029,393.98	E	2,602,100.32
Back = N	76° 00' 28.83" E				
Ahead = N	72° 46' 07.22" E				
Chord Bear = N	74° 23' 18.02" E				

Course from PT BLEBOFF-2 to PC BLEBOFF-3 N 72° 46' 07.22" E Dist 370.00

Curve Data

Curve BLEBOFF-3					
P.I. Station	22+25.16	N	7,023,775.80	E	2,604,409.30
Delta =	3° 14' 21.21" (RT)				
Degree =	0° 56' 49.34"				
Tangent =	171.06				
Length =	342.04				
Radius =	6,050.00				
External =	2.42				
Long Chord =	341.99				
Mid. Ord. =	2.42				
P.C. Station	20+54.10	N	7,023,725.13	E	2,604,245.91
P.T. Station	23+96.14	N	7,023,817.16	E	2,604,575.29
C.C.		N	7,017,946.67	E	2,606,038.10
Back = N	72° 46' 07.22" E				
Ahead = N	76° 00' 28.43" E				
Chord Bear = N	74° 23' 17.82" E				

Course from PT BLEBOFF-3 to PC BLEBOFF-4 N 76° 00' 28.43" E Dist 166.78

Curve Data

Curve BLEBOFF-4					
P.I. Station	26+43.92	N	7,023,877.07	E	2,604,815.71
Delta =	3° 14' 21.14" (LT)				
Degree =	2° 00' 00.00"				
Tangent =	81.00				
Length =	161.96				
Radius =	2,864.79				
External =	1.14				
Long Chord =	161.94				
Mid. Ord. =	1.14				
P.C. Station	25+62.91	N	7,023,857.49	E	2,604,737.12
P.T. Station	27+24.88	N	7,023,901.07	E	2,604,893.08
C.C.		N	7,026,637.28	E	2,604,044.44
Back = N	76° 00' 28.43" E				
Ahead = N	72° 46' 07.29" E				
Chord Bear = N	74° 23' 17.86" E				

HORIZONTAL ALIGNMENT FOR ℄ EUTRN

Curve Data

Curve BLEUTRN-1					
P.I. Station	10+64.50	N	7,023,635.33	E	2,603,239.61
Delta =	73° 06' 24.63" (LT)				
Degree =	65° 51' 25.98"				
Tangent =	64.50				
Length =	111.01				
Radius =	87.00				
External =	21.30				
Long Chord =	103.63				
Mid. Ord. =	17.11				
P.C. Station	10+00.00	N	7,023,654.44	E	2,603,301.21
P.T. Station	11+11.01	N	7,023,570.83	E	2,603,239.99
C.C.		N	7,023,571.35	E	2,603,326.99
Back = S	72° 46' 07.15" W				
Ahead = S	0° 20' 17.49" E				
Chord Bear = S	36° 12' 54.83" W				

Course from PT BLEUTRN-1 to PC BLEUTRN-2 S 0° 20' 17.49" E Dist 89.55

Curve Data

Curve BLEUTRN-2					
P.I. Station	12+86.69	N	7,023,395.15	E	2,603,241.02
Delta =	108° 30' 19.07" (LT)				
Degree =	92° 24' 45.17"				
Tangent =	86.13				
Length =	117.41				
Radius =	62.00				
External =	44.13				
Long Chord =	100.64				
Mid. Ord. =	25.78				
P.C. Station	12+00.56	N	7,023,481.28	E	2,603,240.52
P.T. Station	13+17.97	N	7,023,422.97	E	2,603,322.54
C.C.		N	7,023,481.65	E	2,603,302.52
Back = S	0° 20' 17.49" E				
Ahead = N	71° 09' 23.44" E				
Chord Bear = S	54° 35' 27.02" E				

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

HORIZONTAL ALIGNMENT DATA
℄ EBON, ℄ EBOFF, ℄ EUTRN

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked: AJA	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073		3

SHEET 3 OF 4

2/6/2009 1:34:13 PM AADAMS p:\Active Projects\TXD0643\TXD0643-05\8.00 Plans and Drawings\8.30 Cut Sheets\8.3.04 Roadway\435THG03.001

HORIZONTAL ALIGNMENT FOR ℄ WBON

Curve Data

Curve BLWBON-1					
P.I. Station	11+71.07	N	7,023,637.57	E	2,603,351.46
Delta =	3° 14' 21.61" (LT)				
Degree =	0° 56' 49.34"				
Tangent =	171.07				
Length =	342.05				
Radius =	6,050.00				
External =	2.42				
Long Chord =	342.00				
Mid. Ord. =	2.42				
P.C. Station	10+00.00	N	7,023,586.89	E	2,603,188.07
P.T. Station	13+42.05	N	7,023,697.40	E	2,603,511.73
C.C.		N	7,029,365.35	E	2,601,395.87
Back = N	72° 46' 07.22" E				
Ahead = N	69° 31' 45.60" E				
Chord Bear = N	71° 08' 56.41" E				

Curve Data

Curve BLWBON-2					
P.I. Station	15+13.12	N	7,023,757.23	E	2,603,672.00
Delta =	3° 14' 21.61" (RT)				
Degree =	0° 56' 49.34"				
Tangent =	171.07				
Length =	342.05				
Radius =	6,050.00				
External =	2.42				
Long Chord =	342.00				
Mid. Ord. =	2.42				
P.C. Station	13+42.05	N	7,023,697.40	E	2,603,511.73
P.T. Station	16+84.10	N	7,023,807.90	E	2,603,835.39
C.C.		N	7,018,029.45	E	2,605,627.58
Back = N	69° 31' 45.60" E				
Ahead = N	72° 46' 07.22" E				
Chord Bear = N	71° 08' 56.41" E				

Course from PT BLWBON-2 to PC BLWBON-3 N 72° 46' 07.22" E Dist 400.00

Curve Data

Curve BLWBON-3					
P.I. Station	23+04.66	N	7,023,991.73	E	2,604,428.10
Delta =	4° 10' 32.84" (LT)				
Degree =	0° 56' 49.34"				
Tangent =	220.56				
Length =	440.93				
Radius =	6,050.00				
External =	4.02				
Long Chord =	440.83				
Mid. Ord. =	4.02				
P.C. Station	20+84.10	N	7,023,926.39	E	2,604,217.43
P.T. Station	25+25.03	N	7,024,072.24	E	2,604,633.44
C.C.		N	7,029,704.85	E	2,602,425.24
Back = N	72° 46' 07.22" E				
Ahead = N	68° 35' 34.38" E				
Chord Bear = N	70° 40' 50.80" E				

Curve Data

Curve BLWBON-4					
P.I. Station	26+29.47	N	7,024,110.36	E	2,604,730.68
Delta =	4° 10' 32.79" (RT)				
Degree =	2° 00' 00.00"				
Tangent =	104.44				
Length =	208.79				
Radius =	2,864.79				
External =	1.90				
Long Chord =	208.74				
Mid. Ord. =	1.90				
P.C. Station	25+25.03	N	7,024,072.24	E	2,604,633.44
P.T. Station	27+33.82	N	7,024,141.29	E	2,604,830.43
C.C.		N	7,021,405.09	E	2,605,679.07
Back = N	68° 35' 34.38" E				
Ahead = N	72° 46' 07.17" E				
Chord Bear = N	70° 40' 50.78" E				

HORIZONTAL ALIGNMENT FOR ℄ WBOFF

Curve Data

Curve BLWBOFF-1					
P.I. Station	10+81.00	N	7,022,945.75	E	2,600,975.72
Delta =	3° 14' 20.93" (RT)				
Degree =	2° 00' 00.00"				
Tangent =	81.00				
Length =	161.96				
Radius =	2,864.79				
External =	1.14				
Long Chord =	161.94				
Mid. Ord. =	1.14				
P.C. Station	10+00.00	N	7,022,921.76	E	2,600,898.35
P.T. Station	11+61.96	N	7,022,965.34	E	2,601,054.32
C.C.		N	7,020,185.55	E	2,601,746.98
Back = N	72° 46' 07.88" E				
Ahead = N	76° 00' 28.81" E				
Chord Bear = N	74° 23' 18.34" E				

Course from PT BLWBOFF-1 to PC BLWBOFF-2 N 76° 00' 28.81" E Dist 166.77

Curve Data

Curve BLWBOFF-2					
P.I. Station	14+99.80	N	7,023,047.02	E	2,601,382.13
Delta =	3° 14' 21.59" (LT)				
Degree =	0° 56' 49.34"				
Tangent =	171.07				
Length =	342.05				
Radius =	6,050.00				
External =	2.42				
Long Chord =	342.00				
Mid. Ord. =	2.42				
P.C. Station	13+28.73	N	7,023,005.66	E	2,601,216.14
P.T. Station	16+70.78	N	7,023,097.70	E	2,601,545.53
C.C.		N	7,028,876.15	E	2,599,753.33
Back = N	76° 00' 28.81" E				
Ahead = N	72° 46' 07.22" E				
Chord Bear = N	74° 23' 18.01" E				

Course from PT BLWBOFF-2 to PC BLWBOFF-3 N 72° 46' 07.22" E Dist 540.00

Curve Data

Curve BLWBOFF-3					
P.I. Station	23+81.85	N	7,023,308.34	E	2,602,224.68
Delta =	3° 14' 21.61" (RT)				
Degree =	0° 56' 49.34"				
Tangent =	171.07				
Length =	342.05				
Radius =	6,050.00				
External =	2.42				
Long Chord =	342.00				
Mid. Ord. =	2.42				
P.C. Station	22+10.78	N	7,023,257.66	E	2,602,061.29
P.T. Station	25+52.83	N	7,023,349.70	E	2,602,390.67
C.C.		N	7,017,479.21	E	2,603,853.48
Back = N	72° 46' 07.22" E				
Ahead = N	76° 00' 28.83" E				
Chord Bear = N	74° 23' 18.02" E				

Curve Data

Curve BLWBOFF-4					
P.I. Station	27+23.90	N	7,023,391.06	E	2,602,556.67
Delta =	3° 14' 21.61" (LT)				
Degree =	0° 56' 49.34"				
Tangent =	171.07				
Length =	342.05				
Radius =	6,050.00				
External =	2.42				
Long Chord =	342.00				
Mid. Ord. =	2.42				
P.C. Station	25+52.83	N	7,023,349.70	E	2,602,390.67
P.T. Station	28+94.88	N	7,023,441.74	E	2,602,720.06
C.C.		N	7,029,220.19	E	2,600,927.87
Back = N	76° 00' 28.83" E				
Ahead = N	72° 46' 07.22" E				
Chord Bear = N	74° 23' 18.02" E				

HORIZONTAL ALIGNMENT FOR ℄ WUTRN

Curve Data

Curve BLWUTRN-1					
P.I. Station	10+63.88	N	7,023,348.21	E	2,603,067.30
Delta =	72° 34' 42.50" (LT)				
Degree =	65° 51' 25.98"				
Tangent =	63.88				
Length =	110.21				
Radius =	87.00				
External =	20.94				
Long Chord =	102.98				
Mid. Ord. =	16.87				
P.C. Station	10+00.00	N	7,023,328.72	E	2,603,006.46
P.T. Station	11+10.21	N	7,023,412.09	E	2,603,066.92
C.C.		N	7,023,411.57	E	2,602,979.92
Back = N	72° 14' 22.62" E				
Ahead = N	0° 20' 19.88" W				
Chord Bear = N	35° 57' 01.37" E				

Course from PT BLWUTRN-1 to PC BLWUTRN-2 N 0° 20' 19.88" W Dist 91.55

Curve Data

Curve BLWUTRN-2					
P.I. Station	12+92.13	N	7,023,594.01	E	2,603,065.85
Delta =	106° 53' 32.25" (LT)				
Degree =	85° 30' 57.92"				
Tangent =	90.37				
Length =	125.00				
Radius =	67.00				
External =	45.50				
Long Chord =	107.64				
Mid. Ord. =	27.10				
P.C. Station	12+01.76	N	7,023,503.64	E	2,603,066.38
P.T. Station	13+26.76	N	7,023,567.24	E	2,602,979.53
C.C.		N	7,023,503.24	E	2,602,999.38
Back = N	0° 20' 19.88" W				
Ahead = S	72° 46' 07.87" W				
Chord Bear = N	53° 47' 06.00" W				

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

HORIZONTAL ALIGNMENT DATA

℄ WBON, ℄ WBOFF, ℄ WUTRN

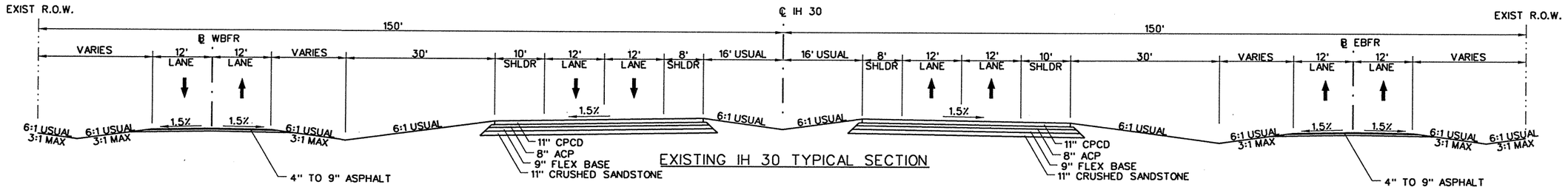
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Checked: AJA	6	TEXAS	SEE TITLE SHEET					IH 30
Drawn: CADD	DIST.	COUNTY		CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked: RRH	DAL	ROCKWALL		0009	12	073		5

SHEET 4 OF 4

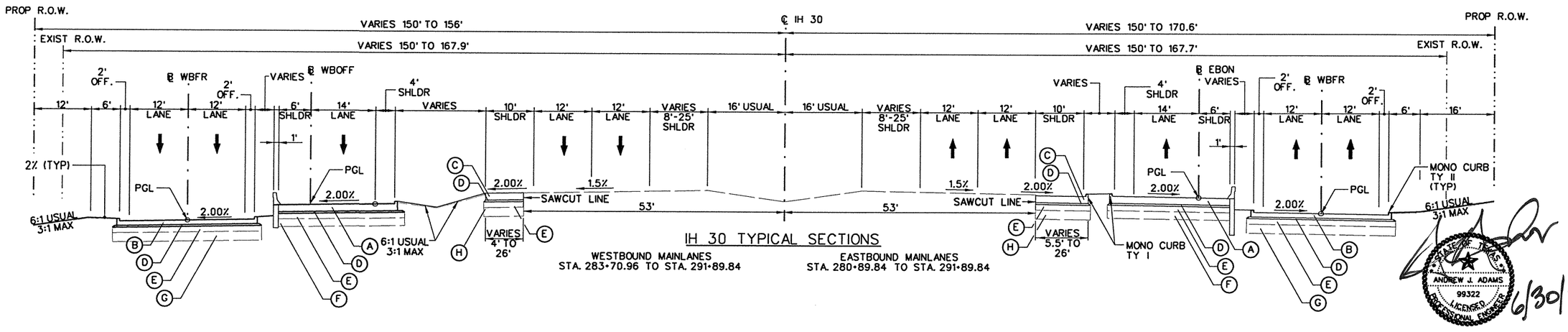
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LEGEND

- (A) CONC PAV (CONT REIN - CRCP)(15")
- (B) CONC PAV (CONC REIN - CRCP)(12")
- (C) CONC PAV (CONC REIN - CPCD)(11")
- (D) 4" D-GR HMA (METH) TY B PG64-22
- (E) LIME TRT (12") (7% LIME)
- (F) EMBANKMENT (DENS CONT) (TY C2) (17")
- (G) EMBANKMENT (DENS CONT) (TY C2) (20")
- (H) EMBANKMENT (DENS CONT) (TY C2) (21")



EXISTING IH 30 TYPICAL SECTION



IH 30 TYPICAL SECTIONS

WESTBOUND MAINLANES
STA. 283+70.96 TO STA. 291+89.84

EASTBOUND MAINLANES
STA. 280+89.84 TO STA. 291+89.84

REPLACED 7-1-09 BB

NOTE:

1. STATION LIMITS SHOWN ARE APPROXIMATE AND FOR NORMAL ROADWAY CONDITIONS. FOR WIDENINGS AND TRANSITIONS, SEE PLAN AND PROFILE SHEETS FOR ADDITIONAL INFORMATION.

SHEET 1 OF 6

NO.	REVISION	BY	DATE

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Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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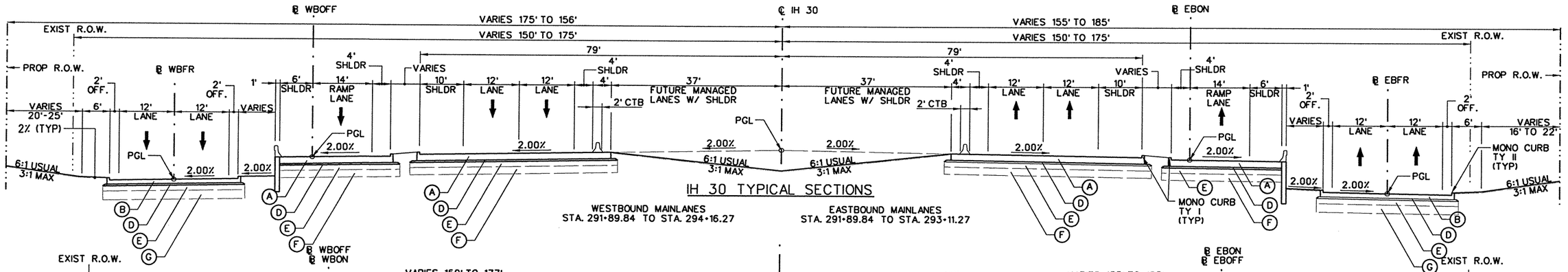
IH 30 AT JOHN KING BLVD.
MAINLANES
TYPICAL SECTIONS

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073		9

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LEGEND

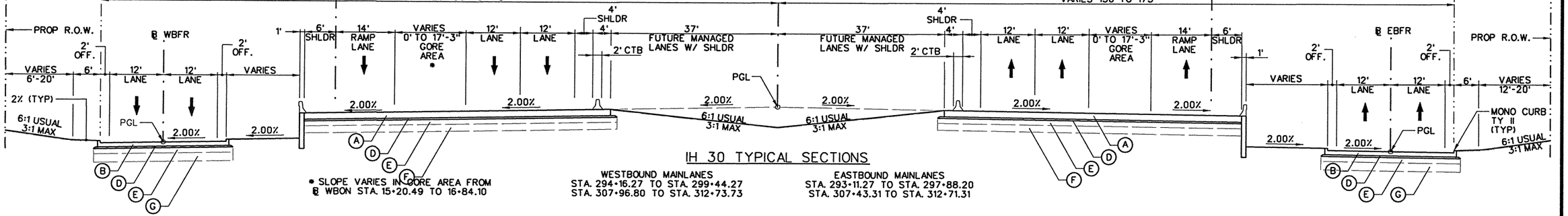
- (A) CONC PAV (CONT REIN - CRCP)(15")
- (B) CONC PAV (CONC REIN - CRCP)(12")
- (C) CONC PAV (CONC REIN - CPCD)(11")
- (D) 4" D-GR HMA (METH) TY B PG64-22
- (E) LIME TRT (12") (7% LIME)
- (F) EMBANKMENT (DENS CONT) (TY C2) (17")
- (G) EMBANKMENT (DENS CONT) (TY C2) (20")
- (H) EMBANKMENT (DENS CONT) (TY C2) (21")



IH 30 TYPICAL SECTIONS

WESTBOUND MAINLANES
STA. 291+89.84 TO STA. 294+16.27

EASTBOUND MAINLANES
STA. 291+89.84 TO STA. 293+11.27



IH 30 TYPICAL SECTIONS

* SLOPE VARIES IN GORE AREA FROM ℄ WBON STA. 15+20.49 TO 16+84.10

WESTBOUND MAINLANES
STA. 294+16.27 TO STA. 299+44.27
STA. 307+96.80 TO STA. 312+73.73

EASTBOUND MAINLANES
STA. 293+11.27 TO STA. 297+88.20
STA. 307+43.31 TO STA. 312+71.31

NOTE:

1. STATION LIMITS SHOWN ARE APPROXIMATE AND FOR NORMAL ROADWAY CONDITIONS. FOR WIDENINGS AND TRANSITIONS, SEE PLAN AND PROFILE SHEETS FOR ADDITIONAL INFORMATION.

STATE OF TEXAS
ANDREW J. ADAMS
99322
LICENSED PROFESSIONAL ENGINEER

6/30/09

(2) REPLACED 7-1-09 BB

NO.	REVISION	BY	DATE

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Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

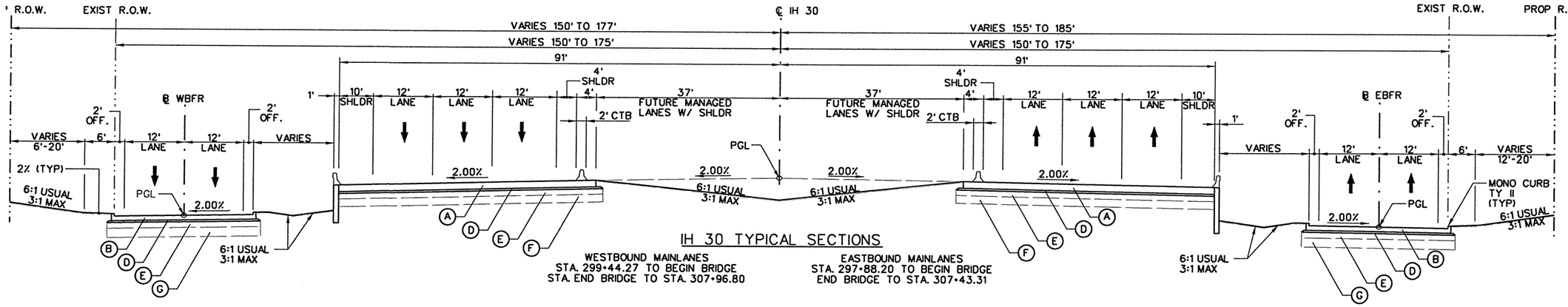
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IH 30 AT JOHN KING BLVD.
MAINLANES
TYPICAL SECTIONS

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Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	10

SHEET 2 OF 6

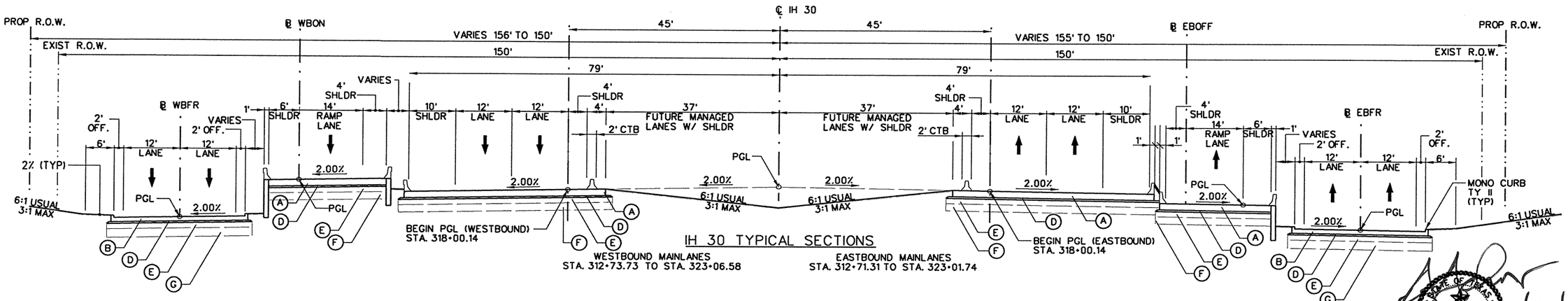
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IH 30 TYPICAL SECTIONS

WESTBOUND MAINLANES
STA. 299+44.27 TO BEGIN BRIDGE
STA. END BRIDGE TO STA. 307+96.80

EASTBOUND MAINLANES
STA. 297+88.20 TO BEGIN BRIDGE
END BRIDGE TO STA. 307+43.31



IH 30 TYPICAL SECTIONS

BEGIN PGL (WESTBOUND)
STA. 318+00.14

WESTBOUND MAINLANES
STA. 312+73.73 TO STA. 323+06.58

EASTBOUND MAINLANES
STA. 312+71.31 TO STA. 323+01.74

BEGIN PGL (EASTBOUND)
STA. 318+00.14

LEGEND

- (A) CONC PAV (CONT REIN - CRCP)(15")
- (B) CONC PAV (CONC REIN - CRCP)(12")
- (C) CONC PAV (CONC REIN - CPCD)(11")
- (D) 4" D-GR HMA (METH) TY B PG64-22
- (E) LIME TRT (12") (7% LIME)
- (F) EMBANKMENT (DENS CONT) (TY C2) (17")
- (G) EMBANKMENT (DENS CONT) (TY C2) (20")
- (H) EMBANKMENT (DENS CONT) (TY C2) (21")

NOTE:

1. STATION LIMITS SHOWN ARE APPROXIMATE AND FOR NORMAL ROADWAY CONDITIONS. FOR WIDENINGS AND TRANSITIONS, SEE PLAN AND PROFILE SHEETS FOR ADDITIONAL INFORMATION.

2 REPLACED 7-1-09 BB

STATE OF TEXAS
ANDREW J. ADAMS
99322
LICENSED PROFESSIONAL ENGINEER
6/30/09

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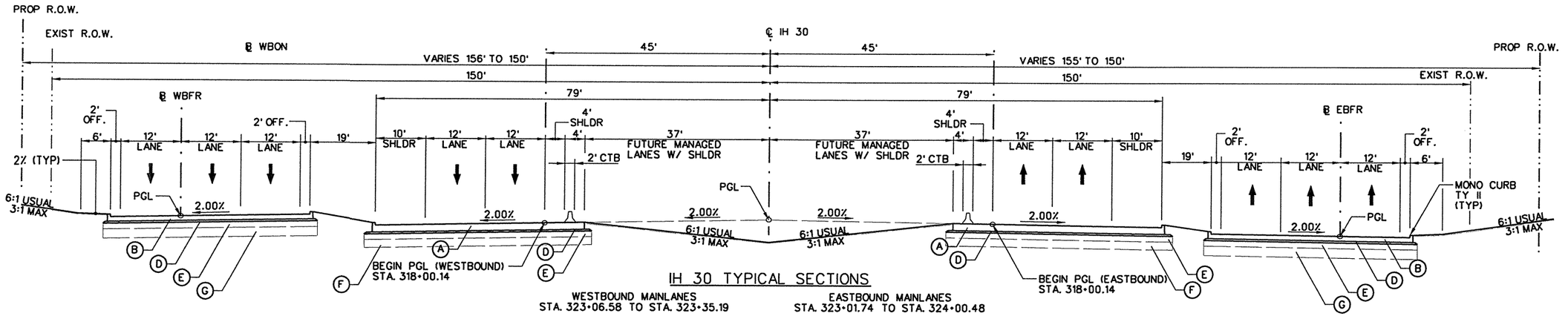
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IH 30 AT JOHN KING BLVD.
MAINLANES
TYPICAL SECTIONS

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Checked: AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	11

SHEET 3 OF 6

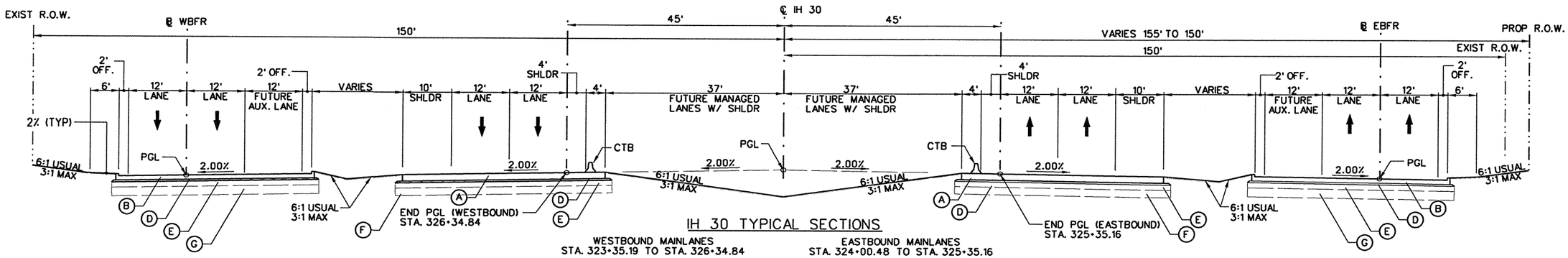
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IH 30 TYPICAL SECTIONS

WESTBOUND MAINLANES
STA. 323+06.58 TO STA. 323+35.19

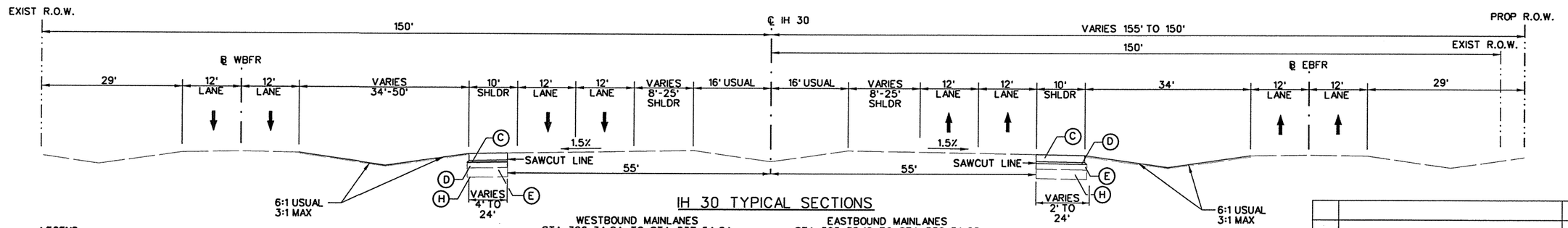
EASTBOUND MAINLANES
STA. 323+01.74 TO STA. 324+00.48



IH 30 TYPICAL SECTIONS

WESTBOUND MAINLANES
STA. 323+35.19 TO STA. 326+34.84

EASTBOUND MAINLANES
STA. 324+00.48 TO STA. 325+35.16



IH 30 TYPICAL SECTIONS

WESTBOUND MAINLANES
STA. 326+34.84 TO STA. 337+54.84

EASTBOUND MAINLANES
STA. 325+35.16 TO STA. 336+34.28

LEGEND

- (A) CONC PAV (CONT REIN - CRCP)(15")
- (B) CONC PAV (CONC REIN - CRCP)(12")
- (C) CONC PAV (CONC REIN - CPCD)(11")
- (D) 4" D-GR HMA (METH) TY B PG64-22
- (E) LIME TRT (12") (7% LIME)
- (F) EMBANKMENT (DENS CONT) (TY C2) (17")
- (G) EMBANKMENT (DENS CONT) (TY C2) (20")
- (H) EMBANKMENT (DENS CONT) (TY C2) (21")

NOTE:

1. STATION LIMITS SHOWN ARE APPROXIMATE AND FOR NORMAL ROADWAY CONDITIONS. FOR WIDENINGS AND TRANSITIONS, SEE PLAN AND PROFILE SHEETS FOR ADDITIONAL INFORMATION.

2 REPLACED 7-1-09 BB

STATE OF TEXAS
ANDREW J. ADAMS
99322
LICENSED
PROFESSIONAL ENGINEER
6/30/09

NO.	REVISION	BY	DATE

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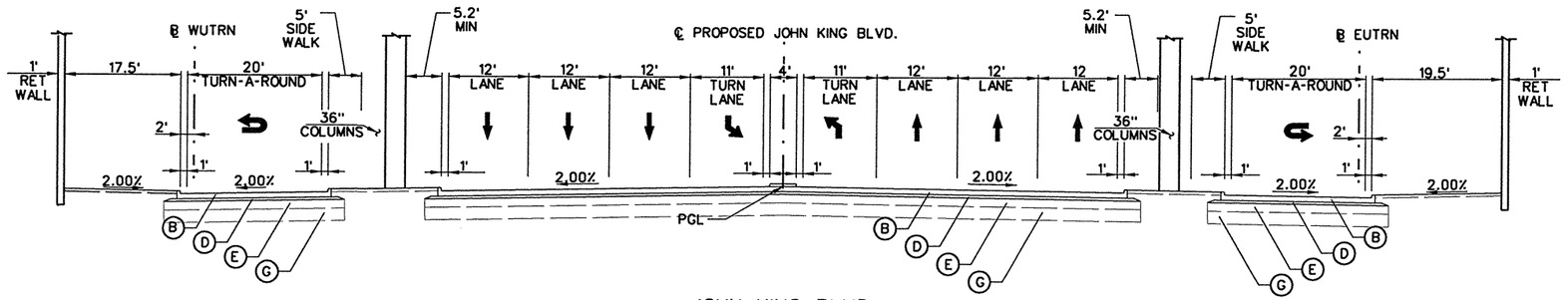
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IH 30 AT JOHN KING BLVD.
MAINLANES
TYPICAL SECTIONS

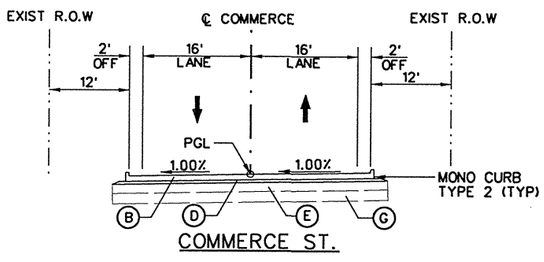
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Checked: AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	12

SHEET 4 OF 6

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JOHN KING BLVD.



COMMERCE ST.

LEGEND

- (A) CONC PAV (CONT REIN - CRCP)(15")
- (B) CONC PAV (CONC REIN - CRCP)(12")
- (C) CONC PAV (CONC REIN - CPCD)(11")
- (D) 4" D-GR HMA (METH) TY B PG64-22
- (E) LIME TRT (12") (7% LIME)
- (F) EMBANKMENT (DENS CONT) (TY C2) (17")
- (G) EMBANKMENT (DENS CONT) (TY C2) (20")
- (H) EMBANKMENT (DENS CONT) (TY C2) (21")

NOTE:

1. STATION LIMITS SHOWN ARE APPROXIMATE AND FOR NORMAL ROADWAY CONDITIONS. FOR WIDENINGS AND TRANSITIONS, SEE PLAN AND PROFILE SHEETS FOR ADDITIONAL INFORMATION.

2 REPLACED 7-1-09 BB

STATE OF TEXAS
ANDREW J. ADAMS
99322
LICENSED PROFESSIONAL ENGINEER
6/30/09

NO.	REVISION	BY	DATE

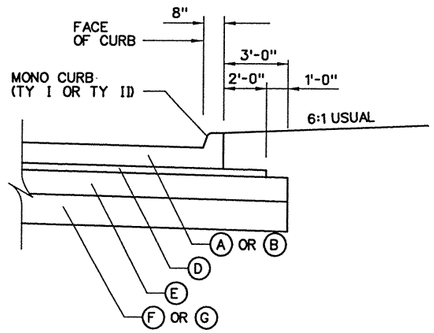
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Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.
CROSS STREETS
TYPICAL SECTIONS

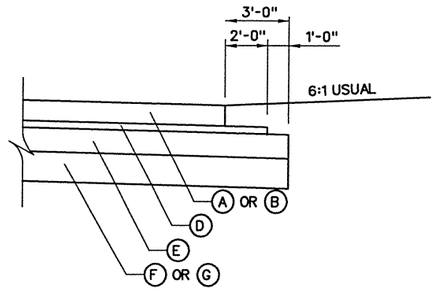
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Checked:	AJA	6	TEXAS	SEE TITLE SHEET				IH 30
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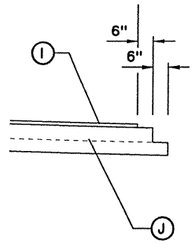
CRCP STRUCTURE

N.T.S.



CRCP STRUCTURE

N.T.S.



HOT MIX STRUCTURE

N.T.S.

LEGEND

- (A) CONC PAV (CONT REIN - CRCP)(15")
- (B) CONC PAV (CONC REIN - CRCP)(12")
- (C) CONC PAV (CONC REIN - CPCD)(11")
- (D) 4" D-GR HMA (METH) TY B PG64-22
- (E) LIME TRT (12") (7% LIME)
- (F) EMBANKMENT (DENS CONT) (TY C2) (17")
- (G) EMBANKMENT (DENS CONT) (TY C2) (20")
- (H) EMBANKMENT (DENS CONT) (TY C2) (21")
- (I) 2" D-GR HMA (METH) TY B PG76-22
- (J) 10" D-GR HMA (METH) TY C PG64-34

STATE OF TEXAS
ANDREW J. ADAMS
99322
LICENSED
PROFESSIONAL ENGINEER

6/30/09

NO.	REVISION	BY	DATE

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IH 30 AT JOHN KING BLVD.

MISCELLANEOUS DETAILS

TYPICAL SECTIONS

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	14

2 REPLACED 7-1-09 BB

6/30/2009 9:38:07 AM aadams pw:/Active Projects/TXD00643/TXD00643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.01 General/435TGT06.999

Project Number: **Control: 0009-12-073**

County: Rockwall

Highway: IH 30

SW3P RESPONSIBILITIES

TxDOT Area of Responsibility

Responsible for the area defined by the limits of the subject project, except for those areas utilized and operated by the contractor. These areas include, though are not limited to, areas used for field offices, equipment and/or material storage, and concrete or asphalt plants.

TxDOT Operational Responsibility

Responsible for seeking coverage under the TPDES Construction General Permit (CGP) and operating the project within the requirements of the CGP for discharging storm water from the subject project and to notify MS4 permit holders of the intent to discharge storm water.

File a Notice of Termination with TCEQ upon completion of the project when the exposed areas have been stabilized with a vegetative cover of at least 70%.

Contractor Area of Responsibility

Responsible for all areas under their direct operational control which includes, though not limited to, areas used for field offices, equipment and/or material storage, and concrete or asphalt plants. These areas may be located on or off the subject project's R.O.W.

Contractor Operational Responsibility

Responsible for seeking coverage under the TPDES Construction General Permit (CGP) and adhering to all requirements of the permit for discharging storm water from the areas under their operational control. Perform regular inspections, prepare a written report of deficiencies, and repair deficiencies within the time frame set forth by the permit. File a Notice of Termination with TCEQ upon completion of the project when the exposed areas have been stabilized with a vegetative cover of at least 70%.

Responsible under contractual obligations to TxDOT to install, clean, repair, replace or remove sediment and erosion control devices as indicated on TxDOT's Inspection Reports, or as required by daily construction practices, within the time frame set forth by the permit.

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Specification Data

Table 1: Soil Constants Requirements

Item	Description	Plasticity Index		Note
		Max	Min	
132	Embk(Dens Cont) (Type C1)	40	8	1
132	Embk(Dens Cont) (Type C2)	25	10	2

Note 1: Material excavated from the project must meet the PI requirements when used in the top 10 feet of embankment that supports the pavement structure or other locations shown in the plans. Do not use shale and obtain approval to incorporate shaley clay produced by the construction project.

Note 2: Use as a non-select embankment backfill as defined under Item 423.2.C.1. Use as an embankment to backfill behind abutments to the extent of the approach slab or to backfill areas enclosed by an abutment and retaining walls or other locations as shown in the plans.

Table 2: Basis of Estimate for Permanent Construction

Item	Description	Thickness	Rate		Quantity	
161	Compost Manf. Topsoil	4"			71,162	SY
164	Broadcast Seed (Perm)	N/A			71,162	SY
166 *	Fertilizer (12-6-6)	N/A	850	Lbs/Ac	6	Ton
168	Vegetative Watering	N/A	155	Mg/Ac	2279	Mg
204	Sprinkling (dust cont)	N/A		Mg/Sta		Mg
260	Hydrated Lime (dry)			7% by wt	3,398	Ton
341	Hot Mix Asphalt (Ty B)		110	Lbs/SY/In	24,353	Ton
340	Hot Mix Asphalt (Ty C)		110	Lbs/SY/In	397	Ton
* For contractor's information only						
Note: (1) Base material weight based on 1.50 Ton/CY (dry- compacted) (2) Asphalt weight based on 110 Lbs/SY/inch (3) Subgrade weight based on ____ Ton/CY (dry- compacted)						

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Table 3: Basis of Estimate for Temporary Erosion Control Items					
Item	Description	Rate		Quantity	
164	Cell Fbr Mlch Seed (Temp)(wm) Cell Fbr Mlch Seed (Temp)(col)			48,060 48,060	SY
166*	Fert (12-6-6)	850	Lbs /Ac	8	Ton
168	Vegetative Watering	155	Mg/Ac	3078	Mg
*For contractor's information only					

Table 4: Hamburg Wheel Test Requirements			
High-Temperature Binder Grade	Test Method	Laboratory Mixture Design or Trial Batch	Production and Placement Test[1]
		Minimum # of Passes @ 0.5" Rut Depth, Tested @122°F	Minimum # of Passes @ 0.5" Rut Depth, Tested @122°F
PG 64-22 or lower	Tex-242-F	7,000	7,000

1. The Engineer may accept if no more than 1of the 5 most recent Hamburg Wheel tests is below the specified number of passes and the failing test is no more than 2000 passes below the specified number of passes.

General:

Access will be provided to all business and residences at all times. Materials, labor and maintenance for these temporary accesses will not be paid for directly but will be considered subsidiary to the various bid items.

The construction, operation and maintenance of the proposed project will be consistent with the state implementation plan as prepared by the Texas Commission on Environmental Quality.

The disturbed area for this project, as shown on the plans is 45 acres. However, **the Total Disturbed Area** (TDA) will establish the required authorization for storm water discharges. The TDA of this project will be determined by the sum of the disturbed area in all project locations in the contract, and all disturbed area on all Project-Specific

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Locations (PSL) located in the project limits and/or within 1 mile of the project limits. The department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction site as shown on the plans, according to the TDA of the project. The contractor will obtain any required authorization from the TCEQ for the discharge of storm water from any PSL for construction support activities on or off of the project row according to the TDA of the project. When the TDA for the project exceeds 1 acre, provide a copy of the appropriate application of permit (NOI, or Construction Site Notice) to the engineer, for any PSL located in the project limits or within 1 mile of the project limits. Follow the directives and adhere to all requirements set forth in the TCEQ, Texas Pollution Discharge Elimination System, Construction General Permit (TPDES, CGP).

Prior to contract letting, bidders may obtain a free computer diskette or electronic files (from the engineer's office) that contains the earthwork information. If copies of the actual cross-sections, in addition to or instead of the diskette, are requested, they will be available at the engineer's office for borrowing by copying companies for the purpose of making copies for the bidder at the bidder's expense. This data is for non-construction purposes only and it is the responsibility of the prospective bidder to validate the enclosed data with appropriate plans, specifications and estimate for the project(s).

Install traffic marking signs prior to sealcoat application and remove within three days after placement of traffic markings.

Leave all right of way areas undisturbed until actual construction is to be performed in said areas.

Use established industry and utility safety practices to erect poles, luminaries, signs or structures near any overhead or underground utility. Consult with the appropriate utility company prior to beginning such work.

Underground utilities owned by the Texas Department of Transportation may be present within the Right-Of-Way on this project. For signal, illumination, surveillance, and communication & control, call 1-800-DIG-TESS (1-800-344-8377), TxDOT Traffic Signal Office (214-320-6682), and TxDOT Freeway Management Office (214-320-4439) for locates a minimum of 48 hours in advance of excavation. For irrigation systems, call TxDOT Maintenance Landscape Office (214-320-6205) for locates a minimum of 48 hours in advance of excavation. If city or town owned irrigation facilities are present, call the appropriate department of the local city or town a minimum of 48 hours in advance of excavation.

For the project to be deemed complete, permanently stabilize all unpaved disturbed areas of the project with a vegetative cover at a minimum of 70% density for the control of erosion.

Repair or replace any structures and utilities that might have been damaged by negligence or a failure to have utility locates performed.

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Perform all electrical work in accordance with the National Electrical Code and Texas Department of Transportation Specifications.

Consult with appropriate electric company representatives according to their respective area to coordinate electrical services installations.

Meet weekly with the engineer to notify him or her of planned work for the upcoming week.

Provide the engineer with a daily work schedule of planned work.

Submit pre-letting questions by e-mail or fax as follows:
e-mail: WFULLE1@dot.state.tx.us
fax: (214) 320-6655
The answers will be submitted in the same format in which they are received. A file containing these questions and answers will be available for review at the area engineer's office located at 4777 E. Highway 80, Mesquite, TX 75150.

Material On Hand (MOH) will not be used in calculating partial payments for Mobilization.

Provide the Engineer with a copy of all DBE subcontractor agreements prior to commencing work.

The following standard detail sheets have been modified:
SMD(SLIP-1)-02(DAL) - District Standard for small sign assemblies.

Item 8:

This Project will be a Five-Day Workweek in accordance with Article 8.3.A.1.

This project includes an incentive for early completion of Milestone 1 as per Special Provision 008-069.

No.	Milestone	Milestone Starts	Milestone Finishes	Maximum Days of Milestone Incentive	Daily Incentive ($)
1	Open the IH 30 bridge over John King Blvd and John King Blvd under IH 30 bridge to traffic as shown in the plans	When time charges begin.	All lanes of IH 30 bridge and John King Blvd are open to traffic on or before December 31, 2009	60	$1,550.00 [The maximum incentive for milestone 1 shall not exceed $93,000.00]

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Item 100:

Remove and replace the existing roadway signs as shown on the plans, or as directed, during construction within the right of way.

The limits of preparing right of way will be measured from Sta. 278+65.50 to Sta. 337+54.84 along the centerline of construction.

Item 104:

In those areas where the pavement is not to be overlaid, provide a smooth surface after the curb removal. Planing or grinding is considered an acceptable method at these locations. Measurement and payment is in accordance with this item.

Sawing of concrete is not paid for directly, but is considered subsidiary to this item.

Items 104 and 496:

Concrete pavement removed as a result of removing the inlets will not be paid for directly but will be considered as subsidiary to Item 496.

Removal of all concrete and structures of the types specified in the plans will be paid for under the pertinent bid item. The removal of other types of obstructions encountered will be paid for under Item 100, if applicable.

Items 105, 251, 305, and 354:

Saw existing asphalt along neat lines where portions are to be left in place temporarily or permanently. Sawing is not paid for directly, but is subsidiary to this item.

Item 105:

Separate the asphalt pavement from the base material. Stockpile the asphalt pavement at Rockwall Maintenance Office. Place the asphalt pavement material in a stockpile that meets the dimensions and requirements designated by the engineer.

Stockpile materials in uniform piles up to 15 feet in height unless otherwise instructed. Furnish adequate equipment at the stockpile to keep and leave the materials in a neat and orderly manner.

Properly dispose of unsalvageable material at your own expense.

Items 110 and 132:

Excavation and embankment for driveways, sleeper slabs, alleys and intersections will not be paid for directly, but will be considered subsidiary to this item.

Items 110, 112 and 132:

Scarify and loosen the excavated areas, unpaved surface areas, except rock, to a depth of at least 8 inches and compact in accordance with the specifications.

Use an approved laboratory to perform tests for sulfate and plasticity index and provide results on sources outside the right of way at no additional expense to the department. Test soil for sulfate levels in accordance with Tex-145-E. Contact the engineer for a list of approved laboratories. Notify the engineer 72 hours before sampling and testing material. Perform split-sample verification testing with the engineer when directed. The engineer will sample and test material produced by the construction project for specification requirements or material sources specified in the plans.

When lime treatment is allowed to reduce Plasticity Index, apply lime slurry in accordance with Item 260, "Lime Treatment (Road-Mixed)." Furnish material containing sulfate at or below the threshold of 5000 parts per million (ppm). For material with sulfate levels greater than 3000 ppm, allow the mixture to mellow for at least three days, or as directed. The engineer will test material placed or excavated to a depth of one foot below and laterally to one foot outside the proposed treatment limit. Notify the engineer 48 hours before lime treatment of the material.

Shale is not an acceptable material for embankment. Do not use shaley clays in embankment unless approved in writing.

Items 110, 132 and 164:

Perform vertical tracking on slopes to temporarily stabilize soil. Provide equipment with a track undercarriage capable of producing a linear soil impression measuring at least 12 inches in length by 2 to 4 inches in width by ½ to 2 inches in depth. Do not exceed 12 inches between track cleats. Install continuous linear track impressions where the minimum 12 inches in length impressions is perpendicular to the direction of water flow. This will not be paid for directly but considered subsidiary to this item.

Item 132:

Earth embankment Type C1 and C2, are mainly composed of material other than shale. Furnish material that is free from vegetation or other objectionable material and that conforms to the requirements of Table 1 (Sheet B). If necessary, add lime slurry in accordance with Item 260, "Lime Treatment (Road-Mixed)" in order to meet these

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requirements. Use Tex-121-E, figure 1, page 5 to calculate the amount of lime required. Furnish material containing sulfate at or below the threshold of 5000 parts per million (ppm). For material with sulfate levels greater than 3000 ppm, allow the mixture to mellow for at least three days, or as directed. Test soil for sulfate levels in accordance with Tex-145-E. Use an approved laboratory to perform tests for sulfate and plasticity index and provide results on sources outside the right of way to the department. Contact the engineer for a list of approved laboratories. Notify the engineer 48 hours before sampling and testing material. Perform split-sample verification testing with the engineer when directed. The engineer will sample and test material produced by the construction project for specification requirements or material sources specified in the plans. The engineer will test material placed or excavated to a depth of one foot below and laterally to one foot outside the proposed treatment limit. Lime treatment and testing of this material will not be paid for directly, but will be considered subsidiary to this item.

Do not use shaley clays in embankment unless approved in writing.

Use embankment material Type C2 described in Table 1 "Soil Constants Requirements" for embankments behind bridge abutments to the extent of the bridge approach slabs, and other embankments enclosed by an abutment and retaining walls.

Item 260:

Furnish and distribute MS-2 smoothly and evenly at the rate of 0.20 gallons per square yard to cure lime, as directed.

Provide Hydrated Lime Slurry and apply lime by slurry placement method.

Item 301:

Provide liquid antistripping agents unless otherwise directed. Provide manufacturer's instruction for liquid antistripping agent.

Add the minimum percentage determined by the manufacturer and try subsequent trials at 0.25% increments, unless otherwise instructed by the manufacture.

Items 305 and 354:

Separate the asphalt pavement from the base material. Stockpile the asphalt pavement at SH 276 at Rochelle. Place the asphalt pavement material in a stockpile that meets the dimensions and requirements designated by the engineer.

Stockpile materials in uniform piles up to 15 feet in height unless otherwise instructed. Furnish adequate equipment at the stockpile to keep and leave the materials in a neat and orderly manner.

Properly dispose of unsalvageable material at your own expense.

Slope longitudinal faces greater than 1 ¼"To a minimum of 1:1 slope at the end of the work period if traffic is able to traverse the joint. Slope transverse tapers to a minimum of 36:1 at the end of the workday. Remove the taper prior to continuing the milling.

For open shoulder sections, plane the asphalt so the flow of water is not impeded at the shoulder edge or across the surface. Added planing up to three feet in width outside the lines and grades of the plans, necessary to provide proper drainage, will be subsidiary to the bid item.

Item 320:

Material Transfer Device is required.

The use of windrow pick-up equipment is allowed except on the first course of roadway material placed over the subgrade.

Items 340, 341:

Place hot mix asphalt when the roadway surface temperature is equal to or higher than the temperatures listed in Table 4 unless otherwise approved. Measure the roadway surface temperature with a handheld infrared thermometer. The Engineer may allow mixture placement to begin prior to the roadway surface reaching the required temperature requirements if conditions are such that the roadway surface will reach the required temperature within 2 hrs. of beginning placement operations. Unless otherwise shown on the plans, place mixtures only when weather conditions and moisture conditions of the roadway surface are suitable in the opinion of the Engineer.

Item 340:

Use aggregate that meets the Surface Aggregate Classification (SAC) requirement of Class B.

Provide the engineer the opportunity to witness all mixture design tests. The engineer may require a retest if not given the opportunity to witness.

Dilution of tack is not allowed.

Provide PG binder 76-22 in Type C mixture.

Item 341:

Use aggregate that meets the Surface Aggregate Classification (SAC) requirement of Class B.

Minimum requirement for coarse aggregate 5 cycle magnesium sulfate soundness is 25%. Meet this requirement for type B hot mix only.

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Provide the engineer the opportunity to witness all mixture design tests. The engineer may require a retest if not given the opportunity to witness.

Dilution of tack is not allowed.

Provide PG binder 64-22 in Type B mixture.

Hamburg Wheel test requirements for mixes with PG 64-22 shall meet Table 5. The use of RAP is permitted to meet these requirements.

Item 360:

Use of multiple piece tiebars will be required. Provide chairs for multiple piece tiebars, threaded connectors or other adequate devices, used in concrete paving, or tie them to the pavement reinforcing steel. If approved by the engineer for specific areas, in lieu of multiple piece tiebars, drill holes into the pavement and grout straight tiebars in place with epoxy. Use a non-impact, rotary core drill to prevent damage to the pavement unless otherwise directed. Clean the drill holes and then completely fill with epoxy before inserting the tiebar. Do not bend the tiebars or insert them into plastic concrete without the approval of the engineer.

Provide curbs monolithically constructed with the concrete pavement. If continuous monolithic curb has to be temporarily omitted for any reason, provide dowelled curbs in the proposed areas, as detailed in the plans, and apply an approved epoxy resin to the pavement to receive the curb as directed. This work and materials will not be paid for directly, but is considered subsidiary to this item.
If asphalt curing is used, cure the concrete pavement with MS-2.

Stockpile the concrete aggregates at the plant site.

Provide pavement widening joints, as detailed in the plans, at all locations where concrete pavement is placed adjacent to existing concrete pavement. Installation of these joints is not paid for directly, but is considered subsidiary to this item.

Payment for furnishing and installing the pre-molded expansion joint material between the retaining walls and concrete pavement is not paid for directly, but is considered subsidiary to this item.

Provide a curing machine equipped with rubber tires, or other acceptable arrangement, so that the machine will span the pavement and monolithic curb.

Curb transition is paid for as Type II curb.

The installation of curb openings is not paid for directly, but is considered subsidiary to this item.

Place construction, sawed and contraction joints in accordance with the pavement detail sheet and as directed. Joint locations, other than as shown on the plans, are subject to approval. Pavement leaveouts are required on this project as necessary to provide for traffic at driveways and side streets as shown in the plans or as directed. The cost of providing these leaveouts, including the construction of a suitable crossover connection at each site, is not paid for directly but is considered subsidiary to this item.

If a traveling form paver is used, provide one equipped with an electronically operated horizontal control device.

Provide tiebars in longitudinal joints but do not place them within 15 inches of transverse joints.

Use "mechanical steel placing equipment" at the discretion of the engineer.

Item 400:

Structural Excavation is not paid for directly but is considered subsidiary to pertinent Items.

When placing concrete storm drain pipe on slopes of greater than 10 percent, provide cement stabilized backfill to a depth shown on the plans. The aggregate shall conform to the requirements of Article 421.2.E.2.

Item 416:

Provide a smooth finish for all portions of drill shafts extending above proposed ground. Include cost for this work in the unit bid price for this item.

Provide a minimum of one core per bent, regardless of placement method.

Item 420:

Apply an ordinary surface finish to all concrete surfaces within 30 days after form removal.

NATIONAL BRIDGE INVENTORY NUMBERS:
Provide National Bridge Inventory (NBI) numbers on all bridge structures and bridge class culverts.

Where beam types allow access to the face of abutment backwall, place NBI numbers on the face of each abutment backwall using 3" block numbers. Locate NBI numbers between the outside beams at opposite corners of the bridge.

Where beam types do not allow access to the face of abutment backwall, place NBI numbers on the face of each abutment cap using 3" block numbers. Locate NBI numbers below the outside beams at opposite corners of the bridge.

Where a bridge begins, ends or contains a bent common to multiple structures, place NBI numbers on both faces near both ends of the common bent cap. The number placed at each of the four locations will correspond to the NBI number assigned to the bridge immediately above the number. Locate NBI numbers below the outside beam. Place using 3" Block Numbers.

For all conditions, use appropriate die cut stencils and black paint for placement. All materials, labor and incidentals associated with placing NBI numbers are subsidiary to the various bid items.

Items 420, 422, 430 and 440:

Provide bridge slab reinforcing steel with epoxy coating complying with Item 440 requirements.

Item 421:

Furnish mix designs to the Engineer in a format compatible to the latest version of the Department's Construction Management System (Site Manager). Mix Design templates will be provided by the Engineer.

Provide sulfate resistant concrete for box culverts and drill shafts. High performance concrete meets the requirement for sulfate resistant concrete when Class C fly ash and Type I cement is not used in the mix design.

Strength evaluation using maturity testing, Tex-426-A, may be used for all concrete elements except drill shafts and mass concrete pours.

Maturity meters may be used for temperature gradient determination in mass concrete pours.

Provide a digital hydraulic compression testing Machine and accessories. The machine shall have a minimum testing range of 2500 pounds force to 250,000 pounds force with a hydraulic switching valve to allow for rapid advancing, hold, controlled advancing and rapid retracting. The machine shall have a load cell to measure compressive forces within the testing range and shall be calibrated and verified in accordance with ASTM latest version. The Machine can meet or exceed the following when approved by the Engineer:

ELE International ACCU-TEK250 Digital Compression Tester including accessories or Forney F-250EX Standard Compression Machine including accessories or TxDOT approved equal.

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Item 423:

For Mechanically Stabilized Earth (MSE) walls, provide a system from one of the following approved suppliers:

Reinforced Earth Walls
The Reinforced Earth Company
1331 Airport Freeway, Suite 302
Euless, Texas 76040-4150
817-283-5503

Reinforced Soil Embankment Walls
Texas Welded Wire, Inc.
645 W. Hurst Blvd.
Hurst, Texas 76053
817-282-4560

Retained Earth Walls
Foster Geotechnical
901 North Highway 77
Hillsboro, Texas 76645
254-580-9100

Stabilized Earth Wall
T&B Structural Systems, Inc.
6800 Manhattan Blvd., Suite 303
Fort Worth, Texas 76120
817-280-9858

Strengthened Earth Walls
Hanson Concrete Products
3500 Maple Ave.
Dallas, Texas 75219
214-525-5877

Strengthened Soil Walls
Shaw Technologies Inc.
P.O. Box 271448
Flower Mound, Texas 75027
972-490-1924

Tensar Retaining Wall System
Tensar Earth Technologies, Inc.
5775-B Glenridge Drive
Atlanta, Georgia 30328
404-250-1290

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Tricon Retained Soil Walls
Tricon Precast, Inc.
15055 Henry Rd.
Houston, Texas 77060
713-931-9832

VP Wall System
Valley Prestress Products, Inc.
P.O. Box 1367
Mission, Texas 78573
956-584-5701

Provide MSE walls with an Ashlar Stone texture form liner finish. See drawings for form liner stone texture detail. Several MSE wall panels will have a custom formed graphic image as shown and noted on the drawings.

The bottom of the custom formed graphic image is to be a minimum of 1 foot above finished grade and a minimum of 1 foot below the bottom of wall coping.

Unless otherwise noted in the plans, the top of the leveling pad is located 2 feet below the proposed ground.

Square foot surface area of retaining wall is measured from the top of retaining wall to the top of the leveling pad. Footing adjustments made to accommodate the available optional retaining walls are not measured.

Unless otherwise shown on the plans, provide Type A backfill as defined under this item for permanent MSE walls not subject to inundation. Unless otherwise shown on the plans, provide type D backfill as defined under this item for walls subject to inundation.

Supply drainage aggregate meeting the requirements of this item for use as filter material with the retaining wall.

Cement-Stabilized Backfill (CSB) is not permitted.

Crushed concrete is not permitted as backfill.

Rap is not acceptable as backfill for MSE retaining walls.

Unless otherwise noted on the plans, provide flowable backfill meeting the requirements of Item 401 between the back of panels and inlets or drainage pipes where the required compaction can not be achieved. Flowable backfill used for this purpose is subsidiary to this item.

Provide earth reinforcements with a length greater than or equal to percentage of wall height shown on the drawings or 8 feet whichever is greater.

Submit design calculations supporting the details necessary to incorporate coping, railing, inlets, drainage, electrical conduits and any additional necessary features.

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The contractor has the option of constructing any of the types of retaining walls for which details and specifications are included in the plans. Footing adjustments made to accommodate the available optional retaining walls are not measured. Regardless of option or options chosen, use the same fascia pattern throughout the entire project, including cast in place full height retaining walls or retaining wall type abutments.

Submit detailed drawings depicting the patterns and matching of precast with cast-in-place for approval.

Form the map of Texas emblem into a form liner textured MSE wall panel on each bridge abutment side wall face. Four emblems total. Emblems are to be located separate and away from the Prairie and Sail graphic images to be applied to the bridge abutment side walls. Show map of Texas emblem locations on graphic panel shop drawing submittal. City of Rockwall Representative approval of the exact location of each map of Texas emblem is required. The cost of forming emblems is considered subsidiary to this item. Inset the map of Texas a minimum of ¾ inch into the face of the panel, and provide a smooth finish with a City of Rockwall Representative approved color.

At contractor's expense, repair all damage to the precast units (such as cracks and chips) as required to match the fascia pattern.

Items 423 and 427:

For cast in place walls, provide an Ashlar Stone form liner texture finish to match the MSE wall texture.

No additional payment shall be made for the Prairie, Sail or map of Texas form liners as they are subsidiary to MSE Walls. However, Contractor shall submit a copy of an invoice from the MSE panel providers listing the costs for the Prairie, Sail and map of Texas form liners.

No additional payment shall be made for the Ashlar Stone form liner texture fascia treatment on the MSE panels as they are subsidiary to MSE walls. However, Contractor shall submit a copy of an invoice from the MSE panel providers listing the costs for the Ashlar Stone fascia treatment.

No additional payment shall be made for the Ashlar Stone or Riverbed Aggregate form liner texture fascia treatment on the cast in place concrete retaining walls, bridge bents or bent cap seam covers as they are subsidiary to wall and bridge construction. However, Contractor shall submit a copy of an invoice from the concrete wall providers listing the costs for the Ashlar Stone and Riverbed Aggregate fascia treatment.

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Item 427:

For cast in place bridge bent and bent cap concrete seam cover fields, provide a Riverbed Aggregate form liner finish to the exposed outer surfaces as noted on drawings.

For cast in place bent cap concrete seam covers, provide custom relief Texas Star graphic and form liner texture finish to exposed face per the detail drawings. For cast in place concrete exposed surfaces and MSE panel retaining wall colors, see table under Item 427.

No additional payment shall be made for the Texas star and Riverbed Aggregate finish field form liners on the bridge bent cap concrete seam covers as they are subsidiary to the bridge bent cap concrete seam cover construction. However, Contractor shall submit a copy of an invoice from the cast in place concrete providers listing the costs for the Texas star and Riverbed Aggregate field seam cover form liners.

Due to the insetting of custom graphics and textures into the wall panels, the panel thickness must be increased a corresponding amount to ensure that the face of surface clearance to the embedded panel reinforcement is maintained as required.

Finish concrete structure surface areas with 2 coats of opaque sealers meeting TxDOT DMS 8108 of the color(s) shown in the drawings and in accordance with Item 427. Note that Sail, Prairie, map of Texas and Texas Star graphic schemes have unique paint palettes as indicated on the drawings and shall be installed in lieu of standard color applied on the balance of the project. Apply 2 coats of all opaque sealer paint applications.

Ensure that surfaces are free of weak surface material, curing compounds and other surface contaminants prior to coating.

FORM LINER FINISHES: Place architectural concrete treatments as shown. Placement of this item is subsidiary to the item to which it is attached. Unless otherwise noted, all exposed retaining wall surfaces shall receive Ashlar Stone form liner texture as listed on drawings or equal. Unless otherwise noted, all exposed bent column surfaces shall receive Riverbed Aggregate form liner texture as listed on drawings or equal. Where used, provide Ashlar Stone or Riverbed Aggregate texture that is continuous with no apparent curves or discontinuities. Variations of the pattern from true vertical exceeding ¼" for each 5'-0" of panel height are not acceptable.

Provide form liners that release without leaving pieces of liner material on the concrete and without pulling or breaking concrete from the textured surface. Provide form release agents as recommended by the manufacturer. Replace form liners as directed that have become damaged or worn. Replacement of form liners is considered incidental to the work and no additional compensation is provided.

Ashlar Stone and Riverbed Aggregate form liners: No horizontal splices in the form liner are permitted. Splices may occur only within the simulated mortar joints between simulated stone elements.

Provide sample panels a minimum of ten days in advance of starting construction of the textured concrete surfaces. Construct sample panel(s) in accordance with Item 427 "Form Liner Finishes" using each type of approved form liner. Sample panels must meet the requirements of the plans and specifications and be approved before any construction form liners may be ordered, obtained or used. Provide panels having a textured portion at least 5'-0" by 5'-0" with a representative 4 inch wide un-textured surrounding surface. If directed, construct and finish additional test panels until a satisfactory concrete surface texture is obtained.

The approved sample panel is the standard of comparison for the production concrete surface texture. If directed, build a new test panel to demonstrate acceptability of any proposed change in construction method.

Tool or replace areas requiring surface treatment that do no match their associated sample panels. Upon completion, tooled or replaced panels must match the associated sample panel. Tooling or replacement is at the contractor's expense.

For proper placement of the expansion joint behind the rail, omit surface finish from the top of T501 (RW) (DAL) rail to bottom of panel as directed.

Joint reveal details and location may vary slightly from what is shown to match the adjacent MSE walls as directed. No additional compensation will be allowed.

MSE wall and cast in place concrete retaining wall Form Liners shall be from the following manufacturers unless otherwise noted or approved by City of Rockwall Representative as an equal product:

Scott Systems, Inc. – Phone: 1-303-373-2500
Greenstreak, Inc. – Phone: 1-800-325-9504
Fitzgerald Formliners – Phone: 1-800-547-7760
Or Approved Equal.

PRAIRIE, SAIL, MAP OF TEXAS EMBLEM AND TEXAS STAR BRIDGE SEAM COVER CUSTOM GRAPHIC IMAGE SCHEMES Master Mold, Form Liner, and Mockup Panel production procedures: The Prairie, Sail, map of Texas and Texas Star graphic schemes shall be constructed using the relief layers and textures as illustrated on the drawings herein.

The contractor shall provide scaled shop drawings illustrating the formalization of this design into final drawings for fabrication for review and approval by the City of Rockwall Representative. The drawings shall include the locations of the graphic panels and map of Texas emblems within the bridge abutment wall elevations and shall include graphic layer shading and MSE panel numbering to identify the level and texture for all portions of the graphic images. The City of Rockwall Representative will provide the initial

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scaleable electronic images of the Prairie, Sail map of Texas and Texas Star bridge Seam Cover graphics in Microstation DGN files to the contractor for use in developing scaled panel shop drawings back to the City of Rockwall Representative for approval prior to fabrication.. The contractor shall provide 1' x 1' square samples of actual form liner material to be used for all textures incorporated in the graphic to the City of Rockwall Representative for approval prior to purchasing and fabrication. The contractor shall notify the City of Rockwall Representative of the fabrication schedule 10 days in advance and coordinate the communication of the following information as outlined below.

The contractor shall prepare one full-scale 5' x l0' mockup panel from each graphic scheme (2). Panels to be used for the mockups are indicated on drawings.

It is intended that acceptable mockup wall panels are to be incorporated into the final construction of the wall. The contractor shall protect and store acceptable panels until such time as they may be incorporated into the work. The mockup wall section shall be temporarily erected in the vertical position outdoors facing south similar to its final position in the constructed project, in a location that allows free solar exposure to the surface, while allowing it to be viewed from a distance no less than 100' from any vantage point as measured from the center of the south face. The City of Rockwall Representative will come to the site and physically examine the mockup and provide comment on the acceptability for final construction. The contractor will receive written comments regarding the mockup within 10 business days of notification that the mockup has been constructed and notification of its location. At the discretion of the City of Rockwall Representative, the contractor shall recast unacceptable wall panel(s) in order to correct the deficiencies as outlined in Item 427.

The two approved mockup panels (one Prairie, one Sail) shall be the standard of quality that will be acceptable for the balance of the custom form liner work required for the project.

Unless otherwise noted, it is the intent of these plans that all exposed surfaces (concrete or steel) of bridges, retaining walls, concrete traffic railing and concrete traffic barrier be given a tinted coating as shown or as directed. Such coating shall meet the applicable provisions of Item 427.

For paint scheme on Sail, Prairie, map of Texas and Texas Star graphic panels see detailed drawings.

The Contractor shall provide 3 inch square, minimum, paint color cards or chip samples of each wall and graphic image color to be used on the project to the City of Rockwall Representative for approval prior to purchasing the paint/opaque sealers. The paint color cards are to be labeled on back to identify what item they are covering. Include manufacturer paint specifications confirming exterior concrete application, finish type, warranty, sealer compatibility and Federal Standard 595B paint color code.

Use Federal Standard 595B colors with individual elements receiving the colors shown in the following table:

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Use Federal Standard 595B colors with individual elements receiving the colors shown in the following table:

Element	Color	Specification Number
CTB	YELLOW SAND	TO BE DETERMINED
Bents	YELLOW SAND	T.B.D.
Bent caps	WARM GREY	T.B.D.
Ashlar Stone retaining wall surfaces	YELLOW SAND	T.B.D.
Retaining wall coping and other abutment components above wall coping	WARM GREY	T.B.D.
Abutments below wall coping	YELLOW SAND	T.B.D.
Prestressed concrete girders and structural steel	YELLOW SAND	T.B.D.
Bottom of slab overhang & slab edge	YELLOW SAND	T.B.D.
Concrete rail parts except central 18" band	YELLOW SAND	T.B.D.
Central 18" band of concrete rails	RED BROWN	T.B.D.

In addition to the Opaque Sealer specified in the table above, all surfaces listed, all exposed form liner wall surfaces, MSE walls, the Sail, Prairie, and map of Texas and Texas Star graphic panels, bents, bent caps, bents and seam cover exposed surfaces on the IH-30 bridge project shall be coated with Clear Type I – Sacrificial Antigrafitti coating per TxDOT DMS 8111.

Form liner materials shall have properties as indicated on the drawings.

No additional payment shall be made for painting and clear coating of the MSE Panels. However, Contractor shall submit a copy of an invoice(s) to the Engineer showing cost of paint and cost of applying paint to the MSE panels.

Item 428:
Provide a Class I surface treatment.

Apply concrete surface treatment to the widened portions of bridge structures only.

Do not treat the inside face of concrete rails.

Item 450 and 440:
Provide epoxy coated reinforcing steel that embeds into the bridge slab.

The 2 special traffic barrier end terminals will be paid for as Item 450 2088.

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Item 464:

The concrete collars and the connections of pipes to existing or proposed concrete boxes or pipe will not be paid for directly but will be considered subsidiary to the various bid items.

At locations where storm drains dead-end, plug with a concrete plug of a thickness equal to 1 ½ inches per foot of diameter of pipe with a minimum thickness of 3 inches. The cost of the plugs shall be included in the unit price bid per foot of the various storm drain pipes.

Item 471:

Tackweld all inlet grates and manhole covers to the frame with two 1-inch welds. Supply un-painted cast iron inlet grate and frame and/or cast iron manhole frame and cover.

Item 479:

Accept ownership of inlet grates and manhole covers and properly dispose of them outside the limits of the right of way in accordance with federal, state and local regulations.

Submit a plan detailing proposed methods of handling phased construction at manholes and water valves.

Payment for the phase construction will be considered subsidiary to this item.

Item 496:

Inlet grates and manhole covers become the property of the contractor for disposal.

Item 502:

Provide written proposed lane closure information by 1:00 pm on the business day prior to the proposed closures. Do not close lanes when this requirement is not met.

When excavation is required next to a pavement lane carrying traffic and the widening is not completed by the end of the work day, backfill against the edge of the pavement with at least a 3:1 slope using an acceptable material to support vehicular traffic. Carefully remove and dispose of this material when work resumes. Backfilling pavement edges, and the materials required for the work will be subsidiary to this item.

Erect a Type III barricade immediately in front of or at each end of all stockpiles that are less than 30 feet from the edge of any traveled lane. Place one Type 2 Object Marker (OM-2Y) alongside the stockpile for every 100 feet of stockpile length.

Place barricades and signs in locations that do not obstruct the sight distance of drivers entering the highway from driveways or side streets.

Provide rectangular shape (CW12-2P) Temporary Clearance Signs on all bridges where the existing vertical clearance has changed. Install Signs to the satisfaction of the Engineer prior to opening to traffic. Plywood sign blanks will have minimum dimensions of 84" X 12". Work performed and materials are subsidiary to this item.

Do not commence work on the road before sunrise. Do not operate or park any equipment/machinery closer than 30 feet from the traveled roadway after sunset unless authorized by the engineer.

When moving unlicensed equipment on or across any pavement or public highways, protect the pavement from all damage using an acceptable method.

Provide 1 shadow vehicles equipped with truck mounted attenuators as shown on the traffic control plan.

If required, provide uniformed off duty police officers and squad cars during lane or ramp closures, night time work or other situations that indicate a need for additional traffic control to protect the traveling public or the construction workforce. Provide documentation such as payroll, log sheets with signatures and badge number, or invoices from the government entity providing the officers for reimbursement. Reimbursement will not be made for coordination fees charged by the police department.

Freeway Lane Closures				
Category of Work	**Number of Rdwy Lanes** per direction	**Peak Times** Monday-Friday 6:00 am - 9:00 am 3:30 pm - 7:00 pm Major Events and Major Holidays**	**Off Peak Times** Monday-Friday 9:00 am - 3:30pm 7:00 pm - 10:30 pm and Saturday	**Lowest Volume Time** Monday-Friday 10:30 pm to 6:00 am and Sunday
Placement of CTB & Bridge Beams, Pavement Markings, Full Depth Roadway Repair, Bridge or	5	None	2	3
	4	None	2	3
	3	None	1	2

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Similar Demolitions*	2	None	1	2
Adjacent Construction, Lanes for Construction Traffic or Similar Operations	5	None	1	2
	4	None	1	2
	3	None	1	1
	2	None	None	1
* Provide a traffic control plan where bridge demolition cannot be accomplished with lane closures. Freeway closures will only be done during Lowest Volume Times. ** Major Holidays are defined under Item 1.82 and also include the Easter Weekend.				

Additional lanes may be closed during Off Peak Times or Lowest Times with written permission of the Engineer. Lane Closures during Off Peak Times may be started earlier or be extended later with written permission of the Engineer.

Traffic Control Plans with Lane Closures causing backups of 20 minutes or greater in duration will be modified by the Engineer.

Work in other areas of the project is not restricted to this time frame.

No extra pay will be allowed for changeable message boards required on standard TCP sheets.

Changeable message boards will be required on this project. Provide 2 CMS's for the duration of the project. Placement, programming, maintenance and replacement of CMS's will be subsidiary to this bid item.

Item 504:

Furnish one Field Office and Laboratory (Type B) for this project.

Provide one local phone line to the field office. Supply one phone jack and one telephone per each room in the field office. The cost of the phone installation and various monthly phone service charges will be the contractor's responsibility.

Parking shall be provided for (8) vehicles, chain link fencing will be provided around the field office and parking areas.

Provide an all in one printer/scanner/fax/copier with software that is compatible with TxDOT equipment, cost not in excess of $300. This is subsidiary to the bid item.

Item 506:

If temporary construction stream crossings are allowed under a Nationwide Permit, submit in writing for approval the type and location of each temporary stream crossing. Use temporary bridges, timber mats, or other structurally sound and non-eroding material for temporary stream crossings. A temporary culvert crossing will consist of storm sewer pipes and 4- to 8-inch nominal size rock. Temporary stream crossings must not cause more than minimal changes to the hydraulic flow characteristics of the stream, increase flooding, or cause more than minimal degradation of water quality. Remove the temporary stream crossings in their entirety and return the affected areas to their pre-existing elevation. All work and materials use for temporary construction stream crossings will not be paid for directly but are subsidiary to pertinent Items.

SW3P Maintenance Reports are made every seven calendar days. Make corrections as soon as possible before the next anticipated rain event or within seven calendar days after being able to enter the site to work for each BMP. A BMP site being "Too Wet to Work" is the only acceptable reason for not accomplishing the corrections with the seven calendar day time limit and should be thoroughly documented on Form 2118. If maintenance corrections are not made within this time frame then all work will cease, time charges will continue until SW3P is brought into compliance and is documented on Form 2118 after TxDOT review.

This in no way releases the contractor of liability for noncompliance.

Obtain from the Engineer a copy of the project's TPDES Storm Water Program and Notice of Intent or Construction Site Notice. Laminate the sheets and bond with adhesive to 36" X 48" plywood sign blanks. Ensure the sheets remain dry. Apply Type C Blue reflective sheeting as the background and add the text "SW3P" in 5" white lettering, centered at the top. Attach the signs to approved temporary mounts and locate at each of the project limits or as directed by the Engineer. SW3P Signs, maintenance, and repostings will be subsidiary to Item 502.

Item 508:

Testing of materials used in the construction of a temporary detour may be waived when approved by the Engineer.

Item 512:

Furnish pre-cast F Shape Barrier with drainage slots as detailed on the Concrete Safety Barrier Standards. Submit for approval the type of barrier joint connection proposed for the project.

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Item 529:

Provide grooved joints at 10-foot intervals and ¾ inch expansion joint material for doweled curb at the same locations as on the existing pavement.

For Curb and Gutter sections, provide grooved joints at 10-foot intervals and ¾ inch expansion joint material at a maximum of 50-foot centers and at all radius points and inlets.

Curb and Gutter transitions will be paid for by the foot at the unit price for the corresponding curb or curb and gutter section.

Saw joints at the same location as on the existing pavement.

Item 536:

Use Class "B" concrete for concrete medians and directional islands.

Item 540:

Furnish one type of post throughout the project except as specifically noted in the plans.

Item 542:

Salvage metal beam guard fence removed from this project and haul to and stockpile at Rockwall Maintenance. The work involved in hauling this material will not be paid for directly, but will be considered subsidiary to this item.

Remove or cut off existing anchor bolts and fill holes with grout in bridge slabs as directed.

Item 545:

Stockpile crash cushion attenuators at Rockwall Maintenance. The work involved in hauling and handling this material will not be paid for directly, but will be considered subsidiary to this item.

Item 556:

The unit price bid per linear foot of "pipe underdrain" shall include the cost of making connections to storm sewer lines.

Place bell and spigot type pipe with an open joint of approximately ¾ inch.

In the event that Type 5 Underdrain Pipe is bid, make the connection as shown in the plans. The cost of making the connection will be considered subsidiary to this item.

The requirements for decantation of filter material are deleted for this project.

Item 585:

Use Surface Test Type A on all intersections and driveways.

Use Surface Test Type B pay adjustment schedule 2 on the travel lanes.

Use Surface Test Type B pay adjustment schedule 3 on the service roads.

Use Surface Test Type B pay adjustment schedule 2 on the ramps.

Item 610:

Provide to the Engineer, in addition to any submittals required by the specifications and elsewhere in the general notes, a list of pre-qualified material to be used on the project.

Use luminaire ballasts rated for operation at 240 and 480 volts.

The luminaires to be removed under this item contain capacitors that may use polychlorinated biphenyl (PCB) as an insulating oil. PCB has been declared a hazardous substance by the EPA. Place all luminaires to be removed on the right of way. The Department will remove all capacitors from the luminaires. Assume all unlabeled capacitors to contain PCB. Take measures to prevent capacitor enclosures from being punctured or otherwise damaged. If PCB capacitors are ruptured, use proper procedures and personnel protective equipment, in accordance with federal and state guidelines.

Existing illumination circuits may be located within or adjacent to the project limits. Either verify with the Engineer or supply a video survey to the Engineer of all the lighting in and adjacent to the project limits before beginning work. Ensure that all assemblies operational at the beginning of construction are operational at the completion of the project. This work will be done at the contractor's expense.

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 proper authority prior to cutting into or removing any sidewalks or curbs for installation of this Item.

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When holes are drilled through concrete structures, use a coring device. Do not use masonry or concrete drills.

Structurally mount junction boxes as shown on the plans. When used for traffic signal installations, use boxes 12"x12"x8", or as approved.

Use conduit hangers for 3 inch and larger conduit when hanging conduit from structures.

Place conduit under existing pavement by an approved boring method. Do not place boring pits closer than 2 feet from the edge of the pavement unless otherwise directed. Do not use water jetting. When boring is used for under pavement conduit installations, the maximum allowable over-cut is 1" in diameter. When conduits are bored, do not exceed 18 inches in the vertical and horizontal tolerances as measured from the intended target point.

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

Furnish and install a non-metallic ¾" wide flat pull rope in conduit runs in excess of 50 feet.

Use a colored cleaner-primer on all PVC to PVC joints before application of PVC cement.

Seal all conduit ends with a permanently soft, non-toxic duct seal. Use a duct seal that does not adversely affect other plastic materials or corrode metals.

Furnish and install non-metallic pull ropes in conduit installed for future use and cap using standard weather-tight conduit caps, as approved. This work will not be paid for directly, but is subsidiary to this Item.

Item 620:

When two or more conductors are present in one conduit or enclosure, identify the conductors as shown in the 'Electrical Details' (ED) standard sheets. Use the identification tag with two plastic straps. On each tag indicate the circuit number, letter, or other identification as shown on the plans.

Do not use non-certified persons to perform electrical work. See Item 7 and any special provisions to Item 7 of the Texas Standards Specifications book for further information for electrical certification.

Dual Breakaway

For both transformer and shoe-base type illumination poles, provide double-pole breakaway fuse holder as shown on the Texas Department of Transportation (TxDOT) - Construction Division's (CST) materials producers list. Category is "Roadway Illumination and Electrical Supplies." Fuse holder is shown on list under Items 610 & 620. Provide 10 amp time delay fuses.

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Item 624:

All conduits feeding to junction boxes mounted on bridges and underpasses will contain an equipment grounding conductor. All equipment grounding conductors will be bonded together at every accessible location. The equipment grounding conductor will also be bonded to a ground rod driven in the closest ground box located at grade level to the bridge or overpass.

Item 628:

Contact the appropriate utility company during the first three weeks of the project lead-time period to allow adequate time for any necessary utility adjustments, transformer installation, etc.

Blast clean service pole pedestals with Class "A" blast cleaning as defined in Item 446. This work will not be paid for directly, but is subsidiary to this Item.

Label the service enclosures indicating service address as well as all required information as shown on the Electrical Detail (ED) standard sheets. Labeling shall be silk screening or other acceptable method. This work will not be paid for directly, but is subsidiary to this Item.

When concrete for service pole foundations is required, use Class A in accordance with Item 421, "Concrete for Structures", except consider the concrete subsidiary to Item 628 for payment purposes. When reinforcing steel for service pole foundations is required, it will be in accordance with Item 440,"Reinforcing Steel", except consider the steel subsidiary to Item 628 for payment purposes.

Contact the City of Rockwall, Mr. Chuck Todd, within the first week of the project lead time to obtain addresses for the service poles to be installed on this project. He can be contacted at 972-771-7746.

Provide a photocell and lighting contactor in electrical services for signals that heve luminaires.

Use only white insulated wire for neutral wire.

Bill the electrical service power usage to the Texas Department of Transportation.

Item 636:

Leave the advance guide sign and/or the exit direction sign for an interchange in place at all times unless prior written approval is given. Replace signs removed by the Contractor before the end of the work day.

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Manufacture all white legends using Clearview font on overhead and large ground-mounted guide signs. This includes destinations, cardinal directions, exit information and exit numbers. Use the font shown on the existing standard sheets for all route markers (including interstate shields) and "Exit Only" panel information.

Use Type D Super High Specific Intensity (Non-fluorescent Prismatic) sheeting for overhead guide signs (both background and legend), conforming to DMS-8300, Flat Surface Reflective Sheeting. Use ASTM Type VIII and Type IX.

Use Type D Super High Specific Intensity (non-fluorescent Prismatic) sheeting for legends and borders on large ground-mounted guide signs, conforming to DMS-8300, Flat Reflective Sheeting. Use ASTM Type VIII and Type IX. Use Type C High Specific Intensity sheeting for the background on large ground-mounted guide signs, conforming to DMS-8300, Flat Surface Reflective Sheeting.

Affix a sign identification decal to the back of all signs in accordance with Item 643.

Attach sheeting applied to extruded aluminum panels to each individual extrusion. Lap each extrusion's horizontal edge with sheeting and do not bridge horizontal gaps between extrusions.

Install new overhead signs tilted "down" at 3°. Furnish and obtain approval of all shop drawings detailing the method to accomplish this installation. All material and labor required for this special installation is considered subsidiary to Item 636.

Ensure the minimum vertical clearance, as shown in the plans, at the highpoint of the roadway after the installation of all overhead signs. Mount new overhead signs with 46% of the sign height positioned below the centerline of the truss, or obtain approval for any exceptions.

Items 644, 647, and 650:

Prior to taking elevations to determine lengths for fabrication of sign posts and/or sign support towers, obtain verification of all proposed locations.

Provide field galvanizing and metallizing equipment, as per Item 445, at all times and make repairs to galvanized surfaces according to the above specification item at intervals as directed.

Base all sign support quantities for pipe and structural steel on the dimensions shown on the approved shop drawings or as approved in writing. Make calculations for measurement of the sign support quantities from the approved show drawing in accordance with Article 9.1 of the standard specifications. Measure increases or decreases in quantities caused by changes in design after the shop drawings are approved as specified ad revised quantities will be the basis for payment.

After sign supports with signs attached have been erected, wash individual units requiring cleaning with an approved cleaning solution to remove all grease, oil, dirt, smears, streaks, and other foreign particles.

Torque the anchor bolts for only the Exit Gore signs to 60 foot-pounds.

Item 650:

All towers and trusses will be match marked, by the fabricator, for erection. Use the tower heights shown in the sign summaries and on the plans for bidding purposes only. Prior to fabrication, take finished grade elevations at the tower locations and determine their exact heights for fabrication in accordance with the details shown on the plans.

Item 656:

Before placing the concrete for the controller foundation, coordinate with the TxDOT-Dallas District to ensure that the anchor bolt spacing will match the anchor bolts and cabinet supplied by the District.

Form a 3/4-inch chamfer on the top edge of each signal pole foundation.

Probe for utilities and underground structures prior to drilling foundations. Foundations shall be paid for once regardless of extra work caused by obstructions.

Item 666:

Provide Type III Glass Traffic Beads that meet the requirements of Departmental Materials Specifications DMS-8290.

Item 672:

Black adhesive will be used on asphalt pavements. White adhesive will be used on concrete pavements.

Item 677:

Grinding of pavements is not allowed to eliminate pavement markings.

Placement of paint or thermo is not allowed to eliminate pavement markings.

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Item 680:

Requirements for this Item include the following work, all of which are subsidiary to this Item:

1. Furnish and install all sign panels for mounting on signal poles, mast arms, and span wires. Fabricate the sign panels in accordance with Item 636, and mount with Astro-Sign Brac, Signfix aluminum channel, or equal as approved by the Engineer. Submit five (5) sets of shop drawings for street name signs. Install the sign panels supplied for mounting on signal poles, mast arms, and span wires. Furnish and install all other signs in accordance to Item 636. Furnish all mounting hardware for all signs. Mount signs with Astro-Sign Brac, Signfix aluminum channel, or equal as approved by the Engineer.
2. Provide submittal literature for all traffic signal equipment before installation.
3. Have a qualified technician on the project site to place the traffic signal in operation.
4. Use qualified personnel to respond to and diagnose all trouble calls during the thirty-day test period. Repair any malfunction to Contractor-supplied signal equipment. Provide to the Engineer a local telephone number, not subject to frequent changes and available on a 24-hour basis, for reporting trouble calls. Response time to reported calls must be less than 2 hours. Make appropriate repairs within 24 hours. Place a logbook in the controller cabinet and keep a record of each trouble call reported. Notify the Engineer of each trouble call. Do not clear the error log in the conflict monitor during the thirty-day test period without approval.
5. Remove the existing stop sign assemblies after the traffic signals are in operation. Paid for under item 100, Prep ROW
6. Install the Opticom equipment supplied by the City of Rockwall.
7. Furnish and install a new eight-phase NEMA controller, meeting the requirements of Departmental Materials Specifications DMS-11170 in a base mounted controller and cabinet. This location will be added to an existing closed loop system. This intersection will be part of an existing closed loop signal system. The signal controller shall be compatible with the Econolite controllers in the existing system.
8. Connect all field wiring to the controller assembly. TxDOT will program the controller for operation, hook up the conflict monitor and other equipment, and turn on the controller. Have a qualified technician and a representative from the controller supplier on the project site to place the traffic signals in operation.
9. Install the controller cabinet in an orientation as directed.
10. Deliver the cabinet, controller, and accessories to the District Signal Shop, 4777 E Hwy 80, Mesquite. Notify the District Signal Shop two working days before delivery at (214)320-6682.
11. When the work required by this contract has been satisfactorily completed on any individual or inter-connected system of signalized intersections, final clean-up has been performed, and the traffic signal equipment supplied has operated continuously and satisfactorily for at least 30 days, release from further maintenance on that particular intersection is authorized. This partial acceptance, made in writing, does not void or alter any of the terms of the contract.
12. Prevent any damage to property owner's poles, fences, shrubs, mailboxes, etc. Protect all underground and overhead utilities and repair any damage. Provide access to all driveways during construction.

13. Notify the District Signal Maintenance Office at (214)320-6682 and Construction Office at (214)320-6694 one week before beginning any work involving traffic signals.

Item 682:

Install signal head attachments so that the wiring to each signal head passes from the mast arm through the attachment hardware to the signal head. Do not leave cable or wiring exposed.

Provide signal head attachments that allow for adjustment about the horizontal and vertical axis.

Provide aluminum signal heads and aluminum tubing in the following color: Federal Yellow #13538 of Federal Standard 595. Provide back plates and the inside of visors with a flat black finish. Provide polycarbonate back plates for all traffic signal heads.

Turn down signal heads or cover with burlap or other material, as approved, until traffic signal is placed in operation.

Mount signal heads level and plumb and aimed as directed.

Item 684:

Provide stranded 14 AWG Type A signal cables as shown on the plans.

Provide a separate multi-conductor signal cable (14 AWG) inside pedestal poles and signal poles from the terminal strip to each signal head as shown on the plans.

Identify each cable as shown on the plans (cable 1, etc.) with permanent marking labels (Panduit Type PLM standard single marker tie, Thomas&Betts Type 548M, or equal) at each ground box, pole base, and controller.

Item 686:

Provide 12 circuit Buchanan Type 112SN, Kulka Type 985-GP-12 CU, or equal terminal strips in the signal pole access compartment. Provide additional terminal strips of 8 circuits each when more than 12 circuits are required.

Mark pole shafts and mast arms with the identification numbers from the plans to facilitate field-assembly. Identify pole shafts and mast arms by intersection for projects with multiple intersections.

Provide nuts on top and bottom (double nuts) of the base plate as shown on the plans.

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Set anchor bolts for mast arm signal poles and strain poles so that two are in tension and two are in compression. Obtain approval of anchor bolt placement before placing concrete.

Use the traffic signal pole heights and mast arm lengths shown on the plans and in the material summary for bidding purposes only. Make field measurements to determine the actual pole height and mast arm length required. Provide vertical clearance of 17 to 19 feet from the roadway to the lowest point of the signal head or mast arm. Place signal heads 40 feet minimum and 180 feet maximum from the stop line. If the nearest signal is more than 180 feet from the stop line, place a supplemental near-side signal head. Determine the field measurements and elevations from the actual field location of the poles, considering all above and below ground utilities and existing roadway elevations.

Provide vibration dampers for mast arms 28 feet long and longer. Use dampers 18"x48" for arms up to 48 feet long, and 16"x66" for longer mast arms. Install using Astro-sign Brac, Signfix aluminum channel, or equal, at a maximum of 3 feet from the end of the mast arm.

Item 687:

Use a 24 inch drilled shaft foundation for all pedestal pole assemblies.

Item 688:

Provide pedestrian push button assemblies that have permanent-type signs within the detector unit which indicates which crosswalk signal is actuated. Provide push buttons with a minimum 2 inch convex plunger. Provide a protective shroud encircling the plunger to deter vandalism that is cast as part of the housing cover. Use a plunger that protrudes beyond the shroud a distance adequate to accommodate the switch travel. Verify the location of the push button assemblies and the direction of the arrows on the signs prior to installation.

Item 6006:

Integrate the proposed traffic signal with the existing closed-loop system to make one system linked by spread spectrum radio communication as shown on the plans. Signal monitor communications are part of the closed-loop system. Provide communication between the master controller unit and any controller linked by either hardwire or radio that is transparent to the communication media. The existing closed-loop system consists of Type Encom spread spectrum radios. Ensure that all spread spectrum radios on the proposed closed-loop system are compatible to allow for proper closed-loop operation and communication. The existing master spread spectrum radio on the proposed system is located at: SH 205 at Boydstun.

Install the heliax cable so that it is not exposed to the outdoor environment.

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Provide the latest version of the applicable SSR diagnostic software to the District on 3.5 inch disks, and ensure that it will operate under DOS 6.2 or Windows 98 operating systems.

Item 6266:

Provide a Video Processor System (VPS) that can provide up to thirty-two (32) detector outputs to the controller from up to ten (10) camera/video processor units (C/VPU). Route the detector outputs through the detector panel and the detector test switches. For each C/VPU, provide a field of view with a minimum of thirty-two (32) virtual detection zones for vehicle detection.
(Note: Use one processor system per intersection)

Wire the outputs as follows:

Card1		Card2	
Output	Detector	Output	Detector
1	1-1	17	3-1
2	6-1	18	8-1
3	6-2	19	8-2
4	6-3	20	8-3
5	6-4	21	8-4
6	Spare	22	Spare
7	SD1	23	SD5
8	SD2	24	SD6
9	5-1	25	7-1
10	2-1	26	4-1
11	2-2	27	4-2
12	2-3	28	4-3
13	2-4	29	4-4
14	Spare	30	Spare
15	SD3	31	SD7
16	SD4	32	SD8

*SD: System Detector

Provide eleven (11) cameras for this project, including one (1) spare camera.

Provide a set-up system. Load required set-up software onto all of the District Signal Shop's notebook computers and provide all necessary licensing. The Contractor does not provide computers as part of the set-up system.

Provide phase red and green load switch outputs from up to eight (8) phases of a NEMA TS2 Type 2 controller as inputs to the VPU for use with internal detector extend/delay timing functions. Ensure the C/VPU is able to condition the detector outputs and detection zones based on the state of the associated phase number and color. Provide separate count loop inputs into the controller for each approach lane.

1 REPLACED 6-29-09 BB

Sheet 15P

Project Number: C-9-12-73 **Control: 0009-12-073**

County: Rockwall

Highway: IH 30

Supply a package that will operate with Windows 98 and NT and provide the functionality defined in both sections 7.0 and 9.0 in both a direct connect and remote communications mode. Ensure the software resident in the C/VPU and the personal computer is capable of transmitting and receiving all information needed for zone set up, monitoring vehicle detection by viewing flashing detection zone overlays, and uploading/downloading and interrogating all stored data within the C/VPU. Ensure remote communications with the C/VPU is possible with the addition of external communication devices (modem, Codec, etc.) using the RS-232 and video output ports on the front of the VPU.

Ensure the C/VPU operational software is stored internally in flash memory and capable of being updated without the removal and replacement of memory devices.

Provide a camera interface panel mounted to the wall of the cabinet for protecting the camera video and power inputs/outputs. The panel shall contain as a minimum; an EDCO ACP-340 for the camera and VIVDS Processor unit power, with an on/off switch, a convenience outlet protected by the ACP-340, a 10-amp circuit breaker, and a terminal strip with a minimum of six (6) 8-32 binder head screws. The AC connections shall be protected using a piece of 1/8-inch plexi-glass.

Install the VIVDS detection zones as directed. Have qualified personnel on site at the time of the signal turn-on to assist with the installation of detection zones.

If the camera locations shown in the plans do not allow for proper sight of the proposed detection zones, relocate the cameras as needed and as directed. This labor and material cost will not be paid separately, but is subsidiary to this item.

The Video Processor Unit (VPU) may reside inside the camera housing. Use video output from the C/VPU in color or black/white with active detection zones overlaid on full motion video.

Provide Field Communications Link required by the manufacturer of the video detection system. These cables will be paid for as the type shown in the plans regardless of actual type of cable.

Sheet 15Q

Project Number: C-9-12-73

Control: 0009-12-073

County: Rockwall

Highway: IH 30

The list of material below is for the Contractor's information only.
It is the responsibility of the Contractor to verify
all items and quantities listed below.

LIST OF MATERIAL/LABOR
SUBSIDIARY TO ITEM 680

DESCRIPTION	UNIT	QUANTITY
2 INCH WEATHERHEAD	EA	1
250W HPS LUMINAIRE	EA	4
8 PHASE NEMA CONTROLLER COMPLETE W/ CABINET AND ACCESSORIES	EA	1
TRAFFIC SIGNAL CONTROLLER FOUNDATION	EA	1
INSTALL OPTICOM EQUIPMENT (INTERSECTION)	LS	1
REGULATORY SIGN PANEL (R10-12,ETC)	EA	14
SINGLE STREET NAME SIGN PANEL	EA	6
CONCRETE PAD (5' X 5' X 4", CLASS B)	SF	25
COPPER GROUND ROD 5/8" X 10'	EA	1

LIST OF MATERIAL
FURNISHED BY THE CITY OF ROCKWALL

DESCRIPTION	UNIT	QUANTITY
OPTICOM CABLE	LF	1180
OPTICOM DETECTOR W/MOUNTING BRACKET	EA	4
OPTICOM MODULES (2-CHANNEL)	EA	4
OPTICOM CARD RACK AND HARNESS	EA	1
OPTICOM CONTROLLER ASSEMBLY COMPLETE WITH CABINET AND ACCESSORIES	EA	1

1 REPLACED 6-29-09 BB

ESTIMATE SUMMARY

PROJECT C 9-12-73		PPROJECT C 9-12-73		PROJECT C 9-12-73		ALT.	ITEM-CODE			DESCRIPTION	UNIT	TOTAL	
CONTROL 0009- 12-073		CONTROL= 0009-12-073		CONTROL 0009-12-073									
IH 3 0 WB BRIDGE		IH 30 EB BRIDGE		IH 30 ROADWAY									
EST.	FINAL	EST.	FINAL	EST.	FINAL		ITEM NO	DESC CODE	SP NO			EST.	FINAL
						59.000			100	2002	002	PREPARING ROW	STA	59.000	
						36483.000			104	2001		REMOVING CONC (PAV)	SY	36483.000	
						1947.000			104	2017		REMOVING CONC (DRIVEWAYS)	SY	1947.000	
						358.000			104	2022		REMOVING CONC (CURB AND GUTTER)	LF	358.000	
						63696.000			105	2039		REMOVE STAB BASE AND ASPH PAV (6"-20")	SY	63696.000	
						113753.000			110	2001		EXCAVATION (ROADWAY)	CY	113753.000	
						58.000			110	2002		EXCAVATION (CHANNEL)	CY	58.000	
						119647.000			132	2006	001	EMBANKMENT (FINAL) (DENS CONT) (TY C)	CY	119647.000	
						59444.000			132	2026	001	EMBANKMENT (FINAL) (DENS CONT) (TY C2)	CY	59444.000	
						71162.000			161	2002	001	COMPOST MANUF TOPSOIL (BOS) (4")	SY	71162.000	
						71162.000			164	2007	002	BROADCAST SEED (PERM) (URBAN) (CLAY)	SY	71162.000	
						48060.000			164	2029	002	CELL FBR MLCH SEED (TEMP) (WARM)	SY	48060.000	
						48060.000			164	2031	002	CELL FBR MLCH SEED (TEMP) (COOL)	SY	48060.000	
						5357.000			168	2001		VEGETATIVE WATERING	MG	5357.000	
						1.000			170	2001		IRRIGATION SYSTEM	LS	1.000	
						1941.000			192	2002		PLANT MATERIAL (1-GAL)	EA	1941.000	
						1618.000			192	2003		PLANT MATERIAL (3-GAL)	EA	1618.000	
						413.000			192	2004		PLANT MATERIAL (5-GAL)	EA	413.000	
						1770.000			192	2016		PLANT BED PREPARATION	SY	1770.000	
						45.000			192	2027		PLANT MATERIAL (100 GAL) (TREE)	EA	45.000	
						3398.000			260	2002	001	LIME (HYDRATED LIME (SLURRY))	TON	3398.000	
						106516.000			260	2010	001	LIME TRT (NEW BASE) (12")	SY	106516.000	
						397.000			340	2064	003	D-GR HMA (METH) TY-C SAC-B PG76-22	TON	397.000	
						24353.000			341	2011	020	D-GR HMA (QCQA) TY-B PG64-22	TON	24353.000	
						6688.000			360	2004	003	CONC PVMT (CONT REINF-CRCP) (11")	SY	6688.000	
						43704.000			360	2005	003	CONC PVMT (CONT REINF-CRCP) (12")	SY	43704.000	
						39613.000			360	2008	003	CONC PVMT (CONT REINF-CRCP) (15")	SY	39613.000	
						236.000			400	2005		CEM STABIL BKFL	CY	236.000	
						9573.000			402	2001		TRENCH EXCAVATION PROTECTION	LF	9573.000	
						48682.000			403	2001		TEMPORARY SPL SHORING	SF	48682.000	
				65.000		74.000			416	2001	001	DRILL SHAFT (18 IN)	LF	139.000	
				738.000		997.000			416	2004	001	DRILL SHAFT (36 IN)	LF	1735.000	
								48.000	416	2018	001	DRILL SHAFT (SIGN MTS) (24 IN)	LF	48.000	
								51.000	416	2022	001	DRILL SHAFT (SIGN MTS) (48 IN)	LF	51.000	
								48.000	416	2029	001	DRILL SHAFT (RDWY ILL POLE) (30 IN)	LF	48.000	
								70.000	416	2032	001	DRILL SHAFT (TRF SIG POLE) (36 IN)	LF	70.000	
								22.000	416	2034	001	DRILL SHAFT (TRF SIG POLE) (48 IN)	LF	22.000	
				60.200		60.200			420	2003	002	CL C CONC (ABUT)	CY	120.400	
				95.400		95.400			420	2004	002	CL C CONC (BENT)	CY	190.800	
								9.400	420	2006	002	CL C CONC (RAIL FOUNDATION)	CY	9.400	
				125.000		125.000			420	2033	002	CL S CONC (APPR SLAB)	CY	250.000	
				15600.000		15600.000			422	2001		REINF CONC SLAB	SF	31200.000	
								58186.000	423	2001		RETAINING WALL (MSE)	SF	58186.000	
				2391.880		2391.880			425	2004	001	PRESTR CONC BEAM (TY IV)	LF	4783.760	
				1639.000		1639.000			428	2001	001	CONC SURF TREAT (CLASS I)	SY	3278.000	
								696.000	432	2002		RIPRAP (CONC) (5 IN)	CY	696.000	
								64.000	432	2039		RIPRAP (MOW STRIP) (4 IN)	CY	64.000	
								7.310	432	2040		RIPRAP (MOW STRIP) (5 IN)	CY	7.310	
				431.000		431.000			442	2005	005	STR STL (MISCELLANEOUS)	LB	862.000	
				626.000		626.000		7439.000	450	2007		RAIL (TY T501)	LF	8691.000	

2 REPLACED 7-1-09 BB

ESTIMATE & QUANTITY SHEET

STATE DIST. NO.	COUNTY	PROJECT NO.	SHEET NO.
18	ROCKWALL	C 9-12-73	16

ESTIMATE SUMMARY

PROJECT C 9-12-73 CONTROL 0009- 12-073 IH 3 0 WB BRIDGE		PPROJECT C 9-12-73 CONTROL= 0009-12-073 IH 30 EB ERIDGE		PROJECT C 9-12-73 CONTROL 0009-12-073 IH 30 ROADWAY		ALT.	ITEM-CODE			DESCRIPTION	UNIT	TOTAL	
EST.	FINAL	EST.	FINAL	EST.	FINAL		ITEM NO	DESC CODE	SP NO			EST.	FINAL
						380.000		450	2054		RAIL (TY T501RW DAL)	LF	380.000	
						50.000		450	2088		RAIL (TY T501) (TRANSITION)	LF	50.000	
						1300.000		450	2093		RAIL (TY T501) (SPCIAL)	LF	1300.000	
						1300.000		450	2120		RAIL (TY SSTR) (SPL)	LF	1300.000	
				159.000				454	2001		SEALED EXPANSION JOINT (4 IN) (SEJ-A)	LF	318.000	
						133.000		462	2010		CONC BOX CULV (6 FT X 3 FT)	LF	133.000	
						4999.000		464	2003		RC PIPE (CL III) (18 IN)	LF	4999.000	
						8101.000		464	2005		RC PIPE (CL III) (24 IN)	LF	8101.000	
						929.000		464	2007		RC PIPE (CL III) (30 IN)	LF	929.000	
						1892.000		464	2009		RC PIPE (CL III) (36 IN)	LF	1892.000	
						31.000		465	2005	001	MANH (COMPL) (TY M)	EA	31.000	
						54.000		465	2104	001	INLET EXT	EA	54.000	
						19.000		465	2137	001	INLET (COMPL) (BWI) (TYI)	EA	19.000	
						40.000		465	2195	001	INLET (COMPL) (CURB) (TY 1)	EA	40.000	
						6.000		465	2281	001	INLET (COMPL) (TY C 1-GRATE)	EA	6.000	
						2.000		466	2036		WINGWALL (FW-S) (HW=6 FT)	EA	2.000	
						210.000		476	2049		JACK OR TUN BOX CULV (6 FT X 3 FT)	LF	210.000	
						6.000		496	2002		REMOV STR (INLET)	EA	6.000	
						34.000		496	2004		REMOV STR (SET)	EA	34.000	
						8.000		496	2006		REMOV STR (HEADWALL)	EA	8.000	
						2125.000		496	2007		REMOV STR (PIPE)	LF	2125.000	
						1.000		500	2001	005	MOBILIZATION	LS	1.000	
						22.000		502	2001	033	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	22.000	
						528.000		506	2002	011	ROCK FILTER DAMS (INSTALL) (TY 2)	LF	528.000	
						528.000		506	2009	011	ROCK FILTER DAMS (REMOVE)	LF	528.000	
						4008.000		506	2016	011	CONSTRUCTION EXITS (INSTALL) (TY 1)	SY	4008.000	
						4008.000		506	2019	011	CONSTRUCTION EXITS (REMOVE)	SY	4008.000	
						12916.000		508	2002		CONSTRUCTING DETOURS	SY	12916.000	
						19890.000		512	2011	001	PORT CTB (DES SOURCE) (SAFETY SH) (TY 2)	LF	19890.000	
						10360.000		512	2017	001	PORT CTB (DES SOURCE) (LOW PROF) (TY 1)	LF	10360.000	
						520.000		512	2018	001	PORT CTB (DES SOURCE) (LOW PROF) (TY 2)	LF	520.000	
						16530.000		512	2020	001	PORT CTB (MOVE) (SAFETY SH) (TY 2)	LF	16530.000	
						12080.000		512	2026	001	PORT CTB (MOVE) (LOW PROF) (TY 1)	LF	12080.000	
						240.000		512	2027	001	PORT CTB (MOVE) (LOW PROF) (TY 2)	LF	240.000	
						19890.000		512	2038	001	PORT CTB (REMOVE) (SAFETY SH) (TY 2)	LF	19890.000	
						10360.000		512	2044	001	PORT CTB (REMOVE) (LOW PROF) (TY 1)	LF	10360.000	
						520.000		512	2045	001	PORT CTB (REMOVE) (LOW PROF) (TY 2)	LF	520.000	
						7410.000		512	2048	001	PORT CTB (FUR & INST) (F-SHAPE) (TY 1)	LF	7410.000	
						1312.670		528	2006		COLORED TEXTURED CONC (5")	SY	1312.670	
						3811.000		529	2005		CONC CURB (MONO) (TY I)	LF	3811.000	
						13897.000		529	2006		CONC CURB (MONO) (TY II)	LF	13897.000	
						2046.000		530	2010		DRIVEWAYS (CONC)	SY	2046.000	
						391.000		531	2004		CONC SIDEWALKS (6")	SY	391.000	
						18.000		531	2005		CURB RAMPS (TY 1)	EA	18.000	
						2.000		540	2011		MTL BEAM GD FEN TRANS (THRIE-BEAM)	EA	2.000	
						2.000		544	2013		GDRAIL END TRT (INSTALL) (HBA POST)	EA	2.000	
						6.000		545	2001		CRASH CUSH ATTEN (INSTL)	EA	6.000	
						2.000		545	2023		CRASH CUSH ATTEN (MOVE&RESET) (REACT) (N)	EA	2.000	
						6.000		545	2024		CRASH CUSH ATTEN (REMOVE) (REACT) (N)	EA	6.000	
						10.000		610	2020	006	INS RD IL AM (TY SA) 40B-8 (.25 KW) S	EA	10.000	

(2) REPLACED 7-1-09

ESTIMATE & QUANTITY SHEET

STATE DIST. NO.	COUNTY	PROJECT NO.	SHEET NO.
18	ROCKWALL	C 9-12-73	16A

ESTIMATE SUMMARY

PROJECT C 9-12-73 CONTROL 0009- 12-073 IH 3 0 WB BRIDGE		PPROJECT C 9-12-73 CONTROL= 0009-12-073 IH 30 EB ERIDGE		PROJECT C 9-12-73 CONTROL 0009-12-073 IH 30 ROADWAY		ALT	ITEM-CODE			DESCRIPTION	UNIT	TOTAL	
EST.	FINAL	EST.	FINAL	EST.	FINAL		ITEM NO	DESC CODE	SP NO			EST.	FINAL
				8.000			610	2025	006	INS RD IL AM (TY SA) 40T-8 (.25 KW) S	EA	8.000	
				3235.000			618	2034		CONDT (PVC) (SCHD 80) (2")	LF	3235.000	
				420.000			618	2035		CONDT (PVC) (SCHD 80) (2") (BORE)	LF	420.000	
				123.000			618	2038		CONDT (PVC) (SCHD 80) (3")	LF	123.000	
				580.000			618	2039		CONDT (PVC) (SCHD 80) (3") (BORE)	LF	580.000	
				635.000			618	2040		CONDT (PVC) (SCHD 80) (4")	LF	635.000	
				958.000			620	2009	001	ELEC CONDR (NO. 6) BARE	LF	958.000	
				356.000			620	2010	001	ELEC CONDR (NO. 6) INSULATED	LF	356.000	
				3240.000			620	2011	001	ELEC CONDR (NO. 8) BARE	LF	3240.000	
				8096.000			620	2012	001	ELEC CONDR (NO. 8) INSULATED	LF	8096.000	
				320.000			620	2016	001	ELEC CONDR (NO.12) INSULATED	LF	320.000	
				12.000			624	2008		GROUND BOX TY A (122311) W/APRON	EA	12.000	
				10.000			624	2014		GROUND BOX TY D (162922) W/APRON	EA	10.000	
				6.000			628	2040		ELC SRV TY A 240/480 100 (SS) SS (E) SP (O)	EA	6.000	
				1.000			628	2100		ELC SRV TY D 120/240 070 (NS) SS (E) SP (O)	EA	1.000	
				56.000			636	2001	014	ALUMINUM SIGNS (TY A)	SF	56.000	
				475.000			636	2002	014	ALUMINUM SIGNS (TY G)	SF	475.000	
				263.500			636	2003	014	ALUMINUM SIGNS (TY O)	SF	263.500	
				33.000			644	2022		INS SM RD SN SUP&AM TY S80 (1) SA (P)	EA	33.000	
				5.000			644	2025		INS SM RD SN SUP&AM TY S80 (1) SA (T)	EA	5.000	
				2.000			644	2027		INS SM RD SN SUP&AM TY S80 (1) SA (U)	EA	2.000	
				2.000			644	2032		INS SM RD SN SUP&AM TY S80 (1) SB (P)	EA	2.000	
				2.000			644	2042		INS SM RD SN SUP&AM TY S80 (2) SA (P)	EA	2.000	
				1976.000			647	2001		INSTALL LRSS (STRUCT STEEL)	LB	1976.000	
				1.000			650	2217		INS OH SN SUP (25 FT CANT) (CIRC TUBE)	EA	1.000	
				1.000			650	2218		INS OH SN SUP (30 FT CANT) (CIRC TUBE)	EA	1.000	
				40.000			658	2261		INSTL DEL ASSM (D-SW) SZ (TYC) GF1 (BI)	EA	40.000	
				16.000			658	2263		INSTL DEL ASSM (D-SY) SZ 1 (FLX) GND	EA	16.000	
				6.000			658	2317		INSTL OM ASSM (OM-2Z) (FLX) SLF	EA	6.000	
				1701.000			662	2001		WK ZN PAV MRK NON-REMOV (W) 4" (BRK)	LF	1701.000	
				18149.000			662	2004		WK ZN PAV MRK NON-REMOV (W) 4" (SLD)	LF	18149.000	
				12853.000			662	2032		WK ZN PAV MRK NON-REMOV (Y) 4" (SLD)	LF	12853.000	
				732.000			662	2064		WK ZN PAV MRK REMOV (W) 4" (BRK)	LF	732.000	
				26302.000			662	2067		WK ZN PAV MRK REMOV (W) 4" (SLD)	LF	26302.000	
				146.000			662	2079		WK ZN PAV MRK REMOV (W) 24" (SLD)	LF	146.000	
				29119.000			662	2099		WK ZN PAV MRK REMOV (Y) 4" (SLD)	LF	29119.000	
				5840.000			666	2003		REFL PAV MRK TY I (W) 4" (BRK) (100MIL)	LF	5840.000	
				27960.000			666	2012		REFL PAV MRK TY I (W) 4" (SLD) (100MIL)	LF	27960.000	
				10310.000			666	2036		REFL PAV MRK TY I (W) 8" (SLD) (100MIL)	LF	10310.000	
				121.000			666	2039		REFL PAV MRK TY I (W) 12" (LNDP) (100MIL)	LF	121.000	
				3959.000			666	2042		REFL PAV MRK TY I (W) 12" (SLD) (100MIL)	LF	3959.000	
				279.000			666	2048		REFL PAV MRK TY I (W) 24" (SLD) (100MIL)	LF	279.000	
				19.000			666	2054		REFL PAV MRK TY I (W) (ARROW) (100MIL)	EA	19.000	
				2.000			666	2075		REFL PAV MRK TY I (W) (EXIT GORE) (100MIL)	EA	2.000	
				15.000			666	2096		REFL PAV MRK TY I (W) (WORD) (100MIL)	EA	15.000	
				52.000			666	2102		REF PAV MRK TY I (W) 36" (YLD TRI) (100MIL)	EA	52.000	
				26593.000			666	2111		REFL PAV MRK TY I (Y) 4" (SLD) (100MIL)	LF	26593.000	
				1080.000			666	2123		REFL PAV MRK TY I (Y) 8" (SLD) (100MIL)	LF	1080.000	
				441.000			666	2126		REFL PAV MRK TY I (Y) 12" (SLD) (100MIL)	LF	441.000	
				60930.000			666	2189		PAVEMENT SEALER 4"	LF	60930.000	

2 REPLACED 7-1-09

ESTIMATE & QUANTITY SHEET

STATE DIST. NO.	COUNTY	PROJECT NO.	SHEET NO.
18	ROCKWALL	C 9-12-73	16B

ESTIMATE SUMMARY

PROJECT C 9-12-73 CONTROL 0009- 12-073 IH 3 0 WB BRIDGE		PPROJECT C 9-12-73 CONTROL= 0009-12-073 IH 30 EB ERIDGE		PROJECT C 9-12-73 CONTROL 0009-12-073 IH 30 ROADWAY		ALT.	ITEM-CODE			DESCRIPTION	UNIT	TOTAL	
EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL		ITEM NO	DESC CODE	SD NO			EST.	FINAL
								11390.000		666	2191		PAVEMENT SEALER 8"	LF	11390.000	
								4521.000		666	2193		PAVEMENT SEALER 12"	LF	4521.000	
								279.000		666	2195		PAVEMENT SEALER 24"	LF	279.000	
								19.000		666	2219		PAVEMENT SEALER (ARROW)	EA	19.000	
								15.000		666	2220		PAVEMENT SEALER (WORD)	EA	15.000	
								2.000		666	2226		PAVEMENT SEALER (EXIT GORE)	EA	2.000	
								52.000		666	2257		PAVEMENT SEALER (YLD TRI)	EA	52.000	
								54.000		672	2010	034	REFL PAV MRKR TY I-A	EA	54.000	
								1041.000		672	2017	034	REFL PAV MRKR TY II-C-R	EA	1041.000	
								1276.000		677	2001		ELIM EXT PAV MRK & MRKS (4")	LF	1276.000	
								668.000		677	2007		ELIM EXT PAV MRK & MRKS (24")	LF	668.000	
								2.000		677	2018		ELIM EXT PAV MRK & MRKS (WORD)	EA	2.000	
								1.000		680	2003		INSTALL HWY TRF SIG (SYSTEM)	EA	1.000	
								20.000		682	2001	001	BACK PLATE (12 IN) (3 SEC)	EA	20.000	
								12.000		682	2014	001	PED SIG SEC (12 IN) LED (2 INDICATIONS)	EA	12.000	
								3.000		682	2022	001	VEH SIG SEC (12 IN) LED (GRN ARW)	EA	3.000	
								17.000		682	2023	001	VEH SIG SEC (12 IN) LED (GRN)	EA	17.000	
								3.000		682	2024	001	VEH SIG SEC (12 IN) LED (YEL ARW)	EA	3.000	
								17.000		682	2025	001	VEH SIG SEC (12 IN) LED (YEL)	EA	17.000	
								20.000		682	2027	001	VEH SIG SEC (12 IN) LED (RED)	EA	20.000	
								1040.000		684	2031		TRF SIG CBL (TY A) (14 AWG) (5 CONDR)	LF	1040.000	
								205.000		684	2033		TRF SIG CBL (TY A) (14 AWG) (7 CONDR)	LF	205.000	
								1398.000		684	2038		TRF SIG CBL (TY A) (14 AWG) (12 CONDR)	LF	1398.000	
								535.000		684	2046		TRF SIG CBL (TY A) (14 AWG) (20 CONDR)	LF	535.000	
								1.000		686	2043		INS TRF SIG PL AM(S) 1 ARM (44')	EA	1.000	
								1.000		686	2047		INS TRF SIG PL AM(S) 1 ARM (48')	EA	1.000	
								3.000		686	2049		INS TRF SIG PL AM(S) 1 ARM (48') LUM	EA	3.000	
								1.000		686	2057		INS TRF SIG PL AM(S) 1 ARM (55') LUM	EA	1.000	
								2.000		687	2001		PED POLE ASSEMBLY	EA	2.000	
								12.000		688	2001		PED DETECT (2 INCH PUSH BTN)	EA	12.000	
								300.000		5049	2002		BIODGRD EROSION CONTROL LOGS (18" DIA)	LF	300.000	
								30342.000		5049	2003		BIODGRD EROSION CONTROL LOGS (12" DIA)	LF	30342.000	
								2.000		5367	2008		CABLE BARRIER TERMINAL SECTION (TL-4)	EA	2.000	
								1.000		6006	2001		SPREAD SPECTRUM RADIO	EA	1.000	
								123.000		6006	2003		HELIAX CABLE	LF	123.000	
								1.000		6006	2004		ANTENNA (OMNI-DIRECTIONAL)	EA	1.000	
								2.000		6266	2001		VIVDS PROCESSOR SYSTEM	EA	2.000	
								11.000		6266	2002		VIVDS CAMERA ASSEMBLY	EA	11.000	
								2.000		6266	2003		VIVDS SET-UP SYSTEM	EA	2.000	
								3101.000		6266	2005		VIVDS COMMUNICATION CABLE (COAXIAL)	LF	3101.000	

(2) REPLACED 7-1-09

ESTIMATE & QUANTITY SHEET

STATE DIST. NO.	COUNTY	PROJECT NO.	SHEET NO.
18	ROCKWALL	C 9-12-73	16C

SUMMARY OF TRAFFIC CONTROL ITEMS

LOCATION		0341	0340	0260	0260	0400	0508	0662	0662	0662	0662	0662	0662	0662
		2011	2064	2002	2010	2006	2002	2001	2004	2032	2064	2067	2079	2099
		* D-GR HMA(QCQA) TY-B PG64-22 (BASE) (10")	* D-GR HMA (METH) TY-C SAC-B PG76-22 (SURFACE) (2")	* LIME (HYDRATED LIME SLURRY)	* LIME TRT (NEW BASE) (12")	CUT & RESTORING PAV	CONSTRUCTING DETOURS	WK ZN PAV MRK NON-REMOV (W) 4" (BRK)	WK ZN PAV MRK NON-REMOV (W) 4" (SLD)	WK ZN PAV MRK NON-REMOV (Y) 4" (SLD)	WK ZN PAV MRK REMOV (W) 4" (BRK)	WK ZN PAV MRK REMOV (W) 4" (SLD)	WK ZN PAV MRK REMOV (W) 24" (SLD)	WK ZN PAV MRK REMOV (Y) 4" (SLD)
		TON	TON	TON	SY	SY	SY	LF	LF	LF	LF	LF	LF	LF
PHASE 1-1														
SHEET 1		843	159	53	1533		1533							
SHEET 2		1373	261	87	2497		2497							
SHEET 3		2369	258	85	2467		2467					701		
SHEET 4		2766	211	70	2034		2034					359		
SHEET 5		1628										747		
PHASE 1-2														
SHEET 1		1342												
SHEET 2		181	36	11	330		330				225			900
SHEET 3		138	28	9	250		250	258	1030	1030	200			2570
SHEET 4								550	2200	2200				2454
SHEET 5		122	24	8	222		222	550	2200	2200				2200
SHEET 6		161	32	10	293		293	343	1372	1372	187			2946
SHEET 7		12	2	1	22		22							1560
SHEET 8														251
SHEET 9														248
PHASE 2-1														
SHEET 1												100		
SHEET 2		122	21	8	221		221		1435	752		511		
SHEET 3									2200	1240		672		
SHEET 4									2187	153		2200	39	
SHEET 5									2200	1270		945		
SHEET 6		120	20	8	218		218		1468	964		633		324
SHEET 7												500		500
PHASE 2-2														
SHEET 1												100		100
SHEET 2												1928		2001
SHEET 3												2101		2200
SHEET 4									838	838		1217	44	1362
SHEET 5									102	102		2098		2098
SHEET 6												1941		2100
SHEET 7												500		500
PHASE 2-3														
SHEET 1											120	751		84
SHEET 2									917	732		3839		3190
SHEET 3												1230		60
PHASE 2-4														
SHEET 1												480		
SHEET 2												2268	63	1471
SHEET 3												481		
DETOURS														
DETOURS														
DETOUR A		516	101	33	938		938							
DETOUR B		393	76	25	714		714							
DETOUR C		377	73	24	686		686							
DETOUR D		270	52	17	490		490							
TOTALS:		12734	1355	448	12916	0	12916	1701	18149	12853	732	26302	146	29119

* QUANTITIES SHOWN ARE FOR INFORMATIONAL PURPOSES ONLY.

SUMMARY SHORING

LOCATION	0403 2001 TEMPORARY SPL SHORING
	SF
TS-A	10283
TS-B	10254
TS-C	9683
TS-D	10052
TS-E	2482
TS-F	958
TS-G	1432
TS-H	1097
TS-I	2247
TS-J	194
TOTALS:	48682

SUMMARY OF TRAFFIC CONTROL ITEMS

LOCATION	0512 2011 PORT CTB (DES SOURCE) (SAFETY SH) (TY 2)	0512 2017 PORT CTB (DES SOURCE (LOW PROF) (TY 1)	0512 2018 PORT CTB (DES SOURCE) (LOW PROF) (TY 2)	0512 2020 PORT CTB (MOVE) (SAFETY SH) (TY 2)	0512 2026 PORT CTB (MOVE) (LOW PROF) (TY 1)	0512 2027 PORT CTB (MOVE) (LOW PROF) (TY 2)	0512 2038 PORT CTB (REMOVE) (SAFETY SH) (TY 2)	0512 2044 PORT CTB (REMOVE) (LOW PROF) (TY 1)	0512 2045 PORT CTB (REMOVE) (LOW PROF) (TY 2)	0545 2001 CRASH CUSH ATTEN (INSTL)	0545 2023 CRASH CUSH ATTEN (MOVE & RESET) (REACT) (N)	0545 2024 CRASH CUSH ATTEN (REMOVE) (REACT) (N)
	LF	LF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA
PHASE 1	19890	3300	160	8310						6		
PHASE 2-1		5760	360	8220	2500	80	11670	800	80		2	4
PHASE 2-2		1300			8260	40			360			
PHASE 2-3					1260	80		7340				
PHASE 2-4					60	40	8220	2220	80			2
TOTALS:	19890	10360	520	16530	12080	240	19890	10360	520	6	2	6

6/29/2009 1:32:07 PM adams $PWFILE$

2 REPLACED 7-1-09

NO.	REVISION	BY	DATE

CP&Y
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Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN
SUMMARY OF QUANTITIES

SHEET 1 OF 1

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	GRB	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	17

SUMMARY OF TRAFFIC CONTROL ITEMS

LOCATION		0341 2011 • D-GR HMA(QCQA) TY-B PG64-22 (BASE) (10") TON	0340 2064 • D-GR HMA (METH) TY-C SAC-B PG76-22 (SURFACE) (2") TON	0260 2002 • LIME (HYDRATED LIME SLURRY) TON	0260 2010 • LIME TRT (NEW BASE) (12") SY	0400 2006 CUT & RESTORING PAV SY	0508 2002 CONSTRUCTING DETOURS SY	0662 2001 WK ZN PAV MRK NON-REMOV (W) 4" (BRK) LF	0662 2004 WK ZN PAV MRK NON-REMOV (W) 4" (SLD) LF	0662 2032 WK ZN PAV MRK NON-REMOV (Y) 4" (SLD) LF	0662 2064 WK ZN PAV MRK REMOV (W) 4" (BRK) LF	0662 2067 WK ZN PAV MRK REMOV (W) 4" (SLD) LF	0662 2079 WK ZN PAV MRK REMOV (W) 24" (SLD) LF	0662 2099 WK ZN PAV MRK REMOV (Y) 4" (SLD) LF
PHASE 1-1			•• 2288											
SHEET 1											177	175		175
SHEET 1A		843	159	53	1533		1533	450	1800	1800	400	400		400
SHEET 2		1373	261	87	2497		2497	550	2200	2200				
SHEET 3		1357	258	85	2467		2467	550	2200	2200		~~701~~ 0		
SHEET 4		1119	211	70	2034		2034	531	2125	2125	75	~~359~~ 75		75
SHEET 5								6			475	~~747~~ 475		475
PHASE 1-1A			•• 1867											
SHEET 1														
SHEET 2								33				660		
SHEET 3								410		1080		330		695
SHEET 4								550		2200				
SHEET 5								550		2200				
SHEET 6								441		1340				670
SHEET 7								86				660		345
SHEET 8														
PHASE 1-2														
SHEET 1									381		~~225~~ 1310	548		900
SHEET 2		181	36	11	330		330	~~258~~ 0	1030	~~1030~~ 0	~~200~~ 460	945		2570
SHEET 3		138	28	9	250		250	~~550~~ 0	2200	~~2200~~ 0				2454
SHEET 4				1				~~550~~ 0	2200	~~2200~~ 0				2200
SHEET 5		122	24	8	222		222	~~343~~ 0	~~1372~~ 1430	~~1372~~ 0	~~187~~ 335	670		~~2746~~ 2200
SHEET 6		161	32	10	293		293				660	908		~~1560~~ 1600
SHEET 7		12	2	1	22		22							251
SHEET 8														248
SHEET 9														
PHASE 2-1														
SHEET 1												100		
SHEET 2		122	21	8	221		221		1435	752		511		
SHEET 3									2200	1240		672		
SHEET 4									2187	153		2200	39	
SHEET 5									2200	1270		945		
SHEET 6		120	20	8	218		218		1468	964		633		324
SHEET 7												500		500
PHASE 2-2														
SHEET 1												100		100
SHEET 2												1928		2001
SHEET 3												2101		2200
SHEET 4									838	838		1217	44	1362
SHEET 5									102	102		2098		2098
SHEET 6												1941		2100
SHEET 7												500		500
PHASE 2-3														
SHEET 1											120	751		84
SHEET 2									917	732		3839		3190
SHEET 3												1230		60
PHASE 2-4														
SHEET 1												480		
SHEET 2												2268	63	1471
SHEET 3												481		
DETOURS														
DETOURS														
DETOUR A		516	101	33	938		938							
DETOUR B		393	76	25	714		714							
DETOUR C		377	73	24	686		686							
DETOUR D		270	~~52~~	17	490		490							
TOTALS:		7104	5510 ~~1355~~	448	12916	0	12916	~~1701~~ 4157	~~10149~~ 26913	~~12853~~ 21196	~~732~~ 4012	~~26302~~ 30341	146	~~29119~~ 31248

*QUANTITIES SHOWN ARE FOR INFORMATIONAL PURPOSES ~~ONLY~~

SUMMARY OF TRAFFIC CONTROL ITEMS

LOCATION	0512 2011 PORT CTB (DES SOURCE) (SAFETY SH) (TY 2) LF	0512 2017 PORT CTB (DES SOURCE (LOW PROF) (TY 1) LF	0512 2018 PORT CTB (DES SOURCE) (LOW PROF) (TY 2) LF	0512 2020 PORT CTB (MOVE) (SAFETY SH) (TY 2) LF	0512 2026 PORT CTB (MOVE) (LOW PROF) (TY 1) LF	0512 2027 PORT CTB (MOVE) (LOW PROF) (TY 2) LF	0512 2038 PORT CTB (REMOVE) (SAFETY SH) (TY 2) LF	0512 2044 PORT CTB (REMOVE) (LOW PROF) (TY 1) LF	0512 2045 PORT CTB (REMOVE) (LOW PROF) (TY 2) LF	0545 2001 CRASH CUSH ATTEN (INSTL) EA	0545 2023 CRASH CUSH ATTEN (MOVE & RESET) (REACT) (N) EA	0545 2024 CRASH CUSH ATTEN (REMOVE) (REACT) (N) EA
PHASE 1	8340 ~~19890~~									4		
PHASE 1-1A	8280 ~~8340~~			8340							4	
PHASE 1-2	2820	3300	160	8340			2730				2	2
PHASE 2-1		5760	360	8220	2500	80	11220	800	80		2	
PHASE 2-2		1300			8260	40			360			
PHASE 2-3					1260	80		7340				
PHASE 2-4					60	40	8220	2220	80			2
TOTALS:	19440 ~~19890~~	10360	520	~~16530~~ 24900	12080	240	22170	10360	520	~~6~~ 4	~~2~~ 8	~~6~~ 4

SUMMARY SHORING

LOCATION	0403 2001 TEMPORARY SPL SHORING SF
TS-A	10283
TS-B	10254
TS-C	9683
TS-D	10052
TS-E	2482
TS-F	958
TS-G	1432
TS-H	1097
TS-I	2247
TS-J	194
TOTALS:	48682

1 •• NOTE:
ITEM 0340 - 2064 HMAC TY-C OVERLAY QUANTITIES ADDED FOR CHANGE ORDER NO.1 FOR PHASE 1 STEP1 AND PHASE 1 STEP 1A WERE CALCULATED USING AN AVERAGE DEPTH OF 4 1/2 INCHES.

1 CHANGE ORDER NO. 1
SHEET REVISED

NO.	REVISION	BY	DATE
1	ADD OVERLAY TO IH 30	GRB	

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IH 30 AT JOHN KING BLVD.
TRAFFIC CONTROL PLAN
SUMMARY OF QUANTITIES

SHEET 1 OF 1

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	GRB	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	17A

pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.xx Quantities/Traffic Control Plans/435YYS01.100
6/30/2010 5:40:56 PM GBRANICK

SUMMARY OF TRAFFIC CONTROL ITEMS

LOCATION		0341 2011 * D-GR HMA(QCQA) TY-B PG64-22 (BASE) (10")	0340 2064 * D-GR HMA (METH) TY-C SAC-B PG76-22 (SURFACE) (2")	0260 2002 * LIME (HYDRATED LIME SLURRY)	0260 2010 * LIME TRT (NEW BASE) (12")	0400 2006 CUT & RESTORING PAV	0508 2002 CONSTRUCTING DETOURS	0662 2001 WK ZN PAV MRK NON-REMOV (W) 4" (BRK)	0662 2004 WK ZN PAV MRK NON-REMOV (W) 4" (SLD)	0662 2032 WK ZN PAV MRK NON-REMOV (Y) 4" (SLD)	0662 2064 WK ZN PAV MRK REMOV (W) 4" (BRK)	0662 2067 WK ZN PAV MRK REMOV (W) 4" (SLD)	0662 2079 WK ZN PAV MRK REMOV (W) 24" (SLD)	0662 2099 WK ZN PAV MRK REMOV (Y) 4" (SLD)	0432 2001 RIPRAP (CONC) (4 IN)
		TON	TON	TON	SY	SY	SY	LF	LF	LF	LF	LF	LF	LF	CY
PHASE 1-1															
SHEET 1		843	159	53	1533		1533								
SHEET 2		1373	261	87	2497		2497								
SHEET 3		1357	258	85	2467		2467					701			
SHEET 4		1119	211	70	2034		2034					359			
SHEET 5												747			
PHASE 1-2															
SHEET 1															
SHEET 2		181	36	11	330		330				225			900	
SHEET 3		138	28	9	250		250	258	1030	1030	200			2570	28
SHEET 4								550	2200	2200				2454	
SHEET 5		122	24	8	222		222	550	2200	2200				2200	27
SHEET 6		161	32	10	293		293	343	1372	1372	187			2946	
SHEET 7		12	2	1	22		22							1560	
SHEET 8														251	
SHEET 9														248	
PHASE 2-1															
SHEET 1												100			
SHEET 2		122	21	8	221		221		1435	752		511			
SHEET 3									2200	1240		672			
SHEET 4									2187	153		2200	39		
SHEET 5									2200	1270		945			
SHEET 6		120	20	8	218		218		1468	964		633		324	
SHEET 7												500		500	
PHASE 2-2															
SHEET 1												100		100	
SHEET 2												1928		2001	
SHEET 3												2101		2200	
SHEET 4									838	838		1217	44	1362	
SHEET 5									102	102		2098		2098	
SHEET 6												1941		2100	
SHEET 7												500		500	
PHASE 2-3															
SHEET 1											120	751		84	
SHEET 2									917	732		3839		3190	
SHEET 3												1230		60	
PHASE 2-4															
SHEET 1												480			
SHEET 2												2268	63	1471	
SHEET 3												481			
DETOURS															
DETOURS															
DETOUR A		516	101	33	938		938								
DETOUR B		393	76	25	714		714								
DETOUR C		377	73	24	686		686								
DETOUR D		270	52	17	490		490								
TOTALS:		7104	1355	448	12916	0	12916	1701	18149	12853	732	26302	146	29119	55

* QUANTITIES SHOWN ARE FOR INFORMATIONAL PURPOSES ONLY.

SUMMARY SHORING

LOCATION	0403 2001 TEMPORARY SPL SHORING
	SF
TS-A	10283
TS-B	10254
TS-C	9683
TS-D	10052
TS-E	2482
TS-F	958
TS-G	1432
TS-H	1097
TS-I	2247
TS-J	194
TOTALS:	48682

9 CHANGE ORDER NO. 9
SHEET REVISED

SUMMARY OF TRAFFIC CONTROL ITEMS

LOCATION	0512 2011 PORT CTB (DES SOURCE) (SAFETY SH) (TY 2)	0512 2017 PORT CTB (DES SOURCE (LOW PROF) (TY 1)	0512 2018 PORT CTB (DES SOURCE) (LOW PROF) (TY 2)	0512 2020 PORT CTB (MOVE) (SAFETY SH) (TY 2)	0512 2026 PORT CTB (MOVE) (LOW PROF) (TY 1)	0512 2027 PORT CTB (MOVE) (LOW PROF) (TY 2)	0512 2038 PORT CTB (REMOVE) (SAFETY SH) (TY 2)	0512 2044 PORT CTB (REMOVE) (LOW PROF) (TY 1)	0512 2045 PORT CTB (REMOVE) (LOW PROF) (TY 2)	0545 2001 CRASH CUSH ATTEN (INSTL)	0545 2023 CRASH CUSH ATTEN (MOVE & RESET) (REACT) (N)	0545 2024 CRASH CUSH ATTEN (REMOVE) (REACT) (N)
	LF	LF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA
PHASE 1	19890	3300	160	8310						6		
PHASE 2-1		5760	360	8220	2500	80	11670	800	80		2	4
PHASE 2-2		1300			8260	40			360			
PHASE 2-3					1260	80		7340				
PHASE 2-4					60	40	8220	2220	80			2
TOTALS:	19890	10360	520	16530	12080	240	19890	10360	520	6	2	6

NO.	REVISION	BY	DATE
9	TEMP INLET, FLUME ADDED	AJA	

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Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.
TRAFFIC CONTROL PLAN
SUMMARY OF QUANTITIES

SHEET 1 OF 1

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: GRB	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	174

10/21/2010 8:08:47 AM aadams pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.xx Quantities/Traffic Control Plans/435YYS01.i00

TRAFFIC CONTROL CRASH CUSHION SUMMARY

TCP PHASE	PLAN SHEET NO.	LOCATION	DIRECTION OF TRAFFIC	DESIGN SPEED MPH	FOUNDATION PAD			BACKUP SUPPORT	
					EXISTING	PROPOSED	PROPOSED THICKNESS	DESCRIPTION	WIDTH
1 - 1	CULV A	EB IH 30 ℄ IH 30 STA. 306+90.00 (53.76' RT)	UNIDIRECTION	70	CONCRETE	CONCRETE (UNREINFORCED)	10"	PRECAST TRAFFIC BARRIER	2'-3"
1 - 1	CULV A	WB IH 30 ℄ IH 30 STA. 310+40.00 (53.20' LT)	UNIDIRECTION	70	CONCRETE	CONCRETE (UNREINFORCED)	10"	PRECAST TRAFFIC BARRIER	2'-3"
1 - 1	1 OF 5	EB IH 30 ℄ IH 30 STA. 288+13.40 (17.93' RT)	UNIDIRECTION	70	CONCRETE	CONCRETE (UNREINFORCED)	10"	PRECAST TRAFFIC BARRIER	2'-3"
1 - 1	5 OF 5	WB IH 30 ℄ IH 30 STA. 330+23.67 (18.63' LT)	UNIDIRECTION	70	CONCRETE	CONCRETE (UNREINFORCED)	10"	PRECAST TRAFFIC BARRIER	2'-3"
1 - 2	2 OF 9	EB IH 30 ℄ IH 30 STA. 279+75.34 (54.62' RT)	UNIDIRECTION	70	CONCRETE	CONCRETE (UNREINFORCED)	10"	PRECAST TRAFFIC BARRIER	2'-3"
1-2	7 OF 9	WB IH 30 ℄ IH 30 STA. 338+49.77 (55.00' LT)	UNIDIRECTION	70	CONCRETE	CONCRETE (UNREINFORCED)	10"	PRECAST TRAFFIC BARRIER	2'-3"
* 2 - 1	2 OF 7	EB IH 30 ℄ IH 30 STA. 286+00.00 (65.51' RT)	UNIDIRECTION	70	CONCRETE	CONCRETE (UNREINFORCED)	10"	PRECAST TRAFFIC BARRIER	2'-3"
* 2 - 1	6 OF 7	WB IH 30 ℄ IH 30 STA. 328+05.61 (73.45' LT)	UNIDIRECTION	70	CONCRETE	CONCRETE (UNREINFORCED)	10"	PRECAST TRAFFIC BARRIER	2'-3"

* MOVE AND RESET FROM PHASE 1

CRASH CUSHION SUMMARY

PLAN SHEET NO.		LOCATION	DIRECTION OF TRAFFIC	DESIGN SPEED MPH	FOUNDATION PAD			BACKUP SUPPORT	
					EXISTING	PROPOSED	PROPOSED THICKNESS	DESCRIPTION	WIDTH
IH 30 ML	1 OF 6	EB IH 30 ℄ IH 30 STA. 285+99 (13.39' RT)	UNIDIRECTION	70	CONCRETE	CONCRETE (UNREINFORCED)	10"	PRECAST TRAFFIC BARRIER	2'-3"
IH 30 ML	4 OF 6	GORE EB IH 30 AND RAMP EBOFF ℄ IH 30 STA. 312+71.73 (79.00' RT)	UNIDIRECTION	70	CONCRETE	CONCRETE (UNREINFORCED)	10"	DBL RAIL (TY T501)	2'-10"
IH 30 ML	6 OF 6	WB IH 30 ℄ IH 30 STA. 330+42.55 (16.00' LT)	UNIDIRECTION	70	CONCRETE	CONCRETE (UNREINFORCED)	10"	PRECAST TRAFFIC BARRIER	2'-3"
EBFR	2 OF 5	GORE EBFR AND RAMP EBON ℄ EBFR STA. 288+66.32 (14.00' LT)	UNIDIRECTION	50	CONCRETE	CONCRETE (UNREINFORCED)	10"	RAIL (TY T501)	1'-5"
WBFR	4 OF 5	GORE WBFR IH AND RAMP WBON ℄ WBFR STA. 316+74.13 (16.67' RT)	UNIDIRECTION	50	CONCRETE	CONCRETE (UNREINFORCED)	10"	RAIL (TY T501)	1'-5"

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

CRASH CUSHION SUMMARY

Designed	GRB	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked	RRH	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked	GRB	DAL	ROCKWALL	0009	12	073		18

SHEET 1 OF 1

5/19/2009 9:45:17 AM aadams pw:Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.02 Summaries/435CCSUM.001

	0104 2001	0104 2017	0104 2022	0105 2039	0496 2002	0496 2004	0496 2007	0496 2006	
LOCATION	REMOV CONC (PAV)	REMOVING CONC (DRIVEWAYS)	REMOVING CONC (CURB AND GUTTER)	REMOVING STAB BASE & ASPH PAV (6"-20")	REMOV STR (INLET)	REMOV STR (SET)	REMOV STR (PIPE)	REMOV STR (HEADWALL)	REMOVE CABLE BARRIER SYSTEM •
	SY	SY	LF	SY	EA	EA	LF	EA	LF
SHEET 1	1091			1091					
SHEET 2	256	396	40	4445		4	241		
SHEET 3	5910	537	234	12311		14	472		510
SHEET 4	10482			16692		2	41		1100
SHEET 5	10477	431	27	16526	3	2	685	4	1100
SHEET 6	6595	583	57	10959		12	216		635
SHEET 7	279			279					
SHEET 8	1393			1393			470	4	
TCP TEMP INLETS					3				
TOTALS:	36483	1947	358	63696	6	34	2125	8	3345

• SUBSIDIARY TO ITEM 100 PREP ROW

NO.	REVISION	BY	DATE

Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

SUMMARY OF QUANTITIES
REMOVAL

Designed: AJA	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: GRB	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	17

SHEET 1 OF 1

2/9/2009 1:41:18 PM adams pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.02 Summaries/435TRP01.001

	0100 2002	0161 2002	0164 2007		0260 2002	0260 2010	0341 2011	0340 2064	0360 2005	0360 2004	0360 2008	0432 2002	0450 2007	0512 2048	0529 2005	0529 2006	0530 2010	0531 2004	0531 2005	0540 2011	0544 2013	0545 2001	5367 2008	0168 2001
LOCATION	PREP ROW	COMPOST MANUF TOPSOIL (BOS)(4")	BROADCAST SEED (PERM) (URBAN) (CLAY)	*FERTILIZER	LIME (HYDRATED LIME (SLURRY))	LIME TRT (NEW BASE)(12")	D-GR HMA (QCQA) TY-B PG64-22	D-GR HMA (METH) TY-C SAC-B PG76-22	CONC PAV (CONT REINF-CRCP) 12"	CONC PAV (CONT REINF-CPCD) 11"	CONC PAV (CONT REINF-CRCP) 15"	RIPRAP (CONC) (5 IN)	RAIL (TY T501)	PORT CTB (FUR & INST) (F-SHAPE) (TY 1)	CONC CURB (MONO) (TY I)	CONC CURB (MONO) (TY II)	DRIVEWAYS (CONC)	CONC SIDEWALK (6")	CURB RAMPS (TY I)	MTL BEAM GD FEN TRANS (THRIE-BEAM)	GDRAIL END TRT (INSTALL) (HBA POST)	CRASH CUSH ATTEN (INSTL)	CABLE BARRIER TERMINAL SECTION (TL-4)	VEGETATIVE WATERING
	STA	SY	SY	TON	TON	SY	TON	TON	SY	SY	SY	CY	LF	LF	LF	LF	SY	SY	EA	EA	EA	EA	EA	MG
IH 30 MAINLANES																								
SHEET 1	7				33	1041	211			794												1	1	
SHEET 2	11	6663	6663	1	334	10134	2121			2564	6581	117		1609	1235									213
SHEET 3	11	6578	6578	1	324	9853	2058				9026	210		1601										211
SHEET 4	11	9044	9044	1	462	13999	2936				12658	76	1255	2200								1		290
SHEET 5	11	12632	12632	1	355	10642	2254			1841	6470	91	300	1757	736					1	1			405
SHEET 6	8	4602	4602	1	62	1952	396			1489				243								1	1	147
EBFR																								
SHEET 1		4278	4278	1	114	4335	1196	89	3022							470	413							137
SHEET 2		3648	3648	0	148	4488	941		3788			57				920	167					1		117
SHEET 3		5516	5516	0	133	4022	847		3508			18				1750	131							177
SHEET 4		1976	1976	0	183	5523	1161		4789			5				1597	190							63
SHEET 5		957	957	0	55	2547	823	91	1443							208	251							31
WBFR																								
SHEET 1		3870	3870	0	91	3750	1104	99	2397							927	146							124
SHEET 2		3692	3692	0	159	4844	1012		4110			36				1765	503							118
SHEET 3		4588	4588	0	125	3806	796		3243							1619								147
SHEET 4		1920	1920	0	191	5773	1213		5024			73				1869						1		61
SHEET 5		1197	1197	0	63	3074	1018	118	1683							475	245			1	1			38
RAMPS																								
EBON					44	1268	279				1268		434		445									
WBOFF					51	1486	327				1486				1080									
EBOFF					38	1038	239				1086		174		174									
WBON					36	1086	228				1038		778		141									
CROSS STREETS																								
JOHN KING BLVD.					314	9288	2043		8572							2298		391	18					
COMMERCE					22	660	145		586															
U-TURNS																								
WEST					31	965	212		780															
EAST					30	942	207		759															
CULVERT "A"												11												
TOTALS:	59	71162	71162	6	3398	106516	24353	397	43704	6688	39613	696	2941	7410	3811	13897	2046	391	18	2	2	5	2	2279

* FOR CONTRACTORS INFORMATION ONLY

2 REPLACED 7-1-09 BB

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

SUMMARY OF QUANTITIES
ROADWAY

Designed: AJA	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: GRB	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	20

SHEET 1 OF 1

6/29/2009 1:34:02 PM adams $PWFILE$

7/1/2009 12:09:00 PM ttanos

SUMMARY OF ESTIMATED RETAINING WALL QUANTITIES

BID ITEM DESCRIPTION / ROADWAY ELEMENT	423-2001	432-2039	450-2007	450-2054	450-2093	450-2120	450-2088
	RETAINING WALL (MSE)	RIPRAP (MOW STRIP) (4 IN)	RAIL (TY T501)	RAIL (TY T501RW DAL)	RAIL (CIP) (TY T501) (SPL)	RAIL (CIP) (TY RAIL) (SPL)	*RAIL (CIP) TYPE 501 (TRANSITION)
	SF	CY	LF	LF	LF	LF	LF
WALL A	16703	25	1199	0	309	309	25
WALL B	15994	26	1052	0	0	0	0
WALL C	8667	6	633	0	793	793	0
WALL D	12221	7	767	380	198	198	25
WALL E	4601	0	847	0	0	0	0
TOTAL	58186	64	4498	380	1300	1300	50

*SPECIAL TRAFFIC BARRIER END TERMINAL SHALL BE PAID UNDER ITEM 450-2088.



Signature of Registrant & Date

SHEET 1 OF 1

2 REPLACED 7-1-09 BB

NO.	REVISION	BY	DATE

APM & Associates, Inc.
Engineering • Planning • CM Services
FIRM REGISTRATION NUMBER: 3091

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IH 30 AT JOHN KING BLVD

RETAINING WALLS
SUMMARY OF ESTIMATED QUANTITIES

Designed: DJP	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn: TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: JLC	DAL	ROCKWALL	0009	12	073	27

J:\2007\07102 TxDOT I30\SHEETS-RETAINING WALL\07102RETWAL QUANTITY 01.dgn

ITEM 465												
INLET ID	INLET LOCATION	* LENGTH FT.	* WIDTH FT.	* HEIGHT FT.	INLET BARRIER WALL TY I EA.	INLET COMPL. (CURB) TY I EA.	INLET EXT EA.	* NUMBER OF GRATES EA.	MANHOLE (COMPL) (TY M) EA.	* RING AND COVER EA.	INLET (COMPL) (TY C) 1-GRATE EA.
BWI-A1	88.98' RT CL30 STA. 301+99.99	5.0	3.0	4.5	1			1			
BWI-A2	88.98' RT CL30 STA. 298+49.97	5.0	3.0	4.5	1			1			
BWI-A3	97.44' RT CL30 STA. 295+99.94	5.0	3.0	4.5	1			1			
MH-A4	72.00' RT CL30 STA. 295+99.94	4.0	4.0	6.0					1	1	
BWI-A5	101.39' RT CL30 STA. 294+99.91	5.0	3.0	4.5	1			1			
BWI-A6	104.33' RT CL30 STA. 293+00.00	5.0	3.0	4.5	1			1			
MH-A7	72.00' RT CL30 STA. 298+00.00	4.0	4.0	4.5					1	1	
CI-A8	77.53' RT CL30 STA. 289+99.96	5.0	3.0	4.5		1		1			
MH-A9	69.60' RT CL30 STA. 290+00.14	4.0	4.0	4.0					1	1	
MH-A10	60.31' RT CL30 STA. 288+00.00	4.0	4.0	4.0					1	1	
CI-11	70.01' RT CL30 STA. 285+99.94	5.0	3.0	4.5		1		1			
MH-A12	60.31' RT CL30 STA. 286+00.17	4.0	4.0	5.0					1	1	
MH-A13	70.00' RT CL30 STA. 282+00.00	4.0	4.0	6.0					1	1	
MH-A14	70.00' RT CL30 STA. 279+70.00	4.0	4.0	5.0					1	1	
BWI-B1	89.00' LT CL30 STA. 302+00.00	5.0	3.0	4.5	1			1			
BWI-B2	90.17' LT CL30 STA. 298+47.92	5.0	3.0	6.0	1			1			
BWI-B3	101.53' LT CL30 STA. 295+99.93	5.0	3.0	5.0	1			1			
MH-B4	72.00' LT CL30 STA. 295+99.93	4.0	4.0	4.0					1	1	
BWI-B5	103.75' LT CL30 STA. 294+99.97	5.0	3.0	4.5	1			1			
BWI-B6	104.33' LT CL30 STA. 293+05.49	5.0	3.0	4.5	1			1			
MH-B7	72.00' LT CL30 STA. 293+05.49	4.0	4.0	5.5					1	1	
MH-B8	69.00' LT CL30 STA. 290+00.00	4.0	4.0	6.5					1	1	
CI-B9	73.76' LT CL30 STA. 288+99.95	5.0	3.0	6.5		1					
MH-B10	61.06' LT CL30 STA. 287+00.00	4.0	4.0	7.0					1	1	
CI-B11	63.23' LT CL30 STA. 284+99.96	5.0	3.0	7.0		1		1			
MH-B12	55.82' LT CL30 STA. 285+00.16	4.0	4.0	8.0					1	1	
MH-B13	70.00' LT CL30 STA. 286+76.74	4.0	4.0	8.5					1	1	
MH-B14	70.00' LT CL30 STA. 280+00.00	4.0	4.0	4.5					1	1	
CI-C1	63.36' LT 205BY STA. 52+60.15	15.0	3.0	4.5		1	2	1			
CI-C2	151.98' LT CL30 STA. 303+94.79	5.0	3.0	4.0		1		1			
CI-C3	152.00' LT CL30 STA. 302+99.79	5.0	3.0	4.5		1		1			
CI-C4	152.00' LT CL30 STA. 302+11.40	15.0	3.0	5.5		1	2	1			
MH-C5	153.15' LT CL30 STA. 298+99.79	4.0	4.0	8.5					1	1	
MH-C6	153.15' LT CL30 STA. 295+99.79	4.0	4.0	8.0					1	1	
MH-C7	150.93' LT CL30 STA. 293+48.65	4.0	4.0	7.5					1	1	
CI-C8	144.01' LT CL30 STA. 291+91.92	15.0	3.0	5.5		1	2	1			
BWI-C9	108.39' lt cl30 sta. 288+89.35	5.0	3.0	4.5				1			
CI-C10	140.00' LT CL30 STA. 288+29.97	5.0	3.0	5.0		1		1			
MH-C11	141.90' LT CL30 STA. 285+29.80	4.0	4.0	5.0					1	1	
CI-C12	140.00' LT CL30 STA. 282+74.97	15.0	3.0	4.5		1	2				
CI-D1	163.99' RT CL30 STA. 302+74.80	10.0	3.0	4.9		1	1	1			
CI-D2	164.01' RT CL30 STA. 300+99.80	5.0	3.0	4.7		1		1			
MH-D3	153.48' RT CL30 STA. 299+00.00	4.0	4.0	8.5					1	1	
MH-D4	153.48' RT CL30 STA. 295+99.80	4.0	4.0	11.0					1	1	
CI-D5	146.33' RT CL30 STA. 292+49.43	5.0	3.0	9.0		1		1			
MH-D6	141.19' RT CL30 STA. 289+99.81	4.0	4.0	8.5					1	1	
BWI-D7	104.33' CL30 STA. 289+00.00	5.0	3.0	5.0				1			
CI-D8	140.00' RT CL30 STA. 287+99.97	15.0	3.0	5.0		1	2	1			
CI-D9	140.00' RT CL30 STA. 285+29.95	15.0	3.0	4.5		1	2	1			

*FOR CONTRACTORS INFORMATION ONLY.

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

SUMMARY OF QUANTITIES
DRAINAGE

Designed: AJA	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: GRB	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	22

2/9/2009 6:37:50 AM adams pw:/Active Projects/TX00643/TX00643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.02 Summaries/435TD001.001

ITEM 465											
INLET ID	INLET LOCATION	* LENGTH FT.	* WIDTH FT.	* HEIGHT FT.	INLET (BARRIER WALL) EA.	INLET COMPL. (CURB) TY I EA.	INLET EXT EA.	* NUMBER OF GRATES EA.	MANHOLE TY M COMPL. 4'X4' EA.	* RISER AND COVER EA.	INLET (COMPL) (TY C) 1-GRATE EA.
CI-D10	140.00' RT CL30 STA. 281+99.95	15.0	3.0	6.0		1	2	1			
CI-E1	140.00' LT CL30 STA. 322+49.61	10.0	3.0	4.5		1	1	1			
CI-E2	140.00' LT CL30 STA. 321+97.24	10.0	3.0	5.0		1	1	1			
CI-E3	140.00' LT CL30 STA. 321+17.45	15.0	3.0	5.5		1	2	1			
CI-E4	140.00' LT CL30 STA. 320+49.61	10.0	3.0	6.0		1	1	1			
CI-E5	140.00' LT CL30 STA. 318+49.61	10.0	3.0	7.5		1	1	1			
MH-E6	140.00' LT CL30 STA. 315+49.61	4.0	4.0	8.0					1	1	
MH-E7	149.15' LT CL30 STA. 312+49.73	4.0	4.0	7.5					1	1	
CI-E8	164.00' LT CL30 STA. 309+99.79	15.0	3.0	5.5		1	2	1			
CI-F1	138.00' RT CL30 STA. 321+49.65	10.0	3.0	4.5		1	1	1			
CI-F2	138.00' RT CL30 STA. 318+99.65	10.0	3.0	4.5		1	1	1			
CI-F3	138.00' RT CL30 STA. 318+24.42	15.0	3.0	5.0		1	2	1			
MH-F4	140.00' RT CL30 STA. 315+24.65	4.0	4.0	7.5					1	1	
MH-F5	140.00' RT CL30 STA. 312+24.65	4.0	4.0	7.0					1	1	
CI-F6	138.00' RT CL30 STA. 309+24.65	15.0	3.0	5.5		1	2	1			
CI-G1	77.50' LT CL30 STA. 320+50.14	15.0	3.0	5.5		1	2	1			
SD-G1A	77.50' LT CL30 STA. 319+34.19			2.0				1			1
CI-G2	77.50' LT CL30 STA. 318+00.14	15.0	3.0	6.0		1	2	1			
SD-G3	00.00' LT CL30 STA. 317+09.19			2.0				1			1
CI-G4	77.50' LT CL30 STA. 317+09.19	15.0	3.0	7.3		1	2	1			
CI-G5	77.50' LT CL30 STA. 316+00.00	15.0	3.0	8.3		1	2	1			
BWI-G6	106.33' LT CL30 STA. 313+14.06	5.0	3.0	13.0	1					1	
BWI-G8	106.33' LT CL30 STA. 312+50.00	5.0	3.0	5.5	1					1	
MH-G9	77.50' LT CL30 STA. 312+50.00	4.0	4.0	14.8				1	1	1	
BWI-G10	103.54' LT CL30 STA. 311+00.00	5.0	3.0	4.0	1					1	
BWI-G12	97.68' LT CL30 STA. 309+50.11	5.0	3.0	8.0	1					1	
JB-G13	77.50' LT CL30 STA. 309+50.11	4.0	4.0	13.0					1		
CI-H1	79.00' RT CL30 STA. 320+50.00	15.0	3.0	5.5		1	2	1			
CI-H2	79.00' RT CL30 STA. 318+00.00	15.0	3.0	5.5		1	2	1			
CI-H3	79.00' RT CL30 STA. 317+09.19	15.0	3.0	6.0		1	2	1			
CI-H4	79.00' RT CL30 STA. 316+00.00	15.0	3.0	7.0		1	2	1			
BWI-H5	106.33' RT CL30 STA. 314+75.00	5.0	3.0	6.5	1					1	
MH-H6	79.00' RT CL30 STA. 314+75.00	4.0	4.0	9.0					1	1	
BWI-H7	105.90' RT CL30 STA. 312+00.00	5.0	3.0	6.0	1					1	
MH-H8	79.00' RT CL30 STA. 312+00.00	4.0	4.0	14.5					1	1	
BWI-H9	100.25' RT CL30 STA. 310+00.00	5.0	3.0	10.0	1					1	
JB-H10	77.00' RT CL30 STA. 310+00.00	4.0	4.0	10.0					1		
CI-I1	51.00' RT CL30 STA. 53+62.09	15.0	3.0	4.0		1	2	1		1	
CI-I2	110.00' RT CL30 STA. 307+26.58	15.0	3.0	2.8		1	2	1		1	
CI-I3	108.00' LT CL30 STA. 308+24.79	15.0	3.0	4.5		1	2	1		1	
BWI-J1	88.81' LT CL30 STA. 308+00.00	5.0	3.0	5.5	1					1	
BWI-K1	91.00' RT CL30 STA. 308+00.00	5.0	3.0	5.5	1					1	
JB-K2	77.00' RT CL30 STA. 308+00.00	4.0	4.0	10.0					1		
CI-L1	88.49' RT 205BY STA. 50+70.73	15.0	3.0	2.1		1	2	1		1	
CI-M1	142.81' RT CL30 STA. 306+20.10	10.0	3.0	2.2		1	1	1		1	
SD-N1	94.91' LT CL30 STA. 329+47.39			3.1				1			1
TCP TEMP INLET	25.5' LT EBFR STA. 308+00.74			2.2							1
TCP TEMP INLET	33.15' RT WBFR STA. 308+54.00			2.5							1
TCP TEMP INLET	33.06' LT EBFR STA. 316+00.39			2.5							1
TOTALS:					19	40	54	54	31	42	6

*FOR CONTRACTORS INFORMATION ONLY

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

SUMMARY OF QUANTITIES

DRAINAGE

Designed: AJA	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: GRB	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	23

2/9/2009 6:37:55 AM adams pw:\Active Projects\TXD0643\TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.02 Summaries/435TD002.001

ITEM 465											
INLET ID	INLET LOCATION	* LENGTH FT.	* WIDTH FT.	* HEIGHT FT.	INLET (BARRIER WALL) EA.	INLET COMPL. (CURB) TY I EA.	INLET EXT EA.	* NUMBER OF GRATES EA.	MANHOLE TY M COMPL. 4'X4' EA.	* RISER AND COVER EA.	INLET (COMPL) (TY C) 1-GRATE EA.
CI-D10	140.00' RT CL30 STA. 281+99.95	15.0	3.0	6.0		1	2	1			
CI-E1	140.00' LT CL30 STA. 322+49.61	10.0	3.0	4.5		1	1	1			
CI-E2	140.00' LT CL30 STA. 321+97.24	10.0	3.0	5.0		1	1	1			
CI-E3	140.00' LT CL30 STA. 321+17.45	15.0	3.0	5.5		1	2	1			
CI-E4	140.00' LT CL30 STA. 320+49.61	10.0	3.0	6.0		1	1	1			
CI-E5	140.00' LT CL30 STA. 318+49.61	10.0	3.0	7.5		1	1	1			
MH-E6	140.00' LT CL30 STA. 315+49.61	4.0	4.0	8.0					1	1	
MH-E7	149.15' LT CL30 STA. 312+49.73	4.0	4.0	7.5					1	1	
CI-E8	164.00' LT CL30 STA. 309+99.79	15.0	3.0	5.5		1	2	1			
CI-F1	138.00' RT CL30 STA. 321+49.65	10.0	3.0	4.5		1	1	1			
CI-F2	138.00' RT CL30 STA. 318+99.65	10.0	3.0	4.5		1	1	1			
CI-F3	138.00' RT CL30 STA. 318+24.42	15.0	3.0	5.0		1	2	1			
MH-F4	140.00' RT CL30 STA. 315+24.65	4.0	4.0	7.5					1	1	
MH-F5	140.00' RT CL30 STA. 312+24.65	4.0	4.0	7.0					1	1	
CI-F6	138.00' RT CL30 STA. 309+24.65	15.0	3.0	5.5		1	2	1			
CI-G1	77.50' LT CL30 STA. 320+50.14	15.0	3.0	5.5		1	2	1			
SD-G1A	77.50' LT CL30 STA. 319+34.19			2.0				1			1
CI-G2	77.50' LT CL30 STA. 318+00.14	15.0	3.0	6.0		1	2	1			
SD-G3	00.00' LT CL30 STA. 317+09.19			2.0				1			1
CI-G4	77.50' LT CL30 STA. 317+09.19	15.0	3.0	7.3		1	2	1			
CI-G5	77.50' LT CL30 STA. 316+00.00	15.0	3.0	8.3		1	2	1			
BWI-G6	106.33' LT CL30 STA. 313+14.06	5.0	3.0	13.0	1					1	
BWI-G8	106.33' LT CL30 STA. 312+50.00	5.0	3.0	5.5	1					1	
MH-G9	77.50' LT CL30 STA. 312+50.00	4.0	4.0	14.8				1	1	1	
BWI-G10	103.54' LT CL30 STA. 311+00.00	5.0	3.0	4.0	1					1	
BWI-G12	97.68' LT CL30 STA. 309+50.11	5.0	3.0	8.0	1					1	
JB-G13	77.50' LT CL30 STA. 309+50.11	4.0	4.0	13.0					1		
CI-H1	79.00' RT CL30 STA. 320+50.00	15.0	3.0	5.5		1	2	1			
CI-H2	79.00' RT CL30 STA. 318+00.00	15.0	3.0	5.5		1	2	1			
CI-H3	79.00' RT CL30 STA. 317+09.19	15.0	3.0	6.0		1	2	1			
CI-H4	79.00' RT CL30 STA. 316+00.00	15.0	3.0	7.0		1	2	1			
BWI-H5	106.33' RT CL30 STA. 314+75.00	5.0	3.0	6.5	1					1	
MH-H6	79.00' RT CL30 STA. 314+75.00	4.0	4.0	9.0					1	1	
BWI-H7	105.90' RT CL30 STA. 312+00.00	5.0	3.0	6.0	1					1	
MH-H8	79.00' RT CL30 STA. 312+00.00	4.0	4.0	14.5					1	1	
BWI-H9	100.25' RT CL30 STA. 310+00.00	5.0	3.0	10.0	1					1	
JB-H10	77.00' RT CL30 STA. 310+00.00	4.0	4.0	10.0					1		
CI-I1	51.00' RT CL30 STA. 53+62.09	15.0	3.0	4.0		1	2	1		1	
CI-I2	110.00' RT CL30 STA. 307+26.58	15.0	3.0	2.8		1	2	1		1	
CI-I3	108.00' LT CL30 STA. 308+24.79	15.0	3.0	4.5		1	2	1		1	
BWI-J1	88.81' LT CL30 STA. 308+00.00	5.0	3.0	5.5	1					1	
BWI-K1	91.00' RT CL30 STA. 308+00.00	5.0	3.0	5.5	1					1	
JB-K2	77.00' RT CL30 STA. 308+00.00	4.0	4.0	10.0					1		
CI-L1	88.49' RT 205BY STA. 50+70.73	15.0	3.0	2.1		1	2	1		1	
CI-M1	142.81' RT CL30 STA. 306+20.10	10.0	3.0	2.2		1	1	1		1	
SD-N1	94.91' LT CL30 STA. 329+47.39			3.1				1			1
TCP TEMP INLET	25.5' LT EBFR STA. 308+00.74			2.2							1
TCP TEMP INLET	33.15' RT WBFR STA. 308+54.00			2.5							1
~~TCP TEMP INLET~~	~~33.06' LT EBFR STA. 316+88.39~~			~~2.5~~							~~1~~
TCP TEMP INLET	33.25' LT IH 30 STA. 292+18.00			2.5							1
TCP TEMP INLET	32.92' RT WBFR STA. 316+00.00			2.5							1
TOTALS:					19	40	54	54	31	42	~~6~~ 8

*FOR CONTRACTORS INFORMATION ONLY

9

9 CHANGE ORDER NO. 9
SHEET REVISED

NO.	REVISION	BY	DATE
9	TEMP INLET ADDED	AJA	

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.
SUMMARY OF QUANTITIES
DRAINAGE

Designed:	AJA	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	GRB	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	23A

SHEET 2 OF 3

10/21/2010 8:10:11 AM aadams pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Lst Sheets/8.3.02 Summaries/435TD002.001

STORM SEWER SUMMARY

			ITEM 464				0462 2010	0476 2049	0400 2003	0400 2002	0400 2005	0402 2001	0110 2002
			RC PIPE (CL III)				CONC BOX CULVERT	JACK OR TUN BOX CULV	STRUCTURAL EXCAVATION	STRUCTURAL EXCAVATION	CEM STABIL BKFL	TRENCH PROTECTION	EXCAVATION (CHANNEL)
LINE			18"	24"	30"	36"	(6 FT X 3 FT)	(6 FT X 3 FT)	(PIPE)	(BOX)			
ID	FROM	TO	LF	LF	LF	LF	LF	LF	CY	CY	CY	LF	CY
LINE A	BWI-A1	OUT	731	1382		566			1586			331	
LINE B	BWI-B1	OUT	757	1326		603			2077			1284	
LINE C	CI-C1	MH-B13	352	1907	65				2160			1485	
LINE D	CI-D1	MH-A13	1290	851					2298			1908	
LINE E	CI-E1	OUT	122	1205					1399			1367	
LINE F	CI-F1	OUT	315	1002					1109			865	
LINE G	CI-G1	OUT	413	86	104	723			1395			1164	
LINE H	CI-H1	OUT	316	190	760				921			630	
LINE I	CI-I1	OUT	182	134					205			330	
LINE J	BWI-J1	OUT	58						8		151		
LINE K	BWI-K1	OUT	9	18					8		85		
LINE L	CI-L1	OUT	208						282			209	
LINE M	CI-M1	OUT	208						55				
CULVERT A							133	210		448			58
TCP TEMP			38										
TOTALS			4999	8101	929	1892	133	210	13503	448	236	9573	58

* FOR CONTRACTORS INFORMATION ONLY

HEADWALL SUMMARY

		ITEM 466					
			0466 2036	*	*	*	*
HEADWALL ID	HEADWALL LOCATION	H HEIGHT	WINGWALL (FW-S) (H=6 FT)	Lw LENGTH OF WINGWALL (EA)	Ltw LENGTH OF TOEWALL	SL	CONC
		FT	EA.	FT	FT	H:V	CY
PW-N	169.67' LT CL30 STA. 308+87.94	6	1	18.894	7.419	3:1	30.2
PW-S	147.16' RT CL30 STA. 308+03.05	6	1	18.894	7.419	3:1	30.2

* FOR CONTRACTORS INFORMATION ONLY

REPLACED 7-1-09 BB

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.
SUMMARY OF QUANTITIES
DRAINAGE

Designed: AJA	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: GRB	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	24

6/30/2009 9:10:32 AM aadams p:\Active Projects\TXD0643\TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.02 Summaries/435TD003.001

STORM SEWER SUMMARY

LINE			ITEM 464 RC PIPE (CL III)				0462 2010 CONC BOX CULVERT	0476 2049 JACK OR TUN BOX CULV	0400 2003 STRUCTURAL EXCAVATION	0400 2002 STRUCTURAL EXCAVATION	0400 2005 CEM STABIL BKFL	0402 2001 TRENCH PROTECTION	0110 2002 EXCAVATION (CHANNEL)
			18"	24"	30"	36"	(6 FT X 3 FT)	(6 FT X 3 FT)	(PIPE)	(BOX)			(CHANNEL)
ID	FROM	TO	LF	LF	LF	LF	LF	LF	CY	CY	CY	LF	CY
LINE A	BWI-A1	OUT	731	1382		566			1586			331	
LINE B	BWI-B1	OUT	757	1326		603			2077			1284	
LINE C	CI-C1	MH-B13	352	1907	65				2160			1485	
LINE D	CI-D1	MH-A13	1290	851					2298			1908	
LINE E	CI-E1	OUT	122	1205					1399			1367	
LINE F	CI-F1	OUT	315	1002					1109			865	
LINE G	CI-G1	OUT	413	86	104	723			1395			1164	
LINE H	CI-H1	OUT	316	190	760				921			630	
LINE I	CI-I1	OUT	182	134					205			330	
LINE J	BWI-J1	OUT	58						8		151		
LINE K	BWI-K1	OUT	9	18					8		85		
LINE L	CI-L1	OUT	208						282			209	
LINE M	CI-M1	OUT	208						55				
CULVERT A							133	210		448			58
TCP TEMP			~~38~~ 83										
TOTALS			~~4999~~ 5044	8101	929	1892	133	210	13503	448	236	9573	58

* FOR CONTRACTORS INFORMATION ONLY

9

HEADWALL SUMMARY

HEADWALL ID	HEADWALL LOCATION	H HEIGHT	0466 2036 WINGWALL (FW-S) (H=6 FT)	* Lw LENGTH OF WINGWALL (EA)	* Ltw LENGTH OF TOEWALL	* SL	* CONC
		FT	EA.	FT	FT	H:V	CY
PW-N	169.67' LT CL30 STA. 308+87.94	6	1	18.894	7.419	3:1	30.2
PW-S	147.16' RT CL30 STA. 308+03.05	6	1	18.894	7.419	3:1	30.2

* FOR CONTRACTORS INFORMATION ONLY

9 CHANGE ORDER NO. 9
SHEET REVISED

NO.	REVISION	BY	DATE
9	TEMP INLET ADDED	AJA	

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.
SUMMARY OF QUANTITIES
DRAINAGE

Designed: AJA	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: GRB	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	24

10/21/2010 8:11:12 AM adams pw:/Active Projects/TX00643/TX00643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.02 Summaries/435TD003.001

TRAFFIC SIGNALS - IH-30 AT JOHN KING BLVD.

ESTIMATE SUMMARY				
ITEM NO	DESC CODE	DESCRIPTION	UNIT	QUANTITY
* 416	2002	DRILL SHAFT (24 IN)	LF	12.00
416	2032	DRILL SHAFT (TRF SIG POLE) (36 IN)	LF	70.00
416	2034	DRILL SHAFT (TRF SIG POLE) (48 IN)	LF	22.00
618	2034	CONDT (PVC) (SCHD 80) (2")	LF	15.00
618	2038	CONDT (PVC) (SCHD 80) (3")	LF	123.00
618	2039	CONDT (PVC) (SCHD 80) (3") (BORE)	LF	580.00
618	2040	CONDT (PVC) (SCHD 80) (4")	LF	235.00
620	2009	ELEC CONDR (NO. 6) BARE	LF	958.00
620	2010	ELEC CONDR (NO. 6) INSULATED	LF	356.00
620	2012	ELEC CONDR (NO. 8) INSULATED	LF	1,616.00
620	2016	ELEC CONDR (NO. 12) INSULATED	LF	320.00
624	2014	GROUND BOX TY D (162922) W/ APRON	EA	10.00
628	2100	ELC SRV TY D 120/240 070 (NS) SS (E) SP (0)	EA	1.00
680	2003	INSTALL HWY TRF SIG (SYSTEM)	EA	1.00
682	2001	BACK PLATE (12 IN) (3 SEC)	EA	20
682	2002	BACK PLATE (12 IN) (4 SEC)	EA	-
682	2003	BACK PLATE (12 IN) (5 SEC)	EA	-
682	2014	PED SIG SEC (12 IN) LED (2 INDICATIONS)	EA	12.00
682	2022	VEH SIG SEC (12 IN) LED (GRN ARW)	EA	3.00
682	2023	VEH SIG SEC (12 IN) LED (GRN)	EA	17.00
682	2024	VEH SIG SEC (12 IN) LED (YEL ARW)	EA	3.00
682	2025	VEH SIG SEC (12 IN) LED (YEL)	EA	17.00
682	2027	VEH SIG SEC (12 IN) LED (RED)	EA	20.00
684	2031	TRF SIG CBL (TY A) (14 AWG) (5 CONDR)	LF	1,040.00
684	2033	TRF SIG CBL (TY A) (14 AWG) (7 CONDR)	LF	205.00
684	2038	TRF SIG CBL (TY A) (14 AWG) (12 CONDR)	LF	1,398.00
684	2046	TRF SIG CBL (TY A) (14 AWG) (20 CONDR)	LF	535.00
686	2043	INS TRF SIG PL AM (S) 1 ARM (44')	EA	1.00
686	2047	INS TRF SIG PL AM (S) 1 ARM (48')	EA	1.00
686	2049	INS TRF SIG PL AM (S) 1 ARM (48') LUM	EA	3.00
686	2057	INS TRF SIG PL AM (S) 1 ARM (55') LUM	EA	1.00
687	2001	PED POLE ASSEMBLY	EA	2.00
688	2001	PED DETECT (2 IN PUSH BTN)	EA	12.00
6006	2001	SPREAD SPECTRUM RADIO	EA	1.00
6006	2004	RADIO ANTENNA	EA	1.00
6006	2003	HELIAX CABLE	LF	123.00
6266	2001	VIVDS PROCESSOR SYSTEM	EA	2.00
6266	2002	VIVDS CAMERA ASSEMBLY	EA	11
6266	2003	VIVDS SET-UP SYSTEM	EA	2.00
6266	2005	VIVDS COMMUNICATION CABLE (COAXIAL)	LF	3,101.00

* ITEM SUBSIDIARY TO ITEM 687

NO.	REVISION	BY	DATE

Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC SIGNALS QUANTITY SUMMARY

Designed: BCM	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked: BCM	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.		JOB NO.	SHEET NO.
Checked: BCM	DAL	ROCKWALL	0009	12		073	25

SHEET 1 OF 1

5/15/2009 3:21:37 PM eFountain ENG Active Projects\TXD064-4\TXD064-3-05 Sig Plans and Reports\IH 30 Cut Sheets\8.3.x. Signals\435TL001.dgn

PLAN SHEET NO	STATION TO STATION	0644 2022 INS SM RD SN SUP & AM TY S80 (1) SA(P) EA	0644 2025 INS SM RD SN SUP & AM TY S80 (1) SA(T) EA	0644 2027 INS SM RD SN SUP & AM TY S80 (1) SA(U) EA	0644 2042 INS SM RD SN SUP & AM TY S80 (2) SA(P) EA	0658 2263 INSTL DEL ASSM (D-SY) SZ 1 (FLX) GND EA	0658 2261 INSTL DEL ASSM (D-SW) SZ (TY C) (TY C)GF1 (BI) EA	0666 2003 REFL PAV MRK TY I (W) 4" (BRK) (100MIL) LF	0666 2012 REFL PAV MRK TY I (W) 4" (SLD) (100MIL) LF	0666 2036 REFL PAV MRK TY I (W) 8" (SLD) (100MIL) LF	0666 2039 REFL PAV MRK TY I (W) 12" (LNDP) (100MIL) LF	0666 2042 REFL PAV MRK TY I (W) 12" (SLD) (100MIL) LF	0666 2048 REFL PAV MRK TY I (W) 24" (SLD) (100MIL) LF	0666 2054 REFL PAV MRK TY I (W) (ARROW) (100MIL) EA	0666 2075 REFL PAV MRK TY I (W) (EXIT GORE) (100MIL) EA	0666 2096 REFL PAV MRK TY I (W) (WORD) (100MIL) EA	0666 2102 REFL PAV MRK TY I (W) 36" (YLD TRI) (100MIL) EA
1 of 9	BEGIN PROJECT TO STA. 275+00.00	0	0	0	0	0	0	250	295	0	0	0	0	0	0	0	0
2 of 9	STA. 275+00.00 TO STA. 286+00.00	1	2	0	0	5	0	650	3665	1007	0	213	0	0	0	0	0
3 of 9	STA. 286+00.00 TO STA. 297+00.00	5	1	0	0	3	13	895	5286	2430	0	728	0	0	1	0	0
4 of 9	STA. 297+00.00 TO STA. 308+00.00	16	0	2	1	0	13	715	4585	1779	121	1606	50	13	0	9	52
5 of 9	STA. 308+00.00 TO STA. 319+00.00	7	1	0	1	3	14	900	5167	3380	0	751	0	0	1	0	0
6 of 9	STA. 319+00.00 TO STA. 330+00.00	1	1	0	0	5	0	935	4141	1124	0	257	0	0	0	0	0
7 of 9	STA. 330+00.00 TO STA. 341+00.00	0	0	0	0	0	0	725	1875	0	0	0	0	0	0	0	0
8 of 9	STA. 341+00.00 TO END PROJECT	0	0	0	0	0	0	350	151	0	0	0	0	0	0	0	0
9 of 9	JOHN KING BLVD	3	0	0	0	0	0	420	2795	590	0	404	229	6	0	6	0
	PROJECT TOTALS =	33	5	2	2	16	40	5840	27960	10310	121	3959	279	19	2	15	52

PLAN SHEET NO	STATION TO STATION	0666 2111 REFL PAV MRK TY I (Y) 4" (SLD) (100MIL) LF	0666 2123 REFL PAV MRK TY I (Y) 8" (SLD) (100MIL) LF	0666 2126 REFL PAV MRK TY I (Y) 12" (SLD) (100MIL) LF	0666 2189 PAVEMENT SEALER (4") LF	0666 2191 PAVEMENT SEALER (8") LF	0666 2193 PAVEMENT SEALER (12") LF	0666 2195 PAVEMENT SEALER (24") LF	0666 2219 PAVEMENT SEALER (ARROW) EA	0666 2220 PAVEMENT SEALER (WORD) EA	0666 2226 PAVEMENT SEALER (EXIT GORE) EA	0666 2257 PAVEMENT SEALER (YLD TRI) EA	0672 2010 REFL PAV MRKR TY I-A EA	0672 2017 REFL PAV MRKR TY II-C-R EA	0677 2001 ELIM EXT PAV MRK & MRKS (4") LF	0677 2007 ELIM EXT PAV MRK & MRKS (24") LF	0677 2018 ELIM EXT PAV MRK & MRKS (WORD) EA
1 of 9	BEGIN PROJECT TO STA. 275+00.00	1105	0	0	1650	0	0	0	0	0	0	0	0	13	0	0	0
2 of 9	STA. 275+00.00 TO STA. 286+00.00	3020	0	0	7335	1007	213	0	0	0	0	0	0	85	0	0	0
3 of 9	STA. 286+00.00 TO STA. 297+00.00	4845	540	220	11026	2970	948	0	0	0	1	0	27	167	0	0	0
4 of 9	STA. 297+00.00 TO STA. 308+00.00	2731	0	0	8028	1779	1727	50	13	9	0	52	0	290	0	0	0
5 of 9	STA. 308+00.00 TO STA. 319+00.00	4630	540	221	10697	3920	972	0	0	0	1	0	27	241	0	0	0
6 of 9	STA. 319+00.00 TO STA. 330+00.00	4141	0	0	9217	1124	257	0	0	0	0	0	0	106	0	0	0
7 of 9	STA. 330+00.00 TO STA. 341+00.00	2692	0	0	5292	0	0	0	0	0	0	0	0	39	0	0	0
8 of 9	STA. 341+00.00 TO END PROJECT	1546	0	0	2047	0	0	0	0	0	0	0	0	19	0	0	0
9 of 9	JOHN KING BLVD	1883	0	0	5098	590	404	229	6	6	0	0	0	81	1276	668	2
	PROJECT TOTALS =	26593	1080	441	60390	11390	4521	279	19	15	2	52	54	1041	1276	668	2

PLAN SHEET NO	STATION TO STATION	0416 2018 DRILL SHAFT (SIGN MTS) (24IN) LF	0416 2022 DRILL SHAFT (SIGN MTS) (48IN) LF	0636 2001 ALUMINUM SIGNS (TY A) SF	0636 2002 ALUMINUM SIGNS (TY G) SF	0636 2003 ALUMINUM SIGNS (TY O) SF	0647 2001 INSTALL LRSS (STRUCT STEEL) LB	0650 2217 INS OH SN SUP (25 FT CANT) (CIRC TUBE) EA	0650 2218 INS OH SN SUP (30 FT CANT) (CIRC TUBE) EA	0644-2032 INS SM RD SN SUP & AM TY S80 (1) SB(P) EA	0658-2317 INSTL OM ASSM (OM-2Z)(FLX) (SLF) EA
1 of 9	BEGIN PROJECT TO STA. 275+00.00	10	0	0.0	79.0	0	379.6	0	0	0	0
2 of 9	STA. 275+00.00 TO STA. 286+00.00	10	0	0.0	91.0	0	380.5	0	0	0	0
3 of 9	STA. 286+00.00 TO STA. 297+00.00	0	0	0	0	0	0	0	0	0	3
4 of 9	STA. 297+00.00 TO STA. 308+00.00	0	51	56.0	0	263.0	0	1	1	0	0
5 of 9	STA. 308+00.00 TO STA. 319+00.00	0	0	0	0	0	0	0	0	0	3
6 of 9	STA. 319+00.00 TO STA. 330+00.00	14	0	0.0	152.5	0	620.6	0	0	0	0
7 of 9	STA. 330+00.00 TO STA. 341+00.00	0	0	0	0	0	0	0	0	0	0
8 of 9	STA. 341+00.00 TO END PROJECT	14	0	0.0	152.5	0	595.1	0	0	0	0
9 of 9	JOHN KING BLVD	0	0	0	0	0	0	0	0	2	0
	PROJECT TOTALS =	48	51	56.0	475.0	263.0	1975.8	1	1	2	6

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

SIGNING AND STRIPING
SUMMARY

Designed: JAV	FED. RD. DIV. NO. 6	STATE TEXAS	FEDERAL AID PROJECT NO. SEE TITLE SHEET			HIGHWAY NO. IH 30
Checked: AJA						
Drawn: CADD	DIST. DAL	COUNTY ROCKWALL	CONTROL NO. 0009	SECTION NO. 12	JOB NO. 073	SHEET NO. 26
Checked: RRH						

SHEET 1 OF 1

5/18/2009 2:56:00 PM $PWFILE$ regular

PLAN SHEET NO	STATION TO STATION	0644 2022 INS SM RD SN SUP & AM TY S80 (1) SA(P) EA	0644 2025 INS SM RD SN SUP & AM TY S80 (1) SA(T) EA	0644 2027 INS SM RD SN SUP & AM TY S80 (1) SA(U) EA	0644 2042 INS SM RD SN SUP & AM TY S80 (2) SA(P) EA	0658 2263 INSTL DEL ASSM (D-SY) SZ 1 (FLX) GND EA	0658 2261 INSTL DEL ASSM (D-SW) SZ (TY C) (TY C)GF1 (BI) EA	0666 2003 REFL PAV MRK TY I (W) 4" (BRK) (100MIL) LF	0666 2012 REFL PAV MRK TY I (W) 4" (SLD) (100MIL) LF	0666 2036 REFL PAV MRK TY I (W) 8" (SLD) (100MIL) LF	0666 2039 REFL PAV MRK TY I (W) 12" (LNDP) (100MIL) LF	0666 2042 REFL PAV MRK TY I (W) 12" (SLD) (100MIL) LF	0666 2048 REFL PAV MRK TY I (W) 24" (SLD) (100MIL) LF	0666 2054 REFL PAV MRK TY I (W) (ARROW) (100MIL) EA	0666 2075 REFL PAV MRK TY I (W) (EXIT GORE) (100MIL) EA	0666 2096 REFL PAV MRK TY I (W) (WORD) (100MIL) EA	0666 2102 REFL PAV MRK TY I (W) 36" (YLD TRI) (100MIL) EA
1 of 9	BEGIN PROJECT TO STA. 275+00.00	0	0	0	0	0	0	250	295	0	0	0	0	0	0	0	0
2 of 9	STA. 275+00.00 TO STA. 286+00.00	1	2	0	0	5	0	650	3665	1007	0	213	0	0	0	0	0
3 of 9	STA. 286+00.00 TO STA. 297+00.00	5	1	0	0	3	13	895	5286	2430	0	728	0	0	1	0	0
4 of 9	STA. 297+00.00 TO STA. 308+00.00	16	0	2	1	0	13	715	4585	1779	121	1606	50	13	0	9	52
5 of 9	STA. 308+00.00 TO STA. 319+00.00	7	1	0	1	3	14	900	5167	3380	0	751	0	0	1	0	0
6 of 9	STA. 319+00.00 TO STA. 330+00.00	1	1	0	0	5	0	935	4141	1124	0	257	0	0	0	0	0
7 of 9	STA. 330+00.00 TO STA. 341+00.00	0	0	0	0	0	0	725	1875	0	0	0	0	0	0	0	0
8 of 9	STA. 341+00.00 TO END PROJECT	0	0	0	0	0	0	350	151	0	0	0	0	0	0	0	0
9 of 9	JOHN KING BLVD	3	0	0	0	0	0	420	2795	590	0	404	229	6	0	6	0
	PROJECT TOTALS =	33	5	2	2	16	40	5840	27960	10310	121	3959	279	19	2	15	52

PLAN SHEET NO	STATION TO STATION	0666 2111 REFL PAV MRK TY I (Y) 4" (SLD) (100MIL) LF	0666 2123 REFL PAV MRK TY I (Y) 8" (SLD) (100MIL) LF	0666 2126 REFL PAV MRK TY I (Y) 12" (SLD) (100MIL) LF	0666 2189 PAVEMENT SEALER (4") LF	0666 2191 PAVEMENT SEALER (8") LF	0666 2193 PAVEMENT SEALER (12") LF	0666 2195 PAVEMENT SEALER (24") LF	0666 2219 PAVEMENT SEALER (ARROW) EA	0666 2220 PAVEMENT SEALER (WORD) EA	0666 2226 PAVEMENT SEALER (EXIT GORE) EA	0666 2257 PAVEMENT SEALER (YLD TRI) EA	0672 2010 REFL PAV MRKR TY I-A EA	0672 2017 REFL PAV MRKR TY II-C-R EA	0677 2001 ELIM EXT PAV MRK & MRKS (4") LF	0677 2007 ELIM EXT PAV MRK & MRKS (24") LF	0677 2018 ELIM EXT PAV MRK & MRKS (WORD) EA
1 of 9	BEGIN PROJECT TO STA. 275+00.00	1105	0	0	1650	0	0	0	0	0	0	0	0	13	77	0	0
2 of 9	STA. 275+00.00 TO STA. 286+00.00	3020	0	0	7335	1007	213	0	0	0	0	0	0	85	3030	0	0
3 of 9	STA. 286+00.00 TO STA. 297+00.00	4845	540	220	11026	2970	948	0	0	0	1	0	27	167	3680	0	0
4 of 9	STA. 297+00.00 TO STA. 308+00.00	2731	0	0	8028	1779	1727	50	13	9	0	52	0	290	2200	0	0
5 of 9	STA. 308+00.00 TO STA. 319+00.00	4630	540	221	10697	3920	972	0	0	0	1	0	27	241	2200	0	0
6 of 9	STA. 319+00.00 TO STA. 330+00.00	4141	0	0	9217	1124	257	0	0	0	0	0	0	106	3370	0	0
7 of 9	STA. 330+00.00 TO STA. 341+00.00	2692	0	0	5292	0	0	0	0	0	0	0	0	39	3220	0	0
8 of 9	STA. 341+00.00 TO END PROJECT	1546	0	0	2047	0	0	0	0	0	0	0	0	19	0	0	0
9 of 9	JOHN KING BLVD	1883	0	0	5098	590	404	229	6	6	0	0	0	81	1276	668	2
	PROJECT TOTALS =	26593	1080	441	60390	11390	4521	279	19	15	2	52	54	1041	19053	668	2

PLAN SHEET NO	STATION TO STATION	0416 2018 DRILL SHAFT (SIGN MTS) (24IN) LF	0416 2022 DRILL SHAFT (SIGN MTS) (48IN) LF	0636 2001 ALUMINUM SIGNS (TY A) SF	0636 2002 ALUMINUM SIGNS (TY G) SF	0636 2003 ALUMINUM SIGNS (TY O) SF	0647 2001 INSTALL LRSS (STRUCT STEEL) LB	0650 2217 INS OH SN SUP (25 FT CANT) (CIRC TUBE) EA	0650 2218 INS OH SN SUP (30 FT CANT) (CIRC TUBE) EA	0644-2032 INS SM RD SN SUP & AM TY S80 (1) SB(P) EA	0658-2317 INSTL OM ASSM (OM-2Z)(FLX) (SLF) EA
1 of 9	BEGIN PROJECT TO STA. 275+00.00	10	0	0.0	79.0	0	379.6	0	0	0	0
2 of 9	STA. 275+00.00 TO STA. 286+00.00	10	0	0.0	91.0	0	380.5	0	0	0	0
3 of 9	STA. 286+00.00 TO STA. 297+00.00	0	0	0	0	0	0	0	0	0	3
4 of 9	STA. 297+00.00 TO STA. 308+00.00	0	51	56.0	0	263.0	0	1	1	0	0
5 of 9	STA. 308+00.00 TO STA. 319+00.00	0	0	0	0	0	0	0	0	0	3
6 of 9	STA. 319+00.00 TO STA. 330+00.00	14	0	0.0	152.5	0	620.6	0	0	0	0
7 of 9	STA. 330+00.00 TO STA. 341+00.00	0	0	0	0	0	0	0	0	0	0
8 of 9	STA. 341+00.00 TO END PROJECT	14	0	0.0	152.5	0	595.1	0	0	0	0
9 of 9	JOHN KING BLVD	0	0	0	0	0	0	0	0	2	0
	PROJECT TOTALS =	48	51	56.0	475.0	263.0	1975.8	1	1	2	6

1 CHANGE ORDER NO. 1
SHEET REVISED

NO.	REVISION	BY	DATE
1	ADD OVERLAY TO IH 30	GRB	

Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.
SIGNING AND STRIPING
SUMMARY

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	26A

SHEET 1 OF 1

6/30/2010 5:40:52 PM GBRANICK pw:/Active Projects/TX00643/TX006643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.xx Signing and Striping/435TSNSUM.dgn

SUMMARY OF EROSION CONTROL ITEMS

LOCATION	0164 2029 CELL FBR MLCH SEED (TEMP) (WARM) SY	0164 2031 CELL FBR MLCH SEED (TEMP) (COOL) SY	*FERTILIZER TONS	0168 2001 VEGETATIVE WATERING MG	0506 2002 ROCK FILTER DAMS (INSTALL) (TY 2) LF	0506 2009 ROCK FILTER DAMS (REMOVE) LF	0506 2016 CONSTRUCTION EXITS (INSTALL) (TY 1) SY	0506 2019 CONSTRUCTION EXITS (REMOVE) SY	5049 2002 BIODGRD EROSION CONTROL LOGS (18" DIA) LF	5049 2003 BIODGRD EROSION CONTROL LOGS (12" DIA) LF
PHASE 1-1										
SHEET 1	1174	1174	0	75	132		668			1927
SHEET 2	2525	2525	0	162	44					1222
SHEET 3	1939	1939	0	124	22				26	771
SHEET 4	2204	2204	0	141					124	1629
SHEET 5	4359	4359	1	279	88				50	4078
SHEET 6	1925	1925	0	123	110		668			1791
PHASE 2-1										
SHEET 1	1072	1072	0	69			668	668		1402
SHEET 2	5745	5745	1	368	44					4613
SHEET 3	6393	6393	1	409	22				50	4621
SHEET 4	6468	6468	1	414	66				50	4732
SHEET 5	5142	5142	1	329			668			3346
SHEET 6	376	376	0	24				668		
PHASE 2-2										
SHEET 1	2295	2295	0	147			668	668		
SHEET 2	913	913	0	58		44				70
SHEET 3	2339	2339	0	150		22				35
SHEET 4	184	184	0	12						35
SHEET 5	1291	1291	0	83		22	668	668		
SHEET 6										
PHASE 2-3										
SHEET 1						132		668		35
SHEET 2						44				35
SHEET 3	253	253	0	16		22				
SHEET 4										
SHEET 5						132		668		
SHEET 6						110				
PHASE 2-4										
SHEET 1	1461	1461	0	94						
TOTALS:	48060	48060	8	3078	528	528	4008	4008	300	30342

*FOR CONTRACTORS INFORMATION ONLY

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.
EROSION CONTROL
SUMMARY OF QUANTITIES

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	27

SHEET 1 OF 1

2/20/2009 8:29:19 AM aadams pw:/Active Projects/TXD0643/TXD00643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.xx Quantities/Erosion Control/435TES01.100

ELECTRICAL SERVICE DATA (ILLUMINATION)

ITEM 0628

SERVICE POLE NO.	SHEET NO.	LOCATION	SERVICE POLE DESCTIPTION (SEE ED (4) - 03)	SERVICE CONDUIT SIZE	SERVICE CONDUCTORS NO./SIZE XHHW	MAIN DISCONNECT		PANELBD./ LOADCENTER AMP RATING (MIN)	CIRCUIT NO.	BRANCH CKT. BRK. POLE/AMPS	BRANCH CIRCUIT AMPS	KVA LOAD
						SAFETY SWITCH AMPS	CKT. BRK. POLE/AMP					
1	3 of 5	CL-IH 30 299+74.27 - 161.00' LT	TY A(240/480)100 (SS)SS(E)SP(O)	2"	3/#2 AWG	100A	2P/100	N/A	A	2P/20A	4.0	2.0
2	3 of 5	CL-IH 30 298+18.20 - 161.00' RT	TY A(240/480)100 (SS)SS(E)SP(O)	2"	3/#2 AWG	100A	2P/100	N/A	A	2P/20A	4.0	2.0
3	1 OF 5	CL-IH 30 284+69.85 - 153.59' RT	TY A(240/480)100 (SS)SS(E)SP(O)	2"	3/#2 AWG	100A	2P/100	N/A	A	2P/20A	2.0	1.0
4	1 OF 5	CL-IH 30 284+79.98 - 154.44' LT	TY A(240/480)100 (SS)SS(E)SP(O)	2"	3/#2 AWG	100A	2P/100	N/A	A	2P/20A	2.0	1.0
5	5 OF 5	CL-IH 30 323+09.61 - 151.86' LT	TY A(240/480)100 (SS)SS(E)SP(O)	2"	3/#2 AWG	100A	2P/100	N/A	A	2P/20A	2.0	1.0
6	6 OF 5	CL-IH 30 320+76.65 - 156.71' LT	TY A(240/480)100 (SS)SS(E)SP(O)	2"	3/#2 AWG	100A	2P/100	N/A	A	2P/20A	2.0	1.0

	0610-2025	0610-2020	0618-2034	0618-2035	0620-2011	0620-2012	0624-2008	0628 2040	416 2029
	0610	0610	0618	0618	0620	0620	0624	0628	416
	INS RD IL AM (TY SA 40T-8) (.25 KW)S	INS RD IL AM (TY SA 40B-8) (.25 KW)S	CONDUIT (PVC) (SCHD 80) (2")	CONDUIT (PVC) (SCHD 80) (2")(BORE)	ELEC CONDUCTOR (NO. 8) BARE	ELEC CONDUCTOR (NO. 8) INSULATED	GROUND BOX TY A (122311) W/APRON	ELC SRV TY A (240/480) 100(SS)SS (E)SP(O)	DRILL SHAFT (RDWY ILL POLE) (30 IN)
SHEET NO.	EA	EA	LF	LF	LF	LF	LF	EA	LF
1 of 5	4		500	140	640	1280	4	2	24
2 of 5									
3 of 5		9	1600	140	1740	3480	4	2	
4 of 5		1	220		220	440			
5 of 5	4		500	140	640	1280	4	2	24
TOTALS	8	10	2820	420	3240	6480	12	6	48

GENERAL NOTES:

1. REFERENCE ROADWAY ILLUMINATION DETAILS (RID) AND ROADWAY ILLUMINATION POLES (RIP) FOR ADDITIONAL DETAILS.
2. REFERENCE ELECTRICAL STANDARD DETAILS (ED) FOR ADDITIONAL INFORMATION.
3. CONDUIT UNDER EXISTING PAVEMENT SHALL BE ACCOMPLISHED BY BORING AND SHALL EXTEND 3 FT. BEYOND PAVING.
4. FURNISHING AND INSTALLATION OF JUNCTION BOXES, FLEXIBLE CONDUITS AND HARDWARE SHALL BE CONSIDERED AS A REQUIREMENT FOR THE CONDUIT INSTALLATION, AND SUBSIDIARY TO THE CONDUIT PAY ITEM.
5. THE CONTRACTOR SHALL VERIFY WITH THE UTILITY COMPANIES THE EXACT LOCATION OF THE EXISTING UNDERGROUND UTILITIES TO AVOID CONFLICT OR DAMAGE TO THESE UTILITIES.
6. THE CONTRACTOR SHALL COORDINATE WITH UTILITY FOR EXACT SERVICE LOCATION.

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

ILLUMINATION QUANTITIES

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AL	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	TEC	DAL	ROCKWALL	0009	12	073	28

4/23/2009 2:46:35 PM adams
p:\Active Projects\TXD0643\TXD0643-05\8.00 Plans and Drawings\8.30 Cut Sheets\8.3.xx Illumination\435TLN001.100

STATION	0110 2001 EXCAVATION (ROADWAY) CY	0132 2006 EMBANKMENT (FINAL)(DENS CONTROL C) CY	0132 2026 EMBANKMENT (FINAL)(DENS CONTROL C2) CY
282+00	0	0	387
283+00	1241	41	540
284+00	1547	81	640
285+00	1887	100	759
286+00	2154	205	859
287+00	2472	233	942
288+00	2641	153	1012
289+00	2598	108	1038
290+00	2520	64	1040
291+00	2497	20	1055
292+00	3197	2	1193
293+00	3625	8	1324
294+00	3098	39	1325
295+00	2287	204	1340
296+00	1428	793	1331
297+00	1057	1983	1282
298+00	1033	3387	1225
299+00	1238	4681	1186
300+00	1860	5914	1239
301+00	2788	7023	1313
302+00	3529	7973	1323
303+00	3854	8853	1320
303+79.68	2893	6969	1030
304+00	0	0	0
305+00	0	0	0
306+79.64	243	2648	370
307+00	1291	7929	5283
308+00	1938	10339	1323
309+00	1464	9722	1349
310+00	1166	8438	1409
311+00	1158	6402	1436
312+00	1107	4113	1395
313+00	1219	1655	1332
314+00	2084	229	1300
315+00	3491	78	1299
316+00	4369	21	1296
317+00	4998	3	1323
318+00	5075	4	1350
320+00	9428	78	2641
321+00	4540	110	1278
322+00	4163	240	1256
323+00	3821	347	1232
324+00	3331	337	1068
325+00	2204	251	777
326+00	1272	176	552
327+00	838	144	392
328+00	526	143	299
329+00	473	159	275
330+00	439	131	250
331+00	408	75	225
332+00	384	34	201
333+00	344	24	176
334+00	292	36	152
335+00	174	25	90
336+00	69	2	34
JOHN KING	0	16920	3378
TOTALS	113753	119647	59444

6/29/2009 2:43:48 PM aadams $PWFILE$

Replaced 7-1-09 BB

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

SUMMARY OF QUANTITIES
EARTHWORK

Designed: AJA	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: GRB	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	29

SHEET 1 OF 1

LEVELS DISPLAYED

1	2	3	4		6	7	8	9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	

ACC:

DISCLAIMER
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

SUMMARY OF SMALL SIGNS

SM RD SGN ASSM TY XXXXX(X)XX(X-XXXX)

- **Post Type**: FRP = Fiberglass; TWT = Thin-Wall; 10BWG = 10 BWG; S80 = Sch 80
- **Posts (1 or 2)**
- **Anchor Type**: UA=Univer-Conc; UB=Univer-Bolt; SA=Slip-Conc; SB=Slip-Bolt; WA=Wedge-Conc
- **Mounting Designation**: P = Prefab. "Plain"; T = Prefab. "T"; U = Prefab. "U"
- 1EXT or 2EXT = # of Ext.; BM = Extruded Wind Beam; WC = 1.12 #/ft Wing Chan.; EXAL = Extruded Alum. signs

PLAN SHEET NO.	SIGN NO.	SIGN NOMENCLATURE	SIGN TEXT	DIMENSIONS	LEGEND SHEETING	BACKGROUND SHEETING	ALUMINUM TYPE A	ALUMINUM TYPE G	Post Type	Posts	Anchor Type	Mounting Designation
2 OF 9												
	(1) (2)	OMITTED										
	(3)	M3-2	EAST	30" X 15"		C			S80	1	SA	P
		M1-1A2	IH 30	24" X 24"		C						
		M6-2L	↖	21" X 15"		C						
	(4)	W4-3R	ADDED LANE SIGN	48" X 48"		E			S80	1	SA	T
	(5) (5a)	OMITTED										
	(5b)	W4-3L	ADDED LANE SIGN	48" X 48"		E			S80	1	SA	T
3 OF 9												
	(6)	M3-2	EAST	24" X 12"		C			S80	1	SA	P
		M1-1A2	IH 30	24" X 24"		C						
		M6-2L	↖	21" X 15"		C						
	(7)	R6-1R	ONE-WAY SIGN	36" X 12"		C			S80	1	SA	P
		R1-1	STOP SIGN	30" X 30"		C						
	(8) (9)	OMITTED										
	(10)	R5-1	DO NOT ENTER SIGN	30" X 30"		C			S80	1	SA	P
	(11)	R5-1	DO NOT ENTER SIGN	30" X 30"		C			S80	1	SA	P
	(12)	OMITTED										
	(13)	R5-1A	WRONG WAY SIGN	36" X 24"		C			S80	1	SA	P
	(14) (15)	OMITTED										
	(16)	W4-3L	ADDED LANE SIGN	36" X 36"		E			S80	1	SA	T
4 OF 9												
	(17)	R5-1A	WRONG WAY SIGN B-B	36" X 24"		C			S80	1	SA	P
		R3-8U	U-TURN SIGN	24" X 30"		C						
	(18)	R5-1A	WRONG WAY SIGN B-B	36" X 24"		C			S80	1	SA	P
		R3-5R	RIGHT TURN ONLY	24" X 30"		C						
	(19)	M3-4	WEST	24" X 12"		C			S80	1	SA	P
		M1-1A2	IH 30	24" X 24"		C						
		M5-3L	↰	21" X 15"		C						
	(20)	M3-2	EAST	24" X 12"		C			S80	1	SA	P
		M1-1A2	IH 30	24" X 24"		C						
		M6-3	↑	21" X 15"		C						
	(21)	W12-3	XX FT XX IN	84" X 24"		E						
	(22)	R1-2	YIELD SIGN B-B	36" X 36"		C			S80	1	SA	P
		R5-1	DO NOT ENTER SIGN	30" X 30"		C						
	(23)	R3-8U	U-TURN SIGN B-B	24" X 30"		C			S80	1	SA	P
		R5-1	DO NOT ENTER SIGN	30" X 30"		C						
	(24)	M3-2	EAST	24" X 12"		C			S80	1	SA	P
		M1-1A2	IH 30	24" X 24"		C						
		M6-1L	←	21" X 15"		C						
	(25)	W12-3	XX FT XX IN	84" X 24"		E						
	(26)	M3-4	WEST	24" X 12"		C			S80	1	SA	U
		M1-1A2	IH 30	24" X 12"		C						
		M5-1L	↰	21" X 15"		C						
		M3-2	EAST	24" X 12"		C						
		M1-1A2	IH 30	24" X 12"		C						
		M5-1R	→	21" X 15"		C						
	(27)	R1-2	YIELD SIGN	36" X 36"		C			S80	1	SA	P
	(28)	W9-2R	MERGE RIGHT SIGN	30" X 30"		E			S80	1	SA	P
	(28a)	E5-2b	68	42" X 24"		C			S80	2	SA	P
		E5-1	EXIT	48" X 42"								
			↗									
	(29)	W4-1aR	THRU TRAFFIC MERGE RIGHT	36" X 36"		E			S80	1	SA	P

ALUMINUM SIGN BLANKS (TYPE A)

Square Ft.	Min. Thickness
Less than 7.5	0.080"
7.5 to 15	0.100"
Greater than 15	0.125"

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

Reflective sheeting will be designated as:

Type C – High Intensity – C
Type D – Prismatic – D
Type E – Flourescent Prismatic – E

SHEET 1 OF 2

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SUMMARY OF SMALL SIGNS

REVISIONS	
DN:- MT	
CK:- BAS	11-93 7-02
DW:- FDN	8-95 2-07
CK:- CAL	1-02

DISTRICT	COUNTY	CONTROL	SECTION	JOB	HIGHWAY
DAL	ROCKWALL	009	12	073	IH30

FEDERAL AID PROJECT

SHEET 30

18

LEVELS DISPLAYED																ACC:
1	2	3	4		6	7	8	9	10	11	12	13	14	15	16	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63		

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SUMMARY OF SMALL SIGNS

SM RD SGN ASSM TY XXXXX(X)XX(X-XXXX)

- Post Type: FRP = Fiberglass; TWT = Thin-Wall; 10BWG = 10 BWG; S80 = Sch 80
- Posts (1 or 2)
- Anchor Type: UA=Univer-Conc; UB=Univer-Bolt; SA=Slip-Conc; SB=Slip-Bolt; WA=Wedge-Conc
- Mounting Designation: P = Prefab. "Plain"; T = Prefab. "T"; U = Prefab. "U"
- 1EXT or 2EXT = # of Ext.; BM = Extruded Wind Beam; WC = 1.12 #/ft Wing Chan.; EXAL = Extruded Alum. signs

PLAN SHEET NO.	SIGN NO.	SIGN NOMENCLATURE	SIGN TEXT	DIMENSIONS	LEGEND SHEETING	BACKGROUND SHEETING	ALUMINUM TYPE A	ALUMINUM TYPE G	Post Type	Posts (1 or 2)	Anchor Type	Mounting Designation
4 OF 9												
	30	W9-2R	MERGE RIGHT SIGN	30" X 30"		E			S80	1	SA	P
	31	R1-2	YIELD SIGN	36" X 36"		C			S80	1	SA	P
	32	M3-2	EAST	24" X 12"		C			S80	1	SA	U
		M1-1A2	IH 30	24" X 24"		C						
		M5-1L	←	21" X 15"		C						
		M3-4	WEST	24" X 12"		C						
		M1-1A2	IH 30	24" X 24"		C						
		M6-1R	→	21" X 15"		C						
	33	W12-3	XX FT XX IN	84" X 24"		E						
	34	M3-4	WEST	24" X 12"		C			S80	1	SA	P
		M1-1A2	IH 30	24" X 24"		C						
		M6-1L	←	21" X 15"		C						
	35	R1-2	YIELD SIGN	36" X 36"		C			S80	1	SA	P
	36	R3-8U	U-TURN SIGN (B-B)	24" X 30"		C			S80	1	SA	P
		R5-1	DO NOT ENTER SIGN (B-B)	30" X 30"		C						
	37	M3-4	WEST	24" X 12"		C			S80	1	SA	P
		M1-1A2	IH 30	24" X 24"		C						
		M6-3	↑	21" X 15"		C						
	38	W12-3	XX FT XX IN	84" X 24"		E						
5 OF 9												
	39	W4-1aR	THRU TRAFFIC MERGE RIGHT	36" X 36"		E			S80	1	SA	P
	40	OMITTED										
	41	E5-2b	70	42" X 24"		C			S80	2	SA	P
		E5-1	EXIT	48" X 42"								
			↗									
	42	R5-1A	WRONG WAY SIGN	36" X 24"		C			S80	1	SA	P
	43	W4-3L	ADDED LANE SIGN	36" X 36"		E			S80	1	SA	T
	44	OMITTED										
	45	R5-1	DO NOT ENTER SIGN	30" X 30"		C			S80	1	SA	P
	46	M3-2	EAST	24" X 12"		C			S80	1	SA	P
		M1-1A2	IH 30	24" X 24"		C						
		M5-3L	↰	21" X 15"		C						
	47	R3-8U	U-TURN SIGN (B-B)	24" X 30"		C			S80	1	SA	P
		R5-1A	WRONG WAY SIGN (B-B)	36" X 24"		C						
	48	R3-5R	RIGHT TURN ONLY (B-B)	24" X 30"		C			S80	1	SA	P
		R5-1A	WRONG WAY SIGN (B-B)	36" X 24"		C						
	49	OMITTED										
	50	OMITTED										
	51	M3-4	WEST	24" X 12"		C			S80	1	SA	P
		M1-1A2	IH 30	24" X 24"		C						
		M6-2L	↖	21" X 15"		C						
6 OF 9												
	52	W4-3L	ADDED LANE SIGN	36" X 36"		E			S80	1	SA	T
	53	OMITTED										
	54	OMITTED										
	55	M3-4	WEST	24" X 12"		C			S80	1	SA	P
		M1-1A2	IH 30	24" X 24"		C						
		M6-2L	↖	21" X 15"		C						
9 OF 9												
	57	W4-1aL	THRU TRAFFIC MERGE LEFT	36" X 36"		E			S80	1	SA	P
	58	R3-5L	LEFT ONLY	36" X 36"		C			S80	1	SB	P
			W/PLAQUE (B-B)	30" X 8"		C						
		R3-8LS	LEFT ONLY/LEFT ONLY	48" X 30"		C						
	59	R3-5L	LEFT ONLY	36" X 36"		C			S80	1	SB	P
			W/PLAQUE (B-B)	30" X 8"		C						
		R3-8LS	LEFT ONLY/LEFT ONLY	48" X 30"		C						
	60	R3-5R	RIGHT ONLY	36" X 36"		C			S80	1	SA	P
	61	R3-5R	RIGHT ONLY	36" X 36"		C			S80	1	SA	P

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

Reflective sheeting will be designated as:

Type C – High Intensity – C
Type D – Prismatic – D
Type E – Flourescent Prismatic – E

ALUMINUM SIGN BLANKS (TYPE A)

Square Ft.	Min. Thickness
Less than 7.5	0.080"
7.5 to 15	0.100"
Greater than 15	0.125"

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REVISIONS		
11-93	7-02	
8-95	2-07	
1-02		

DGN: BAS
CK: CAM

SHEET 2 OF 2

SUMMARY OF SMALL SIGNS

STATE	DISTRICT	COUNTY	CONTROL	SECTION	JOB	HIGHWAY
	DAL	ROCKWALL	009	12	073	IH30

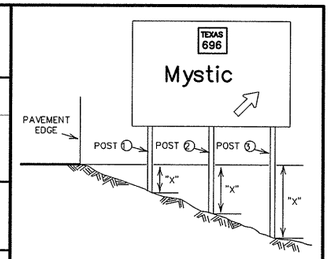
FEDERAL AID PROJECT

SHEET 31

18

SUMMARY OF LARGE SIGNS

PLAN SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT			
					DIRECT APPLY	* ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post (1)	post (2)	post (3)	SIZE	LINEAR FEET post (1)	post (2)	post (3)	TOTAL WEIGHT LBS.	NON-REINF 12"Ø	LINEAR FEET REINFORCED 24"Ø	30"Ø	36"Ø
1	1	GREEN	EXIT 70 F.M. 549 1 MILE	7'6"x2'0" 8'0"x8'0"	13.0		15.0 64.0		321	2.5	2.3		W6x9	17.5	17.3		379.6		10		
2	2	GREEN	EXIT 70 F.M. 549 1/2 MILE	7'6"x2'0" 9'6"x8'0"	13.0		15.0 76.0		321	2.9	2.0		W6x9	17.9	17.0		380.5		10		
4	4	GREEN	EXIT 70 F.M. 549 ↗	7'6"x2'0" 10'0"x9'6"	13.0			15.0 95.0	MOUNT ON PROPOSED COSS NO. 2												
4	5	GREEN	EXIT 68 TEXAS 205 ROCKWALL ↗	7'6"x2'0" 12'0"x11'6"	13.0			15.0 138.0	MOUNT ON PROPOSED COSS NO. 1												
6	7	GREEN	EXIT 68 TEXAS 205 ROCKWALL 1/2 MILE	7'6"x2'0" 12'6"x11'0"	13.0		15.0 137.5		321	1.6	1.4		W6x15	19.6	19.4		620.6		14		
8	8	GREEN	EXIT 68 TEXAS 205 ROCKWALL 1 MILE	7'6"x2'0" 12'6"x11'0"	13.0		15.0 137.5		321	0.9	0.4		W6x15	18.9	18.4		595.1		14		
PAGE TOTALS				78.0			475.0	263.0									1975.8		48.0		



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

The post lengths listed here are approximations, The corrected post lengths will be furnished by the Contractor after the stud posts are placed.

Tower heights shall be verified with the Engineer before fabrication.

* This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0

- 1: Wind Design Zone
- 3: Series No.
- 0: 0 Aluminum/Fiberglass, 1 Aluminum, 2 Fiberglass
- 0: No. of Posts

See sheet SMD(8W1)

SUMMARY OF LARGE SIGNS

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DN:- TxDOT	REVISIONS	
CK:- TxDOT	11-93	1-04
DW:- TxDOT	8-95	9-08
CK:- TxDOT	5-01	

STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT				SHEET
DAL	6	SEE TITLE SHEET				32
COUNTY		CONTROL	SECTION	JOB		HIGHWAY
ROCKWALL		009	12	073		IH 30

TRAFFIC CONTROL PLAN GENERAL NOTES

1. ADVANCE WARNING SIGNS SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF THE PROJECT. CONTRACTOR SHALL ADJUST LOCATION OF SIGNS IN ACCORDANCE WITH APPLICABLE BC STANDARDS AND THE LATEST TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD).
2. ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE TMUTCD.
3. THE CONTRACTOR IS REQUIRED TO MAINTAIN ACCESS TO PRIVATE PROPERTY AT ALL TIMES.
4. EXISTING SIGNS THAT CONFLICT WITH THE PROPOSED CONSTRUCTION SEQUENCING OR TRAFFIC CONTROL DEVICES SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS.
5. THE CONTRACTOR SHALL PLACE A 3:1 SLOPE BETWEEN THE CONSTRUCTION ZONE AND TRAVELLED PAVEMENT AT THE END OF EACH IF DROP-OFF EXCEED 2 INCHES.
6. CONTRACTOR SHALL ENSURE ADEQUATE DRAINAGE THROUGHOUT CONSTRUCTION.
7. ALL LEADING EDGES OF CONCRETE BARRIER SHALL BE PROTECTED WHILE IN THE CLEAR ZONE. WHEN CONNECTING BARRIERS THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING A UNIFORM FACE AND INSURE THAT NO EDGES SHALL PROTRUDE INTO ONCOMING TRAFFIC.

TRAFFIC CONTROL NARRATIVE

PHASE 1 - STEP 1

1. PLACE ALL TRAFFIC CONTROL DEVICES REQUIRED BY TCP AND BC STANDARDS.
2. PLACE TEMPORARY PAVEMENT IN THE IH-30 MEDIAN AS SHOWN.

PHASE 1 - STEP 2

1. PLACE ALL TRAFFIC CONTROL DEVICES REQUIRED BY TCP AND BC STANDARDS.
2. CONVERT WESTBOUND FRONTAGE ROAD BETWEEN TL TOWNSEND DR AND FM 549 TO ONE WAY OPERATION USING PROPOSED AND TEMPORARY STRIPING AS SHOWN IN PLANS. ERECT PERMANENT AND TEMPORARY ONE-WAY SIGNS AS DIRECTED BY ENGINEER.
3. CONSTRUCT CULVERT "A" AS SHOWN.
4. SHIFT TRAFFIC AS SHOWN TO THE TEMPORARY PAVEMENT IN THE IH-30 MEDIAN.
5. PLACE TEMPORARY PAVEMENT MARKINGS AND SIGNS ON EXISTING PAVEMENT AS SHOWN.
6. PLACE ALL PHASE 1 SEDIMENT CONTROL ITEMS AS SHOWN IN SW3P PLANS.
7. CONSTRUCT IH 30 MAINLANES AND COMPLETE JOHN KING BLVD. BRIDGE STRUCTURES AS SHOWN UTILIZING TEMPORARY SHORING, WHERE REQUIRED.
8. CONSTRUCT PROPOSED RAMPS TO LIMITS SHOWN.
9. FULLY CONSTRUCT THE MSE PORTIONS OF RETAINING WALLS A, B, C AND D.
10. CONSTRUCT A PORTION OF RETAINING WALL E AS SHOWN.
11. PLACE PERMANENT IH-30 MAINLANE SIGNING AS DIRECTED BY THE ENGINEER.

PHASE 2 - STEP 1

1. PLACE ALL TRAFFIC CONTROL DEVICES REQUIRED BY TCP AND BC STANDARDS.
2. PLACE PAVEMENT MARKINGS AND SIGNS AS SHOWN.
3. PLACE MAINLANE TRAFFIC IN FINAL POSITION.
4. PLACE ALL PHASE 2 SEDIMENT CONTROL ITEMS AS SHOWN IN SW3P PLANS.
5. CONSTRUCT OUTER PORTION OF BOTH FRONTAGE ROADS.
6. CONSTRUCT COMMERCE, ENTERPRISE AND ALL DRIVEWAYS MAINTAINING ACCESS TO ALL PROPERTIES.
7. PLACE TEMPORARY PAVEMENT AS SHOWN.

PHASE 2 - STEP 2

1. PLACE ALL TRAFFIC CONTROL DEVICES REQUIRED BY TCP AND BC STANDARDS.
2. PLACE PAVEMENT MARKINGS AND SIGNS AS SHOWN.
3. SHIFT FRONTAGE ROAD TRAFFIC TO PREVIOUSLY CONSTRUCTED PAVEMENT.
4. CONSTRUCT INNER PORTION OF BOTH FRONTAGE ROADS.
5. COMPLETE CONSTRUCTION OF ALL PROPOSED RAMPS.
6. COMPLETE RETAINING WALL E
7. CONSTRUCT JOHN KING BLVD. PAVEMENT AS SHOWN.

PHASE 2 - STEP 3

1. PLACE ALL TRAFFIC CONTROL DEVICES REQUIRED BY TCP AND BC STANDARDS.
2. PLACE PAVEMENT MARKINGS AND SIGNS AS SHOWN.
3. UTILIZING PROPOSED AND TEMPORARY STRIPING, ALLOW FRONTAGE ROAD TRAFFIC FULL ACCESS TO PROPOSED PAVEMENT AS SHOWN.
4. KEEP PROPOSED RAMPS CLOSED TO TRAFFIC (EXISTING RAMPS STILL IN USE).
5. SHIFT JOHN KING BLVD. TRAFFIC TO OUTER LANES.
6. CONSTRUCT INNER PORTION OF JOHN KING BLVD.

PHASE 2 - STEP 4

1. PLACE ALL TRAFFIC CONTROL DEVICES REQUIRED BY TCP AND BC STANDARDS.
2. PLACE PAVEMENT MARKINGS AND SIGNS AS SHOWN.
3. SHIFT TRAFFIC TO PREVIOUSLY CONSTRUCTED PROPOSED PAVEMENT.
4. CONSTRUCT REMAINING PORTION OF JOHN KING BLVD. AND FRONTAGE ROADS.
5. PROPOSED RAMPS TO BE OPENED TO TRAFFIC AND EXISTING RAMPS SHALL BE REMOVED UPON TOTAL COMPLETION OF PROJECT.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

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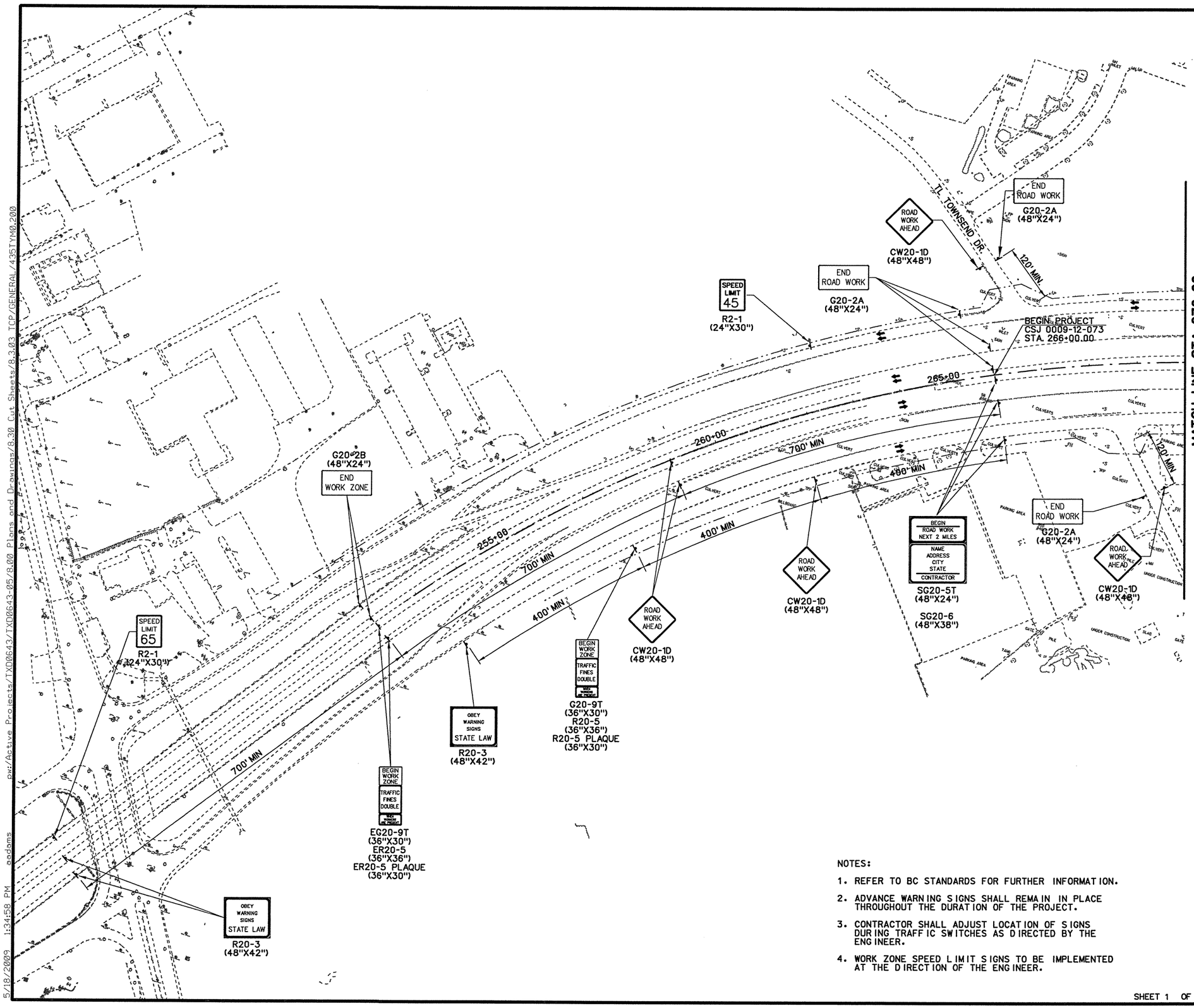
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IH 30 AT JOHN KING BLVD.
TRAFFIC CONTROL PLAN
TRAFFIC CONTROL NARRATIVE

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	GRB	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073		33

SHEET 1 OF 1

2/6/2009 11:46:06 AM GBRANICK pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/GENERAL/435TYG03.001



NOTES:

1. REFER TO BC STANDARDS FOR FURTHER INFORMATION.
2. ADVANCE WARNING SIGNS SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF THE PROJECT.
3. CONTRACTOR SHALL ADJUST LOCATION OF SIGNS DURING TRAFFIC SWITCHES AS DIRECTED BY THE ENGINEER.
4. WORK ZONE SPEED LIMIT SIGNS TO BE IMPLEMENTED AT THE DIRECTION OF THE ENGINEER.

SHEET 1 OF 6

STATE OF TEXAS
ROBIN R. HANDEL
56931
LICENSED PROFESSIONAL ENGINEER
5/20/09

NO.	REVISION	BY	DATE

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IH 30 AT JOHN KING BLVD.

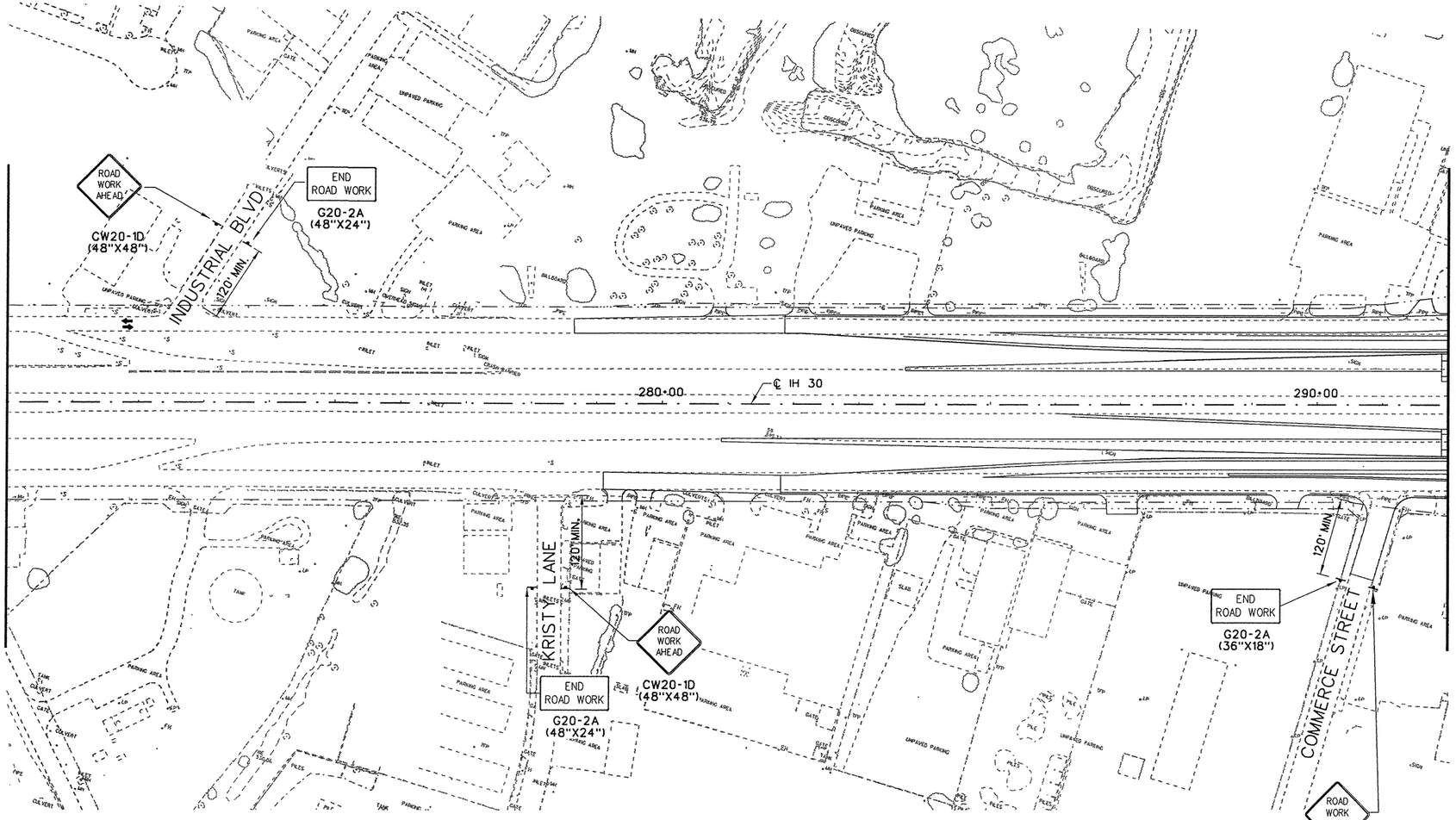
TRAFFIC CONTROL PLAN

ADVANCE WARNING SIGNS

BEGIN TO STA. 270+00

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	34

5/18/2009 1:34:58 PM eadams p:\Active Projects\TX00643\TX00643-05\8.00 Plans and Drawings\8.30 Cut Sheets\8.3.03 TCP\GENERAL\435TYW0.200



NOTES:

1. REFER TO BC STANDARDS FOR FURTHER INFORMATION.
2. ADVANCE WARNING SIGNS SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF THE PROJECT.
3. CONTRACTOR SHALL ADJUST LOCATION OF SIGNS DURING TRAFFIC SWITCHES AS DIRECTED BY THE ENGINEER.
4. WORK ZONE SPEED LIMIT SIGNS TO BE IMPLEMENTED AT THE DIRECTION OF THE ENGINEER.

SHEET 2 OF 6

N

100 50 0 100 200
SCALE FEET

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

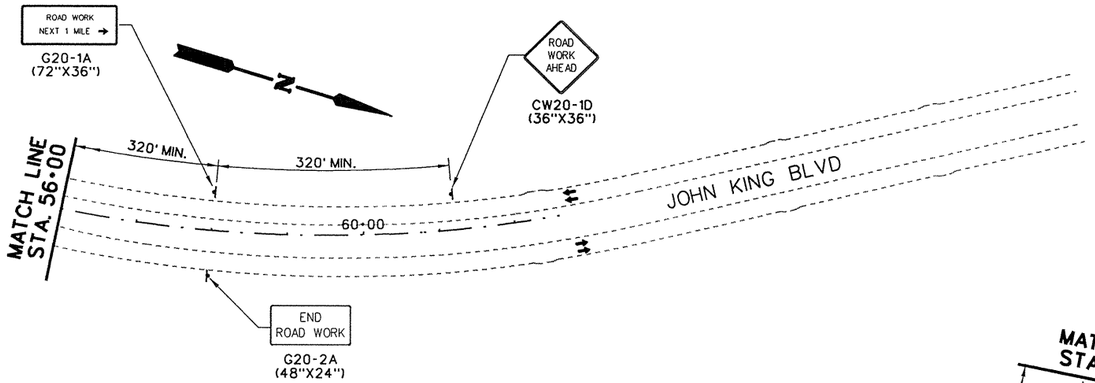
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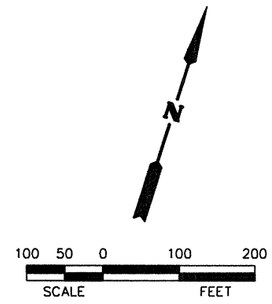
IH 30 AT JOHN KING BLVD.

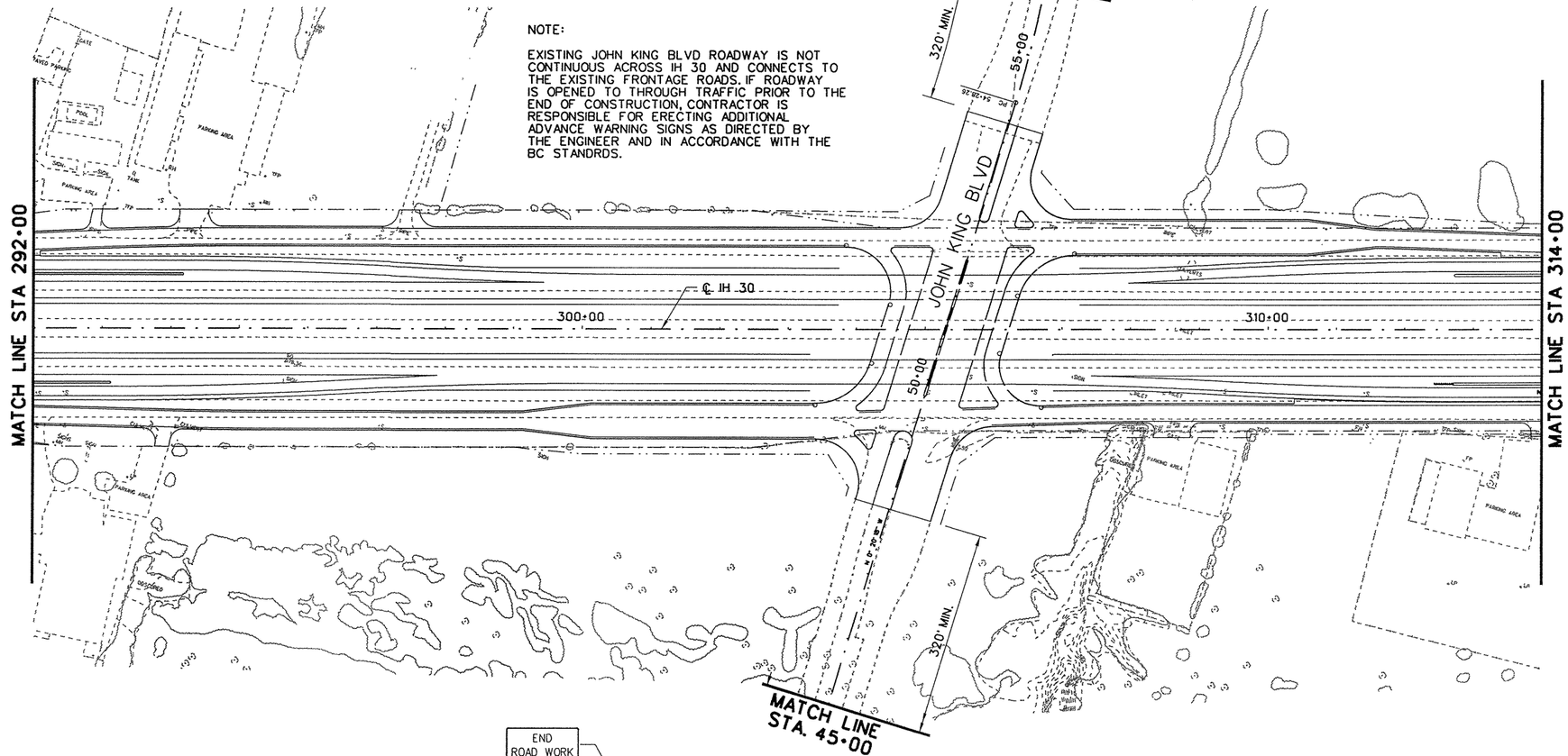
TRAFFIC CONTROL PLAN
ADVANCE WARNING SIGNS
STA. 270+00 TO STA. 292+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	35

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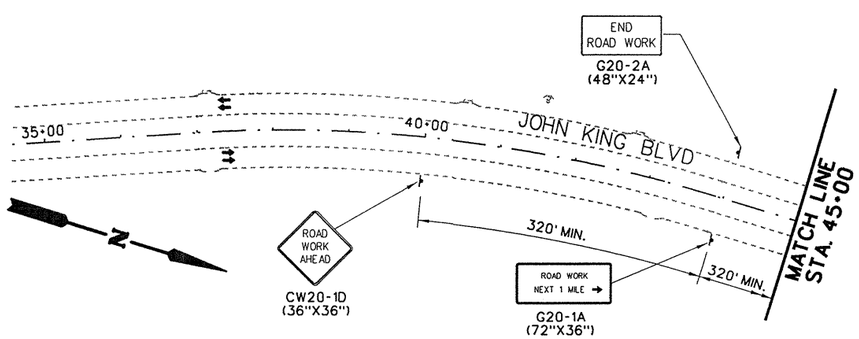






NOTE:

EXISTING JOHN KING BLVD ROADWAY IS NOT CONTINUOUS ACROSS IH 30 AND CONNECTS TO THE EXISTING FRONTAGE ROADS. IF ROADWAY IS OPENED TO THROUGH TRAFFIC PRIOR TO THE END OF CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR ERECTING ADDITIONAL ADVANCE WARNING SIGNS AS DIRECTED BY THE ENGINEER AND IN ACCORDANCE WITH THE BC STANDRDS.



NOTES:

1. REFER TO BC STANDARDS FOR FURTHER INFORMATION.
2. ADVANCE WARNING SIGNS SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF THE PROJECT.
3. CONTRACTOR SHALL ADJUST LOCATION OF SIGNS DURING TRAFFIC SWITCHES AS DIRECTED BY THE ENGINEER.
4. WORK ZONE SPEED LIMIT SIGNS TO BE IMPLEMENTED AT THE DIRECTION OF THE ENGINEER.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

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IH 30 AT JOHN KING BLVD.

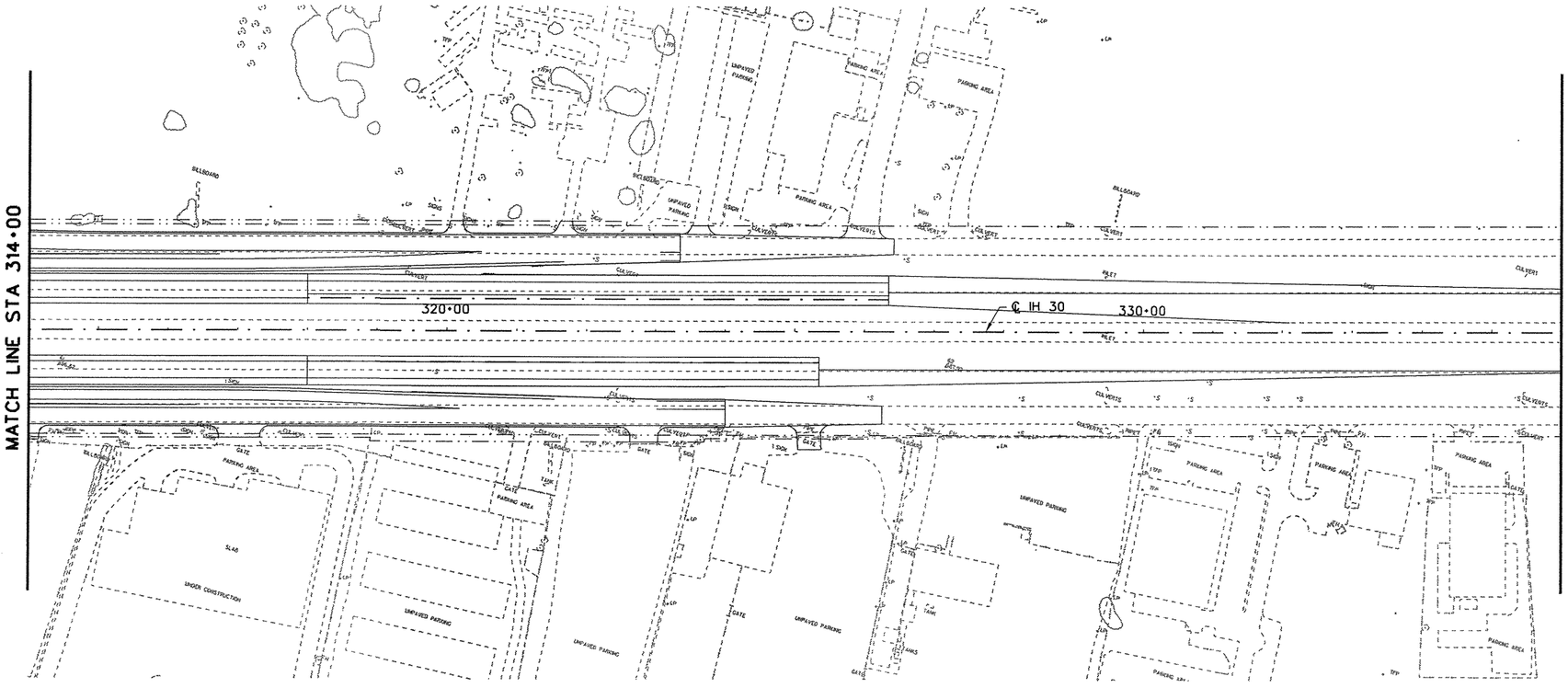
TRAFFIC CONTROL PLAN

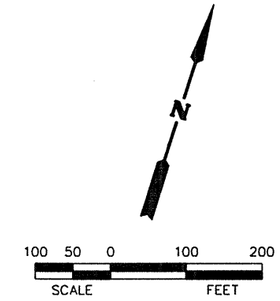
ADVANCE WARNING SIGNS

STA. 292+00 TO STA. 314+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	36

2/6/2009 11:46:29 AM G:\Active Projects\TX02643\TX02643-05\8.00 Plans and Drawings\8.30 Cut Sheets\8.3.03 TCP(GENERAL)(435TYP).dgn





NOTES:

1. REFER TO BC STANDARDS FOR FURTHER INFORMATION.
2. ADVANCE WARNING SIGNS SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF THE PROJECT.
3. CONTRACTOR SHALL ADJUST LOCATION OF SIGNS DURING TRAFFIC SWITCHES AS DIRECTED BY THE ENGINEER.
4. WORK ZONE SPEED LIMIT SIGNS TO BE IMPLEMENTED AT THE DIRECTION OF THE ENGINEER.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
2/9/09

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IH 30 AT JOHN KING BLVD.

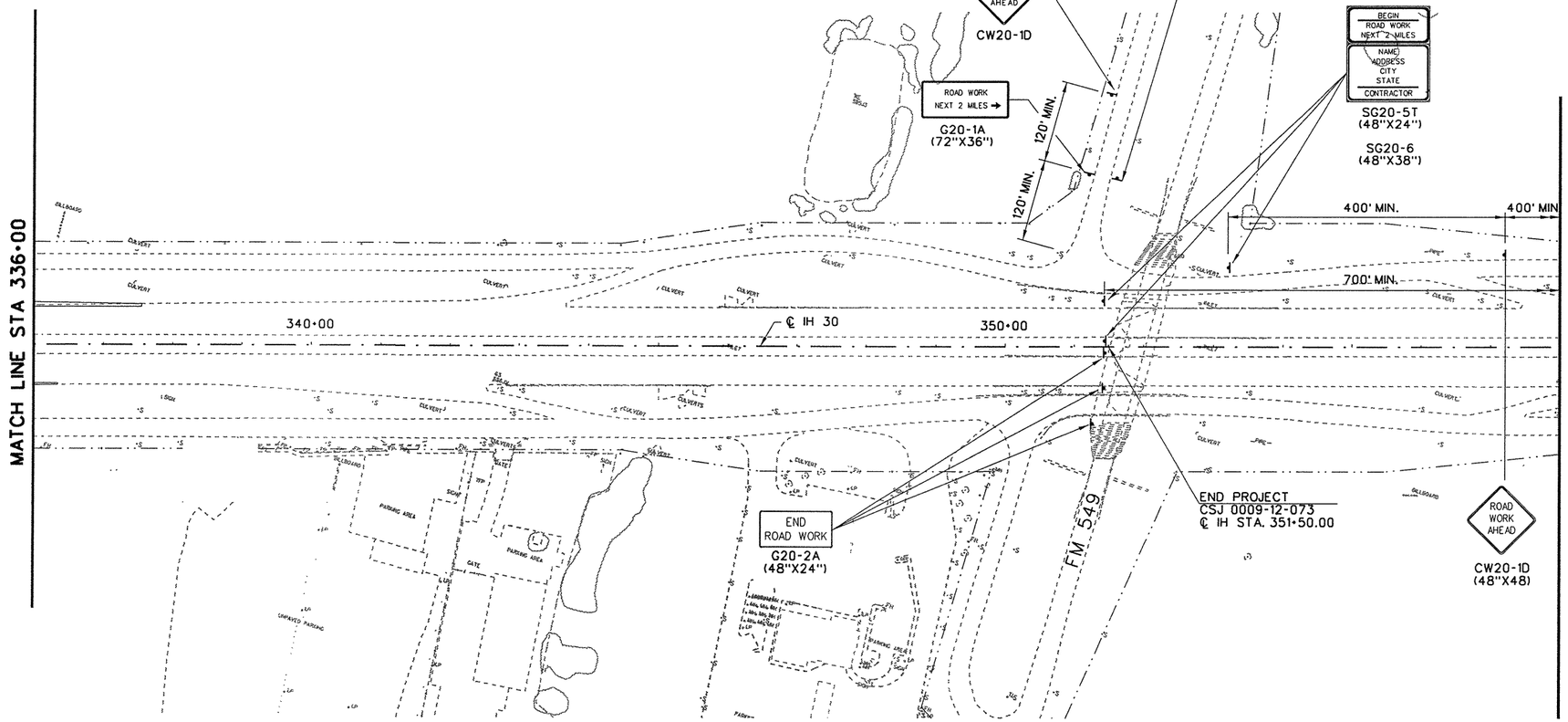
TRAFFIC CONTROL PLAN

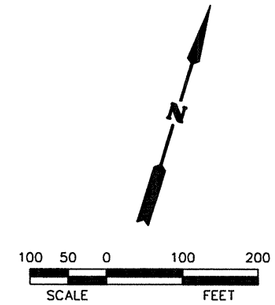
ADVANCE WARNING SIGNS

STA. 314+00 TO STA. 336+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073		37

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NOTES:

1. REFER TO BC STANDARDS FOR FURTHER INFORMATION.
2. ADVANCE WARNING SIGNS SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF THE PROJECT.
3. CONTRACTOR SHALL ADJUST LOCATION OF SIGNS DURING TRAFFIC SWITCHES AS DIRECTED BY THE ENGINEER.
4. WORK ZONE SPEED LIMIT SIGNS TO BE IMPLEMENTED AT THE DIRECTION OF THE ENGINEER.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

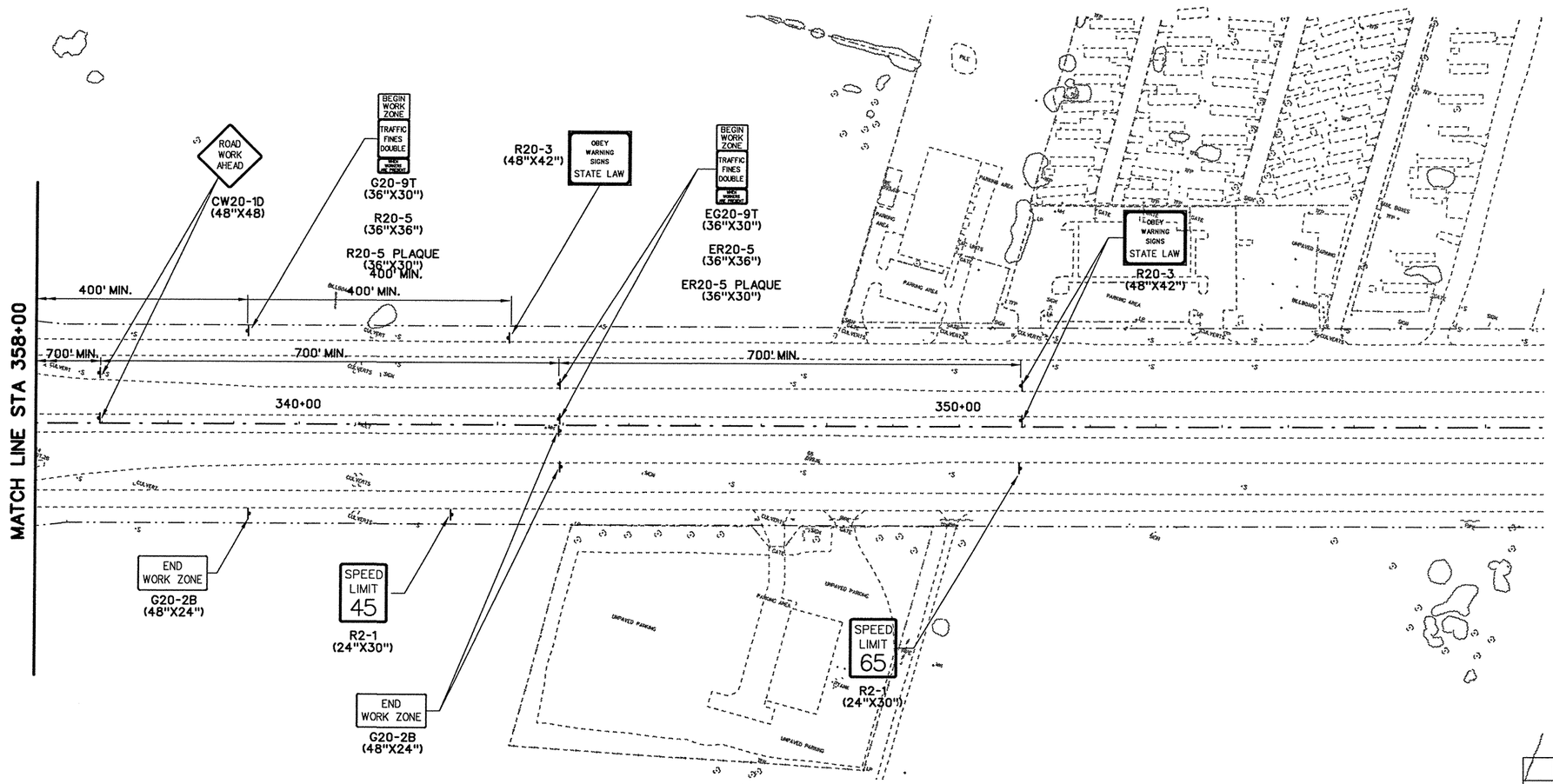
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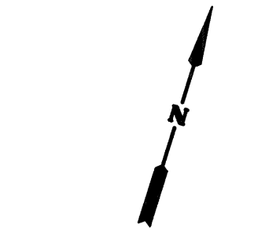
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IH 30 AT JOHN KING BLVD.
TRAFFIC CONTROL PLAN
ADVANCE WARNING SIGNS
STA. 336+00 TO STA. 358+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	38

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NOTES:

1. REFER TO BC(2)-07 STANDARD FOR SIGN PLACEMENT.
2. ADVANCE WARNING SIGNS SHALL REMAIN IN PLACE THROUGHOUT THE DURATION OF THE PROJECT.
3. CONTRACTOR SHALL ADJUST LOCATION OF SIGNS DURING TRAFFIC SWITCHES AS DIRECTED BY THE ENGINEER.
4. WORK ZONE SPEED LIMIT SIGNS TO BE IMPLEMENTED AT THE DIRECTION OF THE ENGINEER.

STATE OF TEXAS
ROBIN R. HANDEL
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5/20/09

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

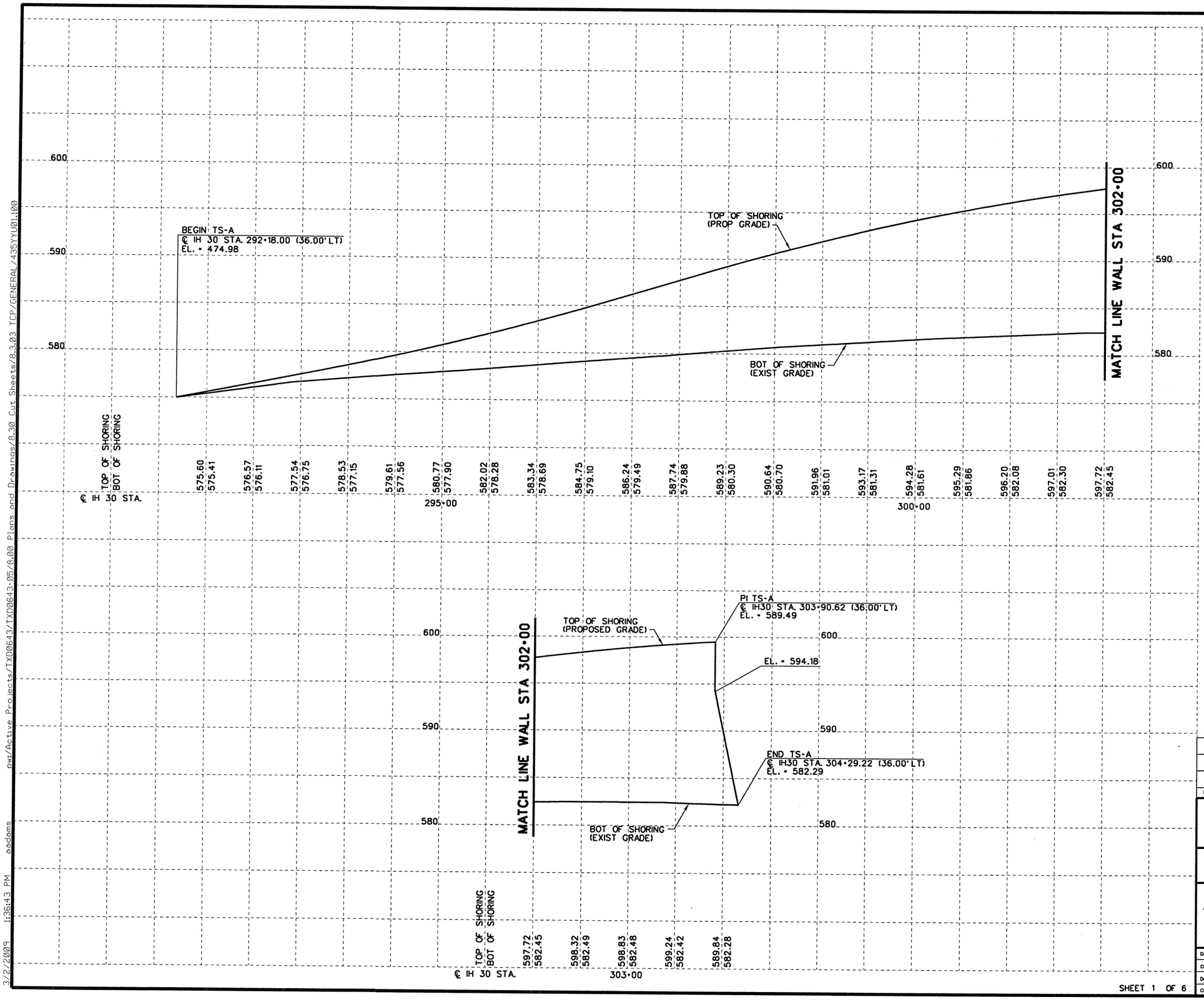
ADVANCE WARNING SIGNS

STA. 358+00 TO END PROJECT

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	39

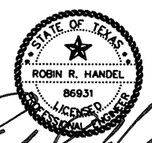
SHEET 6 OF 6

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NOTE:

AREA TS-A = 10,283 SF.



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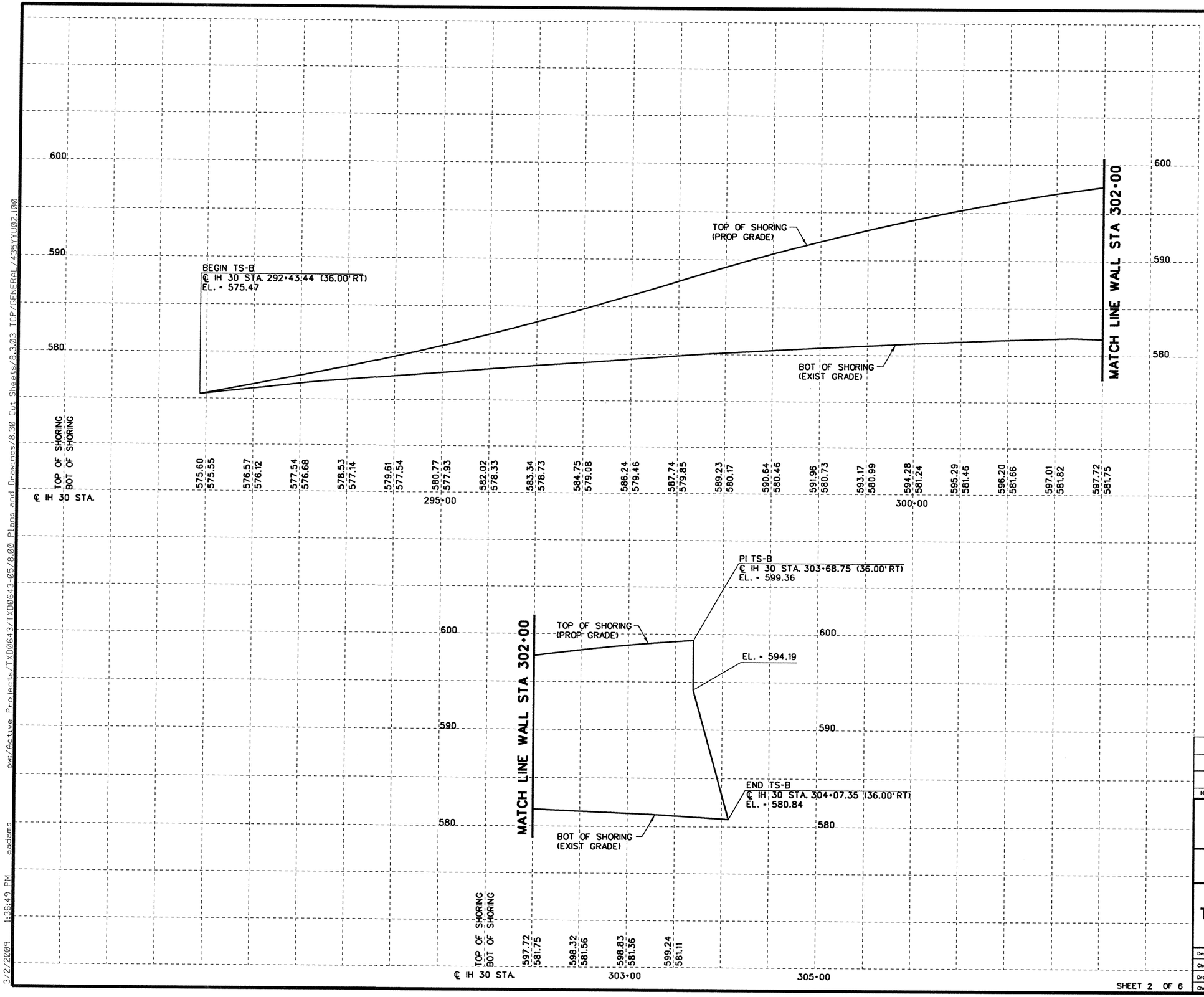
IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN
TEMPORARY SHORING PROFILES TS-A

Designed:	GRB	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	40

SHEET 1 OF 6

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3/2/2009 1:36:43 PM aadams



5 2.5 0 5 10
SCALE VERT. FEET

50 25 0 50 100
SCALE HORZ. FEET

NOTE:

AREAS TS-B = 10,254 SF

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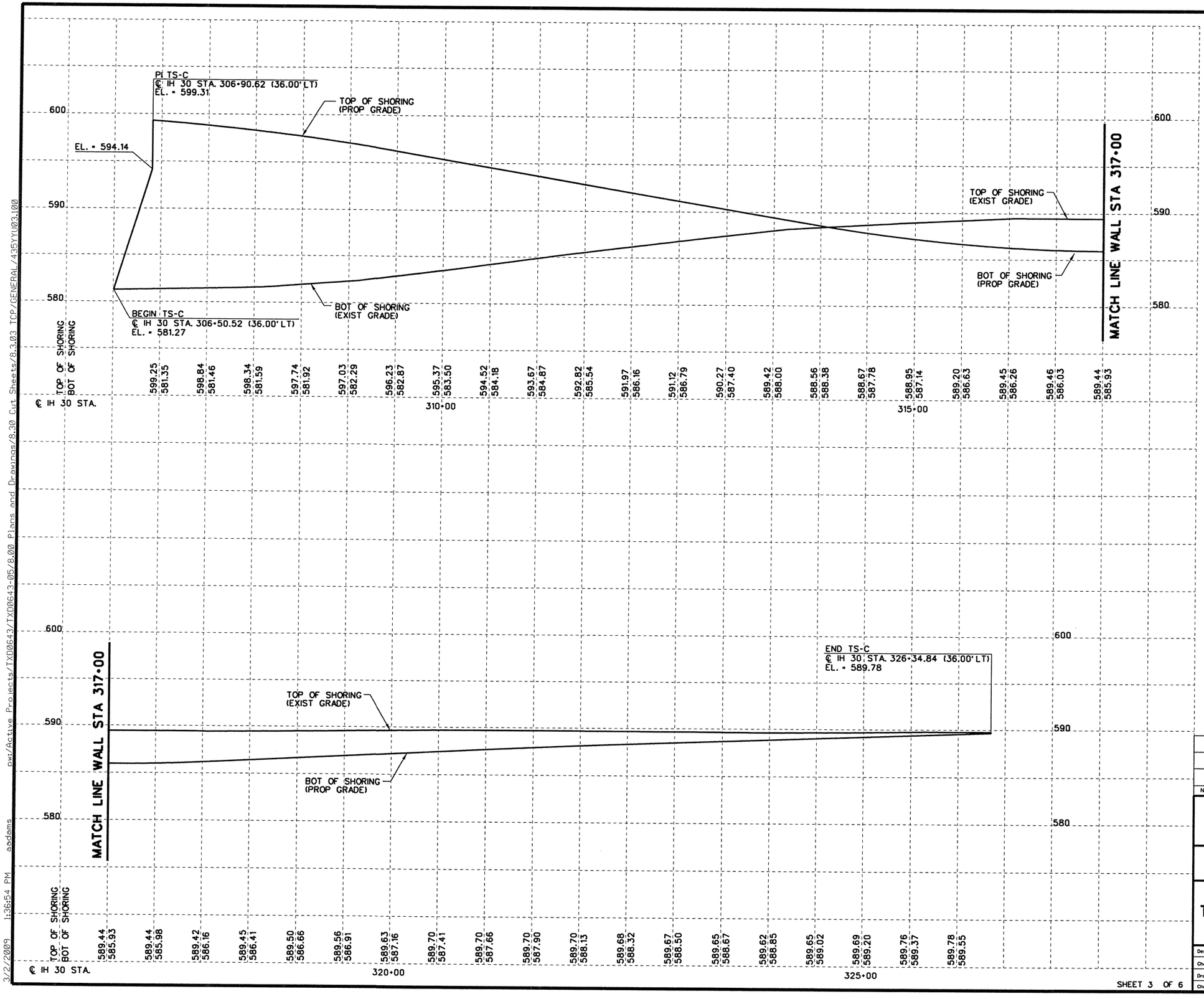
IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

TEMPORARY SHORING PROFILES TS-B

Designed:	GRB	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	41

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NOTE:

AREA TS-C = 9,683 SF

STATE OF TEXAS
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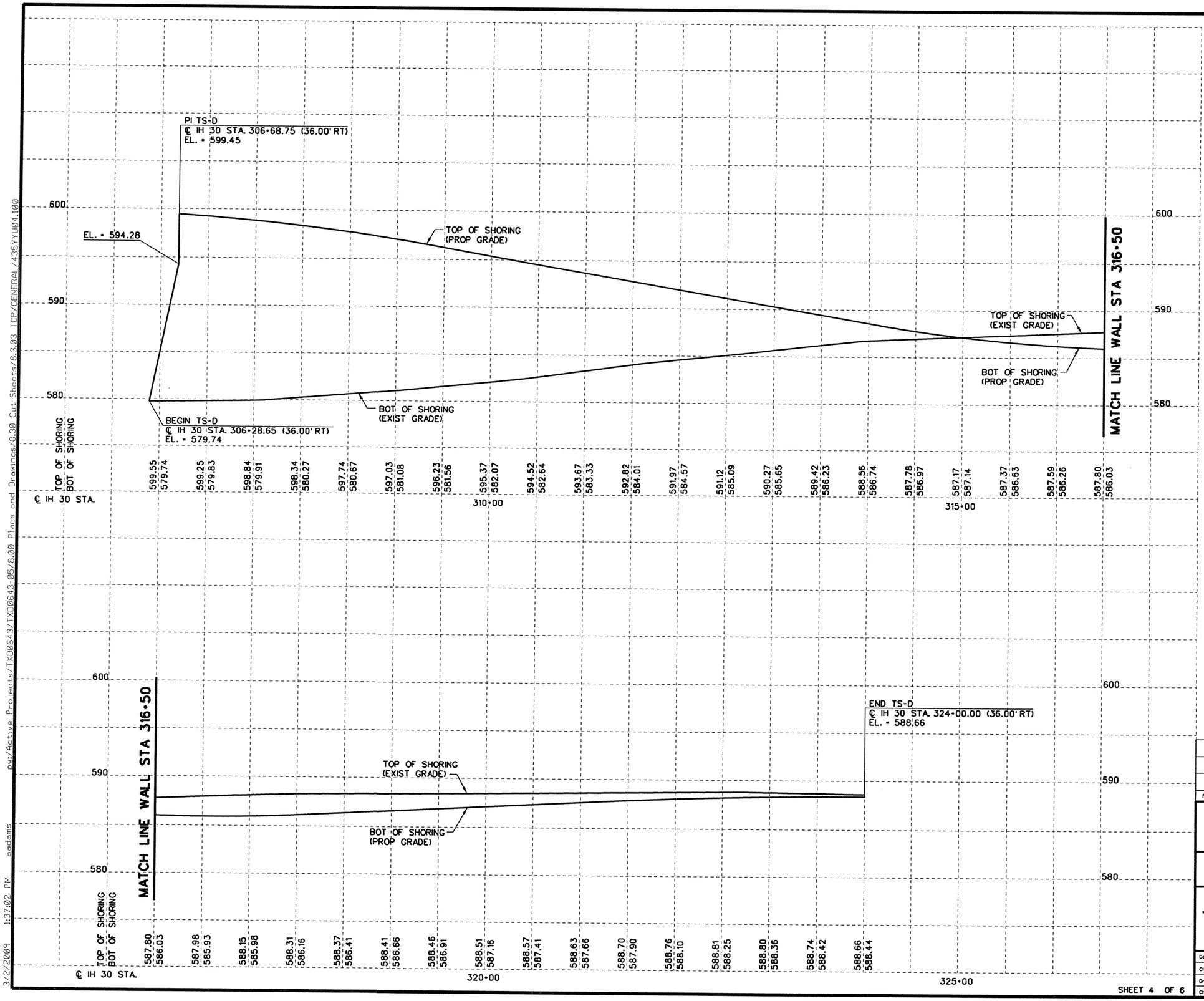
IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

TEMPORARY SHORING PROFILES TS-C

Designed:	GRB	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
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5 2.5 0 5 10
SCALE VERT. FEET

50 25 0 50 100
SCALE HORZ. FEET

NOTE:

AREA TS-D = 10,052 SF

STATE OF TEXAS
ROBIN R. HANDEL
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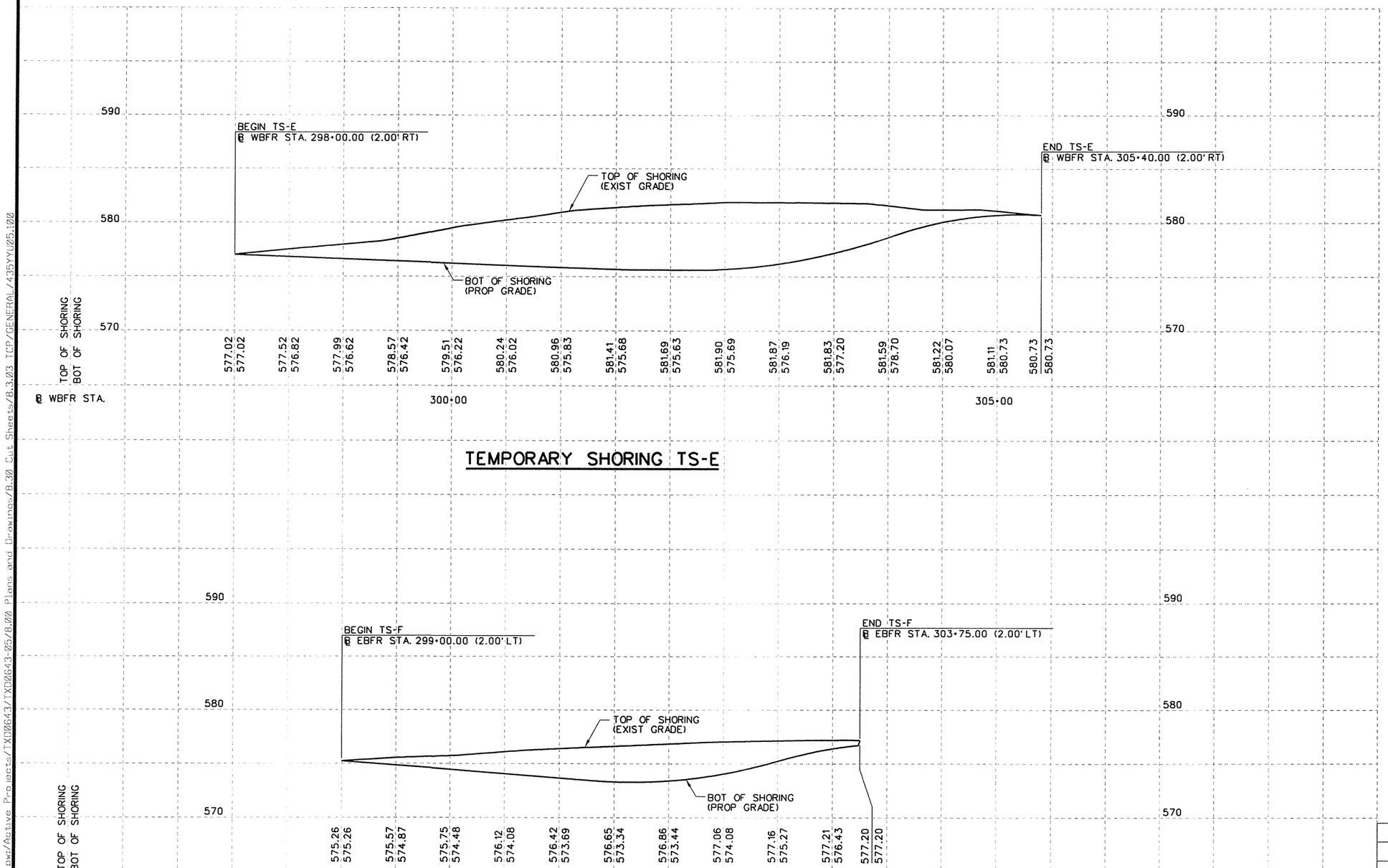
IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

TEMPORARY SHORING PROFILES TS-D

Designed:	GRB	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	43

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TEMPORARY SHORING TS-E

TEMPORARY SHORING TS-F

5 2.5 0 5 10
SCALE VERT. FEET

50 25 0 50 100
SCALE HORZ. FEET

NOTES:

1. AREA TS-E = 2482 SF.
2. AREA TS-F = 958 SF.
3. TEMPORARY SHORING WALL TS-E AND TS-F ARE CONSTRUCTED IN PHASE 2 - STEP 1, SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL INFORMATIION.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

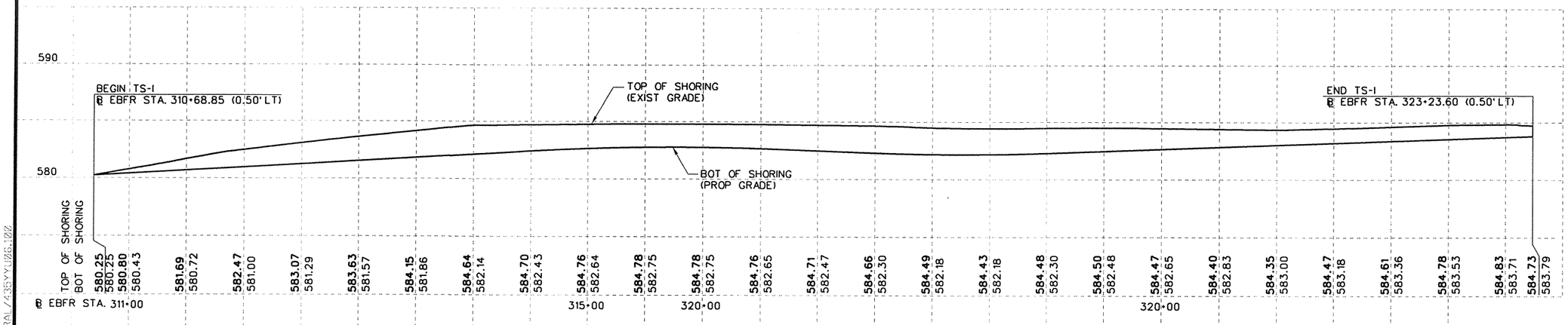
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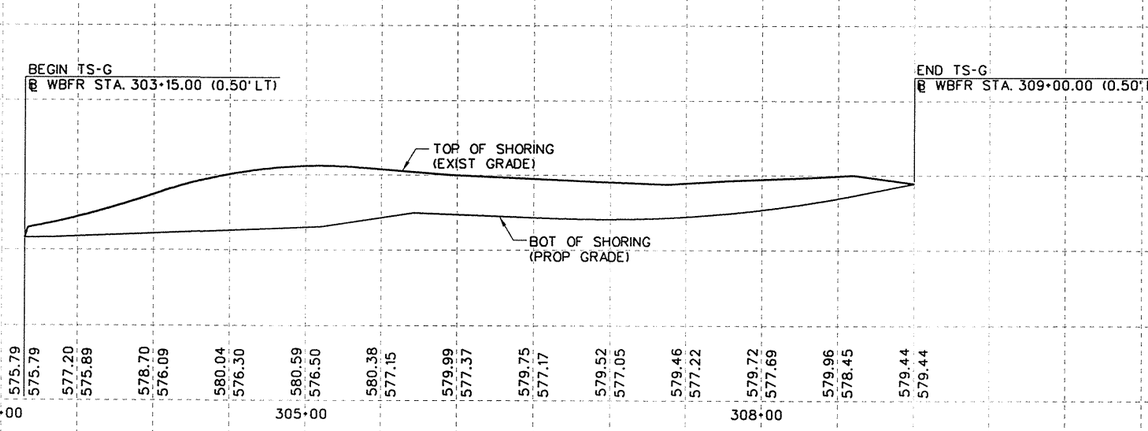
IH 30 AT JOHN KING BLVD.
TRAFFIC CONTROL PLAN
TEMPORARY SHORING PROFILES TS-E AND TS-F

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET				IH 30
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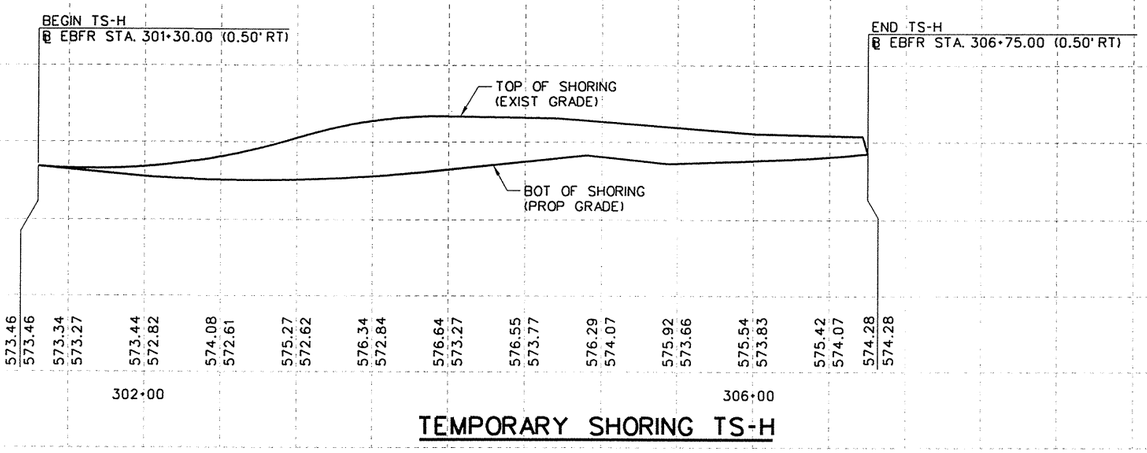
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TEMPORARY SHORING TS-I



TEMPORARY SHORING TS-G



TEMPORARY SHORING TS-H

5 2.5 0 5 10
SCALE VERT. FEET

50 25 0 50 100
SCALE HORZ. FEET

NOTES:

1. AREA TS-G = 1432 SF.
2. AREA TS-H = 1097 SF.
3. AREA TS-I = 2247 SF.
4. TEMOPARY SHORING WALL TS-I IS CONSTRUCTED IN PHASE 2 - STEP 1 AND TEMPORARY SHORING WALLS TS-G AND TS-H ARE CONSTRUCTED IN PHASE 2 - STEP 2. SEE TRAFFIC CONTROL PLANS FOR ADDITIONAL INFORMATION.

STATE OF TEXAS
ROBIN R. HANDEL
86931
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2/9/09

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

TEMPORARY SHORING PROFILES TS-G, TS-H AND TS-I

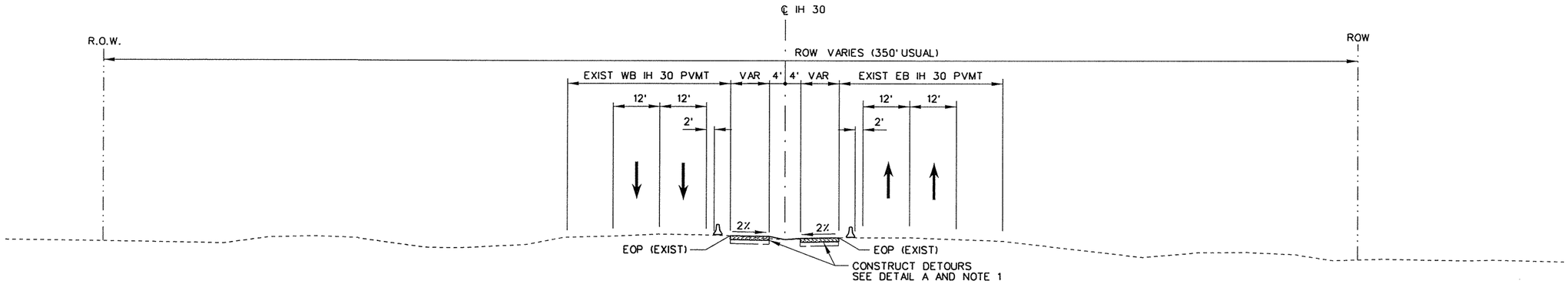
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Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	45

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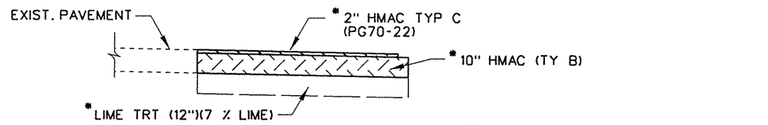
LEGEND

- CONSTRUCTION THIS PHASE
- CONSTRUCTION PREVIOUS PHASE
- PCTB
- LPCB(1)
- PLASTIC DRUM



PHASE 1 - STEP 1

N.T.S.



*FOR CONTRACTORS INFORMATION ONLY

DETAIL A

NOTE:

1. THIS PAVEMENT SHALL BE PAID FOR UNDER ITEM 508, CONSTRUCTING DETOURS.

SHEET 1 OF 1

STATE OF TEXAS
ROBIN R. HANDEL
86931
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2/9/09

NO.	REVISION	BY	DATE

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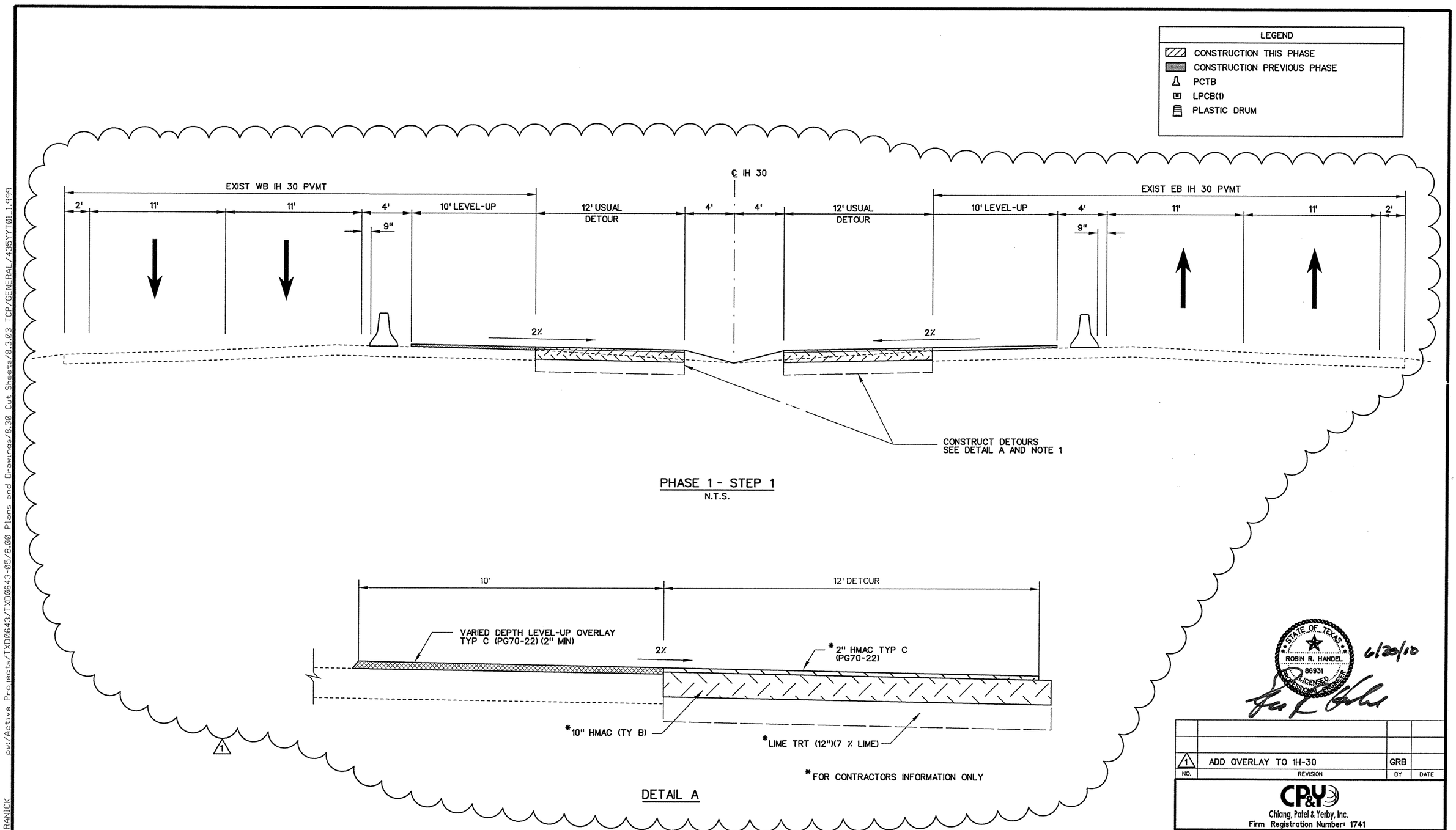
IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

TYPICAL SECTIONS

PHASE 1 - STEP 1

Designed: GRB	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	46



PHASE 1 - STEP 1
N.T.S.

*FOR CONTRACTORS INFORMATION ONLY

DETAIL A

1 CHANGE ORDER NO. 1
SHEET REVISED

NOTE:

1. THIS PAVEMENT SHALL BE PAID FOR UNDER ITEM 508, CONSTRUCTING DETOURS.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
6/30/10

NO.	REVISION	BY	DATE
1	ADD OVERLAY TO 1H-30	GRB	

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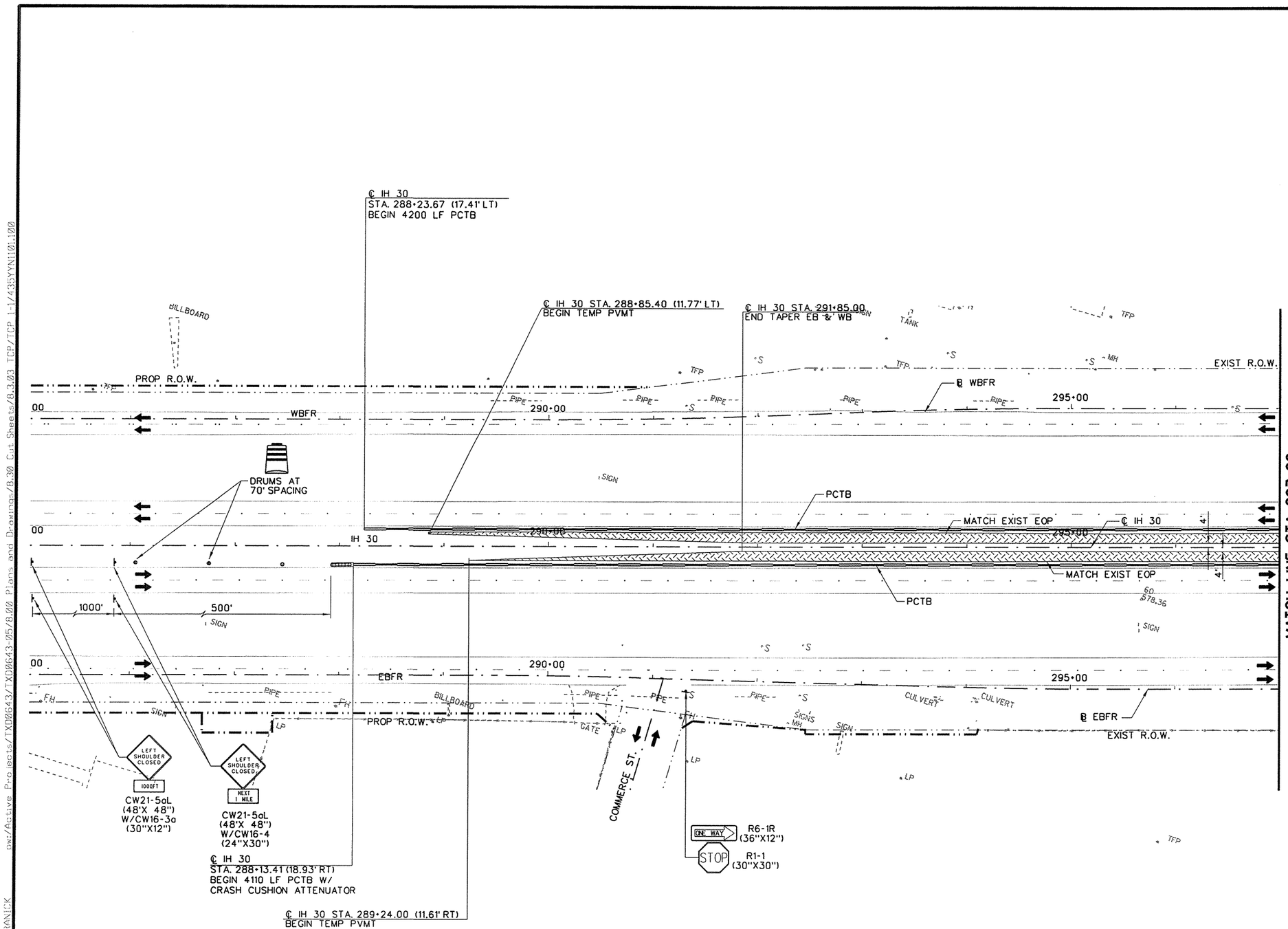
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IH 30 AT JOHN KING BLVD.
TRAFFIC CONTROL PLAN
TYPICAL SECTIONS
PHASE 1 - STEP 1

Designed: GRB	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked: RRH	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073		46A

SHEET 1 OF 1

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N

50 25 0 50 100

SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

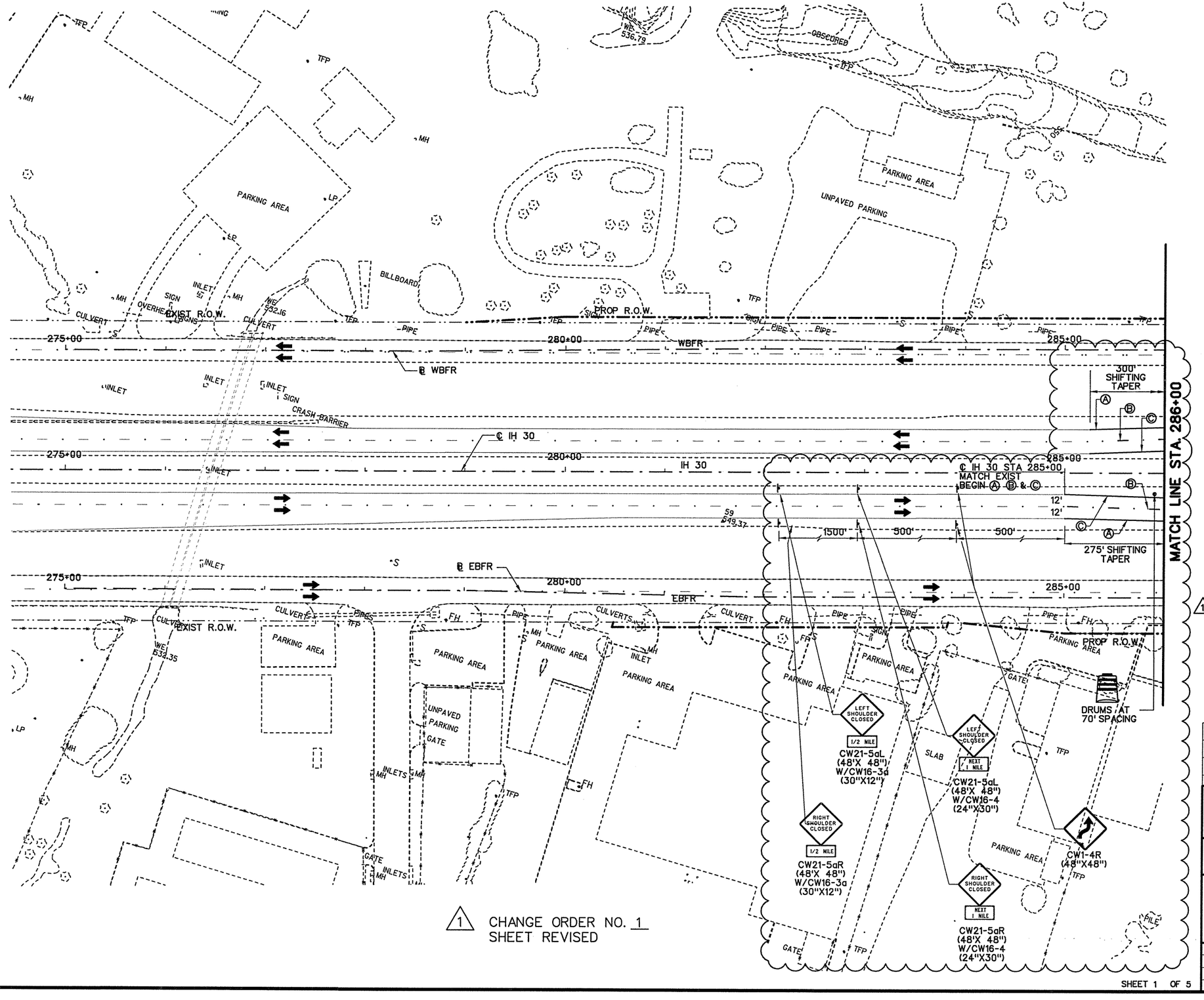
PHASE 1 - STEP 1

BEGIN TO STA. 297+00

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	47

SHEET 1 OF 5

2/6/2009 11:47:33 AM C:\Users\brianvick\Documents\Active Projects\TX00643\TX00643-05\8.00 Plans and Drawings\8.30 Cut Sheets\8.3.03 TCP\TCP 1-1-4.35YYN101.100



NO.	REVISION	BY	DATE
	CTP EXTENSION	AJA	
1	ADD OVERLAY TO IH 30	GRB	

ROBIN R. HANDEL 86931 LICENSED PROFESSIONAL ENGINEER STATE OF TEXAS 6/30/10

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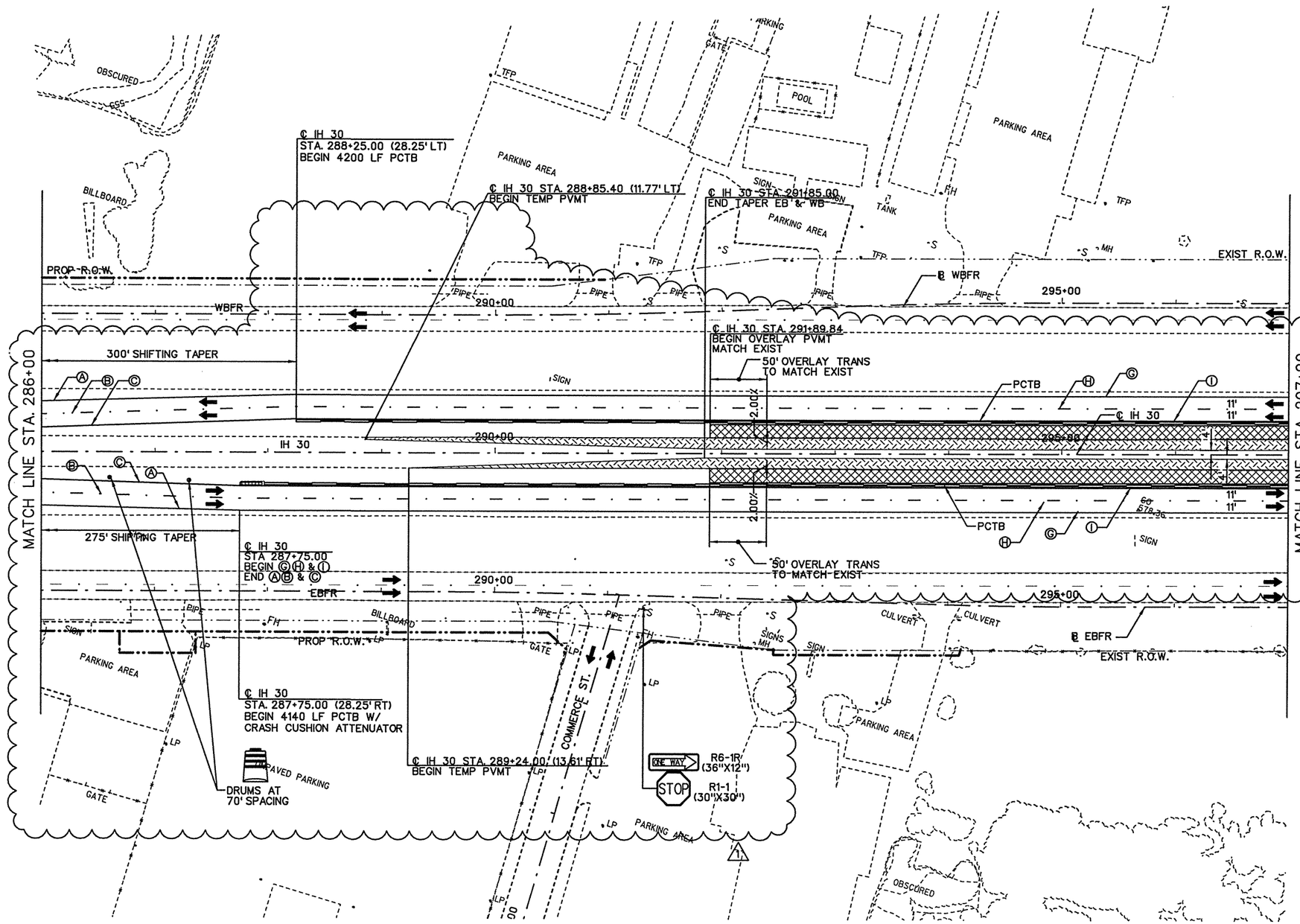
IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN
PHASE 1 - STEP 1
BEGIN TO STA. 297+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	47A

SHEET 1 OF 5

6/30/2010 5:38:29 PM GBRANICK pw:/Active Projects/TX00643/TX00643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/TCP 1-1/43SYYNI10new.100



N

50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (LEVEL-UP)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING
  SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
6/30/10

NO.	REVISION	BY	DATE
	CTB EXTENSION	AJA	
1	ADD OVERLAY TO IH 30	GRB	

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Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

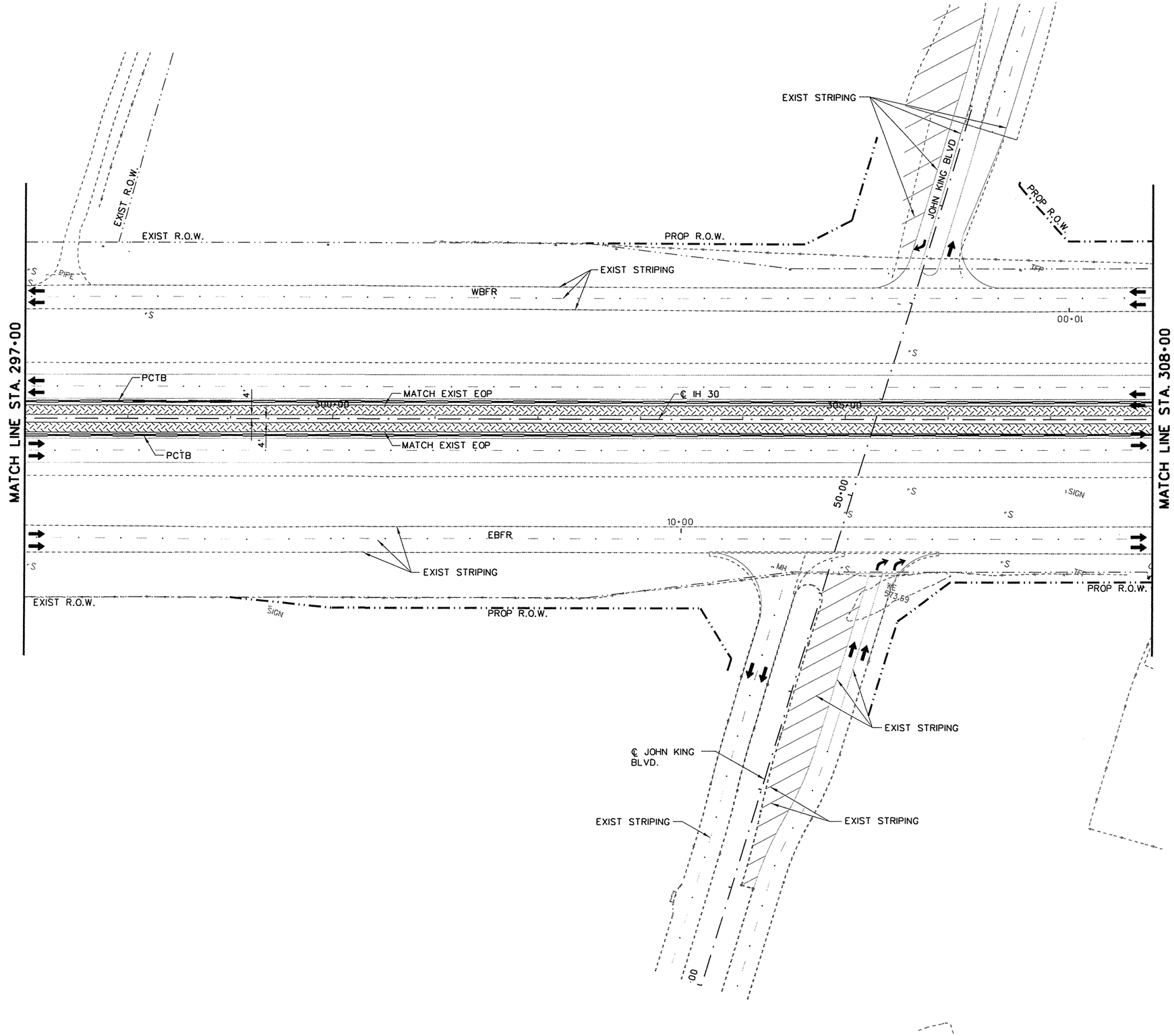
PHASE 1 - STEP 1

BEGIN TO STA. 297+00

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	47B

SHEET 1A OF 5

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N

50 25 0 50 100

SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- (A) WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- (B) WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- (C) WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- (D) WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- (E) WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- (F) WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- (G) WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- (H) WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- (I) WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- (K) WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- (L) WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- (M) RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- (N) RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- (O) PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER

2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

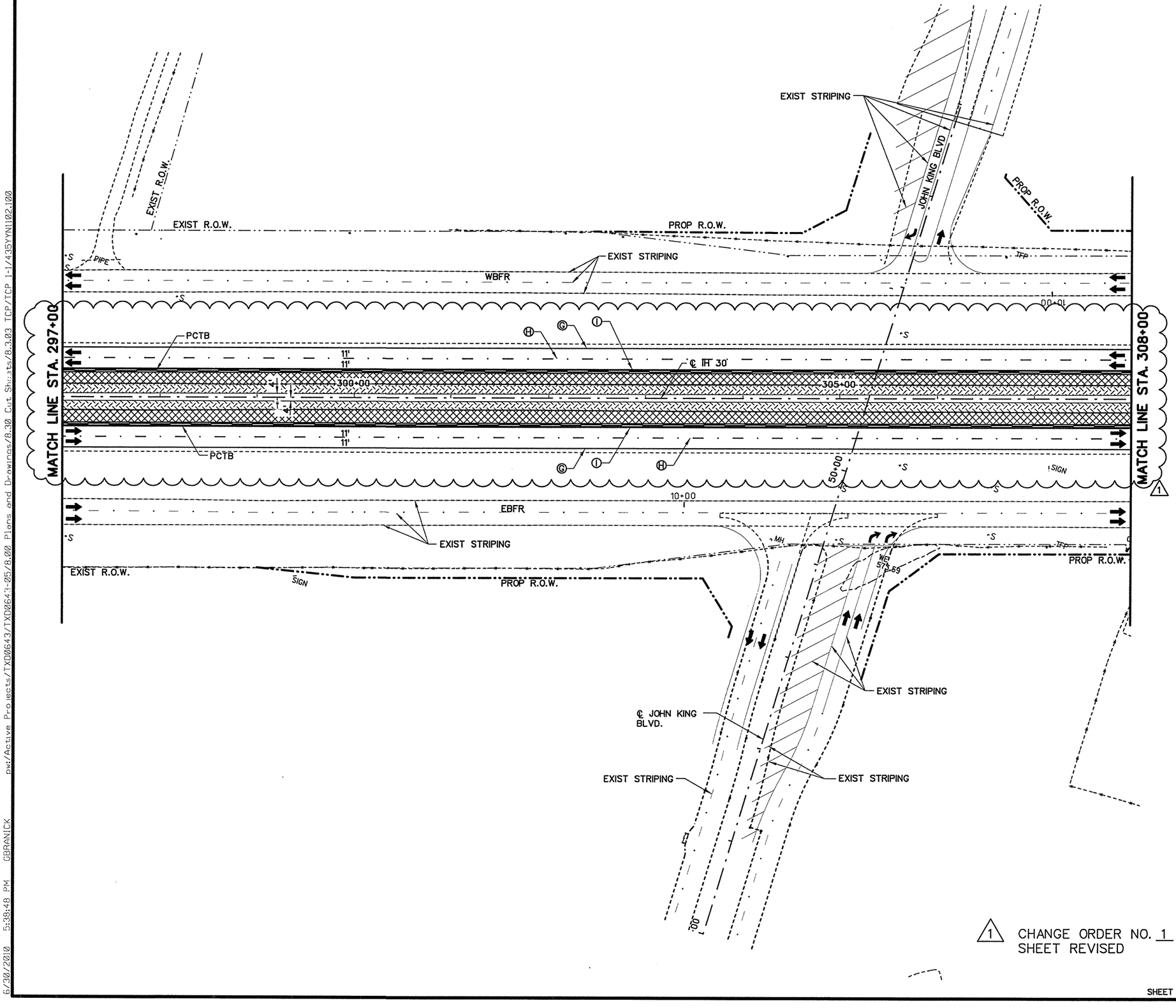
PHASE 1 - STEP 1

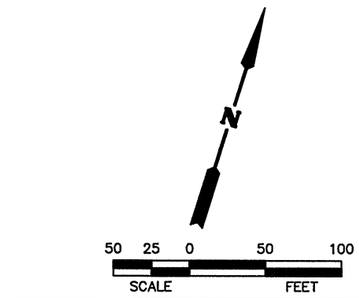
STA. 297+00 TO STA. 308+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073		4B

SHEET 2 OF 5

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LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (LEVEL-UP)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
6/30/10

NO.	REVISION	BY	DATE
1	ADD OVERLAY TO IH 30	GRB	

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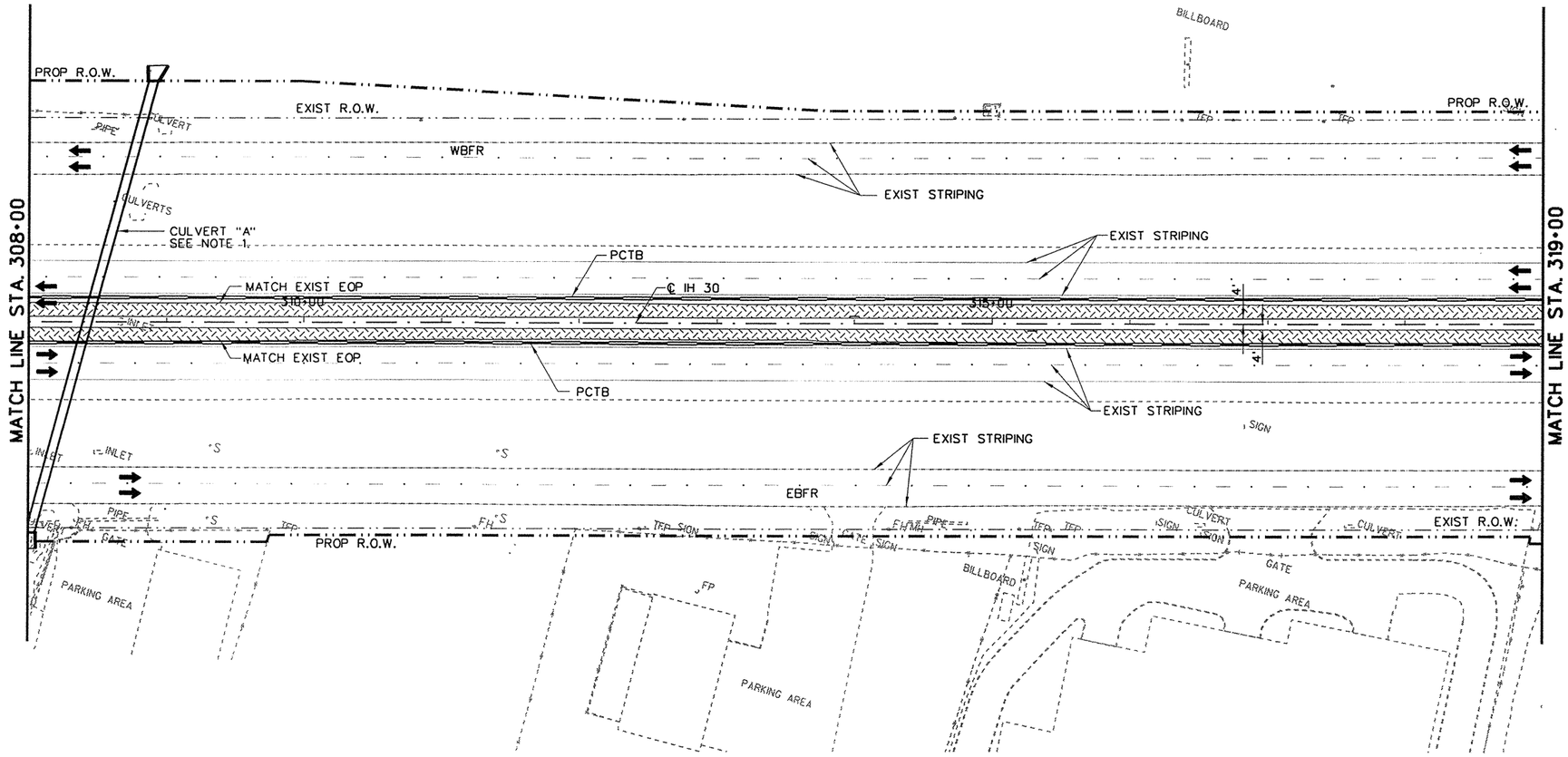
IH 30 AT JOHN KING BLVD.
TRAFFIC CONTROL PLAN
PHASE 1 - STEP 1
STA. 297+00 TO STA. 308+00

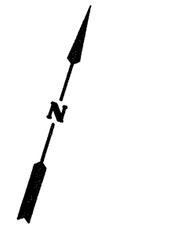
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Checked: RRH	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073		48A

1 CHANGE ORDER NO. 1
SHEET REVISED

SHEET 2 OF 5

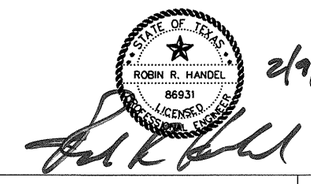
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LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- (A) WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- (B) WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- (C) WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- (D) WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- (E) WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- (F) WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- (G) WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- (H) WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- (I) WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- (K) WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- (L) WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- (M) RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- (N) RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- (O) PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING



NOTE:

1. SEE PHASE 1 - CULVERT "A" DETAIL SHEET FOR MORE INFORMATION.

NO.	REVISION	BY	DATE

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Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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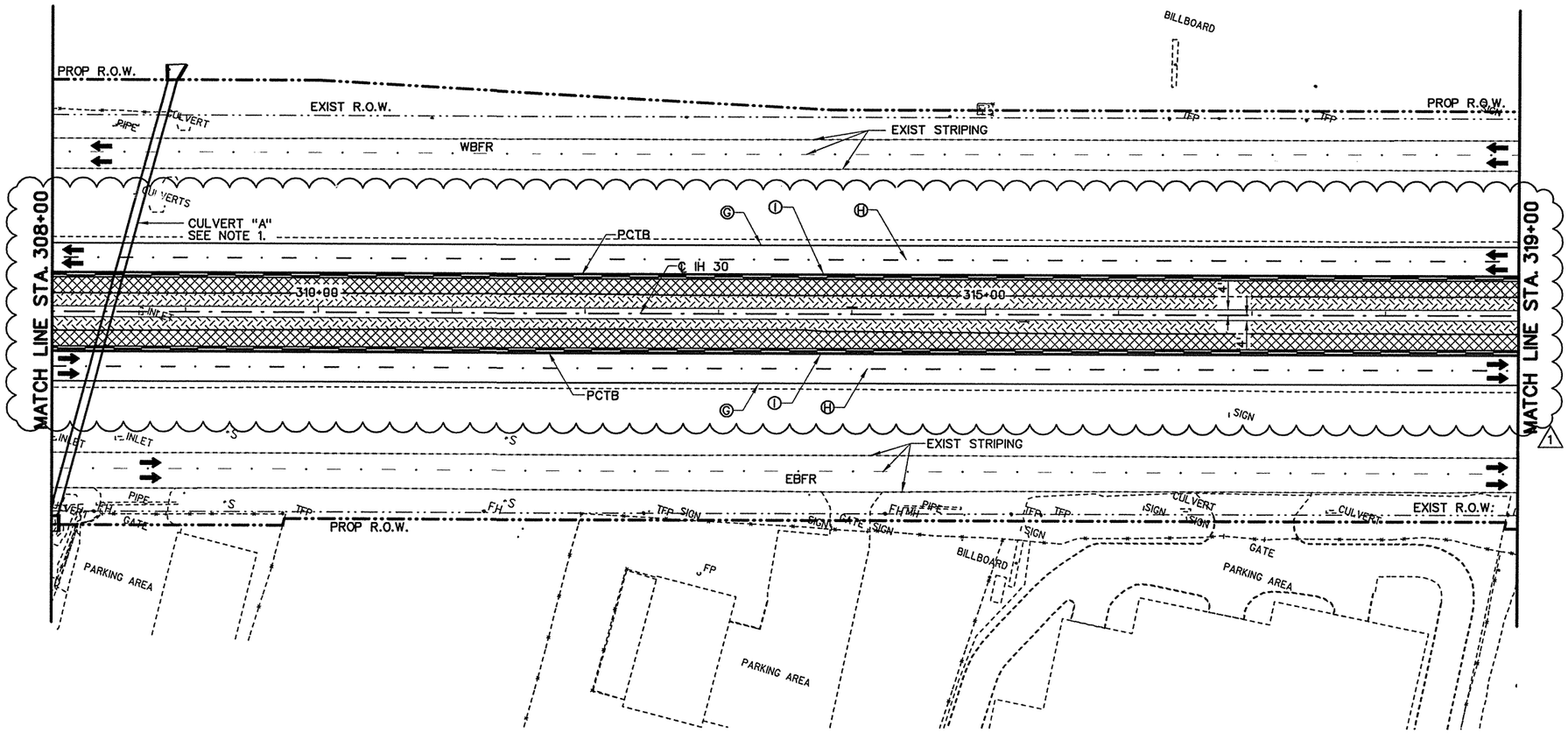
IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

PHASE 1 - STEP 1

STA. 308+00 TO STA. 319+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073		49



N

50 25 0 50 100

SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (LEVEL-UP)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
6/30/10

NOTE:

1. SEE PHASE 1 - CULVERT "A" DETAIL SHEET FOR MORE INFORMATION.

1 CHANGE ORDER NO. 1
SHEET REVISED

NO.	REVISION	BY	DATE
1	ADD OVERLAY TO IH 30	GRB	

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Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

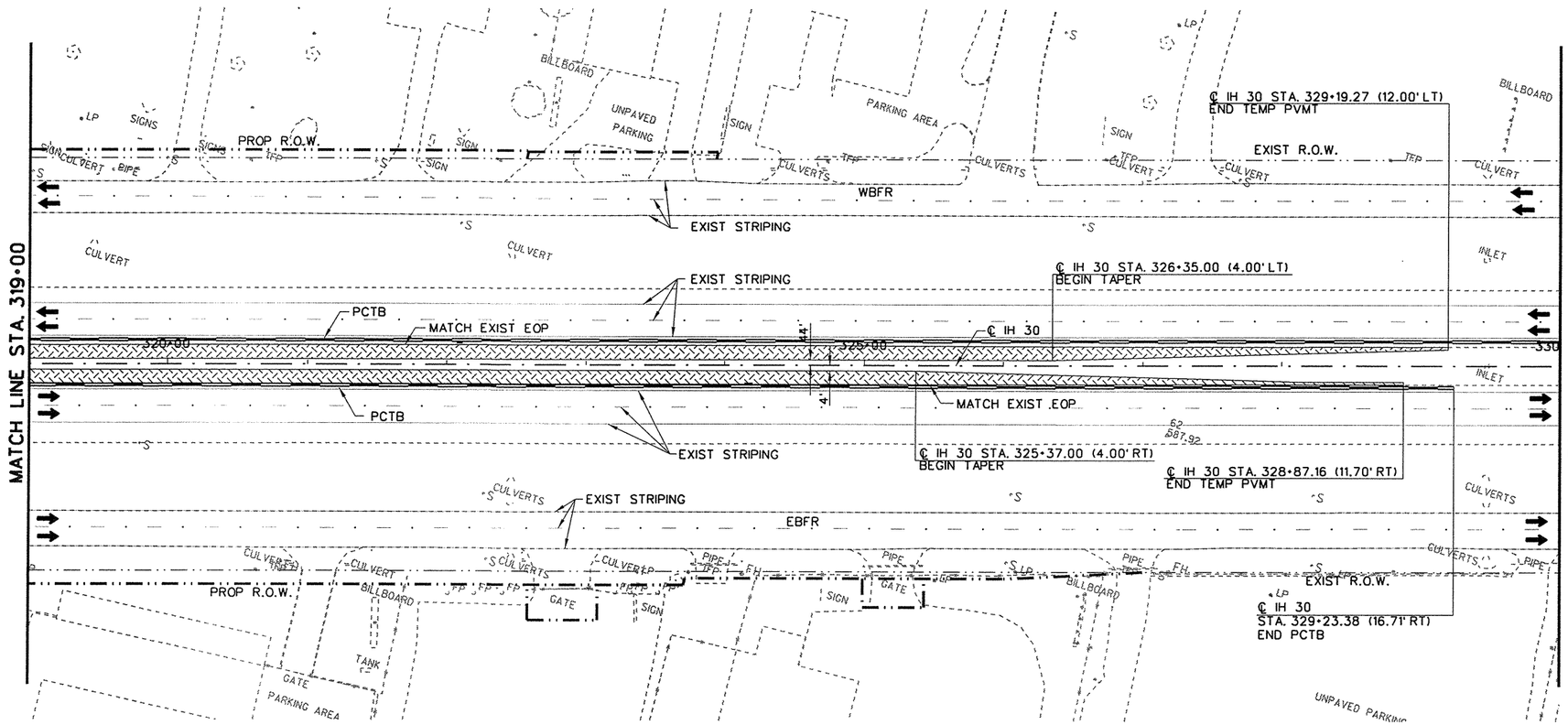
PHASE 1 - STEP 1

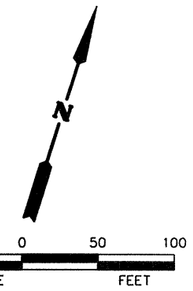
STA. 308+00 TO STA. 319+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	49A

SHEET 3 OF 5

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LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

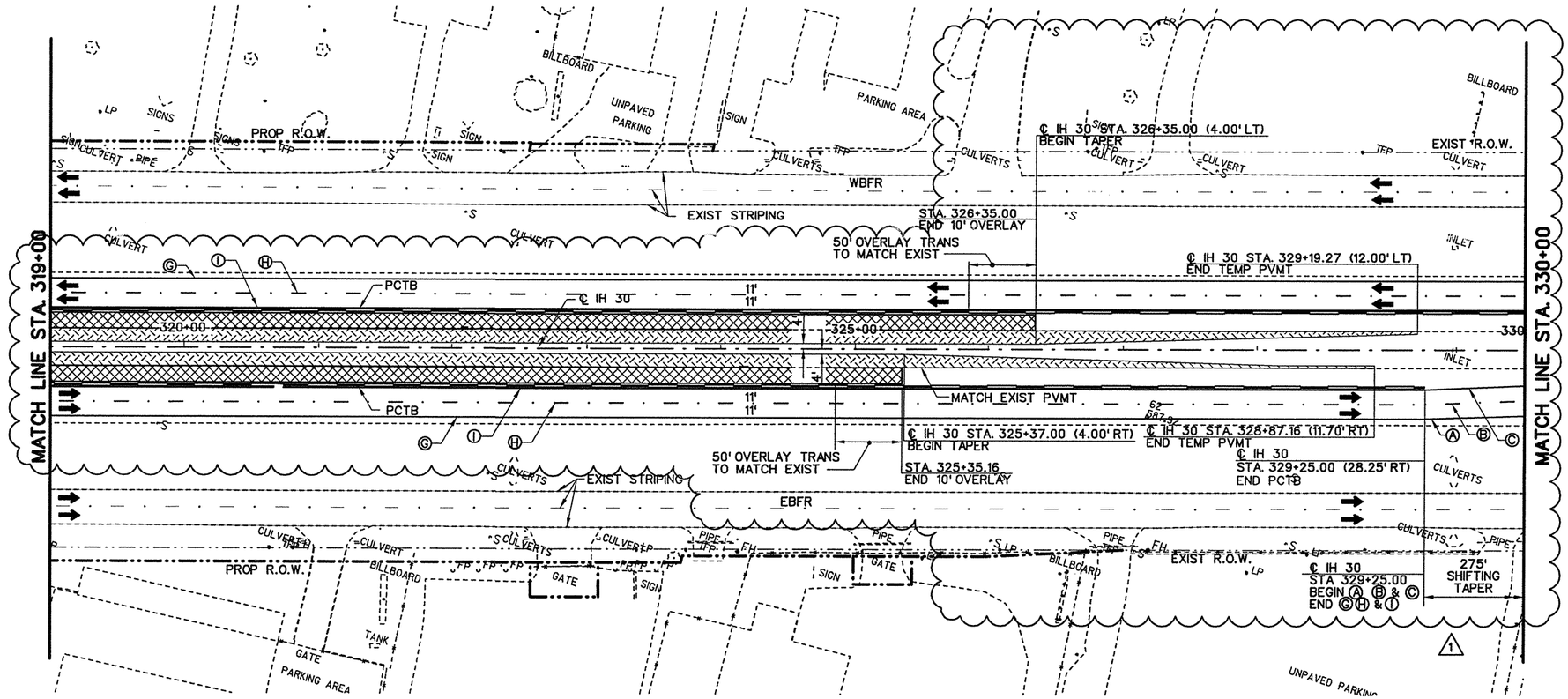
TRAFFIC CONTROL PLAN

PHASE 1 - STEP 1

STA. 319+00 TO STA. 330+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	50

Plan Sheets/8.3D cut Sheets/8.3D3 TCP/TCP 1-1-03-YYN 1:04:10P
X:\0263\X0263 05/18/09 11:48:27 AM



1 CHANGE ORDER NO. 1
SHEET REVISED

SHEET 4 OF 5

50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (LEVEL-UP)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
6/30/10

NO.	REVISION	BY	DATE
	CTB EXTENSION	AJA	
1	ADD OVERLAY TO IH 30	GRB	

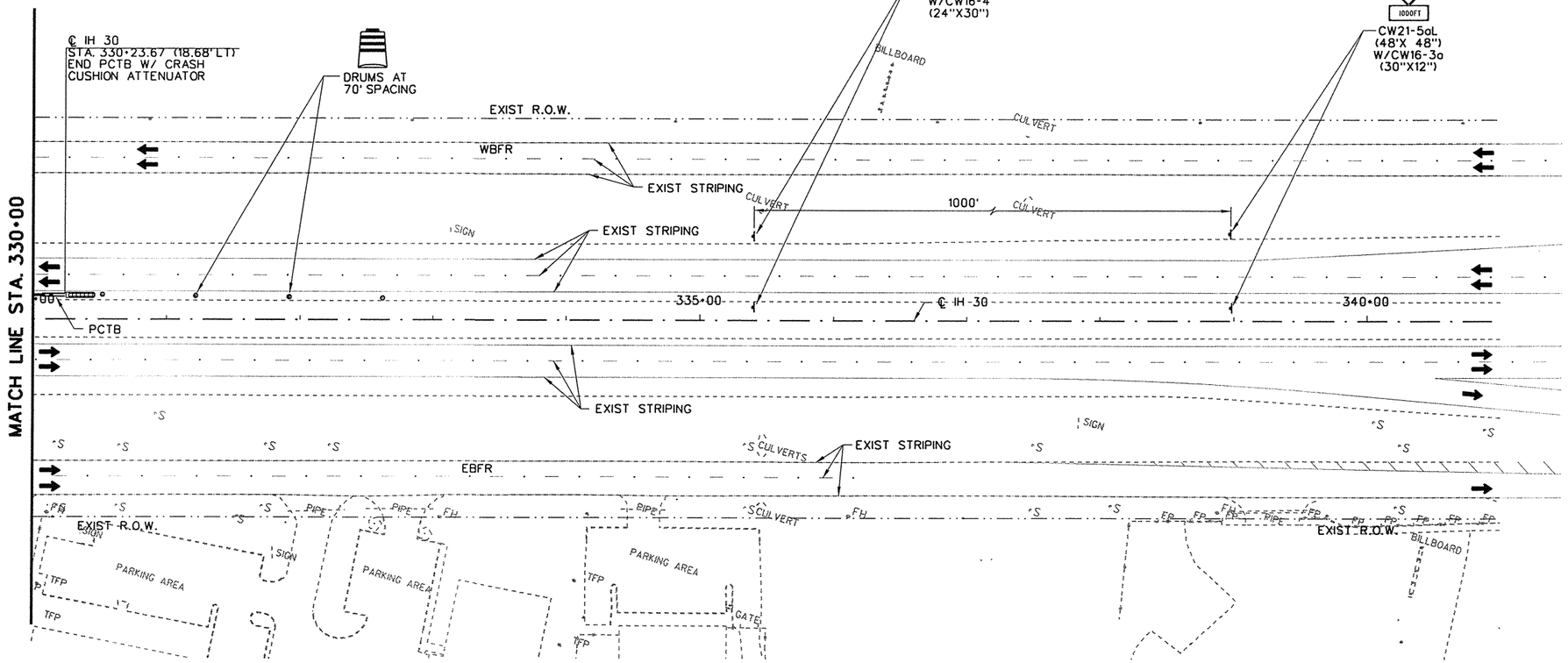
CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.
TRAFFIC CONTROL PLAN
PHASE 1 - STEP 1
STA. 319+00 TO STA. 330+00

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	50A

6/30/2010 5:39:08 PM GBRANICK pw:/Active Projects/TX00643/TX00643-05/8.00 Plans and Drawings/8.30 (u) Sheets/8.3.03 TCP/TCP 1-1/435YYNI104.100



N

50 25 0 50 100

SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- (A) WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- (B) WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- (C) WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- (D) WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- (E) WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- (F) WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- (G) WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- (H) WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- (I) WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- (K) WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- (L) WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- (M) RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- (N) RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- (O) PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER

2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

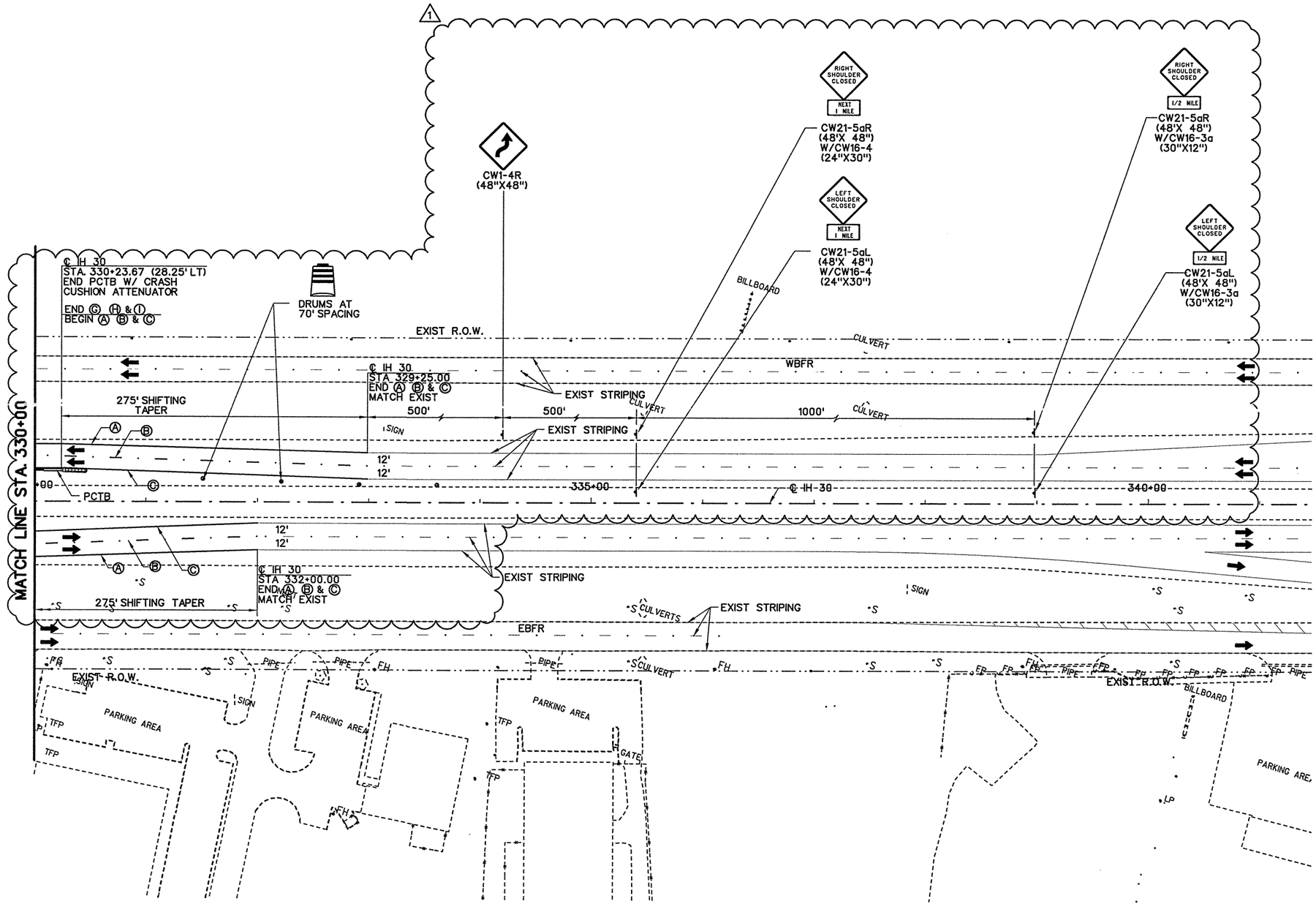
PHASE 1 - STEP 1

STA. 330+00 TO END

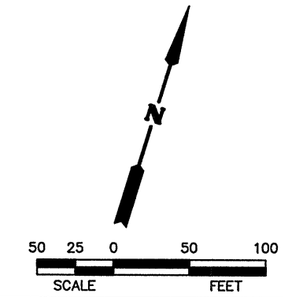
Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073		51

SHEET 5 OF 5

2/9/2009 11:48:16 AM SBRANICK
pw:Active Projects:TX02643:TX02643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/TCP 1-1/435YYN1105.100



1 CHANGE ORDER NO. 1
SHEET REVISED



LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (LEVEL-UP)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
6/30/10

NO.	REVISION	BY	DATE
	CTB EXTENSION	AJA	
1	ADD OVERLAY TO IH 30	GRB	

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Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

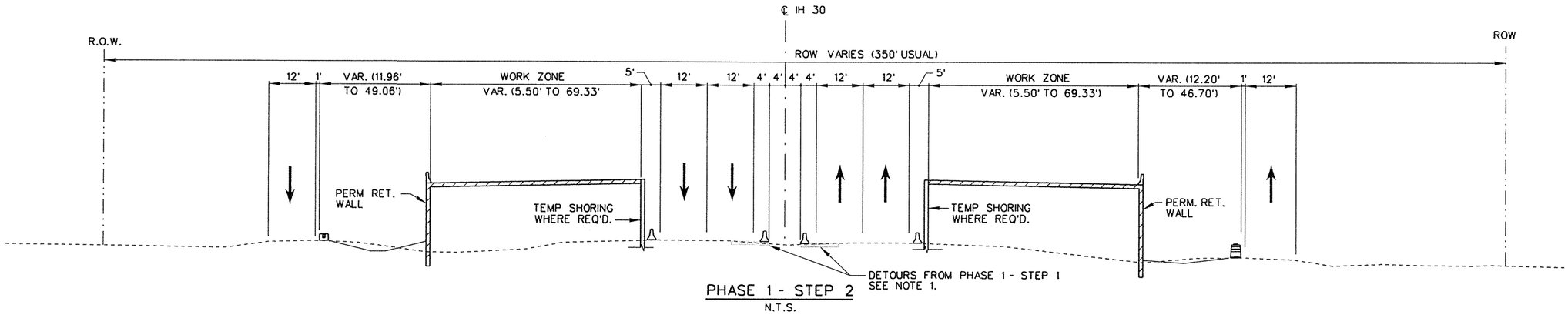
TRAFFIC CONTROL PLAN
PHASE 1 - STEP 1
STA. 330+00 TO END

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	51A

SHEET 5 OF 5

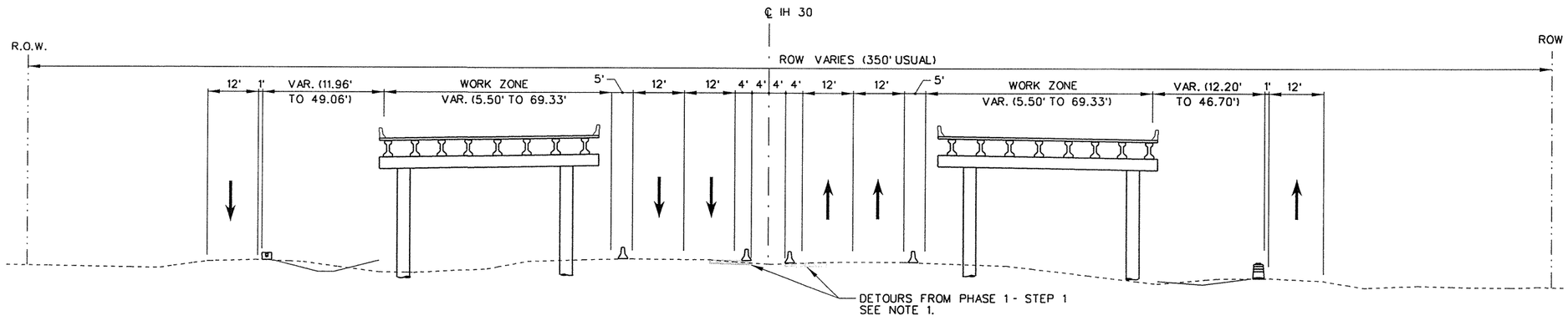
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LEGEND	
	CONSTRUCTION THIS PHASE
	CONSTRUCTION PREVIOUS PHASE
	PCTB
	LPCB(1)
	PLASTIC DRUM



PHASE 1 - STEP 2

N.T.S.



PHASE 1 IH 30 MAINLANES OVER JOHN KING BLVD.

N.T.S.

NOTE:

1. PRIOR TO PERMANENT BRIDGE AND PAVEMENT CONSTRUCTION THIS STEP, CONTRCTOR SHALL SHIFT TRAFFIC AS SHOWN.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER

2/9/09

NO.	REVISION	BY	DATE

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Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

TYPICAL SECTIONS

PHASE 1 - STEP 2

Designed: GRB	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	53

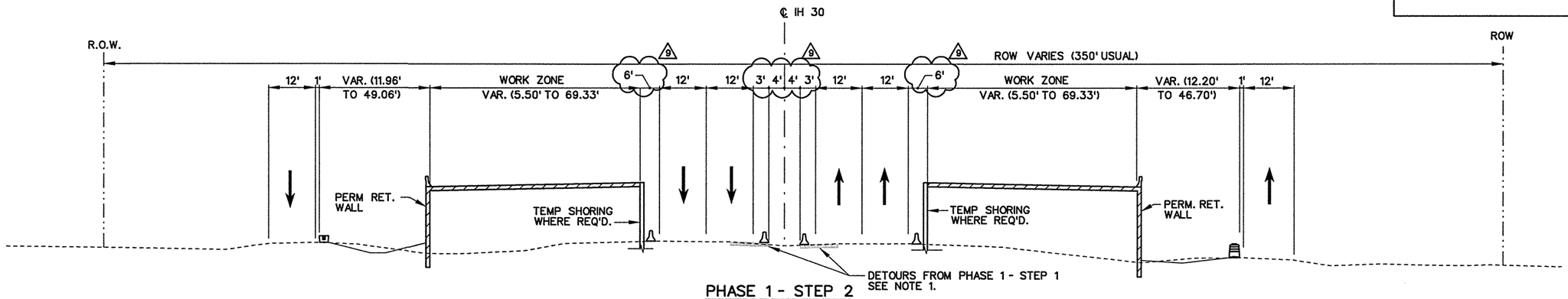
SHEET 1 OF 1

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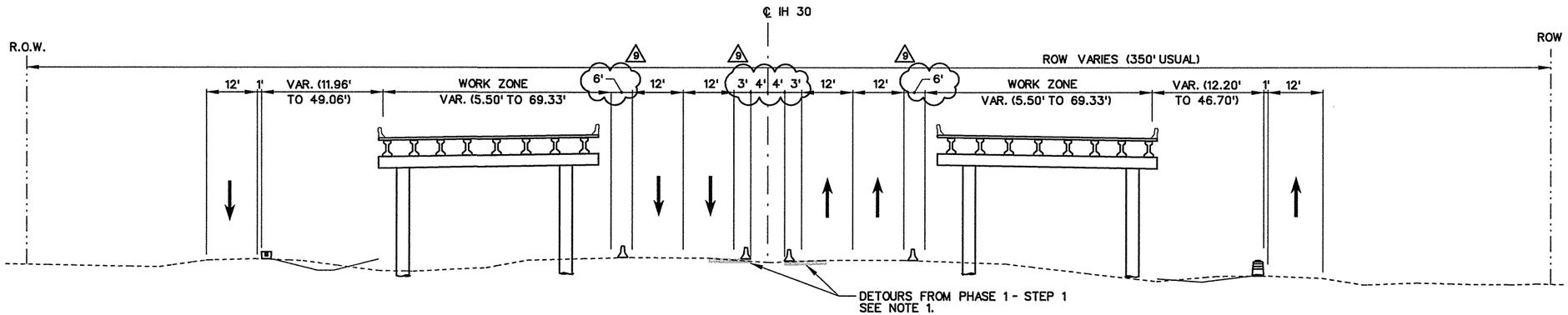
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LEGEND

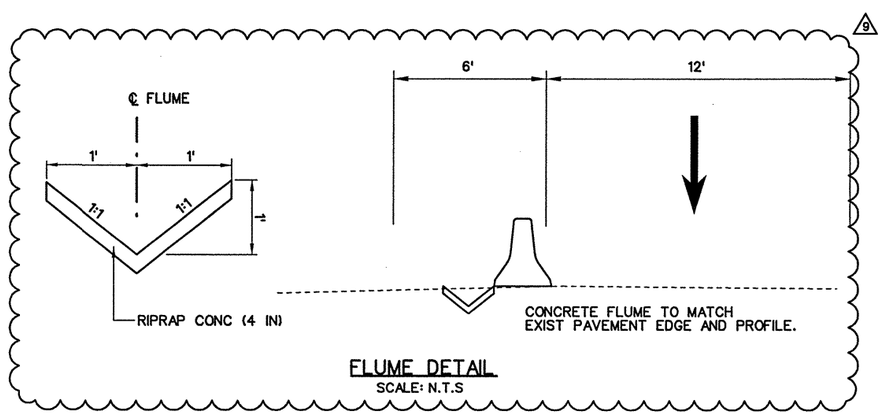
- CONSTRUCTION THIS PHASE
- CONSTRUCTION PREVIOUS PHASE
- PCTB
- LPCB(1)
- PLASTIC DRUM



PHASE 1 - STEP 2
N.T.S.



PHASE 1 IH 30 MAINLANES OVER JOHN KING BLVD.
N.T.S.



FLUME DETAIL
SCALE: N.T.S

9 CHANGE ORDER NO. 9
SHEET REVISED

NOTE:

1. PRIOR TO PERMANENT BRIDGE AND PAVEMENT CONSTRUCTION THIS STEP, CONTRCTOR SHALL SHIFT TRAFFIC AS SHOWN.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
10/21/10

NO.	REVISION	BY	DATE
9	TRAFFIC SHIFT	AJA	

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Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

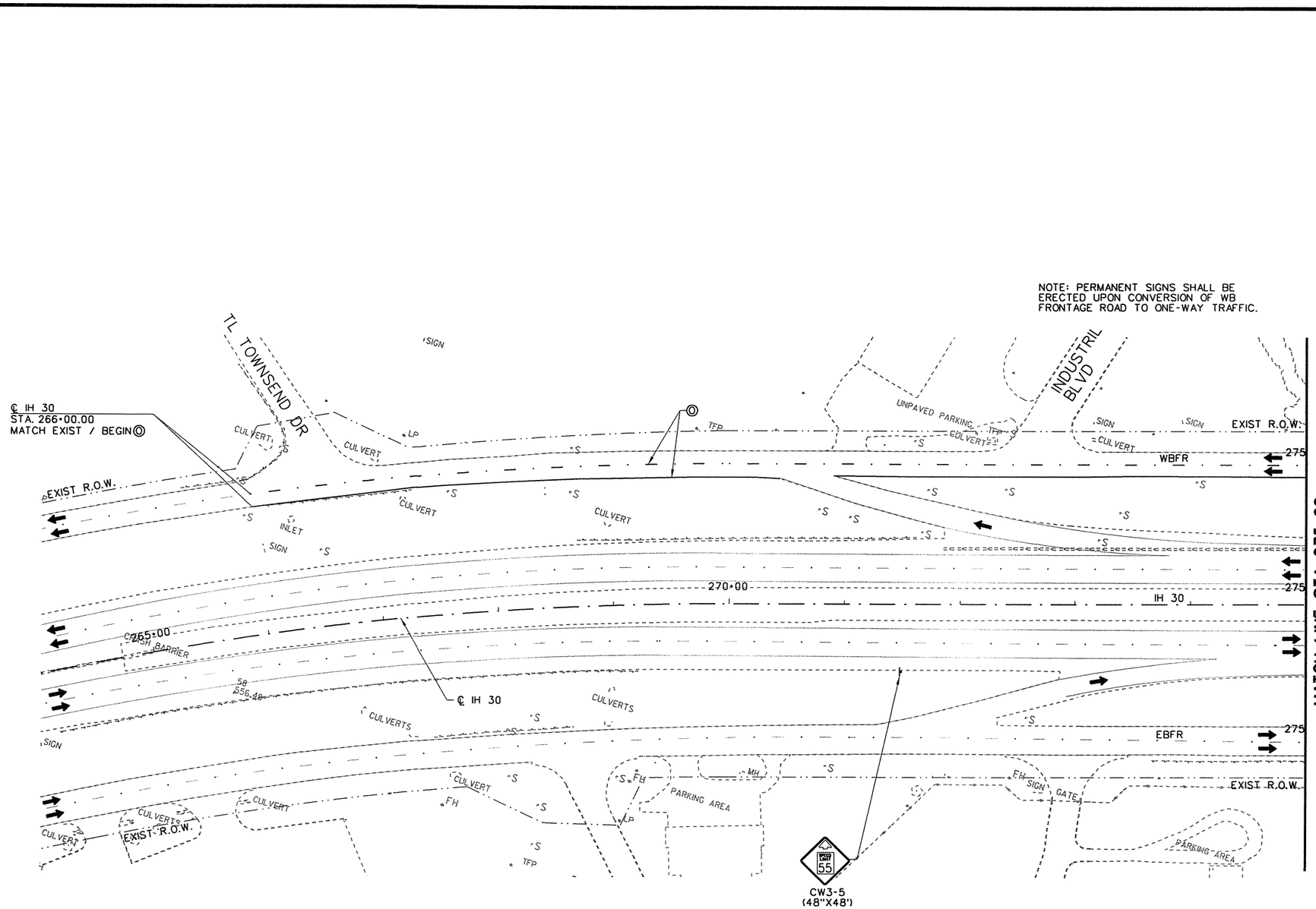
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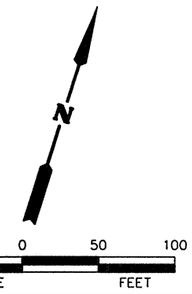
IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN
TYPICAL SECTIONS
PHASE 1 - STEP 2

		FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Designed:	GRB	6	TEXAS	SEE TITLE SHEET			IH 30
Checked:	RRH						
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	53A

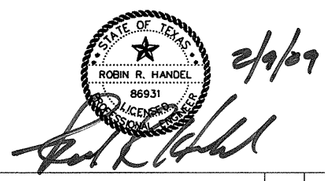
SHEET 1 OF 1





LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING



NO.	REVISION	BY	DATE

NOTE:

CONTRACTOR SHALL HAVE PLACED PERMANENT MAINLANE SIGNS BY THE END OF THIS PHASE AS DIRECTED BY THE ENGINEER.

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Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

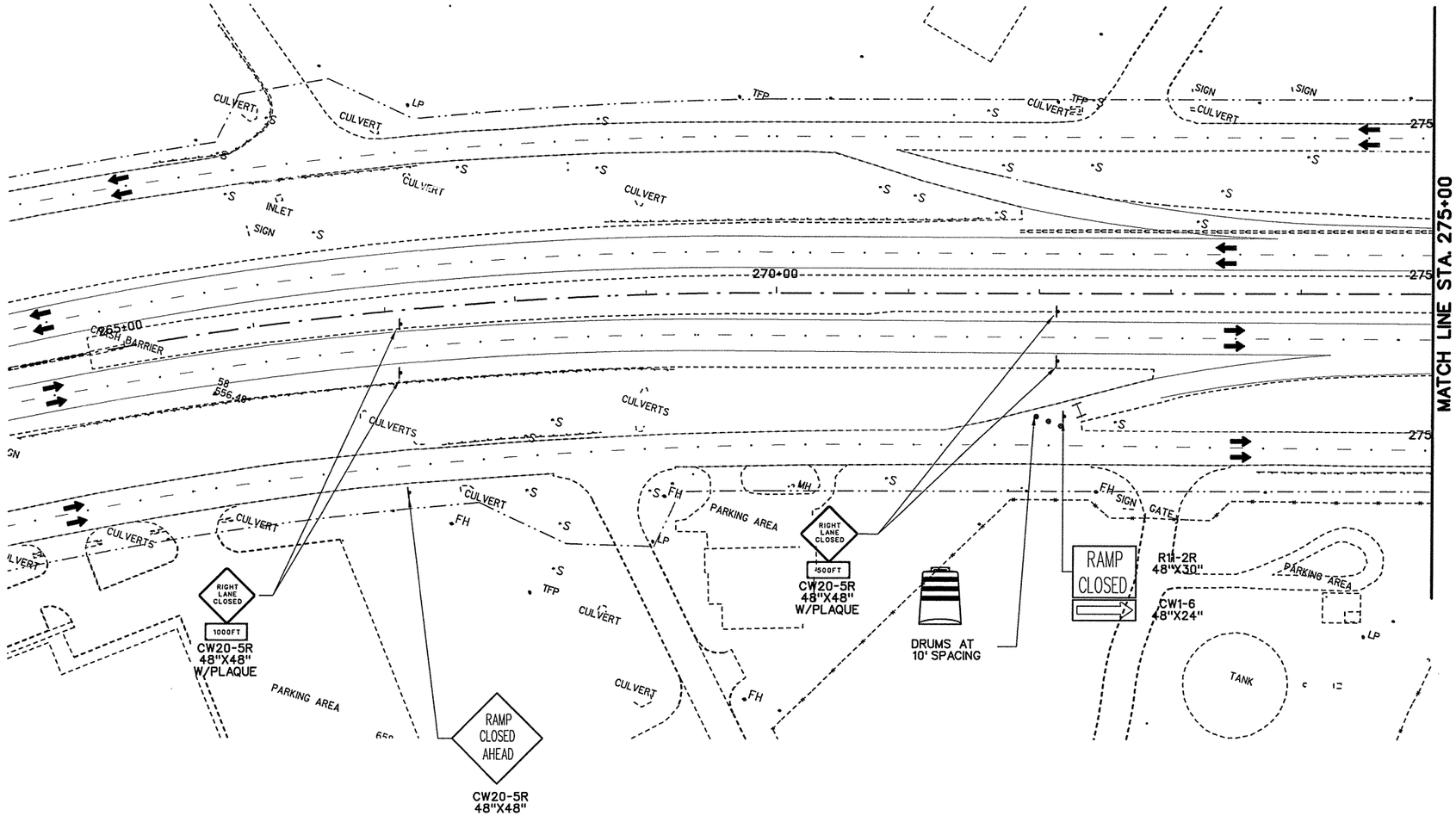
TRAFFIC CONTROL PLAN

PHASE 1 - STEP 2

BEGIN PHASE TO STA. 275+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	54

2/6/2009 11:48:36 AM G:\RANCK pw:/Avenue Projects/TX00643/TX00643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/TCP 1-2435YYN1201.100



50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (LEVEL-UP)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
6/30/10

NO.	REVISION	BY	DATE
1	ADD OVERLAY TO IH 30	GRB	

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Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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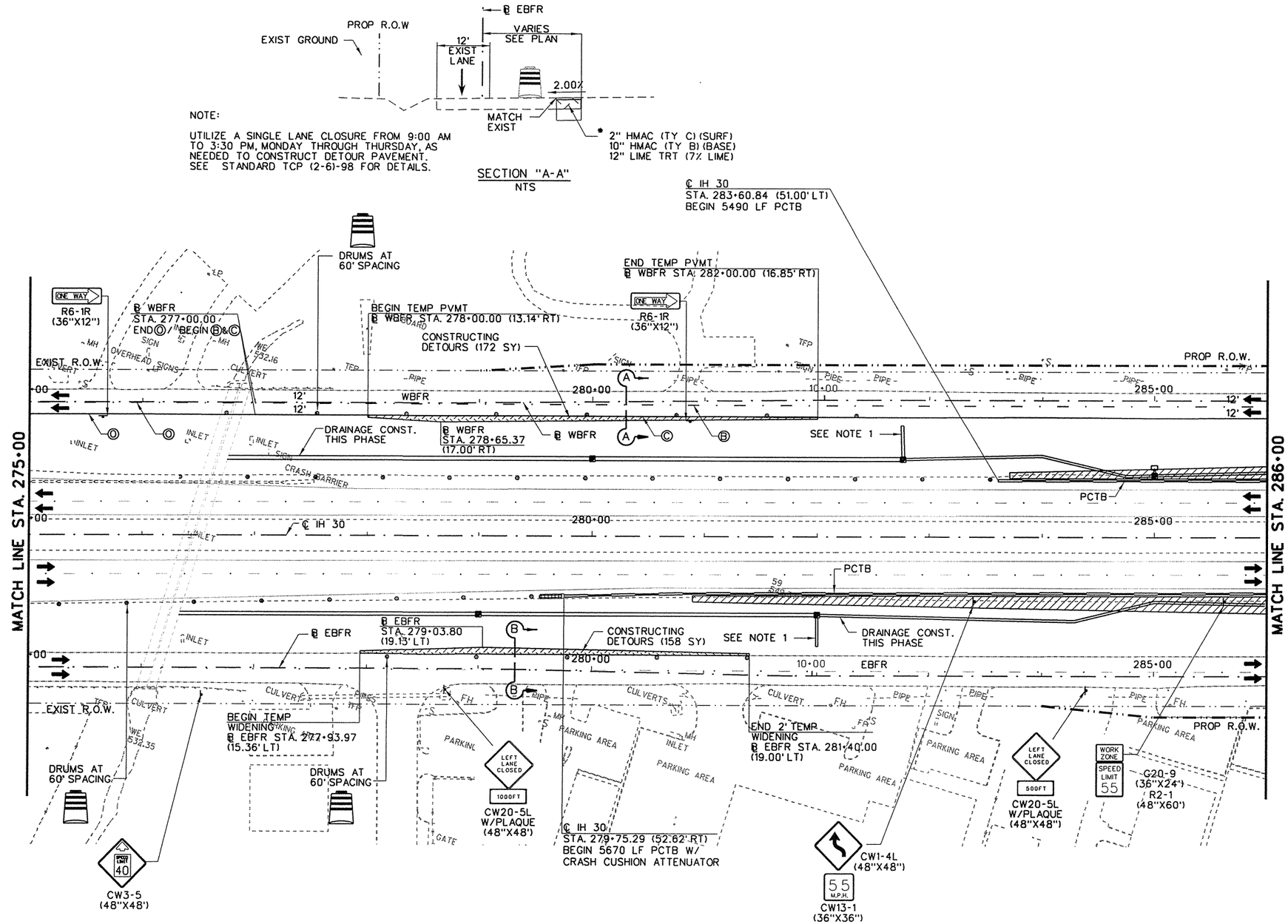
IH 30 AT JOHN KING BLVD.
TRAFFIC CONTROL PLAN
PHASE 1 - STEP 1A
BEGIN TO STA. 275+00

Designed:	GRB	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	54A

1 CHANGE ORDER NO. 1
ADDED NEW SHEET

SHEET 1 OF 8

6/30/2010 5:39:26 PM GBRANICK pw:Active Projects/TX00643/TX00643-05/8.00 Plans and Drawings/8.30 Cst Sheets/8.3.03 TCP/TCP1-1A/435YYN11A01.100



N

50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

NOTES:

1. COMPLETE PIPE TO LIMITS SHOWN THIS PHASE AND PLUG, COMPLETE PIPE AND INLET IN IN PHASE 2 - STEP 1.
2. EXISTING ONE-WAY SIGNS ALONG EBFR SHALL REMAIN IN PLACE OR BE ERECTED ON TEMPORARY SUPPORTS THROUGHOUT CONSTRUCTION.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

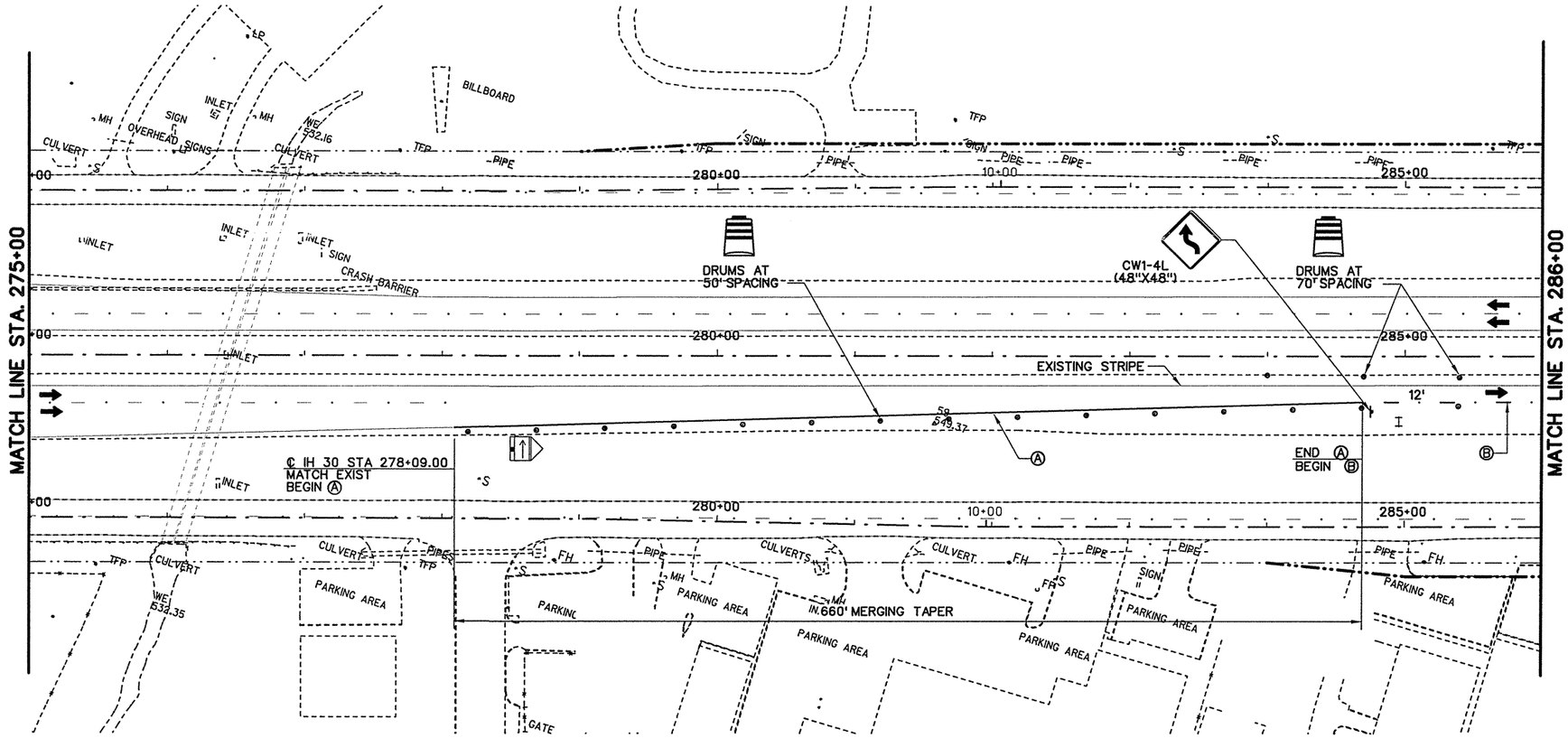
TRAFFIC CONTROL PLAN

PHASE 1 - STEP 2

STA. 275+00 TO STA. 286+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073		55

2/6/2009 11:48:44 AM jbranick Dgn/Active Projects/TX00643/TX00643-05/8.3D Plan and Drawings/8.3D C.S. Sheets/8.3.03 TCP/TCP 1-2-03-YYYY1222.dgn



1 CHANGE ORDER NO. 1
ADDED NEW SHEET

N

50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (LEVEL-UP)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
6/30/10

NO.	REVISION	BY	DATE
1	ADD OVERLAY TO IH 30	GRB	

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

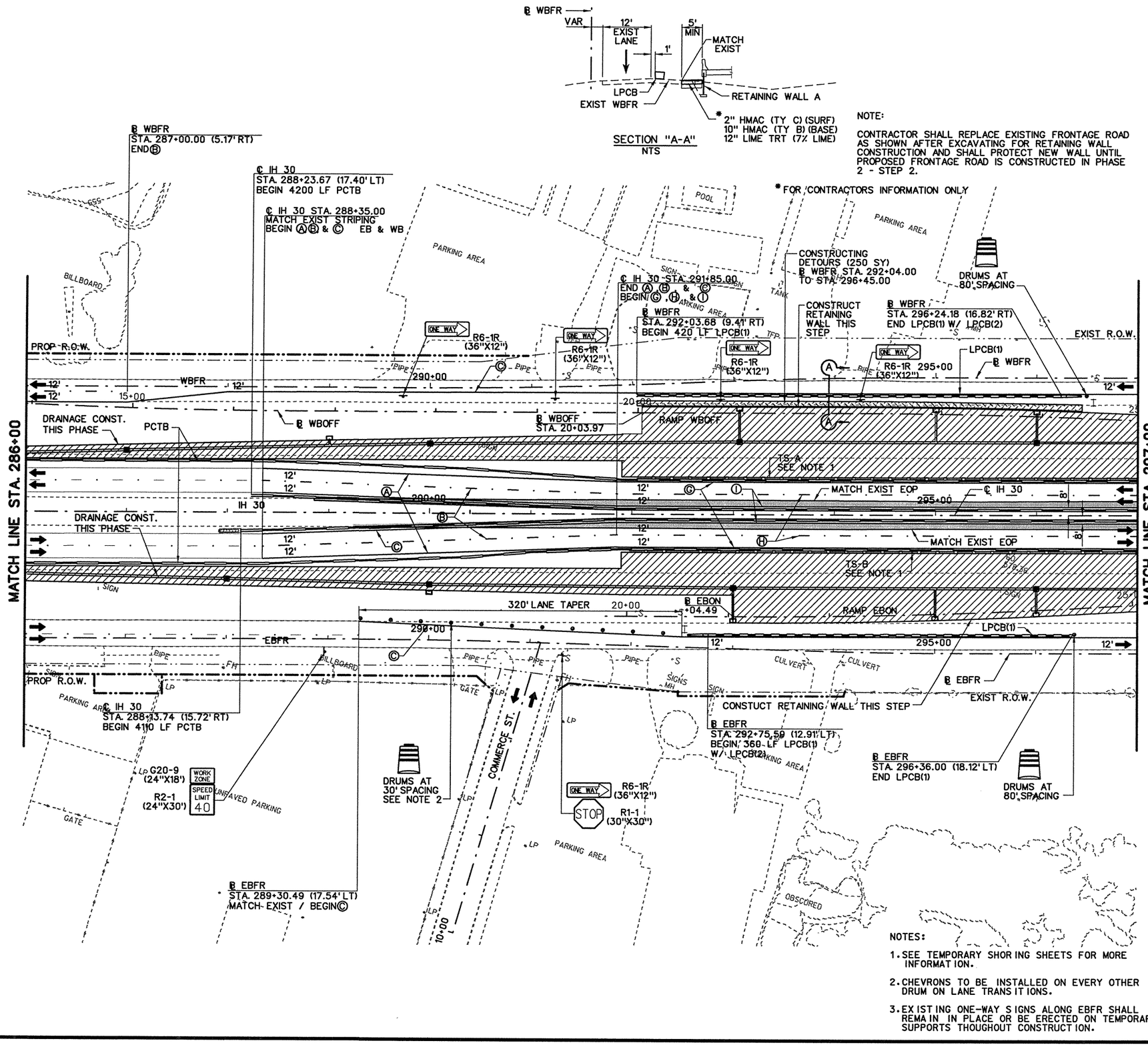
TRAFFIC CONTROL PLAN

PHASE 1 - STEP 1A

STA. 275+00 TO STA. 286+00

Designed:	GRB	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	55A

6/30/2010 5:39:33 PM GBRANICK bwr:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/TCP1-1A/435YYN11A02.100



STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
5/20/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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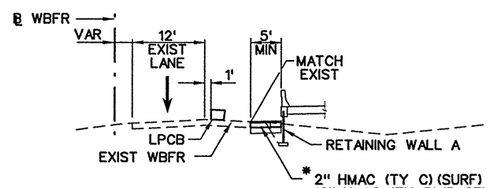
IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN
PHASE 1 - STEP 2
STA. 286+00 TO STA. 297+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	5b

SHEET 3 OF 9

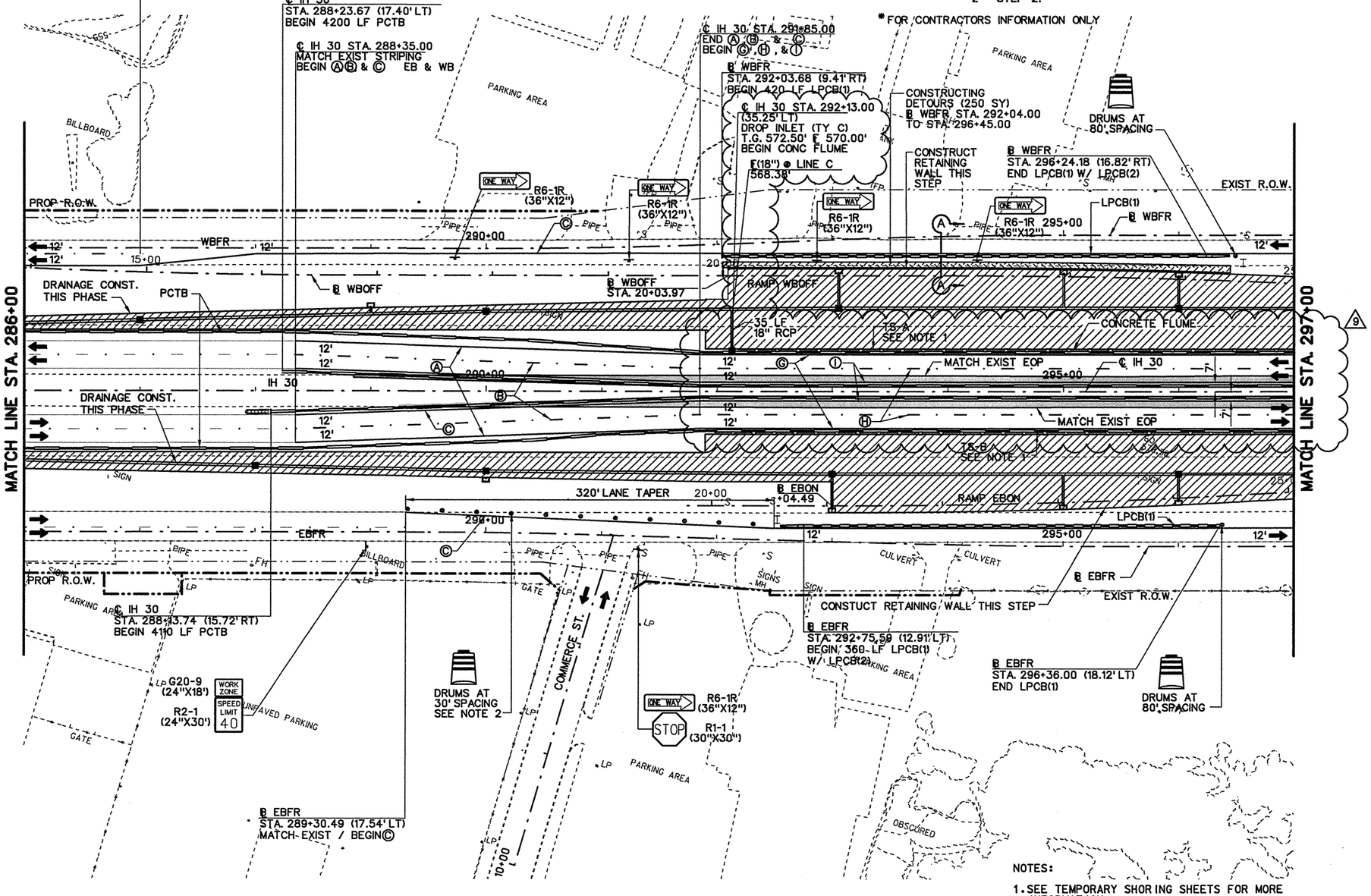
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SECTION "A-A"
NTS

NOTE:

CONTRACTOR SHALL REPLACE EXISTING FRONTAGE ROAD AS SHOWN AFTER EXCAVATING FOR RETAINING WALL CONSTRUCTION AND SHALL PROTECT NEW WALL UNTIL PROPOSED FRONTAGE ROAD IS CONSTRUCTED IN PHASE 2 - STEP 2.



NOTES:

1. SEE TEMPORARY SHORING SHEETS FOR MORE INFORMATION.
2. CHEVRONS TO BE INSTALLED ON EVERY OTHER DRUM ON LANE TRANSITIONS.
3. EXISTING ONE-WAY SIGNS ALONG EBFR SHALL REMAIN IN PLACE OR BE ERECTED ON TEMPORARY SUPPORTS THOUGHOUT CONSTRUCTION.

9 CHANGE ORDER NO. 9
SHEET REVISED

N

50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (LEVEL-UP)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
10/21/10

NO.	REVISION	BY	DATE
9	ADD FLUME, INLET	AJA	

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

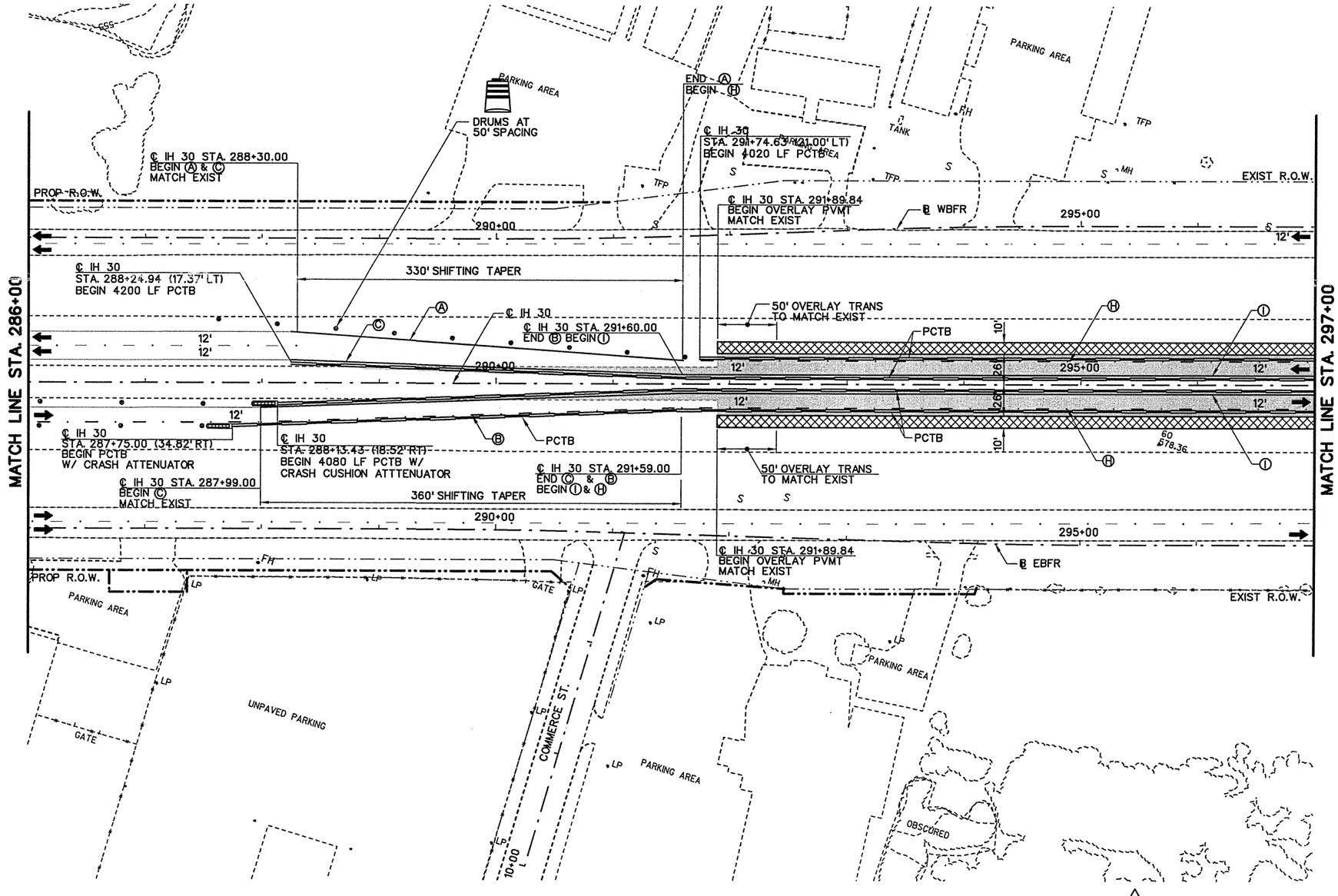
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IH 30 AT JOHN KING BLVD.
TRAFFIC CONTROL PLAN
PHASE 1 - STEP 2
STA. 286+00 TO STA. 297+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	3 of 9

SHEET 3 OF 9

10/21/2010 8:14:30 AM aadams
pw:/Active Projects/TX00643/TX00643-05/8.00 Plans and Drawings/8.30 Civil Sheets/8.3.03 TCP/TCP 1-2-4357YN1203.100



1 CHANGE ORDER NO. 1
ADDED NEW SHEET

50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (LEVEL-UP)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- H TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
6/30/10

NO.	REVISION	BY	DATE
1	ADD OVERLAY TO IH 30	GRB	

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

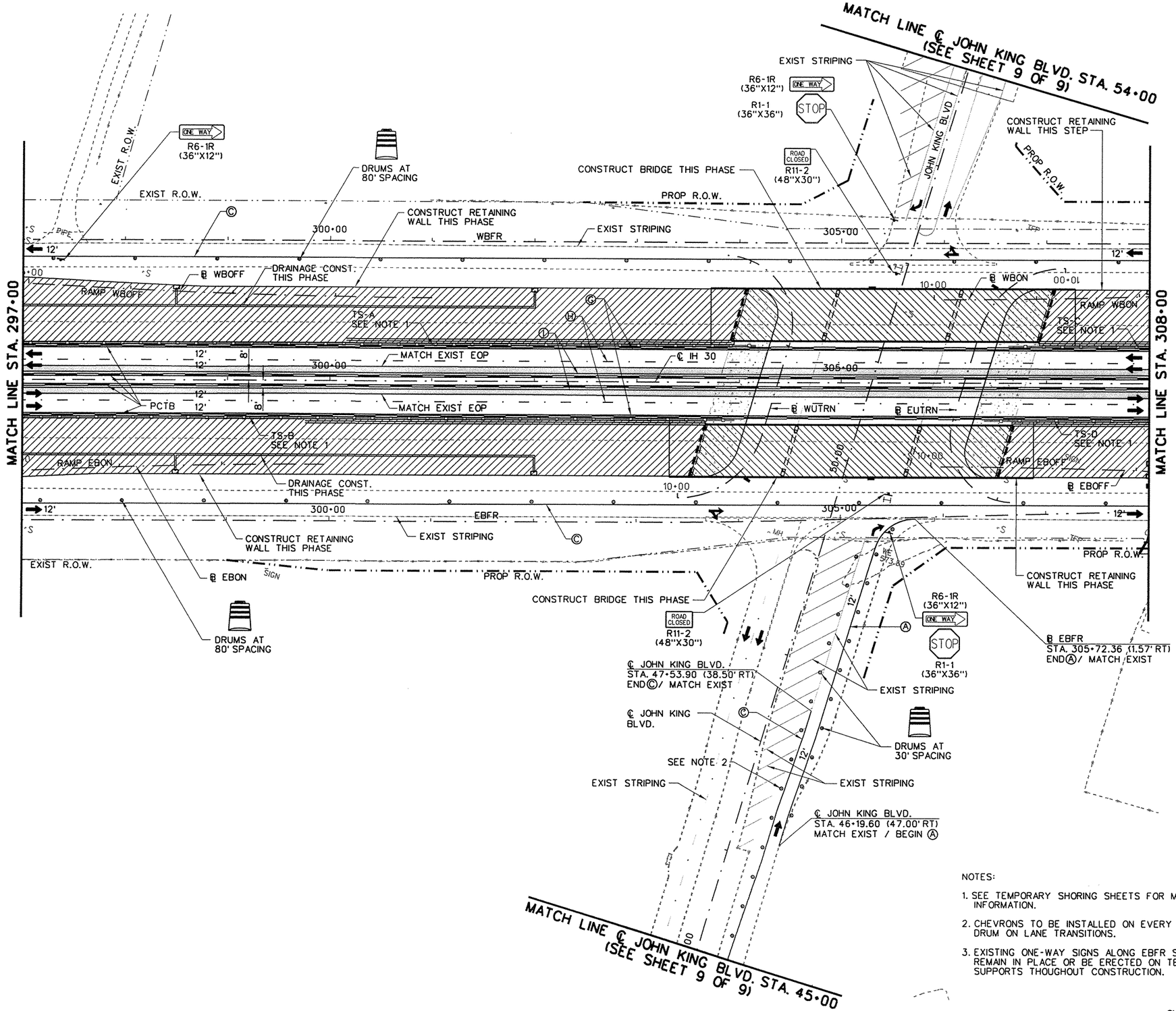
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IH 30 AT JOHN KING BLVD.
TRAFFIC CONTROL PLAN
PHASE 1 - STEP 1A
STA. 286+00 TO STA. 297+00

Designed	GRB	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked	RRH	DAL	ROCKWALL	0009	12	073	56A

SHEET 3 OF 8

6/30/2010 5:39:39 PM GBRANICK pw:\Active Projects\TXD0643\TXD0643-05\8.00 Plans and Drawings\8.30 Cut Sheets\8.3.03 TCP\TCP1-1A\435YYN11A03.100



N

50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

NOTES:

1. SEE TEMPORARY SHORING SHEETS FOR MORE INFORMATION.
2. CHEVRONS TO BE INSTALLED ON EVERY OTHER DRUM ON LANE TRANSITIONS.
3. EXISTING ONE-WAY SIGNS ALONG EBFR SHALL REMAIN IN PLACE OR BE ERECTED ON TEMPORARY SUPPORTS THOUGHOUT CONSTRUCTION.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

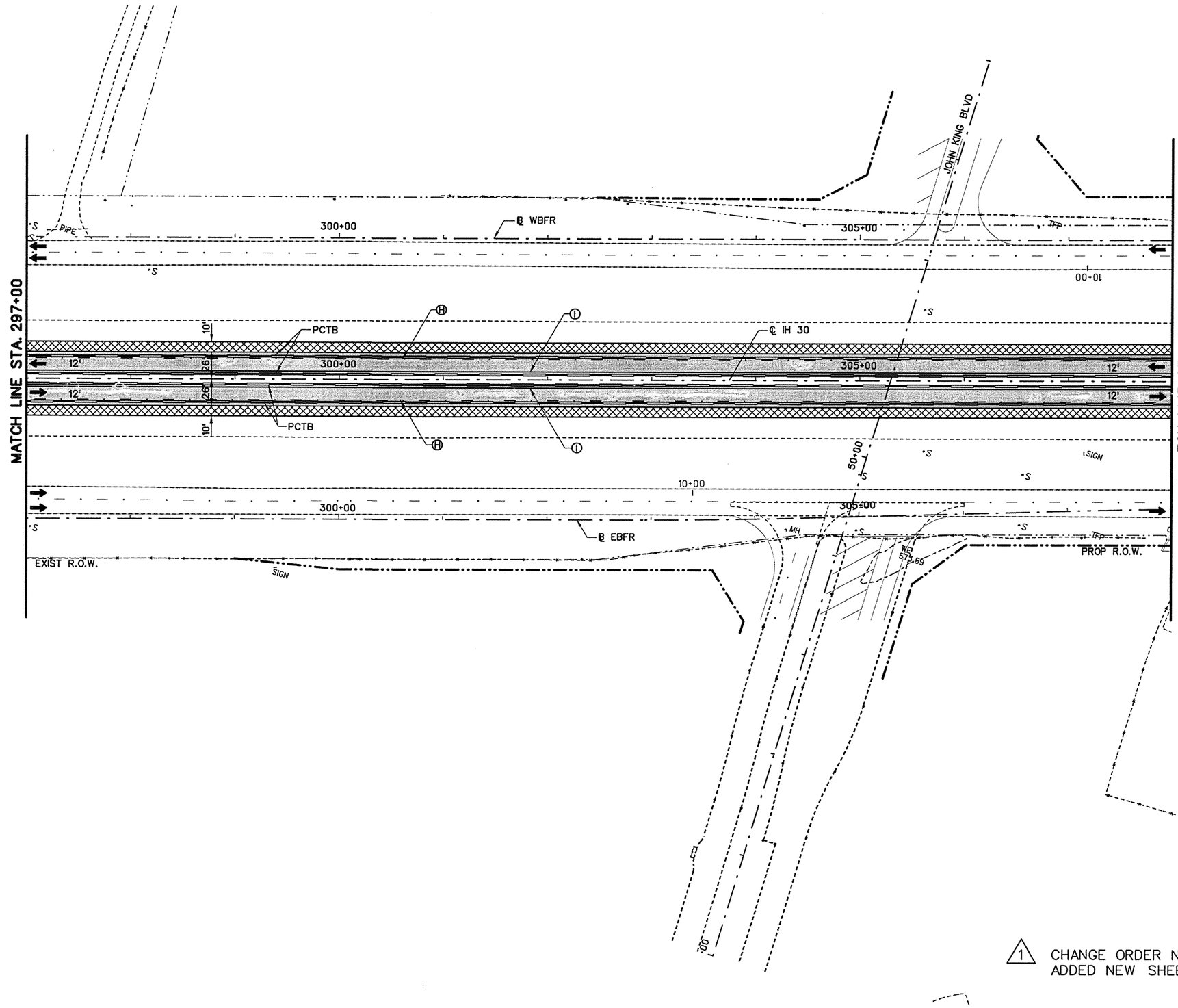
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IH 30 AT JOHN KING BLVD.
TRAFFIC CONTROL PLAN
PHASE 1 - STEP 2
STA. 297+00 TO STA. 308+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	57

SHEET 4 OF 9

2/6/2009 11:43:22 AM CBRANCK
Dwg: Active Projects/TXDOT643/TXDOT643 05/8.dgn Plans and Drawings/8.00 Cut Sheets/8.3.03 TCP/TCP - 2 (4SYMBOL2).dgn



N

50 25 0 50 100

SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (LEVEL-UP)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER

6/30/10

NO.	REVISION	BY	DATE
1	ADD OVERLAY TO IH 30	GRB	

1 CHANGE ORDER NO. 1
ADDED NEW SHEET

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

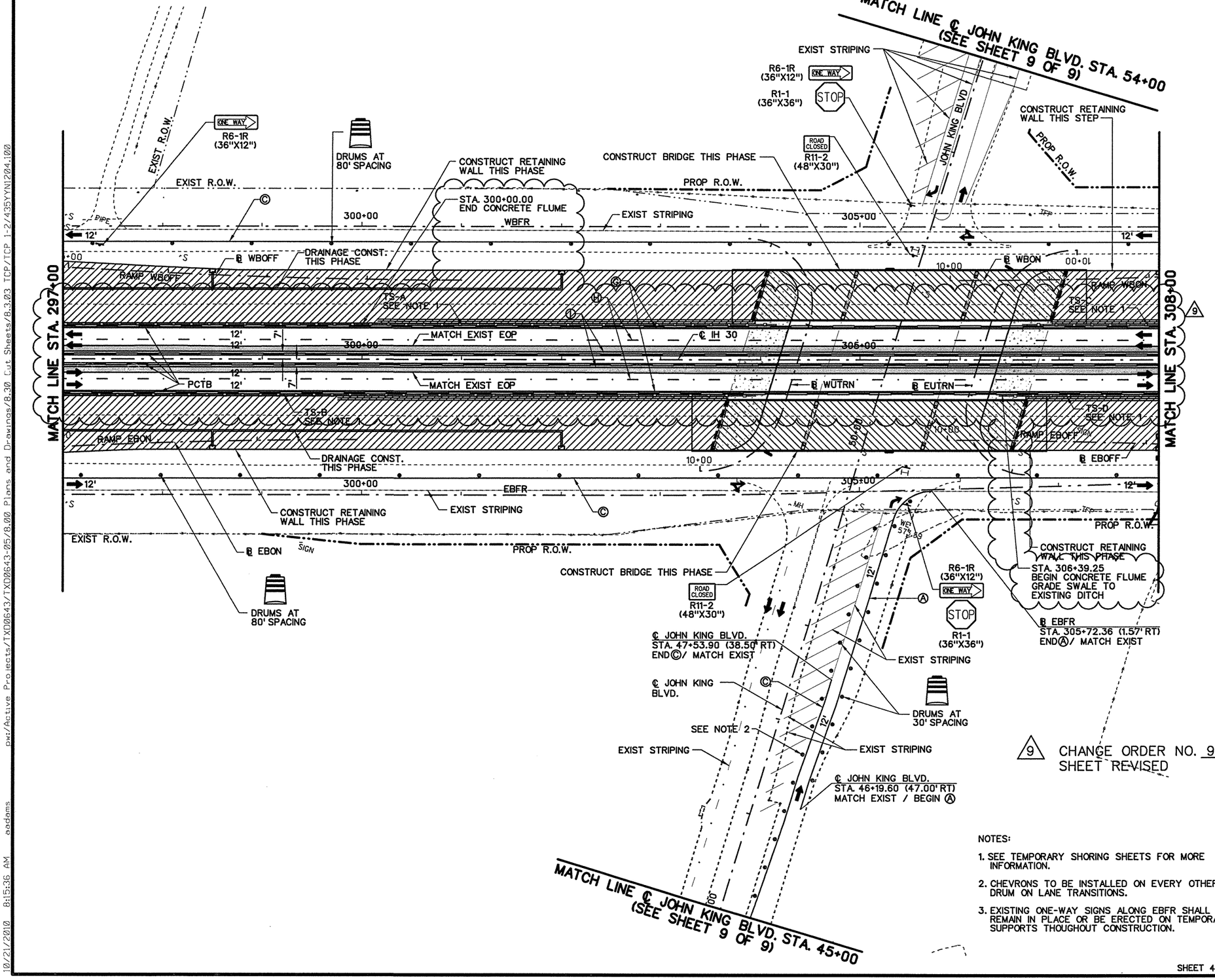
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IH 30 AT JOHN KING BLVD.
TRAFFIC CONTROL PLAN
PHASE 1 - STEP 1A
STA. 297+00 TO STA. 308+00

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	57A

SHEET 4 OF 8

6/30/2010 5:39:48 PM GBRANICK pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/TCP1-1A/435YYN11A004.100



N

50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (LEVEL-UP)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

9 CHANGE ORDER NO. 9
SHEET REVISED

NOTES:

1. SEE TEMPORARY SHORING SHEETS FOR MORE INFORMATION.
2. CHEVRONS TO BE INSTALLED ON EVERY OTHER DRUM ON LANE TRANSITIONS.
3. EXISTING ONE-WAY SIGNS ALONG EBFR SHALL REMAIN IN PLACE OR BE ERECTED ON TEMPORARY SUPPORTS THOUGHOUT CONSTRUCTION.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
10/21/10

NO.	REVISION	BY	DATE
9	ADD FLUME, INLET	AJA	

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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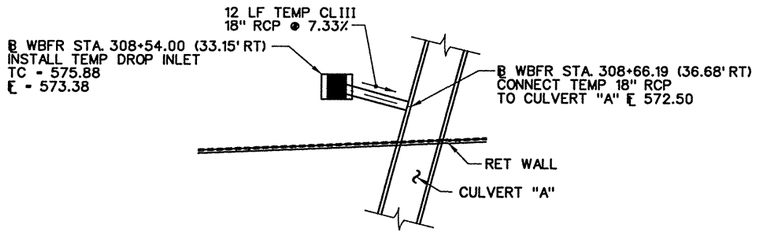
IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN
PHASE 1 - STEP 2
STA. 297+00 TO STA. 308+00

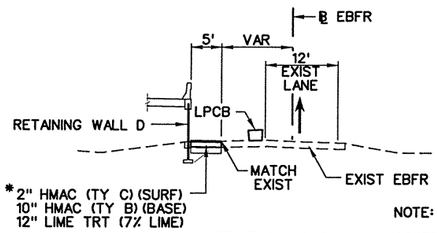
Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	57A

SHEET 4 OF 9

10/21/2010 8:15:36 AM aadams pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/TCP 1-2/435YYN1204.100



DETAIL "B"
N.T.S.

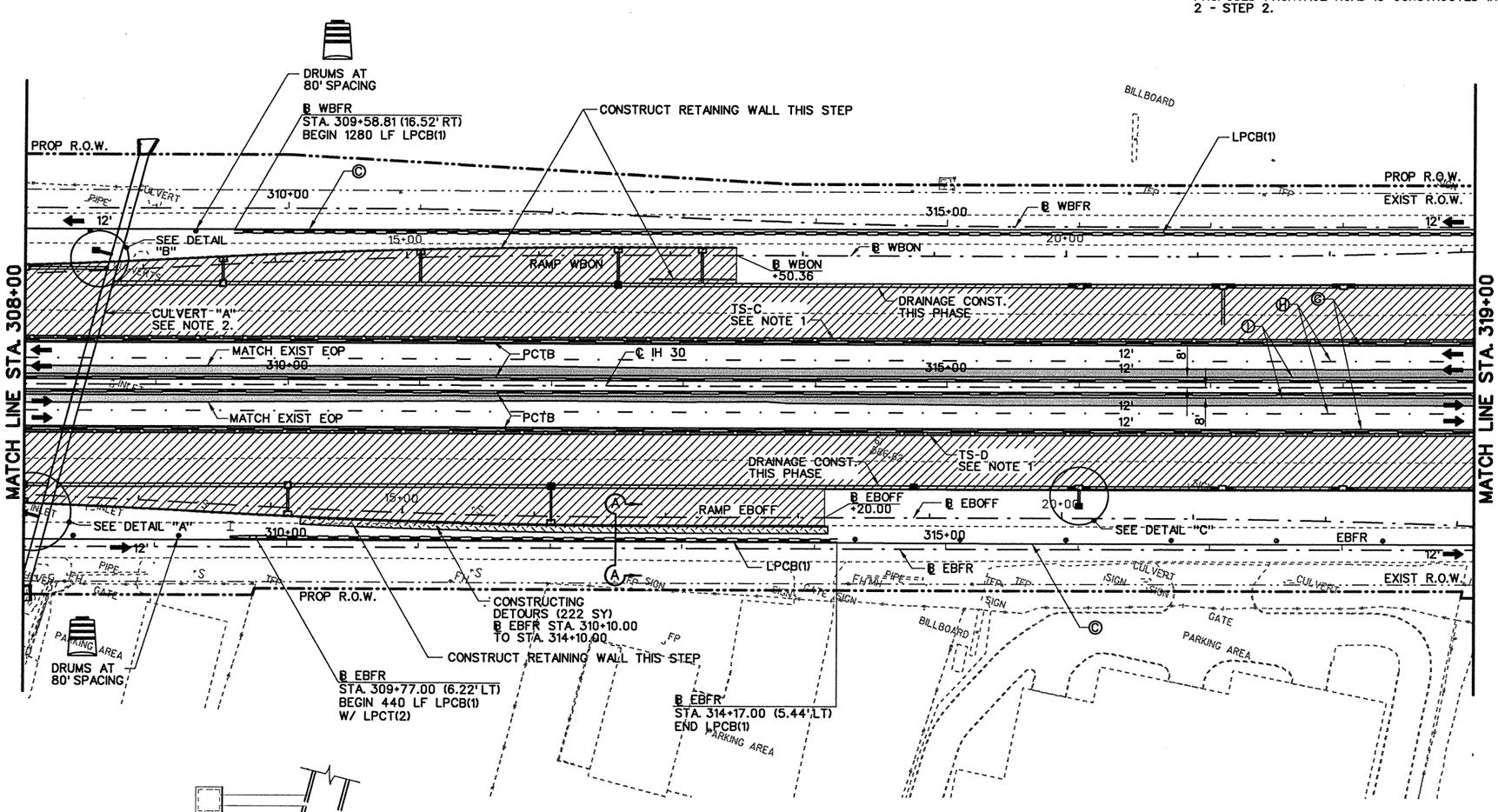


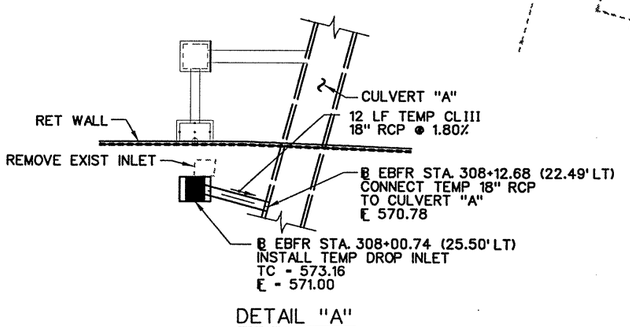
SECTION "A-A"
NTS

*FOR CONTRACTORS INFORMATION ONLY

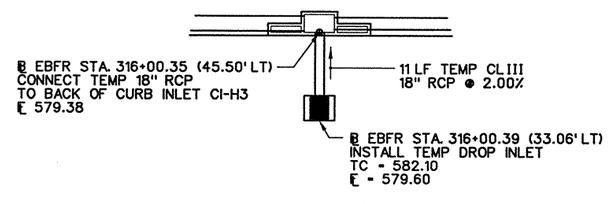
NOTE:

CONTRACTOR SHALL REPLACE EXISTING FRONTAGE ROAD AS SHOWN AFTER EXCAVATING FOR RETAINING WALL CONSTRUCTION AND SHALL PROTECT NEW WALL UNTIL PROPOSED FRONTAGE ROAD IS CONSTRUCTED IN PHASE 2 - STEP 2.





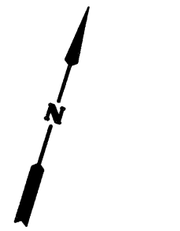
DETAIL "A"
N.T.S.



DETAIL "C"
N.T.S.

NOTES:

1. SEE TEMPORARY SHORING SHEETS FOR MORE INFORMATION.
2. SEE PHASE 1 - CULVERT "A" DETAIL SHEET FOR MORE INFORMATION.
3. EXISTING ONE-WAY SIGNS ALONG EBFR SHALL REMAIN IN PLACE OR BE ERECTED ON TEMPORARY SUPPORTS THOUGHOUT CONSTRUCTION.



50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
5/20/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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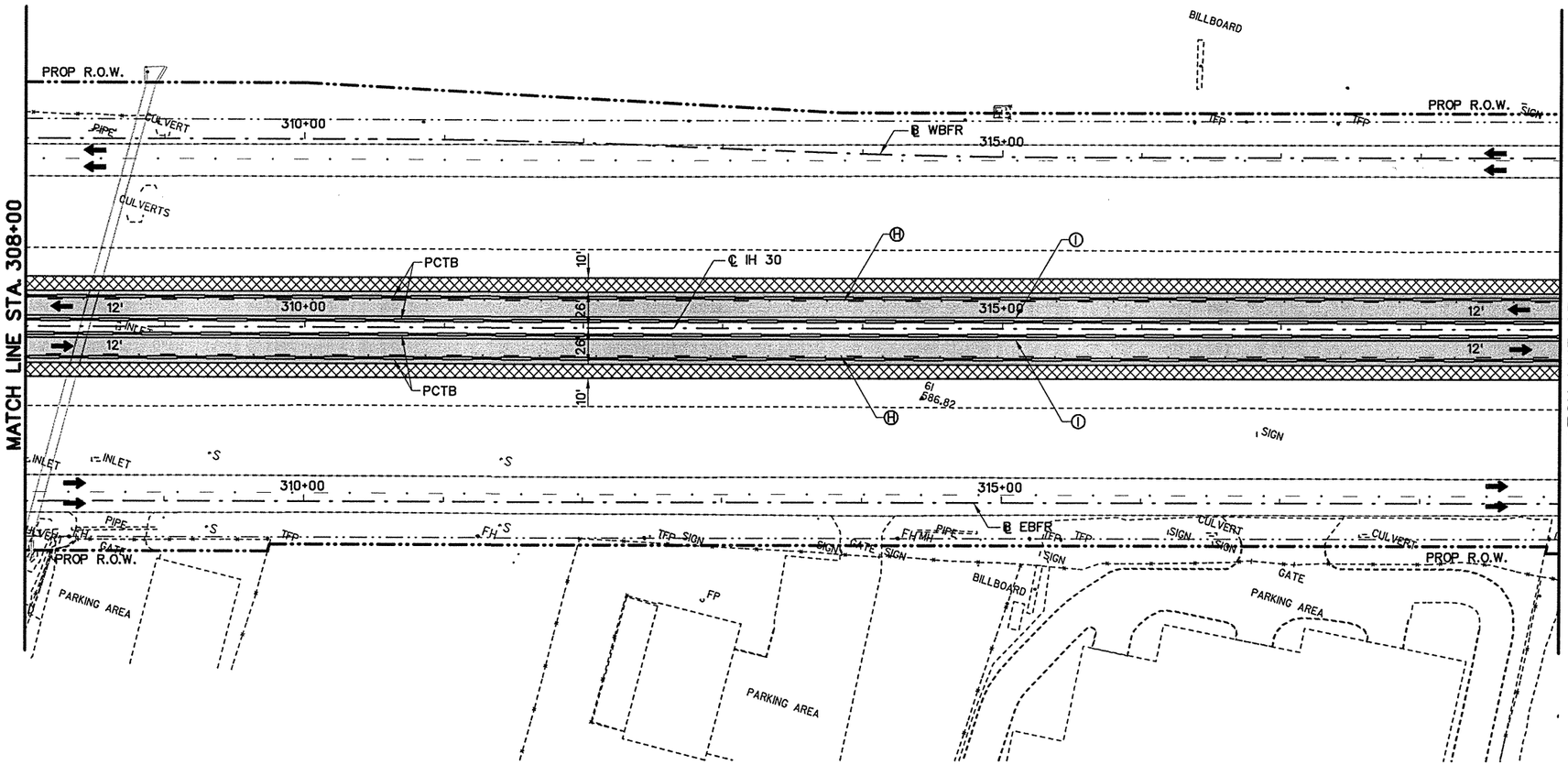
IH 30 AT JOHN KING BLVD.

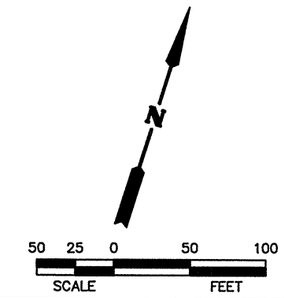
TRAFFIC CONTROL PLAN
PHASE 1 - STEP 2
STA. 308+00 TO STA. 319+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	58

SHEET 5 OF 9

5/18/2009 1:35:19 PM adams pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/TCP 1-2/435XYN1205.100





LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (LEVEL-UP)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER

6/30/10

NO.	REVISION	BY	DATE
1	ADD OVERLAY TO IH 30	GRB	

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Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

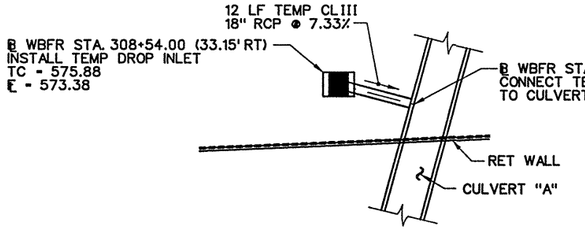
PHASE 1 - STEP 1A

STA. 308+00 TO STA. 319+00

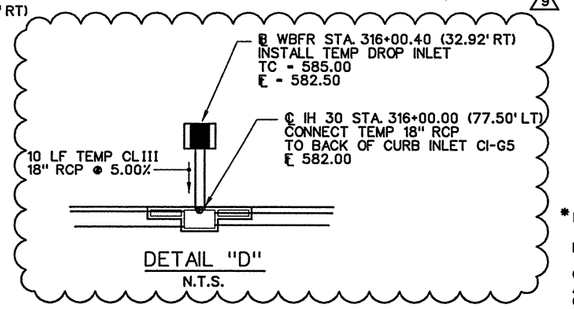
Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	5B A

1 CHANGE ORDER NO. 1
ADDED NEW SHEET

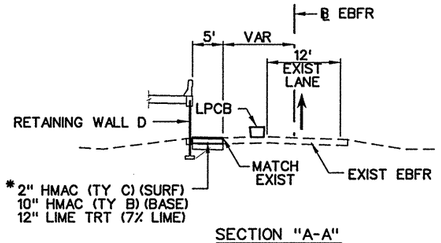
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DETAIL "B"
N.T.S.



DETAIL "D"
N.T.S.

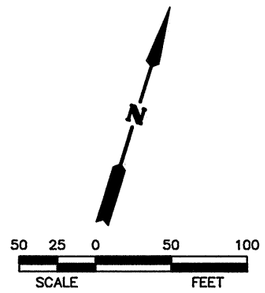


SECTION "A-A"
NTS

*FOR CONTRACTORS INFORMATION ONLY

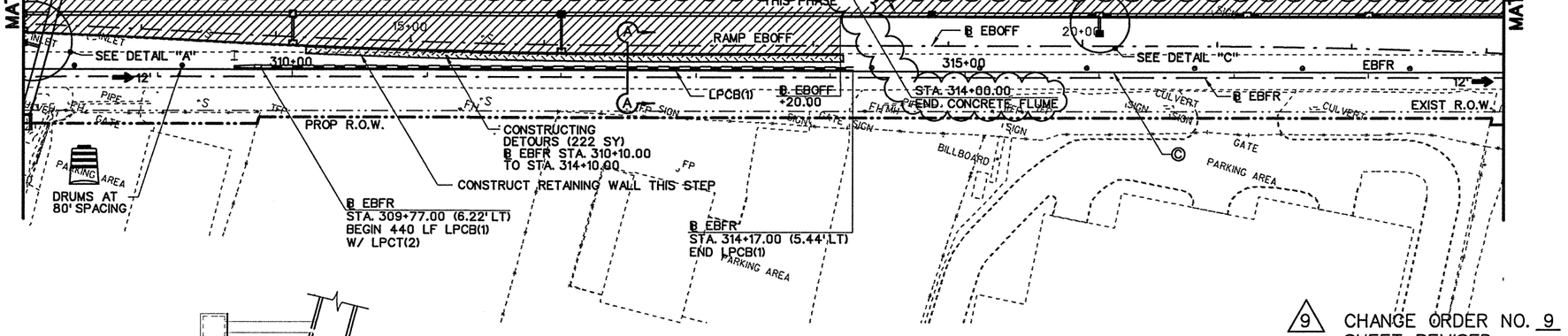
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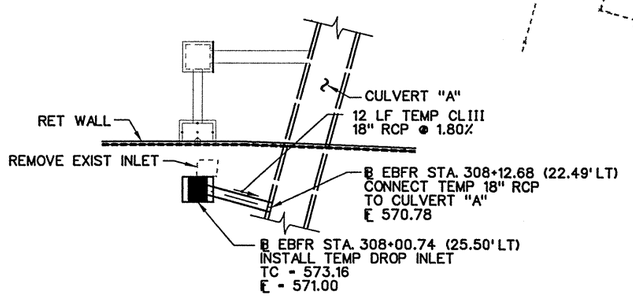
CONTRACTOR SHALL REPLACE EXISTING FRONTAGE ROAD AS SHOWN AFTER EXCAVATING FOR RETAINING WALL CONSTRUCTION AND SHALL PROTECT NEW WALL UNTIL PROPOSED FRONTAGE ROAD IS CONSTRUCTED IN PHASE 2 - STEP 2.



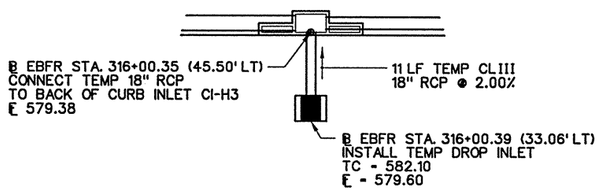
LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (LEVEL-UP)
- (A) WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- (B) WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- (C) WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- (D) WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- (E) WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- (F) WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- (G) WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- (H) WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- (I) WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- (K) WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- (L) WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- (M) RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- (N) RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- (O) PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING





DETAIL "A"
N.T.S.



DETAIL "C"
N.T.S.

9 CHANGE ORDER NO. 9
SHEET REVISED

NOTES:

1. SEE TEMPORARY SHORING SHEETS FOR MORE INFORMATION.
2. SEE PHASE 1 - CULVERT "A" DETAIL SHEET FOR MORE INFORMATION.
3. EXISTING ONE-WAY SIGNS ALONG EBFR SHALL REMAIN IN PLACE OR BE ERECTED ON TEMPORARY SUPPORTS THOUGHOUT CONSTRUCTION.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
10/21/10

NO.	REVISION	BY	DATE
9	ADD FLUME, INLET	AJA	

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Firm Registration Number: 1741

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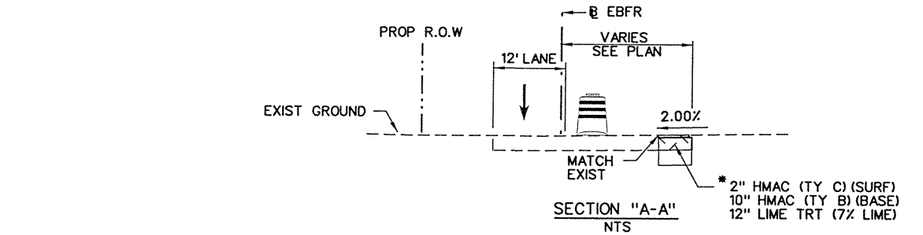
IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN
PHASE 1 - STEP 2
STA. 308+00 TO STA. 319+00

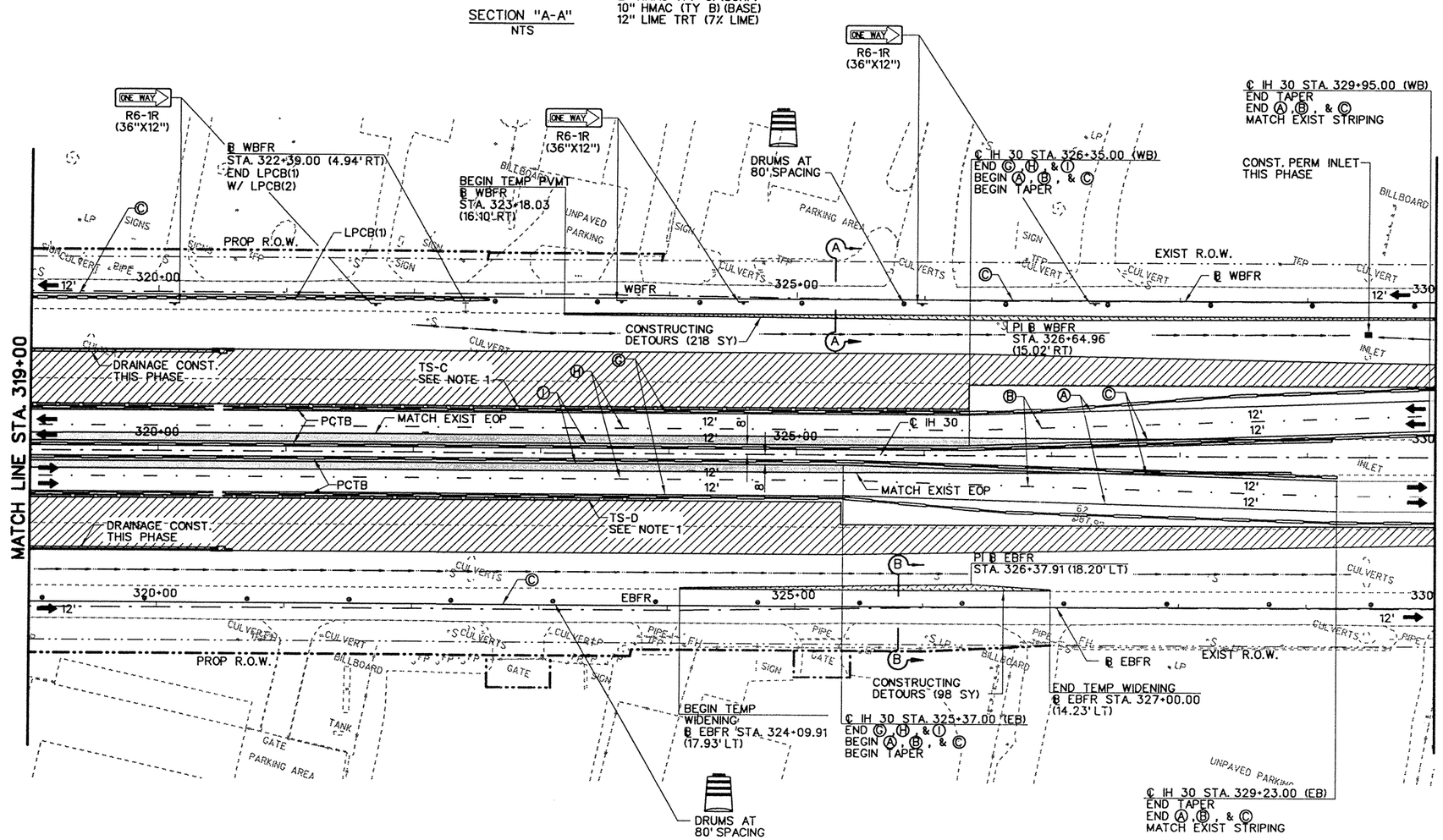
Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073		594

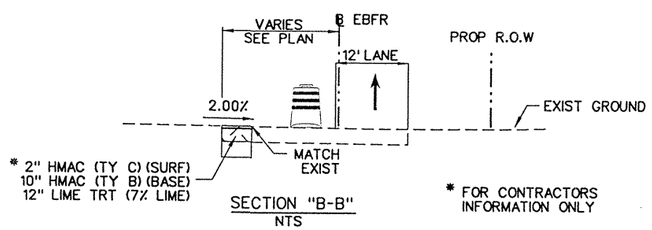
SHEET 5 OF 9

10/21/2010 8:16:49 AM aadams pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/TCP 1-2-435YYN1205.100



SECTION "A-A"
NTS



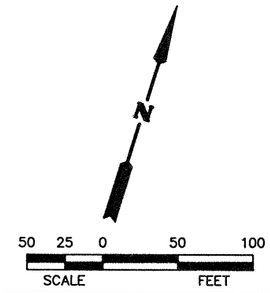


SECTION "B-B"
NTS

* FOR CONTRACTORS INFORMATION ONLY

NOTES:

1. SEE TEMPORARY SHORING SHEETS FOR MORE INFORMATION.
2. EXISTING ONE-WAY SIGNS ALONG EBFR SHALL REMAIN IN PLACE OR BE ERECTED ON TEMPORARY SUPPORTS THOUGHOUT CONSTRUCTION.



LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
5/20/09

NO.	REVISION	BY	DATE

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Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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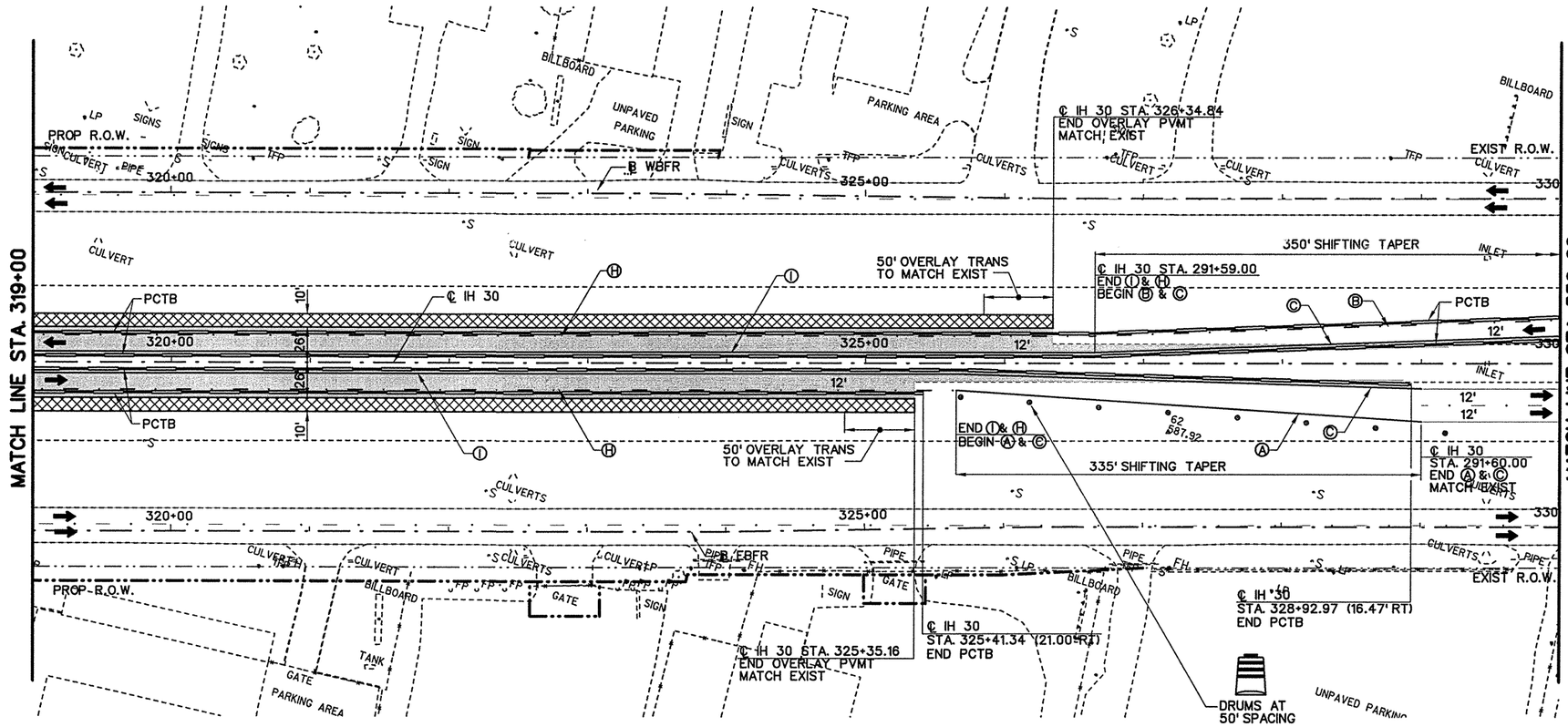
IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN
PHASE 1 - STEP 2
STA. 319+00 TO STA. 330+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	59

SHEET 6 OF 9

5/18/2009 1:35:26 PM adams pw:/Active Projects/TX00643/TX00643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/TCP 1-2-4&5YYN1206.100



N

50 25 0 50 100

SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (LEVEL-UP)
- (A) WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- (B) WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- (C) WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- (D) WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- (E) WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- (F) WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- (G) WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- (H) WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- (I) WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- (K) WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- (L) WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- (M) RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- (N) RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- (O) PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
6/30/10

NO.	REVISION	BY	DATE
1	ADD OVERLAY TO IH 30	GRB	

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

PHASE 1 - STEP 1A

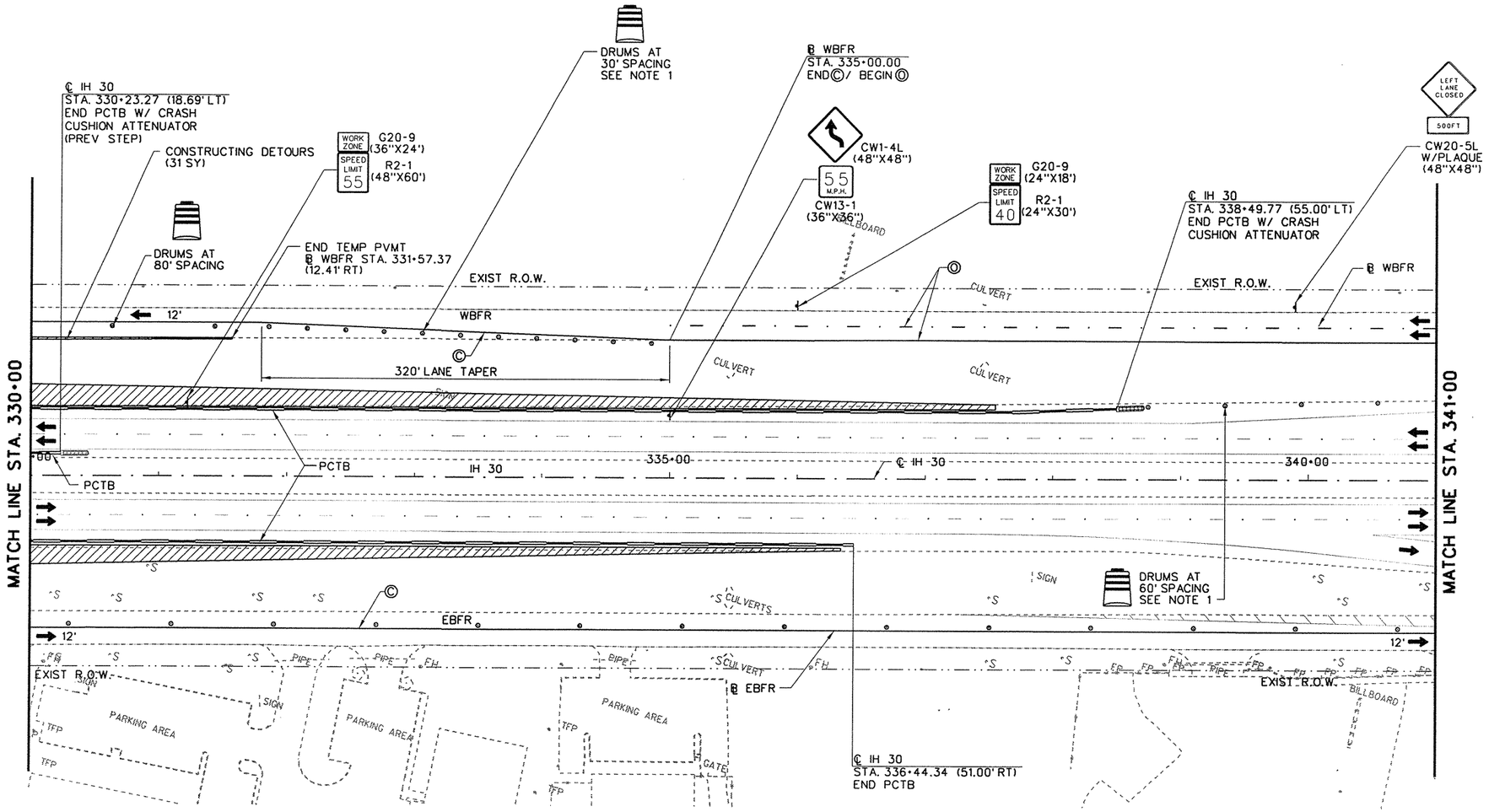
STA. 319+00 TO STA. 330+00

Designed: GRB	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	59A

1 CHANGE ORDER NO. 1
ADDED NEW SHEET

SHEET 6 OF 8

6/30/2010 5:40:00 PM GBRANICK pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/TCP1-1A/435YYN11A05.100



NOTE:

1. CHEVRONS TO BE INSTALLED ON EVERY OTHER DRUM ON LANE TRANSITIONS.
2. EXISTING ONE-WAY SIGNS ALONG EBFR SHALL REMAIN IN PLACE OR BE ERECTED ON TEMPORARY SUPPORTS THOUGHOUT CONSTRUCTION.

N

50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
2/9/01

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

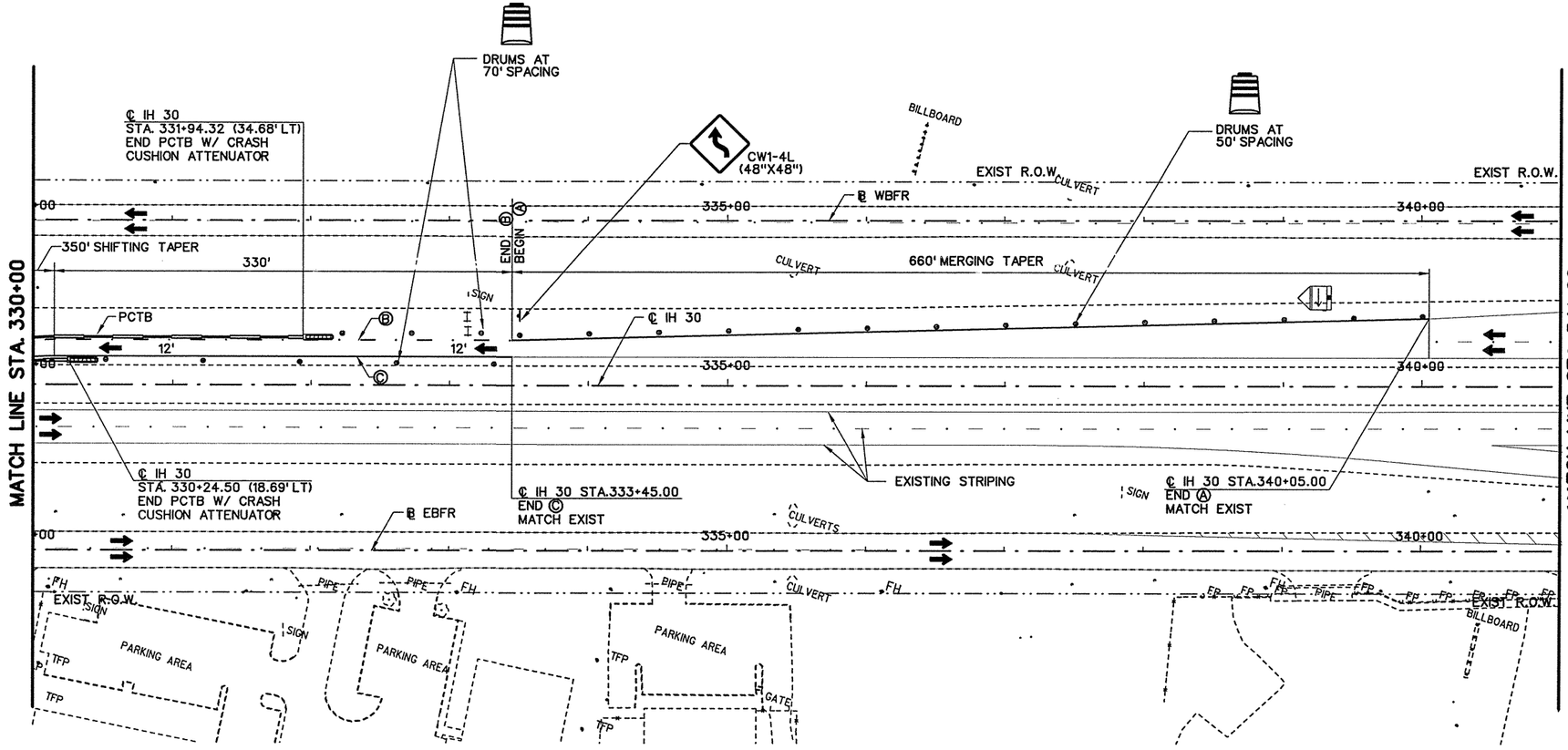
PHASE 1 - STEP 2

STA. 330+00 TO STA. 341+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073		60

SHEET 7 OF 9

2/9/2001 1:49:23 PM jay:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/TCP 1-2/435YYN1207.100



N

50 25 0 50 100

SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (LEVEL-UP)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
6/30/10

NO.	REVISION	BY	DATE
1	ADD OVERLAY TO IH 30	GRB	

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

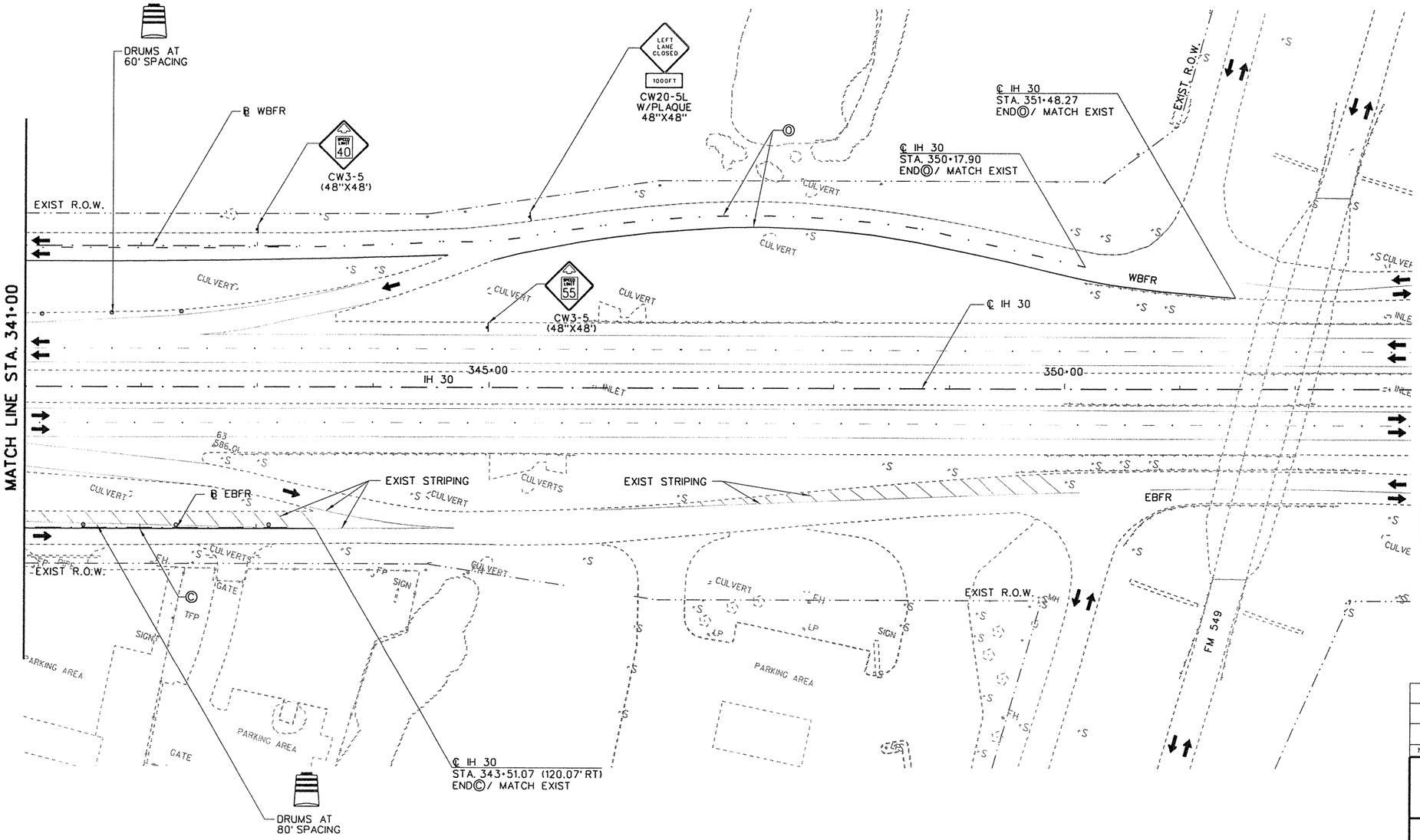
TRAFFIC CONTROL PLAN
PHASE 1 - STEP 1A
STA. 330+00 TO STA. 341+00

Designed:	GRB	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073		60A

1 CHANGE ORDER NO. 1
ADDED NEW SHEET

SHEET 7 OF 8

6/30/2010 5:40:06 PM GBRANICK pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/TCP1-1A/435YYN11A07.100



LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER

2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

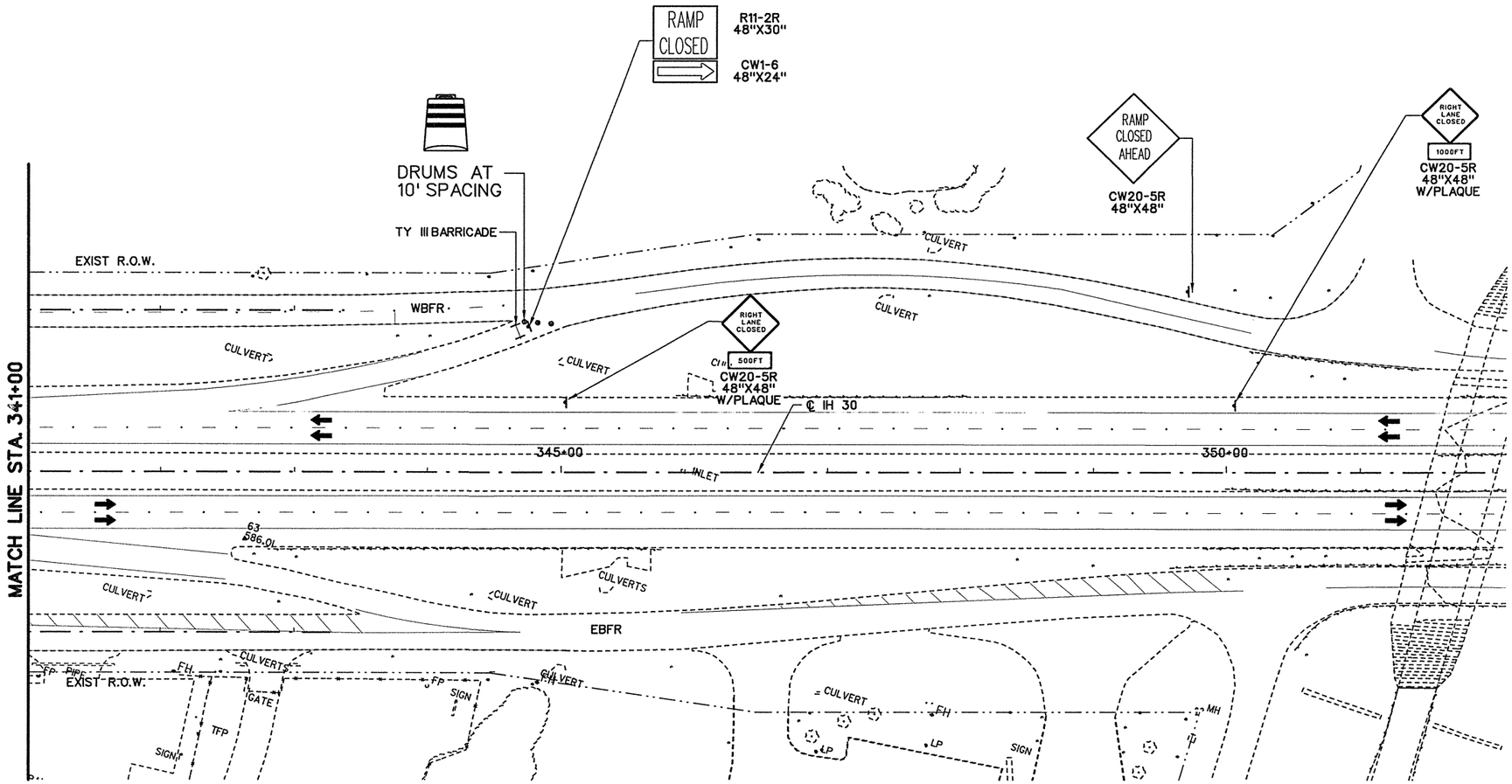
TRAFFIC CONTROL PLAN

PHASE 1 - STEP 2

STA. 341+00 TO END PHASE

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073		61

2/6/2009 4:32:49 PM ESTANICK ok/Active Projects/TXDOT643/TXD643 05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/TCP 1-2-435YYN1208.120



N

50 25 0 50 100

SCALE FEET

LEGEND	
	PROPOSED CONSTRUCTION THIS STEP
	PROPOSED CONSTRUCTION PREVIOUS STEPS
	TEMPORARY PAVEMENT THIS STEP
	TEMPORARY PAVEMENT PREVIOUS STEPS
	HOT MIX (LEVEL-UP)
Ⓐ	WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
Ⓑ	WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
Ⓒ	WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
Ⓓ	WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
Ⓔ	WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
Ⓕ	WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
Ⓖ	WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
Ⓗ	WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
Ⓘ	WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
Ⓚ	WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
Ⓛ	WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
Ⓜ	RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
Ⓝ	RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
Ⓞ	PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
	TY III BARRICADE
	SIGN POST
	TRAILER MOUNTED FLASHING ARROW PANEL
	PCTB
	LPCB(1)
	CHANNELIZING DEVICES
	TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER

6/30/10

NO.	REVISION	BY	DATE
1	ADD OVERLAY TO IH 30	GRB	

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Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

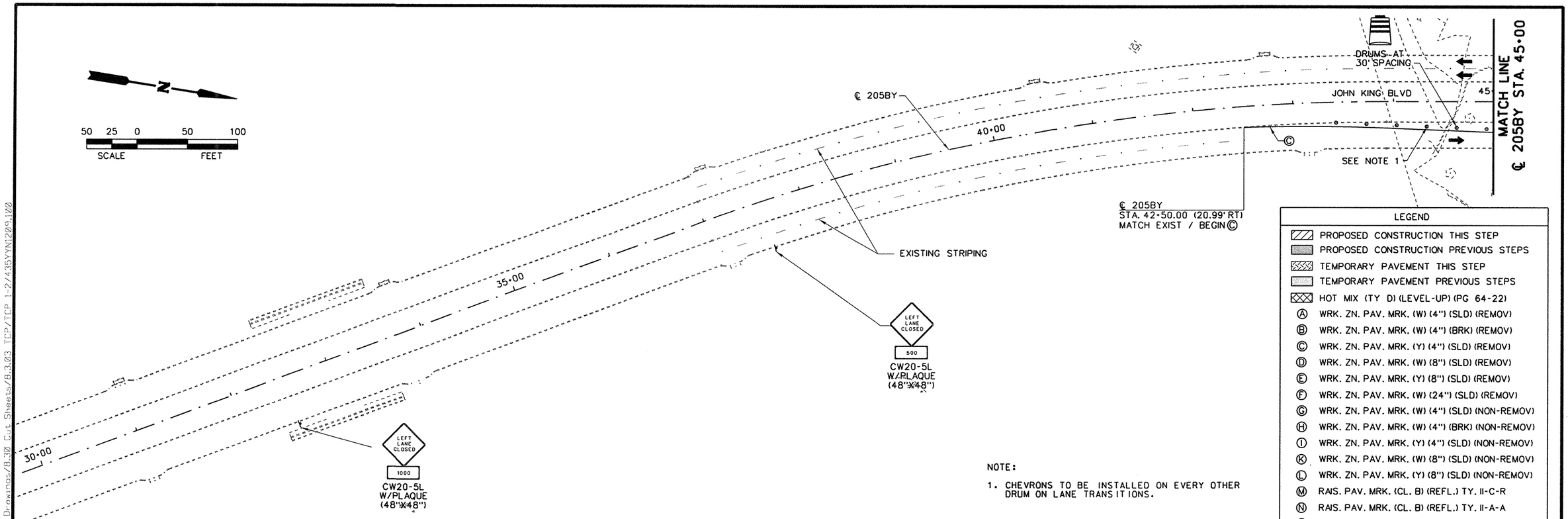
PHASE 1 - STEP 1A

STA. 341+00 TO END

Designed:	GRB	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	61A

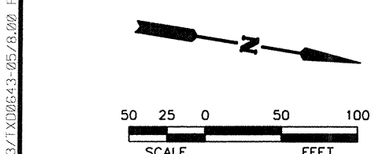
1 CHANGE ORDER NO. 1
ADDED NEW SHEET

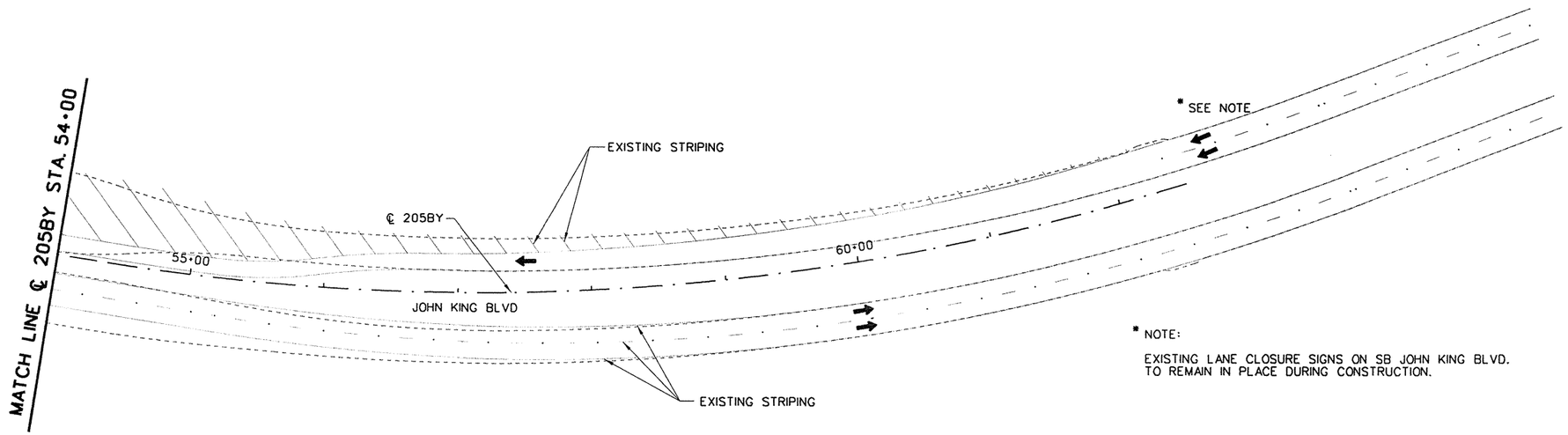
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NOTE:

1. CHEVRONS TO BE INSTALLED ON EVERY OTHER DRUM ON LANE TRANSITIONS.





* NOTE:

EXISTING LANE CLOSURE SIGNS ON SB JOHN KING BLVD. TO REMAIN IN PLACE DURING CONSTRUCTION.

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER

2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

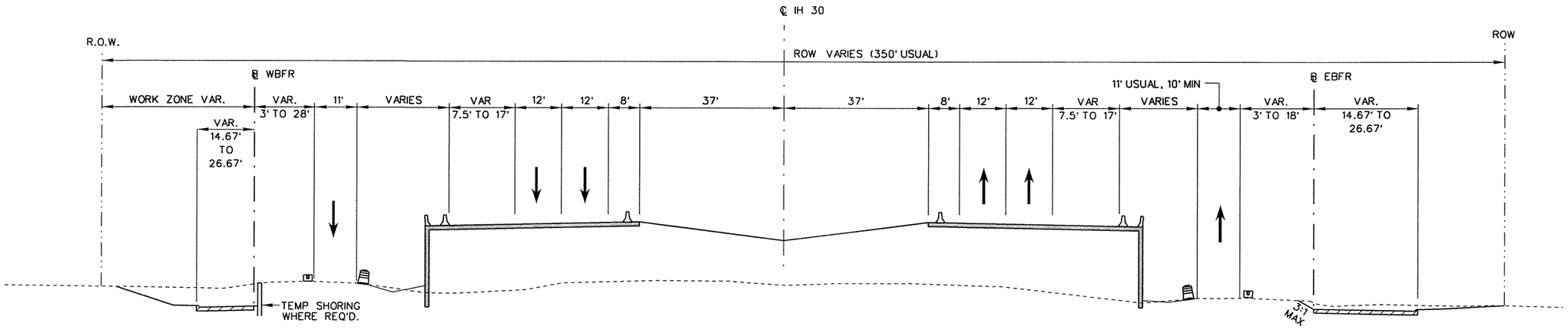
TRAFFIC CONTROL PLAN
PHASE 1 - STEP 2
JOHN KING BLVD

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073		62

SHEET 9 OF 9

2/6/2009 11:43:46 AM GRIFFINEK pw:Active Projects:TXDOT0643:TXDOT0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/TCP 1-2/435YYN1209.100

LEGEND
CONSTRUCTION THIS PHASE
CONSTRUCTION PREVIOUS PHASE
PCTB
LPCB(1)
PLASTIC DRUM



PHASE 2 - STEP 1

N.T.S.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER

2/9/09

NO.	REVISION	BY	DATE

CP&Y

Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

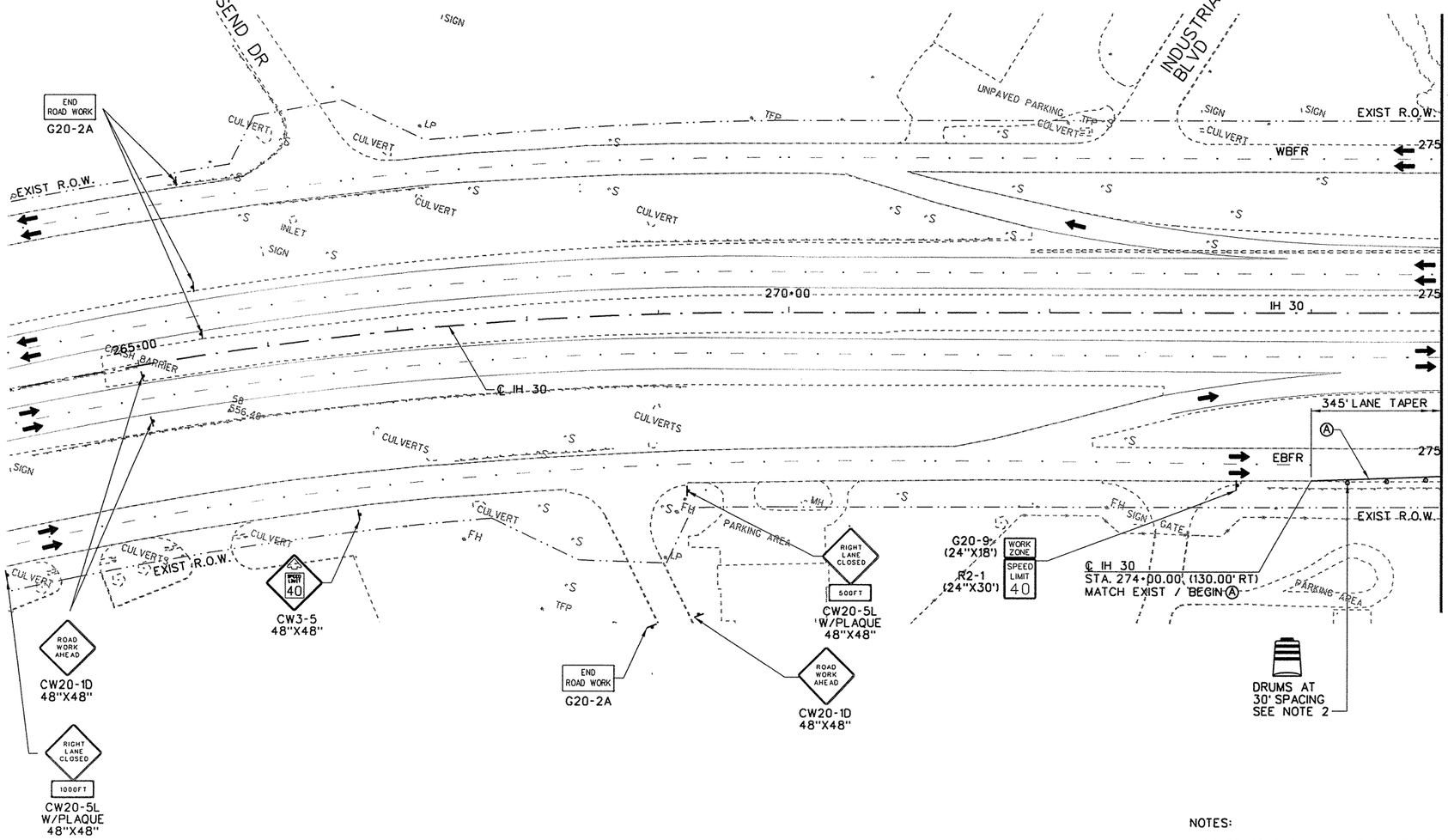
TYPICAL SECTIONS

PHASE 2 - STEP 1

Designed:	GRB	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	63

SHEET 1 OF 1

2/9/2009 11:49:48 AM bswilbanks
bsw/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/GENERAL/435YT02 1.dgn



N

50 25 0 50 100

SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER

2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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NOTES:

1. CONTRACTOR SHALL HAVE PLACED PERMANENT IH-30 MAINLANE SIGNING PRIOR TO CONSTRUCTION OF THIS PHASE.
2. CHEVRONS TO BE INSTALLED ON EVERY OTHER DRUM ON LANE TRANSITIONS.

IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

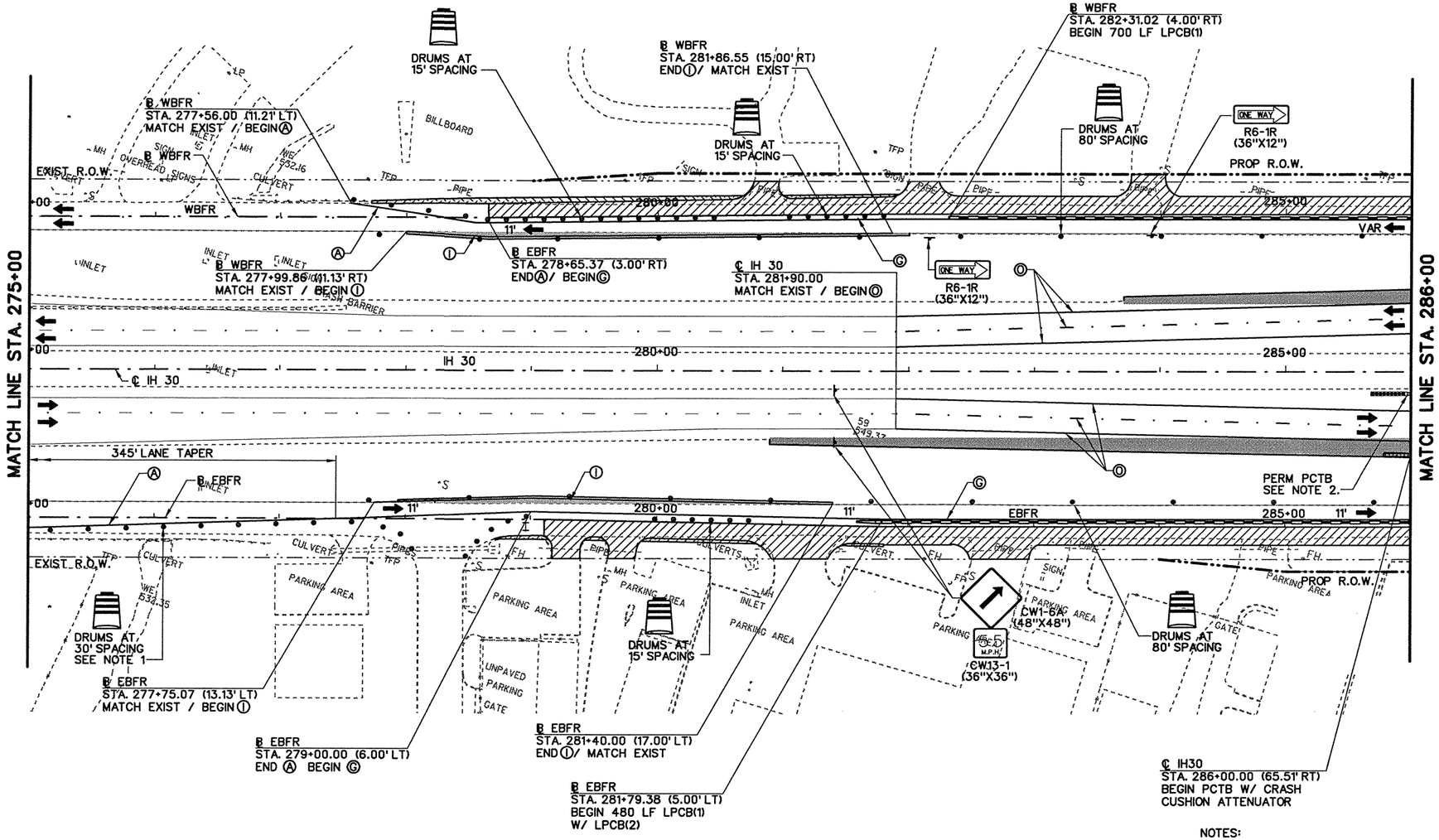
PHASE 2 - STEP 1

BEGIN PHASE TO STA. 275+00

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	64

SHEET 1 OF 7

2/6/2009 12:41:32 PM GRANICK
ext/Active Projects/TX006643/TX006643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/TCP 2-1/435YYN2101.100



N

50 25 0 50 100

SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

NOTES:

1. CHEVRONS TO BE INSTALLED ON EVERY OTHER DRUM ON LANE TRANSITIONS.
2. PERMANENT TRAFFIC BARRIER W/ ATTENUATOR PLACED THIS STEP. SEE PLAN AND PROFILE SHEETS FOR MORE INFORMATION.
3. EXISTING ONE-WAY SIGNS ALONG EBFR SHALL REMAIN IN PLACE OR BE ERECTED ON TEMPORARY SUPPORTS THROUGHOUT CONSTRUCTION.
4. CONTRACTOR TO PHASE CONSTRUCT DRIVEWAYS AND MAINTAIN ACCESS TO ALL PROPERTIES THROUGHOUT CONSTRUCTION.

SHEET 2 OF 7

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
5/20/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

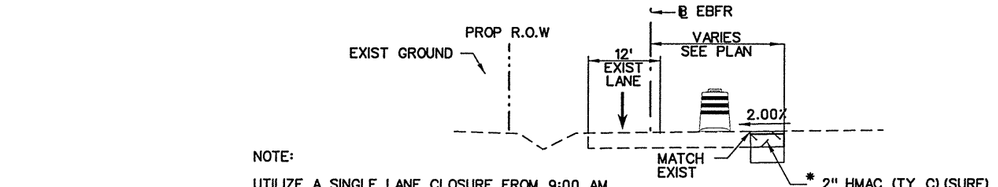
TRAFFIC CONTROL PLAN

PHASE 2 - STEP 1

STA. 275+00 TO STA. 286+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	65

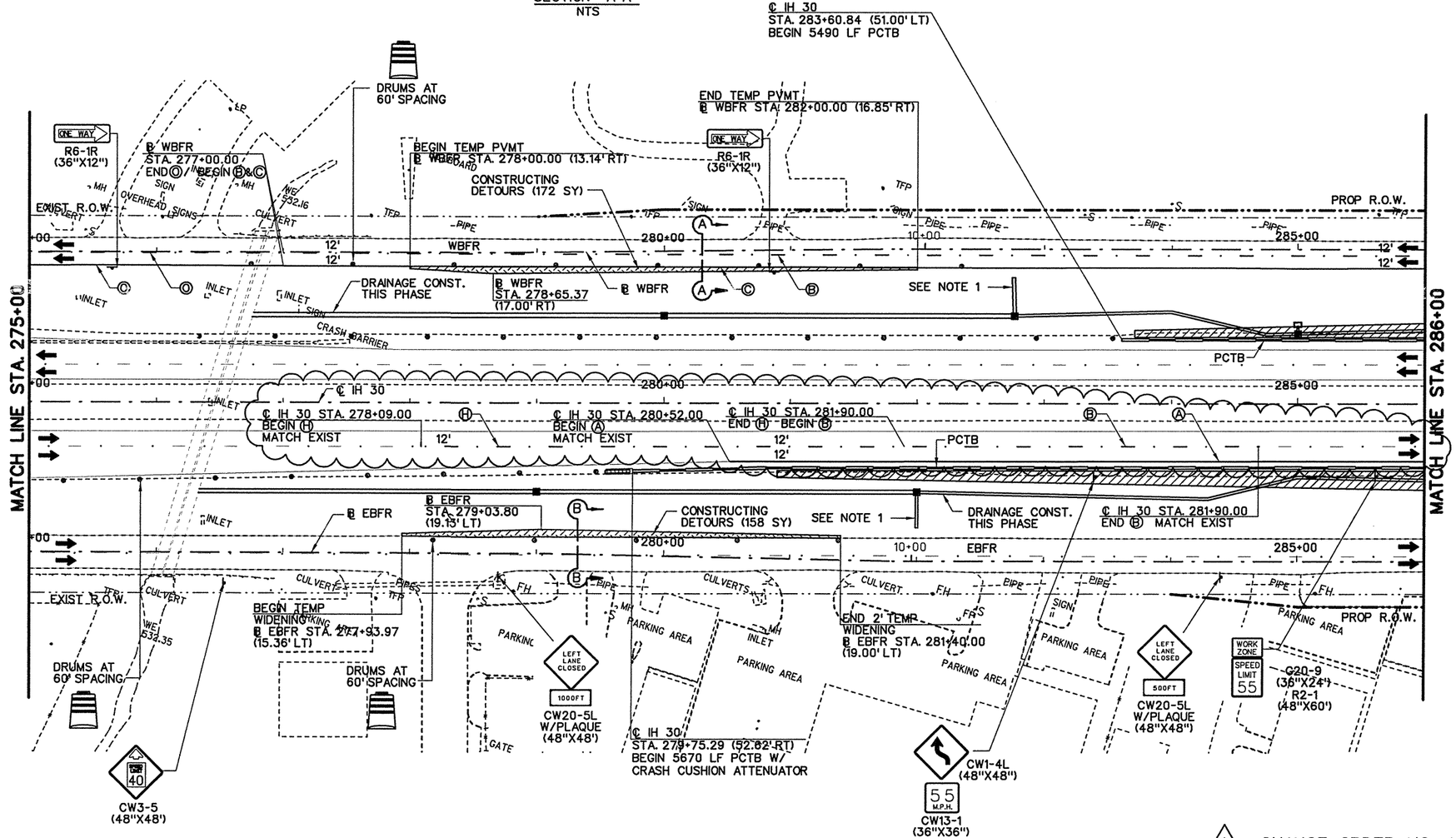
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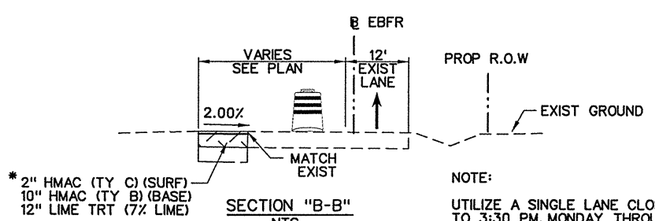


NOTE:

UTILIZE A SINGLE LANE CLOSURE FROM 9:00 AM TO 3:30 PM, MONDAY THROUGH THURSDAY, AS NEEDED TO CONSTRUCT DETOUR PAVEMENT. SEE STANDARD TCP (2-6)-98 FOR DETAILS.

SECTION "A-A"
NTS





SECTION "B-B"
NTS

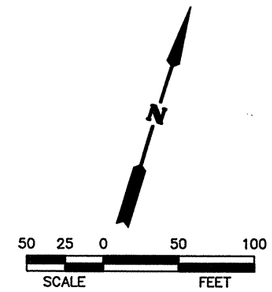
NOTE:

UTILIZE A SINGLE LANE CLOSURE FROM 9:00 AM TO 3:30 PM, MONDAY THROUGH THURSDAY, AS NEEDED TO CONSTRUCT DETOUR PAVEMENT. SEE STANDARD TCP (2-6)-98 FOR DETAILS.

1 CHANGE ORDER NO. 1
REVISED SHEET

NOTES:

1. COMPLETE PIPE TO LIMITS SHOWN THIS PHASE AND PLUG, COMPLETE PIPE AND INLET IN IN PHASE 2 - STEP 1.
2. EXISTING ONE-WAY SIGNS ALONG EBFR SHALL REMAIN IN PLACE OR BE ERECTED ON TEMPORARY SUPPORTS THROUGHOUT CONSTRUCTION.



LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (LEVEL-UP)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING



NO.	REVISION	BY	DATE
1	ADD OVERLAY TO IH 30	GRB	

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

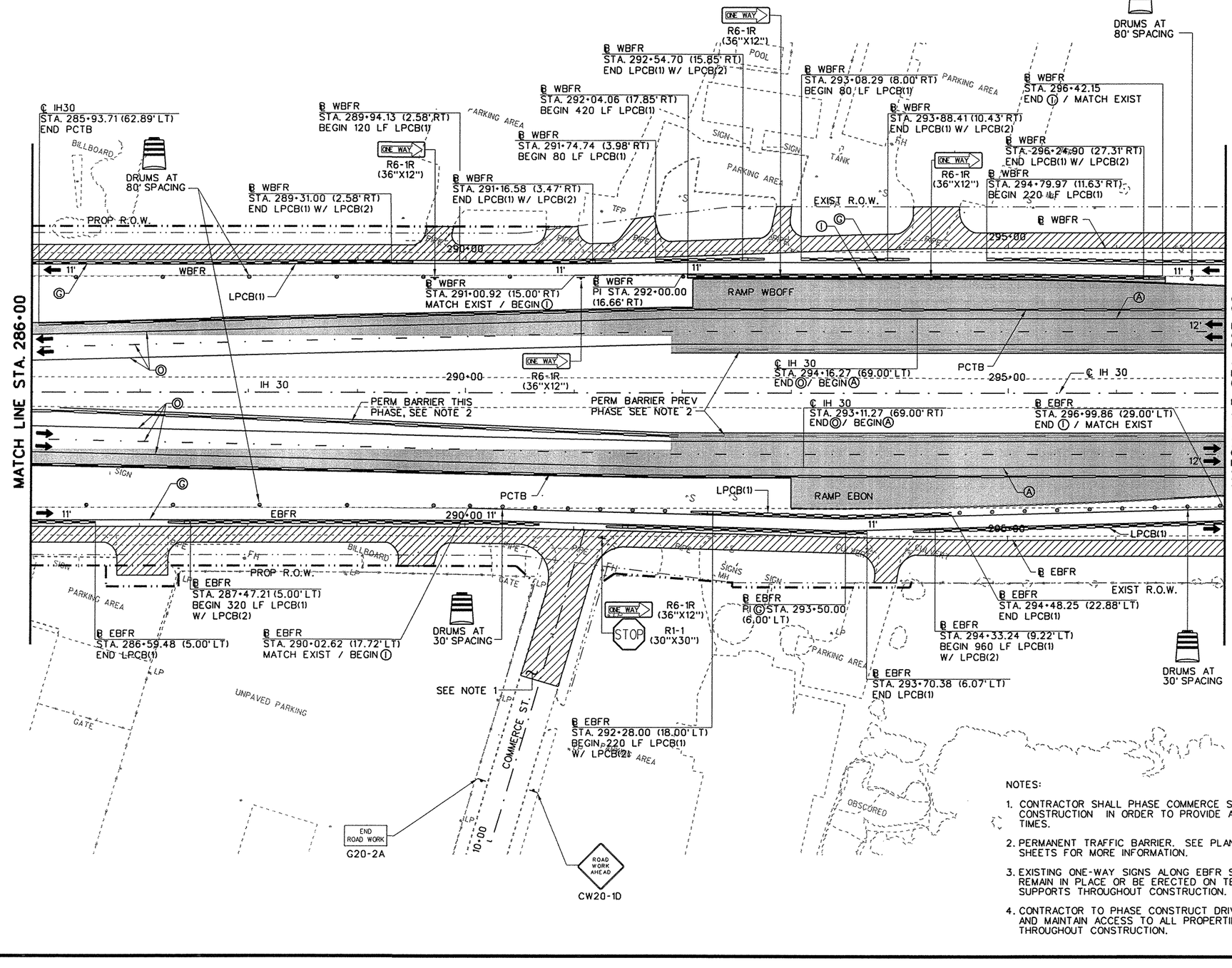
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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN
PHASE 1 - STEP 2
STA. 275+00 TO STA. 286+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	45A

6/30/2010 5:40:19 PM GBRANICK pw:/Active Projects/TX00643/TX00643-05/8.00 Plans and Drawings/8.30 (1 t Sheets/8.3.03 TCP/TCP 1-2-435YYN1202.100



N

50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

NOTES:

1. CONTRACTOR SHALL PHASE COMMERCE STREET CONSTRUCTION IN ORDER TO PROVIDE ACCESS AT ALL TIMES.
2. PERMANENT TRAFFIC BARRIER. SEE PLAN AND PROFILE SHEETS FOR MORE INFORMATION.
3. EXISTING ONE-WAY SIGNS ALONG EBFR SHALL REMAIN IN PLACE OR BE ERECTED ON TEMPORARY SUPPORTS THROUGHOUT CONSTRUCTION.
4. CONTRACTOR TO PHASE CONSTRUCT DRIVEWAYS AND MAINTAIN ACCESS TO ALL PROPERTIES THROUGHOUT CONSTRUCTION.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

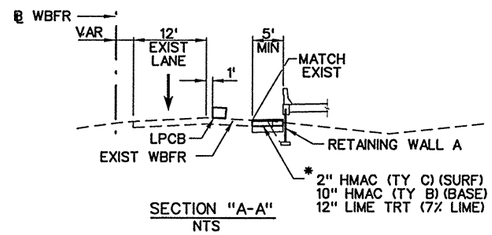
TRAFFIC CONTROL PLAN

PHASE 2 - STEP 1

STA. 286+00 TO STA. 297+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	66

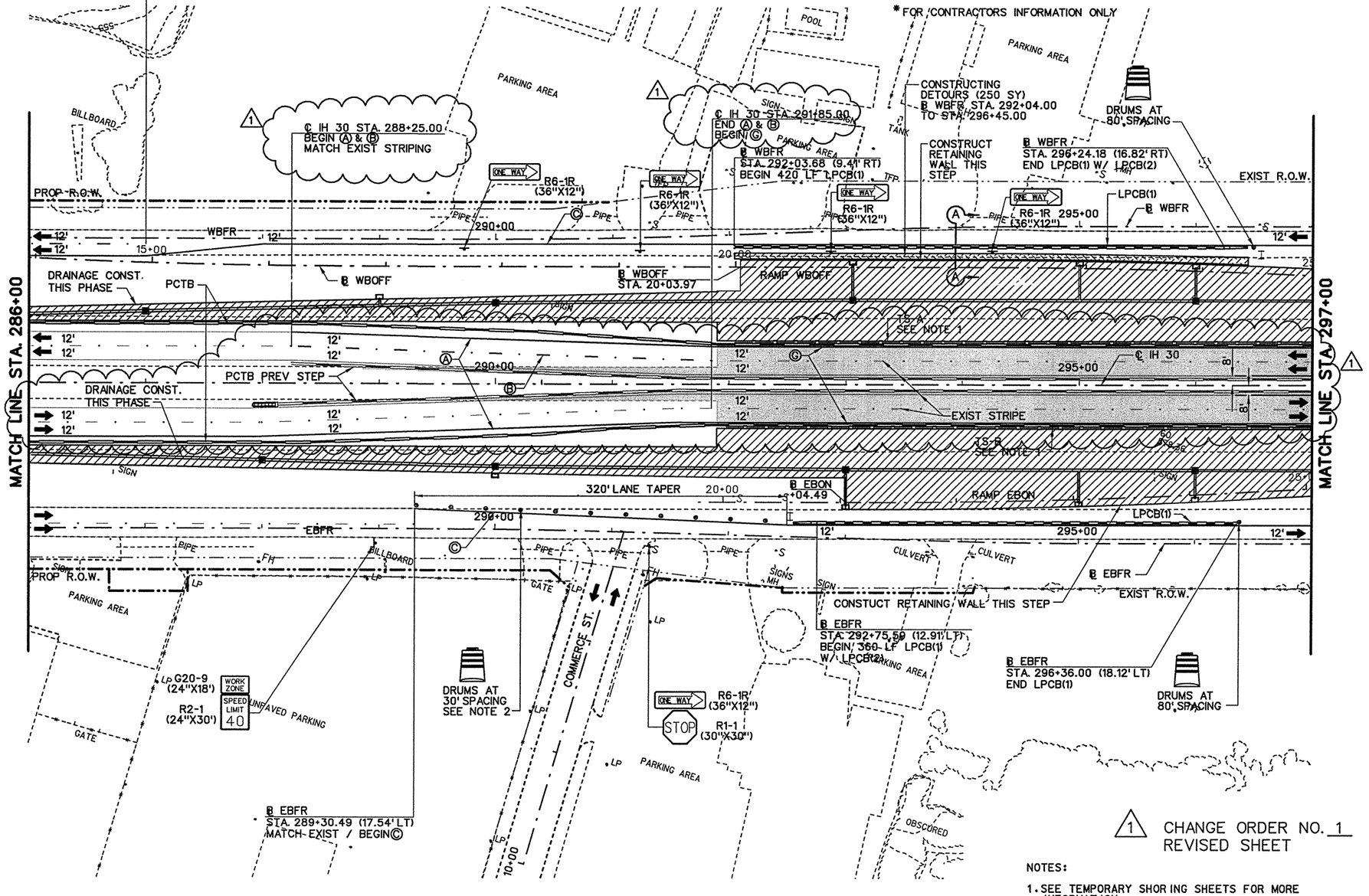
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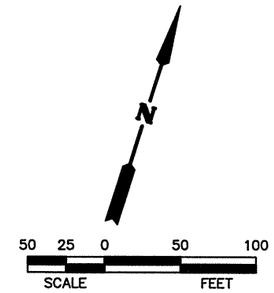


SECTION "A-A"
NTS

NOTE:

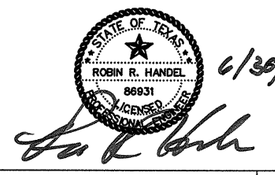
CONTRACTOR SHALL REPLACE EXISTING FRONTAGE ROAD AS SHOWN AFTER EXCAVATING FOR RETAINING WALL CONSTRUCTION AND SHALL PROTECT NEW WALL UNTIL PROPOSED FRONTAGE ROAD IS CONSTRUCTED IN PHASE 2 - STEP 2.





LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (LEVEL-UP)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING



△1 CHANGE ORDER NO. 1
REVISED SHEET

NOTES:

1. SEE TEMPORARY SHORING SHEETS FOR MORE INFORMATION.
2. CHEVRONS TO BE INSTALLED ON EVERY OTHER DRUM ON LANE TRANSITIONS.
3. EXISTING ONE-WAY SIGNS ALONG EBFR SHALL REMAIN IN PLACE OR BE ERECTED ON TEMPORARY SUPPORTS THOUGHOUT CONSTRUCTION.

NO.	REVISION	BY	DATE
1	ADD OVERLAY TO IH 30	GRB	

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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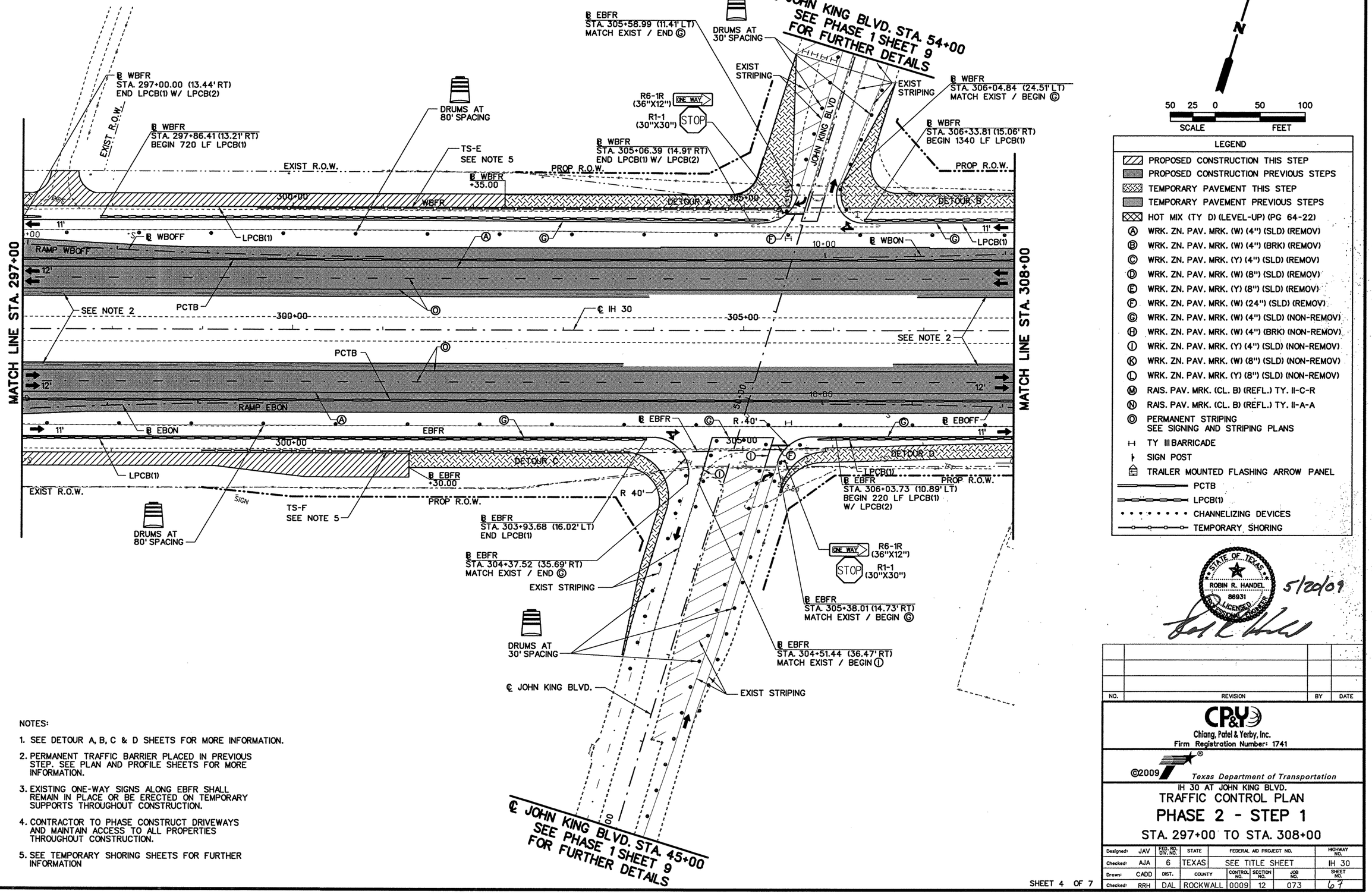
IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN
PHASE 1 - STEP 2
STA. 286+00 TO STA. 297+00

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked: RRH	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073		66A

SHEET 3 OF 9

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NOTES:

1. SEE DETOUR A, B, C & D SHEETS FOR MORE INFORMATION.
2. PERMANENT TRAFFIC BARRIER PLACED IN PREVIOUS STEP. SEE PLAN AND PROFILE SHEETS FOR MORE INFORMATION.
3. EXISTING ONE-WAY SIGNS ALONG EBFR SHALL REMAIN IN PLACE OR BE ERECTED ON TEMPORARY SUPPORTS THROUGHOUT CONSTRUCTION.
4. CONTRACTOR TO PHASE CONSTRUCT DRIVEWAYS AND MAINTAIN ACCESS TO ALL PROPERTIES THROUGHOUT CONSTRUCTION.
5. SEE TEMPORARY SHORING SHEETS FOR FURTHER INFORMATION

N

50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
5/20/09

NO.	REVISION	BY	DATE

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Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

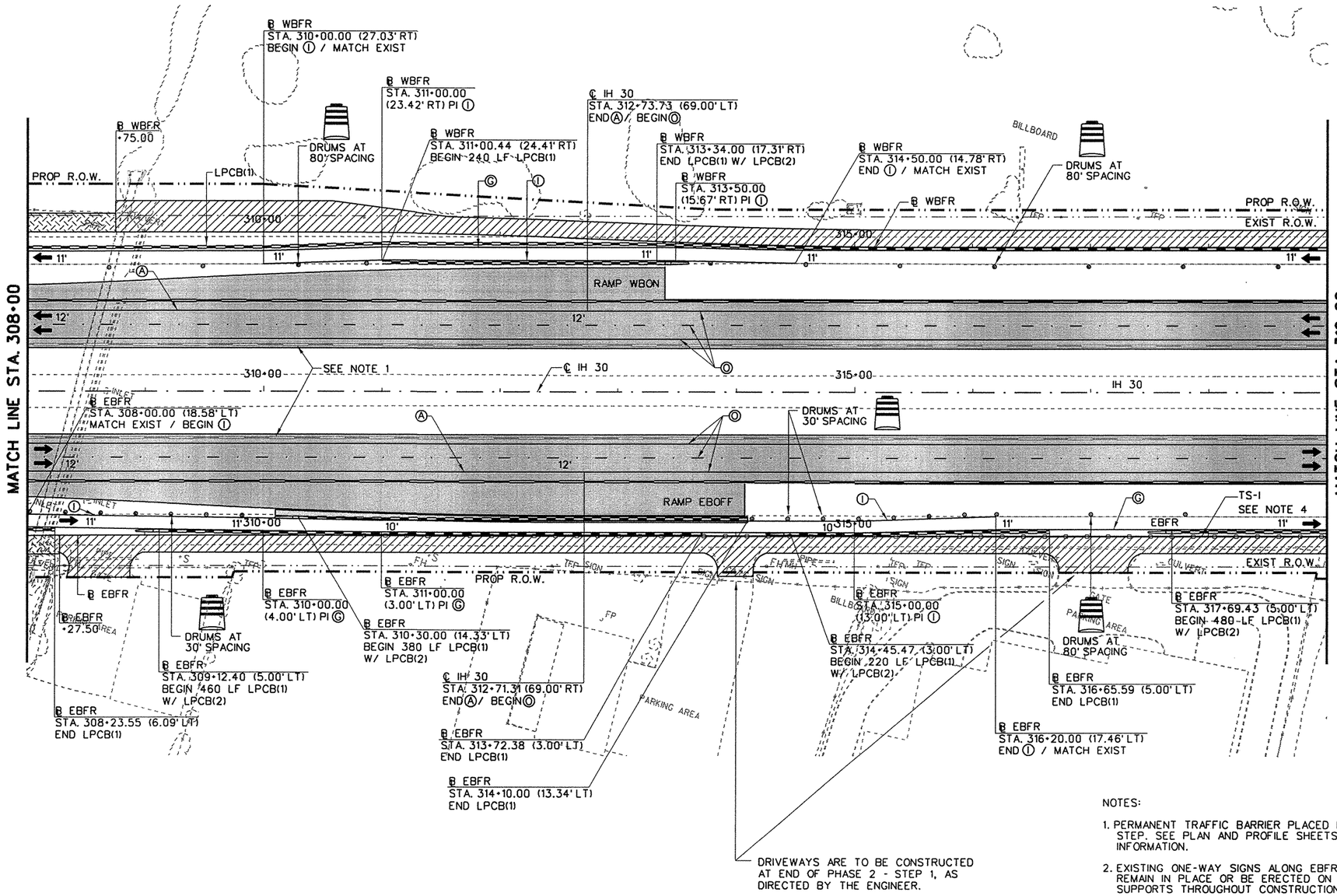
PHASE 2 - STEP 1

STA. 297+00 TO STA. 308+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073		67

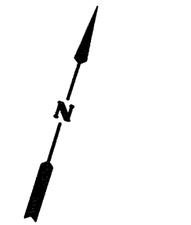
SHEET 4 OF 7

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aadams
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5/18/2009



NOTES:

1. PERMANENT TRAFFIC BARRIER PLACED IN PREVIOUS STEP. SEE PLAN AND PROFILE SHEETS FOR MORE INFORMATION.
2. EXISTING ONE-WAY SIGNS ALONG EBFR SHALL REMAIN IN PLACE OR BE ERECTED ON TEMPORARY SUPPORTS THROUGHOUT CONSTRUCTION.
3. CONTRACTOR TO PHASE CONSTRUCT DRIVEWAYS AND MAINTAIN ACCESS TO ALL PROPERTIES THROUGHOUT CONSTRUCTION.
4. SEE TEMPORARY SHORING SHEETS FOR FURTHER INFORMATION.



LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING



NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

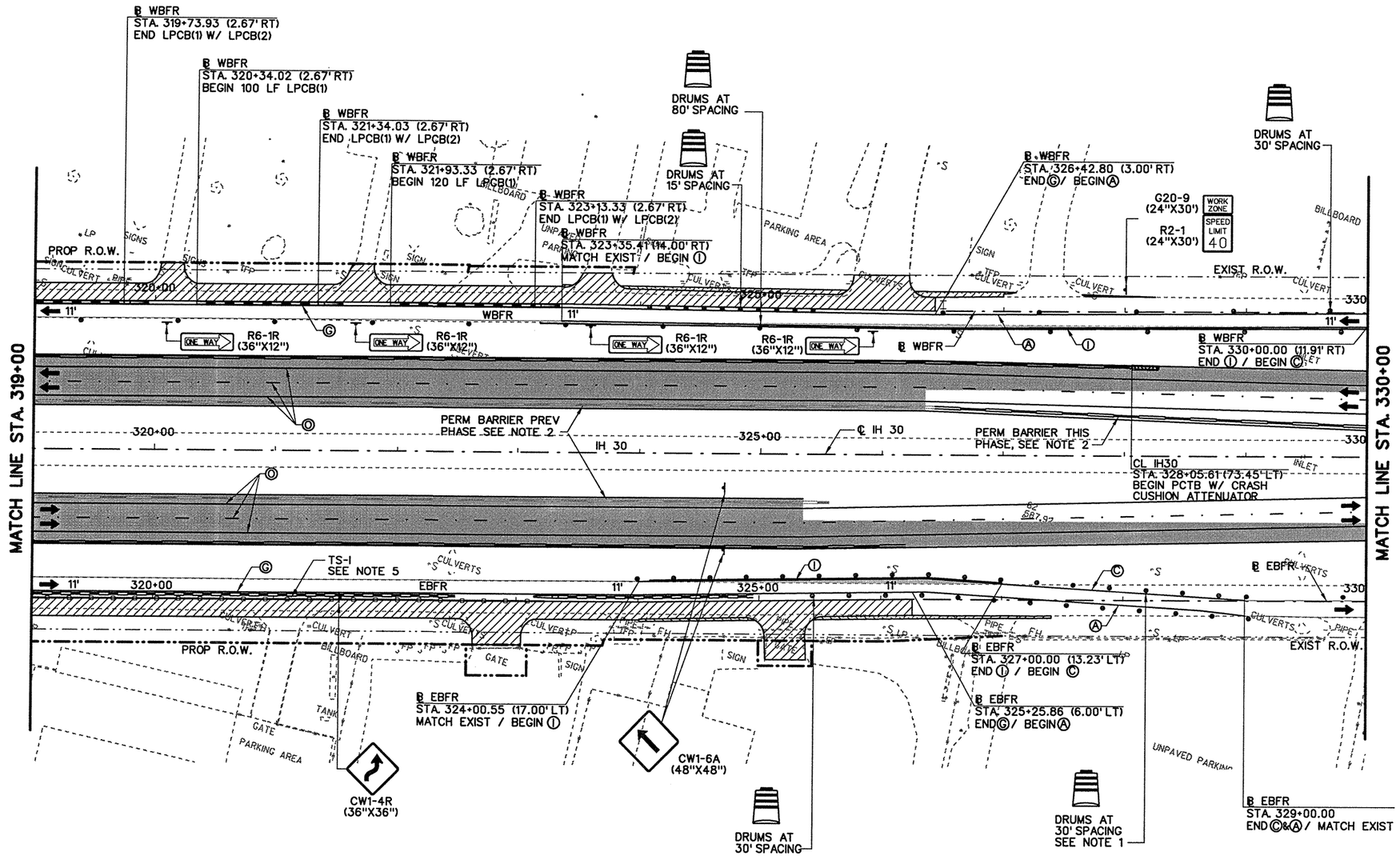
TRAFFIC CONTROL PLAN

PHASE 2 - STEP 1

STA. 308+00 TO STA. 319+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	68

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N

50 25 0 50 100

SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER

6/20/09

NOTES:

1. CHEVRONS TO BE INSTALLED ON EVERY OTHER DRUM ON LANE TRANSITIONS.
2. PERMANENT TRAFFIC BARRIER. SEE PLAN AND PROFILE SHEETS FOR MORE INFORMATION.
3. EXISTING ONE-WAY SIGNS ALONG EBFR SHALL REMAIN IN PLACE OR BE ERECTED ON TEMPORARY SUPPORTS THROUGHOUT CONSTRUCTION.
4. CONTRACTOR TO PHASE CONSTRUCT DRIVEWAYS AND MAINTAIN ACCESS TO ALL PROPERTIES THROUGHOUT CONSTRUCTION.
5. SEE TEMPORARY SHORING SHEETS FOR FURTHER INFORMATION.

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

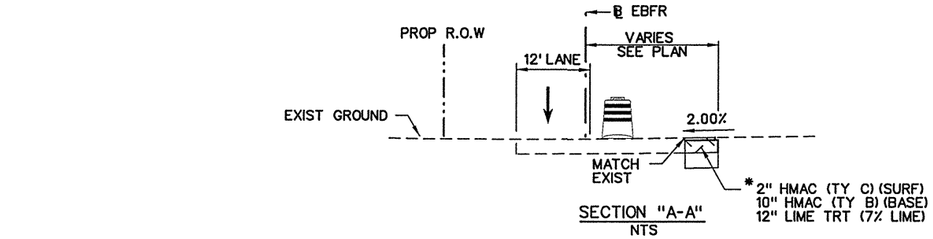
PHASE 2 - STEP 1

STA. 319+00 TO STA. 330+00

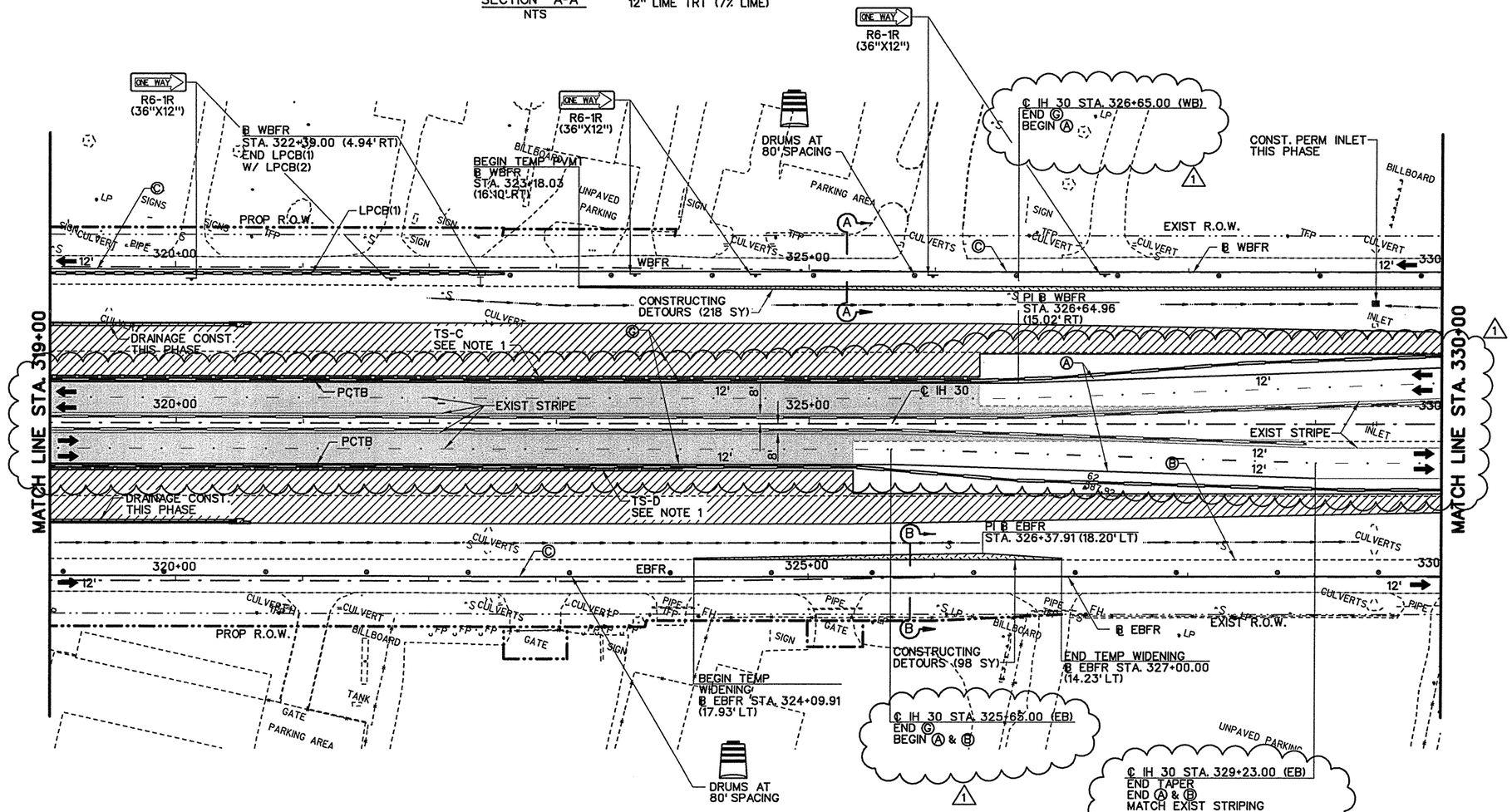
Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	69

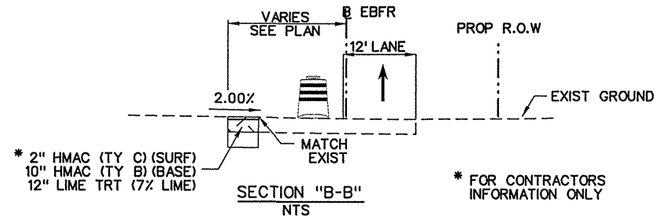
SHEET 6 OF 7

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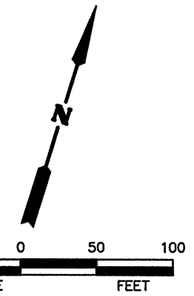
SECTION "A-A"
NTS





SECTION "B-B"
NTS

* FOR CONTRACTORS INFORMATION ONLY



LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (LEVEL-UP)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
6/30/10

NO.	REVISION	BY	DATE
1	ADD OVERLAY TO IH 30	GRB	

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN
PHASE 1 - STEP 2
STA. 319+00 TO STA. 330+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	69A

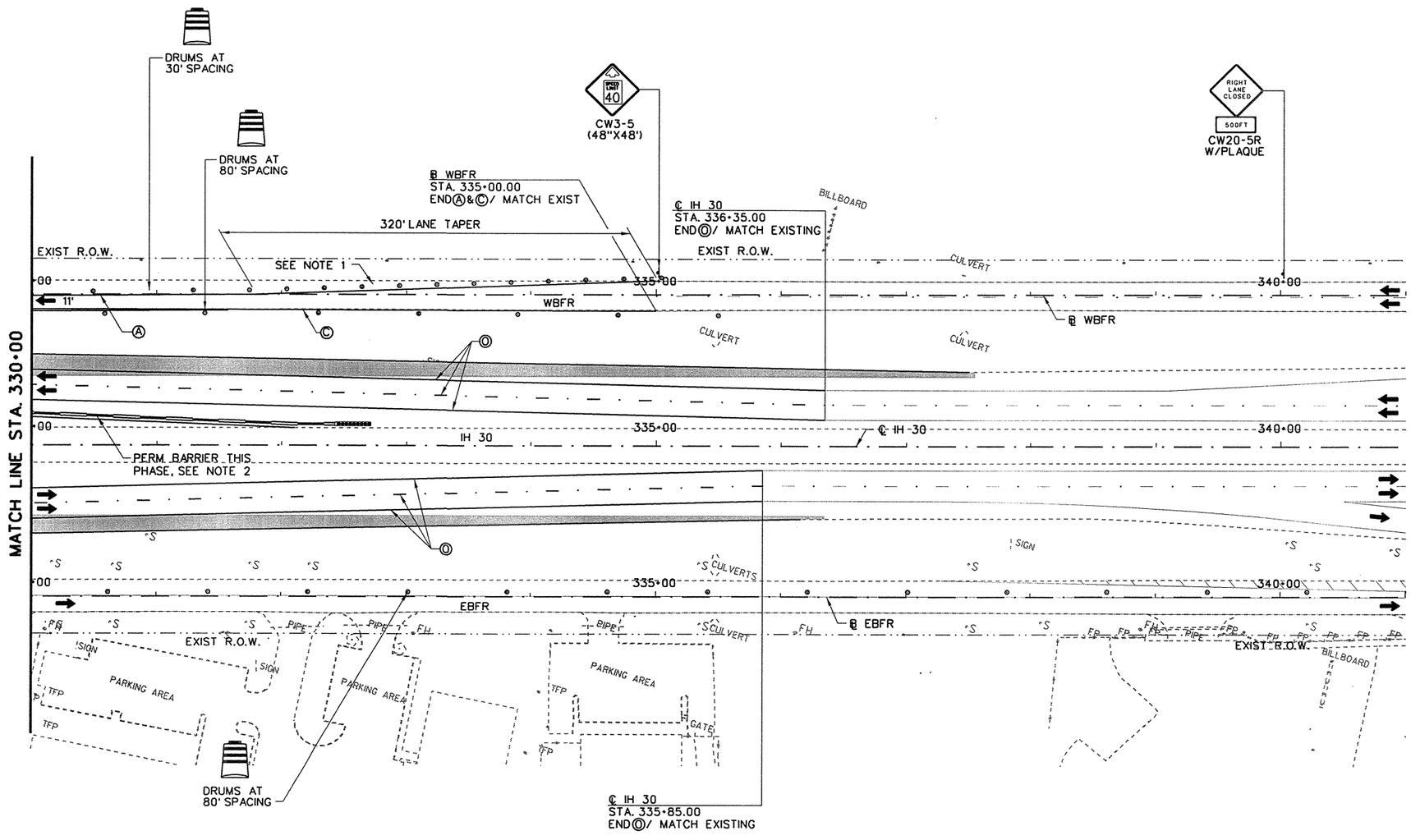
⚠1 CHANGE ORDER NO. 1
REVISED SHEET

NOTES:

1. SEE TEMPORARY SHORING SHEETS FOR MORE INFORMATION.
2. EXISTING ONE-WAY SIGNS ALONG EBFR SHALL REMAIN IN PLACE OR BE ERECTED ON TEMPORARY SUPPORTS THOUGHOUT CONSTRUCTION.

SHEET 6 OF 9

6/30/2010 5:40:37 PM GBRANICK p:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cst Sheets/8.3.03 TCP/TCP 1-2/435YYN1206.100



50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

NOTES:

1. CHEVRONS TO BE INSTALLED ON EVERY OTHER DRUM ON LANE TRANSITIONS.
2. PERMANENT TRAFFIC BARRIER. SEE PLAN AND PROFILE SHEETS FOR MORE INFORMATION.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

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Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

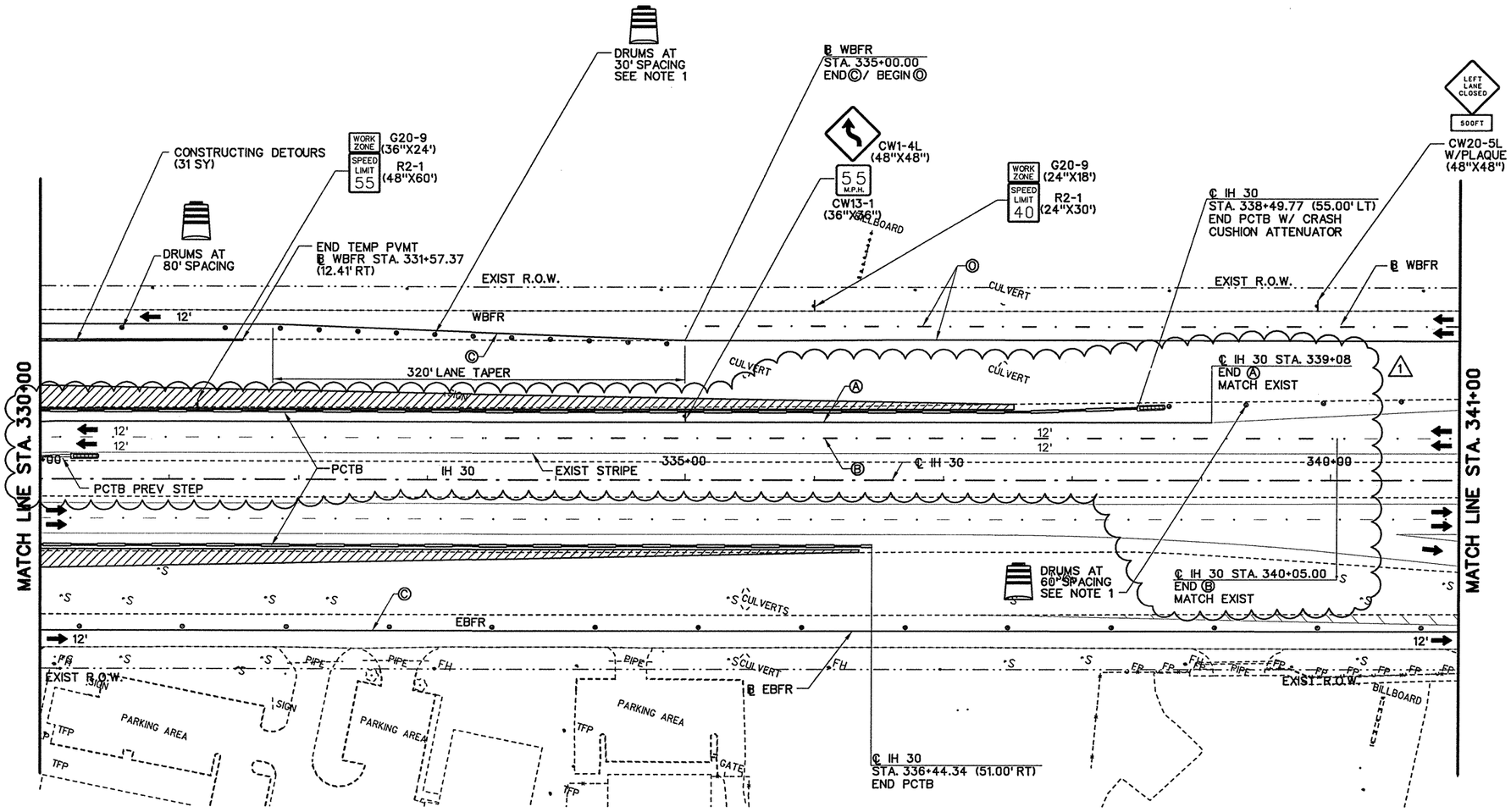
TRAFFIC CONTROL PLAN

PHASE 2 - STEP 1

STA. 330+00 TO END PHASE

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073		70

2/6/2009 12:48:33 PM GBRANICK Dwg/Active Projects/TXDOT643/TXDOT643-05-08 Plans and Drawings/8.3.02 Cut Sheets/8.3.03 TCP/TCP 2-1-435YYN2107.dgn



N

50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (LEVEL-UP)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS ROBIN R. HANDEL 86931 LICENSED PROFESSIONAL ENGINEER 6/30/10

NO.	REVISION	BY	DATE
1	ADD OVERLAY TO IH 30	GRB	

1 CHANGE ORDER NO. 1
REVISED SHEET

NOTE:

1. CHEVRONS TO BE INSTALLED ON EVERY OTHER DRUM ON LANE TRANSITIONS.
2. EXISTING ONE-WAY SIGNS ALONG EBFR SHALL REMAIN IN PLACE OR BE ERECTED ON TEMPORARY SUPPORTS THOUGHOUT CONSTRUCTION.

SHEET 7 OF 9

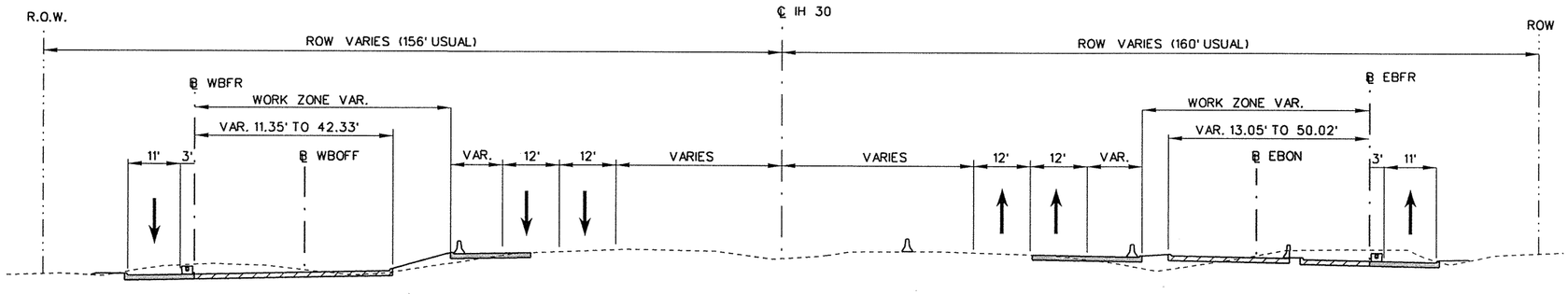
CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.
TRAFFIC CONTROL PLAN
PHASE 1 - STEP 2
STA. 330+00 TO STA. 341+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	7 OF 9

6/30/2010 5:40:45 PM GBRANICK pw:\Active Projects\TXD0643\TXD0643-05\8.00 Plans and Drawings\8.30 Cut Sheets\8.303 TCP\TCP 1-2\435YYN1207.100



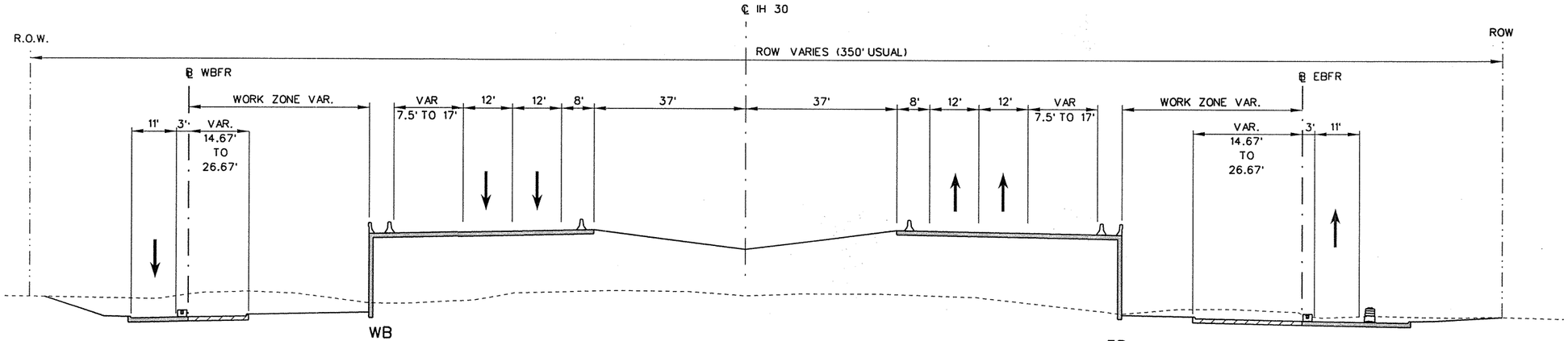
WB
STA. 278+65.50 TO STA. 289+51.88

EB
STA. 279+10.92 TO STA. 293+00.00

PHASE 2 - STEP 2
N.T.S.

LEGEND

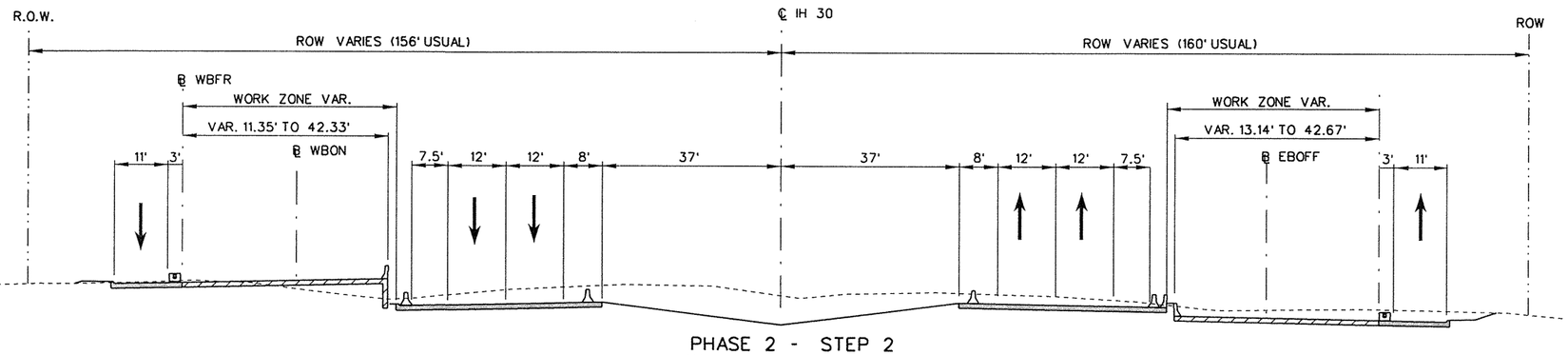
- CONSTRUCTION THIS PHASE
- CONSTRUCTION PREVIOUS PHASE
- PCTB
- LPCB(1)
- PLASTIC DRUM



WB
STA. 289+51.88 TO STA. 315+00

PHASE 2 - STEP 2
N.T.S.

EB
STA. 293+00 TO STA. 315+00



PHASE 2 - STEP 2
315+00 TO STA. 326+42.25
N.T.S.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

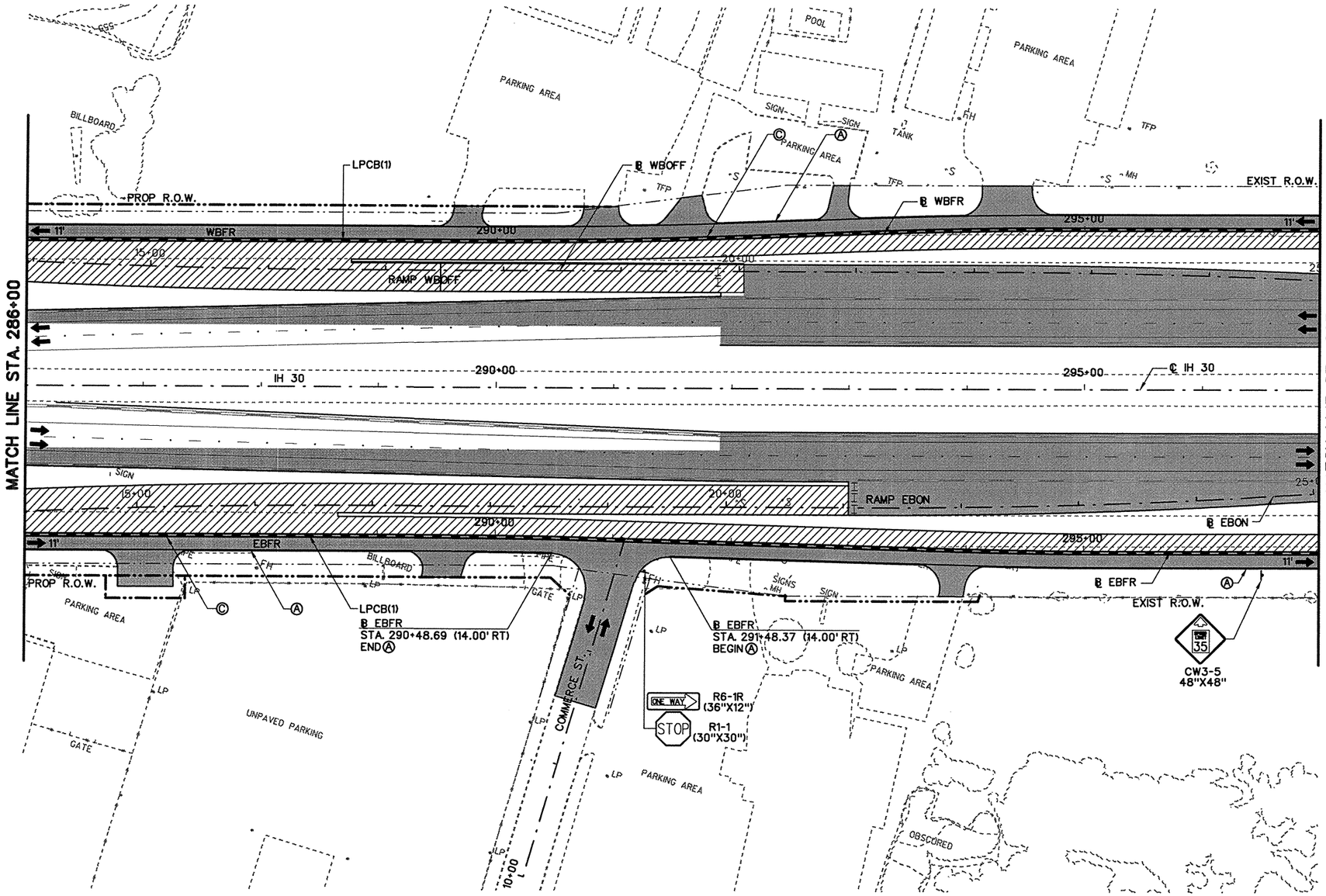
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IH 30 AT JOHN KING BLVD.
TRAFFIC CONTROL PLAN
TYPICAL SECTIONS
PHASE 2 - STEP 2

Designed:	GRB	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	71

SHEET 1 OF 1

Plotted by: RRH on 2/9/09 at 8:30 a.m. Drawing: C:\Projects\8.3.03 TCP\GENERAL\4.3SVY 02 2.dgn



N

50 25 0 50 100

SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
5/20/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

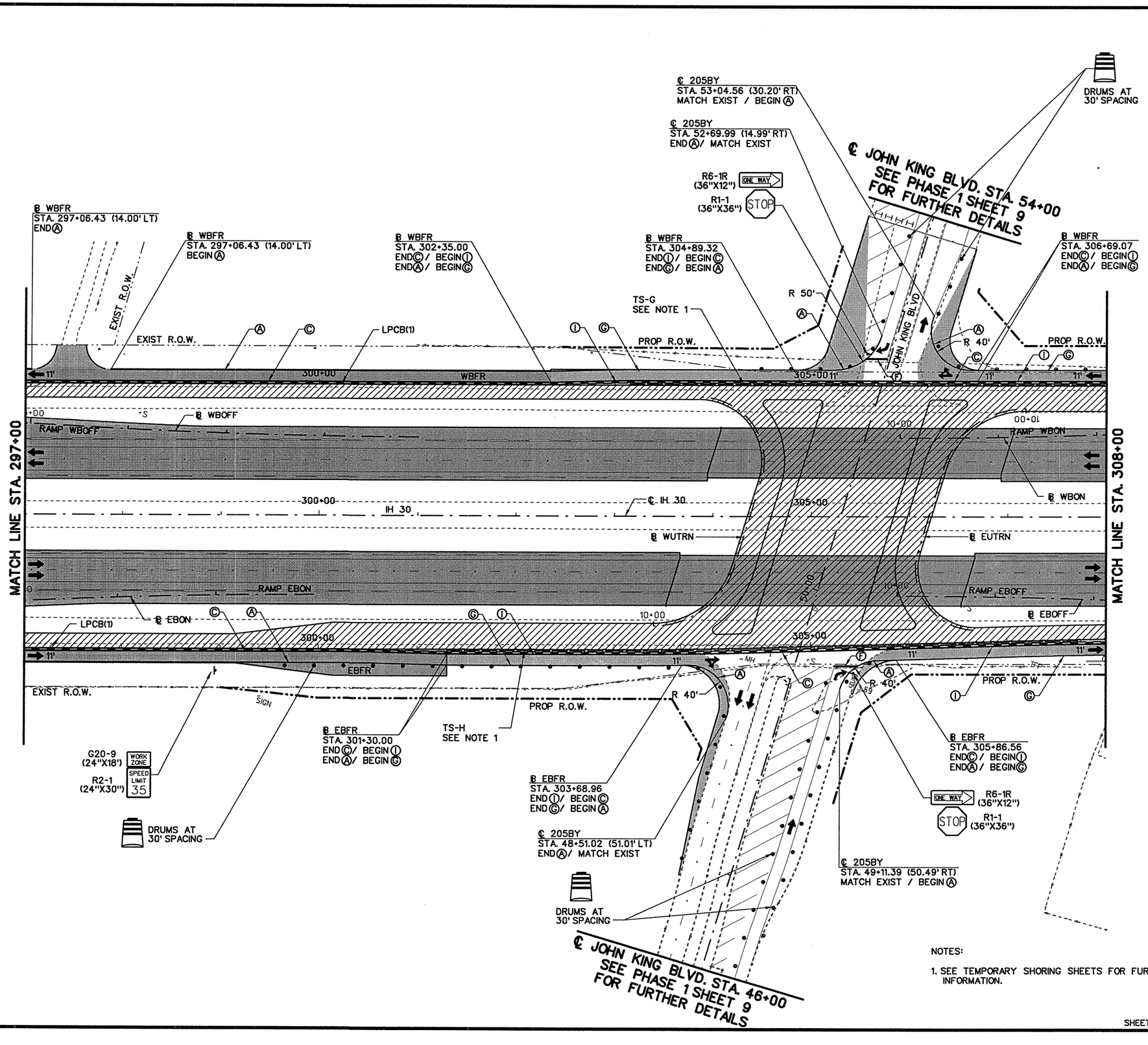
PHASE 2 - STEP 2

STA. 286+00 TO STA. 297+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	74

SHEET 3 OF 7

5/18/2009 1:36:00 PM aadams p:\Active Projects\TXD0643\TXD0643-05\8.00 Plans and Drawings\8.30 Cut Sheets\8.3.03 TCP\TCP 2-2\435YYN2203.100



N

50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
5/20/09

NO.	REVISION	BY	DATE

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Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

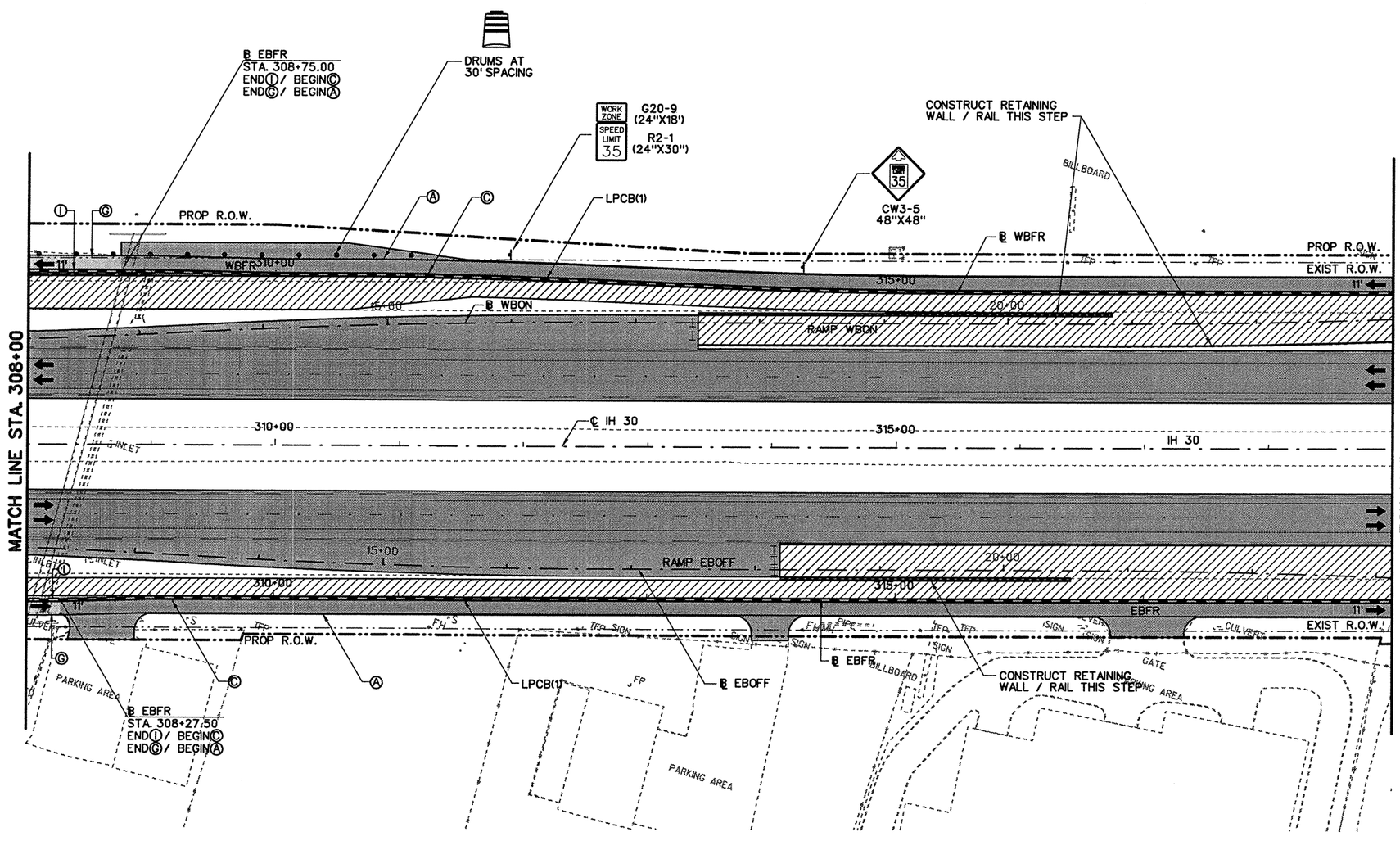
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IH 30 AT JOHN KING BLVD.
TRAFFIC CONTROL PLAN
PHASE 2 - STEP 2
STA. 297+00 TO STA. 308+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	75

SHEET 4 OF 7

5/18/2009 1:36:10 PM eadams p:\Active Projects\TXD0643\TXD0643-05\8.00 Plans and Drawings\8.30 Cut Sheets\8.3.03 TCP\TCP 2-2\435YYN2204.100



50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
5/20/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

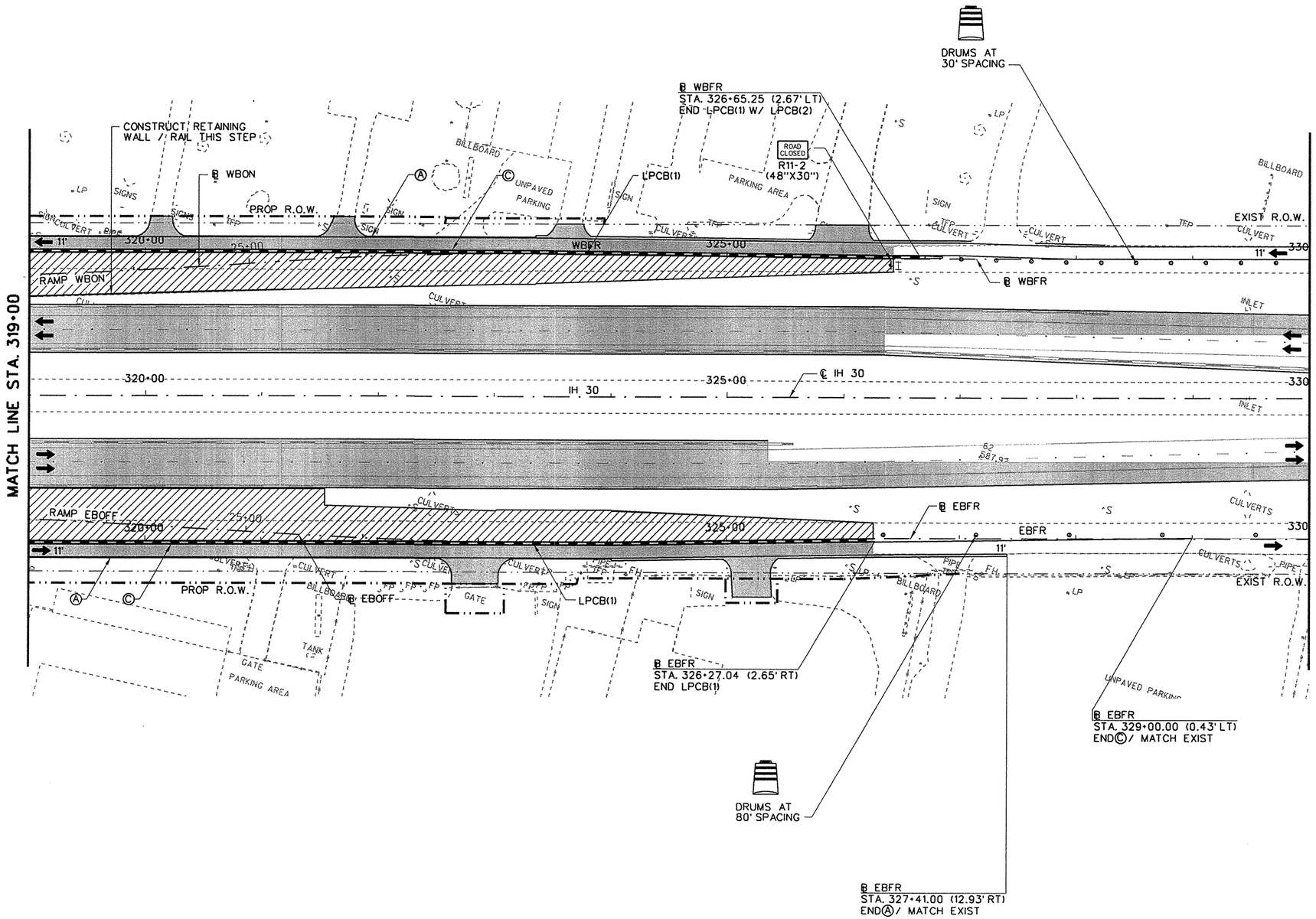
PHASE 2 - STEP 2

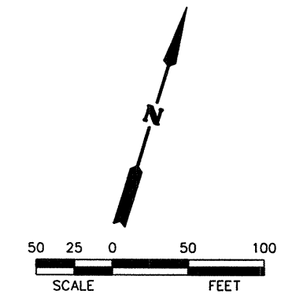
STA. 308+00 TO STA. 319+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	76

SHEET 5 OF 7

5/18/2009 1:36:17 PM aadams pw:/Active Projects/TX00643/TX00643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/TCP 2-2/435YYN2205.100





LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

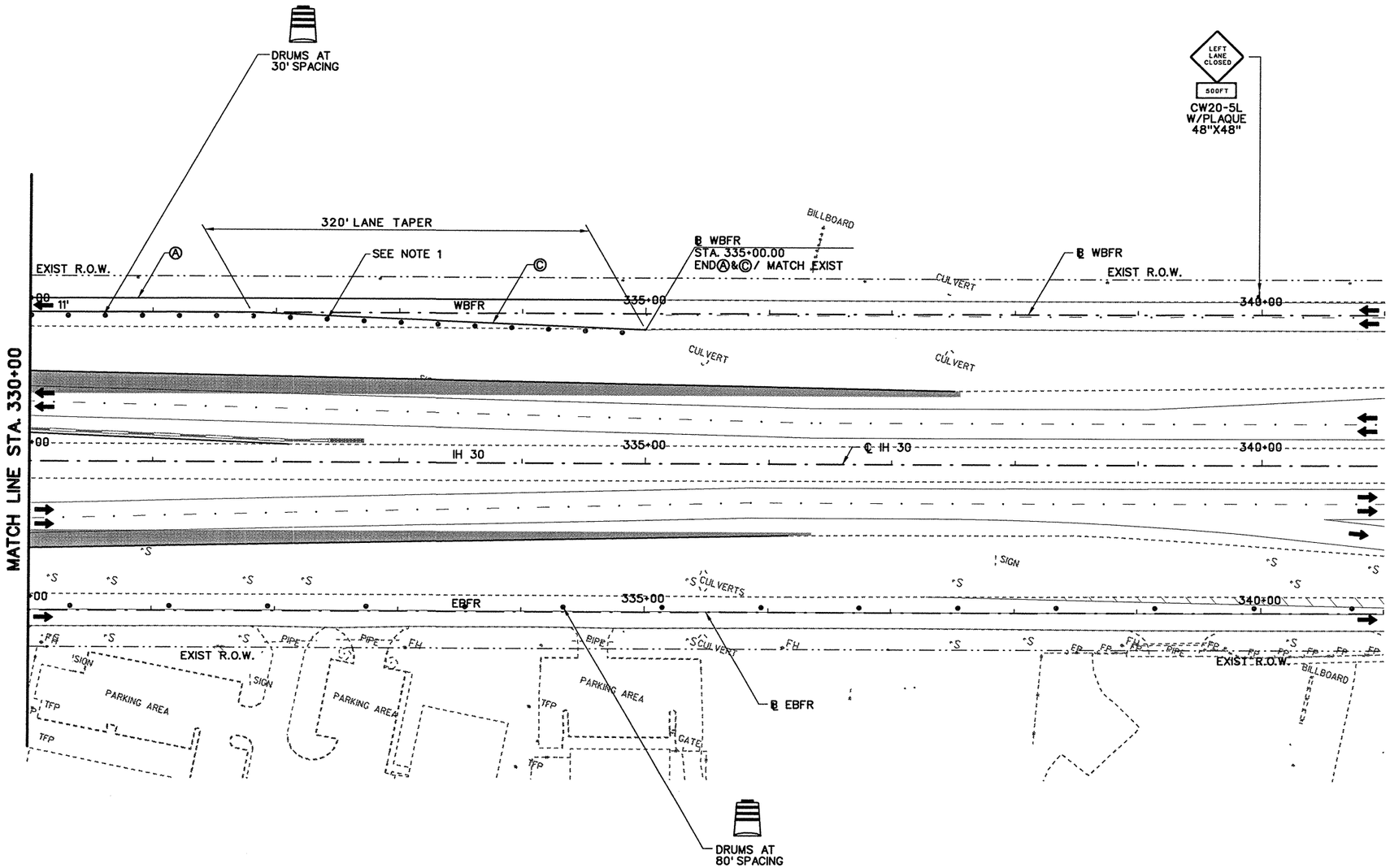
TRAFFIC CONTROL PLAN

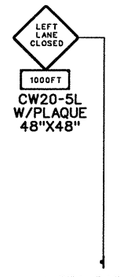
PHASE 2 - STEP 2

STA. 319+00 TO STA. 330+00

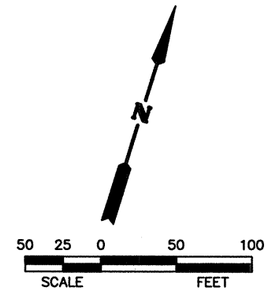
Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073		77

2/6/2009 11:51:35 AM bwr:Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/TCP 2-2/435YYN2206.100





℄ STA. 345+00



LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

NOTES:

1. CHEVRONS TO BE INSTALLED ON EVERY OTHER DRUM ON LANE TRANSITIONS.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
5/20/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

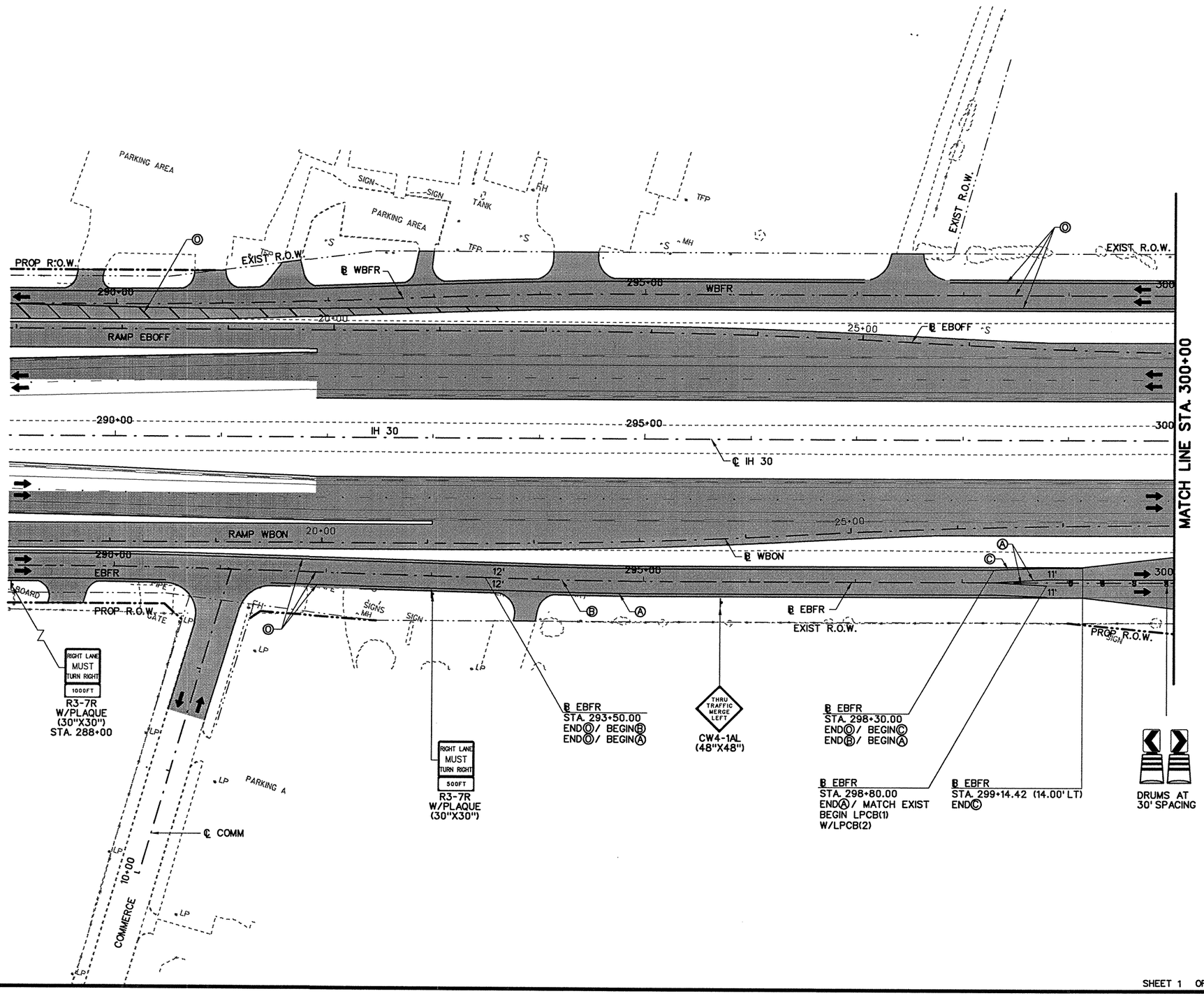
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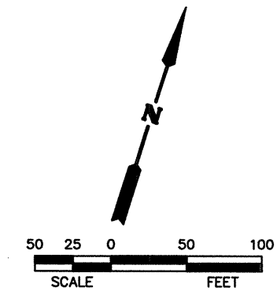
STA. 330+00 TO END PHASE

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	78

SHEET 7 OF 7

5/18/2009 1:36:23 PM aadams p:\Active Projects\TX00643\TX00643-05\8.00 Plans and Drawings\8.30 Cut Sheets\8.3.03 TCP\TCP 2-2\435YYN2207.100





LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
5/20/09

NO.	REVISION	BY	DATE

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Chiang, Patel & Yerby, Inc.
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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

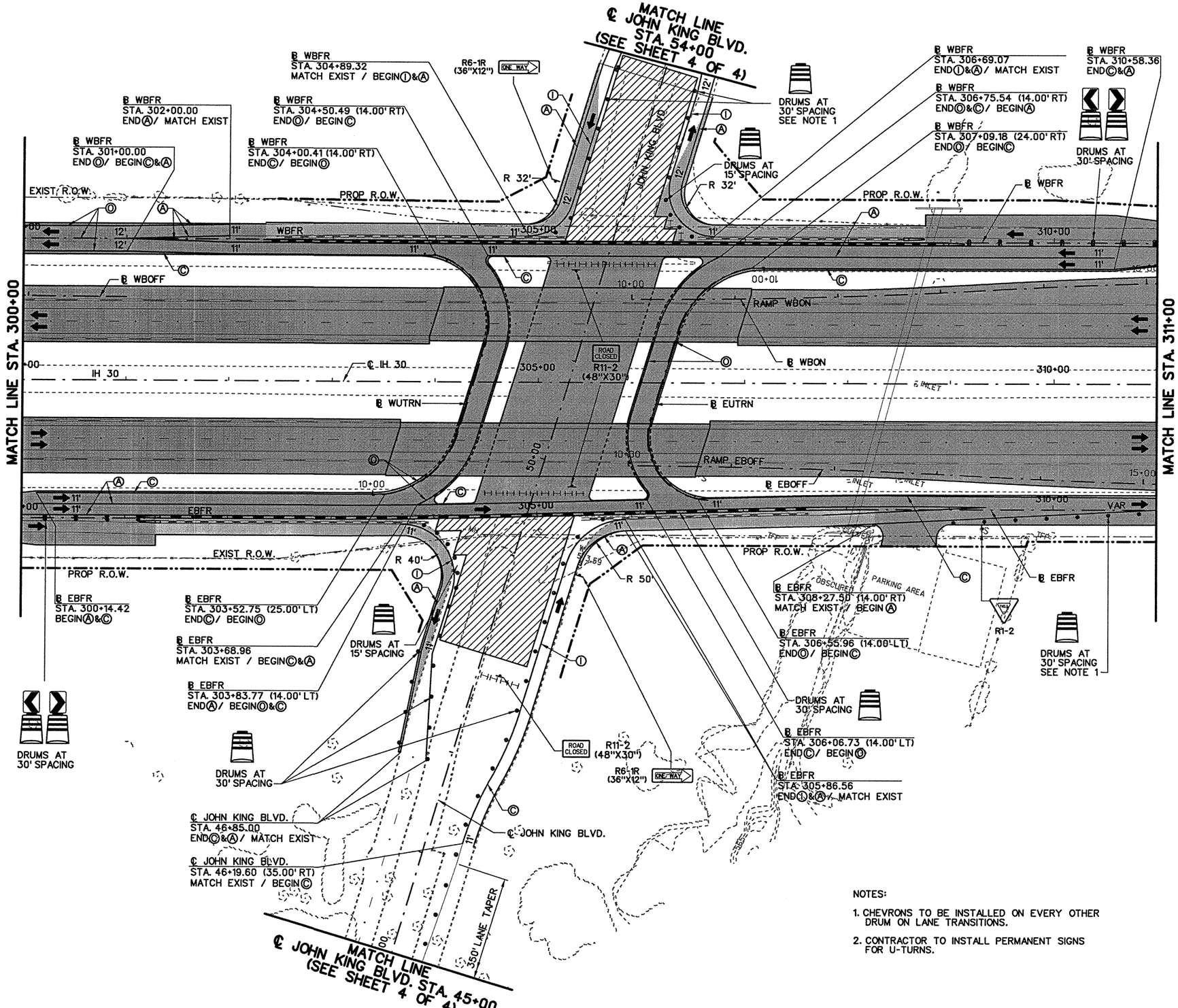
PHASE 2 - STEP 3

BEGIN PHASE TO STA. 300+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	GRB	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	79

SHEET 1 OF 4

5/18/2009 1:36:32 PM adams pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/TCP 2-3/435YYN2301.100



NOTES:

1. CHEVRONS TO BE INSTALLED ON EVERY OTHER DRUM ON LANE TRANSITIONS.
2. CONTRACTOR TO INSTALL PERMANENT SIGNS FOR U-TURNS.

N

50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
5/20/09

NO.	REVISION	BY	DATE

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Firm Registration Number: 1741

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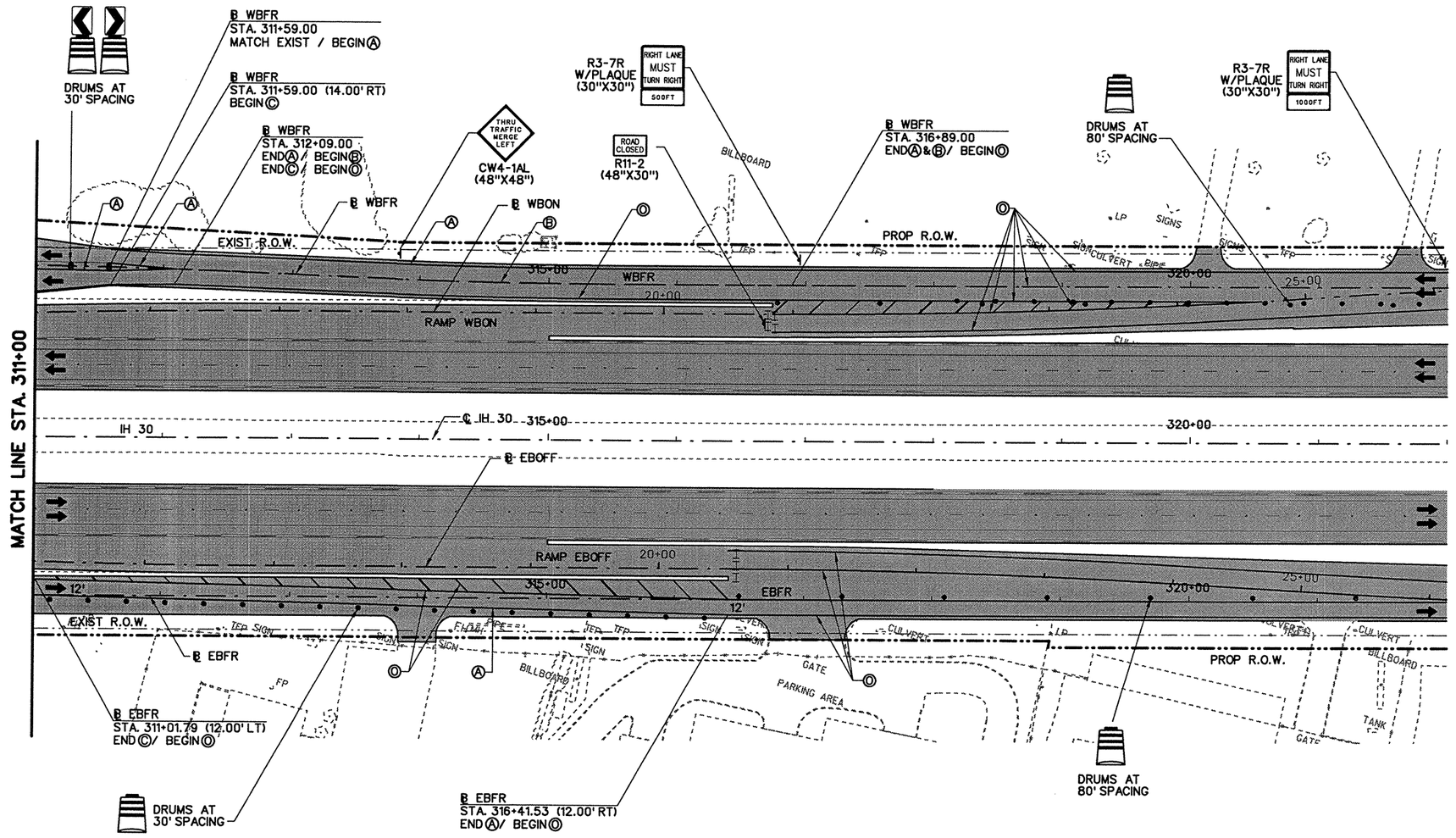
IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN
PHASE 2 - STEP 3
STA. 300+00 TO STA. 311+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	GRB	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	80

SHEET 2 OF 4

5/18/2009 1:36:41 PM adams
pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/TCP 2-3/435YYN2302.100



N

50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
5/20/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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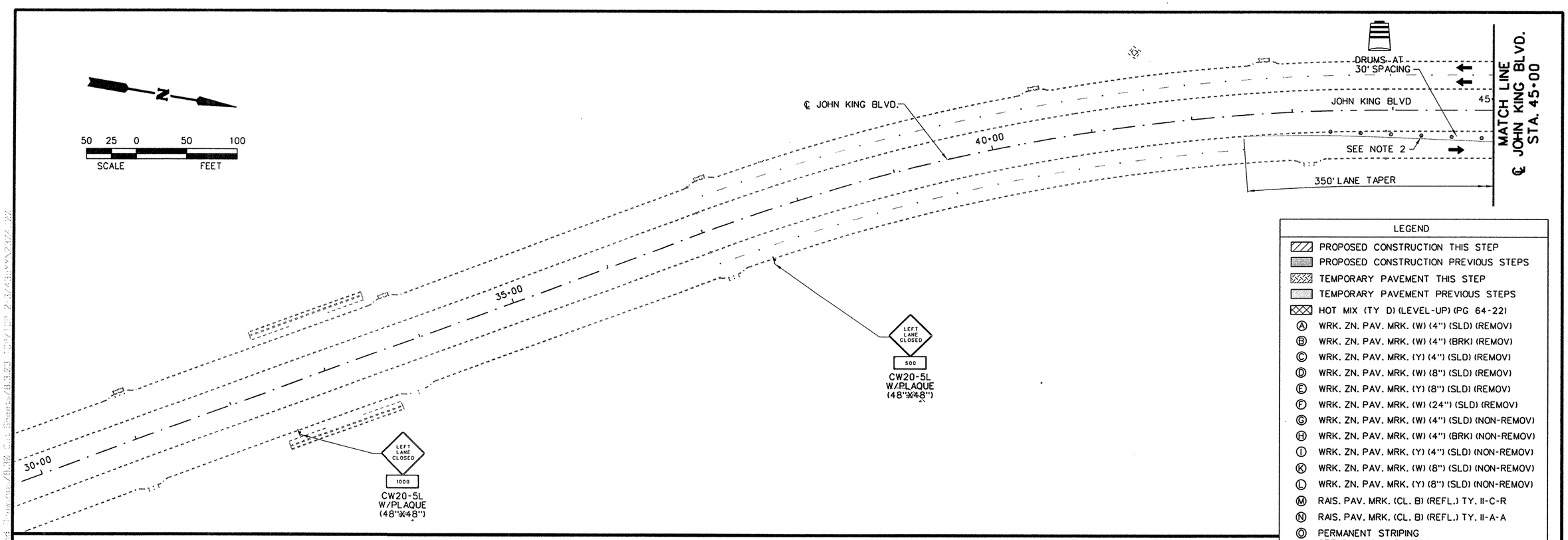
IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN
PHASE 2 - STEP 3
STA. 311+00 TO END PHASE

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	GRB	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	8/

SHEET 3 OF 4

5/18/2009 1:36:48 PM aadams pw:/Active Projects/TX00643/TX00643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.03 TCP/TCP 2-3/435YN2303.100

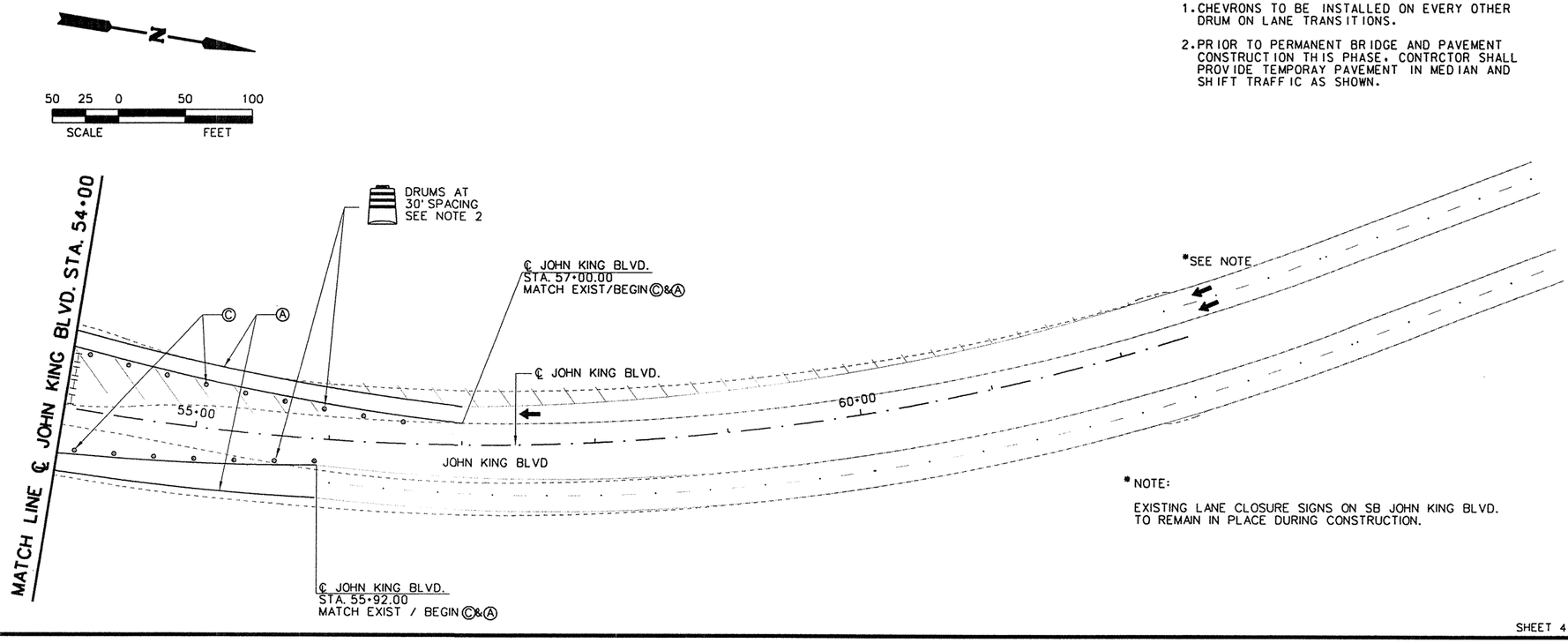


LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

NOTES:

1. CHEVRONS TO BE INSTALLED ON EVERY OTHER DRUM ON LANE TRANSITIONS.
2. PRIOR TO PERMANENT BRIDGE AND PAVEMENT CONSTRUCTION THIS PHASE, CONTRCTOR SHALL PROVIDE TEMPORAY PAVEMENT IN MEDIAN AND SHIFT TRAFFIC AS SHOWN.



*NOTE:

EXISTING LANE CLOSURE SIGNS ON SB JOHN KING BLVD. TO REMAIN IN PLACE DURING CONSTRUCTION.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

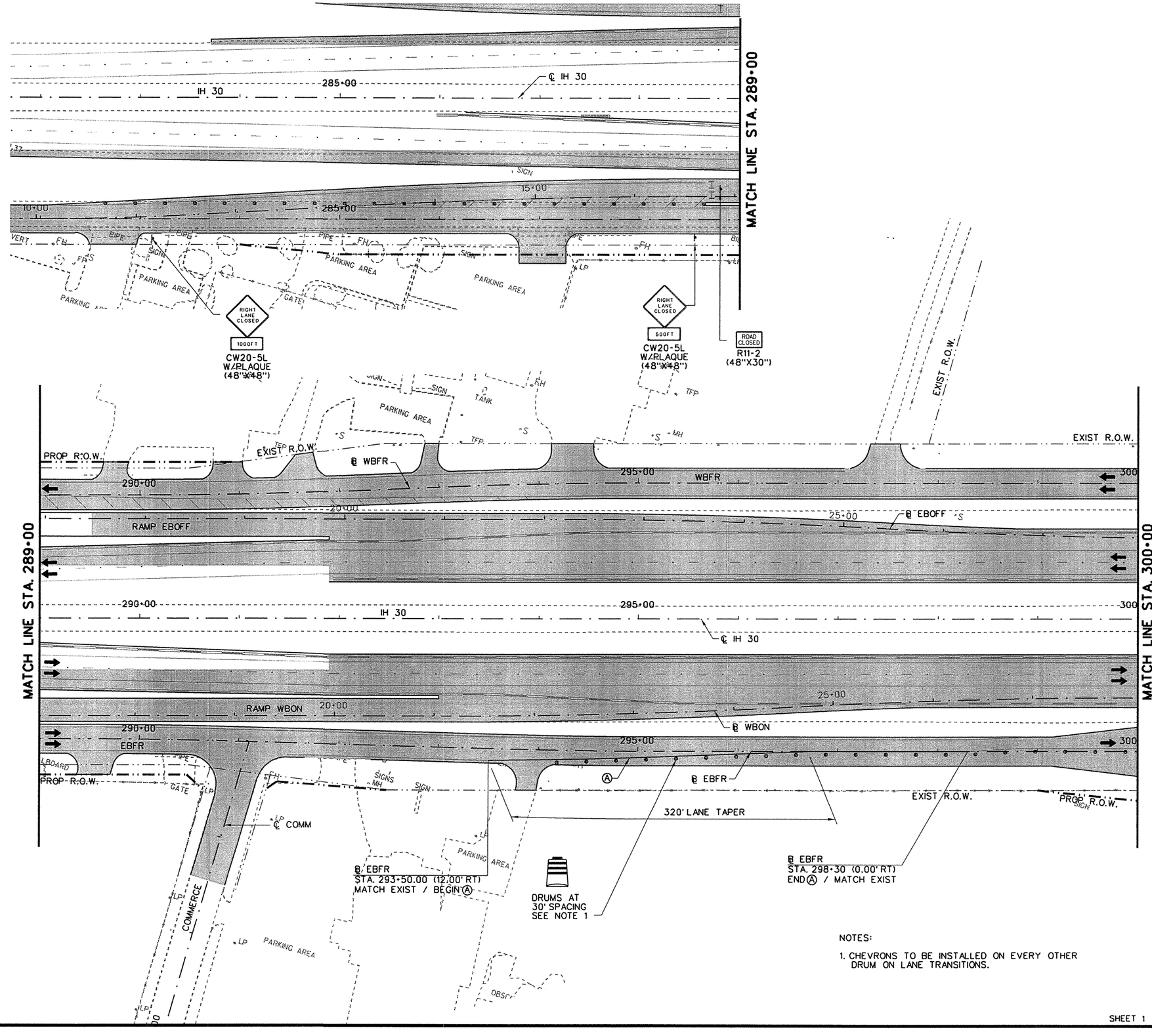
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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN
PHASE 2 - STEP 3
JOHN KING BLVD

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073		82

SHEET 4 OF 4



LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

NOTES:

1. CHEVRONS TO BE INSTALLED ON EVERY OTHER DRUM ON LANE TRANSITIONS.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

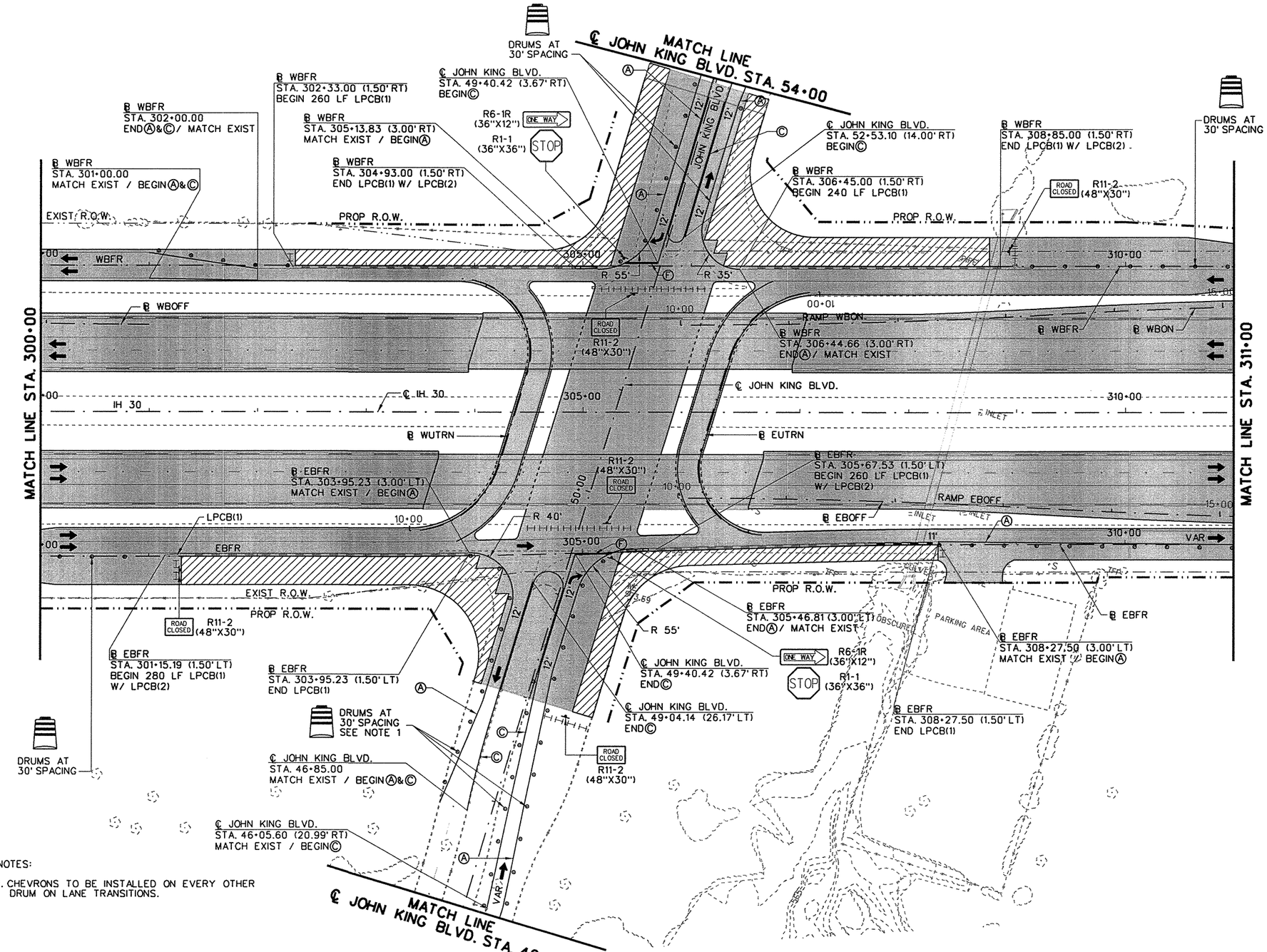
TRAFFIC CONTROL PLAN

PHASE 2 - STEP 4

BEGIN PHASE TO STA. 300+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	GRB	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	83

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NOTES:

1. CHEVRONS TO BE INSTALLED ON EVERY OTHER DRUM ON LANE TRANSITIONS.

N

50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- ℄ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
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PROFESSIONAL ENGINEER
2/9/09

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

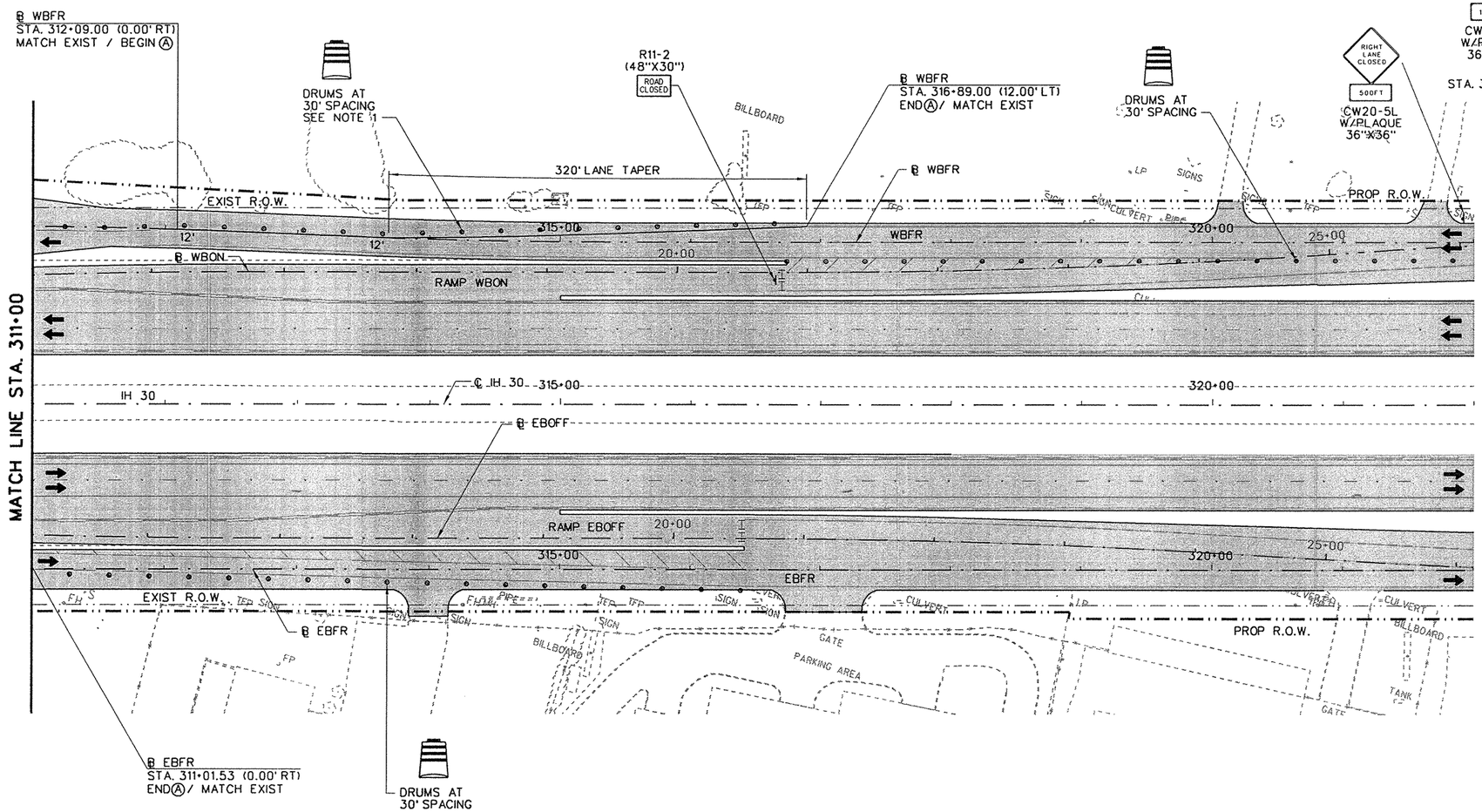
PHASE 2 - STEP 4

STA. 300+00 TO STA. 311+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	GRB	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073		84

SHEET 2 OF 4

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50 25 0 50 100
SCALE FEET

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
- SIGN POST
- TRAILER MOUNTED FLASHING ARROW PANEL
- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
2/9/09

NOTE:

1. CHEVRONS TO BE INSTALLED ON EVERY OTHER DRUM ON LANE TRANSITIONS.

NO.	REVISION	BY	DATE

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Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

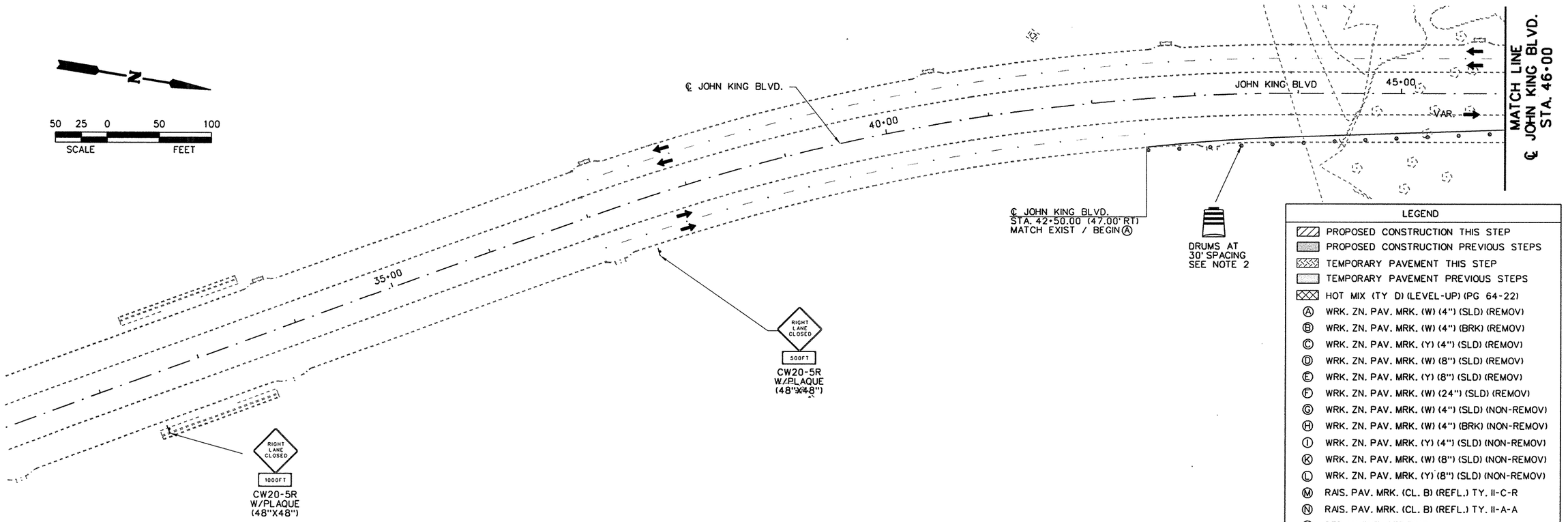
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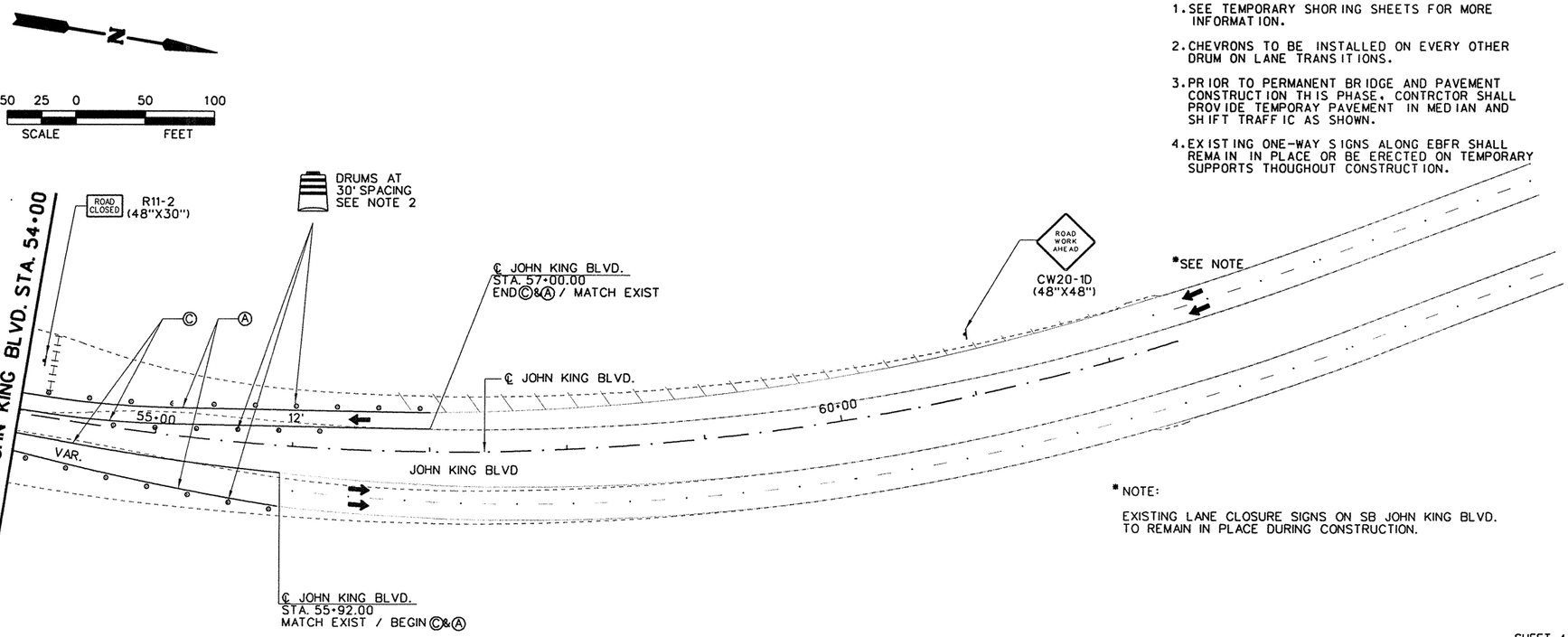
STA. 311+00 TO END PHASE

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	GRB	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	85

SHEET 3 OF 4

...Plans and Drawings/8.3@ Cut Sheets/8.3.03 TCP/TCP 2-4(8)-YY(24.03.00





NOTES:

1. SEE TEMPORARY SHORING SHEETS FOR MORE INFORMATION.
2. CHEVRONS TO BE INSTALLED ON EVERY OTHER DRUM ON LANE TRANSITIONS.
3. PRIOR TO PERMANENT BRIDGE AND PAVEMENT CONSTRUCTION THIS PHASE, CONTRCTOR SHALL PROVIDE TEMPORAY PAVEMENT IN MEDIAN AND SHIFT TRAFFIC AS SHOWN.
4. EXISTING ONE-WAY SIGNS ALONG EBFR SHALL REMAIN IN PLACE OR BE ERECTED ON TEMPORARY SUPPORTS THOUGHOUT CONSTRUCTION.

*NOTE:

EXISTING LANE CLOSURE SIGNS ON SB JOHN KING BLVD. TO REMAIN IN PLACE DURING CONSTRUCTION.

LEGEND

- PROPOSED CONSTRUCTION THIS STEP
- PROPOSED CONSTRUCTION PREVIOUS STEPS
- TEMPORARY PAVEMENT THIS STEP
- TEMPORARY PAVEMENT PREVIOUS STEPS
- HOT MIX (TY D) (LEVEL-UP) (PG 64-22)
- Ⓐ WRK. ZN. PAV. MRK. (W) (4") (SLD) (REMOV)
- Ⓑ WRK. ZN. PAV. MRK. (W) (4") (BRK) (REMOV)
- Ⓒ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (REMOV)
- Ⓓ WRK. ZN. PAV. MRK. (W) (8") (SLD) (REMOV)
- Ⓔ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (REMOV)
- Ⓕ WRK. ZN. PAV. MRK. (W) (24") (SLD) (REMOV)
- Ⓖ WRK. ZN. PAV. MRK. (W) (4") (SLD) (NON-REMOV)
- Ⓗ WRK. ZN. PAV. MRK. (W) (4") (BRK) (NON-REMOV)
- Ⓘ WRK. ZN. PAV. MRK. (Y) (4") (SLD) (NON-REMOV)
- Ⓚ WRK. ZN. PAV. MRK. (W) (8") (SLD) (NON-REMOV)
- Ⓛ WRK. ZN. PAV. MRK. (Y) (8") (SLD) (NON-REMOV)
- Ⓜ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-C-R
- Ⓝ RAIS. PAV. MRK. (CL. B) (REFL.) TY. II-A-A
- Ⓞ PERMANENT STRIPING SEE SIGNING AND STRIPING PLANS
- TY III BARRICADE
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- PCTB
- LPCB(1)
- CHANNELIZING DEVICES
- TEMPORARY SHORING

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
2/9/09

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN

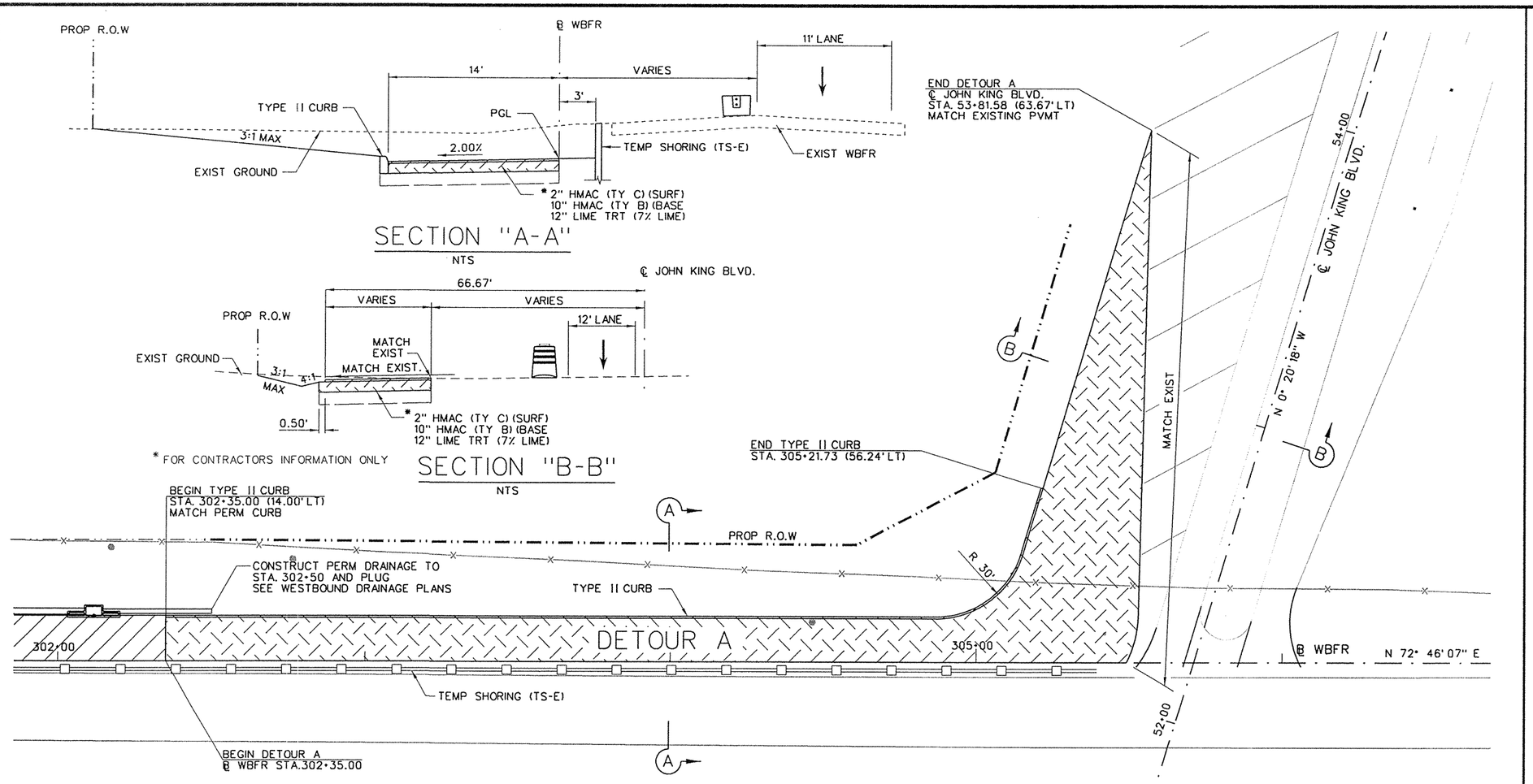
PHASE 2 - STEP 4

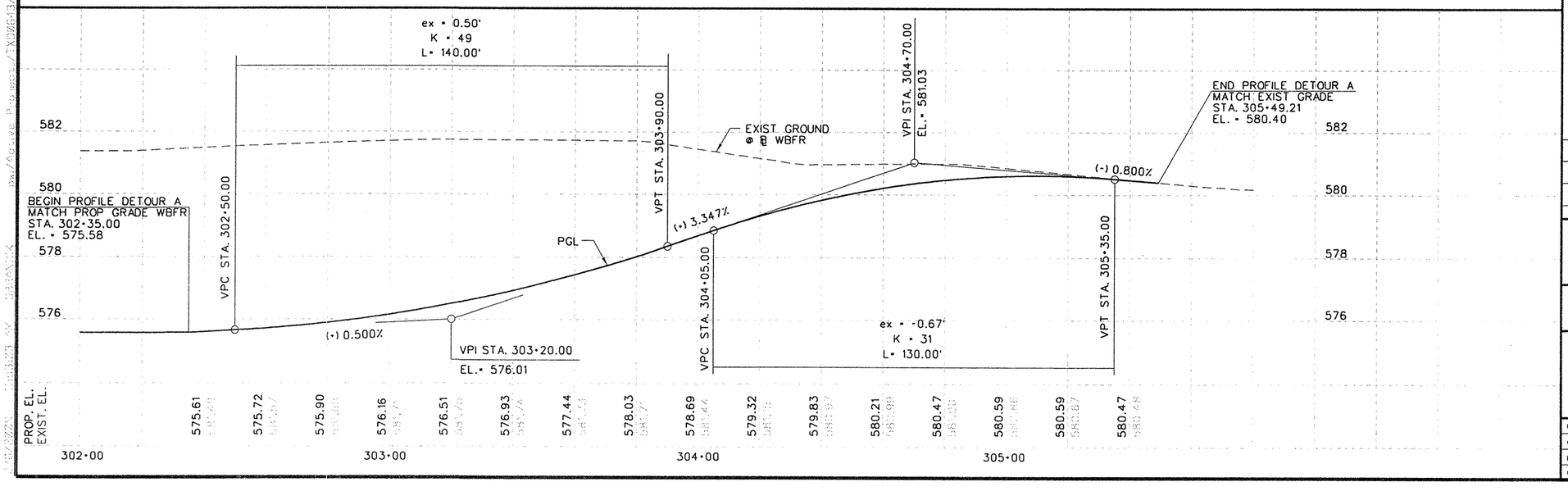
JOHN KING BLVD

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	86

SHEET 4 OF 4

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NOTES:

1. ALL STATIONS AND OFFSETS ARE BASED ON ℄ WBFR UNLESS OTHERWISE NOTED.
2. SEE TRAFFIC CONTROL PLANS PHASE 2 STEPS 1, 2, AND 3, FOR DELINEATION AND INCIDENTAL TRAFFIC CONTROL ITEMS RELEVANT TO DETOUR.



NO.	REVISION	BY	DATE

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Firm Registration Number: 1741

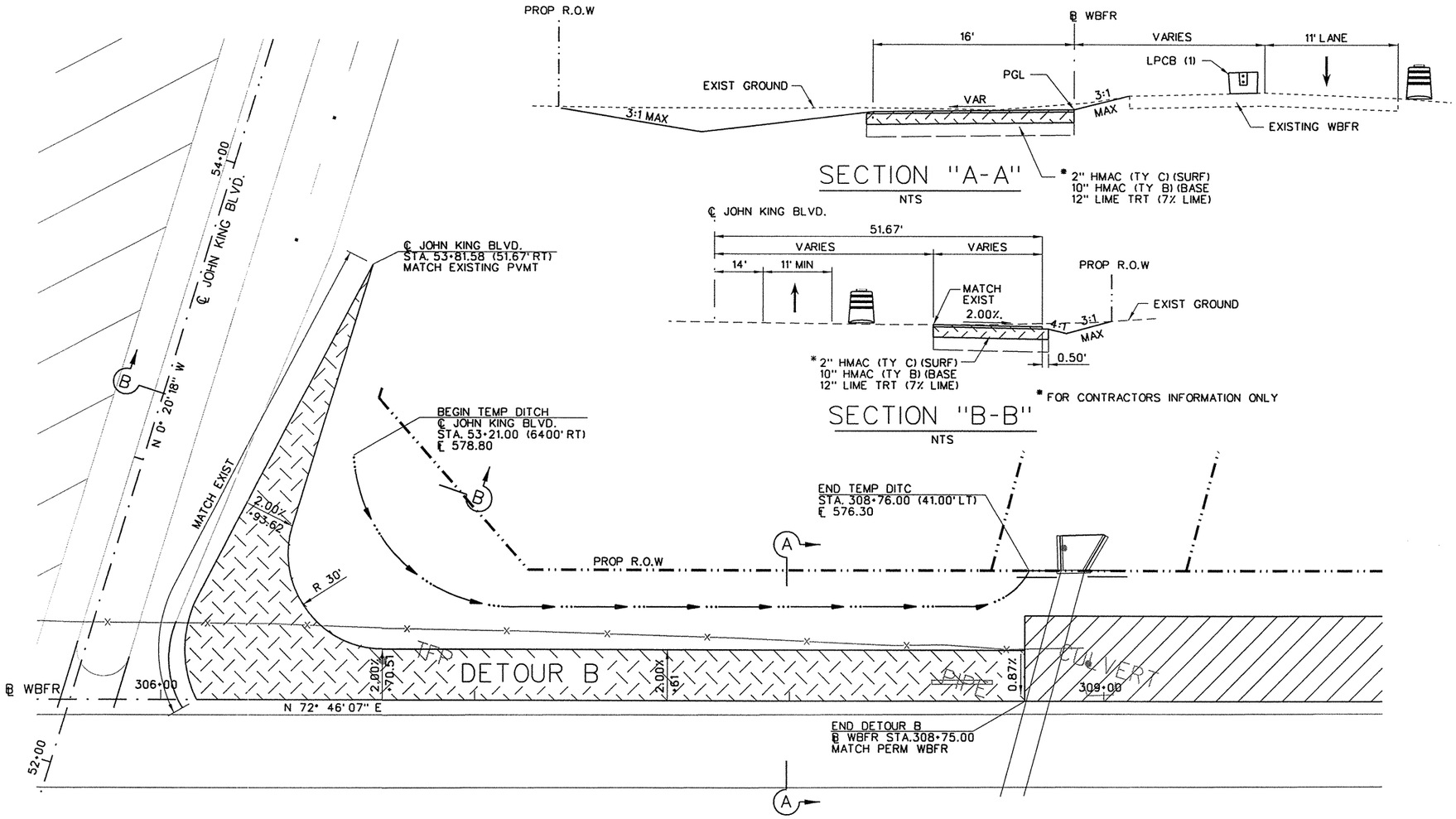
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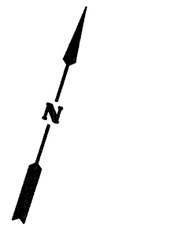
IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN
DETOUR A

Designed:	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	DAL	ROCKWALL	0009	12	073	67

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NOTES:

1. ALL STATIONS AND OFFSETS ARE BASED ON ℄ WBFR UNLESS OTHERWISE NOTED.
2. SEE TRAFFIC CONTROL PLANS PHASE 2 STEPS 1, 2, AND 3, FOR DELINEATION AND INCIDENTAL TRAFFIC CONTROL ITEMS RELEVANT TO DETOUR.



NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

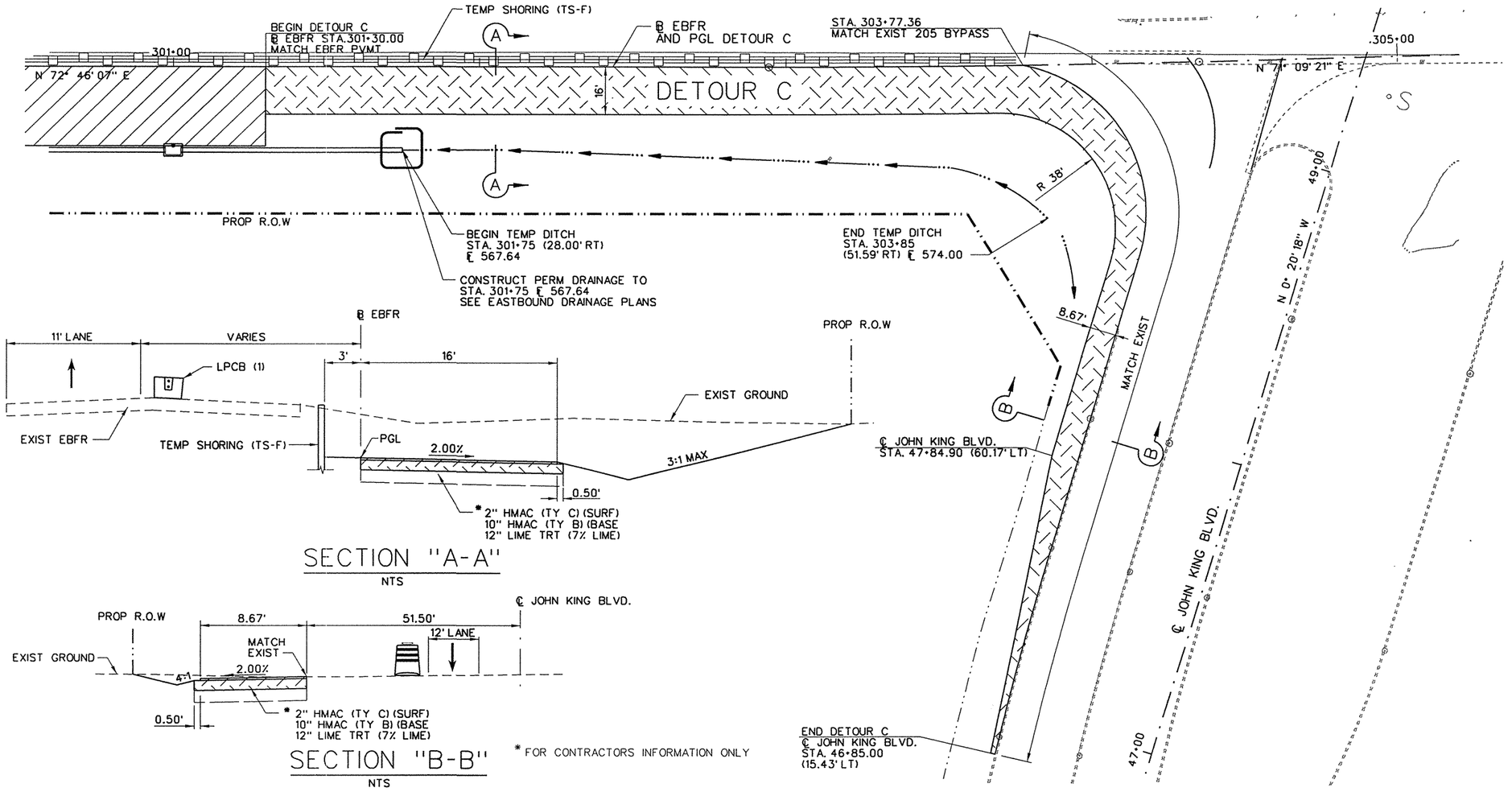
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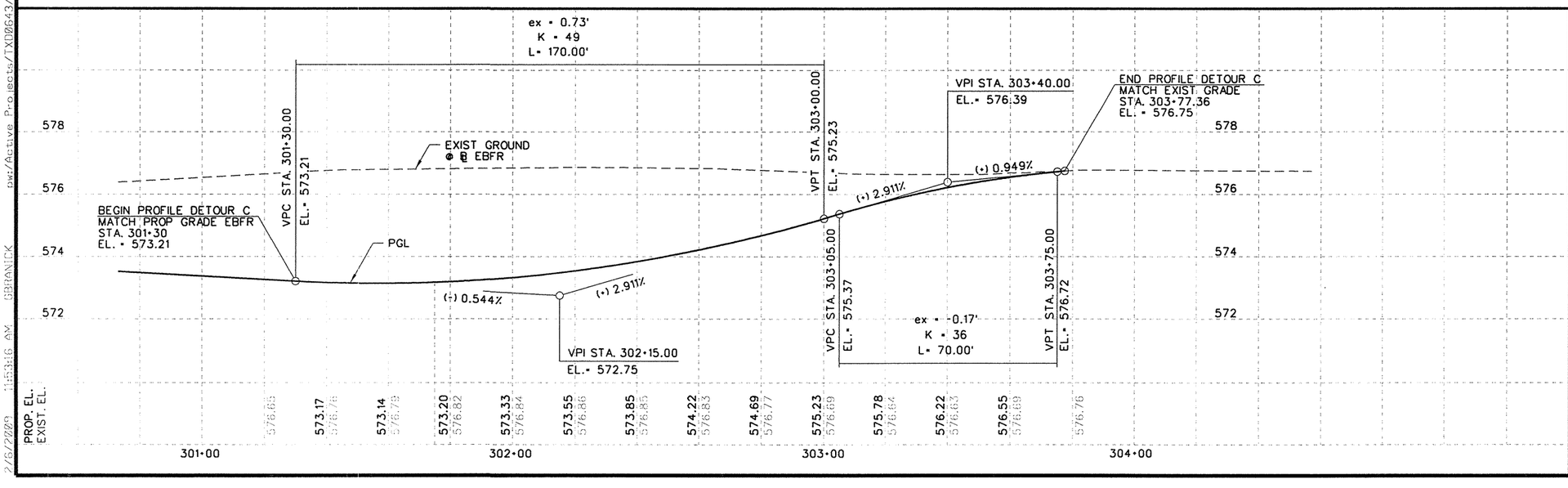
IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN
DETOUR B

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	GRB	DAL	ROCKWALL	0009	12	073	58

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NOTES:

1. ALL STATIONS AND OFFSETS ARE BASED ON ℄ EBFR UNLESS OTHERWISE NOTED.
2. SEE TRAFFIC CONTROL PLANS PHASE 2 STEPS 1, 2, AND 3, FOR DELINEATION AND INCIDENTAL TRAFFIC CONTROL ITEMS RELEVANT TO DETOUR.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

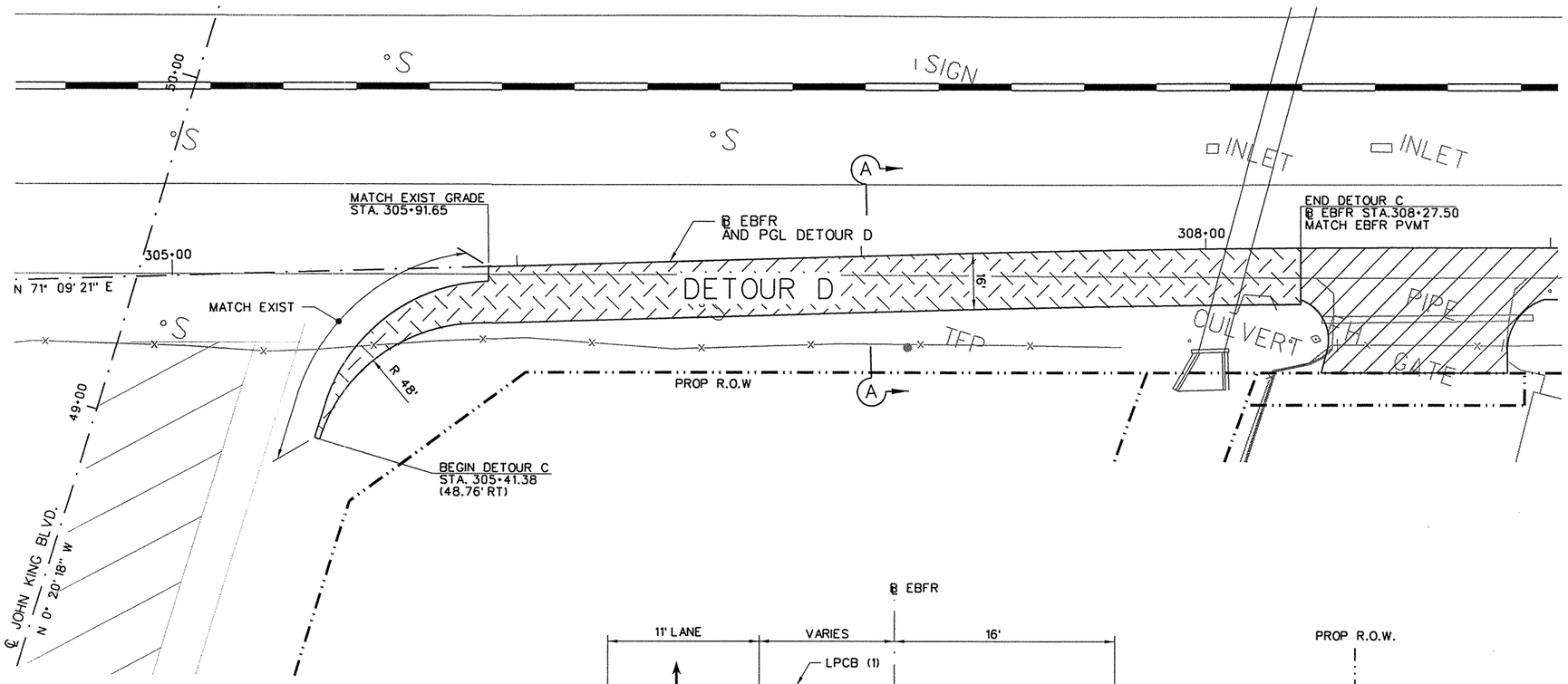
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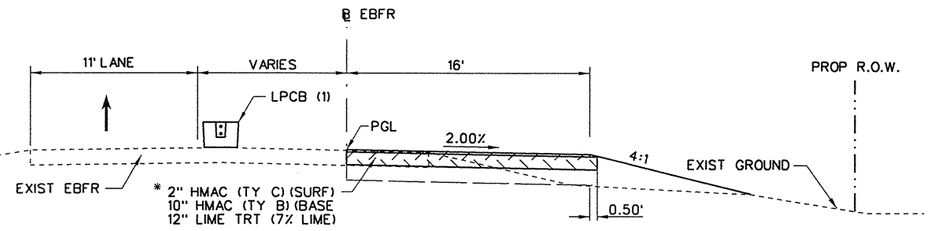
IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN
DETOUR C

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	GRB	DAL	ROCKWALL	0009	12	073	89

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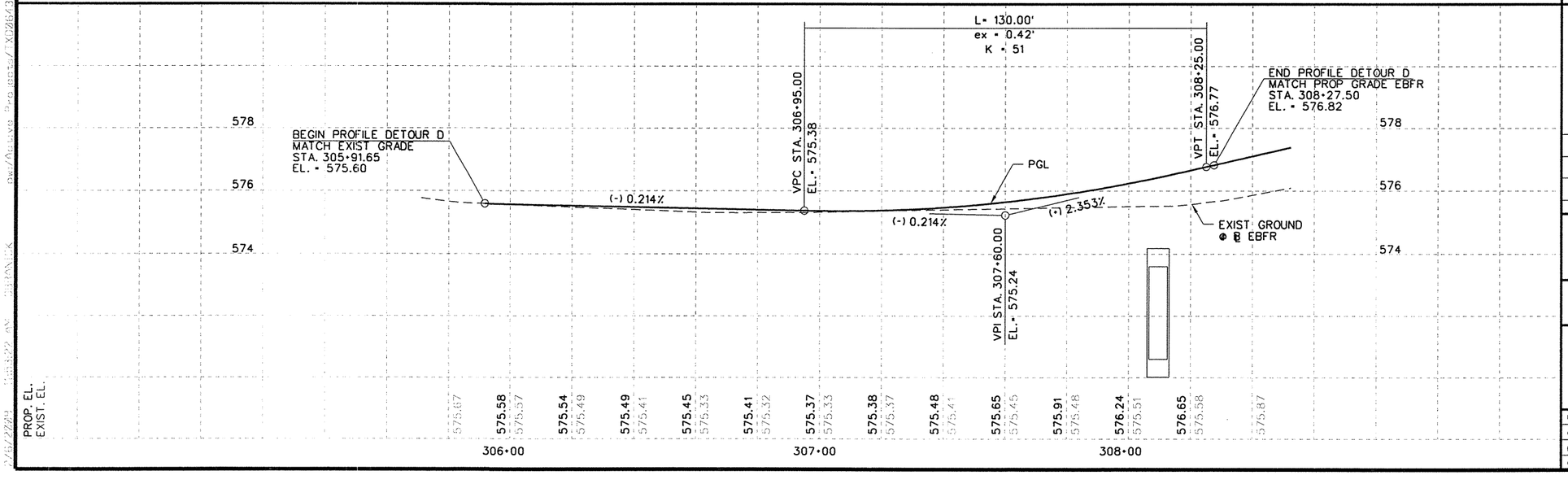




* FOR CONTRACTORS INFORMATION ONLY

SECTION "A-A"

NTS



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SCALE FEET
HORZ.

2 1 0 2 4
SCALE FEET
VERT.

NOTES:

1. ALL STATIONS AND OFFSETS ARE BASED ON ℄ EBFR UNLESS OTHERWISE NOTED.
2. SEE TRAFFIC CONTROL PLANS PHASE 2 STEPS 1, 2, AND 3, FOR DELINEATION AND INCIDENTAL TRAFFIC CONTROL ITEMS RELEVANT TO DETOUR.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
2/4/09

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Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

TRAFFIC CONTROL PLAN
DETOUR D

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	RRH	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	GRB	DAL	ROCKWALL	0009	12	073		90

Plan Review Drawings/8.3Q C.I. Sheets/8.3.03 TCP/TCP 2-1/4350-TCURD.dgn 2/5/2009 2:49:22 PM

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ACC:

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. As shown on BC(2), the OBEY WARNING SIGNS STATE LAW sign 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.
11. Except for devices required by Note 10, 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 Apparel 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" 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.

Only pre-qualified products shall be used. The "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes prequalified products and their sources and may be found on-line at the web address given below or by contacting:

Texas Department of Transportation
Traffic Operations Division - TE
Phone (512) 416-3134

WEB ADDRESSES FOR REFERENCED DOCUMENTS

Compliant Work Zone Traffic Control Devices List (CWZTCD)
http://www.txdot.gov/publications/traffic.htm

Texas Manual on Uniform Traffic Control Devices (TMUTCD)
http://www.txdot.gov/publications/traffic.htm

Standard Highway Sign Designs for Texas (SHSD)
http://www.txdot.gov/publications/traffic.htm

Traffic Engineering Standard Sheets
http://www.txdot.gov/business/disclaim.htm

Material Producer List
http://www.txdot.gov/business/producer_list.htm

Departmental Material Specifications (DMS)
http://www.txdot.gov/services/construction/material_specifications/

Roadway Design Manual
http://www.txdot.gov/services/general_services/manuals.htm

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

BARRICADE AND CONSTRUCTION GENERAL NOTES AND REQUIREMENTS

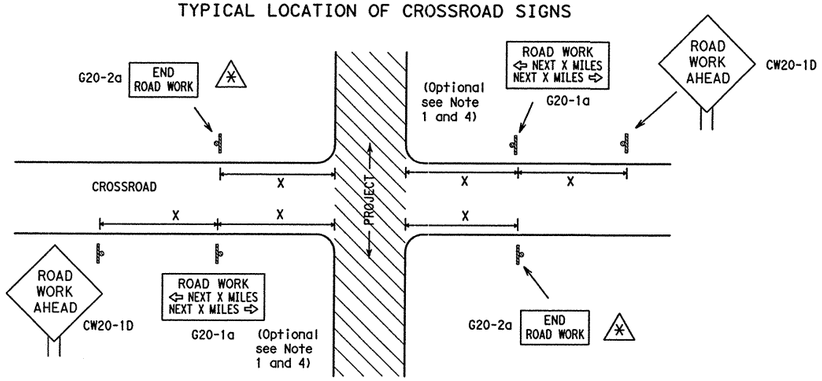
1 of 12 BC(1)-07

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REVISIONS	STATE DISTRICT	FEDERAL REGION	PROJECT NUMBER	SHEET
4-03	18	6		91
9-07	COUNTY		CONTROL SECTION JOB	HIGHWAY
	Rockwall		0009 12 023	1430

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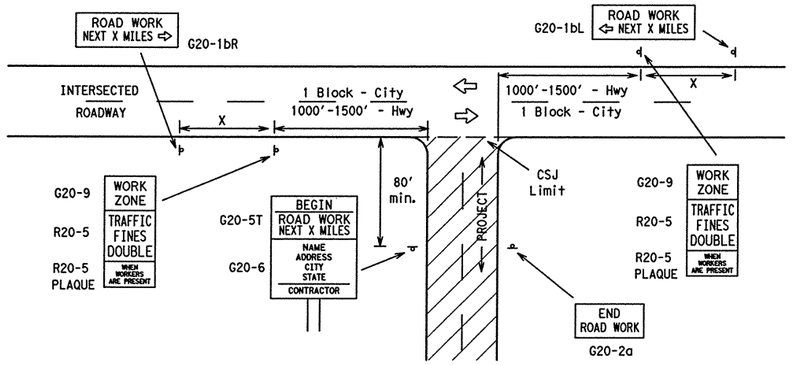
TYPICAL LOCATION OF CROSSROAD SIGNS



✳ May be mounted on back of CW20-1D sign with approval of engineer. (See note 2 below)

1. The typical minimum signing on a crossroad approach should be a CW20-1D ROAD WORK AHEAD sign and a G20-2a 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 (G20-2a) 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. 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 G20-1a 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 G20-6 "Contractor Name" sign behind the Type III Barricades for the road closure (see BC(10) also). The G20-1bL and G20-1bR signs shall be replaced by the detour signing called for in the plans.

TYPICAL CONSTRUCTION WARNING SIGN SIZE AND SPACING [1,5,6]

SIZE			SPACING	
Sign Number or Series	Conventional Road	Expressway/ Freeway	Posted Speed	Sign Spacing "X" △
CW20 [4], CW21, CW22, CW23, CW25	48" x 48"	48" x 48"	MPH	Feet (Apprx.)
			30	120
			35	160
			40	240
			45	320
CW1, CW2, CW7, CW8, CW9, CW11, CW14	36" x 36"	48" x 48"	50	400
			55	500 [2]
			60	600 [2]
			65	700 [2]
			70	800 [2]
			75	900 [2]
			80	1000 [2]
CW3, CW4, CW5, CW6, CW8-3, CW10, CW12	48" x 48"	48" x 48"	✳	✳ [3]

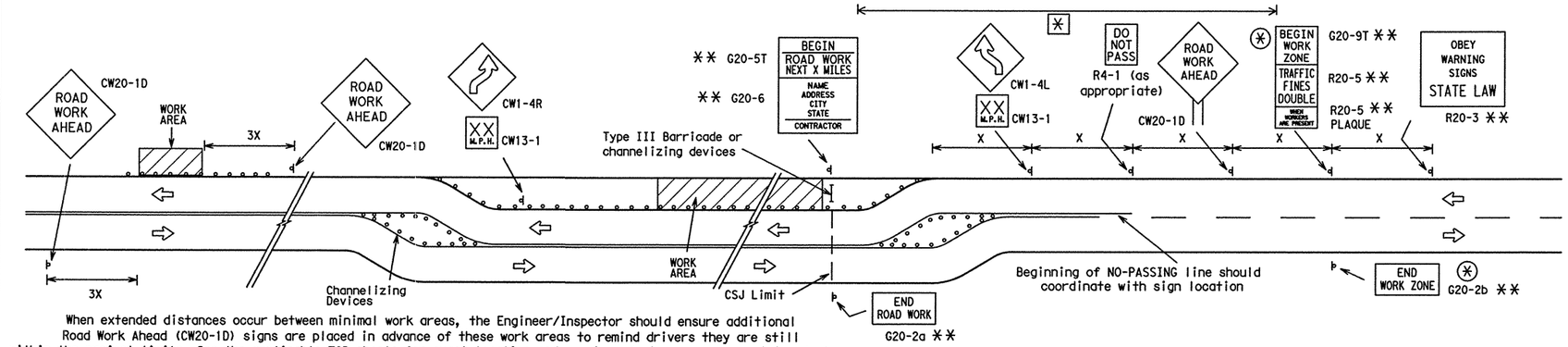
✳ For typical sign spacings on divided highways, expressways and freeways, see Part 6 of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) typical application diagrams or TCP Standard Sheets.
△ Minimum distance from work area to first Advance Warning sign nearest the work area and/or distance 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 ½ 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. 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.

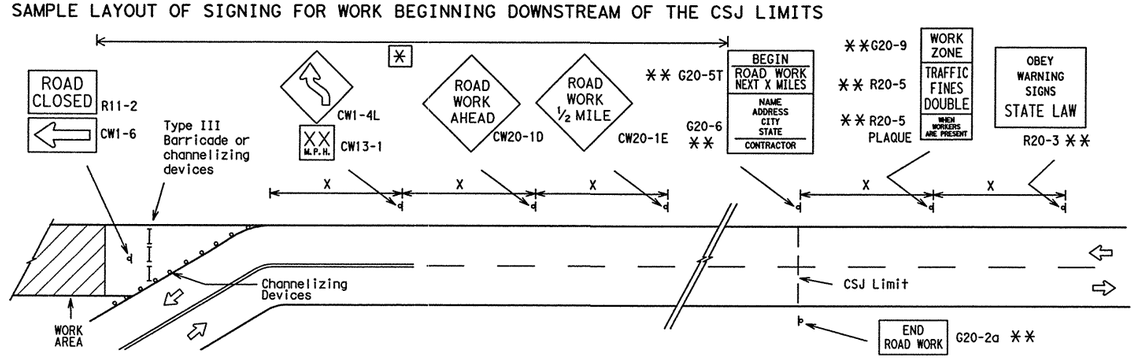
WORK AREAS IN MULTIPLE LOCATIONS WITHIN CSJ LIMITS

SAMPLE LAYOUT OF SIGNING FOR WORK BEGINNING AT THE CSJ LIMITS



When extended distances occur between minimal work areas, 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 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.

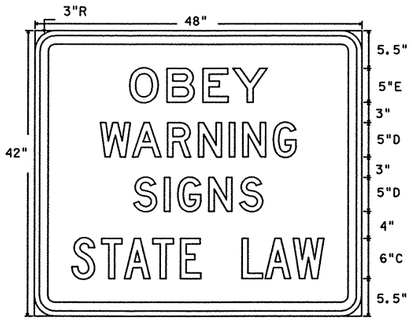
✳ The G20-9T and G20-2b shall be used when advance signs are required outside the CSJ Limits. They inform the motorist of entering or leaving a work zone where traffic fines may double if workers are present.

** Required CSJ Limit signing. See Note 10 on BC(1).

✳ Area for placement of "ROAD WORK AHEAD" sign and other signs or devices as called for on the Traffic Control Plan.

LEGEND

- ⊲ Sign
- O O Channelizing Devices
- I Type III Barricade
- X See Typical Construction Warning Sign Size and Spacing chart or the TMUTCD for sign spacing requirements.



R20-3
Legend/Border - Black
Background - White

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

BARRICADE AND CONSTRUCTION PROJECT LIMIT STANDARD

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REVISIONS 9-07	STATE DISTRICT: 12	FEDERAL REGION: 6	FEDERAL AID PROJECT	SHEET: 92
	COUNTY: Rockwall	CONTROL: 0009	SECTION: 12	JOB: 073	HIGHWAY: 1490

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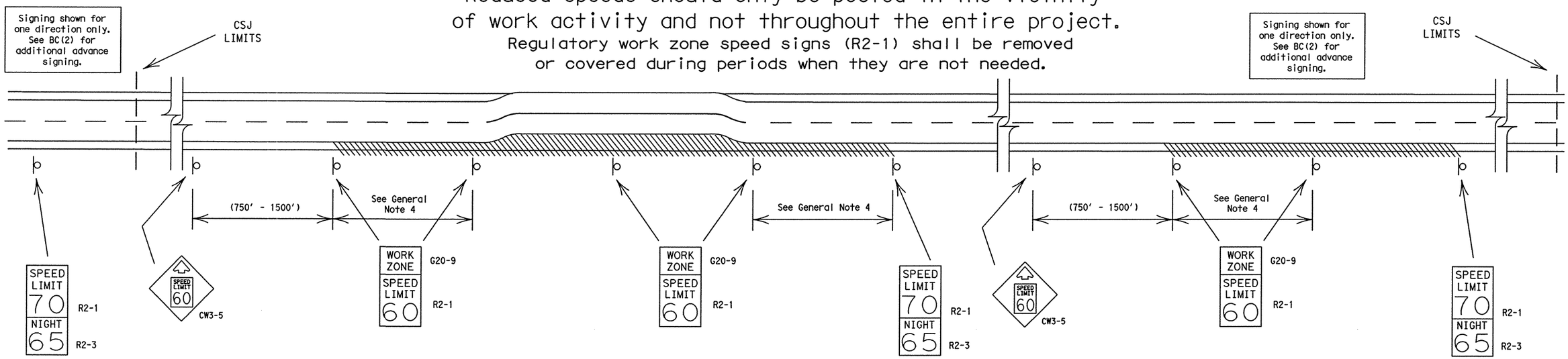
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TYPICAL APPLICATION OF WORK ZONE SPEED LIMIT SIGNS

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 should be included on the design of the traffic control plans when workers or equipment are not behind concrete barrier, when work activity is within 15 feet of pavement edge or actually on the pavement.

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 CW3-5 sign, G20-9 plaque and the R2-1 and R2-3 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 otherwise noted.
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.

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STANDARD PLANS
Texas Department of Transportation
Traffic Operations Division

BARRICADE AND CONSTRUCTION WORK ZONE SPEED LIMIT STANDARD

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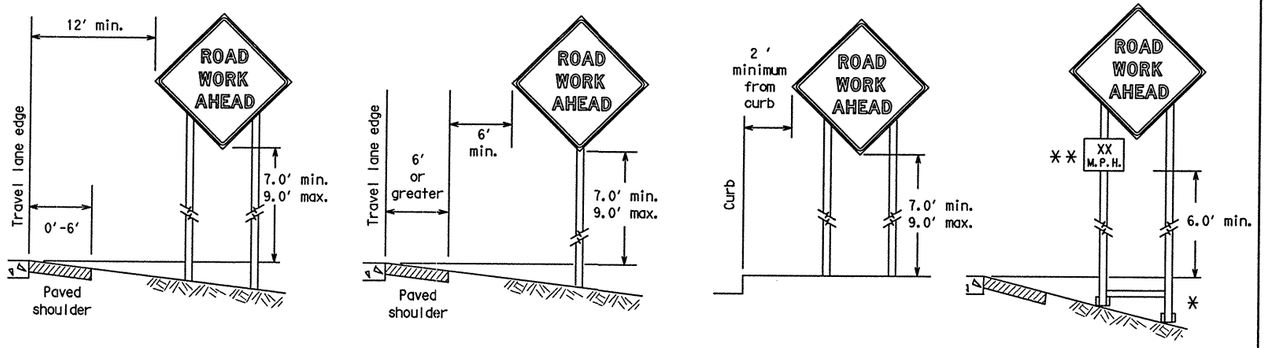
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REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
9-07	18	6		93

COUNTY	CONTROL	SECTION	JOB	HIGHWAY
Rockwall	0009	12	073	IH 30

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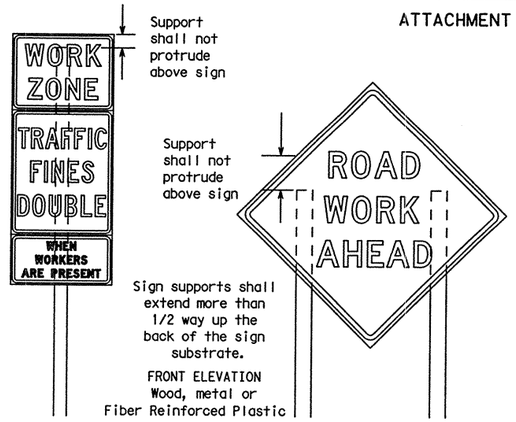
TYPICAL MINIMUM CLEARANCES FOR LONG TERM AND INTERMEDIATE TERM SIGNS

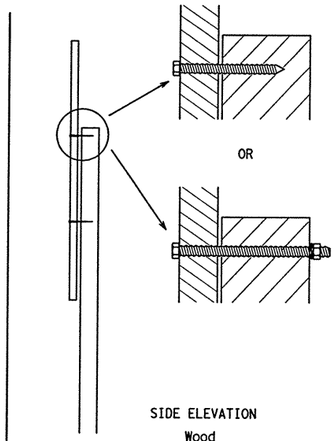


* When placing skid supports on unlevel ground, the leg post lengths must be adjusted so the sign appears straight and plumb. Objects shall NOT be placed under skids as a means of leveling.

** 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

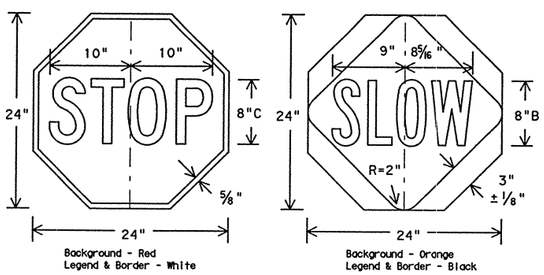
Nails will NOT be allowed.

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 guage 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" as detailed below.
2. When used at night, the STOP/SLOW paddle shall be retroreflectorized.
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.



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, 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.
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 sheets or the CWZTCD. The signs shall meet the required mounting heights shown on the BC Sheets or the SMD Standards 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. Nails shall NOT be used to attach signs to any support.
5. 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.
6. 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.
7. The Contractor shall furnish sign supports listed in the "Compliant Work Zone Traffic Control Device List" (CWZTCD). 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.
8. 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.
9. 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.
10. 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 Engineer may allow the use of smaller size construction warning signs on secondary roads or city streets where speeds are low if the sign size is listed as an option on the "Typical Construction Warning Sign Size and Spacing" chart shown on BC(2).
2. The Contractor shall furnish the sign sizes shown in plans, the BC Sheets, the TCP sheets 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 C (High Specific Intensity), shall be used for signs with a white background.
3. Orange sheeting, meeting the requirements of DMS-8300 Type E (Fluorescent Prismatic), 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 type of sign support meets the crashworthiness standards regardless of the direction of impact. 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. These materials can damage the retroreflectivity of sheeting.
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 is recommended.
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.
6. Rubber (such as tire inner tubes) shall NOT be used for sandbags.
7. 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.
8. 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.
9. Sandbags shall NOT be placed under the skid and shall not be used to level sign supports placed on slopes.

STANDARD PLANS
Texas Department of Transportation
Traffic Operations Division

BARRICADE AND CONSTRUCTION TEMPORARY SIGN NOTES STANDARD

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REVISIONS 9-07	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
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	COUNTY	CONTROL	SECTION	JOB	HIGHWAY
	Rockwall	0009	12	273	11430

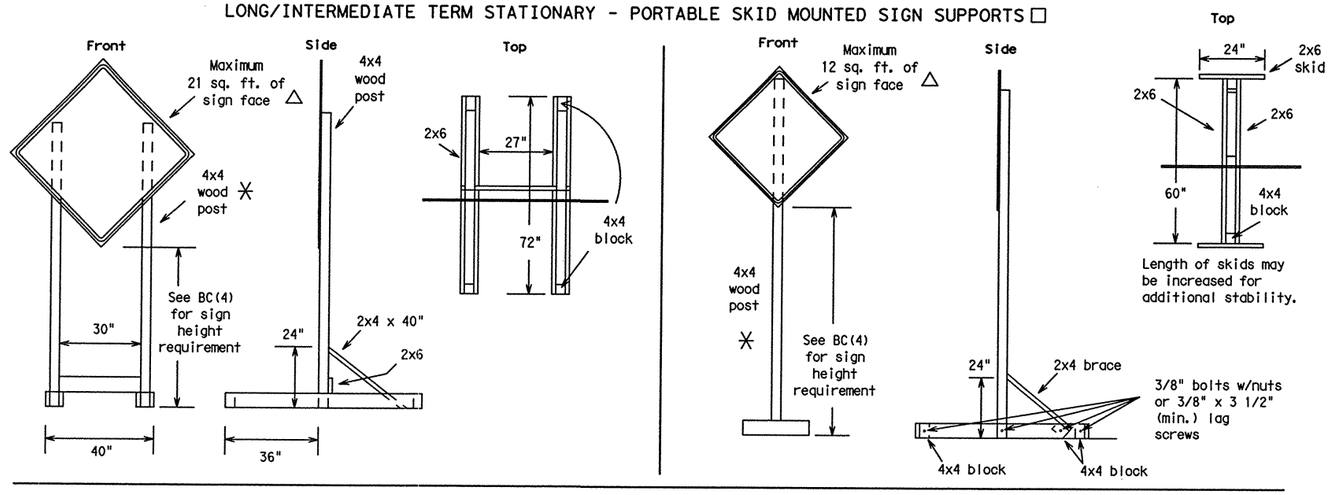
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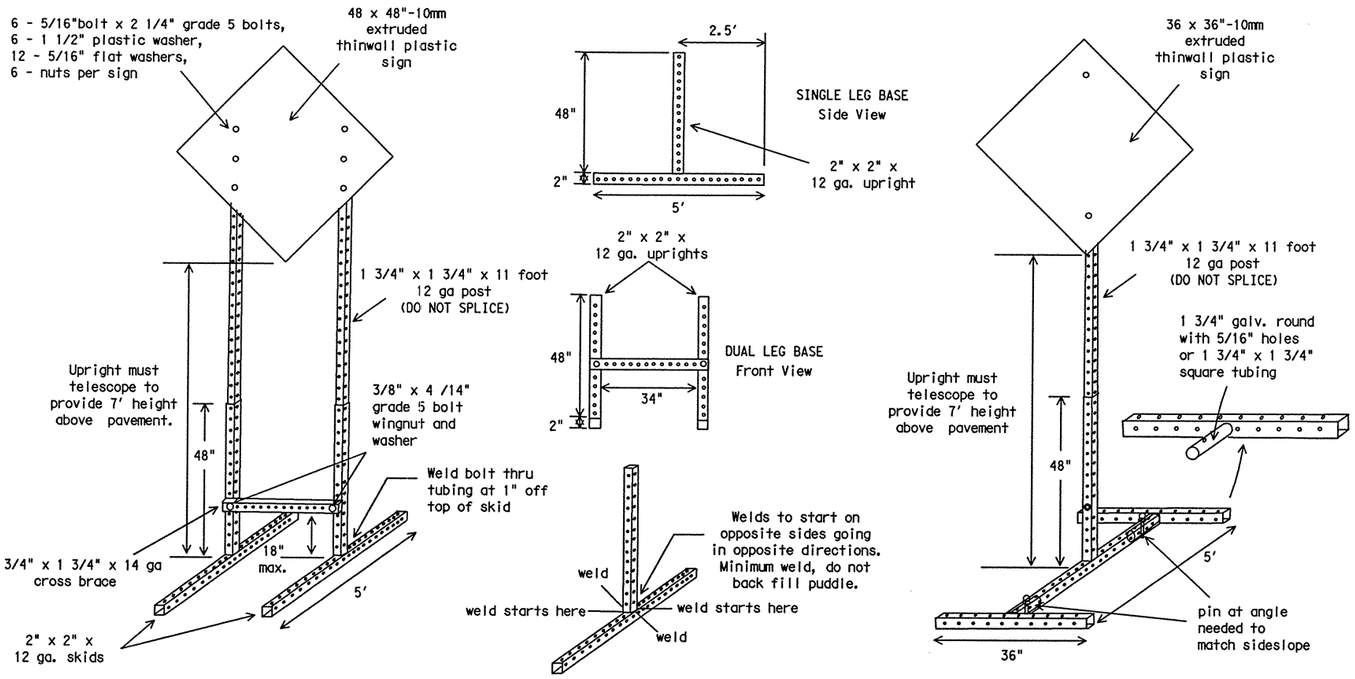
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SKID MOUNTED WOOD SIGN SUPPORTS

LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS □

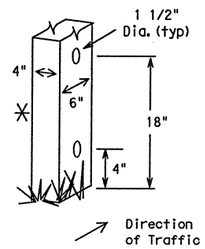


SKID MOUNTED PERFORATED SQUARE STEEL TUBING SIGN SUPPORTS



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)).



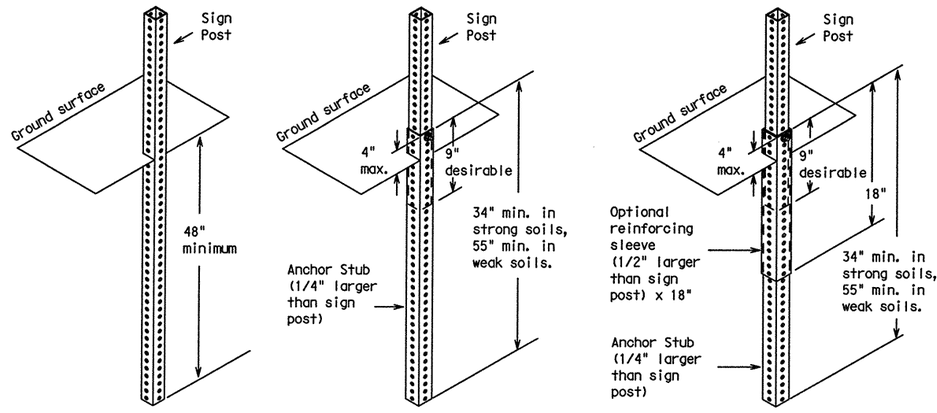
WOOD POST SYSTEM FOR GROUND MOUNTED SIGN SUPPORTS

Nominal Post Size	No. of Posts	Maximum Sq. feet of Sign Face	Minimum Soil Embedment	Drilled Hole(s) Required
4 x 4	1	12	36"	NO
4 x 4	2	21	36"	NO
4 x 6	1	21	36"	YES
4 x 6	2	36	36"	YES

GROUND MOUNTED SIGN SUPPORTS

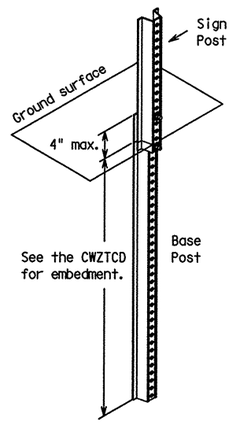
Refer to the CWZTCD and the manufacturer's installation procedure for each type sign support.
The maximum sign square footage shall adhere to the manufacturer's recommendation.
Two post installations can be used for larger signs.

PERFORATED SQUARE METAL TUBING



WING CHANNEL

Lap-splice/base bolted anchor



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. More details of approved Long/Intermediate and Short Term supports can be found on the CWZTCD list. See BC(1) for website location.
3. No more than 2 sign posts shall be placed within a 7 ft. circle, except for specific materials noted on the CWZTCD List.
4. 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.

STANDARD PLANS
Texas Department of Transportation
Traffic Operations Division

BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT STANDARD

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REVISIONS 9-07	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT			SHEET
	08	6				95
	COUNTY		CONTROL	SECTION	JOB	HIGHWAY
	Rockwall		0009	12	013	1630

105

LS DISPLAYED
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17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
49 50 51 52 53 54 55 56 57 58 59 60 61 62 63

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	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	

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.
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 720 feet. 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	Abb.	Word or Phrase	Abb.
Access Road	ACCS RD	Major	MAJ
Air Quality	AIR QLTY	Miles	MI
Alternate	ALT	Miles Per Hour	MPH
Avenue	AVE	Minor	MNR
Best Route	BEST RTE	Monday	MON
Boulevard	BLVD	Normal	NORM
Bridge	BRDG	North	N
Cannot	CANT	Northbound	(route) N
Center	CNTR	Parking	PKING
Construction Ahead	CONST AHEAD	Parking Lot	PRK LOT
Detour Route	DETOUR RTE	Road	RD
Do Not	DONT	Right Lane	RGT LN
East	E	Saturday	SAT
Eastbound	(route) E	Service Road	SERV RD
Emergency	EMER	Shoulder	SHLDR
Emergency Vehicle	EMER VEH	Slippery	SLIP
Entrance, Enter	ENT	South	S
Express Lanes	EXP LANE	Southbound	(route) S
Expressway	EXPWY	Speed	SPD
XXXX Feet	XXXX FT	Street	ST
Fog Ahead	FOG AHD	Sunday	SUN
Freeway	FRWY, FWY	Telephone	PHONE
Freeway Blocked	FWY BLKD	Temporary	TEMP
Friday	FRI	Thursday	THURS
Hazardous Driving	HAZ DRIVING	To Downtown	TO DWNTN
Hazardous Material	HAZMAT	Traffic	TRAF
High-Occupancy Vehicle	HOV	Travelers	TRVLRS
Highway	HWY	Tuesday	TUES
Hours	HR	Time Minutes	TIME MIN
Information	INFO	Upper Level	UPPR LVL
It Is	ITS	Vehicle	VEH
Junction	JCT	Warning	WARN
Left	LFT	Wednesday	WED
Left Lane	LFT LN	Weight Limit	WT LIMIT
Lane Closed	LN CLSD	West	W
Lower Level	LOWR LVL	Westbound	(route) W
Maintenance	MAINT	Wet Pavement	WET PVMT
		Will Not	WONT

Roadway designation # IH-number, US-number, SH-number, FM-number

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

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 *

* LANES SHIFT in Phase 1 must be used with STAY IN LANE in Phase 2.

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 *				

** 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 limted 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.

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 CW20-7a Flagger Symbol, 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 panel provided it meets the visibility, flash rate and dimming requirements on BC(7), for the same size arrow.

STANDARD PLANS
Texas Department of Transportation
Traffic Operations Division

BARRICADE AND CONSTRUCTION PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) STANDARD

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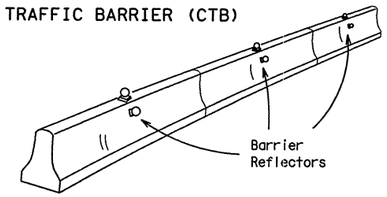
©TxDOT 11-4-02		DN: - TxDOT	CK: - TxDOT	DW: - TxDOT	CK: - TxDOT
REVISIONS 9-07	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT		SHEET
		6			96
	COUNTY		CONTROL	SECTION	JOB	HIGHWAY
	Rockwall		0009	12	073	LOOP

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BARRIER REFLECTORS FOR CONCRETE TRAFFIC BARRIER AND ATTENUATORS

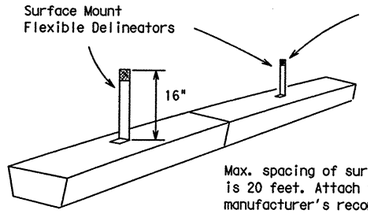
1. Barrier Reflectors shall be prequalified, and conform to the color and reflectivity requirements of DMS-8600. A list of prequalified Barrier Reflectors (Type C Delineators) can be found at the Material Producer List web address shown on BC(1).
2. Color of Barrier Reflectors shall be as specified in the TMUTCD. The cost of the reflectors shall be considered subsidiary to Item 502.

CONCRETE TRAFFIC BARRIER (CTB)



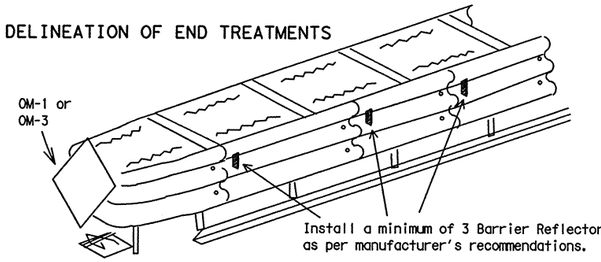
3. Where traffic is on one side of the CTB, two (2) Barrier Reflectors shall be mounted in approximately the midsection of each section of CTB. An alternate mounting location is uniformly spaced at one end of each CTB. This will allow for attachment of a barrier grapple without damaging the reflector. 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. Yellow Barrier Reflectors shall be made with Type E Fluorescent Prismatic Yellow Retroreflective Sheeting. White reflectors shall be made with Type D White Prismatic sheeting.
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.

LOW PROFILE CONCRETE BARRIER (LPCB)



Max. spacing of surface mount flexible delineators is 20 feet. Attach the delineators as per manufacturer's recommendations.

DELINEATION OF END TREATMENTS



	APPROACHING TRAFFIC	
	BOTH SIDES	ONE SIDE
DELINEATION	OM-1	OM-3 or Vertical Panel

END TREATMENTS FOR CTB'S USED IN WORK ZONES

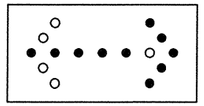
End treatments used on CTB's in work zones shall meet crashworthy standards as defined in the National Cooperative Highway Research Report 350. Refer to the CWZTCD List for approved end treatments and manufacturers.

TYPICAL FLASHING ARROW PANEL

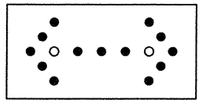
Arrow Panels may be located behind channelizing devices in place for a shoulder taper or merging taper, otherwise they shall be delineated with four (4) channelizing devices placed perpendicular to traffic on the upstream side of traffic.

1. The Flashing Arrow Panel 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 Panels 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 Panel.
4. The Flashing Arrow Panel should be able to display the following symbols:

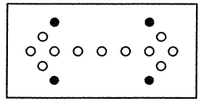
Flashing RIGHT (LEFT) ARROW



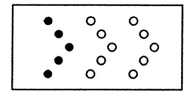
Flashing DOUBLE ARROW



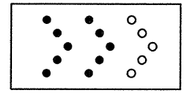
Flashing CAUTION

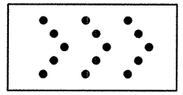


5. The "CAUTION" display consists of four corner lamps flashing simultaneously.
6. The straight line caution display is NOT ALLOWED.
7. The Flashing Arrow Panel shall be capable of minimum 50 percent dimming from rated lamp voltage. The flashing rate of the lamps shall not be less than 25 nor more than 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.



Sequential Chevron





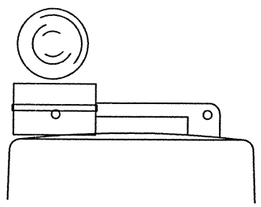
REQUIREMENTS

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

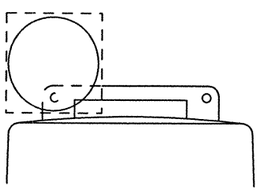
ATTENTION: Flashing Arrow Panels shall be equipped with automatic dimming devices.

WHEN NOT IN USE, REMOVE THE ARROW PANEL FROM THE RIGHT-OF-WAY OR PLACE THE ARROW PANEL BEHIND CONCRETE TRAFFIC BARRIER OR GUARDRAIL.

11. The Flashing Arrow Panel shall be mounted on a vehicle, trailer or other suitable support.
12. A Flashing Arrow Panel SHALL NOT BE USED to laterally shift traffic.
13. A full matrix PCMS may be used to simulate a Flashing Arrow Panel 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 panels should be 7 feet from roadway to bottom of panel.



Type C Warning Light or approved substitute mounted adjacent to the travel way.



Warning reflector may be round or square. Must have a 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 E Sheeting (Fluorescent Prismatic) 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.

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 D (Non-fluorescent Prismatic).
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.

TRUCK-MOUNTED ATTENUATORS

1. Truck-mounted attenuators (TMA) used on TxDOT facilities must meet the requirements outlined in the National Cooperative Highway Research Report No. 350 (NCHRP 350).
2. Refer to the CWZTCD for the requirements of Level 2 or Level 3 TMAs.
3. Refer to the dates shown in the CWZTCD to ensure that the TMA meets the age requirements and the crashworthiness criteria established by the Federal Highway Administration (FHWA) for TMAs.
4. Refer to the CWZTCD for a list of approved TMAs.
5. TMAs are required on freeways unless otherwise noted in the plans.
6. A TMA should be used anytime that it can be positioned approximately 30 to 100 feet in advance of the area of crew exposure without adversely affecting the work performance.
7. 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.

S DISPLAYED	ACC:
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17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32	
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48	
49 50 51 52 53 54 55 56 57 58 59 60 61 62 63	

STANDARD PLANS
Texas Department of Transportation
Traffic Operations Division

BARRICADE AND CONSTRUCTION ARROW PANEL, REFLECTORS, WARNING LIGHTS & ATTENUATOR STANDARD

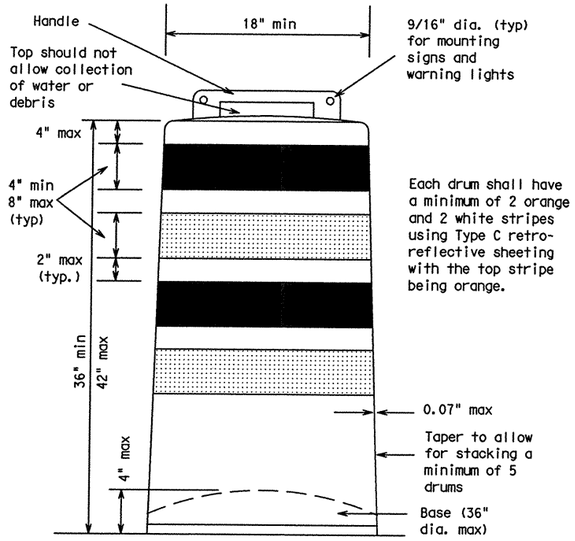
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REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
9-07		6		97

COUNTY	CONTROL	SECTION	JOB	HIGHWAY
Rockwall	0009	12	073	(4)30

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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 ar 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

Prequalified plastic drums shall meet the following requirements:

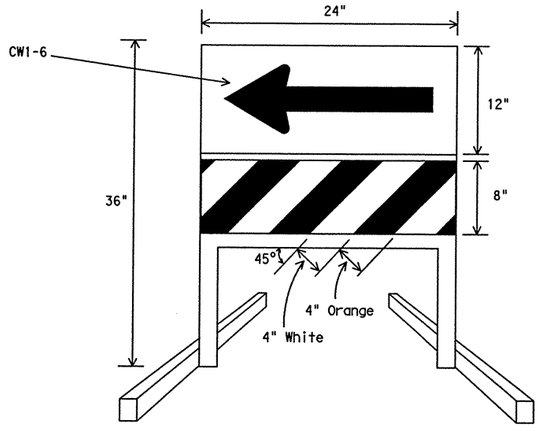
1. Plastic drums shall be a two-piece design; the "body" of the drum shall be the top portion and the "base" shall be the bottom.
2. The body and base shall lock together in such a manner that the body separates from the base when impacted by a vehicle traveling at a speed of 20 MPH or greater but prevents 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 minimum unballasted weight of 7.7 lbs. and maximum unballasted weight of 11 lbs. The wall of the drum body shall be a minimum of 0.07 inch in thickness. Weight of any drum supplied shall not vary more than 0.5 lb. from that of the prequalified sample.
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, "Flat Surface Reflective Sheeting." High Specific Intensity (Type C) retroreflective 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.

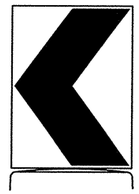
BALLAST

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. 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.
4. 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.
5. Ballast shall not be placed on top of drums.
6. Adhesives may be used to secure base of drums to pavement.

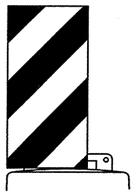


DIRECTION INDICATOR BARRICADE

1. The Direction Indicator Barricade may be used in tapers, transitions, and other areas where specific directional guidance to drivers is necessary.
2. If used, the Direction Indicator Barricade should be used in series to direct the driver through the transition and into the intended travel lane.
3. The Direction Indicator Barricade shall consist of One-Direction Large Arrow (CW1-6) sign in the size shown with a black arrow on a background of Type E Fluoprescent Prismatic Orange above a rail with Type C High Specific Intensity retroreflective sheeting in alternation 4" white and orange stripes sloping downward at an angle of 45 degrees in the direction road users are to pass.
4. Double arrows on the Direction Indicator Barricade will not be allowed.
5. Approved manufacturers are shown on the CWZTCD List. Ballast shall be as approved by the manufacturers instructions.



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 E (Fluorescent Prismatic) 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 C (High Specific Intensity). 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.
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.

LS DISPLAYED
1 2 3
7 8 9 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
49 50 51 52 53 54 55 56 57 58 59 60 61 62 63

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STANDARD PLANS
Texas Department of Transportation
Traffic Operations Division

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES STANDARD

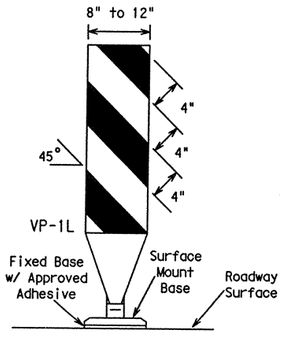
8 of 12 BC(8)-07

©TxDOT 11-4-02		DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
REVISIONS 4-03 9-07	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT		SHEET
		6			98
	COUNTY		CONTROL	SECTION	JOB	HIGHWAY
	Rockwall		0008	12	073	IH 30

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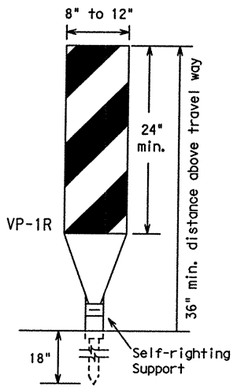
CHANNELIZING DEVICES

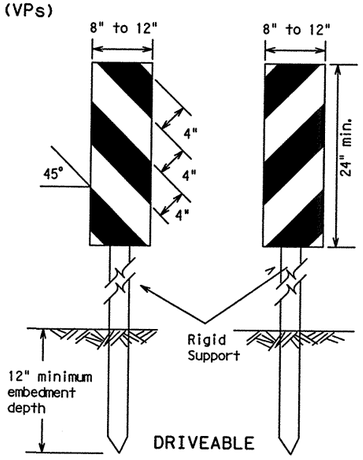
VERTICAL PANELS (VPs)



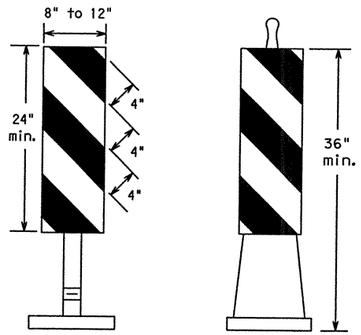
FIXED

(Rigid or self-righting)





DRIVEABLE

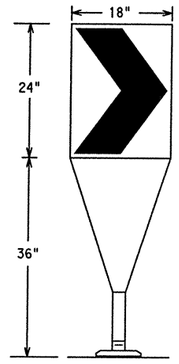


(Rigid or self-righting)

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 Appendix B "Treatment of Pavement Drop-offs in Work Zones" for additional guidelines on the use of 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, shall have a minimum of 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 C (High Specific Intensity) conforming to Departmental Material Specification DMS-8300, unless noted otherwise.
7. Where the height of reflective material on the vertical panel is greater than 36 inches, a panel stripe of 6 inches shall be used.

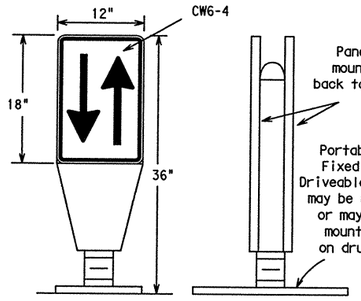
CHEVRONS



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 E (Fluorescent Prismatic) conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall be black vinyl non-reflective decal sheeting meeting 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.

OPPOSING TRAFFIC LANE DIVIDERS (OTLD)



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 simple tubular markers or VPs.
3. Spacing between the OTLD shall not exceed 500 feet. Tubular markers or VPs placed between the OTLD's should not exceed 100 foot spacing.
4. The OTLD shall be orange with a black nonreflective legend. Sheeting for the OTLD shall be retroreflective Type E (Fluorescent Prismatic) conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall be black vinyl non-reflective decal sheeting meeting the requirements of DMS-8300.

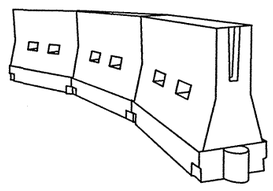
GENERAL NOTES:

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 approximately 35 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.
8. Examples on this sheet are commonly used channelizing devices in work zones. For other devices, refer to the CWZTCD.

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
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'-75'
35		205'	225'	245'	35'	70'-90'
40		265'	295'	320'	40'	80'-100'
45	L=WS	450'	495'	540'	45'	90'-110'
50		500'	550'	600'	50'	100'-125'
55		550'	605'	660'	55'	110'-140'
60		600'	660'	720'	60'	120'-150'
65		650'	715'	780'	65'	130'-165'
70		700'	770'	840'	70'	140'-175'
75		750'	825'	900'	75'	150'-185'
80		800'	880'	960'	80'	160'-195'

✕✕Taper lengths have been rounded off.
L=Length of Taper (FT.) W=Width of Offset (FT.)
S=Posted Speed (MPH)

HOLLOW OR WATER BALLASTED SYSTEMS USED AS LONGITUDINAL CHANNELIZING DEVICES OR BARRIERS



LONGITUDINAL CHANNELIZING DEVICES

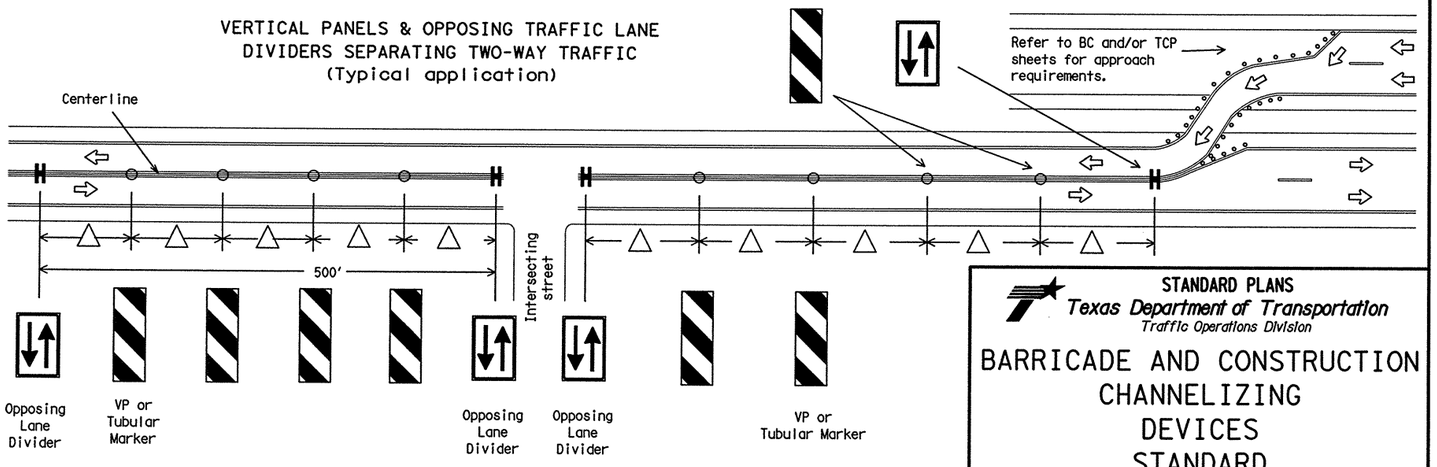
1. Longitudinal channelizing devices are crashworthy, lightweight, deformable devices that are highly visible, have good target value and can be connected together. **They are not designed to contain or redirect a vehicle on impact.**
2. Longitudinal channelizing devices may be used instead of a line of cones or drums.
3. Longitudinal channelizing devices shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
4. Longitudinal channelizing devices should not be used to provide positive protection for obstacles, pedestrians or workers.
5. Longitudinal channelizing devices shall be retroreflective, or supplemented with retroreflective delineation as required for temporary barriers on BC(7)-07.

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 NCHRP 350 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 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 be not less than 32 inches in height.

VERTICAL PANELS & OPPOSING TRAFFIC LANE DIVIDERS SEPARATING TWO-WAY TRAFFIC (Typical application)



△ Spacing between the VP's or tubular markers shall not exceed 100 feet. On roadways with speeds less than 45 MPH, spacing between the tubular markers or VP's shall be as shown on the channelizing spacing table shown on this page. If the table shows spacing greater than 100 feet based on the roadway speed, then use a maximum of 100 feet spacing between the tubular markers or VP's. Every fifth channelizing device shall be an OTLD, except when the OLTD must be spaced closer to accomodate an intersection. Spacing between the OTLD shall not exceed 500 feet.

STANDARD PLANS
Texas Department of Transportation
Traffic Operations Division

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES STANDARD

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REVISIONS 9-07	STATE DISTRICT	FEDERAL REGION 6	FEDERAL AID PROJECT	SHEET 99
	COUNTY Rockwall	CONTROL 0009	SECTION 12	JOB 073	HIGHWAY IH 30

ACC:
IS DISPLAYED
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63

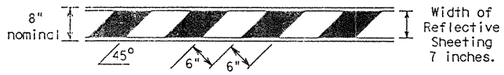
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TYPE III BARRICADES

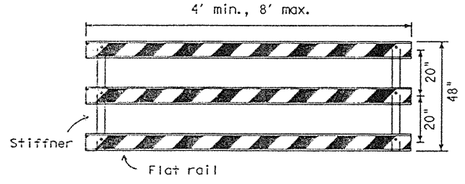
1. Refer to the Compliant Work Zone Traffic Control Devices List (CWZTCD) for details of the Type III Barricades and a list of all materials used in the construction of Type III Baricades.
2. Type III Barricades shall be used at each end of construction projects closed to all traffic.
3. Barricades extending 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 C (High Specific Intensity) conforming to Departmental Material Specfication DMS-8300 unless otherwise noted.

Barricades shall NOT be used as a sign support.

TYPICAL STRIPING DETAIL FOR BARRICADE RAIL

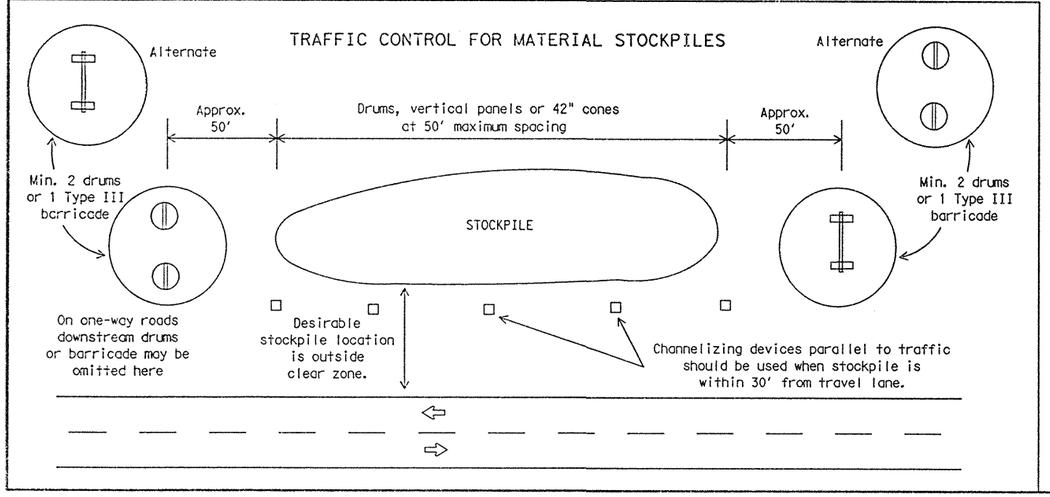


TYPICAL PANEL DETAIL FOR SKID OR POST TYPE BARRICADES



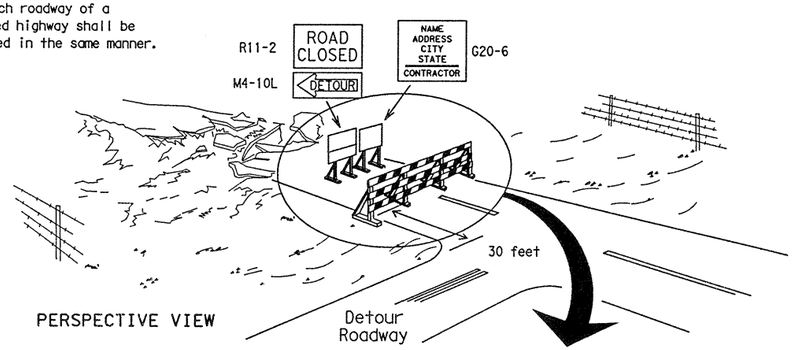
Stiffner may be inside or outside of support, but no more than 2 stiffeners shall be allowed on one barricade.

TRAFFIC CONTROL FOR MATERIAL STOCKPILES



TYPE III BARRICADE (POST AND SKID) TYPICAL APPLICATION

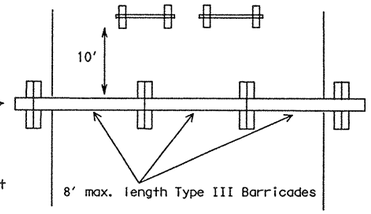
Each roadway of a divided highway shall be barricaded in the same manner.



PERSPECTIVE VIEW

The three rails on Type III barricades shall be reflectorized orange and reflective white stripes on one side facing one-way traffic and both sides for two-way traffic.

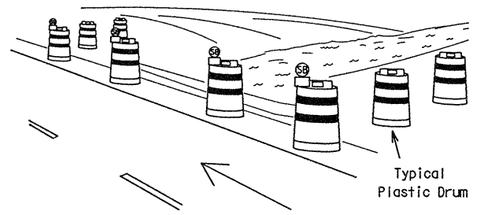
Barricade striping should slant downward in the direction of detour.



PLAN VIEW

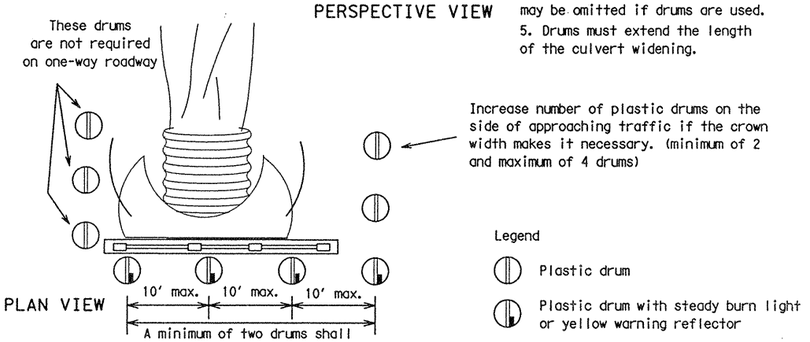
1. Signs should be mounted on independent supports at a 7 foot mounting height in center of roadway. The signs should be a minimum of 10 feet behind Type III Barricades.
2. Advance signing shall be as specified elsewhere in the plans.

CULVERT WIDENING OR OTHER ISOLATED WORK WITHIN THE PROJECT LIMITS



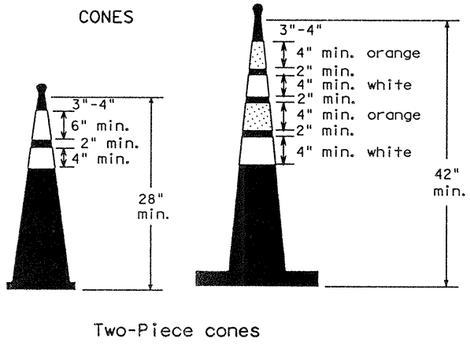
PERSPECTIVE VIEW

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.

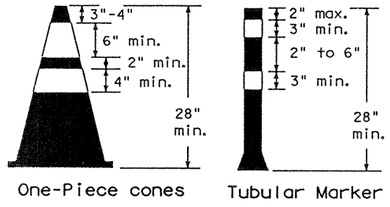


PLAN VIEW

CONES



Two-Piece cones



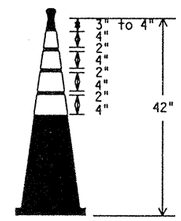
One-Piece cones

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 a minimum of 28 inches in height when used either on freeways or at nighttime.
2. Cones or tubular markers shall be predominantly orange, fluorescent red-orange, or fluorescent yellow-orange. They should be kept clean and bright for maximum visibility.
3. Cones used only for daytime operations do not require the reflectorized bands.
4. Cones and tubular markers used for nighttime operations shall be reflectorized. Reflectorized material shall have a smooth, sealed outer surface that displays the same approximate color during the day and night. The reflectorized bands shall be retroreflective Type C (High Specific Intensity) conforming to Departmental Material Specification DMS-8300, unless otherwise noted.
5. When used at night, appropriate personnel shall ensure that cones and tubular markers remain in their proper location and in an upright position.
6. Reflectorization of 28"cones shall consist of a minimum 6 inch band placed at least 3 inches but not more than 4 inches from the top, supplemented by a minimum 4 inch band spaced a minimum of 2 inches below the 6 inch band.
7. Reflectorization of 42" cones shall be provided by alternating 4 to 6" orange and white stripes with orange on top.
8. Reflectorization of tubular markers shall be a minimum of two 3 inch bands placed a maximum of 2 inches from the top with a maximum of 6 inches between bands.
9. One-piece cones or tubular markers are generally suitable for temporary usage (up to 8 hours) with other channelization devices such as vertical panels, drums or two-piece cones for long term usage. Care should be taken to ensure they remain in their proper location and in an upright position.
10. Cones or tubular markers used on each project shall be of the same size and shape.
11. The handle may be designed as a hook or other shape, fabricated from non-rigid materials similar to the cone material, and may extend up to a maximum of 8 inches above the top of cone. Length of the handle shall not be considered with regard to the overall height of the cone.



EDGELINE CHANNELIZER

1. This device is intended only for use in place of a vertical panel to channelize traffic by indicating the edge of the travel lane. It is not intended to be used in transitions or tapers.
2. This device shall not be used to separate lanes of traffic (opposing or otherwise) or warn of objects.
3. This device is based on a 42 inch, two-piece cone with an alternate striping pattern: four 4 inch retroreflective bands, with an approximate 2 inch gap between bands. The color of the band should correspond to the color of the edgeline (yellow for left edgeline, white for right edgeline) for which the device is substituted or for which it supplements. The reflectorized bands shall be retroreflective Type C encapsulated bead (High Specific Intensity) conforming to Departmental Material Specification DMS-8300, unless otherwise noted.
4. The base must weigh a minimum of 30 lbs.

STANDARD PLANS
Texas Department of Transportation
Traffic Operations Division

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES STANDARD

10 of 12 BC(10)-07

© TxDOT 11-4-02		DN:- TxDOT	CK:- TxDOT	DW:- TxDOT	CK:- TxDOT
REVISIONS 9-07	STATE DISTRICT / FEDERAL REGION: 6	FEDERAL AID PROJECT			SHEET: 100
	COUNTY: Rockwall	CONTROL: 0009	SECTION: 12	JOB: 073	HIGHWAY: 1430

ACC:

LEVELS DISPLAYED																
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63		

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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.

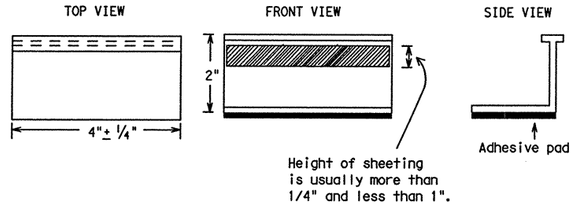
MAINTAINING WORK ZONE PAVEMENT MARKINGS

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 two weeks, 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.
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

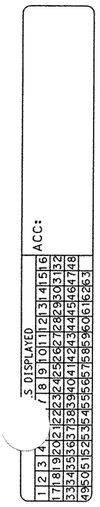
1. Raised pavement markers used as guidemarks shall be from the approved product list, and meet the requirements of DMS-4200.
2. All temporary construction raised pavement markers provided on a project shall be of the same manufacturer.
3. Adhesive for guidemarks shall be bituminous material hot applied 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
PREFABRICATED PAVEMENT MARKINGS-PERMANENT	DMS-8240
PREFABRICATED PAVEMENT MARKINGS-REMOVABLE	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).



STANDARD PLANS
Texas Department of Transportation
Traffic Operations Division

BARRICADE AND CONSTRUCTION PAVEMENT MARKINGS STANDARD

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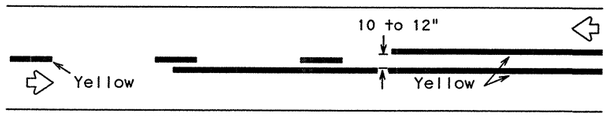
DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT

REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
2-98		6		101
1-02				
11-02	COUNTY	CONTROL	SECTION	JOB	HIGHWAY
9-07	Rockwall	0009	12	573	1050

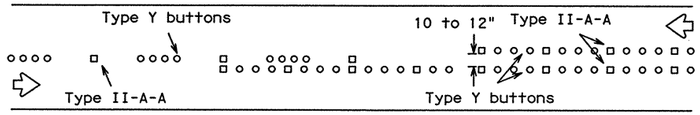
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PAVEMENT MARKING PATTERNS

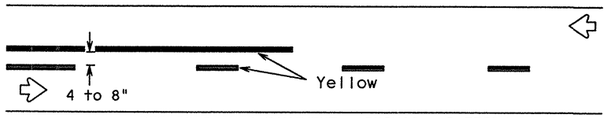
CENTER LINE & NO-PASSING ZONE BARRIER LINES FOR TWO-LANE, TWO-WAY HIGHWAYS



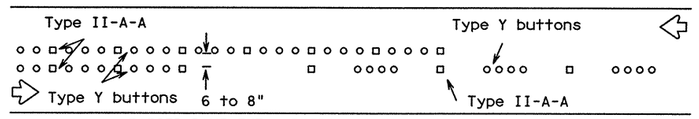
REFLECTORIZED PAVEMENT MARKINGS - PATTERN A



RAISED PAVEMENT MARKERS - PATTERN A



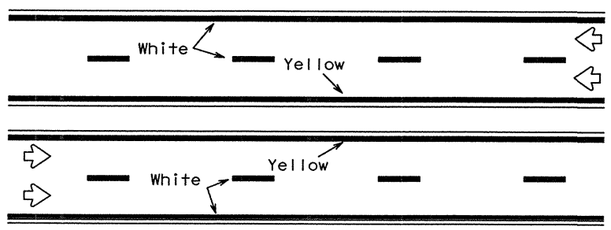
REFLECTORIZED PAVEMENT MARKINGS - PATTERN B



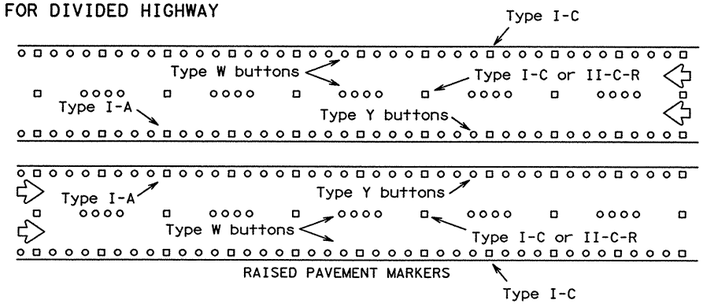
RAISED PAVEMENT MARKERS - PATTERN B

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.

EDGE & LANE LINES FOR DIVIDED HIGHWAY



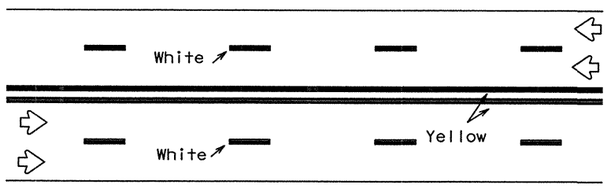
REFLECTORIZED PAVEMENT MARKINGS



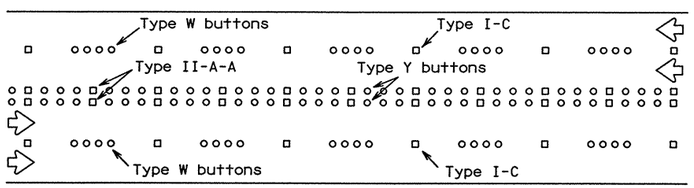
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

LANE & CENTER LINES FOR MULTILANE UNDIVIDED HIGHWAYS



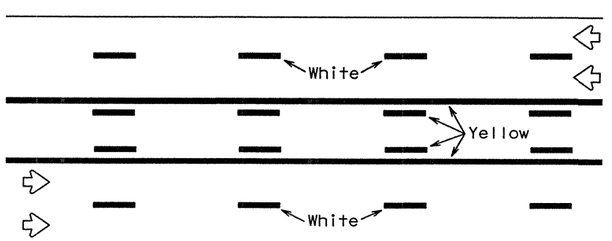
REFLECTORIZED PAVEMENT MARKINGS



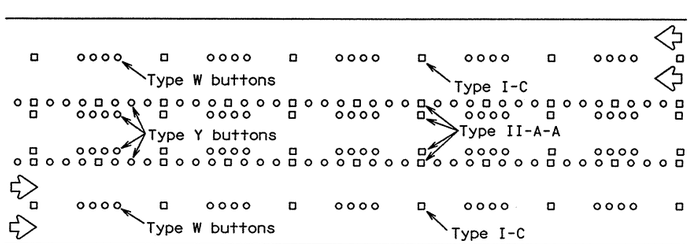
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

TWO-WAY LEFT TURN LANE



REFLECTORIZED PAVEMENT MARKINGS



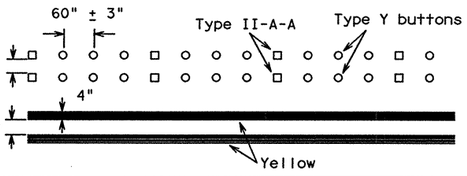
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

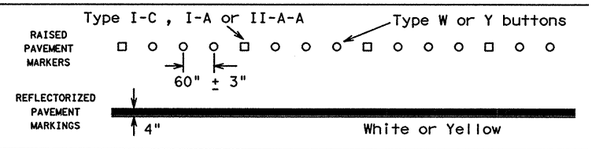
STANDARD WORK ZONE PAVEMENT MARKINGS DETAILS

SOLID LINES

DOUBLE NO-PASSING LINE

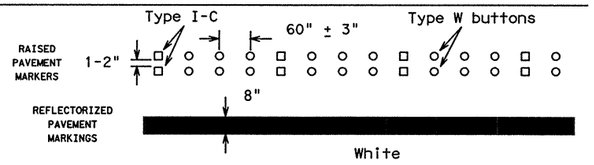


EDGE LINE OR SINGLE NO-PASSING LINE



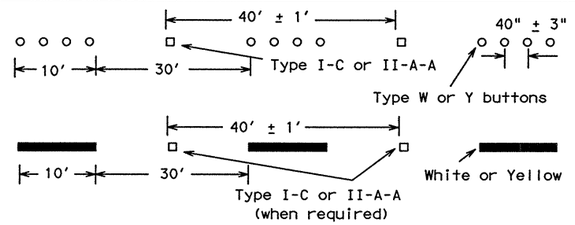
WIDE LINE

(FOR LEFT TURN CHANNELIZING LINE OR CHANNELIZING LINE USED TO DISCOURAGE LANE CHANGING.)



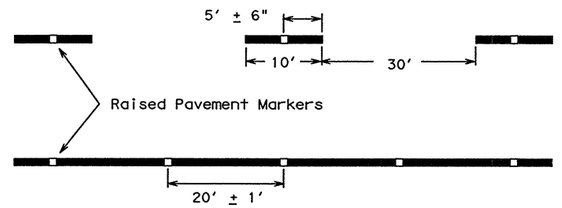
BROKEN LINE

(FOR CENTER LINE OR LANE 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."

STANDARD PLANS
Texas Department of Transportation
Traffic Operations Division

BARRICADE AND CONSTRUCTION PAVEMENT MARKING PATTERNS STANDARD

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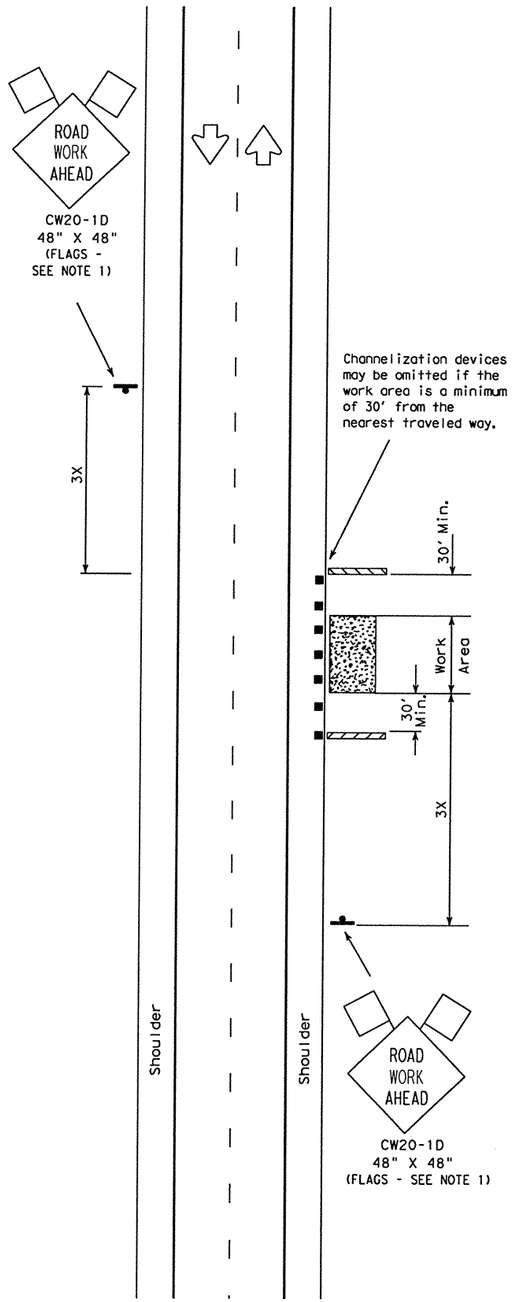
DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT

REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
1-97				
2-98		6		102
11-02	COUNTY	CONTROL	SECTION	JOB	HIGHWAY
9-07	Rockwall	0009	12	023	16930

109C

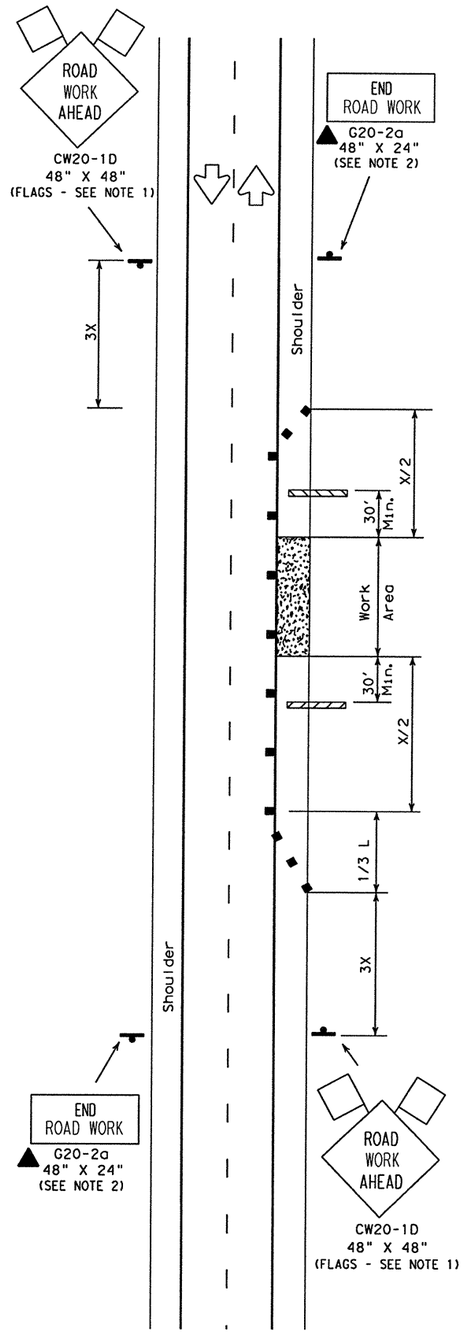
5 DISPLAYED ACC:
1 2 3 4 / 5 6 7 8 9 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
49 50 51 52 53 54 55 56 57 58 59 60 61 62 63

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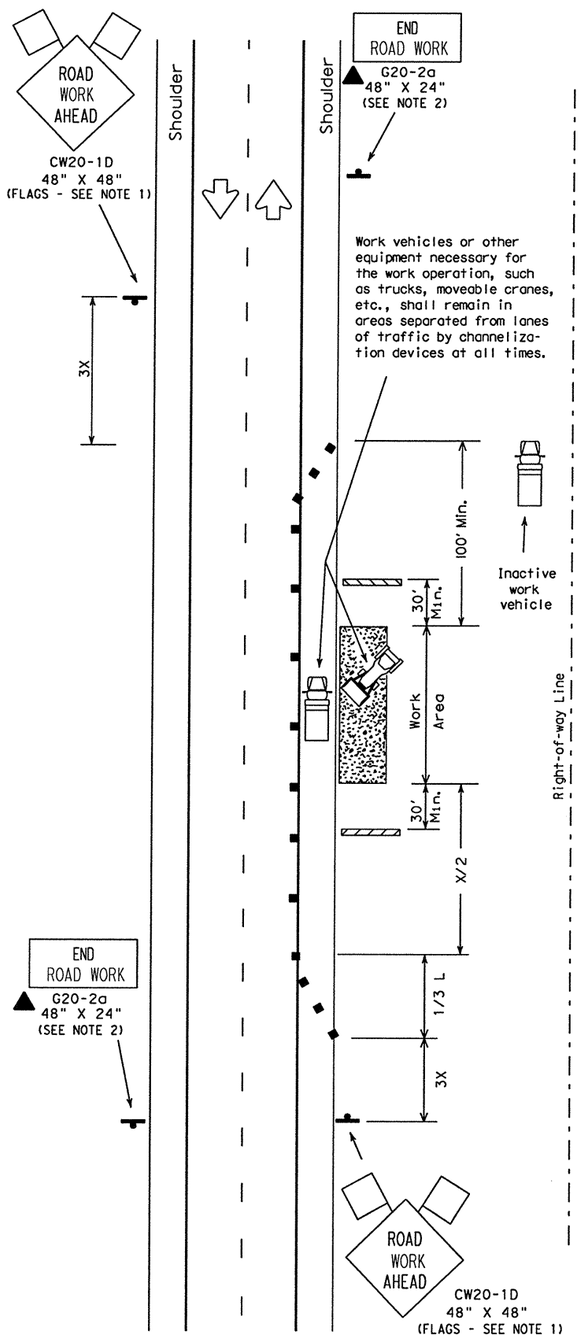
TCP (2-1a)

Work Area Near Shoulder



TCP (2-1b)

Work Area on Shoulder



TCP (2-1c)

Work Vehicles on Shoulder

LEGEND

Type III Barricade ■ ■ Channelizing Devices Flag
Heavy Work Vehicle Truck Mounted Attenuator
Trailer Mounted Flashing Arrow Panel (M) Portable Changeable Message Sign
Flagger Sign Post

Posted Speed ✳	Formula	Minimum Desirable Taper Lengths ✳✳ 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Device On a Taper	On a Tangent	Minimum Sign Spacing X Distance
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'-75'	120'
35		205'	225'	245'	35'	70'-90'	160'
40		265'	295'	320'	40'	80'-100'	240'
45	L=WS	450'	495'	540'	45'	90'-110'	320'
50		500'	550'	600'	50'	100'-125'	400'
55		550'	605'	660'	55'	110'-140'	500'
60		600'	660'	720'	60'	120'-150'	✳600'
65		650'	715'	780'	65'	130'-165'	✳700'
70		700'	770'	840'	70'	140'-175'	✳800'

✳ 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. Unless otherwise stated in the plans, flags attached to signs 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.
3. Type III barricades are required on both sides of work area at all times. (See BC Standards for barricade details.)
4. Stockpiled material should be placed a minimum 30' from nearest traveled way.
5. Oh high speed facilities advance warning signs should be installed approximately 3X from the work area or from the beginning of a lane or shoulder taper. On low speed facilities the advance warning sign should be placed on the "X" minimum distance.

Only pre-qualified products shall be used. A list of compliant products and their sources may be obtained by writing or faxing:

Standards Engineer
Traffic Operations Division - TE
Texas Department of Transportation
125 East 11th Street
Austin, Texas 78701-2483
Phone (512) 416-3335
Fax (512) 416-3161
E-mail TRF-STANDARD@mailgw.dot.state.tx.us

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

TRAFFIC CONTROL PLAN

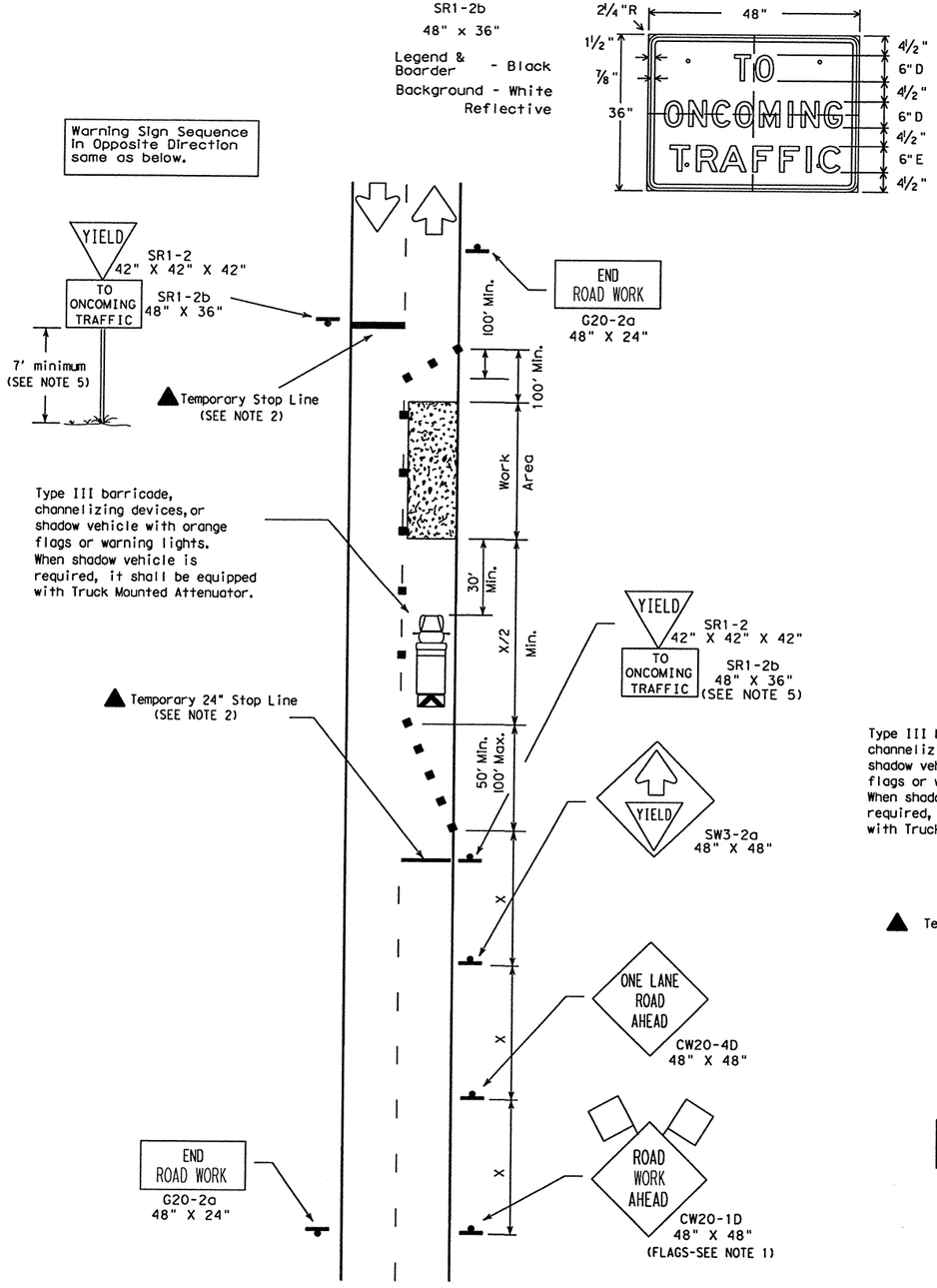
TCP(2-1)-98

©TxDOT December 1985	DN: - LR	CK: - MT	DW: - DN	CK: - MT	REQ NO.:
REVISIONS 2-94 8-95 1-97 4-98	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT		SHEET
		6			103
	COUNTY		CONTROL	SECTION	JOB	HIGHWAY
	Rockwall		0008	13	073	(4)30

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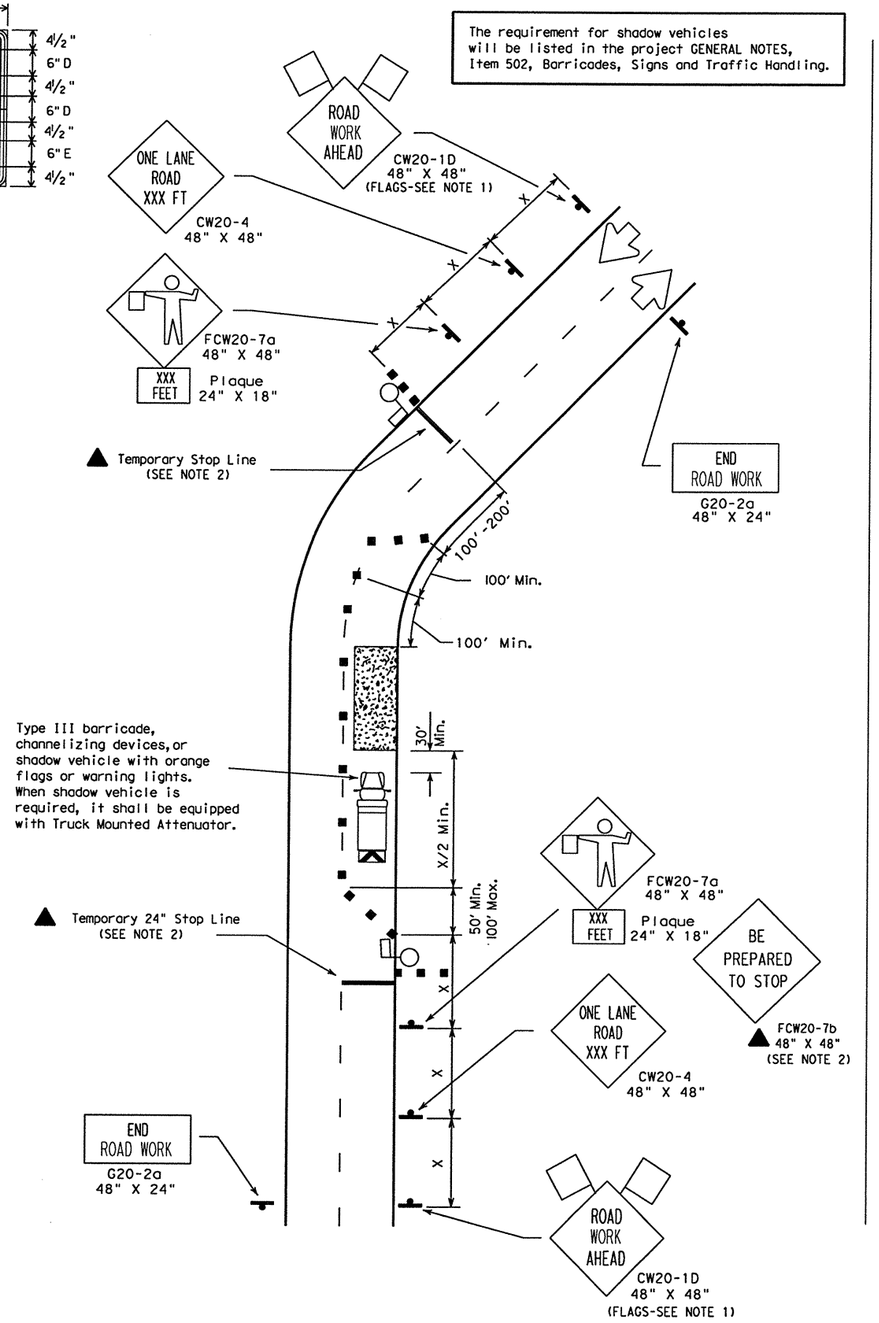
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CK:
DW:
CK:

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TCP (2-2a)

2-Lane Roadway Without Paved Shoulders
One Lane Closed
Adequate Field of View



TCP (2-2b)

2-Lane Roadway Without Paved Shoulders
One Lane Closed
Inadequate Field of View

LEGEND

Type III Barricade ■ ■ Channelizing Devices Flag
Heavy Work Vehicle Truck Mounted Attenuator
Trailer Mounted Flashing Arrow Panel (M) Portable Changeable Message Sign
Flagger Sign Post

Posted Speed ✳	Formula	Minimum Desirable Taper Lengths ✳✳ 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Device On a Taper	On a Tangent	Minimum Sign Spacing X Distance
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'-75'	120'
35		205'	225'	245'	35'	70'-90'	160'
40		265'	295'	320'	40'	80'-100'	240'
45	L=WS	450'	495'	540'	45'	90'-110'	320'
50		500'	550'	600'	50'	100'-125'	400'
55		550'	605'	660'	55'	110'-140'	500'
60		600'	660'	720'	60'	120'-150'	✳600'
65		650'	715'	780'	65'	130'-165'	✳700'
70		700'	770'	840'	70'	140'-175'	✳800'

✳ 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 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.
3. The BE PREPARED TO STOP sign may be installed after the ONE LANE ROAD XXX FT sign, but proper sign spacing shall be maintained.
4. YIELD sign traffic control may be used on projects with approaches that have adequate sight distance. For projects in urban areas, work zones should be no longer than one half city block. In rural areas on roadways with less than 4000 ADT and work areas should be no longer than 400'.
5. YIELD TO ONCOMING TRAFFIC sign shall be placed on a support at a 7' minimum mounting height.
6. Flaggers should use two-way radios or other methods of communication to control traffic.
7. Length of work area should be based on the ability of flaggers to communicate.
8. For intermediate term situations, when it is not feasible to remove and restore pavement markings, the channelization must be made dominant by using a very close spacing. This is especially important in locations of conflicting information, such as where traffic is directed over a double yellow centerline. In such locations a maximum channelizing device spacing of 10 feet is recommended. The 10 foot channelizing device spacing recommendation is intended for the area of conflicting information and not the entire work zone.

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

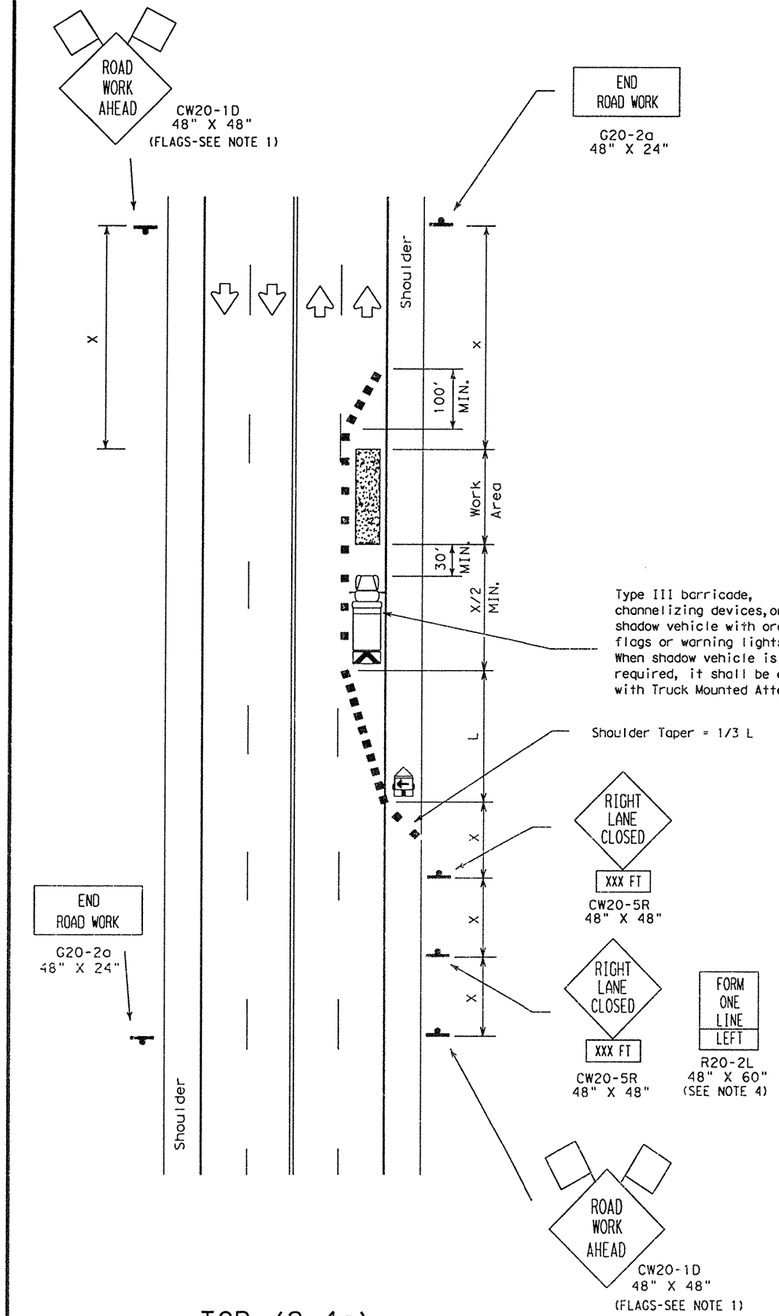
TRAFFIC CONTROL PLAN

TCP(2-2)-03

©TxDOT December 1985	DN: LR	CK: MT	DW: DN	CK: MT	NEG NO.:
REVISIONS 8-95 1-97 4-98 3-03	STATE DISTRICT:	FEDERAL REGION: 6	FEDERAL AID PROJECT		SHEET: 104
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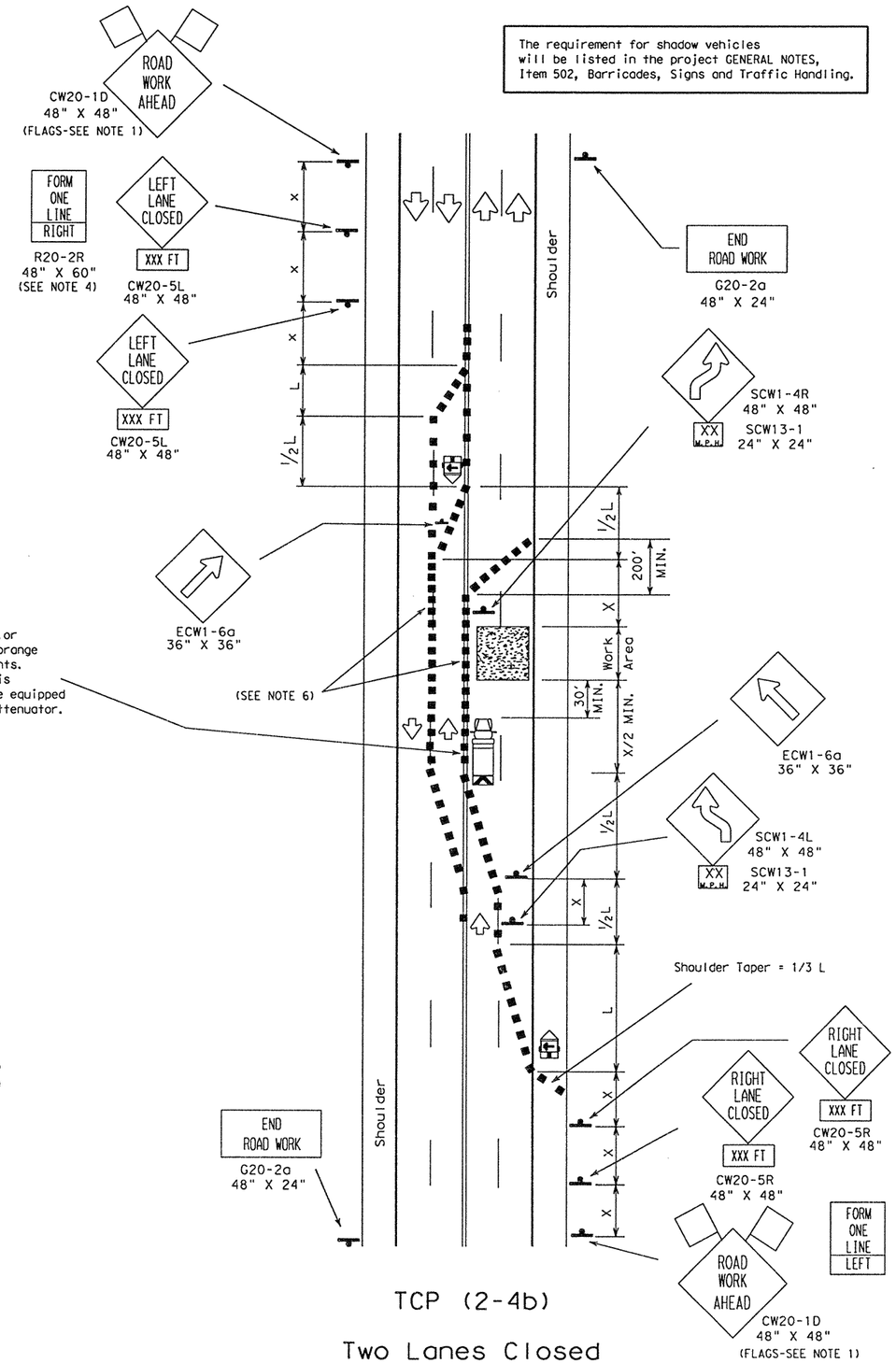
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TCP (2-4a)

One Lane Closed
Less Than Two Weeks

The requirement for shadow vehicles will be listed in the project GENERAL NOTES, Item 502, Barricades, Signs and Traffic Handling.



TCP (2-4b)

Two Lanes Closed
Less Than Two Weeks

LEGEND

Type III Barricade ■ ■ Channelizing Devices Flag
Heavy Work Vehicle Truck Mounted Attenuator
Trailer Mounted Flashing Arrow Panel (M) Portable Changeable Message Sign
Flagger Sign Post

Posted Speed ✳	Formula	Minimum Desirable Taper Lengths ✳✳ 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Device On a Taper	On a Tangent	Minimum Sign Spacing X Distance
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'-75'	120'
35		205'	225'	245'	35'	70'-90'	160'
40		265'	295'	320'	40'	80'-100'	240'
45	L=WS	450'	495'	540'	45'	90'-110'	320'
50		500'	550'	600'	50'	100'-125'	400'
55		550'	605'	660'	55'	110'-140'	500'
60		600'	660'	720'	60'	120'-150'	✳600'
65		650'	715'	780'	65'	130'-165'	✳700'
70		700'	770'	840'	70'	140'-175'	✳800'

✳ 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. Unless otherwise stated in the plans, flags attached to signs are REQUIRED.
2. TCP (2-4b) shall be used only on projects that will be at a location for less than two weeks.
3. Existing pavement markings may remain in place for projects less than two weeks in duration.
4. The FORM ONE LINE LEFT (or RIGHT) sign may be used following the RIGHT (or LEFT) LANE CLOSED XXX FT sign. Spacing distance between signs should be the minimum distance indicated.
5. Downstream taper is optional. When used, it should be 100' minimum length per lane.
6. For intermediate term situations, when it is not feasible to remove and restore pavement markings, the channelization must be made dominant by using a very close spacing. This is especially important in locations of conflicting information, such as where traffic is directed over a double yellow centerline. In such locations a maximum channelizing device spacing of 10 feet is recommended. The 10 foot channelizing device spacing recommendation is intended for the area of conflicting information and not the entire work zone.

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

TRAFFIC CONTROL PLAN

TCP(2-4)-03

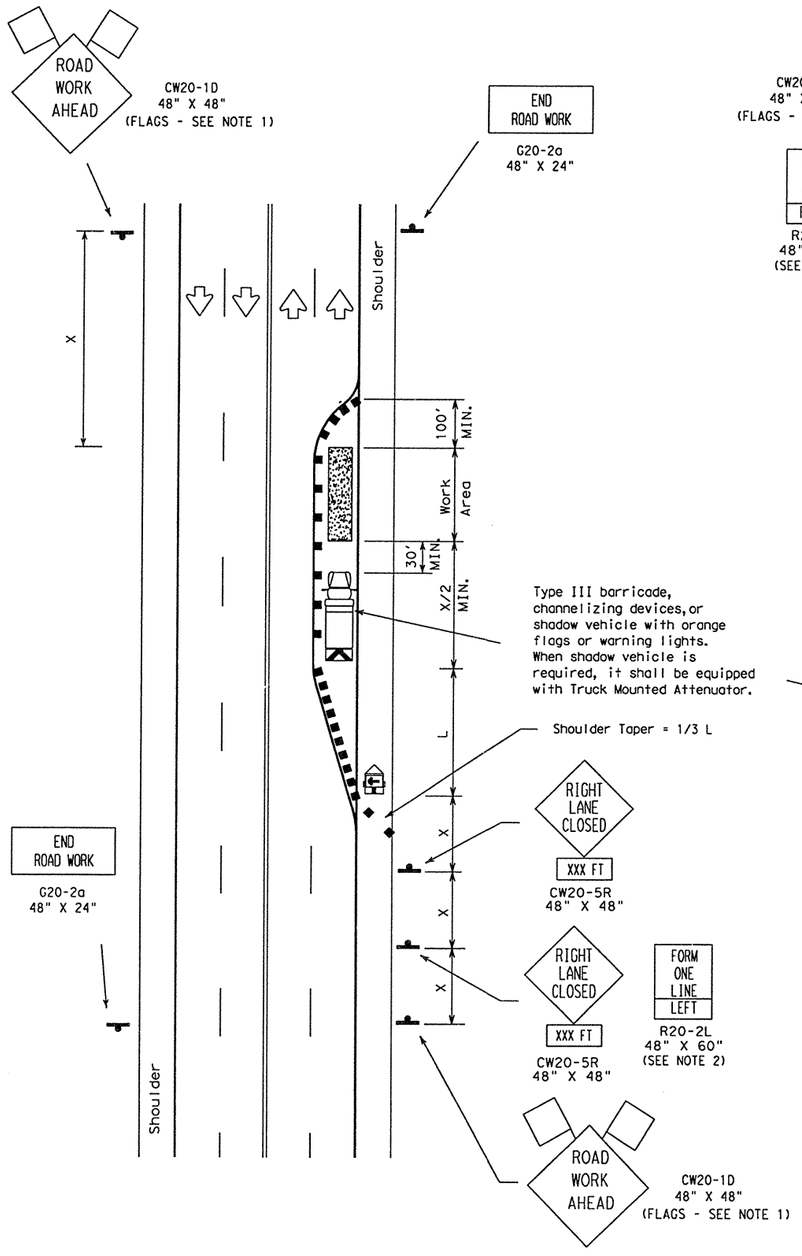
© TxDOT December 1985

DN: LR	CK: MT	DW: DN	CK: DM	REQ NO.:

REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
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1-97	COUNTY	CONTROL	SECTION	JOB	HIGHWAY
4-98	Rockwall	0091	12	073	(615)
3-03					

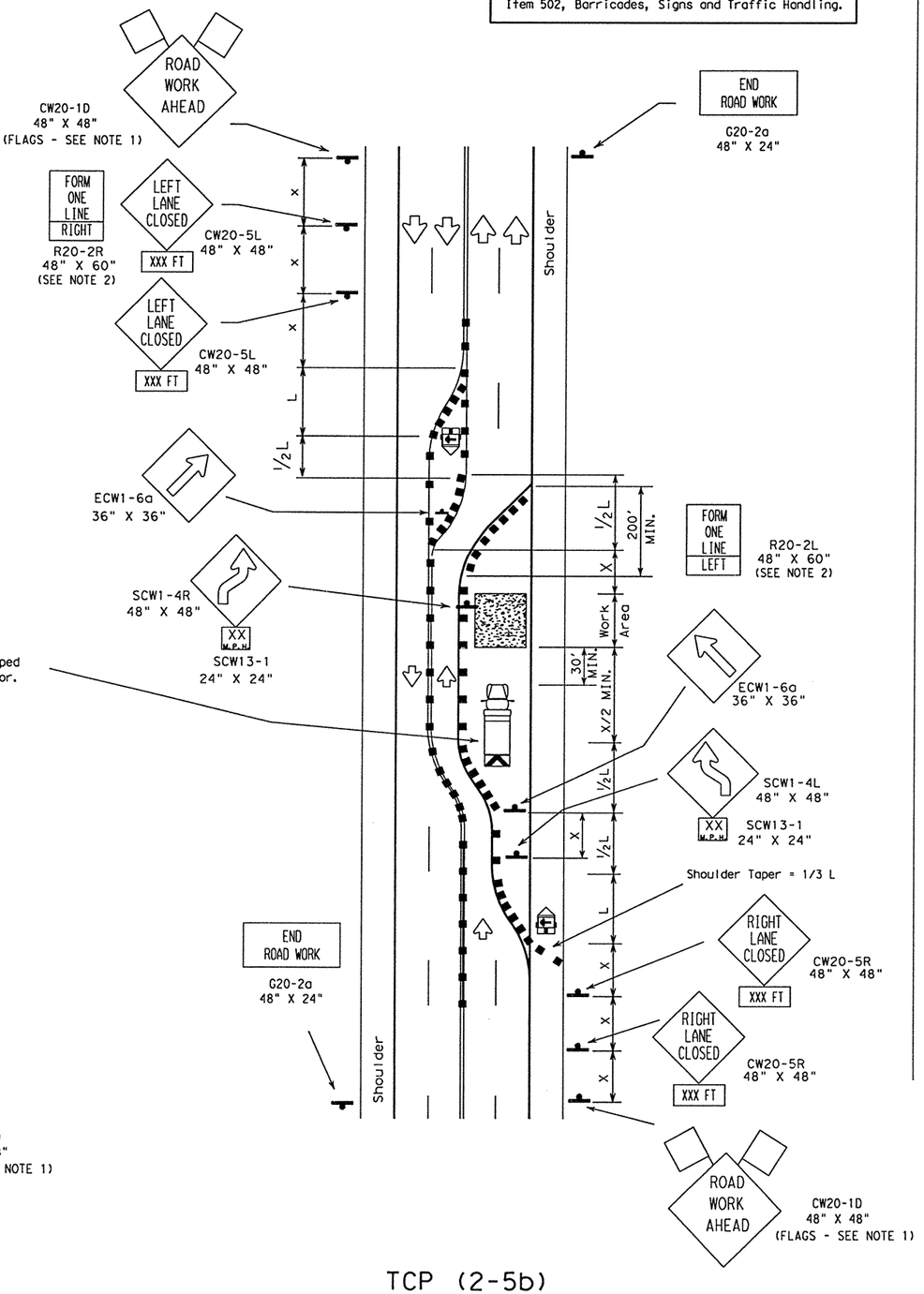
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ACC:
FILE:
DN:
CK:
DW:
CK:

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TCP (2-5a)
One Lane Closed
More Than Two Weeks

The requirement for shadow vehicles will be listed in the project GENERAL NOTES, Item 502, Barricades, Signs and Traffic Handling.



TCP (2-5b)
Two Lanes Closed
More Than Two Weeks

LEGEND

Type III Barricade ■ ■ Channelizing Devices Flag
Heavy Work Vehicle Truck Mounted Attenuator
Trailer Mounted Flashing Arrow Panel (M) Portable Changeable Message Sign
Flagger Sign Post

Posted Speed ✳	Formula	Minimum Desirable Taper Lengths ✳✳ 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Device On a Taper	On a Tangent	Minimum Sign Spacing X Distance
30	$L = \frac{WS^2}{60}$	150'	165'	180'	30'	60'-75'	120'
35		205'	225'	245'	35'	70'-90'	160'
40		265'	295'	320'	40'	80'-100'	240'
45	L=WS	450'	495'	540'	45'	90'-110'	320'
50		500'	550'	600'	50'	100'-125'	400'
55		550'	605'	660'	55'	110'-140'	500'
60		600'	660'	720'	60'	120'-150'	✳600'
65		650'	715'	780'	65'	130'-165'	✳700'
70		700'	770'	840'	70'	140'-175'	✳800'

✳ 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. Unless otherwise stated in the plans, flags attached to signs are REQUIRED.
2. The FORM ONE LINE LEFT (or RIGHT) sign may be used following the RIGHT (or LEFT) LANE CLOSED XXX FT sign. Spacing distance between signs should be the minimum distance indicated.
3. When the work zone will be in place more than two weeks, conflicting pavement markings shall be removed. New markings shall be installed and maintained to the satisfaction of the Engineer.
4. Downstream taper is optional. When used, it should be 100' minimum length per lane.
5. For intermediate term situations, when it is not feasible to remove and restore pavement markings, the channelization must be made dominant by using a very close spacing. This is especially important in locations of conflicting information, such as where traffic is directed over a double yellow centerline. In such locations a maximum channelizing device spacing of 10 feet is recommended. The 10 foot channelizing device spacing recommendation is intended for the area of conflicting information and not the entire work zone.

DN: CK: DW: CK:
DATE:
ACC:
FILE:
LEVELS AVED

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

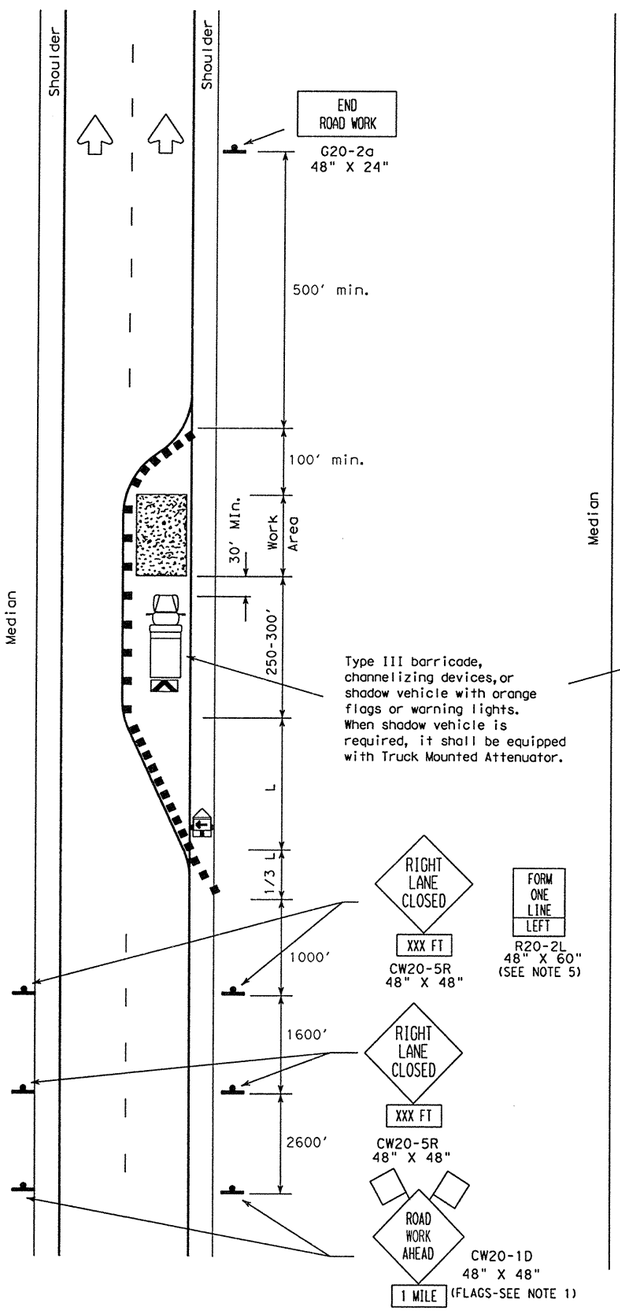
TRAFFIC CONTROL PLAN

TCP(2-5)-03

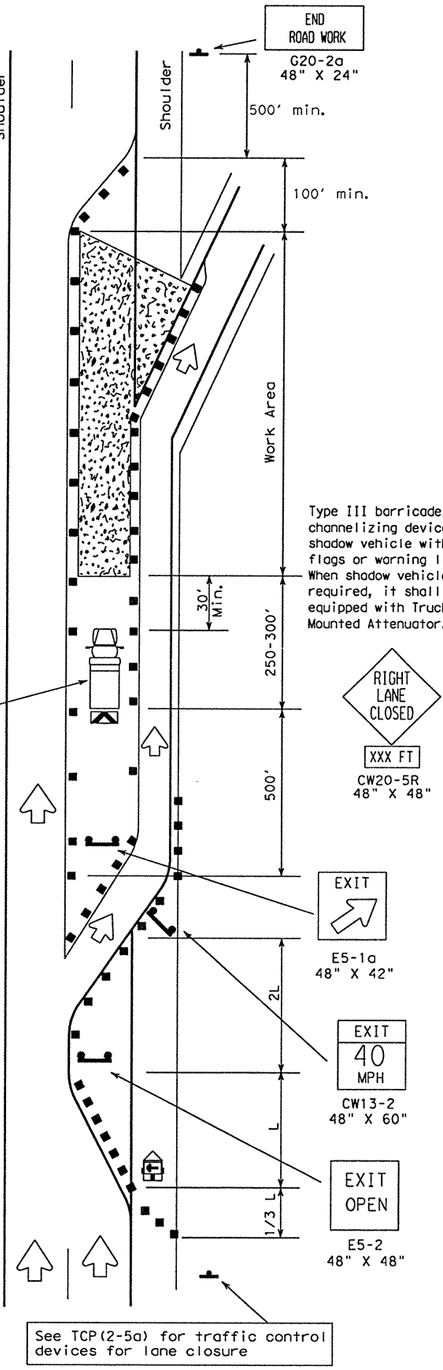
©TxDOT December 1985 DN:-LR CK:- DW:-DN CK:-MT MCG NO.:

REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
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1-97	COUNTY		CONTROL / SECTION / JOB	HIGHWAY
4-98				
3-03	Rockwall		0009 / 12 / 073	1930

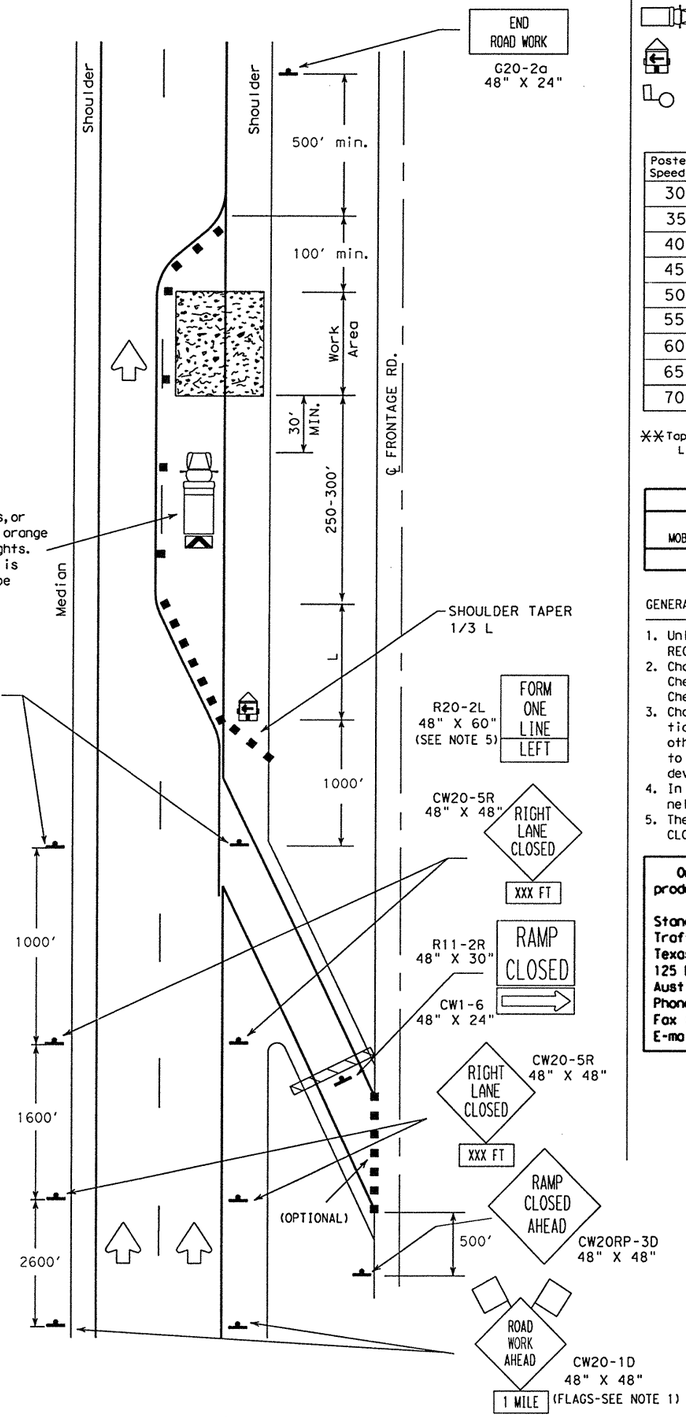
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TCP (2-6a)
One Lane Closure



TCP (2-6b)
Lane Closure Near Exit Ramps



TCP (2-6c)
Lane Closure Near Entrance Ramps

LEGEND

Type III Barricade ■ ■ Channelizing Devices Flag
Heavy Work Vehicle Truck Mounted Attenuator
Trailer Mounted Flashing Arrow Panel (M) Portable Changeable Message Sign
Flagger Sign Post

Posted Speed	Formula	Minimum Desirable Taper Lengths ✻✻ 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Device On a Taper	On a Tangent
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'-75'
35		205'	225'	245'	35'	70'-90'
40		265'	295'	320'	40'	80'-100'
45	L=WS	450'	495'	540'	45'	90'-110'
50		500'	550'	600'	50'	100'-125'
55		550'	605'	660'	55'	110'-140'
60		600'	660'	720'	60'	120'-150'
65		650'	715'	780'	65'	130'-165'
70		700'	770'	840'	70'	140'-175'

✻✻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. Unless otherwise stated in the plans, flags attached to signs are REQUIRED.
2. 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.
3. Channelizing devices used along the work area or along tangent sections may be supplemented with vertical panels (VP) placed on every other channelizing device. If night time conditions make it difficult to see at least two VP's, the VP's may be placed on each channelizing device.
4. In areas with safety lighting or continuous illumination the channelizing devices can be supplemented with delineators.
5. The FORM ONE LINE LEFT sign may be used following the RIGHT LANE CLOSED sign.

Only pre-qualified products shall be used. A list of compliant products and their sources may be obtained by writing or faxing:

Standards Engineer
Traffic Operations Division - TE
Texas Department of Transportation
125 East 11th Street
Austin, Texas 78701-2483
Phone (512) 416-3335
Fax (512) 416-3161
E-mail TRF-STANDARD@mailgw.dot.state.tx.us

The requirement for shadow vehicles will be listed in the project GENERAL NOTES, Item 502, Barricades, Signs and Traffic Handling.

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

TRAFFIC CONTROL PLAN

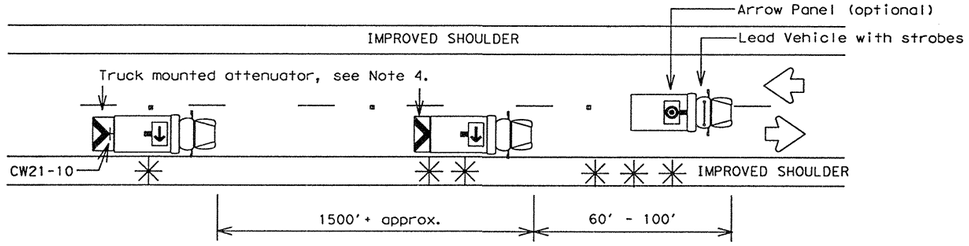
TCP(2-6)-98

©TxDOT December 1985	DN:-LR	CK:-MT	DW:-DN	CK:-DM	REG NO.:

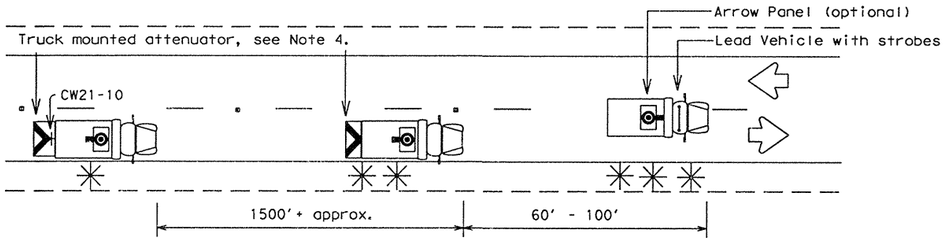
REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT			SHEET
2-94		6				107
8-95	COUNTY		CONTROL	SECTION	JOB	HIGHWAY
1-97						
4-98	Rockwall		0009	12	073	1438

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DATE: FILE:
LEVEL

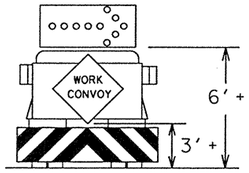
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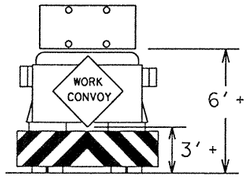
Two Lane Highway With Paved Shoulders (work on travel lane)



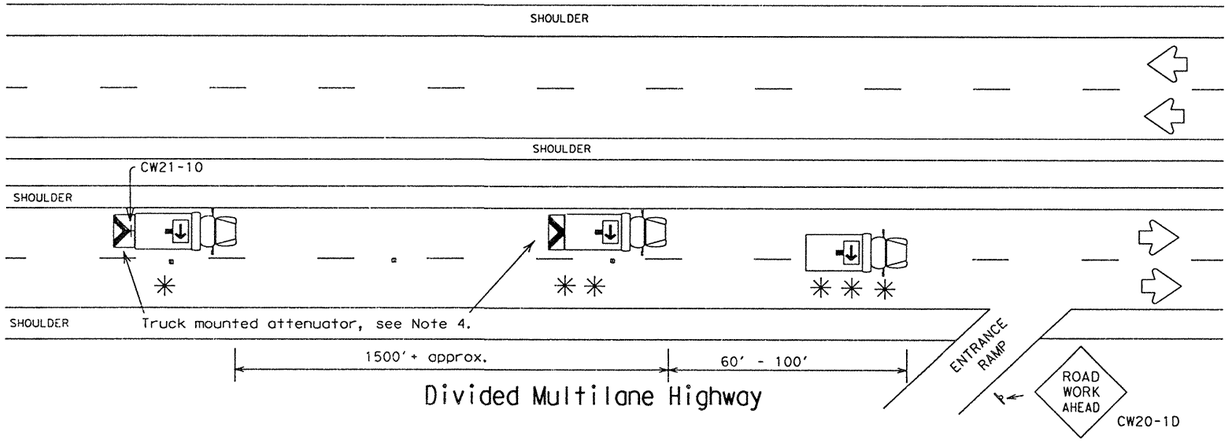
Two Lane Highway Without Paved Shoulders (work on travel lane)



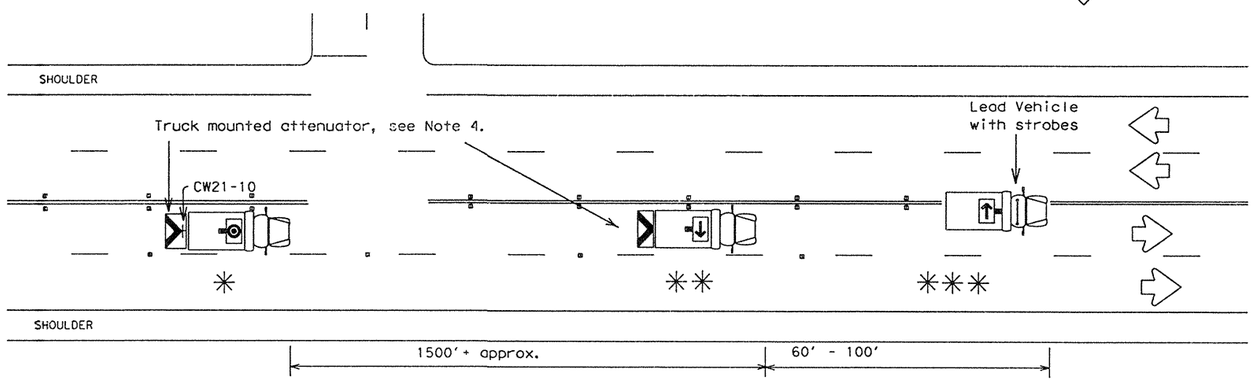
TYPICAL TRAIL VEHICLE
RIGHT Directional display
Flashing Arrow Panel



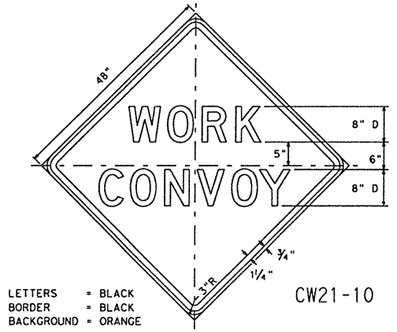
TYPICAL TRAIL VEHICLE
with (four corner flash)
CAUTION display
Flashing Arrow Panel



Divided Multilane Highway



Undivided Multilane Highway



LETTERS = BLACK
BORDER = BLACK
BACKGROUND = ORANGE

CW21-10

Legend:

- ✱ TRAIL VEHICLE
- ✱✱ SHADOW VEHICLE
- ✱✱✱ WORK VEHICLE
- Truck mounted attenuator
- HEAVY WORK VEHICLE

Arrow Panel Displays

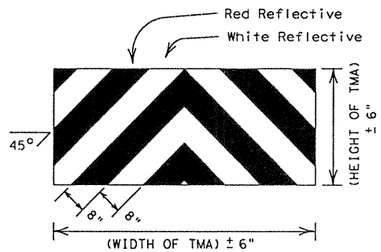
- RIGHT Directional
- LEFT Directional
- RIGHT or LEFT Directional
- CAUTION mode

GENERAL NOTES:

1. TRAIL, SHADOW, LEAD, and work vehicles shall be equipped with arrow panels as illustrated. 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. All traffic control devices shall be in accordance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD), latest edition.
3. The use of yellow rotating beacons or strobe lights on vehicles are required unless otherwise stated elsewhere in the plans.
4. The use of truck mounted attenuators (TMA) on the SHADOW VEHICLE and the TRAIL VEHICLE are required.
5. Optional 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 D-9-8300, TYPE C.
6. Flashing Arrow Panels shall be Type B or Type C as per BC Standards. The panel operation shall be controlled from inside the vehicle.
7. Each vehicle shall have two-way radio communication capability.
8. When work convoys must change lanes, the TRAIL VEHICLE should change lanes first to shadow the other convoy vehicles.
9. Vehicle spacing between TRAIL VEHICLE and 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.

Only pre-qualified products shall be used. A list of compliant products and their sources may be obtained by writing or faxing:

Standards Engineer
Traffic Operations Division - TE
Texas Department of Transportation
125 East 11th Street
Austin, Texas 78701-2483
Phone (512) 416-3335
Fax (512) 416-3161
E-mail TRF-STANDARD@mailgw.dot.state.tx.us



OPTIONAL STRIPING FOR TMA

STRIPING FOR TMA WILL BE REQUIRED ON ALL PROJECTS AWARDED AFTER JANUARY 1, 2000

Shadow and trail vehicle shall be equipped with Truck Mounted Attenuator.

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

TRAFFIC CONTROL PLAN MOBILE OPERATIONS RAISED PAVEMENT MARKER INSTALLATION TCP(3-3)-98

© TxDOT September 1987 DN: LR CK: - DW: DN CK: DM MSG NO.:

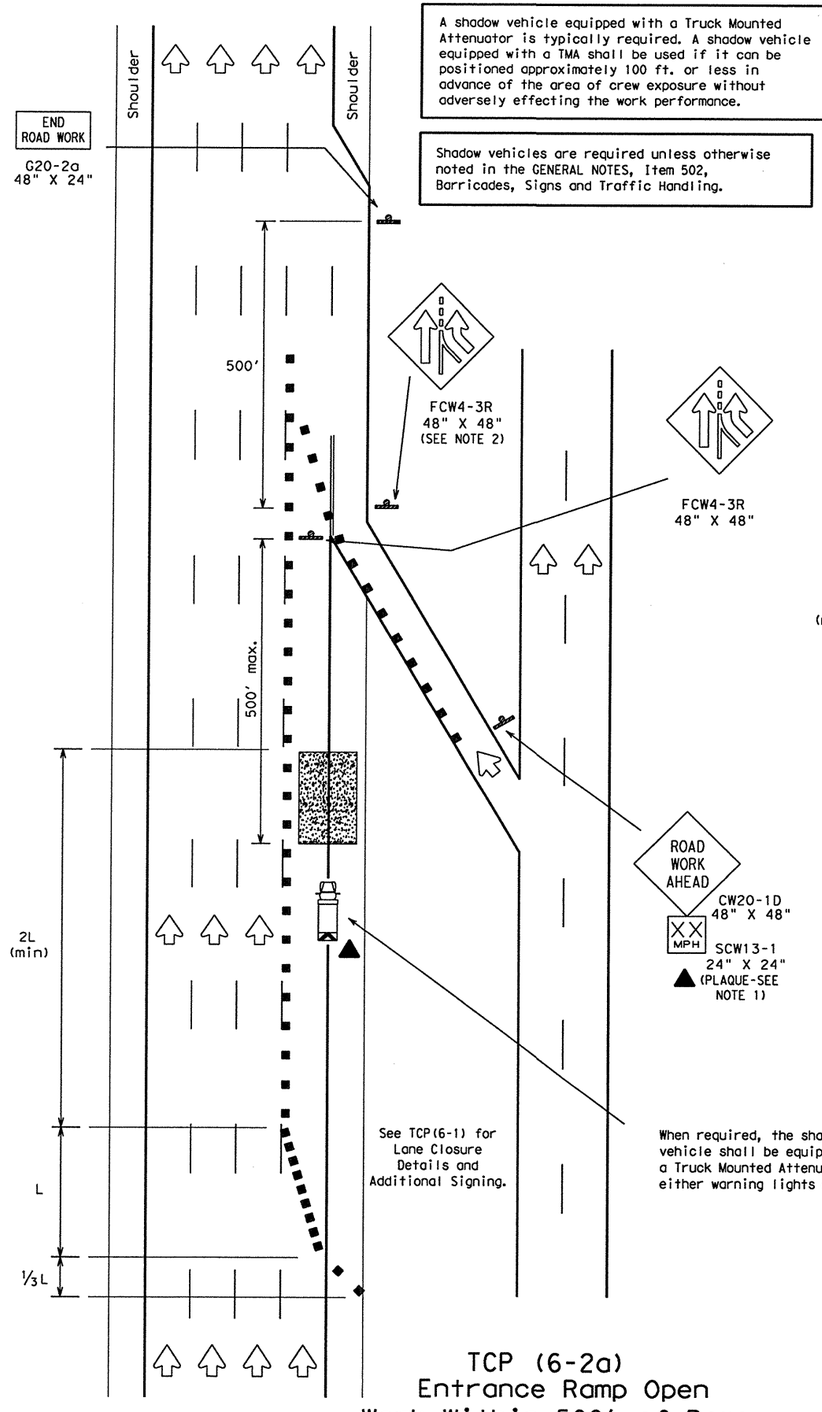
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2-94		6					108
8-95	COUNTY		CONTROL	SECTION	JOB		HIGHWAY
1-97	Rockwall		0009	12	073		1430
4-98							

LEVELS DISPLAYED
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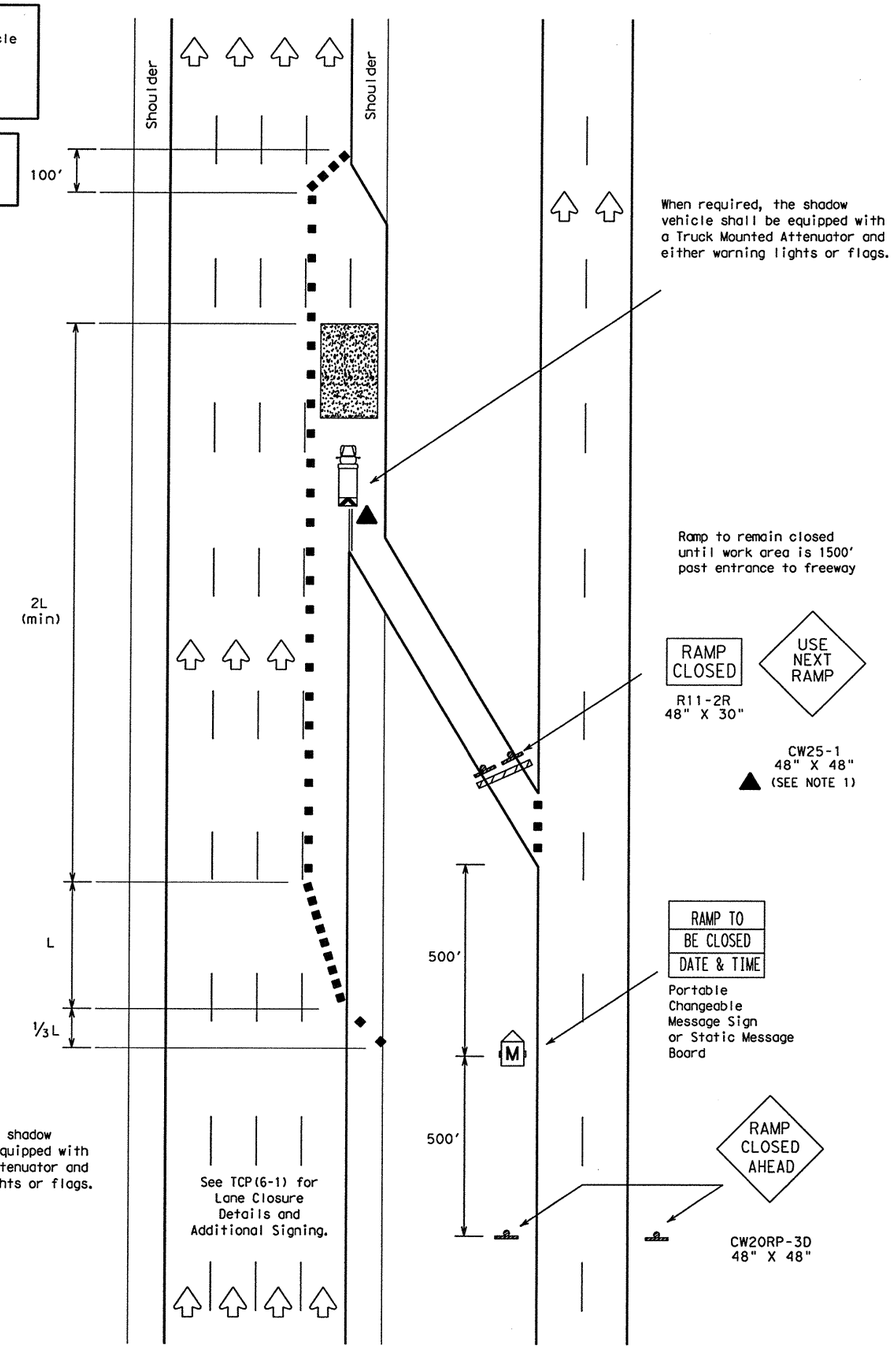
DATE:
ACC:
FILE:

DN:
CK:
DW:
CK:

DISCLAIMER
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TCP (6-2a)
Entrance Ramp Open
Work Within 500' of Ramp



TCP (6-2b)
Entrance Ramp Closed

LEGEND

Type III Barricade ■ ■ Channelizing Devices Flag
Heavy Work Vehicle Truck Mounted Attenuator
Trailer Mounted Flashing Arrow Panel (M) Portable Changeable Message Sign
Flagger Sign Post

Posted Speed	Formula	Minimum Desirable Taper Lengths ✳✳ 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Device On a Taper	On a Tangent
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'-75'
35		205'	225'	245'	35'	70'-90'
40		265'	295'	320'	40'	80'-100'
45	L=WS	450'	495'	540'	45'	90'-110'
50		500'	550'	600'	50'	100'-125'
55		550'	605'	660'	55'	110'-140'
60		600'	660'	720'	60'	120'-150'
65		650'	715'	780'	65'	130'-165'
70		700'	770'	840'	70'	140'-175'

✳✳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. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans.
2. ADDED LANE Symbol (FCW4-3R) sign may be omitted when sign between ramp and mainlane can be seen from both roadways.

Only pre-qualified products shall be used. A list of compliant products and their sources may be obtained by writing or faxing:

Standards Engineer
Traffic Operations Division - TE
Texas Department of Transportation
125 East 11th Street
Austin, Texas 78701-2483
Phone (512) 416-3335
Fax (512) 416-3161
E-mail TRF-STANDARD@mailgw.dot.state.tx.us

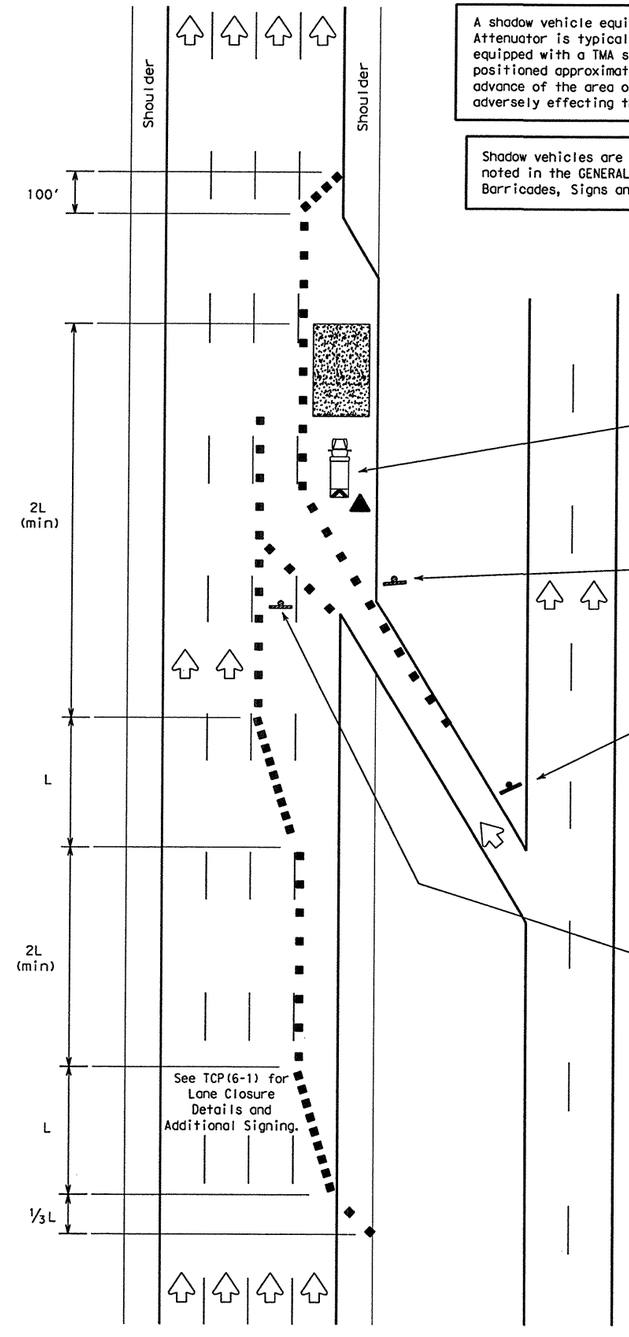
ADDITIONAL REQUIREMENTS FOR LANE CLOSURES AND ADVANCE SIGNING SHALL BE AS SHOWN ON TCP (6-1) OR AS DIRECTED BY THE ENGINEER.

| LEVELS | | | |

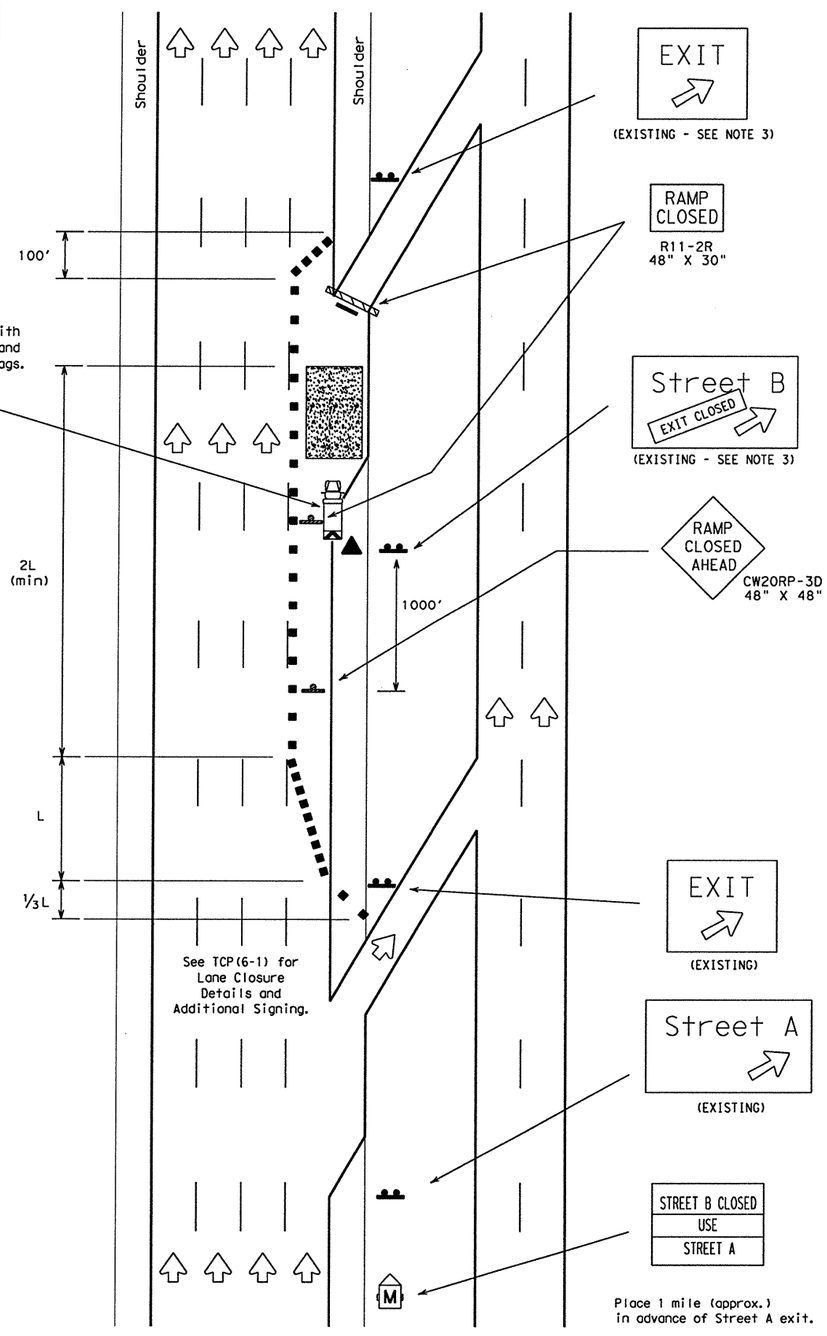
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A shadow vehicle equipped with a Truck Mounted Attenuator is typically required. A shadow vehicle equipped with a TMA shall be used if it can be positioned approximately 100 ft. or less in advance of the area of crew exposure without adversely effecting the work performance.

Shadow vehicles are required unless otherwise noted in the GENERAL NOTES, Item 502, Barricades, Signs and Traffic Handling.



TCP (6-3a)
Entrance Ramp Open



TCP (6-3b)
Exit Ramp Closed
Traffic Exits Prior to Closed Ramp

LEGEND

Type III Barricade ■ ■ Channelizing Devices Flag
Heavy Work Vehicle Truck Mounted Attenuator
Trailer Mounted Flashing Arrow Panel
Portable Changeable Message Sign
Flagger Sign Post

Posted Speed	Formula	Minimum Desirable Taper Lengths ✳✳ 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Device On a Taper	On a Tangent
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'-75'
35		205'	225'	245'	35'	70'-90'
40		265'	295'	320'	40'	80'-100'
45	L=WS	450'	495'	540'	45'	90'-110'
50		500'	550'	600'	50'	100'-125'
55		550'	605'	660'	55'	110'-140'
60		600'	660'	720'	60'	120'-150'
65		650'	715'	780'	65'	130'-165'
70		700'	770'	840'	70'	140'-175'

✳✳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. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans.
2. ADDED LANE (FCW4-3R) sign may be omitted when sign between ramp and mainlane can be seen from both roadways.
3. Existing exit gore, exit direction, and advance guide signs not in use should be covered, removed or EXIT CLOSED (CW26-1T) sign attached. See BC Standards for sign details.

Only pre-qualified products shall be used. A list of compliant products and their sources may be obtained by writing or faxing:

Standards Engineer
Traffic Operations Division - TE
Texas Department of Transportation
125 East 11th Street
Austin, Texas 78701-2483
Phone (512) 416-3335
Fax (512) 416-3161
E-mail TRF-STANDARD@mailgw.dot.state.tx.us

ADDITIONAL REQUIREMENTS FOR LANE CLOSURES AND ADVANCE SIGNING SHALL BE AS SHOWN ON TCP (6-1) OR AS DIRECTED BY THE ENGINEER.

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

TRAFFIC CONTROL PLAN

TCP(6-3)-98A

© TxDOT Feburary 1994

DN: LR	CK: CW	DW: DN	CK: MT	MEG NO.:

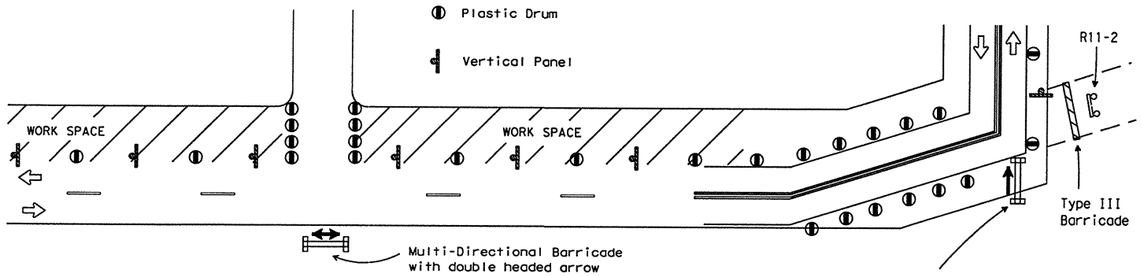
REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
1-97		6		110
4-98	COUNTY	CONTROL	SECTION	JOB	HIGHWAY
8-98	Rockwall	0009	12	553	

DN: CK: DW: CK:
DATE: ACC: FILE:

LEV 1 2 3 4 5 6
CVED 1 1 1 2 1 3 1 4 1 5 1 6
7 1 8 1 9 2 0 2 1 2 2 2
2 3 3 3 3 3 4 3 5 3 6 3 7 3 8 3 9 4 0 4 1 4 2 4 3 4 4 4 5 4 6 4 7 4 8
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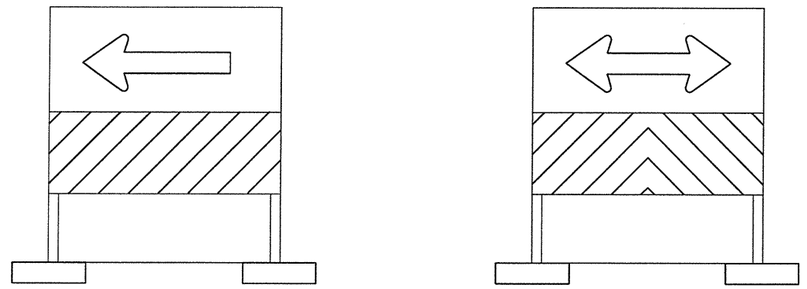
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CHANNELIZING DEVICES FOR URBAN ROADWAY TYPE PROJECT



For spacing between devices, see BC(8). Use self-righting supports in areas where there is a high potential for channelizing devices to be struck.

MULTI-DIRECTIONAL BARRICADE

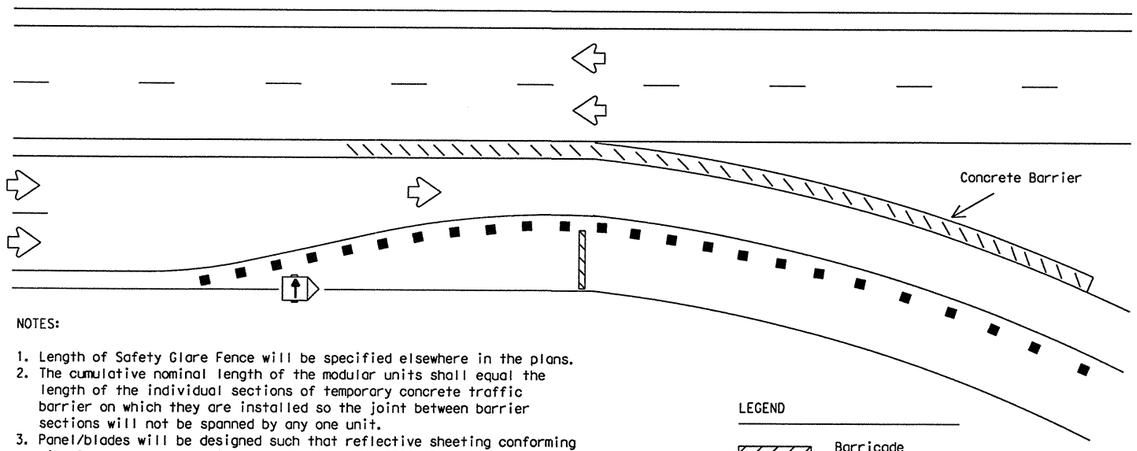


Single Headed Arrow

Double Headed Arrow

1. Multi-directional barricade shall not be used for lane closures.
2. May be used for sharp changes in alignment, or across roadway from stem of "T" intersection.
3. Typically used for Intermediate Term Stationary, Short Term Stationary or Short Duration work zone operations.
4. See the CWZTCD List for approved designs.

BARRIER DELINEATION WITH SAFETY GLARE FENCE



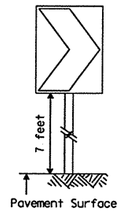
NOTES:

1. Length of Safety Glare Fence will be specified elsewhere in the plans.
2. The cumulative nominal length of the modular units shall equal the length of the individual sections of temporary concrete traffic barrier on which they are installed so the joint between barrier sections will not be spanned by any one unit.
3. Panel/blades will be designed such that reflective sheeting conforming with Departmental Material Specification DMS-8300, Flat Surface Reflective Sheeting, Type C (High Specific Intensity), minimum size of 2 inches by 12 inches can be attached to the edge of the panel/blade. The sheeting shall be attached to one panel/blade per section of concrete barrier not to exceed a spacing of 30 feet. Barrier reflectors are not necessary when panel/blades are installed.
4. Moduler Glare Screens for head light barrier shall meet the requirements of DMS-8610.

LEGEND

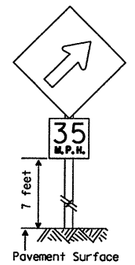
- Barricade
- Channelizing devices
- Trailer mounted flashing arrow panel
- Safety glare fence

USAGE OF CW1-6, ECW1-6a AND CW1-8 SIGNS



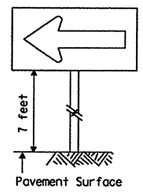
CW1-8

The CHEVRON sign (CW1-8) may be used to replace roadside delineation on curves or used in transitions or tapers.



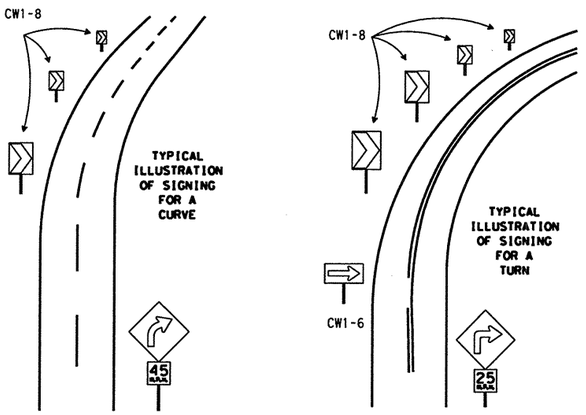
ECW1-6a

An UPWARD SLOPING ARROW sign (ECW1-6a) is intended to be used to indicate the beginning of a curve or transition. It should be preceded with an appropriate curve sign when needed, and should not be used throughout the curve or transition. Advisory speed plaque is optional.



CW1-6

A LARGE ARROW sign (CW1-6) is intended to be used to give notice of a sharp change in alignment (turn) in the direction of travel. It should be preceded with an appropriate advance construction warning turn sign.



NOTES:

1. CW1-6, ECW1-6a & CW1-8 signs shall be mounted on fixed supports.
2. 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.
3. For two-way traffic, use same arrangement of signs on outside of curve for each direction of travel.
4. Appropriate advance warning CURVE or TURN sign with Advisory Speed plaque should be used when needed.

Only pre-qualified products shall be used. A copy of the "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources and may be obtained by contacting:

Standards Engineer
Traffic Operations Division - TE
Texas Department of Transportation
125 East 11th Street
Austin, Texas 78701-2483
Phone (512) 416-3120
Fax (512) 416-3299

Instructions to locate the "CWZTCD" on TxDOT website are:

Start at website - www.dot.state.tx.us
Click on "About TxDOT",
Click on "Organizational Chart",
Click on Traffic Operations Box,
Click on "Compliant Work Zone Traffic Control Devices",
Click on "View PDF".
This site is printable.

PREQUALIFICATION PROCEDURES ARE OBTAINED FROM:

CONSTRUCTION DIVISION-MATERIALS AND TESTS SECTION
TEXAS DEPARTMENT OF TRANSPORTATION (TxDOT)
125 EAST 11th STREET
AUSTIN, TX 78701-2483

DEPARTMENTAL MATERIAL SPECIFICATIONS

FLAT SURFACE REFLECTIVE SHEETING	DMS-8300
DELINEATORS AND OBJECT MARKERS	DMS-8600
MODULER GLARE SCREENS	DMS-8610

COLOR	USAGE	SIGN SHEETING
ORANGE	BACKGROUND	TYPE E (FLUORESCENT PRISMATIC)
WHITE	BACKGROUND	TYPE C (HIGH SPECIFIC INTENSITY)
BLACK	LEGEND & BORDERS	VINYL NON-REFLECTIVE SHEETING

REFER TO THE BC SHEETS FOR SHEETING REQUIREMENT ON CHANNELIZING DEVICES.

The five categories of work duration and their time at a location shall be:

A. Long-term stationary is work that occupies a location more than 3 days.

B. Intermediate-term stationary is work that occupies a location more than one daylight period up to 3 days, or nighttime work lasting more than 1 hour.

C. Short-term stationary is daytime work that occupies a location for more than 1 hour, but less than 12 hours.

D. Short duration is work that occupies a location up to 1 hour.

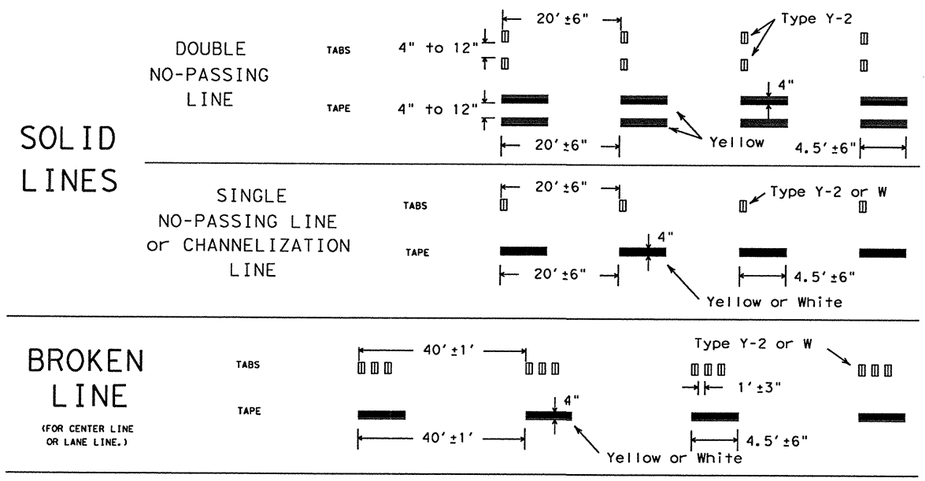
E. Mobile is work that moves intermittently or continuously.

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WORK ZONE SHORT TERM PAVEMENT MARKINGS DETAILS



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).

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(10).
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.

REMOVABLE - PREFABRICATED PAVEMENT MARKINGS

1. Removable prefabricated pavement markings shall meet the requirements of DMS-8241. A list of prequalified products can be found at the following web site:
   ftp://ftp.dot.state.tx.us/pub/txdot-info/gsd/pdf/pavemark.pdf

NON REMOVABLE - PREFABRICATED PAVEMENT MARKINGS

1. Non-removable prefabricated pavement markings (foil back) shall meet the requirements of DMS-8240 or the TXDOT Purchase Specification No. 550-74-89. A list of prequalified products and a copy of the TXDOT Purchase Specifications can be found at web sites:
   ftp://ftp.dot.state.tx.us/pub/txdot-info/gsd/pdf/pavement.pdf
   ftp://ftp.dot.state.tx.us/pub/txdot-info/gsd/pdf/tss/tss377.pdf

RAISED PAVEMENT MARKERS

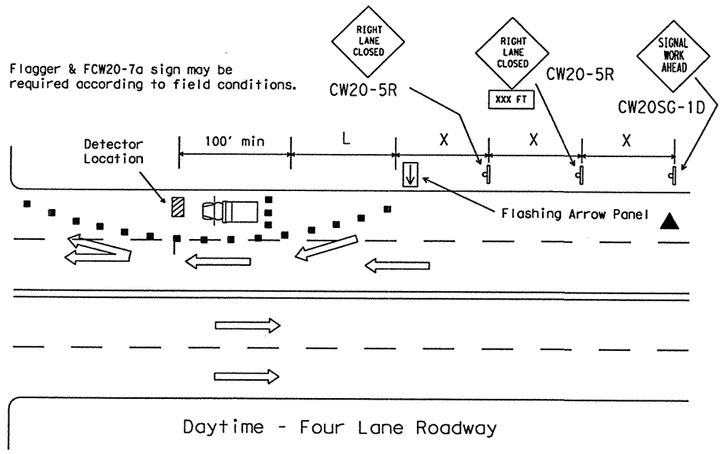
1. All raised pavement markers used for work zone markings shall meet the requirements of Item 672, "RAISED PAVEMENT MARKERS" and Departmental Material Specification DMS-4200.
2. A list of prequalified reflective raised pavement markers can be found at the following web site:
   ftp://ftp.dot.state.tx.us/pub/txdot-info/gsd/pdf/dms4200preq.pdf

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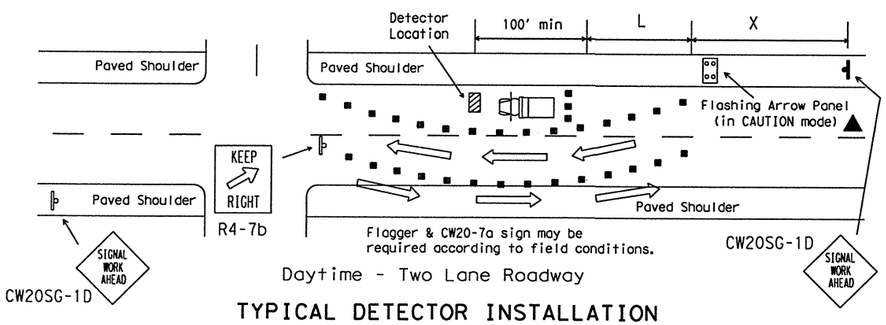
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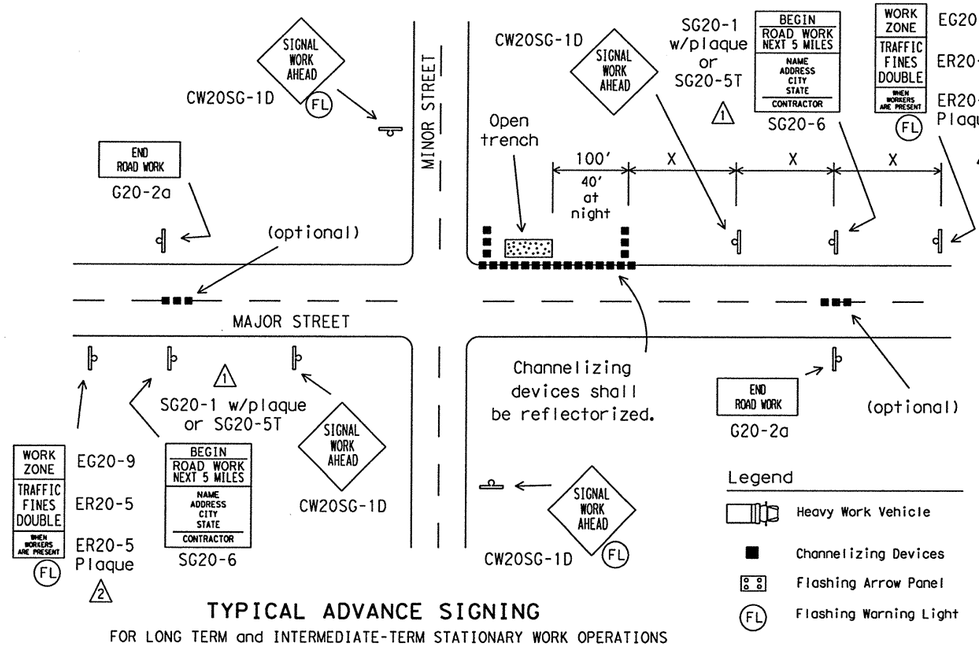
Posted Speed	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Device On a Taper	On a Tangent	Minimum Sign Spacing X Distance
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'-75'	120'
35		205'	225'	245'	35'	70'-90'	160'
40		265'	295'	320'	40'	80'-100'	240'
45	L=WS	450'	495'	540'	45'	90'-110'	320'
50		500'	550'	600'	50'	100'-125'	400'
55		550'	605'	660'	55'	110'-140'	500'
60		600'	660'	720'	60'	120'-150'	600'
65		650'	715'	780'	65'	130'-165'	700'
70		700'	770'	840'	70'	140'-175'	800'
75		750'	825'	900'	75'	150'-185'	900'

** Taper lengths have been rounded off.
L=Length of Taper (FT.) W=Width of Offset (FT.) S=Posted Speed (MPH)



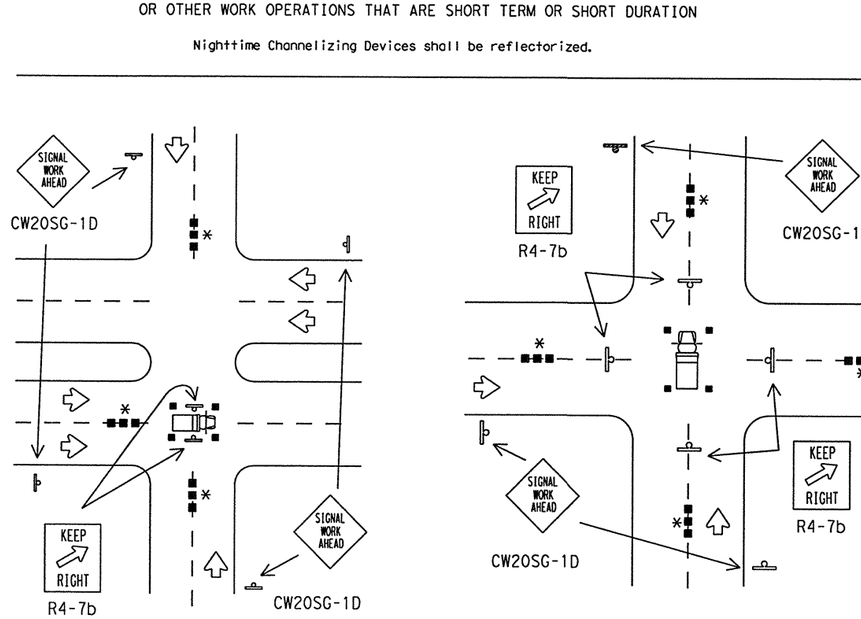
TYPICAL DETECTOR INSTALLATION
OR OTHER WORK OPERATIONS THAT ARE SHORT TERM OR SHORT DURATION

Nighttime Channelizing Devices shall be reflectorized.



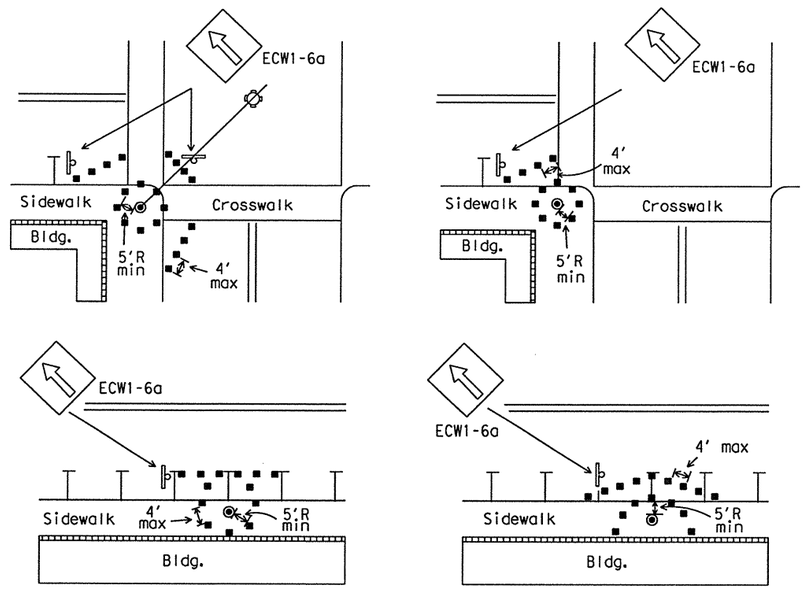
TYPICAL ADVANCE SIGNING
FOR LONG TERM and INTERMEDIATE-TERM STATIONARY WORK OPERATIONS

Observe Warning Signs State Law (R20-3) shall be required.
See BC(2).
Location will be as directed by the Engineer.



TYPICAL HANGING SIGNAL INSTALLATIONS
OR OTHER WORK OPERATIONS THAT ARE SHORT TERM OR SHORT DURATION

* Advance warning channelizing devices are optional.



Channelizing devices should not be placed closer than 5 foot radius (minimum) to signal poles.
Parking may be eliminated by placing channelizing devices in spaces.
If pedestrian walkways are blocked, refer to the Texas Manual on Uniform Traffic Control Devices (TMUTCD) Part 6.

TYPICAL RESTRICTED PEDESTRIAN MOVEMENTS
FOR ALL WORK OPERATIONS REGARDLESS OF WORK DURATION

▲ The arrow panel may be omitted when stated elsewhere in the plans.

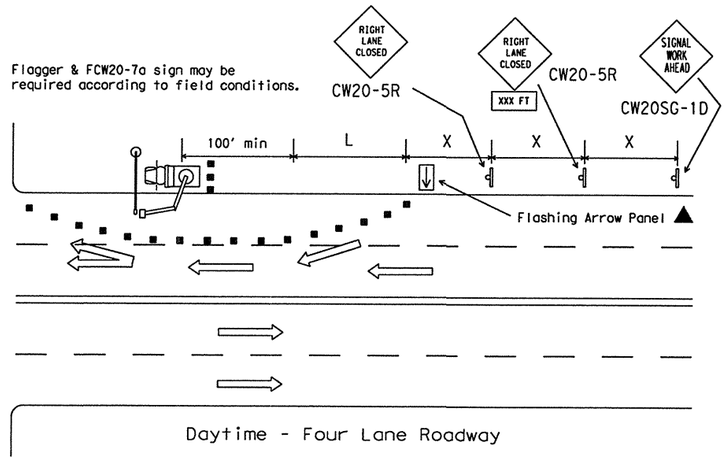
1. Typical channelizing device is the 28" cone.
2. Plastic drums or vertical panels may be used if approved by the Engineer.
3. For several closely adjoining projects, advance signing may not be required in advance of each intersection, but only in advance of the intersections at the project limits.
4. See details elsewhere in the plans for advance signing requirements.
5. Advance signs shall be in place when signal construction operations are in progress.
6. The contractor shall remove advance signs when no construction operations are underway.
7. Obstructions or hazards at the work area shall be clearly marked and delineated at all times.
8. All holes, trenches or other hazardous areas shall be adequately protected by lights or other protective devices.
9. Trenches shall be covered or surrounded with orange plastic construction fence as directed by the Engineer.
10. Flagger and FCW20-7a sign may be required according to field conditions.
11. Vehicles parked in roadway shall be equipped with two strobes.
12. High level flags at corners of vehicle may also be used.
13. Work operations that require work vehicle in traveled way 20 minutes or less may use cones, high level flags and strobes as advance warning devices.
14. Cones should only be placed around vehicle.
15. Flaggers may be used on high speed rural intersections.

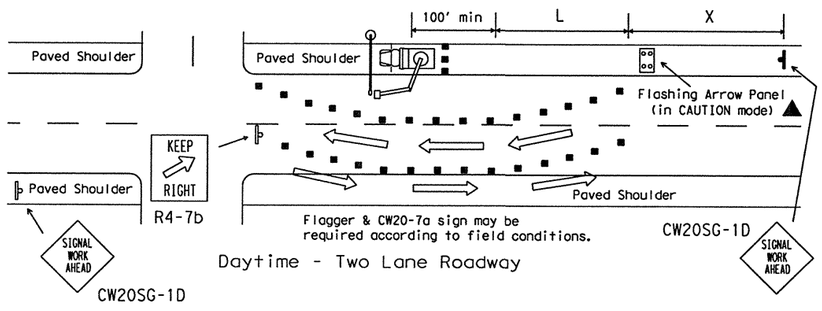
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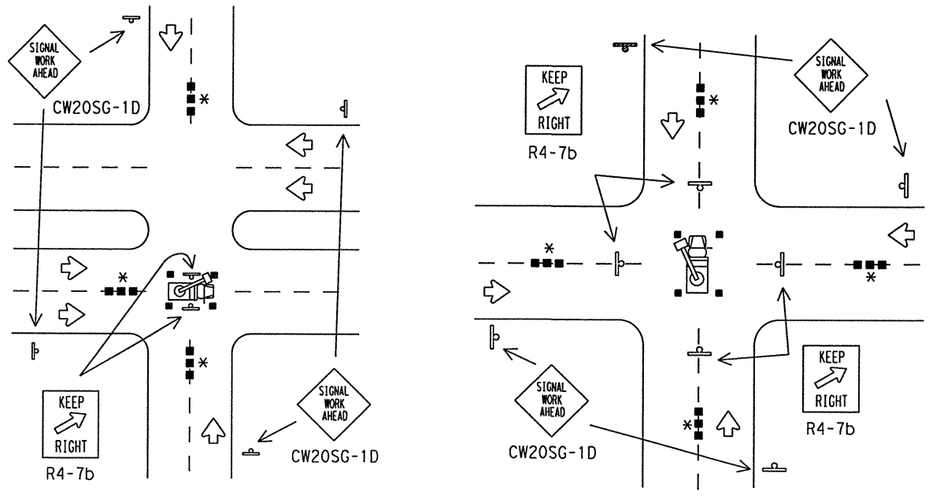
"ABOVE LANE" WORK PERFORMED BY BUCKET TRUCK





▲ The arrow panel may be omitted when stated elsewhere in the plans.

"ABOVE TRUCK" WORK PERFORMED BY BUCKET TRUCK



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. Nails shall NOT be used to attach signs to any support.
5. 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.
6. 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 "Texas Manual on Uniform Traffic Control Devices" (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. The additional signs requested by the Engineer/Inspector shall not be subsidiary.
7. The Contractor shall furnish sign supports listed in the "Compliant Work Zone Traffic Control Device List" (CWZTCD). 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 that the Engineer can verify the correct procedures are being followed.
8. The contractor is responsible for sign installations and replacing signs with damaged or cracked substrates and/or damaged or marred reflective sheeting as directed by the Engineer/Inspector.
9. 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".
10. The Contractor shall replace damaged wood posts. New or damaged wood sign posts shall not be spliced.

Duration of Work (as defined by the TMUTCD Part 6)

The types of sign supports, 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 that the sign support and substrate meets crashworthiness and length of work requirements.

a. Long-term stationary is work that occupies a location more than 3 days.
b. Intermediate-term stationary is work that occupies a location more than one daylight period up to 3 days, or nighttime work lasting more than 1 hour.
c. Short-term stationary is daytime work that occupies a location for more than 1 hour, but less than 12 hours.
d. Short duration is work that occupies a location up to 1 hour.
e. Mobile is work that moves intermittently or continuously.

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.
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.
5. Regulatory signs shall be mounted at least 7 feet, but not more than 9 feet, above the paved surface regardless of work duration.

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 type of sign support meets the crashworthiness standards regardless of the direction of impact. 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 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.
5. Burlap shall NOT be used to cover signs.
6. Duct tape or other adhesive material shall NOT be affixed to a sign face. These materials can damage the retroreflectivity of sign sheeting.
7. Signs shall be removed upon completion of the 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 is recommended.
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 will 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.
6. Rubber (such as tire inner tubes) shall NOT be used for sandbags.
7. Rubber ballasts (such as those used with cones or edgeline channelizers) shall NOT be used as sign support weights.
8. 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.
9. Sandbags shall NOT be placed under the skid and shall not be used to level sign supports placed on slopes.

Only pre-qualified products shall be used. A copy of the "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources and may be obtained by contacting:

Standards Engineer
Traffic Operations Division - TE
Texas Department of Transportation
125 East 11th Street
Austin, Texas 78701-2483
Phone (512) 416-3120
Fax (512) 416-3299

Instructions to locate the "CWZTCD" on TxDOT website are:

Start at website - www.dot.state.tx.us
Click on "About TxDOT",
Click on "Organizational Chart",
Click on Traffic Operations Box,
Click on "Compliant Work Zone Traffic Control Devices",
Click on "View PDF".
This site is printable.

DEPARTMENTAL MATERIAL SPECIFICATIONS

PLYWOOD SIGN BLANKS	DMS-7100
ALUMINUM SIGN BLANKS	DMS-7110
FLAT SURFACE REFLECTIVE SHEETING	DMS-8300
FLEXIBLE ROLL-UP REFLECTIVE SIGNS	DMS-8310
VINYL NON-REFLECTIVE SHEETING	DMS-8320

COLOR	USAGE	SHEETING MATERIAL
ORANGE	BACKGROUND	TYPE E (FLUORESCENT PRISMATIC)
WHITE	BACKGROUND	TYPE C (HIGH SPECIFIC INTENSITY)
WHITE	LEGEND & BORDERS	TYPE C (HIGH SPECIFIC INTENSITY)
BLACK	LEGEND & BORDERS	VINYL NON-REFLECTIVE SHEETING

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ACC:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63		

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

TRAFFIC SIGNAL INSTALLATION BARRICADES AND SIGNS

SHEET 2 OF 2 **WZ(BTS-2)-03**

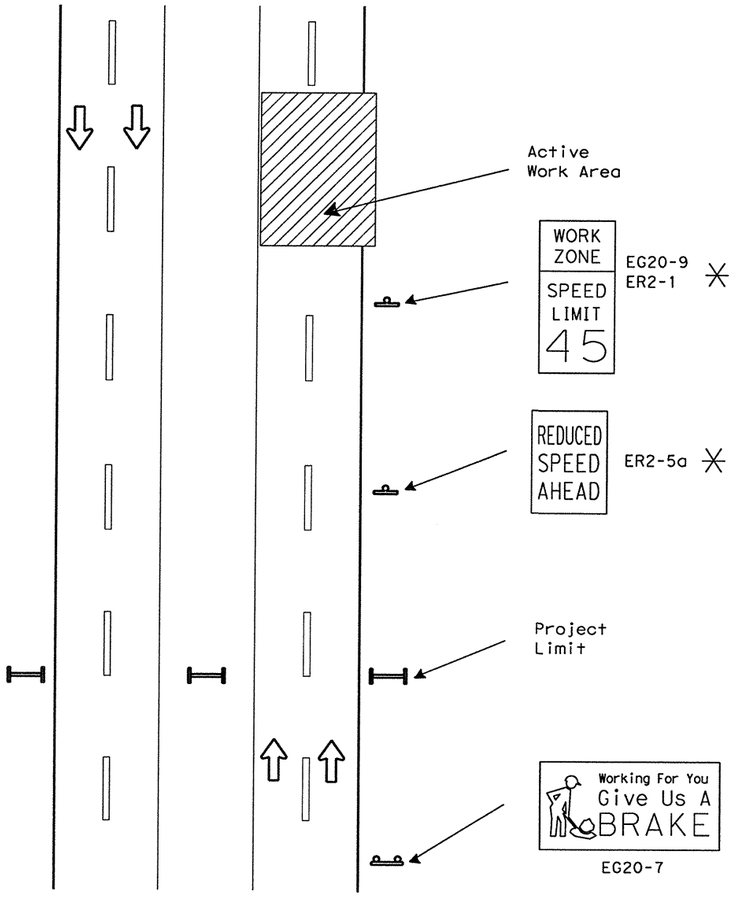
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REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
2-98		6		114
4-98	COUNTY	CONTROL	SECTION	JOB / HIGHWAY
10-99	Rockwall	0006	12	073
3-03				

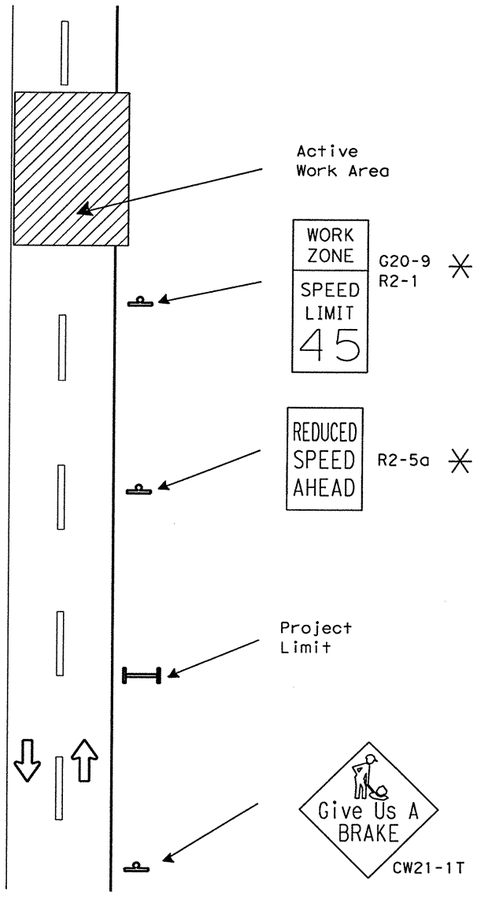
116B

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Divided Highway



Undivided Highway



SIGNS ARE SHOWN FOR ONE DIRECTION OF TRAVEL

✳ Posted only when reduced speed is directed by the Engineer

SUMMARY OF LARGE SIGNS

BACKGROUND COLOR	SIGN DESIGNATION	SIGN TEXT	SIGN DIMENSIONS	REFLECTIVE SHEETING	PLY TY A (SQ FT)	GALVANIZED STRUCT STEEL Size	GALVANIZED STRUCT STEEL (LF) ①	GALVANIZED STRUCT STEEL (LF) ②	DRILLED SHAFT 24" DIA. (LF)
Orange	EG20-7	Give Us A BRAKE	16' x 8'	Type E	128	W8x18	16	17	12
Orange	G20-7	Give Us A BRAKE	8' x 4'	Type E	32	S4x7.7	12	13	7✳

✳ 12" Non-reinforced Concrete Footing (LF)

SUMMARY OF SMALL SIGNS

BACKGROUND COLOR	SIGN DESIGNATION	SIGN TEXT	SIGN DIMENSIONS	REFLECTIVE SHEETING	PLY TY A (SQ FT)
Orange	EG20-9	WORK ZONE	36" x 24"	Type E	6
Orange	G20-9	WORK ZONE	24" x 18"	Type E	3
White	ER2-1	SPEED LIMIT	36" x 48"	Type C	12
White	ER2-5a	REDUCED SPEED AHEAD	36" x 48"	Type C	12
Orange	CW21-1T	GIVE US A BRAKE	48" x 48"	Type E	16

DEPARTMENTAL MATERIAL SPECIFICATIONS

PLYWOOD SIGN BLANKS	DMS-7100
ALUMINUM SIGN BLANKS	DMS-7110
FLAT SURFACE REFLECTIVE SHEETING	DMS-8300
VINYL NON-REFLECTIVE SHEETING	DMS-8320

COLOR	USAGE	SHEETING MATERIAL
WHITE	BACKBROUND	TYPE C (HIGH SPECIFIC INTENSITY)
ORANGE	BACKGROUND	TYPE E (FLUORESCENT PRISMATIC)
BLACK	LEGEND & BORDERS	VINYL NON-REFLECTIVE SHEETING

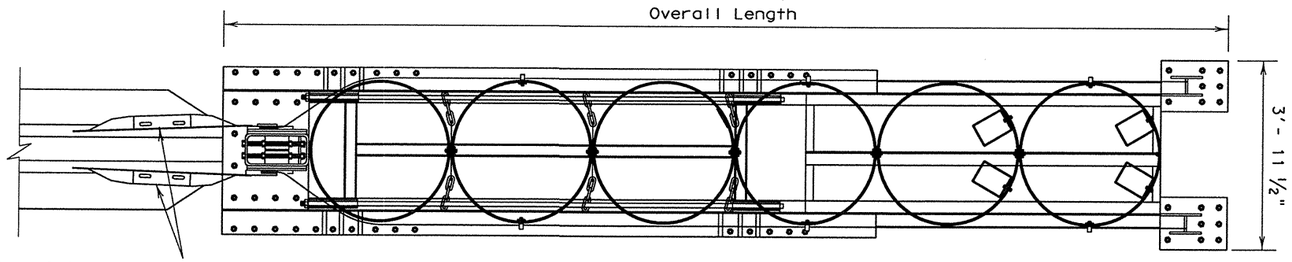
GENERAL NOTES:

1. See BC and SMD sheets for additional sign support details.
2. Sign locations shall be approved by the Engineer.
3. For projects more than two miles in length, Give Us a BRAKE and WORK ZONE SPEED LIMIT signs should be repeated halfway through the project.
4. The WORK ZONE (G20-9) sign is to be installed in combination with a SPEED LIMIT (R2-1) sign.
5. Speed limits shall be regulatory and approved by the Transportation Commission.
6. EG20-9, G20-9, ER2-1, R2-1, ER2-5a, R2-5a and CW21-1T signs and supports shall be considered subsidiary to Item 502, "Barricades, Signs and Traffic Handling."
7. G20-7 and EG20-7 signs shall be paid for under the following bid items:
   Item 634 Plywood Signs Type A
   Item 647 Large Roadside Sign Supports
   Item 656 Foundations for Signs, Traffic Signals and Roadway Ill. Assem.
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.

ACC:

IS DISPLAYED

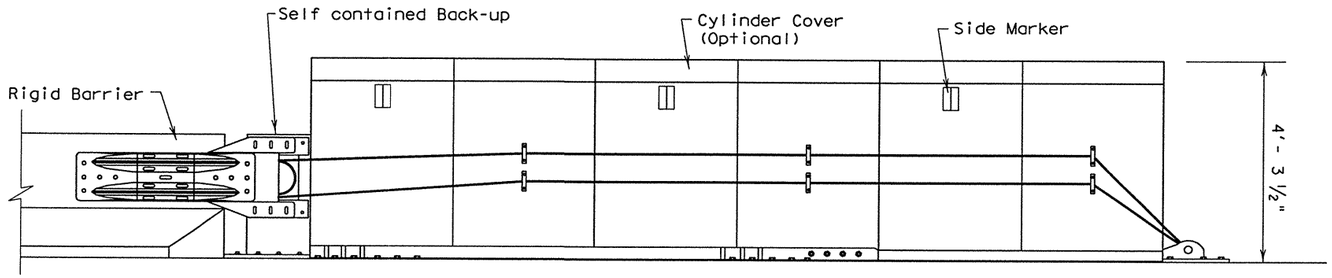
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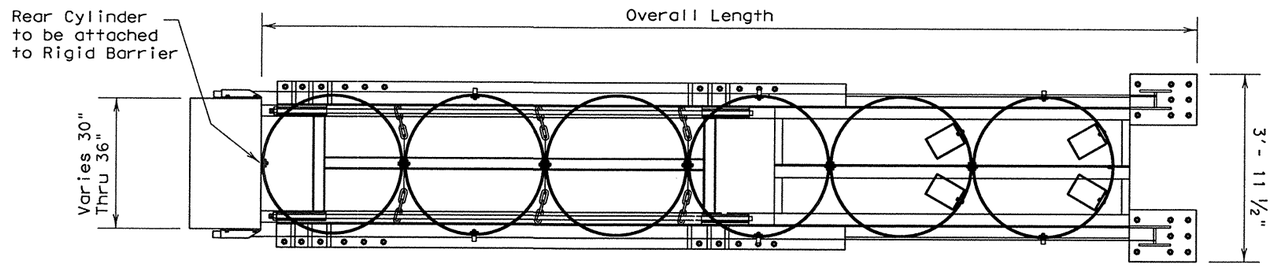
Transition Plate(s) (Optional) required w/bi-directional traffic flows only.

TYPICAL PLAN "B" (Self Contained Backup)

(Cylinder Cover not shown for clarity)

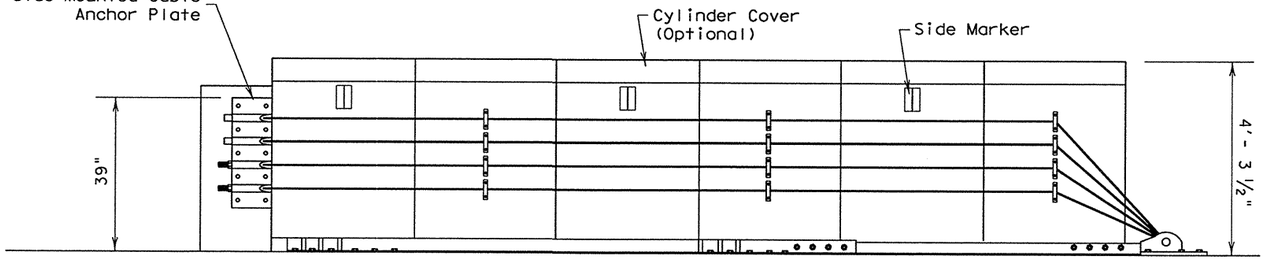


TYPICAL ELEVATION "B"



TYPICAL PLAN "S" (Side Mount, Concrete Backup Support)

(Cylinder Cover not shown for clarity)



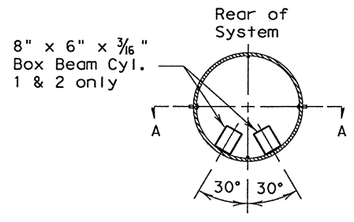
TYPICAL ELEVATION "S"

GENERAL NOTES

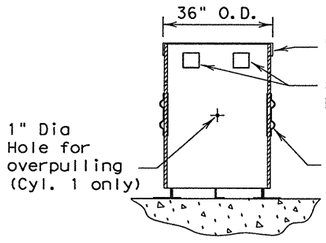
1. The REACT system is manufactured by QUIXOTE TRANSPORTATION SAFETY INC. 35 East Wacker Drive, Suite 1500, Chicago, IL 60601 Phone:1-888-323-6374. Distributed by CONTRACTORS BARRICADE SERVICE INC. 4110 Long Leaf Lane, Porter, Tx. Phone: (281)360-6098.
2. The nose of the REACT 350 shall be clad with a plastic wrap with standard delineation adhered to the wrap and shall have a series of side marker reflectors on both sides of the unit. See site plan views for marker and plastic wrap color orientation.
3. All steel components to be hot dipped galvanized except stakes, drive spikes, threaded bolts in backup unit, and wedge fittings on cables.
4. The installation area should be free from curbs, elevated objects, or depressions. If the REACT system is to span expansion joints contact the manufacturer.
5. The REACT system should be approximately parallel with the barrier or ℄ of merging barriers. The maximum permissible cross-slope is 8%.

DESIGN DATA

	REACT 350.4-B	REACT 350.4-S	REACT 350.6-B	REACT 350.6-S	REACT 350.9-B	REACT 350.9-S	REACT 350 HS-B	REACT 350 HS-S
DESIGN SPEED	45 MPH	45 MPH	55 MPH	55 MPH	65 MPH	65 MPH	70 MPH	70 MPH
OVERALL LENGTH	15'-3"	13'-9"	21'-3"	19'-9"	30'-3"	28'-9"	30'-3"	28'-9"
OVERALL WEIGHT	2580 lb.	2340 lb.	3340 lb.	3100 lb.	4310 lb.	4070 lb.	4520 lb.	4280 lb.

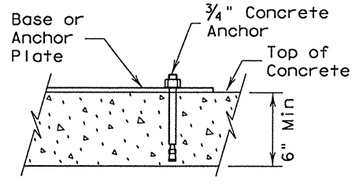


PLAN



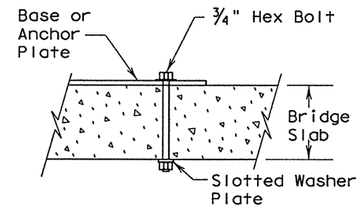
TYPICAL CYLINDER

SECTION A-A

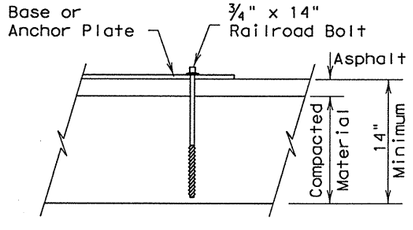


CONCRETE PAVEMENT DETAIL

NOTE: If separate pad is required for REACT, then the pad thickness shall be 8"



BRIDGE DECK DETAIL



ASPHALT PAVEMENT DETAIL

Min. Asphalt thickness shall be 2"

Texas Department of Transportation
Design Division (Roadway)

REUSABLE ENERGY ABSORBING CRASH TERMINAL

(NARROW REACT 350)

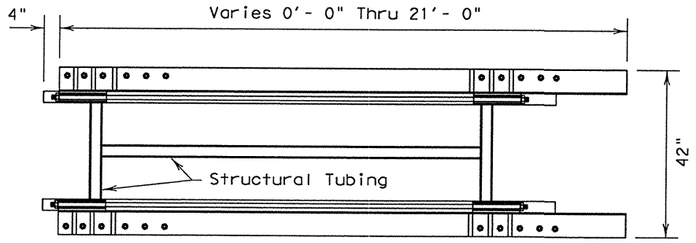
REACT(N)-05

SHEET 1 OF 2

FILE: reactn05.dgn	DN:	CK:	DW: BGD	CK: AM
©TxDOT FEBRUARY 1998	DISTRICT	FEDERAL AID PROJECT		SHEET
REVISIONS				116
	COUNTY	CONTROL	SECT	JOB	HIGHWAY
	Rockwall				

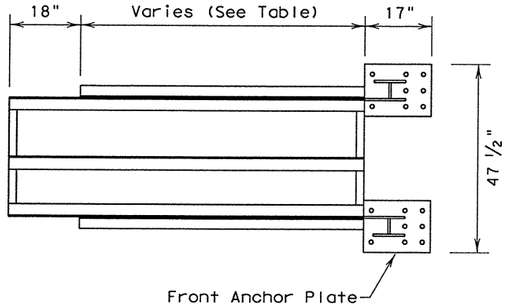
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1



REAR SECTION OF BASE TRACK

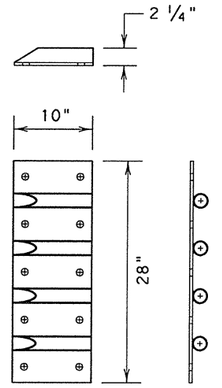
(FOR UNITS WITHOUT SELF CONTAINED BACK-UP ONLY) "S"



FRONT SECTION OF BASE TRACK

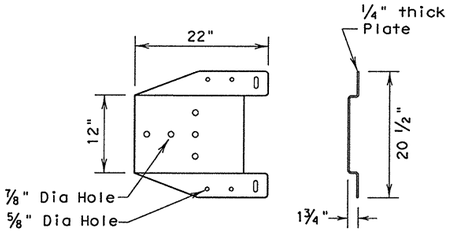
NUMBER OF CYLINDERS	FRONT BASE TRACK LENGTH
4	1'-5"
6	7'-5"
9	16'-5"
11	22'-5"

(The Front Section will vary depending on the size of the system)



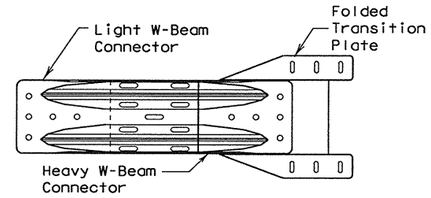
SIDE CABLE ANCHOR PLATE

(FOR UNITS WITHOUT A SELF CONTAINED BACK-UP ONLY)



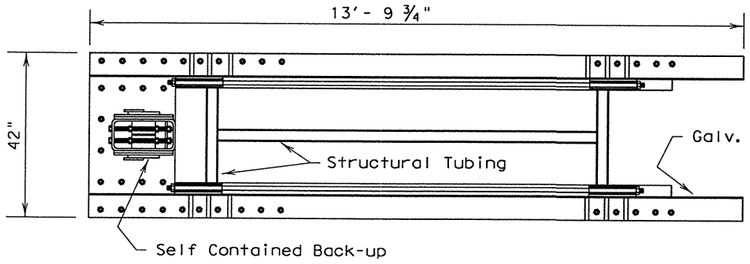
FOLDED TRANSITION PLATE

(For use in transition applications)



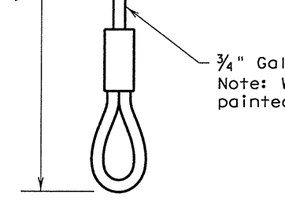
TRANSITION PLATE WITH W-BEAM CONNECTOR

(Connector overlap will vary per traffic direction - Reverse traffic shown)



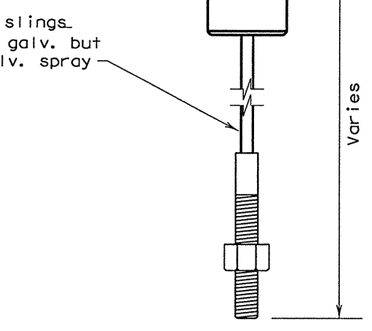
REAR SECTION OF BASE TRACK

(FOR UNITS WITH SELF CONTAINED BACK-UP ONLY) "B"



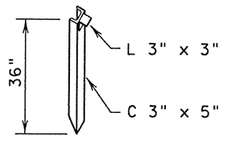
CABLE DETAIL

(FOR UNITS WITH SELF CONTAINED BACK-UP ONLY)



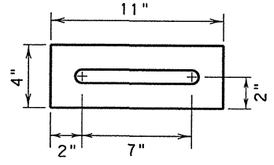
CABLE DETAIL

(FOR UNITS WITH SELF CONTAINED BACK-UP ONLY)



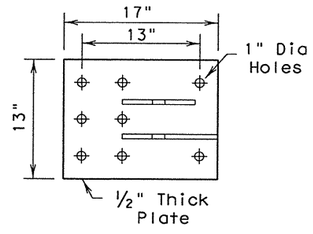
CHANNEL STAKE

(FOR USE W/ASPHALT PAVEMENT)

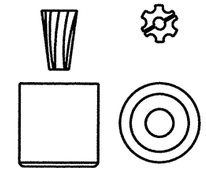


SLOTTED WASHER PLATE

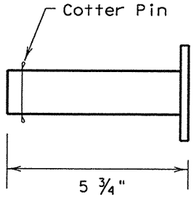
(FOR BRIDGE DECK APPLICATIONS ONLY)



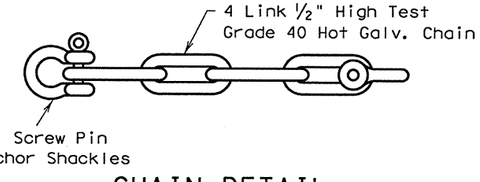
FRONT ANCHOR PLATE DETAIL



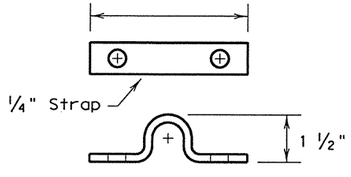
CABLE WEDGE



FRONT ANCHOR PIN DETAIL



CHAIN DETAIL



CABLE STRAP

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Texas Department of Transportation
Design Division (Roadway)

REUSABLE ENERGY ABSORBING CRASH TERMINAL

(NARROW REACT 350)

REACT(N)-05

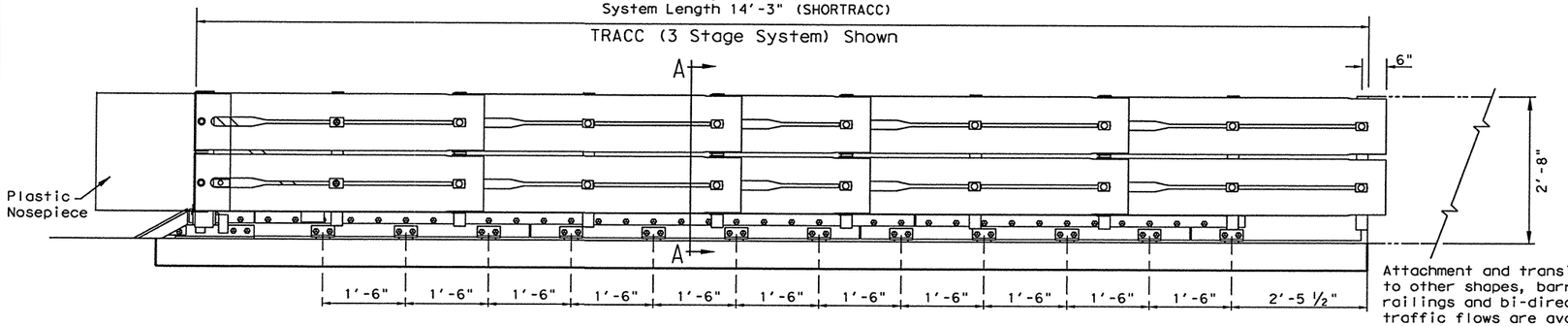
SHEET 2 OF 2

FILE: reactn05.dgn	DN:	CK:	DW: BGD	CK: AM
© TxDOT FEBRUARY 1998	DISTRICT	FEDERAL AID PROJECT		SHEET
REVISIONS				117
	COUNTY	CONTROL	SECT	JOB	HIGHWAY
	Refugio	008	12	003	

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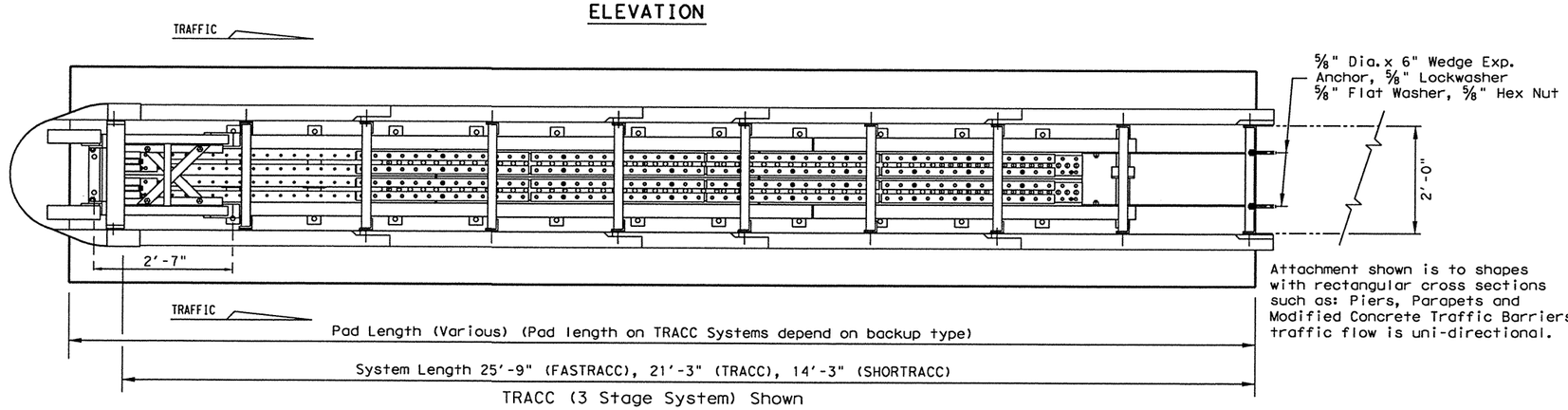
System Length 25'-9" (FASTRACC)
System Length 21'-3" (TRACC)
System Length 14'-3" (SHORTRACC)

TRACC (3 Stage System) Shown



Attachment and transitions to other shapes, barriers railings and bi-directional traffic flows are available. (See manufacturer's product manual)

ELEVATION



TRACC (3 Stage System) Shown

Attachment shown is to shapes with rectangular cross sections such as: Piers, Parapets and Modified Concrete Traffic Barriers, traffic flow is uni-directional.

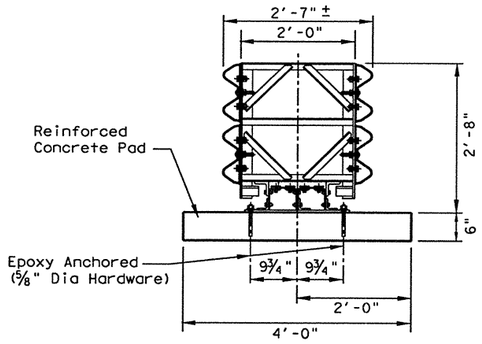
GENERAL NOTES

1. For additional information contact, Trinity Industries Inc. at 1-800-527-6050, Ext. 8249.
2. For bi-directional traffic, appropriate transition panels will be required.
3. Details of components for the TRACC and backups and reinforcing details will be shown on the manufacturer's shop drawings furnished to the Engineer.
4. Concrete shall be class "S" with a minimum compressive strength of 4,000 p.s.i.
5. If the cross-slope varies more than 2% over the length of the system, the concrete pad will require leveling. Maximum permissible cross-slope is 8%.
6. The installation area should be free from curbs, elevated objects, or depressions.
7. The TRACC system should be approximately parallel with the barrier or ℄ of merging barriers.

BILL OF MATERIAL

PART #	FAST TRACC QTY	TRACC QTY	SHORT TRACC QTY	DESCRIPTION
25936A	1			FASTRACC Unit Assembly
25980A		1		TRACC Unit Assembly
25997A			1	SHORTRACC Unit Assembly
3310G	4	4	4	⅝" Lockwasher
4451G	4	4	4	⅝" Dia x 6" Wedge Exp. Anchor
6531B	1	1	1	Plastic Nosepiece
6668B	4	4	4	Reflective Sheeting
✳ ANCHOR HARDWARE (CONCRETE BASE)				
5204G	32	26	18	⅝"Dia x 7 ½" All Thd. Rod
3310G	32	26	18	⅝" Lockwasher
3361G	32	26	18	⅝" Hex Nut
3300G	32	26	18	⅝" Flat Washer
5206B	3	3	2	TRACC Adhesive HIT HY150 Kit
✳ ANCHOR HARDWARE (ASPHALT BASE)				
6380G	32	26	18	⅝" Dia x 18" All Thd. Rod
3310G	32	26	18	⅝" Lockwasher
3361G	32	26	18	⅝" Hex Nut
3300G	32	26	18	⅝" Flat Washer
5206B	7	5	4	TRACC Adhesive HIT HY150 Kit

✳ See manufacturer's product manual



SECTION A-A

PLAN

TYPE (NARROW)	DESIGN SPEED (mph)	SYSTEM LENGTH	PAD LENGTHS
FASTRACC (4 Stage System)	70	25'- 9"	26'- 8"
TRACC (3 Stage System)	50 or greater	21'- 3"	22'- 0" 23'- 0" 24'- 0"
SHORTRACC (2 Stage System)	45 or less	14'- 3"	15'- 0" 16'- 0" 17'- 0"

The Stage System refers to number of replaceable sled sections that could be replaced independently.

Concrete pad length on TRACC & SHORTRACC depends on backup type.

FOUNDATION OPTIONS
6" Reinforced Concrete
8" Unreinforced Concrete
3" Min. Asphalt over 3" Min. Concrete
6" Asphalt over 6" Compact Subbase
8" Minimum Asphalt

For steel placement in concrete foundations (See manufacturer's product manual)

BACKUP SUPPORT OPTIONS
Square Concrete Backup
Concrete Barrier (CTB) Backup
Single Slope Concrete Barrier (SSCB)
Guardrail Backup (Base-Plated Post)
Guardrail Backup (Driven Post)
TRANSITION OPTIONS
Vertical Wall
Modified (CTB) to Vertical Wall
Concrete Barrier (CTB)
Guardrail (W-Beam)
Guardrail (Thrie-Beam)

Backup and Transition types are shown elsewhere on the plans, (i.e. Attenuator location details or in the general notes).

For bi-directional transition panel details (See manufacturer's product manual)

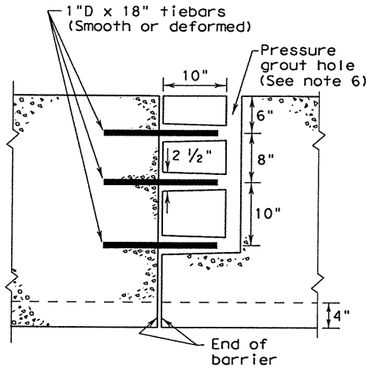
Texas Department of Transportation
Design Division (Roadway)

TRINITY ATTENUATING CRASH CUSHION

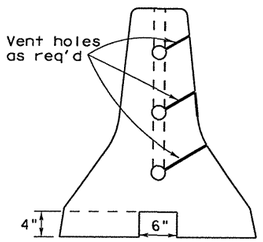
(NARROW TRACC Systems)
(FASTRACC, TRACC, SHORTRACC)

TRACC(N)-05

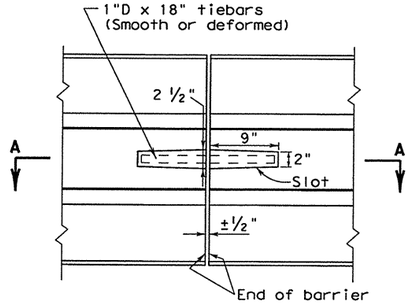
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©TxDOT OCTOBER 2001	DISTRICT	FEDERAL AID PROJECT			SHEET
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	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	Rockwall					



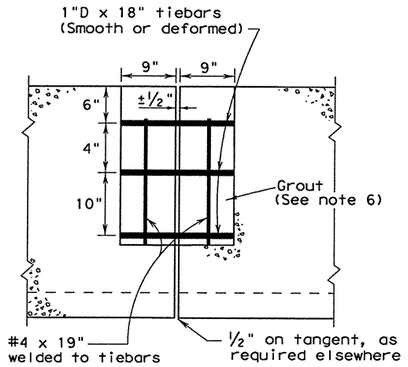
SECTION THROUGH ℄ AT JOINT
MALE-FEMALE DESIGN OPTION



END VIEW
MALE-FEMALE DESIGN OPTION

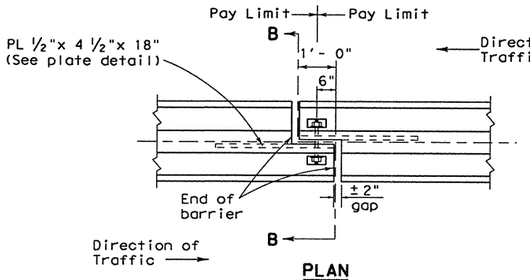


PLAN
SLOTTED DESIGN OPTION

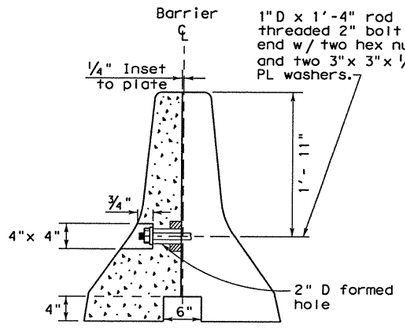


SECTION A-A (THROUGH ℄ AT JOINT)
SLOTTED DESIGN OPTION

JOINT TYPE A



PLAN
END DETAIL



SECTION B-B

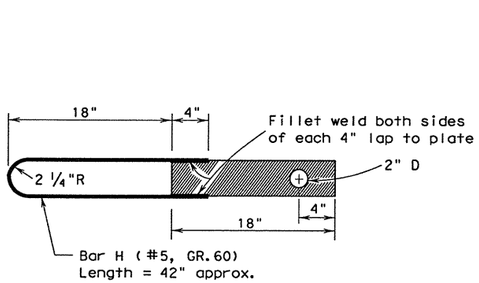
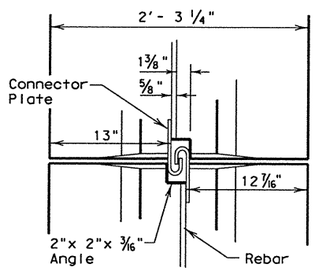


PLATE DETAIL

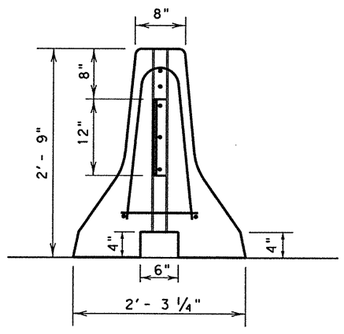


J-J HOOKS DETAIL

Note: J-J Hooks is a proprietary barrier connection system. This system can be used as an alternate bid item to a different joint type. If this connection system is exclusively specified in the plans, prior approval for sole source use must be obtained.

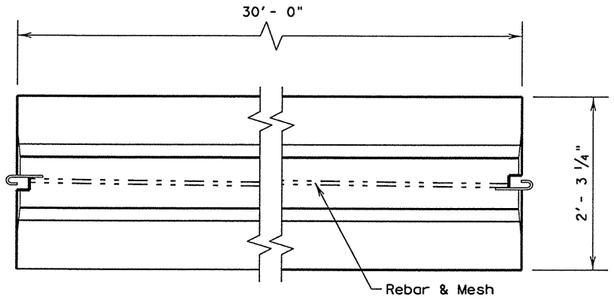
Details of components for the J-J Hooks connection and reinforcing details will be shown on the manufacturer's shop drawings furnished to the Engineer.

JOINT TYPE B



END VIEW

JOINT TYPE J



TOP VIEW
PRECAST (CTB) WITH J-J HOOKS

GENERAL NOTES

1. Where illumination is to be placed on concrete traffic barrier, a 10 ft. cast-in-place section shall be provided at each light pole location as shown on sheet CTBI(3). Pole, anchor bolt, and other illumination details are shown on sheet CTBI(4).
2. Concrete shall be class C or H.
3. Plates shall conform to ASTM A36 steel.
4. Mesh for joint Type J barrier shall conform to ASTM A185.
5. Regardless of the method of handling, barrier section lifting points shall be 6 ¼ feet from the ends of the barrier. Lifting devices and attachments to barrier sections shall be as approved by the Engineer.
6. For joint Type A barrier that is installed in a temporary location, tiebars should be placed in the slot when the slot design option is used or, for the male-female design option, the male-female connections should be mated. For joint Type A, neither of the optional joint designs should be grouted for temporary locations of barrier.
7. When installed in a permanent roadway location, end connections of the joint Type A barrier shall be grouted with a mixture of two parts sand and one part cement with enough water to make the mixture plastic. Grouting shall be done in a manner that will assure a smooth surface at the joint.
8. Surface finishing and grouting (where required) shall be considered subsidiary to the various bid items involved.
9. All steel fittings for joint Type B and Type J barrier shall be galvanized after fabrication in accordance with ASTM 123.
10. Barrier length shall be 30 feet ± 4 inches unless specified elsewhere in the plans.
11. Forms shall be constructed of steel. Edges of barrier shall be rounded or chamfered as shown on sheet PCTB(2).
12. The contractor has the option of placing precast (joint Type A, B or J) or cast-in-place Type 2 Concrete Traffic Barrier as shown on sheet CTB(2) unless otherwise shown in the plans.

NOTE:
BARRIER FROM EXISTING STOCKPILES THAT SUBSTANTIALLY MEETS THE REQUIREMENTS SHOWN ON THIS SHEET MAY BE USED ON THIS PROJECT.

NEW BARRIER SHALL NOT BE CAST ACCORDING TO THE DETAILS SHOWN ON THIS SHEET.

R = Radius
D = Diameter

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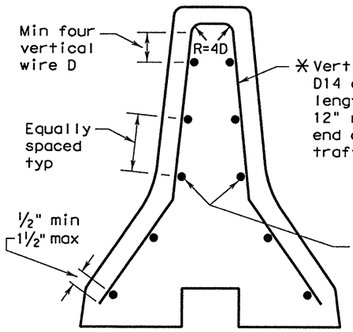
PRECAST CONCRETE TRAFFIC BARRIER TYPE 2

PCTB(1)-04

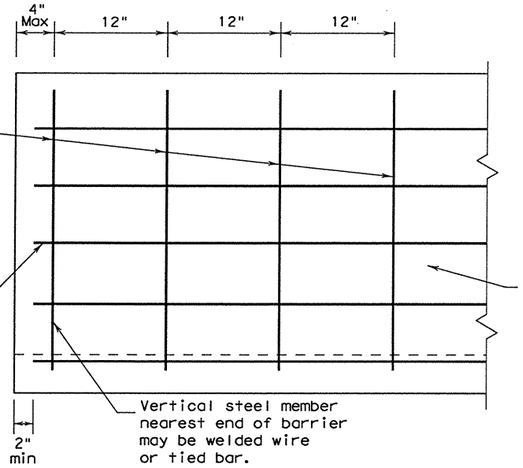
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©TxDOT December 1990	DIST	FEDERAL AID PROJECT			SHEET
REVISIONS					119
	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	Rockwall		0009	16	073	

Configurations of welded wire fabric other than as shown in the WWF Detail will be permitted when the conditions tabulated below are satisfied.

DESCRIPTION	LONGITUDINAL WIRES	VERTICAL WIRES
1. Wire type	Deformed	Smooth or Deformed
2. Minimum (cumulative total) wire area	1.24 sq. inch	0.133 sq. in. per longitudinal foot (req'd only in end 3'-4" of precast sections)
3. No. of wires Minimum Maximum	 6 14	 4 at 12" C-C ea. precast end 12 at 4" C-C ea. precast end
4. Bending radius	n/a	Minimum radius = two vertical wire diameters
5. Wire placement a. Top wire	Not less than 4 nor more than 5 vertical wire dia. from the upper bends in the vertical wires	n/a
b. Bottom wire	4" (±½") from bottom of barrier	n/a
c. Other wires	Uniformly and symmetrically spaced along faces of barrier	Minimum spacing 4" Maximum spacing 12"
6. Maximum wire size differential	The smaller wire shall have an area of 40% or more of the larger wire.	



END VIEW



ELEVATION VIEW

Note: Detail shown is for D12 longitudinal wires and D14 or W14 vertical wires. Other size and spacing combinations meeting the tabulated conditions may be used.

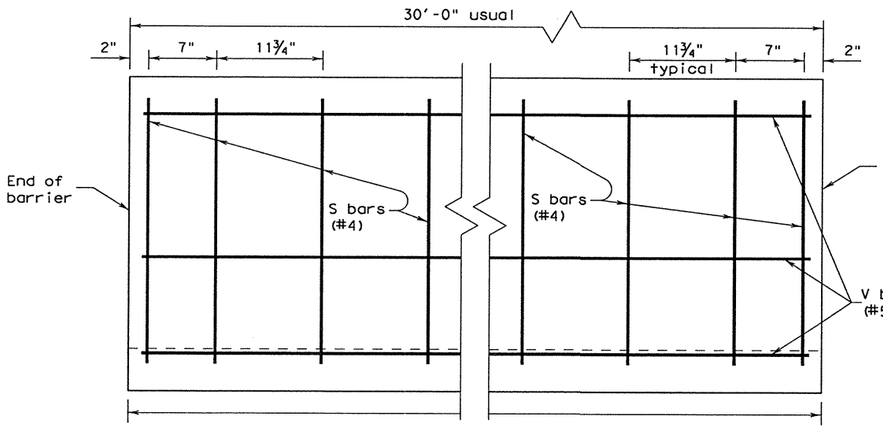
DETAILS OF WELDED WIRE FABRIC OPTION

GENERAL NOTES

1. Concrete shall be class C or H.
2. Where used, rebar reinforcement shall conform to ASTM A-615.
3. Wire fabric shall conform to ASTM A-185 or A-497.
4. Barrier length shall be 30 ft.± unless otherwise specified in plans.
5. All concrete, reinforcement, joint connection systems, grout, and etc. as shown are considered as part of the barrier for payment.

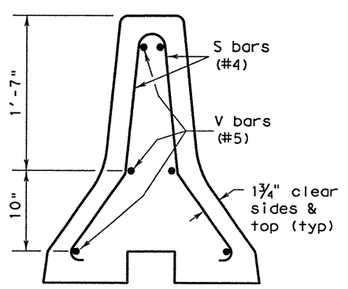
# Approximate P.L.F. quantities		
Concrete	CY.	0.112
Rebar	LB.	6.62
Welded wire fabric	LB.	4.82

For Contractor's information only
Weight of one 30 ft. unit = Approximately 7 Tons

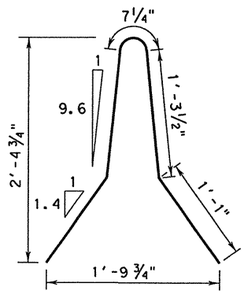


ELEVATION OF BARRIER

Additional vertical steel shall be provided as necessary to properly position steel and stabilize rebar cage.

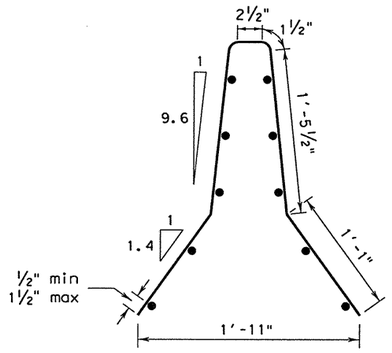


SECTION NEAR END OF BARRIER

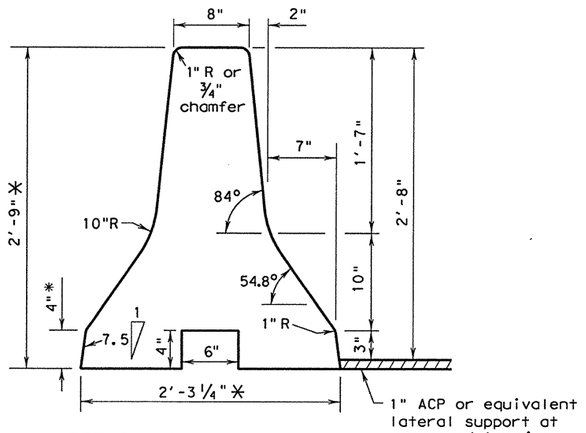


BARS S (#4)

DETAILS OF REBAR OPTION



VERTICAL WIRE DETAILS



DETAIL OF BARRIER SHAPE

* When 1" ACP is not used for lateral support, these dimensions shall be adjusted accordingly.

NOTE:
BARRIER FROM EXISTING STOCKPILES THAT SUBSTANTIALLY MEETS THE REQUIREMENTS SHOWN ON THIS SHEET MAY BE USED ON THIS PROJECT.

NEW BARRIER SHALL NOT BE CAST ACCORDING TO THE DETAILS SHOWN ON THIS SHEET.

Texas Department of Transportation
Design Division (Roadway)

PRECAST CONCRETE TRAFFIC BARRIER TYPE 2

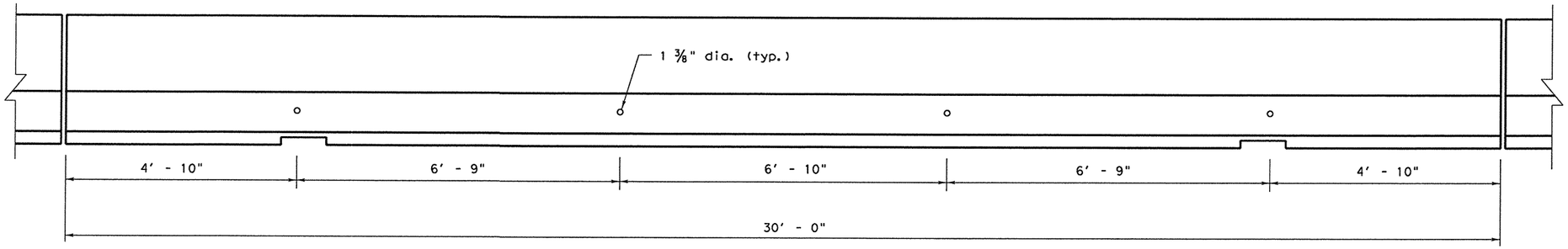
PCTB(2)-04

FILE: pctb204.dgn	DN: GTH	CK: GTH	DW: RAR	CK: TQM	
© TxDOT 1996	DIST	FEDERAL AID PROJECT			SHEET
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	Refurbished 9/2012					

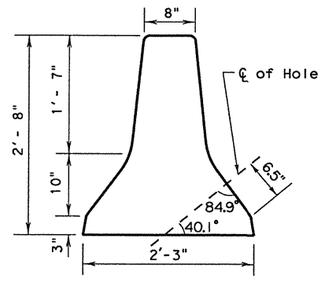
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LEVELED
1

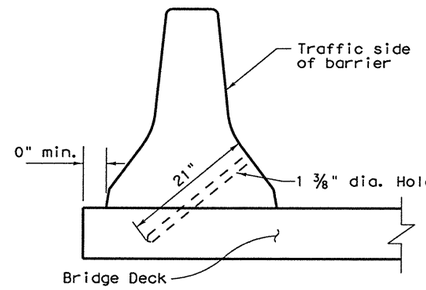
DISCLAIMER:
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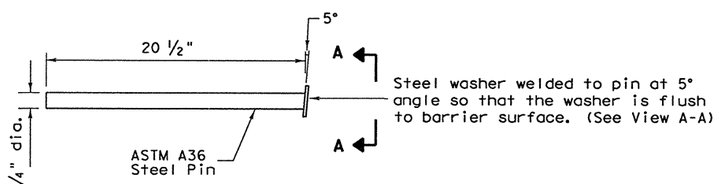
DETAIL 1



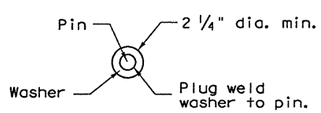
DETAIL 2



DETAIL 3



DETAIL 4



VIEW A-A

GENERAL NOTES

1. These details provide a method of laterally restraining precast concrete barrier to limit deflections under normally expected passenger vehicle impacts. These details are intended for use in work zones, primarily on bridge decks, where temporary barrier must be placed less then 2 ft. from the longitudinal edge of the deck or dropoff and parallel to the direction of travel. See Texas Transportation Institute Research Study 2-8-93-1959 for additional development information.

2. Each precast concrete barrier section shall have four 1 3/8 in. diameter holes drilled completely through the barrier. The center lines of the holes are as shown in Detail 2. As shown, the entry point of the hole is located 6 1/2 in. along the face of the barrier up from the first break. If the drill bit encounters a rebar in the barrier, the entry point may be shifted 6 in.± longitudinally along the barrier. The four holes are spaced along the lenth of the barrier as shown in Detail 1.

3. The drilling of bridge deck is accomplished by placing the pre-drilled barrier section on the bridge deck in the desired position. then the hole is drilled into the bridge deck with the bit passing though the hole in the barrier. The bit is to be inserted into the hole in the barrier to a total of 21 in. so that the bridge deck is drilled to a point which is slightly more than 5 in. ± below the surface of the bridge deck depending upon the slope of the deck as shown in Detail 3.

4. The barrier section is secured in place by inserting the four 1 1/4 in. diameter steel pins which are 20 1/2 in. long through the barrier section and into the deck. Detail 4 presents a sketch of the steel pins. Note that steel washers have been welded to the top of the steel pins to aid in removal of the pins when the barrier is to be moved.

5. These details may be used with precast barrier joint Type A, B, angle or channel connections.

6. The drilling of holes in the barrier, drilling of holes in bridge deck, fabrication and materials for the 1 1/4 in. pins, installation of pins, and any repair to bridge deck or barrier shall be considered as subsidary to the barrier bid items.

7. The barrier and new bridge deck will be repaired as directed by the Engineer with non-shrinkage grout.

8. A core drilling method approved by the Engineer will be required.

NOTE:
BARRIER FROM EXISTING STOCKPILES THAT SUBSTANTIALLY MEETS THE REQUIREMENTS SHOWN ON THIS SHEET MAY BE USED ON THIS PROJECT.

NEW BARRIER SHALL NOT BE CAST ACCORDING TO THE DETAILS SHOWN ON THIS SHEET.

R = Radius
D = Diameter

Texas Department of Transportation
Design Division (Roadway)

PRECAST CONCRETE TRAFFIC BARRIER TYPE 2

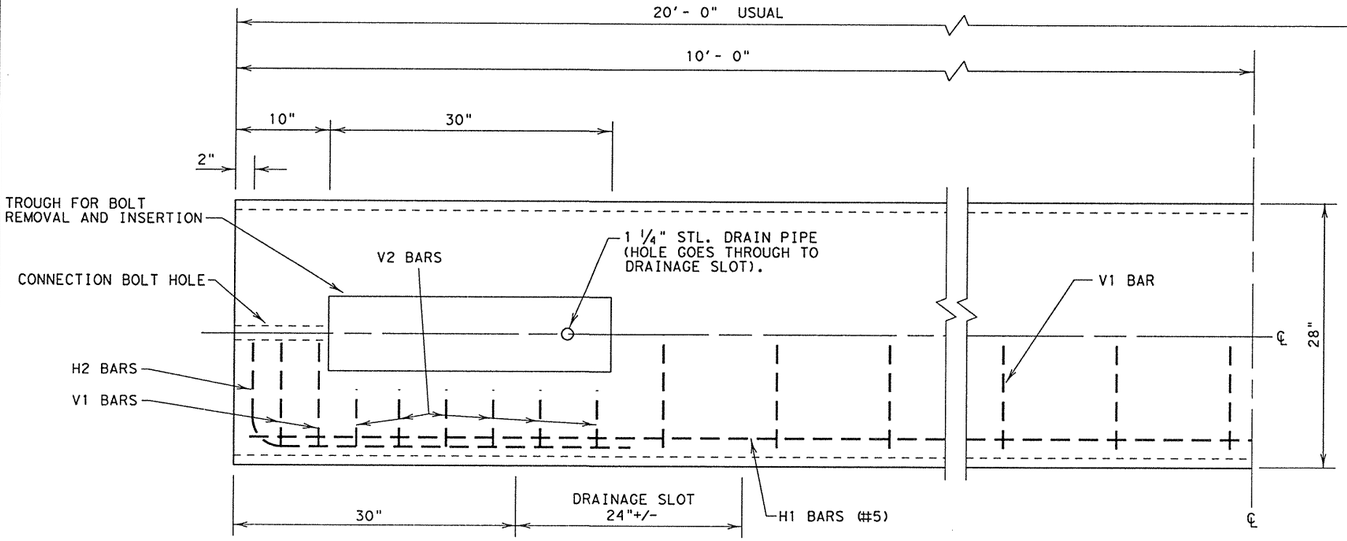
PCTB(3)-04

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© TxDOT April 1994	DIST	FEDERAL AID PROJECT			SHEET
REVISIONS					121
	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	Rockwall		0009	12	023	

LEVEL 1 VED

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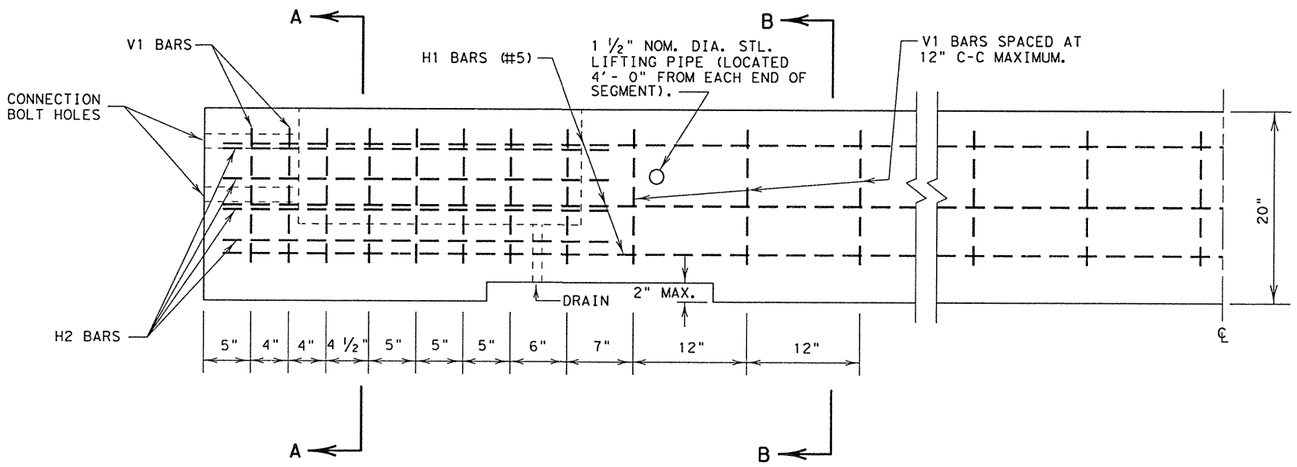
LEVELS DISPLAYED



NOTE: CONCRETE ON BOTTOM HALF OF PLAN VIEW IS REMOVED IN ORDER TO SHOW DETAILS

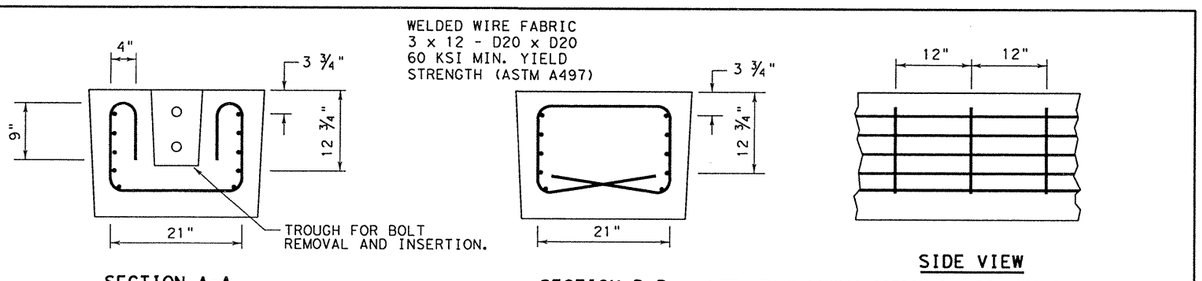
PLAN VIEW - TYPE 1

(SYMMETRICAL ABOUT CENTER LINES)



ELEVATION - TYPE 1

(SYMMETRICAL ABOUT CENTER LINES)



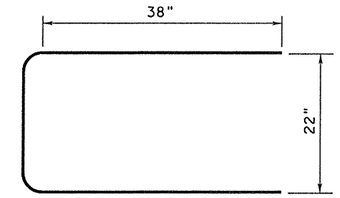
SECTION A-A

SECTION B-B

SIDE VIEW

NOTE: THIS FABRIC OPTION CAN BE USED IN PLACE OF V1, V2 AND H1 BARS. THE H2 BARS SPECIFIED ARE STILL REQUIRED.

WELDED WIRE FABRIC OPTIONAL REINFORCING

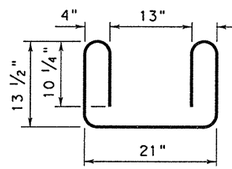


H2 BAR (#5)

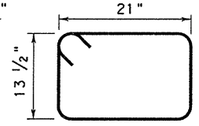
(GRADE 60 MIN.)

NOTE: H2 REBAR IS TO BE BENT AT A 3" RADIUS.

NOTE: ALL BENDING OF SHEAR REBAR IS AT A 2" RADIUS, UNLESS SPECIFIED OTHERWISE.

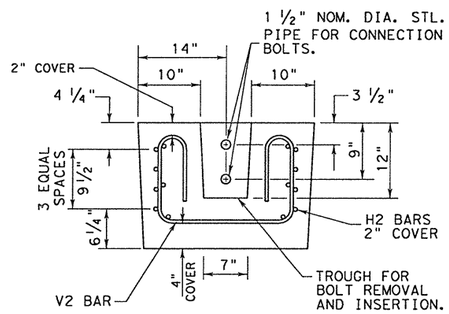


V2 BAR (#4)

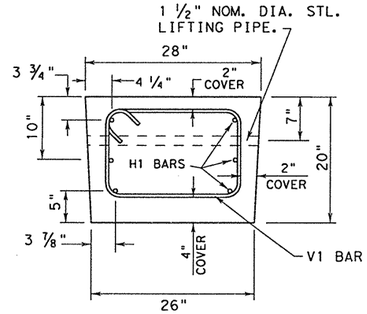


V1 BAR (#4)

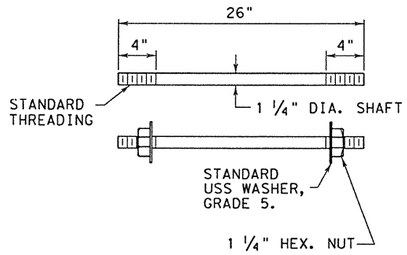
REINFORCING STEEL DETAILS



SECTION A-A



SECTION B-B



CONNECTION BOLT

FOR CONTRACTORS INFORMATION ONLY

(TYPE 1) APPROX. QUANTITIES 20 FT. SECTION		
CONCRETE	CY	2.6
REINFORCING STEEL	LBS	330
TOTAL BARRIER WT.	LBS	11000

GENERAL NOTES

1. BARRIER LENGTH SHALL BE 20 FEET (+/- 1 INCH) UNLESS OTHERWISE SPECIFIED IN THE PLANS.
2. ALL CONCRETE, REINFORCEMENT, ANCHOR BOLTS, BLOCKING, ETC., AS SHOWN ARE CONSIDERED AS PART OF THE BARRIER FOR PAYMENT.
3. ALL CONCRETE SHALL BE CLASS A, C, OR H, UNLESS OTHERWISE SPECIFIED.
4. ALL REINFORCING STEEL SHALL BE GRADE 40, UNLESS OTHERWISE SPECIFIED.
5. CHAMFER ALL EDGES ¾ INCH, AS DIRECTED BY THE ENGINEER.
6. STEEL PIPE SHALL BE HOT DIP GALVANIZED IN CONFORMANCE TO ASTM DESIGNATION A123. BOLTS, NUTS AND WASHERS SHALL BE HOT-DIP GALVANIZED TO ASTM DESIGNATION A153.
7. BOLTS SHALL CONFORM TO ASTM A36. NUTS SHALL CONFORM TO A307 REQUIREMENTS AND SHALL BE TAPPED OR CHASED AFTER GALVANIZING. BOLTS AND NUTS SHALL HAVE CLASS 2A AND 2B FIT TOLERANCES.
8. THE BARRIER SHOULD BE LIGHT IN COLOR AND SHOULD BE SUPPLEMENTED BY DELINEATION AS DETAILED ELSEWHERE IN THE PLANS.

Texas Department of Transportation
Design Division (Roadway)

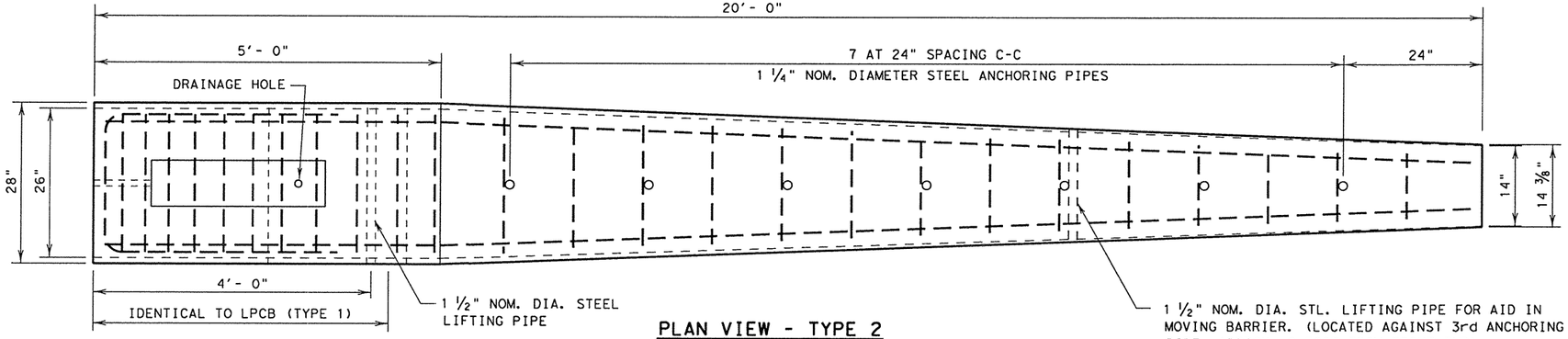
LOW PROFILE CONCRETE BARRIER

(PORTABLE AND PRECAST)

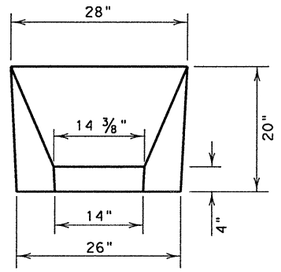
LPCB(1)-92

SHEET 1 OF 2

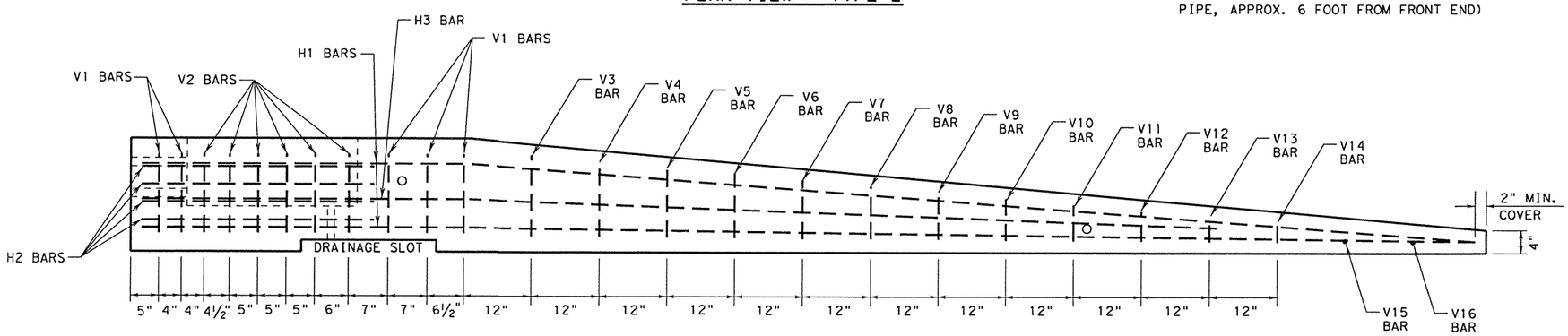
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©TxDOT September 1992	DISTRICT	FEDERAL AID PROJECT			SHEET
REVISIONS					122
	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	Real County		0073			



PLAN VIEW - TYPE 2



APPROACH VIEW

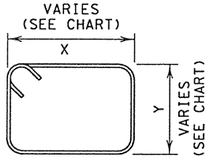


ELEVATION - TYPE 2

NOTE: ANCHORING PIPES NOT SHOWN IN ELEVATION.

GENERAL NOTES

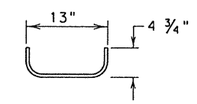
1. TYPE 2 BARRIER SHALL BE USED AS AN END TREATMENT FOR TYPE 1 BARRIER WHEN APPROPRIATE.
2. THE ANCHORAGE PINS ARE ALL THE SAME LENGTH AND ARE INTENDED TO BE DRIVEN FLUSH WITH THE TOP OF THE BARRIER SURFACE.
3. THE BENDS IN THE H3 AND H1 BARS ARE SLIGHT, NO FORMAL BEND IS NECESSARY.
4. TYPE 2 BARRIER MUST BE LIFTED FROM REAR FIRST TO PREVENT CRACKING OF SLOPED SECTION.
5. SEE SHEET 1 OF 2 FOR ADDITIONAL INFORMATION.



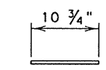
V 3-11 BARS (#4)

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

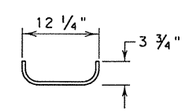
NOTE: ALL BENDING OF SHEAR REBAR IS AT A 2" RADIUS, UNLESS SPECIFIED OTHERWISE.



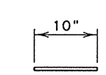
V12 BAR (#4)



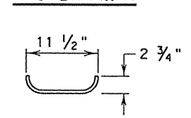
V15 BAR (#4)



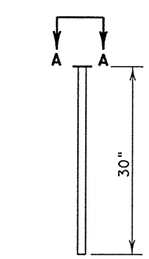
V13 BAR (#4)



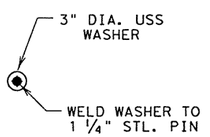
V16 BAR (#4)



V14 BAR (#4)



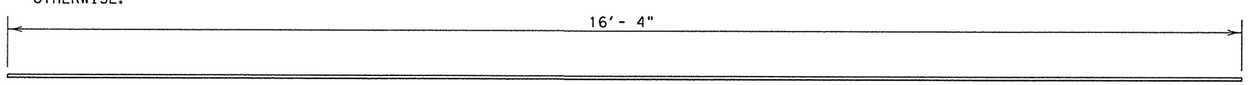
ANCHORING PIN
(1 ¼"DIA., A36 STL.)



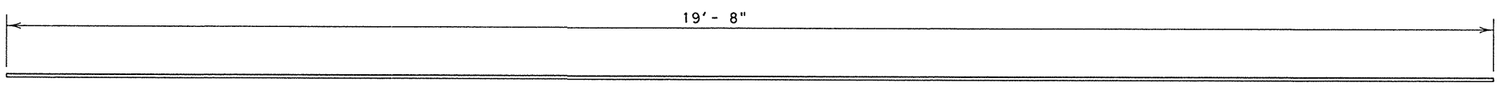
A-A
(HEAD OF ANCHORING PIN)

FOR CONTRACTORS INFORMATION ONLY

(TYPE 2) APPROX. QUANTITIES 20 FT. SECTION		
CONCRETE	CY	1.65
REINFORCING STEEL	LBS	240
TOTAL BARRIER WT.	LBS	7000



H3 BARS (#5)
(GRADE 60)



H1 BARS (#5)
(GRADE 60)

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LEVELS SAVED 1

Texas Department of Transportation
Design Division (Roadway)

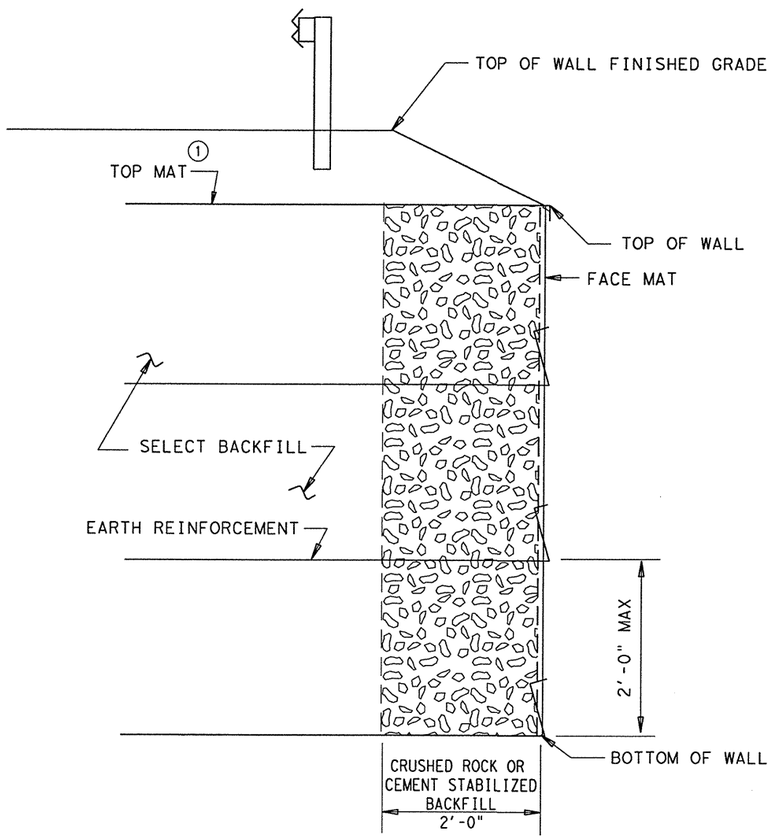
LOW PROFILE CONCRETE BARRIER
(PORTABLE AND PRECAST)

LPCB(2)-92

SHEET 2 OF 2

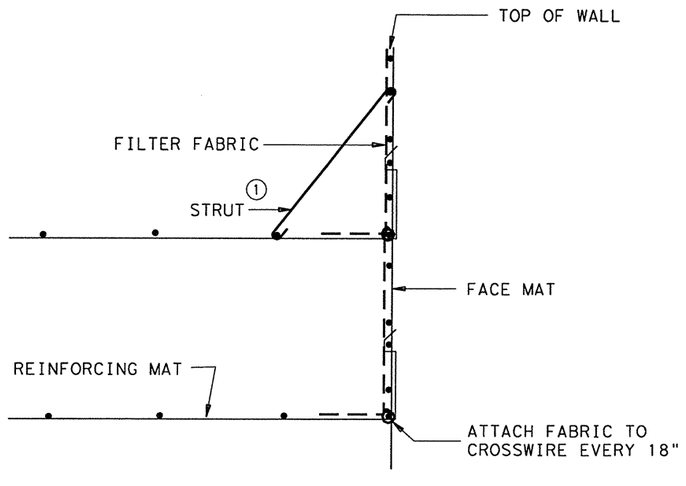
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REVISIONS					123
	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	Rockwall		0009	12	073	

① PROVIDE EITHER TOP MAT OR STRUT TO STABILIZE TOP OF WALL



TYPICAL SECTION

(SHOWING TOP MAT OPTION)



DETAIL OF WALL FACE

(SHOWING STRUT OPTION)

EARTH REINFORCEMENTS:

The maximum vertical spacing of earth reinforcements shall be 24 inches.

The minimum length of earth reinforcements shall be 6 feet for walls 6 feet and shorter, and 8 feet for walls over 6 feet tall.

Minimum wire size for welded wire earth reinforcements shall be W4.5. Longitudinal wire spacing shall not exceed 12 inches. Transverse wire spacing shall not exceed 24 inches.

Earth reinforcement allowable stresses and pullout shall be calculated with current AASHTO Standard and Interim Specifications.

Factor of safety in pullout of the earth reinforcements shall be greater than 1.5 at each reinforcement level.

WALL FACE:

Minimum wire size for welded wire material used for all facing shall be W4.5. Spacing of the wire shall not exceed 6 inches in either the horizontal or vertical direction. The facing shall be designed to maintain a vertical position during wall backfilling. This may be accomplished with wire struts, external bracing, or other means which provide acceptable performance. If the face does not remain vertical during wall backfilling, work shall be stopped until the system is modified to meet this requirement.

Angled struts or a top mat shall be provided to stabilize the top basket face. Strut spacing shall not exceed 24 inches.

STABILITY CRITERIA:

Factor of safety in sliding along the base of the structure shall be greater than or equal to 1.5.

Factor of safety in overturning shall be greater than or equal to 2.0.

The base pressure resultant shall fall within the middle third of the retaining wall.

DESIGN PARAMETERS:

Structure shall be based on the following design parameters:

Random Backfill: Unit weight = 120 pcf.
(Embankment or Existing Soils) ø = 30° c = 0 psf
Select Backfill: Unit weight = 120 pcf
ø = 30° c = 0 psf

GENERAL NOTES:

Sections shown are for informational purposes only. Specific geometry is to be determined based on wall layouts and other plan information.

SPECIAL NOTE - FACE CONSTRUCTION

When constructing wire faced walls, it is critical that the area immediately behind the face mat be completely filled. Failure to fill and compact this area will result in bulging of the face mats and settlement of the top of wall. The filter fabric shall closely follow the contours of the face unit, with particular attention paid to the lower corner of the basket. The fabric shall be pulled into the corner and attached to the basket with hog rings or tie wire. The coarse rock or cement stabilized backfill in the two foot zone behind the face shall extend completely to the top of the face mat. Particular care shall be taken not to leave a gap or void below the next layer of earth reinforcement.

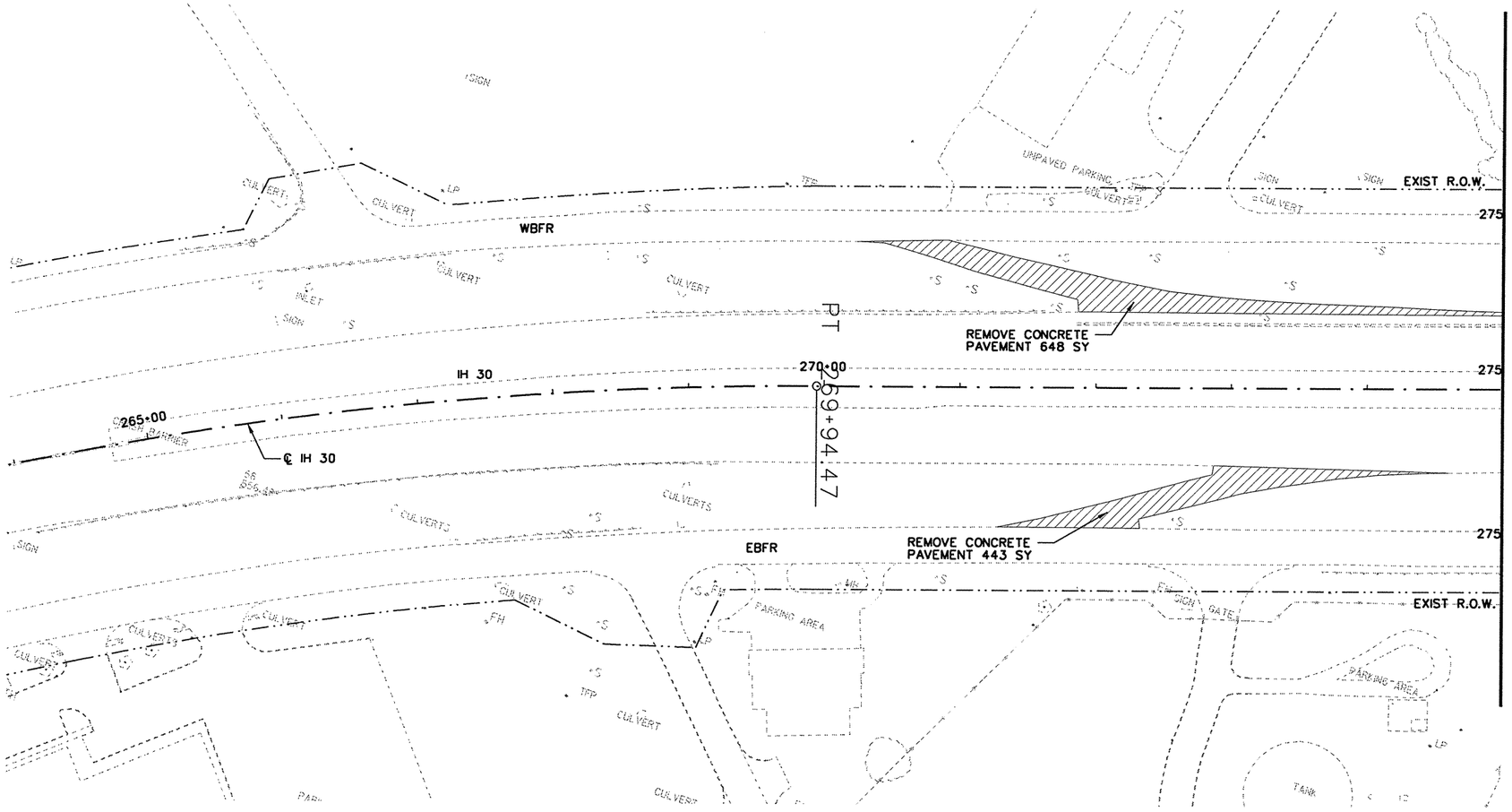
PATH:
LEVELS 1

Texas Department of Transportation
Bridge Division

TEMPORARY EARTH RETAINING WALL

RW(TEW)

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© TxDOT April 2002	DISTRICT	FEDERAL AID PROJECT			SHEET	
REVISIONS 5-06 : General Notes					124	
	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	Refugio		0008	12	073	



N

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SCALE FEET

LEGEND

- ASPHALT PVMT REMOVAL
- CONC PAVEMENT REMOVAL
- DRAINAGE PIPE REMOVAL
- POST AND CABLE FENCE REMOVAL
- REMOVE SMALL RDSD SGN ASSEM
- INLET REMOVAL
- REMOVE STR (WINGWALL)

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER

2/9/09

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Firm Registration Number: 1741

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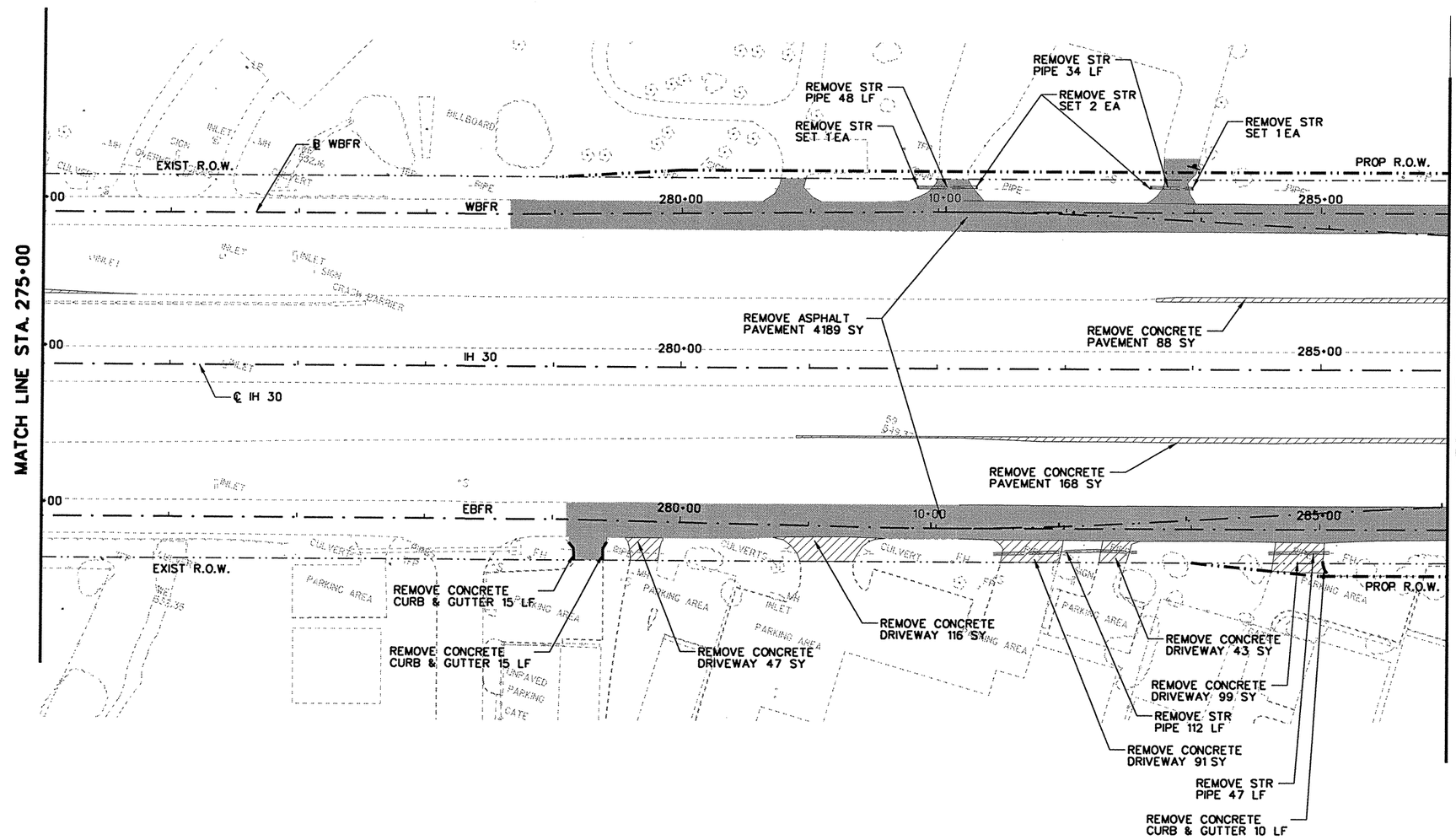
REMOVAL PLANS

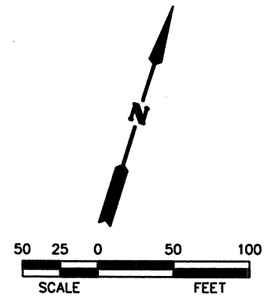
STA. 264+00 TO STA. 275+00

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Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
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SHEET 1 OF 8

2/6/2009 1:51:25 PM AADAMS pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.045 Removal/435TRL00.100





LEGEND

- ASPHALT PVMT REMOVAL
- CONC PAVEMENT REMOVAL
- DRAINAGE PIPE REMOVAL
- POST AND CABLE FENCE REMOVAL
- REMOVE SMALL RDSD SGN ASSEM
- INLET REMOVAL
- REMOVE STR (WINGWALL)

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
2/9/09

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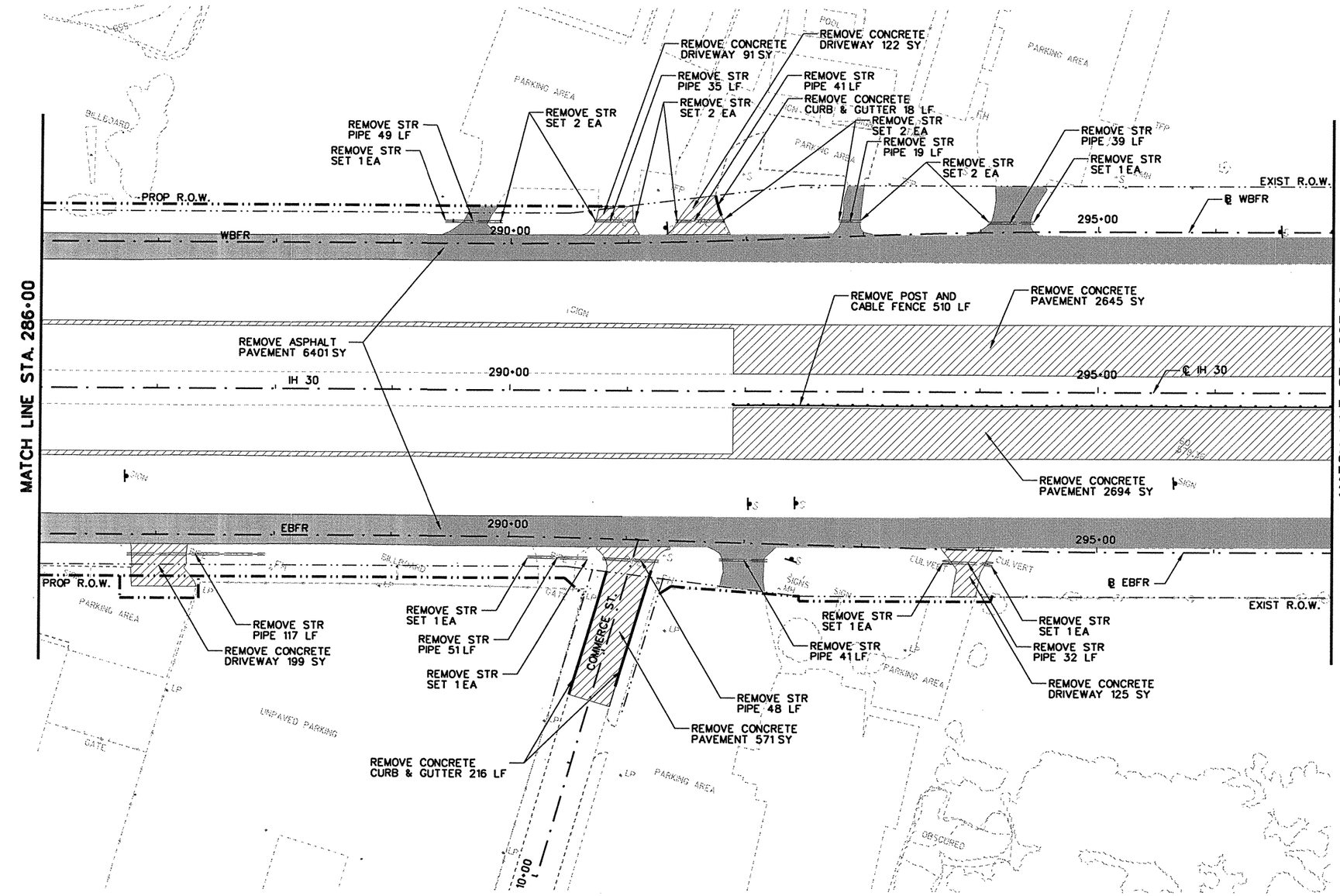
REMOVAL PLANS

STA. 275+00 TO STA. 286+00

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SHEET 2 OF 8

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2/6/2009 1:51:32 PM AADAMS



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SCALE FEET

LEGEND

- ASPHALT PVMT REMOVAL
- CONC PAVEMENT REMOVAL
- DRAINAGE PIPE REMOVAL
- POST AND CABLE FENCE REMOVAL
- REMOVE SMALL RDSD SGN ASSEM
- INLET REMOVAL
- REMOVE STR (WINGWALL)

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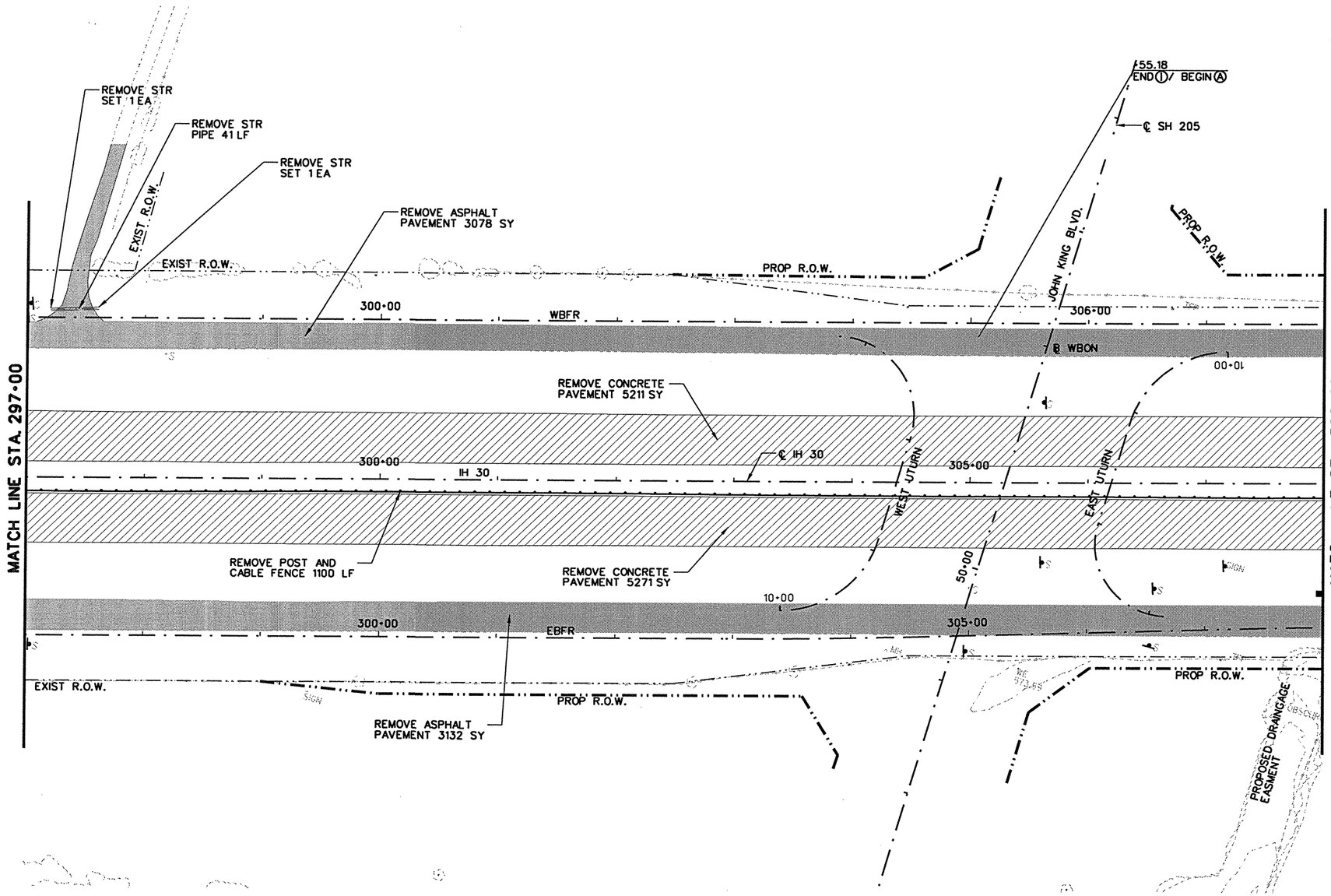
REMOVAL PLANS

STA. 286+00 TO STA. 297+00

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SHEET 3 OF 8

2/6/2009 1:51:39 PM AADAMS pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.045 Removal/435TRL02.100



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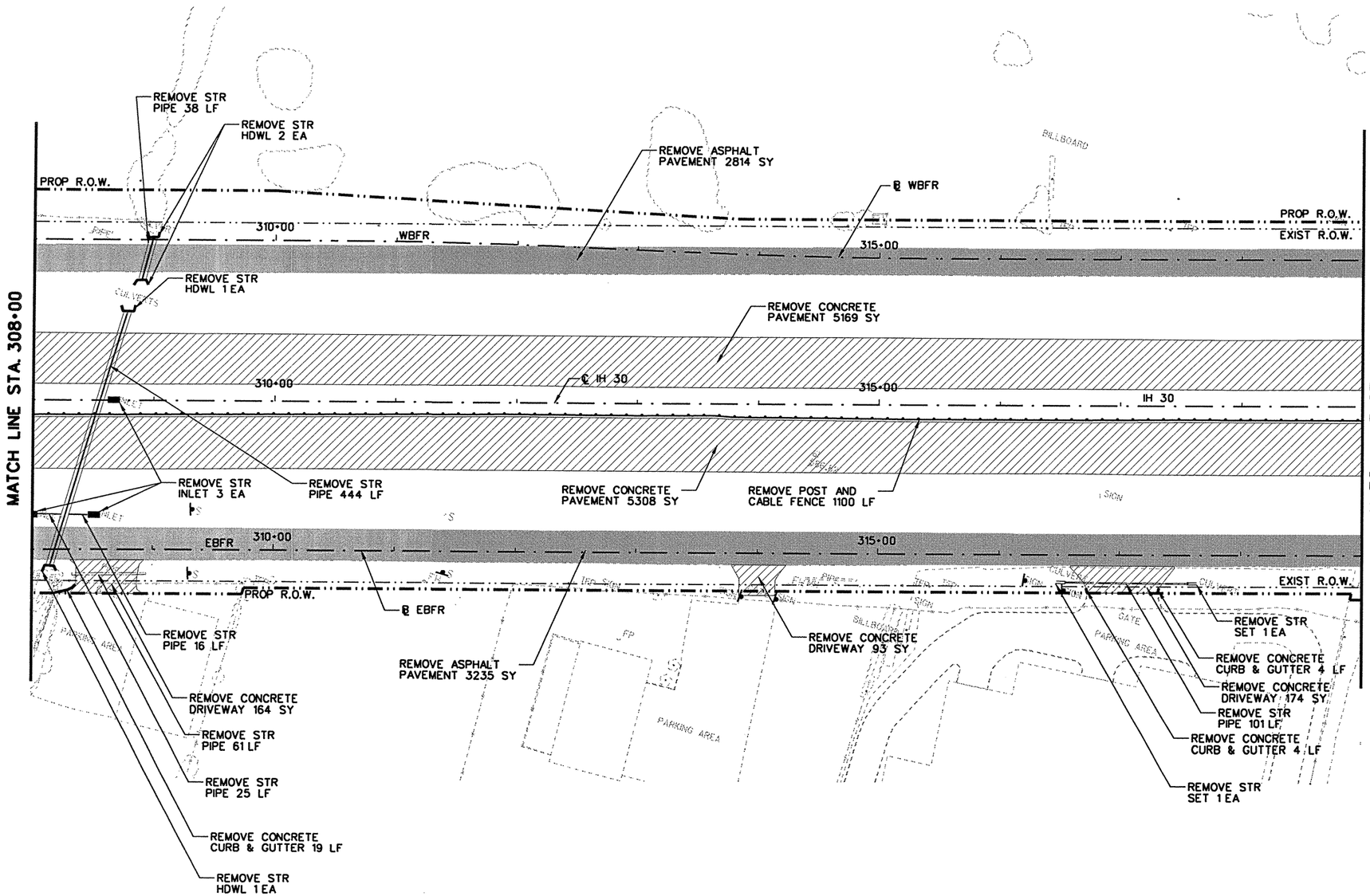
REMOVAL PLANS

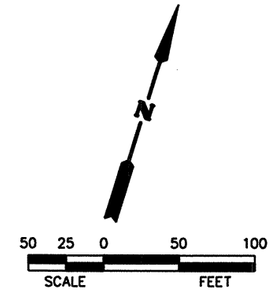
STA. 297+00 TO STA. 308+00

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SHEET 4 OF 8

2/6/2009 1:51:47 PM AADAMS pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.045 Removal/435TRL03.100





LEGEND

- ASPHALT PVMT REMOVAL
- CONC PAVEMENT REMOVAL
- DRAINAGE PIPE REMOVAL
- POST AND CABLE FENCE REMOVAL
- REMOVE SMALL RDSD SGN ASSEM
- INLET REMOVAL
- REMOVE STR (WINGWALL)

STATE OF TEXAS
ROBIN R. HANDEL
86931
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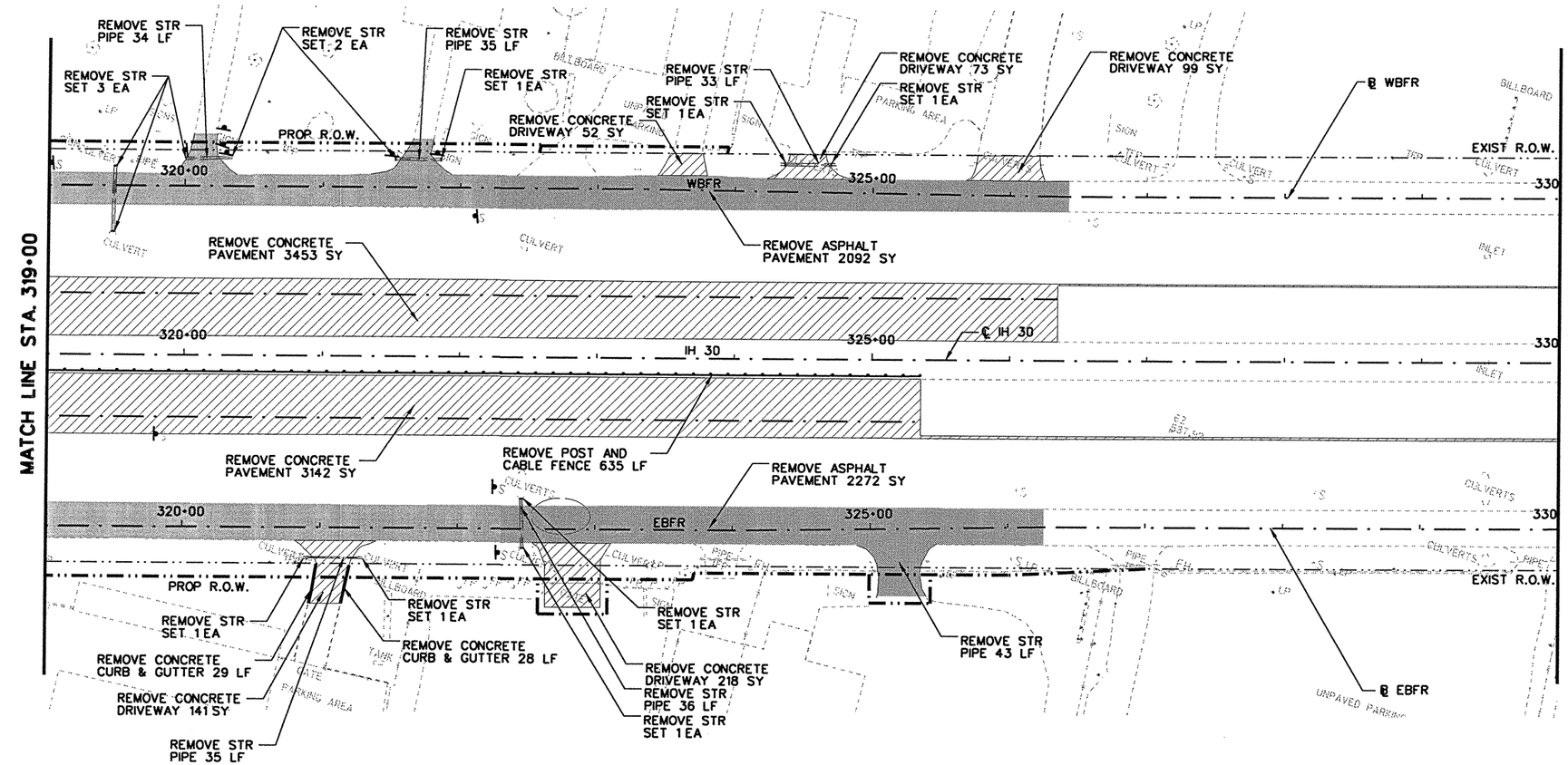
REMOVAL PLANS

STA. 308+00 TO STA. 319+00

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SHEET 5 OF 8

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SCALE FEET

LEGEND

- ASPHALT PVMT REMOVAL
- CONC PAVEMENT REMOVAL
- DRAINAGE PIPE REMOVAL
- POST AND CABLE FENCE REMOVAL
- REMOVE SMALL RDSD SGN ASSEM
- INLET REMOVAL
- REMOVE STR (WINGWALL)

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER

2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

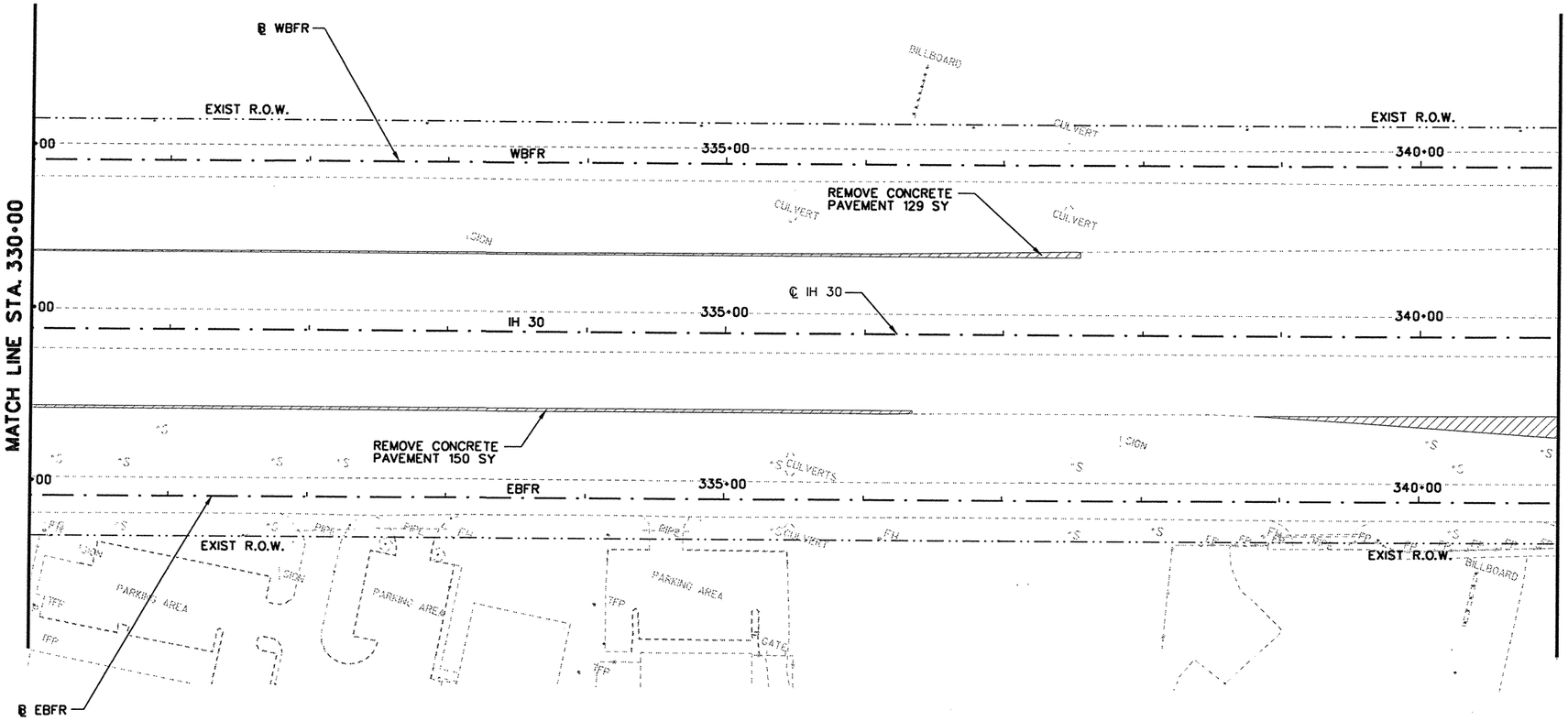
REMOVAL PLANS

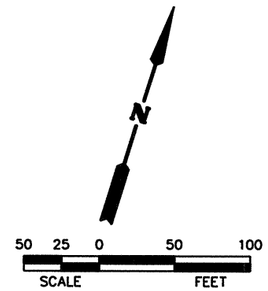
STA. 319+00 TO STA. 330+00

Designed:	CBC	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	130

SHEET 6 OF 8

2/6/2009 1:52:01 PM AADAMS
pw:/Active Projects/TX00643/TX00643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.045 Removal/435TRL05.100





LEGEND

- ASPHALT PVMT REMOVAL
- CONC PAVEMENT REMOVAL
- DRAINAGE PIPE REMOVAL
- POST AND CABLE FENCE REMOVAL
- REMOVE SMALL RDSD SGN ASSEM
- INLET REMOVAL
- REMOVE STR (WINGWALL)

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

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IH 30 AT JOHN KING BLVD.

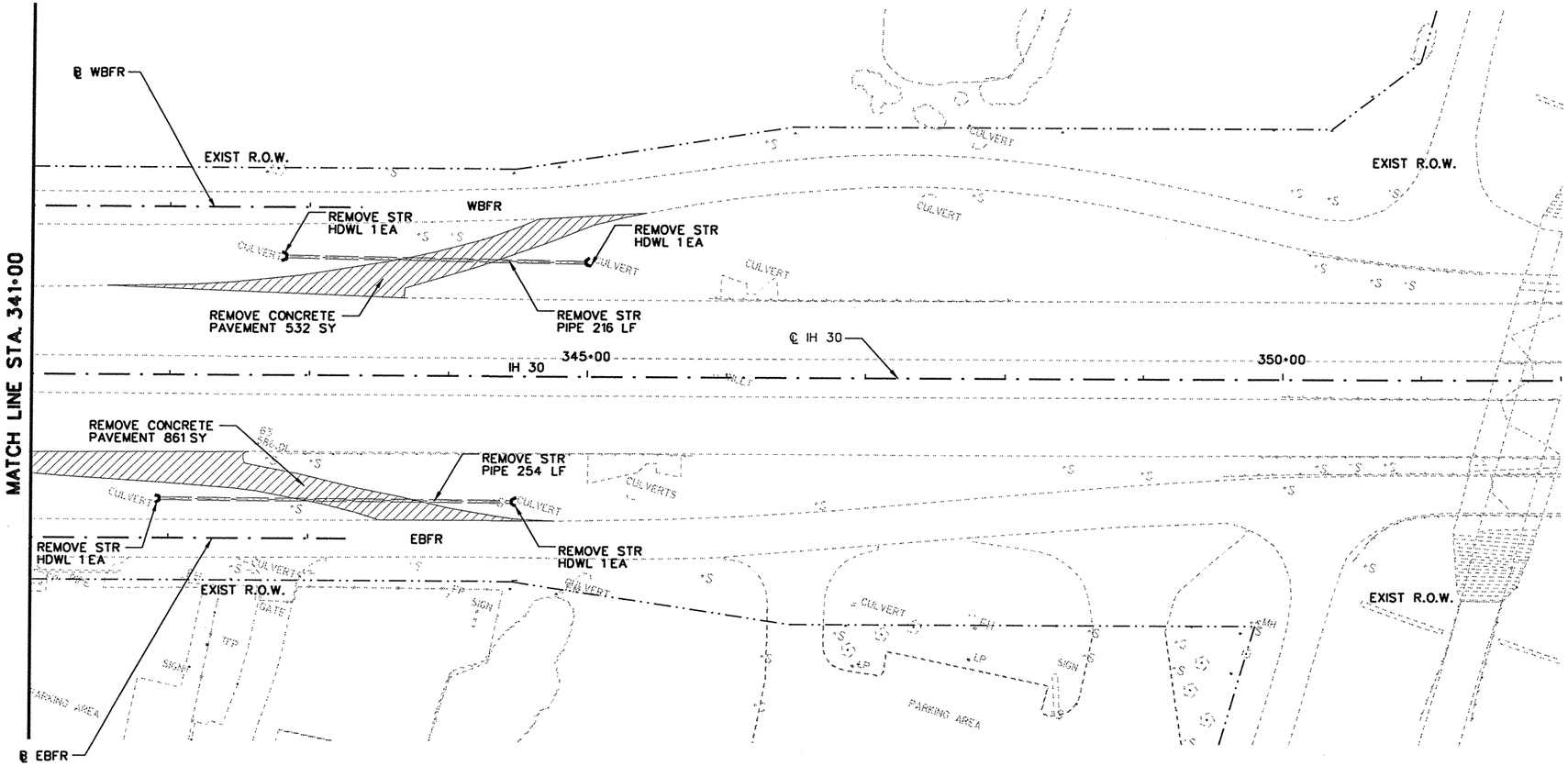
REMOVAL PLANS

STA. 330+00 TO STA. 341+00

Designed:	GBG	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	131

SHEET 7 OF 8

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N

50 25 0 50 100

SCALE FEET

LEGEND

- ASPHALT PVMT REMOVAL
- CONC PAVEMENT REMOVAL
- DRAINAGE PIPE REMOVAL
- POST AND CABLE FENCE REMOVAL
- REMOVE SMALL RDSD SGN ASSEM
- INLET REMOVAL
- REMOVE STR (WINGWALL)

STATE OF TEXAS
ROBIN R. HANDEL
86931
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2/9/09

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IH 30 AT JOHN KING BLVD.

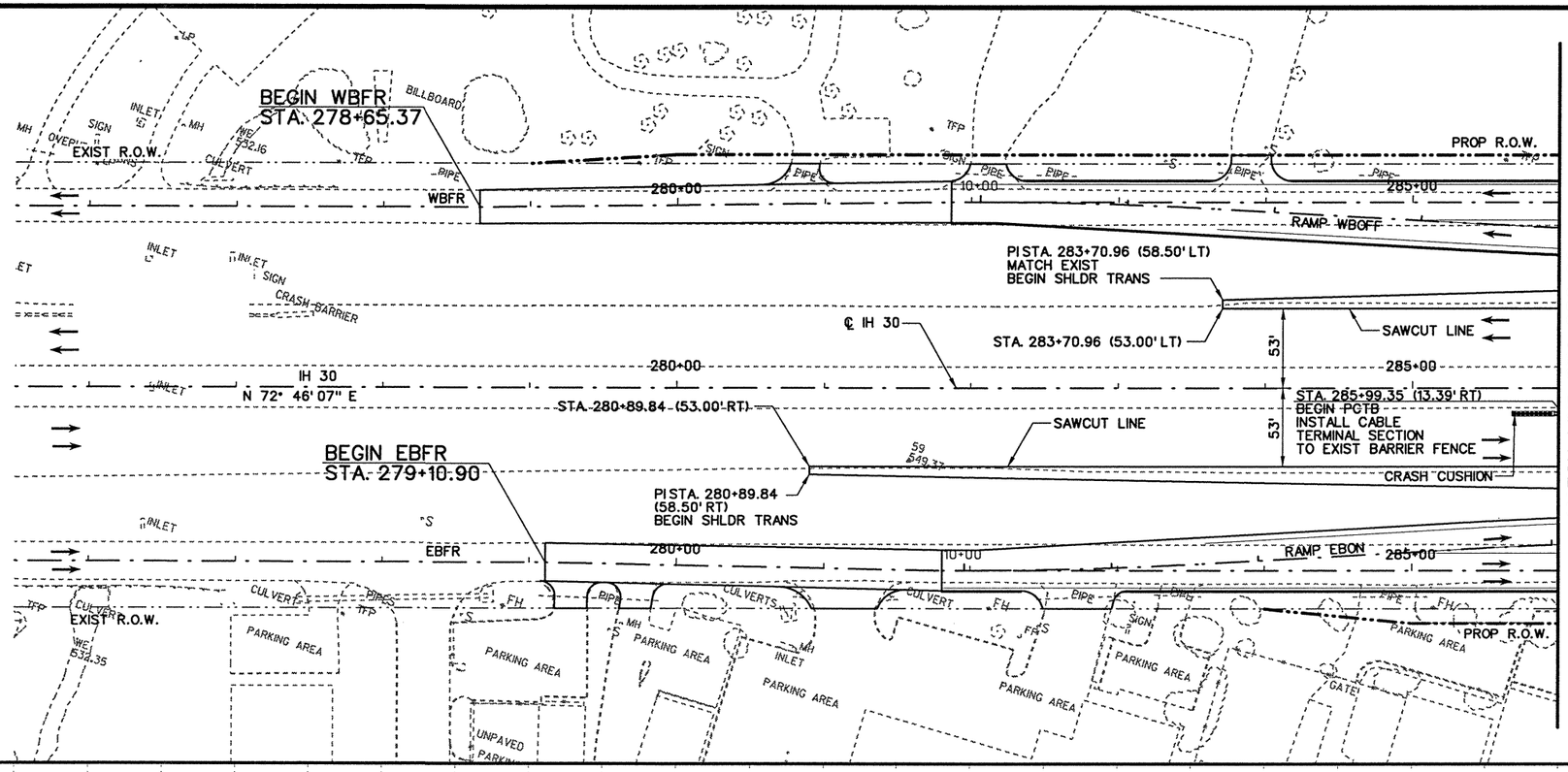
REMOVAL PLANS

STA. 341+00 TO STA. 352+00

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Checked:	AJA	6	TEXAS	SEE TITLE SHEET				IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073		132

SHEET 8 OF 8

2/6/2009 1:52:16 PM AADAMS p:\Active Projects\TXD0643\TXD0643-05\8.00 Plans and Drawings\8.30 Cut Sheets\8.3.045 Removal\4357RL07.100



5 2.5 0 5 10
SCALE VERT. FEET

50 25 0 50 100
SCALE HORZ. FEET

NOTES:

1. ALL DIMENSIONS ARE TO THE FACE OF CURB OR NOMINAL FACE OF BARRIER/RAIL.
2. ALL STATIONS AND OFFSETS ARE FROM ℄ IH30.

STATE OF TEXAS
ROBIN R. HANDEL
86931
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5/20/09

NO.	REVISION	BY	DATE

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Firm Registration Number: 1741

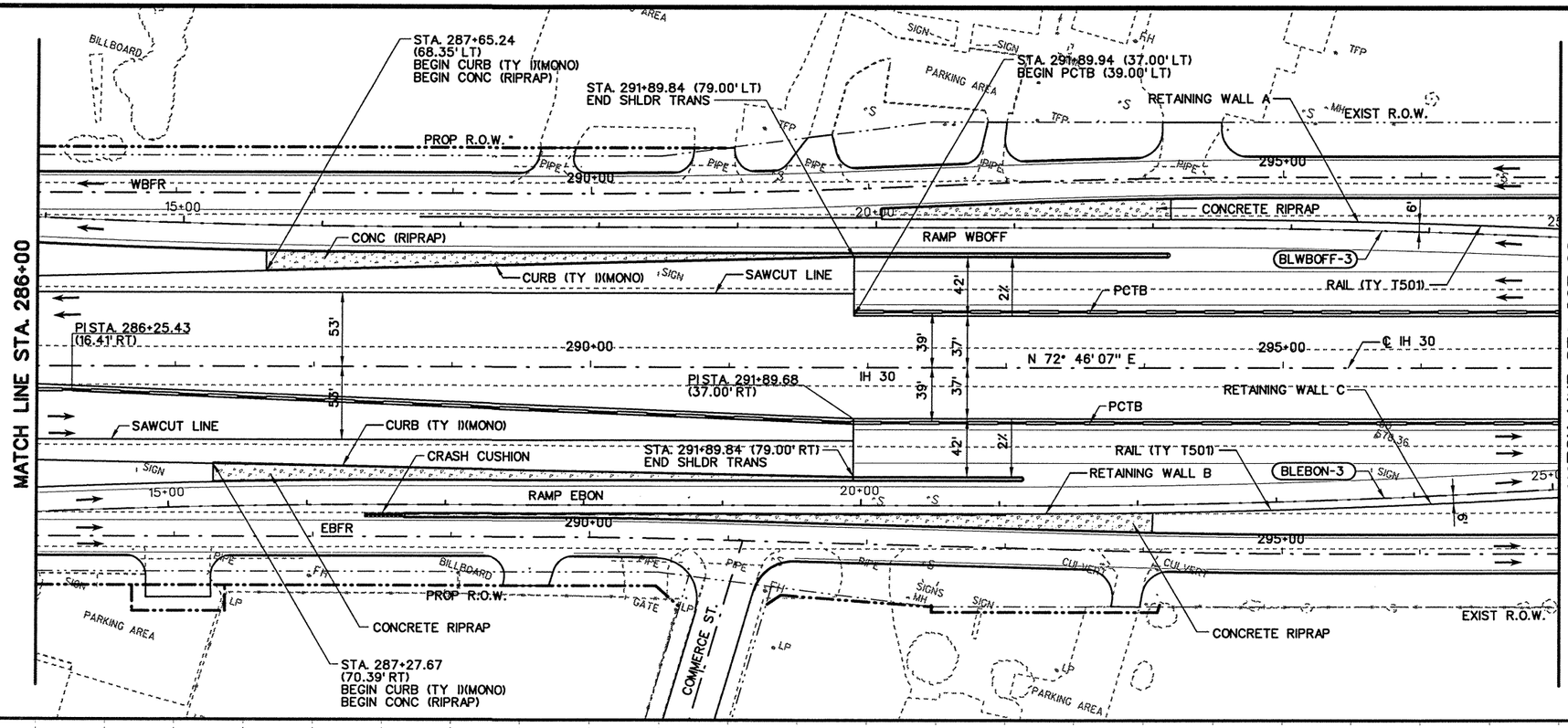
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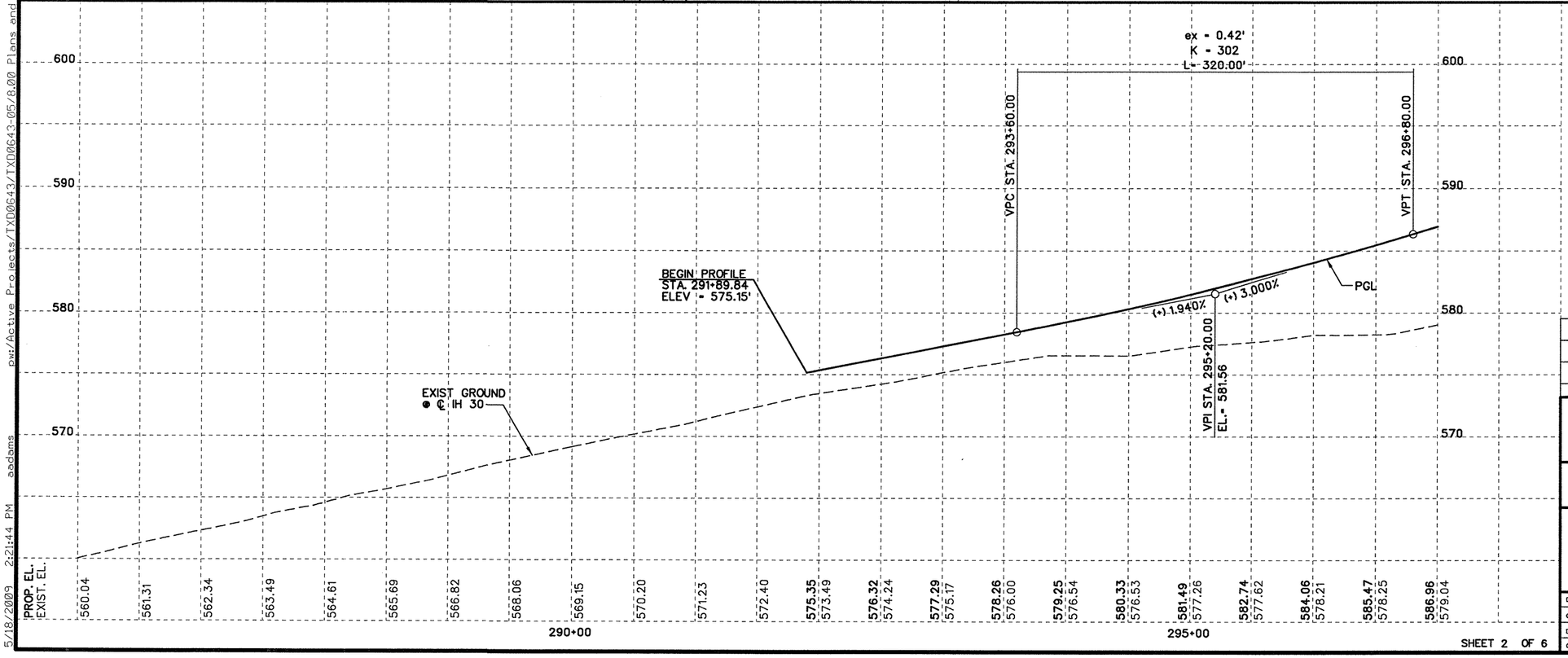
IH 30 AT JOHN KING BLVD.
ROADWAY PLAN AND PROFILE
IH 30 MAINLANES
BEGIN PROJECT TO STA. 286+00

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	133

SHEET 1 OF 6

5/18/2009 2:21:36 PM adadams pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.04 Roadway/435MPP01.100





STATE OF TEXAS
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5/20/09

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IH 30 AT JOHN KING BLVD.

ROADWAY PLAN AND PROFILE

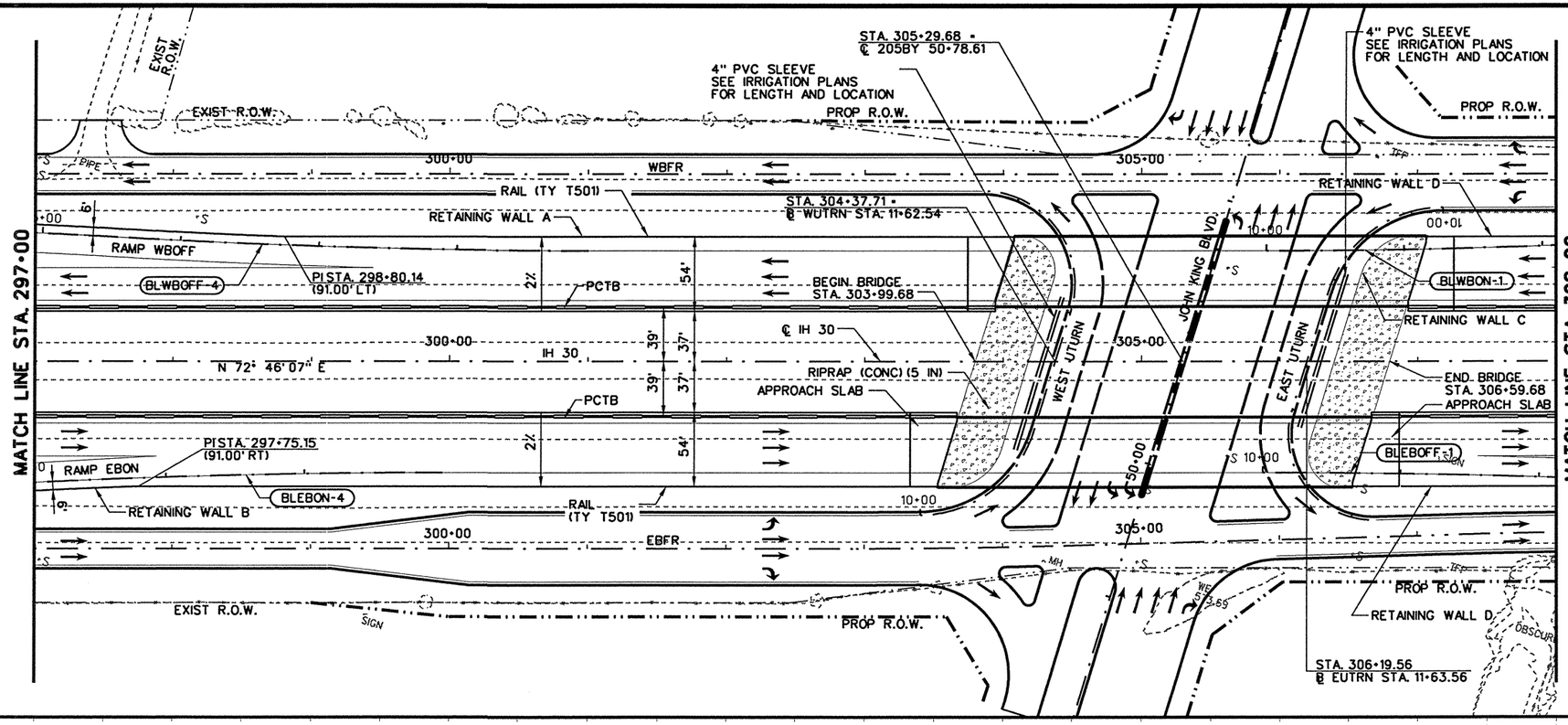
IH 30 MAINLANES

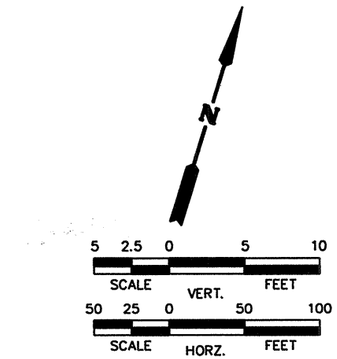
STA. 286+00 TO STA. 297+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
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Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	134

SHEET 2 OF 6

5/18/2009 2:21:44 PM adams pw:/Active Projects/TX00643/TX00643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.04 Roadway/435MPP02.100





NOTES:

1. 4" PVC SLEEVE TO BE PLACED PRIOR TO RIPRAP CONSTRUCTION.
2. REFER TO AMENITY PAVING SHEET FOR COLORED TEXTURED CONCRETE LOCATION.

STATE OF TEXAS
ROBIN R. HANDEL
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2/27/09

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IH 30 AT JOHN KING BLVD.

ROADWAY PLAN AND PROFILE

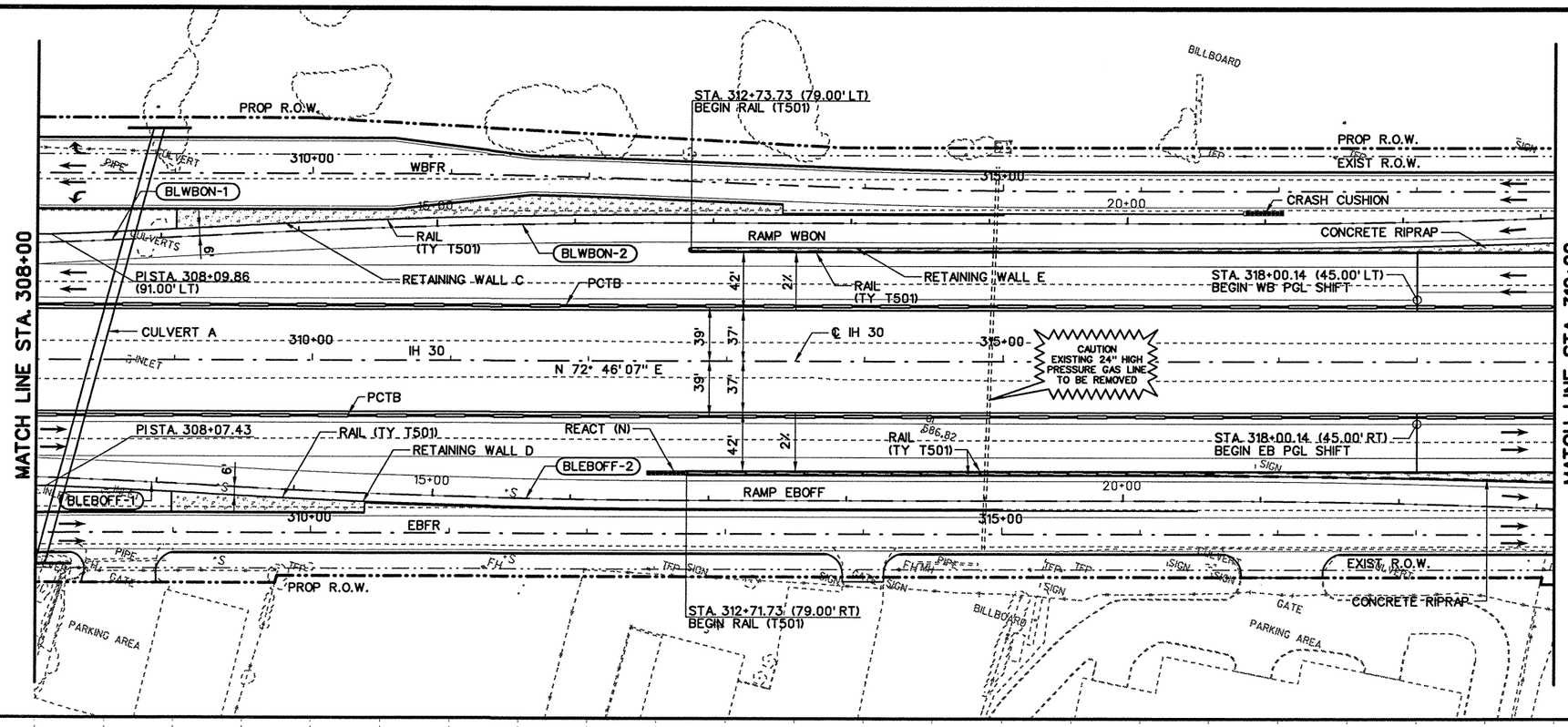
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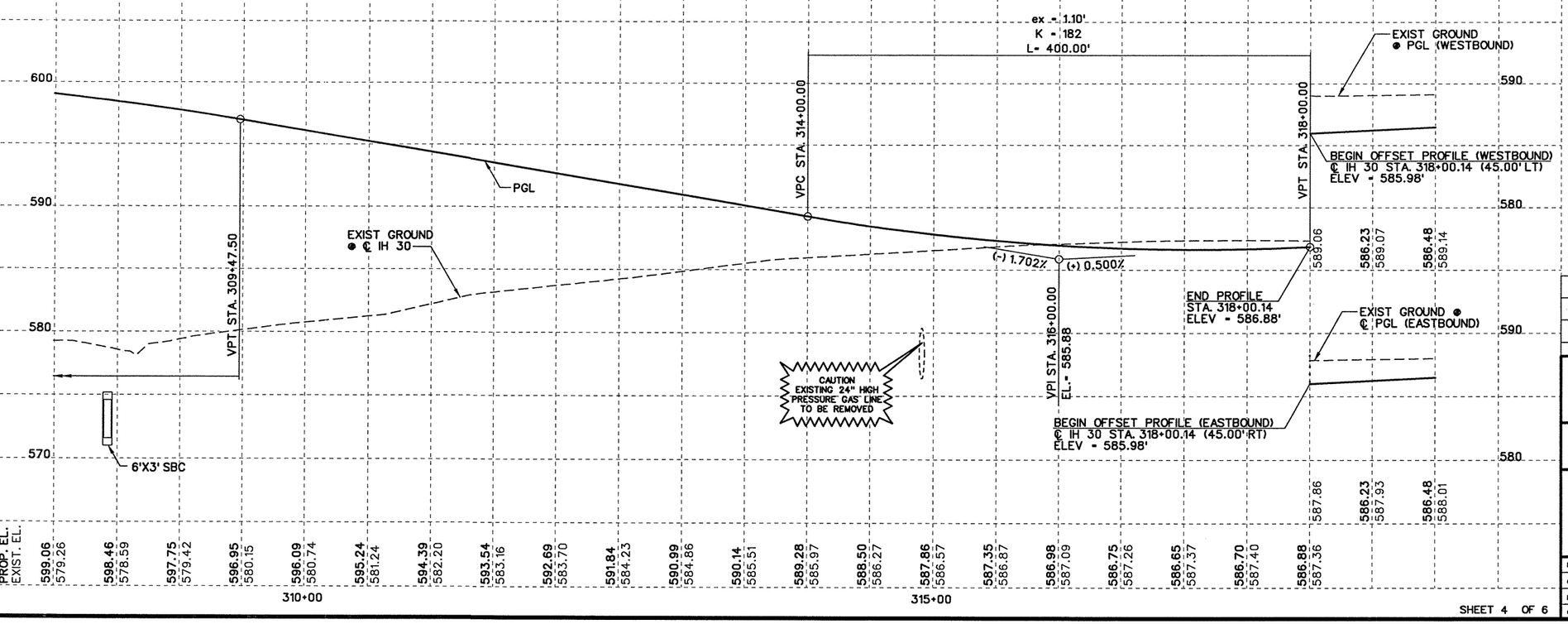
STA. 297+00 TO STA. 308+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
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Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	13

SHEET 3 OF 6

pw:/Active Projects/TX00643/TX00643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.04 Roadway/435MPP03.100
2/27/2009 8:51:45 AM aadams





SCALE VERT. 5 2.5 0 5 10 FEET

SCALE HORZ. 50 25 0 50 100 FEET

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
5/20/09

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IH 30 AT JOHN KING BLVD.

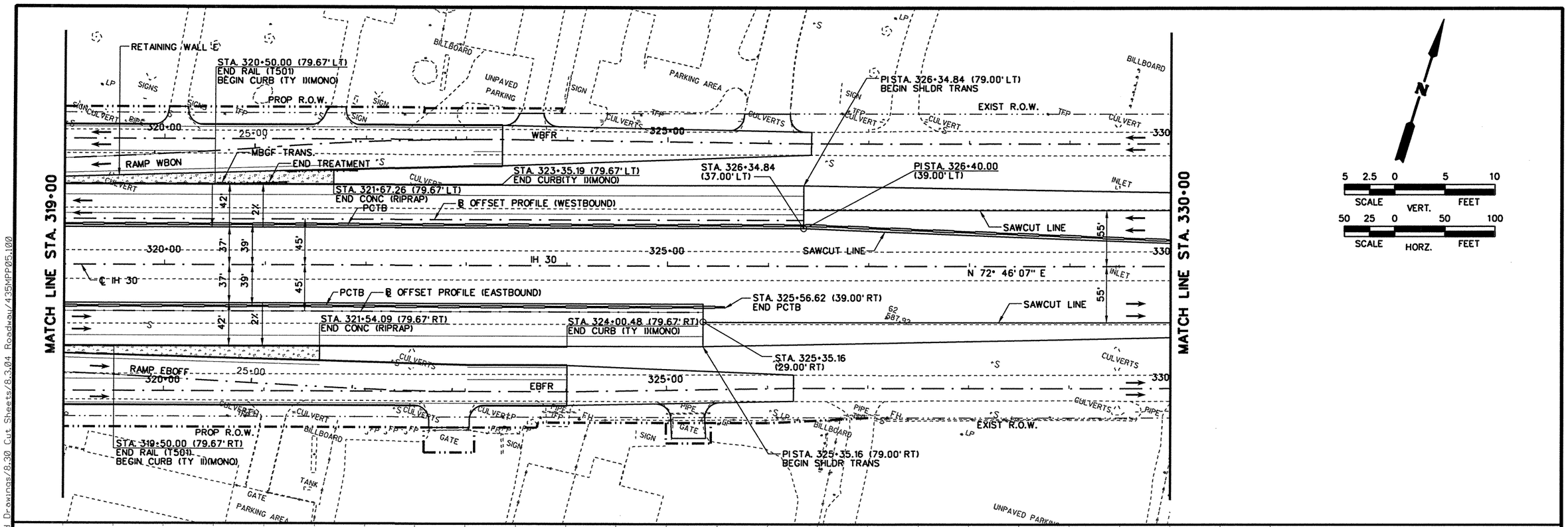
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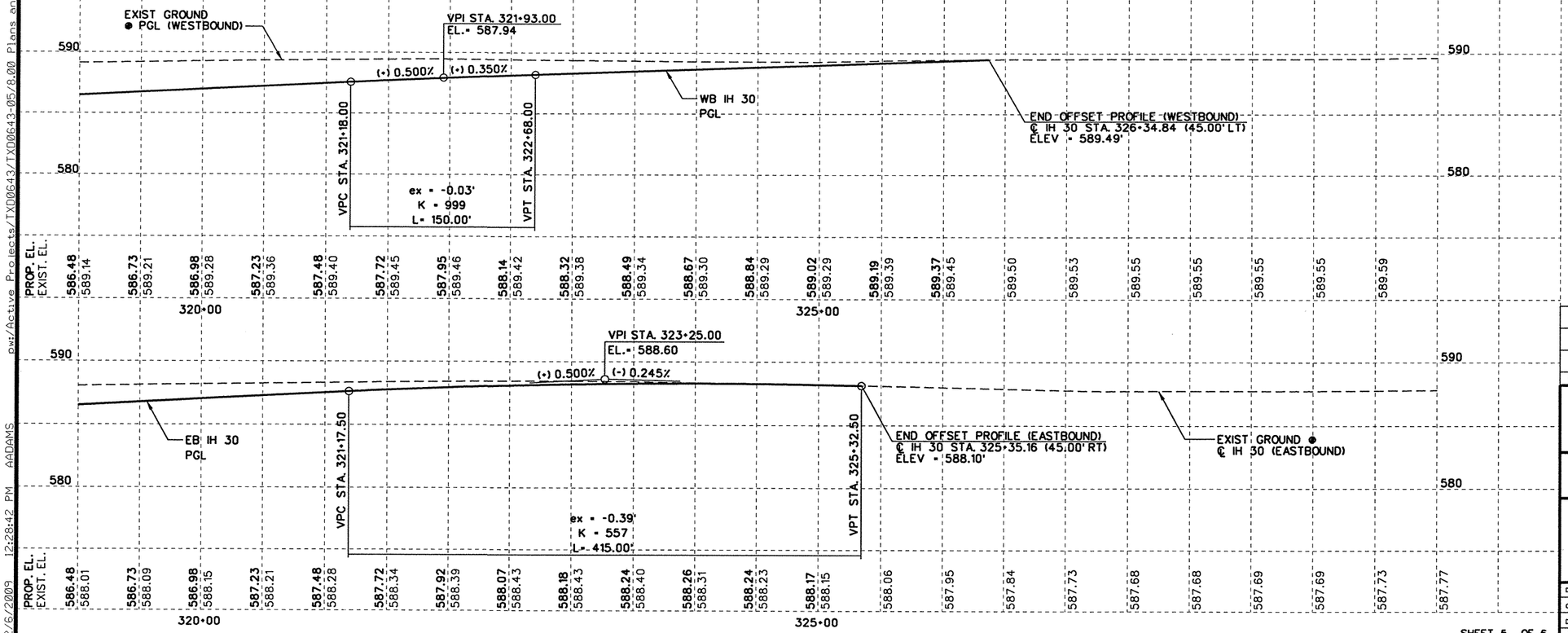
IH 30 MAINLANES

STA. 308+00 TO STA. 319+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	136

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STATE OF TEXAS
ROBIN R. HANDEL
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2/9/09

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Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

ROADWAY PLAN AND PROFILE

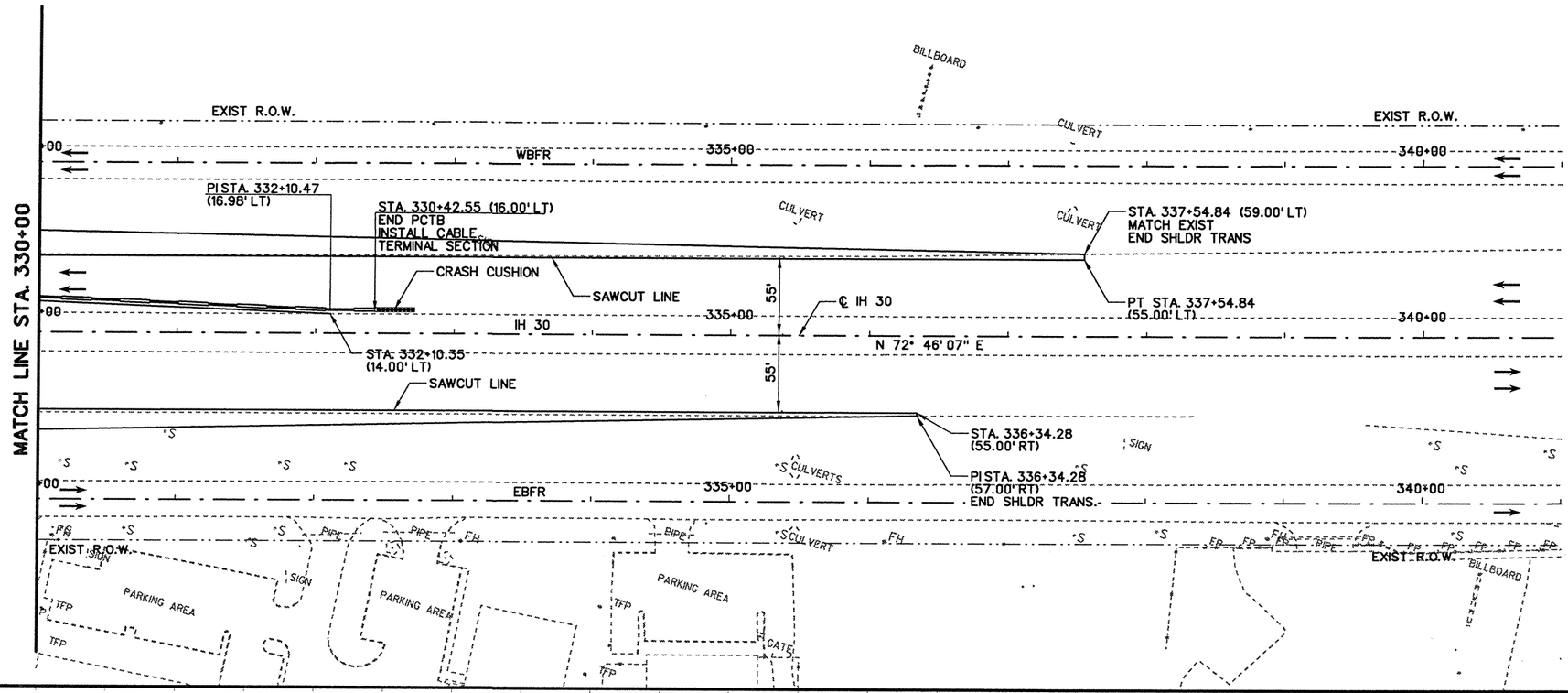
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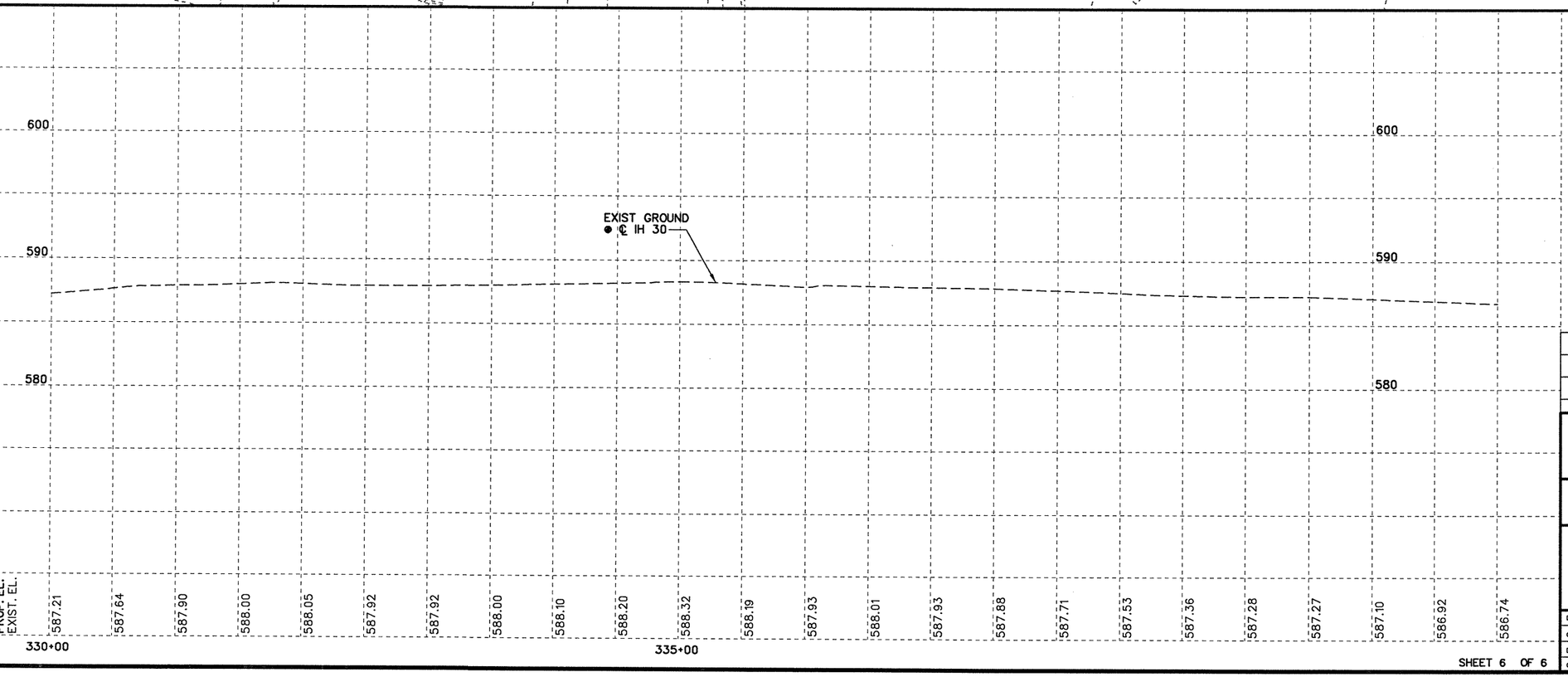
STA. 319+00 TO STA. 330+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
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Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	134

SHEET 5 OF 6

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5/18/2009 2:21:57 PM aadams pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.04 Roadway/435MPP06.100

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
5/20/09

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IH 30 AT JOHN KING BLVD.

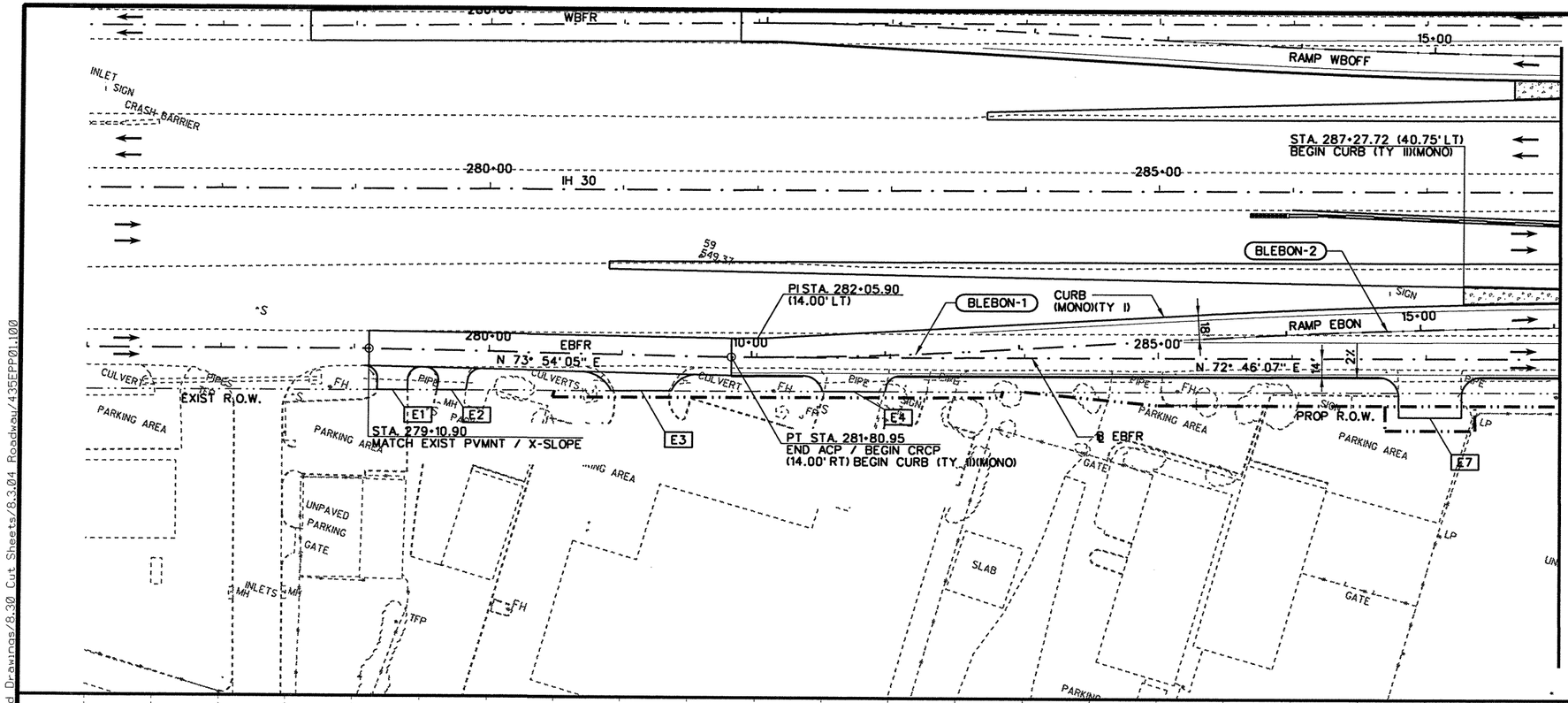
ROADWAY PLAN AND PROFILE

IH 30 MAINLANES

STA. 330+00 TO END PROJECT

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Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	136

SHEET 6 OF 6



MATCH LINE STA. 288+00

N

5 2.5 0 5 10
SCALE VERT. FEET

50 25 0 50 100
SCALE HORZ. FEET

NOTES:

1. ALL DIMENSIONS ARE TO THE FACE OF CURB OR NOMINAL FACE OF BARRIER/RAIL.
2. ALL STATIONS AND OFFSETS ARE FROM ℄ EBFR.

Exx DRIVEWAY NUMBER
SEE DRIVEWAY DETAIL SHEET

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER

2/4/09

NO.	REVISION	BY	DATE

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IH 30 AT JOHN KING BLVD.

ROADWAY PLAN AND PROFILE

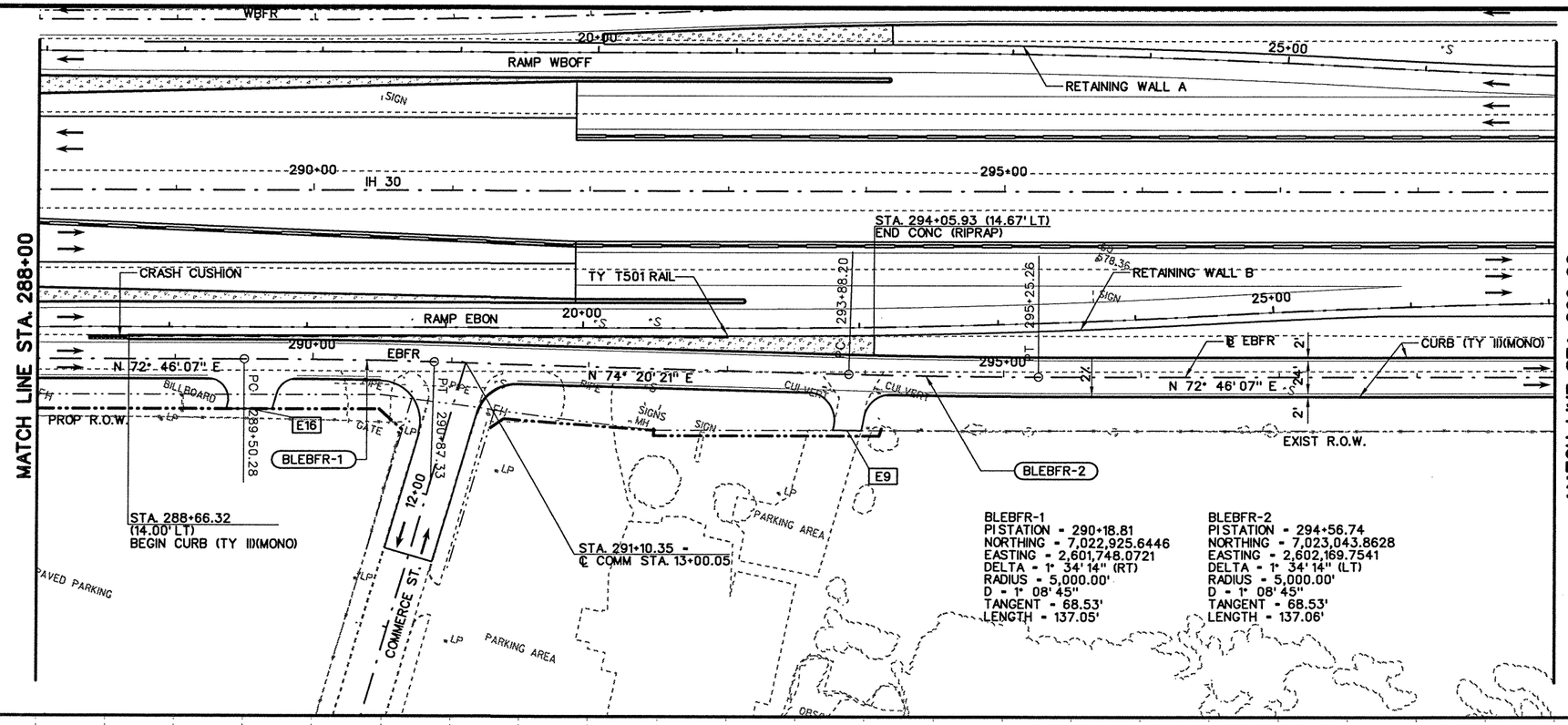
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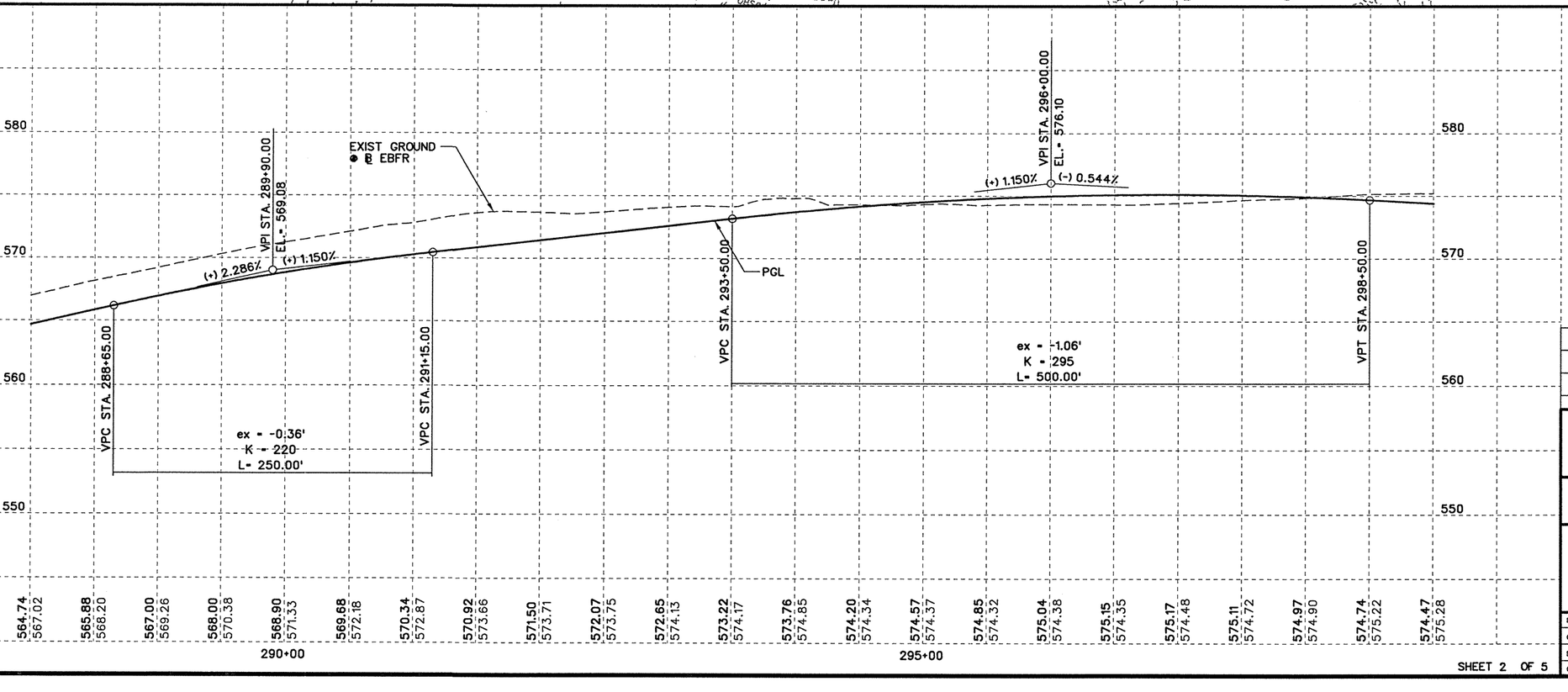
BEGIN PROJECT TO STA. 288+00

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Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	139

SHEET 1 OF 5

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STATE OF TEXAS
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IH 30 AT JOHN KING BLVD.

ROADWAY PLAN AND PROFILE

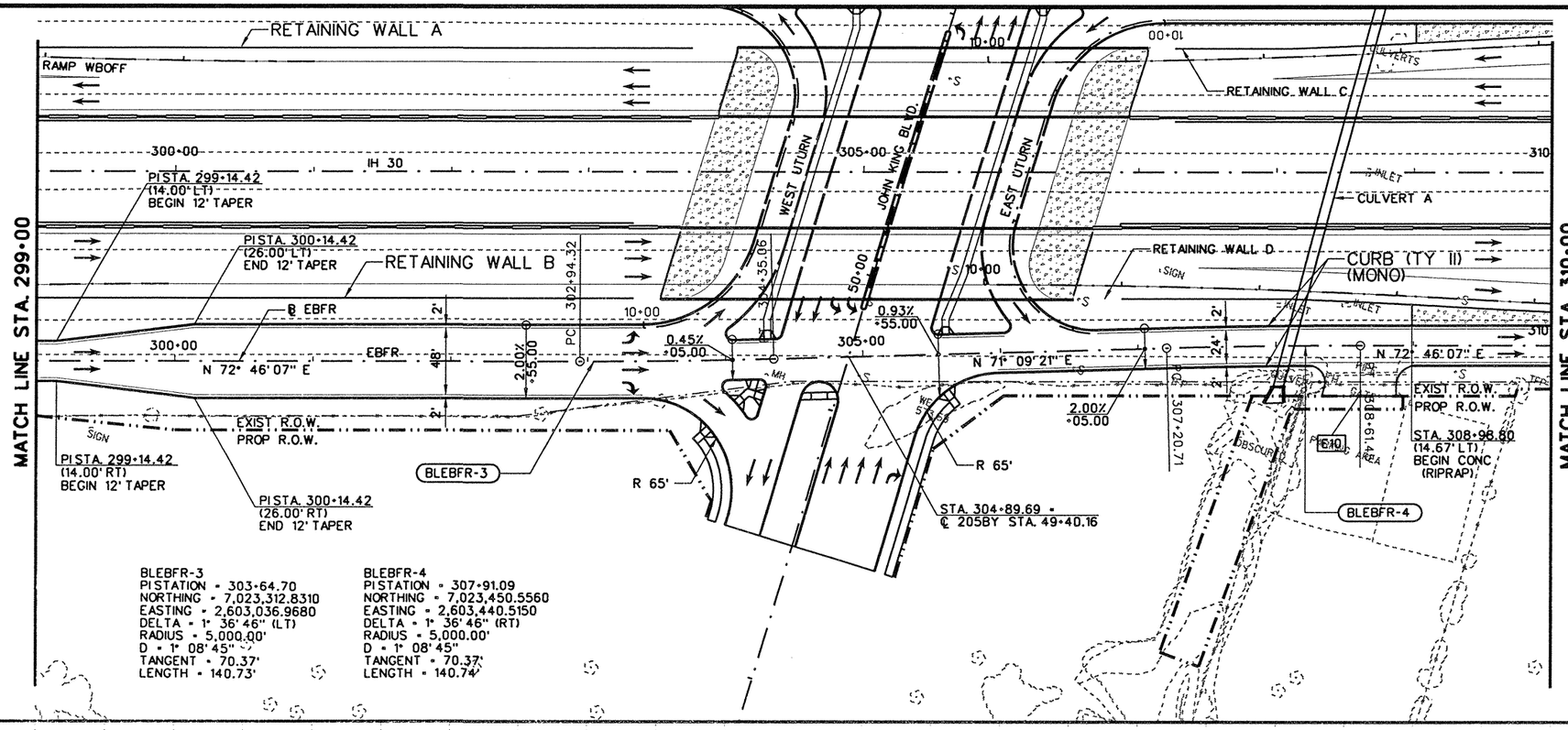
EBFR

STA. 288+00 TO STA. 299+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
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Checked:	RRH	DAL	ROCKWALL	0009	12	073	140

SHEET 2 OF 5

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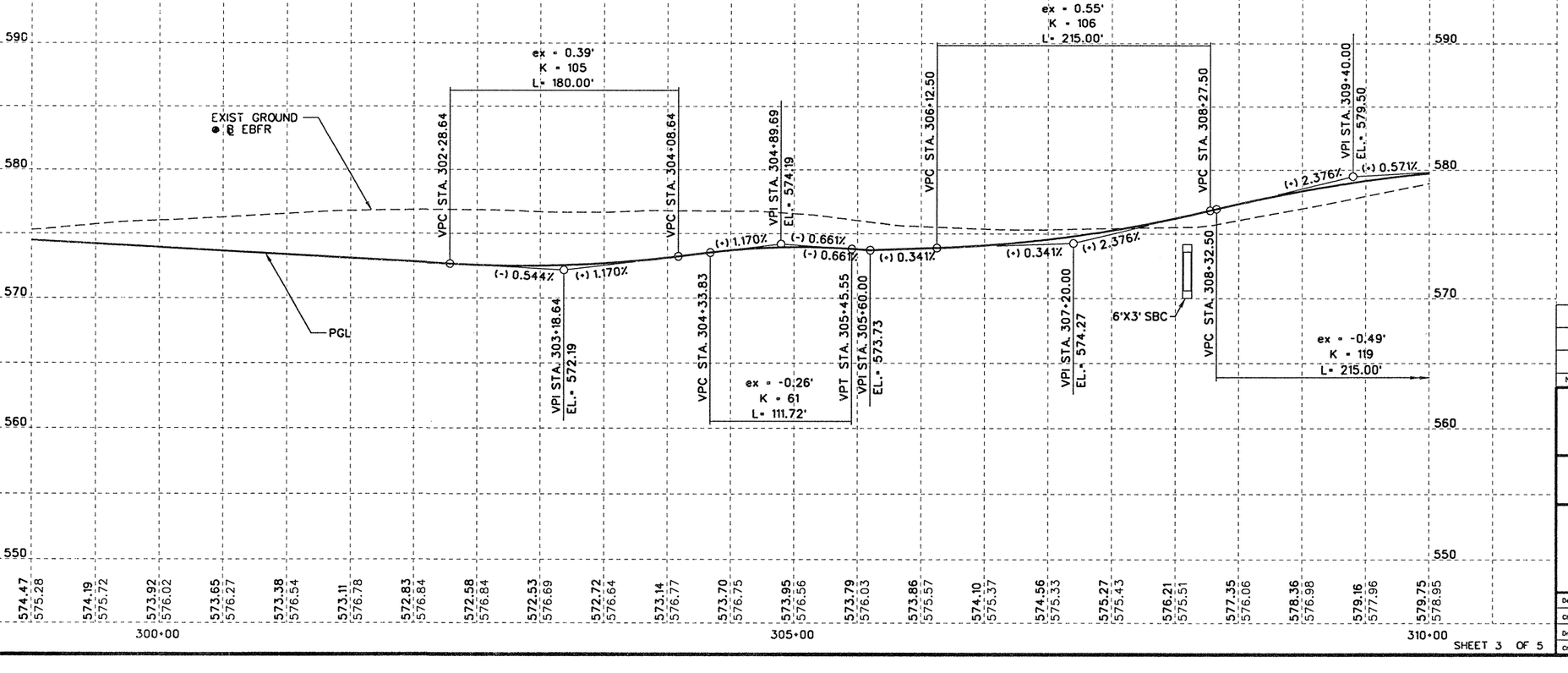


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EASTING = 2,603,036.9680
DELTA = 1° 36' 46" (LT)
RADIUS = 5,000.00'
D = 1° 08' 45"
TANGENT = 70.37'
LENGTH = 140.73'

BLEBFR-4
PISTATION = 307+91.09
NORTHING = 7,023,450.5560
EASTING = 2,603,440.5150
DELTA = 1° 36' 46" (RT)
RADIUS = 5,000.00'
D = 1° 08' 45"
TANGENT = 70.37'
LENGTH = 140.74'

5 2.5 0 5 10
SCALE VERT. FEET

50 25 0 50 100
SCALE HORZ. FEET



NO.	REVISION	BY	DATE

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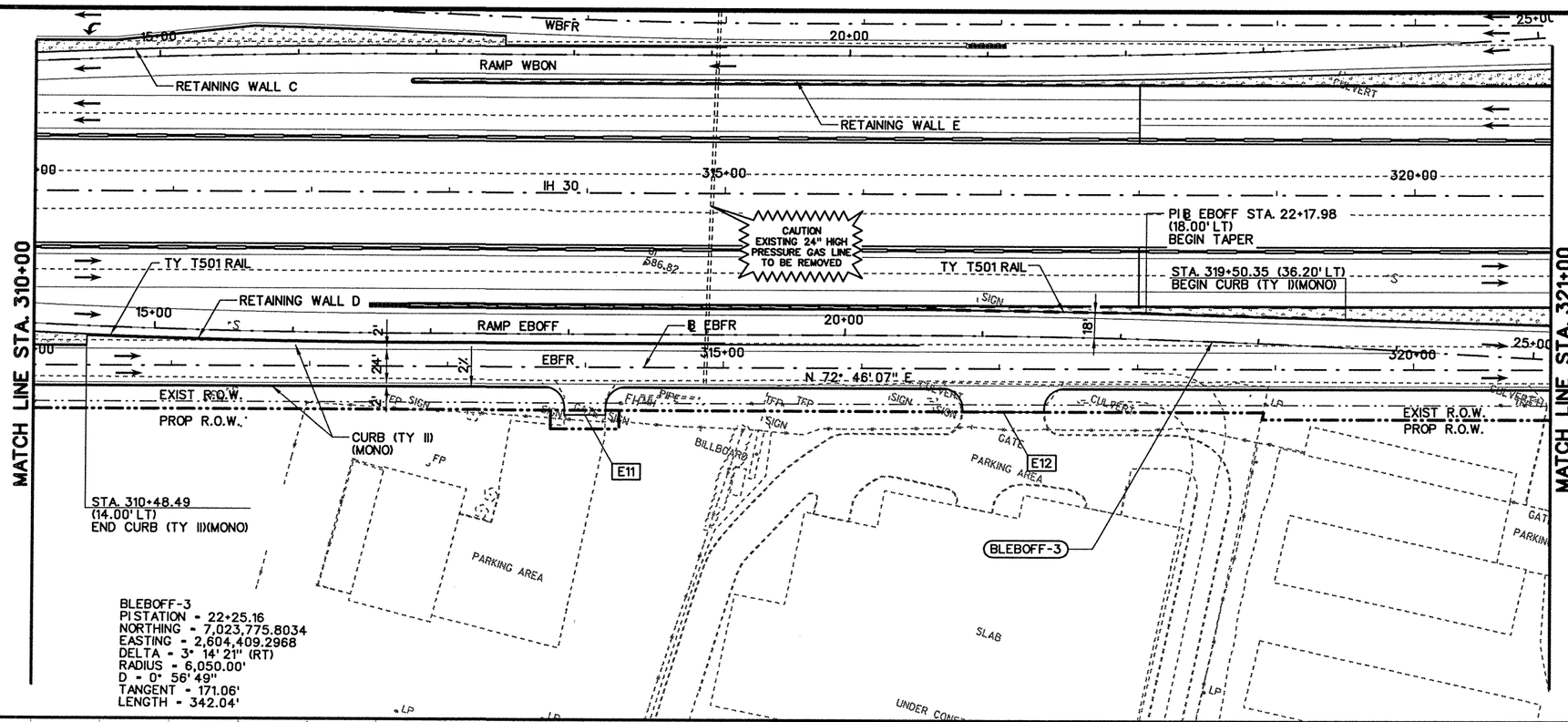
IH 30 AT JOHN KING BLVD.
ROADWAY PLAN AND PROFILE
EBFR
STA. 299+00 TO STA. 310+00

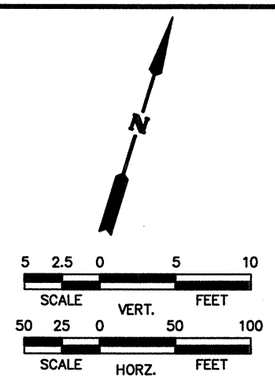
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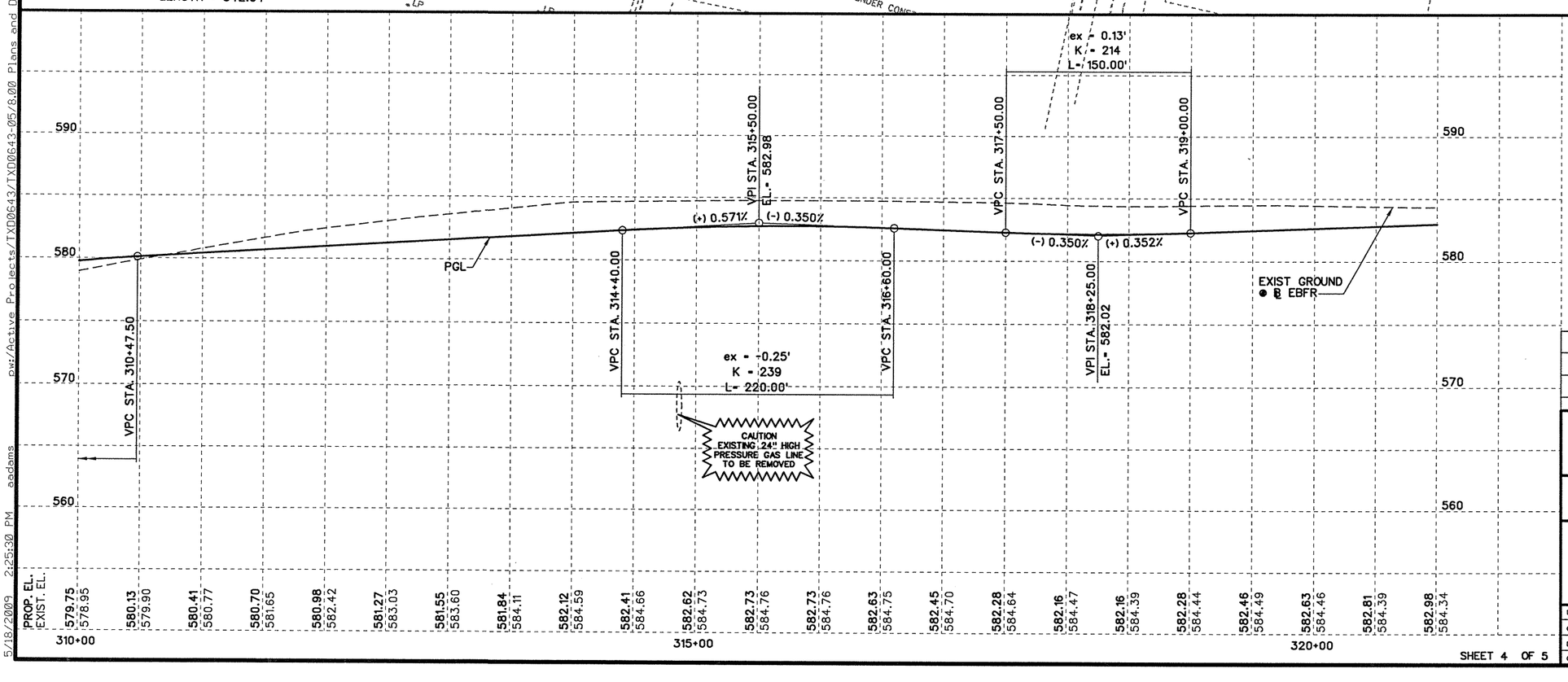
SHEET 3 OF 5

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
2/9/09

2/6/2009 12:29:28 PM AADAMS pw:\Active Projects\TX00643\TX00643-05\8.00 Plans and Drawings\8.30 Cut Sheets\8.3.04 Roadway\435EPP03.100







STATE OF TEXAS
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5/20/09

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IH 30 AT JOHN KING BLVD.

ROADWAY PLAN AND PROFILE

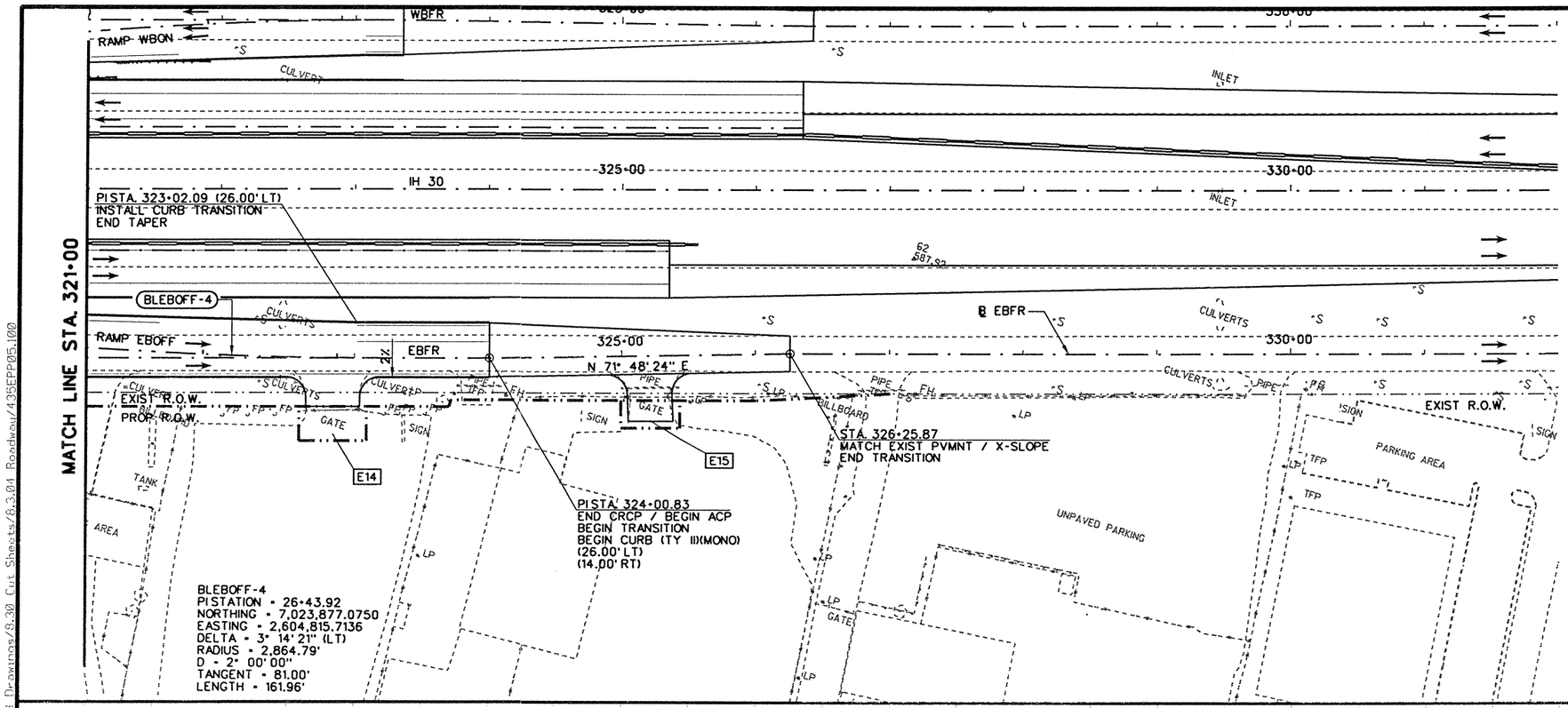
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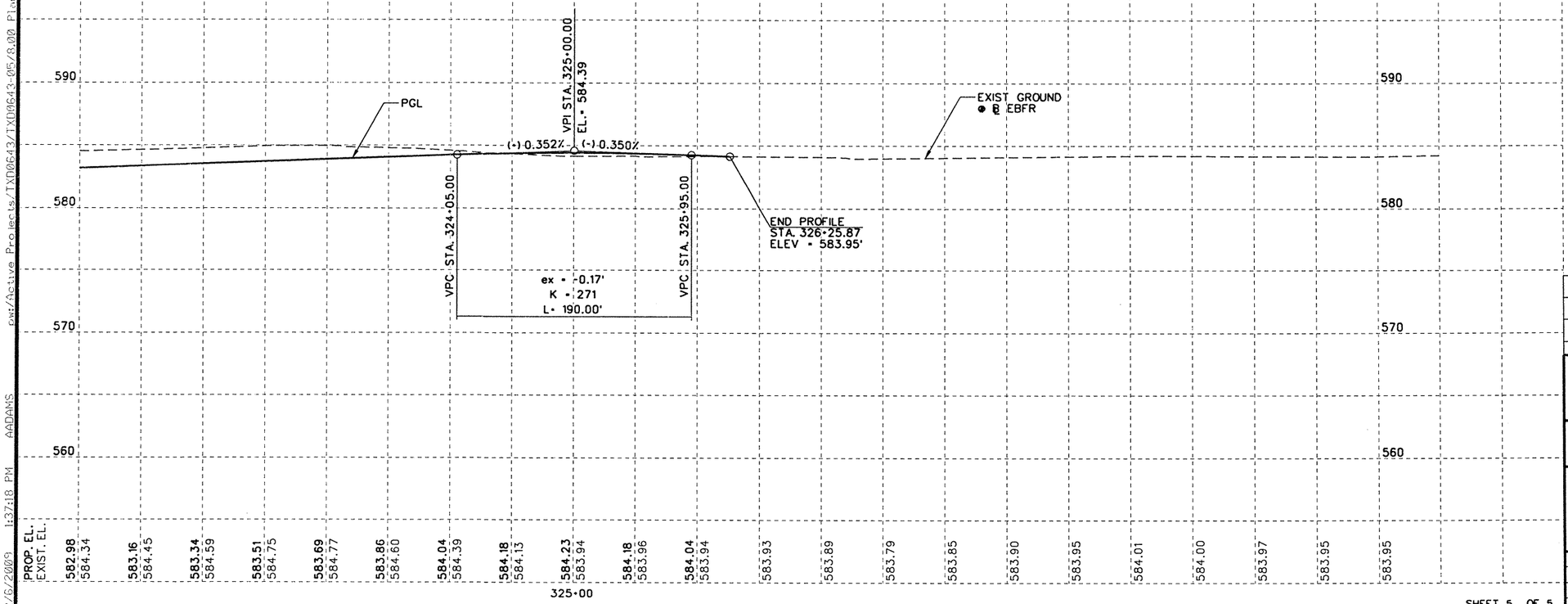
STA. 310+00 TO STA. 321+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	142

SHEET 4 OF 5

5/18/2009 2:25:30 PM aadams p:\Active Projects\TXD0643\TXD0643-05\8.00 Plans and Drawings\8.30 Cut Sheets\8.3.04 Roadway\435EPP04.100





STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

ROADWAY PLAN AND PROFILE

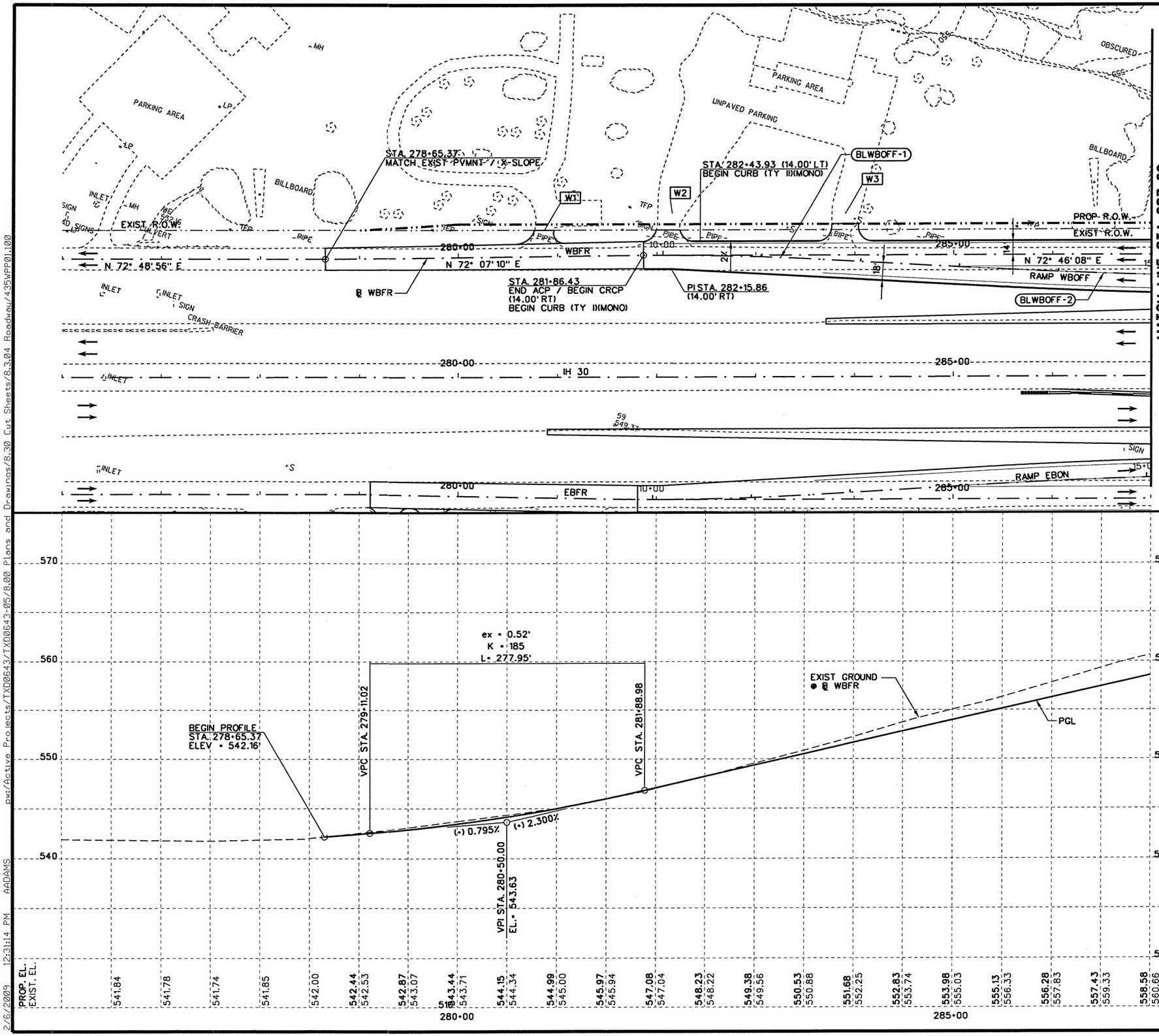
EBFR

STA. 321+00 TO END OF PROJECT

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	143

SHEET 5 OF 5

2/6/2009 1:37:18 PM AADAMS
p:\Active Projects\TX00643\TX00643-05\8.00 Plans and Drawings\8.30 Cut Sheets\8.3.04 Roadway\435EPP05.100



5 2.5 0 5 10
SCALE VERT. FEET

50 25 0 50 100
SCALE HORZ. FEET

NOTES:

1. ALL DIMENSIONS ARE TO THE FACE OF CURB OR NOMINAL FACE OF BARRIER/RAIL.
2. ALL STATIONS AND OFFSETS ARE FROM ℄ WBFR.

Wxx DRIVEWAY NUMBER
SEE DRIVEWAY DETAIL SHEET

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

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Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

ROADWAY PLAN AND PROFILE
WBFR
BEGIN PROJECT TO STA. 287+00

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	144

SHEET 1 OF 5

2/6/2009 12:31:14 PM AADAMS pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.04 Roadway/435WPP01.100

p:\Active Projects\TXD0643\TXD0643-05\8.00 Plans and Drawings\8.30 Cut Sheets\8.3.04 Roadway\435WPP02.100
2/6/2009 12:31:20 PM AADAMS

BLWBFR-1
PI STATION = 291+00.04
NORTHING = 7,023,186.5839
EASTING = 2,601,752.2279
DELTA = 2° 17' 35" (LT)
RADIUS = 4,999.99'
D = 1° 08' 45"
TANGENT = 100.07'
LENGTH = 200.11'

BLWBFR-2
PI STATION = 294+00.00
NORTHING = 7,023,286.8411
EASTING = 2,602,034.9662
DELTA = 2° 17' 34" (RT)
RADIUS = 4,999.99'
D = 1° 08' 45"
TANGENT = 100.06'
LENGTH = 200.09'

STA. 292+08.98 (14.00' RT) BEGIN CURB (TY II)(MONO)

STA. 294+18.26 (14.67' RT) END CONC (RIPRAP)

MATCH LINE STA. 287+00

MATCH LINE STA. 298+00

PROP R.O.W.
EXIST R.O.W.

W4 W5 W6 W7 W8

BLWBFR-1 BLWBFR-2

PC 289+99.97
PT 292+00.08

℄ WBFR

CURB (TY II)(MONO)

EXIST R.O.W.

290+00 295+00

N 72° 46' 08" E

N 70° 28' 33" E

N 72° 46' 07" E

RAMP WBOFF

RETAINING WALL A

PC 294+99.94
PT 295+00.03

IH 30

RETAINING WALL B

RAMP EBON

SIGN

PARKING AREA

TFP

PIPE

RH

TANK

N

5 2.5 0 5 10
SCALE VERT. FEET

50 25 0 50 100
SCALE HORZ. FEET

EXIST GROUND
℄ WBFR

PGL

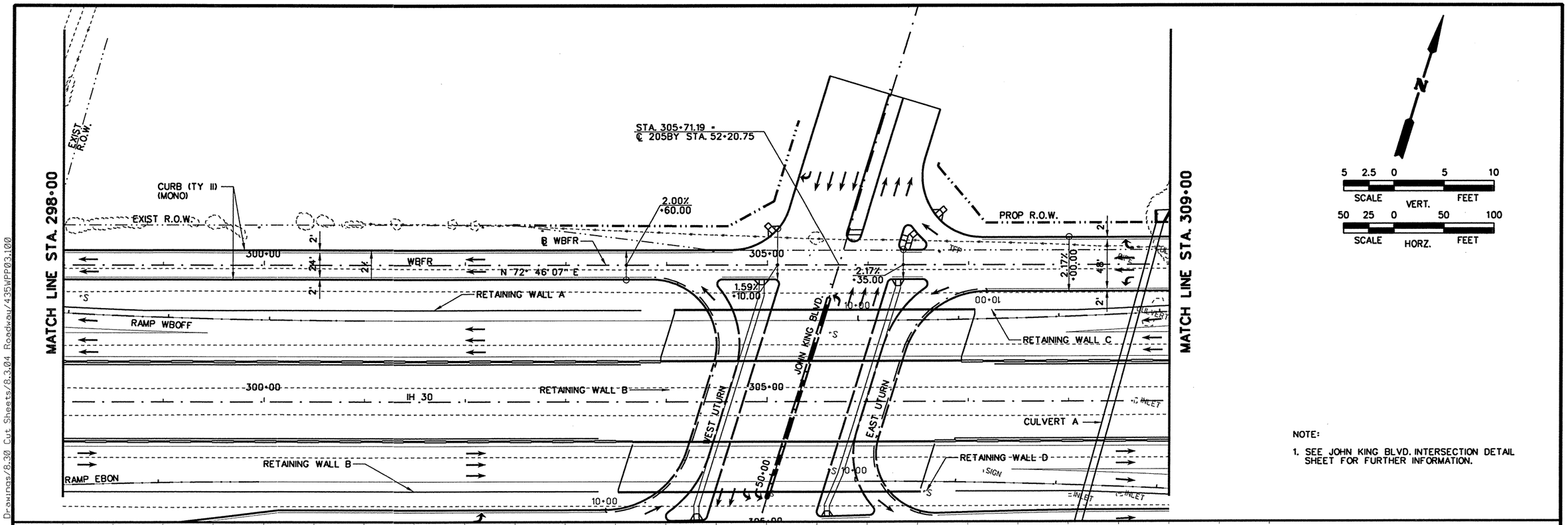
VPI STA. 291+65.00
EL.= 569.27
(+) 2.300%
(+) 1.138%

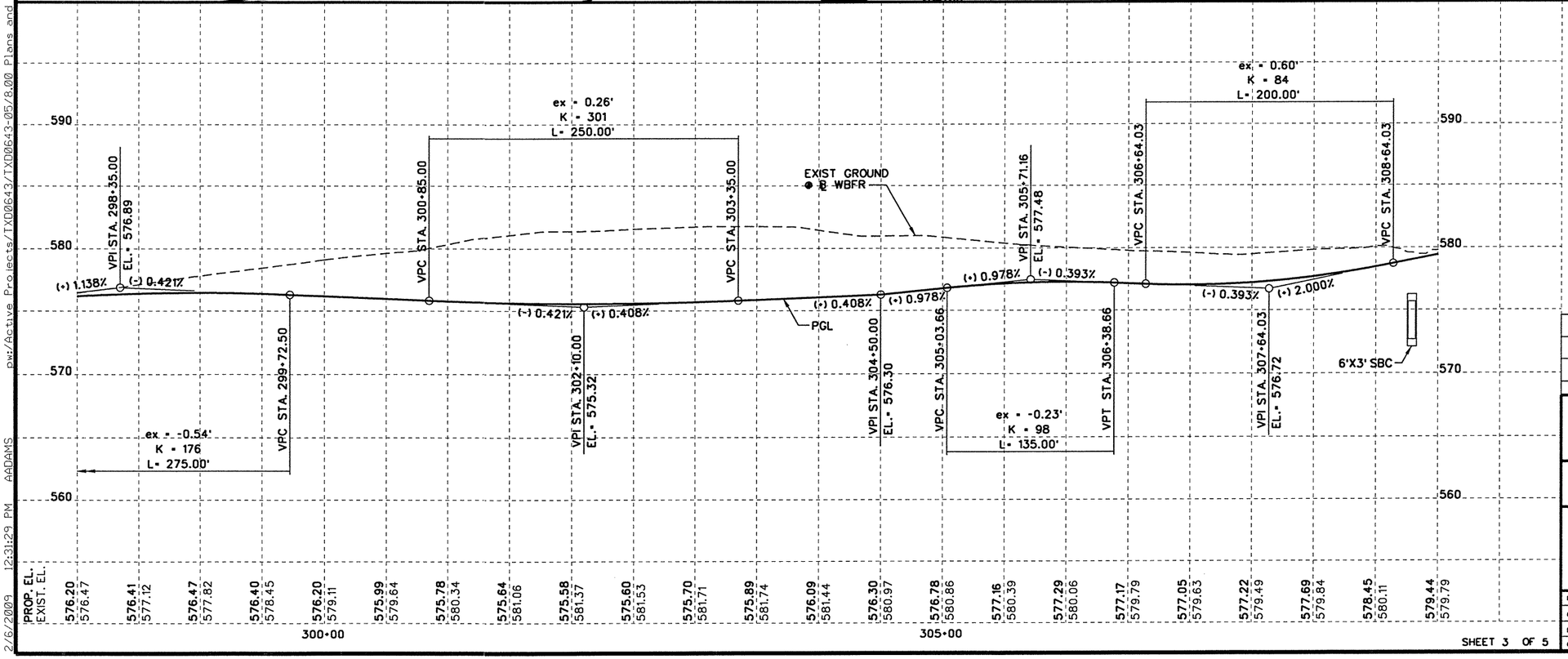
VPC STA. 290+40.00
ex = -0.36'
K = 215
L= 250.00'

VPC STA. 292+90.00

VPC STA. 296+97.50
ex = -0.54'
K = 176
L= 275.00'

| PROP. EL. / EXIST. EL. | | |





STATE OF TEXAS
ROBIN R. HANDEL
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IH 30 AT JOHN KING BLVD.

ROADWAY PLAN AND PROFILE

WBFR

STA. 298+00 TO STA. 309+00

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	146

SHEET 3 OF 5

2/6/2009 12:31:29 PM AADAMS pw:/Active Projects/TX00643/TX00643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.04 Roadway/435WPP03.100

BLWBFR-3
PI STATION = 311+49.81
NORTHING = 7,023,805.1945
EASTING = 2,603,706.2578
DELTA = 2° 17' 35" (RT)
RADIUS = 4,999.99'
D = 1° 08' 45"
TANGENT = 100.07'
LENGTH = 200.11'

BLWBFR-4
PI STATION = 314+49.73
NORTHING = 7,023,882.5147
EASTING = 2,603,996.0697
DELTA = 2° 17' 35" (LT)
RADIUS = 4,999.99'
D = 1° 08' 45"
TANGENT = 100.07'
LENGTH = 200.11'

MATCH LINE STA. 309+00

MATCH LINE STA. 320+00

PI STA. 311+58.36
(14.00' LT)
END 12' TAPER

PI STA. 310+58.36
(26.00' LT)
BEGIN 12' TAPER

STA. 316+74.13
(14.00' RT)
END CURB (TY II)(MONO)

BLWBFR-4

BLWBFR-3

BILLBOARD

STA. 316+74.13 (16.67' RT)
END RAIL (TY 501)

BLWBON-3

PI @ WBON STA. 22+57.71
(18.00' RT)
BEGIN 4' TAPER

PROP. R.O.W.

CURB (TY II)
(MONO)

313+49.66

315+49.77

PROP. R.O.W.

EXIST R.O.W.

℄ WBFR

310+00

N 72° 46' 07" E

2.00%
+90.00

PC

15+00

N 75° 03' 42" E

312+49.85

310+49.74

WBFR

315+00

20+00

N 72° 46' 07" E

CRASH CUSHION

RAMP WBON

RETAINING WALL E

PI STA. 310+58.36
(26.00' RT)
BEGIN 12' TAPER

RETAINING WALL C

310+00

PI STA. 311+58.36
(14.00' RT)
END 12' TAPER

IH 30

315+00

320

CAUTION
EXISTING 24" HIGH
PRESSURE GAS LINE
TO BE REMOVED

RETAINING WALL H

RETAINING WALL D

15+00

RAMP EBOFF

20+00

310+00

315+00

320

600
590
580
570

VPI STA. 311+00.00
EL.= 583.44

(+) 2.000%

(+) 1.524%

PGL

VPI STA. 315+50.00
EL.= 590.30

(+) 1.524%

(-) 0.350%

VPC STA. 319+93.00

EXIST GROUND
℄ WBFR

VPC STA. 309+95.00

VPC STA. 312+05.00

ex = -0.12'
K = 441
L= 210.00'

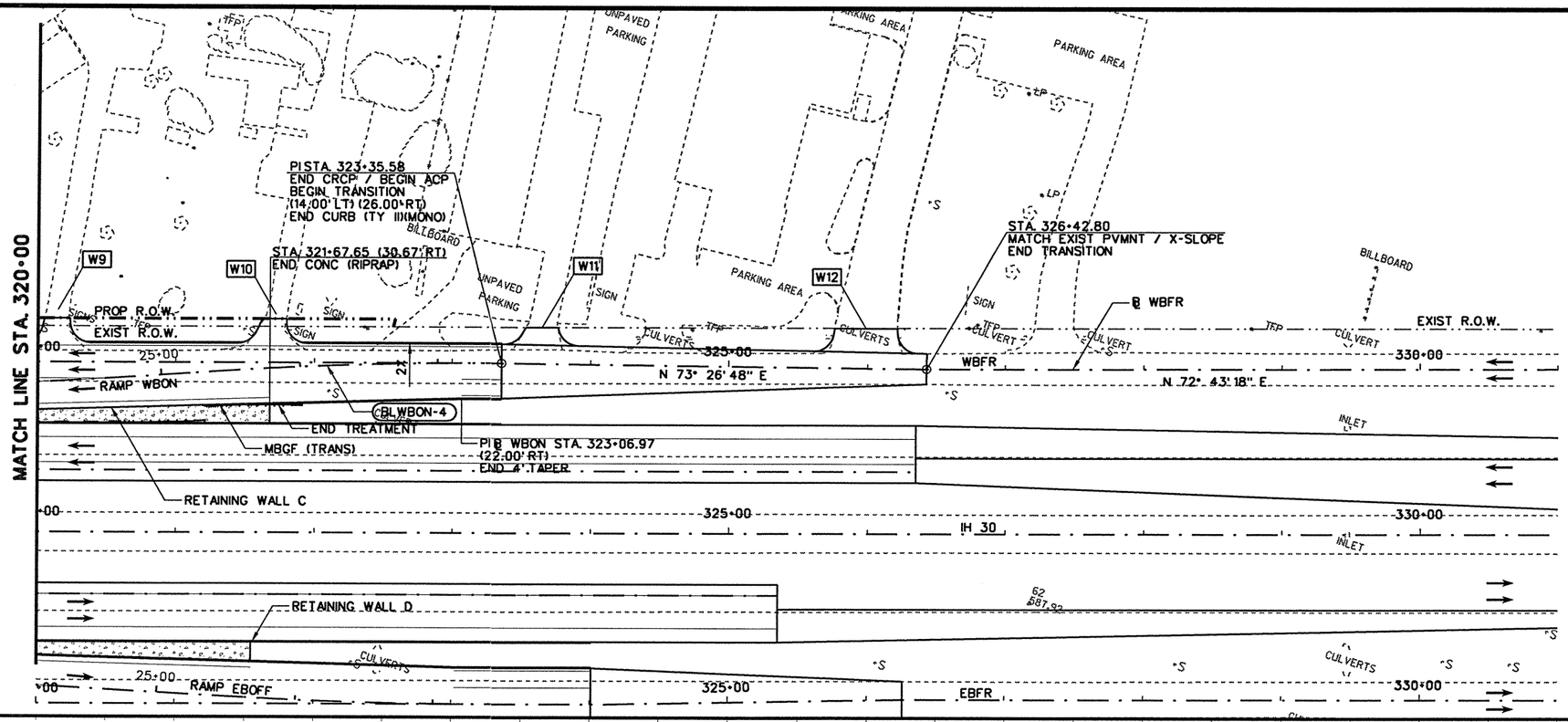
VPC STA. 314+25.00

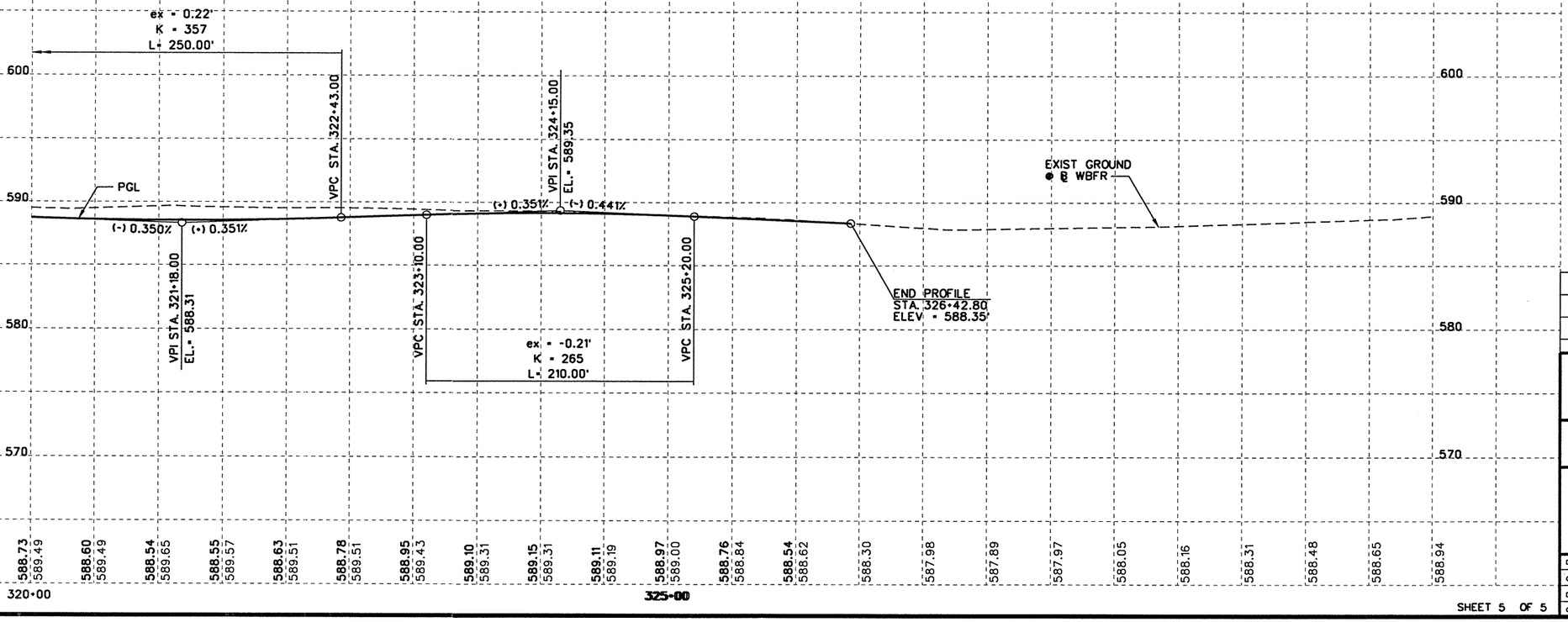
CAUTION
EXISTING 24" HIGH
PRESSURE GAS LINE
TO BE REMOVED

ex = -0.59'
K = 133
L= 250.00'

VPC STA. 316+75.00

| PROP. EL. / EXIST. EL. | | |





STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

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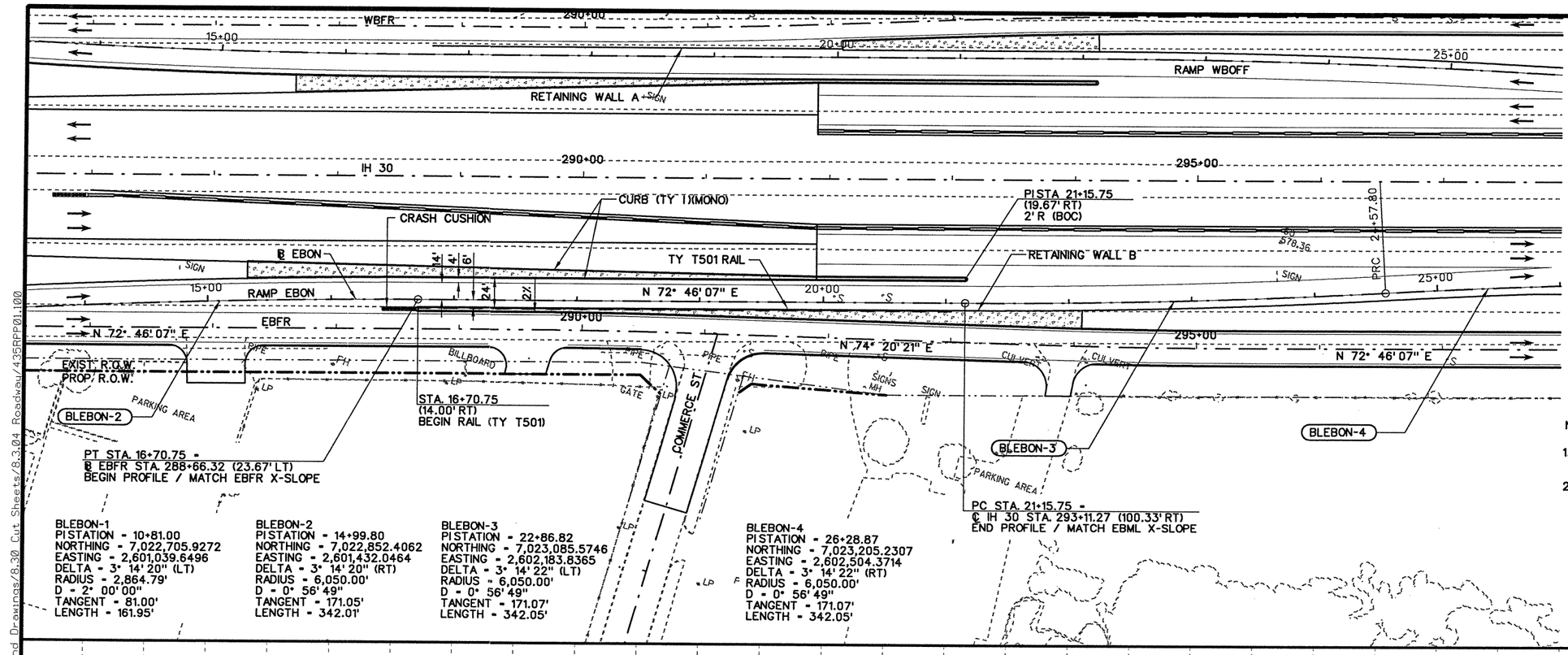
IH 30 AT JOHN KING BLVD.

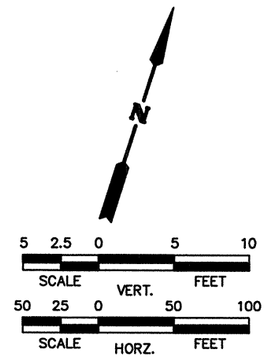
ROADWAY PLAN AND PROFILE
WBFR
STA. 320+00 TO END PROJECT

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	148

SHEET 5 OF 5

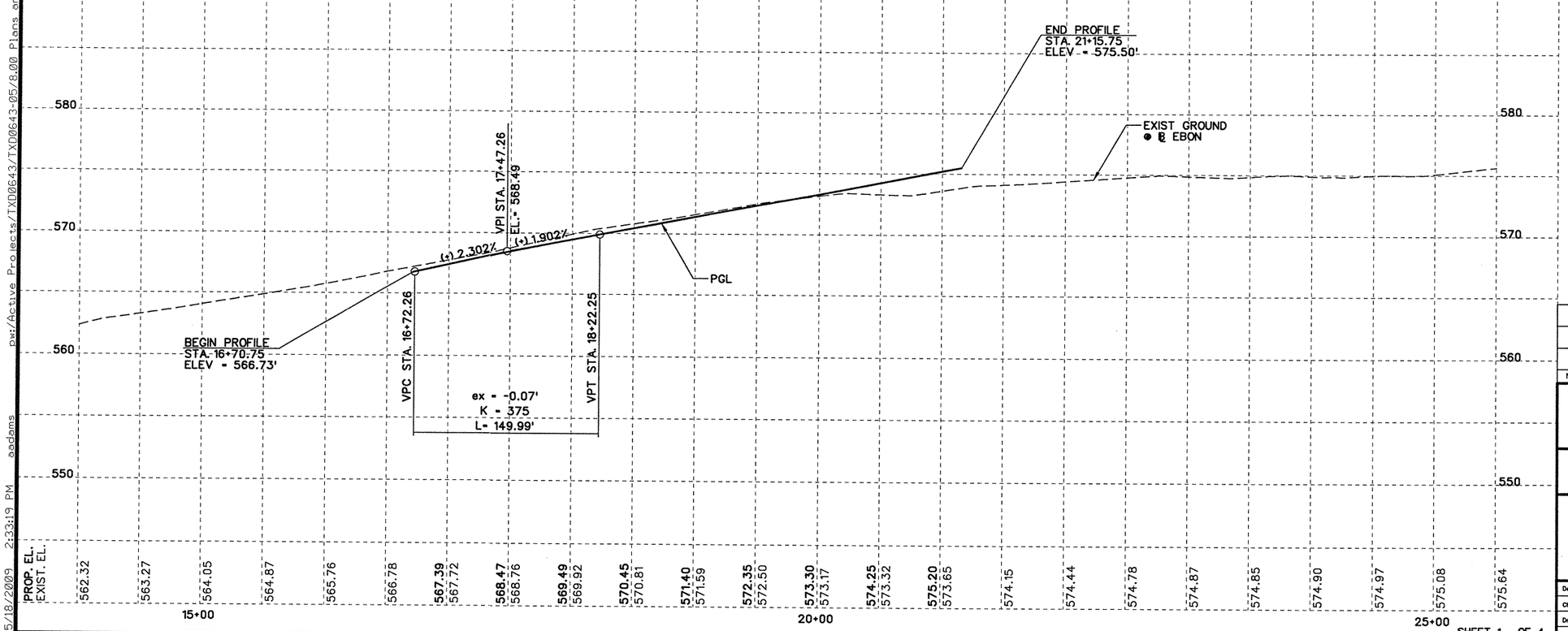
2/6/2009 12:31:42 PM AADAMS pw:/Active Projects/TX00643/TX00643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.04 Roadway/435WPP05.100





NOTES:

1. ALL DIMENSIONS ARE TO THE FACE OF CURB OR NOMINAL FACE OF BARRIER/RAIL.
2. ALL STATIONS AND OFFSETS ARE FROM ℄ EBON.



STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
5/20/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

ROADWAY PLAN AND PROFILE
RAMP EBON

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	149

SHEET 1 OF 4

5/18/2009 2:33:19 PM aadams
pw:/Active Projects/TX00643/TX00643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.04 Roadway/435RPP01.100

BLWBOFF-1
PISTATION = 10+81.00
NORTHING = 7,022,945.7520
EASTING = 2,600,975.7192
DELTA = 3° 14' 21" (RT)
RADIUS = 2,864.79'
D = 2° 00' 00"
TANGENT = 81.00'
LENGTH = 161.96'

BLWBOFF-2
PISTATION = 14+99.80
NORTHING = 7,023,047.0221
EASTING = 2,601,382.1334
DELTA = 3° 14' 22" (LT)
RADIUS = 6,050.00'
D = 0° 56' 49"
TANGENT = 171.07'
LENGTH = 342.05'

BLWBOFF-3
PISTATION = 23+81.85
NORTHING = 7,023,308.3388
EASTING = 2,602,224.6802
DELTA = 3° 14' 22" (RT)
RADIUS = 6,050.00'
D = 0° 56' 49"
TANGENT = 171.07'
LENGTH = 342.05'

BLWBOFF-4
PISTATION = 27+23.90
NORTHING = 7,023,391.0637
EASTING = 2,602,556.6693
DELTA = 3° 14' 22" (LT)
RADIUS = 6,050.00'
D = 0° 56' 49"
TANGENT = 171.07'
LENGTH = 342.05'

PC STA. 22+10.78 =
℄ IH 30 STA. 294+16.27 (100.33' LT)
END PROFILE / MATCH WBML X-SLOPE

PT STA. 16+70.78 =
℄ WBFR STA. 288+76.29 (23.67' RT)
BEGIN PROFILE / MATCH WBFR X-SLOPE

STA. 16+70.78 (17.00' RT)
END CURB (TY II)(MONO)
BEGIN CURB (TY II)(MONO)

PI STA. 22+10.78
(19.67' RT)
5' R (BOC)

RAMP WBOFF N 72° 46' 07" E

RAMP EBON

℄ WBOFF

℄ EBFR

IH 30

RETAINING WALL A

RETAINING WALL B

TY T501 RAIL

EXIST R.O.W.

PROP R.O.W.

BLWBOFF-2

BLWBOFF-3

BILLBOARD

POOL

PARKING AREA

SIGN

TFP

PIPE

FH

CUL VERT

MH

290+00

295+00

15+00

20+00

25+00

24'

14'

6'

4'

ex = 0.12'
K = 229
L= 150.00'

VPC STA. 16+85.00

VPT STA. 18+35.00

VPI STA. 19+45.00
EL.= 572.00

(+) 3.456%

(+) 2.102%

(+) 2.802%

VPI STA. 17+60.00
EL.= 565.61'

VPC STA. 18+35.00

ex = -0.37'
K = 162
L= 220.00'

VPT STA. 20+55.00

PGL

END PROFILE
STA. 22+10.78
ELEV = 577.59'

EXIST GROUND
@ ℄ WBOFF

BEGIN PROFILE
STA. 16+70.78
ELEV = 563.11'

580
570
560
550

PROP. EL. / EXIST. EL.	15+00						20+00						25+00
PROP. EL.	557.73	558.92	559.99	561.10	561.95	562.83	563.93	565.42	567.02	568.71	570.32	571.77	573.07
EXIST. EL.							563.87	564.86	565.95	566.91	568.00	569.18	570.27
PROP. EL. / EXIST. EL.	574.21	575.26	576.31	577.36	574.24	574.56	574.77	574.88	575.10	575.28			
	571.15	572.09	572.88	573.64									

5 2.5 0 5 10
SCALE FEET
VERT.

50 25 0 50 100
SCALE FEET
HORZ.

NOTES:

1. ALL DIMENSIONS ARE TO THE FACE OF CURB OR NOMINAL FACE OF BARRIER/RAIL.
2. ALL STATIONS AND OFFSETS ARE FROM ℄ WBOFF.

ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS
2/9/09

NO.	REVISION	BY	DATE

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Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.
ROADWAY PLAN AND PROFILE
RAMP WBOFF

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	120

SHEET 2 OF 4

2/6/2009 12:30:09 PM AADAMS p:\Active Projects\TX00643\TX00643-05\8.00 Plans and Drawings\8.30 Cut Sheets\8.3.04 Roadway\435RPP02.100

BLWBON-1
PISTATION = 11+71.07
NORTHING = 7,023,637.5690
EASTING = 2,603,351.4605
DELTA = 3° 14' 22" (LT)
RADIUS = 6,050.00'
D = 0° 56' 49"
TANGENT = 171.07'
LENGTH = 342.05'

BLWBON-2
PISTATION = 15+13.12
NORTHING = 7,023,757.2251
EASTING = 2,603,671.9954
DELTA = 3° 14' 22" (RT)
RADIUS = 6,050.00'
D = 0° 56' 49"
TANGENT = 171.07'
LENGTH = 342.05'

BLWBON-3
PISTATION = 22+55.16
NORTHING = 7,023,977.0662
EASTING = 2,604,380.8148
DELTA = 3° 14' 21" (LT)
RADIUS = 6,050.00'
D = 0° 56' 49"
TANGENT = 171.06'
LENGTH = 342.03'

BLWBON-4
PISTATION = 26+29.47
NORTHING = 7,024,110.3550
EASTING = 2,604,730.6800
DELTA = 4° 10' 33" (RT)
RADIUS = 2,864.79'
D = 2° 00' 00"
TANGENT = 104.44'
LENGTH = 208.79'

PT STA. 15+20.49 =
℄ IH 30 STA. 311+10.15 (98.12' LT)
BEGIN PROFILE / MATCH WBML X-SLOPE

PC STA. 20+84.10 =
℄ WBFR STA. 316+74.13 (23.67' RT)
END PROFILE / MATCH WBFR X-SLOPE

PROP R.O.W. — BLWBON-2 — RETAINING WALL C — BILLBOARD — PROP R.O.W. — EXIST R.O.W. — CRASH CUSHION — BLWBON-1 — ℄ WBON — TY T501 RAIL — RETAINING WALL E — BLWBON-3 — IH 30 — RETAINING WALL D — RETAINING WALL H — RAMP WBON — RAMP EBOFF — WBFR — EBFR — EXIST R.O.W. — PROP R.O.W.

N 72° 46' 07" E

310+00 315+00 15+00 20+00

N

5 2.5 0 5 10
SCALE VERT. FEET

50 25 0 50 100
SCALE HORZ. FEET

NOTES:

1. ALL DIMENSIONS ARE TO THE FACE OF CURB OR NOMINAL FACE OF BARRIER/RAIL.
2. ALL STATIONS AND OFFSETS ARE FROM ℄ WBON.

ex = 0.59'
K = 98
L= 215.00'

BEGIN PROFILE
STA. 15+20.49
ELEV = 592.26'

VPC STA. 15+52.50
VPT STA. 17+67.50
VPI STA. 16+60.00
EL. = 589.81
VPI STA. 19+25.00
EL. = 590.98
VPC STA. 18+50.00
VPT STA. 20+00.00
PGL
(-) 1.756%
(+) 0.440%
(+) 0.440%
(-) 0.400%
ex = -0.16'
K = 179
L= 150.00'
END PROFILE
STA. 20+84.10
ELEV = 590.34'
EXIST GROUND
℄ WBON

600 590 580 570

PROP. EL.	EXIST. EL.
	576.16
	578.00
	578.89
	579.96
	581.18
591.74	582.22
590.98	583.21
590.47	584.15
590.22	584.98
590.22	585.92
590.43	586.64
590.65	587.32
590.80	587.77
590.81	587.99
590.68	588.12
590.48	588.57
	588.57
	588.29
	588.11
	588.15
	588.27

15+00 20+00

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
5/20/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

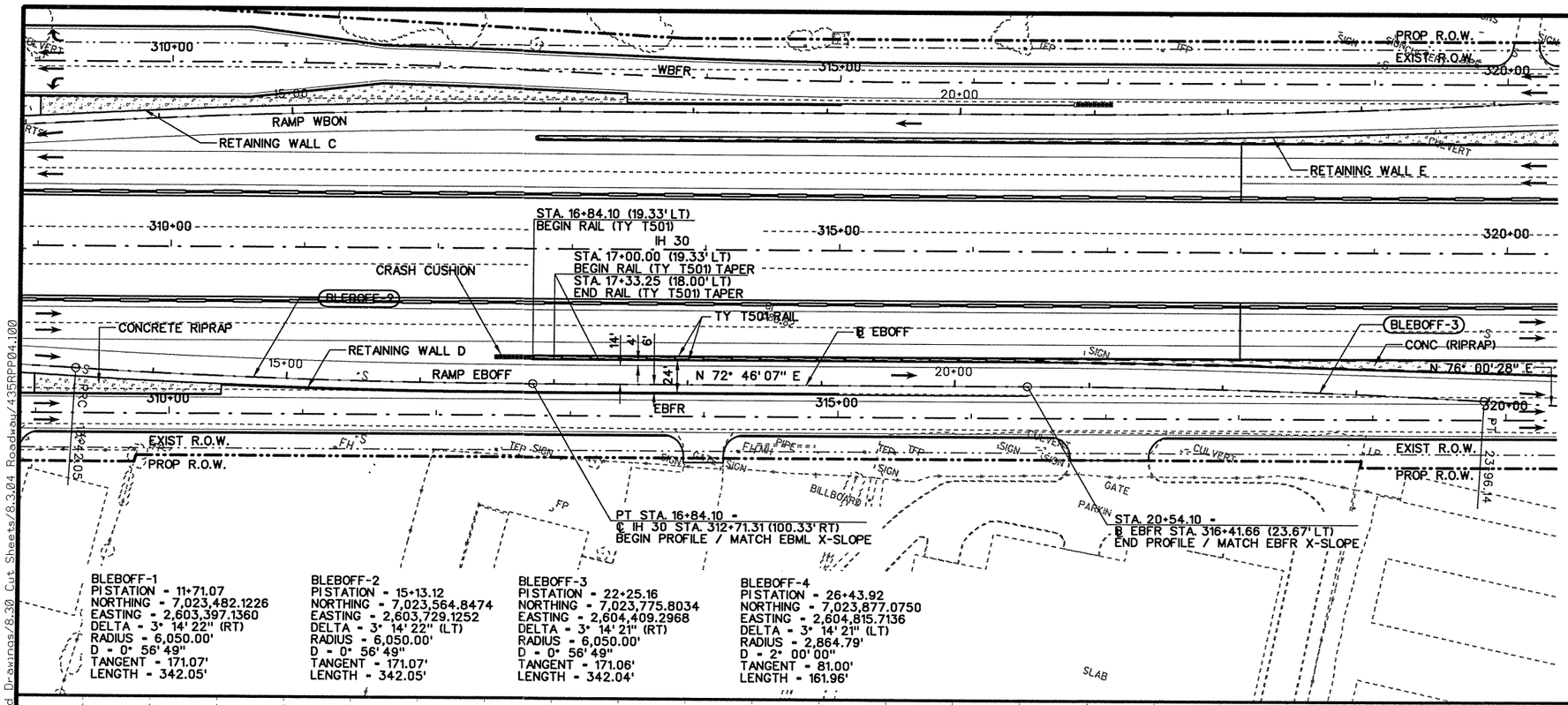
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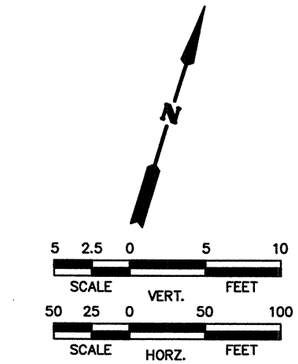
IH 30 AT JOHN KING BLVD.
ROADWAY PLAN AND PROFILE
RAMP WBON

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	15

SHEET 3 OF 4

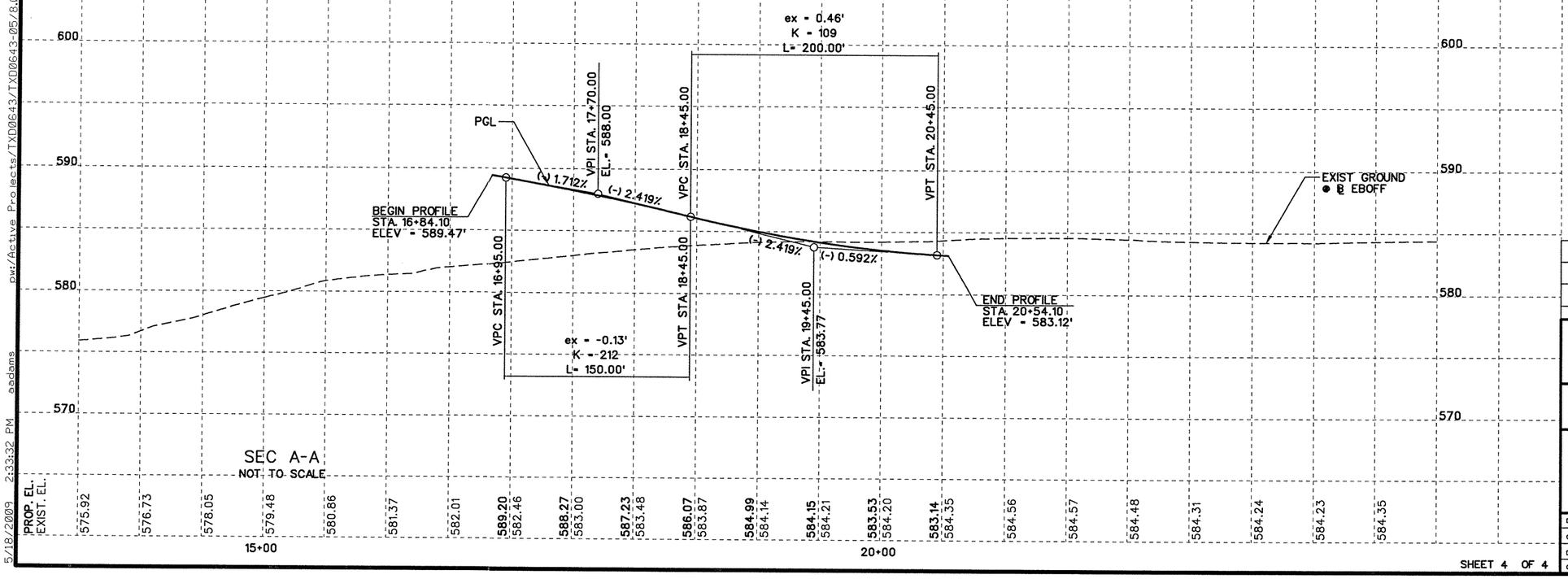
5/18/2009 2:33:25 PM adams
pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.04 Roadway/435RPP03.100





NOTES:

1. ALL STATIONS AND OFFSETS ARE FROM ℄ EBOFF, UNO.



STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER

5/20/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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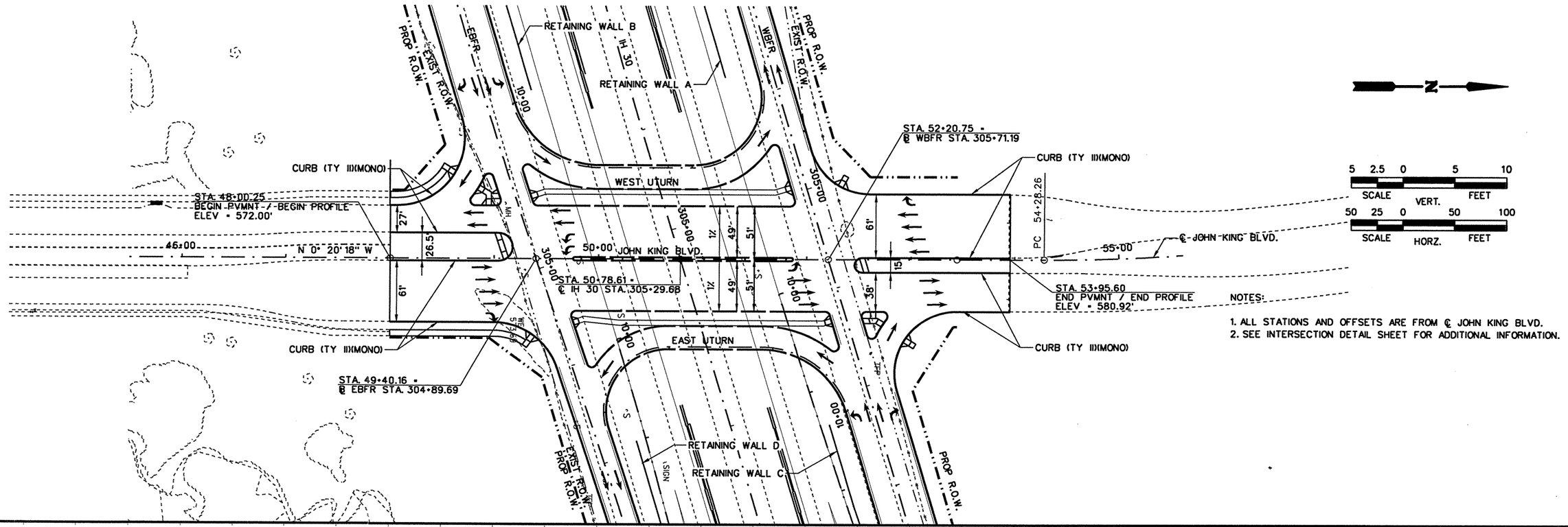
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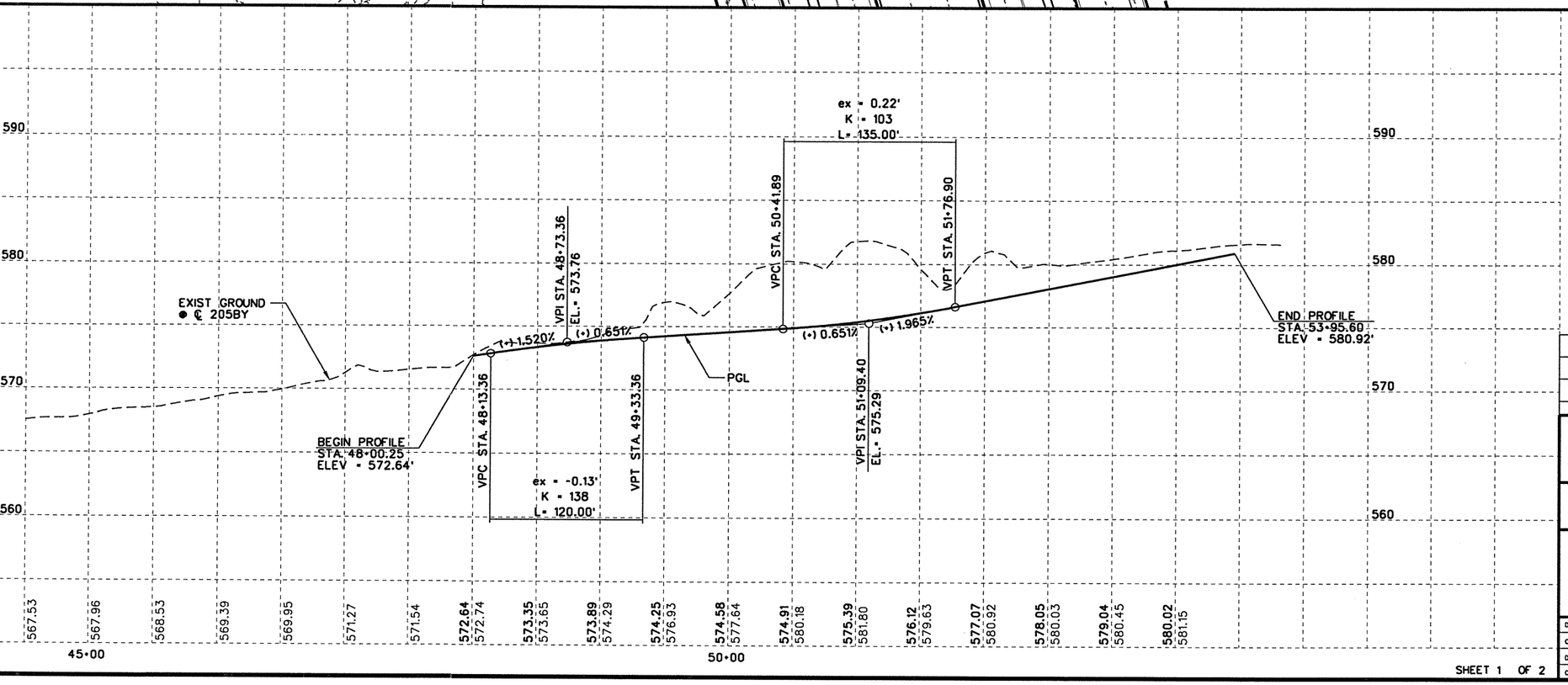
ROADWAY PLAN AND PROFILE
RAMP EBOFF

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	152

SHEET 4 OF 4

5/18/2009 2:33:32 PM eadams pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.04 Roadway/435RPP04.100





STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

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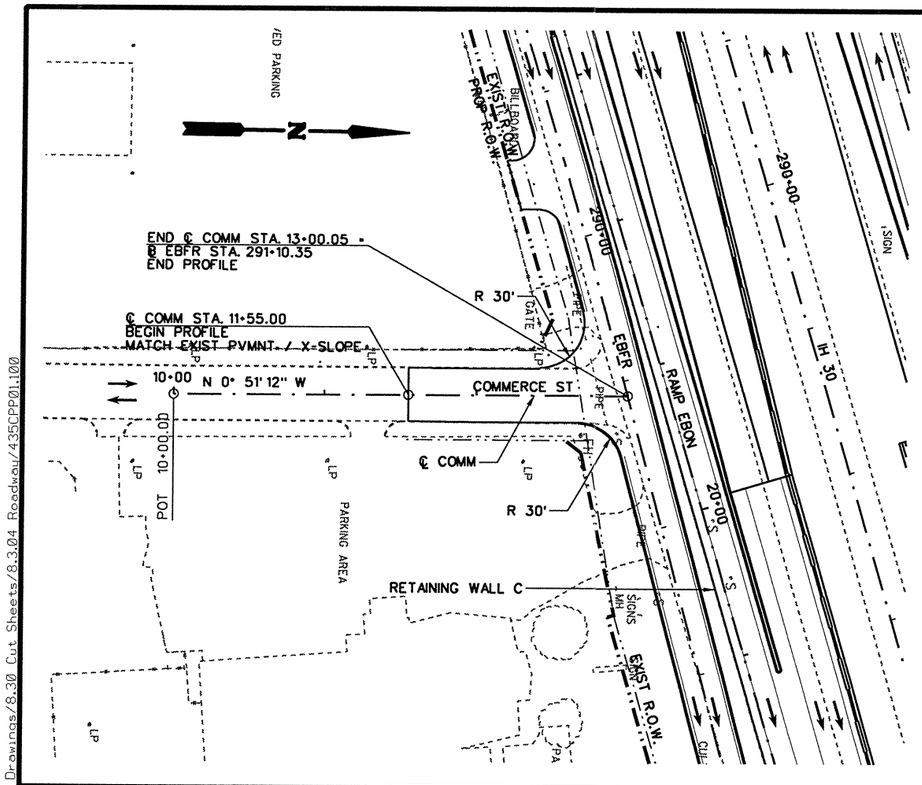
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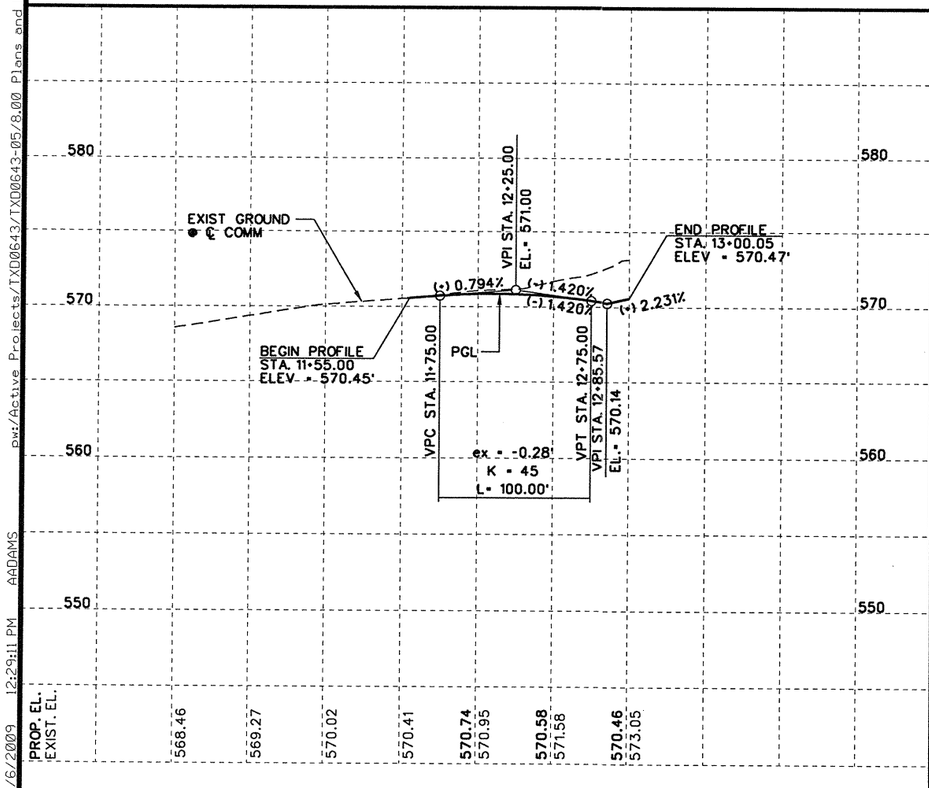
ROADWAY PLAN AND PROFILE
JOHN KING BLVD.

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	153

SHEET 1 OF 2

2/6/2009 12:29:06 PM ADDAMS pw:/Active Projects/TXD0643/TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.04 Roadway/4358PP01.100





5 2.5 0 5 10
SCALE VERT. FEET

50 25 0 50 100
SCALE HORZ. FEET

NOTES:

1. ALL STATIONS AND OFFSETS ARE FROM ℄ COMMERCE, UNO.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER
2/9/09

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Firm Registration Number: 1741

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IH 30 AT JOHN KING BLVD.

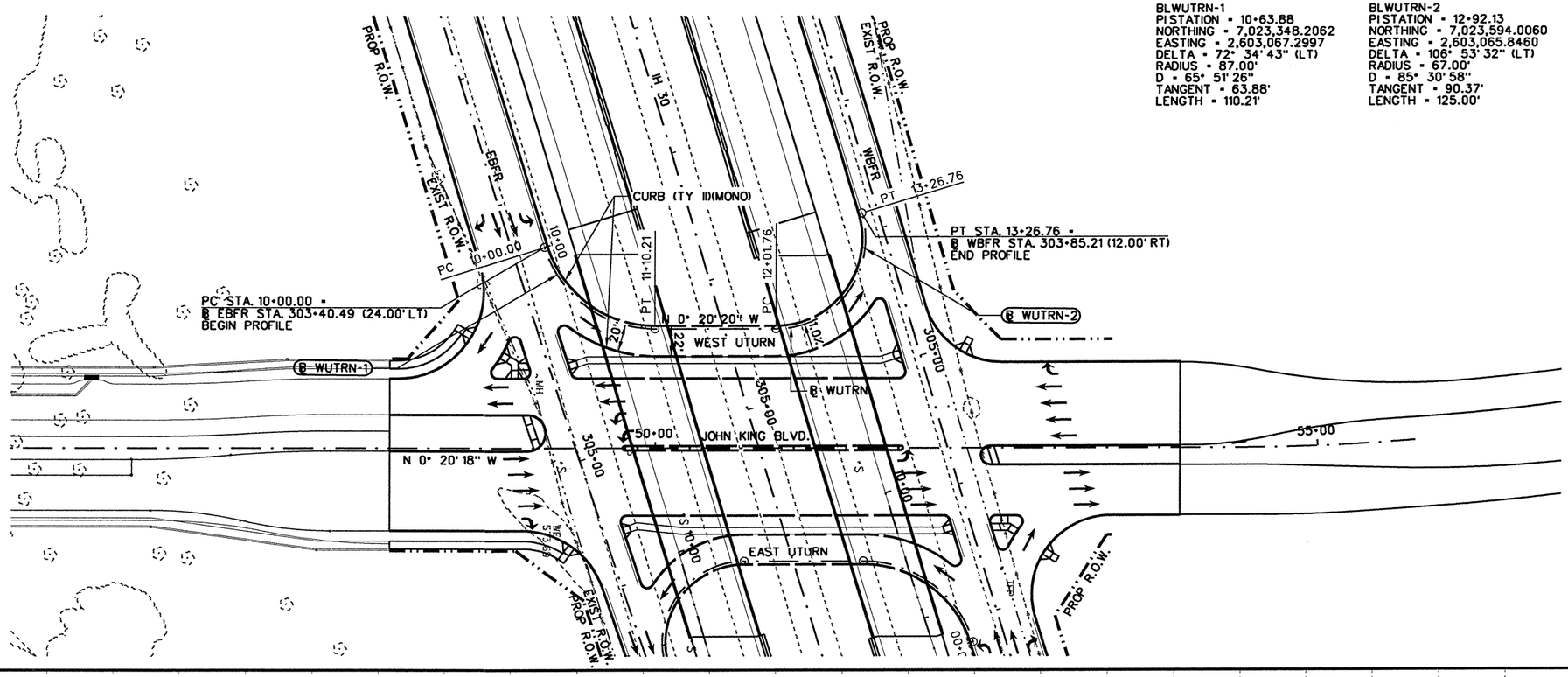
ROADWAY PLAN AND PROFILE

COMMERCE

Designed: JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	154

SHEET 2 OF 2

2/6/2009 12:29:11 PM AADAMS px:/Active Projects/TXD0643/TXD00643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.04 Roadway/435CPP01.100



BLWUTRN-1
PISTATION = 10+63.88
NORTHING = 7,023,348.2062
EASTING = 2,603,067.2997
DELTA = 72° 34' 43" (LT)
RADIUS = 87.00'
D = 65° 51' 26"
TANGENT = 63.88'
LENGTH = 110.21'

BLWUTRN-2
PISTATION = 12+92.13
NORTHING = 7,023,594.0060
EASTING = 2,603,065.8460
DELTA = 106° 53' 32" (LT)
RADIUS = 67.00'
D = 85° 30' 58"
TANGENT = 90.37'
LENGTH = 125.00'

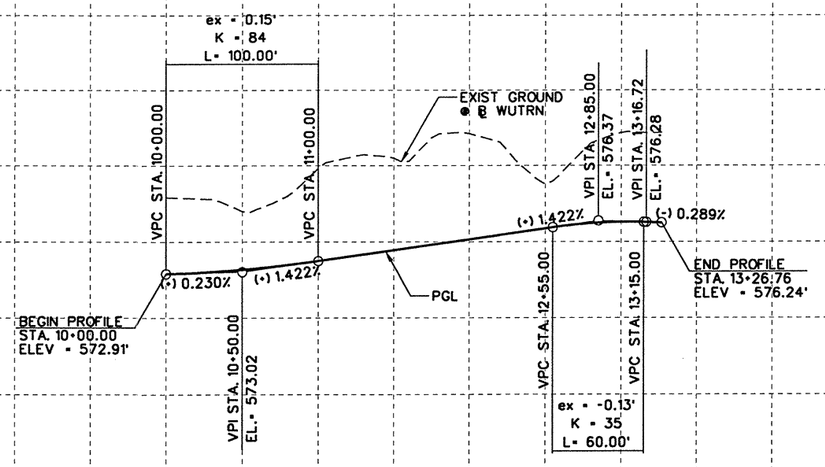
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SCALE VERT. 5 2.5 0 5 10 FEET

SCALE HORZ. 50 25 0 50 100 FEET

NOTES:

1. ALL STATIONS AND OFFSETS ARE FROM ℄ WUTRN.
2. SEE INTERSECTION DETAIL SHEET FOR ADDITIONAL INFORMATION.



PROP. EL.	572.91	573.17	573.74	574.45	575.16	575.87	576.29
EXIST. EL.	577.90	576.99	579.82	580.50	582.14	578.77	582.19

10+00

ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS
2/9/09

NO.	REVISION	BY	DATE

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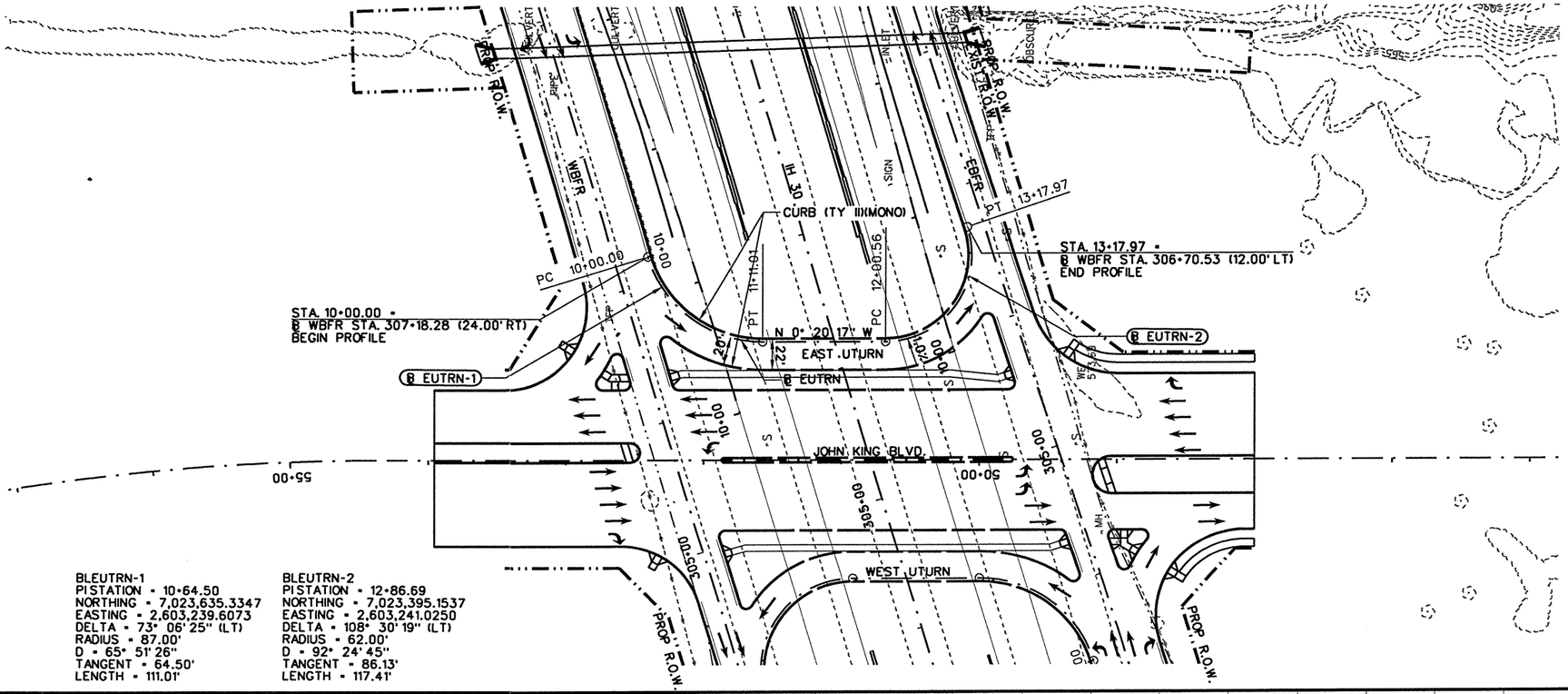
IH 30 AT JOHN KING BLVD.

ROADWAY PLAN AND PROFILE
WEST U-TURN

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	155

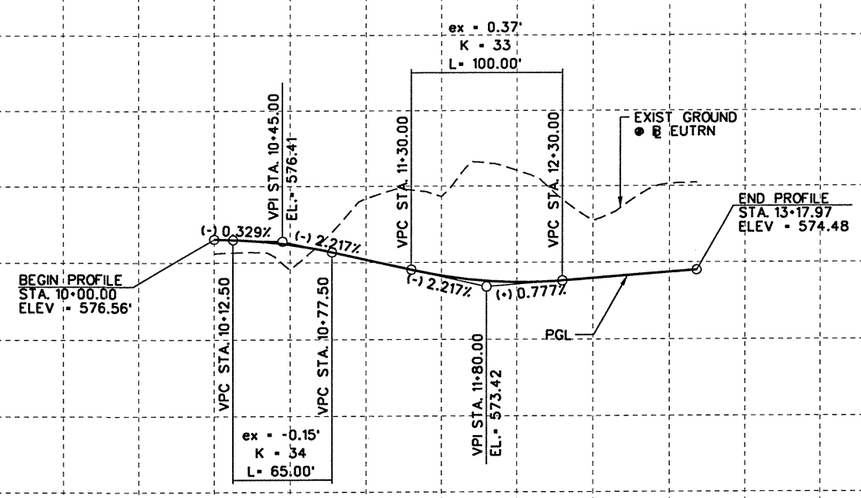
SHEET 1 OF 2

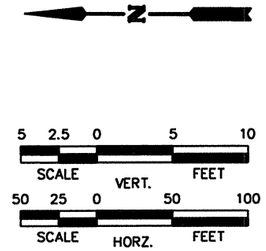
2/6/2009 12:31:03 PM AADAMS pw:/Active Projects/TX00643/TX00643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.04 Roadway/435UPP01.100



BLEUTRN-1
PI STATION = 10+64.50
NORTHING = 7,023,635.3347
EASTING = 2,603,239.6073
DELTA = 73° 06' 25" (LT)
RADIUS = 87.00'
D = 65° 51' 26"
TANGENT = 64.50'
LENGTH = 111.01'

BLEUTRN-2
PI STATION = 12+86.69
NORTHING = 7,023,395.1537
EASTING = 2,603,241.0250
DELTA = 108° 30' 19" (LT)
RADIUS = 62.00'
D = 92° 24' 45"
TANGENT = 86.13'
LENGTH = 117.41'





NOTES:

1. ALL STATIONS AND OFFSETS ARE FROM ℄ EUTRN.
2. SEE INTERSECTION DETAIL SHEET FOR ADDITIONAL INFORMATION.

STATE OF TEXAS
ROBIN R. HANDEL
86931
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PROFESSIONAL ENGINEER
2/9/09

NO.	REVISION	BY	DATE

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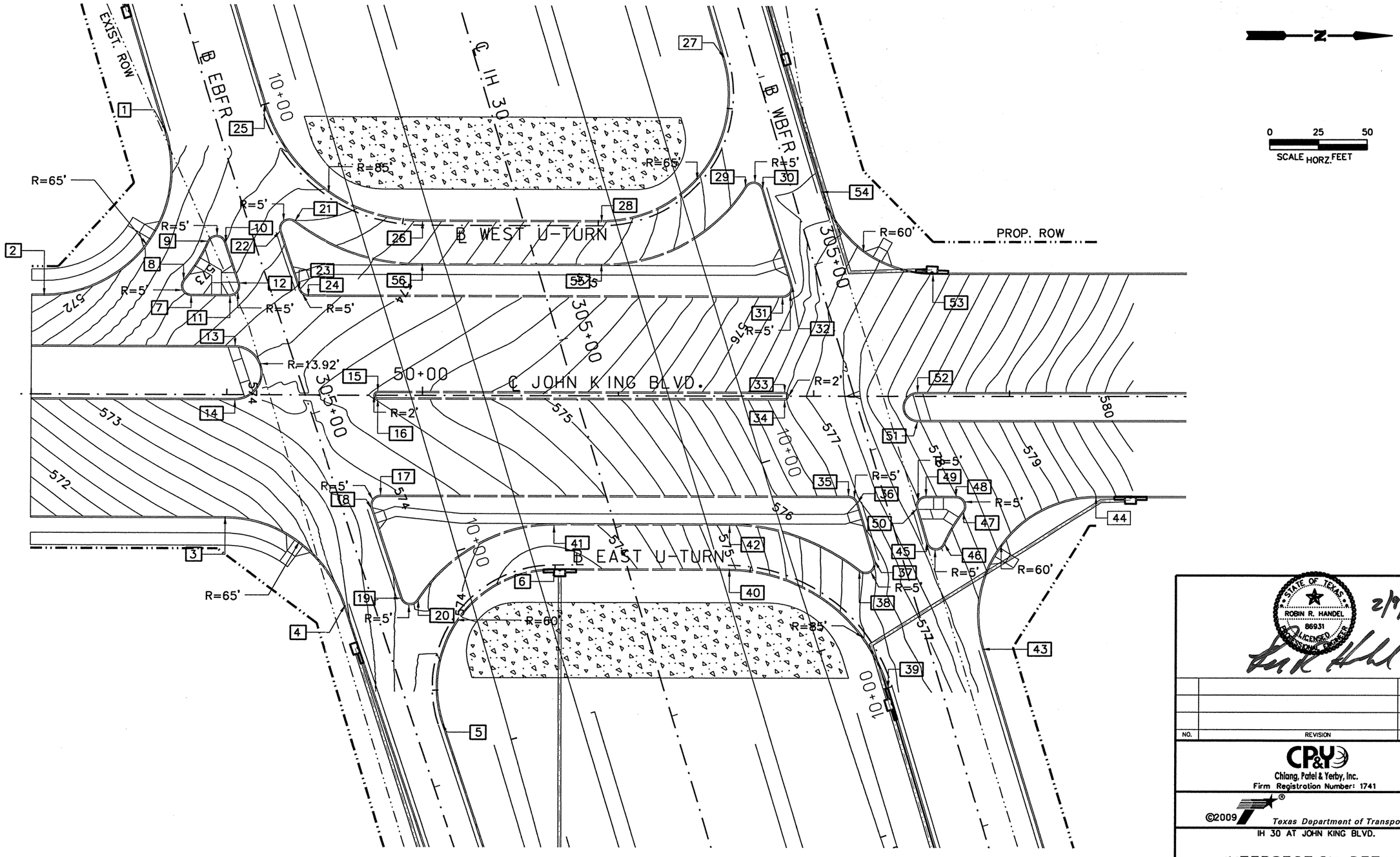
IH 30 AT JOHN KING BLVD.

ROADWAY PLAN AND PROFILE
EAST U-TURN

Designed:	JAV	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	156

SHEET 2 OF 2

2/6/2009 12:31:09 PM AADAMS pw:\Active Projects\TX00643\TX00643-05\8.00 Plans and Drawings\8.30 Cut Sheets\8.3.04 Roadway\435UPP02.100



SEE SHEET 2 OF 2 FOR POINT DATA INFO.

SCALE HORZ. FEET 0 25 50

STATE OF TEXAS
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IH 30 AT JOHN KING BLVD.

INTERSECTION DETAIL
JOHN KING BLVD.

Designed:	AWD	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	157

SHEET 1 OF 2

2/6/2009 12:28:54 PM AADAMS p:\Active Projects\TXD0643\TXD0643-05\8.00 Plans and Drawings\8.30 Cut Sheets\8.3.04 Roadway\435B1L01.050

SUMMARY OF POINT DATA

POINT NUMBER	LOCATION	STATION	OFFSET (FT)	ELEVATION	DESCRIPTION
1	EBFR	303+39.14	26.00' RT	572.14	POINT OF CURVATURE
2	205BY	48+06.41	50.83' LT	571.70	POINT OF TANGENCY
3	205BY	48+99.47	62.33' RT	572.66	POINT OF CURVATURE
4	EBFR	305+97.53	14.00' RT	573.57	POINT OF TANGENCY
5	EBFR	306+70.53	14.00' LT	574.47	POINT OF TANGENCY
6	205BY	50+67.73	88.00' RT	573.68	POINT OF CURVATURE
7	205BY	48+81.49	51.00' LT	573.06	POINT OF CURVATURE
8	205BY	48+77.58	59.12' LT	572.91	POINT OF REVERSE CURVE
9	EBFR	303+98.63	22.73' RT	572.86	POINT OF REVERSE CURVE
10	EBFR	304+01.95	14.00' RT	573.00	POINT OF TANGENCY
11	205BY	49+01.39	51.00' LT	573.27	POINT OF CURVATURE
12	EBFR	304+24.32	14.00' RT	573.28	POINT OF TANGENCY
13	205BY	49+04.14	25.17' LT	573.66	POINT OF CURVATURE
14	205BY	49+04.14	2.67' LT	573.88	POINT OF TANGENCY
15	205BY	49+77.29	2.00' LT	574.41	POINT OF CURVATURE
16	205BY	49+77.29	2.00' RT	574.41	POINT OF TANGENCY
17	205BY	49+78.94	51.00' RT	573.94	POINT OF TANGENCY
18	EBFR	305+55.10	14.00' LT	573.84	POINT OF CURVATURE
19	EBFR	306+03.12	14.00' LT	574.03	POINT OF CURVATURE
20	EBFR	306+06.99	22.16' LT	574.26	POINT OF REVERSE CURVE
21	EBFR	304+02.37	23.12' LT	573.40	POINT OF REVERSE CURVE
22	EBFR	304+05.21	14.00' LT	573.34	POINT OF CURVATURE
23	EBFR	304+37.00	14.00' LT	573.61	POINT OF CURVATURE
24	205BY	49+41.45	51.00' LT	573.69	POINT OF TANGENCY
25	EBFR	303+40.49	26.00' LT	572.89	POINT OF CURVATURE
26	205BY	49+99.56	90.00' LT	573.86	POINT OF TANGENCY
27	WBFR	303+85.21	14.00' RT	576.23	POINT OF TANGENCY
28	205BY	50+91.11	90.00' LT	575.16	POINT OF CURVATURE
29	WBFR	304+51.16	22.36' RT	576.31	POINT OF REVERSE CURVE
30	WBFR	304+54.95	14.00' RT	576.32	POINT OF CURVATURE
31	205BY	51+83.88	51.00' LT	576.24	POINT OF CURVATURE
32	WBFR	305+06.90	14.00' RT	576.32	POINT OF TANGENCY
33	205BY	51+85.20	2.00' LT	576.76	POINT OF CURVATURE
34	205BY	51+85.20	2.00' RT	576.76	POINT OF TANGENCY
35	205BY	52+17.90	51.00' RT	576.91	POINT OF CURVATURE
36	WBFR	306+23.95	14.00' RT	576.94	POINT OF TANGENCY
37	WBFR	306+54.41	14.00' RT	576.67	POINT OF TANGENCY
38	WBFR	306+57.26	23.11' RT	576.35	POINT OF REVERSE CURVE
39	WBFR	307+18.28	26.00' RT	576.54	POINT OF TANGENCY
40	205BY	51+57.28	88.00' RT	574.92	POINT OF CURVATURE
41	205BY	50+67.73	66.00' RT	573.90	POINT OF TANGENCY
42	205BY	51+57.28	66.00' RT	575.14	POINT OF CURVATURE
43	WBFR	307+13.31	26.00' LT	577.65	POINT OF CURVATURE
44	205BY	53+44.34	51.00' RT	579.39	POINT OF TANGENCY
45	WBFR	306+53.22	14.00' LT	577.47	POINT OF CURVATURE
46	WBFR	306+56.56	22.72' LT	577.66	POINT OF REVERSE CURVE
47	205BY	52+77.05	59.06' RT	578.01	POINT OF REVERSE CURVE
48	205BY	52+73.10	51.00' RT	578.00	POINT OF TANGENCY
49	205BY	52+57.61	51.00' RT	577.69	POINT OF TANGENCY
50	WBFR	306+35.49	14.00' LT	577.53	POINT OF CURVATURE
51	205BY	52+53.10	13.00' RT	577.98	POINT OF TANGENCY
52	205BY	52+53.10	2.00' LT	578.09	POINT OF CURVATURE
53	205BY	52+60.73	63.00' LT	577.63	POINT OF TANGENCY
54	WBFR	304+65.12	14.00' LT	576.49	POINT OF CURVATURE
55	205BY	50+91.11	68.00' LT	575.38	POINT OF CURVATURE
56	205BY	49+99.56	68.00' LT	574.08	POINT OF TANGENCY

2/6/2009 12:29:00 PM AADAMS p:\Active Projects\TXD0643\TXD0643-05/8.00 Plans and Drawings/8.30 Cut Sheets/8.3.04 Roadway/435811_02.dgn

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED PROFESSIONAL ENGINEER

2/9/09

NO.	REVISION	BY	DATE

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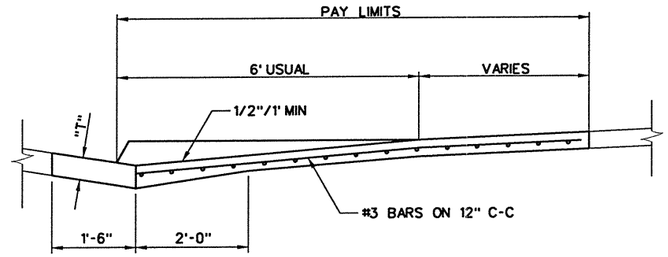
IH 30 AT JOHN KING BLVD.

INTERSECTION DETAIL

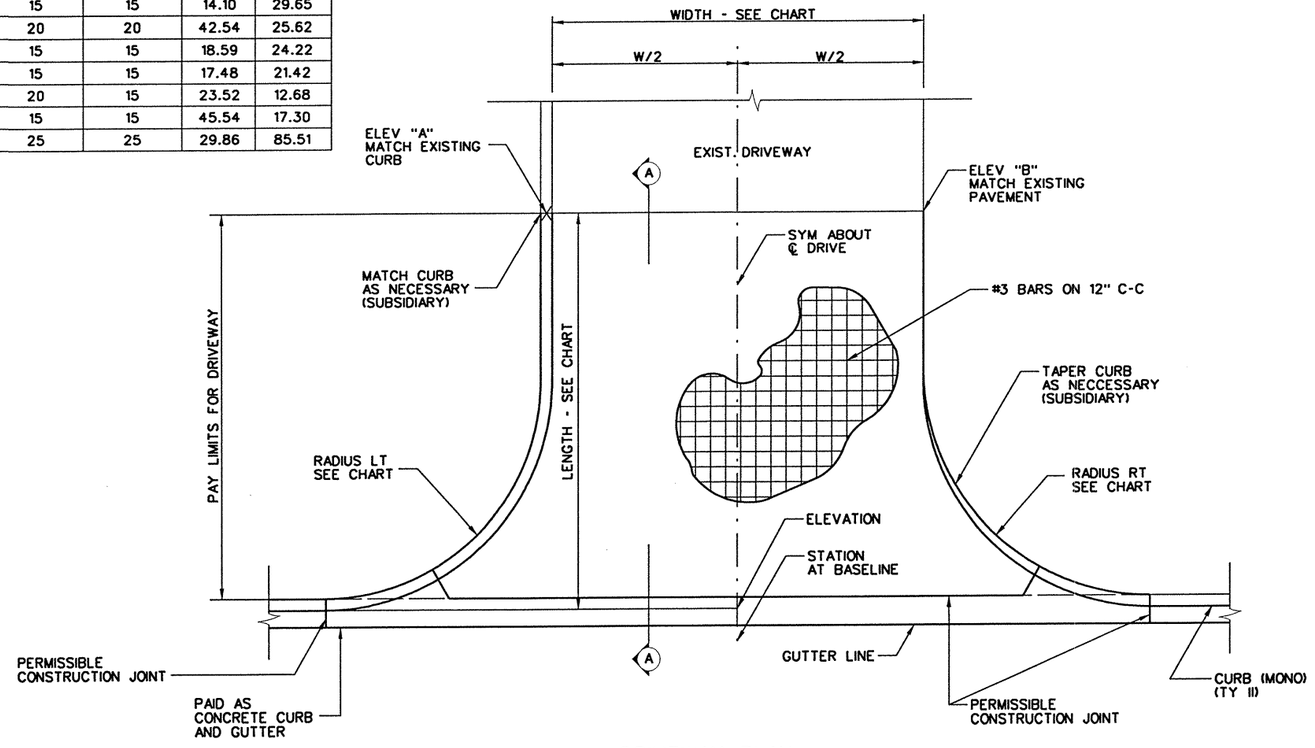
JOHN KING BLVD.

Designed: AWD	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: AJA	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: RRH	DAL	ROCKWALL	0009	12	073	158

DRIVEWAY NUMBER	STREET HORIZONTAL ALIGNMENT	STATION	ELEV	RADIUS LT (FT)	RADIUS RT (FT)	WIDTH (FT)	LENGTH (FT)
E01	EBFR	279+28.99	544.55	10	10	22.28	17.99
E02	EBFR	279+72.61	545.55	10	10	21.60	16.95
E03	EBFR	281+14.77	548.80	20	25	45.06	13.59
E04	EBFR	282+72.67	552.40	10	15	46.95	12.01
-							
-							
E07	EBFR	287+02.93	562.24	15	15	46.95	30.87
-							
E09	EBFR	293+88.28	573.36	20	20	20.63	26.78
E10	EBFR	308+60.51	577.30	15	12	53.97	22.00
E11	EBFR	313+99.73	581.84	15	15	29.85	20.45
E12	EBFR	317+02.99	582.16	15	15	58.65	17.00
-							
E14	EBFR	322+83.99	583.35	15	15	40.19	22.00
E15	EBFR	325+19.75	583.95	15	15	33.52	21.99
E16	EBFR	289+64.88	568.20	15	15	33.43	22.98
W01	WBFR	280+82.06	544.39	20	10	19.92	14.17
W02	WBFR	282+11.65	547.05	15	15	24.02	29.14
W03	WBFR	283+90.32	551.18	15	15	27.01	28.45
W04	WBFR	289+68.55	564.46	15	10	24.88	18.50
W05	WBFR	290+89.00	567.19	15	15	29.36	17.12
W06	WBFR	291+66.03	568.65	15	15	17.46	23.88
W07	WBFR	292+87.72	570.39	15	15	14.10	29.65
W08	WBFR	294+34.23	572.06	20	20	42.54	25.62
W09	WBFR	320+14.71	588.40	15	15	18.59	24.22
W10	WBFR	321+68.94	588.29	15	15	17.48	21.42
W11	WBFR	323+64.35	588.84	20	15	23.52	12.68
W12	WBFR	325+98.39	588.55	15	15	45.54	17.30
W13	WBFR	297+36.36	575.47	25	25	29.86	85.51



SECTION "A-A"
SCALE: NTS



DRIVEWAY PLAN
SCALE: NTS

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER

2/9/09

NO.	REVISION	BY	DATE

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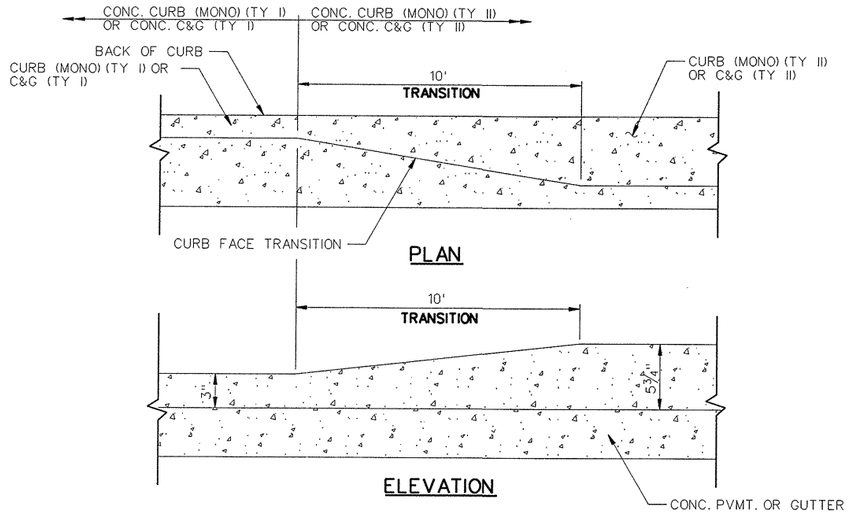
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IH 30 AT JOHN KING BLVD.
ROADWAY PLAN AND PROFILE
DRIVEWAY DETAIL

Designed:	RNR	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	JAV	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn:	CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	RRH	DAL	ROCKWALL	0009	12	073	159

SHEET 1 OF 1

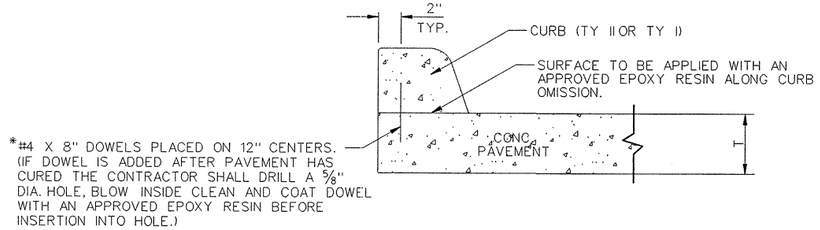
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G TY I CURB TRANSITION TO TY II CURB

SCALE: NTS

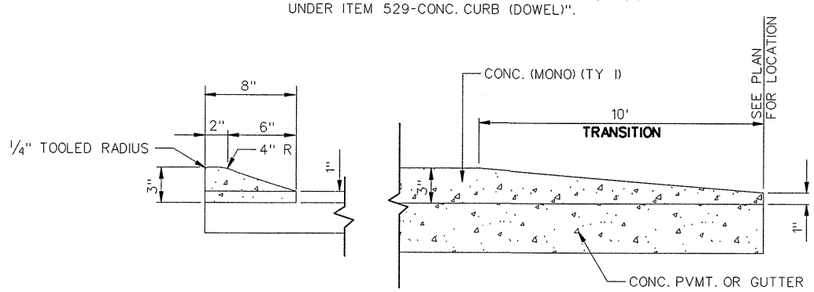
CURB TRANSITION WILL BE PAID UNDER ITEM
529-" CONC. CURB (MONO) (TY II)"
OR ITEM 529-"CONC. CURB & GUTTER (TY II)".



I DOWELED CURB

SCALE: NTS

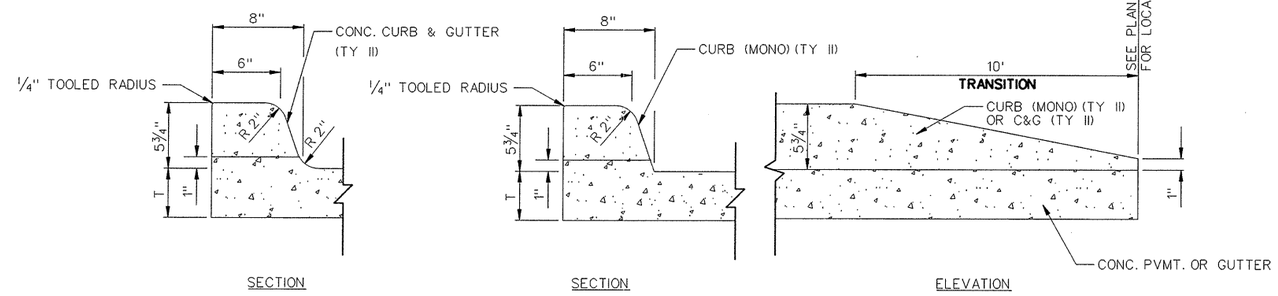
PAYMENT FOR DOWELD CURB WILL BE PAID FOR
UNDER ITEM 529-CONC. CURB (DOWEL)".



J TY I MONO CURB TRANSITION

SCALE: NTS

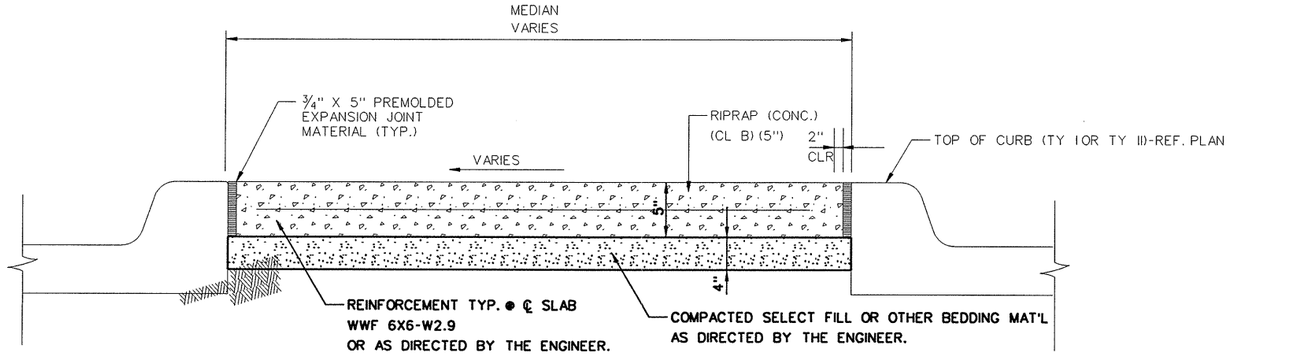
CURB TRANSITION WILL BE PAID FOR UNDER ITEM
529-"CONC. CURB (MONO) (TY I)" OR ITEM
529-CONC. CURB & GUTTER (TY I)



H TY II CURB TRANSITION

SCALE: NTS

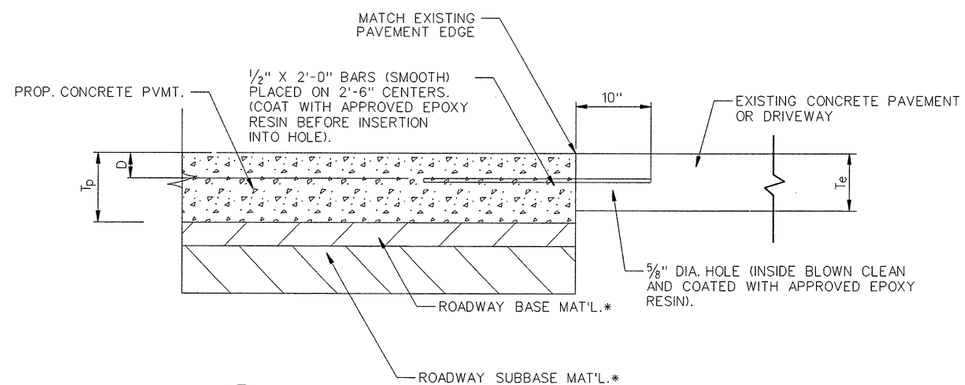
CURB TRANSITION WILL BE PAID UNDER ITEM
529-" CONC. CURB (MONO) (TY II)"
OR ITEM 529-"CONC. CURB & GUTTER (TY II)".



H MEDIAN GORE NOSE PAVEMENT DETAIL

SCALE: NTS

D=1/2T_p OR 1/2T_e, WHICHEVER IS LESS.



G ANCHOR JOINT DETAIL

SCALE: NTS

TO BE USED WHERE PROPOSED CONCRETE MEETS EXISTING CONCRETE PAVEMENT AND DRIVEWAYS. THE COST FOR THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO THE COST OF ITEM 360 "CONCRETE PAVEMENT" AND ITEM 530 "DRIVEWAYS "(CONC.)".

* REF. ROADWAY TYPICAL SECTIONS.

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER
2/9/09

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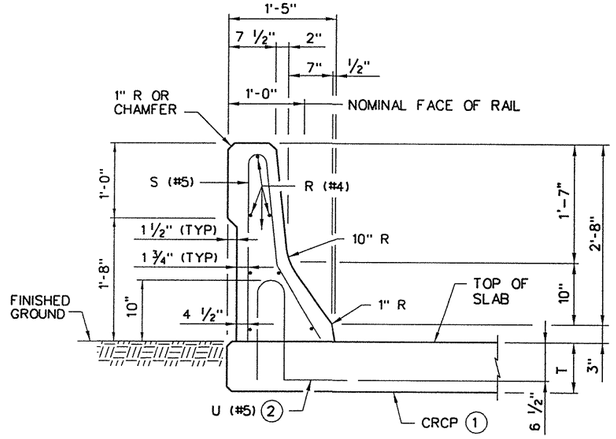
IH 30 AT JOHN KING BLVD.

MISCELLANEOUS ROADWAY DETAILS

Designed:	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	6	TEXAS	SEE TITLE SHEET			IH 30
Drawn: CADD	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	DAL	ROCKWALL	0009	12	073	160

SHEET 1 OF 2

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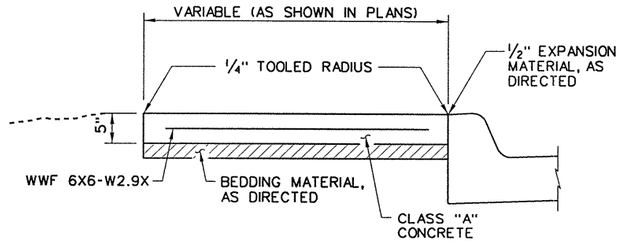


TYPE T501 RAIL ON CRCP

SEE TXDOT STANDARD, TYPE T501, FOR RAIL AND REINFORCEMENT DETAILS NOT SHOWN.

(1) SEE TXDOT STANDARD CRCP(1)-03 FOR PAVEMENT REINFORCEMENT AND DETAILS NOT SHOWN.

(2) AS AN AID IN SUPPORTING REINFORCEMENT, ADDITIONAL LONGITUDINAL BARS MAY BE USED IN THE CONCRETE PLACEMENT WITH APPROVAL OF THE ENGINEER. SUCH BARS SHALL BE FURNISHED AT THE CONTRACTOR'S EXPENSE.



SIDEWALK DETAILS

PLACE A 3/4" EXPANSION JOINT AT 40-FT (MAX) INTERVALS AND AT SIDEWALK ENDS.

EXPANSION JOINTS WILL BE CONTINUOUS WITH ADJACENT CURB AND GUTTER JOINTS.

PLACE A 1/4" TOOLED RADIUS AT ALL JOINTS.

ENSURE THE CROSS SLOPE OF THE SIDEWALK DOES NOT EXCEED 2%.

PAYMENT FOR SIDEWALK WILL BE IN ACCORDANCE WITH ITEM 531, "SIDEWALKS".

SEE STATEWIDE PED STANDARD FOR ADDDITIONAL PEDESTRIAN ELEMENT CRITERIA.

STATE OF TEXAS
ROBIN R. HANDEL
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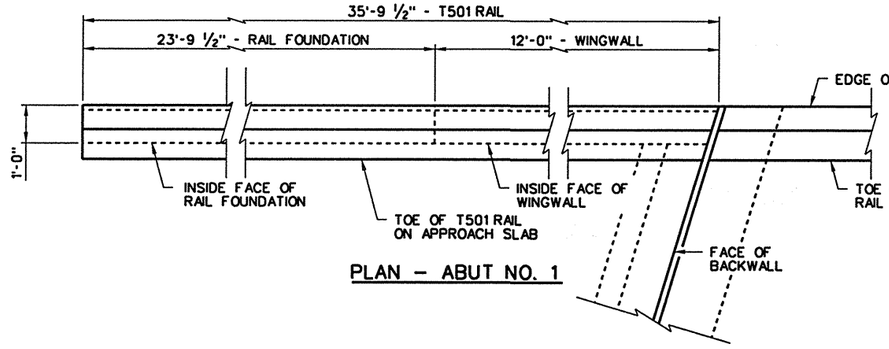
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MISCELLANEOUS ROADWAY DETAILS

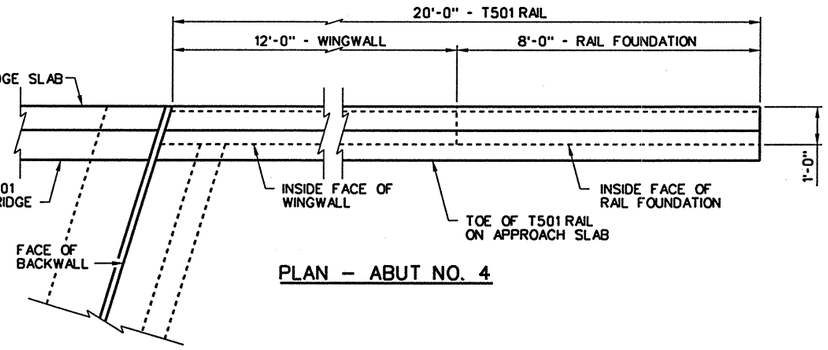
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SHEET 2 OF 2

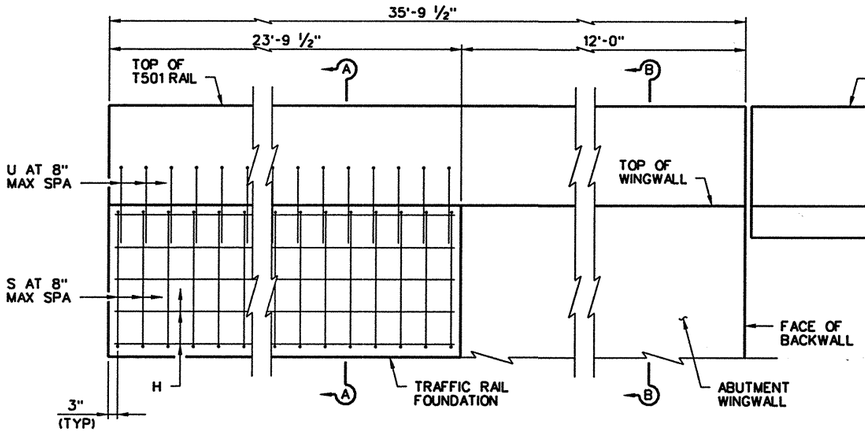
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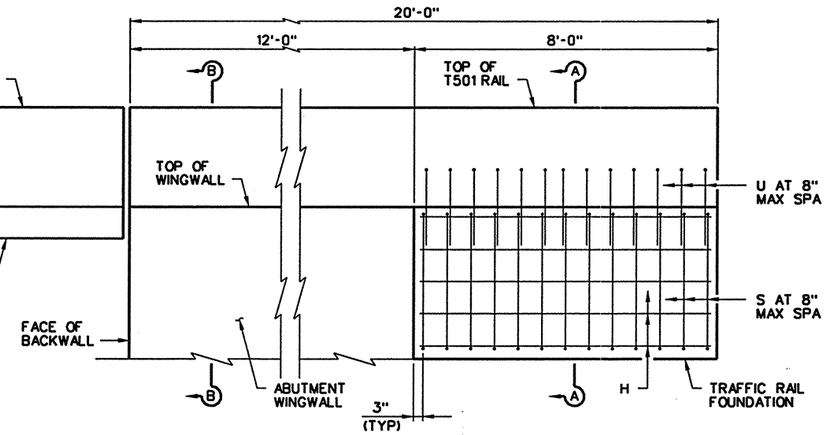
PLAN – ABUT NO. 1



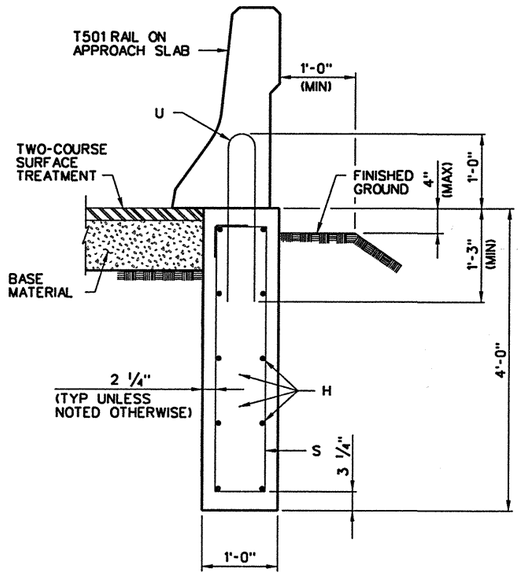
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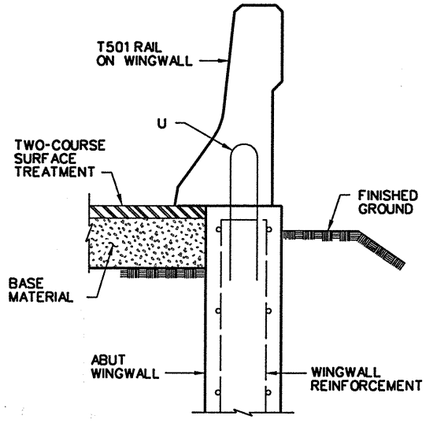
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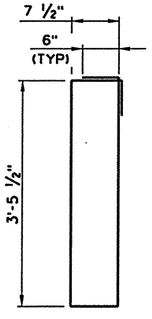
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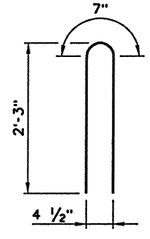
SECTION A-A



SECTION B-B



BARS S



BARS U

① TABLE OF ESTIMATED QUANTITIES

BAR	NO.	SIZE	LENGTH	WEIGHT
H	10	#5	23'- 6"	245
S	36	#5	9'- 2"	344
U	36	#5	4'- 9"	178
REINFORCING STEEL			LB	767
CLASS "C" CONCRETE			CY	3.5

② TABLE OF ESTIMATED QUANTITIES

BAR	NO.	SIZE	LENGTH	WEIGHT
H	10	#5	7'- 8"	80
S	13	#5	9'- 2"	124
U	13	#5	4'- 9"	64
REINFORCING STEEL			LB	268
CLASS "C" CONCRETE			CY	1.2

① QUANTITIES FOR ONE TRAFFIC RAIL FOUNDATION AT ABUTMENT NO. 1.

② QUANTITIES FOR ONE TRAFFIC RAIL FOUNTATION AT ABUTMENT NO. 4.

GENERAL NOTES

1. DESIGNED ACCORDING TO 2007 AASHTO LRFD SPECIFICATIONS WITH CURRENT INTERIMS (HL93 LOADING)
2. ALL CONCRETE TO BE CLASS "C".
3. ALL REINFORCING TO BE GRADE 60.
4. TRAFFIC RAIL TYPE T501 TO BE PAID FOR BY THE LINEAR FOOT.
5. SEE "TRAFFIC RAIL TYPE T501" SHEET FOR DIMENSIONS AND REINFORCING.

STATE OF TEXAS
JEFFREY P. WOUTERS
80701
REGISTERED PROFESSIONAL ENGINEER
02-06-2009

NO.	REVISION	BY	DATE

CP&Y
Chiang, Patel & Yerby, Inc.
Firm Registration Number: 1741

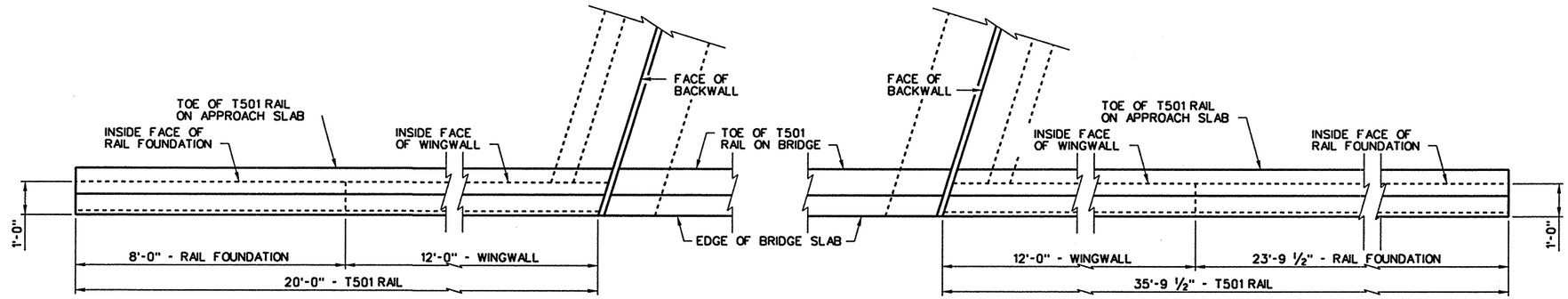
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IH 30 AT JOHN KING BLVD.

TRAFFIC RAIL TYPE T501 AND FOUNDATION DETAILS EBML

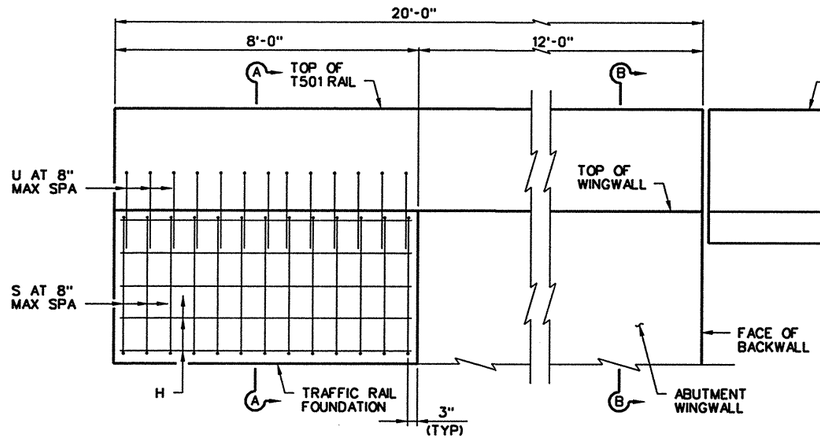
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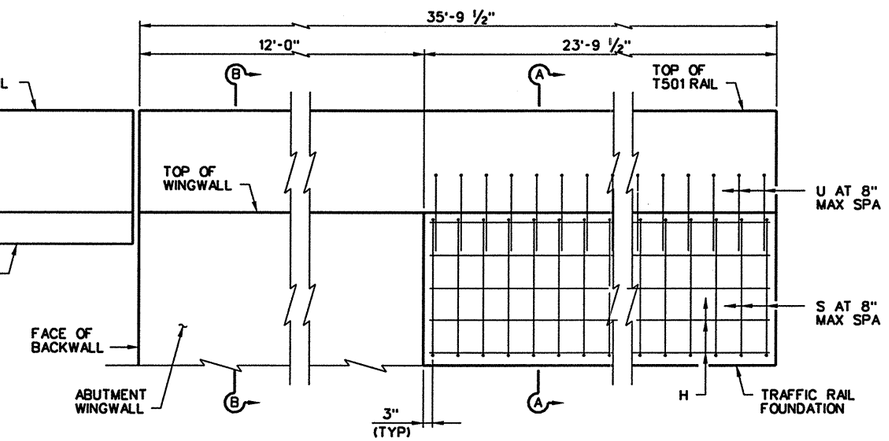


PLAN – ABUT NO. 1

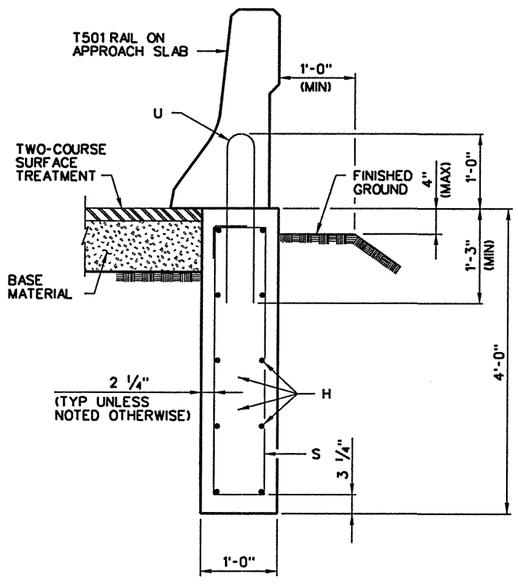
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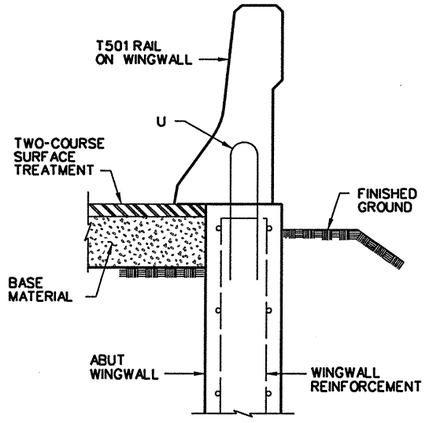
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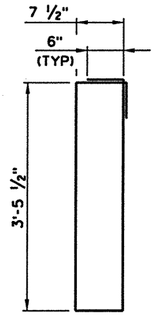
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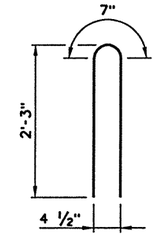
SECTION A-A



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5. SEE "TRAFFIC RAIL TYPE T501" SHEET FOR DIMENSIONS AND REINFORCING.

STATE OF TEXAS
JEFFREY P. WOUTERS
80701
REGISTERED
PROFESSIONAL ENGINEER
02-06-2009

NO.	REVISION	BY	DATE

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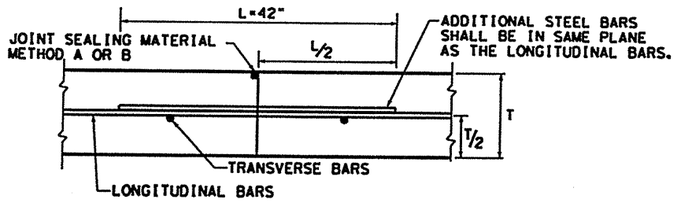
TRAFFIC RAIL TYPE T501 AND FOUNDATION DETAILS

WBML

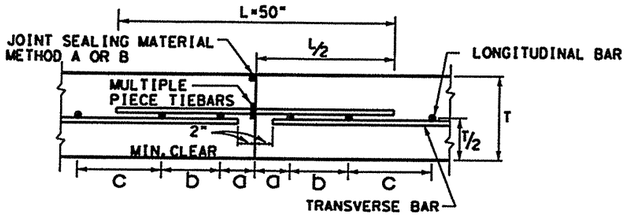
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Checked: KH	DAL	ROCKWALL	0009	12	073		163

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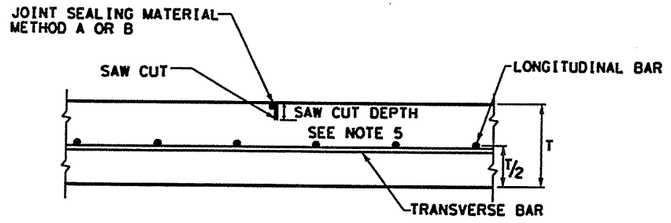
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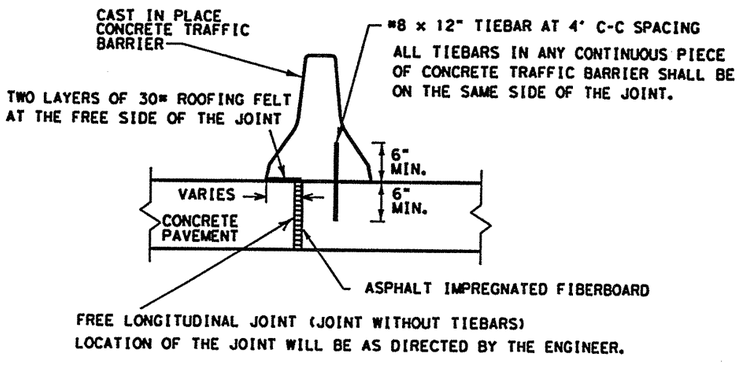
TRANSVERSE CONSTRUCTION JOINT
SECTION X - X



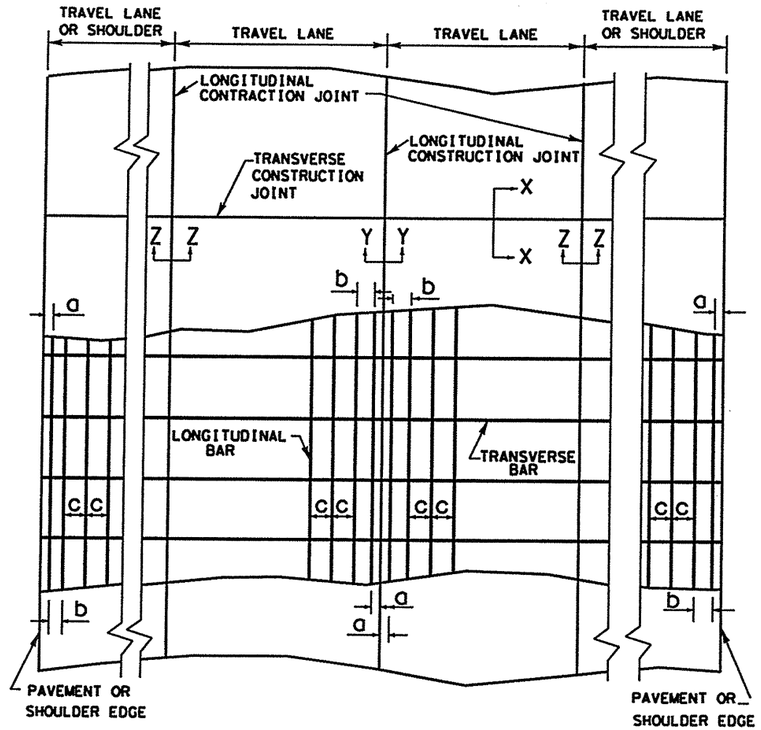
LONGITUDINAL CONSTRUCTION JOINT
SECTION Y - Y



LONGITUDINAL CONTRACTION JOINT
SECTION Z - Z



FREE LONGITUDINAL JOINT DETAIL



TYPICAL PAVEMENT LAYOUT

GENERAL NOTES

1. DETAILS FOR PAVEMENT WIDTH, PAVEMENT THICKNESS AND THE CROWN CROSS-SLOPE SHALL BE SHOWN ELSEWHERE IN THE PLANS.
2. LONGITUDINAL AND TRANSVERSE REINFORCING STEEL SHALL BE #6 DEFORMED STEEL BARS CONFORMING TO ASTM A 615 (GRADE 60) OR ASTM A 996 (GRADE 60).
3. THE DETAIL FOR THE JOINT SEALANT AND RESERVOIR IS SHOWN ON STANDARD SHEET "CONCRETE PAVING DETAILS, JOINT SEALS."
4. PAVEMENT WIDTHS OF MORE THAN 15 FT. SHALL HAVE A LONGITUDINAL JOINT (SECTION Z-Z OR Y-Y). THESE JOINTS SHALL BE LOCATED WITHIN 6 IN. OF THE LANE LINE UNLESS THE JOINT LOCATION IS SHOWN ELSEWHERE ON THE PLANS.
5. THE SAW CUT DEPTH FOR THE LONGITUDINAL JOINT SHALL BE MINIMUM OF ONE THIRD THE SLAB THICKNESS. IT MAY BE MINIMUM OF ONE FOURTH THE SLAB THICKNESS WHEN CRUSHED LIMESTONE IS USED AS THE COARSE AGGREGATE.
6. REINFORCING STEEL SPLICES SHALL BE A MINIMUM OF 25 IN.
7. MULTIPLE PIECE TIEBARS SHALL BE USED AT LONGITUDINAL CONSTRUCTION JOINTS UNLESS OTHERWISE SPECIFIED IN THE PLANS. THE TIEBARS SHALL BE #6 BARS. THE TIEBAR SPACING SHALL BE EQUAL TO THE TRANSVERSE BAR SPACING.
8. STEEL BAR PLACEMENT TOLERANCE SHALL BE +/- 1 IN. HORIZONTALLY AND +/- 0.5 IN. VERTICALLY. THE AVERAGE BAR SPACINGS SHALL CONFORM TO TABLE NO.1 AND TABLE NO.2.
9. MISSING OR DAMAGED TIEBARS SHALL BE REPLACED BY DRILLING AND EPOXY GROUTING AT THE CONTRACTOR'S EXPENSE.
10. AT TRANSVERSE CONSTRUCTION JOINTS, THE ADDITIONAL STEEL BARS SHALL BE PLACED APPROXIMATELY MIDWAY BETWEEN THE LONGITUDINAL STEEL BARS.
11. CONSOLIDATION WITH HAND-MANIPULATED MECHANICAL VIBRATORS IS REQUIRED ADJACENT TO ALL TRANSVERSE CONSTRUCTION JOINTS.

TABLE NO.1 LONGITUDINAL STEEL

SLAB THICKNESS AND BAR SIZE		REGULAR STEEL BARS	FIRST SPACING AT EDGE OR JOINT	SECOND SPACING FROM EDGE OR JOINT	ADDITIONAL STEEL BARS AT TRANSVERSE CONST. JOINT	
T (IN.)	BAR SIZE	SPACING c (IN.)	SPACING a (IN.)	SPACING b (IN.)	SPACING 2 x c (IN.)	LENGTH L (IN.)
8	#6	9	3 TO 4	3 TO 9	18	42
9	#6	8	3 TO 4	3 TO 8	16	42
10	#6	7	3 TO 4	3 TO 7	14	42
11	#6	6.5	3 TO 4	3 TO 6.5	13	42
12	#6	6	3 TO 4	3 TO 6	12	42
13	#6	5.5	3 TO 4	3 TO 5.5	11	42

TABLE NO.2 TRANSVERSE STEEL

SLAB THICKNESS AND BAR SIZE		PAVEMENT WIDTH (PW) FROM LONGITUDINAL FREE EDGE TO NEAREST LONGITUDINAL FREE EDGE, FT.						
		PW <=48	PW <=60	PW <=72	PW <=84	PW <=96	PW <=108	PW <=120
T (IN.)	BAR SIZE	SPACING (FT.)	SPACING (FT.)	SPACING (FT.)	SPACING (FT.)	SPACING (FT.)	SPACING (FT.)	SPACING (FT.)
8	#6	3	3	3	3	2.5	2.5	2
9	#6	3	3	3	2.5	2	2	1.5
10	#6	3	3	2.5	2.5	2	1.5	1.5
11	#6	3	2.5	2.5	2	2	1.5	1.5
12	#6	3	2.5	2	2	1.5	1.5	1
13	#6	2.5	2.5	2	1.5	1.5	1.5	1

Texas Department of Transportation
Construction Division (Pavements)

CONTINUOUSLY REINFORCED CONCRETE PAVEMENT

ONE LAYER STEEL BAR PLACEMENT
T-8, 9, 10, 11, 12, &13 INCHES

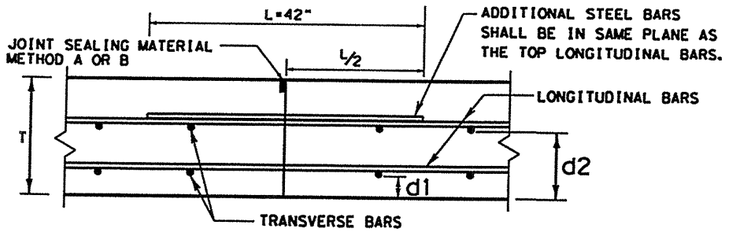
CRCP(1)-03

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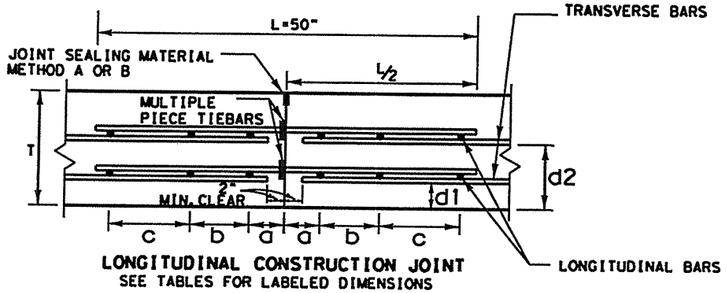
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DISTRICT	FEDERAL AID PROJECT			SHEET
				164
COUNTY	CONTROL	SECTION	JOB	HIGHWAY
Rockwall	6009	12	073	

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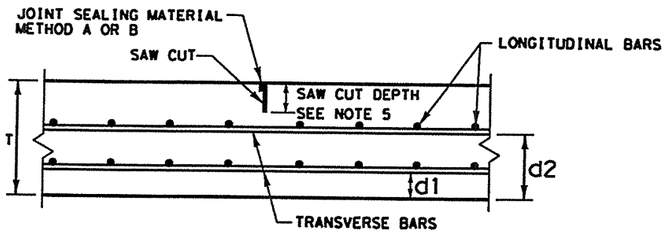
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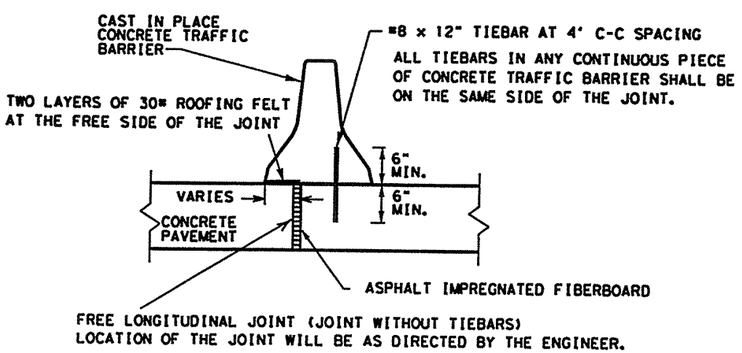
TRANSVERSE CONSTRUCTION JOINT
SECTION X - X



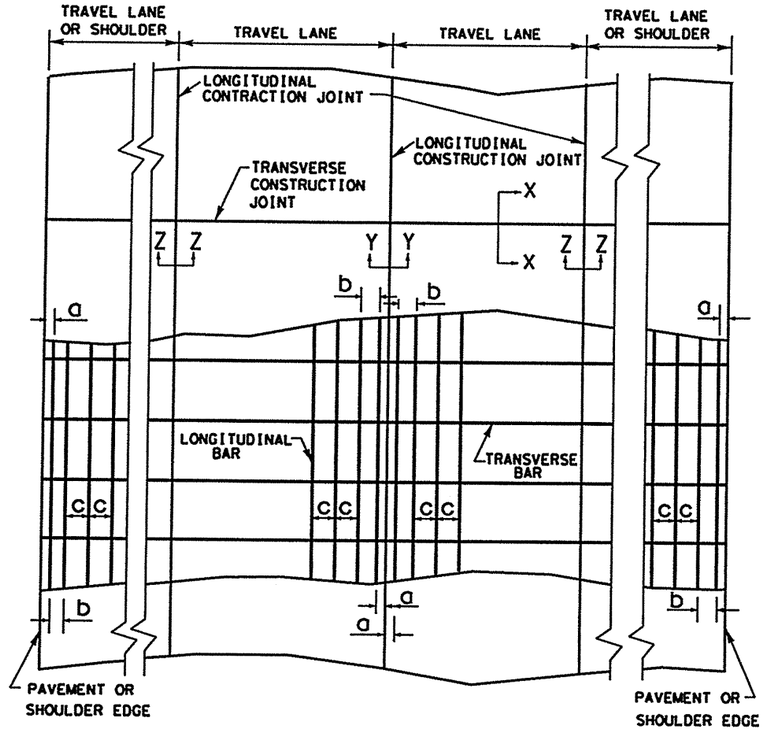
LONGITUDINAL CONSTRUCTION JOINT
SEE TABLES FOR LABELED DIMENSIONS
SECTION Y - Y



LONGITUDINAL CONTRACTION JOINT
SECTION Z - Z



FREE LONGITUDINAL JOINT DETAIL



TYPICAL PAVEMENT LAYOUT

GENERAL NOTES

1. DETAILS FOR PAVEMENT WIDTH, PAVEMENT THICKNESS AND THE CROWN CROSS-SLOPE SHALL BE SHOWN ELSEWHERE IN THE PLANS.
2. LONGITUDINAL AND TRANSVERSE REINFORCING STEEL SHALL BE #6 DEFORMED STEEL BARS CONFORMING TO ASTM A 615 (GRADE 60) OR ASTM A 996 (GRADE 60).
3. THE DETAIL FOR THE JOINT SEALANT AND RESERVOIR IS SHOWN ON STANDARD SHEET "CONCRETE PAVING DETAILS, JOINT SEALS."
4. PAVEMENT WIDTHS OF MORE THAN 15 FT. SHALL HAVE A LONGITUDINAL JOINT (SECTION Z-Z OR Y-Y). THESE JOINTS SHALL BE LOCATED WITHIN 6 IN. OF THE LANE LINE UNLESS THE JOINT LOCATION IS SHOWN ELSEWHERE ON THE PLANS.
5. THE SAW CUT DEPTH FOR THE LONGITUDINAL JOINT SHALL BE 4 INCHES. IT MAY BE MINIMUM OF ONE FOURTH THE SLAB THICKNESS WHEN CRUSHED LIMESTONE IS USED AS THE COARSE AGGREGATE.
6. REINFORCING STEEL SPLICES SHALL BE A MINIMUM OF 25 IN.
7. MULTIPLE PIECE TIEBARS SHALL BE USED AT LONGITUDINAL CONSTRUCTION JOINTS UNLESS OTHERWISE SPECIFIED IN THE PLANS. THE TIEBARS SHALL BE #6 BARS. THE TIEBAR SPACING SHALL BE EQUAL TO THE TRANSVERSE BAR SPACING.
8. STEEL BAR PLACEMENT TOLERANCE SHALL BE +/- 1 IN. HORIZONTALLY AND +/- 0.5 IN. VERTICALLY. THE AVERAGE BAR SPACINGS SHALL CONFORM TO TABLE NO.1, TABLE NO. 2, AND TABLE NO.3.
9. MISSING OR DAMAGED TIEBARS SHALL BE REPLACED BY DRILLING AND EPOXY GROUTING AT THE CONTRACTOR'S EXPENSE.
10. AT TRANSVERSE CONSTRUCTION JOINTS, THE ADDITIONAL STEEL BARS SHALL BE PLACED APPROXIMATELY MIDWAY BETWEEN THE LONGITUDINAL STEEL BARS OF THE TOP LAYER.
11. CONSOLIDATION WITH HAND-MANIPULATED MECHANICAL VIBRATORS IS REQUIRED ADJACENT TO ALL TRANSVERSE CONSTRUCTION JOINTS.

TABLE NO. 1 LONGITUDINAL STEEL

SLAB THICKNESS AND BAR SIZE		REGULAR STEEL BARS	FIRST SPACING AT EDGE OR JOINT	SECOND SPACING FROM EDGE OR JOINT	ADDITIONAL STEEL BARS AT TRANSVERSE CONST. JOINT	
T (IN.)	BAR SIZE	SPACING c (IN.)	SPACING a (IN.)	SPACING b (IN.)	SPACING c (IN.)	LENGTH L (IN.)
14	#6	9.5	3 TO 4	3 TO 9.5	9.5	42
15	#6	8.5	3 TO 4	3 TO 8.5	8.5	42

TABLE NO. 2 TRANSVERSE STEEL

SLAB THICKNESS AND BAR SIZE		PAVEMENT WIDTH (PW) FROM LONGITUDINAL FREE EDGE TO NEAREST LONGITUDINAL FREE EDGE, FT.						
		PW <=48	PW <=60	PW <=72	PW <=84	PW <=96	PW <=108	PW <=120
T (IN.)	BAR SIZE	SPACING (FT.)	SPACING (FT.)	SPACING (FT.)	SPACING (FT.)	SPACING (FT.)	SPACING (FT.)	SPACING (FT.)
14	#6	3	3	3	3	3	2.5	2.5
15	#6	3	3	3	3	2.5	2.5	2

TABLE NO. 3
TWO LAYER STEEL PLACEMENT SPECIFICATIONS OF DIMENSIONS

THICKNESS T (IN.)	d1 (IN.)	d2 (IN.)
14	4.5	8.5
15	5.0	9.0

Texas Department of Transportation
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CONTINUOUSLY REINFORCED CONCRETE PAVEMENT

TWO LAYER STEEL BAR PLACEMENT T-14,&15 INCHES

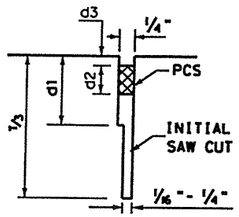
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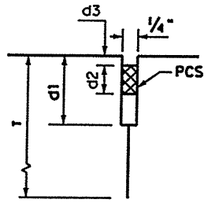
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					165
	COUNTY	CONTROL	SECTION		HIGHWAY
	Parker all	0009	12	073	

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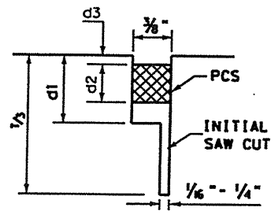


SAWED
LONGITUDINAL JOINT

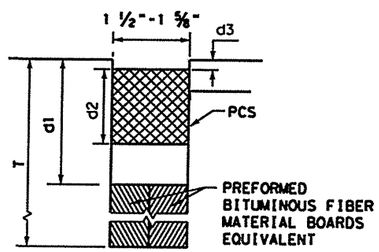


LONGITUDINAL
CONSTRUCTION JOINT

LONGITUDINAL JOINT SEALS



SAWED
CONTRACTION JOINT



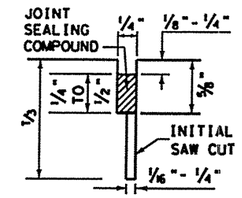
FORMED
FORMED EXPANSION JOINT

TRANSVERSE JOINT SEALS

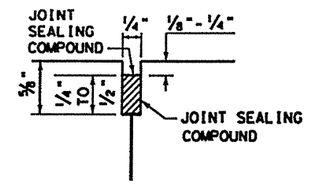
METHOD A: PREFORMED COMPRESSION SEALS (PCS)
(CLASS 6 PREFORMED JOINT SEALANT)

GENERAL NOTES FOR METHOD "A"

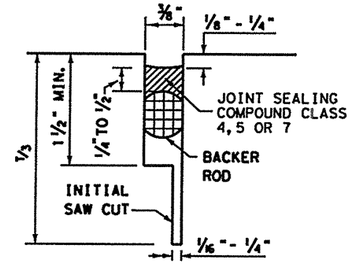
1. UNLESS OTHERWISE SHOWN IN THE PLANS, EITHER METHOD "A" OR METHOD "B" MAY BE USED.
2. THE LOCATION OF JOINTS SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.
3. DIMENSIONS d1, d2, AND d3 SHALL BE IN ACCORDANCE WITH THE PREFORMED COMPRESSION SEAL MANUFACTURES RECOMMENDATION.
4. THE JOINT RESERVOIR FOR SEALANT SHALL BE SAWED UNLESS OTHERWISE SHOWN ON THE PLANS FOR THE LONGITUDINAL AND TRANSVERSE CONSTRUCTION AND THE TWO SAWED JOINTS.
5. THE JOINTS SHALL BE CLEANED IN ACCORDANCE WITH THE ITEM 438 AND PRIOR TO BEGINNING OPERATIONS, THE CONTRACTOR SHALL SUBMIT A STATEMENT FROM THE SEALANT MANUFACTURER SHOWING THE RECOMMENDED EQUIPMENT AND INSTALLATION PROCEDURES TO BE USED.
6. THE SAW CUT FOR THE LONGITUDINAL JOINT SHALL BE ONE FOURTH THE SLAB THICKNESS WHEN CRUSHED LIMESTONE IS USED AS THE COARSE AGGREGATE.



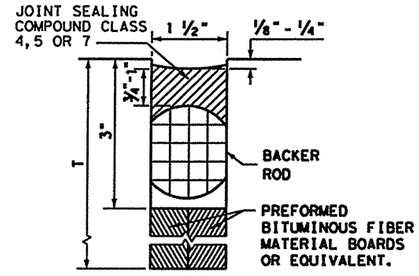
SAWED
LONGITUDINAL JOINT



LONGITUDINAL OR TRANSVERSE
CONSTRUCTION JOINT



TRANSVERSE SAWED
CONTRACTION JOINT



TRANSVERSE FORMED
EXPANSION JOINT

METHOD B: JOINT SEALING COMPOUND

GENERAL NOTES FOR METHOD "B"

1. UNLESS OTHERWISE SHOWN IN THE PLANS, EITHER METHOD "A" OR METHOD "B" MAY BE USED.
2. THE LOCATION OF JOINTS SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.
3. THE ENGINEER SHALL SELECT A TARGET PLACEMENT THICKNESS FOR THE SEALANT DETAILS WHICH SHOW RANGES IN THICKNESS. THE TARGET THICKNESS WILL NORMALLY BE THE MIDPOINT OF THE RANGE.
4. THE JOINT RESERVOIR FOR SEALANT SHALL BE SAWED UNLESS OTHERWISE SHOWN ON THE PLANS FOR THE LONGITUDINAL AND TRANSVERSE CONSTRUCTION AND THE TWO SAWED JOINTS.
5. THE JOINTS SHALL BE CLEANED IN ACCORDANCE WITH THE ITEM 438 AND PRIOR TO BEGINNING OPERATIONS, THE CONTRACTOR SHALL SUBMIT A STATEMENT FROM THE SEALANT MANUFACTURER SHOWING THE RECOMMENDED EQUIPMENT AND INSTALLATION PROCEDURES TO BE USED.
6. THE SAW CUT FOR THE LONGITUDINAL JOINT SHALL BE ONE FOURTH THE SLAB THICKNESS WHEN CRUSHED LIMESTONE IS USED AS THE COARSE AGGREGATE.

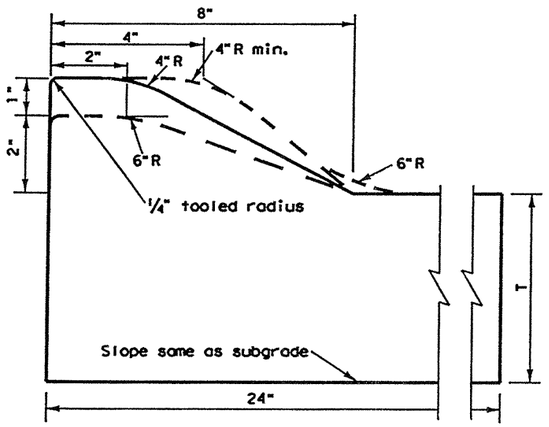
Texas Department of Transportation
Construction Division (Pavement)

CONCRETE PAVING DETAILS
JOINT SEALS

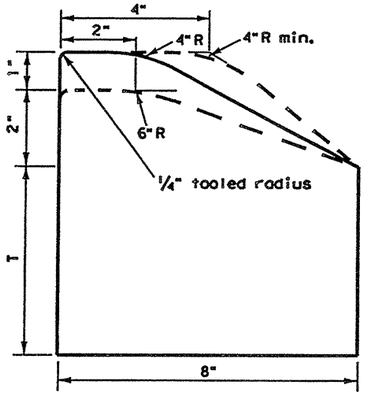
JS-94

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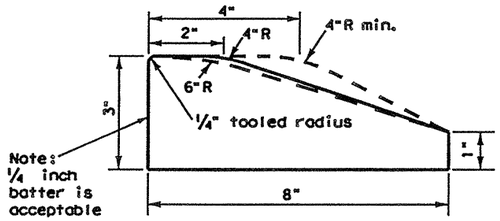
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	COUNTY	CONTROL	SECTION	JOB	HIGHWAY
	Rockwall	0009	12	073	



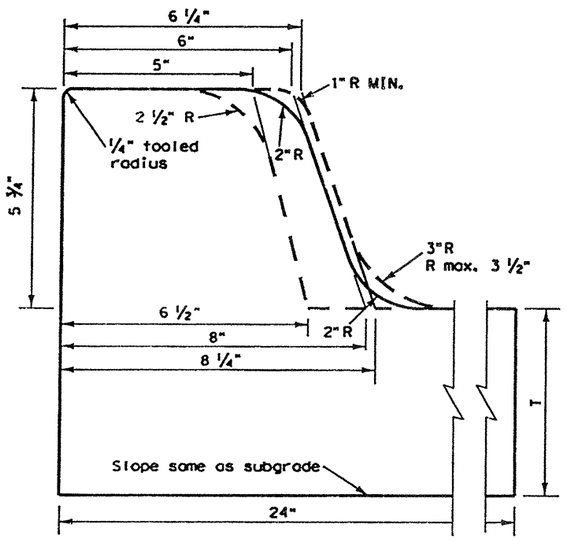
TYPE I CURB AND GUTTER



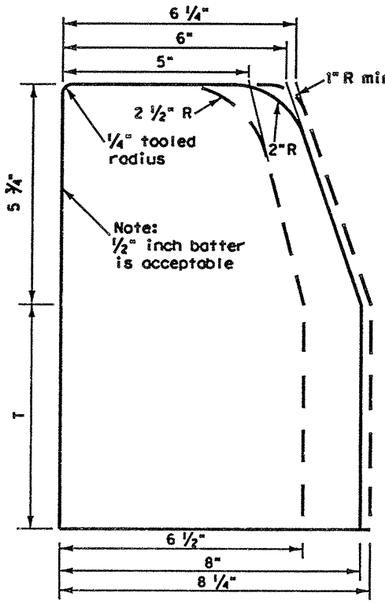
TYPE I CURB



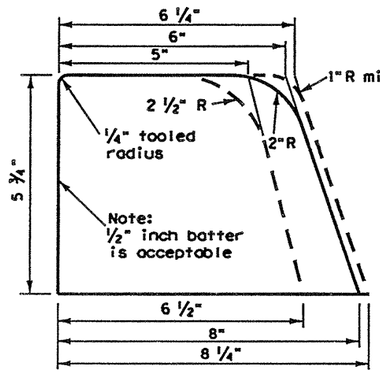
TYPE I MONO CURB OR CURB PLACED ON PAVEMENT



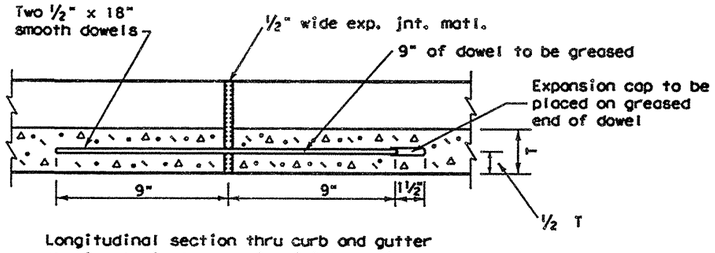
TYPE II CURB AND GUTTER



TYPE II CURB



TYPE II MONO CURB OR CURB PLACED ON PAVEMENT



Longitudinal section thru curb and gutter showing typical expansion joint details.

Reinforcing steel (when used) shall not cross expansion joints. Steel shall be terminated 3" ± 1" from face of the joint.

GENERAL NOTES

1. Contractor may use existing forms if the cross section lies within the band shown by dotted lines. If new forms are to be purchased, leased, or constructed they shall conform to the solid line.
2. When reinforcing steel is required or placed at contractor's option, one of the following schemes of reinforcement shall be required. The manner of placement and location shall be to the satisfaction of the Engineer.
   a. Type I, or Type II, curb and gutter reinforcement shall have longitudinal reinforcing bars as follows: three #3, two #4, two #5, or one #6.
   b. All types of curb (reinf.) shall have one #3 or #4 bar for for longitudinal reinforcement.
3. Reinforcing bars shall be lapped a minimum of 15".
4. When curb or curb and gutter is placed by a separate pour adjacent to or atop concrete pavement, curb or curb and gutter shall be tied to pavement in a manner satisfactory to the engineer with 8-inch long #3 or #4 bars spaced at 5 feet and expansion and/or contraction joints of curb or curb and gutter shall match those of pavement.

   When curb and curb and gutter is not constructed adjacent to concrete pavement, the following shall govern:
   a. Reinforced curb or curb and gutter shall have no contraction joints.
   b. Non-reinforced curb or curb and gutter shall have formed, tooled or sawed contraction joints at 10'±. The depth of these joints shall be sufficient to ensure cracking at the joints.
   c. Reinforcing curb or curb and gutter shall have expansion joints at points of curvature and at intervals no greater than 120' in all curves and at structures such as bridges, box culverts, curb inlets, etc.
   d. Non-reinforced curb or curb and gutter shall have expansion joints at points of curvature on curves of radius less than 25° and at structures such as bridges, box culverts, curb inlets, etc.
5. One-half inch expansion joint material shall be provided where curb or curb gutter is adjacent to sidewalk or riprap.
6. Unless otherwise shown, transitions between curbs or curbs and gutters of differing cross section shall be accomplished over a 20 foot length or as approved by the Engineer.
7. At contractor's option, dimension "T" may be thickness of pavement structure. In no case shall it be less than 6".
8. See the RAMP standard sheet for information on curb ramps and sidewalks crossing driveways.

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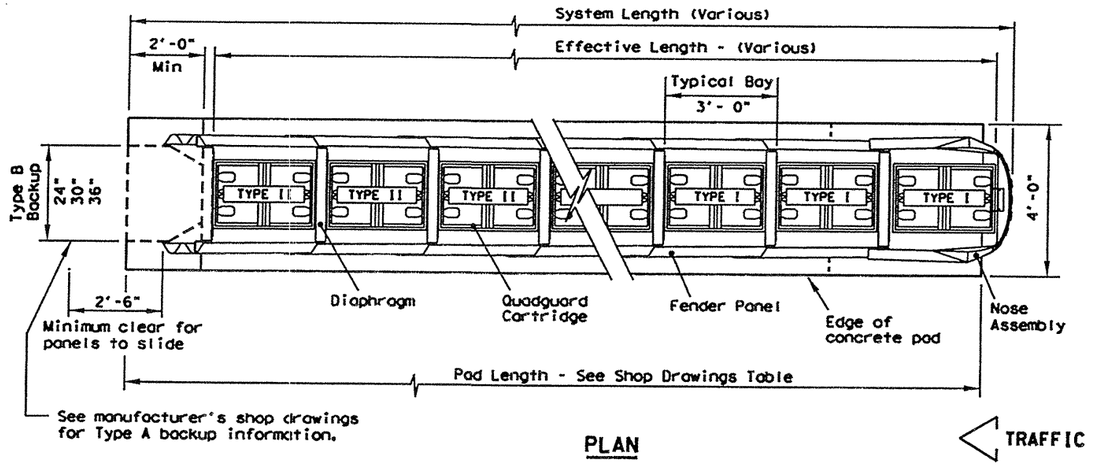
LEVELS ...ATED

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Design Division (Roadway)

CONCRETE CURB AND CURB AND GUTTER

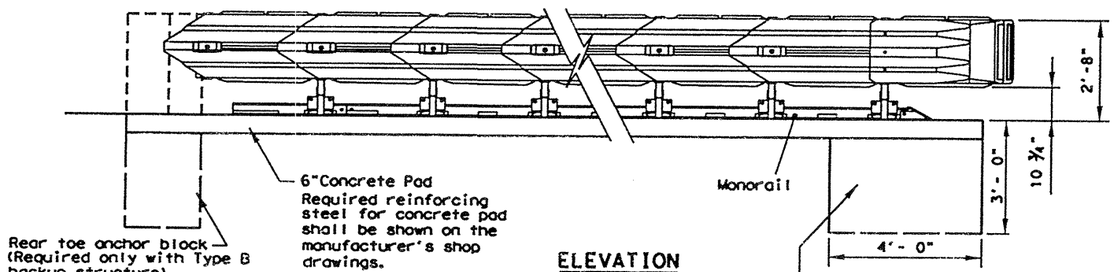
CCCG-01

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©TxDOT 1995	DIST	FEDERAL AID PROJECT			SHEET
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	Rockwall		0009	12	073	



PLAN

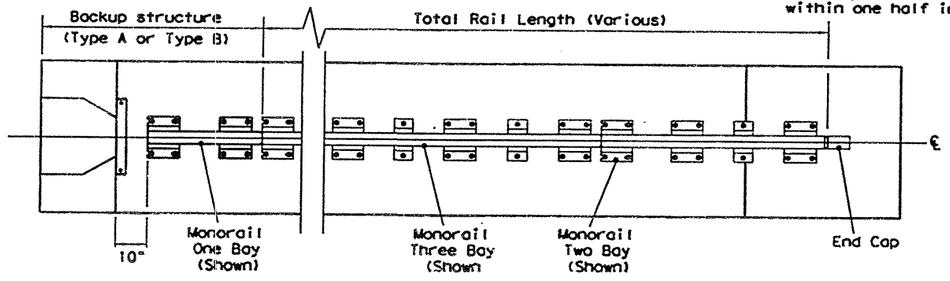
TRAFFIC



ELEVATION

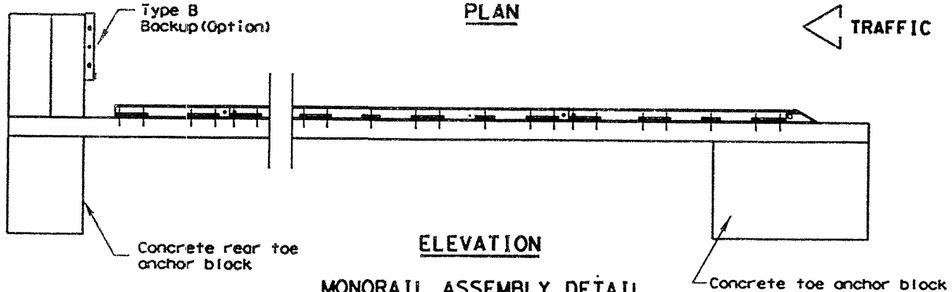
QUADGUARD SYSTEM DETAIL

Note: Monorail & Backup Assembly must be straight within one half inch.



PLAN

TRAFFIC



ELEVATION

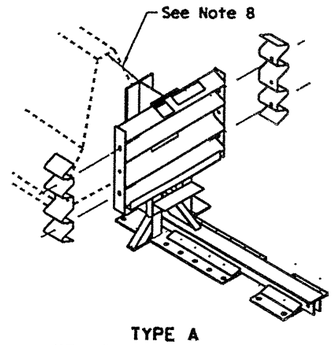
MONORAIL ASSEMBLY DETAIL

(See the manufacturer's shop drawings for monorail hardware installation.)

DESIGN SPEED (MPH)	NO. OF BAYS	UNIT EFFECTIVE LENGTH	PAD LENGTH TYPE A	PAD LENGTH TYPE B
45 OR LESS	3	11'- 8"	12'- 0"	11'- 6"
50	4	14'- 8"	15'- 0"	14'- 6"
55	5	17'- 8"	18'- 0"	17'- 6"
60	6	20'- 8"	21'- 0"	20'- 6"
65	7	23'- 8"	24'- 0"	23'- 6"
70	9	29'- 8"	30'- 0"	29'- 6"
75	10	32'- 8"	33'- 0"	32'- 6"

Additional bays may be added if special considerations warrant and site conditions will accommodate additional length.

QUAD(N) units are available in 24", 30", or 36" widths from 3 to 12 bays. Unit width, number of bays, and backup type shall be specified elsewhere in the plans.



TYPE A
TENSION STRUT BACKUP

TENSION STRUT: Consists of diagonal struts, connections, and accessories, as detailed by the Manufacturer, located at the rear of the QUAD unit. Typical application is for QUAD units attached to double-face guardrail. When used, a 4'-0"x 4'-0"x 3'-0" concrete toe anchor block shall be provided beneath the front portion of the concrete pad, except where the QUAD unit is to be placed on continuously reinforced concrete pavement or bridge deck (7" minimum, 4,000 p.s.i.) or non-reinforced concrete pavement (8" minimum, 4,000 p.s.i.)

TYPE CZ
CONSTRUCTION ZONE UNIT

CONSTRUCTION ZONE UNIT: Details for the components will be included on the manufacturer's shop drawings furnished to the Engineer. (3 to 9 Bay lengths)

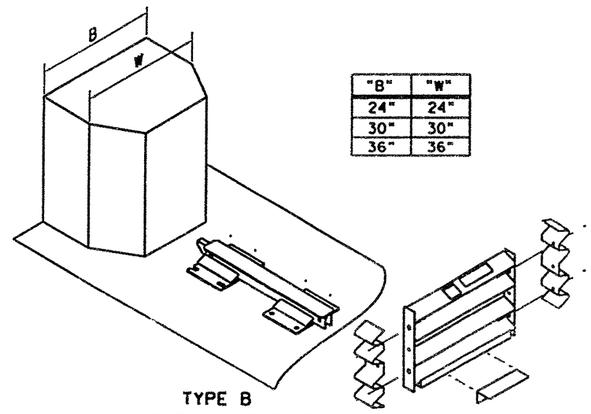
Anchorage requirements are as follows: (Type CZ only)

WITH FOUNDATION TYPE:	ANCHOR WITH:
Minimum six inch portland cement concrete pad	MP-3 polyester anchoring system with 7" studs, 5.5" embedment
Minimum three inch asphaltic concrete over minimum three inch portland cement concrete	MP-3 polyester anchoring system with 18" studs, 16.5" embedment
Minimum six inch asphaltic concrete over minimum six inch compacted base	MP-3 polyester anchoring system with 18" studs, 16.5" embedment
Minimum eight inch asphaltic concrete	MP-3 polyester anchoring system with 18" studs, 16.5" embedment

If the unit is anchored to asphaltic concrete, it should be relocated to fresh, undisturbed asphalt and re-anchored after each impact to ensure adequate future performance. A zero clearance between the backup and barrier wall is recommended in no case should this distance exceed 7 inches.

GENERAL NOTES

1. For bi-directional traffic, appropriate transition panels will be required.
2. Details of components for the QUAD and backups and reinforcing details will be shown on the manufacturer's shop drawings furnished to the Engineer.
3. Concrete shall be class "S" with a minimum compressive strength of 4,000 p.s.i.
4. If the cross-slope varies more than 2% over the length of the system, the concrete pad will require levelling. Maximum permissible cross-slope is 8%.
5. The installation area should be free from curbs, elevated objects, or depressions.
6. The QUAD system should be approximately parallel with the barrier or ℄ of merging barriers.
7. Unit width selected should be adequate to protect an errant vehicle travelling at 15 degrees to the roadway from the face or corner of the fixed object.
8. For the permanent steel backup, (Type A) the distance between the back of backup and the barrier wall should not exceed 7 inches in any case.



"B"	"W"
24"	24"
30"	30"
36"	36"

TYPE B
CONCRETE BACKUP

CAST-IN-PLACE CONCRETE WALL BACKUP: If cast-in-place structures such as bridge parapets, columns, or special walls are used as backup structures, then intermediate walls shall be provided between the structures and the QUAD unit. Intermediate walls shall be equal in height and width to the QUAD unit and reinforced with a steel cage. A cast-in-place transition section from concrete barrier may be used. Reinforcing steel should transition from the standard barrier section to the standard backup section. Details for the intermediate walls, cast-in-place transition sections, or other modifications will be shown elsewhere in the plans. Concrete wall backups may be used on continuously reinforced concrete pavement pavement or bridge deck (7" minimum, 4,000 p.s.i.)or non-reinforced concrete pavement (8" minimum, 4,000 p.s.i.) in those cases, all vertical steel will be doweled (5 inch minimum) into existing decks or located and placed prior to pouring proposed decks as approved by the Engineer.

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LEVEL SPLAYED

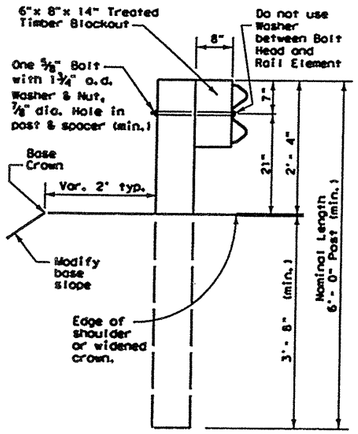
Texas Department of Transportation
Design Division (Roadway)

QUADGUARD SYSTEM (NARROW)

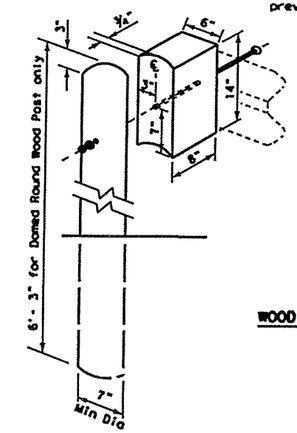
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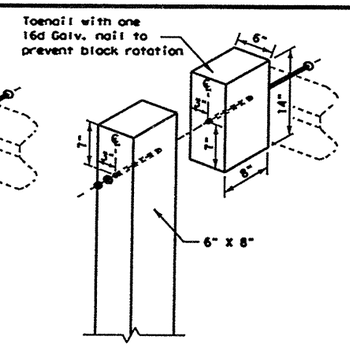
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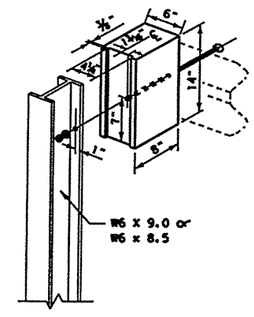
TYPICAL POST



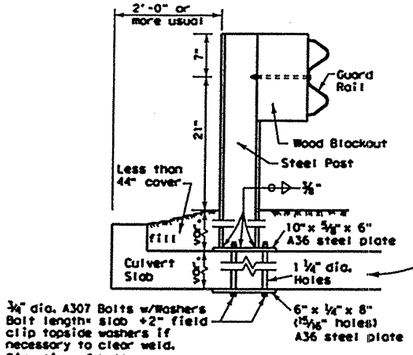
WOOD BLOCKOUT TO ROUND WOOD POST DETAIL



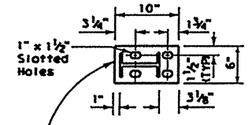
WOOD BLOCKOUT TO RECTANGULAR WOOD POST DETAIL

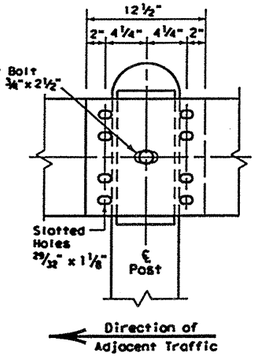


WOOD BLOCKOUT TO STEEL POST DETAIL

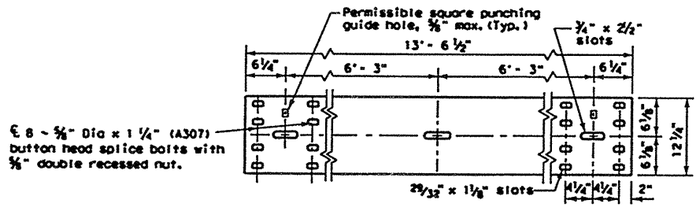


LOW FILL CULVERT POST MOUNTING OPTION





RAIL SPLICE

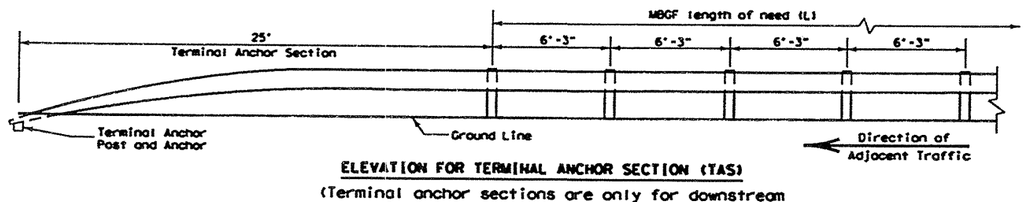


ELEVATION OF NOMINAL 12 1/2 FOOT GUARDRAIL

(25 foot sections may also be supplied)

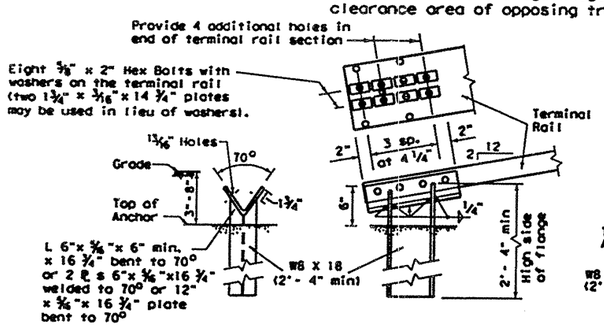
GENERAL NOTES

1. The exact position of guard fence shall be as shown elsewhere on the plans or as directed by the Engineer. Guard fence shall be transitioned to a smooth connection with other guard fence or structure railing as shown elsewhere on plans.
2. Rail element shall meet all requirements of AASHTO M-180 except as modified on the plans. The terminal connectors shall be of the same material, but shall not be less than 10 gauge. Contractor shall verify that the locations of bolt holes match those in the Terminal Connector prior to ordering of materials.
3. Unless otherwise shown in the plans, guard fence placed in the vicinity of curbs shall be blocked out so that the face of curb is located directly below or behind the face of the blockout. Rail placed over curbs shall be installed so that the post bolt is located approximately 21-inches above the gutter pan or roadway surface.
4. Unless otherwise shown in the plans, MBGF shall be placed with the face of rail directly above the shoulder edge (or curbface) except for upstream end treatments.
5. At the option of the Contractor, the rail elements for the guard fence may be furnished in either 12 ½ or 25 foot nominal lengths with post bolt slots for connection to posts.
6. The terminal anchor post shall be set in Class "A" concrete in (unless otherwise shown on plans) in accordance with Item, "Portland Cement Concrete". Concrete shall be subsidiary to the bid item requiring construction of the terminal rail section and anchorage system.
7. An anchor other than to a terminal anchor post shall consist of a connection similar to the rail splice or similar to the terminal connector.
8. Galvanized washers used with the eight 5/8" splice bolts and nuts that are provided for terminal connectors and/or terminal anchor posts shall be 1 3/4"x 3"x 3/16", or 1" i.d. and 2" o.d. x 0.134" (ANSI B27.2) narrow Type A plain washers.
9. Special fabrication will be required at installations having a curvature of less than 150' radius.
10. Button head post bolts (A307) shall be of sufficient length to extend through the full thickness of the nut and no more than 3/4" beyond it. Button head splice bolts (A307) are 5/8"x 1 1/4" with a 5/8" double recessed nut. Fittings (bolts, nuts, and washers) shall be in accordance with Item, Metal for Structures". Fittings shall be subsidiary.
11. Crown will be widened to accommodate guard fence.
12. If guardrail is placed on a side slope away from the pavement edge, then the slope rate between the edge of the pavement and the face of the barrier will be 1V:10H or flatter.
13. Posts shall not be set full depth in concrete.
14. Where solid rock is encountered or where shown on the plans, the diameter of the holes shall be approximately 12 inches, the backfilling shall be with a cohesionless material, and embedment depth shall be 1'-6" or more as directed by the Engineer.
15. Unless otherwise directed by the Engineer, a composite material post and/or blockout from the Department approved list of suppliers may be substituted for a post and/or blockout of similar dimensions. The list of approved suppliers of posts and blockouts will be maintained by the Construction Division, TxDOT.

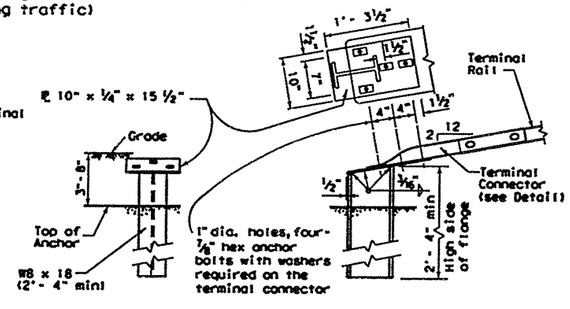


ELEVATION FOR TERMINAL ANCHOR SECTION (TAS)

(Terminal anchor sections are only for downstream guardrail end anchorage usage outside the horizontal clearance area of opposing traffic)

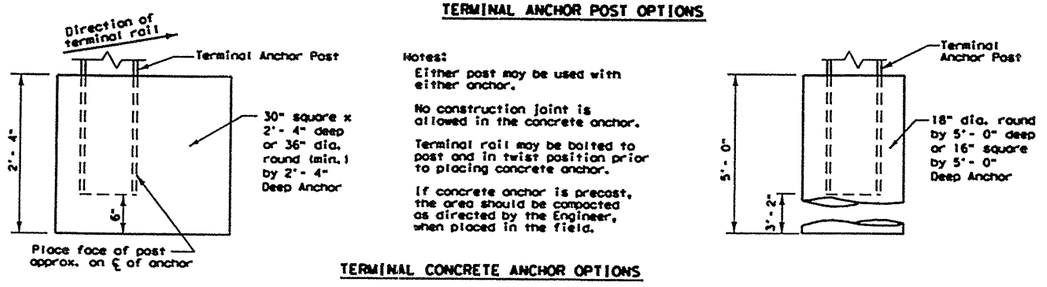


Note: This post requires four additional holes (shop or field) in the terminal rail member with eight 5/8" bolts and washer plates as shown for attachment.

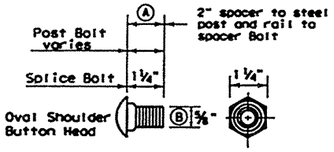


Note: This optional post requires the use of the 10 ga. terminal connector with four 7/8" hex bolts for attachment to the anchor post.

TERMINAL ANCHOR POST OPTIONS



TERMINAL CONCRETE ANCHOR OPTIONS

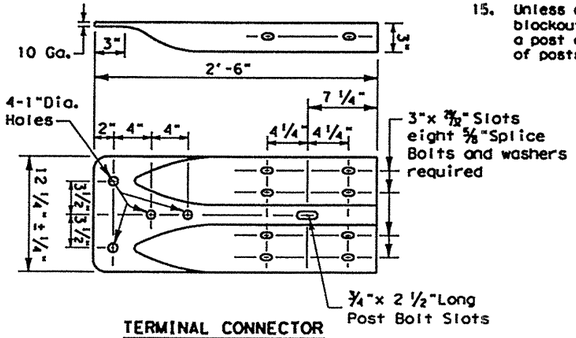


SPLICE BOLT

Ⓐ 1 ¼" spacer to steel post hex bolt, 2" rail to spacer button head bolt.

Ⓑ (⅝" hex bolts required for terminal connector)

TERMINAL CONNECTOR : The terminal connector may also be used on the MBGF(TL2) transition (See MBGF(TL2) Standard Sheet), or on the downstream end of a concrete rail located outside the horizontal clearance area of opposing traffic. (See BED Standard Sheet)



TERMINAL CONNECTOR

R = Radius
D = Diameter

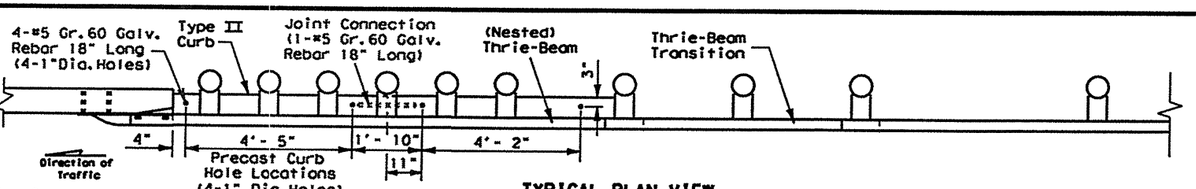
Texas Department of Transportation
Design Division (Roadway)

METAL BEAM GUARD FENCE

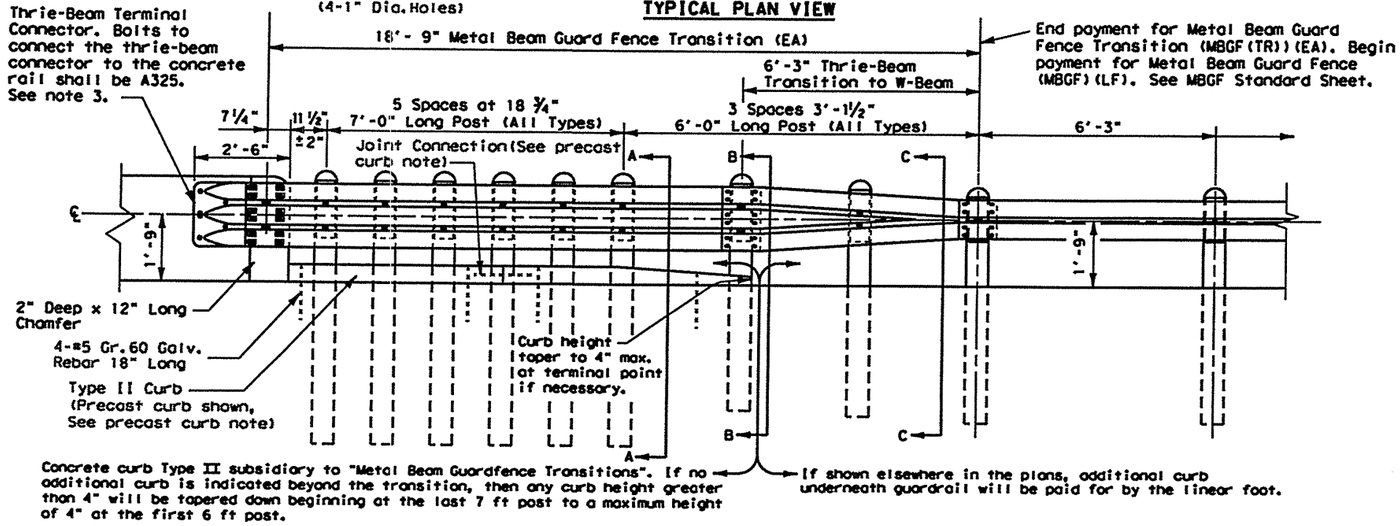
MBGF-03A

FILE: mbgf03a.dgn	DN: MAM	CK: MAM	DW: RAR	CK: MAM	
©TxDOT JULY 1994	DIST	FEDERAL AID PROJECT			SHEET
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	Rockwall		0009	12	073

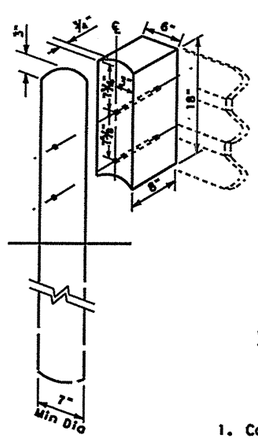
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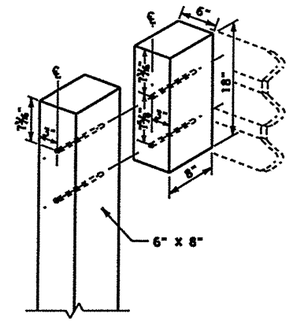
TYPICAL PLAN VIEW



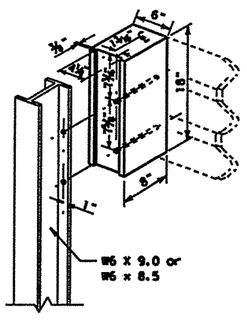
TYPICAL ELEVATION VIEW



WOOD BLOCKOUT TO ROUND WOOD POST DETAIL



WOOD BLOCKOUT TO RECTANGULAR WOOD POST DETAIL

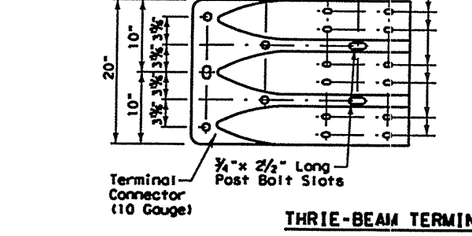


WOOD BLOCKOUT TO STEEL POST DETAIL

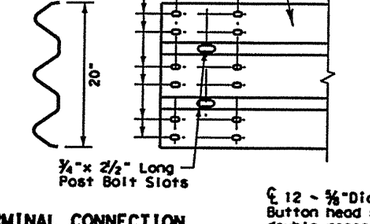
GENERAL NOTES

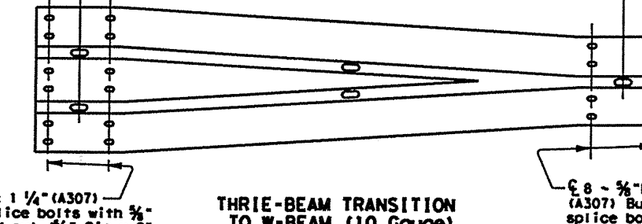
1. Concrete curb may be cast-in-place or precast as shown on this sheet. When used in conjunction with thrie-beam guardfence transitions, curb shall be Type II (typically 5 ¾" height above surface; See CCCG standard sheet) unless otherwise shown in the plans. If other curb heights are shown in the plans in conjunction with the transition, this curb height may be from 4" to 8" with a relatively vertical face. Concrete curbs shall be continuous to the seventh post. Any drainage cuts must be located past this post.
2. The type of post (round wood post, rectangular wood post, or steel post) will be shown elsewhere in the plans. The exact position of transitions shall be shown elsewhere in the plans or as directed by the Engineer. See MBGF standard sheet for additional details and information.
3. Rail element shall meet all requirements of AASHTO M-180 except as modified on the plans. The terminal connector and the thrie-beam transition to w-beam shall be of the same material, but shall not be less than 10 gauge.

   Contractor shall verify that the locations of bolt holes match those in the Terminal Connector prior to ordering of materials.
4. Unless otherwise shown in the plans, transitions shall be placed with the blockout face in front of or directly above the curbface.
5. Galvanized washers used with the ⅝" splice bolts and nuts that are provided for terminal connectors shall be (FWR03)(3"x 1 ¾"x ⅜" with 1"x ¾" slotted hole).
6. Button head post bolts (A307) shall be of sufficient length to extend through the full thickness of the nut and no more than ¾" beyond it. Button head spice bolts (A307) are ⅝" x 1 ¼" with a ⅝" double recessed nut. Galvanized fittings (bolts, nuts, and washers) shall be in accordance with Item, "Metal For Structures". Fittings shall be subsidiary to the bid item requiring construction of transition.
7. Crown will be widened to accommodate transitions.
8. Where solid rock is encountered or where shown on the plans, the diameter of the holes shall be approximately 12 inches, the backfilling shall be with a cohesionless material, and embedment depth shall be 1'- 6" or more as directed by the Engineer.
9. Posts shall not be set full depth in concrete.
10. Unless otherwise directed by the Engineer, a composite material post and/or blockout from the Department approved list of suppliers may be substituted for a post and/or blockout of similar dimensions. The list of approved suppliers of posts and blockouts will be maintained by the Construction Division, TxDOT.
11. Refer to MBGF Standard Sheet for additional details.

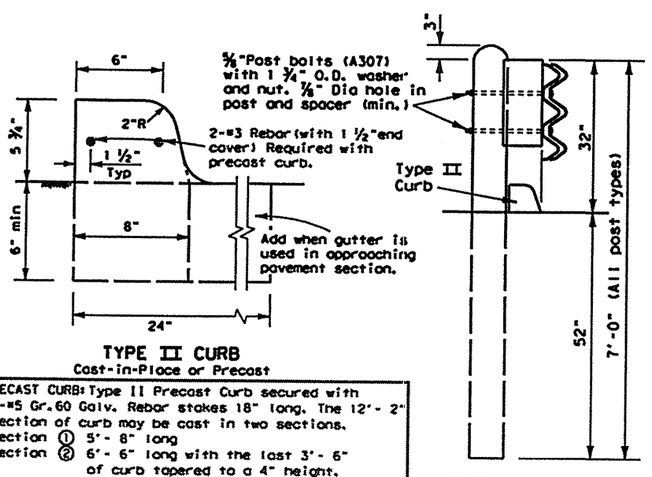


THRIE-BEAM TERMINAL CONNECTION



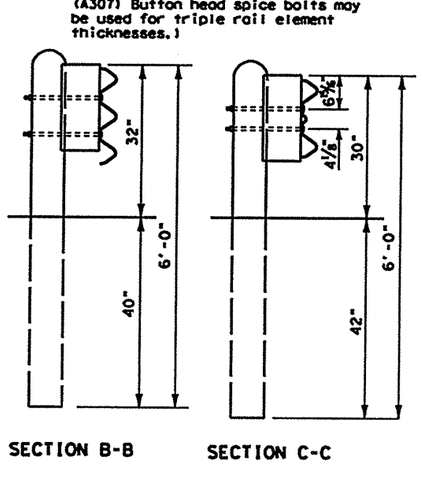


THRIE-BEAM TRANSITION TO W-BEAM (10 Gauge)



TYPE II CURB
Cast-in-Place or Precast

SECTION A-A

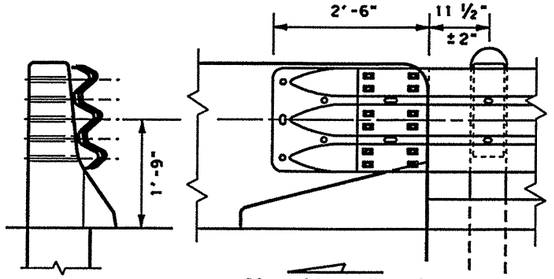


SECTION B-B

SECTION C-C

TRANSITION SECTIONS

PRECAST CURB: Type II Precast Curb secured with 4-#5 Gr. 60 Galv. Rebar stakes 18" long. The 12'- 2" section of curb may be cast in two sections.
Section ① 5'- 8" long
Section ② 6'- 6" long with the last 3'- 6" of curb tapered to a 4" height.
The Joint Connection is two 9" long 1" dia female ends connected with 1-#5 Gr. 60 Galv. Rebar 18" long.



CONNECTION TO T5, SSTR, & HT SERIES BRIDGE RAILS AND CTB & SSCB TRAFFIC BARRIERS

(24) Washers (FWR03)(3"x 1 ¾"x ⅜" with 1"x ¾" slotted hole) under the head and nut will be required for the terminal connector to nested thrie beam. (12) 2" x ⅝" splice bolts for these series rails.
See typical views and T5, SSTR, HT, CTB & SSCB Series Standard Sheets for additional details.

If connecting to existing Bridge Rails. Contact the Bridge Division for proper retrofit details.

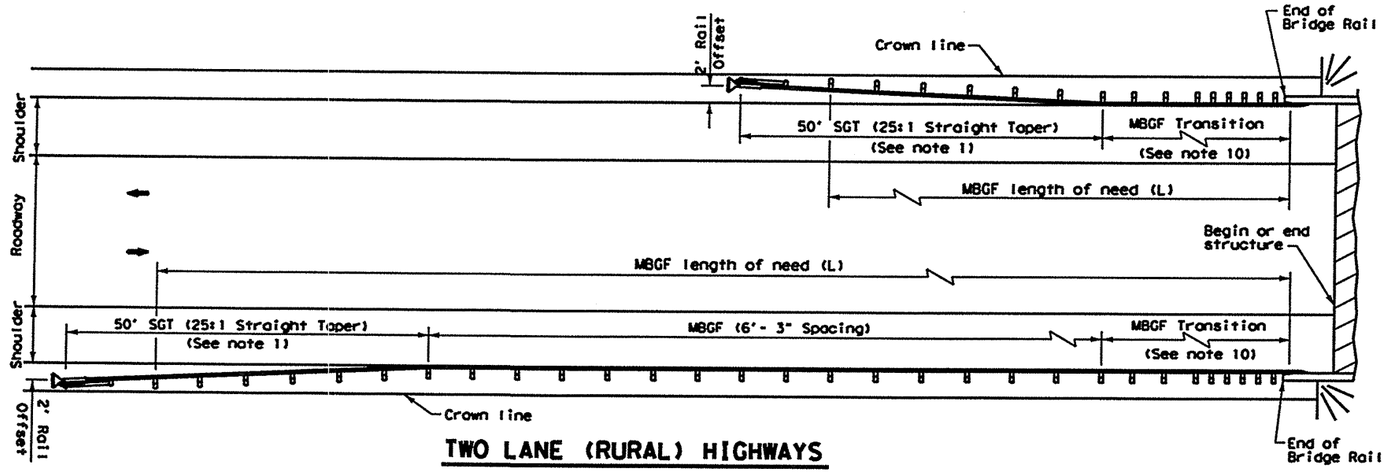
Texas Department of Transportation
Design Division (Roadway)

METAL BEAM GUARD FENCE TRANSITION

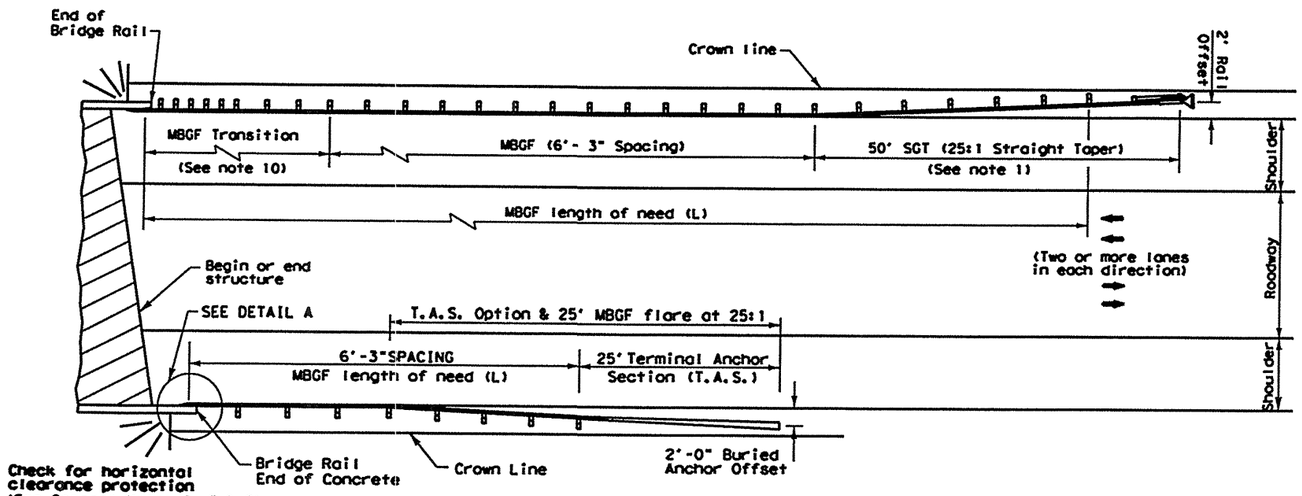
MBGF(TR)-05

FILE: mbgftr05.dgn	DN: MAM	CK: MAM	DW: BGD	CK:
©TxDOT December 2001	DIST	FEDERAL AID PROJECT		SHEET
REVISIONS				17D
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	Rockwall	0009	12	073	

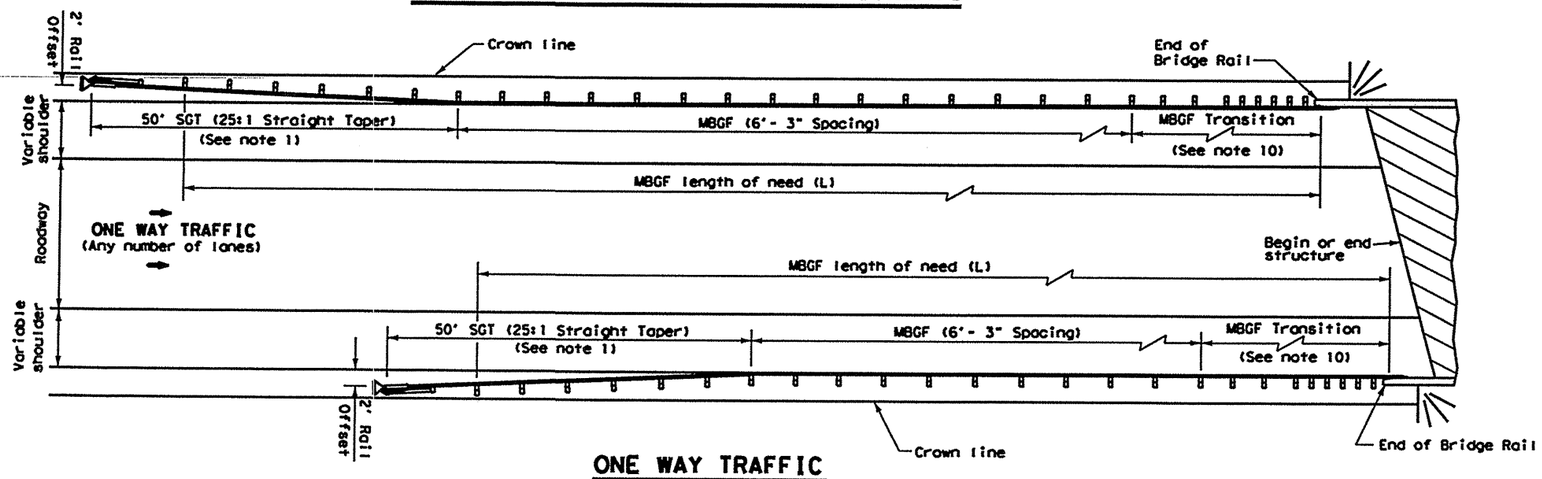
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TWO LANE (RURAL) HIGHWAYS



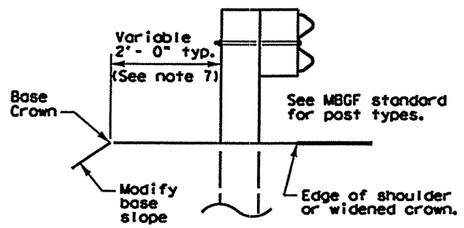
MULTILANE UNDIVIDED (RURAL) HIGHWAYS



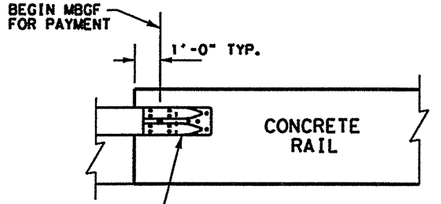
ONE WAY TRAFFIC

GENERAL NOTES

1. For more detail: See MBGF, SGT, and MBGF transition standard sheets.
2. Quantities of metal beam guard fence (MBGF) at individual bridge ends are shown elsewhere in plans.
3. Use average daily traffic (ADT) for the current year to determine MBGF length of need in accordance with the Roadway Design Manual unless otherwise specified. Where significant traffic volume growth is anticipated on low volume (0-750 ADT) highways, use length determinations for the higher volume category.
4. MBGF may not be required to shield departure end of bridge unless other obstacles within the horizontal clearance limits or opposing traffic indicate a MBGF consideration.
5. Terminal anchor sections (T.A.S) are only for downstream end anchorage usage outside the horizontal clearance area of opposing traffic.
6. Direct connection of MBGF (at 6'-3" post spacing without transition) to concrete rail is only for downstream rail connections outside the horizontal clearance area of opposing traffic.
7. The crown will be widened to accommodate MBGF. Typically the crown line should be 2'- 0" from the back of the MBGF post. This applies to new construction on new alignment or where existing roadway cross section is to be widened to increase roadway width. This does not apply to rehabilitation work where existing roadway crown width is to be retained (See Typical Cross Section at MBGF).
8. For restrictive width bridges, a 25' tangent section of MBGF should connect to the wingwall. The adjoining MBGF that lies within the roadway (Lanes & Shoulder area) crown should be flared at the rate of 25:1 (Longitudinal : Lateral). Length at these bridges should be determined as stated above or the length necessary to locate the terminal end at a 2'- 0" offset from shoulder edge, whichever is greater.
9. Variations in post spacings and/or the use of spacer blocks or shims may be required by the Engineer in order to accommodate the required rail connection to existing structures.
10. Transition length and post spacing will vary depending on the transition type. Transition type will be shown elsewhere in the plans.



TYPICAL CROSS SECTION AT MBGF



DETAIL A

Texas Department of Transportation
Design Division (Roadway)

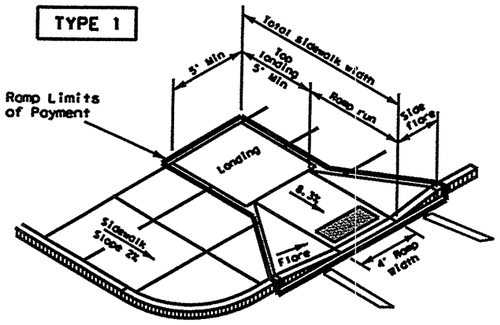
BRIDGE END DETAILS

BED-03

FILE: bed03.dgn	DN: RM	CK: RM	DW: CL	CK: RM		
©TxDOT SEPTEMBER 1991	DIST	FEDERAL AID PROJECT			SHEET	
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	Rockwall		2009	12	073	

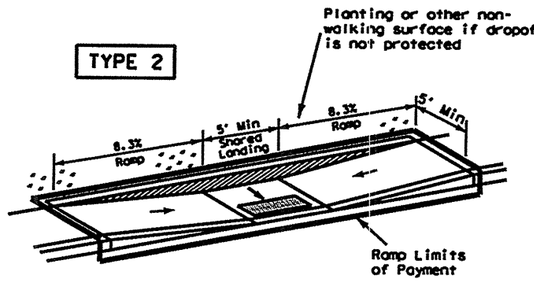
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TYPE 1



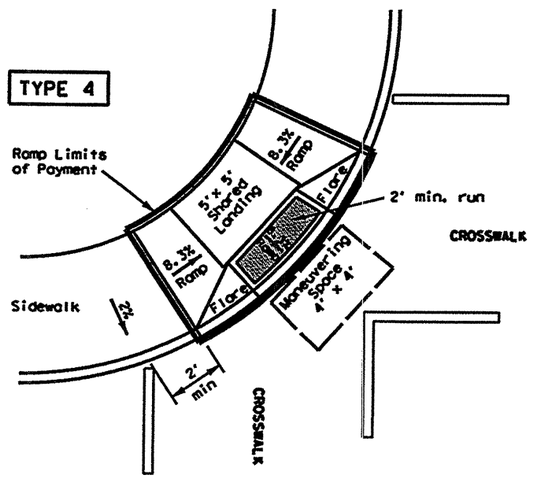
PERPENDICULAR CURB RAMP

TYPE 2



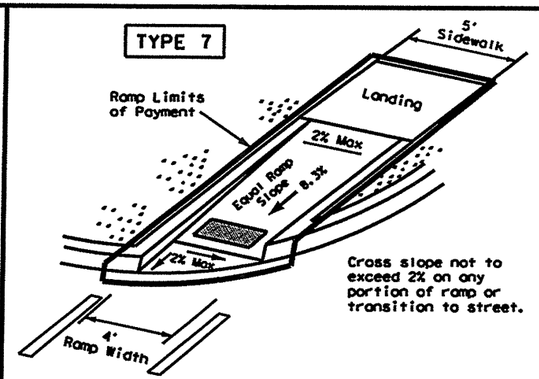
PARALLEL CURB RAMP
(Use only where water will not pond in the landing.)

TYPE 4



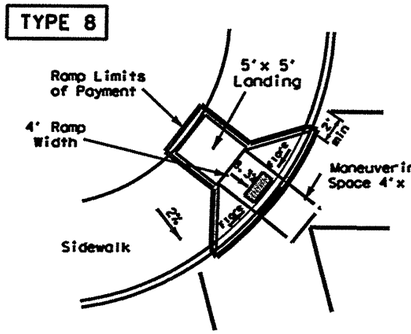
DIAGONAL COMBINATION CURB RAMP
Perpendicular to the Tangent of the Curb Radius and Contained in Crosswalk

TYPE 7



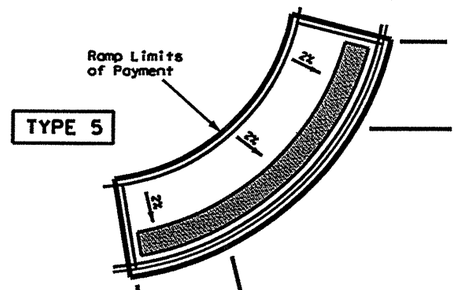
DIRECTIONAL RAMP WITHIN RADIUS
(Sidewalk set back from curb)

TYPE 8



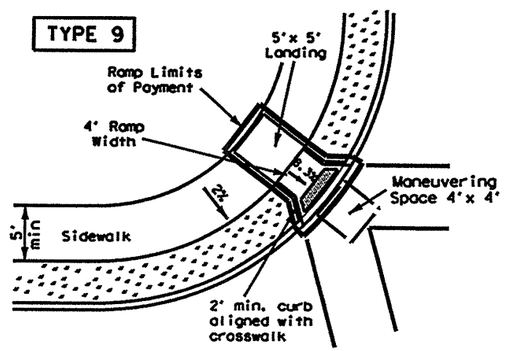
DIAGONAL CURB RAMP (FLARED SIDES)

TYPE 5



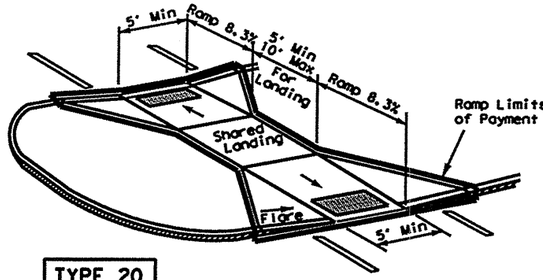
FLUSH LANDING

TYPE 9

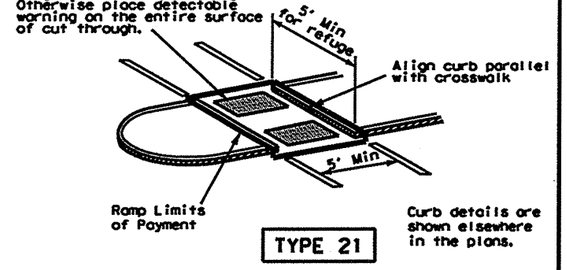


DIAGONAL CURB RAMP (RETURNED CURB)

TYPE 20



TYPE 21

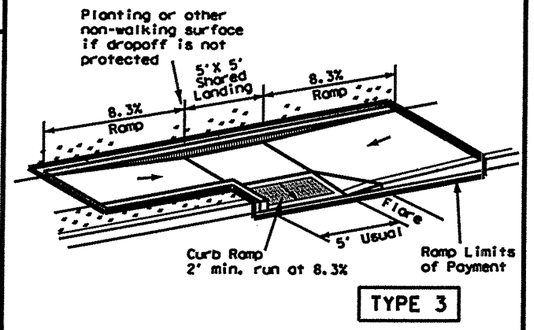


Curb details are shown elsewhere in the plans.

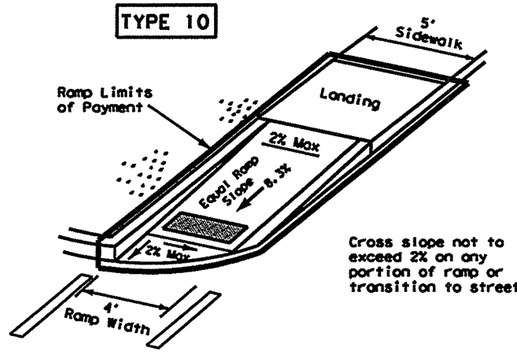
CURB RAMPS AT MEDIAN ISLANDS

Planting or other non-walking surface if dropoff is not protected

TYPE 3



TYPE 10

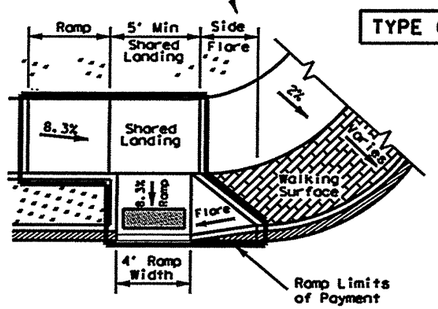


Cross slope not to exceed 2% on any portion of ramp or transition to street.

DIRECTIONAL RAMP WITHIN RADIUS
(Sidewalk adjacent to curb)

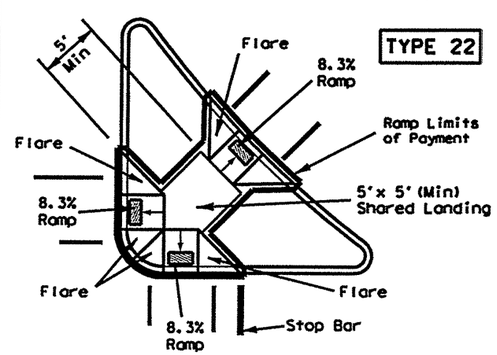
Planting or other non-walking surface if dropoff is not protected

TYPE 6



COMBINATION CURB RAMPS

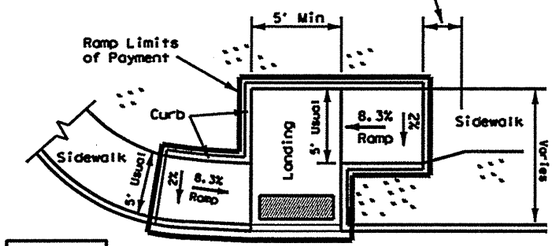
TYPE 22



COMBINATION ISLAND RAMPS

Min. 2' taper to existing or proposed sidewalk

TYPE 11



OFFSET PARALLEL CURB RAMP

NOTES:
See General Notes on sheet 2 of 4 for more information.

" " Denotes planting or non-walking surface.

Texas Department of Transportation
Design Division (Roadway)

PEDESTRIAN FACILITIES
CURB RAMPS

PED-05

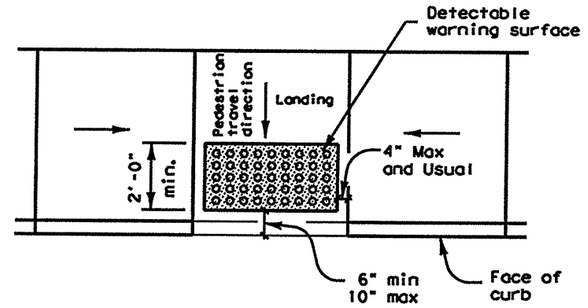
SHEET 1 OF 4

FILE: ped05.dgn	DN: EH	CK:	DW: BGD	CK:
©TxDOT March 2002	DIST	FEDERAL AID PROJECT		SHEET
REVISIONS				172
	COUNTY	CONTROL	SECT	JOB	HIGHWAY
	Rockwall	0009	12	073	

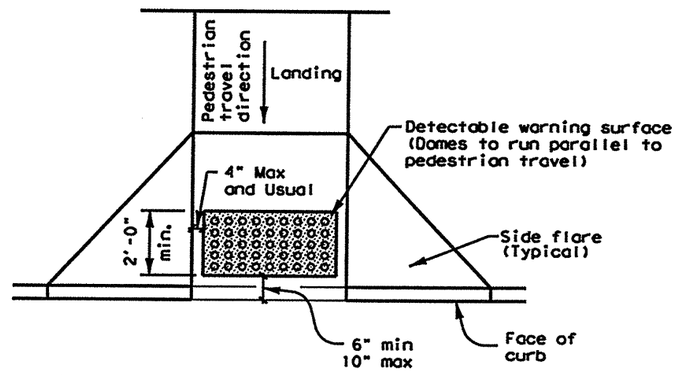
DETECTABLE WARNINGS

General Notes for Detectable Warnings

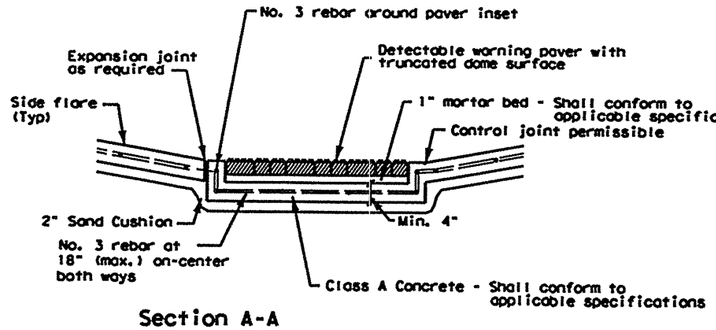
1. Curb ramps must contain a detectable warning surface that consists of raised truncated domes complying with Section 4.29 of the Texas Accessibility Standards (TAS). The surface must contrast visually with adjoining surfaces, including side flares. Furnish dark brown or dark red detectable warning surface adjacent to uncolored concrete, unless specified elsewhere in the plans.
2. Detectable warning surfaces must be slip resistant and not allow water to accumulate.
3. Align truncated domes in the direction of pedestrian travel when entering the street.
4. Shaded areas on Sheet 1 of 4 indicate the approximate location for the detectable warning surface for each curb ramp type.
5. Detectable warning surfaces shall be a minimum of 24" in depth in the direction of pedestrian travel, and extend the full width of the curb ramp or landing where the pedestrian access route enters the street.
6. Detectable warning surfaces shall be located so that the edge nearest the curb line is a minimum of 6" and a maximum of 10" from the extension of the face of curb. Detectable warning surfaces may be curved along the corner radius.
7. TxDOT maintains a list of Qualified Detectable Warning Materials. Details are provided herein for the placement of landscape pavers. For other materials, refer to the manufacturer's product manual for proper installation.



Typical placement of detectable warning surface on landing at street edge.



Typical placement of detectable warning surface on sloping ramp run.

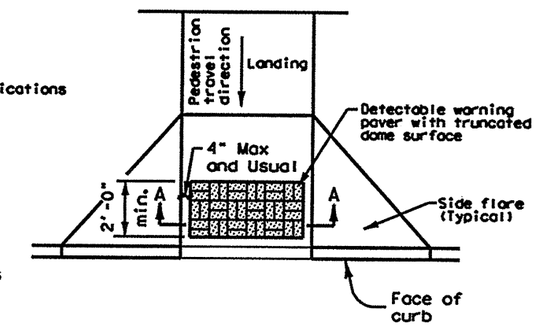


Section A-A

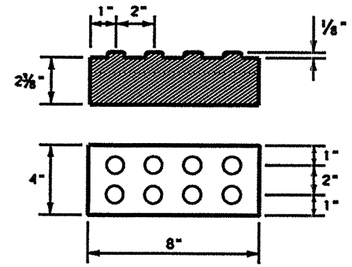
General Notes (Pavers)

Furnish detectable warning paver units meeting all requirements of ASTM C-936, C-33. Lay in a two by two unit basket weave pattern or as directed.

Lay full-size units first followed by closure units consisting of at least 25 percent of a full unit. Cut detectable warning paver units using a power saw.



Truncated Dome Pattern Curb Ramp



Detectable Warning Paver

DETECTABLE WARNING PAVER (OPTION)

Pedestrian Facilities General Notes

1. All slopes are maximum allowable. The least possible slope that will still drain properly should be used. Adjust curb ramp length or grade of approach sidewalks as directed.
2. The minimum sidewalk width is 5'. Where the sidewalk is adjacent to the back of curb, a 6' sidewalk width is encouraged. Where a 5' sidewalk can not be provided due to site constraints, a minimum 3' sidewalk with 5'x 5' passing areas at intervals not to exceed 200' is required.
3. Landings shall be 5'x 5' minimum with a maximum 2% slope in any direction.
4. Maneuvering space at the bottom of curb ramps shall be a minimum of 4'x 4' wholly contained within the crosswalk and wholly outside the parallel vehicular travel path.
5. Maximum allowable cross slope on sidewalk and curb ramp surfaces is 2%.
6. Curb ramps with returned curbs may be used only where pedestrians would not normally walk across the ramp, either because the adjacent surface is planting or other non-walking surface or because the side approach is substantially obstructed. Otherwise, provide flared sides.
7. Additional information on curb ramp location, design, light reflective value and texture may be found in the current edition of the Texas Accessibility Standards (TAS) and 16 TAC §68.102.
8. To serve as a pedestrian refuge area, the median should be a minimum of 5' wide. Medians should be designed to provide accessible passage over or through them.
9. Small channelization islands, which do not provide a minimum 5'x 5' landing at the top of curb ramps, shall be cut through level with the surface of the street.
10. Crosswalk dimensions, crosswalk markings and stop bar locations shall be as shown elsewhere in the plans. At intersections where crosswalk markings are not required, curb ramps shall be aligned with theoretical crosswalks, or as directed by the Engineer.
11. Existing features that comply with TAS may remain in place unless otherwise shown on the plans.
12. Handrails are not required on curb ramps. Provide curb ramps wherever an accessible route crosses (penetrates) a curb.
13. Curb ramps and landings shall be constructed and paid for in accordance with Item 531 "Sidewalks".
14. Separate curb ramp and landings from adjacent sidewalk and any other elements with premold or board joint of ¾" unless otherwise directed by the Engineer.
15. Provide a smooth transition where the curb ramps connect to the street.
16. Curbs shown on sheet 1 within the limits of payment are considered part of the curb ramp for payment, whether it is concrete curb, gutter, or combined curb and gutter.
17. Flare slope shall not exceed 10% measured along curb line.

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Texas Department of Transportation
Design Division (Roadway)

PEDESTRIAN FACILITIES

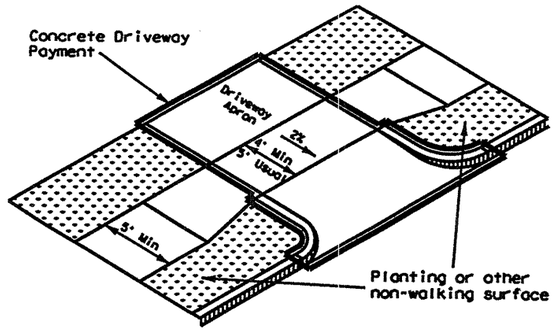
GENERAL NOTES AND DETECTABLE WARNINGS

PED-05

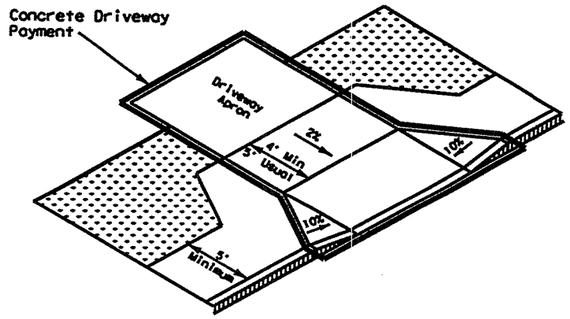
SHEET 2 OF 4

FILE: ped05.dgn	DN: EH	CK:	DW: BGD	CK:
©TxDOT March 2002	DIST	FEDERAL AID PROJECT		SHEET
REVISIONS				173
	COUNTY	CONTROL	SECT	JOB	HIGHWAY
	Nacogdoches	0009	12	519	

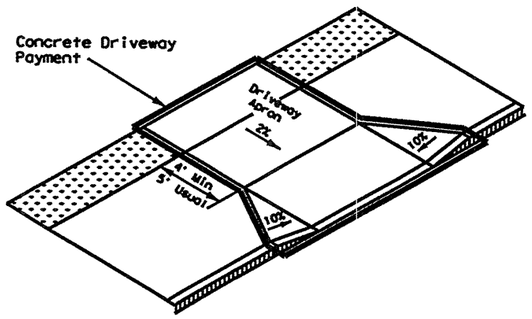
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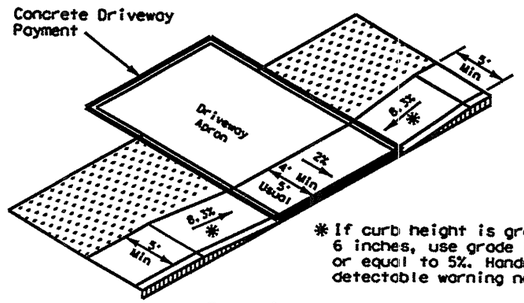
Setback sidewalk



Apron offset sidewalk



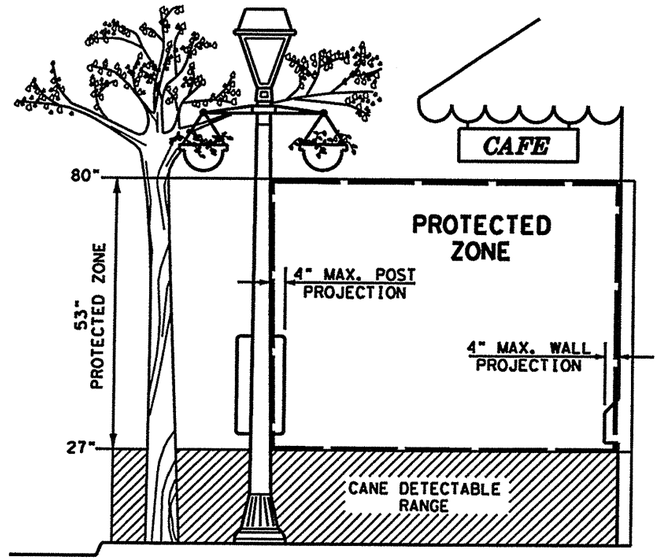
Wide sidewalk



* If curb height is greater than 6 inches, use grade less than or equal to 5%. Handrail and detectable warning not required.

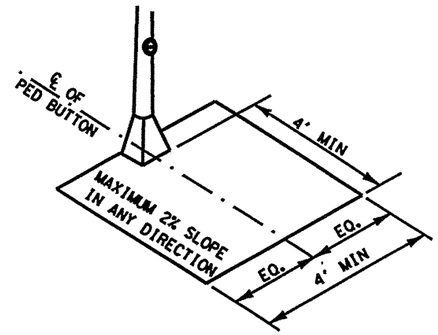
Ramp sidewalk

SIDEWALK TREATMENT AT DRIVEWAYS

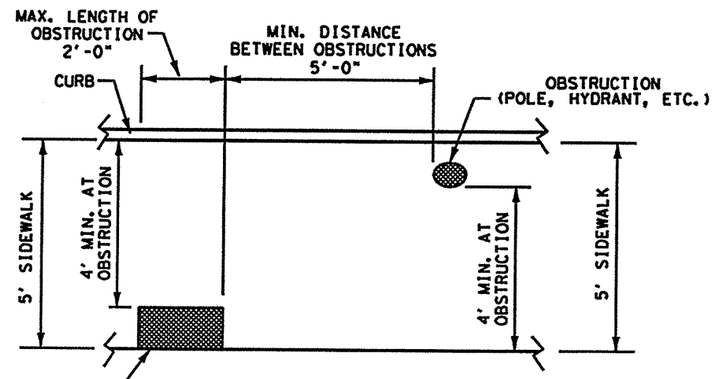


PROTECTED ZONE

In pedestrian circulation area, maximum 4" projection for post or wall mounted objects between 27"and 80" above the surface.



CLEAR GROUND SPACE CENTERED AT PEDESTRIAN PUSH BUTTON



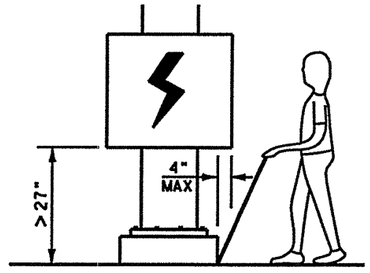
PLAN VIEW

PLACEMENT OF STREET FIXTURES

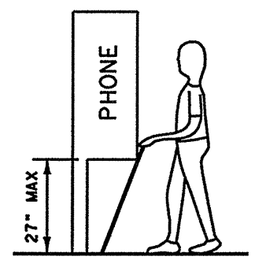
(ITEMS NOT INTENDED FOR PUBLIC USE. MINIMUM 4' x 4' CLEAR GROUND SPACE REQUIRED AT PUBLIC USE FIXTURES.)

General Notes

1. All slopes are maximum allowable. The least possible slope that will still drain properly should be used.
2. Place traffic signal or illumination poles, ground boxes, controller boxes, signs, drainage facilities and other items so as not to obstruct the accessible route or clear ground space.
3. Usual sidewalk cross slope equals 1.5%. The maximum allowable sidewalk cross slope equals 2%.
4. Street grades and cross slopes shall be as shown elsewhere in the plans.
5. Existing features that comply with TAS may remain in place unless otherwise shown on the plans.
6. Changes in level greater than ¼inch are not permitted.
7. The least possible grade should be used to maximize accessibility. The running slope of sidewalks and crosswalks, within the public right of way, may follow the grade of the parallel roadway. Where a continuous grade greater than 5% must be provided, handrails may be desirable on one or both sides of the sidewalk to improve accessibility. Handrails may also be needed to protect pedestrians from potentially hazardous conditions. If provided, handrails must comply with TAS 4.8.5.
8. Handrail extensions shall not protrude into the usable landing area or into intersecting pedestrian routes.
9. Driveways and turnouts shall be constructed and paid for in accordance with Item, "Driveways and Turnouts". Sidewalks shall be constructed and paid for in accordance with Item, "Sidewalks".
10. Sidewalk details are shown elsewhere in the plans.



When an obstruction of a height greater than 27" from the surface would create a protrusion of more than 4" into the pedestrian circulation area, construct additional curb or foundation at the bottom to provide a maximum 4" overhang.



Protruding objects of a height ≤ 27" are detectable by cane and do not require additional treatment.

DETECTION BARRIER FOR VERTICAL CLEARANCE < 80"

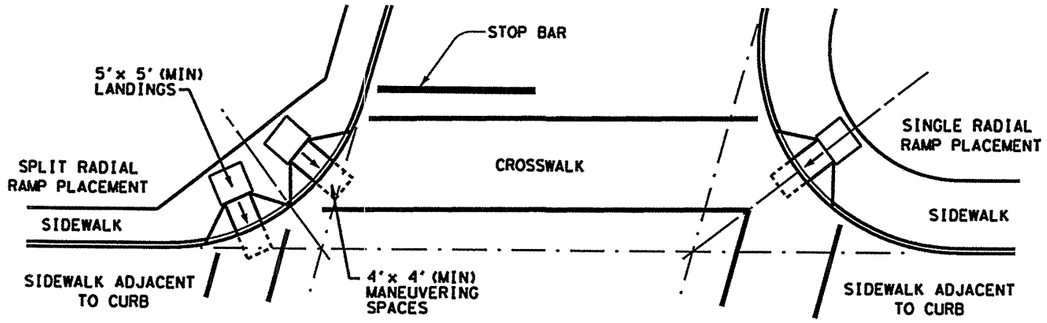
Texas Department of Transportation
Design Division (Roadway)

PEDESTRIAN FACILITIES
SIDEWALKS

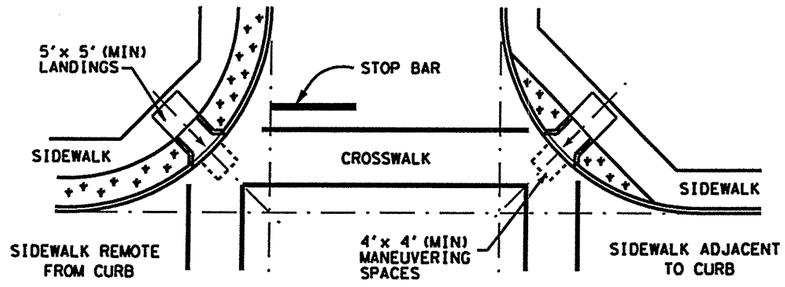
PED-05

SHEET 3 OF 4

FILE: ped05.dgn	DN: EH	CK:	DW: BGD	CK:	
©TxDOT March 2002	DIST	FEDERAL AID PROJECT			SHEET
REVISIONS					174
	COUNTY	CONTROL	SECT	JOB	HIGHWAY
	Rockwall	0009	16	035	



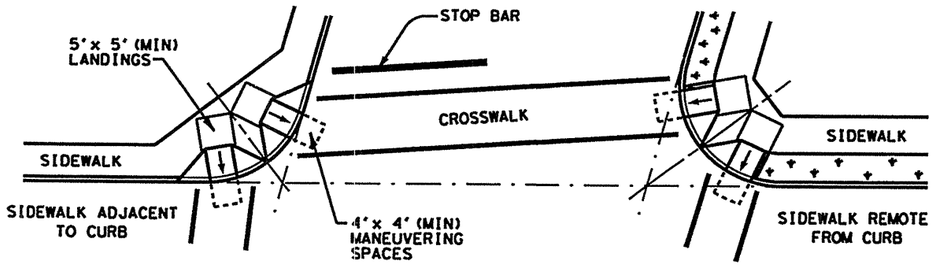
SKEWED INTERSECTION WITH "LARGE" RADIUS



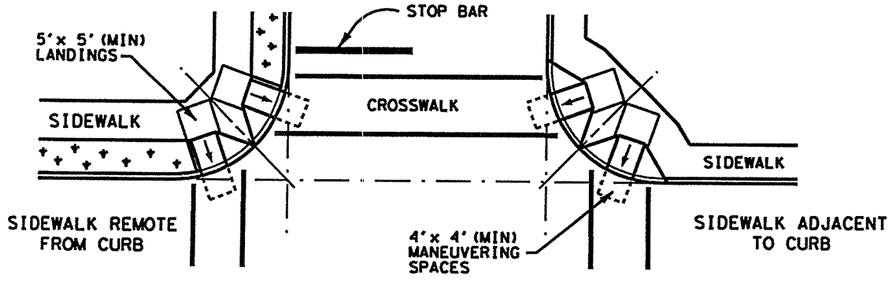
NORMAL INTERSECTION WITH "LARGE" RADIUS

General Notes

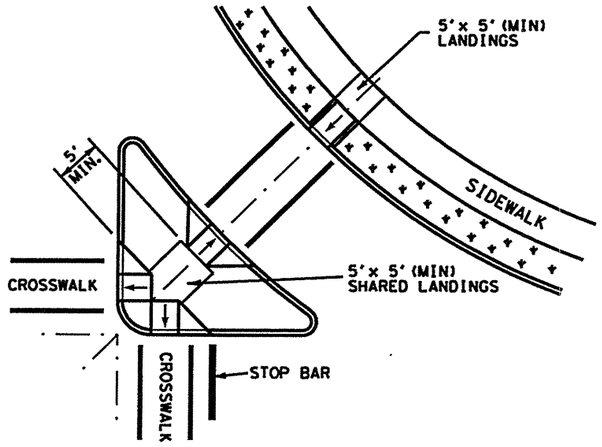
1. Street grades and cross slopes shall be as shown elsewhere in the plans.
2. Ramps are shown here without detectable warnings for simplicity. Detectable warnings are required at the locations shown on the PED Standard (Sheets 1 and 2 of 4) and in accordance with the details shown below.
3. Small channelization islands, which can not provide a minimum 5' x 5' landing at the top of ramps, shall be cut through level with the surface of the street.



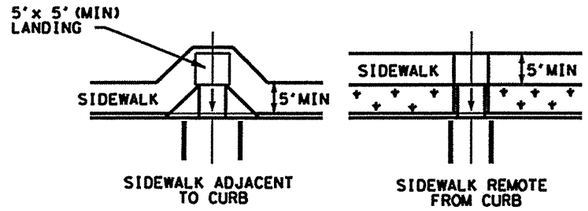
SKEWED INTERSECTION WITH "SMALL" RADIUS



NORMAL INTERSECTION WITH "SMALL" RADIUS



AT INTERSECTION
W/FREE RIGHT TURN & ISLAND



MID-BLOCK PLACEMENT
PERPENDICULAR RAMPS

TYPICAL CROSSING LAYOUTS

SEE SHEET 1 OF 4 FOR DETAILS AND DIMENSIONS

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Texas Department of Transportation
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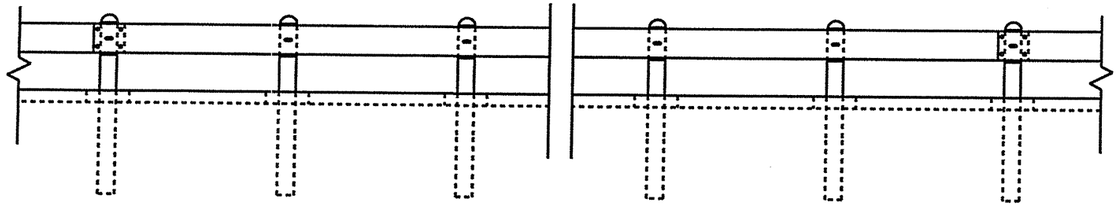
PEDESTRIAN FACILITIES

INTERSECTION LAYOUTS

PED-05

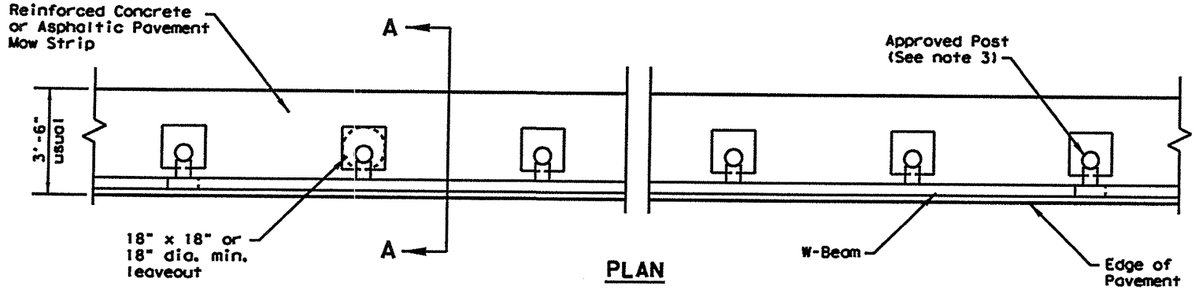
SHEET 4 OF 4

FILE: ped05.dgn	DN: EH	CK:	DW: BGD	CK:	
©TxDOT March 2002	DIST	FEDERAL AID PROJECT			SHEET
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	Blackwell				17073	

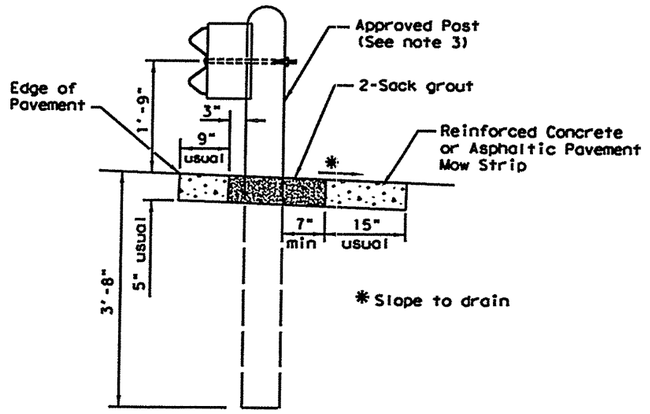


ELEVATION

TRAFFIC

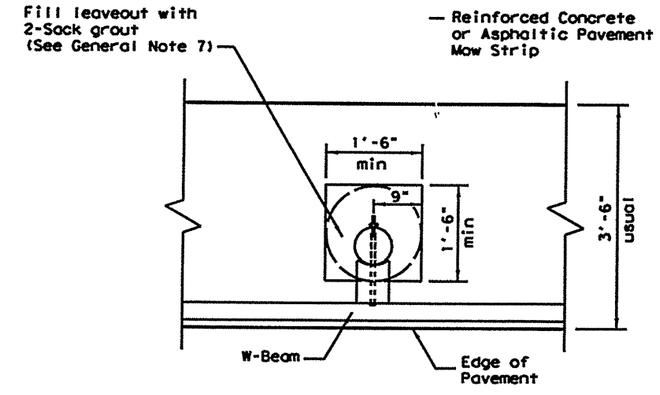


PLAN



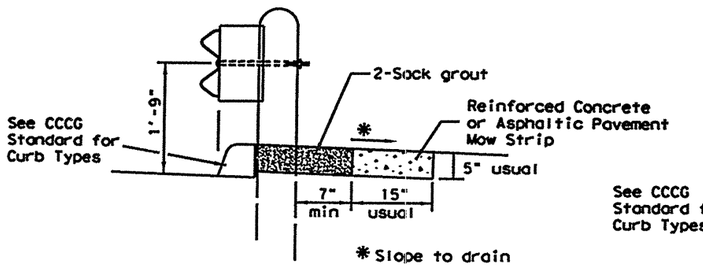
SECTION A-A

Typical



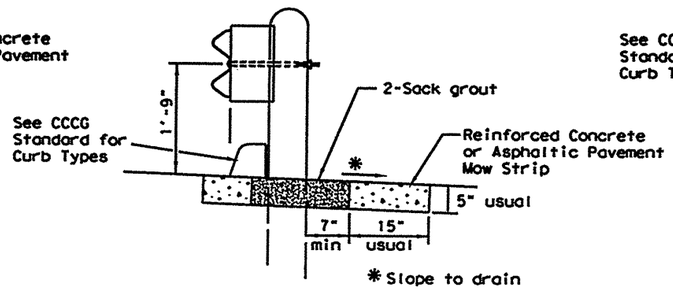
MOW STRIP DETAIL

Reinforced Concrete or Asphaltic Pavement Mow Strip with 18" x 18" or 18" dia. minimum leaveout.



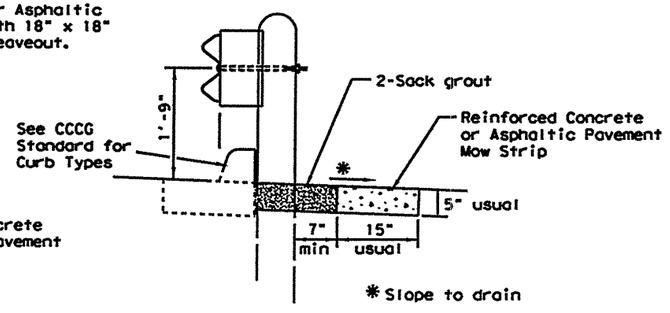
CURB OPTION (1)

Shown at curbed location



CURB OPTION (2)

Curb shown on top of mow strip



CURB OPTION (3)

GENERAL NOTES

1. Mow strips shall be asphaltic pavement or concrete riprap as shown on the plans and will be paid for under the pertinent bid item of work. Asphaltic payment shall meet the requirements of and be placed in accordance with the pertinent bid item as shown on the plans. Concrete riprap shall be placed in accordance with Item 432, "Riprap".
2. The leaveout behind the post shall be a minimum of 7".
3. The type of approved post will be shown elsewhere in the plans. See the applicable standard sheets for additional details and information.
4. Other curb placement options may be used. Curbs are not considered part of the mow strip and will be paid for under other pertinent bid item.
5. Depth of mow strip may vary, (5" usual, 8" maximum).
6. The limits of payment for asphaltic pavement or concrete riprap will include leaveouts for post.
7. The leave outs shall be filled with no more than a 2-sack grout mixture and placed in accordance with Section 421.2(8), "Mortar and Grout". Payment for furnishing and placing the grout mixture will be considered subsidiary to the pay item of asphaltic pavement or concrete riprap.

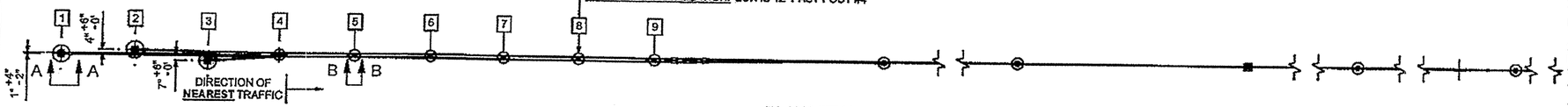
DISCLAIMER:
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Texas Department of Transportation
Design Division (Roadway)

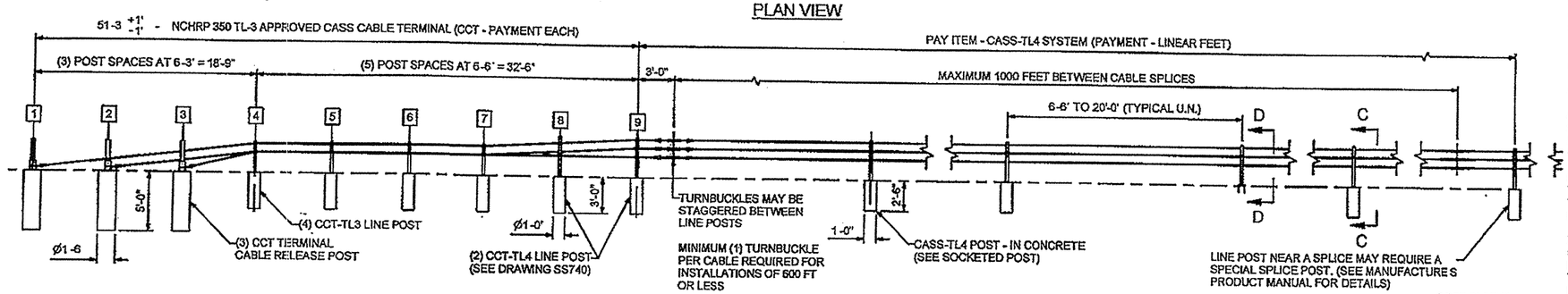
MOW STRIP

MS-03

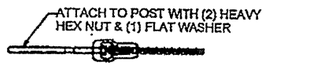
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©TxDOT April 2003	DIST	FEDERAL AID PROJECT			SHEET
REVISIONS					196
	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	Rockwall					



PLAN VIEW



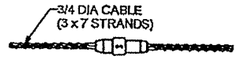
ELEVATION VIEW
(TYPICAL LAY-OUT)



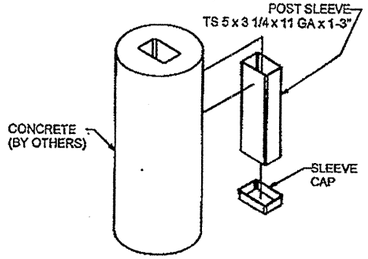
CABLE STUD ASSEMBLY



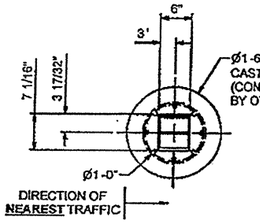
CABLE SPLICE WITH TURNBUCKLE
(OPEN BODY STYLE)



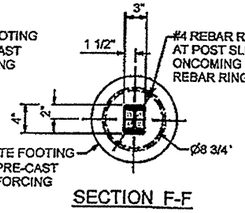
TORPEDO CABLE SPLICE



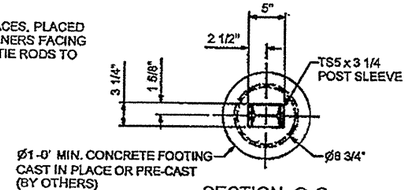
CONCRETE FOOTING ASSEMBLY
(IN QUALIFYING MOW STRIP SEE CHART)



SECTION E-E



SECTION F-F

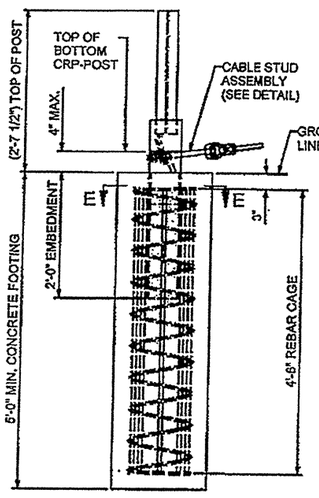


SECTION G-G

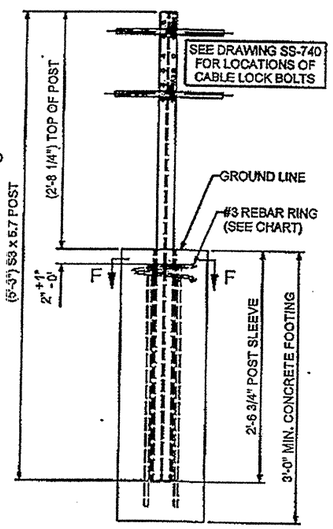
CABLE TENSION CHART	
FAHRENHEIT DEGREES	PRE-STRETCHED LB/FORCE
-10	7300
0	7000
10	6600
20	6300
30	6000
40	5600
50	5300
60	5000
70	4600
80	4300
90	4000
100	3600
110	3300
120	3000
130	2700
140	2500
150	2300

ALLOWABLE DEVIATION FROM CHART IN TANGENT SECTIONS: +800 -200 POUNDS/FORCE

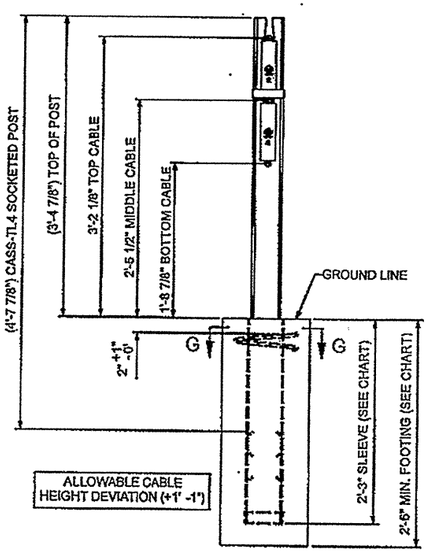
CABLE TENSION READINGS ARE TYPICALLY HIGHER IN CURVED CABLE SECTIONS



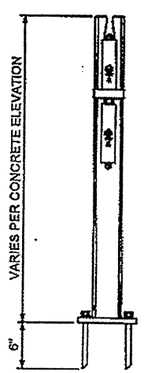
VIEW A-A
(CABLE RELEASE POST 1-3)



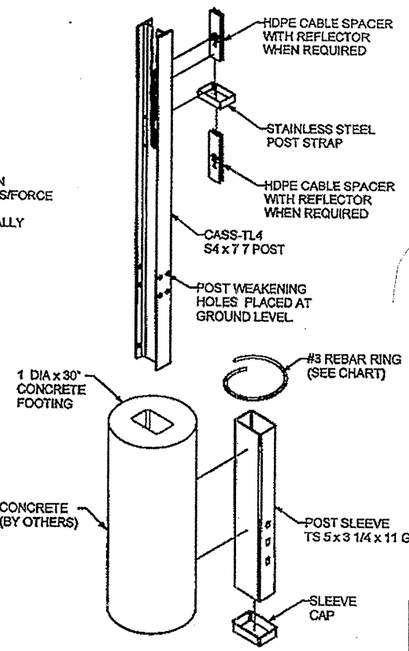
VIEW B-B
(TERMINAL LINE POST 4-7)



SECTION C-C
(SOCKETED POST)



SECTION D-D
(BASE PLATED POST)



STANDARD POST & CONCRETE FOOTING
(SOCKETED POST)

NOTES:

1 THIS DRAWING IS A GENERAL OVERVIEW OF CASS-TL4 BARRIER SYSTEM. SEE SS-740 (LATEST VERSION) FOR SPECIFIC DETAILS OF CASS CABLE TERMINAL (CCT) AND CABLE SAFETY SYSTEM (CASS) REQUIREMENTS, PROPER INSTALLATION OPTIONS AND SPECIFICATION.

2. CASS IS DESIGNED FOR BI-DIRECTIONAL TRAFFIC FLOWS AND CAN BE INSTALLED ON EITHER SIDE OF THE MEDIAN. CONTACT TRINITY (800-527-6050) OR CONSULT THE DESIGN, INSTALLATION OR REPAIR MANUAL(S) FOR ADDITIONAL INFORMATION

3. ALL CONCRETE FOR CASS FOOTINGS SHALL BE TxDOT CLASS A. IF CLASS A OR STRONGER CONCRETE IS UTILIZED FOR THE MOWSTRIP, PLEASE SEE CHART BELOW FOR ALLOWABLE FOOTING DEPTH AND SLEEVE DEVIATIONS

4. ALL POSTS SHALL BE SOCKETED UNLESS OTHERWISE SPECIFIED ALL CABLES SHALL BE PRE-STRETCHED UNLESS OTHERWISE SPECIFIED

5. FOR PAYMENT SEE SPECIAL SPECIFICATION "CABLE BARRIER SYSTEM"

6. CASS-TL4 SHALL BE INSTALLED ON SHOULDERS OR MEDIANS WITH SLOPES OF 6:1 OR FLATTER WITHOUT OBSTRUCTIONS, DEPRESSIONS ETC THAT MAY SIGNIFICANTLY AFFECT THE STABILITY OF AN ERRANT VEHICLE GRADING OF SITE AND/OR APPROPRIATE FILL MATERIALS MAY BE REQUIRED. THE DESIGNER/INSTALLER SHALL "FLATTEN" OR "ROUND" VARIOUS TOPOGRAPHICAL INCONSISTENCIES THAT COULD INTERFERE WITH THE ABILITY OF THE INSTALLER TO CONSISTENTLY MAINTAIN THE DESIGN HEIGHT (IN RELATION TO THE TERRAIN) OF THE CABLES. PLEASE CONSULT MANUAL(S) AND/OR TxDOT MEMO(S) FOR INSTALLATIONS IN "DITCH SECTIONS"

7. CASS-TL4 POST SPACING MAY BE MODIFIED TO AVOID OBSTACLES THAT CONFLICT WITH THE INSTALLATION OF CASS-TL4 LINE POSTS OR TO REDUCE DEFLECTION ON RADIUSES. NO POST SPACE CAN EXCEED THE MAXIMUM POST TxDOT SPACE LIMIT OF 20' REDUCING OR INCREASING POST SPACING AFFECTS DEFLECTION CASS-TL4 MAY BE LATERALLY TRANSFERRED AT A RATE NOT TO EXCEED 30:1

8 POST FOUNDATIONS MAY BE DRILLED THROUGH EXISTING PAVEMENT PLEASE SEE LINE POST FOUNDATION CHART FOR MINIMUM FOOTING REQUIREMENTS IN VARIOUS APPLICATIONS.

9. FOR AESTHETIC PURPOSES TRINITY RECOMMENDS ALL SLEEVES, DRIVEN POSTS, AND LOWER CABLE RELEASE POSTS TO BE INSTALLED REASONABLY PLUMB (APPROXIMATELY 1/8" PER FOOT)

10. CASS-TL4 SHALL BE INSTALLED IN WELL-DRAINED, COMPACTED, NCHRP REPORT 350 STANDARD SOIL. IF SOIL DOESN'T MEET THIS CLASSIFICATION IF SOLID ROCK/CONCRETE IS ENCOUNTERED BELOW GRADE OR IF SOIL IS SUSCEPTABLE TO SEVERE FREEZE/THAW CYCLES, PLEASE CONTACT TRINITY ABOUT ALTERNATE FOOTING DESIGN(S). TRINITY SUGGESTS THE USE OF "MOW STRIPS" FOR EROSION PREVENTION AND EASE OF MAINTENANCE / INSTALLATION

11 SEE THE TEXAS MUTCD FOR PROPER 'BARRIER' DELINEATION

TRINITY HIGHWAY PRODUCTS, LLC.
2525 STEMMONS FREEWAY
DALLAS, TX 75207
PRODUCT.INFO@TRIN.NET
PHONE: (800) 644-7976

MOW STRIP DETAIL*			CONCRETE FOOTING CHART		
MOW STRIP	DEPTH	WIDTH	FOOTING	TUBE SLEEVE	REBAR RING
NONE			30" MIN	27" MIN.	YES
HMA	6" MIN.	3' MIN.	27" MIN	15" MIN.	NO
HMA	8" MIN.	3' MIN.	24" MIN	15" MIN.	NO
RC	3" MIN.	3' MIN.	24" MIN	15" MIN.	NO

CHART DOES NOT APPLY TO TERMINAL POSTS 1 THRU 9
* MOW STRIP OR PAVEMENT
HMA = HOT MIX ASPHALT (NOT RECYCLED ASPHALT PAVEMENT)
RC = REINFORCED CONCRETE (TXDOT CLASS A MINIMUM)

STATE OF TEXAS
ROBIN R. HANDEL
86931
LICENSED
PROFESSIONAL ENGINEER

6/17/09

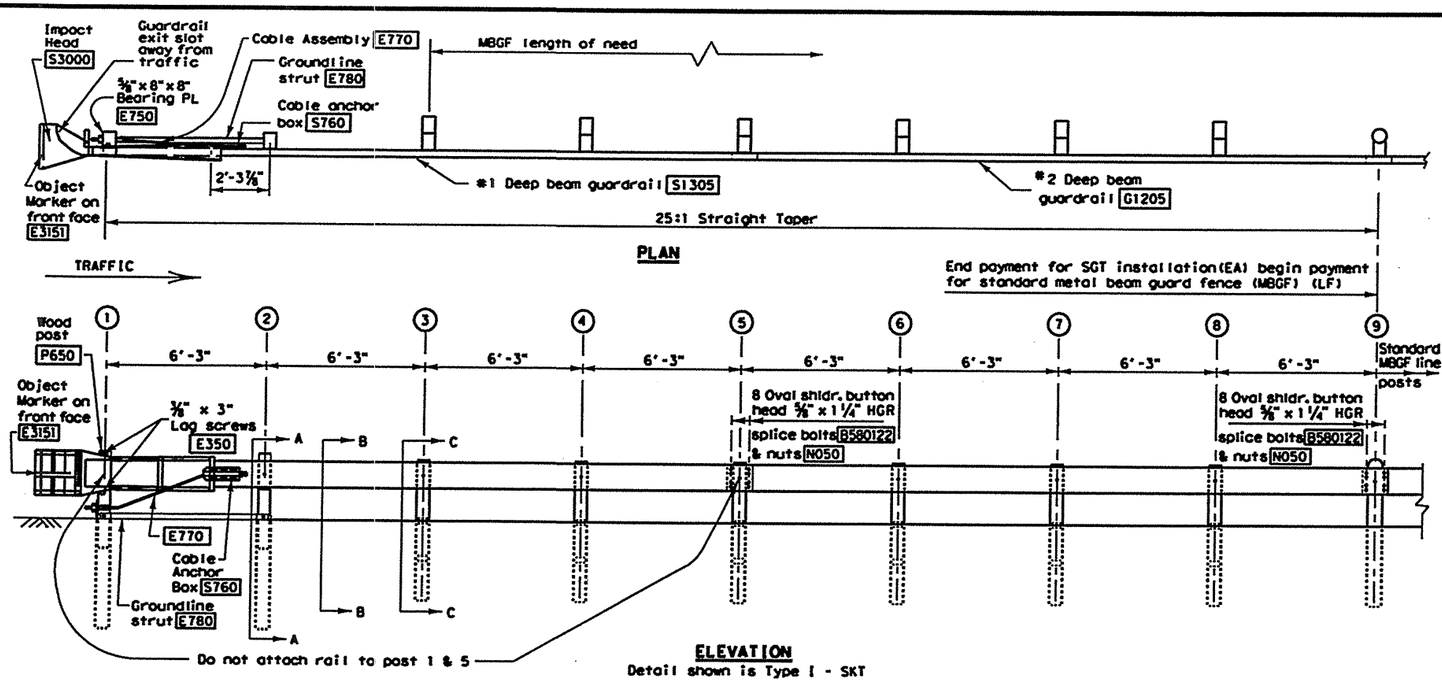
CASS-TL4 CABLE SAFETY SYSTEM

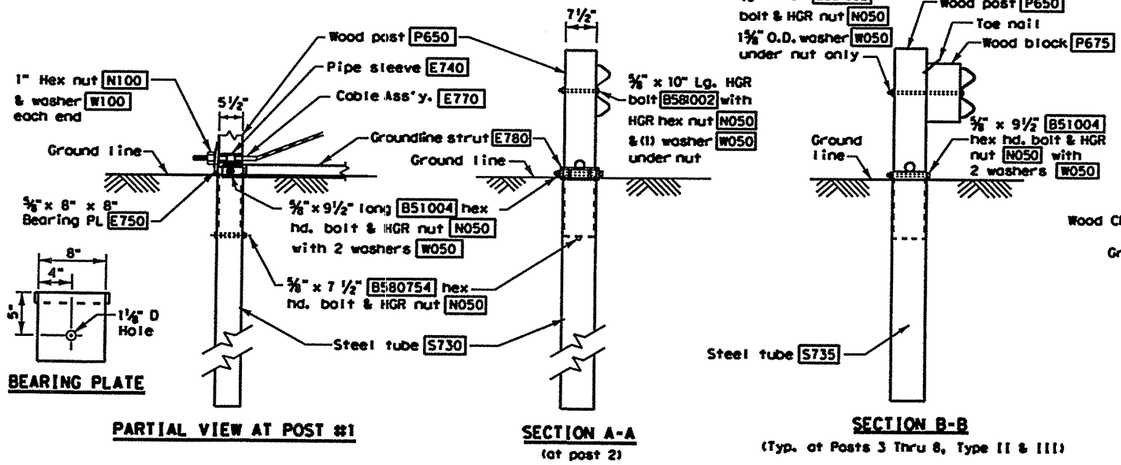
TRINITY HIGHWAY PRODUCTS, LLC

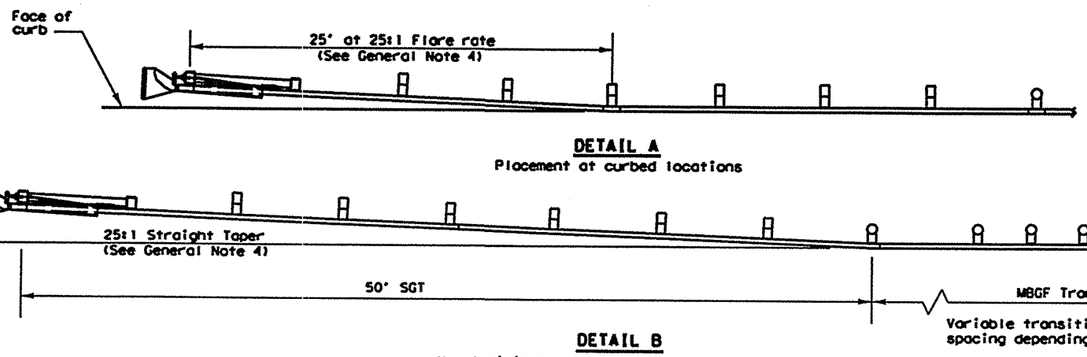
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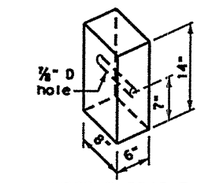
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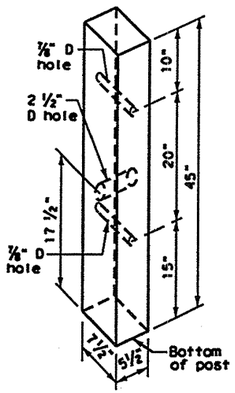
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	DISTRICT	FEDERAL AID PROJECT		SHEET
REVISIONS	18			177
	COUNTY	CONTROL	SECT	JOB	HIGHWAY
	Rockwall	0009	12	073	IH 30











GENERAL NOTES

1. The Type of SGT unit will be specified elsewhere in the plans. Numbers in circles indicate post position. The Type of SGT unit chosen is a maintenance consideration and does not affect the systems performance.

	Post & Tube Options	Post Only
Type I	Posts ① thru ②	Posts ③ thru ⑧
Type II	Posts ① thru ④	Posts ⑤ thru ⑧
Type III	Posts ① thru ⑧	None

2. If the SGT system must be placed on a radius, the minimum radius is 150 feet.
3. All bolts, nuts cable assemblies, cable anchors, steel tubes & bearing plates shall be galvanized.
4. For non-curb installations, the MBGF will be flared at a rate of 25:1 over the first 50 foot of the system to prevent the terminal head from encroaching on the shoulder. The flare may be decreased or eliminated for specific installations if directed by the Engineer. A 25:1 flare rate will be used at curb sections, beginning at post number 5 and ending at post number one.
5. The steel tubes shall not protrude more than 4 inches above ground. Site grading may be necessary to meet this requirement.
6. The steel tubes may be driven with an approved driving head. They shall not be driven with the wood post in the tube. If the steel tubes are placed in drilled holes, the backfill material must be satisfactorily compacted to prevent tube settlement.
7. When rock excavation is encountered, a 12 inch diameter post hole, 20 inches into the rock may be used if approved by the Engineer. Granular material will be placed in the bottom of the hole approximately 2 ½ inches deep to provide drainage. The steel tube sleeves will be field cut to not less than 20 inches in length, placed in the hole and backfilled with adequately compacted material excavated from the hole.
8. The breakaway cable assembly must be taut. A locking device, (vice grips or channel lock pliers) should be used to prevent the cable from twisting when tightening the nuts.
9. The wood blockouts shall be "toe nailed" to the rectangular wood posts to prevent them from turning when the wood shrinks.
10. For curb installations, the soil tubes and posts shall be installed at the proper ground elevation behind the curb. The posts will then require field drilling new holes to accommodate the rail to post connection bolt to maintain the proper height of the rail above the gutter pan. The excess post length above the rail will be removed if directed by the Engineer.
11. An object marker shall be installed on the front of the impact head as detailed on D&OM(VIA).
12. A special site evaluation should be considered, prior to using this end treatment where there is less than 25 feet between the outlet side of the end treatment and any adjacent driving lane.

BILL OF MATERIAL

Code #	POST & TUBE OPTIONS Type I Qty.	Type II Qty.	Type III Qty.	DESCRIPTION
S1305	1	1	1	#1 Deep Beam Guardrail (12 Ga.)
G1205	1	1	1	#2 Deep Beam Guardrail (12 Ga.)
S730	2	2	2	Steel Tube - 6" x 8" x 72" x ⅜" or ⅛" min
S735	0	2	6	Steel Tube - 6" x 8" x 54" x ⅜" or ⅛" min
P650	2	4	8	Wood Posts - 5½" x 7½" x 45"
P671	6	4	0	Wood CRT Posts - 6" x 8" x 72"
P675	6	6	6	Wood Blockouts - 6" x 8" x 14"
E740	1	1	1	Pipe Sleeve - 2" Std. Pipe x 5½"
E750	1	1	1	Bearing Plate - ⅜" x 8" x 8"
S760	1	1	1	Cable Anchor Box
E770	1	1	1	Cable Assembly
E780	1	1	1	Groundline Strut
S3000	1	1	1	Impact Head
				HARDWARE
B580754	2	2	2	⅝" x 7 ½" Hex Hd. Bolt
B51004	2	4	8	⅝" x 9 ½" Hex Hd. Bolt (Top of Tubes)
W050	11	15	23	⅝" Washers
B581002	1	1	1	⅝" x 10" HGR Post Bolt (Post 2)
B580122	16	16	16	⅝" x 1 ¼" HGR Splice Bolt
B581802	6	6	6	⅝" x 18" HGR Post Bolt (Posts ③ thru ⑧)
N050	27	29	33	⅝" HGR Nut (16-Spl, 7-Posts, 2-Strut)
E350	2	2	2	⅜" x 3" Lag Screw
N100	2	2	2	1" Hex Nut (Anchor Cable)
W100	2	2	2	1" Washer (Anchor Cable)
S858A	8	8	8	Cable Anchor Box Shoulder Bolts
N055A	8	8	8	½" A325 Structural Nut
W050A	16	16	16	½" A325 Structural Washer
E3151	1	1	1	Object Marker - (18" x 18")

POST & TUBE OPTIONS	
Type I	post ① thru ②
Type II	post ① thru ④
Type III	post ① thru ⑧

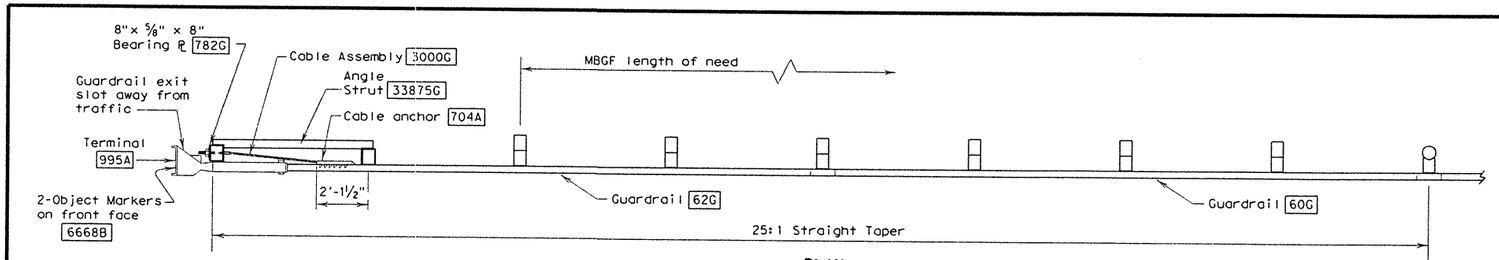
R = Radius
D = Diameter

Texas Department of Transportation
Design Division (Roadway)

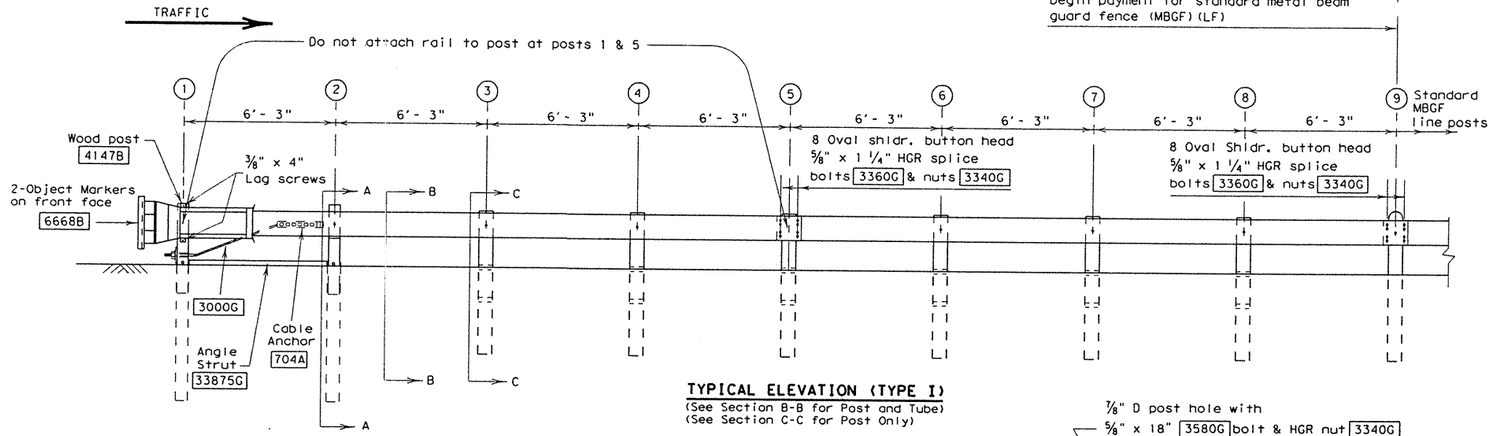
SINGLE GUARDRAIL TERMINAL
(SKT 350) (WOOD POST)
SGT(8)-03A

FILE: sgt803a.dgn	DN: MAM	CK: MAM	DW: BGD	CK: MAM	
©TxDOT July 2001	DIST	FEDERAL AID PROJECT			SHEET
REVISIONS					198
	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	Rockwall		2009	12	073	

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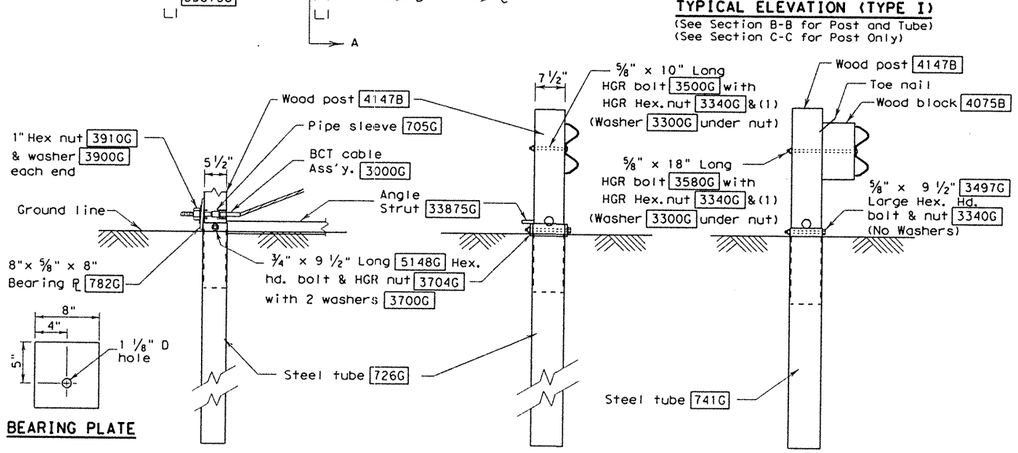


PLAN



TYPICAL ELEVATION (TYPE I)

(See Section B-B for Post and Tube)
(See Section C-C for Post Only)

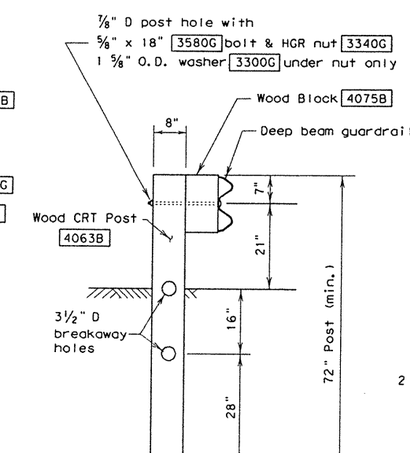


BEARING PLATE

PARTIAL VIEW AT POST #1

SECTION A-A

(at post 2)

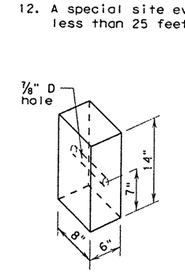


SECTION B-B

(Typ. at Posts 3 thru 8, Type II & III)

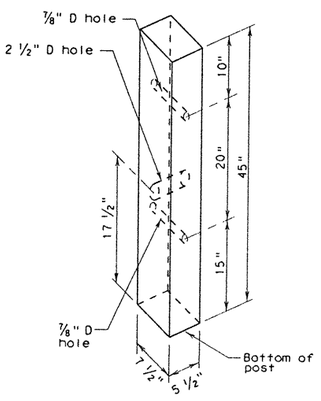
SECTION C-C

(Typ. at post only positions)



WOOD BLOCKOUT

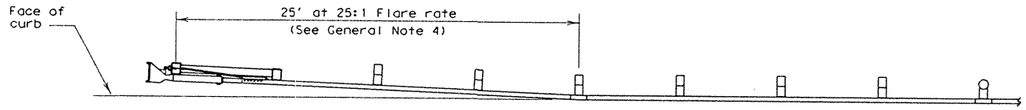
4075B



All measurements should be taken from bottom of posts.

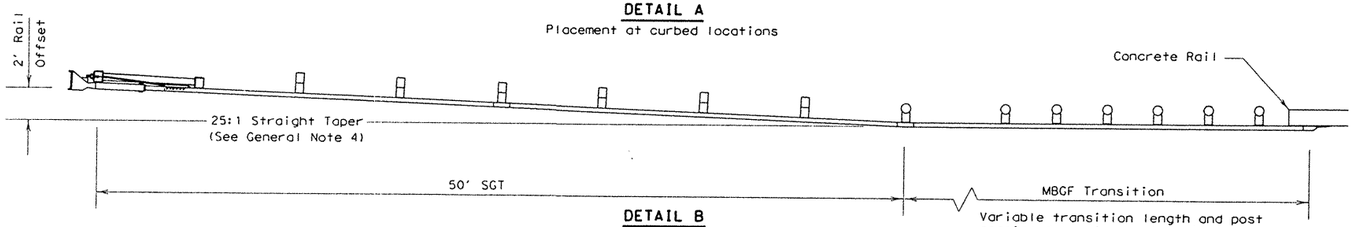
WOOD POST

4147B



DETAIL A

Placement at curbed locations



DETAIL B

Usual minimum placement to protect bridge ends

Variable transition length and post spacing depending on transition type

POST & TUBE OPTIONS			
Type I	Posts	①	thru ②
Type II	Posts	①	thru ④
Type III	Posts	①	thru ⑧

R = Radius
D = Diameter

GENERAL NOTES

1. The Type of SGT unit will be specified elsewhere in the plans. Numbers in circles indicate post position. The Type of SGT unit chosen is a maintenance consideration and does not affect the systems performance.

Post & Tube Options		Post Only
Type I	Posts ① thru ②	Posts ③ thru ⑧
Type II	Posts ① thru ④	Posts ⑤ thru ⑧
Type III	Posts ① thru ⑧	None

2. If the SGT system must be placed on a radius, the minimum radius is 150 feet.
3. All bolts, nuts, cable assemblies, cable anchors, steel tubes & bearing plates shall be galvanized.
4. For non-curb installations, the MBGF will be flared at a rate of 25:1 over the first 50 foot of the system to prevent the terminal head from encroaching on the shoulder. The flare may be decreased or eliminated for specific installations if directed by the Engineer. A 25:1 flare rate will be used at curb sections, beginning at post number 5 and ending at post number one.
5. The steel tubes shall not protrude more than 4 inches above ground. Site grading may be necessary to meet this requirement.
6. The steel tubes may be driven with an approved driving head. They shall not be driven with the wood post in the tube. If the steel tubes are placed in drilled holes, the backfill material must be satisfactorily compacted to prevent tube settlement.
7. When rock excavation is encountered, a 12 inch diameter post hole, 20 inches deep may be used if approved by the Engineer. Granular material will be placed in the bottom of the hole approximately 2 1/2 inches deep to provide drainage. The steel tube sleeves will be field cut to 20 inches in length, placed in the hole and backfilled with adequately compacted material excavated from the hole.
8. The breakaway cable assembly must be taut. A locking device, (vice grips or channel lock pliers) should be used to prevent the cable from twisting when tightening the nuts.
9. The wood blockouts shall be "toe nailed" to the rectangular wood posts to prevent them from turning when the wood shrinks.
10. For curb installations, the soil tubes and posts shall be installed at the proper ground elevation behind the curb. The posts will then require field drilling new holes to accommodate the rail to post connection bolt to maintain the proper height of the rail above the gutter pan. The excess post length above the rail will be removed if directed by the Engineer.
11. An object marker shall be installed on the front of the impact head as detailed on D&OM(VIA).
12. A special site evaluation should be considered, prior to using this end treatment where there is less than 25 feet between the extrusion side of the end treatment and any adjacent driving lane.

BILL OF MATERIAL

Code #	POST & TUBE OPTIONS Type I Qty.	Type II Qty.	Type III Qty.	DESCRIPTION
62G	1	1	1	#1 Deep Beam Guardrail (12 Ga) at 25'
60G	1	1	1	#2 Deep Beam Guardrail (12 Ga) at 25'
726G	2	2	2	Steel Tube - 6"x 8"x 72"x 1/8" min
741G	0	2	6	Steel Tube - 6" x 8" x 54" x 1/8" min
4147B	2	4	8	Wood Posts - 5 1/2" x 7 1/2" x 45"
4063B	6	4	0	Wood CRT Posts - 6"x 8"x 72"
4075B	6	6	6	Wood Block - 6"x 8"x 14"
705G	1	1	1	Pipe Sleeve - 2" std. pipe x 5 1/2"
782G	1	1	1	Bearing Plate - 8"x 8"x 5/8"
704A	1	1	1	Cable Anchor
3000G	1	1	1	Cable Assembly (3/4" x 78")
33875G	1	1	1	Angle Strut
995A	1	1	1	ET-2000 Plus Guardrail Terminal
				HARDWARE
5148G	2	2	2	3/4" x 9 1/2" Hex Hd (Top of tubes 1&2) A325
3300G	7	7	7	5/8" Washers
3478G	2	2	2	5/8" x 7 1/2" Hex Bolt
3500G	1	1	1	5/8" x 10" Post Bolt (Post 2 of LET)
3580G	6	6	6	5/8" x 18" HGR Post Bolt (posts ③ thru ⑧)
3360G	16	16	16	5/8" x 1 1/4" HGR Splice Bolt
3340G	25	27	31	5/8" HGR Nut (16-spi, 7-posts)
4228G	2	2	2	3/8" x 4" Lag Screw
3910G	2	2	2	1" Hex Nut (Anchor Cable)
3900G	2	2	2	1" Washer (Anchor Cable)
6668B	2	2	2	Object Marker (12" x 12")
3700G	4	4	4	3/4" Washer
3704G	2	2	2	3/4" Heavy Hex Nut
3497G	0	2	6	5/8" x 9 1/2" Hex Hd (Top of Tubes 3-8) A307

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LAYER LEVEL

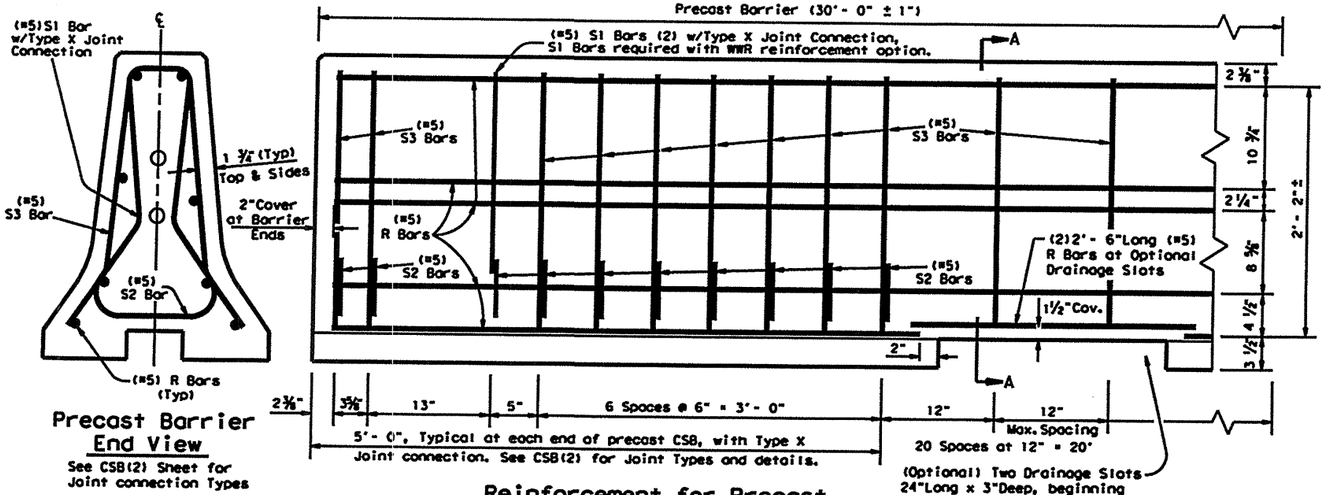
Texas Department of Transportation
Design Division (Roadway)

SINGLE GUARDRAIL TERMINAL
(ET-2000 PLUS)
(WOOD POST)

SGT(7)-03A

FILE: sgt703a.dgn	DN: MAM	CK: MAM	DW: BGD	CK:	
©TxDOT APRIL 1997	DIST	FEDERAL AID PROJECT			SHEET
REVISIONS	18				178A
	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	Rockwall		0009	12	073	14430

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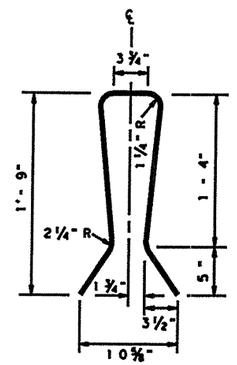


Precast Barrier End View

See CSB(2) Sheet for Joint connection Types

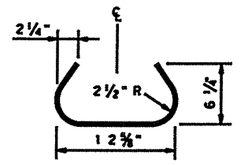
Reinforcement for Precast Concrete Safety Barrier (Type 1)

Showing reinforcement for Joint Type X, See CSB(2) for Joint Types and connection details.



S1 Bar

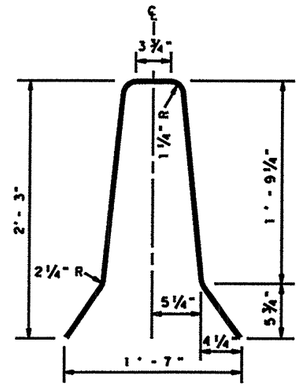
=5 Rebar (2) (Joint Type X)



S2 Bar

=5 Rebar (Stirrup) (20) (Joint Type X)

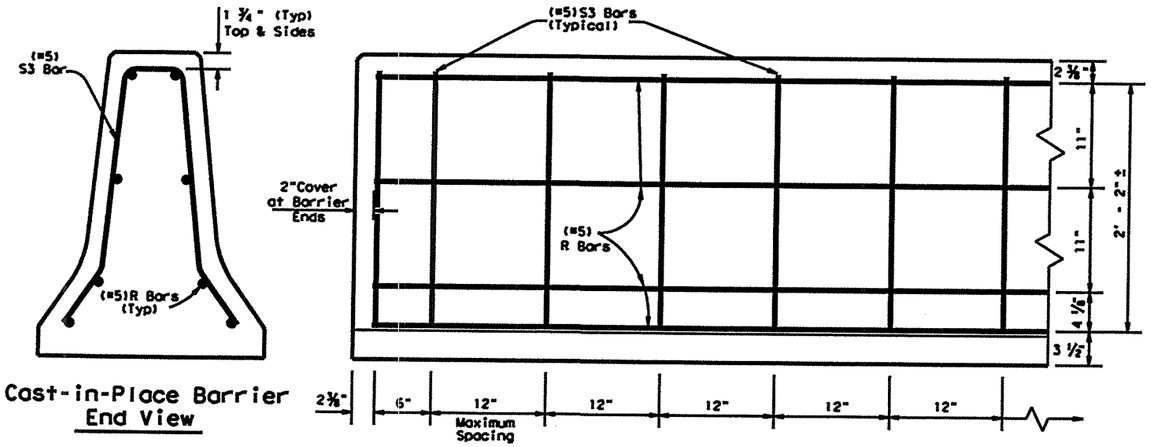
Note:
Two S1 Bars are required with the use of WWR reinforcement option. The S1 Bars may need a slight modification to fit within the WWR cage, as directed by the Engineer.



S3 Bar

=5 Rebar

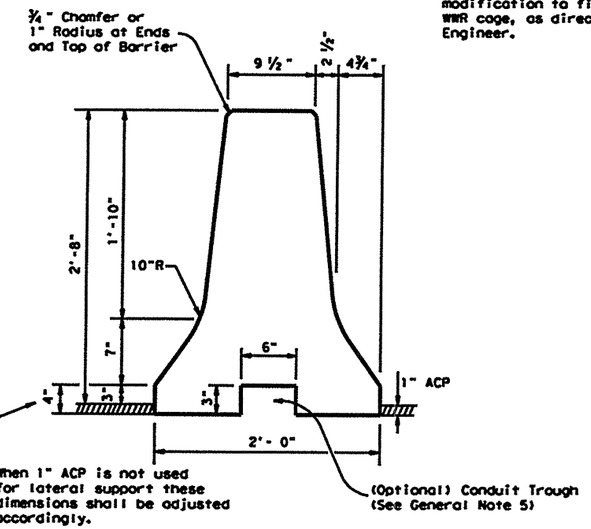
Used with Precast and Cast-in-place Concrete Safety Barrier (CSB).



Cast-in-Place Barrier End View

Reinforcement for Cast-in-Place Concrete Safety Barrier (Type 1)

Showing reinforcement for CSB. Expansion joints to be placed every 100 ft. or less.



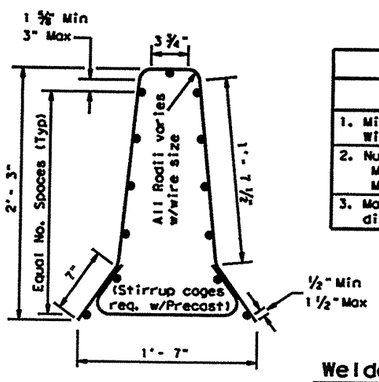
Concrete Safety Barrier

General Notes

1. Concrete shall be Class C or H.
2. Where used, rebar reinforcement shall be Grade 60 and conform to ASTM A615.
3. Precast barrier length shall be 30 ft.
4. Joint connection systems, grout, etc. as shown are considered subsidiary.
5. Conduit trough and drainage slots may be omitted, as shown elsewhere or as directed by the Engineer.
6. Cast-in-place barrier may be slip formed. Additional reinforcement may be tack welded to the upper two-thirds of the reinforcement cage to provide bracing. Do not weld to M bars or anchor bolts.

Approximate Per L.F. Quantities			
		Precast	C.I.P
Concrete	CY.	0.108	0.108
Rebar	LB.	17.03	14.00

For Contractor's information only
Weight of one Precast 30 ft. unit = Approx. 7 Tons



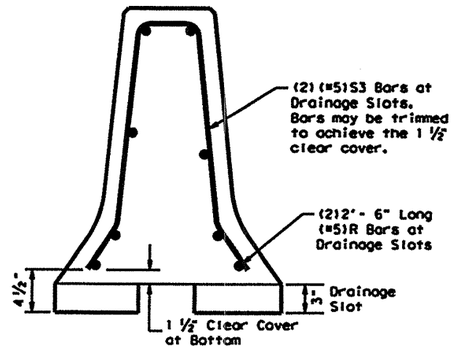
Welded Wire Reinforcement (WWR) Table		
DESCRIPTION	LONGITUDINAL WIRE	VERTICAL WIRE
1. Min. (Cumulative Total) Wire Area	Match R Bars (in^2 /ft.)	Match S Bars (in^2 /ft.) (Stirrup cages required at ends of Precast CSB)
2. Number of Wires Minimum Maximum	No. of Wires 9 13	
3. Maximum wire size differential	The smaller wire shall have an area of 40% or more of the larger wire.	

General Notes

1. Deformed Welded Wire Reinforcement shall conform to ASTM A497.
2. Welded wire cage may require a slight adjustment to accommodate the Type X connection pipes. As directed by the Engineer.
3. Deformed welded wire reinforcement (WWR) may be used as an option to conventional reinforcement. Combinations of reinforcing steel and WWR or configurations of WWR other than shown will be permitted when conditions in the table are satisfied and the dimension from the end of section to first welded wire does not exceed 3".

Welded Wire Reinforcement (WWR) Option for Bars S and R

(Precast or Cast-in-Place)



Section A-A

Steel Placement at Drainage Slot (If drainage slots are required)

Texas Department of Transportation
Design Division (Roadway)

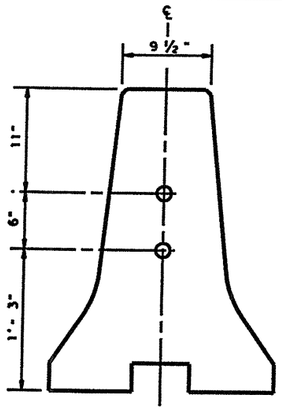
CONCRETE SAFETY BARRIER (F-SHAPE)

REINFORCEMENT FOR PRECAST AND CAST-IN-PLACE BARRIER (TYPE 1)

CSB(1)-04

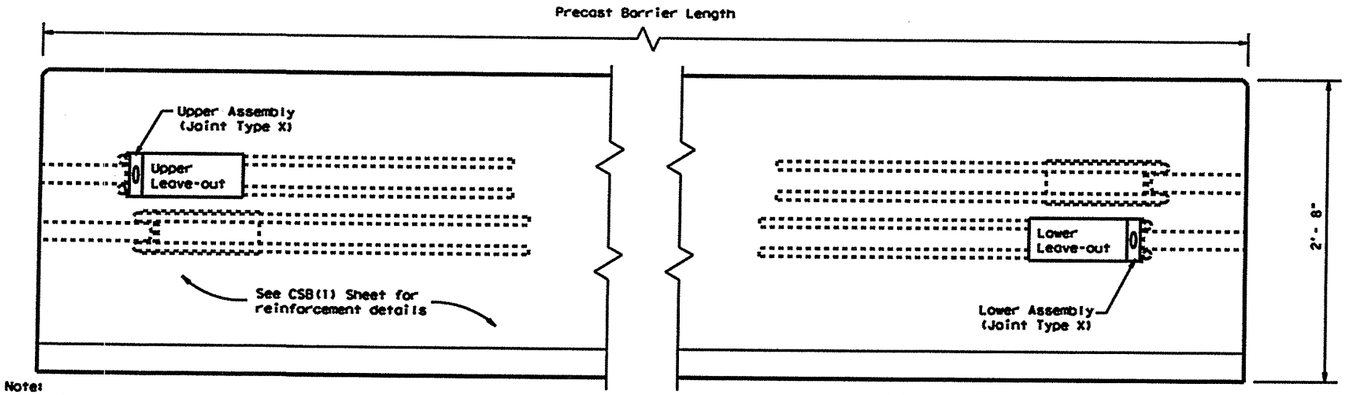
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©TxDOT December 2004	DIST	FEDERAL AID PROJECT		SHEET
REVISIONS				199
	COUNTY	CONTROL	SECT	JOB	HIGHWAY
	Rockwall	0008	12	678	

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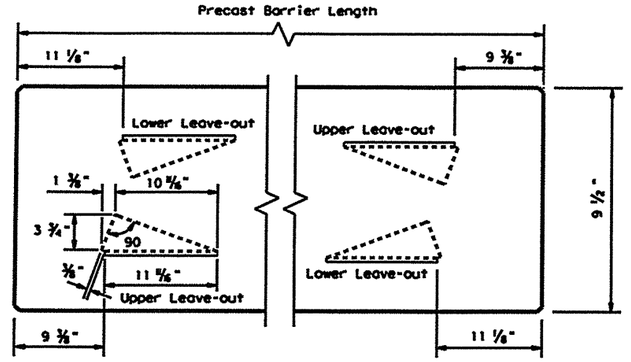
Precast Barrier
End View

Note:
The Pipe Assembly locations are very important to properly connecting the barrier segments.

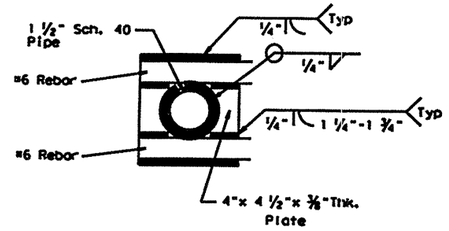


Precast Barrier Elevation View
See CSB(1) Sheet for reinforcement details

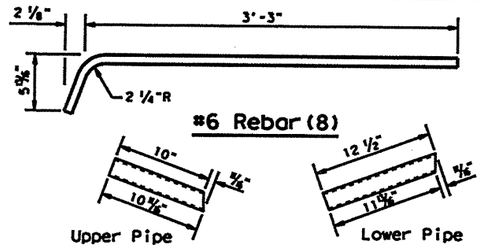
Note:
The Type X connection is a non-proprietary barrier connection system.



Top view of side leave outs
When precast barrier is used in a permanent location leave-outs shall be grouted.



Section A-A
Showing welding requirements



1 ½" Schedule 40 Pipe (2 each)

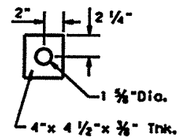
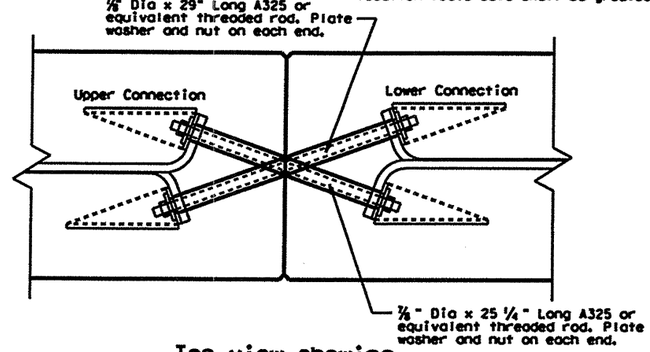


Plate (4)

Assembly and Components for Joint Type X



Top view showing
Joint Connection Type X

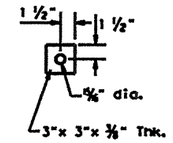
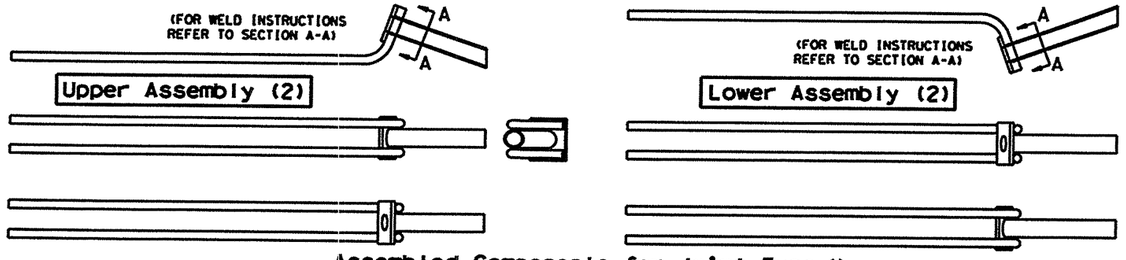


PLATE WASHER

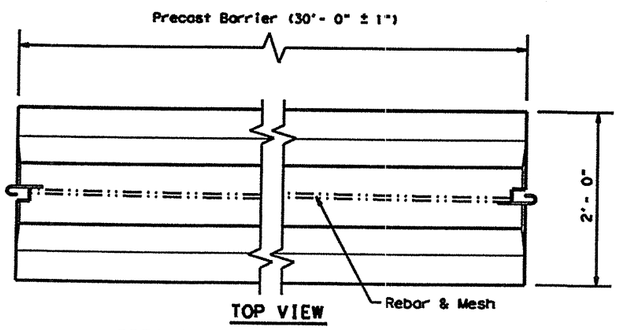


Assembled Components for Joint Type X

General Notes

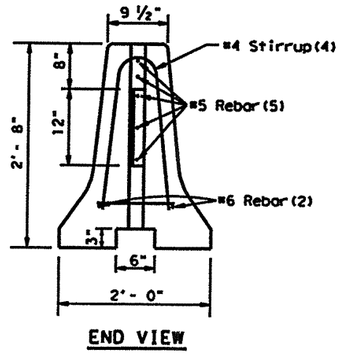
1. Concrete shall be Class C or H.
2. Where used, rebar reinforcement shall be Grade 60 and conform to ASTM A615.
3. Precast barrier length shall be 30 ft. unless otherwise specified on the plans.
4. All concrete, reinforcement, joint connection systems, grout, and etc. as shown are considered as part of the barrier for payment.
5. Bottom trough and drainage slot options all to be shown elsewhere on the plans, or as directed by the Engineer.
6. Regardless of the method of handling, barrier section lifting points shall be ± 6 ¼ feet from the ends of the barrier. Lifting devices and attachments to barrier sections shall be as approved by the Engineer.
7. Surface finishing and grouting (where required) shall be two parts sand one part cement with enough water to make the mixture plastic. Grouting shall be done in a manner that will assure a smooth surface. Surface finishing shall be considered subsidiary to the various bid items involved.
8. All steel fittings for joint Type X and Type J barrier shall be galvanized after fabrication in accordance with ASTM A153.
9. The contractor has the option of placing precast (joint Type X or J) or cast-in-place Concrete Safety Barrier as shown on sheet CSB(1) unless otherwise shown in the plans.

Joint Connection (Type X)



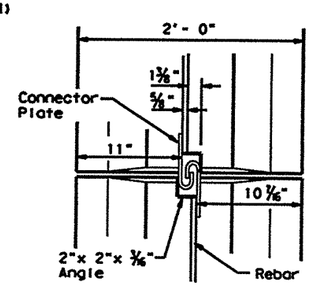
TOP VIEW

PRECAST (CSB) WITH J-J HOOKS
See CSB(1) Sheet for reinforcement details



END VIEW

Joint Connection (Type J)



J-J HOOKS DETAIL

Note: J-J Hooks is a proprietary barrier connection system. This system can be used as an alternate bid item to a different joint type. If this connection system is exclusively specified in the plans, prior approval for sole source use must be obtained.

Details of components for the J-J Hooks connection and reinforcing details will be shown on the manufacturer's shop drawings furnished to the Engineer.

Texas Department of Transportation
Design Division (Roadway)

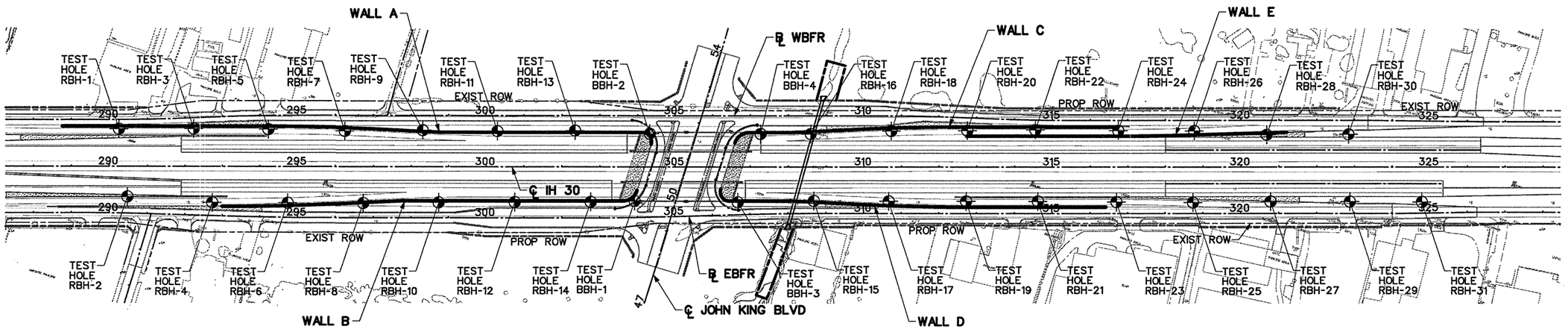
CONCRETE SAFETY BARRIER (F-SHAPE)

JOINT TYPES FOR PRECAST BARRIER

CSB(2)-04

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©TxDOT December 2004	DIST	FEDERAL AID PROJECT		SHEET
REVISIONS				180
	COUNTY	CONTROL	SECT	JOB	HIGHWAY
	Rockwall	0009	12	573	

ttanos
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2/6/2009
i:\2007\07102 txdot i30\sheets-retaining wall\07102RETWAL LAYOUT.dgn



N

0 150 300
SCALE IN FEET

NO.	REVISION	BY	DATE

APM & Associates, Inc.
Engineering • Planning • CM Services
FIRM REGISTRATION NUMBER: 3091

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IH 30 AT JOHN KING BLVD

RETAINING WALLS
LAYOUT PLAN

STATE OF TEXAS
AFISU OLABIMTAN
63663
LICENSED
PROFESSIONAL ENGINEER

Signature of Registrant & P.E. 2-6-09 Date

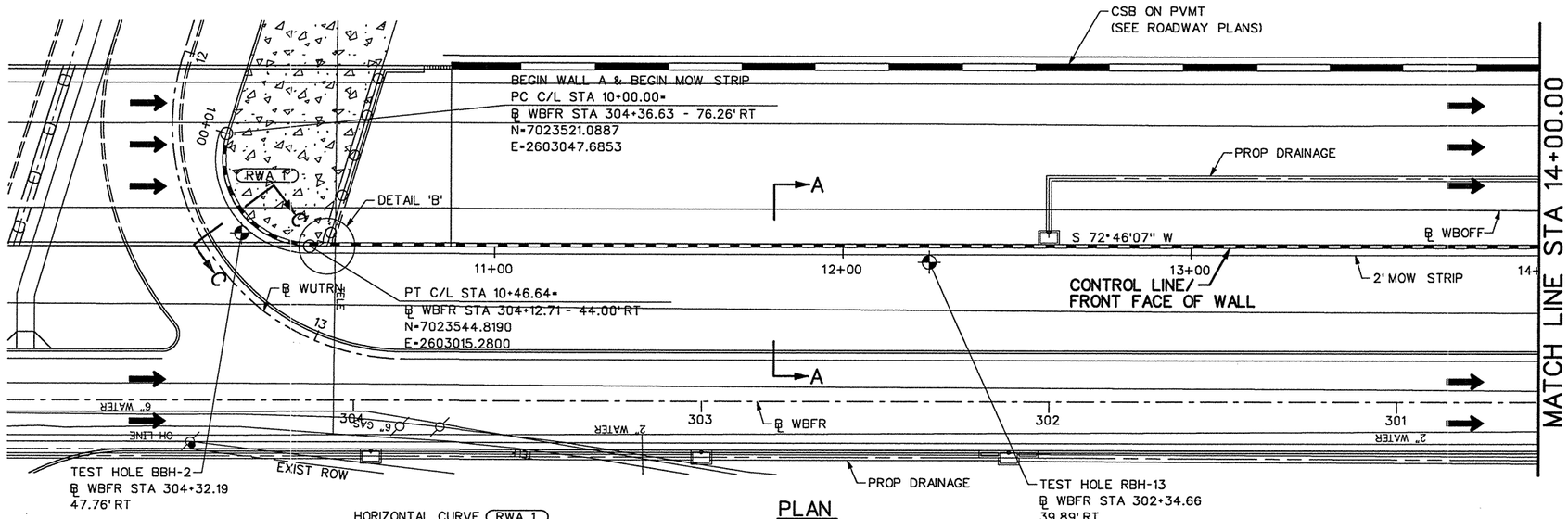
SHEET 1 OF 1

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Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073	181

$USERNAME$

$TIME$

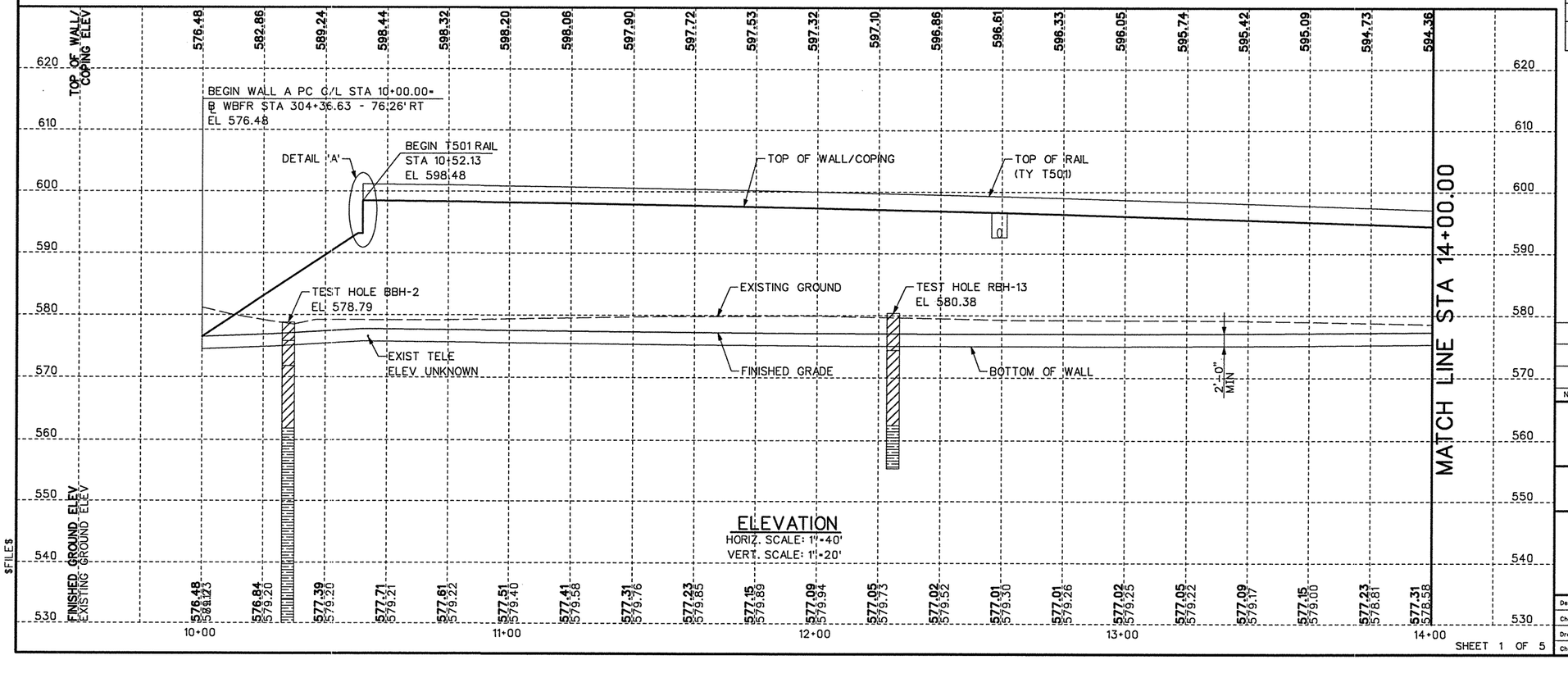
6/30/2009



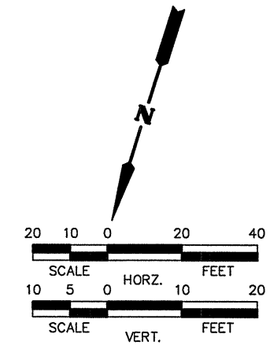
PLAN
SCALE: 1"=40'

HORIZONTAL CURVE (RWA 1)

PI STA = 10+33.72
Δ = 106°53'35" (LT)
D= 229°10'59"
T= 33.72'
L= 46.64'
R= 25.00'
PC STA 10+00.00
TANGET BRG. @ PC = N 00°20'18" W
PT STA 10+46.64
TANGET BRG. @ PT = S 72°46'07" W



ELEVATION
HORIZ. SCALE: 1"=40'
VERT. SCALE: 1"=20'



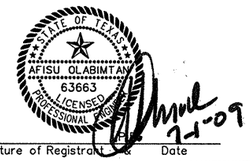
NOTES:

1. REFER TO SHEET 5 OF 5 FOR TYPICAL SECTIONS, DETAILS AND GENERAL NOTES.
2. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
3. REFER TO THE WALL FORM LINER PLAN SHEETS FOR AESTHETIC GUIDELINES AND ADDITIONAL INFORMATION.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL COORDINATE ALL EXISTING UTILITY RELOCATION TO AVOID ANY CONFLICTS WITH RETAINING WALL CONSTRUCTION.

ESTIMATED QUANTITIES

423-2001	RETAINING WALL (MSE)	SF	16703
432-2039	RIP RAP (MOW STRIP) (4IN)	CY	25
450-2007	RAIL (TY T501)	LF	1199
450-2093	RAIL (CIP) (TY T501) (SPL)	LF	309
450-2120	RAIL (CIP) (TY RAIL) (SPL)	LF	309
450-2130	SPECIAL TRAFFIC BARRIER END TERMINAL	EA	1

2 REPLACED 7-1-09 BB



Signature of Registrant & Date 7-1-09

NO.	REVISION	BY	DATE

APM & Associates, Inc.
Engineering . Planning . CM Services
FIRM REGISTRATION NUMBER: 3091

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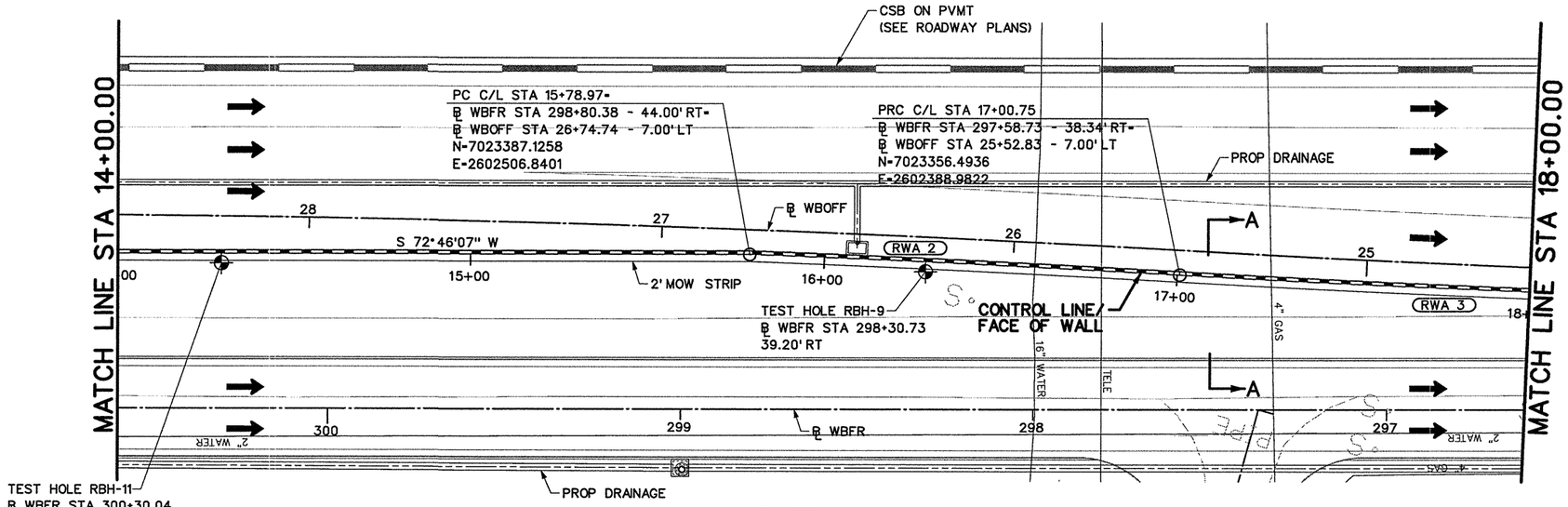
IH 30 AT JOHN KING BLVD

RETAINING WALL A
PLAN AND ELEVATION

Designed:	DJP	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073	182

SHEET 1 OF 5

$FILE$



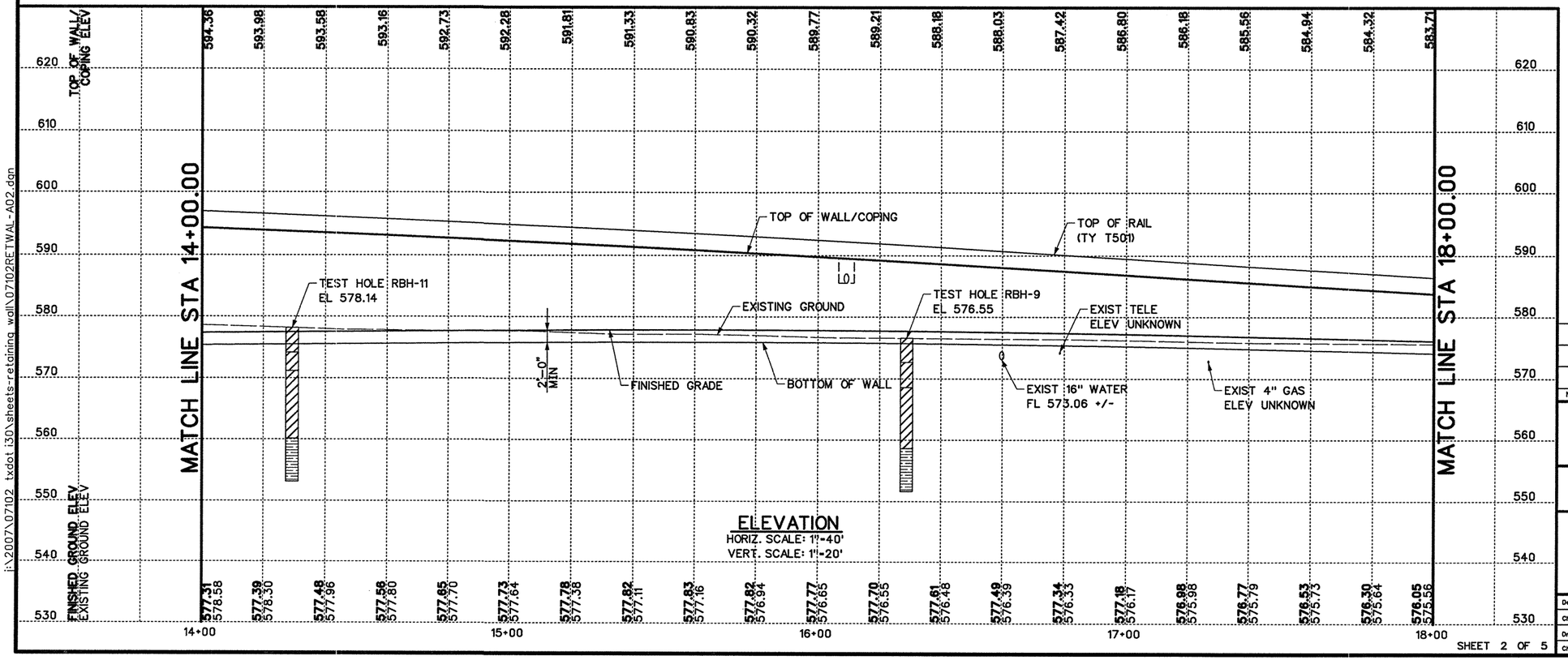
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SCALE: 1"=40'

HORIZONTAL CURVE (RWA 2)

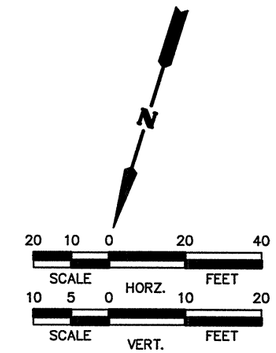
PI STA = 16+39.86
Δ = 01°09'17" (RT)
D= 00°56'53"
T= 60.89'
L= 121.78'
R= 6043.00'
PC STA 15+78.97
TANGET BRG. @ PC = S 74°51'12" W
PT STA 17+00.75
TANGET BRG. @ PT = S 76°00'29" W

HORIZONTAL CURVE (RWA 3)

PI STA = 18+72.02
Δ = 03°14'22" (LT)
D= 00°56'45"
T= 171.27'
L= 342.45'
R= 6057.00'
PC STA 17+00.75
TANGET BRG. @ PC = S 76°00'29" W
PT STA 20+43.19
TANGET BRG. @ PT = S 72°46'07" W

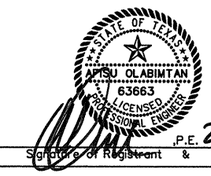


ELEVATION
HORIZ. SCALE: 1"=40'
VERT. SCALE: 1"=20'



NOTES:

1. REFER TO SHEET 5 OF 5 FOR TYPICAL SECTIONS, DETAILS AND GENERAL NOTES.
2. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
3. REFER TO THE WALL FORM LINER PLAN SHEETS FOR AESTHETIC GUIDELINES AND ADDITIONAL INFORMATION.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL COORDINATE ALL EXISTING UTILITY RELOCATION TO AVOID ANY CONFLICTS WITH RETAINING WALL CONSTRUCTION.



Signature of Registrant & P.E. Date 2-6-09

NO.	REVISION	BY	DATE

APM & Associates, Inc.
Engineering • Planning • CM Services
FIRM REGISTRATION NUMBER: 3091

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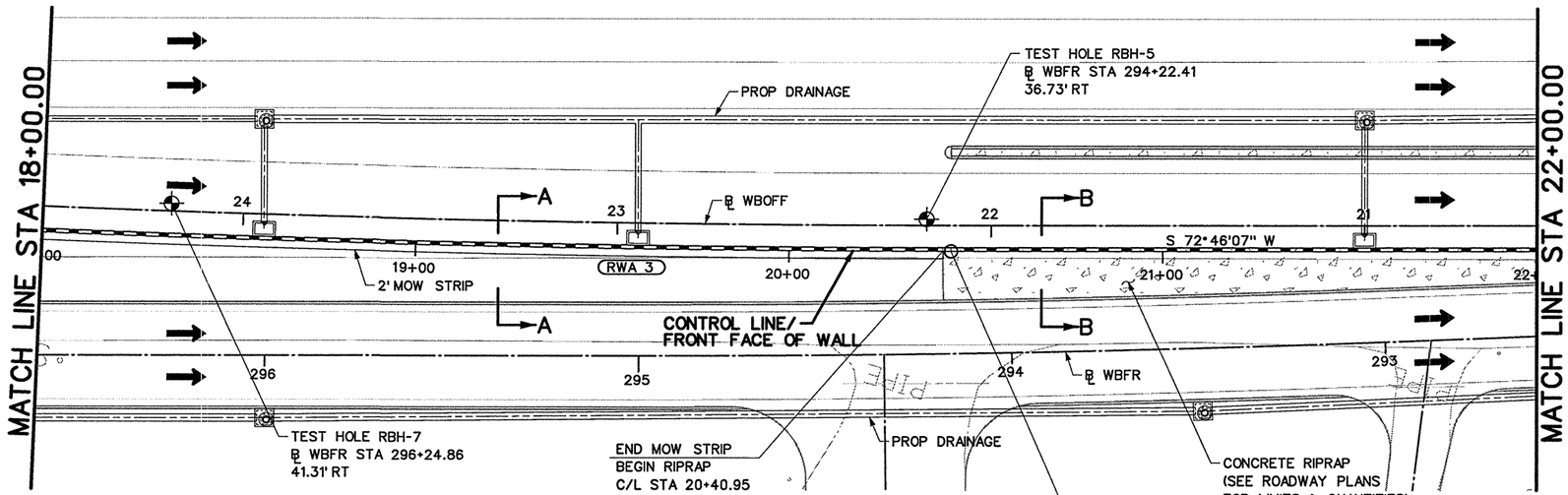
IH 30 AT JOHN KING BLVD

RETAINING WALL A
PLAN AND ELEVATION

Designed:	DJP	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073	103

SHEET 2 OF 5

ttanos 3:02:45 PM 2/6/2009
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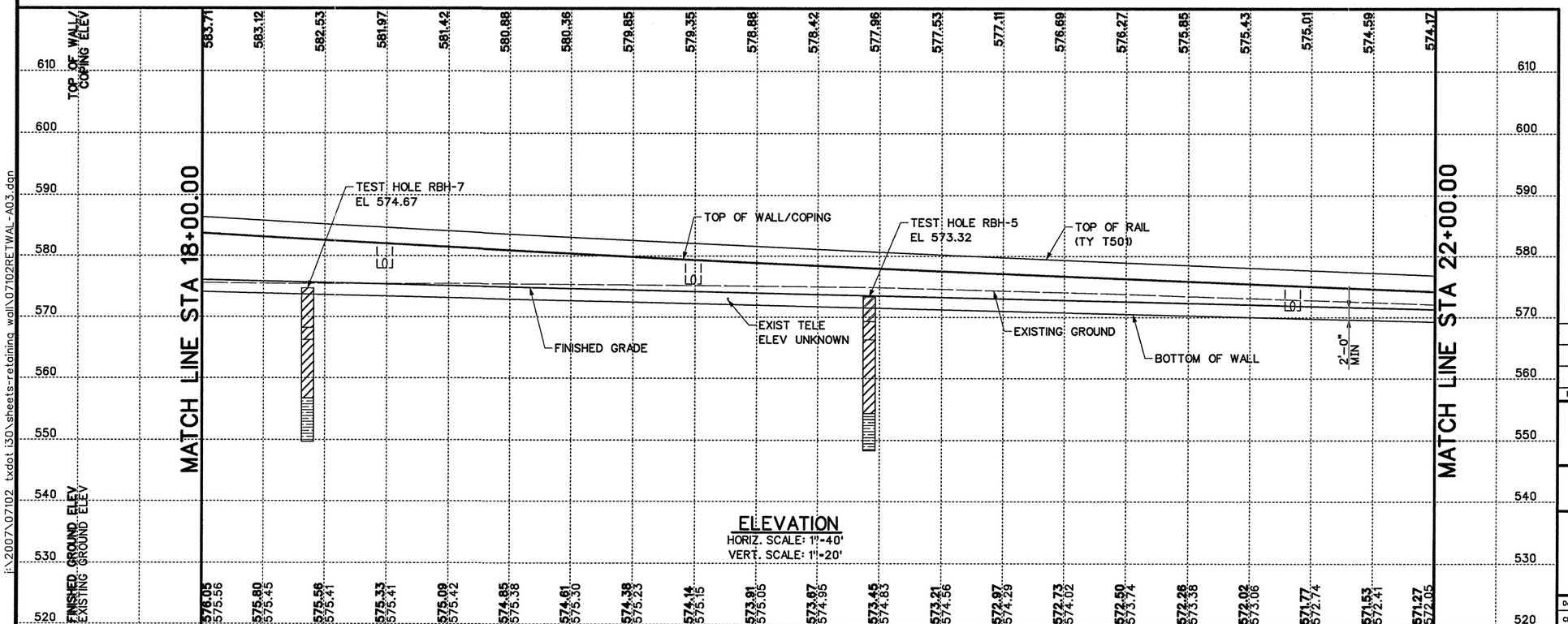


PLAN
SCALE: 1"=40'

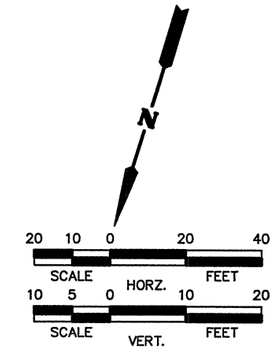
HORIZONTAL CURVE (RWA 3)

PI STA = 18+72.02
Δ = 03°14'22" (LT)
D= 00°56'45"
T= 171.27'
L= 342.45'
R= 6057.00'
PC STA 17+00.75
TANGET BRG. @ PC = S 76°00'29" W
PT STA 20+43.19
TANGET BRG. @ PT = S 72°46'07" W

PT C/L STA 20+43.19=
℄ WBFR STA 294+16.00 - 27.96' RT=
℄ WBOFF STA 22+10.78 - 7.00' LT
N=7023264.3484
E=2602059.2145



ELEVATION
HORIZ. SCALE: 1"=40'
VERT. SCALE: 1"=20'



NOTES:

1. REFER TO SHEET 5 OF 5 FOR TYPICAL SECTIONS, DETAILS AND GENERAL NOTES.
2. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
3. REFER TO THE WALL FORM LINER PLAN SHEETS FOR AESTHETIC GUIDELINES AND ADDITIONAL INFORMATION.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL COORDINATE ALL EXISTING UTILITY RELOCATION TO AVOID ANY CONFLICTS WITH RETAINING WALL CONSTRUCTION.

STATE OF TEXAS
AFISU OLABIMTAN
63663
LICENSED PROFESSIONAL ENGINEER
P.E. 2-6-09
Signature of Registrant & Date

NO.	REVISION	BY	DATE

APM & Associates, Inc.
Engineering • Planning • CM Services
FIRM REGISTRATION NUMBER: 3091

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IH 30 AT JOHN KING BLVD

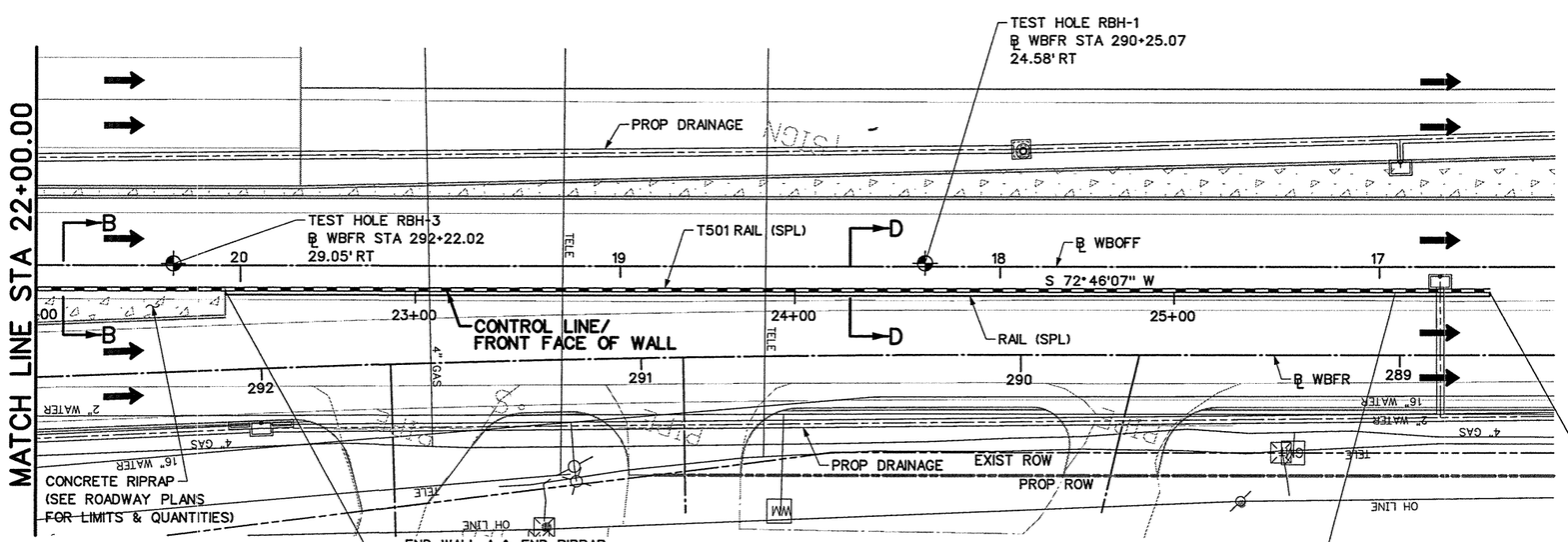
RETAINING WALL A

PLAN AND ELEVATION

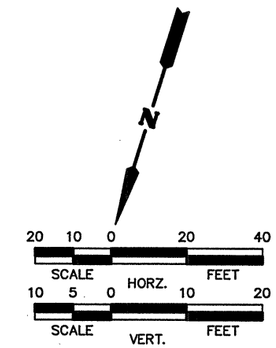
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Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073	184

SHEET 3 OF 5

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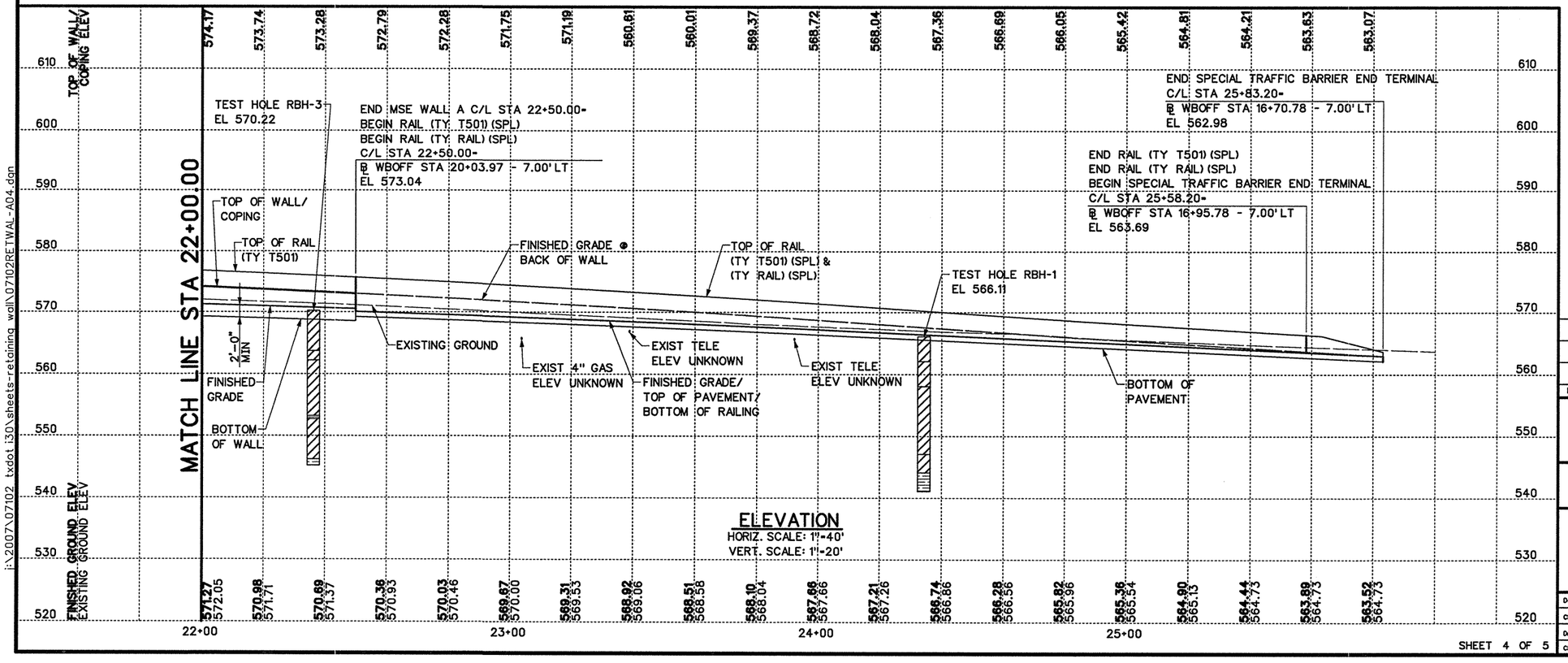


PLAN
SCALE: 1"=40'



NOTES:

1. REFER TO SHEET 5 OF 5 FOR TYPICAL SECTIONS, DETAILS AND GENERAL NOTES.
2. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
3. REFER TO TRAFFIC RAIL (TYPE T501) (SPL) SHEET AND TRAFFIC RAIL (TYPE RAIL) (SPL) SHEET FOR RAIL CONSTRUCTION AND ADDITIONAL INFORMATION.
4. REFER TO THE WALL FORM LINER PLAN SHEETS FOR AESTHETIC GUIDELINES AND ADDITIONAL INFORMATION.
5. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL COORDINATE ALL EXISTING UTILITY RELOCATION TO AVOID ANY CONFLICTS WITH RETAINING WALL CONSTRUCTION.



ELEVATION
HORIZ. SCALE: 1"=40'
VERT. SCALE: 1"=20'

SHEET 4 OF 5



Signature of Registrant & Date

NO.	REVISION	BY	DATE

APM & Associates, Inc.
Engineering • Planning • CM Services
FIRM REGISTRATION NUMBER: 3091

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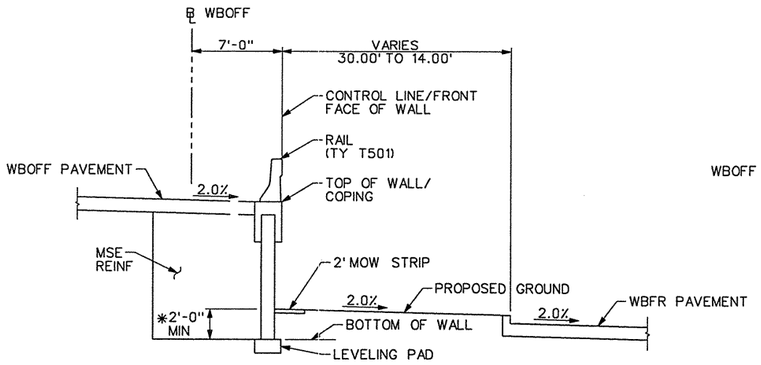
IH 30 AT JOHN KING BLVD

RETAINING WALL A

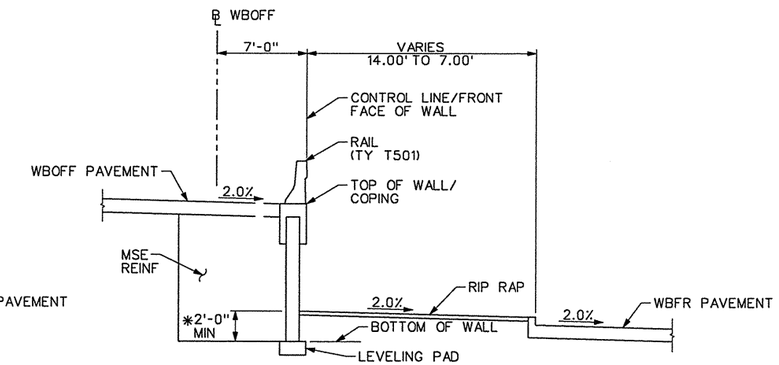
PLAN AND ELEVATION

Designed:	DJP	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073	185

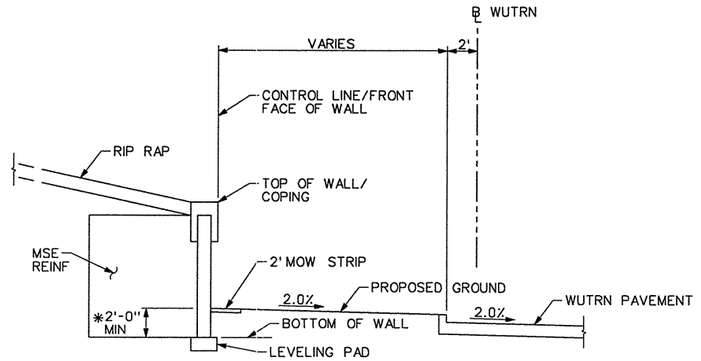
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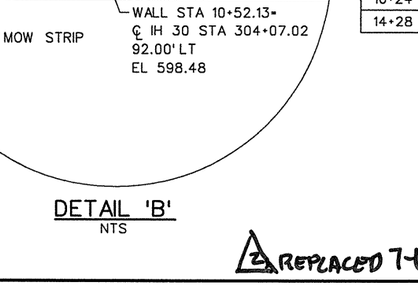
SECTION A-A
NTS
STA 10+51.52 TO STA 20+41.16



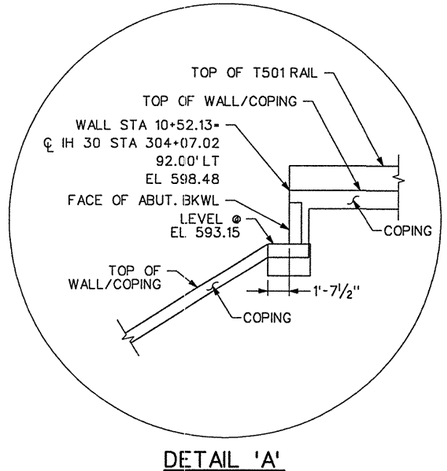
SECTION B-B
NTS
STA 20+41.16 TO STA 22+50.00



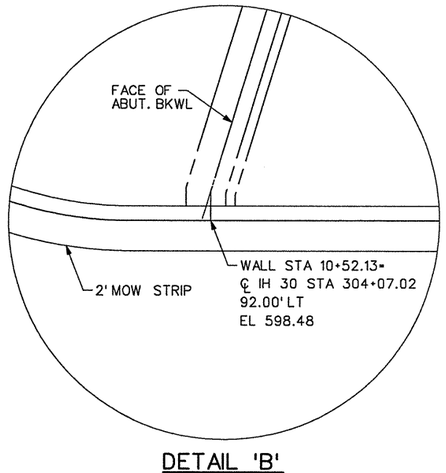
SECTION C-C
NTS
BEGIN WALL TO STA 10+51.52



WALL MOW STRIP DETAIL
NTS



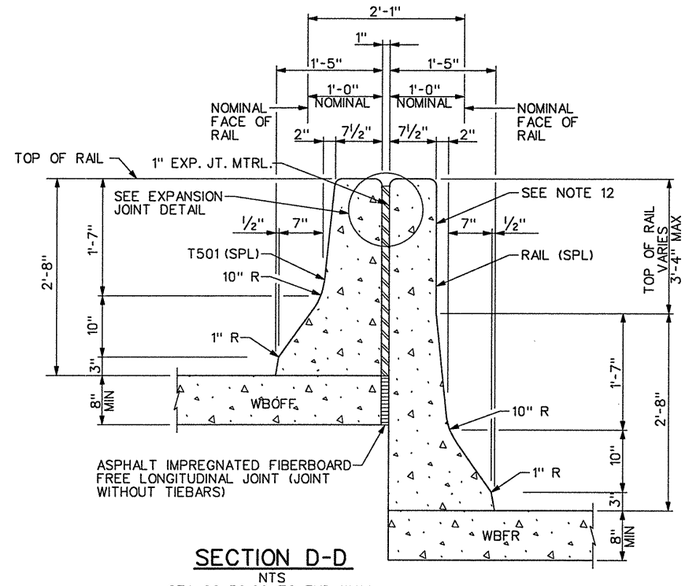
DETAIL 'A'
NTS



DETAIL 'B'
NTS

GENERAL NOTES:

1. ALL STA. AND OFFSETS ARE FROM THE C/L WALL "A" UNLESS NOTED OTHERWISE (UNO).
*2. SQUARE FOOT SURFACE AREA OF RETAINING WALL IS MEASURED FROM TOP OF RETAINING WALL TO 2'-0" BELOW PROPOSED GROUND, (UNO). LEVELING PAD ADJUSTMENTS MADE TO ACCOMMODATE THE AVAILABLE OPTIONAL RETAINING WALLS WILL NOT BE MEASURED FOR PAYMENT.
3. WALL BACKFILL SHALL CONFORM TO THE REQUIREMENTS OF TxDOT ITEM 0423, TYPE "A" SELECT BACKFILL.
4. PARTICLES LARGER THAN 1/4" SHALL BE ANGULAR OR CRUSHED. ROUNDED ROCK OR GRAVEL WILL NOT BE ALLOWED. CEMENT STABILIZED BACKFILL WILL NOT BE PERMITTED.
5. PROVIDE EMBANKMENT EARTH REINFORCEMENTS WITH A MINIMUM LENGTH GREATER THAN THE REQUIREMENTS OF THE TABLE BELOW OR 8' WHICHEVER IS LARGER, TO MEET THE REQUIREMENTS OF TERRACON CONSULTANTS, INC. GEOTECHNICAL ENGINEERING REPORT NO. 94085412, DATED JANUARY 14, 2009.
6. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE DURING CONSTRUCTION AND POST CONSTRUCTION PERIOD.
7. DRAINAGE TRUNK AND LATERAL PIPES IN THE VICINITY OF THE WALL SHALL BE CONSTRUCTED PRIOR TO WALL CONSTRUCTION.
8. WALL MANUFACTURER SHALL ADJUST AND ACCOMMODATE ANY INLETS POSITIONED WITHIN THE REINFORCING ZONE OF AN MSE WALL. ADJUSTMENTS SHALL BE SHOWN IN THE SHOP DRAWINGS.
9. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
10. REFER TO THE ROADWAY AND DRAINAGE PLANS FOR ADDITIONAL INFORMATION FOR ROADWAY AND DRAINAGE ITEMS RESPECTIVELY.
11. REFER TO TxDOT STANDARDS RW(MSE) & RW(TRF) FOR ADDITIONAL INFORMATION.
12. REFER TO TRAFFIC RAIL(TYPE T501) (SPL) SHEET AND TRAFFIC RAIL(TYPE RAIL) (SPL) SHEET FOR RAIL CONSTRUCTION AND ADDITIONAL INFORMATION.
13. REFER TO THE WALL FORM LINER PLAN SHEETS FOR AESTHETIC GUIDELINES AND ADDITIONAL INFORMATION.



SECTION D-D
NTS
STA 22+50.00 TO END WALL

EARTH REINFORCEMENTS				
WALL STATION START	WALL STATION END	H_{MIN}	H_{MAX}	MINIMUN ALLOWABLE LENGTH
22+50	16+24	0'	9'	8'
16+24	14+28	9'	19'	100% H
14+28	10+00	19'	23'	100% H

NO.	REVISION	BY	DATE
2	REPLACED 7-1-09 BB		

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FIRM REGISTRATION NUMBER: 3091

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IH 30 AT JOHN KING BLVD

RETAINING WALL A
TYPICAL SECTIONS AND GENERAL NOTES

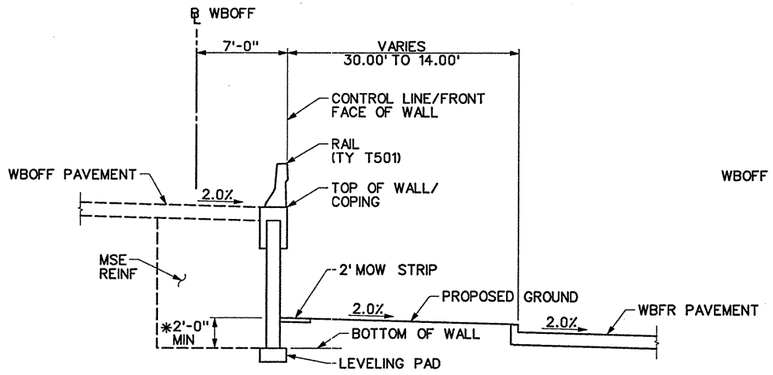
STATE OF TEXAS
AFISU OLABIMTAN
63663
LICENSED PROFESSIONAL ENGINEER
7-1-09
Signature of Registrant & Date

SHEET 5 OF 5

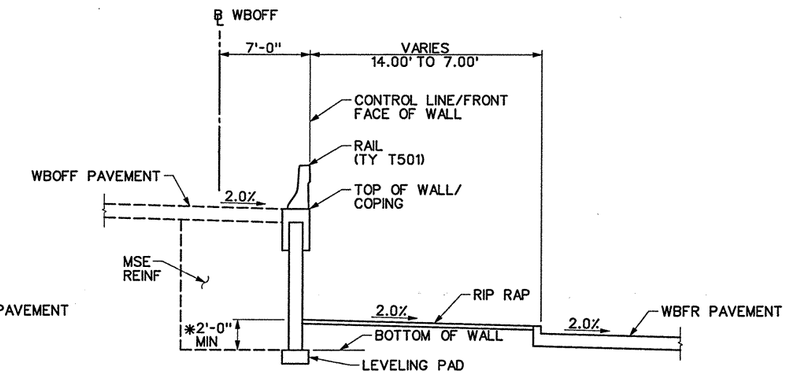
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Checked: ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn: TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: JLC	DAL	ROCKWALL	0009	12	073	186

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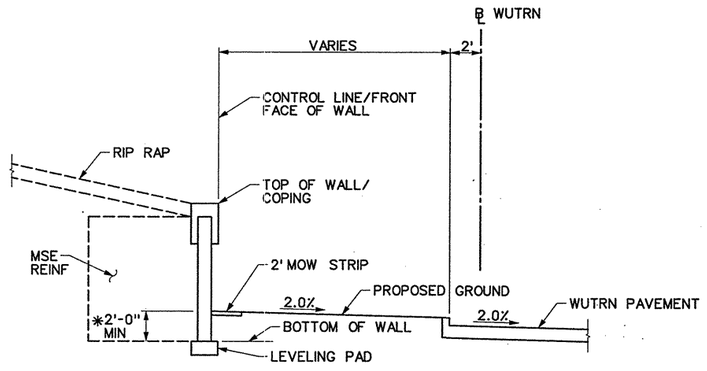
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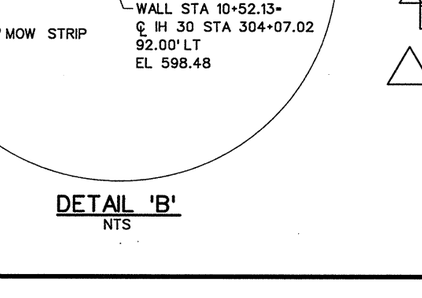
SECTION A-A
NTS
STA 10+51.52 TO STA 20+41.16



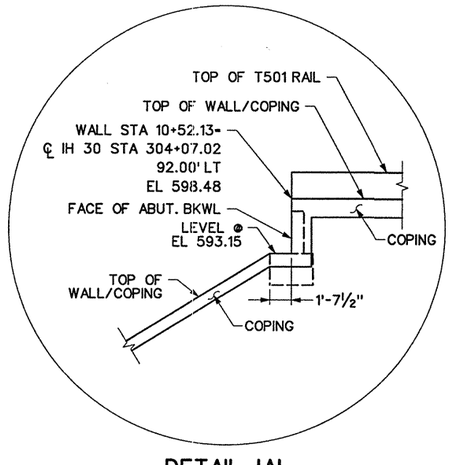
SECTION B-B
NTS
STA 20+41.16 TO STA 22+50.00



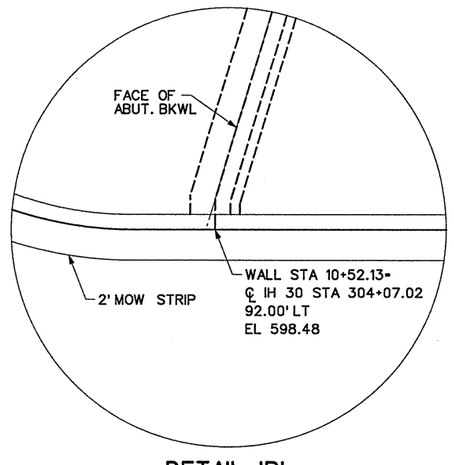
SECTION C-C
NTS
BEGIN WALL TO STA 10+51.52



WALL MOW STRIP DETAIL
NTS



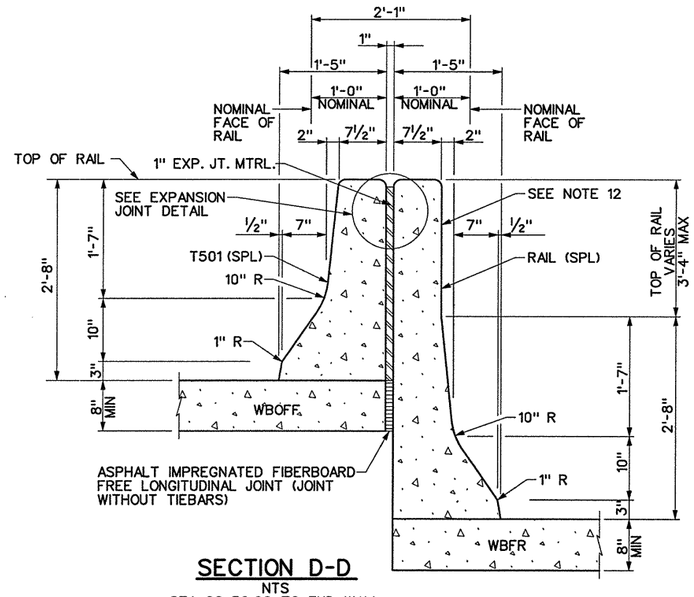
DETAIL 'A'
NTS



DETAIL 'B'
NTS

GENERAL NOTES:

1. ALL STA. AND OFFSETS ARE FROM THE C/L WALL "A" UNLESS NOTED OTHERWISE (UNO).
*2. SQUARE FOOT SURFACE AREA OF RETAINING WALL IS MEASURED FROM TOP OF RETAINING WALL TO 2'-0" BELOW PROPOSED GROUND, (UNO). LEVELING PAD ADJUSTMENTS MADE TO ACCOMMODATE THE AVAILABLE OPTIONAL RETAINING WALLS WILL NOT BE MEASURED FOR PAYMENT.
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6. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE DURING CONSTRUCTION AND POST CONSTRUCTION PERIOD.
7. DRAINAGE TRUNK AND LATERAL PIPES IN THE VICINITY OF THE WALL SHALL BE CONSTRUCTED PRIOR TO WALL CONSTRUCTION.
8. WALL MANUFACTURER SHALL ADJUST AND ACCOMMODATE ANY INLETS POSITIONED WITHIN THE REINFORCING ZONE OF AN MSE WALL. ADJUSTMENTS SHALL BE SHOWN IN THE SHOP DRAWINGS.
9. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
10. REFER TO THE ROADWAY AND DRAINAGE PLANS FOR ADDITIONAL INFORMATION FOR ROADWAY AND DRAINAGE ITEMS RESPECTIVELY.
11. REFER TO TxDOT STANDARDS RW(MSE) & RW(TRF) FOR ADDITIONAL INFORMATION.
12. REFER TO TRAFFIC RAIL(TYPE T501) (SPL) SHEET AND TRAFFIC RAIL(TYPE RAIL) (SPL) SHEET FOR RAIL CONSTRUCTION AND ADDITIONAL INFORMATION.
13. REFER TO THE WALL FORM LINER PLAN SHEETS FOR AESTHETIC GUIDELINES AND ADDITIONAL INFORMATION.



SECTION D-D
NTS
STA 22+50.00 TO END WALL

EARTH REINFORCEMENTS				
WALL STATION START	WALL STATION END	H_{MIN}	H_{MAX}	MINIMUN ALLOWABLE LENGTH
22+50	18+40	0'	9'	8'
1 18+40	14+28	9'	19'	100% H
14+28	10+00	19'	23'	100% H

△ ~ FIELD CHANGE #_____

AFISU OLABIMTAN
63663
REGISTERED PROFESSIONAL ENGINEER
STATE OF TEXAS
11-23-09

Signature of Registrant & Date

SHEET 5 OF 5

NO.	REVISION	BY	DATE
1	REVISED EARTH REINFORCEMENT STATION LIMIT	DP	11/20/09

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FIRM REGISTRATION NUMBER: 3091

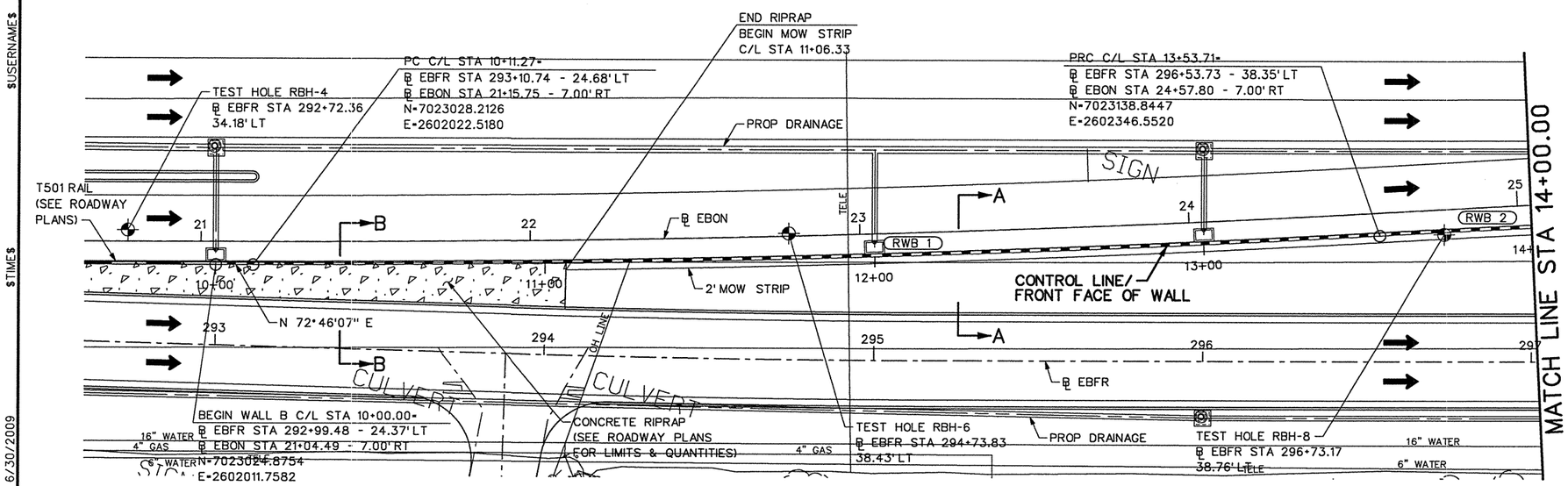
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IH 30 AT JOHN KING BLVD

RETAINING WALL A

TYPICAL SECTIONS AND GENERAL NOTES

Designed: DJP	FED. RD. DIV. NO. 6	STATE TEXAS	FEDERAL AID PROJECT NO. (SEE TITLE SHEET)			HIGHWAY NO. IH 30
Checked: ACO						
Drawn: TFT	DIST. DAL	COUNTY ROCKWALL	CONTROL NO. 0009	SECTION NO. 12	JOB NO. 073	SHEET NO. 86A
Checked: JLC						



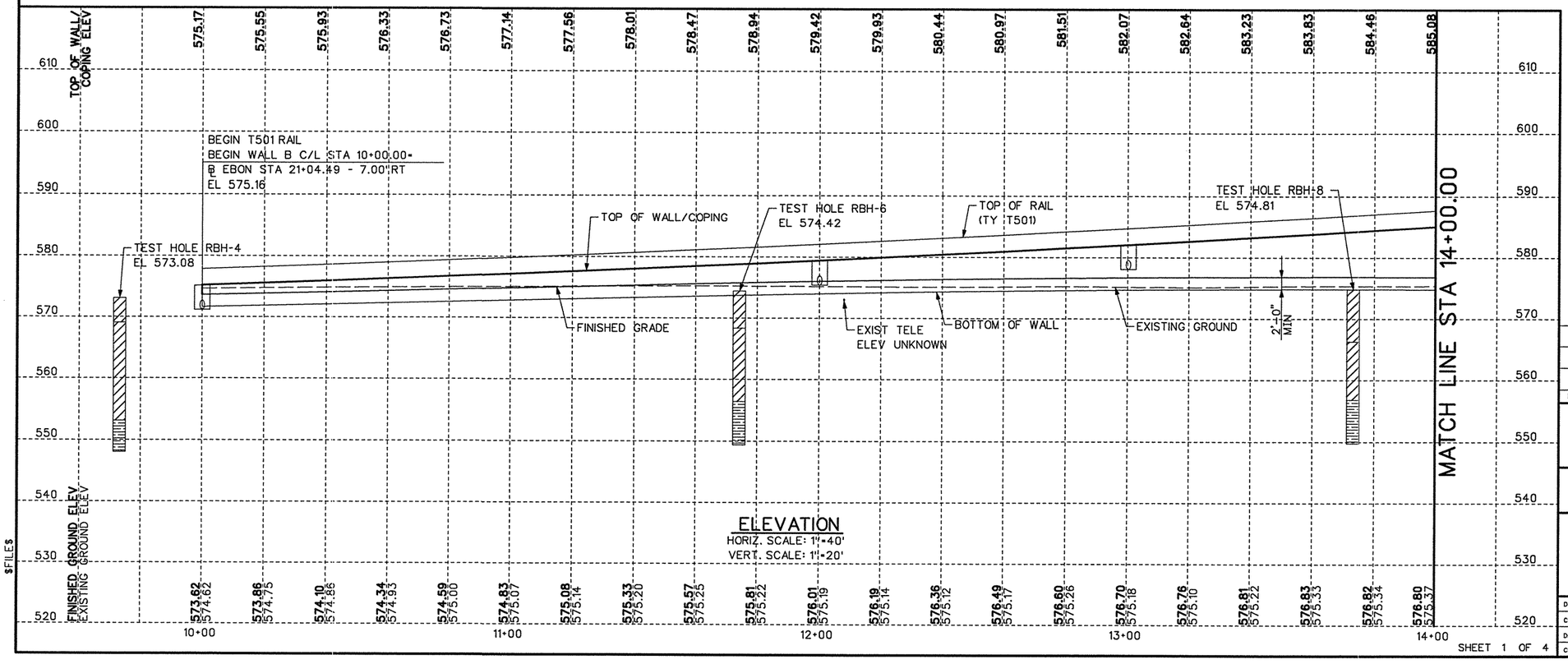
PLAN
SCALE: 1"=40'

HORIZONTAL CURVE (RWB 1)

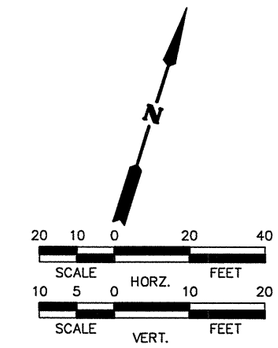
PI STA = 11+82.53
Δ = 03°14'22" (LT)
D= 00°56'46"
T= 171.27'
L= 342.45'
R= 6057.00'
PC STA 10+11.27
TANGET BRG. @ PC = N 72°46'07" E
PT STA 13+53.71
TANGET BRG. @ PT = N 69°31'46" E

HORIZONTAL CURVE (RWB 2)

PI STA = 14+14.60
Δ = 01°09'17" (RT)
D= 00°56'53"
T= 60.89'
L= 121.78'
R= 6043.00'
PC STA 13+53.71
TANGET BRG. @ PC = N 69°31'46" E
PT STA 14+75.49
TANGET BRG. @ PT = N 70°41'02" E



ELEVATION
HORIZ. SCALE: 1"=40'
VERT. SCALE: 1"=20'



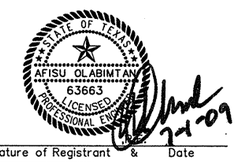
NOTES:

1. REFER TO SHEET 4 OF 4 FOR TYPICAL SECTIONS, DETAILS AND GENERAL NOTES.
2. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
3. REFER TO THE WALL FORM LINER PLAN SHEETS FOR AESTHETIC GUIDELINES AND ADDITIONAL INFORMATION.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL COORDINATE ALL EXISTING UTILITY RELOCATION TO AVOID ANY CONFLICTS WITH RETAINING WALL CONSTRUCTION.

ESTIMATED QUANTITIES

423-2001	RETAINING WALL (MSE)	SF	15994
432-2039	RIP RAP (MOW STRIP) (4IN)	CY	26
450-2007	RAIL (TY T501)	LF	1052

E REPLACED 7-1-09 BB



Signature of Registrant & Date

NO.	REVISION	BY	DATE

APM & Associates, Inc.
Engineering . Planning . CM Services
FIRM REGISTRATION NUMBER: 3091

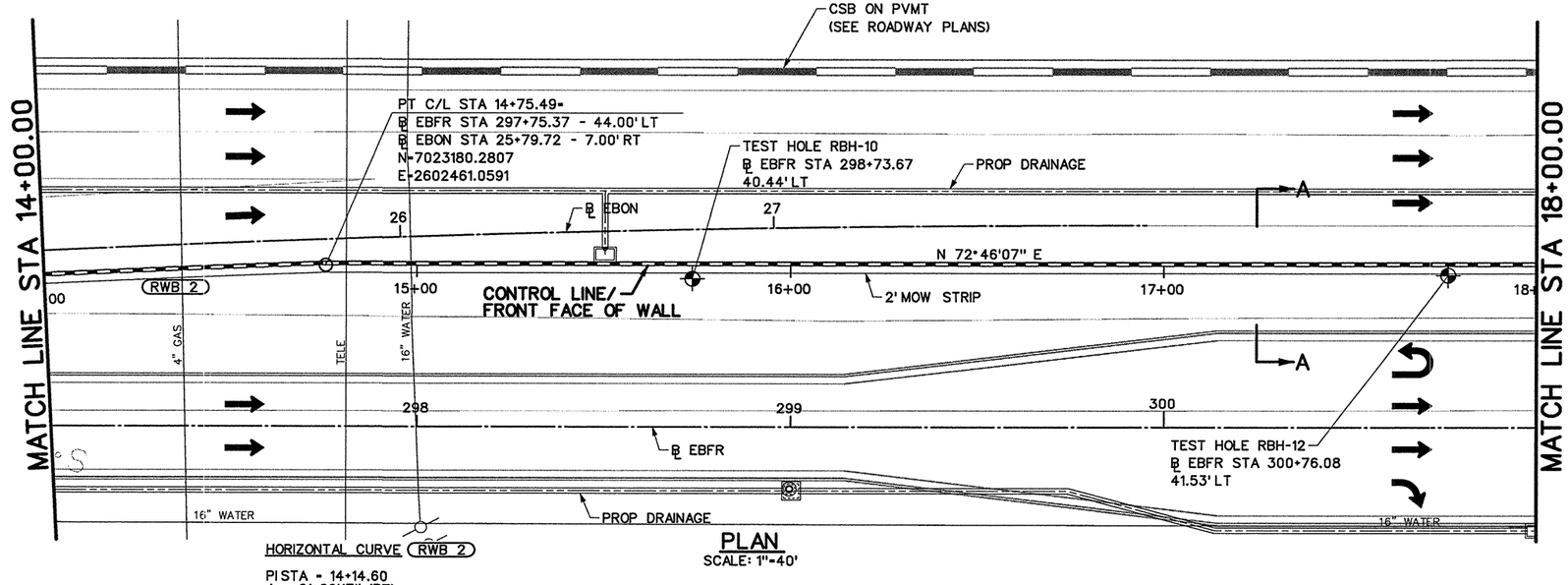
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IH 30 AT JOHN KING BLVD

RETAINING WALL B
PLAN AND ELEVATION

Designed:	DJP	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073	187

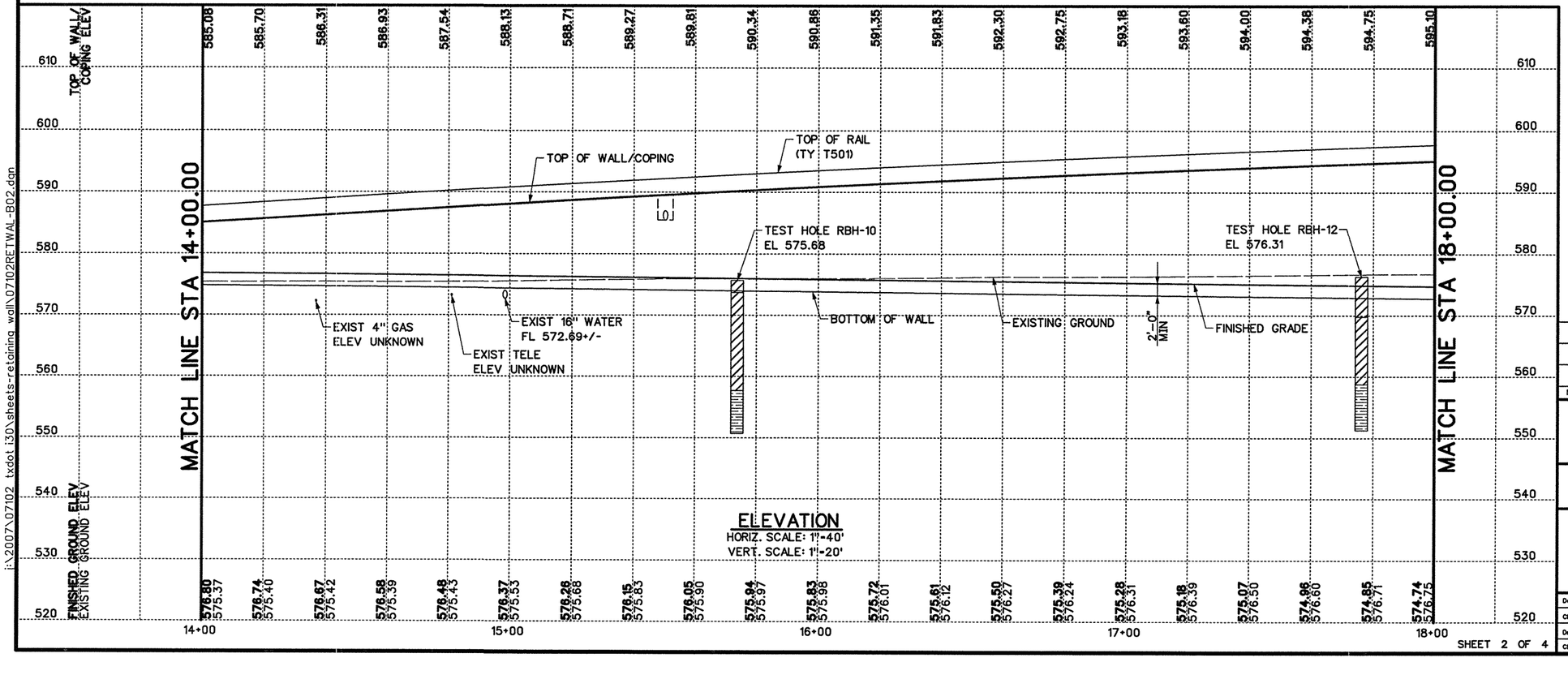
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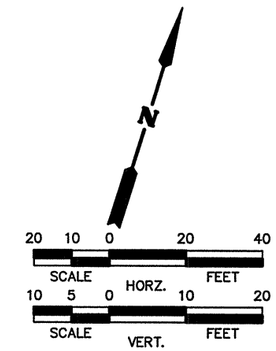
HORIZONTAL CURVE (RWB 2)

PI STA = 14+14.60
Δ = 01°09'17" (RT)
D= 00°56'53"
T= 60.89'
L= 121.78'
R= 6043.00'
PC STA 13+53.71
TANGET BRG. @ PC = N 69°31'46" E
PT STA 14+75.49
TANGET BRG. @ PT = N 70°41'02" E

PLAN
SCALE: 1"=40'



ELEVATION
HORIZ. SCALE: 1"=40'
VERT. SCALE: 1"=20'



NOTES:

1. REFER TO SHEET 4 OF 4 FOR TYPICAL SECTIONS, DETAILS AND GENERAL NOTES.
2. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
3. REFER TO THE WALL FORM LINER PLAN SHEETS FOR AESTHETIC GUIDELINES AND ADDITIONAL INFORMATION.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL COORDINATE ALL EXISTING UTILITY RELOCATION TO AVOID ANY CONFLICTS WITH RETAINING WALL CONSTRUCTION.

STATE OF TEXAS
AFISU OLABIMTAN
63663
LICENSED
PROFESSIONAL ENGINEER

Signature of Registrant & Date 2-6-09 P.E.

NO.	REVISION	BY	DATE

APM & Associates, Inc.
Engineering • Planning • CM Services
FIRM REGISTRATION NUMBER: 3091

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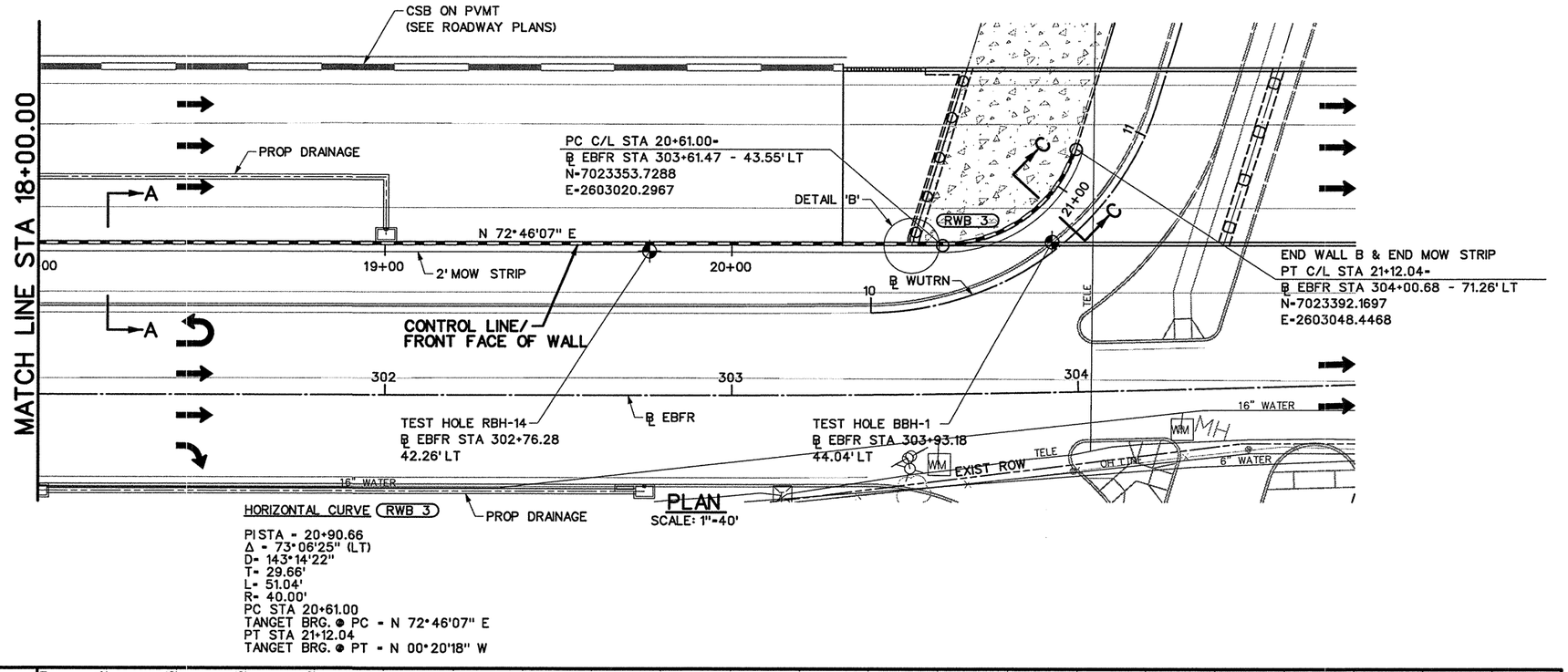
IH 30 AT JOHN KING BLVD

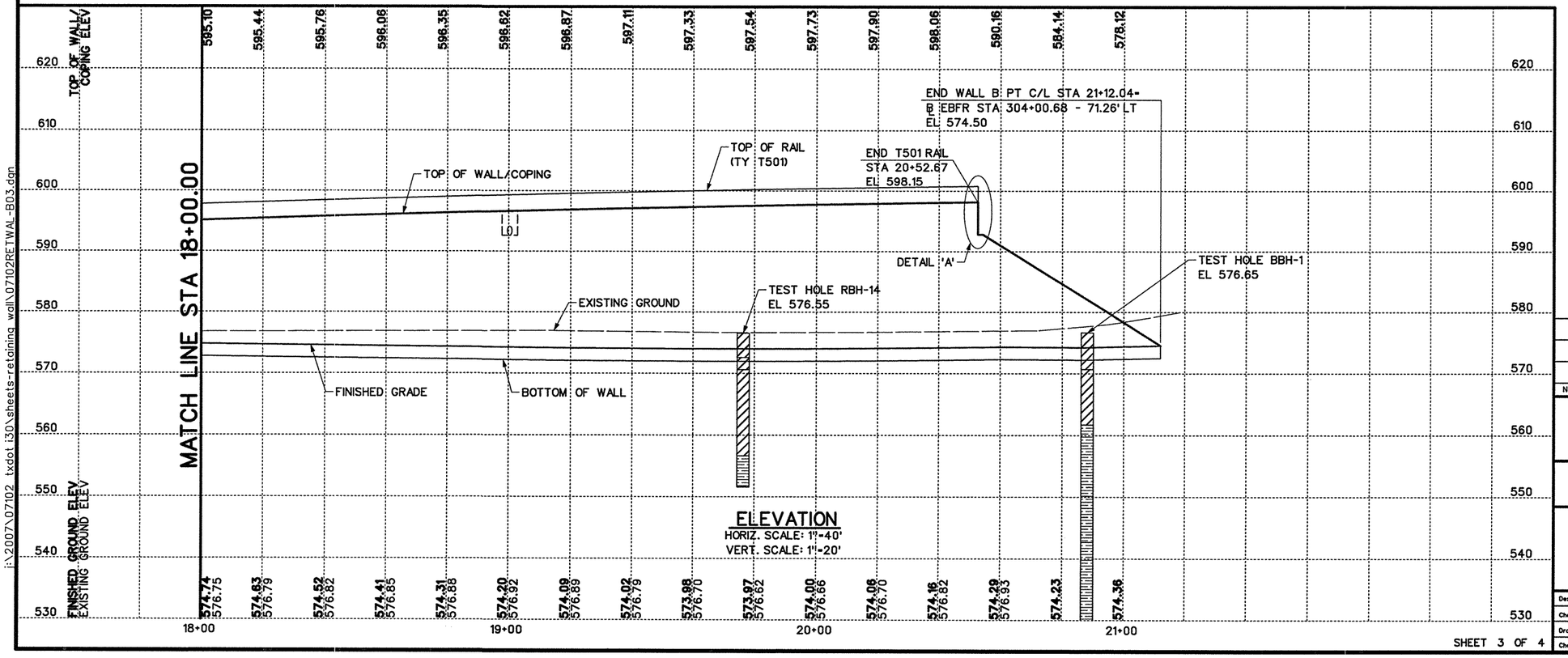
RETAINING WALL B
PLAN AND ELEVATION

Designed: DJP	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn: TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: JLC	DAL	ROCKWALL	0009	12	073	188

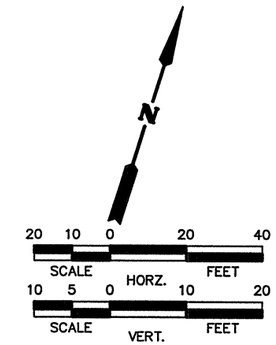
SHEET 2 OF 4

ttanos 3:02:53 PM 2/6/2009
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ELEVATION
HORIZ. SCALE: 1"=40'
VERT. SCALE: 1"=20'



NOTES:

1. REFER TO SHEET 4 OF 4 FOR TYPICAL SECTIONS, DETAILS AND GENERAL NOTES.
2. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
3. REFER TO THE WALL FORM LINER PLAN SHEETS FOR AESTHETIC GUIDELINES AND ADDITIONAL INFORMATION.
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STATE OF TEXAS
AFISU OLABIMTAN
63663
LICENSED
PROFESSIONAL ENGINEER
P.E.

Signature of Registrant & Date 2-6-09

NO.	REVISION	BY	DATE

APM & Associates, Inc.
Engineering • Planning • CM Services
FIRM REGISTRATION NUMBER: 3091

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IH 30 AT JOHN KING BLVD

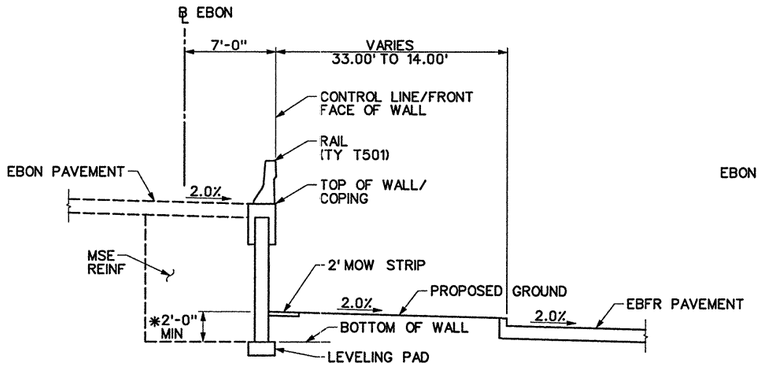
RETAINING WALL B

PLAN AND ELEVATION

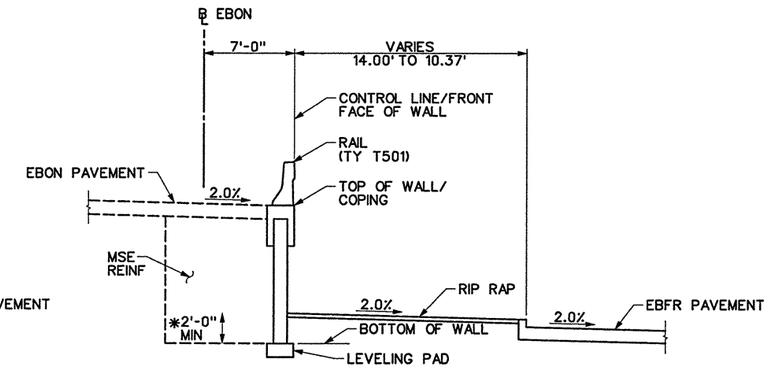
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Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073	189

SHEET 3 OF 4

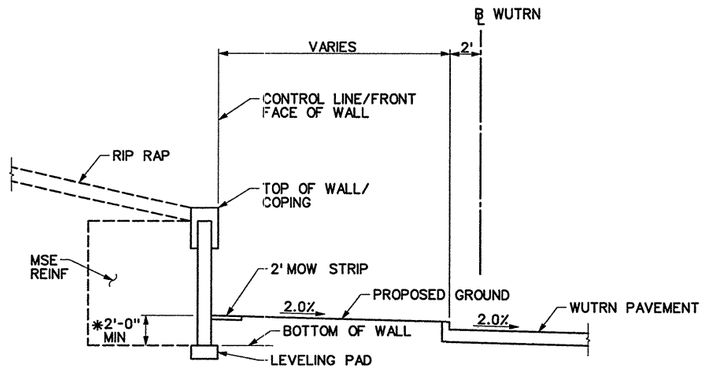
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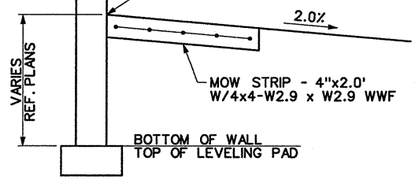
SECTION A-A
NTS
STA 11+06.41 TO STA 20+52.06



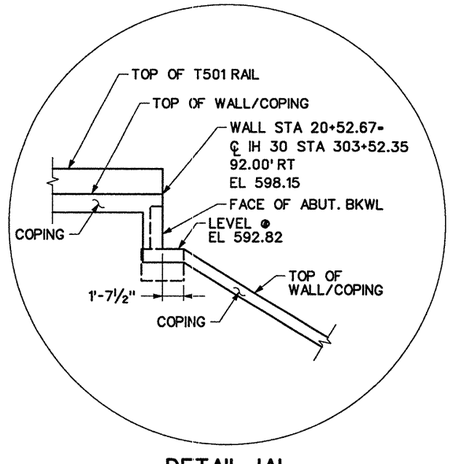
SECTION B-B
NTS
BEGIN WALL TO STA 11+06.41



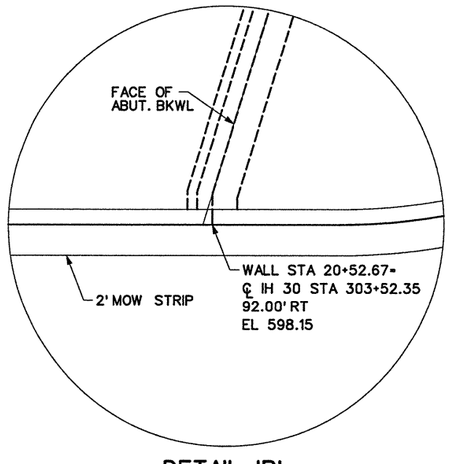
SECTION C-C
NTS
STA 20+52.06 TO END WALL



WALL MOW STRIP DETAIL
NTS



DETAIL 'A'
NTS



DETAIL 'B'
NTS

GENERAL NOTES:

1. ALL STA. AND OFFSETS ARE FROM THE C/L WALL "B" UNLESS NOTED OTHERWISE (UNO).
*2. SQUARE FOOT SURFACE AREA OF RETAINING WALL IS MEASURED FROM TOP OF RETAINING WALL TO 2'-0" BELOW PROPOSED GROUND, (UNO). LEVELING PAD ADJUSTMENTS MADE TO ACCOMMODATE THE AVAILABLE OPTIONAL RETAINING WALLS WILL NOT BE MEASURED FOR PAYMENT.
3. WALL BACKFILL SHALL CONFORM TO THE REQUIREMENTS OF TxDOT ITEM 0423, TYPE "A" SELECT BACKFILL.
4. PARTICLES LARGER THAN 1/4 " SHALL BE ANGULAR OR CRUSHED. ROUNDED ROCK OR GRAVEL WILL NOT BE ALLOWED. CEMENT STABILIZED BACKFILL WILL NOT BE PERMITTED.
5. PROVIDE EMBANKMENT EARTH REINFORCEMENTS WITH A MINIMUM LENGTH GREATER THAN THE REQUIREMENTS OF THE TABLE BELOW OR 8' WHICHEVER IS LARGER, TO MEET THE REQUIREMENTS OF TERRACON CONSULTANTS, INC. GEOTECHNICAL ENGINEERING REPORT NO. 94085412, DATED JANUARY 14, 2009.
6. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE DURING CONSTRUCTION AND POST CONSTRUCTION PERIOD.
7. DRAINAGE TRUNK AND LATERAL PIPES IN THE VICINITY OF THE WALL SHALL BE CONSTRUCTED PRIOR TO WALL CONSTRUCTION.
8. WALL MANUFACTURER SHALL ADJUST AND ACCOMMODATE ANY INLETS POSITIONED WITHIN THE REINFORCING ZONE OF AN MSE WALL. ADJUSTMENTS SHALL BE SHOWN IN THE SHOP DRAWINGS.
9. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
10. REFER TO THE ROADWAY AND DRAINAGE PLANS FOR ADDITIONAL INFORMATION FOR ROADWAY AND DRAINAGE ITEMS RESPECTIVELY.
11. REFER TO TxDOT STANDARDS RW(MSE) & RW(TRF) FOR ADDITIONAL INFORMATION.
12. REFER TO TRAFFIC RAIL(TYPE T501) (SPL) SHEET AND TRAFFIC RAIL(TYPE RAIL) (SPL) SHEET FOR RAIL CONSTRUCTION AND ADDITIONAL INFORMATION.
13. REFER TO THE WALL FORM LINER PLAN SHEETS FOR AESTHETIC GUIDELINES AND ADDITIONAL INFORMATION.

EARTH REINFORCEMENTS				
WALL STATION START	WALL STATION END	H_{MIN}	H_{MAX}	MINIMUN ALLOWABLE LENGTH
10+00	15+74	0'	9'	8'
15+74	17+40	9'	20'	100% H
17+40	21+12	20'	26'	100% H

NO.	REVISION	BY	DATE

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IH 30 AT JOHN KING BLVD

RETAINING WALL B

TYPICAL SECTIONS AND GENERAL NOTES

STATE OF TEXAS
AFISU OLABIMTAN
63663
LICENSED
PROFESSIONAL ENGINEER

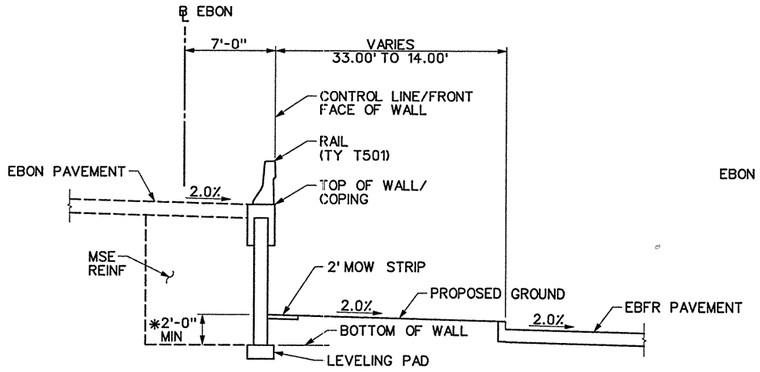
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SHEET 4 OF 4

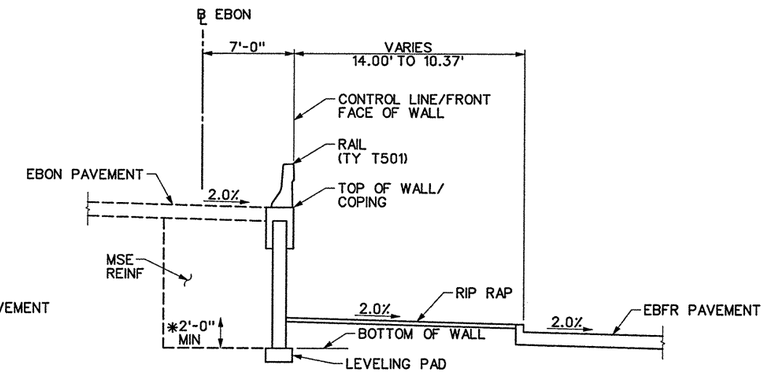
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Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073	190

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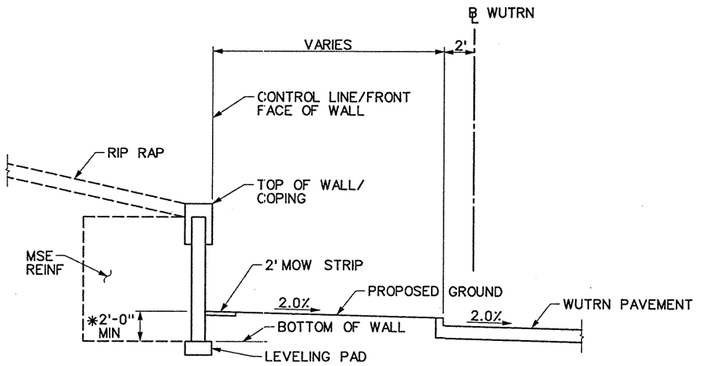
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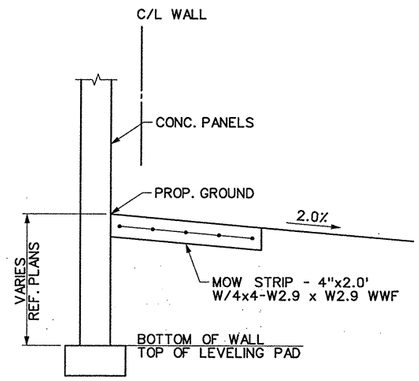
SECTION A-A
NTS
STA 11+06.41 TO STA 20+52.06



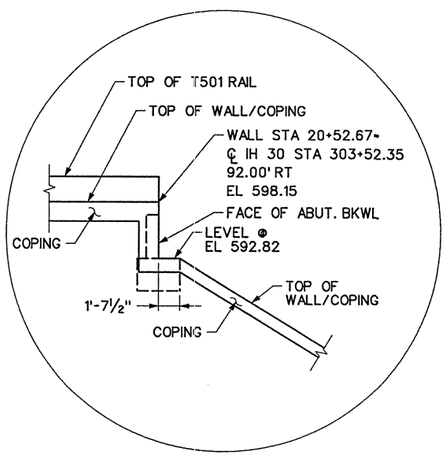
SECTION B-B
NTS
BEGIN WALL TO STA 11+06.41



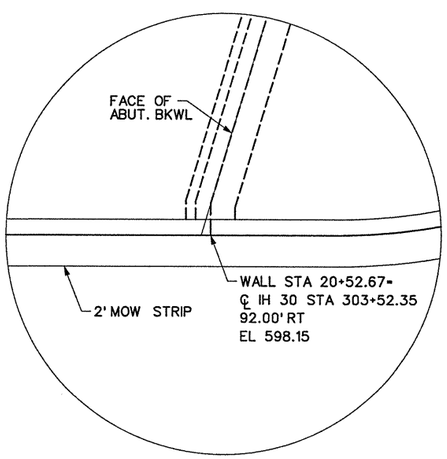
SECTION C-C
NTS
STA 20+52.06 TO END WALL



WALL MOW STRIP DETAIL
NTS



DETAIL 'A'
NTS



DETAIL 'B'
NTS

GENERAL NOTES:

1. ALL STA. AND OFFSETS ARE FROM THE C/L WALL "B" UNLESS NOTED OTHERWISE (UNO).
*2. SQUARE FOOT SURFACE AREA OF RETAINING WALL IS MEASURED FROM TOP OF RETAINING WALL TO 2'-0" BELOW PROPOSED GROUND, (UNO). LEVELING PAD ADJUSTMENTS MADE TO ACCOMMODATE THE AVAILABLE OPTIONAL RETAINING WALLS WILL NOT BE MEASURED FOR PAYMENT.
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7. DRAINAGE TRUNK AND LATERAL PIPES IN THE VICINITY OF THE WALL SHALL BE CONSTRUCTED PRIOR TO WALL CONSTRUCTION.
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EARTH REINFORCEMENTS				
WALL STATION START	WALL STATION END	H_{MIN}	H_{MAX}	MINIMUN ALLOWABLE LENGTH
10+00	13+60	0'	9'	8'
△1 13+60	17+40	9'	20'	100% H
17+40	21+12	20'	26'	100% H

△ ~ FIELD CHANGE #_____

NO.	REVISION	BY	DATE
△1	REVISED EARTH REINFORCEMENT STATION LIMIT	DP	11/20/09

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FIRM REGISTRATION NUMBER: 3091

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IH 30 AT JOHN KING BLVD

RETAINING WALL B

TYPICAL SECTIONS AND GENERAL NOTES

STATE OF TEXAS
AFISU OLABIMTAN
63663
REGISTERED PROFESSIONAL ENGINEER

Signature of Registrant & Date 11-23-09

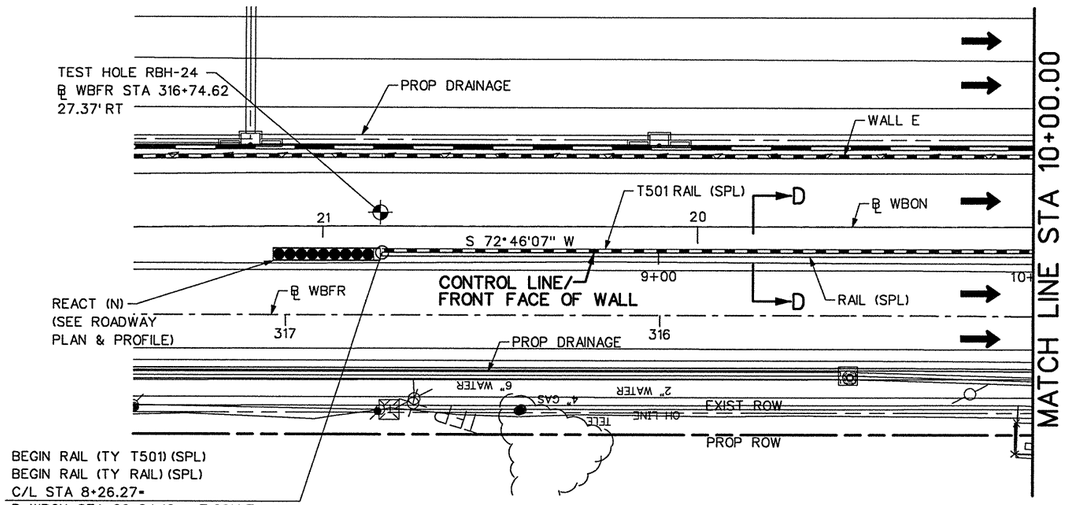
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Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073	190A

SHEET 4 OF 4

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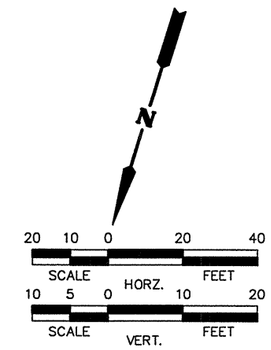
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6/30/2009



PLAN
SCALE: 1"=40'

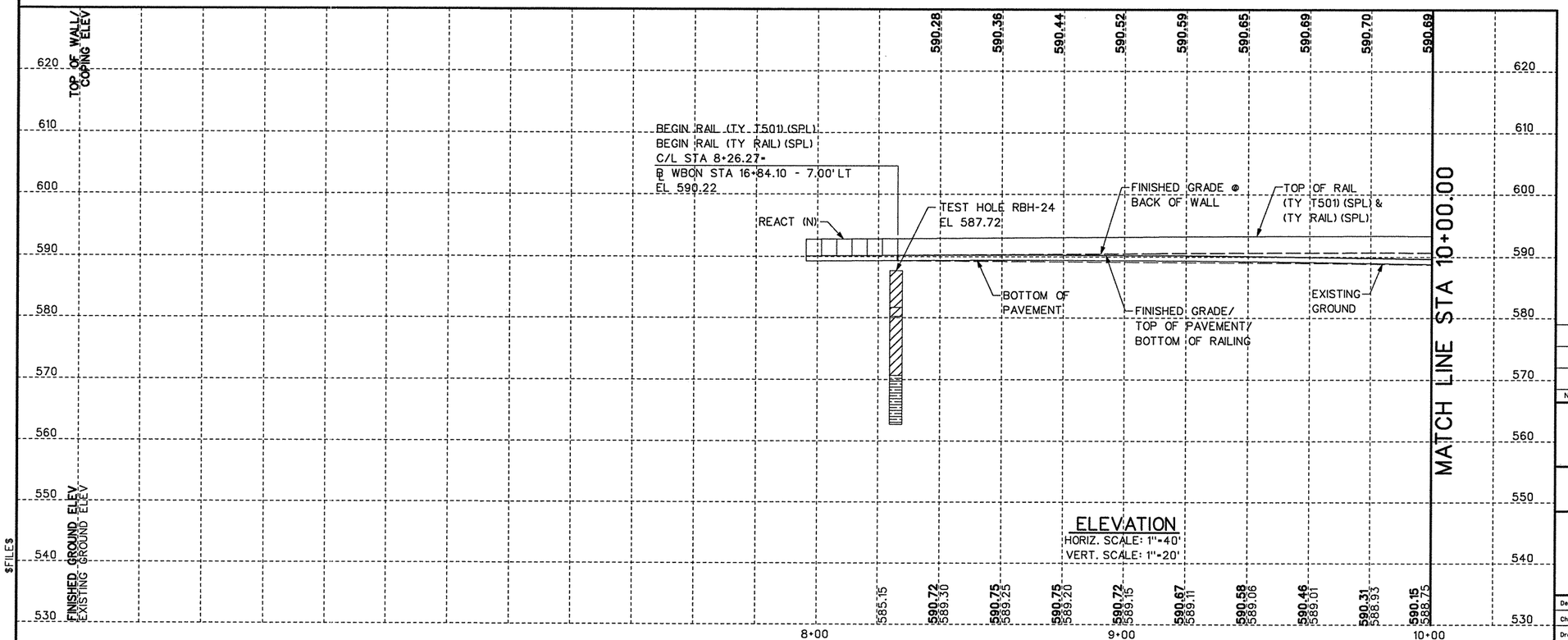
ESTIMATED QUANTITIES			
423-2001	RETAINING WALL (MSE)	SF	8667
432-2039	RIP RAP (MOW STRIP) (4IN)	CY	6
450-2007	RAIL (TY T501)	LF	633
450-2093	RAIL (CIP) (TY T501) (SPL)	LF	334
450-2120	RAIL (CIP) (TY RAIL) (SPL)	LF	334



NOTES:

1. REFER TO SHEETS 4 OF 5 AND 5 OF 5 FOR TYPICAL SECTIONS, DETAILS AND GENERAL NOTES.
2. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
3. REFER TO TRAFFIC RAIL (TYPE T501) (SPL) SHEET AND TRAFFIC RAIL (TYPE RAIL) (SPL) SHEET FOR RAIL CONSTRUCTION AND ADDITIONAL INFORMATION.
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5. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL COORDINATE ALL EXISTING UTILITY RELOCATION TO AVOID ANY CONFLICTS WITH RETAINING WALL CONSTRUCTION.

2 REPLACED 7-1-09 BB



ELEVATION
HORIZ. SCALE: 1"=40'
VERT. SCALE: 1"=20'

$FILE$

STATE OF TEXAS
AFISU OLABIMTAN
63663
LICENSED PROFESSIONAL ENGINEER

7-1-09
Signature of Registrant & Date

NO.	REVISION	BY	DATE

APM & Associates, Inc.
Engineering • Planning • CM Services
FIRM REGISTRATION NUMBER: 3091

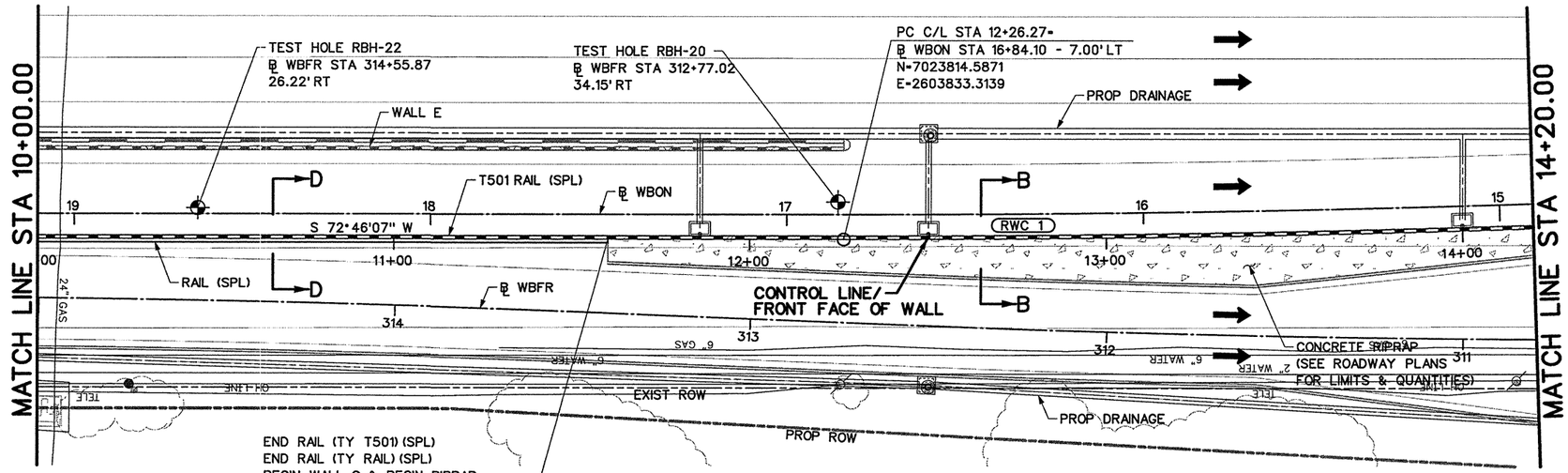
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IH 30 AT JOHN KING BLVD

RETAINING WALL C
PLAN AND ELEVATION

Designed:	DJP	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073	191

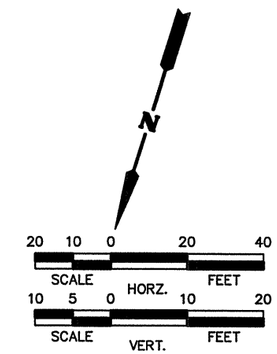
SHEET 1 OF 5



PLAN
SCALE: 1"=40'

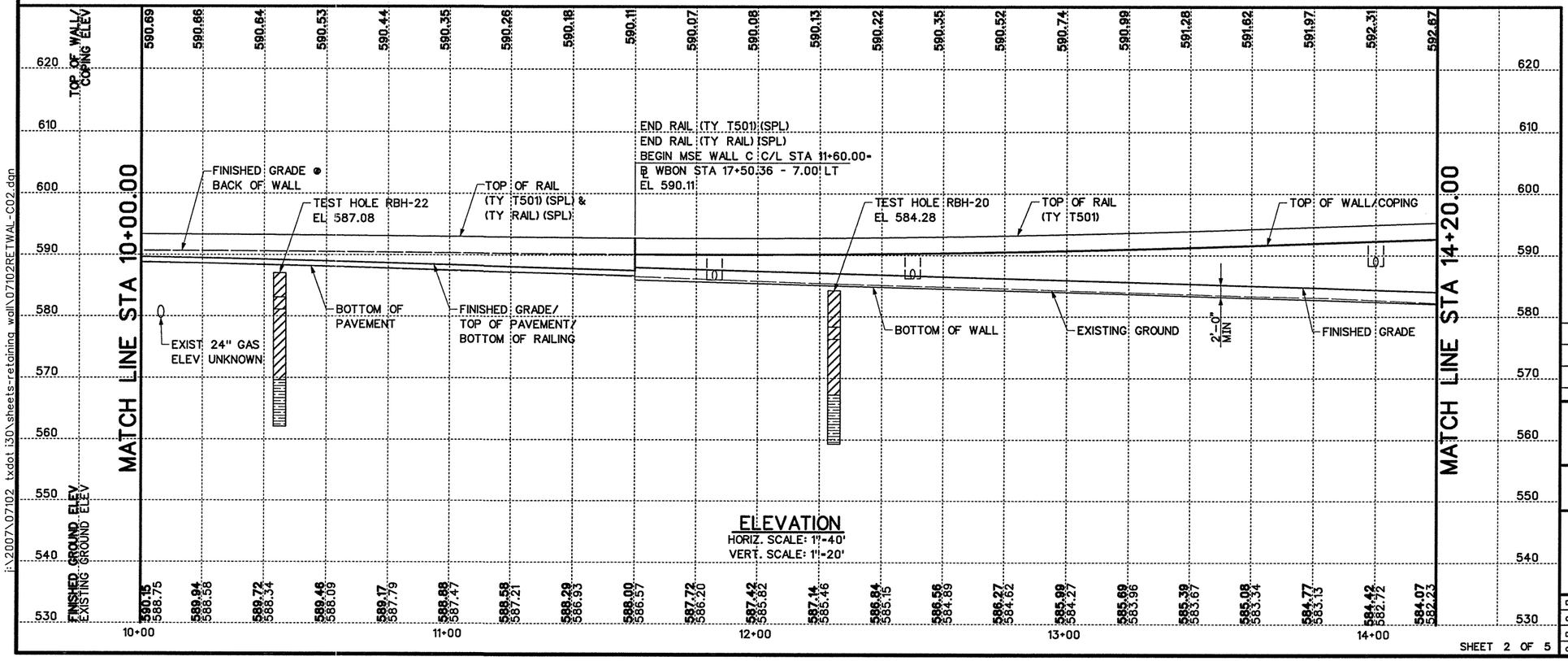
HORIZONTAL CURVE (RWC 1)

PI STA = 13+97.53
Δ = 03°14'22" (LT)
D= 00°56'45"
T= 171.27'
L= 342.45'
R= 6057.00'
PC STA 12+26.27
TANGET BRG. @ PC = S 72°46'07" W
PT STA 15+68.71
TANGET BRG. @ PT = S 69°31'46" W



NOTES:

1. REFER TO SHEETS 4 OF 5 AND 5 OF 5 FOR TYPICAL SECTIONS, DETAILS AND GENERAL NOTES.
2. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
3. REFER TO TRAFFIC RAIL (TYPE T501) (SPL) SHEET AND TRAFFIC RAIL (TYPE RAIL) (SPL) SHEET FOR RAIL CONSTRUCTION AND ADDITIONAL INFORMATION.
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5. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL COORDINATE ALL EXISTING UTILITY RELOCATION TO AVOID ANY CONFLICTS WITH RETAINING WALL CONSTRUCTION.



ELEVATION
HORIZ. SCALE: 1"=40'
VERT. SCALE: 1"=20'

SHEET 2 OF 5

STATE OF TEXAS
AFISU OLABIMTAN
63663
LICENSED PROFESSIONAL ENGINEER
P.E. 2-6-09
Signature of Registrant & Date

NO.	REVISION	BY	DATE

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Engineering • Planning • CM Services
FIRM REGISTRATION NUMBER: 3091

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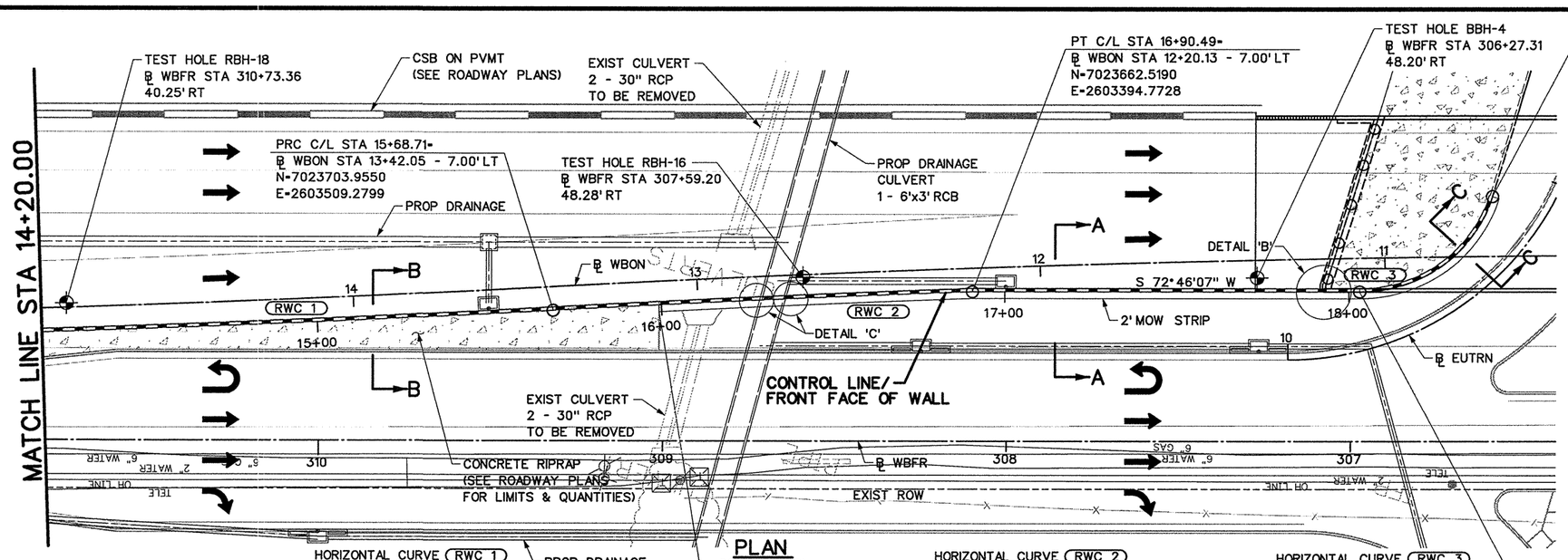
IH 30 AT JOHN KING BLVD

RETAINING WALL C
PLAN AND ELEVATION

Designed:	DJP	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073	92

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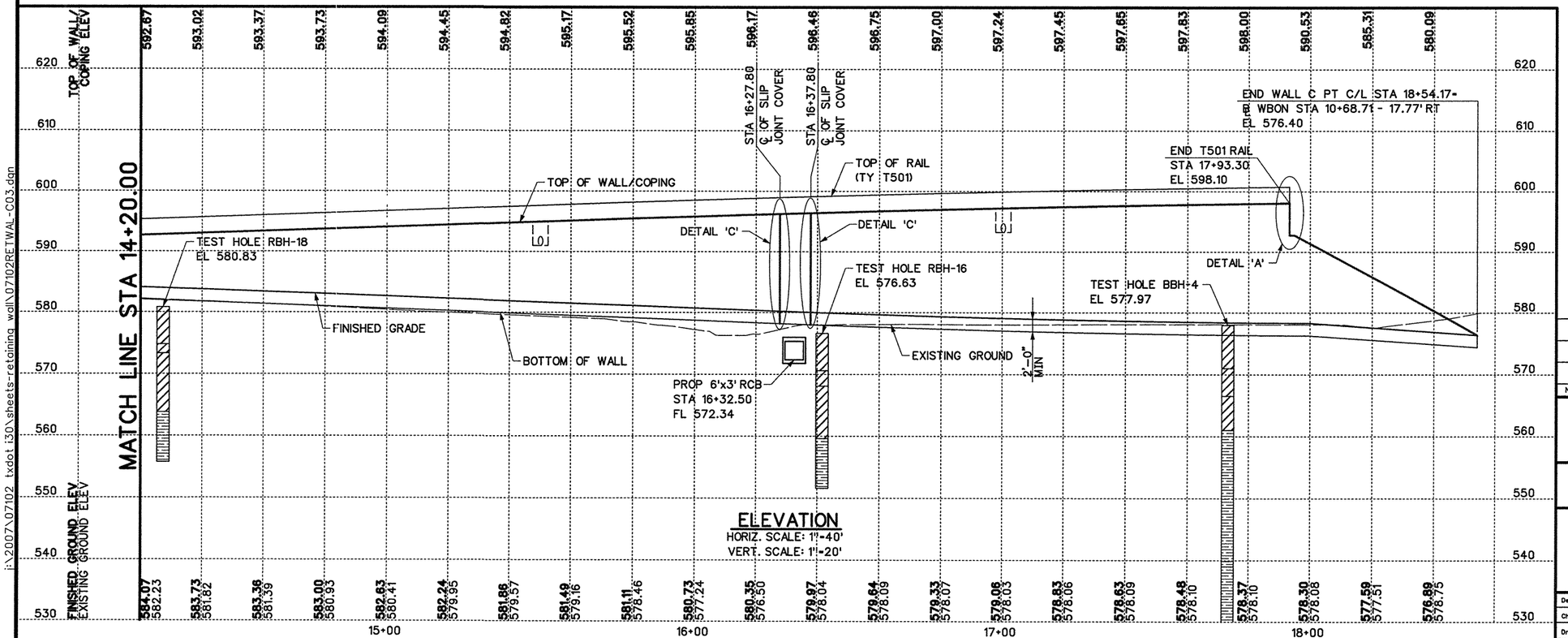
PLAN
SCALE: 1"=40'

HORIZONTAL CURVE (RWC 1)
PI STA = 13+97.53
Δ = 03°14'22" (LT)
D= 00°56'45"
T= 171.27'
L= 342.45'
R= 6057.00'
PC STA 12+26.27
TANGET BRG. @ PC = S 72°46'07" W
PT STA 15+68.71
TANGET BRG. @ PT = S 69°31'46" W

HORIZONTAL CURVE (RWC 2)
PI STA = 16+29.60
Δ = 01°09'17" (RT)
D= 00°56'53"
T= 60.89'
L= 121.78'
R= 6043.00'
PC STA 15+68.71
TANGET BRG. @ PC = S 69°31'46" W
PT STA 16+90.49
TANGET BRG. @ PT = S 70°41'02" W

HORIZONTAL CURVE (RWC 3)
PI STA = 18+32.79
Δ = 73°06'25" (LT)
D= 143°14'22"
T= 29.66'
L= 51.04'
R= 40.00'
PC STA 18+03.14
TANGET BRG. @ PC = S 72°46'07" W
PT STA 18+54.17
TANGET BRG. @ PT = S 00°20'18" E

NOTES:
1. REFER TO SHEETS 4 OF 5 AND 5 OF 5 FOR TYPICAL SECTIONS, DETAILS AND GENERAL NOTES.
2. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
3. REFER TO THE WALL FORM LINER PLAN SHEETS FOR AESTHETIC GUIDELINES AND ADDITIONAL INFORMATION.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL COORDINATE ALL EXISTING UTILITY RELOCATION TO AVOID ANY CONFLICTS WITH RETAINING WALL CONSTRUCTION.



ELEVATION
HORIZ. SCALE: 1"=40'
VERT. SCALE: 1"=20'

STATE OF TEXAS
AFISU OLABIMTAN
63663
LICENSED PROFESSIONAL ENGINEER
P.E. 2-23-09
Signature of Registrant & Date

NO.	REVISION	BY	DATE

APM & Associates, Inc.
Engineering • Planning • CM Services
FIRM REGISTRATION NUMBER: 3091

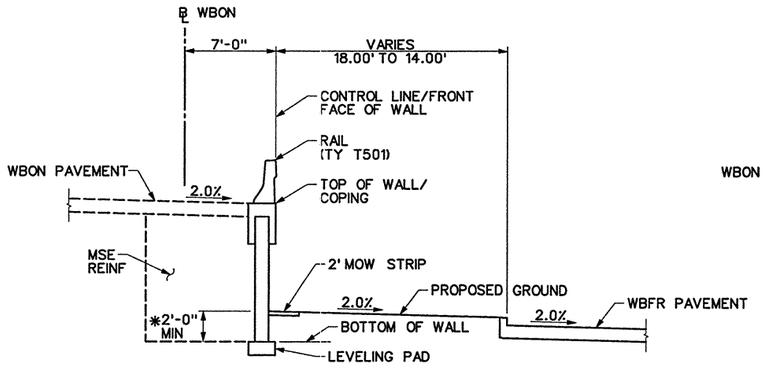
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IH 30 AT JOHN KING BLVD

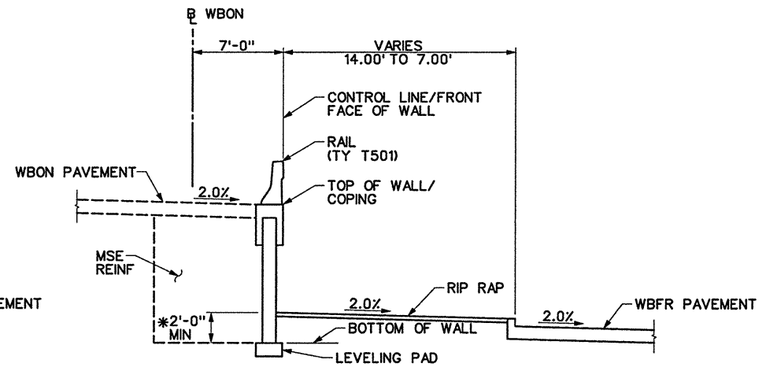
RETAINING WALL C
PLAN AND ELEVATION

Designed:	DJP	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073	193

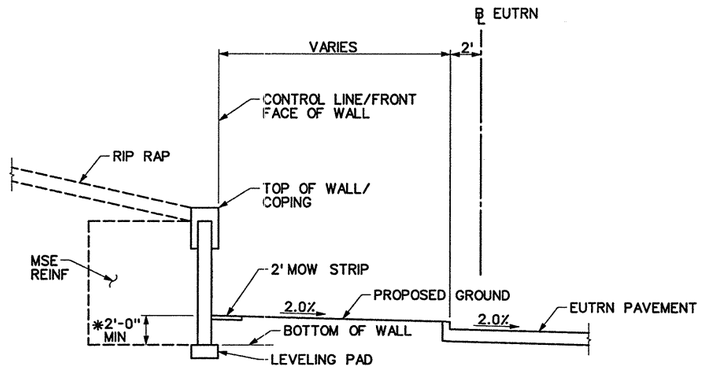
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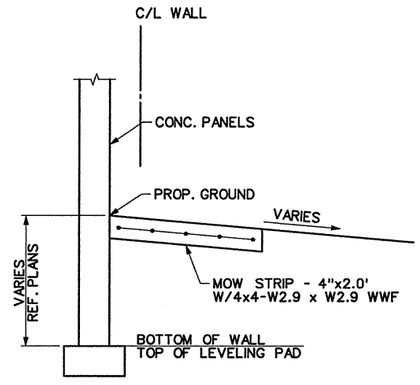
SECTION A-A
NTS
STA 15+99.36 TO STA 17+92.69



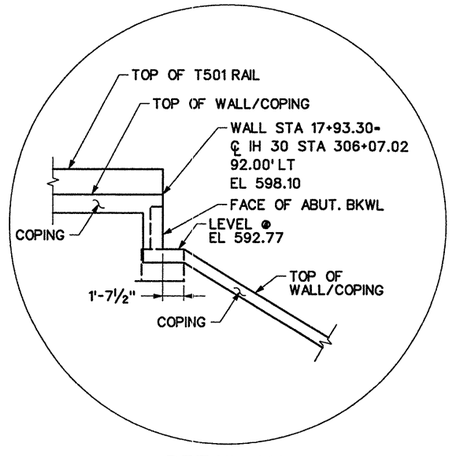
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NTS
STA 11+60.00 TO STA 15+99.36



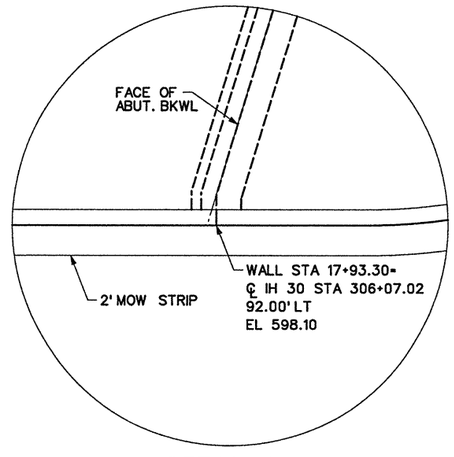
SECTION C-C
NTS
STA 17+92.69 TO END WALL



WALL MOW STRIP DETAIL
NTS



DETAIL 'A'
NTS



DETAIL 'B'
NTS

GENERAL NOTES:

1. ALL STA. AND OFFSETS ARE FROM THE C/L WALL "C" UNLESS NOTED OTHERWISE (UNO).
*2. SQUARE FOOT SURFACE AREA OF RETAINING WALL IS MEASURED FROM TOP OF RETAINING WALL TO 2'-0" BELOW PROPOSED GROUND, (UNO). LEVELING PAD ADJUSTMENTS MADE TO ACCOMMODATE THE AVAILABLE OPTIONAL RETAINING WALLS WILL NOT BE MEASURED FOR PAYMENT.
3. WALL BACKFILL SHALL CONFORM TO THE REQUIREMENTS OF TxDOT ITEM 0423, TYPE "A" SELECT BACKFILL.
4. PARTICLES LARGER THAN 1/4 " SHALL BE ANGULAR OR CRUSHED. ROUNDED ROCK OR GRAVEL WILL NOT BE ALLOWED. CEMENT STABILIZED BACKFILL WILL NOT BE PERMITTED.
5. PROVIDE EMBANKMENT EARTH REINFORCEMENTS WITH A MINIMUM LENGTH GREATER THAN THE REQUIREMENTS OF THE TABLE BELOW OR 8' WHICHEVER IS LARGER, TO MEET THE REQUIREMENTS OF TERRACON CONSULTANTS, INC. GEOTECHNICAL ENGINEERING REPORT NO. 94085412, DATED JANUARY 14, 2009.
6. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE DURING CONSTRUCTION AND POST CONSTRUCTION PERIOD.
7. DRAINAGE TRUNK AND LATERAL PIPES IN THE VICINITY OF THE WALL SHALL BE CONSTRUCTED PRIOR TO WALL CONSTRUCTION.
8. WALL MANUFACTURER SHALL ADJUST AND ACCOMMODATE ANY INLETS POSITIONED WITHIN THE REINFORCING ZONE OF AN MSE WALL. ADJUSTMENTS SHALL BE SHOWN IN THE SHOP DRAWINGS.
9. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
10. REFER TO THE ROADWAY AND DRAINAGE PLANS FOR ADDITIONAL INFORMATION FOR ROADWAY AND DRAINAGE ITEMS RESPECTIVELY.
11. REFER TO TxDOT STANDARDS RW(MSE) & RW(TRF) FOR ADDITIONAL INFORMATION.
12. REFER TO TRAFFIC RAIL(TYPE T501) (SPL) SHEET AND TRAFFIC RAIL(TYPE RAIL) (SPL) SHEET FOR RAIL CONSTRUCTION AND ADDITIONAL INFORMATION.
13. REFER TO THE WALL FORM LINER PLAN SHEETS FOR AESTHETIC GUIDELINES AND ADDITIONAL INFORMATION.

EARTH REINFORCEMENTS				
WALL STATION START	WALL STATION END	H_{MIN}	H_{MAX}	MINIMUN ALLOWABLE LENGTH
11+60	14+20	0'	9'	8'
14+20	14+60	9'	11'	100% H
14+60	18+54	11'	22'	100% H

NO.	REVISION	BY	DATE

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FIRM REGISTRATION NUMBER: 3091

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IH 30 AT JOHN KING BLVD

RETAINING WALL C
TYPICAL SECTIONS AND GENERAL NOTES

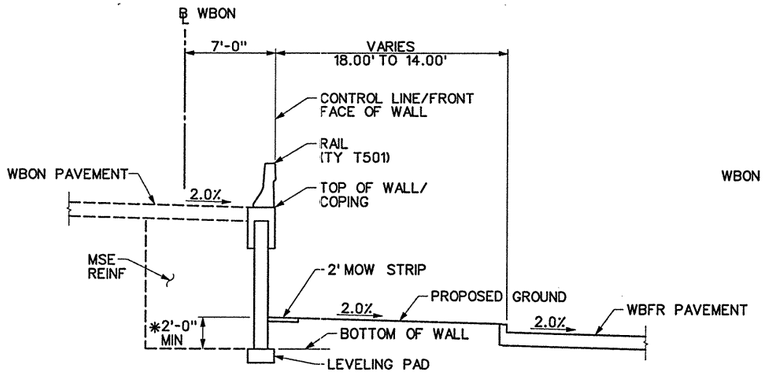
STATE OF TEXAS
AFISU OLABIMTAN
63663
LICENSED
PROFESSIONAL ENGINEER

Signature of Registrant & P.E. 2-25-09 Date

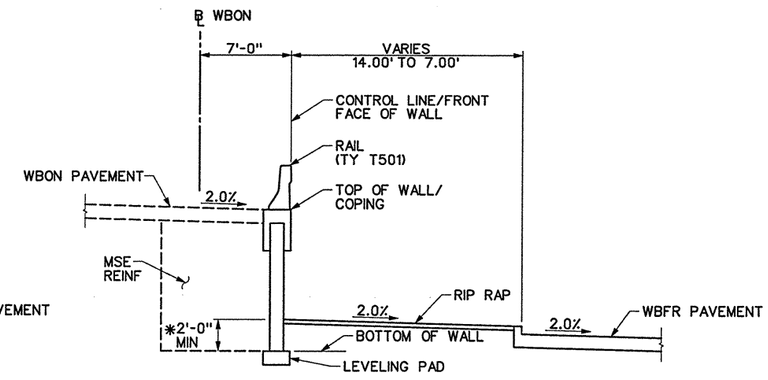
SHEET 4 OF 5

Designed: DJP	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn: TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: JLC	DAL	ROCKWALL	0009	12	073	194

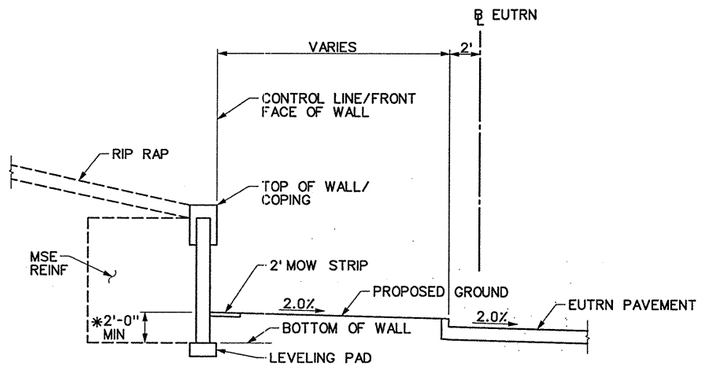
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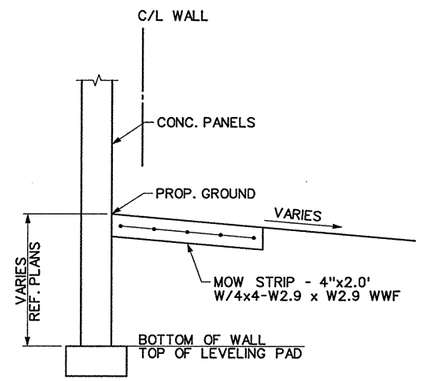
SECTION A-A
NTS
STA 15+99.36 TO STA 17+92.69



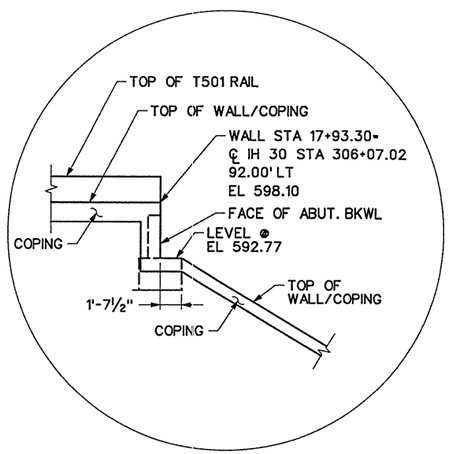
SECTION B-B
NTS
STA 11+60.00 TO STA 15+99.36



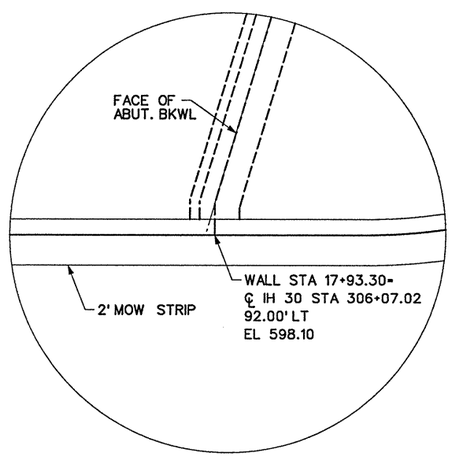
SECTION C-C
NTS
STA 17+92.69 TO END WALL



WALL MOW STRIP DETAIL
NTS



DETAIL 'A'
NTS



DETAIL 'B'
NTS

GENERAL NOTES:

1. ALL STA. AND OFFSETS ARE FROM THE C/L WALL "C" UNLESS NOTED OTHERWISE (UNO).
*2. SQUARE FOOT SURFACE AREA OF RETAINING WALL IS MEASURED FROM TOP OF RETAINING WALL TO 2'-0" BELOW PROPOSED GROUND, (UNO). LEVELING PAD ADJUSTMENTS MADE TO ACCOMMODATE THE AVAILABLE OPTIONAL RETAINING WALLS WILL NOT BE MEASURED FOR PAYMENT.
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5. PROVIDE EMBANKMENT EARTH REINFORCEMENTS WITH A MINIMUM LENGTH GREATER THAN THE REQUIREMENTS OF THE TABLE BELOW OR 8' WHICHEVER IS LARGER, TO MEET THE REQUIREMENTS OF TERRACON CONSULTANTS, INC. GEOTECHNICAL ENGINEERING REPORT NO. 94085412, DATED JANUARY 14, 2009.
6. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE DURING CONSTRUCTION AND POST CONSTRUCTION PERIOD.
7. DRAINAGE TRUNK AND LATERAL PIPES IN THE VICINITY OF THE WALL SHALL BE CONSTRUCTED PRIOR TO WALL CONSTRUCTION.
8. WALL MANUFACTURER SHALL ADJUST AND ACCOMMODATE ANY INLETS POSITIONED WITHIN THE REINFORCING ZONE OF AN MSE WALL. ADJUSTMENTS SHALL BE SHOWN IN THE SHOP DRAWINGS.
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EARTH REINFORCEMENTS				
WALL STATION START	WALL STATION END	H_{MIN}	H_{MAX}	MINIMUN ALLOWABLE LENGTH
11+60	13+70	0'	9'	8'
1 13+70	14+60	9'	11'	100% H
14+60	18+54	11'	22'	100% H

△ ~ FIELD CHANGE #_____

NO.	REVISION	BY	DATE
1	REVISED EARTH REINFORCEMENT STATION LIMIT	DP	11/20/09

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FIRM REGISTRATION NUMBER: 3091

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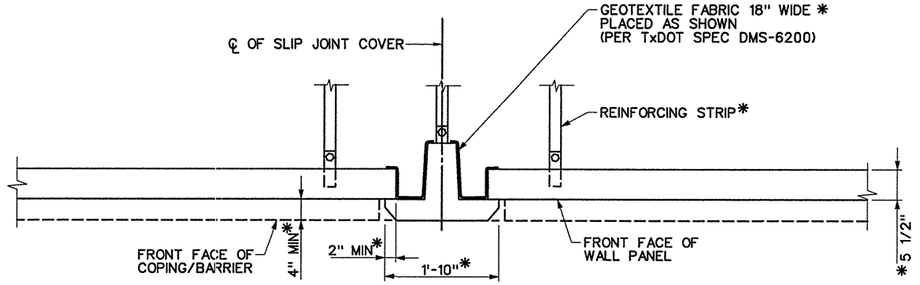
IH 30 AT JOHN KING BLVD

RETAINING WALL C
TYPICAL SECTIONS AND GENERAL NOTES

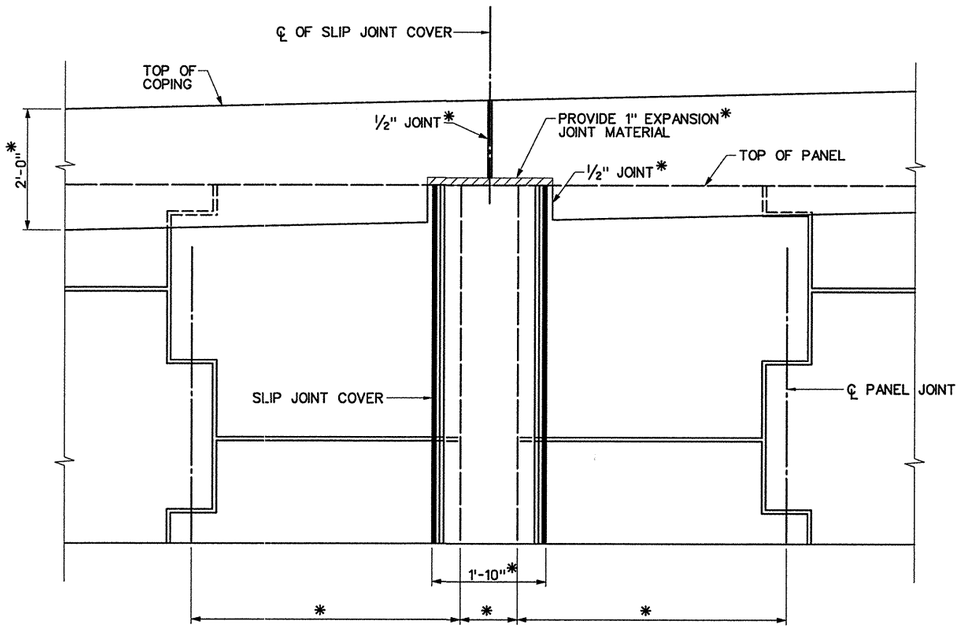
STATE OF TEXAS
AFISU OLABIMTAN
63663
REGISTERED PROFESSIONAL ENGINEER
11-23-09

Signature of Registrant & Date

Designed:	DJP	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073	194A



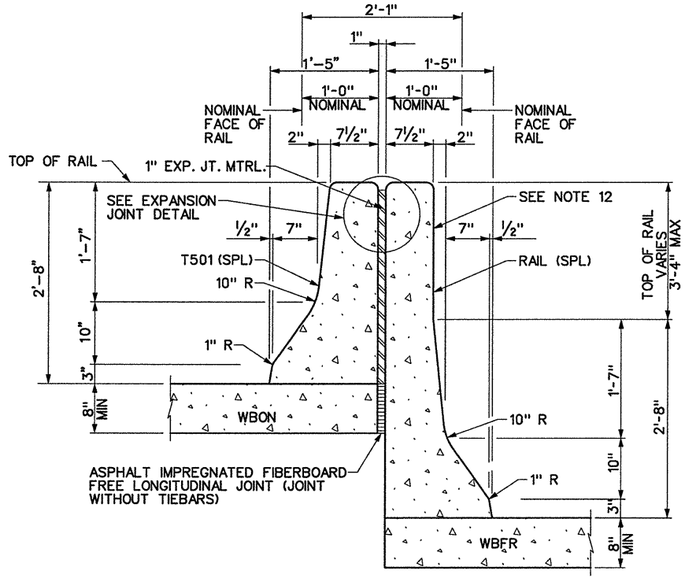
PLAN



ELEVATION

DETAIL 'C'
NTS

*DIMENSIONS MAY VARY DEPENDING ON MANUFACTURERS SPECIFICATIONS. SHOP DRAWINGS SHALL BE SUBMITTED BY MANUFACTURER AND APPROVED BY ENGINEER.



SECTION D-D
NTS
BEGIN WALL TO STA 11+60.00

NO.	REVISION	BY	DATE

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FIRM REGISTRATION NUMBER: 3091

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IH 30 AT JOHN KING BLVD

RETAINING WALL C

TYPICAL SECTIONS AND GENERAL NOTES

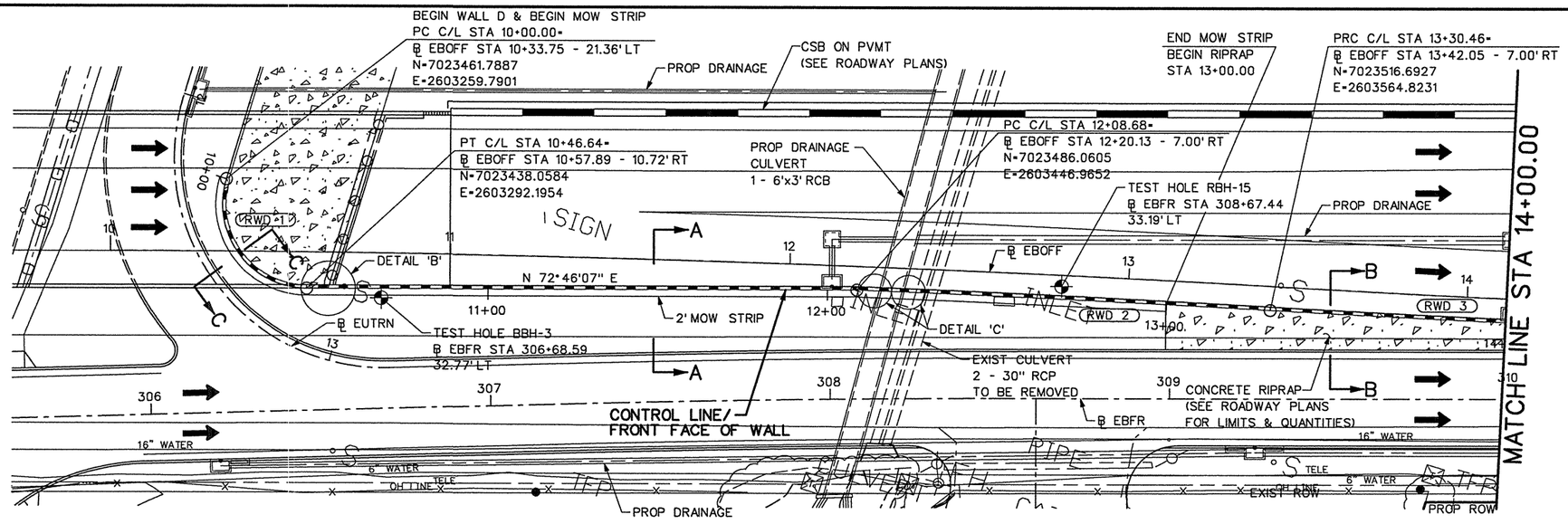
STATE OF TEXAS
AFISU OLABIMTAN
63663
LICENSED
PROFESSIONAL ENGINEER

Signature of Registrant & Date, P.E. 2-25-09

SHEET 5 OF 5

Designed: DJP	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked: ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn: TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: JLC	DAL	ROCKWALL	0009	12	073	195

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2/23/2009
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PLAN
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HORIZONTAL CURVE (RWD 1)

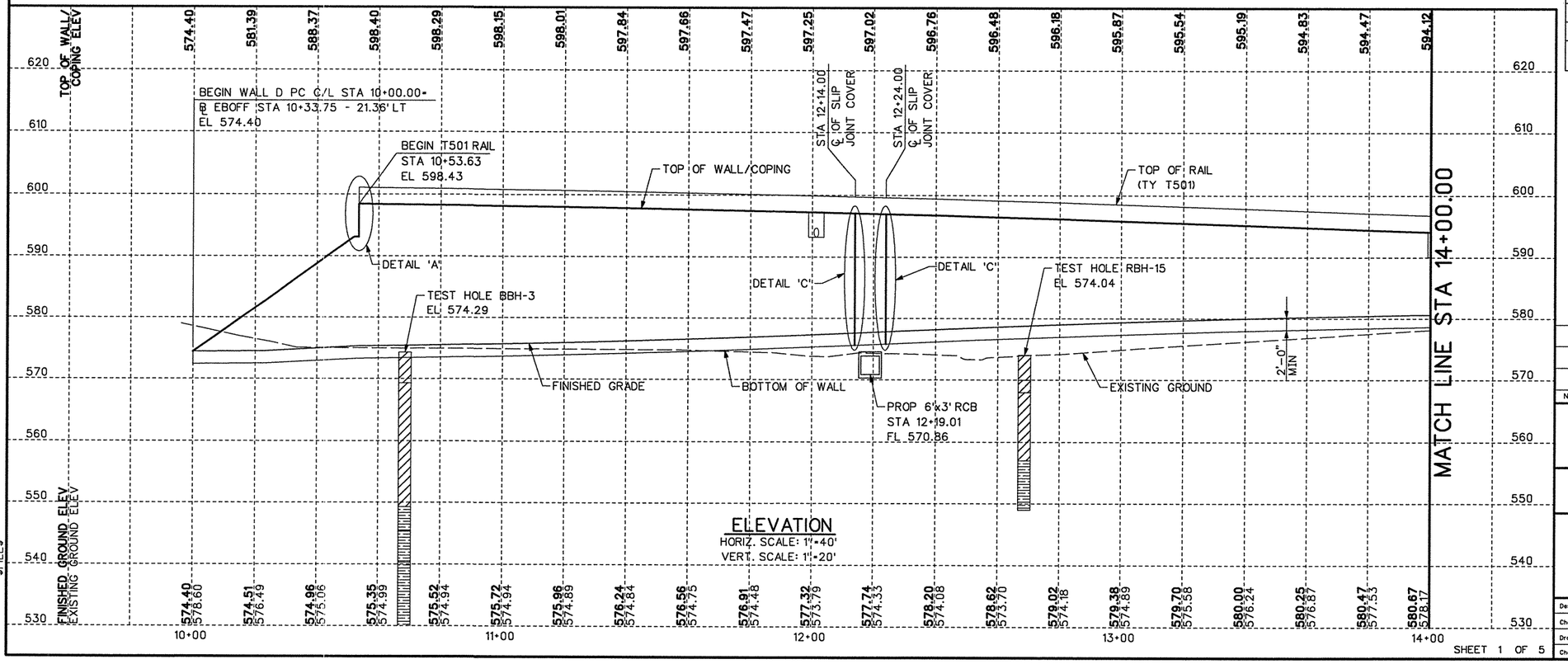
PI STA = 10+33.72
Δ = 106°53'35" (LT)
D= 229°10'59"
T= 33.72'
L= 46.64'
R= 25.00
PC STA 10+00.00
TANGET BRG. @ PC = S 00°20'18" E
PT STA 10+46.64
TANGET BRG. @ PT = N 72°46'07" E

HORIZONTAL CURVE (RWD 2)

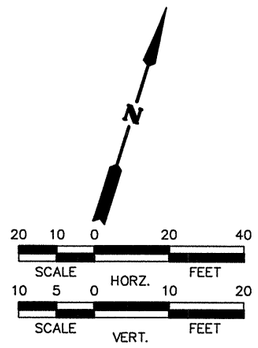
PI STA = 12+69.57
Δ = 01°09'17" (RT)
D= 00°56'53"
T= 60.89'
L= 121.87'
R= 6043.00
PC STA 12+08.68
TANGET BRG. @ PC = N 74°51'12" E
PT STA 13+30.46
TANGET BRG. @ PT = N 76°00'29" E

HORIZONTAL CURVE (RWD 3)

PI STA = 15+01.73
Δ = 03°14'22" (LT)
D= 00°56'45"
T= 171.27'
L= 342.45'
R= 6057.00'
PC STA 13+30.46
TANGET BRG. @ PC = N 76°00'29" E
PT STA 16+72.90
TANGET BRG. @ PT = N 72°46'07" E



ELEVATION
HORIZ. SCALE: 1"=40'
VERT. SCALE: 1"=20'



NOTES:

1. REFER TO SHEETS 4 OF 5 AND 5 OF 5 FOR TYPICAL SECTIONS, DETAILS AND GENERAL NOTES.
2. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
3. REFER TO THE WALL FORM LINER PLAN SHEETS FOR AESTHETIC GUIDELINES AND ADDITIONAL INFORMATION.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL COORDINATE ALL EXISTING UTILITY RELOCATION TO AVOID ANY CONFLICTS WITH RETAINING WALL CONSTRUCTION.

ESTIMATED QUANTITIES

423-2001	RETAINING WALL (MSE)	SF	12221
432-2039	RIP RAP (MOW STRIP) (4IN)	CY	7
450-2007	RAIL (TY T501)	LF	767
450-2054	RAIL (TY T501RW DAL)	LF	380
450-2093	RAIL (CIP) (TY T501) (SPL)	LF	198
450-2120	RAIL (CIP) (TY RAIL) (SPL)	LF	198
450-2130	SPECIAL TRAFFIC BARRIER END TERMINAL	EA	1

2 REPLACED 7-1-09 BB

STATE OF TEXAS
AFISU OLABIMTAN
63663
LICENSED PROFESSIONAL ENGINEER
7-1-09
Signature of Registrant Date

NO.	REVISION	BY	DATE

APM & Associates, Inc.
Engineering . Planning . CM Services
FIRM REGISTRATION NUMBER: 3091

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IH 30 AT JOHN KING BLVD

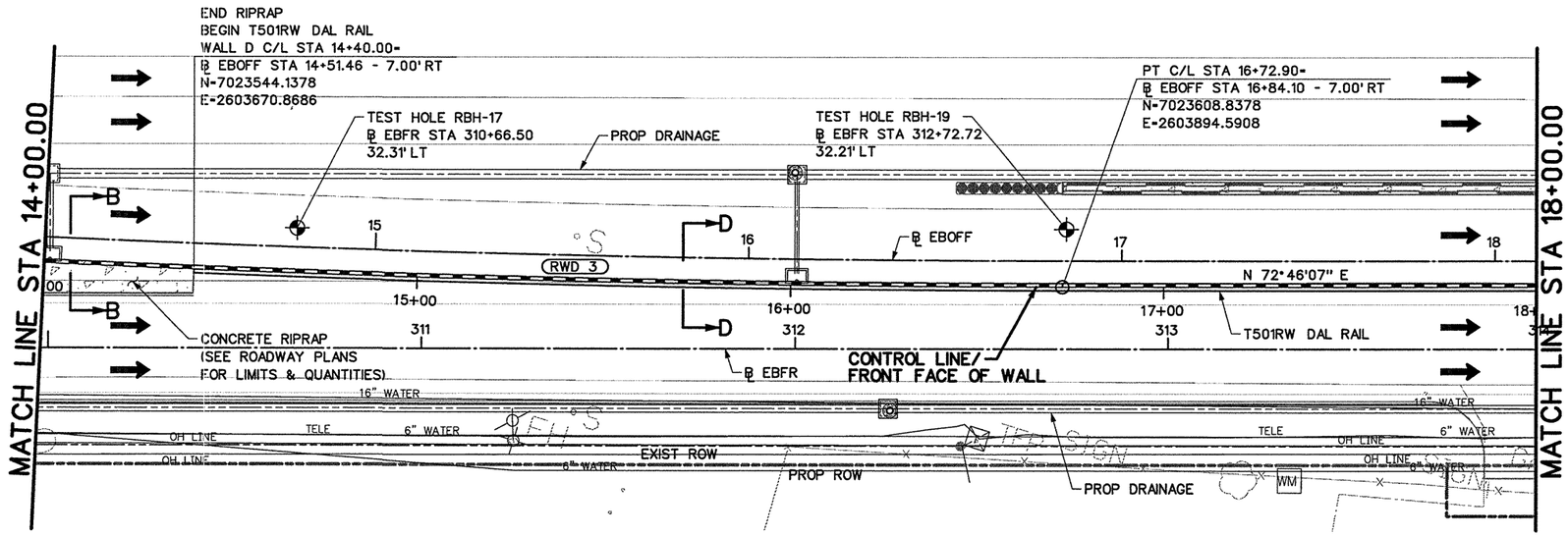
RETAINING WALL D
PLAN AND ELEVATION

Designed:	DJP	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073	196

SHEET 1 OF 5

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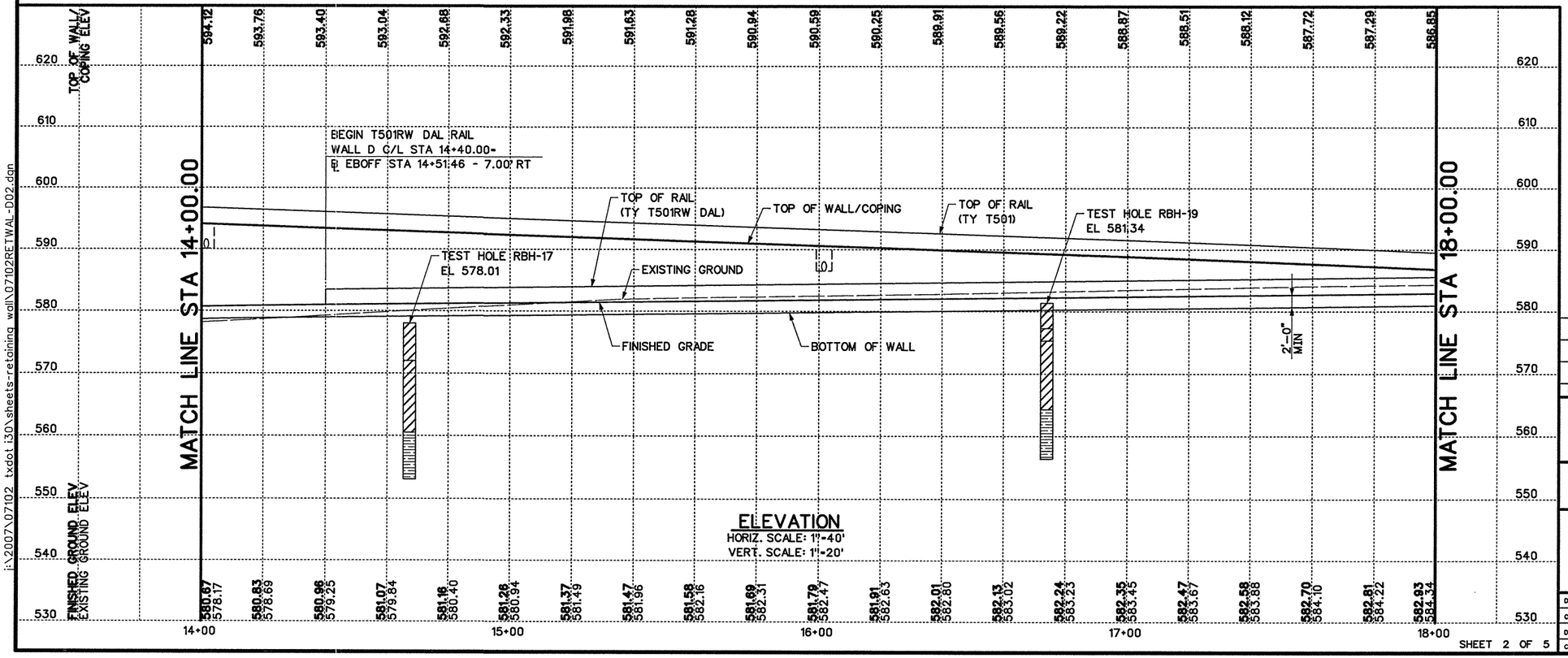
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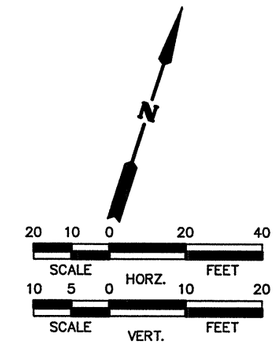
PLAN
SCALE: 1"=40'

HORIZONTAL CURVE (RWD 3)

PI STA = 15+01.73
Δ = 03°14'22" (LT)
D = 00°56'45"
T = 171.27'
L = 342.45'
R = 6057.00'
PC STA 13+30.46
TANGET BRG. @ PC = N 76°00'29" E
PT STA 16+72.90
TANGET BRG. @ PT = N 72°46'07" E



ELEVATION
HORIZ. SCALE: 1"=40'
VERT. SCALE: 1"=20'



NOTES:

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2. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
3. REFER TO THE WALL FORM LINER PLAN SHEETS FOR AESTHETIC GUIDELINES AND ADDITIONAL INFORMATION.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL COORDINATE ALL EXISTING UTILITY RELOCATION TO AVOID ANY CONFLICTS WITH RETAINING WALL CONSTRUCTION.

STATE OF TEXAS
AFISU OLABIMTAN
63663
LICENSED PROFESSIONAL ENGINEER
P.E. 2-6-09
Signature of Registrant & Date

NO.	REVISION	BY	DATE

APM & Associates, Inc.
Engineering • Planning • CM Services
FIRM REGISTRATION NUMBER: 3091

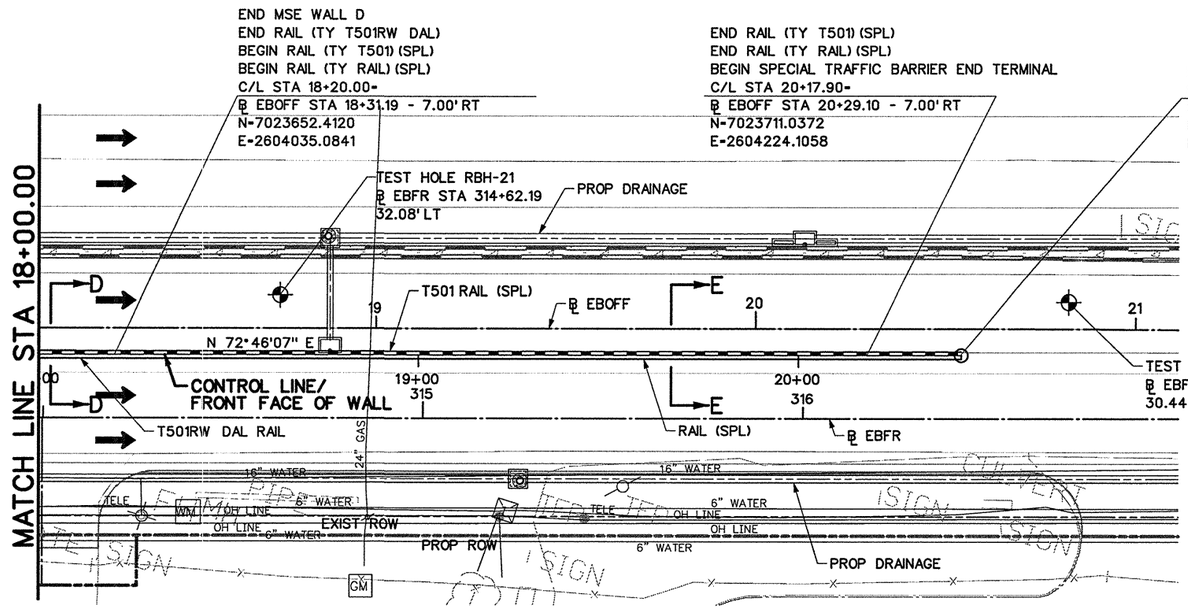
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IH 30 AT JOHN KING BLVD

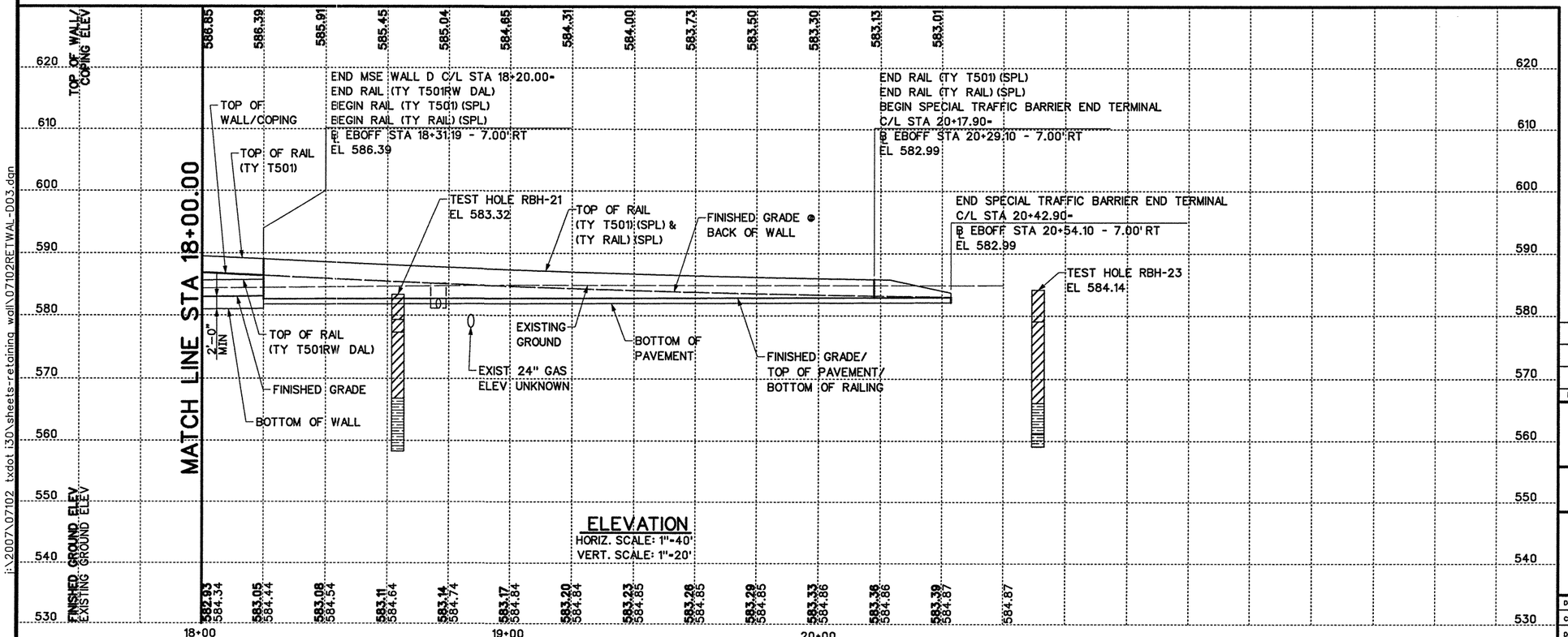
RETAINING WALL D
PLAN AND ELEVATION

Designed:	DJP	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073	197

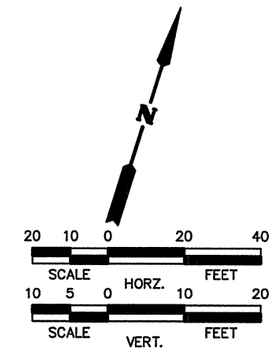
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2/6/2009
i:\2007\07102 txdot i30\sheets-retaining wall\07102RETWAL-D03.dgn



PLAN
SCALE: 1"=40'



ELEVATION
HORIZ. SCALE: 1"=40'
VERT. SCALE: 1"=20'



NOTES:

1. REFER TO SHEETS 4 OF 5 AND 5 OF 5 FOR TYPICAL SECTIONS, DETAILS AND GENERAL NOTES.
2. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
3. REFER TO TRAFFIC RAIL (TYPE T501) (SPL) SHEET AND TRAFFIC RAIL (TYPE RAIL) (SPL) SHEET FOR RAIL CONSTRUCTION AND ADDITIONAL INFORMATION.
4. REFER TO THE WALL FORM LINER PLAN SHEETS FOR AESTHETIC GUIDELINES AND ADDITIONAL INFORMATION.
5. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL COORDINATE ALL EXISTING UTILITY RELOCATION TO AVOID ANY CONFLICTS WITH RETAINING WALL CONSTRUCTION.

STATE OF TEXAS
AFISU OLABIMTAN
63663
LICENSED
PROFESSIONAL ENGINEER

Signature of Registrant & P.E. Date 2-6-09

NO.	REVISION	BY	DATE

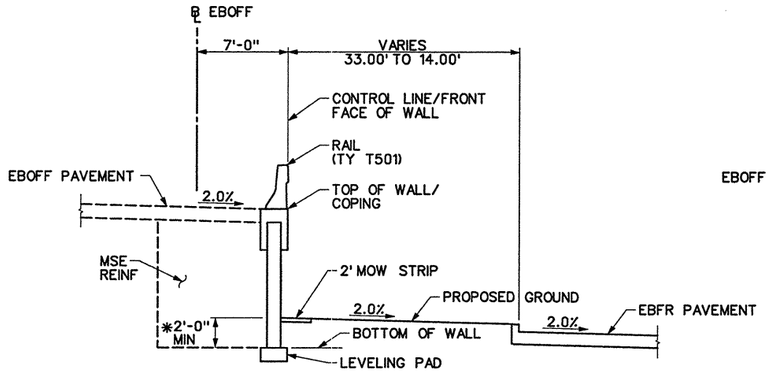
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FIRM REGISTRATION NUMBER: 3091

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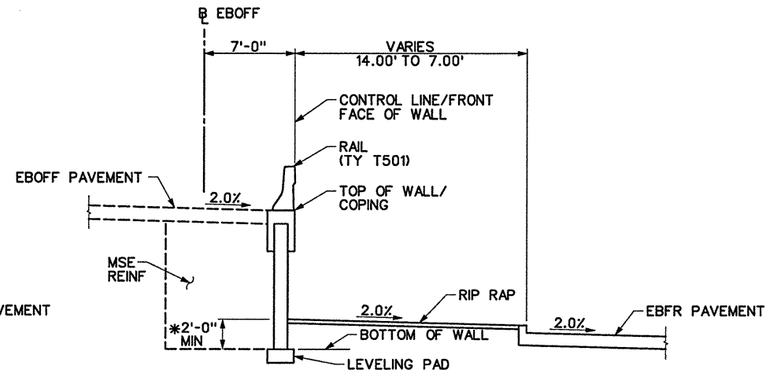
IH 30 AT JOHN KING BLVD

RETAINING WALL D
PLAN AND ELEVATION

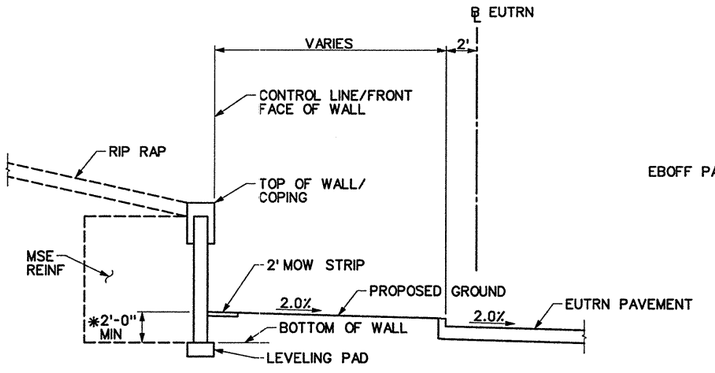
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Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073	19



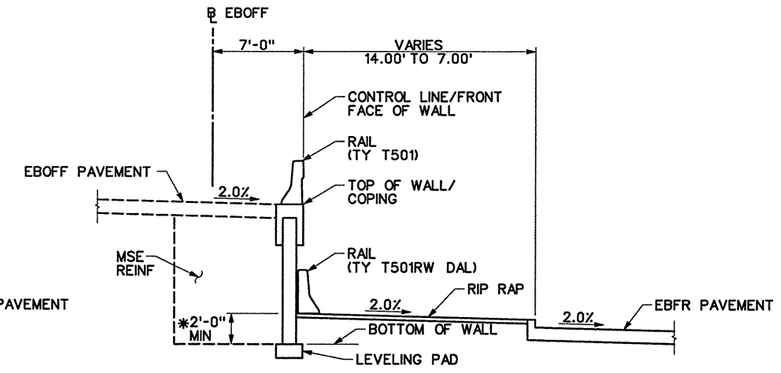
SECTION A-A
NTS
STA 10+53.02 TO STA 13+00.00



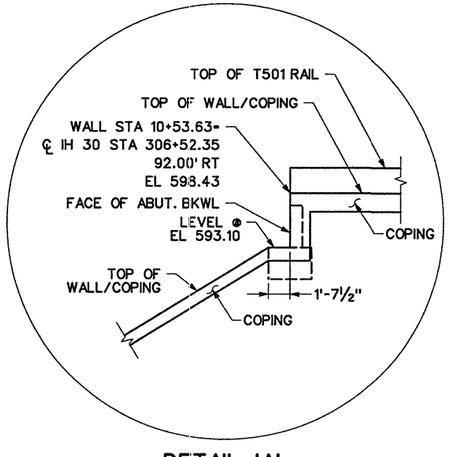
SECTION B-B
NTS
STA 13+00.00 TO STA 14+40.00



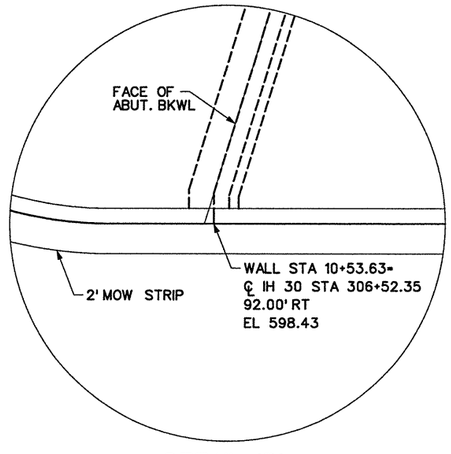
SECTION C-C
NTS
BEGIN WALL TO STA 10+53.02



SECTION D-D
NTS
STA 14+40.00 TO STA 18+20.00



DETAIL 'A'
NTS



DETAIL 'B'
NTS

GENERAL NOTES:

1. ALL STA. AND OFFSETS ARE FROM THE C/L WALL "D" UNLESS NOTED OTHERWISE (UNO).
*2. SQUARE FOOT SURFACE AREA OF RETAINING WALL IS MEASURED FROM TOP OF RETAINING WALL TO 2'-0" BELOW PROPOSED GROUND, (UNO). LEVELING PAD ADJUSTMENTS MADE TO ACCOMMODATE THE AVAILABLE OPTIONAL RETAINING WALLS WILL NOT BE MEASURED FOR PAYMENT.
3. WALL BACKFILL SHALL CONFORM TO THE REQUIREMENTS OF TxDOT ITEM 0423, TYPE "A" SELECT BACKFILL.
4. PARTICLES LARGER THAN 1/4 " SHALL BE ANGULAR OR CRUSHED. ROUNDED ROCK OR GRAVEL WILL NOT BE ALLOWED. CEMENT STABILIZED BACKFILL WILL NOT BE PERMITTED.
5. PROVIDE EMBANKMENT EARTH REINFORCEMENTS WITH A MINIMUM LENGTH GREATER THAN THE REQUIREMENTS OF THE TABLE BELOW OR 8' WHICHEVER IS LARGER, TO MEET THE REQUIREMENTS OF TERRACON CONSULTANTS, INC. GEOTECHNICAL ENGINEERING REPORT NO. 94085412, DATED JANUARY 14, 2009.
6. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE DURING CONSTRUCTION AND POST CONSTRUCTION PERIOD.
7. DRAINAGE TRUNK AND LATERAL PIPES IN THE VICINITY OF THE WALL SHALL BE CONSTRUCTED PRIOR TO WALL CONSTRUCTION.
8. WALL MANUFACTURER SHALL ADJUST AND ACCOMMODATE ANY INLETS POSITIONED WITHIN THE REINFORCING ZONE OF AN MSE WALL. ADJUSTMENTS SHALL BE SHOWN IN THE SHOP DRAWINGS.
9. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
10. REFER TO THE ROADWAY AND DRAINAGE PLANS FOR ADDITIONAL INFORMATION FOR ROADWAY AND DRAINAGE ITEMS RESPECTIVELY.
11. REFER TO TxDOT STANDARDS RW(MSE) & RW(TRF) FOR ADDITIONAL INFORMATION.
12. REFER TO TRAFFIC RAIL(TYPE T501) (SPL) SHEET AND TRAFFIC RAIL(TYPE RAIL) (SPL) SHEET FOR RAIL CONSTRUCTION AND ADDITIONAL INFORMATION.
13. REFER TO THE WALL FORM LINER PLAN SHEETS FOR AESTHETIC GUIDELINES AND ADDITIONAL INFORMATION.

EARTH REINFORCEMENTS				
WALL STATION START	WALL STATION END	H_{MIN}	H_{MAX}	MINIMUN ALLOWABLE LENGTH
18+20	16+75	0'	9'	8'
16+75	15+60	9'	11'	100% H
15+60	14+20	11'	15'	100% H
14+20	10+00	16'	26'	100% H

NO.	REVISION	BY	DATE

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FIRM REGISTRATION NUMBER: 3091

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IH 30 AT JOHN KING BLVD

RETAINING WALL D

TYPICAL SECTIONS AND GENERAL NOTES

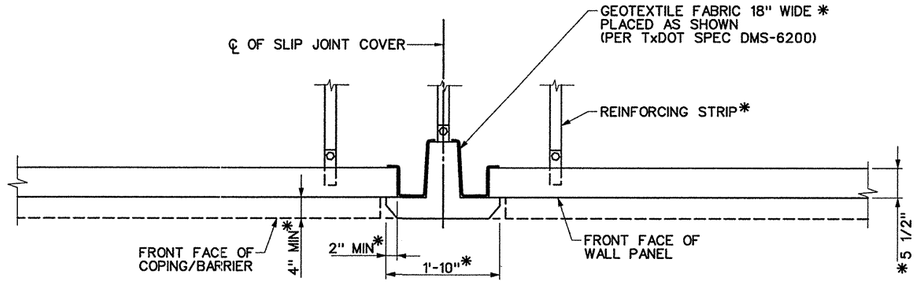


Signature of Registrant & P.E. Date 2-25-09

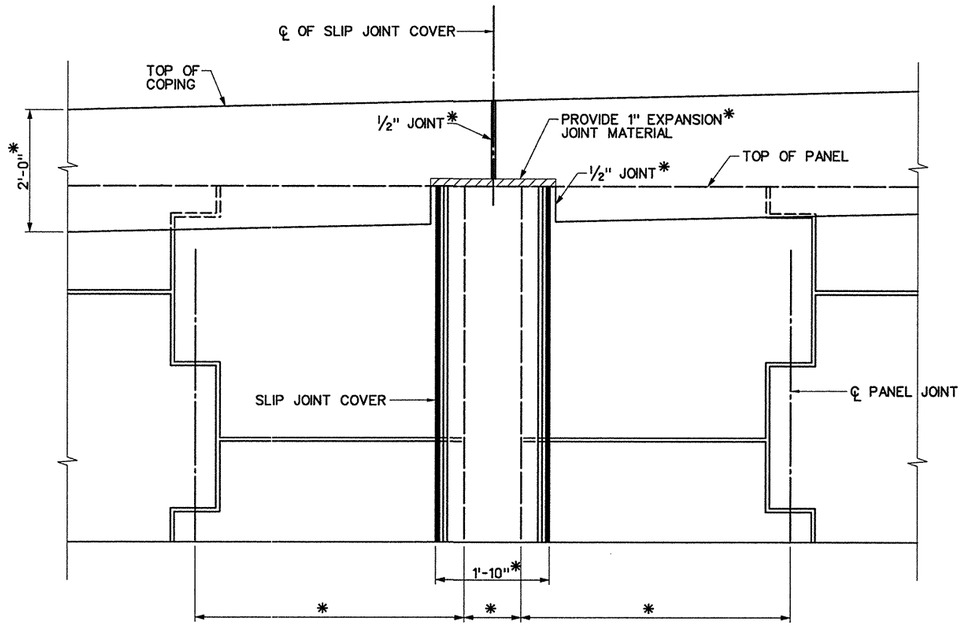
SHEET 4 OF 5

Designed:	DJP	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)				IH 30
Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073		199

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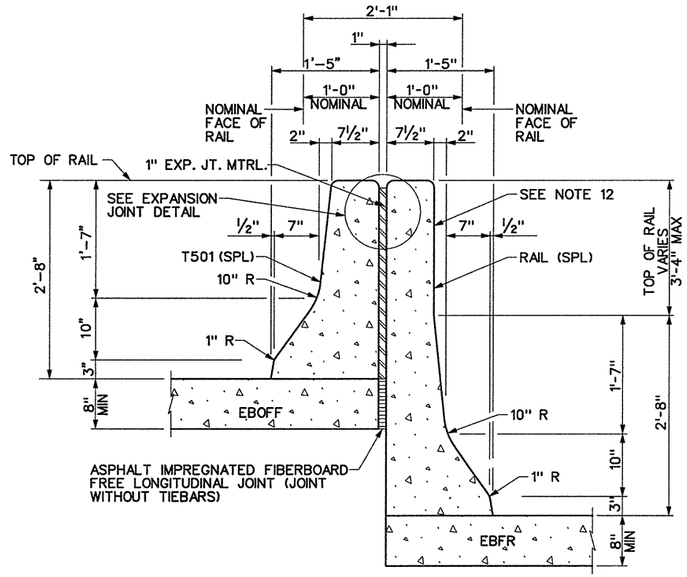
PLAN



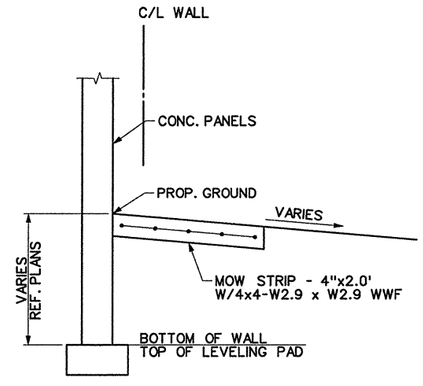
ELEVATION

*DIMENSIONS MAY VARY DEPENDING ON MANUFACTURERS SPECIFICATIONS. SHOP DRAWINGS SHALL BE SUBMITTED BY MANUFACTURER AND APPROVED BY ENGINEER.

DETAIL 'C'
NTS



SECTION E-E
NTS
STA 18+20.00 TO END WALL



WALL MOW STRIP DETAIL
NTS

NO.	REVISION	BY	DATE

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FIRM REGISTRATION NUMBER: 3091

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IH 30 AT JOHN KING BLVD

RETAINING WALL D

TYPICAL SECTIONS AND GENERAL NOTES

STATE OF TEXAS
AFISU OLABIMTAN
63663
LICENSED
PROFESSIONAL ENGINEER

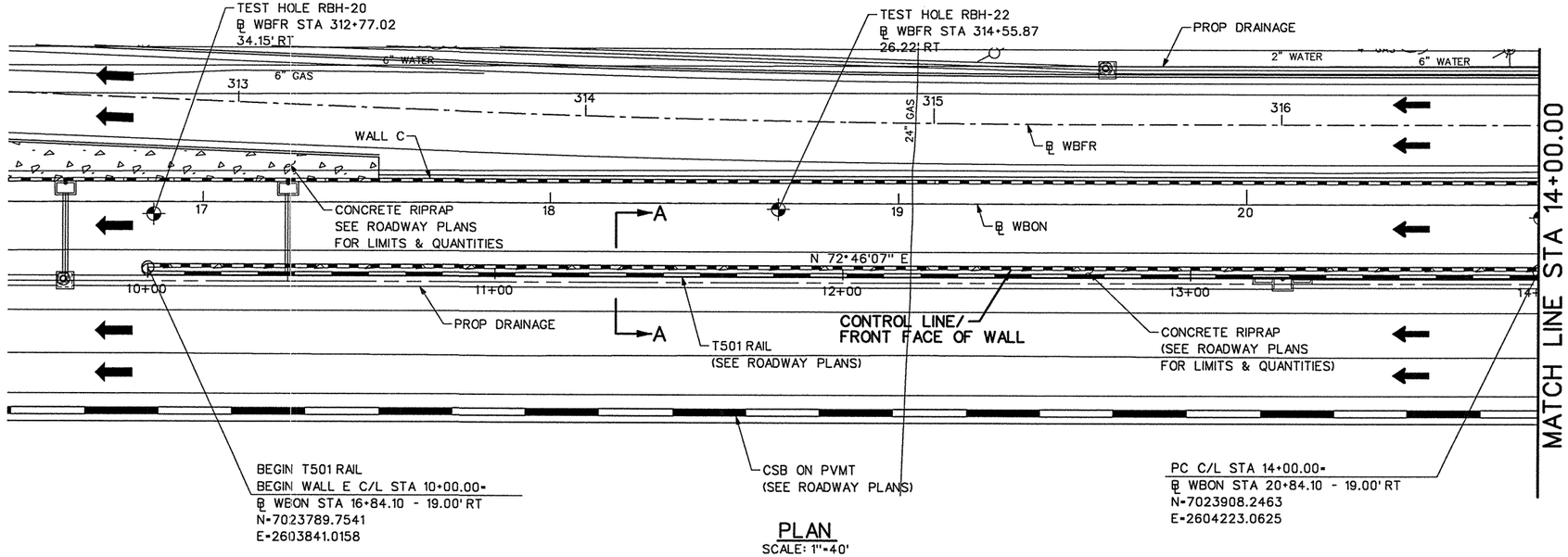
Signature of Registrant & Date P.E. 2-23-09

SHEET 5 OF 5

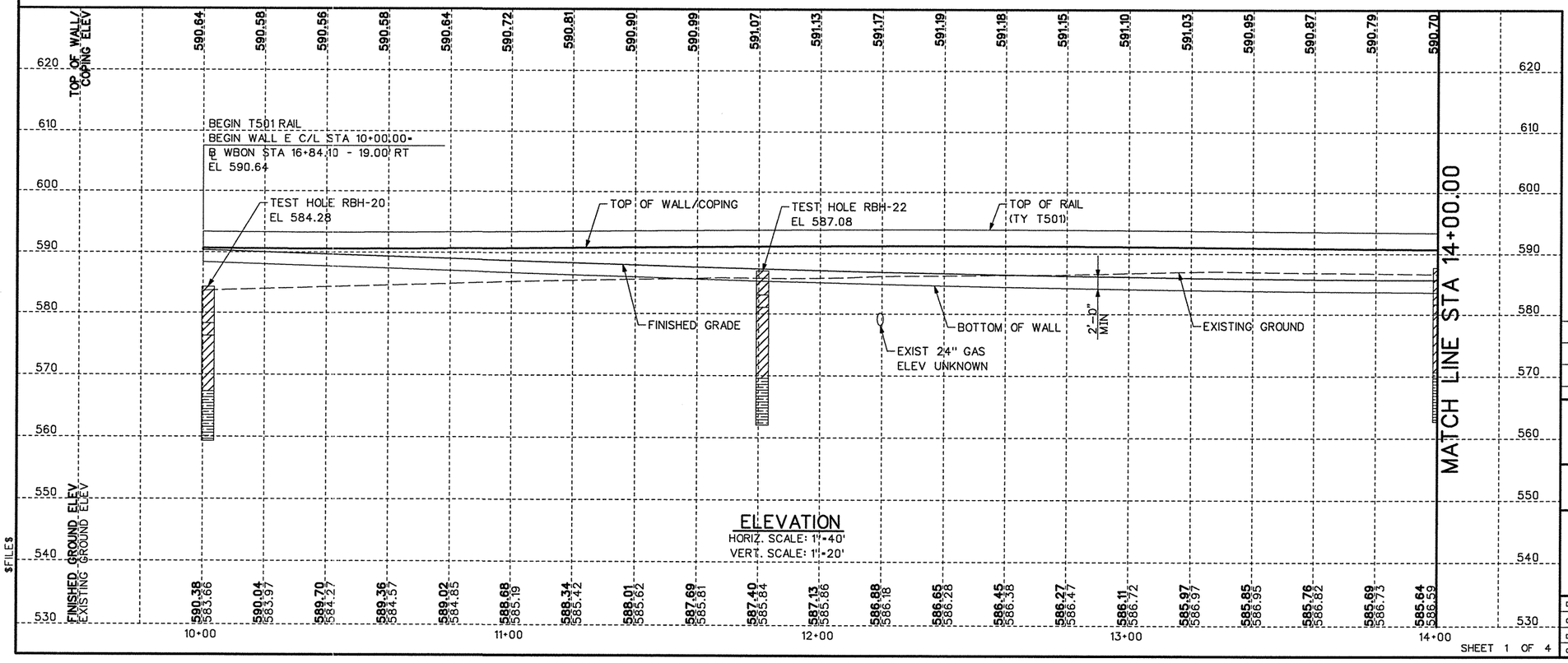
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Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073	200

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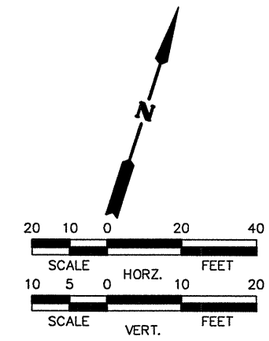


PLAN
SCALE: 1"=40'



ELEVATION
HORIZ. SCALE: 1"=40'
VERT. SCALE: 1"=20'

SHEET 1 OF 4

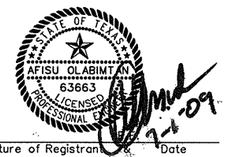


NOTES:

1. REFER TO SHEET 4 OF 4 FOR TYPICAL SECTIONS, DETAILS AND GENERAL NOTES.
2. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
3. REFER TO THE WALL FORM LINER PLAN SHEETS FOR AESTHETIC GUIDELINES AND ADDITIONAL INFORMATION.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL COORDINATE ALL EXISTING UTILITY RELOCATION TO AVOID ANY CONFLICTS WITH RETAINING WALL CONSTRUCTION.

ESTIMATED QUANTITIES			
423-2001	RETAINING WALL (MSE)	SF	4601
450-2007	RAIL (TY T501)	LF	847

A REPLACED 7-1-09 BB



Signature of Registrant Date

NO.	REVISION	BY	DATE

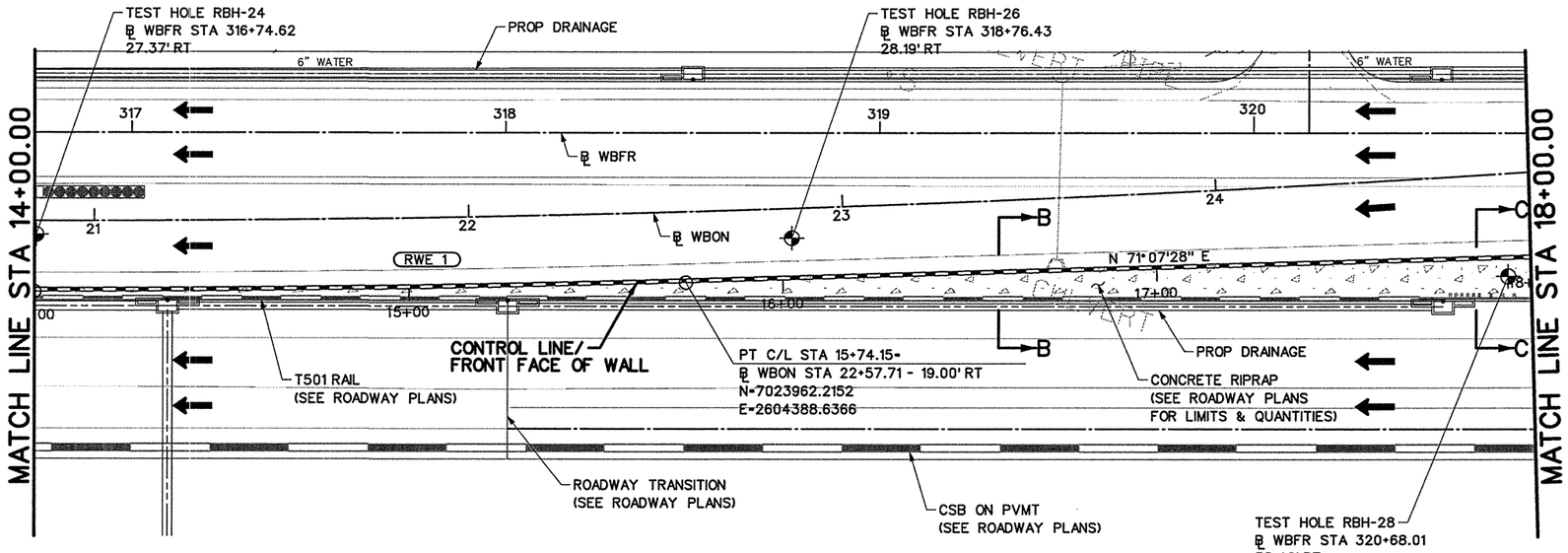
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FIRM REGISTRATION NUMBER: 3091

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IH 30 AT JOHN KING BLVD

RETAINING WALL E
PLAN AND ELEVATION

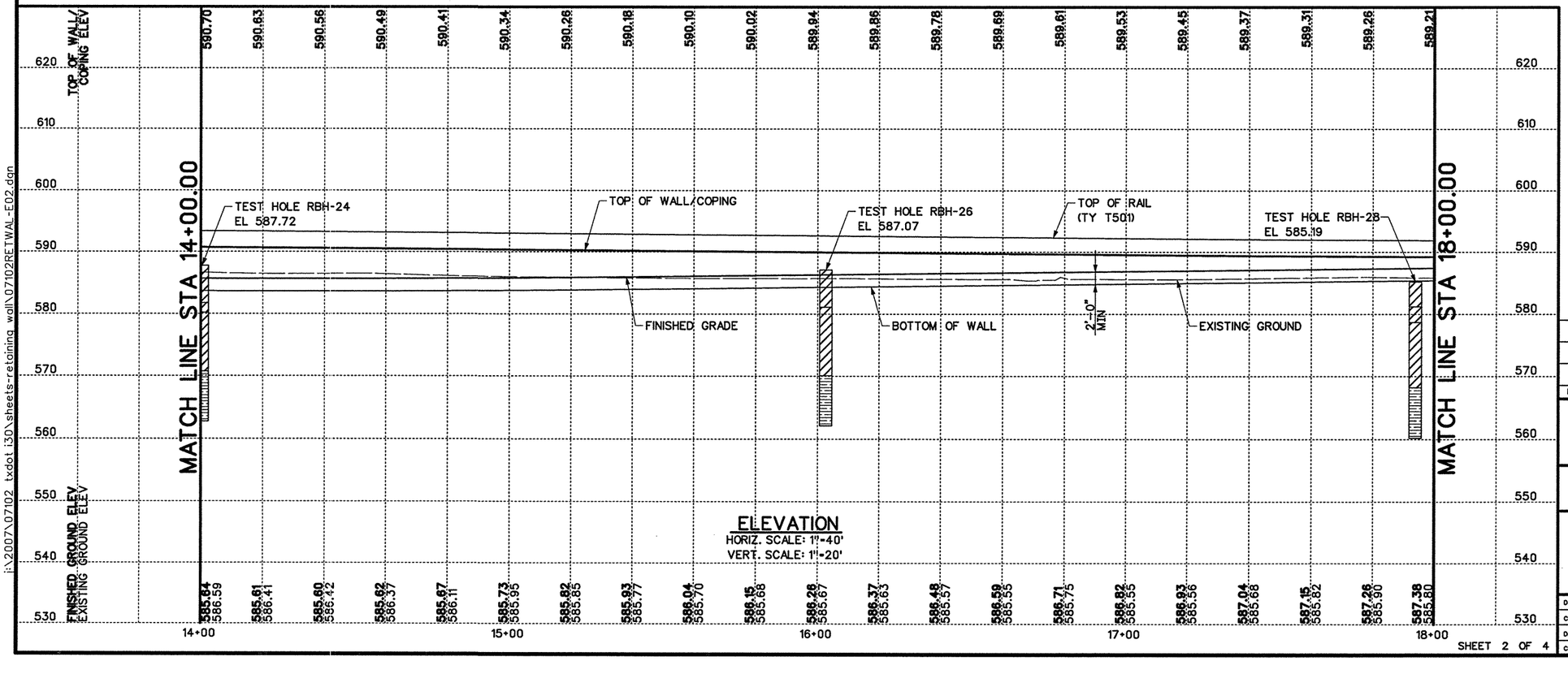
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Checked: ACO	DIST. DAL	COUNTY ROCKWALL	CONTROL NO. 0009	SECTION NO. 12	JOB NO. 073	SHEET NO. 201
Drawn: TFT						
Checked: JLC						



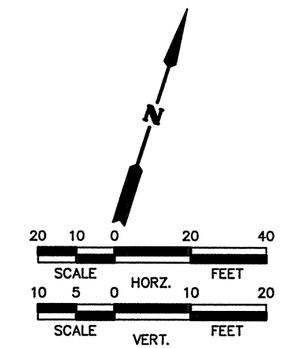
PLAN
SCALE: 1"=40'

HORIZONTAL CURVE (RWE 1)

PI STA = 14+87.08
Δ = 01°38'39" (LT)
D= 00°56'39"
T= 87.07'
L= 174.15'
R= 6069.00'
PC STA 14+00.00
TANGET BRG. @ PC = N 72°46'07" E
PT STA 15+74.15
TANGET BRG. @ PT = N 71°07'28" E



ELEVATION
HORIZ. SCALE: 1"=40'
VERT. SCALE: 1"=20'



NOTES:

1. REFER TO SHEET 4 OF 4 FOR TYPICAL SECTIONS, DETAILS AND GENERAL NOTES.
2. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
3. REFER TO THE WALL FORM LINER PLAN SHEETS FOR AESTHETIC GUIDELINES AND ADDITIONAL INFORMATION.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL COORDINATE ALL EXISTING UTILITY RELOCATION TO AVOID ANY CONFLICTS WITH RETAINING WALL CONSTRUCTION.

STATE OF TEXAS
AFISU OLABIMTAN
63663
LICENSED
PROFESSIONAL ENGINEER
P.E.
2-6-09
Signature of Registrant & Date

NO.	REVISION	BY	DATE

APM & Associates, Inc.
Engineering • Planning • CM Services
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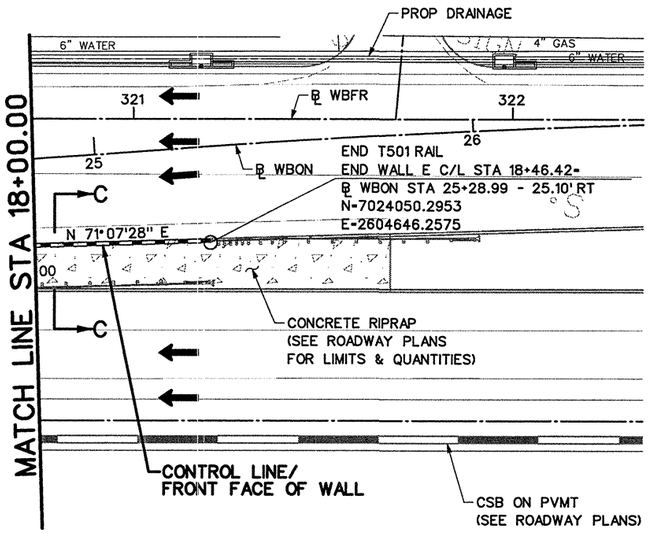
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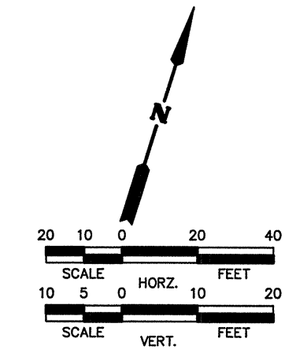
RETAINING WALL E
PLAN AND ELEVATION

Designed:	DJP	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
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Checked:	JLC	DAL	ROCKWALL	0009	12	073	202

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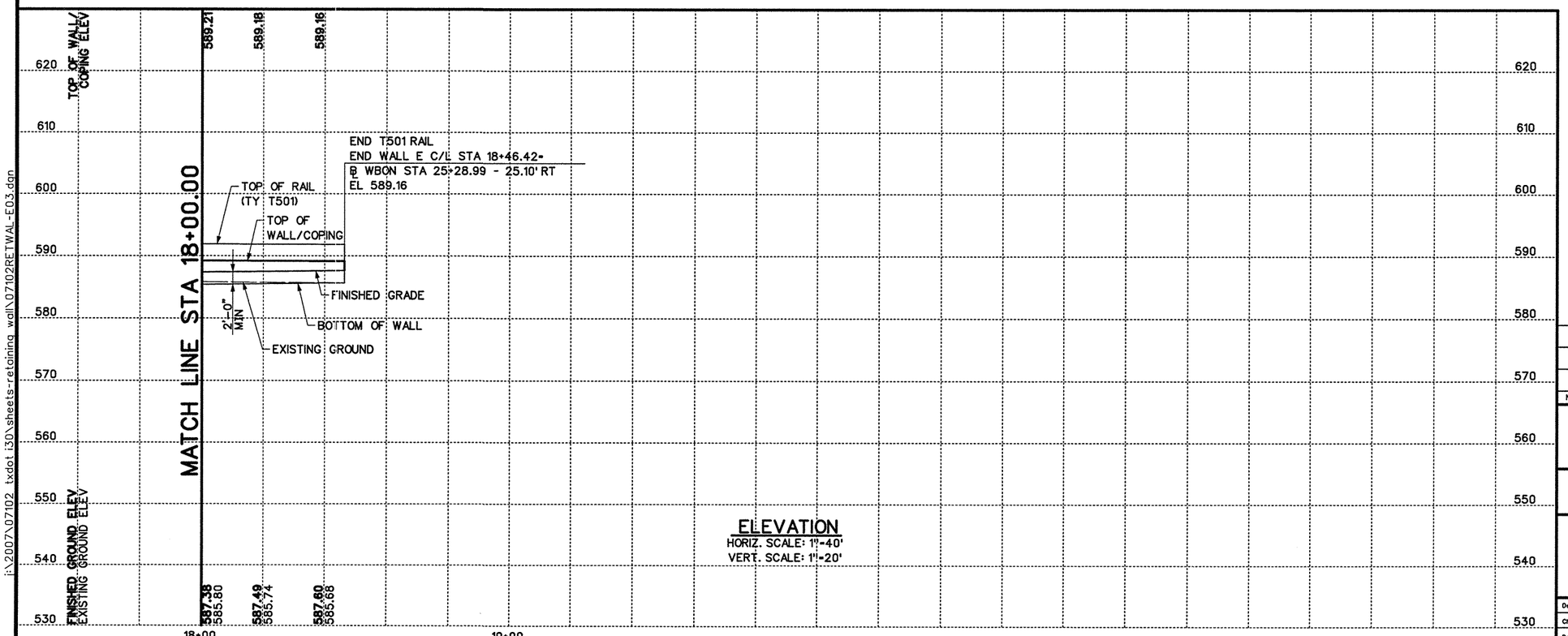


PLAN
SCALE: 1"=40'



NOTES:

1. REFER TO SHEET 4 OF 4 FOR TYPICAL SECTIONS, DETAILS AND GENERAL NOTES.
2. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
3. REFER TO THE WALL FORM LINER PLAN SHEETS FOR AESTHETIC GUIDELINES AND ADDITIONAL INFORMATION.
4. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL COORDINATE ALL EXISTING UTILITY RELOCATION TO AVOID ANY CONFLICTS WITH RETAINING WALL CONSTRUCTION.



ELEVATION
HORIZ. SCALE: 1"=40'
VERT. SCALE: 1"=20'

SHEET 3 OF 4

AFISU OLABIMTAN
63663
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
P.E.
Signature of Registrant & Date 2-6-09

NO.	REVISION	BY	DATE

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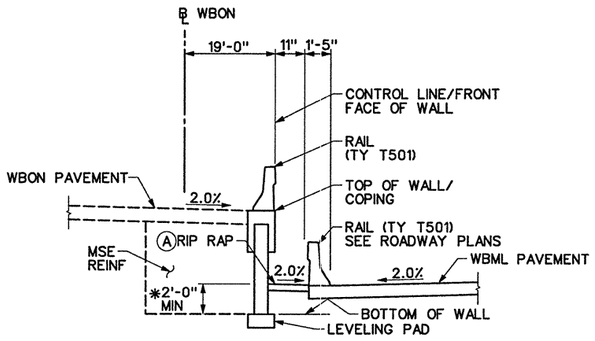
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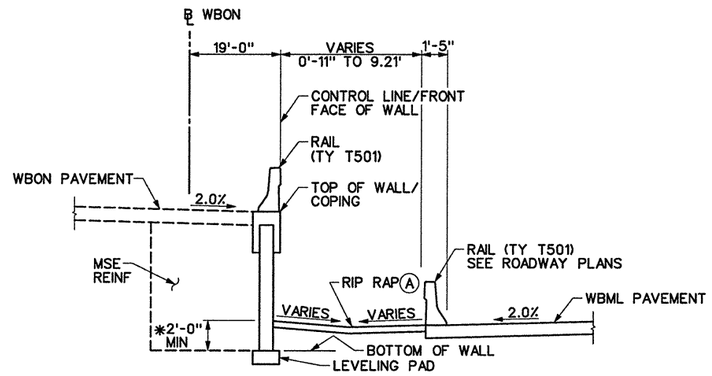
RETAINING WALL E
PLAN AND ELEVATION

Designed:	DJP	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.			HIGHWAY NO.
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Checked:	JLC	DAL	ROCKWALL	0009	12	073	203

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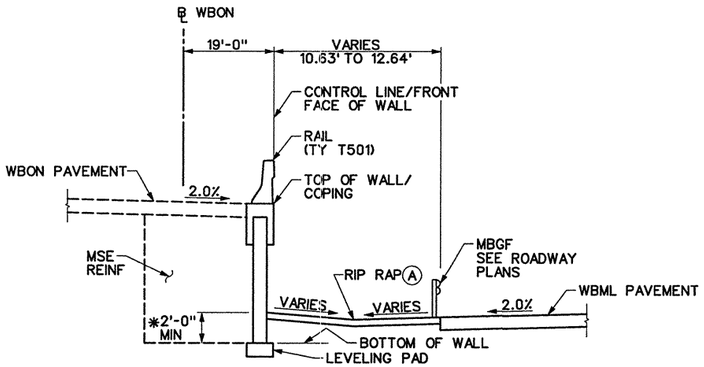


SECTION A-A
NTS
BEGIN WALL TO STA 14+00.00



SECTION B-B
NTS
STA 14+00.00 TO STA 17+76.37

Ⓐ FOR LIMITS AND QUANTITIES SEE ROADWAY PLANS



SECTION C-C
NTS
STA 17+76.37 TO END WALL

GENERAL NOTES:

1. ALL STA. AND OFFSETS ARE FROM THE C/L WALL "E" UNLESS NOTED OTHERWISE (UNO).
*2. SQUARE FOOT SURFACE AREA OF RETAINING WALL IS MEASURED FROM TOP OF RETAINING WALL TO 2'-0" BELOW PROPOSED GROUND, (UNO). LEVELING PAD ADJUSTMENTS MADE TO ACCOMMODATE THE AVAILABLE OPTIONAL RETAINING WALLS WILL NOT BE MEASURED FOR PAYMENT.
3. WALL BACKFILL SHALL CONFORM TO THE REQUIREMENTS OF TxDOT ITEM 0423, TYPE "A" SELECT BACKFILL.
4. PARTICLES LARGER THAN 1/4" SHALL BE ANGULAR OR CRUSHED. ROUNDED ROCK OR GRAVEL WILL NOT BE ALLOWED. CEMENT STABILIZED BACKFILL WILL NOT BE PERMITTED.
5. PROVIDE EMBANKMENT EARTH REINFORCEMENTS WITH A MINIMUM LENGTH GREATER THAN THE REQUIREMENTS OF THE TABLE BELOW OR 8' WHICHEVER IS LARGER, TO MEET THE REQUIREMENTS OF TERRACON CONSULTANTS, INC. GEOTECHNICAL ENGINEERING REPORT NO. 94085412, DATED JANUARY 14, 2009.
6. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE DURING CONSTRUCTION AND POST CONSTRUCTION PERIOD.
7. DRAINAGE TRUNK AND LATERAL PIPES IN THE VICINITY OF THE WALL SHALL BE CONSTRUCTED PRIOR TO WALL CONSTRUCTION.
8. WALL MANUFACTURER SHALL ADJUST AND ACCOMMODATE ANY INLETS POSITIONED WITHIN THE REINFORCING ZONE OF AN MSE WALL. ADJUSTMENTS SHALL BE SHOWN IN THE SHOP DRAWINGS.
9. REFER TO THE CORE BORING SHEETS FOR BORING INFORMATION.
10. REFER TO THE ROADWAY AND DRAINAGE PLANS FOR ADDITIONAL INFORMATION FOR ROADWAY AND DRAINAGE ITEMS RESPECTIVELY.
11. REFER TO TxDOT STANDARDS RW(MSE) & RW(TRF) FOR ADDITIONAL INFORMATION.
12. REFER TO TRAFFIC RAIL(TYPE T501) (SPL) SHEET AND TRAFFIC RAIL(TYPE RAIL) (SPL) SHEET FOR RAIL CONSTRUCTION AND ADDITIONAL INFORMATION.
13. REFER TO THE WALL FORM LINER PLAN SHEETS FOR AESTHETIC GUIDELINES AND ADDITIONAL INFORMATION.

EARTH REINFORCEMENTS				
WALL STATION START	WALL STATION END	H_{MIN}	H_{MAX}	MINIMUN ALLOWABLE LENGTH
10+00	18+46	0'	8'	8'

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IH 30 AT JOHN KING BLVD

RETAINING WALL E
TYPICAL SECTIONS AND GENERAL NOTES

STATE OF TEXAS
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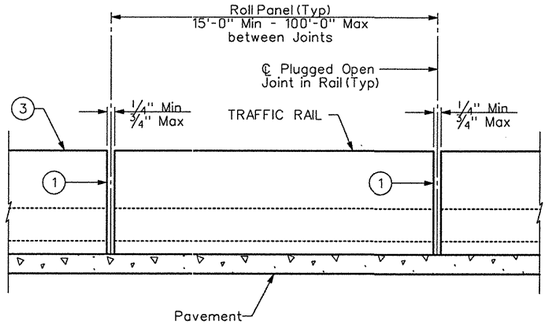
Signature of Registrant & P.E. Date 2-25-09

SHEET 4 OF 4

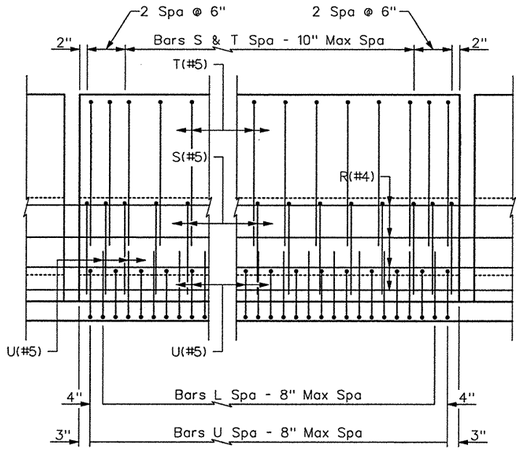
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Checked: ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn: TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked: JLC	DAL	ROCKWALL	0009	12	073	204

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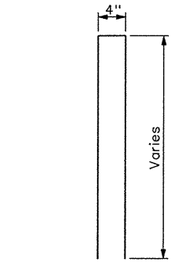
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ROADWAL ELEVATION
Showing Minimum Height Geometry

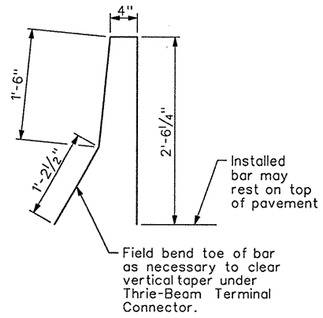


ROADWAL ELEVATION
Showing Maximum Height
Traffic Rail Reinforcing

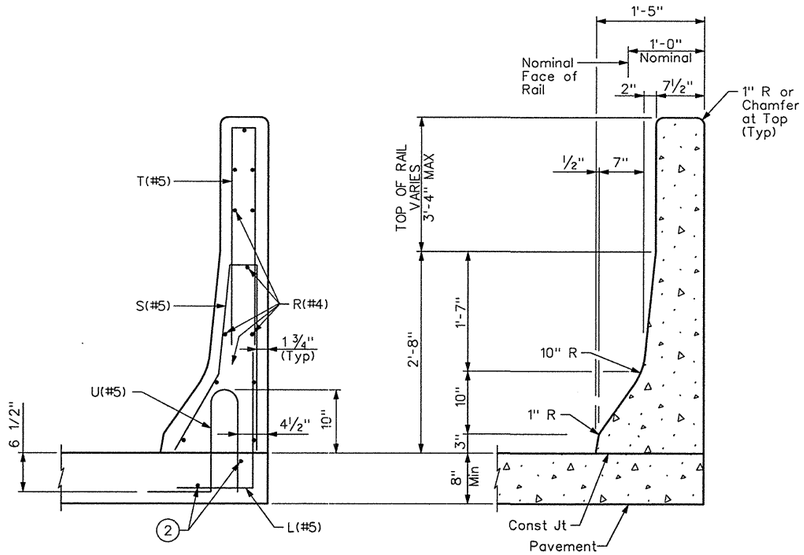


BARS T (#5)

(Bars T may be omitted when Traffic Rail is 2'-8" in height.)

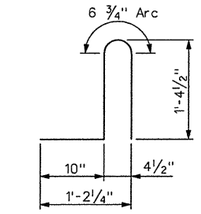


BARS S (#5)

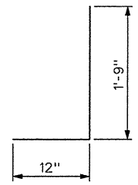


SHOWING REINFORCING

SHOWING CONVENTIONAL GEOMETRY



BARS U (#5)



BARS L (#5)

TYPICAL SECTIONS THRU RAIL

1. Rail Joints shall be provided as necessary to maintain a 100' maximum and a 15' minimum length of unbroken wall. Forming material used in joints shall be left in place and shall be light in color and compressible, such as the following listed materials: polystyrene, molded cork granules, sponge rubber sheet, etc. A 2' wide filter fabric, conforming to Departmental Material Specification D-9-6200, shall be centered on back side of joints for the full height of the rail using construction adhesive prior to backfill.

2. As an aid in supporting reinforcement, additional longitudinal bars may be used in the pavement with the approval of the Engineer. Such bars shall be furnished at the Contractor's expense.

3. See Retaining Wall Plan & Elevation Sheets for Top of Rail elevations.

This rail has been evaluated and approved to be of equal strength to railings with like geometry, which have been crash tested to meet NCHRP Report 350 TL-3 criteria. This rail can be used for design speeds of 50 mph and greater.

All steel components except reinforcing shall be galvanized unless otherwise shown on plans. Epoxy coat bars U if pavement bars are epoxy coated.

All concrete for railing wall shall be Class "C".

All reinforcing steel shall be Grade 60.

This railing may be constructed with slip-forms when shown on the plans or approved by the Engineer, with equipment approved by the Engineer. Sensor control for both line and grade must be provided. When slip-forming is used, the concrete may be cured with membrane curing compound.

Additional reinforcing may be tack welded to the upper two thirds of the reinforcing cage to provide bracing when slip-forming is used. Additional anchorage devices may be added when welding is necessary in the lower one third of the cage. Do not weld to U or S bars in the lower one third of the cage.

The back of railing shall be vertical unless otherwise shown on the plans or approved by the Engineer.

All parts of the railing including concrete parapet wall, MBGF Terminal Connections, bolts, nuts, washers, and reinforcing, are included in the price bid per linear foot of rail.

Shop drawings will be required for this rail.

Maximum weight of Railing is 638 plf.

STATE OF TEXAS
AFISU OLABIMTAN
63663
LICENSED PROFESSIONAL ENGINEER

Signature of Registrant, P.E. & Date 2-6-09

SHEET 1 OF 1

NO.	REVISION	BY	DATE

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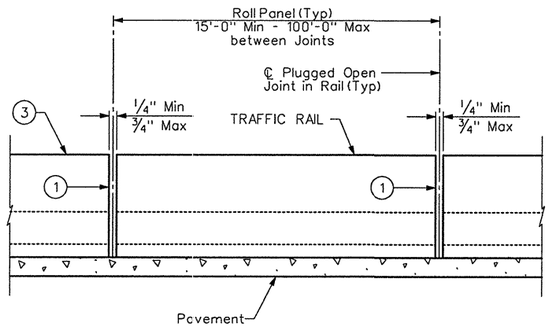
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IH 30 AT JOHN KING BLVD

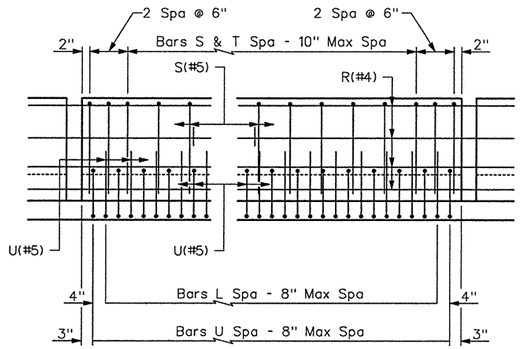
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Checked: ACO							
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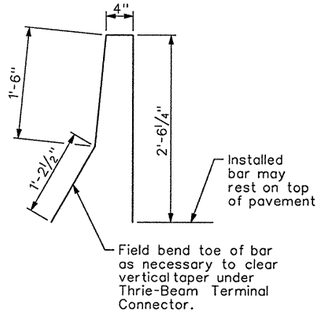
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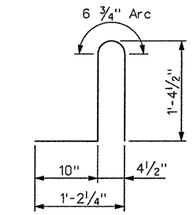
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Showing Minimum Height Geometry



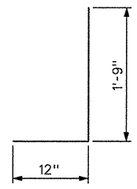
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Traffic Rail Reinforcing



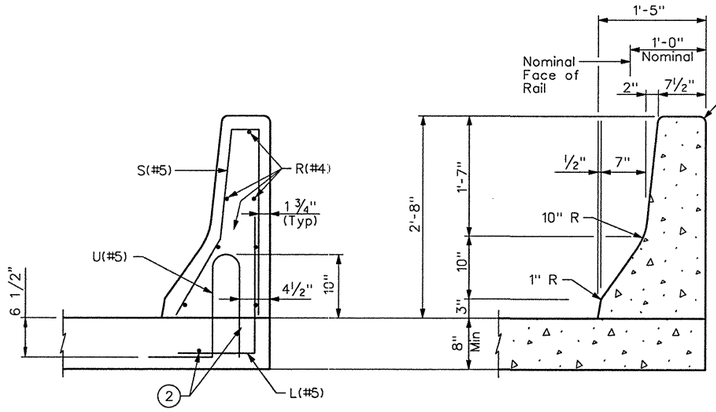
BARS S (#5)



BARS U (#5)



BARS L (#5)



SHOWING REINFORCING

SHOWING CONVENTIONAL GEOMETRY

TYPICAL SECTIONS THRU RAIL

1. Rail Joints shall be provided as necessary to maintain a 100' maximum and a 15' minimum length of unbroken wall. Forming material used in joints shall be left in place and shall be light in color and compressible, such as the following listed materials: polystyrene, molded cork granules, sponge rubber sheet, etc. A 2' wide filter fabric, conforming to Departmental Material Specification D-9-6200, shall be centered on back side of joints for the full height of the rail using construction adhesive prior to backfill.

2. As an aid in supporting reinforcement, additional longitudinal bars may be used in the pavement with the approval of the Engineer. Such bars shall be furnished at the Contractor's expense.

3. See Retaining Wall Plan & Elevation Sheets for Top of Rail elevations.

This rail has been evaluated and approved to be of equal strength to railings with like geometry, which have been crash tested to meet NCHRP Report 350 TL-3 criteria. This rail can be used for design speeds of 50 mph and greater.

All steel components except reinforcing shall be galvanized unless otherwise shown on plans. Epoxy coat bars U if pavement bars are epoxy coated.

All concrete for railing wall shall be Class "C".

All reinforcing steel shall be Grade 60.

This railing may be constructed with slip-forms when shown on the plans or approved by the Engineer, with equipment approved by the Engineer. Sensor control for both line and grade must be provided. When slip-forming is used, the concrete may be cured with membrane curing compound.

Additional reinforcing may be tack welded to the upper two thirds of the reinforcing cage to provide bracing when slip-forming is used. Additional anchorage devices may be added when welding is necessary in the lower one third of the cage. Do not weld to U or S bars in the lower one third of the cage.

The back of railing shall be vertical unless otherwise shown on the plans or approved by the Engineer.

All parts of the railing including concrete parapet wall, MBGF Terminal Connections, bolts, nuts, washers, and reinforcing, are included in the price bid per linear foot of rail.

Shop drawings will be required for this rail.

Average weight of Railing is 326 plf.

STATE OF TEXAS
AFISU OLABIMTAN
63663
LICENSED
PROFESSIONAL ENGINEER

P.E. 2-6-09
Signature of Registrant & Date

SHEET 1 OF 1

NO.	REVISION	BY	DATE

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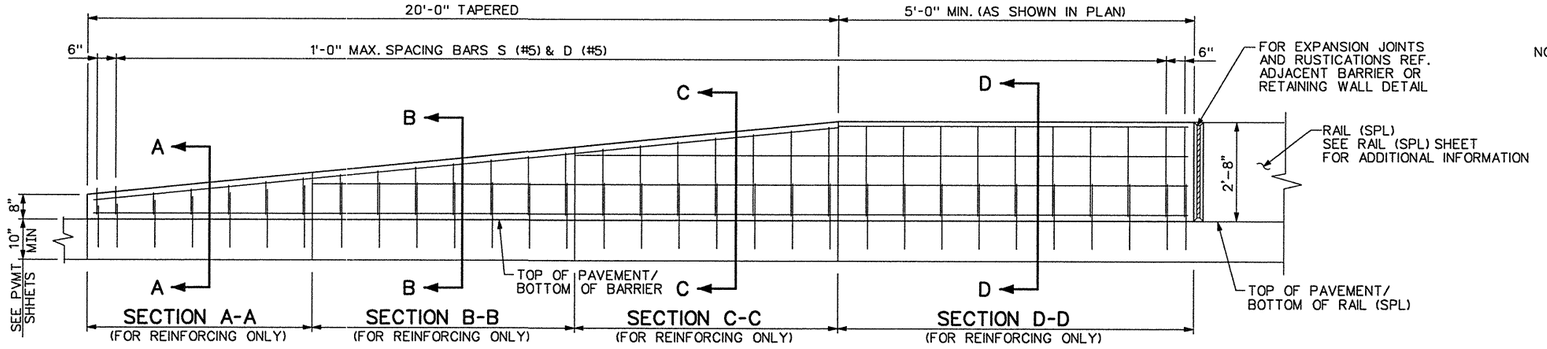
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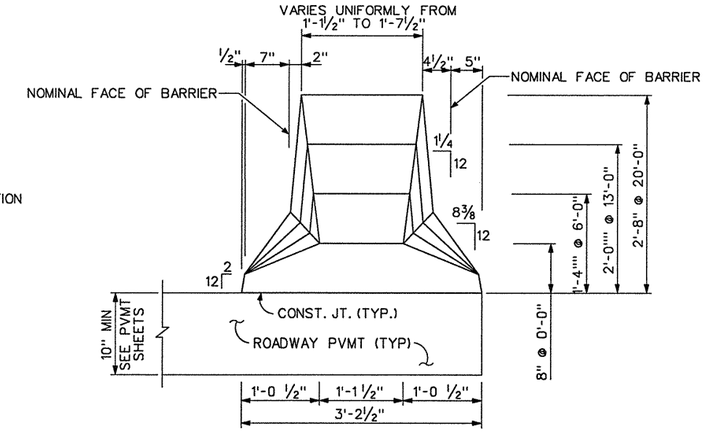
IH 30 AT JOHN KING BLVD

CAST-IN-PLACE CONCRETE TRAFFIC RAIL TYPE T501 (SPL)

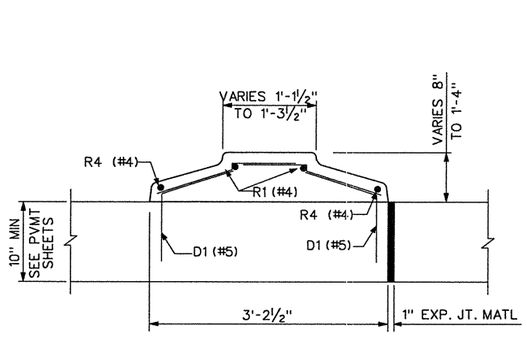
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Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073	206

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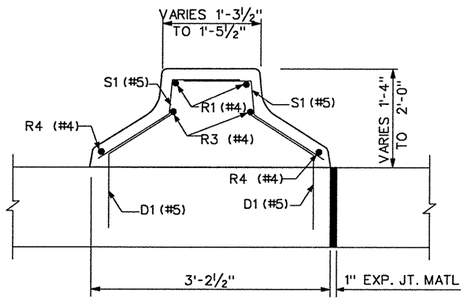




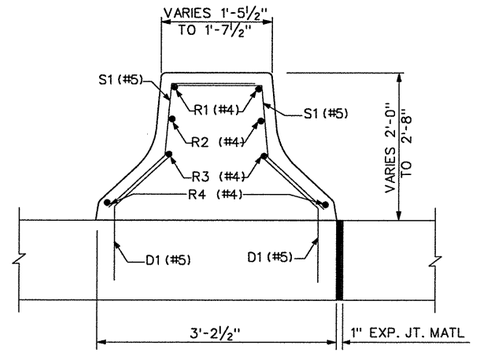
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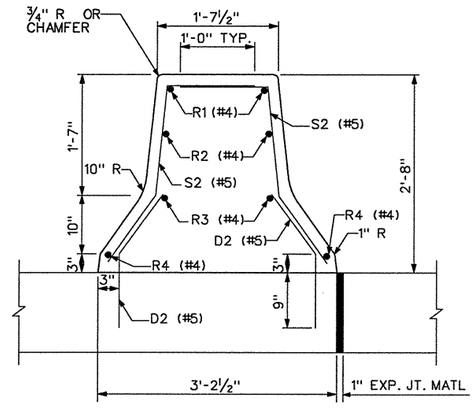
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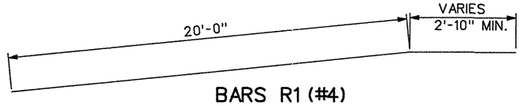
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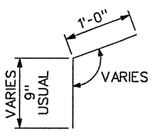
SECTION C-C



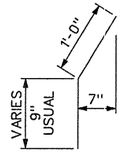
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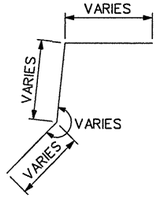
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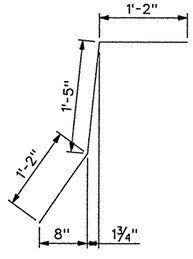
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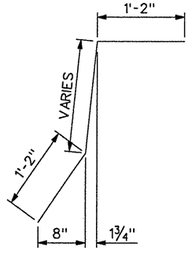
BARS D2 (#5)



BARS S1 (#5)



BARS S2 (#5)



BARS S3 (#5)

GENERAL NOTES:

1. Designed according to AASHTO 2007 LRFD and current interim specifications.
2. All Parts of barriers including terminal and reinforcing steel are included in the price bid per liner foot of barrier.
3. Shop drawings will be required for this barrier.
4. All concrete for barrier shall be Class "C".
5. All reinforcing bars shall be grade 60 steel.
6. Dimensions relating to reinforcing steel are to centers of bars.
7. At the point of construction joints for the barrier, the longitudinal bars shall extend beyond the joint so that bar splices will be a minimum of two feet from the construction joint.
8. Bar splices for barrier shall be a minimum of 24 times the nominal diameter of the bar.
9. Any method devised by the Contractor and approved by the Engineer that will assure the longitudinal roadway steel for barrier will be positioned +/-½" as dimensioned will be satisfactory.
10. Special Traffic Barrier End Terminal shall be paid under Item 450-2088 Rail (CIP) Type 501 (Transition).

STATE OF TEXAS
AFISU OLABIMTAN
63663
LICENSED PROFESSIONAL ENGINEER

Signature of Registrant & Date 7-1-09

SHEET 1 OF 1

REPLACED 7-1-09 BB

NO.	REVISION	BY	DATE

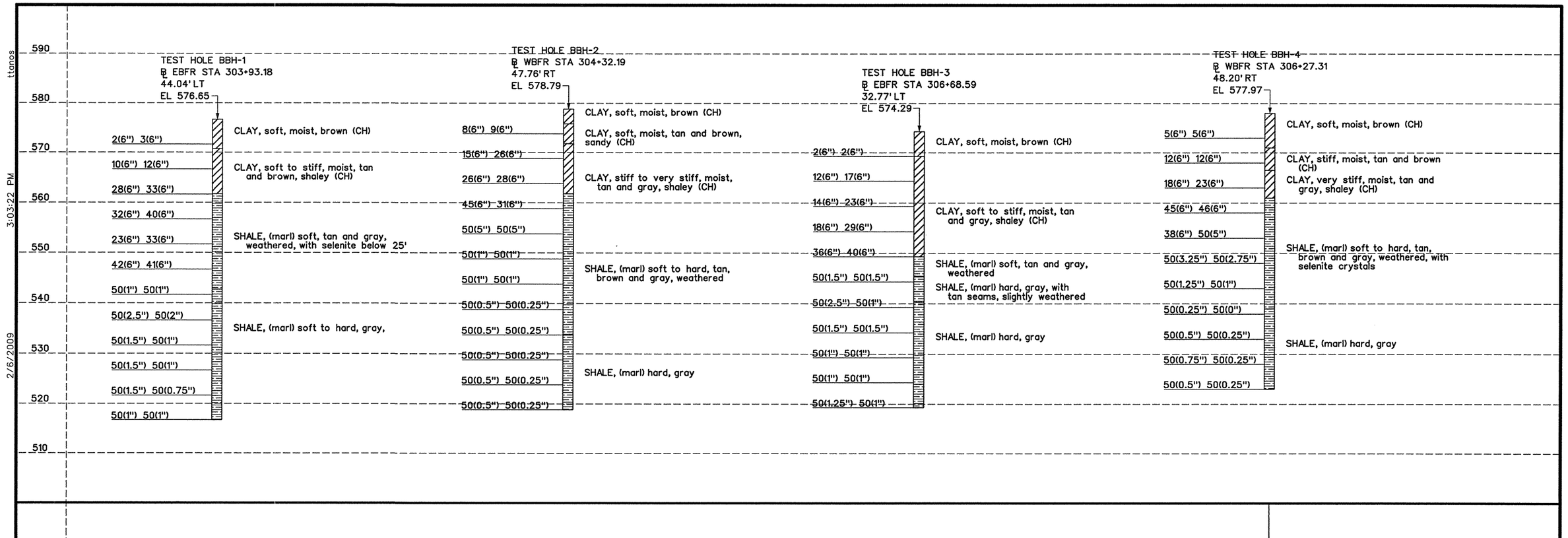
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SPECIAL TRAFFIC BARRIER END TERMINAL

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Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073	207



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AFISU OLABIMTAN
63663
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PROFESSIONAL ENGINEER

2-6-09
P.E.
Signature of Registrant & Date

SHEET 1 OF 4

NO.	REVISION	BY	DATE

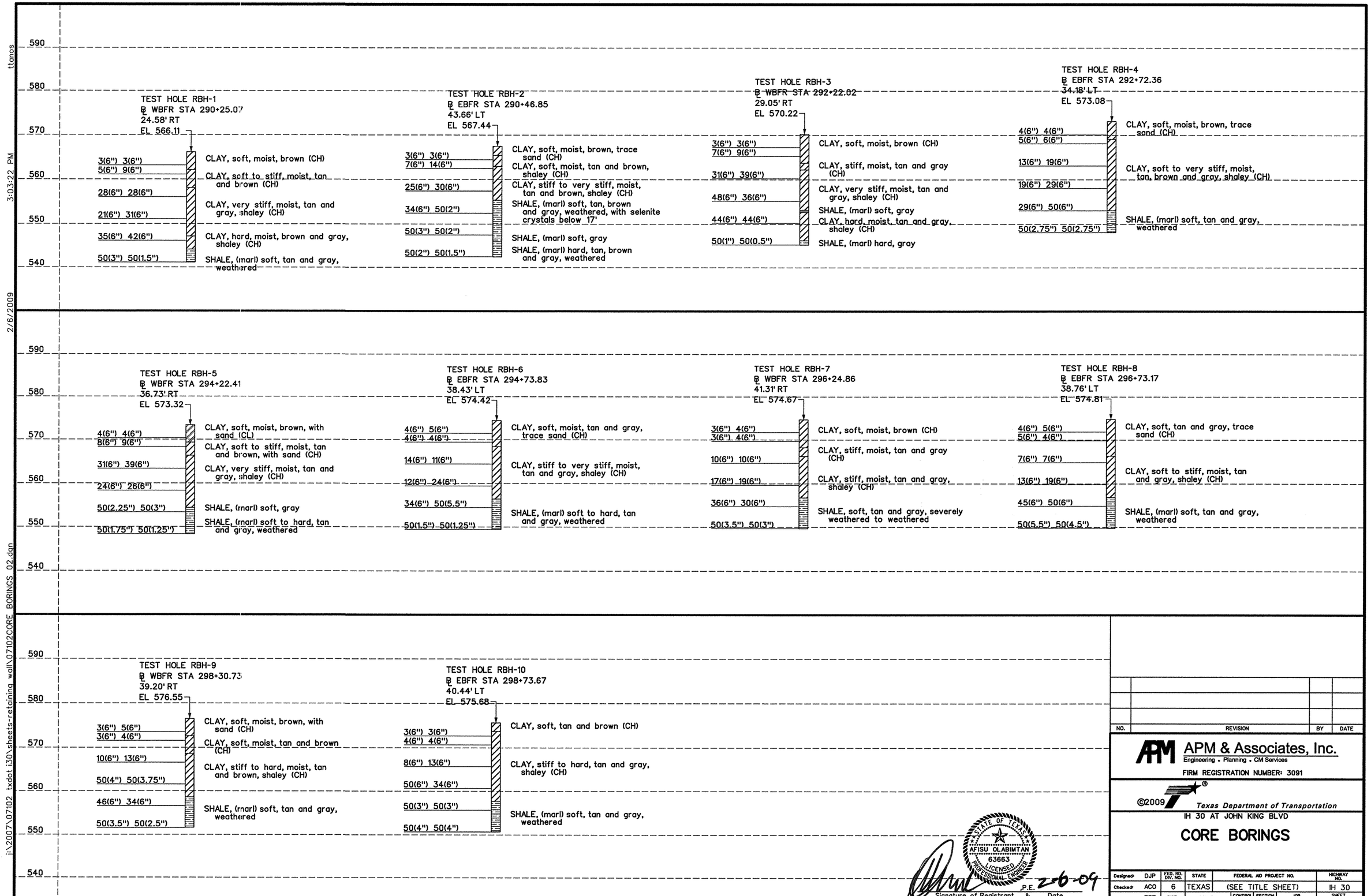
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CORE BORINGS

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Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
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CORE BORINGS

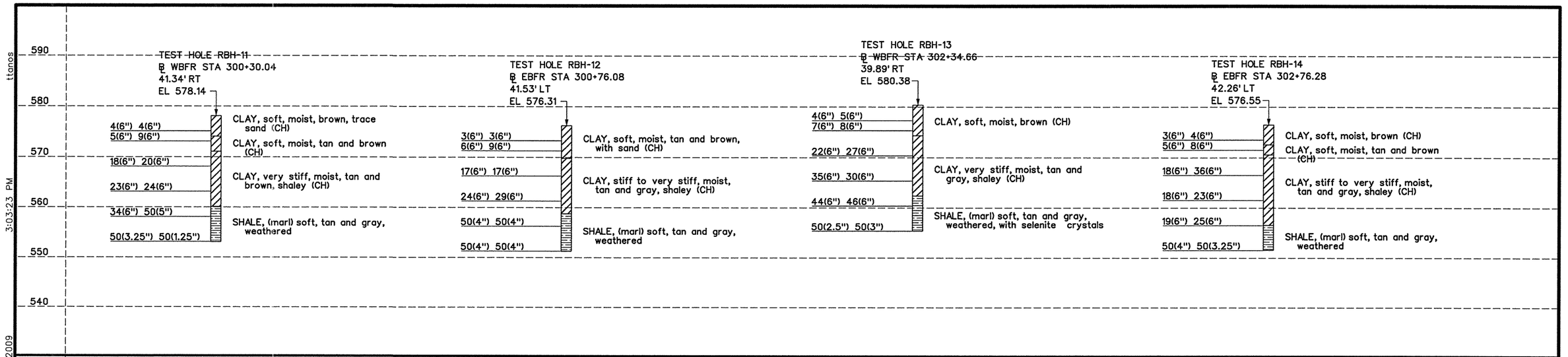
STATE OF TEXAS
AFISU OLABIMTAN
63663
LICENSED PROFESSIONAL ENGINEER

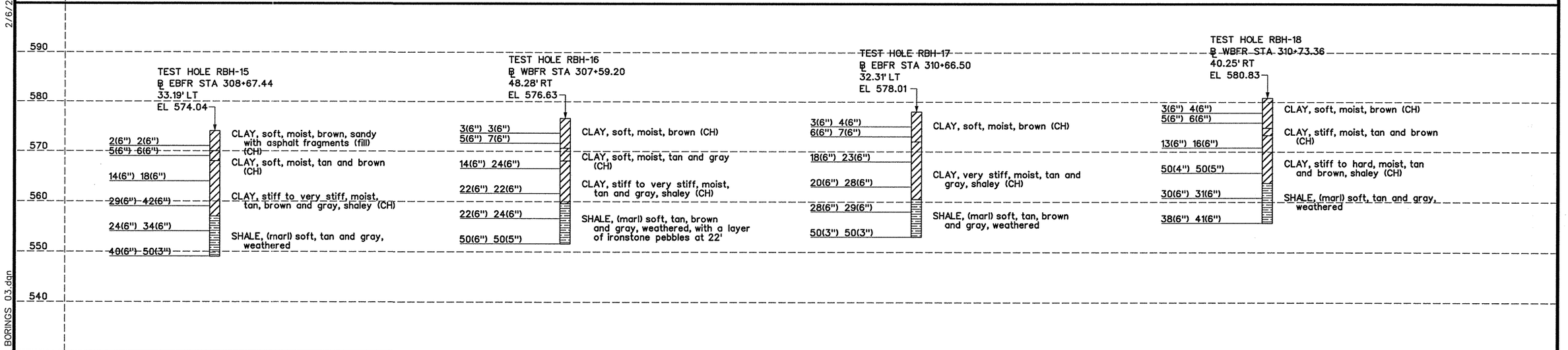
Signature of Registrant & P.E. 2-6-09 Date

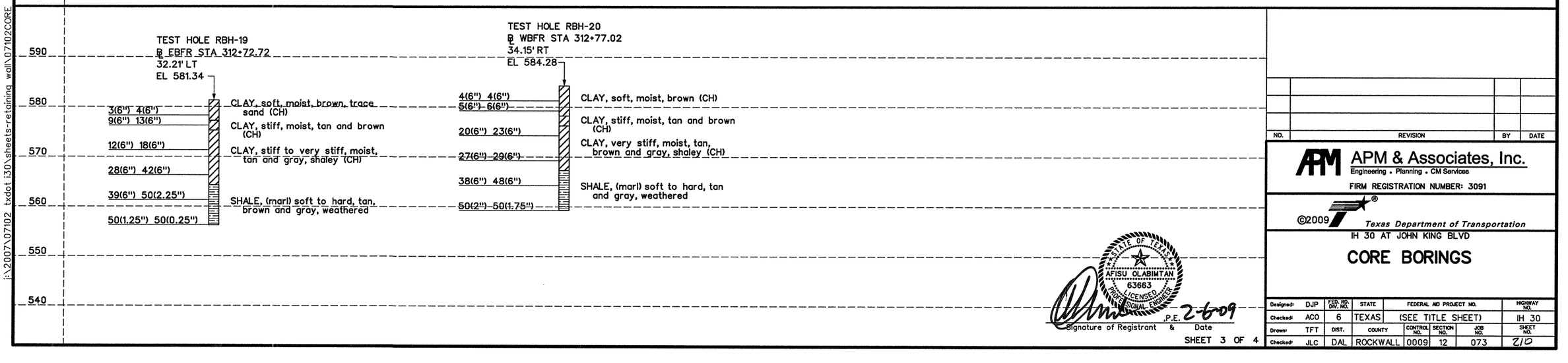
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Checked:	JLC	DAL	ROCKWALL	0009	12	073	209

SHEET 2 OF 4

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CORE BORINGS

STATE OF TEXAS
AFISU OLABINTAN
63663
LICENSED PROFESSIONAL ENGINEER

Signature of Registrant & P.E. Date 2-6-09

SHEET 3 OF 4

Designed:	DJP	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.				HIGHWAY NO.
Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)				IH 30
Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073		210

ttanos

3:03:24 PM

2/6/2009

i:\2007\07102 txdot i30\sheets-retaining wall\07102CORE BORINGS 04.dgn

600
590
580
570
560
550

TEST HOLE RBH-21
℄ EBFR STA 314+62.19
32.08' LT
EL 583.32

4(6") 4(6") — CLAY, soft, moist, brown, trace sand (CH)
10(6") 16(6") — CLAY, stiff, moist, tan and brown shaley (CH)
35(6") 16(6") — CLAY, very stiff, moist, tan, brown and gray, shaley (CH)
30(6") 27(6")
40(6") 50(4") — SHALE, (marl) soft to hard, tan, brown and gray, weathered
50(1.25") 50(1")

TEST HOLE RBH-22
℄ WBFR STA 314+55.87
26.22' RT
EL 587.08

3(6") 3(6") — CLAY, soft, moist, brown, trace sand (CH)
4(6") 5(6") — CLAY, soft, moist, tan and gray (CH)
24(6") 23(6")
34(6") 36(6") — CLAY, very stiff, moist, tan, brown and gray, shaley (CH)
50(4") 50(2.25")
50(3.5") 50(2.25") — SHALE, (marl) soft, tan, brown and gray, weathered

TEST HOLE RBH-23
℄ EBFR STA 316+70.03
30.44' LT
EL 584.14

3(6") 3(6") — CLAY, soft, moist, brown (CH)
3(6") 4(6")
17(6") 27(6") — CLAY, soft to very stiff, moist, tan and brown, shaley (CH)
28(6") 23(6")
44(6") 45(6") — SHALE, (marl) soft, tan and gray, weathered
50(1.5") 50(0.75") — SHALE, (marl) hard, gray

TEST HOLE RBH-24
℄ WBFR STA 316+74.62
27.37' RT
EL 587.72

4(6") 5(6") — CLAY, soft, moist, brown (CH)
4(6") 7(6") — CLAY, stiff, moist, tan and brown (CH)
13(6") 13(6")
34(6") 40(6") — CLAY, stiff to very stiff, moist, tan, brown and gray, shaley (CH)
50(2.5") 50(3.25")
50(4") 50(2") — SHALE, (marl) soft, tan, brown and gray, weathered, with selenite crystals

600
590
580
570
560
550

TEST HOLE RBH-25
℄ EBFR STA 318+73.76
29.03' LT
EL 583.44

3(6") 3(6") — CLAY, soft, moist, brown, with sand (CH)
4(6") 5(6")
16(6") 21(6") — CLAY, stiff to very stiff, moist, tan and gray, shaley (CH)
30(6") 36(6")
40(6") 31(6") — SHALE, (marl) soft, tan and gray, weathered
50(4") 50(3")

TEST HOLE RBH-26
℄ WBFR STA 318+76.43
28.19' RT
EL 587.07

4(6") 4(6") — CLAY, soft, moist, brown, trace sand (CH)
5(6") 9(6")
18(6") 20(6") — CLAY, stiff to very stiff, moist, tan and gray, shaley (CH)
25(6") 39(6")
50(5") 35(6") — SHALE, (marl) soft, tan, brown and gray, weathered, with selenite crystals
50(3") 50(2")

TEST HOLE RBH-27
℄ EBFR STA 320+78.67
31.43' LT
EL 582.35

3(6") 3(6") — CLAY, soft, moist, brown, trace sand (CH)
5(6") 5(6")
29(6") 32(6") — CLAY, soft to very stiff, moist, tan and gray, shaley (CH)
30(6") 27(6")
50(3") 50(4") — SHALE, (marl) soft to hard, tan, brown and gray, weathered
50(0.5") 50(0.25")

TEST HOLE RBH-28
℄ WBFR STA 320+68.01
38.40' RT
EL 585.19

3(6") 3(6") — CLAY, soft, moist, brown, trace sand (CH)
7(6") 9(6")
13(6") 15(6") — CLAY, soft to stiff, moist, tan and brown, shaley (CH)
32(6") 39(6") — CLAY, stiff to very stiff, moist, tan and brown, shaley (CH)
48(6") 37(6")
50(4") 50(1.25") — SHALE, (marl) soft, tan, brown and gray, weathered

600
590
580
570
560
550

TEST HOLE RBH-29
℄ EBFR STA 322+88.06
31.40' LT
EL 582.21

3(6") 3(6") — CLAY, soft, moist, brown (CH)
5(6") 6(6") — CLAY, stiff, moist, tan and brown (CH)
17(6") 17(6") — CLAY, stiff to very stiff, moist, tan and brown, shaley (CH)
39(6") 49(6")
37(6") 32(6") — SHALE, (marl) soft, tan, brown and gray, weathered
50(3") 50(2")

TEST HOLE RBH-30
℄ EBFR STA 322+84.02
37.34' RT
EL 583.68

4(6") 4(6") — CLAY, soft, moist, brown, with sand and calcareous nodules (CH)
9(6") 8(6") — CLAY, soft, moist, tan and brown, trace sand (CH)
18(6") 20(6") — CLAY, stiff, moist, tan and brown, shaley (CH)
29(6") 50(6") — SHALE, (marl) soft, tan, brown and gray, weathered, with selenite crystals below 22'
42(6") 47(6") — SHALE, (marl) soft, gray
50(5") 47(6") — SHALE, (marl) soft, tan, brown and gray, weathered

TEST HOLE RBH-31
℄ EBFR STA 324+79.94
29.36' LT
EL 583.36

3(6") 4(6") — CLAY, soft, moist, brown, trace sand (CH)
5(6") 6(6") — CLAY, soft, moist, tan and brown (CH)
15(6") 15(6") — CLAY, stiff to very stiff, moist, tan, brown and gray, shaley (CH)
27(6") 28(6")
26(6") 33(6") — SHALE, (marl) soft, tan, brown and gray, weathered, with selenite crystals below 20'
50(4.5") 50(5.5")

STATE OF TEXAS
AFISU OLABINTAN
63663
LICENSED
PROFESSIONAL ENGINEER

P.E. 2-6-09
Signature of Registrant & Date

SHEET 4 OF 4

NO.	REVISION	BY	DATE

APM & Associates, Inc.
Engineering • Planning • CM Services
FIRM REGISTRATION NUMBER: 3091

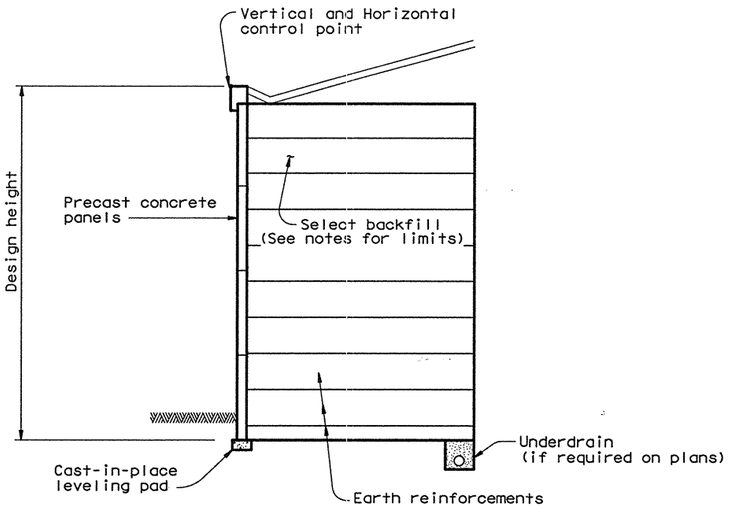
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IH 30 AT JOHN KING BLVD

CORE BORINGS

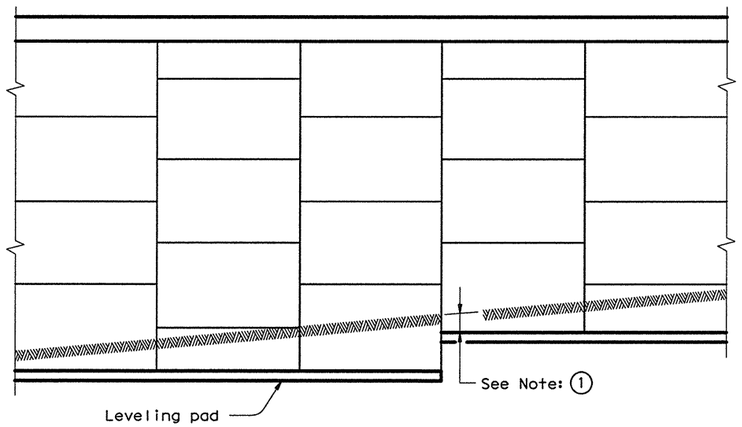
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Checked:	ACO	6	TEXAS	(SEE TITLE SHEET)			IH 30
Drawn:	TFT	DIST.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
Checked:	JLC	DAL	ROCKWALL	0009	12	073	211

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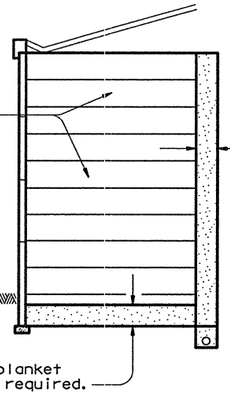
TYPICAL SECTION

(Wall at bottom of slope)



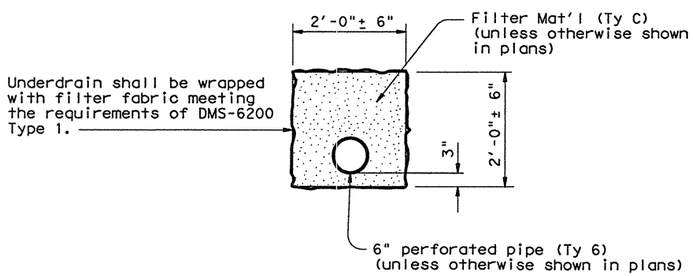
ELEVATION

① NOTE: Unless noted elsewhere in the plans, 1' minimum cover shall be provided from the top of leveling pad to finish grade.

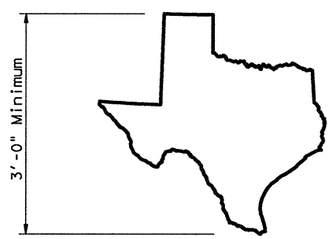


SPECIAL DRAINAGE PROVISIONS

(For use when cement stabilized backfill is used)



UNDERDRAIN DETAIL



MAP OF TEXAS EMBLEM

Map of Texas emblem shall be formed into a wall panel next to each bridge abutment. The exact location of each emblem shall be approved by the Engineer. The cost of forming the emblems will not be paid for directly, but shall be incidental to the Item "Retaining Wall".

The map of Texas shall be inset a minimum of ¾" into the face of the panel, and shall receive a smooth finish. The inset area shall be finished in a contrasting color as approved by the Engineer.

DESIGN PARAMETERS:
Design of retaining walls shall be based on the following design parameters:

Random Backfill (Embankment of Existing Soils)	unit weight = 125 pcf Ø = 30° c = 0 psf
Select Backfill	unit weight = 125 pcf Ø = 34° c = 0 psf
Cement Stabilized Select Backfill	unit weight = 125 pcf Ø = 45° c = 0 psf

Stress in steel and concrete shall be in accordance with current AASHTO Standard and Interim Specifications.
The minimum length of earth reinforcements shall be 8'-0".

STABILITY CRITERIA:
Factor of safety in sliding along the base of the structure shall be greater than or equal to 1.5.
Factor of safety in overturning shall be greater than or equal to 2.0.
The base pressure resultant shall fall within the middle third of the retaining wall.
The factor of safety against pullout of the earth reinforcements shall be greater than or equal to 1.5 at each level. Pullout resistance shall be determined from test data evaluated at ¾ inch strain.

CORROSION CRITERIA:
The earth reinforcement elements shall be designed to have a corrosion resistance - durability to ensure a minimum design life of 75 years. Maximum loss per side due to corrosion shall be computed by assuming a uniform loss model based on the following
Zinc corrosion rate (First 2 years) - 15 µm/yr.
Zinc corrosion rate (subsequent years) - 4 µm/yr.
Carbon steel corrosion rate - 12 µm/yr.
All stress and pullout calculations shall be done on the calculated earth reinforcement section remaining after 75 years.

GENERAL NOTES:

Section and elevation shown is for informational purposes only. Specific geometry is to be determined based on wall layouts and other plan information.
The select backfill specified for use within the mechanically stabilized earth volume shall extend horizontally from the back of the panels to the end of the earth reinforcements. The select backfill shall extend vertically from the top of the leveling pad or 4" below the lowest earth reinforcement, whichever is lower, to the top of panels.
The uppermost earth reinforcements shall be no more than 3.0' below the top of wall.
The lowest level of earth reinforcements shall be no more than 2.0' above the top of the leveling pad.
Minimum wire size for earth reinforcements shall be W7.0. If different longitudinal and cross wires are used in an earth reinforcement mesh, the smaller wire shall have at least 50% of the cross sectional area of the larger wire.
Standard precast concrete panels shall have a maximum height of 6', and a maximum surface area of 50 sq ft. Minimum panel thickness shall be 5". Panels shall be arranged to provide offset horizontal joints.
An open joint shall be provided around the perimeter of the concrete panels. The nominal joint opening shall be between ⅜" and ¾". The joint configuration shall be such that the filter fabric or pad materials are not exposed at the wall face.
A one-piece corner panel shall be provided for wall angle changes of greater than 30 degrees. Butting of chamfered panels will be allowed for angle changes of 30 degrees or less.
Concrete coping shall be provided along the top of wall, at the vertical steps at bridge backwalls, and at other vertical steps along the top of wall. The joints between all coping segments shall be sealed to prevent infiltration of water into the retaining wall backfill. Sealing shall be in accordance with the Item "Joint Sealants and Fillers", using Class 4 joint sealant.

LEVELS
1 2 3 4 5 6 7 8
17 18 19 20 21 22 23 24
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
49 50 51 52 53 54 55 56 57 58 59 60 61 62 63

D 12 13 14 15 16 PATH:

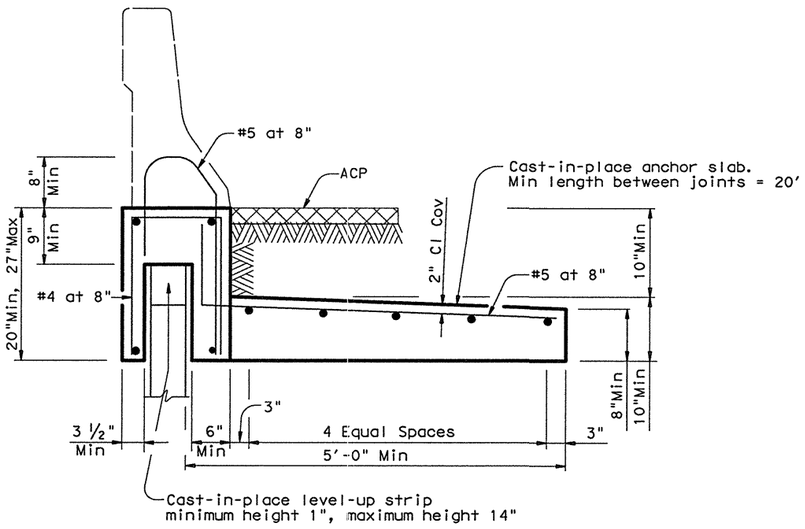
Texas Department of Transportation
Bridge Division

MECHANICALLY STABILIZED EARTH RETAINING WALL

RW(MSE)

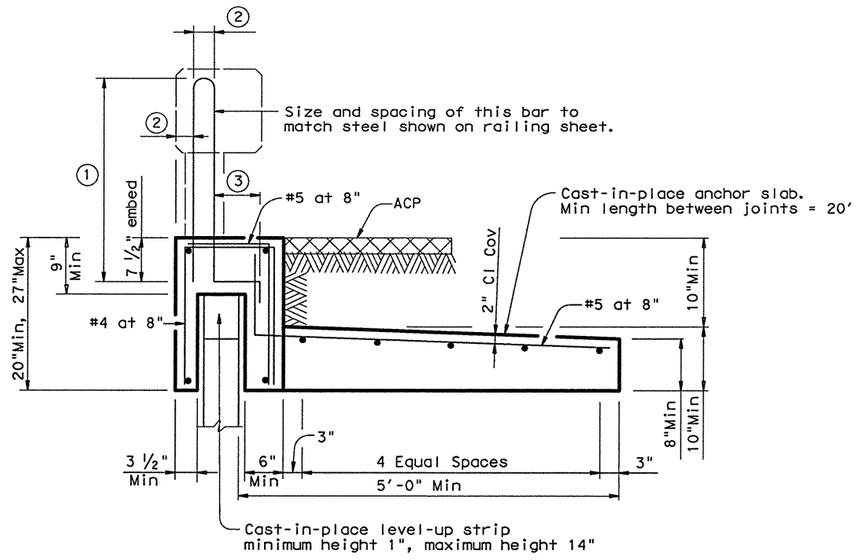
FILE: rwstde01.dgn	DN: TxDOT	CK: TxDOT	DW: GHO		CK: MPM
©TxDOT April 2002	DISTRICT	FEDERAL AID PROJECT			SHEET
REVISIONS	DALLAS	(SEE TITLE SHEET)			2/2
	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	ROCKWALL		0009	12	073	IH 30

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"WIDE BASED" RAILING
T501, T502, C501, C502 & SSTR
ADJACENT TO ACP

(Showing T501 Rail, other rails listed similar)



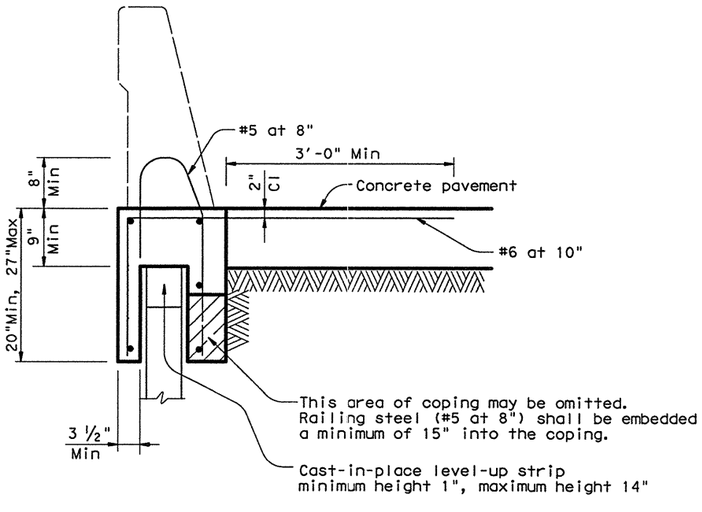
"NARROW BASED" RAILING
T221, T203, T401, T402, T411, C221, C203, C402, C411
ADJACENT TO ACP

(Showing T203 Rail, other rails listed similar)

① Reinforcement length equal to length shown on the appropriate Rail standard plus 1".

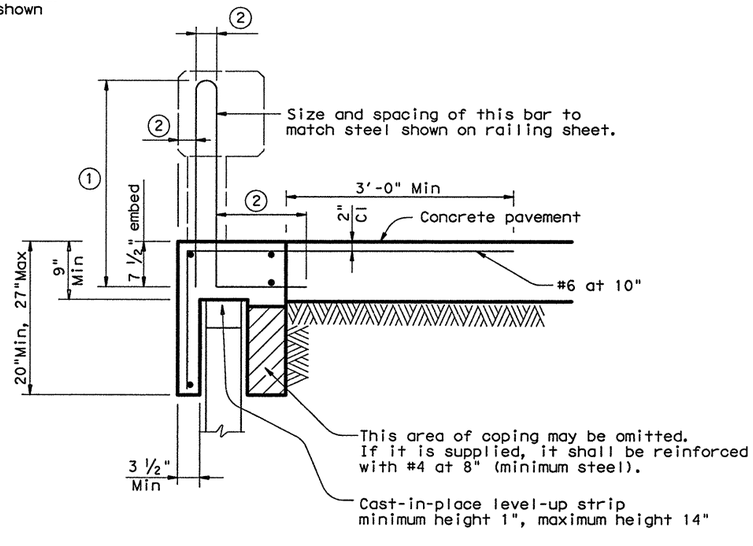
② Match dimension on the appropriate Rail standard.

③ Match dimension on the appropriate Rail standard. Bend end of rail anchorage reinforcing as shown as required to maintain Clear Cover.



"WIDE BASED" RAILING
T501, T502, C501, C502 & SSTR
ADJACENT TO CONCRETE PAVEMENT

(Showing SSTR Rail, other rails listed similar)



"NARROW BASED" RAILING
T221, T203, T401, T402, T411, C221, C203, C402, C411
ADJACENT TO CONCRETE PAVEMENT

(Showing T203 Rail, other rails listed similar)

CAST-IN-PLACE COPINGS:
Casting of the coping directly against the precast panel sides will not be permitted, as this may result in panel cracking. The contractor shall use a ¼" (Min) compressible material on both sides of the panel to isolate the coping from the precast panel.
When cast-in-place coping is anchored to reinforced concrete pavement, a smooth level-up strip shall be provided on the top of the precast panels. The purpose of the level-up is to allow the pavement and coping to move longitudinally relative to the wall without causing damage.
Railing and coping joints shall be provided at 33' maximum spacing. Railing and coping joints shall be placed to coincide with precast panel joints.

PRECAST COPINGS:
A smooth level-up strip shall be provided on top of the precast panels prior to installation of the coping. Shims may be used on top of the level-up strip to facilitate alignment.
Precast coping shall be provided in 10' minimum lengths.

JOINTED CONCRETE PAVEMENT:
When coping is adjacent to and anchored into jointed concrete pavement, the coping joints shall coincide with the pavement joints.

JOINT SEALER:
The joints between coping segments shall be sealed in accordance with the Item "Joint Sealants and Fillers", joint sealing material, Class 4. The joint shall be sealed 3" below and 6" above the adjoining pavement surface, or as directed by the Engineer. The purpose of the joint sealing is to contain surface drainage and prevent infiltration into the retaining wall backfill.

GENERAL NOTES:
Details on this sheet are to be used in development of specific details for mounting traffic railing on mechanically stabilized earth (MSE) walls.
The specific details proposed shall have strengths equivalent to those shown on this sheet. Areas of particular importance are the connection of the coping to the railing, the strength of the vertical coping leg connecting the railing to the anchor slab, and the connection of the coping to the anchor slab or concrete pavement.
Shop drawings for the traffic railing foundations shall be submitted to the Engineer in accordance with the Item "Retaining Wall". The shop drawings shall include bar bending details.
Precasting of the coping or coping and railing will be allowed. The anchor slab, when required, shall be cast-in-place.
The Contractor's attention is directed to the fact that various configurations of precast coping/railing combinations are covered by patent. The contractor shall provide for use of these systems in accordance with Article 7.3.
Concrete shall be Class "C".
All reinforcing steel shall be Grade 60.
Longitudinal bars shall be #4.
Coping and anchor slabs shall be considered subsidiary to the Item "Retaining Wall". The traffic railing will be paid for by the linear foot for the appropriate railing type.

LEVELS
1 2 3 4 5 6 7 8
1 11 21 31 41 51 61 71 81 91 102 112 122 132 142
33 43 53 63 73 83 94 104 114 124 134 144 154 164 174 184
45 95 05 15 25 35 45 55 65 75 85 95 06 16 26 36

PATH:

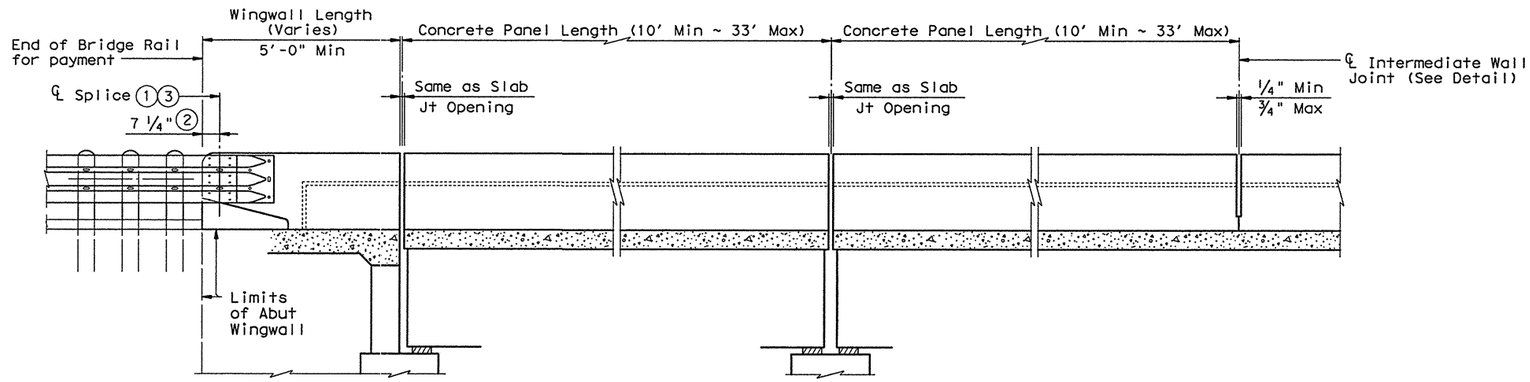
Texas Department of Transportation
Bridge Division

RETAINING WALL TRAFFIC RAILING FOUNDATIONS

RW(TRF)

FILE: rwstde03.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT		CK: MPM	
©TxDOT April 2002	DISTRICT	FEDERAL AID PROJECT			SHEET	
REVISIONS	DALLAS	(SEE TITLE SHEET)			23	
4-05: Updated Rail names, anchorage.	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	ROCKWALL		0009	12	073	IH 30

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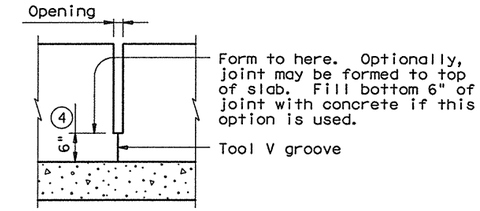


AT ABUTMENT BENTS
Showing TL-3 Transition

AT SLAB EXP JOINTS

AT INTERMEDIATE WALL JOINTS

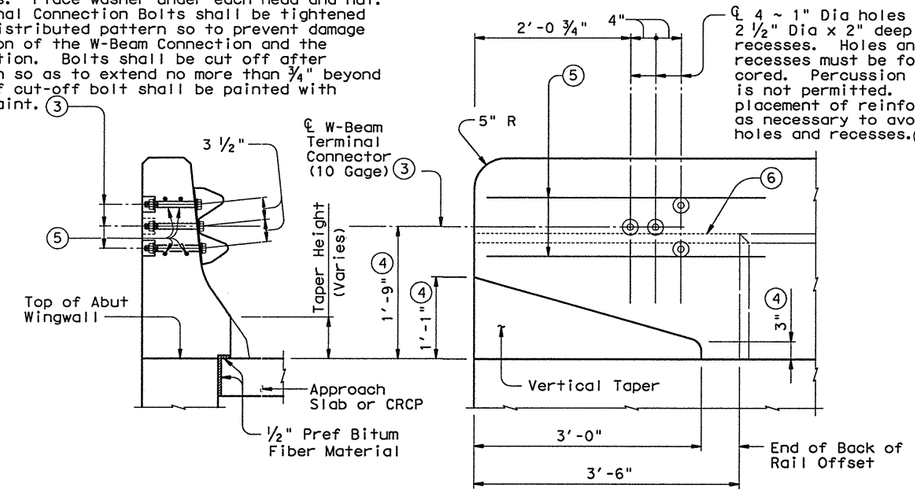
ROADWAY ELEVATION OF RAIL



INTERMEDIATE WALL JOINT DETAIL

Note: Provide intermediate wall joints over all slab construction joints, over interior supports on continuous units, and at equal intervals in between as necessary to maintain a 33' maximum length of unbroken wall.

℄ 4 ~ 7/8" Dia A325 Hex Head Bolts with two 1 3/4" O.D. washers. Place washer under each head and nut. The 4 Terminal Connection Bolts shall be tightened in a well distributed pattern so to prevent damage or distortion of the W-Beam Connection and the MBGF Transition. Bolts shall be cut off after installation so as to extend no more than 3/4" beyond nut. End of cut-off bolt shall be painted with Zinc-rich paint. (3)

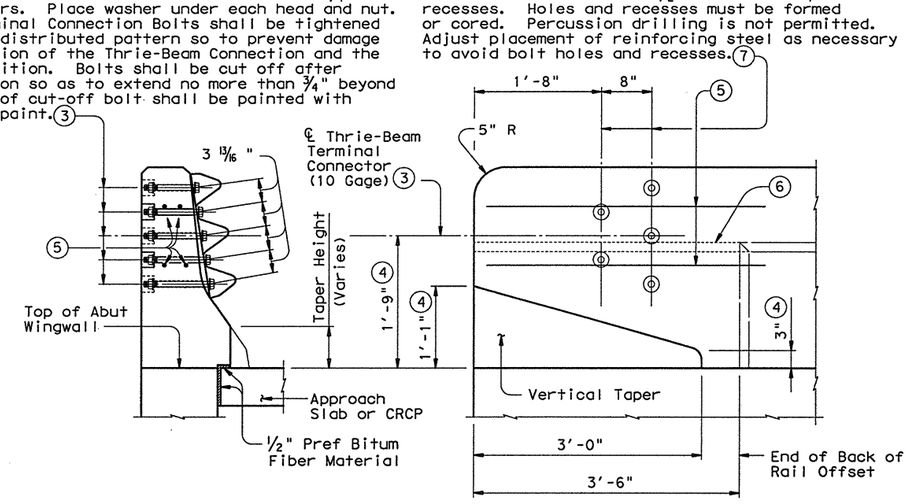


SECTION ELEVATION

TL-2 TERMINAL CONNECTION DETAILS

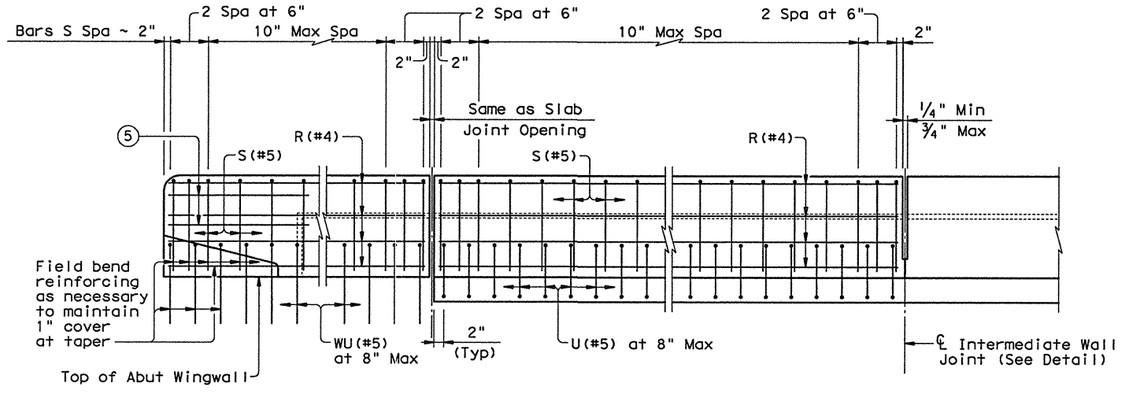
℄ 5 ~ 7/8" Dia A325 Hex Head Bolts with two 1 3/4" O.D. washers. Place washer under each head and nut. The 5 Terminal Connection Bolts shall be tightened in a well distributed pattern so to prevent damage or distortion of the Thrie-Beam Connection and the MBGF Transition. Bolts shall be cut off after installation so as to extend no more than 3/4" beyond nut. End of cut-off bolt shall be painted with Zinc-rich paint. (3)

℄ 5 ~ 1" Dia holes and 2 1/2" Dia x 2" deep recesses. Holes and recesses must be formed or cored. Percussion drilling is not permitted. Adjust placement of reinforcing steel as necessary to avoid bolt holes and recesses. (7)



SECTION ELEVATION

TL-3 TERMINAL CONNECTION DETAILS



ELEVATION SHOWING TYPICAL REINFORCING PLACEMENT

(1) Metal Beam Guard Fence Transitions must be attached to the bridge rail and extended along the embankment unless otherwise shown in the plans.

(2) Showing TL-3 Splice location, TL-2 Splice location is 1'-0".

(3) Terminal Connectors and associated hardware are to be paid for under the Item "Metal Beam Guard Fence".

(4) Increase 2" for structures with Overlay.

(5) 4 additional Bars R(#4) 3'-8" in length shall be placed inside Bars S(#5) and centered 2'-0" from end of rail when Terminal Connections are required.

(6) Back of rail offset may, with Engineer's approval be continued to the end of the railing.

(7) Bolt recesses are only required when pedestrian sidewalks are adjacent to back of rail.

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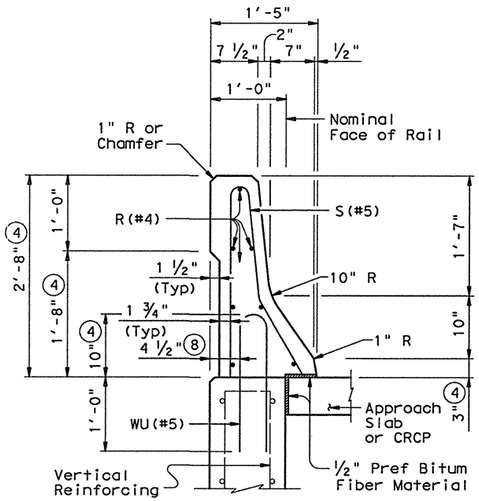
TRAFFIC RAIL

TYPE T501

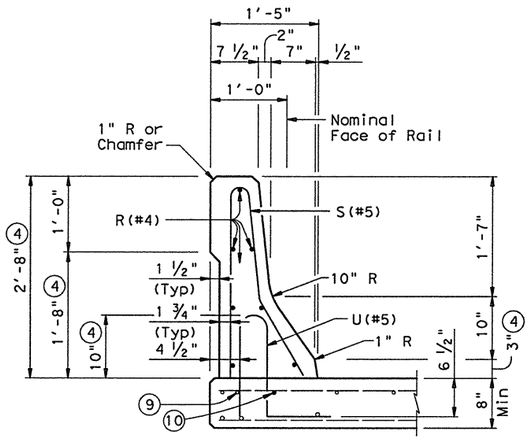
FILE: rlstde16.dgn	DN: TxDOT	CK: TxDOT	DW: JTR	CK: TxDOT
©TxDOT February 2003	DISTRICT	FEDERAL AID PROJECT		SHEET
REVISIONS	DALLAS	(SEE TITLE SHEET)		2/4
4-05: Added TL-2 Terminal Connection, minor corrections & modified Notes.	COUNTY	CONTROL	SECT	JOB	HIGHWAY
	ROCKWALL	0009	12	073	IH 30

ACC:
ED
LEVELS

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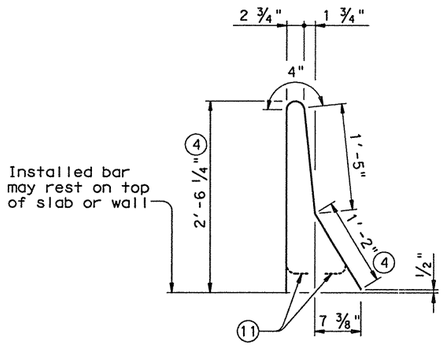


ON ABUTMENT WINGWALLS OR CIP RETAINING WALLS

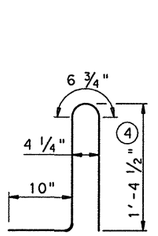


ON BRIDGE SLAB

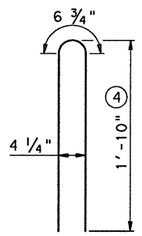
SECTIONS THRU RAIL



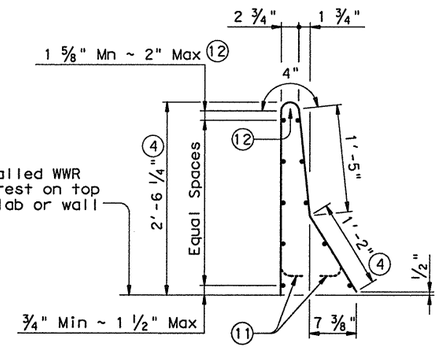
BARS S (#5)



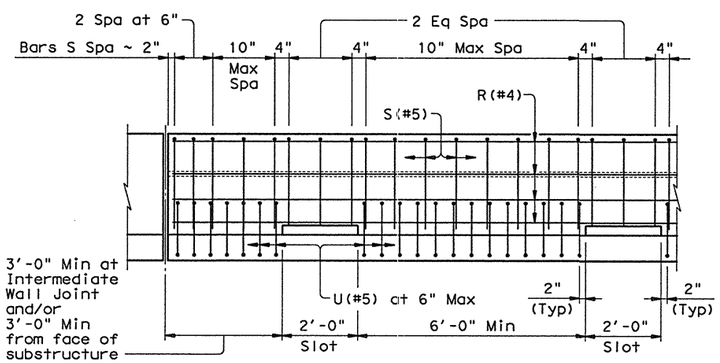
BARS U (#5)



BARS WU (#5)

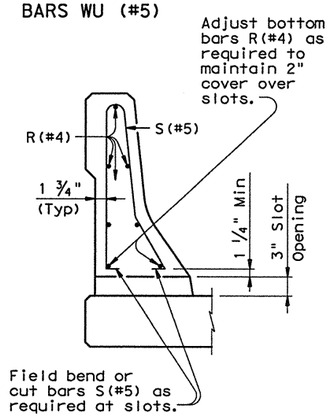


OPTIONAL WELDED WIRE REINFORCEMENT (WWR)



OPTIONAL SIDE SLOT DRAIN DETAIL

Note: Side Slot Drains may be used where shown elsewhere on the plans or as directed by the Engineer. If continuous slots at 8 ft c-c are required, then details as on standard Type T502 should apply. Drains should not be placed over railroad tracks, lower roadways, or sidewalks. When this rail is used as a separator between a roadway surface and a sidewalk surface, side drain slots will not be permitted.



SECTION THRU OPTIONAL SIDE SLOT DRAIN

④ Increase 2" for structures with Overlay.

⑧ 5 ½" when vertical reinforcing has closer clear cover over horizontal reinforcing in abutment wingwalls or retaining walls on traffic side of wall.

⑨ As an aid in supporting reinforcement, additional longitudinal bars may be used in the slab with the approval of the Engineer. Such bars shall be furnished at the Contractors expense.

⑩ Top longitudinal slab bar may be adjusted laterally 3" ± to tie reinforcing.

⑪ Bend or cut as required to clear drain slots.

⑫ No longitudinal wires may be within upper bend.

GENERAL NOTES:

This rail has been evaluated and approved to be of equal strength to railings with like geometry, which have been crash tested to meet NCHRP Report 350 TL-4 criteria. This rail can be used for design speeds of 50 mph and greater when a TL-3 rated guard fence transition is used. When a TL-2 rated guard fence transition is used, this rail can only be used for design speeds of 45 mph and less.

Rail anchorage details shown on this standard may require modification for select structure types. See appropriate details elsewhere in plans for these modifications.

All steel components except reinforcing shall be galvanized unless otherwise shown on plans.

All concrete shall be Class "C".

All reinforcing steel shall be Grade 60.

Shop drawings will not be required for this rail.

This railing may be constructed with slip-forms when approved by the Engineer, with equipment approved by the Engineer. Sensor control for both line and grade must be provided. Tack welding to provide bracing for slip-form operations is acceptable. Welding can be performed at a minimum spacing of 3 ft between the cage and the anchorage. It is permissible to weld to U, WU and S bars at any location on the cage. If increased bracing is needed, additional anchorage devices must be added and welding must be performed in the upper two thirds of the cage.

The back of railing shall be vertical unless otherwise shown on the plans or approved by the Engineer.

Deformed welded wire reinforcement (WWR) may be used as an option to conventional reinforcement and shall be made in accordance with ASTM A497 (Deformed Wire). Combinations of Reinforcing Steel and WWR or configurations of WWR other than shown will be permitted when the conditions in the table are satisfied and the dimension from end of section to first welded vertical wire does not exceed 3".

Epoxy coat bars U and WU if slab bars are epoxy coated.

Average weight of railing with no overlay is 326 plf.

DESCRIPTION	LONGITUDINAL WIRES	VERTICAL WIRES
Minimum (Cumulative Total) Wire Area	0.933 Sq In.	0.248 Sq In. per Ft
	No. of Wires	Spacing
Minimum	6	4"
Maximum	11	12"
Maximum Wire Size Differential	The smaller wire shall have an area of 40% or more of the larger wire.	

Texas Department of Transportation
Bridge Division

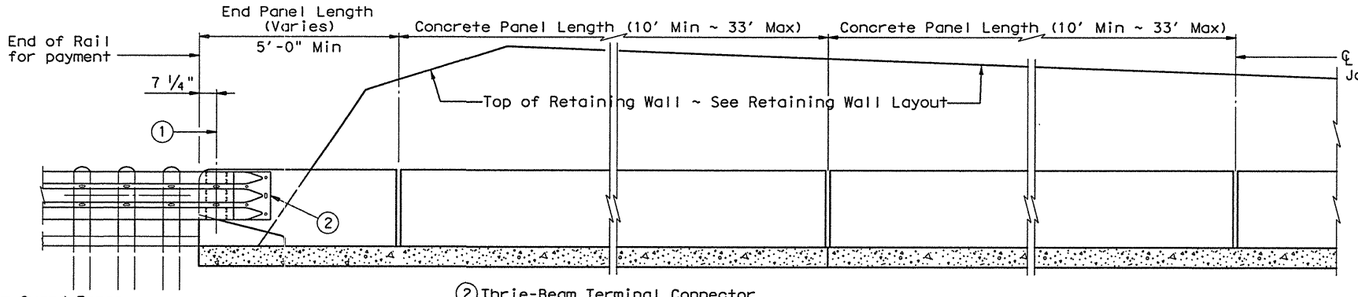
TRAFFIC RAIL

TYPE T501

FILE: rlstde16.dgn	DN: TxDOT	CK: TxDOT	DW: JTR	CK: TxDOT
© TxDOT February 2003	DISTRICT	FEDERAL AID PROJECT		SHEET
REVISIONS	DALLAS	(SEE TITLE SHEET)		215
4-05: Added TL-2 Terminal Connection, minor corrections & modified Notes.	COUNTY	CONTROL	SECT	JOB	HIGHWAY
	ROCKWALL	0009	12	073	IH 30

ACC:
ED
LEVEL
1

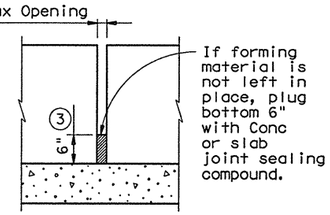
DISCLAIMER:
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any purpose whatsoever. TxDOT assumes no responsibility for its standard to other formats or for incorrect results or damages resulting from its use.



(1) Metal Beam Guard Fence Transitions must be attached to the bridge rail and extended along the embankment unless shown otherwise on the plans. See plan sheet for details and length for payment.

(2) Thrie-Beam Terminal Connector shall receive the same protective coating as the attached Metal Beam Guard Fence.

(3) Increase 2" for structures with Overlay.

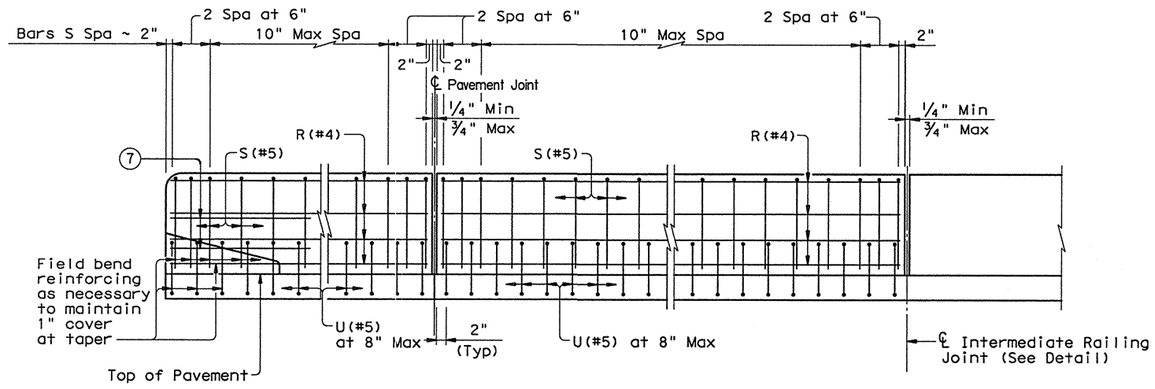


INTERMEDIATE RAILING JOINT DETAIL

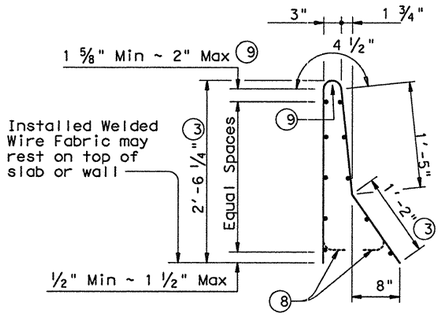
Note: Provide intermediate rail joints over all pavement construction joints and at equal intervals in between as necessary to maintain a 33' maximum length of unbroken railing. Material used in forming joint may be left in place if it is compressible and light in color such as the following materials: polystyrene, molded cork granules, sponge rubber sheet, etc.

END PANEL AT PAVEMENT JOINTS AT INTERMEDIATE WALL JOINTS

ROADWAY ELEVATION OF RAIL



ELEVATION SHOWING TYPICAL REINFORCING PLACEMENT



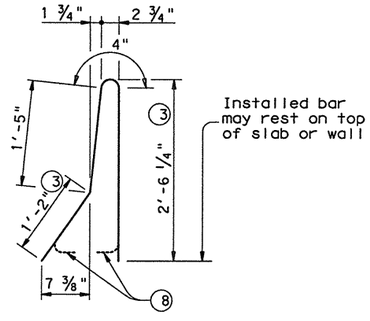
OPTIONAL WELDED WIRE FABRIC

DESCRIPTION	LONGITUDINAL WIRES	VERTICAL WIRES
Minimum (Cumulative Total) Wire Area	0.933 Sq In.	0.248 Sq In. per Ft
	No. of Wires	Spacing
Minimum	6	4"
Maximum	11	12"
Maximum Wire Size Differential	The smaller wire shall have an area of 40% or more of the larger wire.	

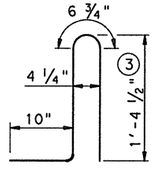
(3) Increase 2" for structures with Overlay.

(9) No longitudinal wires may be within upper bend.

(8) Bend as required to clear weep holes by 1 1/2".



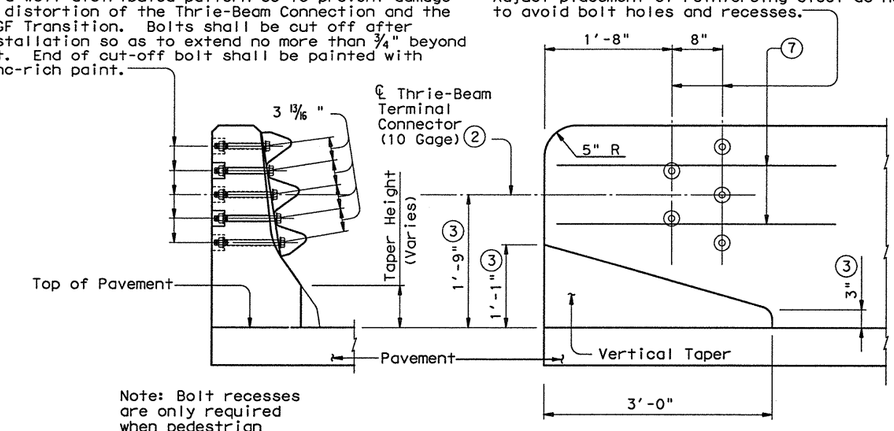
BARS S (#5)



BARS U (#5)

℄ 5 ~ 7/8" Dia A325 Hex Head Bolts with two 1 3/4" O.D. washers. Place washer under each head and nut. The 5 Terminal Connection Bolts shall be tightened in a well distributed pattern so to prevent damage or distortion of the Thrie-Beam Connection and the MBGF Transition. Bolts shall be cut off after installation so as to extend no more than 3/4" beyond nut. End of cut-off bolt shall be painted with Zinc-rich paint.

℄ 5 ~ 1" Dia holes and 2 1/2" Dia x 2" deep recesses. Holes and recesses must be formed or cored. Percussion drilling is not permitted. Adjust placement of reinforcing steel as necessary to avoid bolt holes and recesses.



Note: Bolt recesses are only required when pedestrian sidewalks are adjacent to back of rail.

SECTION ELEVATION

TERMINAL CONNECTION DETAILS

(7) 4 additional Bars R(#4) 3'-8" in length shall be placed inside Bars S(#5) and centered 2'-0" from end of rail when Terminal Connections are required.

(1) Converted for use in front of retaining wall and made Dallas District Standard.

SHEET 1 OF 3

Texas Department of Transportation
Dallas District

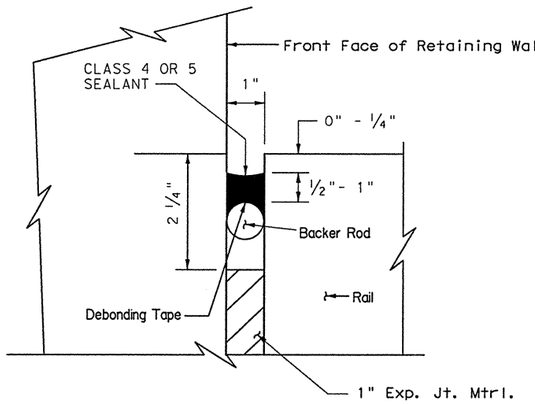
TRAFFIC RAIL

TYPE T501RW DAL

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©TxDOT February 2003	DISTRICT	FEDERAL AID PROJECT		SHEET
REVISIONS	DALLAS	(SEE TITLE SHEET)		216
1 February 2004	COUNTY	CONTROL	SECT	JOB	HIGHWAY
	ROCKWALL	0009	12	073	IH 30

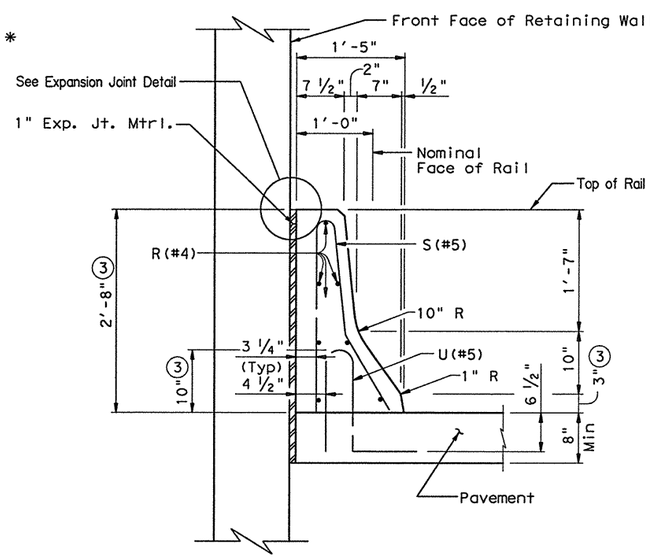
ACC: 63
ED
LEVELS 1 2 4 5 6

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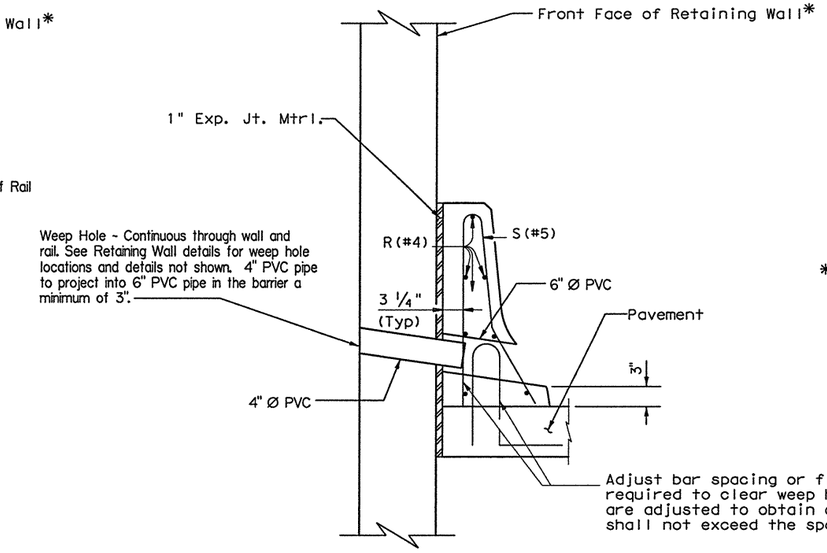


EXPANSION JOINT DETAIL
BETWEEN RAIL AND RETAINING WALL

PLACE IN ACCORDANCE WITH ITEM 438 "CLEANING AND/OR SEALING JOINTS AND CRACKS".



SECTION ON CONCRETE PAVEMENT

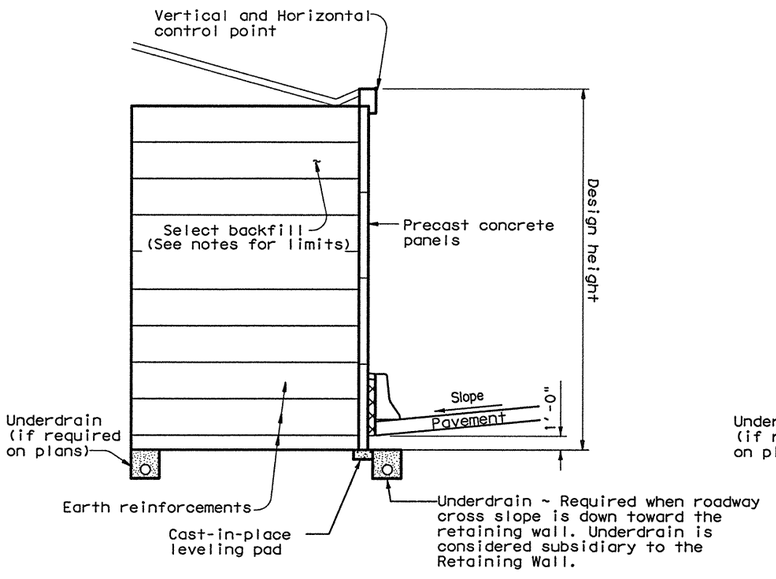


*- If a surface finish is required, the area between top of rail and bottom of wall shall have a flat surface

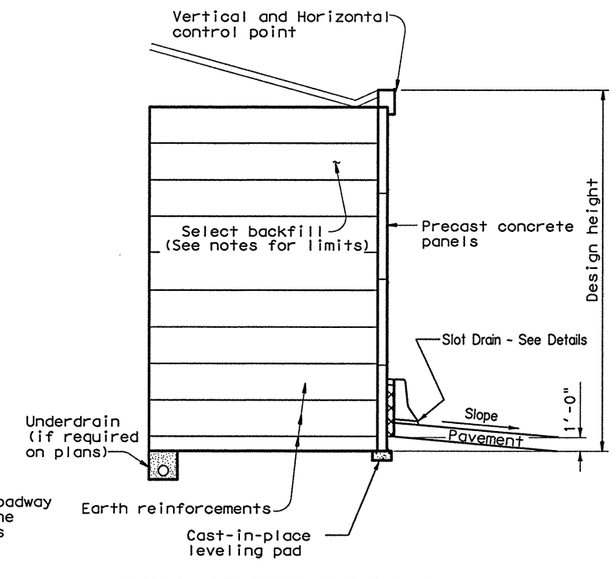
SECTION THRU WEEP HOLES

Note: Weep holes shall not be placed within 1'-4" of intermediate Rail Joints.

DETAILS FOR RAIL IN FRONT OF WALLS WITH NO COPING



WALL AT BOTTOM OF ROADWAY SLOPE



WALL AT TOP OF ROADWAY SLOPE

TYPICAL SECTIONS SHOWING DRAINAGE REQUIREMENTS FOR MSE AND OTHER FREE DRAINING WALLS

These details shows additional drainage requirements applicable when the Retaining Wall is of a free draining type such as MSE.

For Retaining Wall type and details (Including Underdrain details), see the Retaining Wall Layout and its associated details and standards.

GENERAL NOTES:

This rail has been evaluated and approved to be of equal strength to railings with like geometry, which have been crash tested to meet NCHRP Report 350 TL-4 criteria. The T501 rail can be used for design speeds of 50 mph and greater.

All parts of the railing including concrete parapet wall, reinforcing, MBGF connections, bolts, nuts and washers are included in the price bid per linear foot of rail.

All steel components except reinforcing shall be galvanized unless otherwise shown on plans.

All concrete for railing wall shall be Class "C".

All reinforcing steel shall be Grade 60.

Shop drawings will not be required for this rail.

This railing may be constructed with slip-forms when shown on the plans or approved by the Engineer, with equipment approved by the Engineer. Sensor control for both line and grade must be provided. When slip-forming is used, the concrete may be cured with membrane curing compound.

Additional reinforcing may be tack welded to the upper two thirds of the reinforcing cage to provide bracing when slip-forming is used. Additional anchorage devices may be added when welding is necessary in the lower one third of the cage. Do not weld to U or S bars in the lower one third of the cage.

The back of railing shall be vertical unless otherwise shown on the plans or approved by the Engineer.

Deformed welded wire fabric may be used as an option to conventional reinforcement and shall be made in accordance with ASTM A497 (Deformed Wire). Combinations of Reinforcing Steel and Welded Wire Fabric or configurations of Welded Wire Fabric other than shown will be permitted when the conditions in the table are satisfied and the dimension from end of section to first welded vertical wire does not exceed 3".

Average weight of railing with no overlay is 356 plf.

⚠ Converted for use in front of retaining wall and made Dallas District Standard.

Texas Department of Transportation
Dallas District

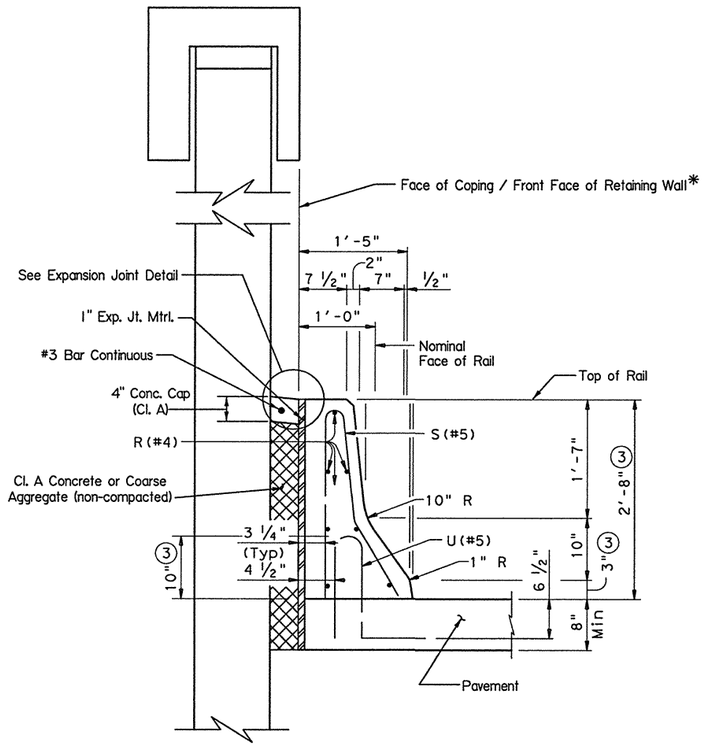
TRAFFIC RAIL

TYPE T501RW DAL

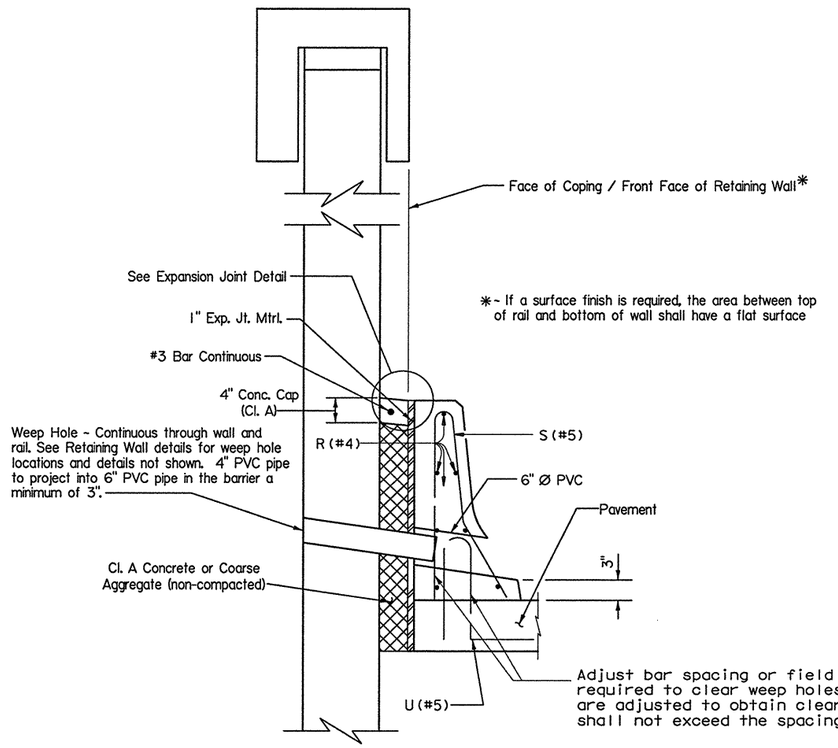
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© TxDOT February 2003	DISTRICT	FEDERAL AID PROJECT		SHEET
REVISIONS	DALLAS	(SEE TITLE SHEET)		217
⚠ February 2004	COUNTY	CONTROL	SECT	JOB	HIGHWAY
	ROCKWALL	0009	12	073	IH 30

ACC: DISPLAYED 1 2 4 5 6 63

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SECTION WITH COPING ON CONCRETE PAVEMENT

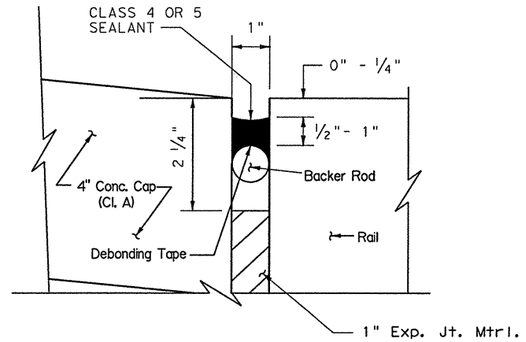


*- If a surface finish is required, the area between top of rail and bottom of wall shall have a flat surface

SECTION THRU WEEP HOLES

Note: Weep holes shall not be placed within 1'-4" of Intermediate Rail Joints.

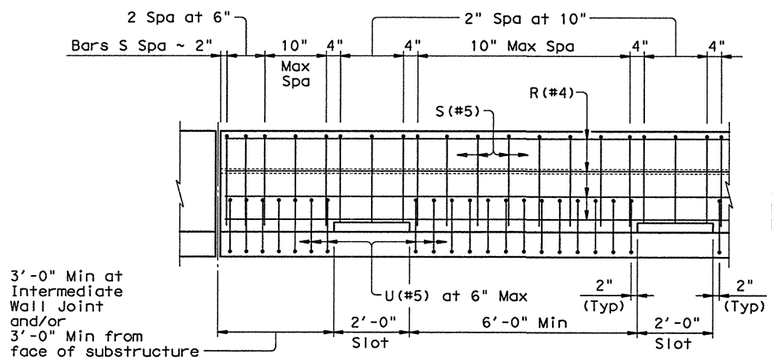
Weep holes shall not be used for retaining walls on high PI or expansive soils. Consult Dallas District Bridge Section for appropraite drainage measures for the specific conditions encountered.



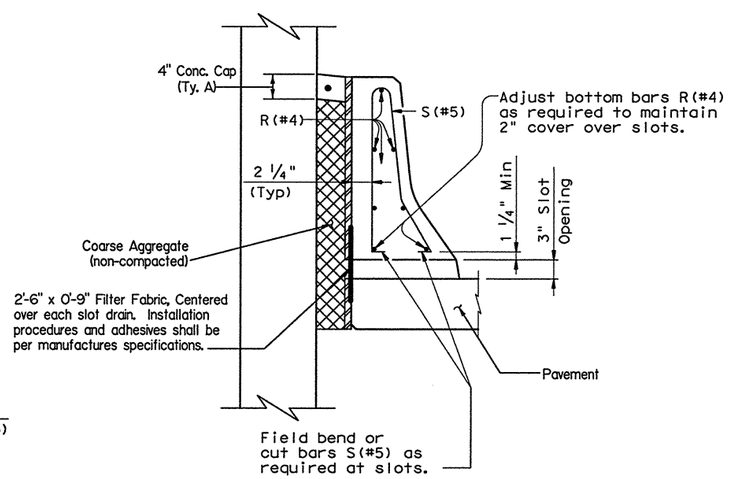
EXPANSION JOINT DETAIL
BETWEEN RAIL AND RETAINING WALL

PLACE IN ACCORDANCE WITH ITEM 438 "CLEANING AND/OR SEALING JOINTS AND CRACKS".

DETAILS FOR RAIL IN FRONT OF WALLS WITH COPING



SLOT DRAIN DETAIL



SECTION THRU SLOT DRAIN

1 Converted for use in front of retaining wall and made Dallas District Standard.

SHEET 3 OF 3

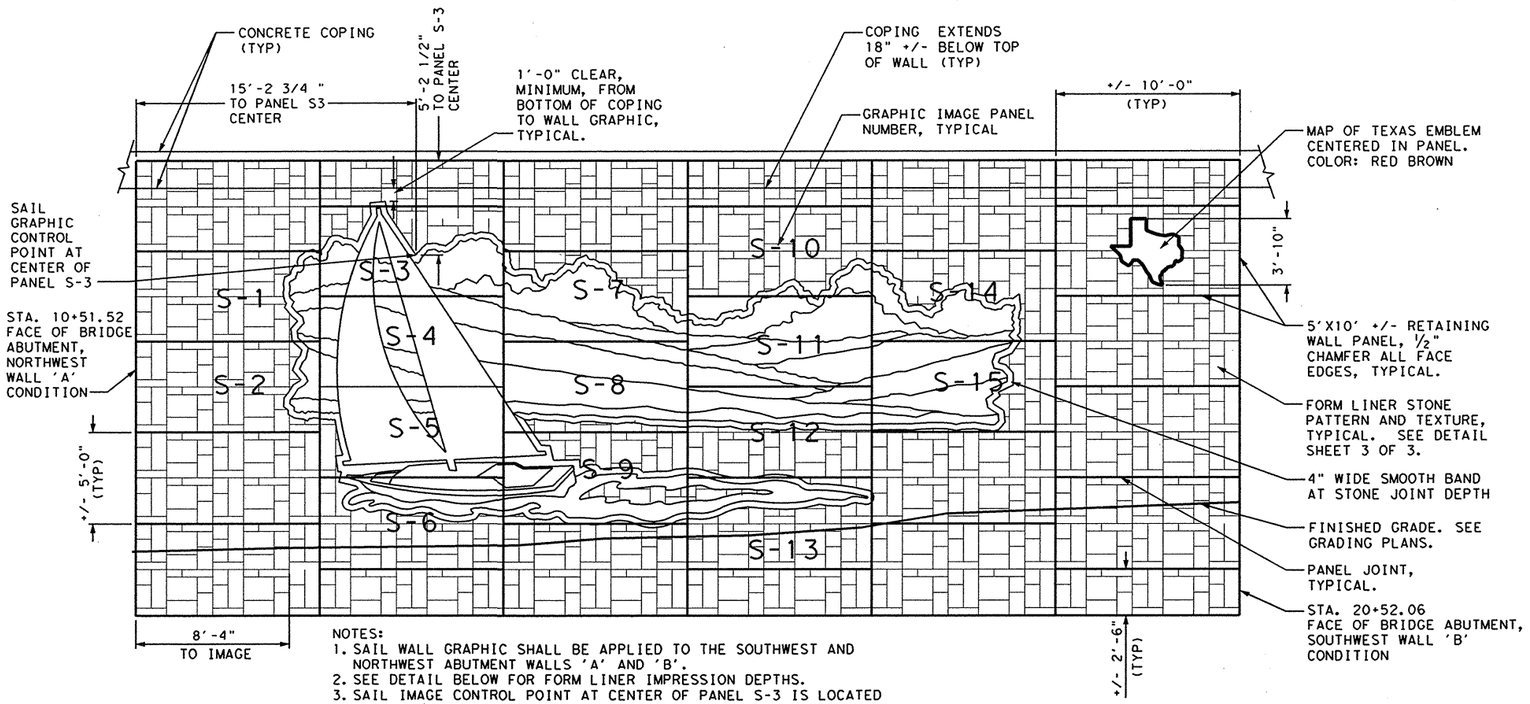
Texas Department of Transportation
Dallas District

TRAFFIC RAIL

TYPE T501RW DAL

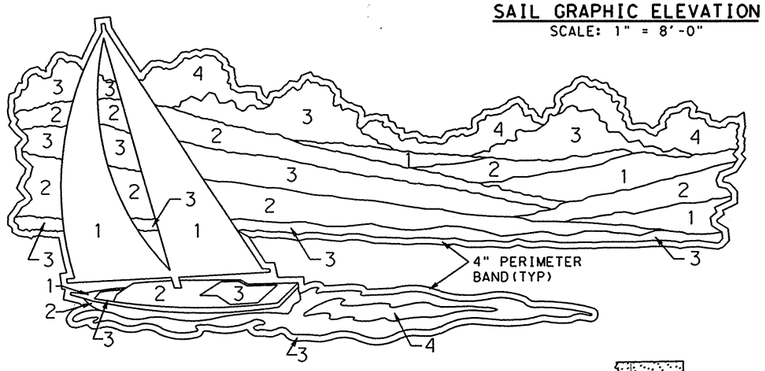
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© TxDOT February 2003	DISTRICT	FEDERAL AID PROJECT			SHEET		
REVISIONS	DALLAS	(SEE TITLE SHEET)			218		
1 February 2004	COUNTY		CONTROL	SECT	JOB	HIGHWAY	
	ROCKWALL		0009	12	073	IH 30	

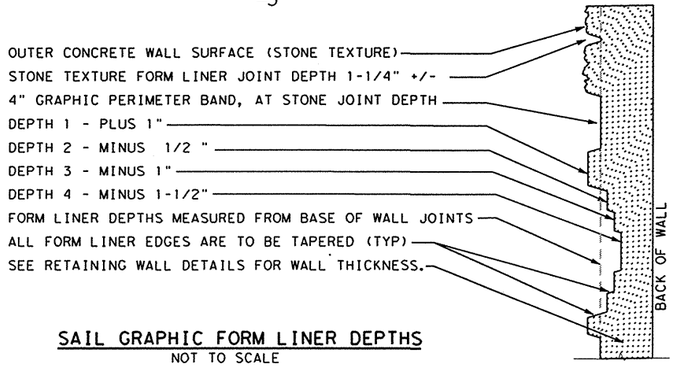
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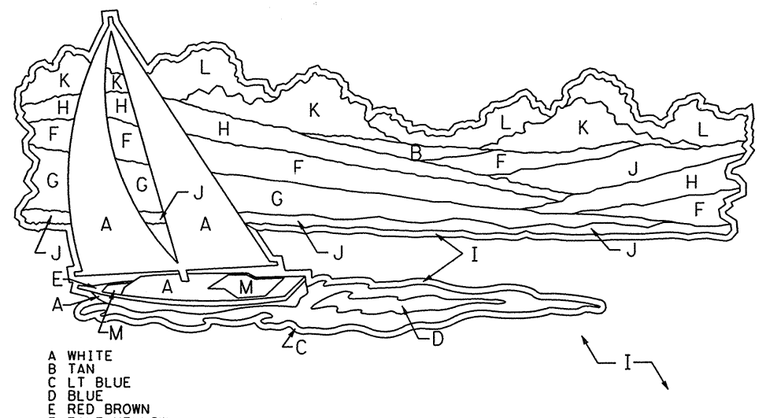
NOTES:
1. SAIL WALL GRAPHIC SHALL BE APPLIED TO THE SOUTHWEST AND NORTHWEST ABUTMENT WALLS 'A' AND 'B'.
2. SEE DETAIL BELOW FOR FORM LINER IMPRESSION DEPTHS.
3. SAIL IMAGE CONTROL POINT AT CENTER OF PANEL S-3 IS LOCATED 15'-2 3/4" FROM PRIMARY INTERSECTING ABUTMENT FACE UNDER BRIDGE, 5'-2 1/2" FROM TOP OF WALL ELEVATION UNDER COPING.
4. PREPARE MOCK-UP OF PANEL S-11 FOR CITY OF ROCKWALL APPROVAL.
5. SEE SHEET 3 OF 3 FOR STONE FORM LINER DETAIL.

SAIL GRAPHIC ELEVATION
SCALE: 1" = 8'-0"





SAIL GRAPHIC FORM LINER DEPTHS
NOT TO SCALE



A WHITE
B TAN
C LT BLUE
D BLUE
E RED BROWN
F PALE YELLOW
G EARTH YELLOW
H ORANGE YELLOW
I YELLOW SAND (BASE OF WALL)
J MEDIUM BROWN
K GREEN
L DEEP GREEN
M DEEP BLUE

PAINT COLORS TO BE FEDERAL STANDARD 595-B. EXACT PAINT COLORS TO BE DETERMINED BY THE CITY OF ROCKWALL REPRESENTATIVE.

CONCRETE COATINGS TO BE SUPPLIED BY ONE OF THE FOLLOWING MANUFACTURERS OR APPROVED EQUAL:

SHERWIN WILLIAMS CO.
INDUSTRIAL COATING SPECIALTIES CORP.
TEXTURED COATINGS OF AMERICA, INC.

SAIL GRAPHIC PAINT COLOR
NOT TO SCALE

GENERAL NOTES

1. ALL RETAINING WALLS ARE TO RECEIVE FORM LINER STONE TEXTURE, UNLESS NOTED OTHERWISE. SEE SHEET 3 OF 3 FOR FORM LINER STONE TEXTURE DETAIL.
2. ALL EXPOSED WALL, COLUMN, BENT CAP AND BARRIER SURFACES ARE TO BE PAINTED WITH TWO COATS OF COLOR 'YELLOW SAND' BY APPROVED MANUFACTURER UNLESS OTHERWISE NOTED.
3. FOR FABRICATION AND FINISHING OF THE MSE WALLS, MAP OF TEXAS EMBLEM, PRAIRIE, SAIL AND GRAPHIC IMAGE PANELS, SEE GENERAL NOTES ITEMS 420, 423 AND 427.
4. CONTRACTOR SHALL SUBMIT PAINT COLOR CHIPS FOR ALL WALL AND GRAPHIC IMAGE COLORS TO CITY OF ROCKWALL REPRESENTATIVE FOR APPROVAL PRIOR TO PURCHASING PAINT. SEE GENERAL NOTES ITEM 427.

REGISTERED LANDSCAPE ARCHITECT
CORY M. SCHULZ
2032
STATE OF TEXAS

2/9/09

Sheet 1 of 3 Sheets

Parsons Brinckerhoff Quade & Douglas, Inc.
2777 Stemmons Freeway
Suite 1333
Dallas, TX 75207

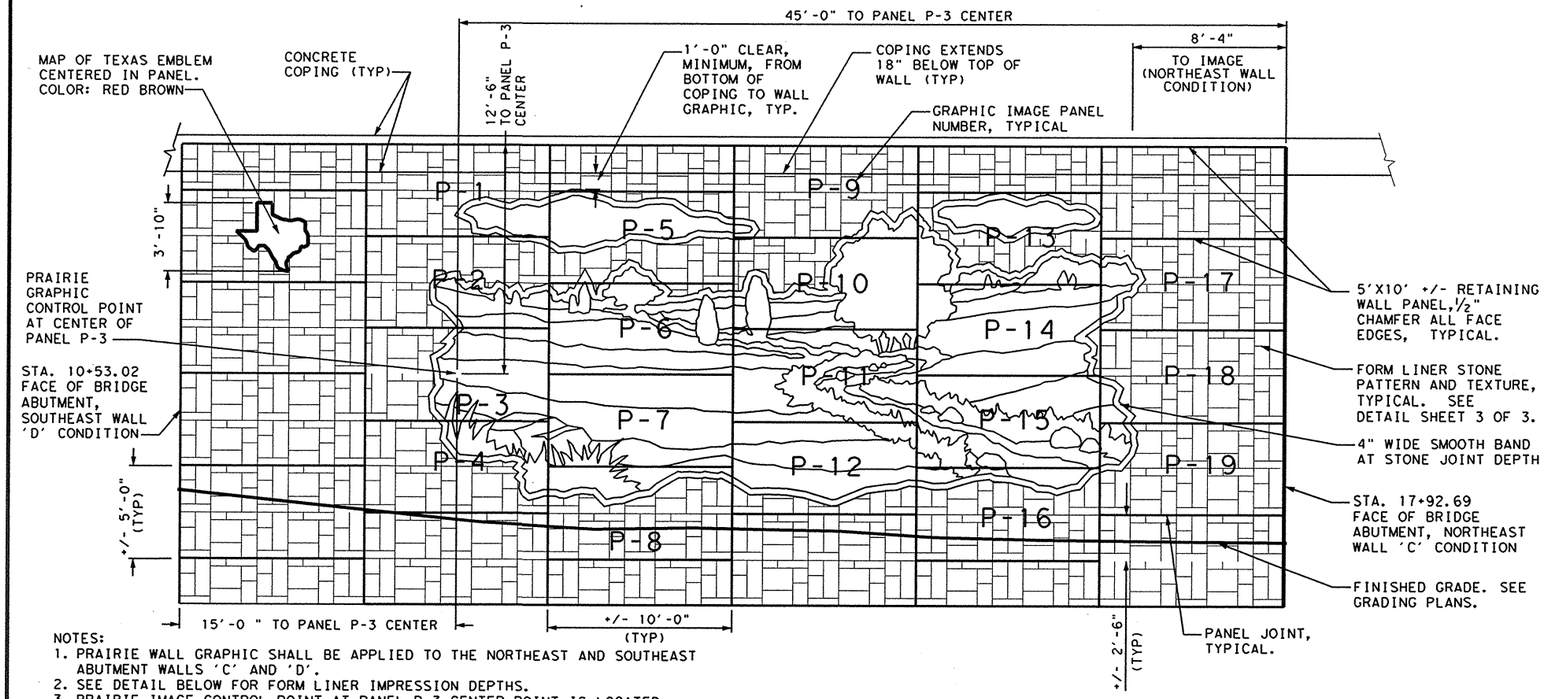
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IH-30
OVER JOHN KING BLVD
WALL FORM LINER PLANS

SAIL FORM LINER GRAPHIC

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
TMT	6	(See Title Sheet)		IH 30
DESIGN CK.	STATE	DISTRICT	COUNTY	SHEET NO.
CMS	TEXAS	DALLAS	ROCKWALL	2.9
GRAPHICS	CONTROL	SECTION	JOB	
LEL	0009	12	073	
GRAPHICS CK.				
CMS				

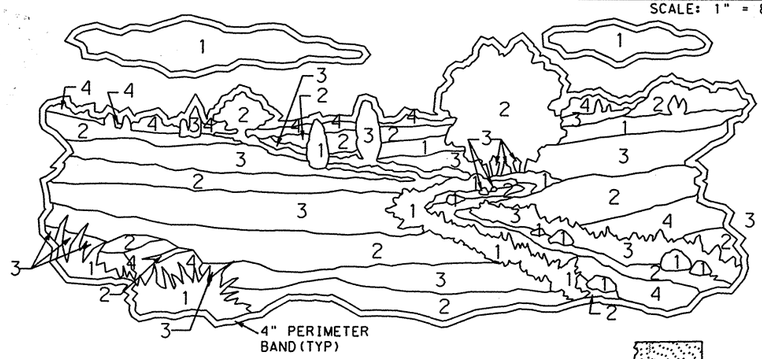
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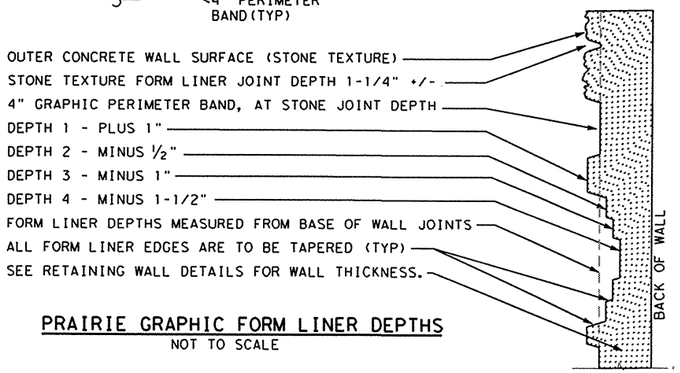


NOTES:
1. PRAIRIE WALL GRAPHIC SHALL BE APPLIED TO THE NORTHEAST AND SOUTHEAST ABUTMENT WALLS 'C' AND 'D'.
2. SEE DETAIL BELOW FOR FORM LINER IMPRESSION DEPTHS.
3. PRAIRIE IMAGE CONTROL POINT AT PANEL P-3 CENTER POINT IS LOCATED 15'-0" OR 45'-0" FROM PRIMARY INTERSECTING ABUTMENT FACE UNDER BRIDGE, 12'-6" FROM TOP OF WALL ELEVATION UNDER COPING.
4. PREPARE MOCK-UP OF PANEL P-11 FOR CITY OF ROCKWALL APPROVAL.

PRAIRIE GRAPHIC ELEVATION

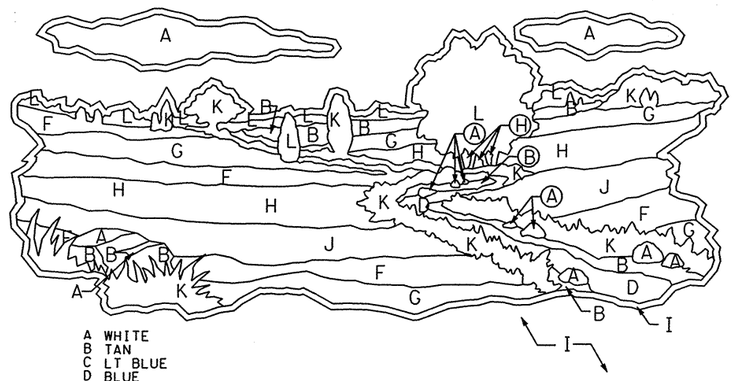
SCALE: 1" = 8'-0"





PRAIRIE GRAPHIC FORM LINER DEPTHS

NOT TO SCALE



A WHITE
B TAN
C LT BLUE
D BLUE
E RED BROWN
F PALE YELLOW
G EARTH YELLOW
H ORANGE YELLOW
I YELLOW SAND (BASE OF WALL)
J MEDIUM BROWN
K GREEN
L DEEP GREEN
M DEEP BLUE

PAINT COLORS TO BE FEDERAL STANDARD 595-B. EXACT PAINT COLORS TO BE DETERMINED BY THE CITY OF ROCKWALL REPRESENTATIVE..

CONCRETE COATINGS TO BE SUPPLIED BY ONE OF THE FOLLOWING MANUFACTURERS OR APPROVED EQUAL:

SHERWIN WILLIAMS CO.
INDUSTRIAL COATING SPECIALTIES CORP.
TEXTURED COATINGS OF AMERICA, INC.

PRAIRIE GRAPHIC PAINT COLORS

SCALE: 1" = 8'-0"

GENERAL NOTES

1. CONTRACTOR SHALL SUBMIT PAINT COLOR CHIPS FOR ALL WALL AND GRAPHIC IMAGE COLORS TO CITY OF ROCKWALL REPRESENTATIVE FOR APPROVAL PRIOR TO PURCHASING PAINT. SEE GENERAL NOTES ITEM 427.
2. SEE SHEET 1 OF 3 FOR ADDITIONAL NOTED REQUIREMENTS.

REGISTERED LANDSCAPE ARCHITECT
CORY M. SCHULZ
2032
STATE OF TEXAS

2/9/09

Sheet 2 of 3 Sheets

Parsons Brinckerhoff Quade & Douglas, Inc.
2777 Stemmons Freeway
Suite 1333
Dallas, TX 75207

Texas Department of Transportation
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IH-30
OVER JOHN KING BLVD
WALL FORM LINER PLANS

PRAIRIE FORM LINER GRAPHIC

DESIGN	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		HIGHWAY NO.
TMT	6	(See Title Sheet)		IH 30
DESIGN CK. CMS	STATE	DISTRICT	COUNTY	SHEET NO.
GRAPHICS LEL	TEXAS	DALLAS	ROCKWALL	220
GRAPHICS CK. CMS	CONTROL	SECTION	JOB	
	0009	12	073	

$FILE$
$DATE$