

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-3	TYPICAL SECTIONS
4-6	SPECIFICATION DATA & GENERAL NOTES
8-9A	ESTIMATE & QUANTITY SHEETS
10-13	SUMMARY SHEETS
14-15	SEQUENCE OF CONSTRUCTION
16-17	DETOUR PLAN SHEETS
18-21	TRAFFIC CONTROL PLAN SHEETS
22-31	PLAN PROFILE SHEETS
32-37	DRAINAGE AREA MAPS
38	DRAINAGE CALCULATIONS
39-40	CULVERT LAYOUT SHEETS
41-42	RAMP DRAINAGE CROSS SECTIONS
43-44	JUNCTION BOX DETAIL SHEETS
45	INLET MODIFICATION DETAILS
46-47	MISCELLANEOUS DETAILS
48-53	STORM WATER PREVENTION PLAN SHEETS
54	ILLUMINATION LAYOUT
55-56	SUMMARY OF LARGE SIGNS
57-60	SUMMARY OF SMALL SIGNS
61-67	SIGNING & DELINEATION LAYOUT
68	GUIDE SIGN DETAILS
68A	FIELD TEST PLAN - JOINT SEALS

DISTRICT STANDARD SHEETS

69-70	TYPE F SPECIAL (FOLDING SIGN)
71	DROP INLET DETAILS (TYPE C)
72	CONCRETE PAVEMENT CONTRACTION DESIGN
73	JOINT SEAL (CONCRETE PAVING DETAILS)
74	STANDARD RAMP TAPERS

STANDARD SHEETS

75	MBGF-94
76	TB (BMGF)-92
77	SGT(1)-95
78-80	EC(1)-(3)-93
81-82	ED(1) & (2)-93
83	RID(3)-93
84-85	IE(1)-(2)-93
86-89	IM(1), (2), (4), (5)-93
90-91	M(1) & (3)
92-93	R(1)-(2)
94-95	W(1)-(2)
96-98	SMD(1-1, 2, 3)
99	SMD(2)
100-102	SMD(8-1, 2, 3)
103-104	SMD(8-W1, W2)
105-106	D&OM(1)-(2)-92
107	RPM(1)-92
108	PM(1)-92A
109	PM(2)-92
110	FPM(1)-92
111-119	BC(1)-(9)-94
120	WZ(BD)-92
121	TCP NOTES-94
122	TCP(2-5)-94
123-125	TCP(3-1, 2, 3)-94
126-130	TCP(6-1, 2, 3, 4, 8)-94
* 131A, 131B, 131C	PC-1, 4, 7
132	CD-SPR
133	RID(2)-93
134	WZ(STPM)-92
135	IM(2)-93

* SHEETS OMITTED:
131



The standard sheets specifically identified above have been selected by me or under my responsible supervision as being applicable to this project.

Larry D. Tegtmeyer
Larry D. Tegtmeyer, P.E. Date 1-17-95

STATE OF TEXAS DEPARTMENT OF TRANSPORTATION

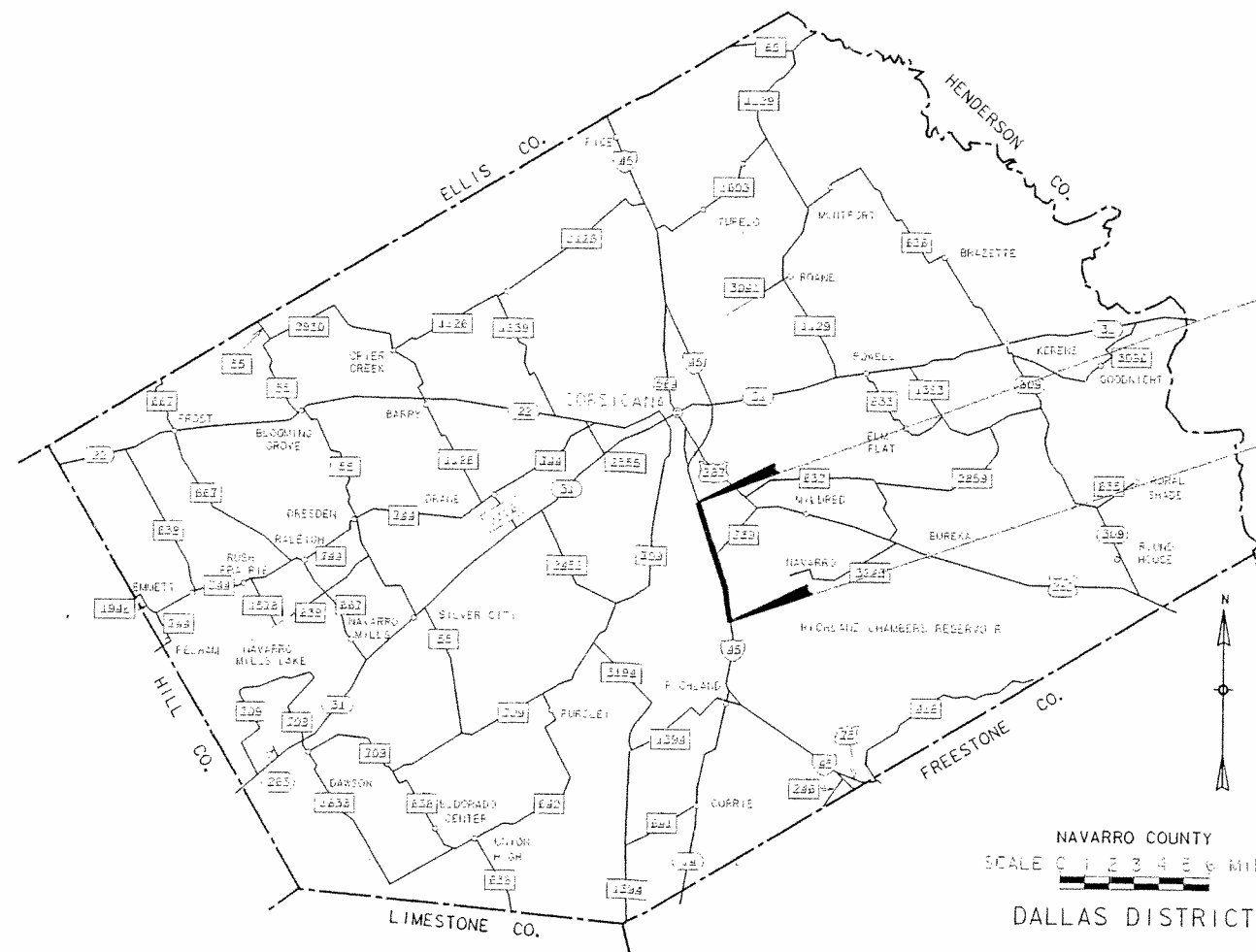
PLANS OF PROPOSED STATE HIGHWAY IMPROVEMENT

FEDERAL AID PROJECT NO. IM 45-3(95)22/
NAVARRO COUNTY

IH45
NET LENGTH OF PROJECT 26400.00 FT = 5.00 MI

FROM: 3.3 MI N OF RICHLAND
TO: 2.0 MI S OF CORSICANA

FOR THE CONSTRUCTION OF THE REHABILITATION OF EXISTING ROAD
CONSISTING OF GRADING, STRUCTURES, SALVAGED BASE, ASP, CONCRETE PAVEMENT, SIGNING AND PAVEMENT MARKING



NAVARRO COUNTY
SCALE 0 1 2 3 4 5 6 MILES
DALLAS DISTRICT

DESIGN SPEED = 70 MPH

NOTE:

SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION, MARCH 1, 1993, AND SPECIFICATION ITEM LISTED AS FOLLOWS, SHALL GOVERN ON THIS PROJECT: REQUIRED CONTRACT PROVISIONS FOR ALL FEDERAL-AID CONSTRUCTION CONTRACTS (FORM FHWA 1273, DECEMBER, 1993)

THE CONTRACTOR SHALL PROVIDE AND ERECT BARRICADES AND WARNING SIGNS IN ACCORDANCE WITH BC-(1) THRU (9)-1994 AT POINTS INDICATED AND AT OTHER POINTS AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL MAKE HIS OWN INVESTIGATION AND ARRANGEMENTS FOR RAIL DELIVERY POINTS AND TRACKAGE FACILITIES.

FINAL PLANS
LETTING DATE: 6-7-95
WORK BEGAN: 7-26-95
WORK COMPLETE: 12-4-97
WORK ACCEPTED: 12-12-97

END PROJECT IM45-3(95)22/
CONTROL 0093-01-064
STA 459+00

BEGIN PROJECT IM45-3(95)22/
CONTROL 0093-01-064
STA 195+00



TEXAS DEPARTMENT OF TRANSPORTATION

RECOMMEND FOR LETTING
Larry D. Tegtmeyer P.E.
PROJECT ENGINEER

RECOMMEND FOR LETTING
David M. J. P.E.
PROJECT ENGINEER

RECOMMEND FOR LETTING
John C. Blum P.E.
DIRECTOR OF TRANSPORTATION PLANNING & DESIGN

RECOMMEND FOR LETTING
James M. Blum P.E.
DISTRICT ENGINEER

APPROVE FOR LETTING
Maria G. Blum P.E.
FOR DIRECTOR OF DES. DIVISION

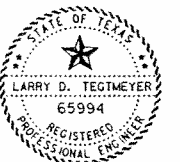
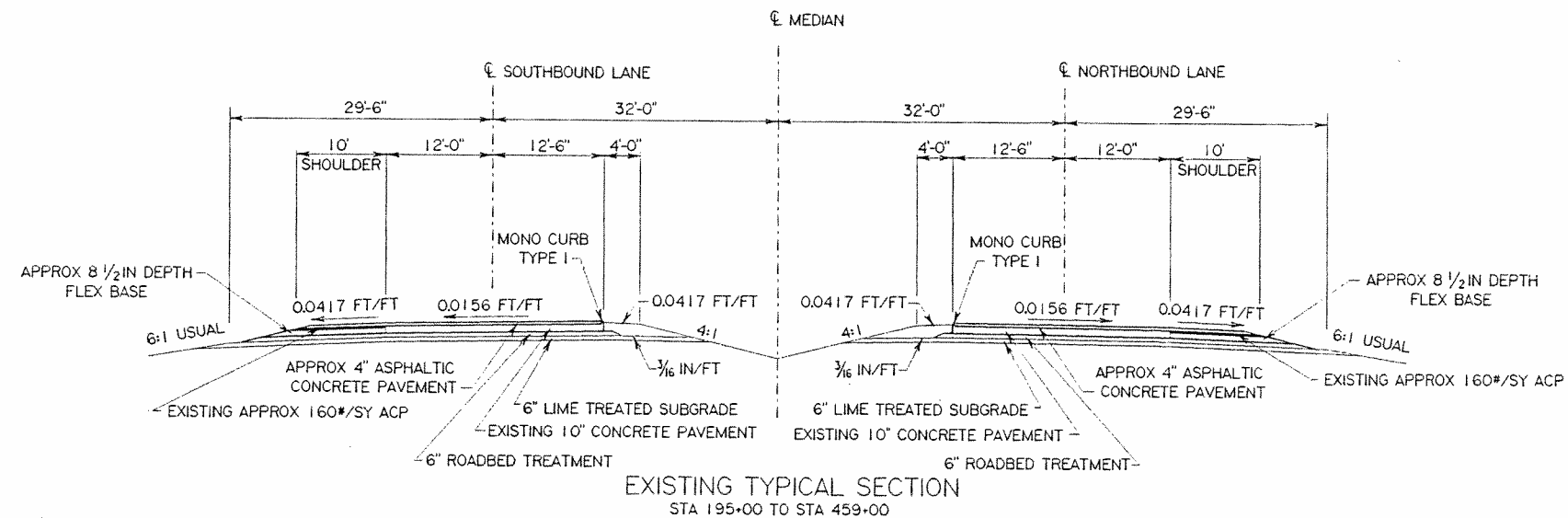
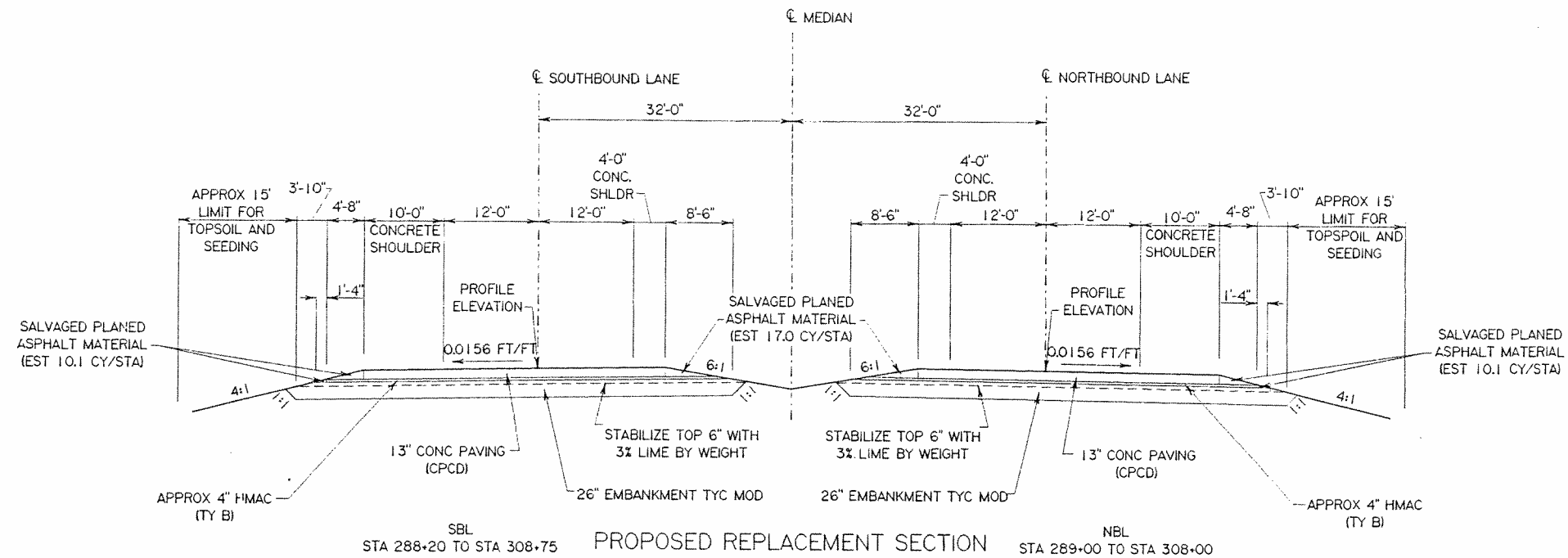
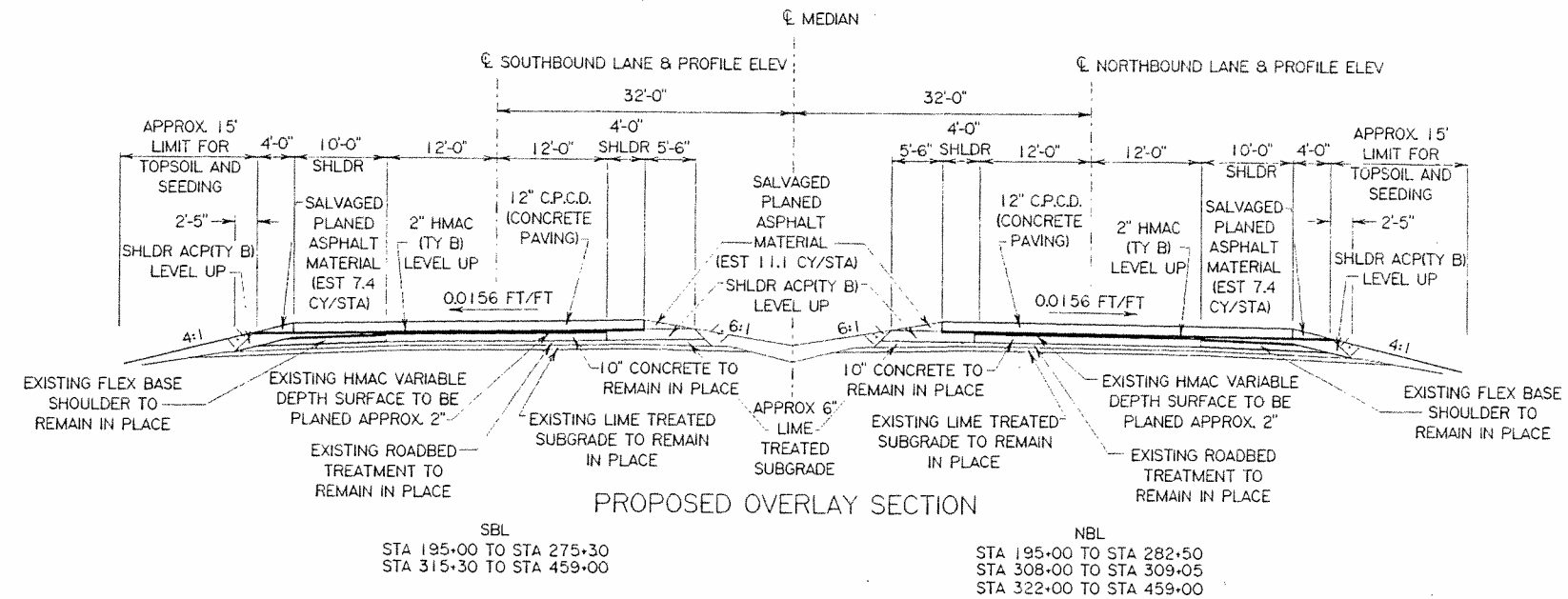
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR

DATE

REVISED 5/25/95

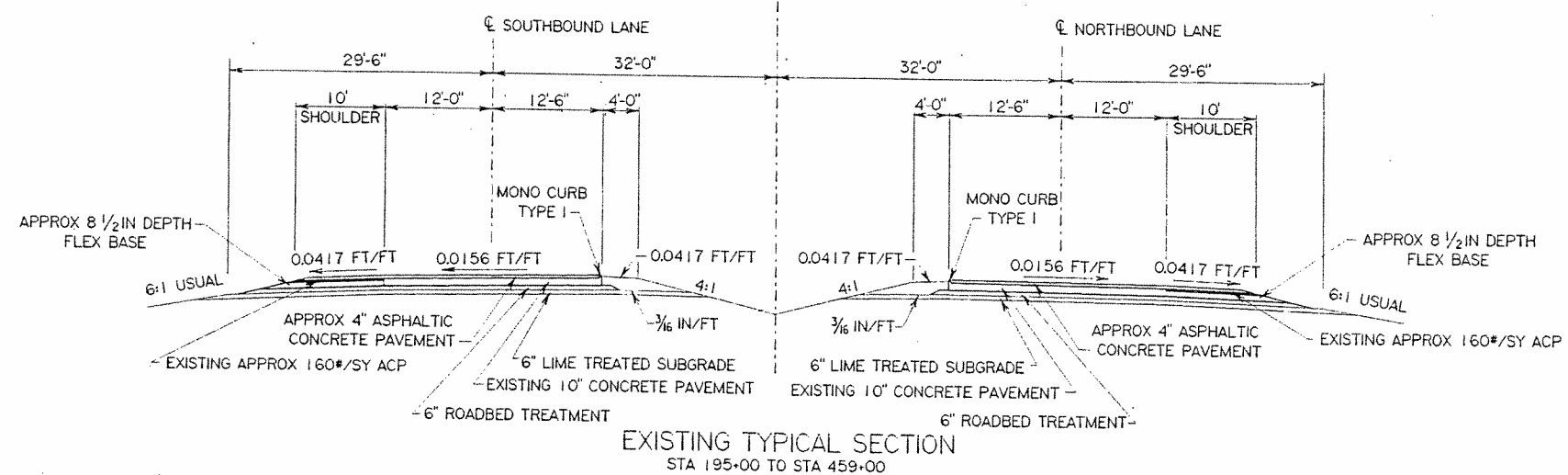
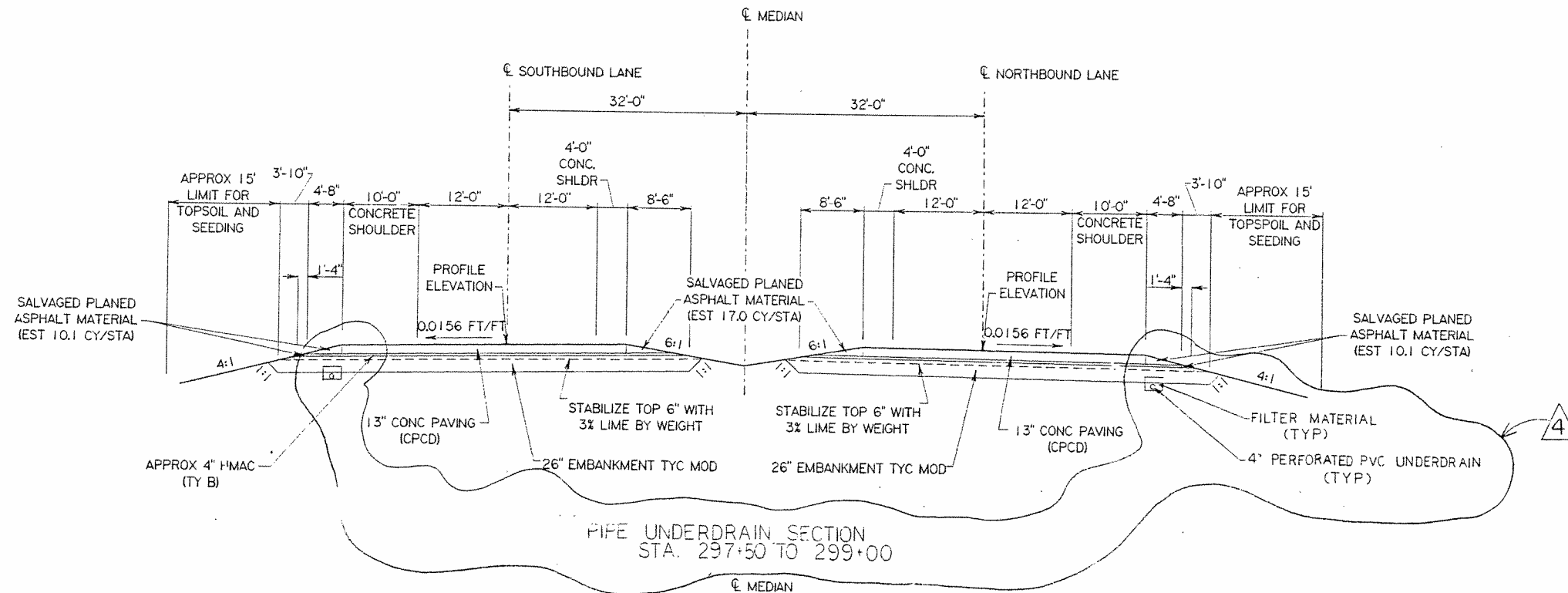
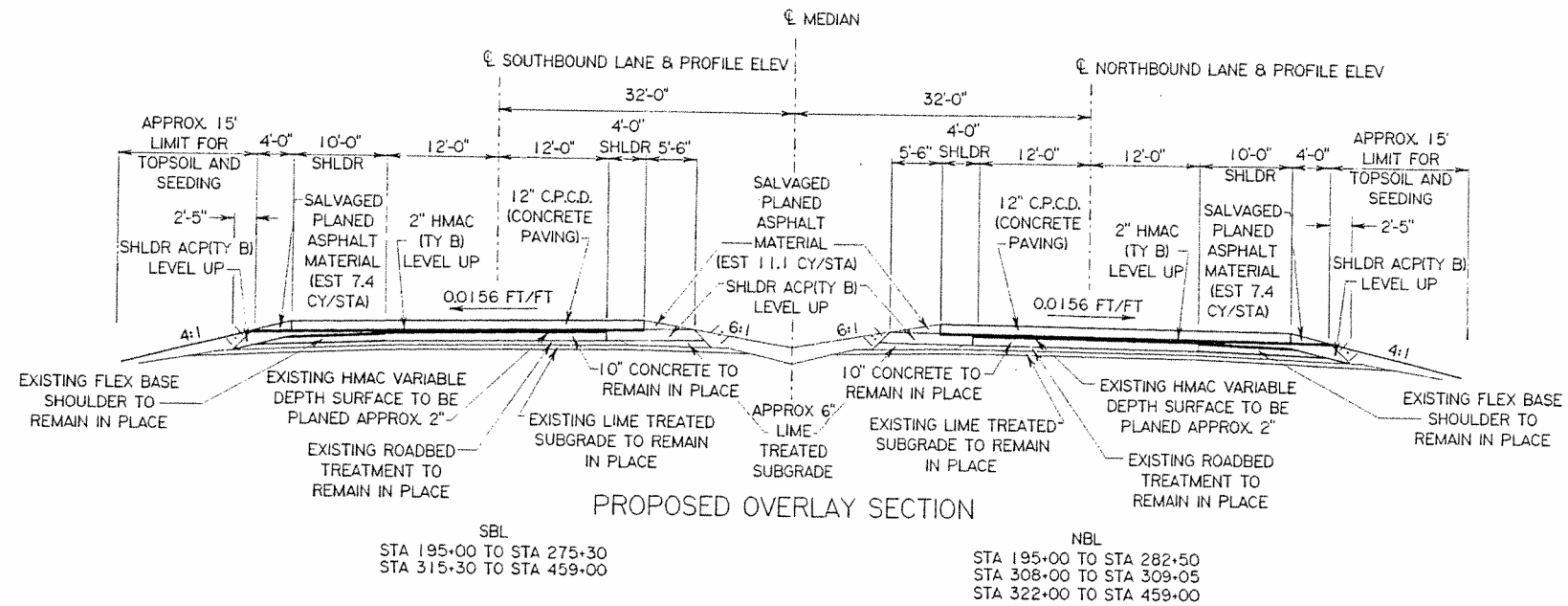


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Larry D. Tegtmeyer

TYPICAL SECTIONS
SHEET 1 OF 2
SCALE 1" = 10'

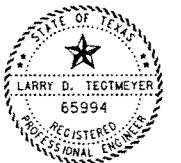
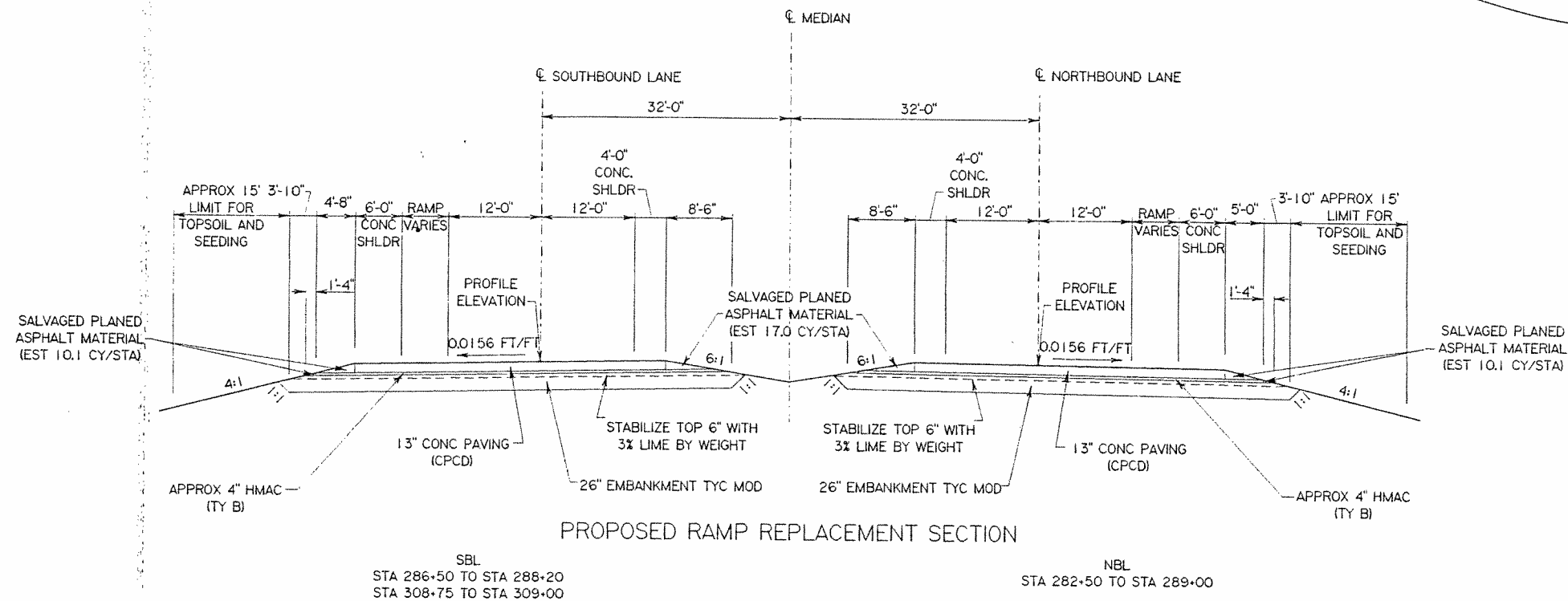
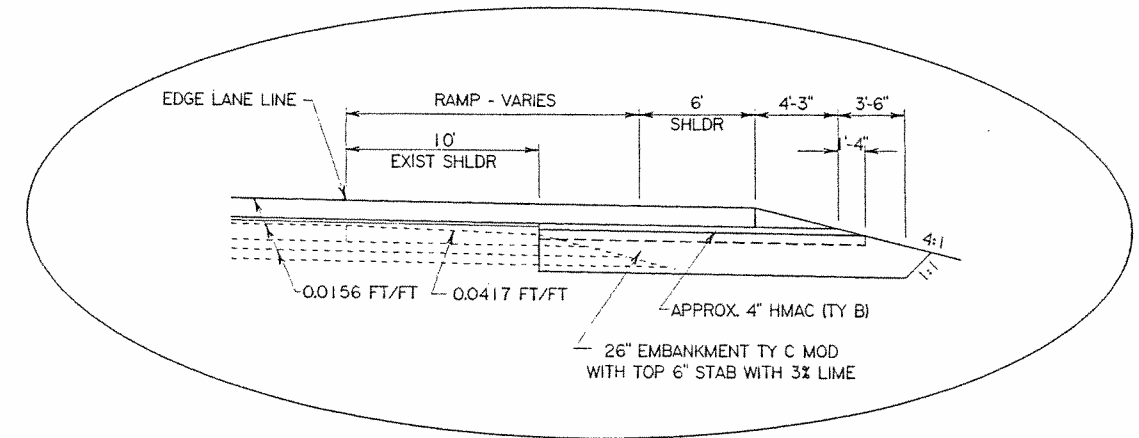
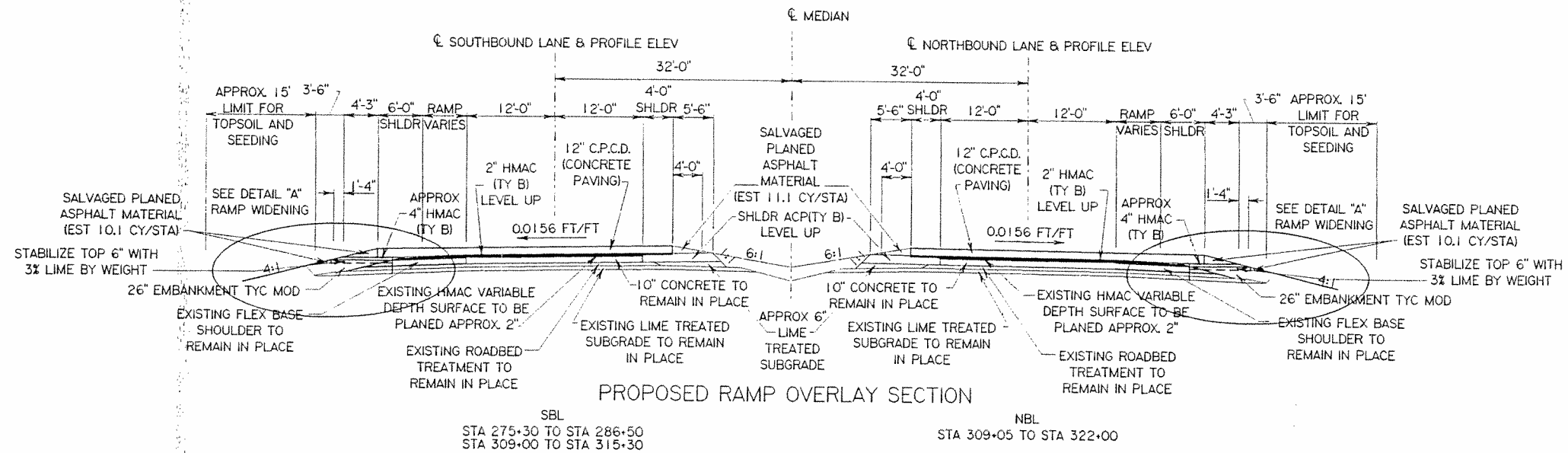
FED. ROAD DIST. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
6		2
STATE	COUNTY	
TEXAS	NAVARRO	



ONLY
4-19-96

CHANGE ORDER NO. 4
TYPICAL SECTIONS
SHEET 1 OF 2
SCALE 1" = 10'

FED. ROAD DIST. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
6	IM45-3(95) 221	2 A
STATE	COUNTY	
TEXAS	DALLAS	NAVARRO



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Larry D. Tegtmeyer

TYPICAL SECTIONS
SHEET 2 OF 2
SCALE 1"=10'

FED. RD. DIST. NO.	FEDERAL AID PROJECT NO.	SHEET NO.
6		3
STATE	CITY	COUNTY
TEXAS	DALLAS	NAVARRO
CONTROL	SECTION	HIGHWAY NO.

GENERAL NOTES

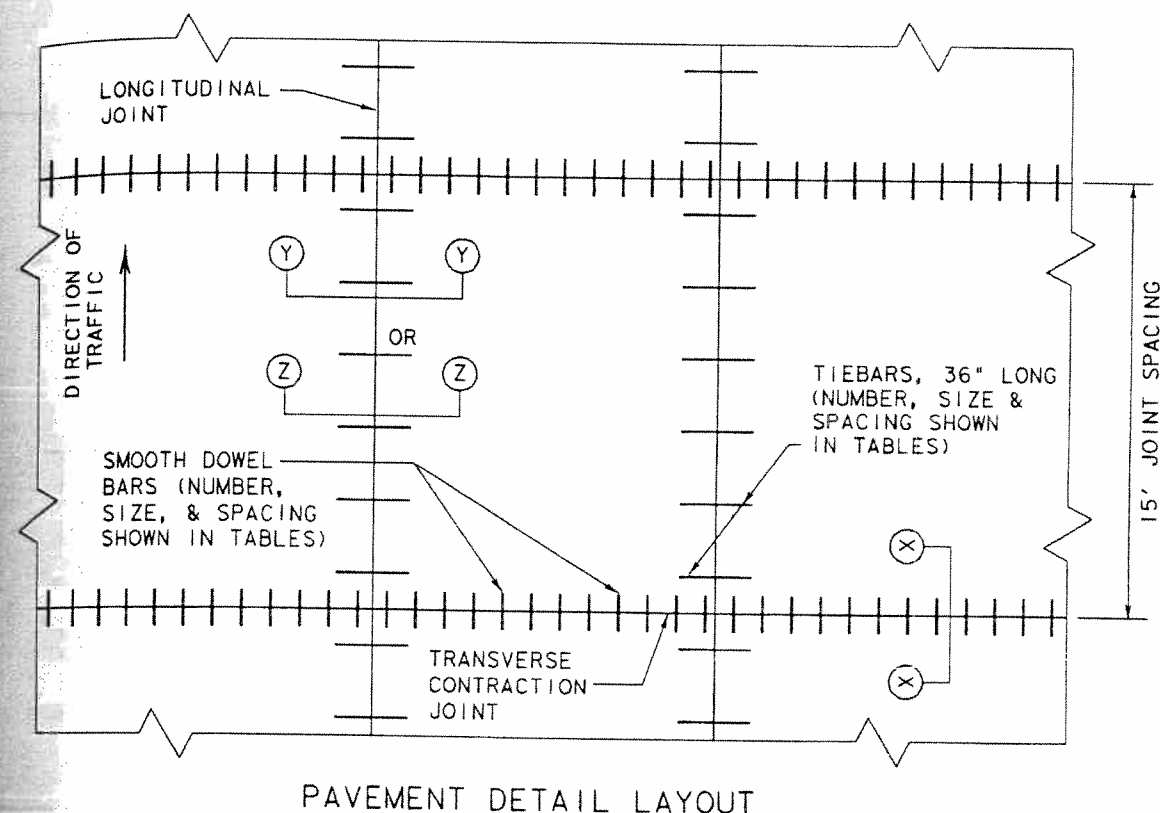
- NO EXPANSION JOINTS WILL BE USED EXCEPT AT STRUCTURE ENDS OR FIXED OBJECTS AS SHOWN ELSEWHERE IN THE PLANS.
- FOR FURTHER INFORMATION REGARDING THE PLACEMENT OF CONCRETE AND LOAD TRANSFER DEVICES REFER TO THE GOVERNING SPECIFICATIONS FOR "CONCRETE PAVEMENT".
- DETAILS AS TO PAVEMENT WIDTH, PAVEMENT THICKNESS, AND THE CROWN CROSS-SLOPE SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.
- JOINT GROOVE AND SEAL DETAILS SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.
- PAVEMENT WIDTHS IN EXCESS OF 16' SHALL BE PROVIDED WITH A LONGITUDINAL JOINT (SECTION Z-Z OR Y-Y). THESE JOINTS SHALL BE LOCATED WITHIN 6" OF THE LANE LINES UNLESS SHOWN ELSEWHERE ON THE PLANS. LONGITUDINAL JOINT TYPES AND LOCATIONS FOR THIS SPECIFIC PROJECT ARE SHOWN ELSEWHERE ON THE PLANS.
- THE JOINT BETWEEN THE OUTSIDE LANE AND THE SHOULDER SHALL BE A LONGITUDINAL WARPING JOINT (SECTION Z-Z) UNLESS OTHERWISE SHOWN IN THE PLANS.
- THE SPACING BETWEEN TRANSVERSE JOINTS SHALL BE 15 FEET UNLESS OTHERWISE SHOWN ON THE PLANS. THE SPACING BETWEEN TRANSVERSE JOINTS WILL NEVER EXCEED 20 FEET.
- TIEBAR REQUIREMENTS INCREASE AS PAVEMENTS WIDEN. THE PAVEMENT WIDTH SHALL BE MEASURED AT RIGHT ANGLES TO THE CENTERLINE AND SHALL INCLUDE ALL MAINLINES, CONNECTORS, RAMPS AND CONCRETE SHOULDERS THAT ARE TIED TOGETHER. WHERE WIDTHS EXCEED 100', ADDITIONAL TIEBARS WILL BE REQUIRED, UNLESS A "FREE" (NON-REINFORCED) LONGITUDINAL JOINT IS SHOWN ELSEWHERE IN THE PLANS. WHERE THE CENTER MEDIAN IS TO BE PAVED AND A MEDIAN BARRIER IS PROVIDED, THE "FREE" (NON-REINFORCED) LONGITUDINAL JOINT WILL BE PLACED UNDER THE BARRIER.
- WITH APPROVAL OF THE ENGINEER, MULTIPLE PIECE TIEBARS (THREADED COUPLING OR OTHER ADEQUATE DEVICE) MAY BE USED TO FACILITATE CONSTRUCTION. MULTIPLE PIECE TIEBARS SHALL DEVELOP A TENSILE STRENGTH OVER THEIR ENTIRE LENGTH EQUAL TO $1\frac{1}{4}$ TIMES THE YIELD STRENGTH OF THE TIEBARS SHOWN ON THIS STANDARD. EACH END OF THE MULTIPLE PIECE TIEBARS SHALL CONSIST OF DEFORMED REINFORCEMENT OF AT LEAST THE SIZE OF THE TIEBARS SHOWN. THE DEFORMED PORTION OF EACH END OF THE MULTIPLE PIECE TIEBARS SHALL BE AT LEAST $\frac{1}{2}$ OF THE LENGTH OF THE TIEBARS SHOWN. THE SPACING FOR MULTIPLE PIECE TIEBARS SHALL BE EQUAL TO OR LESS THAN THAT OF THE TIEBARS SHOWN.
- DOWEL AND TIEBAR SPACINGS SHALL NOT VARY MORE THAN ONE TWELFTH OF THE SPACING SHOWN HEREIN.
- TRANSVERSE TIEBARS SHALL NOT BE WITHIN 15 INCHES OF TRANSVERSE JOINTS.
- TIEBARS SHALL BE STEEL CONFORMING TO ASTM DESIGNATION A-615 OR A-616, GRADE 60. NO BENDING OF TIEBARS WILL BE ALLOWED. THE LENGTH OF THE TIEBARS SHALL BE 36 INCHES.
- TIEBARS SHALL BE SECURED PARALLEL TO THE PAVEMENT SURFACE AND PERPENDICULAR TO THE CENTERLINE BY:
 - USE OF BAR CHAIRS
 - BY ANY OTHER MEANS WHICH, PRIOR TO ITS USE, HAS BEEN APPROVED BY THE ENGINEER.
 - USE OF CONTINUOUS WIRE BASKETS.
- DOWEL BARS SHALL BE SECURED PARALLEL TO THE PAVEMENT SURFACE AND CENTERLINE BY USE OF CONTINUOUS WIRE BASKETS.
- WHERE A MONOLITHIC CURB IS SPECIFIED, THE JOINT IN THE CURB SHALL COINCIDE WITH PAVEMENT JOINTS AND MAY BE FORMED BY ANY MEANS WHICH, PRIOR TO ITS USE, HAS BEEN APPROVED BY THE ENGINEER.
- TRANSVERSE CONSTRUCTION JOINTS MAY BE FORMED BY USE OF METAL OR WOOD FORMS EQUAL IN DEPTH TO THE NOMINAL DEPTH OF THE PAVEMENT, OR BY OTHER MEANS WHICH HAVE BEEN APPROVED BY THE ENGINEER PRIOR TO THEIR USE.
- IF SILICEOUS GRAVEL IS USED AS A COARSE AGGREGATE, THE SAW CUT DEPTH FOR ALL CONTRACTION JOINTS AND LONGITUDINAL WARPING JOINTS SHALL BE $T/3$.

CONCRETE PAVEMENT DETAILS

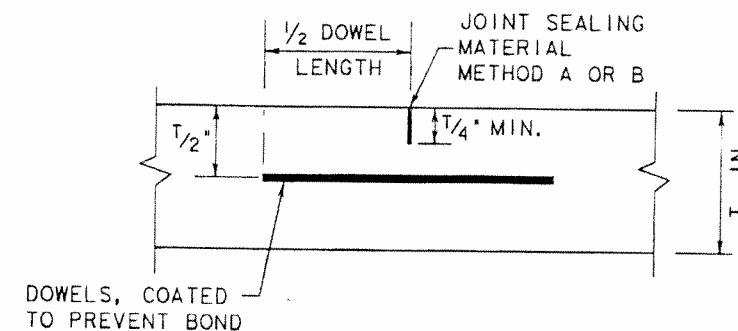
CONTRACTION DESIGN

TxDOT
DISTRICT 18 STANDARD

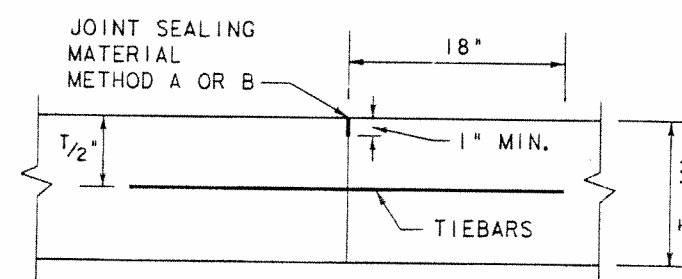
STATE	DISTRICT	COUNTY
TEXAS	DALLAS	NAVARRO



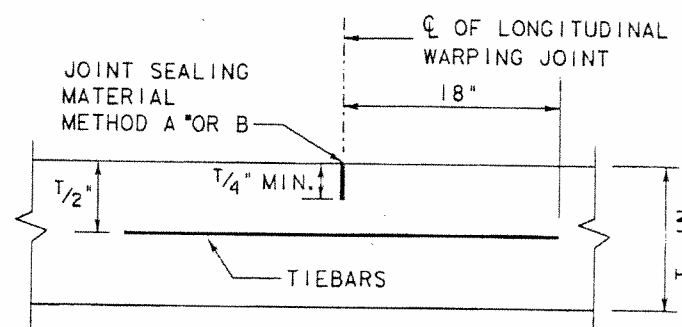
T, IN.	DOWELS (SMOOTH BARS)	
	SIZE AND LENGTH	AVERAGE SPACING (INCHES)
8	1" X 18"	12
9	1 $\frac{1}{8}$ " X 18"	12
10	1 $\frac{1}{4}$ " X 18"	12
11	1 $\frac{3}{8}$ " X 18"	12
12	1 $\frac{1}{2}$ " X 18"	12
13	1 $\frac{5}{8}$ " X 18"	12
14	1 $\frac{3}{4}$ " X 18"	12
15	1 $\frac{7}{8}$ " X 18"	12



TRANSVERSE CONTRACTION JOINT
SECTION X-X



LONGITUDINAL CONSTRUCTION JOINT
SECTION Y-Y



LONGITUDINAL WARPING JOINT
SECTION Z-Z

GRADE 60 TRANSVERSE TIEBAR REQUIREMENTS FOR EACH 15' LONG SLAB

T IN.	DISTANCE FROM THE LONGITUDINAL JOINT TO THE NEAREST LONGITUDINAL FREE EDGE, FT.											
	< = 20			< = 30			< = 40			< = 50		
	NO. OF C-C SPACING IN.	BAR SIZE	NO. OF C-C SPACING IN.	BAR SIZE	NO. OF C-C SPACING IN.	BAR SIZE	NO. OF C-C SPACING IN.	BAR SIZE	NO. OF C-C SPACING IN.	BAR SIZE	NO. OF C-C SPACING IN.	BAR SIZE
8	5	36"	5	36"	5	7	25"	5	8	21"	5	9
9	6	30"	6	30"	6	8	21"	6	9	18"	6	10
10	7	25"	6	30"	7	25"	9	18"	7	21"	7	11
11	7	25"	7	25"	8	21"	10	16"	8	18"	8	12
12	5	36"	8	21"	10	16"	11	15"	9	18"	9	13
13	6	30"	8	21"	11	15"	12	13"	10	16"	10	14
14	6	30"	9	18"	12	13"	13	10"	11	15"	11	15
15	6	30"	9	18"	12	13"	13	10"	11	15"	11	15