

STATE OF TEXAS

STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION

INDEX OF SHEETS

PLANS OF PROPOSED STATE HIGHWAY IMPROVEMENT

FEDERAL AID PROJECT
MA-M 5009(3)

SH 289

COLLIN COUNTY

FROM: CARPENTER ROAD
TO: PROPOSED S.H. 190

NET LENGTH OF PROJECT: 22,767.81 FT. = 4.311 MI.

TYPE: GRADING, STRUCTURES, STORM SEWERS,
CONCRETE PAVING AND PAVEMENT MARKINGS

DESIGN SPEED = .5 MPH

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

THE CONTRACTOR SHALL PROVIDE AND ERECT BARRICADES AND WARNING SIGNS IN ACCORDANCE WITH BC-(1) THRU EC-(7)-1982 AT POINTS INDICATED AND AT OTHER POINTS AS DIRECTED BY THE ENGINEER.

ROADWAY 22,364.6 FT. = 4.235 MI.
BRIDGE 403.20 FT. = 0.076 MI.
TOTAL 22,767.81 FT. = 4.311 MI.

FINAL PLANS

LETTING DATE: 3-18-87
DATE WORK BEGAN: 5-11-87
DATE OF COMPLETION: 1-23-89
DATE OF ACCEPTANCE: 1-26-89

FIELD CHANGE NO. 1: CONSISTED OF SUBSTITUTING VERTICAL PANELS FOR CONCRETE TRAFFIC BARRIERS ALONG THE EDGES OF NEW CONCRETE PAVEMENT IN CONSTRUCTION STAGES II AND III.

FIELD CHANGE NO. 2: CONSISTED OF CONSTRUCTION OF ONE INLET (CULVERT) (TYC) (1-60" DIA) 68 FT. LT. OF CENTERLINE STA 1472+29.

SUPPLEMENTAL AGREEMENT NO. 1: PROVIDED FOR A UNIT PRICE OF \$1.00 IN FIELD CHANGE NO. 2.

CITY OF PLANO

APPROVED: 4-9-86 1986
CITY MANAGER
APPROVED: _____ 1986

STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION

CORRECT: 4-9-86
John M. E. Olin
SENIOR DESIGN ENGINEER
CORRECT: May 2, 1986
John V. Blum Jr.
DISTRICT DESIGN ENGINEER
CORRECT: 4/30/86
William C. Duff
SUPERVISING RESIDENT ENGINEER
RECOMMENDED FOR APPROVAL: May 19, 1986
Robert J. Smith
DISTRICT ENGINEER

APPROVED: 5-7-86
James H. H. H. H.
BRIDGE ENGINEER
APPROVED: 5-14-86
James P. S. S.
CHIEF ENGINEER, HIGHWAY DESIGN

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED: _____
DIVISION ADMINISTRATOR DA

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-6	PROJECT LAYOUT
7-8	TYPICAL SECTIONS
9-13	REMOVAL ITEM SHEETS
14-16	ESTIMATE AND QUANTITY SHEETS
17-21	SPECIFICATION DATA SHEETS
24-42	SUMMARY SHEETS
43	LATERAL DETAILS
44	EROSION CONTROL DETAILS & SUMMARY
45-66	PLAN-PROFILE SHEETS
67-72	CROSS-STREET PROFILES
73-75	PAVING CONTOURS
76-77	GRADING CONTOURS
78	MISCELLANEOUS DETAILS
79	DRAINAGE AREA MAP
80-102	DRAINAGE SHEETS
103	HYDRAULIC DATA SHEET-CULVERT COMPUTATIONS
104-110	CULVERT LAYOUTS
111-115	NEW-P-15 (MOD), NEW-P (MOD), NEW-P-4 (MOD), NEW-N (MOD) + Spl. Headwall Detail
116	CULVERT MOUNTING FOR T6 TRAFFIC RAIL (MOD)
117-121	PAVEMENT MARKING SHEETS
122-183	CONSTRUCTION SEQUENCE SHEETS
184	SLOTTED DRAIN DETAILS
185-186	SD (MOD1), SD (MOD2)
187-188	CURB & GRATE INLET DETAILS
189-190	CURB INLET DETAILS
191	DROP INLET DETAILS
192	MANHOLE DETAILS
193	EXISTING DROP STRUCTURE MODIFICATIONS
194-205	SLOTTED DRAIN COMPUTATIONS
206-210	RUNOFF AND INLET COMPUTATIONS
211-220	STORM SEWER COMPUTATIONS
221-226	LATERAL COMPUTATIONS
227-229, 229A	AT&SF RR OVERPASS, 8-D (MOD) - COMBINATION RAIL TYPE C201 (MOD)
232	JS-75 (MOD)
233	RR8 & RR9
235-241	BC(1)-82 THRU BC(7)-82
242	CPCD-80(1)
243	GF(TD)-86
244	BED(OWT)-84
245	BAS-75
246	CBR(P.P)-86
247	TB(BMGF)-86
248	TRAFFIC RAIL TYPE T6
249	PC-6
250	MC10-3
251	SC-45A
252	MC8-3
253	MCT-2
254	SC-NA
255	CH 11
256	Prestressed Concrete Box Beams
257-260	Summary of Alternate Inlets
261	OMITTED

STANDARDS

BEGIN PROJECT

CONTROL 91-5-25
STA 1315+44

END PROJECT

CONTROL 91-5-25
STA 1543+00

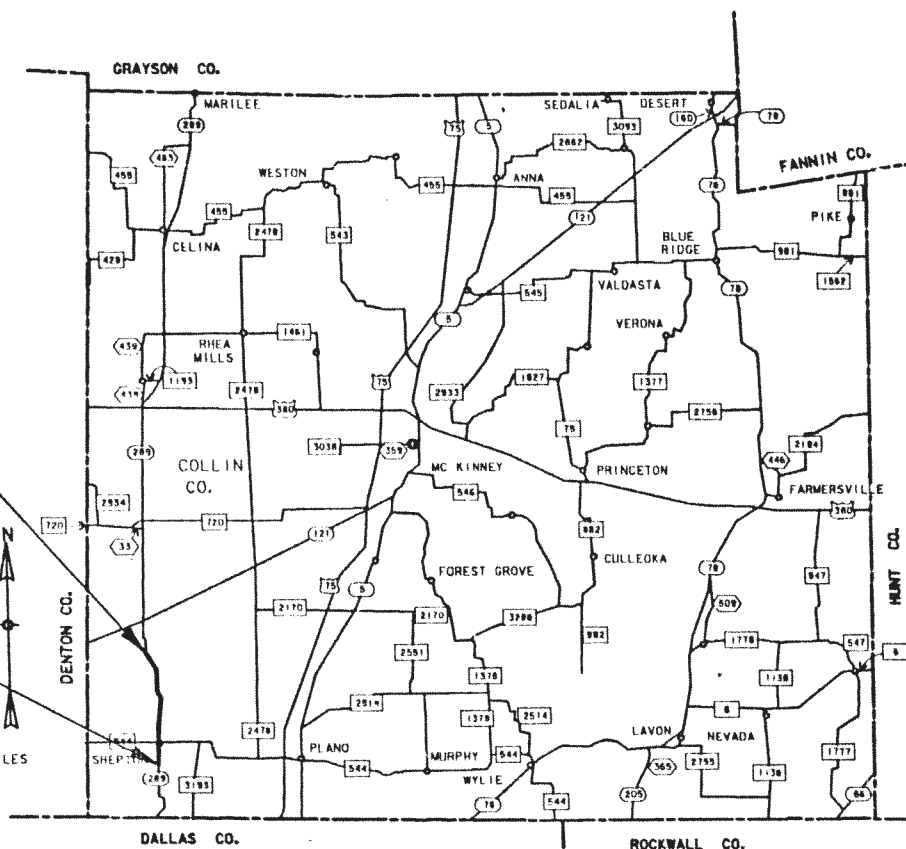
EXCEPTION: NONE
EQUATIONS:

STA. 1487+48.67 BK= STA. 1487+38.70 FWD=+9.97'
STA. 1541+68.00 BK= STA. 1541+66.16 FWD=+1.84'

NOTE:

SPECIFICATIONS ADOPTED BY THE STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION OF TEXAS, SEPTEMBER 1, 1982, AND SPECIFICATION ITEMS LISTED AND DATED AS FOLLOWS, SHALL GOVERN ON THIS PROJECT. REQUIRED CONTRACT PROVISIONS, ALL FEDERAL AID CONSTRUCTION CONTRACTS (FORM PR-1273, SEPTEMBER, 1975).

COLLIN COUNTY
SCALE 0 1 2 3 4 5 6 MILES
DISTRICT 18



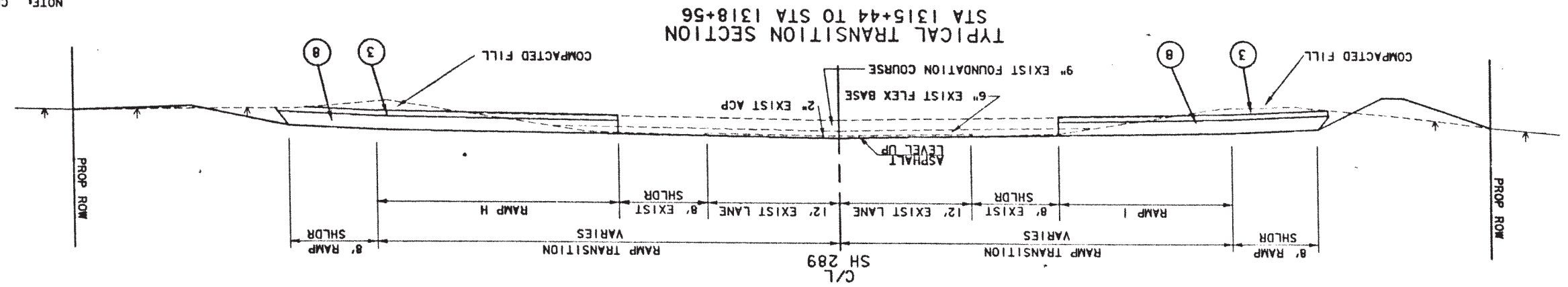
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15	COLLIN	91	5	25	7
14	COLLIN	91	5	25	7
13	COLLIN	91	5	25	7
12	COLLIN	91	5	25	7
11	COLLIN	91	5	25	7
10	COLLIN	91	5	25	7
9	COLLIN	91	5	25	7
8	COLLIN	91	5	25	7
7	COLLIN	91	5	25	7
6	COLLIN	91	5	25	7
5	COLLIN	91	5	25	7
4	COLLIN	91	5	25	7
3	COLLIN	91	5	25	7
2	COLLIN	91	5	25	7
1	COLLIN	91	5	25	7

NOTE: CROSS-STREETS TO BE BUILT TO SAME SECTION DEPTH AS SH 289 1.0, 9" CPD, 6" ASB, 6" LITS

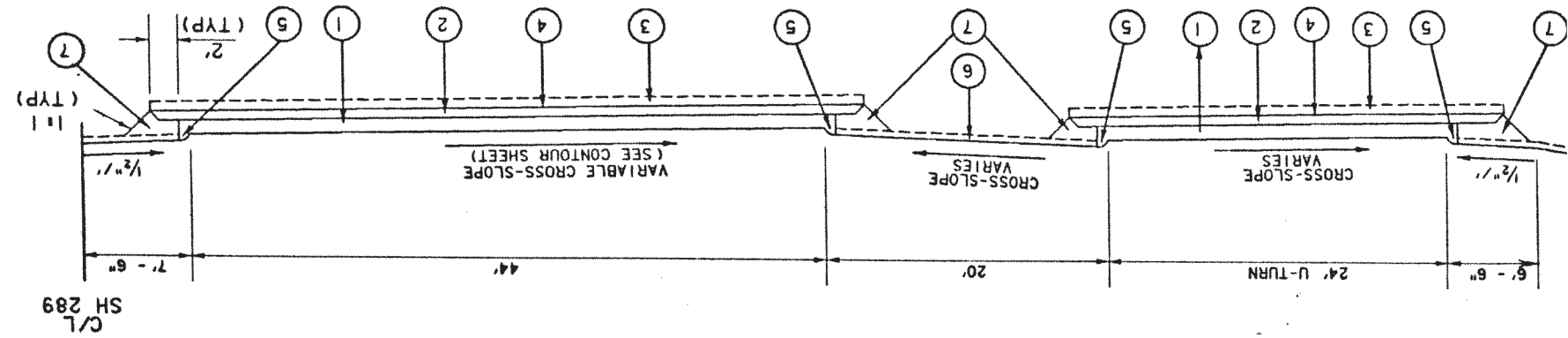
TYPICAL SECTIONS

- 1 9" CPD
- 2 6" ASPHALT STABILIZED BASE
- 3 6" LIME TREATED SUBGRADE (4% LIME)
- 4 0.25 GAL/SY PRIME COAT
- 5 TYPE 1 CURB
- 6 4" MULCH SOD
- 7 BACKFILL
- 8 15" ASPHALT STABILIZED BASE

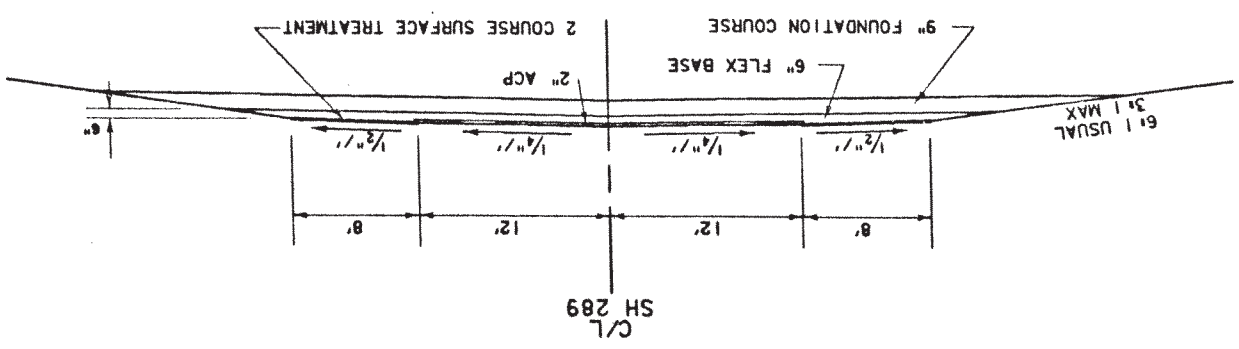
LEGEND



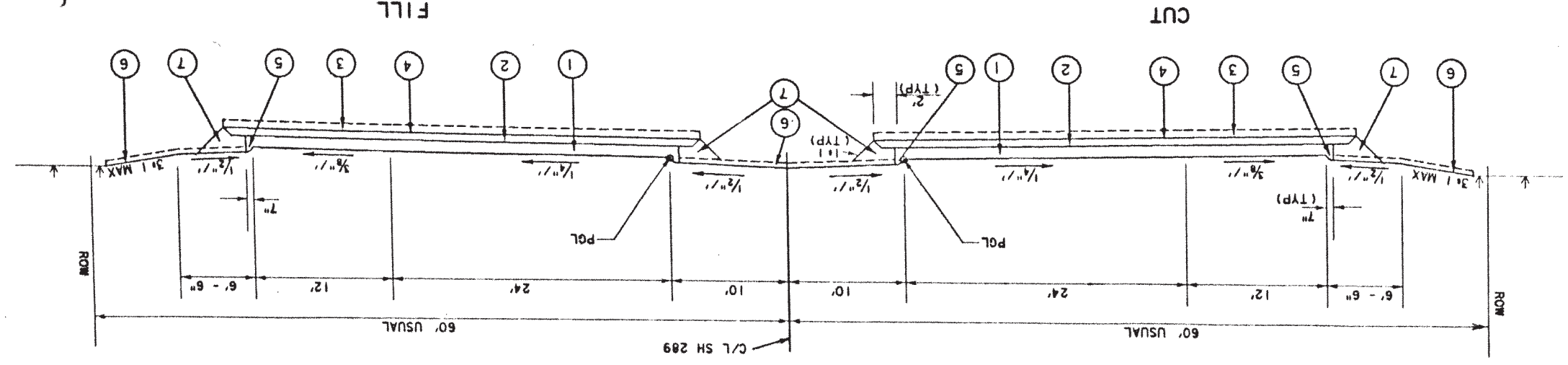
CARPENTER ROAD AND U-TURN SECTION (HALF SECTION)



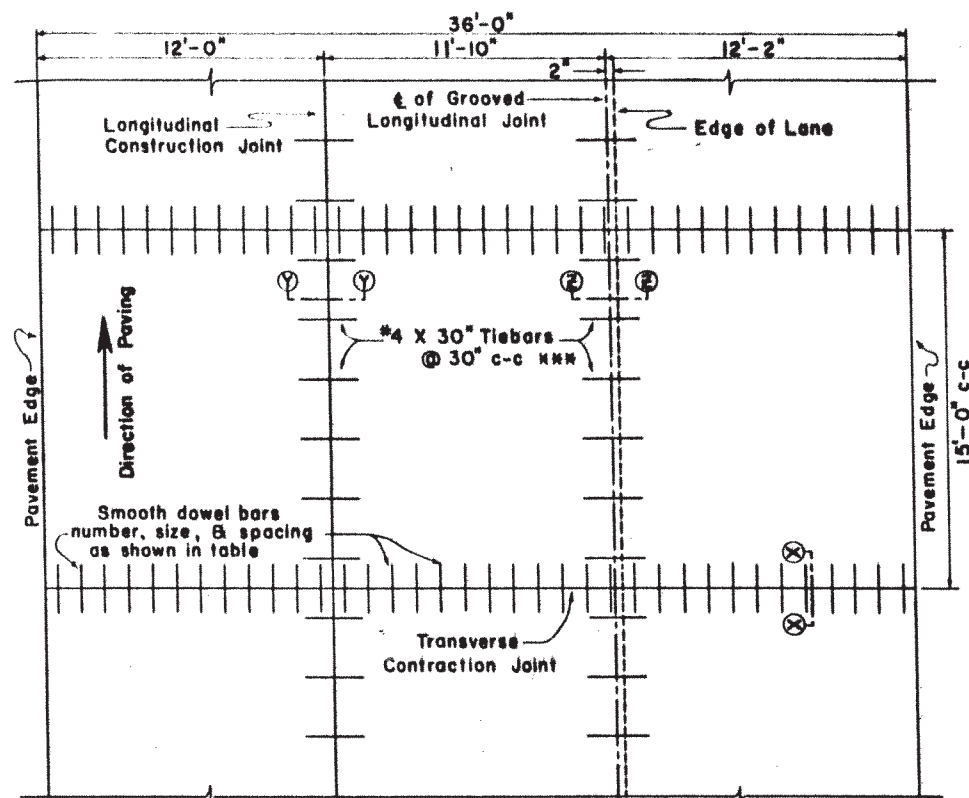
EXISTING SECTION SH 289



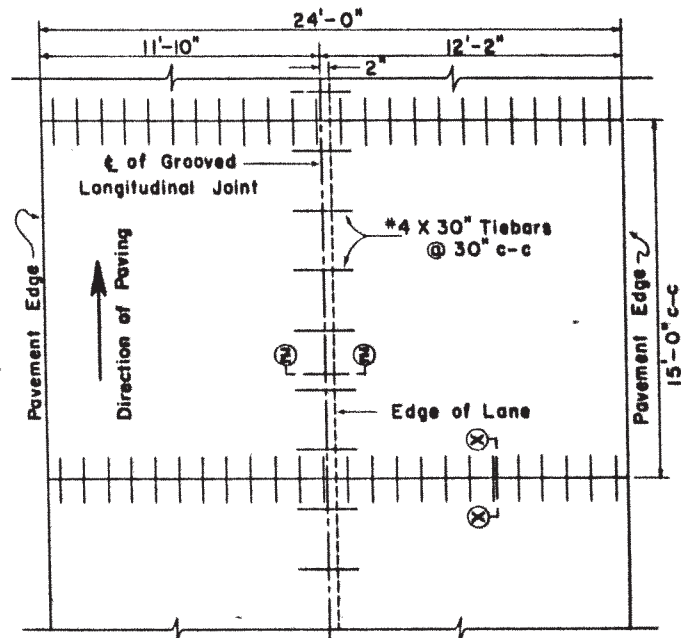
FROM PROPOSED SH 190 (NORTH) TO CARPENTER RD.



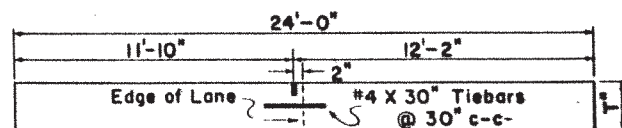
*** At locations where the pavement width is greater than 40 feet but less than 60 feet the tie bar spacing shall be 24" center to center. At locations where pavement width is greater than 60 feet #5 tie bars 36" long shall be 24" center to center.



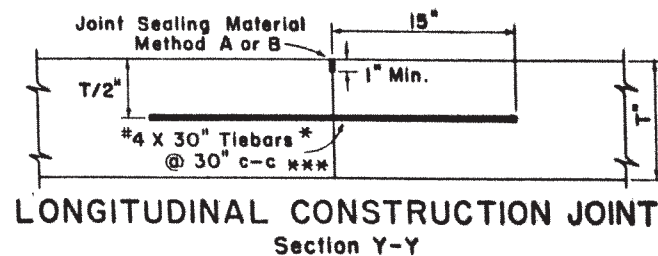
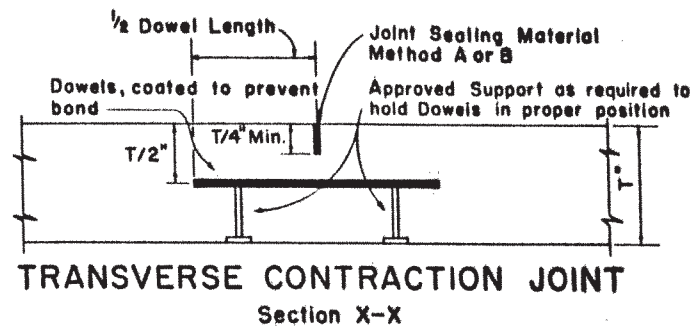
THREE LANE PAVEMENT PLAN
(12 ft. & 24 ft. Placement)**



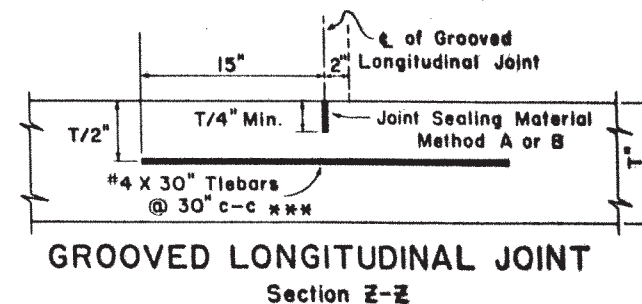
TWO LANE PAVEMENT PLAN



TYPICAL SECTION
(24 ft. Placement)**



* WITH THE APPROVAL OF THE ENGINEER, MULTIPLE PIECE TIEBARS (THREADED COUPLING OR OTHER ADEQUATE DEVICE) MAY BE USED TO FACILITATE CONSTRUCTION PROVIDED THE SYSTEM DEVELOPS A FORCE EQUAL TO 1 1/2 TIMES THE MINIMUM FORCE OF THE TIEBAR SHOWN. THE SPACINGS FOR THE SYSTEM SHALL BE LESS THAN OR EQUAL TO THE SPACING ALLOWED FOR BARS OF SIMILAR YIELD STRENGTH.



** Lane widths are for illustrative purposes only and should not be used if in conflict with typical cross sections shown elsewhere in the plans.

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.
- TIEBARS SHALL BE SECURED PARALLEL TO THE PAVEMENT SURFACE AND PERPENDICULAR TO THE CENTERLINE BY:
 - USE OF BAR CHAIRS
 - ACCURATELY PLACED IN POSITION ON THE SCREED CONCRETE BY MEANS OF AN APPROVED TEMPLATE AND FORCED TO THE PROPER POSITION WITH A SUITABLE TOOL, OR
 - BY ANY OTHER MEANS WHICH, PRIOR TO ITS USE, HAS BEEN APPROVED BY THE ENGINEER.
- DOWEL BARS SHALL BE SECURED PARALLEL TO THE PAVEMENT SURFACE AND CENTERLINE BY A DOWEL BAR CHAIR.
- WHEN WORK IS STOPPED DUE TO BREAKDOWN OR OTHER CAUSE, CONCRETE SHALL BE REMOVED BEYOND LAST CONTRACTION JOINT IN PLACE AND A HEAVY INSTALLATION.
- 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.
- 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.
- LONGITUDINAL AND TRANSVERSE STEEL SPACING SHALL NOT VARY MORE THAN ONE TWELFTH OF THE SPACING SHOWN HEREON.
- THE TIEBAR SPACINGS SHOWN ARE FOR ASTM DESIGNATIONS: A-615, OR A-616, GRADE 60, TIEBARS, WHICH SHALL NOT BE BENT. IF TIEBARS ARE TO BE BENT, THEY SHALL BE STEEL CONFORMING TO ASTM DESIGNATION: A-615, GRADE 40, WITH A CENTER TO CENTER SPACING OF 24 INCHES.

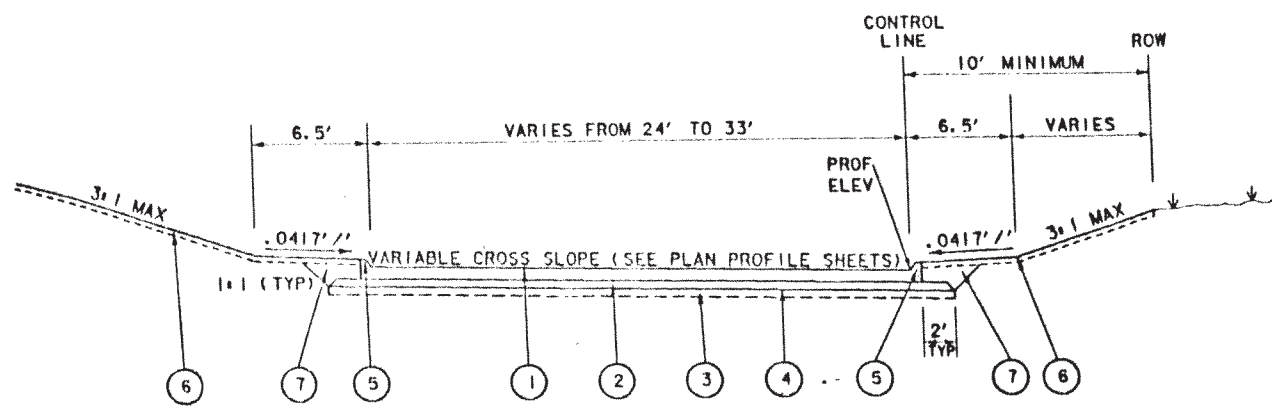
DEPTH OF PAVEMENT (INCHES)	DOWELS (SMOOTH BARS)		
	SIZE AND LENGTH	AVERAGE SPACING (INCHES)	WEIGHT PER FOOT OF JOINT (LBS.)
8	1" X 18"	12	4.01
9	1 1/8" X 20"	12	5.63
10	1 1/4" X 22"	12	7.65
11	1 3/8" X 24"	12	10.10



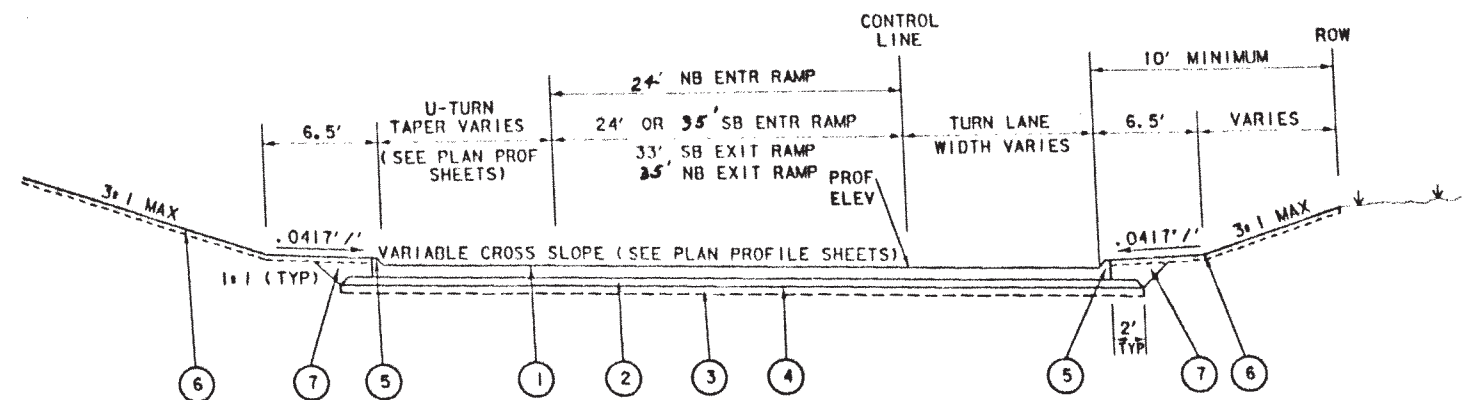
STATE DEPARTMENT OF HIGHWAYS
AND PUBLIC TRANSPORTATION

CONCRETE PAVEMENT DATA CONTRACTION DESIGN CPCD - 80 (1)

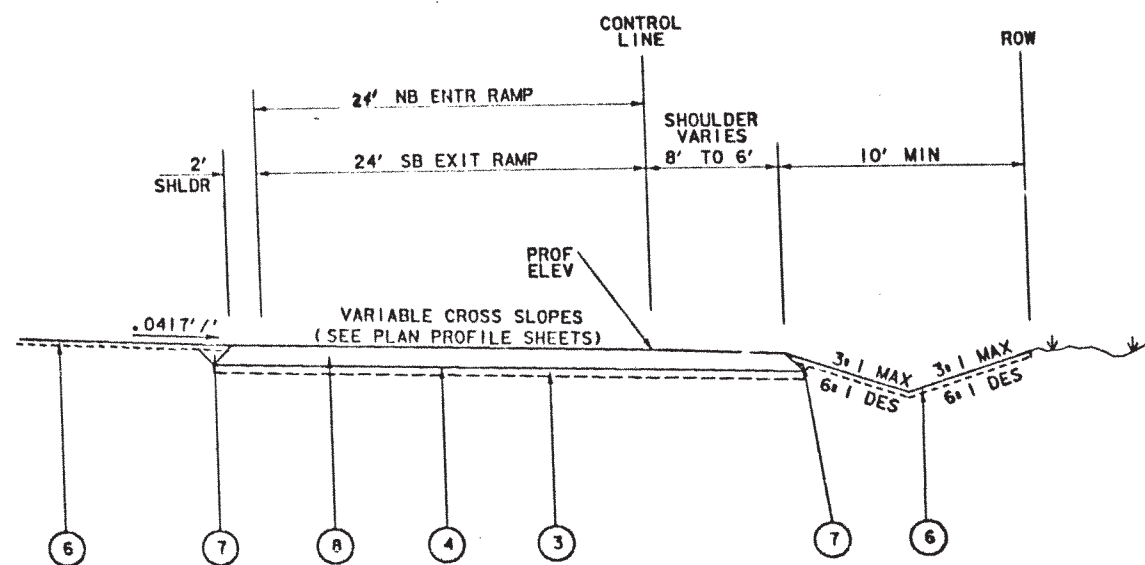
IN.	DRAWING	DATE	PROJ. NO.	STATE	FEDERAL PROJECT NO.
1	DN	ORIGINAL	6	TEXAS	MA-M 5004 (2)
2	DW	REVISED			
3	CH	REVISED			
4	TR				
5	CH				



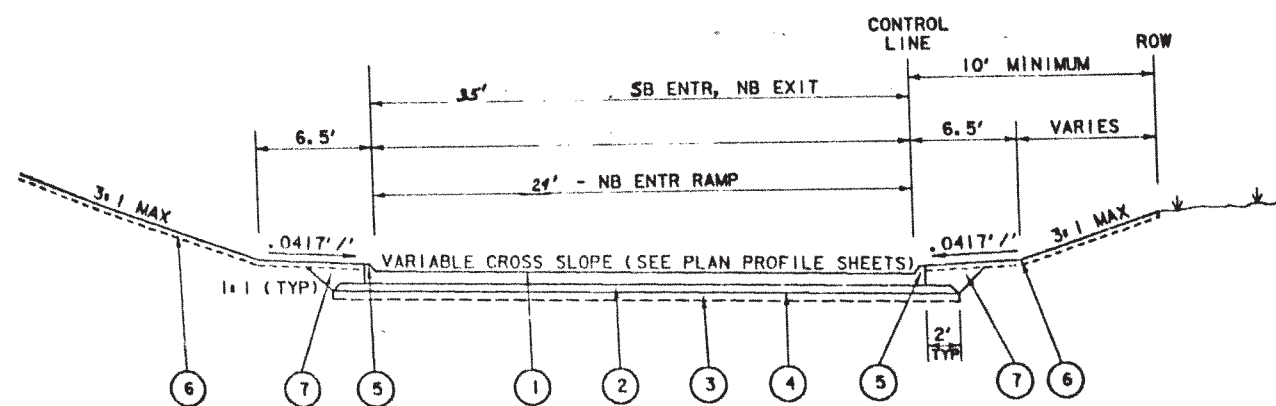
SB EXIT RAMP - PERMANENT SECTION



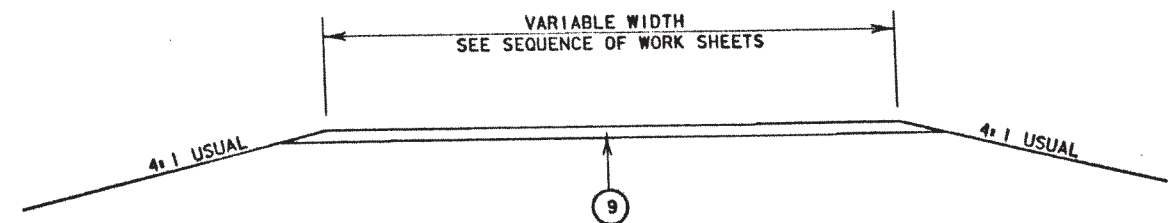
U-TURN RAMP TAPER SECTIONS



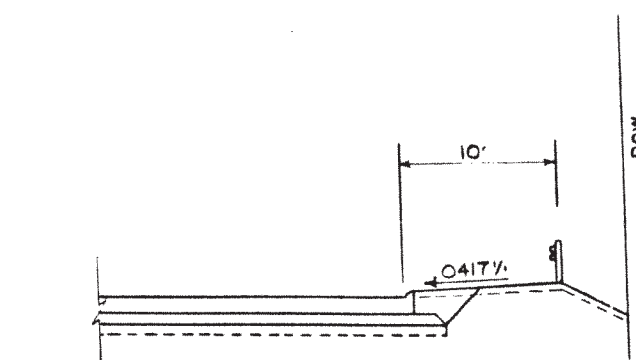
TEMPORARY PAVEMENT TO
NB ENTRANCE RAMP AND SB EXIT RAMP



RAMP SECTIONS



TYPICAL FULL DETOUR



TYPICAL GUARD FENCE SECTION

LEGEND

- ① 9" CPCD
- ② 6" ASPHALT STABILIZED BASE
- ③ 6" LIME TREATED SUBGRADE (4% LIME)
- ④ 0.25 GAL/SY PRIME COAT
- ⑤ TYPE I CURB
- ⑥ 4" MULCH SOD
- ⑦ BACKFILL
- ⑧ 15" ASPHALT STABILIZED BASE
- ⑨ 9" ASPHALT STABILIZED BASE

TYPICAL SECTION

NOTE: CROSS-STREETS TO BE BUILT TO
SAME SECTION DEPTH AS SH 289
I.e. 9" CPCD, 6" ASB, 6" LTS

STATE	COUNTY	FEDERAL AID PROJECT NO.
6	TEXAS	MA-M 5009(3)
STATE	COUNTY	SECTION
18	COLLIN	91 5