STATE OF TEXAS FINAL PLANS

PES HOLD BIY NO	STATE		C 265 · 8 - 44 , ETC.					
6	TEXAS	C 265						
 STATE SIST. NO.	900	MTY	SYATE CONTROL MO.	HI-DOLY MJ.				
13	EAVE	TTE	365 00 44 m	CIL 71				

STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION

PLANS OF PROPOSED STATE HIGHWAY IMPROVEMENT

CONTRACTOR NAME: BAY INC. CONTRACTOR ADDRESS: CORPUS CHRISTI, TX. FEBRUARY 28,1989 DATE COMPLETED: LIST OF APPROVED FIELD CHANGES:

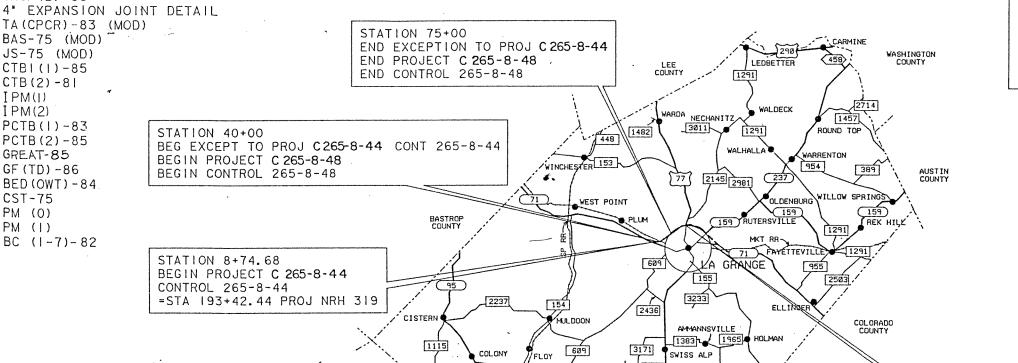
DESIGN SPEED: 60 MPH

SEE SHEET IA.

PROJECTS C 265-8-44 & C 265-8-48 FAYETTE COUNTY STATE HIGHWAY 71

LIMITS: FROM 1.2 MI WEST OF F.M. 609 EAST TO U.S. 77 BASE AND SURFACING FOR FOUR LANE DIVIDED FACILITY

NET LENGTH OF PROJECT = 14.094.32 FT = 2.667 MI



609

PRAHA

FLOY

COLONY

PROJECT ROADWAY BRIDGES CONTROL MILES MILES FΥ MILES C 265-8-44 265-8-44 9,009.32 1.706 1,585.00 0.300 10,594.32 2.006 C 265-8-48 265-8-48 3,115.00 0.589 385.00 3,500.00 0.661

GRAPHIC SCALE (MILES)

STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION

STATION 149+69 END CONTROL 265-8-44 END PROJECT C 26578E44

THER SIGNS, BARRICADES, AND TRAFFIC CONTROL REFER TO TRAFFIC OL PLAN'S, SPECIAL PROVISION "DETOUR, BARRICADES, WARNING SIGNS, NCE OF WORK, ETC.*, AND BC (1-7)-82 STANDARDS.

II (C) BARRICADES AND SIGNS G 20-1, G 20-2, G 20-6, R 20-3

W 20-ID SHALL BE PLACED AT SH 71 AND US 77 INTERSECTIONS. CW 20-ID AND G 20-2 SHALL BE USED AT INTERSECTIONS OF ALL

FICATIONS ADOPTED BY THE STATE DEPARTMENT GHWAYS AND PUBLIC TRANSPORTATION, SEPTEMBER 1, 1982, PECIFICATION ITEMS, LISTED AND DATED AS FOLLOWS, GOVERN ON THESE PROJECTS: SPECIAL LABOR PROVISIONS STATE PROJECTS (000---011).

DEX OF SHEETS

DESCRIPTION

TITLE SHEET

TYPICAL SECTIONS

PLAN PROFILE SHEETS

PRIVATE ENTRANCES

RAMP DETAILS

SD (1-2)

CRCP(B)-85

BAS-75 (MOD)

JS-75 (MOD)

CTB1(1)-85

PCTB(1)-83

PCTB(2)-85

GREAT-85

CST-75

PM (0) PM (1) BC (1-7)-82

CADE NOTES:

C ROADS ENTERING THE PROJECT.

GF (TD) -86

BED (OWT) -84

CTB(2)-81 TPM(I)

IPM(2)

TRAFFIC CONTROL PLAN

SLOTTED MEDIAN DRAINS

COUNTY ROAD INTERSECTIONS

10,10A SPEC DATA, GENERAL NOTES, & BASIS OF ESTIMATE

RAMPS & TURNAROUNDS QUANTITY SUMMARY

ESTIMATE AND QUANTITY SUMMARY

T NO.

31

FAYETTE COUNTY

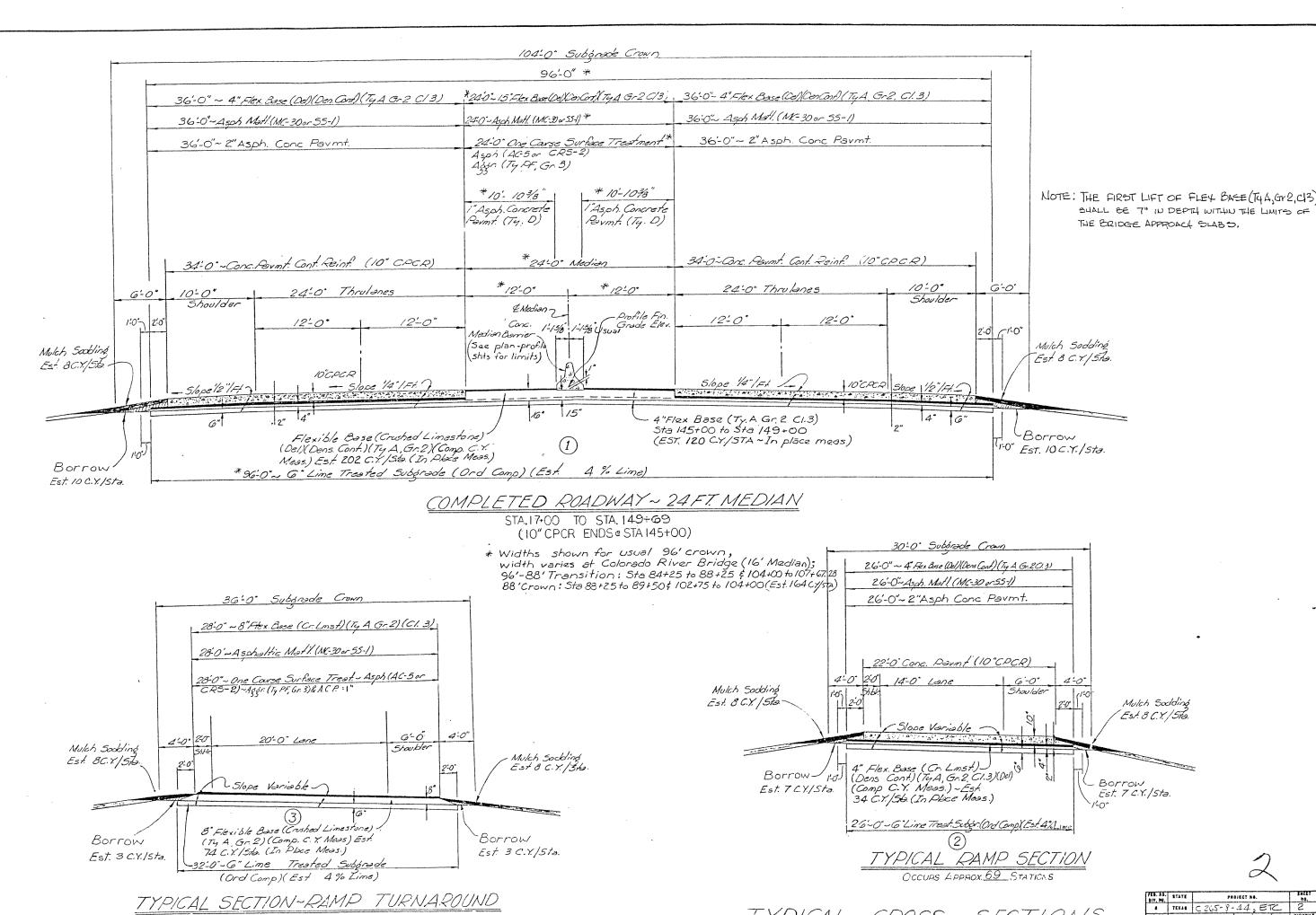
1 956

1579 86HULENBURG

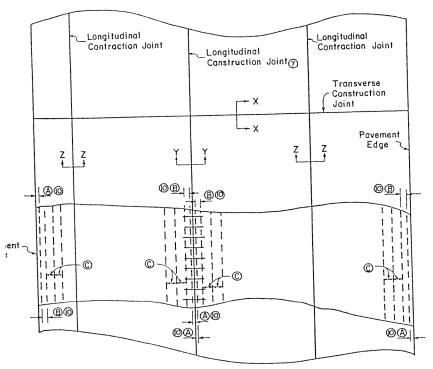
NO EQUATIONS NO AT-GRADE RAILROAD CROSSINGS

RESIDENT/ENGINEER RECOMMENDED FOR APPROVAL

10-10-86 Quis Yhang BRIDGE ENGINEER APPROVED FOR LETTING: 10-10-86



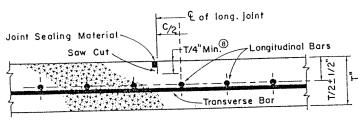
TVNICII CENTINAIS 10000



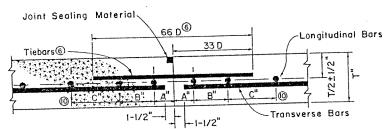
	NUMBER OF BARS									
	REQUIRED FOR VARIOUS									
SPACING	Т	YPICAL	PLACEN	NENT WI	тнѕ (FT.)	9			
С	Typical Placement Widths (FT.) (19									
(IN.)	12 16 22 24 27 3L									
6	24	32	44	48	54	68	76			
7	21	27	37	41	46	58	65			
8	18	24	33	36	41	51	57			
9	16	22	30	32	36	46	51			
	_	_								

x 1	T (1N.)	Longitudinal Bar Size	Spacing C (in.)	Trans. Bar Size	PAVEMENT GIVEN T	MUM ALLOW WIDTH (F RANSVERSE PACINGS (1	T.) FOR STEEL	B _S ₩ ⁴ (INFT.)
	8	б	9	4 5 6	120 186 264	60 93 132	40 62 88	120.0 186.0 264.0
	9	6	8	4 5 6	106 165 234	53 82 117	35 55 78	106.7 165.3 234.7 96.0
	10	6	7	5 6	96 148 211	48 74 105	32 49 70 29	148.8 211.2 87.3
0.6	11	6 4 ²	7 6	4 5 6	87 135 192	43 67 96	45 64	135.3 192.0 80.0
	12	6 5②	6 9	4 5 6	80 124 176	40 62 88	26 41 58	124.0 176.0 73.8
	13	7 5©	8	4 5 6	73 114 162	36 57 81	24 38 54	114.5 162.5
	14	7 5 ²	7 7.5	4 5 6	68 106 150	34 53 75	22 35 50	68.6 106.3 150.9
	15	7 5 ²	7	5 6	64 99 140	32 49 70	21 33 46	64.0 99.2 140.8

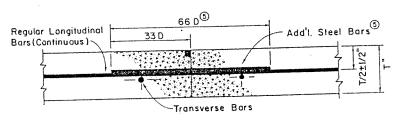
TWO LANE PAVEMENT PLAN (38' PLACEMENT OR 16' & 22' PLACEMENT (7)



LONGITUDINAL CONTRACTION JOINT Section Z-Z



LONGITUDINAL CONSTRUCTION JOINT Section Y-Y



TRANSVERSE CONSTRUCTION JOINT Section X-X

- NOTE: ① LONGITUDINAL AND TRANSVERSE BARS SHALL BE DEFORMED STEEL CONFORMING TO ASTM A-615 OR ASTM A-616 (GRADE 60) AS NOTED IN THE STANDARD SPECIFICATIONS AND THEREFORE THE PERCENTAGE OF STEEL REQUIRED IS HIGHER THAN THAT FOR WIRE MATS. (GRADE 70 STEEL).
 - For pavements greater than 11'' in thickness, contractors may have the option of placing two layers of steel. THE SMALLER LONGITUDINAL BAR SIZES INDICATED ARE ONLY TO BE USED WHEN TWO LAYERS OF STEEL ARE PLACED. FOR TRANSVERSE BARS, IF ALL OTHER VARIABLES ARE HELD CONSTANT, THE MAXIMUM ALLOWABLE PAVEMENT WIDTH MAY BE DOUBLED WHEN TWO LAYERS OF STEEL ARE USED.

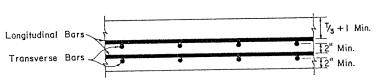
WHEN THE "DOUBLE STRIKE-OFF" PROCEDURE IS NOT USED CHAIRS WILL BE REQUIRED TO SUPPORT BOTH LAYERS OF STEEL.

- PAVEMENT WIDTH SHALL BE MEASURED AT RIGHT ANGLES TO THE CENTERLINE AND SHALL INCLUDE ALL MAINLANES, CONNECTORS, RAMPS AND CONCRETE SHOULDERS THAT ARE TIED TOGETHER. TRANSVERSE STEEL REQUIREMENTS AND THE MAXIMUM ALLOWABLE PAVEMENT WIDTH WERE DETERMINED USING SUBGRADE DRAG THEORY (SEE APPENDIX F, SECTION 109 OF THE HIGHWAY DESIGN DIVISION OPERATIONS AND PROCEDURES MANUAL) WITH A COEFFICIENT OF SLIDING RESISTANCE (F OF 1.5, AND AN ALLOWABLE STEEL STRESS (FS) OF 45.0 KS1.
- 4 To determine the maximum allowable pavement width (W) for spacing other than those given, divide "B_SW" (for the given bar size) by the desired transverse bar spacing (B_S). Transverse bar spacing shall not be less than 12" nor greater than 36".
- (3) ADDITIONAL STEEL AT THE TRANSVERSE CONSTRUCTION JOINTS SHALL BE BARS OF EQUAL DIAMETER; AND A SPACING OF DOUBLE THAT SPECIFIED FOR THE LONGITUDINAL STEEL OF THE GIVEN THICKNESS. THE LENGTH OF THE BARS SHALL BE 66 TIMES THE BAR DIAMETER ("D").
- (6) TRANSVERSE TIEBARS AT THE LONGITUDINAL CONSTRUCTION JOINTS SHALL BE BARS OF EQUAL DIAMETER AND SPACING TO THOSE SPECIFIED FOR THE TRANSVERSE STEEL OF THE GIVEN THICKNESS. THE LENGTH OF THE BARS SHALL BE 66 TIMES THE BAR DIAMETER ("D").
- THE LONGITUDINAL CONSTRUCTION JOINT CAN BE RELOCATED OR MAY BE REPLACED BY A LONGITUDINAL CONTRACTION JOINT DEPENDING ON THE PLACEMENT WIDTH.
- (8) If SILICEOUS RIVER GRAVEL IS USED AS A COARSE AGGREGATE, A CUT OF T/3 SHALL BE REQUIRED.
- (9) WHEN MACHINE-PLACING OF STEEL REINFORCEMENT IS USED, THE USE OF CHAIRS SHALL NOT BE REQUIRED, AND THE TRANSVERSE STEEL MAY BE PLACED ABOVE OR BELOW THE LONGITUDINAL STEEL.
- The number of bars required for the various placement widths (indicated in the Table) includes 2 bars at "B" spacing on both sides with an overhang "A".
 - "A" SPACING SHALL BE BETWEEN 3" AND 4".
 - "B" spacing shall be between 3" and 9".

THE TWO SPACINGS COMBINED ("A" AND "B"), LOCATED AT BOTH LONGITUDINAL EDGES OF THE POUR, SHALL PROVIDE FOR THE REMAINING SPACE AND STEEL LOCATION TO ROUND OUT THE PLACEMENT WIDTH.

GENERAL NOTES

- 1. NO EXPANSION JOINTS WILL BE USED EXCEPT AT STRUCTURE ENDS OR FIXED OBJECTS AS SHOWN ELSEWHERE IN THE PLANS.
- 2. For further information regarding the placement of concrete and Rein-FORCEMENT REFER TO THE GOVERNING SPECIFICATIONS FOR "CONCRETE PAVEMENTS."
- DETAILS AS TO PAVEMENT WIDTH, PAVEMENT THICKNESS AND THE CROWN CROSS-SLOPE SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.
- 4. WITHIN ANY AREA BOUNDED BY TWO FEET OF PAVEMENT LENGTH MEASURED PARALLEL TO THE CENTERLINE AND TWELVE FEET OF PAVEMENT WIDTH MEASURED PERPENDICULAR TO THE PAVEMENT CENTERLINE, NOT OVER 33% OF THE REGULAR LONGITUDINAL STEEL SHALL BE SPLICED.
- 5. THE LONGITUDINAL STEEL SHALL BE PLACED AT THE VERTICAL SLAB CENTER WITH A TOLERANCE OF 1/2 INCH. TRANSVERSE STEEL SHALL BE PLACED DIRECTLY ABOVE OR BELOW THE LONGITUDINAL STEEL.
- 6. Splices shall be a minimum of 33 times the nominal steel diameter ("D").
- BARS THAT REQUIRE BENDING SHALL BE GRADE 40 STEEL CONFORMING TO REQUIREMENTS
 OF ASTM DESIGNATION: A 615. Spacings for grade 40 STEEL SHALL BE 2/3 OF
 THAT SPECIFIED FOR GRADE, 60 STEEL.
- 8. At transverse construction joints the regular longitudinal steel shall extend a minimum of four feet on either side of the joint.
- 9. VIBRATION WITH HAND-MANIPULATED MECHANICAL VIBRATORS WILL BE REQUIRED ADJACENT TO ALL TRANSVERSE CONSTRUCTION JOINTS.
- 10. THE CHAIRS USED TO SUPPORT THE STEEL SHALL BE OF SUFFICIENT STRUCTURAL GUALITY AND NUMBER TO HOLD THE STEEL MAT WITHIN THE PLACEMENT HEIGHT TOLERANCES. CHAIRS SHALL BE OF A TYPE APPROVED BY THE ENGINEER.
- 11. 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 YIELD STRENGTH OF THE TIEBAR SHOWN. THE SPACING FOR THE SYSTEM SHALL BE LESS THAN OR EQUAL TO THAT OF THE TIEBARS SHOWN.
- 12. JOINT, GROOVE AND SEAL DETAILS SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.
- 13. LONGITUDINAL AND TRANSVERSE STEEL SPACING SHALL NOT VARY MORE THAN ONE-TWELFTH OF THE SPACING SHOWN HEREON.
- 14. IF WIDTHS OCCUR, OTHER THAN THE TYPICAL WIDTHS SHOWN, INDIVIDUAL BARS (WIRES) OF THE SIZE SPECIFIED HEREON MAY BE ADDED OR REMOVED TO OBTAIN THE APPROPRIATE WIDTH. SPACING REQUIREMENTS SHALL NOT BE EXCEEDED, HOWEVER.



OPTIONAL STEEL PLACEMENT ®



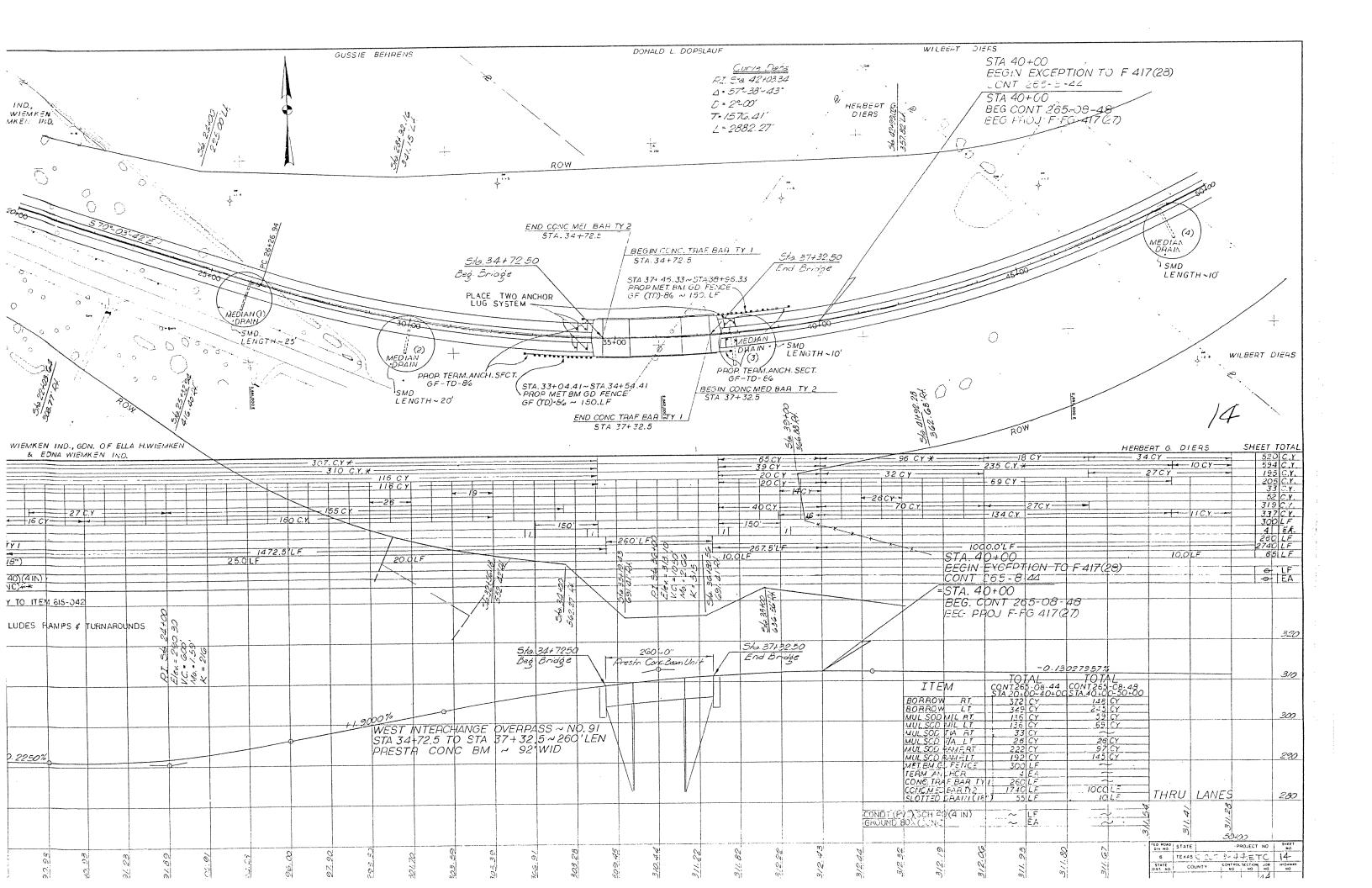
STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION

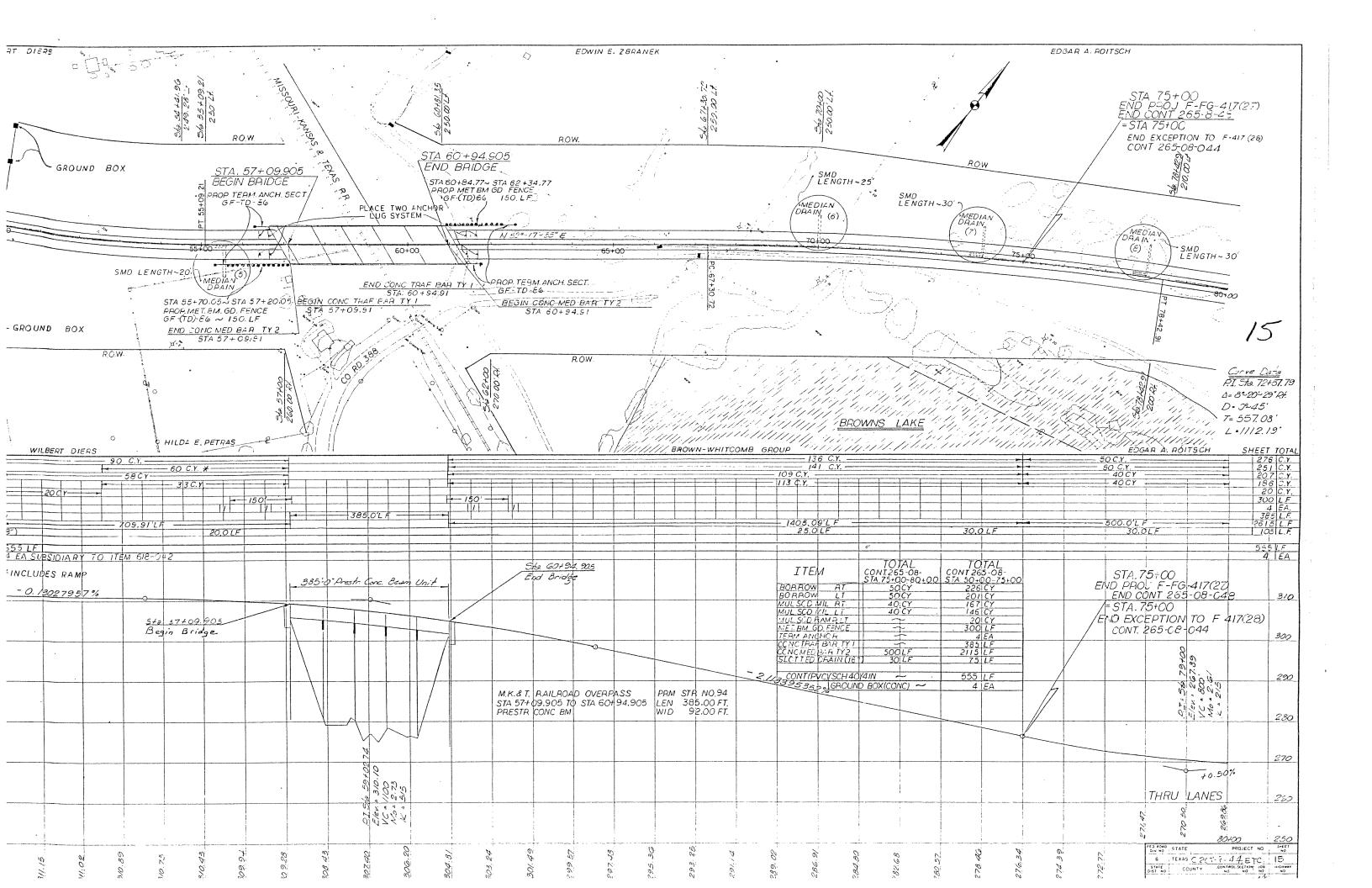
CONCRETE PAVEMENT DETAILS

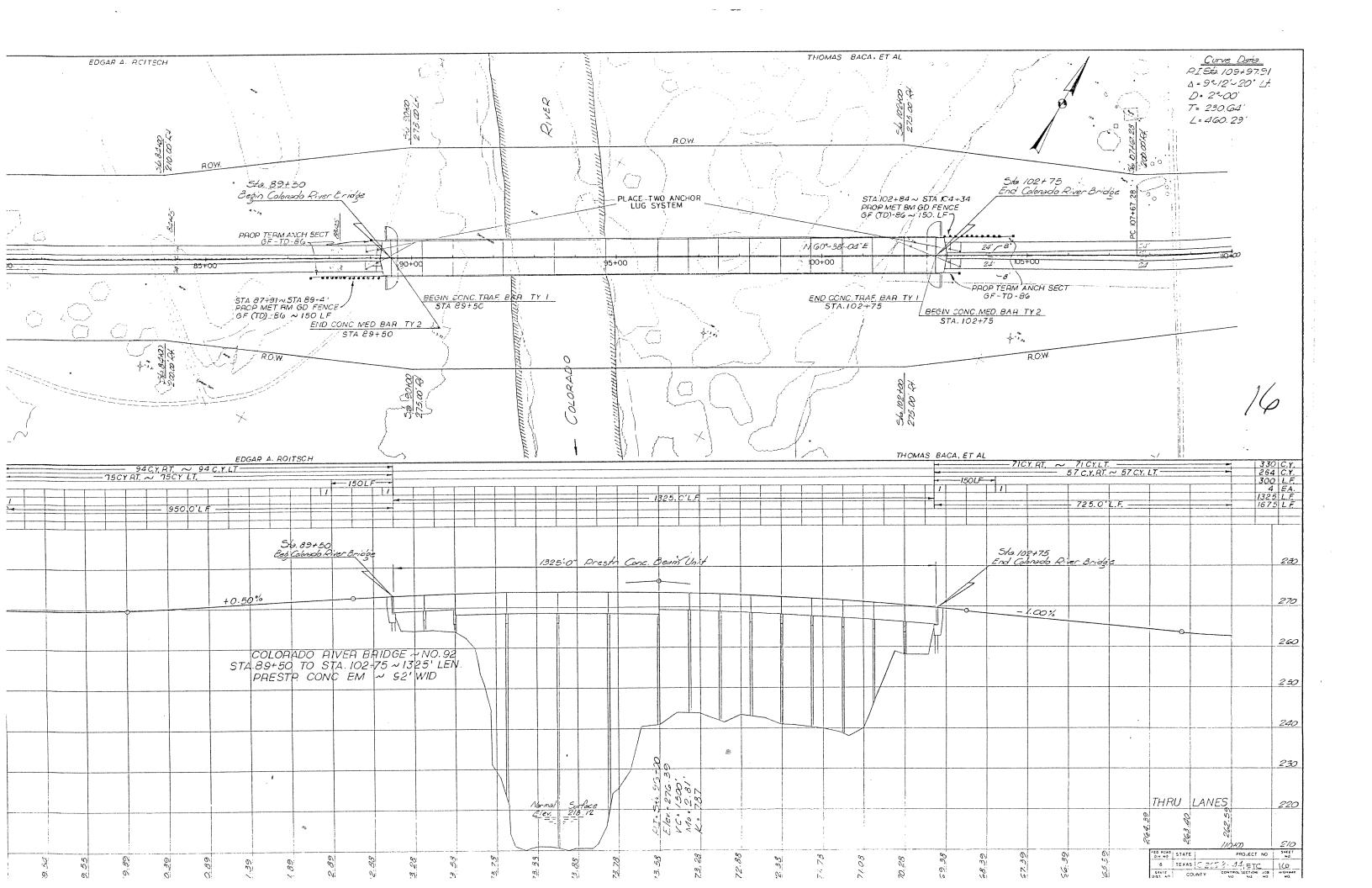
CONTINUOUSLY REINFORCED STEEL BARS

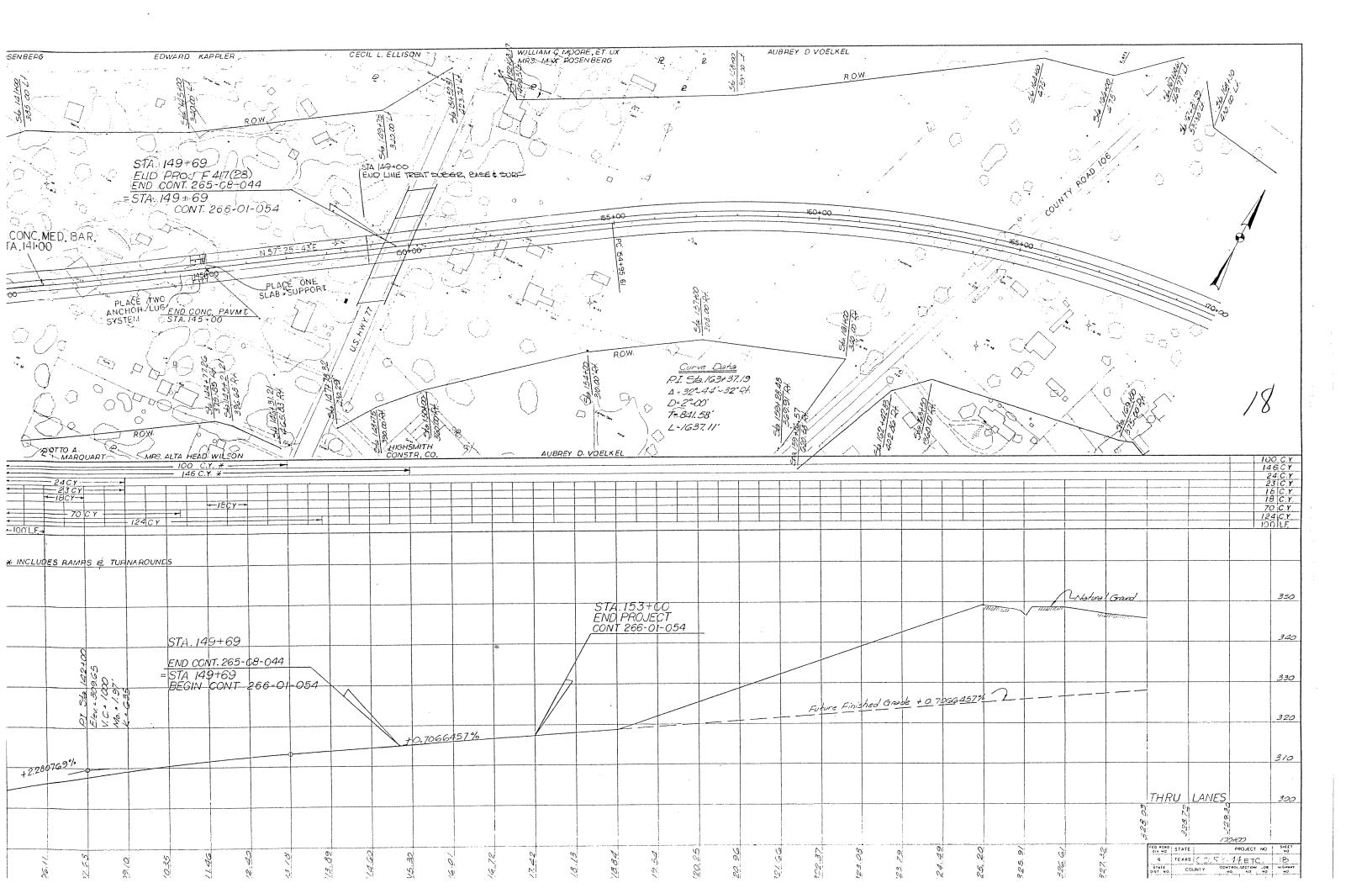
CRCP (B) - 85

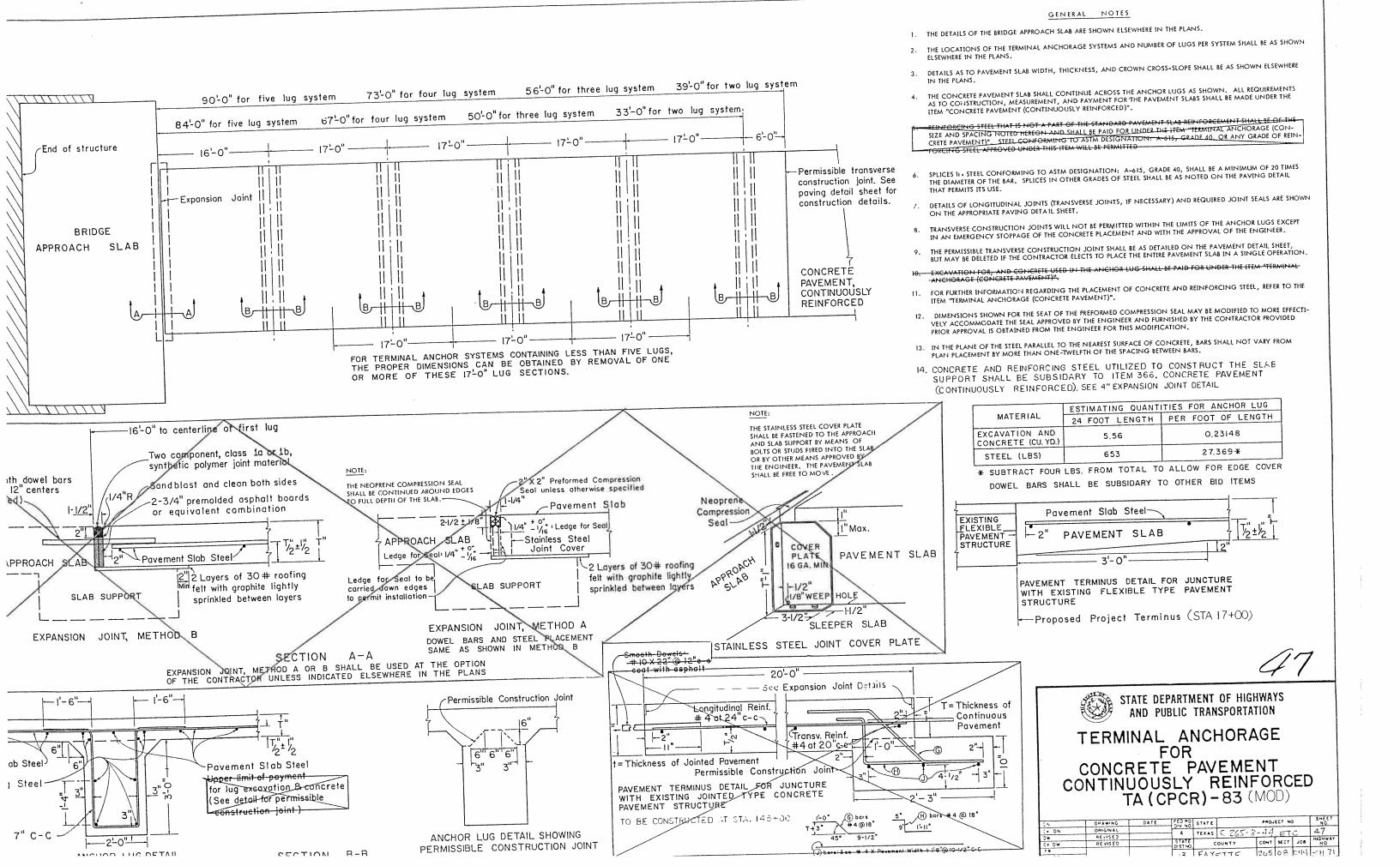
GN I	DRAWING	DATE	FED AD	STATE	PROJECT NO				SHEET NO.	
	ORIGINAL		6	TEXAS	C _UK - 1 - 1	LET	2.		45	-
OW OW	REVISED		STATE	C	OUNTY	CONT.	SECT.	108	HIGH	WAY 0
TR CX TR			13	FAYE	TTE	265	8	44,	SH	71

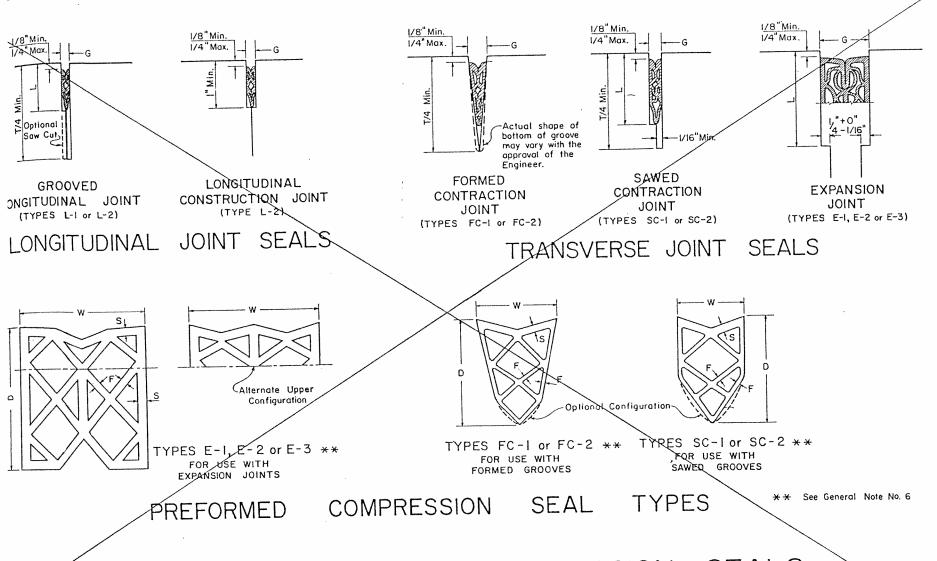












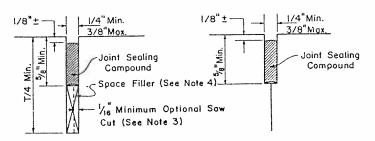
MÉTHOD A: PREFORMED COMPRESSION SEALS

	JOINT G	ROOVE	MINIM	IUM JOI	NT SEA	L SIZE	то в	E USE	₀ 2	SEAL DESIGN-
JOINT TYPE	WIDTH G (In.)	DEPTH	WIDTH W (In.)	DEPTH D (In.)	MAX. WID.LAT. COMP.	THICK. S (In.)	TOLER. ³ S (In.)		TOLER.3	ATION 8 TYPE
LONGITUDINAL	1/8 +1/16	7/8	5/16	5/8	1/8	0.040	-0.005	0.040	-0.005	L-I
1	14 + 1/32	ı	7/16	23/32	7/32	0.062	-0.005	0.040	-0.005	L-2
CAUCO TOME	1, -0	1-1/2	11/16	1-1/8	1/4	0.080	-0.012	0.040	-0.009	sc-I
VERSE CONTRACTION JOINT	3, -0	1-3 /4	13/16	1-1/8	5/16	0.080	-0.012	0.040	-0.009	SC-2
FORMED TRANS-	3/8	N/A	13/16	1-1/8	5/16	0.080	-0.012	0.040	-0.009	FC-I
VERSE CONTRAG	5/8	N/A	1-1/4	1-1/2	5/8	0.080	-0.012	0.080	-0.012	FC-2
	1 *	2-1/8	1-5/8	1-5/8	7/8	0.094	-0.016	0.080	-0.012	E-1
EXPANSION	1-1/4*	2-3/4	2	2	1	0.125	-0.016	0.110	-0.016	E-2
JOINTS	1-5/8	3-3/8	2-1/2	2-3/4	1-1/4	0.187	-0.016	0.125	-0.016	E-3

- THIS GROOVE WIDTH IS FOR SUMMER CONCRETE PLACEMENT. WHEN CONCRETE IS PLACED DURING THE WINTER SEASON, THIS GROOVE SHALL BE INCREASED 1/8".
- I. DUE TO SMALL VARIATIONS IN SEAL SIZES, THIS DIMENSION MAY HAVE TO BE MODIFIED SLIGHTLY TO INSURE PROPER INSTALLATION. THIS DIMENSION IS APPLICABLE ONLY WHEN A STEPPED GROOVE IS USED. N/A: NOT APPLICABLE.
- THESE DIMENSIONS ARE MINIMUM DIMENSIONS. DIMENSIONS GREATER THAN THOSE SHOWN MAY BE USED IF APPROVED BY THE ENGINEER AND IF THEY PERMIT INSTALLATION IN A WORKMANLIKE MANNER AT NO EXTRA EXPENSE TO THE STATE.
- 3. ONLY MINIMUM TOLERANCES ARE SHOWN. ANY REASONABLE OVERSIZE WILL BE ACCEPTED PROVIDED PROPER INSTALLATION IS POSSIBLE.

GENERAL NOTES FOR METHOD "A"

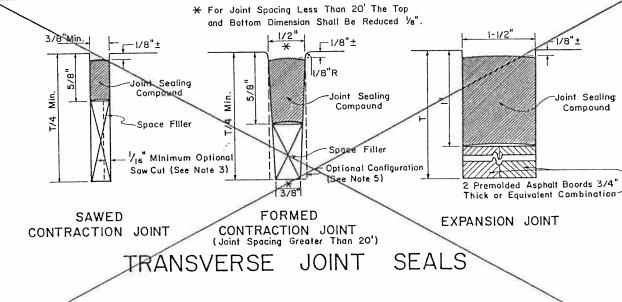
- A SAMPLE OF EACH SIZE AND TYPE OF SEAL PROPOSEO FOR USE SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
- THE SEALS SHOWN AS METHOD "A" OR METHOD "B" MAY BE USED AT ANY JOINT REQUIRING A SEAL, HOWEVER, THE SAME SEAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.
- 3. LONGITUDINAL JOINTS SHALL BE SAWED STRAIGHT AND TRUE TO LINE AS DETAILED IN THE STANDARD SPECI-
- 4. TRANSVERSE JOINTS MAY BE SAWED OR FORMED AND SHALL BE PLACED AS SHOWN ELSEWHERE IN THE PLANS.
- 5. THE SEALS DESIGNATED L-1 AND L-2 SHALL HAVE A CONFIGURATION SIMILAR TO THE TYPE FC OR SC.
- OTHER INTERIOR CONFIGURATIONS MAY BE USED PROVIDED THE MATERIAL MEETS ALL OF THE REQUIREMENTS OF THE SPECIFICATIONS AND AS OTHERWISE SHOWN HEREON OR ELSEWHERE IN THE PLANS. THE NUMBER OF INTERIOR CELLS AND/OR THE THICKNESS OF THE EXTERIOR AND INTERIOR WALLS SHALL BE SUCH AS TO PROVIDE AN ADEQUATE COMPRESSIVE FORCE TO MAINTAIN A POSITIVE SEAL.
 - UNLESS OTHERWISE SPECIFIED, THE SIDES OF THE FORMED CONTRACTION JOINT MAY BE FORMED PARALLEL, BUT IF SO FORMED, THE SEAL SHALL BE AN APPROPRIATE TYPE SC SEAL APPROVED BY THE ENGINEER.
 - UNLESS THE GROOVE AND SEAL COMBINATION IS SPECIFICALLY DESIGNATED ELSEWHERE IN THE PLANS, ANY GROOVE AND SEAL COMBINATION SHOWN IN THE TABLE FOR A PARTICULAR TYPE JOINT MAY BE USED, BUT MUST BE APPROVED BY THE ENGINEER.
 - 9. SEE EXPANSION JOINT DETAIL FOR TRANSVERSE EXPANSION JOINTS.



GROOVED LONGITUDINAL JOINT

LONGITUDINAL CONSTRUCTION JOINT

I ONGITUDINAL JOINT SEALS



METHOD B: JOINT SEALING COMPOUND

GENERAL NOTES FOR METHOD "B"

- 1. LONGITUDINAL JOINTS MAY BE SAWED OR FORMED AS DETAILED IN THE STANDARD SPECIFICATIONS.
- 2. TRANSVERSE JOINTS MAY BE SAWED OR FORMED AND SHALL BE PLACED AS SHOWN ELSEWHERE IN THE PLANS.
- A SUITABLE SPACE FILLER SHALL BE USED WHERE SHOWN AND THE JOINT SEAL COMPOUND POURED TO THE DEPTH INDICATED EXCEPT THAT IF THE MINIMUM SAW CUT IS USED, THE SPACE FILLER MAY BE DELETED.
- 4. AT THE OPTION OF THE CONTRACTOR, THE SPACE FILLER MAY BE OMITTED IN THE LONGITUDINAL JOINT ONLY AND THE JOINT SEALING COMPOUND POURED FULL DEPTH.
- 5. UNLESS OTHERWISE SPECIFIED THE SIDES OF THE FORMED CONTRACTION JOINT MAY BE FORMED PARALLEL AT THE OPTION OF THE CONTRACTOR.
- 6. UNLESS OTHERWISE SHOWN IN THE PLANS, EITHER METHOD "A" OR METHOD "B" MAY BE USED.





STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION

CONCRETE PAVING DETAILS

JOINT SEALS

JS - 75 (MOD)

DN	DRAWING	DATE	FED RD	STATE		SHEET NO.	
CK DN	REVISED		6	TEXAS	C 265-8-	AA, ETC.	49
Cx DW	REVISEO		STATE	c	DUNTY C	ONT SECT JE	HIGHWAY