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STATE OF TEXAS STATE HIGHWAY DEPARTMENT

PLANS OF COMPLETED STATE HIGHWAY IMPROVEMENT

FEDERAL AID PROJECT. S-1513 (6)

PLAN: 1 IN. = 20 FT.
PROFILE: 1 IN. HOR. = 20 FT., 1 IN. VERT. = 4 FT.
CROSS-SECTIONS: 1 IN. HOR. AND VERT. = 5 FT.
OTHERS AS NOTED.

NET LENGTH OF PROJECT= 2,765 FT.= 0.523 MI.

HARDIN COUNTY
STATE HIGHWAY 326
FROM U.S. HWY. 69 IN KOUNTZE, S.W.
GRADING, STRUCTURES AND CONCRETE PAVEMENT

FINAL PLANS
AS CONSTRUCTED

257.53' H 79°41' E From Sta. 4+35.
Sta. 4+42.55 on U.S. Hwy. 69 F-355(6)

BEG OF PROJECT
STA. 4+35
CONT. 601 SEC. 1 JOB

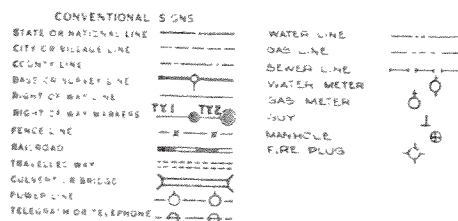
END OF PROJECT S 1513 (6)
STA. 32+00
CONT. 601 SEC. 1 JOB

Class 5' D' borrow pit
Signs: D-34A, D-35,
D-57, D-59, D-67 &
W-155

Class 5' D' borrow pit
Signs: D-34A, D-35,
D-57, D-59, D-67 &
W-155

AS CONSTRUCTED DATA CORRECT

Lester P. Landgraf SR. RES. ENGR. DATE 8/17/67
LESTER P. LANDGRAF SR. RES. ENGR. DATE



SPECIFICATIONS ADOPTED BY THE STATE HIGHWAY DEPARTMENT
OF TEXAS JANUARY 2, 1962 AND
AND DATED AS FOLLOWS: GOVERNED ON THIS PROJECT
SPECIFICATION ITEMS LISTED
REQUIRED PROVISIONS FOR FEDERAL AID CONTRACTS
SECONDARY HIGHWAYS (FORM P.R. 1216, DECEMBER 1965)

ONE RAILROAD CROSSING
(MAIN TRACK & SPUR TRACK)
NO EXCESSIONS
NO EQUATIONS

LAYOUT SCALE: 1 IN. = 400 FT.

STATE HIGHWAY DEPARTMENT

CORRECT. June 2nd '66

Lester P. Landgraf
RESIDENT ENGINEER

RECOMMENDED FOR APPROVAL 6-9-66

John G. Keller
DISTRICT ENGINEER

APPROVED:

APPROVED:

APPROVED:

APPROVED:

APPROVED:

APPROVED:

APPROVED

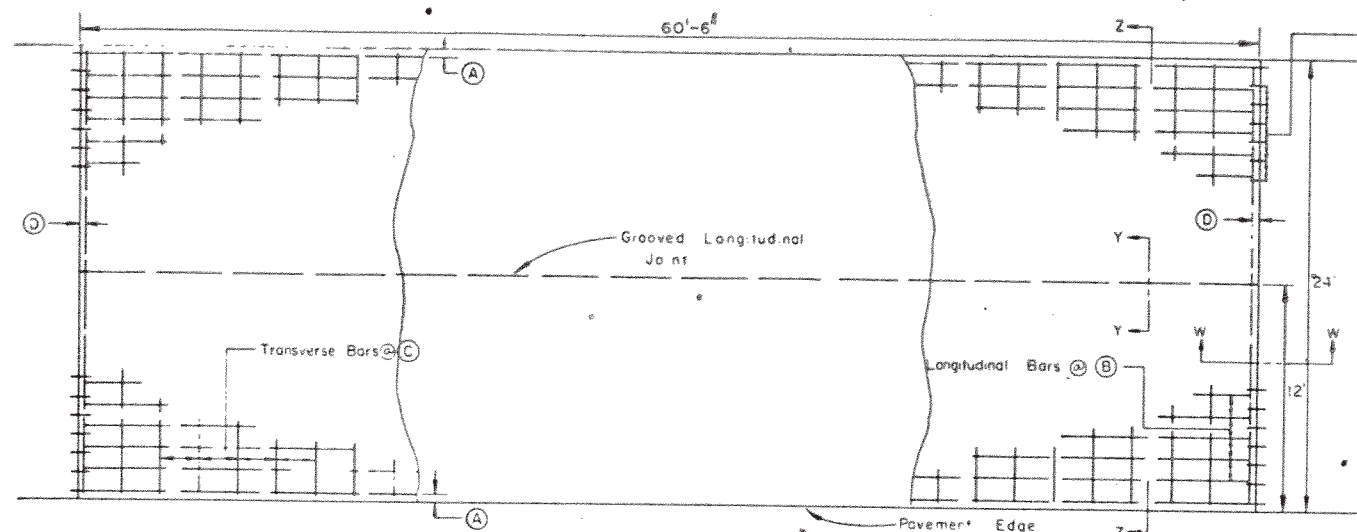
Pat Rose

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

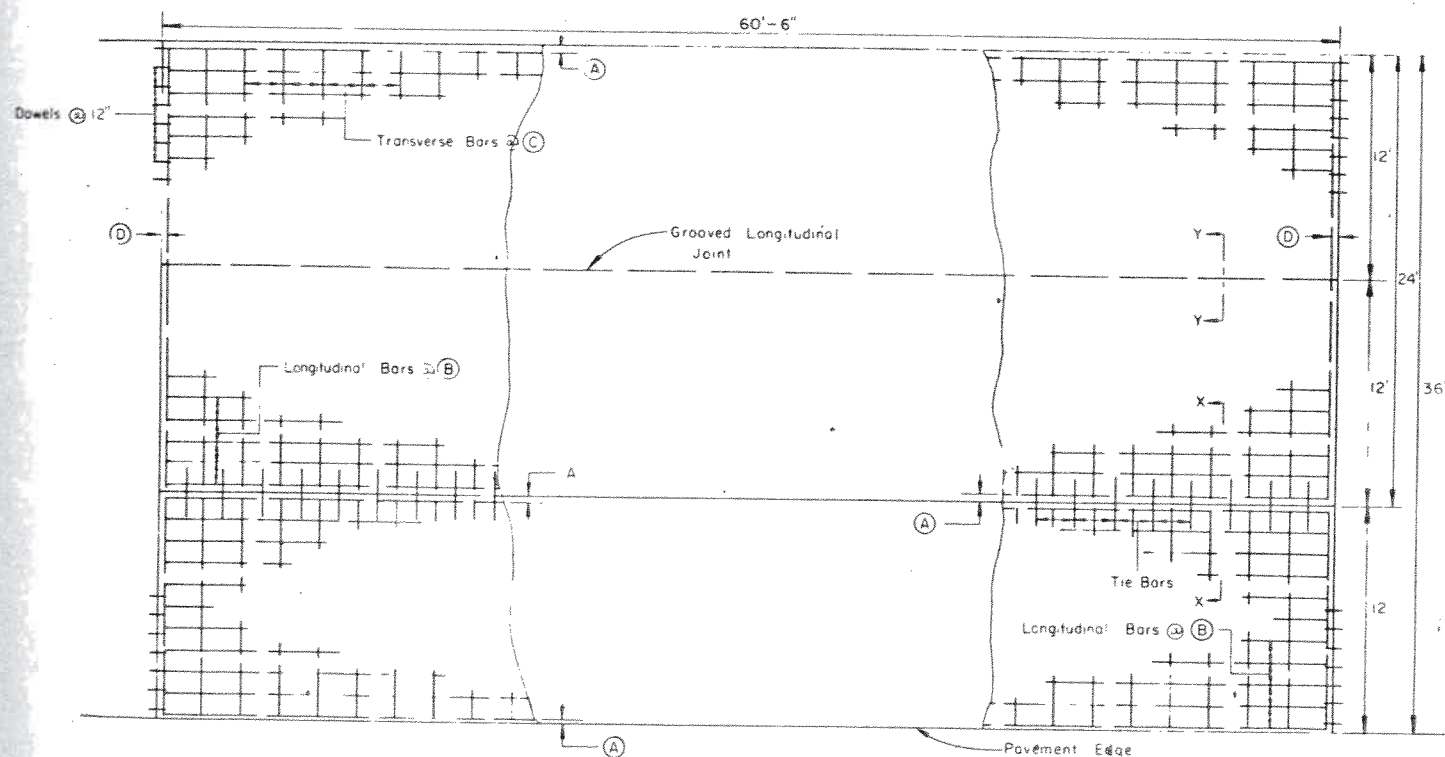
APPROVED:

DIVISION ENGINEER

DATE

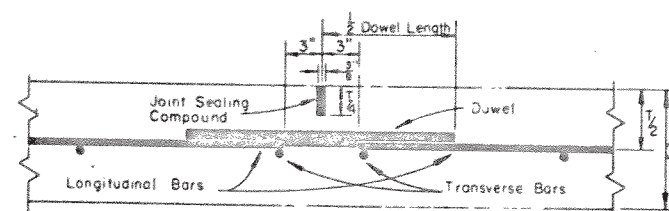


TWO LANE PAVEMENT PLAN
(24 ft. Placement)*

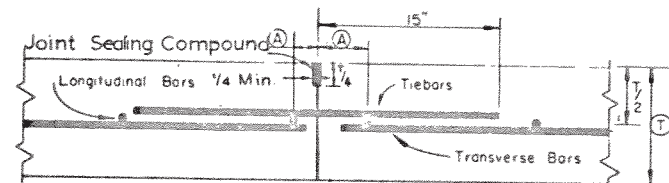


THREE LANE PAVEMENT PLAN
(12 ft. and 24 ft. Placement)*

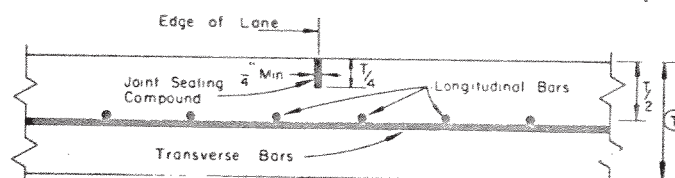
*Lane widths are for illustrative purposes only and should not be used if in conflict with typical cross sections shown elsewhere in the plans.



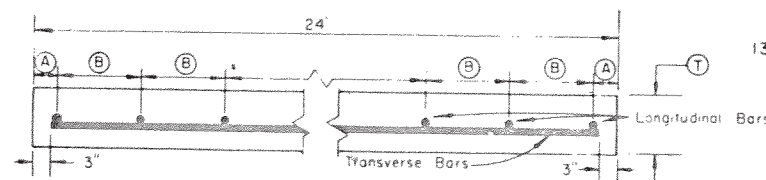
CONTRACTION JOINT
Section W-W



LONGITUDINAL CONSTRUCTION JOINT
(SAWED with Tie Bars)
Section X-X



GROOVED LONGITUDINAL JOINT
(Sawed with Tie Bars)
Section Y-Y



TYPICAL SECTION
Section Z-Z

GENERAL NOTES

- ALL GROOVED JOINTS SHALL BE SAWED VERTICAL AND TRUE TO LINE BY AN APPROVED METHOD AND FILLED WITH CATALYTICALLY BLOWN ASPHALT JOINT SEALING COMPOUND (PENETRATION 68-88).
- CONSTRUCTION JOINTS MAY BE FORMED BY THE 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.
- TREATMENT OF PAVEMENT ENDS AT STRUCTURES OR AT FIXED OBJECTS WILL BE SHOWN ELSEWHERE IN THE PLANS.
- FOR FURTHER INFORMATION REGARDING THE PLACEMENT OF CONCRETE AND REINFORCEMENT 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.
- LONGITUDINAL BARS AND TRANSVERSE BARS SHALL BE INTERMEDIATE GRADE, HARD GRADE, OR HIGH-YIELD STEEL IN ACCORDANCE WITH THE SIZE AND SPACING SHOWN IN THE TABLE, EXCEPT THAT ONLY INTERMEDIATE GRADE STEEL SHALL BE USED WHERE BARS ARE TO BE BENT.
- IT IS THE INTENT OF THIS DESIGN THAT THE LONGITUDINAL STEEL BE AT THE CENTER OF THE SLAB. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO TAKE ALL NECESSARY PRECAUTIONS TO INSURE THAT THE FINAL POSITION OF THE STEEL IS WITHIN 1/2 INCH OF THE SLAB CENTER.
- CONCRETE SHALL NOT BE DISCHARGED FROM THE MIXER DIRECTLY ON TOP OF OR ON THE SIDES OF JOINT ASSEMBLY.
- ANY APPROVED METAL CHAIR TYPE OR DESIGN, WHICH WILL SATISFY THE REQUIREMENTS NOTED HERE WILL BE PERMITTED. CHAIR SPACINGS SHALL NOT BE GREATER THAN 50" C-C MEASURED PARALLEL TO PAVEMENT CENTER LINE AND 30" C-C MEASURED PERPENDICULAR TO THE PAVEMENT CENTER LINE. ADDITIONAL CHAIRS SHALL BE USED IF NECESSARY TO MEET THE STEEL PLACEMENT REQUIREMENTS.
- THE CONTRACTOR SHALL HOLD AND SAVE THE STATE, ITS OFFICERS, ITS AGENTS, AND ITS EMPLOYEE HARMLESS TO LIABILITY OF ANY NATURE OR KIND, INCLUDING COST AND EXPENSES FOR OR ON A/C OF ANY PATENT OR UNPATENTED INVENTION, ARTICLE OR APPLIANCE MANUFACTURED OR USED IN ACCORDANCE WITH THE DETAILS OF THESE PLANS.
- BARS MAY BE PLACED EITHER TOP OR BOTTOM OF JOINT STEEL.

TABLE OF REINF. STEEL SIZES, SPACINGS AND ESTIMATED Q_L

ALTERNATE DESIGNS ①		PAVEMENT THICKNESS (T)* (INCHES)	24' PLACEMENT WIDTH						12' PLACEMENT WIDTH						DOWELS (SMOOTH BARS)		TIE BARS (DEFORMED)			
			LONGITUDINAL			TRANSVERSE			② STEEL #/SY	LONGITUDINAL			TRANSVERSE			② STEEL #/SY	AVG SIZE (IN)	WT #/FT OF JT	AVG SIZE (IN)	WT #/FT OF JT
			BAR #	SPAC (IN)	SPAC (IN)	BAR #	SPAC (IN)	SPAC (IN)		BAR #	SPAC (IN)	SPAC (IN)	BAR #	SPAC (IN)	SPAC (IN)					
L	10	3	4	8	4	24	3	800	3	4	8	4	24	3	771	1 1/8 X 20	12	789	4	24
	9	3	4	8 1/2	4	26 1/2	5 1/2	740	3	4	8 1/2	4	26 1/2	5 1/2	714	1 1/8 X 20	12	566	4	26
	8	3	4	10	4	30	3	648	3	4	10	4	30	3	630	1 1/8 X 20	12	401	4	30
H	10	4	4 1/2	10 1/2	4	18	3	1070	4	4 1/2	10 1/2	4	18	3	1084	1 1/8 X 22	12	789	4	18
	9	4	6	12	4	20	3	957	4	6	12	4	20	3	988	1 1/8 X 20	12	566	4	20
	8	4	2 1/2	13 1/2	4	22	11	868	4	4 1/2	13 1/2	4	22	11	860	1 1/8 X 18	12	401	4	22

NOTE:

- One of the alternate designs must be crossed out.
 - L alternate—to be used with subbases having a low friction factor.
 - H alternate—to be used with subbases having a high friction factor.

2) Steel weights are for contractor's use only and include weights of longitudinal and transverse bars.

GENERAL NOTES CONT'D.

- ALL SMOOTH DOWEL BARS SHALL BE SECURED BY DOWEL BAR CHAIR EXCEPT WHEN PLACED BY APPROVED VIBRATORY METHODS.
- PAVEMENT SHALL TERMINATE WITH A CONSTRUCTION JOINT WITH TIE BARS. ALL EXPOSED STEEL SHALL BE COATED WITH ASPHALT.

TEXAS HIGHWAY DEPARTMENT
CONCRETE PAVEMENT DETAILS
JOINTED REINFORCED
STEEL BARS
CPJR (B) - 62 (SPL)

CHK'D BY	DATE	REVISED	DATE	STATE	COUNTY	CONTRACT	SHEET	NO.
CH BFM		ORIGINAL		TEXAS	HARDIN	601	1	
CK ON MDS		REVISED						
LW JFC								
CK JFW								
TR								
CH TR BFM								

Rev longitudinal const j't Apr 15, 1966

