

FED. ROAD DIST. NO.	STATE	W.P.S. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
9	VT.	183A	1936	1	24

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STATE OF VERMONT

STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED

STATE HIGHWAY

U. S. WORKS PROGRAM GRADE SECONDARY PROJECT (W.P.G.S. 183A)

Standard Structure Sheets 5-28 & 5-29 approved by the Chief Engineer July 11, 1935.

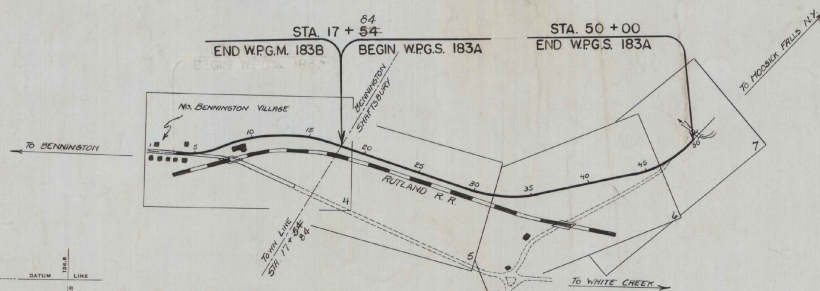
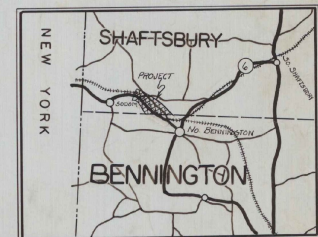
Standard Structure Sheet 5-30 approved by the Chief Engineer Aug 12, 1935.

Standard Structure Sheet 5-31 approved by the Chief Engineer July 25, 1935.

TOWNS TOWN OF SHAFTSBURY BENNINGTON-HOOSICK FALLS N. Y. ROAD

FROM THE BENNINGTON-SHAFTSBURY TOWN LINE NORTHWESTERLY 0.612 MILES.

LENGTH OF PROJECT ~~3202.4~~ ^{3233.6} FT. = ~~0.607~~ ^{0.612} MILES.



CONVENTIONAL SIGNS

COUNTY LINE	GROUND ELEVATION
TOWN LINE	FENCE LINE
STONE WALL	RAILROAD
UNFENCED PROPERTY	RETAINING WALL
GUARD RAIL	CENTER LINE
TRAVELED WAY	SURVEY LINE
RAILROAD	CULVERT
RETAINING WALL	DROP INLET
CENTER LINE	TROLLEY POLE
SURVEY LINE	POWER POLE
CULVERT	TELEPHONE POLE
DROP INLET	TREES
TROLLEY POLE	HEDGE
POWER POLE	
TELEPHONE POLE	
TREES	
HEDGE	

CURVE DATA	
DEFLECTION ANGLE	Δ
DEGREE OF CURVE	D
RADIUS OF CURVE	R
TANGENT DISTANCE	T
LENGTH OF CURVE	L
EXTERNAL DISTANCE	E
POINT OF INTERSECTION	P. I.
POINT OF CURVE	P. C.
POINT OF TANGENT	P. T.
POINT ON TANGENT	P. O. T.

SCALES	
TITLE	1" = 500'
TYPICAL	1" = 2'
PLAN	1" = 50'
PROFILE	HOR. 1" = 50'
	VER. 1" = 10'
CROSS-SECTIONS	1" = 5'

These plans are subject to such revisions as may be required by the Bureau of Public Roads or the Commissioner of Highways. Construction is to be carried on in accordance with the plans and Standard Road and Bridge Specifications of 1930, including all subsequent approved revisions and such revised specifications and special provisions as are included with the plans. Attention of the contractor is called to the fact that the State Highway Board reserves the right to extend this project at the same contract price. Said cost of extension not to exceed 25% of the amount of the contract.

APPROVED: DECEMBER 16, 1935
H. J. Gagnier
 COMMISSIONER OF HIGHWAYS
 SUBMITTED BY ORDER OF THE STATE HIGHWAY BOARD

RECOMMENDED _____
 DISTRICT ENGINEER BUREAU OF PUBLIC ROADS
 RECOMMENDED FOR APPROVAL _____
 CHIEF ENGINEER BUREAU OF PUBLIC ROADS
 APPROVED _____
 DIRECTOR - BUREAU OF PUBLIC ROADS

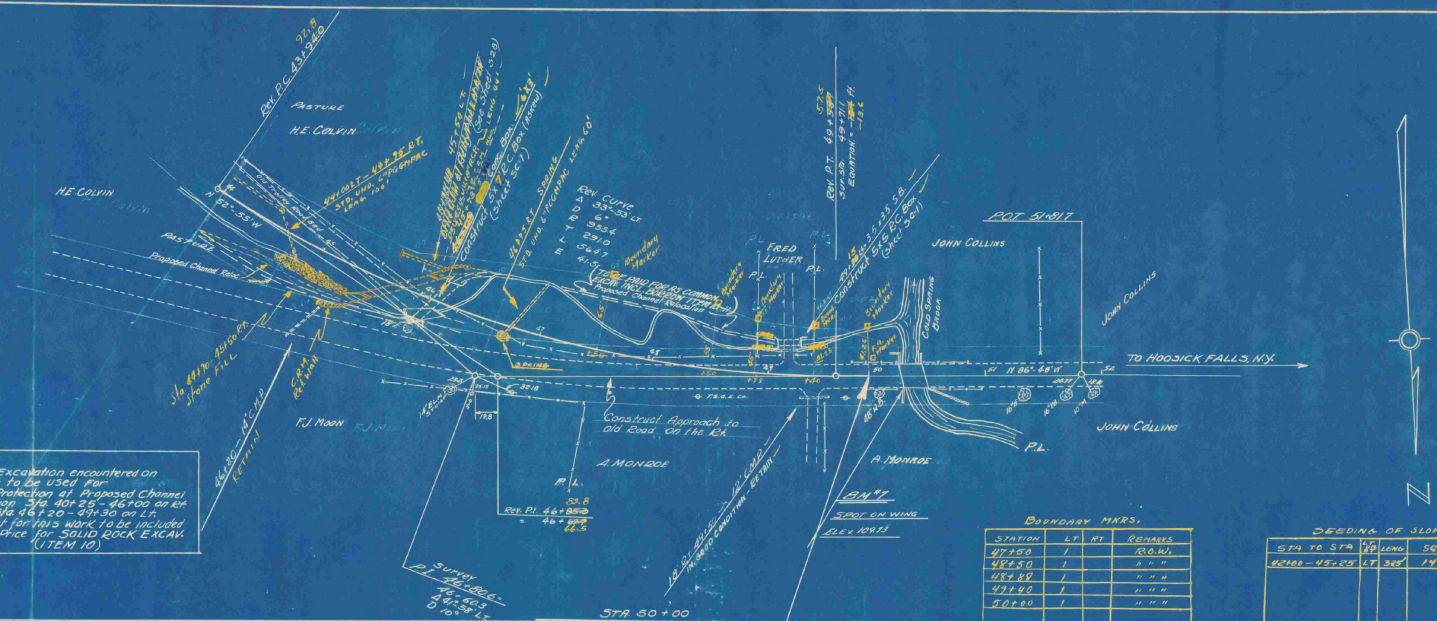
CORRECT: DECEMBER 16, 1935
G. J. [Signature]
 ROAD ENGINEER

SERIES W.P.S. NO. 183A FILED
 SHEET 1 OF 24

PLAN

DATE	11/11/36
BY	J. J. ...
REVISION	...
NO.	...

NOTE:
Rock Excavation encountered on Project to be used for Bank Protection of Proposed Channel Relocation STA 40+55 - 46+00 on an embankment 45' x 20' - 95' x 30' on L.S. Payment for this work to be included in Bid Price for SOLID ROCK EXCAV. (ITEM 10)



BOUNDARY MARKS

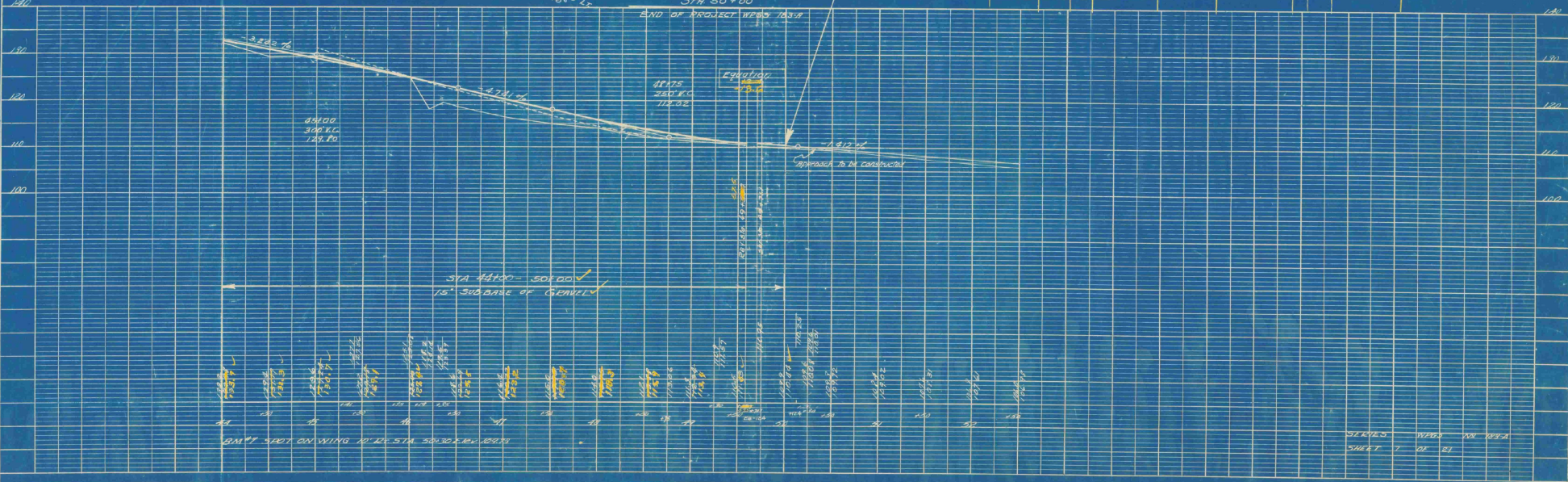
STATION	LT	RT	REMARKS
47+00	1		R.O.W.
48+50	1		" " "
49+45	1		" " "
49+90	1		" " "
50+00	1		" " "

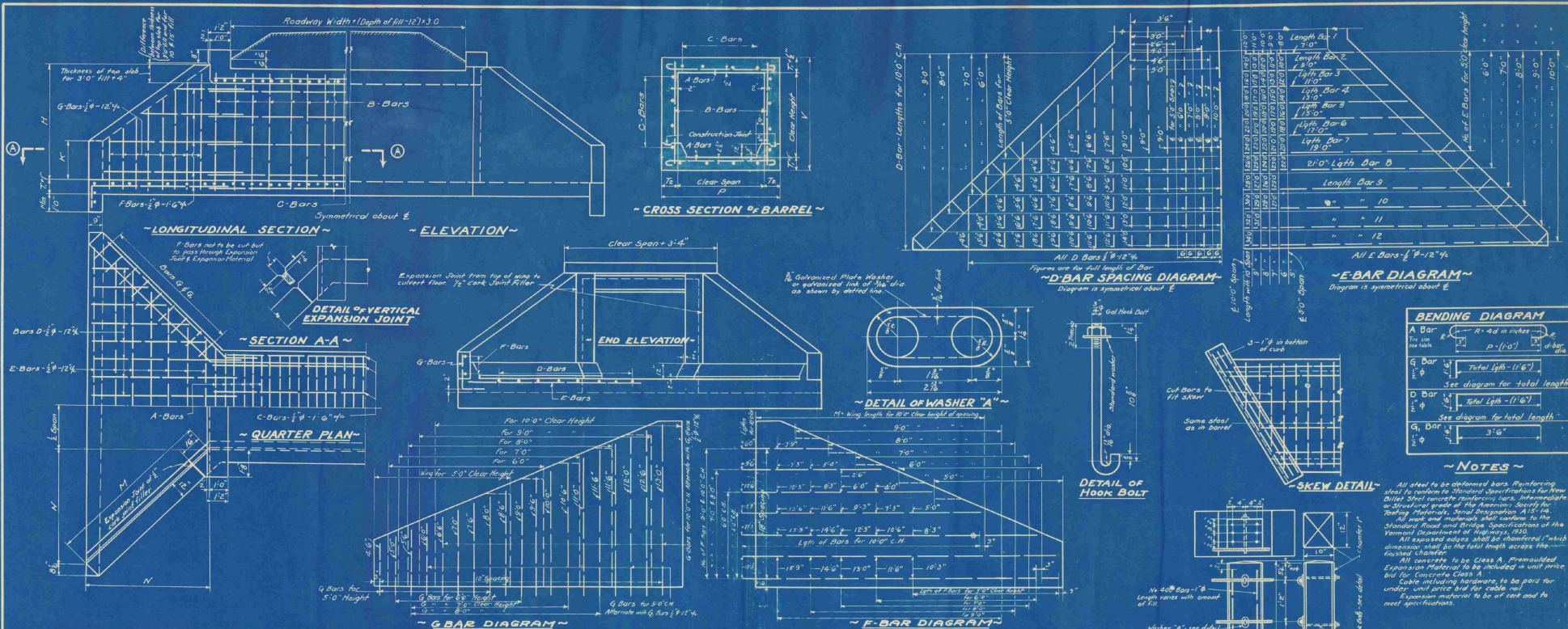
DEEDING OF SLOPES

STA TO STA	LONG	SG. ME.
49+00 - 49+20	17	126.9

PROFILE

DATE	11/11/36
BY	J. J. ...
REVISION	...
NO.	...





DESIGN No.	Clear Span	Clear Height	FOR FILLS NOT OVER 3'-0"						FOR FILLS NOT OVER 10'-0"						FOR FILLS NOT OVER 15'-0"						FOR ALL FILLS																									
			BARREL OF CULVERT						BARREL OF CULVERT						BARREL OF CULVERTS						TWO WINGS AND AN APRON																									
DIMENSION OF REINFORCING STEEL			QUANTITIES			DIMENSIONS			REINFORCING STEEL			QUANTITIES			DIMENSIONS			REINFORCING STEEL			QUANTITIES			DIMENSIONS			REINFORCING STEEL			QUANTITIES																
T	V	P	A-BARS	B-BARS	C-BARS	QTY	WTS	WTS	T	V	P	A-BARS	B-BARS	C-BARS	QTY	WTS	WTS	T	V	P	A-BARS	B-BARS	C-BARS	QTY	WTS	WTS	H	K	M	N	D-BARS	F-BARS	QTY	WTS	WTS											
1	8'0"	2'3"	8	6"	6"	6"	7"	7"	14	4.44	6.77	271	5.6	81	8	6"	6"	8	6"	6"	6"	7"	7"	14	4.44	6.77	271	5.6	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	14	4.44	6.77	271	5.6	81
2	8'0"	3'0"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81
3	8'0"	3'6"	8	6"	6"	6"	8"	8"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81
4	8'0"	4'0"	8	6"	6"	6"	8"	8"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81
5	8'0"	4'6"	8	6"	6"	6"	9"	9"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81
6	8'0"	5'0"	8	6"	6"	6"	9"	9"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81
7	8'0"	5'6"	8	6"	6"	6"	10"	10"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81
8	8'0"	6'0"	8	6"	6"	6"	10"	10"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81
9	8'0"	6'6"	8	6"	6"	6"	10"	10"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81
10	8'0"	7'0"	8	6"	6"	6"	10"	10"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81
11	8'0"	7'6"	8	6"	6"	6"	10"	10"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81
12	8'0"	8'0"	8	6"	6"	6"	10"	10"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81
13	8'0"	8'6"	8	6"	6"	6"	10"	10"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81
14	8'0"	9'0"	8	6"	6"	6"	10"	10"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81
15	8'0"	9'6"	8	6"	6"	6"	10"	10"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81
16	8'0"	10'0"	8	6"	6"	6"	10"	10"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81
17	8'0"	10'6"	8	6"	6"	6"	10"	10"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81
18	8'0"	11'0"	8	6"	6"	6"	10"	10"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81
19	8'0"	11'6"	8	6"	6"	6"	10"	10"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81
20	8'0"	12'0"	8	6"	6"	6"	10"	10"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81
21	8'0"	12'6"	8	6"	6"	6"	10"	10"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81
22	8'0"	13'0"	8	6"	6"	6"	10"	10"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81	8	6"	6"	8	6"	6"	8	6"	6"	7"	7"	16	5.64	8.12	328	7.8	81

VERMONT DEPT. OF HIGHWAYS

STANDARD CONCRETE BOX CULVERT

SPANS - 5 TO 10 FT.

FOR FILLS OF 3 FT. TO 15 FT.

DESIGN DATA

Design for Top slab 10'-0" Clear Span

LL = 12,000
 Top = 4,800
 Total = 16,800

Leading = 2-15 Treads

Effective slab width 17'-0" x 4' 1/2"

7 1/2" Spans where depth of fill of Roadway is 18'-0" or less - The multipliers are -

• 175 + 25 = 200
 • 110 + 25 = 135
 • 30 = 925 x 3.0
 • 100 = 200

REINFORCING STEEL

Bar Lengths see diagram
 Bar Spacing see diagram
 Bar Lengths see diagram
 Bar Spacing see diagram

NOTES

All steel to be deformed bars. Reinforcing steel to conform to Standard Specifications for New Bar. Steel concrete reinforcing bars, intermediate or structural steel of the American Society for Testing Materials, Standard Specification A 307. All work and material shall conform to the Standard Road and Bridge Specifications of the Vermont Department of Highways, 1930.

All exposed edges shall be chamfered (which dimension shall be the total length across the finished chamfer).

Concrete to be Class A. Formulated Expansion Material to be included in unit price but for concrete class B.

Cable including hardware, to be paid for under unit price bid for cable and Expansion material to be of cast and to meet specifications.

Correct: _____ BRIDGE ENGINEER

Designed by H. B. ZACKERMAN
 Drawn by H. B. Z.
 Traced by A. G. H.
 Checked by J. C. D.
 Series No. 361 Filed _____
 Sheet of Sheets _____