STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

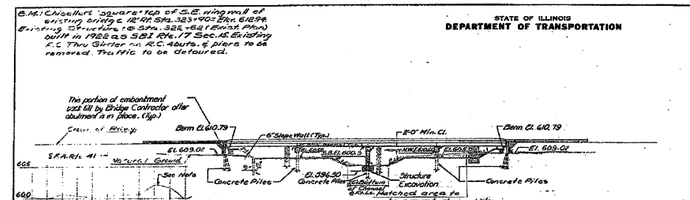
SHEET NO. 1 OF 6 SHEETS

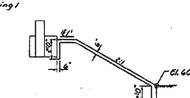
GENERAL NOTES

See Proposal for Paving Data.
All structural steel shall be shop painted with two coats of basic lead silico chromate paint.
Slope wall shall be reinforced with welded wire fabric 6x6 mesh, weighting 58 lbs. per 100 sq. ft.
Layout of slope walls may be varied in the field to suit ground conditions as directed by the Engineer.
Expansion guards which are not cast in the precast unit shall be fabricated and erected in accordance with Article 505.07(a) of the Std. Specs. and are included in quantity of structural steel.
The top surface of the beams shall be finished in accordance with Article 505.06 of the Std. Specs. except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners.
Reinforcement bars in the field units shall conform to the requirements of AASHTO M31 or M615 Grade 60.
The concrete rail section above the membrane construction joint at the top of the deck beams shall be constructed of Class I concrete, except the aggregates shall conform to the requirements of Hardrail Concrete.
Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.
The contractor shall drive 3 Precast Concrete Test Piles in a permanent location, One each at Pier 1 and East Abut. as directed by the Engineer before ordering the remainder of piles.
Concrete piles at abutments shall be driven in 14"ø holes pre-cored 10 ft. into natural ground.

TOTAL BILL OF MATERIAL

Item	Unit	Super.	Sub.	Total
Preformed Joint Seal* 4"	Ln. Ft.	97		97
Waterproofing Membrane System	Sq. Yds.	871		871
Fine Mortar Patching Course	Sq. Yds.	43.36		43.36
Bituminous Concrete Surface Course, Class I	Tons	1051		1051
Protective Coat	Sq. Yds.	184		184
Class I Concrete	Cu. Yds.	13.5	141.5	1914
P.C.C. Deck Beams (17")	Sq. Ft.	8364		8364
Structural Steel	Lbs.	6510		6510
Reinforcement Bars	Lbs.	6440	87760	94160
Precast Concrete Piles (16")	Lin. Ft.		1103	1103
Test Piles, Precast Concrete	Each	3		3
Name Plates	Each	1		1
Steel H-Piles (12")	Lin. Ft.		588	588
Channel Excavation	Cu. Yds.		560	560
Removal of Cast Structures	Each		1	1
Structure Excavation	Cu. Yds.		464	464





STATION 323+21.04
BUILT IN 19 BY
STATE OF ILLINOIS
CO. RT. 41 SEC. 15 BR-2

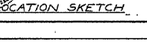
LOCATION PLATE
(See Sht. 2 of 6)
*STR. NO.
*Structure No. to be supplied by District

WATERWAY INFORMATION
Drainage Area 49 Sq. Miles
Character Timber, cultivated.
Overflow Channel 936 Sq. Ft.
Proposed Opening 938 Sq. Ft.
H.W.El. (50) = 610.6
Q (50) = 32000 c.f.s.
Calculated Head = 0.26'
H.W.El. (100) = 611.0
Q (100) = 36,700 c.f.s.
Calculated Head = 0.55'

PRESTRESSED UNITS
f'c = 5,000 psi
f'ci = 4,000 psi
fs = 270,000 psi (5/8" Strands)
fsi = 189,000 psi (5/8" Strands)

FIELD UNITS
f'c = 4,000 psi
fs = 60,000 psi (Reinf.)
fs = 20,000 psi (Struct.)
Loading H 20-44

Design Specifications: 1977 AASHTO as applicable.
Allow 25'-1 3/8" Ft. For Future W.B.



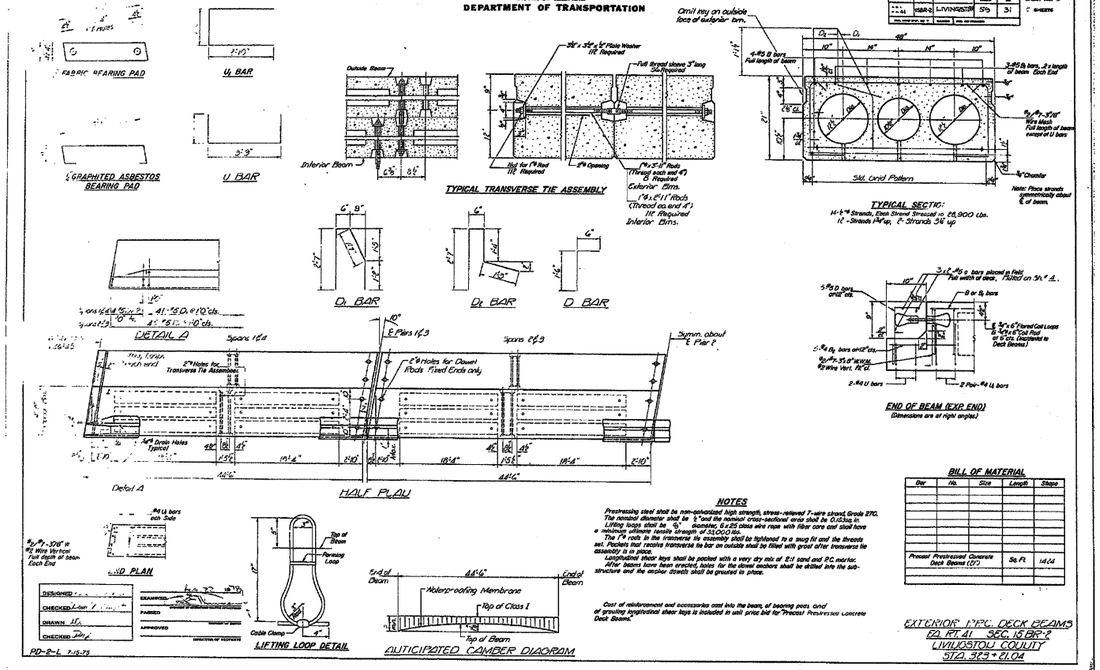
LOCATION SKETCH

GENERAL PLAN & ELEVATION
F.A.R.TE 41 OVER EAST FORK OF MAZON RIVER
F.A.R.TE 41 SECTION 15 BR-2
LIVINGSTON CO.
STA. 323 + 21.04

PD-P-L 7-13-79

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 2 OF 6 SHEETS



NOTES

Prestressing steel shall be non-galvanized high strength, stress-relieved 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 5/8" diameter, 6 x 25 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 52,000 lbs.
The 1"ø rods in the transverse tie assembly shall be tightened to a snug fit and the threads wet. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place.
Longitudinal shear keys shall be packed with a very dry mix of 2:1 sand and P.C. mortar. After beams have been erected, holes for the dowel anchors shall be drilled into the substructure and the anchor dowels shall be grouted in place.

Cost of reinforcement and accessories cast into the beam, of bearing pads and of grouting longitudinal shear keys is included in unit price bid for "Precast Prestressed Concrete Deck Beams."

BILL OF MATERIAL

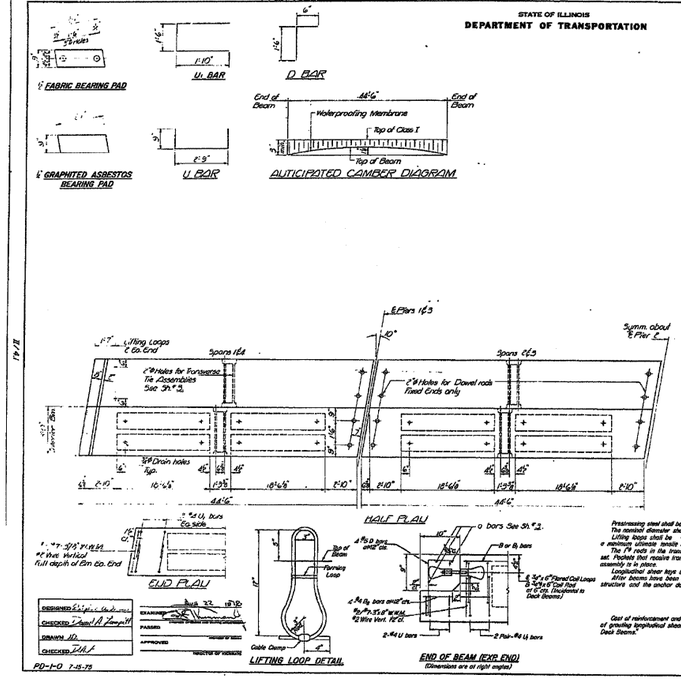
Bar	No.	Size	Length	Shape
Precast Prestressed Concrete Deck Beams (17")		Sq. Ft.	1414	

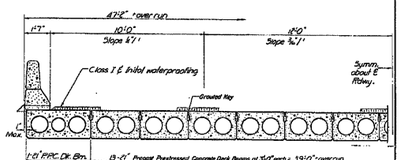
EXTERIOR P.P.C. DECK BEAMS
CO. RT. 41 SEC. 15 BR-2
LIVINGSTON COUNTY
STA. 323+21.04

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 3 OF 6 SHEETS





BILL OF MATERIAL

Bar	No.	Size	Length	Shape
Precast Prestressed Concrete Deck Beams (17")		Sq. Ft.	6348	

NOTES

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INTERIOR P.P.C. DECK BEAMS
CO. RT. 41 SEC. 15 BR-2
LIVINGSTON COUNTY
STA. 323+21.04

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
41	15 BR-2	LIVINGSTON	64	51
		CONTRACT NO. 66691		
	ILLINOIS FED. AID PROJECT			