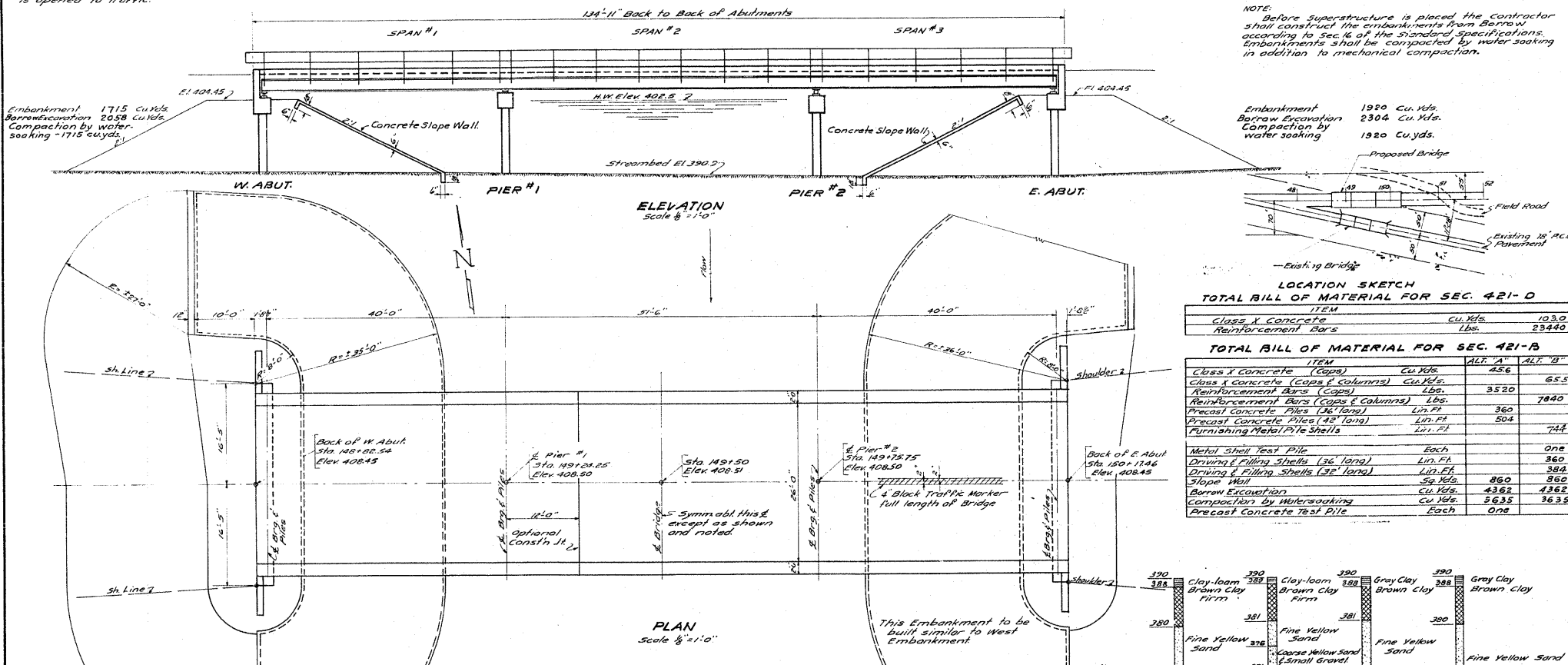


STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
421-B	St. Clair	41	31
SHEET NO. 1 5 SHEETS			

341' Top of Subguard of NW Corner of Bridge
33' RT. Sta. 149+02 ELEV. 402.42
Existing Structure - 3-32' I-Beam spans on
crossed Pile Bents to be removed by
Pavement Contractor after New Pavement
is opened to traffic.



NOTE:
Before Superstructure is placed the Contractor shall construct the embankments from Borrow according to sec. 4 of the Standard Specifications. Embankments shall be compacted by water-soaking in addition to mechanical compaction.

Embankment 1715 Cu. Yds.
Borrow Excavation 2058 Cu. Yds.
Compaction by water-soaking - 1715 Cu. Yds.

Embankment 1920 Cu. Yds.
Borrow Excavation 2304 Cu. Yds.
Compaction by water-soaking 1920 Cu. Yds.

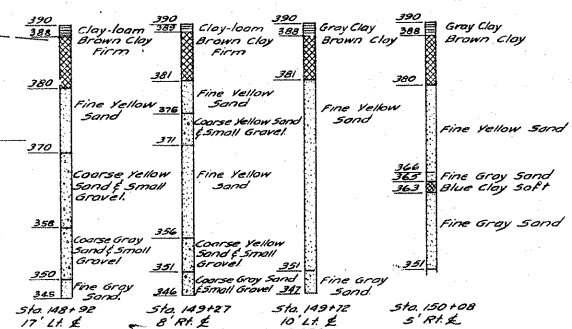


TOTAL BILL OF MATERIAL FOR SEC. 421-D

ITEM	CU. YDS.	103.0
Class X Concrete		
Reinforcement Bars	Lbs.	23440

TOTAL BILL OF MATERIAL FOR SEC. 421-B

ITEM	ALT. 'A'	ALT. 'B'
Class X Concrete (Caps)	Cu. Yds.	45.6
Class X Concrete (Caps & Columns)	Cu. Yds.	65.5
Reinforcement Bars (Caps)	Lbs.	3520
Reinforcement Bars (Caps & Columns)	Lbs.	7840
Precast Concrete Piles (36' long)	Lin. Ft.	360
Precast Concrete Piles (42' long)	Lin. Ft.	504
Furnishing Metal Pile Shells	Lin. Ft.	744
Metal Shell Test Pile	Each	One
Driving & Filling Shells (36' long)	Lin. Ft.	360
Driving & Filling Shells (42' long)	Lin. Ft.	504
Slope Wall	Sq. Yds.	860
Borrow Excavation	Cu. Yds.	4362
Compaction by Water-soaking	Cu. Yds.	5635
Precast Concrete Test Pile	Each	One



TOTAL BILL OF MATERIAL FOR SECS. 421-F, 421-E & 421-P

ITEM	SEC. 421-F	SEC. 421-E	SEC. 421-P
Structural Steel	Lbs.	100,680	100,680
Name Plates	Each	One	One
Painting Structural Steel	Lbs.		100,680

GENERAL PLAN & ELEVATION
OVERFLOW CHANNEL OF KASKASKIA RIVER
S.B.I. RT. 150 (F.A. RT. 68) SEC. 421-BDE-F-P
ST. CLAIR COUNTY
STA. 149+50

GENERAL NOTES

Class X concrete shall be used throughout. Concrete floor slab shall be poured in one continuous operation between construction its shown and finished in accordance with Art. 613(e) of the Standard Specifications. Reinforced Joint filler shall conform with Art. 115.67 or 115.68 of the Standard Specifications. Slope wall shall be reinforced with welded wire fabric, 6"x6" mesh, 4 wires, weighing 50 lbs. per 100 sq. ft. All rivets and open holes shall be except as noted. All connections shall be riveted except as noted. All splices for stringers shall have rivet holes punched and reamed to proper size with all stringers of a continuous unit assembled in shop in their proper positions, with or without the Diaphragms in place. Leave assembled for shop inspection. See sheet 421-P for field reaming of Rail Post connections and alignment of Rolling. Provide one Lock Washer on all bolts connecting Rail to Posts, also provide 1/2" and 1/8" shims for Rail connections to 80% of Posts. All Rollers, Bearing Plates, Lead Plates and Anchor Bolts shall be furnished, painted and set in accordance with Art. 54.3(d) of the Standard Specifications and paid for as Structural Steel. No sectional construction joints will be allowed in concrete floor slab.

Anchor Bolts shall be set before riveting Diaphragms over Abutments and Piers. Inspection of Structural Steel by Illinois Division of Highways before painting. Structural Steel shall receive one shop coat of red lead paint, see Art. 55.8 of the Standard Specifications for painting of contact and inaccessible surfaces and surfaces in contact with concrete. Shop paint shall be furnished and applied by the Contractor for section 421-P. After erection rivet heads and abrasions to shop coat shall be spot painted with red lead paint by Contractor for sec. 421-P. All structural steel shall receive two field coats of aluminum paint which shall be furnished and applied by Contractor for sec. 421-P. The Contractor shall drive one Test Pile (Metal Shell or Precast Concrete Pile) as directed by the Engineer before casting or driving remainder of piles. Boring Data are shown on the drawings only as a guide to bidders in estimating soil conditions which may be encountered in the work.

WATERWAY DATA

Waterway Area	294250 Acres	f _s = 12000' / 6" Steel
Character	Rolling - bridges	f _s = 20000' / 6" Reinf.
Equivalent (Railroad)	34	f _c = 17000' / 6" x 18
Present Bridge Opening	1050 Sq. Ft.	N=20 LOADING
Opening Provided	1050 Sq. Ft. this Bridge	
Opening Provided (4 Bridges)	2450 Sq. Ft.	

COMPUTED	Edward J. Dublin	EXAMINED	
CHECKED	R. J. Smith	PASSED	
DRAWN	E. P. Robinson	APPROVED	
CHECKED	R. J. S.		
ASSEMBLED			
CHECKED			

Revised 1-4-46 L.A.W.

FOR INFORMATION ONLY