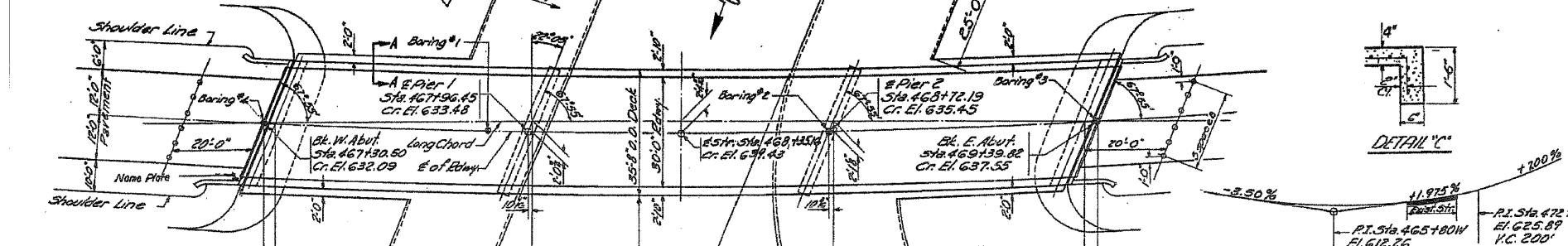
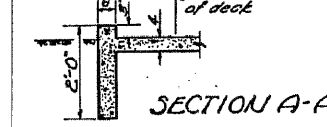
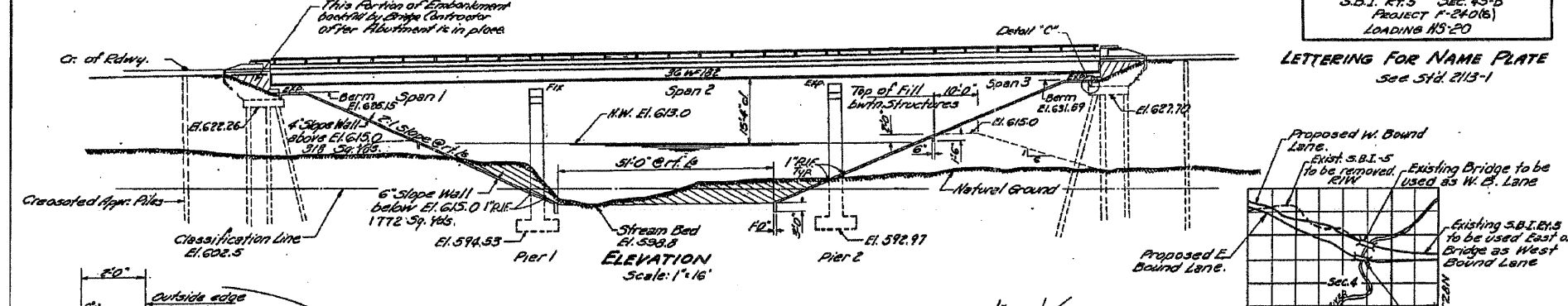


STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

STATION 468+35  
BUILT 19. BY  
STATE OF ILLINOIS  
S.B.I. RT. 5 SEC. 45-B  
PROJECT F-240(6)  
LOADING 45-20

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8/15/61	45A+B	JO DAVIESS	166	21
PROJECT: F-240(6)			SHEETS: 17	

B.M. 10 on S.W. corner of W. Abutment of existing bridge  
Elev. 619.07  
Existing Bridge: 4 Span P.C.D.G. on Concrete  
Substructure, Rebuilt in 1955 as Sec. 30 B.Y.  
to remain in place on West Bound Lane.



**HORIZ. CURVE DATA**

A = 26° 21'  
D = 2° 30'  
R = 2792.01  
T = 536.53  
L = 1054.00  
E = 60.33  
Max. S.E. = 0.045 1/4"  
Full S.E. on full length of Bridge.

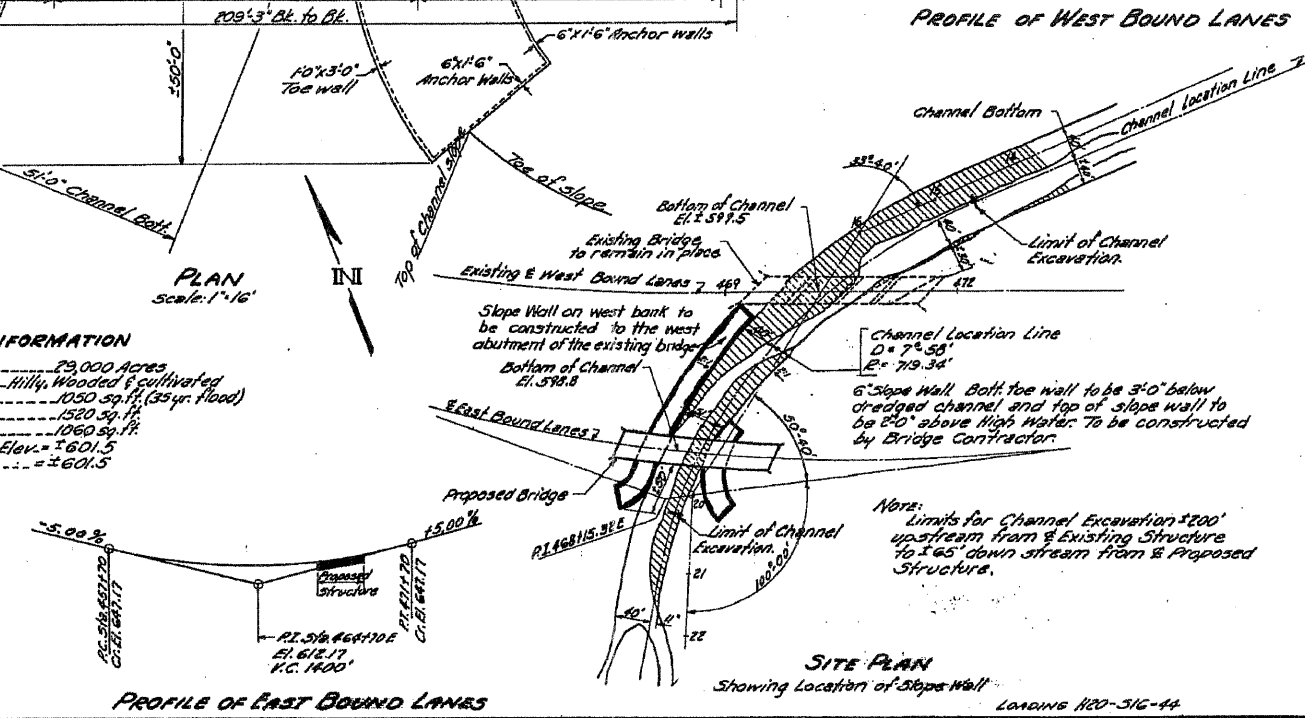
**DESIGN STRESSES**  
f<sub>c</sub> = 4000 psi. (Super.)  
f<sub>c</sub> = 75 psi. (Pier Figs.)  
f<sub>s</sub> = 20,000 psi. (Reinft.)  
f<sub>s</sub> = 20,000 psi. (Structure)  
Max. Footing Pressure = 2.8 1/2"  
Average Footing Pressure = 1.5 1/2"  
γ = 110

**APPROACH PILE DATA**  
Crested Timber Piles  
Length = 25'-0"  
No. Req'd. = 12

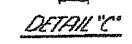
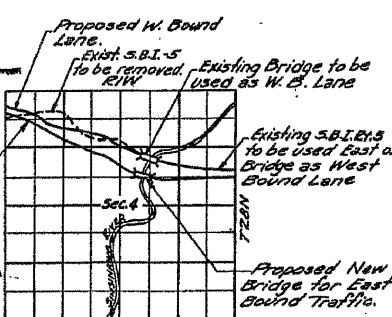
**WATERWAY INFORMATION**  
Drainage Area = 29,000 Acres  
Character = Milly, Wooded & cultivated  
Key'd Opening = 1050 sq. ft. (34yr. Flood)  
Present Opening = 1500 sq. ft.  
Proposed Opening = 1060 sq. ft.  
Ordinary Water Elev. = ±601.5  
Low Water Elev. = ±601.5

DESIGNED	H. A. Luff
CHECKED	C. W. S. D.
DRAWN	E. R. S.
CHECKED	C. W. S. D.

EXAMINED	Aug 25 1961
PASSED	H. C. B.
APPROVED	R. B. B.



LETTERING FOR NAME PLATE  
see Std. 2113-1



**GENERAL NOTES**

Class X concrete shall be used throughout.  
Coarse aggregate to be used in parapet handrails & end posts must be absolutely free of chert, flint, limonite, lignite & soft sandstone.

The concrete floor slab shall be finished in accordance with Article 51.19 of the Standard Specifications.  
Slope wall shall be reinforced with welded wire fabric 6"x6" mesh, #4 wire, weighing 20# per 100 sq. ft.  
Layout of slope walls may be varied to suit ground conditions in the field, as directed by the Engineer.  
Piles 3/4" x 6" open holes 1/2" x 6" unless noted.  
All Structural Steel shall conform to ASTM Specifications A-36.

All bolsters, rockers, bearing plates, lead plates, pintles and anchor bolts shall be fabricated and set in accordance with Article 51.15 of the Standard Specifications and are included in quantity of Structural Steel.  
Anchor bolts shall be set before riveting diaphragms over supports.

Expansion guards shall be fabricated and erected in accordance with Article 51.13 (d) of the standard Specifications.

Expansion guards are included in quantity of Structural Steel, Est. Weight 1820 Lbs.  
The following surfaces of expansion guards shall be given two shop coats of red lead paint, outside face of vertical legs and top face of horizontal legs of 4"x4"x8. Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. See Articles 56.1 to 56.5 inclusive of the Standard Specifications.

The contractor shall drive two test piles in permanent location as directed by the Engineer before ordering remainder of piles. One each, test pile at East Abutment and West Abutment.

Bridge Seal Sealant shall be used at Abutments only.  
Permanent forms will not be permitted in forming the Concrete Floor.

Excavation for portions of structures in the embankments shall not be classified.

**SEC. 45-B**  
**TOTAL BILL OF MATERIAL**

Item	Unit	Superstr	Substr	Total
Class X Concrete	Cu. Yds.	2272	334.0	2606
Reinforcement Bars	Lbs.	58210	21,110	79,320
Structural Steel	Lbs.	273,620		273,620
Class B Excav. for Str.	Cu. Yds.		430	430
Aluminum Handrail	Lb. Ft.	412		412
Slope Wall - 4'	Sq. Yds.		318	318
Name Plates	Each	1		1
Crested Piles	Lb. Ft.		300	300
Steel Piles (6 0P36)	Lb. Ft.		770	770
Steel Test Piles (8 0P36)	Each		2	2
Slope Wall 6'	Sq. Yds.		1772	1772
Bridge Seal Sealant	Lump Sum		1	1
Protective Coat	Sq. Yds.	930		930

\* Includes excavation for slope wall

GENERAL PLAN & ELEVATION  
SINSINAWA RIVER  
PROJECT F-240 (6)  
S.B.I. RT. 5 SEC. 45-B  
JO DAVIESS COUNTY  
STA. 468+35