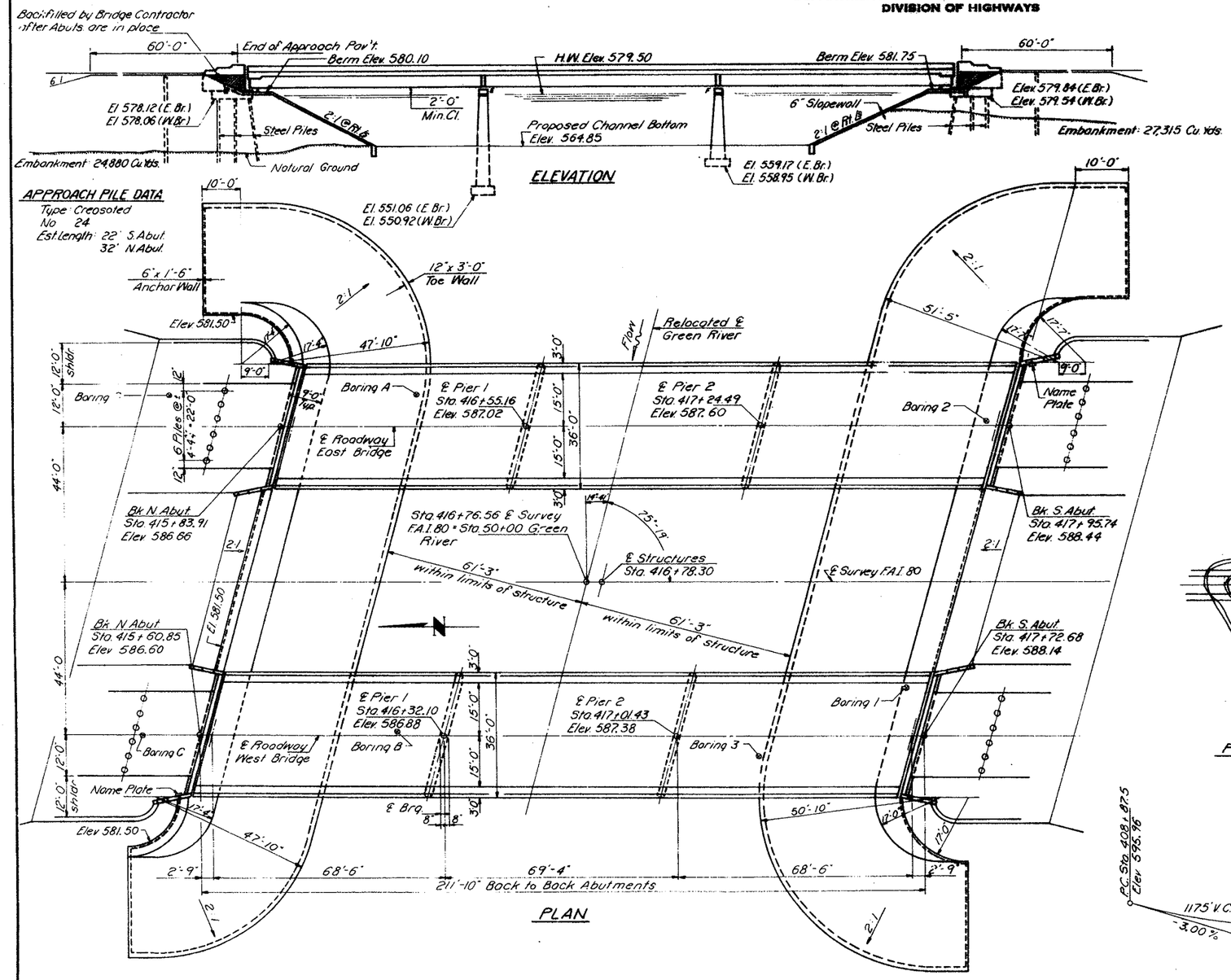
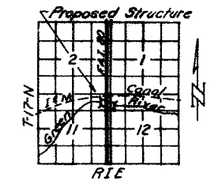
B.M.: P.K. Nail in Trunk of benched 24" Elm 166' Rt. of Sta. 421+00 Elev. 575.37

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

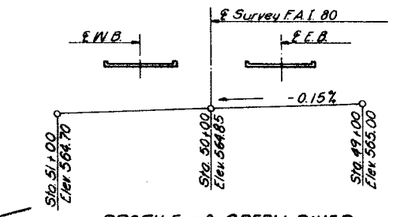
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 80	37-18-1	HENRY	37	6
PROJ. ADMIN SHEET NO. 7	ILLINOIS	PROJ. AID PROVISION: I-80-1(52)7		

SHEET NO. 1
12 SHEETS

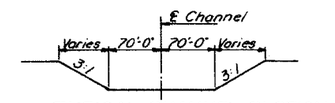




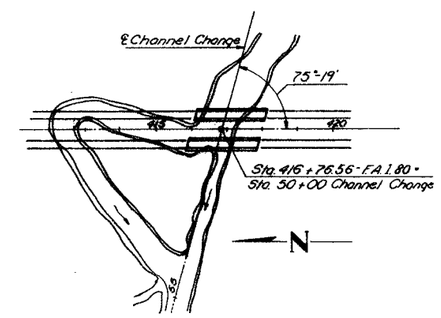
LOCATION PLAN



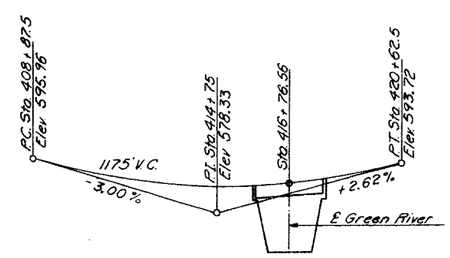
PROFILE of GREEN RIVER



TYPICAL CHANNEL SECTION
Outside Limit of Structure



PLAN of CHANNEL CHANGE



GRADE PROFILE F.A.I. 80

GENERAL NOTES

Class X Concrete shall be used throughout except as noted.

Class A Concrete shall be used in piers.

Coarse aggregate to be used in parapet handrails and end posts must be free of chert, flint, limonite, lignite and soft sandstone.

The concrete floor slab shall be finished in accordance with Article 51.19 of the Standard Specifications.

Permanent forms will not be permitted in forming the concrete floor.

For concrete to be used in prestressed beams see special provisions.

Slope Wall shall be reinforced with welded wire fabric 6"x6" mesh, weighing 58# per 100 Sq. Ft.

Layout of slope walls may be varied to suit ground conditions in the field, as directed by the engineer.

All reinforcement bars shall be lapped 20 diameters unless shown otherwise.

Expansion guards shall be fabricated and erected in accordance with Article 51.13 (d) of the Standard Specifications. Est. Wt. = 3450#

The exposed surfaces of the expansion guards shall be given two shop coats of red lead paint, the contact surfaces shall be given one coat of red lead paint. Anchor studs shall not be painted.

The contractor shall drive one steel test pile at the North Abutment of West Bridge and one steel test pile at the South Abutment of East Bridge, all in permanent locations, as directed by the engineer before ordering remaining piles.

Drive all steel piles to refusal.

STATION 416+78.30
BUILT 196 BY
STATE OF ILLINOIS
F.A.I. RT. 80 SEC. 37-18-1
F.A. PROJ. I-80-1(52)
LOADING H20-S16 & ALT.

NAME PLATE
See Standard 2113

TOTAL BILL OF MATERIAL

	Item	Unit	Super	Sub	Total
⊕	Bridge Seal Sealant	L.S.			1
*	Class B Excavation for Struct.	Cu. Yds.			215
	Structural Steel	Lbs.	3450	240	3690
	Prestressed Conc. I-Beams-48"	Lin. Ft.	2484		2484
	Class A Concrete	Cu. Yds.		608.4	608.4
	Class X Concrete	Cu. Yds.	540.6	152.6	693.2
	Aluminum Handrail	Lin. Ft.	834		834
	Reinforcement Bars	Lbs.	99,650	33,220	132,870
	Creosoted Piles (20'-38')	Lin. Ft.			648
	Rock Excav. for Struct.	Cu. Yd.		24	24
	Cofferdam Excav.	Cu. Yd.		790	790
	Steel Piles (10BP42)	Lin. Ft.		1076	1076
	Test Piles Steel (10BP42)	Ea.		2	2
	Name Plates	Ea.	2		2
	Slope Wall	Sq. Yds.			2560
	Protective Coat	Sq. Yds.	1940		1940
	Cofferdams - Pier 1	Ea.		2	2
	Cofferdams - Pier 2	Ea.		2	2

*Include 215 Cu. Yds. for Slope Wall Excavation
⊕ Bridge Abutments only

DESIGNED	T. M. Chang
CHECKED	
DRAWN	W. R. DEASON
CHECKED	

EXAMINED Aug. 7 1963 — ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED — ENGINEER OF DESIGN
APPROVED — CHIEF HIGHWAY ENGINEER

WATERWAY INFORMATION

Drainage Area . . . 645,120 Acres
Character Flat, Wooded, Sand, Cultivated
Required Opening . . . 2150 Sq. Ft. (50 Yr. Fl.)

Proposed Opening . . . 2150 Sq. Ft.

DESIGN STRESSES

for Prestress Concrete I-Beam

f'c = 5,000 psi.
f'ci = 4,000 psi.
fs = 248,000 psi. (Cables 7/16")
fsi = 173,600 psi. (")

DESIGN STRESSES

Cost in Place Unit

fc = 1400 psi.
vc = 75 psi. Footing
fs = 20,000 psi. Reinf.
n = 10

LOADING: H20-S16 & ALTERNATE

GENERAL PLAN & ELEVATION
PROJECT I-80-1(52)7
GREEN RIVER
F.A.I. RT. 80 SEC. 37-18-1
HENRY COUNTY
STA. 416+78.30

SN 037-0025 & -0026