ROUTES FAP 865 AND FAP 726
D-9 CONTRACT MAINTENANCE FY 05-7
WILLIAMSON & PERRY COUNTIES
CONTRACT #98880
SHEET 17 OF 22

Bench Mark: "□" in top of hubguard 10' Rt. of Sta. 899+77, Elev. 399.32
Exist. Structure: #073-0023. Built in year 1927 as SBI Route 152, Section 104B at Sta. 904+29. 8 R.C.D.G. spans at ±53' and a 160' long Penn truss span. Total length bk. to bk. abuts. = 586'. C. to C. watertable = 24'8". The Contractor shall remove the existing superstructure and replace it with a new one consisting of 24" deep wide flange beams and 7½" concrete deck. Existing substructure elements shall be repaired as necessary and widened as shown.
Traffic shall be maintained by utilizing Stage Construction.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

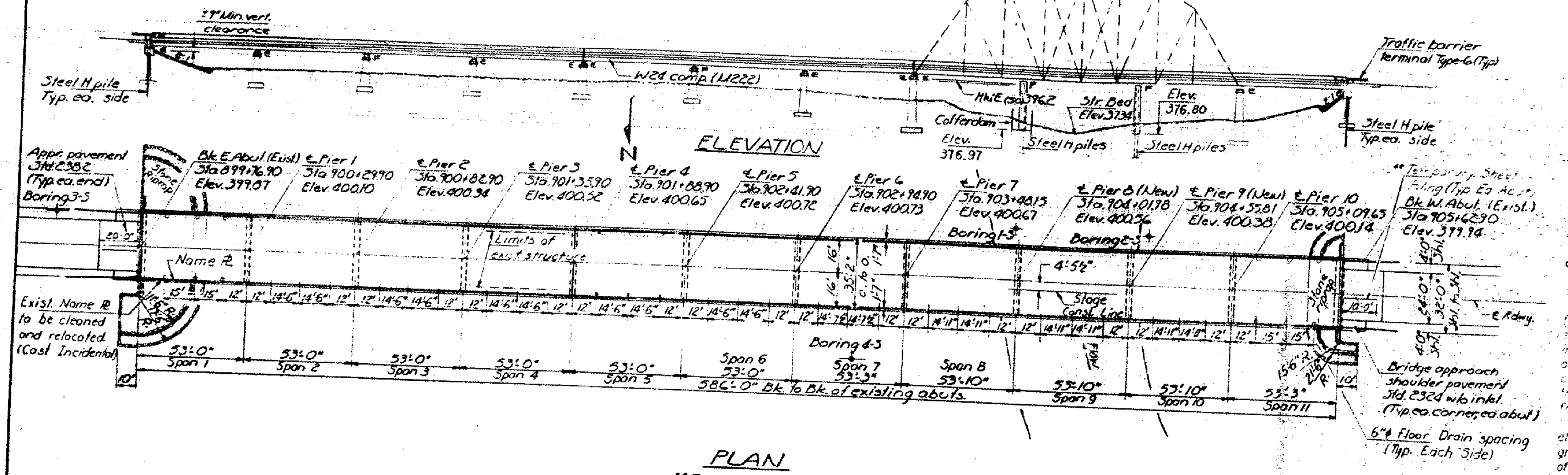
		PERRY	34	2

SHEET NO. 1
30 SHEETS

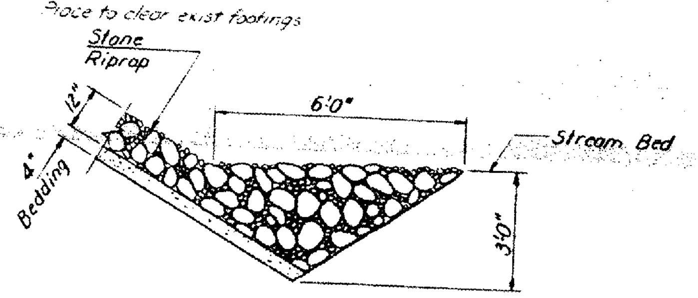
* 104-BC-BR

GENERAL NOTES

[illegible] Data.
[illegible] strength bolts AASHTO M 164, Type [illegible] [illegible] unless otherwise noted.
[illegible] AASHTO M 222 Structural [illegible] 334,420 Pounds.
[illegible] three times the depth of the beams [illegible] way from deck joints, the AASHTO M 222 structural steel shall be cleaned and given one coat of the [illegible] primer [illegible] vinyl finish coat. [illegible] the field.
[illegible] welding [illegible] bottom flange of beams [illegible] the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.
Anchor bolts shall be set before bolting diaphragms over supports.
All structural steel shall be AASHTO M 222 unless otherwise noted.
The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These Components are the wide flange beams and all splice plate material of the wide flange beams.
Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53 Grade 60.
Layout of [illegible] may be varied in the field to suit ground condition as directed by the Engineer.
Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of ⅛ inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two ⅛" adjusting shims of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. (For Type I Elastomeric Bearings, shims of the dimensions of top plate shall be provided and placed as detailed).
The contractor shall drive 2 steel HP10x42 test piles in permanent locations; 1 at Pier 7 (Temporary truss support) and 1 at the West Abut. as directed by the Engineer before ordering the remainder of piles.



** Top Elev. = 400.50
Tip Elev. = 383.37
Place to clear exist. footings



STONE RIPRAP ANCHOR DETAIL

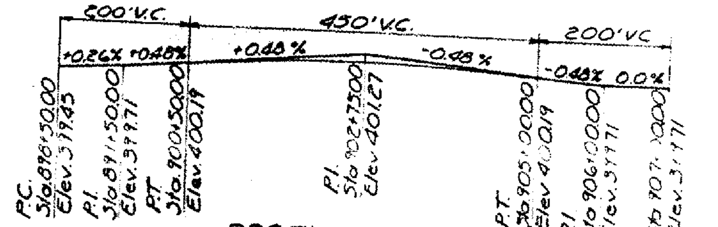
* At Pier 8

STATION 904+29.00
BUILT 198_ BY
STATE OF ILLINOIS
F.A. RT. 865 SEC. 104BC-BR
LOADING HS 20
STR. NO. 073-0023

NAME PLATE
(See Std. 2113)

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Removal of Existing Superstructures	Each	1		1
Concrete Removal	Cu. Yd.		63	63
Structure Excavation	Cu. Yd.		125	125
Floor Drains	Each	66		66
Protective Coat	Sq. Yd.	2571		2571
Class X Concrete	Cu. Yd.	620.6	2277	848.3
Structural Steel	Lump Sum	1		1
Stud Shear Connectors	Each	10275		10275
Reinforcement Bars	Pound		24860	24860
Reinforcement Bars (Epoxy Coated)	Pound	168100		168100
Steel Piles HP10 x 42	Lin. Ft.		1688	1688
Test Piles Steel HP10 x 42	Each		2	2
Name Plates	Each	1		1
Stone Riprap	Tons		251	251
Temporary Bridge Rail	Lin. Ft.	628		628
Neoprene Expansion Joint 2"	Lin. Ft.	102		102
Neoprene Expansion Joint 4"	Lin. Ft.	34		34
Elastomeric Bearing Assembly, Type I				
* Cofferdam Excavation				
* Cofferdams				
Temporary Sheet Piling				



PROFILE GRADE

DESIGNED Marcus H. Christensen
CHECKED Bolen
DRAWN R.D. JS
CHECKED A

May 8, 1985
EXAMINED B. H. H.
ENGINEER OF BRIDGE DESIGN
PASSED James I. Raybourn
ENGINEER OF BRIDGES AND STRUCTURES
APPROVED
DIRECTOR OF HIGHWAYS

WATERWAY INFORMATION

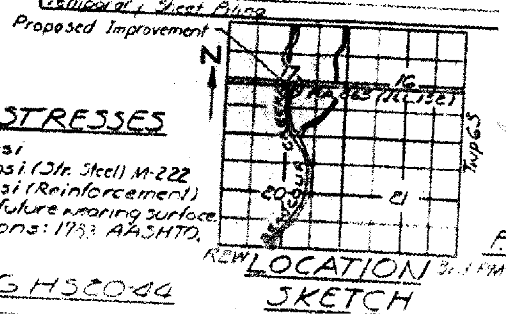
Drainage Area 284 Sq. mi. Low Grade Elev. 397.40 @ Sta. 882+00

Flood		Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	Main Channel	50	14400	4294	4507	396.21	.68	.64	396.89	396.85
	Overflow		5100	1670	1670					
	Total		19500	5964	6177					
Base	Main Channel	100	16900	4382	4890	396.95	.85	.69	397.80	397.64
	Overflow		5800	1797	1797					
	Total		22700	6179	6687					
[illegible]	Main Channel	90	[illegible]	4350	4828	[illegible]	.81	.69	397.64	397.52
	Overflow		[illegible]	1776	1776					
	Total		[illegible]	6126	6604					

DESIGN STRESSES

f'c = 3,500 psi
fy = 50,000 psi (Str. Steel) M-222
fy = 60,000 psi (Reinforcement)
Allow 25#/sq. ft. for future wearing surface.
Design Specifications: 1983 AASHTO.

LOADING HS20-44



LOCATION SKETCH

FOR INFORMATION ONLY:

BRIDGE NO. 3 STRUCTURE 073-0023

GENERAL PLAN
ILL. RTE. 152 OVER
BEAUCOUP CREEK
F.A. RTE. 865 SEC. 104BC-BR
PERRY COUNTY
STA 904+29