FOR INFORMATION ONLY

098-0095

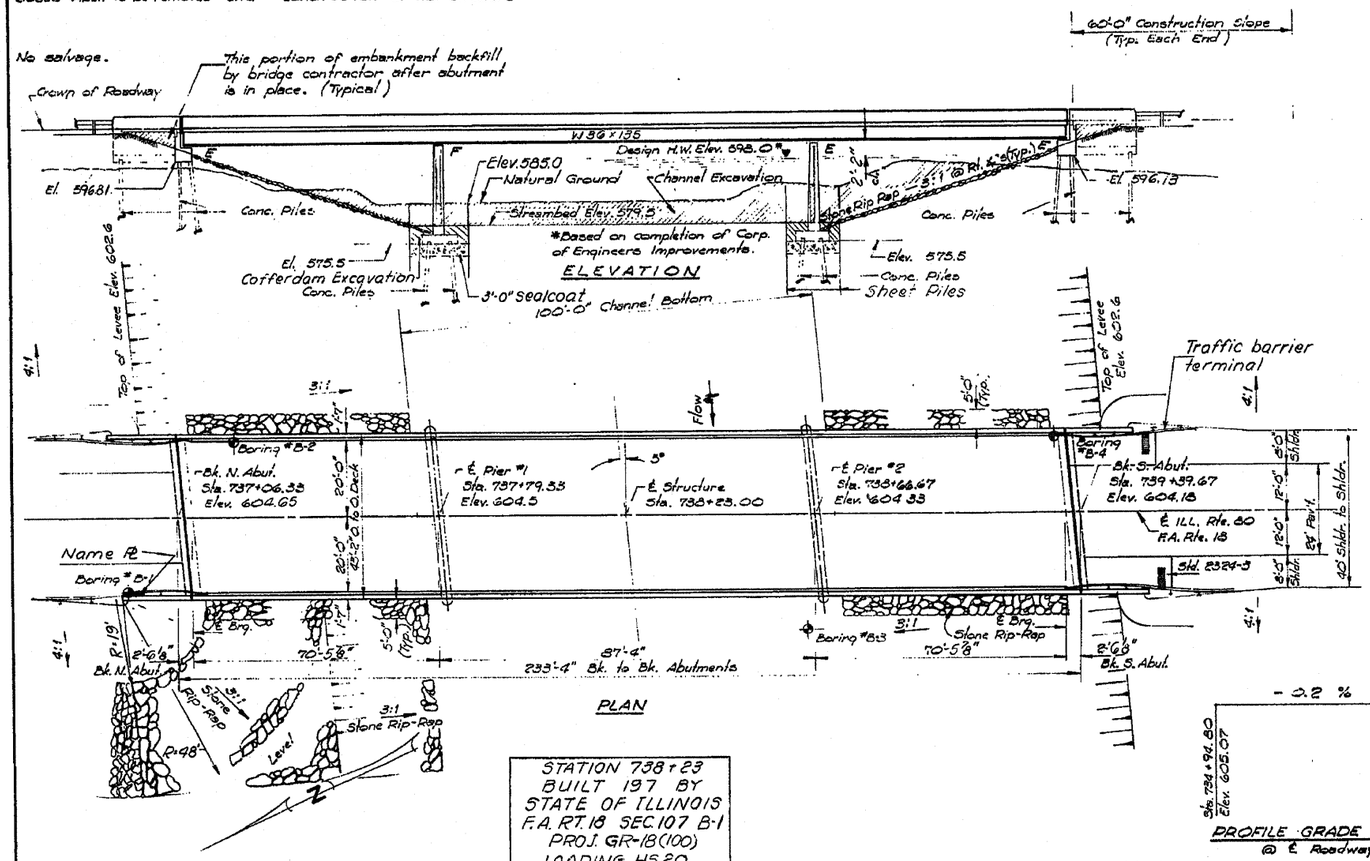
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 1197 F.A.P. 18	107-1, 107-2, 107-3	WHITESIDE	61	49
FED. ROAD DIST. NO. 7	CLASSIFICATION	FED. AID PROJECT		

SHEET NO. 1
13 SHEETS

BM. USGS BM #121 Chis "D" NE WW of Bridge over Johnson Creek. Elev 594.77

Existing Structure: @ Sta. 738+23, Built in 1931 as SBI Rte.80, Sec. 107-B, Existing Steel Truss w/40' Rdwy, Superstructure and R.C. closed Abut. to be removed after construction of new structure

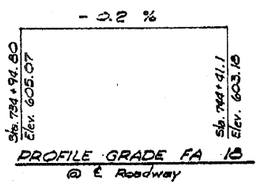


PLAN

STATION 738+23
BUILT 197 BY
STATE OF ILLINOIS
F.A. RT. 18 SEC. 107 B-1
PROJ. GR-18(100)
LOADING HS20
*STR. NO.

NAME PLATE
See Std. 2113

*Str. No. to be supplied by District.



PROFILE GRADE FA 18 @ ℄ Roadway **

DESIGN STRESSES

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (Structural Steel)

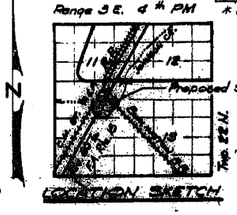
WATERWAY INFORMATION

Drainage Area	= 65.5 sq. mi.
Design Discharge (below 50 yr. HWE)	= 17,000 c.f.s.
Existing Opening	= 1,200 sq. ft.
Required Opening (below 50 yr. HWE)	= 2800 sq. ft.
Proposed Opening	= 3,140 sq. ft.
Created Head for Design Flood	= 0
200 yr. Discharge	= 22,400 c.f.s.
Created Head 100 yr. Flood	= 0
50 yr. H.W.E.	= 598.0 Elev.
200 yr. H.W.E.	= 599.4 Elev.

LOADING HS 20-44

Allow 25 #/sq. ft. for future wearing surface. Design Specifications: 1977 AASHTO, 1978 Interim Specifications.

DESIGNED	L. A. Hanch	
CHECKED	Duane K. Fuhrer	
DRAWN	Mercado	
CHECKED		
EXAMINED	Carl E. Hausmann	Sept. 29 1978
PASSED		
APPROVED		



GENERAL NOTES

See Proposal for Boring Data.

Fasteners shall be high strength bolts. Bolts ⅞" ϕ, open holes 1⅜" ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 224,040 lbs. M222
1180 lbs. M183

All structural steel shall be AASHTO: M 222 unpainted except expansion joint angles and attached bars which shall be AASHTO: M 183 and shop painted with two coats of basic lead silico chromate paint.

Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one-fourth 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 setting diaphragms over supports.

Layout of stone riprap may be varied in the field to suit ground conditions as directed by the Engineer.

The Contractor shall drive one (1) test pile at a permanent location at Pier #1 South Abut, as directed by the Engineer before ordering the remainder of piles.

The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.

The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.

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 tension flanges, webs and all splice plate material of the steel girders or wide flange beams.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of ± 0.125". Adjustment shall be made either by grinding the surface or by shimming the bearing. Two ϕ adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.

No shims shall be allowed under Type I Elastomeric Bearing Pads at Pier 2 & North Abutment.

Protective coat shall be applied to surfaces of the deck & face of parapet and curb in accordance with Art. 503.12 of the Standard Specifications.

Reinforcement bars shall conform to the requirements of AASHTO M-31 Grade 60

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Removal of Existing Structure 3	Each			1
Protective Coat	Sq. Yd.	1228		1228
Class X Concrete	Cu. Yd.	289.7	790	1079.7
Class A Concrete	Cu. Yd.		244.9	244.9
Stud Shear Connectors	Each	4140		4140
Reinforcement Bars	Pound	32380	30150	62530
Reinf. Bars (Epoxy Coated)	Pound	46850		46850
Concrete Piles	Lin. Ft.		4258	4258
Test Pile Concrete	Each		2	2
Name Plates	Each	1		1
Stone Riprap	Sq. Yd.			1228
Neoprene Expansion Joint 2"	Lin. Ft.	43		43
Preformed Joint Sealer 2½"	Lin. Ft.	44		44
Channel Excavation	Cu. Yd.			8806
Seal Coat Concrete	Cu. Yd.		131.6	131.6
Cofferdam Pier 1	Each		1	1
Cofferdam Pier 2	Each		1	1
Cofferdam Excavation	Cu. Yds.		307	307
Structural Steel	L. Sum	1		1

** Quantity based on 100' upstream & 150' downstream

GENERAL PLAN & ELEVATION
PROJECT GR-18(100)
Rte. [illegible] Sec. [illegible] Johnson Creek
F.A. Rte. [illegible] Sec. 107B-1
Whiteside County
Sta. 738+23

STATE OF ILLINOIS
2237

* FAS 1197 (West Lincolnway Road) & FAP 308 (IL 84)
**D2 Bridge Painting 2009-3

FILE NAME = P:\PAINTING\64E93\PLANeng.dgn	USER NAME = linkdj	DESIGNED - ---	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	Existing Plans SN 098-0095	F.A. RTE. -	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - ---	REVISED - ---			*	**	Whiteside	15	8
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - ---	REVISED - ---					CONTRACT NO. 64E93		
	PLOT DATE = Thu Jan 29 10:19:49 2009	DATE - ---	REVISED - ---		SCALE: --- SHEET NO. -- OF --- SHEETS STA. --- TO STA. ---			ILLINOIS FED. AID PROJECT		