FAP ROUT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
353	(12&13) WRS-4	WILL	608	414
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

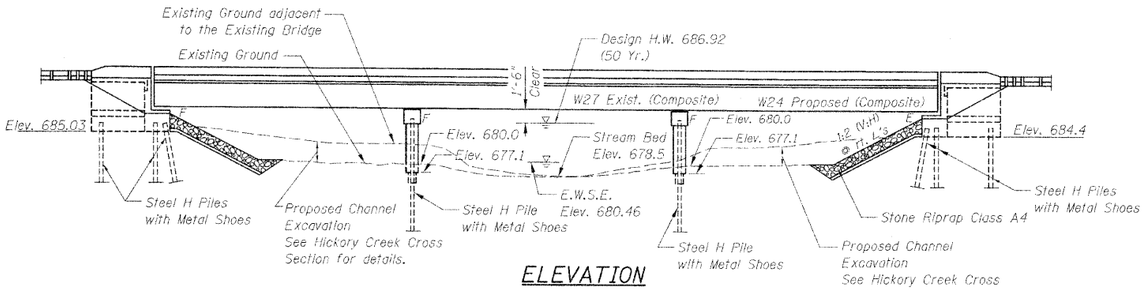
Contract No. 62478

BENCHMARK

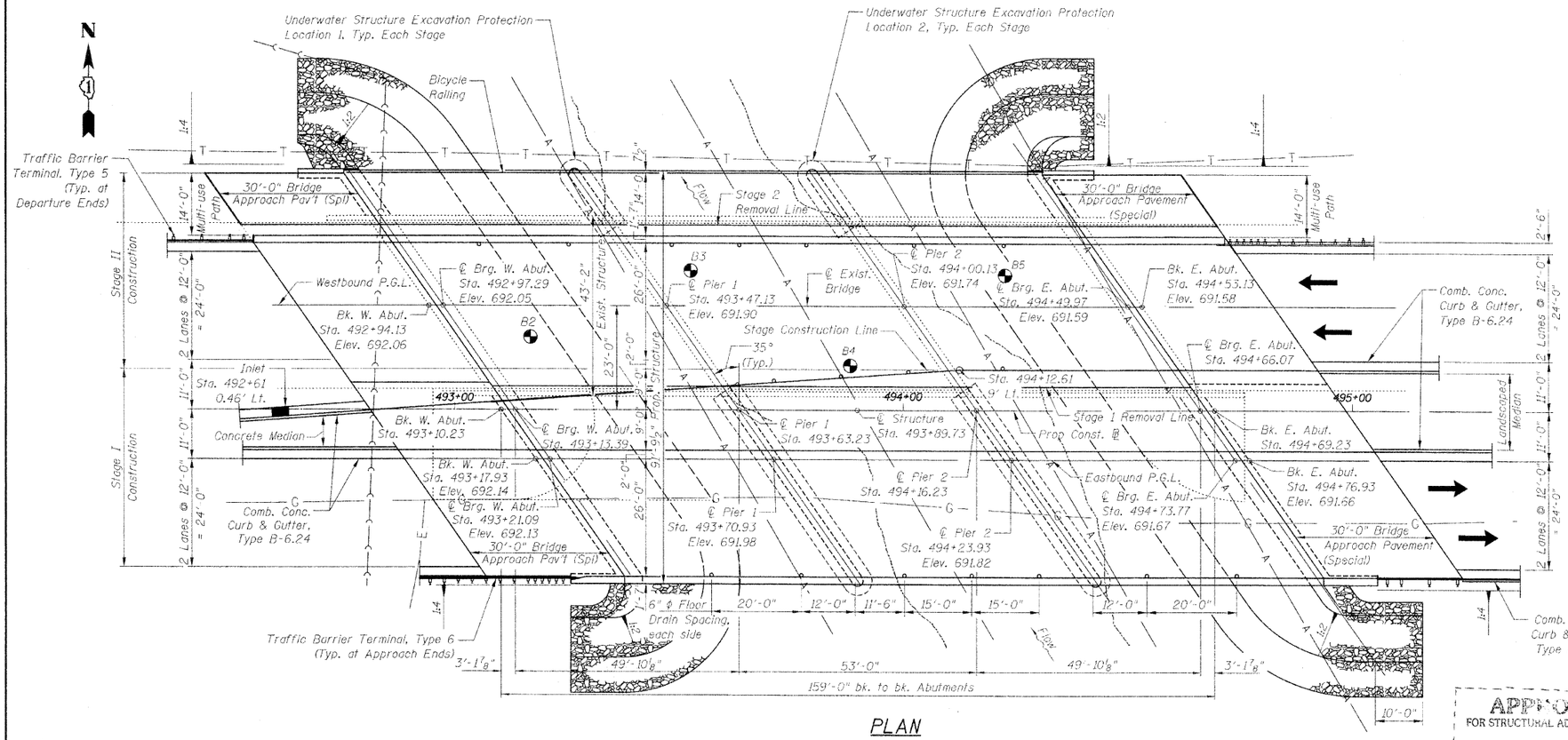
B.M. #10 - Cut □ on concrete parapet, Southwest corner of bridge. Elev. 694.593

Existing Structure No. 099-0311, built in 1996 as F.A.P. Rte. 353, Section 13B-R-1(90). The superstructure consists of a composite reinforced concrete deck supported on steel wide flanged beams. Length is 159'-0" bk-bk, and width is 43'-2" o-o. The piers are single row steel H pile bents encased in concrete. The abutments are standard pile cap abutments supported on steel H piles. Traffic will be maintained during the widening of the bridge by stage construction.

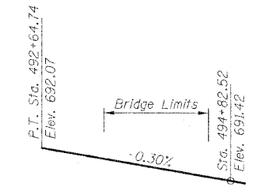
No salvage.



ELEVATION

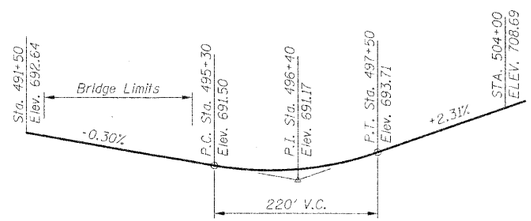


PLAN



See Roadway Grading Plan outside of bridge limits

WESTBOUND PROFILE GRADE - U.S. ROUTE 30



EASTBOUND PROFILE GRADE - U.S. ROUTE 30

DESIGN SCOUR ELEVATION TABLE

	W. Abut.	Pier #1	Pier #2	E. Abut.
Design Scour Elevation ft.	685.0	661.0	661.0	684.0

WATERWAY INFORMATION TABLE

Drainage Area = 17.4 Sq. Mi. Low Grade Elevation: Exist. = 690.9 @ Sta. 496+35; Prop. = 691.1 @ Sta. 495+56 Max. Rec. H.W.E. = 688.0

Flood	Frequency Year	Discharge (C.F.S.)	Waterway Opening Existing (Sq. Ft.)	Waterway Opening Proposed (Sq. Ft.)	Natural H.W.E.	Created Head Existing (Feet)	Created Head Proposed (Feet)	Headwater Elevation Existing	Headwater Elevation Proposed
	10	1600	529	529	686.1	0.4	0.2	686.5	686.3
Design	50	2500	621	621	686.9	0.5	0.3	687.4	687.2
Base	100	3000	669	669	687.3	0.6	0.4	687.9	687.7
Max. Calc.	500	5500	831	831	688.8	1.4	1.2	690.2	690.0

LEGEND

- Foundation Borings obtained 1996
- A — Aerial Line
- Storm Sewer
- G — Gas Line
- T — Telephone Line

DESIGN SPECIFICATIONS

2002 AASHTO

LOADING HS 20-44

Allow 50 #/Sq. Ft. for future wearing surface.

DESIGN STRESSES

f'c = 3500 psi
fy = 60,000 psi (Reinf.)
fy = 50,000 psi (Struct.) M270 Grade 50

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0

CIVILTECH ENGINEERING, INC.
GREGORY J. HATLESTAD, S.E.

STATE OF ILLINOIS — GREGORY J. HATLESTAD 081-005562 — LICENSED STRUCTURAL ENGINEER

GREGORY J. HATLESTAD, S.E.
081-005562
EXP 11/30/2010
DATE 6/11/2010

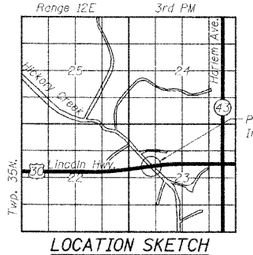
APPROVED
FOR STRUCTURAL ADEQUACY ONLY
ENGINEER OF BRIDGES AND STRUCTURES

STATION 493+89.73
WIDENED 201_ BY
STATE OF ILLINOIS
U.S. ROUTE 30 SEC. 13B-R-1(90)
LOADING HS20
STR. NO. 099-0311

NAME PLATE

See Std. 515001

Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.



LOCATION SKETCH

S1 OF S26

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
GENERAL PLAN & ELEVATION
U.S. RTE. 30 OVER HICKORY CREEK
STATION 493+89.73
STRUCTURE NUMBER 099-0311

SCALE: None **DRAWN BY:** C. Cooney
DATE: June 11, 2010 **CHECKED BY:** G. Hatlestad

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