B.M. - #409 "□" chiseled on Southeast wingwall of S.N. 101-0120
Elev. 833.05

EXISTING STRUCTURE: Structure No. 101-0120 built in 1961, is 4 span continuous wide flange beam superstructure with 5 beam lines on 2 open reinforced concrete stub abutments and 3 reinforced concrete hammerhead style piers founded on spread footings with a 43° left ahead skew angle. The continuous beams are fixed at pier 2 and expansion over piers 1 and 3 and the abutments. The bridge length is 263'-0" Bk-Bk of Abutments and the deck width is 32'-0" out to out.

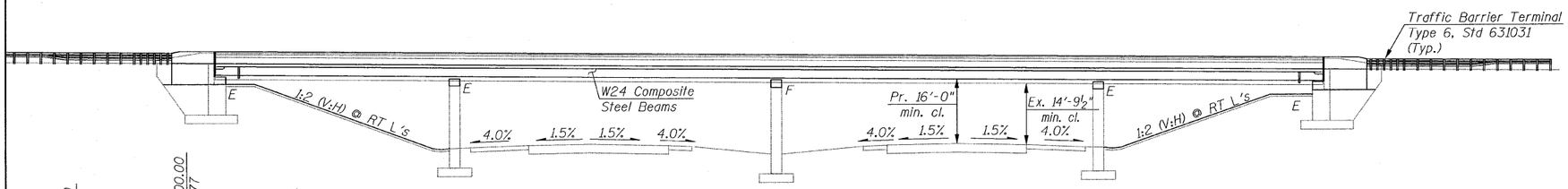
Traffic to be maintained using Detour Routes

No Salvage.

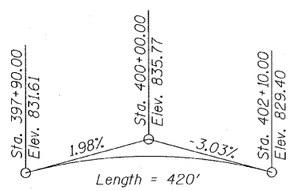
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STATION 399+98.12
RE-BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. RT. 301 SEC. (1-1HB-1)D
LOADING HL-93
STR. NO. 101-0120

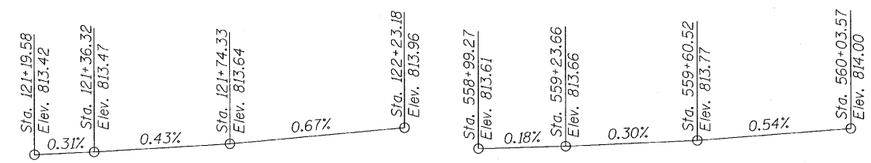
NAME PLATE
See Std. 515001



ELEVATION

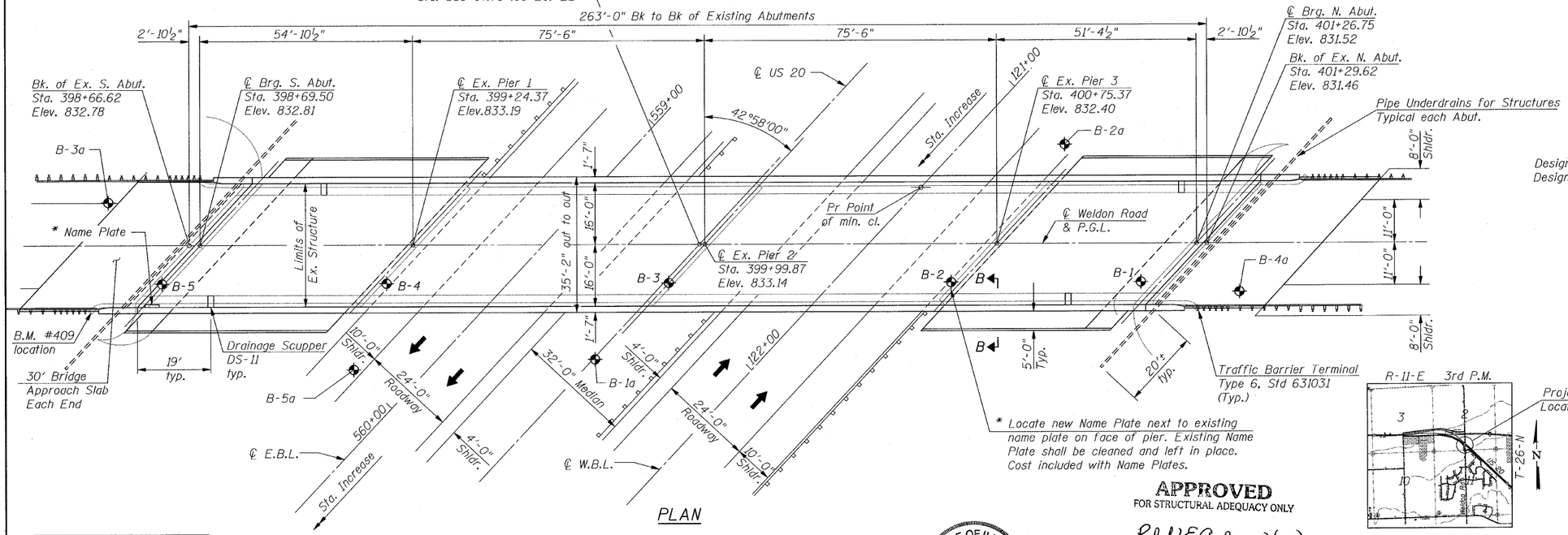


PROFILE - ℄ WELDON ROAD



PROFILE - ℄ US 20 W.B.L.

PROFILE - ℄ US 20 E.B.L.



PLAN

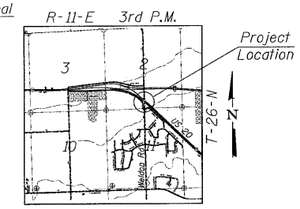
LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
2007 AASHTO LRFD Bridge Design Specifications
with 2008 and 2009 Interims

DESIGN STRESSES
FIELD UNITS (NEW CONSTRUCTION)
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

FIELD UNITS (EXISTING CONSTRUCTION)
f'c = 1,400 psi (Super Structure)
f'c = 1,000 psi (Substructure with earth pressure)
f'c = 1,400 psi (Substructure, w/o earth pressure)
fy = 20,000 psi (reinforcement)

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.055g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.097g
Soil Site Class = C



LOCATION SKETCH

GENERAL PLAN
WELDON ROAD OVER
F.A.P. RTE 301 (US 20)
SECTION (1-1HB-1)D
WINNEBAGO COUNTY
STATION 399+98.12
S.N. 101-0120

Soil Borings B-1 thru B-5 are from original plans (1960)
Soil Borings B-1a thru B-5a are by IDOT (2007)

* New Name Plates required at 2 locations.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson (RD)
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
DAVID BOOHER
4775
SPRINGFIELD, ILL.
LICENSED STRUCTURAL ENGINEER

David Booher, Illinois S.E. 081-004775
Expires 11-30-2010

9-20-2010
Date

DESIGNED	SCD
CHECKED	DRB
DRAWN	THW
CHECKED	SCD

ie consultants
IE CONSULTANTS, INC
6420 SOUTH SIXTH STREET
SPRINGFIELD, ILLINOIS 62712
TEL. (217) 529-8027
FAX (217) 529-4543
WWW.IE-CONSULTANTS.COM

SHEET NO. 1 OF 34 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	301	(1-1HB-1)D	WINNEBAGO	55	17
			CONTRACT NO. 64E11		
		ILLINOIS	FED. AID PROJECT		