

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 301	1-HBR-2	WINNEBAGO	57	20
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT-				

Contract #64D50

Bench Mark: #413 STA. 98+81.96, 21.53' RT EL. 787.14 Chiseled square in top of wingwall

Existing Structure: S.N. 101-0096 built 1964 as F.A. 194, Section 1HB-2. Structure consists of four span continuous WF beams and reinforced concrete deck supported by closed abutments and hammerhead piers. 209'-2" back-to-back abutments. 35'-8" out-to-out deck. Superstructure to be removed and replaced using bridge closure.

No Salvage.

DESIGN SPECIFICATIONS
2007 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS
4th Edition with 2008 Interims for Super Structures
1995 FHWA Seismic Retrofit Manual

DESIGN STRESSES

FIELD UNITS (NEW CONSTRUCTION)

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 50,000$ psi (AASHTO M270 GRADE 50)

FIELD UNITS (EXISTING CONSTRUCTION)

$f'_c = 1,000$ psi Substructure (with earth pressure)
 $f'_c = 1,400$ psi Substructure (without earth pressure)
 $f_s = 20,000$ psi (reinforcement)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Bedrock Acceleration Coefficient (A) = 0.04
Site Coefficient (S) = 1.2

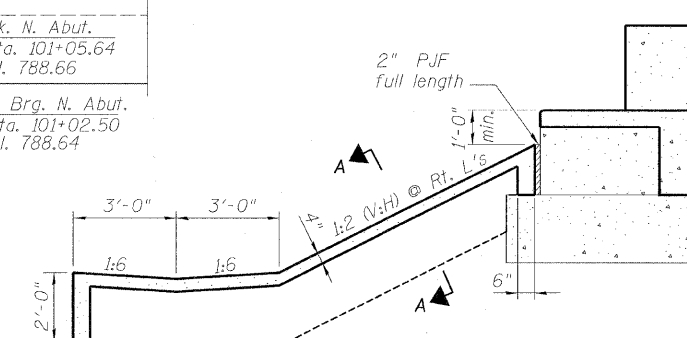
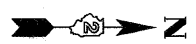
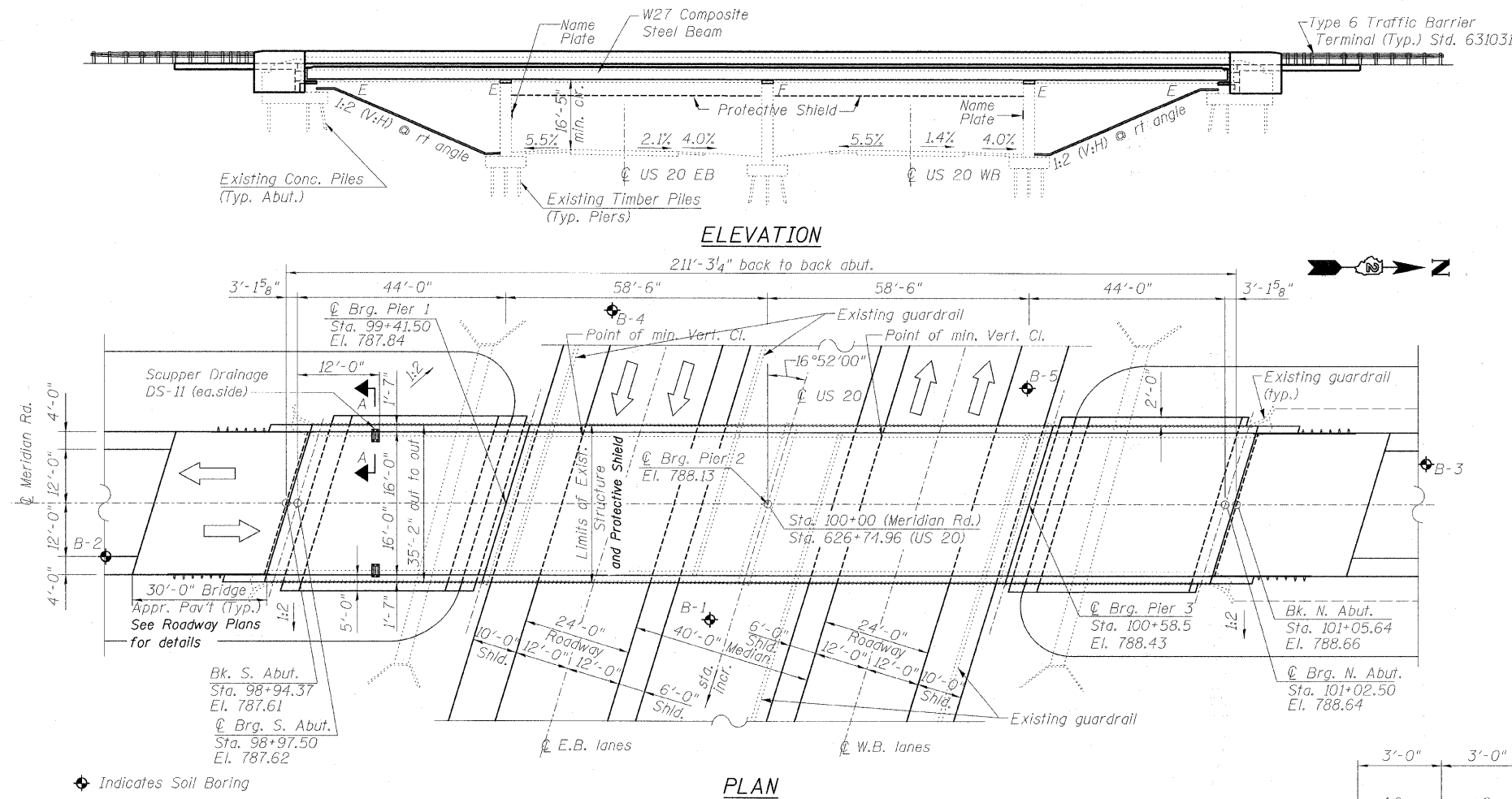
LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

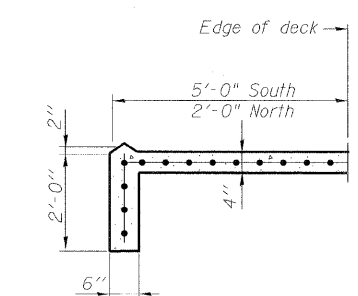
STATION 626+74.96
RE-BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. 301 - SEC. 1-HBR-2
LOADING HL93
STR. NO. 101-0096

NAME PLATE

See Std. 515001
Place Name Plate next to existing Name Plates.

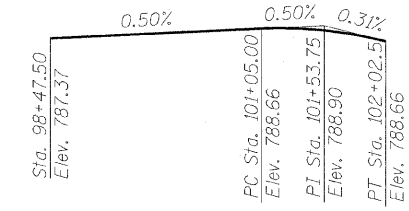


SECTION THRU PILE SUPPORTED STUB ABUTMENT
(Horiz. dim. @ Rt. L's)

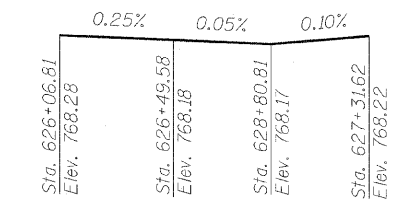


SECTION A-A

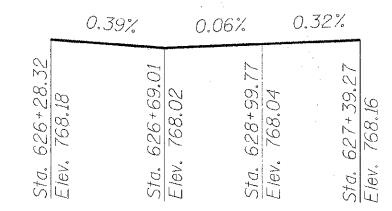
No.	Station	Offset
B-1	Sta. 99+87	26'R
B-2	Sta. 98+52	12'R
B-3	Sta. 101+50	9'L
B-4	Sta. 99+65	49'L
B-5	Sta. 100+58	26'L



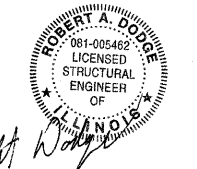
PROFILE GRADE
(along Meridian Rd.)
LVC=97.50



US 20 WB PAVEMENT ELEV.
US 20 Crown @ C



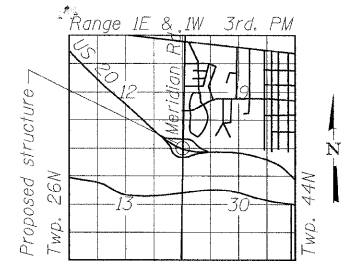
US 20 EB PAVEMENT ELEV.
US 20 Crown @ C



Robert A. Douglas
Licensed Structural Engineer
(Illinois Structural Engineer's Seal)

MY LICENSE EXPIRES 11/30/2010

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



LOCATION SKETCH

GENERAL PLAN & ELEVATION
MERIDIAN ROAD OVER US 20
F.A.P. 301 (US 20) - SEC. 1-HBR-2
WINNEBAGO COUNTY
STATION 100+00
STRUCTURE NO. 101-0096

10:32:58 AM
11/25/2009
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