

Bench Mark: Chiseled "□" on hubguard Southwest corner of bridge 15.4' Rt. Station 1035+17, Elevation 498.336

Existing Structure: S.N. 050-0094, built in 1966 as S.B.I. Route 7 (F.A.S. Rte. 260), Section X-IBR. The existing structure consists of a three span continuous plate girder with reinforced concrete deck. 292'-0" back-to-back abutments. 36'-0" out to out deck. The deck is to be removed and replaced, one girder line added and the substructure widened using stage construction.

No salvage

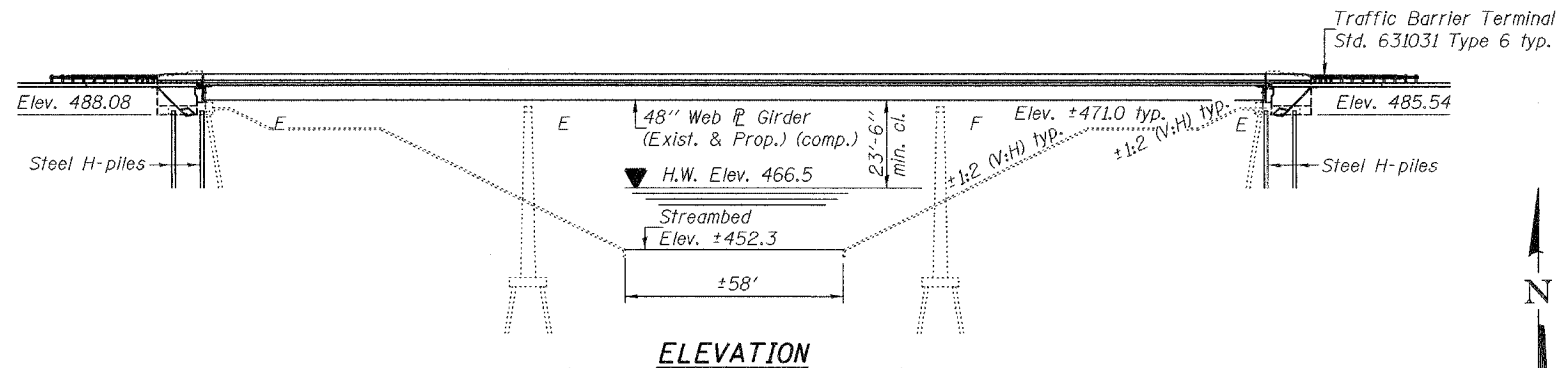
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
FAP 623	X-IBR	LaSalle	126	56	41 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:			

Contract #66617

GENERAL NOTES

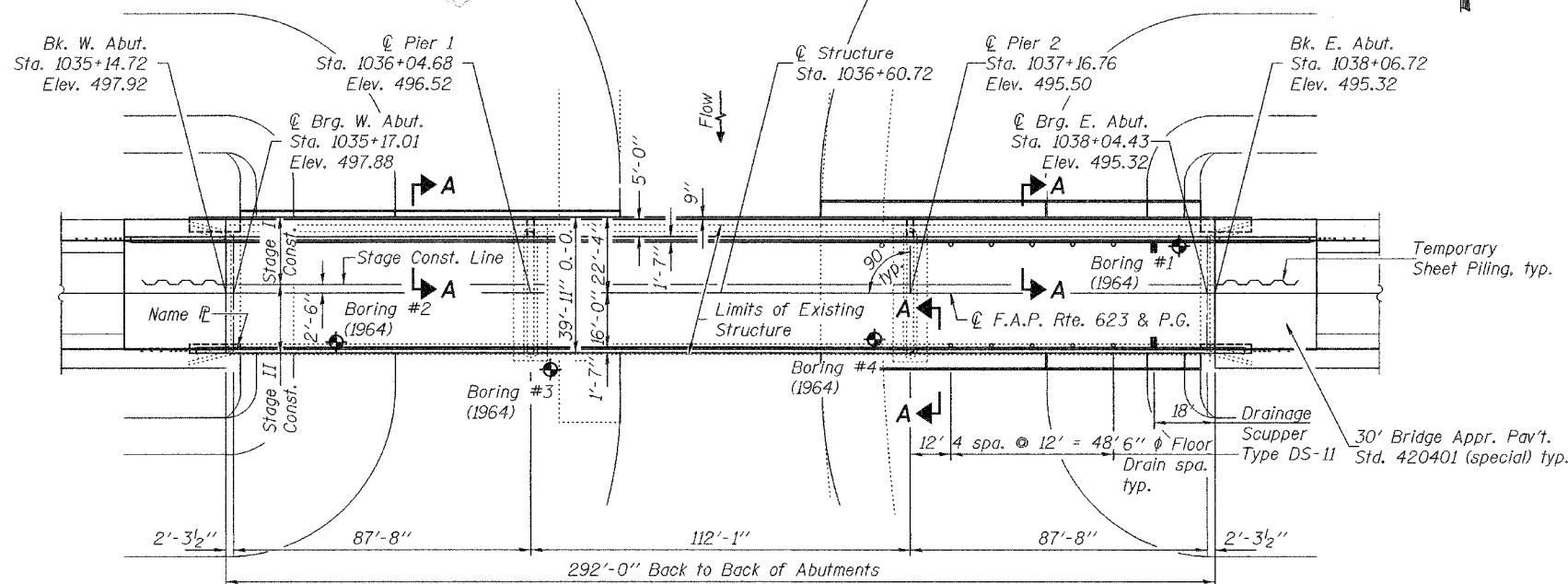
Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts $\frac{7}{8}$ " ϕ , holes $\frac{15}{16}$ " ϕ , unless otherwise noted.
 Calculated weight of Structural Steel = 78,260 lbs. (AASHTO M270 Grade 36)
 No field welding is permitted except as specified in the contract documents.
 No in-stream work will be allowed due to environmental constraints.
 Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
 Reinforcement bars designated (E) shall be epoxy coated.
 Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.
 As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by an individual acceptable to the Engineer. Any cracks that cannot be removed by grinding $\frac{1}{4}$ inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.
 Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction 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 scope of the work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.
 Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of $\frac{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
 The existing structural steel contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
 The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
 The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.
 Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.
 Concrete Sealer shall be applied to the exposed surface areas of the West and East Abutments.
 Cleaning and Painting of the existing structural steel shall be as specified in the special provision for Cleaning and Painting Existing Steel Structures. All existing steel shall be cleaned per Near White Blast Cleaning - SSPC-SP10. All existing steel shall be painted according to the requirements of Paint System 1 - OZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Interstate Green, Munsell No. 7.5G 4/8.
 A minimum of two (2) air monitors will be required to monitor abrasive blasting operations at this site, see special provision for Containment and Disposal of Lead Paint Cleaning Residues.
 The Organic zinc rich primer / Epoxy / Polyurethane Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat of the exterior and bottom flange of the fascia beams shall be Interstate Green, Munsell No. 7.5G 4/8. See special provision for Cleaning and Painting New Metal Structures.



STATION 1036+60.72
REBUILT 20 BY
STATE OF ILLINOIS
F.A.P. RT. 623 - SEC. X-IBR
LOADING HS20
STR. NO. 050-0094

NAME PLATE
See Std. 515001

Existing name plate shall be cleaned and placed next to new name plate. Cost included in "Name Plates."



PLAN

For Section A-A, see sheet 2 of 41.

SCOPE OF WORK

1. Remove and replace deck. Add new girder on North side of bridge.
2. Make all girders composite in positive moment regions.
3. Remove and replace abutment cross frames/diaphragms.
4. Replace existing abutment bearings with elastomeric bearings.
5. Widen abutments & piers.
6. Remove and replace abutment backwalls and wingwalls.
7. Repair substructure as shown.
8. Erosion under slope wall at Southwest nose of Pier 2 to be filled and paid for as Slope Wall Slurry Pumping. For details, see sheet 2 of 41.

LOADING HS20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

FIELD UNITS
New Construction
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 36,000$ psi (AASHTO M270 Grade 36 structural steel)
 $f_y = 50,000$ psi (AASHTO M270 Grade 50, H-piles only)
Existing Construction
 $f'_c = 3,500$ psi
 $f_y = 40,000$ psi (reinforcement)
 $f_y = 36,000$ psi (structural steel)

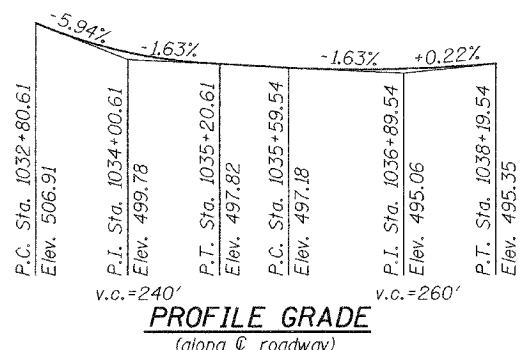
SEISMIC DATA

Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 3.8%g
 Site Coefficient (S) = 1.0

WATERWAY INFORMATION

Drainage Area = 126 Sq. Mi. Low Grade Elev. 495.38' @ Sta. 10+90

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	50	9739	918	918	464.7	0.7	0.7	465.4	465.4	467.6
Base	100	11043	1203	1203	467.1	1.2	1.2	468.3	468.3	467.6
Overtopping	-	-	-	-	-	-	-	-	-	-
Max. Calc.	500	14095	1364	1364	468.4	1.5	1.5	469.9	469.9	467.6



PROFILE GRADE
(along ϕ roadway)

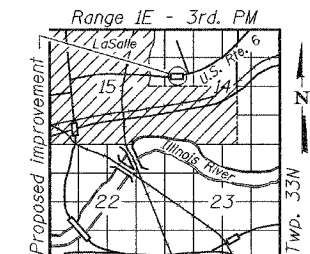
DESIGNED	Fossel, T...
CHECKED	Stephen M. Ryan
DRAWN	WDC/BML
CHECKED	FT/SHR

February 1, 2007
 EXAMINED Thomas J. Anderson
 PASSED Ralph E. Anderson



EXPIRES 11-30-2008

This seal excludes sheet 39 of 41.



LOCATION SKETCH

GENERAL PLAN & ELEVATION
 U.S. ROUTE 6 OVER
 LITTLE VERMILION RIVER
 F.A.P. ROUTE 623 - SECTION X-IBR
 LaSALLE COUNTY
 STATION 1036+60.72
 STRUCTURE NO. 050-0094