

Bench Mark: Chiseled square in S.E. corner of 6'x6' concrete pad for streamflow monitoring station, 33.5' south of Il. 15, Sta. 1201+10. Chiseled square in center of 4.0'x3.0' concrete box culvert, 41.0' north of Il. 15, Sta. 1204+40.

Existing Structure: S.N. 041-0023 Built in 1921 as S.B.I. Route 15, Sec. 13-4 at Station 1200+35 as a simple span thru-truss 103'-4" Bk.-Bk. abutment, supported on timber piles. Bridge widening, and superstructure replacement with PPC deck beams 2-span in 1971. Existing bridge to be removed and replaced. Traffic to be maintained utilizing stage construction.

No salvage

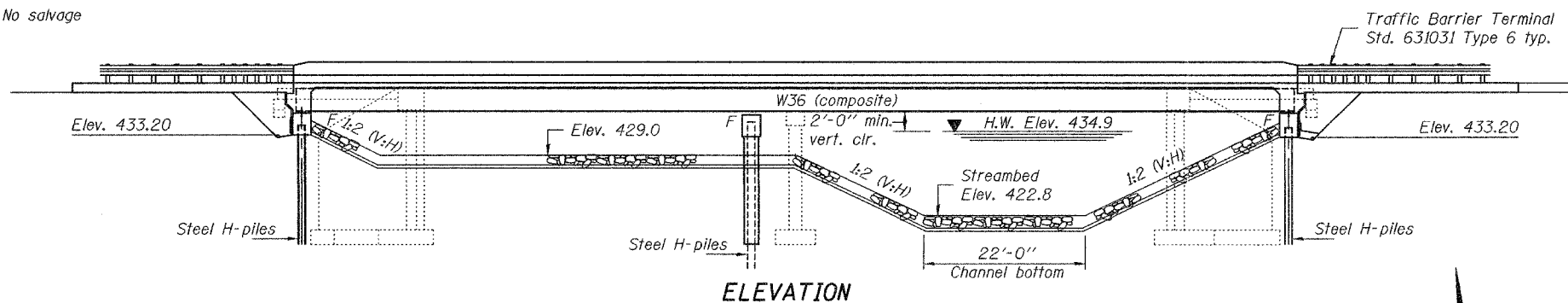
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	POST MILES	SHEET	SHEET NO. 1
FAP 821	13B-1	JEFFERSON	39	14	17 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-		

Contract #98957

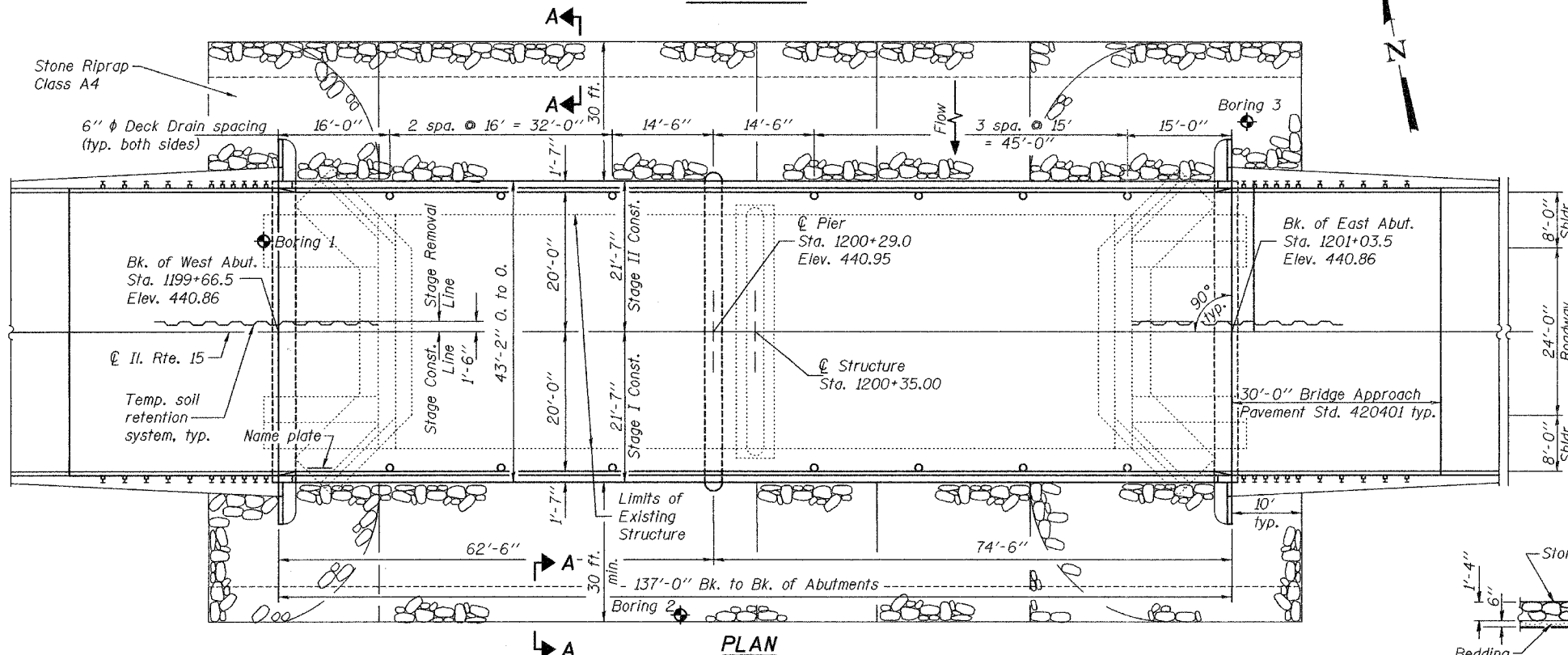
INDEX OF SHEETS

- 1 General Plan
- 2 General Data & Stage Construction Details
- 3 Temporary Concrete Barrier
- 4-5 Top of Slab Elevations
- 6 Superstructure
- 7 Superstructure Details
- 8 Diaphragm Details
- 9 Structural Steel
- 10 Structural Steel Details
- 11 Anchor Bolt Details
- 12 West Abutment
- 13 East Abutment
- 14 Pier
- 15 Bar Splicer Assembly Details
- 16-17 Boring Logs



STATION 1200+35.00
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RT. 821 SEC. 13B-1
LOADING HL-93
STRUCTURE NO. 041-0106

NAME PLATE
See Std. 515001



TOTAL BILL OF MATERIAL

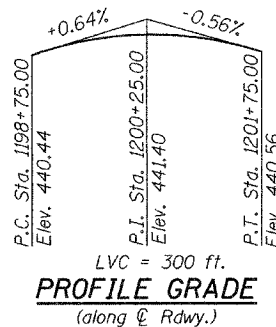
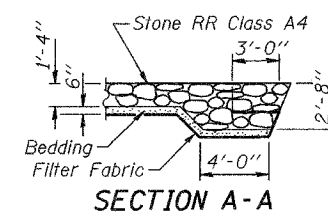
ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.		141	141
Stone Riprap, Class A4	Sq. Yd.		1767	1767
Filter Fabric	Sq. Yd.		1767	1767
Removal of Existing Structures	Each		1	1
Structure Excavation	Cu. Yd.		203	203
Floor Drains	Each	14		14
Concrete Structures	Cu. Yd.		76.2	76.2
Concrete Superstructure	Cu. Yd.	200.2		200.2
Bridge Deck Grooving	Sq. Yd.	579		579
Protective Coat	Sq. Yd.	724		724
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	2484		2484
Reinforcement Bars, Epoxy Coated	Pound	48910	8580	57490
Furnishing Steel Piles HPI2x74	Foot		291	291
Furnishing Steel Piles HPI0x57	Foot		579	579
Driving Piles	Foot		870	870
Temporary Soil Retention System	Sq. Ft.		444	444
Name Plates	Each	1		1
Bar Splicers	Each	534	49	583
Underwater Structure Excavation Protection, Location 1	Each		1	1
Geocomposite Wall Drain	Sq. Yd.		75	75
Pipe Underdrains for Structures, 4"	Foot		161	161

WATERWAY INFORMATION

Drainage Area = 79.0 sq. mi. Exst. Low Grade Elev. 437.8 ft. Sta. 1219+00
Prop. Low Grade Elev. 438.2 ft. Sta. 1219+00

Bridge	Freq. Yr.	Opening Sq. Ft.		Head - Ft.		Headwater El.			
		Exst.	Prop.	Exst.	Prop.	Exst.	Prop.		
041-0106	10	1892	587	638	434.6	0.8	0.8	435.4	435.4
041-0024	10	237	182	249				435.4	435.4
041-0104	10	2450	975	975				435.4	435.4
Total	10	4579	1744	1862				435.4	435.4
041-0106	50	2485	615	676	434.9	1.1	1.1	436.0	436.0
041-0024	50	328	191	266				436.0	436.0
041-0104	50	3629	1040	1040				436.0	436.0
Total	50	6442	1846	1982				436.0	436.0
041-0106	100	2742	624	689	435.0	1.2	1.2	436.2	436.2
041-0024	100	371	194	271				436.2	436.2
041-0104	100	4091	1060	1060				436.2	436.2
Total	100	7204	1878	2020				436.2	436.2
041-0106	500	3320	653	728	435.3	1.5	1.4	436.8	436.8
041-0024	500	572	203	288				436.8	436.7
041-0104	500	5062	1120	1120				436.8	436.7
Total	500	8954	1976	2136				436.8	436.7

10 yr. velocity through proposed bridge = 3.0 fps



DESIGNED *Robert J. Thompson*
CHECKED *h.t. duong*
DRAWN *h.t. duong*
CHECKED *RJL*

EXAMINED *Thomas J. ...*
PASSED *Ralph E. ...*
ENGINEER OF BRIDGE DESIGN
ENGINEER OF BRIDGES AND STRUCTURES



EXPIRES 11-30-2006

LOADING HL-93
Allow 50 psf for future wearing surface

DESIGN SPECIFICATIONS
AASHTO LRFD Bridge Design Specification
U.S. 3rd. Edition w/2005 interims

DESIGN STRESSES
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 50,000$ psi (structural steel M270, GR 50W)

SEISMIC DATA
Seismic Performance Zone (SPZ) = 2
Bedrock Acceleration Coefficient (A) = 9.75%
Site Coefficient (S) = 1.0



GENERAL PLAN
ILLINOIS ROUTE 15 OVER
BIG MUDDY CREEK
F.A.P. RT. 821 - SECTION 13B-1
JEFFERSON COUNTY
STATION 1200+35.00
STRUCTURE NO. 041-0106