

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

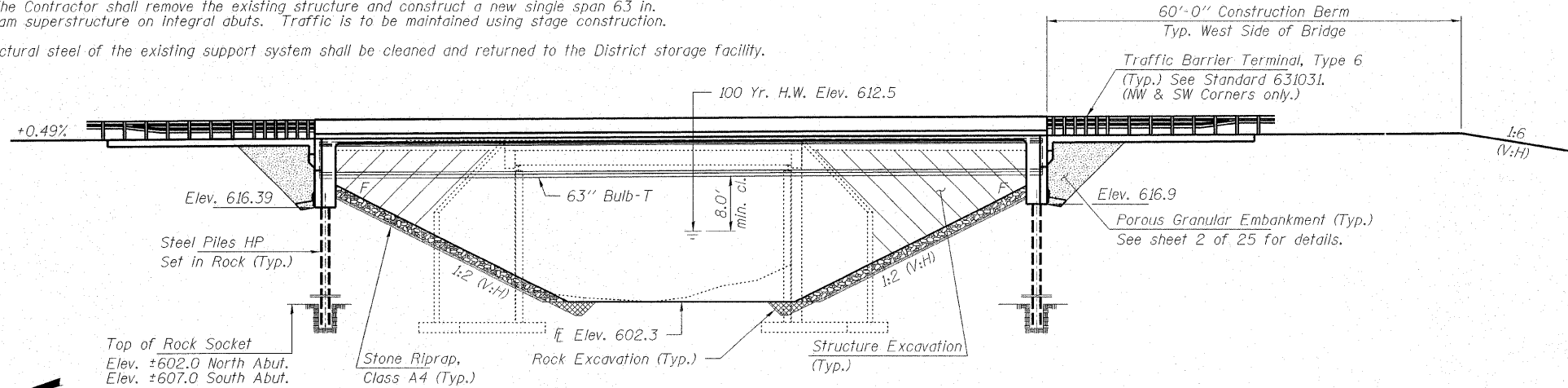
ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.	SHEET NO. 1
FAU 2503	(35) BR-2	KENDALL	129	25	25 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract No. 66399

Bench Mark: Box cut on top of NW corner on North headwall of culvert under North Street at IL 25: Elev. 626.37

Existing Structure: #047-0034, built originally in year 1924, as S.B.I. Rte. 18 Sec. 12 EXT. at Sta. 12+87. In 1976, the old R.C. Deck Girder superstructure was removed and the closed abuts. substructure rebuilt to accommodate a new widened P.P.C. Deck Beam superstructure, 43'-0" bk.-bk. abuts. and 38'-0" o.-o. P.P.C. Bulb-T Beam superstructure on integral abuts. Traffic is to be maintained using stage construction.

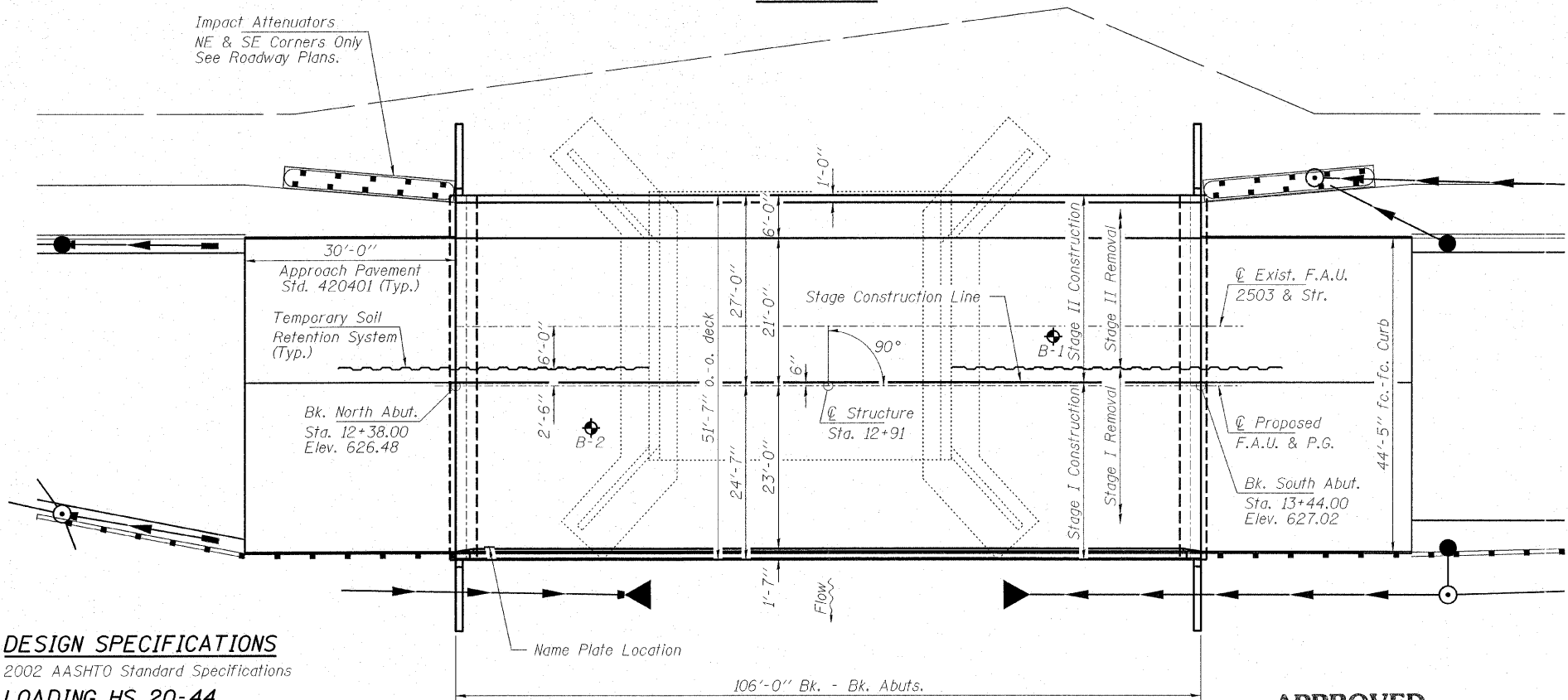
Salvage: The structural steel of the existing support system shall be cleaned and returned to the District storage facility.



ELEVATION

INDEX OF STRUCTURE SHEETS

1. General Plan & Elevation
2. General Details
3. Stage Construction Details
4. Steel Railing (Temporary)
5. Temporary Concrete Barrier for Stage Construction
6. Slab Elevations - Beam 1 & 2
7. Slab Elevations - Beam 3 - @ Rdwy.
8. Slab Elevations - Beam 5 - 8
9. Slab Elevations - North Approach
10. Slab Elevations - South Approach
11. Superstructure
12. Superstructure Details
13. Superstructure Details
14. Superstructure Details - West Parapet
15. Superstructure Details - East Parapet
16. Diaphragm Details
17. Framing Details
18. 63" PPC Bulb-T Beam
19. Beam Details
20. Railing Details
21. North Abutment
22. South Abutment
23. Bar Splicers
24. Steel H Piles
25. Boring Logs



PLAN

Note: For riprap layout see sheet 2 of 25.

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications

LOADING HS 20-44
Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinf.)

PRECAST PRESTRESSED UNITS
f'c = 6,000 psi
f'ci = 5,000 psi
f's = 270,000 psi (1/2" low lax. strands)
f'si = 201,960 psi (1/2" low lax. strands)

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.5

WATERWAY INFORMATION

Drainage Area = 28.0 Sq. Mi.		Low Grade Elev. 626.3 @ Sta. 12+00				
Flood Yr.	Freq. C.F.S.	Q	Opening Sq. Ft.	Natural H.W.E.	Head - Ft.	Headwater El.
Design	50	1,800	336 513	611.95	0.4 0.2	612.35 612.15
Base	100	1,979	348 534	612.25	0.4 0.2	612.65 612.45
Max. Calc.	500	2,361	372 579	612.85	0.4 0.1	613.25 612.95

DESIGN SCOUR ELEVATION TABLE

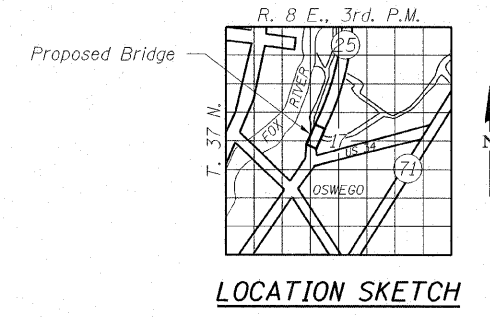
Design Scour Elevation	N. Abut. 602.3	S. Abut. 602.3
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APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Robert E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES



Steven W. Megginson 3-4-08
ILLINOIS STRUCTURAL NO. 081-6064
Expires 11-30-08



TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.		282	282
Stone Riprap, Class A4	Sq. Yd.			1,115
Filter Fabric	Sq. Yd.			1,331
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		58.0	58.0
Concrete Superstructure	Cu. Yd.	243.0		243.0
Bridge Deck Grooving	Sq. Yd.	495		495
Protective Coat	Sq. Yd.	661		661
Furnishing & Erecting P.P.C. Bulb-T Beams 63"	Foot	835		835
Reinforcement Bars, Epoxy Coated	Pound	33,830	8,000	41,830
Furnishing Steel Piles HP12x63	Foot		376	376
Name Plates	Each		1	1
Temporary Soil Retention System	Sq. Ft.			1,133
Bar Splicers	Each	370	26	396
Geocomposite Wall Drain	Sq. Yd.		122	122
Pipe Underdrain for Structures 4"	Foot		192	192
Aluminum Railing, Type L	Foot	104		104
Structure Excavation	Cu. Yd.		520	520
Setting Piles in Rock	Each		16	16
Concrete Encasement	Cu. Yd.		5.6	5.6
Asbestos Bearing Pad Removal	Each		24	24
Steel Railing (Temporary)	Foot		86	86

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS

HLR

3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400

ELGIN • SPRINGFIELD

PROJECT NUMBER: 12-06-0029-1 DATE: 01/14/08
DESIGNED: P.S.L. CHECKED: M.D.C. DRAWN: D.A.B.

GENERAL PLAN AND ELEVATION
IL 25 OVER WAUBONSEE CREEK
F.A.U. ROUTE 2503 / SECTION (35) BR-2
KENDALL COUNTY
STATION 12+91.00
STRUCTURE NO. 047-0062