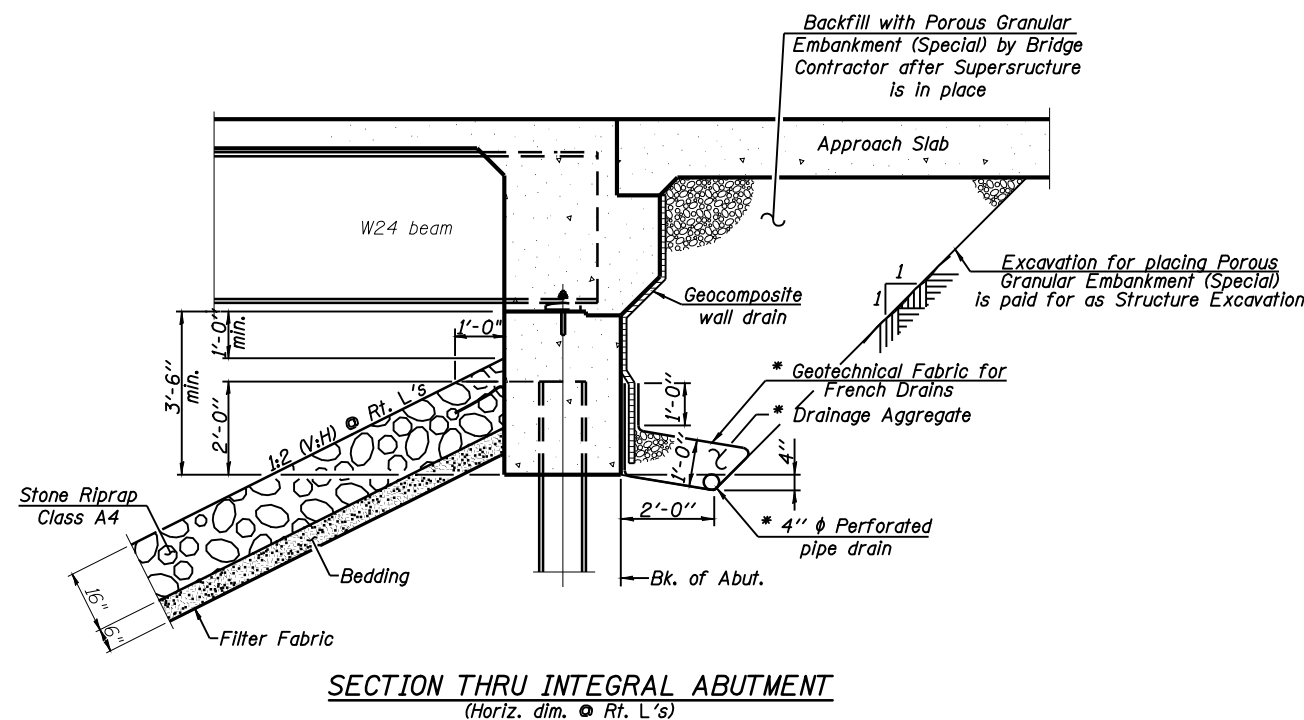
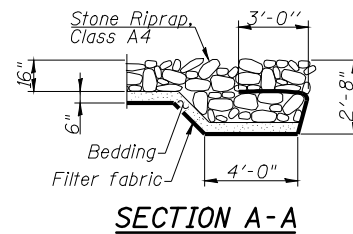
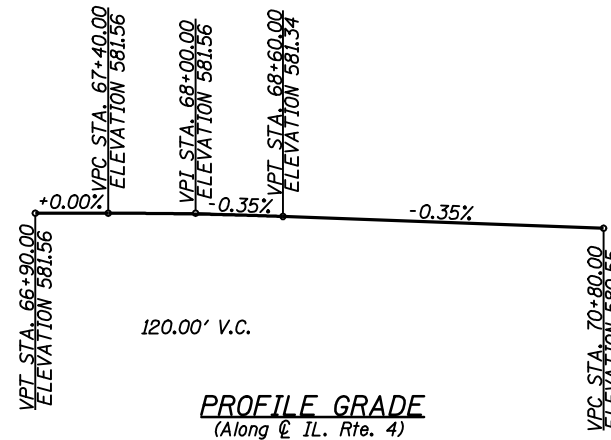


GENERAL NOTES

- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts - 7/8 in. ϕ , holes $\frac{5}{16}$ in. ϕ , unless otherwise noted.
- Calculated weight of Structural Steel = 149130 lbs. (M 270, Grade 50)
20740 lbs. (M 270 Grade 36)
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
- Reinforcement bars designated (E) shall be epoxy coated.
- Bearing seat surfaces shall be constructed or adjusted to the 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 Inorganic Zinc Rich Primer / Acrylic / Acrylic 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 for 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".
- Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
- The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- The Contractor is advised that the existing PPC Deck beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.
- If the Contractor's procedures for existing beam removal involves placement of heavy equipment on the existing deck beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads. Cost included with Removal of Existing Structures.



* Included in the cost of Pipe Underdrains for Structures.

Note:
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu. Yd.		225	225
Stone Riprap, Class A4	Sq. Yd.		2375	2375
Filter Fabric	Sq. Yd.		2375	2375
Removal of Existing Structures	Each		1	1
Slope Wall Removal	Sq. Yd.		418	418
Structure Excavation	Cu. Yd.		278	278
Floor Drains	Each	14		14
Concrete Structures	Cu. Yd.		286.7	286.7
Concrete Superstructure	Cu. Yd.	589.2		589.2
Bridge Deck Grooving	Sq. Yd.	1324		1324
Concrete Encasement	Cu. Yd.		18.2	18.2
Protective Coat	Sq. Yd.	1773		1773
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	7140		7140
Reinforcement Bars, Epoxy Coated	Pound	144810	27380	172190
Bar Splicers	Each	696	152	848
Bicycle Railing	Foot	384		384
Parapet Railing	Foot	384		384
Furnishing Steel Piles HP 10 x 42	Foot		1362	1362
Driving Piles	Foot		550	550
Test Pile Steel HP 10 x 42	Each		2	2
Pile Shoes	Each		52	52
Temporary Sheet Piling	Sq. Ft.		599	599
Name Plates	Each	1		1
Anchor Bolts, 1"	Each		112	112
Geocomposite Wall Drain	Sq. Yd.		117	117
Pipe Underdrains for Structures, 4"	Foot		240	240
Setting and Driving Piles in Rock	Each		28	28
Underwater Structure Excavation Protection - Location 1	Each		1	1
Underwater Structure Excavation Protection - Location 2	Each		1	1
Mechanical Splicers	Each		60	60

WATERWAY INFORMATION

Existing Low Grade Elev. 579.61 \bullet Sta. 70+50
Proposed Low Grade Elev. 580.51 \bullet Sta. 71+00
Drainage Area = 7.3 sq. mi.

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	1040	270	420	575.47	0.2	0.0	575.63	575.47
Base	100	1960	410	590	577.20	0.3	0.1	577.52	577.26
Overtop Existing	>500	-	-	-	-	-	-	-	-
Overtop Proposed	>500	-	-	-	-	-	-	-	-
Max. Calc.	500	2650	470	670	578.23	0.6	0.2	578.79	578.46

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	N. Abut.	Pier 1	Pier 2	S. Abut.
	574.5	564.0	563.9	574.0

GENERAL NOTES & BILL OF MATERIAL
S.N. 084-0521

<p>Allen Henderson & Associates, Inc. Civil and Structural Engineers Springfield, IL. 62703 Phone: (217)544-8033 IL. Design Firm No. 184-001907</p>	<p>SHEET NO. 2</p> <p>30 SHEETS</p>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		662	H(RS-10,B-2)	SANGAMON	84	46
		CONTRACT NO. 72A73				
		FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		