

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET
F. A. P. 846	4-RB	WILL	87	30
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. S2

SHEETS 520

CONTRACT NO. 62269

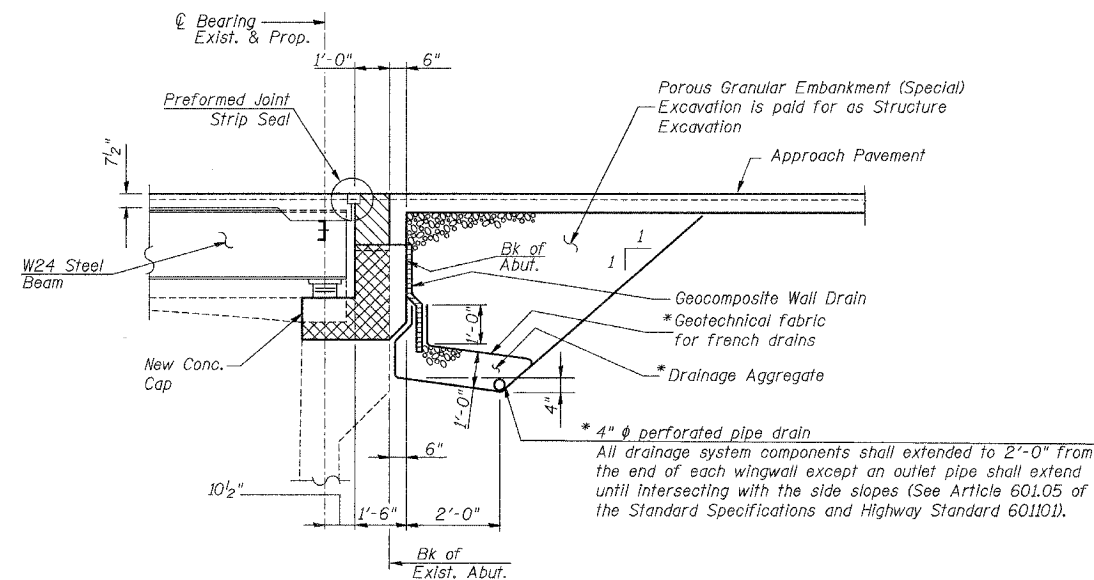
**GENERAL NOTES:**

- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts  $\frac{3}{4}$ "  $\phi$ , holes  $\frac{13}{16}$ "  $\phi$ , unless otherwise noted.
- Calculated weight of Structural Steel = 63,990 pounds (M270), Grade 50  
8,830 pounds (M270, Grade 36)
- Anchor bolts shall be set before bolting diaphragms over supports.
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60 (IL modified). See Special Provisions.
- Reinforcement bars designated (E) shall be epoxy coated.
- 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 the designated elevations within a tolerance of  $\frac{1}{16}$ " (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 and exterior Steel Surfaces and bottom flanges of all beams shall be light warm gray, munsell No 10Y 7/1. See Special Provision for "Cleaning and Painting new Metal Structures".

- Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.
- Backfill shall be placed behind the abutment after the superstructure has been poured and falsework removed. See Article 502.10 of the Standard Specifications.
- A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.
- All construction joints shall be bonded.
- Clean and relocate existing name plate adjacent to new plate. Cost included with Name Plates.
- Concrete Sealer shall be applied to the designated areas of the abutments.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER.	SUB.	TOTAL
Porous Granular Embankment (Special)	Cu yd	-	62	62
Removal of Existing Superstructures No. 1	Each	1		1
Concrete Removal	Cu yd		84.8	84.8
Structure Excavation	Cu yd		632	632
Cofferdam Excavation	Cu yd		318	318
Rock Excavation for Structures	Cu yd		170	170
Cofferdam (Location 1)	Each		1	1
Cofferdam (Location 2)	Each		1	1
Floor Drains	Each	12		12
Concrete Structures	Cu yd		132.1	132.1
Concrete Superstructure	Cu yd	124		124
Bridge Deck Grooving	Sq yd	474		474
Protective Coat	Sq yd	572		572
Erecting Structural Steel	L Sum	0.52		0.52
Stud Shear Connectors	Each	3384		3384
Reinforcement Bars, Epoxy Coated	Pound	38910	31190	70100
Bar Splicers	Each		96	96
Name Plates	Each	1		1
Preformed Joint Strip Seal	Foot	85		85
Erecting Elastomeric Bearing Assembly, Type I	Each	18		18
Anchor Bolts, 1"	Each		24	24
Anchor Bolts, 1/4"	Each		12	12
Anchor Bolts, 1/2"	Each		12	12
Concrete Sealer	Sq ft		134	134
Epoxy Crack Injection	Foot		23	23
Geocomposite Wall Drain	Sq yd		43	43
Pipe Underdrains for Structures, 4"	Foot		159	159
Structural Repair of Concrete (Depth Greater Than 5")	Sq ft		16	16
Structural Repair of Concrete (Depth Equal To or less Than 5")	Sq ft		10	10
Furnishing and Erecting Precast Concrete Panels	Each	12		12
Concrete Bridge Railing	Foot	213		213
Class SI Concrete	Cu yd	-	12.2	12.2



**SECTION THRU ABUTMENT**

(Section thru Abutment Extension Similar)

\* Included in the cost of Pipe Under Drains for Structures, 4".

DESIGNED	NDS/GMK
CHECKED	MTP/SMK/GBC
DRAWN	NDS/DCB
CHECKED	SMK/GBC

- Area of Backwall to be constructed after removal of formwork for Superstructure
- Area of Abutment to be constructed before placement of Superstructure

ILLINOIS DEPARTMENT OF TRANSPORTATION  
GENERAL NOTES, TOTAL BILL OF MATERIAL & SECTION THRU ABUTMENT  
FAP 846  
NB IL. ROUTE 53 OVER PRAIRIE CREEK STATION 1305+00 SECTION 4-RB  
WILL COUNTY  
STRUCTURE NO. 099-0090  
SCALE: NONE  
DATE: AUGUST 2007  
 DELTA ENGINEERING INC.  
CONSULTING ENGINEERS, CHICAGO, ILLINOIS