



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	3268F-R-1	COOK	279	134
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 62387

**GENERAL NOTES**

Fasteners shall be high strength bolts (AASHTO M164, Type 3 in unpainted areas and mechanically galvanized AASHTO M 164, Type 1 or 2 in painted areas). Bolts  $\frac{1}{8}$ " diameter, open holes  $\frac{1}{16}$ " diameter, unless otherwise noted.

Calculated weight of Structural Steel:  
AASHTO (M270 GR 50W) = 244,060 pounds

All structural steel shall be AASHTO M270 Grade 50W.

Field welding of construction accessories will not be permitted to beams.

Anchor bolts shall be set before bolting diaphragms over supports.

The main load carrying member components subjected to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams and all splice plate material except fill plates.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.

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 embankment that must be constructed prior to construction of the abutments.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of  $\frac{1}{8}$ ". Adjustments shall be made either by grinding the surface or by shimming the bearing. Two  $\frac{1}{8}$ " adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.

Steel piles at abutments shall be driven in holes precored through the embankment according to Article 512.09(c) of the Standard Specifications.

The contractor shall drive 1 test pile, HP10x42, in a permanent location at each abutment and pier as directed by the Engineer before ordering the remainder of the piles.

AASHTO M 270 Grade 50W structural steel shall only be painted, at the ends of the beams, for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Those areas shall be primed in the shop with an inorganic zinc rich primer per AASHTO M300, Type I. No field painting shall be required. All structural steel shall be cleaned as specified in the special provision for "Surface Preparation and Painting Requirements for Weathering Steel".

All construction joints shall be bonded.

All embedded and separate bearing plates, side retainers, anchor bolts, nuts, washers and pintles shall be galvanized according to AASHTO M111 or M232 (as applicable).

Slipforming of the parapets is not allowed.

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.

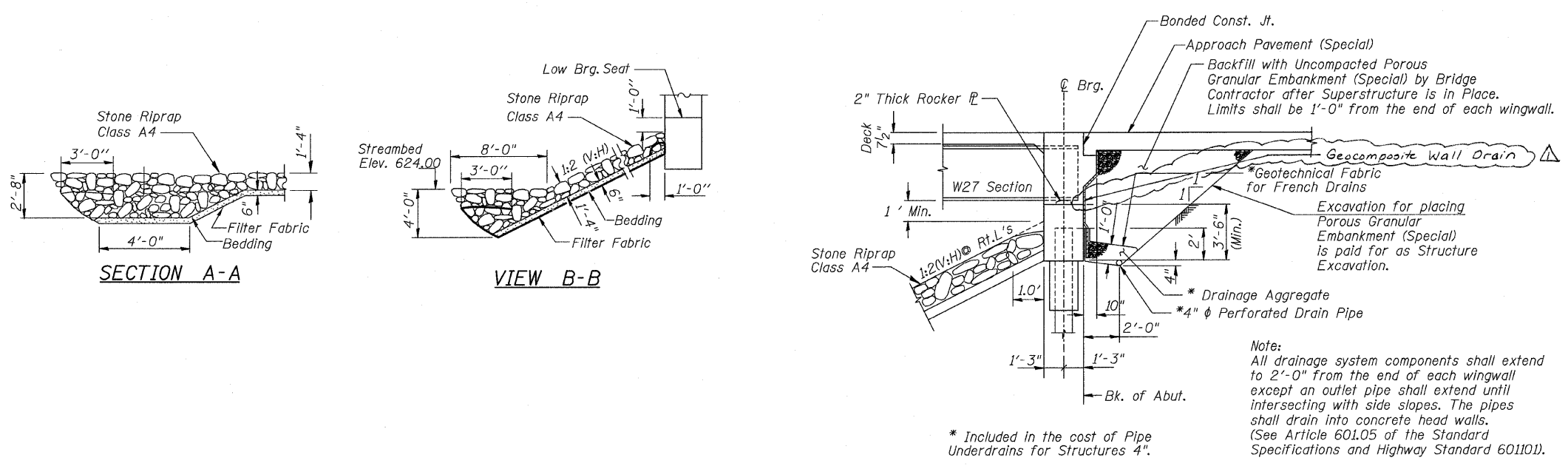
All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

**TOTAL BILL OF MATERIAL**

DESCRIPTION	UNIT	SUB-STRUCTURE	SUPER STRUCTURE	TOTAL QUANTITIES
Porous Granular Embankment (Special)	CU YD	210		210
Stone Riprap, Class A4	SQ YD	1160		1160
Filter Fabric	SQ YD	1350		1350
Removal of Existing Structure	EACH		1	1
Structure Excavation	CU YD	229		229
Concrete Structures	CU YD	305.1		305.1
Concrete Superstructure	CU YD		480	480
Bridge Deck Grooving	SQ YD		1200	1200
Protective Coat	SQ YD		1620	1620
Erecting Structural Steel	LUMP SUM		1	1
Stud Shear Connectors	EACH		6210	6210
Reinforcement Bars, Epoxy Coated	POUND	25880	111200	137080
Aluminum Railing, Type L	FOOT		309	309
Furnishing Steel Piles HP10x42	FOOT	2813		2813
Driving Piles	FOOT	2813		2813
Pile Shoes	EACH	52		52
Test Pile Steel HP10x42	EACH		4	4
Temporary Sheet Piling	SQ FT	2780		2780
Name Plates	EACH		1	1
Anchor Bolts, 1"	EACH	80		80
Underwater Structure Excavation Protection - Location 1	EACH	1		1
Underwater Structure Excavation Protection - Location 2	EACH	1		1
Bar Splicers	EACH	114	857	971
Pipe Underdrains For Structures 4"	FOOT	203		203
<i>Geocomposite Wall Drain</i>	<i>SQ YD</i>		<i>125</i>	<i>125</i>

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**SECTION THRU INTEGRAL ABUTMENT**  
Dimensions at Rt. L's

REVISIONS	
NAME	DATE

Rev. 4-14-08

**STV Incorporated**  
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ILLINOIS DEPARTMENT OF TRANSPORTATION  
ILLINOIS ROUTE 21  
MILWAUKEE AVE. OVER DES PLAINES RIVER  
F.A.P. ROUTE 374 SECTION 3268F-R-1  
COOK COUNTY, SN 016-6566

**GENERAL NOTES & B.O.M.**

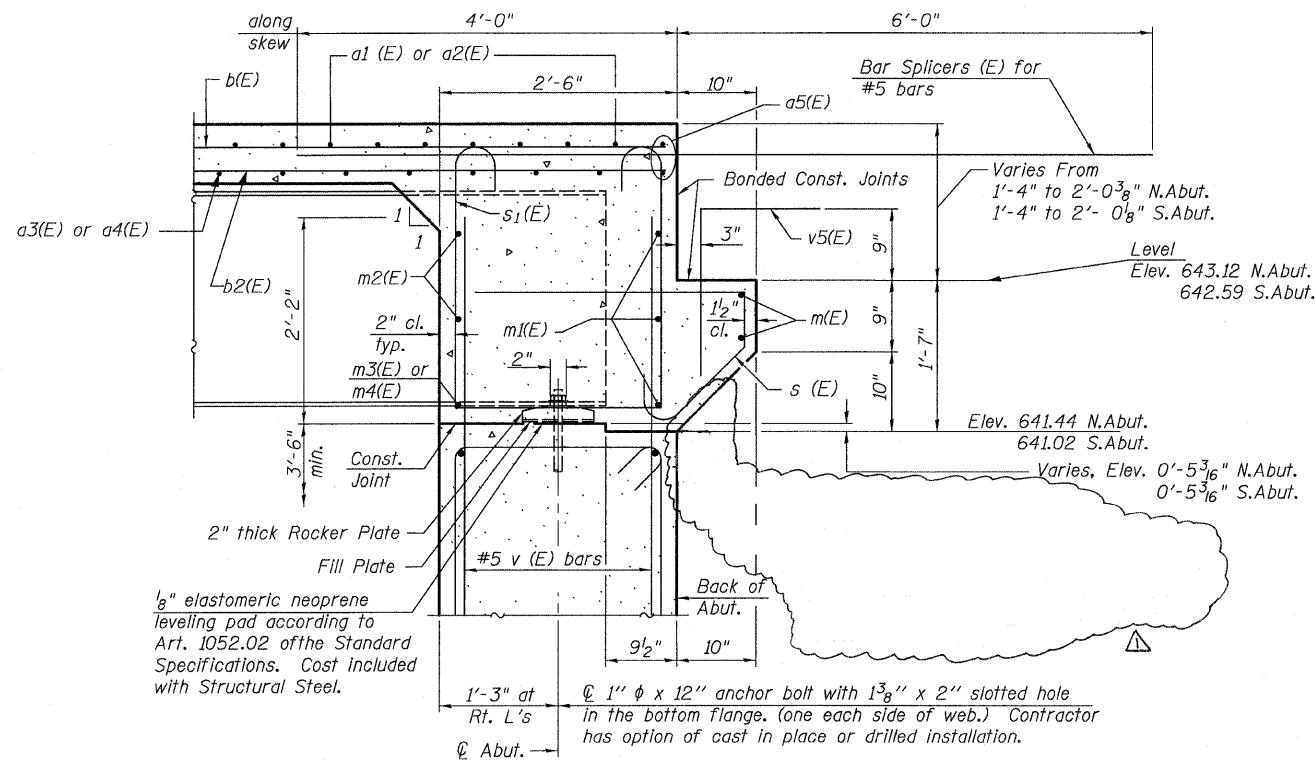
DESIGN BY: BTO DRAWN BY: BTO  
DATE: 02/05/08 CHECKED BY: JAW CHECKED BY: JAN

F.A.P. No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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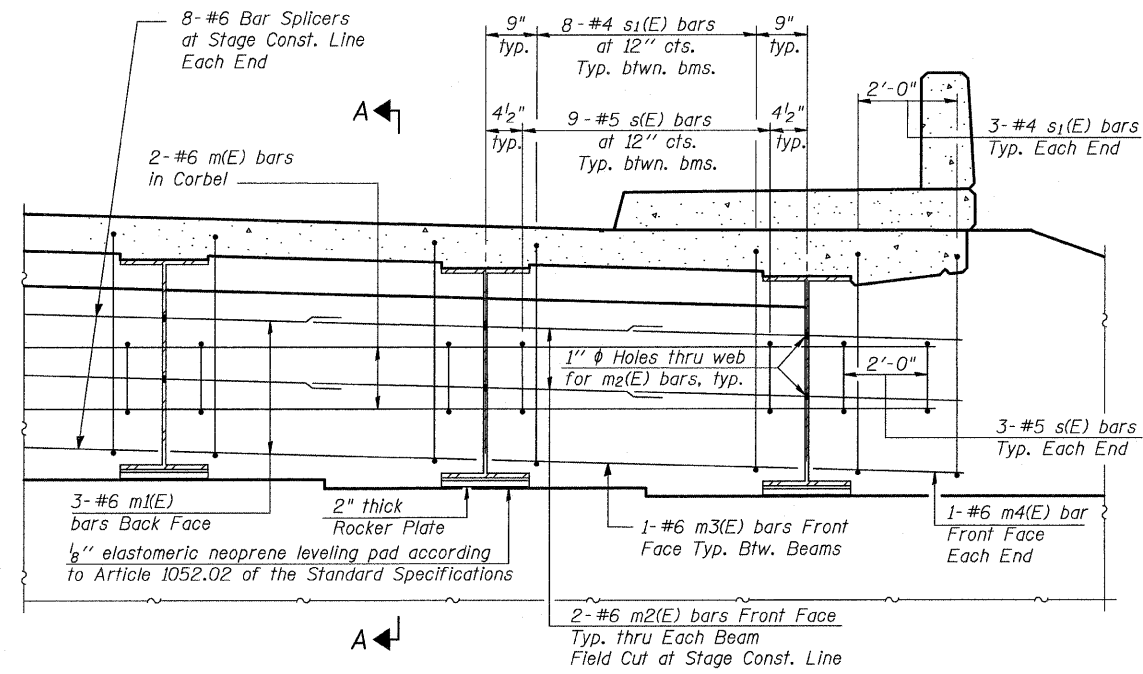
Notes:  
 Reinforcement bars in diaphragm are billed with superstructure on sheet 13 of 29.  
 Concrete in diaphragm is included with Concrete Superstructure on sheet 13 of 29.  
 For details of bars s(E) & s1(E) see sheet 13 of 29.  
 The s(E) and s1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.  
 For anchor bolt details see sheet 23 of 29.  
 For Abutments see sheets 18 & 19 of 29.  
 Dimensions at right angles to abutment, except as shown.  
 Cost included with Concrete Superstructure.

Minimum Bar Lap #6 bar = 2'-9"



SECTION A-A

\* Included in the cost of Concrete Superstructure



DIAPHRAGM ELEVATION AT ABUTMENT

Rev. 4-14-08

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 ILLINOIS ROUTE 21  
 MILWAUKEE AVE. OVER DES PLAINES RIVER  
 F.A.P. ROUTE 374 SECTION 3268F-R-1  
 COOK COUNTY, SN 016-6566

ABUTMENT DIAPHRAGM DETAILS

DESIGN BY: AWH DRAWN BY: AWH  
 DATE: 02/05/08 CHECKED BY: JAW CHECKED BY: JAW