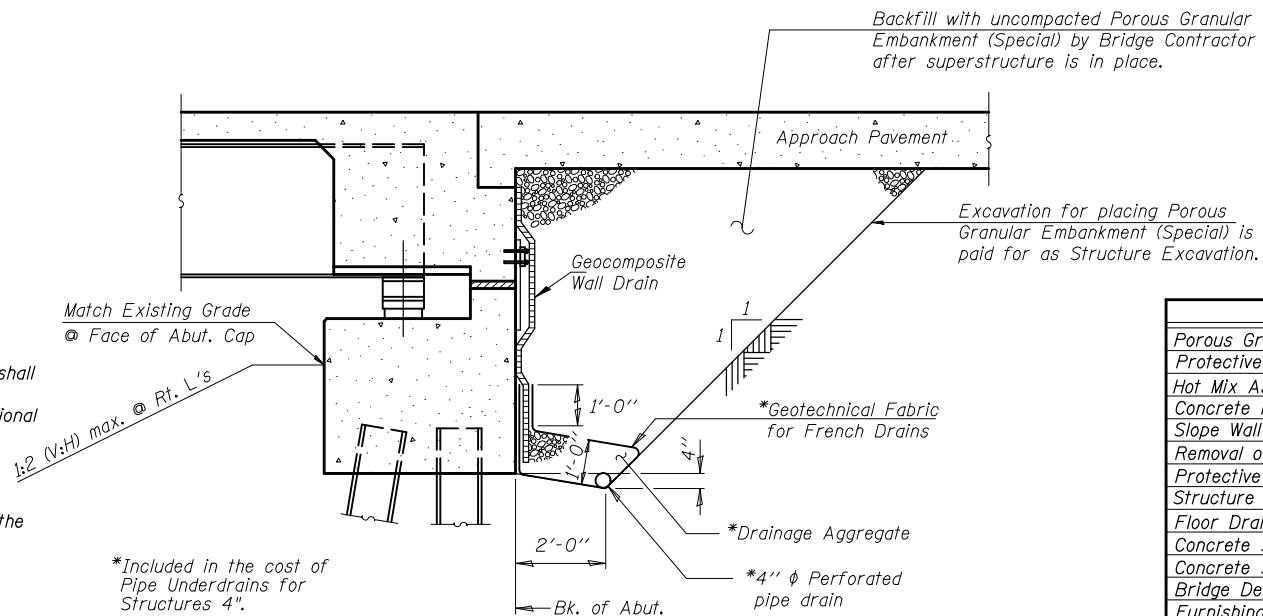


### GENERAL NOTES

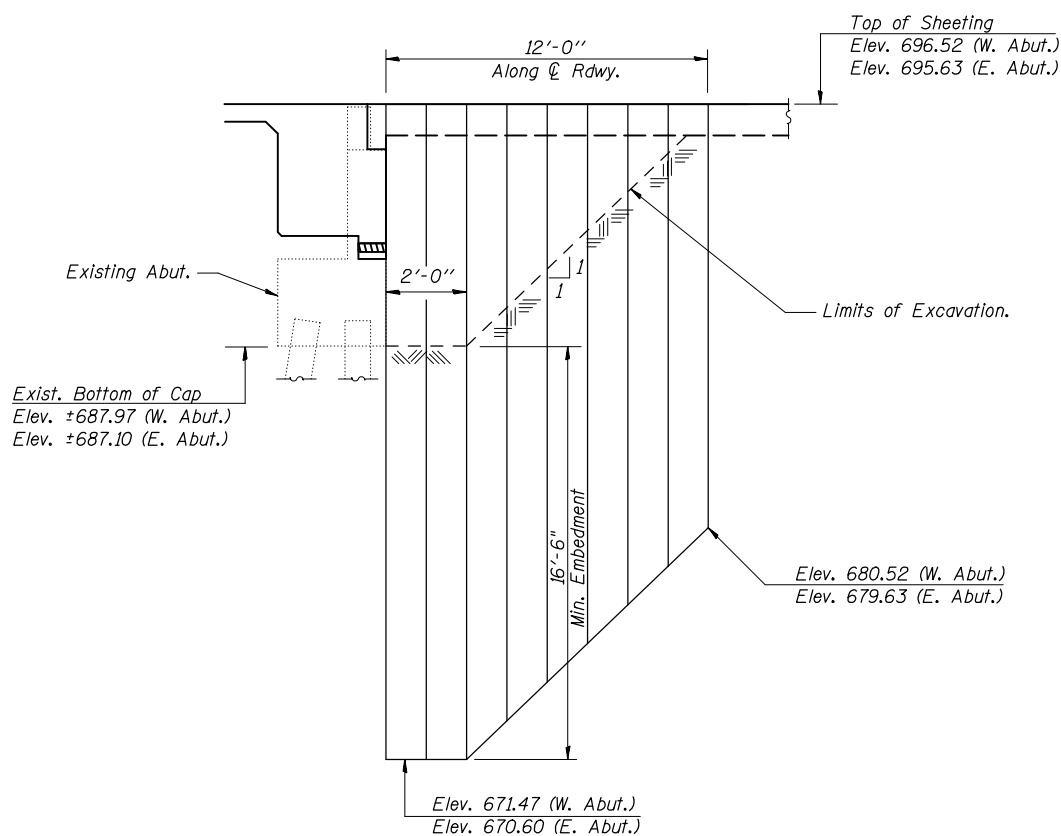
- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts  $\frac{3}{4}$ " $\phi$ , open holes  $\frac{7}{8}$ " $\phi$ , unless otherwise noted.
- No field welding is permitted except as specified in the contract documents.
- All new structural steel shall be shop painted with an inorganic zinc rich primer per AASHTO M300, Type 1.
- Reinforcement bars designated (E) shall be epoxy coated.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions
- 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 the scope of work, however, the Contractor will be paid for the quantity actually furnished based on the unit price bid for the work.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of  $\frac{1}{8}$  in. (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearing.  
  
Two  $\frac{1}{8}$ " adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
- Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.  
  
As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by an individual acceptable to the Engineer. Any cracks that can not be removed by grinding  $\frac{1}{4}$  inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing weld accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- Cleaning and field painting of structural steel shall be done under a separate painting contract.
- Existing structural steel shall only be cleaned and painted as required by the special provision Cleaning and Painting Contact Surface Areas of Existing Steel Structures.
- The Contractor shall test the existing welds by non-destructive methods within 2 ft. of the end of the existing cover plates for cracks after removal of the existing concrete deck. Dye penetrant (PT), magnetic particle (MT), or other approved testing method shall be performed by qualified personnel approved by the Engineer. If cracks are found, report them to the Bureau of Bridges and Structures for disposition. The cost of testing is included in Removal of Existing Concrete Deck. The cost of crack repair, if necessary, will be paid for according to Article 109.04 of the Standard Specifications.
- Partial depth saw cutting of the existing concrete deck over the top of beam or girder flanges shall be permitted. See Special Provision for Removal of Existing Non-Composite Bridge Decks.
- Slipforming of the concrete parapets is not allowed.



### SECTION THRU SEMI-INTEGRAL ABUTMENT

(Dimensions at Rt. L's)

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).



### TEMPORARY SHEET PILING AT ABUTMENTS

Dimensions at Rt. L's unless noted otherwise

### TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.		282	282
Protective Coat	Sq. Yd.	1557		1557
Hot Mix Asphalt Surface Removal (Deck)	Sq. Yd.	452		452
Concrete Removal	Cu. Yd.		46.9	46.9
Slope Wall Removal	Sq. Yd.		132	132
Removal of Existing Concrete Deck	Each	1		1
Protective Shield	Sq. Yd.	832		832
Structure Excavation	Cu. Yd.		311	311
Floor Drains	Each	8		8
Concrete Structures	Cu. Yd.		11.8	11.8
Concrete Superstructure	Cu. Yd.	487.9		487.9
Bridge Deck Grooving	Sq. Yd.	654		654
Furnishing and Erecting Structural Steel	Pound	3530		3530
Stud Shear Connectors	Each	4995		4995
Jack and Remove Existing Bearings	Each	18		18
Reinforcement Bars, Epoxy Coated	Pound	103,485	1,610	105,095
Bar Splicers	Each	784	4	788
Slope Wall 4"	Sq. Yd.		200	200
Temporary Sheet Piling	Sq. Ft.		519	519
Name Plates	Each		2	2
Elastomeric Bearing Assembly, Type I	Each	18		18
Geocomposite Wall Drain	Sq. Yd.		112	112
Pipe Underdrain for Structures 4"	Foot		190	190
Polymer Concrete	Cu. Ft.	2.2		2.2
Drainage Scuppers, DS-11	Each	2		2
** Diamond Grinding (Bridge Section)	Sq. Yd.	997		997
Anchor Bolts, 1"	Each	36		36

\*\* Quantity includes bridge deck and approach pavements. See Special Provision.

### TEMPORARY SHEET PILING DATA

Minimum Section Modulus = 13.5 in<sup>3</sup>/ft  
Embedment Tip Elevation = Refer to Detail  
Length Required = Refer to Detail

Note: If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

DESIGNED	Ruben V. Boehler
CHECKED	Tim S. Howard
DRAWN	Nicole L. Darling
CHECKED	Michael D. Cummins

### NOTE

Plan elevations relative to the existing structure have been taken from existing plans and reduced by 0.47 feet to match benchmark datum.

### GENERAL NOTES, DETAILS & TOTAL BILL OF MATERIAL

IL ROUTE 133 OVER I-57  
F.A.I. ROUTE 57 SECTION (15,21-25HB-2)BR  
DOUGLAS COUNTY  
STA. 1492+76.53  
S.N. 021-0024

CUMMINS ENGINEERING CORPORATION

JOB #: 2114  
FILE: 2114BILLMAT  
DATE: 10/24/06