

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment	Cu·Yd		370	370
Porous Granular Embankment, Special	Cu Yd		507	507
Concrete Removal	Cu Yd		71.5	71.5
Slope Wall Removal	Sq Yd		840	840
Removal of Existing Concrete Deck	Each	1		1
Protective Shield	Sq Yd	680		680
Structure Excavation	Cu Yd		677	677
Concrete Structures	Cu Yd		196.9	196.9
Concrete Superstructure	Cu Yd	574.1		574.1
Bridge Deck Grooving	Sq Yd	1,449		1,449
Protective Coat	Sq Yd	1,869		1,869
Furnishing and Erecting Structural Steel	Pound	20,750		20,750
Stud Shear Connectors	Each	4,374		4,374
Reinforcement Bars, Epoxy Coated	Pound	141,630	17,610	159,240
Bar Splicers	Each	1,222	211	1,433
Slope Wall 4 Inch	Sq Yd		742	742
Name Plates	Each	1		1
Preformed Joint Strip Seal	Foot	79		79
Elastomeric Bearing Assembly, Type II	Each	12		12
Anchor Bolts, 1"	Each	36		36
Anchor Bolts, 1 1/4"	Each	12		12
Anchor Bolts, 1 1/2"	Each	12		12
Concrete Sealer	Sq Ft		2,398	2,398
Epoxy Crack Injection	Foot		68	68
Geocomposite Wall Drain	Sq Yd		185	185
Pipe Underdrains for Structures 4"	Foot		190	190
Conduit Attached to Structure, 2" Dia., Galvanized Steel	Foot		180	180
Structural Steel Removal	L Sum	1		1
Removal of Existing Bearings	Each	24		24
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq Ft		9	9
Structural Repair of Concrete (Depth Greater Than 5 Inches)	Sq Ft		24	24
Jacking Existing Superstructure	L Sum	1		1
Modular Expansion Joint-Swivel 6"	Foot	77		77
Temporary Soil Retention System	Sq Ft		500	500
Drainage Scuppers, DS-12	Each	4		4
High Load Multi-Rotation Bearings, Guided Expansion, 300k	Each	6		6

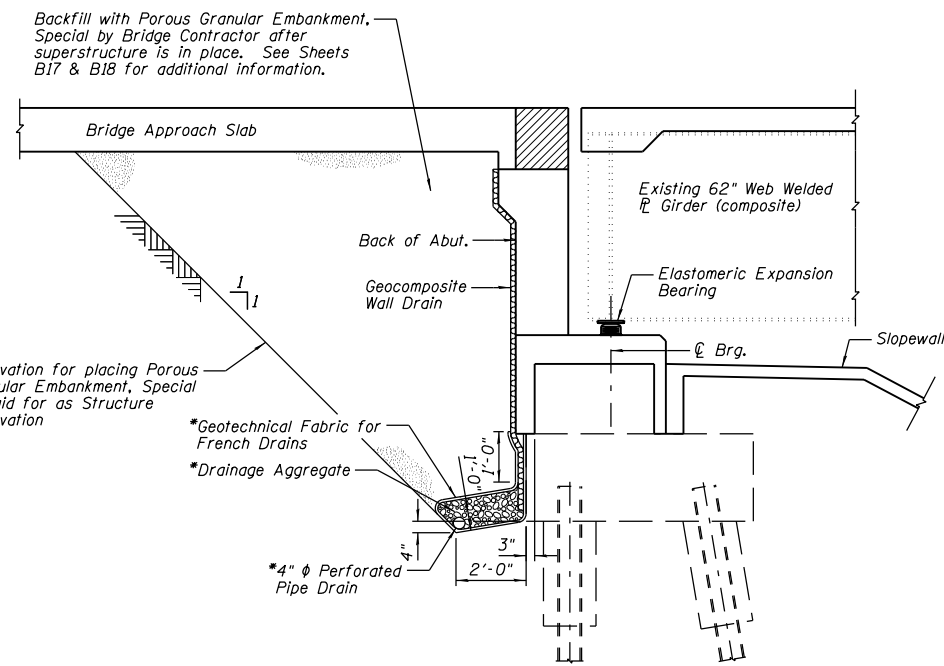
GENERAL NOTES:

- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts 7/8 in. ϕ , holes 15/16 in. ϕ , unless otherwise noted.
- Calculated weight of Structural Steel = 4090 lb. Grade 50.
= 16,660 lb. Grade 36.
- No field welding is permitted except as specified in the contract document.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
- Reinforcement bars designated (E) shall be epoxy coated.
- Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or 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 qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding 1/4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.
- If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
- Plan dimensions and details relative to existing plans are subject to nominal construction 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 at the unit price bid for the work.
- Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
- Concrete Sealer shall be applied to the designated areas of the Abutments and Pier No. 1.
- Cleaning and field painting of existing structural steel shall be done under a separate painting contract.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- The concrete for bridge decks finished according to Article 503.16(a) of the Standard Specifications shall be placed and compacted parallel to the skew in uniform increments along centerline of bridge. The machine used for finishing shall be set parallel to the skew for striking off and screeding the concrete.
- A copy of the existing bridge plans will be provided by the District upon request.
- Removal of the existing sliding plate expansion devices shall be included with Removal of Existing Concrete Deck.
- All new structural steel shall be shop painted with the inorganic zinc primer per AASHTO M 300, Type 1.
- Existing structural steel shall only be cleaned and painted as required by the Special Provision "Cleaning and Painting Adjacent Areas of Existing Steel Structures".

DESIGNED	JML
CHECKED	MSW
DRAWN	DJM
CHECKED	MGO/MSW

DATE 08/09/10

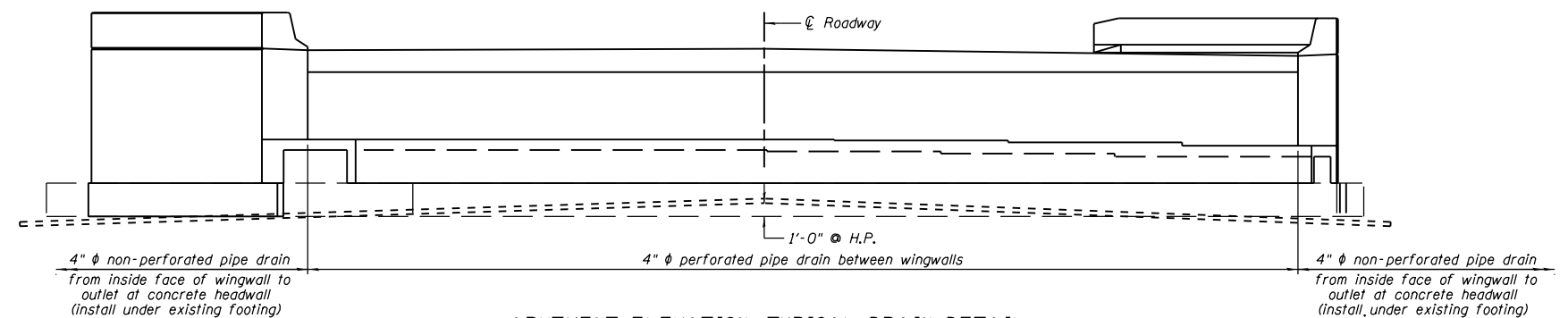
FARNSWORTH GROUP, INC.



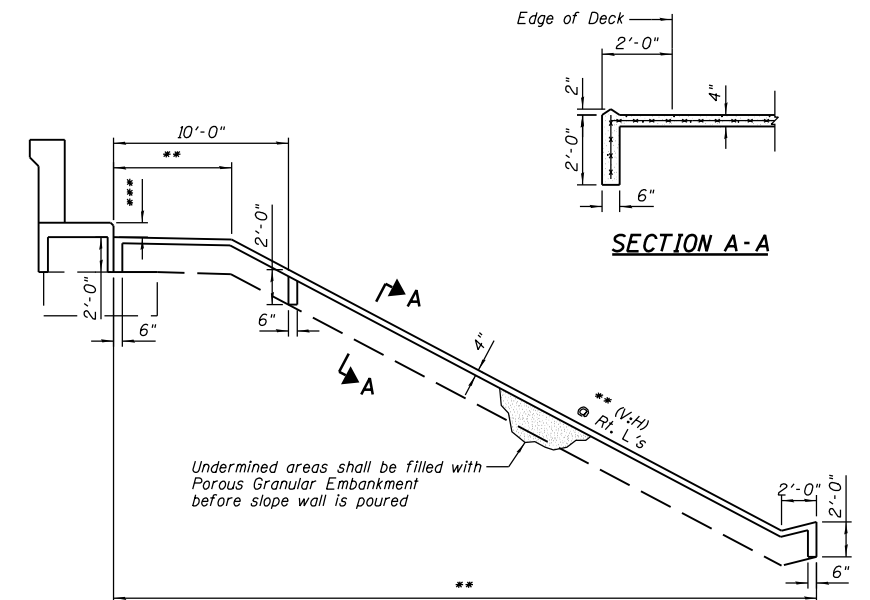
SECTION THRU WEST ABUTMENT
(Similar for East Abutment)

NOTES:

- Dimensions ϕ Rt. L's to Abutment.
- Included in cost of Pipe Underdrains for Structures.
- All drainage system components shall extend to the inside face 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 60110).



ABUTMENT ELEVATION, TYPICAL DRAIN DETAIL



SECTION THRU SLOPE WALL
(Similar for East Abutment)

NOTES:

- Match existing dimension.
- 1'-0" min. ϕ low brg. seat.
- Horizontal dimensions ϕ Rt. L's to Roadway.
- Slope Wall shall be reinforced with welded wire fabric, 6 in. x 6 in. - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.
- The actual area of slope undermining is unknown, therefore a 1'-6" thickness of Porous Granular Embankment has been assumed under the entire area of the slope wall. The actual amount shall be measured in the field.

GENERAL DATA
STRUCTURE NO. 084-0078

SHEET NO. B2 42 SHEETS	F.A.I. RTE. 72	SECTION (84-3HB-5)BR	COUNTY SANGAMON	TOTAL SHEETS 84	SHEET NO. 38
	SN 084-0078		CONTRACT NO. 72C70		
FED. ROAD DIST. NO. 6 ILLINOIS FED. AID PROJECT					