

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment	Cu Yd		330	330
Porous Granular Embankment, Special	Cu Yd		399	399
Concrete Removal	Cu Yd		59.3	59.3
Slope Wall Removal	Sq Yd		645	645
Removal of Existing Bearings	Each	24		24
Removal of Existing Concrete Deck	Each	1		1
Protective Shield	Sq Yd	339		339
Structure Excavation	Cu Yd		399	399
Concrete Structures	Cu Yd		154.0	154.0
Concrete Superstructure	Cu Yd	464.7		464.7
Bridge Deck Grooving	Sq Yd	1,191		1,191
Protective Coat	Sq Yd	1,523		1,523
Erecting Structural Steel	L Sum	1		1
Stud Shear Connectors	Each	2,984		2,984
Structural Steel Removal	L Sum	1		1
Structural Steel Repair	Pound	490		490
Reinforcement Bars, Epoxy Coated	Pound	114,800	12,630	127,430
Bar Splicers	Each	954	189	1,143
Slope Wall 4 Inch	Sq Yd		660	660
Name Plates	Each		1	1
Preformed Joint Strip Seal	Foot	70		70
Erecting Elastomeric Bearing Assembly, Type I	Each	12		12
Erecting Elastomeric Bearing Assembly, Type II	Each	6		6
Anchor Bolts, 1"	Each	24		24
Anchor Bolts, 1/2"	Each	24		24
Concrete Sealer	Sq Ft		341	341
Epoxy Crack Injection	Foot		53	53
Geocomposite Wall Drain	Sq Yd		109	109
Pipe Underdrains for Structures 4"	Foot		152	152
Conduit Attached to Structure, 2" Dia., Galvanized Steel	Foot		128	128
Jacking Existing Superstructure	L Sum	1		1
Modular Expansion Joint 6"	Foot	68		68
Drainage Scuppers, DS-12	Each	4		4
Temporary Soil Retention System	Sq Ft		335	335
Structural Repair of Concrete (Depth Greater Than 5 Inches)	Sq Ft		10	10
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq Ft		96	96

GENERAL NOTES:

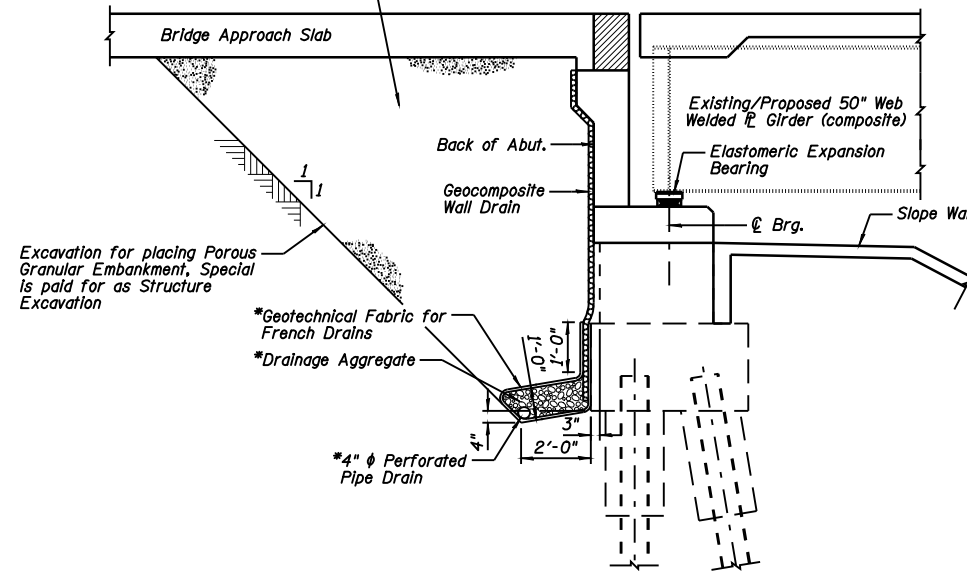
- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts 7/8 in. ϕ , holes 5/8 in. ϕ , unless otherwise noted.
- Calculated weight of Structural Steel = 93,950 Grade 50.
= 17,720 Grade 36.
- No field welding is permitted except as specified in the contract document.
- Reinforcement 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 Abutment Seats, Backwall and Abutment Face.
- 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 Inorganic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. 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".
- 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.
- Slipforming of parapets is not allowed.
- The existing structure plans are available at the District Office.
- Removal of the existing sliding plate expansion devices shall be included with Removal of Existing Concrete Deck.
- All new structural steel furnished under this contract 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 03/05/09

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

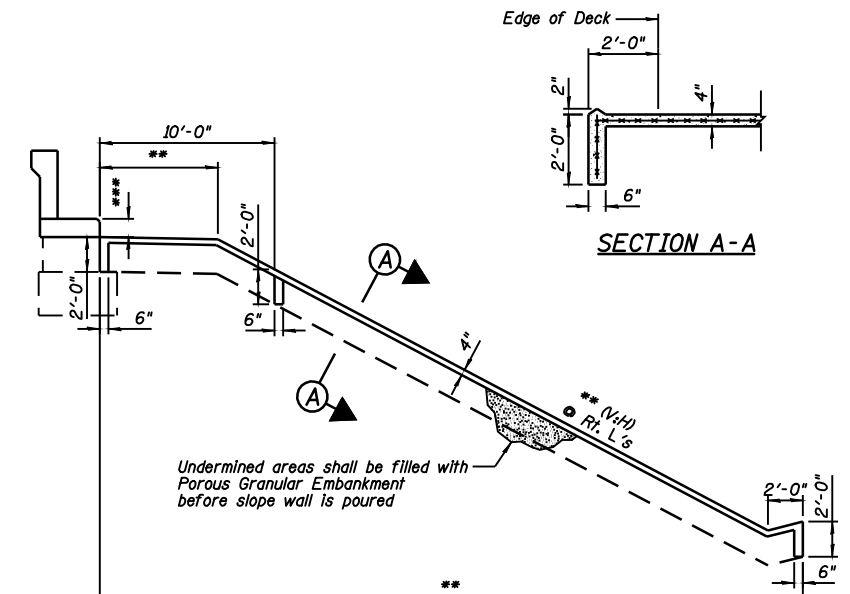
Backfill with Porous Granular Embankment, Special by Bridge Contractor after superstructure is in place. See Sheets B17 & B18 for additional information.



SECTION THRU SOUTH ABUTMENT
(Similar for North Abutment)

NOTES:

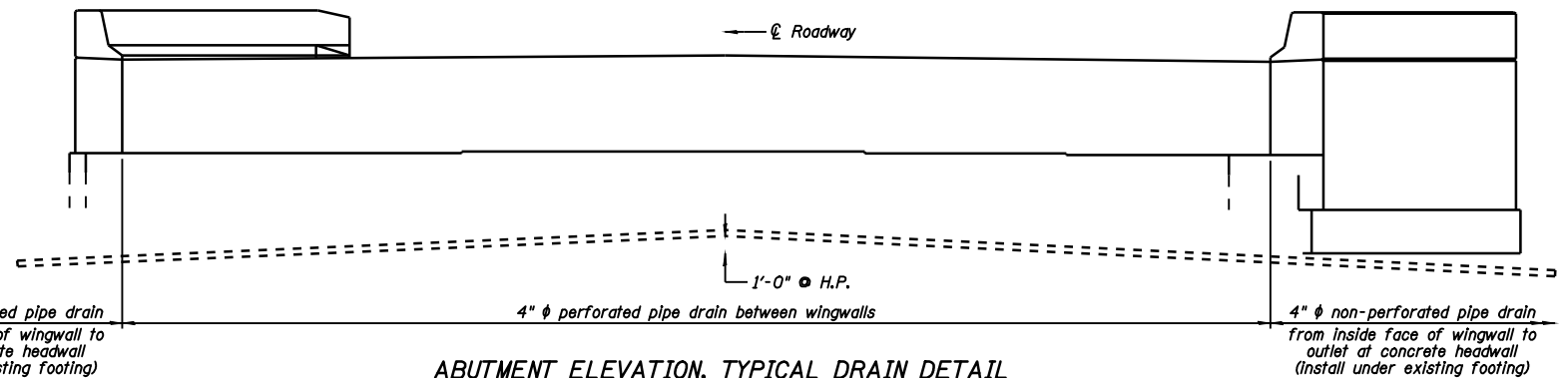
- Dimensions ϕ Rt. L's to Abutment.
- *Included in cost of Pipe Underdrains for Structures.
- All drainage system components shall extend to the inside face of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 60110).



SECTION THRU SLOPE WALL
(Similar for North 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.



ABUTMENT ELEVATION, TYPICAL DRAIN DETAIL

**BILL OF MATERIAL,
GENERAL NOTES AND
MISCELLANEOUS DETAILS
STRUCTURE NO. 084-0028**

SHEET NO. B2	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	55	(84-3HB-6)BR	SANGAMON	90	36
44 SHEETS	SN 084-0028		CONTRACT NO. 72A64		
FED. ROAD DIST. NO. 6 ILLINOIS FED. AID PROJECT					