

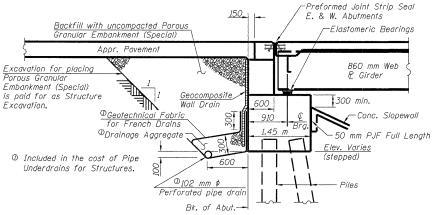
WL W

CHECKED

Note:

Bk. W. Abut.

All drainage system components shall extend parallel to the abutment back wall until they intersect the wingwalls. The pipe shall extend under the north wingwall to SN 060-0310. The pipe shall also extend under the south wingwall until intersecting the south side slopes. The pipes shall drain into a concrete headwall on south side slope. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



SECTION THRU ABUTMENT

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts M22, holes 24 mm ϕ , unless otherwise noted.

Calculated mass of Structural Steel = 140,780 kg (M270M Grade 345) 13,730 ka (M270M Grade 250)

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 surfaces shall be gray, Munsell No. 5B 7/1. The color of the finish for the exterior and bottom flange of the fascia girders shall be Reddish Brown, Munsell No. 2.5 YR 3/4. See Special Provisions for "Cleaning and Painting New Metal Structures".

The structural steel bearing plates of the Elastomeric Bearing Assemblies shall conform to the requirements of AASHTO M 270M Grade 345.

Slope wall shall be reinforced with welded wire fabric, 152×152 -MW25.8 x MW25.8 with a mass of 2.91 kg/m^2 .

The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments. Pile driving at the abutments will NOT be allowed until two (2) months after the completion of the embankment cones.

The contractor shall drive one (1) metal shell test pile in a permanent location at the West Abutment and at Pier #1 as directed by the Engineer before ordering the remainder of piles.

Concrete Sealer shall be applied to all exposed surface areas of the abutments.

The elevations of the existing top-of-rail profiles shall be verified prior to beginning construction.

All dimensions are in millimeters (mm) except as noted,

All structural steel shall be AASHTO M 270M Grade 345 unless noted otherwise.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 400. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of 3 mm. Adjustment shall be made either by grinding the surface or by shimming the bearings.

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

Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

Two 3 mm adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed

as shown on bearing details.

Piles shall be driven through 380 mm diameter precored holes extending to elevation 185.5 at East Abutment & Elevation 184.5 at West Abutment according to Article 512.09(c) of the Standard Specifications. Cost included in driving piles.

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.

Slip forming of parapets will not be allowed.

* 60-15VB-1 & 2

380 mm 50 mm \$ Galv. Conduit

Notes:

50 mm ¢ Galv. Conduit shall be Sch. 40 pipe. Extend to clear wingwall at a point outside of the shoulder. Cost included with "Concrete Superstructure" See Sheet #1 of 45 for locations.

PARTIAL PLAN OF ABUTMENT

(Showing Electrical Conduit)

TOTAL BILL OF MATERIAL

	ITEM	UNIT	SUPER	SUB	TOTAL
	Stud Shear Connectors	Each	6,171		6,171
	Bar Splicers	Each		146	146
	Test Pile Metal Shells	Each		2	2
	Name Plates	Each	1		1
	Elastomeric Bearing Assembly, Type I	Each	22		22
	Elastomeric Bearing Assembly, Type II	Each	9		9
	Porous Granular Embankment, Special	m3		172	172
***	Stone Riprap, Class A3	m2		77	77
***	Filter Fabric	m2		77	77
	Structure Excavation	m3		1,102	1,102
	Concrete Encasement	m3		13.3	13.3
	Form Liner Textured Surface	m2	27	55	82
	Concrete Structures	m3		613.7	613.7
	Concrete Superstructure	m3	324.3		324.3
1	Bridge Deck Grooving	m2	1,240		1,240
**	Protective Coat	m2	1,402		1,402
	Furnishing and Erecting Structural Steel	L Sum	0.5		0,5
	Reinforcement Bars, Epoxy Coated	kg	59 , 010	50,290	109,300
***	Slope Wall 100 mm	m2		1,154	1,154
	Furnishing Metal Shell Piles 356mmX6.35mm	Meter		2,325.0	2,325.0
	Driving Piles	Meter		2,325.0	2,325.0
***	Temporary Sheet Piling	m2		729	729
	Anchor Bolts, M24	Each	40		40
	Anchor Bolts, M36	Each	44		44
	Preformed Joint Strip Seal	Meter	44.6		44.6
	Concrete Sealer	m2		143	143
	Geocomposite Wall Drain	m2		95	95
***	Pipe Underdrains for Structures 100 mm	Meter		73.8	73.8
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** Quantity is for inside & top surface of parapet & deck.

*** For Quantity South of Local Tangent to £ F.A.P. Rte. 310 at Sta. 39+157.48.

TOTAL BILL OF MATERIALS.

GENERAL NOTES AND DETAILS

FAP RTE 310 (IL RTE 255) SB & RAMP D OVER

UNION PACIFIC & KANSAS CITY SOUTHERN R.R.

SECTION 60-15VB-1 & 2

MADISON COUNTY

STATION 39+160.297

STRUCTURE NUMBER 060-0311

Klingner & Assoc., P.C