INDEX OF SHEETS

GENERAL NOTES:

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts in painted areas and ASTM A325 Type 3 in unpainted areas. Bolts $\frac{7}{8}$ in. ϕ, holes $\frac{15}{16}$ in. ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 744,980 lb

All structural steel shall be AASHTO M 270 Grade 50W except expansion joints and expansion bearings at expansion joints shall be AASHTO M270 Grade 50.

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

Reinforcement bars designated (E) shall be epoxy coated.

Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of $\frac{1}{8}$ 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. 1

All structural steel girders and diaphragms within a distance of 10 ft. from the expansion joints shall be metalized and painted with a color matching the Federal Color Standard 595a 20045 as specified in the Special Provisions for Metalizing Structural Steel. The System shall be shop applied according to Paint System 2. All structural steel components of diaphragms within a distance of 10 ft. from the expansion joints may be galvanized in lieu of metalizing at the Contractor's option. If galvanizing is used, all structural steel components of diaphragm shall be AASHTO M270 Grade 50. Galvanizing shall be according to the Special Provision for Hot Dip Galvanizing for Structural Steel. Bearings at the abutments shall be hot dip galvanized.

Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the west abutment.

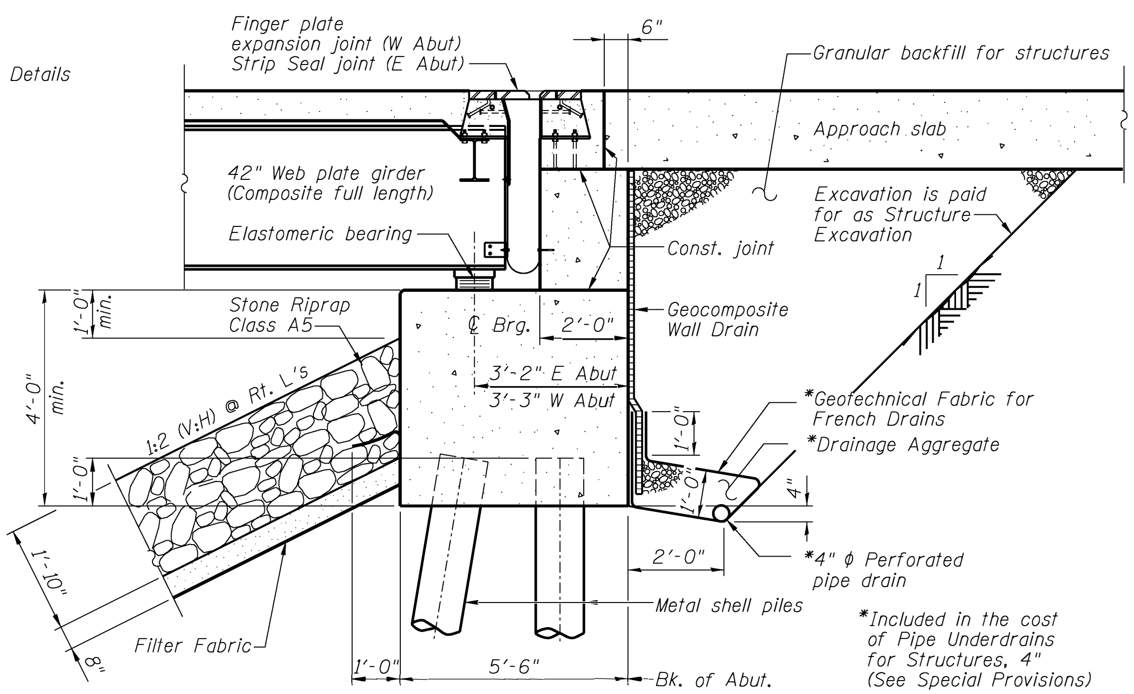
Seal coat thickness design is based on the Cofferdam Design Water Elevation (CDWE). Cofferdam design details and proposed changes in seal coat thickness shall be submitted to the Engineer for approval with the cofferdam design.

The Contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with a reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.

If the Contrctor's procedures for existing deck beam removal involves placement of heavy equipment on the existing deck beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, sealed by an Illinois Licensed Structural Engineer, verifying the structural adequacy of the beams for the proposed loads. Cost included with Removal of Existing Structures.

TOTAL BILL OF MATERIAL

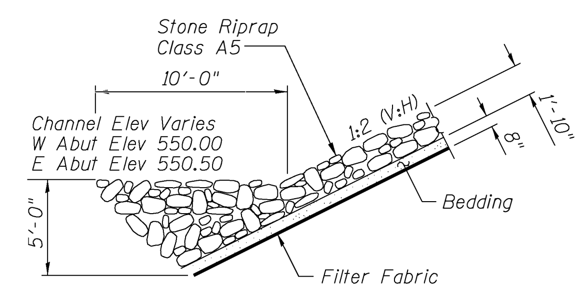
Item	Unit	Super	Sub	Total
Removal of Existing Structures	Each	1	- - -	1
Structure Excavation	Cu. Yd.	- - -	300	300
Cofferdam Excavation	Cu. Yd.	- - -	896	896
Cofferdam (Type 2) (Location - 1)	Each	- - -	1	1
Cofferdam (Type 2) (Location - 2)	Each	- - -	1	1
Concrete Structures	Cu. Yd.	- - -	406.1	406.1
Concrete Superstructure	Cu. Yd.	695.2	- - -	695.2
Bridge Deck Grooving	Sq. Yd.	2227	- - -	2227
Seal Coat Concrete	Cu. Yd.	- - -	194.8	194.8
Protective Coat	Sq. Yd.	2909	- - -	2909
Concrete Superstructure (Approach Slab)	Cu. Yd.	96.0	- - -	96.0
Furnishing and Erecting Structural Steel	L. Sum	1	- - -	1
Stud Shear Connectors	Each	7920	- - -	7920
Reinforcement Bars, Epoxy Coated	Pound	217000	39350	256350
Bar Splicers	Each	1934	466	2400
Furnishing Metal Shell Piles 14" x 0.312"	Foot	- - -	4171	4171
Driving Piles	Foot	- - -	4171	4171
Test Pile Metal Shells	Each	- - -	3	3
Name Plates	Each	1	- - -	1
Preformed Joint Strip Seal	Foot	36	- - -	36
Finger Plate Expansion Joint, 3"	Foot	33	- - -	33
Fabric Reinforced Elastomeric Trough	Foot	40	- - -	40
Elastomeric Bearing Assembly, Type I	Each	- - -	18	18
Elastomeric Bearing Assembly, Type II	Each	- - -	12	12
Anchor Bolts, 3/4"	Each	- - -	24	24
Anchor Bolts, 1 1/4"	Each	- - -	12	12
Anchor Bolts, 1 1/2"	Each	- - -	36	36
Temporary Sheet Piling	Sq. Ft.	- - -	1186	1186
Temporary Soil Retention System	Sq. Ft.	- - -	166	166
Concrete Sealer	Sq. Ft.	- - -	830	830
Geocomposite Wall Drain	Sq. Yd.	- - -	92	92
Conduit Attached to Structure, 1" Dia., Galvanized Steel	Foot	- - -	100	100
USGS Gage Equipment Cabinet, Special	Each	- - -	1	1
Granular Backfill for Structures	Cu. Yd.	- - -	135	135
Asbestos Bearing Pad Removal	Each	- - -	198	198
Drainage Scuppers, DS-11	Each	16	- - -	16
Pipe Underdrains for Structures 4"	Foot	- - -	140	140
Temporary Support System	Each	- - -	9	9



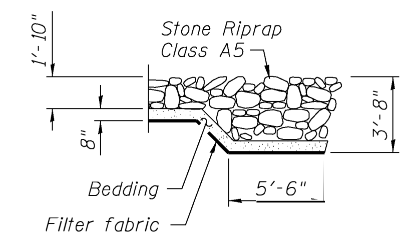
SECTION THRU PILE SUPPORTED STUB ABUTMENT

(Horiz. dim. @ Rt. L's)

Note:
All drainage system components shall extend parallel to the abutment back wall until they intersect the wingwalls or 2'-0'' from the end of the wingwalls when the wings are parallel to the abutment. The pipe shall extend under the wingwall, if necessary, until intersecting the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



SECTION A-A



SECTION B-B

FILE NAME =

CHASTAIN & ASSOCIATES LLC CONSULTING ENGINEERS 184-001397	USER NAME = csiefert	DESIGNED - ACB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL DATA STRUCTURE NO. 066-0021
	PLOT TIME = 7:11:20 AM	CHECKED - JMB	REVISED -		
	PLOT SCALE = 2.0000 ' / in.	DRAWN - RLK	REVISED -		
	PLOT DATE = 3/21/2018	CHECKED - JMB	REVISED -		SHEET NO. 2 OF 48 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
639	(123B)BR-1	MERCER	106	24

CONTRACT NO. 68663

ILLINOIS FED. AID PROJECT

1 5/31/18