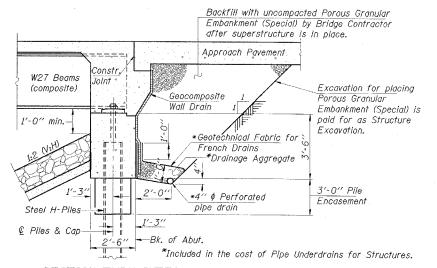
## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.	SHEET NO. 2
FAP 328	*	CLAY	61	19	26 SHEETS
FEG. ROAD D	IST. NO	TLLINOIS FED. AID OF			

CONTRACT NO. 74037

)37 \*(6BR-2)B-i



## SECTION THRU INTEGRAL ABUTMENT

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 601.101).

## **GENERAL NOTES**

- Fasteners shall be AASHTO M 164 Type 1, mechanically galvanized bolts in pointed areas and M 164 Type 3 in unpainted areas. Bolts 7<sub>8</sub> %, holes <sup>15</sup><sub>16</sub> %, unless otherwise noted.
- 2. Calculated weight of Structural Steel = 79,910 lbs.
- All structural steel shall be AASHTO M270 Grade 50W including structural steel bearing plates and fill plates for splices.
- Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.
- 5. No field welding is permitted except as specified in the contract documents.
- 6. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
- 7. Reinforcement bars designated (E) shall be epoxy coated.
- 8. 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 scope of the work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.
- Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of <sup>1</sup>8" (0.01 ft.) Adjustment shall be made either by grinding the surface or by shimming the bearings.
- 10. Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the stage removal line before Stage I removal to ensure the remaining portion will not be prematurely damaged.
- II. AASHTO M270 Grade 50W structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3". Those areas shall be primed in the shop with a Department approved zinc rich primer. No field painting shall be required. All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".
- 12. The Contractor shall drive test piles in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles. The test piles shall be driven to 110 percent of the Nominal Required Bearing Indicated in the pile data information.
- 13. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- 14. The Contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. If is the Contractor's responsibility to account for the condition of the beams when developing construction procedures.
- 15. If the Contractor's procedure for existing deck beam removal or placement of new deck beams involves placement of crones or other heavy equipment on deck beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the deck beams.

## TOTAL BILL OF MATERIAL

TIEM					
Stone Riprap, Class A4	ITEN	UNIT	SUPER	SUB	TOTAL
Filter Fabric   Sq. Yd.   740   74				88	88
Removal of Existing Structures				740	740
Structure Excavation   Cu. Yd.   Concrete Structures   Cu. Yd.   66.0	Filter Fabric			740	740
Concrete Structures		Each	0.5	0.5	1
Concrete Superstructure		Cu. Yd.		270	270
Bridge Deck Groving	Concrete Structures	Cu. Yd.		66.0	66.0
Protective Coat   Sq. Yd.   613   613   613   613   613   613   613   613   613   613   613   613   615		Cu. Yd.	181.0		181.0
Reinforcement Bars   Pound   150   150   150   Reinforcement Bars   Epoxy Coated   Pound   38480   7310   45790   Furnishing and Erecting Structural Steel   L. Sum   I   I   I   I   I   I   I   I   I		Sq. Yd.	490		490
Reinforcement Bars, Epoxy Coated   Pound   38480   7310   45790	Protective Coat	Sq. Yd.	613		613
Furnishing and Erecting Structural Steel	Reinforcement Bars	Pound	150		150
Stud Shear Connectors	Reinforcement Bars, Epoxy Coated	Pound	38480	7310	45790
Precast Prestressed Concrete Deck Beams (21" Depth)         Sq. Ft.         384         384           Removal of Existing Precast Prestressed Concrete Deck Beams         Sq. Ft.         384         384           Pipe Underdrains for Structures 4"         Foot         150         150           Geocomposite Wall Drain         Sq. Yd.         66         66         66           Furnishing Steel Piles HP10x42         Foot         1025         1025           Driving Piles         Foot         1025         1025           Test Pile Steel HP10x42         Each         2         2           Pile Shoes         Each         22         22           Underwater Structure Excavation Protection-Location 1         Each         1         1           Hot-Mix Asphalt Surface Course, Mix "C", C50         Ton         7         7           Asbestos Bearing Pad Removal         Each         44         44           Floor Drains         Each         1         1           Name Plates         Each         1         1           Temporary Sheet Piling         Sq. Ft.         810         810           Removing and Re-erecting Existing Railing         Foot         126         126           Bar Splicers         Each	Furnishing and Erecting Structural Steel	L. Sum	1		1
Removal of Existing Precast Prestressed Concrete Deck Beams   Sq. Ft.   384   384   384   719e Underdrains for Structures 4"   Foot   Foot   150   1	Stud Shear Connectors	Each	2052		2052
Pipe Underdrains for Structures 4"         Foot         150         150           Geocomposite Wall Drain         Sq. Yd.         66         66           Furnishing Steel Piles HP10x42         Foot         1025         1025           Driving Piles         Foot         1025         1025           Test Pile Steel HP10x42         Each         2         2           Pile Shoes         Each         22         22           Underwater Structure Excavation Protection-Location 1         Each         1         1           Hort-Mix Asphalt Surface Course, Mix "C", C50         Ton         7         7           Asbestos Bearing Pad Removal         Each         44         44           Floor Drains         Each         1         1           Name Plates         Each         1         1           Temporary Sheet Pilling         Sq. Ft.         810         810           Removing and Re-erecting Existing Railing         Foot         126         126           Bar Splicers         Each         454         44         498           Anchor Boits, 1"         Each         36         36           Concrete Encasement         Cu. Yd.         10.0         10.0	Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	384		384
Geocomposite Wall Drain         Sq. Yd.         66         66           Furnishing Steel Piles HPI0x42         Foot         1025         1025           Driving Piles         Foot         1025         1025           Test Pile Steel HPI0x42         Each         2         2           Pile Shoes         Each         22         22           Underwater Structure Excavation Protection-Location 1         Each         1         1           Hot-Mix Asphalt Surface Course, Mix "C", C50         Ton         7         7           Asbestos Bearing Pad Removal         Each         44         44           Floor Drains         Each         1         1           Name Plates         Each         1         1           Temporary Sheet Piling         Sq. Ft.         810         810           Removing and Re-erecting Existing Railing         Foot         126         126           Bar Splicers         Each         454         44         498           Anchor Bolts, 1"         Each         36         36           Concrete Encasement         Cu. Yd.         10.0         10.0	Removal of Existing Precast Prestressed Concrete Deck Beams	Sq. Ft.	384		384
Furnishing Steel Piles HPI0x42         Foot priving Piles         IO25 1025           Driving Piles         Foot 1025 1025         IO25 1025           Test Pile Steel HPI0x42         Each 2 2 2         2 2           Pile Shoes         Each 22 22         22           Underwater Structure Excavation Protection-Location 1         Each 1         1 1           Hot-Mix Asphalt Surface Course, Mix "C", C50         Ton 7         7           Asbestos Bearing Pad Removal         Each 44         44           Floor Drains         Each 14         14           Name Plates         Each 1         1           Temporary Sheet Piling         Sq. Ft. 810         810           Removing and Re-erecting Existing Railing         Foot 126         126           Bar Splicers         Each 454         44         498           Anchor Botts, 1"         Each 36         36           Concrete Encasement         Cu. Yd. 10.0         10.0	Pipe Underdrains for Structures 4"			150	150
Driving Piles         Foot         1025         1025           Test Pile Steel HPI0x42         Each         2         2           Pile Shoes         Each         22         22           Underwater Structure Excavation Protection-Location 1         Each         1         1           Hot-Mix Asphalt Surface Course, Mix "C", C50         Ton         7         7           Asbestos Bearing Pad Removal         Each         44         44           Floor Drains         Each         14         14           Name Plates         Each         1         1           Temporary Sheet Pilling         Sq. Ft.         810         810           Removing and Re-erecting Existing Railing         Foot         126         126           Bar Splicers         Each         454         44         498           Anchor Botts, 1"         Each         36         36           Concrete Encasement         Cu. Yd.         10.0         10.0	Geocomposite Wall Drain			66	66
Test Pile Steel HP10x42         Each         2         2           Pile Shoes         Each         22         22           Underwater Structure Excavation Protection-Location 1         Each         1         1           Hot-Mix Asphalt Surface Course, Mix "C", C50         Ton         7         7           Asbestos Bearing Pad Removal         Each         44         44           Floor Drains         Each         14         14           Mame Plates         Each         1         1           Temporary Sheet Pilling         Sq. Ft.         810         810           Removing and Re-erecting Existing Railing         Foot         126         126           Bar Splicers         Each         454         44         498           Anchor Bolts, 1"         Each         36         36           Concrete Encasement         Cu. Yd.         10.0         10.0	Furnishing Steel Piles HP10x42			1025	1025
Pile Shoes         Each         22         22           Underwater Structure Excavation Protection-Location 1         Each         1         1           Hot-Mix Asphalt Surface Course, Mix "C", C50         Ton         7         7           Asbestos Bearing Pad Removal         Each         44         44           Floor Drains         Each         14         14           Name Plates         Each         1         1           Temporary Sheet Piling         Sq. Ft.         810         80           Removing and Re-erecting Existing Railing         Foot         126         126           Bar Splicers         Each         454         44         498           Anchor Bolts, 1"         Each         36         36           Concrete Encasement         Cu. Yd.         10.0         10.0	Driving Piles			1025	1025
Underwater Structure Excavation Protection-Location 1	Test Pile Steel HP10x42			2	2
Hot-Mix Asphalt Surface Course, Mix "C", C50         Ton         7         7           Asbestos Bearing Pad Removal         Each         44         44           Floor Drains         Each         14         14           Name Plates         Each         1         1           Temporary Sheet Pilling         Sq. Ff.         810         810           Removing and Re-erecting Existing Railing         Foot         126         126           Bar Splicers         Each         454         44         498           Anchor Botts, I"         Each         36         36           Concrete Encasement         Cu. Yd.         10.0         10.0	Pile Shoes	Each		22	22
Asbestos Bearing Pad Removal         Each         44         44           Floor Drains         Each         14         14           Name Plates         Each         1         1           Temporary Sheet Pilling         Sq. Ft.         810         810           Removing and Re-erecting Existing Railing         Foot         126         126           Bar Splicers         Each         454         44         498           Anchor Bolts, 1"         Each         36         36           Concrete Encasement         Cu. Yd.         10.0         10.0	Underwater Structure Excavation Protection-Location 1			1	
Floor Drains         Each         14         14           Name Plates         Each         1         1           Temporary Sheet Piling         Sq. Ft.         810         810           Removing and Re-erecting Existing Railing         Foot         126         126           Bar Splicers         Each         454         44         498           Anchor Bolts, I"         Each         36         36         36           Concrete Encasement         Cu. Yd.         10.0         10.0	Hot-Mix Asphalt Surface Course, Mix "C", C50		7		7
Name Plates         Each         1         1           Temporary Sheet Piling         Sq. Ft.         810         810           Removing and Re-erecting Existing Railing         Foot         126         126           Bar Splicers         Each         454         44         498           Anchor Botts, I"         Each         36         36           Concrete Encasement         Cu. Yd.         10.0         10.0	Asbestos Bearing Pad Removal	Each	44		44
Temporary Sheet Pilling   Sq. Ft.   810   810		Each	14		14
Removing and Re-erecting Existing Railing         Foot         126         126           Bar Splicers         Each         454         44         498           Anchor Bolts, I"         Each         36         36           Concrete Encasement         Cu. Yd.         10.0         10.0	Name Plates	Each	1		1
Bar Splicers         Each         454         44         498           Anchor Botts, I"         Each         36         36           Concrete Encasement         Cu. Yd.         10.0         10.0	Temporary Sheet Piling	Sq. Ft.		810	810
Anchor Botts, I"         Each         36         36           Concrete Encasement         Cu. Yd.         10.0         10.0	Removing and Re-erecting Existing Railing	Foot	126		126
Concrete Encasement Cu. Yd. 10.0 10.0	Bar Splicers	Each	454	44	498
	Anchor Bolts, 1"	Each		36	36
Preformed Joint Seal 2½" Foot 6 6	Concrete Encasement	Cu. Yd.		10.0	10.0
	Preformed Joint Seal 2½"		6		6
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GENERAL DATA

<u>US ROUTE 45 OVER</u>

<u>BUCK CREEK</u>

FAP RTE 328-SECTION (6BR-2)B-1

<u>CLAY COUNTY</u>

<u>STATION 1510+13.00</u>

<u>STRUCTURE NO. 013-0041</u>

ES	C	A			
CONSULTANTS, INC.					
DESIGNED BY:	ELH	01/07			
DRAWN BY:	CJ	01/07			
CHECKED BY:	ELH	04/07			
APPROVED BY-	PDP	04/07			