

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
10-00091-00-BT	EFFINGHAM	17	4			
CONTRACT NO. 95646						

GENERAL NOTES

- The Contractor shall drive 2 test piles (1 each abutment) in a permanent location, to 110% of the nominal required bearings as specified for production piles as approved by the Engineer before ordering the remainder of the piles.
- 2. Reinforcement bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.
- 3. The Metal Pile Shells shall be according to ASTM A252 Grades 2 or 3.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

DESIGN SPECIFICATIONS

"LRFD Guide Specifications for the Design of Pedestrian Bridges"

DESIGN STRESSES

FIFLD UNITS f'c = 4,000 psi fy = 60,000 psi (reinforcement)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2 Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.211g Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.471g Soil Site Class = D

TOTAL BILL OF MATERIAL

	Unit	Super	Sub.		Total
Item			Piers	Abuts.	10(0)
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Pedestrian Truss Superstructure	Sq. Ft.	1,500			1,500
Concrete Structures	Cu.Yds.			68.0	68.0
Reinforcement Bars	Pound			9,680	9,680
Furnishing Metal Pile Shells 12" X 0.179"	Foot			880	880
Driving Piles	Foot			880	880
Test Pile Metal Shells	Each			2	2
Name Plates	Each			1_1_	
Granular Backfill	Cu Yd			60	60
Stone Riprap, Class A5	Tons			775	775
Aggregate (Erosion Control)	Tons			320	320
Filter Fabric	Sq. Yd.			775	775
Channel Excavation	Cu.Yds.			130	130
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THIS STUCTURAL SEAL COVERS THE PEDESTRIAN TRUSS SUPERSTRUCTURE ABUTMENTS AND THE TIMBER ITEMS OF THE WOOD DECKING SPECIAL



PROPOSED LOCATION SKETCH

A SEPARATE STRUCTURAL SEAL WILL BE PROVIDED BY THE PEDESTRIAN TRUSS SUPERSTRUCTURE MANUFACTURER.

A SEPARATE STRUCTURAL SEAL WILL BE PROVIDED BY THE HELICAL PILE MANUFACTURER FOR THE WOOD DECKING SPECIAL.

STATION 35B+82.66 LITTLE WABASH RIVER SEC. 10-00091-00-BT BUILT 20 EFFINGHAM COUNTY PROJECT NO. TCSP-IL09(029)

LETTERING FOR NAME PLATE

Locate Name Plate at N.W. corner of Bridge. Contractor to coordinate permanent mounting on the bridge with the bridge manufacturer.

CHARLESTON ENGINEERING, INC. CONSULTING ENGINEERS 105 NORTH KITCHELL P.O. BOX 387 OLNEY, ILLINOIS 62450 (618) 392-0736 ARTMENT OF PROFESSIONAL REGULATION REGISTRATION

GENERAL PLAN & ELEVATION

PEDESTRIAN BRIDGE OVER LITTLE WABASH RIVER

> SEC. 10-00091-00-BT **EFFINGHAM COUNTY** STATION 35B+82.66

PILE DATA (2-ABUTS.)

B.M. RT. STA. 35B+07 STEEL PIN ELEV. 526.10

EXISTING GROUND-

AGGREGATE (EROSION CONTROL)-

STONE RIPRAP, CLASS A5-/

FURNISHED EXCAVATION

GRANULAR BACKFILL

METAL SHELL PILES 12" -

Type Metal Shell Piles 12"
Nominal Required Bearing Factored Resistance Available 122 kips Estimated Pile Length Number of Production Piles Number of Test Piles

40 Feet 22 2 (1 Each Abutment)

- BATTER FRONT ROW OF PILES 2":12"

- CHANNEL EXCAVATION (TYP)

PROFILE VIEW

100 YR. H.W.E. 530.0

S.B. ELEV. 514.9

LOW STEEL ELEV. 531.5

RIPRAP BEDDING

BATTER FRONT ROW OF PILES 2":12"

STONE RIPRAP, CLASS A5

Drainage Area = 224.0 SQ MI
 Freq.
 Q. Vopening Sq. Ft. Yr.
 Nat. Head - Ft. Headwater EI.
 Head - Ft. Headwater EI.

 Yr.
 C.F.S.
 Exist. Prop. H.W.E. Exist. Prop. Exist. Prop. 14.W.E.
 Exist. Prop. Exist. Prop. 14.W.E. Exist. Prop. Exist. Prop. 15.W.A. 1477 527.9
 N/A 0.10 N/A 528.0

 100
 28,785
 N/A 1800 530.0
 N/A 0.07 N/A 530.1
 31,500 N/A 1860 530.4
 N/A 0.05 N/A 530.4

 500
 38,200 N/A 2005 531.4
 N/A 0.05 N/A 531.4

WATERWAY INFORMATION

STONE RIPRAP, CLASS A5

FURNISHED EXCAVATION

GRANULAR BACKFILL

- METAL SHELL PILES 12"

AGGREGATE (EROSION CONTROL)