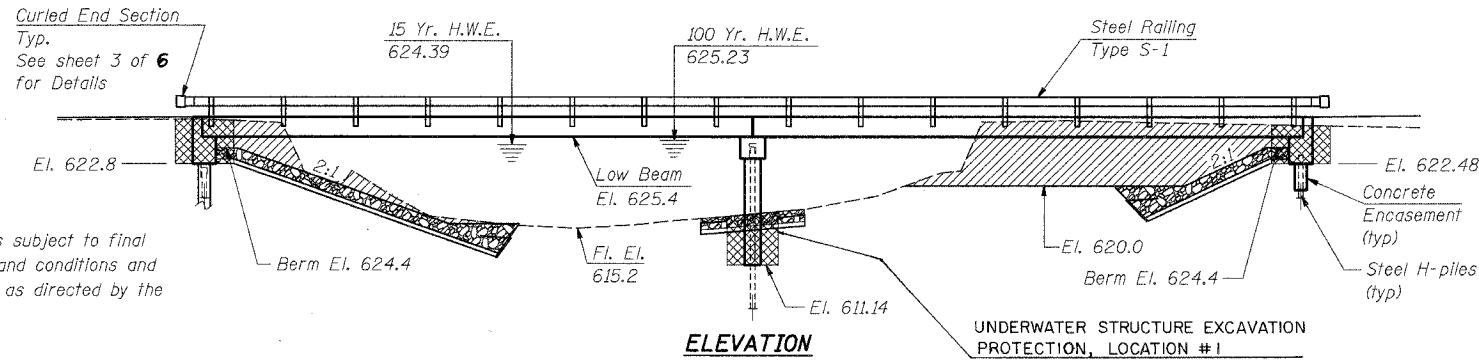


T.B.M.#1 - R.R. Spike in Top of Center Pile at South Wingwall on East Side of Bridge. Elev. 627.30

EXISTING STRUCTURE: S.N. 087-3080, 2 Span Bridge with Wood Plank Deck on Steel I-Beams on Timber Abutments, Pier, Wingwalls and Piles. Steel Railing and 1" Conduit on Bottom of North I-Beam. 80'-0" Length, 16'-9" Width.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 69	*	SHELBY	12	7
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT		
* 01-19113-00-BR		SHEET 1 OF 6		

(CURLED END SECTIONS INCLUDED IN THE COST OF TYPE S-1 RAILING)

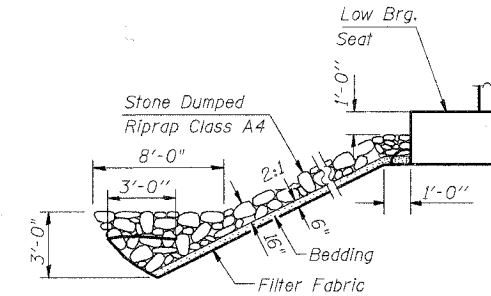


NOTE 1:
Riprap layout is subject to final terrain details and conditions and shall be placed as directed by the Engineer.

- Channel Excavation
- Structure Excavation
- Stone Dumped Riprap Class A4

GENERAL NOTES

See Proposal for Borings Data
The Contractor shall drive one steel test pile at each abutment and at the pier as directed by the Engineer before ordering the remainder of the piles.
Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60.



STONE RIPRAP ANCHOR DETAIL

LAKE FORK BRANCH
BUILT 200 BY
SHELBY COUNTY
RURAL ROAD DISTRICT
SEC. 01-19113-00-BR
TR 69 STA. 15+12.13
STR. NO. 087-3530 LOADING HS 20

NAME PLATE
(See Std. 515001)

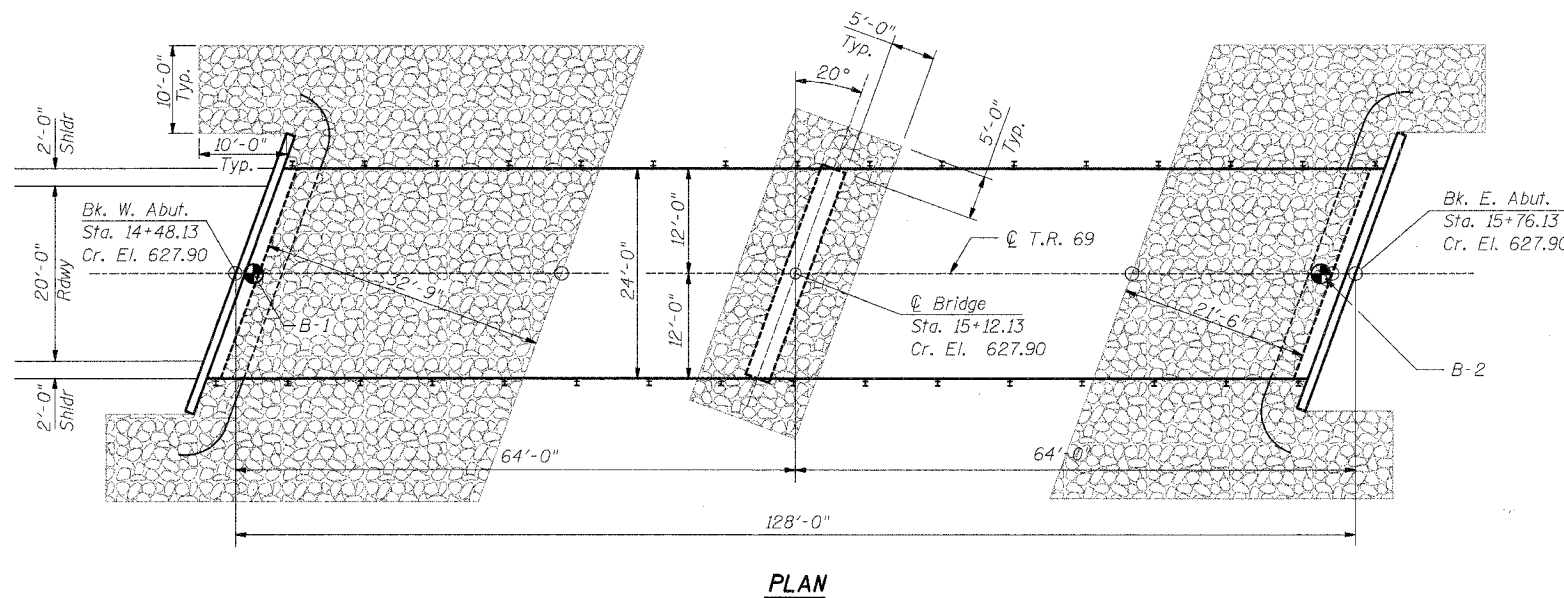
BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Structure Excavation	Cu. Yd.		117	117
Concrete Structures	Cu. Yd.		53.6	53.6
Reinforcement Bars	Pound		4740	4740
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	3018		3018
Steel Railing, Type S-1	Foot	256		256
Furnishing Steel Piles HP 10 x 42	Foot		390	390
Driving Steel Piles	Foot		390	390
Test Pile Steel HP 10 x 42	Each		3	3
Concrete Encasement	Cu. Yd.		2.2	2.2
Name Plates	Each	1		1
Removal of Existing Structures	Each		1	1
Channel Excavation	Cu. Yd.		415	415
Stone Dumped Riprap	Ton		610	610
Filter Fabric	Sq. Yd.		911	911
Underwater Structure Excavation Protection - Location 1	L.S.		1	1

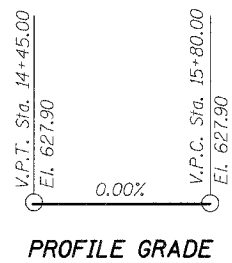
I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO Standard Specifications for Highway Bridges.



David Booher
David Booher, Illinois S.E. 081-004775 Date **3-20-08**
Expires 11-30-2008



PLAN



PROFILE GRADE

WATERWAY INFORMATION

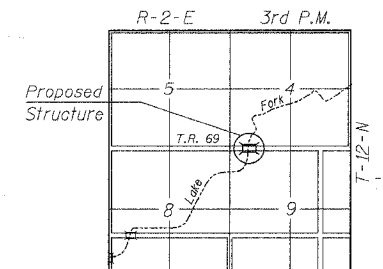
Drainage Area	34.05	Sq.Mi.
Required Opening (15yr.)	666	Sq.Ft.
Provided Opening	666	Sq.Ft.
Present Opening	530	Sq.Ft.
15yr. Discharge	1986	cfs
100yr. Discharge	3146	cfs
Created Head at Bridge (100yr.)	<1.0	Ft.
Created Head 1000' upstream (100yr.)	<0.5	Ft.
Design (15yr.) HWE	624.39	
(100yr) HWE	625.23	

DESIGN STRESSES

Precast Unit
f'c = 5,000 psi
f'cl = 4,000 psi
f's = 270,000 psi
f'sl = 189,000 psi

Cast-in-Place Unit
f'c = 3,500 psi
f's = 60,000 psi
n = 9

LOADING HS 20
DESIGN SPECIFICATION:
AASHTO 2002 Standard Specifications for Highway Bridges.
FUTURE WEARING SURFACE: 50 lb/Sq. Ft.



LOCATION MAP

GENERAL PLAN AND ELEVATION
T.R. 69 OVER LAKE FORK BRANCH
SEC. 01-19113-00-BR
SHELBY COUNTY
S.N. 087-3530
STA. 15+12.13

ie consultants
6420 South Sixth Street
Springfield, Illinois 62707
Tel. (217) 529-8027
Fax (217) 529-4543
ieSpringfield@ie-consultants.com
www.ie-consultants.com

DESIGNED BY: G.B.M.	CHECKED BY: D.R.B.	DRAWN BY: J.P.H.	DATE: March 2008
------------------------	-----------------------	---------------------	---------------------