

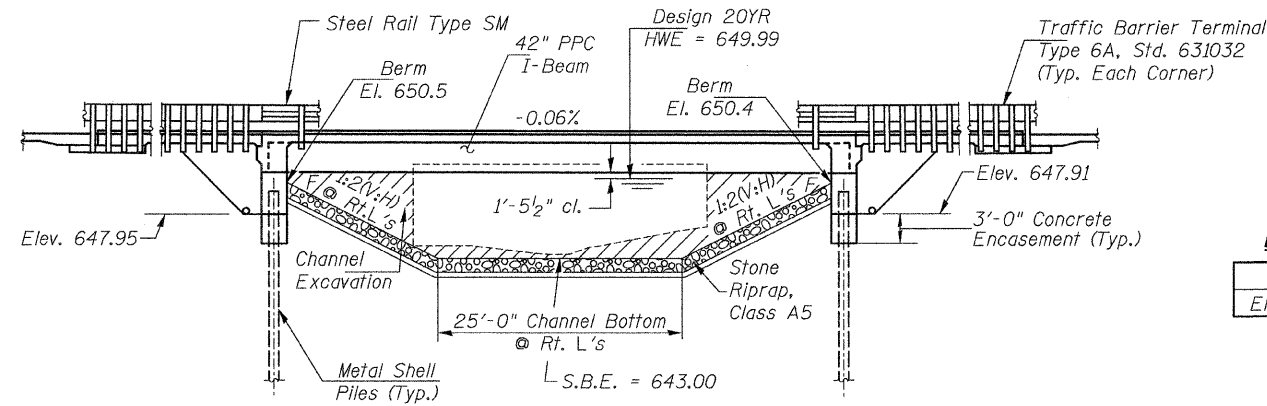
BM: Railroad Spike in Power Pole Sta. 14+61, 33' Lt. Elev. 657.59
 BM: Railroad Spike in Power Pole Sta. 21+68, 33' Lt. Elev. 652.41

Existing Structure:

Single span RC slab on RC T-beam superstructure with single element concrete rail on curb. A steel WT rail has been added inside of the original concrete rail. The substructure consists of concrete closed abutments on untreated timber piles. The structure is 32'-0" back to back of abutments, 28'-4" out to out of deck, with a ±24' driving surface, and is not skewed. Str. No. 050-3031

Salvage: None

Road to be closed to traffic during construction.



ELEVATION

DESIGN SCOUR TABLE

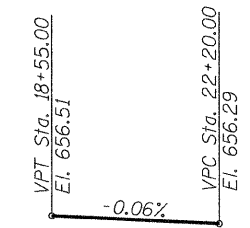
Location	S. Abut.	N. Abut.
Elevation (Ft.)	648.0	647.9

NOTE:
 For Bill of Material and General Notes, See Shee 2 of 22.

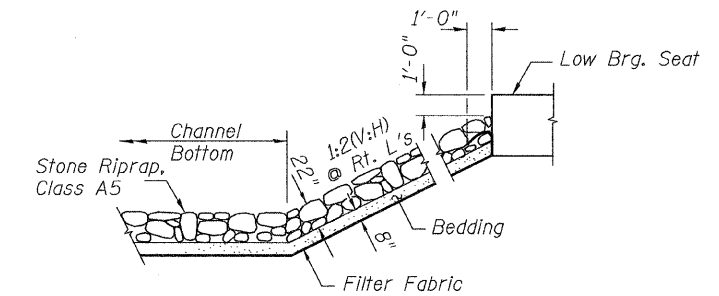
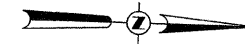
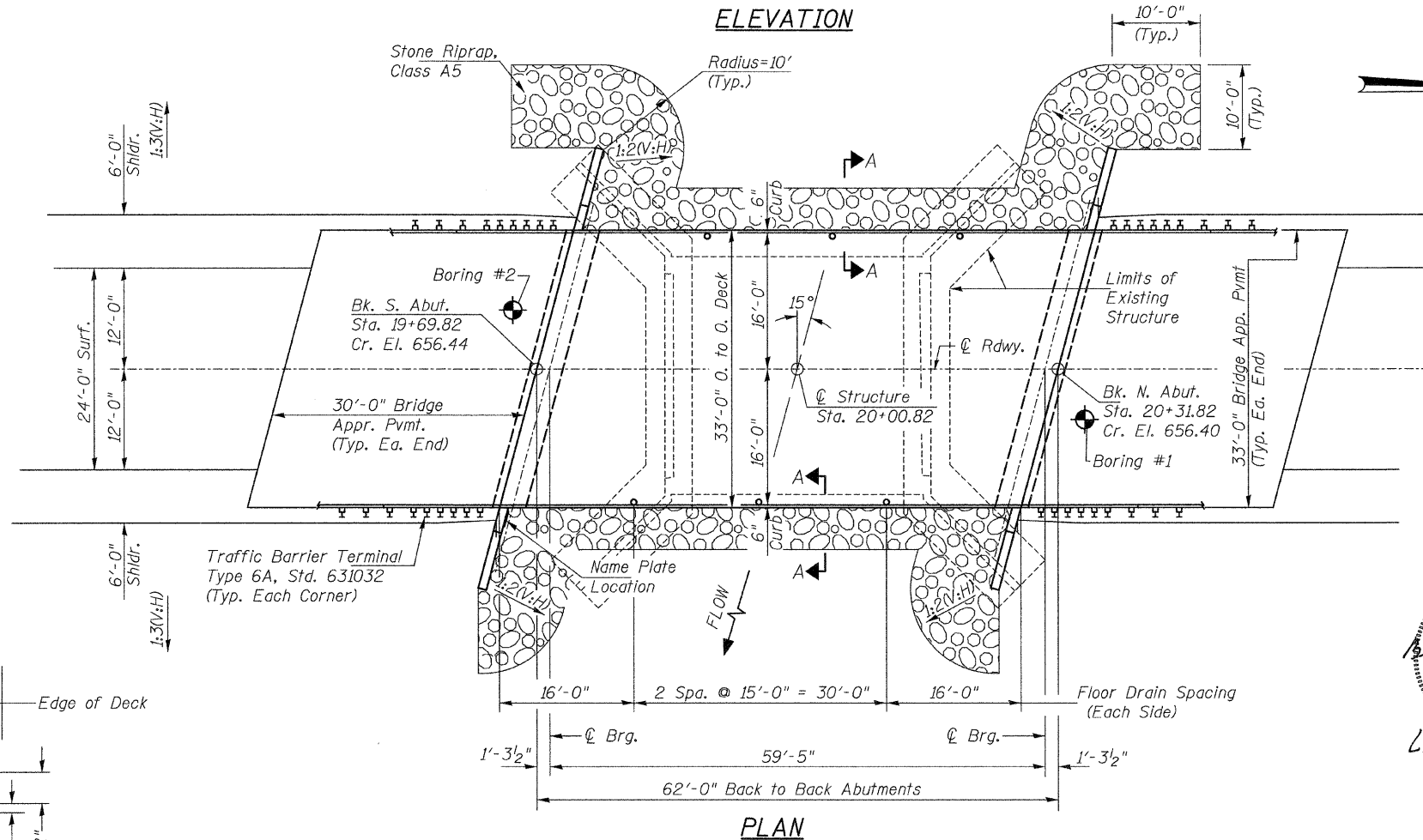
**BRANCH OF NETTLE CREEK
 BUILT 2011 BY
 LASALLE COUNTY
 SEC. 09-00658-00-BR
 C.H. 25 STATION 20+00.82
 F.A. PROJ. BRS-0271(103)
 STR. NO. 050-3598
 LOADING HL-93 w/120,000 LB. TRUCK**

NAME PLATE

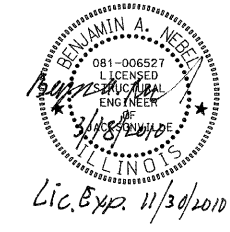
Locate Name Plate on Wingwall
 S.E. Corner of Bridge (See Std. 515001)



PROFILE GRADE

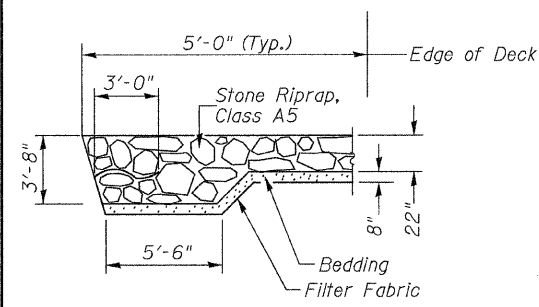


STONE RIPRAP DETAIL



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 LRFD Bridge Design Specifications.

Benjamin A. Nebel 3/14/2010
 Illinois Structural No. 6527
 Expires 11/30/2010



SECTION A-A

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.07g
 Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.13g
 Soil Site Class = C

LOADING HL-93 w/ 120,000 lb. TRUCK

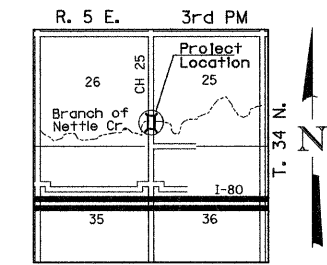
Allow 50#/sq. ft. for future wearing surface.
DESIGN SPECIFICATIONS
 2007 AASHTO LRFD Bridge Design Specifications
 4th Edition with Interims

DESIGN STRESSES

FIELD UNITS
 f'_c = 3,500 psi
 f_y = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

f'_c = 6,000 p.s.i.
 f'_{ci} = 5,000 p.s.i.
 f'_s = 270,000 p.s.i. (1/2" ϕ low relaxation strands)
 f'_{si} = 201,960 p.s.i. (1/2" ϕ low relaxation strands)



DESIGNED	B.A.N
CHECKED	J.O.H.
DRAWN	T.A.C.
CHECKED	B.A.N./J.E.H.

WATERWAY INFORMATION

Drainage Area = 7.65 Sq. Mi.		Low Grade Elev. = 656.28 @ Sta. 22+51.41					
Flood Yr.	Q C.F.S.	Opening Exist.	Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Headwater El. Prop.	
Design	20 752	161	272	649.99	0.09 0.00	650.08 649.99	
Base	100 1,060	173	296	650.42	0.28 0.00	650.70 650.42	

GENERAL PLAN & ELEVATION

SHEET NO. 1 22 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 25	09-00658-00-BR	LASALLE	39	8
S.N. 050-3598			CONTRACT NO. 87451		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BRS-0271(103)			