Benchmark:
#1 - Existing Brass disk on top of N.E. parapet wall of bridge over Kickapoo Creek, Str. No. 072-0043. Disk Stamped "Elev. = 561.47".
Elevation: 561.084' (NAVD 88)

#2 - Iron rod with IDOT yellow cap near Sta. 474+98, Offset 22'± Lt. Approximately 450'± Northwesterly of Str. No. 072-0043.
Elevation: 559.897' (NAVD 88)

Existing Structure: S.N. 072-0043 was constructed as S.A. Rte. 11 Section Z-2B-15D @ Sta. 279+60 in 1932. The single span steel truss was set on closed abutments. In 1979 the steel truss was replaced by PPC Deck Beams spanning the modified original abutments with a pier added at mid-span. The existing structure is 143'-4" back to back of abutments and 31'-0" wide face to face. The existing bridge is to be removed and replaced. Traffic is to be detoured during construction.

Salvage: none

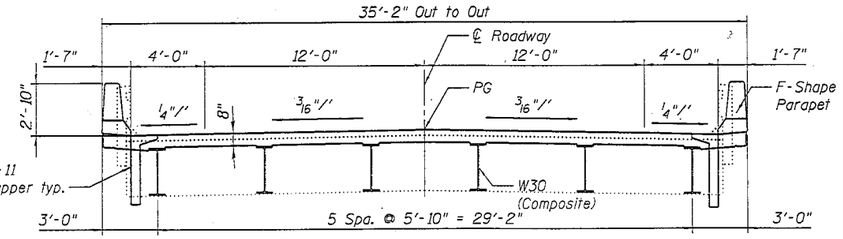
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevations (ft.)				
	W. Abut.	Pier 1	Pier 2	E. Abut.
Q 100	553.02	496.85	496.85	553.28
Q 500	553.02	485.10	483.84	553.28

WATERWAY INFORMATION

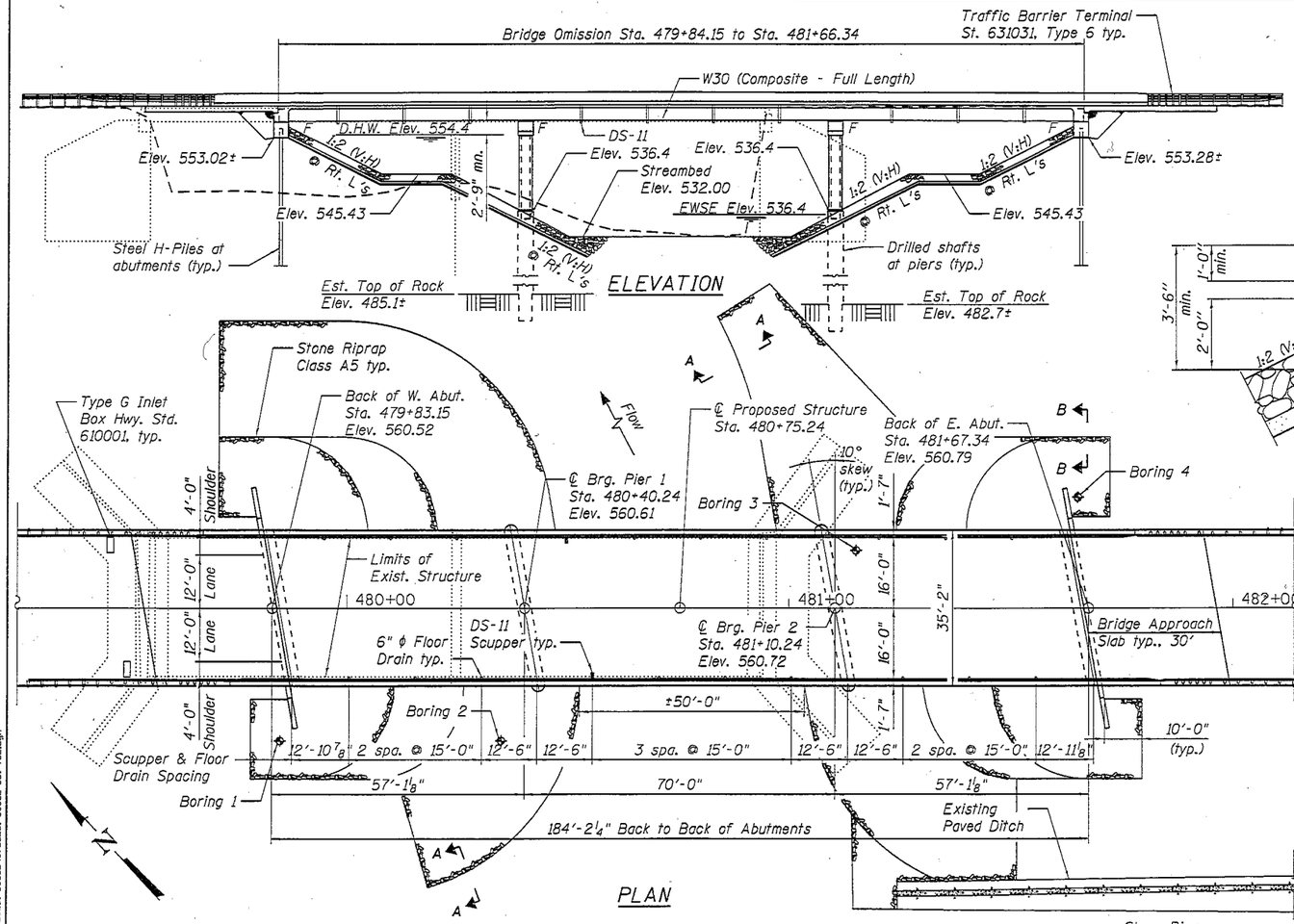
Drainage Area = 79.8 Sq. Mi. Low Grade Elev. = 560.44 @ Sta. 478+41.36

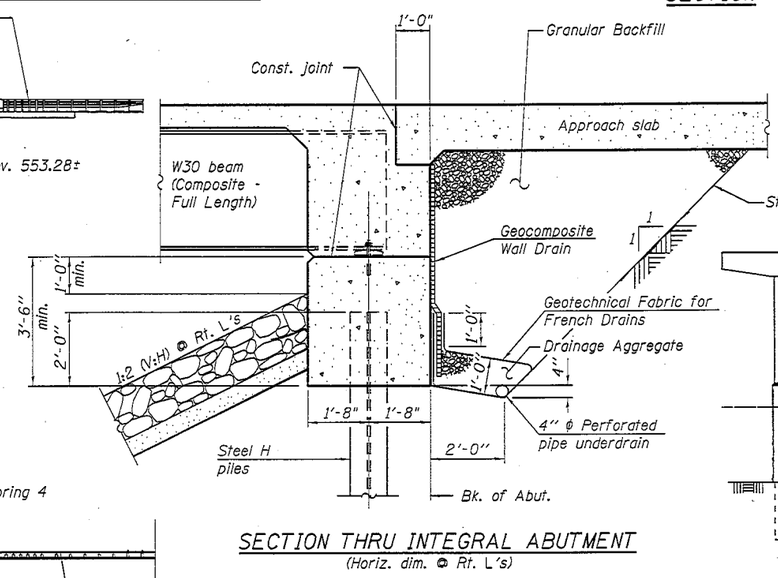
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	6,870	1617	1637	551.7	0.3	0.1	552.0	551.8
Design	50	11,000	1969	2017	554.4	0.5	0.3	554.7	554.7
Base	100	12,900	2114	2174	555.4	0.5	0.3	555.9	555.7
Overtopping									
Max. Calc.	500	17,600	2395	2477	557.5	0.9	0.6	558.4	558.1



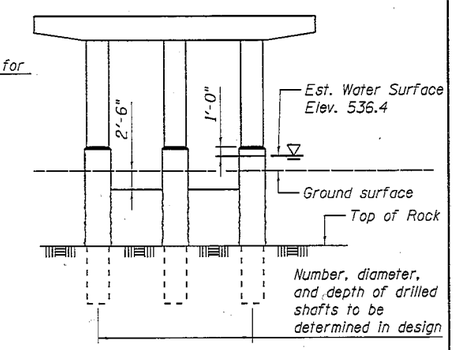
SECTION

APPROVED
JAN 31 2013
AS A BASIS FOR PREPARATION OF DETAILED PLANS

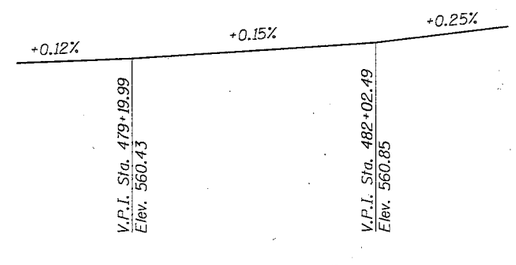




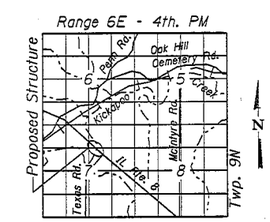
SECTION THRU INTEGRAL ABUTMENT
(Horiz. dim. @ Rt. L's)



PIER SKETCH



PROFILE GRADE
@ ℄ IL Rte 8



LOCATION SKETCH

HIGHWAY CLASSIFICATION

IL Rte. 8
Functional Class: Major Collector (Non-Urban)
ADT: 1650 (2009)/1550 (2017)
ADTT: 66 (2009)/62 (2017)
DHV: 233
Design Speed: 55 m.p.h.
Posted Speed: 55 m.p.h.
2-Way Traffic
Directional Distribution: 50%

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications with 2010 Interims

DESIGN STRESSES

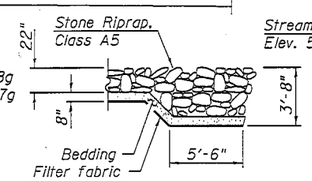
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50W)

SEISMIC DATA

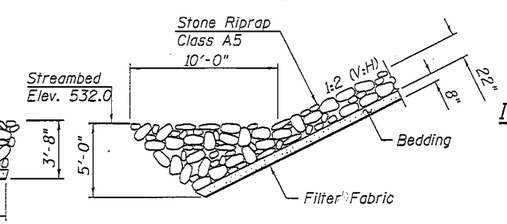
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.108g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.167g
Soil Site Class = D

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.



SECTION B-B



SECTION A-A

GENERAL PLAN AND ELEVATION
IL RTE 8 OVER W. FORK KICKAPOO CREEK
F.A.S. RT. 1388 SEC. (Z-2C-15D)BR
PEORIA COUNTY
STA. 480+75.24
STRUCTURE NO. 072-0231

THOUVENOT, WADE & MOERCHEN, INC. TWM	USER NAME = mjoost	DESIGNED - JTH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN	F.A.S RTE. 1388	SECTION (Z-2C-15D) BR
SWANSEA • WATERLOO • EDWARDSVILLE • CARBONDALE • ST. CHARLES		CHECKED - ALN	REVISED -			COUNTY PEORIA	TOTAL SHEETS / SHEET NO.
	PLOT SCALE = 0.1667 ' / in.	DRAWN - JTH	REVISED -			CONTRACT NO. 68862	
	PLOT DATE = 1/31/2013	CHECKED - ALN	REVISED -		SHEET NO. 1 OF 1 SHEETS	ILLINOIS FED. AID PROJECT	

FILE NAME = P:\0P50072\IL 8-Kick\4.CADD\4.3-ST\072023I-68862\072023I-68862-001-TSL.dgn