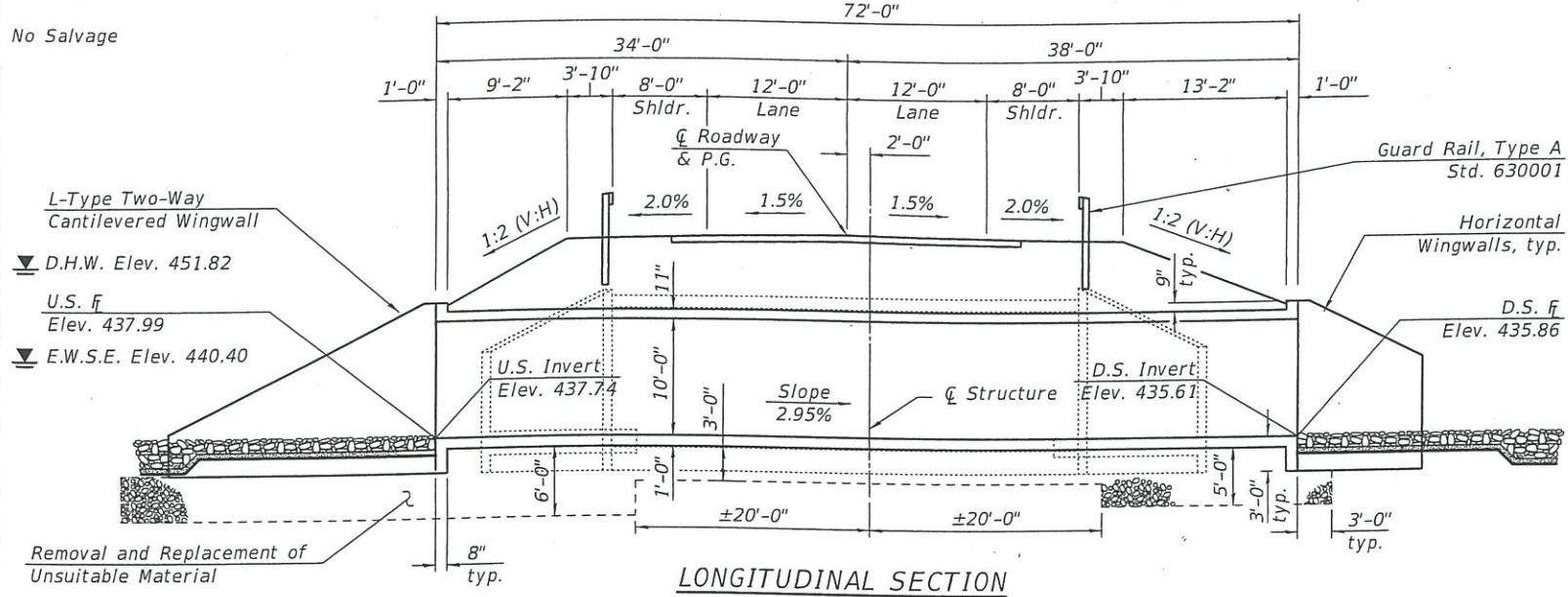


Benchmark: Chiseled box set in the center of the headwall on the south side of IL 161 S.N. 014-2001, Elev =

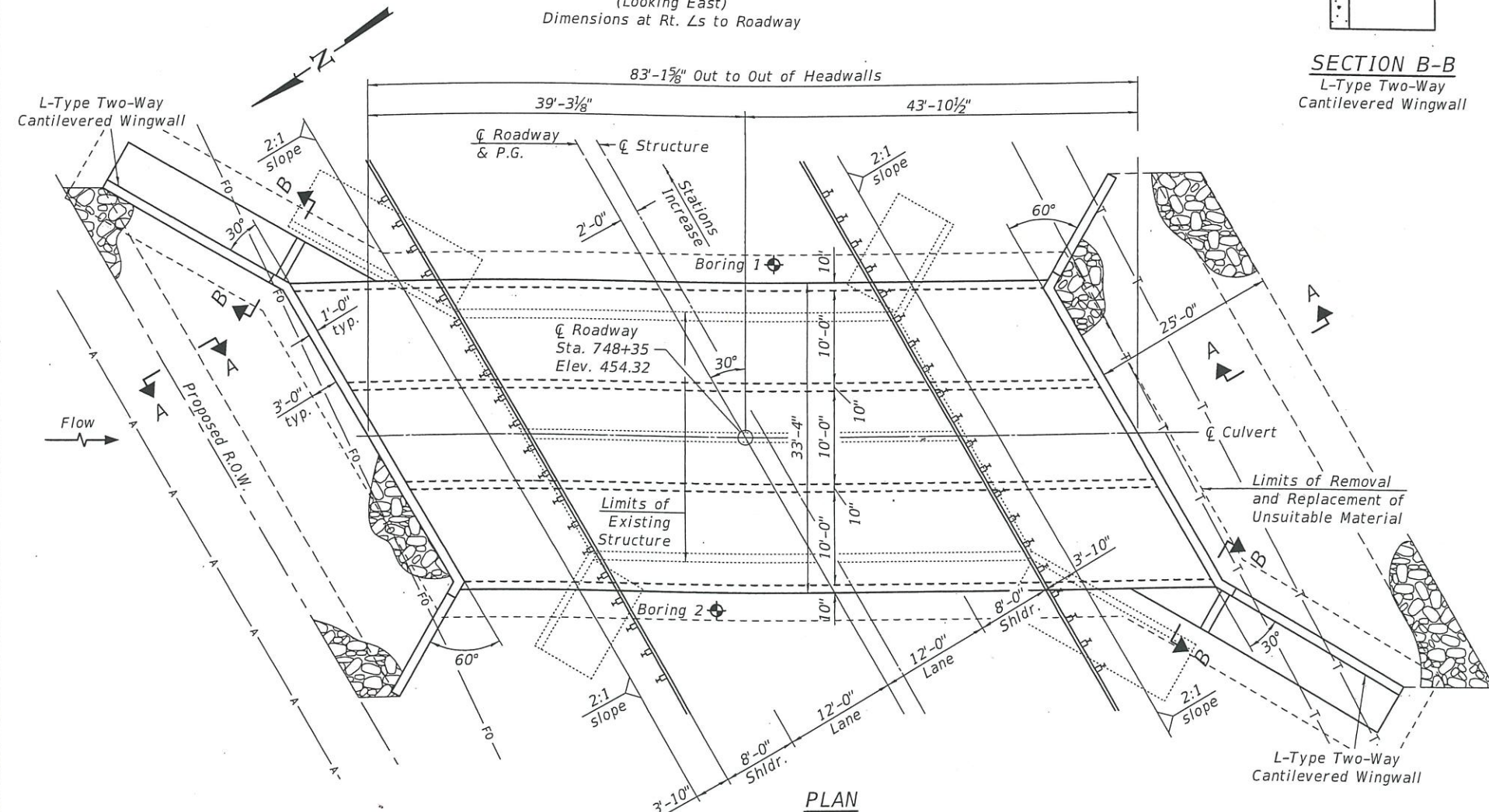
Existing Structure: S.N. 014-2001 was built in 1940 as F.A. Route 150 - Section 7A at Station 748+35 as a cast-in-place 26'-10" W x 13'-0" H x 47'-11" L box culvert with a 30° skew. Existing structure is to be removed and replaced with traffic maintained utilizing a marked detour route.

Note: Precast not allowed.

No Salvage



LONGITUDINAL SECTION
(Looking East)
Dimensions at Rt. Ls to Roadway



PLAN

WATERWAY INFORMATION

Drainage Area = 178.247 sq. mi. Existing Low Grade Elev. (014-0025) 451.04 @ Sta. 741+32.84
Proposed Low Grade Elev. (014-0080) 454.32 @ Sta. 695+20.48 to 721+22.20 & 738+85.37 to 764+03.26

Flood	Freq. Yr.	Q C.F.S.	Opening Ft ²		Head - Ft.			Headwater El.	
			Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.	Prop.
Design	10	938	264	300	450.8	1.52	1.24	452.32	452.04
Base	50	1161	264	300	451.82	1.84	1.70	453.66	453.52
Existing O.T.	100	1243	264	300	452.2	2.24	1.88	454.44	454.08
Proposed O.T.	2	873	264	--	450.51	0.35	--	450.86	--
Max. Calc.	100	1243	--	300	452.2	--	1.88	--	454.08
	500	894	264	300	456.47	0.23	0.15	456.7	456.62

DESIGN STRESSES

FIELD UNITS
f_c = 3,500 psi
f_y = 60,000 psi (Reinforcement)

HIGHWAY CLASSIFICATION

F.A.P. Rte. 805 - IL Rte. 161
Functional Class: Minor Arterial
ADT: 4900 (2015); 6100 (2038)
ADTT: 665 (2015)
DHV: 490
Design Speed: 55 m.p.h.
Posted Speed: 55 m.p.h.
Two-Way Traffic

DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2015 & 2016 Interims

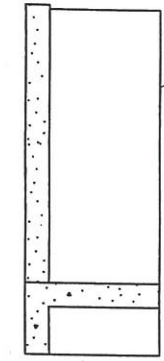
LOADING HL-93

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

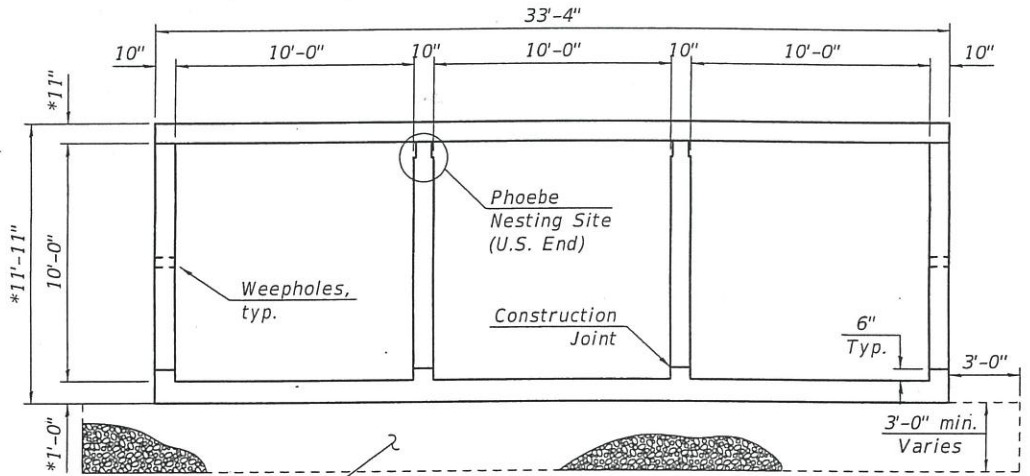
APPROVED

SEP 29 2017

AS A BASIS FOR PREPARATION OF DETAILED PLANS



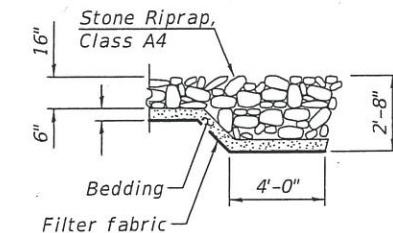
SECTION B-B
L-Type Two-Way Cantilevered Wingwall



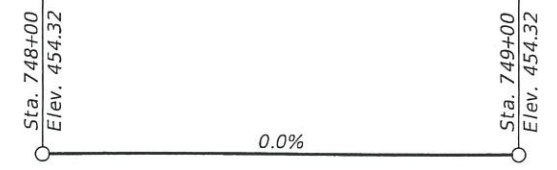
SECTION THRU BARREL
Dimensions at Rt. Ls to Roadway

Removal and Replacement of Unsuitable Material

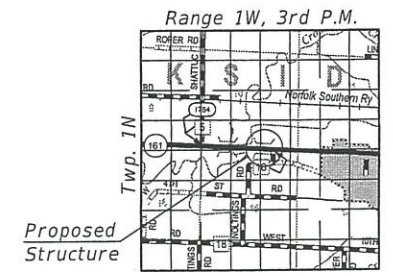
* Slab Thickness may be refined in final design



SECTION A-A



PROFILE GRADE
(along C F.A.P. Rte. 805)



LOCATION SKETCH

GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 161 OVER
CROOKED CREEK OVERFLOW
F.A.P. RTE. 805 - SEC. 7BR, 7BR-1
CLINTON COUNTY
STATION 748+35
STRUCTURE NO. 014-2025

9/28/2017 2:37:19 PM

DESIGNED -	CRYSTAL D. STONE
CHECKED -	AL-BARRAE R. SHEBIB
DRAWN -	IAN J. ANDREWS
CHECKED -	RICHARD J. CHAPUT

SEPTEMBER 28, 2017

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 1 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	7BR, 7BR-1	CLINTON		
CONTRACT NO. 76887				
ILLINOIS FED. AID PROJECT				