

Bench Mark: #JL1 - Set chiseled square in southwest side of grain bin foundation, just northeast of box at Bench Mark T-245, Elev. 486.04 (NAVD 88).

Existing Structure: S.N. 086-0022 built in 1923 as a single span bridge with a reinforced concrete deck slab supported by closed abutments on wood piles located at Sta. 300+50.00 at 0 degree skew. Back to back of abutments is 22'-0", width is 42'-2". Structure to be removed and new structure to be constructed in stages at Sta. 300+50.00. Traffic to be maintained utilizing stage construction.

The Precast Alternate requires cast-in-place headwalls.

No Salvage.

Note: Backfill to top of culvert with Granular Culvert Backfill. Removal and replacement of weak soils with Rockfill - Foundation may be required beneath the culvert. The Engineer will determine the required depth of improvement following excavation to plan grade.

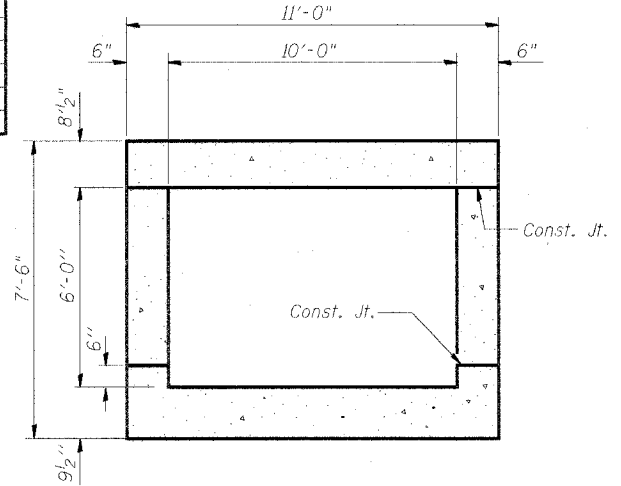
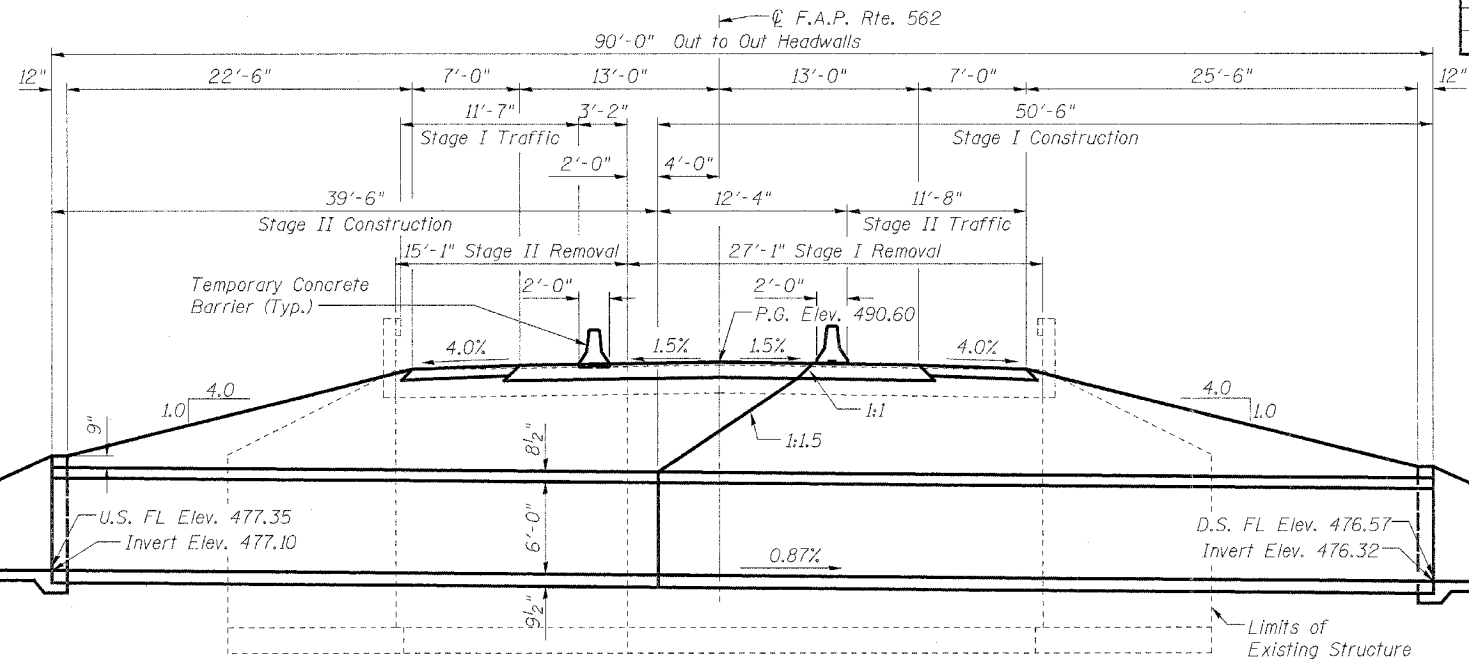
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Furnished Excavation	Cu. Yd.	915
Removal of Existing Structure	Each	1
Structure Excavation	Cu. Yd.	570
Reinforcement Bars, Epoxy Coated	Pound	15,540
Box Culvert End Sections	Each	2
Concrete Box Culverts	Cu. Yd.	75.0
Temporary Soil Retention System	Sq. Ft.	436
Granular Culvert Backfill	Cu. Yd.	350
Bar Splicers	Each	43
Rock Fill - Foundation	Ton	150

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
IL 100	117B-4	SCOTT	39	21

6 SHEETS



SECTION THRU BARREL

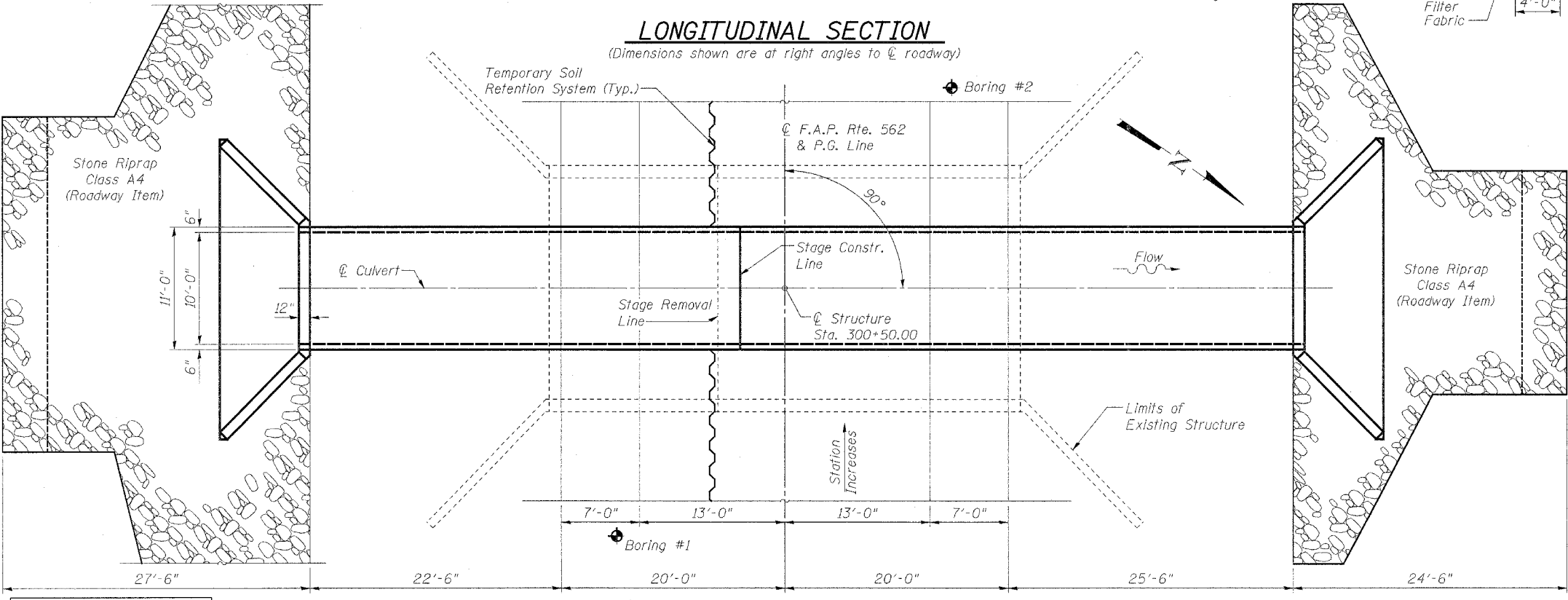
WATERWAY INFORMATION

Drainage Area = 0.44 sq. mi. Low Grade Elev. 489.8 @ Sta. 301+00

Flood	Freq. Yr.	C.F.S.	Opening Sq. Ft. Exist.	Prop.	Nat. H.W.E. Exist.	Prop.	Head - Ft. Exist.	Prop.	Headwater El. Exist.	Prop.
Design	10	115.9	46.4	15.5	480.18	480.56	0.06	1.10	480.24	481.28
Base	50	182.9	54.0	17.8	480.56	480.70	0.22	2.02	480.78	482.58
Overtopping	100	211.6	57.1	18.6	480.70	-	0.29	2.38	480.99	483.08
Max. Calc.	500	280.9	63.8	20.7	481.05	-	0.39	3.17	481.44	484.22

LONGITUDINAL SECTION

(Dimensions shown are at right angles to roadway)



PLAN



DESIGNED	S.C. Crowley
CHECKED	K.L. Hayes
DRAWN	S.C. Crowley
CHECKED	K. L. Hayes/ D. Siegfried

Note: Existing abutments are not stable once the existing slab is removed. Excavate behind Stage I abutments prior to Stage I slab removal. Follow same procedure during Stage II removal. Excavation is included in Structure Excavation quantity.

HIGHWAY CLASSIFICATION

F.A.P. 562 - IL Rte. 100  
ADT: 1650(2001), 2340(2020)  
ADTT: 347(2001), 491(2020)  
DHV:  
Functional Class: Minor Arterial, (Non-Urban)  
Design Speed: 55 mph

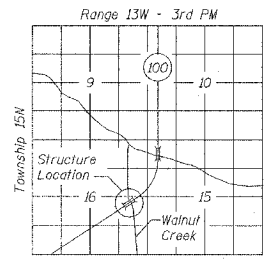
DESIGN SPECIFICATIONS

AASHTO Standard Specifications for Highway Bridges Seventeenth Edition, 2002

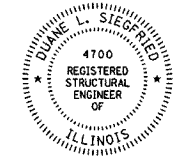
DESIGN STRESSES

f<sub>y</sub> = 60,000 psi  
f'<sub>c</sub> = 3,500 psi

LOADING HS 20-44



LOCATION SKETCH



Signature: *[Signature]* Date: 4/28/05  
License Expires 11/30/2006

GENERAL PLAN  
ILLINOIS ROUTE 100 OVER  
WALNUT CREEK  
F.A.P. ROUTE 562 - SECTION 117(B-4)  
SCOTT COUNTY  
STATION 300+50.00  
STRUCTURE NO. 086-7500

Plot Date: 4/28/2005  
 Plotted By: csp@stl.com  
 Pen Tables: 100+tbl  
 File Name: s:\0400\11\_000\Cad\SS\Wolnut\Wolnut2\_Final.dgn