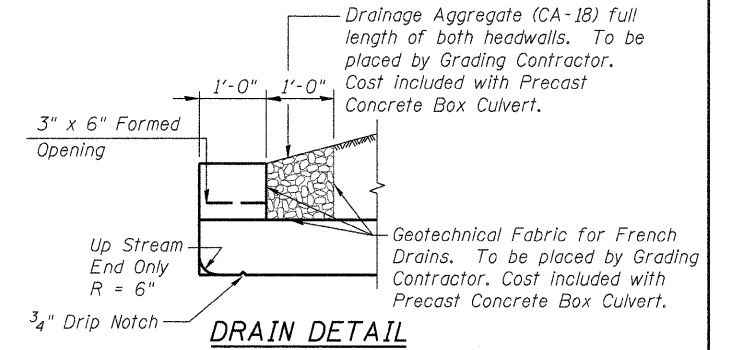
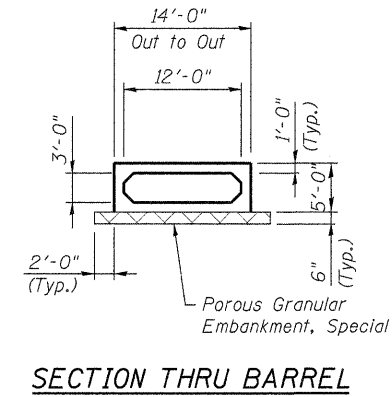
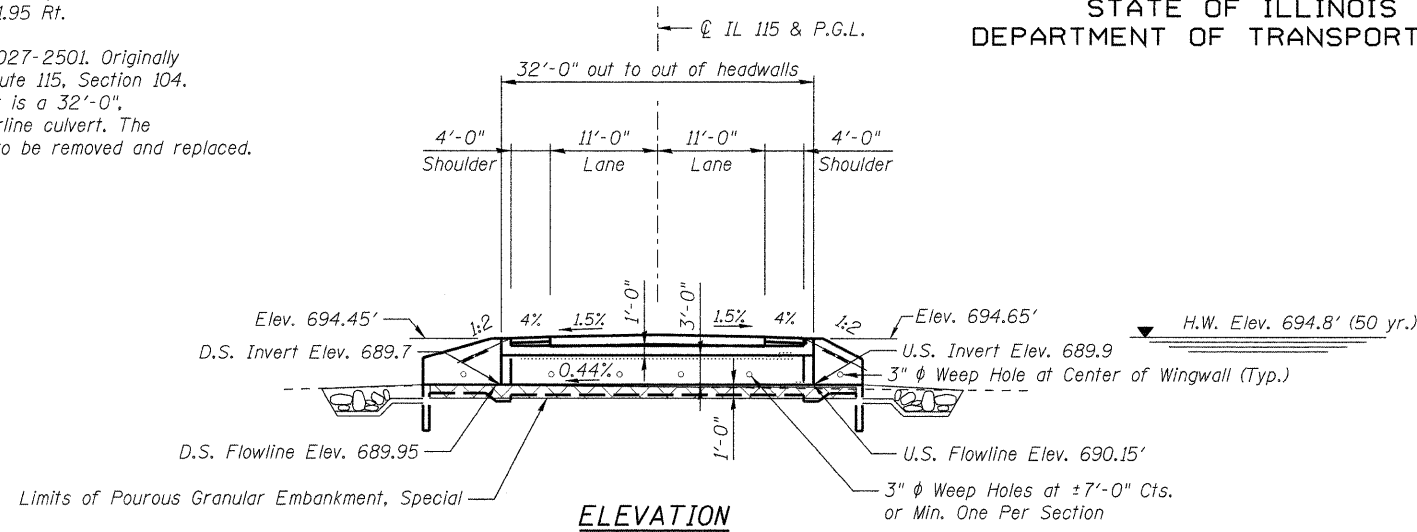


Bench Mark: ROW marker NW quad IL 115 & CR 9
Sta. 1259+95.67 111.95 Rt.

Existing Structure: S.N. 027-2501. Originally built in 1926 as Route 115, Section 104. The existing culvert is a 32'-0", 45'-3" along centerline culvert. The existing culvert is to be removed and replaced.

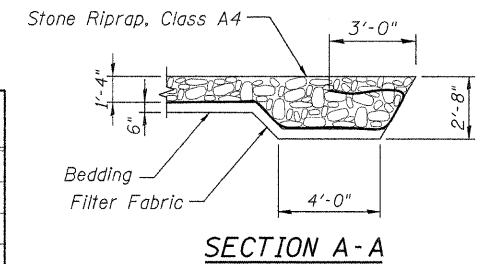
No salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



TOTAL BILL OF MATERIAL

Item	Unit	Total
Porous Granular Embankment	Cu Yd	95
Porous Granular Embankment, Special	Cu Yd	34
Stone Riprap, Class A4	Sq Yd	88
Filter Fabric	Sq Yd	88
Removal of Existing Structures	Each	1
Structure Excavation	Cu Yd	199
Name Plates	Each	1
Box Culvert End Sections	Each	2
Precast Concrete Box Culvert 12' x 3' (M273)	Foot	25
Grating for Concrete Headwall	Each	2



DESIGN SPECIFICATIONS
2002 AASHTO 17th Edition

LOADING HS20-44 & ALT.
Allow 50#/sq. ft. for future wearing surface.
Design fill height < 2 ft.

DESIGN STRESSES

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

PRECAST UNITS
f_c = 5,000 psi
f_y = 65,000 psi (welded wire fabric)

Indicates Boring Logs

GENERAL NOTES

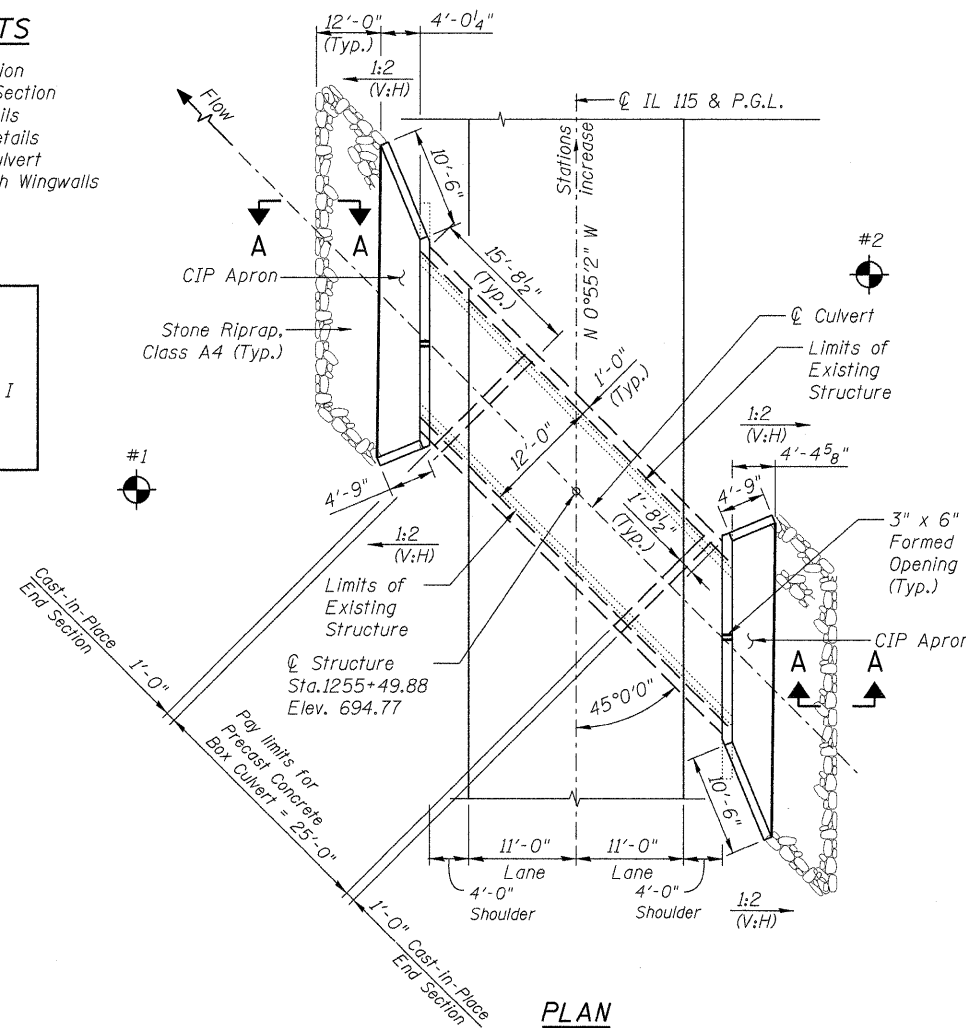
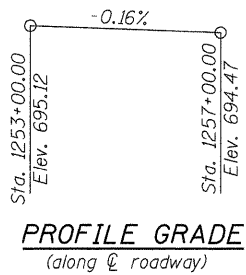
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See special provision.
- Reinforcement bars designated (E) shall be epoxy coated.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- Precast Concrete Box Culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M 273.
- Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.
- Class SI Concrete shall be used for cast-in-place concrete.
- Exposed edges shall be beveled 3/4".
- For backfilling and embankment see standard specifications.
- Precast End Sections are not allowed.
- All construction joints shall be bonded.
- The cast-in-place end section shall be poured monolithically with the wingwall.

INDEX OF SHEETS

- S1 General Plan and Elevation
- S2 Precast Concrete Box Section
- S3 Cast In Place Box Details
- S4 Cast In Place Apron Details
- S5 Section Through Box Culvert
- S6 Grating for Culverts with Wingwalls
- S7 Soil Boring Logs

STATION 1255+49.88
BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. RT. 796 SEC. 104 I
LOADING HS20
STR. NO. 027-2551

NAME PLATE
See Std. 515001



WATERWAY INFORMATION - DISTRICT APPROVED

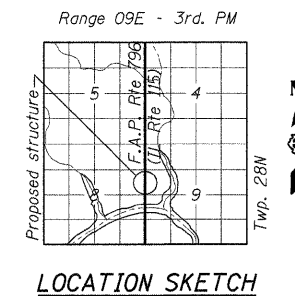
Drainage Area = 0.52 mi² (P) & (E) Low Grade Elev. 694.18 ft. @ Sta. 1258+49.88

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	333	30	36	694.1	0.5	0.4	694.6	694.5
Base	50	573	30	36	694.8	0.2	0.1	695.0	694.9
Overtopping	100	685	30	36	695.0	0.2	0.1	695.2	695.1
Max. Calc.	500	966	30	36	695.2	0.1	0.1	695.3	695.3

Design Elev.	US	DS
Scour Elev.	686.9	686.7



EXPIRATION DATE 11-30-2010
DATE 01/13/2010



GENERAL PLAN AND ELEVATION
ILLINOIS 115 OVER DRAINAGE DITCH
F.A.P. ROUTE 796 SEC. NO. 104 I
FORD COUNTY
STATION 1255+49.88
STRUCTURE NO. 027-2551

benesch
alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-566-0450
Job # 3938.02

SHEET NO. S1	F.A.P. RTE. 796	SECTION 104 I & 105 BR-1	COUNTY FORD	TOTAL SHEETS 51	SHEET NO. 37
SHEETS S7	CONTRACT NO. 66848			ILLINOIS FED. AID PROJECT	

x:\3900s\3938\structures\illioverkellycreek_culvert\final\plans\27-2501-66848-30-gpe.dgn