

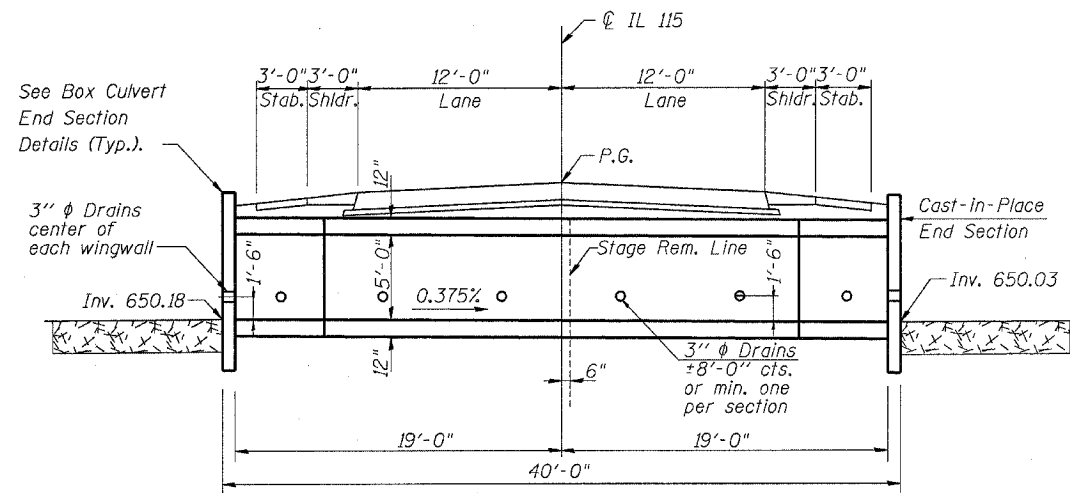
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
796	105I-1	FORD	25	13
FED. ROAD DIST. NO. ILLINOIS				

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

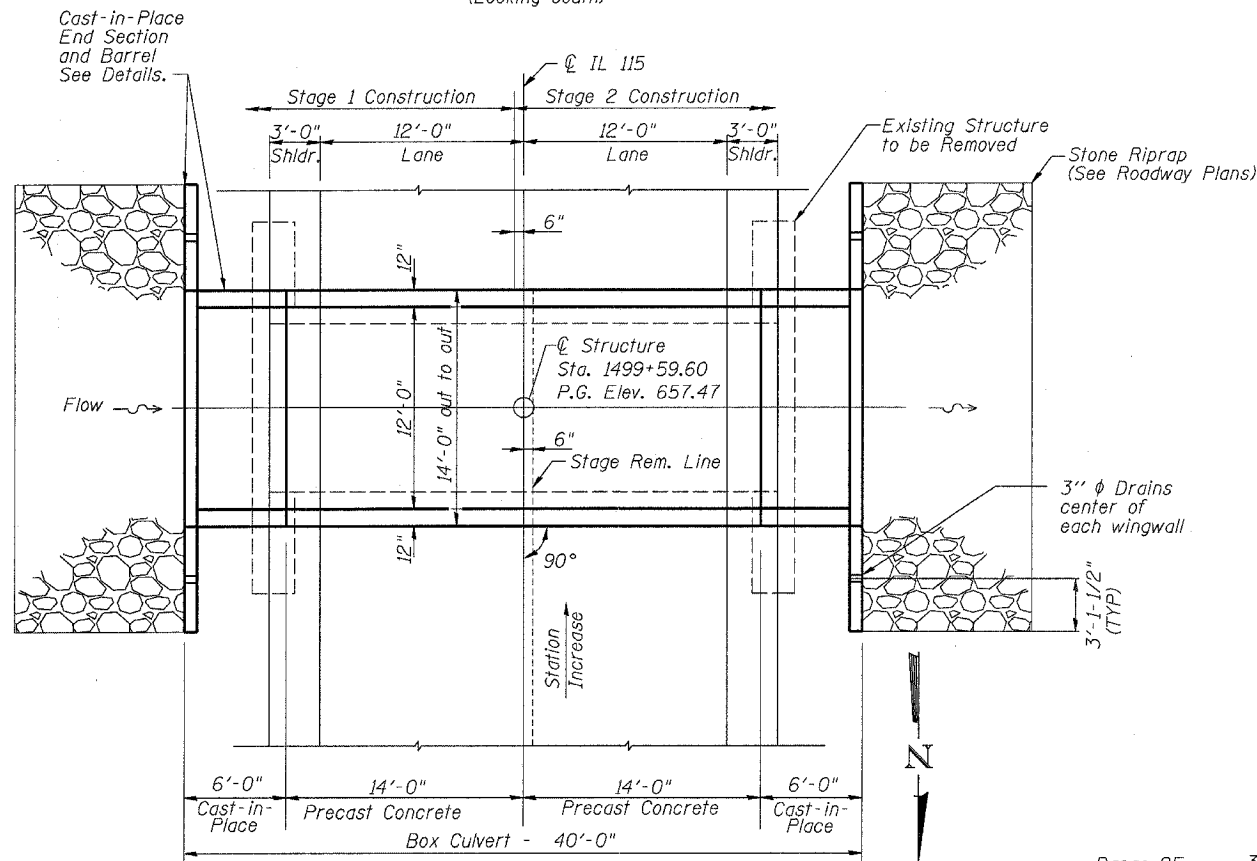
B.M.: Chiseled "X" on top of S.E. wingwall, Sta. 125+85.90, 17.6' H.  
Elev. 674.52

Existing Structure: SN 027-2504 was originally constructed in 1928. The existing structure is a single 10' x 5' box culvert with wing walls parallel to IL 115. The structure measures 30' long. Staging shall be used during construction of the box culvert.

No salvage



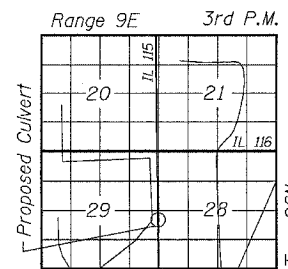
**ELEVATION**  
(Looking south)



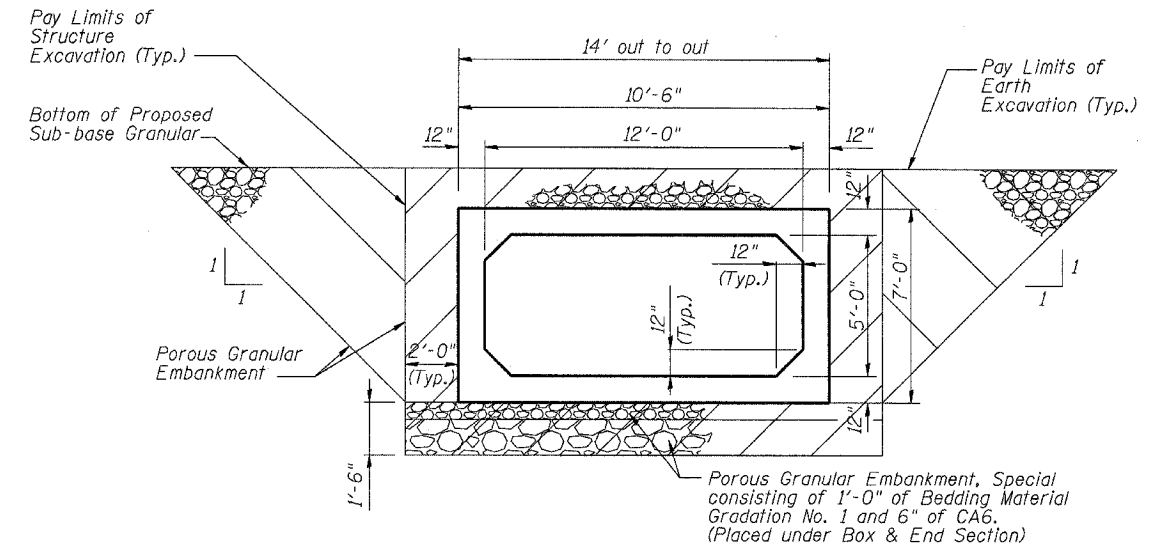
**PLAN**

**WATERWAY INFORMATION**

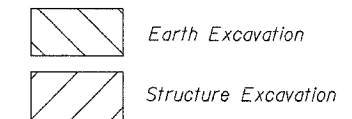
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
			50	60	652.6	0.5	0.4	653.1	653.0
Design	50	182	50	60	653.2	0.5	0.3	653.7	653.5
Base	100	214	50	60	654.7	0.5	0.3	655.2	655.0
Overtopping									
Max. Calc.	500	293	50	60	655.9	0.7	0.5	656.6	656.4



**LOCATION SKETCH**



**SECTION THROUGH BARREL**



**GENERAL NOTES**

- ① 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.
- ② Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
- ③ Reinforcement bars designated (E) shall be epoxy coated.
- ④ Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
EARTH EXCAVATION	CU YD	73
POROUS GRANULAR EMBANKMENT	CU YD	89
POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	97
REINFORCEMENT BARS, EPOXY COATED	POUND	4552
REMOVAL OF EXISTING STRUCTURE	EACH	1
EXPANSION BOLTS 3/4 INCH	EACH	56
STRUCTURE EXCAVATION	CU YD	117
PRECAST CONCRETE BOX CULVERT 12' X 5' (M273)	FOOT	28
CONCRETE BOX CULVERTS	CU YD	26.4
SHEET WATERPROOFING MEMBRANE SYSTEM	SQ YD	118
TEMPORARY SOIL RETENTION SYSTEM	SQ FT	60

**DESIGN SPECIFICATIONS**

1996 AASHTO with 1997 thru 2002 Interims

**LOADING HS20-44**

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

Design Fill Height = <2 ft.

**DESIGN STRESSES**

Precast  
f'c = 5,000 psi  
fy = 65,000 psi (welded wire fabric)  
Cast-In-Place  
f'c = 3,500 psi  
fy = 60,000 psi (reinforcement)

**GENERAL PLAN**  
**IL 115 OVER DRAINAGE DITCH**  
**FAP ROUTE 796 - SECTION (105)I-1**  
**FORD COUNTY**  
**STATION 1499+59.60**

Rev.