

Existing Structure: SN 006-2526 was originally constructed in 1928. The existing 8'x5' reinforced concrete box culvert measures 34' face to face of curb built on a 45° skew to the left.

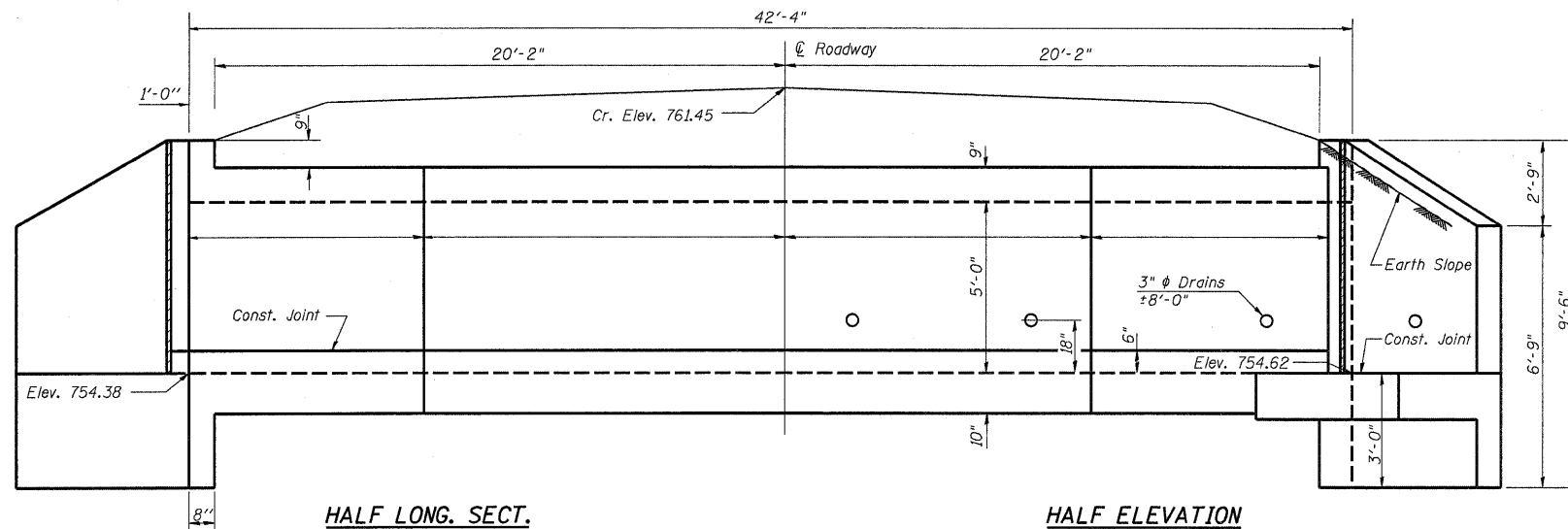
Traffic shall be detoured during construction of the box culvert.

No salvage

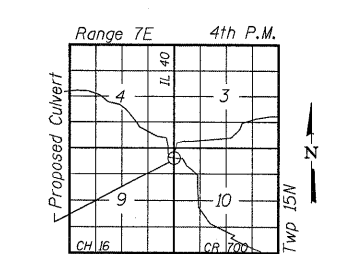
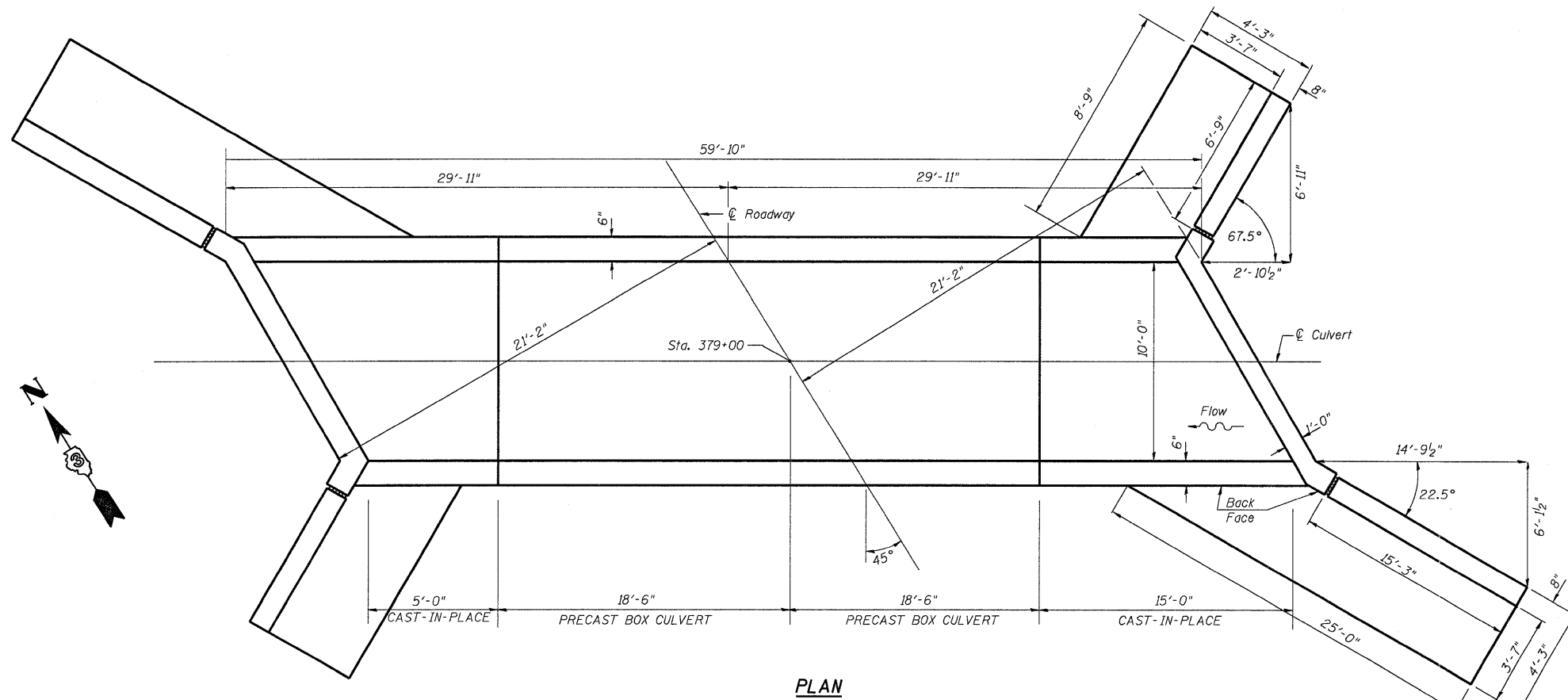
GENERAL NOTES

- 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 All Reinforcement Bars 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	91
POROUS GRANULAR EMBANKMENT	CU YD	142
POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	48
REINFORCEMENT BARS, EPOXY COATED	POUND	9535
REMOVAL OF EXISTING STRUCTURE	L SUM	1
EXPANSION BOLTS 3/4 INCH	EACH	52
STRUCTURE EXCAVATION	CU YD	103
PRECAST CONCRETE BOX CULVERT 10' X 5' (M273)	FOOT	37
CONCRETE BOX CULVERTS	CU YD	35.8
SHEET WATERPROOFING MEMBRANE SYSTEM	SQ YD	125



Dimensions at Rt. L's to C Roadway



LOCATION SKETCH

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)

WATERWAY INFORMATION

Drainage Area = 0.45 sq. mi. Existing and Proposed Low Grade Elev. 760.01 @ Sta. 377+00

Flood	Freq. Yr.	Q C.F.S.	Opening	Nat. Head - Ft.	Prop. Head - Ft.	Headwater El.
			Sq. Ft.	Exist.	Prop.	Exist. Prop.
Design	10	213	29	37	758.3	0.8 0.5 759.1 758.8
Base	50	349	31	39	758.5	1.5 1.4 760.0 759.9
Overtopping	100	413	32	40	758.6	1.5 1.4 760.1 760.0
Max. Calc.	500	567	34	42	758.8	1.5 1.4 760.3 760.2