

BM #1
Railroad spike in power pole west side of IL 47
Sta 373+51.73, 45.02' Rt, Elev 684.02

BM #1
Railroad spike in power pole west side of IL 47
Sta 371+46.53, 53.19' Rt, Elev 688.87

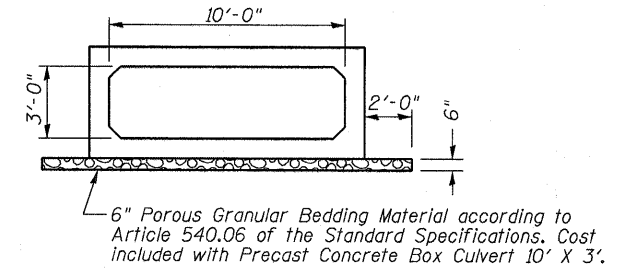
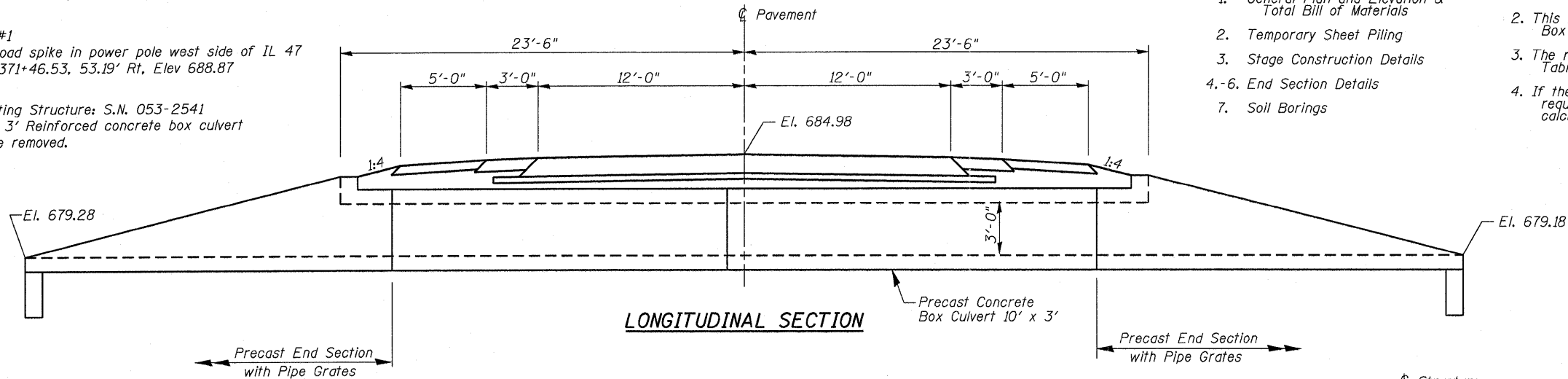
Existing Structure: S.N. 053-2541
6' x 3' Reinforced concrete box culvert
to be removed.

INDEX OF CULVERT PLANS

1. General Plan and Elevation & Total Bill of Materials
2. Temporary Sheet Piling
3. Stage Construction Details
- 4-6. End Section Details
7. Soil Borings

GENERAL NOTES

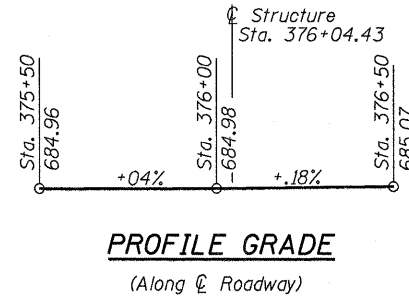
1. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.
2. This Box Culvert has a fill height of less than 2 ft. The Precast Concrete Box Culvert shall conform to the requirements of AASHTO M 273.
3. The reinforcement in the box section shall be according to AASHTO M273 Table 1 for a 10' x 3' box section except A_s1 shall be 0.38 in²/ft.
4. If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.



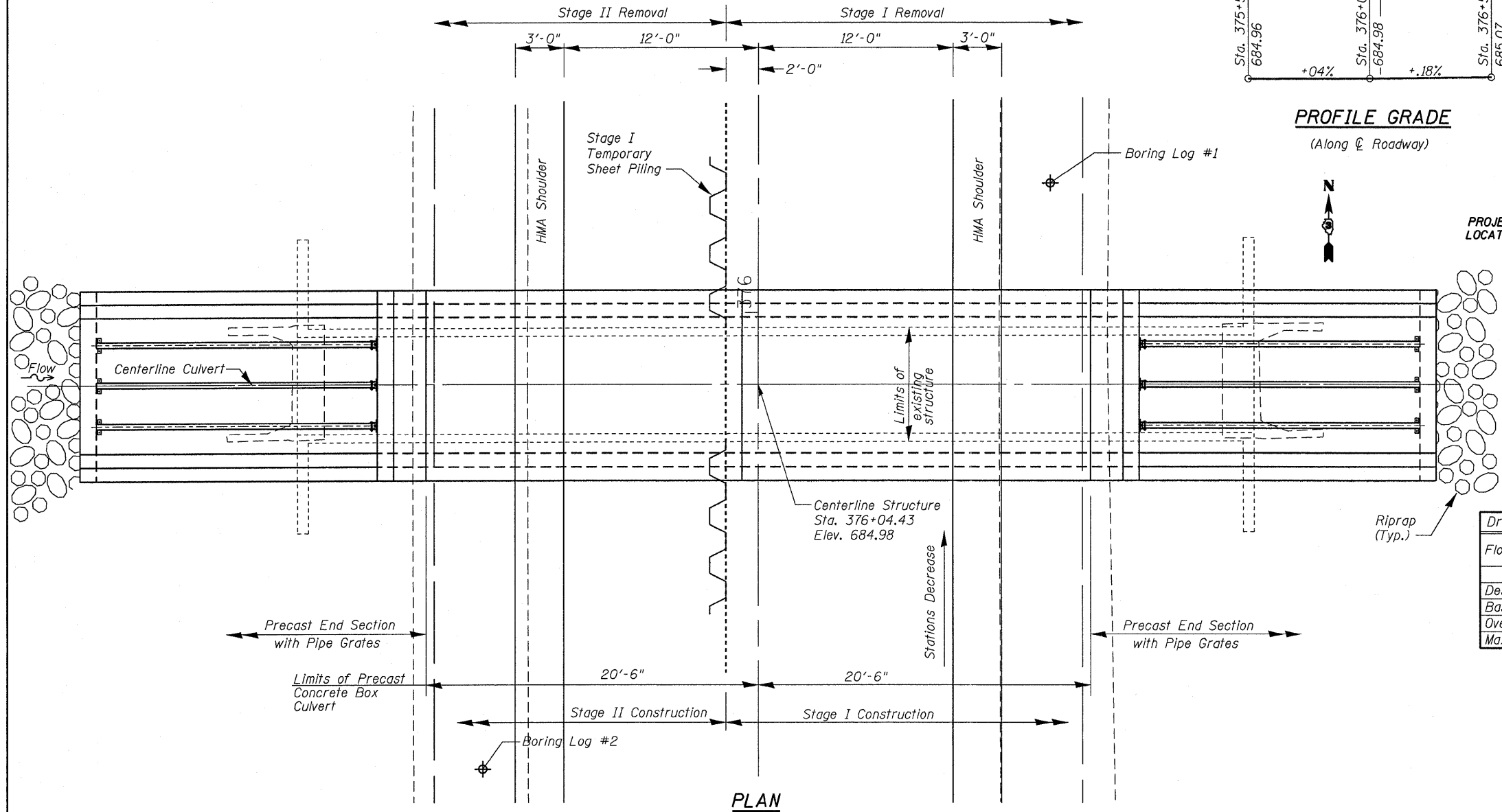
SECTION THRU BARREL
Precast

TOTAL BILL OF MATERIAL

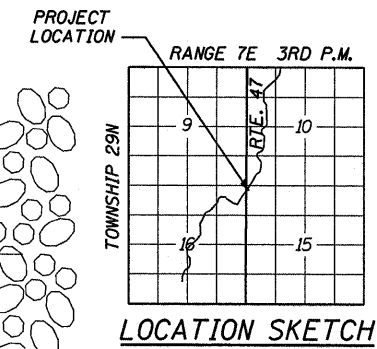
ITEM	UNIT	TOTAL
Stone Riprap, Class A4	Sq Yd	32
Filter Fabric	Sq Yd	32
Porous Granular Embankment	Cu Yd	67
Removal of Existing Structures	Each	1
Temporary Sheet Piling	Sq Ft	194
Grated Box Culvert End Sections, Culvert No. 1	Each	2
Precast Concrete Box Culverts 10'x3'	Foot	41



PROFILE GRADE
(Along & Roadway)



PLAN



LOCATION SKETCH

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
2002 AASHTO
DESIGN STRESSES
FIELD UNITS

Precast
f'_c = 5,000 psi
f_y = 65,000 psi (welded wire fabric)

WATERWAY INFORMATION

Drainage Area = 0.22 sq. mi. Low Grade Elev. = 684.75 @ Sta. 375+70

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
10	142	5	6	679.9	4.2	2.5	684.1	682.4	
Design	50	217	10	16	680.9	4.0	2.9	684.9	683.7
Base	100	258	11	17	681.0	4.0	3.6	685.0	684.6
Overtopping	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Max. Calc.	500	439	13	20	681.3	3.9	3.8	685.2	685.1

GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 47 OVER DRAINAGE DITCH
F.A.P. RT. 326 SEC. (121)I
LIVINGSTON COUNTY
STATION 376+04.43
STRUCTURE NO. 053-2578