

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

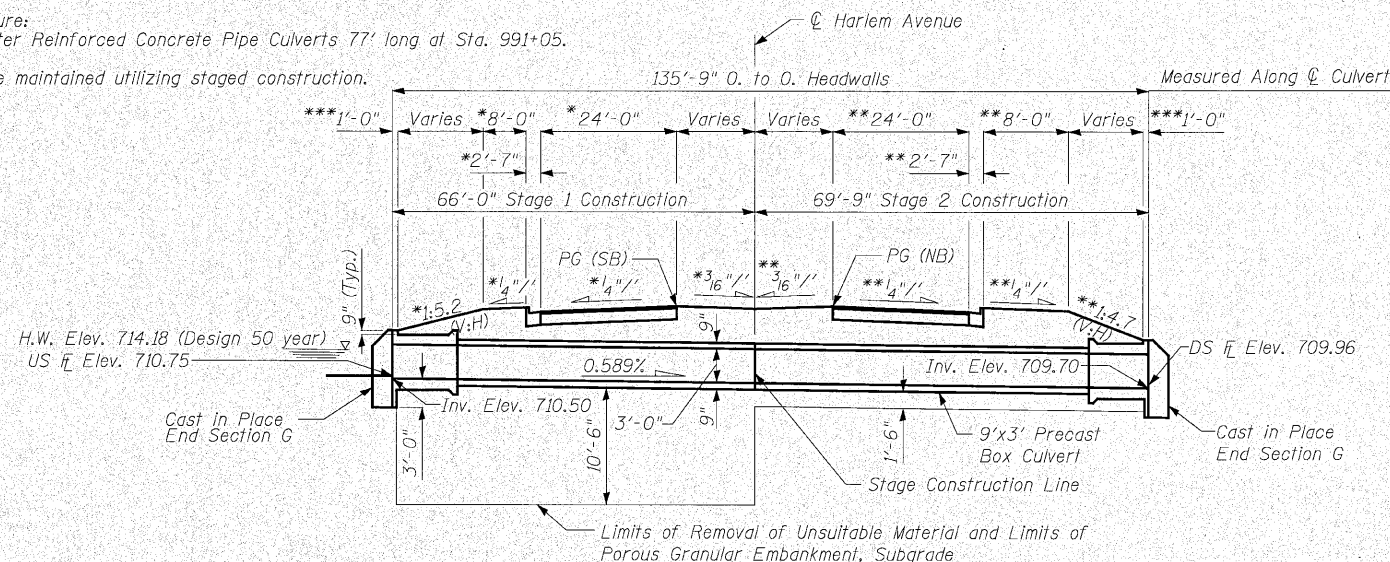
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
353	(12&13)WRS-4	Will	608	485	8 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-		Contract No. 62478

Benchmark:  
BM# 12 - Chiseled square on 5 foot headwall at southwest corner of US Route 30 and Harlem Avenue.  
Elevation 722.44.

Existing Structure:  
Two 30" Diameter Reinforced Concrete Pipe Culverts 77' long at Sta. 991+05.

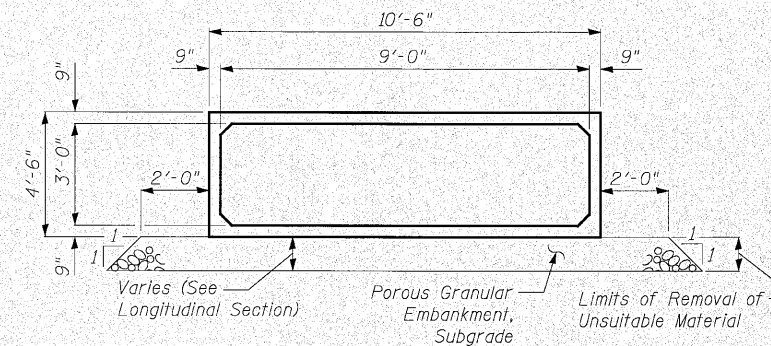
Traffic is to be maintained utilizing staged construction.

No Salvage.



**LONGITUDINAL SECTION**

\*Dimensions at Right Angle to PG (SB)  
\*\*Dimensions at Right Angle to PG (NB)  
\*\*\*Dimensions at Right Angle to C Harlem Ave.



**SECTION THRU PRECAST CONCRETE BARREL**

**INDEX OF CULVERT DRAWINGS**

Sheet No.	Title
1	General Plan
2	General Notes, Staging & Temporary Sheet Piling
3	End Section G
4	Sections and Details
5	Soil Boring Logs CS-29 & CS-30
6	Soil Boring Log CS-31
7	Soil Boring Log CS-32
8	Soil Boring Logs CS-32ST & CS-33

**NOTE:**

For Sections B-B & C-C See Sheet 2

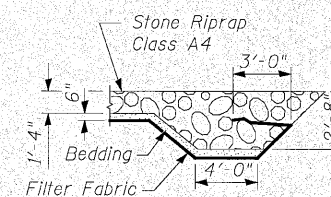
**TOTAL BILL OF MATERIAL**

Item	Unit	Total
Removal and Disposal of Unsuitable Material	Cu Yd	968
Porous Granular Embankment, Subgrade	Cu Yd	696
Stone Riprap, Class A4	Sq Yd	66
Filter Fabric	Sq Yd	66
Temporary Sheet Piling	Sq Ft	3,827
Box Culvert End Section, Culvert No. 4	Each	2
Precast Concrete Box Culvert 9'x3'	Foot	118

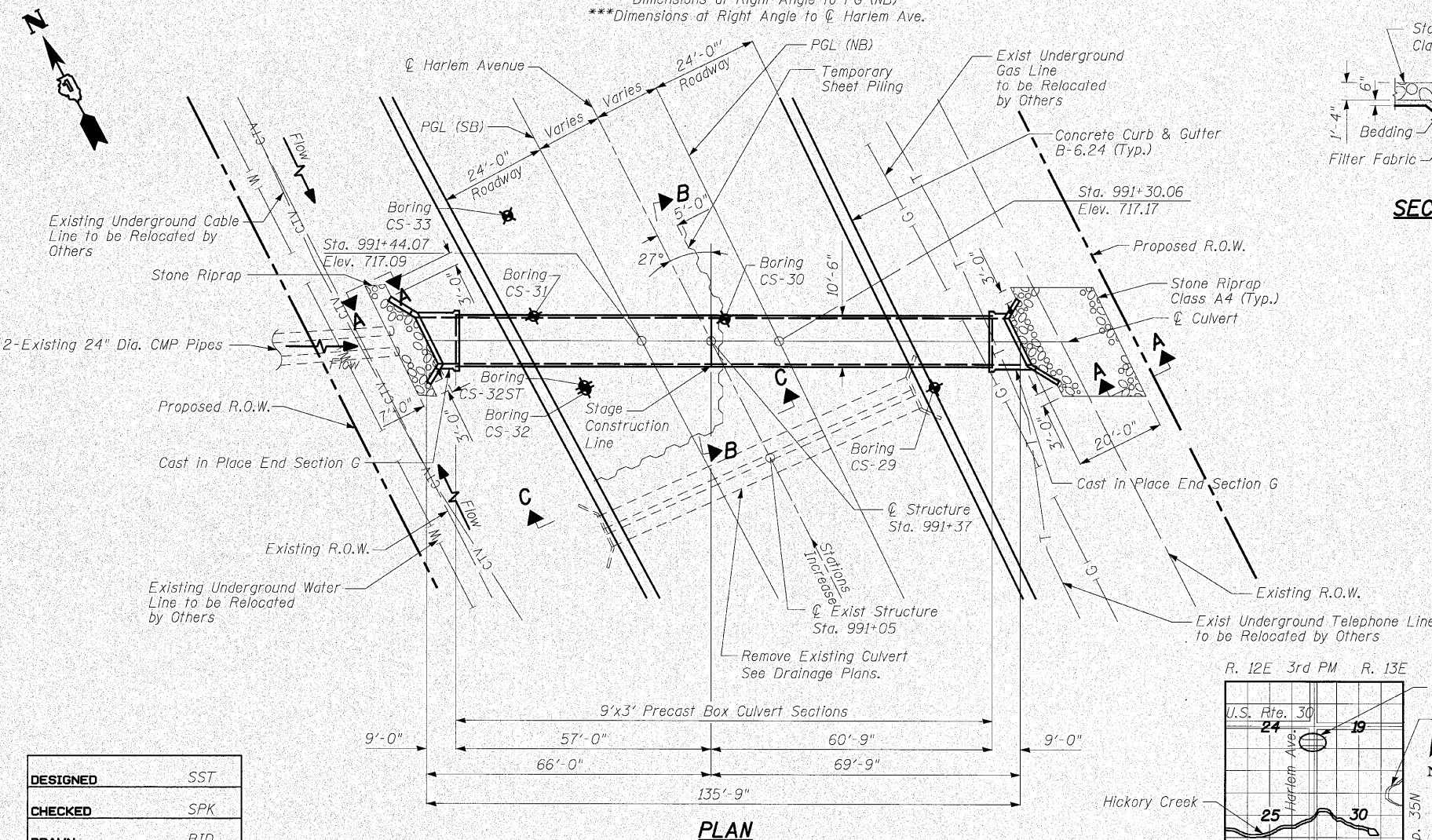
**WATERWAY INFORMATION TABLE**

Drainage Area = 0.16 sq.miles Low Grade Elev. 716.89 @ Sta. 992+23.52

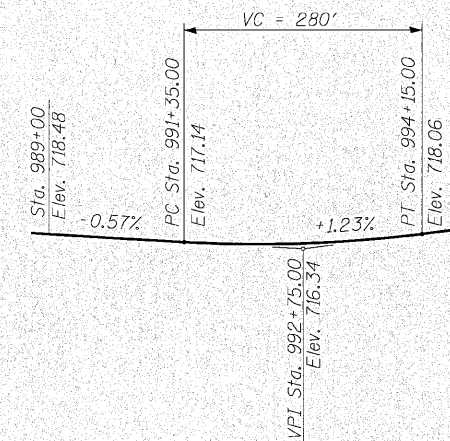
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. Head - Ft.		Headwater E.L.		
			Exist.	Prop.	H.W.E. Exist.	Prop.	Exist.	Prop.	
Design	10	83	8.13	19.24	712.70	1.52	0.00	714.22	712.50
Design	50	180	9.82	25.88	713.64	2.07	0.71	715.71	714.18
Base	100	221	9.82	25.88	713.92	1.88	1.48	715.80	715.13
Overtopping	-	303	-	25.88	714.25	-	3.14	-	717.39
Max. Calc.	500	465	9.82	25.88	715.10	1.03	2.86	716.13	717.94



**SECTION A-A**

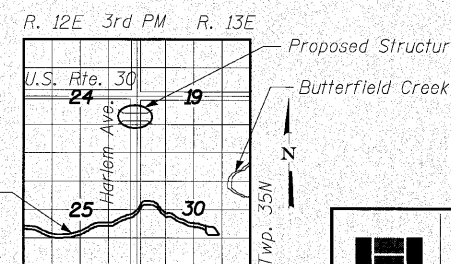


**PLAN**



**PROFILE GRADE**

(Along Median Edge of Roadway)



**LOCATION SKETCH**

DESIGNED	SST
CHECKED	SPK
DRAWN	BID
CHECKED	SPK

**DESIGN SPECIFICATIONS**

2002 AASHTO

**LOADING HS20-44**

Allow 50#/sq. ft. for Future Wearing Surface.

**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)

**GENERAL PLAN**  
**HARLEM AVENUE OVER**  
**DRAINAGE DITCH**  
**F.A.P. ROUTE 353 - SEC. (12&13)WRS-4**  
**WILL COUNTY**  
**STATION 991+37.00**  
**STRUCTURE NO. 099-C029**



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