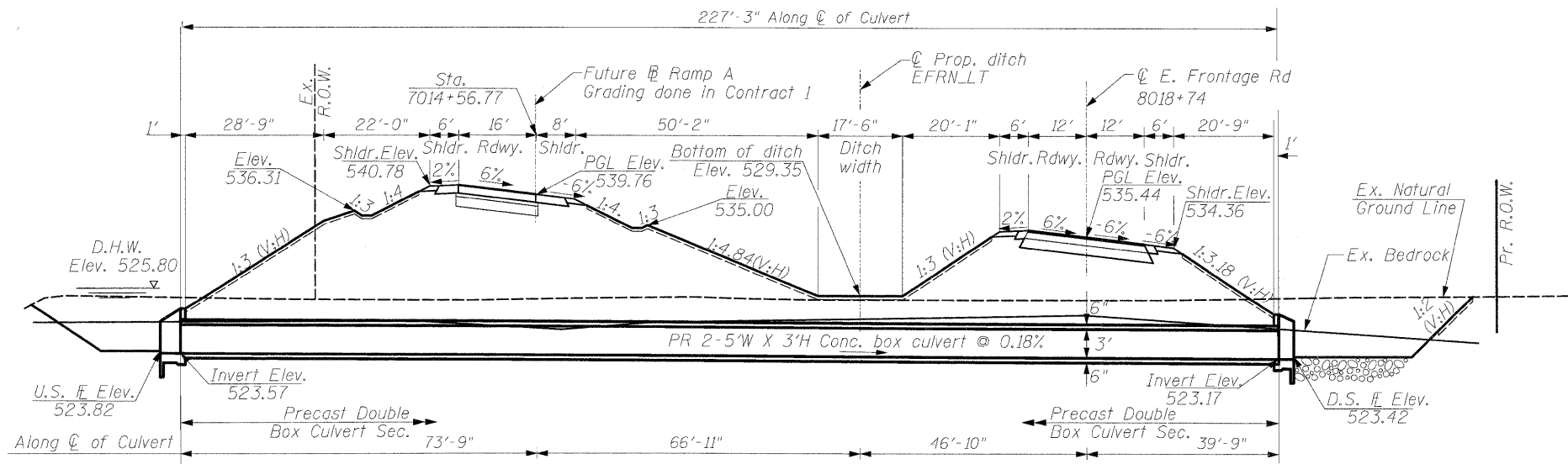
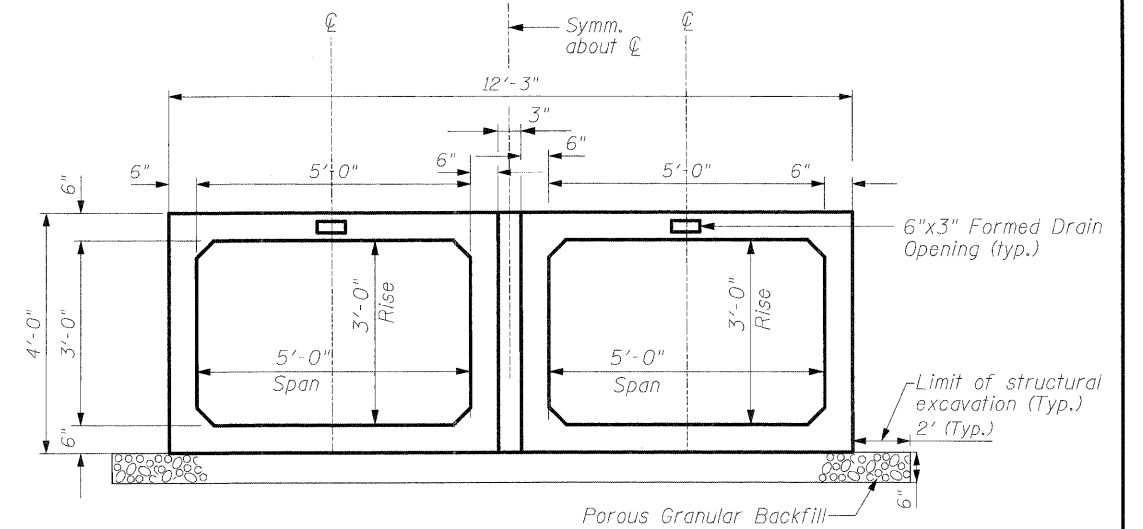


Bench Mark: BM 7  
 (RR spike in E. side of power pole +6.5' tall at the South Edge  
 of a pond on the E. side of E. Frontage Rd. between CPT'S 214 & 215. Elev.=556.123  
 Existing Structures: None.

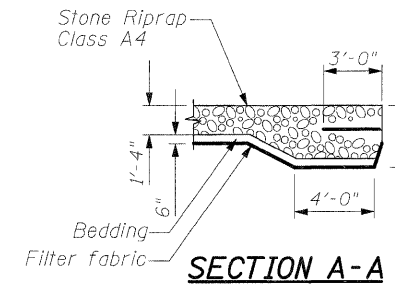
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION



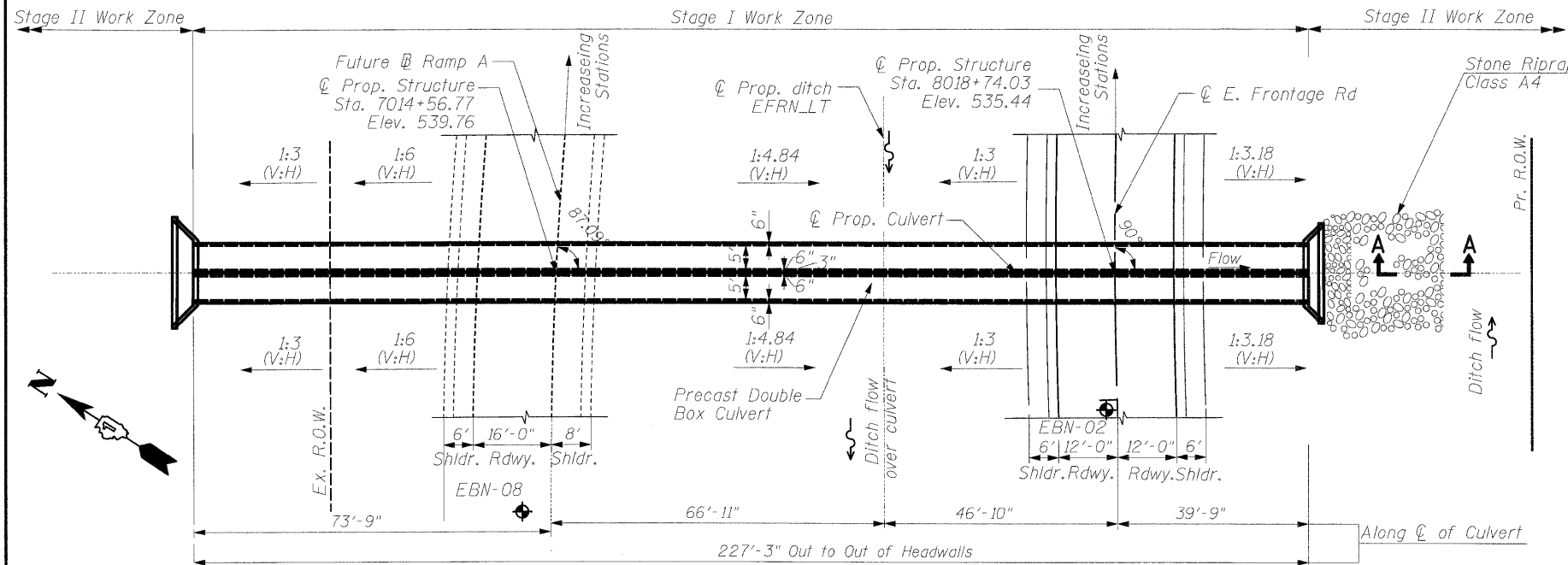
LONGITUDINAL SECTION  
 N.T.S.



SECTION THRU BARREL  
 N.T.S.



SECTION A-A



PLAN  
 N.T.S.

CURVE DATA

P.I. Station 8015+77.77  
 Delta = 36° 00' 38.32" (RT)  
 Degree = 5° 21' 17.08"  
 Tangent = 347.7740'  
 Length = 672.4996'  
 Radius = 1,070.00'  
 External = 55.0985'  
 Long Chord = 661.4854'  
 Mid. Ord. = 52.4002'  
 P.C. Station 8012+30.00  
 P.T. Station 8019+02.50

CURVE DATA

P.I. Station 7015+25.31  
 Delta = 61° 20' 36.44" (RT)  
 Degree = 6° 51' 42.37"  
 Tangent = 495.2296'  
 Length = 893.9888'  
 Radius = 835.00'  
 External = 135.8127'  
 Long Chord = 851.8980'  
 Mid. Ord. = 116.8131'  
 P.C. Station 7010+30.08  
 P.T. Station 7019+24.07

DESIGN SPECIFICATIONS

AASHTO 2002

LOADING HS-20-44

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

DESIGN STRESSES

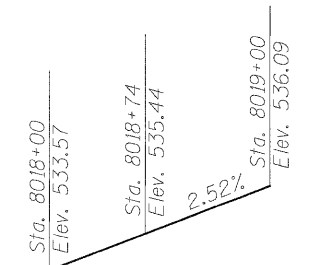
FIELD UNITS

Cast-In-Place Units  
 $f'_c = 3,500$  psi (Concrete)  
 $f_y = 60,000$  psi (Reinforcement)

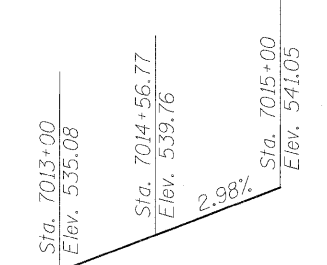
Precast Units  
 $f'_c = 5,000$  psi (Concrete)  
 $f_y = 65,000$  psi (Welded Wire Fabric)

SEISMIC DATA

Seismic Performance Zone (SPC) = A  
 Bedrock Acceleration Coeff.(A) = 0.04g  
 Site Coefficient (S) = 1.0



PROFILE GRADE  
 (Along E. Frontage Rd.)



PROFILE GRADE  
 (Along R. Ramp A)

GENERAL PLAN & ELEVATION-RAMP A  
 OVER UNNAMED DITCH  
 F.A.I. ROUTE 55 - SEC. (99-182)AC-3  
 WILL COUNTY  
 STATION 7014+56.77  
 STRUCTURE NO. 099-0523

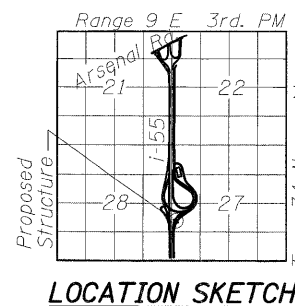
LEGEND

◆ - Soil Boring Location

WATERWAY INFORMATION

Drainage Area = 0.168 sq. mi. Low Grade Elev. 534.36 @ Sta. 8018+74 E. Frontage Rd.

	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		50	83	N/A	16.3	524.63	N/A	1.17	N/A	525.80
Base		100	109	N/A	19.6	524.94	N/A	1.3	N/A	526.24
Overtopping			405							



LOCATION SKETCH

**SINGH**  
 SINGH & ASSOCIATES, INC.  
 CONSULTING ENGINEERS  
 300 W. ADAMS ST.  
 CHICAGO, IL 60606  
 TEL: (312) 629-0240  
 FAX: (312) 629-8449

SHEET NO.  
 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-182)AC-3	WILL	524	327
Sta.8018+74 (E. Frontage Rd.)		CONTRACT NO. 60C31		
FED. RD. DIST. NO. 1 ILLINOIS FED. AID PROJECT				