

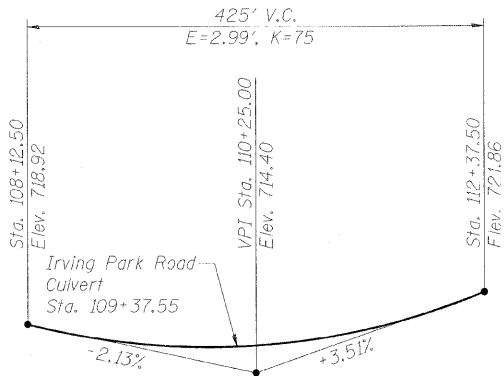
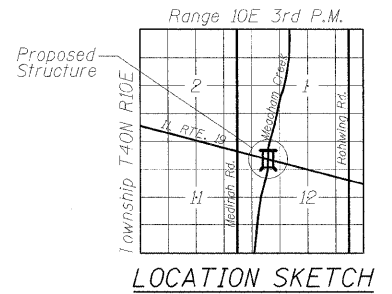
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

Bench Mark: "X" cut on top of arrow bolt of Fire Hydrant on NE quadrant of intersection Irving Park Road and Valley Lane, Elevation 718.82.

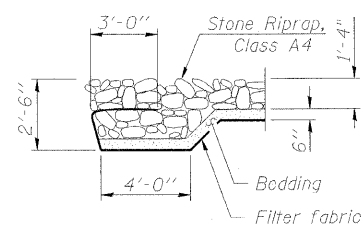
Existing Structure:  
Structure Number 022-3053, was built in 1930 and carries Illinois Route 19 (Irving Park Road) over Meacham Creek. The 14-foot single span concrete bridge measures 42'-8 3/8" out-to-out and 16'-0" long.

Traffic to be detoured during construction of culvert and staged for roadway construction.

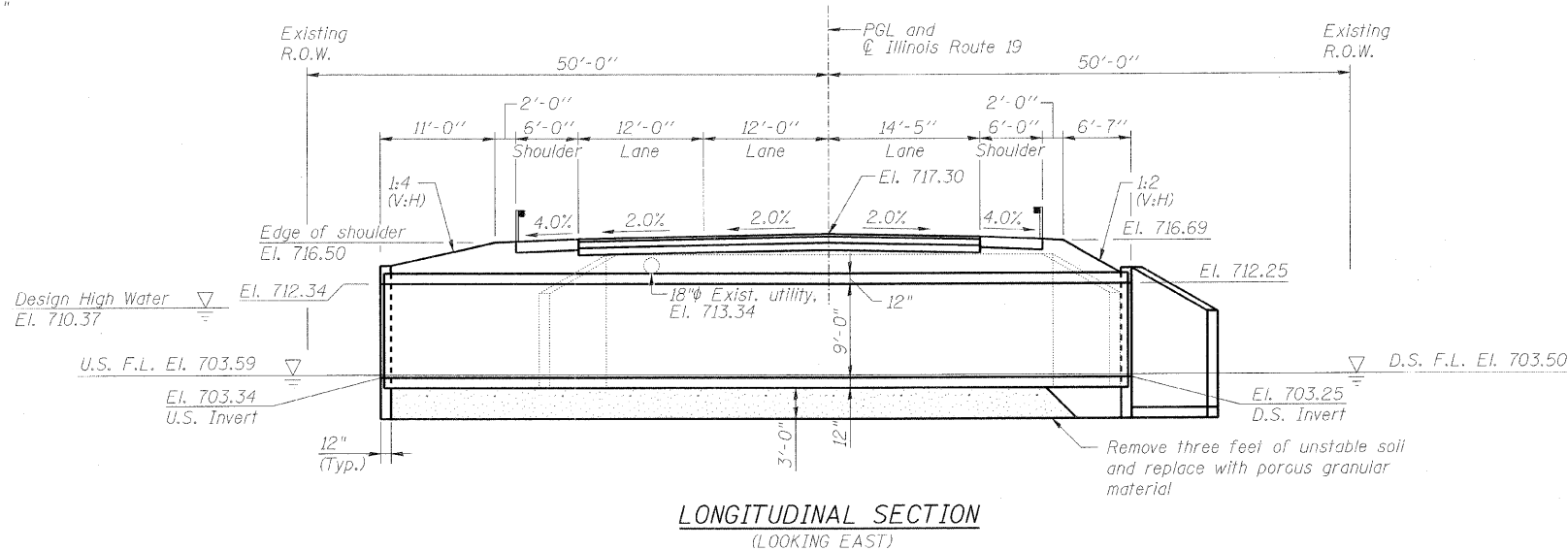
No Salvage.



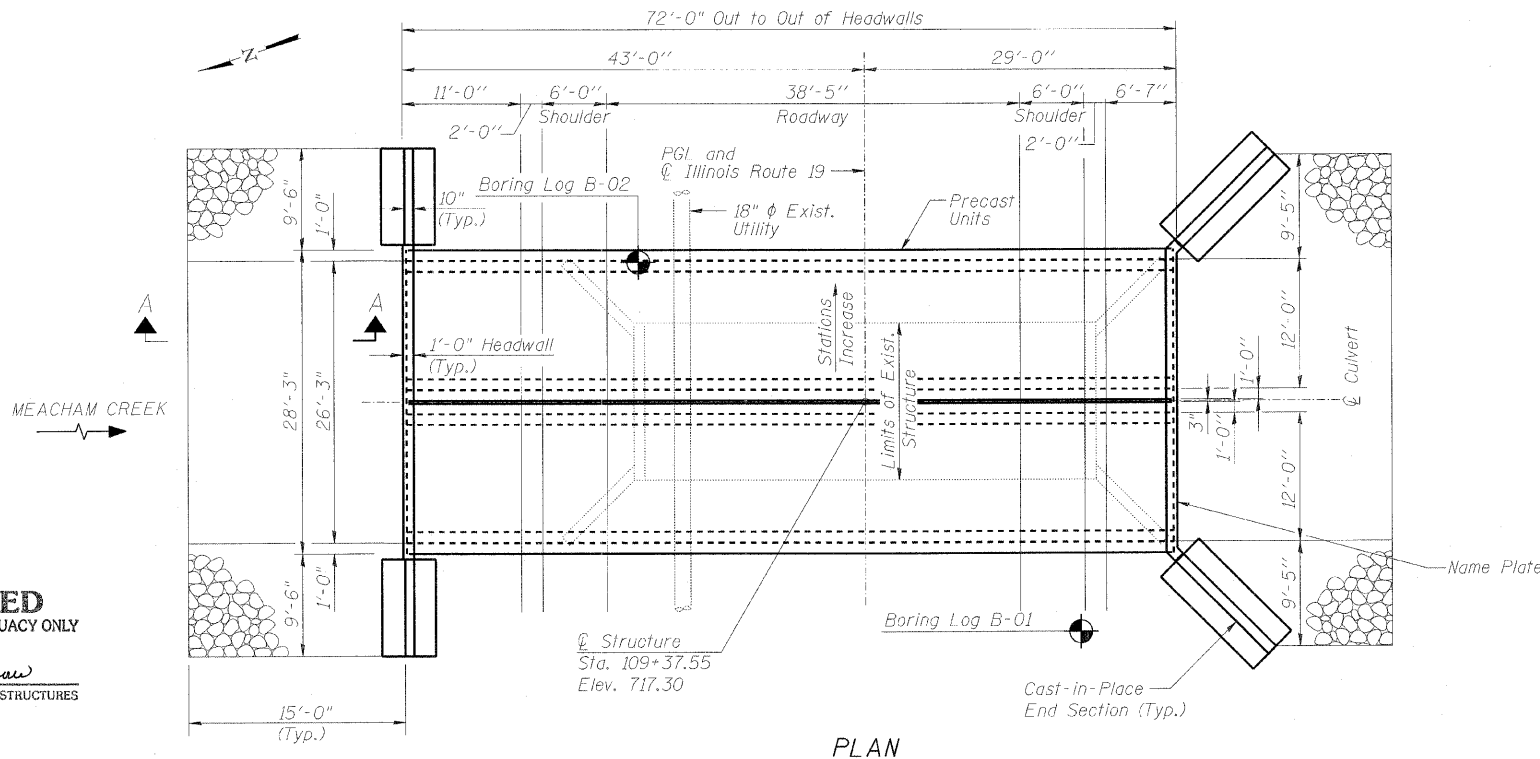
PROFILE GRADE  
(Along IL Rte. 19)



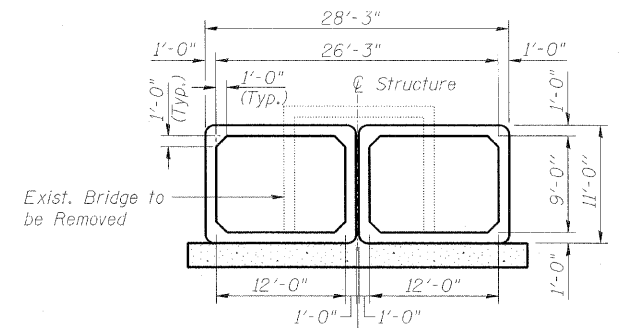
SECTION A-A



LONGITUDINAL SECTION  
(LOOKING EAST)



PLAN



SECTION THRU DOUBLE BOX CULVERT

DESIGN SPECIFICATIONS  
2002 AASHTO Standard Specifications  
for Highway Bridges 17th Edition

LOADING HS-20  
Allow 50#/sq. ft. for future wearing surface.

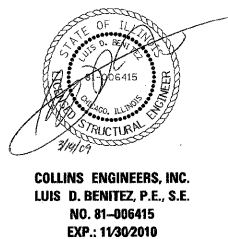
DESIGN STRESSES  
FIELD UNITS

f'c = 3,500 psi  
fy = 60,000 psi

PRECAST UNITS

f'c = 5,000 psi  
fy = 65,000 psi (Welded wire fabric)  
fy = 60,000 psi

GENERAL PLAN



APPROVED  
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson  
ENGINEER OF BRIDGES AND STRUCTURES

WATERWAY INFORMATION

Drainage Area = 4.05 Sq. Mi. Low Grade Elev. 717.7 @ Sta. 1763' (CBBEL IL 19)

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	10	165	62.69	150.99	709.63	0.12	0.02	709.75	709.65	
Base	50	247	71.60	168.80	710.37	0.24	0.03	710.61	710.40	
Overtopping	100	283	74.50	174.60	710.62	0.30	0.05	710.92	711.67	
Max. Calc.	> 500	374.3	81.33	188.25	711.18	0.48	0.03	711.66	711.21	

Notes:  
For General Notes and Total Bill of Material see sheet S2 of S9.

For Box Culvert Layout see sheet S3 of S9.

For Guardrail Details see civil drawings.

For Sideslopes refer to the Proposed Plan and Profile and Cross Section sheets.

Legends:  
D.S. = Down Stream  
U.S. = Up Stream  
F.L. = Flow Line

<b>COLLINS ENGINEERS</b> DESIGNED: LDB CHECKED: JMH DATE: 11/25/08 DRAWN: DR		SHEET NO. S1 OF S9 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			1321	31T-2	DuPAGE	59	33
			SN: 022-2005		CONTRACT NO. 60A90		
			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				