

B.M. #64 -
Iron rod in cap, Station 609+99.89, Elevation 770.97, Offset 119.64 Right,
North = 2062752.54, East = 2435617.51

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 301	177-2	STEPHENSON	386	135
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

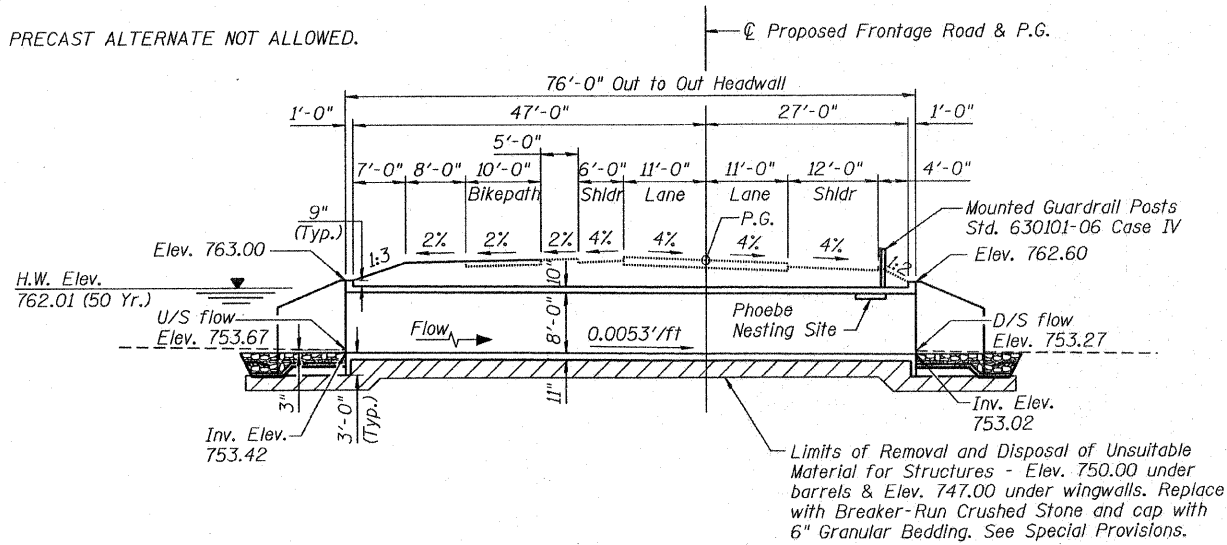
Contract No. 64799

Existing Structure: None

Staging: None

No Salvage

Note: PRECAST ALTERNATE NOT ALLOWED.



LONGITUDINAL SECTION

All Horiz. Dimensions are at Rt. Angle's to Local Tangent to Proposed Frontage Road at Sta. 103+72.00 (Looking Northeast)

WATERWAY INFORMATION

Existing Low Grade Elev. = N/A

Drainage Area = 4.3 sq. miles Proposed Low Grade Elev. (Heine Rd.) = 764.54 ft
Sta. 9+30.96

Flood	Freq. Year	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater EL.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Ten-Year	10	888	--	240	762.00	--	0.55	--	762.55
Design	50	1366	--	240	762.01	--	1.26	--	763.27
Base	100	1566	--	240	762.01	--	1.63	--	763.64
Overtopping	--	--	--	--	--	--	--	--	--

10 Year Velocity through Exist. Culvert = N/A 10 Year Velocity through Proposed Culvert = 3.70 fps

CURVE DATA

P.I. STA. = 107+82.77
 $\Delta = 120^{\circ}19'19''$ (RT)
 $D = 8^{\circ}48'53''$
 $R = 650.00'$
 $T = 1133.17'$
 $L = 1365.01'$
 $E = 656.36'$
 $e = 4.0\%$
 $T.R. = 31'$
 $S.E. RUN = 82'$
 $P.C. STA. = 96+49.59$
 $P.T. STA. = 110+14.60$

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 (Reinf.)

SEISMIC DATA

Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 0.032g
 Site Coefficient (S) = 1.0

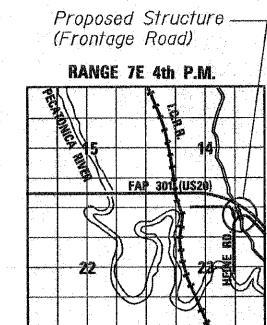
APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Rafael E. Anderson (TS)
ENGINEER OF BRIDGES AND STRUCTURES

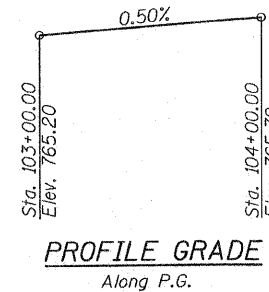


Signed Jamal Grainawi
Jamal I. Grainawi, S.E., IL. Lic. No. 081-005161
Expires 11-30-2010
Date 1/25/2010

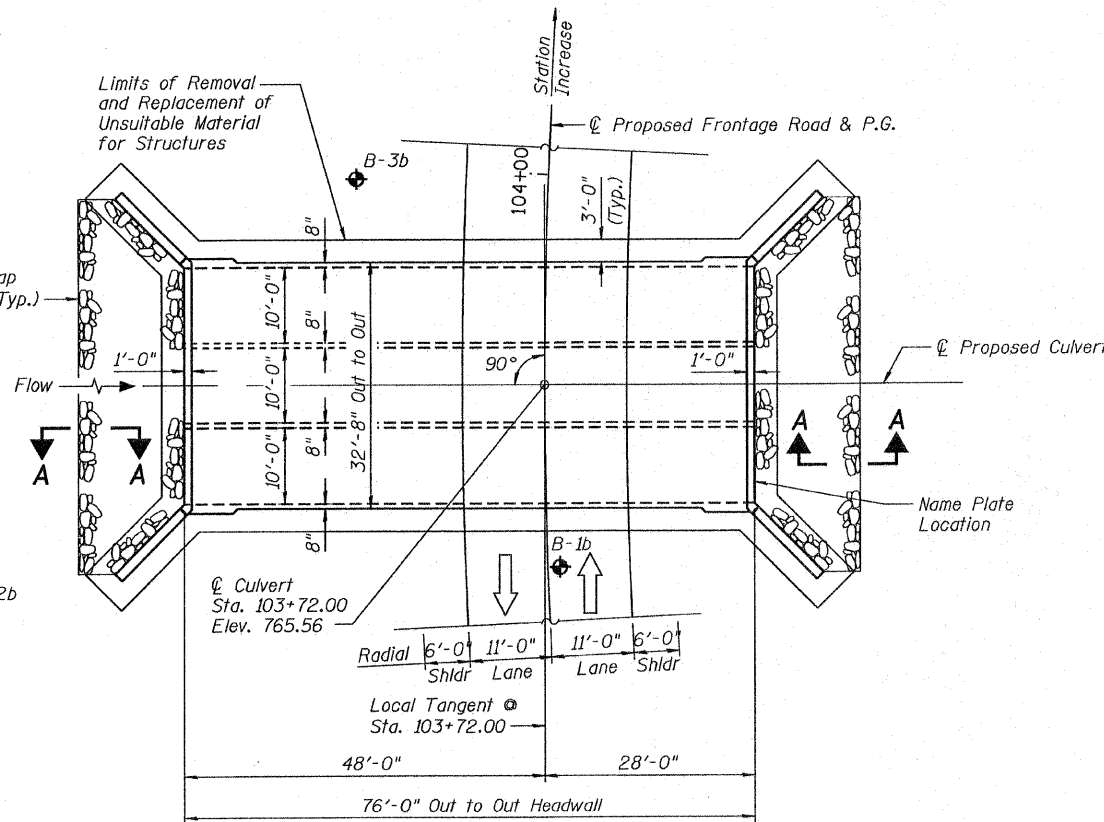
GENERAL PLAN
FRONTAGE ROAD OVER
WESTERN TRIBUTARY TO
PECATONICA RIVER
F.A.P. ROUTE 301 SECTION 177-2-1A
STEPHENSON COUNTY
STATION 103+72.00
STRUCTURE NO. 089-2018



LOCATION SKETCH



PROFILE GRADE
Along P.G.



PLAN

LEGEND

Soil Boring location shown thus: B-1b

DESIGNED	M. SHAIKH
CHECKED	J. GRAINAWI
DRAWN	M. SHAIKH
CHECKED	J. GRAINAWI

Note:

1. For Section A-A, see Sheet 2 of 5.

