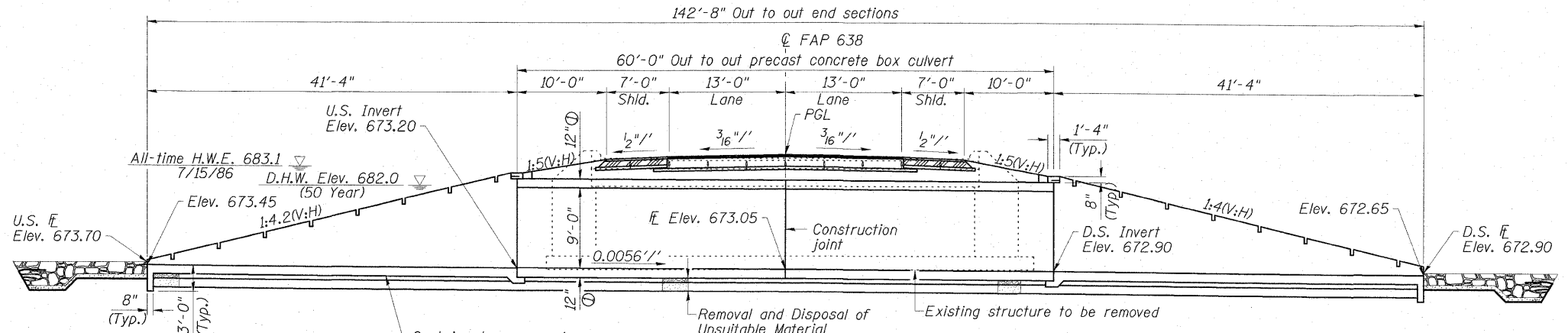


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BENCHMARK: Chiseled square on SE hubguard of bridge, SN 037-0091
Sta. 725+59.5, 21.1' Rt.
Elev. 685.95

EXISTING STRUCTURE:
SN 037-0091 was originally built in 1927 as Section 136. The superstructure originally consisted of a concrete slab superstructure on closed abutments. The superstructure was replaced with ten, 4'-4" wide, 11" thick PPC deck beams in 1974 as Section 136BR. The deck width is 43'-4", and the length is 26'-9" back to back of abutments. The existing structure is to be removed and replaced. One lane of traffic will be maintained utilizing stage construction.

No salvage.

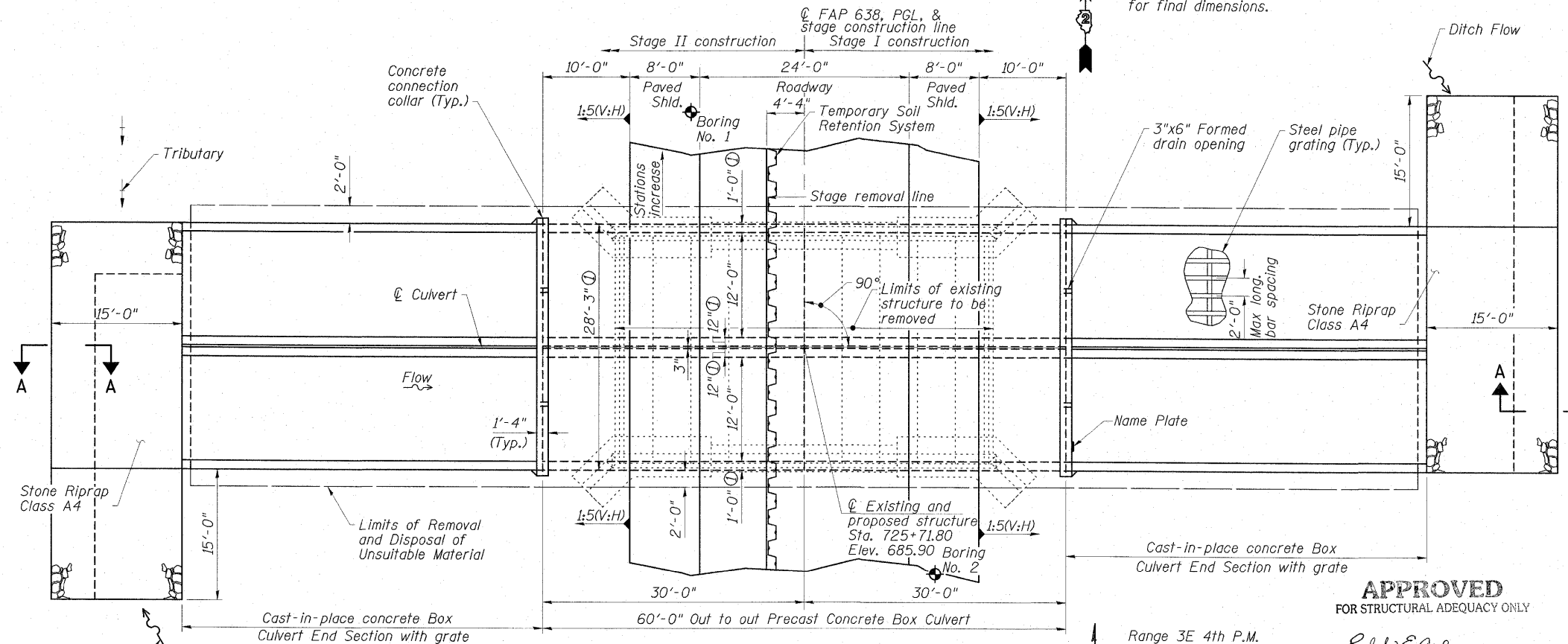


STRUCTURE INDEX OF SHEETS

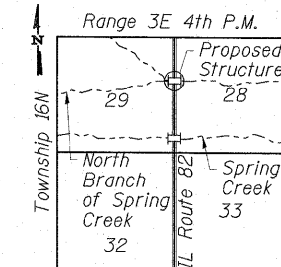
General Plan	Sheet No. 1 of 7
General Data	Sheet No. 2 of 7
Stage Construction Details	Sheet No. 3 of 7
Box Culvert Details	Sheet Nos. 4 & 5 of 7
Soil Boring Logs	Sheet No. 6 of 7
Temporary Concrete Barrier	Sheet No. 7 of 7

LONGITUDINAL SECTION
(Looking North)

① Thickness of precast culvert walls and slabs shall be verified on shop drawings and coordinated for final dimensions.

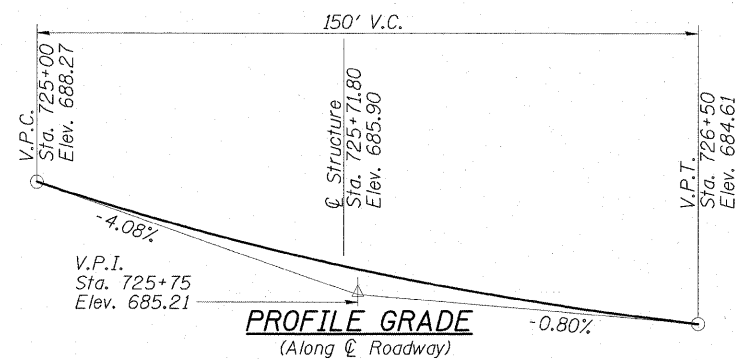
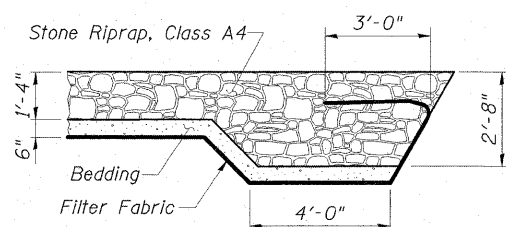


PLAN



LOCATION SKETCH

SECTION A-A



PROFILE GRADE
(Along Centerline of Roadway)

WATERWAY INFORMATION

Drainage Area = 2.65 Sq. Mi.		Exist. Low Grade Elev. = 683.76 Ft. @ Sta. 727+70		Prop. Low Grade Elev. = 683.97 Ft. @ Sta. 727+70					
Flood	Frequency Year	Discharge (cfs)	Waterway Opening (Sq. Ft.)		Nat. H.W.E.	Head (Ft.)		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	602	154	194	681.3	0.1	0.0	681.4	681.3
Base	50	967	171	211	682.0	0.4	0.1	682.4	682.1
Overtopping	100	1127	176	216	682.2	0.5	0.3	682.7	682.5
Max Calc.	340	1447	186	-	682.6	0.9	-	683.5	-
	500	1515	-	216	682.6	-	0.8	-	683.4

DESIGN SPECIFICATIONS
2002 AASHTO

LOADING HS20-44

Allow 50 psf for future wearing surface.

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi

$f_y = 60,000$ psi (Reinf.)

PRECAST UNITS

$f'_c = 5,000$ psi

$f_y = 65,000$ psi (WWF)

SCOUR INFORMATION

Design Scour Elevation (Ft.)	Upstream	Downstream
	670.4	669.7

ESCA
CONSULTANTS, INC.

DESIGNED BY:	DAJ	11/08
DRAWN BY:	cj	11/08
CHECKED BY:	ELH	03/09
APPROVED BY:	RDP	03/09



EXPIRES 11-30-09

Richard D. Payne
SIGNATURE

11-21-08
DATE

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Richard E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

GENERAL PLAN
IL 82 OVER
NORTH BRANCH OF SPRING CREEK
FAP ROUTE 638 - SECTION 136BR-1
HENRY COUNTY
STATION 725+71.80
STRUCTURE NO. 037-0172

SHEET NO. 1 7 SHEETS	F.A.P. RTE. 638	SECTION 136BR-1	COUNTY HENRY	TOTAL SHEETS 67	SHEET NO. 40
	CONTRACT NO. 64428				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			