

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Benchmarks: U.S.G.S. Brass disk, top of Northeast wingwall, Station 585+33.50/28.50' LT., Elevation = 677.70.
R.R. Spike in Power Pole, Northwest Quadrant of IL Rte. 47 & IL Rte. 116 @ ROW Corner, ±100' Northeast of Bridge,
Station 586+19/151' LT., Elevation = 673.54.

Existing Structure: SN 053-0076 was originally constructed in 1964 as SBI Rte. 116, Section 114BR. The structure consists of a single span precast prestressed concrete deck beam superstructure with closed concrete abutments supported on spread footings. The back-to-back abutment dimension measures 39'-0" while the out-to-out width measures 56'-4". The structure is to be replaced using stage construction.

No Salvage.

DESIGN SPECIFICATIONS
AASHTO 2002

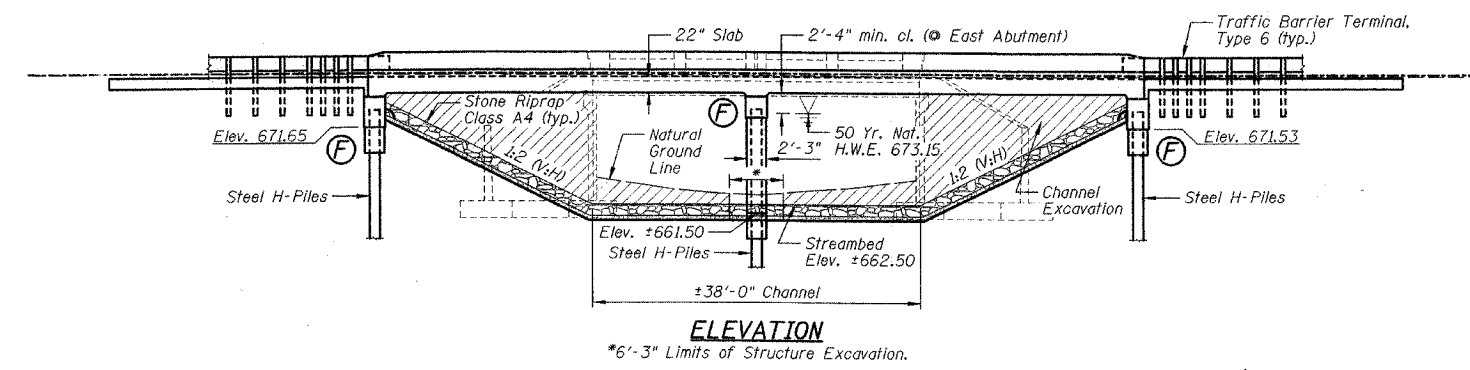
DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi (Cast-In-Place)
fy = 60,000 psi (Reinforcement)

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface.

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.042
Site Coefficient (S) = 1.0

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
681	114BR	LIVINGSTON	43	18
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET NO. B1
OF 14 SHEETS



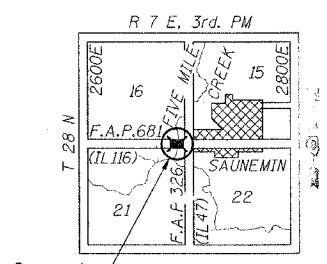
SCOUR INFORMATION

Design Scour Elevation	West Abutment	Pier	East Abutment
	671.65	656.50	671.53

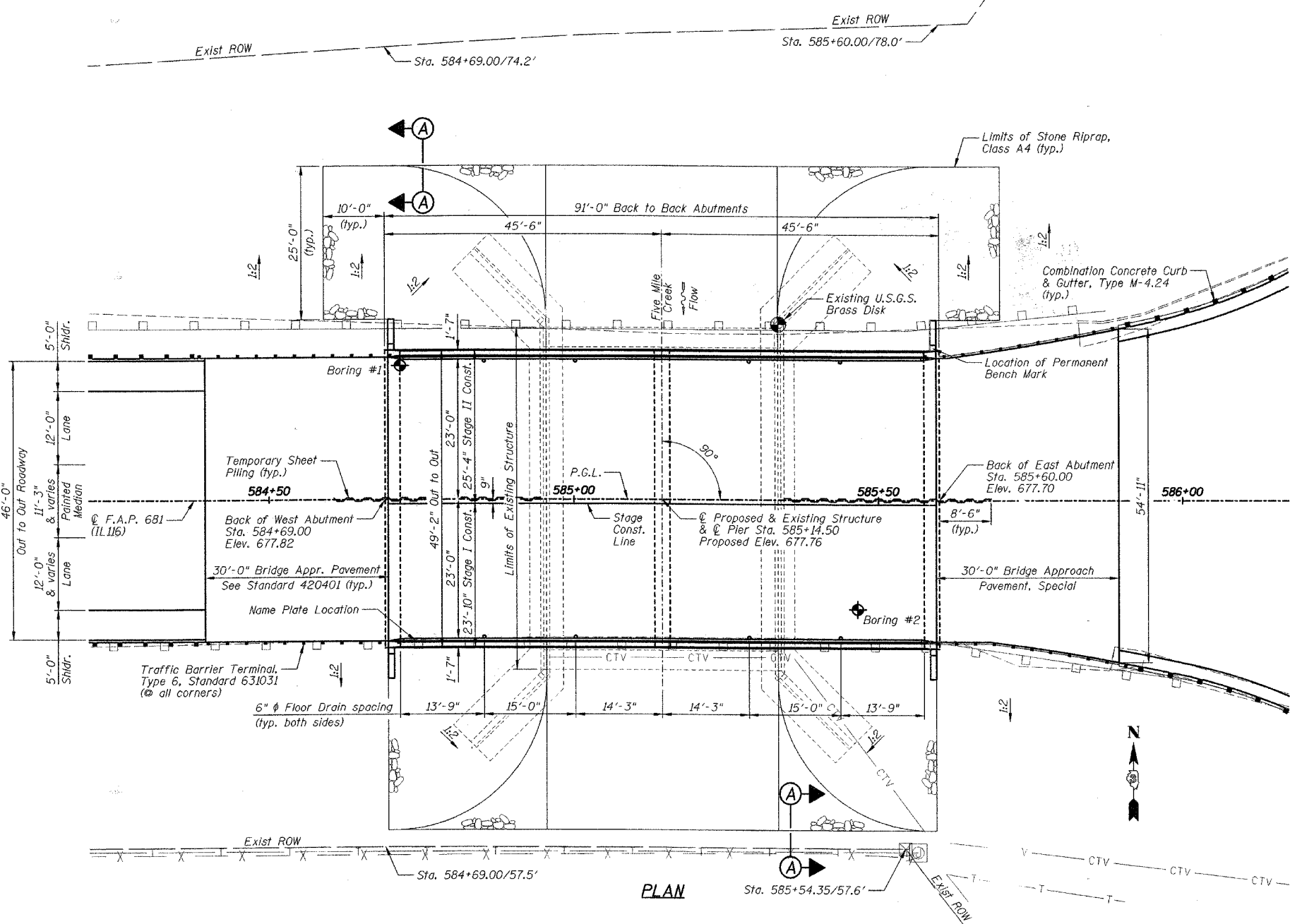
WATERWAY INFORMATION

Drainage Area = 9.60 Sq. Mi. Low Grade Elev. 677.32 ft. @ Sta. 586+50.00

Flood Freq. Yr.	C.F.S.	Opening Sq. Ft.	Nat. Head - Ft.	Prop. Head - Ft.	Headwater El.	Headwater El.			
10	1057	300	463	672.54	0.25	0.17	672.80	672.70	
Design	50	1579	323	504	673.15	0.61	0.33	673.80	673.50
Base	100	1793	331	518	673.35	0.80	0.41	674.20	673.80
Overtopping									
Max. Calc.	500	2294	347	547	673.77	1.44	0.62	675.20	674.40



LOCATION SKETCH



PLAN

INDEX TO SHEETS

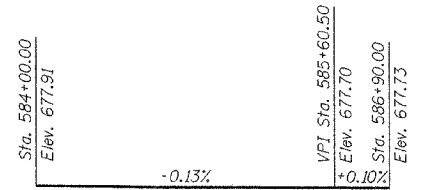
SHEET NO.	TITLE
B1	GENERAL PLAN AND ELEVATION
B2	GENERAL NOTES, BILL OF MATERIAL, SECTION AND SUBSTRUCTURE LAYOUT PLAN
B3	STAGE CONSTRUCTION AND TEMPORARY SHEET PILING
B4	TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
B5	BAR SPLICER ASSEMBLY DETAILS
B6	SUPERSTRUCTURE DECK (TOP OF SLAB)
B7	SUPERSTRUCTURE DECK (BOTTOM OF SLAB)
B8	SUPERSTRUCTURE CROSS SECTIONS
B9	SUPERSTRUCTURE DETAILS, PARAPET DETAILS AND BILL OF MATERIAL
B10	WEST ABUTMENT
B11	EAST ABUTMENT
B12	PIER
B12A	PILE DETAILS
B13-B14	SOIL BORING LOGS

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

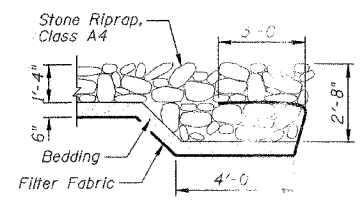
Ralph E. Anderson (sm)
ENGINEER OF BRIDGES AND STRUCTURES

STATION 585+14.50
BUILT 200_ BY
STATE OF ILLINOIS
F.A.P. RTE. 681 SECTION 114BR
LOADING HS20
STR. NO. 053-0181

NAME PLATE
See Standard 515001



PROFILE GRADE
(Along E Roadway)



SECTION A-A

REVISIONS

NAME	DATE
DJM	9/21/07

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN AND ELEVATION
F.A.P. 681 (IL116) OVER FIVE MILE CREEK
SECTION 114BR
LIVINGSTON COUNTY
STATION 585+14.50
STRUCTURE NO. 053-0181

DESIGNED BY: JML
DATE: 02/05/07

DRAWN BY: DJM
CHECKED BY: MSW