APPROVED

MAR 0 8 2001

AS A BASIS FOR
PREPARATION OF DETAILED PLANS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
709	105BR-5	CHAMPAIGN	2	1

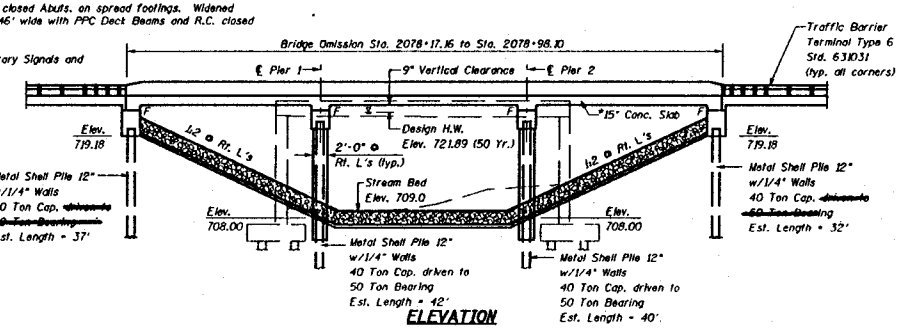
STA. 2074+53 TO STA. 2082+62
FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

BENCHMARK: 4601-6 Elev. = 719.95
chiseled "□" on west Headwall of F.E.
@ 29.2' RT. Sta. 2088+45.5
Approx. 400' East of Intersection
of U.S. 136 & T.R. 3000 N & 1200 E.
EXISTING STRUCTURE: S.N. 010-0063 to be removed. Built in 1925 as S.A. Route 10 Section 69B-15D.
Single span, R.C. T-Beams 40' x26' wide with R.C. closed Abuts. on spread footings. Widened
in 1972 as SBI Route 119 Section 105 BY to 40' x 46' wide with PPC Deck Beams and R.C. closed
Abuts. on spread footings.

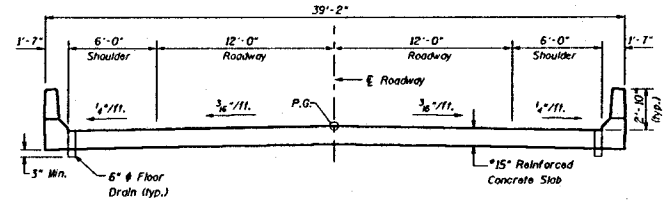
One lane of traffic to be maintained utilizing Temporary Signals and
Stage Construction.

No salvage.

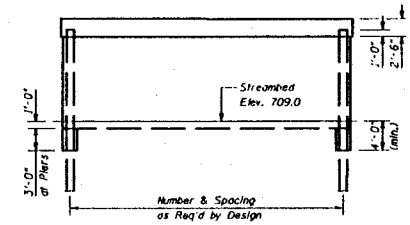
Note: Do not overdrive Piles



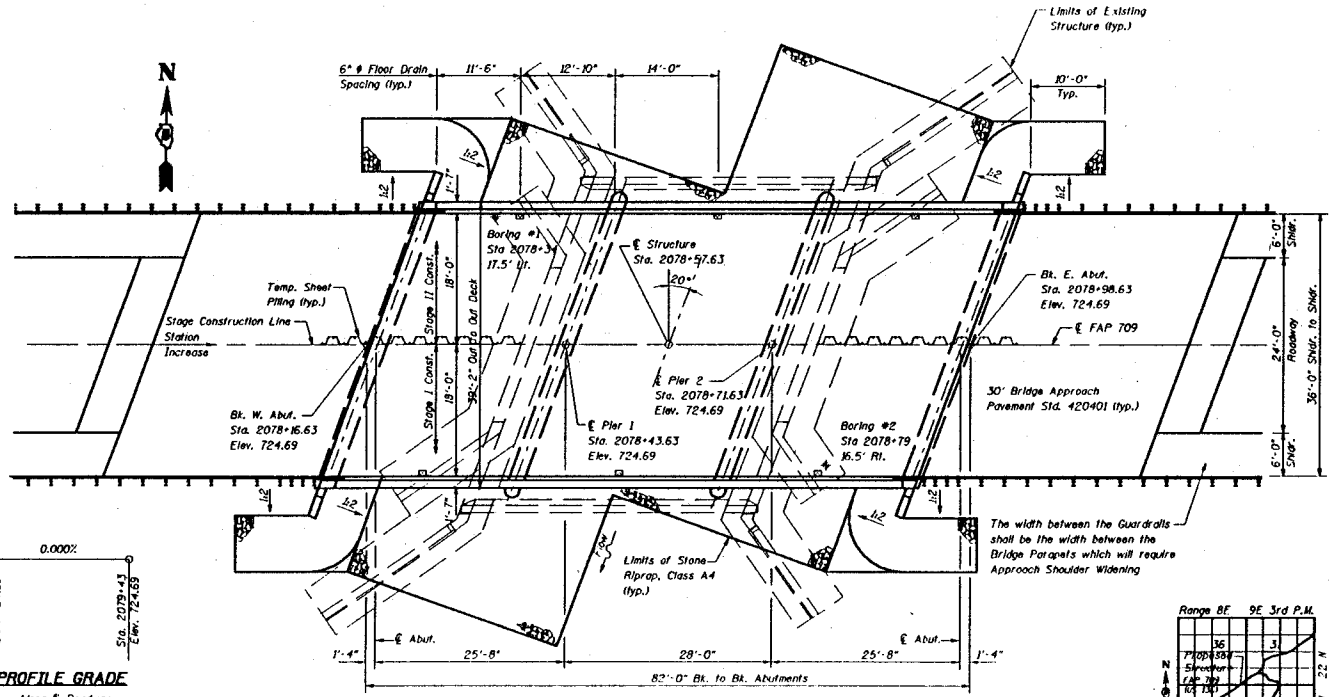
ELEVATION



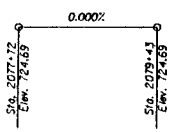
PROPOSED CROSS SECTION
Looking East
* Slab thickness may be refined in Final Design.



PIER SKETCH



PLAN



PROFILE GRADE
Along ℄ Roadway

WATERWAY INFORMATION

Drainage Area = 17.86 Sq. Mi. Low Grade Elev. 721.88 @ Sta. 2085+00

Flood	Freq. Yr.	Q CFS	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E. Ft.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater Elev. - Ft. Exist.	Headwater Elev. - Ft. Prop.
Design	50	1879.00	352.20	578.20	721.89	0.71	0.25	722.66	722.14
Base	100	2154.00	352.20	597.70	722.18	1.00	0.32	723.18	722.50
Overtopping	300	2657.00	352.20	-	722.67	1.47	-	724.14	-
Max. Calc.	500	2809.00	-	605.70	722.81	-	0.51	-	723.32

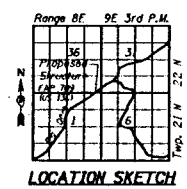
DESIGN STRESSES
FIELD UNITS
f'_c = 3,500 psi
f_y = 60,000 psi (Reinf.)

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

HIGHWAY CLASSIFICATION
FAP Route 709
Class: Minor Arterial
A.D.T.: 3100 (1999) 3700 (2019)
D.H.V.: 400 (2019)
Design Speed: 55 mph
Posted Speed: 55 mph

DESIGN SPECIFICATIONS
AASHTO 1996 with 1997, 1998, 1999 Interims

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.047
Site Coefficient (S) = 1.0



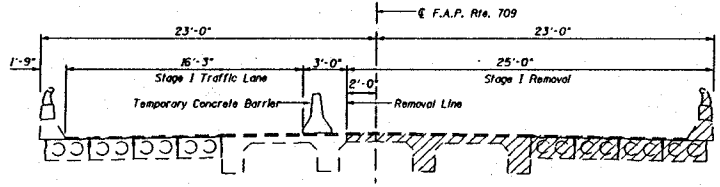
LOCATION SKETCH

REVISIONS NAME	DATE

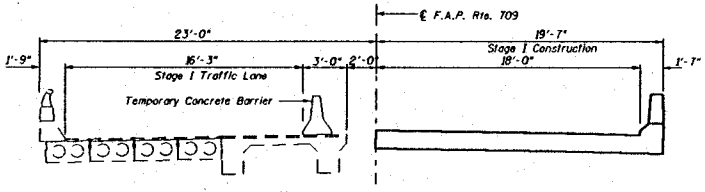
ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN (SHEET 1)
US ROUTE 136 OVER BIG DITCH
FAP RTE. 709 SECTION 105BR-5
STA. 2078+57.63
CHAMPAIGN COUNTY STR. NO. 010-0276

SCALE: 1/8" = 1'-0" DRAWN BY RMH
DATE 11-2000 CHECKED BY MJS

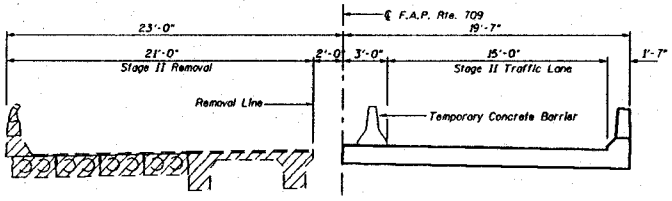
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
709	105BR-5	CHAMPAIGN	2	2
STA. 2074+53		TO STA. 2082+62		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



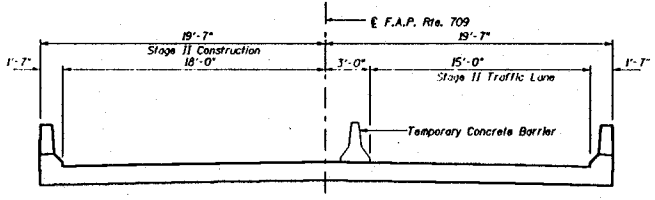
STAGE I REMOVAL
(Looking East)



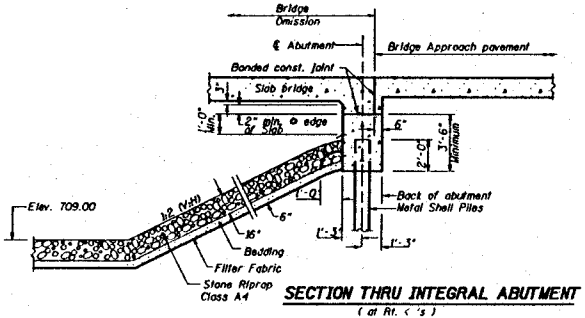
STAGE I CONSTRUCTION
(Looking East)



STAGE II REMOVAL
(Looking East)



STAGE II CONSTRUCTION
(Looking East)



SECTION THRU INTEGRAL ABUTMENT
(at Rt. < 's)

APPROVED

MAR 0 8 2001

AS A BASIS FOR
PREPARATION OF DETAILED PLANS

Notes:

Hatched area indicate removal of existing Concrete Deck.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN (SHEET 2)
US ROUTE 136 OVER BIG DITCH
FAP RTE. 709 SECTION 105BR-5
STA. 2078+57.63
CHAMPAIGN COUNTY STR. NO. 010-0276

SCALE: NTS — DRAWN BY LP
DATE 11-2000 — CHECKED BY M/S