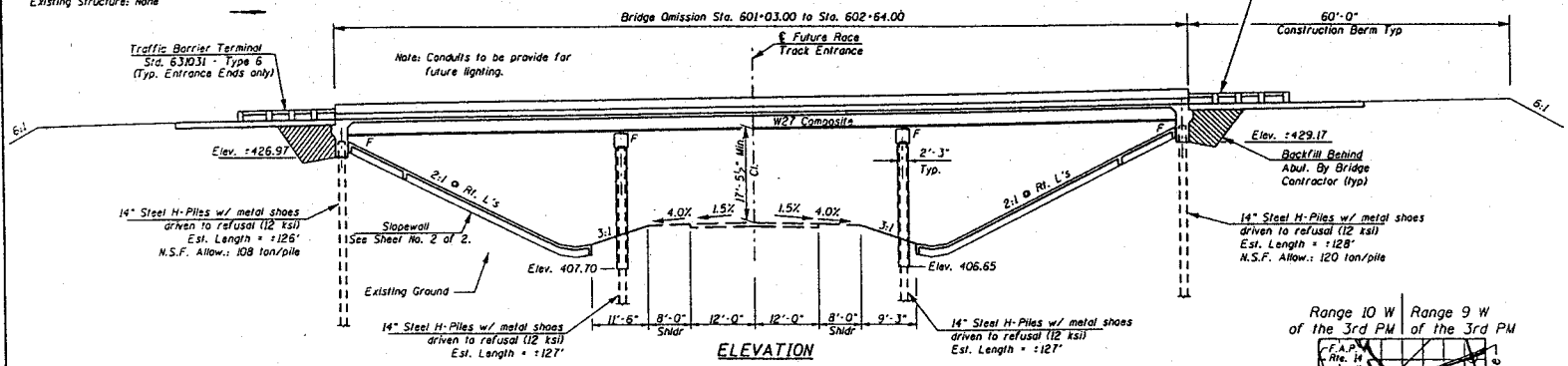
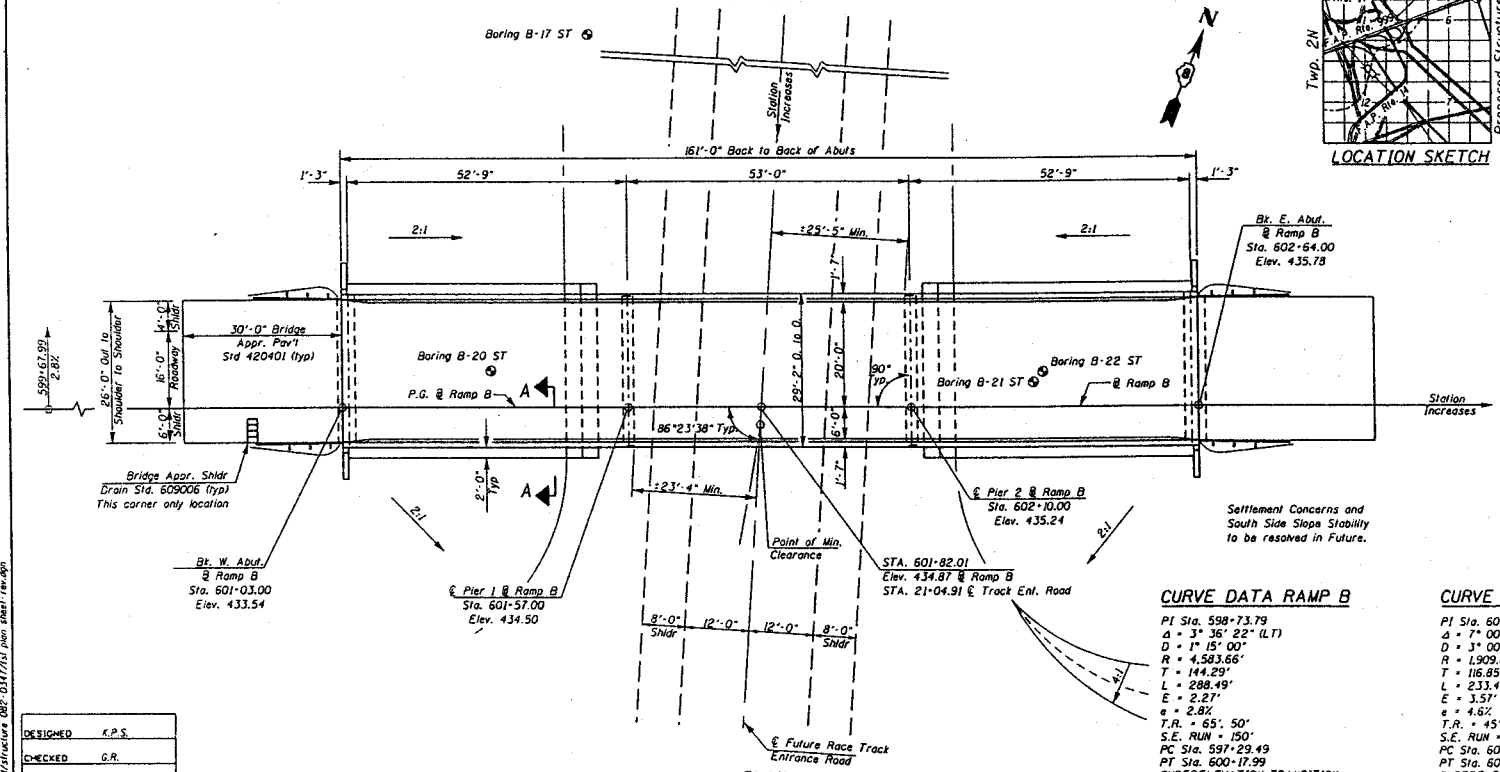
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	83-3HB	ST. CLAIR		
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Sheet 1 of 2 Sheets

TBM C Spike in first PP along old RR on the north side of canal 103.32' Rt. Sta. 201+93.00 FAP RTE. 999 Elevation 419.13 Existing Structure: None

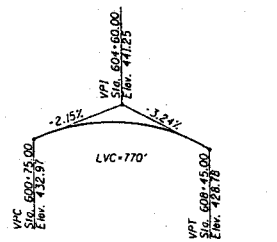


ELEVATION

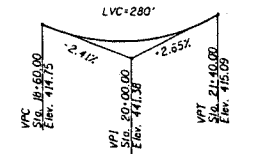


PLAN

LOCATION SKETCH



PROFILE GRADE @ RAMP B



PROFILE GRADE TRACK ENT. ROAD

DESIGN SPECIFICATION

1996 AASHTO WITH 1997, 1998, 1999, 2000, & 2002 Interims

LOADING HS20-44 & ALT.

Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (reinf.)
fy = 50,000 psi (M270 Grade 50) struct. steel
fy = 36,000 psi (M270 Grade 36) struct. steel

HIGHWAY CLASSIFICATION

F.A.P. Rte. 999 Ramp B - Reloc. WB I-70
ADT: 6820 (2000); 9170 (2020)
DHV: 1087 (2020)
Functional Class: Ramp
Design Speed: 50 mph

Future Race Track Entrance
ADT: Not Available
DHV: Not Available
Functional Class: Local Road
Design Speed: Not Available

SEISMIC DATA

Seismic Performance Category (SPC) = B
Bedrock Acceleration Coefficient (A)=0.12g
Site Coefficient (S) = 1.5

CURVE DATA RAMP B

PI Sta. 598+73.79
Δ = 3° 36' 22" (LT)
D = 1° 15' 00"
R = 4,583.66'
T = 144.29'
L = 288.49'
E = 2.27'
e = 2.8%
T.R. = 65', 50'
S.E. RUN = 150'
PC Sta. 597+29.49
PT Sta. 600+17.99
SUPERELEVATION TRANSITION
STA. 595+64.49 TO STA. 597+79.49
STA. 599+67.99 TO STA. 601+67.99

CURVE DATA RAMP B

PI Sta. 604+81.22
Δ = 7° 00' 08" (RT)
D = 3° 00' 00"
R = 1,909.86'
T = 116.85'
L = 233.41'
E = 3.57'
e = 4.6%
T.R. = 45'
S.E. RUN = 135'
PC Sta. 603+64.37
PT Sta. 605+97.78
SUPERELEVATION TRANSITION
STA. 602+74.37 TO STA. 603+09.37
STA. 605+52.78 TO STA. 606+92.79

GENERAL PLAN
F.A.P. RTE. 999 RAMP B OVER FUTURE RACE TRACK ENTRANCE
SECTION 83-3HB
ST. CLAIR COUNTY
STATION 601+84.33
STRUCTURE NO. 082-0347

DESIGNED	K.P.S.
CHECKED	G.R.
DRAWN	M. D.
CHECKED	G.R. & M.E.B.

00:\ricodd\structure 082-0347\1st plan sheet rev.dgn

Conditionally Approved

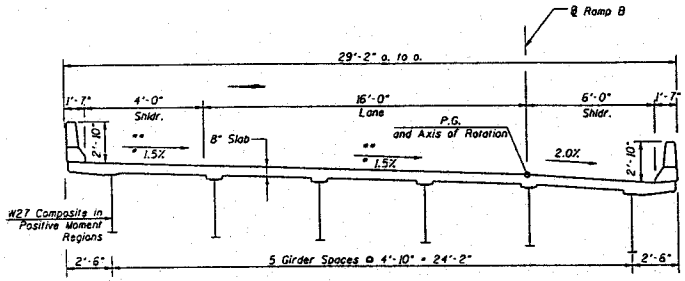
APPROVED

JUN 11 2002

AS A BASIS FOR
PREPARATION OF DETAILED PLANS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	83-3HB	ST. CLAIR		
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

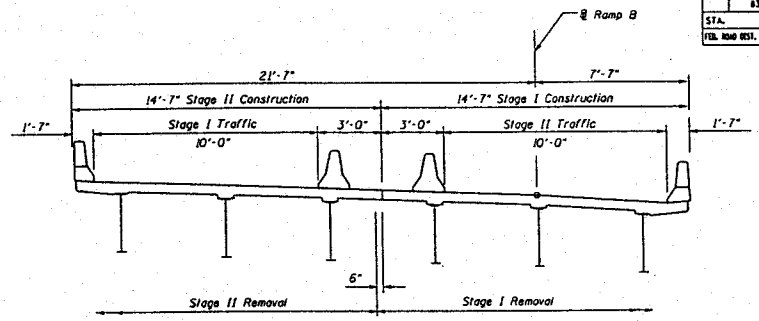
Sheet 2 of 2 Sheets



SECTION THRU BRIDGE DECK (LOOKING EAST)

(Looking East)

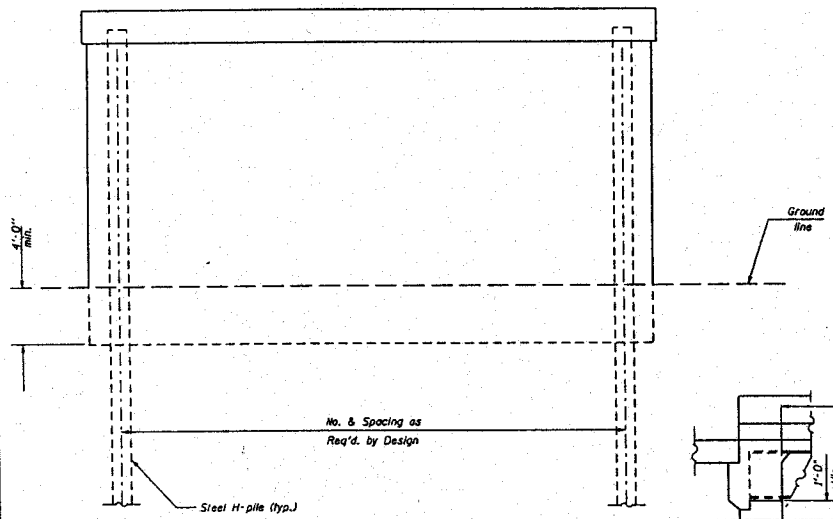
All Dimensions are measured at Rt. L's to the ℄ of Ramp B unless noted otherwise
** From Sta. 601+03.00 to Sta. 601+17.99 Varies (-0.28% to 0.0%) & From Sta. 601+17.99 to Sta. 601+67.99 Varies (0.0% to 1.5%)
* From Sta 601+67.99 to Bk. East Abut. as Shown.



FUTURE STAGE CONSTRUCTION (LOOKING NORTHEAST)

Notes

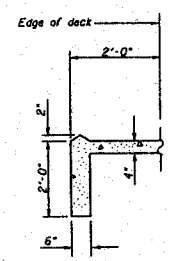
1. Minimum stage traffic width = 10'-0" for single lane ramp per IDOT. Wider lanes used where available.
2. Top reinforcement in deck slab will be designed to account for staging per IDOT.
3. Unless directed otherwise, beams will be checked for stage construction loading, assuming 50 psf FWS, including the increase in composite loading from the barrier and accounting for possible different distribution of wheel load to the exterior staged girder, as required.



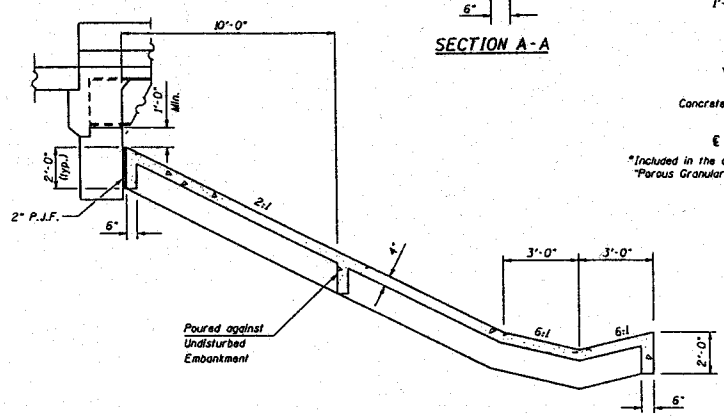
PIER SKETCH

CONSOLIDATION-INDUCED NEGATIVE SKIN FRICTION				
LOCATION	H-PILE SIZE	NSF w/i EMBANKMENT FILL (tons)	NSF w/i UNDERLYING SOILS (tons)	TOTAL DOWNDRAG (tons)
E. ABUTMENT	12" PILES 14" PILES	45 53	57 67	102 120
E. INT. PIERS	12" PILES 14" PILES	0* 0*	58 68	58 68
W. ABUTMENT	12" PILES 14" PILES	45 53	47 55	92 108
W. INT. PIERS	12" PILES 14" PILES	0* 0*	56 66	56 66

* No consolidation-induced down drag within embankment as the proposed grade is approximately near the existing grade. The negative skin friction is due to possible consolidation of underlying soils caused by adjacent embankment fill only.

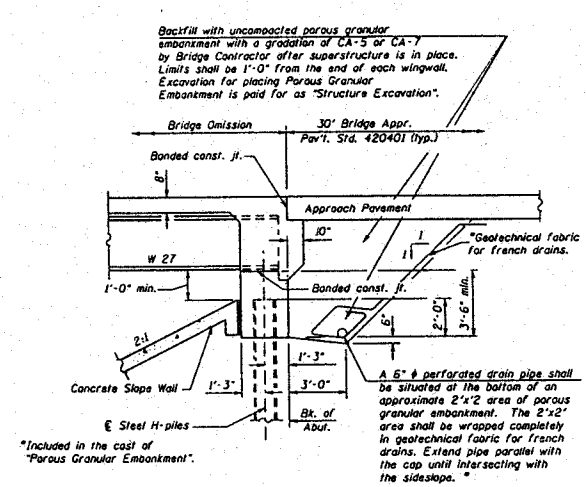


SECTION A-A



SECTION THRU SLOPEWALL

(Dimensions @ Rt. L's)



SECTION THRU INTEGRAL ABUTMENTS

(Dimensions @ Rt. L's)

DESIGNED	K.P.S.
CHECKED	G.R.
DRAWN	W. D.
CHECKED	G.R. & W.E.B.

DETAILS
E.A.P RTE. 999 RAMP B OVER FUTURE RACE TRACK ENTRANCE
SECTION 83-3HB
ST. CLAIR COUNTY
STATION 601+84.33
STRUCTURE NO. 082-0347

00:11/cadd/structure 082-0347/tsl details sheet.dgn

APPROVED

JUN 11 2002

AS A BASIS FOR
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