Bench Marks:
IDOT BM #15 Chiseled square at the southeast quadrant of the intersection of West Grand Avenue and Hazel Dell Road. Benchmark is located 33 feet south of the centerline of Hazel Dell Road on a headwall of a concrete pipe culvert. NAVD88 El. 602.47
IDOT BM #80 Chiseled cross on the center bolt of the east leg of an iron sign truss over the eastbound lane of Interstate 72. Benchmark is located 1.62 miles east of Il Route 4. NAVD88 El. 601.28
IDOT BM #0150 Disk in monument vault on survey calibration baseline. Benchmark is located 13 feet north of the centerline of Hazel Dell Road and 0.5 miles west of the intersection of Hazel Dell Road and West Grand Avenue. NAVD88 El. 600.47
IDOT BM #374 Railroad spike in power pole west of a bike path and southeast of Recreation Drive. Benchmark is located 0.81 miles south of the intersection of West Grand Avenue and Hazel Dell Road. NAVD88 El. 604.61

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

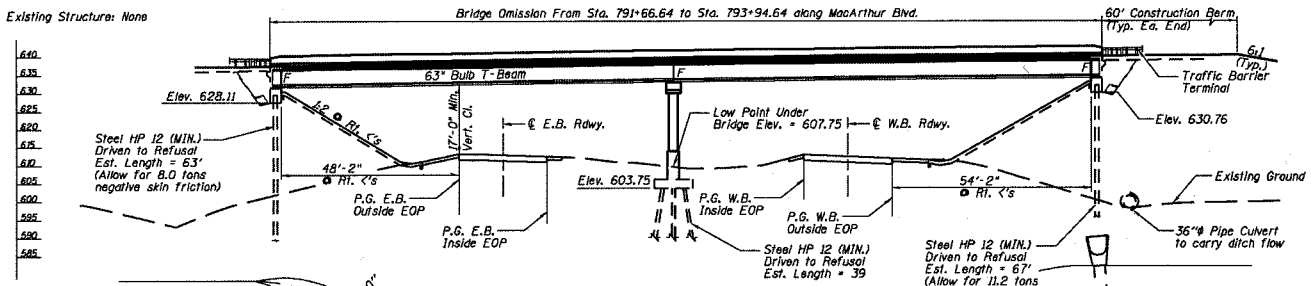
Note: The piles at the abutments should be driven through 18" ϕ diameter pre-cored holes extending down to Elev. 602.0 at S. Abut. and 600.0 at N. Abut. or to the present ground elevation whichever occurs first.

F.A.U. 8071	*	SANGAMON		

*(84-9-4)HBK,BY,BY-1

SHEET NO. 01
02 SHEETS

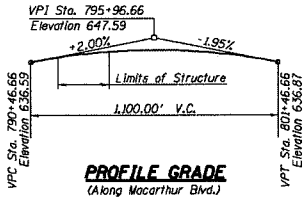
Existing Structure: None



ELEVATION
(Looking West)

MEDIAN POINTS		
POINT	STATION	OFFSET
'A'	791+66.57	0.74' Lt.
'B'	791+67.44	9.19' Rt.
'C'	793+93.11	17.50' Lt.
'D'	793+95.12	5.50' Rt.

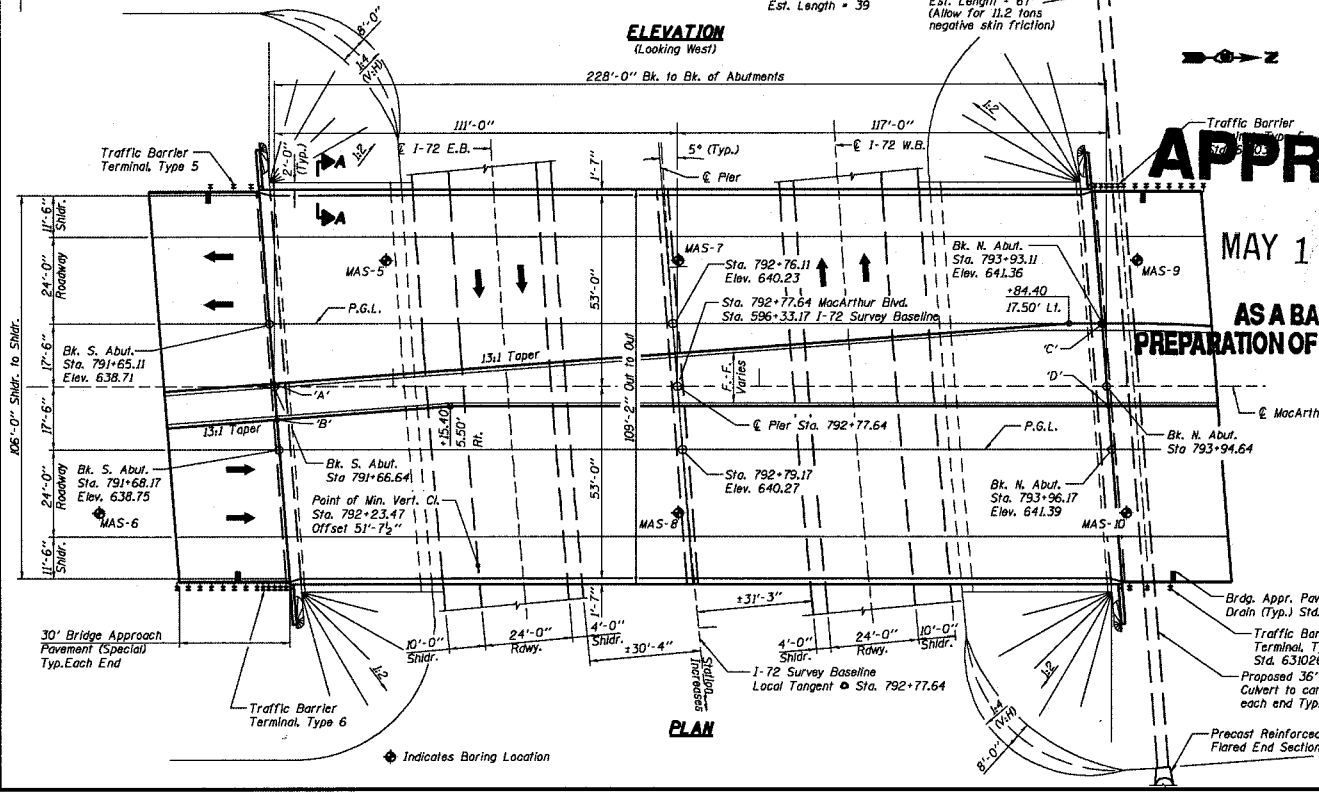
MEDIAN POINTS
(at Back Abutments)



PROFILE GRADE
(Along Macarthur Blvd.)

HIGHWAY CLASSIFICATION

	FAI 72	FAU 8071 MacArthur Boulevard
Functional Class:	INTERSTATE	N. OF I-72 OTHER PRINCIPAL ARTERIAL S. OF I-72 MINOR ARTERIAL
DHV:	3150 (2023)	1210 (2023)
ADT:	31000 (2003)	
	46100 (2023)	26600 (2023)
ADTT:	620 (2003)	
	920 (2023)	530 (2023)
Design Speed:	70 m.p.h.	45 m.p.h.
Posted Speed:	65 m.p.h.	45 m.p.h.



PLAN

APPROVED
MAY 18 2004
AS A BASIS FOR PREPARATION OF DETAILED PLANS

CURVE DATA
(I-72 Survey Baseline)

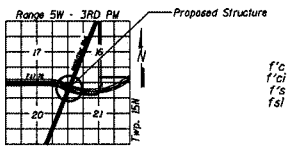
P.I. STA= 607+25.73
Δ= 36° 03' 13" (Lt.)
D= 01° 36' 09"
R= 3,575.66'
T= 1,163.65'
L= 2,250'
E= 184.58'
P.C. STA= 595+62.07
P.T. STA= 618+12.07
e= 4.5%
S.E. ATTN: 594+35 TO 596+35
617+52 TO 619+52

DESIGN SPECIFICATIONS
AASHTO 2002

LOADING HS20-44
Allow 50 psf for future wearing surface.

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.05g
Site Coefficient (S) = 2.0

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (reinf.)
PRECAST PRESTRESSED UNITS
f'c = 6,000 psi
f'ci = 5,000 psi
f's = 270,000 psi (1/2"ϕ low lax strands)
fsi = 201,960 psi (1/2"ϕ low lax strands)



LOCATION SKETCH

Corporate License Number 184-001-084

GENERAL PLAN
MACARTHUR BLVD. OVER F.A.I. 72
SECTION (84-9-4)HBK,BY,BY-1
SANGAMON COUNTY
STATION 792+77.64
STRUCTURE NUMBER 084-0513

JOB 96S2002B
DATE 05/27/03

REVISED JMM 10/21/03
05/27/2003

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. 8071	*	SANGAMON		

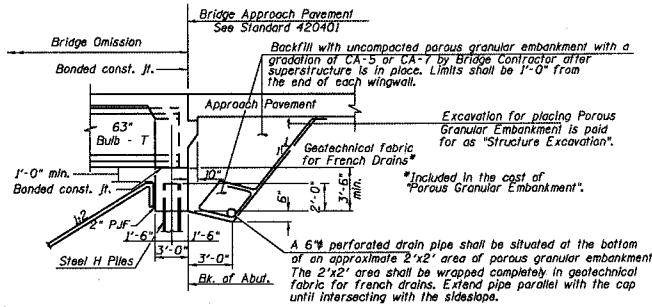
SHEET NO. 02
02 SHEETS

*(84-9-4)HBK,BY,BY-1

Along I-72 E.B. Outside EOP		Along I-72 E.B. Inside EOP		Along I-72 W.B. Outside EOP		Along I-72 W.B. Inside EOP	
Station	Elevation	Station	Elevation	Station	Elevation	Station	Elevation
595+79.47	612.63	595+80.93	611.96	595+86.82	612.52	595+85.28	613.24
596+28.78	614.16	596+30.57	613.21	596+37.79	613.87	596+35.90	614.70
596+78.14	615.62	596+80.27	614.73	596+88.82	615.37	596+86.58	615.75

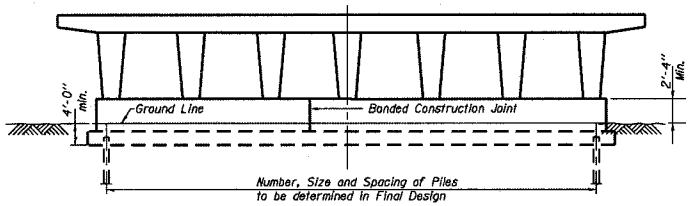
I-72 PAVEMENT ELEVATIONS

(The I-72 EB & WB pavement elevations shown were adjusted from surveyed elevations to account for a future mill of 1/4" and an overlay of 3 3/4")

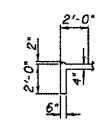


SECTION THRU INTEGRAL ABUTMENT

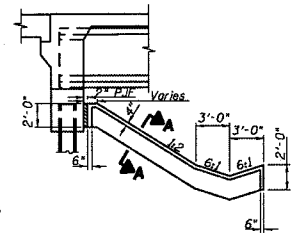
(Dimensions @ Rt. <'s to Bk. of Abutment)



PIER SKETCH

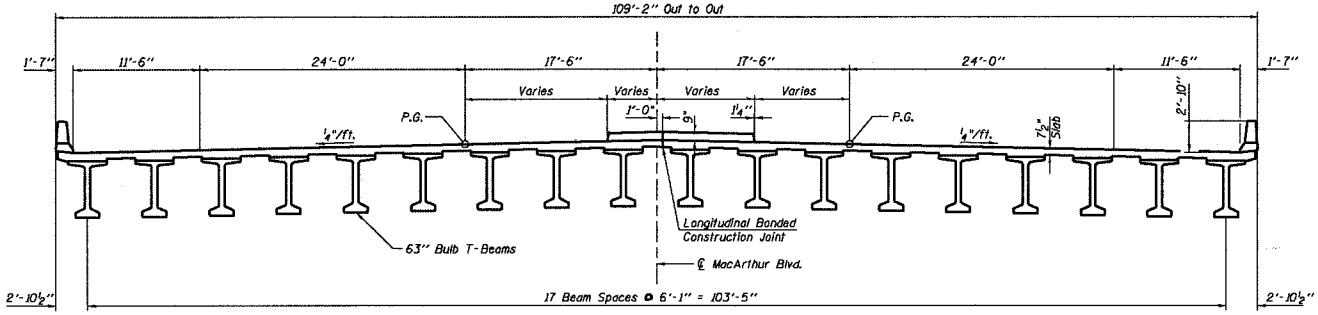


SECTION A-A



SECTION THRU SLOPEWALL

(Dimensions @ Rt. <'s to Bk. of Abutment)



CROSS SECTION

Note: Deck will be cast in two longitudinal sections split by the longitudinal bonded construction joint shown above. A delay of 21 days will be provided between the pour for each section.

Corporate License Number 184-001-084

DETAILS
MACARTHUR BLVD. OVER F.A.I. 72
SECTION (84-9-4)HBK,BY,BY-1
SANGAMON COUNTY
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