

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
F.A.P. 132	102BR-1	MASSAC	82	54	16 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #78032

Bench Mark 640008: Chiseled square in northwest wingwall of SN 064-0008. Elevation 409.14

Existing Structure: The original structure was built in 1933 as a single span pony truss on reinforced concrete closed abutments with a length of 85'-0" back-to-back of abutments. The structure was rehabilitated in 1981. A pier was constructed at midspan and the abutments were modified to accommodate a wider superstructure. The truss was replaced with a two-span P.P.C. deck beam superstructure with a total width of 32'-0" out-to-out of superstructure.

Proposed Improvements: The existing superstructure is to be replaced with P.P.C. deck beams and a HMA surface course and waterproofing. Minor substructure repairs are required. Traffic to be maintained at all times utilizing stage construction.

No Salvage.

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications, 4th Edition

LOADING HL-93

No allowance for Future Wearing Surface.

DESIGN STRESSES

FIELD UNITS

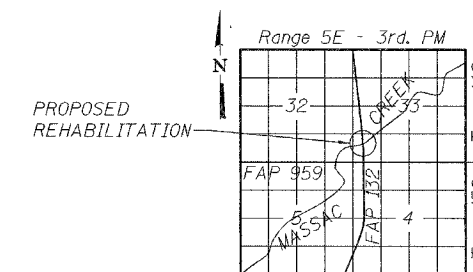
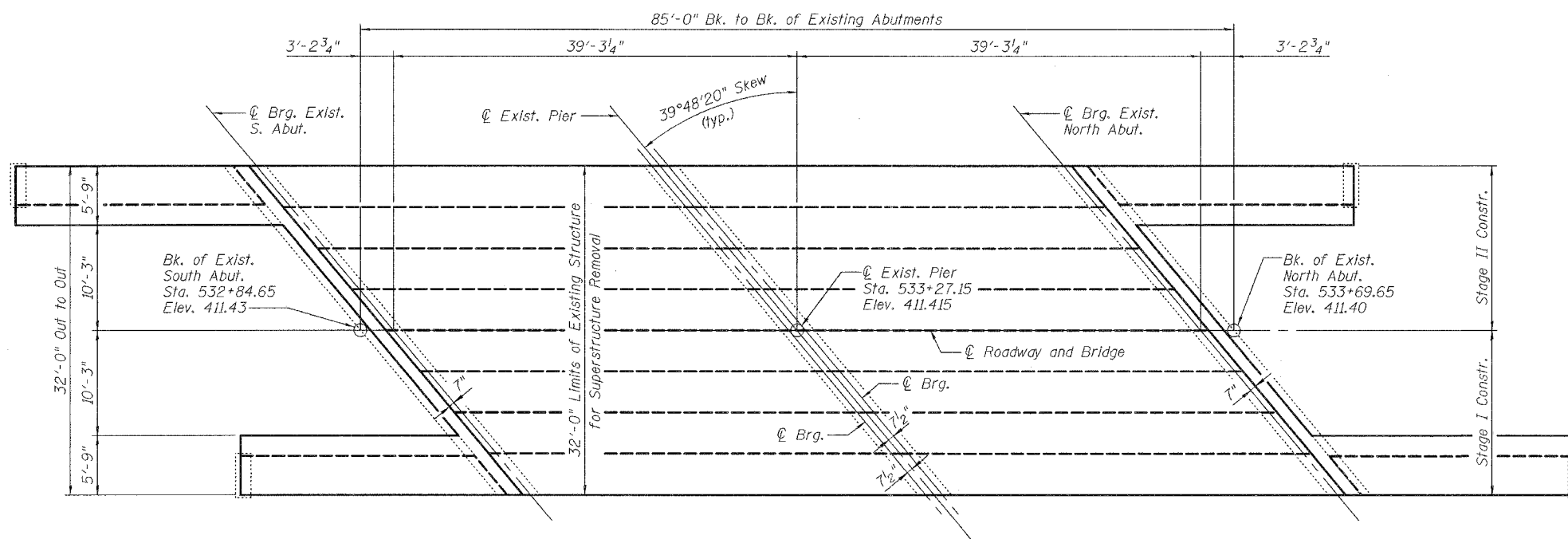
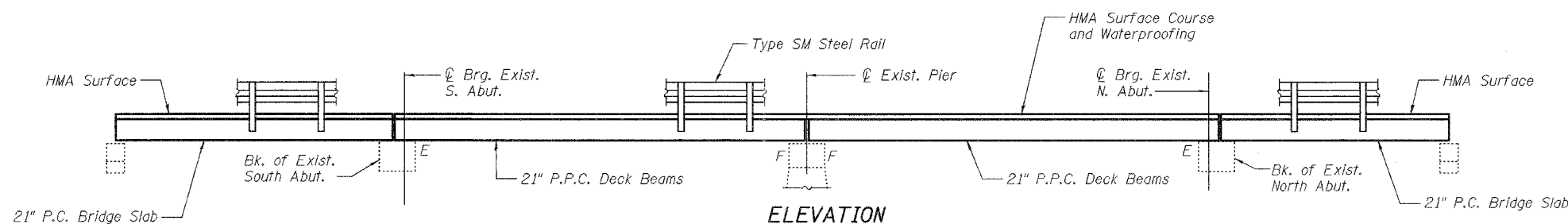
$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)

PRECAST PRESTRESSED UNITS

$f'_c = 6,000$ psi
 $f'_{ci} = 5,000$ psi
 $f_{pu} = 270,000$ psi ($\frac{1}{2}$ " ϕ low lax. strands)
 $f_{pbt} = 201,960$ psi ($\frac{1}{2}$ " ϕ low lax. strands)

PRECAST UNITS

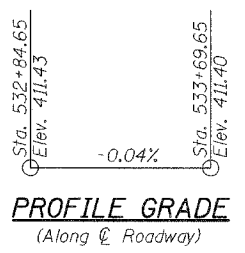
$f'_c = 4,500$ psi
 $f_y = 60,000$ psi (Reinforcement)



STATION 533+27.15
REBUILT 200... BY
STATE OF ILLINOIS
F.A.P. RT. 132 SEC. 102BR-1
LOADING HL93
STR. NO. 064-0008

NAME PLATE
See Std. 515001

Notes:
Existing name plate shall be cleaned and relocated adjacent to the new name plate. Cost included with Name Plates.
Locate name plate at outside face of top steel railing tube at southeast corner of bridge.



DESIGNED	RLM
CHECKED	YSS
DRAWN	PRC
CHECKED	RLM

02/04/08

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

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



David W. Petermeier 3/13/08

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EDWARDSVILLE, ILLINOIS
ILLINOIS LICENSED STRUCTURAL
ENGINEER NO. 081-005642
EXPIRES NOV. 30, 2008

GENERAL PLAN & ELEVATION
ILL. ROUTE 145 OVER MASSAC CREEK
F.A.P. ROUTE 132 - SECTION 102BR-1
MASSAC COUNTY
STATION 533+27.15
STRUCTURE NO. 064-0008