Bench Mark: Chiseled square on northeast wingwall of East Bound Structure.
Elev. 682.06

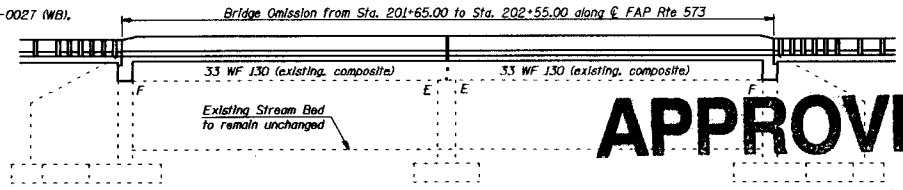
Existing Structures: No. 045-0026 (EB) & No. 045-0027 (WB), built as FA Rte. 131, Sec. 61 B in 1958.
The Superstructures consist of a R.C. deck 91'-0" long by 35'-8" wide supported on two simply supported wide flange beam spans.
Decks to be removed and replaced using stage construction.

No Salvage.

F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61B-BR-1	KANE		
PROJ. FEDERAL ASSIST. NO. 1	R.A. ENGINEER	PROJ. ENG. PROJECT-		

SHEET NO. 1 of 2

Contract No.: 62B17

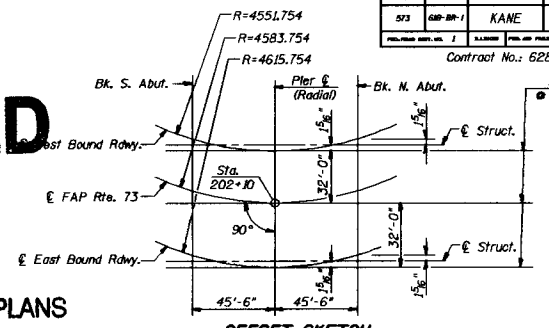


ELEVATION

APPROVED

JUN 3 0 2004

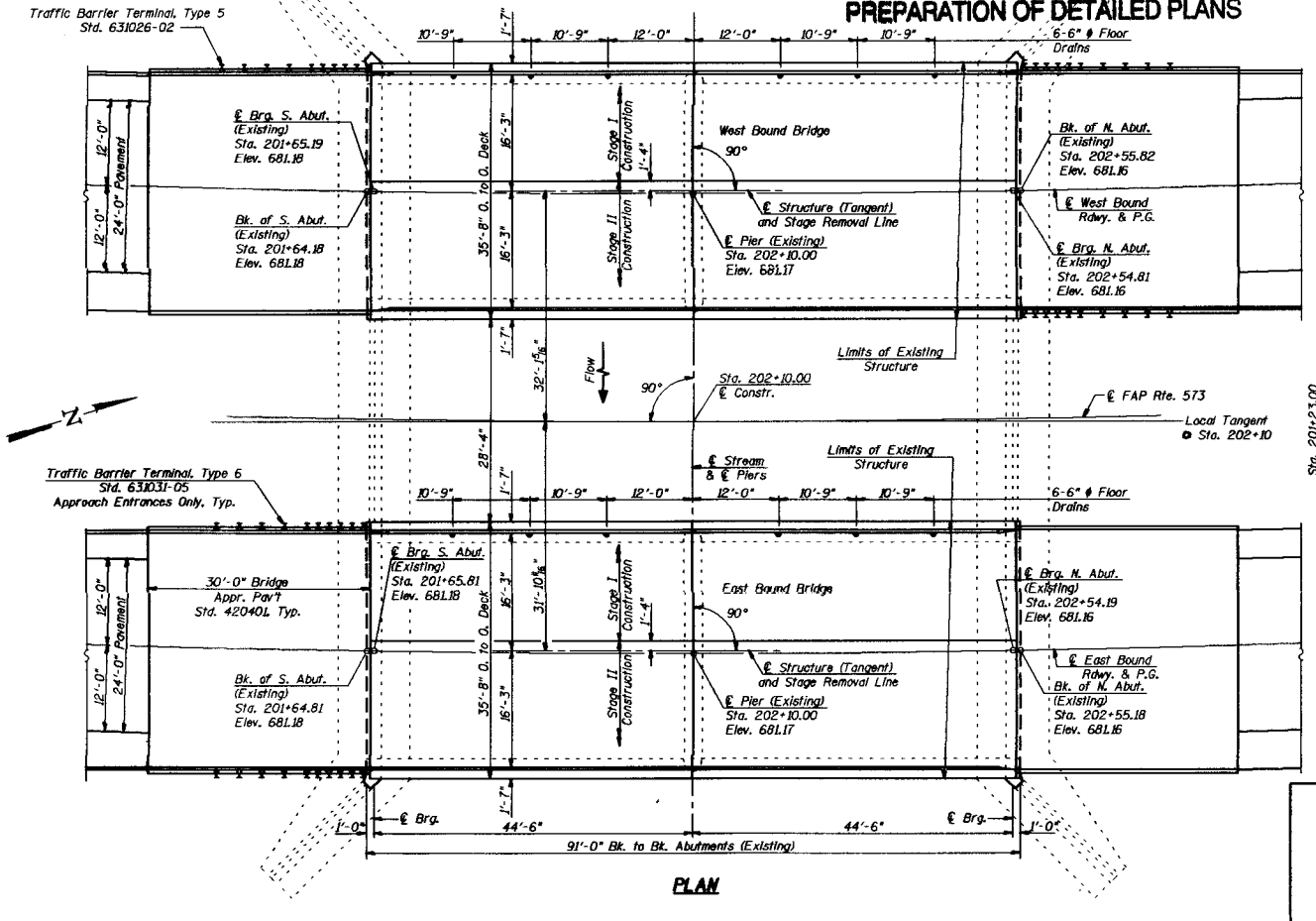
AS A BASIS FOR PREPARATION OF DETAILED PLANS



OFFSET SKETCH

CURVE DATA

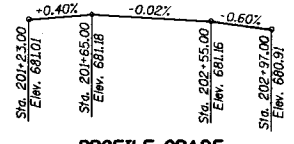
Δ = 74°-46'-20"
D = 1°-15'-0"
T = 3502.784'
L = 5981.778'
E = 1185.154'
R = 4583.754'
P.C. Sta. 143+51.33
P.I. Sta. 178+54.11
P.T. Sta. 203+33.11
S.E. = 2.0 %
S.E. Removed from Sta. 202+73.99 to Sta. 203+92.22



PLAN

SCOPE OF WORK

1. Remove and replace existing deck utilizing stage construction.
2. Remove and replace west bound pier cap.
3. Install concrete diaphragms with existing steel diaprogms encased in the concrete at each pier. Also replace the expansion joints at each pier.
4. Remove and replace the concrete diaphragms/ curtain walls at the abutments.
5. Remove expansion bearings and replace with elastomeric bearings at both piers.
6. Substructure repairs.
7. Install stud shear connectors on existing beams.
8. All existing structural steel shall be cleaned where it is going to be encased in concrete.
9. Remove and replace Bridge Approach Pavements.



PROFILE GRADE
(along ℄ Construction)

HIGHWAY CLASSIFICATION

IL Rte. 56 - FAP Rte. 573
Functional Class: Other Principal Arterial
ADT: 5800 (1997); 6480 (2015)
DHV: 650 ADTT: 8 %
Design Speed: 55 m.p.h.
Posted Speed: 55 m.p.h.

LOADING HS20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO

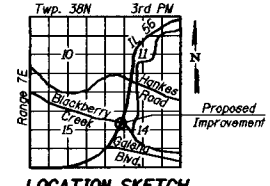
DESIGN STRESSES

FIELD UNITS

f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 33,000 psi (Existing)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = .04g
Site Coefficient (S) = 1.0



LOCATION SKETCH

REVISIONS	
NAME	DATE

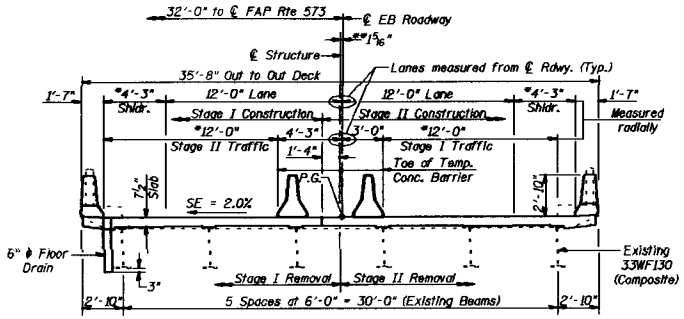
ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN
IL RTE. 56 OVER BLACKBERRY CREEK
FAP RTE 573 - SECTION 61B-BR-1
KANE COUNTY
STATION 202+10.00
STRUCTURE NO. 045-0026 (E.B.)
STRUCTURE NO. 045-0027 (W.B.)

DATE: 6/23/04
DRAWN BY WJV
CHECKED BY BLB

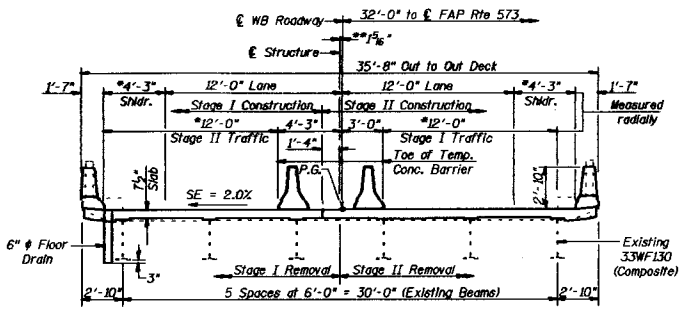
F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
573	61B-BR-1	KANE		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 2 of 2

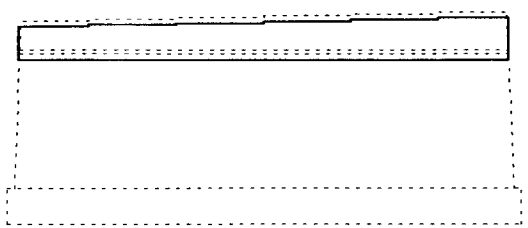
Contract No.: 62817



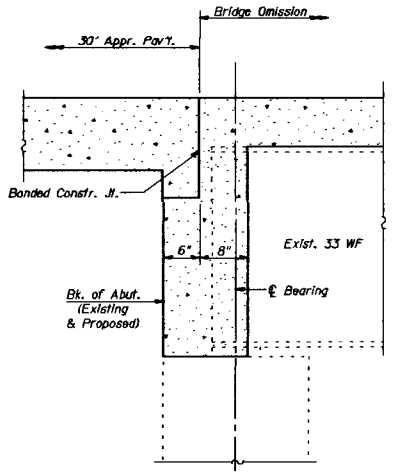
CROSS SECTION (EAST BOUND LANES)
(Looking North)



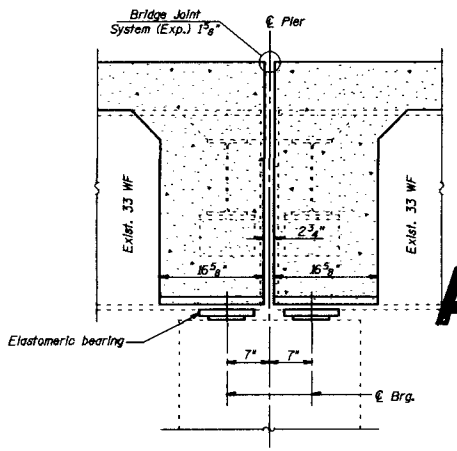
CROSS SECTION (WEST BOUND LANES)
(Looking North)



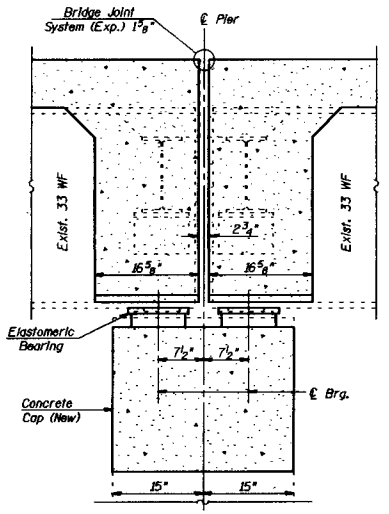
WEST BOUND PIER SKETCH



SECTION THRU ABUTMENTS



SECTION THRU EAST BOUND PIER



SECTION THRU WEST BOUND PIER

* Varies ±1 5/16"; dimensions to the west of the ℄ of Roadway will be an additional 1 5/16" at the ℄ of the structure and will be 1 5/16" less at both ends of the structure. Dimensions to the east of the ℄ of Roadway will be an additional 1 5/16" at both ends of the structure and will be 1 5/16" less at the ℄ of the structure.

** Varies from 1 5/16" west of ℄ Roadway at the ℄ of Structure to 1 5/16" east of ℄ roadway at both ends of the structure.

APPROVED

JUN 3 0 2004

AS A BASIS FOR
PREPARATION OF DETAILED PLANS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DETAILS
IL RTE. 56 OVER BLACKBERRY CREEK
FAP RTE 573 - SECTION 61B-BR-1
KANE COUNTY
STATION 202+10.00
STRUCTURE NO. 045-0026 (E.B.)
STRUCTURE NO. 045-0027 (W.B.)

DATE: 6/23/04 DRAWN BY WJV CHECKED BY BLB