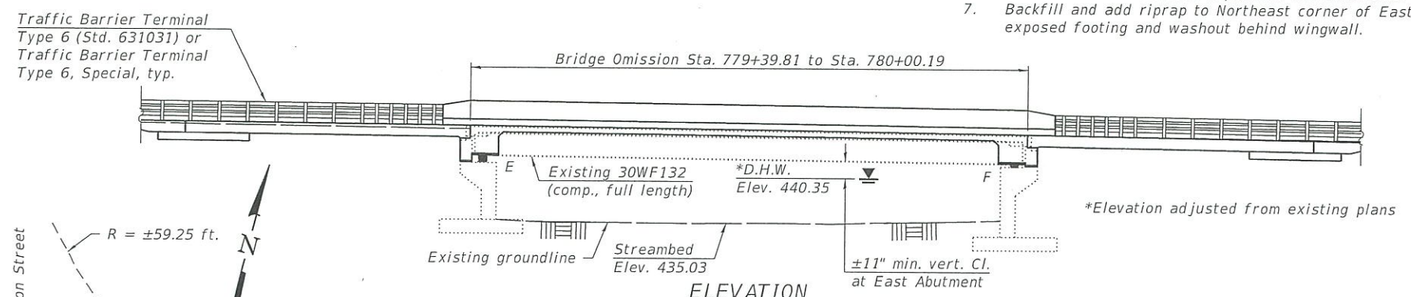
Benchmark: A chiseled "□" on flat top of the Southwest concrete wingwall of S.N. 007-0014, Elev. 445.712.

Existing structure: S.N. 007-0014 was originally constructed in 1948 as F.A. 158 in Section 6B-3 at Sta. 779+70.00. In 1990, the structure was cleaned and painted. Also occurring in 1990, was the installation of curb mount retrofit bride rails and approach guardrails. The existing structure is a single span with steel WF beams that is 58'-0" long from centerline to centerline of abutment bearings along ℄ IL-96. The out-to-out reinforced concrete deck width is 30'-0". The substructure consists of closed reinforced concrete abutments. The structure consists of two 11'-0" lanes, with 2'-0" shoulders, that carries F.A.P. Route 304 (IL-96) over an unnamed creek. Stage construction shall be utilized.

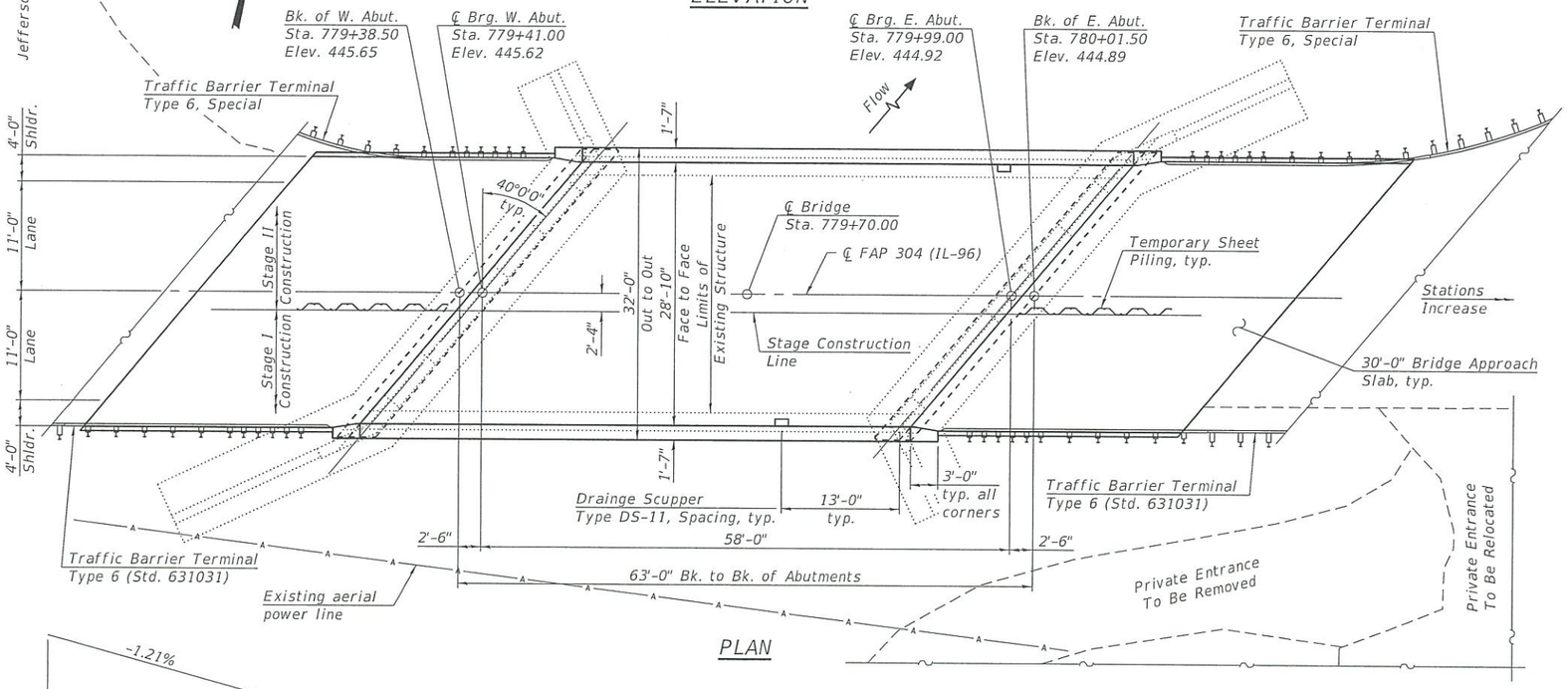
No salvage.

SCOPE OF WORK

1. Remove and replace existing concrete deck with new, widened deck to accomodate stage construction.
2. Place drainage scuppers near east end of bridge.
3. Add shear stud connectors to make the deck composite.
4. Reconfigure existing abutments and wingwalls to a semi-integral configuration. Remove and replace the bearings at the West Abutment with expansion bearings, and install steel shims as required. Remove and replace the bearings at the East Abutment with fixed bearings.
5. Clean and paint existing structural steel beam ends and outside surfaces of fascia beams.
6. Perform formed concrete repairs at the abutments.
7. Backfill and add riprap to Northeast corner of East Abutment to exposed footing and washout behind wingwall.



ELEVATION



PLAN

PROFILE GRADE

(Along ℄ roadway)

HIGHWAY CLASSIFICATION

F.A.P. Rte. 304 (IL-96)
Functional Class: Minor Arterial
ADT: 1,000 (2019); 1,150 (2039)
ADTT: 74 (2019); 85 (2039)
DHV: 200
Design Speed: 35 m.p.h.
Posted Speed: 35 m.p.h.
Two-Way Traffic

LOADING HS20-44 (New Const.)

No future wearing surface.

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition (LFD)

SEISMIC DATA

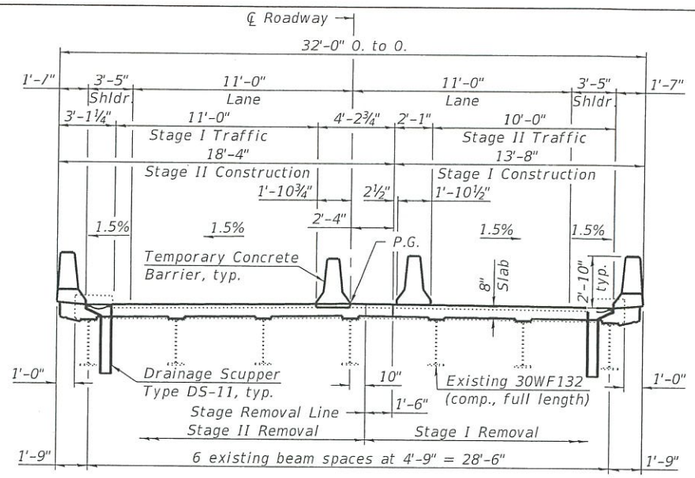
Seismic Performance Category (SPC) = A
Horizontal Bedrock Acceleration Coefficient (A) = 0.06g
Site Coefficient (S) = 1.0

DESIGN STRESSES

FIELD UNITS (New Construction)
f'c = 4,000 psi (Superstructure)
f'c = 3,500 psi (Substructure)
fy = 60,000 psi (Reinforcement)

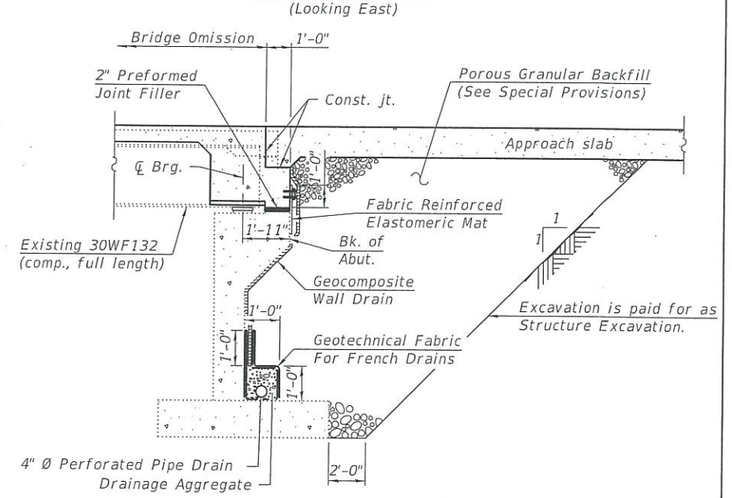
FIELD UNITS (Exist. Construction)
f'c = 3,000 psi (Superstructure)
f'c = 2,000 psi (Substructure)
fy = 33,000 psi (Structural Steel)
fy = 40,000 psi (Reinforcement)

LOCATION SKETCH



CROSS SECTION

(Looking East)



SECTION THRU SEMI-INTEGRAL ABUTMENT

(Horiz. dim. @ Rt. ℄'s)

APPROVED

SEP 14 2018

AS A BASIS FOR
PREPARATION OF DETAILED PLANS

GENERAL PLAN
IL-96 OVER CREEK
F.A.P. 304 - SECTION 6B-3
CALHOUN COUNTY
STATION 779+70.00
STRUCTURE NO. 007-0014

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USER NAME = cabuettner	DESIGNED - TSF	REVISED -	
	CHECKED - MAB	REVISED -	
PLOT SCALE =	DRAWN - TSF	REVISED -	
PLOT DATE = 9/12/2018	CHECKED - MAB	REVISED -	

9/12/2018 10:31:53 AM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 1 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
304	6B-3	CALHOUN		
		CONTRACT NO. 76J17		
	ILLINOIS FED. AID PROJECT			