Bench Mark: Stainless steel plug in concrete ℄ median, Sta. 225+00.00, Elev. 579.90

Existing Structures: SN 081-0018 and SN 081-0019 originally built in 1964 as FAI 280, Section 81-1VB. Both structures were rehabilitated in 1988 as Section 81-1VBY. The existing structures consist of 3-span continuos non-composite steel beams 201'-9" long bk. to bk. abuts. and 36'-7" wide o. to o. supported on pile bent abutments and solid wall hammerhead piers on pile supported footings. The existing decks are to be removed and replaced and widened as composite construction. The substructures are to be widened as necessary. Traffic will be maintained using cross overs.

No Salvage

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson (TFG)
ENGINEER OF BRIDGES AND STRUCTURES

SEISMIC DATA

Seismic Performance Category (SPC) = A
Horizontal Bedrock Acceleration Coefficient (A) = .034
Site Coefficient (S) = 1.0

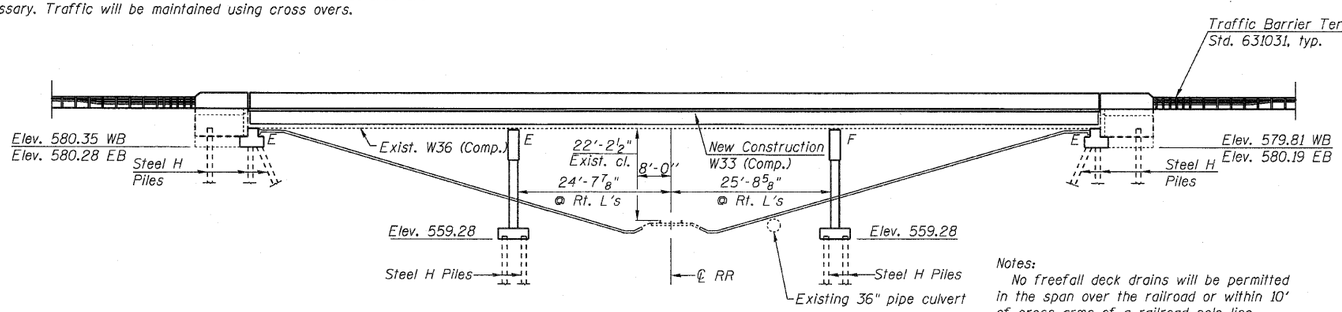
LOADING HS20-44 & ALT.

DESIGN SPECIFICATIONS

AASHTO 2002

DESIGN STRESSES

EXISTING	PROPOSED
fc = 1,000 psi (Substructure)	fc' = 3,500 psi
fc = 1,400 psi (Superstructure)	fy = 60,000 psi (Reinforcement)
fs = 20,000 psi (Reinforcement)	fy = 36,000 psi (Structural Steel)
fs = 20,000 psi (Structural Steel, A36)	



ELEVATION

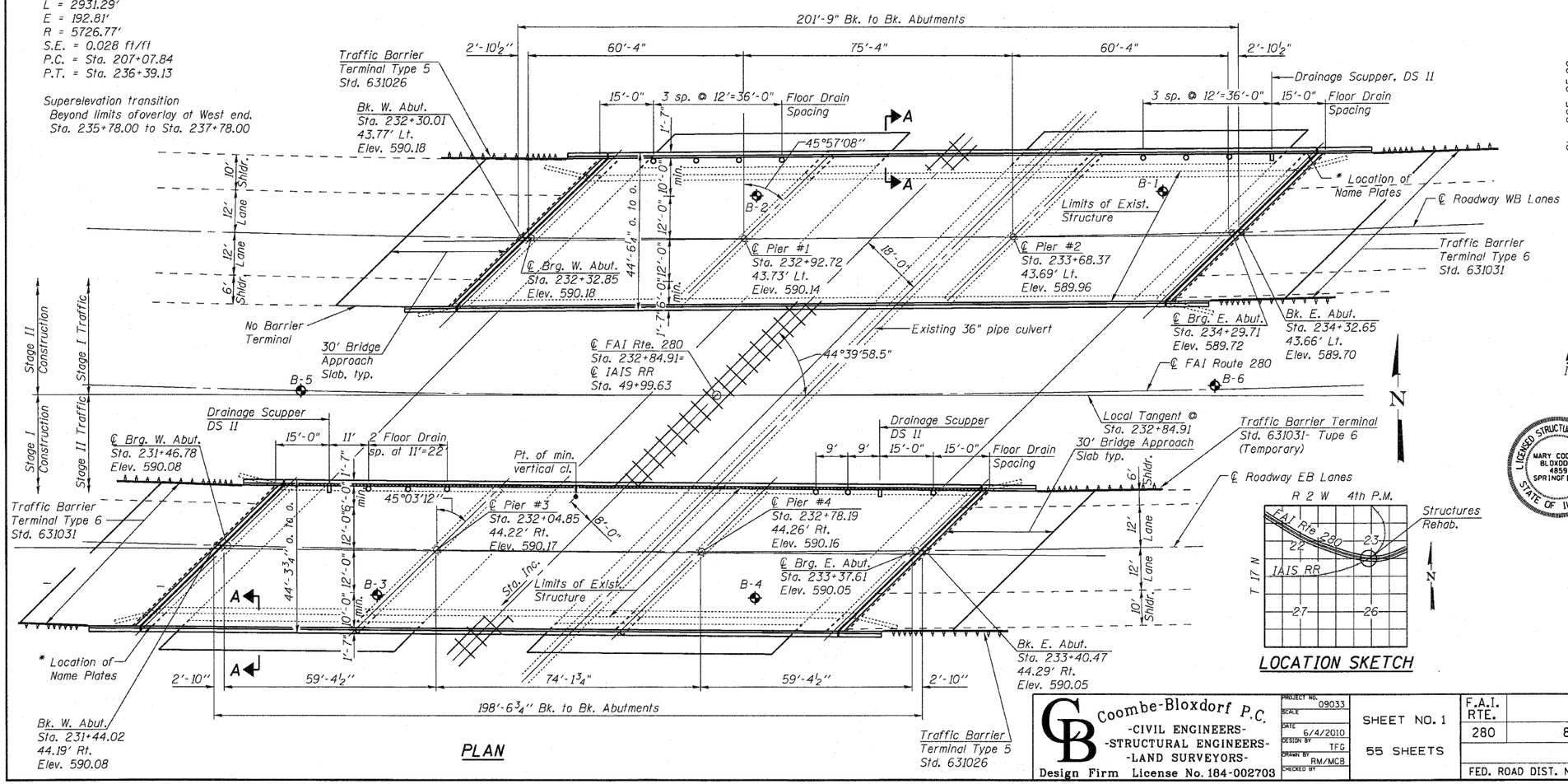
Notes:
No freefall deck drains will be permitted in the span over the railroad or within 10' of cross arms of a railroad pole line.

* Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates. See Sheet 2 of 55 for details of new name plates.

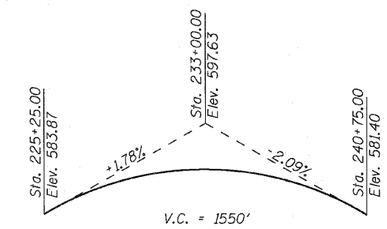
℄ FAI 280 CURVE DATA

Δ = 29°19'38"
D = 1°00'02"
T = 1498.51'
L = 2931.29'
E = 192.81'
R = 5726.77'
S.E. = 0.028 ft/ft
P.C. = Sta. 207+07.84
P.T. = Sta. 236+39.13

Superelevation transition
Beyond limits ofoverlay at West end.
Sta. 235+78.00 to Sta. 237+78.00



PLAN



PROFILE GRADE

Along ℄ Survey FAI Route 280

STA.	ELEV.
49+00	562.58
49+50	562.93
50+00	563.37
50+50	563.64
51+00	563.94

EXIST. TOP OF RAIL ELEVATIONS

Iowa Interstate R.R. milepost = 85.28 Milan Branch

LOCATION SKETCH

LICENSED STRUCTURAL ENGINEER MARY COOMBE BLOXDORF 4859 SPRINGFIELD STATE OF ILLINOIS

Mary Coombe Bloxdorf

ILLINOIS STRUCTURAL NO. 4859
EXPIRES 11/30/10
DATE: 07/21/10

GENERAL PLAN
F.A.I. 280 OVER IAIS RAILROAD
F.A.I. 280, SEC. 81-1 (VB) R
ROCK ISLAND COUNTY
STATION 232+84.91
SN 081-0018 (EB), SN 081-0019 (WB)

Coombe-Bloxdorf P.C.
-CIVIL ENGINEERS-
-STRUCTURAL ENGINEERS-
-LAND SURVEYORS-
Design Firm License No. 184-002703

PROJECT NO. 09033
SCALE
DATE 6/4/2010
DESIGN BY TFG
DRAWN BY RM/MCB
CHECKED BY

SHEET NO. 1
55 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
280	81-1 (VB) R	ROCK ISLAND	503	187
		CONTRACT NO. 64815		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

PLOT DATE = 7/21/2010
FILE NAME = ...081-0018-0019-64815-001-cpsx.dgn
PLOT SCALE = 166.6442 ' / IN.
USER NAME = OTC