

Bench Mark: Brass Plug on SE wingwall N.B. S.N.058-0008 over IL 105 Elevation = 640.56

Existing Structure: S.N. 058-0049 built in 1971 as F.A. Rt. 2 Section 48BR at Station 655+79.10. The superstructure consists of three span continuous steel plate girders with a reinforced concrete deck slab and bituminous overlay (1984). Approach slabs are supported off of vaulted abutments and approach bents on precast piles. The solid wall piers are supported on precast piled footings. The structure length measure 476'-6" bk-to-bk of approach bents and 34'-0" out-to-out of deck with no skew. Spans 1 & 3 are 120'-9" and Span 2 is 188'-0". The vaulted abutments slabs are 21'-2 1/2" long. Existing concrete decks, abutment backwalls and abutment bearings to be removed and replaced.

Traffic to be maintained detour to SN 058-0010 (IL 105) with crossovers.

No Salvage

LOADING HS20-44

Allow 25 #/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS (NEW CONST.)

(NEW CONSTRUCTION)

2002 AASHTO Standard Specifications

SEISMIC DATA

Seismic Performance Category (SPC)=A
Bedrock acceleration coefficient (A) = 0.048
Site Coefficient (S) = 1.2

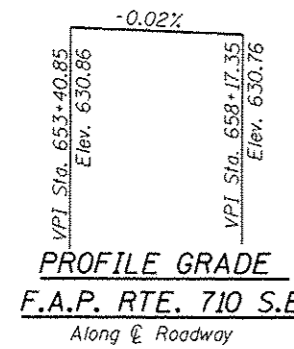
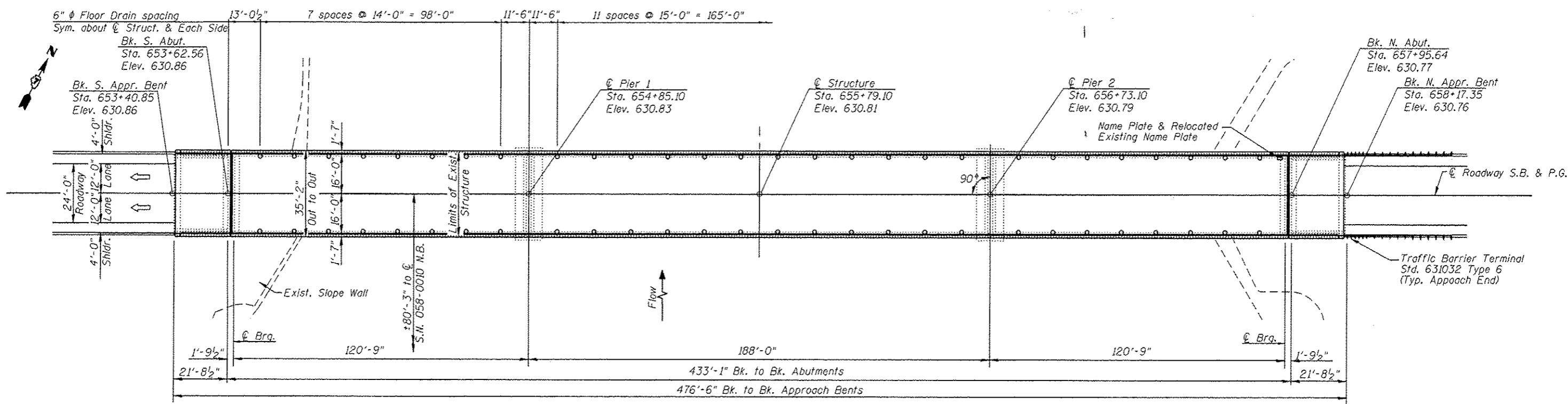
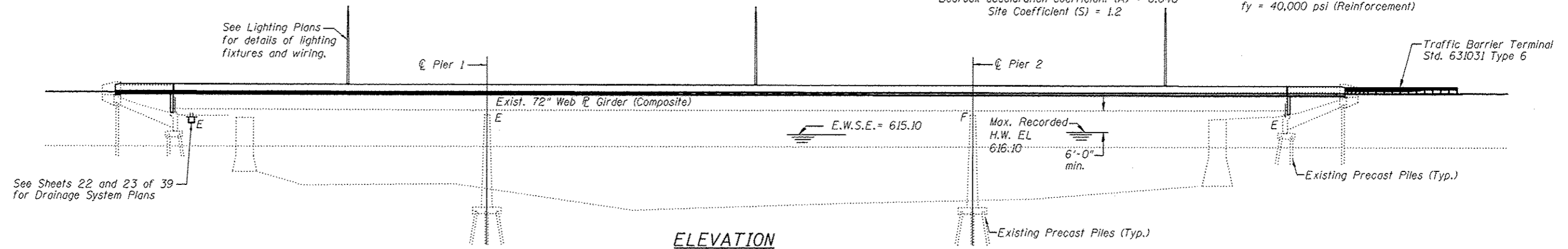
DESIGN STRESSES

FIELD UNITS (NEW CONSTRUCTION)

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (Steel)

FIELD UNITS (EXIST. CONSTRUCTION)

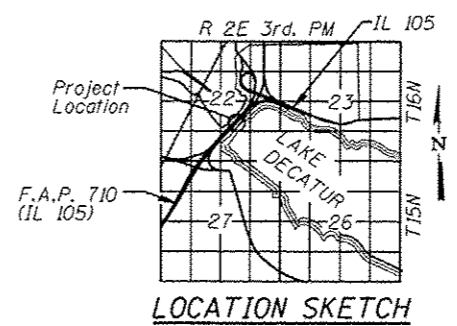
fy = 36,000 psi (Structural Steel)
f'c = 3,500 psi (Substructure)
fy = 40,000 psi (Reinforcement)



APPROVED
For Structural Adequacy Only
Carl Perry
Engineer of Bridges & Structures



Mary Coombe Blodorf
ILLINOIS STRUCTURAL NO. 4859
EXPIRES 11/30/14
DATE: 06/11/14



GENERAL PLAN AND ELEVATION
IL 105 SOUTHBOUND
OVER LAKE DECATUR
F.A.P. 710 - SEC. (48X-B-2)BR & (48BR)BR
MACON COUNTY
STATION 655+79.10
STRUCTURE NO. 058-0049

BLANK, WESSELINK, COOK & ASSOCIATES DECATUR, ILLINOIS ENGINEERS - CONSULTANTS DESIGN FIRM NO. 184000894

FILE NAME *	USER NAME *	DESIGNED PBB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN AND ELEVATION STRUCTURE NO. 058-0049 SHEET NO. 1 OF 39 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		CHECKED MCB	REVISED -			710	(48X-B-2)BR & (48BR)BR	MACON	144	39	
		DRAWN MLO	REVISED -			CONTRACT NO. 74438					
		CHECKED PBB/MCB	REVISED -			ILLINOIS FED. AID PROJECT					