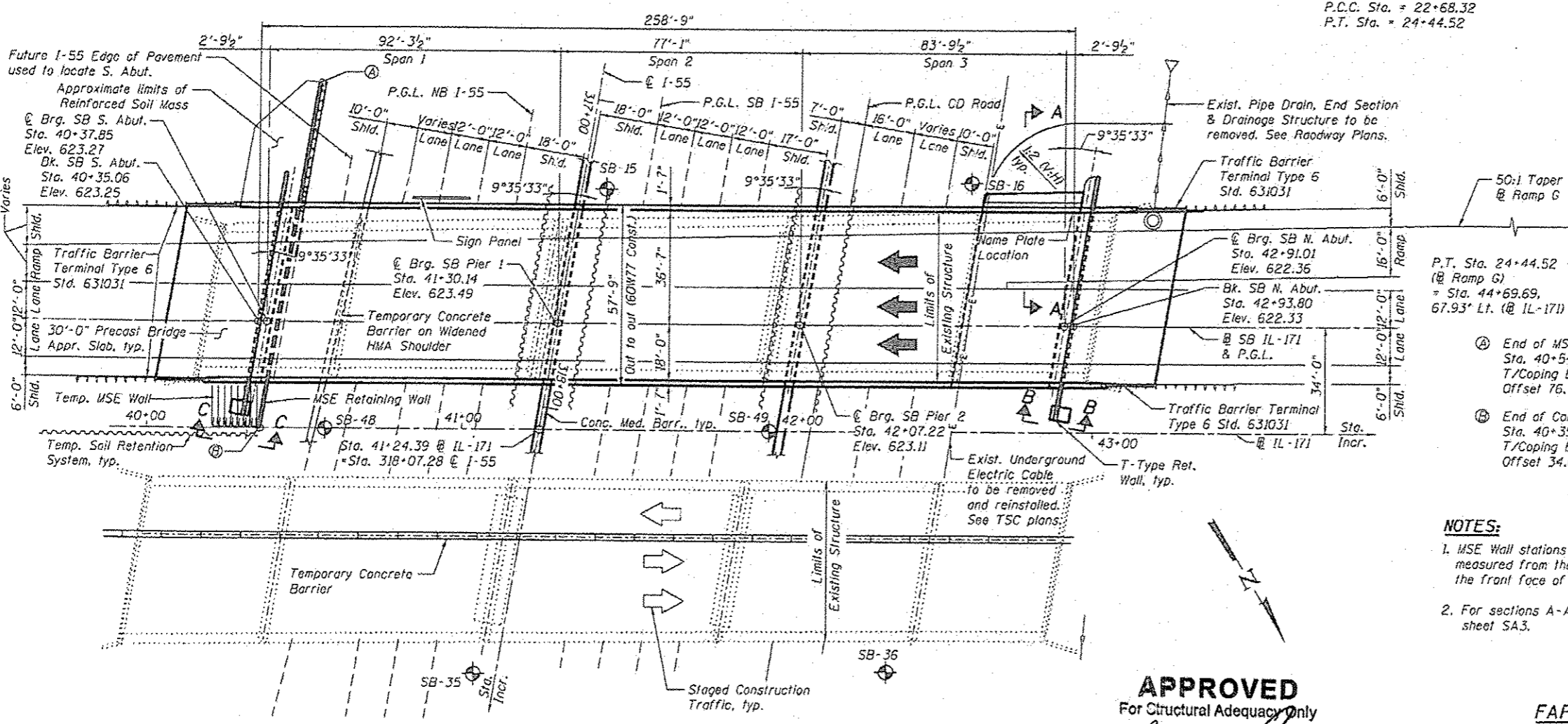
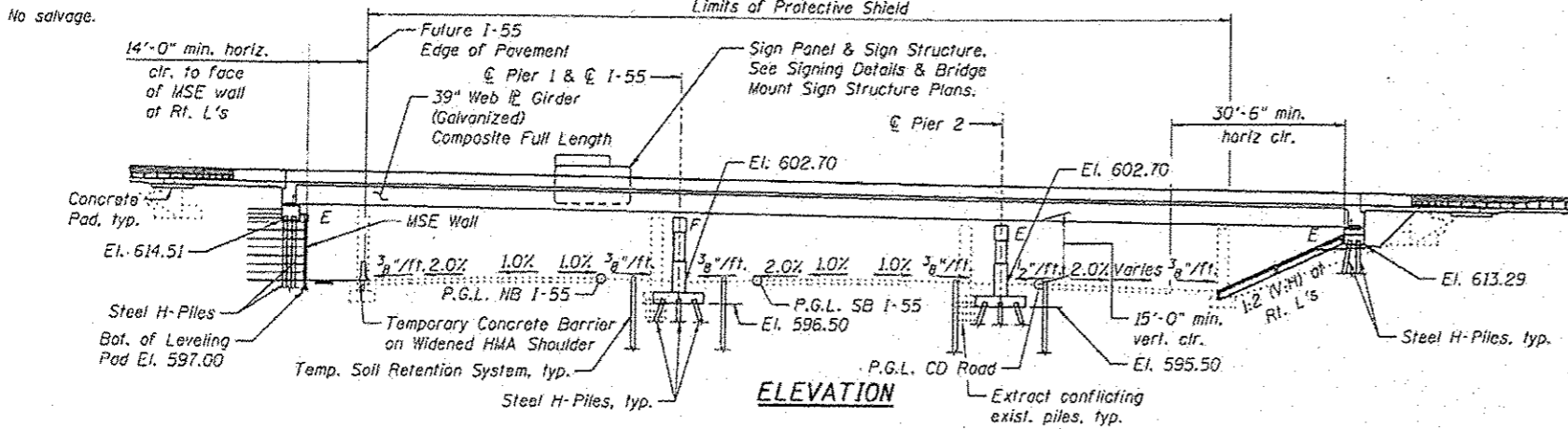


Benchmark: Chiseled square on wingwall at NE corner of NB IL-171 bridge wall over sanitary and ship canal. El. 625.62

Existing Structure: S.N. 016-0484 was originally built in 1964 under section number 0707-608HB. The superstructure consists of five span continuous W33 rolled beams (8 beam lines). The reinforced concrete deck is 7 1/2" thick, including a 2" microsilica concrete overlay. The substructure consists of four reinforced concrete column piers founded on steel piles and two reinforced concrete stub abutments founded on steel piles. The structure is 283'-8" back to back of abutments, with an out-to-out deck width varying from 49'-0 1/8" to 54'-8 1/2" on 9° 34' 18" ahead left skew. Traffic is to be maintained utilizing crossovers.

No salvage.



PLAN

STATION 41+24.39  
BUILT 2011 BY  
STATE OF ILLINOIS  
F.A.P. RT. 373  
SEC. 0707-608&611HB-B  
LOADING HL-93  
STRUCTURE NO. 016-1510

**NAME PLATE**  
See Std. 515001

**RAMP G CURVE DATA**

P.I. Sta. = 23+57.67  
Δ = 23° 28' 41" (RT)  
D = 13° 19' 29"  
R = 430.00'  
T = 89.35'  
L = 176.20'  
E = 9.19'  
e = 5.8%  
P.C.C. Sta. = 22+68.32  
P.T. Sta. = 24+44.52

**SEISMIC DATA**

Seismic Performance Zone (SPZ) = 1  
Design Spectral Acceleration at 1.0 sec. (S<sub>D1</sub>) = 0.063 g  
Design Spectral Acceleration at 0.2 sec. (S<sub>D5</sub>) = 0.114 g  
Soil Site Class = C

**LOADING HL-93**

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

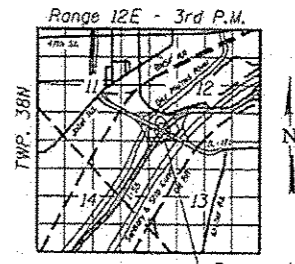
**DESIGN SPECIFICATIONS**

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition with 2013 Interims

**DESIGN STRESSES**

**FIELD UNITS**  
f'<sub>c</sub> = 3,500 psi  
f<sub>y</sub> = 60,000 psi (Reinforcement)  
f<sub>y</sub> = 50,000 psi (AASHTO M270 Grade 50)

**PRECAST UNITS**  
f'<sub>c</sub> = 4,500 psi (Precast Panels)  
f'<sub>c</sub> = 6,000 psi (Precast Bridge Approach Slab)



LOCATION SKETCH

P.T. Sta. 24+44.52  
(@ Ramp G)  
= Sta. 44+69.69,  
67.93' Lt. (@ IL-171)

Ⓐ End of MSE Wall  
Sta. 40+54.35  
T/Coping Elev. 603.00  
Offset 76.71' Lt.

Ⓑ End of Contract 60W77 MSE Wall  
Sta. 40+35.64  
T/Coping Elev. 616.09  
Offset 34.00' Rt.

**NOTES:**

- MSE Wall stations and offsets are measured from the @ SB IL-171 to the front face of precast panels.
- For sections A-A, B-B and C-C see sheet SA3.

**GENERAL PLAN & ELEVATION**  
**SB IL-171 OVER I-55**  
**FAP 373 - SECTION (0707-608&611)HB-B**  
**COOK COUNTY**  
**STATION 41+24.39**  
**STRUCTURE NO. 016-1510**

**APPROVED**  
For Structural Adequacy Only

*De Carl Kopyev*  
Engineer of Bridges & Structures

**benesch**  
engineers • scientists • planners  
Alfred Benesch & Company  
205 North Michigan Avenue, Suite 2400  
Chicago, Illinois 60601  
312-565-0450 Job No. 10093

FILE NAME *	USER NAME *	DESIGNED -	REVISED -
0161510_S&W77_D01.CPF.dgn	ksk	SLY	
		CHECKED -	REVISED -
		KWS	
PLOT SCALE *		DRAWN -	REVISED -
		KMS	
PLOT DATE *		CHECKED -	REVISED -
6/23/2014		KWS	

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

SHEET NO. S41 OF S413 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
373	0707-608&611HB-B	COOK	177	66
CONTRACT NO. 60W77			[ILLINOIS] FED. AID PROJECT	

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