

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BENCH MARK #A:  
Chiseled "□" Located on the Top of Crash Wall  
on the West Edge of Pier at  $\bar{C}$  125th Street. Elev. 179.298

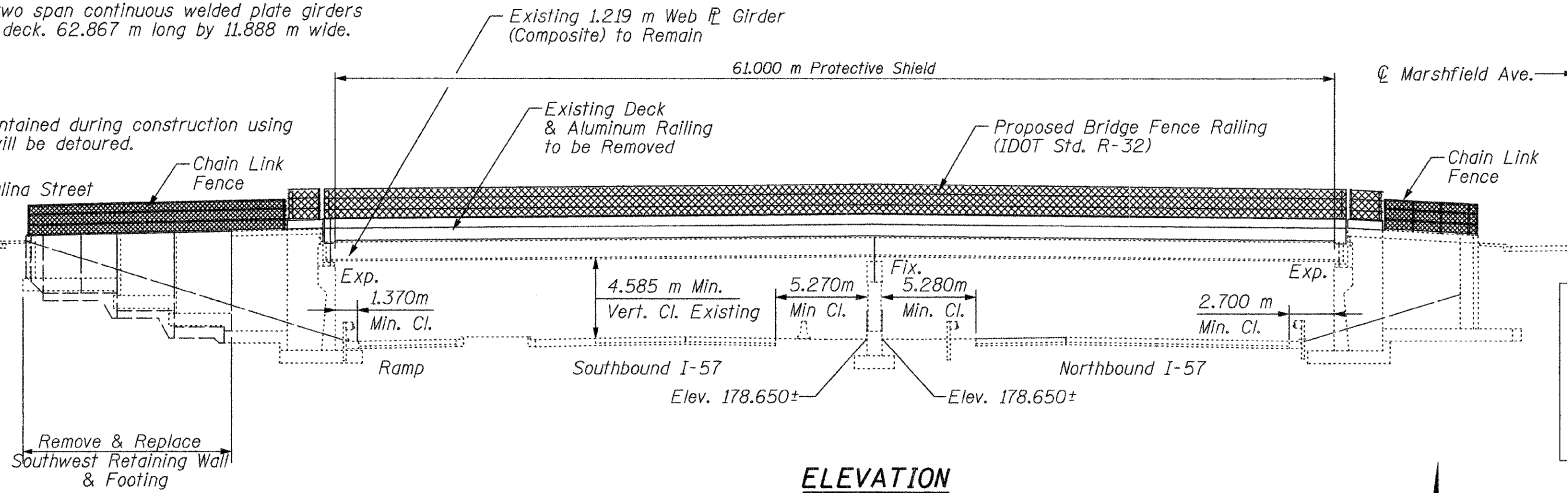
EXISTING STRUCTURE:  
SN 016-2034 was built in 1967 under Section 068-1818.3-C.F.  
The Superstructure consists of two span continuous welded plate girders  
supporting a composite concrete deck. 62.867 m long by 11.888 m wide.

No Skew.

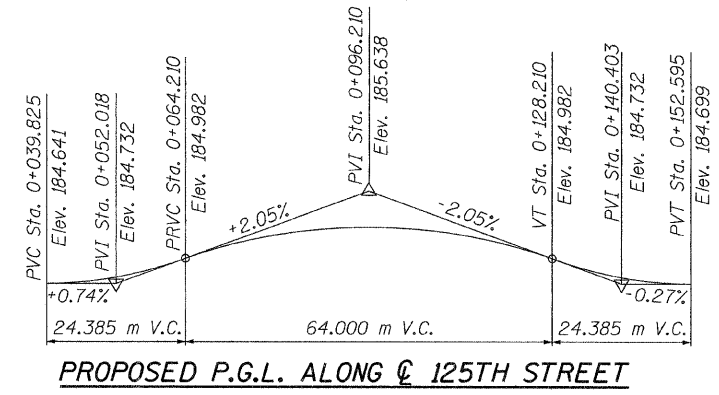
CONSTRUCTION STAGING:  
One Lane WB Traffic will be maintained during construction using  
stage construction. EB Traffic will be detoured.

Salvage: Existing protective  
shield and Aluminum  
Railing (see sheet S-2,  
note 14)

Note:  
All dimensions in millimeters (mm)  
except as noted.



STATION 0+098.688  
REBUILT 200\_ BY  
STATE OF ILLINOIS  
F.A.I. RTE 57  
SEC. 1818.3 B-R  
LOADING MS18  
STRUCTURE NO. 016-2034



**NAME PLATE**  
See Std. 515001

Existing Name Plate shall be cleaned  
and placed next to new Name Plate.  
See Sheet S-21. Cost included with  
Name Plates.

**SCOPE OF WORK:**

- 1-Remove and replace deck utilizing stage construction.
- 2-Remove and replace existing abutment bearings with Elastomeric Bearings.
- 3-All existing structural steel shall be cleaned and painted (Separate Contract).
- 4-Remove and replace approach slabs.
- 5-Remove and replace southwest retaining wall.
- 6-Modify wingwalls and abutments as shown.
- 7-Repair abutments, wingwalls and pier as required.
- 8-Remove and replace underdeck lighting fixtures and conduits.
- 9-Remove, ground mount and reinstall traffic signs to new parapets.

**LOADING MS18**

Allow 2.4 kN/m<sup>2</sup> for future wearing surface.

**DESIGN SPECIFICATIONS**

2002 AASHTO Standard Specifications for Highway Bridges

**DESIGN STRESSES**

**FIELD UNITS**

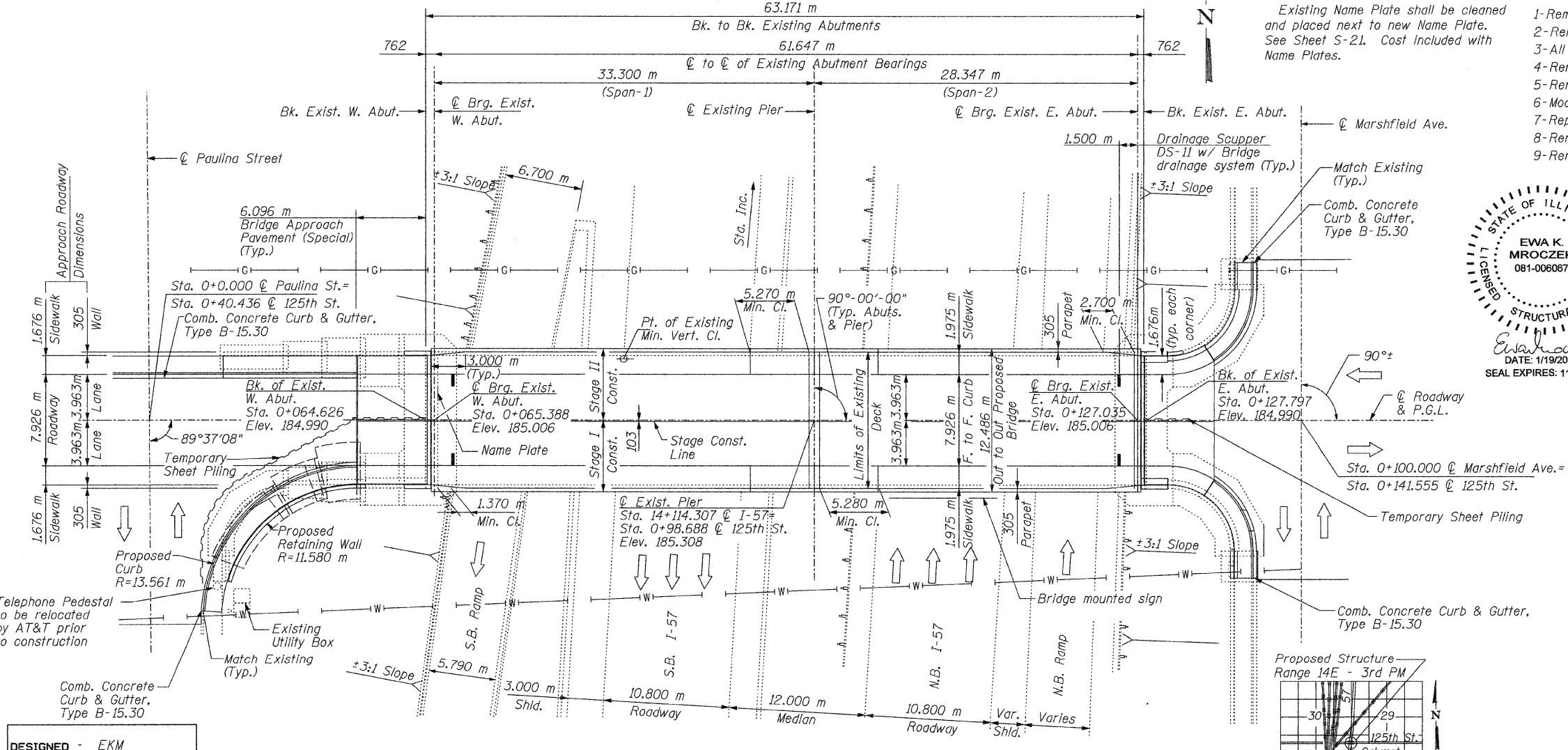
- $f'_c = 24$  MPa  
 $f_y = 400$  MPa (reinforcement)  
 $f_y = 250$  MPa (M270M Grade 250)

**EXISTING**

- $f'_c = 24$  MPa  
 $f'_c = 17$  MPa (with earth pressure)  
 $f_y = 300$  MPa (reinforcement)  
 $f_y = 250$  MPa (ASTM A-36)  
 $f_y = 300$  MPa (ASTM A-441, to 38 mm)  
 $f_y = 275$  MPa (ASTM A-441, 38 to 100 mm)

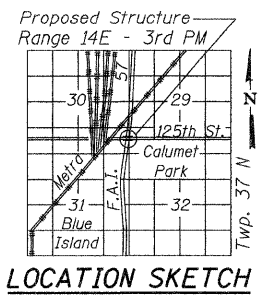
**SEISMIC DATA**

Seismic Performance Category (SPC) = A  
Bedrock Acceleration Coefficient (A) = 0.038 g  
Site Coefficient (S) = 1.0



**PLAN**

**APPROVED**  
FOR STRUCTURAL ADEQUACY ONLY  
Ralph E. Anderson  
ENGINEER OF BRIDGES AND STRUCTURES



DESIGNED - EKM
CHECKED - SCD
DRAWN - RD
CHECKED - EKM

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SHEET NO. S-1 S-26 SHEETS	F.A.I. RTE. 57	SECTION 1818.3B-R	COUNTY COOK	TOTAL SHEETS 58	SHEET NO. 25
	CONTRACT NO. 60862			ILLINOIS FED. AID PROJECT	

1/19/2009 rdantley