BENCH MARK:
Chiseled " □ " on West wingwall of N. Abutment. El. 666.81

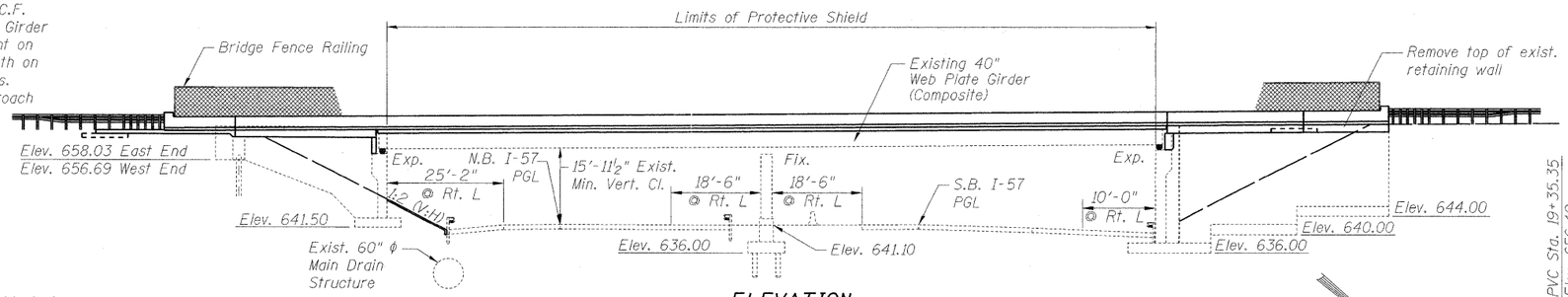
EXISTING STRUCTURE:
SN 016-1015 built in 1968 under section 068-1112.1-C.F.
The Structure is a two span continuous welded Plate Girder with a concrete deck, supported by a vaulted abutment on South side, a tall wall abutment on the North side, both on spread footings, and the pier supported on steel piles.
The existing structure is 173'-8 3/4" long. vaulted approach span is 29'-9 3/4" long. The bridge is 67'-0" wide.

CONSTRUCTION STAGING:
One lane of traffic in each direction will be maintained during construction using stage construction. Shoulder closures will be required on I-57 for substructure repairs.

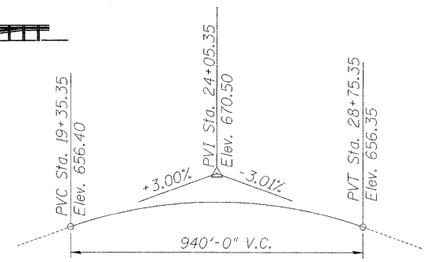
No Salvage

SCOPE OF WORK:

1. Remove and replace deck & vaulted spans (minor widening) using stage construction.
2. Remove & replace abutment backwalls.
3. Remove & replace abutment bearings with Elastomeric Bearings.
4. Clean and paint structural steel. (Separate contract)
5. Repair abutments, pier.
6. Replace south slope wall.
7. Remove approach pavements and replace with approach slabs.
8. Remove top of exist. retaining walls and sidewalks at North Abutment.
9. Remove and replace underdeck lighting fixtures and conduits.
10. Remove traffic sign structures and reinstall new sign structures.
11. Slopewall widening (South).

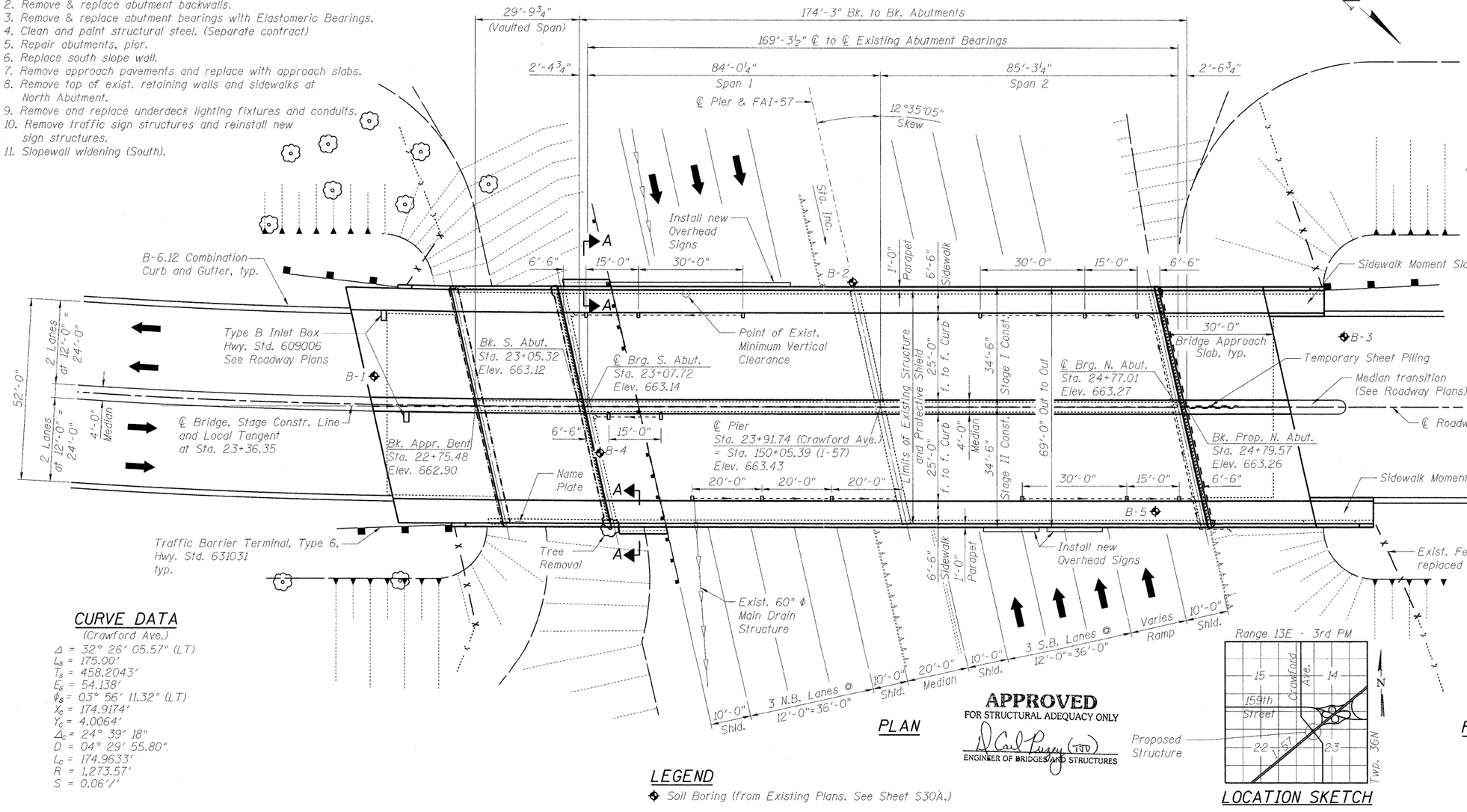


ELEVATION



P.G.L. CRAWFORD AVENUE

Along ℄ Roadway (below median)



CURVE DATA

(Crawford Ave.)

Δ = 32° 26' 05.57" (LT)
L_s = 175.00'
T_s = 458.2043'
E_s = 54.138'
ϕ_s = 03° 56' 11.32" (LT)
X_c = 174.9174'
Y_c = 4.0064'
Δ_c = 24° 39' 18"
D = 04° 29' 55.80"
L_c = 174.9633'
R = 1,273.57'
S = 0.06'/'

LEGEND

◆ Soil Boring (from Existing Plans. See Sheet S30A.)

PLAN

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
D Carl Pusey (TSD)
ENGINEER OF BRIDGES AND STRUCTURES

LOCATION SKETCH

LOADING HS-20

Allow 50 psf for future wearing surface.

DESIGN SPECIFICATIONS

2002 AASHTO Specifications for Highway Bridges

DESIGN STRESSES

FIELD UNITS

f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 36,000 psi (M270 Grade 36)

EXISTING UNITS

f_c = 1,400 psi
f_s = 20,000 (reinforcement)
f_s = 20,000 (ASTM A36)

SEISMIC DATA

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

LICENSED STRUCTURAL ENGINEER
BRAD H. SAYERS
081-006267
CHICAGO
ILLINOIS
STATE OF ILLINOIS

BRAD H. SAYERS, S.E.
IL. LIC. NO. 081-006267
EXP 11/30/12
DATE 8/8/11

GENERAL PLAN
CRAWFORD AVE. OVER I-57
F.A.U. RTE. 3778 - SECT. 1112.B1
COOK COUNTY
STATION 23+91.74
STRUCTURE NO. 016-1015

FILE NAME = g:\projects\2102165.004\cadd\structure\sht\016181S_68863_R01_General Plan.dgn

ENTRAN	USER NAME = 2sayerb	DESIGNED - TWO	REVISED -
		CHECKED - BHS	REVISED -
	PLOT SCALE = N/A	DRAWN - TWO	REVISED -
	PLOT DATE = 8/5/2011	CHECKED - GSP	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
STRUCTURE NO. 016-1015
SHEET NO. 51 OF 36 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	1112.1B	COOK	75	28
		CONTRACT NO. 60863		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		