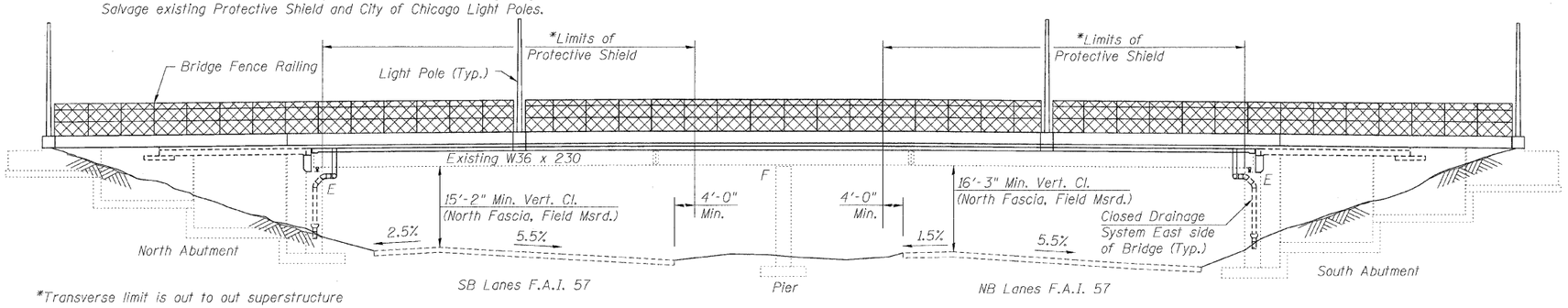
Sheets 28-30 Not USED

TOTAL SHEETS	SHEET NO.
77	31

Bench Mark: Kam #8 - South bolt on fire hydrant at northwest corner of Genoa Avenue and 99th Street. Elev. 611.465

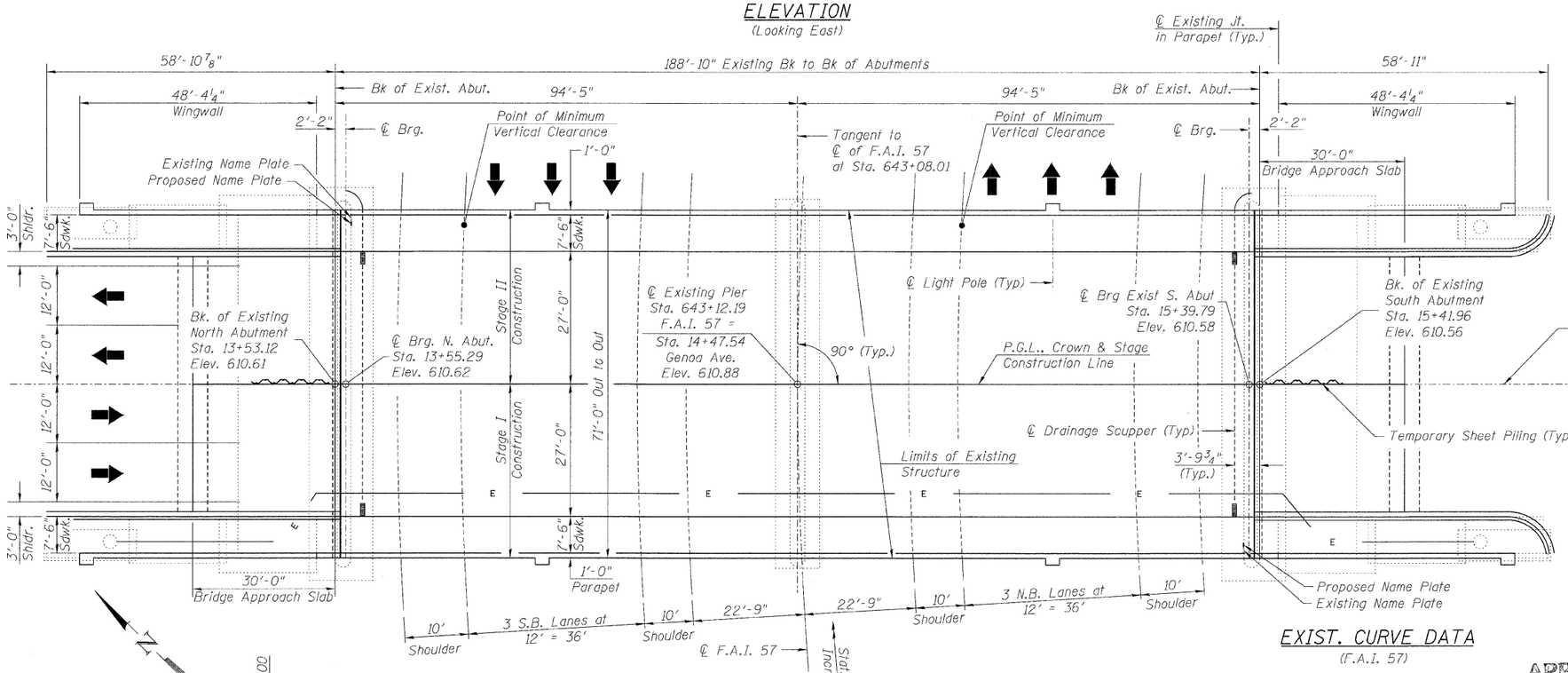
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Existing Structure: Structure Number 016-2030, Built as Genoa Road under Section 068-2222.3-C.F. at Sta. 643+08.01 in 1963.
Superstructure - 2 span continuous non-composite rolled steel beams with cover plates supporting a reinforced concrete deck, 71'-0" out to out and 188'-10" back to back abutments.
Substructure - The abutments, center pier, and wingwalls are constructed of reinforced concrete with spread footings.
Traffic is to be maintained during the rehabilitation utilizing staged construction.
Salvage existing Protective Shield and City of Chicago Light Poles.

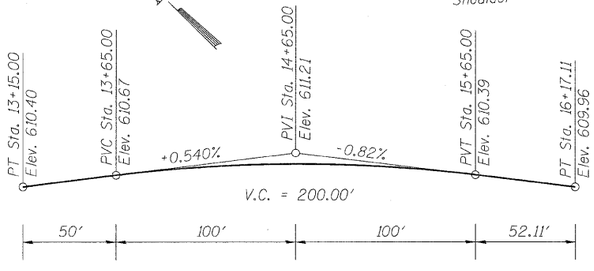


*Transverse limit is out to out superstructure

ELEVATION
(Looking East)



PLAN



PROPOSED PROFILE GRADE
(Genoa Avenue along ℄ of roadway)

DESIGN SPECIFICATIONS
2002 AASHTO "Standard Specifications for Highway Bridges"

LOADING HS 20-44
Allow 50 lb/sq. ft for future wearing surface.

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04 g
Site Coefficient (S) = 1.0

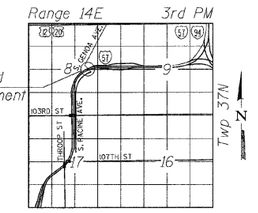
DESIGN STRESSES
New Construction (Field Units)
f'_c = 3,500 psi
f_y = 60,000 psi (Reinforcement)
f_y = 36,000 psi (Structural Steel) (M270 Grade 36)

Existing Construction (Field Units)
f_c = 1400 psi (Without Earth Pressure)
f_c = 800 psi (With Earth Pressure)
f_s = 20,000 psi (Reinforcement)
f_y = 33,000 psi (Structural Steel)

EXIST. CURVE DATA
(F.A.I. 57)
P.I. Sta. = 644+35.40
Δ = 81° 10' 18.12"
D = 3° 44' 59.98"
R = 1527.89'
T = 1308.91'
L = 2164.58'
E = 484.00'
P.C. Sta.= 631+26.49
P.T. Sta. = 652+91.08
S.E.= 5.5%

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Rudolph E Anderson (TJO)
ENGINEER OF BRIDGES AND STRUCTURES

INDEX OF SHEETS



LOCATION SKETCH

LICENSED STRUCTURAL ENGINEER
MICHAEL T. HALEY
81-5991
CHATHAM
STATE OF ILLINOIS

Michael T. Haley 3/4/2010
Michael T. Haley — Date
Licensed Structural Engineer
State of Illinois No. 81-5991
Expires 11/30/2010

GENERAL PLAN AND ELEVATION
GENOA AVENUE OVER I-57
FAI RTE 57 - SECTION 2222.3B
COOK COUNTY
STATION 14+47.54
STRUCTURE NO. 016-2030

LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

Designed By: ESH | Checked By: MTH | Drawn By: ESH
Date: 7/2009 | File: 016-2030.dgn

SHEET NO. 1
32 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	2222.3B	COOK	77	31
		CONTRACT NO. 62119		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		