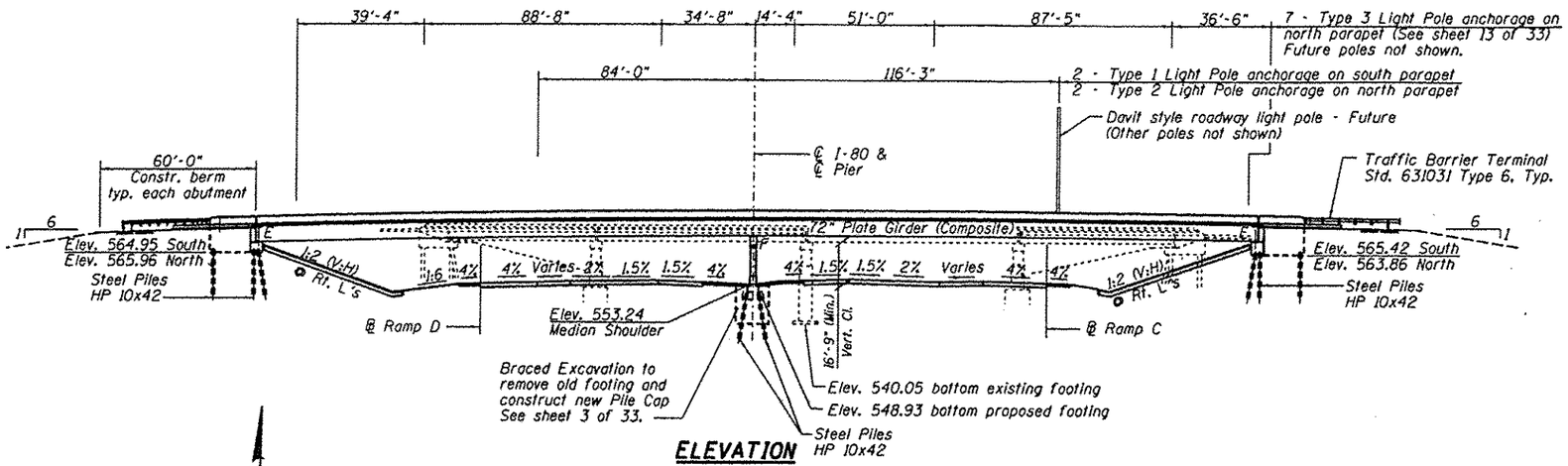
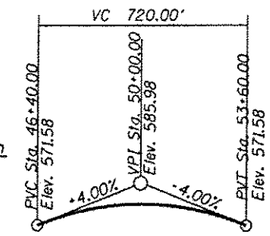
Bench Mark:
BM 21 - Fire Hydrant at Sta. 121+21.45, 64.50' Rt. - Elev. 551.714

Existing Structure:
SN 032-0046 was built in 1959 as Section (32, 47)-4 at approximately Sta 50+13.50, 14.74' Lt (Minooka Road (CH 16C) stationing) and Sta. 1574+07.64, 1.35' Lt (I-80 stationing). The structure is skewed 44°-03'-00" left forward. The existing structure consists of a four span PCC I-beam w/ pile bent abutments and multiple column piers. The back-to-back of abutments length of the bridge is 281'-9" with a clear width of 28'-0". The existing structure will be replaced. Minooka Road will be closed during construction. No Salvage.

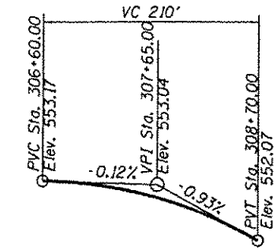
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



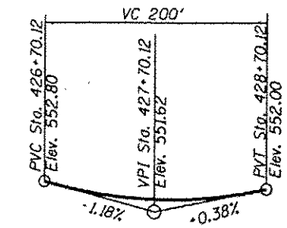
ELEVATION



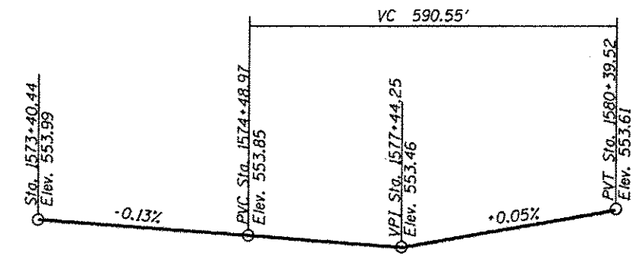
PROFILE GRADE
(Along Minooka Road)



PROFILE GRADE
(Along Ramp C - Future)

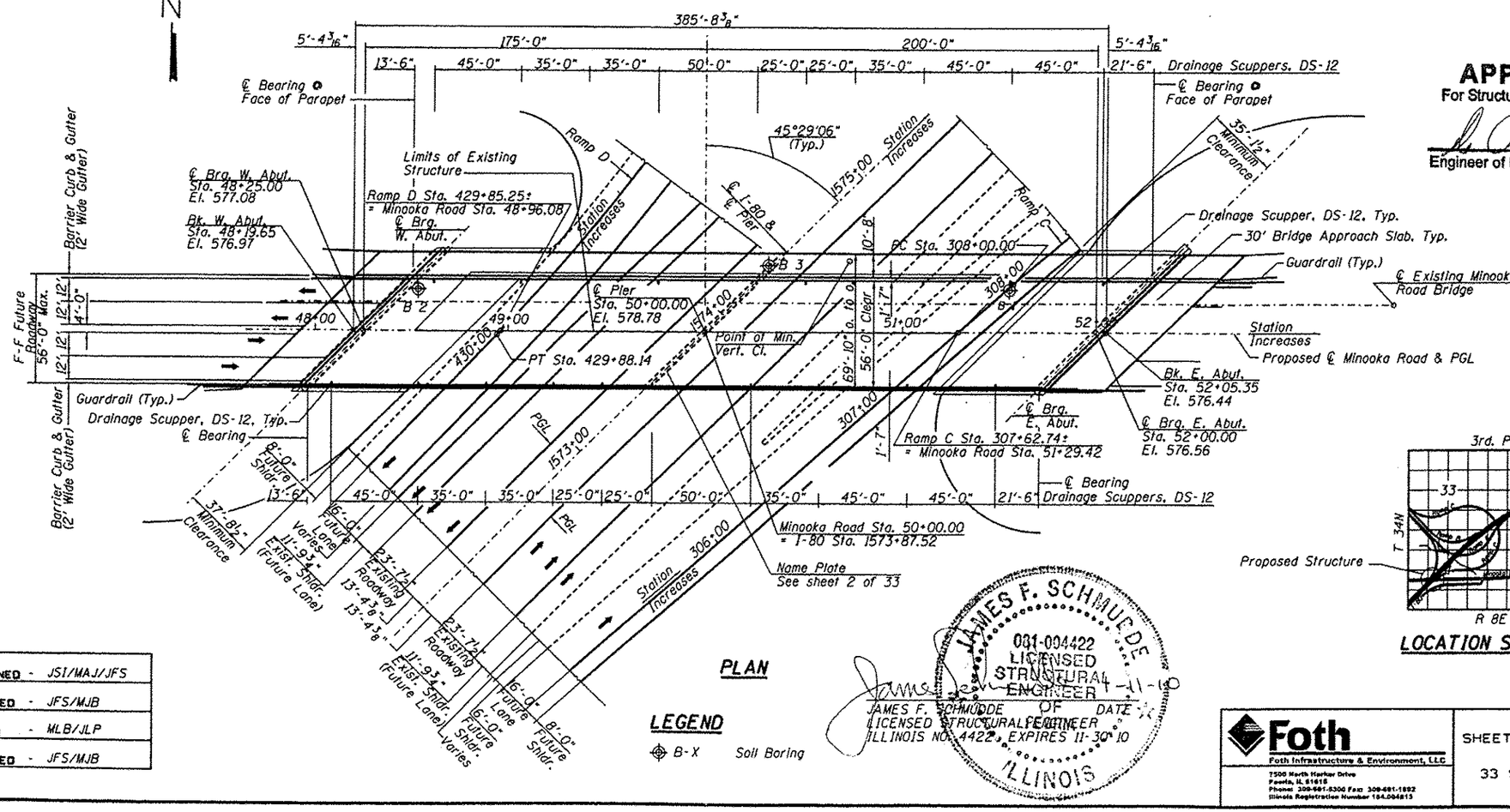


PROFILE GRADE
(Along Ramp D - Future)



PROFILE GRADE
(Along I-80 EB & WB)

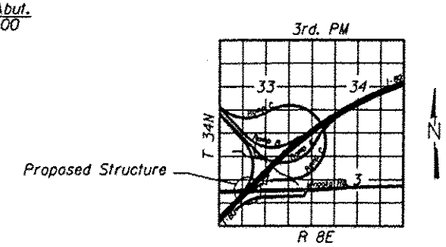
APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures



PLAN

LEGEND
B-X Soil Boring

JAMES F. SCHMUDDE DATE 11-1-10
LICENSED STRUCTURAL ENGINEER
ILLINOIS NO. 4422 EXPIRES 11-30-10



LOCATION SKETCH

LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
2007 AASHTO LRFD Bridge Design Specifications
2008 Interim Revisions

DESIGN STRESSES
FIELD UNITS
f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 50,000 psi (M270 Grade 50)
f_y = 36,000 psi (M270 Grade 36)

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.069g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.127g
Soil Site Class = C

GENERAL PLAN AND ELEVATION
MINOOKA ROAD CH 16C OVER FAI I-80
FAU 400 SECTION (32, 47-4) HBR-2
GRUNDY COUNTY
STATION 50+00
STRUCTURE NO. 032-0119

DESIGNED -	JSI/MAJ/JFS
CHECKED -	JFS/MJB
DRAWN -	MLB/JLP
CHECKED -	JFS/MJB

Foth
Foth Infrastructure & Environment, LLC
7500 North Harlem Drive
Peoria, IL 61615
Phone: 309-691-5300 Fax: 309-691-1892
Illinois Registration Number 184.004813

SHEET NO. 1
33 SHEETS

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
400	(32, 47-4) HBR-2	GRUNDY	143	62
	S.N. 032-0119	CONTRACT NO. 66873		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		