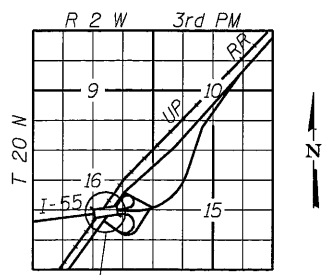
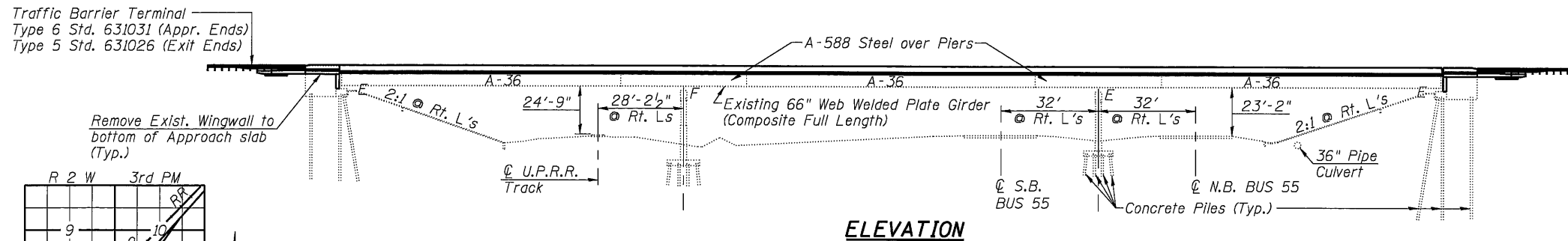
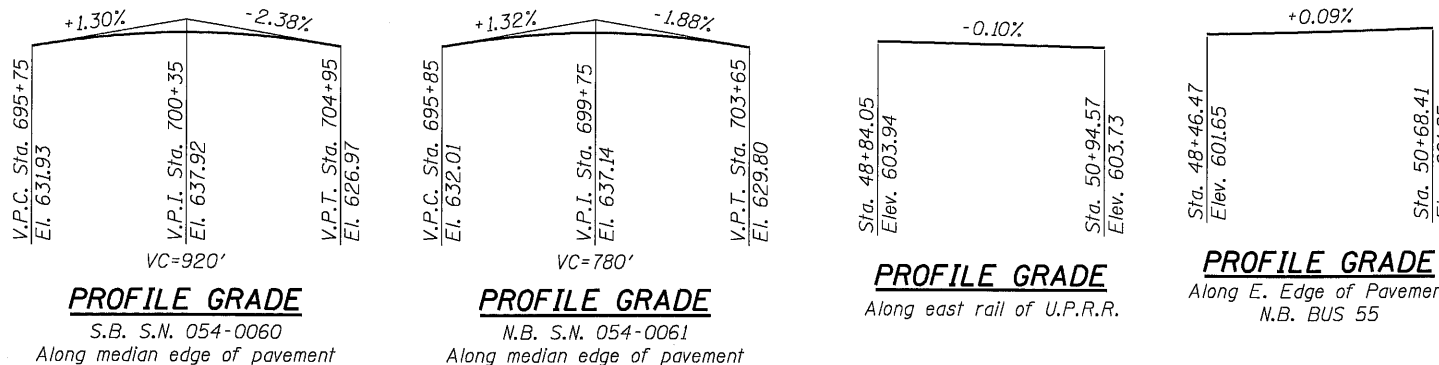


Benchmark: Chiseled Square on South Approach of S.N. 054-0060, over old US 66, Elev. 633.05

Existing Structure: S.N. 054-0060 (S.B.) and 054-0061 (N.B.) built in 1974 as F.A.I. Rte. 55, Section 54-4VHB, at Sta. 700+89.92. Existing dual structures each consist of a 3-span continuous reinforced concrete deck on 66" I girders supported by open stub abutments and multi-column trapezoidal piers on concrete piles. The structures are 491'-8³/₄" Bk. to Bk. of abutments and the out to out of deck varies from 42'-7¹/₈" to 52'-6¹/₄" (S.B.) and 42'-3" to 48'-1³/₈" (N.B.). The existing bridge deck, backwalls and wingwalls are to be removed and replaced under staged construction.



SCOPE OF WORK

1. Remove and replace bridge deck.
2. Remove and replace end diaphragms.
3. Remove and replace bearings at expansion joints.
4. Remove and replace approach pavements.
5. Remove and replace abutment backwalls.
6. Make wingwall modifications.
7. Repair slopewalls, abutment caps and piers as necessary.

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.046g
Site Coefficient (S) = 1.5

DESIGN SPECIFICATIONS

2002 AASHTO (New Construction)
1985 FHWA Seismic Retrofit Manual
1969 AASHTO (Existing Construction)

DESIGN STRESSES

FIELD UNITS (New Construction)

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (M270 Grade 36)

FIELD UNITS (Existing Construction)

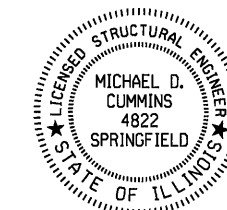
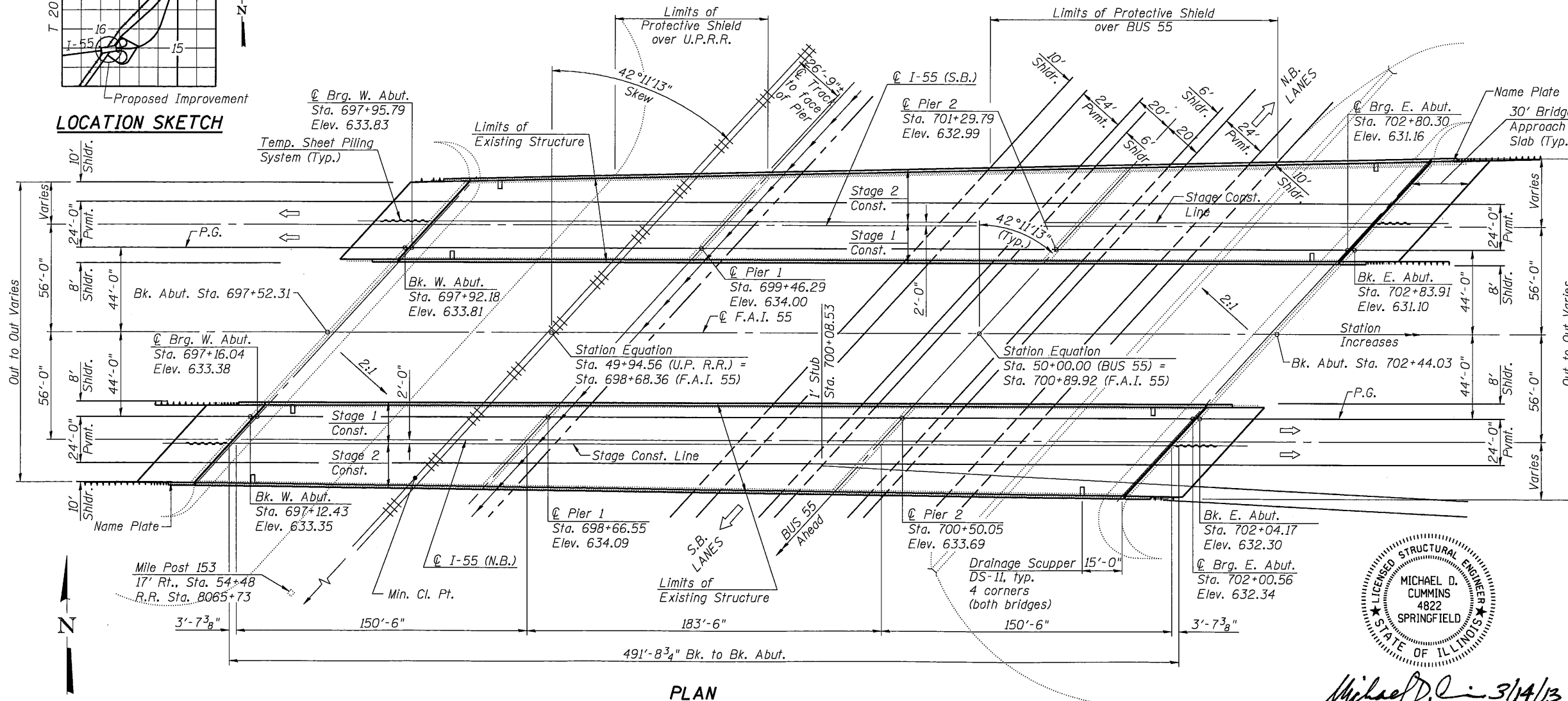
f'c = 1,200 psi (Deck Slab)
f'c = 1,400 psi (Curb, Parapet, Substructure)
fs = 20,000 psi (Reinforcement & Steel)
fs = 27,000 psi (Neg. Moment Areas)

LOADING HS20-44 & ALT.

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

GENERAL PLAN

I-55 OVER BUS 55 & U.P.R.R.
F.A.I. RTE. 55
SECTION D6 LOGAN CO BR 2011-1
LOGAN COUNTY
STATION 700+89.92
STRUCTURE NO. 054-0060 (S.B.)
STRUCTURE NO. 054-0061 (N.B.)



Michael D. Cummins 3/14/13
(Expires 11/30/2014)



JOB	= 2265.2	DESIGNED	- AAN	REVISED	-
FILE	= 0540060_0061-72E11-01-CPE.dgn	CHECKED	- MDC	REVISED	-
DATE	= 1/18/2011	DRAWN	- SJS	REVISED	-
		CHECKED	- MDC	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
STRUCTURE NO. 054-0060 (SB) & STRUCTURE NO. 054-0061 (NB)

SHEET NO. 1 OF 53 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	D6 LOGAN CO BR 2011-1	LOGAN	429	231
				CONTRACT NO. 72E11
ILLINOIS FED. AID PROJECT				