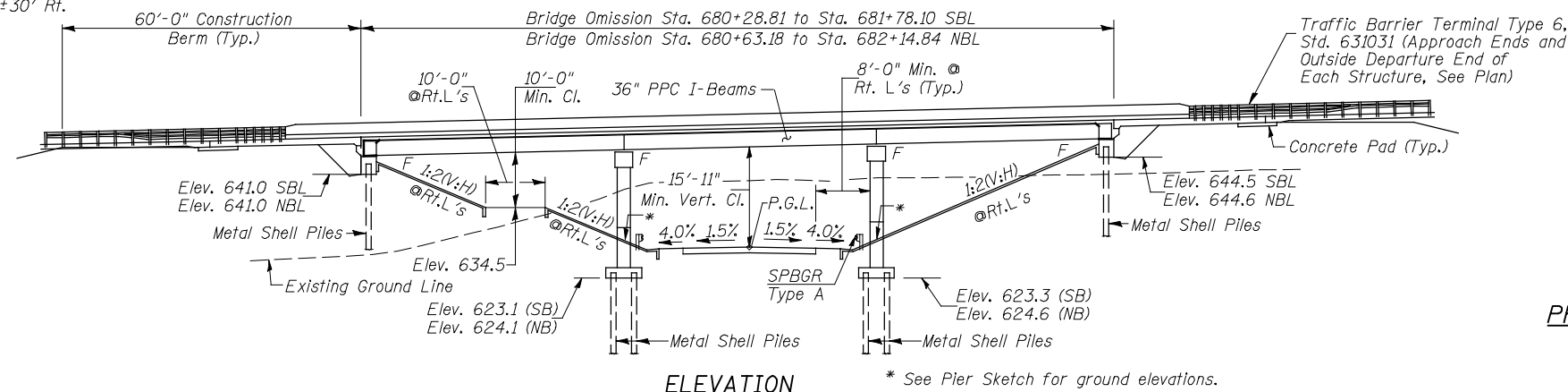


B.M.: RR Spike in Power Pole,
CH 14 Sta. ±2020+31.50, ±30' Rt.
Elev. 645.794

Existing Structure: None

CH 14 will be closed during construction.

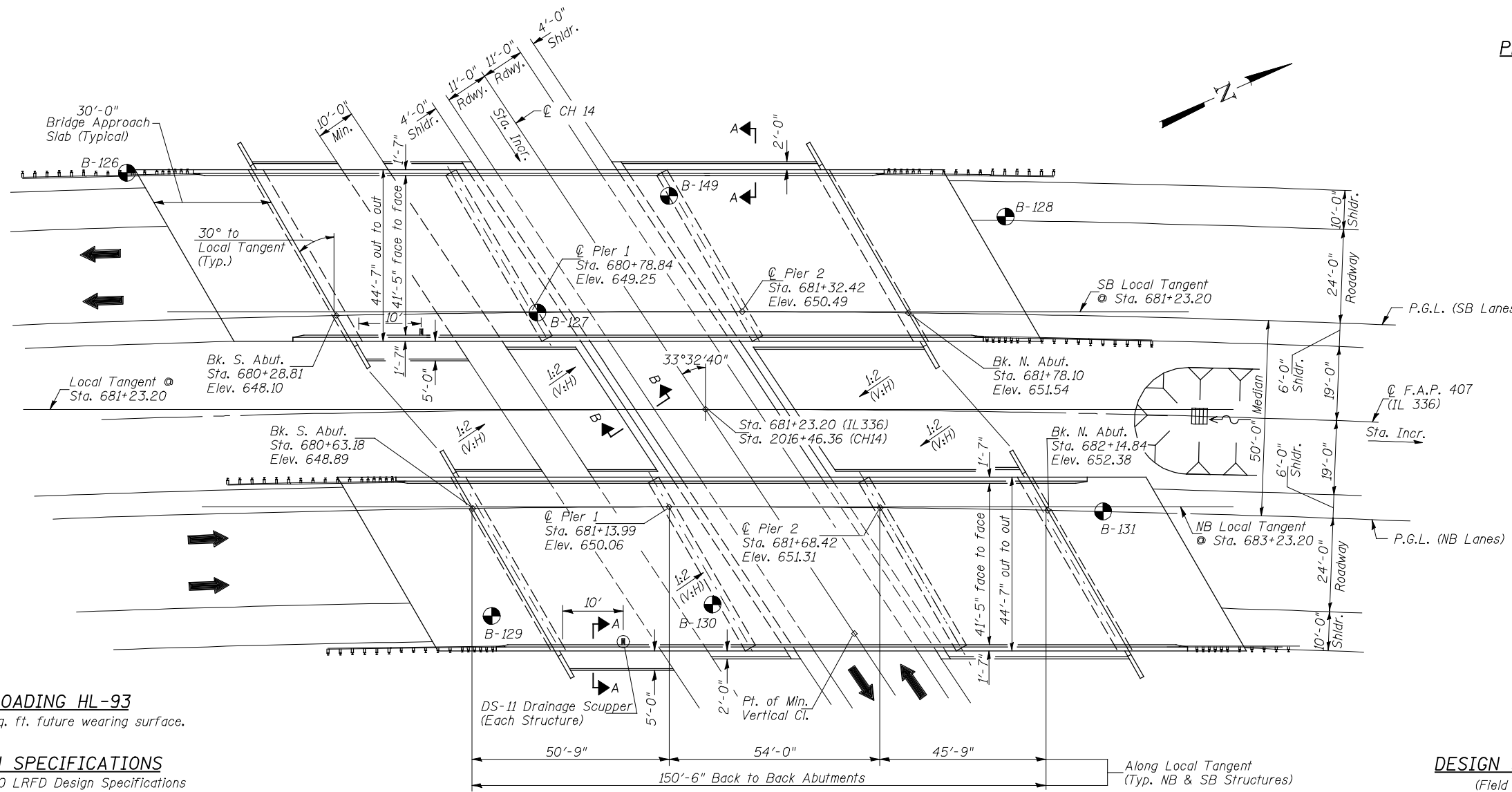
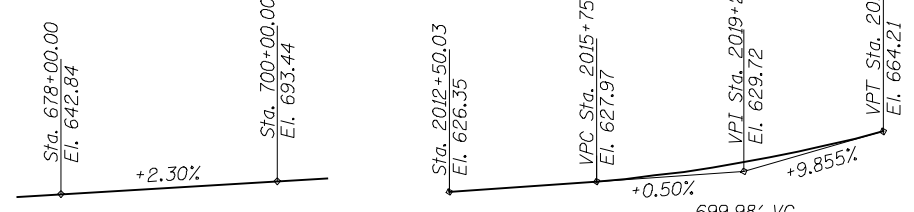


ELEVATION

* See Pier Sketch for ground elevations.

PROFILE GRADE IL 336 (FAP 407)

PROFILE GRADE CH 14
(@ C Rdwy.)



PLAN

PROP CURVE IL 336-4

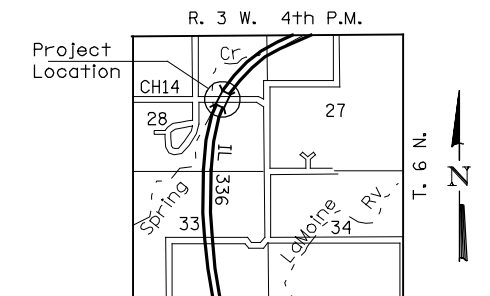
HIGHWAY CLASSIFICATION

PI STA. = 685+49.24
Δ = 60° 09' 14" (RT)
D = 1° 16' 24"
R = 4,500.00'
T = 2,606.15'
L = 4,724.48'
E = 700.19'
e = 4.1%
T.R. = 41.42'
S.E. RUN = 182.25'
P.C. STA. = 659+43.10
P.T. STA. = 706+67.58

F.A.P. Route 407 IL 336
Functional Class: Principal Arterial (Rural)
ADT: 3,045 (2015); 3,715 (2035)
ADTT: 10%
DHV: 370 (2035)
Design Speed: 70 m.p.h.
Posted Speed: 65 m.p.h.

HIGHWAY CLASSIFICATION

County Highway 14
Functional Class: Major Collector (Non-Urban)
ADT: 762 (2015); 930 (2035)
ADTT: 10%
DHV: 93 (2035)
Design Speed: 50 m.p.h.
Posted Speed: Unposted



LOCATION SKETCH

LOADING HL-93

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

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Design Specifications
5th Edition with 2010 Interims

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.11g
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.17g
Soil Site Class = D

DESIGN STRESSES

(Field Units)
 f'_c = 3,500 p.s.i.
 f_y = 60,000 p.s.i. (Reinforcement)
(Precast Prestressed Units)
 f'_c = 5,000 p.s.i.
 f'_c = 6,000 p.s.i.
 f_{pu} = 270,000 p.s.i. ($1/2"$ low lax strands)
 f_{pbt} = 201,960 p.s.i. ($1/2"$ low lax strands)

GENERAL PLAN

IL 336 OVER CH 14
FAP 407 - SECTION (55-3)A
MCDONOUGH COUNTY
STATION 681+23.20
STR. NO. 055-0070 (NB)
STR. NO. 055-0071 (SB)

**NOT FOR CONSTRUCTION
FOR ROADWAY REFERENCE ONLY**

Hutchison Engineering, Inc.
Jacksonville & Shorewood, Illinois

USER NAME = jdeon	DESIGNED - JOH	REVISED -
PLOT SCALE = NONE	CHECKED - BAN	REVISED -
PLOT DATE = 12/12/2012	DRAWN - TAC	REVISED -
	CHECKED - JOH/BAN	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP 407 (IL RTE 336)
CH 14 TS & L
SHEET NO. 1 OF 2 SHEETS

F.A.P. RTE. 407	SECTION (55-3)A	COUNTY McDonough	TOTAL SHEETS 671	SHEET NO. 259
055-0070(SB) & 055-0071(NB)		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				