

Existing Structure: S.N. 037-0015 and 037-0016 Built as F.A.I. 74 in 1967 section 37-4HB. 3 span concrete slab bridges 117'-6" Back to Back Abuts. 43'-8" out to out width. Superstructures and abutments are to be removed and replaced. Traffic is to be maintained using stage construction.

No salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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STATION 1422+16.80
RE-BUILT 20 BY
STATE OF ILLINOIS
F.A.I. RTE. 74 SEC. 37-4HB
LOADING HL-93
STRUCTURE NO. 037-0015 (S.B.)

STATION 1422+16.80
RE-BUILT 20 BY
STATE OF ILLINOIS
F.A.I. RTE. 74 SEC. 37-4HB
LOADING HL-93
STRUCTURE NO. 037-0016 (N.B.)

NAME PLATE

See Std. 515001

Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

LOADING HL 93

Allow 25#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications with 2008 Interims (Superstructure)

DESIGN STRESSES

FIELD UNITS NEW CONSTRUCTION	FIELD UNITS EXISTING STRUCTURE
$f'_c = 3,500$ psi	$f'_c = 1,400$ psi
$f_y = 60,000$ psi (reinforcement)	$f_s = 20,000$ psi (Reinforcement)

SEISMIC DATA

New Construction:
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.057g
Design Spectral Acceleration at 0.2 Sec. (S_{D5}) = 0.09g
Soil Site Class = D

Existing Piers:
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04
Site Coefficient (S) = 1.0

GENERAL PLAN & ELEVATION

I-74 OVER OPHIEM ROAD

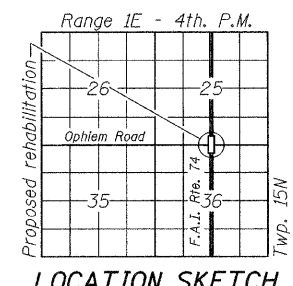
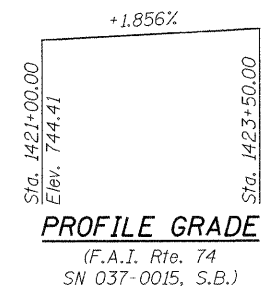
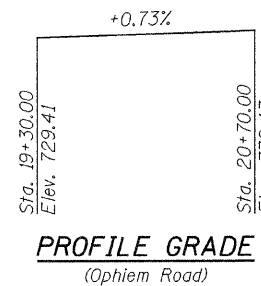
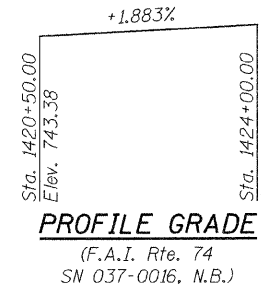
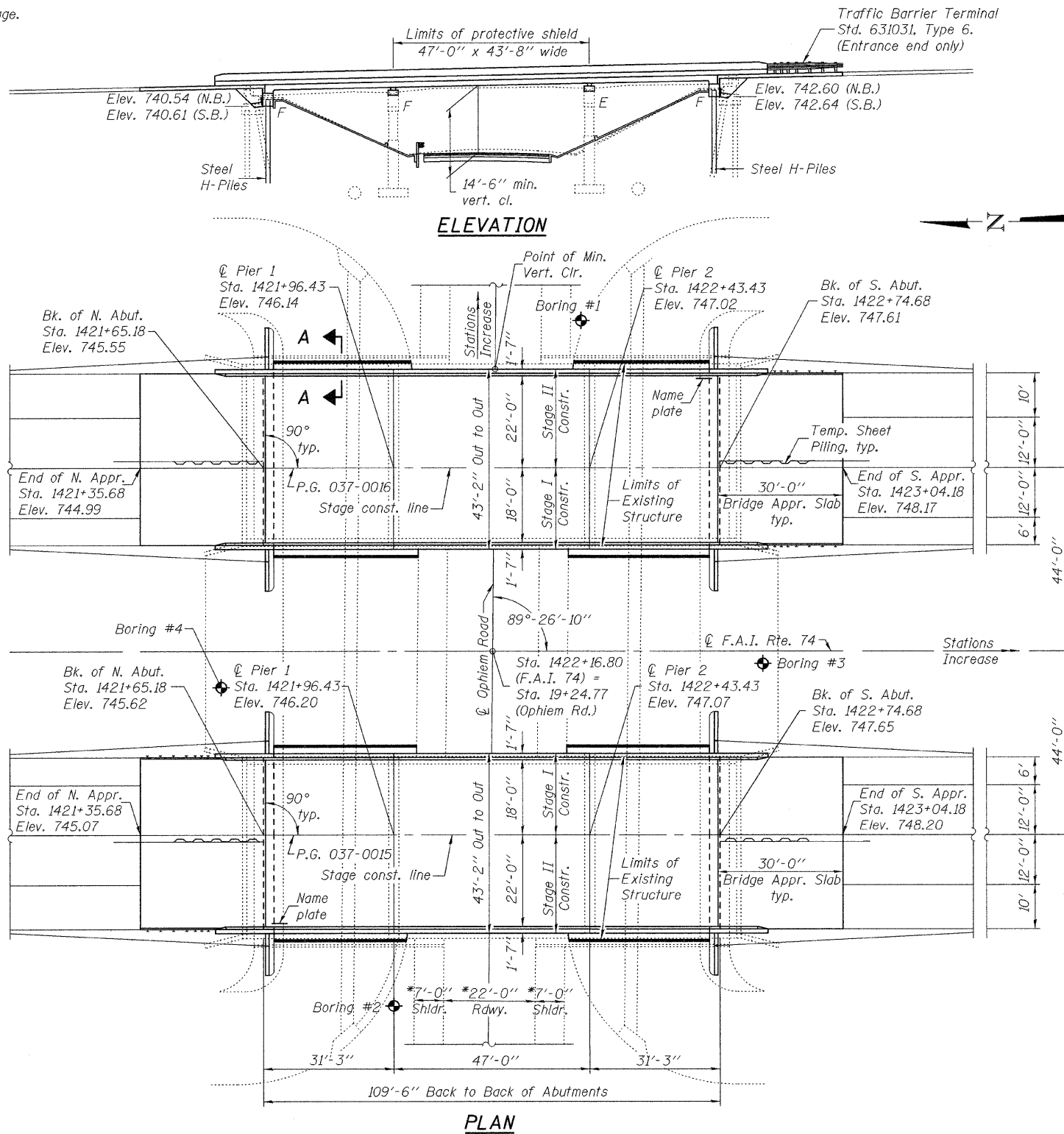
F.A.I. RTE. 74 - SEC. 37-4HB

HENRY COUNTY

STA. 1422+16.80

STRUCTURE NO. 037-0015 (S.B.)

STRUCTURE NO. 037-0016 (N.B.)



DESIGNED	<i>Allen R. B...</i>
CHECKED	<i>Richard D. Tolson</i>
DRAWN	<i>h.t. duong</i>
CHECKED	<i>NRB/MUR/LGA</i>

EXAMINED	<i>Thomas J. Anderson</i>	September 29, 2009
PASSED	<i>Barth J. Anderson</i>	

Note: For Section A-A see sheet 2 of 30.
* Dimensions are taken from existing plans. For proposed dimensions, see roadway plans.



EXPIRES 11-30-2010

SHEET NO. 1	F.A.I. RTE. 74	SECTION 37-4HB	COUNTY Henry	TOTAL SHEETS 148	SHEET NO. 37
30 SHEET					
CONTRACT NO. 64264					
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					