

Bench Mark: Chiseled square on northeast wingwall of S.N. 082-0212. Right of Station 438+68 Elevation 414.95

Existing Structure: S.N. 082-0212 was built in 1972 at Sta. 437+31.90 as SBI Rte. 13 Sec. 28BR

The structure consists of three simple span PPC-deck beams on pile bent abutments and piers on concrete piles.

The bk. to bk. abutments dimension measures 117'-8³/₈" while the O.-O. width measures 33'-4¹/₂".

The existing superstructure shall be removed and replaced with PPC deck beams.

Road closure shall be used during construction. Traffic to be detoured.

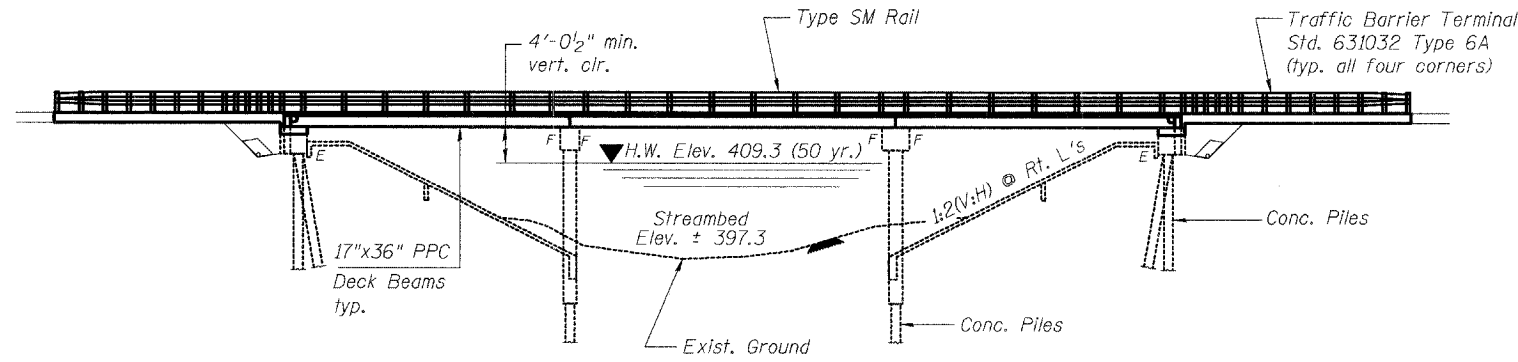
No salvage

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. F.A.P. 592	SECTION 28BR-2	COUNTY ST. CLAIR	SHEET NO. 51	SHEET NO. 31	SHEET NO. 1 21 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

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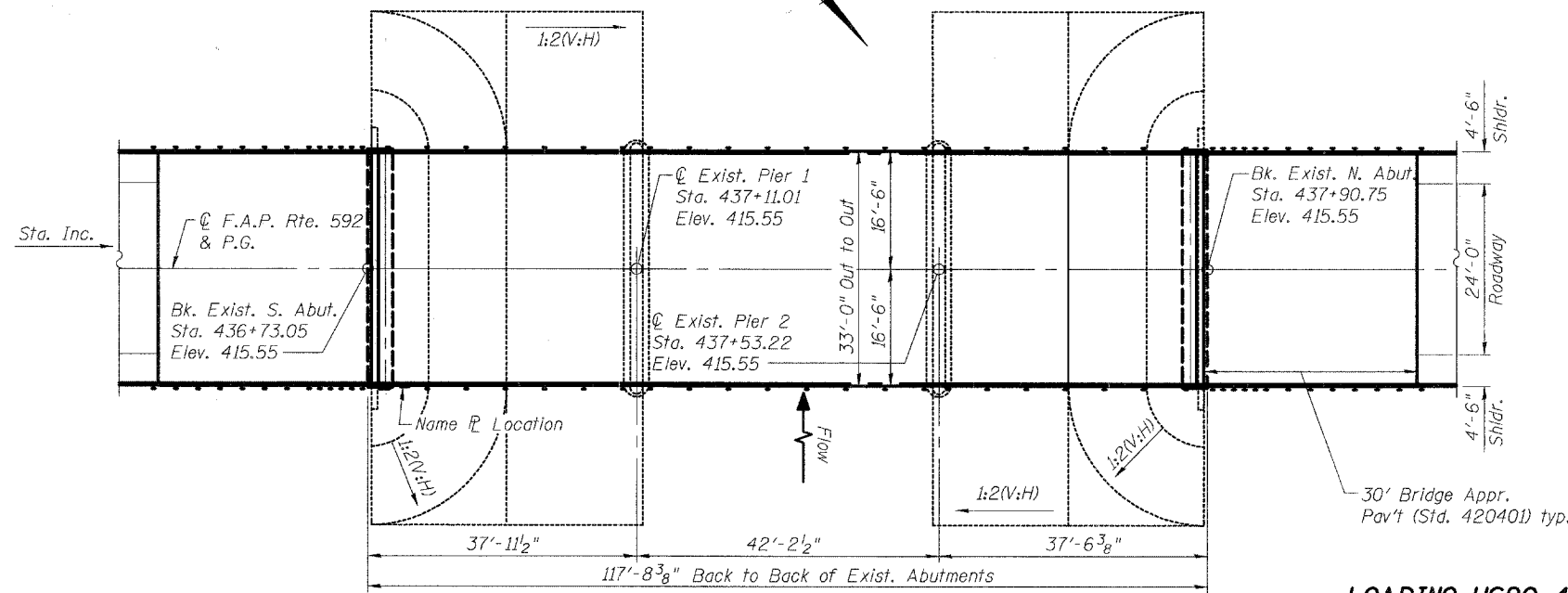
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ELEVATION

SCOPE OF WORK

1. Existing deck beams, HMA wearing surface, and railing shall be removed.
2. Repair abutments, repair piers, and repair slope walls.
3. New deck beams shall be installed and doweled into position.
4. Concrete wearing surface shall be poured and bridge rail installed.



PLAN

STATION 437+31.90
BUILT 200 BY
STATE OF ILLINOIS
FAP RTE 592 - SEC 28BR-2
LOADING HS20
STR. NO. 082-0212

NAME PLATE

See Std. 515001

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



Alan D. Lukens Date 6-14-06

Licensed Structural Engineer
State of Illinois No. 081-005167
License Expires 11/30/06

LOADING HS20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO

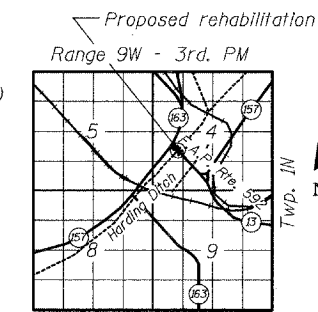
DESIGN STRESSES

FIELD UNITS

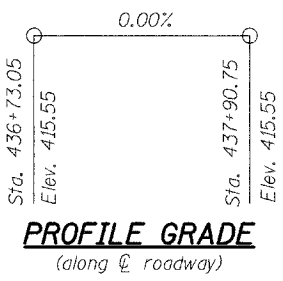
- $f'_c = 3,500$ psi
- $f'_c = 5,000$ psi (Concrete Wearing Surface)
- $f_y = 60,000$ psi (reinforcement)

PRECAST PRESTRESSED UNITS

- $f'_c = 5,000$ psi
- $f'_{ci} = 4,000$ psi
- $f'_s = 270,000$ psi (1/2" ϕ low lax. strands)
- $f'_{si} = 201,960$ psi (1/2" ϕ low lax. strands)



LOCATION SKETCH



DESIGNED	ADL
CHECKED	WLW
DRAWN	RJP
CHECKED	ADL

GENERAL PLAN & ELEVATION
F.A.P. ROUTE 592 - SECTION 28BR-2
ST. CLAIR COUNTY
STATION 437+31.90
STRUCTURE NO. 082-0212

6/13/2006

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