ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 72	74-70HBR	PIATT	41	17
FED. ROAD DIST. NO. 5	ILLINOIS	PROJECT		

Sheet 1 of 20 CONTRACT #90957

B.M. #4329-7 Chiseled Square on Wingwall at the Northwest Corner of the Bridge Elev. 753.589

Existing Structure: S.N. 074-0007, Built in 1969 as F.A. Route 11, Section 74-70HB at Station 1461+61.77 (I-72). The existing structure is a Four Span Continuous Wide Flange Beam Bridge supporting a R.C. Slab on multiple column hammerhead piers on timber piles and pile bent abutments on concrete piles. Overall length is 269'-2" back to back of abutments. Bridge width is 34'-0" out to out of deck with a 30'-6" roadway width measured face to face of curbs. The existing superstructure will be raised $12\frac{3}{4}$". The contractor will remove and replace the existing concrete deck and complete other work as shown on the plans.

Project will be completed under road closure. Ramps will remain open for the duration of the project.

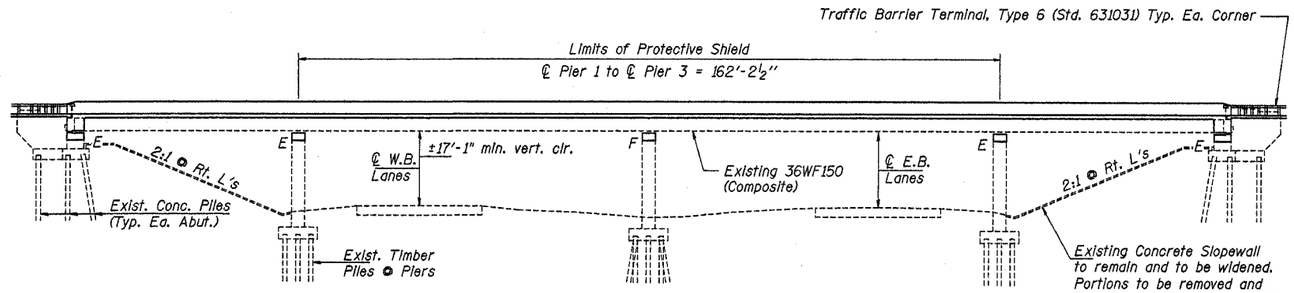
No Salvage.

STATION 1421+61.77
REBUILT 200 BY
STATE OF ILLINOIS
F.A.I. RT. 72 SEC. 74-70HBR
LOADING HS20
STR. NO. 074-0007

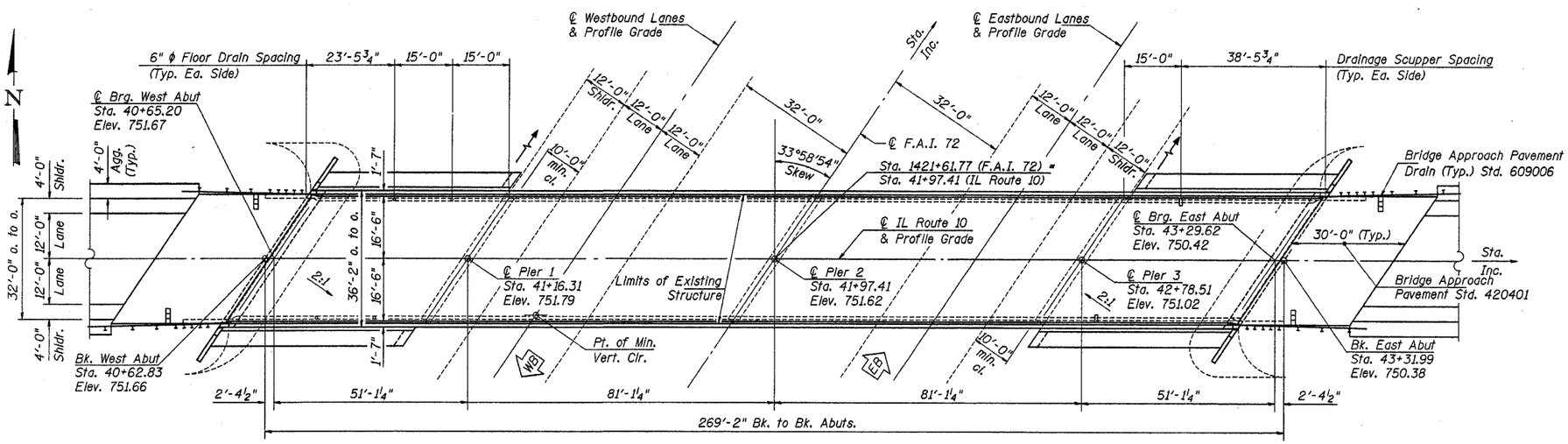
LETTERING FOR NAME PLATES

See Std. 515001

Locate one new name plate adjacent to each existing name plate on Pier 1 and Pier 3.



ELEVATION



PLAN

INDEX OF SHEETS

1. General Plan and Elevation
2. General Notes and Total Bill of Material
3. Slopewall Details
4.-5. Top of Slab Elevations
6. Superstructure
7.-8. Superstructure Details
9. Drainage Scupper, DS-12
10. Structural Steel
11. Jacking Existing Superstructure
12.-13. Bearing Details
14. Abutment Concrete Removal Details
15. West Abutment
16. East Abutment
17. Abutment Details
18. Pier Modifications
19. Bar Splicer Assembly Details
20. Anchor Bolt Details

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 4.7%g
Site Coefficient (S) = 1.5

DESIGN SPECIFICATIONS

1996 AASHTO with 1997 through 2002 Interims

LOADING HS20-44

Allow 25#/Sq. Ft. for future wearing surface

DESIGN STRESSES

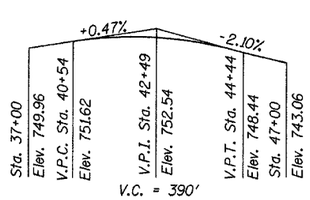
New Construction

f'_c = 3,500 psi
f_y = 60,000 psi (Reinforcement)

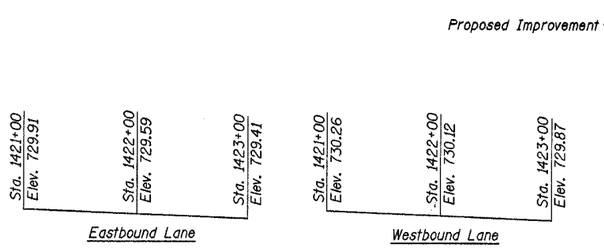
Existing Structure

f_c = 1,400 psi (Substructure)
f_s = 20,000 psi (Reinforcement)
f_y = 36,000 psi (Structural Steel A-36)
n = 10

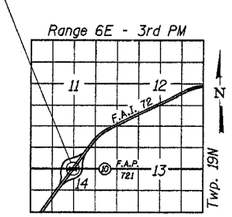
APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES



PROFILE GRADE
(Along ℄ of IL Route 10)



PROFILE GRADE F.A.I. 72



LOCATION SKETCH

MICHAEL D. CUMMINS 081-0048529 LICENSED STRUCTURAL ENGINEER SPRINGFIELD ILLINOIS

Michael D. Cummins 10/8/2004
(Expires 11/30/2004)

DESIGNED	A.J.E. & T.S.H.
CHECKED	M.D.C.
DRAWN	A.J.E. & T.S.H.
CHECKED	M.D.C.

GENERAL PLAN & ELEVATION

IL ROUTE 10 OVER I-72
F.A.I. ROUTE 72 SECTION 74-70HBR
PIATT COUNTY
STA. 1421+61.77
S.N. 074-0007

CUMMINS ENGINEERING CORPORATION

JOB #: 2088
FILE: 088GPE
DATE: 5/14/04