

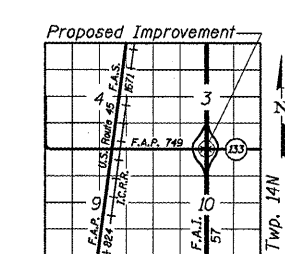
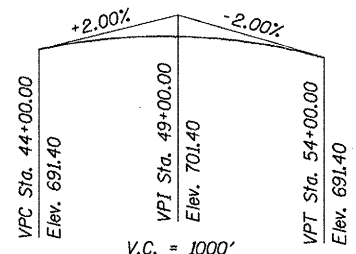
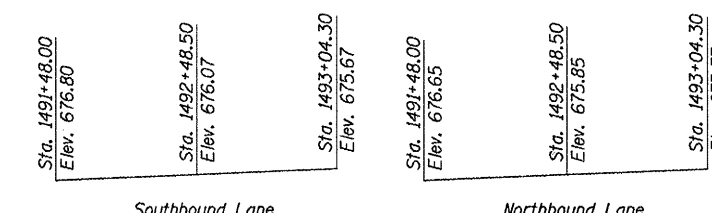
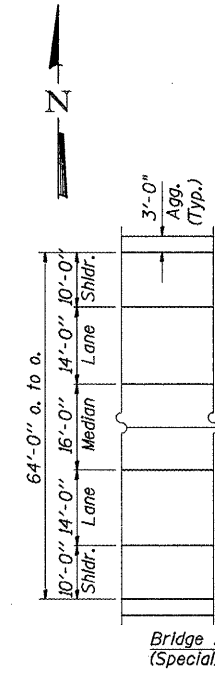
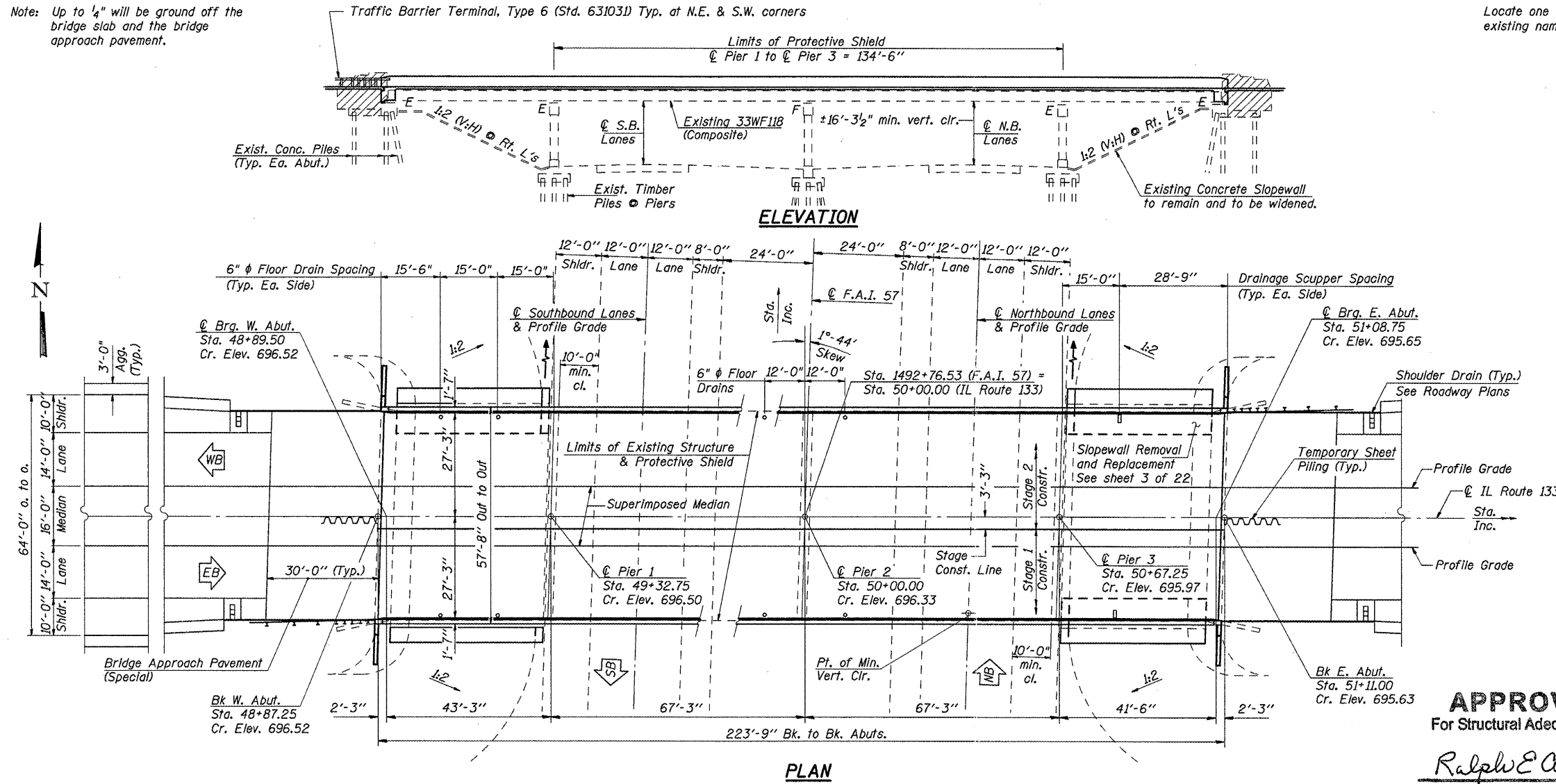
B.M. #4343-1 Chiseled Square on the Northwest Corner of the Southwest Wingwall of the bridge Elev. 698.155

Existing Structure: S.N. 021-0024, Built In 1968 as Section 21-25HB-2 at Station 1492+76.53 (I-57). 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 223'-9" back to back of abutments. Bridge width is 55'-8" out to out of deck with two 18'-3" traffic lanes and a 16'-0" median measured face to face. The existing deck has a 1 1/4" bituminous surface overlay with waterproofing membrane. The contractor will remove and replace the existing concrete deck and complete other work as shown in these plans.

Traffic shall be maintained at all times utilizing Stage Construction.

No Salvage.

Note: Up to 1/4" will be ground off the bridge slab and the bridge approach pavement.



DESIGNED	Ruben V. Boehler
CHECKED	Tim S. Howard
DRAWN	Nicole L. Darling
CHECKED	Michael D. Cummins

PROFILE GRADE F.A.I. 57

PROFILE GRADE  
(Along median edge of roadway)  
(The profile grade shows the final elevations after grinding.)

LOCATION SKETCH

STATION 1492+76.53  
REBUILT 200 BY  
STATE OF ILLINOIS  
F.A.I. RT. 57 SEC. (15,21-25HB-2)BR  
LOADING HS20  
STR. NO. 021-0024

**LETTERING FOR NAME PLATES**

See Std. 515001  
Locate one new name plate adjacent to each existing name plate on Pier 1 and Pier 3.

**INDEX OF SHEETS**

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

**SEISMIC DATA**

Seismic Performance Category (SPC) = A  
Bedrock Acceleration Coefficient (A) = 0.050  
Site Coefficient (S) = 1.5

**DESIGN SPECIFICATIONS**

2002 AASHTO

**LOADING HS20-44**

Allow 50#/Sq. Ft. for future wearing surface

**DESIGN STRESSES**

New Construction

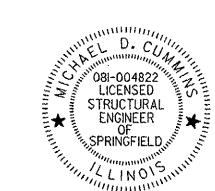
$f_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)

Existing Structure

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

**APPROVED**  
For Structural Adequacy Only

*Ralph E. Anderson* (TSJ)  
Engineer of Bridges & Structures



*Michael D. Cummins* (12-11-09)  
(Expires 11/30/2010)

**GENERAL PLAN & ELEVATION**

IL ROUTE 133 OVER I-57  
F.A.I. ROUTE 57 SECTION (15,21-25HB-2)BR  
DOUGLAS COUNTY  
STA. 1492+76.53  
S.N. 021-0024

CUMMINS ENGINEERING CORPORATION	JOB #: 2114
	FILE: 2114GPE
	DATE: 10/24/06

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 57	(15,21-25HB-2)BR	DOUGLAS	65	37
FED. ROAD DIST. NO. 5	ILLINOIS PROJECT			
Sheet 1 of 22			CONTRACT #90952	