

B.M.: PK Nail on East shoulder pavement Sta. 63+84.00, offset 16' Rt., Elev. 665.017

Existing Structure: SN 099-0133 at Sta. 64+70 built in 1924 as S.B I. 44 Sec. 18. Existing structure is a 3 span 21" X 36" PPC Deck Beam Bridge with the 4" concrete wearing surface. In 1971 abutments and piers were widened to accommodate the new superstructure. The substructure consists of two closed abutments and two solid concrete piers. The structure measures 128'-11 1/2" Bk. to Bk. Abutments and 33'-0" Out to Out Deck. Traffic is to be maintained utilizing stage construction. One lane for both directions will be provided by using temporary traffic signals.

Salvage: None

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STATION 65+70
REBUILT 200 BY
STATE OF ILLINOIS
FAP RT. 852 SEC. 18B
LOADING HL 93
S.N. 099-0133

NAME PLATE
See Std. 515001

SCOPE OF WORK

1. Total Superstructure Removal and Replacement
2. Substructure Repairs
3. Approach Slab Removal and Replacement

GENERAL NOTES

Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.

Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60 (IL Modified). See Special Provisions.

The Contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.

Attach new Name Plate to the inside face of Railing as shown. Existing name plate is to be removed, cleaned and relocated adjacent to new name plate. Cost included in the cost of Name Plates.

Reinforcement Bars designated (E) shall be epoxy coated.

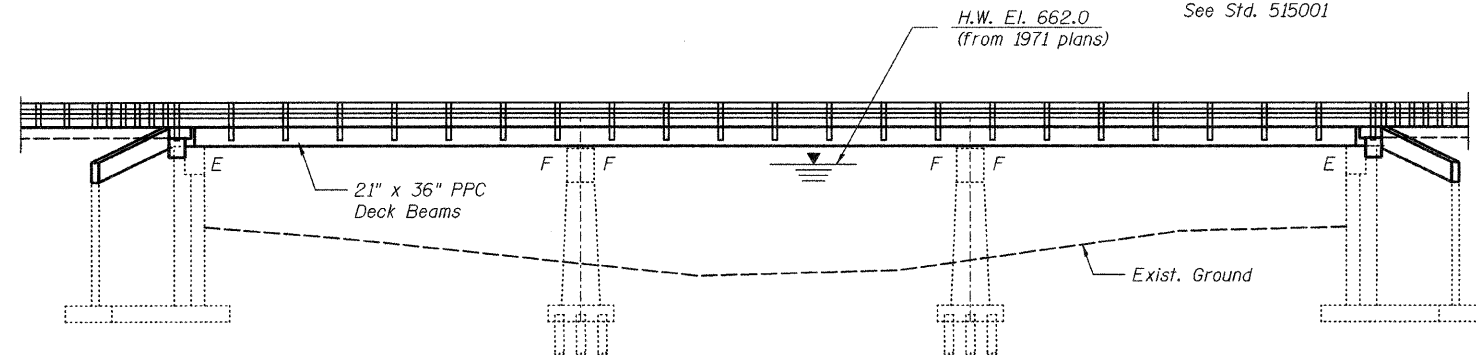
After the removal of the existing beams for stage I removal, the Contractor shall re-connect or re-engage the transverse ties in the existing beams for stage I traffic.

Burn or cut the existing dowel rods flush with existing bearing seat. Grind the existing dowel rods smooth and seal with epoxy. The cost of this work shall be included with "Removal of Existing Superstructure."

No in-stream work will be allowed on this project.

The minimum thickness of the concrete overlay shall be 5" and varies as required to adjust for the new profile grade and beam camber.

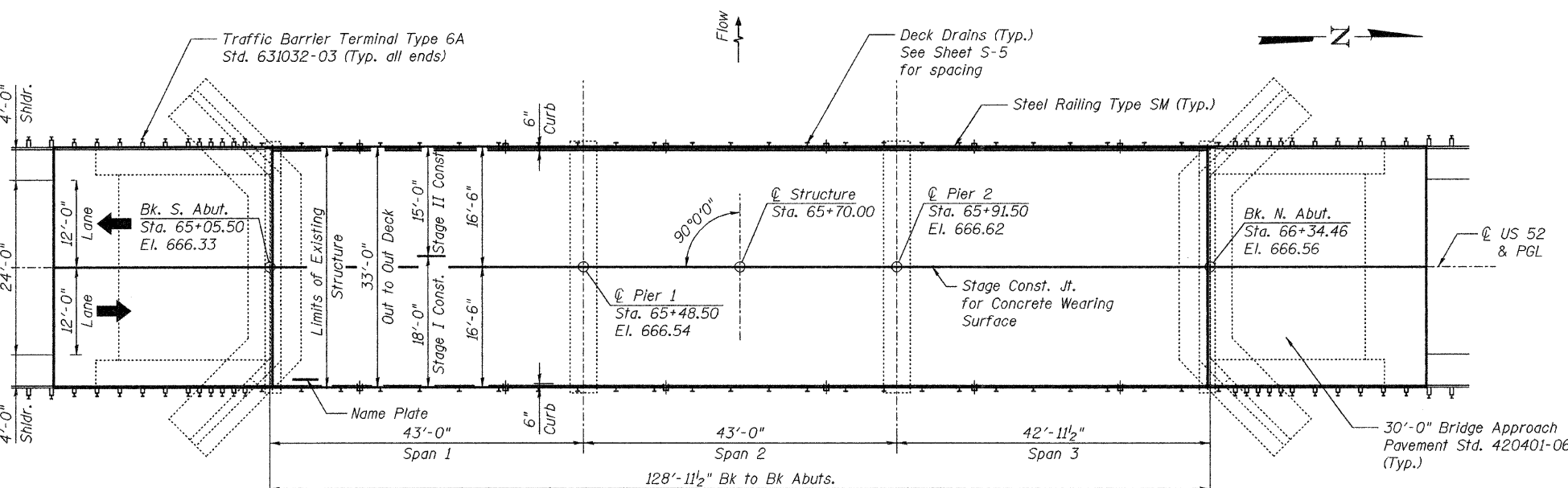
Repair of the substructure shall be completed prior to placement of the new deck beams.



ELEVATION

INDEX OF SHEETS

- S-1. General Plan & Elevation
- S-2. Stage Construction Details
- S-3. Temporary Concrete Barrier
- S-4. 21"x36" Deck Beam
- S-5. 21"x36" Deck Beam Details
- S-6. Superstructure Details 1
- S-7. Superstructure Details 2
- S-8. Steel Railing Details
- S-9. North and South Abutment Repairs
- S-10. North and South Abutments
- S-11. Pier 1
- S-12. Pier 2
- S-13. Bar Splicer Details



PLAN

LOADING HL - 93

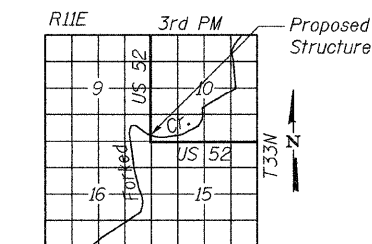
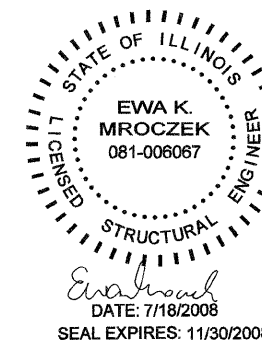
No future wearing surface allowed

DESIGN SPECIFICATIONS

AASHTO LRFD Bridge Design Specifications
(4th Edition, 2007)

DESIGN STRESSES

FIELD UNITS	PRESTRESSED UNITS
f'c = 3,500 psi	f'c = 6,000 psi
f_y = 60,000 psi	f'ci = 5,000 psi
	f's = 270,000 psi (1/2" ϕ low lax. strands)
	f'si = 201,400 psi (1/2" ϕ low lax. strands)



LOCATION SKETCH

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Reple E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Removal of Existing Superstructures	Each	1
Concrete Removal	Cu. Yd.	0.5
Concrete Structures	Cu. Yd.	6.8
Concrete Superstructure	Cu. Yd.	3.1
Bridge Deck Grooving	Sq. Yd.	442
Protective Coat	Sq. Yd.	470
Concrete Wearing Surface	Sq. Yd.	470
* Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	4,226
Reinforcement Bars, Epoxy Coated	Pound	7,090
Bar Splicers	Each	139
Steel Railing, Type SM	Foot	265
Name Plates	Each	1
Preformed Joint Strip Seal	Foot	66
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq. Ft.	474
* Asbestos Bearing Pad Removal	Each	24

* Special Provision

GENERAL PLAN AND ELEVATION

US 52 OVER FORKED CREEK

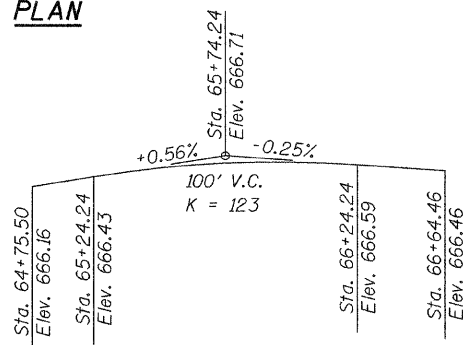
STA. 65+70
S.N. 099-0133

SHEET NO. S-1	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	852	18B	WILL	31	16
S-13 SHEETS			CONTRACT NO. 60D87		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

DESIGNED	B. Sauter
CHECKED	E. Mroczek
DRAWN	R. Danley
CHECKED	B. Sauter

CG **Ciorba Group, Inc.**
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@ciorba.com

PROFILE GRADE



7/18/2008

rdm:ley

N:\PROJ\3229\3229_23\Design\Structural\CAD\Sheet\3229_23_01_GP.sht