

Bench Mark - Chiseled "□" on S.E. Wingwall S.N. 038-0185
Sta. 559+37, 16'-6" Lt., Elevation 637.33.

Existing Structure S.N. 038-0185 - 3 span Precast, Prestressed Concrete Deck beam on pile bent piers and abutments. 34'-0" out to out superstructure and 128'-2" bk. to bk. abutments. Built as S.B.I. 25 Section 38 BR-1 in 1987. Existing Superstructure to be removed and replaced. Traffic to be detoured during construction.

No Salvage

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 1324	38 BR-1	IROQUOIS	29	9
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET NO. 1
7 SHEETS

Contract # 66564

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 Grade 60.

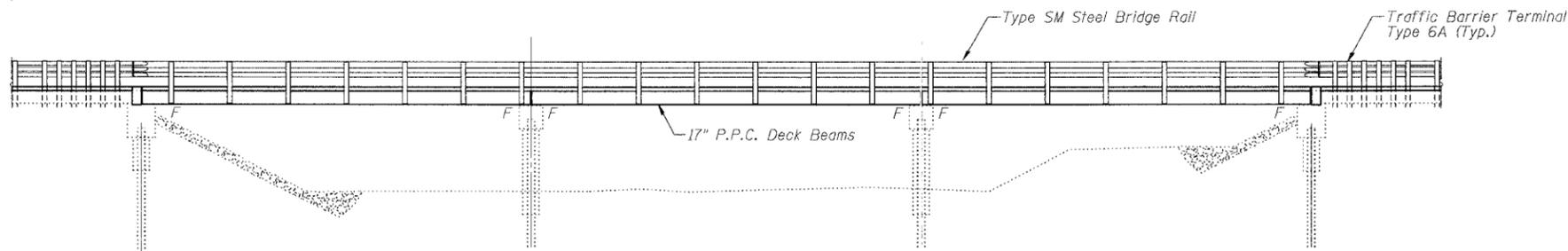
Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The Contractor is advised that the existing PPC Deck Beams are in 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.

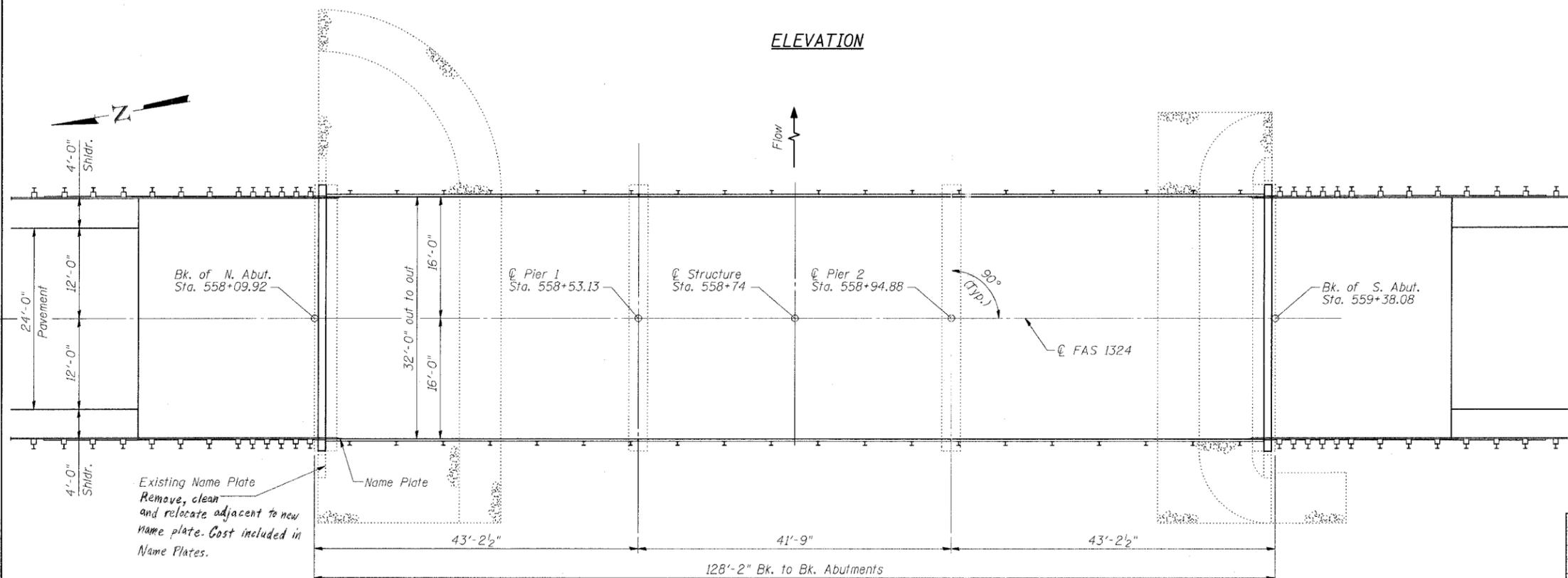
The cut strands at each beam end shall be given two coats of zinc dust spray or paint meeting the requirements of ASTM A780. The zinc dust spray or paint shall be applied before corrosion appears and allowed to dry according to the manufacturer's specifications prior to another coat of zinc. A concrete sealer meeting the requirements of Section 587 of the Standard Specifications shall be applied to the exterior face and 9" in on the underside of the fascia beams. The sealer shall be applied after visible crack growth has subsided. This work shall be performed by the producer and included with the cost of the beam.

If the Contractor procedure for existing beam removal or replacement of new beams involves placement of cranes or other heavy equipment on new beams, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the new beams. To distribute load to multiple beams and protect the concrete, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels and any outriggers in the down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying beams. Prior to placement of the timber mats, the following shall be done: placement and tightening of transverse tie assemblies, grouting and curing the dowel rods 24 hours minimum, and grouting and curing the shear keys. A temporary means of lateral restraint will be required for fascia beams at expansion ends of beams to prevent movement of the beams.

All construction joints shall be bonded.
No in-stream work will be allowed on this project.



ELEVATION



PLAN

LOADING HS20-44

No allowance for Future Wearing Surface

DESIGN SPECIFICATIONS

2002 AASHTO 17th Edition

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
 $f'_c = 4,000$ psi
 $f'_s = 270,000$ psi (1/2" low lax. strands)
 $f'_s = 201,960$ psi (3/8" low lax. strands)

EXISTING UNITS

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

STATION 558+74
REBUILT 20 BY
STATE OF ILLINOIS
F.A.S. ROUTE 1324
LOADING HS20
STR. NO. 038-0185

NAME PLATE

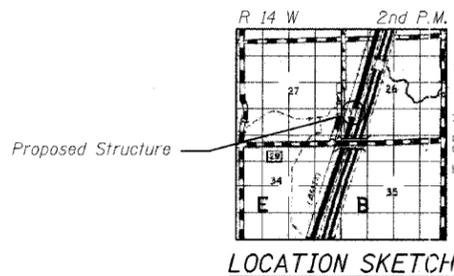
See Std. 515001
Attach to backside of 8" rail element.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Protective Coat	Sq. Yd.	445		445
Removal of Existing Superstructures	Each	1		1
Concrete Removal	Cu. Yd.		4.4	4.4
Concrete Structures	Cu. Yd.		5.7	5.7
Bridge Deck Grooving	Sq. Yd.	417		417
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	4000		4000
Reinforcement Bars Epoxy Coated	Lb.	5650	870	6520
Steel Bridge Rail, Type SM	Foot	256		256
Name Plates	Each	1		1
Concrete Wearing Surface, 5"	Sq. Yd.	445		445

INDEX OF SHEETS

- General Plan & Elevation
- 3. Superstructure Details
- Type SM Steel Bridge Rail
- Concrete Removal Details
- Abutments



LOCATION SKETCH

FILE NAME = J:\03236\WO\DRAWINGS\038-0185\SNO38-0185_GPE.dgn
PLOT SCALE = 1/2"=20'
PLOT DATE = 12/27/05
PLOT TIME = 11:41 AM
OPERATOR = GVB

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION

OLD US 45 OVER LANGAN CREEK
FAS ROUTE 1324 SECTION 38 BR-1
IROQUOIS COUNTY
STATION 558+74
S.N. 038-0185

SCALE: VERT. 1"=10'
HORIZ. 1"=40'
DATE: 12/27/05

DRAWN BY: HEBERLING
DESIGNED BY: SANFORD
CHECKED BY:

COMPUTER FILE NO.
SNO38-0185_GPE.dgn
PROJECT
WO-10
03236

REVISIONS	
NAME	DATE

