Existing Structure - Single bridge built in 1958. Structure No. 001-3027 at Sta 336+56. The structure is a three span, wide flange steel beam bridge with open stub concrete abutments and solid concrete piers, 149'-6" back to back of abutments, 28'-0" roadway width and 0° skew.

Roadway will be closed during construction. Access to local properties shall be maintained during construction.

No salvage.

BM #2 (Location #1)-60d Spike in Power Pole, 40' Rt. of Sta 337+58, Elevation = 600.59

INDEX OF SHEETS

- General Plan and Elevation
- 2-3 Top of Slab Elevations
- 4-5 Superstructure
- Steel Bridge Rail (Special)
- Structural Steel Details
- Moment & Reaction Tables, Jack and Remove Existing Bearings
- Type I Elastomeric Bearing
- 10 Type II Elastomeric Bearing
- 11 Anchor Bolt Details for Bearings
- 12 Bridge Approach Pavement (Special)

CURL CREEK REBUILT 200_ SEC. 05-00189-00-BR PROJECT RS-1588 (106) LOADING HS20 STR. NO. 001-3027

Rail Mount Name Plate at Southwest Corner of Bridge (See Plan)

NAME PLATE

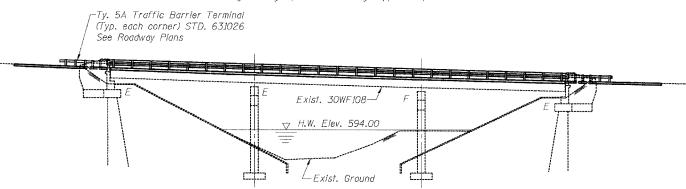
See Std. 515001 (1 Required)

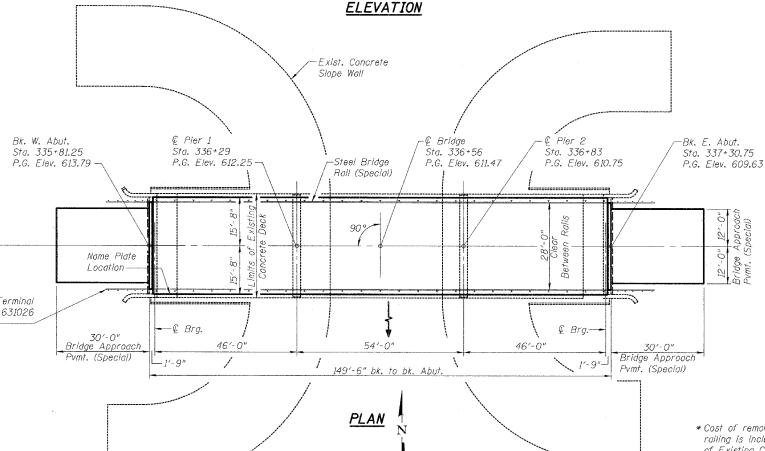
> Sta. Inc. € FAS Rte 1588 & Profile Grade Line -Ty. 5A Traffic Barrier Terminal

(Typ. each corner) STD. 631026 See Roadway Plans

SCOPE OF WORK

- Remove deck, curbs, railing and top of abutment backwalls.
- Remove existing rocker expansion bearings at abutments. Replace with elastomeric bearings.
- Install shear connectors in positive moment areas of beam lines.
- Construct 7^l_2 " deck, top of abutment backwalls, preformed joint seals, steel bridge railing (special) and bridge approach pavements.





* Cost of removing existing steel bridge railing is included in Pay Item "Removal of Existing Concrete Deck".

Structure

LOCATION SKETCH

Location

Seismic Performance Category (SPC) = A **DESIGN SPECIFICATIONS** Bedrock Acceleration Coefficient (A) = 0,043

17th Edition - 2002 AASHTO Load Factor Design

LOADING HS 20-44

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

DESIGN STRESSES

FIELD UNITS f'c = 2500 psi (existing)f'c = 3500 psi (new) $fv = 60.000 \, psi \, (reinf.)$

fs = 18,000 psi (Existing Structure)

005167

 ${\it "I \ certify \ that \ to \ the \ best \ of \ my \ knowledge, information \ and}$ belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current 'AASHTO Standard Specifications for Highway Bridges'.'

> als To him 01/25/06

Alan D. Lukens Licensed Structural Engineer State of Illinois No. 081-005167 License Expires November 30, 2006

GENERAL NOTES

FAS RTE 1588 FED. ROAD DIST. NO. 7 ILLINOIS

Location #1 Structure No. 001-302

* 05-00189-00-8R SHEET NO. 1 OF 12

Painting of the existing structural steel will not be done under this contract.

All new structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. Final field painting will be required for the elastomeric bearing assemblies.

Field welding of construction accessories will not be permitted to the bottom flange of beams nor to the top flange for a distance equal to one-fourth the span length each way from pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

Reinforcement bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.

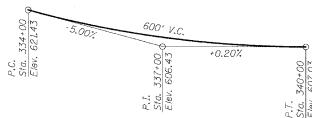
Plan dimensions and details relative to existing structure have been taken from existing plans, and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variation 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 existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

All construction joints shall be bonded.

Prior to pouring the new concrete deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item "Removal of Existing Concrete Deck". All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04.

The structural steel bearing plates of the Elastomeric Bearing Assembly shall conform to the requirements of AASHTO M'270 Grade 50.



PROFILE GRADE

TOTAL BILL OF MATERIAL

	ITEM	UNIT	SUPER	SUB	TOTAL
	Name Plates	EACH	1		1
ż	Removal of Existing Concrete Deck	EACH	1		1
oving existing steel bridge cluded in Pay Item "Removal Concrete Deck".	Protective Coat	SQ YD	512		512
	Elastomeric Bearing Assembly Type I	EACH	6		6
	Elastomeric Bearing Assembly Type II	EACH	6		6
	Concrete Superstructure	CU YD	116.0		116.0
	Stud Shear Connectors	EACH	2,172		2,172
	Reinforcement Bars, Epoxy Coated	POUND	26,880		26,880
	Preformed Joint Seal 2½"	FOOT	31.5		31.5
	Preformed Joint Seal 4"	FOOT	31.5		<i>31</i> .5
	Bridge Deck Grooving	SQ YD	458		458
	Concrete Removal	CU YD	3.1		3.1
	Jack and Remove Existing Bearings	Each	12		12
	Steel Bridge Rail (Special)	FOOT	299		299
	Bridge Approach Pavement (Special)	SQ YD	160		160
4TH P.M. RANGE 6 WEST RANGE 5 WE	CT CT				
THINGE O WEST MANGE O WE	2'				I

EAW 12/05 REV. NO. DRAWN CHKD. APPD. DATE

F.A.S. RTE. 1588 OVER CURL CREEK SECTION 05-00189-00-BR Project RS-1588 (106) ADAMS COUNTY

GENERAL PLAN AND ELEVATION STRUCTURE NUMBER 001-3027 STATION 336+56

Engineers / Architects

616 North 24th Street (217) 223-3670 Quincy, Illinois 62301 FAX: 223-3603 www.klingner.com STATE OF ILLINOIS DESIGN FIRM * 1842738

KLINGNER

& ASSOCIATES, P.C.

SEISMIC DATA

Site Coefficient (S) = 1.0