

F.A.I. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2006-032 BY	WILL	505	261
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

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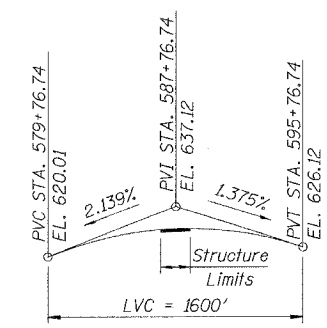
**GENERAL NOTES**

- \* 1. Fasteners shall be high strength bolts. Bolts  $\frac{7}{8}$ "  $\phi$ , open holes  $\frac{5}{16}$ "  $\phi$  unless otherwise noted.
- 2. Calculated weight of Structural Steel \*\*: M 270 Grade 50 = 103,270 lbs.  
M 270 Grade 36 = 12,220 lbs.  
Calculated weight of Anchor Bolts \*\*\* = 340 lbs.  
\*\* Structural Steel to be erected under pay item Erecting Structural Steel. The listed weights include weight of structural framing, low profile fixed bearings, side retainers, adjusting shim plates for bearings and bolts.  
\*\*\* Anchor bolts to be furnished and installed under pay item Furnishing and Erecting Structural Steel.
- \* 3. All structural steel shall be AASHTO M270 Grade 50, unless noted otherwise.
- 4. Field welding of construction accessories will not be permitted to beams.
- 5. Anchor bolts shall be set before bolting diaphragms over supports.
- \* 6. The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams and all splice plate material except fill plates.
- 7. Reinforcement bars shall conform to the requirements of AASTHO M31 or M322 Grade 60.
- 8. Partial depth saw cutting of the existing concrete deck over top of the beam flanges shall be permitted. See Special Provision for "Removal of Existing Non-Composite Bridge Decks".
- 9. Slope wall shall be reinforced with welded wire fabric, 6" x 6" - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft..
- 10. 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 for the work.
- 11. Protective Coat shall not be applied to the surfaces to which Waterproofing Membrane System is applied.
- 12. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of  $\frac{1}{8}$  inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two  $\frac{1}{8}$ " adjusting shims, of the dimensions of the bottom bearing plate, will be provided by the Fabrication Contractor for each bearing. In addition to all other plates or shims. For Type I Elastomeric Bearings, two  $\frac{1}{8}$ " adjusting shims will be provided by the Fabrication Contractor for each bearing and placed as detailed.
- 13. The Contractor shall drive 5 test piles, one at each abutment and pier, in a permanent location as directed by the Engineer before ordering the remainder of piles.
- 14. 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 covering removal of the existing concrete. All the 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.  
  
All existing construction accessories welded to the top flange over the pier(s) between the quarter points of the beams or girders shall be removed. The remaining weld shall be ground smooth and inspected for cracks using magnetic particle testing. Any cracks that cannot be removed by grinding approximately  $\frac{1}{4}$  inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of this work will be paid for according to Article 109.04.
- 15. Bridge Seat Sealer shall be applied to the seat area of the newly constructed abutments.
- 16. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead in this project.
- 17. All construction joints shall be bonded.
- 18. If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06 of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

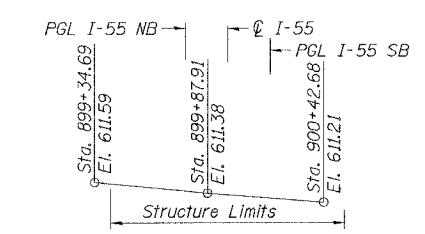
**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu Yd		144	144
Concrete Removal	Cu Yd		54.4	54.4
Removal of Existing Concrete Deck	Each	2		2
Structure Excavation	Cu Yd		240	240
Preformed Joint Seal 2 1/2"	Ft	188.5		188.5
Bridge Joint System (Expansion), 1-5/8"	Ft	233.0		233.0
Concrete Structures	Cu Yd		184.4	184.4
Concrete Superstructure	Cu Yd	609.6		609.6
Bridge Deck Grooving	Sq Yd	2,176		2,176
Protective Coat	Sq Yd	2,598	3	2,601
Erecting Elastomeric Bearing Assembly, Type I	Each	8		8
Erecting Elastomeric Bearing Assembly, Type II	Each	8		8
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq Ft		20	20
Structural Repair of Concrete (Depth Greater Than 5")	Sq Ft		5	5
Erecting Structural Steel	L Sum	0.3		0.3
Furnishing and Erecting Structural Steel	Lb	340		340
Stud Shear Connectors	Each	14,436		14,436
Reinforcement Bars, Epoxy Coated	Lb	147,880	26,660	174,540
Slope Wall 4 Inch	Sq Yd		181	181
Furnishing Steel Piles HP12x53	Ft		1,234	1,234
Driving Steel Piles	Ft		1,234	1,234
Test Pile Steel HP12x53	Each		5	5
Metal Shoes	Each		39	39
Braced Excavation	Cu Yd		92	92
Name Plates	Each	2		2
Bridge Seat Sealer	Sq Ft		148	148
Epoxy Crack Sealing	Ft		60	60
Geocomposite Wall Drain	Sq Yd		36	36
Pipe Underdrains for Structures 4"	Ft		90	90
Conduit Embedded in Structure, 2" dia., Galvanized Steel	Ft	377		377
Drainage Scuppers, DS-11	Each	24		24
Temporary Soil Retention System	Sq Ft		78	78
Bar Splicers	Each	1,110	296	1,406
Protective Shield	Sq Yd	998		998

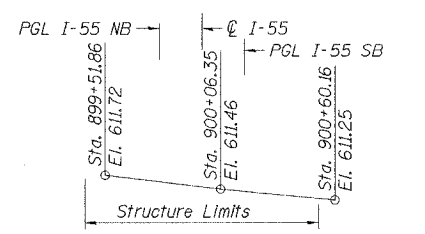
- 19. The organic zinc rich primer/epoxy/urethane paint system shall be used by the Fabrication Contractor for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. See Special Provision for Cleaning and Painting New Metal Structures.  
The Erection Contractor shall use care when working with beams. Touch up in the field will be performed by the Erection Contractor. The cost for touch up painting shall be included in the contract unit price for Erecting Structural Steel.
  - 20. See Special Provision for "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".
  - 21. Existing concrete surfaces against which concrete will be poured shall be clean and free of laitance and shall be roughened to a full amplitude of  $\frac{1}{4}$  inch. Existing surfaces include abutments and backwalls. Cost included with Concrete Structures as applicable.
- \* These notes included in erection contract For Information Only.



**PROFILE OF PGL I-55 NB & SB**  
(Developed from Survey Data)



**PROFILE OF U.S. ROUTE 30 WB**  
(From Survey)



**PROFILE OF U.S. ROUTE 30 EB**  
(From Survey)

STATION 587+80.82  
BUILT 20\_\_ BY  
STATE OF ILLINOIS  
F.A.I. RT. 55  
SECTION 2006-032 BY  
LOADING HS20 & ALT.  
STR. NO. 099-0016  
(Southbound Structure)

**NAME PLATE**  
See Std. 515001  
See Sht. SC-14 for location

STATION 587+80.82  
BUILT 20\_\_ BY  
STATE OF ILLINOIS  
F.A.I. RT. 55  
SECTION 2006-032 BY  
LOADING HS20 & ALT.  
STR. NO. 099-0017  
(Northbound Structure)

**NAME PLATE**  
See Std. 515001  
See Sht. SC-14 for location

**MORCOM, N.V., INC.**  
CONSULTING ENGINEERS  
CHICAGO, ILLINOIS

**SHT. SC-2 OF 38**

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
FAL ROUTE 55  
US 30 (PLAINFIELD ROAD) TO LILY CACHE SLOUGH  
SB & NB I-55 OVER US RTE. 30, S.N. 099-0016 & 099-0017  
STA. 587+80.82, SECTION 2006-032 BY  
WILL COUNTY

**GENERAL NOTES, INDEX OF SHEETS & TOTAL BILL OF MATERIAL**

SCALE: DRAWN BY PA  
DATE 07/21/06 CHECKED BY MJK

**TENG**  
TENG & ASSOCIATES, INC.  
ENGINEERS/ARCHITECTS/PLANNERS  
CHICAGO, ILLINOIS

PLOT DATE = 08/07/06  
 FILE NAME = 0990002.DGN  
 PLOT SCALE = 1"=40'  
 USER NAME = AUGER\*  
 7-18-2006 17:49:48  
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