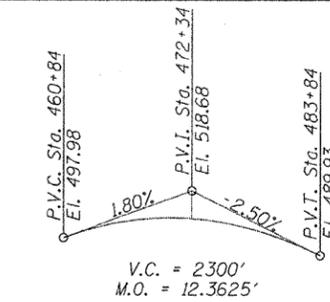


PROPOSED IMPROVEMENTS

1. Replace expansion joints at the abutments.
2. Hydroscarify deck $\frac{3}{4}$ " and install $2\frac{1}{4}$ " microsilica overlay.
3. Perform full depth deck patching.
4. Replace deteriorated diaphragms at abutments.
5. Replace steel rocker bearings at abutments with elastomerics.
6. Plug/extend existing floor drains.
7. Riprap abutments.
8. Substructure repairs.

INDEX OF SHEETS

1. General Plan & Elevation
2. Stage Construction Details
3. Riprap Details
4. Deck Slab Repair
5. Superstructure Concrete Removal
6. Superstructure Details
7. Superstructure Details
8. Preformed Joint Strip Seal
9. Floor Drain Details
10. Structural Steel Details
11. Bearing Details
12. Abutment Concrete Repair Details
13. Pier Concrete Repair Details
14. Bar Splicer Details



EXISTING PROFILE GRADE

(Along F.A.P. 690 P.G.)
(From Existing Plans)

DESIGN STRESSES

FIELD UNITS (NEW CONSTRUCTION)
 $f'_c = 3500$ psi
 $f_y = 60,000$ psi (Reinforcement)

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A3	Sq. Yd.		50	50
Filter Fabric	Sq. Yd.		50	50
Hot Mix Asphalt Surface Removal, 1 1/2"	Sq. Yd.	1136		1136
Concrete Removal	Cu. Yd.	27.8		27.8
Protective Shield	Sq. Yd.	1374		1374
Concrete Superstructure	Cu. Yd.	27.5		27.5
Bridge Deck Grooving	Sq. Yd.	900		900
Floor Drain Extension	Each	4		4
Reinforcement Bars, Epoxy Coated	Pound	3855		3855
Bar Splicers	Each	40		40
Preformed Joint Strip Seal	Foot	138		138
Elastomeric Bearing Assembly, Type I	Each	18		18
Anchor Bolts, 1"	Each		36	36
Protective Coat	Sq. Yd.	1877		1877
Polymer Concrete	Cu. Ft.	4.0		4.0
Furnishing and Erecting Structural Steel	Pound	8340		8340
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft.		721	721
Bridge Deck Microsilica Concrete Overlay, 2 1/4"	Sq. Yd.	1096		1096
Plug Existing Deck Drains	Each	4		4
Jack and Remove Existing Bearings	Each	18		18
Bridge Deck Hydro-scarification, 3/4"	Sq. Yd.	1096		1096
Cleaning Bridge Seats	Sq. Ft.		236	236
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	49.3		49.3
Structural Steel Removal	Pound	4770		4770

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts $\frac{3}{4}$ " ϕ , holes $\frac{5}{16}$ " ϕ , unless otherwise noted.

All structural steel shall be AASHTO M270 Grade 50.

Reinforcement bars shall conform to the requirements of ASTM A706, Grade 60.

Reinforcement bars designated (E) shall be epoxy coated.

The layout of the riprap may be varied to suit ground conditions in the field as determined by the Engineer.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

Plan dimensions and details relative to existing plans are subject to nominal construction 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 at the unit price bid for the work.

Cleaning and field painting of structural steel shall be done under a separate painting contract.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

The existing abutment seats shall be cleaned according to the special provision for "Cleaning Bridge Seats".

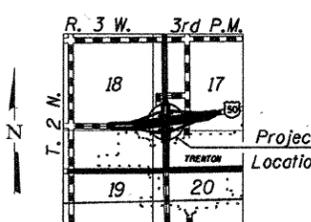
All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. Cost included with Furnishing and Erecting Structural Steel.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures."

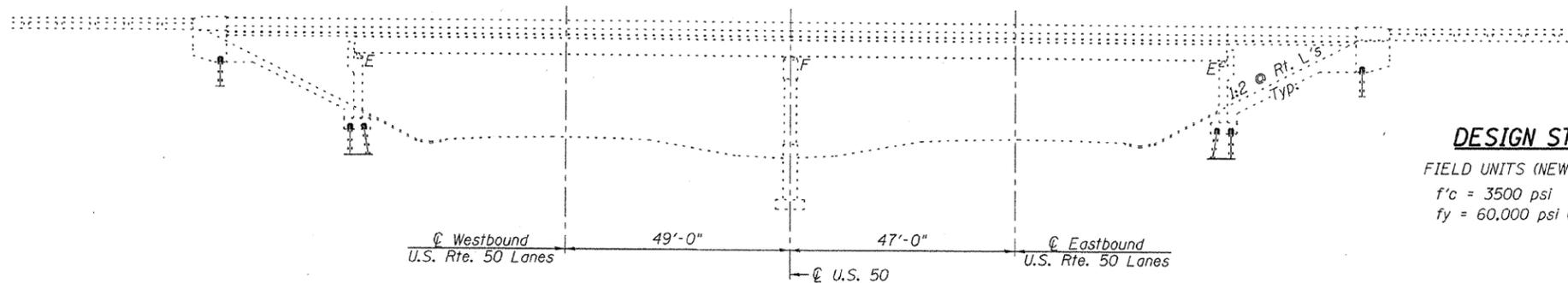
Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.

Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50°F.

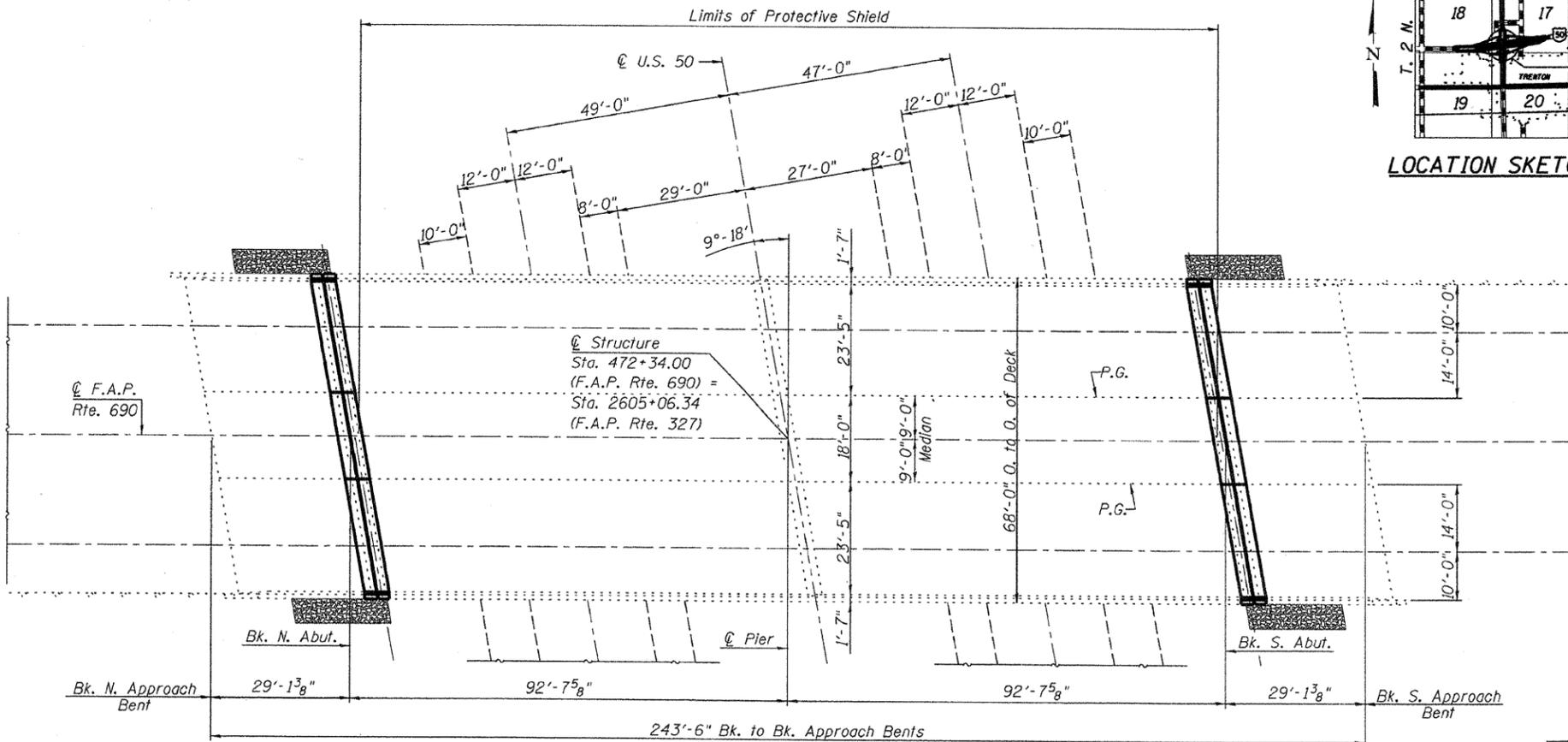
Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.



LOCATION SKETCH



ELEVATION



PLAN



Mark A. Henderson 12/2/09
Expiration Date 11/30/2010

GENERAL PLAN & ELEVATION
IL. ROUTE 160 OVER U.S. ROUTE 50
S.N. 014-0065



Allen Henderson & Associates, Inc.
Civil and Structural Engineers Springfield, IL
62703 Phone: (217)544-8033 IL Design Firm
No. 184-001907

SHEET NO. 1
14 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
690	14-12BR-1	CLINTON	72	21
CONTRACT NO. 76B27				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				