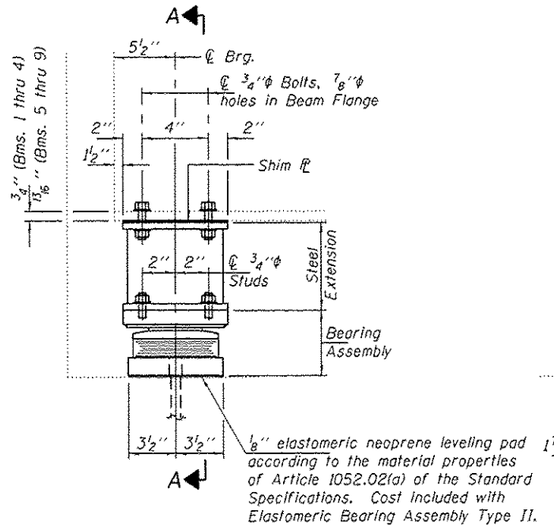
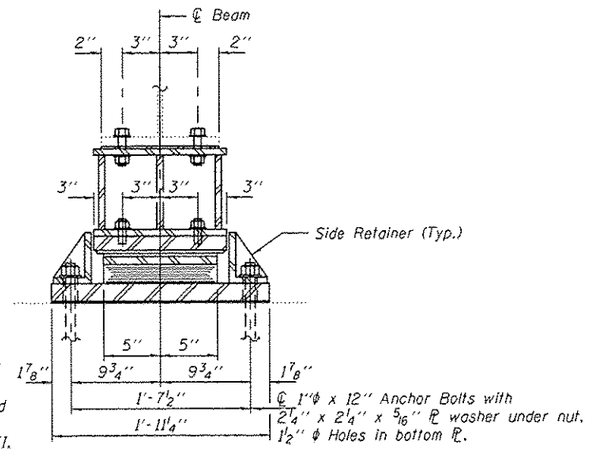


ELEVATION AT ABUTMENT



SECTION A-A

TYPE II TFE ELASTOMERIC EXP. BRG.

BEAM REACTIONS

R℄	(K)	16.2
R℄	(K)	26.3
Imp.	(K)	7.7
R (Total)	(K)	50.2

Notes:

Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.

Min. jack capacity = 30 Tons.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

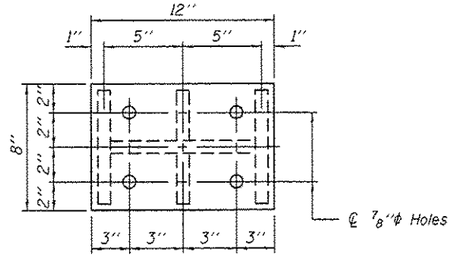
Anchor bolts for Type II bearings shall be placed in holes drilled through the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

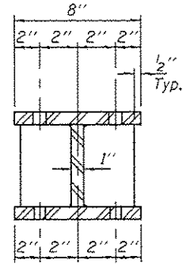
Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The ⅛" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

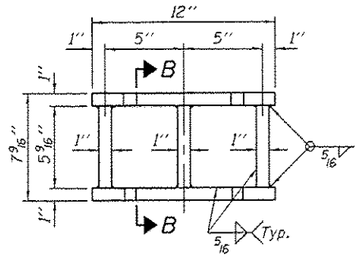
Bonding of ⅛" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



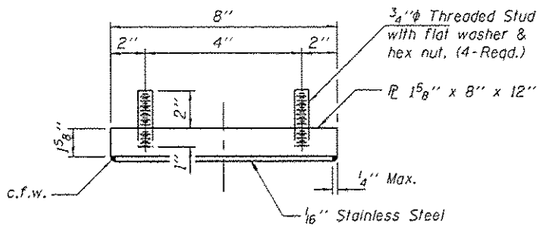
PLAN TOP AND BOTTOM PLATE



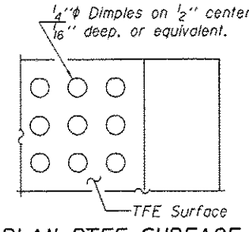
SECTION B-B



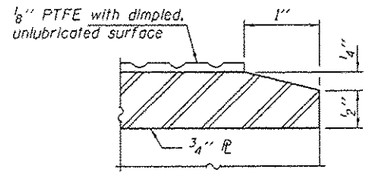
STEEL EXTENSION DETAIL



TOP BEARING ASSEMBLY



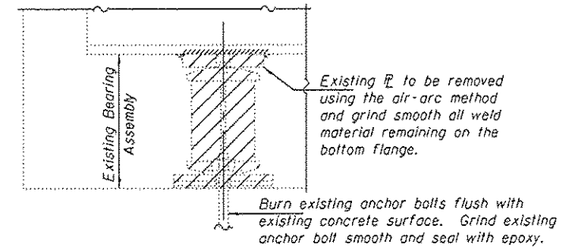
PLAN-PTFE SURFACE



SECTION THRU PTFE

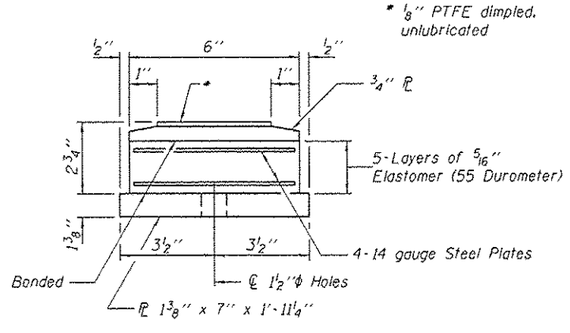
TABLE OF DIMENSION

Beam	Dim. "A"
1	0"
2	5/8"
3	0"
4	5/8"
5	½"
6	0"
7	5/8"
8	0"
9	5/8"

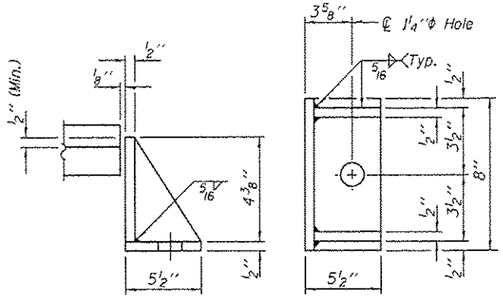


EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

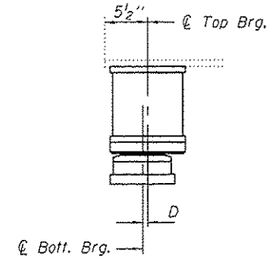


BOTTOM BEARING ASSEMBLY



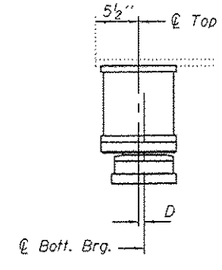
SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



BELOW 50° F.

(Move bott. brg. away from fixed brg.)



ABOVE 50° F.

(Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

D = ⅛" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	9
Jack and Remove Existing Bearings	Each	9
Furnishing and Erecting Structural Steel	Pound	1220
Anchor Bolts 1"ϕ	Each	18

TYII/REPS 12-03-2008

DESIGNED	-	SMR	
CHECKED	-	TLC	
DRAWN	-	Kyle M. Staffan	
CHECKED	-	SMR	TLC

EXAMINED — ACTING ENGINEER OF STRUCTURAL SERVICES

PASSED — ACTING ENGINEER OF BRIDGES AND STRUCTURES

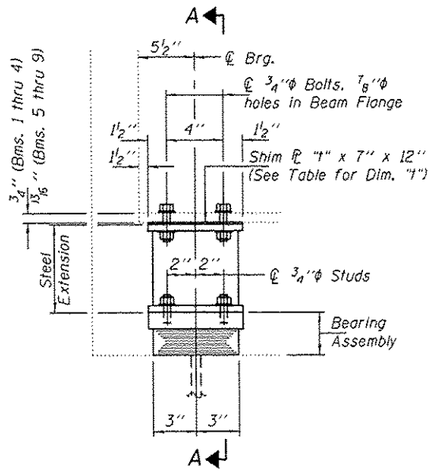
DATE - AUGUST 18, 2014

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

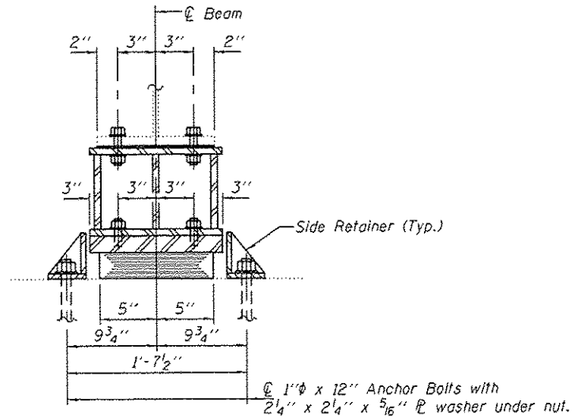
ELASTOMERIC BEARING, TYPE II DETAILS FOR WEST ABUTMENT
SN 060-0031 (E.B.)

SHEET NO. 6 OF 8 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(11,12)RS-3	MADISON	242	201
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			



ELEVATION AT ABUTMENT



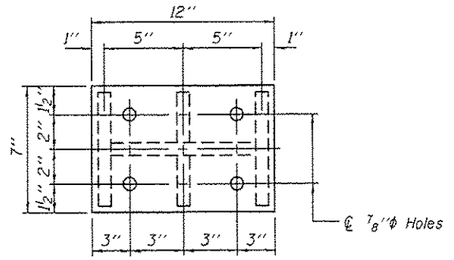
SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.

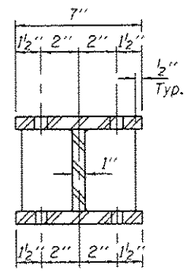
BEAM REACTIONS

RP	(K)	16.2
RL	(K)	26.3
Imp.	(K)	7.7
R (Total)	(K)	50.2

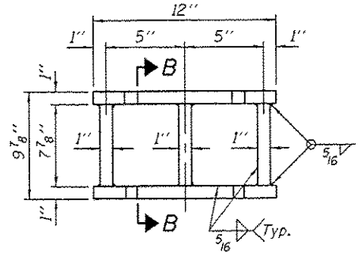
Notes:
Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.
Min. jack capacity = 30 Tons.
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type I.



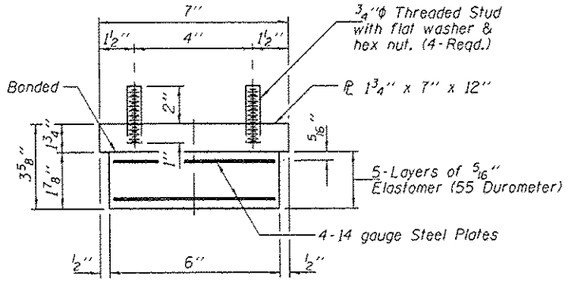
PLAN TOP AND BOTTOM PLATE



SECTION B-B



STEEL EXTENSION DETAIL

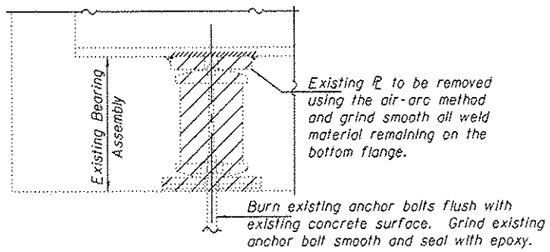


BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.

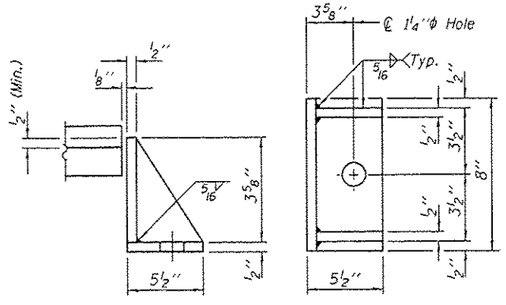
TABLE OF DIMENSION

Beam	Dim. "1"
1	0"
2	⅝"
3	0"
4	⅝"
5	½"
6	0"
7	⅝"
8	0"
9	⅝"



EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.



SIDE RETAINER

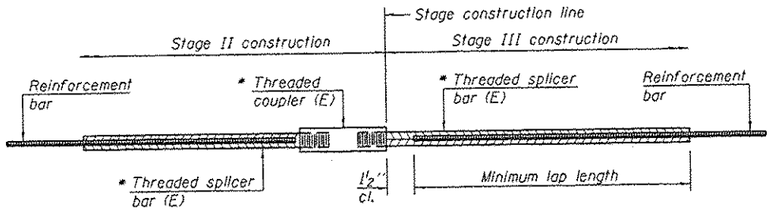
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	9
Jack and Remove Existing Bearings	Each	9
Furnishing and Erecting Structural Steel	Pound	1200
Anchor Bolts 1"ϕ	Each	18

TYI/REPS 12-03-2008

DESIGNED - SMR	EXAMINED	ACTING ENGINEER OF STRUCTURAL SERVICES	DATE - AUGUST 18, 2014	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ELASTOMERIC BEARING, TYPE I DETAILS FOR EAST ABUTMENT SN 060-0031 (E.B.)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - TLC						70	60-(11,12)RS-3	MADISON	242	202
DRAWN - Kyla M. Steffan	PASSED	ACTING ENGINEER OF BRIDGES AND STRUCTURES			SHEET NO. 7 OF 8 SHEETS			CONTRACT NO. 76F13		
CHECKED - SMR TLC								ILLINOIS FED. AID PROJECT		



STANDARD BAR SPLICER ASSEMBLY

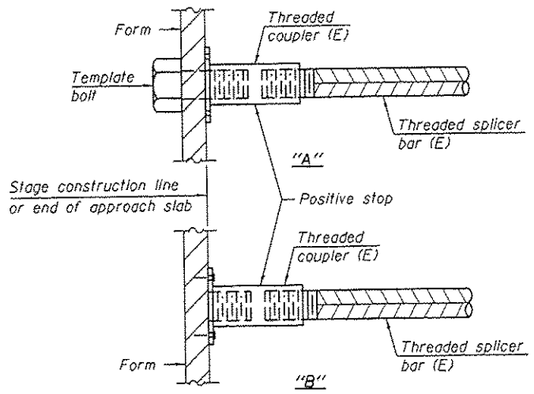
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C
Table 5: Epoxy bar, Class C
Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min. lap length + 1½" + thread length

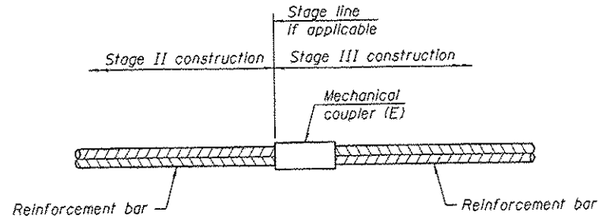
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
West Deck	#5	8	3
East Deck	#5	8	3
West Hatchblock	#6	4	3
East Hatchblock	#6	4	3



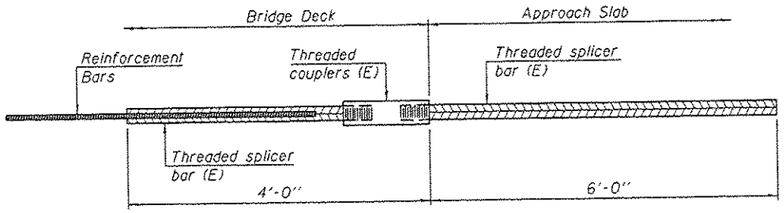
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



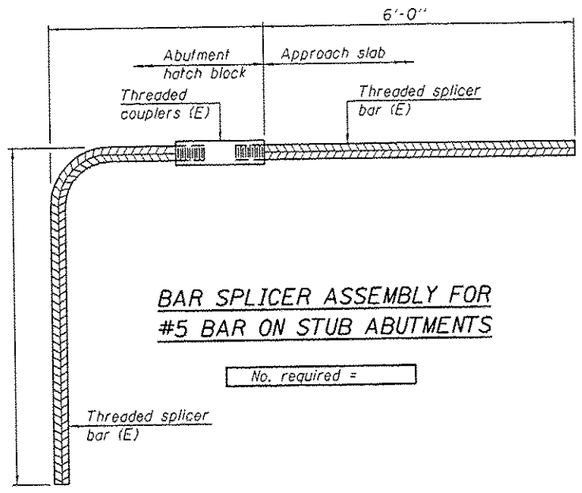
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 1-27-12

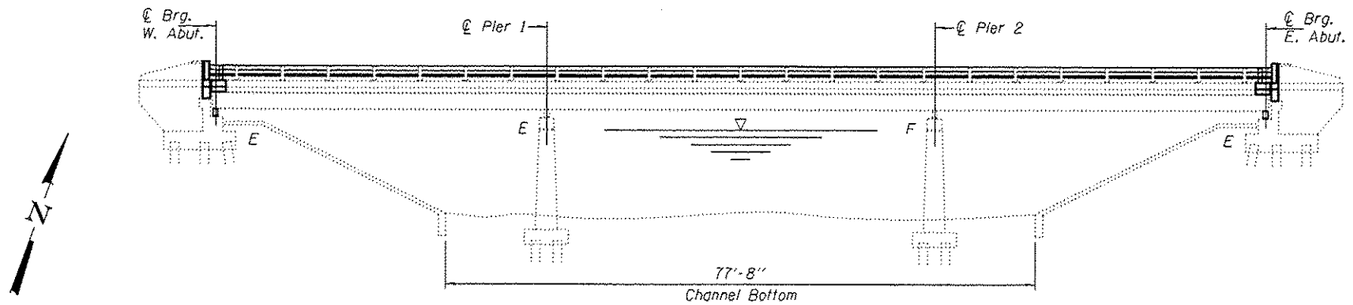
DESIGNED - SMR
CHECKED - TLC
DRAWN - Kyle M. Stoffan
CHECKED - SMR TLC

EXAMINED
ACTING ENGINEER OF STRUCTURAL SERVICES
PASSED
ACTING ENGINEER OF BRIDGES AND STRUCTURES
DATE - AUGUST 18, 2014

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

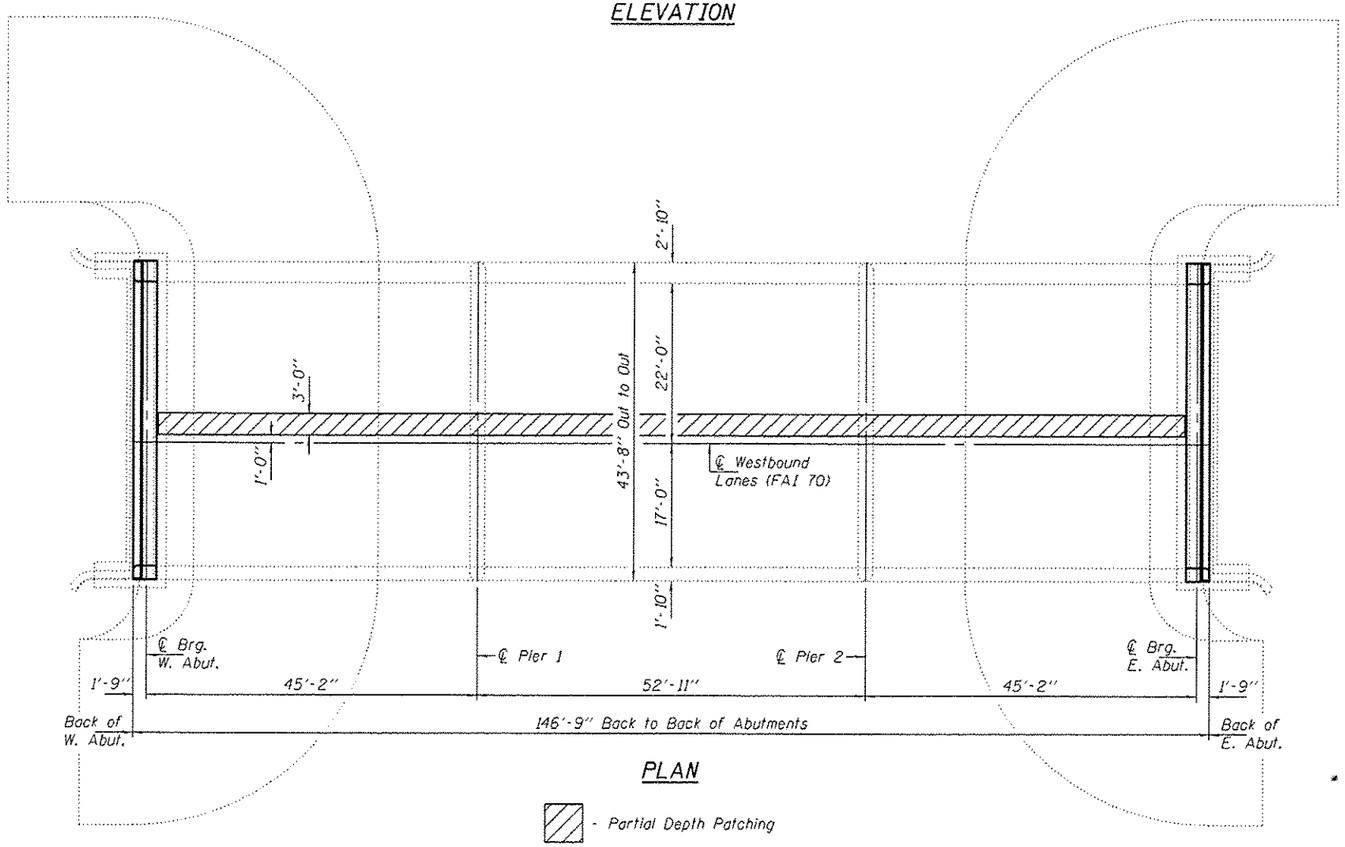
BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
SN 060-0031 (E.B.)
SHEET NO. 8 OF 8 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(1).12)RS-3	MADISON	242	203
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			



N

ELEVATION



PLAN

- Partial Depth Patching

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

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.

Reinforcement bars designated (E) shall be epoxy coated.

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.

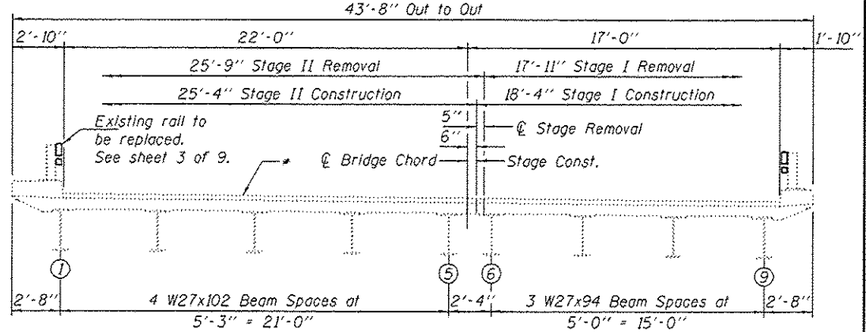
Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods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

The new deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

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

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

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All beams, bearings and other structural steel within 5 ft. (measured along beam) of either side of deck joints shall be cleaned per Near White Blast Cleaning - SSPC-SP10. The exterior surfaces and bottom of the bottom flange of the fascia beams shall be cleaned per Commercial Grade Power Tool Cleaning - SSPC-SP15. The designated areas cleaned per Near White Blast Cleaning and per Commercial Grade Power Tool Cleaning shall be painted according to the requirements of Paint System 1 - OZ/E/U. The color of the final finish coat for all interior and exterior steel surfaces shall be Interstate Green, Munsell No. 7.5G 4/8.



CROSS SECTION

(Looking East)

* Apply Bridge Deck Concrete Sealer to the deck surface and the face & top of the curbs.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	12.3
Concrete Superstructure	Cu. Yd.	12.3
Preformed Joint Strip Seal	Foot	90
Reinforcement Bars, Epoxy Coated	Pound	1370
Bar Splicers	Each	24
Bridge Deck Concrete Sealer	Sq. Ft.	6500
Cleaning and Painting Steel Bridge No. 6	L.S.	1
Containment and Disposal of Lead Paint Cleaning Residues, Bridge No. 6	L.S.	1
Jack and Remove Existing Bearings	Each	18
Elastomeric Bearing Assembly, Type I	Each	9
Elastomeric Bearing Assembly, Type II	Each	9
Anchor Bolts, 1"ϕ	Each	36
Furnishing and Erecting Structural Steel	Pound	2420
Deck Slab Repair (Partial)	Sq. Yd.	46.7
Bridge Rail Removal	Foot	292
Steel Railing, Type 2399	Foot	292

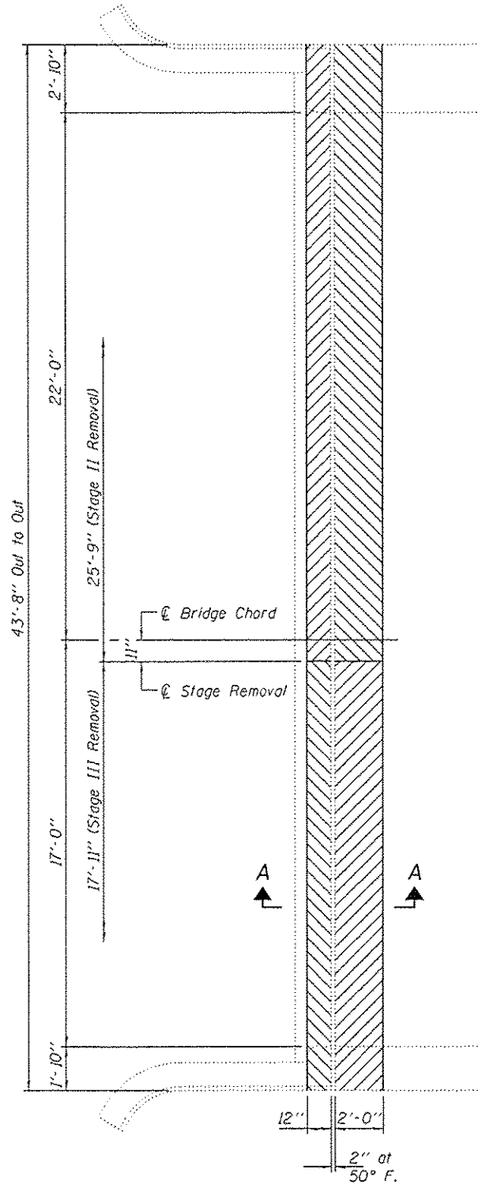
LICENSED STRUCTURAL ENGINEER
DAVID CARL PUZEY
081-005470
SPRINGFIELD ILLINOIS
STATE OF ILLINOIS

Expires: November 30, 2014

DESIGNED - Stephen M Ryan	EXAMINED	DATE - AUGUST 18, 2014	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
CHECKED - Tom Cook		ACTING ENGINEER OF STRUCTURAL SERVICES	
DRAWN - Kyle M. Steffen	PASSED		
CHECKED - TLC		ACTING ENGINEER OF BRIDGES AND STRUCTURES	

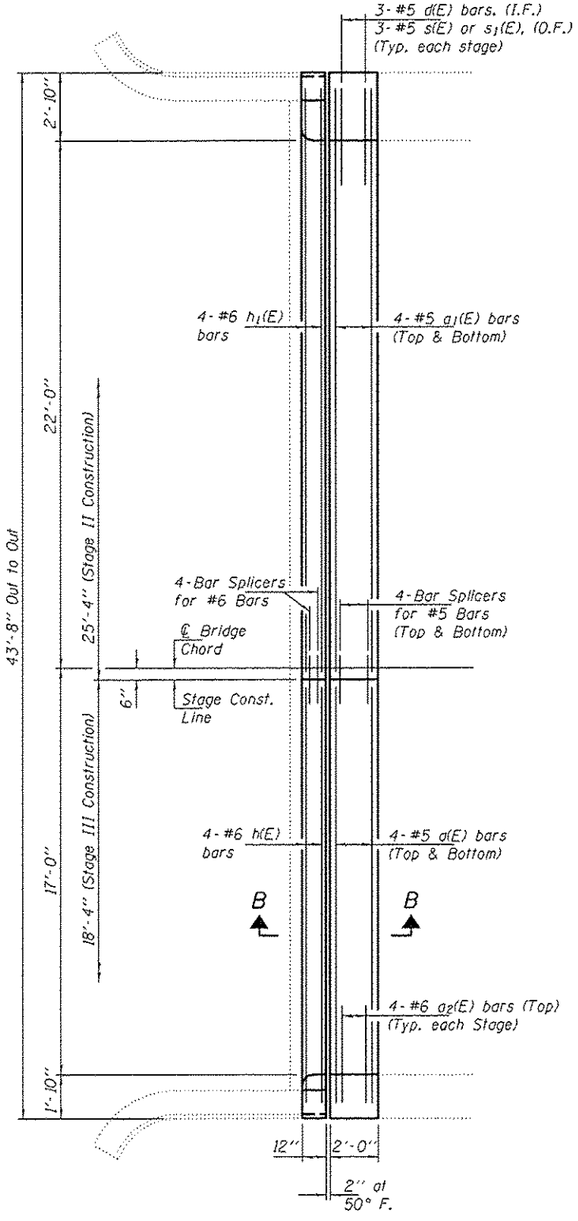
GENERAL PLAN & ELEVATION
F.A.I. ROUTE 70 OVER SUGAR CREEK
SN 060-0032 (W.B.)
SHEET NO. 1 OF 9 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-1(11,12)RS-3	MADISON	242	204
		CONTRACT NO. 76F13		
		ILLINOIS FED. AID PROJECT		



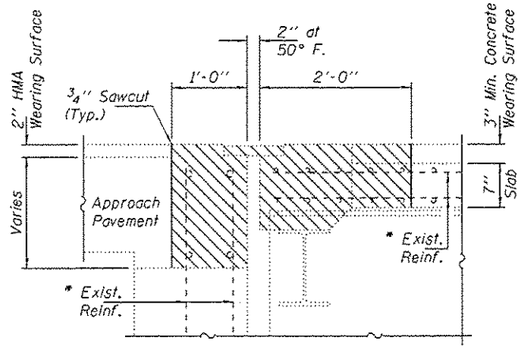
REMOVAL PLAN

West Abutment shown,
East Abutment similar.

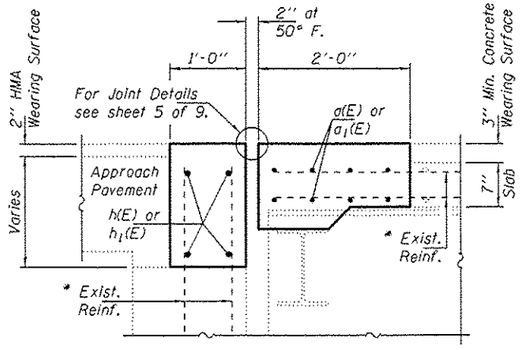


REPLACEMENT PLAN

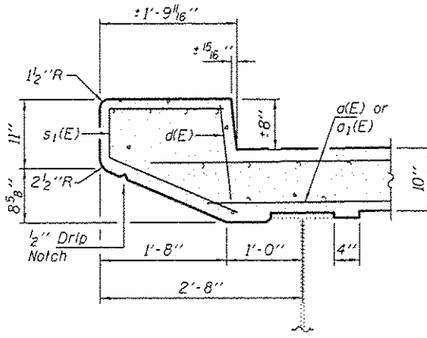
West Abutment shown,
East Abutment similar.



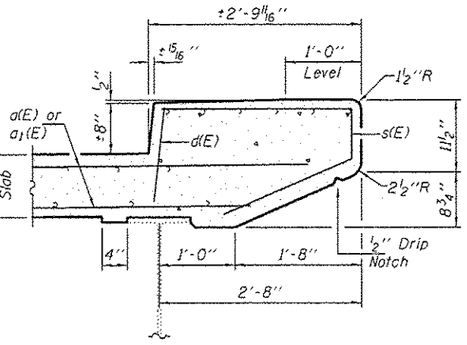
SECTION A-A



SECTION B-B

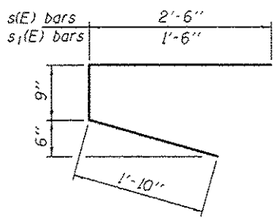


SOUTH CURB DETAILS



NORTH CURB DETAILS

* *Existing reinforcement 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 shall be included with Concrete Removal.*



BARS s(E) & s1(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	16	#5	17'-10"	—
a1(E)	16	#5	24'-10"	—
a2(E)	16	#6	4'-0"	—
d(E)	12	#4	1'-3"	—
h(E)	8	#6	17'-10"	—
h1(E)	8	#6	24'-10"	—
s(E)	6	#4	5'-1"	⊏
s1(E)	6	#4	4'-1"	⊏
Concrete Removal			Cu. Yd.	12.3
Concrete Superstructure			Cu. Yd.	12.3
Bar Splicers			Each	24
Reinforcement Bars, Epoxy Coated			Pound	1370

DESIGNED - SMR
CHECKED - TLC
DRAWN - Kyle M. Steffen
CHECKED - SMR TLC

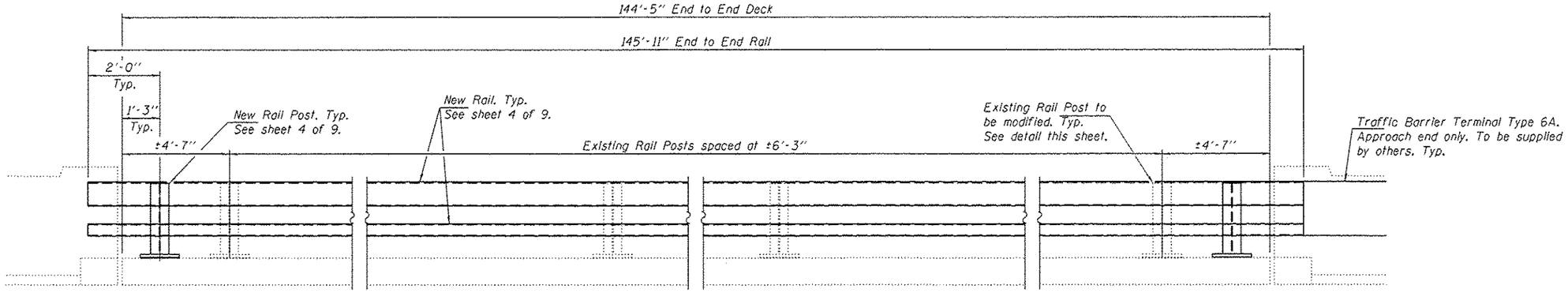
EXAMINED
Timothy A. Bradt
ACTING ENGINEER OF STRUCTURAL SERVICES
PASSED
J. Carl Piney
ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - AUGUST 18, 2014

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

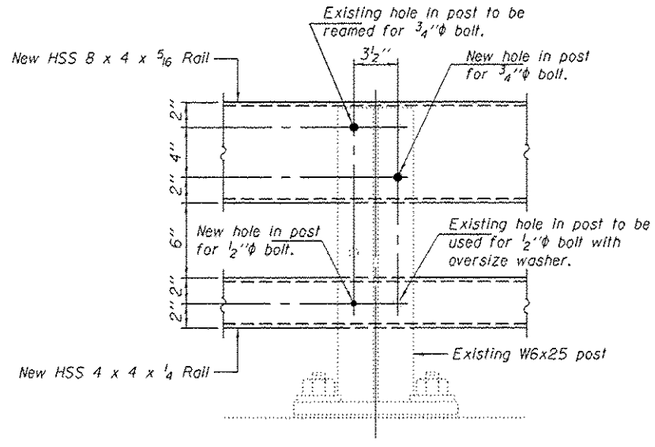
EXPANSION JOINT REMOVAL & REPLACEMENT DETAILS
SN 060-0032 (W.B.)
SHEET NO. 2 OF 9 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(11,12)RS-3	MADISON	242	205
		CONTRACT NO. 76F13		
		ILLINOIS FED. AID PROJECT		



RAIL MODIFICATION DETAIL

Notes:
Existing top and bottom rail elements to be removed.
One new rail post to be installed at each corner of the bridge.
New top and bottom rail elements to be attached.

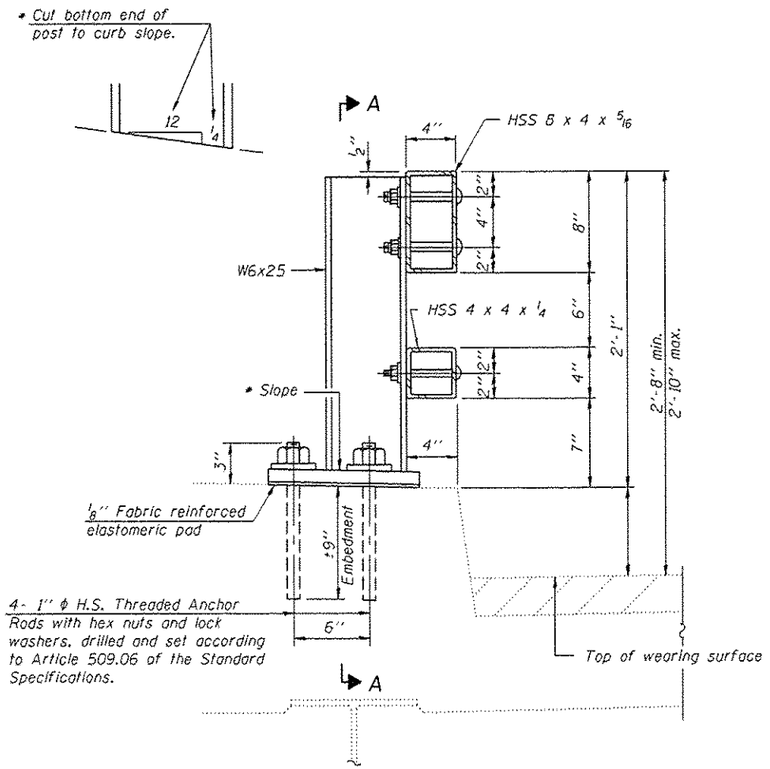


EXISTING RAIL POST MODIFICATION DETAIL

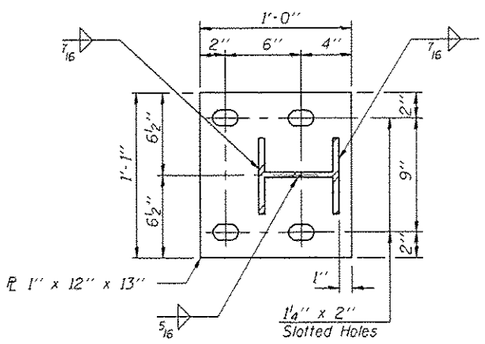
BILL OF MATERIAL

Item	Unit	Quantity
Bridge Rail Removal	Foot	292

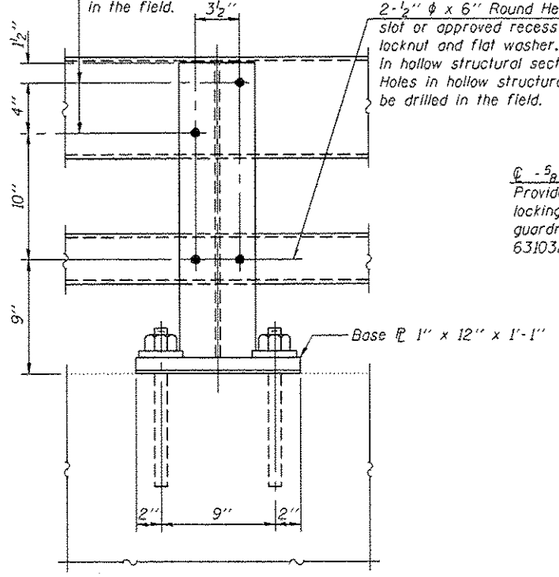
DESIGNED - SMR	EXAMINED	Timothy A. Bradt	DATE - AUGUST 18, 2014	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	RAIL MODIFICATION DETAILS SN 060-0032 (W.B.)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - TLC		ACTING ENGINEER OF STRUCTURAL SERVICES				70	60-(11,12)RS-3	MADISON	242	206
DRAWN - Kyle M. Steffen	PASSED	J. Carl Puzey						CONTRACT NO. 76F13		
CHECKED - SMR TLC		ACTING ENGINEER OF BRIDGES AND STRUCTURES			SHEET NO. 3 OF 9 SHEETS			ILLINOIS FED. AID PROJECT		



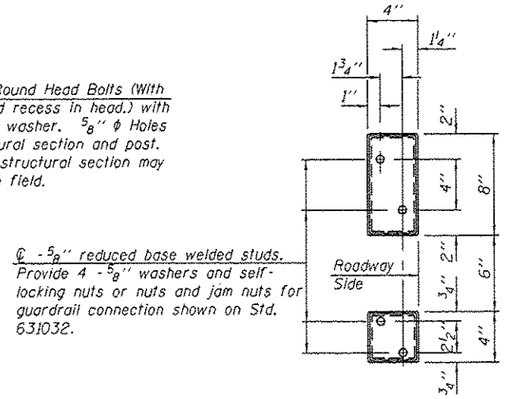
SECTION AT RAIL POST



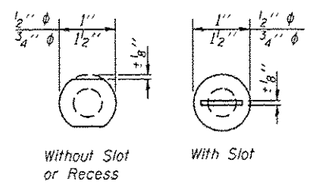
BASE PLATE DETAIL



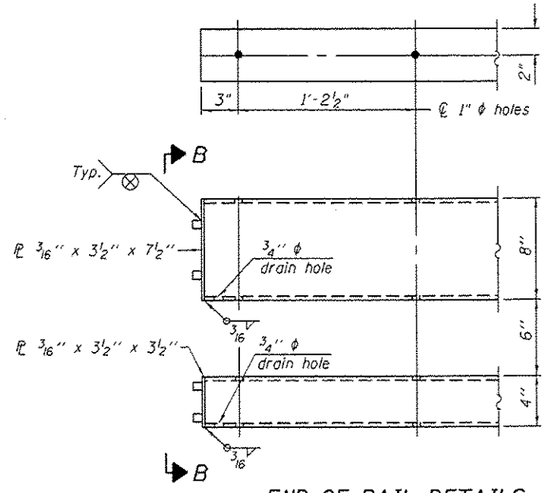
SECTION A-A



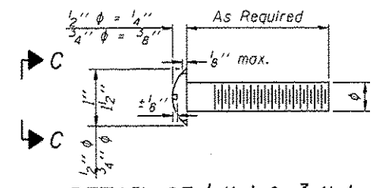
VIEW B-B



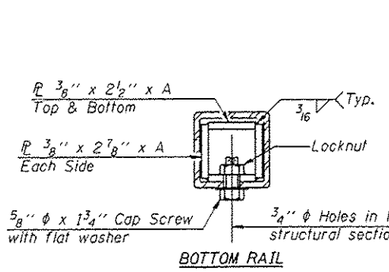
VIEW C-C



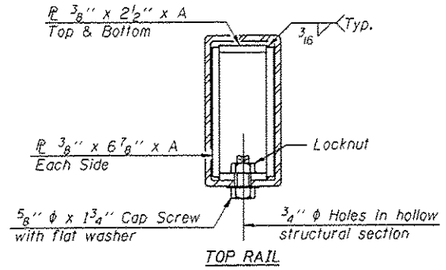
END OF RAIL DETAILS



DETAIL OF 1/2" ϕ & 3/4" ϕ ROUND HEAD BOLTS

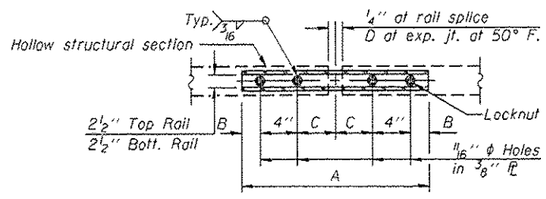


BOTTOM RAIL

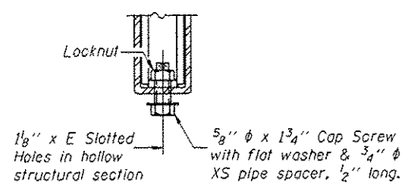


TOP RAIL

SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE PL TYPICAL



RAIL SPLICE CONNECTION AT EXPANSION JT.

Notes:

All field drilled holes shall be coated with an approved zinc rich paint before erection.

Posts shall not be located closer than 1'-3" to an existing bridge expansion joint or end of bridge.

Steel Bridge Rail expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.

Provide one 1/8" and two 1/16" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.

All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

SPLICE DIMENSIONS

T	D	A	B	C	E
≤4"	2 1/2"	1'-8"	2"	4"	2 1/2"
>4" ≤6 1/2"	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
>6 1/2" ≤9"	5"	2'-4"	3 1/2"	6 1/2"	9"
>9" ≤13"	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	1/4"	1'-8"	2"	4"	—

T = Total movement at expansion joint as shown on the design plans.

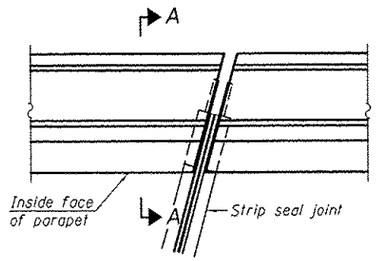
BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type 2399	Foot	292

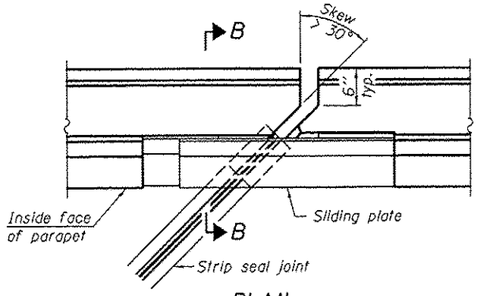
(6'-3" Maximum Post Spacing)

R-31 7-1-10

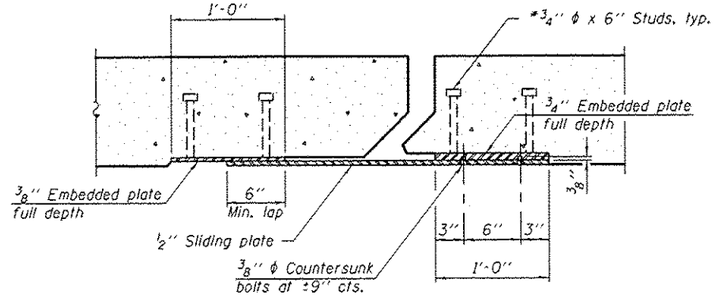
DESIGNED - SMR	EXAMINED	Timothy A. Sheehy ACTING ENGINEER OF STRUCTURAL SERVICES	DATE - AUGUST 18, 2014	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STEEL RAILING, TYPE 2399 STRUCTURE NO.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - TLC	PASSED	A. Carl Purvis ACTING ENGINEER OF BRIDGES AND STRUCTURES				70	60-(11,12)RS-3	MADISON	242	207
DRAWN - Kyle M. Stoffon									CONTRACT NO. 76F13	
CHECKED - SMR TLC					SHEET NO. 4 OF 9 SHEETS			ILLINOIS FED. AID PROJECT		



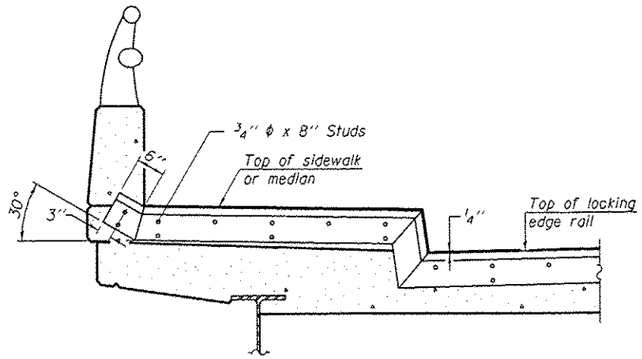
PLAN
(For skews ≤ 30°)



PLAN
(For skews > 30°)
Showing point block

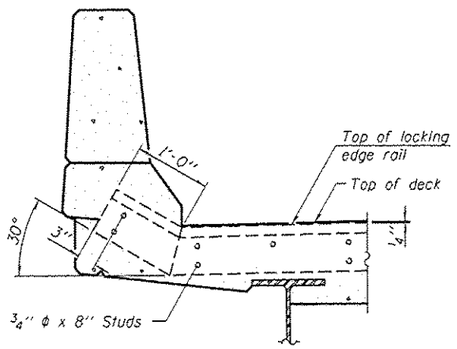


SECTION C-C

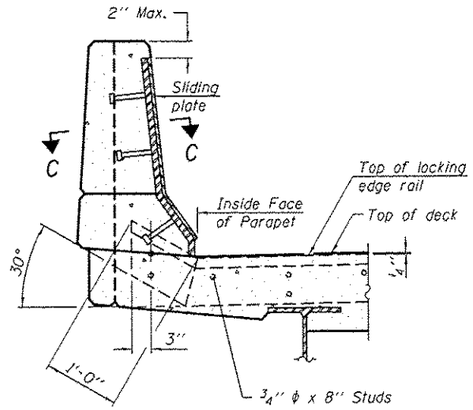


TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN

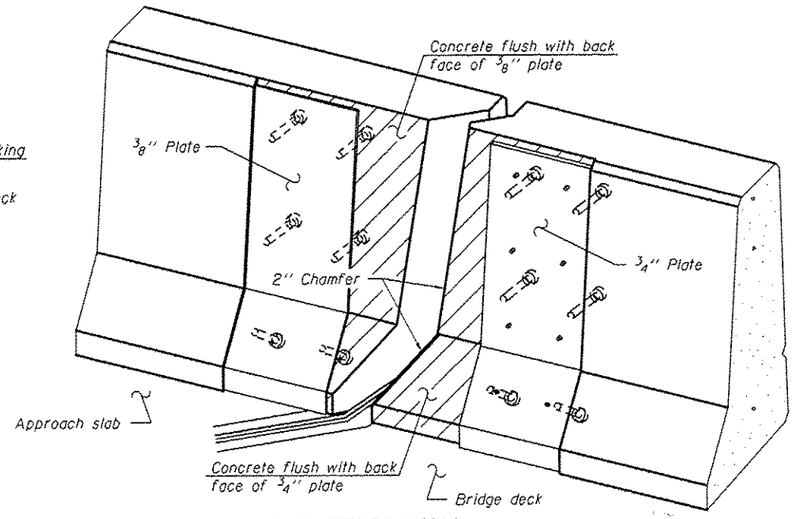
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



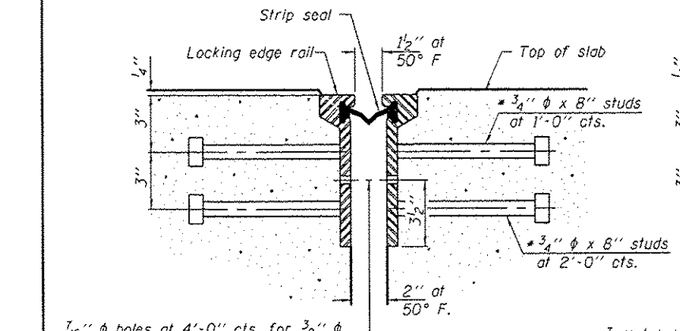
SECTION A-A



SECTION B-B

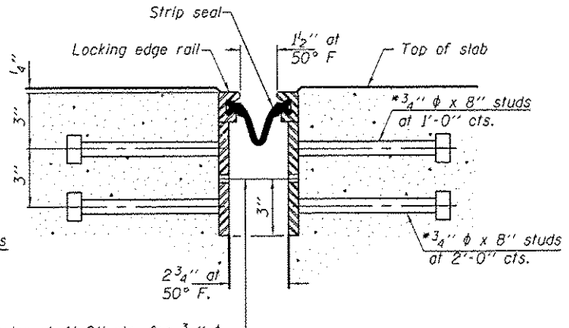


TRIMETRIC VIEW
(Showing back plates only)



7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

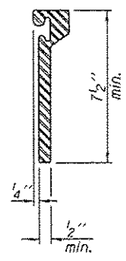
SECTION THRU ROLLED RAIL JOINT



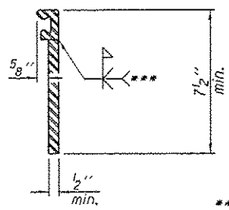
7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU WELDED RAIL JOINT

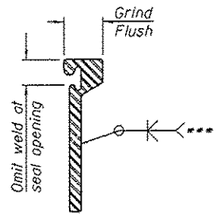
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



ROLLED EXTRUDED RAIL



WELDED RAIL



*** Back gouge not required if complete joint penetration is verified by mock-up.

LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

Rolled rail shown, welded rail similar.

LOCKING EDGE RAILS

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.

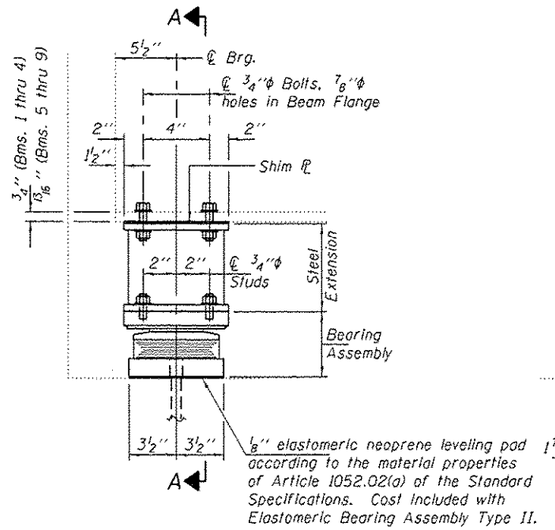
Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.

BILL OF MATERIAL

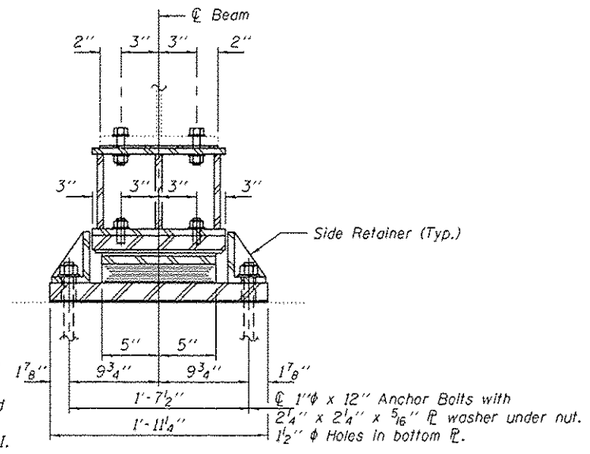
Item	Unit	Total
Preformed Joint Strip Seal	Foot	90

EJ-SSJ 1-27-12

DESIGNED - SMR	EXAMINED	ACTING ENGINEER OF STRUCTURAL SERVICES	DATE - AUGUST 18, 2014	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PREFORMED JOINT STRIP SEAL SN 060-0032 (W.B.)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - TLC	PASSED	ACTING ENGINEER OF BRIDGES AND STRUCTURES				70	60-(11,12)RS-3	MADISON	242	208
DRAWN - Kyle M. Steffan					SHEET NO. 5 OF 9 SHEETS			CONTRACT NO. 76F13		
CHECKED - SMR TLC								ILLINOIS FED. AID PROJECT		



ELEVATION AT ABUTMENT



SECTION A-A

TYPE II TFE ELASTOMERIC EXP. BRG.

BEAM REACTIONS

R℄	(K)	16.2
R℄	(K)	26.3
Imp.	(K)	7.6
R (Total)	(K)	50.2

Notes:

Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.

Min. jack capacity = 30 Tons.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

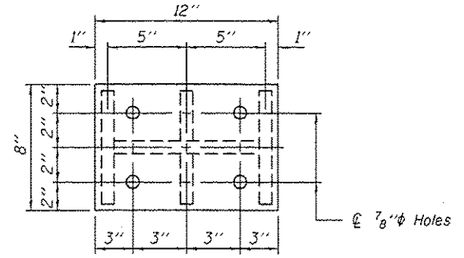
Anchor bolts for Type II bearings shall be placed in holes drilled through the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

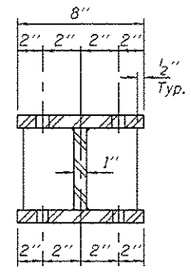
Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The ⅛" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

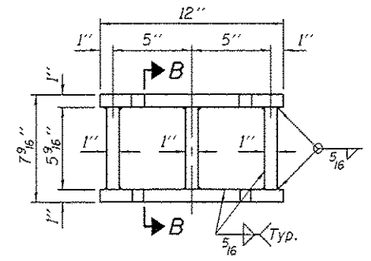
Bonding of ⅛" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



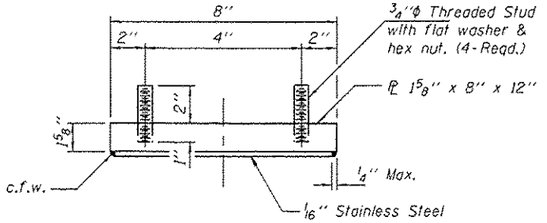
PLAN TOP AND BOTTOM PLATE



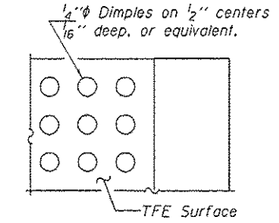
SECTION B-B



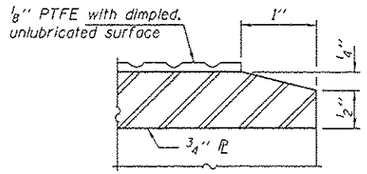
STEEL EXTENSION DETAIL



TOP BEARING ASSEMBLY



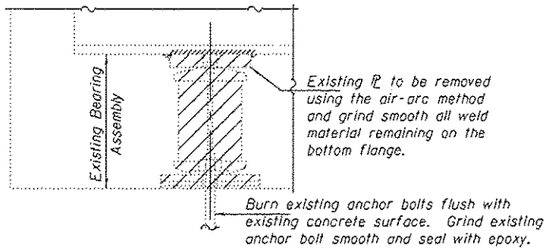
PLAN-PTFE SURFACE



SECTION THRU PTFE

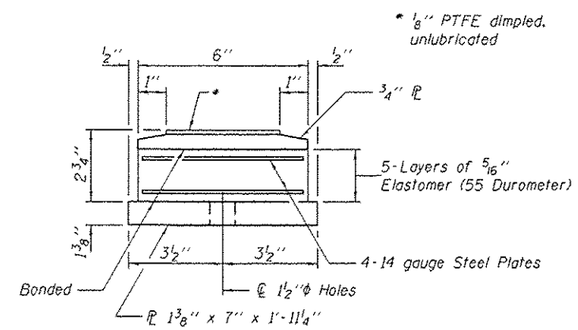
TABLE OF DIMENSION

Beam	Dim. "1"
1	0"
2	0"
3	5/8"
4	5/8"
5	0"
6	5/8"
7	0"
8	0"
9	0"

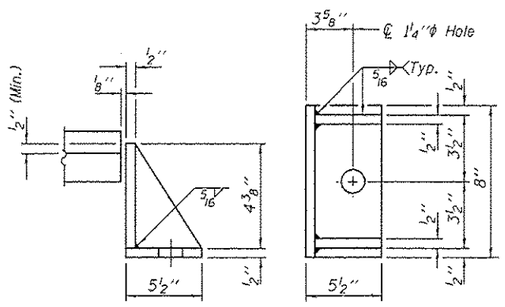


EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

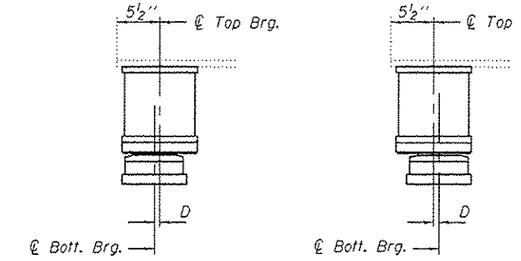


BOTTOM BEARING ASSEMBLY



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



SETTING ANCHOR BOLTS AT EXP. BRG.

D = ⅛" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

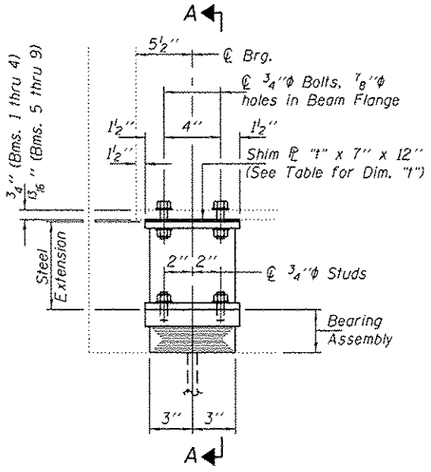
BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	9
Jack and Remove Existing Bearings	Each	9
Furnishing and Erecting Structural Steel	Pound	1220
Anchor Bolts 1"ϕ	Each	18

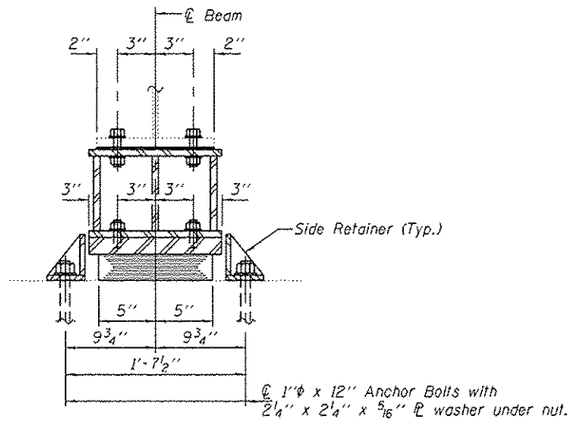
TYII/REPS 12-03-2008

DESIGNED - SMR	EXAMINED	Timothy A. Ruhl Jr. ACTING ENGINEER OF STRUCTURAL SERVICES	DATE - AUGUST 18, 2014	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ELASTOMERIC BEARING, TYPE II DETAILS FOR WEST ABUTMENT SN 060-0032 (W.B.)
CHECKED - TLC	PASSED	J. Carl Ringo ACTING ENGINEER OF BRIDGES AND STRUCTURES			SHEET NO. 6 OF 9 SHEETS
DRAWN - Kyle M. Steffen					
CHECKED - SMR TLC					

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(1).12RS-3	MADISON	242	209
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			



ELEVATION AT ABUTMENT

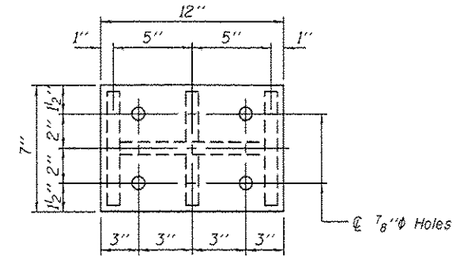


SECTION A-A

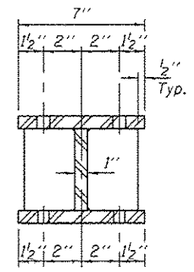
BEAM REACTIONS

R℄	(K)	16.2
R℄	(K)	26.3
Imp.	(K)	7.7
R (Total)	(K)	50.2

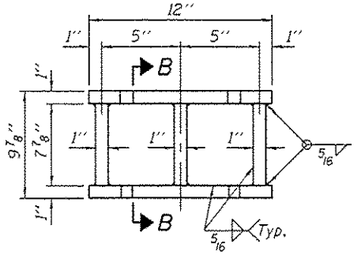
Notes:
Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.
Min. jack capacity = 30 Tons.
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type I.



PLAN TOP AND BOTTOM PLATE

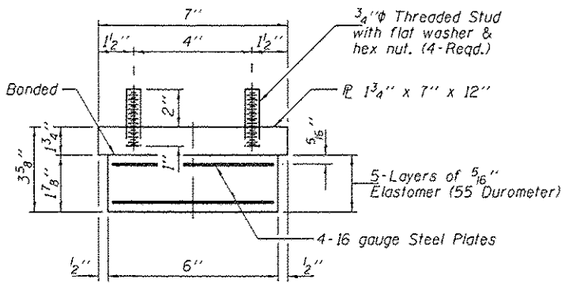


SECTION B-B



STEEL EXTENSION DETAIL

TYPE I ELASTOMERIC EXP. BRG.

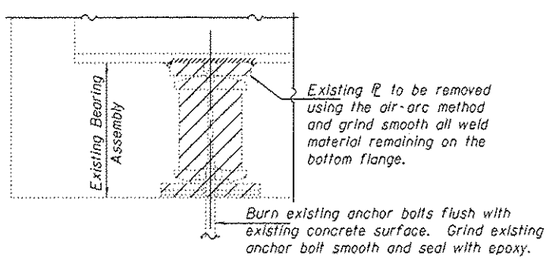


BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.

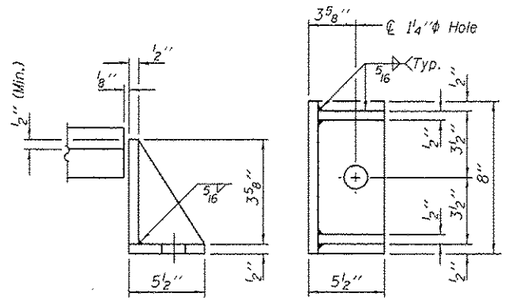
TABLE OF DIMENSION

Beam	Dim. "t"
1	0"
2	0"
3	⅝"
4	⅝"
5	0"
6	⅝"
7	0"
8	0"
9	0"



EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

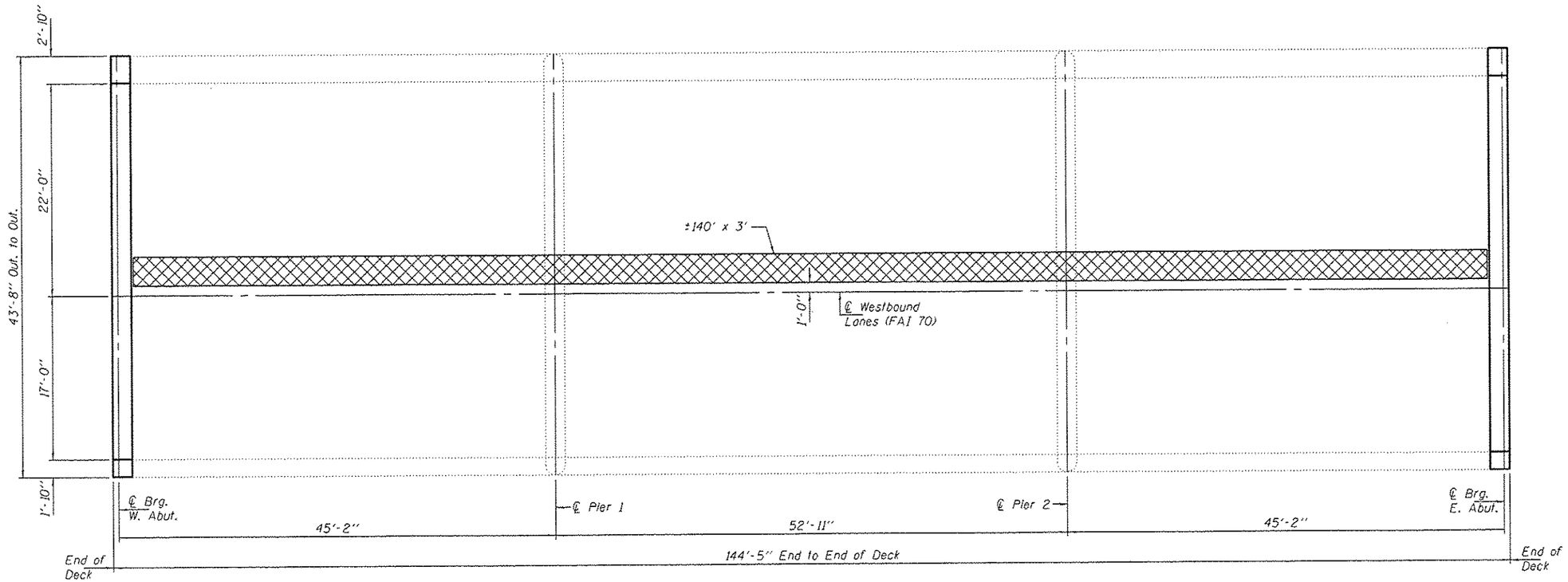
BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	9
Jack and Remove Existing Bearings	Each	9
Furnishing and Erecting Structural Steel	Pound	1200
Anchor Bolts 1"ϕ	Each	18

TYI/REPS 12-03-2008

DESIGNED - SMR	EXAMINED	Timothy A. Bollt, ACTING ENGINEER OF STRUCTURAL SERVICES	DATE - AUGUST 18, 2014	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ELASTOMERIC BEARING, TYPE I DETAILS FOR EAST ABUTMENT SN 060-0032 (W.B.)
CHECKED - TLC	PASSED	J. Carl Tripp, ACTING ENGINEER OF BRIDGES AND STRUCTURES			SHEET NO. 7 OF 9 SHEETS
DRAWN - Kyle M. Stoffan					
CHECKED - SMR TLC					

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(1),12)RS-3	MADISON	242	210
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			



DECK SLAB REPAIR (PARTIAL) PLAN

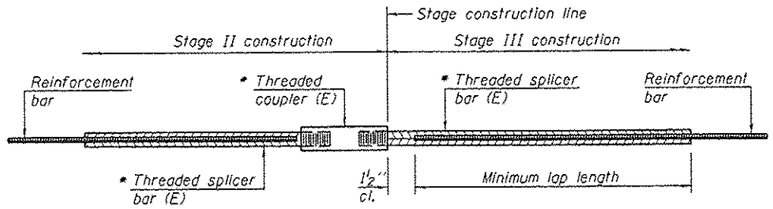
Cross-Hatched area indicates Deck Slab Repair (Partial).

N

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Deck Slab Repair (Partial)	Cu. Yd.	46.7

DESIGNED - SMR	EXAMINED	Timothy A. Bulat	DATE - AUGUST 18, 2014	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DECK SLAB REPAIR (PARTIAL) SN 060-0032 (W.B.)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - TLC		ACTING ENGINEER OF STRUCTURAL SERVICES				70	60-(11,12)RS-3	MADISON	242	211
DRAWN - Kyla M. Steffen	PASSED	J. Carl Koenig						CONTRACT NO. 76F13		
CHECKED - SMR TLC		ACTING ENGINEER OF BRIDGES AND STRUCTURES			SHEET NO. 8 OF 9 SHEETS			ILLINOIS FED. AID PROJECT		



STANDARD BAR SPLICER ASSEMBLY

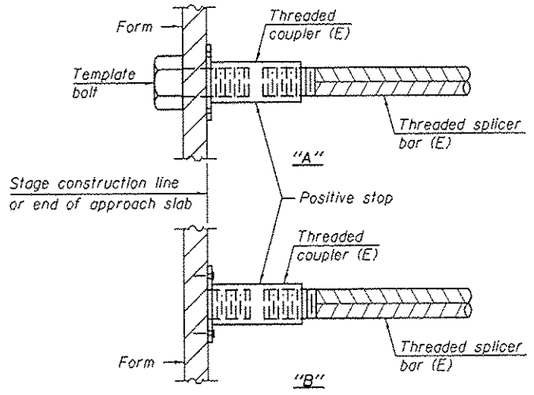
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C
Table 5: Epoxy bar, Class C
Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min. lap length + 1½" + thread length

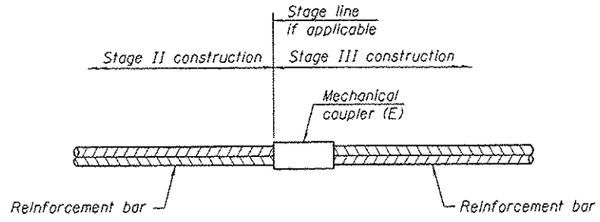
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
West Deck	#5	8	3
West Hatchblock	#6	4	3
East Deck	#5	8	3
East Hatchblock	#6	4	3



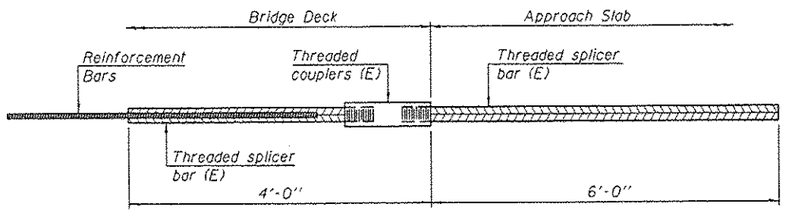
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



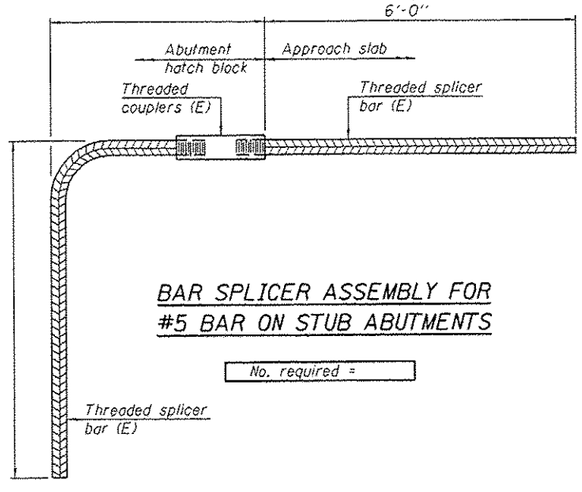
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

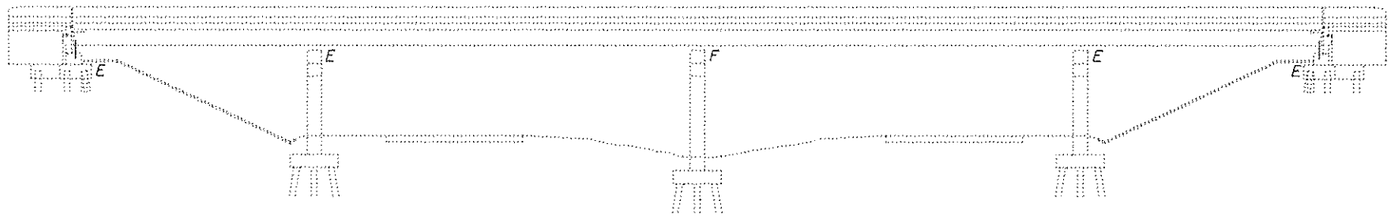
All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

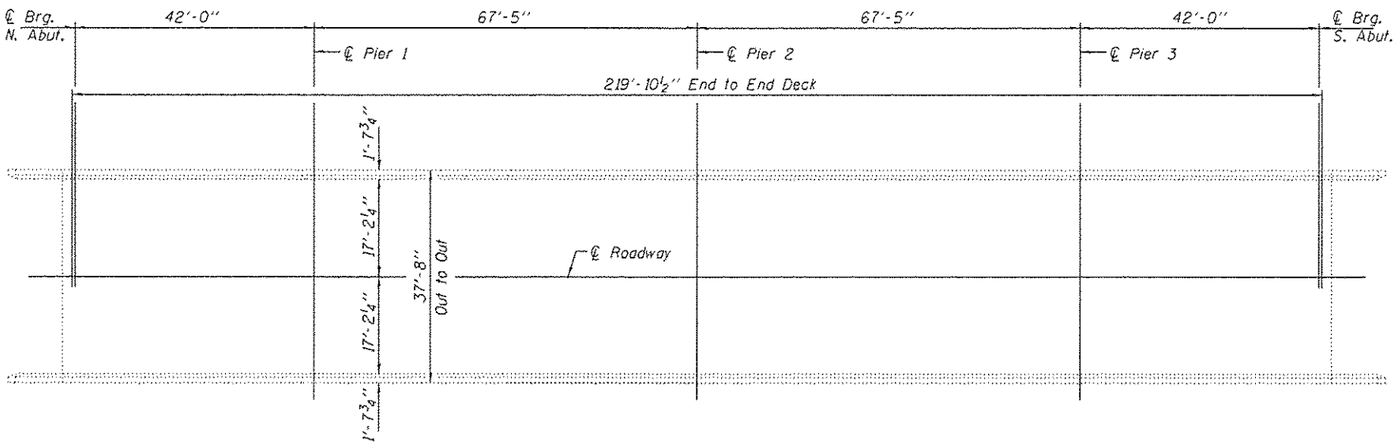
See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 1-27-12

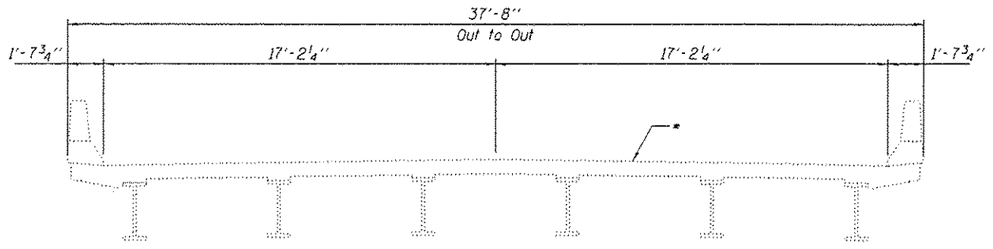
DESIGNED - SMR	EXAMINED	Timothy A. Sheldahl	DATE - AUGUST 18, 2014	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS SN 060-0032 (W.B.)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - TLC		ACTING ENGINEER OF STRUCTURAL SERVICES				70	60-(11,12)RS-3	MADISON	242	212
DRAWN - Kyle M. Steffen	PASSED	J. Carl Koenig			SHEET NO. 9 OF 9 SHEETS			CONTRACT NO. 76F13		
CHECKED - SMR TLC		ACTING ENGINEER OF BRIDGES AND STRUCTURES						ILLINOIS FED. AID PROJECT		



ELEVATION

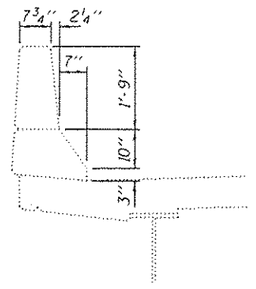


PLAN



CROSS SECTION

* Apply Bridge Deck Concrete Sealer to the deck surface and the face & top of the parapets.



SECTION THRU PARAPET

GENERAL NOTES

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.

LICENSED STRUCTURAL ENGINEER
DAVID CARL PUZEY
081-005470
SPRINGFIELD ILLINOIS
STATE OF ILLINOIS

EXPIRES 11-30-2014

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Bridge Deck Concrete Sealer	Sq. Ft.	9185

DESIGNED		EXAMINED	
CHECKED			ACTING ENGINEER OF STRUCTURAL SERVICES
DRAWN	baliva	PASSED	
CHECKED	DAP TJC		ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE AUGUST 18, 2014
REVISED
REVISED

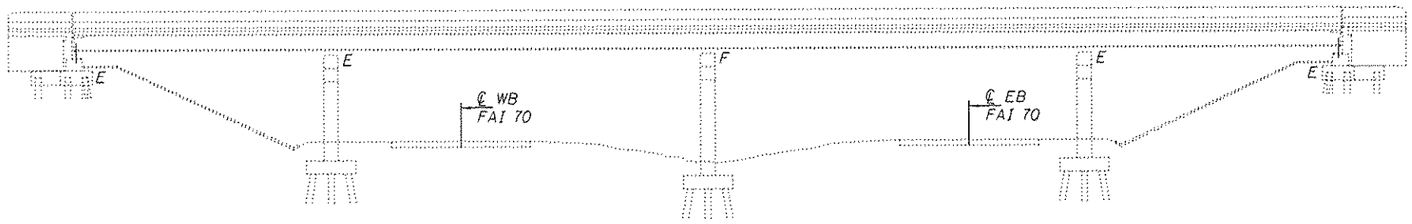
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND ELEVATION
II. 4 OVER FAI 70
SN 060-0108
SHEET NO. 1 OF 1 SHEETS

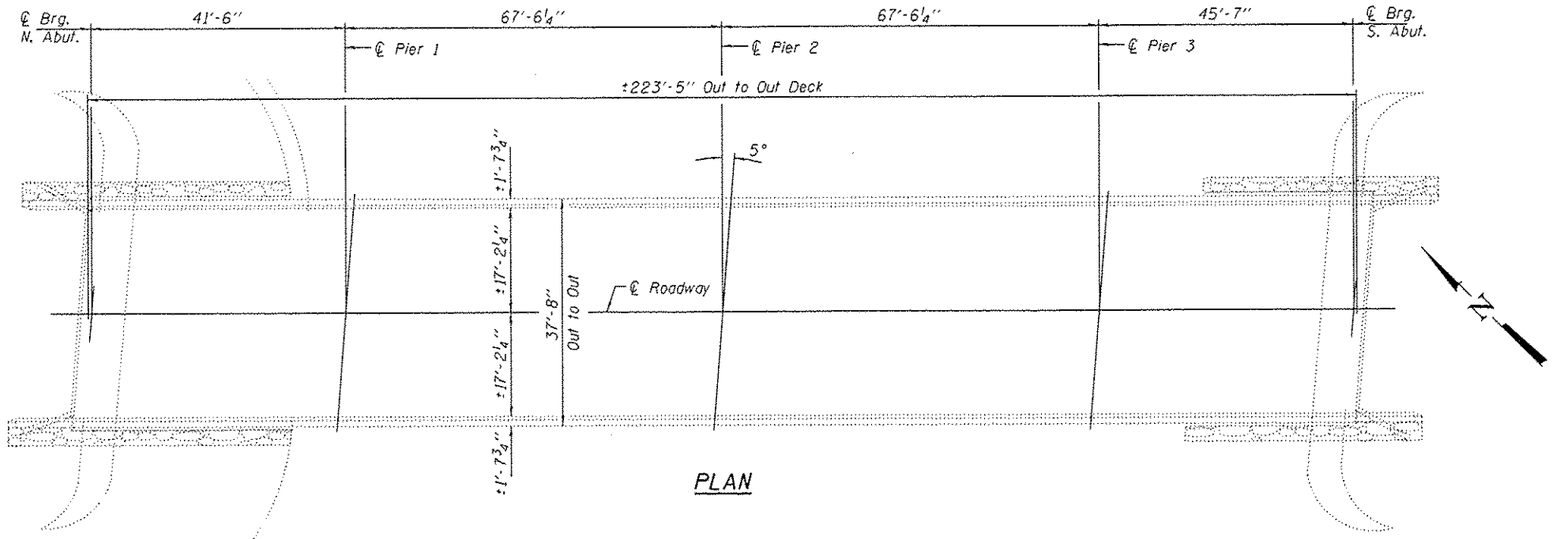
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TO	60-111,121RS-3	MADISON	242	213
		CONTRACT NO. 76F13		
	ILLINOIS	FED. AID PROJECT		

GENERAL NOTES

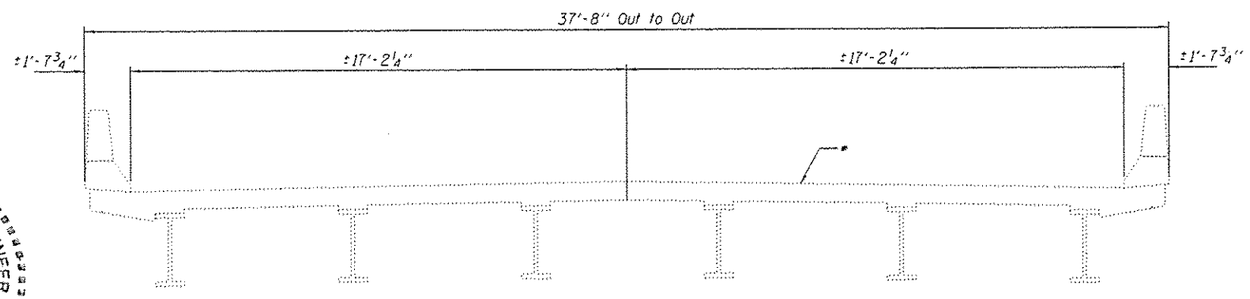
Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall 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.



ELEVATION

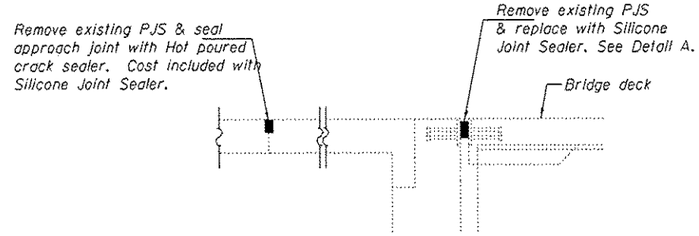


PLAN

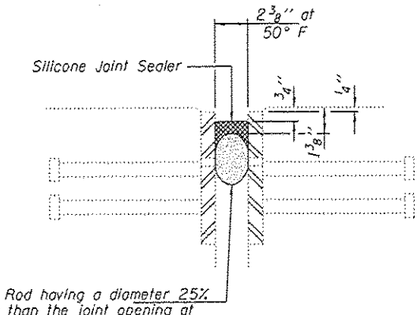


CROSS SECTION

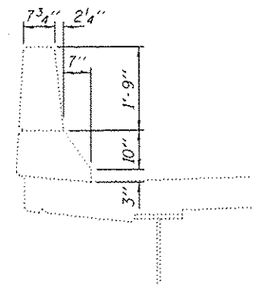
* Apply Bridge Deck Concrete Sealer to the deck surface and the face & top of the parapets.



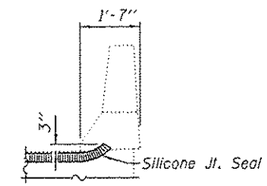
SECTION THRU ABUTMENT



DETAIL A



SECTION THRU PARAPET



TYPICAL END OF SEAL TREATMENTS

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Bridge Deck Concrete Sealer	Sq. Ft.	9333
Silicone Joint Sealer, 2.5"	Foot	76

LICENSED STRUCTURAL ENGINEER
DAVID CARL PUZEY
081-005470
SPRINGFIELD ILLINOIS
STATE OF ILLINOIS

EXPIRES 11-30-2014

DESIGNED		EXAMINED		DATE AUGUST 18, 2014	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
CHECKED		PASSED	ACTING ENGINEER OF STRUCTURAL SERVICES	REVISED	
DRAWN	Daliva		ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED	
CHECKED					

PLAN AND ELEVATION
IL. 143 OVER FAI 70
SN 060-0151
SHEET NO. 1 OF 1 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TO	60-111,121RS-3	MADISON	242	214
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.

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.

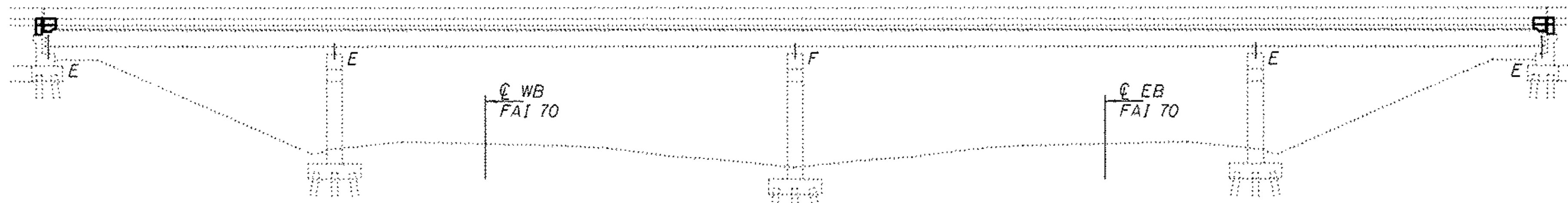
Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

The new deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

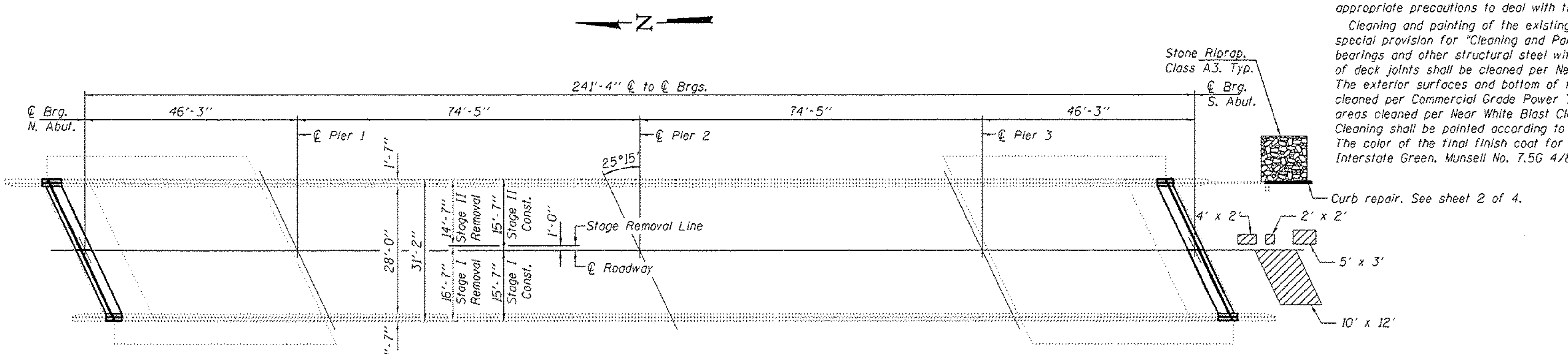
Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50° F.

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

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All beams, bearings and other structural steel within 5 ft. (measured along beam) of either side of deck joints shall be cleaned per Near White Blast Cleaning - SSPC-SP10. The exterior surfaces and bottom of the bottom flange of the fascia beams shall be cleaned per Commercial Grade Power Tool Cleaning - SSPC-SP15. The designated areas cleaned per Near White Blast Cleaning and per Commercial Grade Power Tool Cleaning shall be painted according to the requirements of Paint System 1 - OZ/E/U. The color of the final finish coat for all interior and exterior steel surfaces shall be Interstate Green, Munsell No. 7.5G 4/8.

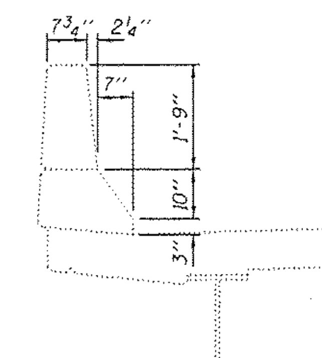


ELEVATION

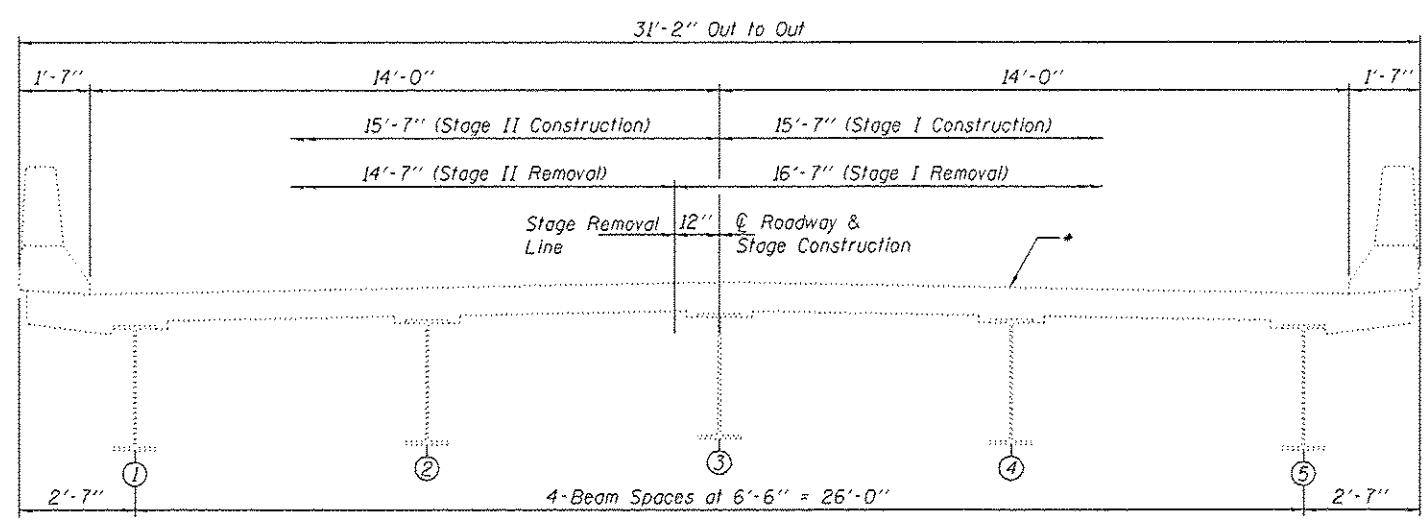


PLAN

▨ - Structural Repair of Concrete (Depth ≤ 5")



SECTION THRU PARAPET



CROSS SECTION

(Looking South)

* Apply Bridge Deck Concrete Sealer to the deck surface and the face & top of the parapets.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	10.0
Concrete Superstructure	Cu. Yd.	10.1
Preformed Joint Strip Seal	Foot	67
Reinforcement Bars, Epoxy Coated	Pound	1400
Bar Splicers	Each	24
Bridge Deck Concrete Sealer	Sq. Ft.	8590
Cleaning and Painting Steel Bridge No. 7	L.S.	1
Containment and Disposal of Lead Paint Cleaning Residuals, Bridge No. 7	L.S.	1
Stone Riprap Class A3	Sq. Yd.	11.1
Structural Repair of Concrete (Depth ≤ 5")	Sq. Ft.	135

LICENSED STRUCTURAL ENGINEER
DAVID CARL PUZEY
081-005470
SPRINGFIELD ILLINOIS
STATE OF ILLINOIS

EXPIRES 11-30-2014

DESIGNED		EXAMINED	ACTING ENGINEER OF STRUCTURAL SERVICES
CHECKED	Stephen M Ryan	PASSED	ACTING ENGINEER OF BRIDGES AND STRUCTURES
DRAWN	baliva	DATE	AUGUST 18, 2014
CHECKED	TZC SMR	REVISED / REVISED	

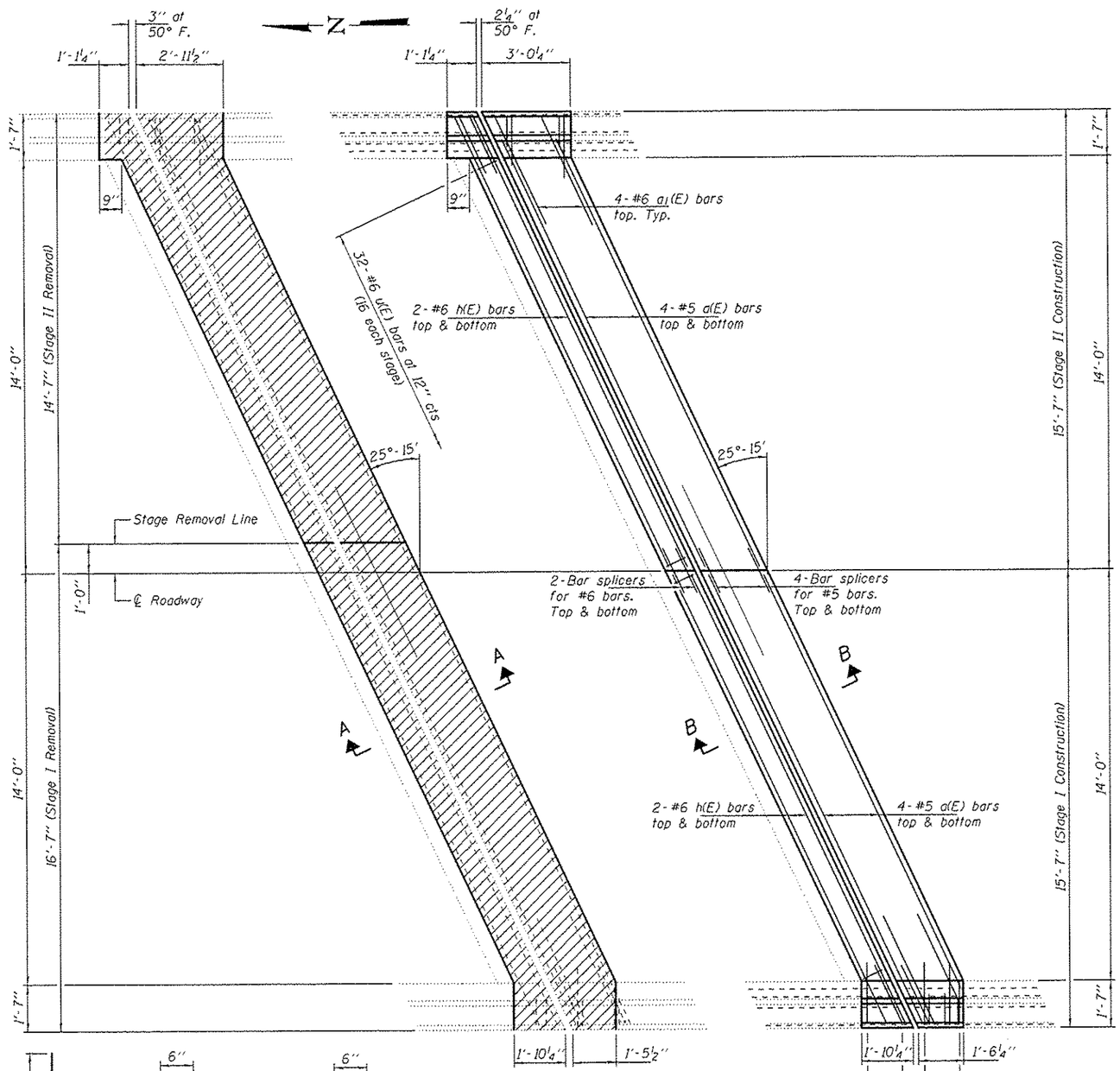
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

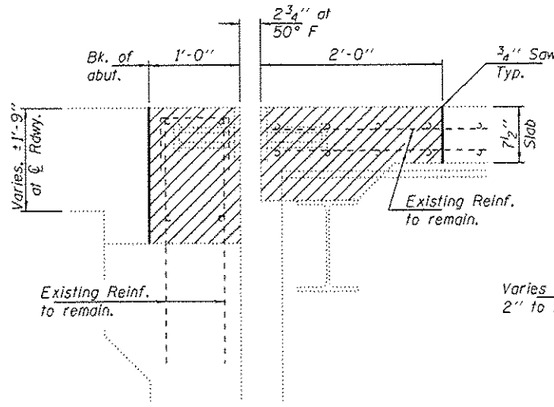
PLAN AND ELEVATION
MARINE ROAD OVER FAI 70
SN 060-0164
SHEET NO. 1 OF 4 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-1(I),121RS-3	MADISON	242	215

CONTRACT NO. 76F13

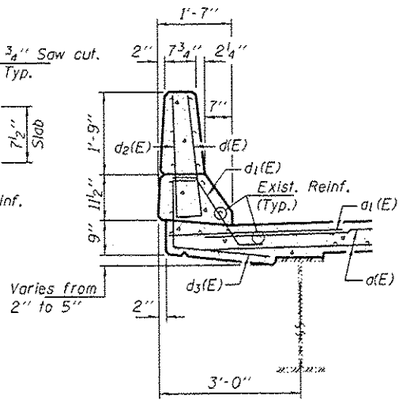
ILLINOIS FED. AID PROJECT



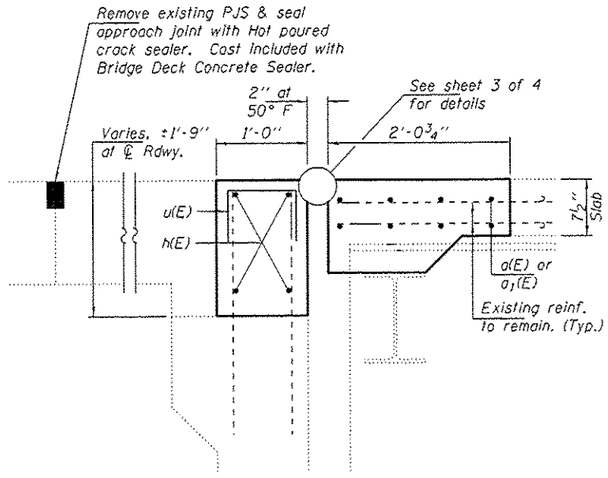


SECTION A-A

(Near ℄ Roadway)
(Dims at RT L's to end of deck)

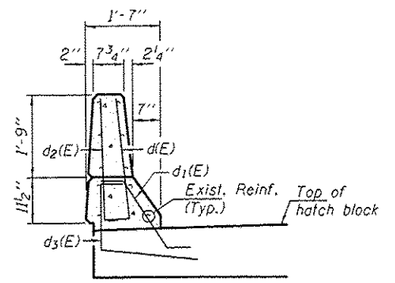


TYPICAL PARAPET SECTION

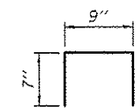


SECTION B-B

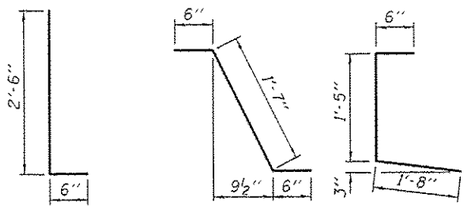
(Near ℄ Roadway)
(Dims at RT L's to end of deck)



TYPICAL SECTION AT APPROACH PARAPET



BAR u(E)



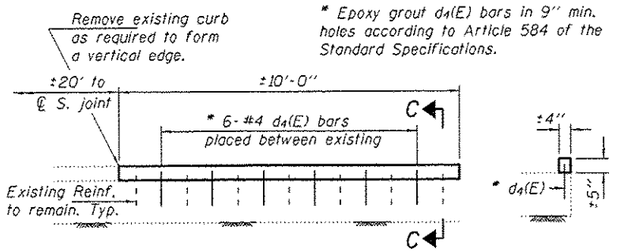
BARS d(E) & d2(E) BAR d1(E) BAR d3(E)

CONCRETE REMOVAL DETAILS

CONCRETE REPLACEMENT DETAILS

North abutment shown
South abutment similar

Notes:
Hatched areas indicate removal.
Bend a1(E) bars in field as necessary.



SOUTHEAST APPROACH CURB REPAIR SECTION C-C

Curb dimensions are approximate, Engineer to field verify & rebuild to match existing.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	32	#5	16'-10"	
a1(E)	16	#6	4'-0"	
d(E)	20	#5	3'-0"	
d1(E)	20	#5	2'-7"	
d2(E)	20	#4	3'-0"	
d3(E)	20	#4	3'-7"	
d4(E)	6	#6	1'-0"	
h(E)	16	#4	16'-10"	
u(E)	64	#5	1'-11"	
Concrete Removal			Cu. Yd.	10.0
Concrete Superstructure			Cu. Yd.	10.2
Reinforcement Bars, Epoxy Coated			Pound	1400

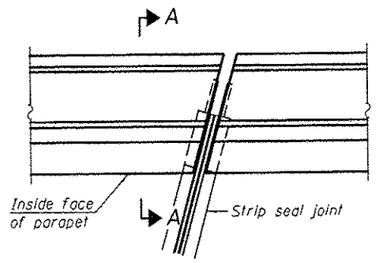
DESIGNED	TLC		
CHECKED	SMR		
DRAWN	baliva		
CHECKED	TLC SMR		

EXAMINED
PASSED
Timothy A. Anderson
ACTING ENGINEER OF STRUCTURAL SERVICES
ACTING ENGINEER OF BRIDGES AND STRUCTURES
DATE AUGUST 18, 2014
REVISED
REVISED

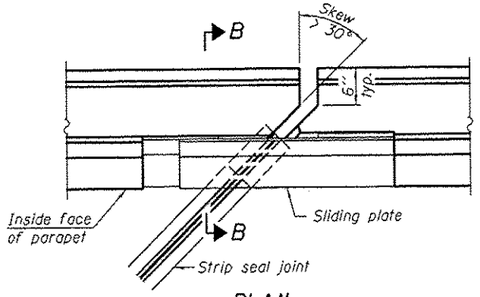
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REPAIR DETAILS
SN 060-0164
SHEET NO. 2 OF 4 SHEETS

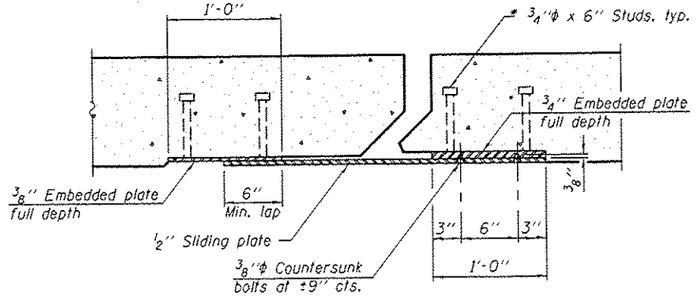
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TO	60-111,121RS-3	MADISON	242	216
		CONTRACT NO. 76F13		
		ILLINOIS FED. AID PROJECT		



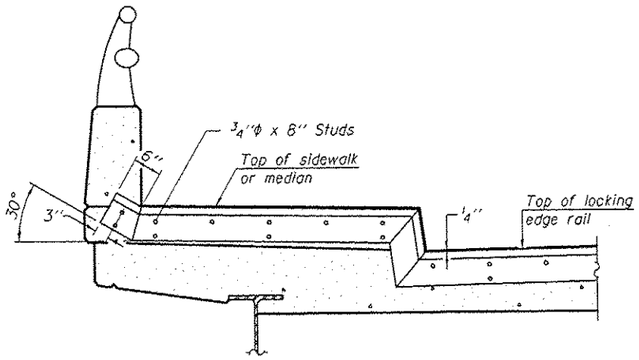
PLAN
(For skews ≤ 30°)



PLAN
(For skews > 30°)
Showing point block

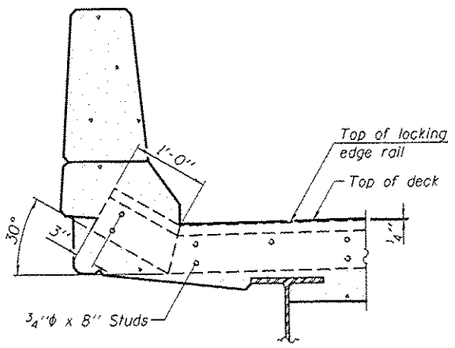


SECTION C-C

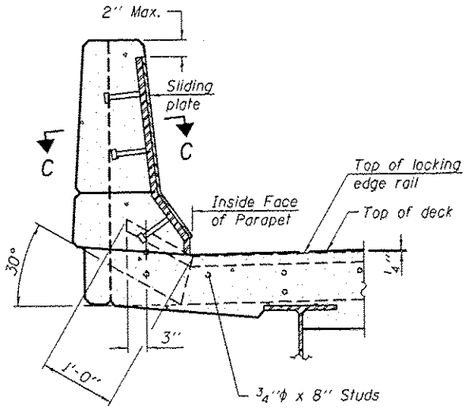


TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN

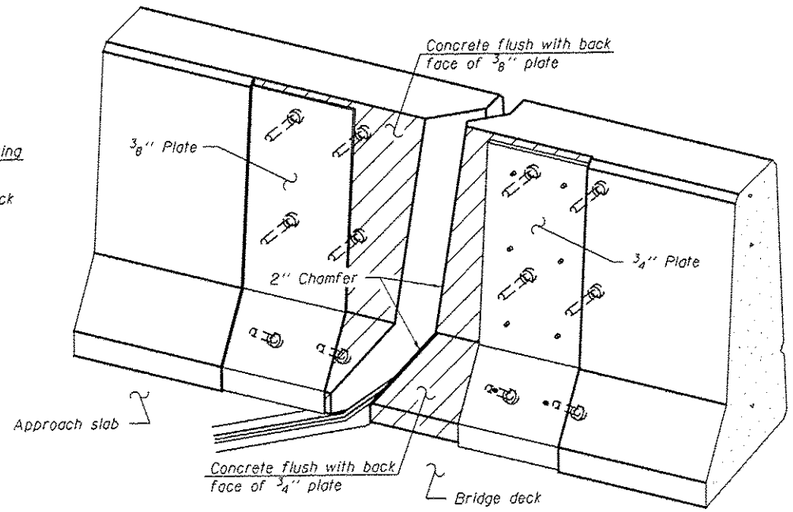
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



SECTION A-A



SECTION B-B



TRIMETRIC VIEW
(Showing back plates only)

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

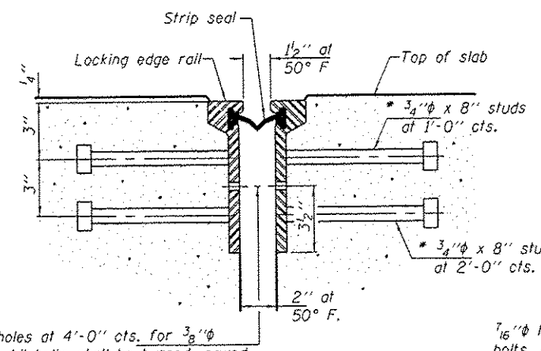
The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

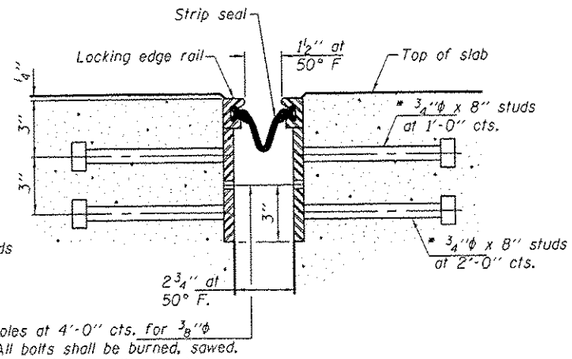
Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.

Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.



7/16"ϕ holes at 4'-0" cts. for 3/8"ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

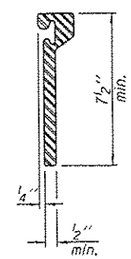
SECTION THRU ROLLED RAIL JOINT



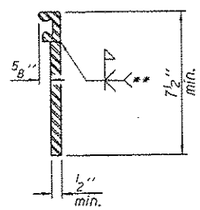
7/16"ϕ holes at 4'-0" cts. for 3/8"ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU WELDED RAIL JOINT

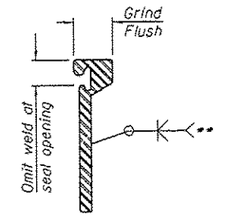
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



ROLLED EXTRUDED RAIL



WELDED RAIL



** Back gouge not required if complete joint penetration is verified by mock-up.

LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

Rolled rail shown, welded rail similar.

BILL OF MATERIAL

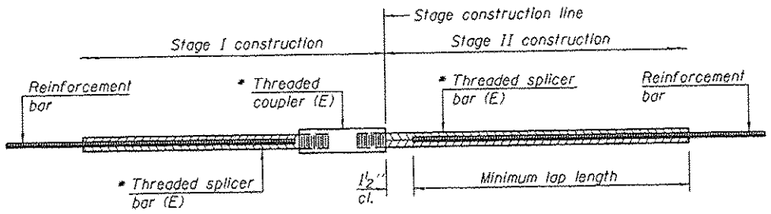
Item	Unit	Total
Preformed Joint Strip Seal	Foot	67

LOCKING EDGE RAILS

EJ-SSJ 1-27-12

DESIGNED TLC	EXAMINED	DATE AUGUST 18, 2014	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
CHECKED SMR	PASSED	REVISED	PREFORMED JOINT STRIP SEAL SN 060-0164
DRAWN baliva	ACTING ENGINEER OF STRUCTURAL SERVICES	REVISED	SHEET NO. 3 OF 4 SHEETS
CHECKED TLC SMR	ACTING ENGINEER OF BRIDGES AND STRUCTURES		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-111,121RS-3	MADISON	242	217
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			



STANDARD BAR SPLICER ASSEMBLY

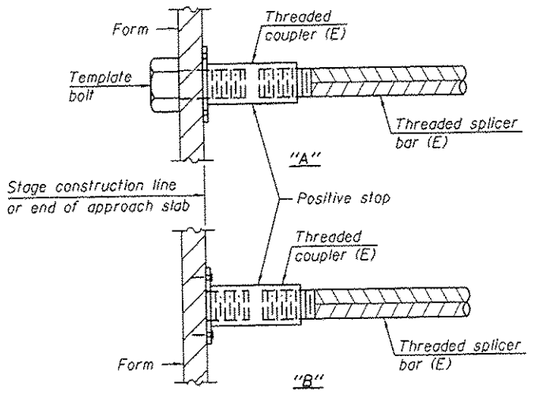
Bar size to be spliced	Minimum Lap Lengths					
	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C
Table 5: Epoxy bar, Class C
Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min. lap length + 1½" + thread length

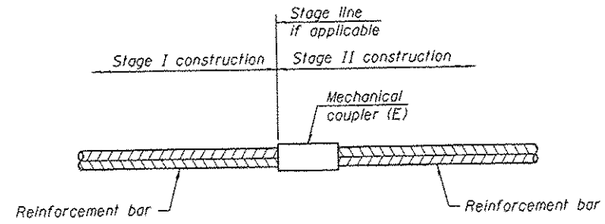
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
N. End of deck	#5	8	3
N. Hatch block	#6	4	3
S. End of deck	#5	8	3
S. Hatch block	#6	4	3



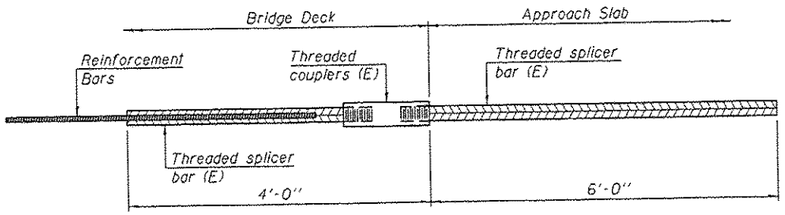
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



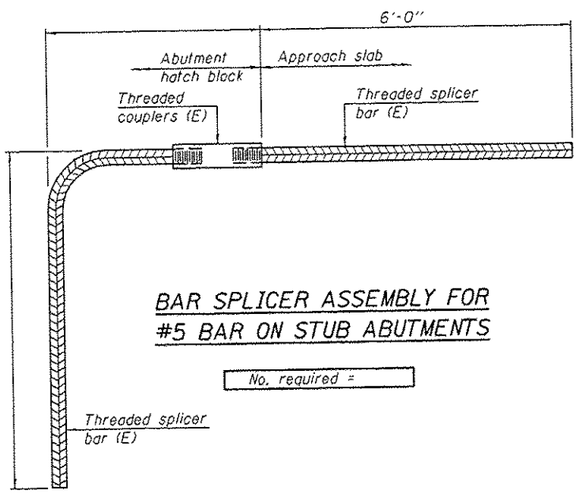
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

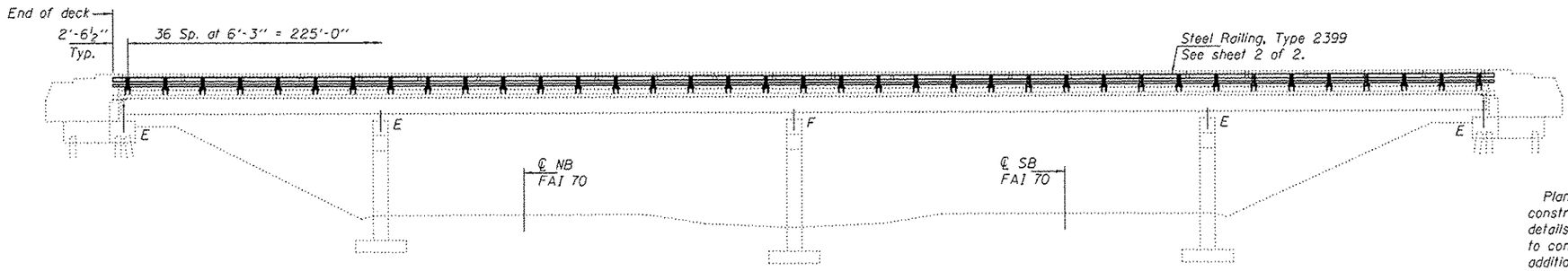
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 1-27-12

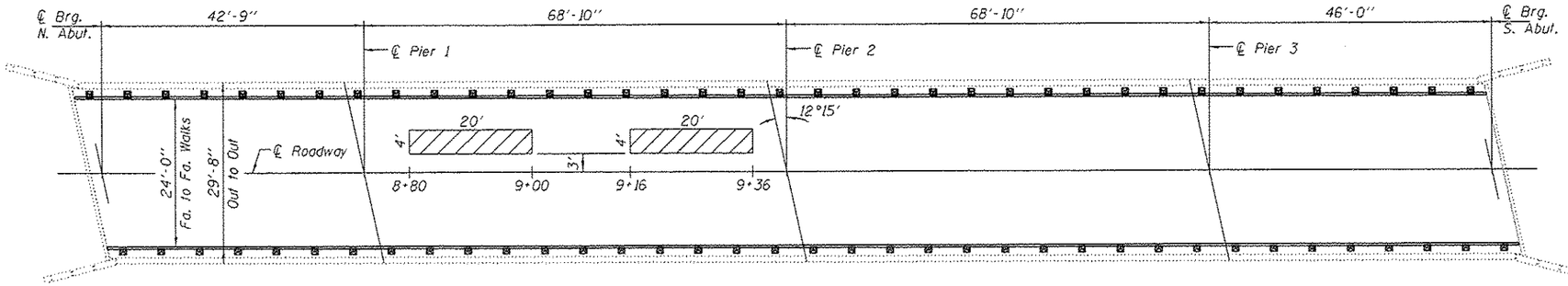
DESIGNED TLC	EXAMINED	DATE AUGUST 18, 2014	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
CHECKED SMR	PASSED	REVISED	BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS SN 060-0164
DRAWN baliva	ACTING ENGINEER OF STRUCTURAL SERVICES	REVISED	SHEET NO. 4 OF 4 SHEETS
CHECKED TLC SMR	ACTING ENGINEER OF BRIDGES AND STRUCTURES		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10	60-(11,12)RS-3	MADISON	242	218
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			



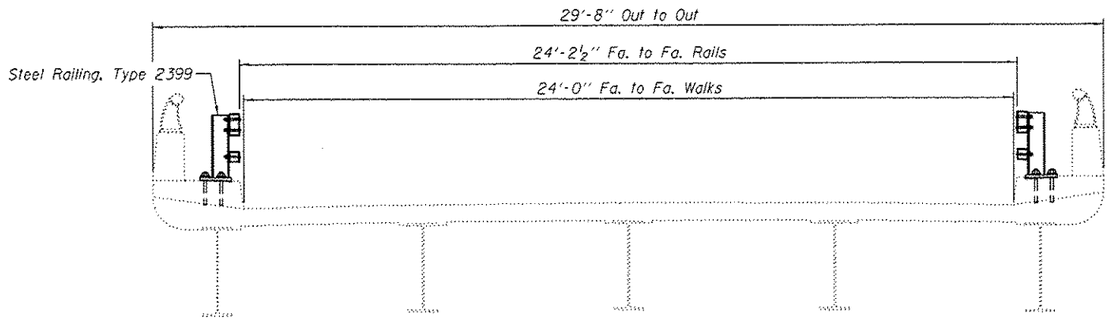
ELEVATION

Z



PLAN

Hatched areas indicate
Deck Slab Repair (Partial)



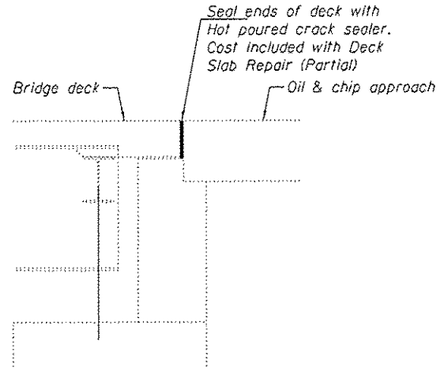
CROSS SECTION

GENERAL NOTES

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.

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.

The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.



SECTION THRU ABUTMENT

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Steel Railing, Type 2399	Foot	460
Deck Slab Repair (Partial)	Sq. Yd.	17.8

LICENSED STRUCTURAL ENGINEER
DAVID CARL PUZEY
081-005470
SPRINGFIELD
ILLINOIS
STATE OF ILLINOIS

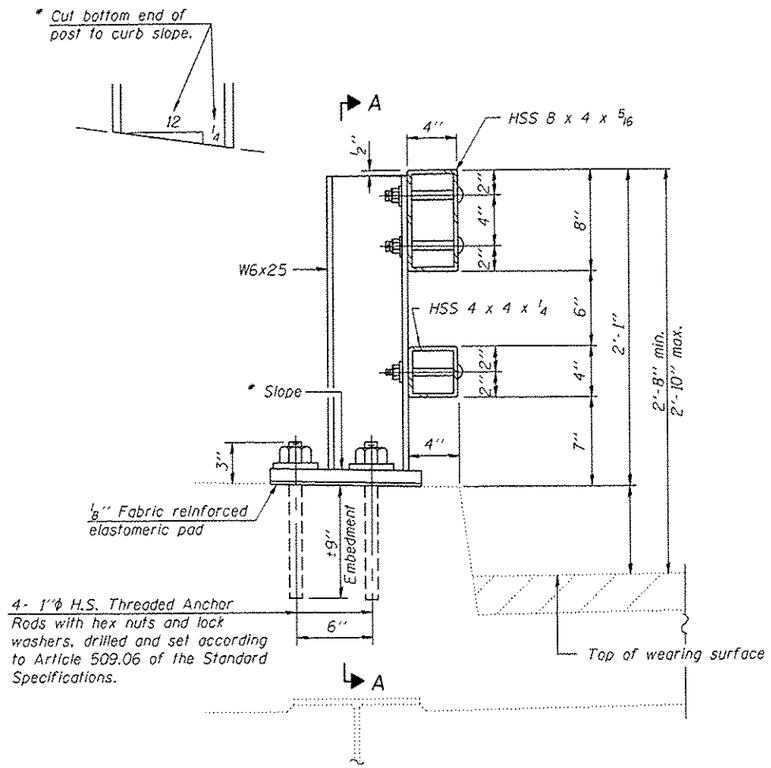
EXPIRES 11-30-2014

DESIGNED	John Clark	EXAMINED		DATE	AUGUST 18, 2014
CHECKED	Stephen M Ryan	PASSED	ACTING ENGINEER OF STRUCTURAL SERVICES	REVISED	
DRAWN	baliva		ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED	
CHECKED	TLC SMR				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

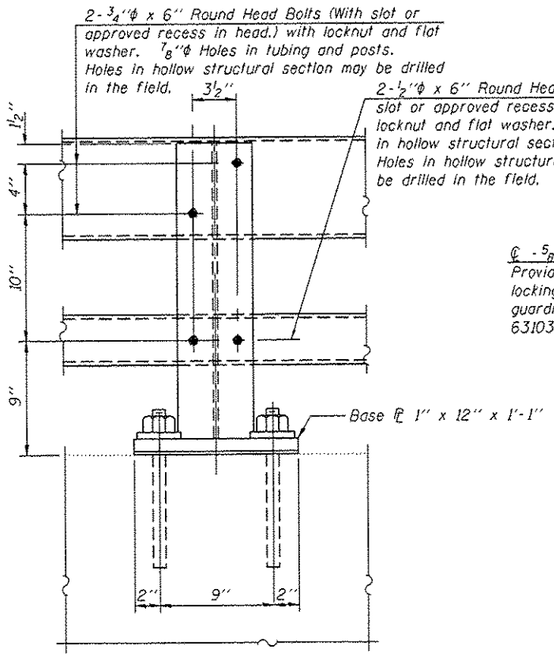
PLAN AND ELEVATION
OLD STAUNTON RD OVER FAI 70
SN 060-0174
SHEET NO. 1 OF 2 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-1(1,12)RS-3	MADISON	242	219
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			

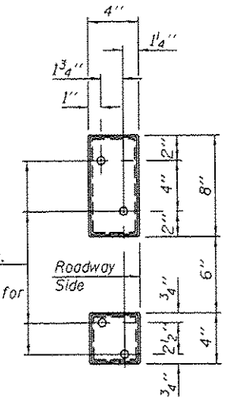


SECTION AT RAIL POST

BASE PLATE DETAIL



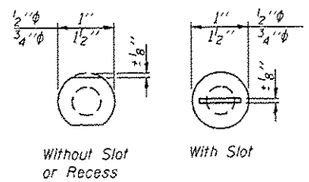
SECTION A-A



℄ - 5/8" reduced base welded studs. Provide 4 - 5/8" washers and self-locking nuts or nuts and jam nuts for guardrail connection shown on Std. 631032.

Roadway Side

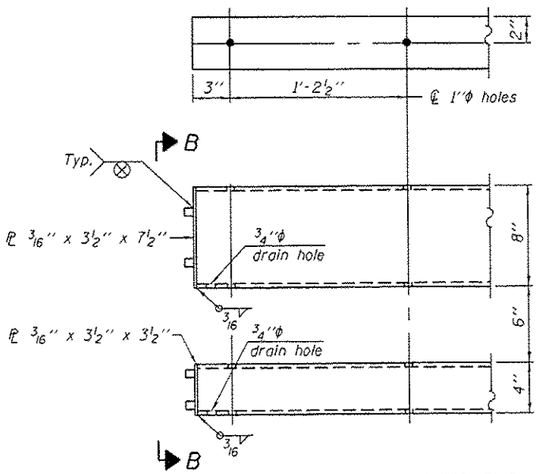
VIEW B-B



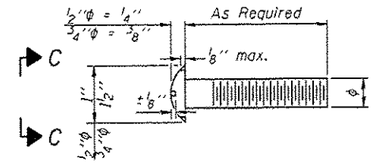
Without Slot or Recess

With Slot

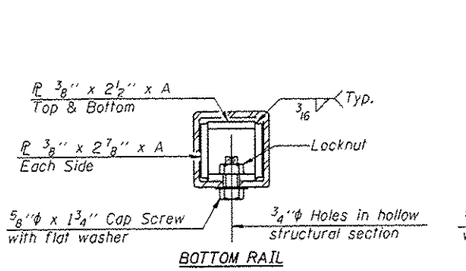
VIEW C-C



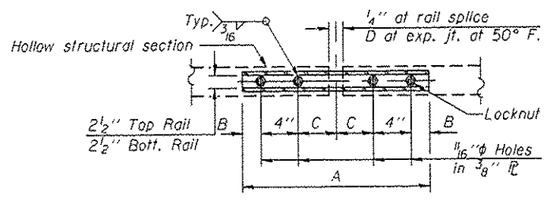
END OF RAIL DETAILS



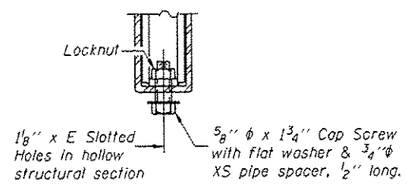
DETAIL OF 1/2"ϕ & 3/4"ϕ ROUND HEAD BOLTS



SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE PL TYPICAL



RAIL SPLICE CONNECTION AT EXPANSION JT.

Notes:

All field drilled holes shall be coated with an approved zinc rich paint before erection.

Posts shall not be located closer than 1'-3" to an existing bridge expansion joint or end of bridge.

Steel Bridge Rail expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.

Provide one 1/8" and two 1/16" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.

All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

SPLICE DIMENSIONS

T	D	A	B	C	E
≤4"	2 1/2"	1'-8"	2"	4"	2 1/2"
>4" ≤6 1/2"	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
>6 1/2" ≤9"	5"	2'-4"	3 1/2"	6 1/2"	9"
>9" ≤13"	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	1/4"	1'-8"	2"	4"	—

T = Total movement at expansion joint as shown on the design plans.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type 2399	Foot	460

(6'-3" Maximum Post Spacing)

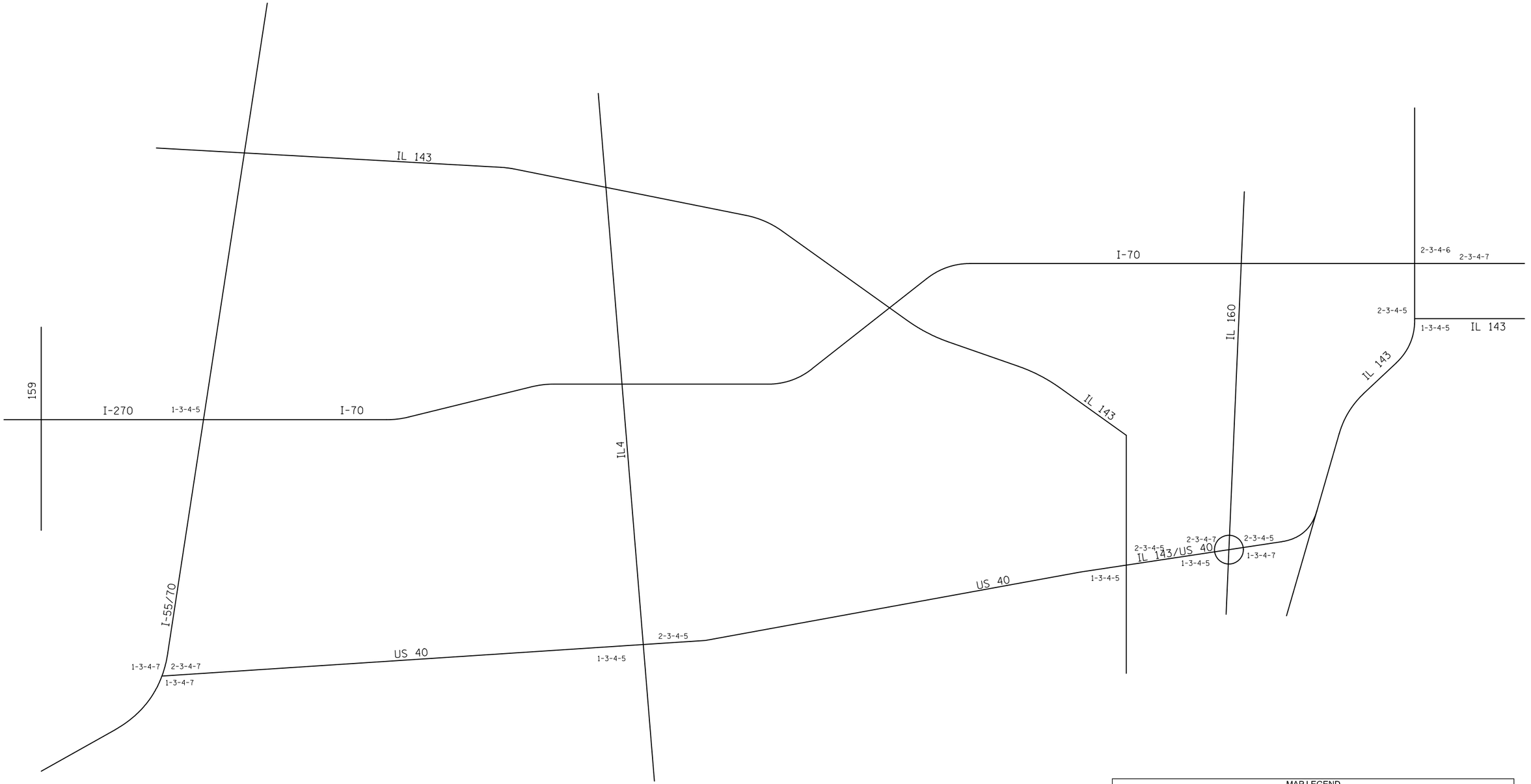
R-31 7-1-10

DESIGNED TLC	EXAMINED	Timothy A. Sheikh ACTING ENGINEER OF STRUCTURAL SERVICES	DATE AUGUST 18, 2014
CHECKED SMR	PASSED	A Carl Tunney ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED
DRAWN baliva			REVISED
CHECKED TLC SMR			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL RAILING, TYPE 2399
SN 060-0174
SHEET NO. 2 OF 2 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TO	60-111,121RS-3	MADISON	242	220
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			



MAP LEGEND				
MAP NUMBER	STANDARD SIGN NUMBER	SIZE	DESCRIPTION	COLOR
1	M3-2i	30X15	EAST	BLUE
2	M3-2i	30X16	WEST	BLUE
3	M1-1	36X36	70	BLUE
4	M4-1A	24X12	ALT	ORANGE
5	M6-3	21X15	ARROW UP	ORANGE
6	M6-1L	21X15	ARROW LEFT	ORANGE
7	M6-2R	21X18	ARROW UP/RIGHT	ORANGE

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

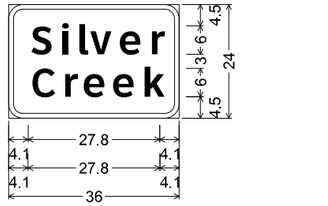
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALTERNATE ROUTE SIGNING

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

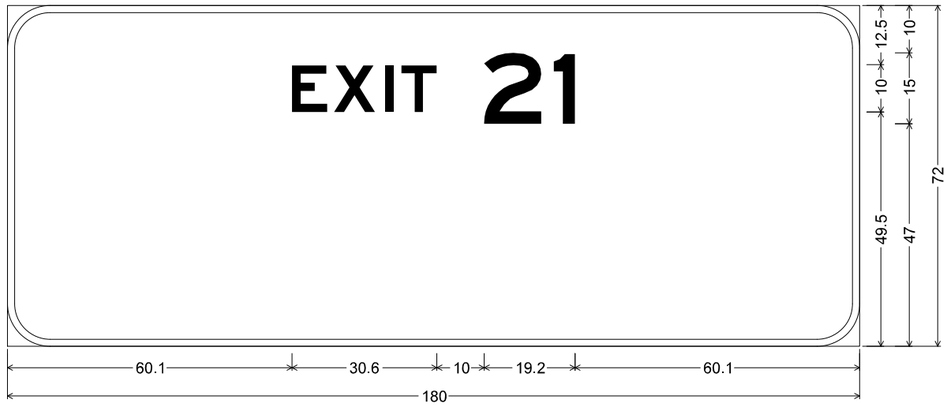
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	60-(11,12)RS-3		242	221
			CONTRACT NO. 76F13	
	ILLINOIS FED. AID PROJECT			

STA 1107+36



3.0" Radius, 1.0" Border, White on Green;
[Silver] ClearviewHwy-5-W;
[Creek] ClearviewHwy-5-W;

EB STA 1149+28



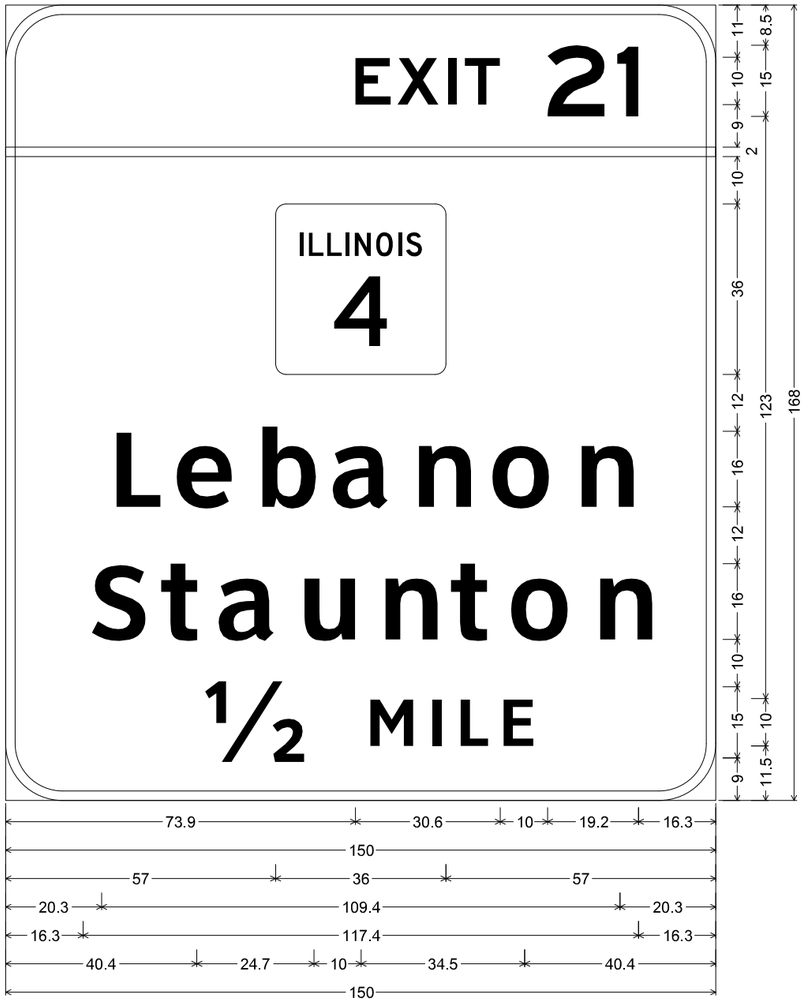
9.0" Radius, 1.5" Border, White on Blue;
[EXIT 21] E 2K;

EB STA 1159+00

12.0" Radius, 2.0" Border, White on Green;
[EXIT 21] E 2K; [Lebanon] ClearviewHwy-5-W; [Staunton] ClearviewHwy-5-W;
[1 MILE] E 2K;

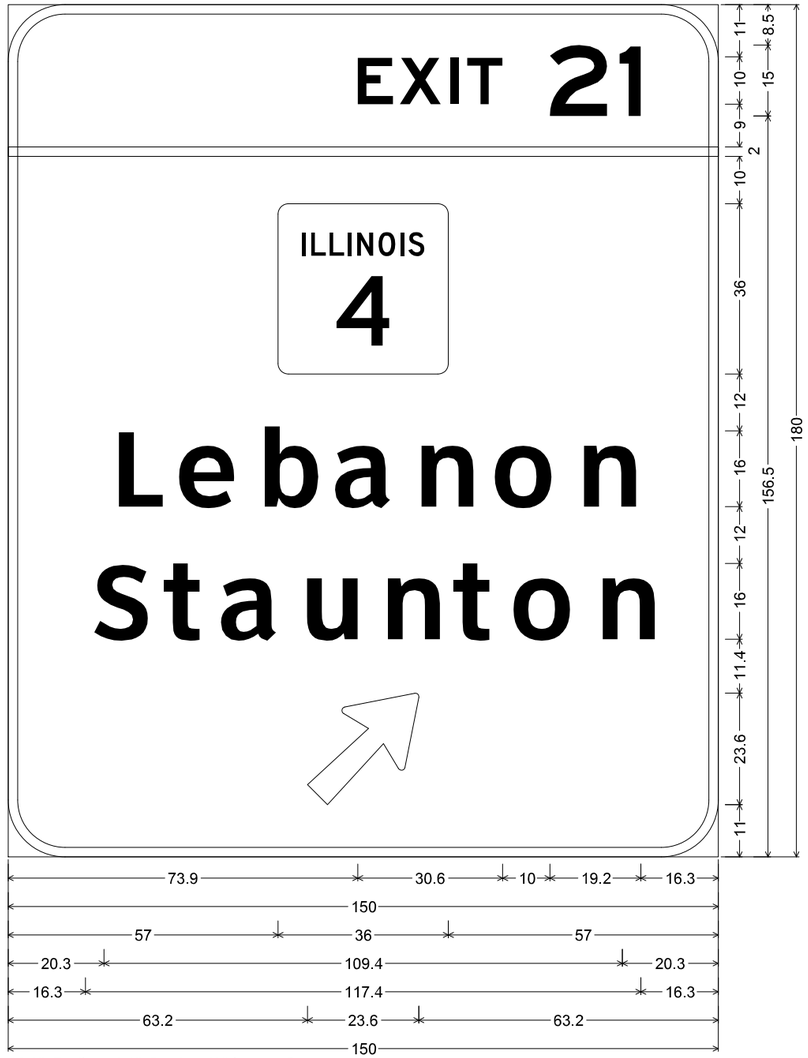
FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED - ___	REVISED - ·	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SIGN PANEL DETAILS	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - ___	REVISED - ·			70	60-(11,12)RS-3	MADISON	242	222
	PLOT SCALE = $SCALE$	CHECKED - ___	REVISED - ·					CONTRACT NO. 76F13		
	PLOT DATE = $DATE$	DATE - _____	REVISED - ·		SCALE: _____ SHEET ___ OF ___ SHEETS STA. _____ TO STA. _____			ILLINOIS FED. AID PROJECT		

EB STA 1183+00



12.0" Radius, 2.0" Border, White on Green;
[EXIT 21] E 2K; [Lebanon] ClearviewHwy-5-W; [Staunton] ClearviewHwy-5-W;
[½ MILE] ClearviewHwy-5-W;

EB STA 1209+00



12.0" Radius, 2.0" Border, White on Green;
[EXIT 21] E 2K; [Lebanon] ClearviewHwy-5-W; [Staunton] ClearviewHwy-5-W;
Arrow 133 - 30.0" 45°;

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED - ___	REVISED - ·
		DRAWN - ___	REVISED - ·
	PLOT SCALE = $SCALE$	CHECKED - ___	REVISED - ·
	PLOT DATE = $DATE$	DATE - _____	REVISED - ·

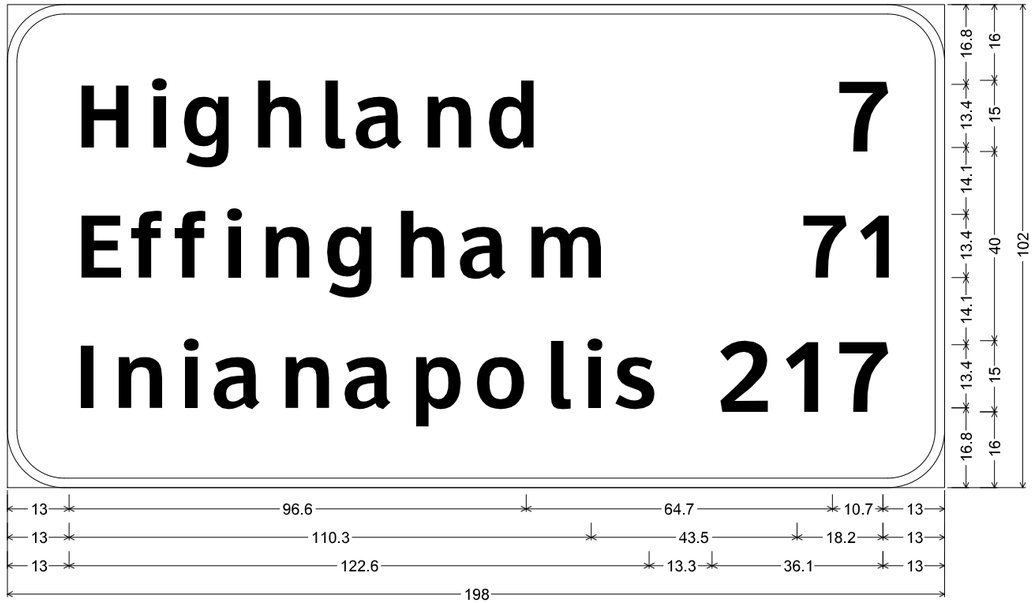
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN PANEL DETAILS

SCALE: _____ | SHEET ___ OF ___ SHEETS | STA. _____ | TO STA. _____

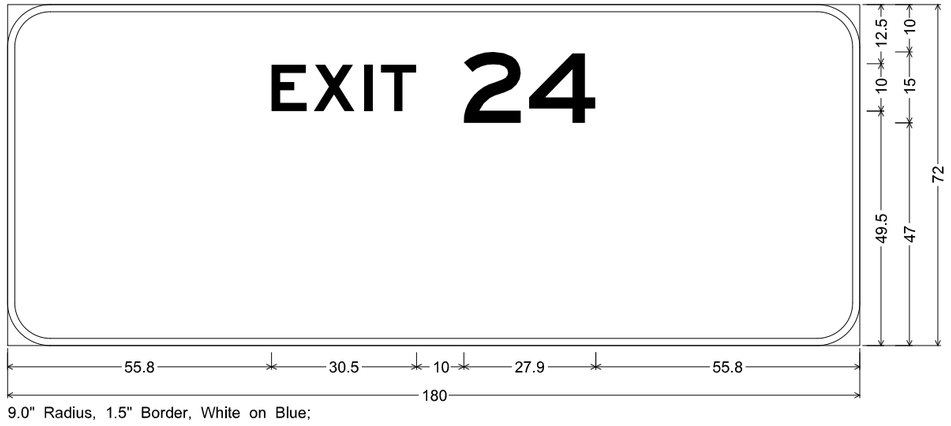
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(11,12)RS-3	MADISON	242	223
		CONTRACT NO. 76F13		
	ILLINOIS	FED. AID PROJECT		

EB STA 1276+50



12.0" Radius, 2.0" Border, White on Green;
[Highland] ClearviewHwy-5-W; [7] ClearviewHwy-5-W; [Effingham] ClearviewHwy-5-W; [71] ClearviewHwy-5-W;
[Inianapolis] ClearviewHwy-5-W; [217] ClearviewHwy-5-W;

EB STA 1332+00



9.0" Radius, 1.5" Border, White on Blue;
[EXIT 24] E 2K;

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED - ___	REVISED - ·
		DRAWN - ___	REVISED - ·
	PLOT SCALE = $SCALE$	CHECKED - ___	REVISED - ·
	PLOT DATE = $DATE$	DATE - _____	REVISED - ·

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN PANEL DETAILS

SCALE: _____ | SHEET ___ OF ___ SHEETS | STA. _____ TO STA. _____

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(11,12)RS-3	MADISON	242	224
		CONTRACT NO. 76F13		
		ILLINOIS FED. AID PROJECT		

EB STA 1339+00

12.0" Radius, 2.0" Border, White on Green;
[EXIT 24] E 2K; [Marine] ClearviewHwy-5-W; [Highland] ClearviewHwy-5-W;
[1 MILE] E 2K;

EB STA 1364+00

12.0" Radius, 2.0" Border, White on Green;
[EXIT 24] E 2K; [Marine] ClearviewHwy-5-W; [Highland] ClearviewHwy-5-W;
[½ MILE] ClearviewHwy-5-W;

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED - ___	REVISED - ·
		DRAWN - ___	REVISED - ·
	PLOT SCALE = $SCALE$	CHECKED - ___	REVISED - ·
	PLOT DATE = $DATE$	DATE - _____	REVISED - ·

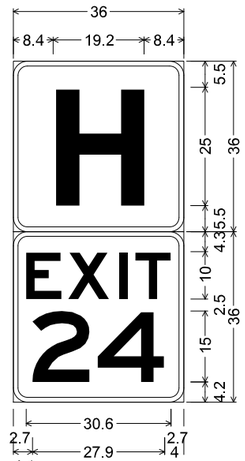
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN PANEL DETAILS

SCALE: _____ | SHEET ___ OF ___ SHEETS | STA. _____ | TO STA. _____

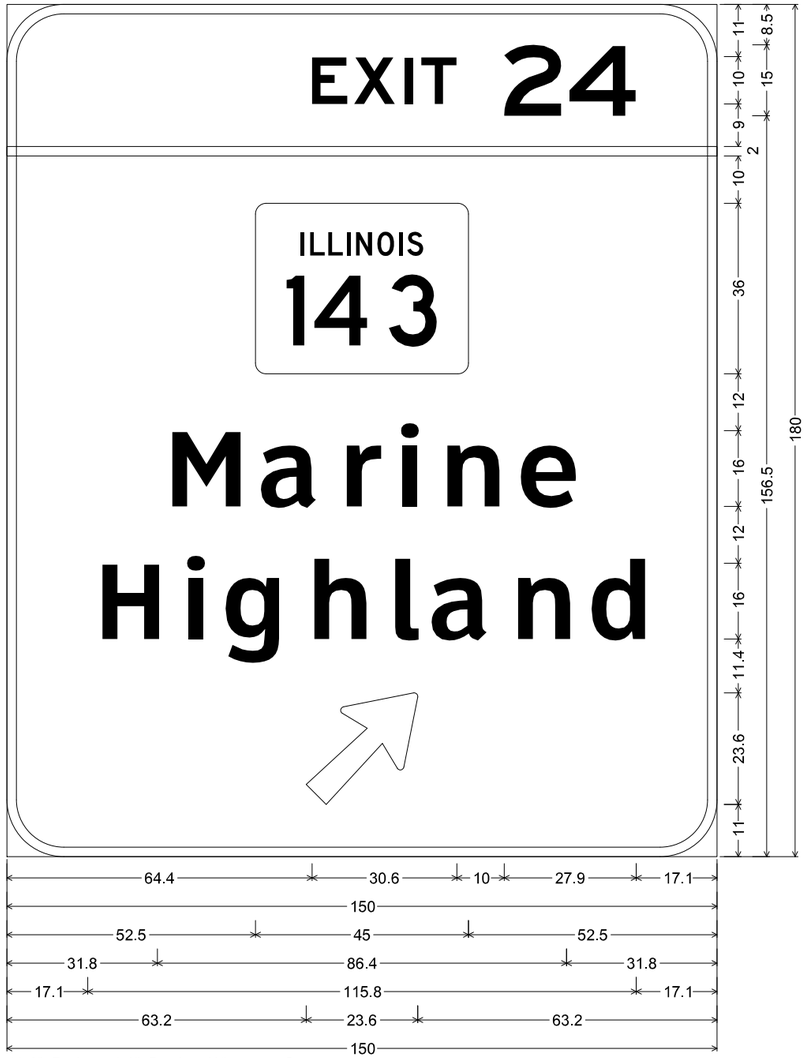
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(11,12)RS-3	MADISON	221	225
		CONTRACT NO. 76F13		
	ILLINOIS	FED. AID PROJECT		

EB STA 1370+50



3.0" Radius, 1.0" Border, White on Blue;
[H] ClearviewHwy-5-W;
3.0" Radius, 1.0" Border, White on Blue;
[EXIT] E 2K;
[24] E 2K;

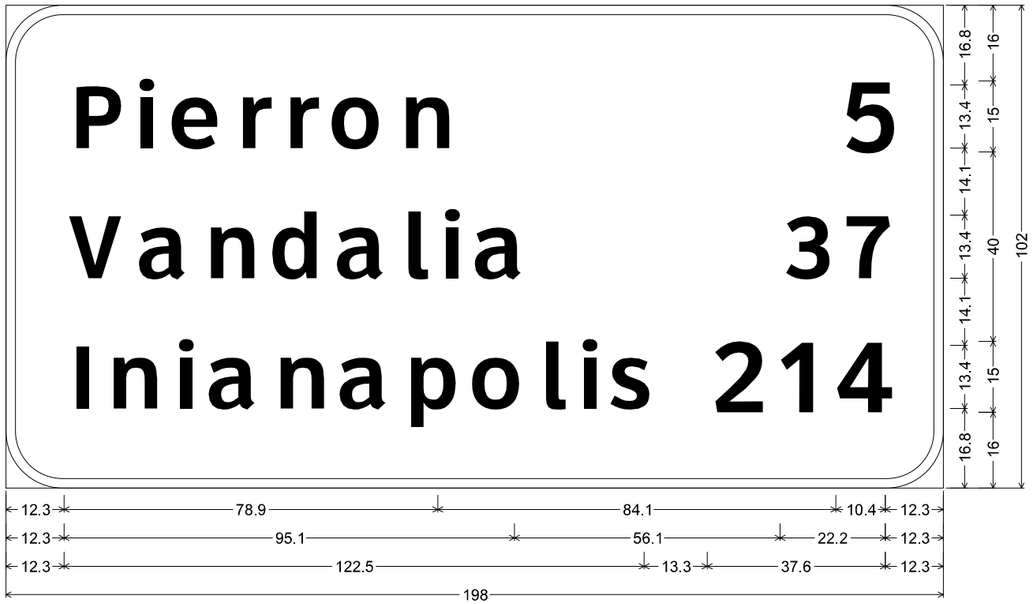
EB STA 1389+00



12.0" Radius, 2.0" Border, White on Green;
[EXIT 24] E 2K; [Marine] ClearviewHwy-5-W; [Highland] ClearviewHwy-5-W;
Arrow 133 - 30.0" 45°;

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - ___	REVISED - ·	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SIGN PANEL DETAILS	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - ___	REVISED - ·			70	60-(11,12)RS-3	MADISON	242	226
	PLOT SCALE = $SCALE$	CHECKED - ___	REVISED - ·					CONTRACT NO. 76F13		
	PLOT DATE = $DATE$	DATE - _____	REVISED - ·		SCALE: _____ SHEET ___ OF ___ SHEETS STA. _____ TO STA. _____			ILLINOIS FED. AID PROJECT		

EB STA 1536+00



12.0" Radius, 2.0" Border, White on Green;
[Pierron] ClearviewHwy-5-W; [5] ClearviewHwy-5-W; [Vandalia] ClearviewHwy-5-W; [37] ClearviewHwy-5-W;
[Inianapolis] ClearviewHwy-5-W; [214] ClearviewHwy-5-W;

EB STA 1545+48

12.0" Radius, 2.0" Border, White on Blue;
[REST AREA] D 2K; [TOURIST INFO] D 2K; [CENTER] D 2K; [1 MILE] D 2K;
[NEXT REST AREA] D 2K 55% spacing; [62 MILES] D 2K;
D9-6 SPECIAL; 1.9" Radius, 0.8" Border, White on Blue;
Symbol RM080;

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED - ___	REVISED - ·
		DRAWN - ___	REVISED - ·
	PLOT SCALE = $SCALE$	CHECKED - ___	REVISED - ·
	PLOT DATE = $DATE$	DATE - _____	REVISED - ·

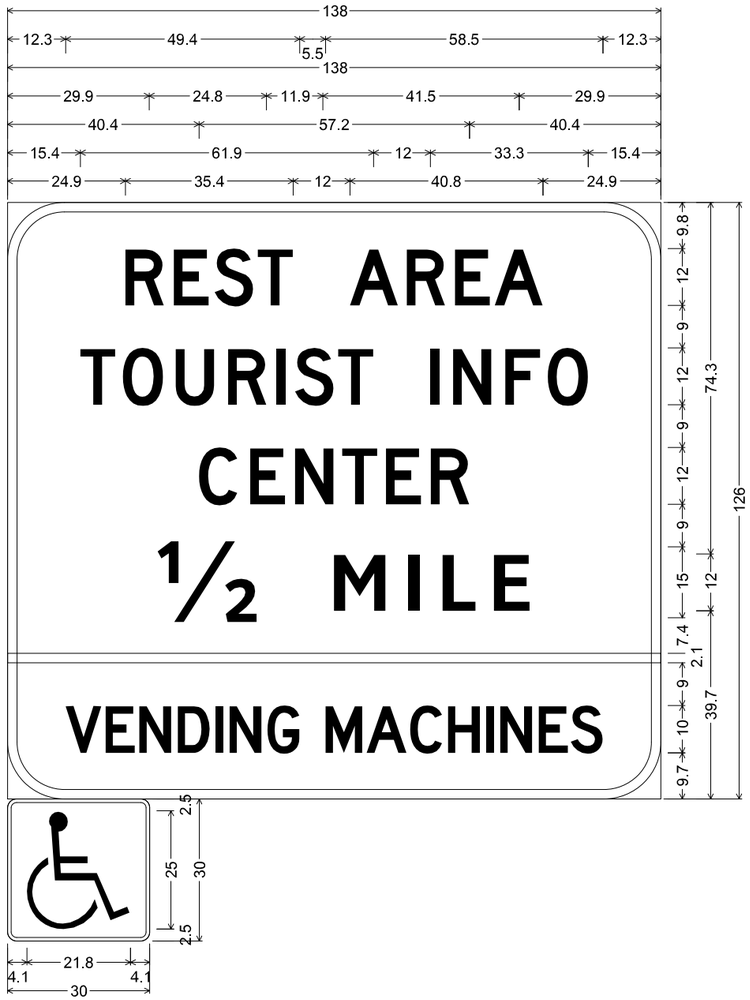
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN PANEL DETAILS

SCALE: _____ | SHEET ___ OF ___ SHEETS | STA. _____ | TO STA. _____

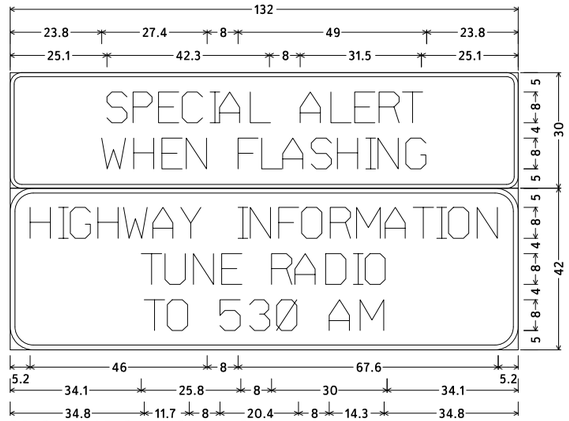
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(11,12)RS-3	MADISON	242	227
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			

EB STA 1577+45



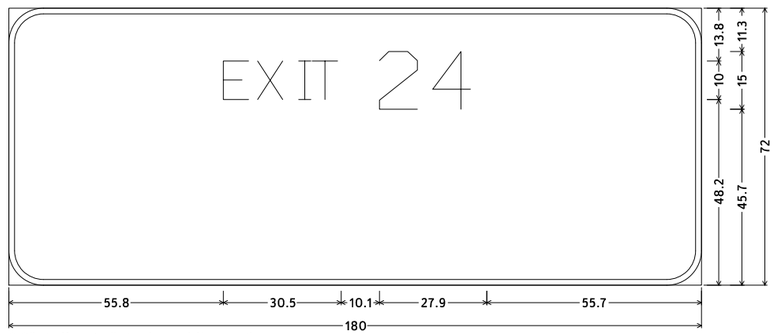
12.0" Radius, 2.0" Border, White on Blue;
[REST AREA] D 2K; [TOURIST INFO] D 2K; [CENTER] D 2K;
[½ MILE] ClearviewHwy-5-W; [VENDING MACHINES] D 2K 55% spacing;
D9-6 SPECIAL; 1.9" Radius, 0.8" Border, White on Blue;
Symbol RM080;

W B STA 1577+00



3.0" Radius, 1.0" Border, Black on Fluorescent orange;
[SPECIAL ALERT] D 2K; [WHEN FLASHING] D 2K;
6.0" Radius, 1.3" Border, White on Blue;
[HIGHWAY INFORMATION] D 2K; [TUNE RADIO] D 2K; [TO 530 AM] D 2K;

W B STA 1558+53



9.0" Radius, 1.5" Border, White on Blue;
[EXIT 24] E 2K;

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - ___	REVISED - ·
		DRAWN - ___	REVISED - ·
	PLOT SCALE = $SCALE$	CHECKED - ___	REVISED - ·
	PLOT DATE = $DATE$	DATE - _____	REVISED - ·

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN PANEL DETAILS

SCALE: _____ | SHEET ___ OF ___ SHEETS | STA. _____ | TO STA. _____

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(11,12)RS-3	MADISON	242	228
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			

W B STA 1XXX+XX

12.0" Radius, 2.0" Border, White on Green;
[EXIT 24] E 2K; [Marine] ClearviewHwy-5-W;
[Highland] ClearviewHwy-5-W; [1 MILE] E 2K;

W B STA 1XXX+XX

12.0" Radius, 2.0" Border, White on Green;
[EXIT 24] E 2K; [Marine] ClearviewHwy-5-W;
[Highland] ClearviewHwy-5-W; [½ MILE] ClearviewHwy-5-W;

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - ___	REVISED - ·
		DRAWN - ___	REVISED - ·
	PLOT SCALE = $SCALE$	CHECKED - ___	REVISED - ·
	PLOT DATE = $DATE$	DATE - _____	REVISED - ·

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN PANEL DETAILS

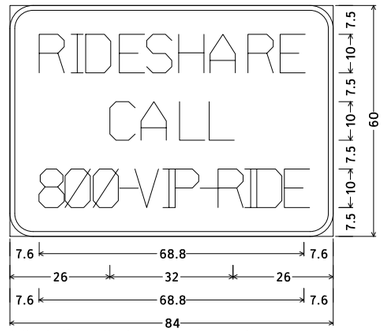
SCALE: _____ | SHEET ___ OF ___ SHEETS | STA. _____ | TO STA. _____

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(11,12)RS-3	MADISON	242	229
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			

WB STA 1504+00

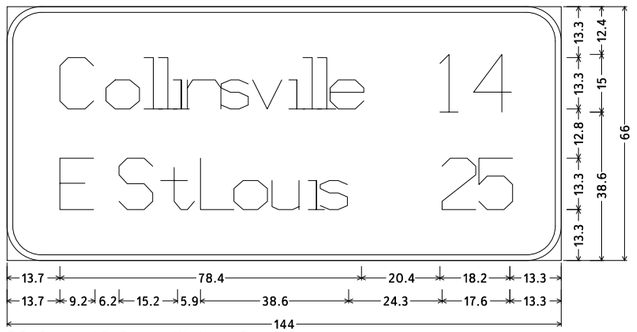
12.0" Radius, 2.0" Border, White on Green;
[EXIT 24] E 2K; [Marine] ClearviewHwy-5-W;
[Highland] ClearviewHwy-5-W; Arrow 133 - 30.0" 45{;

WB STA 1360+87



6.0" Radius, 1.3" Border, White on Blue;
[RIDESHARE] D 2K 90} spacing; [CALL] D 2K;
[800-VIP-RIDE] C 2K 79} spacing;

WB STA 1351+33



9.0" Radius, 1.5" Border, White on Green;
[Collinsville] ClearviewHwy-5-W; [14] ClearviewHwy-5-W;
[E St Louis] ClearviewHwy-5-W; [25] ClearviewHwy-5-W;

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED - ___	REVISED - ·
		DRAWN - ___	REVISED - ·
	PLOT SCALE = $SCALE$	CHECKED - ___	REVISED - ·
	PLOT DATE = $DATE$	DATE - _____	REVISED - ·

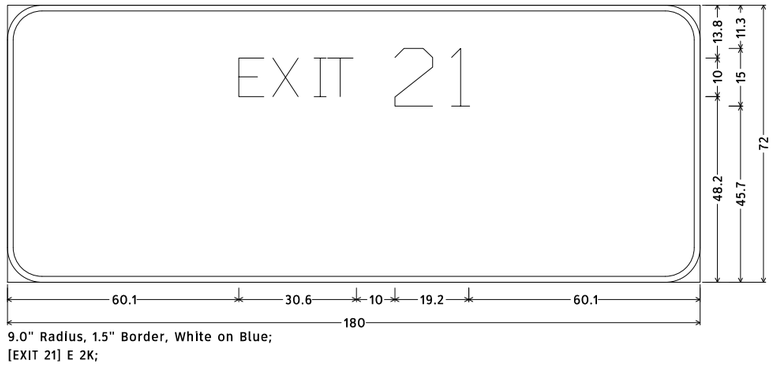
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN PANEL DETAILS

SCALE: _____ | SHEET ___ OF ___ SHEETS | STA. _____ | TO STA. _____

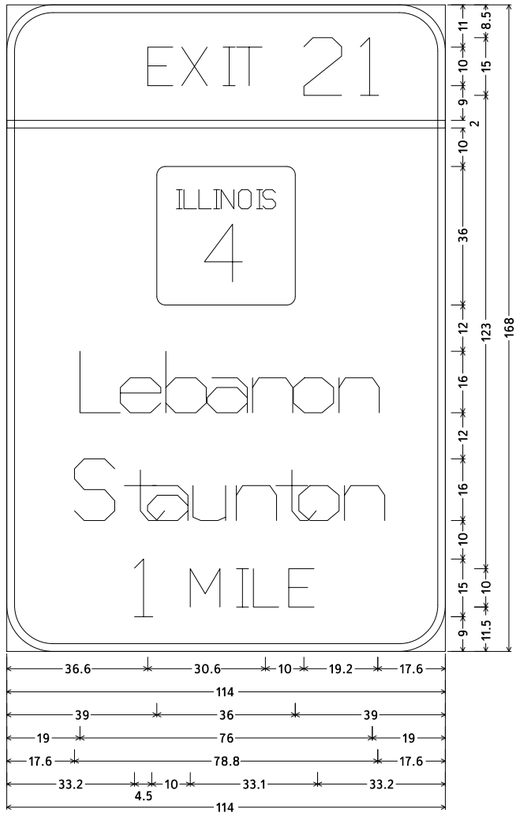
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(11,12)RS-3	MADISON	242	230
		CONTRACT NO. 76F13		
		ILLINOIS	FED. AID PROJECT	

W B STA 1310+00



9.0" Radius, 1.5" Border, White on Blue;
[EXIT 21] E 2K;

W B STA 1296+00



12.0" Radius, 2.0" Border, White on Green;
[EXIT 21] E 2K; [Lebanon] ClearviewHwy-5-W;
[Staunton] ClearviewHwy-5-W; [1 MILE] E 2K;

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED - ___	REVISED - ·
		DRAWN - ___	REVISED - ·
	PLOT SCALE = $SCALE$	CHECKED - ___	REVISED - ·
	PLOT DATE = $DATE$	DATE - _____	REVISED - ·

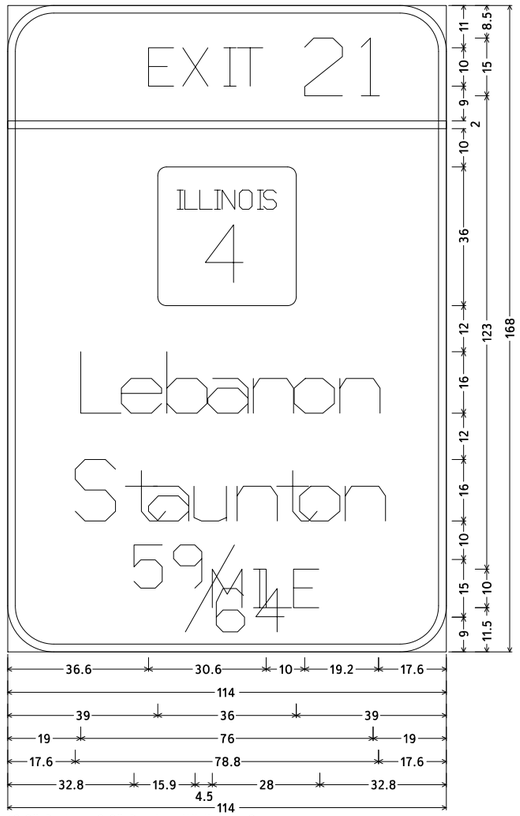
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN PANEL DETAILS

SCALE: _____ | SHEET ___ OF ___ SHEETS | STA. _____ | TO STA. _____

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(11,12)RS-3	MADISON	242	231
			CONTRACT NO. 76F13	
		ILLINOIS	FED. AID PROJECT	

W B STA 1270+25



12.0" Radius, 2.0" Border, White on Green;
[EXIT 21] E 2K; [Lebanon] ClearviewHwy-5-W;
[Staunton] ClearviewHwy-5-W; [½ MILE] ClearviewHwy-5-W;

W B STA 1246+45

12.0" Radius, 2.0" Border, White on Green;
[EXIT 21] E 2K; [Lebanon] ClearviewHwy-5-W;
[Staunton] ClearviewHwy-5-W; Arrow 133 - 30.0" 45(;

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED - ___	REVISED - ·
		DRAWN - ___	REVISED - ·
	PLOT SCALE = $SCALE$	CHECKED - ___	REVISED - ·
	PLOT DATE = $DATE$	DATE - _____	REVISED - ·

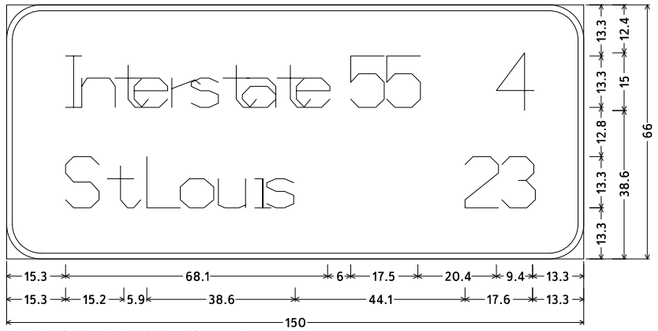
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN PANEL DETAILS

SCALE: _____ | SHEET ___ OF ___ SHEETS | STA. _____ | TO STA. _____

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(11,12)RS-3	MADISON	242	232
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			

W B STA 1177+03

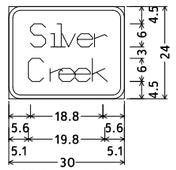


9.0" Radius, 1.5" Border, White on Green;
[Interstate 55] ClearviewHwy-5-W; [4] ClearviewHwy-5-W; [St Louis] ClearviewHwy-5-W;
[23] ClearviewHwy-5-W;

W B STA 1053+07

12.0" Radius, 2.0" Border, White on Green;
[EXIT 15B] E 2K; [Chicago] ClearviewHwy-5-W; [Kansas City] ClearviewHwy-5-W; [2 MILES] E 2K;

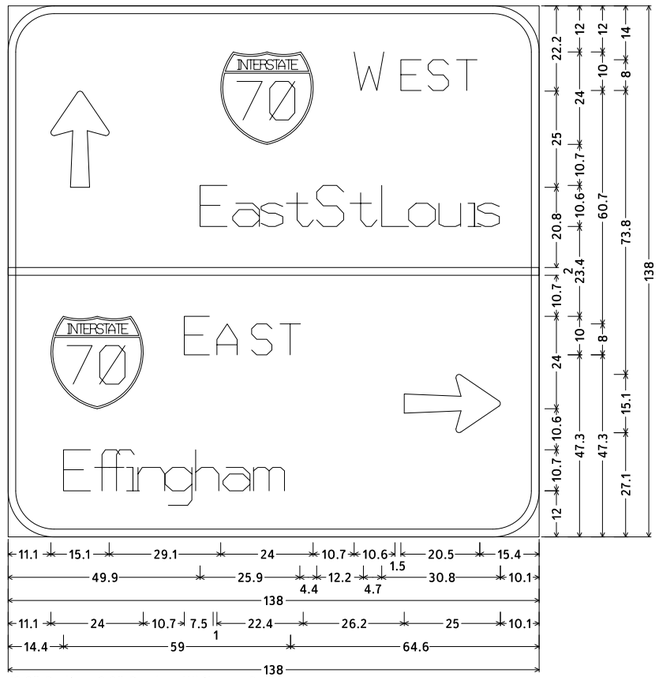
W B STA 1110+90



3.0" Radius, 1.0" Border, White on Green;
[Silver] ClearviewHwy-5-W;
[Creek] ClearviewHwy-5-W;

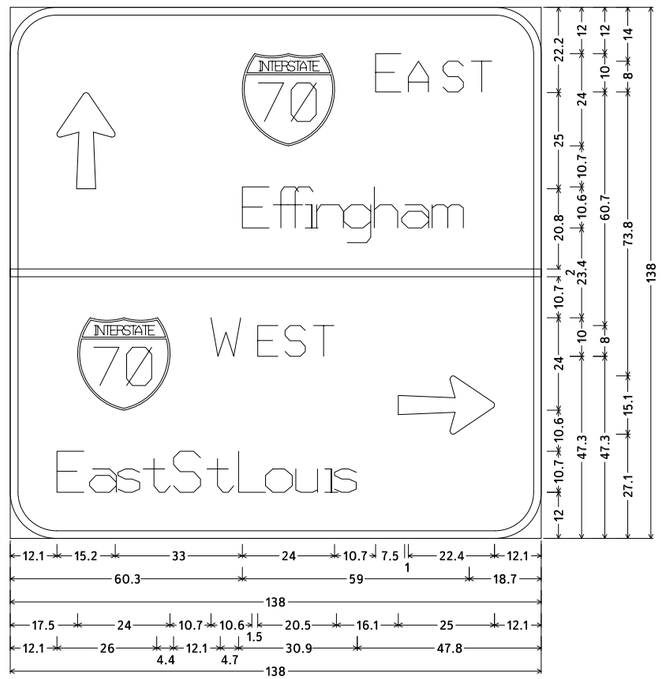
FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED - ___	REVISED - ·	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**SIGN PANEL DETAILS**	F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - ___	REVISED - ·			70	60-(11,12)RS-3	MADISON	242	233
	PLOT SCALE = $SCALE$	CHECKED - ___	REVISED - ·					CONTRACT NO. 76F13		
	PLOT DATE = $DATE$	DATE - _____	REVISED - ·		SCALE: _____ SHEET ___ OF ___ SHEETS STA. _____ TO STA. _____			ILLINOIS FED. AID PROJECT		

IL 4 STA 628+43 EAST



12.0" Radius, 2.0" Border, White on Green;
Arrow 80 - 25.0" 90{; [WEST] E 2K; [East St Louis] ClearviewHwy-5-W;
[EAST] E 2K; [Effingham] ClearviewHwy-5-W; Arrow 80 - 25.0" 0{;

IL 4 STA 613+97 WEST



12.0" Radius, 2.0" Border, White on Green;
Arrow 80 - 25.0" 90{; [EAST] E 2K; [Effingham] ClearviewHwy-5-W; [WEST] E 2K;
[East St Louis] ClearviewHwy-5-W; Arrow 80 - 25.0" 0{;

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - ___	REVISED - ·
		DRAWN - ___	REVISED - ·
	PLOT SCALE = $SCALE$	CHECKED - ___	REVISED - ·
	PLOT DATE = $DATE$	DATE - _____	REVISED - ·

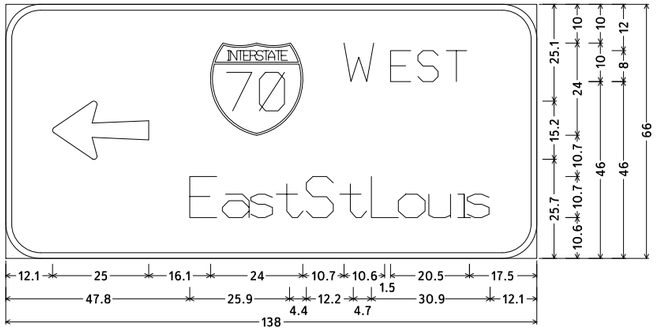
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN PANEL DETAILS

SCALE: _____ | SHEET ___ OF ___ SHEETS | STA. _____ | TO STA. _____

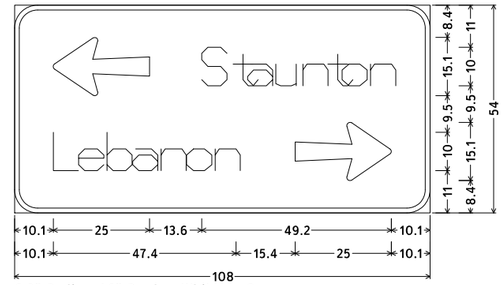
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(11,12)RS-3	MADISON	242	234
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			

IL 4 STA 615+99 EAST



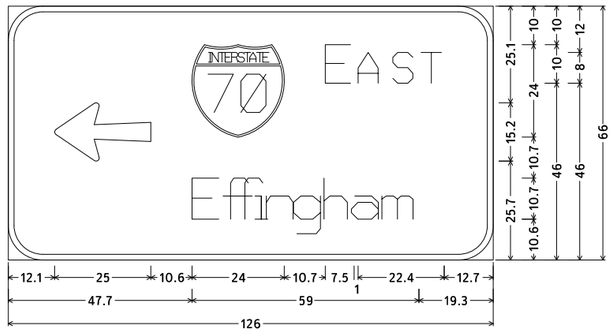
9.0" Radius, 1.5" Border, White on Green;
Arrow 80 - 25.0" 180{; [WEST] E 2K; [East St Louis] ClearviewHwy-5-W;

IL 4 EB I-70 RAMP STA 12+24 RT



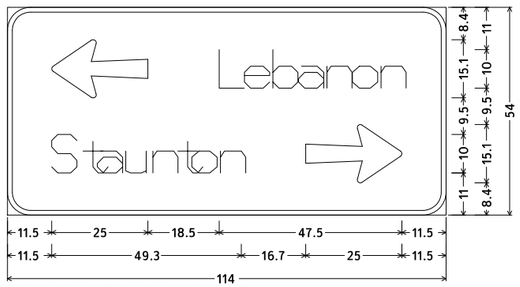
6.0" Radius, 1.3" Border, White on Green;
Arrow 80 - 25.0" 180{; [Staunton] ClearviewHwy-5-W;
[Lebanon] ClearviewHwy-5-W; Arrow 80 - 25.0" 0{;

IL 4 STA 626+89 WEST



9.0" Radius, 1.5" Border, White on Green;
Arrow 80 - 25.0" 180{; [EAST] E 2K; [Effingham] ClearviewHwy-5-W;

IL 4 WB I-70 RAMP STA 11+08 RT



6.0" Radius, 1.3" Border, White on Green;
Arrow 80 - 25.0" 180{; [Lebanon] ClearviewHwy-5-W;
[Staunton] ClearviewHwy-5-W; Arrow 80 - 25.0" 0{;

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - ___	REVISED - ·
		DRAWN - ___	REVISED - ·
	PLOT SCALE = $SCALE$	CHECKED - ___	REVISED - ·
	PLOT DATE = $DATE$	DATE - _____	REVISED - ·

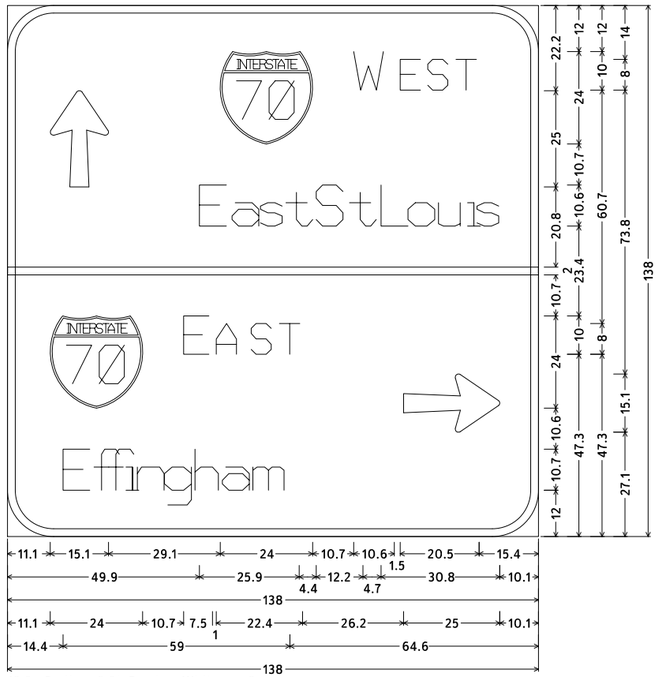
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN PANEL DETAILS

SCALE: _____ | SHEET ___ OF ___ SHEETS | STA. _____ | TO STA. _____

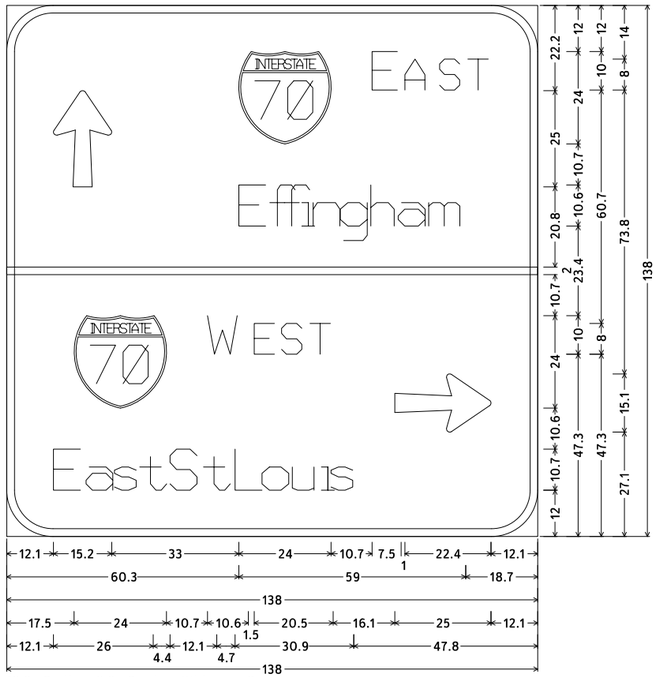
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(11,12)RS-3	MADISON	242	235
		CONTRACT NO. 76F13		
		ILLINOIS	FED. AID PROJECT	

IL 143 STA 121+60 EAST



12.0" Radius, 2.0" Border, White on Green;
Arrow 80 - 25.0" 90{; [WEST] E 2K; [East St Louis] ClearviewHwy-5-W;
[EAST] E 2K; [Effingham] ClearviewHwy-5-W; Arrow 80 - 25.0" 0{;

IL 143 STA 107+56 WEST



12.0" Radius, 2.0" Border, White on Green;
Arrow 80 - 25.0" 90{; [EAST] E 2K; [Effingham] ClearviewHwy-5-W; [WEST] E 2K;
[East St Louis] ClearviewHwy-5-W; Arrow 80 - 25.0" 0{;

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - ___	REVISED - ·
		DRAWN - ___	REVISED - ·
	PLOT SCALE = $SCALE$	CHECKED - ___	REVISED - ·
	PLOT DATE = $DATE$	DATE - _____	REVISED - ·

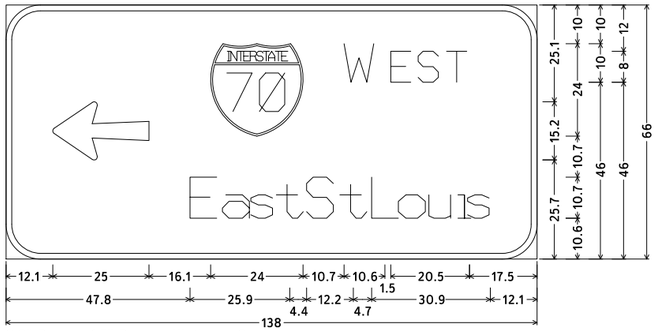
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN PANEL DETAILS

SCALE: _____ | SHEET ___ OF ___ SHEETS | STA. _____ | TO STA. _____

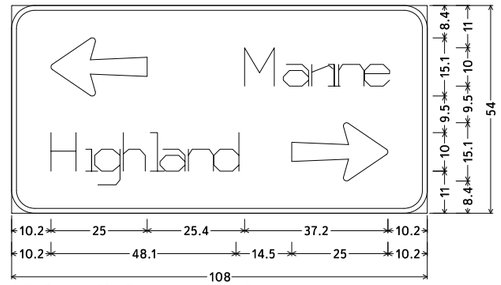
F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(11,12)RS-3	MADISON	242	236
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			

IL 143 STA 108+76 EAST



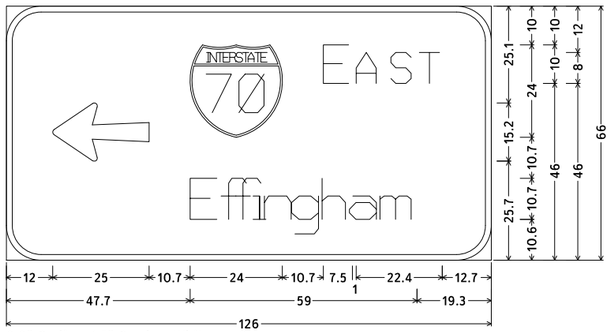
9.0" Radius, 1.5" Border, White on Green;
Arrow 80 - 25.0" 180{; [WEST] E 2K; [East St Louis] ClearviewHwy-5-W;

IL 143 EB I-70 RAMP STA 18+21 RT



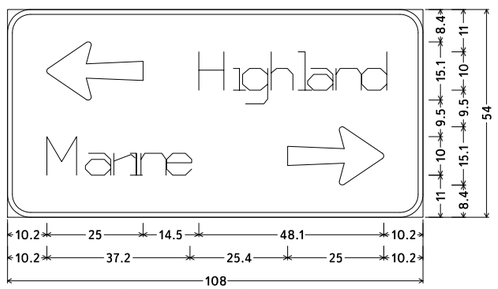
6.0" Radius, 1.3" Border, White on Green;
Arrow 80 - 25.0" 180{; [Marine] ClearviewHwy-5-W;
[Highland] ClearviewHwy-5-W; Arrow 80 - 25.0" 0{;

IL 143 STA 120+46 WEST



9.0" Radius, 1.5" Border, White on Green;
Arrow 80 - 25.0" 180{; [EAST] E 2K; [Effingham] ClearviewHwy-5-W;

IL 143 WB I-70 RAMP STA 18+34 RT



6.0" Radius, 1.3" Border, White on Green;
Arrow 80 - 25.0" 180{; [Highland] ClearviewHwy-5-W;
[Marine] ClearviewHwy-5-W; Arrow 80 - 25.0" 0{;

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - ___	REVISED - ·
		DRAWN - ___	REVISED - ·
	PLOT SCALE = $SCALE$	CHECKED - ___	REVISED - ·
	PLOT DATE = $DATE$	DATE - _____	REVISED - ·

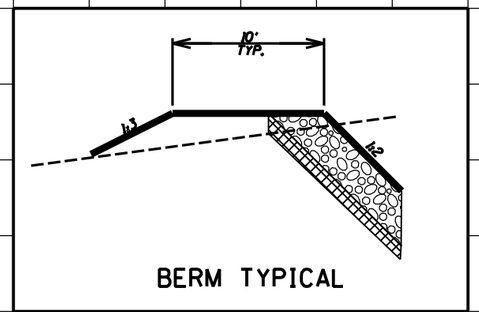
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN PANEL DETAILS

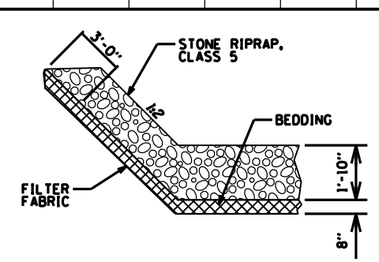
SCALE: _____ | SHEET ___ OF ___ SHEETS | STA. _____ | TO STA. _____

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(11,12)RS-3	MADISON	242	237
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			

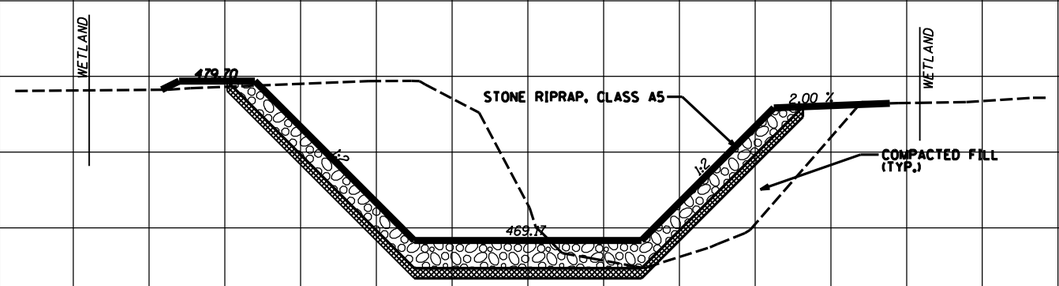
FINAL SURVEY	DATE
	BY
SURVEYED	
PLOTTED	
TEMPLATE	
NOTE BOOK	
NOS.	
AREAS CHECKED	



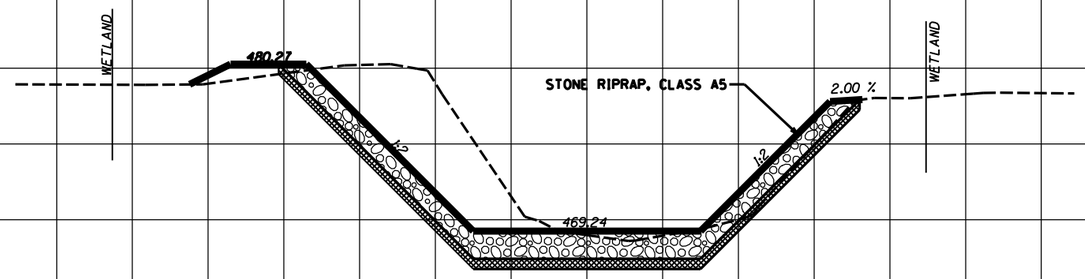
BERM TYPICAL



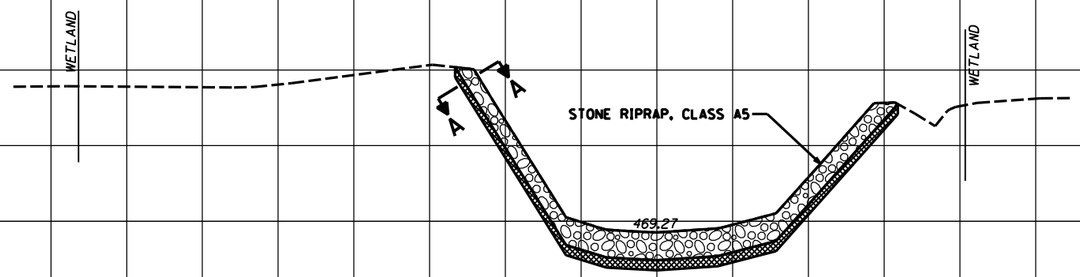
SECTION A-A



12+75.00



12+50.00



12+38.13

ORIGINAL SURVEY	DATE
	BY
SURVEYED	
PLOTTED	
TEMPLATE	
NOTE BOOK	
NOS.	
AREAS CHECKED	

FILE NAME = c:\pw_work\pwidot\hoffmanj\d0402244\xx-D876F13-sht-xssht.dgn	USER NAME = hoffmanj	DESIGNED - DWB	REVISED -
		DRAWN - DWB	REVISED -
	PLOT SCALE = H=10:V=5	CHECKED - CDL	REVISED -
$MODELNAME$	PLOT DATE = 6/27/2014	DATE - 5/7/14	REVISED -

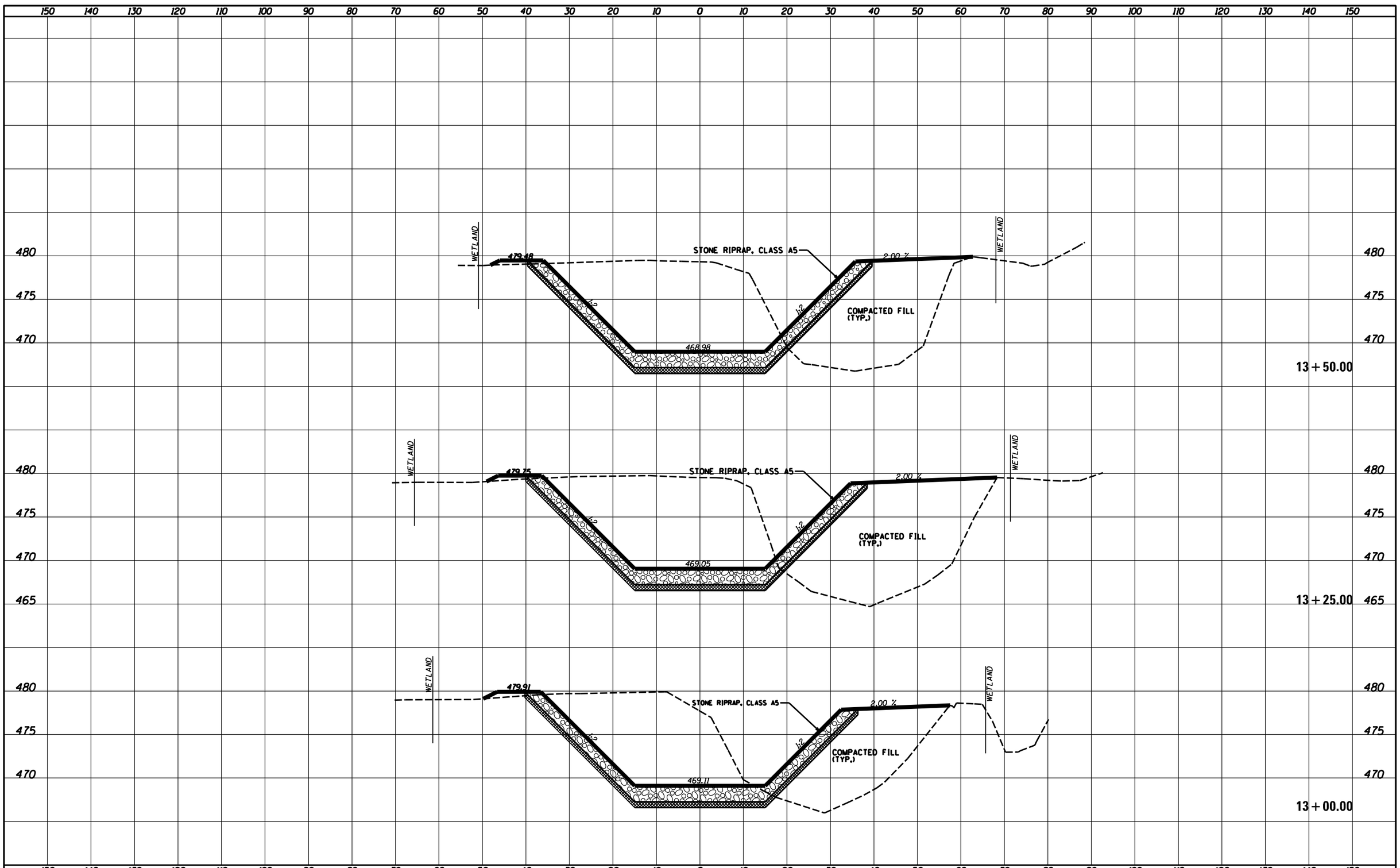
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: H=10:V=5 | SHEET 1 OF 5 SHEETS | STA. 12+38.13 | TO STA. 12+75.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(11,12)RS-3	MADISON	242	238
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED	BY	
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		DATE



ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED	BY	
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		DATE

FILE NAME = c:\pw_work\pwidot\hoffmanj\d0402244\xx-D876F13-sht-xssht.dgn	USER NAME = hoffmanj	DESIGNED - DWB	REVISED -
		DRAWN - DWB	REVISED -
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$MODELNAME$	PLOT DATE = 6/27/2014	DATE - 5/7/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

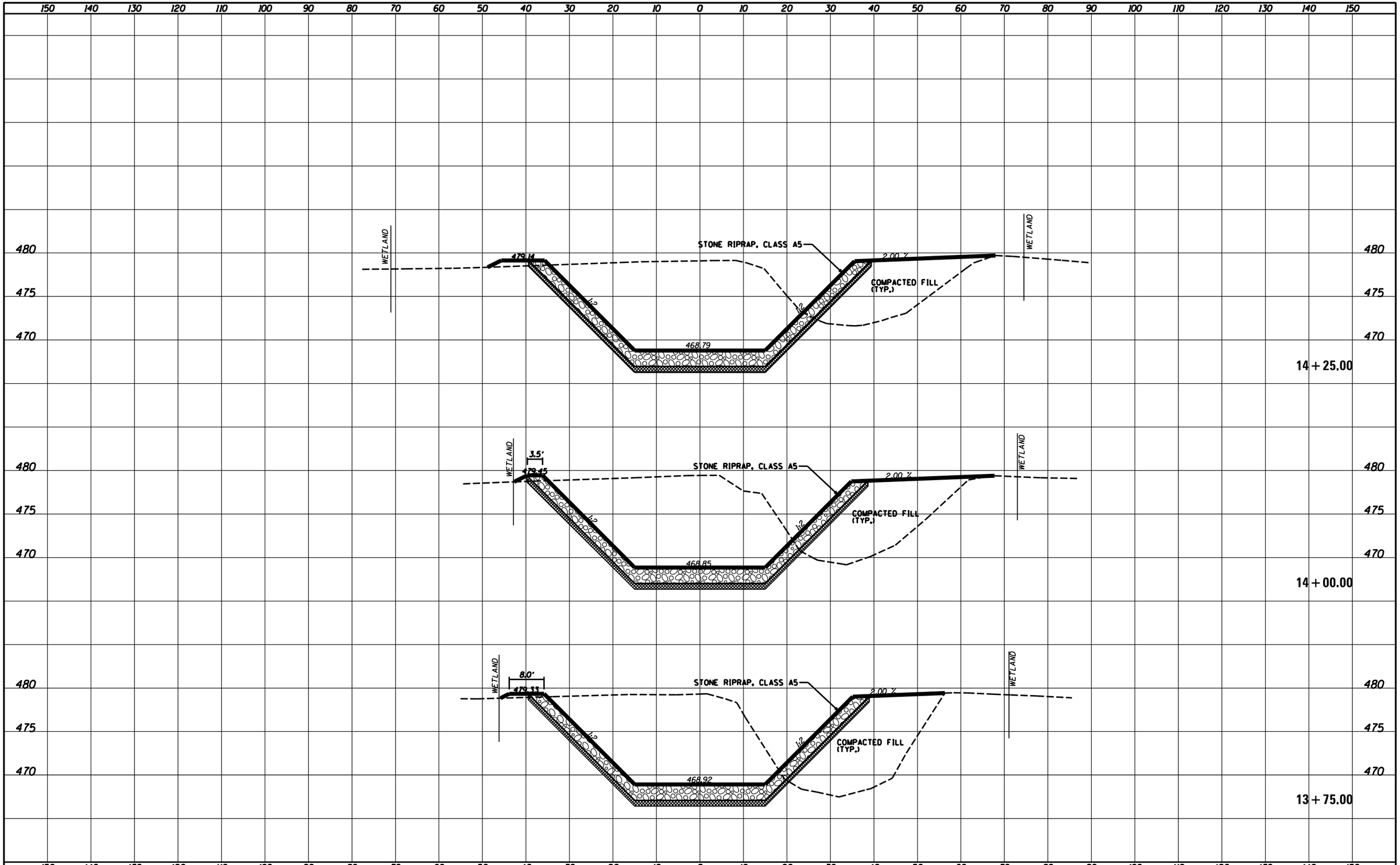
CROSS SECTIONS

SCALE: H=10:V=5 | SHEET 2 OF 5 SHEETS | STA. 13+00.00 TO STA. 13+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(11,12)RS-3	MADISON	242	239
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
NO.	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
NO.	AREAS CHECKED	



FILE NAME = c:\pw_work\pwidot\hoffmanj\d0402244\xx-D876F13-sht-xssht.dgn	USER NAME = hoffmanj	DESIGNED - DWB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS
		DRAWN - DWB	REVISED -		
$MODELNAME$	PLOT SCALE = H=10:V=5	CHECKED - CDL	REVISED -		SCALE: H=10:V=5 SHEET 3 OF 5 SHEETS STA. 13+75.00 TO STA. 14+25.00
	PLOT DATE = 6/27/2014	DATE - 5/7/14	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(11,12)RS-3	MADISON	242	240
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

485
480
475
470

EXISTING SN 060-0031 (UIP)

EXISTING SLOPE WALL (UIP)

EXISTING BRIDGE PIERS (UIP)

EXCAVATE TO EXISTING SLOPE WALL (TYP)

STONE RIPRAP, CLASS A5

1:2

2.00 %

468.60

EXISTING SLOPE WALL (UIP)

EXCAVATE TO EXISTING SLOPE WALL (TYP)

14 + 96.43

485
480
475
470

EXISTING SN 060-0031 (UIP)

EXISTING SLOPE WALL (UIP)

EXISTING BRIDGE PIERS (UIP)

EXCAVATE TO EXISTING SLOPE WALL (TYP)

STONE RIPRAP, CLASS A5

1:2

2.00 %

468.64

EXISTING SLOPE WALL (UIP)

EXCAVATE TO EXISTING SLOPE WALL (TYP)

14 + 79.71

480
475
470

WETLAND

478.98

STONE RIPRAP, CLASS A5

1:2

2.00 %

468.72

COMPACTED FILL (TYP.)

14 + 50.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

FILE NAME = c:\pw_work\pwidot\hoffmanj\d0402244\xx-D876F13-sht-xssht.dgn	USER NAME = hoffmanj	DESIGNED - DWB	REVISED -
		DRAWN - DWB	REVISED -
	PLOT SCALE = H=10:V=5	CHECKED - CDL	REVISED -
$MODELNAME$	PLOT DATE = 6/27/2014	DATE - 5/7/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: H=10:V=5 | SHEET 4 OF 5 SHEETS | STA. 14+50.00 TO STA. 14+96.43

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(11,12)RS-3	MADISON	242	241
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

475
470

STONE RIPRAP, CLASS A5

468.12

475
470

15+75.00

480
475
470

478.92

STONE RIPRAP, CLASS A5

1:3

1:2

468.28

480
475
470

15+50.00

485
480
475
470

EXISTING SN 060-0031 (UIP)

EXISTING SLOPE WALL (UIP)

1:2

EXCAVATE TO EXISTING SLOPE WALL (TYP)

EXISTING BRIDGE PIERS (UIP)

STONE RIPRAP, CLASS A5

2.00 %

1:2

468.49

2.00 %

1:2

EXISTING SLOPE WALL (UIP)

EXCAVATE TO EXISTING SLOPE WALL (TYP)

485
480
475
470

15+18.98

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

FILE NAME = c:\pw_work\pwidot\hoffmanj\d0402244\xx-D876F13-sht-xssht.dgn	USER NAME = hoffmanj	DESIGNED - DWB	REVISED -
		DRAWN - DWB	REVISED -
$MODELNAME$	PLOT SCALE = H=10:V=5	CHECKED - CDL	REVISED -
	PLOT DATE = 6/27/2014	DATE - 5/7/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: H=10:V=5 | SHEET 5 OF 5 SHEETS | STA. 15+18.98 TO STA. 16+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	60-(11,12)RS-3	MADISON	242	242
		CONTRACT NO. 76F13		
	ILLINOIS FED. AID PROJECT			