

EAST EDGE OF SHOULDER

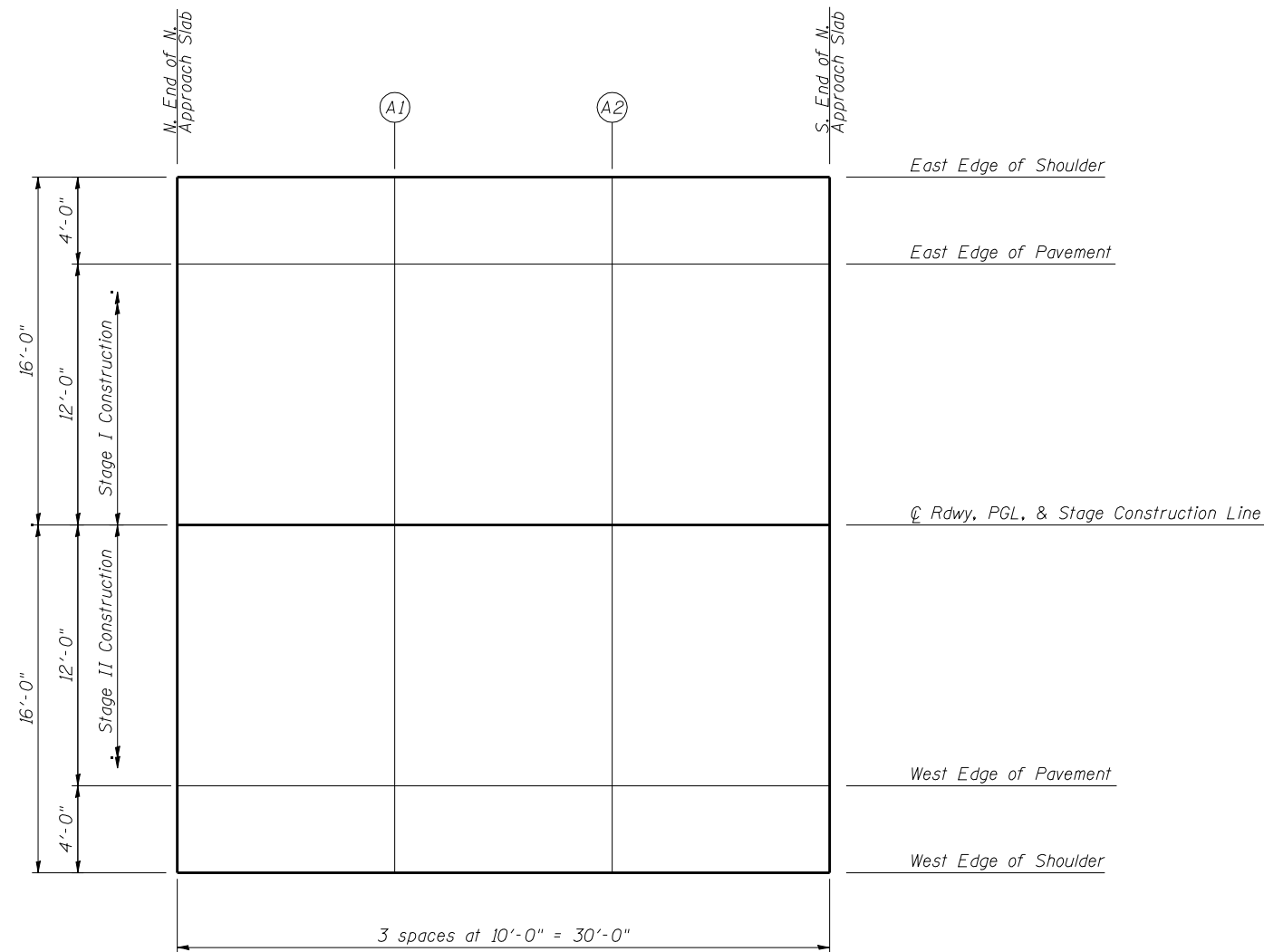
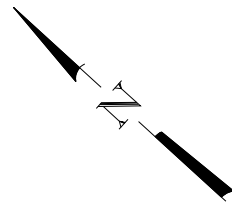
Location	Station	Offset	Theoretical Grade Elevations
N. End N. Approach	53638.33	-16.00	607.84
A1	53648.33	-16.00	607.89
A2	53658.33	-16.00	607.94
S. End N. Approach	53668.33	-16.00	607.99

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End N. Approach	53638.33	-12.00	607.92
A1	53648.33	-12.00	607.97
A2	53658.33	-12.00	608.02
S. End N. Approach	53668.33	-12.00	608.07

☉ ROADWAY, PGL & STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
N. End N. Approach	53638.33	0.00	608.11
A1	53648.33	0.00	608.16
A2	53658.33	0.00	608.21
S. End N. Approach	53668.33	0.00	608.26



PLAN

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End N. Approach	53638.33	12.00	607.92
A1	53648.33	12.00	607.97
A2	53658.33	12.00	608.02
S. End N. Approach	53668.33	12.00	608.07

WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
N. End N. Approach	53638.33	16.00	607.84
A1	53648.33	16.00	607.89
A2	53658.33	16.00	607.94
S. End N. Approach	53668.33	16.00	607.99

FILE NAME = C:\Users\jg6754\OneDrive\Documents\68754-007-approach-slab.dgn  
 CB PROJECT NO. 09824-B

E-AS

7-1-10

**Coombe-Bloxdorf P.C.**  
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USER NAME = _CFC_	DESIGNED - GLB	REVISED -
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PLOT DATE = 10/13/2015	CHECKED - MCB	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TOP OF N APPROACH SLAB ELEVATIONS  
 STRUCTURE NO. 048-0097**

SHEET NO. 7 OF 31 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1)BR-1	KNOX	152	101
CONTRACT NO. 68754				
ILLINOIS FED. AID PROJECT				

EAST EDGE OF SHOULDER

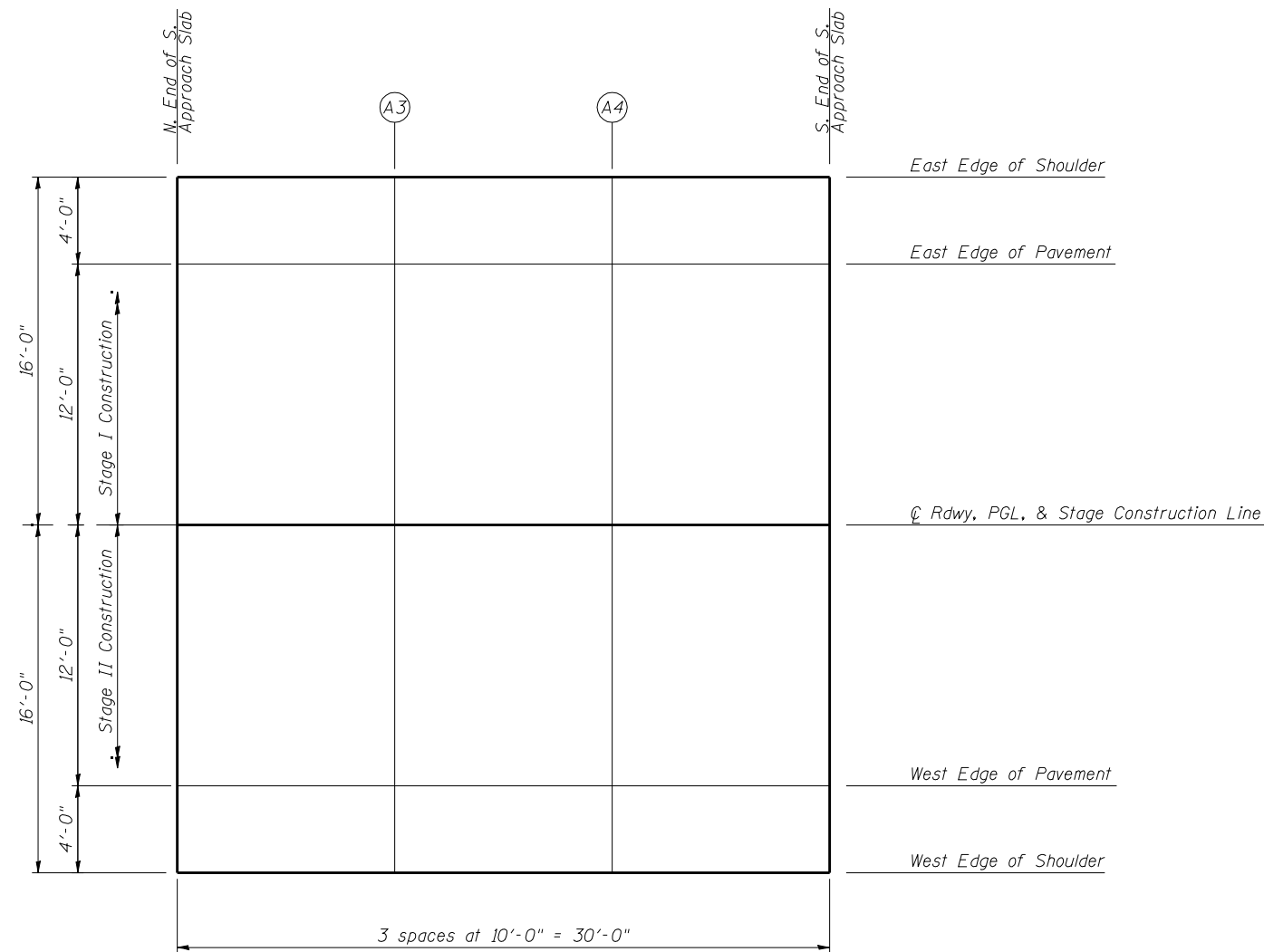
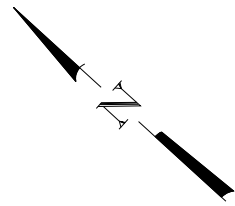
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N. End S. Approach	53743.67	-16.00	608.37
A3	53753.67	-16.00	608.42
A4	53763.67	-16.00	608.47
S. End S. Approach	53773.67	-16.00	608.52

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End S. Approach	53743.67	-12.00	608.45
A3	53753.67	-12.00	608.50
A4	53763.67	-12.00	608.55
S. End S. Approach	53773.67	-12.00	608.60

☉ ROADWAY, PGL & STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
N. End S. Approach	53743.67	0.00	608.64
A3	53753.67	0.00	608.69
A4	53763.67	0.00	608.74
S. End S. Approach	53773.67	0.00	608.79



PLAN

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End S. Approach	53743.67	12.00	608.45
A3	53753.67	12.00	608.50
A4	53763.67	12.00	608.55
S. End S. Approach	53773.67	12.00	608.60

WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
N. End S. Approach	53743.67	16.00	608.37
A3	53753.67	16.00	608.42
A4	53763.67	16.00	608.47
S. End S. Approach	53773.67	16.00	608.52

FILE NAME = G:\68754-008-001-001-001-001.dgn  
 PROJECT NO. 68754-0

E-AS

7-1-10

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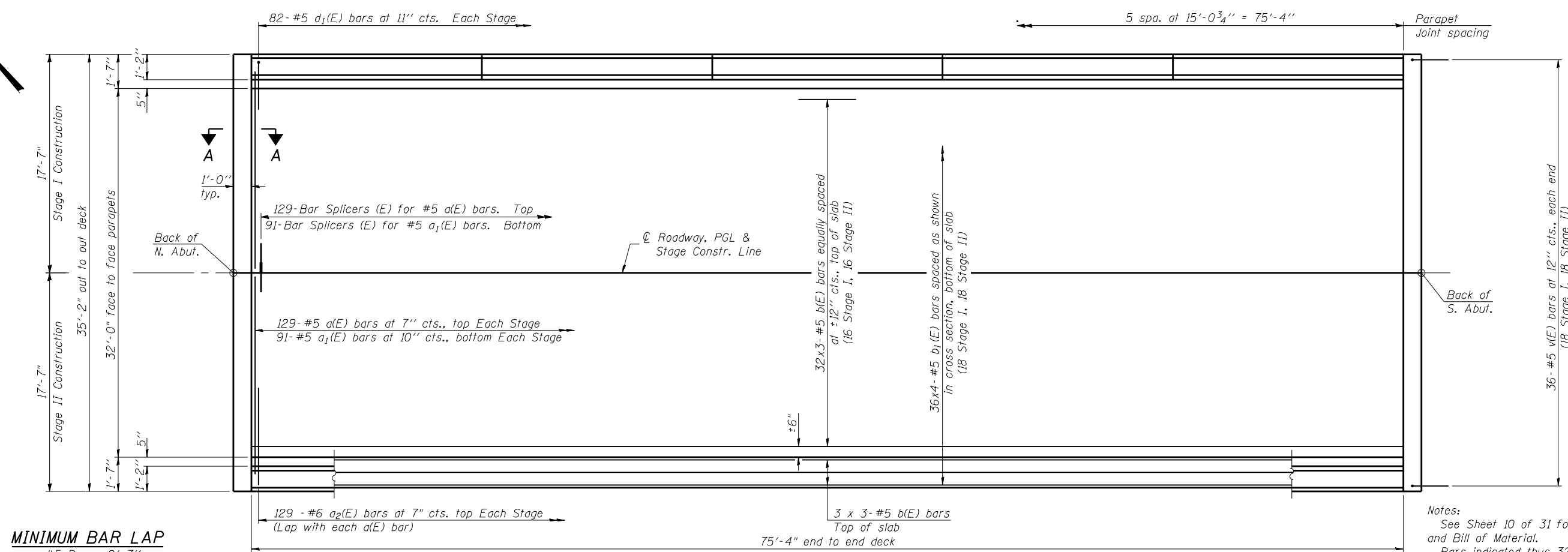
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**TOP OF S APPROACH SLAB ELEVATIONS**  
**STRUCTURE NO. 048-0097**

SHEET NO. 8 OF 31 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 68754				

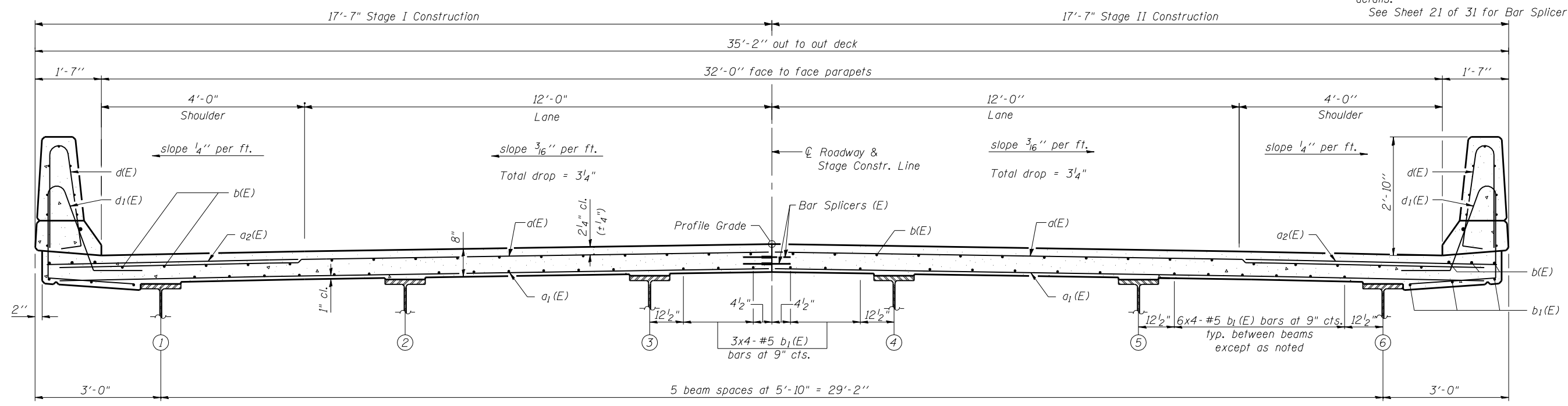
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**MINIMUM BAR LAP**  
#5 Bar = 2'-7"

**PLAN**

**Notes:**  
See Sheet 10 of 31 for superstructure details and Bill of Material.  
Bars indicated thus 32 x 3-#5 etc. indicates 32 lines of bars with 3 lengths per line.  
See Sheet 10 of 31 for parapet reinforcement.  
See Sheet 11 of 31 for Sec. A-A and diaphragm details.  
See Sheet 21 of 31 for Bar Splicer Details.



**CROSS SECTION**  
(Looking South)

FILE NAME = 68754-009-superstr.dgn  
USER = MCB  
PROJECT NO. 0824-B

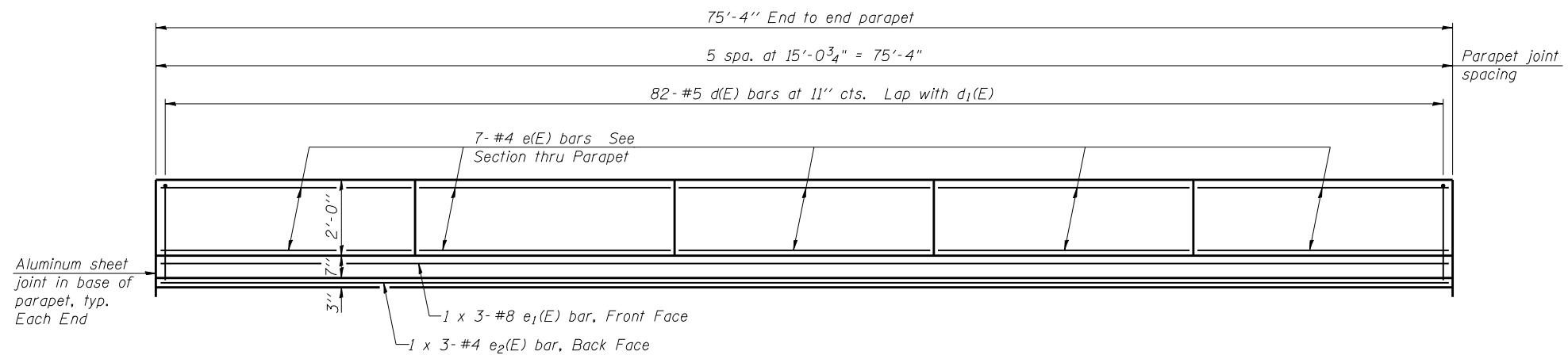
**SI-1-0**  
1-27-12  
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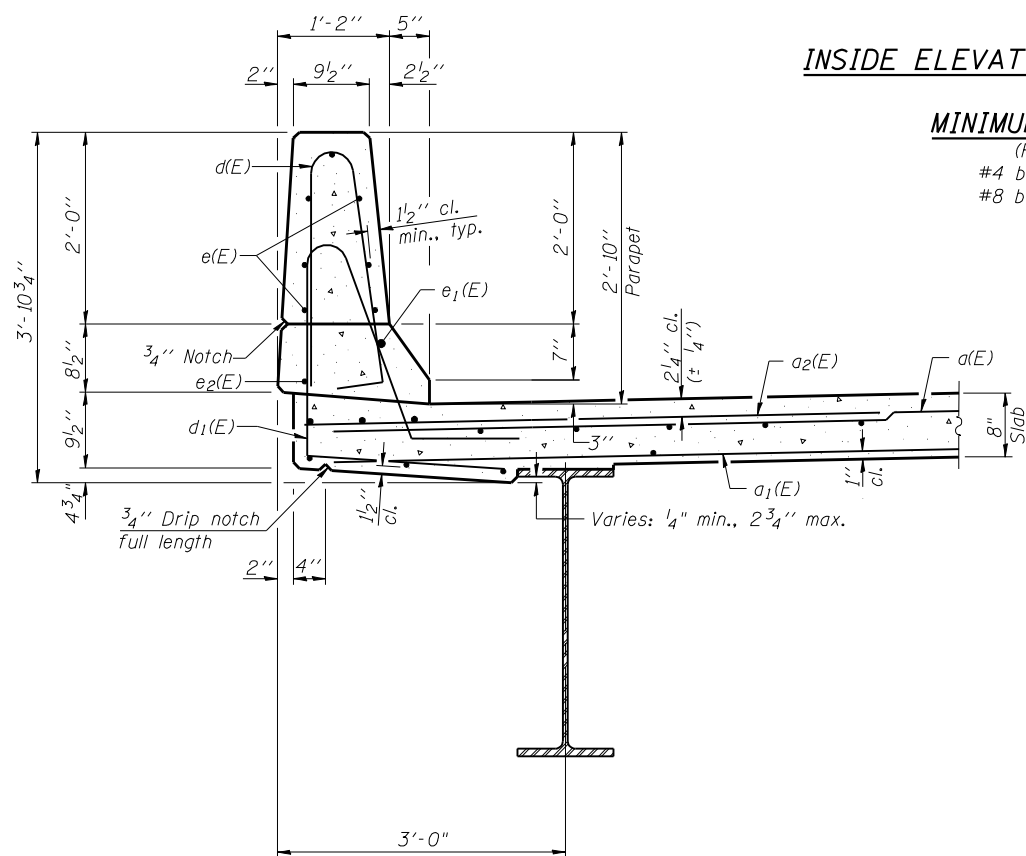
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**DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE**  
**STRUCTURE NO. 048-0097**  
SHEET NO. 9 OF 31 SHEETS

F.A.P. RTE. 626	SECTION 42-(B,B-1)BR-1	COUNTY KNOX	TOTAL SHEETS 152	SHEET NO. 103
CONTRACT NO. 68754				
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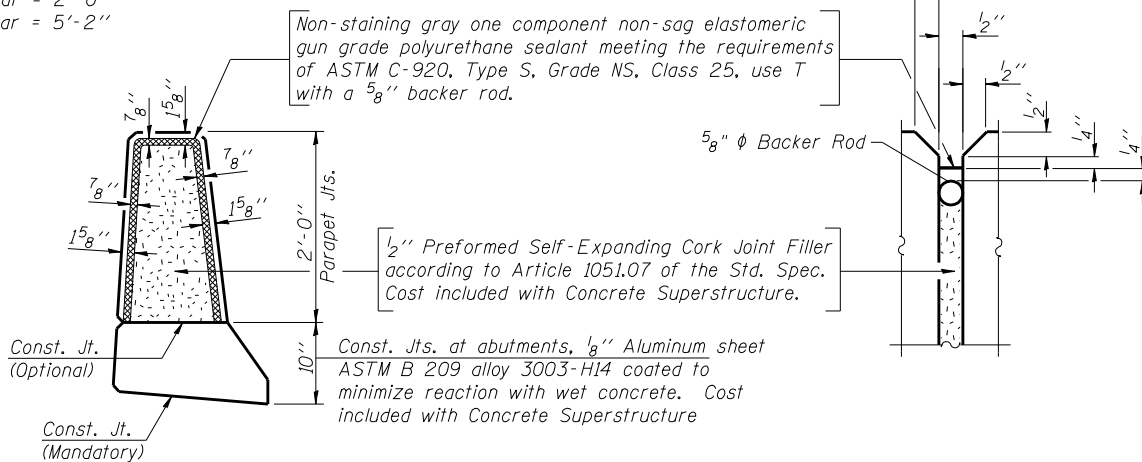
**INSIDE ELEVATION OF PARAPET**



**SECTION THRU PARAPET**

**MINIMUM BAR LAP**

(Parapet)  
 #4 bar = 2'-0"  
 #8 bar = 5'-2"

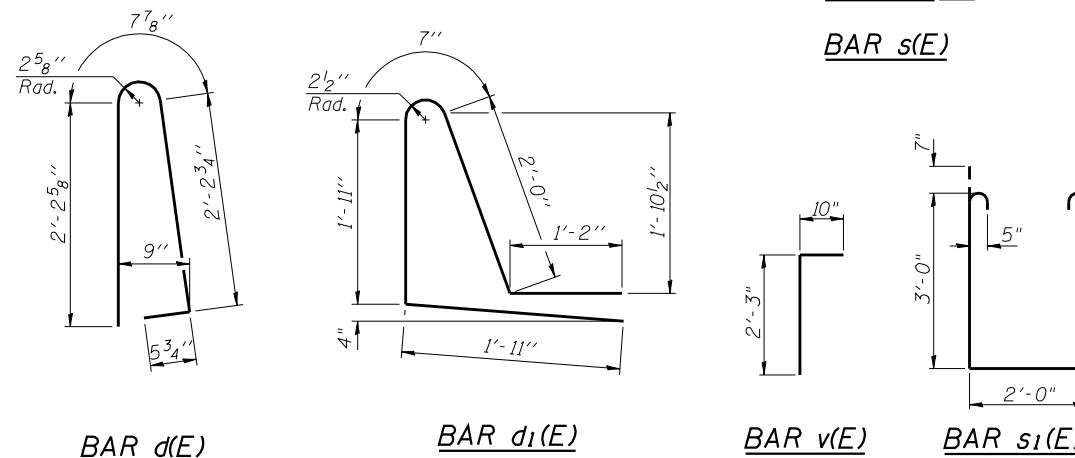


**PARAPET JOINT DETAILS**

**SUPERSTRUCTURE BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	258	#5	17'-1"	—
a1(E)	182	#5	16'-9"	—
a2(E)	258	#6	6'-6"	—
b(E)	114	#5	26'-9"	—
b1(E)	144	#5	20'-9"	—
d(E)	164	#5	5'-7"	⌋
d1(E)	164	#5	7'-7"	⌋
e(E)	70	#4	14'-9"	—
e1(E)	6	#8	28'-6"	—
e2(E)	6	#4	26'-4"	—
m(E)	16	#6	17'-3"	—
m1(E)	30	#6	5'-6"	—
m2(E)	12	#6	2'-8"	—
m3(E)	36	#5	4'-0"	—
s(E)	72	#5	7'-2"	⌋
s1(E)	72	#5	9'-2"	⌋
v(E)	72	#5	3'-1"	⌋
Reinforcement Bars, Epoxy Coated			Pound	22,420
Concrete Superstructure			Cu. Yds.	110.4

Bars indicated thus 1 x 3-#8 etc. indicates 1 line of bars with 3 lengths per line.



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8-31-12

FILE NAME = G:\Projects\048-0097-010-Superstr-Details.dgn  
 CB PROJECT NO. 09824-B

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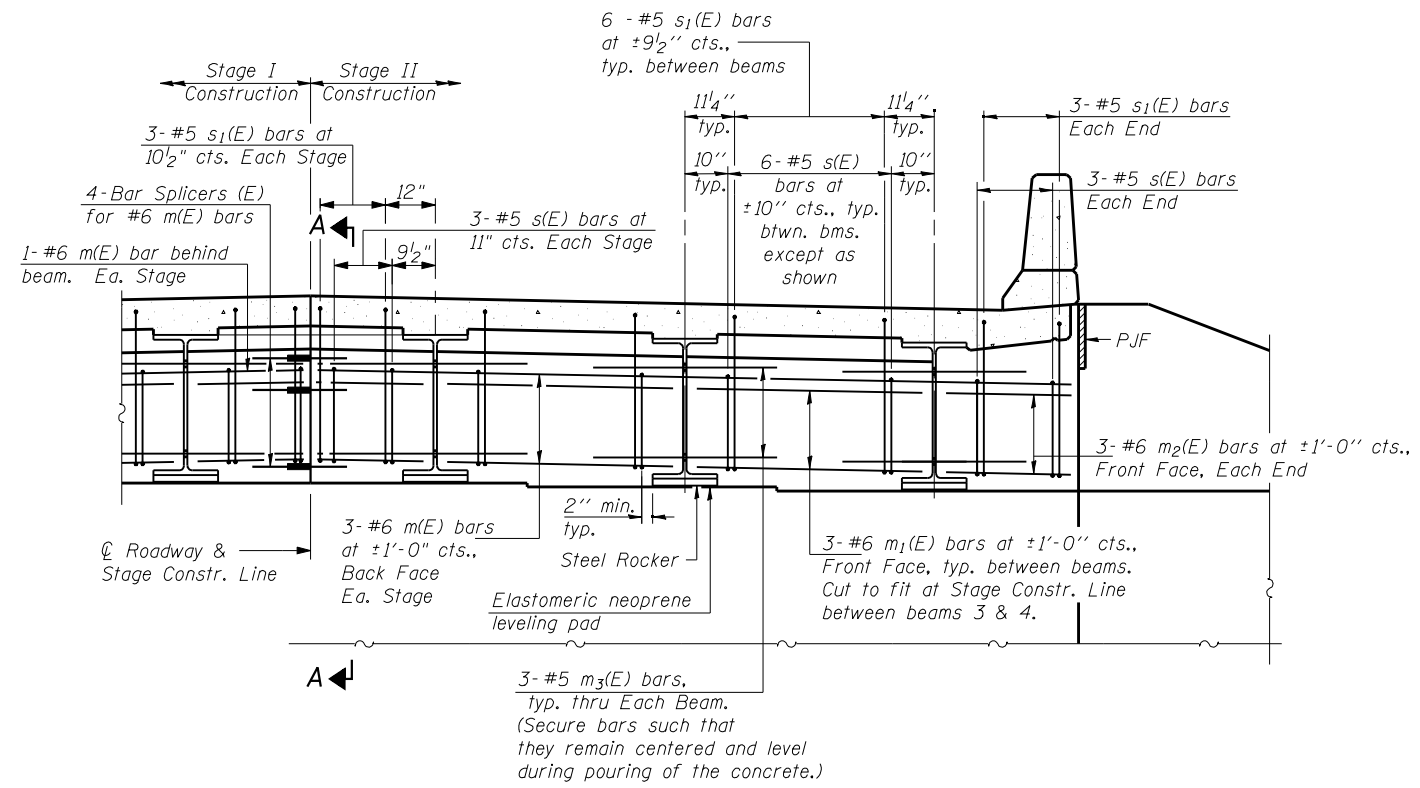
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS  
 STRUCTURE NO. 048-0097**

SHEET NO. 10 OF 31 SHEETS

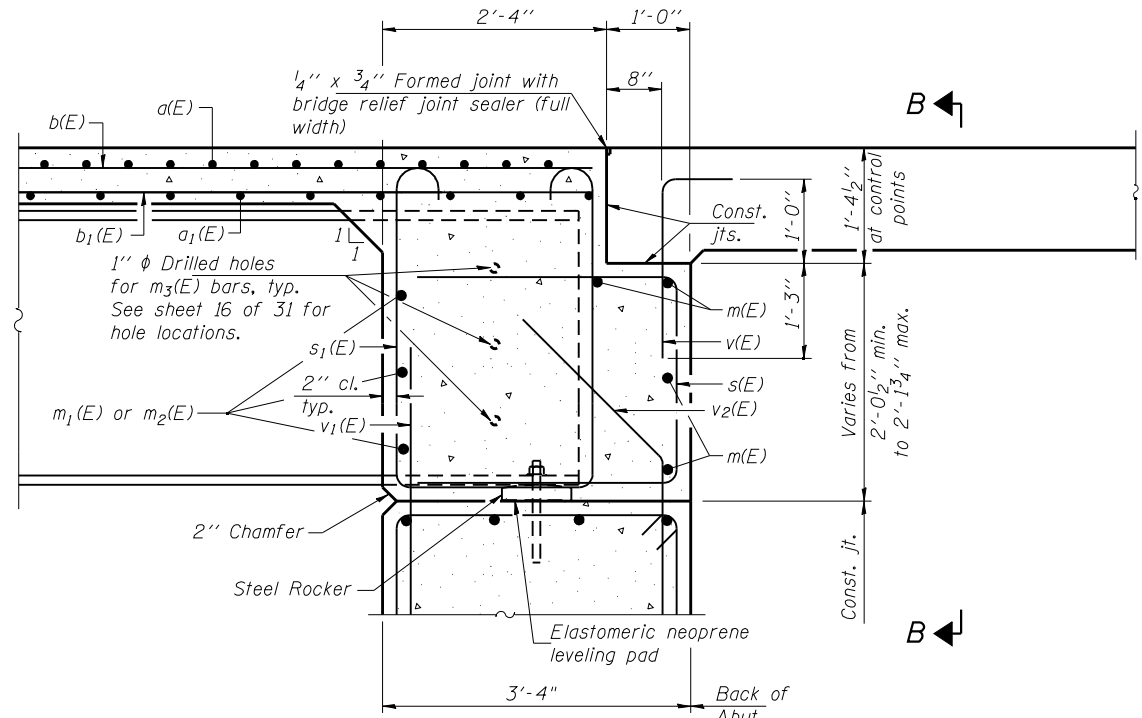
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CONTRACT NO. 68754				

ILLINOIS FED. AID PROJECT

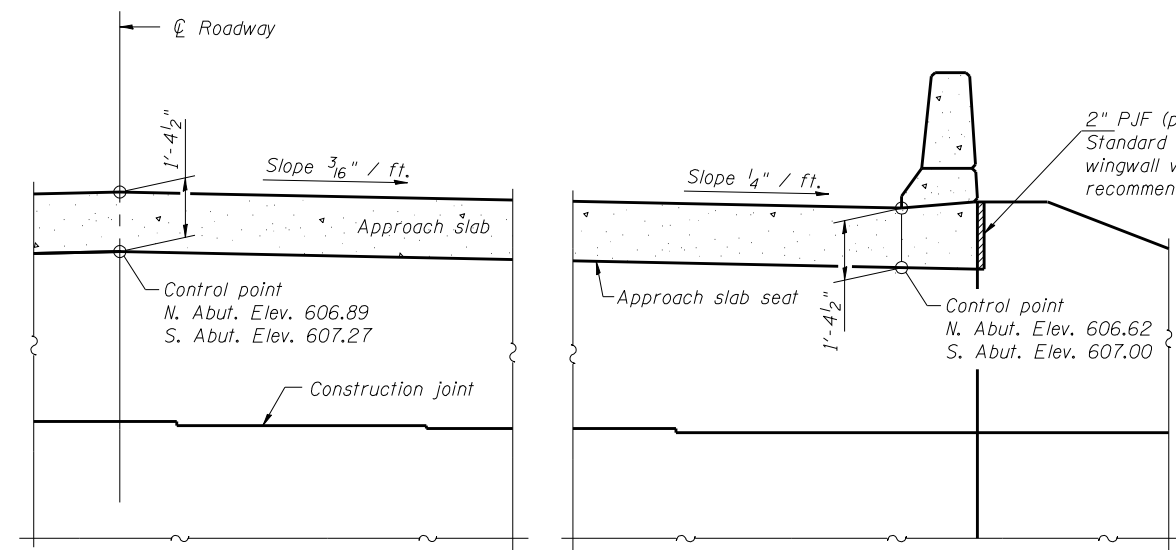


**DIAPHRAGM ELEVATION AT S. ABUTMENT**

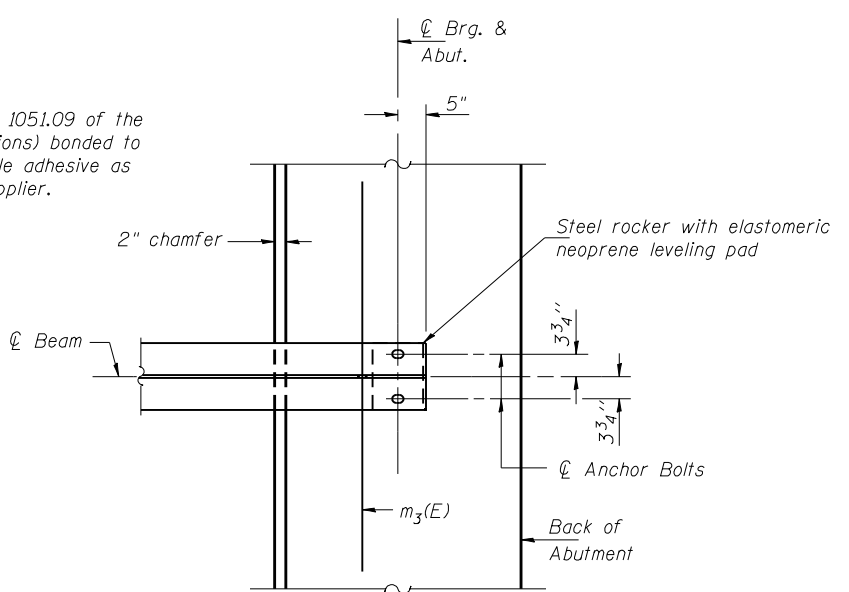
(Looking South)  
Similar at North Abutment



**SECTION A-A**



**SECTION B-B**



**PARTIAL PLAN AT ABUTMENT**

(Showing bottom flange of beam)

Notes:  
Reinforcement bars in diaphragm are billed with superstructure on sheet 10 of 31.  
Concrete in diaphragm is included with Concrete Superstructure on sheet 10 of 31.  
For details of bars s(E), s1(E) and v(E) see sheet 10 of 31.  
The approach slab seat shall have a constant slope determined from the control points shown.  
For bearing details see sheet 17 of 31.  
For details of bars v1(E) and v2(E), see Abutment sheets.  
For bar splicer details see sheet 21 of 31.

FILE NAME = 68754-011-40shr.dgn  
CB PROJECT NO. 0824-B

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8-31-12

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DIAPHRAGM DETAILS  
STRUCTURE NO. 048-0097**

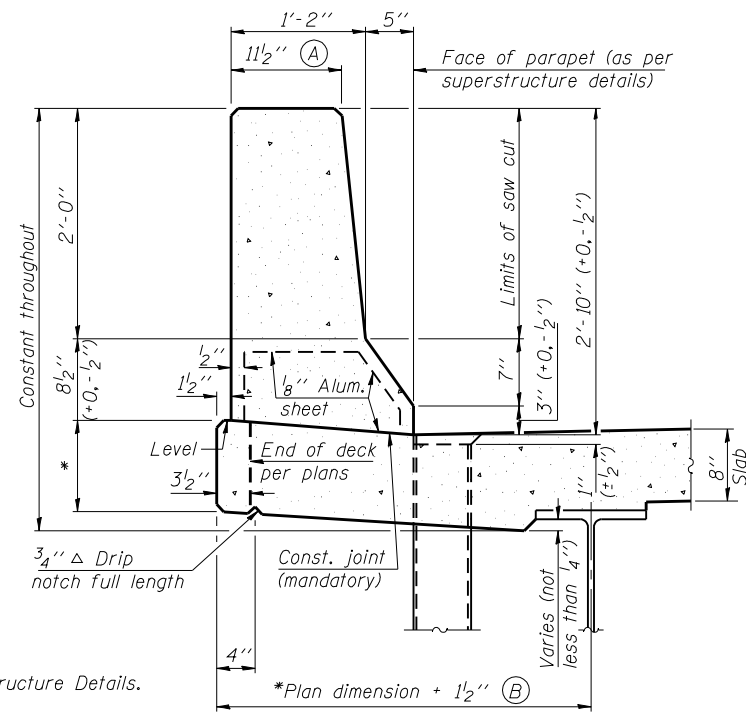
SHEET NO. 11 OF 31 SHEETS

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CONTRACT NO. 68754				

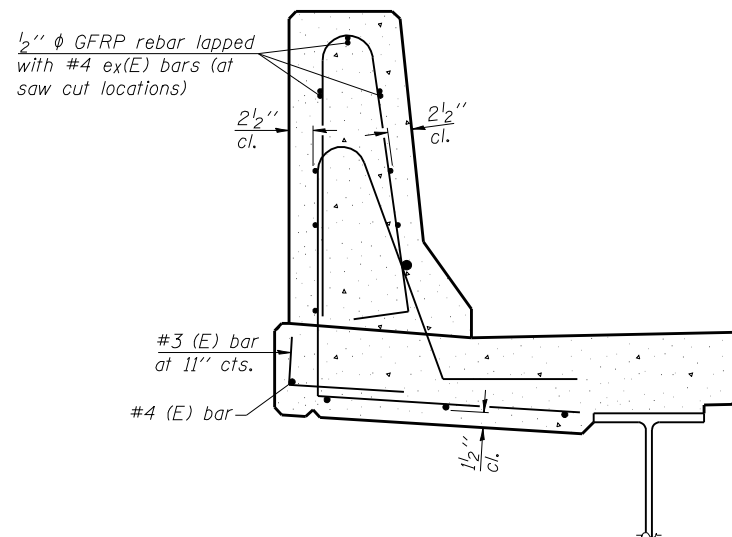
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**GENERAL NOTES**

All dimensions shall remain the same as shown on superstructure details, except dimensions A and B which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension A and B = 0.0165 cu. yds./ft. for 34" parapet or = 0.0223 cu. yds./ft. for 42" parapet.  
Place aluminum sheet in curb portion at and near piers. Full thickness saw cut at all joint locations in lieu of cork joint filler.  
Steel superstructure shown. Other superstructure types similar.

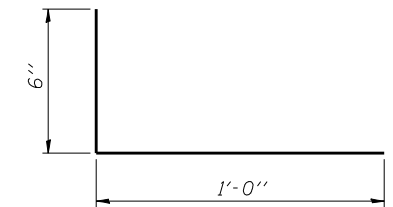


**34" F SHAPE PARAPET SECTION**  
(Showing dimensions)

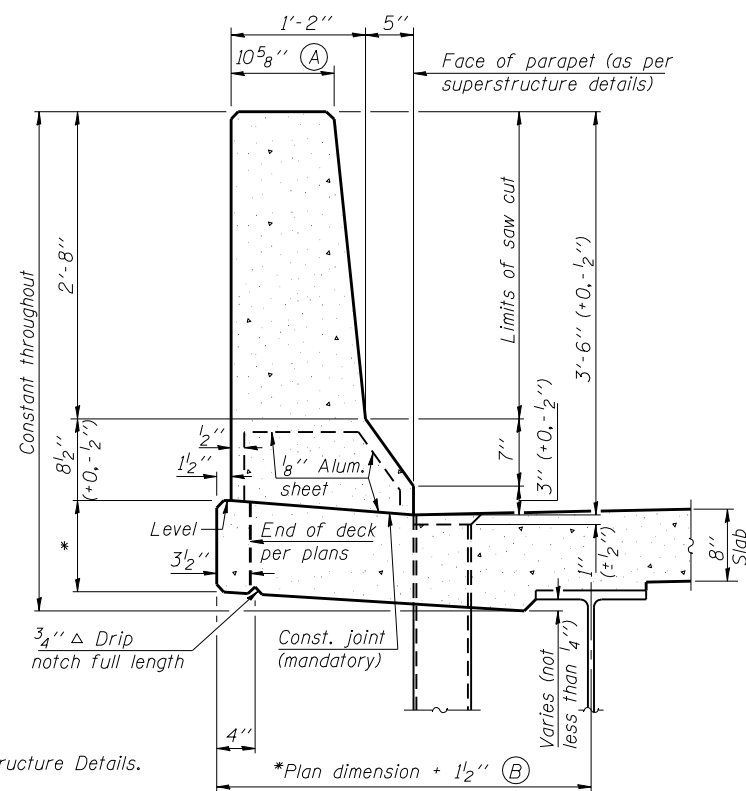


**SECTION**

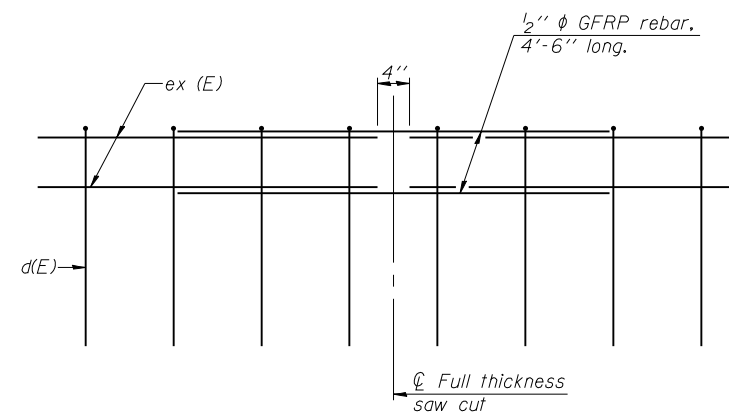
(34" parapet shown - 42" parapet similar)  
(Showing reinforcement clearances for slip forming and additional reinforcement bars)



**#3 (E) BAR**

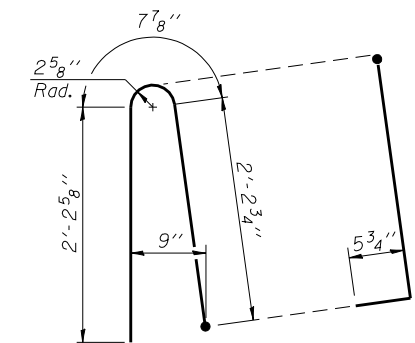


**42" F SHAPE PARAPET SECTION**  
(Showing dimensions)

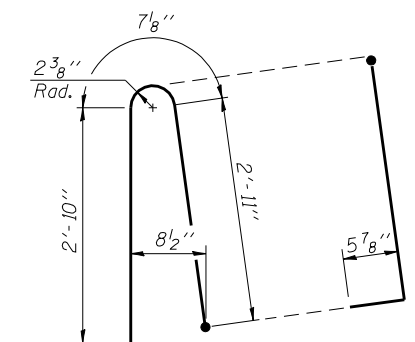


**GFRP REBAR STIFFENING DETAIL**

(Place as shown in parapet section at each parapet joint location.)



**ALTERNATE BAR d(E)**  
(For 34" parapet when conduit is present)



**ALTERNATE BAR d(E)**  
(For 42" parapet when conduit is present)

SFP 34-42

8-16-12

FILE NAME = G:\9754-012-1111 Form.dgn  
CB PROJECT NO. 09824-B

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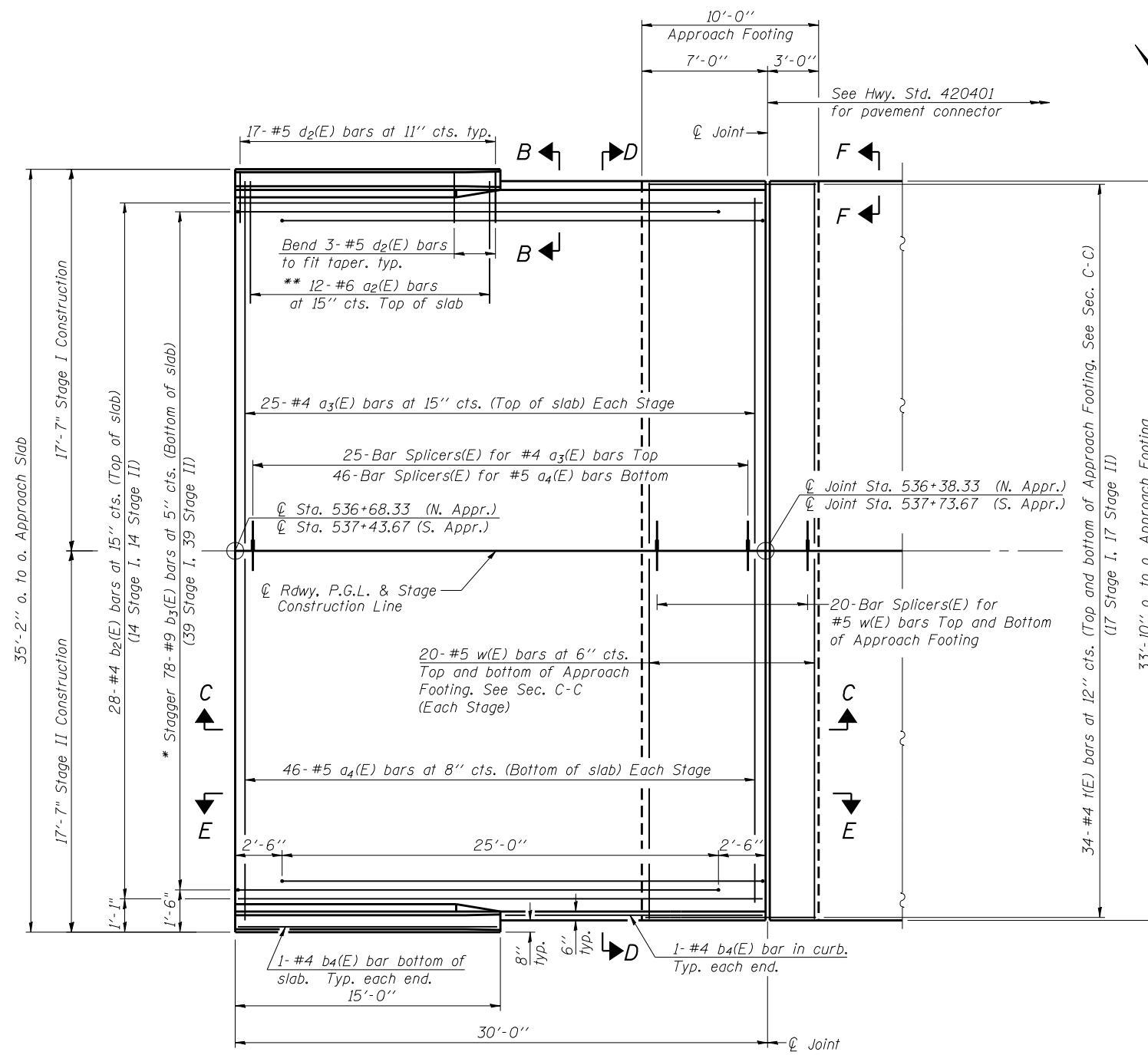
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**CONCRETE PARAPET SLIPFORMING OPTION**  
**STRUCTURE NO. 048-0097**

SHEET NO. 12 OF 31 SHEETS

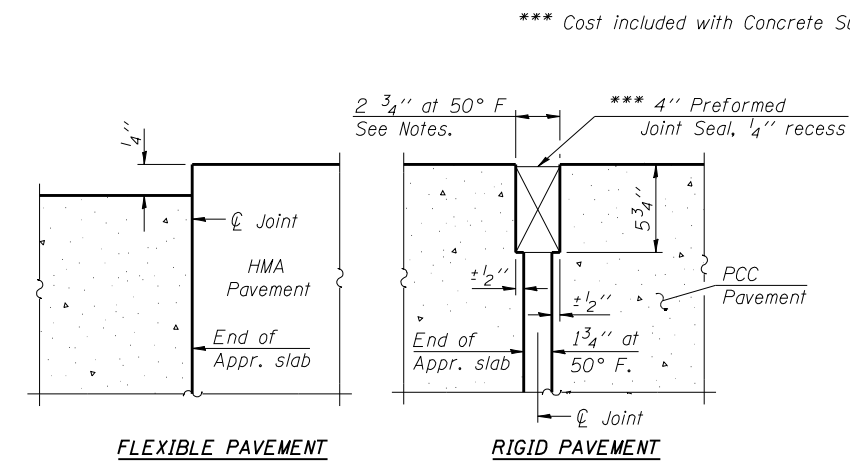
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626	42-(B,B-1)BR-1	KNOX	152	106
CONTRACT NO. 68754				
ILLINOIS FED. AID PROJECT				

Notes:  
 See sheet 14 of 31 for Sections C-C & D-D and View E-E.  
 The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1/2" for installation purposes.  
 For barsplicer details see sheet 21 of 31.

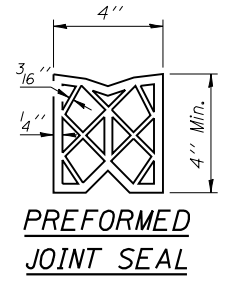


PLAN

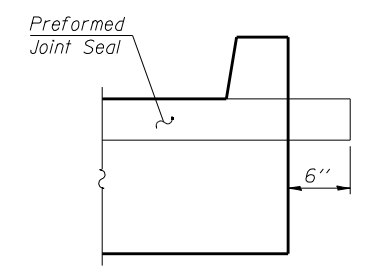
\* Tilt #9 b3(E) bars as required to maintain clearance.  
 \*\* Space between a3(E) bars, typ. ea. parapet.



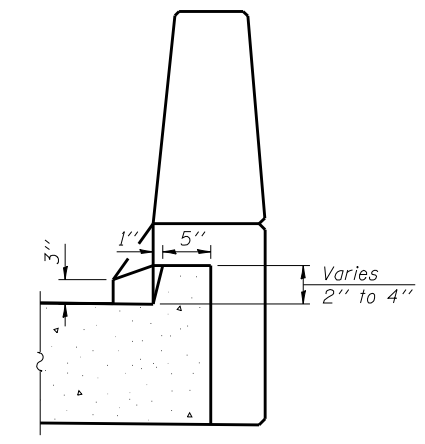
DETAIL A



PREFORMED JOINT SEAL



VIEW F-F



VIEW B-B

\*\*\* Cost included with Concrete Superstructure.

FILE NAME = G:\68754-013-APP-116.dgn  
 CB PROJECT NO. 09224-B

**BA-0**  
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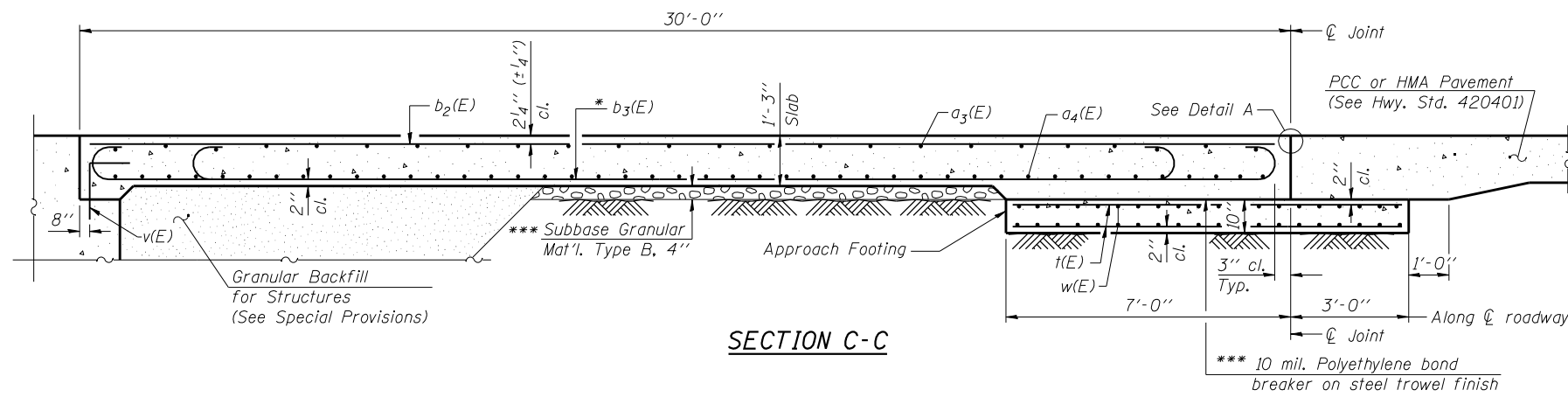
12-12-12

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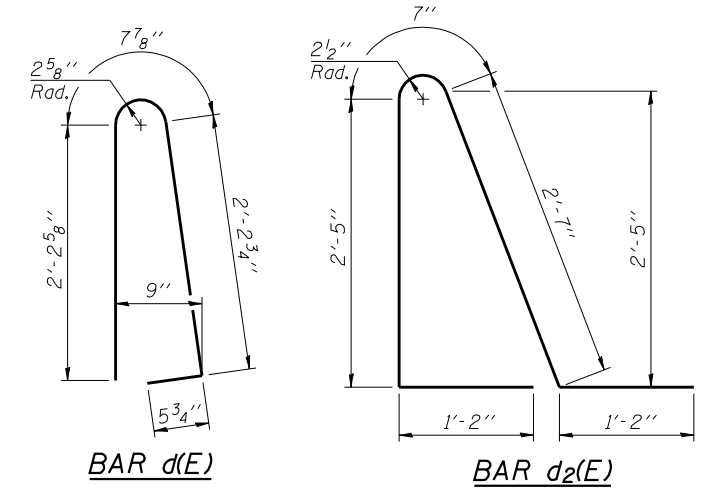
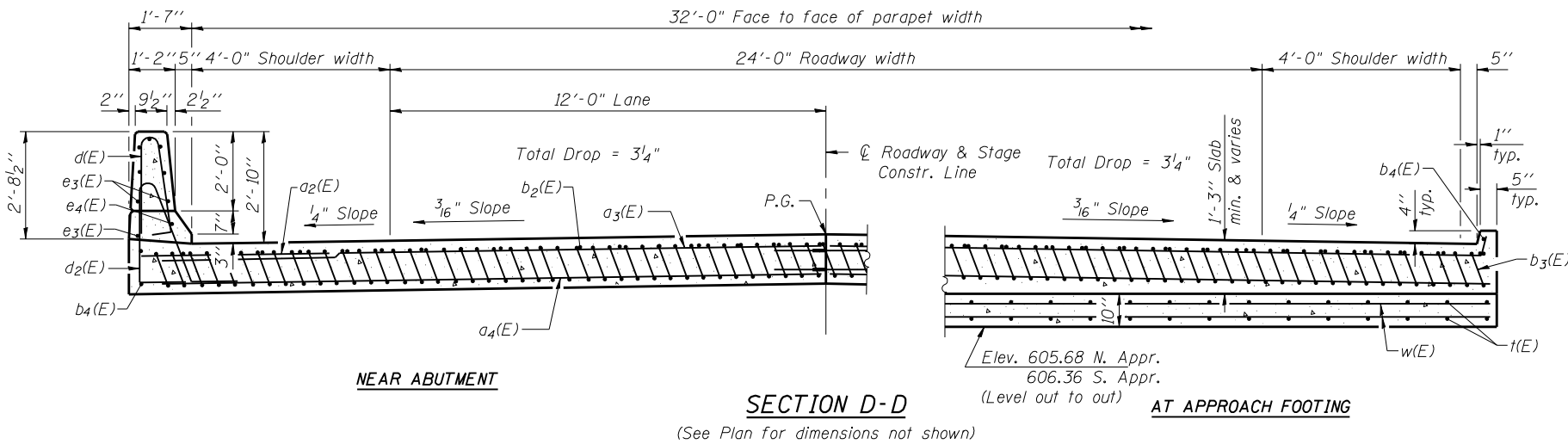
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

(Sheet 1 of 2)  
**BRIDGE APPROACH SLAB DETAILS**  
**STRUCTURE NO. 048-0097**  
 SHEET NO. 13 OF 31 SHEETS

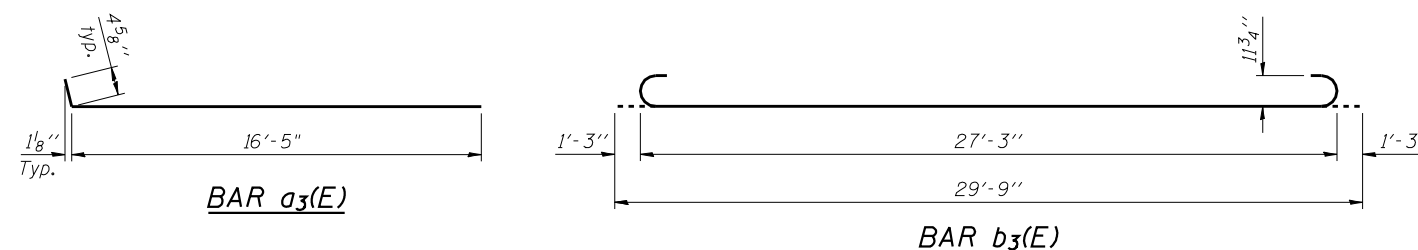
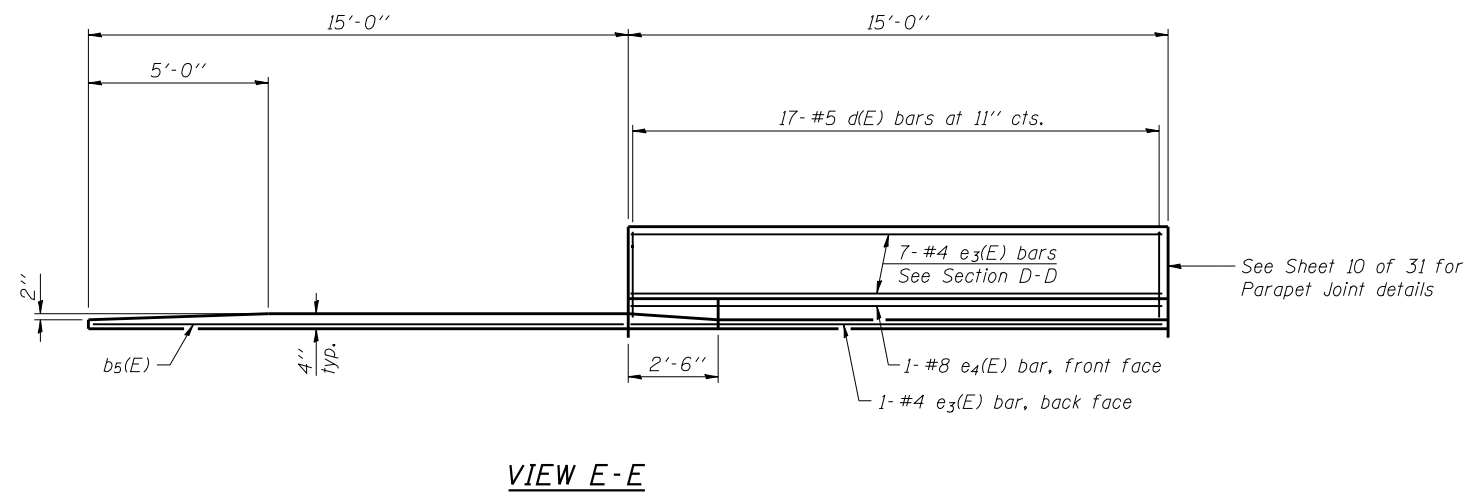
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626	42-(B,B-1)BR-1	KNOX	152	107
CONTRACT NO. 68754				
ILLINOIS FED. AID PROJECT				



Notes:  
 See sheet 13 of 31 for Detail A and View B-B.  
 Approach slab and parapet concrete shall be paid for as Concrete Superstructure.  
 Approach footing concrete shall be paid for as Concrete Structures.  
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.  
 For v(E) bar details, see sheet 10 of 31.  
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.  
 For bar splicer details, see sheet 21 of 31.  
 Cost of excavation for approach footing included with Concrete Structures.  
 For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 31.  
 For additional parapet details, see sheet 10 of 31.



\* Tilt #9 b3(E) bars as required to maintain clearance.  
 \*\*\* Cost included with Concrete Superstructure.



**TWO APPROACHES  
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a2(E)	48	#6	6'-6"	—
a3(E)	100	#4	16'-10"	—
a4(E)	184	#5	16'-7"	—
b2(E)	56	#4	29'-8"	—
b3(E)	156	#9	29'-9"	—
b4(E)	8	#4	14'-8"	—
d(E)	68	#5	5'-7"	⤴
d2(E)	68	#5	7'-11"	⤴
e3(E)	32	#4	14'-8"	—
e4(E)	4	#8	14'-8"	—
t(E)	136	#4	9'-8"	—
w(E)	160	#5	16'-7"	—
Concrete Superstructure			Cu. Yd.	107.1
Concrete Structures			Cu. Yd.	20.8
** Reinforcement Bars, Epoxy Coated			Pound	26,820

\*\* 23,170 lbs (Superstructure)  
 3,650 lbs (Substructure)

FILE NAME: G:\9754-014-100-100-100-100.dwg  
 CB PROJECT NO: 09824-B

BA-0 12-12-12

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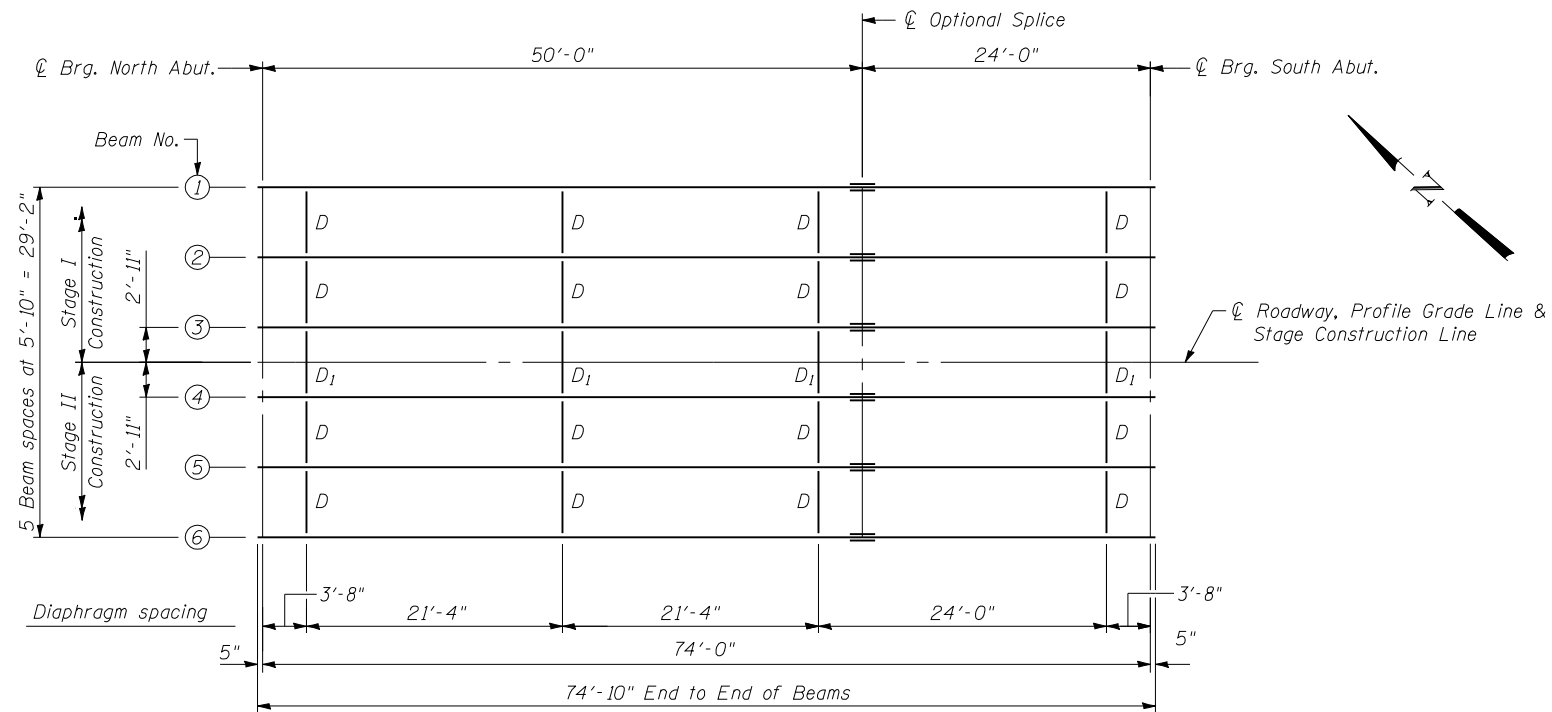
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BRIDGE APPROACH SLAB DETAILS  
 STRUCTURE NO.

SHEET NO. 14 OF 31 SHEETS

F.A.P. RTE. 626	SECTION 42-(B,B-1)BR-1	COUNTY KNOX	TOTAL SHEETS 152	SHEET NO. 108
				CONTRACT NO. 68754
ILLINOIS FED. AID PROJECT				



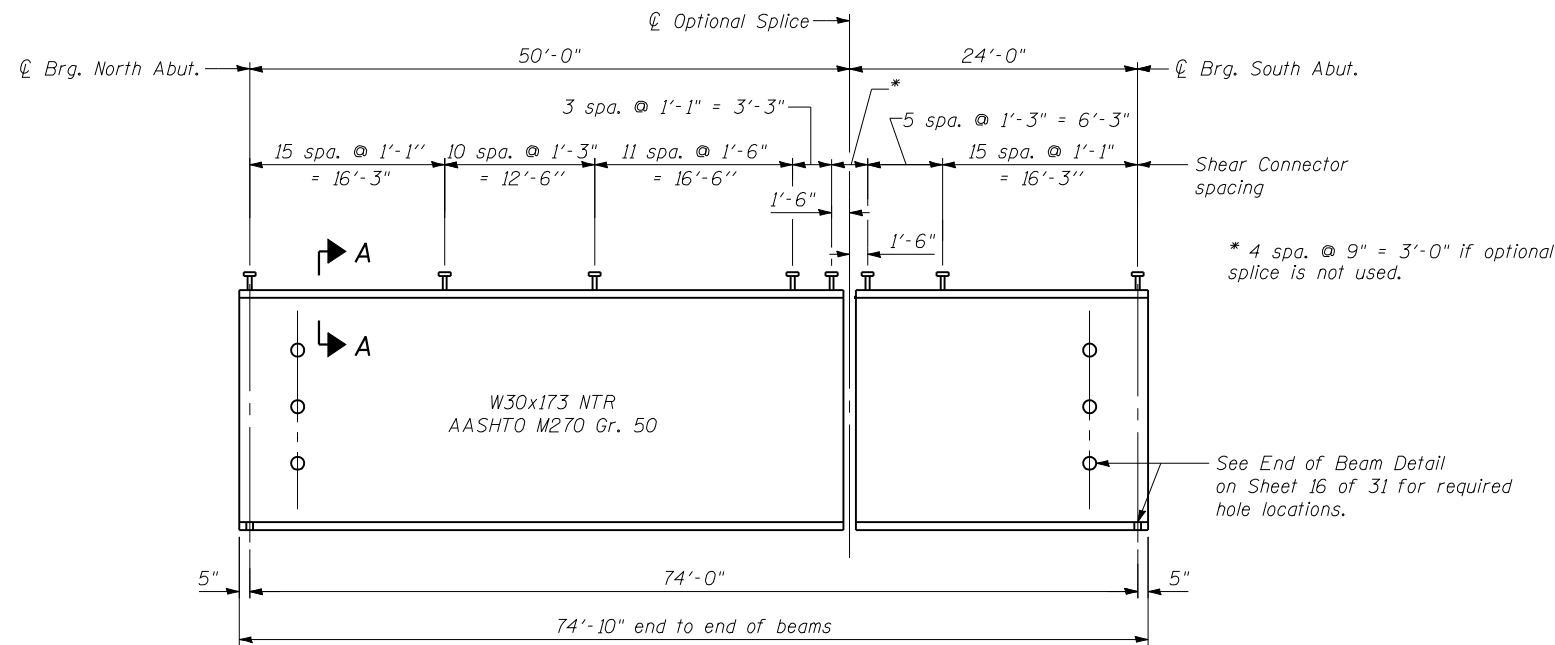


**FRAMING PLAN**

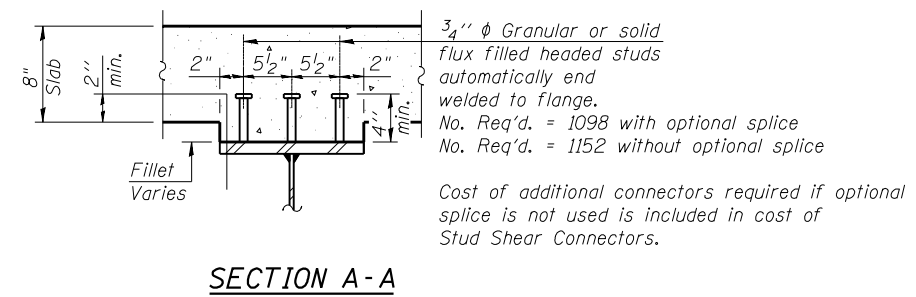
**TOP OF BEAM ELEVATIONS**

Location	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6
℄ N. Abutment	607.25	607.36	607.45	607.45	607.36	607.25
℄ Optional Splice	607.50	607.61	607.70	607.70	607.61	607.50
℄ S. Abutment	607.62	607.73	607.82	607.82	607.73	607.62

For Fabrication Only



**BEAM ELEVATION**  
(Showing shear connector spacing)



**SECTION A-A**

Cost of additional connectors required if optional splice is not used is included in cost of Stud Shear Connectors.

Notes:  
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.  
See Sheet 16 of 31 for Splice Detail, Diaphragm Detail, and End of Beam Detail.

FILE NAME = 68754-015-Framing.dgn  
PROJECT NO. 0924-B

**Coombe-Bloxdorf P.C.**  
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- LAND SURVEYORS -  
Design Firm License No. 184-002703

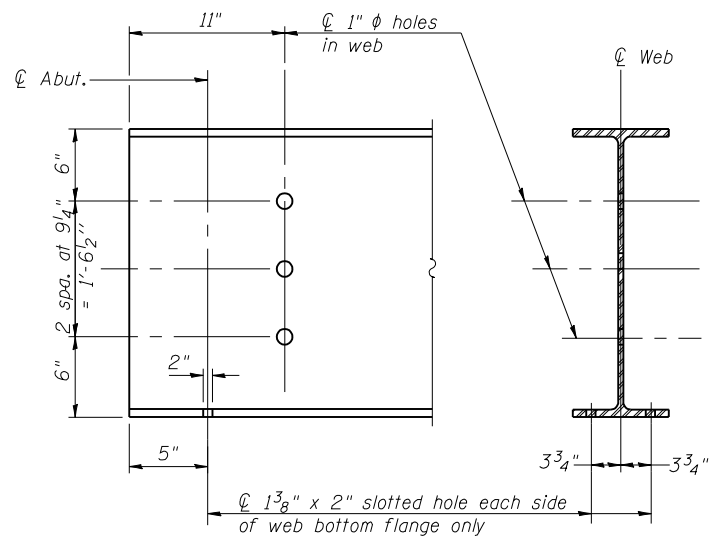
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PLOT DATE = 10/13/2015	DRAWN - MMY	REVISED -
	CHECKED - MCB	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

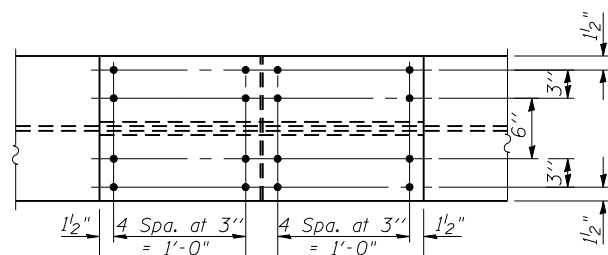
**FRAMING PLAN**  
**STRUCTURE NO. 048-0097**

SHEET NO. 15 OF 31 SHEETS

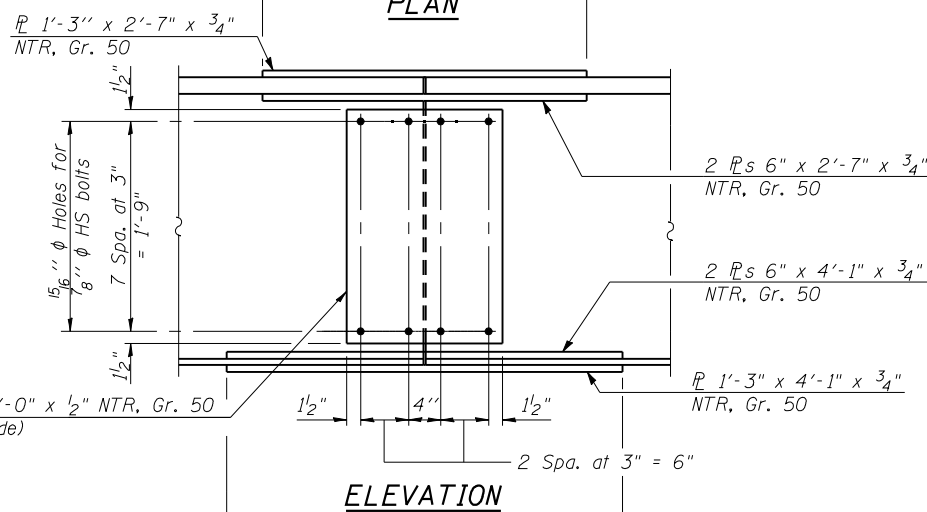
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1)BR-1	KNOX	152	109
CONTRACT NO. 68754				
ILLINOIS FED. AID PROJECT				



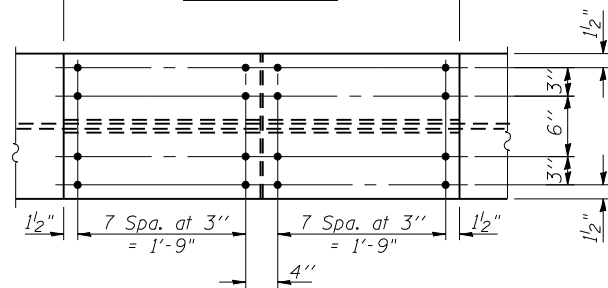
**END OF BEAM DETAIL**  
(Showing required hole locations)



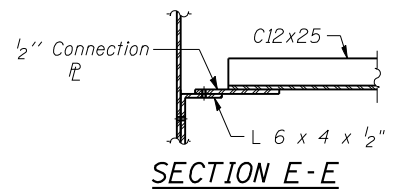
**PLAN**



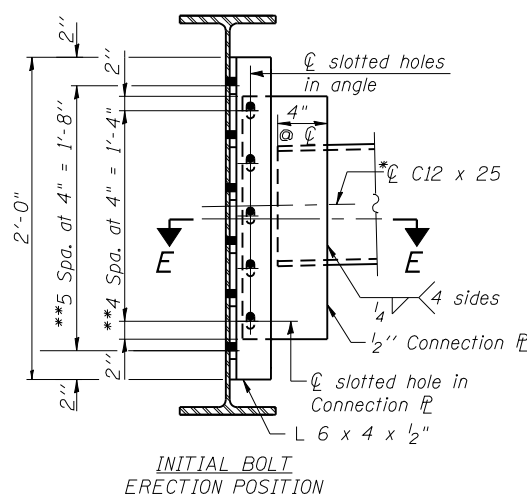
**ELEVATION**



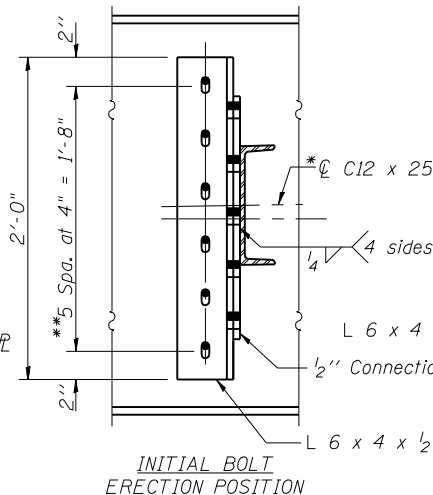
**PLAN**  
**SPLICE DETAIL**  
(6 Required)



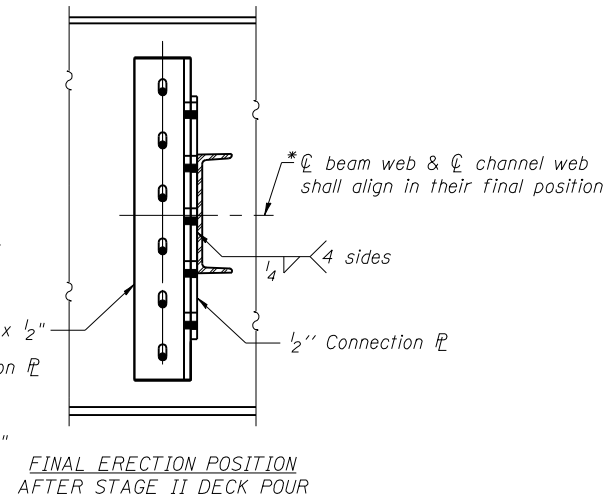
**SECTION E-E**



**INITIAL BOLT ERECTION POSITION**

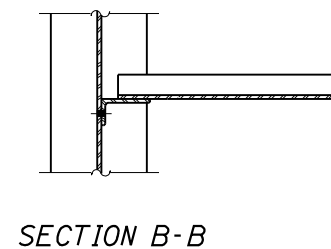


**INITIAL BOLT ERECTION POSITION**

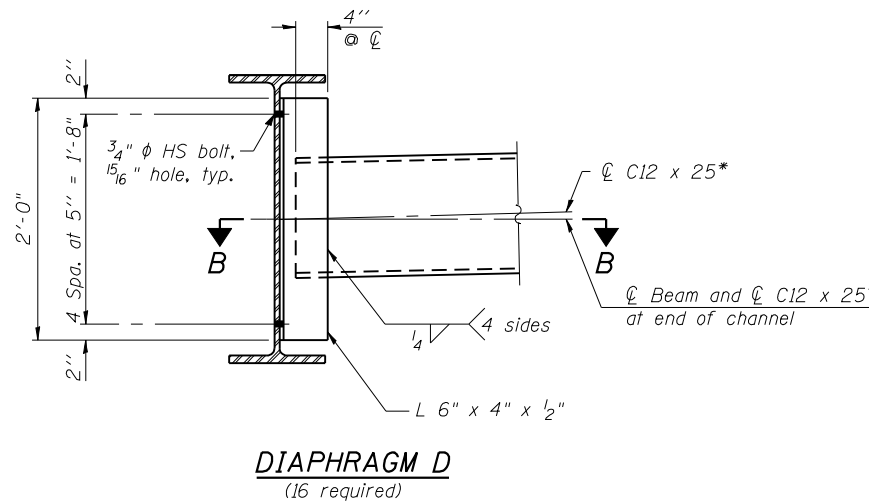


**FINAL ERECTION POSITION AFTER STAGE II DECK POUR**

**DIAPHRAGM 'D1'**  
(east side beam 4)  
(4 required)



**SECTION B-B**



**DIAPHRAGM D**  
(16 required)

**Notes:**

All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted.  
Two hardened washers required for each set of oversized holes.  
The connecting angle for diaphragm D<sub>1</sub> attached to Beam 4 shall have 13/16" x 17/8" slotted holes with 1/4" plate washers covering the entire slot. The holes in the connecting plate at this connection shall also be 13/16" x 17/8" slotted holes with 1/4" plate washers covering the entire slot. The bolts for the slotted holes shall only be finger tight prior to pouring the Stage II deck and then tightened after completion of the pour. The slotted holes shall be positioned as shown to allow the bolts to move to the final erection positions under deck load. The holes shall be positioned to allow maximum bolt displacement without laterally stressing the beams.

\* Alternate C12x30 channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized, shall be provided at no additional cost to the Department.

\*\* 3/4" diameter HS bolts, 5/16" diameter holes in beam and slotted holes in angle and connection plate.

**Notes:**

Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

FILE NAME = G:\74-016-1-steel-det.dgn  
CB PROJECT NO. 0924-B

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Design Firm License No. 184-002703

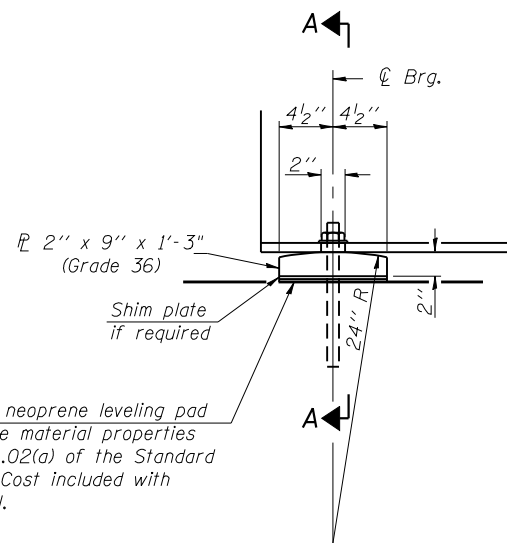
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PLOT DATE = 10/13/2015	DRAWN - MMY	REVISED -
	CHECKED - MCB	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**STRUCTURAL STEEL DETAILS**  
**STRUCTURE NO. 048-0097**

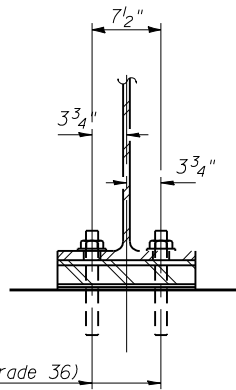
SHEET NO. 16 OF 31 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1)BR-1	KNOX	152	110
CONTRACT NO. 68754				
ILLINOIS FED. AID PROJECT				



1/8" elastomeric neoprene leveling pad according to the material properties of Article 1052.02(a) of the Standard Specifications. Cost included with Structural Steel.

1"  $\phi$  x 12" anchor bolts (Grade 36) with 2 1/4" x 2 1/4" x 5/16" PL washer under nut. 1 3/8" x 2" slotted hole in flange. 1 1/2"  $\phi$  holes in bearing plate.



SECTION A-A

ELEVATION AT ABUTMENT

INTEGRAL ABUTMENT BEARING

Notes:

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

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

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

All bearing plates, anchor bolts, nut and washers shall be galvanized according to AASHTO M111 or M232 as applicable.

INTERIOR BEAM MOMENT TABLE		
0.5 Sp.		
$I_s$	(in <sup>4</sup> )	8230
$I_c(n)$	(in <sup>4</sup> )	18,883
$I_c(3n)$	(in <sup>4</sup> )	13,733
$S_s$	(in <sup>3</sup> )	541
$S_c(n)$	(in <sup>3</sup> )	733
$S_c(3n)$	(in <sup>3</sup> )	663
DC1	(k/')	0.85
M <sub>DC1</sub>	(k)	582
DC2	(k/')	0.15
M <sub>DC2</sub>	(k)	103
DW	(k/')	0.27
M <sub>DW</sub>	(k)	185
$M_L + IM$	(k)	979
$M_u$ (Strength I)	(k)	2847
$\phi_r M_n$	(k)	3406
$f_s$ DC1	(ksi)	12.9
$f_s$ DC2	(ksi)	1.9
$f_s$ DW	(ksi)	3.3
$f_s$ (L+IM)	(ksi)	16.0
$f_s$ (Service II)	(ksi)	38.9
$0.95R_n F_y f$	(ksi)	47.5
$V_f$	(k)	23.1

INTERIOR BEAM REACTION TABLE		
Abutment		
$R_{DC1}$	(k)	31.5
$R_{DC2}$	(k)	5.7
$R_{DW}$	(k)	9.9
$R_{L+IM}$	(k)	70.7
$R_{Total}$	(k)	117.8

$I_s, S_s$ : Non-composite moment of inertia and section modulus of the steel section used for computing  $f_s$  (Service II) due to non-composite dead loads (in<sup>4</sup> and in<sup>3</sup>).

$I_c(n), S_c(n)$ : Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing  $f_s$  (Service II) in uncracked sections due to short-term composite live loads (in<sup>4</sup> and in<sup>3</sup>).

$I_c(3n), S_c(3n)$ : Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing  $f_s$  (Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in<sup>4</sup> and in<sup>3</sup>).

DC1: Un-factored non-composite dead load (kips/ft.).

M<sub>DC1</sub>: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

M<sub>DC2</sub>: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

M<sub>DW</sub>: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

$M_L + IM$ : Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

$M_u$  (Strength I): Factored design moment (kip-ft.).

$1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_L + IM$

$\phi_r M_n$ : Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft).

$f_s$  DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).

$M_{DC1} / S_{sc}$

$f_s$  DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).

$M_{DC2} / S_c(3n)$  or  $M_{DC2} / S_c(cr)$  as applicable.

$f_s$  DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).

$M_{DW} / S_c(3n)$  or  $M_{DW} / S_c(cr)$  as applicable.

$f_s$  (L+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).

$M_L + IM / S_c(n)$  or  $M_L + IM / S_c(cr)$  as applicable.

$f_s$  (Service II): Sum of stresses as computed below (ksi).

$f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3 f_s (L+IM)$

$0.95R_n F_y f$ : Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

$V_f$ : Maximum factored shear range in span computed according to Article 6.10.10.

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1"	Each	24

FILE NAME = 68754-017-bearing.dwg  
 PROJECT NO. 0824-B

**Coombes-Bloxdorf P.C.**  
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 STRUCTURAL ENGINEERS-  
 LAND SURVEYORS  
 Design Firm License No. 184-002703

USER NAME = .CFC.	DESIGNED - GLB	REVISED -
	CHECKED - MCB	REVISED -
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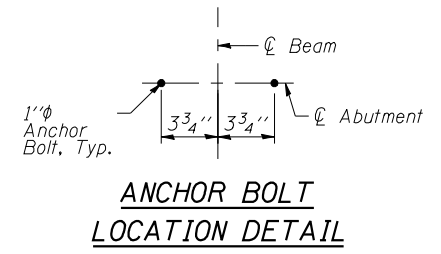
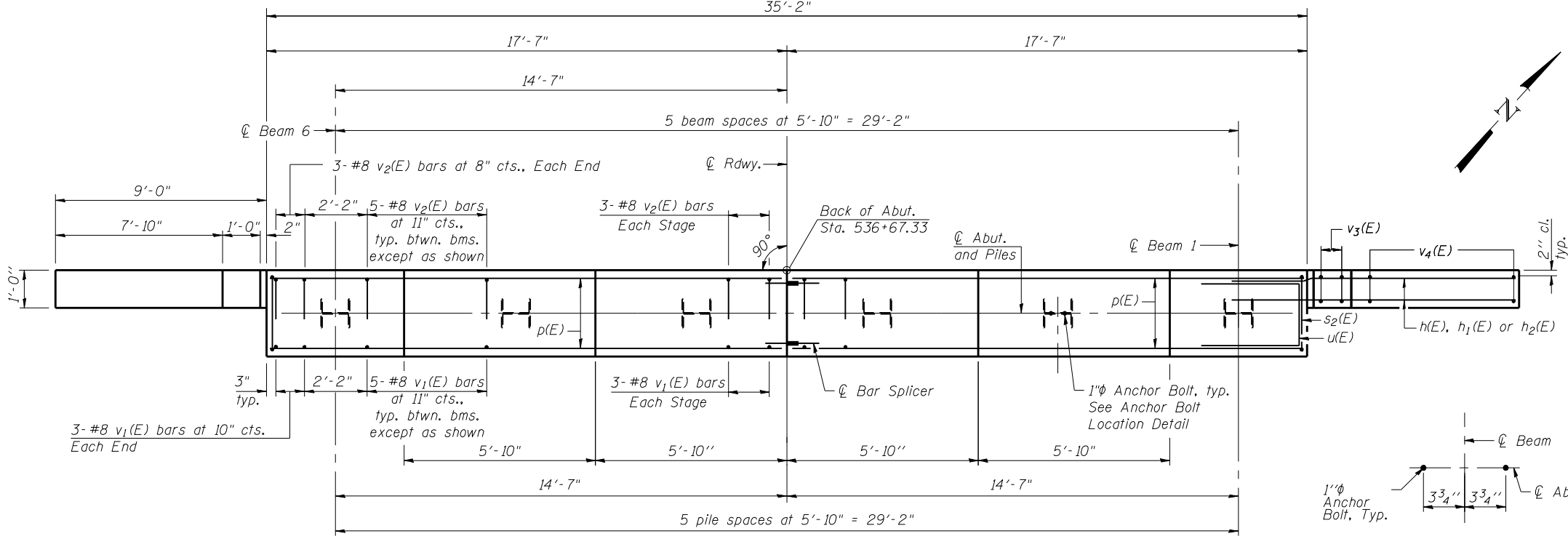
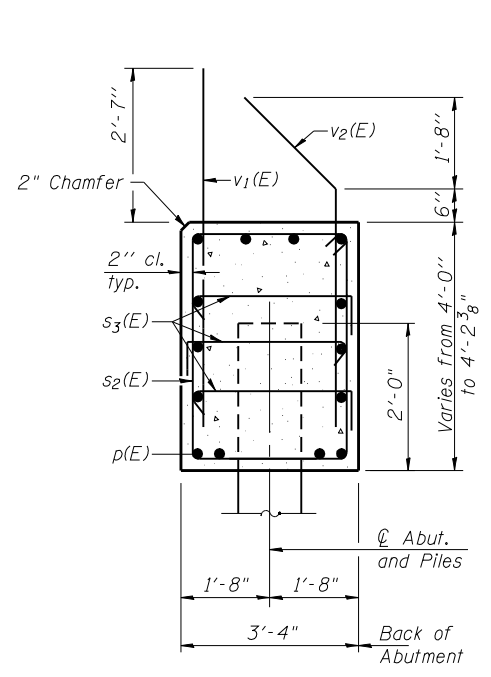
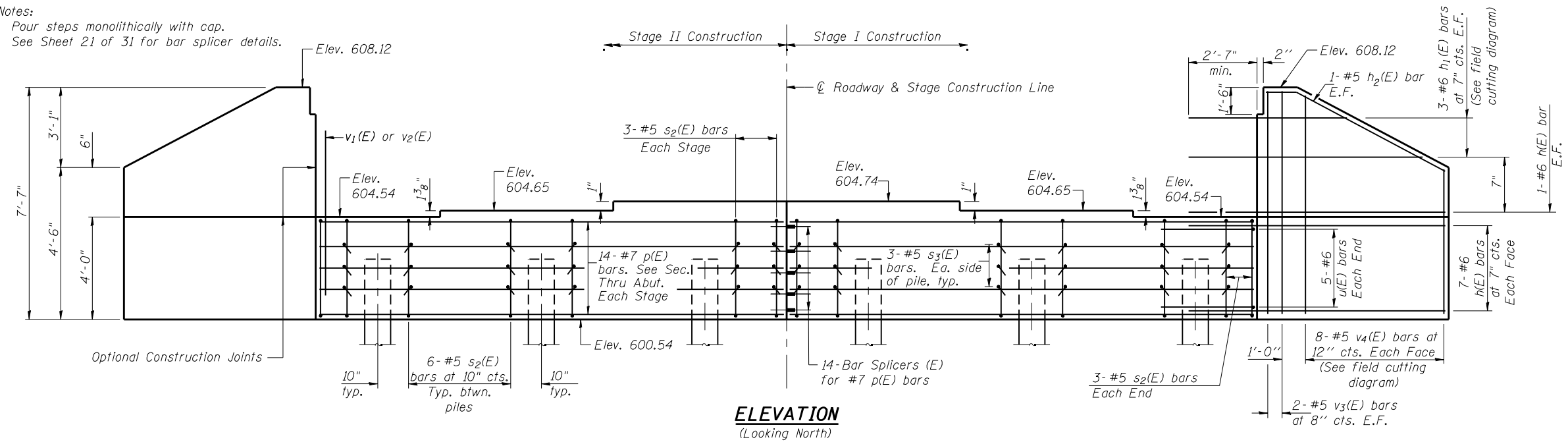
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BEARING DETAILS  
 STRUCTURE NO. 048-0097

SHEET NO. 17 OF 31 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1)BR-1	KNOX	152	111
CONTRACT NO. 68754				
ILLINOIS FED. AID PROJECT				

Notes:  
 Pour steps monolithically with cap.  
 See Sheet 21 of 31 for bar splicer details.



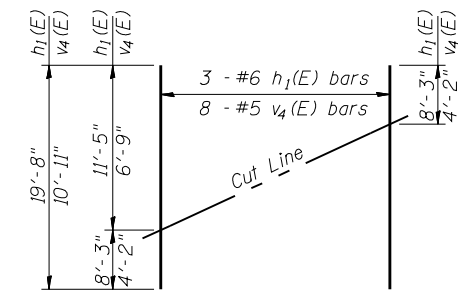
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	32	#6	11'-5"	—
h1(E)	6	#6	19'-8"	—
h2(E)	4	#5	9'-0"	—
p(E)	28	#7	17'-3"	—
s2(E)	36	#5	14'-3"	□
s3(E)	36	#5	4'-0"	└
u(E)	10	#6	10'-7"	▭
v1(E)	32	#8	5'-11"	—
v2(E)	32	#8	6'-2"	└
v3(E)	8	#5	7'-2"	—
v4(E)	16	#5	10'-11"	—
Structure Excavation		Cu. Yd.	47	
Concrete Structures		Cu. Yd.	21.9	
Reinforcement Bars, Epoxy Coated		Pound	3870	
Furnishing Steel Piles HP 12x53		Foot	115	
Driving Piles		Foot	115	
Test Pile		Each	1	

For details of piles see sheet 20 of 31.

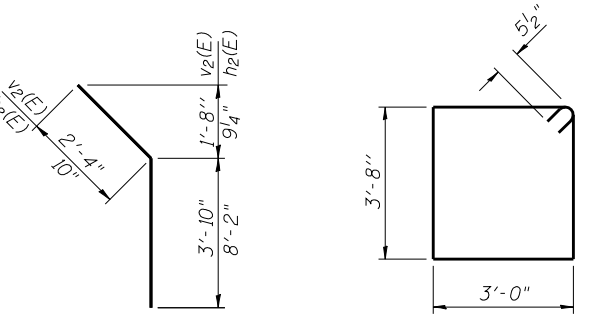
**PILE DATA**

Type: HP 12x53  
 Nominal Required Bearing: 418 kip  
 Factored Resistance Available: 230 kip  
 Est. Length: 23 ft.  
 No. Production Piles: 5  
 No. Test Piles: 1

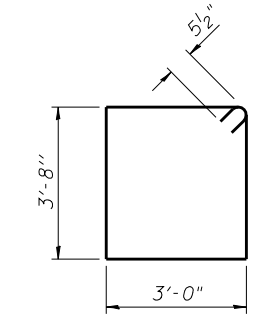


**FIELD CUTTING DIAGRAM**

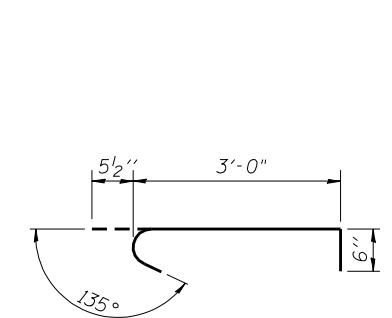
Order h1(E) and v4(E) full length. Cut as shown and use remainder of bars in opposite face.



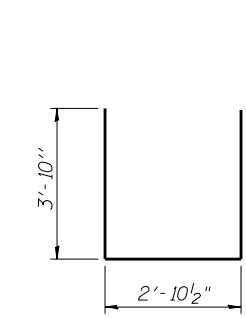
**BAR v2(E) & h2(E)**



**BAR s2(E)**



**BAR s3(E)**



**BAR u(E)**

FILE NAME = G:\Projects\AI-2440-0\AI-2440-018-abut.rwdgn  
 CB PROJECT NO. 09824-B

**AI-2440-0**  
 8-31-12  
**Coombe-Bloxdorf P.C.**  
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 STRUCTURAL ENGINEERS-  
 LAND SURVEYORS  
 Design Firm License No. 184-002703

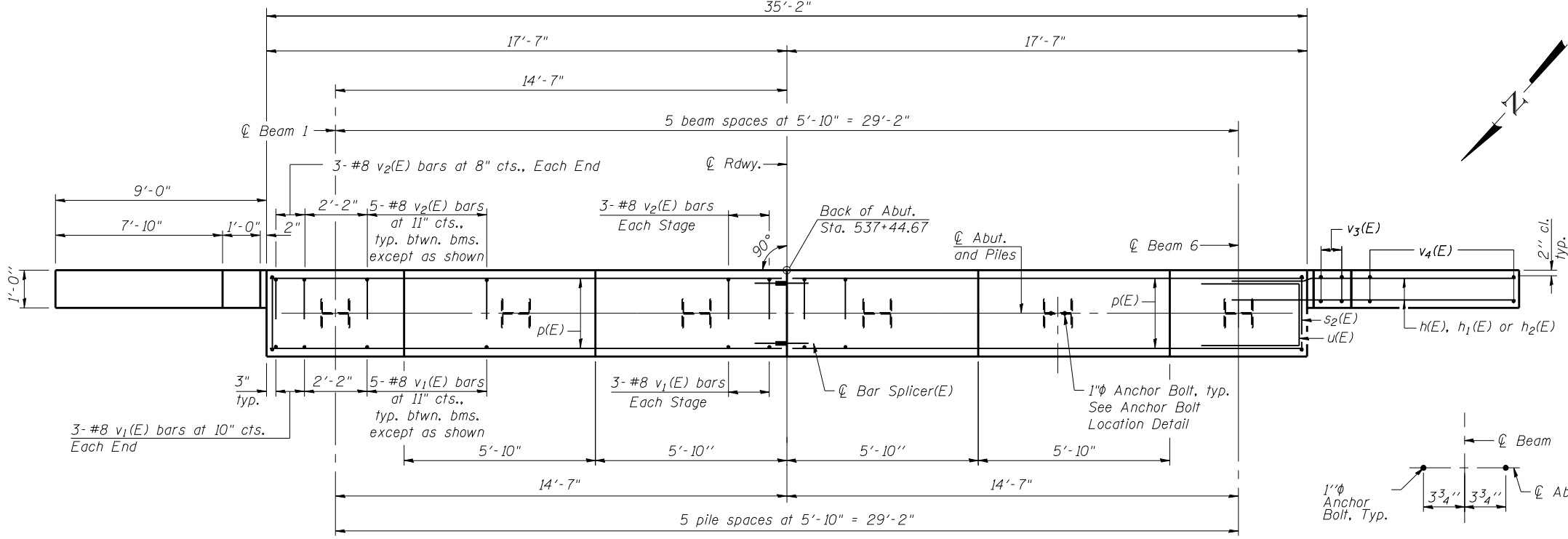
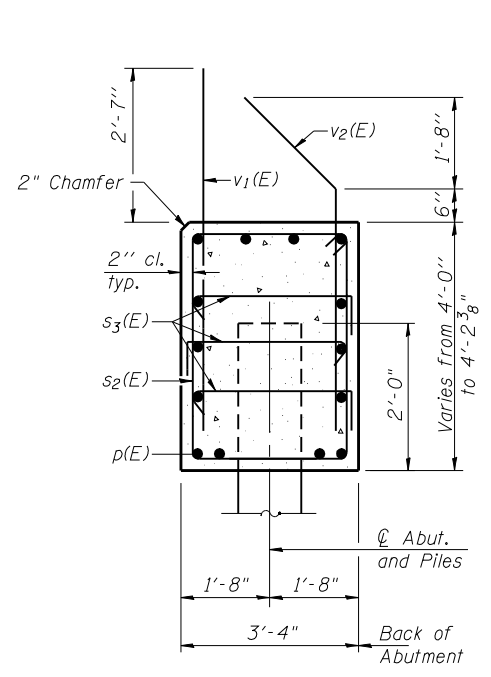
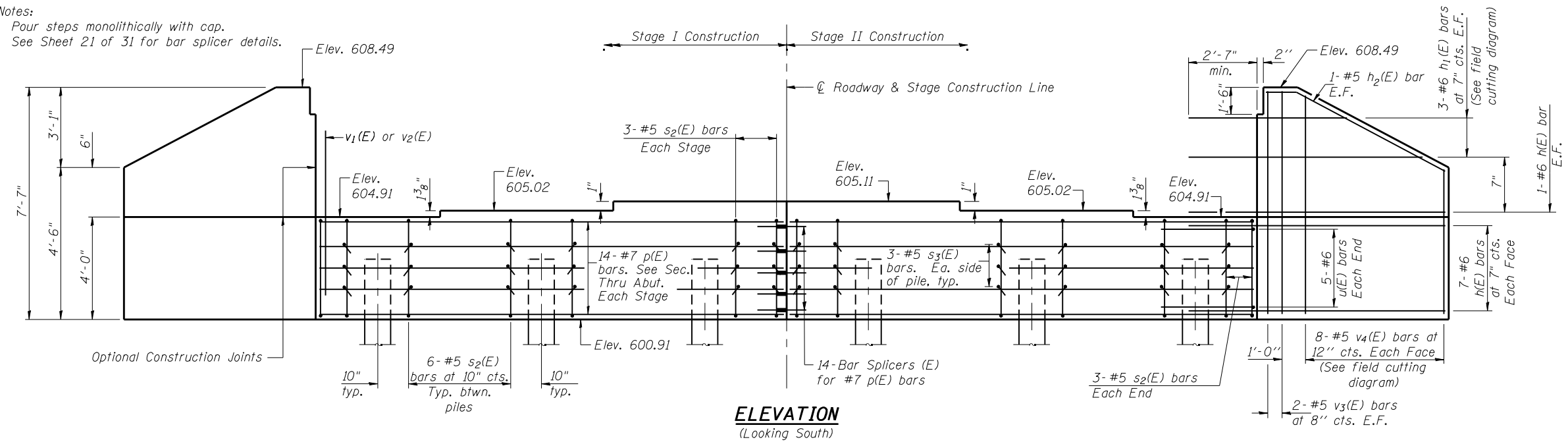
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PLOT DATE = 10/13/2015	DRAWN - MMY	REVISED -
	CHECKED - MCB	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**NORTH ABUTMENT DETAILS**  
**STRUCTURE NO. 048-0097**  
 SHEET NO. 18 OF 31 SHEETS

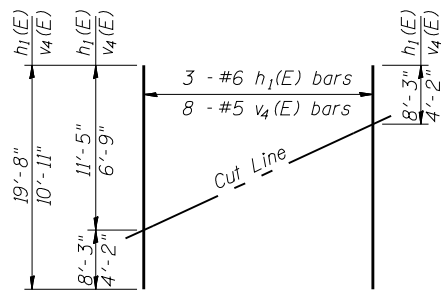
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1)BR-1	KNOX	152	112
CONTRACT NO. 68754				
ILLINOIS FED. AID PROJECT				

Notes:  
 Pour steps monolithically with cap.  
 See Sheet 21 of 31 for bar splicer details.



**PILE DATA**

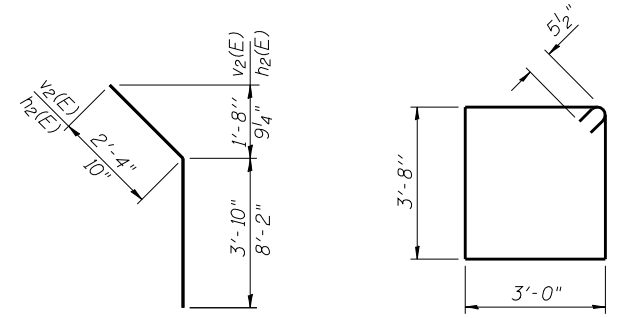
Type: HP 12x53  
 Nominal Required Bearing: 418 kip  
 Factored Resistance Available: 230 kip  
 Est. Length: 23 ft.  
 No. Production Piles: 5  
 No. Test Piles: 1



**FIELD CUTTING DIAGRAM**

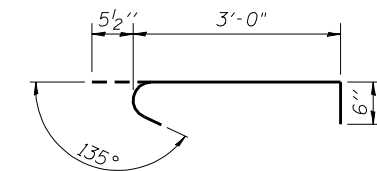
Order h1(E) and v4(E) full length. Cut as shown and use remainder of bars in opposite face.

**PLAN**

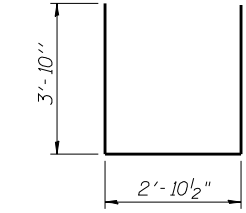


**BAR v2(E) & h2(E)**

**BAR s2(E)**

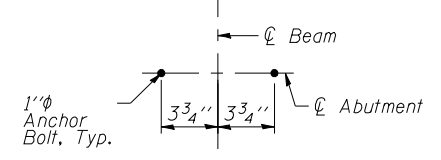


**BAR s3(E)**



**BAR u(E)**

**ANCHOR BOLT LOCATION DETAIL**



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	32	#6	11'-5"	—
h1(E)	6	#6	19'-8"	—
h2(E)	4	#5	9'-0"	—
p(E)	28	#7	17'-3"	—
s2(E)	36	#5	14'-3"	□
s3(E)	36	#5	4'-0"	└
u(E)	10	#6	10'-7"	▭
v1(E)	32	#8	5'-11"	—
v2(E)	32	#8	6'-2"	—
v3(E)	8	#5	7'-2"	—
v4(E)	16	#5	10'-11"	—
Structure Excavation		Cu. Yd.	47	
Concrete Structures		Cu. Yd.	21.9	
Reinforcement Bars, Epoxy Coated		Pound	3870	
Furnishing Steel Piles HP 12x53		Foot	115	
Driving Piles		Foot	115	
Test Pile		Each	1	

For details of piles see sheet 20 of 31.

FILE NAME = 68754-019-abut-stdgn  
 CB PROJECT NO. 09824-B

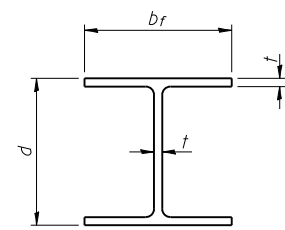
AI-2440-0  
 8-31-12  
**Combe-Bloxdorf P.C.**  
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 STRUCTURAL ENGINEERS-  
 LAND SURVEYORS  
 Design Firm License No. 184-002703

USER NAME = .CFC.	DESIGNED - AMC	REVISED -
PLOT SCALE = 0:2.000000 '1' / IN.	CHECKED - MCB	REVISED -
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

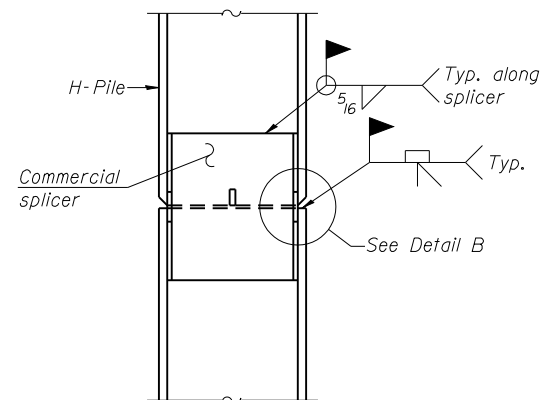
**SOUTH ABUTMENT DETAILS**  
**STRUCTURE NO. 048-0097**  
 SHEET NO. 19 OF 31 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1)B-1	KNOX	152	113
CONTRACT NO. 68754				
ILLINOIS FED. AID PROJECT				

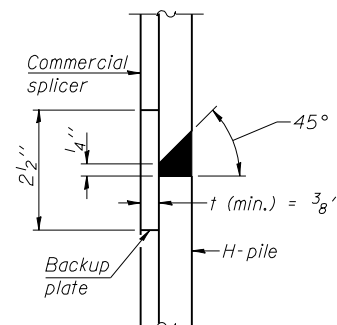


**STEEL PILE TABLE**

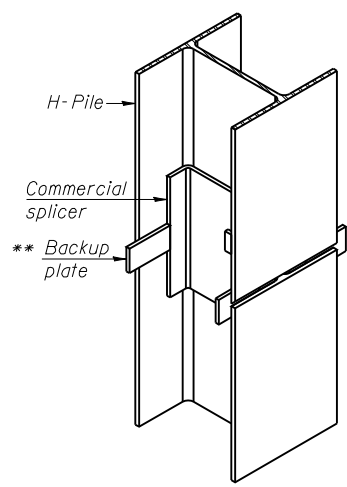
Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



**ELEVATION**

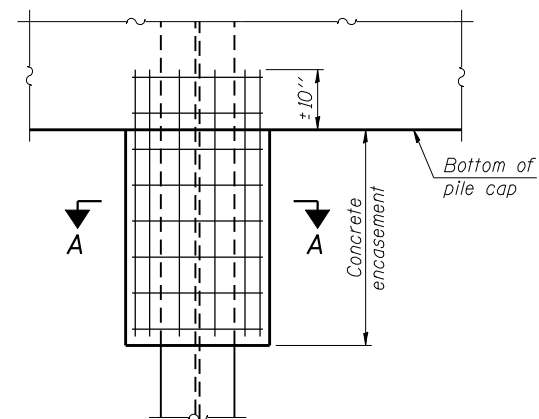


**DETAIL "B"**



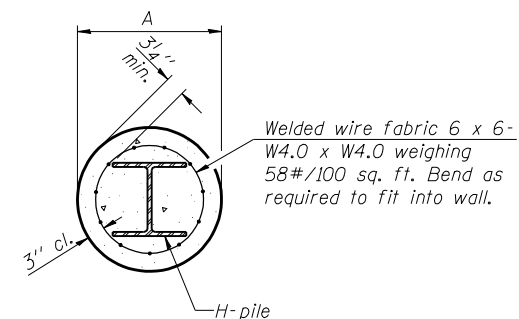
**ISOMETRIC VIEW**

**WELDED COMMERCIAL SPLICE**



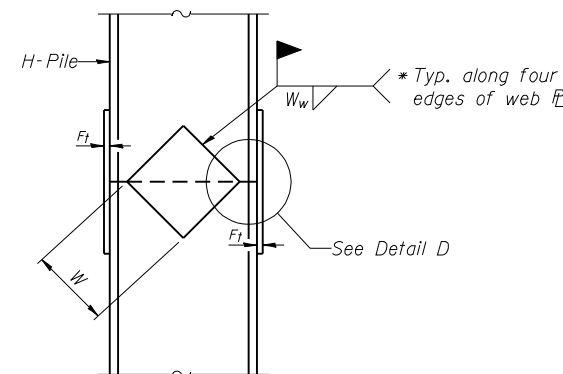
**ELEVATION**

**PILE ENCASEMENT**



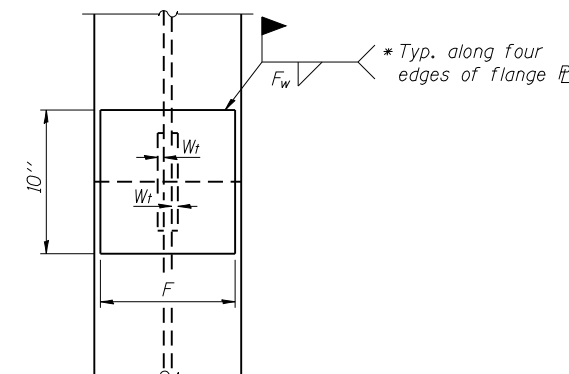
**SECTION A-A**

Note: Forms for encasement may be omitted when soil conditions permit.

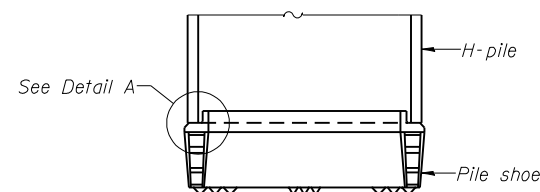


**ELEVATION**

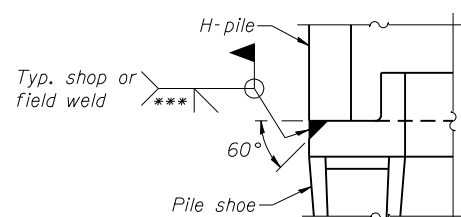
**DETAIL D**



**END VIEW**

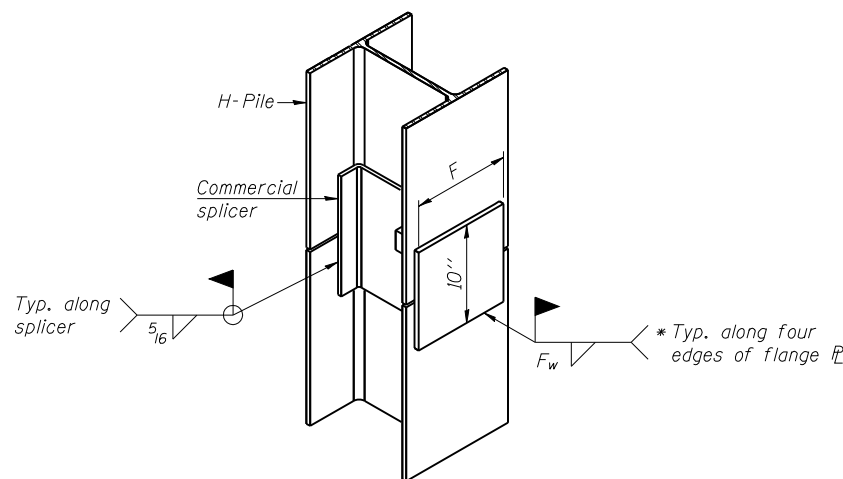


**ELEVATION**



**DETAIL A**

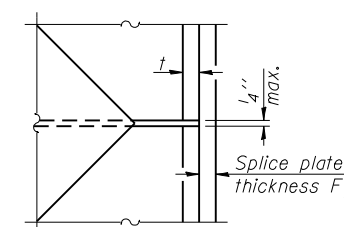
**H-PILE SHOE ATTACHMENT**



**ISOMETRIC VIEW**

**WELDED COMMERCIAL SPLICE ALTERNATE**

- \* Interrupt welds 1/4" from end of web and/or each flange.
- \*\* Remove portions of backup plates that extend outside the flanges.
- \*\*\* Weld size per pile shoe manufacturer (5/16" min.).



**WELDED PLATE FIELD SPLICE**

Note: The steel H-piles shall be according to AASHTO M270 Grade 50.

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	1/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

FILE NAME = 68754-020-hp1.txdgn  
CB PROJECT NO. 09224-B

**F-HP**  
1-27-12  
Combe-Bloxdorf P.C.  
CIVIL ENGINEERS-  
STRUCTURAL ENGINEERS-  
LAND SURVEYORS  
Design Firm License No. 184-002703

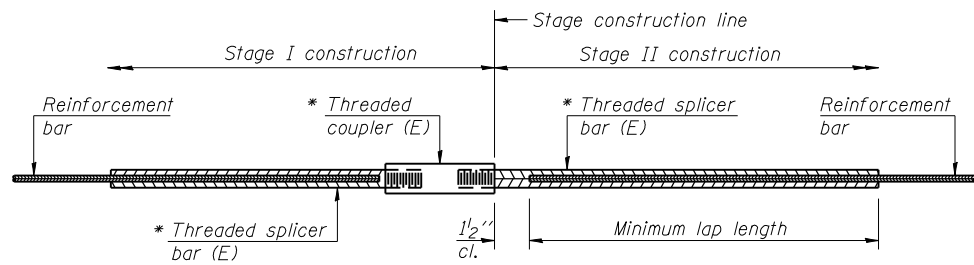
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	CHECKED - MCB	REVISD -
PLOT SCALE = 0:2.000000 '1' / IN.	DRAWN - MMY	REVISD -
PLOT DATE = 10/13/2015	CHECKED - MCB	REVISD -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**HP PILE DETAILS  
STRUCTURAL NO. 048-0097**

SHEET NO. 20 OF 31 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1)BR-1	KNOX	152	114
CONTRACT NO. 68754				
ILLINOIS FED. AID PROJECT				



**STANDARD BAR SPLICER ASSEMBLY**

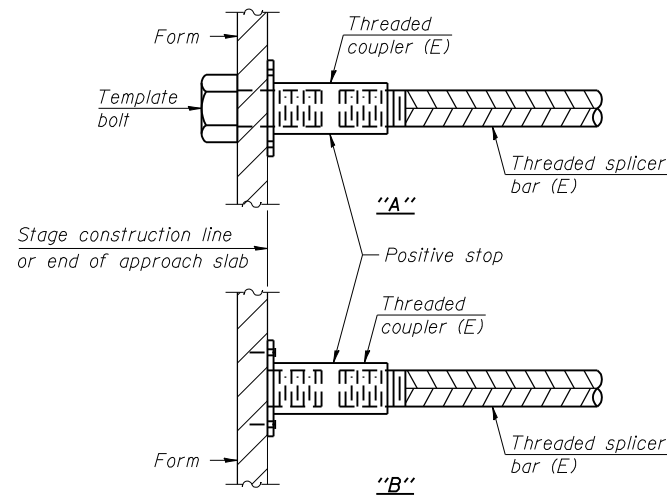
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	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 + 1/2" + 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
Deck	5	220	Table 3
End Diaphragm	6	8	Table 4
Approach slab	4	50	Table 4
Approach slab	5	92	Table 3
Approach footing	5	80	Table 3
Abutments	7	28	Table 4



**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.

**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.

FILE NAME = G:\68754-021-01\cwr.dgn  
 CB PROJECT NO. 09824-B

BSD-1

8-31-12

**Coombes-Bloxdorf P.C.**  
 CIVIL ENGINEERS  
 STRUCTURAL ENGINEERS  
 LAND SURVEYORS  
 Design Firm License No. 184-002703

USER NAME = .CFC.	DESIGNED - GLB	REVISED -
	CHECKED - MCB	REVISED -
PLOT SCALE = 0:2.000000 '1' / IN.	DRAWN - MMY	REVISED -
PLOT DATE = 10/13/2015	CHECKED - MCB	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
 STRUCTURE NO. 048-0097**

SHEET NO. 21 OF 31 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1)BR-1	KNOX	152	115
CONTRACT NO. 68754				
ILLINOIS FED. AID PROJECT				





**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.

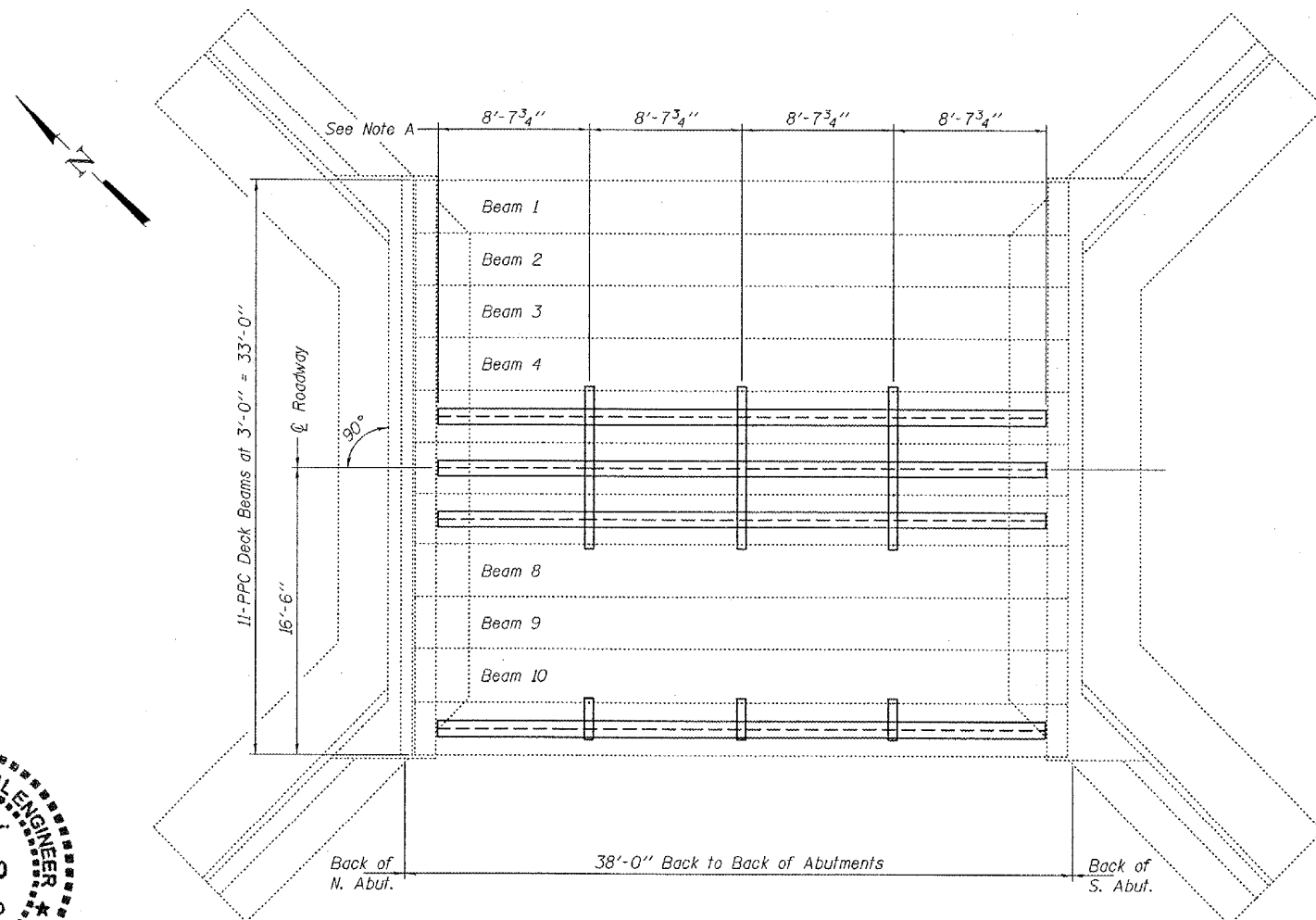
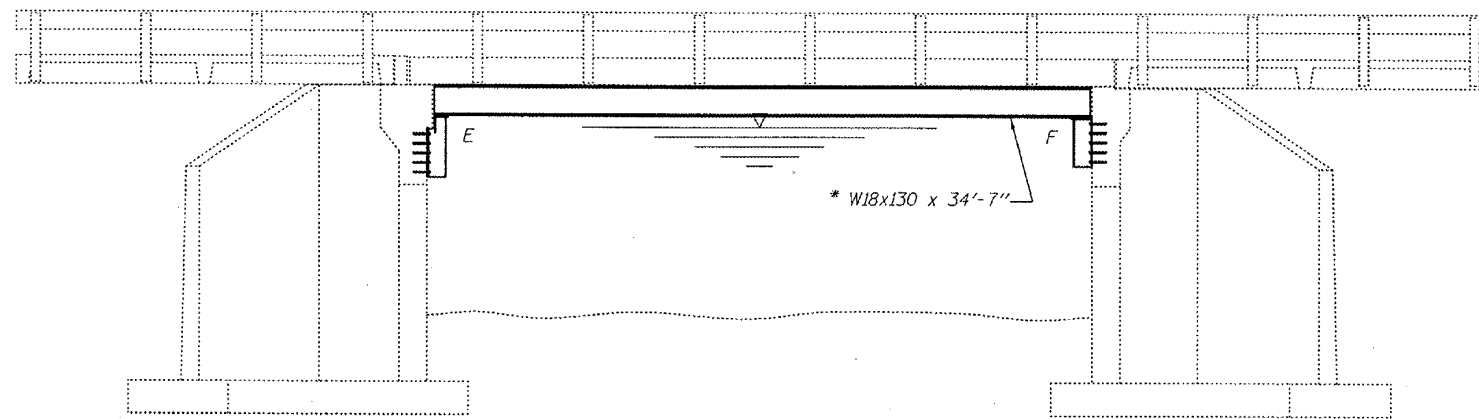
The contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the contractor's responsibility to account for the condition of the beams when developing construction procedures.

See Section 584 of the Standard Specifications for Epoxy Grouting of Threaded Rods; Minimum embedment 9".

If the contractor's procedure for placement of beams involves placement of cranes or other heavy equipment on the bridge, a detailed procedure shall be submitted to the Engineer for approval. The procedure shall include calculations, prepared and sealed by an Illinois Licensed Structural Engineer, verifying that the equipment and procedure used will not overstress the existing beams. To distribute load to multiple beams and protect the existing surface, in all cases a double layer mat of heavy timbers shall be used at all times under crane tracks or wheels and any outriggers in the down position. If necessary, shims shall be used under the crane mat to ensure uniform contact with the underlying beams.

The cost of epoxy grouting threaded rods on the abutments and beams shall be included with Furnishing and Erecting Structural Steel.

The Contractor has the option of using used steel. See Special Provisions..



\* Contractor is to verify beam length prior to ordering material. Other sections meeting the section modulus requirements shown may be allowed subject to approval by the Bureau of Bridges and Structures. Maximum Girder depth = 18". No additional payment will be allowed if the Contractor chooses a heavier steel section than the one specified in the plans. (Min. Sx = 256 in.<sup>3</sup>)

Note A:  
 ⊕ Transverse Tie R's (3 per span).  
 Place additional shims at midpoints between Tie R's. Securely weld shims to top flange of support beam. Minimum shim size is 6" x flange width.



Expires: November 30, 2012

DESIGNED - <i>[Signature]</i>	EXAMINED - <i>[Signature]</i>	DATE - AUGUST 18, 2011
CHECKED - <i>[Signature]</i>	PASSED - <i>[Signature]</i>	REVISED -
DRAWN - Kyle M. Steffen	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED -
CHECKED - <i>[Signature]</i>		REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION  
ILLINOIS ROUTE 97 OVER LITTLE HAW CREEK  
SN 048-0015

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	(42B)1	KNOX	8	7
CONTRACT NO. 68A68				
ILLINOIS FED. AID PROJECT				

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	Pound	20,150

FILE NAME - 68754-023-1-11-11.dgn  
 PROJECT NO. 09824-8

**Coombe-Bloxdorf P.C.**  
 CIVIL ENGINEERS-  
 STRUCTURAL ENGINEERS-  
 LAND SURVEYORS-  
 Design Firm License No. 184-002703

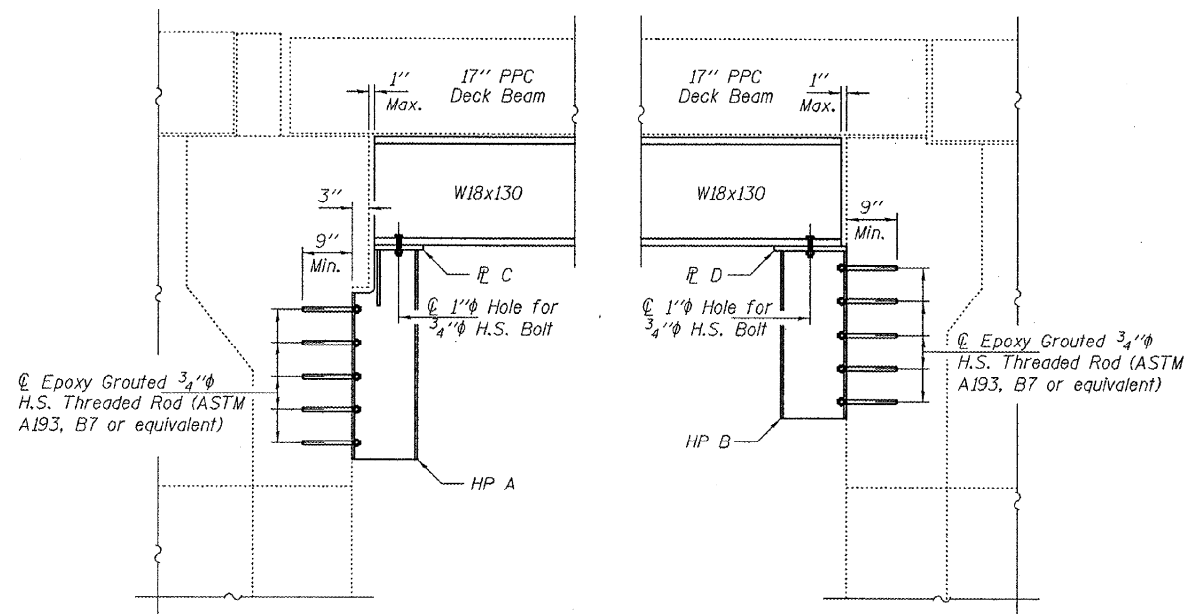
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PLOT DATE = 10/13/2015	DRAWN - MMY	REVISED -
	CHECKED - MCB	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS  
FOR INFORMATION ONLY

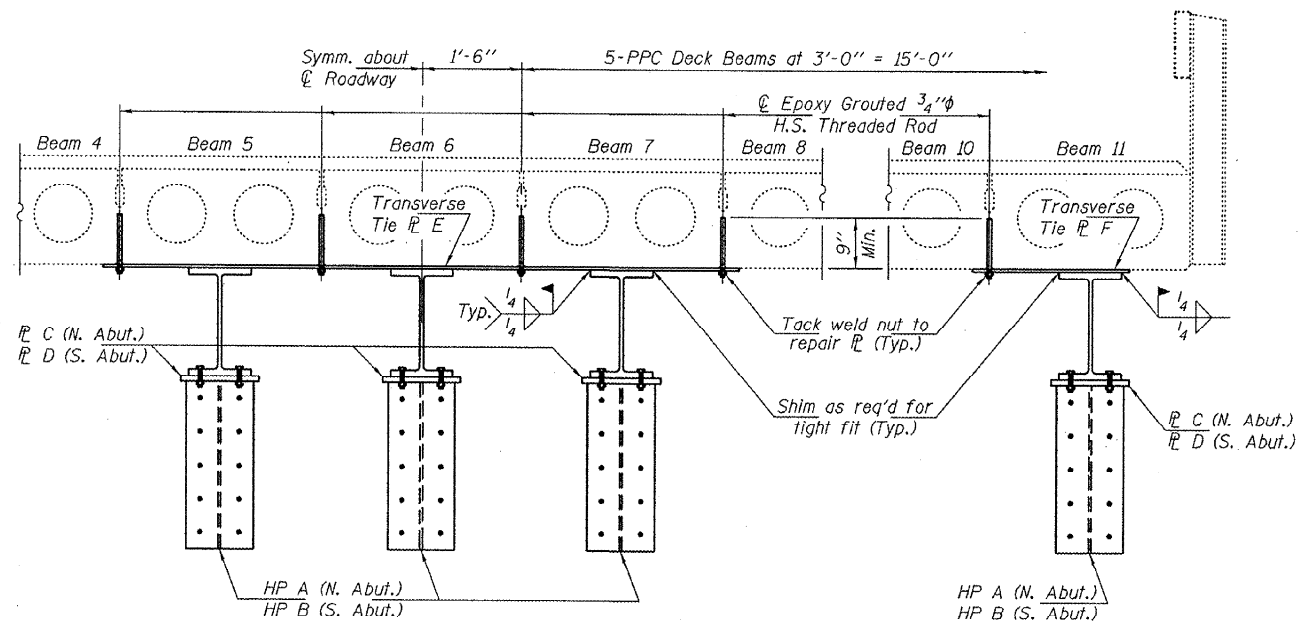
SHEET NO. 23 OF 31 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1)BR-1	KNOX	152	117
CONTRACT NO. 68754				
ILLINOIS FED. AID PROJECT				



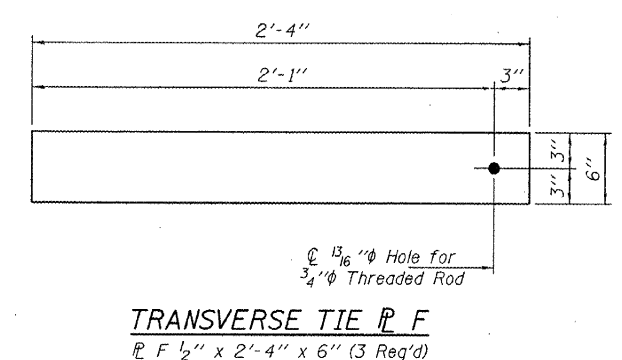
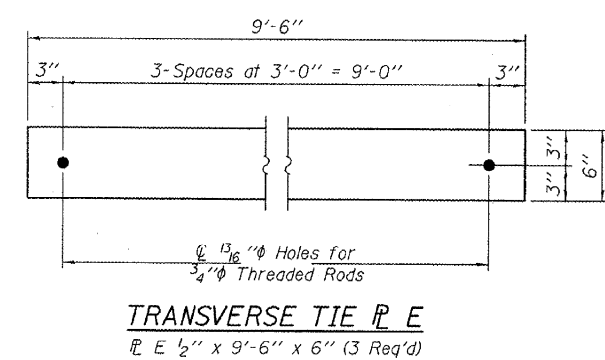
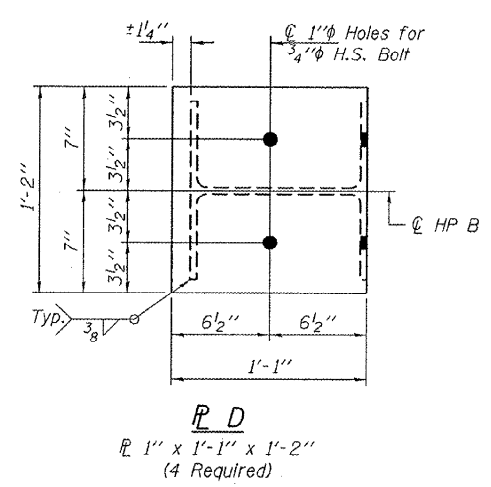
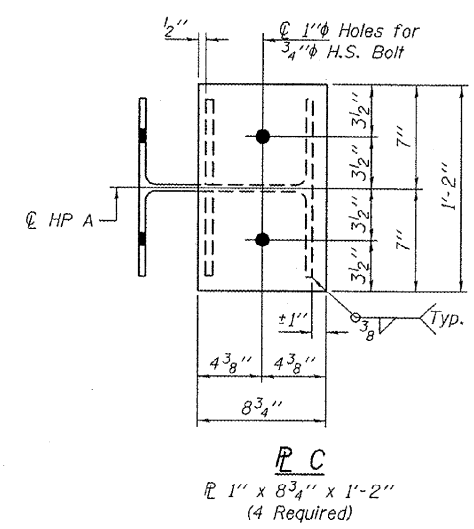
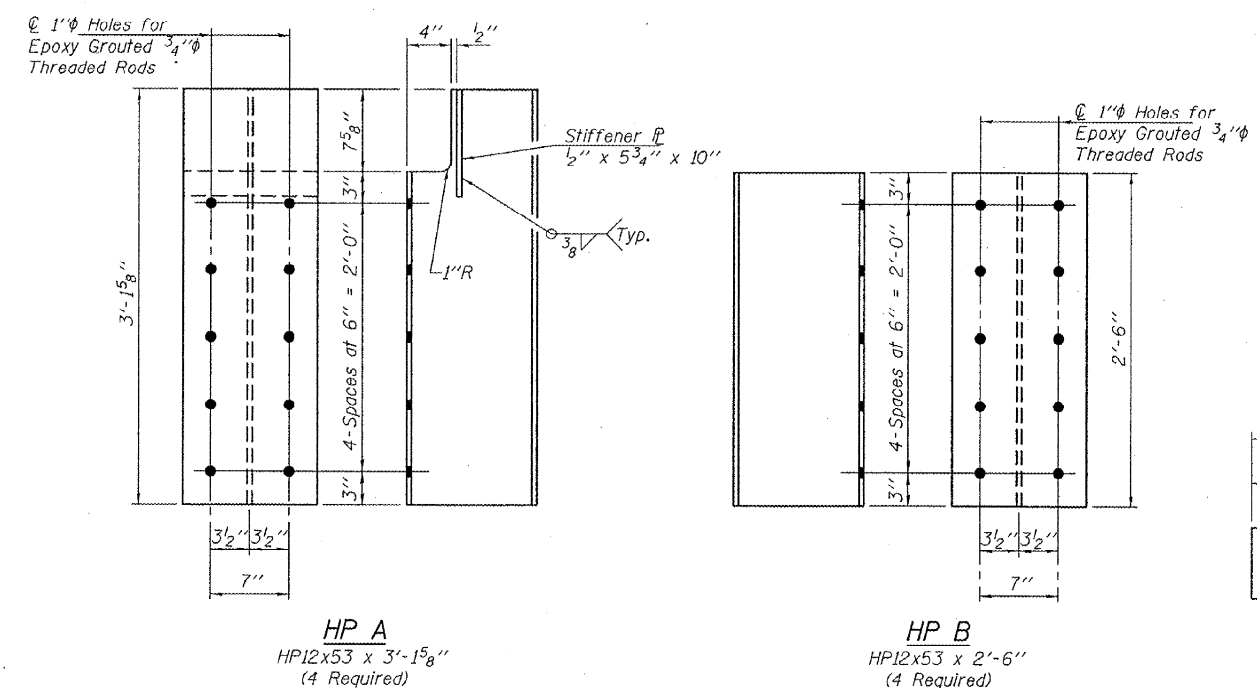
SECTION THRU N. ABUT.

SECTION THRU S. ABUT.



PARTIAL CROSS-SECTION

(Looking South)  
S. Abut. shown, N. Abut. similar by rotation except as noted.



DESIGNED - GGE	EXAMINED - <i>James F. J...</i>	DATE - AUGUST 18, 2011
CHECKED - ATH	PASSED - <i>ACTING ENGINEER OF STRUCTURAL SERVICES</i>	REVISED -
DRAWN - Kyle M. Steffen	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED -
CHECKED - GGE ATH		

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		DECK BEAM SUPPORT DETAILS SN 048-0015		F.A.P. RTE. 626	SECTION (42B)I	COUNTY KNOX	TOTAL SHEETS 8	SHEET NO. 8
SHEET NO. 2 OF 2 SHEETS				CONTRACT NO. 68A68 ILLINOIS FED. AID PROJECT				

FILE NAME: 68754-024-01-Plan.dgn  
PROJECT NO. 0924-B

**Coombe-Bloxdorf P.C.**  
- CIVIL ENGINEERS -  
- STRUCTURAL ENGINEERS -  
- LAND SURVEYORS -  
Design Firm License No. 184-002703

USER NAME = .CFC.	DESIGNED - GLB	REVISED -
PLOT SCALE = 0:2.000000 '1' / IN.	CHECKED - MCB	REVISED -
PLOT DATE = 10/13/2015	DRAWN - MMY	REVISED -
	CHECKED - MCB	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		EXISTING BRIDGE PLANS FOR INFORMATION ONLY		F.A.P. RTE. 626	SECTION 42-(B,B-1)BR-1	COUNTY KNOX	TOTAL SHEETS 152	SHEET NO. 118
SHEET NO. 24 OF 31 SHEETS				CONTRACT NO. 68754 ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-B	KNOX	152	119

8 SHEETS

Benchmark: Chiseled square on Northwest Abutment of Bridge, Rt. Sta. 536+68, Elev. 606.60.  
Existing Structure: Built as S.B.I. Rte 8, Section 42 B, Sta. 537+10 in 1926. R.C. DG Super-structure on closed R.C. Abutments. Substructure to be widened to accommodate new P.P.C. Deck beam superstructure. No salvage.  
Bridge No. 048-0015.  
Width of Exst. Deck = 24'-2"

Type "S" Bridgerail

GENERAL NOTES

All structural steel shall be shop painted with two coats of basic lead silico chromate paint.  
Expansion guards which are not cast in the precast unit shall be fabricated and erected in accordance with Article 503.07(c) of the Standard Specifications and are included in quantity of structural steel.

The top surface of the beams shall be finished in accordance with Article 505.06 of the Standard Specification except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners.

Expansion bolts shall consist of self drilling expansion anchors and 3/4" x 12" hooked bolts.  
Reinforcement bars shall conform to the requirements of AASHTO M31 or M53 Grade 60.

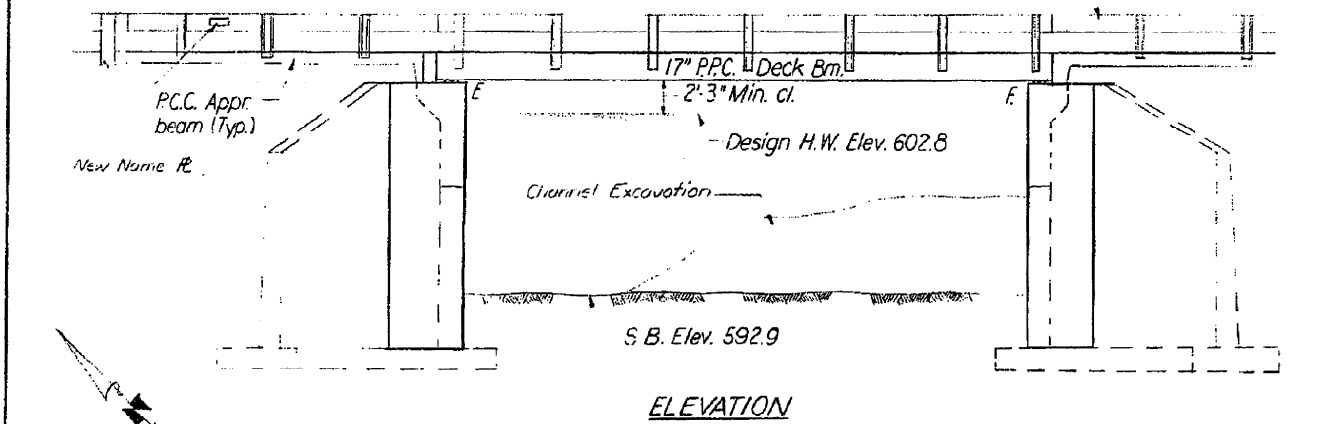
Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction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

STATION 537+10.00  
BUILT 19 BY  
STATE OF ILLINOIS  
F.A. RT. 626 SEC. (42B-1) BR  
LOADING HS20  
\*STR. NO.

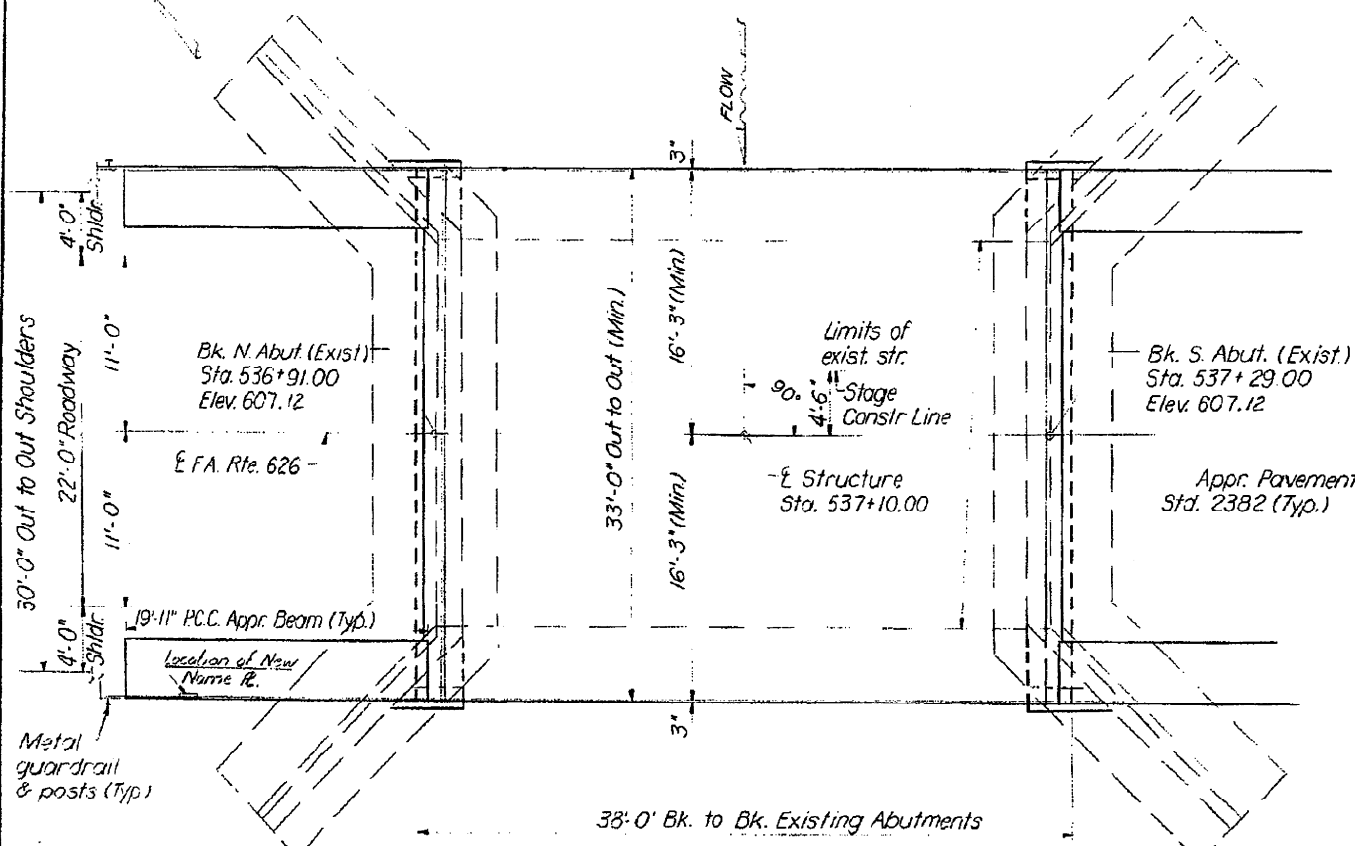
NAME PLATE

Std. 2113

\*Structure Number to be supplied by District.



ELEVATION



PLAN

0.00%

Sta. 537+10.00  
Elev. 607.12

PROFILE GRADE

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Bituminous Concrete Surface Course Class I	Ton	16		16
Removal of Existing Superstructures	Each	1		1
Concrete Removal	Cu. Yd.		18	18
Expansion Bolts (3/4" dia)	Each		56	56
Class X Concrete	Cu. Yd.	3.6	43.5	47.1
Precast Concrete Bridge Slab	Sq. Ft.	299		299
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	1225		1225
Structural Steel	Pound	2340		2340
Steel Railing, Type "S"	Lin. Ft.	156		156
Reinforcement Bars	Pound	110	2760	2870
Name Plates	Each	1		1
Portland Cement Mortar Fairing Course	Lin. Ft.	371		371
Preformed Joint Sealer (2 1/2")	Lin. Ft.	34		34
Waterproofing Membrane System	Sq. Yd.	102		102
Temporary Bridge Pile	Lin. Ft.	38		38
Structure Excavation	Cu. Yd.		44	44

LOADING HS 20-44

Design Specifications: 1977 AASHTO, 1978 & 1979  
Interim Specifications as applicable.  
Allow 25#/Sq. Ft. for future wearing surface.

WATERWAY INFORMATION

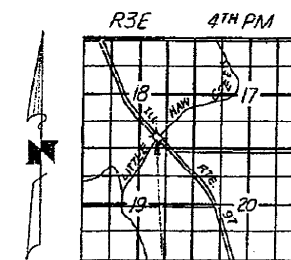
Drainage Area - 8.36 Sq. Miles  
Design Discharge (50 Year) - 2100 c.f.s.  
Existing Opening (Below 50 Yr. H.W.E.) - 222 S.F.  
Required Opening (Below 50 Yr. H.W.E.) - 346 S.F.  
Proposed Opening (Below 50 Yr. H.W.E.) - 346 S.F.  
Created Head for Design Flood - 1.5 Ft.  
100 Year Discharge - 2400 c.f.s.  
Created Head for 100 Year Flood - 1.9 Ft.  
100 Year High Water Flow - 607.0

DESIGN STRESSES

FIELD UNITS  
f'c = 3,500 p.s.i.  
f'y = 60,000 p.s.i.

PRECAST UNITS  
f'c = 4,500 p.s.i.  
f'c = 1,800 p.s.i.  
f's = 20,000 p.s.i.

PRECAST PRESTRESSED UNITS  
f'c = 5,000 p.s.i.  
f'ci = 4,000 p.s.i.  
f's = 270,000 p.s.i. (2nd Strands)  
f's = 100,000 p.s.i. (1st Strands)



Proposed reconstr.

GENERAL PLAN AND ELEVATION  
F.A. ROUTE 626 OVER  
LITTLE HAW CREEK  
F.A. ROUTE 626 SECTION (42B-1) BR  
KNOX COUNTY

DESIGNED	M. J. P. (A.H.)	EXAMINED	DECEMBER 26, 1977
CHECKED	DAU (A.H.)	PASSED	
DRAWN	JDP	APPROVED	
CHECKED	D.K.		



FILE NAME: 68754-025-119.dgn  
PROJECT NO: 09824-B

Coombe-Bloxdorf P.C.  
CIVIL ENGINEERS-  
STRUCTURAL ENGINEERS-  
LAND SURVEYORS-  
Design Firm License No. 184-002703

USER NAME	= .JFC.	DESIGNED	- GLB	REVISED	-
PLOT SCALE	= 0:2.000000 '1' / IN.	CHECKED	- MCB	REVISED	-
PLOT DATE	= 10/13/2015	DRAWN	- MMY	REVISED	-
		CHECKED	- MCB	REVISED	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS  
FOR INFORMATION ONLY

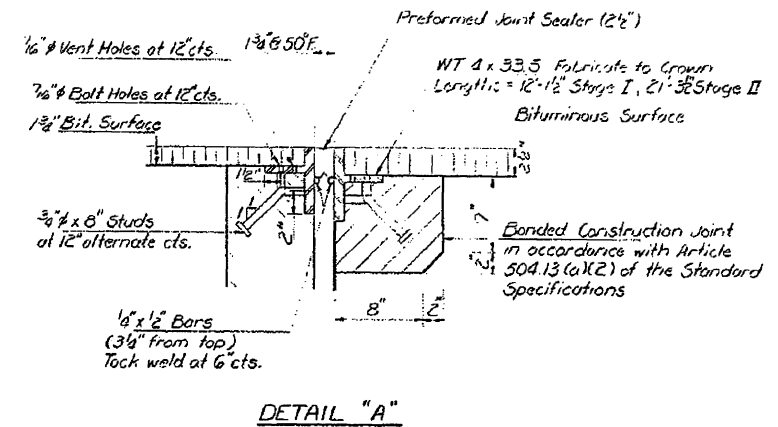
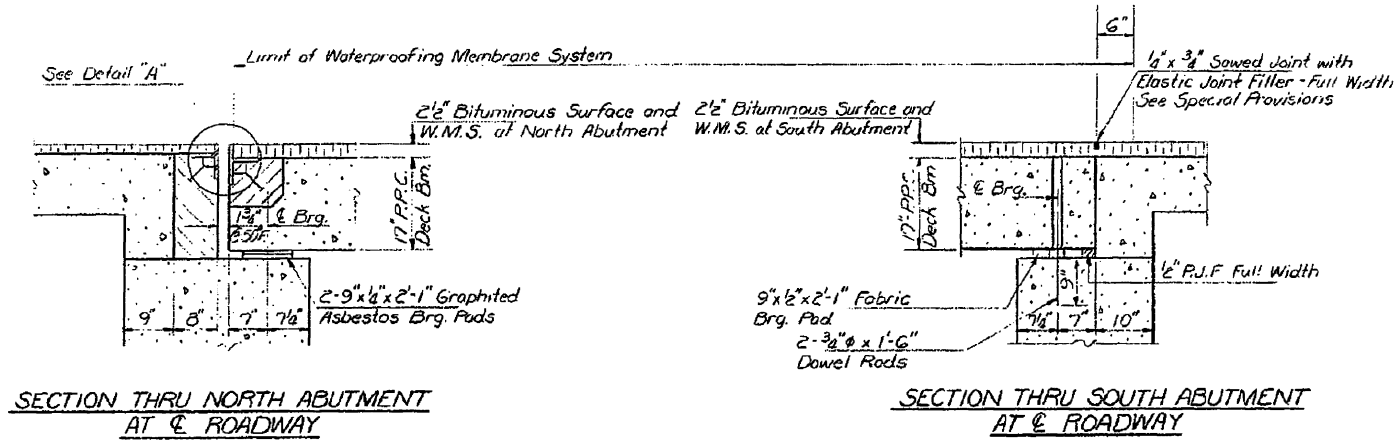
SHEET NO. 25 OF 31 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1)BR-1	KNOX	152	119
				CONTRACT NO. 68754
ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

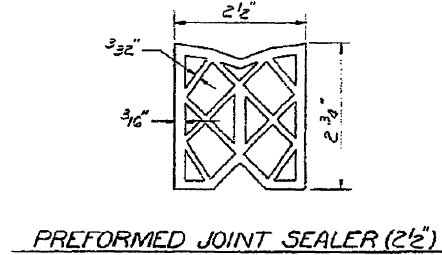
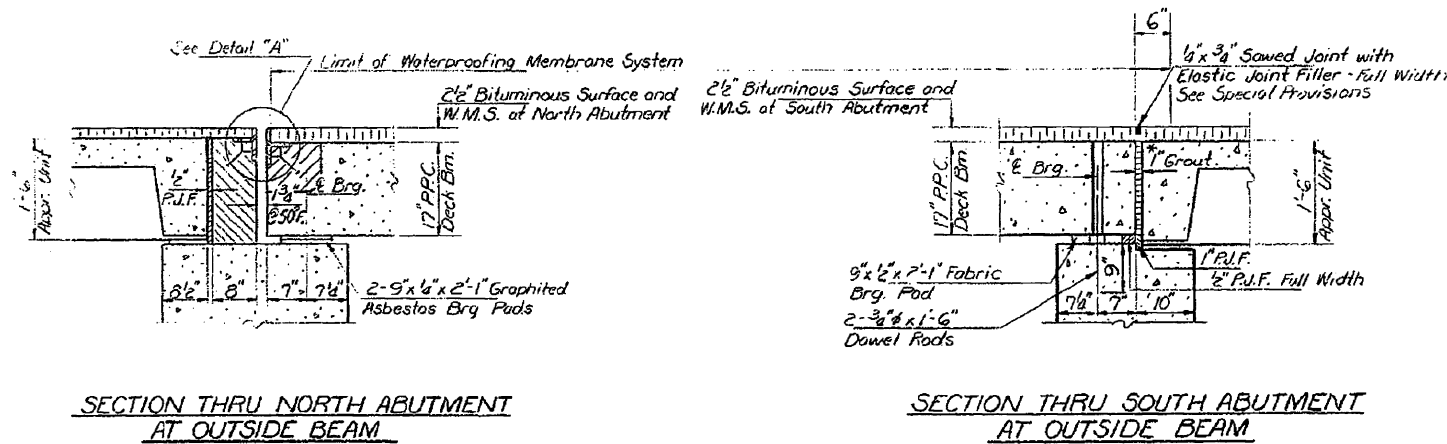
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1)BR-1	KNOX	152	120

SHEET NO. 4  
8 SHEETS



Notes: Hatched area to be poured after beams are in place. Class X Concrete quantities in hatched areas are billed with the Superstructure.

Ends of beams shall be aligned at the expansion joints. Any linear variation in the beam lengths shall be placed at the fixed joint.



\* 1" Joint shall be packed with a very dry mix of 2:1 sand and Portland Cement Mortar. 1" dimension may vary plus or minus to accommodate tolerance in beam lengths.

SUPERSTRUCTURE DETAILS  
F.A. RT. 626 SEC. (42B-1)BR  
KNOX COUNTY  
STATION 537+10.00

DESIGNED M.J. RIANN	EXAMINED
CHECKED DAN KROLL	PASSED
DRAWN Joe Sutherland	APPROVED
CHECKED DK	

DESIGNER'S SIGNATURE: M.J. RIANN  
DATE: Dec 26 2019

FILE NAME: 68754-026-01-10.dgn  
CB PROJECT NO: 09224-B

**Coombe-Bloxdorf P.C.**  
CIVIL ENGINEERS  
STRUCTURAL ENGINEERS  
LAND SURVEYORS  
Design Firm License No. 184-002703

USER NAME = .JFC.	DESIGNED - GLB	REVISED -
PLOT SCALE = 0:2.000000 '1' / IN.	CHECKED - MCB	REVISED -
PLOT DATE = 10/13/2015	DRAWN - MMY	REVISED -
	CHECKED - MCB	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS  
FOR INFORMATION ONLY

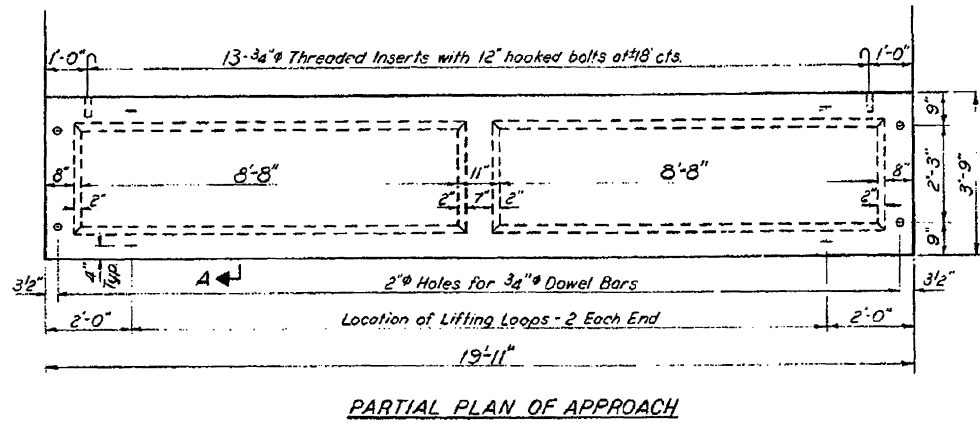
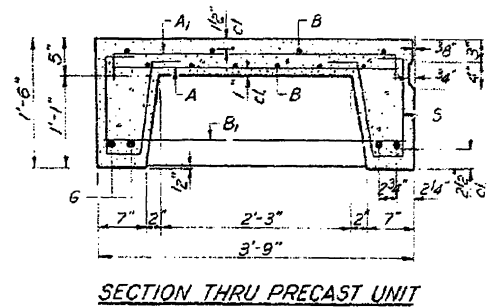
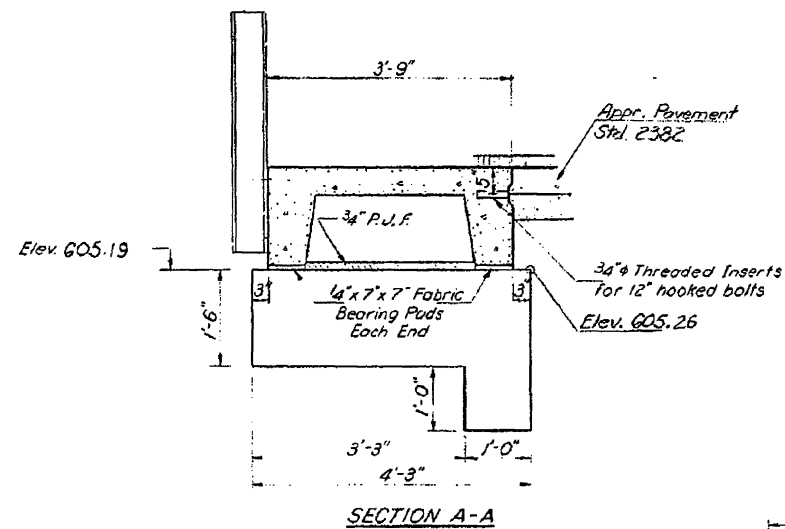
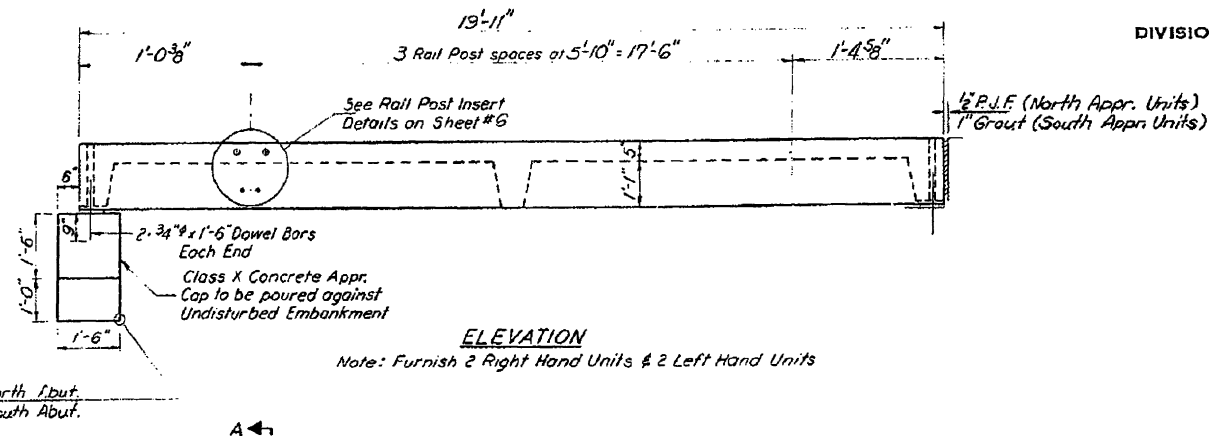
SHEET NO. 26 OF 31 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1)BR-1	KNOX	152	120

CONTRACT NO. 68754  
ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS  
DIVISION OF HIGHWAYS

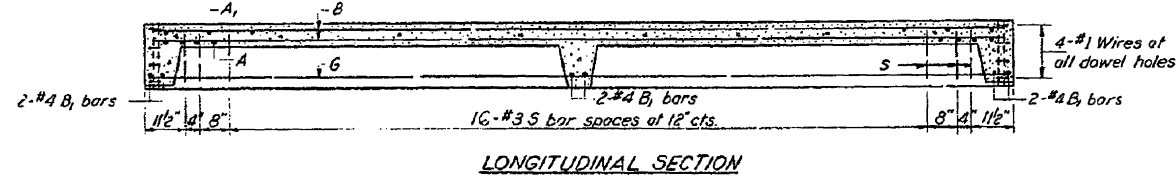
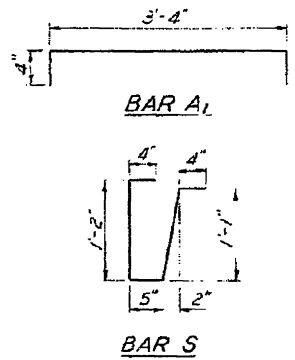
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEETS
626	42-(B)-1BR-1	KNOX	152	27	31



**BAR LIST - ONE UNIT**

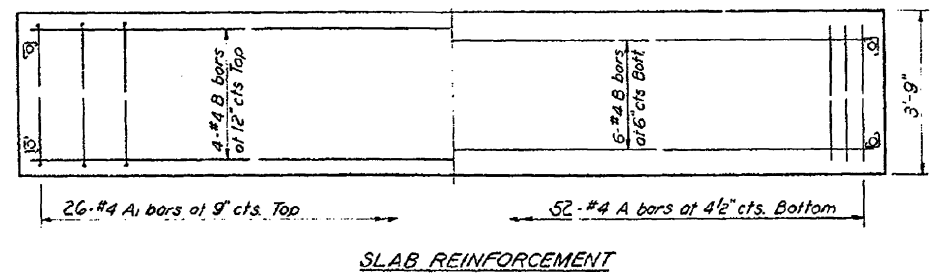
Reinforcement to be cast into slab

Bar	No	Size	Length	Shape
A	52	#4	3'-3"	—
A <sub>1</sub>	26	#4	4'-0"	—
B	10	#4	19'-6"	—
B <sub>1</sub>	6	#4	3'-6"	—
S	4	#10	19'-6"	—
3	42	#3	3'-4"	—



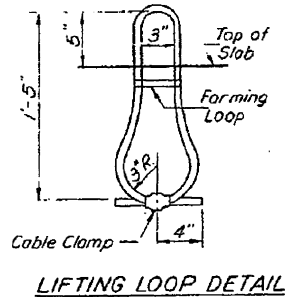
**NOTES**

Unless otherwise approved by the Engineer, lifting loops shall be 1/2" 6x25 class wire rope with fiber core and shall have a minimum ultimate strength of 21,000 lbs. Loops shall be burned off after slab has been erected. Holes shall be drilled and anchor dowels grouted in place. Cost of reinforcement and accessories cast into the slab unit, bearing pads, furnishing, drilling for, placing and grouting anchor dowels and 3/4" hooked bolts is included in Unit bid price for "Precast Concrete Bridge Slab." The Precast Concrete Bridge Slab shall be erected and aligned with the exterior face of the exterior Deck Beam after Deck Beams are in final position.



**BILL OF MATERIAL**

Item	Unit	Quantity
Precast Concrete Bridge Slab	Sq. Ft.	299
Class X Concrete	Cu. Yds.	1.5



**STRESSES**  
f<sub>c</sub> = 4,500 psi.  
f<sub>c</sub> = 1,800 psi.  
f<sub>s</sub> = 20,000 psi.  
n = 8  
**LOADING HS-20**

**APPROACH DETAILS**  
F.A. RT. 626 SEC. (42B-1) BR  
KNOX COUNTY  
STATION 537+0.00

DESIGNED: M. F. FIANI  
CHECKED: DAN KRUL  
DRAWN: Joe Sutherland  
CHECKED: D.K.

EXAMINED: [Signature]  
PASSED: [Signature]  
APPROVED: [Signature]

FILE NAME: 68754-027-1-11-11.dgn  
PROJECT NO: 09824-B

**Coombe-Bloxdorf P.C.**  
CIVIL ENGINEERS  
STRUCTURAL ENGINEERS  
LAND SURVEYORS  
Design Firm License No. 184-002703

USER NAME	DESIGNED	CHECKED	DRAWN	DATE
_JFC_	GLB	MCB	MMY	10/13/2015

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS  
FOR INFORMATION ONLY

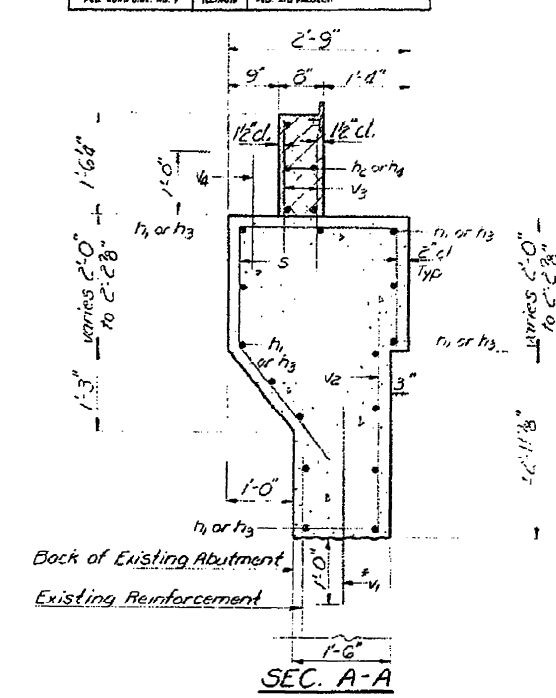
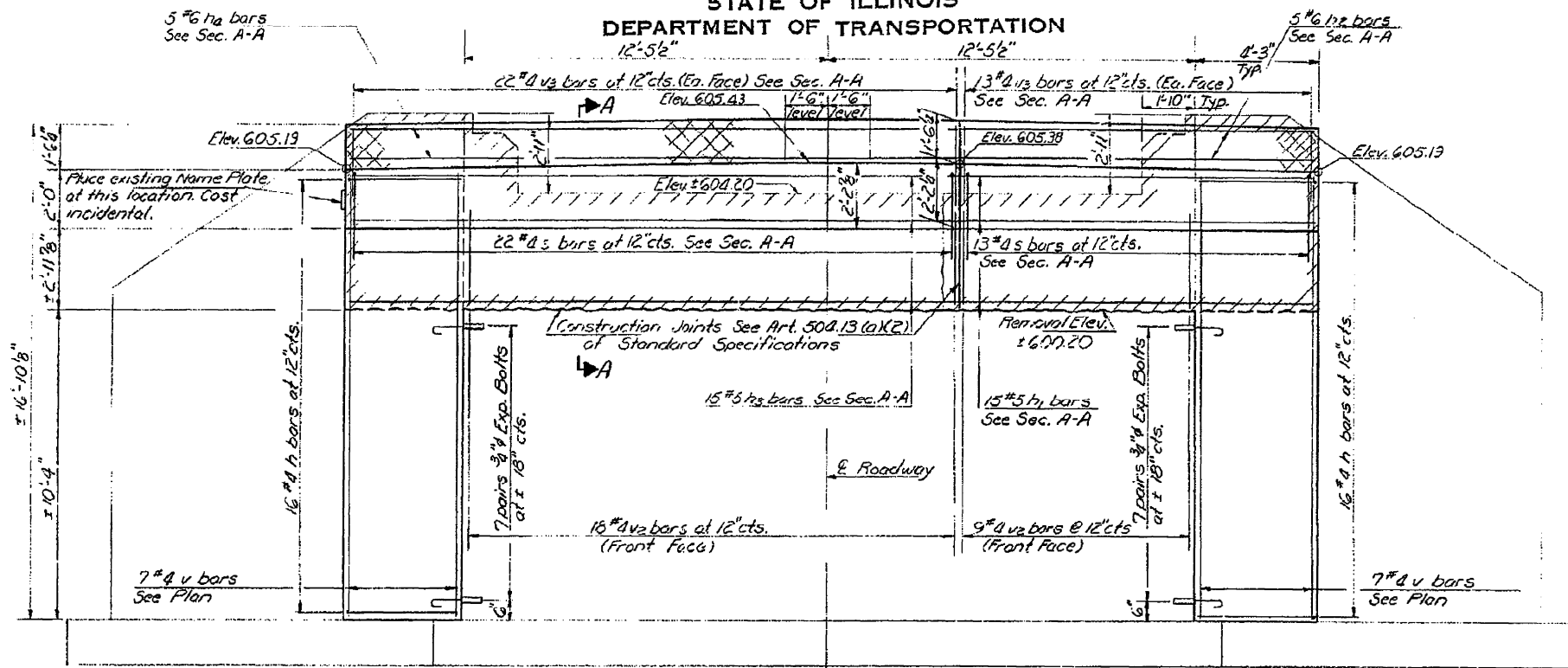
SHEET NO. 27 OF 31 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B)-1BR-1	KNOX	152	121

CONTRACT NO. 68754  
ILLINOIS FED. AID PROJECT

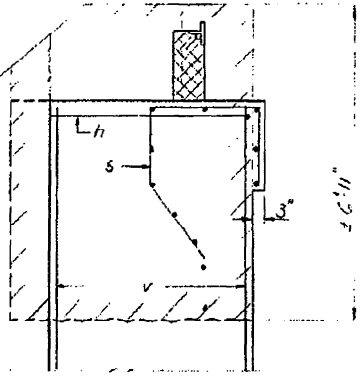
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-B-1	KNOX	152	122
SHEET NO. 7 8 SHEETS				

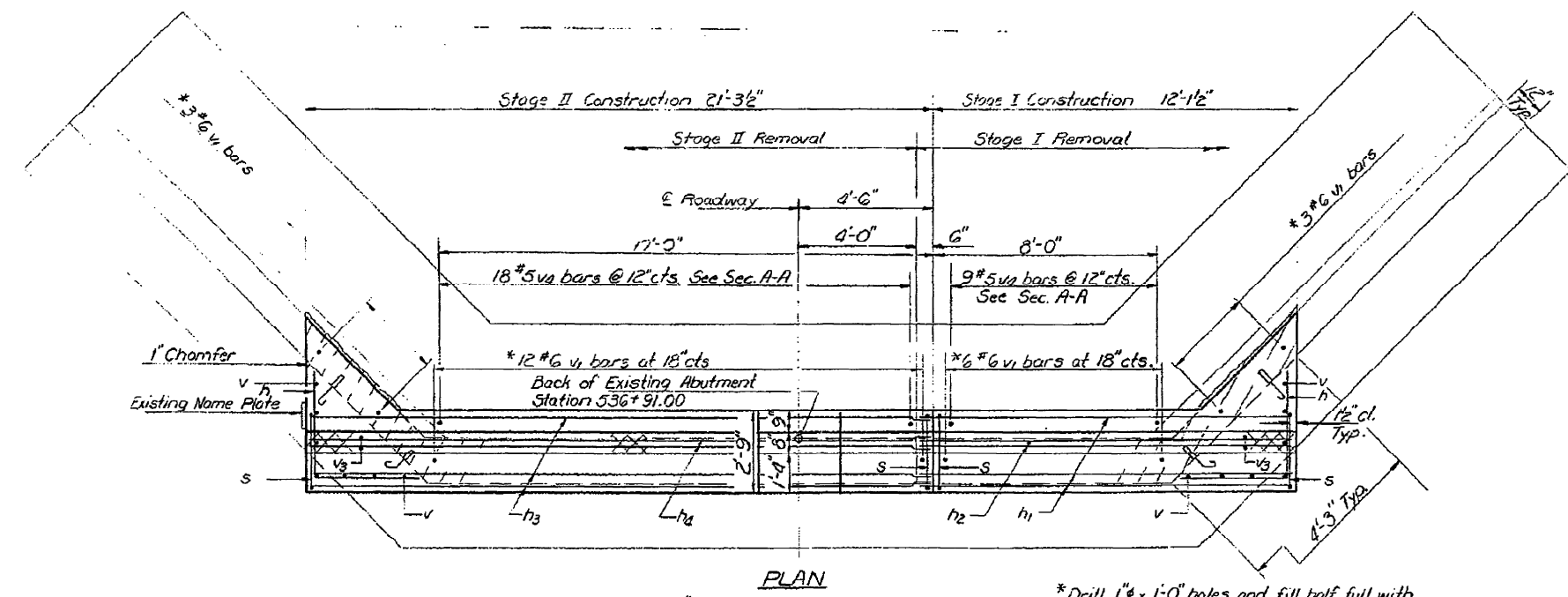


Notes: Hatched area indicates Concrete Removal. Reinforcement extending into removed area shall be cleaned and incorporated into new construction. Expansion Bolts shall be anchored in sound concrete. All edges shall have standard 3/4" chamfers except as noted. Cross hatched area to be poured after beams are in place. Class X Concrete in cross hatched area shall be billed with superstructure.

ELEVATION



END VIEW



PLAN

BILL OF MATERIAL

Bar	No	Size	Length	Shape
h	32	#4	7'-8"	L
h1	15	#5	12'-6"	—
h2	5	#6	12'-6"	—
h3	15	#5	21'-2"	—
h4	5	#6	21'-2"	—
s	35	#4	7'-6"	C
v	18	#4	15'-0"	—
v1	24	#6	3'-0"	—
v2	27	#4	3'-3"	—
v3	70	#4	2'-6"	—
v4	27	#5	2'-0"	—
Class X Concrete		Cu. Yd.	2.7	
Reinforcement Bars		Pound	1600	
Expansion Bolts 3/4"Ø		Each	25	
Concrete Removal		Cu. Yd.	9	

\* Drill 1" x 1'-0" holes and fill half full with epoxy before placement of 1/4 bars. See Special Provisions for epoxy grout.

DESIGNED M.J. RYANN  
CHECKED DAN KEUL  
EXAMINED [Signature]  
PASSED [Signature]  
DEC 29 11 19 79

FILE NAME: G:\6754-928-8-pln.dgn  
CB PROJECT NO: 09224-8

Coombe-Bloxdorf P.C.  
CIVIL ENGINEERS  
STRUCTURAL ENGINEERS  
LAND SURVEYORS  
Design Firm License No. 184-002703

USER NAME = .CFC.	DESIGNED - GLB	REVISED -
PLOT SCALE = 0:2.000000 '1' / IN.	CHECKED - MCB	REVISED -
PLOT DATE = 10/13/2015	DRAWN - MMY	REVISED -
	CHECKED - MCB	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS  
FOR INFORMATION ONLY

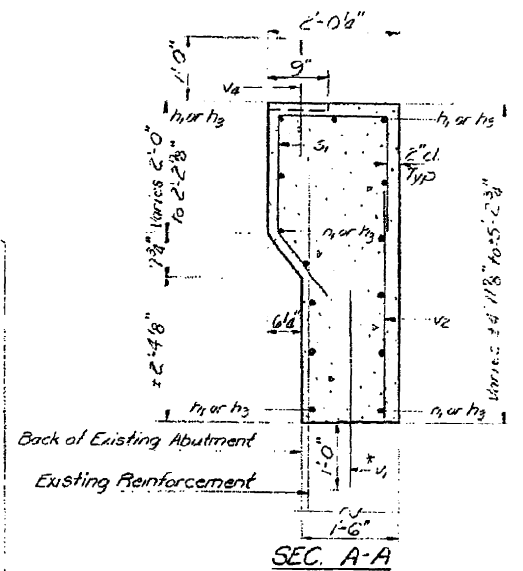
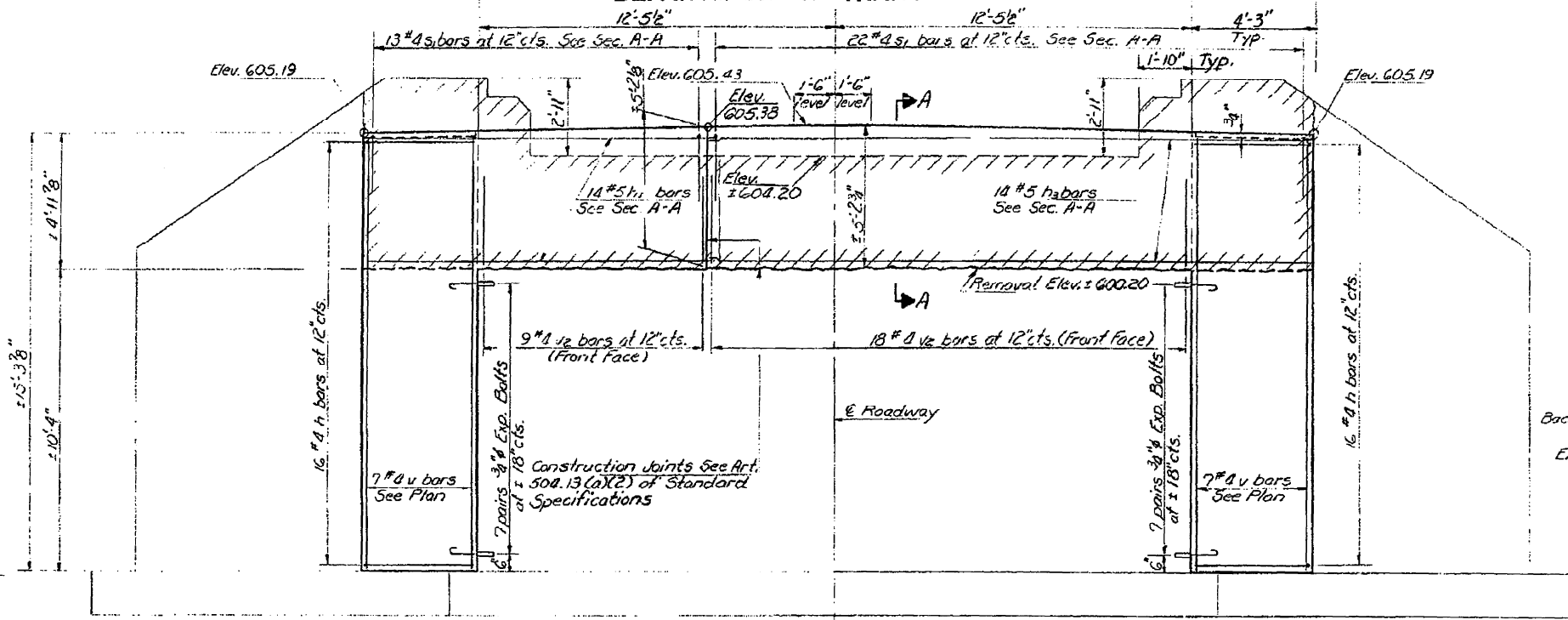
SHEET NO. 28 OF 31 SHEETS

NORTH ABUTMENT  
F.A. RT. 626 SEC. (42B-1)BR

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1)BR-1	KNOX	152	122
CONTRACT NO. 68754				
ILLINOIS FED. AID PROJECT				

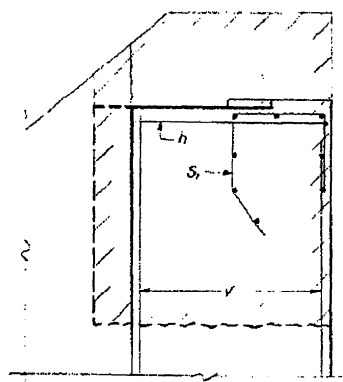
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-B-1BR	KNOX	14	11
SHEET NO. 8 8 SHEETS				

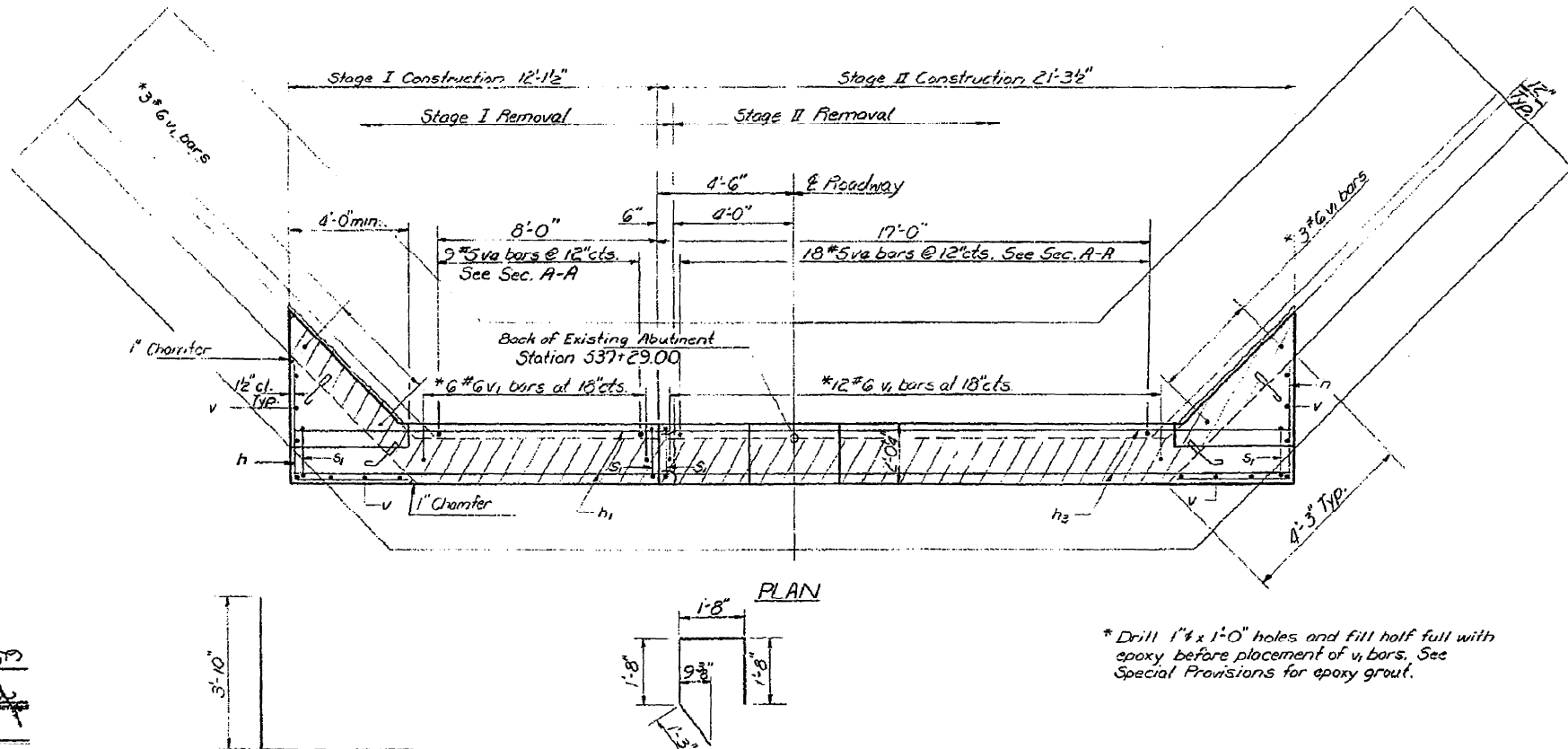


ELEVATION

Notes: Hatched area indicates Concrete Removal. Reinforcement extending into removed area shall be cleaned and incorporated into new construction.  
Expansion Bolts shall be anchored in sound concrete.  
All edges shall have standard 3/4" chamfer except as noted.



END VIEW



PLAN

BILL OF MATERIAL

Bar	No	Size	Length	Shape
h	32	#4	7'-8"	L
h <sub>1</sub>	14	#5	12'-6"	—
h <sub>2</sub>	14	#5	21'-2"	—
s <sub>1</sub>	35	#4	6'-3"	C
v	14	#4	15'-0"	—
v <sub>1</sub>	24	#6	3'-0"	—
v <sub>2</sub>	27	#4	3'-3"	—
v <sub>3</sub>	27	#5	2'-0"	—
Class X Concrete		Cu Yd.	20.8	
Reinforcement Bars		Pound	1160	
Expansion Bolts 3/4"		Each	28	
Concrete Removal		Cu Yd.	9	

DESIGNED M.J. RYANN  
CHECKED DAN KRULL  
EXAMINED [Signature]  
PASSED [Signature]

\* Drill 1" x 1'-0" holes and fill half full with epoxy before placement of v<sub>1</sub> bars. See Special Provisions for epoxy grout.

SOUTH ABUTMENT  
F.A. RT. 626 SEC. 142B-17BR  
KNOX COUNTY

FILE NAME: 68754-29-11-11-11.dgn  
CB PROJECT NO. 09824-B

Coombe-Bloxdorf P.C.  
- CIVIL ENGINEERS -  
- STRUCTURAL ENGINEERS -  
- LAND SURVEYORS -  
Design Firm License No. 184-002703

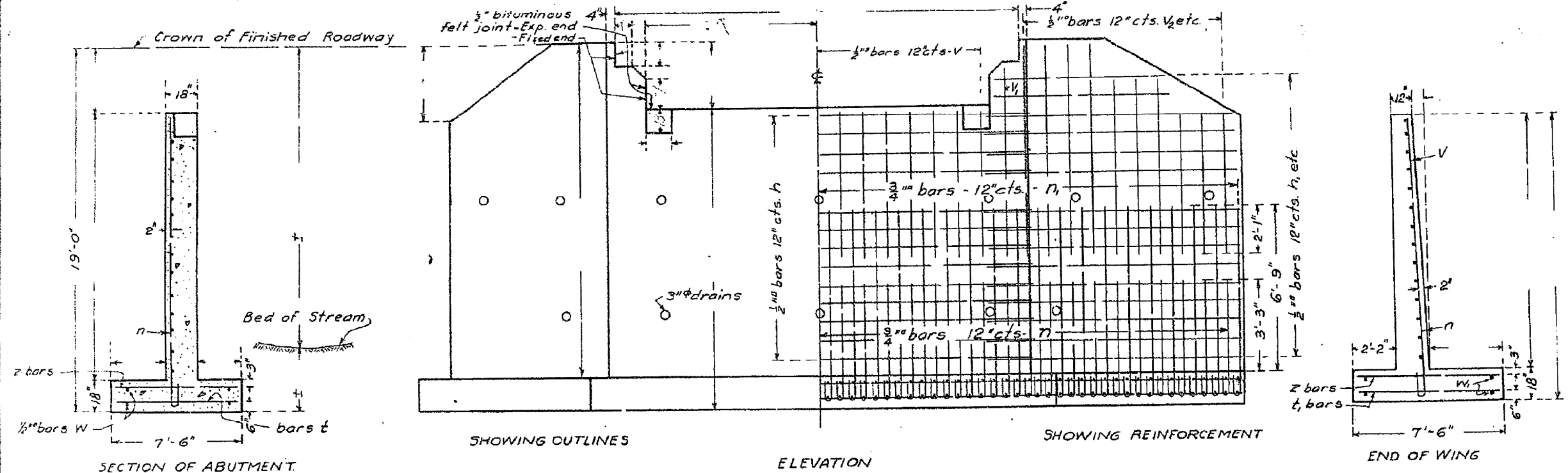
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PLOT DATE = 10/13/2015	DRAWN - MMY	REVISED -
	CHECKED - MCB	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

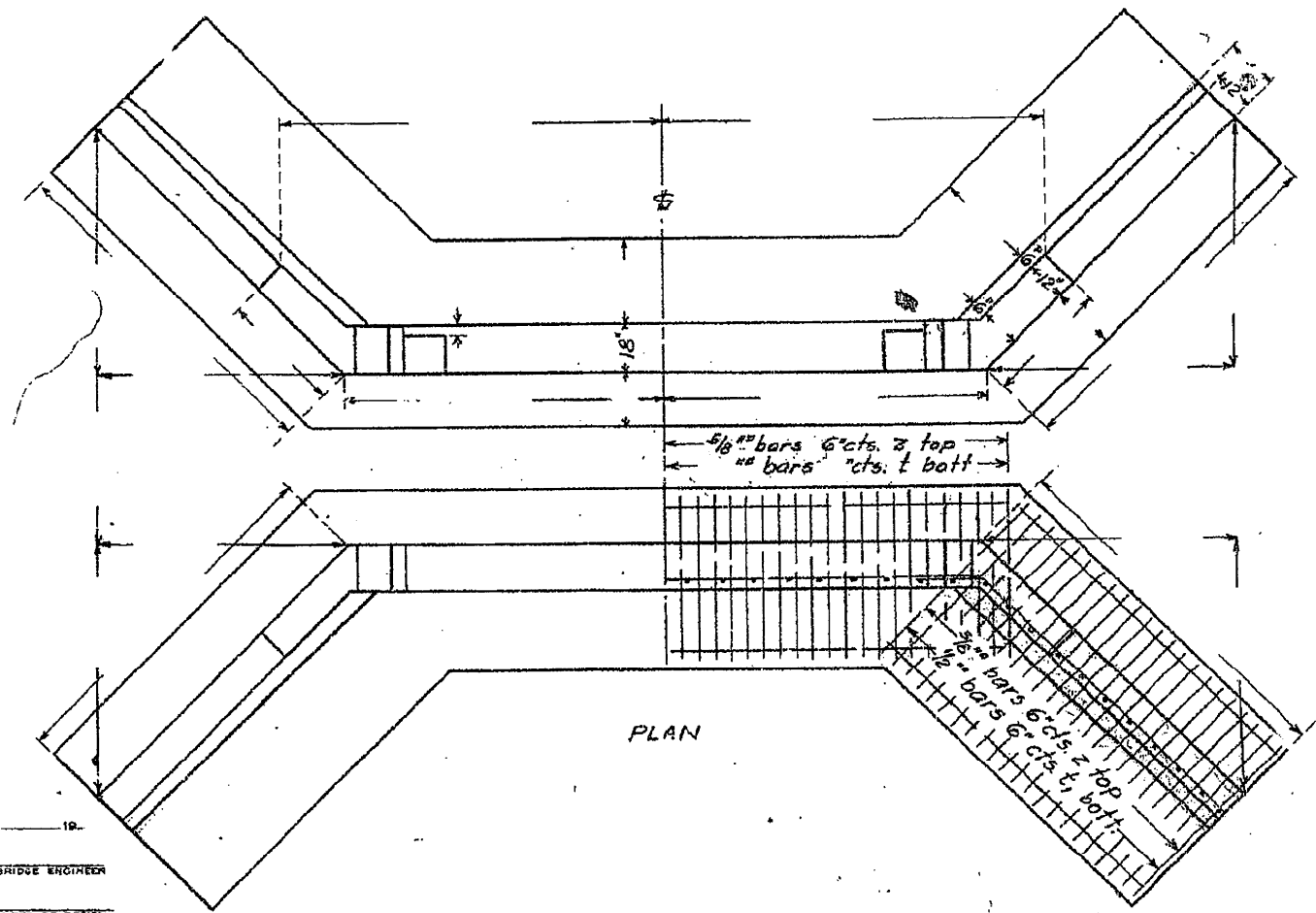
EXISTING BRIDGE PLANS  
FOR INFORMATION ONLY

SHEET NO. 29 OF 31 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-B-1BR-1	KNOX	152	123
CONTRACT NO. 68754				
ILLINOIS FED. AID PROJECT				



Class A concrete shall be used throughout.  
Proportions 1:2 1/2 : 4  
All reinforcing steel shall be securely wired in place before concrete is poured.



**BILL OF MATERIAL**

Bars	No.	Size	Length
V		1/2"	
V <sub>1</sub>		1/2"	
V <sub>2</sub>		1/2"	
V <sub>3</sub>		1/2"	
h		1/2"	
h <sub>1</sub>		1/2"	
h <sub>2</sub>		1/2"	
n		3/4"	6'-3"
n <sub>1</sub>		3/4"	9'-9"
t			7'-3"
t <sub>1</sub>		1/2"	7'-3"
Z		5/8"	7'-3"
W		1/2"	
W <sub>1</sub>		1/2"	

Reinforcing Steel - Lbs.  
Concrete Cu. Yds.

STANDARD	COMPUTED -	W. Schaefer	EXAMINED -	19-
	CHECKED -	E. J. Boyd		BRIDGE ENGINEER
SPECIAL	DRAWN -	W. N. S.	PASSED -	
	CHECKED -	E. J. B.	ENGINEER OF DESIGN	
	ASSEMBLED -		APPROVED -	
	CHECKED -		CHIEF HIGHWAY ENGINEER	

Pockets revised 10-17-23 N.V.V.

FILE NAME - 68754-02B-01-plan.dgn  
PROJECT NO. 09224-B

**Coombe-Bloxdorf P.C.**  
CIVIL ENGINEERS  
STRUCTURAL ENGINEERS  
LAND SURVEYORS  
Design Firm License No. 184-002703

USER NAME =	_JFC_	DESIGNED -	GLB	REVISED -	
		CHECKED -	MCB	REVISED -	
PLOT SCALE =	0:2.000000 ' / IN.	DRAWN -	MMY	REVISED -	
PLOT DATE =	10/13/2015	CHECKED -	MCB	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS  
FOR INFORMATION ONLY

SHEET NO. 30 OF 31 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B)-1BR-1	KNOX	152	124
CONTRACT NO. 68754				
ILLINOIS FED. AID PROJECT				

1014



B.M. #53 N+W in T.P. Rt. Sta. 530+60 Elev. 151.74

NOTE: Contractor to Remove Old Structure and Dispose of as Directed by the Engineer, also to Clear Channel between Abutments within Limits of Right of Way to Elev. 121.00.

ROUTE/ISSUE	COUNTY	SEC.	TOTAL SHEETS	SHEET NO.
8	Knox	42B	125	125

Elev. 136.15

2'-11"

14'-4"

3'-10" 2'-2" 3'-10"

15'-2"

3'-10"

6'-0"

17'-3"

2'-6"

10'-7 1/2"

24'-3"

2'-11" 16'-1"

16'-1"

4'

11'-3" 13'-0"

4'-0"

15'-0"

15'-0"

12'-0"

12'-0"

12'-5 1/2"

12'-5 1/2"

35'-0" FLOW LINE

12'-0"

8 Alt. Sp. @ 1'-7 1/2" = 12'-10"

3'-10"

3'-10"

4'-7"

12'-0"

12'-0"

17'-0"

12'-0"

42

8

20

12

V4

V5

12

20

30

40

8

114

114

108

136

230

8

16

k3

8

9'-6"

11'-0"

12'-0"

10'-6"

9'-0"

7'-6"

25'-0"

19'-0"

15'-0"

3/8"

26'-0"

10'-0"

9'-0"

10,520  
139.7

15 Ton Untreated Piles 12" Butt, 10" Tip, 38 Req'd.  
10" " " 8" " " 46

STA 537+10  
STATE BOND ISSUE ROUTE 8  
SEC. 42B KNOX COUNTY

1014

H.L. Brown  
H.W. Bush

April 1,  
H.F. Burns  
H.W. Bush  
Frank T. Sheets

FILE NAME: 68754-031-01.dwg  
CB PROJECT NO: 09224-8

**Coombe-Bloxdorf P.C.**  
CIVIL ENGINEERS  
STRUCTURAL ENGINEERS  
LAND SURVEYORS  
Design Firm License No. 184-002703

USER NAME = .CFC.	DESIGNED - GLB	REVISED -
PLOT SCALE = 0:2.000000 ' / IN.	CHECKED - MCB	REVISED -
PLOT DATE = 10/13/2015	DRAWN - MMY	REVISED -
	CHECKED - MCB	REVISED -

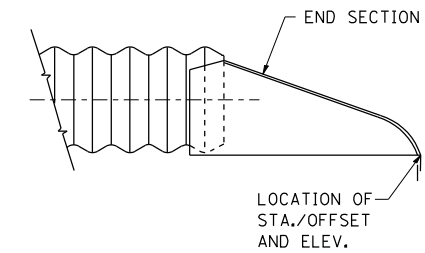
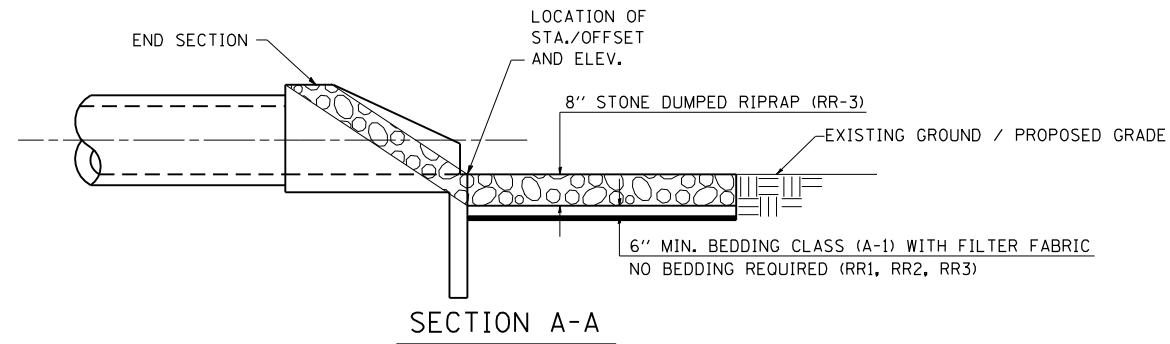
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXISTING BRIDGE PLANS  
FOR INFORMATION ONLY**

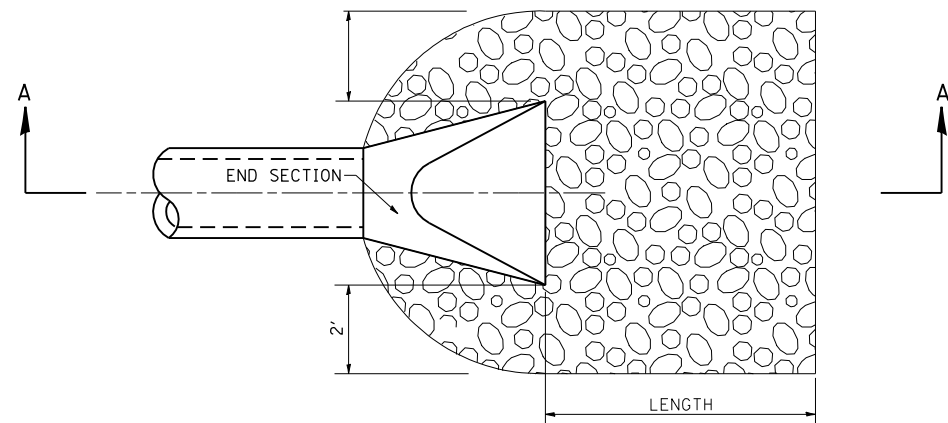
SHEET NO. 31 OF 31 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1)BR-1	KNOX	152	125

CONTRACT NO. 68754  
ILLINOIS FED. AID PROJECT

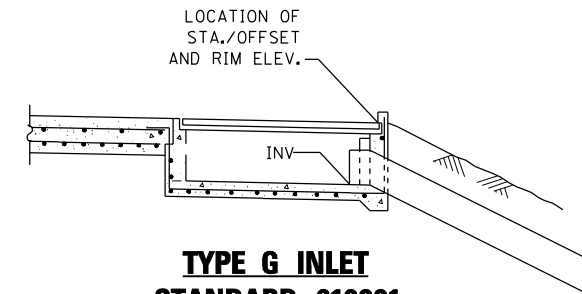


**METAL END SECTION**  
NOT TO SCALE



**PLAN**

**TYPICAL RIPRAP DETAIL**  
NOT TO SCALE



**TYPE G INLET  
STANDARD 610001**  
NOT TO SCALE

FILE NAME = ...D468754-sht-126-128-details.dgn	USER NAME = CFC..	DESIGNED -	REVISED -
Construction Details	PLOT SCALE = 100.0000' / IN.	DRAWN -	REVISED -
CB PROJECT NO 09024-8	PLOT DATE = 10/13/2015	CHECKED -	REVISED -
		DATE - / /	REVISED -

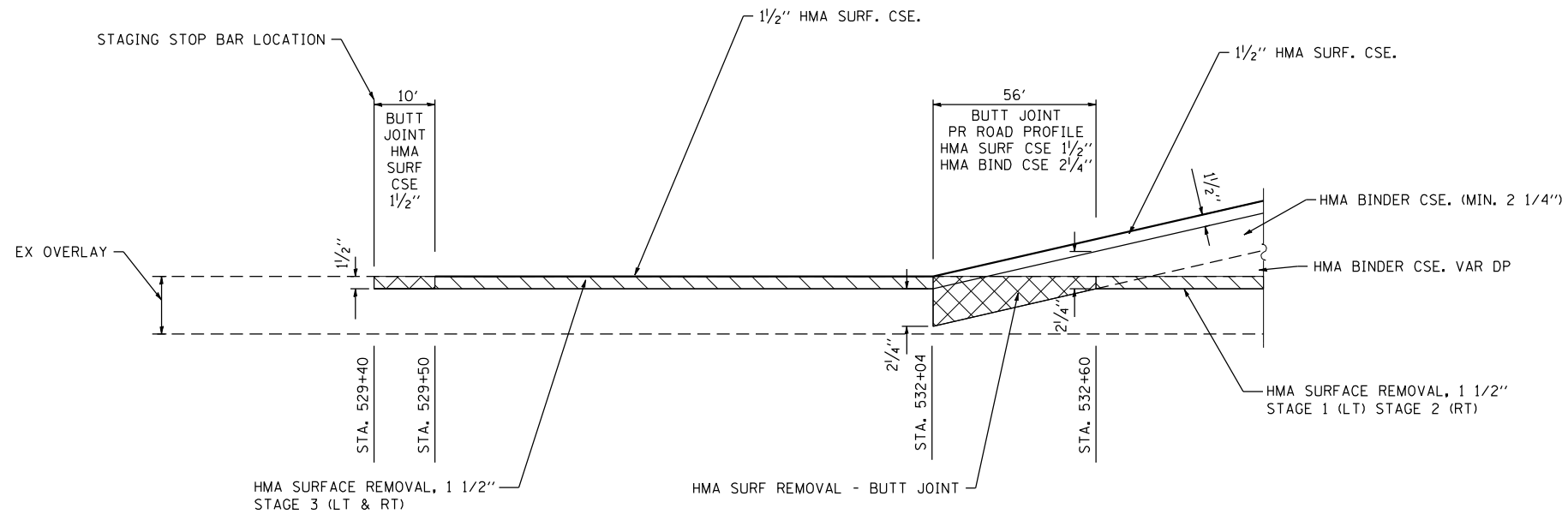
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CONSTRUCTION DETAILS  
IL 97 OVER LITTLE HAW CREEK**

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

**CB** Coombe-Bloxdorf P.C.  
- CIVIL ENGINEERS -  
- STRUCTURAL ENGINEERS -  
- LAND SURVEYORS -  
Design Firm License No. 184-002703



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1) BR-1	KNOX	152	126
				CONTRACT NO. 68754
ILLINOIS FED. AID PROJECT				

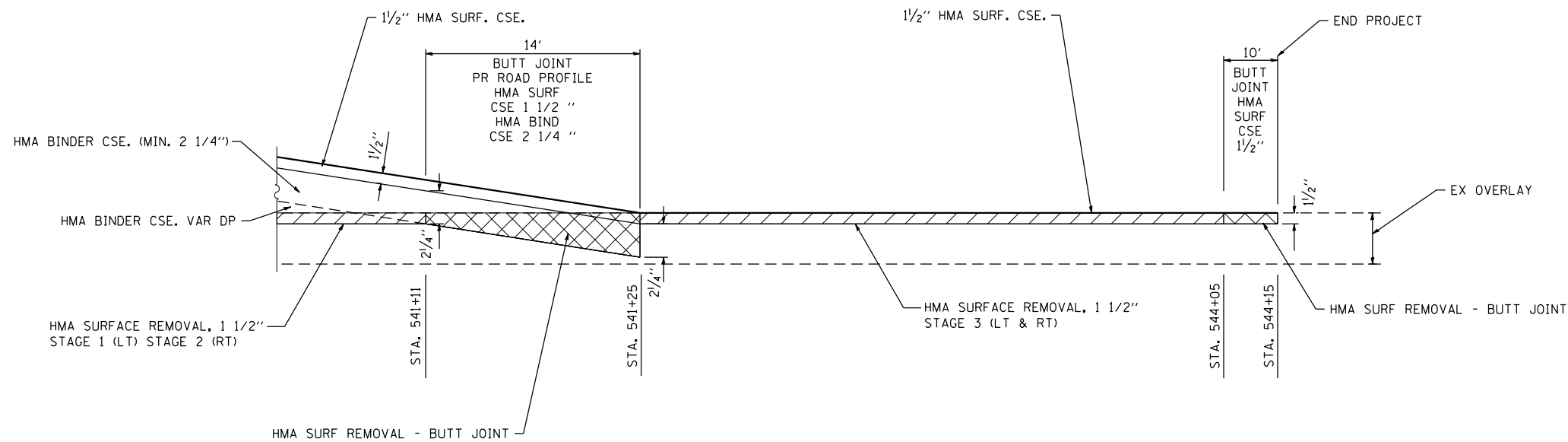


**HMA PAVEMENT THICKNESS TAPER DETAIL – NORTH OF BRIDGE**

NOT TO SCALE

**LEGEND**

-  HMA SURFACE REMOVAL BUTT JOINT
-  HMA SURFACE REMOVAL, 1 1/2 "



**HMA PAVEMENT THICKNESS TAPER DETAIL – SOUTH OF BRIDGE**

NOT TO SCALE

**CB** Coombe-Bloxdorf P.C.  
 - CIVIL ENGINEERS -  
 - STRUCTURAL ENGINEERS -  
 - LAND SURVEYORS -  
 Design Firm License No. 184-002703

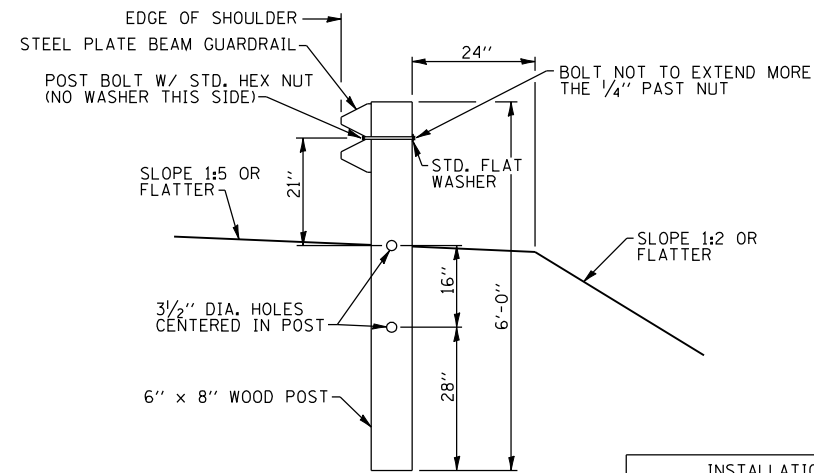
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Construction Details	PLOT SCALE = 100.0000 ' / IN.	CHECKED -	REVISED -
CB PROJECT NO 09024-8	PLOT DATE = 10/13/2015	DATE - / /	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CONSTRUCTION DETAILS  
 LITTLE HAW CREEK**

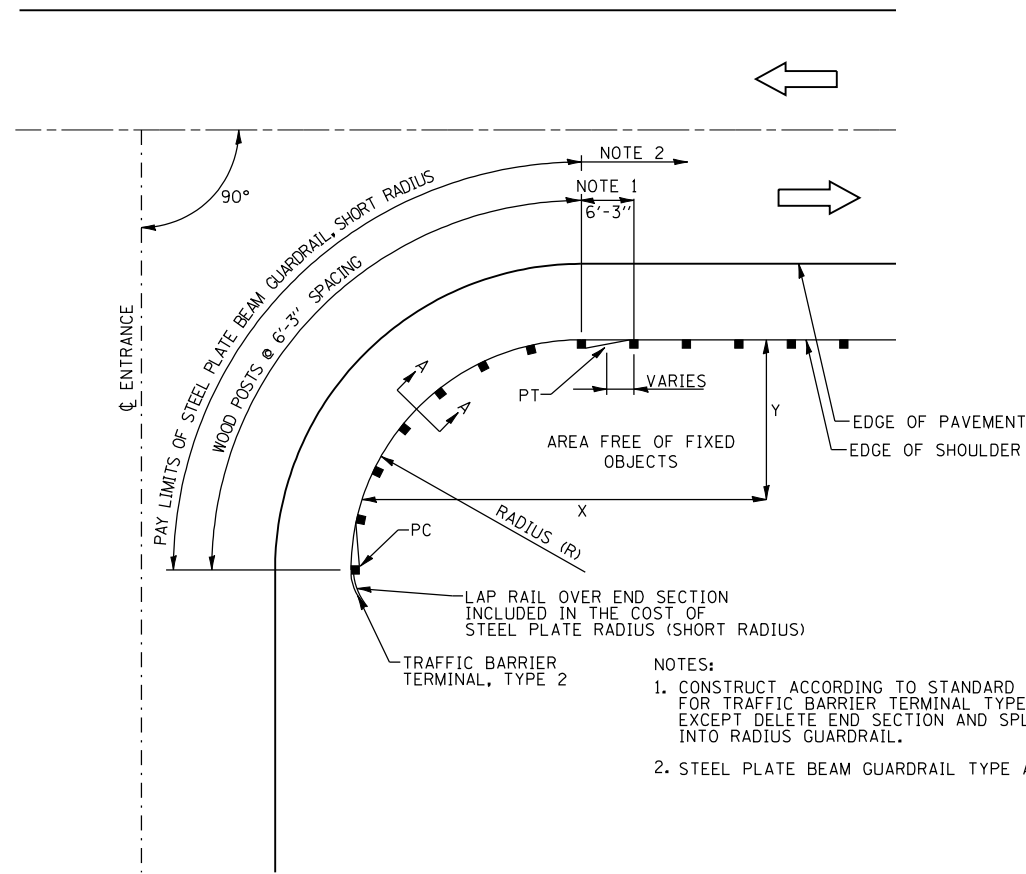
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1) BR-1	KNOX	152	127
				CONTRACT NO. 68754
ILLINOIS FED. AID PROJECT				



**SECTION A-A**  
NOT TO SCALE

INSTALLATION CHARACTERISTICS PER DESIGN RADIUS			
R	NO. OF WOOD POSTS	X	Y
17'-0"	6	30'	15'



**PLAN VIEW**  
NOT TO SCALE

- NOTES:
1. CONSTRUCT ACCORDING TO STANDARD 631011 FOR TRAFFIC BARRIER TERMINAL TYPE 2, EXCEPT DELETE END SECTION AND SPLICE INTO RADIUS GUARDRAIL.
  2. STEEL PLATE BEAM GUARDRAIL TYPE A.

FILE NAME =	USER NAME = CFC..	DESIGNED -	REVISED -
...D468754-sht-126-128-details.dgn		DRAWN -	REVISED -
Construction Details	PLOT SCALE = 100.0000' / IN.	CHECKED -	REVISED -
CB PROJECT NO 09024-8	PLOT DATE = 10/13/2015	DATE - / /	REVISED -

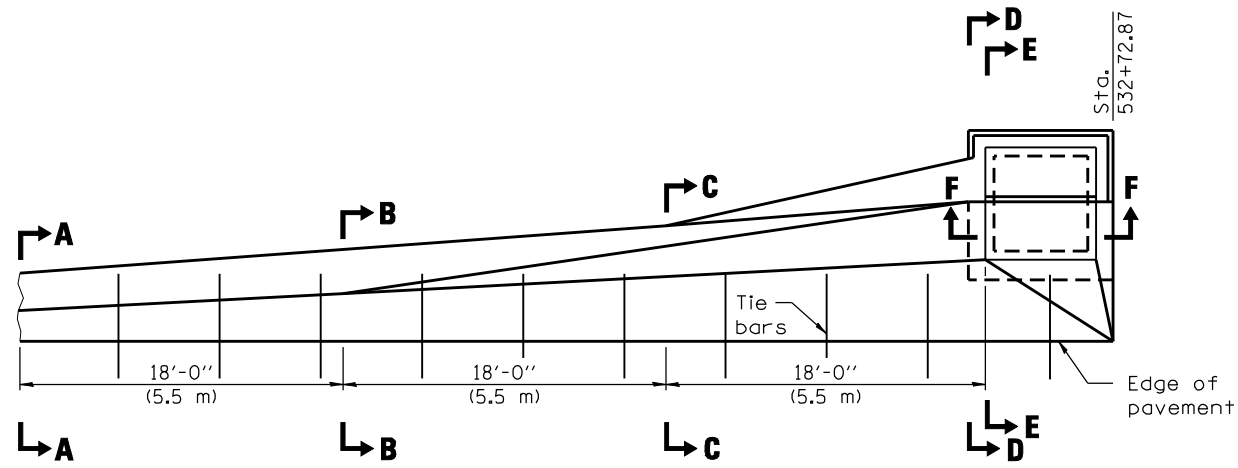
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CONSTRUCTION DETAILS  
LITTLE HAW CREEK**

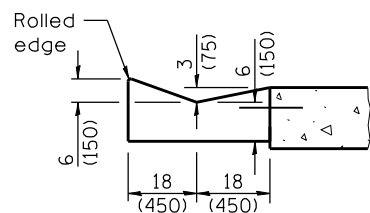
SCALE: SHEET NO. OF SHEETS STA. TO STA.

**CB** Coombe-Bloxdorf P.C.  
- CIVIL ENGINEERS -  
- STRUCTURAL ENGINEERS -  
- LAND SURVEYORS -  
Design Firm License No. 184-002703

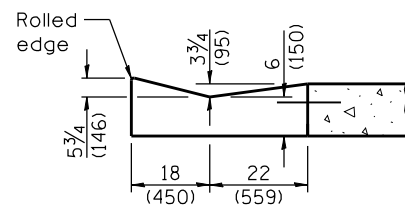
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1) BR-1	KNOX	152	128
			CONTRACT NO. 68754	
ILLINOIS FED. AID PROJECT				



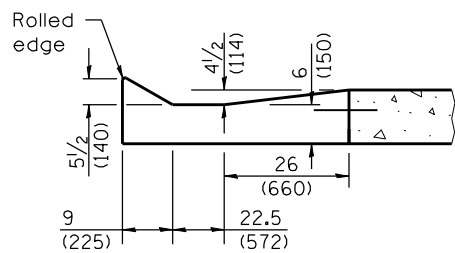
**PLAN - SINGLE OUTLET**



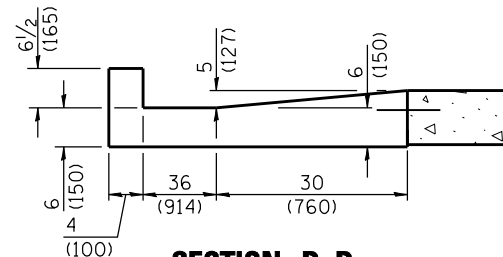
**SECTION A-A**



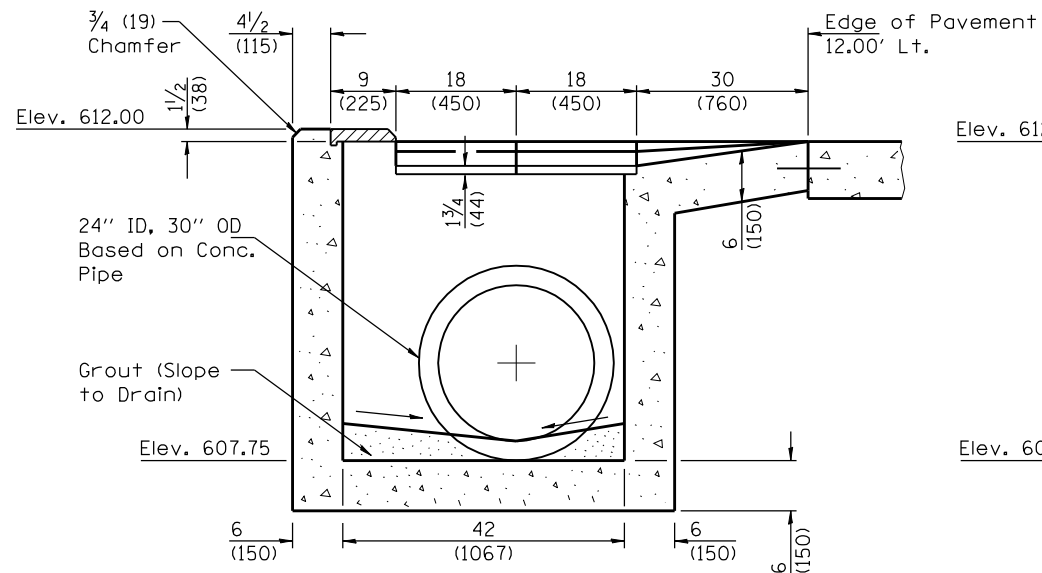
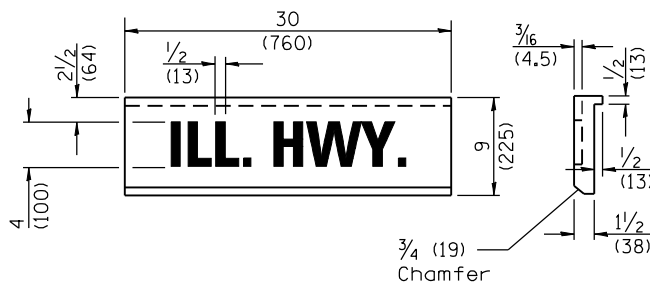
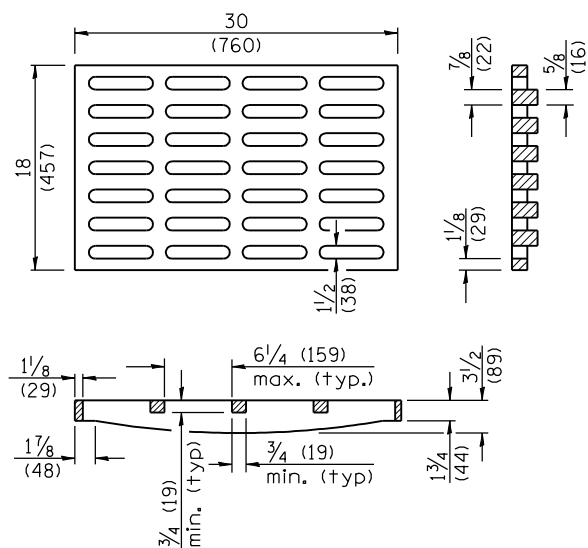
**SECTION B-B**



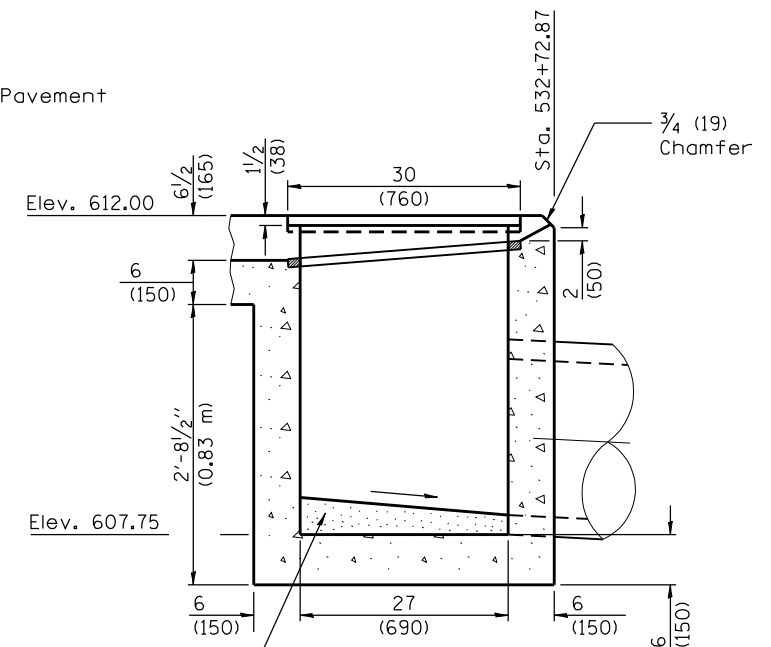
**SECTION C-C**



**SECTION D-D**



**SECTION E-E**



**SECTION F-F**

**QUANTITIES**

Material	Single
Concrete - cu. yd. (m <sup>3</sup> )	6.63 (5.07)
Cast Iron Grate - Ea.	2
Cast Iron Cover - Ea.	1

**GENERAL NOTES**

The gutter outlet shall be tied to the pavement in accordance with details for longitudinal construction joint shown on Standard 420001.

All dimensions are in inches (millimeters) unless otherwise shown.

**CB** Coombe-Bloxdorf P.C.  
 - CIVIL ENGINEERS -  
 - STRUCTURAL ENGINEERS -  
 - LAND SURVEYORS -  
 Design Firm License No. 184-002703

FILE NAME = ... \D468754-sht-129-std-606111-03.dgn	USER NAME = CFC..	DESIGNED -	REVISED -
Default	PLOT SCALE = 0.166667' / IN.	DRAWN -	REVISED -
CB PROJECT NO 09024-8	PLOT DATE = 10/13/2015	CHECKED -	REVISED -
		DATE - / /	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

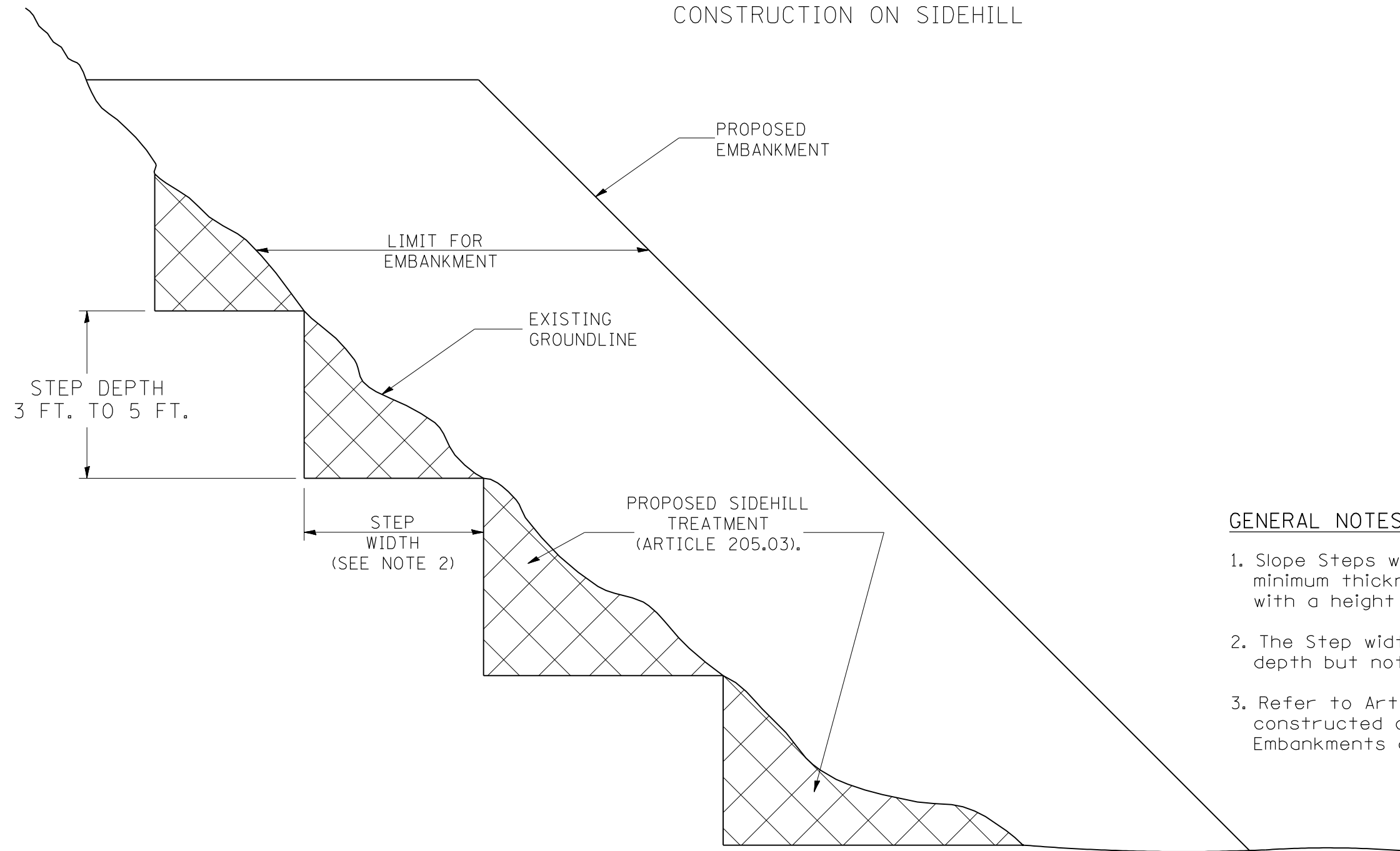
**OUTLET FOR TYPE A GUTTER (SPECIAL)  
 LITTLE HAW CREEK**

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

F.A.P. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42(B,B-1) BR-1	KNOX	152	129
CONTRACT NO. 68754				
ILLINOIS FED. AID PROJECT				

# SLOPE STEPS DETAIL

## TYPICAL CROSS-SECTION EMBANKMENT CONSTRUCTION ON SIDEHILL



### GENERAL NOTES:

1. Slope Steps will be required for all 12" minimum thickness "sliver fills" and on fills with a height of 10'(3.0m).
2. The Step width shall be twice the Step depth but not less than 6 feet.
3. Refer to Article 205.03 for Embankment to be constructed on Hillside or Slopes, or if existing Embankments are to be widened.

### REPLACEMENT MATERIAL:



STANDARD EMBANKMENT  
(IN ACCORDANCE WITH  
205 OF THE STANDARD SPECIFICATION).

All dimensions are in inches (millimeters)  
unless otherwise noted.

1-1-97	RENUM. L-5.03, NEW REVISION BOX, REVISED TITLE	T.P.			
	BOX, REVISED GENERAL NOTES.				
10-16-06	REVISED TO 2007 SPEC.	M.A.			

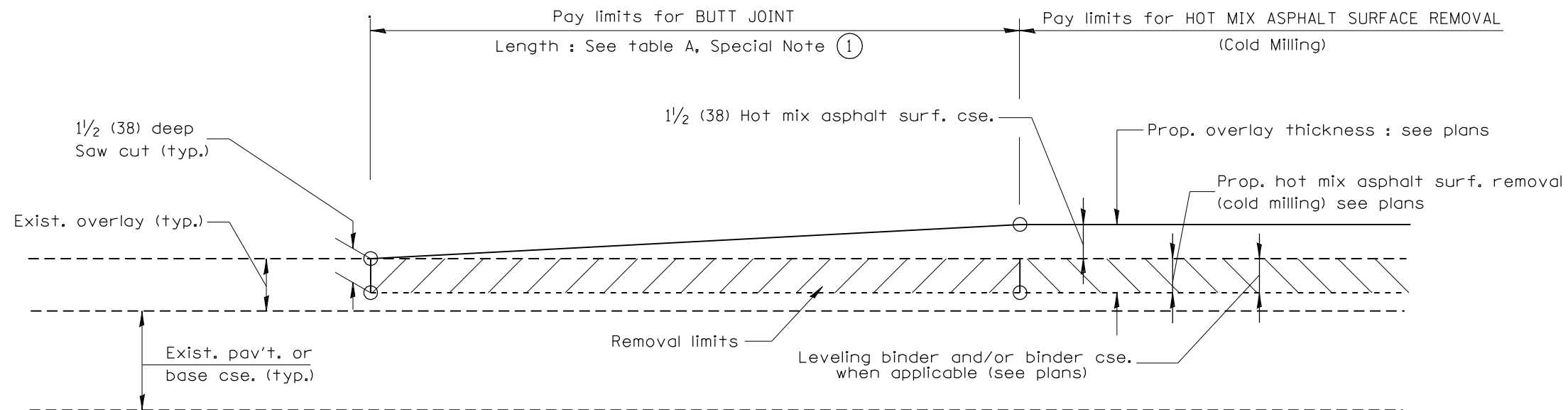
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

NOT TO SCALE

**DISTRICT 4 STANDARDS  
SLOPE STEPS DETAIL**

CADD STD. 205001-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1) BR-1	KNOX	152	130
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 68754	



**CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)**

**TABLE A**  
(LENGTHS AND TAPER RATES)

SPECIAL NOTE NUMBER	ELEMENT	MAINLINE INTERSTATES & 4-LANE EXPRESSWAYS	ALL OTHERS
①	LENGTH OF BUTT JOINT	60'(18.0 m)	30'(9.0 m)
②	PERMANENT TAPER RATE	1:480	1:240
③	TEMPORARY RAMP TAPER RATE	1:80	1:40
④	TEMPORARY RAMP LENGTH	10'(3.0 m)	5'(1.5 m)
⑤	LENGTH OF BUTT JOINT	10'(3.0 m)	10'(3.0 m)

**GENERAL NOTES**

1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.
2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.
3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.

(MODIFIED)  
All dimensions are in inches (millimeters) unless otherwise noted.

01-01-97	RENUM. C-23.01, NEW REVISION BOX	T.P.
04-01-97	CORRECTION TO DEPTH	J.A.
09-15-05	REVISED DESIGNER NOTE	M.M.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

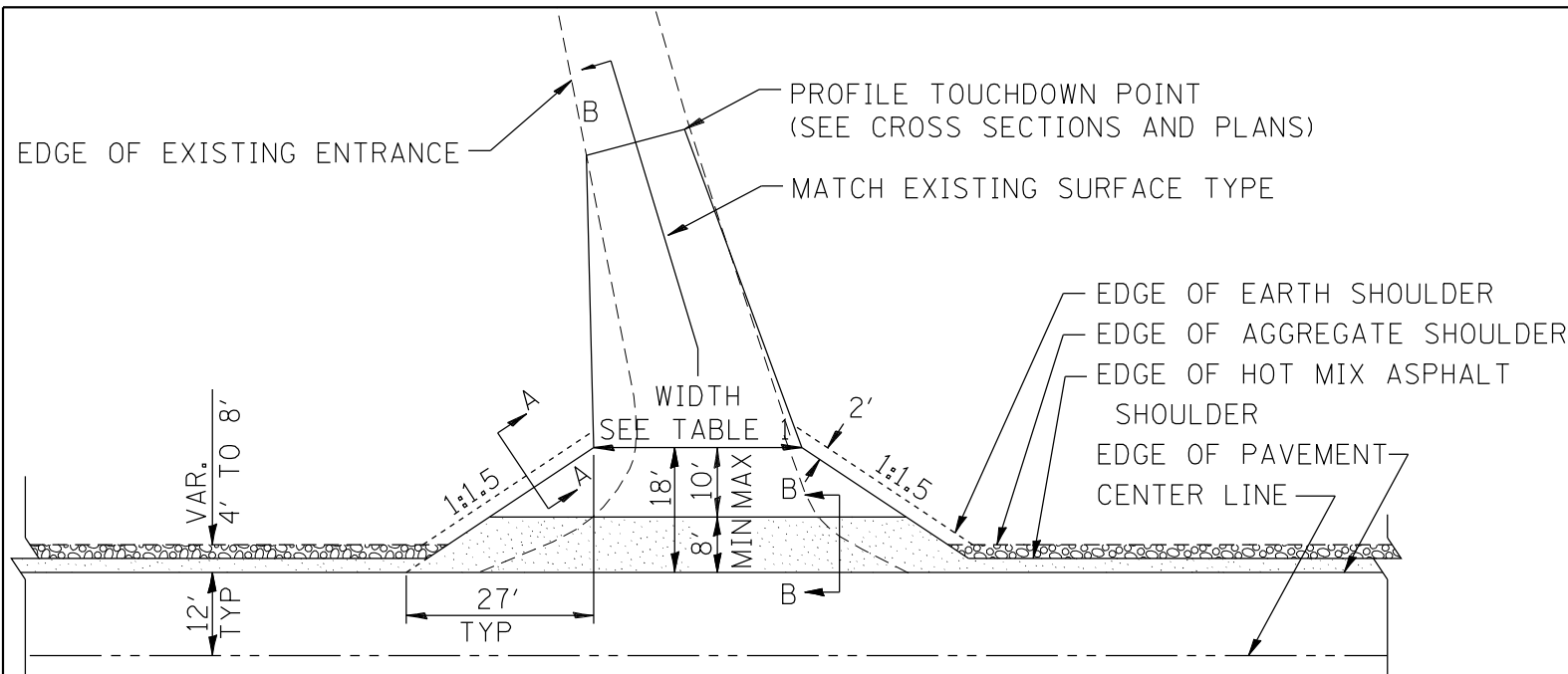
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

NOT TO SCALE

**DISTRICT 4 STANDARDS**  
**BUTT JOINTS**

CADD STD. 406101-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42- (B,B-1) BR-1	KNOX	152	131
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 68754	

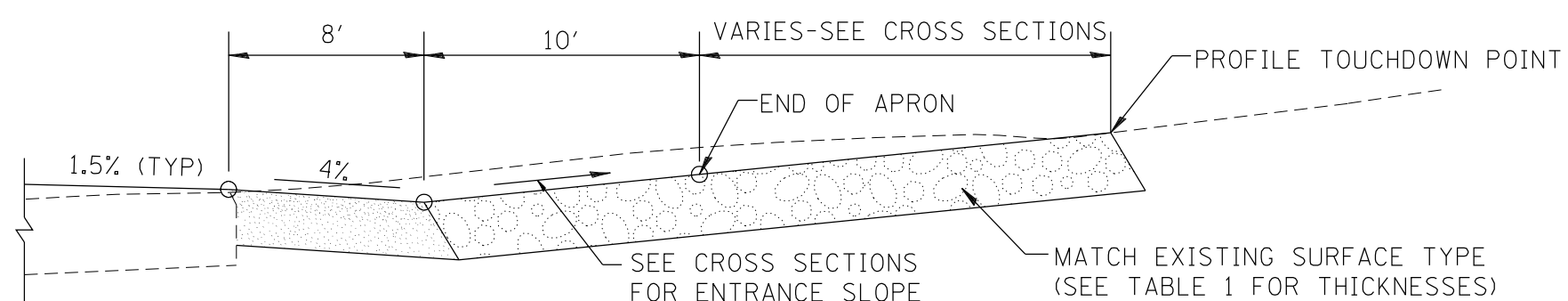


**PLAN**

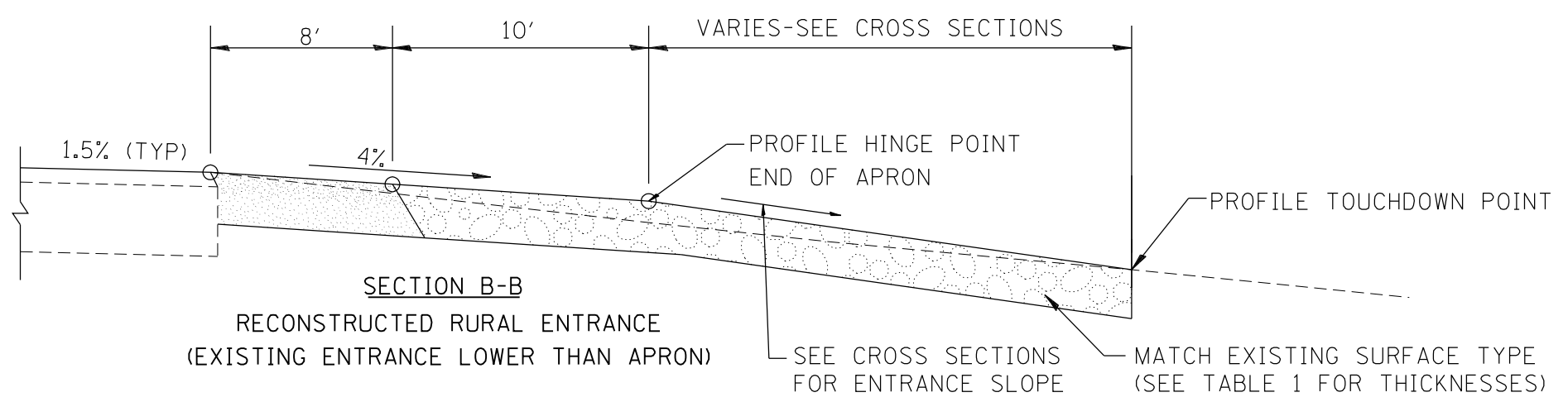
**COMMERCIAL / FARM-RELATED ENTRANCE**

TABLE 1					
RURAL ENTRANCE DESIGN					
ELEMENT	NON-COMMERCIAL		NON-COMMERCIAL W/ LARGE FARM EQUIPMENT	COMMERCIAL	
	12'(3.6m) Min.	24'(7.2m) Max.	20' (6.1m)Max.	30' (9.0m)Max.	
WIDTH (W)	12'(3.6m) Min.	24'(7.2m) Max.	20' (6.1m)Max.	30' (9.0m)Max.	14'(4.3m) Min., 24'(7.2m) Max., 24'(7.2m) Min., 35'(10.7m) Max.
FLARE	1:1.5				
MAX. GRADE (G)	12%		12%		10%

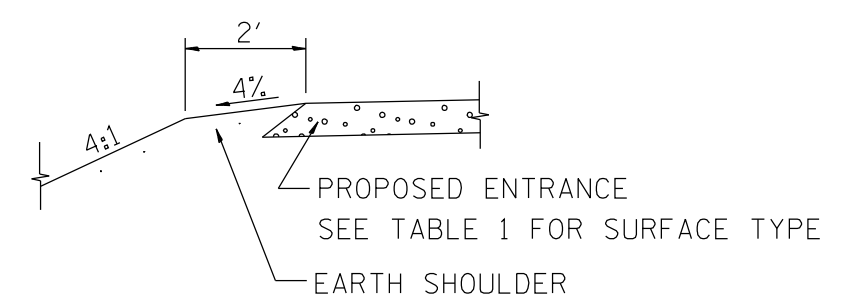
SURFACE TYPE	NON-COMMERCIAL		NON-COMMERCIAL W/ LARGE FARM EQUIPMENT	COMMERCIAL	
	12'(3.6m) Min.	24'(7.2m) Max.	20' (6.1m)Max.	30' (9.0m)Max.	14'(4.3m) Min., 24'(7.2m) Max., 24'(7.2m) Min., 35'(10.7m) Max.
INCIDENTAL HOT MIX ASPHALT SURFACING	6"		—	8"	
AGGREGATE SURFACE COURSE	6"		8"	8"	
PCC DRIVEWAY PAVEMENT	6"		—	7"	



**SECTION B-B  
RECONSTRUCTED RURAL ENTRANCE  
(EXISTING ENTRANCE HIGHER THAN APRON)**



**SECTION B-B  
RECONSTRUCTED RURAL ENTRANCE  
(EXISTING ENTRANCE LOWER THAN APRON)**



**SECTION A-A  
SHOULDER TREATMENT FOR RURAL ENTRANCES**

**GENERAL NOTES**

- ENTRANCES SHALL SLOPE AWAY FROM THE PAVEMENT AT A RATE EQUAL TO THE SHOULDER SLOPE FOR A MINIMUM DISTANCE OF 8'.
- A MINIMUM 8' PAVED SHOULDER SHALL BE CONSTRUCTED BETWEEN LOCATIONS WHERE THE RURAL ENTRANCE IS LESS THAN 50' FROM AN ADJACENT SIDEROAD, ENTRANCE OR MAILBOX TURNOUT.
- A TAPER RATE OF 5:1 IS DESIRABLE WHEN TRANSITING FROM THE RURAL ENTRANCE WIDTH SHOWN IN TABLE 1, TO THE EXISTING ENTRANCE WIDTH.

All dimensions are in inches (millimeters) unless otherwise noted.

01-01-97	RENUM. C-103.06, NEW REVISION BOX	T.P.	10-16-06	REVISED TO 2007 SPEC.	M.A.
07-01-97	REVISE DESIGNER NOTES	J.A.			
01-17-03	ADJUST DESIGN, CHANGE ENTRANCE	JATR			
09-15-05	RADIUS FOR FLARE	M.M.A.			

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

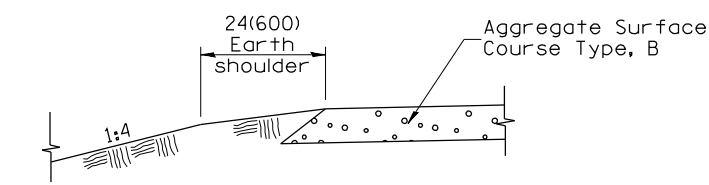
NOT TO SCALE

**DISTRICT 4 STANDARDS  
RURAL ENTRANCES FOR "3R" PROJECTS**

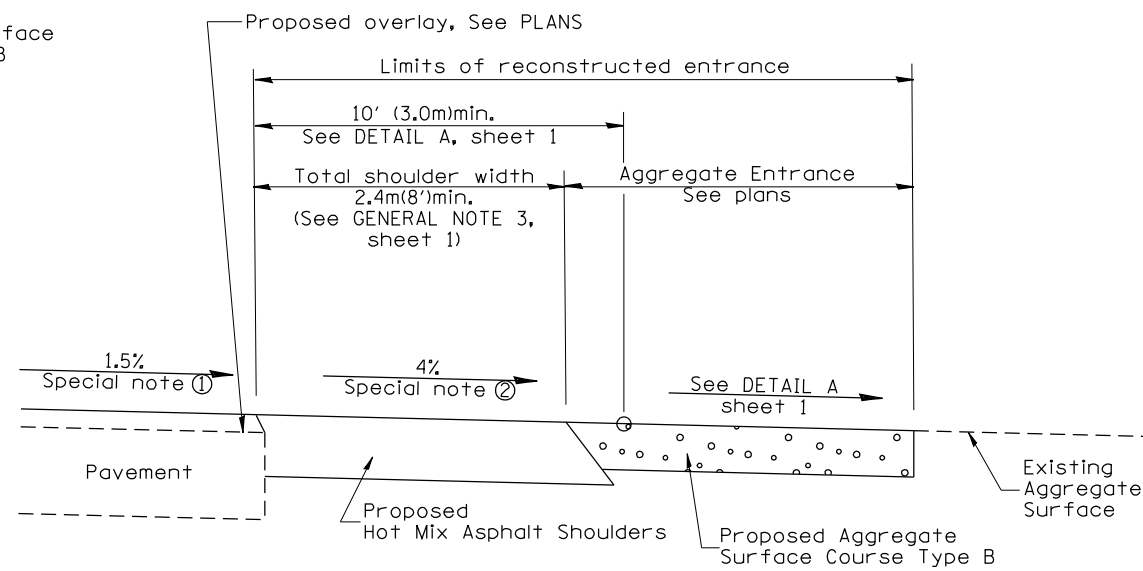
SHT. 1 OF 2  
CADD STD. 406301-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42- (B,B-1) BR-1	KNOX	152	132
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 68754	

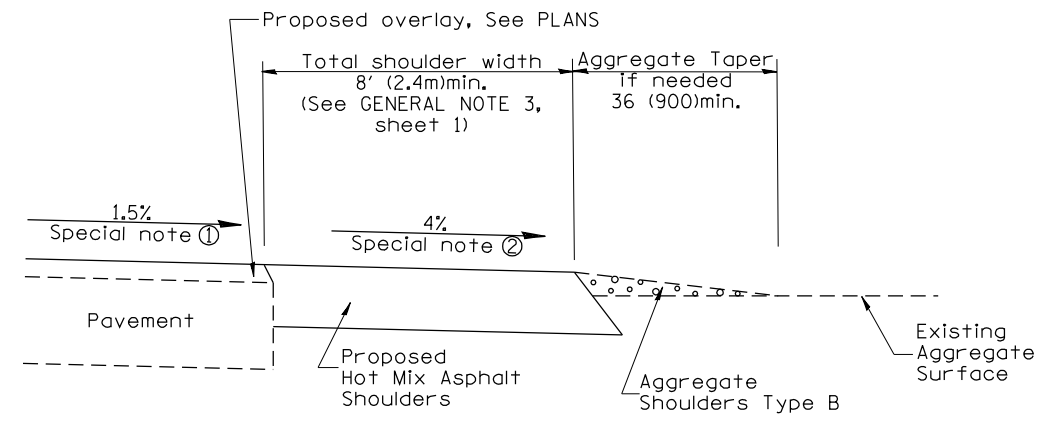




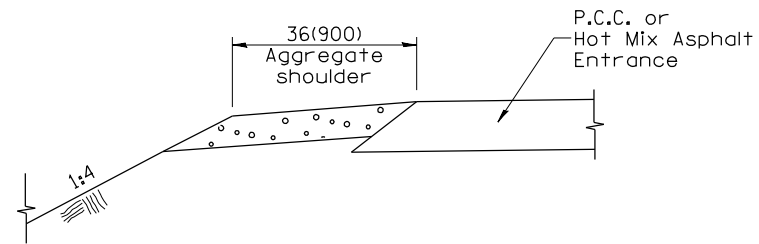
**SECTION A-A**  
SHOULDER TREATMENT FOR AGGREGATE ENTRANCES



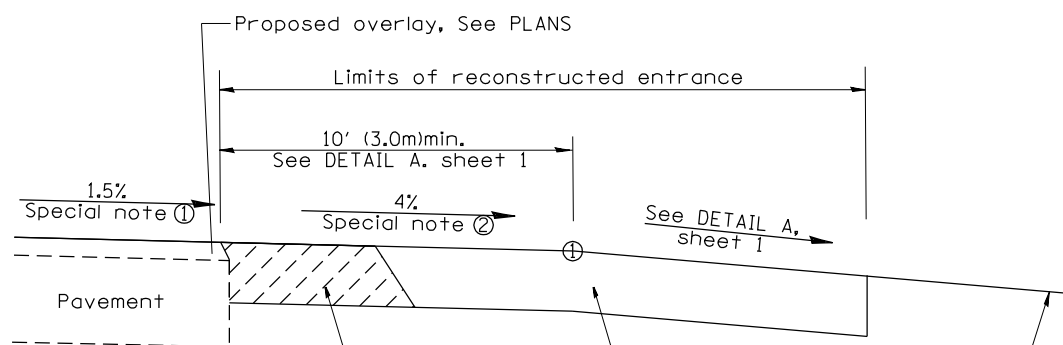
**SECTION B-B**  
RECONSTRUCTED AGGREGATE ENTRANCE



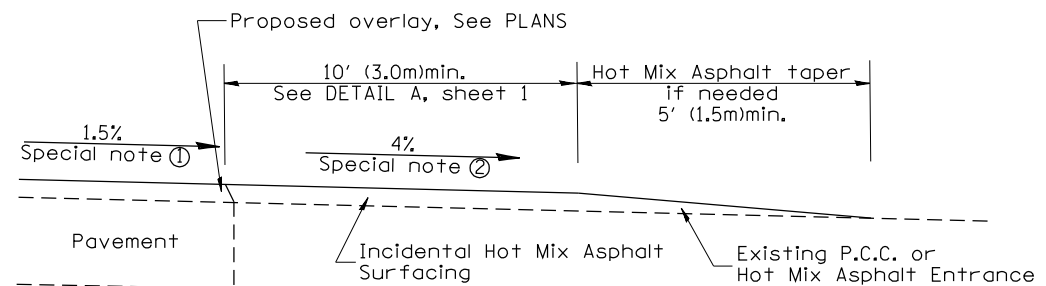
**SECTION B-B**  
EXISTING AGGREGATE ENTRANCE



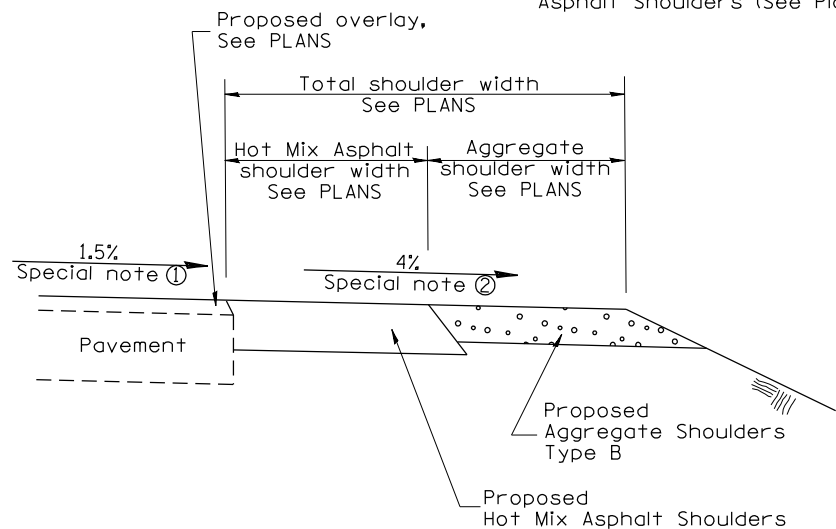
**SECTION C-C**  
SHOULDER TREATMENT FOR P.C.C. OR HOT MIX ASPHALT ENTRANCES



**SECTION D-D**  
RECONSTRUCTED P.C.C. OR HOT MIX ASPHALT ENTRANCE



**SECTION D-D**  
EXISTING P.C.C. OR HOT MIX ASPHALT ENTRANCE

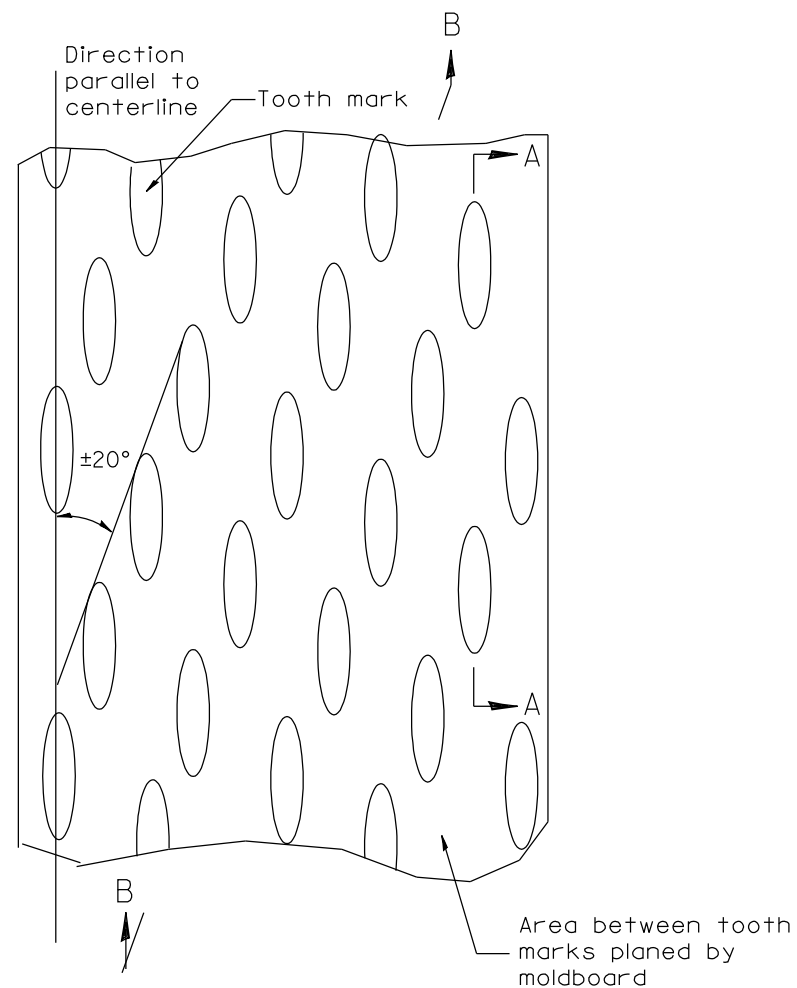


**SECTION E-E**  
MAINLINE SHOULDER TREATMENT

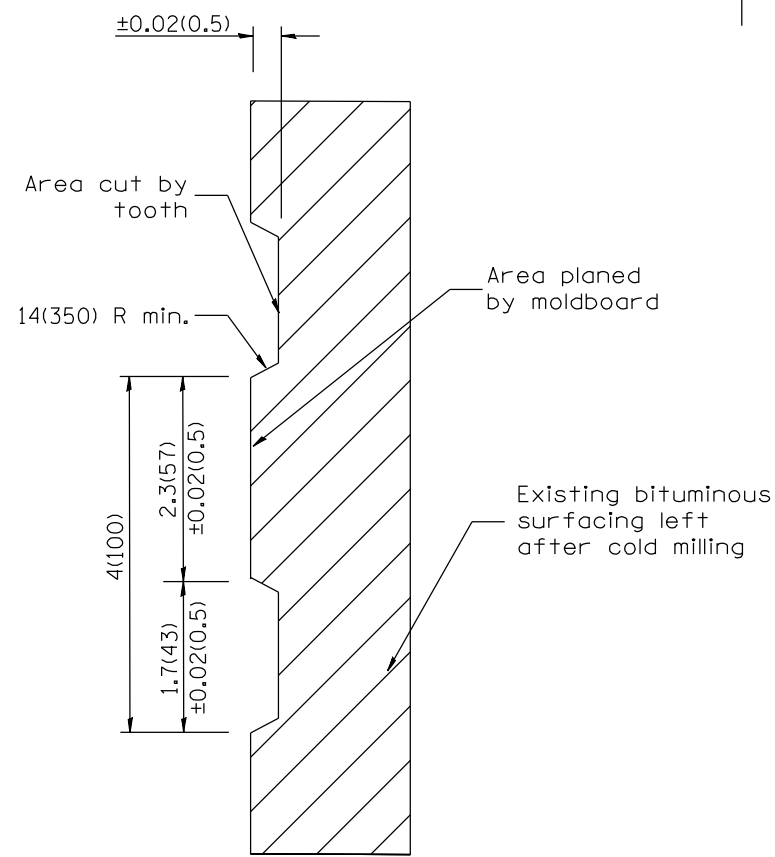
**SPECIAL NOTES**

- ① The mainline pavement cross-slope is 1.5% for tangent alignment. See PLANS for cross-slope on super-elevated horizontal curves.
- ② The shoulder slope shall control the entrance profile for a distance of 10' (3.0m) minimum from the pavement edge. The shoulder cross-slope is 4% for tangent alignment. Through super-elevated curves, the maximum pavement-shoulder breakover should not be greater than 10% for shoulders 6' (1.8m) and wider and 12% for shoulders 4' (1.2m) and less. Where 12' (366cm) paved shoulders are provided, the breakover should be at the edge of the paved shoulder rather than at the pavement edge.

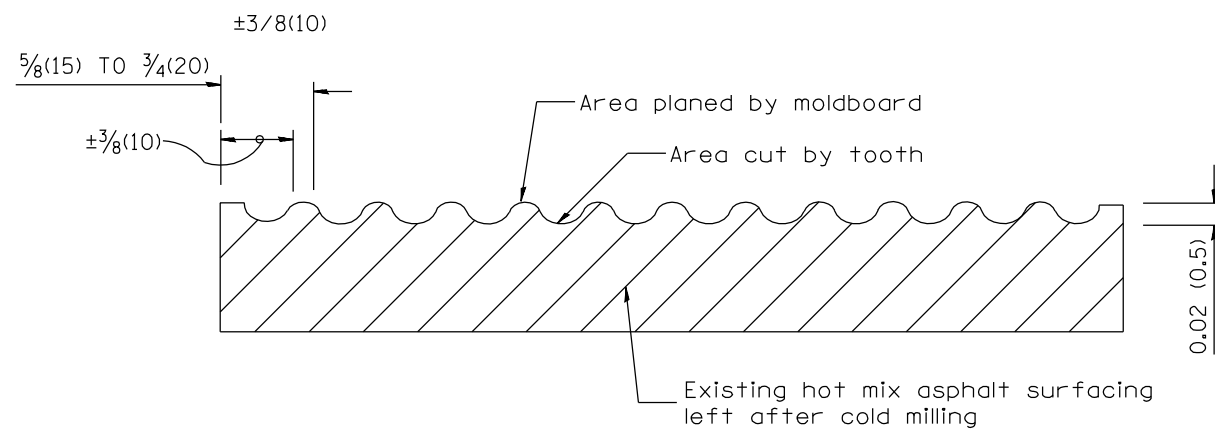
All dimensions are in inches (millimeters) unless otherwise noted.



PLAN



SECTION A-A



SECTION B-B PROJECTED  
PERPENDICULAR TO CENTERLINE

General notes:

1. Coldmilling shall consist of two processes: Cutting with carbide teeth mounted on a rotating drum, and planing with a moldboard mounted immediately behind the cutting drum.
2. Other similar patterns will be acceptable if they consist of a smooth, flat, planed surface interspersed with a pattern of discontinuous longitudinal striations.

All dimensions are in inches (millimeters) unless otherwise noted.

01-01-97	RENUM. C-104.01, NEW REVISION BOX	T.P.
04-20-98	REMOVED MILLING DETAIL FROM STANDARD	J.A.
09-08-98	CORRECT NOTE LEADER PLACEMENT	R.W.
10-16-06	REVISED TO 2007 SPEC.	M.A.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT 4 STANDARDS  
HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

NOT TO SCALE

CADD STD. 440001-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42- (B,B-1) BR-1	KNOX	152	134
CONTRACT NO. 68754				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

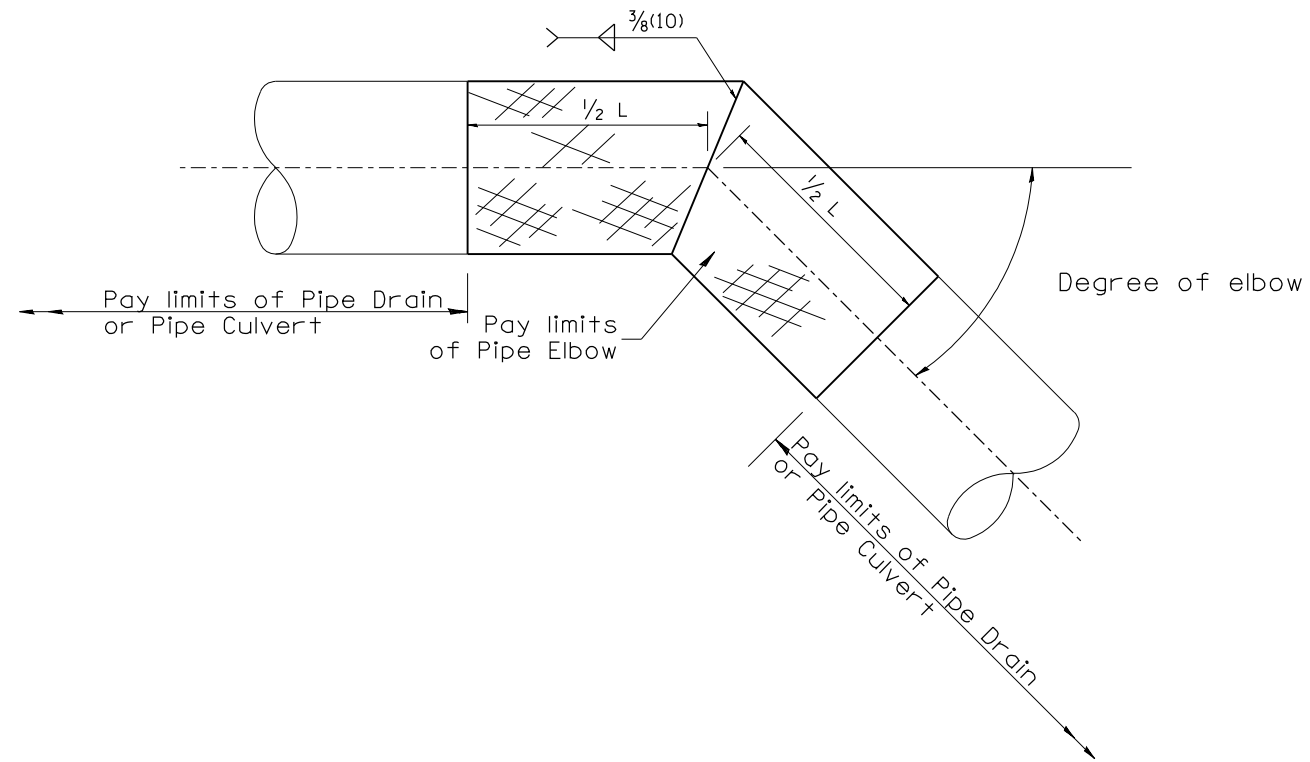
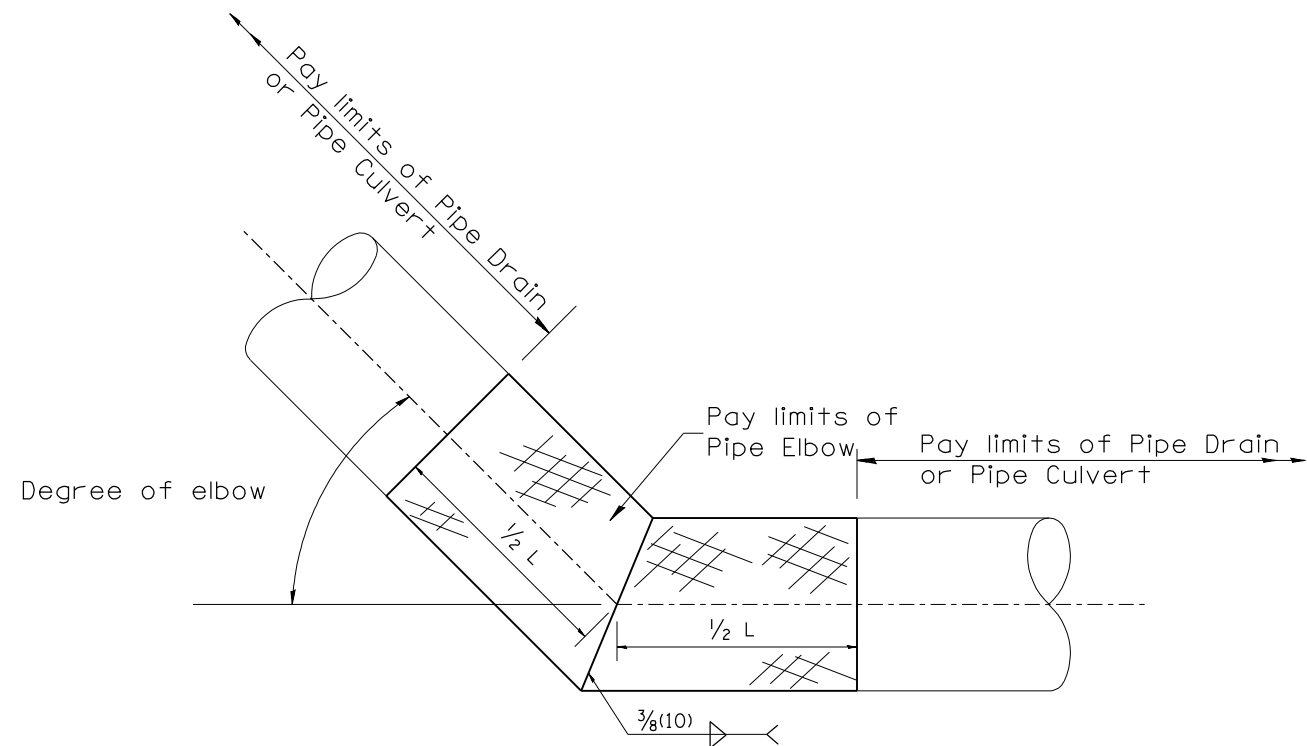


TABLE A		
ELBOW DESIGN CONTROLS		
PIPE DIAMETER	L = Pay limits of Pipe Elbow and minimum length of pipe required for fabrication	
	DEGREE OF ELBOW ≤ 45°	DEGREE OF ELBOW ≥ 46°
12(300)	24(600)	4'(1.22M)
15(375)	24(600)	4'(1.22M)
18(450)	24(600)	4'(1.22M)
21(525)	24(600)	4'(1.22M)
24(600)	4'(1.22M)	4'(1.22M)
30(750)	4'(1.22M)	6'(1.83M)
36(900)	4'(1.22M)	6'(1.83M)

TABLE B	
ELBOW DESIGN CONTROLS	
EARTH SLOPE (V:H)	DEGREE OF ELBOW *
1:6	9°
1:4	14°
1:3	18°
1:2	26°
1:1½	33°

\* Approximate - based upon 0.5% inlet and outlet flowlines.



All dimensions are in inches (millimeters) unless otherwise noted.

01-01-97	RENUM. J-11.05, NEW REVISION BOX,	T.P.
	REVISED TITLE BOX	
10-16-06	REVISED TO 2007 SPEC.	M.A.

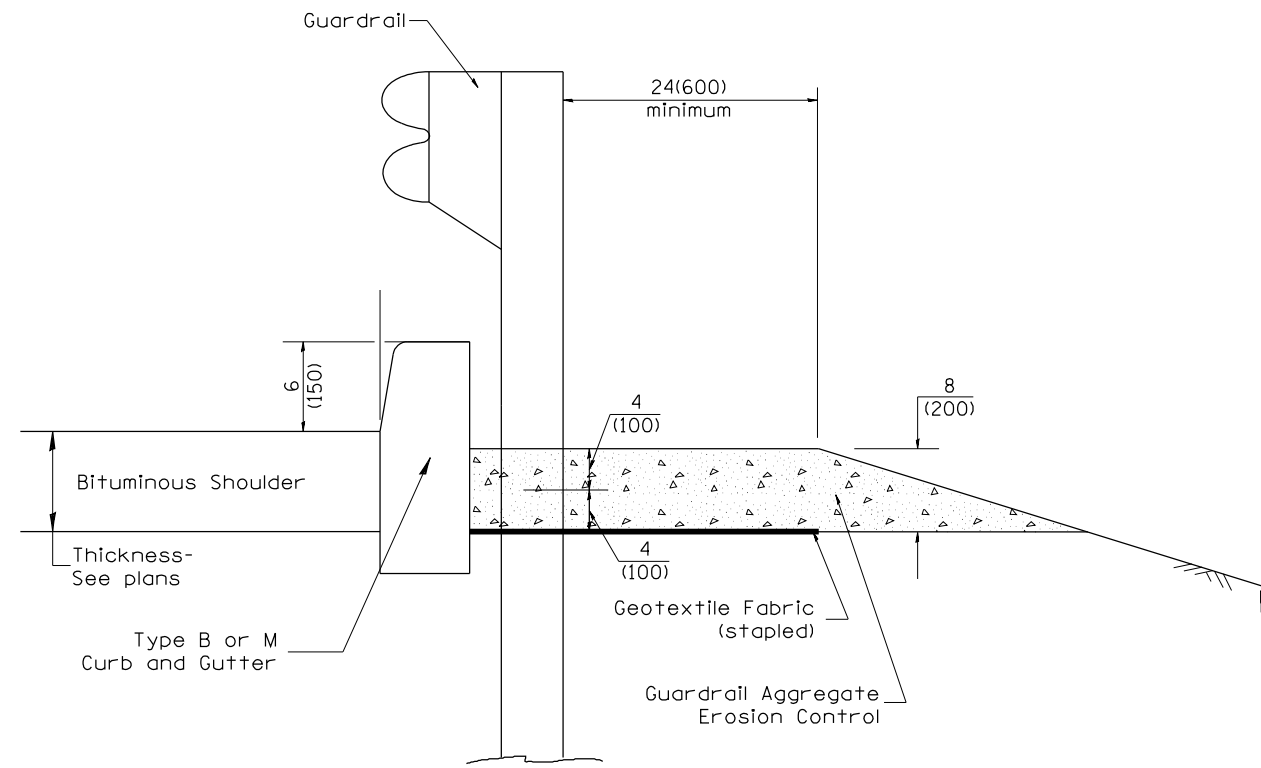
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

NOT TO SCALE

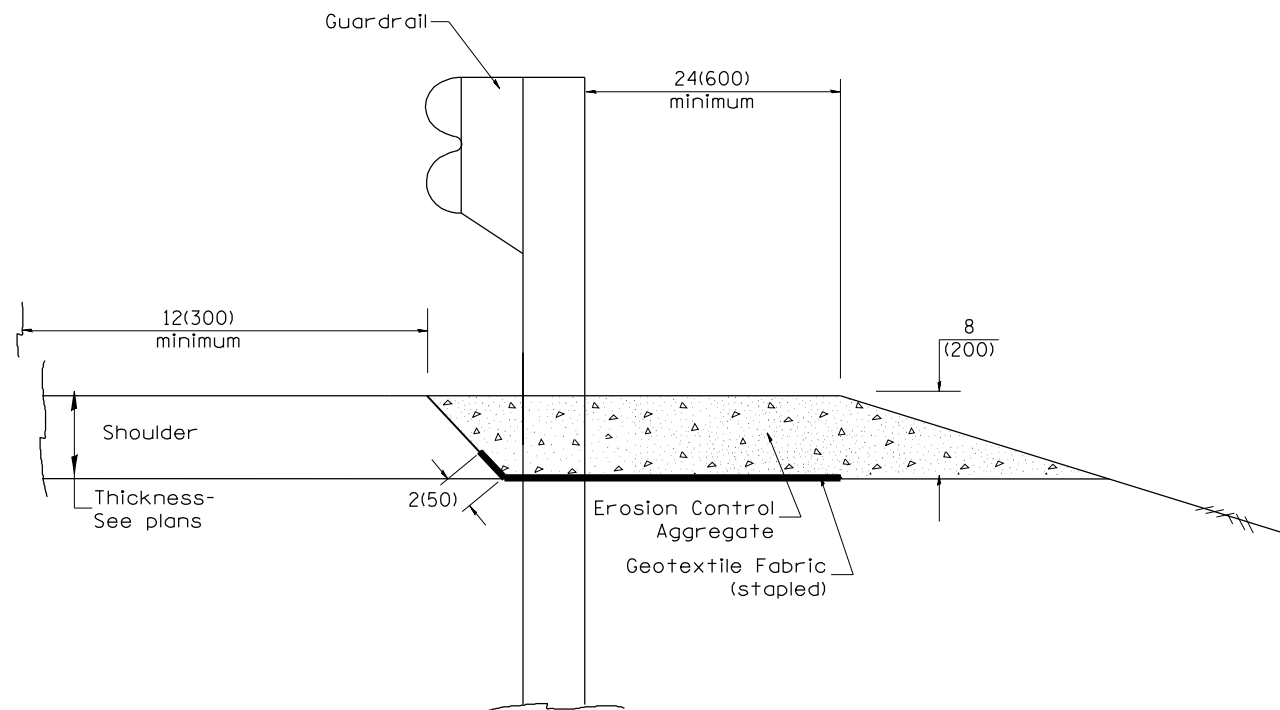
DISTRICT 4 STANDARDS  
PIPE ELBOW

CADD STD. 601301-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42- (B,B-1) BR-1	KNOX	152	135
CONTRACT NO. 68754				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



TYPICAL SECTION WITH EROSION CONTROL CURB



TYPICAL SECTION WITHOUT EROSION CONTROL CURB

GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL

1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.
2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.
3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 12(300) minimum overlap. A knife cut for guardrail post installation is necessary.
4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.
5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be filled and the aggregate returned to line and grade.
6. Materials shall meet the following requirements:
  - A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01(c) of the Standard Specifications.
  - B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.

All dimensions are in inches (millimeters) unless otherwise noted.

01-01-97	RENUM. C-22.01, NEW REVISION BOX	T.P.			
03-01-97	CORRECT STD. NUMBERS IN NOTES PG. 2	J.A.			
11-03-00	CORRECTION TO NOTES	M.A.			
10-16-06	REVISED TO 2007 SPEC.	M.A.			

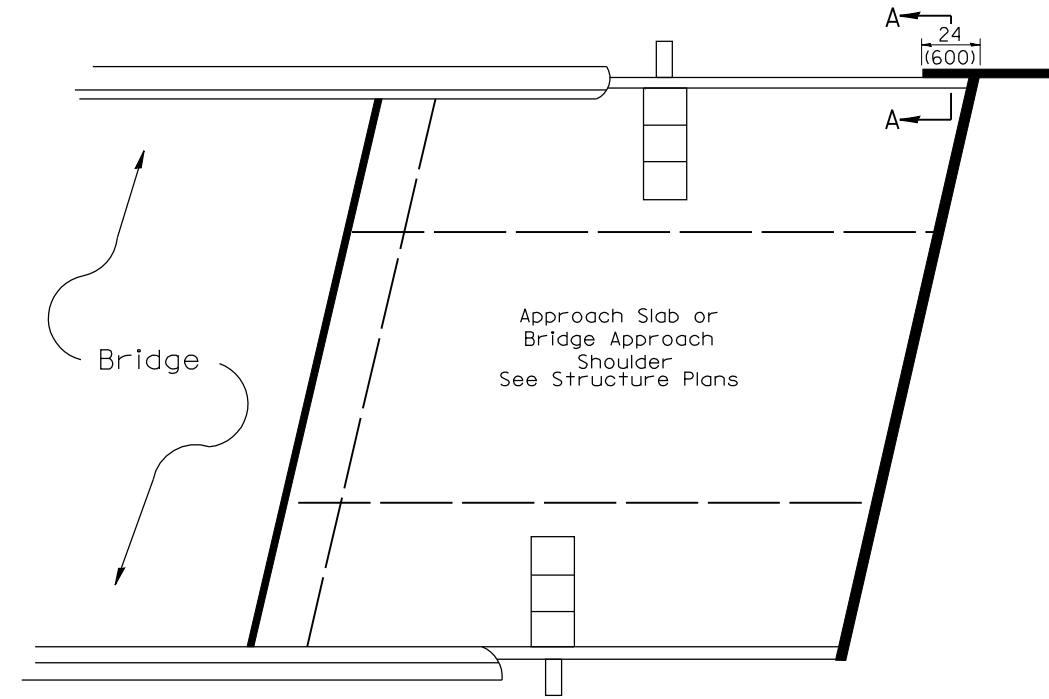
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT 4 STANDARDS  
GUARDRAIL EROSION CONTROL TREATMENTS**

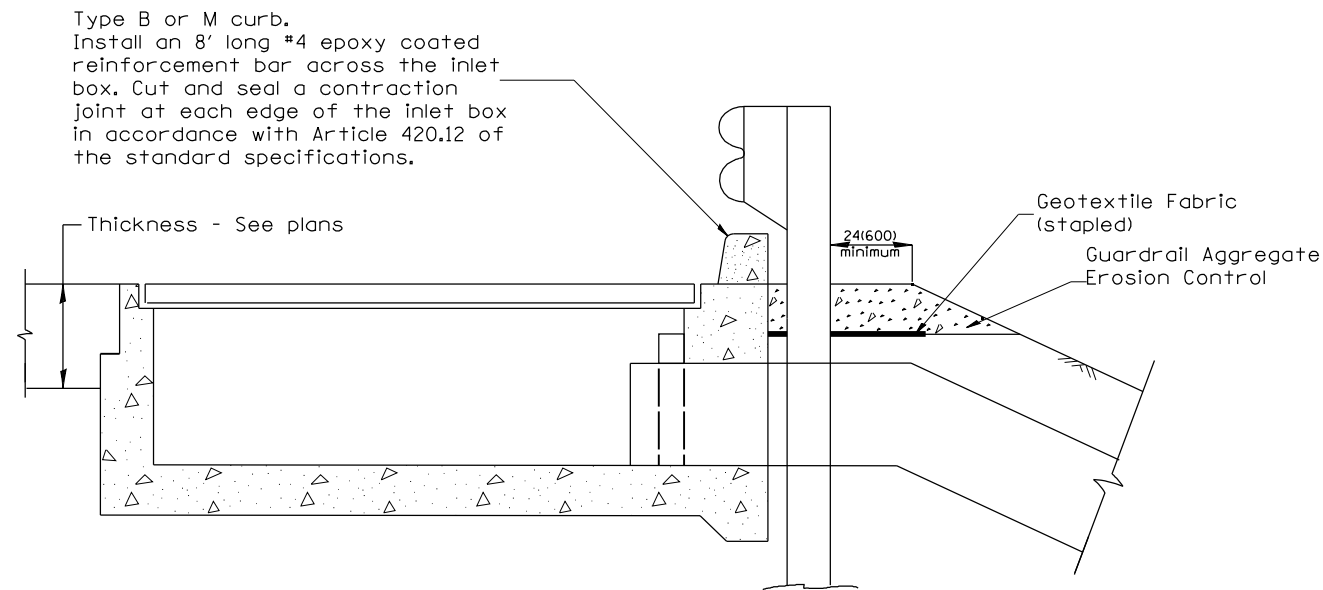
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SHT. 1 OF 2  
CADD STD. 630101-D4

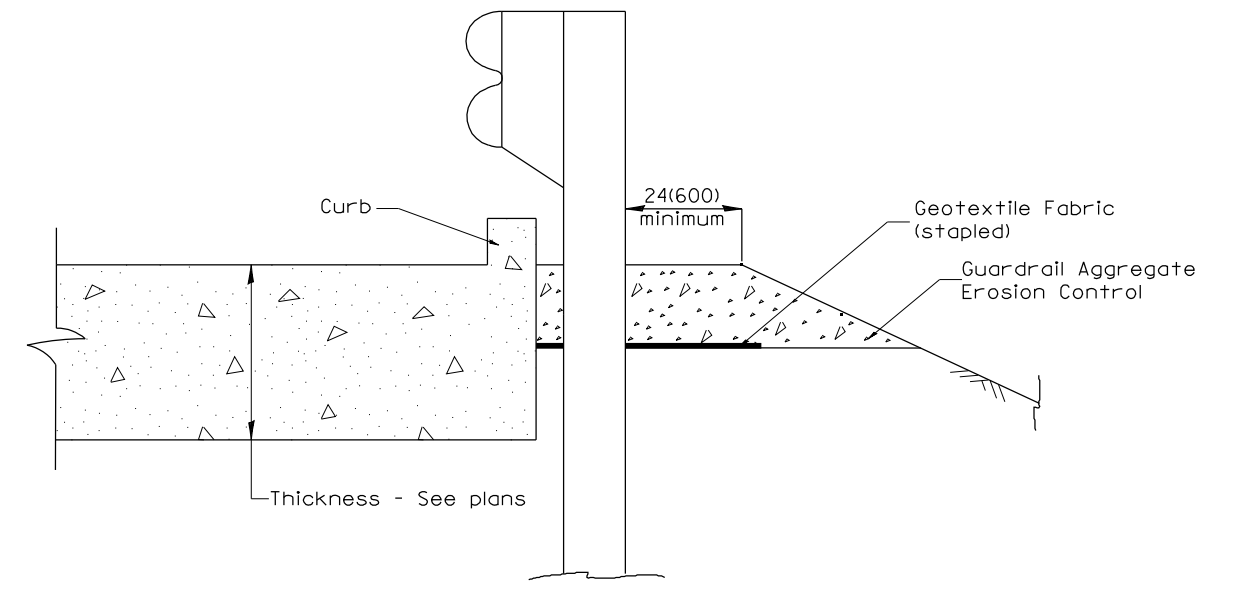
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42- (B,B-1) BR-1	KNOX	152	136
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 68754	



PLAN VIEW  
APPROACH SLAB OR BRIDGE APPROACH SHOULDER  
 (STANDARD 609001 or 609006)



TYPICAL SECTION AT INLETS  
TYPE E & F & G (STANDARD 610001)



SECTION A-A  
TYPICAL SECTION WITH BRIDGE APPROACH CURB

All dimensions are in inches (millimeters) unless otherwise noted.


**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

NOT TO SCALE

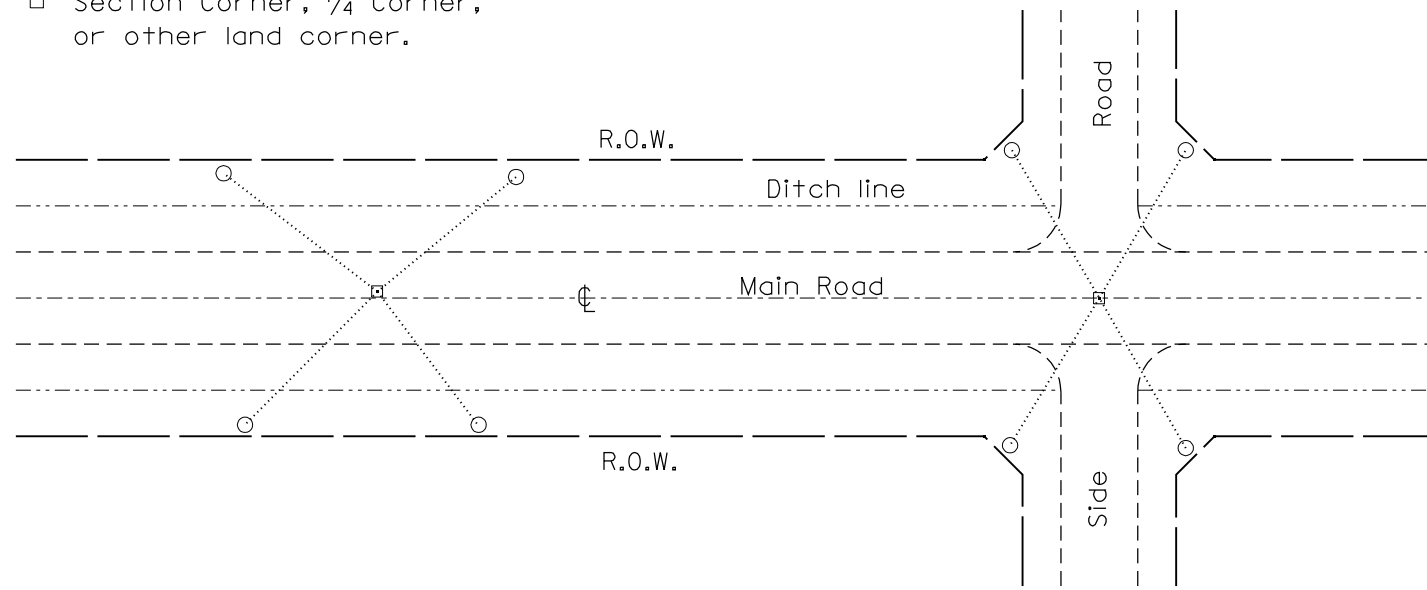
**DISTRICT 4 STANDARDS**  
**GUARDRAIL EROSION CONTROL TREATMENTS**

SHT. 2 OF 2  
 CADD STD. 630101-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42- (B,B-1) BR-1	KNOX	152	137
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
CONTRACT NO. 68754				

**PERMANENT SURVEY TIES**

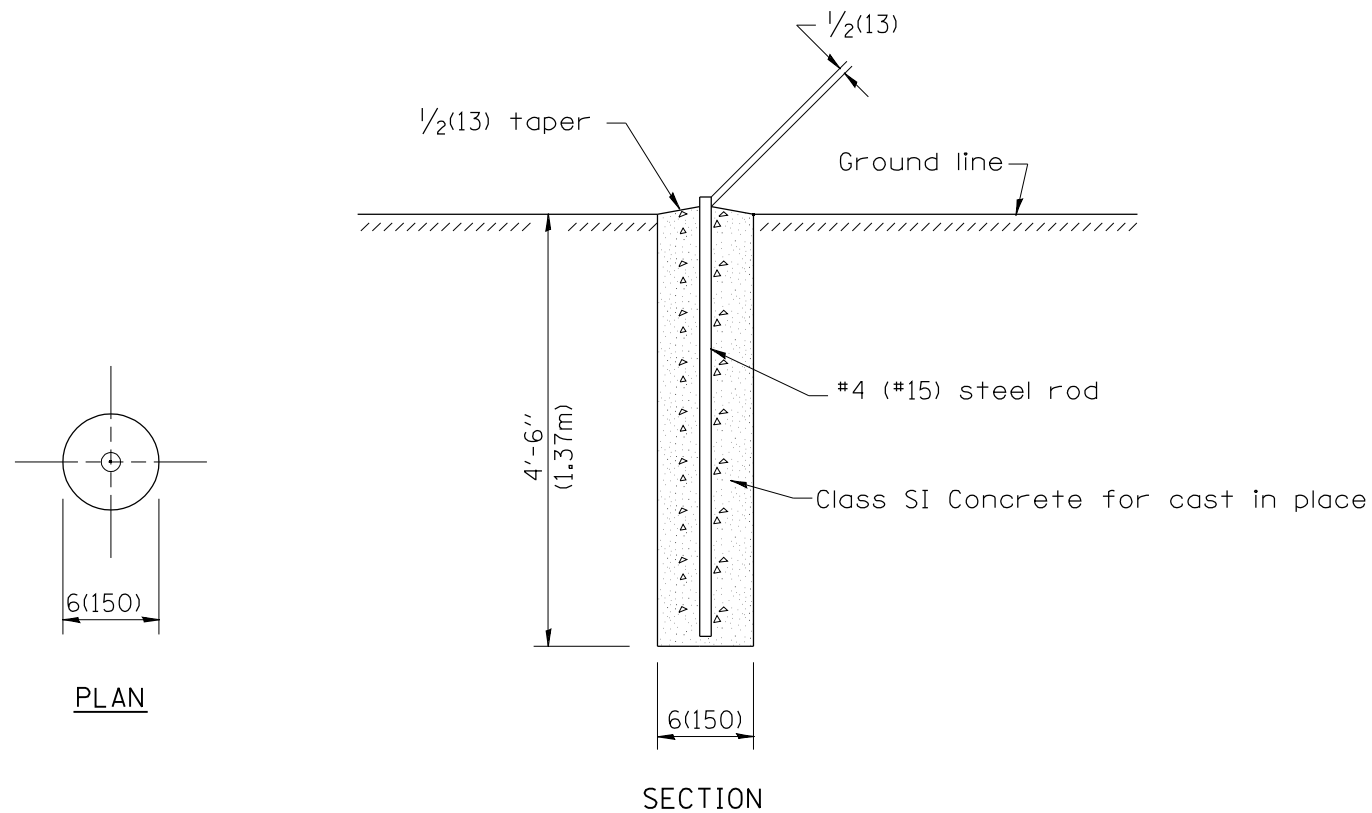
- Permanent Survey Tie
- Section Corner, 1/4 Corner, or other land corner.



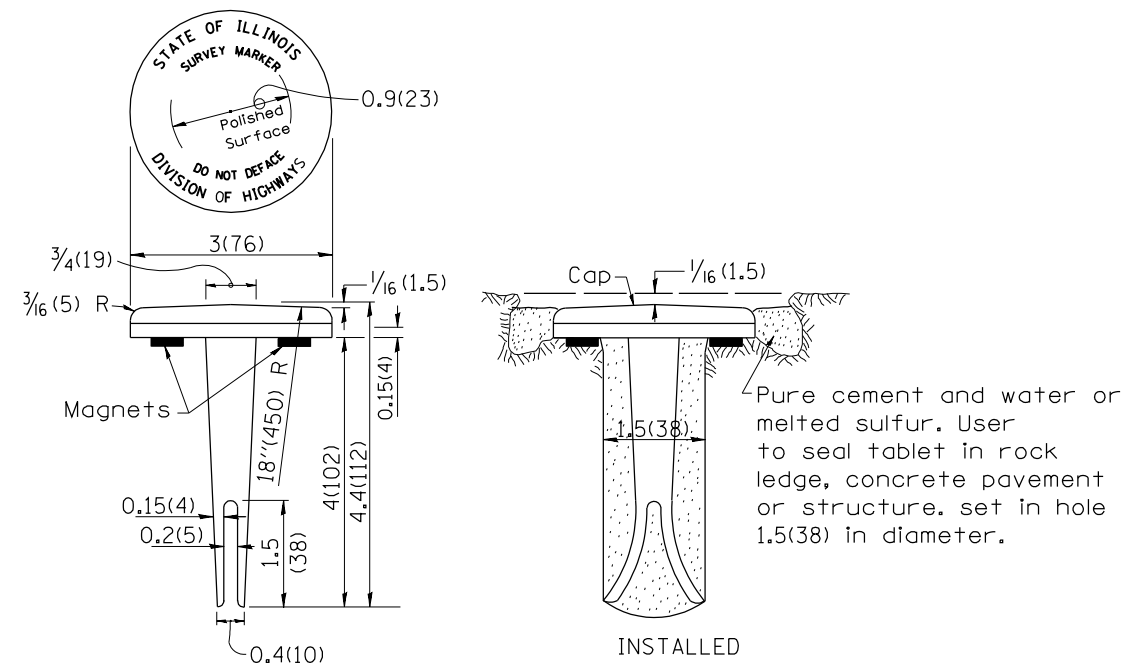
**TYPICAL APPLICATION**

**GENERAL NOTES**

1. The marker shall be cast in place of Class SI Concrete.
2. Tie marker shall be installed after the final seeding has been completed unless otherwise specified by the Engineer.
3. The tie distances to the section corner shall be measured and recorded by the surveyor setting the PSM. All ties shall be turned over to the IDOT Chief of Surveys or Chief of Plats for recordation.
4. All documentation shall be performed by a PLS



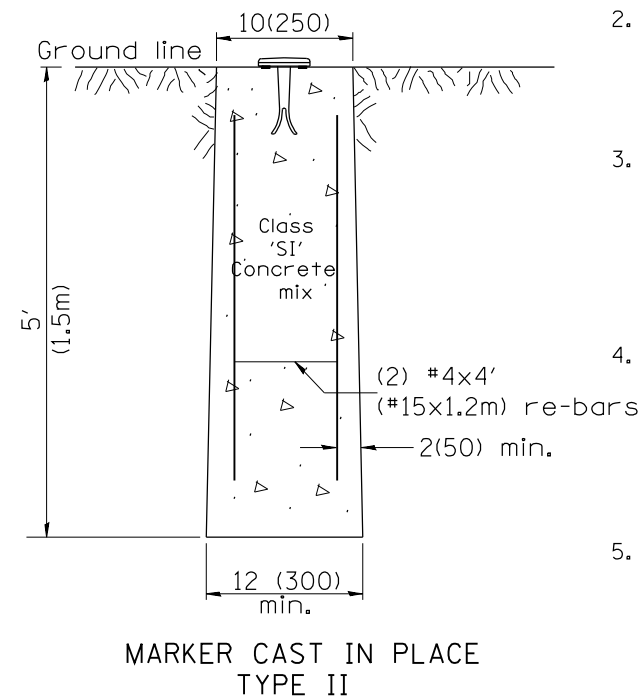
**PERMANENT SURVEY MARKERS**



**TYPE I**

**GENERAL NOTES**

1. All type II markers shall be cast in place, and precast markers will not be allowed.
2. Two permanent magnets, each having a diameter of 3/4 (19) and a thickness of 1/4 (6), or equivalent, shall be attached to the underside of the tablet with an approved epoxy bonding agent.
3. The location of the markers shall be in accordance with the plans in general, the markers will be placed at the P.T.'s, P.C.'s, and P.I.'s located within the R.O.W. of horizontal curves and spaces along the tangents in a way that a minimum of two markers are always inter-visible, and not to exceed 1000' (300m).
4. The markers shall be placed under the direction of the Engineer and shall be installed in a workmanlike manner in order that there will be no further settlement or horizontal shifting. The monuments shall be placed in a way that the survey point will fall within the portion of the plaque provided for that purpose.
5. The project designation, the centerline station, the survey point, and the elevation shall be permanently marked by the use of metal dies after marker has been installed.



**MARKER CAST IN PLACE TYPE II**

All dimensions are in inches (millimeters) unless otherwise noted.

01-01-97	RENUM. D-3.01, NEW REVISION BOX, REVISED	T.P.	10-16-06	REVISED TO 2007 SPEC.	M.A.
	TITLE BOX, ADD DESIGNER NOTE		01-04-11	REVISED FOR CORRECTIONS	R.D.
07-07-98	ADD DESIGNER NOTE	J.A.			
05-24-06	REMOVED GEN. NOTE UNDER TIES	M.A.			

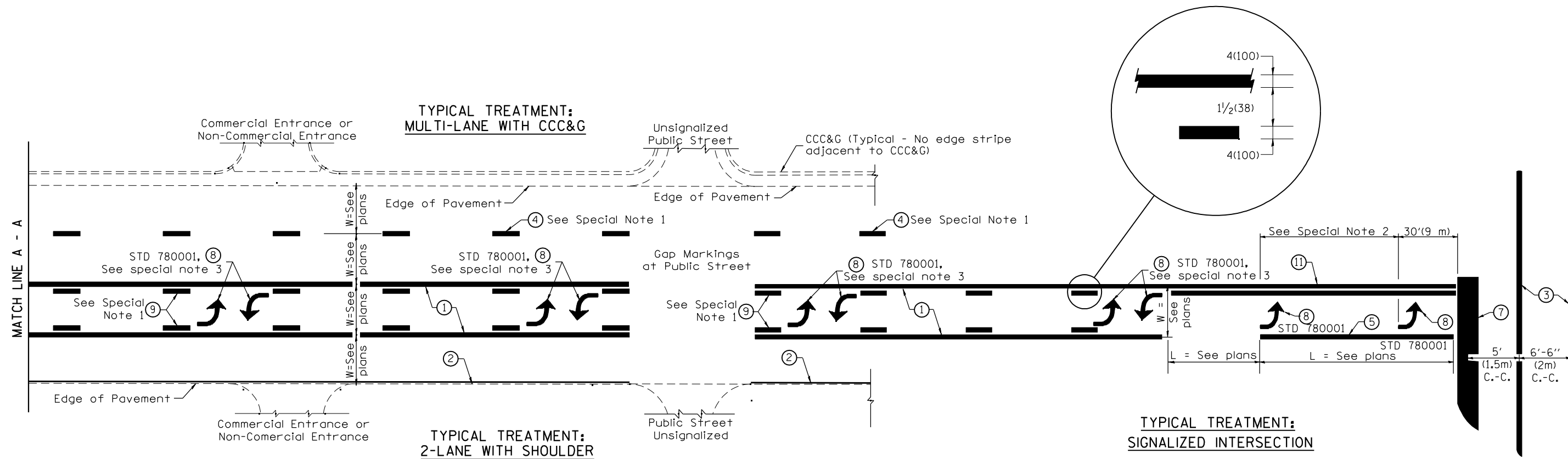
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT 4 STANDARDS  
PERMANENT SURVEY TIE & PERMANENT SURVEY MARKERS TY.I - TY.II**

NOT TO SCALE

CADD STD. 667101-D4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42- (B,B-1) BR-1	KNOX	152	138
CONTRACT NO. 68754				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



**FLUSH PAVED MEDIAN: TWO-WAY LEFT TURN LANE  
WITH ONE-WAY LEFT TURN LANE AT SIGNALIZED INTERSECTION**

**TYPICAL PAVEMENT MARKING LEGEND**

(Note: This is a District Standard Legend. Some elements may not apply to specific project.)

- ① 4(100) Solid (Yellow)
- ② 4(100) Solid (White)
- ③ 2-6(150) Crosswalk @ 6'-6" (2m)min C.-C. (White)  
2-8(200) Crosswalk @ 6'-6" (2m)min C.-C. (White) (When traffic signals are present.)
- ④ 6(150) Skip-Dash (White) (See Special Note 1)
- ⑤ 8(200) Solid (White)
- ⑥ 12(300) Diagonal (White) (Item ⑥ is shown on Std. 780001)
- ⑦ 24(600) Stop Bar (White)
- ⑧ Letters & Arrows (See Std. 780001 and Special Notes 2 & 3)
- ⑨ 4(100) Skip-Dash (Yellow) (See Special Note 1)
- ⑩ 12(300) Diagonal (Yellow) (See Table A)
- ⑪ 4(100) Double Solid (Yellow) (See Table A)

**SPECIAL NOTES**

1. Skip-Dash markings will be centered between both ends of city blocks and shall be placed in alignment transversely across the pavement.
2. The following shall apply to arrows located in one-way left turn lanes:
  - A. A minimum of two (2) arrows is required.
  - B. The maximum spacing between arrows is 80' (24 m).
  - C. Arrows shall be evenly spaced if three (3) or more are required.
3. The following shall apply to arrow pairs located in two-way left turn lanes:
  - A. A minimum of two (2) arrow pairs is required.
  - B. The maximum spacing between arrow pairs is 200' (61 m).
  - C. Arrow pairs shall be evenly spaced if three (3) or more are required.
  - D. The spacing between Bi Directional Left Turn Arrows is 33' (10 m).

**GENERAL NOTES**

1. Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
2. See Plans for Pavement Markings adjacent to curbed islands and medians, and through lane reductions.

01-01-97	RENUM. F-8.03, NEW REVISION BOX	T.P.	10-16-06	REVISED TO 2007 SPEC.
02-07-97	ADD BI DIRECTIONAL DIMENSION	J.A.		
10-97	CORRECT BI DIRECTIONAL DIMENSION	J.A.		
08-02	ADD CROSSWALK DMNS. WITH T.S.	M.A.		

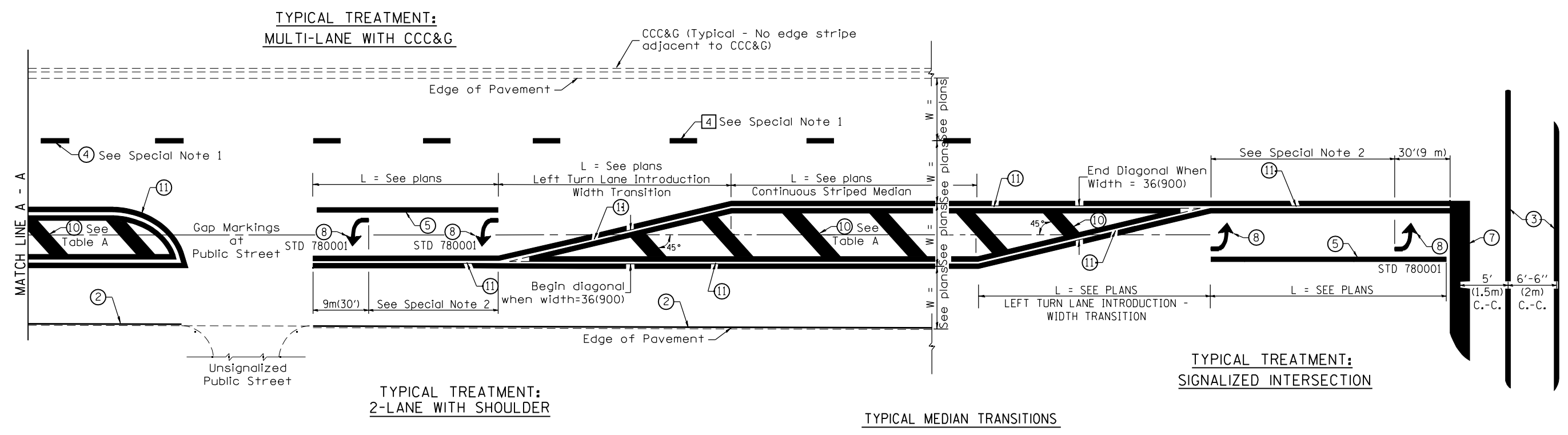
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

NOT TO SCALE

**DISTRICT 4 STANDARDS  
TYPICAL PAVEMENT MARKINGS**

SHT. 1 OF 2  
CADD STD. 780001-D4

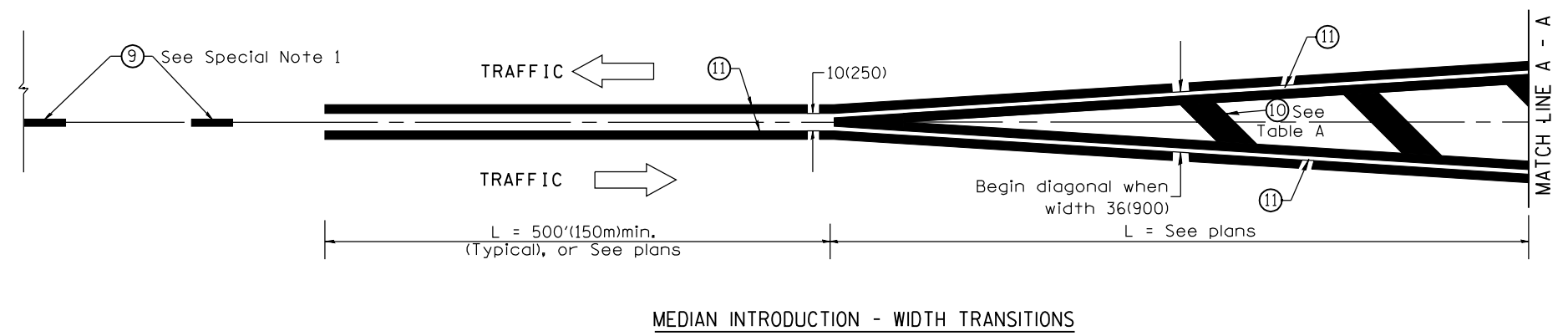
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1) BR-1	KNOX	152	139
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 68754	



FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE

TABLE A  
RECOMMENDED SPACING BETWEEN DIAGONAL LINES

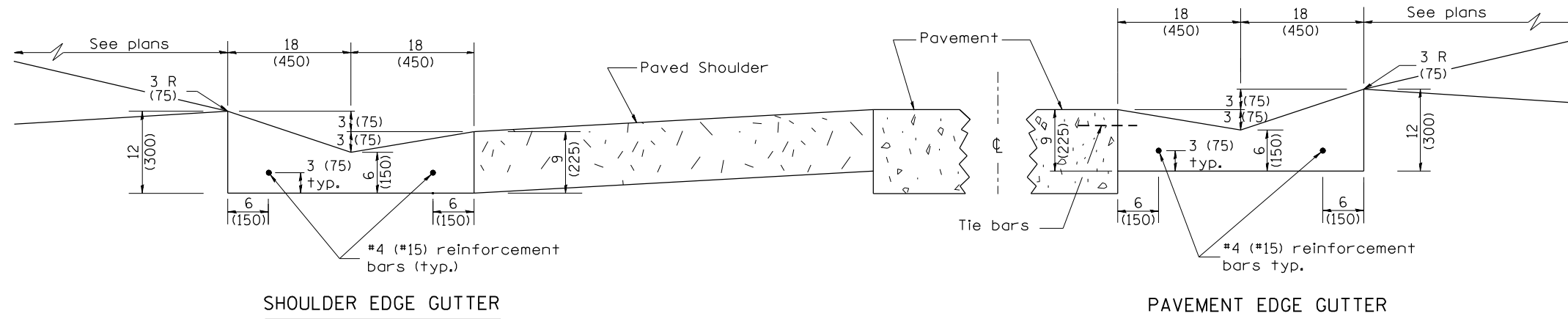
SPEED LIMIT RANGE	INTERSECTION CHANNELIZATION (Includes Width Transitions for Median and Left Turn Lane Introductions)	
	CONTINUOUS	
Less Than 30 mph (50 km/h)	50' (15m)	15' (5m)
30 - 45 mph (50 - 70 km/h)	75' (23m)	20' (6m)
Over 45 mph (70 km/h)	150' (46m)	30' (9m)



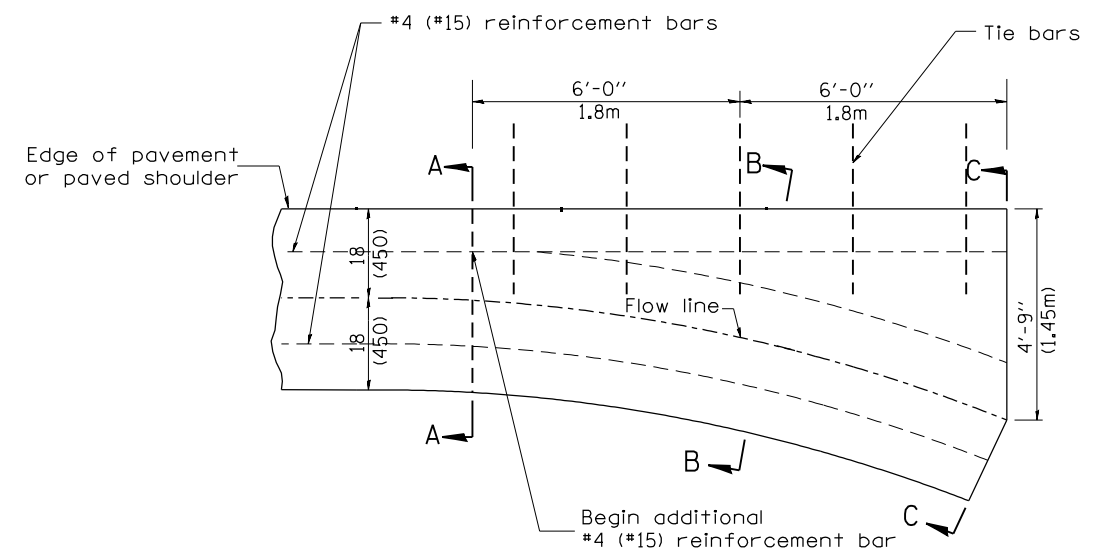
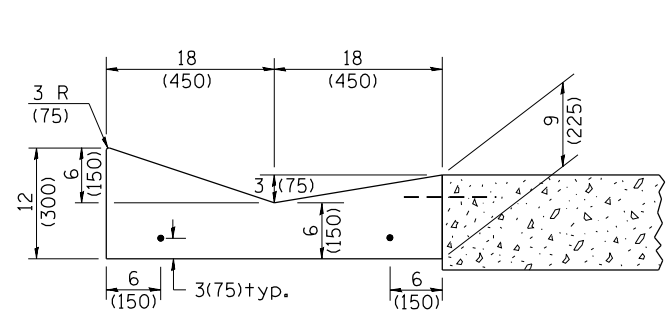
All dimensions are in inches (millimeters) unless otherwise noted.



DESIGNER NOTES:  
 1. INCLUDE STATE STANDARD 420001.  
 2. PAY ITEM FOR INLETS, OUTLETS, AND ENTRANCES IS X6060097 CLASS SI CONCRETE (OUTLET), SPECIAL



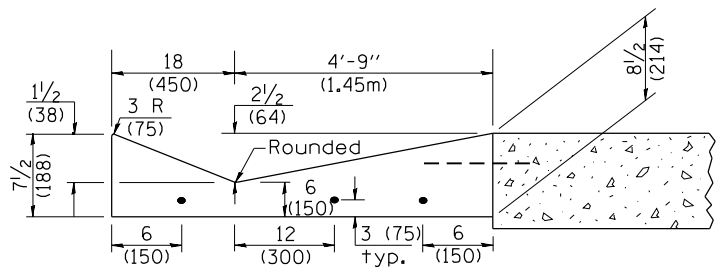
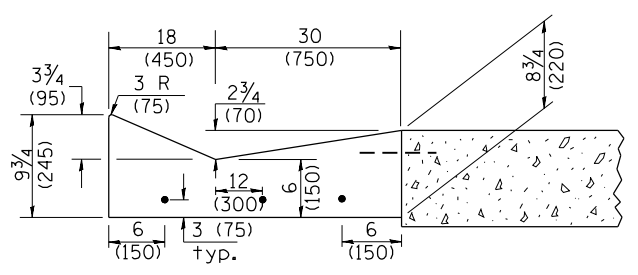
**CONCRETE GUTTER, TYPE A, (SPECIAL)**



**QUANTITY**  
 Section C-C to A-A= 1.2 cu. yd.  
 (0.92 m<sup>3</sup>) concrete.

**GENERAL NOTES:**

1. CONCRETE GUTTER, TYPE A, (SPECIAL) shall conform to the applicable portions of Section 606.
2. Tie bars shall be No. 6 (No. 20) at 24" (600mm) centers unless otherwise shown.
3. Gutter, gutter inlets, gutter outlets, and gutter entrances shall be tied to rigid pavement in accordance with details shown on Standard 420001.
4. Joints shall be constructed in accordance with Article 606.06.
5. Welded wire fabric shall conform to Article 1006.10(c)(1), and shall not be less than 58 lbs/100 sq.ft. (2.83 kg/m<sup>2</sup>).



**INLET**

**QUANTITIES**

CALC. BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

01-01-97	RENUM. A-1.02, NEW REVISION BOX, ELIMINATED	T.P.	01-10-07	REVISED QUANTITY	M.A.
	EXPANSION ANCHOR TIES		11-16-07	REVISED QUANTITY	M.A.
02-28-02	ENTRANCE TYPICALS REVISED	M.A.	02-15-11	CHANGED MODIFIED TO SPECIAL	R.D.
10-16-06	REVISED TO 2007 SPEC.	M.A.			

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

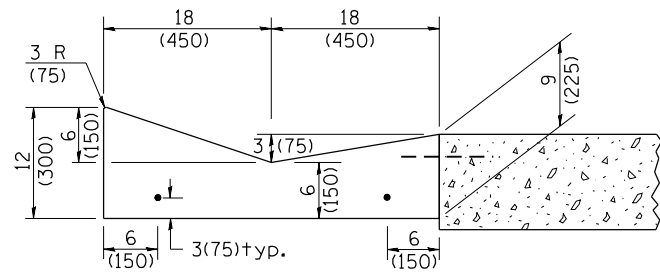
NOT TO SCALE

**CONCRETE GUTTER, TYPE A, (SPECIAL)  
 (INLET, OUTLET & ENTRANCE)**

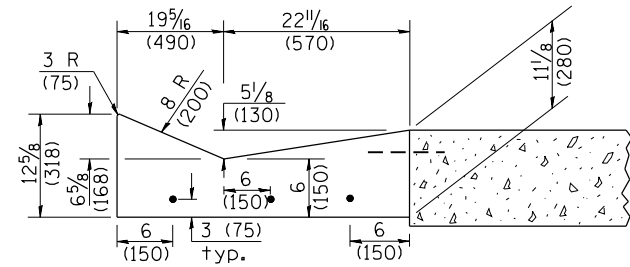
SHT. 1 OF 3  
 CADD STD. 606101-D4

All dimensions are in inches (millimeters) unless otherwise noted.

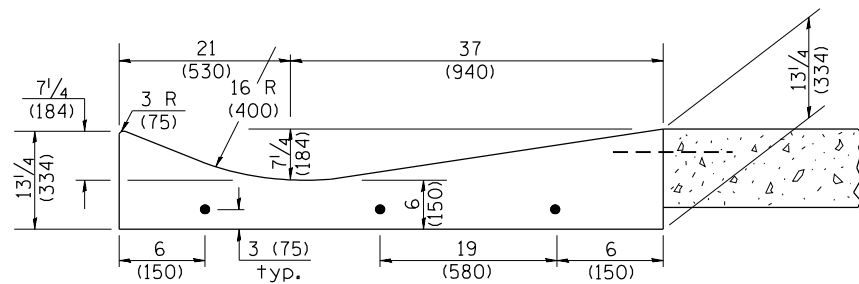
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1) BR-1	KNOX	152	141
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 68754	



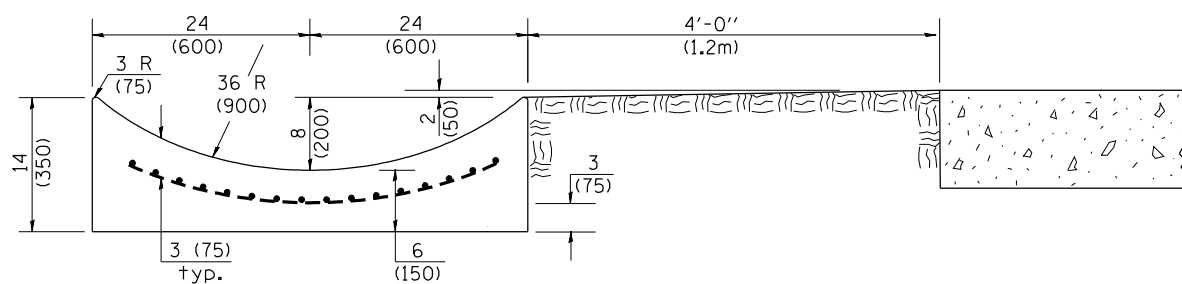
SECTION A-A



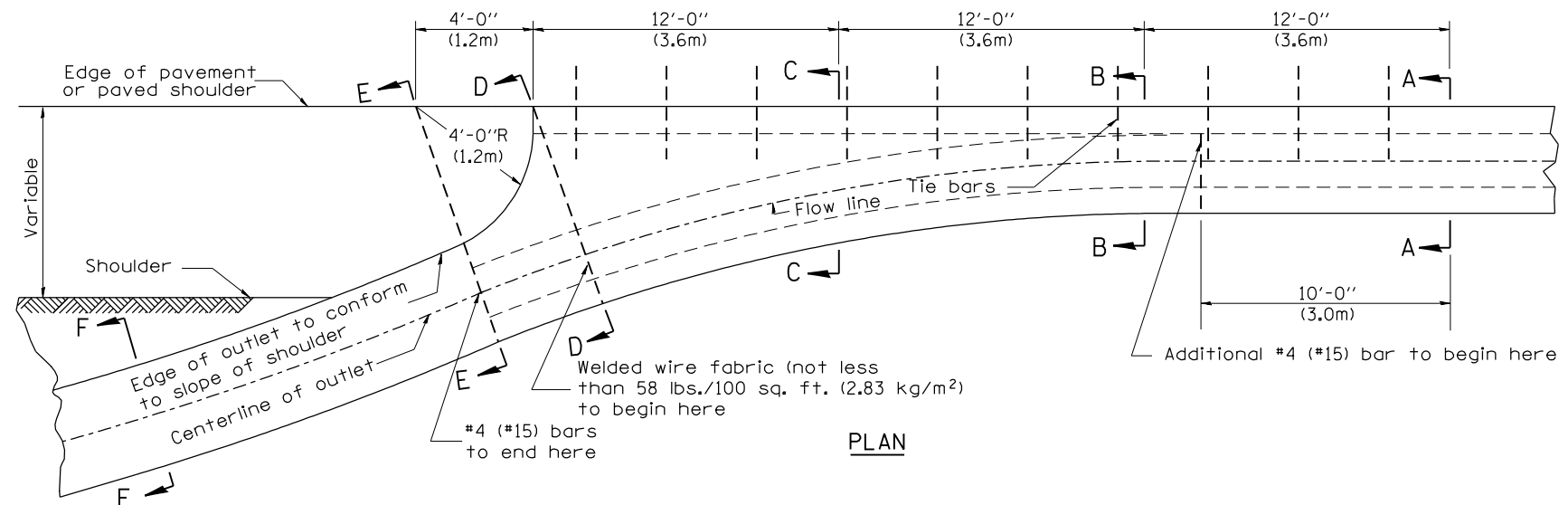
SECTION B-B



SECTION C-C



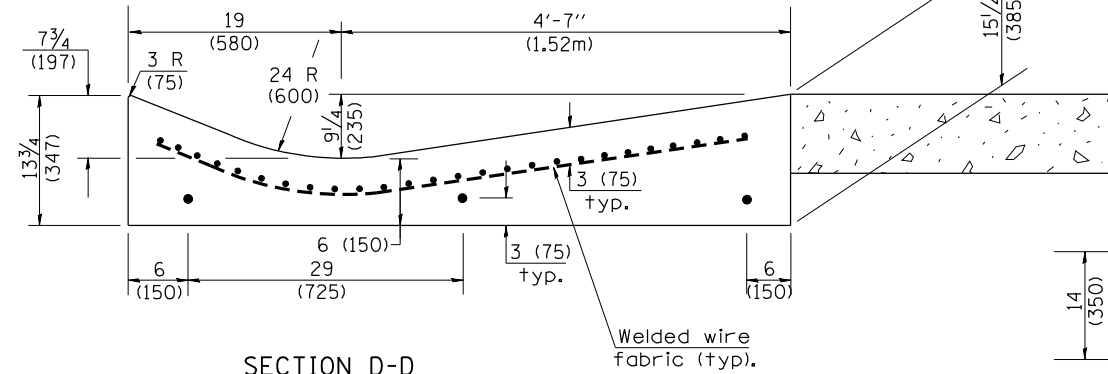
SECTION E-E



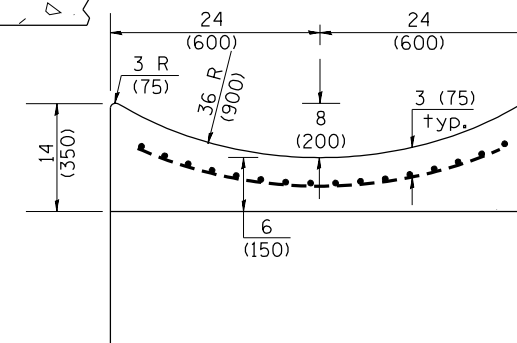
PLAN

**QUANTITY**  
 Section A-A to E-E = 4.5 cu. yd. (3.36 m<sup>3</sup>) concrete.  
 Section E-E to F-F = 0.10 cu. yd./ft. (0.26 m<sup>3</sup>/m) concrete.

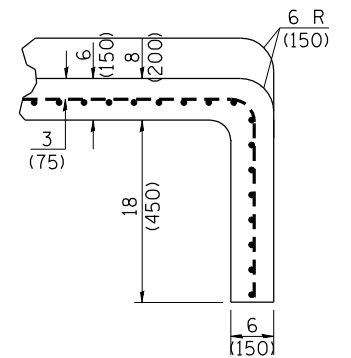
If the average grade of pavement for the distance from section A-A to section D-D exceeds 2%, this distance shall be increased 6 ft. (1.8 m) for each 1% increase in grade. A quantity adjustment is required.



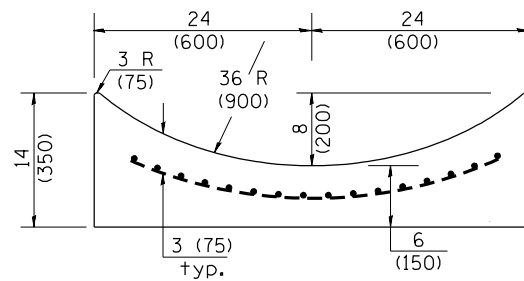
SECTION D-D



SECTION F-F



SECTIONS AT END OF OUTLET  
(CURTAIN WALL)

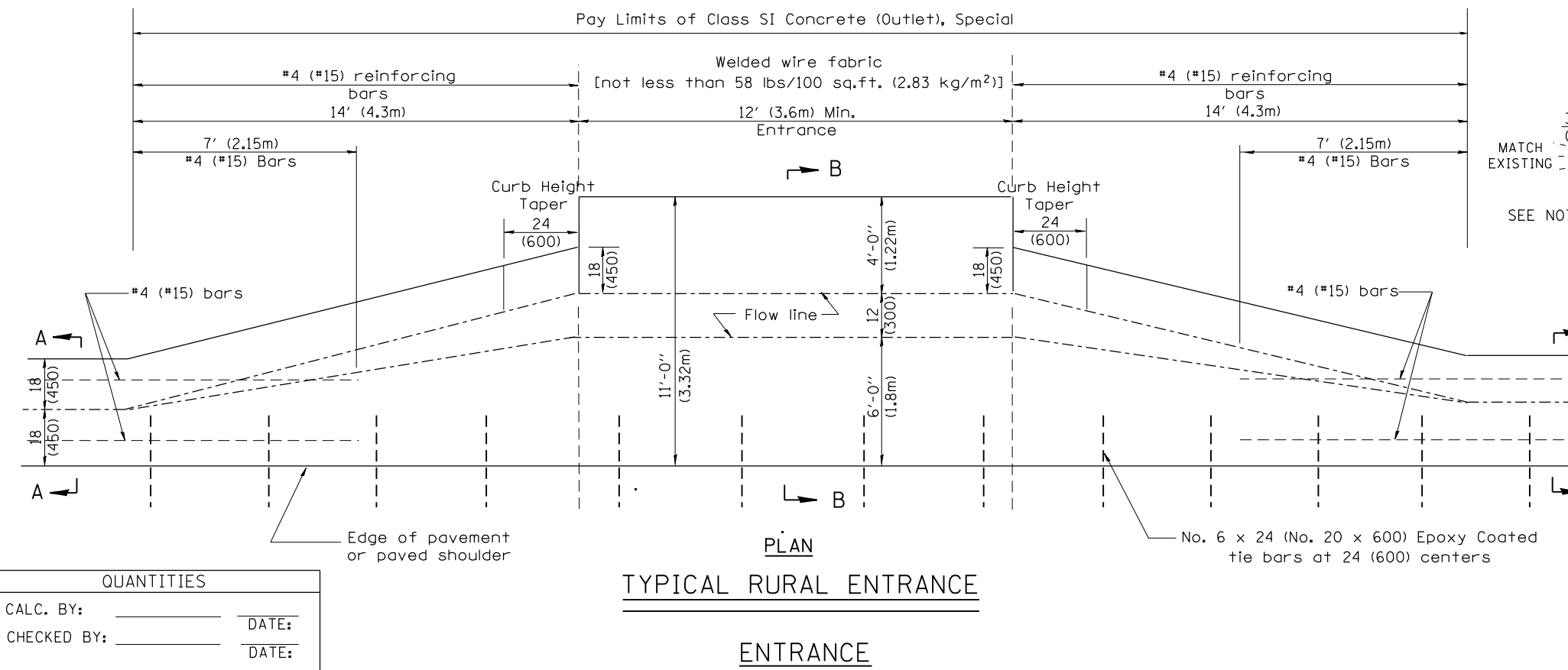
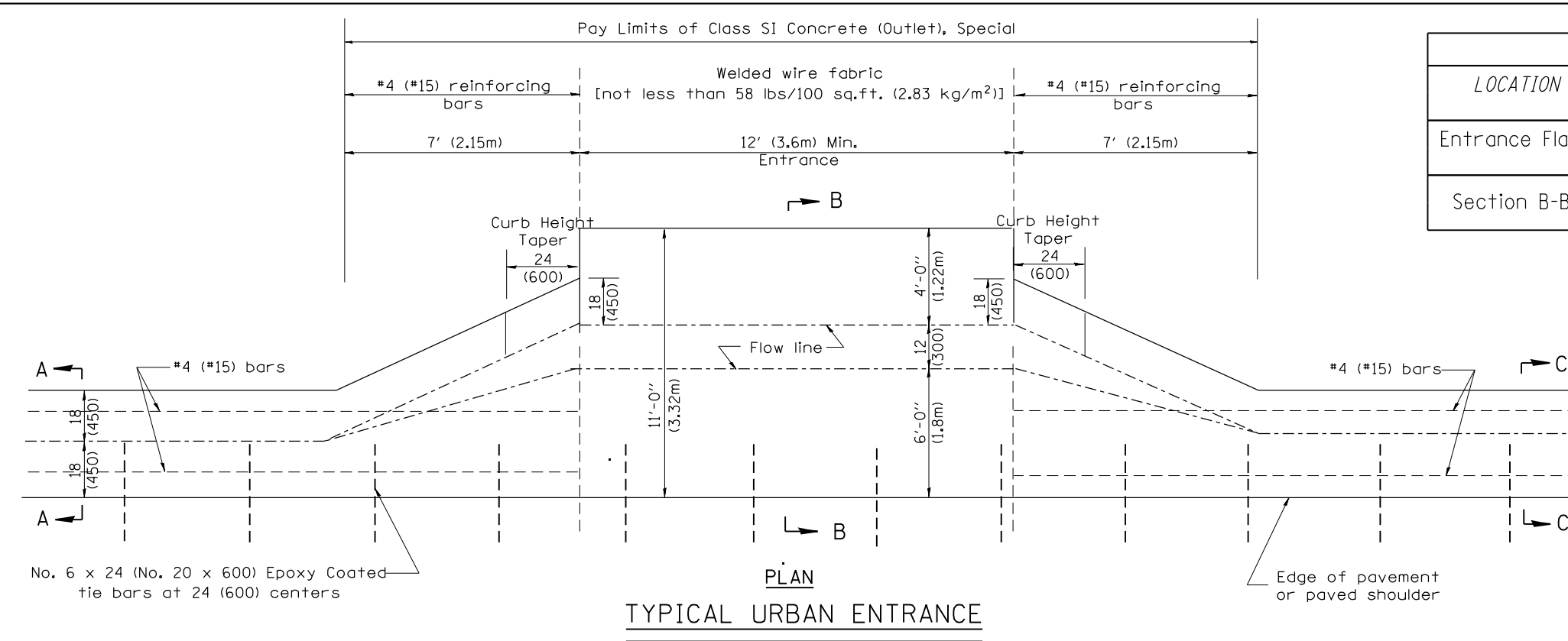


**QUANTITY**  
 Curtain Wall = 0.1 cu. yd. (0.08 m<sup>3</sup>) concrete.

**QUANTITIES**  
 CALC. BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

OUTLET

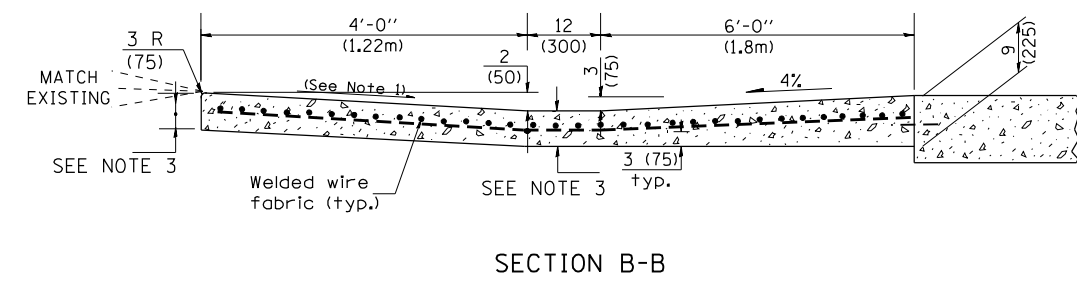
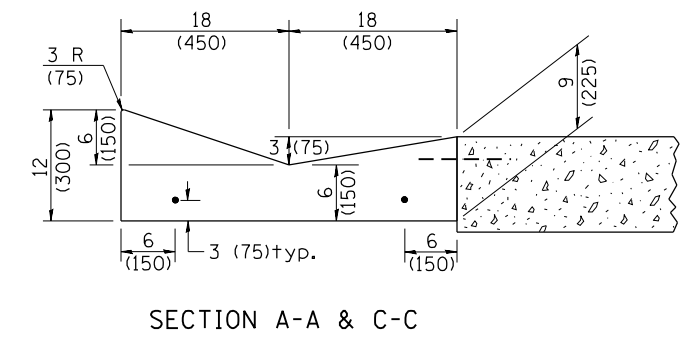
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1) BR-1	KNOX	152	142
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 68754	



QUANTITIES	
CALC. BY:	DATE:
CHECKED BY:	DATE:

QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

QUANTITY CALCULATION			
LOCATION	LENGTH	NON-COMMERCIAL 6 (150)	COMMERCIAL ENTRANCE 8 (200)
Entrance Flare	7 Ft (2.15 m) Urban 14 Ft (4.30 m) Rural	0.15 Cu Yd / Ft (0.37 Cu M / M)	0.18 Cu Yd / Ft (0.45 Cu M / M)
Section B-B	See Plans	0.23 Cu Yd / Ft (0.57 Cu M / M)	0.28 Cu Yd / Ft (0.70 Cu M / M)



- GENERAL NOTES
- Slope may be increased from 4% (min.) to 6% (max.) in order to match the existing.
  - The cross-slope is to be constructed as given in the plans from back turnout to where driveway matches existing.
  - For Non-Commercial Entrances the driveway thickness shall be 6 (150). For Commercial Entrances the driveway thickness shall be 8 (200).

All dimensions are in inches (millimeters) unless otherwise noted.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CONCRETE GUTTER, TYPE A, (SPECIAL)  
(INLET, OUTLET & ENTRANCE)

SHT. 3 OF 3  
CADD STD. 606101-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1) BR-1	KNOX	152	143

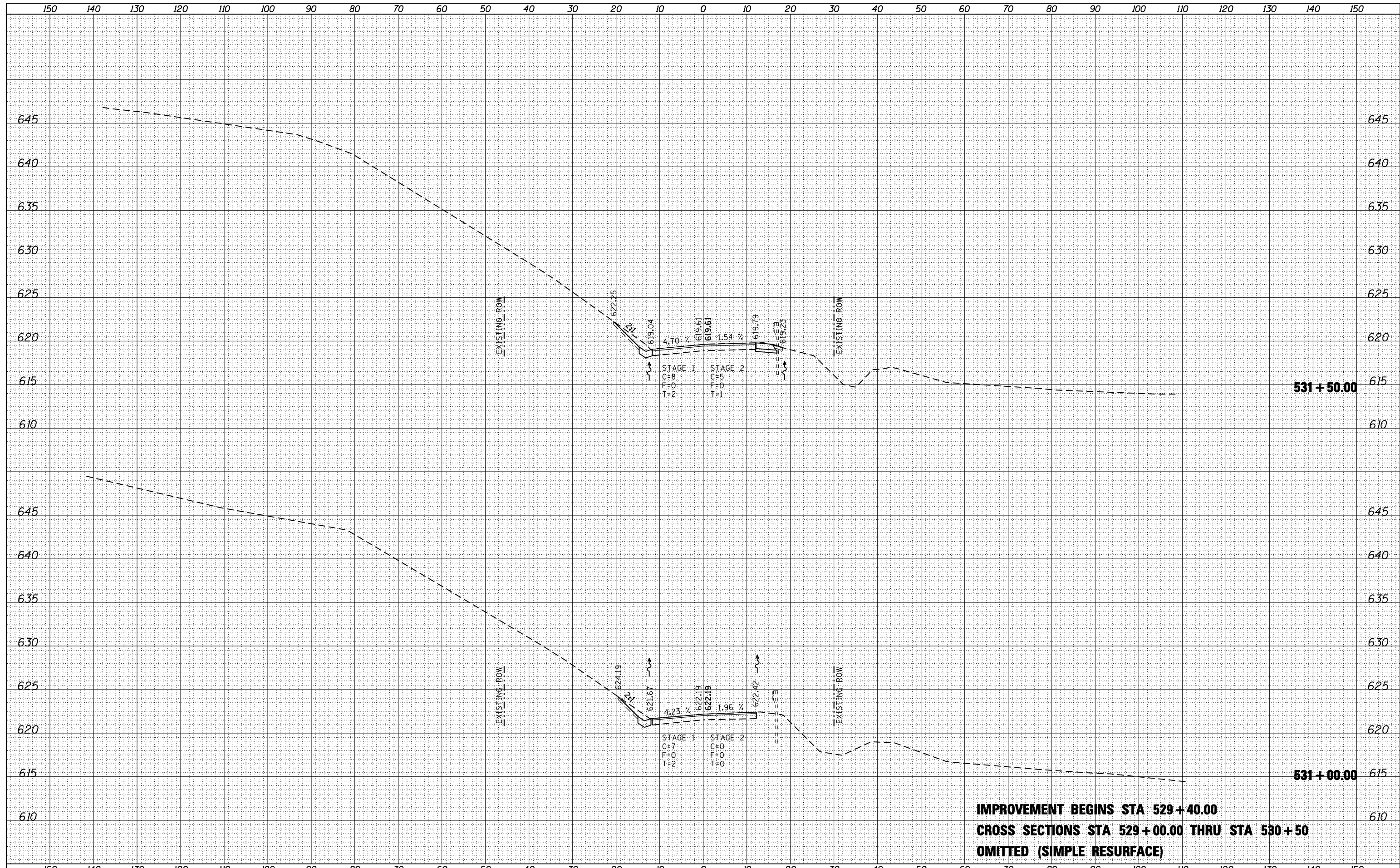
CONTRACT NO. 68754

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

NOT TO SCALE

BY	DATE

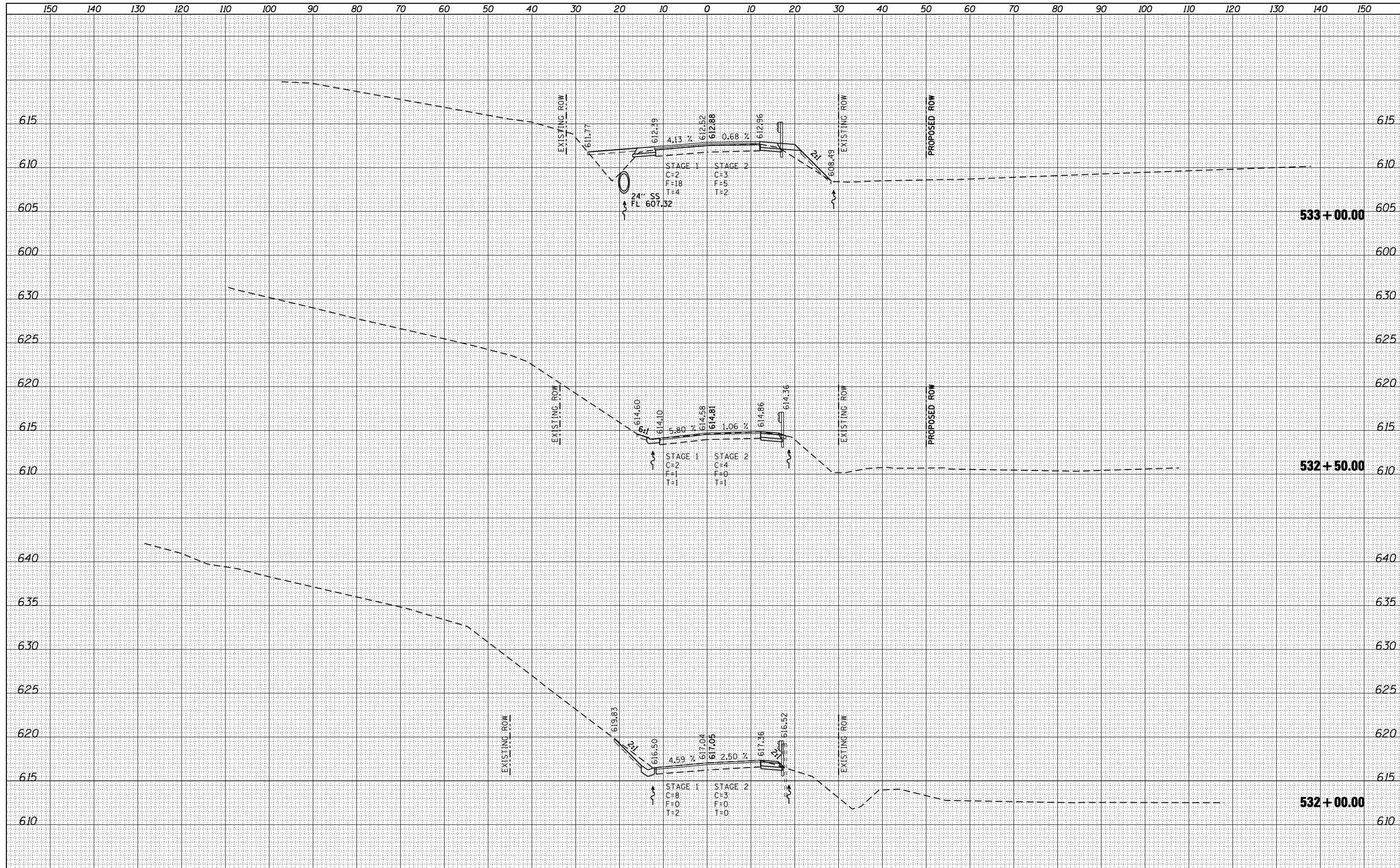
BY	DATE



**IMPROVEMENT BEGINS STA 529+40.00**  
**CROSS SECTIONS STA 529+00.00 THRU STA 530+50**  
**OMITTED (SIMPLE RESURFACE)**

DATE	
BY	
ORIGINAL SURVEY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
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TEMPLATE	
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FILE NAME = ...D468754-sht-144-152-xssht.dgn  
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PLOT SCALE = 20.000000' / IN.	DRAWN -	REVISED -
PLOT DATE = 10/13/2015	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

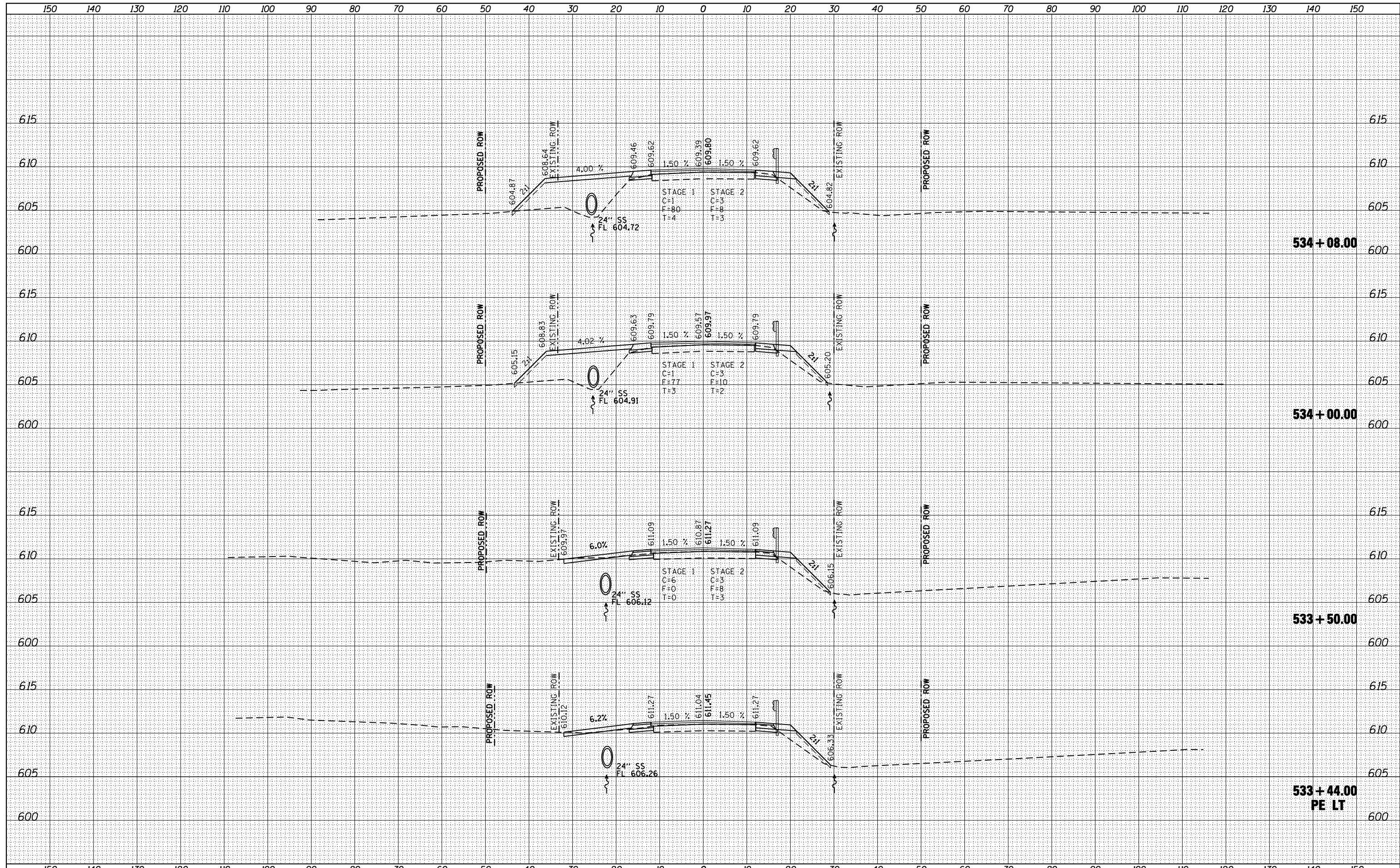
**CROSS SECTIONS  
 LITTLE HAW CREEK**

SCALE: SHEET 2 OF 9 SHEETS STA. 532+00.00 TO STA. 533+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1) BR-1	KNOX	152	145
			CONTRACT NO. 68754	
ILLINOIS FED. AID PROJECT				

DATE	
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NOTE BOOK	
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NOTE BOOK	
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PLOT SCALE = 20.000000' / IN.	DRAWN -	REVISED -
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	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

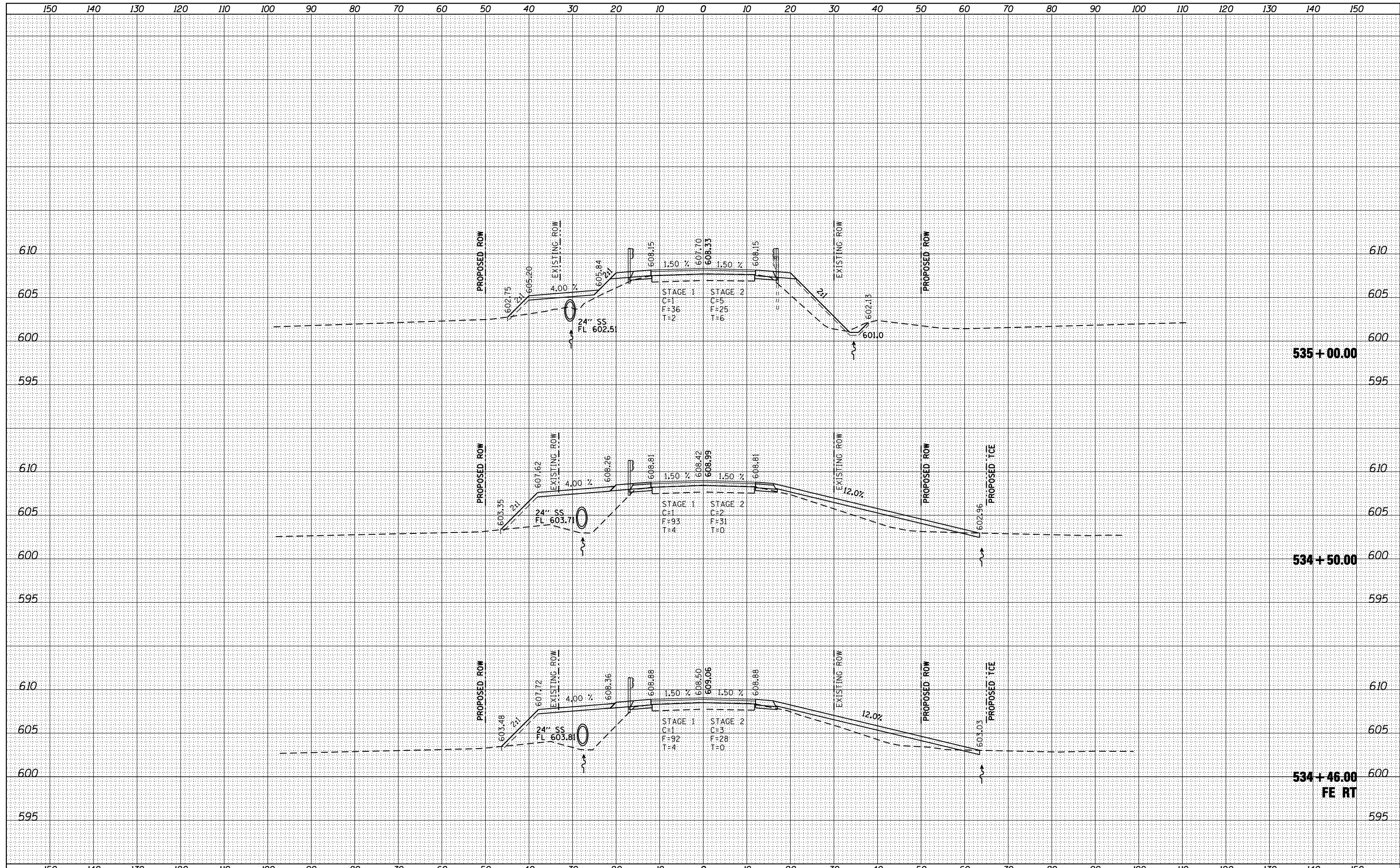
**CROSS SECTIONS  
LITTLE HAW CREEK**

SCALE: SHEET 3 OF 9 SHEETS STA. 533+44.00 TO STA. 534+08.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1) BR-1	KNOX	152	146
CONTRACT NO. 68754				
ILLINOIS FED. AID PROJECT				

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

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



FILE NAME = ...D468754-sh1-144-152-xssht.dgn  
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	DATE -	REVISD -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

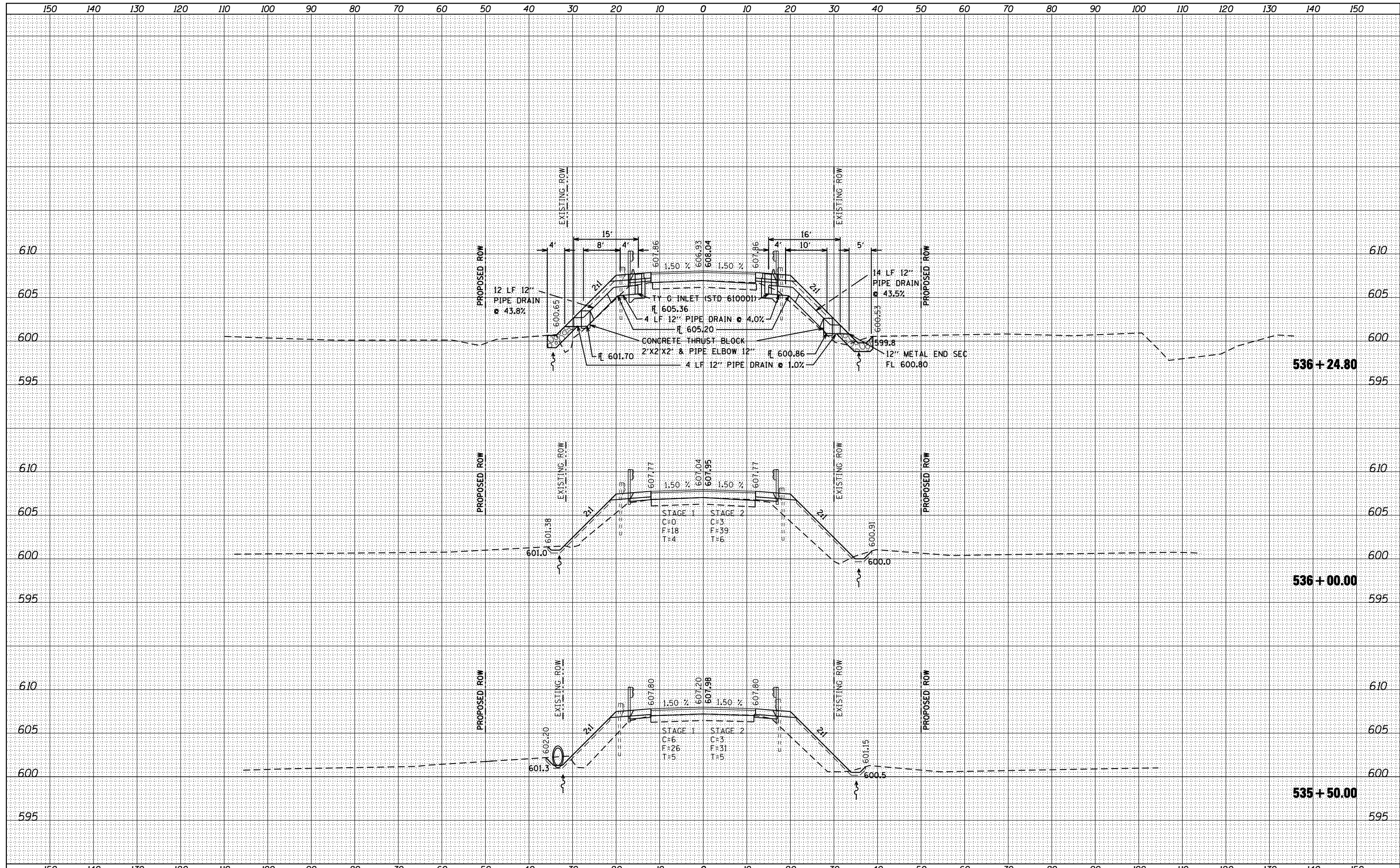
**CROSS SECTIONS  
 LITTLE HAW CREEK**

SCALE: SHEET 4 OF 9 SHEETS STA. 534+46.00 TO STA. 535+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1) BR-1	KNOX	152	147
CONTRACT NO. 68754			ILLINOIS FED. AID PROJECT	

BY	DATE

ORIGINAL SURVEY	SURVEYED
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
 LITTLE HAW CREEK**

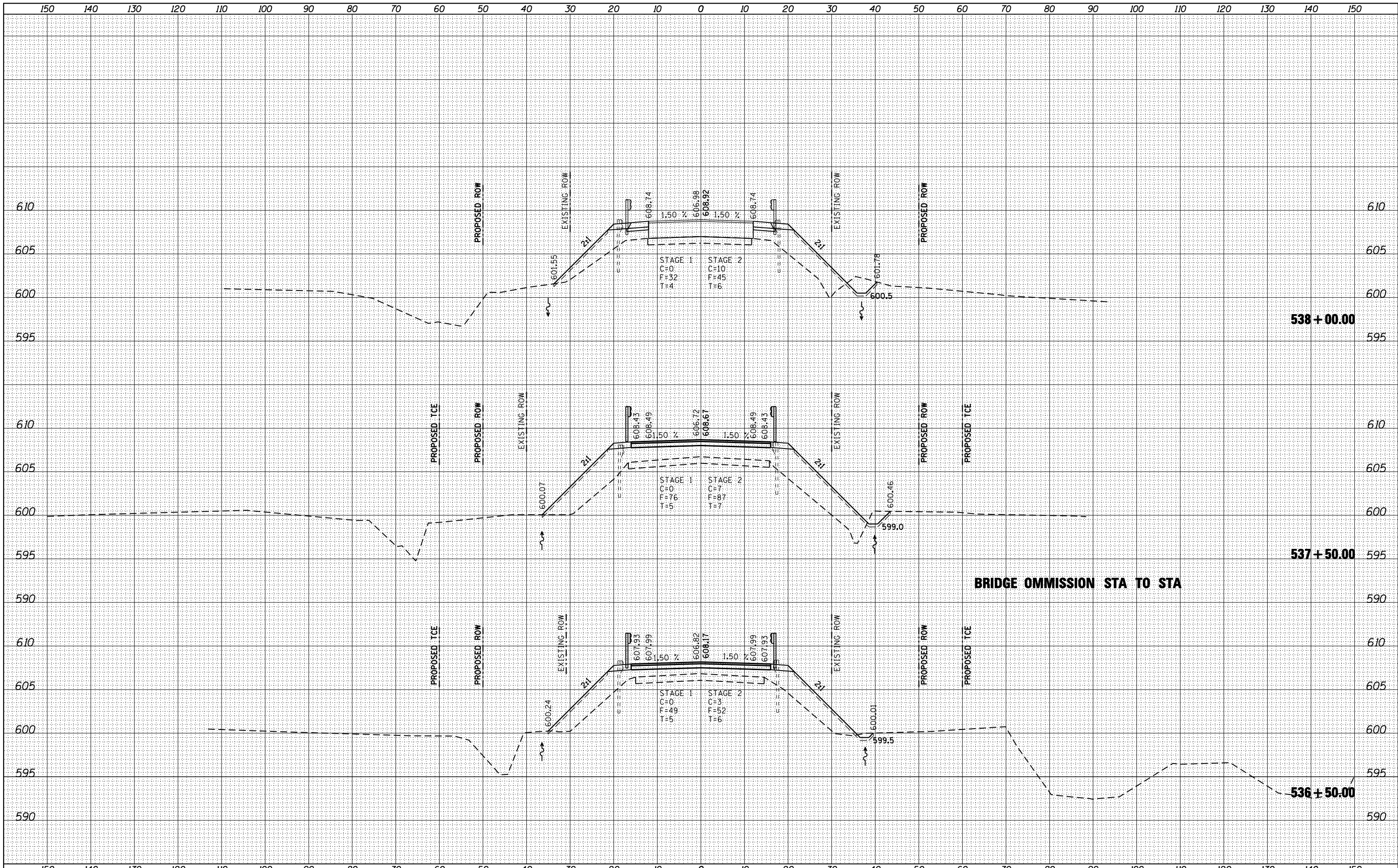
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1) BR-1	KNOX	152	148
CONTRACT NO. 68754			ILLINOIS FED. AID PROJECT	



BY	DATE
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 CB PROJECT NO 09024-8

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PLOT DATE = 10/13/2015	CHECKED -	REVISED -
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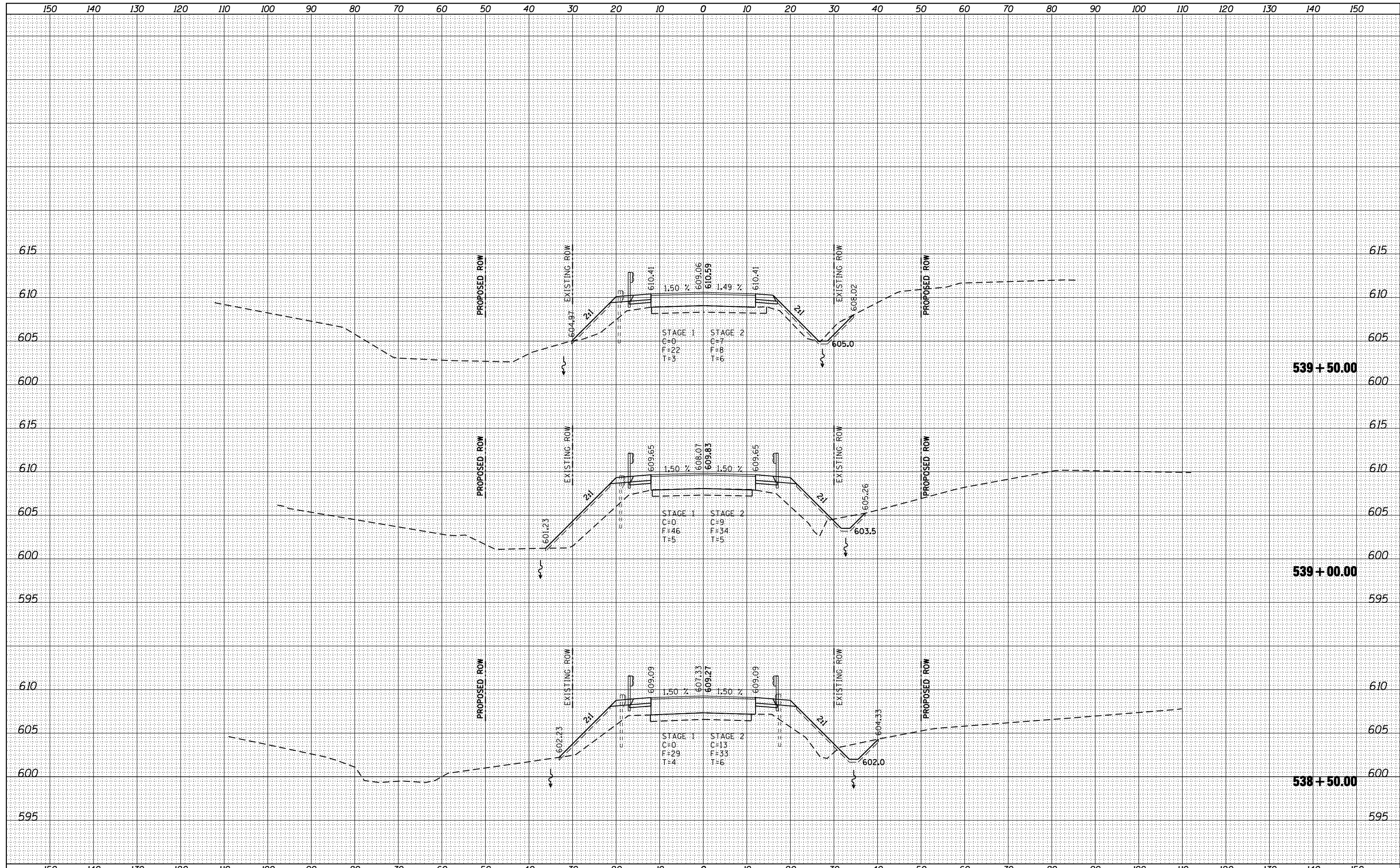
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
LITTLE HAW CREEK**  
 SCALE: SHEET 6 OF 9 SHEETS STA. 536+50.00 TO STA. 538+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1) BR-1	KNOX	152	149
CONTRACT NO. 68754			ILLINOIS FED. AID PROJECT	

BY	DATE
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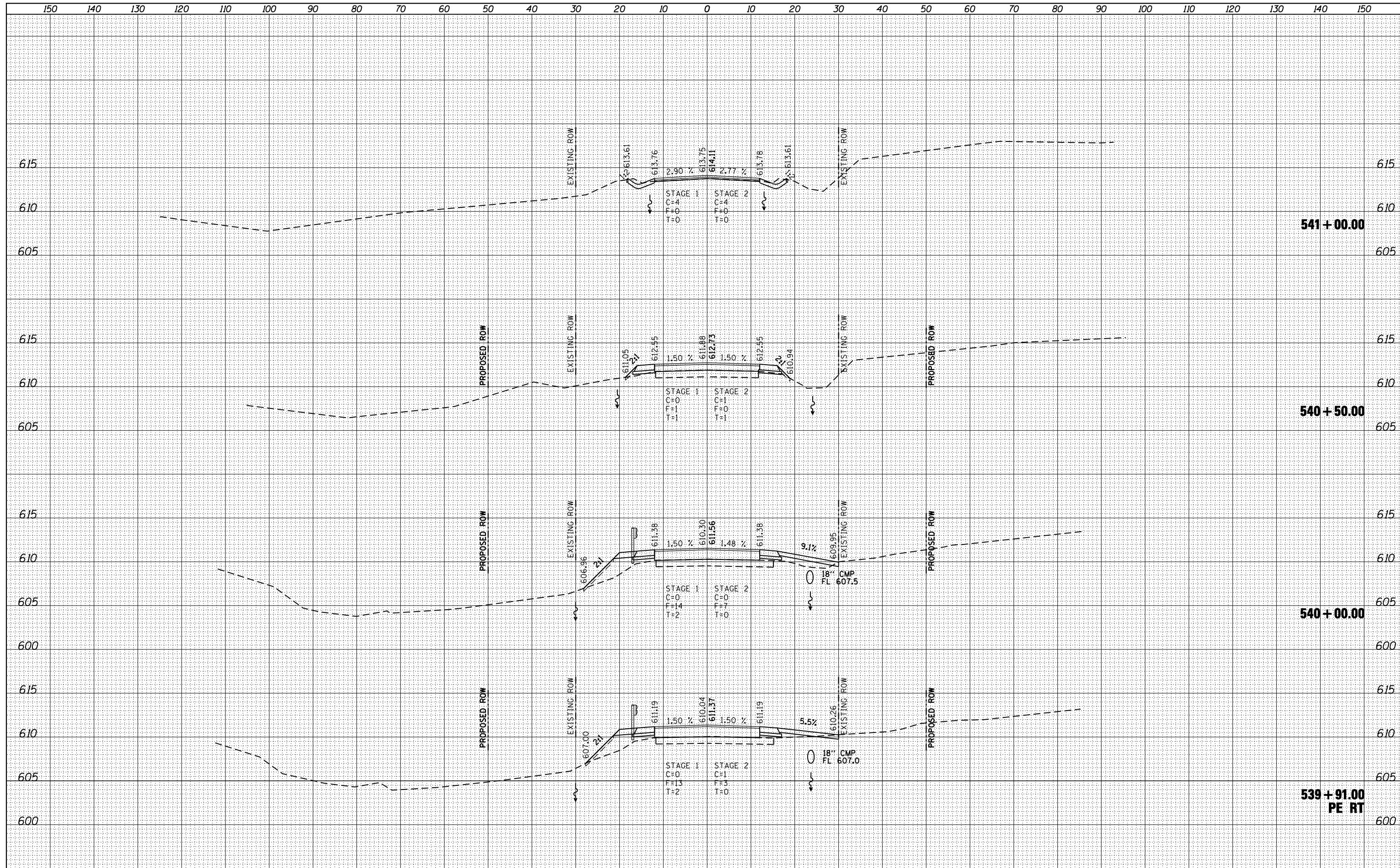
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FILE NAME =	USER NAME = CFC...	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS</b> <b>LITTLE HAW CREEK</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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Default		CHECKED -	REVISED -		CONTRACT NO. 68754							
CB PROJECT NO 09024-8		DATE -	REVISED -		SCALE:	SHEET 7 OF 9 SHEETS	STA. 538+50.00 TO STA. 539+50.00	ILLINOIS FED. AID PROJECT				

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
SURVEYED	
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NOTE BOOK	
AREAS CHECKED	
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FILE NAME = ...D468754-sht-144-152-xssht.dgn  
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USER NAME = CFC...	DESIGNED -	REVISED -
PLOT SCALE = 20.000000' / IN.	DRAWN -	REVISED -
PLOT DATE = 10/13/2015	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
 LITTLE HAW CREEK**  
 SCALE: SHEET 8 OF 9 SHEETS STA. 539+91.00 TO STA. 541+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
626	42-(B,B-1) BR-1	KNOX	152	151
CONTRACT NO. 68754			ILLINOIS FED. AID PROJECT	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
NO.	

DATE	
BY	
SURVEYED	
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AREAS	
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