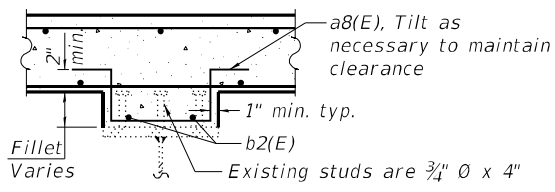


**MINIMUM BAR LAP**  
 #4 bar = 2'-5"  
 #5 bar = 3'-6"



**DEEP FILLET SECTION**

**PLAN**

\* Order a(E), a1(E) & a2(E) bars full length.  
 Cut to fit skew and use remainder of bars in opposite end.

**Notes:**  
 See sheet 20 of 36 for superstructure details and Bill of Material.  
 Bars indicated thus 95x3-#5 etc. indicates 95 lines of bars with 3 lengths per line.

MODEL: Default  
 FILE NAME: W:\191+134\_IDOT\_IL\_53 at IL 56\CADD\_Sheets\Structural\01B\_Bridge Deck Replacement\160P75\_SHT-15\_Superstructure Plan.dgn



USER NAME =	DESIGNED - TJJ	REVISED -
PLOT SCALE =	CHECKED - JJI	REVISED -
PLOT DATE =	DRAWN - TJJ	REVISED -
	CHECKED - JJI	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE PLAN  
 STRUCTURE NO. 022-0057**

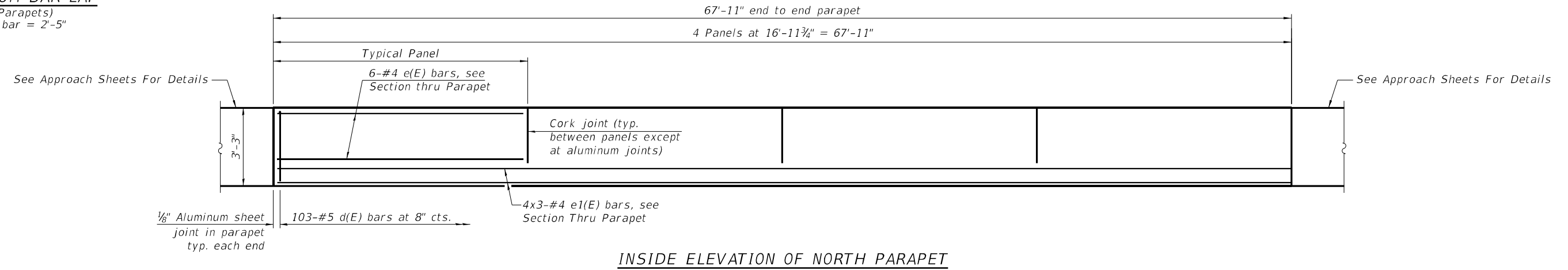
SHEET 15 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	301
CONTRACT NO. 60P75				

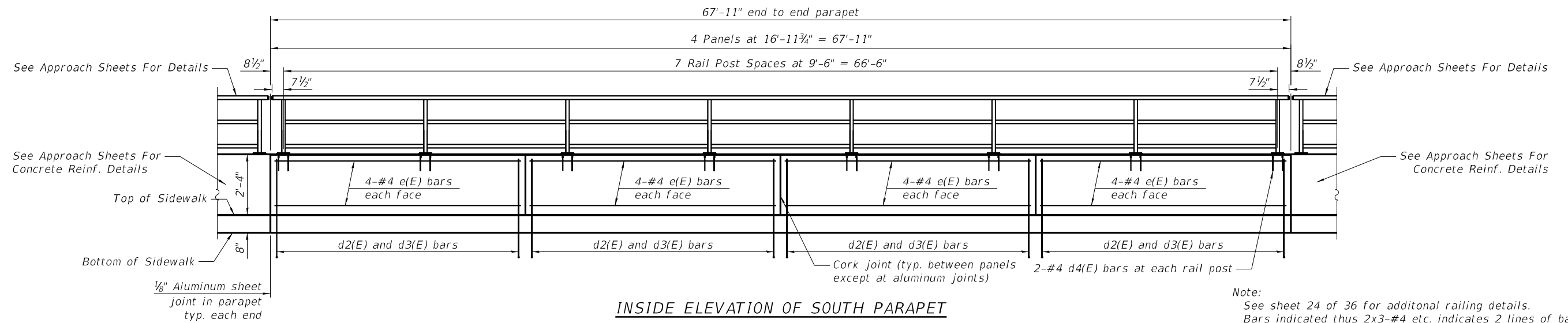
ILLINOIS FED. AID PROJECT



**MINIMUM BAR LAP**  
(Parapets)  
#4 bar = 2'-5"

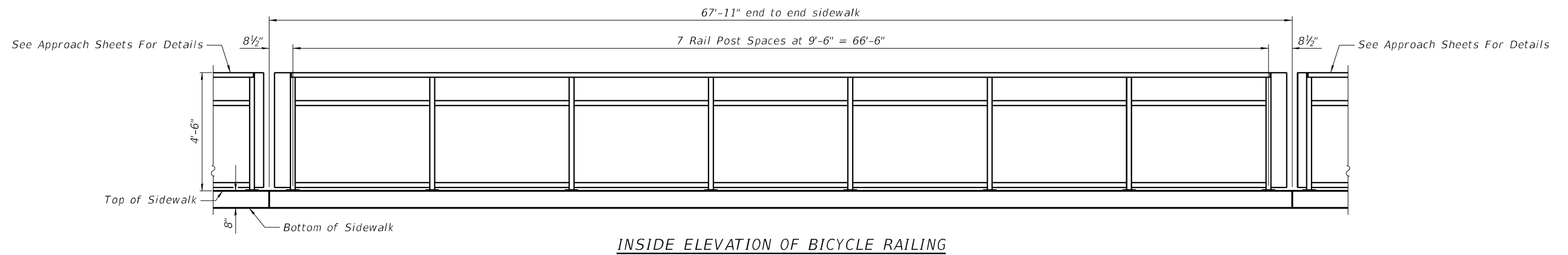


**INSIDE ELEVATION OF NORTH PARAPET**



**INSIDE ELEVATION OF SOUTH PARAPET**

Note:  
See sheet 24 of 36 for additional railing details.  
Bars indicated thus 2x3-#4 etc. indicates 2 lines of bars with 3 lengths per line.



**INSIDE ELEVATION OF BICYCLE RAILING**

MODEL: Default  
FILE NAME: W:\191+134\_IDOT\_IL\_53 at IL 56\CADD\_Sheets\Structural\01B\_Bridge Deck Replacement\160P75\_SHT-17\_Parapet\_Elevations.dgn



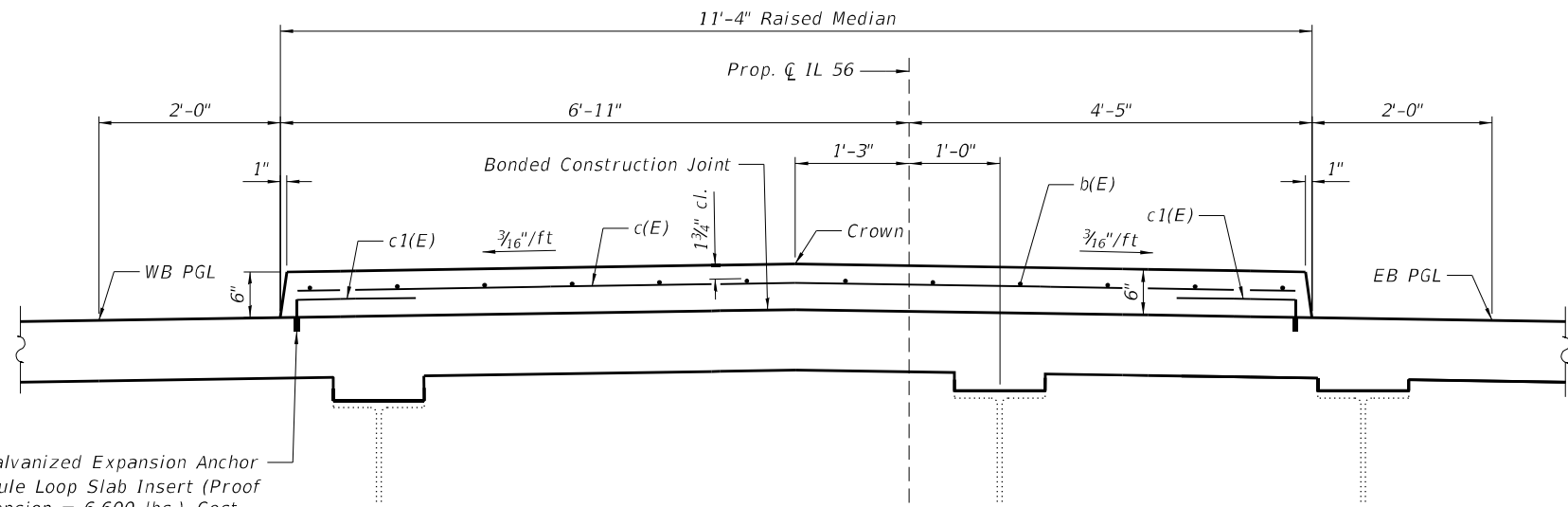
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	CHECKED - JJI	REVISED -
PLOT SCALE =	DRAWN - TJJ	REVISED -
PLOT DATE =	CHECKED - JJI	REVISED -

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PARAPET ELEVATIONS  
STRUCTURE NO. 022-0057

SHEET 17 OF 36 SHEETS

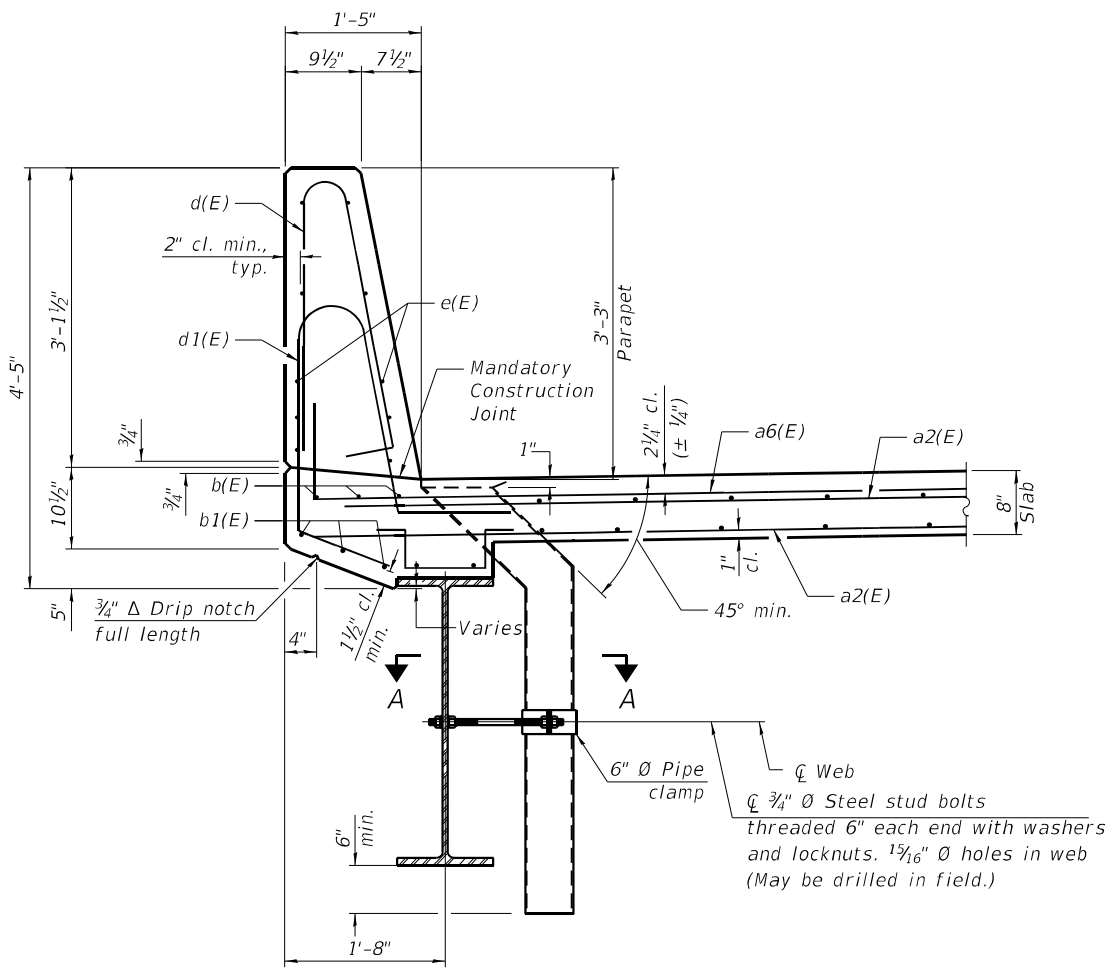
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4		529	303
			CONTRACT NO. 60P75	
ILLINOIS FED. AID PROJECT				



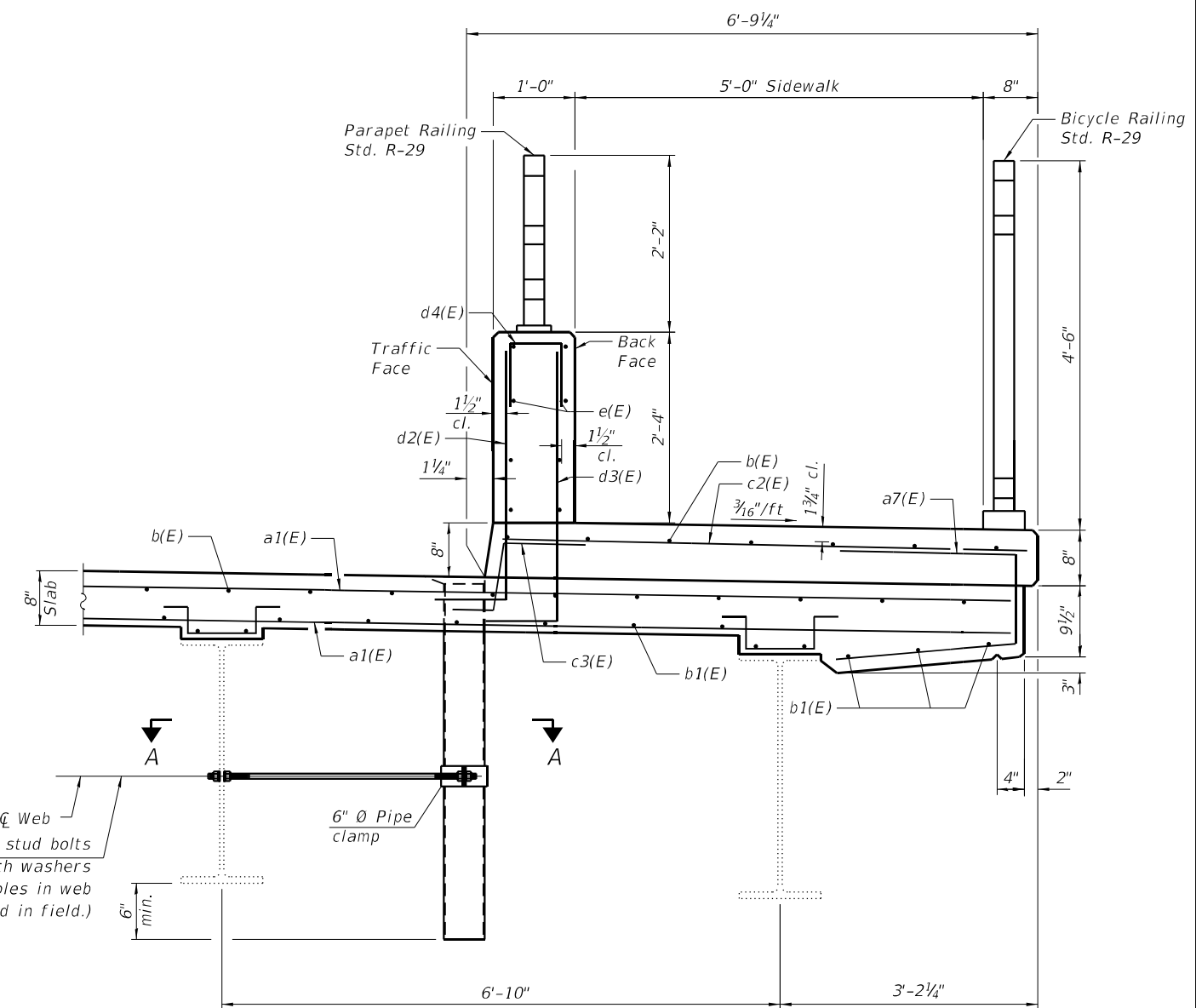
3/4" Ø Galvanized Expansion Anchor or ferrule Loop Slab Insert (Proof Load Tension = 6,600 lbs.). Cost included with Reinforcement Bars. Epoxy Coated.

**SECTION THRU MEDIAN**  
(Facing East)  
(Deck Reinforcement Omitted for Clarity)

Notes:  
Drains shall be located clear of all diaphragms.  
For Section A-A see Sheet 20 of 36.



**SECTION THRU NORTH PARAPET**  
(Facing East)



**SECTION THRU SOUTH PARAPET & SIDEWALK**  
(Facing East)

MODEL: Default  
FILE NAME: W:\191+134\_IDOT\_IL\_53 at IL 56\CADD\_Sheets\Structural\01B\_Bridge Deck Replacement\160P75\_SHT-18\_Parapet and Median Sections.dgn



USER NAME =	DESIGNED - TJJ	REVISED -
PLOT SCALE =	CHECKED - JJI	REVISED -
PLOT DATE =	DRAWN - TJJ	REVISED -
	CHECKED - JJI	REVISED -

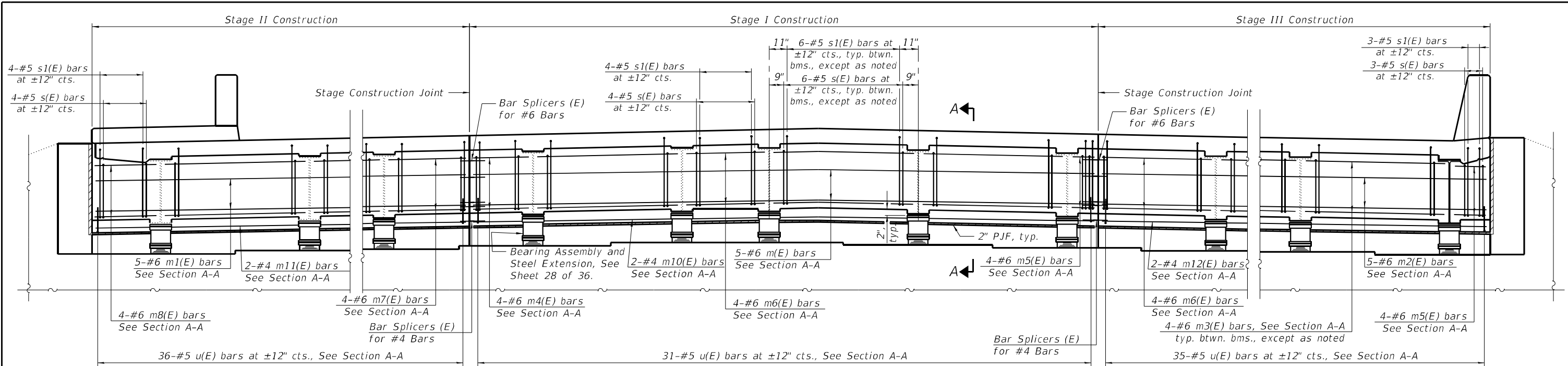
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**PARAPET AND MEDIAN SECTIONS**  
**STRUCTURE NO. 022-0057**

SHEET 18 OF 36 SHEETS

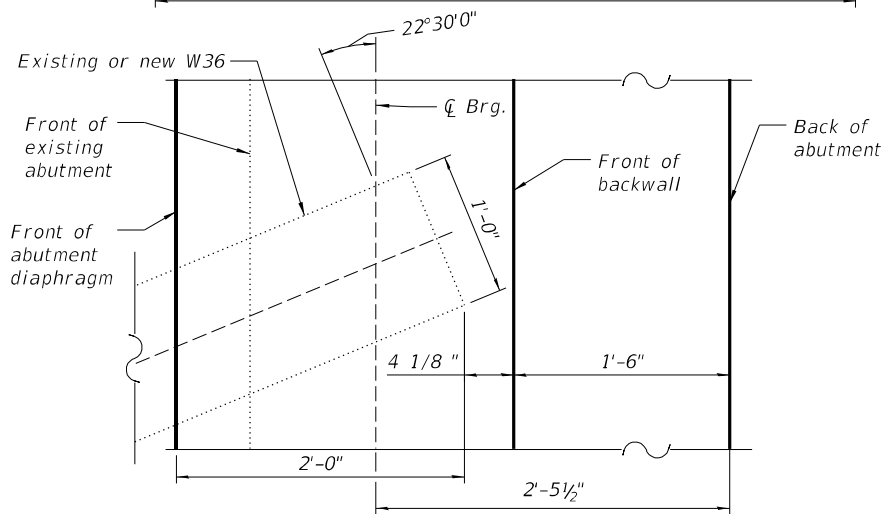
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	304
CONTRACT NO. 60P75				

ILLINOIS FED. AID PROJECT



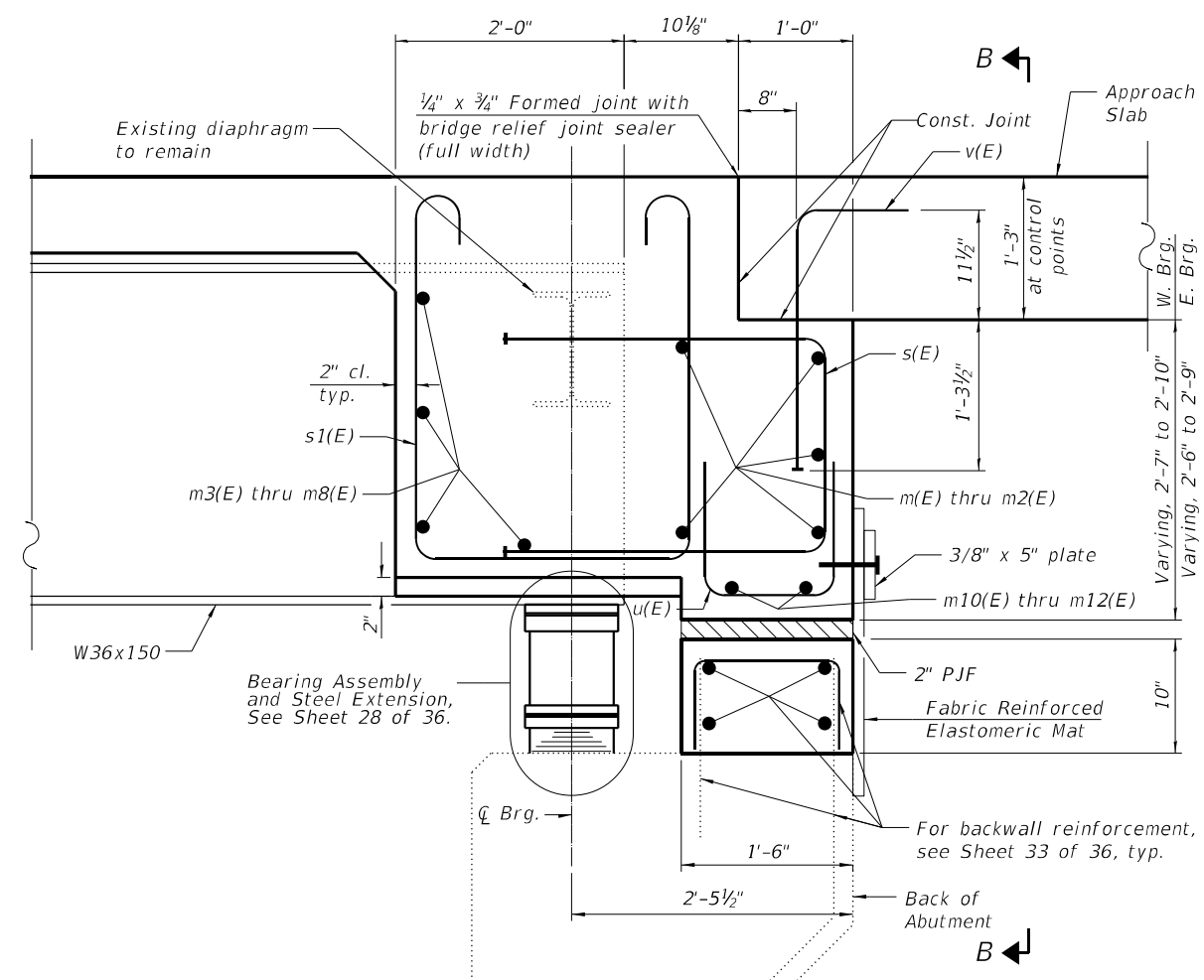
**DIAPHRAGM AT ABUTMENT**

(Looking West)  
(West Abutment Shown, East Abutment Similar)



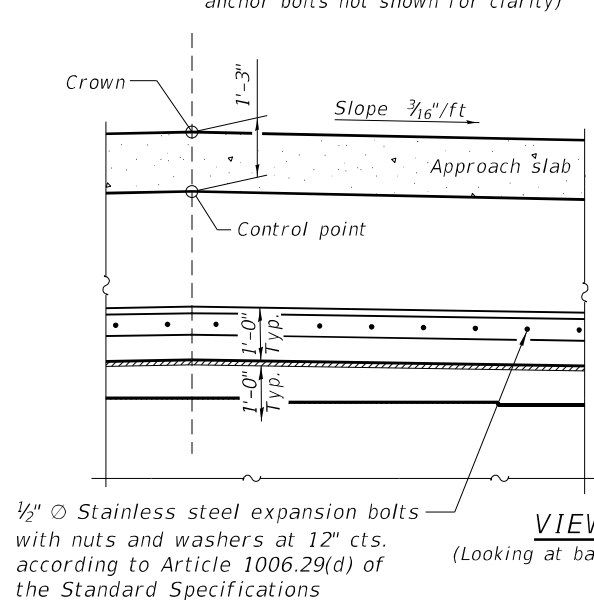
**TYPICAL PLAN AT ABUTMENT**  
(Showing beam orientation, bearings and anchor bolts not shown for clarity)

**Notes:**  
Reinforcement bars in diaphragm are billed with superstructure on sheet 20 of 36.  
Concrete in diaphragm is included with Concrete Superstructure on sheet 20 of 36.  
For details of bars s(E), s1(E) and v(E) see sheet 20 of 36.  
The s(E) and s1(E) bars shall be placed parallel to the beams.  
Spacing for these bars shall be at right angles to the beams.  
The approach slab seat shall have a constant slope determined from the control points shown.  
For layout and details of bearings, steel extensions, side retainers, and anchor bolts, see sheet 28 of 36.  
Beams shall be braced for stability during erection and remain braced until deck is poured and cured.

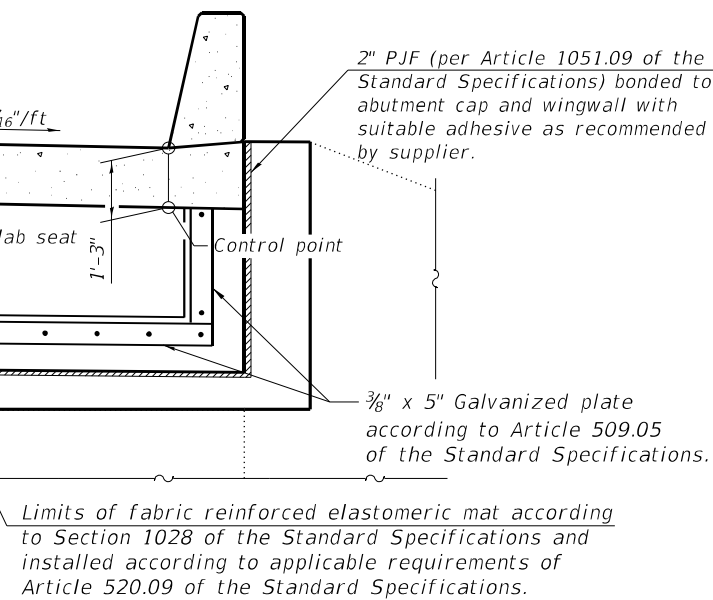


**SECTION A-A**

(at Rt. L's)  
(West Abutment Shown, East Abutment Similar)



**VIEW B-B**  
(Looking at back of abutment)



MODEL: Default  
FILE NAME: W:\191+134\_IDOT\_IL\_53 at IL 56\CADD\_Sheets\Structural\018\_Bridge Deck Replacement\160P75\_SHT-19\_Abutment\_Diaphragm.dgn



USER NAME =	DESIGNED - TJJ	REVISED -
PLOT SCALE =	CHECKED - JJI	REVISED -
PLOT DATE =	DRAWN - TJJ	REVISED -
	CHECKED - JJI	REVISED -

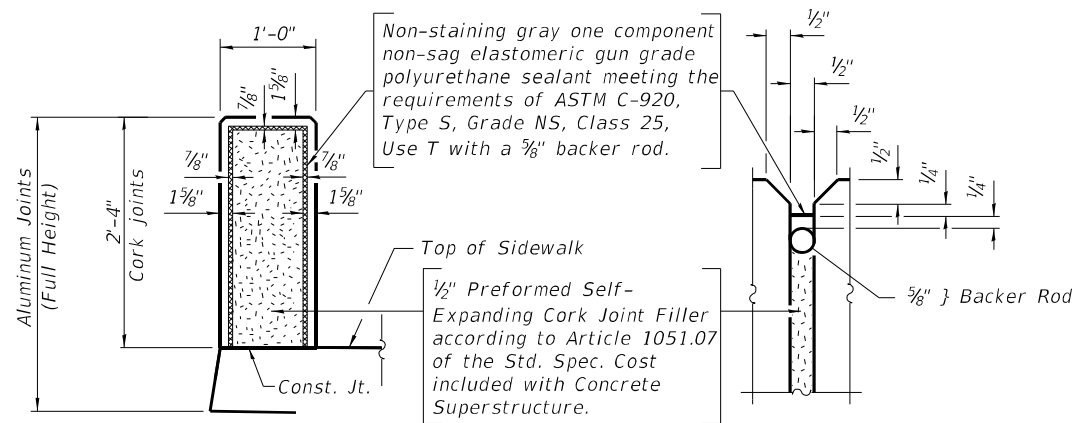
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ABUTMENT DIAPHRAGM  
STRUCTURE NO. 022-0057**

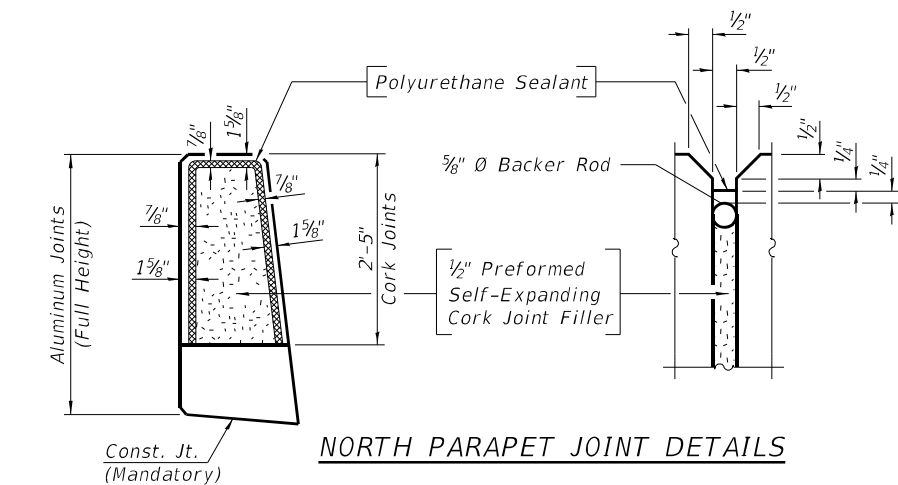
SHEET 19 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	305
CONTRACT NO. 60P75				

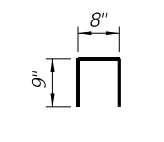
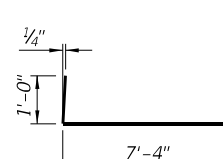
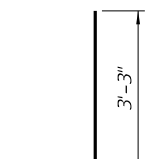
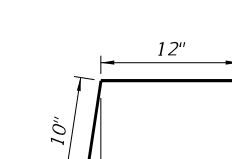
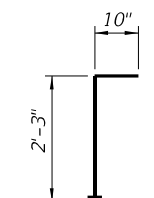
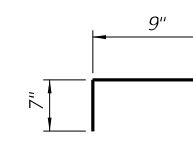
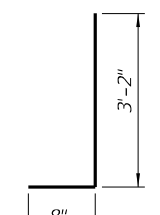
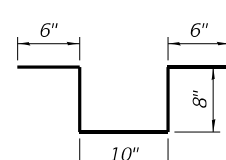
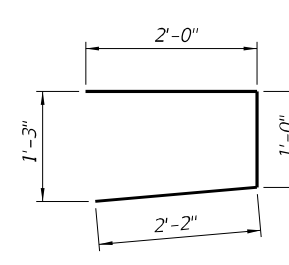
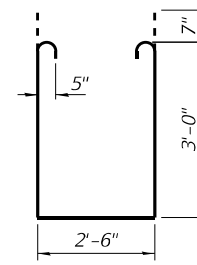
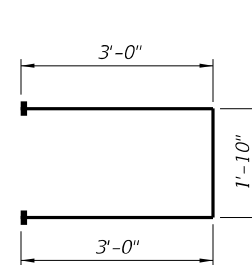
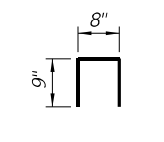
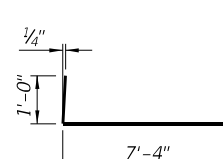
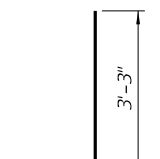
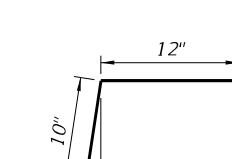
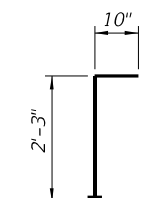
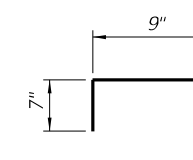
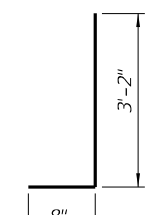
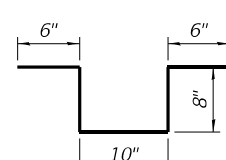
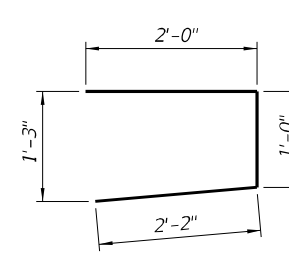
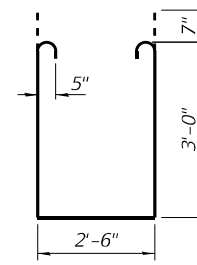
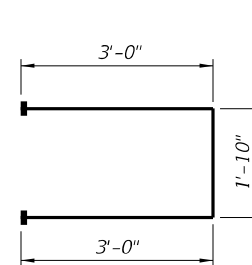
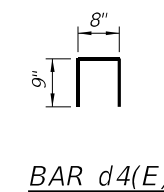
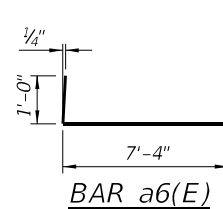
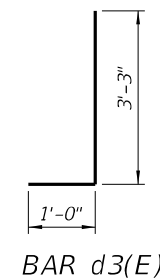
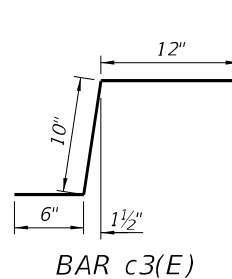
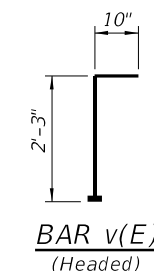
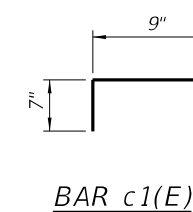
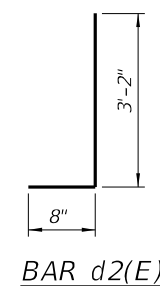
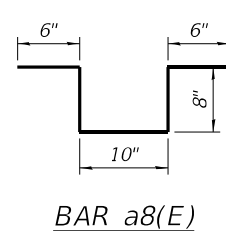
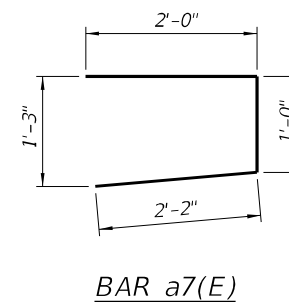
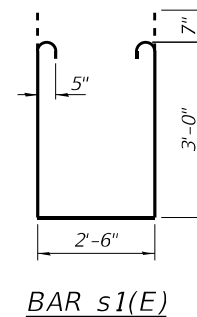
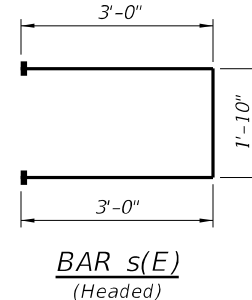
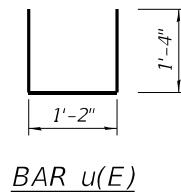
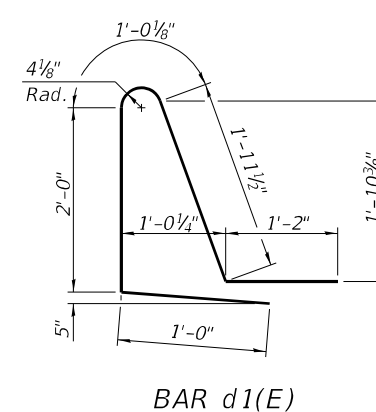
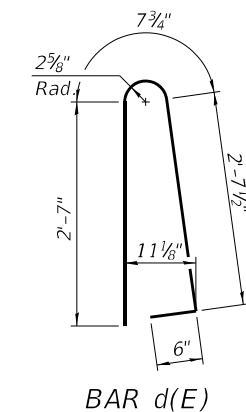
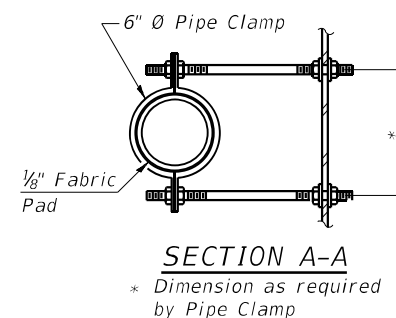
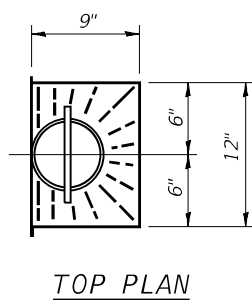
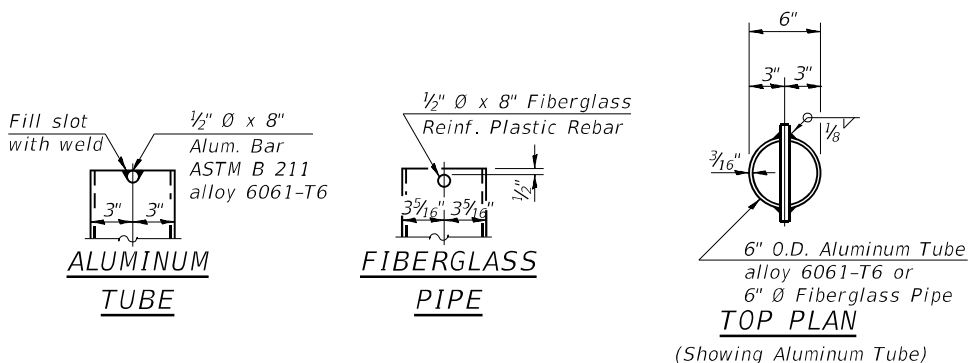
ILLINOIS FED. AID PROJECT



SOUTH PARAPET JOINT DETAILS



NORTH PARAPET JOINT DETAILS



SUPERSTRUCTURE  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	229	#5	29'-7"	—
a1(E)	229	#5	34'-0"	—
a2(E)	229	#5	33'-2"	—
a3(E)	4	#5	31'-11"	—
a4(E)	4	#5	36'-9"	—
a5(E)	4	#5	35'-7"	—
a6(E)	137	#6	8'-4"	—
a7(E)	92	#5	5'-2"	—
a8(E)	960	#4	3'-2"	—
b(E)	360	#5	25'-2"	—
b1(E)	352	#5	19'-9"	—
b2(E)	90	#4	24'-5"	—
c(E)	69	#5	11'-9"	—
c1(E)	138	#5	1'-4"	—
c2(E)	69	#5	6'-10"	—
c3(E)	69	#5	2'-4"	—
d(E)	103	#5	6'-4"	—
d1(E)	103	#5	7'-2"	—
d2(E)	69	#6	3'-10"	—
d3(E)	69	#4	4'-3"	—
d4(E)	16	#4	2'-2"	—
e(E)	56	#4	16'-8"	—
e1(E)	12	#4	24'-5"	—
m(E)	10	#6	29'-6"	—
m1(E)	10	#6	34'-1"	—
m2(E)	10	#6	33'-1"	—
m3(E)	88	#6	6'-6"	—
m4(E)	8	#6	2'-1"	—
m5(E)	16	#6	2'-7"	—
m6(E)	16	#6	3'-7"	—
m7(E)	8	#6	4'-1"	—
m8(E)	8	#6	1'-4"	—
m10(E)	4	#4	29'-6"	—
m11(E)	4	#4	34'-1"	—
m12(E)	4	#4	33'-1"	—
s(E)	164	#5	7'-10"	—
s1(E)	164	#5	9'-8"	—
u(E)	204	#4	3'-10"	—
v(E)	204	#5	3'-1"	—
Reinforcement Bars, Epoxy Coated		Lbs.		57,530
Concrete Superstructure		Cu. Yds.		300.8
Bridge Deck Grooving		Sq. Yd.		560
Protective Coat		Sq. Yd.		800

MODEL: Default  
FILE NAME: W:\191+134\_IDOT\_IL\_53 at IL 56\CADD\_Sheets\Structural\01B\_Bridge Deck Replacement\160P75\_SHT-20\_Superstructure\_Details.dgn



USER NAME =	DESIGNED - TJJ	REVISED -
PLOT SCALE =	CHECKED - JJI	REVISED -
PLOT DATE =	DRAWN - TJJ	REVISED -
	CHECKED - JJI	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS  
STRUCTURE NO. 022-0057

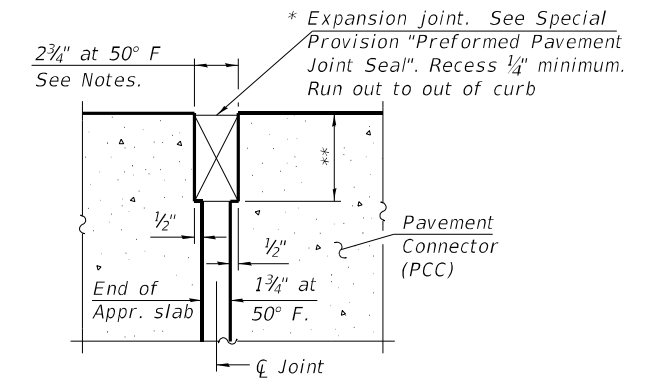
SHEET 20 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	306
CONTRACT NO. 60P75				
ILLINOIS FED. AID PROJECT				

Notes:  
 See sheet 23 of 36 for Sections B-B & C-C.  
 a20(E) thru a26(E) bar spacings measured along  $\bar{C}$  Rdwy.  
 The joint opening shall be determined per article 520.04 of the Standard Specifications 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 1/2" for installation purposes.  
 See Sheet 20 of 36 for the c1(E), d2(E), and d3(E) bar bending details.

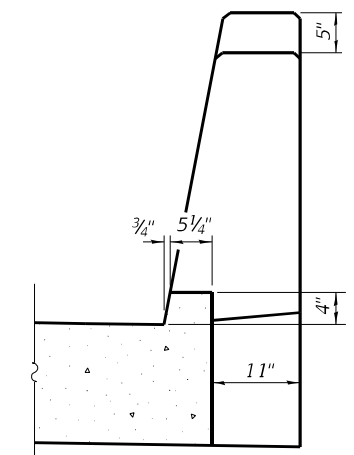
**TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING**

Point	West Approach		East Approach	
	Top	Bottom	Top	Bottom
A	681.73	680.90	681.48	680.65
B	682.41	681.57	682.35	681.51
C	681.51	680.67	681.65	680.82
D	681.70	680.87	681.41	680.58
E	682.36	681.53	682.29	681.46
F	681.44	680.61	681.61	680.78

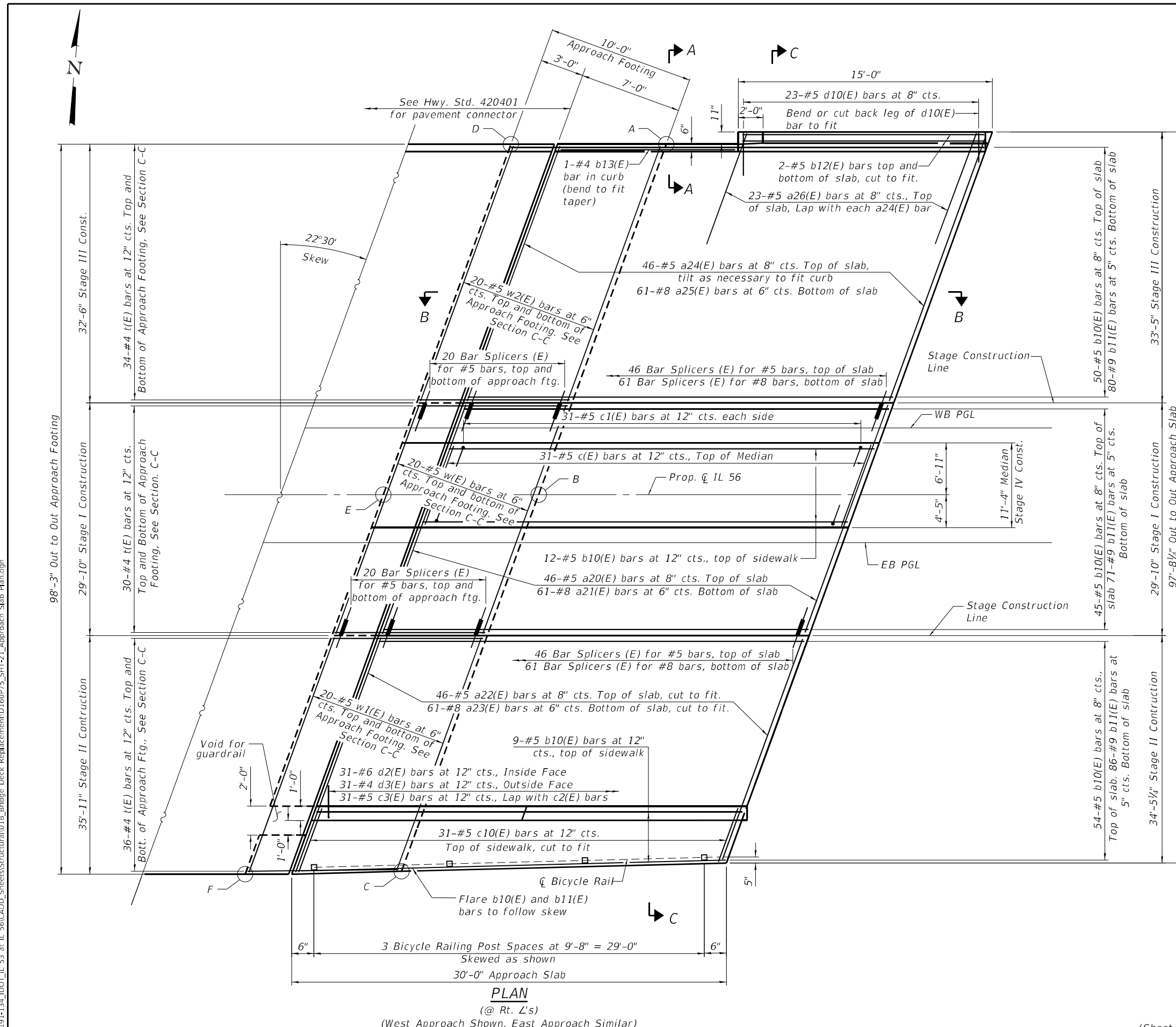


**DETAIL A**  
 (@ Rt. L's)

\* Cost included with Concrete Superstructure (Approach Slab).  
 \*\* Per manufacturer recommendations



**VIEW A-A**



**PLAN**  
 (@ Rt. L's)  
 (West Approach Shown, East Approach Similar)

(Sheet 1 of 3)

MODEL: Default  
 FILE NAME: WA\191+134\_IDOT\_IL\_53 at IL 56\CADD\_Sheets\Structural\1B\_Bridge Deck Replacement\160P75\_SHT-21\_Approach Slab Plan.dgn



USER NAME =	DESIGNED - TJJ	REVISED -
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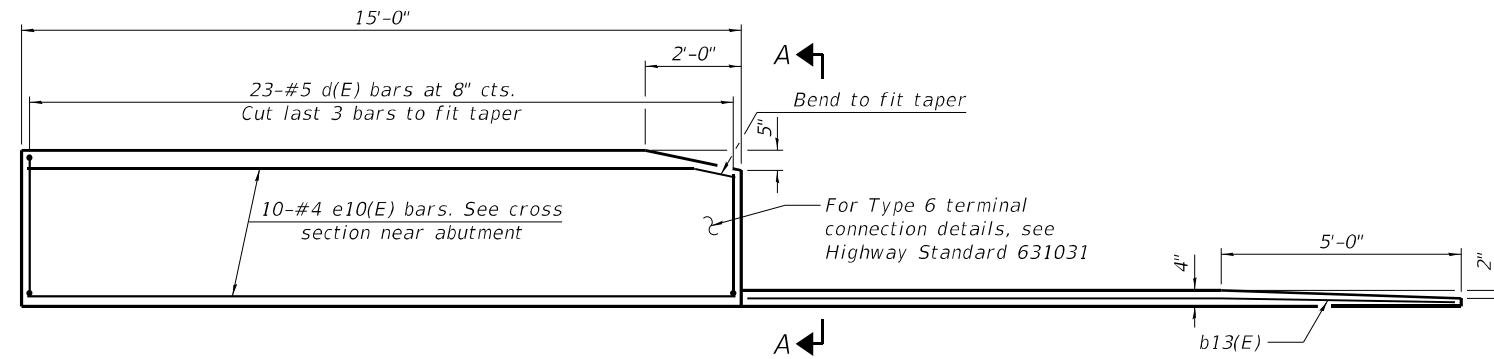
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS**  
**STRUCTURE NO. 022-0057**

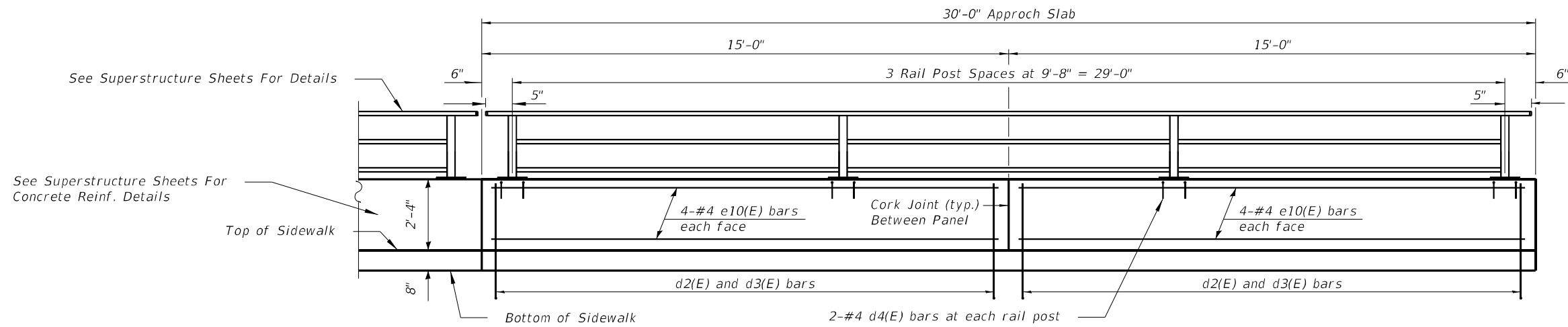
SHEET 21 OF 36 SHEETS

F.A.P. RTE. = 365	SECTION = (56&57)R-4	COUNTY = DuPAGE	TOTAL SHEETS = 529	SHEET NO. = 307
CONTRACT NO. 60P75			ILLINOIS FED. AID PROJECT	

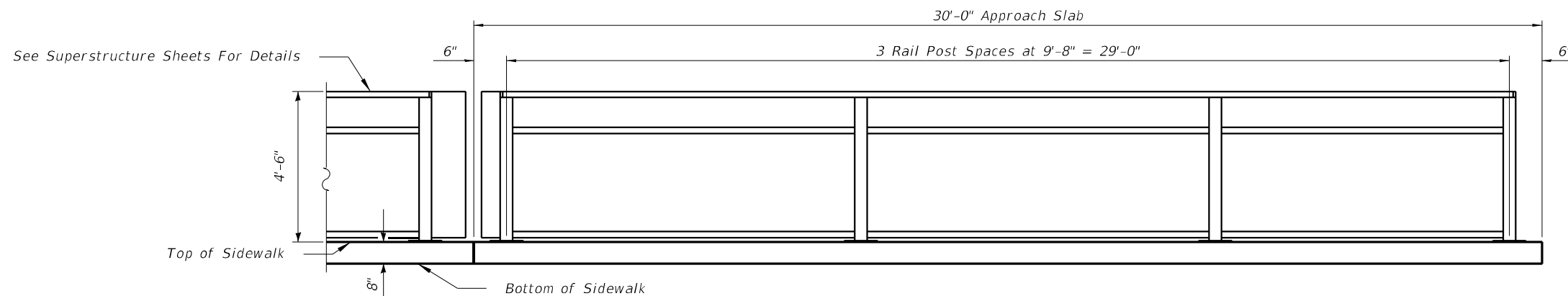
**MINIMUM BAR LAP**  
 (Parapets)  
 #4 bar = 2'-5"



**INSIDE ELEVATION OF NORTH PARAPET AND CURB**  
 (Looking North)  
 (East Approach Shown, West Approach Similar)



**INSIDE ELEVATION OF SOUTH PARAPET**  
 (Looking North)  
 (East Approach Shown, West Approach Similar)



**INSIDE ELEVATION OF BICYCLE RAILING**  
 (Looking North)  
 (East Approach Shown, West Approach Similar)

(Sheet 2 of 3)

MODEL: Default  
 FILE NAME: W:\191+134\_IDOT\_IL\_53 at IL 56\CADD\_Sheets\Structural\01B\_Bridge Deck Replacement\160P75\_SHT-22\_Approach Slab Parapet Elevations.dgn



USER NAME =	DESIGNED - TJJ	REVISED -
	CHECKED - JJI	REVISED -
PLOT SCALE =	DRAWN - TJJ	REVISED -
PLOT DATE =	CHECKED - JJI	REVISED -

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

**BRIDGE APPROACH SLAB DETAILS**  
**STRUCTURE NO. 022-0057**

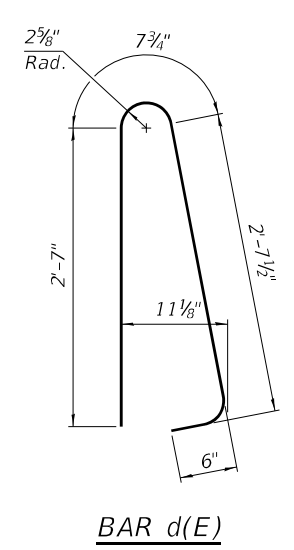
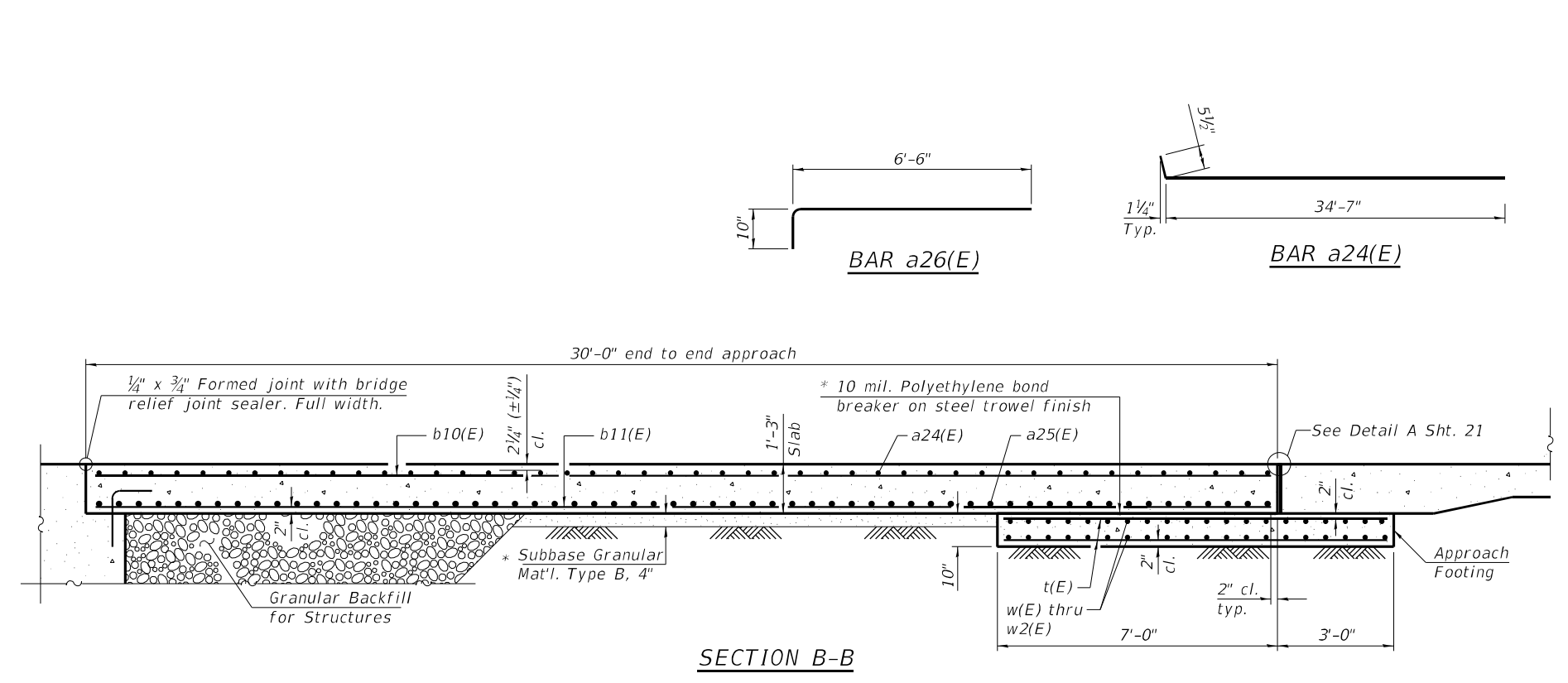
SHEET 22 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4		529	308
CONTRACT NO. 60P75				

ILLINOIS FED. AID PROJECT

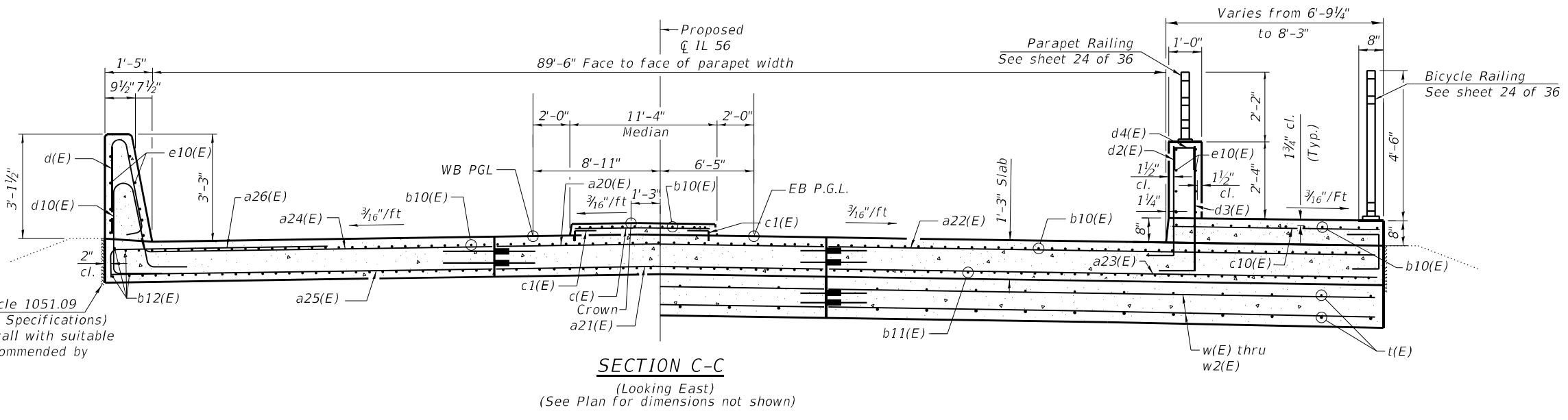


Notes:  
 The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.  
 Parapet concrete shall be paid for as Concrete Superstructure.  
 Approach slab shall be paid for as Concrete Superstructure (Approach Slab).  
 Approach footing concrete shall be paid for as Concrete Structures.  
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.  
 Cost of excavation for approach footing included with Concrete Structures.  
 For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 36.



**TWO APPROACHES  
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape	
a20(E)	92	#5	31'-11"	—	
a21(E)	122	#8	31'-11"	—	
a22(E)	92	#5	38'-7"	—	
a23(E)	122	#8	38'-7"	—	
a24(E)	92	#5	35'-1"	—	
a25(E)	122	#8	35'-9"	—	
a26(E)	46	#6	7'-4"	—	
b10(E)	336	#5	29'-8"	—	
b11(E)	474	#9	29'-8"	—	
b12(E)	8	#5	14'-8"	—	
b13(E)	2	#4	14'-8"	—	
c(E)	62	#5	11'-9"	—	
c1(E)	124	#5	1'-4"	—	
c10(E)	62	#5	8'-6"	—	
d(E)	46	#5	6'-4"	—	
d2(E)	62	#6	3'-7"	—	
d3(E)	62	#4	4'-3"	—	
d4(E)	16	#4	2'-2"	—	
d10(E)	46	#5	8'-5"	—	
e10(E)	52	#4	14'-8"	—	
t(E)	400	#4	9'-8"	—	
w(E)	80	#5	31'-11"	—	
w1(E)	80	#5	38'-7"	—	
w2(E)	80	#5	34'-10"	—	
Concrete Superstructure (Approach Slab)				Cu. Yd.	272.2
Concrete Structures				Cu. Yd.	65.8
Bridge Deck Grooving				Sq. Yd.	495
Protective Coat				Sq. Yd.	698
Reinforcement Bars, Epoxy Coated				Pound	118,210



2" PJF (per Article 1051.09 of the Standard Specifications) bonded to wingwall with suitable adhesive as recommended by supplier.

MODEL: Default  
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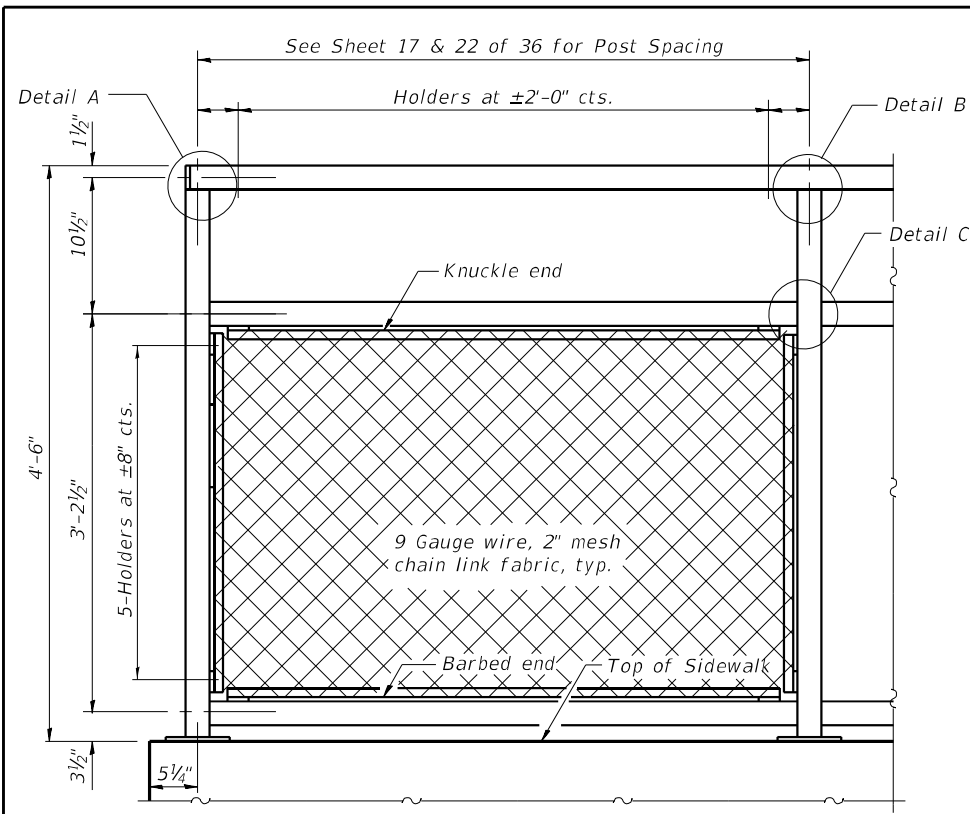


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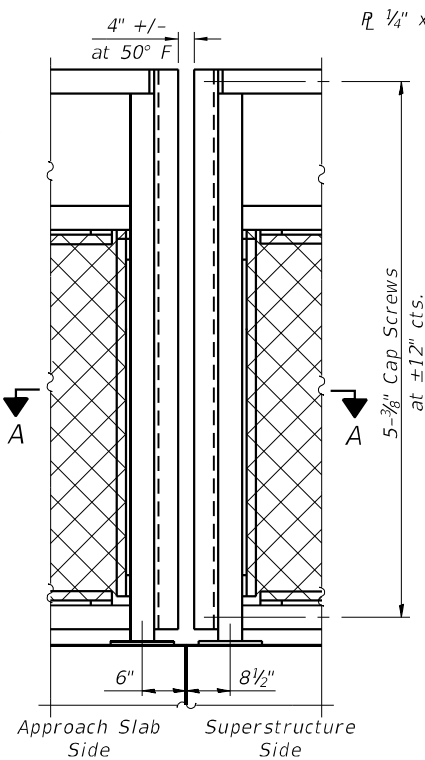
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS  
 STRUCTURE NO. 022-0057**

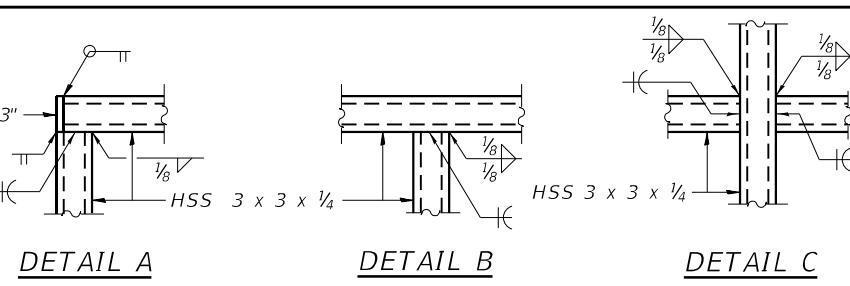
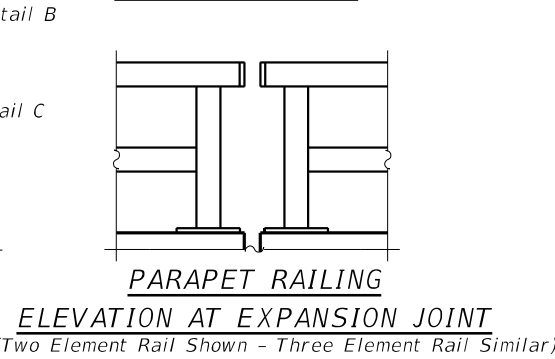
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CONTRACT NO. 60P75				
ILLINOIS FED. AID PROJECT				



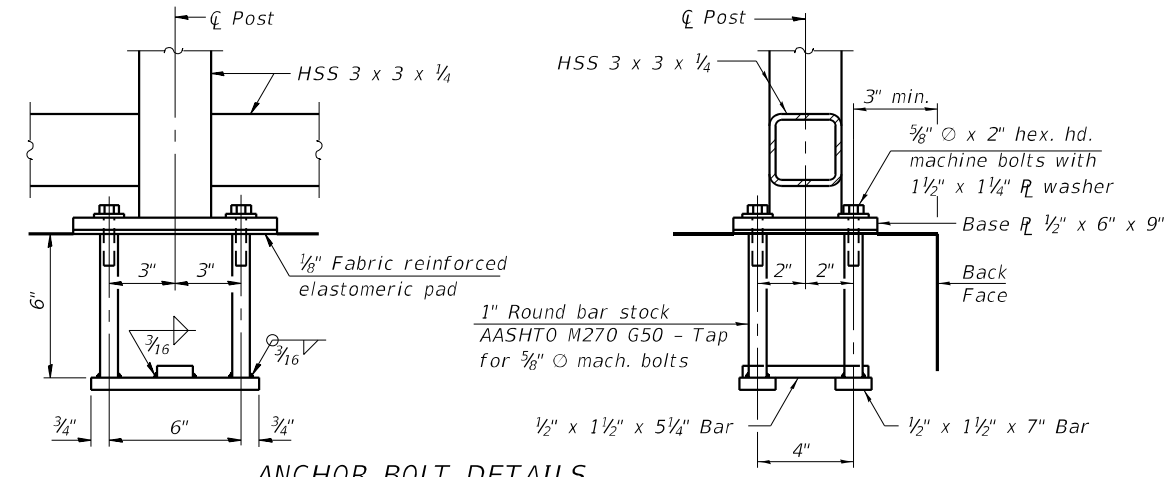
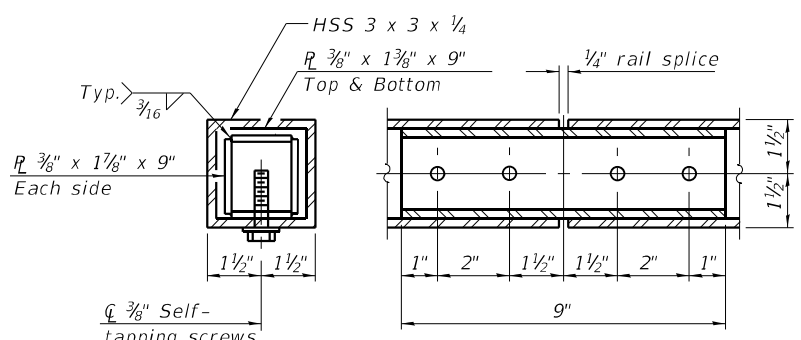
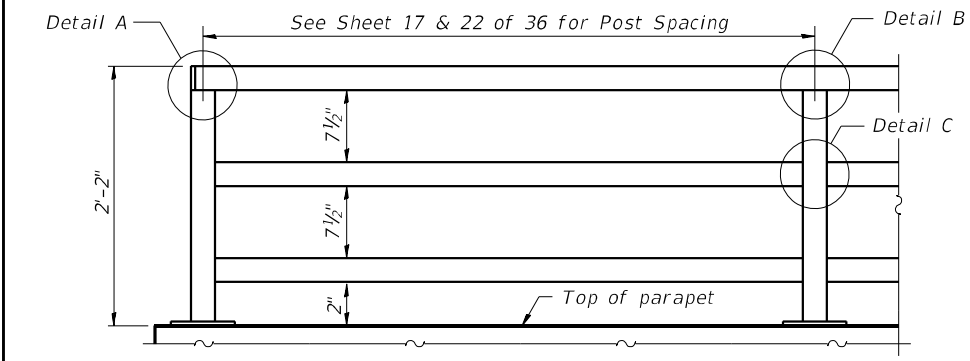
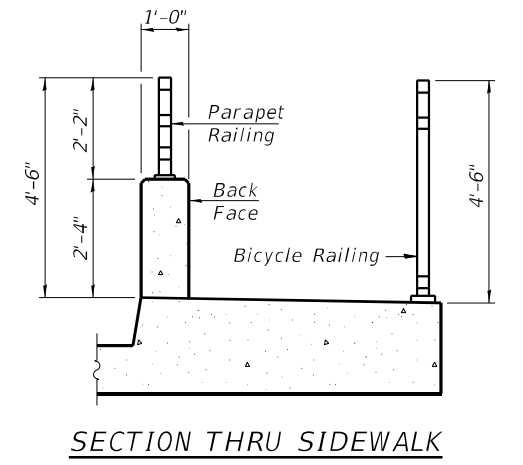
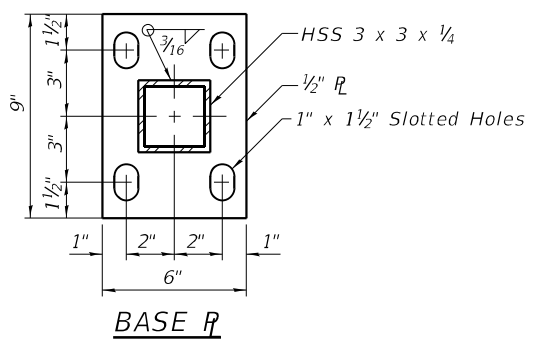
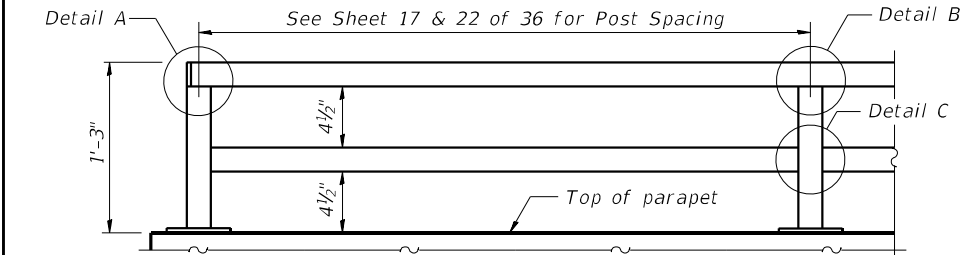
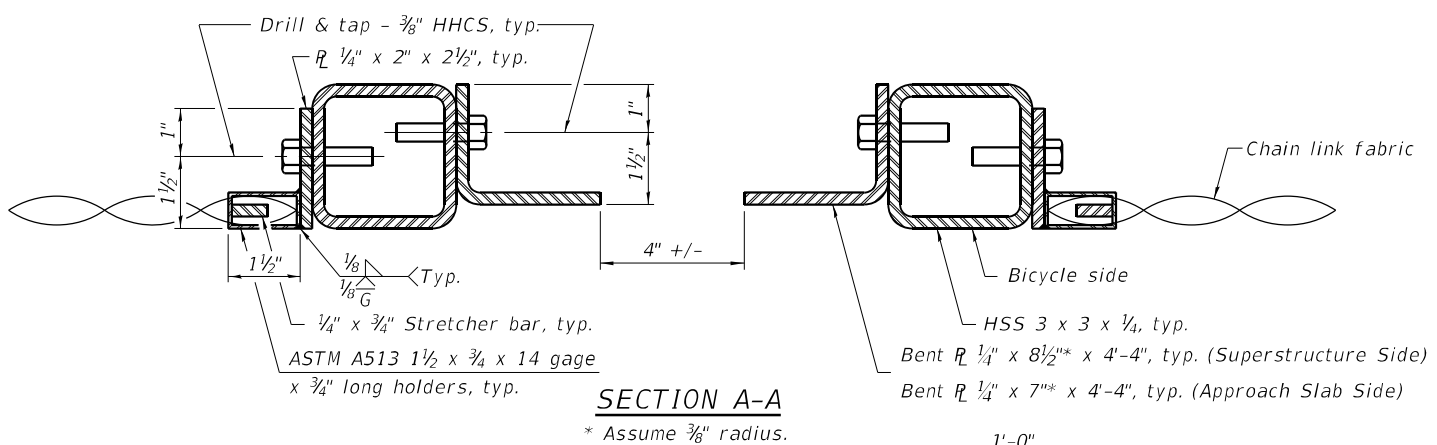
**BICYCLE RAILING**



**BICYCLE RAILING**



Notes:  
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.  
 Place reinforcement bars to miss anchor rod locations. CVN testing is not required for the HSS tubing used in the Bicycle Railing.  
 All HSS tubing used for the Parapet Railing shall be CVN tested according to Article 1006.34(b) of the Standard Specifications.



In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" O anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

**BILL OF MATERIAL**

Item	Unit	Quantity
Bicycle Railing	Foot	128
Parapet Railing	Foot	128

MODEL: Default  
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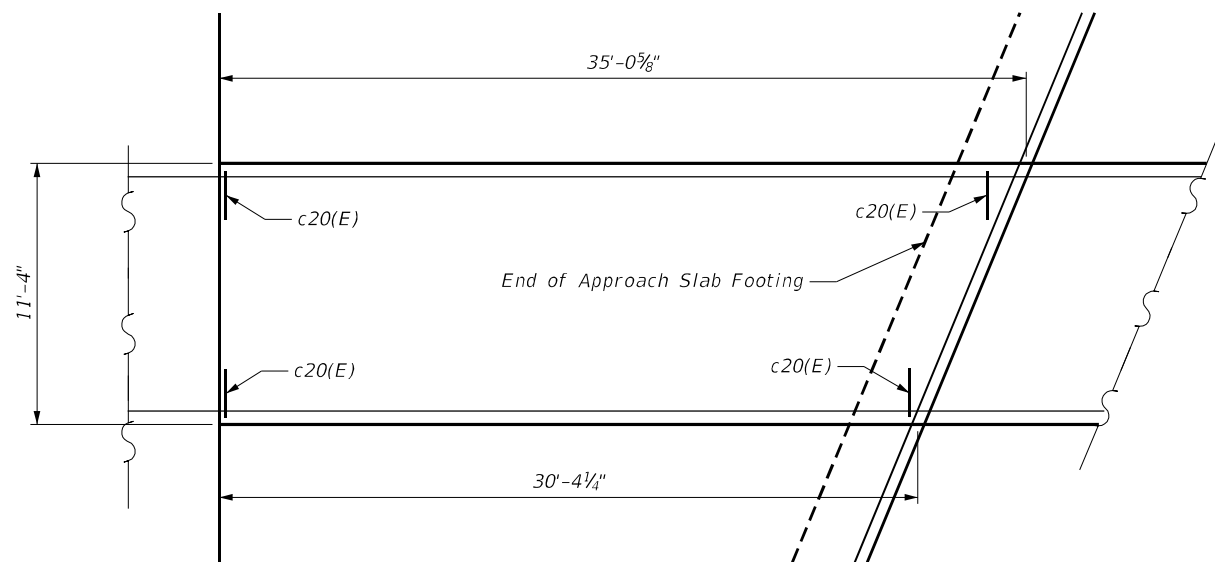
BICYCLE RAILING  
 STRUCTURE NO. 022-0057

SHEET 24 OF 36 SHEETS

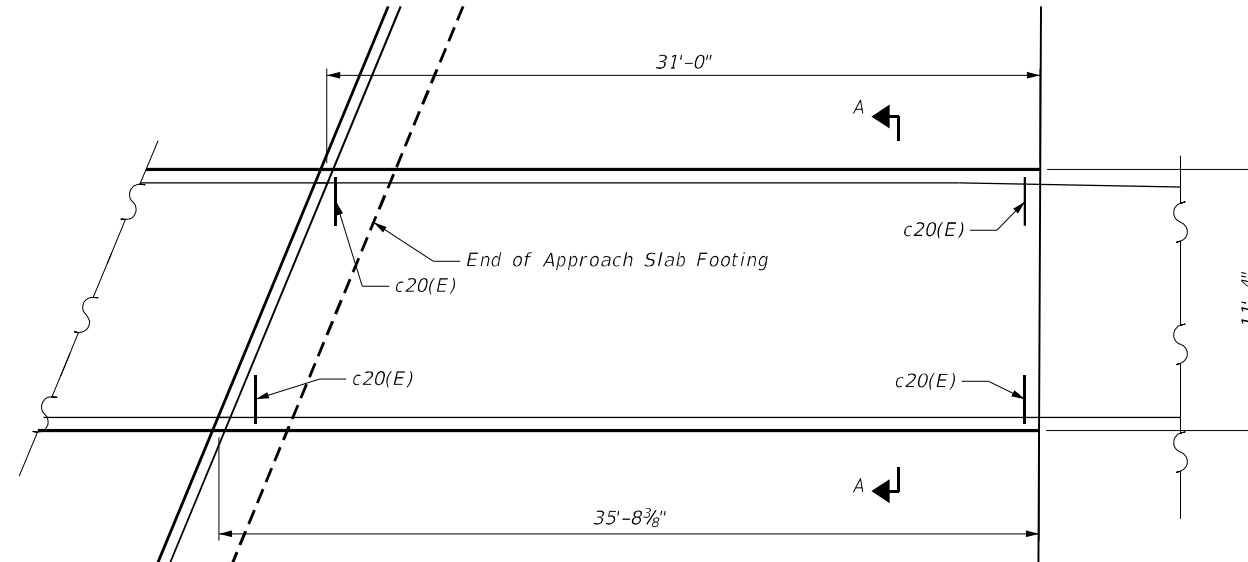
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CONTRACT NO. 60P75				

ILLINOIS FED. AID PROJECT

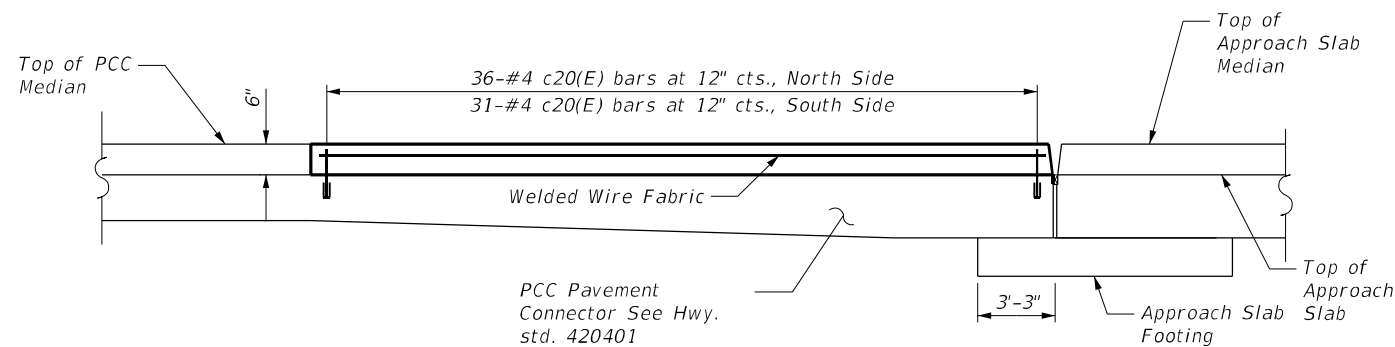
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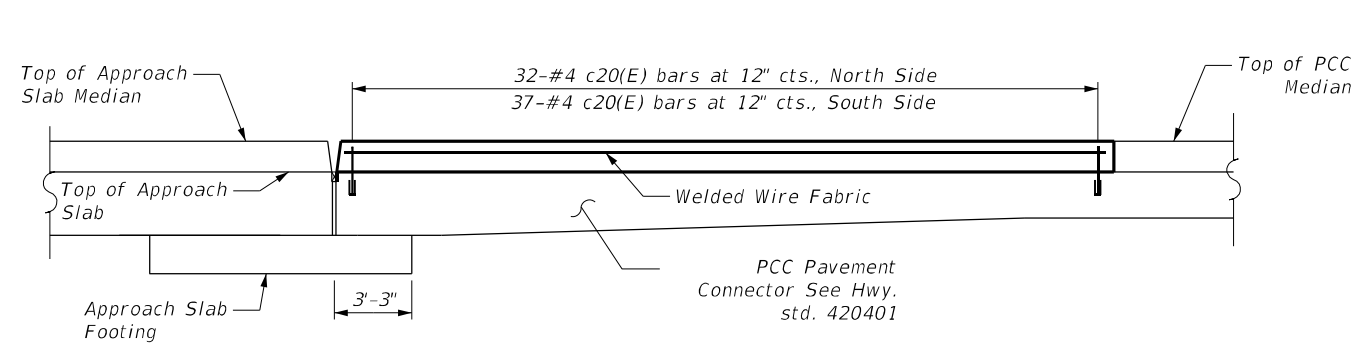
WEST MEDIAN - PLAN



EAST MEDIAN - PLAN

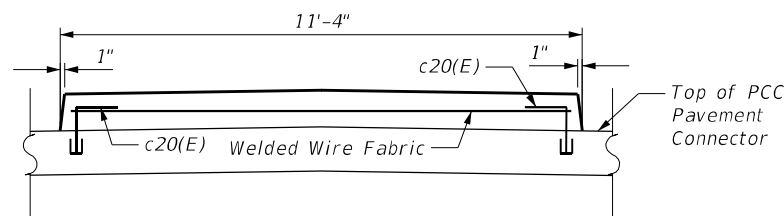


WEST MEDIAN - LONGITUDINAL SECTION

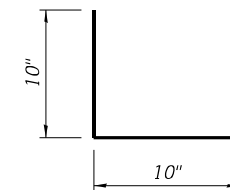


EAST MEDIAN - LONGITUDINAL SECTION

Notes:  
 c20(E) bars may be cast in PCC Pavement connector or drilled and grouted in accordance with Article 584 of the Standard Specifications. Embedment Length = 6"  
 Welded Wire Fabric shall be 0.11 sq. in./ft. in both directions. Maximum wire spacing shall be 6". Minimum lap distance shall be two cross wires. Cost included with Concrete Superstructure (Approach Slab).



SECTION A-A



BAR c20(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape	
c20(E)	136	#4	1'-8"	┐	
Reinforcement Bars, Epoxy Coated				Pound	160
Concrete Superstructure (Approach Slab)				Cu. Yd.	32.8



USER NAME =	DESIGNED - TJJ	REVISED -
PLOT SCALE =	CHECKED - JJI	REVISED -
PLOT DATE =	DRAWN - TJJ	REVISED -
	CHECKED - JJI	REVISED -

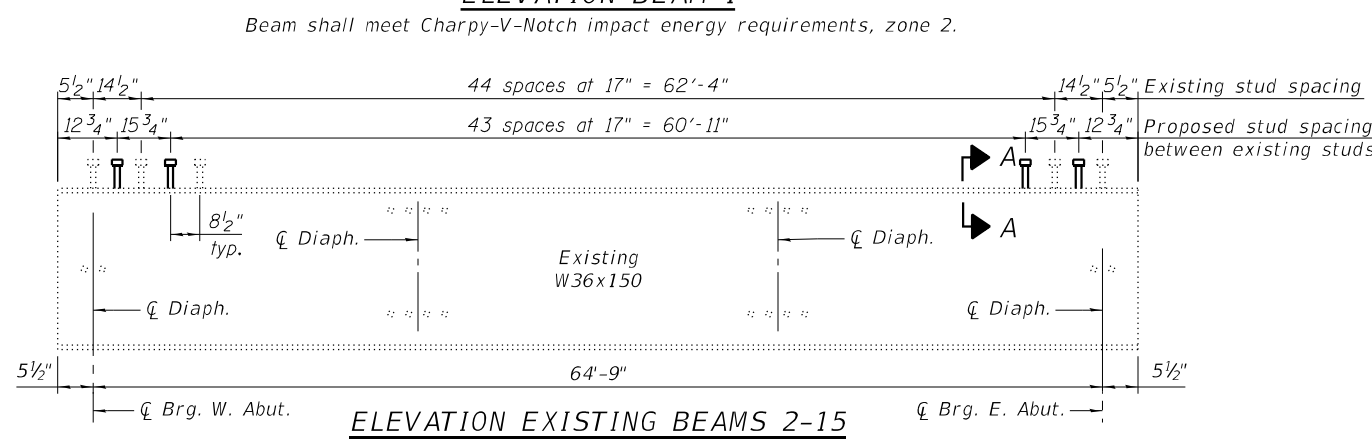
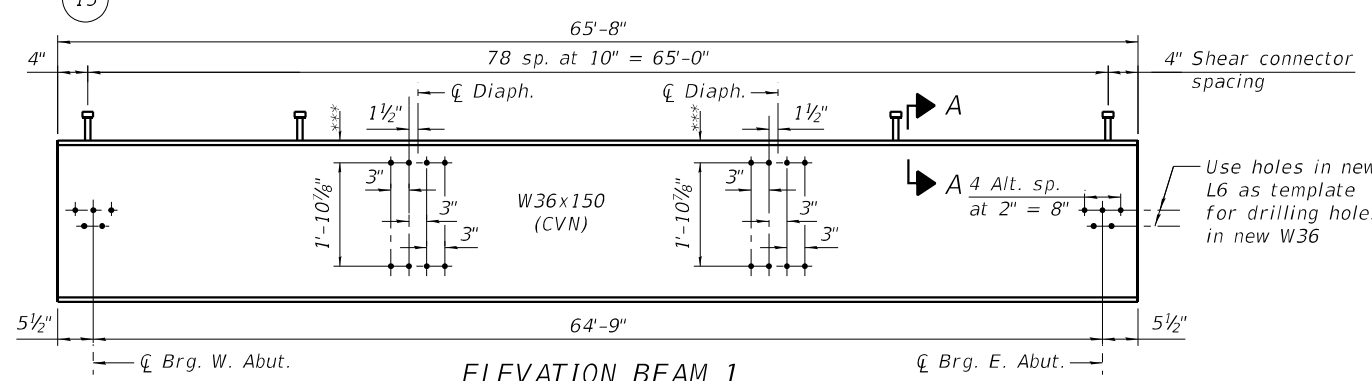
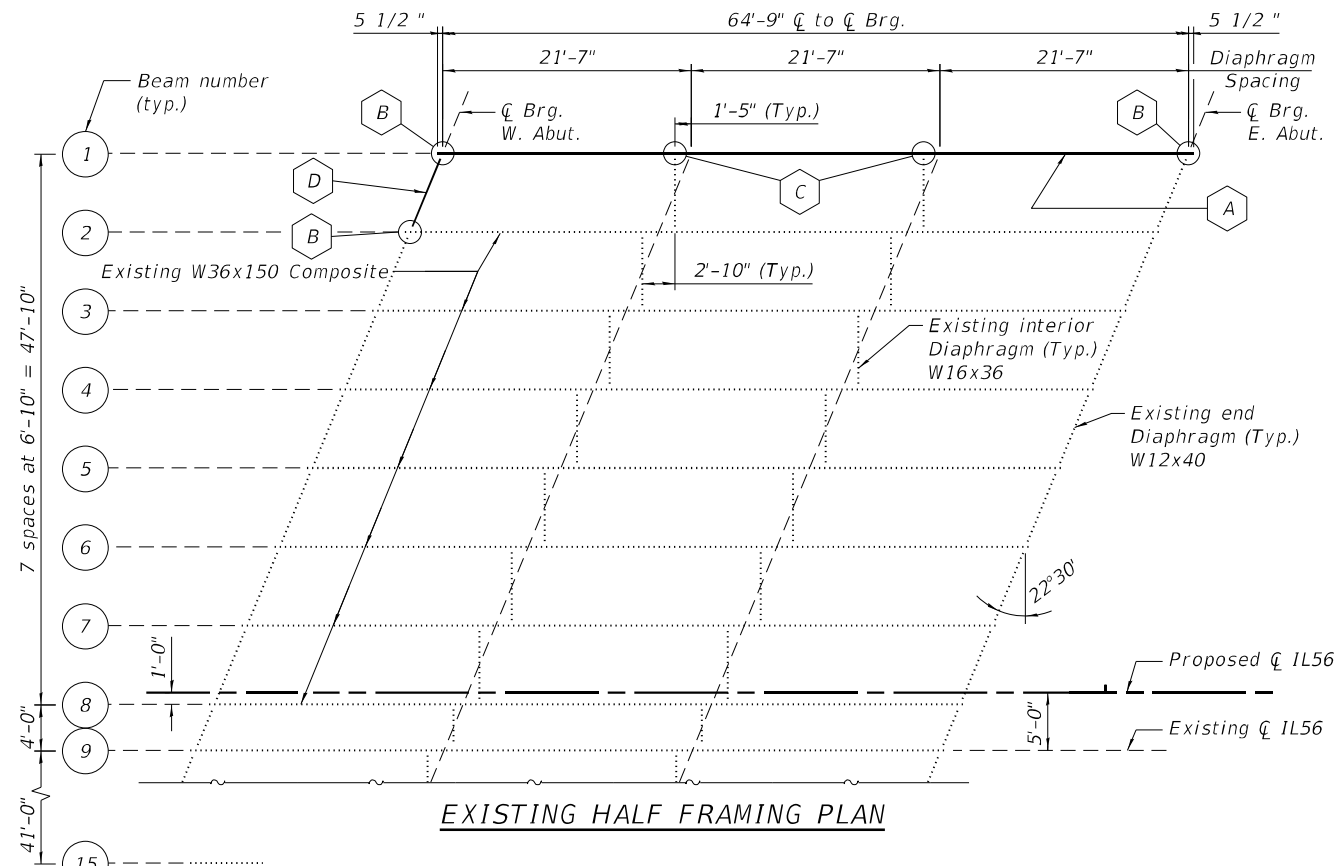
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PAVEMENT CONNECTOR MEDIAN DETAILS  
 STRUCTURE NO. 022-0057

SHEET 25 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	311
				CONTRACT NO. 60P75
ILLINOIS FED. AID PROJECT				

- A Remove existing W36x135 (Non composite Beam 1) and replace with new W36x150 composite beam
- B Remove and replace existing connection angle at end diaphragms
- C Remove and replace existing connection angles at interior diaphragms
- D Remove and replace existing W12x40 end diaphragm



**BILL OF MATERIAL**

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	10,290
Structural Steel Removal	Pound	10,270

Note: Structural Steel Removal quantity includes steel bearings attached to the beam being removed only.

BEAM MOMENT TABLE			
0.5 Sp. 1			
	Prop. Ext. Beam	Exist. Int. Beam	
$I_s$	(in <sup>4</sup> )	9,040	9,040
$I_c(n)$	(in <sup>4</sup> )	21,714	23,314
$I_c(3n)$	(in <sup>4</sup> )	15,858	17,323
$S_s$	(in <sup>3</sup> )	504	504
$S_c(n)$	(in <sup>3</sup> )	708	724
$S_c(3n)$	(in <sup>3</sup> )	638	658
Z	(in <sup>3</sup> )	--	--
$R$	(k/')	0.769	0.894
$M_D$	(k)	408	473
$s_D$	(k/')	0.267	0.283
$M_s D$	(k)	140	148
$M_L$	(k)	530	550
$M_I$	(k)	140	145
$S_2[M_L + M_I]$	(k)	1,116	1,158
$M_a$	(k)	2,163	2,313
$M_u$	(k)	3,821	4,021
$f_c D$ (non-comp)	(ksi)	9.70	11.26
$f_c D$ (comp)	(ksi)	2.63	2.71
$f_s S_2[M_L + M_I]$	(ksi)	18.92	19.20
$f_s$ (Overload)	(ksi)	31.26	33.16
$f_s$ (Total)	(ksi)	40.63	43.11
VR	(k)	96.89	119.38

\* Compact section  
\*\* Braced non-compact and partially braced section

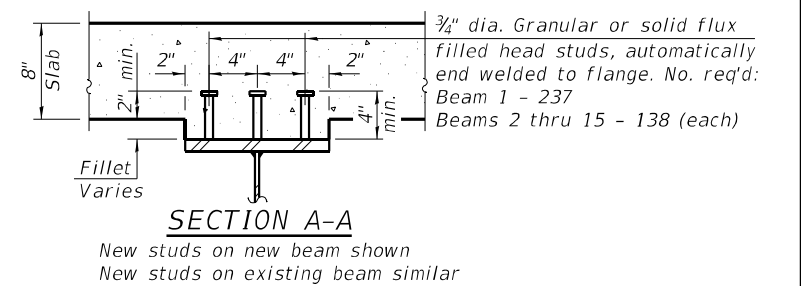
BEAM REACTION TABLE			
Abutment			
	Prop. Ext. Beam	Exist. Int. Beam	
$R_D$	(k)	66.4	71.1
$R_L$	(k)	44.7	53.8
$R_I$	(k)	10.8	13.2
$R_{Total}$	(k)	121.8	138.1

Note: Reactions include approach slab load at each abutment.

BEAM DEFLECTION TABLE		
0.5 Sp. 1		
	Prop. Ext. Beam	Exist. Int. Beam
$\delta$ (non-comp)	1 1/4"	1 1/2"
$\delta$ (comp)	1/4"	1/4"

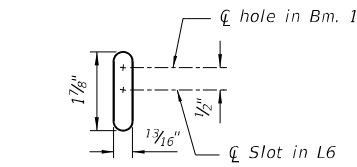
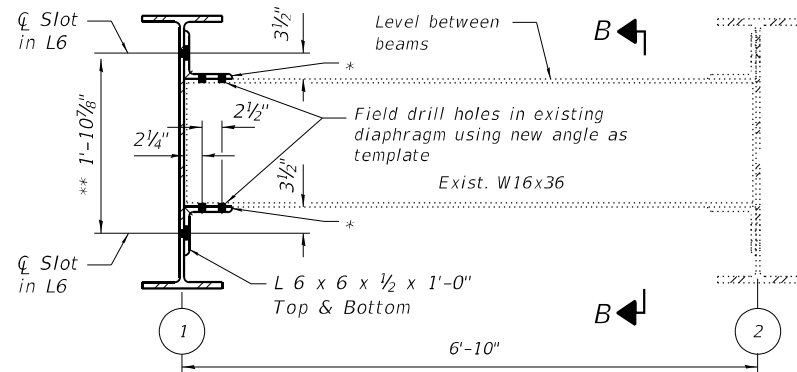
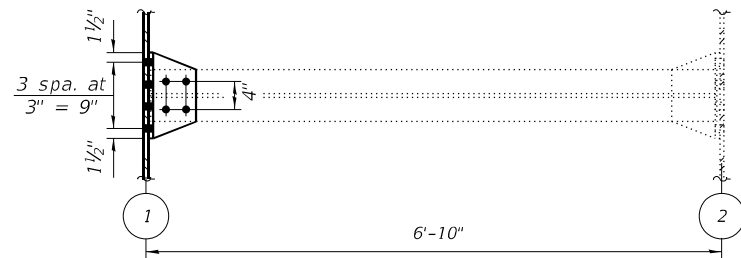
Notes:  
The cost of removal of steel members to be replaced with new steel members as detailed on the plans shall be included with Structural Steel Removal.  
Cost of temporary removal and re-installation of all other existing members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.  
For diaphragm details, See Sheet 27 of 36.  
Fasteners shall be high strength bolts. Bolts 3/4"  $\phi$  open holes 13/16"  $\phi$  unless noted otherwise.  
Existing bolts shall not be re-used.  
AASHTO M270 Grade 50W shall be used for all structural steel.  
The cost of all field drilling required for installation of the steel members is included with Furnishing and Erecting Structural Steel.  
Natural camber of new beam shall be placed upward for fabrication.

$I_s, S_s$ : Non-composite moment of inertia and section modulus of the steel section used for computing  $f_s$  (Total and Overload) 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  $f_s$  (Total and Overload) 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  $f_s$  (Total and Overload) due to long-term composite (superimposed) dead loads (in<sup>4</sup> and in<sup>3</sup>).  
Z: Plastic Section Modulus of the steel section in non-composite areas (in<sup>3</sup>).  
 $R$ : Un-factored non-composite dead load (kips/ft.).  
 $M_D$ : Un-factored moment due to non-composite dead load (kip-ft.).  
 $s_D$ : Un-factored long-term composite (superimposed) dead load (kips/ft.).  
 $M_s D$ : Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).  
 $M_L$ : Un-factored live load moment (kip-ft.).  
 $M_I$ : Un-factored moment due to impact (kip-ft.).  
 $M_a$ : Factored design moment (kip-ft.).  
 $1.3 [M_D + M_s D + \frac{2}{3} (M_L + M_I)]$   
 $M_u$ : Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).  
 $f_s$  (Overload): Sum of stresses as computed from the moments below (ksi).  
 $M_D + M_s D + \frac{2}{3} (M_L + M_I)$   
 $f_s$  (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).  
 $1.3 [M_D + M_s D + \frac{2}{3} (M_L + M_I)]$   
VR: Maximum  $\delta$  + impact shear range within the composite portion of the span for stud shear connector design (kips).



MODEL: Plot Sheet  
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<b>BLA, Inc.</b>	USER NAME =	DESIGNED - TJJ	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>BEAM REPLACEMENT DETAILS STRUCTURE NO. 022-0057</b>	F.A.P. RTE. =	SECTION =	COUNTY =	TOTAL SHEETS =	SHEET NO. =
	PLOT SCALE =	CHECKED - JJI	REVISED -			365	(56&57)R-4	DuPAGE	529	312
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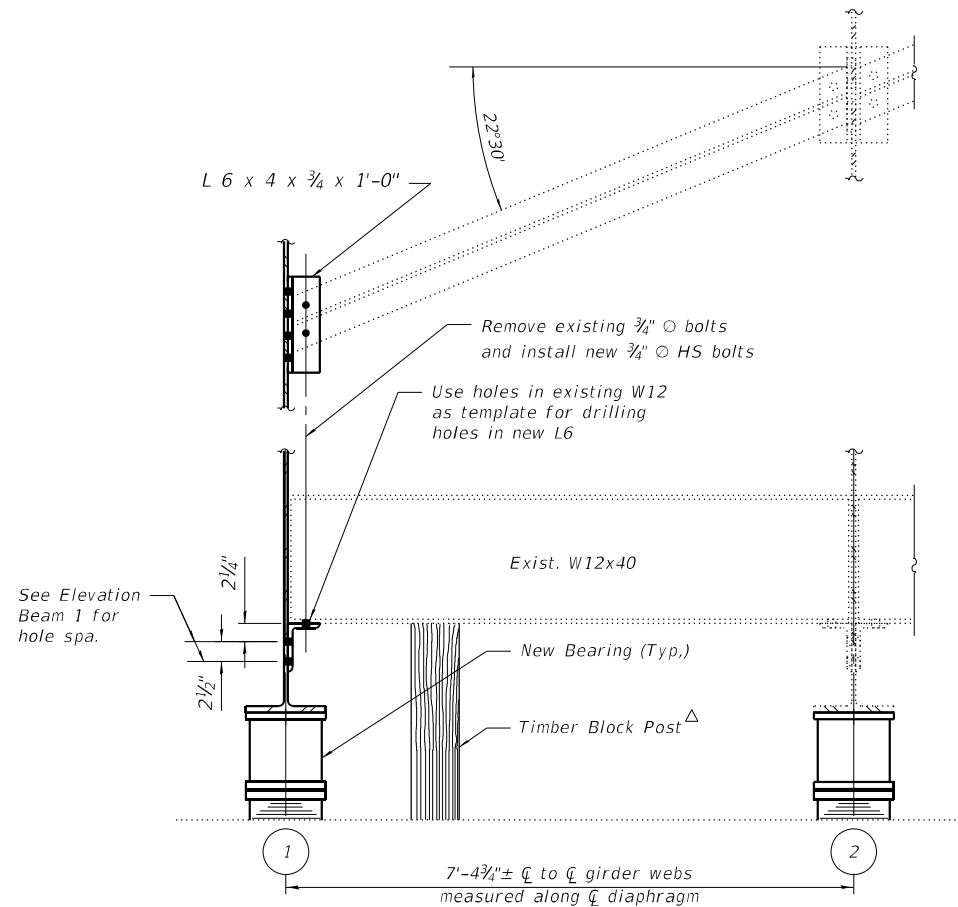


**INTERIOR DIAPHRAGM CONNECTION ANGLE REPLACEMENT DETAIL**  
(2 Locations)

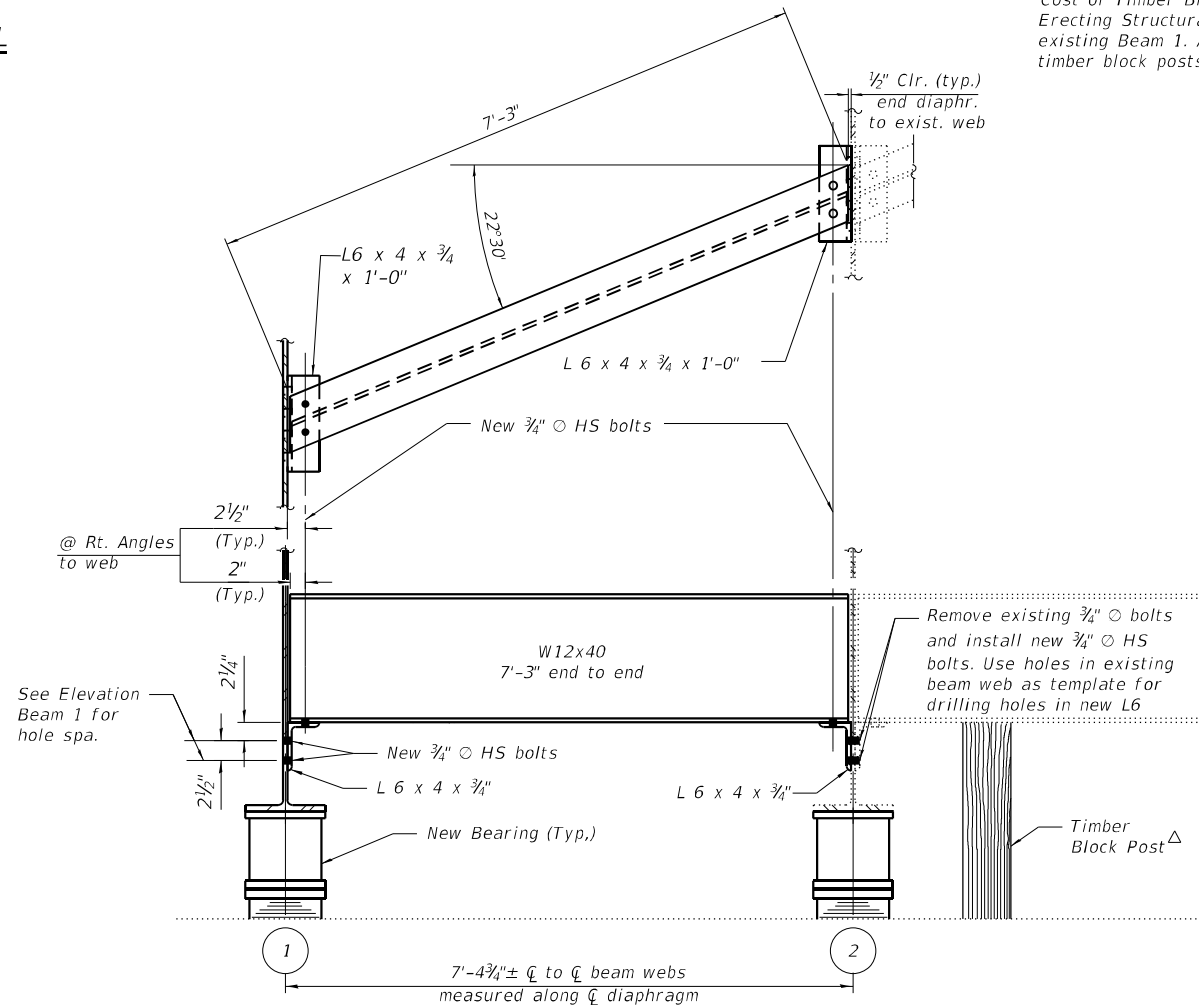
Notes:  
For Beam Replacement Details, See Sheet 26 of 36.  
Two hardened washers required for each set of oversized holes.  
Existing bolts shall not be re-used.  
AASHTO M270 Grade 50W shall be used for all structural steel.  
The cost of all field drilling required for installation of the steel members is included with Furnishing and Erecting Structural Steel.  
All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

Diaphragm D Notes:  
2 3/4" x 2 3/4" x 3/16" R washer shall be required over long slotted holes for Diaphragms D. 1 3/16" O holes in R washer.  
Bolts for the long slotted holes shall be finger-tightened prior to the Stage II deck slab pour and then be fully-tightened after completion of the pour.  
Contact surfaces of existing structural steel shall be cleaned per SSPC SP-3. Cost included with Furnishing and Erecting Structural Steel.

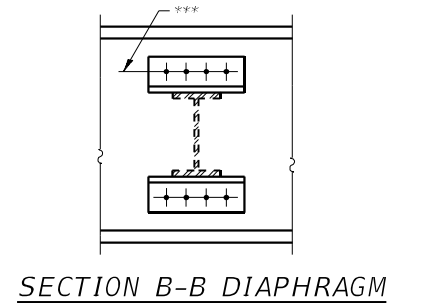
\* Existing L to be removed using the air-arc method and grind smooth all weld material remaining on W16 flange. Cost included in Structural Steel Removal.  
\*\* Use slot detail as template to locate holes in new beam 1  
\*\*\* 3/4" O HS bolts. 1 3/16" O holes in beam. 1 3/16" x 1 7/8" long slotted holes in L6x4. Use slot detail as template to locate holes in new beam 1. See Slot Detail on this sheet.  
Δ Cost of Timber Block Posts is included with Furnishing and Erecting Structural Steel. Place timber block post near existing Beam 1. Attach diaphragm to new Beam 1. Remove timber block posts.



**END DIAPHRAGM CONNECTION ANGLE REPLACEMENT DETAIL**  
(1 Required At East Abut.)



**END DIAPHRAGM REPLACEMENT DETAIL**  
(At West Abut.)  
(2 connection angles Required)



MODEL: Plot Sheet  
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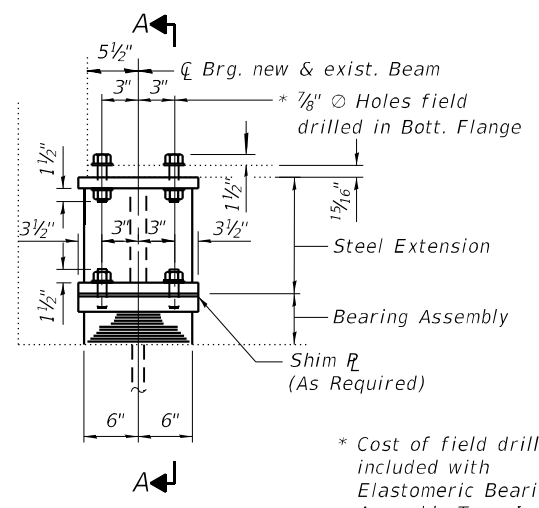
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STATE OF ILLINOIS  
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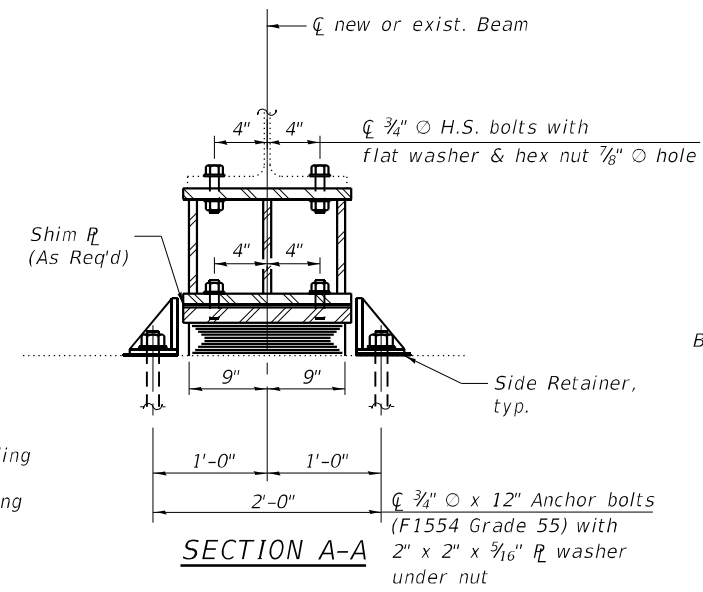
STEEL DIAPHRAGM DETAILS  
STRUCTURE NO. 022-0057

SHEET 27 OF 36 SHEETS

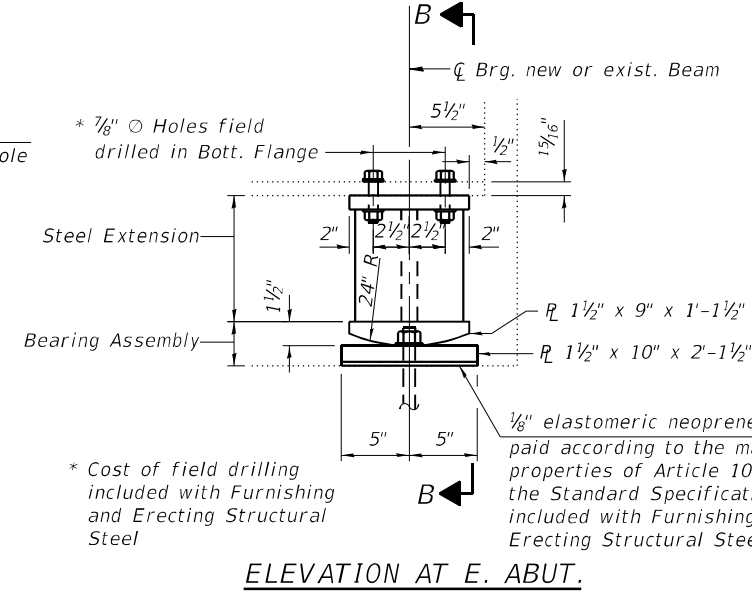
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	313
CONTRACT NO. 60P75				
ILLINOIS FED. AID PROJECT				



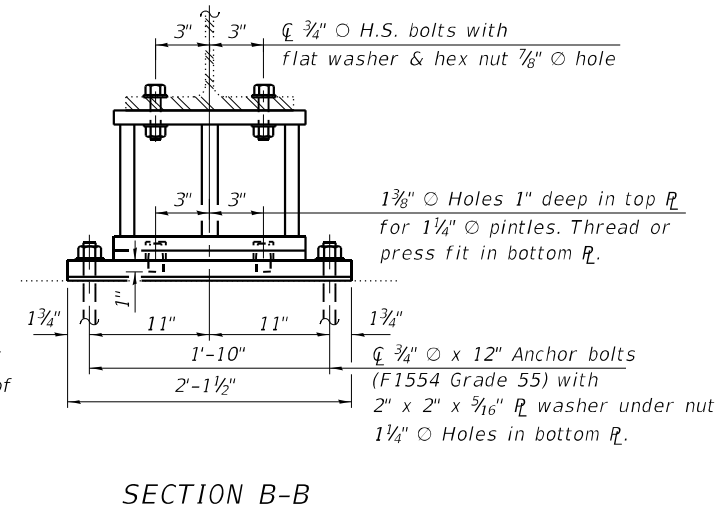
ELEVATION AT W. ABUT.



SECTION A-A



ELEVATION AT E. ABUT.

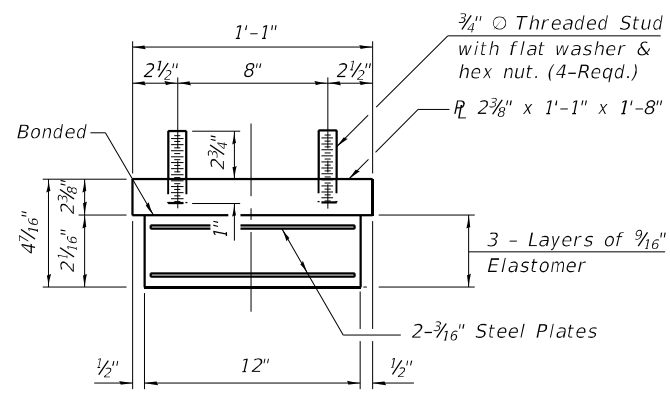


SECTION B-B

TYPE I ELASTOMERIC EXP. BRG.

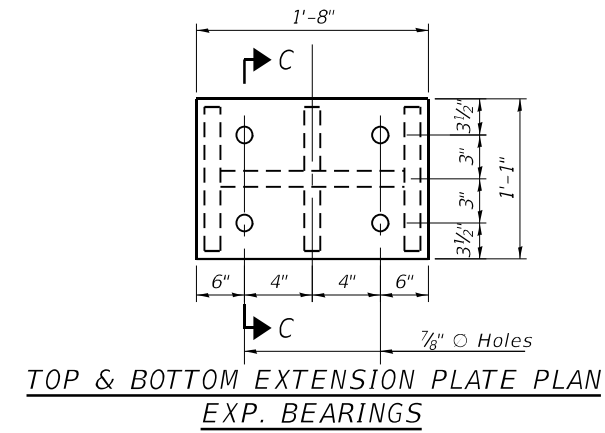
FIXED BEARING

Notes:  
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.  
 Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.  
 The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M270 Gr. 50W.  
 Prior to ordering any material the Contractor shall verify in the field all bearing height and shim thickness dimensions.  
 Two 1/8" adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

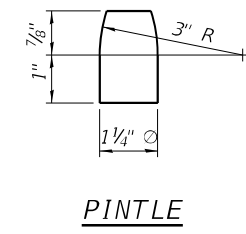


EXP. BEARING ASSEMBLY

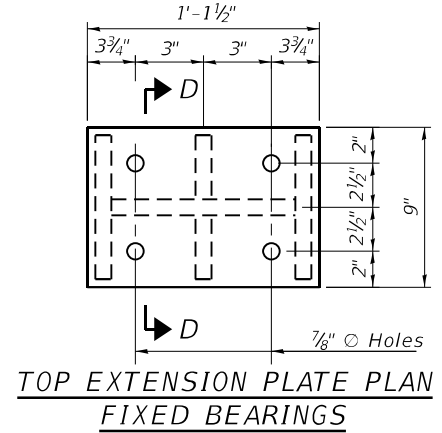
Note:  
 Shim plates shall not be placed under Bearing Assembly.



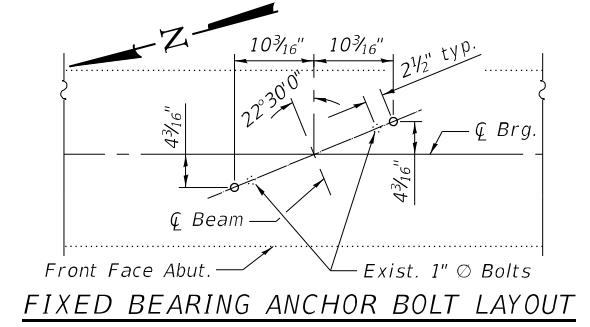
TOP & BOTTOM EXTENSION PLATE PLAN  
 EXP. BEARINGS



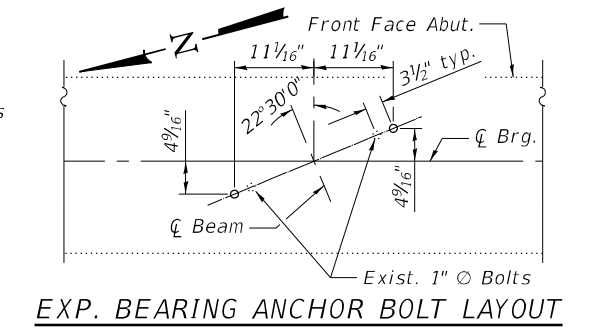
PINTLE



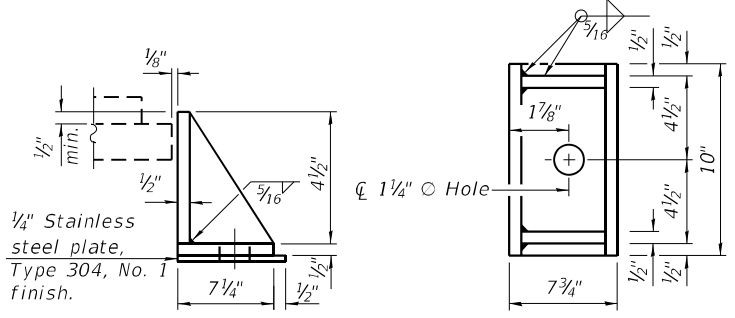
TOP EXTENSION PLATE PLAN  
 FIXED BEARINGS



FIXED BEARING ANCHOR BOLT LAYOUT

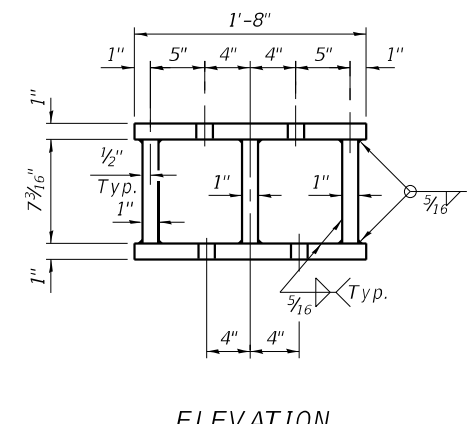


EXP. BEARING ANCHOR BOLT LAYOUT



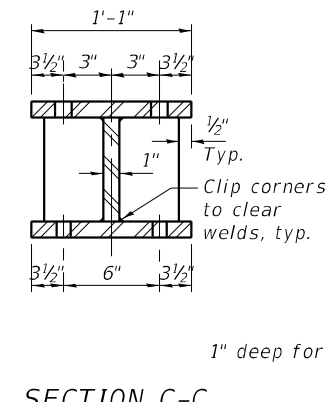
SIDE RETAINER

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

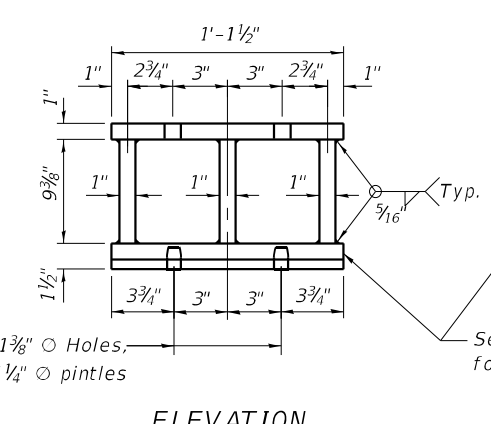


ELEVATION  
 STEEL EXTENSION FOR EXP. BEARINGS

(15 Thus)  
 Weight included with Furnishing and Erecting Structural Steel

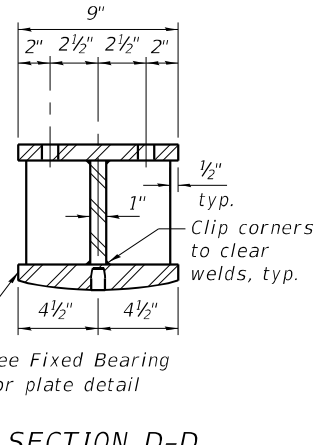


SECTION C-C



ELEVATION  
 FIXED BEARINGS WITH STEEL EXTENSION

(15 Thus)  
 Weight included with Furnishing and Erecting Structural Steel



SECTION D-D

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	15
Anchor Bolts, 3/4"	Each	60
Furnishing and Erecting Structural Steel	Pound	8,000

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PLOT DATE =	DRAWN - TJJ	REVISED -
	CHECKED - JJI	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BEARING DETAILS  
 STRUCTURE NO. 022-0057

SHEET 28 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	314
CONTRACT NO. 60P75				
ILLINOIS FED. AID PROJECT				

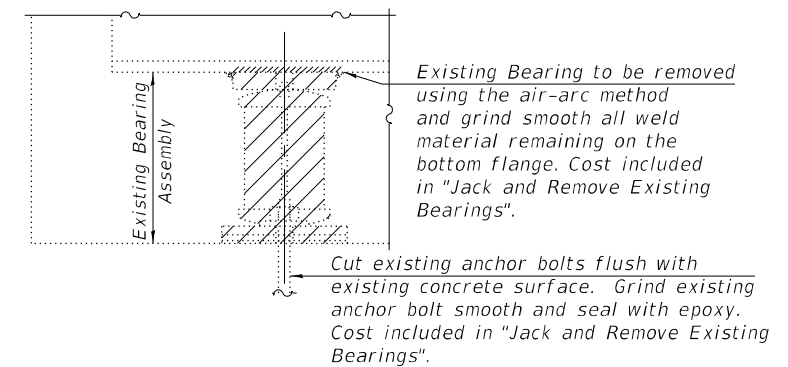
**BEAM REACTION TABLE**

	W. Abut.	E. Abut.
R D*	(k) 6.0	6.0

\* Service Load Weight of Existing Structural Steel

**JACKING EXISTING SUPERSTRUCTURE & REMOVING BEARING NOTES:**

1. Jack and Remove Existing Bearings shall be conducted according to the Special Provision "Jack and Remove Existing Bearings". See Beam Reaction Table for loads.
2. Jacking and removing existing bearings shall be done in stages after deck removal for each stage and prior to construction of the new deck for each stage, as approved by the Engineer.
3. New bearings shall be installed in each stage after existing bearings are removed and while girders are still jacked with temporary shoring, blocking, cribbing, etc. are still in place.
4. The existing anchor bolts shall be cut off flush with the existing bridge seat, the rockers, top plates, bottom plates, shims and lead plates shall be removed.
5. The new holes for anchor bolts shall be drilled at the locations specified.
6. Existing diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost to be included with "Jack and Remove Existing Bearings".



**EXISTING BEARING REMOVAL DETAIL**

Cost included with Jack and Remove Existing Bearings.

**Notes:**

Prior to ordering any material, the Contractor shall field measure, record and provide a copy to the Engineer with all required bearing and shim dimensions, including if there are conflicts between the existing as-built anchor bolts and proposed anchor bolt locations. Cost included with Jack and Remove Existing Bearing.

See Sheets 31 & 32 of 36 for bridge seat repair locations.

The cost of removing the existing bearings at existing Beam 1 are included with Structural Steel Removal.

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Jack and Remove Existing Bearings	Each	28

MODEL: Default  
FILE NAME: W:\191+134\_IDOT\_IL\_53 at IL 56\CADD\_Sheets\Structural\01B\_Bridge Deck Replacement\160P75\_SHT-29\_Bearing Removal\_Details.dgn



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PLOT DATE =	CHECKED - JJI	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BEARING REMOVAL DETAILS  
STRUCTURE NO. 022-0057**

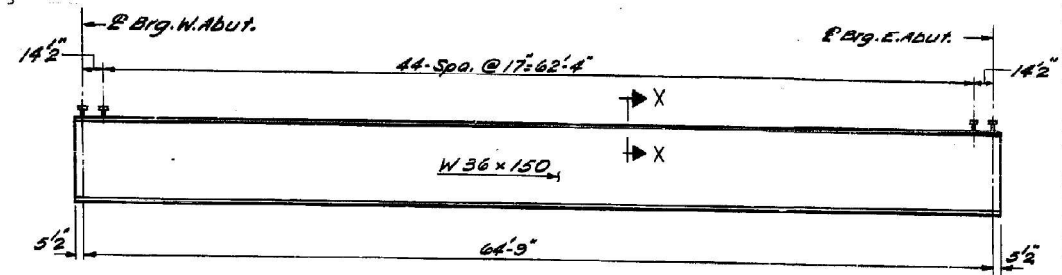
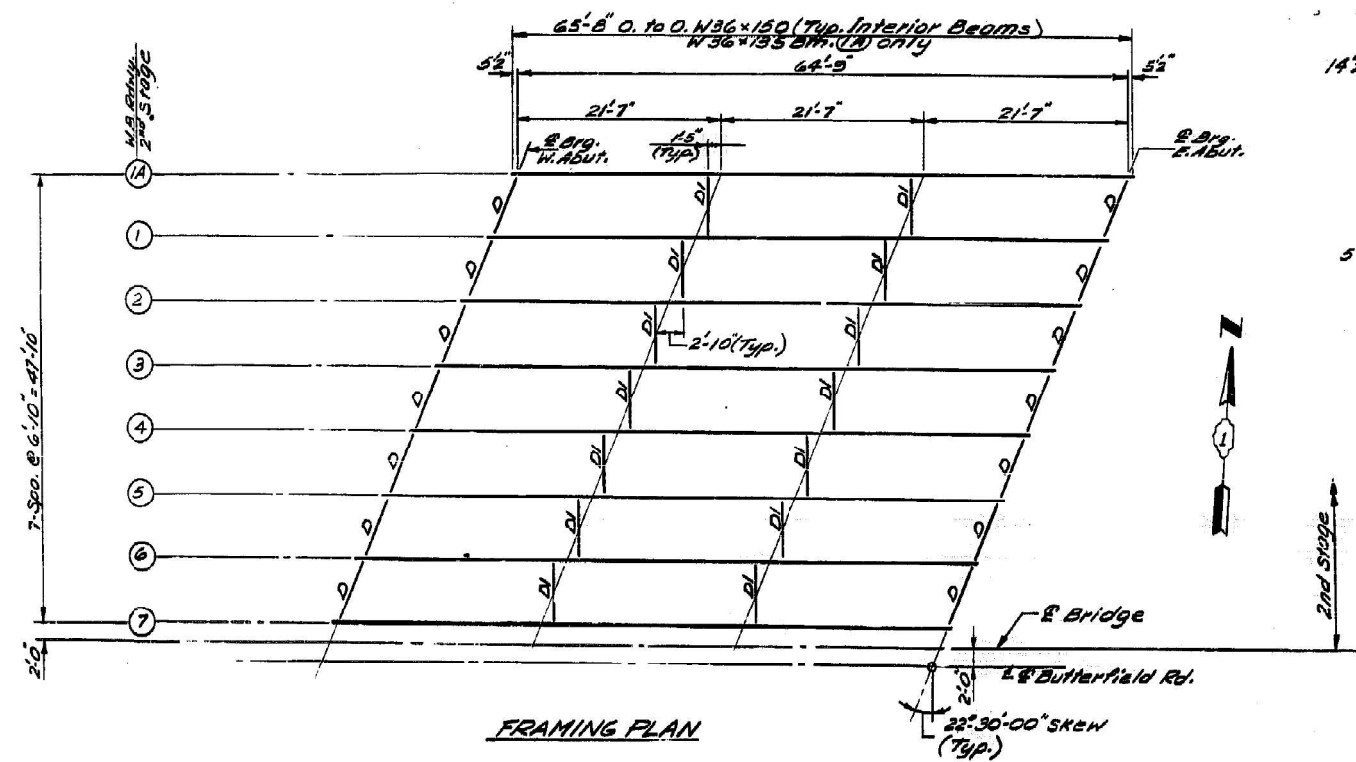
SHEET 29 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 60P75	
		ILLINOIS FED. AID PROJECT		

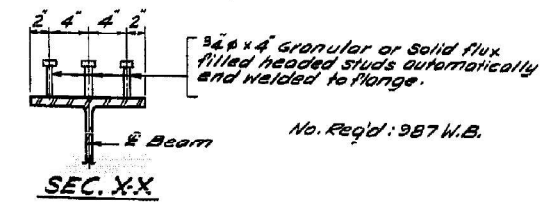
EXISTING PLANS  
FOR INFORMATION ONLY

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DATE	REVISION	BY	TOTAL SHEETS	SHEET NO.
				328
SHEETS				

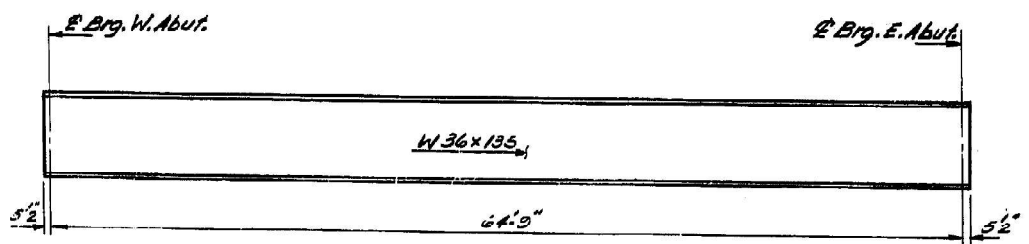


TYP BEAM ELEVATION (Beam #1 thru 7)  
(Composite)



TOP OF BEAM ELEVATIONS								
LOCATION	WEST BOUND ROADWAY							
BEAM	1A	1	2	3	4	5	6	7
E Brg. W. Abut.	682.62	682.76	682.90	683.01	683.11	683.21	683.31	683.40
E Brg. E. Abut.	682.51	682.63	682.80	682.93	683.05	683.16	683.28	683.40

\* For fabrication only



ELEVATION BEAM (1A)  
(Non Composite)

NOTE: For bearing and diaphragm detail see sheet #32A. Original framing plan for Beams 1 through 7 remain unchanged as shown on sheet #2. Beam 1A, 2 end diaphragms D and 2 interior diaphragms D1 are added. Work this sheet with sheet #32A.

DESIGNED	M. K. ...	EXAMINED	
CHECKED	P. ...	PASSED	
DRAWN	L. ...	APPROVED	
CHECKED	P. ...		

All Structural Steel shall be A588. (Unpainted)

INTERIOR BEAM MOMENT TABLE	
0.5 Sp.	
I <sub>a</sub> (in <sup>4</sup> )	3000
I <sub>c</sub> (in <sup>4</sup> )	21400
S <sub>a</sub> (in <sup>3</sup> )	500
S <sub>c</sub> (in <sup>3</sup> )	700
Q	0.833
M <sub>R</sub> (K)	440
I <sub>a</sub> Q (K <sup>2</sup> )	10.50
S <sub>a</sub> Q (K)	0.416
M <sub>S</sub> Q (K)	220
M <sub>U</sub> (K)	356
M <sub>imp</sub> (K)	146
Total (K)	322
P <sub>a</sub> Q (K <sup>2</sup> )	15.81
I <sub>a</sub> Total (K <sup>2</sup> )	26.31
V <sub>R</sub> (K)	78.4

EXTERIOR BEAM MOMENT TABLE	
0.5 Sp.	
I <sub>a</sub> (in <sup>4</sup> )	7820
S <sub>a</sub> (in <sup>3</sup> )	440
Q	0.71
M <sub>R</sub> (K)	373
M <sub>U</sub> (K)	142
Total (K)	515
I <sub>a</sub> Total (K <sup>2</sup> )	14.04
V <sub>R</sub> (K)	8.74

I<sub>a</sub> and S<sub>a</sub> are the moment of inertia and section modulus of the steel section. V<sub>R</sub> is the maximum 1/2 shear range in span.

INTERIOR BEAM REACTION TABLE	
Abut.	
R <sub>R</sub> (K)	40.6
R <sub>L</sub> (K)	47.4
Imp. (K)	12.5
R <sub>total</sub> (K)	100.5

REVISED  
11-16-72

STRUCTURAL STEEL  
WEST BOUND RDWY  
F.A. RT. 151 SEC. 56 B  
DUPAGE COUNTY  
STA. 73+85

I<sub>a</sub> and S<sub>a</sub> are the moment of inertia and section modulus of the steel section. I<sub>c</sub> and S<sub>c</sub> are the moment of inertia and section modulus of the composite section used in computing I<sub>a</sub>. V<sub>R</sub> is the maximum 1/2 impact shear range in span.

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	CHECKED - JJI	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURAL STEEL PLANS (FOR INFORMATION ONLY)  
STRUCTURE NO. 022-0057

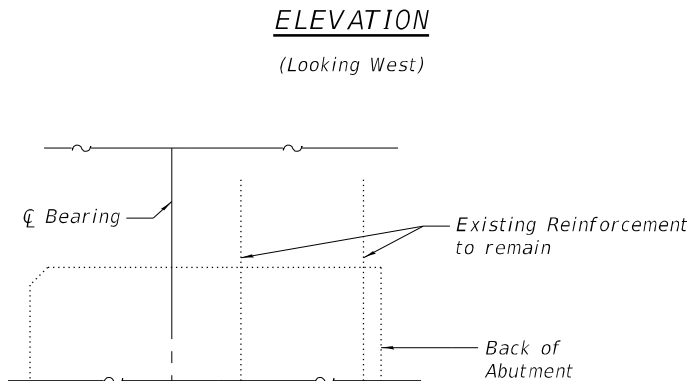
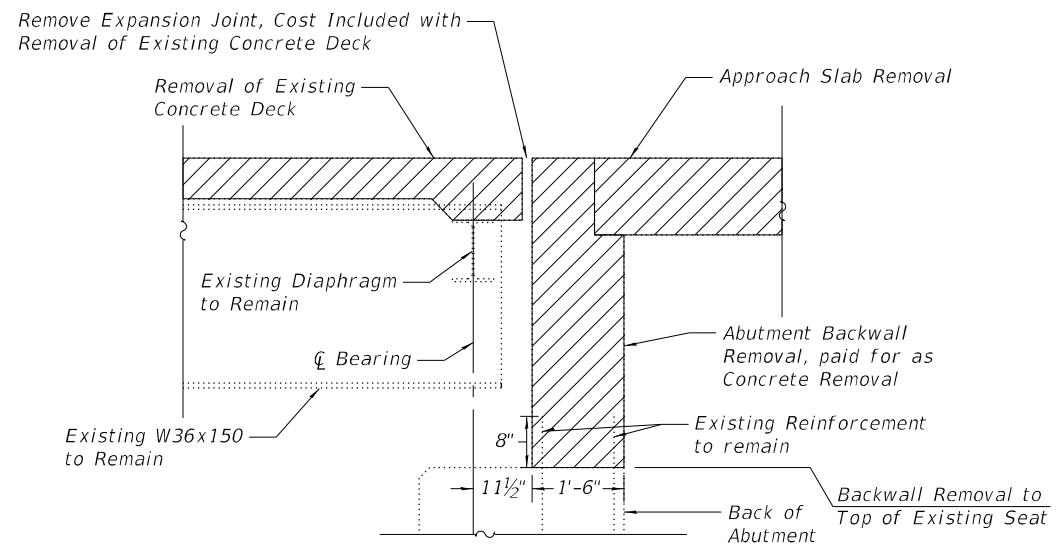
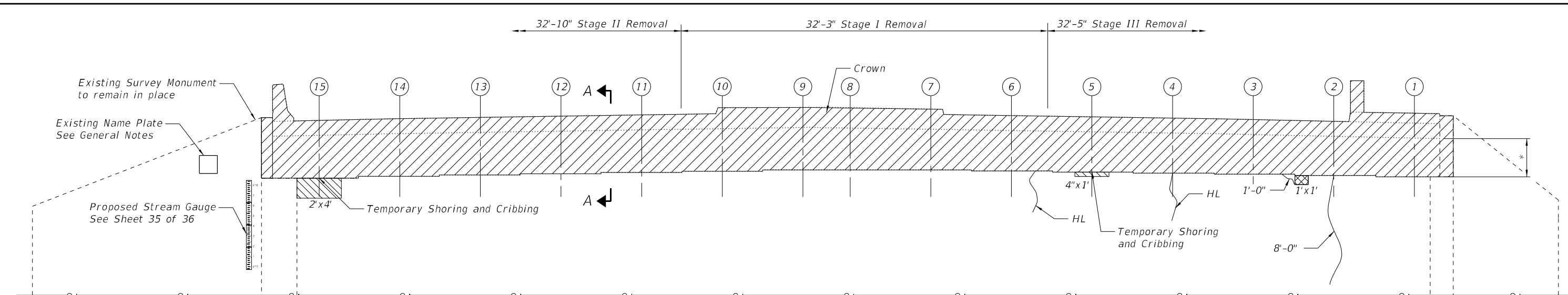
SHEET 30 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	316
CONTRACT NO. 60P75				

ILLINOIS FED. AID PROJECT



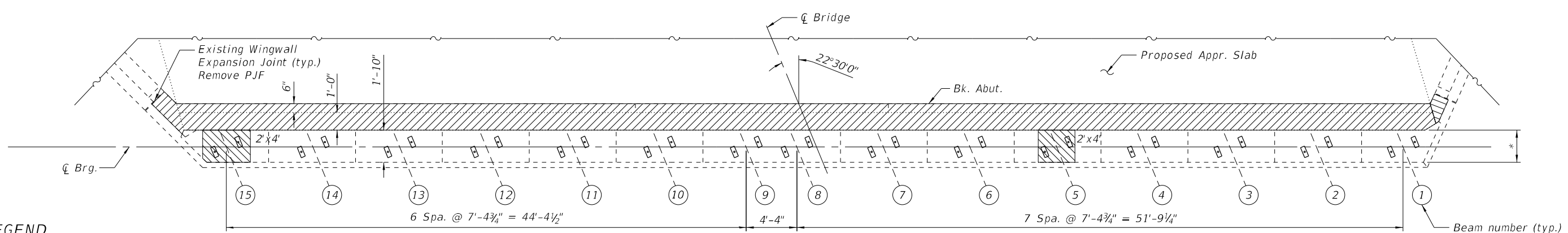
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\* Horizontal areas of the existing bridge seats shall be cleaned in accordance to Special Provision for "Cleaning Bridge Seats".

**SECTION A-A**  
(Existing Abutment Removal)

**SECTION A-A**  
(Existing After Abutment Removal)



**LEGEND**

- Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)
- Structural Repair of Concrete (Depth Greater than 5 Inches)
- Epoxy Crack Injection
- Hairline Crack
- Concrete Removal

**Notes:**  
 For Stream Gauge information, see Sheet 35 of 36.  
 For wingwall Reconstruction Details and Bill of Material, See Sheet 34 of 36.  
 Structural Repair of Concrete at bearing seats of Beam 15 and Beam 5 shall be performed after existing bearings are removed and prior to installation of new bearings. Beam support is included in "Temporary Shoring and Cribbing".  
 Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.



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PLOT SCALE =	CHECKED - JJI	REVISED -
PLOT DATE =	DRAWN - TJJ	REVISED -
	CHECKED - JJI	REVISED -

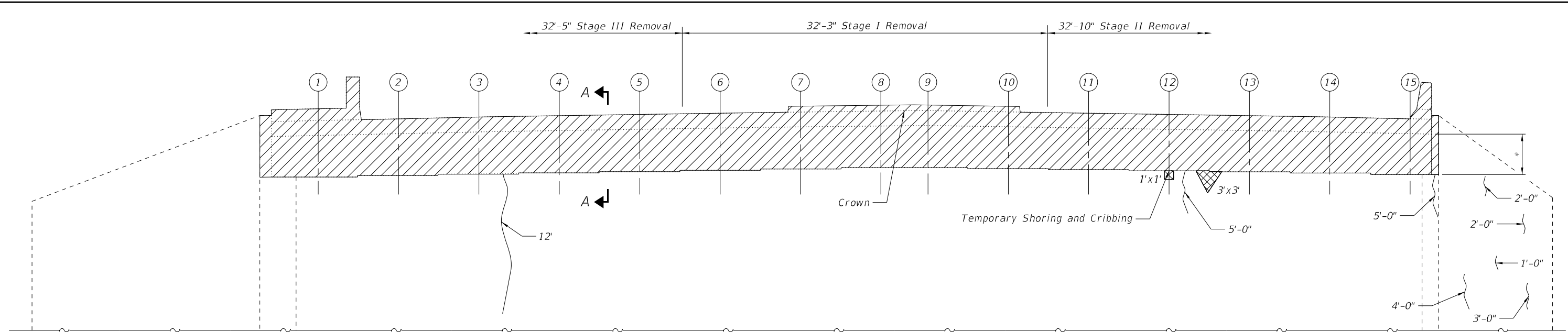
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WEST ABUTMENT REMOVAL & REPAIR DETAILS  
STRUCTURE NO. 022-0057**

SHEET 31 OF 36 SHEETS

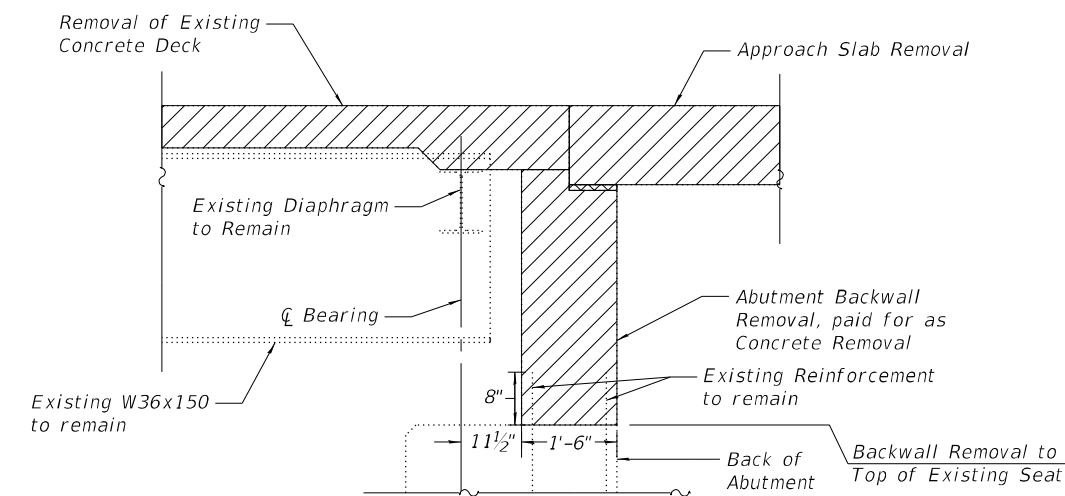
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	317
CONTRACT NO. 60P75				

ILLINOIS FED. AID PROJECT

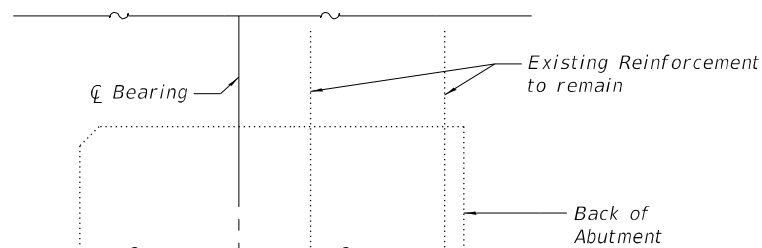


**ELEVATION**  
(Looking East)

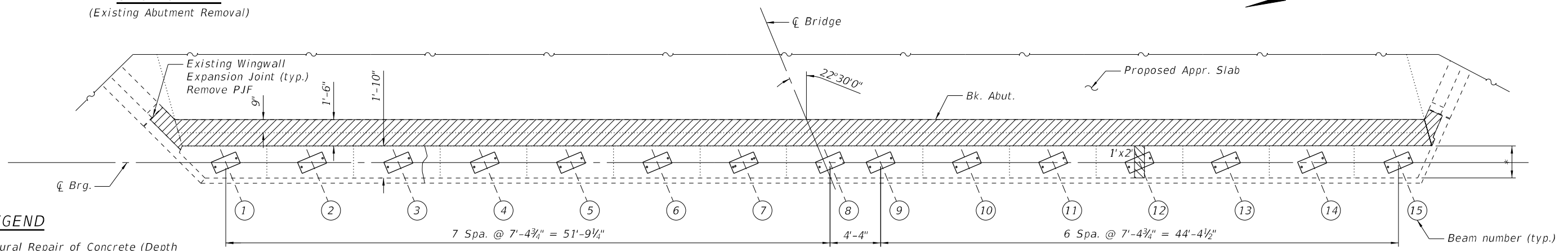
\* Horizontal areas of the existing bridge seats shall be cleaned in accordance to Special Provision for "Cleaning Bridge Seats".



**SECTION A-A**  
(Existing Abutment Removal)



**SECTION A-A**  
(Existing After Abutment Removal)



**LEGEND**

- Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)
- Structural Repair of Concrete (Depth Greater than 5 Inches)
- Epoxy Crack Injection
- Concrete Removal

**Notes:**  
For wingwall Reconstruction Details and Bill of Material, See Sheet 34 of 36.  
Structural Repair of Concrete at bearing seats of Beam 12 shall be performed after existing bearings are removed and prior to installation of new bearings. Beam support is included in "Temporary Shoring and Cribbing".  
Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

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

**EAST ABUTMENT REMOVAL & REPAIR DETAILS**  
**STRUCTURE NO. 022-0057**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 60P75	

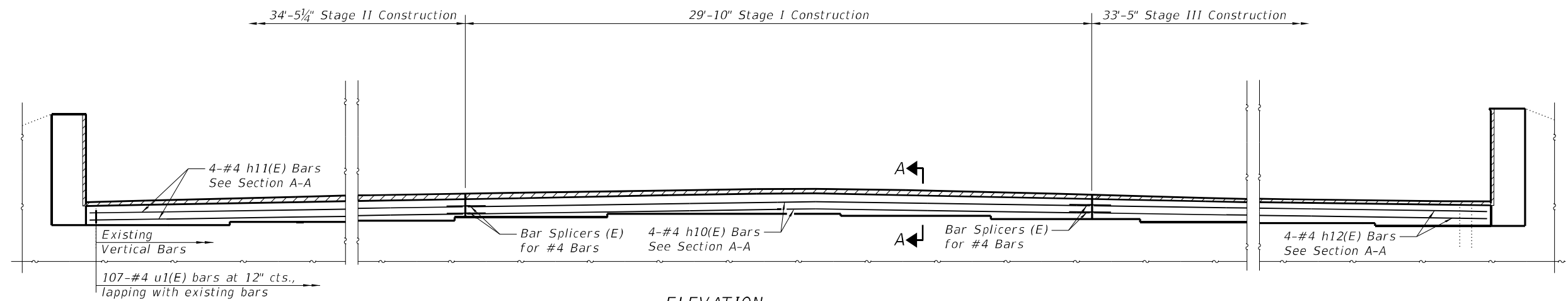
SHEET 32 OF 36 SHEETS

ILLINOIS FED. AID PROJECT

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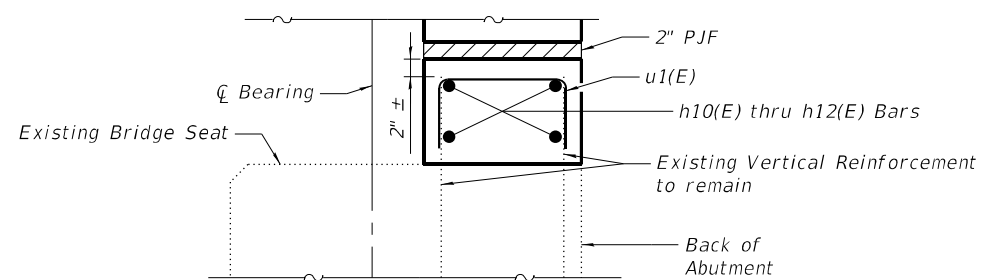


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	CHECKED - JJI	REVISED -

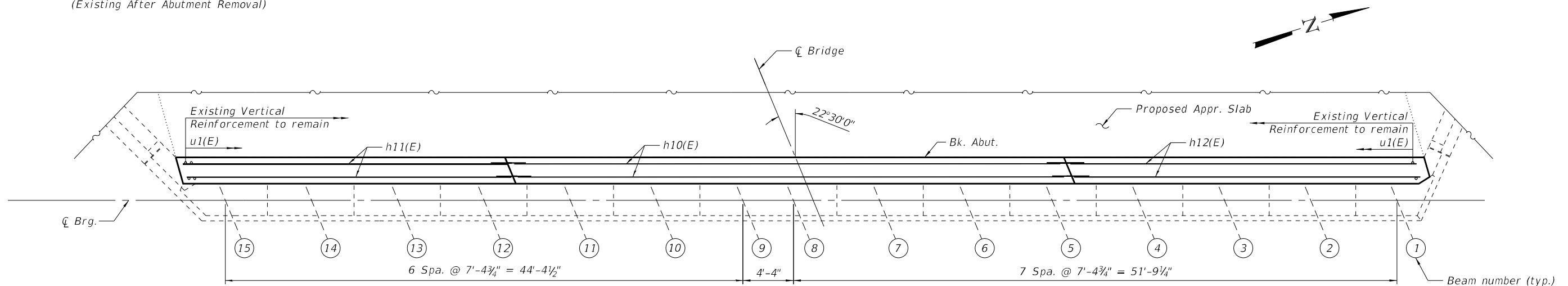


**ELEVATION**  
 (Looking West)  
 (West Abutment Shown, East Abutment Similar)

Notes:  
 Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included in Concrete Removal.  
 For 2" P.J.F. detail see Sheet 19 of 36.  
 The u1(E) bars are placed at right angles to cap and spaced along cap.



**SECTION A-A**  
 (Existing After Abutment Removal)



**TOP VIEW**  
 (Looking West)  
 (West Abutment Shown, East Abutment Similar)

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PLOT DATE =	DRAWN - TJJ	REVISED -
	CHECKED - JJI	REVISED -

**STATE OF ILLINOIS  
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**ABUTMENT BACKWALL DETAILS  
 STRUCTURE NO. 022-0057**

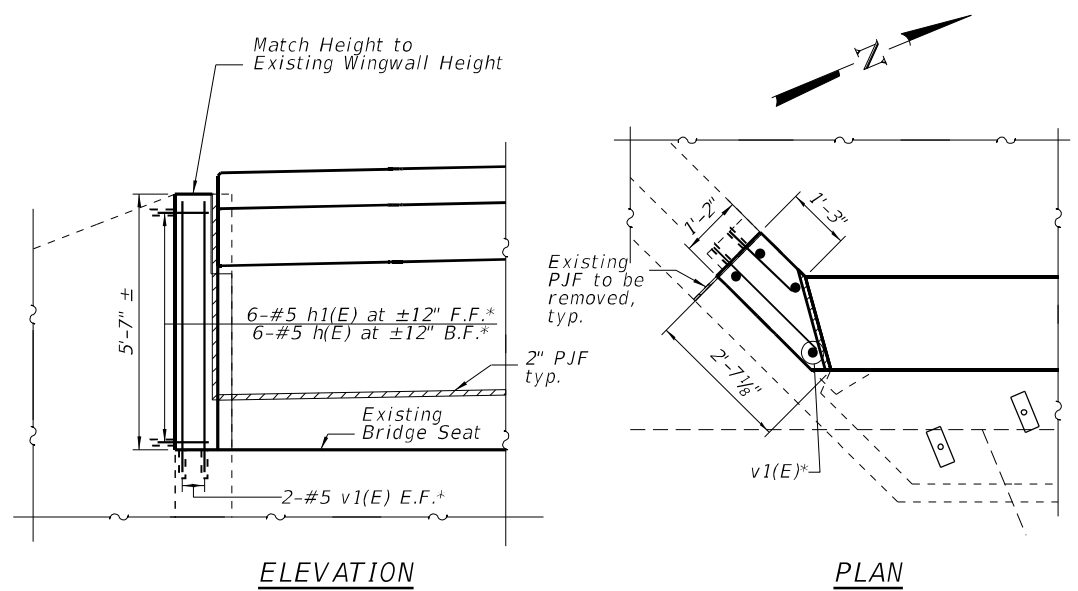
SHEET 33 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	319
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60P75	

**TWO ABUTMENTS BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
v1(E)	8	#5	6'-0"	—
v2(E)	8	#5	6'-2"	—
h(E)	12	#5	1'-9"	—
h1(E)	12	#5	2'-8"	—
h2(E)	12	#5	1'-2"	—
h3(E)	12	#5	1'-7"	—
h10(E)	8	#4	29'-6"	—
h11(E)	8	#4	34'-1"	—
h12(E)	8	#4	33'-1"	—
u1(E)	214	#4	2'-2"	□
Reinforcement Bars, Epoxy Coated			Pound	1,020
Structural Repair of Concrete (Depth Equal to or Less than 5 Inches)			Sq. Ft.	11
Structural Repair of Concrete (Depth Greater than 5 Inches)			Sq. Ft.	30
Epoxy Crack Injection			Foot	43
Concrete Removal			Cu. Yd.	47.0
Concrete Structures			Cu. Yd.	13.2
Cleaning Bridge Seats			Sq. Ft.	388
Temporary Shoring and Cribbing			Each	3

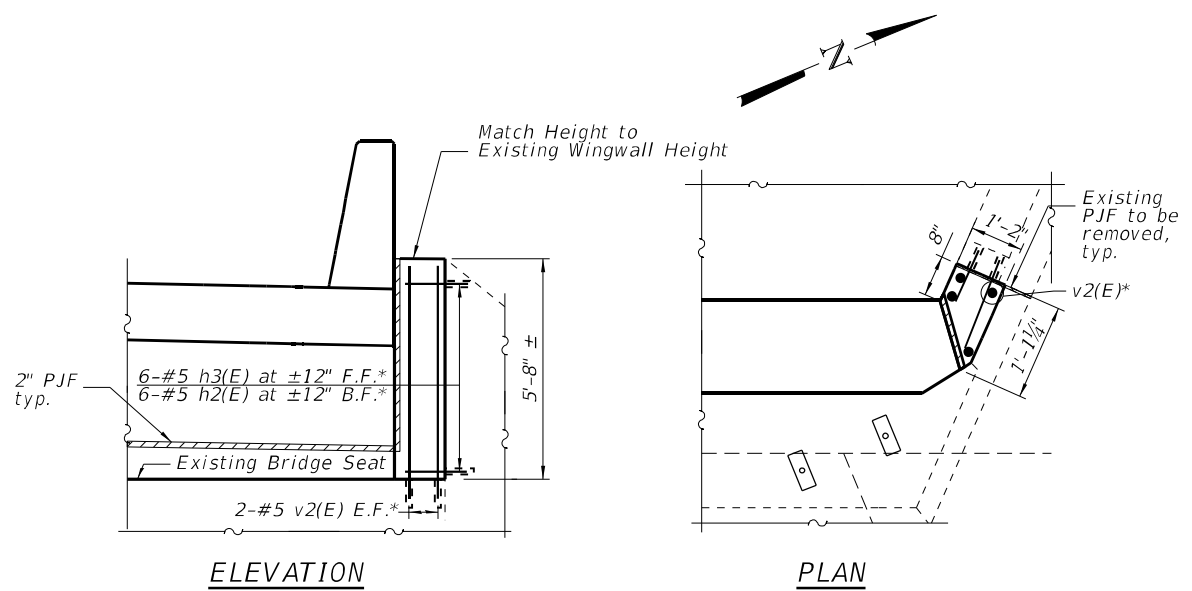
\* #5 bars v1(E), v2(E), h(E), h1(E), h2(E), & h3(E) shall be drilled and grouted with an embedment length of 8" in accordance with Article 584 of the Standard Specifications.



**ELEVATION**

**PLAN**

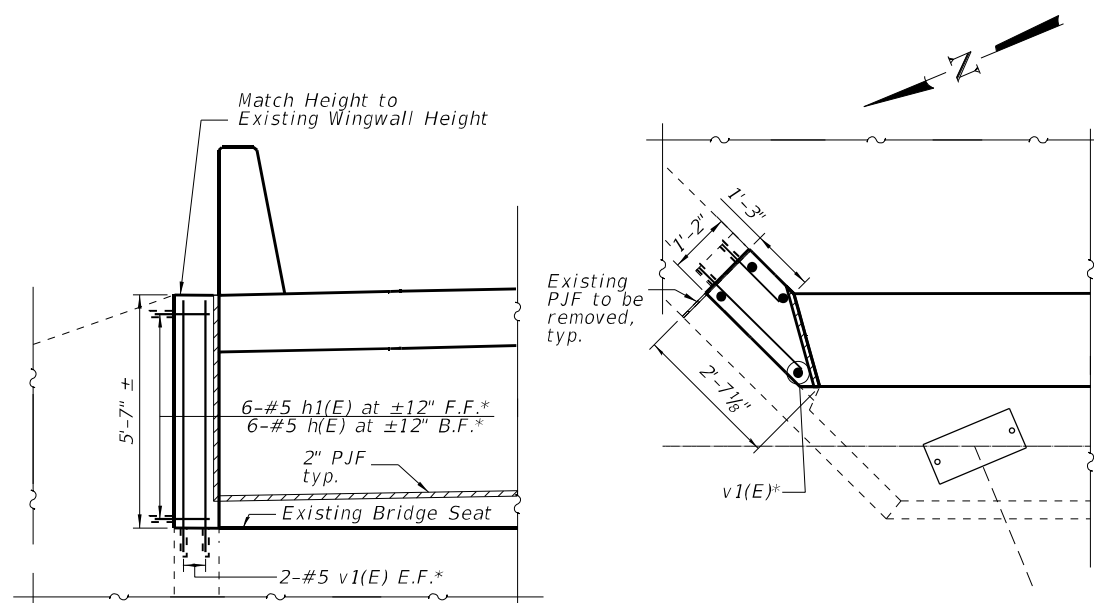
**SOUTHWEST WINGWALL**



**ELEVATION**

**PLAN**

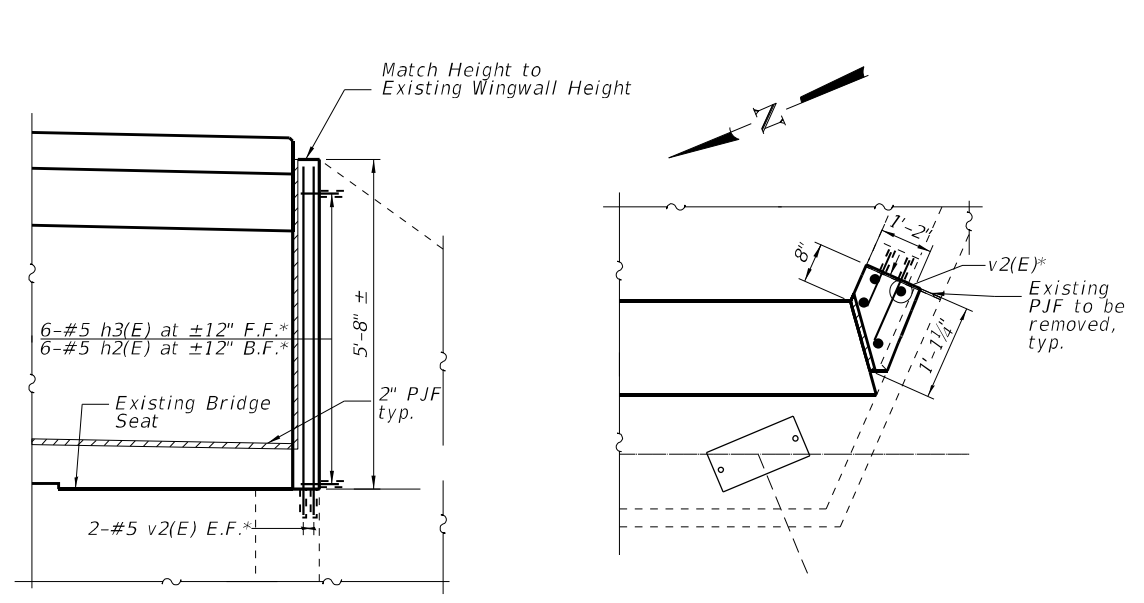
**NORTHWEST WINGWALL**



**ELEVATION**

**PLAN**

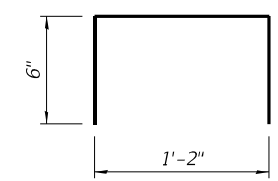
**NORTHEAST WINGWALL**



**ELEVATION**

**PLAN**

**SOUTHEAST WINGWALL**



**BAR u1(E)**

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PLOT SCALE =	CHECKED - JJI	REVISED -
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	CHECKED - JJI	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

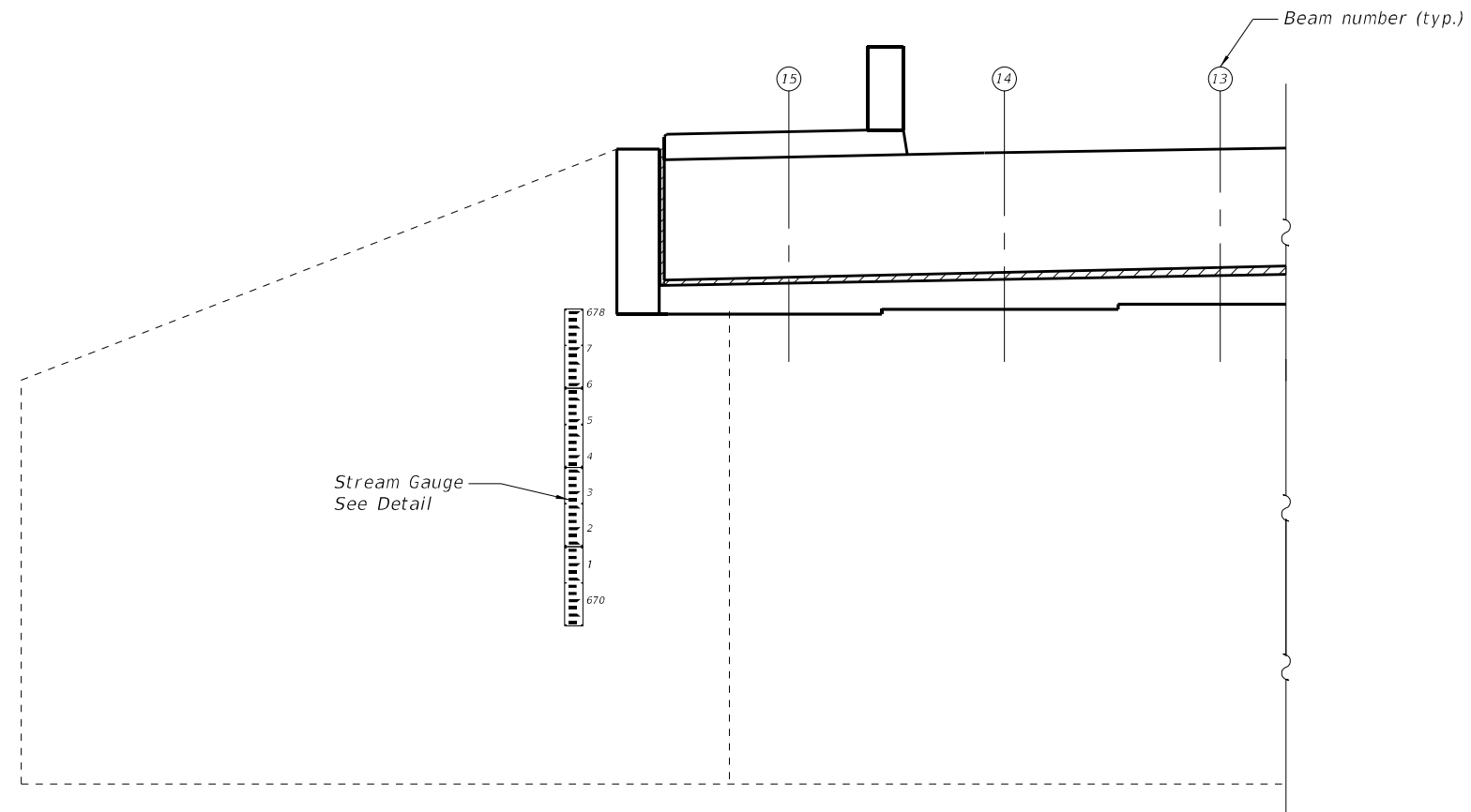
**ABUTMENT REPAIR DETAILS  
STRUCTURE NO. 022-0057**

SHEET 34 OF 36 SHEETS

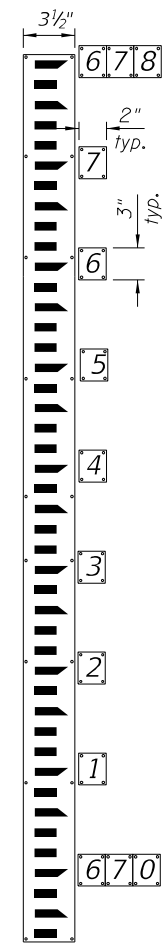
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	320
			CONTRACT NO. 60P75	

ILLINOIS FED. AID PROJECT

MODEL: Default  
 FILE NAME: W:\191+134\_IDOT\_IL\_53 at IL 56\CADD\_Sheets\Structural\01B\_Bridge Deck Replacement\160P75\_SHT-35\_SW\_WW\_stream\_gauge.dgn



SOUTHWEST WINGWALL STREAM GAUGE ELEVATION



STREAM GAUGE DETAIL

STREAM GAUGE NOTES:

The gauge plates shall be porcelain enameled iron plate graduated in feet and tenths, unnumbered and 3 1/2" wide. Gauge plates shall be "WaterMark" Style "E" or approved equivalent.

Each individual number plate should be a black numeral on a 2"x3" white porcelain enameled iron plate. Number plates shall be "Watermark" Style "E" or approved equivalent. Elevations shall be installed as shown.

Both the gauge plates and number plates shall be fastened directly to the wingwall with a 1/4" diameter, 1 1/2" long masonry screw with a hex washer head.

The Contractor must determine exact elevation of the Gauge Plates in the field and install Gauge Plates within a tolerance of 1/4".

Three digit elevations to be installed at the top of the gauge and at every elevation ending with 0. At all of the other whole elevations, place the last digit as shown in the Stream Gauge detail.

See Special Provisions.



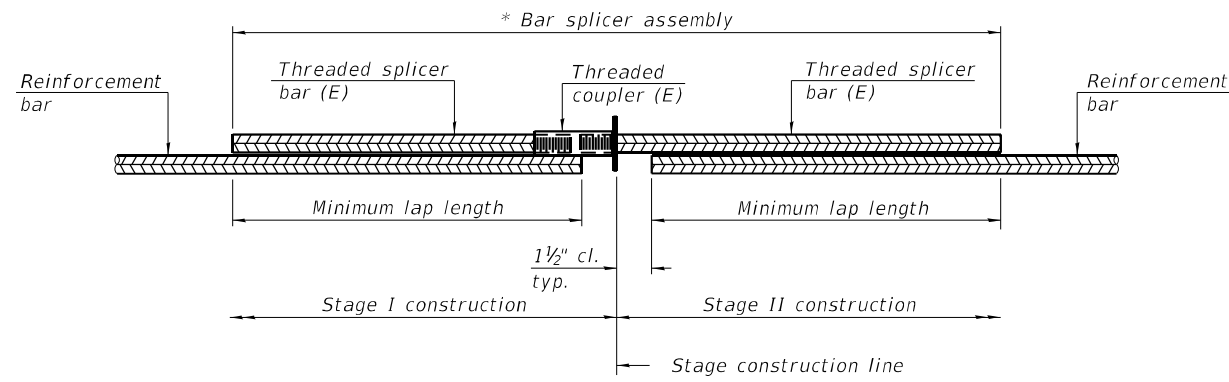
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	CHECKED - JJI	REVISED -
PLOT SCALE =	DRAWN - TJJ	REVISED -
PLOT DATE =	CHECKED - JJI	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SOUTHWEST WINGWALL STREAM GAUGE  
 STRUCTURE NO. 022-0057

SHEET 35 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4		529	321
CONTRACT NO. 60P75				
ILLINOIS FED. AID PROJECT				

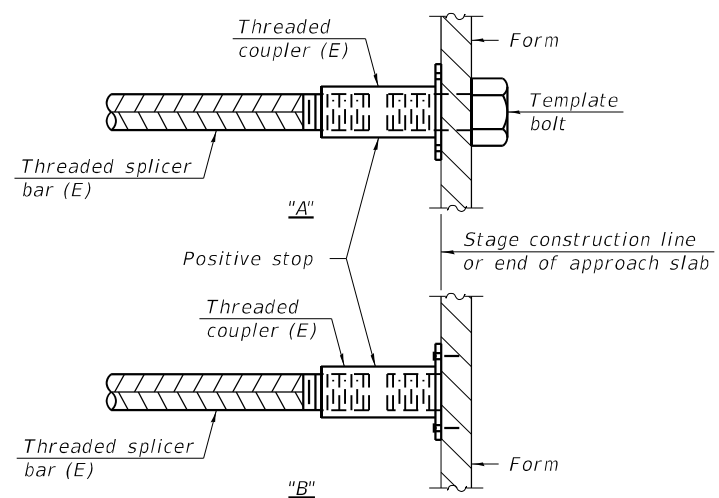


**STANDARD BAR SPLICER ASSEMBLY PLAN**  
 (All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

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

Location	Bar size	No. assemblies required	Minimum lap length
Deck Top	#5	278	3'-0"
Deck Bottom	#5	188	3'-6"
W. Backwall	#4	8	2'-7"
E. Backwall	#4	8	2'-7"
W. Diaphragm	#4	4	2'-5"
W. Diaphragm	#6	18	4'-0"
E. Diaphragm	#4	4	2'-5"
E. Diaphragm	#6	18	4'-0"
W. Appr. Slab	#5	92	3'-2"
W. Appr. Slab	#8	122	4'-9"
E. Appr. Slab	#5	92	3'-2"
E. Appr. Slab	#8	122	4'-9"
W. Appr. Ftg.	#5	80	3'-2"
E. Appr. Ftg.	#5	80	3'-2"

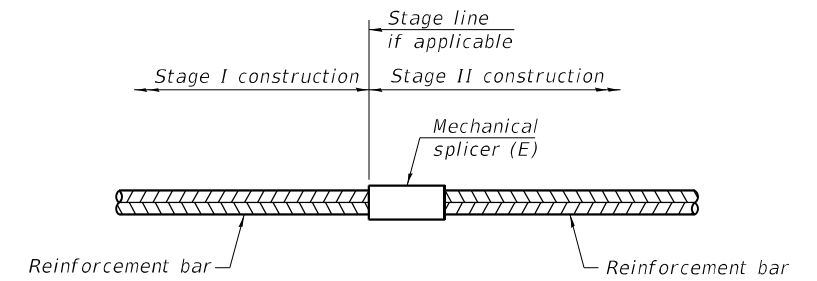


**INSTALLATION AND SETTING METHODS**

"A" : Set bar splicer assembly by means of a template bolt.

"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



**STANDARD MECHANICAL SPLICER**

Location	Bar size	No. assemblies required

**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.

MODEL: Default  
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PLOT DATE =	DRAWN - TJJ	REVISED -
	CHECKED - JJI	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
 STRUCTURE NO. 022-0057

SHEET 36 OF 36 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	322
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60P75	

Benchmark: Bronze Disk monument on southwest wingwall of existing IL 56 bridge S.N. 022-0057 over the East Branch DuPage River, Elev. 683.44.  
 Existing Structure: None. Pedestrian traffic on existing path to be maintained during construction. See Sheets 84, 91, 95 & 108 of 490.

**DESIGN SPECIFICATIONS**

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition  
 2009 AASHTO LRFD Guide Specifications for the Design of Pedestrian Bridges 2nd Edition with 2015 Interims

**LOADING**

Pedestrian Uniform Live Loading = 90 psf  
 Vehicle Load = H-10  
 Design Wind Velocity = 90 mph  
 F.W.S. = 25 psf

\* Temporary pipeline protection, as required by Nicor, designed by Contractor. Approved and inspected by Nicor. Cost included with Cofferdam (Type 1) (In-Stream/Wetland Work).

**LEGEND**

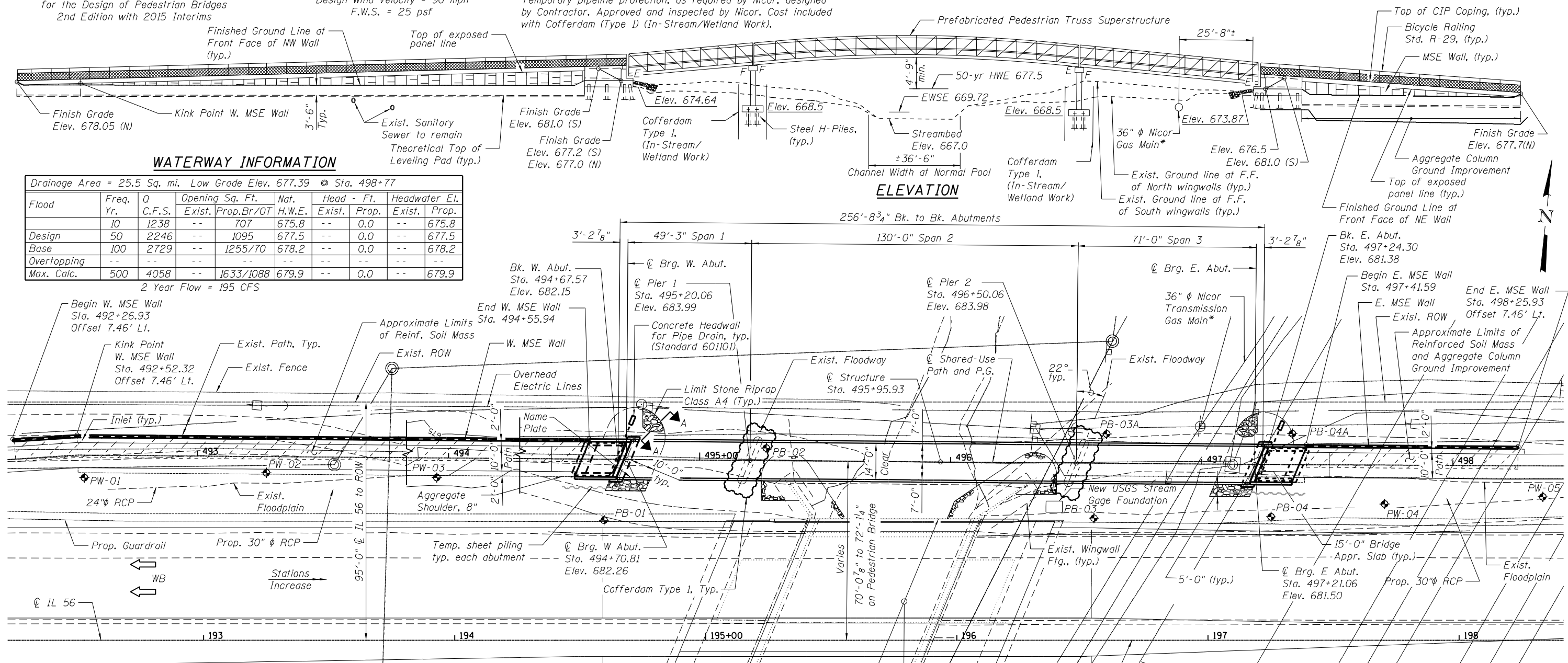
- Exist. Water Line
- Prop. Guardrail
- Prop. Storm Sewer
- Exist. Sanitary Sewer
- ◆ PW-01 Soil Boring Location
- Exist. Aerial Line
- Exist. Electric Line
- Exist. Fence
- Exist. Fiber Optic Line
- Exist. Gas Line
- High Voltage Line \*\*

**WATERWAY INFORMATION**

Drainage Area = 25.5 Sq. mi. Low Grade Elev. 677.39 @ Sta. 498+77

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.Br/OT	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	50	2246	--	707	675.8	--	0.0	--	675.8	
Base	100	2729	--	1095	677.5	--	0.0	--	677.5	
Overtopping	--	--	--	1255/70	678.2	--	0.0	--	678.2	
Max. Calc.	500	4058	--	1633/1088	679.9	--	0.0	--	679.9	

2 Year Flow = 195 CFS



**DESIGN STRESSES**

**FIELD UNITS**

f'c = 3,500 psi  
 f'c = 4,000 psi (superstructure concrete)  
 fy = 60,000 psi (Reinforcement)

**PREFABRICATED BRIDGE UNITS**

fy = 50,000 psi (M270 Grade 50) -Truss  
 fy = 46,000 psi (ASTM A500 Grade C) Structural Tubing-Truss

**PRECAST UNITS**

f'c = 4,500 psi (Precast Panels)

**SEISMIC DATA**

Seismic Performance Zone (SPZ) = 1  
 Design Spectral Acceleration at 1.0 sec. (SD1) = 0.089  
 Design Spectral Acceleration at 0.2 sec. (SDS) = 0.158  
 Soil Site Class = D

Notes:  
 Wall offsets are measured from the @ Shared-Use Path to the front face of precast panels.  
 Pedestrian Bridge and Walls to be constructed in Pre-Stage I.  
 See Roadway Staging Plans.  
 For Section A-A see sheet 2 of 21.

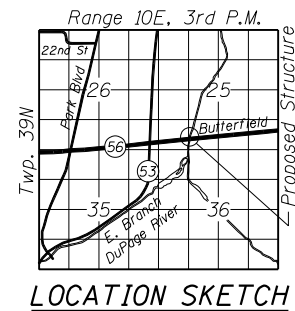
**LEGEND**

- Approximate Limits of Reinf. Soil Mass

**DESIGN SCOUR ELEVATION TABLE**

Event / Limit	Design Scour Elevations (ft.)					Item 113
	State	W. Abut.	Pier 1	Pier 2	E. Abut.	
Q100	674.6	664.6	662.6	673.9		5
Q200	674.6	664.1	662.2	673.9		
Design	674.6	664.6	662.6	673.9		
Check	674.6	664.1	662.2	673.9		

**APPROVED**  
 For Structural Adequacy Only  
 [Signature]  
 Engineer of Bridges & Structures



**GENERAL PLAN AND ELEVATION**  
**PEDESTRIAN BRIDGE OVER**  
**EAST BRANCH DuPAGE RIVER**  
**SECTION (56 & 57) R-4**  
**DuPAGE COUNTY**  
**STATION 495+95.93**  
**STRUCTURE NO. 022-8301**



USER NAME =	DESIGNED - NS	REVISED -
PLOT SCALE =	CHECKED - PRD	REVISED -
PLOT DATE = 3/22/2024	DRAWN - GM	REVISED -
	CHECKED - PRD	REVISED -

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

F.A.P. RTE. 365	SECTION (56&57)R-4	COUNTY DuPAGE	TOTAL SHEETS 529	SHEET NO. 323
CONTRACT NO. 60P75			ILLINOIS FED. AID PROJECT	

**GENERAL NOTES**

All structural steel shall be AASHTO M 270 Grade 50.

Structural Tubing shall be ASTM A500, Grade C.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

Concrete Sealer shall be applied to the designated areas of the abutment and piers.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception of masked off connection surfaces, field installed fasteners, masked off expansion joint surfaces and damaged areas shall be touched up in the field. The color of the final finish coat for all steel surfaces shall be Reddish Brown, Munsel No. 2.5YR 3/4. Cost included in Pedestrian Truss Superstructure.

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

Work for constructing pedestrian bridge will be performed under low overhead clearance. Contractor shall consider the overhead power lines in addressing all aspects of the project. Estimated elevation of lowest high voltage line is 736.0. The Contractor and ComEd are required to verify clearances during construction. All costs associated with work under low overhead clearance are included in "Pedestrian Bridge Superstructure, Temporary Sheet Piling, and Driving Piles".

Bridge bearing seat elevations are subject to revision based on the pedestrian truss superstructure shop drawings. Contractor shall verify all dimensions and elevations with final shop drawings and make necessary approved changes to bearing seat elevations and substructure reinforcement. Cost included with Pedestrian Truss Superstructure.

Pedestrian bridge shall be simple spans.

Deck shall receive a brushed finish at right angles to the edges according to Article 424.06 of the Standard Specifications except the surface shall not be divided by grooves. The cost for finishing shall be included with Pedestrian Truss Superstructure.

Protective coat shall be applied to the concrete deck in accordance with Section 503 of the Standard Specifications.

**TRUSS MANUFACTURER**

Truss manufacturer shall camber the truss as necessary to provide allowance for profile grade and for dead load deflection.

Truss manufacturer shall provide the cast-in-place reinforced concrete deck design. Concrete deck to utilize stay-in-place galvanized forms. Reinforcement shall be epoxy coated. Cost included with Pedestrian Truss Superstructure.

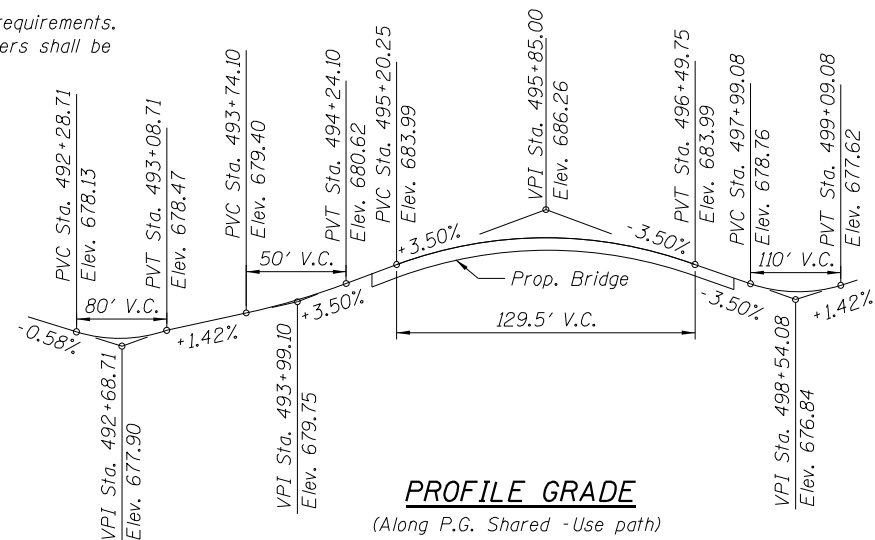
See Special Provisions for high strength bolt requirements. All other fasteners, anchor bolts, nuts and washers shall be hot-dipped galvanized or stainless steel.

EAST BRANCH DuPAGE RIVER  
STATION 495+95.93  
BUILT 202\_ BY  
STATE OF ILLINOIS  
SECTION (56 & 57) R-4  
LOADING H-10  
STRUCTURE NO. 022-8301

**NAME PLATE**

See Std. 515001

Name Plate shall be mounted on the interior face of top chord of truss.

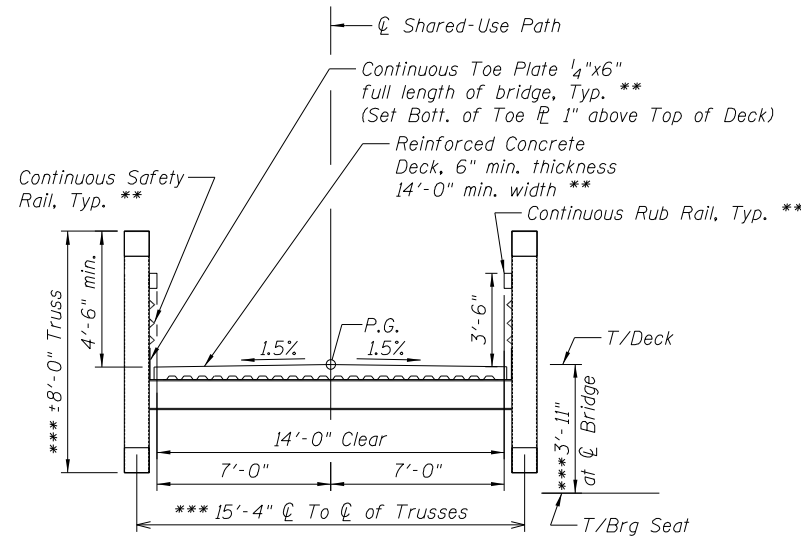


**PROFILE GRADE**

(Along P.G. Shared -Use path)

**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
1.	General Plan and Elevation
2.	General Data
3.	Temporary Sheet Piling and Cofferdams
4.	Bridge Details
5.	Top of Slab Elevations
6.	Bridge Approach Slab Details
7.	East and West Abutment
8.	Abutment Details
9.	Pier 1 and 2
10.	West MSE Wall
11.	East MSE Wall
12.	MSE Wall Details
13.	Bicycle Railing
14.	HP Pile Details
15.-21.	Boring Logs

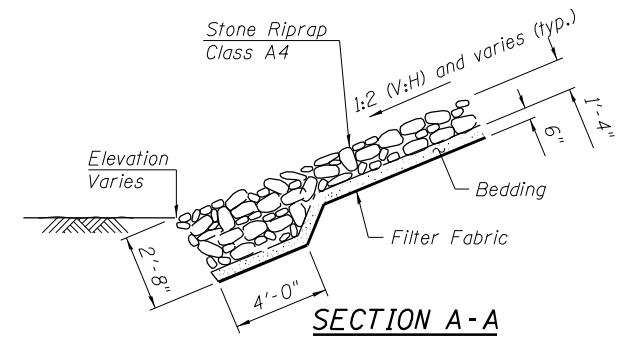


**CROSS SECTION**

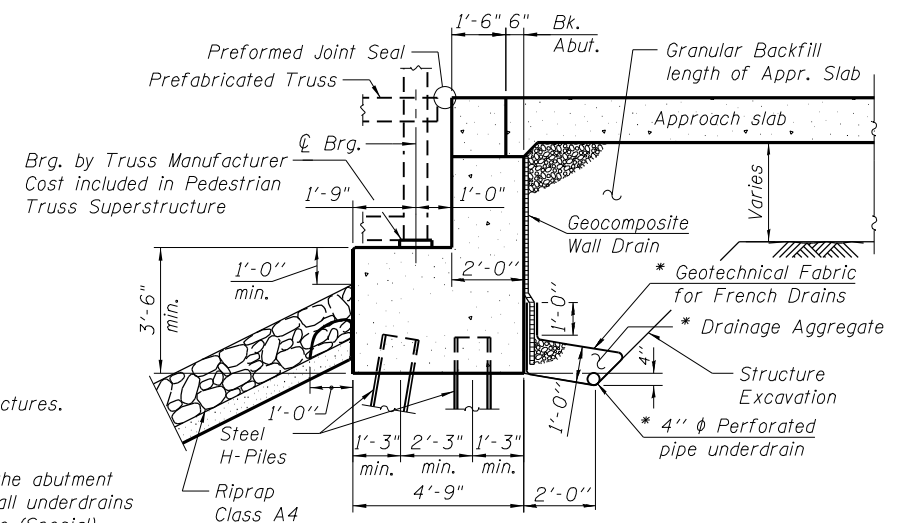
\*\* Cost included in Pedestrian Truss Superstructure  
\*\*\* Subject to refinement per Truss Manufacturer

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A4	Sq Yd	-	119	119
Filter Fabric	Sq Yd	-	119	119
Structure Excavation	Cu Yd	-	495	495
Cofferdam Excavation	Cu Yd	-	172	172
Concrete Structures	Cu Yd	-	121.0	121.0
Concrete Encasement	Cu Yd	-	6.3	6.3
Form Liner Textured Surface	Sq Ft	-	193	193
Protective Coat	Sq Yd	570	-	570
Concrete Superstructure (Approach Slab)	Cu Yd	19.5	-	19.5
Reinforcement Bars, Epoxy Coated	Pound	3220	9760	12980
Bar Splicers	Each	-	32	32
Bicycle Railing	Foot	373	-	373
Furnishing Steel Piles HP10X42	Foot	-	907	907
Driving Piles	Foot	-	907	907
Test Pile Steel HP10X42	Each	-	4	4
Pile Shoes	Each	-	34	34
Name Plates	Each	1	-	1
Preformed Joint Seal 1 1/2"	Foot	62	-	62
Temporary Sheet Piling	Sq Ft	-	1015	1015
Mechanically Stabilized Earth Retaining Wall	Sq Ft	-	1624	1624
Granular Backfill For Structures	Cu Yd	-	72	72
Concrete Sealer	Sq Ft	-	1090	1090
Geocomposite Wall Drain	Sq Yd	-	37	37
Pipe Underdrains For Structures 4"	Foot	-	90	90
Pipe Underdrains For Structures (Special) 4"	Foot	-	20	20
Pedestrian Truss Superstructure	Sq Ft	3595	-	3595
Aggregate Column Ground Improvement	L Sum	-	1	1
Cofferdam (Type 1) (In-Stream/Wetland Work)	Each	-	2	2



**SECTION A-A**



**SECTION THRU PILE SUPPORTED**

**STUB ABUTMENT**

(Horiz. dim. @ Rt. L's)

\*Included in the cost of Pipe Underdrains for Structures.

Note:

All drainage system components shall extend parallel to the abutment back wall until they intersect the wingwalls. Connect wingwall underdrains to abutment underdrain. The Pipe Underdrains for Structure (Special) shall extend under the wingwall until intersecting the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 60110). See Sht. 8 of 21 for additional details. Excavation required to install Pipe Underdrains for Structures (Special) 4" shall be included with the price bid for that item.

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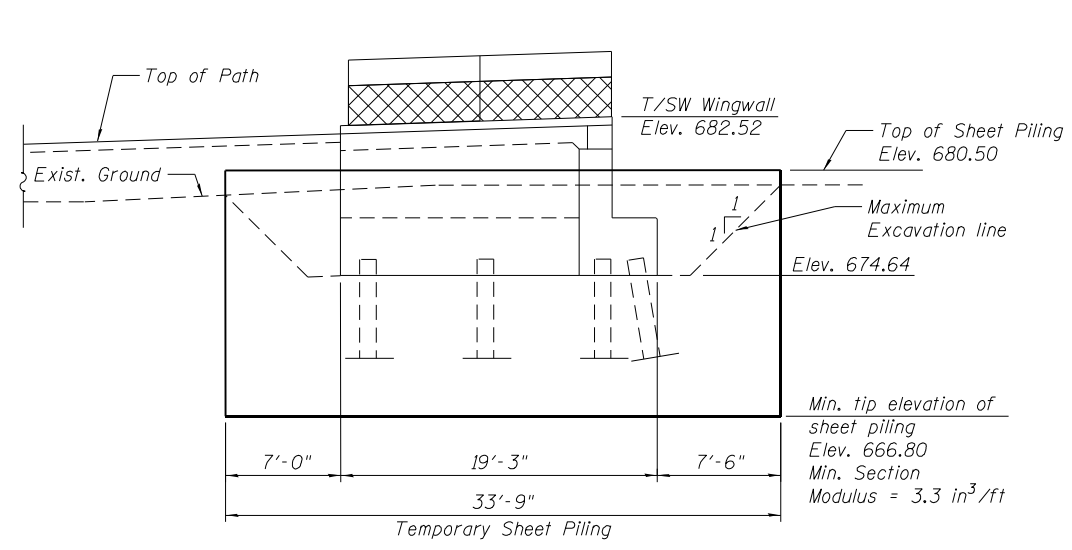
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL DATA  
STRUCTURE NO. 022-8301

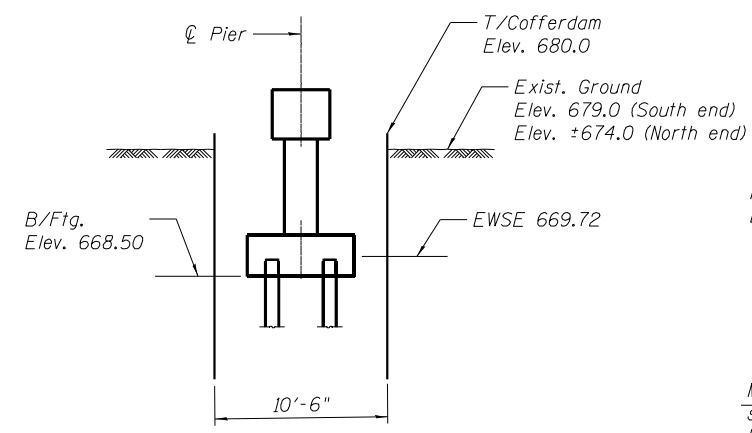
SHEET NO. 2 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 60P75			ILLINOIS FED. AID PROJECT	

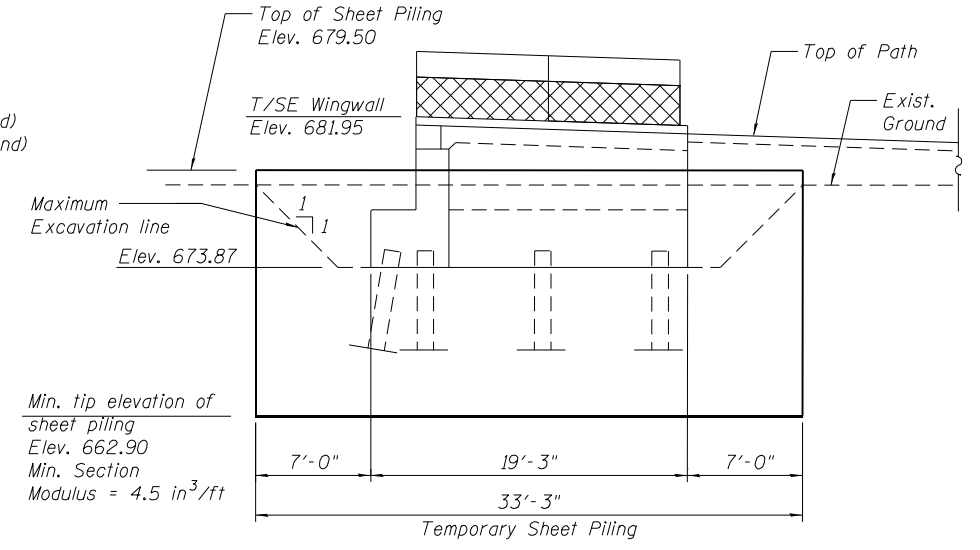




**SECTION A-A**

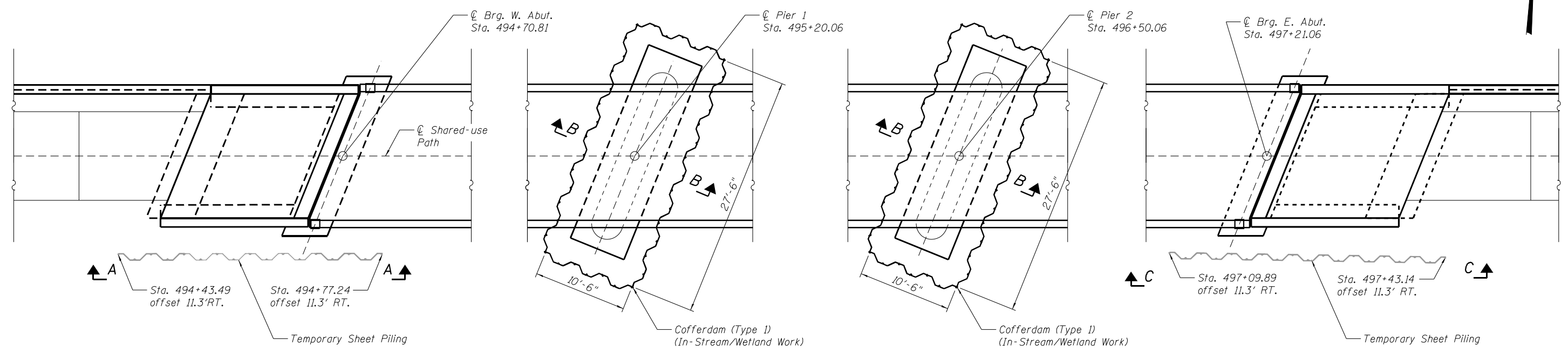


**SECTION B-B**



**SECTION C-C**

Note:  
If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.  
Temporary Sheet Piling is Grade 50.



**PARTIAL PLAN**

(Showing Temporary Sheet Piling and Cofferdams)

FILE NAME = W:\191-134\_IDOT\_IL\_53.ctb; I:\56\CADD\_Sheets\Structure\02\_Bedestrian\02\_Bedestrian\02\_TempSheetPiling and Cofferdam



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PLOT SCALE =	DRAWN - GM	REVISED -
PLOT DATE = 2/1/2024	CHECKED - PRD	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY SHEET PILING AND COFFERDAMS  
STRUCTURE NO. 022-8301**

SHEET NO. 3 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	325
CONTRACT NO. 60P75				

ILLINOIS FED. AID PROJECT

**BRIDGE REACTION TABLE**  
**SPAN 1**

Load Type	P (Lbs.)	H (Lbs.)
Dead Load	21,670	----
Uniform Live Load	15,514	----
Vehicle Load	9,430	----
Wind Uplift (20 psf)	5,356	----
Wind	±1,317	4,568

Table References:

P - Vertical load at each base plate (4 Per Span)  
H - Horizontal load at each footing (2 Per Span)  
Positive - Downward load; Negative - Upward load

**BRIDGE REACTION TABLE**  
**SPAN 2**

Load Type	P (Lbs.)	H (Lbs.)
Dead Load	57,200	----
Uniform Live Load	40,950	----
Vehicle Load	9,780	----
Wind Uplift (20 psf)	14,138	----
Wind	±3,477	12,058

Table References:

P - Vertical load at each base plate (4 Per Span)  
H - Horizontal load at each footing (2 Per Span)  
Positive - Downward load; Negative - Upward load

**BRIDGE REACTION TABLE**  
**SPAN 3**

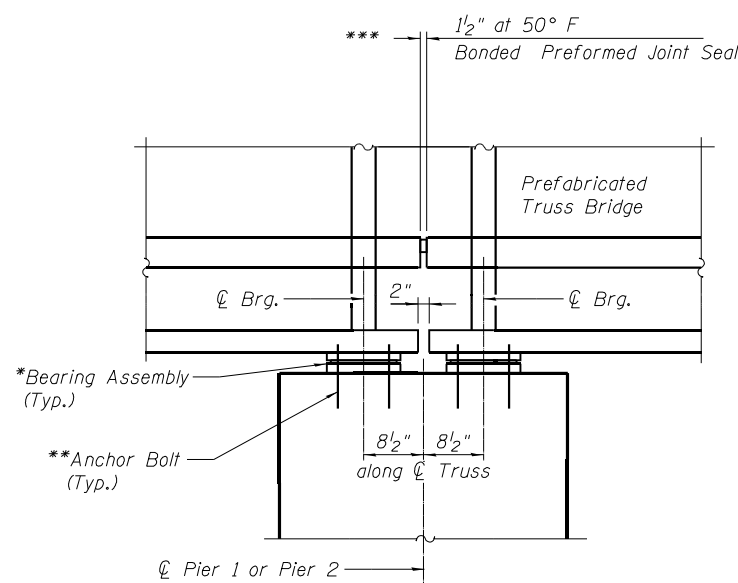
Load Type	P (Lbs.)	H (Lbs.)
Dead Load	31,240	----
Uniform Live Load	22,365	----
Vehicle Load	9,610	----
Wind Uplift (20 psf)	7,721	----
Wind	±1,899	6,585

Table References:

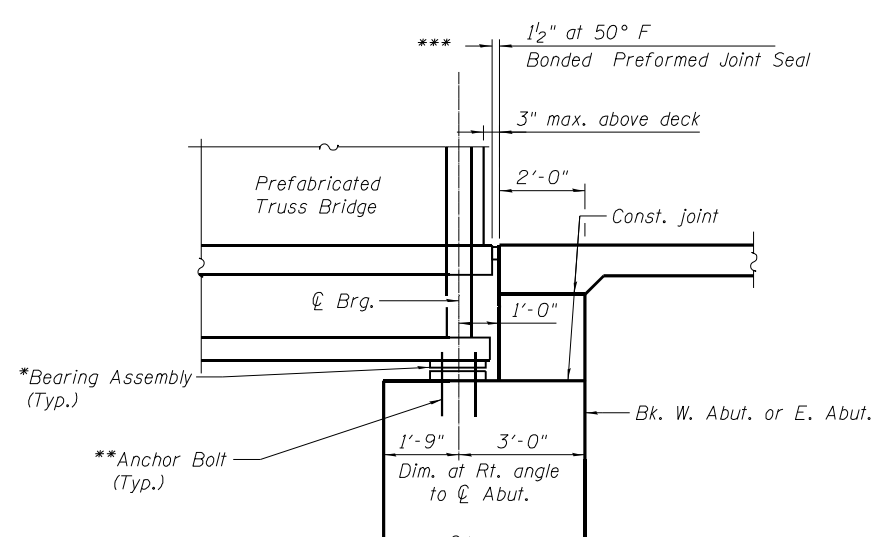
P - Vertical load at each base plate (4 Per Span)  
H - Horizontal load at each footing (2 Per Span)  
Positive - Downward load; Negative - Upward load

**Notes:**

Dead Load includes future wearing surface and estimated truss dead load.  
Bridge section details and reaction table loads are for reference only. Pedestrian truss superstructure manufacturer is responsible for design and loads to the substructure.  
The substructure is designed per AASHTO LRFD and based on the assumed truss loads shown in the tables. If the manufacturer's design exceeds those loads and/or the substructure needs to be adjusted to accommodate the truss superstructure chosen, then the Contractor shall submit the redesign to the Engineer for approval prior to ordering any material or starting construction. All design calculations, shop drawings and redesigned substructure drawings shall be sealed by a Structural Engineer licensed in the State of Illinois and shall be the responsibility of the Contractor.



**SECTION THRU PIER CAP**



**SECTION THRU ABUTMENT**

**BRIDGE JOINT DETAILS**

\* Base plate, teflon pad, setting plate, and fabric pad shall be supplied by Bridge Manufacturer. Bearings shall be detailed and installed to provide the Fixed and Expansion End conditions as shown in the plans and to resist the forces as shown on the Bridge Reactions Tables.

\*\* Contractor shall coordinate with Bridge Manufacturer for Anchor Bolt Requirements. Cost of Anchor Bolts shall be included with the item "Pedestrian Truss Superstructure".

\*\*\* See Guide Bridge Special Provision "Preformed Bridge Joint Seal".

FILE NAME = W:\191-134\_IDOT\_IL\_53\_of\_IL\_56\CADD\_Sheets\Structure\02\_Pedestrian\02\_Pedestrian\160P75\_SHT-04\_Bridge Deck and Details.dgn



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PLOT DATE = 2/1/2024	CHECKED - PRD	REVISED -

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

**BRIDGE DETAILS**  
**STRUCTURE NO. 022-8301**

SHEET NO. 4 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	326
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60P75	

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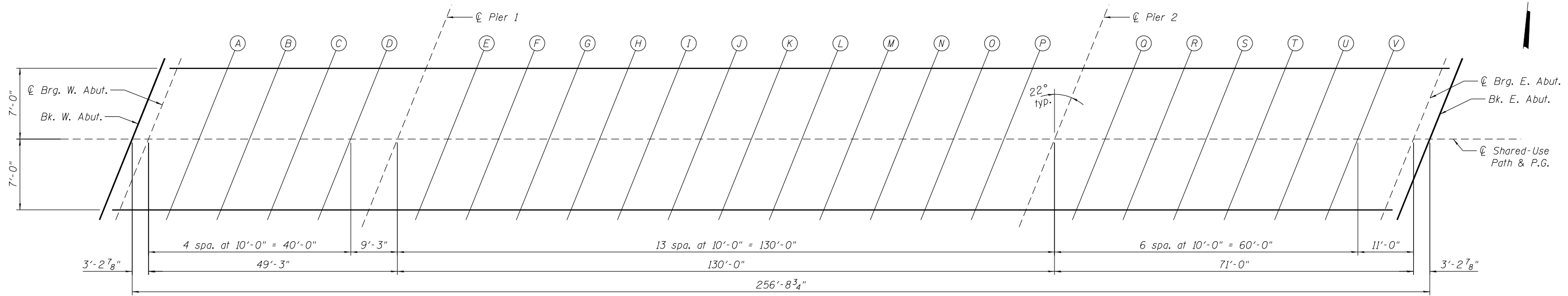
Location	Station	Offset	Theoretical Deck Elevations
Bk. of W. Abut.	494+70.40	7.00 Lt	682.14
☉ Brg. W. Abut.	494+73.64	7.00 Lt	682.26
A	494+83.64	7.00 Lt	682.61
B	494+93.64	7.00 Lt	682.96
C	495+03.64	7.00 Lt	683.31
D	495+13.64	7.00 Lt	683.66
☉ Pier 1	495+22.89	7.00 Lt	683.98
E	495+32.89	7.00 Lt	684.29
F	495+42.89	7.00 Lt	684.54
G	495+52.89	7.00 Lt	684.74
H	495+62.89	7.00 Lt	684.89
I	495+72.89	7.00 Lt	684.98
J	495+82.89	7.00 Lt	685.02
K	495+92.89	7.00 Lt	685.01
L	496+02.89	7.00 Lt	684.94
M	496+12.89	7.00 Lt	684.81
N	496+22.89	7.00 Lt	684.63
O	496+32.89	7.00 Lt	684.40
P	496+42.89	7.00 Lt	684.12
☉ Pier 2	496+52.89	7.00 Lt	683.78
Q	496+62.89	7.00 Lt	683.43
R	496+72.89	7.00 Lt	683.08
S	496+82.89	7.00 Lt	682.73
T	496+92.89	7.00 Lt	682.38
U	497+02.89	7.00 Lt	682.03
V	497+12.89	7.00 Lt	681.68
☉ Brg E. Abut.	497+23.89	7.00 Lt	681.29
Bk. of E. Abut.	497+27.13	7.00 Lt	681.18

**CL PATH**

Location	Station	Offset	Theoretical Deck Elevations
Bk. of W. Abut.	494+67.57	0.00	682.15
☉ Brg. W. Abut.	494+70.81	0.00	682.26
A	494+80.81	0.00	682.61
B	494+90.81	0.00	682.96
C	495+00.81	0.00	683.31
D	495+10.81	0.00	683.66
☉ Pier 1	495+20.06	0.00	683.99
E	495+30.06	0.00	684.31
F	495+40.06	0.00	684.58
G	495+50.06	0.00	684.80
H	495+60.06	0.00	684.96
I	495+70.06	0.00	685.07
J	495+80.06	0.00	685.12
K	495+90.06	0.00	685.12
L	496+00.06	0.00	685.07
M	496+10.06	0.00	684.96
N	496+20.06	0.00	684.79
O	496+30.06	0.00	684.58
P	496+40.06	0.00	684.31
☉ Pier 2	496+50.06	0.00	683.98
Q	496+60.06	0.00	683.63
R	496+70.06	0.00	683.28
S	496+80.06	0.00	682.93
T	496+90.06	0.00	682.58
U	497+00.06	0.00	682.23
V	497+10.06	0.00	681.88
☉ Brg E. Abut.	497+21.06	0.00	681.50
Bk. of E. Abut.	497+24.30	0.00	681.38

**7 FEET RIGHT**

Location	Station	Offset	Theoretical Deck Elevations
Bk. of W. Abut.	494+64.74	7.00 Rt	681.95
☉ Brg. W. Abut.	494+67.98	7.00 Rt	682.06
A	494+77.98	7.00 Rt	682.41
B	494+87.98	7.00 Rt	682.76
C	494+97.98	7.00 Rt	683.11
D	495+07.98	7.00 Rt	683.46
☉ Pier 1	495+17.23	7.00 Rt	683.78
E	495+27.23	7.00 Rt	684.12
F	495+37.23	7.00 Rt	684.41
G	495+47.23	7.00 Rt	684.64
H	495+57.23	7.00 Rt	684.81
I	495+67.23	7.00 Rt	684.94
J	495+77.23	7.00 Rt	685.01
K	495+87.23	7.00 Rt	685.02
L	495+97.23	7.00 Rt	684.98
M	496+07.23	7.00 Rt	684.89
N	496+17.23	7.00 Rt	684.74
O	496+27.23	7.00 Rt	684.54
P	496+37.23	7.00 Rt	684.28
☉ Pier 2	496+47.23	7.00 Rt	683.98
Q	496+57.23	7.00 Rt	683.63
R	496+67.23	7.00 Rt	683.28
S	496+77.23	7.00 Rt	682.93
T	496+87.23	7.00 Rt	682.58
U	496+97.23	7.00 Rt	682.23
V	497+07.23	7.00 Rt	681.88
☉ Brg E. Abut.	497+18.23	7.00 Rt	681.49
Bk. of E. Abut.	497+21.47	7.00 Rt	681.38



**PLAN**

The Pedestrian Truss Superstructure manufacturer shall determine the Theoretical Deck Elevations Adjusted for Dead Load Deflection and take into account the concrete deck appropriately in the determination of bridge camber such that the Profile Grade shown on sheet 2 of 21 is attained.

FILE NAME = W:\191-134\_IDOT\_IL\_53\_of\_IL\_56\CADD\_Sheets\Structure\02\_Pedestrian\02\_Pedestrian\02\_Pedestrian\02\_Pedestrian\02\_Pedestrian\02\_Pedestrian.dgn



USER NAME =	DESIGNED - NS	REVISED -
PLOT SCALE =	CHECKED - PRD	REVISED -
PLOT DATE = 2/1/2024	DRAWN - GM	REVISED -
	CHECKED - PRD	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS  
STRUCTURE NO. 022-8301**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	327
SHEET NO. 5 OF 21 SHEETS			CONTRACT NO. 60P75	
ILLINOIS FED. AID PROJECT				

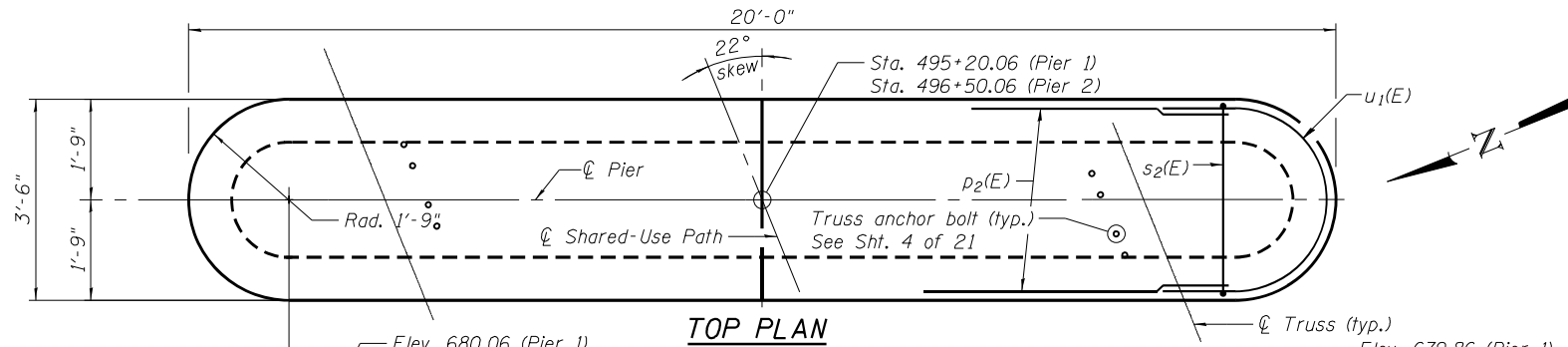




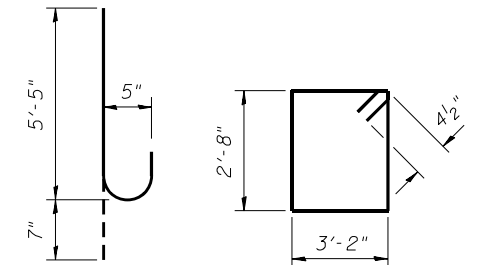


**PILE DATA**

Type: HP10x42 with Pile Shoes  
 Nominal Required Bearing: 335 kip  
 Factored Resistance Available: 184 kip  
 Est. Length: 28 Ft (Pier 1)  
 25 Ft (Pier 2)  
 No. Production Piles: 7 per Pier (14 Total)  
 No. Test Piles: 1 per Pier (2 total)

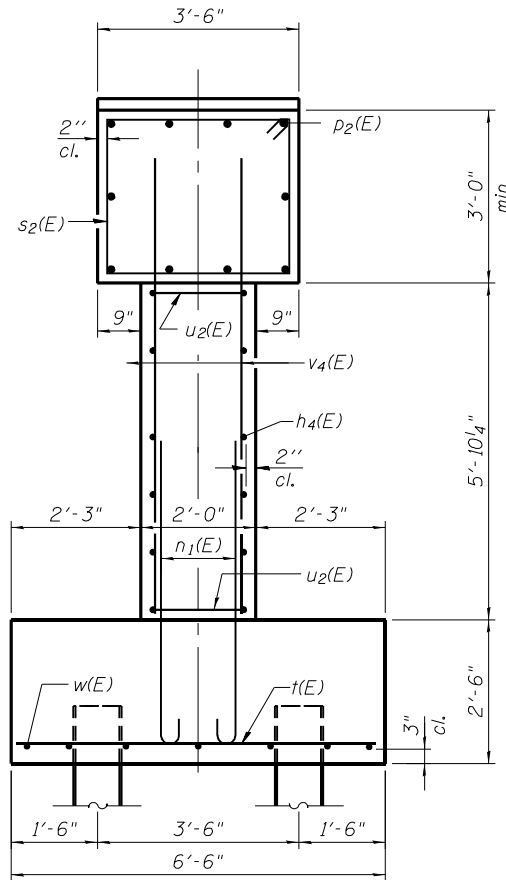


**TOP PLAN**

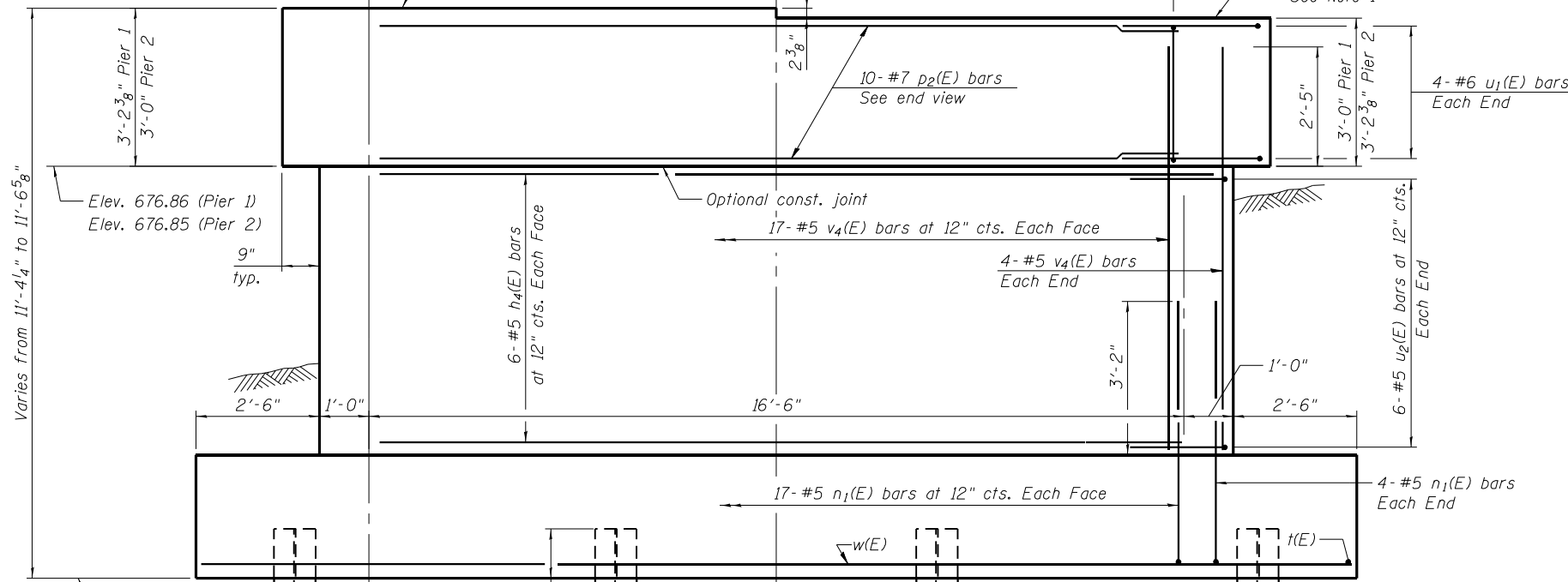


**BAR n<sub>1</sub>(E)**

**BAR s<sub>2</sub>(E)**

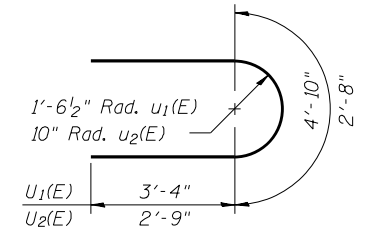


**END VIEW**



**ELEVATION**

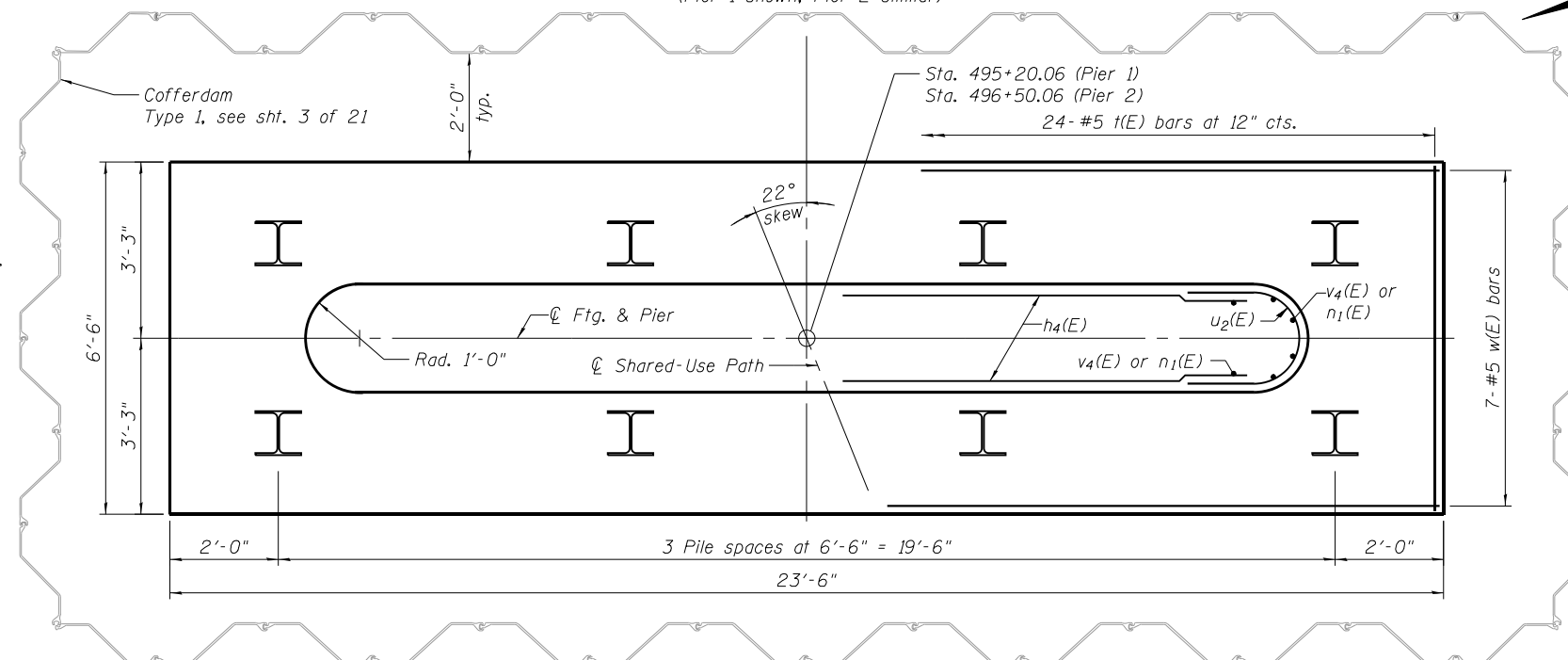
(Looking East)  
 (Pier 1 shown, Pier 2 similar)



**BARS u<sub>1</sub>(E) & u<sub>2</sub>(E)**

**TWO PIERS  
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h4(E)	24	#5	16'-6"	—
n1(E)	84	#5	6'-0"	⌋
p2(E)	20	#7	16'-6"	—
s2(E)	34	#4	12'-5"	□
t(E)	48	#5	6'-2"	—
u1(E)	16	#6	11'-6"	⌋
u2(E)	24	#5	8'-2"	⌋
v4(E)	84	#5	8'-3"	—
w(E)	14	#5	23'-2"	—
Cofferdam Excavation		Cu. Yd.	172	
Concrete Structures		Cu. Yd.	59.9	
Reinforcement Bars, Epoxy Coated		Pound	3,750	
Furnishing Steel Piles HP10x42		Foot	371	
Driving Piles		Foot	371	
Test Pile Steel HP10x42		Each	2	
Pile Shoes		Each	16	
Concrete Sealer		Sq. Ft.	688	
Cofferdam (Type 1) (In-Stream/Wetland Work)		Each	2	



**FOOTING PLAN**

- Notes:
- The Pier Cap seat elevations shall be coordinated by the Contractor for the requirements of the Pedestrian Truss Superstructure with approval from the Engineer.
  - Concrete Sealer shall be applied to all exposed concrete surfaces.
  - Pour steps monolithically with cap.
  - For details of piles see sheet 14 of 21.

FILE NAME = W:\191-134\_IDOT\_IL\_53.dwg; 5/6/CADD\_Sheets\Structure\102\_Pedestrian\160975\_SHT-09\_Pier 1 and 2.dwg



USER NAME =	DESIGNED - NS	REVISED -
PLOT SCALE =	CHECKED - PRD	REVISED -
PLOT DATE = 2/1/2024	DRAWN - GM	REVISED -
	CHECKED - PRD	REVISED -

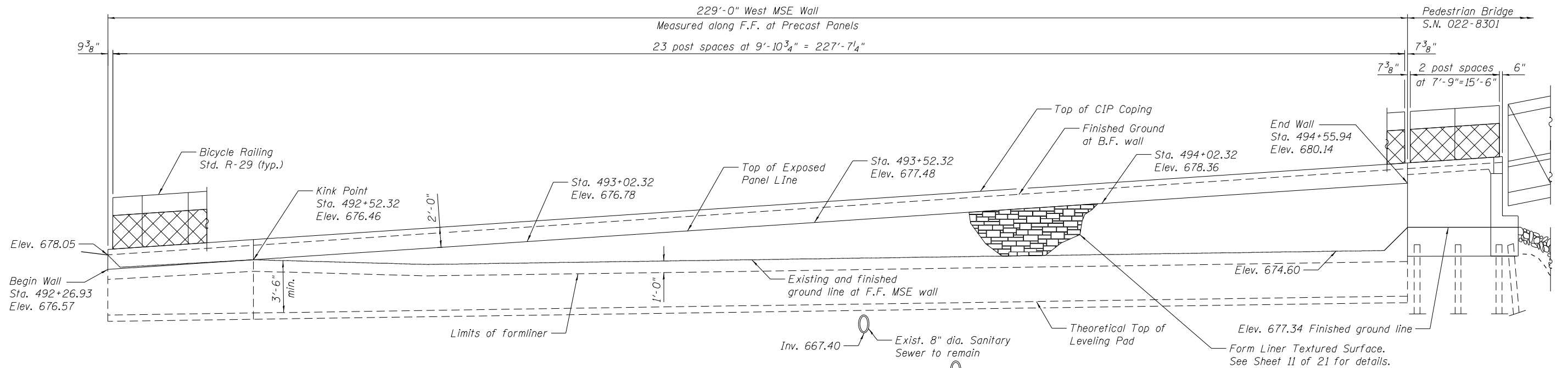
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PIER 1 AND 2  
 STRUCTURE NO. 022-8301**

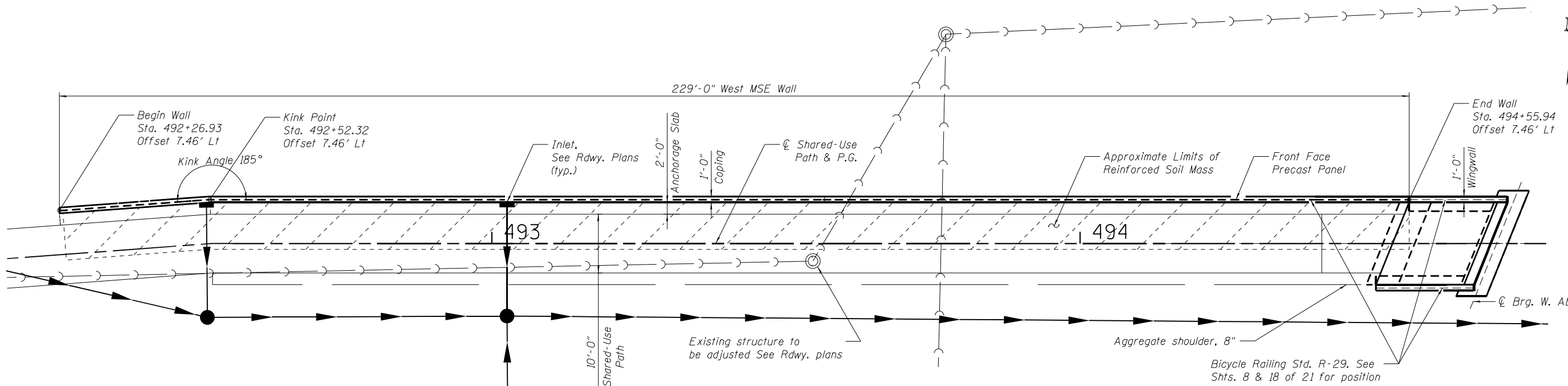
SHEET NO. 9 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	331
CONTRACT NO. 60P75				

ILLINOIS FED. AID PROJECT



**ELEVATION**  
(Scale V:H 2:1)  
(Looking at back face of wall)



**PLAN**

**BILL OF MATERIAL**

Item	Unit	Total
Structure Excavation	Cu. Yd.	235
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	1,211
Protective Coat	Sq. Yd.	90

- Notes:
1. Wall Stations and Offsets are given to the Front Face (FF) of the wall and are measured from centerline of Shared-Use Path.
  2. Wall is built in conjunction with new bridge S.N. 022-8301.
  3. Horizontal dimensions measured along front face of precast panels.
  4. Cast-in-place concrete and reinforcing steel, epoxy coated, required for coping and anchorage slab will be included in payment for Mechanically Stabilized Earth Retaining Wall.
  5. Contractor shall coordinate MSE retaining wall construction with abutment construction. The Contractor shall be cognizant about the site constraints and the related challenges associated with this work. Installation procedures will be affected by existing conditions and may require modifications to the details and/or procedures shown on the plans. It is the Contractor's responsibility to determine the most cost-effective method of construction and include all items necessary for the proper and safe execution of the work.

FILE NAME = W:\191-134\_IDOT\_IL\_53\_of\_11\_S01CADD\_Sheets\Structure\102\_Pedestrian\160P75\_SHT-10\_West MSE Wall.dgn



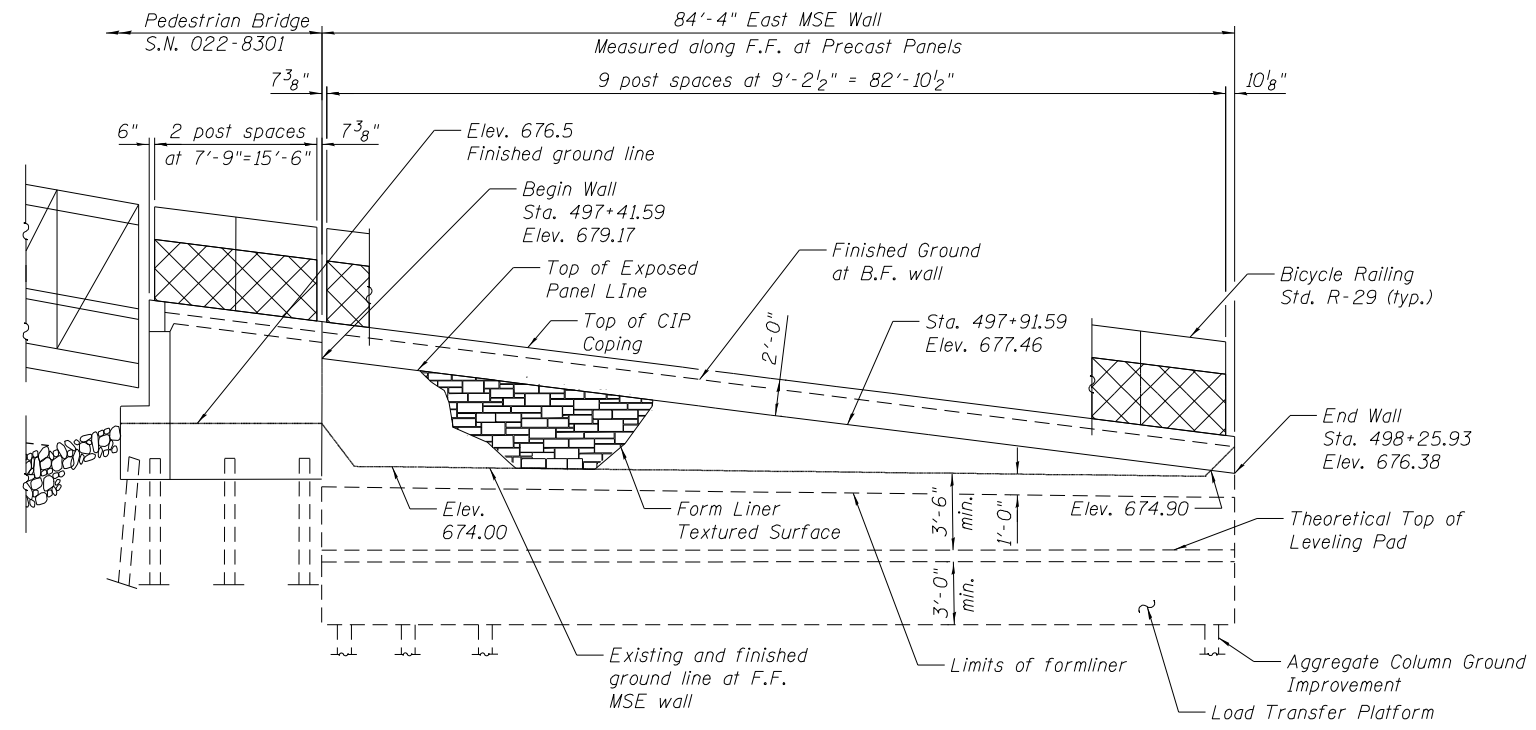
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	CHECKED - PRD	REVISED -
PLOT SCALE =	DRAWN - GM	REVISED -
PLOT DATE = 2/1/2024	CHECKED - PRD	REVISED -

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

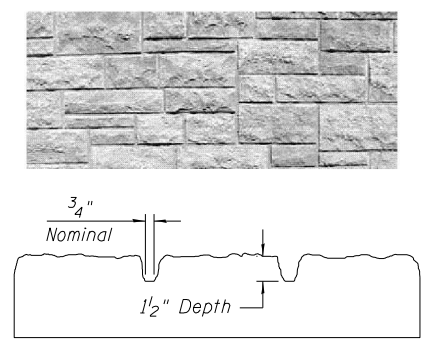
**WEST MSE WALL**  
**STRUCTURE NO. 022-8301**  
SHEET NO. 10 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	332
CONTRACT NO. 60P75				
ILLINOIS FED. AID PROJECT				



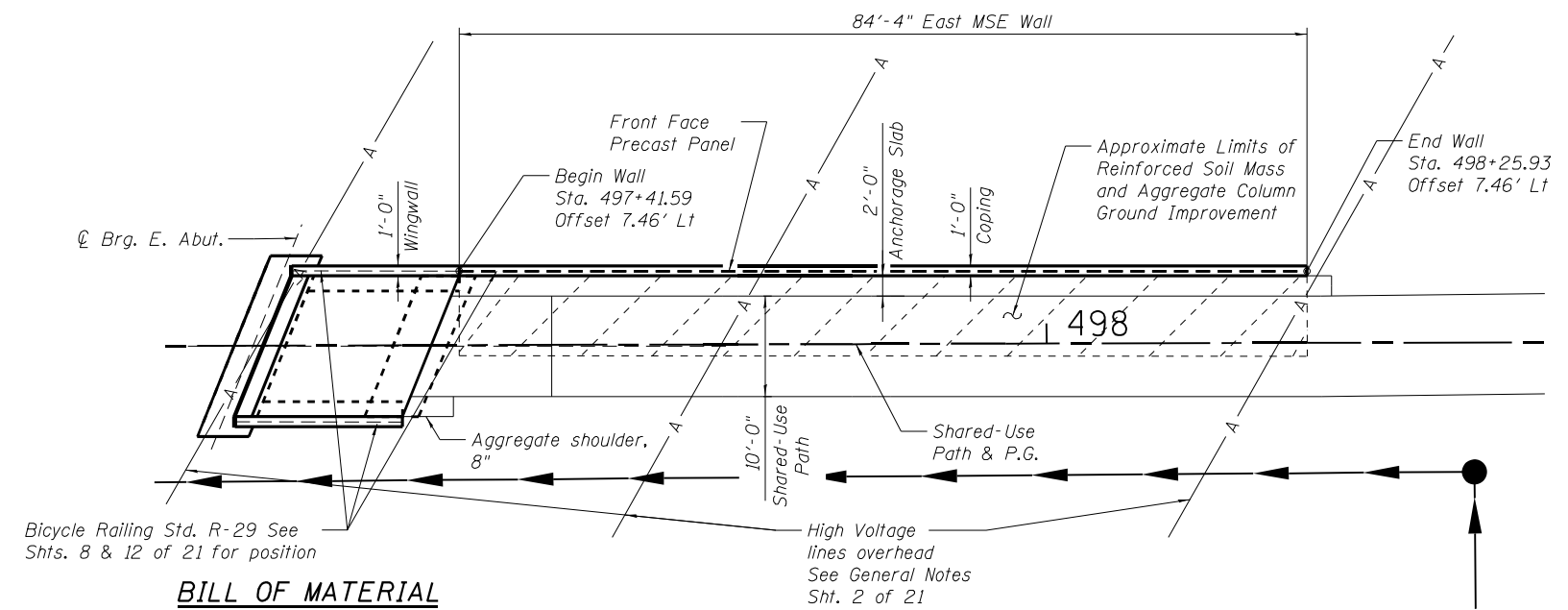


**ELEVATION**  
(Scale V:H 2:1)  
(Looking at back face of wall)



**FORM LINER  
TEXTURED DETAIL**

Note:  
Form liner textured surface is to be used on MSE walls and bridge abutment wingwalls, as indicated on the plans. Cost of form liner on MSE walls is included in the cost of "Mechanically Stabilized Earth Retaining Wall". Cost of form liner on abutment wingwalls is paid for as "Form Liner Textured Surface". Work shall comply with Section 503 of the Standard Specifications.  
Provide pattern for Ashlar limestone surface utilizing the following form liner manufacturers or equivalent, as approved by the Engineer:  
Custom Rock International, pattern #2108 - Tollway Ashlar  
Spec Formliners, pattern #1523 - RE Ashlar  
Fitzgerald Formliners, pattern #17000 Florida Ashlar  
Symons/Dayton Superior - Southwest Ashlar Stone



**PLAN**

**BILL OF MATERIAL**

Item	Unit	Total
Structure Excavation	Cu. Yd.	164
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	413
Aggregate Column Ground Improvement	L. Sum	1
Protective Coat	Sq. Yd.	33

- Notes:
1. Wall Stations and Offsets are given to the Front Face (FF) of the wall and are measured from centerline of Shared-Use Path.
  2. Wall is built in conjunction with new bridge S.N. 022-8301.
  3. Horizontal dimensions measured along front face of precast panels.
  4. See Special Provisions for Aggregate Column Ground Improvement for design and construction requirements.
  5. Cast-in-place concrete and reinforcing steel, epoxy coated, required for coping and anchorage slab will be included in payment for Mechanically Stabilized Earth Retaining Wall.
  6. Contractor shall coordinate MSE retaining wall construction with abutment construction. The Contractor shall be cognizant about the site constraints and the related challenges associated with this work. Installation procedures will be affected by existing conditions and may require modifications to the details and/or procedures shown on the plans. It is the Contractor's responsibility to determine the most cost-effective method of construction and include all items necessary for the proper and safe execution of the work.

FILE NAME = W:\191-134\_IDOT\_IL\_53\_of\_11\_50\CADD\_Sheets\Structure\02\_Pedestrian\022\_Pedestrian\022\_East MSE Wall.dgn



USER NAME =	DESIGNED - NS	REVISED -
PLOT SCALE =	CHECKED - PRD	REVISED -
PLOT DATE = 2/1/2024	DRAWN - GM	REVISED -
	CHECKED - PRD	REVISED -

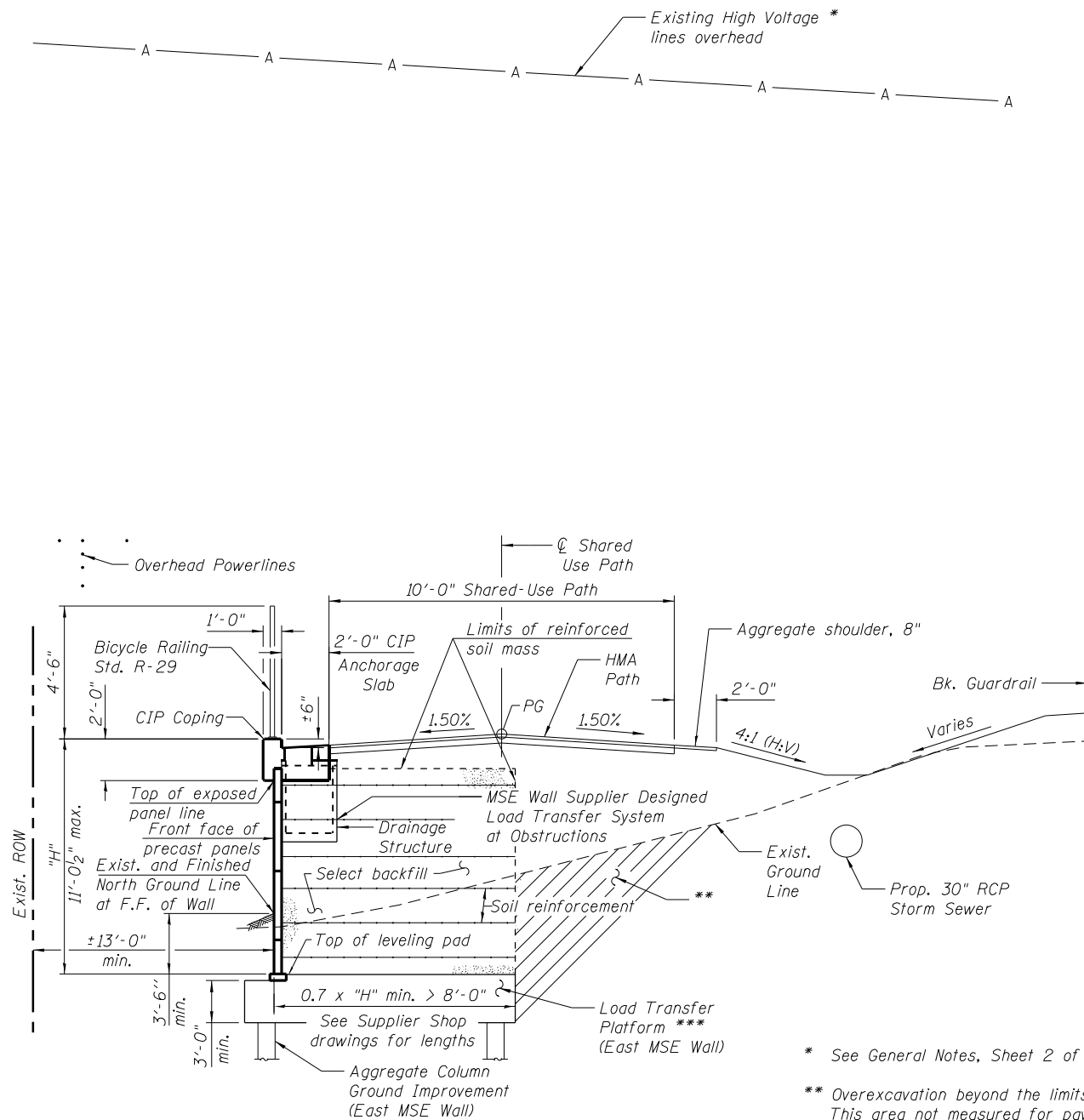
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EAST MSE WALL  
STRUCTURE NO. 022-8301**  
SHEET NO. 11 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	333
CONTRACT NO. 60P75				
ILLINOIS FED. AID PROJECT				

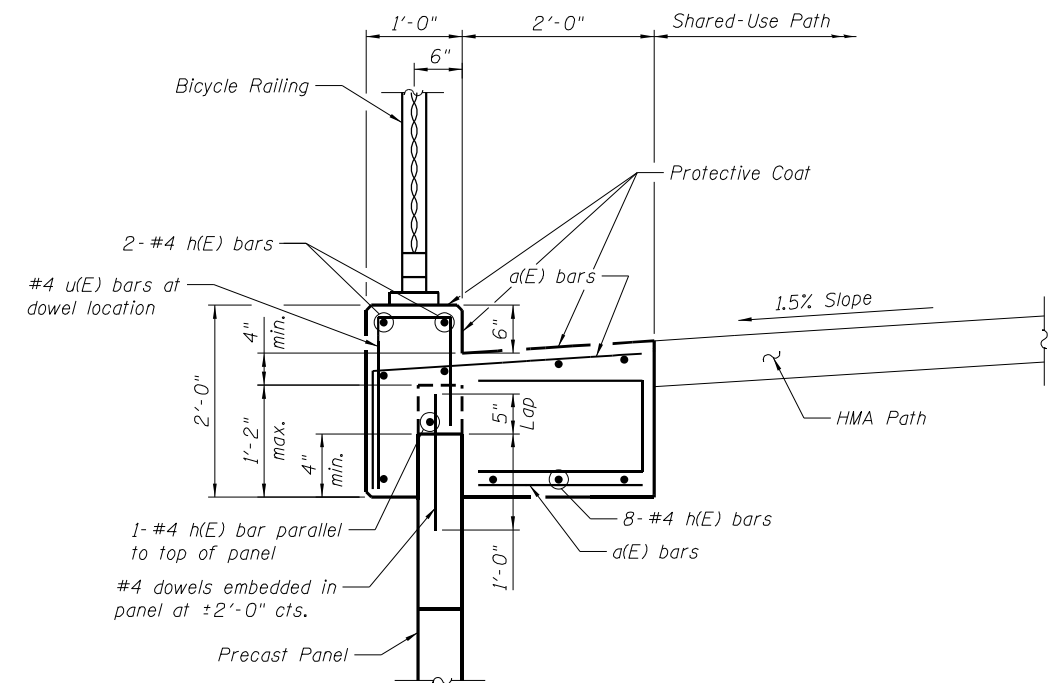
**BILL OF MATERIALS**  
(for information only)

Bar	No.	Size	Length	Shape
a(E)				—
h(E)				—
u(E)				⌋
Concrete Structures		Cu. Yd.	4.3	
Reinforcement Bars, Epoxy Coated		Pound	3,220	



**TYPICAL SECTION  
THRU MSE WALL**  
(Looking East)

- \* See General Notes, Sheet 2 of 21.
- \*\* Overexcavation beyond the limits of structure excavation. This area not measured for payment. Backfill overexcavation with same material as used for select fill.
- \*\*\* Cost included in "Aggregate Column Ground Improvement".



**SECTION THRU C.I.P. COPING  
AND ANCHORAGE SLAB**

Note:  
Cast-in-place concrete and reinforcing steel, epoxy coated, required for coping and anchorage slab shall be included for payment in Mechanically Stabilized Earth Retaining Wall.

FILE NAME = W:\191-134\_IDOT\_IL\_53.ctb; I:\5616CADD\_Sheets\Structure\102\_Pedestrian\160P75\_SHT-12\_MSE Wall Details.dgn



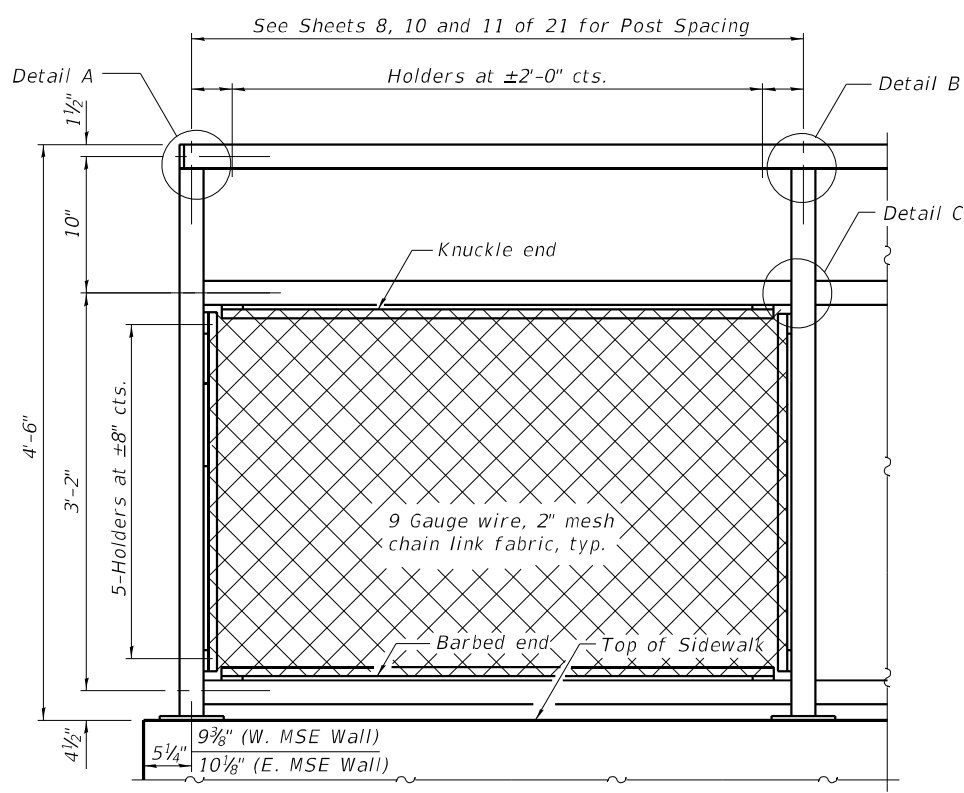
USER NAME =	DESIGNED - NS	REVISED -
PLOT SCALE =	CHECKED - PRD	REVISED -
PLOT DATE = 2/1/2024	DRAWN - GM	REVISED -
	CHECKED - PRD	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

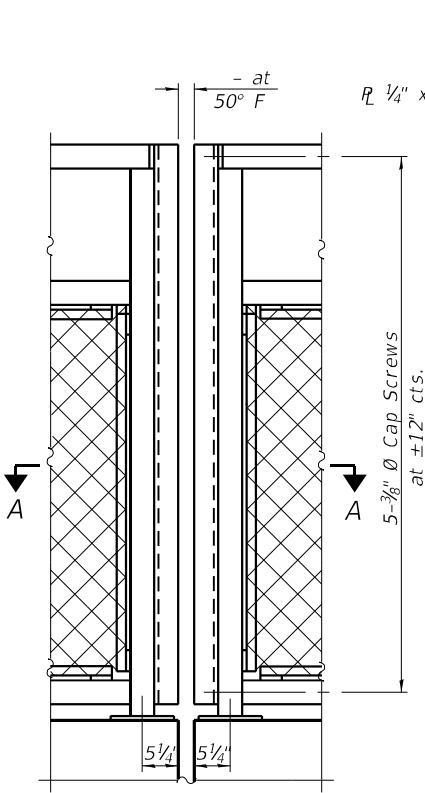
**MSE WALL DETAILS  
STRUCTURE NO. 022-8301**  
SHEET NO. 12 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	334
CONTRACT NO. 60P75				
ILLINOIS FED. AID PROJECT				

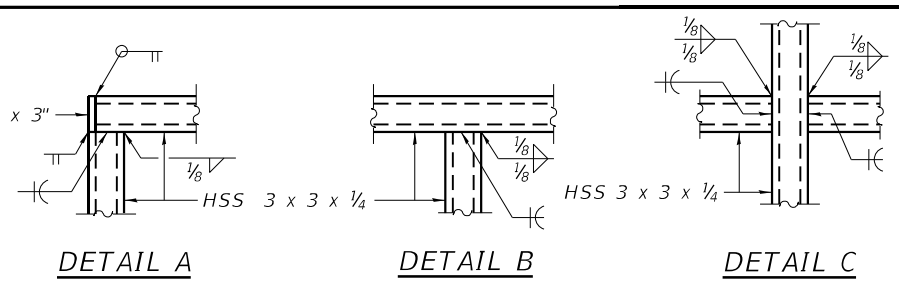
FILE NAME = W:\191-134\_IDOT\_IL\_53.dwg; S:\CADD\_Sheets\Structure\102\_Besteman\160975\_SHT-13\_Bicycle Railing.dwg



**BICYCLE RAILING**



**BICYCLE RAILING**

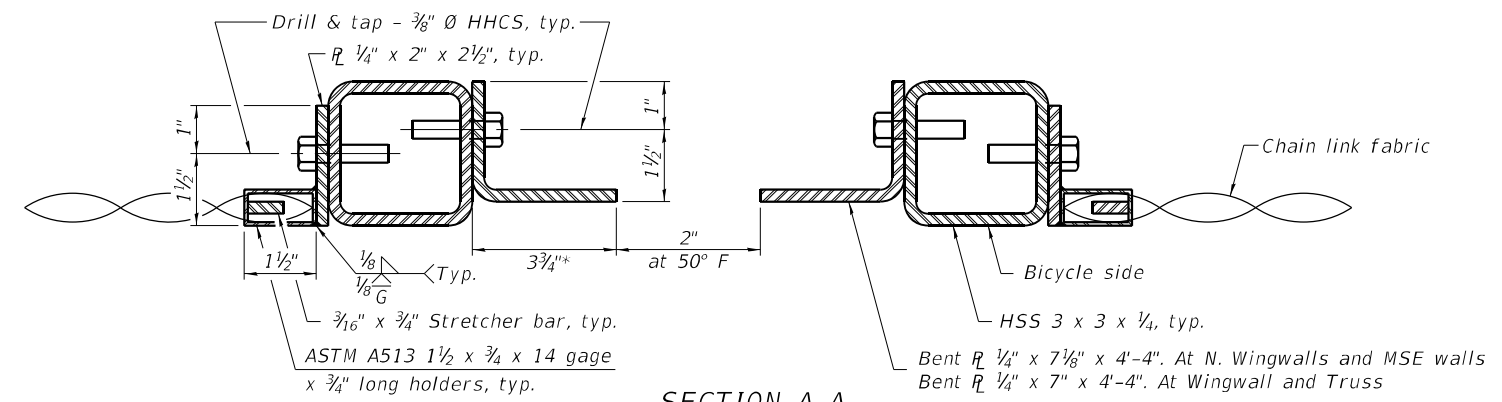


**DETAIL A**

**DETAIL B**

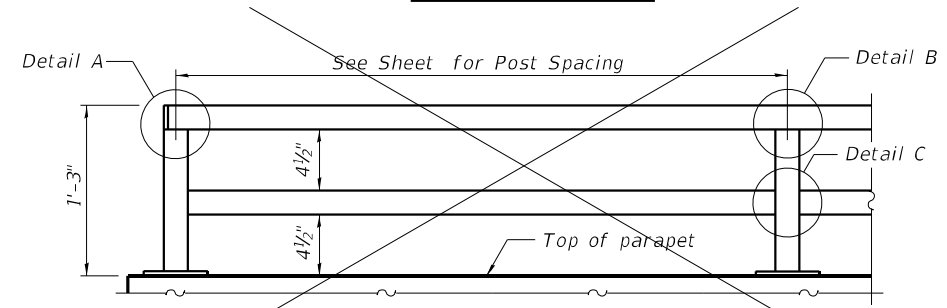
**DETAIL C**

All post, railing, splices, anchor devices, and bent plates shall be painted using the Organic Zinc Rich Primer/Epoxy/Urethane Paint System. The entire system shall be shop applied, with the exception of masked off connection surfaces, field fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all steel surfaces shall be Reddish Brown, Munsel No. 2.5YR 3/4. Cost included in Bicycle Railing.



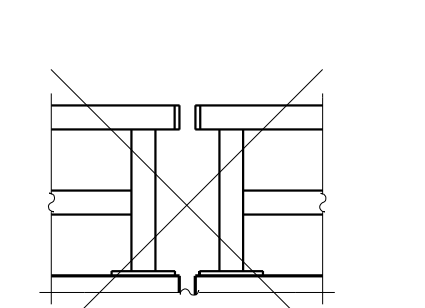
**SECTION A-A**

\* Assume 3/8" radius. Dimensions may need to be modified for larger joints to avoid gaps greater than 6".



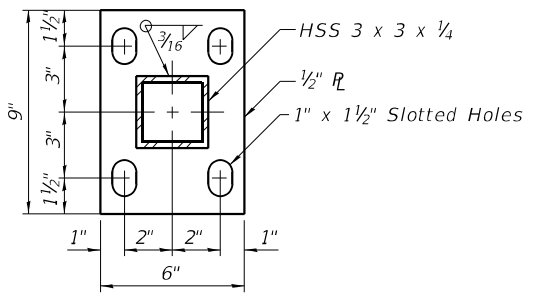
**PARAPET RAILING**

**ELEVATION**  
(Inside Face of Two Element Rail)

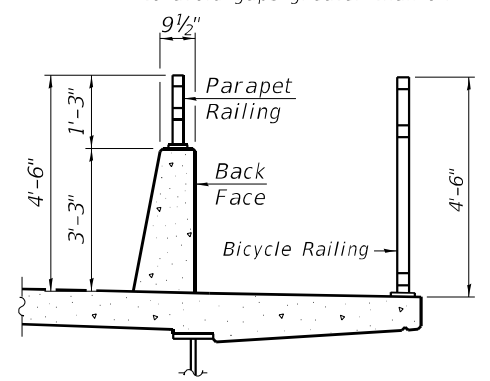


**PARAPET RAILING**

**ELEVATION AT EXPANSION JOINT**

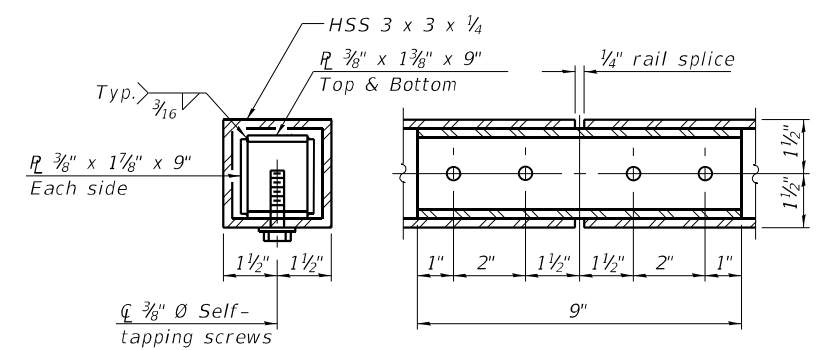


**SECTION B-B**

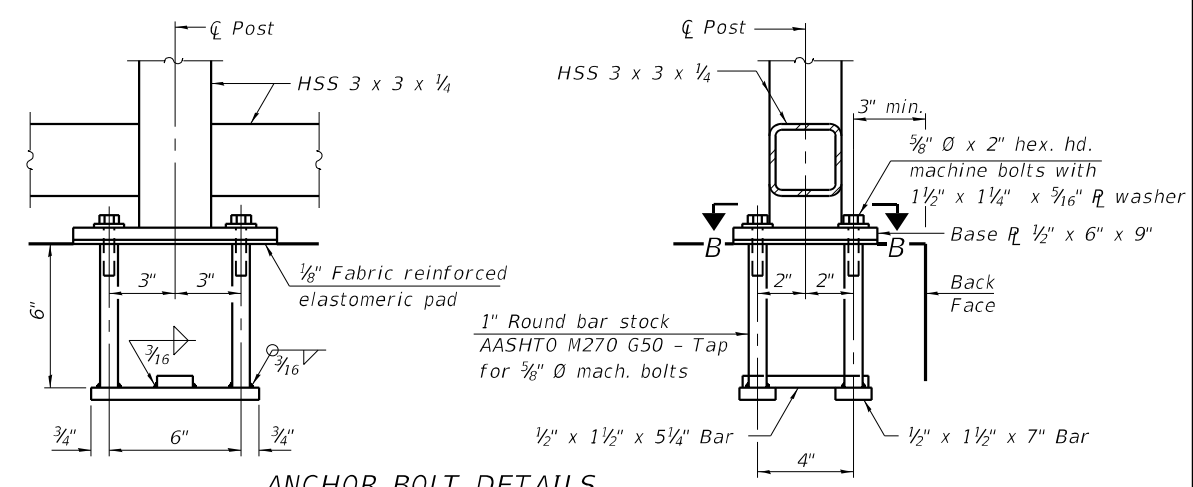


**SECTION THRU DECK**

All post, railing, splices, anchor devices, and bent plates shall be painted using the Organic Zinc Rich Primer/Epoxy/Urethane Paint System. The entire system shall be shop applied, with the exception of masked off connection surfaces, field fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all steel surfaces shall be Reddish Brown, Munsel No. 2.5YR 3/4. Cost included in Bicycle Railing.



**RAIL SPLICE**



**ANCHOR BOLT DETAILS**

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" diameter anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

**BILL OF MATERIAL**

Item	Unit	Quantity
Bicycle Railing	Foot	373

**RAILING CRITERIA**

NCHRP 350 Test Level	4
Railing Weight (plf)	25
Bicycle Railing Weight (plf)	50
Max Post Spacing	10'-0"

Notes:  
Place reinforcement bars to miss anchor rod locations. CVN testing is not required for the HSS tubing used in the Bicycle Railing.  
All HSS tubing used for the Parapet Railing shall be CVN tested according to Article 1006.34(b) of the Standard Specifications.



USER NAME	DESIGNED	REVISIONS
NS	NS	
PRD	PRD	
GM	GM	
PRD	PRD	

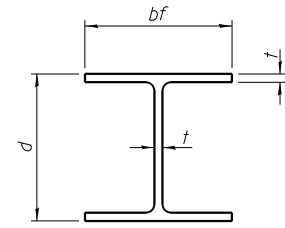
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**BICYCLE RAILING**  
**STRUCTURE NO. 022-8301**

SHEET NO. 13 OF 21 SHEETS

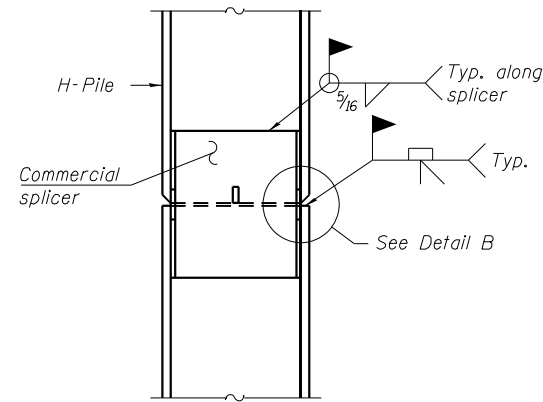
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	335
				CONTRACT NO. 60P75

ILLINOIS FED. AID PROJECT

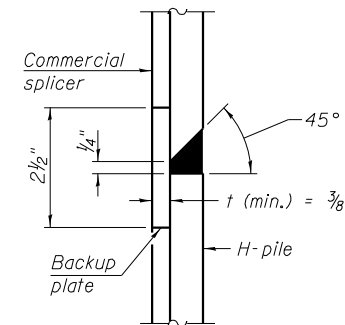


**STEEL PILE TABLE**

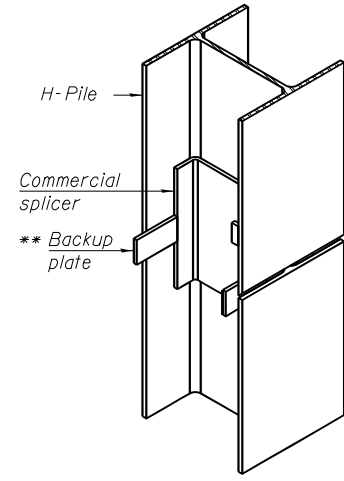
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	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**

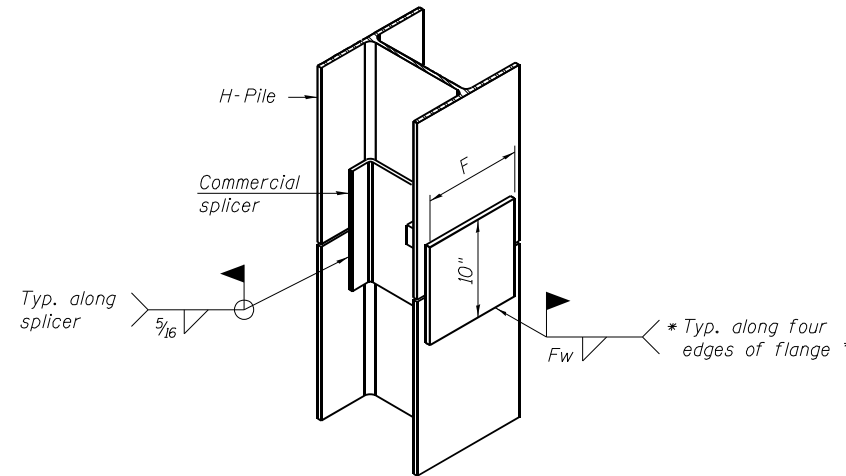


**DETAIL "B"**



**ISOMETRIC VIEW**

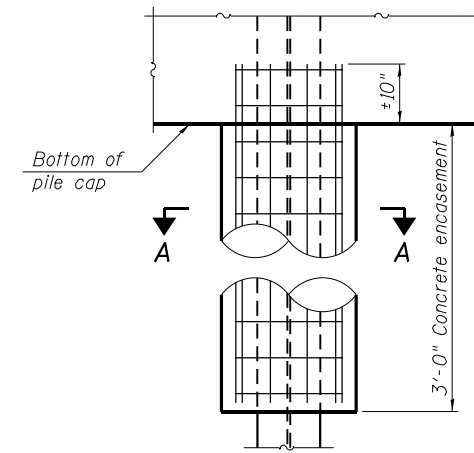
**WELDED COMMERCIAL SPLICE**



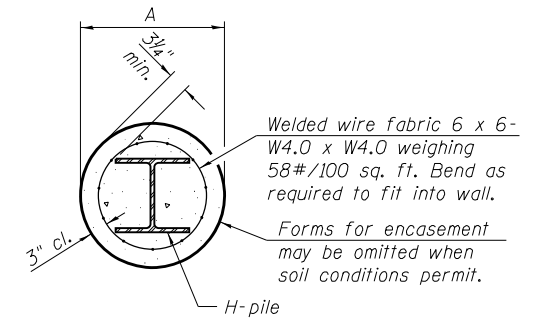
**ISOMETRIC VIEW**

**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.).

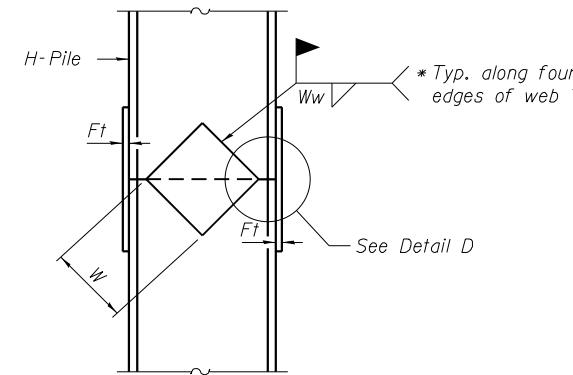


**ELEVATION**

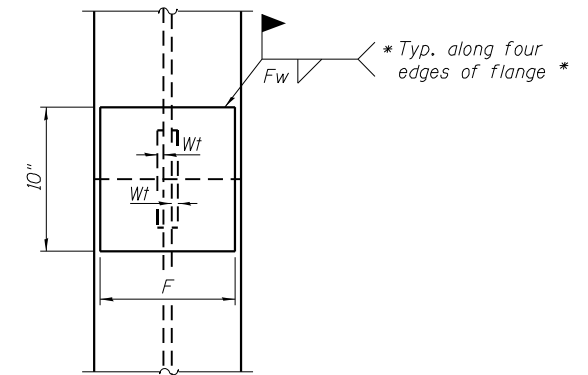


**SECTION A-A**

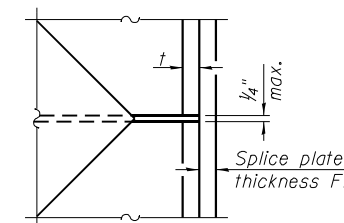
**INDIVIDUAL PILE CONCRETE ENCASUREMENT**  
(when specified)



**ELEVATION**



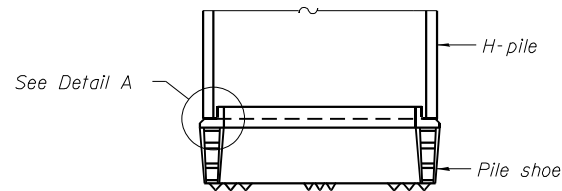
**END VIEW**



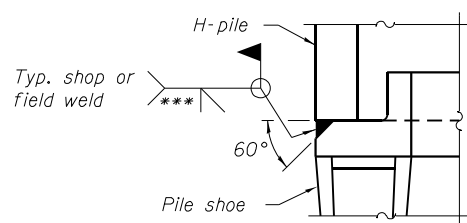
**DETAIL D**

**WELDED PLATE FIELD SPLICE**

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"



**ELEVATION**



**DETAIL A**

**SHOE ATTACHMENT**

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

F-HP 1-1-2020



DESIGNED - NS	REvised -
CHECKED - PRD	REvised -
DRAWN - GM	REvised -
CHECKED - PRD	REvised -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS  
STRUCTURE NO. 022-8301

SHEET NO. 14 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	336
CONTRACT NO. 60P75			ILLINOIS FED. AID PROJECT	

FILE NAME = W:\191-134\_IDOT\_IL\_53\_of\_11\_50\CADD\_Sheets\Structure\02\_Pedestrian\0160P75\_SHT-14\_Pile\_Details.dgn

PAGE 1 of 2

**SOIL BORING LOG**

Geo Services, Inc.  
Geotechnical, Environmental & Civil Engineering  
805 Arpent Court, Suite 204  
Naperville, Illinois 60565  
(630) 355-2838

ROUTE F.A.P. RTE. 365 DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls  
SECTION 634X-N-3 LOCATION SEC 25, T39N, R10E, SW1/4, 3RD PM  
COUNTY DuPage County DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE Diedrich Automatic

STRUCT. NO. n/a Station 495+85.00  
BORING NO. PB-01 Station 494+64  
Offset 25.3' Right  
Ground Surface Elev. 681.4

DEPTH (ft)	BLOW S (ft)	UCS (tsf)	MOIST (%)	DEPT H (ft)	BLOW S (ft)	UCS (tsf)	MOIST (%)
12.0"							
AS			13				
7			112				
6							
6	1.96		16				
4							
3							
4	1.0P		17				
7			116				
8							
5	3.98		16				
2			104				
3							
5	2.58		23				
6							
18							
12		NP	8				
25							
17							
17		NP	6				
11							
12		NP	11				
8							
8							
8		NP	8				

Surface Water Elev. n/a  
Stream Bed Elev. n/a  
Groundwater Elevation:  
First Encounter 667.9  
Upon Completion n/a  
After \_\_\_\_\_ Hrs. \_\_\_\_\_

CLAY LOAM with Stone-dark brown, gray & black-stiff to very stiff (A-6) Fill  
SAND & GRAVEL-gray-medium dense to dense (A-1)  
SILTY CLAY-dark brown, gray & black-very stiff (A-6)  
SAND & GRAVEL-brown-dense (A-1)  
SAND & GRAVEL-gray-medium dense to dense (A-1)

680.4  
673.4  
670.9  
665.9

642.2  
641.2

Drillers Observation: Weathered Rock

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in Italics above moist (%)  
NR-No Recovery

PAGE 2 of 2

**SOIL BORING LOG**

Geo Services, Inc.  
Geotechnical, Environmental & Civil Engineering  
805 Arpent Court, Suite 204  
Naperville, Illinois 60565  
(630) 355-2838

ROUTE F.A.P. RTE. 365 DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls  
SECTION 634X-N-3 LOCATION SEC 25, T39N, R10E, SW1/4, 3RD PM  
COUNTY DuPage County DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE Diedrich Automatic

STRUCT. NO. n/a Station 495+85.00  
BORING NO. PB-01 Station 494+64  
Offset 25.3' Right  
Ground Surface Elev. 681.4

DEPTH (ft)	BLOW S (ft)	UCS (tsf)	MOIST (%)	DEPT H (ft)	BLOW S (ft)	UCS (tsf)	MOIST (%)
7							
8							
4		NP	11				
9							
11							
11		NP	12				
4							
4							
6		NP	12				
9							
7							
9		NP	12				
631.4							
70							
55							
60							

Surface Water Elev. n/a  
Stream Bed Elev. n/a  
Groundwater Elevation:  
First Encounter 667.9  
Upon Completion n/a  
After \_\_\_\_\_ Hrs. \_\_\_\_\_

Silurian System, Niagaran Series Dolomite  
RUN 1 (-40.0' to -50.0')  
Light gray to gray with horizontal to wavy bedding & some varving. Numerous horizontal fractures with some chert nodules throughout.  
Recovery=100.0%  
R.Q.D.=15.5%

End Of Boring @ -50.0'  
Hollow Stem Augers to -40.0'  
Rotary Drilling To Completion  
Diedrich Automatic Hammer

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in Italics above moist (%)  
NR-No Recovery

PAGE 1 of 1

**ROCK CORE LOG**

Geo Services, Inc.  
Geotechnical, Environmental & Civil Engineering  
805 Arpent Court, Suite 204  
Naperville, Illinois 60565  
(630) 355-2838

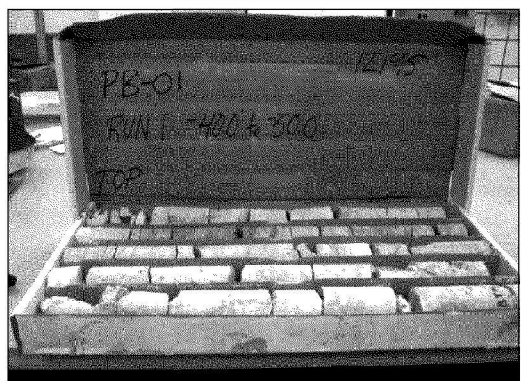
ROUTE F.A.P. RTE. 365 DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls  
SECTION 634X-N-3 LOCATION SEC 25, T39N, R10E, SW1/4, 3RD PM  
COUNTY DuPage County CORING METHOD Rotary Wash

STRUCT. NO. n/a CORING BARREL TYPE & SIZE NX Double Swivel-10 ft  
Station 495+85.00 Core Diameter 2.0 in  
BORING NO. PB-01 Top of Rock Elev. 642.2  
Station 494+64 Begin Core Elev. 641.2  
Offset 25.3' Right  
Ground Surface Elev. 681.4

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORRECTION (min)	STRENGTH (tsf)
1	100.0	15.5	n/a	0.7	4.5

Surface Water Elev. n/a  
Stream Bed Elev. n/a  
Groundwater Elevation:  
First Encounter 667.9  
Upon Completion n/a  
After \_\_\_\_\_ Hrs. \_\_\_\_\_

Silurian System, Niagaran Series Dolomite  
RUN 1 (-40.0' to -50.0')  
Light gray to gray with horizontal to wavy bedding & some varving. Numerous horizontal fractures with some chert nodules throughout.



Color pictures of the cores Yes. Cores will be stored for examination for \_\_\_\_  
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

FILE NAME = W:\191-134\_IDOT\_IL\_53\_of\_IL\_50\CADD\_Sheets\Structure\02\_Pedestrian\02\_Pedestrian\160P75\_Sht-15\_SoilBoringLogs.dgn



USER NAME =	DESIGNED - NS	REVISED -
PLOT SCALE =	CHECKED - PRD	REVISED -
PLOT DATE = 2/1/2024	DRAWN - GM	REVISED -
	CHECKED - PRD	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS I  
STRUCTURE NO. 022-8301**

SHEET NO. 15 OF 21 SHEETS

F.A.P. RTE. 365	SECTION (56&57)R-4	COUNTY DuPage	TOTAL SHEETS 529	SHEET NO. 337
CONTRACT NO. 60P75			ILLINOIS FED. AID PROJECT	

PAGE 1 of 2

**SOIL BORING LOG**

Geo Services, Inc.  
Geotechnical, Environmental & Civil Engineering  
803 Airport Court, Suite 204  
Naperville, Illinois 60565  
(630) 355-2838

ROUTE F.A.P. RTE. 365 DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls  
SECTION 634X-N-3 LOCATION SEC 25, T39N, R10E, SW1/4, 3RD PM  
COUNTY DuPage County DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE Diedrich Automatic

STRUCT. NO. n/a Station 495+85.00  
BORING NO. PB-02 Station 495+26  
Offset 4.6' Left  
Ground Surface Elev. 674.0

DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)	DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)
12.0"							
12.0" TOPSOIL with Gravel-black (Fill) <i>673.0</i>							
3				4			
CLAYEY GRAVEL & STONE-dark brown to black-medium dense (Fill) <i>671.0</i>							
6				7			
4				12	NP	7	
SAND & GRAVEL-brown-loose (A-1)							
2				5			
3				6			
4		NP	5	25	6	NP	9
SAND & GRAVEL-gray-medium dense to dense (A-1) <i>668.0</i>							
11				8			
17				8			
15		NP	7	7		NP	7
5				15			
10				14			
9		NP	9	30	21	NP	5
SAND & GRAVEL-gray-medium dense to dense (A-1) <i>642.0</i>							
4				50/1'	NP	9	
5		NP	9	Drillers Observation: Apparent Bedrock <i>641.5</i>			
Silurian System, Niagara Series Dolomite RUN 1 (-32.5' to -42.5')							
5				Light gray to gray with horizontal to wavy bedding. Numerous horizontal fractures with some chert nodules throughout.			
6				35			
15		NP	9	55			
8							
8							
10		NP	8				
6							
5							
4		NP	7	40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B)-Bulge, (S)-Shear, (P)-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in Italics above moist (%)  
NR-No Recovery

PAGE 2 of 2

**SOIL BORING LOG**

Geo Services, Inc.  
Geotechnical, Environmental & Civil Engineering  
803 Airport Court, Suite 204  
Naperville, Illinois 60565  
(630) 355-2838

ROUTE F.A.P. RTE. 365 DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls  
SECTION 634X-N-3 LOCATION SEC 25, T39N, R10E, SW1/4, 3RD PM  
COUNTY DuPage County DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE Diedrich Automatic

STRUCT. NO. n/a Station 495+85.00  
BORING NO. PB-02 Station 495+26  
Offset 4.6' Left  
Ground Surface Elev. 674.0

DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)	DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)
Recovery=98.5% R.Q.D.=15.5%							
RUN 1							
<i>631.5</i>							
End Of Boring @ -42.5' Hollow Stem Augers to -32.5' Rotary Drilling To Completion Diedrich Automatic Hammer							
-45							
-65							
-37.5							
-70							
-55							
-75							
-80							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B)-Bulge, (S)-Shear, (P)-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in Italics above moist (%)  
NR-No Recovery

PAGE 1 of 1

**ROCK CORE LOG**

Geo Services, Inc.  
Geotechnical, Environmental & Civil Engineering  
803 Airport Court, Suite 204  
Naperville, Illinois 60565  
(630) 355-2838

ROUTE F.A.P. RTE. 365 DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls  
SECTION 634X-N-3 LOCATION SEC 25, T39N, R10E, SW1/4, 3RD PM  
COUNTY DuPage County CORING METHOD Rotary Wash

STRUCT. NO. n/a CORING BARREL TYPE & SIZE NX Double Swivel-10 ft  
Station 495+85.00 Core Diameter 2.0 in  
BORING NO. PB-02 Top of Rock Elev. 642.0  
Station 495+26 Begin Core Elev. 641.5  
Offset 4.6' Left  
Ground Surface Elev. 674.0

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORRECTION (min)	STRENGTH (tsf)
1		98.5	15.5	n/a	98.5 @ -38.7
Silurian System, Niagara Series Dolomite RUN 1 (-32.5' to -42.5')					
Light gray to gray with horizontal to wavy bedding. Numerous horizontal fractures with some chert nodules throughout.					
-37.5					
-42.5					

Color pictures of the cores Yes. Cores will be stored for examination for \_\_\_\_  
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

FILE NAME = W:\191-134\_IDOT\_IL\_53\_of\_IL\_50\CADD\_Sheets\Structure\02\_Pedestrian\02PB025\_SHT-16\_SoilBoringLogs\_IL.dgn



USER NAME =	DESIGNED - NS	REVISED -
PLOT SCALE =	CHECKED - PRD	REVISED -
PLOT DATE = 2/1/2024	DRAWN - GM	REVISED -
	CHECKED - PRD	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS II  
STRUCTURE NO. 022-8301**

SHEET NO. 16 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	338
CONTRACT NO. 60P75			ILLINOIS FED. AID PROJECT	

Geo Services, Inc.		SOIL BORING LOG		PAGE 1 of 2	
Geotechnical, Environmental & Civil Engineering 803 Artpark Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838		DATE 10/1/2012		LOGGED BY DR	
ROUTE F.A.P. RTE. 365		DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls		GSI JOB No. 12195	
SECTION 634X-N-3		LOCATION SEC 25, T39N, R10E, SW1/4, 3RD PM		COUNTY DuPage County	
COUNTY DuPage County		DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE Diedrich Automatic			
STRUCT. NO. n/a		Surface Water Elev. n/a		DEPTH (ft)	
Station 495+85.00		Stream Bed Elev. n/a		BLOW S (tsf)	
BORING NO. PB-03		Groundwater Elevation:		UCS (%)	
Station 496+57		First Encounter 665.1		MOIST (%)	
Offset 22.0' Right		Upon Completion n/a			
Ground Surface Elev. 681.6		After Hrs. n/a			
2.0" ASPHALT, 8.0" CRUSHED STONE		SAND & GRAVEL-medium dense (A-1)		661.2	
CLAY-brown-stiff (Fill)		SILTY LOAM-gray-medium dense (A-4)		658.6	
ORGANIC SILTY CLAY-dark brown & black-soft to medium stiff (A-7)		SAND & GRAVEL-gray-medium dense to very dense (A-1)		645.1	
SILTY CLAY-dark gray-stiff (A-6)		Drillers Observation: Weathered Rock		642.1	
SAND & GRAVEL-gray-medium dense (A-1)		Silurian System, Niagara Series Dolomite		40	

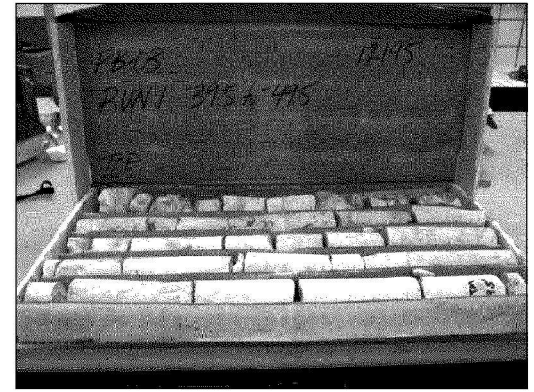
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in Italics above moist (%)  
NR-No Recovery

Geo Services, Inc.		SOIL BORING LOG		PAGE 2 of 2	
Geotechnical, Environmental & Civil Engineering 803 Artpark Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838		DATE 10/1/2012		LOGGED BY DR	
ROUTE F.A.P. RTE. 365		DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls		GSI JOB No. 12195	
SECTION 634X-N-3		LOCATION SEC 25, T39N, R10E, SW1/4, 3RD PM		COUNTY DuPage County	
COUNTY DuPage County		DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE Diedrich Automatic			
STRUCT. NO. n/a		Surface Water Elev. n/a		DEPTH (ft)	
Station 495+85.00		Stream Bed Elev. n/a		BLOW S (tsf)	
BORING NO. PB-03		Groundwater Elevation:		UCS (%)	
Station 496+57		First Encounter 665.1		MOIST (%)	
Offset 22.0' Right		Upon Completion n/a			
Ground Surface Elev. 681.6		After Hrs. n/a			
RUN 1 (-32.5' to -42.5')		Light gray with horizontal to wavy bedding. Numerous horizontal fractures with some chert nodules throughout.		632.1	
Recovery=100.0%					
R.Q.D.=46.0%					
End Of Boring @ -49.5'					
Hollow Stem Augers to -39.5'					
Rotary Drilling To Completion					
Diedrich Automatic Hammer					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in Italics above moist (%)  
NR-No Recovery

Geo Services, Inc.		ROCK CORE LOG		PAGE 1 of 1	
Geotechnical, Environmental & Civil Engineering 803 Artpark Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838		DATE 10/1/2012		LOGGED BY DR	
ROUTE F.A.P. RTE. 365		DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls		GSI JOB No. 12195	
SECTION 634X-N-3		LOCATION SEC 25, T39N, R10E, SW1/4, 3RD PM		COUNTY DuPage County	
COUNTY DuPage County		CORING METHOD Rotary Wash			
STRUCT. NO. n/a		CORING BARREL TYPE & SIZE NX Double Swivel-10 ft		DEPTH (ft)	
Station 495+85.00		Core Diameter 2.0 in		CORRECTION (%)	
BORING NO. PB-03		Top of Rock Elev. 642.1		RECOVERY (%)	
Station 496+57		Begin Core Elev. 641.6		CORRECTION (min) (%)	
Offset 22.0' Right				STRENGTH (tsf)	
Ground Surface Elev. 681.6					
Silurian System, Niagara Series Dolomite		RUN 1 (-32.5' to -42.5')		1	
Light gray with horizontal to wavy bedding. Numerous horizontal fractures with some chert nodules throughout.				100.0	
				46.0	
				n/a	
				37.0	
				-32.5	

Color pictures of the cores Yes. Cores will be stored for examination for \_\_\_\_  
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)



FILE NAME = W:\191-134\_IDOT\_IL\_53\_of\_11\_50\CADD\_Sheets\Structure\102\_Pedestrian\160P75\_SHT-17\_SoilBoringLogs\_IL.dgn




USER NAME =	DESIGNED - JMT	REVISED -
PLOT SCALE =	CHECKED - JWD	REVISED -
PLOT DATE = 2/1/2024	DRAWN - GM	REVISED -
	CHECKED - JWD	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS III  
STRUCTURE NO. 022-8301  
SHEET NO. 17 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	339
CONTRACT NO. 60P75			ILLINOIS FED. AID PROJECT	

FILE NAME = W:\191-134\_IDOT\_IL\_53.ctb, 5/6/CADD\_Sheets\Structure\02\_Pedestrian\02\_Pedestrian\02\_Pedestrian\160775\_SHT-18\_SoilBoringLogs IV.dgn



**SOIL BORING LOG**


PAGE 1 of 1  
 DATE 12/10/2012  
 LOGGED BY TZ  
 GSI JOB No. 12195

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ROUTE F.A.P. RTE. 365 DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls  
 SECTION 634X-N-3 LOCATION SEC 25, T39N, R10E, SW1/4, 3RD PM  
 COUNTY DuPage County DRILLING METHOD Hand Auger HAMMER TYPE Manual

	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev. <u>n/a</u> Stream Bed Elev. <u>n/a</u> Groundwater Elevation: First Encounter <u>666.9</u> $\nabla$ Upon Completion <u>666.9</u> $\nabla$ Wet Cave In <u>666.4</u> $\nabla$	D E P T H	B L O W S	U C S	M O I S T
	(ft)	/6"	(tsf)	(%)		(ft)	/6"	(tsf)	(%)
TOPSOIL-black									
			AS	1.0P	36				
667.9			AS	0.5P	38				
-5						-25			
SAND & GRAVEL-brown (A-1)			AS	NP	15				
664.4			AS	NP	15				
End Of Boring @ -8.0 Hand Auger									
-10						-30			
-15						-35			
-20						-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in Italics above moist (%)  
 NR-No Recovery



**SOIL BORING LOG**

PAGE 1 of 1  
 DATE 12/10/2012  
 LOGGED BY TZ  
 GSI JOB No. 12195

---

ROUTE F.A.P. RTE. 365 DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls  
 SECTION 634X-N-3 LOCATION SEC 25, T39N, R10E, SW1/4, 3RD PM  
 COUNTY DuPage County DRILLING METHOD Hand Auger HAMMER TYPE Manual

	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev. <u>n/a</u> Stream Bed Elev. <u>n/a</u> Groundwater Elevation: First Encounter <u>666.9</u> $\nabla$ Upon Completion <u>667.4</u> $\nabla$ Wet Cave In <u>666.9</u> $\nabla$	D E P T H	B L O W S	U C S	M O I S T
	(ft)	/6"	(tsf)	(%)		(ft)	/6"	(tsf)	(%)
TOPSOIL-black									
670.9			AS	-	33				
SILTY CLAY-dark brown-stiff (A-7) Wet			AS	1.0P	35				
669.4			AS	1.0P	35				
ORGANIC SILTY CLAY-black-soft			AS	0.25P	54				
667.9			AS	0.25P	54				
-5						-25			
SAND & GRAVEL-gray			AS	NP	17				
666.9			AS	NP	17				
SAND & GRAVEL-brown			AS	NP	17				
664.9			AS	NP	17				
End Of Boring @ -8.0 Hand Auger									
-10						-30			
-15						-35			
-20						-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in Italics above moist (%)  
 NR-No Recovery



USER NAME =	DESIGNED - JMT	REVISED -
CHECKED - JWD	REVISED -	
PLOT SCALE =	DRAWN - GM	REVISED -
PLOT DATE = 2/1/2024	CHECKED - JWD	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS IV  
STRUCTURE NO. 022-8301**

SHEET NO. 18 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	340
CONTRACT NO. 60P75				
ILLINOIS FED. AID PROJECT				



Geo Services, Inc.		SOIL BORING LOG		PAGE 1 of 2	
Geotechnical, Environmental & Civil Engineering 800 Artpark Court, Suite 204 Naperville, Illinois 60565 (630) 355-2639		DATE <u>10/2/2012</u>		LOGGED BY <u>DR</u>	
ROUTE <u>F.A.P. RTE. 365</u>		DESCRIPTION <u>Pedestrian Bridge over East Branch DuPage River &amp; Retaining Walls</u>		GSI JOB No. <u>12195</u>	
SECTION <u>634X-N-3</u>		LOCATION <u>SEC 25, T39N, R10E, SW1/4, 3RD PM</u>		COUNTY <u>DuPage County</u>	
DRILLING METHOD <u>Hollow Stem Auger/Rotary</u>		HAMMER TYPE <u>Diedrich Automatic</u>			
STRUCT. NO. <u>n/a</u>		Surface Water Elev. <u>n/a</u>		DEPTH (ft)	
Station <u>495+85.00</u>		Stream Bed Elev. <u>n/a</u>		BLOW S	
BORING NO. <u>PB-04</u>		Groundwater Elevation:		UCS	
Station <u>497+28</u>		First Encounter <u>667.0</u>		Qu	
Offset <u>20.9' Right</u>		Upon Completion <u>n/a</u>		MOIST	
Ground Surface Elev. <u>681.0</u>		After _____ Hrs. _____		(tsf) (%)	
2.0" ASPHALT, 8.0" CRUSHED STONE					
CLAYEY SAND-gray- loose to medium dense (A-2)					
CLAY TO CLAY LOAM-brown & gray- very stiff (A-6) Fill					
SILTY LOAM-gray-loose (A-4)					
TOPSOIL-black					
ORGANIC SILTY CLAY-black- medium stiff (A-7)					
SANDY LOAM-gray-loose (A-2)					
SAND & GRAVEL-gray- loose to medium dense (A-1)					
CLAYEY SAND-gray- loose to medium dense (A-2)					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-S Shelby Tube Sample VS-Vane Shear Test  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)  
NR-No Recovery

Geo Services, Inc.		SOIL BORING LOG		PAGE 2 of 2	
Geotechnical, Environmental & Civil Engineering 800 Artpark Court, Suite 204 Naperville, Illinois 60565 (630) 355-2639		DATE <u>10/2/2012</u>		LOGGED BY <u>DR</u>	
ROUTE <u>F.A.P. RTE. 365</u>		DESCRIPTION <u>Pedestrian Bridge over East Branch DuPage River &amp; Retaining Walls</u>		GSI JOB No. <u>12195</u>	
SECTION <u>634X-N-3</u>		LOCATION <u>SEC 25, T39N, R10E, SW1/4, 3RD PM</u>		COUNTY <u>DuPage County</u>	
DRILLING METHOD <u>Hollow Stem Auger/Rotary</u>		HAMMER TYPE <u>Diedrich Automatic</u>			
STRUCT. NO. <u>n/a</u>		Surface Water Elev. <u>n/a</u>		DEPTH (ft)	
Station <u>495+85.00</u>		Stream Bed Elev. <u>n/a</u>		BLOW S	
BORING NO. <u>PB-04</u>		Groundwater Elevation:		UCS	
Station <u>497+28</u>		First Encounter <u>667.0</u>		Qu	
Offset <u>20.9' Right</u>		Upon Completion <u>n/a</u>		MOIST	
Ground Surface Elev. <u>681.0</u>		After _____ Hrs. _____		(tsf) (%)	
Light gray with horizontal to wavy bedding. Numerous horizontal fractures with some chert nodules throughout. Recovery=99.0% R.Q.D.=32.0%		RUN 1			
End Of Boring @ -48.0' Hollow Stem Augers to -38.0' Rotary Drilling To Completion Diedrich Automatic Hammer					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-S Shelby Tube Sample VS-Vane Shear Test  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)  
NR-No Recovery

Geo Services, Inc.		ROCK CORE LOG		PAGE 1 of 1	
Geotechnical, Environmental & Civil Engineering 800 Artpark Court, Suite 204 Naperville, Illinois 60565 (630) 355-2639		DATE _____		LOGGED BY <u>DR</u>	
ROUTE <u>F.A.P. RTE. 365</u>		DESCRIPTION <u>Pedestrian Bridge over East Branch DuPage River &amp; Retaining Walls</u>		GSI JOB No. <u>12195</u>	
SECTION <u>634X-N-3</u>		LOCATION <u>SEC 25, T39N, R10E, SW1/4, 3RD PM</u>		COUNTY <u>DuPage County</u>	
CORING METHOD <u>Rotary Wash</u>					
STRUCT. NO. <u>n/a</u>		CORING BARREL TYPE & SIZE <u>NX Double Swivel-10 ft</u>		DEPTH (ft)	
Station <u>495+85.00</u>		Core Diameter <u>2.0 in</u>		RECOVERY (%)	
BORING NO. <u>PB-04</u>		Top of Rock Elev. <u>645.0</u>		CORRECTION (%)	
Station <u>497+28</u>		Begin Core Elev. <u>643.0</u>		CORRECTION (ft)	
Offset <u>20.9' Right</u>				STRENGTH (tsf)	
Ground Surface Elev. <u>681.0</u>					
Silurian System, Niagara Series Dolomite RUN 1 (-32.5' to -42.5') Light gray with horizontal to wavy bedding. Numerous horizontal fractures with some chert nodules throughout.		1		99.0	
		32.0		n/a	
		421.0		-43.3	



Color pictures of the cores Yes. Cores will be stored for examination for \_\_\_\_  
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

FILE NAME = W:\191-134\_IDOT\_IL\_53\_of\_11\_50\CADD\_Sheets\Structural\02\_Pedestrian\160775\_Sht-19\_SoilBoringLogs\_V.dgn

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering 805 Airport Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838		SOIL BORING LOG		PAGE 1 of 1	
ROUTE F.A.P. RTE. 365		DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls		DATE 9/27/2012	
SECTION 634X-N-3		LOCATION SEC 25, T39N, R10E, SW1/4, 3RD PM		LOGGED BY DR	
COUNTY DuPage County		DRILLING METHOD 3.25" Hollow Stem Auger		HAMMER TYPE CME Automatic	
STRUCT. NO. -		Surface Water Elev. <i>n/a</i>		DEPT H B L O W S U C S M O I S T	
Station 495+85.00		Stream Bed Elev. <i>n/a</i>		(ft) /6" (tsf) (%)	
BORING NO. PW-01		Groundwater Elevation:			
Station 492+52		First Encounter 669.4			
Offset 5.0' Right		Upon Completion 669.9			
Ground Surface Elev. 675.9		After _____ Hrs. _____			
TOPSOIL with Gravel-black		SAND & GRAVEL-gray-medium dense (A-1)			
672.4		650.4			
SAND & GRAVEL-brown-medium dense to dense (A-1)		WEATHERED ROCK-gray-very dense			
666.4		645.9-30'			
SAND & GRAVEL-gray-medium dense (A-1)		End Of Boring @ -30.0'			
		Hollow Stem Augers			
		CME Automatic Hammer			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in Italics above moist (%)  
NR-No Recovery

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering 805 Airport Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838		SOIL BORING LOG		PAGE 1 of 1	
ROUTE F.A.P. RTE. 365		DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls		DATE 9/27/2012	
SECTION 634X-N-3		LOCATION SEC 25, T39N, R10E, SW1/4, 3RD PM		LOGGED BY DR	
COUNTY DuPage County		DRILLING METHOD 3.25" Hollow Stem Auger		HAMMER TYPE CME Automatic	
STRUCT. NO. -		Surface Water Elev. <i>n/a</i>		DEPT H B L O W S U C S M O I S T	
Station 495+85.00		Stream Bed Elev. <i>n/a</i>		(ft) /6" (tsf) (%)	
BORING NO. PW-02		Groundwater Elevation:			
Station 493+26		First Encounter 668.1			
Offset 4.0' Right		Upon Completion 668.6			
Ground Surface Elev. 674.6		After _____ Hrs. _____			
TOPSOIL-black		SAND & GRAVEL-gray-medium dense to very dense (A-1)			
671.1		668.6			
SILTY CLAY LOAM-brown & gray-medium dense to dense (A-6)		SAND & GRAVEL-brown-medium dense (A-1)			
664.1		644.6-30'			
SAND & GRAVEL-gray-medium dense to very dense (A-1)		End Of Boring @ -30.0'			
		Hollow Stem Augers			
		CME Automatic Hammer			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in Italics above moist (%)  
NR-No Recovery

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering 805 Airport Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838		SOIL BORING LOG		PAGE 1 of 1	
ROUTE F.A.P. RTE. 365		DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls		DATE 9/28/2012	
SECTION 634X-N-3		LOCATION SEC 25, T39N, R10E, SW1/4, 3RD PM		LOGGED BY DR	
COUNTY DuPage County		DRILLING METHOD 3.25" Hollow Stem Auger		HAMMER TYPE Diedrich Automatic	
STRUCT. NO. -		Surface Water Elev. <i>n/a</i>		DEPT H B L O W S U C S M O I S T	
Station 495+85.00		Stream Bed Elev. <i>n/a</i>		(ft) /6" (tsf) (%)	
BORING NO. PW-03		Groundwater Elevation:			
Station 494+02		First Encounter 667.7			
Offset 10.0' Right		Upon Completion 670.7			
Ground Surface Elev. 676.7		After _____ Hrs. _____			
12.0" TOPSOIL-black		CLAY LOAM-dark brown, gray & black-stiff to very stiff (Fill)			
675.7		667.7			
CLAYEY SAND & GRAVEL-brown-medium dense (A-2) Possible Fill		SAND & GRAVEL-gray-medium dense to dense (A-1)			
663.7		643.2			
SAND & GRAVEL-gray-medium dense to dense (A-1)		Auger Refusal @ -33.5'			
		Possible Bedrock			
		End Of Boring			
		Hollow Stem Augers			
		Diedrich Automatic Hammer			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in Italics above moist (%)  
NR-No Recovery

FILE NAME = W:\191-134\_IDOT\_IL\_53\_of\_IL\_56\CADD\_Sheets\Structure\02\_Pedestrian\0160P75\_SHT-20\_SoilBoringLogs\_V1.dgn



USER NAME =	DESIGNED - JMT	REVISED -
PLOT SCALE =	CHECKED - JWD	REVISED -
PLOT DATE = 2/1/2024	DRAWN - GM	REVISED -
	CHECKED - JWD	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS VI  
STRUCTURE NO. 022-8301  
SHEET NO. 20 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	342
CONTRACT NO. 60P75			ILLINOIS FED. AID PROJECT	

Geo Services, Inc.		SOIL BORING LOG		PAGE 1 of 1	
Geotechnical, Environmental & Civil Engineering 800 Airport Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838		DATE 9/28/2012		LOGGED BY DR	
ROUTE F.A.P. RTE. 365		DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls		CSI JOB No. 12195	
SECTION 634X-N-3		LOCATION SEC 25, T39N, R10E, SW1/4, 3RD PM		COUNTY DuPage County	
DRILLING METHOD 3.25" Hollow Stem Auger		HAMMER TYPE Diedrich Automatic			
STRUCT. NO. -	Station 495+85.00	DEPT H	BLOW S	UCS Qu	MOIST (%)
BORING NO. PW-04	Station 497+86	(ft)	/6"	(tsf)	(%)
Offset 1.9' Left	Ground Surface Elev. 674.6				
Surface Water Elev. n/a	Stream Bed Elev. n/a				
Groundwater Elevation:	First Encounter 657.6				
	Upon Completion 657.6				
	After Hrs.				
12.0" TOPSOIL-black	673.6	AS	-	13	
		3		107	
		5			
		5	2.68	20	
CLAY-dark brown, gray & black-stiff to very stiff (A-6) Fill					
		2		1.8	
		5			
		4	1.98	22	
	669.1				
TOPSOIL-black					
		3			
		4			
		6	1.5F	28	
ORGANIC SILTY CLAY-black-medium stiff (A-7)					
		1		77	
		2			
		3	0.88	37	
	664.1				
SILTY SAND with Gravel-dark gray-very loose (A-2)					
		1			
		2			
		2	NP	16	
	661.6				
PEAT-dark gray to black-very loose (A-8)					
		1			
		1	NP	73	
	659.1				
		3			
		3			
		4	NP	13	
SILTY SAND with Gravel-dark gray-loose (A-2)					
		2			
		3			
		3			
		20	NP	11	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)  
NR-No Recovery

Geo Services, Inc.		SOIL BORING LOG		PAGE 1 of 1	
Geotechnical, Environmental & Civil Engineering 800 Airport Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838		DATE 9/28/2012		LOGGED BY DR	
ROUTE F.A.P. RTE. 365		DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls		CSI JOB No. 12195	
SECTION 634X-N-3		LOCATION SEC 25, T39N, R10E, SW1/4, 3RD PM		COUNTY DuPage County	
DRILLING METHOD 3.25" Hollow Stem Auger		HAMMER TYPE Diedrich Automatic			
STRUCT. NO. -	Station 495+85.00	DEPT H	BLOW S	UCS Qu	MOIST (%)
BORING NO. PW-05	Station 498+27	(ft)	/6"	(tsf)	(%)
Offset 3.8' Left	Ground Surface Elev. 674.0				
Surface Water Elev. n/a	Stream Bed Elev. n/a				
Groundwater Elevation:	First Encounter 662.5				
	Upon Completion 666.5				
	After Hrs.				
12.0" SILTY SAND-black (Fill)	673.0	AS	-	13	
		2		107	
		4			
		6	2.4B	24	
CLAY-brown & gray spotted black-stiff to very stiff (A-6) Fill					
		3		108	
		4			
		5	1.9B	22	
	668.5				
TOPSOIL-black					
		2		71	
		2			
		3	0.7B	50	
	666.5				
ORGANIC SILTY CLAY-dark gray to black-very loose (A-7)					
		1		84	
		2			
		2	0.4B	37	
	662.5				
SILTY SAND with Gravel-dark gray-medium dense (A-2)					
		4			
		6	NP	17	
	661.0				
SANDY LOAM-gray-loose (A-2)					
		3			
		4			
		5	NP	15	
	658.5				
		5			
		8			
		9	NP	14	
SILTY LOAM-gray-loose to medium dense (A-4)					
		4			
		4			
		5	NP	20	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)  
NR-No Recovery

FILE NAME = W:\191-134\_IDOT\_IL\_53.dwg, 5/6/CADD\_Sheets\Structure\102\_Pedestrian\160P75\_SHT-21\_SoilBoringLogs\_VLL.dwg



USER NAME =	DESIGNED - JMT	REVISED -
PLOT SCALE =	CHECKED - JWD	REVISED -
PLOT DATE = 2/1/2024	DRAWN - GM	REVISED -
	CHECKED - JWD	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS VII  
STRUCTURE NO. 022-8301  
SHEET NO. 21 OF 21 SHEETS

F.A.P. RTE. 365	SECTION (56&57)R-4	COUNTY DuPage	TOTAL SHEETS 529	SHEET NO. 343
CONTRACT NO. 60P75			ILLINOIS FED. AID PROJECT	

**INDEX OF SHEETS**

- 1. General Data
- 2-4. Plan & Elevation
- 5-12. Soil Boring Logs

**BILL OF MATERIAL**

Item	Unit	Total
Noise Abatement Wall, Ground Mounted	Sq. Ft.	15,150

**LOADING**

Wind Load on Noise Wall = 25 psf  
 Equivalent Fluid Pressure = 40 pcf  
 Live Load Surcharge = 2 ft height of soil

**DESIGN SPECIFICATIONS**

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition  
 2002 AASHTO Guide Specifications for Structural Design of Sound Barriers

**DESIGN STRESSES**

**FIELD UNITS**

$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi Reinforcement  
 $f_y = 50,000$  psi M270 Grade 50

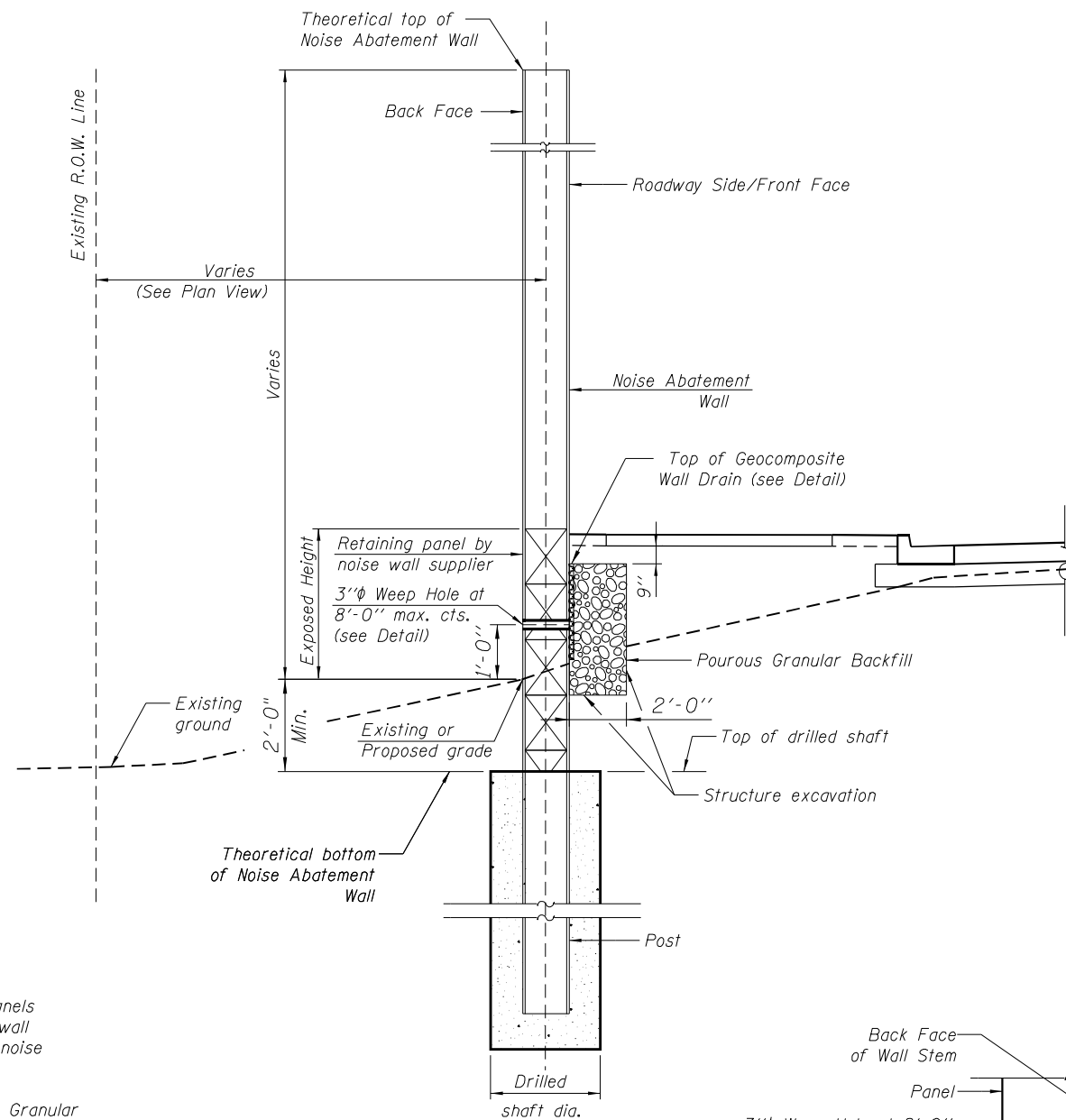
**SEISMIC DATA**

Seismic Performance Zone (SPZ) = 1  
 Design Spectral Acceleration at 1.0 sec. ( $S_{D1}$ ) = 0.058g  
 Design Spectral Acceleration at 0.2 sec. ( $S_{D5}$ ) = 0.109g  
 Soil Site Class = C

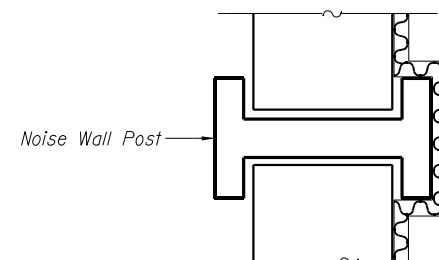
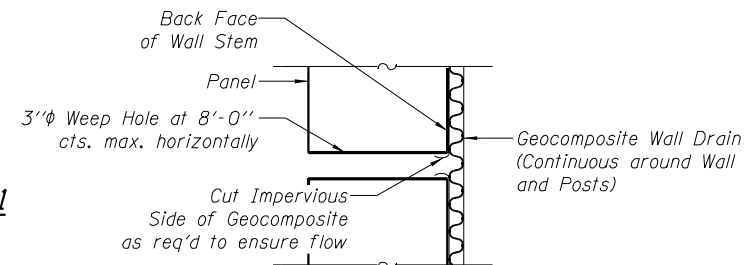
**Notes:**

**Noise Abatement Wall, Ground Mounted**

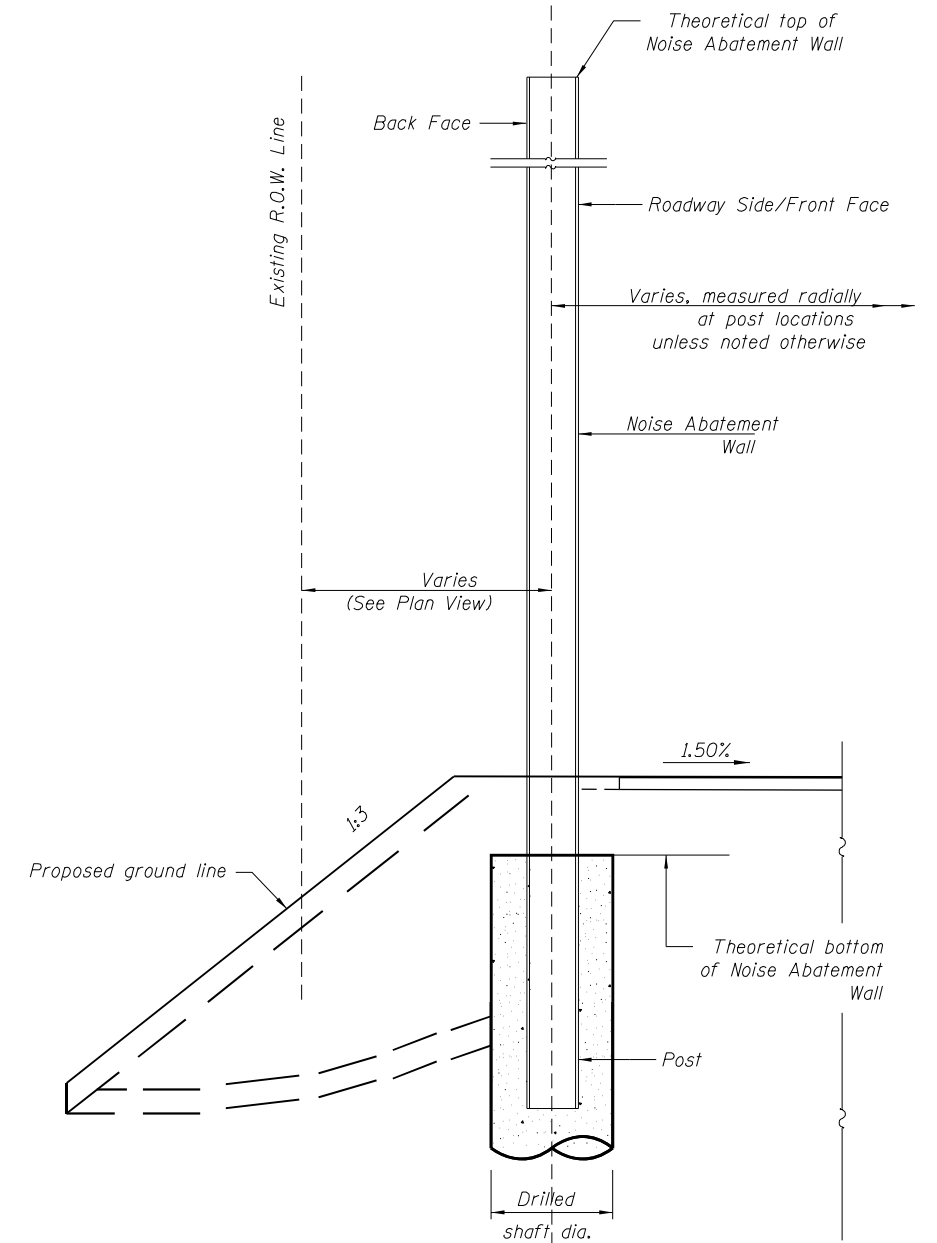
- Type, size and spacing of post, noise wall panels, retaining wall panels drilled shaft size and embedment length, reinforcement details and wall limits including top of wall and bottom of wall to be determined by noise wall supplier.
- Cost of Structure Excavation, Geocomposite Wall Drain and Poursous Granular Backfill will be included in the cost of "Noise Abatement Wall, Ground Mounted". Refer to Standard Specifications Section 502 for Structure Excavation, Section 591 for Geocomposite Wall Drain and Section 209 for Poursous Granular Backfill.
- The foundation, posts, and retaining wall panel shall be designed to accommodate the ultimate or maximum noise wall height and earth retention condition.



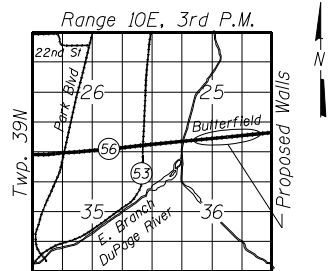
**TYPICAL SECTION THRU NOISE ABATEMENT WALL #1 WITH RETAINING PANELS**



**PLAN WEEP HOLE AND GEOCOMPOSITE WALL DRAIN DETAIL**



**TYPICAL SECTION THRU NOISE ABATEMENT WALL #2**



**LOCATION SKETCH**

FILE NAME = D:\60P75\_SHT-01 Walls\_BLA.dgn  
 USER NAME = SUSTAINABLES


 2600 Warrenville Road, Suite 203, Downers Grove, IL 60515  
 630.705.0110 voice, 630.839.2566 fax  
 www.mps-il.com  
**MILLENNIA PROFESSIONAL SERVICES**

DESIGNED - TVN	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE - 2/1/2024	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**GENERAL DATA  
 NOISE ABATEMENT WALLS**

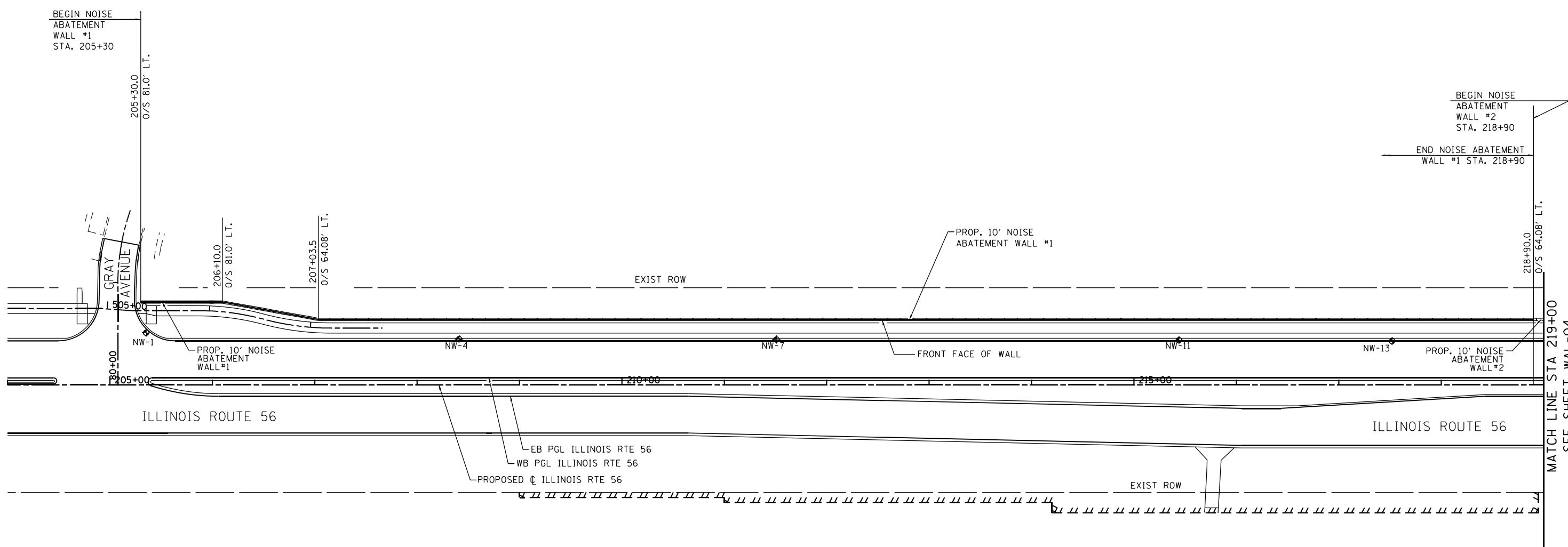
SCALE: N/A SHEET NO. 1 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	(56&57)R-4	DUPAGE	529	344
CONTRACT NO. 60P75				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

WAL-01

SFILES

NOTE:  
 SEE SHEET WAL-01 FOR TYPICAL SECTION,  
 BILL OF MATERIAL, AND GENERAL DATA.  
 THE CONTRACTOR SHALL VERIFY AND CONSIDER  
 THE LOCATIONS OF OVERHEAD UTILITIES PRIOR TO WALL ERECTION.  
 SEE NEXT SHEET FOR PROFILE FROM STA. 205+30  
 TO STA. 219+00. STATIONS AND OFFSETS ARE TO FRONT FACE OF WALL.



FILE NAME = D:\60P75\_SHT-02 Walls\_BLA.dgn  
 USER NAME = SUSTRIANAKES



2600 Warrenville Road, Suite 203, Downers Grove, IL 60515  
 630.705.0110 voice, 630.839.2566 fax  
 www.mps-il.com  
**MILLENNIA PROFESSIONAL SERVICES**

DESIGNED - TVN	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE - 2/1/2024	REVISED -

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

**PLAN**  
**NOISE ABATEMENT WALLS**

SCALE: 1"=50'    SHEET NO. 2 OF 4 SHEETS    STA.    TO STA.

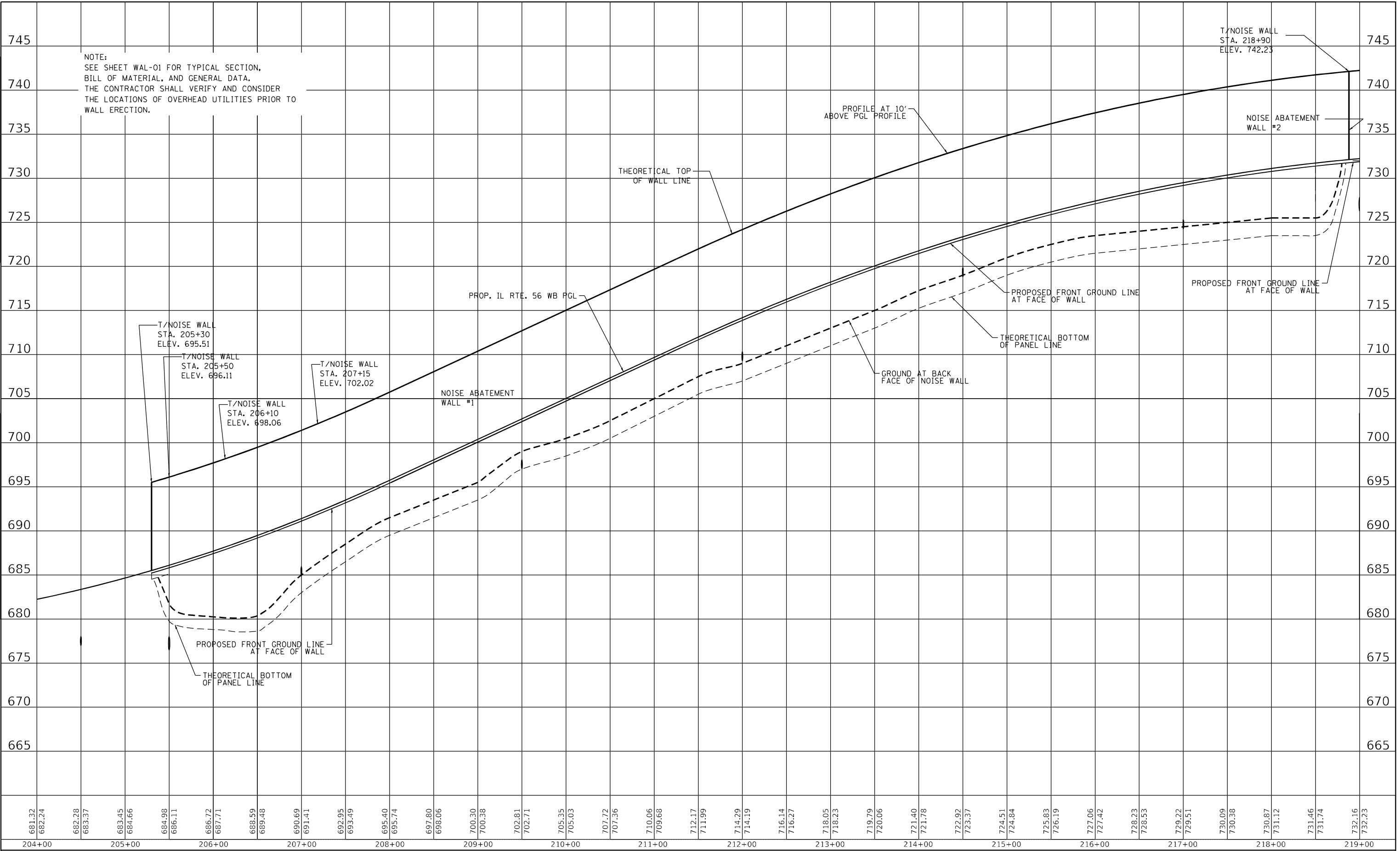
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	(56657)R-4	DUPAGE	529	345
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60P75	

WAL-02

SFILES

PLAN	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	ALIGNMENT CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	CARD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	ALIGNMENT CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	CARD FILE NAME	



NOTE:  
SEE SHEET WAL-01 FOR TYPICAL SECTION,  
BILL OF MATERIAL, AND GENERAL DATA.  
THE CONTRACTOR SHALL VERIFY AND CONSIDER  
THE LOCATIONS OF OVERHEAD UTILITIES PRIOR TO  
WALL ERECTION.

FILE NAME = D:\60P75\_SHT-03 Walls\_BLA.dgn  
PLOT SCALE = 1/8" = 1' - 0"  
USER NAME = #USERNAME#



2600 Warrenville Road, Suite 203, Downers Grove, IL 60515  
630.705.0110 voice, 630.839.2566 fax  
www.mps-il.com  
**MILLENNIA PROFESSIONAL SERVICES**

DESIGNED -	TVN	REVISED -	
DRAWN -	TVN	REVISED -	
CHECKED -	EG	REVISED -	
DATE -	2/1/2024	REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

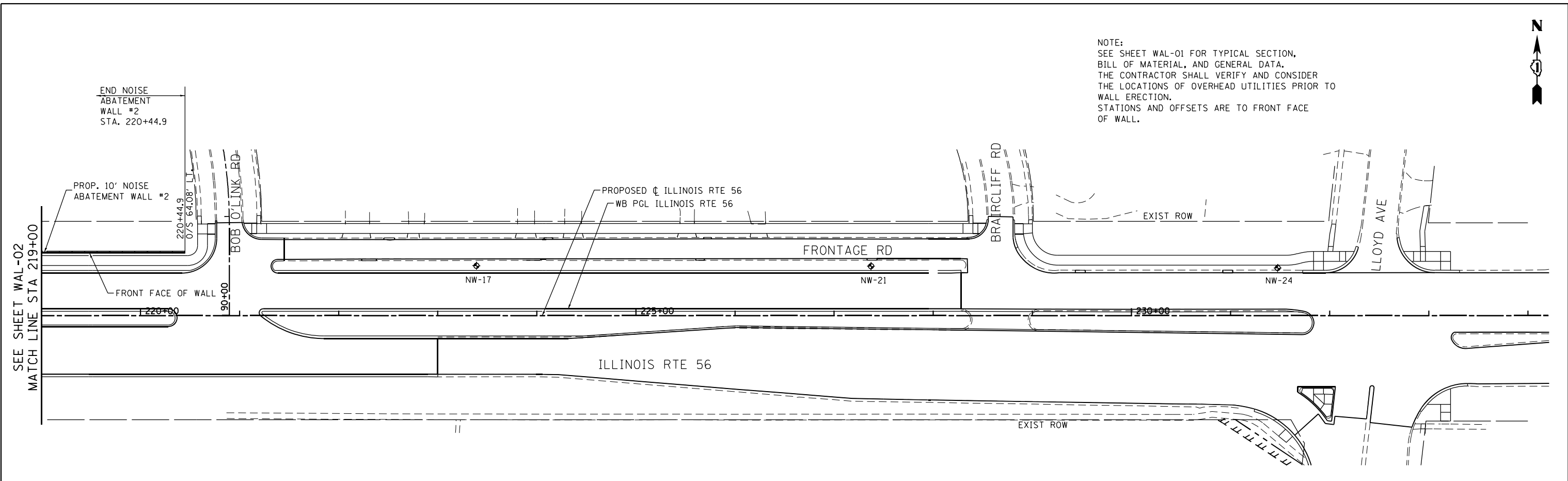
PROFILE	
NOISE ABATEMENT WALLS	
HORIZ 1"=50'	
SCALE: VERT 1"=5'	SHEET 3 OF 4 SHEETS
STA. 205+30	TO STA. 219+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
870	(56&57)R-4	DUPAGE	529	346
CONTRACT NO. 60P75				
ILLINOIS FED. AID PROJECT				

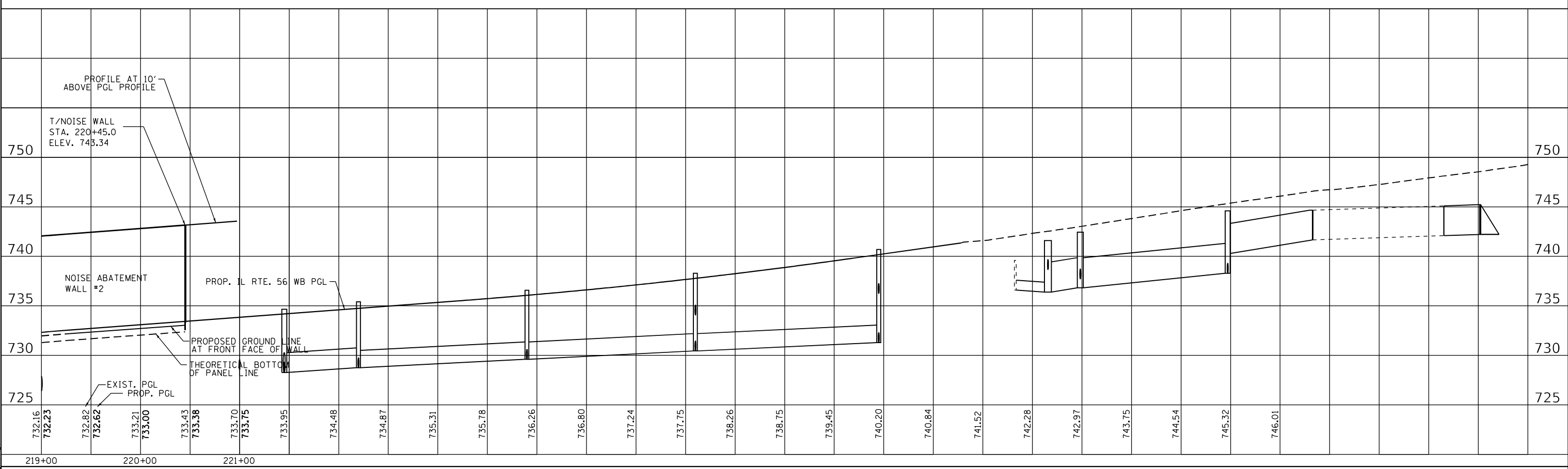
WAL-03



NOTE:  
 SEE SHEET WAL-01 FOR TYPICAL SECTION,  
 BILL OF MATERIAL, AND GENERAL DATA.  
 THE CONTRACTOR SHALL VERIFY AND CONSIDER  
 THE LOCATIONS OF OVERHEAD UTILITIES PRIOR TO  
 WALL ERECTION.  
 STATIONS AND OFFSETS ARE TO FRONT FACE  
 OF WALL.



PROFILE	SUBMITTED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHKD	
	NO.	



FILE NAME = D:\60P75\_SHT-04 Walls\_BLA.dgn  
 PLOT SCALE = 1/8"=1'-0"  
 USER NAME =



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**MILLENNIA PROFESSIONAL SERVICES**

DESIGNED - TVN	REVISED
DRAWN - TVN	REVISED
CHECKED - EG	REVISED
DATE - 2/1/2024	REVISED

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PLAN AND PROFILE  
 NOISE ABATEMENT WALL**  
 HORIZ 1"=50'  
 SCALE: VERT 1"=5' SHEET 4 OF 4 SHEETS STA. 219+00 TO STA. 220+45

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
B70	(56&57)R-4	DUPAGE	529	347
CONTRACT NO. 60P75				
ILLINOIS FED. AID PROJECT				

WAL-04

Geo Services, Inc.		SOIL BORING LOG				PAGE 1 of 1					
Geotechnical, Environmental & Civil Engineering 805 Amberst Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838		DATE 9/24/2012				LOGGED BY DR					
ROUTE F.A.P. RTE. 365		DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls				GSI JOB No. 12195					
SECTION 634X-N-3		LOCATION SEC 25, T39N, R10E, SW1/4, 3RD PM				COUNTY DuPage County					
DRILLING METHOD 3.25" Hollow Stem Auger		HAMMER TYPE CME Automatic				STRUCT. NO. XX					
Station 205+30		Surface Water Elev. n/a				Stream Bed Elev. n/a					
Offset 61.0' Left		BORING NO. NW-01				Groundwater Elevation:					
Ground Surface Elev. 682.1		First Encounter 668.6				Upon Completion 670.6					
		After Hrs.									
DEPTH	BLOW	UCS	MOIST					DEPTH	BLOW	UCS	MOIST
(ft)	(/6")	(tsf)	(%)					(ft)	(/6")	(tsf)	(%)
10.0"	AS	-	35	10.0" CLAYEY TOPSOIL-dark brown				681.2			
2				CLAY LOAM-brown-stiff							
3	1.0P	16		SAND & GRAVEL-gray-medium dense to dense (A-1)							
4				TOPSOIL-black				678.1			
5	1.5P	32		End Of Boring @ -25.0' Hollow Stem Augers CME Automatic Hammer				657.1-25			
6				SILTY CLAY-brown & gray-stiff (A-6)				676.1			
7	1.0P	23		SILTY SAND-brown-medium dense (A-2)				674.1			
8				SILTY LOAM-brown & gray-medium dense (A-4)				670.6			
9				SAND & GRAVEL-gray-medium dense to dense (A-1)				668.6			
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The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-S Shelby Tube Sample VS-Vane Shear Test. The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206). The Unit Dry Weight (pcf) is noted in italics above moist (%). NR-No Recovery.

Geo Services, Inc.		SOIL BORING LOG				PAGE 1 of 1					
Geotechnical, Environmental & Civil Engineering 805 Amberst Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838		DATE 5/29/2013				LOGGED BY DR					
ROUTE F.A.P. RTE. 365		DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls				GSI JOB No. 12195					
SECTION 634X-N-3		LOCATION SEC 25, T39N, R10E, SW1/4, 3RD PM				COUNTY DuPage County					
DRILLING METHOD 3.25" Hollow Stem Auger		HAMMER TYPE CME Automatic				STRUCT. NO. XX					
Station 202+20		Surface Water Elev. n/a				Stream Bed Elev. n/a					
Offset 38.3' Left		BORING NO. NW-02				Groundwater Elevation:					
Ground Surface Elev. 678.3		First Encounter Dry to 5.0'				Upon Completion n/a					
		After Hrs.									
DEPTH	BLOW	UCS	MOIST					DEPTH	BLOW	UCS	MOIST
(ft)	(/6")	(tsf)	(%)					(ft)	(/6")	(tsf)	(%)
9.0"				9.0" ASPHALT				677.6			
6				CRUSHED STONE-medium dense (Fill)				676.3			
4				TOPSOIL-black				675.3			
2				SANDY CLAY LOAM-gray-stiff (A-6)				672.8			
3				End Of Boring @ -25.0' Hollow Stem Augers to 5.0' Rotary Drilling To Completion CME Automatic Hammer				653.3-25			
5	1.5P	16		SAND & GRAVEL-brown-medium dense (A-1)				667.8			
8											
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The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) ST-S Shelby Tube Sample VS-Vane Shear Test. The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206). The Unit Dry Weight (pcf) is noted in italics above moist (%). NR-No Recovery.

Geo Services, Inc.		SOIL BORING LOG				PAGE 1 of 1					
Geotechnical, Environmental & Civil Engineering 805 Amberst Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838		DATE 5/29/2013				LOGGED BY DR					
ROUTE F.A.P. RTE. 365		DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls				GSI JOB No. 12195					
SECTION 634X-N-3		LOCATION SEC 25, T39N, R10E, SW1/4, 3RD PM				COUNTY DuPage County					
DRILLING METHOD 3.25" Hollow Stem Auger		HAMMER TYPE CME Automatic				STRUCT. NO. XX					
Station 203+37		Surface Water Elev. n/a				Stream Bed Elev. n/a					
Offset 51.2' Left		BORING NO. NW-03				Groundwater Elevation:					
Ground Surface Elev. 678.2		First Encounter Dry to 5.0'				Upon Completion n/a					
		After Hrs.									
DEPTH	BLOW	UCS	MOIST					DEPTH	BLOW	UCS	MOIST
(ft)	(/6")	(tsf)	(%)					(ft)	(/6")	(tsf)	(%)
677.2	AS	-	26	TOPSOIL-black							
2				CLAY to CLAY LOAM-brown & gray spotted black-very stiff (A-6) Fill				675.2			
4	3.0P	19		SAND & GRAVEL-gray-medium dense to dense (A-1)							
2				SILTY CLAY-brown & gray-medium stiff (A-6)				672.7			
2				End Of Boring @ -25.0' Hollow Stem Augers CME Automatic Hammer				653.2-25			
5	0.5P	18		SANDY CLAY LOAM with Gravel-brown & gray-medium stiff (Possible Fill)				670.2			
6				SANDY LOAM-gray-medium dense (A-2)				667.7			
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Geo Services, Inc. Geotechnical, Environmental & Civil Engineering 805 Amberl Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838		SOIL BORING LOG		PAGE 1 of 1			
ROUTE <u>F.A.P. RTE. 365</u>		DESCRIPTION <u>Pedestrian Bridge over East Branch DuPage River &amp; Retaining Walls</u>		DATE <u>9/24/2012</u>			
SECTION <u>634X-N-3</u>		LOCATION <u>SEC 25, T39N, R10E, SW1/4, 3RD PM</u>		LOGGED BY <u>DR</u>			
COUNTY <u>DuPage County</u>		DRILLING METHOD <u>3.25" Hollow Stem Auger</u>		HAMMER TYPE <u>CME Automatic</u>			
STRUCT. NO. <u>XX</u>	Station <u>XX</u>	Surface Water Elev. <u>n/a</u>	Stream Bed Elev. <u>n/a</u>	DEPT	BLOW	UCS	MOIST
BORING NO. <u>NW-04</u>	Station <u>208+33</u>	Groundwater Elevation:		DEPTH	BLOW	UCS	MOIST
Offset <u>62.0' Left</u>	Ground Surface Elev. <u>693.1</u>	First Encounter <u>Dry</u>	Upon Completion <u>Dry</u>	H	S	Qu	T
	(ft) (/6") (tsf) (%)	After ____ Hrs.		(ft) (/6") (tsf) (%)			
10.0" CLAYEY TOPSOIL—dark brown 692.2							
SAND—brown—medium dense (A-3)							
CLAY to CLAY LOAM—brown & gray spotted black—stiff to hard (A-6) Fill							
SANDY CLAY LOAM—brown—stiff (A-2/A-6)							
SAND—brown—medium dense (A-3)							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B)—Bulge, (S)—Shear, (P)—Penetrometer, (ST)—Shelby Tube Sample, (VS)—Vane Shear Test. The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206). The Unit Dry Weight (pcf) is noted in italics above moist (%). NR—No Recovery.

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering 805 Amberl Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838		SOIL BORING LOG		PAGE 1 of 1			
ROUTE <u>F.A.P. RTE. 365</u>		DESCRIPTION <u>Pedestrian Bridge over East Branch DuPage River &amp; Retaining Walls</u>		DATE <u>5/29/2013</u>			
SECTION <u>634X-N-3</u>		LOCATION <u>SEC 25, T39N, R10E, SW1/4, 3RD PM</u>		LOGGED BY <u>DR</u>			
COUNTY <u>DuPage County</u>		DRILLING METHOD <u>3.25" Hollow Stem Auger</u>		HAMMER TYPE <u>CME Automatic</u>			
STRUCT. NO. <u>XX</u>	Station <u>XX</u>	Surface Water Elev. <u>n/a</u>	Stream Bed Elev. <u>n/a</u>	DEPT	BLOW	UCS	MOIST
BORING NO. <u>NW-05</u>	Station <u>204+14</u>	Groundwater Elevation:		DEPTH	BLOW	UCS	MOIST
Offset <u>74.9' Left</u>	Ground Surface Elev. <u>681.0</u>	First Encounter <u>672.0</u>	Upon Completion <u>672.0</u>	H	S	Qu	T
	(ft) (/6") (tsf) (%)	After ____ Hrs.		(ft) (/6") (tsf) (%)			
SANDY TOPSOIL with Gravel—black 680.0							
CLAY LOAM—dark brown, gray & black—stiff (A-6) Fill							
CLAY—dark brown & gray spotted black—stiff (CL)							
SANDY LOAM—brown—loose (A-2)							
CLAYEY SAND & GRAVEL—brown—loose (A-2)							
SAND & GRAVEL—gray—medium dense to dense (A-1)							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B)—Bulge, (S)—Shear, (P)—Penetrometer, (ST)—Shelby Tube Sample, (VS)—Vane Shear Test. The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206). The Unit Dry Weight (pcf) is noted in italics above moist (%). NR—No Recovery.

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering 805 Amberl Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838		SOIL BORING LOG		PAGE 1 of 1			
ROUTE <u>F.A.P. RTE. 365</u>		DESCRIPTION <u>Pedestrian Bridge over East Branch DuPage River &amp; Retaining Walls</u>		DATE <u>5/29/2013</u>			
SECTION <u>634X-N-3</u>		LOCATION <u>SEC 25, T39N, R10E, SW1/4, 3RD PM</u>		LOGGED BY <u>DR</u>			
COUNTY <u>DuPage County</u>		DRILLING METHOD <u>3.25" Hollow Stem Auger</u>		HAMMER TYPE <u>CME Automatic</u>			
STRUCT. NO. <u>XX</u>	Station <u>XX</u>	Surface Water Elev. <u>n/a</u>	Stream Bed Elev. <u>n/a</u>	DEPT	BLOW	UCS	MOIST
BORING NO. <u>NW-06</u>	Station <u>207+12</u>	Groundwater Elevation:		DEPTH	BLOW	UCS	MOIST
Offset <u>37.6' Left</u>	Ground Surface Elev. <u>690.4</u>	First Encounter <u>674.4</u>	Upon Completion <u>674.4</u>	H	S	Qu	T
	(ft) (/6") (tsf) (%)	After ____ Hrs.		(ft) (/6") (tsf) (%)			
9.0" ASPHALT 689.7							
CLAYEY SAND & GRAVEL—brown (Fill) 688.9							
CLAY LOAM—brown—stiff to very stiff (A-6) Fill							
TOPSOIL—black							
SANDY CLAY LOAM—brown—stiff (A-6)							
SILTY SAND—brown—loose to medium dense (A-2)							
SAND & GRAVEL—gray—medium dense (A-1)							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B)—Bulge, (S)—Shear, (P)—Penetrometer, (ST)—Shelby Tube Sample, (VS)—Vane Shear Test. The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206). The Unit Dry Weight (pcf) is noted in italics above moist (%). NR—No Recovery.

FILE NAME = D:\60P75\sh-02\_SBORING.dgn  
USER NAME = JESSIE



2600 Warrenville Road, Suite 203, Downers Grove, IL 60515  
630.705.0110 voice, 630.839.2566 fax  
www.mps-il.com

MILLENNIA PROFESSIONAL SERVICES

DESIGNED	- TVN	REVISED	-
DRAWN	-	REVISED	-
CHECKED	-	REVISED	-
DATE	- 2/1/2024	REVISED	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

IL ROUTE 56 (BUTTERFIELD RD)  
SOIL BORING LOGS

SCALE: N/A SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
B70	634X-N-3	DUPAGE	529	349
CONTRACT NO. 60P75				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SBOR-02

8FILES

SOIL BORING LOG									
Geo Services, Inc. Geotechnical, Environmental & Civil Engineering 805 Amber Court, Suite 204 Naperville, Illinois 60565 (630)-355-2838					PAGE 1 of 1 DATE 9/21/2012 LOGGED BY DR GSI JOB No. 12195				
ROUTE F.A.P. RTE. 365 DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls					ROUTE F.A.P. RTE. 365 DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls				
SECTION 634X-N-3 LOCATION					SECTION 634X-N-3 LOCATION SEC 25, T39N, R10E, SE1/4, 3RD PM				
COUNTY DuPage County DRILLING METHOD 3.25" Hollow Stem Auger HAMMER TYPE CME Automatic					COUNTY DuPage County DRILLING METHOD 3.25" Hollow Stem Auger HAMMER TYPE CME Automatic				
STRUCT. NO. XX Station XX					STRUCT. NO. XX Station XX				
BORING NO. NW-07 Station 211+38 Offset 62.0' Left Ground Surface Elev. 706.8					BORING NO. NW-08 Station 209+27 Offset 37.7' Left Ground Surface Elev. 700.7				
DEPTH	BLOW	UCS	MOIST	Surface Water Elev.	DEPTH	BLOW	UCS	MOIST	Surface Water Elev.
H	S	Qu	T	Stream Bed Elev.	H	S	Qu	T	Stream Bed Elev.
(ft)	(/6")	(tsf)	(%)	n/a	(ft)	(/6")	(tsf)	(%)	n/a
Groundwater Elevation:					Groundwater Elevation:				
First Encounter Dry					First Encounter Dry				
Upon Completion Dry					Upon Completion Dry				
After Hrs.					After Hrs.				
10.0" TOPSOIL-black 706.0									
CLAY-dark brown & black-very loose to loose (A-6) Fill									
CLAY LOAM-brown-very stiff to hard (A-6)									
SILTY CLAY LOAM-brown-loose to dense (A-4/A-6)									
SAND & GRAVEL-brown (Fill) 699.2									
CLAY LOAM-brown & gray-very stiff to hard (A-6) Fill									
SANDY CLAY LOAM-brown-loose (A-4/A-6)									
SILTY SAND & GRAVEL-brown-medium dense (A-2)									
SILTY CLAY LOAM-brown-loose to dense (A-4/A-6)									
SANDY CLAY LOAM-brown-stiff (A-6)									
SILTY CLAY-brown-very stiff (A-6)									

SOIL BORING LOG									
Geo Services, Inc. Geotechnical, Environmental & Civil Engineering 805 Amber Court, Suite 204 Naperville, Illinois 60565 (630)-355-2838					PAGE 1 of 1 DATE 5/29/2013 LOGGED BY DR GSI JOB No. 12195				
ROUTE F.A.P. RTE. 365 DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls					ROUTE F.A.P. RTE. 365 DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls				
SECTION 634X-N-3 LOCATION					SECTION 634X-N-3 LOCATION SEC 25, T39N, R10E, SE1/4, 3RD PM				
COUNTY DuPage County DRILLING METHOD 3.25" Hollow Stem Auger HAMMER TYPE CME Automatic					COUNTY DuPage County DRILLING METHOD 3.25" Hollow Stem Auger HAMMER TYPE CME Automatic				
STRUCT. NO. XX Station XX					STRUCT. NO. XX Station XX				
BORING NO. NW-08 Station 209+27 Offset 37.7' Left Ground Surface Elev. 700.7					BORING NO. NW-09 Station 210+54 Offset 49.4' Left Ground Surface Elev. 705.5				
DEPTH	BLOW	UCS	MOIST	Surface Water Elev.	DEPTH	BLOW	UCS	MOIST	Surface Water Elev.
H	S	Qu	T	Stream Bed Elev.	H	S	Qu	T	Stream Bed Elev.
(ft)	(/6")	(tsf)	(%)	n/a	(ft)	(/6")	(tsf)	(%)	n/a
Groundwater Elevation:					Groundwater Elevation:				
First Encounter Dry					First Encounter Dry				
Upon Completion Dry					Upon Completion Dry				
After Hrs.					After Hrs.				
9.0" ASPHALT 700.0									
SAND & GRAVEL-brown (Fill) 699.2									
CLAY LOAM-brown & gray-very stiff to hard (A-6) Fill									
SANDY CLAY LOAM-brown-loose (A-4/A-6)									
SILTY SAND & GRAVEL-brown-medium dense (A-2)									
SILTY CLAY LOAM-brown-loose to dense (A-4/A-6)									
SANDY CLAY LOAM-brown-stiff (A-6)									
SILTY CLAY-brown-very stiff (A-6)									

SOIL BORING LOG									
Geo Services, Inc. Geotechnical, Environmental & Civil Engineering 805 Amber Court, Suite 204 Naperville, Illinois 60565 (630)-355-2838					PAGE 1 of 1 DATE 5/24/2013 LOGGED BY DR GSI JOB No. 12195				
ROUTE F.A.P. RTE. 365 DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls					ROUTE F.A.P. RTE. 365 DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls				
SECTION 634X-N-3 LOCATION					SECTION 634X-N-3 LOCATION SEC 25, T39N, R10E, SE1/4, 3RD PM				
COUNTY DuPage County DRILLING METHOD 3.25" Hollow Stem Auger HAMMER TYPE CME Automatic					COUNTY DuPage County DRILLING METHOD 3.25" Hollow Stem Auger HAMMER TYPE CME Automatic				
STRUCT. NO. XX Station XX					STRUCT. NO. XX Station XX				
BORING NO. NW-09 Station 210+54 Offset 49.4' Left Ground Surface Elev. 705.5					BORING NO. NW-09 Station 210+54 Offset 49.4' Left Ground Surface Elev. 705.5				
DEPTH	BLOW	UCS	MOIST	Surface Water Elev.	DEPTH	BLOW	UCS	MOIST	Surface Water Elev.
H	S	Qu	T	Stream Bed Elev.	H	S	Qu	T	Stream Bed Elev.
(ft)	(/6")	(tsf)	(%)	n/a	(ft)	(/6")	(tsf)	(%)	n/a
Groundwater Elevation:					Groundwater Elevation:				
First Encounter Dry					First Encounter Dry				
Upon Completion Dry					Upon Completion Dry				
After Hrs.					After Hrs.				
12.0" ASPHALT, 12.0" SAND & GRAVEL-dark brown									
CLAY LOAM-brown-very stiff to hard (A-6) Fill									
SANDY CLAY LOAM-dark brown-hard (A-6)									
SILTY CLAY LOAM with Gravel-brown-medium dense (A-4/A-6)									
SILTY SAND & GRAVEL-brown-medium dense to dense (A-2)									
SANDY SILT-brown-medium dense to dense (A-2/A-4)									
SANDY CLAY LOAM-brown-stiff (A-6)									
SILTY CLAY LOAM-brown-loose to dense (A-4/A-6)									
SANDY CLAY LOAM-brown-stiff (A-6)									
SILTY CLAY-brown-very stiff (A-6)									

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B)-Bulge, (S)-Shear, (P)-Penetrometer. ST-S Shelby Tube Sample VS-Vane Shear Test. The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206). The Unit Dry Weight (pcf) is noted in italics above moist (%). NR-No Recovery.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B)-Bulge, (S)-Shear, (P)-Penetrometer. ST-S Shelby Tube Sample VS-Vane Shear Test. The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206). The Unit Dry Weight (pcf) is noted in italics above moist (%). NR-No Recovery.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B)-Bulge, (S)-Shear, (P)-Penetrometer. ST-S Shelby Tube Sample VS-Vane Shear Test. The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206). The Unit Dry Weight (pcf) is noted in italics above moist (%). NR-No Recovery.

FILE NAME = D:\60P75\sh-03\_SBORING.dgn  
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USER NAME = ZIMMERMAN



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DATE - 2/1/2024

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

IL ROUTE 56 (BUTTERFIELD RD)  
SOIL BORING LOGS

SCALE: N/A SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.  
B70 634X-N-3 DUPAGE 529 350  
CONTRACT NO. 60P75  
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

SBOR-03

8FILES



Geo Services, Inc. Geotechnical, Environmental & Civil Engineering 805 Amberst-Curtis, Suite 204 Naperville, Illinois 60565 (630)-355-2838		SOIL BORING LOG				PAGE 1 of 1			
ROUTE <u>F.A.P. RTE. 365</u>		DESCRIPTION <u>Pedestrian Bridge over East Branch DuPage River &amp; Retaining Walls</u>				DATE <u>9/21/2012</u>			
SECTION <u>634X-N-3</u>		LOCATION <u>SEC 25, T39N, R10E, SW1/4, 3RD PM</u>				LOGGED BY <u>DR</u>			
COUNTY <u>DuPage County</u>		DRILLING METHOD <u>3.25" Hollow Stem Auger</u>				HAMMER TYPE <u>CME Automatic</u>			
STRUCT. NO. <u>XX</u>		Surface Water Elev. <u>n/a</u>				Stream Bed Elev. <u>n/a</u>			
Station <u>XX</u>		Groundwater Elevation:				First Encounter <u>Dry</u>			
BORING NO. <u>NW-13</u>		First Encounter Upon Completion <u>Dry</u>				After <u>    </u> Hrs. <u>    </u>			
Station <u>217+48</u>		Ground Surface Elev. <u>725.0</u>				(ft) (/6") (tsf) (%)			
Offset <u>62.0' Left</u>									
Ground Surface Elev. <u>725.0</u>									
10.0" TOPSOIL-black		724.2							
CLAY LOAM-dark brown & black-stiff (A-6) Fill		722.0							
CLAY LOAM-brown-very stiff to hard (A-6)		712.0							
CLAY to CLAY LOAM-gray-very stiff to hard (A-6)									
End Of Boring @ -25.0' Hollow Stem Augers CME Automatic Hammer									

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering 805 Amberst-Curtis, Suite 204 Naperville, Illinois 60565 (630)-355-2838		SOIL BORING LOG				PAGE 1 of 1			
ROUTE <u>F.A.P. RTE. 365</u>		DESCRIPTION <u>Pedestrian Bridge over East Branch DuPage River &amp; Retaining Walls</u>				DATE <u>5/24/2013</u>			
SECTION <u>634X-N-3</u>		LOCATION <u>SEC 25, T39N, R10E, SE1/4, 3RD PM</u>				LOGGED BY <u>DR</u>			
COUNTY <u>DuPage County</u>		DRILLING METHOD <u>3.25" Hollow Stem Auger</u>				HAMMER TYPE <u>CME Automatic</u>			
STRUCT. NO. <u>XX</u>		Surface Water Elev. <u>n/a</u>				Stream Bed Elev. <u>n/a</u>			
Station <u>XX</u>		Groundwater Elevation:				First Encounter <u>Dry</u>			
BORING NO. <u>NW-14</u>		First Encounter Upon Completion <u>Dry</u>				After <u>    </u> Hrs. <u>    </u>			
Station <u>216+52</u>		Ground Surface Elev. <u>726.2</u>				(ft) (/6") (tsf) (%)			
Offset <u>49.7' Left</u>									
Ground Surface Elev. <u>726.2</u>									
8.0" ASPHALT		725.5							
CRUSHED STONE & GRAVEL-loose (Fill)		724.2							
CLAY LOAM-dark brown & black-stiff (Fill)		723.2							
SILTY CLAY-dark brown-stiff (A-6) Wet		720.7							
CLAY LOAM-brown-stiff to hard (A-6)		719.2							
CLAY to CLAY LOAM-gray-stiff to very stiff (A-6)									
End Of Boring @ -25.0' Hollow Stem Augers CME Automatic Hammer									

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering 805 Amberst-Curtis, Suite 204 Naperville, Illinois 60565 (630)-355-2838		SOIL BORING LOG				PAGE 1 of 1			
ROUTE <u>F.A.P. RTE. 365</u>		DESCRIPTION <u>Pedestrian Bridge over East Branch DuPage River &amp; Retaining Walls</u>				DATE <u>5/24/2013</u>			
SECTION <u>634X-N-3</u>		LOCATION <u>SEC 25, T39N, R10E, SE1/4, 3RD PM</u>				LOGGED BY <u>DR</u>			
COUNTY <u>DuPage County</u>		DRILLING METHOD <u>3.25" Hollow Stem Auger</u>				HAMMER TYPE <u>CME Automatic</u>			
STRUCT. NO. <u>XX</u>		Surface Water Elev. <u>n/a</u>				Stream Bed Elev. <u>n/a</u>			
Station <u>XX</u>		Groundwater Elevation:				First Encounter <u>727.9</u>			
BORING NO. <u>NW-15</u>		First Encounter Upon Completion <u>Dry</u>				After <u>    </u> Hrs. <u>    </u>			
Station <u>220+37</u>		Ground Surface Elev. <u>731.4</u>				(ft) (/6") (tsf) (%)			
Offset <u>53.2' Left</u>									
Ground Surface Elev. <u>731.4</u>									
14.0" ASPHALT		730.2							
SAND, GRAVEL & STONE (Fill)		729.4							
CLAY LOAM-dark brown & gray spotted black-very stiff (A-6) Fill		725.9							
CLAY LOAM-brown-stiff to very stiff (A-6)		715.9							
CLAY to CLAY LOAM-gray-stiff to very stiff (A-6)									
End Of Boring @ -25.0' Hollow Stem Augers CME Automatic Hammer									

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B)-Bulge, (S)-Shear, (P)-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test. The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206). The Unit Dry Weight (pcf) is noted in italics above moist (%). NR-No Recovery.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B)-Bulge, (S)-Shear, (P)-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test. The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206). The Unit Dry Weight (pcf) is noted in italics above moist (%). NR-No Recovery.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B)-Bulge, (S)-Shear, (P)-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test. The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206). The Unit Dry Weight (pcf) is noted in italics above moist (%). NR-No Recovery.

FILE NAME = D:\60P75-wt-05-SBORING.dgn  
 USER NAME = JMSRNAME



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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>IL ROUTE 56 (BUTTERFIELD RD) SOIL BORING LOGS</b>			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
B70	634X-N-3	DUPAGE	529	352
CONTRACT NO. 60P75				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SBOR-05

8FILES

Geo Services, Inc.		SOIL BORING LOG				PAGE 1 of 1	
Geotechnical, Environmental & Civil Engineering 805 Amberly Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838		DATE 5/28/2013				LOGGED BY KD	
ROUTE F.A.P. RTE. 365		DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls				GSI JOB No. 12195	
SECTION 634X-N-3		LOCATION SEC 25, T39N, R10E, SE1/4, 3RD PM				COUNTY DuPage County	
DRILLING METHOD 3.25" Hollow Stem Auger		HAMMER TYPE CME Automatic				STRUCT. NO. XX	
STATION XX		BORING NO. NW-16				Station 222+38	
Offset 39.2' Left		Ground Surface Elev. 734.0				Groundwater Elevation:	
		First Encounter 717.5				Upon Completion 720.0	
		After Hrs.					
DEPTH	BLU	UCS	MOIST	DEPTH	BLU	UCS	MOIST
(ft)	(/6")	(tsf)	(%)	(ft)	(/6")	(tsf)	(%)
0				0			
15.0" ASPHALT				0			
				732.7			
				6			
SAND & GRAVEL-medium dense (Fill)				732.0			
				7	4.5+P	17	
				6			121
				6			
CLAY LOAM-brown-				709.0-25			
very stiff to hard (A-6) Fill				8	3.9B	15	
				6			114
				8			
				11	5.0B	18	
				5			
				10			
				723.5			
				-10	7	2.5P	17
				5			
CLAY LOAM-gray-very stiff (A-6)				7			
				9	2.75P	18	
				2			
SILTY LOAM-gray-				6			
medium dense (A-4)				721.0			
				-15	7	NP	18
				18			
				718.5			
				39			
CLAY LOAM-gray-				14	3.0P	13	
stiff to very stiff (A-6)							
				4			124
				7			
				-20	8	1.9B	13

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B)-Bulge, (S)-Shear, (P)-Penetrometer) ST-S Shelby Tube Sample VS-Vane Shear Test  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)  
NR-No Recovery

Geo Services, Inc.		SOIL BORING LOG				PAGE 1 of 1	
Geotechnical, Environmental & Civil Engineering 805 Amberly Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838		DATE 9/21/2012				LOGGED BY DR	
ROUTE F.A.P. RTE. 365		DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls				GSI JOB No. 12195	
SECTION 634X-N-3		LOCATION SEC 25, T39N, R10E, SW1/4, 3RD PM				COUNTY DuPage County	
DRILLING METHOD 3.25" Hollow Stem Auger		HAMMER TYPE CME Automatic				STRUCT. NO. XX	
STATION XX		BORING NO. NW-17				Station 223+50	
Offset 50.0' Left		Ground Surface Elev. 734.5				Groundwater Elevation:	
		First Encounter Dry				Upon Completion Dry	
		After Hrs.					
DEPTH	BLU	UCS	MOIST	DEPTH	BLU	UCS	MOIST
(ft)	(/6")	(tsf)	(%)	(ft)	(/6")	(tsf)	(%)
0				0			
15.0" ASPHALT				0			
				733.9			
				5			116
				4			
				3	3.8B	17	
				4			114
				5			
				709.5-25			
CLAY-brown & gray-				7	5.1B	18	
very stiff to hard (A-6)							
				5			111
				9			
				12	7.3B	19	
				8			116
				13			
				724.0			
				-10	17	7.6B	17
				4			111
				8			
				11	4.9B	19	
				3			114
				5			
				-15	9	4.4B	18
				3			
				5			
				7	2.0P	14	
				4			128
				8			
				-20	10	3.6B	12

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B)-Bulge, (S)-Shear, (P)-Penetrometer) ST-S Shelby Tube Sample VS-Vane Shear Test  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)  
NR-No Recovery

Geo Services, Inc.		SOIL BORING LOG				PAGE 1 of 1	
Geotechnical, Environmental & Civil Engineering 805 Amberly Court, Suite 204 Naperville, Illinois 60565 (630) 355-2838		DATE 5/28/2013				LOGGED BY KD	
ROUTE F.A.P. RTE. 365		DESCRIPTION Pedestrian Bridge over East Branch DuPage River & Retaining Walls				GSI JOB No. 12195	
SECTION 634X-N-3		LOCATION SEC 25, T39N, R10E, SE1/4, 3RD PM				COUNTY DuPage County	
DRILLING METHOD 3.25" Hollow Stem Auger		HAMMER TYPE CME Automatic				STRUCT. NO. XX	
STATION XX		BORING NO. NW-18				Station 224+34	
Offset 39.2' Left		Ground Surface Elev. 735.8				Groundwater Elevation:	
		First Encounter 711.8				Upon Completion 711.8	
		After Hrs.					
DEPTH	BLU	UCS	MOIST	DEPTH	BLU	UCS	MOIST
(ft)	(/6")	(tsf)	(%)	(ft)	(/6")	(tsf)	(%)
0				0			
12.0" ASPHALT				0			
				734.8			
				12			
SAND & GRAVEL-medium dense (Fill)				733.8			
				9			
				7	4.5+P	18	
				732.8			
				6			
				712.8			
				6			5
SANDY LOAM-brown-				710.8-25			
medium dense (A-2) Apparent Fill				8			6
				-5	8	NP	14
				730.3			
				3			
				5			
				7	3.25P	19	
				2			116
CLAY-gray-very stiff to hard (A-6)				8			
				10	12	5.3B	17
				4			129
				8			
				9	2.4B	14	
				722.8			
				3			
				5			
				-15	4	NP	11
				720.3			
				3			127
				5			
				10	2.75B	12	
				5			126
				8			
				-20	10	3.3B	12

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B)-Bulge, (S)-Shear, (P)-Penetrometer) ST-S Shelby Tube Sample VS-Vane Shear Test  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in italics above moist (%)  
NR-No Recovery

FILE NAME : D:\60P75-911-06-SBORING.dgn  
USER NAME : JESSIE.MAYE



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

<b>IL ROUTE 56 (BUTTERFIELD RD)</b>	
<b>SOIL BORING LOGS</b>	
SCALE:	SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
B70	634X-N-3	DUPAGE	529	353
CONTRACT NO. 60P75				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SBOR-06

8FILES

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering 805 Amberly Court, Suite 204 Naperville, Illinois 60565 (630)-355-2838										SOIL BORING LOG										PAGE 1 of 1	
ROUTE <u>F.A.P. RTE. 365</u> DESCRIPTION <u>Pedestrian Bridge over East Branch DuPage River &amp; Retaining Walls</u>										DATE <u>5/29/2013</u>										LOGGED BY <u>KD</u>	
SECTION <u>634X-N-3</u> LOCATION <u>SEC 25, T39N, R10E, SW1/4, 3RD PM</u>										GSI JOB No. <u>12195</u>											
COUNTY <u>DuPage County</u> DRILLING METHOD <u>3.25" Hollow Stem Auger</u> HAMMER TYPE <u>CME Automatic</u>																					
STRUCT. NO. <u>XX</u> Station <u>XX</u>																					
BORING NO. <u>NW-19</u> Station <u>229+25</u> Offset <u>39.3' Left</u> Ground Surface Elev. <u>742.1</u> (ft) (6") (tsf) (%)																					
Surface Water Elev. <u>n/a</u> Stream Bed Elev. <u>n/a</u> Groundwater Elevation: First Encounter <u>728.1</u> Upon Completion <u>728.1</u> After <u>    </u> Hrs. (ft) (6") (tsf) (%)																					
12.0" ASPHALT <u>741.1</u>										CLAY-gray-stiff to very stiff (A-6) <u>721.6</u>											
SAND & GRAVEL-medium dense (Fill) <u>740.1</u>																					
TOPSOIL-black																					
SILTY CLAY-brown & gray spotted black-medium stiff (A-6) Wet <u>736.6</u>																					
CLAY LOAM-brown & gray-stiff to very stiff (A-6) <u>734.1</u>																					
CLAY LOAM-brown & gray-stiff to very stiff (A-6) <u>720.6</u>																					
CLAY gray-stiff to very stiff (A-6) <u>711.1</u>																					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B)-Bulge, (S)-Shear, (P)-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in Italics above moist (%)  
NR-No Recovery

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering 805 Amberly Court, Suite 204 Naperville, Illinois 60565 (630)-355-2838										SOIL BORING LOG										PAGE 1 of 1	
ROUTE <u>F.A.P. RTE. 365</u> DESCRIPTION <u>Pedestrian Bridge over East Branch DuPage River &amp; Retaining Walls</u>										DATE <u>5/30/2013</u>										LOGGED BY <u>TZ</u>	
SECTION <u>634X-N-3</u> LOCATION <u>SEC 25, T39N, R10E, SW1/4, 3RD PM</u>										GSI JOB No. <u>12195</u>											
COUNTY <u>DuPage County</u> DRILLING METHOD <u>3.25" Hollow Stem Auger</u> HAMMER TYPE <u>CME Automatic</u>																					
STRUCT. NO. <u>XX</u> Station <u>XX</u>																					
BORING NO. <u>NW-19A</u> Station <u>229+28</u> Offset <u>53.4' Left</u> Ground Surface Elev. <u>741.0</u> (ft) (6") (tsf) (%)																					
Surface Water Elev. <u>n/a</u> Stream Bed Elev. <u>n/a</u> Groundwater Elevation: First Encounter <u>736.0</u> Upon Completion <u>n/a</u> After <u>    </u> Hrs. (ft) (6") (tsf) (%)																					
TOPSOIL-black (Fill) <u>740.0</u>										CLAY LOAM-brown & gray-stiff (A-6) Fill <u>738.5</u>											
TOPSOIL-black																					
SILTY CLAY-dark brown & gray spotted black-stiff (A-6) Wet <u>734.0</u>																					
CLAY-brown & gray-stiff (A-6) <u>731.0</u>																					
End Of Boring @ -10.0' Hand Auger																					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B)-Bulge, (S)-Shear, (P)-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in Italics above moist (%)  
NR-No Recovery

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering 805 Amberly Court, Suite 204 Naperville, Illinois 60565 (630)-355-2838										SOIL BORING LOG										PAGE 1 of 1	
ROUTE <u>F.A.P. RTE. 365</u> DESCRIPTION <u>Pedestrian Bridge over East Branch DuPage River &amp; Retaining Walls</u>										DATE <u>5/29/2013</u>										LOGGED BY <u>KD</u>	
SECTION <u>634X-N-3</u> LOCATION <u>SEC 25, T39N, R10E, SW1/4, 3RD PM</u>										GSI JOB No. <u>12195</u>											
COUNTY <u>DuPage County</u> DRILLING METHOD <u>3.25" Hollow Stem Auger</u> HAMMER TYPE <u>CME Automatic</u>																					
STRUCT. NO. <u>XX</u> Station <u>XX</u>																					
BORING NO. <u>NW-20</u> Station <u>230+52</u> Offset <u>39.2' Left</u> Ground Surface Elev. <u>743.8</u> (ft) (6") (tsf) (%)																					
Surface Water Elev. <u>n/a</u> Stream Bed Elev. <u>n/a</u> Groundwater Elevation: First Encounter <u>727.8</u> Upon Completion <u>725.8</u> After <u>    </u> Hrs. (ft) (6") (tsf) (%)																					
13.0" ASPHALT <u>742.7</u>										CLAY LOAM-gray-very stiff (A-6) <u>723.3</u>											
CRUSHED STONE-medium dense (Fill) <u>741.8</u>																					
CLAY LOAM-brown & gray spotted black-hard (A-6) Fill <u>740.8</u>										SILTY LOAM-gray-medium dense (A-4) <u>718.8</u>											
SILTY CLAY-dark brown, gray & black-stiff to very stiff (A-6) Wet <u>735.3</u>																					
CLAY-brown & gray-stiff to very stiff (A-6) <u>728.3</u>																					
SAND & GRAVEL-gray-medium dense (A-1) <u>725.8</u>																					
CLAY LOAM-gray-very stiff (A-6) <u>722.3</u>																					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B)-Bulge, (S)-Shear, (P)-Penetrometer) ST-Shelby Tube Sample VS-Vane Shear Test  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) The Unit Dry Weight (pcf) is noted in Italics above moist (%)  
NR-No Recovery

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DRAWN	-		REVISED	-
CHECKED	-		REVISED	-
DATE	-	2/1/2024	REVISED	-

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 56 (BUTTERFIELD RD)  
SOIL BORING LOGS**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
B70	634X-N-3	DUPAGE	529	354
CONTRACT NO. 60P75				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SBOR-07

8FILES



**GENERAL NOTES**

1. Any information concerning type or location of underground and other utilities is not guaranteed to be accurate or all inclusive. The Contractor is responsible for making his own determinations as to the type and location of the utilities as may be necessary to avoid damage thereto. Contractor shall call J.U.L.I.E. prior to excavation.
2. The excavation and work area shall be properly drained at all times during construction. All wet, loose, frozen or other unsuitable material shall be removed prior to placement of concrete or compacted backfill. The cost of any pumping required shall be included in the cost of Precast Concrete Box Culverts items.
3. It shall be the responsibility of the Contractor to divert the flow during construction in order to keep the construction areas free of water. The method of water diversion shall be subject to the approval of the Engineer and cost shall be included with Precast Concrete Box Culverts items.
4. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
5. Concrete for cast-in-place end sections, junction boxes and wingwalls shall be paid for as CONCRETE BOX CULVERTS.
6. Structural seal does not include design of precast elements.
7. Reinforcement bars designated (E) shall be epoxy coated.
8. Exposed edges shall have a 3/4" chamfer.
9. Cover from the face of concrete to face of reinforcement bars shall be 3" for surfaces cast against earth and 2" for all other surfaces unless otherwise noted.
10. Contractor shall coordinate with Precast Box Culvert Manufacturer to account for possible creep between box segments. Creep shall be determined prior to constructing all Junction Boxes.
11. See Highway Standard 602701 for manhole steps detail. Cost of manhole steps is included in cost of CONCRETE BOX CULVERTS.
12. Drain holes shall be provided on exterior culvert walls for each precast box segment with a clear rise greater than 3ft. The drain hole shall be located within 1/3 of the clear rise of the box culvert, shall not intercept the haunch, and shall conform to the requirements of Article 503.11 of the Standard Specification.
13. Complete or partial removal of existing culverts and culvert headwalls and wingwalls where indicated shall be according to Section 501 of the Standard Specifications, except existing box culvert walls and slabs shall be saw cut full depth. Cost shall be included in Removal of Existing Structures items. See sheets 15, 18 and 25.
14. PRECAST CONCRETE BOX CULVERTS, of the size specified, shall conform to the applicable requirements of Section 540 of the Standard Specification and ASTM C 1577.
15. 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 because 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.
16. See Sheet 22 & 23 of 32 for typical culvert details and excavation limits.
17. Precast box culvert sections shall be furnished with openings in the wall for storm sewer connections. Pipe connections shall be according to Section 602 of the Standard Specifications.
18. Precast box culverts shall be cast without bells and spigots on the ends that are in a junction chamber or at the headwall.
19. The location of the existing 54 inch water transmission main and the existing 10 inch water main and all appurtenances shall be field verified prior to construction/excavation activities. The water mains shall be physically located every 200 feet and as directed by the Engineer. During the field verification, the clearance between the water mains and the proposed box culvert and Temporary Soil Retention System shall be verified. The contractor shall submit documentation of the field verification and survey to the Engineer prior to construction/excavation activities. The contractor shall exercise extreme caution when working adjacent to the water mains. All costs for this work shall be included in the Precast Concrete Box Culverts items.
20. Geocomposite Wall Drain shall be according to Section 591 of the Standard Specifications, except that concrete nails shall not be used in areas where it overlaps Membrane Waterproofing System for Buried Structures.
21. See Drainage plans for additional culvert details.
22. See Roadway Cross Sections to determine box culvert design fill height.
23. Culvert S23C and portions of culvert S8 have watermain requirements. Costs included in the culvert item.

**INDEX OF SHEETS**

1. General Notes
2. General Plan-I
3. General Data
4. General Plan-II
5. General Plan-III
6. General Plan-IV
7. General Plan-V
8. General Plan-VI
9. General Plan-VII
10. General Plan-VIII  
Culvert No. S23A, S23B & S23C
11. IL 53 Culvert S134 Staging
12. IL 53 Culvert S134 Staging Details
13. IL 56 Culvert Staging  
Culverts S23A, S23B & S23C
14. IL 56 Culvert Staging Details  
Culverts S23A, S23B & S23C
15. Junction Box 1 Details
16. Junction Box 2 & 3 Details
17. Junction Box 5 Details
18. Junction Box 8 Details
19. Junction Box 134 Details
20. Culvert Extension  
S23A and S23B Details
21. Culvert Extension S0 Details
22. Culvert Details I
23. Culvert Details II
24. Headwall 136 Details
25. Headwall 23 Details
26. Boring Logs-I
27. Boring Logs-II
28. Boring Logs-III
29. Boring Logs-IV
30. Boring Logs-V
31. Boring Logs-VI
32. Boring Logs-VII

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Removal And Disposal Of Unsuitable Material	Cu Yd	183
Porous Granular Embankment	Cu Yd	813
Porous Granular Backfill	Cu Yd	183
Stone Riprap, Class A5	Sq Yd	80
Filter Fabric	Sq Yd	279
Removal Of Existing Structures No. 1	Each	1
Removal Of Existing Structures No. 2	Each	1
Removal Of Existing Structures No. 3	Each	1
Structure Excavation	Cu Yd	429
Reinforcement Bars, Epoxy Coated	Pound	21,880
Name Plates	Each	2
Temporary Soil Retention System	Sq Ft	648
Concrete Box Culverts	Cu Yd	120.2
Precast Concrete Box Culverts 4' X 4'	Foot	29.0
Precast Concrete Box Culverts 5' X 3'	Foot	19.0
Precast Concrete Box Culverts 6' X 3'	Foot	1,230.0
Precast Concrete Box Culverts 8' X 4'	Foot	554.0
Geocomposite Wall Drain	Sq Yd	2,023
Grates, Type 8	Each	1
Frames And Lids, Type 1, Closed Lid	Each	5
Dewatering	L Sum	1
Membrane Waterproofing System For Buried Structures	Sq Yd	2,023
Storm Sewer (Water Main Requirements) 48 Inch	Foot	172

**LOADING HL-93**

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

**DESIGN SPECIFICATIONS**

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

**DESIGN STRESSES**

**FIELD UNITS**

f'c = 3,500 psi  
fy = 60,000 psi (Reinforcement)

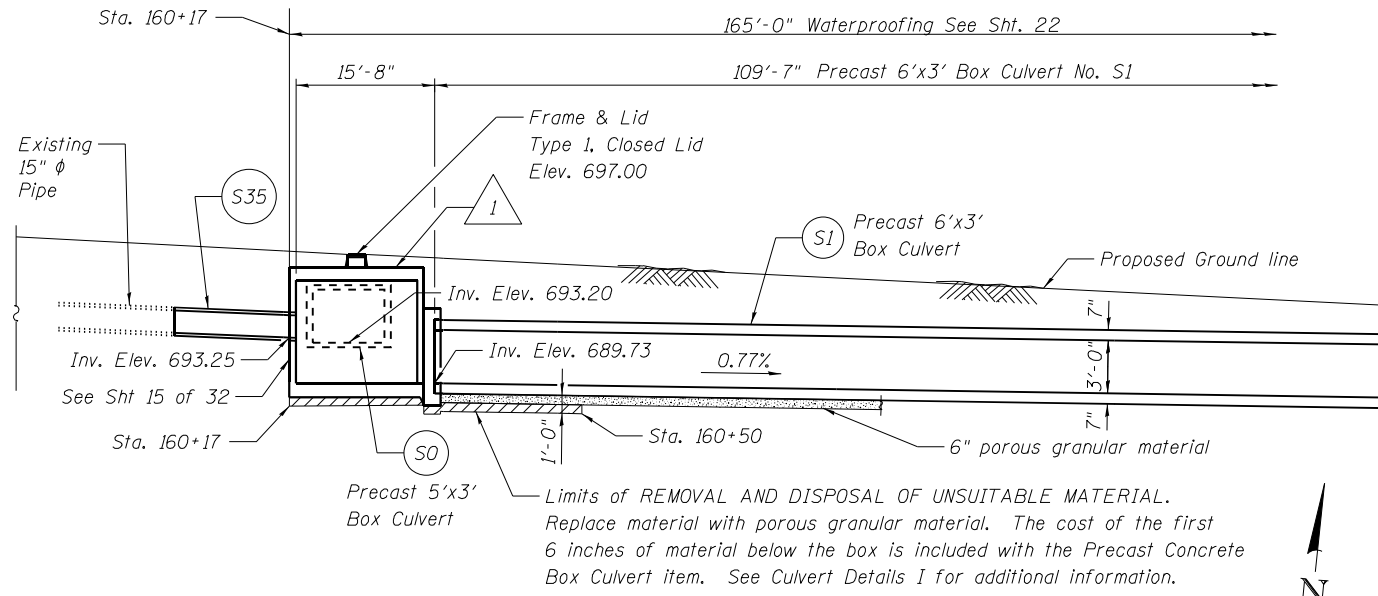
**PRECAST UNITS**

f'c = 5,000 psi  
fy = 60,000 psi (Reinforcement)  
fy = 65,000 psi (Welded Wire Fabric)

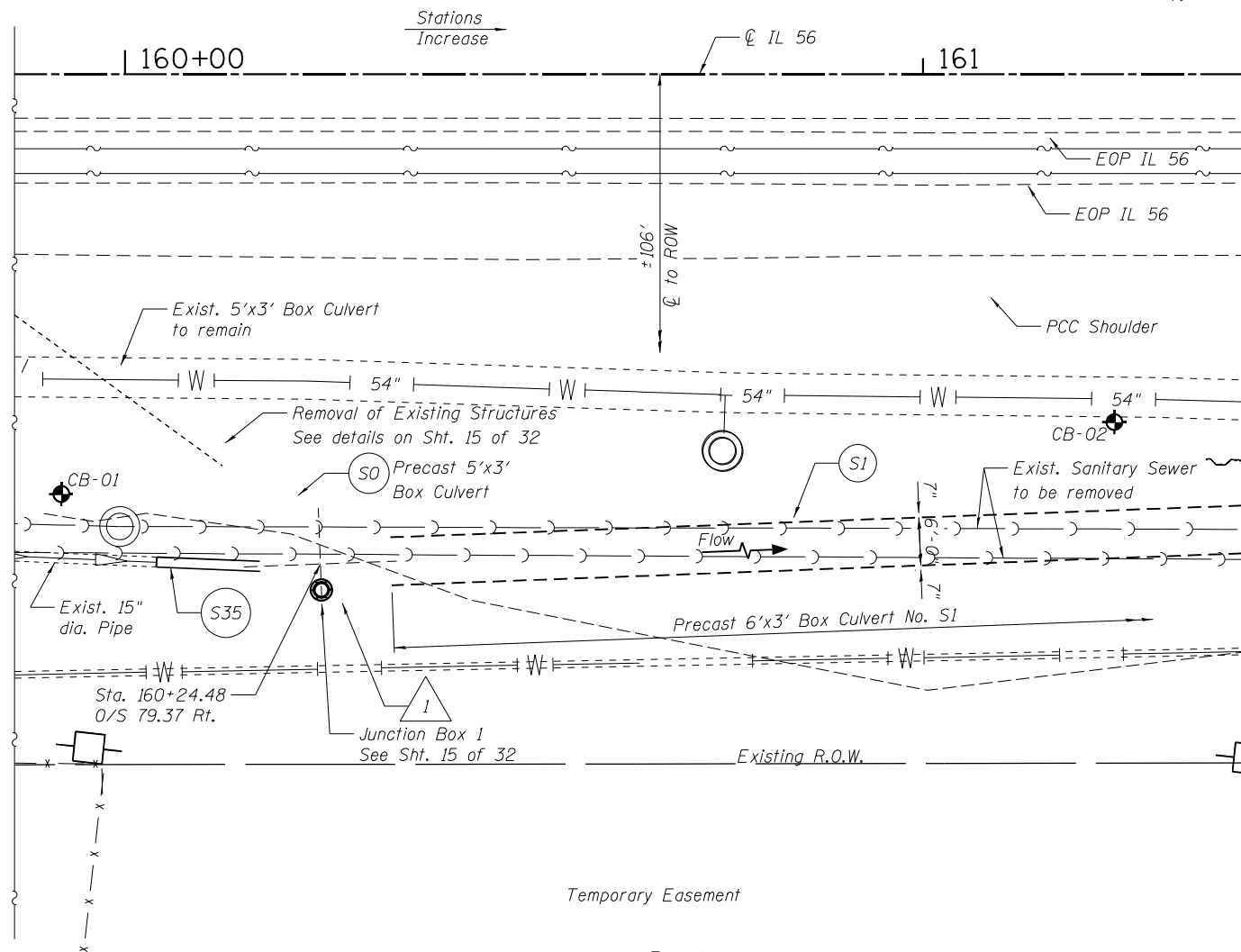
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	CHECKED - JJI	REVISED -	365			(56&57)R-4	DuPAGE	529	356	
PLOT SCALE =	DRAWN - TJ	REVISED -	CONTRACT NO. 60P75							
PLOT DATE = 2/1/2024	CHECKED - JJI	REVISED -	SHEET NO. 1 OF 32 SHEETS							
						ILLINOIS		FED. AID PROJECT		





**LONGITUDINAL SECTION**

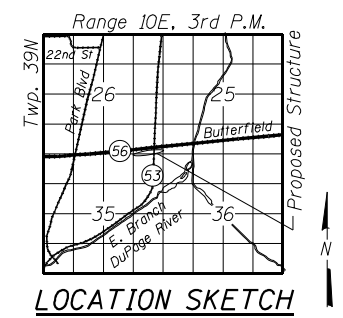


**PLAN**

MATCH LINE STA. 161+40 SEE SHEET 4 OF 32.

**Benchmark:**  
 Benchmark 79  
 Set rebar at the southwest corner of IL-56 (Butterfield Road) and Arboretum Road, 11 feet south of the south bituminous shoulder of Butterfield Road and 42 feet west of the centerline of Arboretum Road. Elevation = 693.65  
 Existing Structure: None.

**LEGEND**  
 1 See Drainage Plans for items and additional details



**GENERAL PLAN - I**  
**CULVERT NO. S1**  
**IL 56**  
**F.A.P. RTE 365**  
**SECTION (56&57)R-4**  
**DuPAGE COUNTY**  
**STA. 160+00 TO STA. 179+00**

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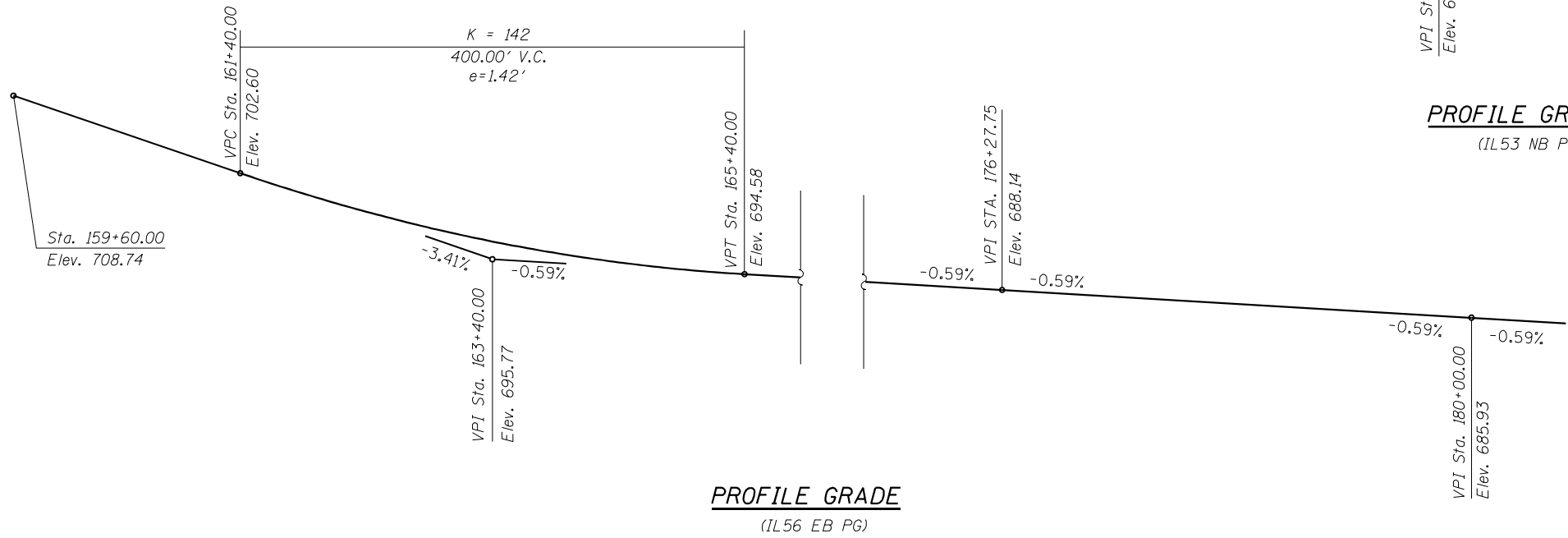
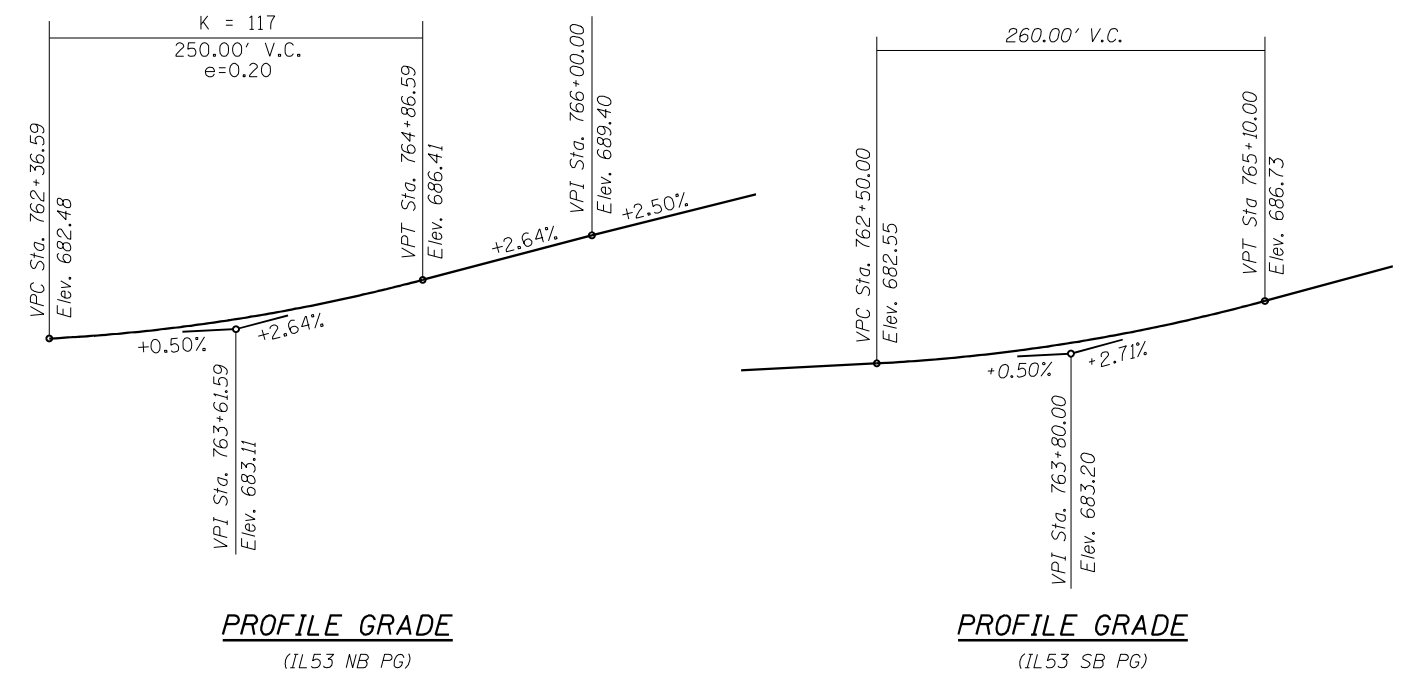
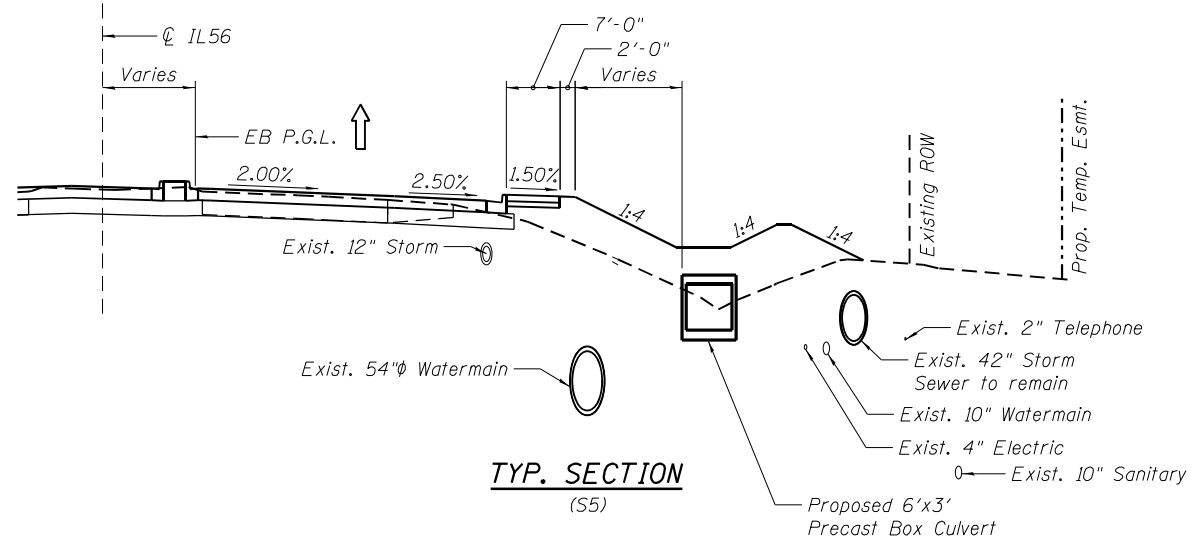
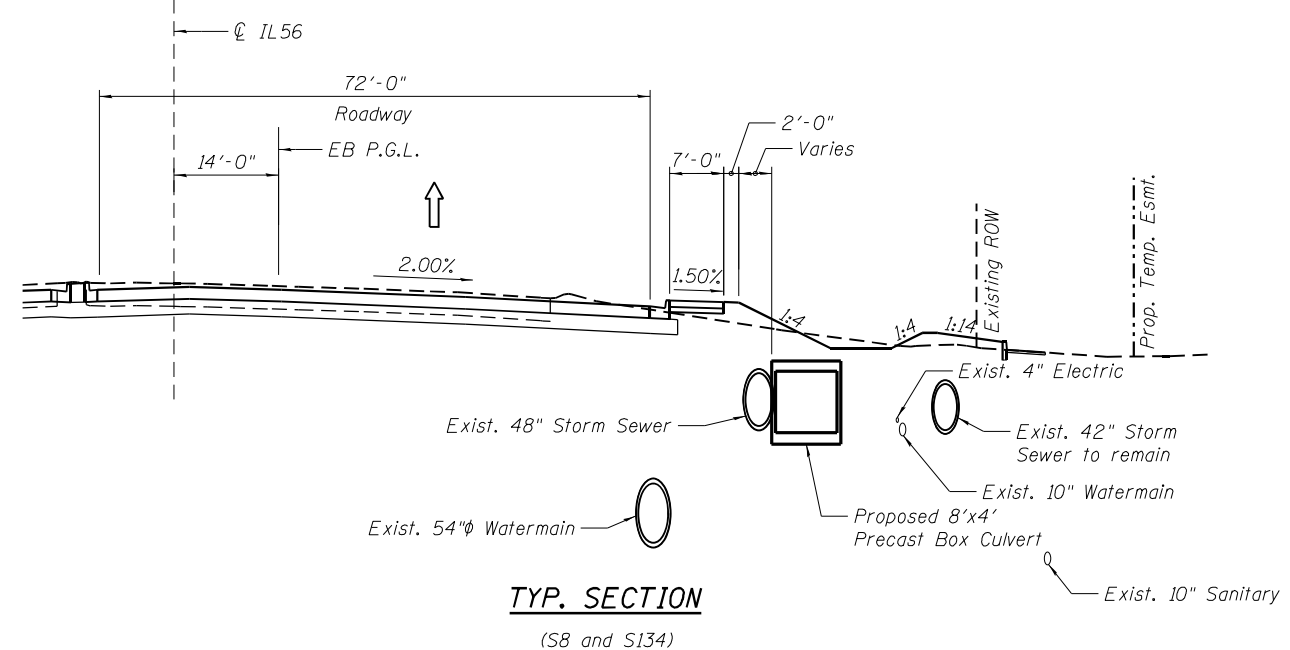
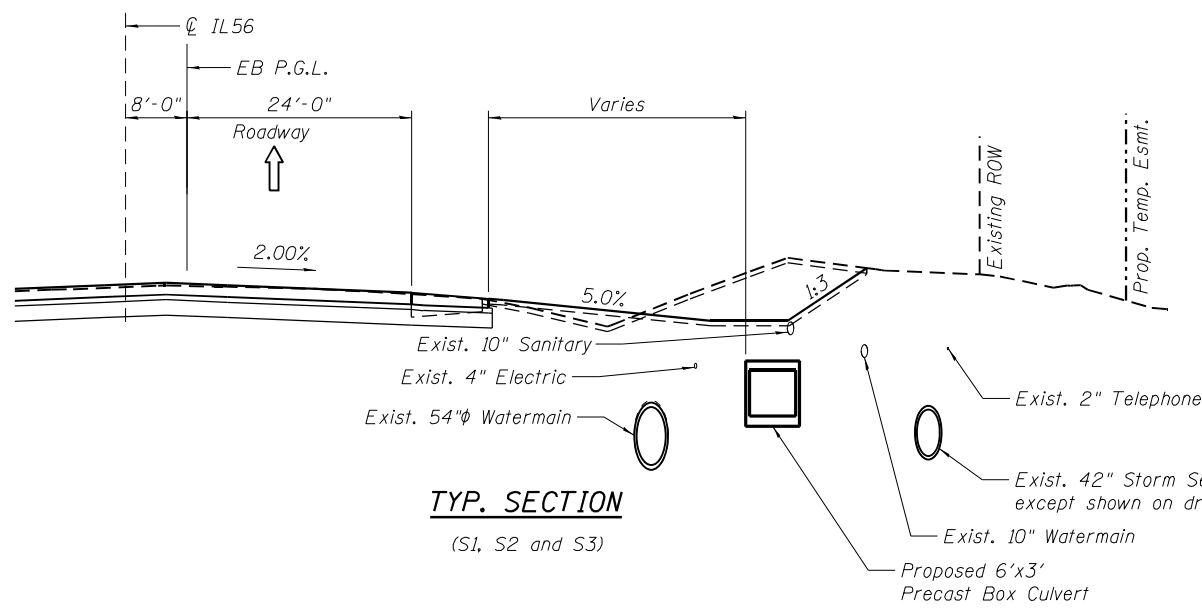


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	CHECKED - JJI	REVISED -

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

**GENERAL PLAN-I**  
**CULVERT NO. S1**  
 SHEET NO. 2 OF 32 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	357
			CONTRACT NO. 60P75	
ILLINOIS FED. AID PROJECT				



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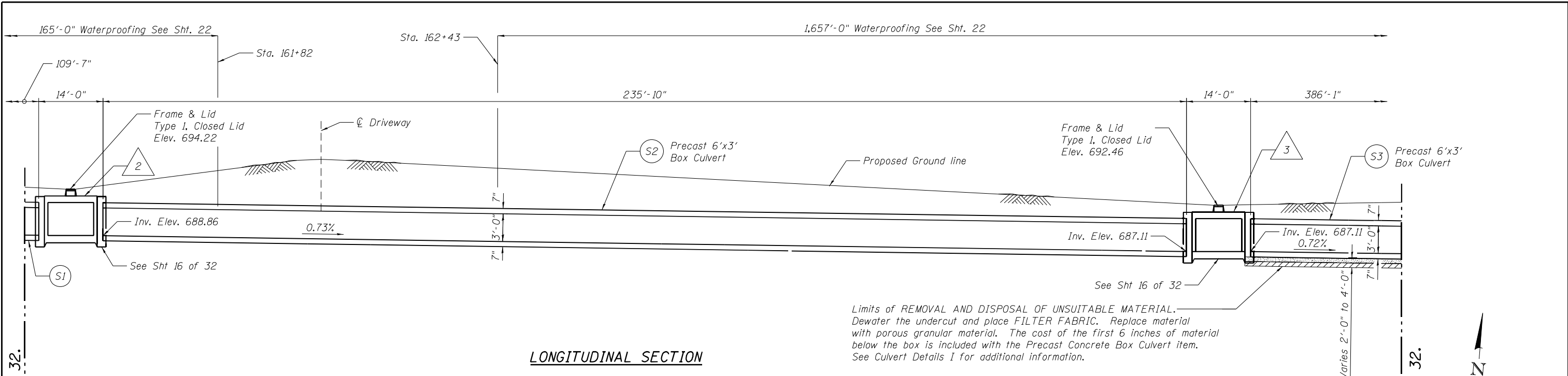
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PLOT DATE = 2/1/2024	DRAWN - TJ	REVISED -
	CHECKED - JJI	REVISED -

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

**GENERAL DATA**  
**STA. 160 + 00 TO STA. 179 + 00**

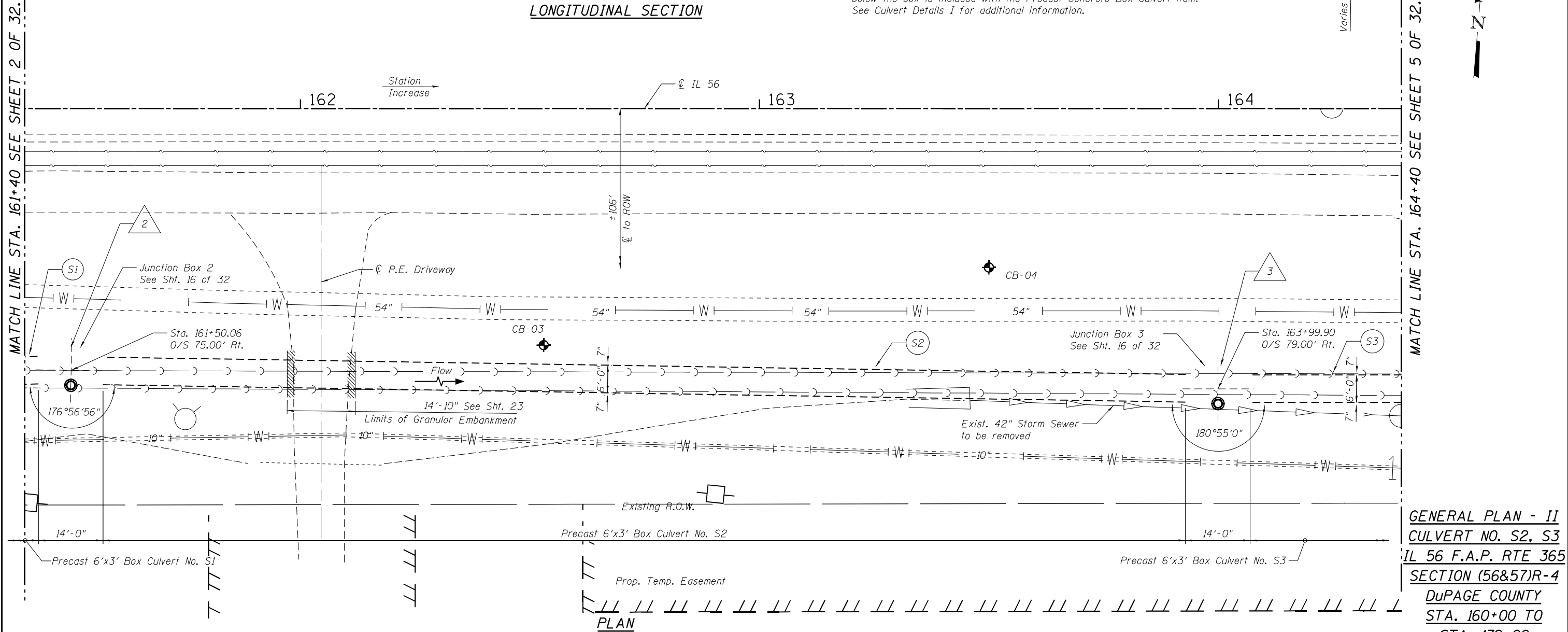
SHEET NO. 3 OF 32 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	358
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60P75	



**LONGITUDINAL SECTION**

Limits of REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL.  
 Dewater the undercut and place FILTER FABRIC. Replace material with porous granular material. The cost of the first 6 inches below the box is included with the Precast Concrete Box Culvert item. See Culvert Details I for additional information.



**PLAN**

**GENERAL PLAN - II**  
**CULVERT NO. S2, S3**  
**IL 56 F.A.P. RTE 365**  
**SECTION (56&57)R-4**  
**DuPAGE COUNTY**  
**STA. 160+00 TO**  
**STA. 179+00**

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PLOT DATE = 2/1/2024	DRAWN - TJ	REVISD -
	CHECKED - JJI	REVISD -

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

**GENERAL PLAN-II**  
**CULVERT NO. S2, S3**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	359
CONTRACT NO. 60P75				

ILLINOIS FED. AID PROJECT

SHEET NO. 4 OF 32 SHEETS

1,657'-0" Waterproofing See Sht. 22

386'-1"

Arboretum Rd.

Proposed Ground line

S3 Precast 6'x3' Box Culvert

0.72%

Sta. 165+00

Varies 2'-4"

Limits of REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL. Dewater the undercut and place FILTER FABRIC. Replace material with porous granular material. The cost of the first 6 inches of material below the box is included with the Precast Concrete Box Culvert item. See Culvert Details I for additional information.

LONGITUDINAL SECTION

Station Increase

165+00

166

167

62

Arboretum Rd.

±106' ± To ROW

28'-9" See Sht. 23 Limits of Granular Embankment

CB-06

CB-07

Flow

Exist. 42" Storm Sewer to remain

Existing R.O.W.

Precast 6'x3' Box Culvert No. S3

Hydro pneumatic under ground tank

Pump Station

Prop. Temp. Easement

PLAN

MATCH LINE STA. 164+40 SEE SHEET 4 OF 32. MATCH LINE STA. 167+40 SEE SHEET 6 OF 32.



GENERAL PLAN - III  
CULVERT NO. S3  
IL 56 F.A.P. RTE 365  
SECTION (56&57)R-4  
DuPAGE COUNTY  
STA. 160+00 TO  
STA. 179+00

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DRAWN - TJ	REVISED -
CHECKED - JJI	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN-III  
CULVERT NO. S3

SHEET NO. 5 OF 32 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	360
CONTRACT NO. 60P75				

ILLINOIS FED. AID PROJECT

1,657'-0" Waterproofing See Sht. 22

386'-1"

14'-0"

498'-0"

S3 Precast 6'x3' Box Culvert

Frame & Lid Type 1, Closed Lid Elev. 689.36

S5 Precast 6'x3' Box Culvert

S6 12" RCP

0.72%

Inv. Elev. 684.31

Inv. Elev. 684.31

0.72%

Sta. 170+00

**LONGITUDINAL SECTION**

Limits of REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL. Replace material with porous granular material. The cost of the first 6 inches of material below the box is included with the Precast Concrete Box Culvert item. See Culvert Details I for additional information.

Station Increase

168

169

170+00

MATCH LINE STA. 167+40 SEE SHEET 5 OF 32.

MATCH LINE STA. 170+40 SEE SHEET 7 OF 32.



Sta. 168+00.00  
O/S 79.00' Rt.

Junction Box 5  
See Sht. 17 of 32

360' Taper

Commercial Drive

S3

S4

S5

S6

6

CB-08

CB-09

CB-10

Precast 6'x3' Box Culvert No. S3

Precast 6'x3' Box Culvert No. S5

Pipe connection to Box Culvert  
See Drainage Schedule

37'-6" See Sht. 23  
Limits of Granular Embankment

35'-5" See Sht. 23  
Limits of Granular Embankment

Exist. 42" dia Storm Sewer to remain

Existing R.O.W.

Prop. Temp. Easement

**PLAN**

**GENERAL PLAN - IV**  
**CULVERT NO. S3, S5**  
**IL 56 F.A.P. RTE 365**  
**SECTION (56&57)R-4**  
**DuPAGE COUNTY**  
**STA. 160+00 TO**  
**STA. 179+00**

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	CHECKED - JJI	REVISED -

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

**GENERAL PLAN - IV**  
**CULVERT NO. S3, S5**

SHEET NO. 6 OF 32 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	361
CONTRACT NO. 60P75				

ILLINOIS FED. AID PROJECT

1,657'-0" Waterproofing See. Sheet 22

498'-0"

SN 022-8302

20'-0"

168'-0"

Frame & Lid  
Type 1, Closed Lid  
Elev. 687.43  
See Sht 18 of 32  
Inv. Elev. 680.84

S6  
12" (Watermain Requirements)

S8  
Precast 8'x4' Box Culvert  
Inv. Elev. 680.33

S5  
Precast 6'x3' Box Culvert

Proposed Ground line

0.72%

Sta. 170+50

Inv. Elev. 680.70

Sta. 173+00

Type 8 Grate  
Elev. 686.34  
See Drainage Plans

Limits of REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL.  
Replace material with porous granular material. The cost of the first 6 inches of material below the box is included with the Precast Concrete Box Culvert item. See Culvert Details I for additional information.

Limits of REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL.  
Replace material with porous granular material. The cost of the first 6 inches of material below the box is included with the Precast Concrete Box Culvert item. See Culvert Details I for additional information.

**LONGITUDINAL SECTION**

171

Station Increase

IL 56

172

173

C & G  
Type B-6.24

±105'  
to ROW

Exist. 4'x4' Box Culvert,  
connect to S23B

48" Watermain Requirements  
S23C

54"

CB-11

S5

S6B

Pipe connection to Box Culvert  
See Drainage Schedule

Removal of Exist. Str.  
See Sht. 18  
Sta. 173+15.00  
O/S 79.00' Rt.

S8

CB-13

Flow

Precast 6'x3' Box Culvert No. S5

7 - See Drainage Plans

20'-0"  
Precast 8'x4' Box Culvert No. S8

Existing R.O.W.

Exist. 42" dia Storm Sewer to remain

Junction Box 8  
See Sht. 18 of 32

Prop. Temp Easement

**PLAN**

MATCH LINE STA. 170+40 SEE SHEET 6 OF 32.

MATCH LINE STA. 173+40 SEE SHEET 8 OF 32.

**GENERAL PLAN - V**  
**CULVERT NO. S5, S8**  
**IL 56 F.A.P. RTE 365**  
**SECTION (56&57)R-4**  
**DuPAGE COUNTY**  
**STA. 160+00 TO**  
**STA. 179+00**  
**STRUCTURE NO. 022-8302**

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

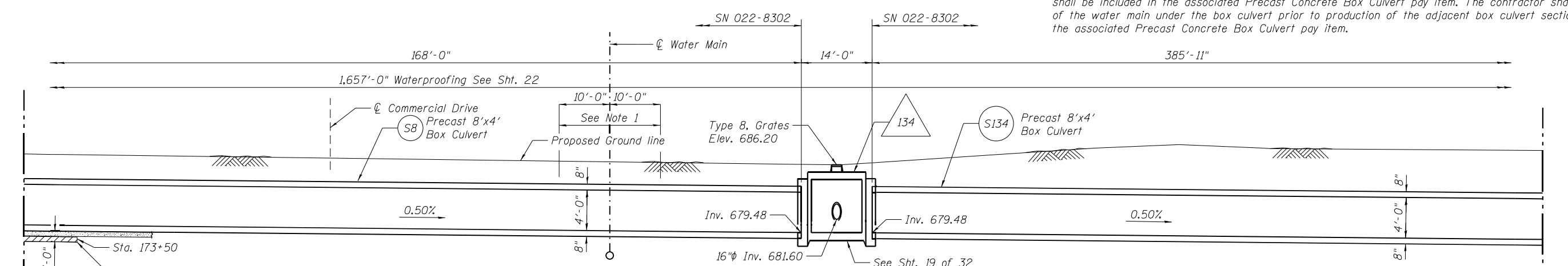
**GENERAL PLAN - V**  
**CULVERT NO. S5, S8**

SHEET NO. 7 OF 32 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	362
CONTRACT NO. 60P75				

ILLINOIS FED. AID PROJECT

Note 1:  
The joints between precast box culvert sections for 10 feet on both sides of the water main shall be sealed with a one-piece rubber gasket meeting the requirements of ASTM C 1677. Rubber gaskets shall be installed by the precaster at the plant prior to shipping the precast box sections. Gaskets shall be held in place using an adhesive approved by the gasket supplier. External sealing of the box culvert joints shall be according to Article 540.06 of the Standard Specifications. All cost for providing gasketed precast box culvert joints at the locations indicated on the plans shall be included in the associated Precast Concrete Box Culvert pay item. The contractor shall determine the location of the water main under the box culvert prior to production of the adjacent box culvert sections. Cost is included in the associated Precast Concrete Box Culvert pay item.

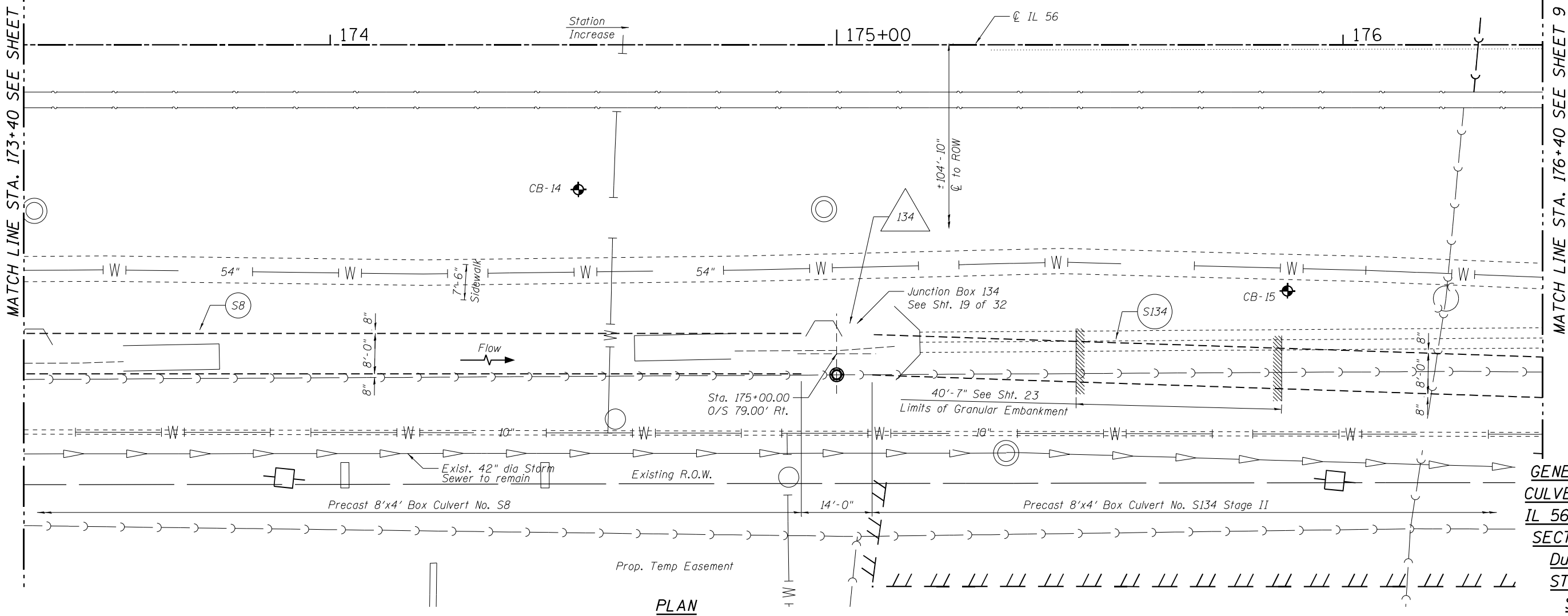


Limits of REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL.  
Replace material with porous granular material. The cost of the first 6 inches of material below the box is included with the Precast Concrete Box Culvert item. See Culvert Details I for additional information.

**LONGITUDINAL SECTION**

MATCH LINE STA. 173+40 SEE SHEET 7 OF 32.

MATCH LINE STA. 176+40 SEE SHEET 9 OF 32.



**PLAN**

**GENERAL PLAN - VI**  
**CULVERT NO. S8, S134**  
**IL 56 F.A.P. RTE 365**  
**SECTION (56&57)R-4**  
**DuPAGE COUNTY**  
**STA. 160+00 TO**  
**STA. 179+00**  
**STRUCTURE NO. 022-8302**

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

**GENERAL PLAN - VI**  
**CULVERT NO. S8, S134**

SHEET NO. 8 OF 32 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	363
CONTRACT NO. 60P75				

ILLINOIS FED. AID PROJECT

MATCH LINE STA. 176+40 SEE SHEET 8 OF 32.

SN 022-8302

**LOADING HL-93**  
Allow 50#/sq. ft. for future wearing surface.

**DESIGN SPECIFICATIONS**

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

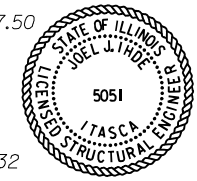
**DESIGN STRESSES**

**FIELD UNITS**

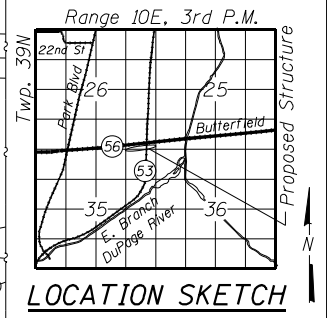
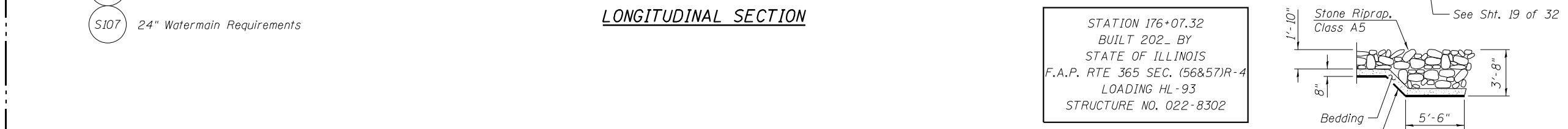
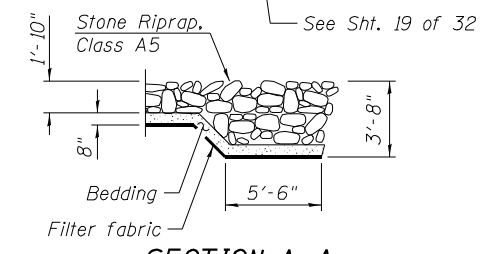
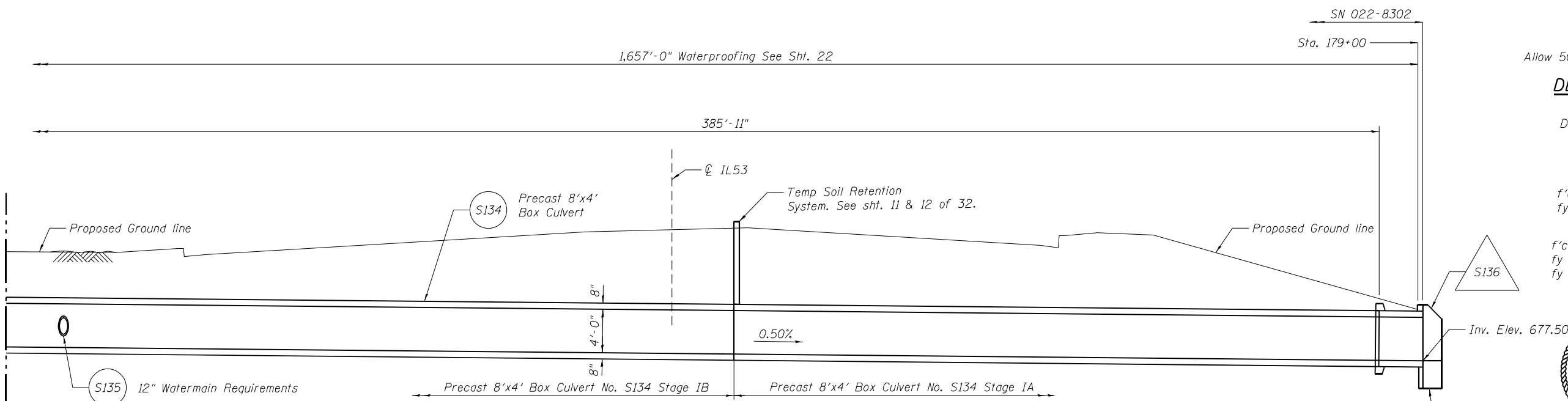
$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)

**PRECAST UNITS**

$f'_c = 5,000$  psi  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 65,000$  psi (Welded Wire Fabric)



DATE SIGNED:  
EXP. DATE:



**GENERAL PLAN - VII**  
**CULVERT NO. S134**  
**IL 56 F.A.P. RTE 365**  
**SECTION (56&57)R-4**  
**DuPAGE COUNTY**  
**STA. 160+00 TO**  
**STA. 179+00**  
**STRUCTURE NO. 022-8302**

FILE NAME = W:\191-134\_IDOT\_IL\_53\_of\_IL\_56\CADD\_Sheets\Structure\104\_Culverts\160P75\_09\_Gen\_Plan\_Village.dwg



USER NAME =	DESIGNED - TJ	REVISED -
PLOT SCALE =	CHECKED - JJI	REVISED -
PLOT DATE = 2/1/2024	DRAWN - TJ	REVISED -
	CHECKED - JJI	REVISED -

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

**GENERAL PLAN - VII**  
**CULVERT NO. S134**

SHEET NO. 9 OF 32 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	364
CONTRACT NO. 60P75				

ILLINOIS FED. AID PROJECT



STATION 172+84.76  
 BUILT 202\_ BY  
 STATE OF ILLINOIS  
 F.A.P. RTE 365 SEC. (56&57)R-4  
 LOADING HL-93  
 STRUCTURE NO. 022-C006

**NAME PLATE**  
 See Std. 515001

**LOADING HL-93**  
 Allow 50#/sq. ft. for future wearing surface.

**DESIGN SPECIFICATIONS**

2020 AASHTO LRFD Bridge  
 Design Specifications, 9th Edition

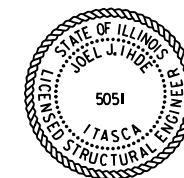
**DESIGN STRESSES**

**FIELD UNITS**

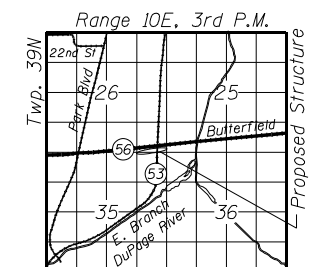
$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)

**PRECAST UNITS**

$f'_c = 5,000$  psi  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 65,000$  psi (Welded Wire Fabric)

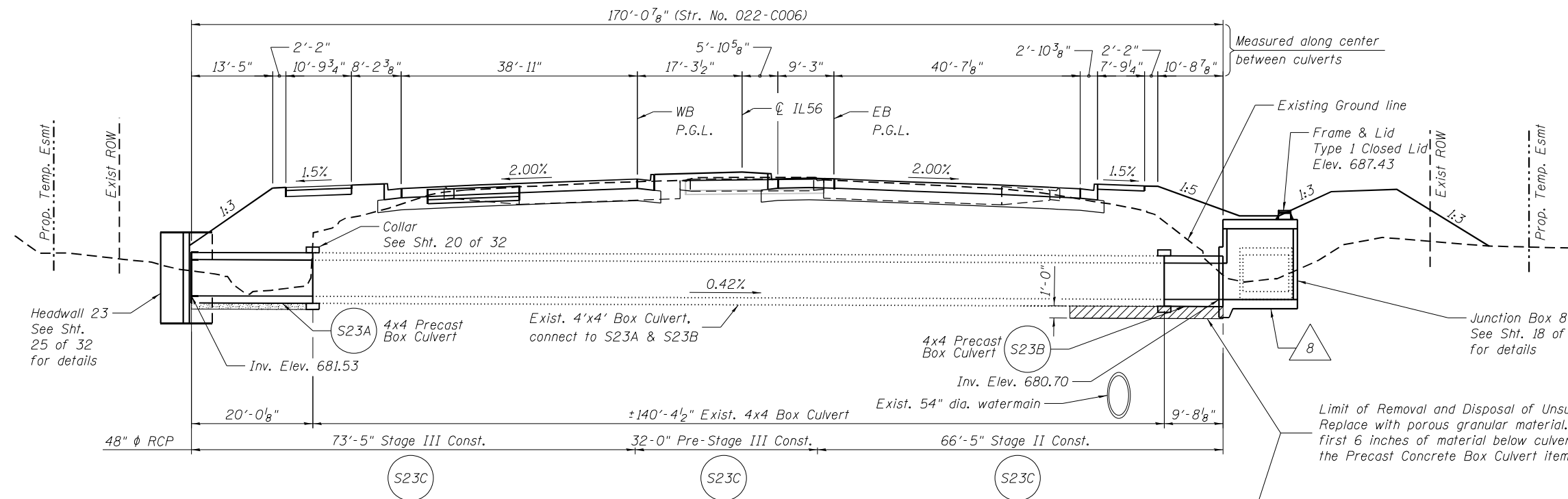


DATE SIGNED:  
 EXP. DATE:

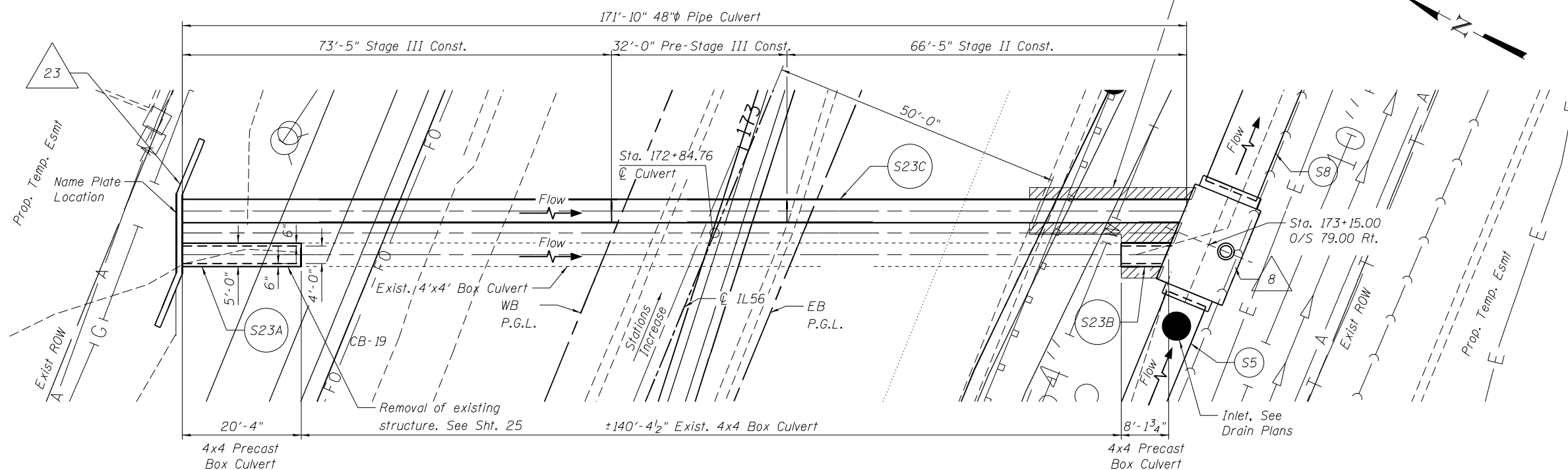


**LOCATION SKETCH**

**GENERAL PLAN - VIII**  
**CULVERT NO. S23A, S23B & S23C**  
**IL 56 F.A.P. RTE 365**  
**SECTION (56&57)R-4**  
**DuPAGE COUNTY**  
**STA. 160+00 TO**  
**STA. 179+00**  
**STRUCTURE NO. 022-C006**



**4x4 BOX CULVERT LONGITUDINAL SECTION**  
**48" RCP IN BACK**  
 (Along  $\phi$  Culverts)



**PLAN**

FILE NAME = W:\191-134\_IDOT\_IL\_53\_of\_IL\_56\CADD\_Sheets\Structure\04\_Culverts\160P75\_10 Gen Plan VIII.dgn



USER NAME =	DESIGNED - TJ	REVISED -
	CHECKED - JJJ	REVISED -
PLOT SCALE =	DRAWN - TJ	REVISED -
PLOT DATE = 2/1/2024	CHECKED - JJJ	REVISED -

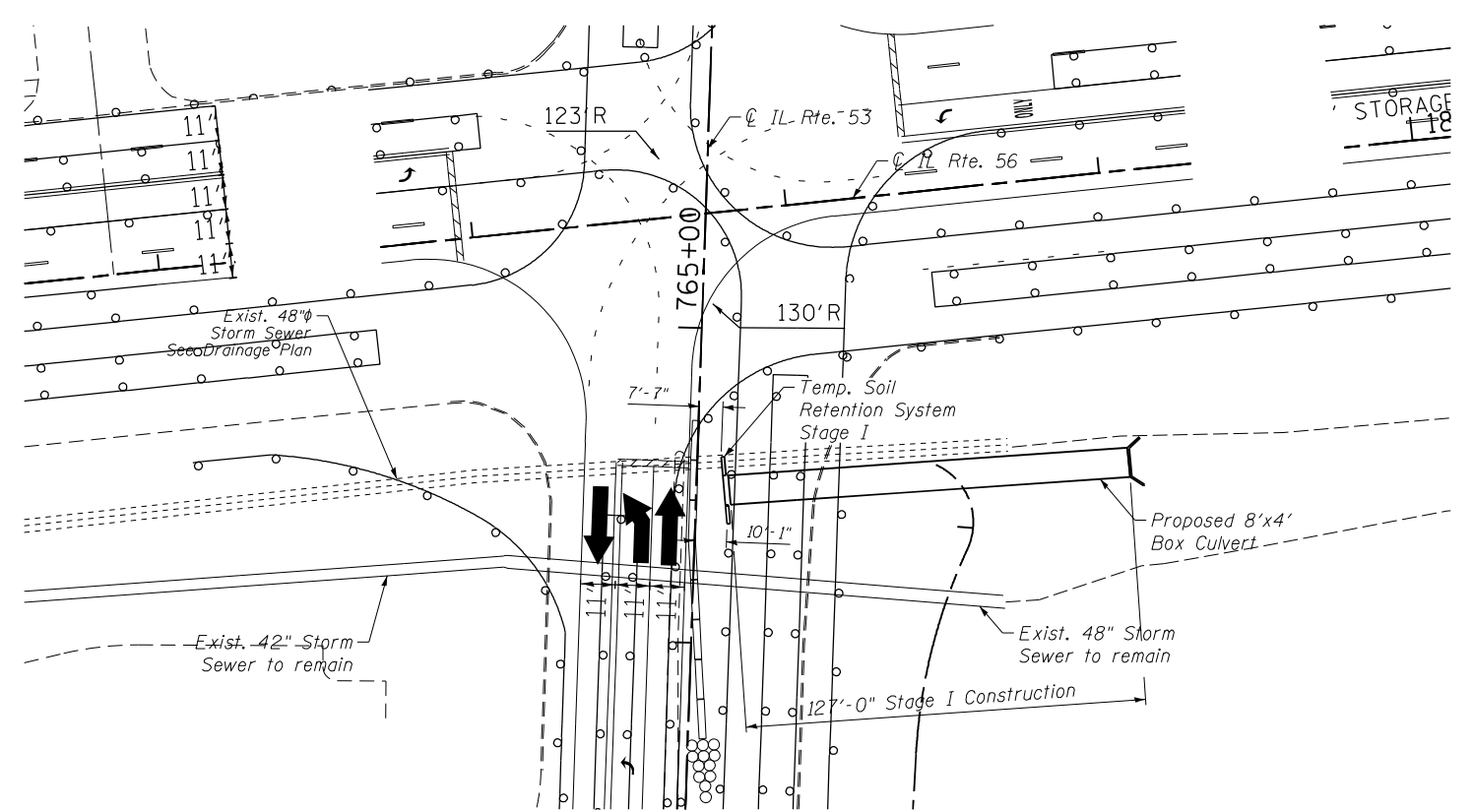
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN VIII**  
**CULVERT NO. S23A, S23B & S23C**

SHEET NO. 10 OF 32 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	365
CONTRACT NO. 60P75				

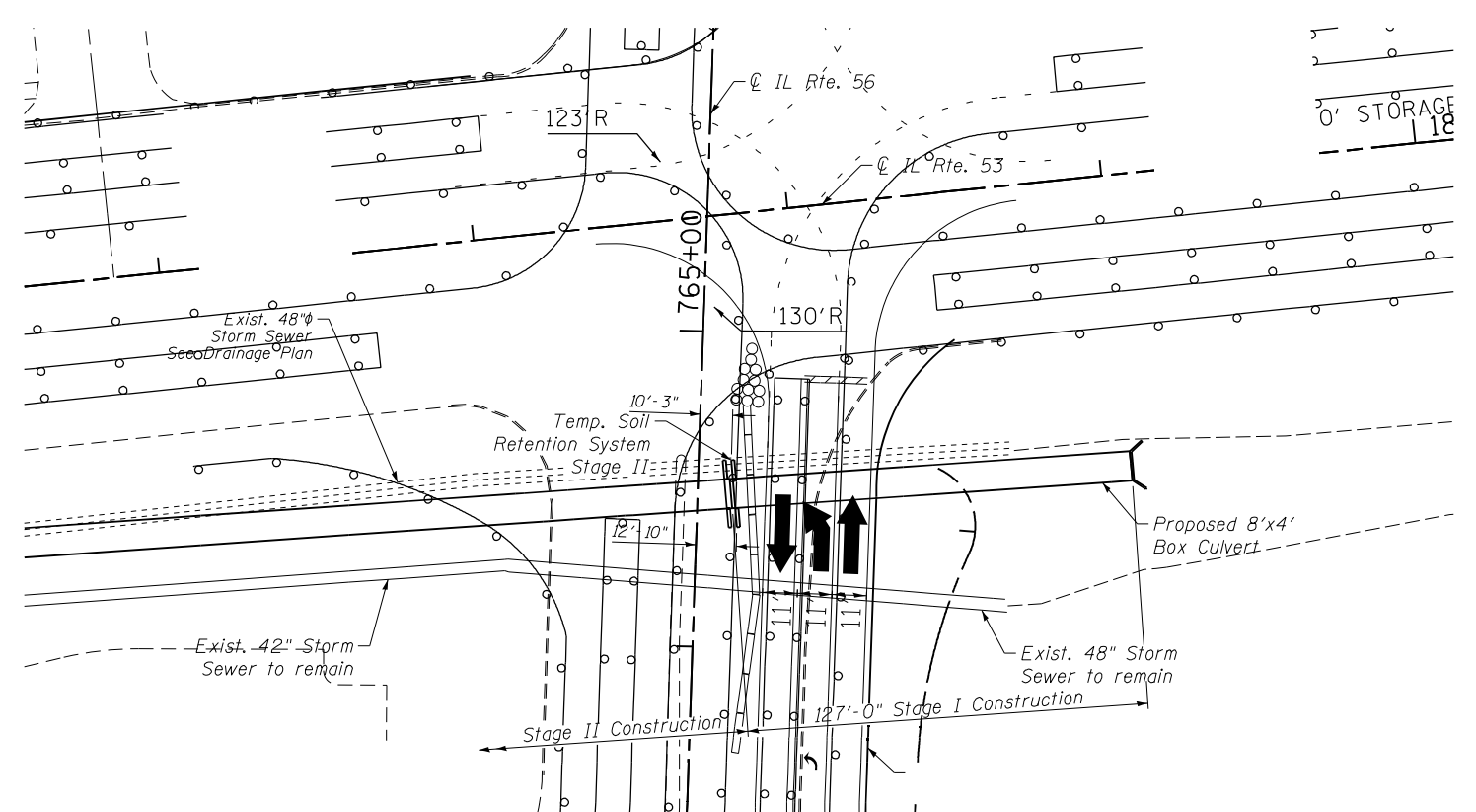
ILLINOIS FED. AID PROJECT



**STAGE I CONSTRUCTION PLAN**  
(For MOT see MOT Stage 1A)

*Notes:*  
The temporary soil retention system shall be designed by the Contractor as a minimum, to retain the exposed surface area specified in the plans or as directed by the Engineer. The design calculations and details for the temporary soil retention system shall be submitted to the Engineer for approval. The calculations shall be prepared and sealed by an Illinois Licensed Structural Engineer.

See sheet 12 of 32 for temporary soil retention system details.



**STAGE II CONSTRUCTION PLAN**  
(For MOT see MOT Stage 1B)

FILE NAME = W:\191-134\_IDOT\_IL\_53.dwg; 56(CADD\_Sheets\Structural\04\_Culverts\ID160P75\_11\_IL53\_Culvert Staging L.dwg)



USER NAME =	DESIGNED - TJ	REVISED -
	CHECKED - JJI	REVISED -
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PLOT DATE = 2/1/2024	CHECKED - JJI	REVISED -

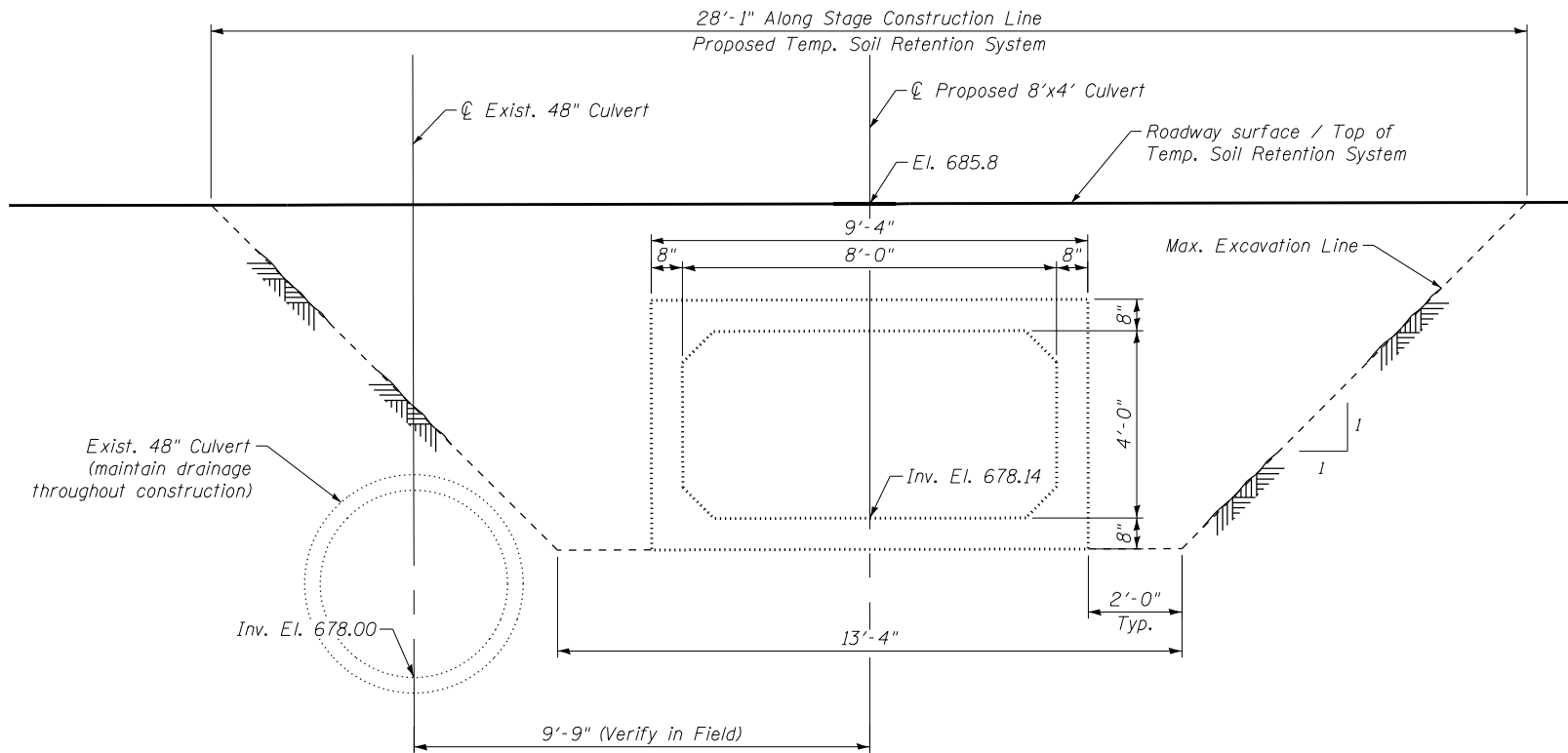
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IL 53 – CULVERT S134 STAGING**

SHEET NO. 11 OF 32 SHEETS

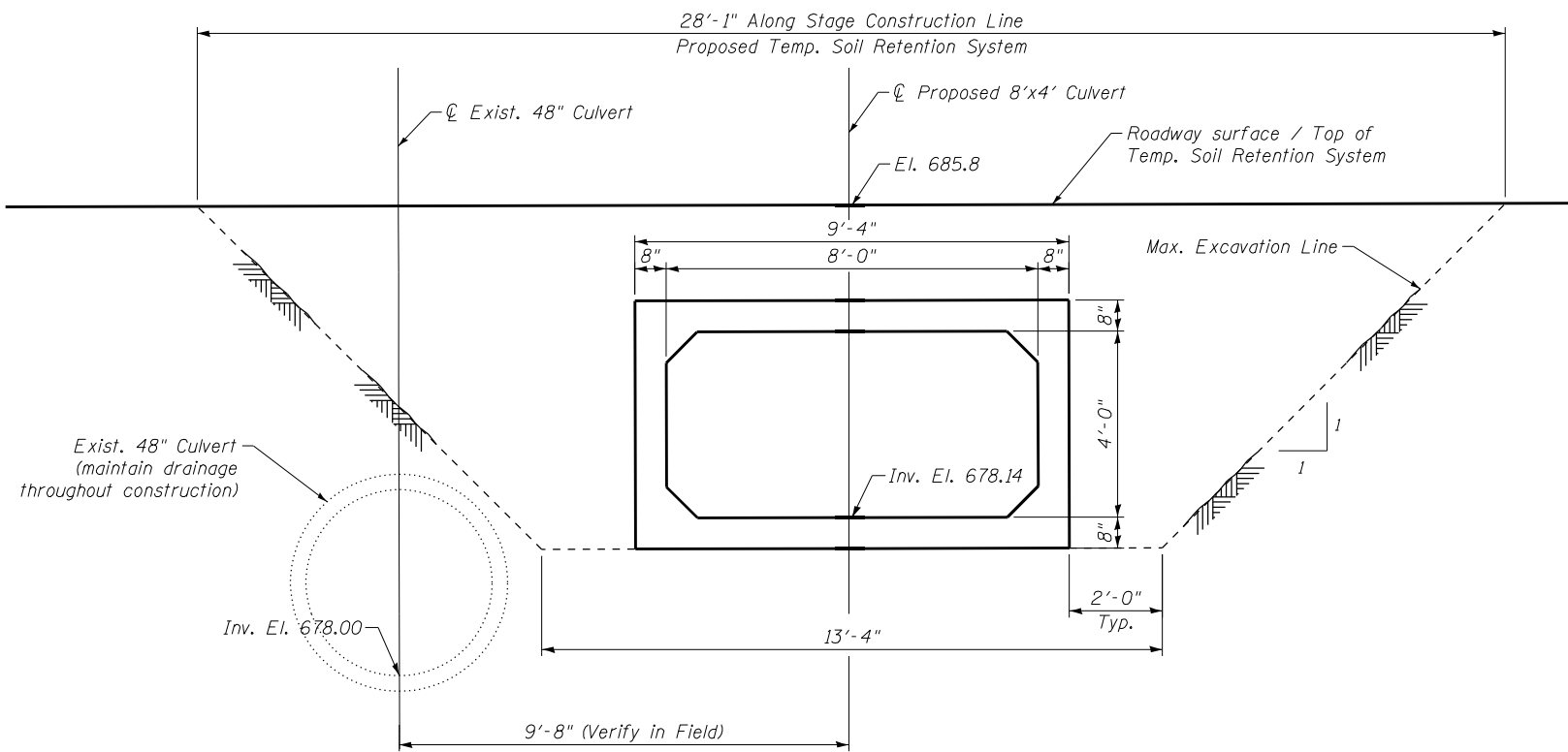
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	366
CONTRACT NO. 60P75				

ILLINOIS FED. AID PROJECT



**STAGE I TEMPORARY SOIL RETENTION SYSTEM**  
(Looking East)

Note:  
See Culvert Details II for excavation and backfill details.



**STAGE II TEMPORARY SOIL RETENTION SYSTEM**  
(Looking East)

**BILL OF MATERIAL**

ITEM	UNIT	Quantity
Temporary Soil Retention System	Sq. Ft.	361

FILE NAME = W:\191-134\_IDOT\_IL\_53.dwg; 5/31/2024; 5:06 CAD; D:\Structural\160P75\_12\_IL53\_Culvert\_Staging\_IL.dgn



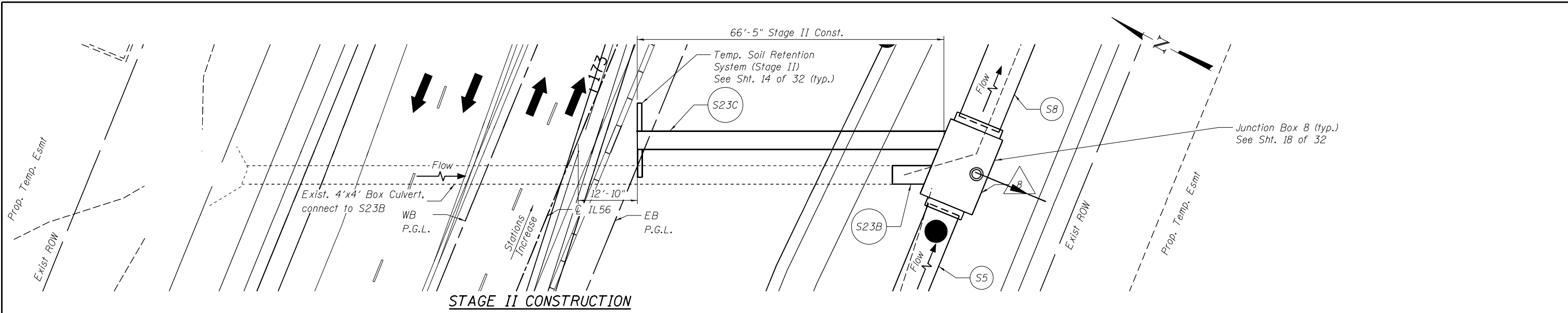
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	CHECKED - JJJ	REVISED -
PLOT SCALE =	DRAWN - TJ	REVISED -
PLOT DATE = 2/1/2024	CHECKED - JJJ	REVISED -

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

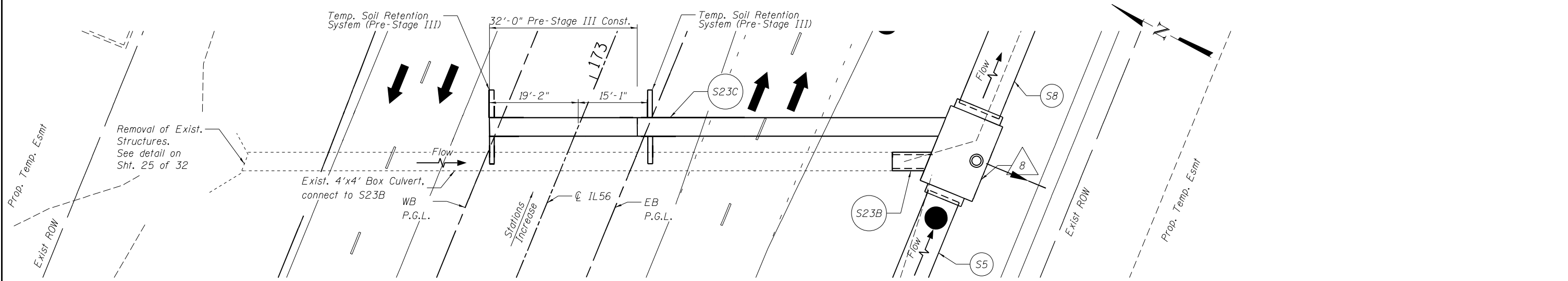
**IL 53 – CULVERT S134 STAGING DETAILS**

SHEET NO. 12 OF 32 SHEETS

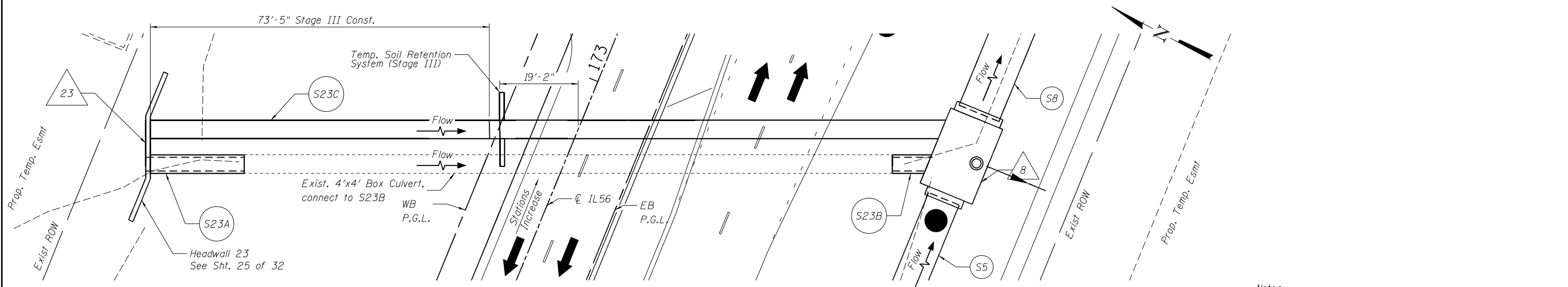
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	367
			CONTRACT NO. 60P75	
ILLINOIS FED. AID PROJECT				



**STAGE II CONSTRUCTION**



**PRE-STAGE III CONSTRUCTION**



**STAGE III CONSTRUCTION**

*Notes:*  
 The temporary soil retention system shall be designed by the Contractor as a minimum, to retain the exposed surface area specified in the plans or as directed by the Engineer. The design calculations and details for the temporary soil retention system shall be submitted to the Engineer for approval. The calculations shall be prepared and sealed by an Illinois Licensed Structural Engineer.

FILE NAME = W:\191-134\_IDOT\_IL\_53\_of\_IL\_56\CADD\_Sheets\Structural\04\_culverts\160P75\_13\_IL\_56\_Culvert\_Staging.dgn



USER NAME =	DESIGNED - TJ	REVISED -
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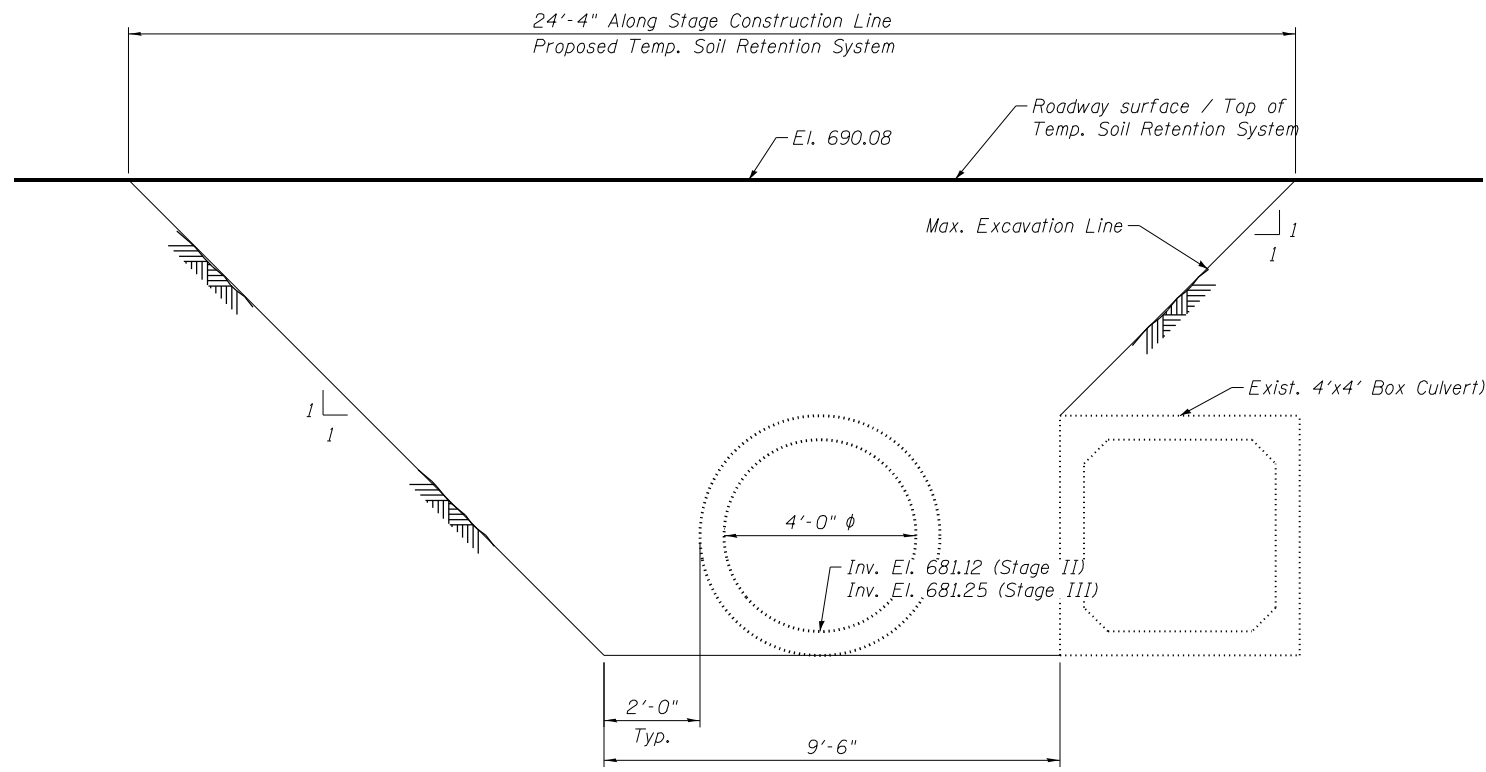
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**IL 56 CULVERT STAGING  
 CULVERT NO. S23A, S23B & S23C**

SHEET NO. 13 OF 32 SHEETS

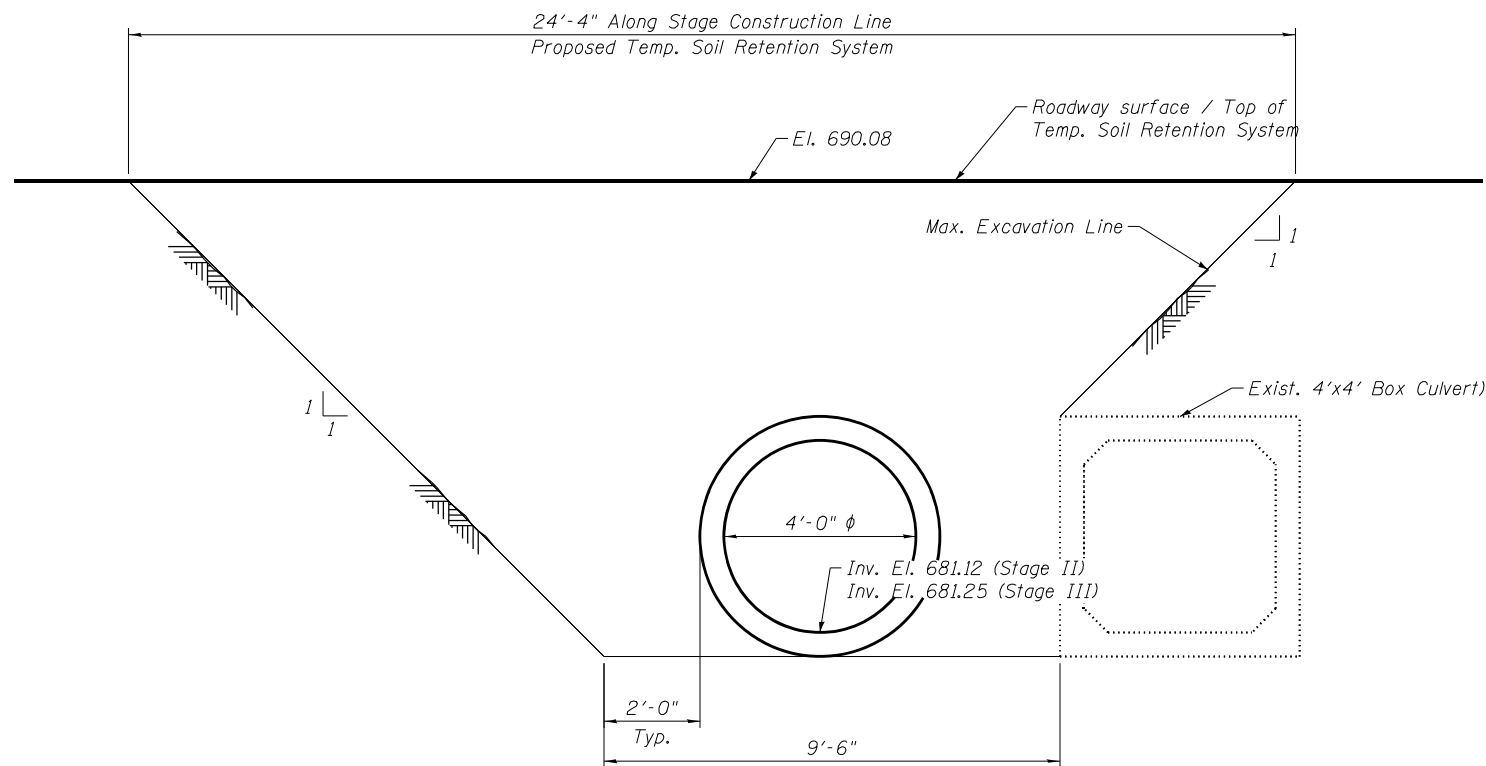
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	368
CONTRACT NO. 60P75				

ILLINOIS FED. AID PROJECT



**STAGE II TEMPORARY RETENTION SYSTEM**

(At Stage II Construction Line, Looking South)  
 (Pre-Stage III Temp. Soil Ret. System at At Stage III Construction Line similar)



**PRESTAGE III TEMPORARY RETENTION SYSTEM**

(At Stage II Construction Line, Looking South)  
 (Stage III Temp. Soil Ret. System at At Stage III Construction Line similar)

**BILL OF MATERIAL**

ITEM	UNIT	Quantity
Temporary Soil Retention System	Sq. Ft.	287

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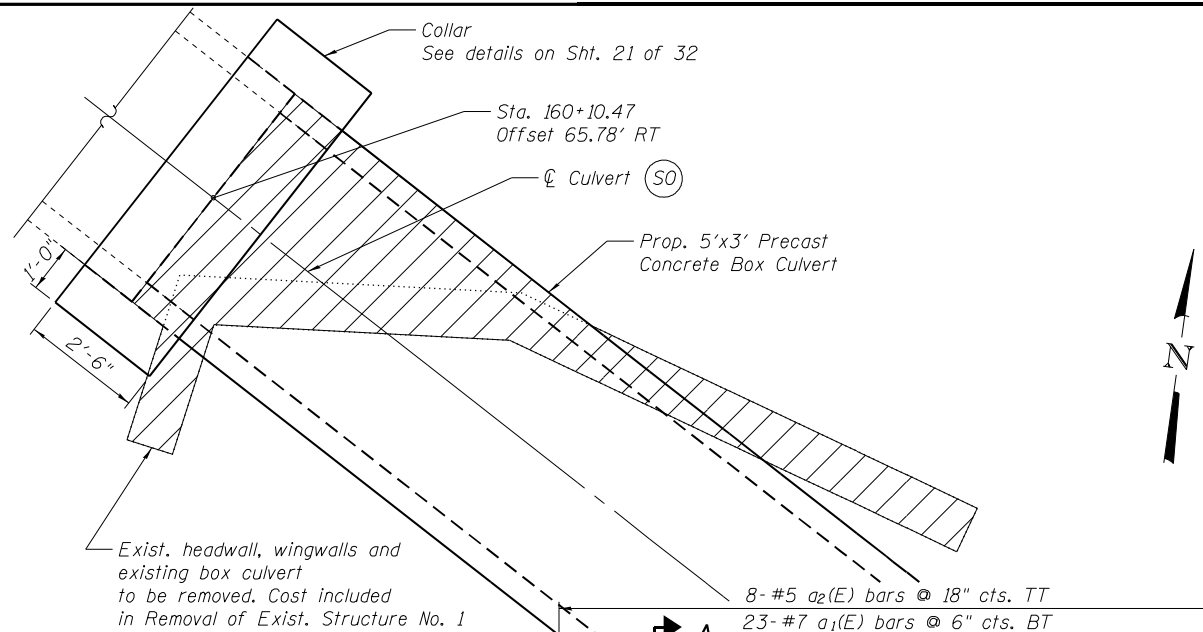
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PLOT DATE = 2/1/2024	CHECKED - JJJ	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**IL 56 CULVERT STAGING DETAILS  
 CULVERT NO. S23A, S23B & S23C**

SHEET NO. 14 OF 32 SHEETS

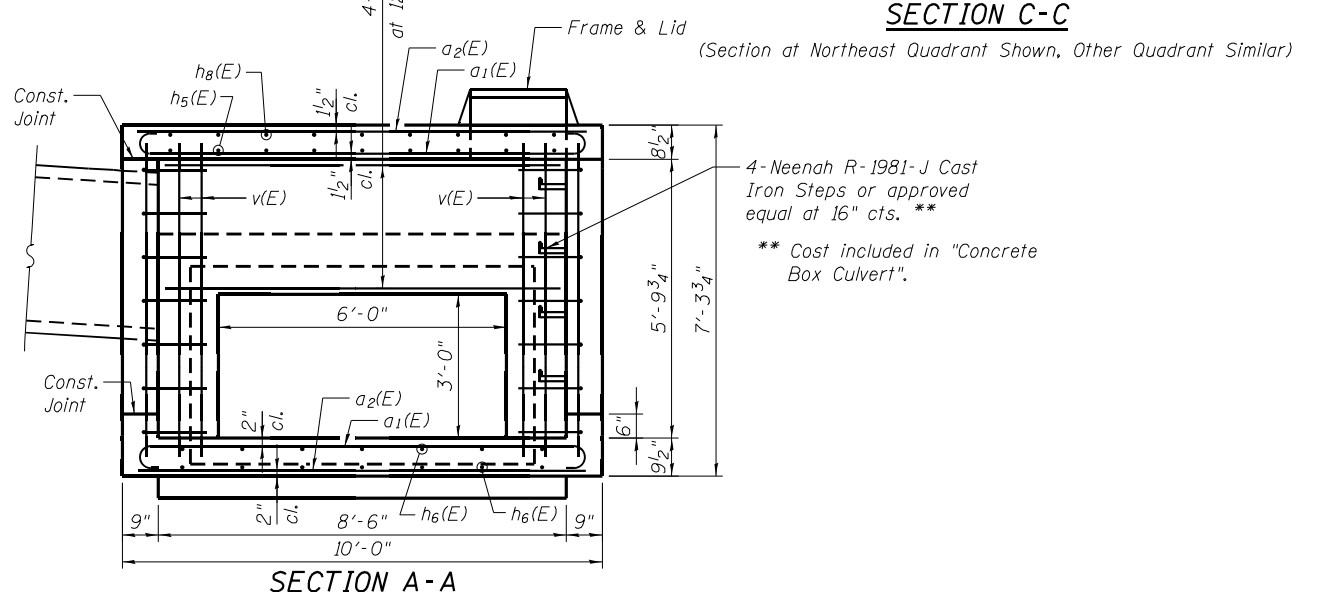
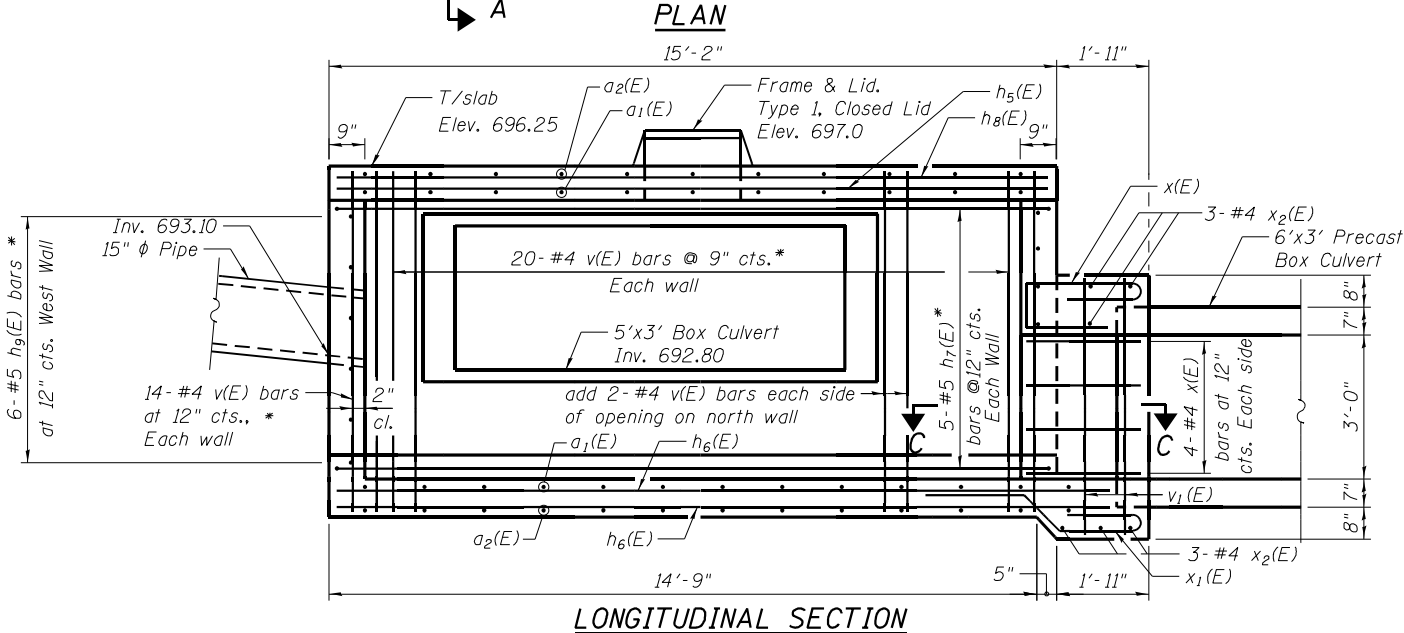
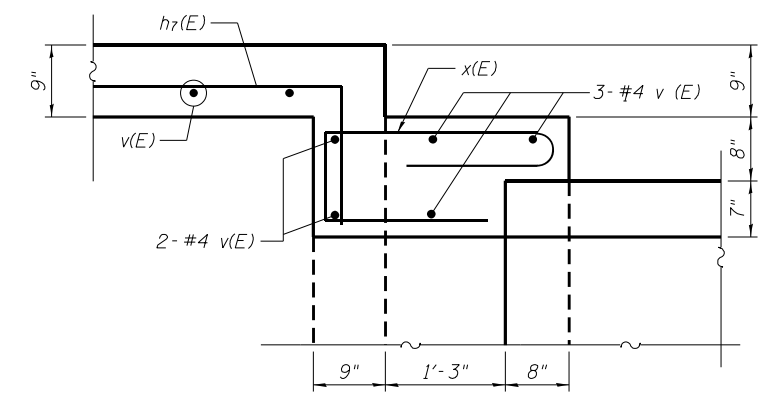
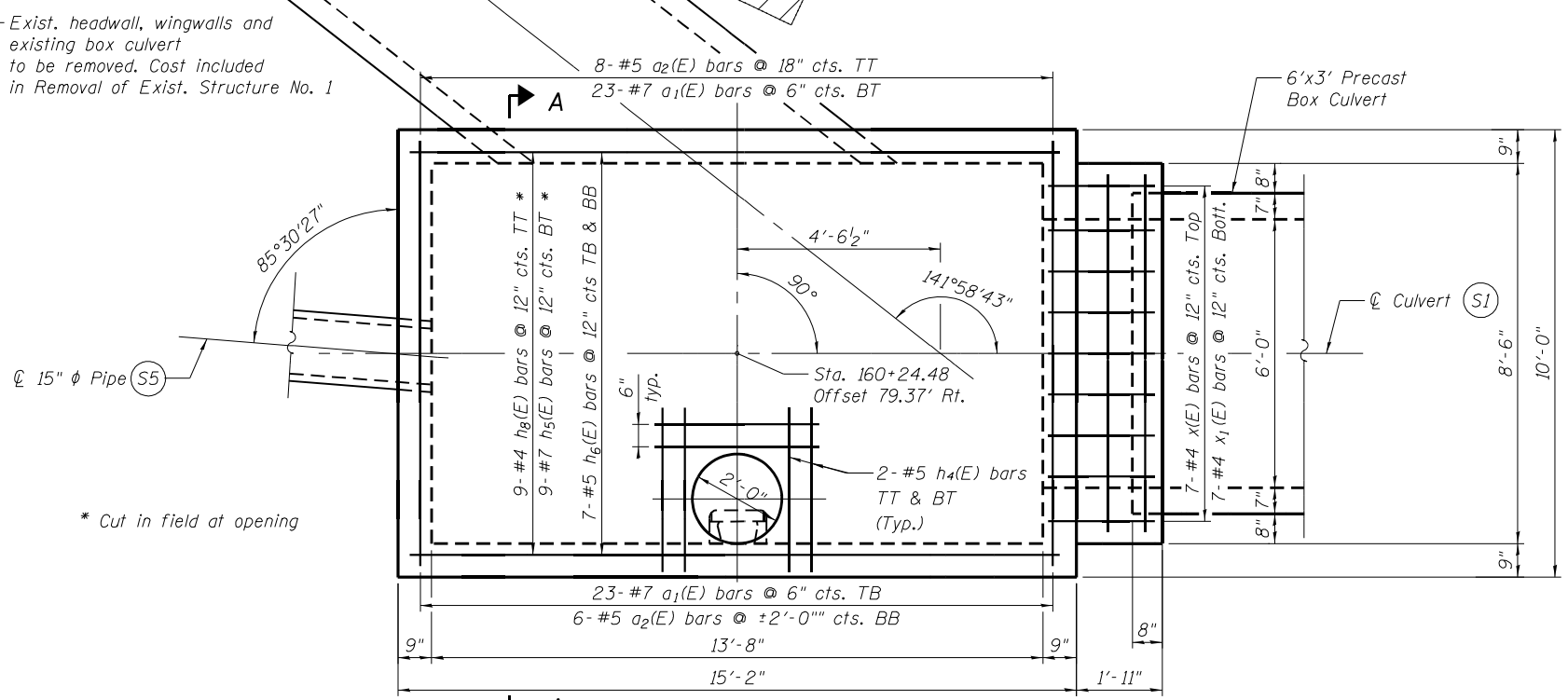
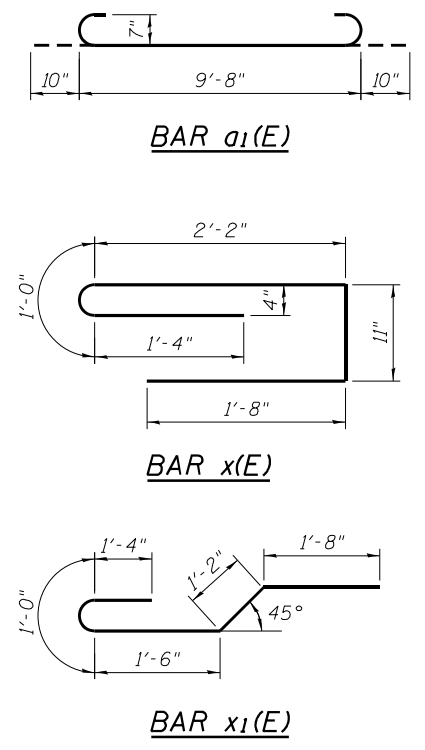
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	369
			CONTRACT NO. 60P75	
		ILLINOIS FED. AID PROJECT		



**LEGEND**  
 TT = Top of Top Slab  
 BT = Bottom of Top Slab  
 TB = Top of Bottom Slab  
 BB = Bottom of Bottom Slab

**JUNCTION BOX 1  
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a1(E)	46	#7	11'-4"	[U]
a2(E)	14	#5	9'-8"	[U]
h4(E)	12	#5	4'-0"	[U]
h5(E)	9	#7	14'-8"	[U]
h6(E)	14	#5	16'-7"	[U]
h7(E)	10	#5	16'-10"	[U]
h8(E)	9	#4	14'-8"	[U]
h9(E)	4	#5	9'-8"	[U]
x1(E)	15	#4	7'-1"	[U]
x1(E)	7	#4	6'-8"	[U]
x2(E)	6	#4	8'-2"	[U]
v(E)	76	#4	7'-0"	[U]
v1(E)	6	#4	5'-2"	[U]
Reinforcement Bars, Epoxy Coated			Pound	2,590
Concrete Box Culverts			Cu. Yd.	15.4



FILE NAME = W:\191-134\_IDOT\_IL\_53.dwg; 5/6/2024 10:53:11 AM; S:\CADD\_Sheets\Struct\104\_Culverts\160P75\_15 Junction Box 1.dwg

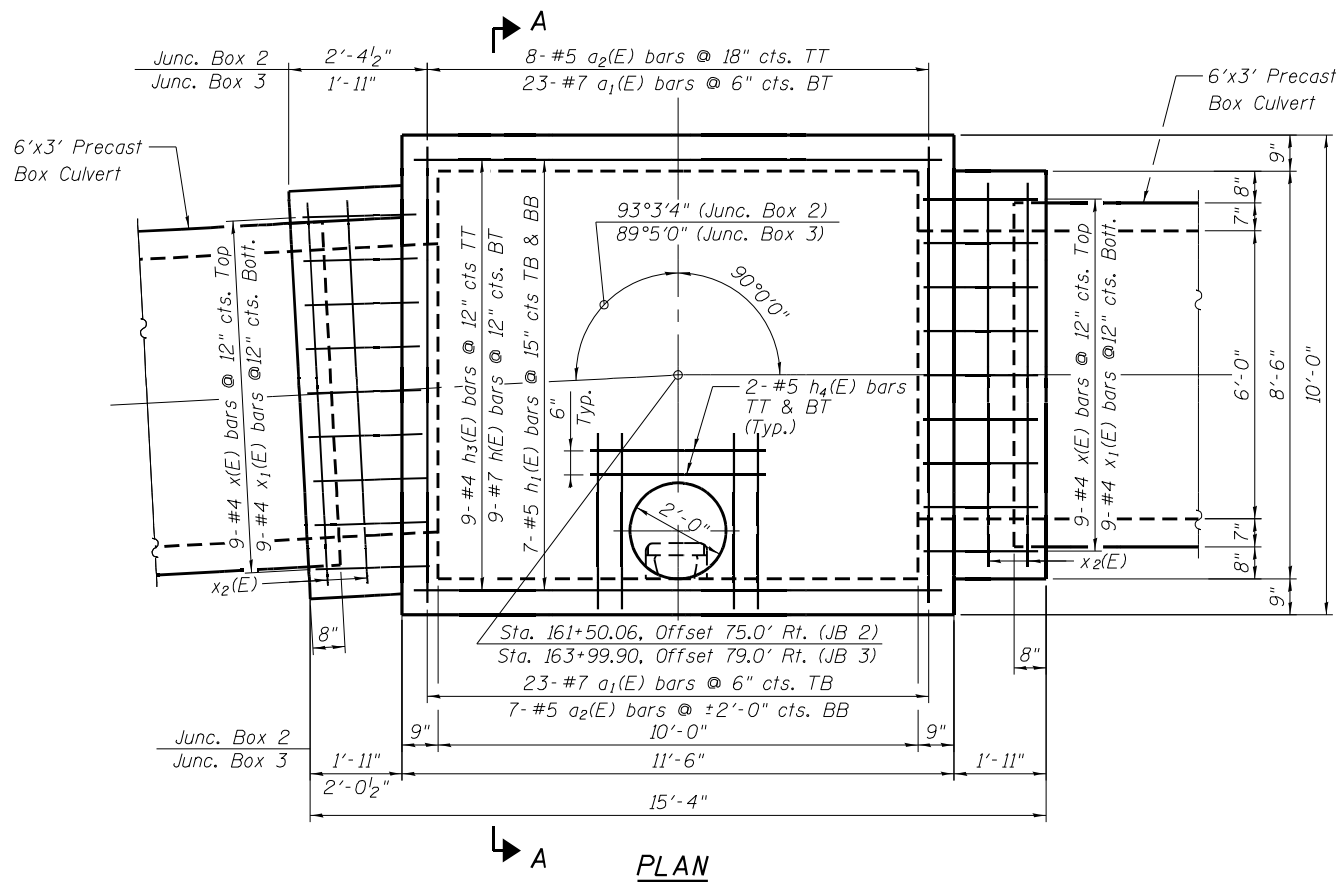


USER NAME =	DESIGNED - TJ	REVISED -
PLOT SCALE =	CHECKED - JJJ	REVISED -
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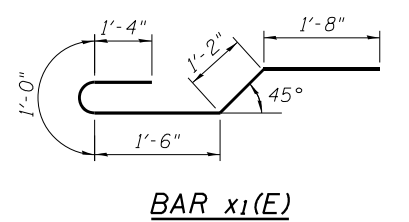
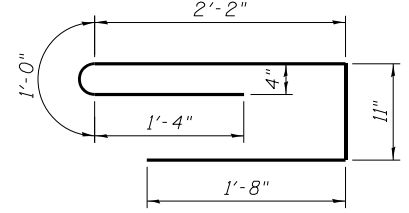
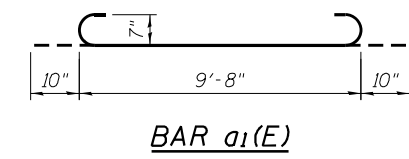
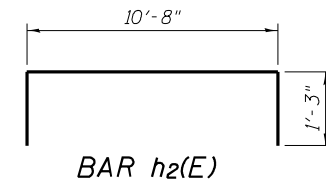
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**JUNCTION BOX 1  
 DETAILS**  
 SHEET NO. 15 OF 32 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	370
CONTRACT NO. 60P75			ILLINOIS FED. AID PROJECT	



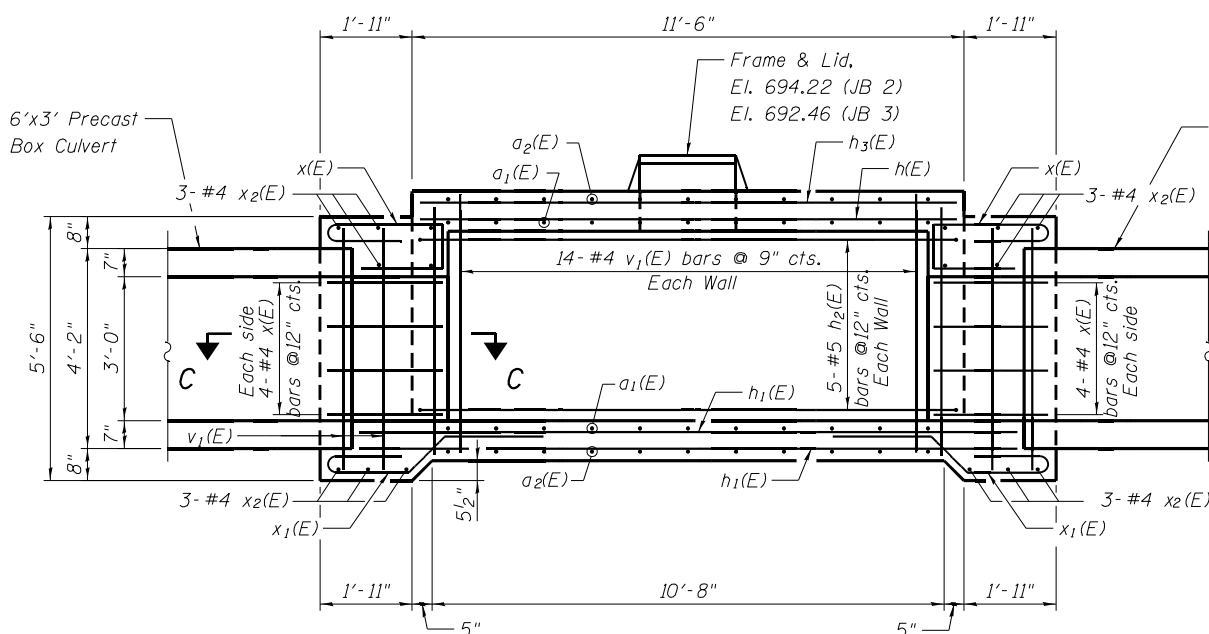
**LEGEND**  
 TT = Top of Top Slab  
 BT = Bottom of Top Slab  
 TB = Top of Bottom Slab  
 BB = Bottom of Bottom Slab



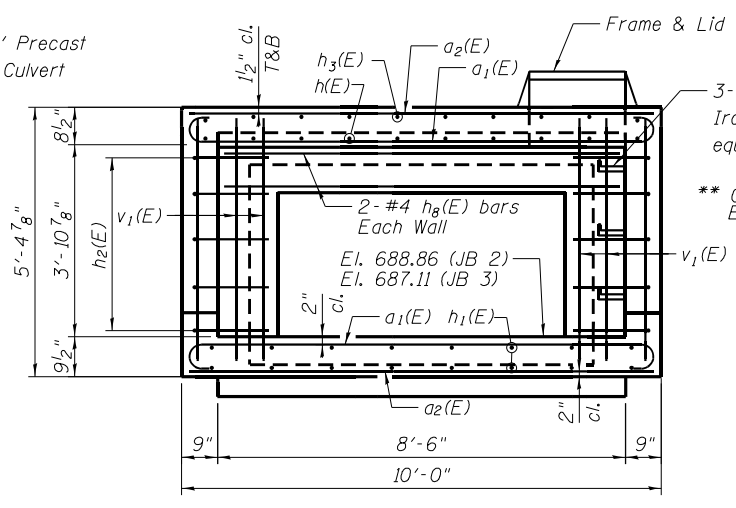
**JUNCTION BOX 2 & 3**  
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a1(E)	92	#7	11'-4"	
a2(E)	30	#5	9'-8"	
h(E)	18	#7	11'-2"	
h1(E)	28	#5	13'-8"	
h2(E)	20	#5	13'-2"	
h3(E)	18	#4	11'-2"	
h4(E)	24	#5	4'-0"	
h8(E)	8	#4	9'-8"	
x(E)	68	#4	7'-1"	
x1(E)	36	#4	6'-8"	
x2(E)	24	#4	8'-2"	
v1(E)	96	#4	5'-1"	
Reinforcement Bars, Epoxy Coated			Pound	4,750
Concrete Box Culverts			Cu. Yd.	27.6

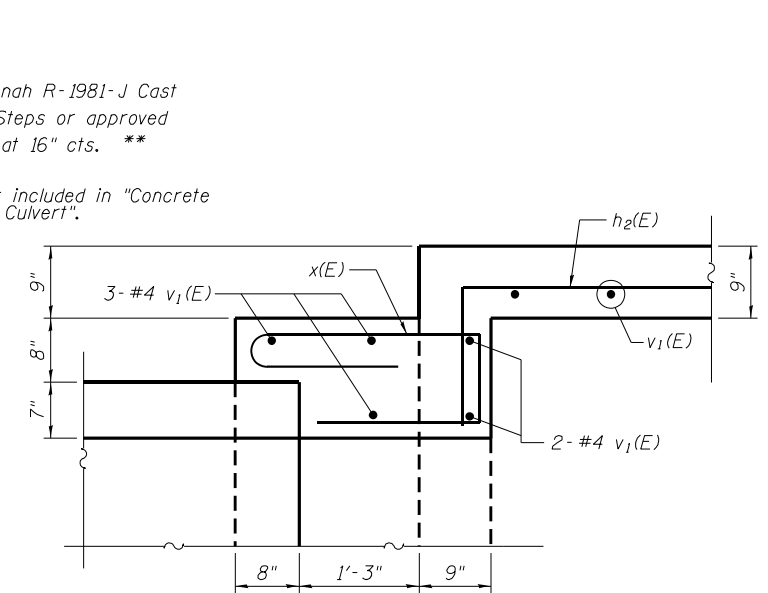
**PLAN**



**LONGITUDINAL SECTION**



**SECTION A-A**



**SECTION C-C**

(Section at Northwest Quadrant Shown, 3 Other Quadrants Similar)

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USER NAME =	DESIGNED - TJ	REVISED -
PLOT SCALE =	CHECKED - JJJ	REVISED -
PLOT DATE = 2/1/2024	DRAWN - TJ	REVISED -
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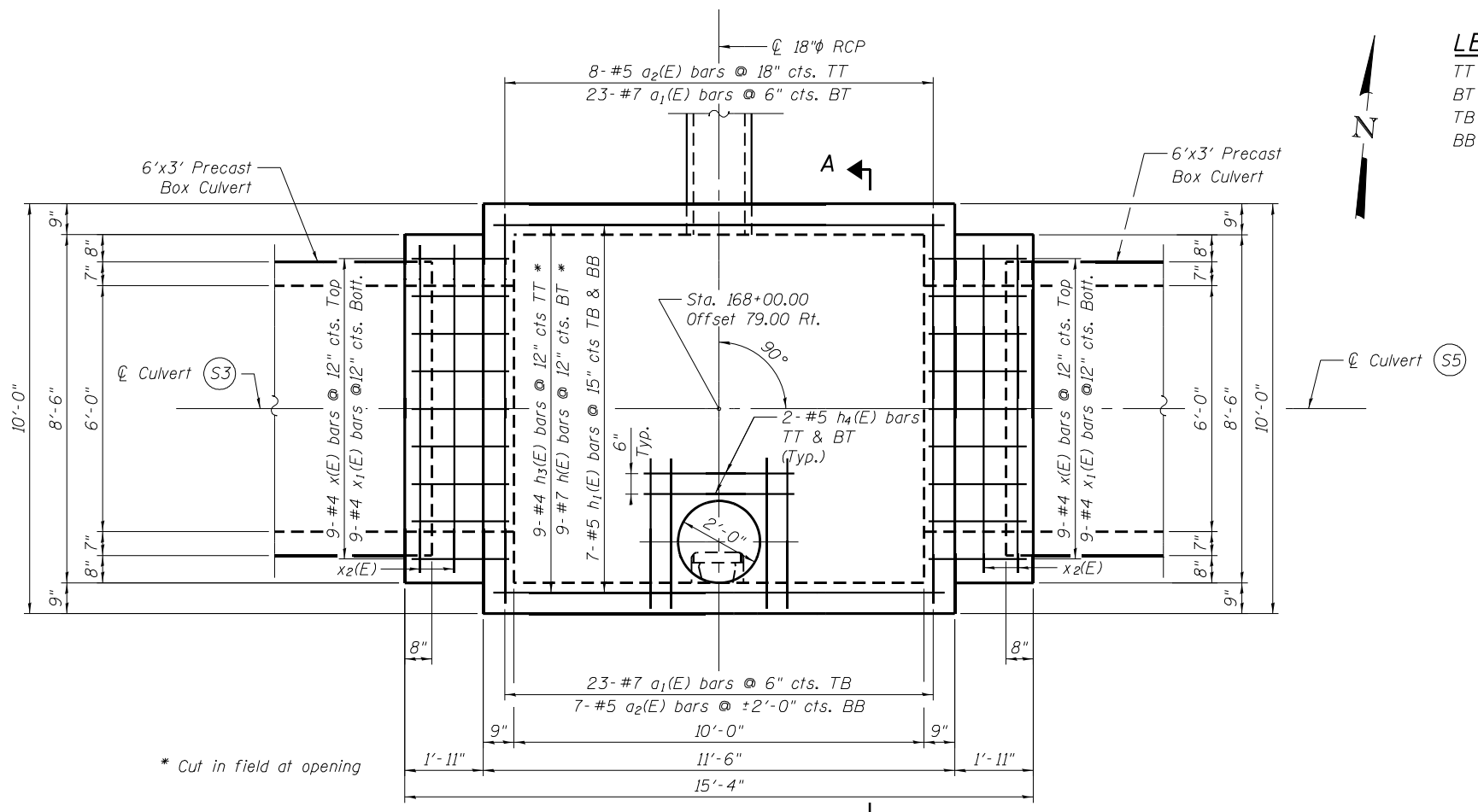
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**JUNCTION BOX 2 & 3**  
**DETAILS**

SHEET NO. 16 OF 32 SHEETS

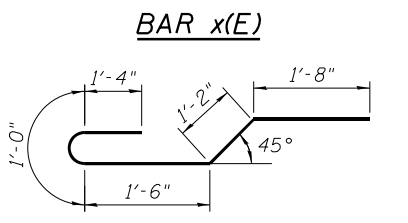
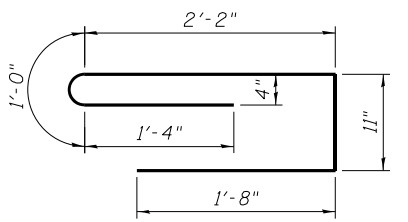
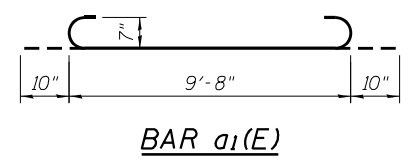
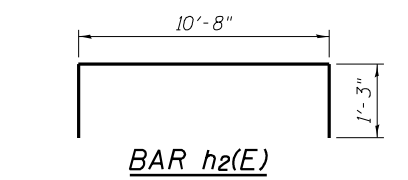
F.A.P. RTE. 365	SECTION (56&57)R-4	COUNTY DuPAGE	TOTAL SHEETS 529	SHEET NO. 371
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60P75	

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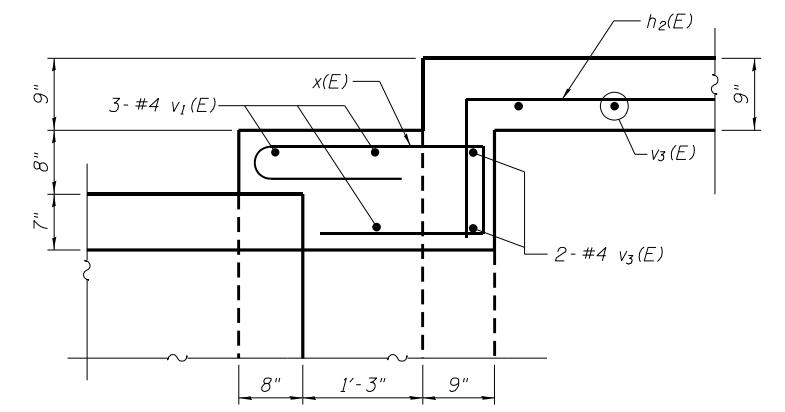
PLAN

**LEGEND**  
 TT = Top of Top Slab  
 BT = Bottom of Top Slab  
 TB = Top of Bottom Slab  
 BB = Bottom of Bottom Slab



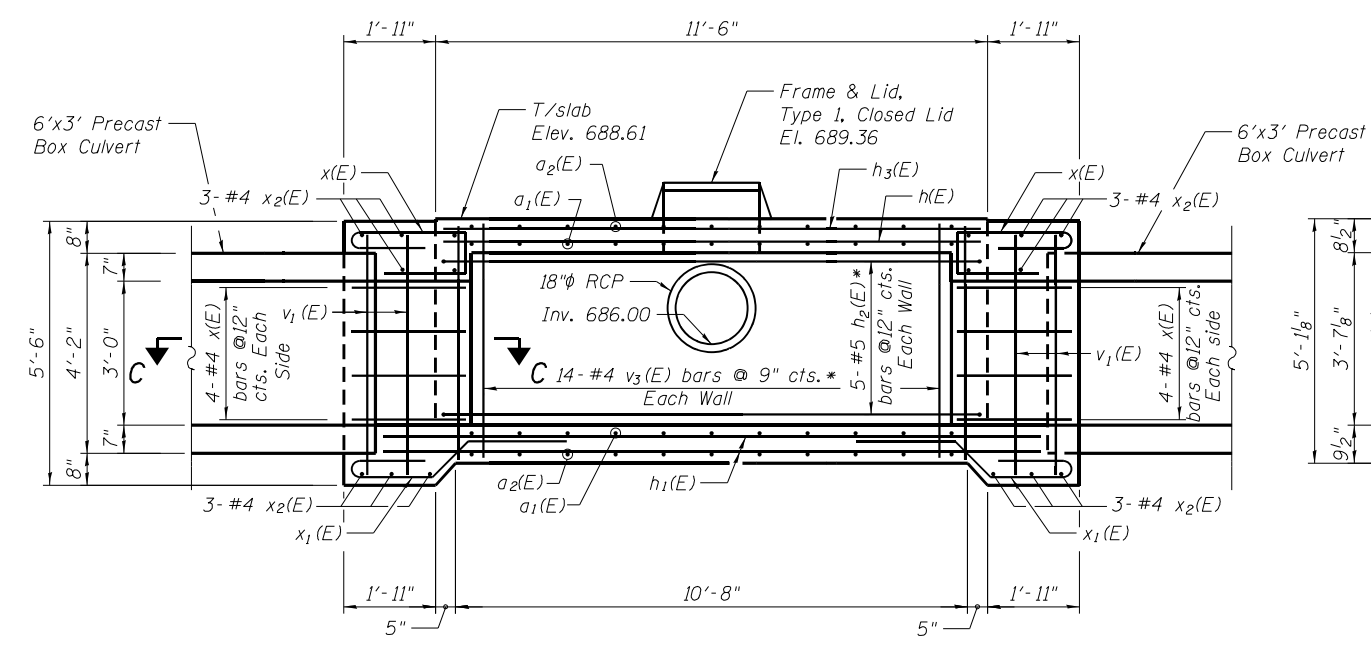
**JUNCTION BOX 5  
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a1(E)	46	#7	11'-4"	
a2(E)	15	#5	9'-8"	
h(E)	9	#7	10'-8"	
h1(E)	14	#5	13'-8"	
h2(E)	10	#5	13'-2"	
h3(E)	9	#4	10'-8"	
h4(E)	12	#5	4'-0"	
h8(E)	4	#5	9'-8"	
x(E)	34	#4	7'-1"	
x1(E)	18	#4	6'-8"	
x2(E)	12	#4	8'-2"	
v1(E)	12	#4	5'-2"	
v3(E)	44	#4	4'-9"	
Reinforcement Bars			Pound	2,400
Epoxy Coated				
Concrete Box Culverts			Cu. Yd.	13.3

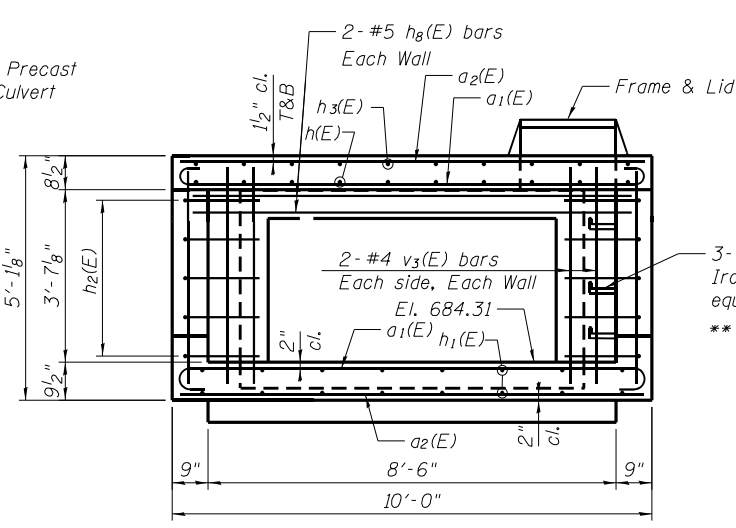


SECTION C-C

(Section at Northwest Quadrant Shown, 3 Other Quadrants Similar)



LONGITUDINAL SECTION



SECTION A-A

3- Neenah R-1981-J Cast Iron Steps or approved equal at 16" \*\*  
 \*\* Cost included in "Concrete Box Culvert".



USER NAME =	DESIGNED - TJ	REVISED -
PLOT SCALE =	CHECKED - JJJ	REVISED -
PLOT DATE = 2/1/2024	DRAWN - TJ	REVISED -
	CHECKED - JJJ	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

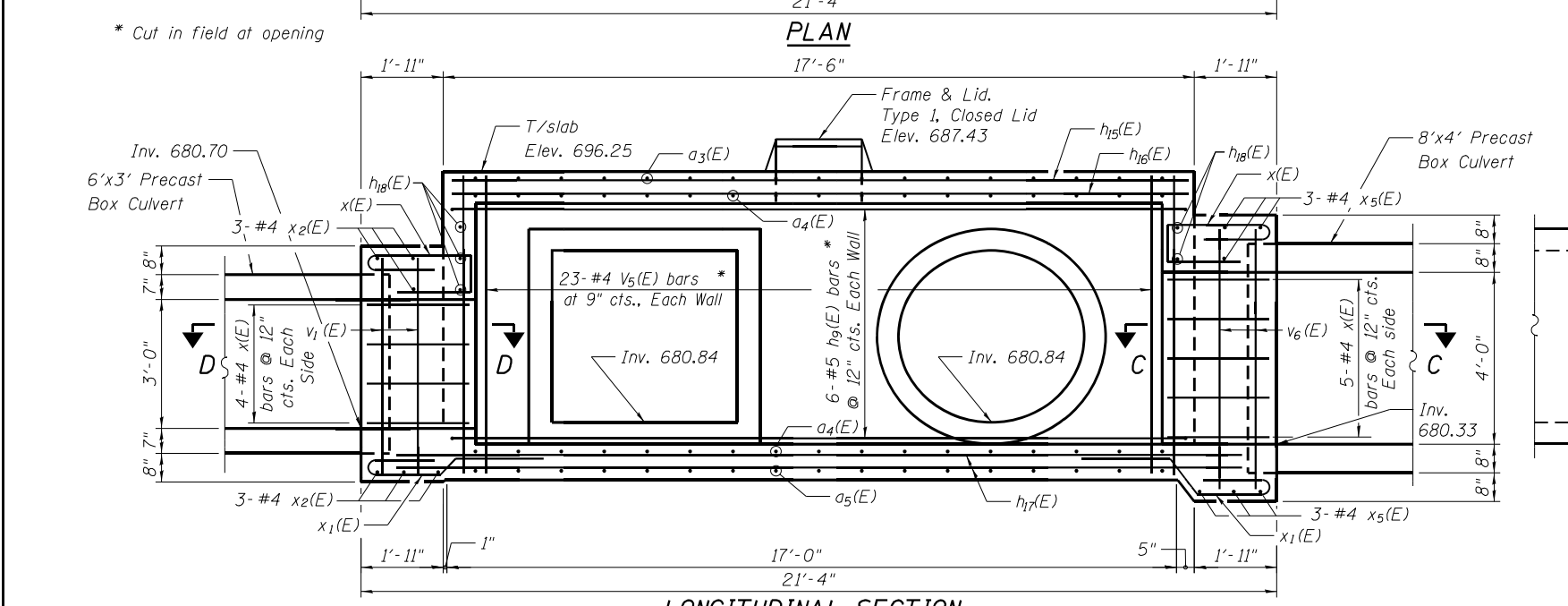
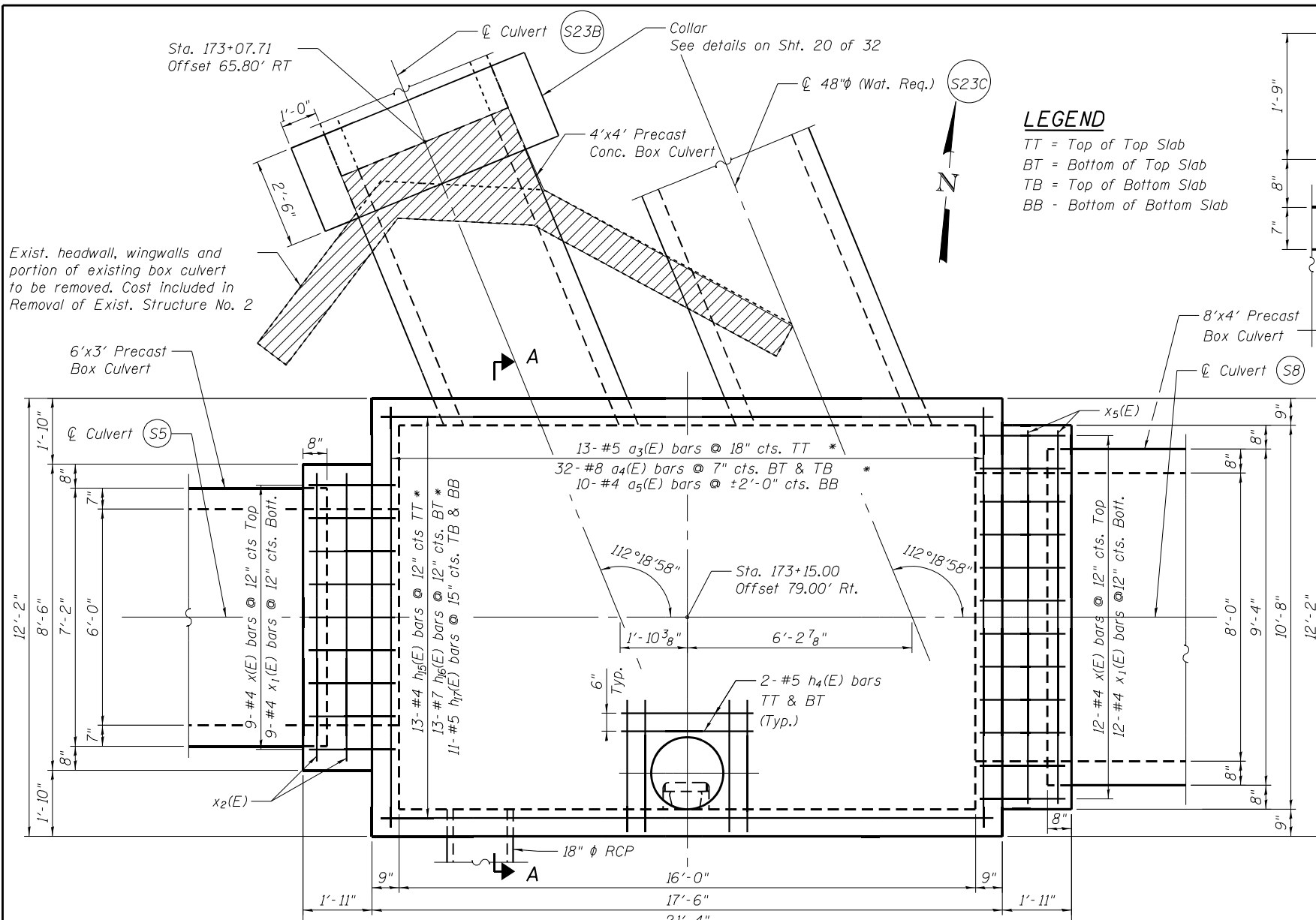
JUNCTION BOX 5  
 DETAILS

SHEET NO. 17 OF 32 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	372
CONTRACT NO. 60P75				

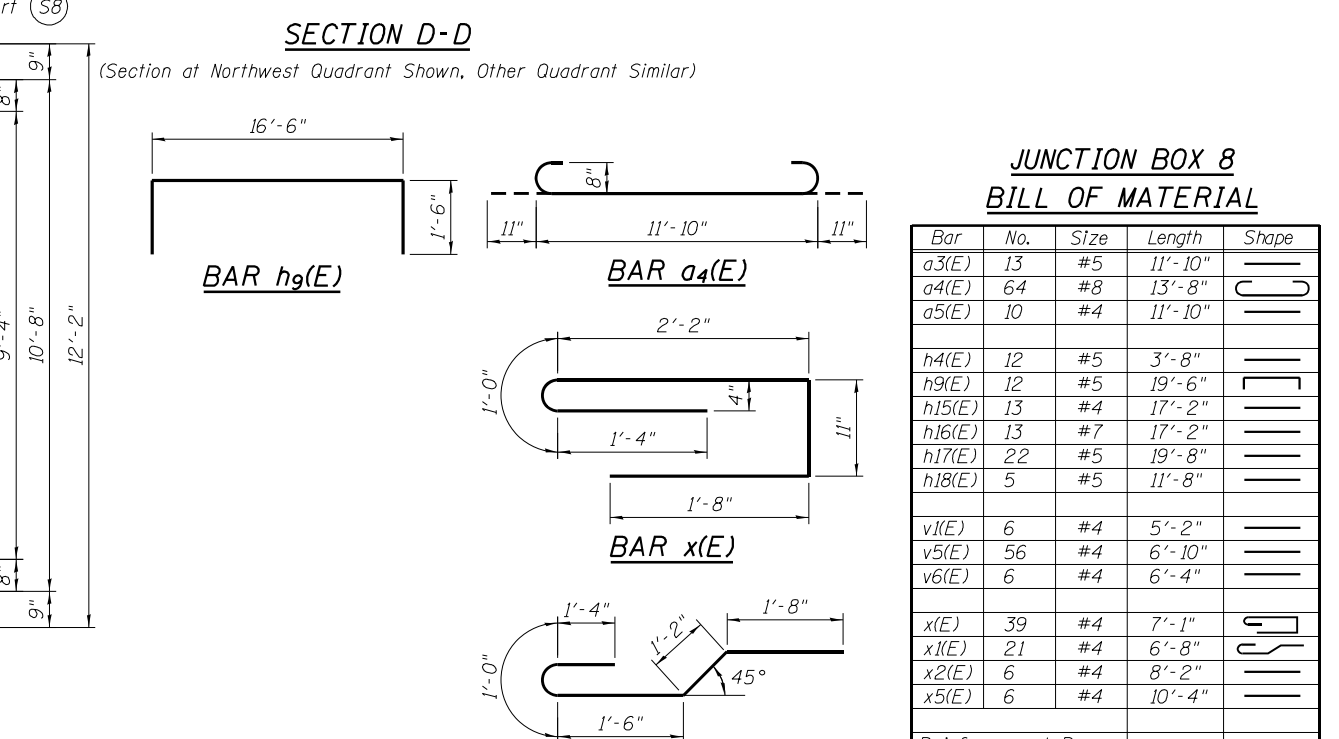
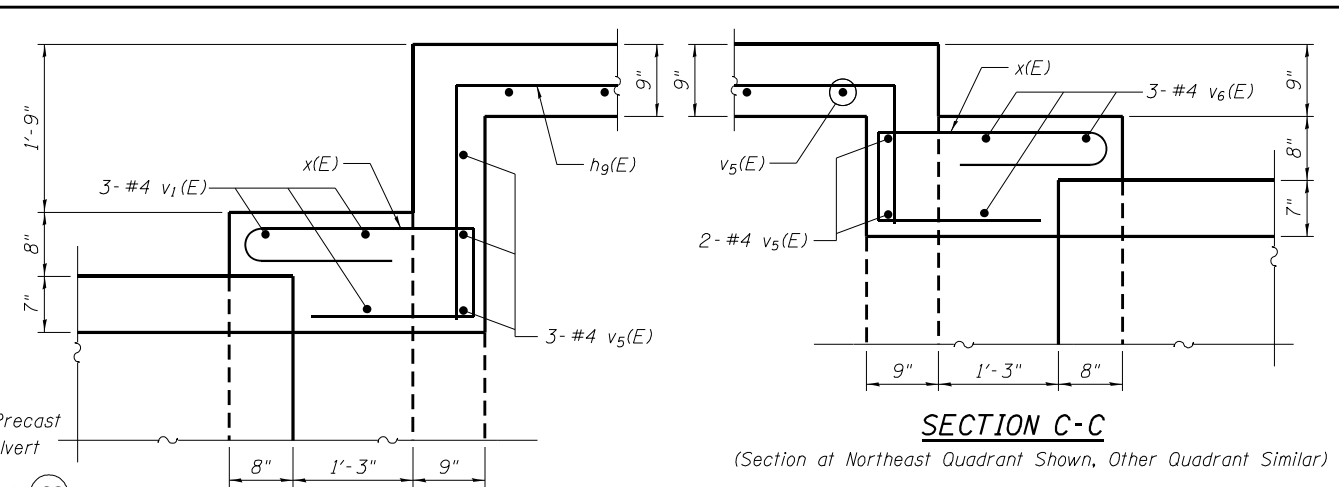
ILLINOIS FED. AID PROJECT





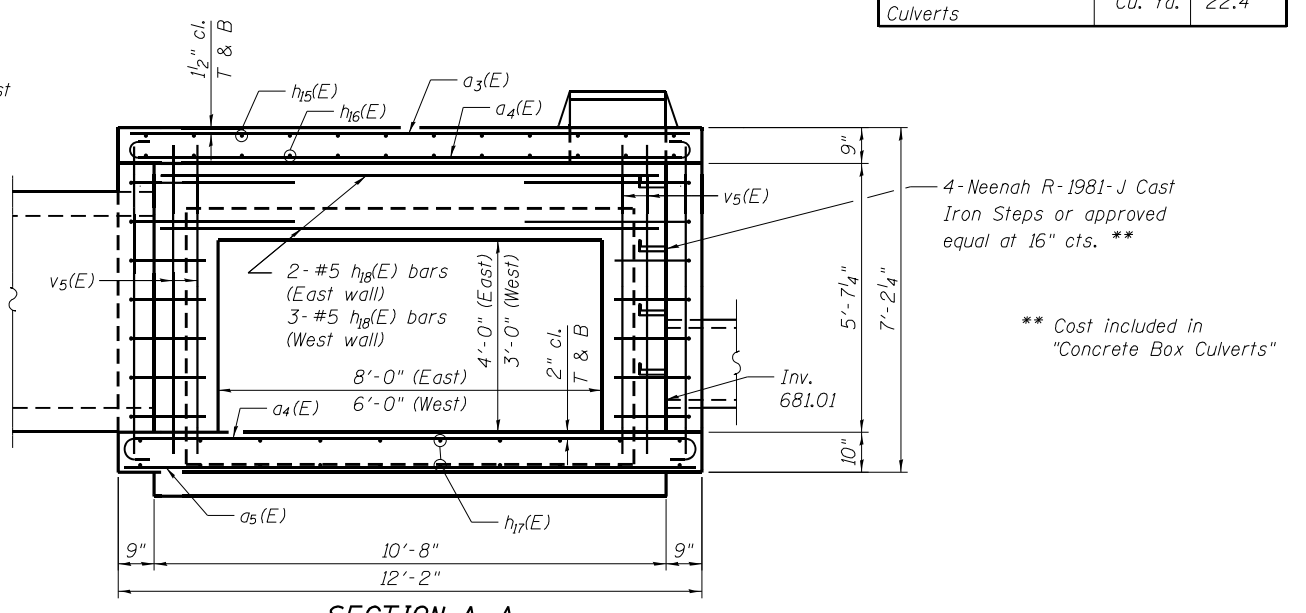
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PLOT SCALE =	CHECKED - JJI	REVISED -
PLOT DATE = 2/1/2024	DRAWN - TJ	REVISED -
	CHECKED - JJI	REVISED -

**LEGEND**  
 TT = Top of Top Slab  
 BT = Bottom of Top Slab  
 TB = Top of Bottom Slab  
 BB = Bottom of Bottom Slab



**JUNCTION BOX 8  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a3(E)	13	#5	11'-10"	—
a4(E)	64	#8	13'-8"	U
a5(E)	10	#4	11'-10"	—
h4(E)	12	#5	3'-8"	—
h9(E)	12	#5	19'-6"	—
h15(E)	13	#4	17'-2"	—
h16(E)	13	#7	17'-2"	—
h17(E)	22	#5	19'-8"	—
h18(E)	5	#5	11'-8"	—
v1(E)	6	#4	5'-2"	—
v5(E)	56	#4	6'-10"	—
v6(E)	6	#4	6'-4"	—
x(E)	39	#4	7'-1"	—
x1(E)	21	#4	6'-8"	—
x2(E)	6	#4	8'-2"	—
x5(E)	6	#4	10'-4"	—
Reinforcement Bars Epoxy Coated		Pound	4,640	
Concrete Box Culverts		Cu. Yd.	22.4	



F.A.P. RTE. = 365	SECTION = (56&57)R-4	COUNTY = DuPAGE	TOTAL SHEETS = 529	SHEET NO. = 373
CONTRACT NO. 60P75			ILLINOIS FED. AID PROJECT	

FILE NAME = W:\191-134\_IDOT\11\_53.ctb; S:\CADD\_Sheets\Struct\104\_Culverts\160P75\_18\_Junction Box\_8.dgn

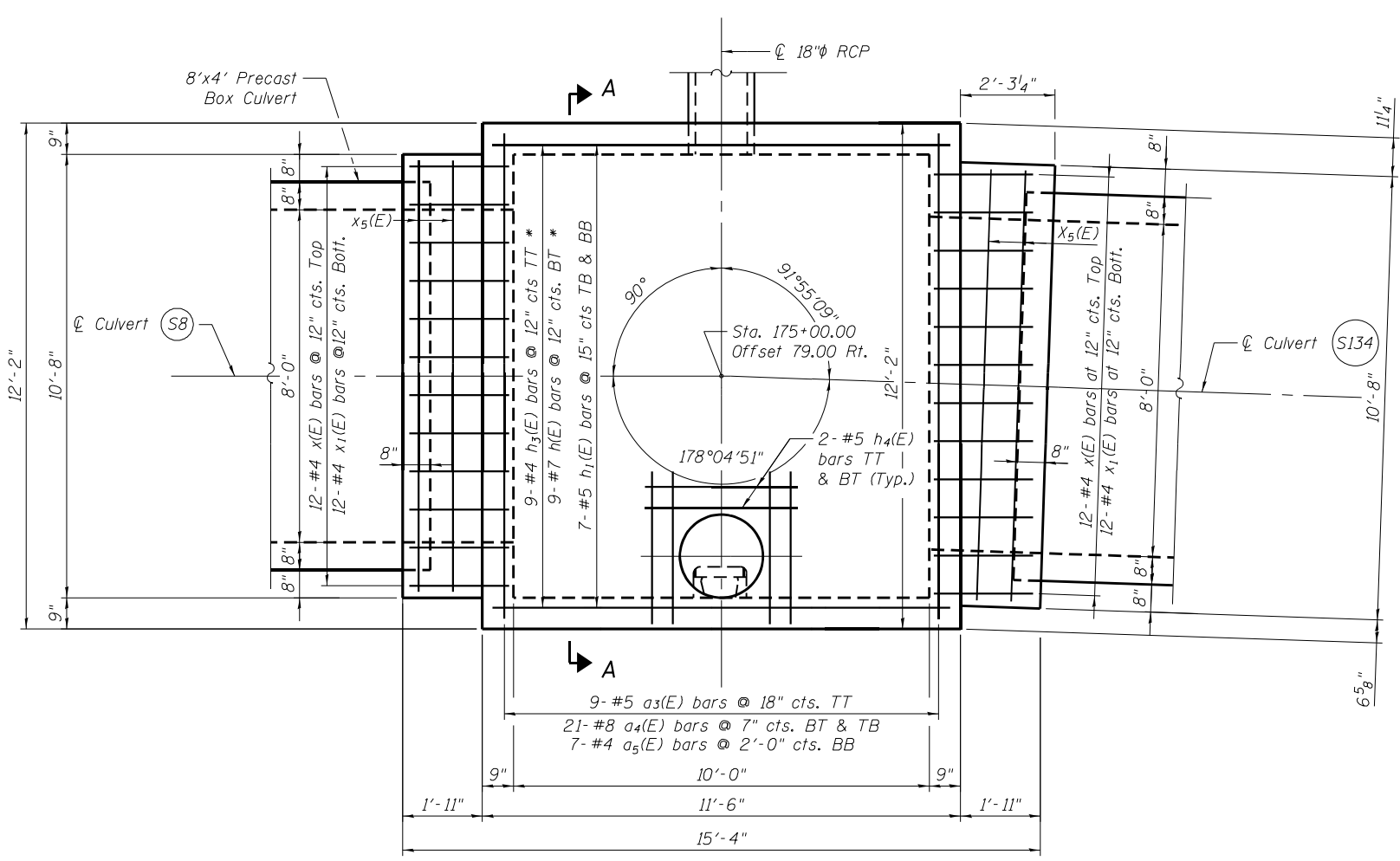


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

JUNCTION BOX 8  
DETAILS

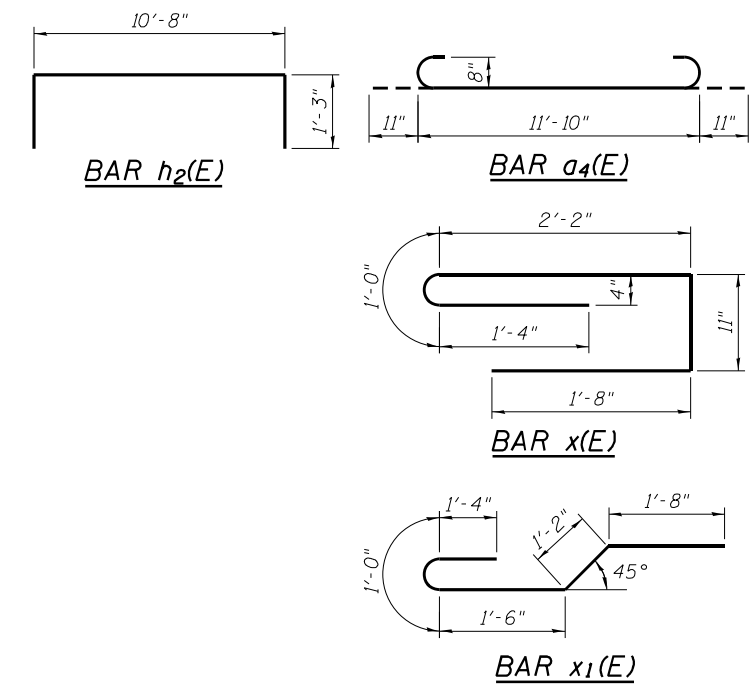
SHEET NO. 18 OF 32 SHEETS

FILE NAME = W:\191-134\_IDOT\_IL\_53.dwg, 5/16/2024, 10:53:11 AM, S:\CADD\_Sheets\Structural\191-134\_IDOT\_IL\_53.dwg, 5/16/2024, 10:53:11 AM, S:\CADD\_Sheets\Structural\191-134\_IDOT\_IL\_53.dwg



**PLAN**

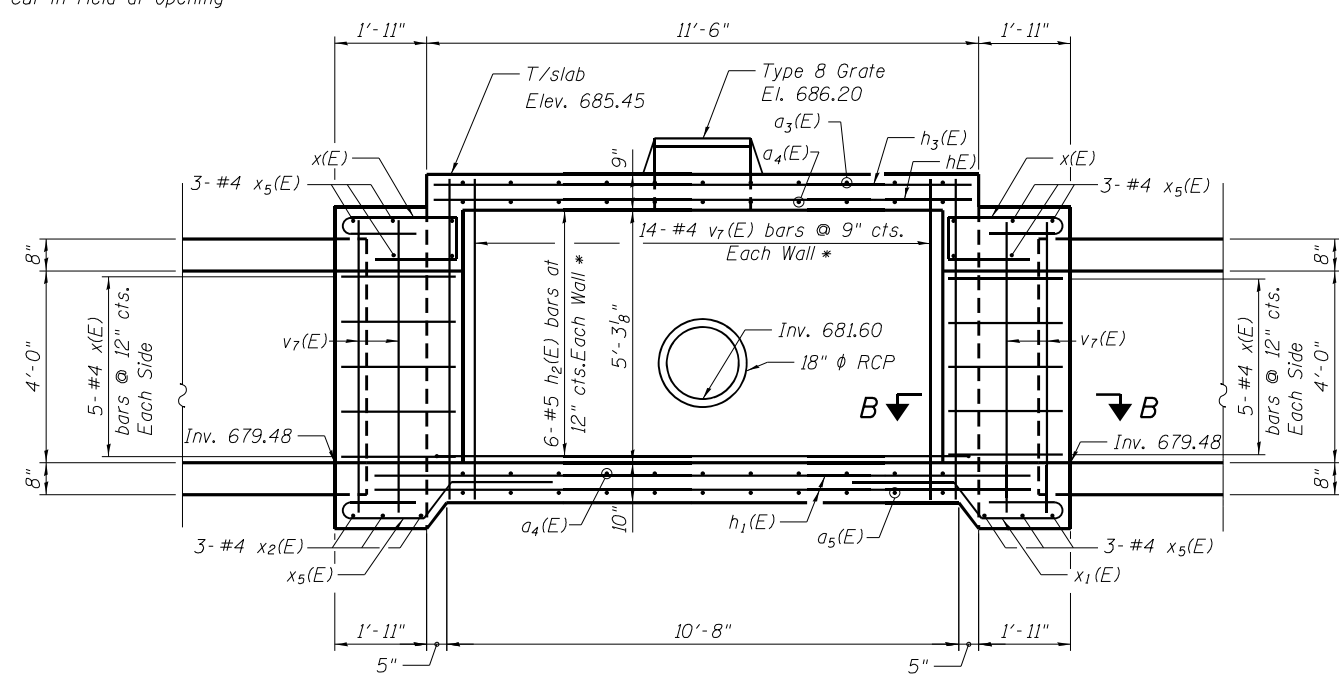
**LEGEND**  
 TT = Top of Top Slab  
 BT = Bottom of Top Slab  
 TB = Top of Bottom Slab  
 BB = Bottom of Bottom Slab



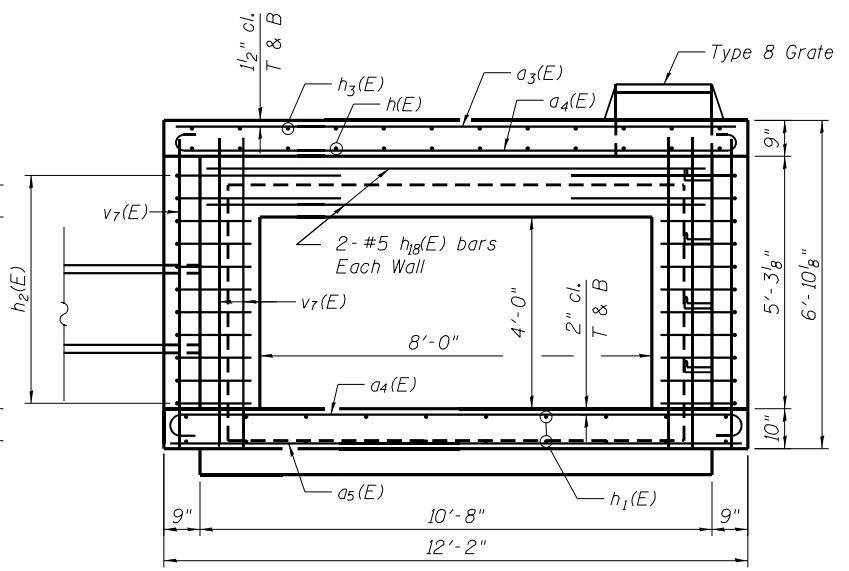
**JUNCTION BOX 134  
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a3(E)	9	#5	11'-10"	—
a4(E)	42	#8	13'-8"	—
a5(E)	7	#4	11'-10"	—
h(E)	9	#7	11'-2"	—
h1(E)	14	#5	13'-8"	—
h2(E)	12	#5	13'-2"	—
h3(E)	9	#4	11'-2"	—
h4(E)	12	#5	4'-0"	—
h18(E)	4	#5	11'-8"	—
v7(E)	48	#4	6'-6"	—
x(E)	44	#4	7'-1"	—
x1(E)	24	#4	6'-8"	—
x5(E)	12	#4	10'-4"	—
Reinforcement Bars			Pound	3,050
Epoxy Coated				
Concrete Box Culverts			Cu. Yd.	16.8

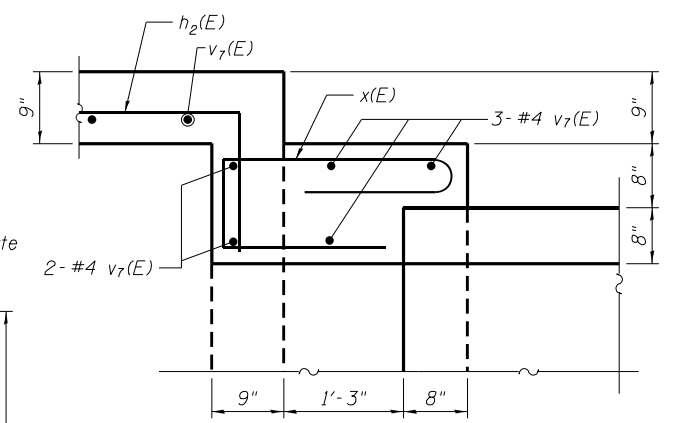
\* Cut in field at opening



**LONGITUDINAL SECTION**



**SECTION A-A**



**SECTION B-B**

(Section at Northeast Quadrant Shown, 3 Other Quadrants Similar)



USER NAME =	DESIGNED - TJ	REVISED -
PLOT SCALE =	CHECKED - JJI	REVISED -
PLOT DATE = 2/1/2024	DRAWN - TJ	REVISED -
	CHECKED - JJI	REVISED -

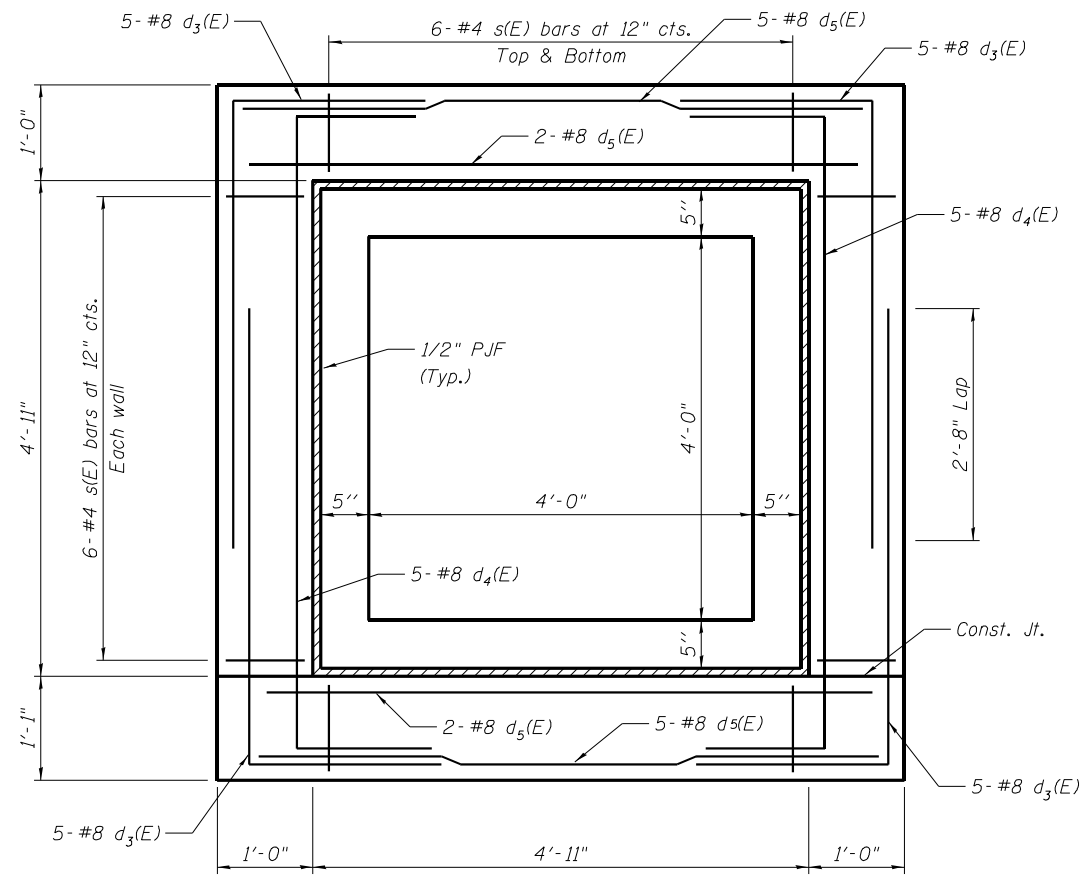
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**JUNCTION BOX 134  
 DETAILS**

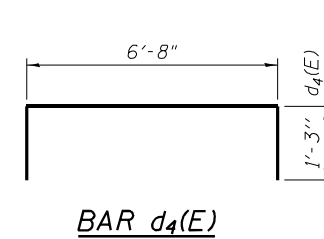
SHEET NO. 19 OF 32 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	374
CONTRACT NO. 60P75				

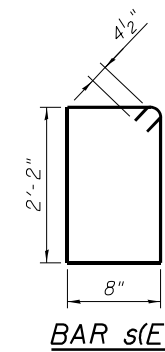
ILLINOIS FED. AID PROJECT



**COLLAR ELEVATION**  
(2 Required)



**BAR d<sub>4</sub>(E)**



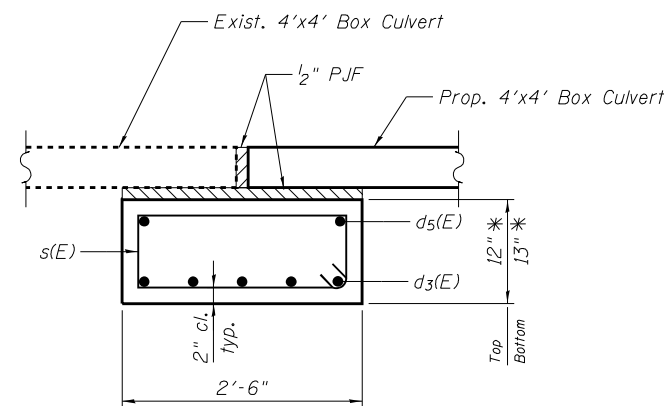
**BAR s(E)**



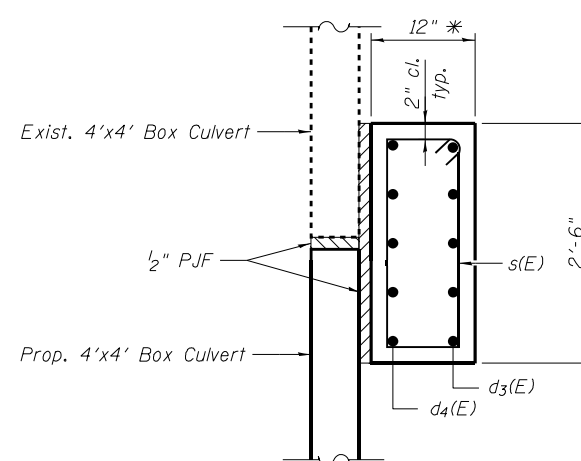
**BAR d<sub>3</sub>(E)**

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
d3(E)	20	#8	7'-7"	
d4(E)	20	#8	7'-11"	
d5(E)	8	#8	6'-7"	
s(E)	48	#4	6'-5"	
Reinforcement Bars, Epoxy Coated			Pound	1,180
Concrete Box Culverts			Cu. Yd.	2.3



**SECTION THRU TOP & BOTTOM COLLAR SLAB**



**SECTION THRU COLLAR SIDEWALL**

\* Minimum existing and proposed culvert wall and slab dimensions may vary at joint.

Note:  
See Sheets 10, 18 and 25 of 32 for location.

FILE NAME = W:\191-134\_IDOT\_IL\_53.ctb... 5/6/CADD\_Sheets\Structure\04\_Culverts\04\_Culvert\_Extension\_Details\_S23a\_s23b.dgn



USER NAME =	DESIGNED - TJ	REVISD -
PLOT SCALE =	CHECKED - JJI	REVISD -
PLOT DATE = 2/1/2024	DRAWN - TJ	REVISD -
	CHECKED - JJI	REVISD -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CULVERT EXTENSION S23A & S23B  
DETAILS**

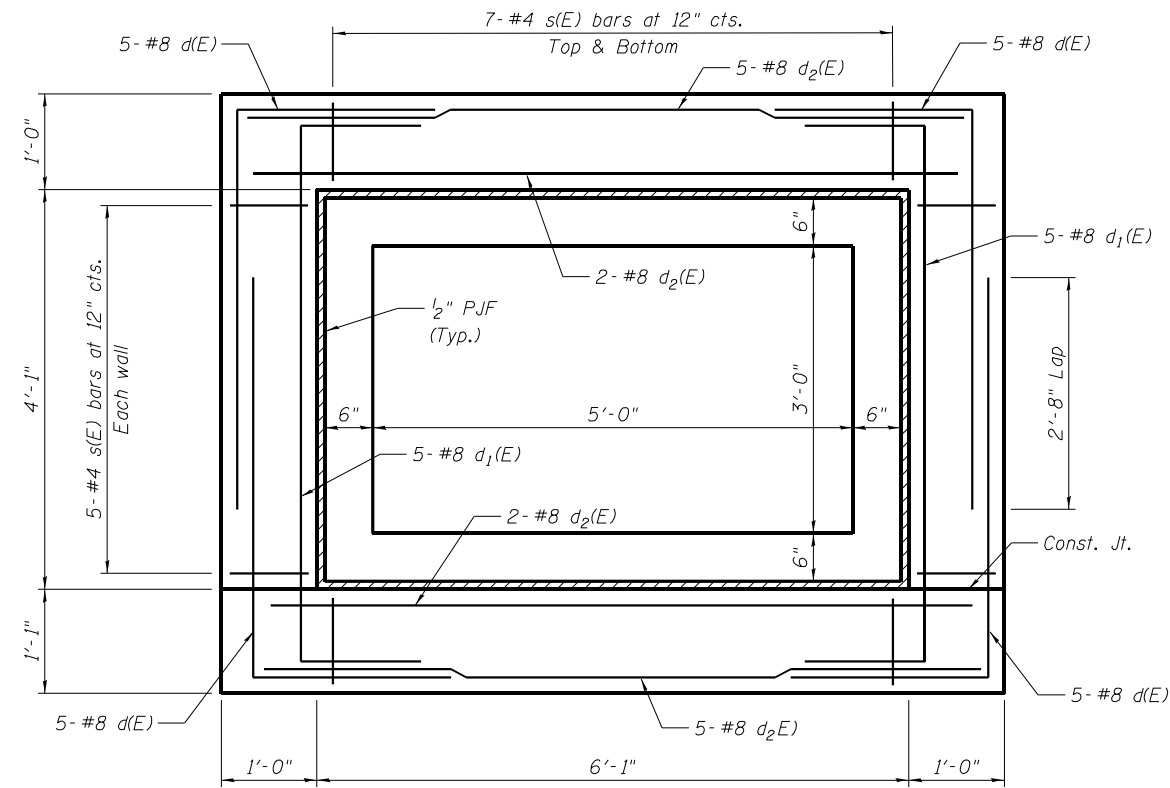
SHEET NO. 20 OF 32 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	375
			CONTRACT NO. 60P75	

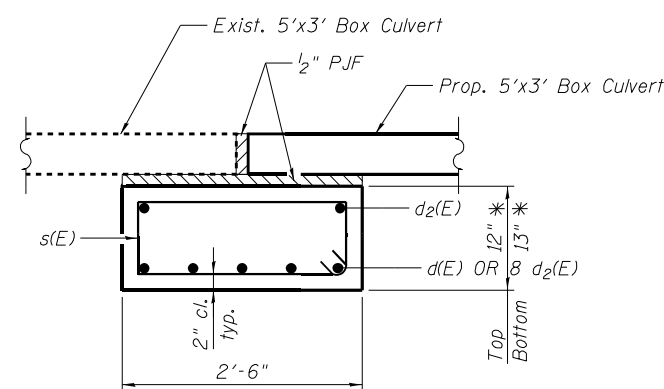
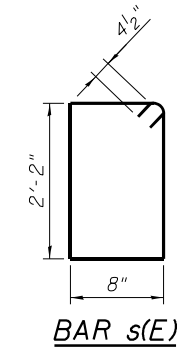
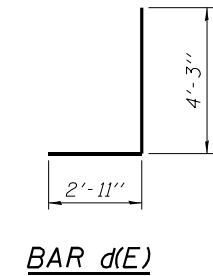
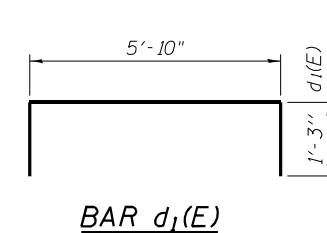
ILLINOIS FED. AID PROJECT

**BILL OF MATERIAL**

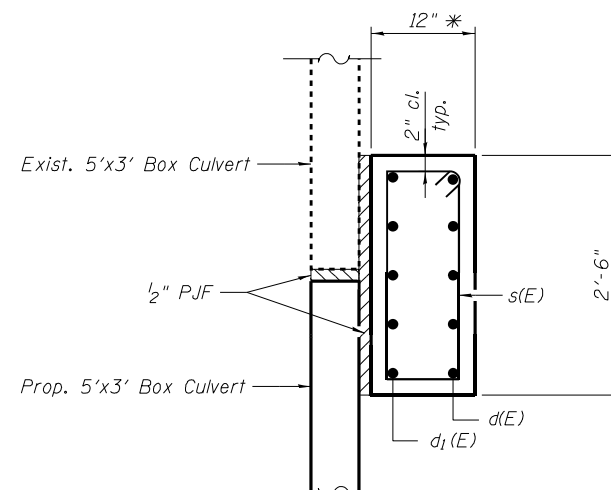
Bar	No.	Size	Length	Shape
d(E)	20	#8	7'-2"	
d1(E)	10	#8	8'-4"	
d2(E)	14	#8	7'-9"	
s(E)	24	#4	6'-5"	
Reinforcement Bars Epoxy Coated			Pound	1,000
Concrete Box Culverts			Cu. Yd.	2.3



**COLLAR ELEVATION**



**SECTION THRU TOP & BOTTOM COLLAR SLAB**



**SECTION THRU COLLAR SIDEWALL**

\* Minimum existing and proposed culvert wall and slab dimensions may vary at joint.

Note:  
See Sheet 15 of 32 for location.

FILE NAME = W:\191-134\_IDOT\_IL\_53.dwg; 5/6/CADD\_Sheets/Structure/04\_Culverts/04\_Culvert\_Extension\_50.dgn



USER NAME =	DESIGNED - TJ	REVISED -
PLOT SCALE =	CHECKED - JJJ	REVISED -
PLOT DATE = 2/1/2024	DRAWN - TJ	REVISED -
	CHECKED - JJJ	REVISED -

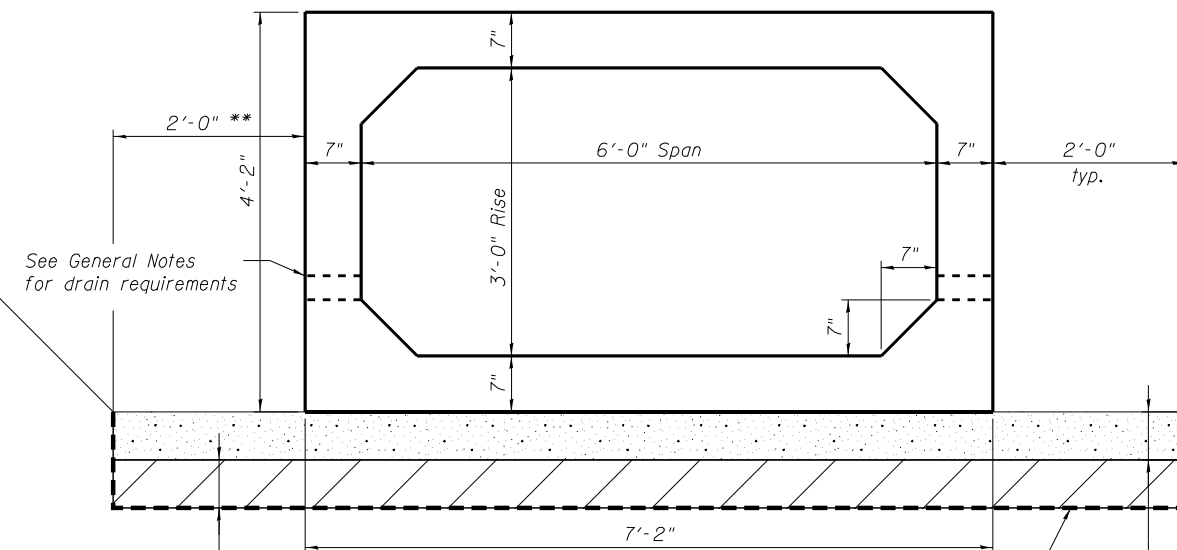
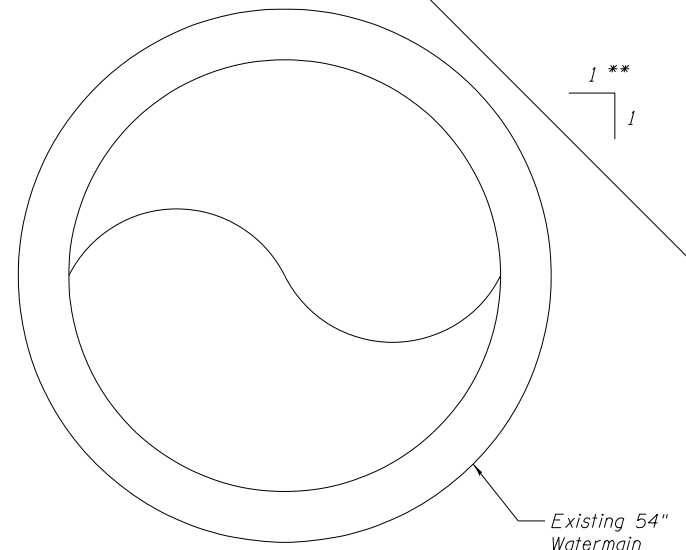
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CULVERT EXTENSION SO  
DETAILS**

SHEET NO. 21 OF 32 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56657)R-4	DuPAGE	529	376
			CONTRACT NO. 60P75	
ILLINOIS FED. AID PROJECT				

\*\* Maximum excavation limit adjacent to watermain



Note:  
Unsuitable soil removal paid for as REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL. Porous granular material beyond 6" below box paid for as POROUS GRANULAR BACKFILL. Non-woven filter fabric paid for as FILTER FABRIC. Dewatering paid for as DEWATERING, LUMP SUM.

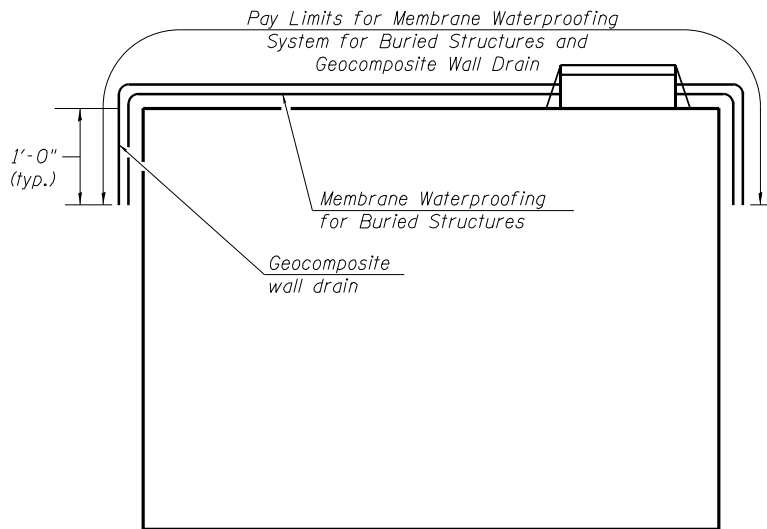
See General Notes for drain requirements

\* Non-woven filter fabric

6" of porous granular material (Typ.)  
Cost included with Precast Concrete Box Culverts items

6" of unsuitable soil removal and replacement with porous granular material CA7, CA 11 or CA 18. Sta. 160+17 to Sta. 160+50, Sta. 170+00 to Sta. 170+50 and Sta. 173+00 to Sta. 173+50. See General Plans.\*

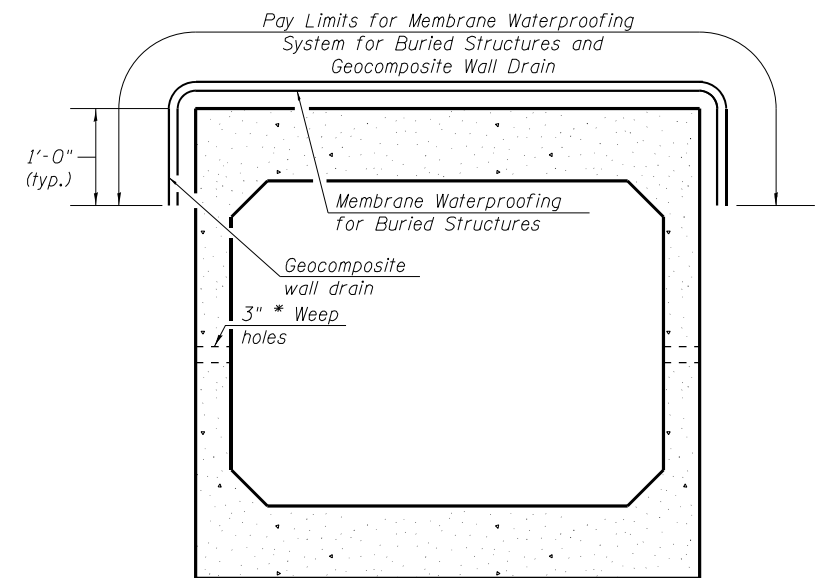
\* Quick condition may occur at base of excavations at Sta. 164+07 to Sta. 165+00. If encountered, dewater and remove any soils loosened by the quick condition. 1'-6" to 3'-6" of unsuitable loosened soil removal may be required, replace with porous granular material CA7, CA 11 or CA 18 placed on top of a non-woven filter fabric. \*



**JUNCTION BOX WATERPROOFING**

**TYPICAL SECTION THRU 6' x 3' BOX CULVERT  
8'x4' BOX CULVERT & JUNCTION BOXES SIMILAR**

(For 8'x4' Box Culvert dimensions see sheet 12 of 32)



**PRECAST BOX CULVERT WATERPROOFING**

See culvert General Plans for locations

FILE NAME = W:\191-134\_IDOT\_IL\_53.dwg 5/15/2024 5:00:00 PM



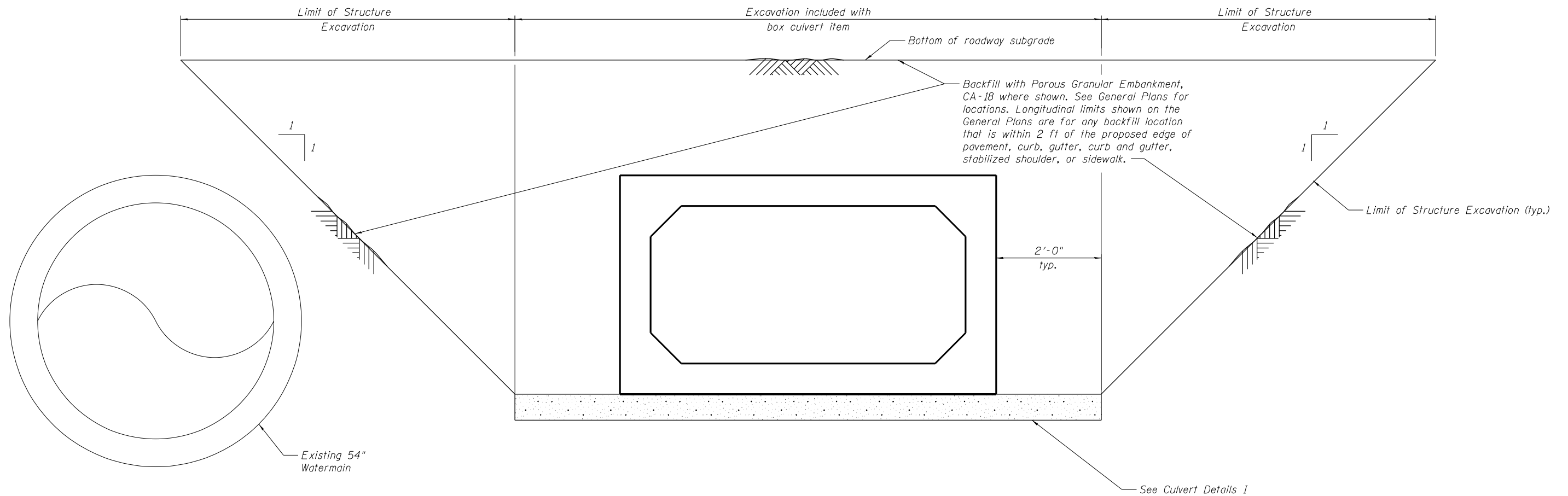
USER NAME =	DESIGNED - TJ	REVISED -
CHECKED - JJI	REVISOR -	
PLOT SCALE =	DRAWN - TJ	REVISED -
PLOT DATE = 2/1/2024	CHECKED - JJI	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CULVERT DETAILS I**

SHEET NO. 22 OF 32 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	377
CONTRACT NO. 60P75			ILLINOIS FED. AID PROJECT	



**BOX CULVERT BACKFILL AT ROADWAY CROSSINGS**

(See General Plans for locations and limits of roadway backfill)

FILE NAME = W:\191-134\_IDOT\_IL\_53.dwg, 56\CADD\_Sheets\Structure\04\_Culverts\04160P75\_23\_Culvert\_Details\_II.dwg



USER NAME =	DESIGNED - TJ	REVISED -
	CHECKED - JJI	REVISED -
PLOT SCALE =	DRAWN - TJ	REVISED -
PLOT DATE = 2/1/2024	CHECKED - JJI	REVISED -

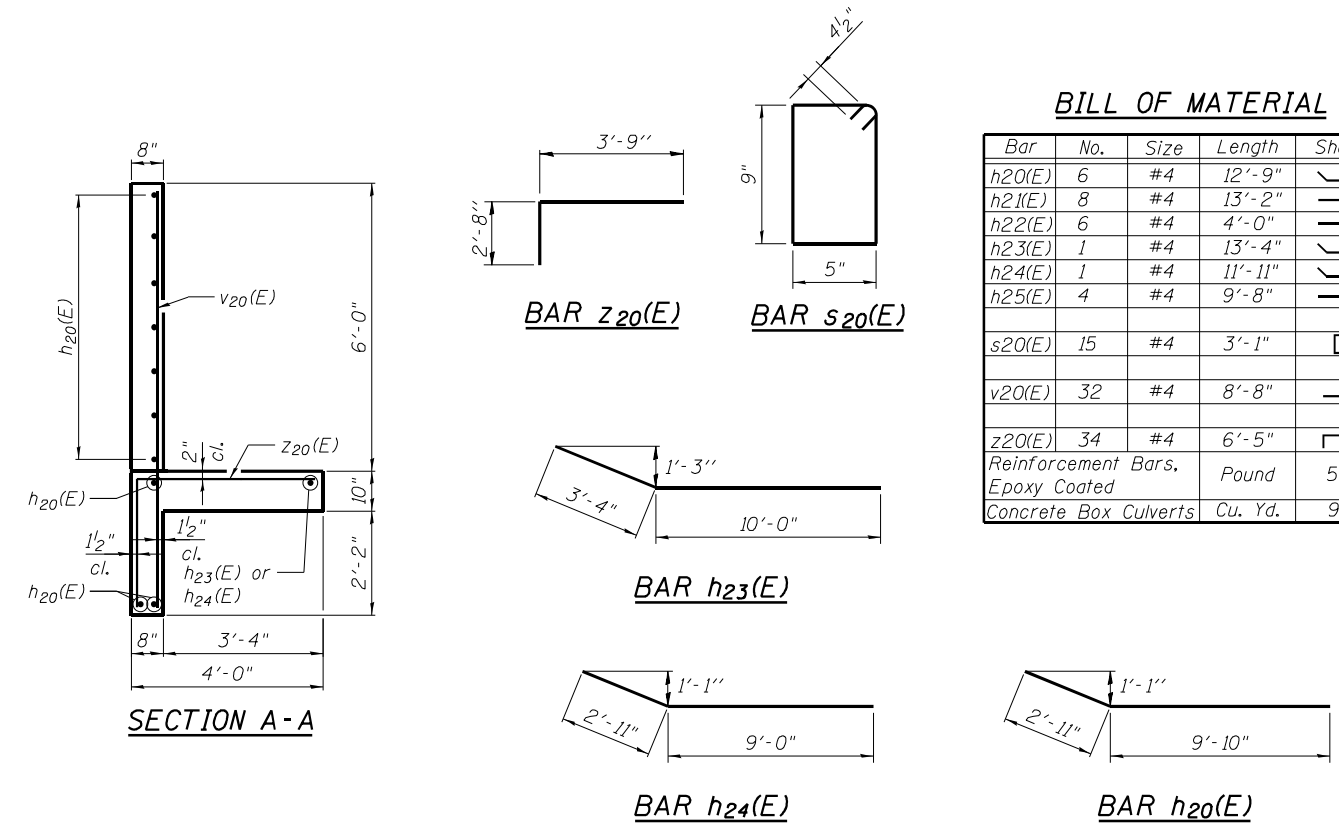
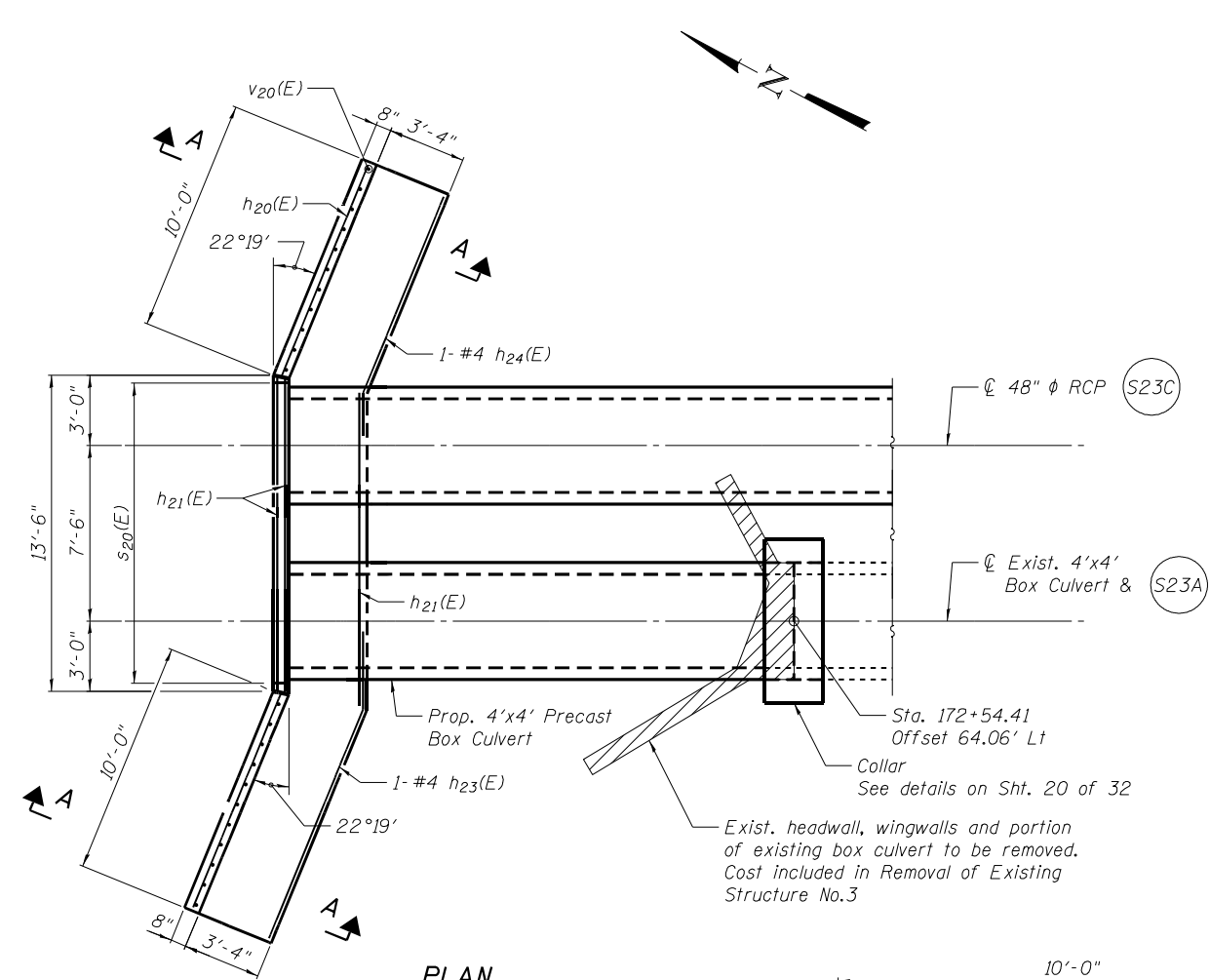
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CULVERT DETAILS II**

SHEET NO. 23 OF 32 SHEETS

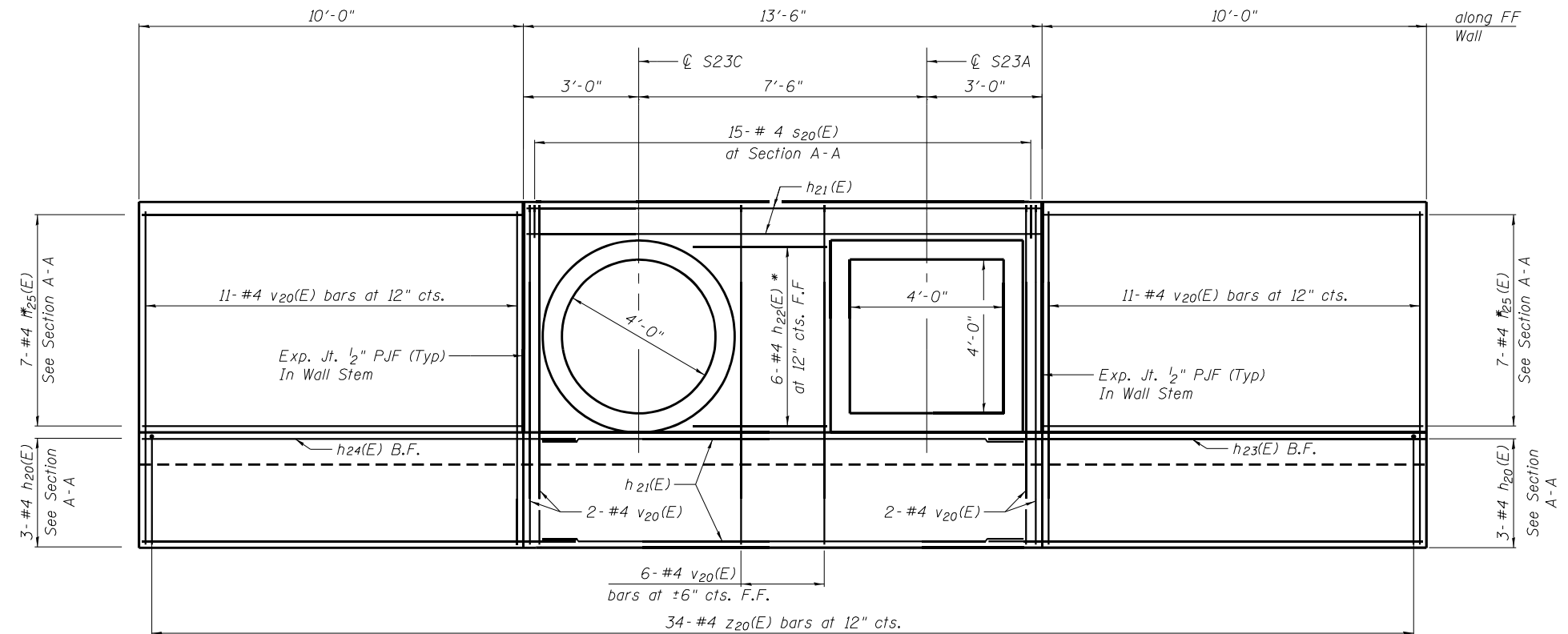
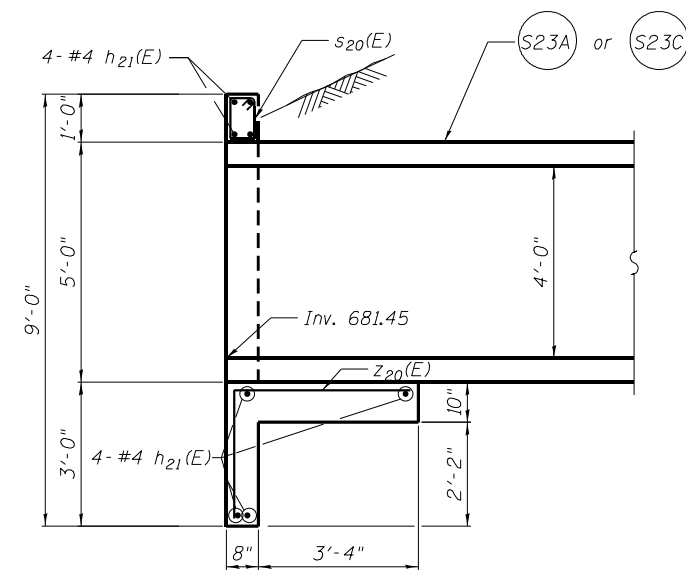
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	378
			CONTRACT NO. 60P75	
ILLINOIS FED. AID PROJECT				





**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h <sub>20</sub> (E)	6	#4	12'-9"	┌
h <sub>21</sub> (E)	8	#4	13'-2"	┌
h <sub>22</sub> (E)	6	#4	4'-0"	┌
h <sub>23</sub> (E)	1	#4	13'-4"	┌
h <sub>24</sub> (E)	1	#4	11'-11"	┌
h <sub>25</sub> (E)	4	#4	9'-8"	┌
s <sub>20</sub> (E)	15	#4	3'-1"	┌
v <sub>20</sub> (E)	32	#4	8'-8"	┌
z <sub>20</sub> (E)	34	#4	6'-5"	┌
Reinforcement Bars, Epoxy Coated		Pound	550	
Concrete Box Culverts		Cu. Yd.	9.9	



\* Cut in field at opening

FILE NAME = W:\191-134\_IDOT\_IL\_53.dwg, S:\CADD\_Sheets\Structure\104\_Culverts\160P75\_25\_Headwall\_23.dwg



USER NAME =	DESIGNED - TJ	REVISED -
PLOT SCALE =	CHECKED - JJJ	REVISED -
PLOT DATE = 2/1/2024	DRAWN - TJ	REVISED -
	CHECKED - JJJ	REVISED -

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

**HEADWALL 23**  
**DETAILS**

SHEET NO. 25 OF 32 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	380
CONTRACT NO. 60P75				

ILLINOIS FED. AID PROJECT





SOIL BORING LOG

GSI Job No. 12195 Page 1 of 1 Date 9/26/13

ROUTE F.A.P. RTE. 365 DESCRIPTION IL Route 56 at IL Route 53 Culverts, IDOT Project No. D-91-612-11, Contract No. 60P75 LOGGED BY NW SECTION 634X-N-3 LOCATION SE 1/4, SEC. 26, TWP. T39N, RNG. R10E, 3rd PM COUNTY DuPage DRILLING METHOD Hollow Stem Auger HAMMER TYPE Diedrich Automatic

Table with columns for Depth (ft), Blows (B), Unconfined Compressive Strength (tsf), Moisture Content (%), and Soil Description. Includes data for borings CB-01 and CB-02.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

GSI Job No. 12195 Page 1 of 1 Date 9/26/13

ROUTE F.A.P. RTE. 365 DESCRIPTION IL Route 56 at IL Route 53 Culverts, IDOT Project No. D-91-612-11, Contract No. 60P75 LOGGED BY NW SECTION 634X-N-3 LOCATION SE 1/4, SEC. 26, TWP. T39N, RNG. R10E, 3rd PM COUNTY DuPage DRILLING METHOD Hollow Stem Auger HAMMER TYPE Diedrich Automatic

Table with columns for Depth (ft), Blows (B), Unconfined Compressive Strength (tsf), Moisture Content (%), and Soil Description. Includes data for borings CB-02 and CB-03.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

GSI Job No. 12195 Page 1 of 1 Date 9/26/13

ROUTE F.A.P. RTE. 365 DESCRIPTION IL Route 56 at IL Route 53 Culverts, IDOT Project No. D-91-612-11, Contract No. 60P75 LOGGED BY NW SECTION 634X-N-3 LOCATION SE 1/4, SEC. 26, TWP. T39N, RNG. R10E, 3rd PM COUNTY DuPage DRILLING METHOD Hollow Stem Auger HAMMER TYPE Diedrich Automatic

Table with columns for Depth (ft), Blows (B), Unconfined Compressive Strength (tsf), Moisture Content (%), and Soil Description. Includes data for borings CB-03 and CB-04.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

FILE NAME = W:\191-134\_IDOT\_IL\_53\_at\_IL\_56\CADD\_Sheets\Structure\104\_Culverts\160P75\_26\_Boring\_Logs\_1.dgn



Table with columns for USER NAME, DESIGNED, CHECKED, PLOT SCALE, PLOT DATE, REVISED, and DRAWN.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

BORING LOGS - I SHEET NO. 26 OF 32 SHEETS

Table with columns for F.A.P. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., and CONTRACT NO.



### SOIL BORING LOG

GSI Job No. 12195  
Page 1 of 1  
Date 9/30/13

ROUTE F.A.P. RTE. 365 DESCRIPTION IL Route 56 at IL Route 53 Culverts, IDOT Project No. D-91-612-11, Contract No. 60P75 LOGGED BY NW

SECTION 634X-N-3 LOCATION SE 1/4, SEC. 26, TWP. T39N, RNG. R10E, 3<sup>rd</sup> PM

COUNTY DuPage DRILLING METHOD Hollow Stem Auger HAMMER TYPE Diedrich Automatic

STRUCT. NO. Station	D E P T H S	B L O W S	U C S Qu	M O I S T	Surface Water Elev. Stream Bed Elev.	D E P T H S	B L O W S	U C S Qu	M O I S T
BORING NO. CB-04 Station 163+50 Offset 52.60ft Right Ground Surface Elev. 694.90 ft					n/a ft n/a ft				
6.0" TOPSOIL-black									
SILTY CLAY-dark brown to black-stiff to very stiff	5			29		3			
	5	1.5	24			6	1.8	14	
	5	P				11	B		
becoming brown & gray @ -3.0'									
	3								
	4	2.1	24			3			
	4	B				10		11	
	5					3			
	6					15		16	
	2					4			
	4	2.2	27			7		21	
	4	B				19			
	2					3			
	2	1.0	26			18		16	
	3	B				13			
	-10					13			
CLAY LOAM brown stiff to very stiff						18			
	ST	3.5	18			20		4	
		P				16			
	3					9			
	6	3.5	17			9	1.1	11	
	8	B				10	B		
	-15					35			
becoming gray @ -15.5'						7			
	3					11	2.1	12	
	12	3.5	14			17	B		
	13	P				17			
	3					12			
	5	3.5	15			13	2.5	12	
	7	P				17	B		
	-20					40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)



### SOIL BORING LOG

GSI Job No. 12195  
Page 1 of 1  
Date 9/30/13

ROUTE F.A.P. RTE. 365 DESCRIPTION IL Route 56 at IL Route 53 Culverts, IDOT Project No. D-91-612-11, Contract No. 60P75 LOGGED BY NW

SECTION 634X-N-3 LOCATION SE 1/4, SEC. 26, TWP. T39N, RNG. R10E, 3<sup>rd</sup> PM

COUNTY DuPage DRILLING METHOD Hollow Stem Auger HAMMER TYPE Diedrich Automatic

STRUCT. NO. Station	D E P T H S	B L O W S	U C S Qu	M O I S T	Surface Water Elev. Stream Bed Elev.	D E P T H S	B L O W S	U C S Qu	M O I S T
BORING NO. CB-05 Station 164+52 Offset 74.80ft Right Ground Surface Elev. 692.70 ft					n/a ft n/a ft				
6.0" SANDY TOPSOIL-black									
SANDY CLAY LOAM with GRAVEL-brown-loose	2			19		3			
	4	1.8	20			4	0.8	15	
	3	P				5	B		
	2					4			
	3					6	0.7	12	
	4					7	B		
	-5					25			
	2					2			
	3					3	1.0	25	
	5					3	P		
	5					3			
	5					5		15	
	5					5			
	-10					10			
SAND & GRAVEL-brown-medium dense						2			
	3					3		13	
	5					5			
	5					5		15	
	-10					10			
SILTY SAND with GRAVEL-brown-loose						2			
	2					2		28	
	3					3			
	3					3			
	5					5			
	5					5		15	
	7	1.4	18			7	B		
	-15					15			
	3					3			
	4	0.7	18			4			
	6	B				6			
	4					4			
	5					5			
	18					18		10	
	24					24			
	16					16			
	16					16		12	
	9	B				9			
	-20					40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)



### SOIL BORING LOG

GSI Job No. 12195  
Page 1 of 1  
Date 9/30/13

ROUTE F.A.P. RTE. 365 DESCRIPTION IL Route 56 at IL Route 53 Culverts, IDOT Project No. D-91-612-11, Contract No. 60P75 LOGGED BY NW

SECTION 634X-N-3 LOCATION SE 1/4, SEC. 26, TWP. T39N, RNG. R10E, 3<sup>rd</sup> PM

COUNTY DuPage DRILLING METHOD Hollow Stem Auger HAMMER TYPE Diedrich Automatic

STRUCT. NO. Station	D E P T H S	B L O W S	U C S Qu	M O I S T	Surface Water Elev. Stream Bed Elev.	D E P T H S	B L O W S	U C S Qu	M O I S T
BORING NO. CB-06 Station 165+57 Offset 71.00ft Right Ground Surface Elev. 693.80 ft					n/a ft n/a ft				
6.0" TOPSOIL-black									
CLAY LOAM-brown-hard (Possible Fill)	9			26		2			
	6	4.5	20			5		19	
	8	P				6			
	6					3			
	10	4.5	13			4			
	12	P				6		19	
	-5					6			
	5					4			
	20	4.5	14			8	2.8	18	
	26	P				9	B		
	21					3			
	29		5			4		22	
	17					5			
	5					4			
	7		6			4		24	
	6					15			
	4					7			
	5					7		6	
	5		8			4			
	-15					35			
	2					2			
	2		12			50/5"		19	
	2					2			
	3		15			3			
	5					5			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)

FILE NAME = W:\191-134\_IDOT\_IL\_53\_at\_IL\_56\CADD\_Sheets\Structural\04\_Culverts\160P75\_27\_Boring\_Logs\_2.dgn



SOIL BORING LOG

GSI Job No. 12195 Page 1 of 1 Date 10/1/13

ROUTE F.A.P. RTE. 365 DESCRIPTION IL Route 56 at IL Route 53 Culverts, IDOT Project No. D-91-612-11, Contract No. 60P75 LOGGED BY NW

SECTION 634X-N-3 LOCATION SE 1/4, SEC. 26, TWP. T39N, RNG. R10E, 3rd PM

COUNTY DuPage DRILLING METHOD Hollow Stem Auger HAMMER TYPE Diedrich Automatic

Table with columns for DEPTH, BLOW COUNTS, UCS, and SOIL TYPE. Includes data for borings CB-07 and CB-08, showing soil layers like CLAY LOAM and SAND & GRAVEL.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

GSI Job No. 12195 Page 1 of 1 Date 10/1/13

ROUTE F.A.P. RTE. 365 DESCRIPTION IL Route 56 at IL Route 53 Culverts, IDOT Project No. D-91-612-11, Contract No. 60P75 LOGGED BY NW

SECTION 634X-N-3 LOCATION SE 1/4, SEC. 26, TWP. T39N, RNG. R10E, 3rd PM

COUNTY DuPage DRILLING METHOD Hollow Stem Auger HAMMER TYPE Diedrich Automatic

Table with columns for DEPTH, BLOW COUNTS, UCS, and SOIL TYPE. Includes data for borings CB-07 and CB-08, showing soil layers like CLAY LOAM and SAND & GRAVEL.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

GSI Job No. 12195 Page 1 of 1 Date 10/1/13

ROUTE F.A.P. RTE. 365 DESCRIPTION IL Route 56 at IL Route 53 Culverts, IDOT Project No. D-91-612-11, Contract No. 60P75 LOGGED BY NW

SECTION 634X-N-3 LOCATION SE 1/4, SEC. 26, TWP. T39N, RNG. R10E, 3rd PM

COUNTY DuPage DRILLING METHOD Hollow Stem Auger HAMMER TYPE Diedrich Automatic

Table with columns for DEPTH, BLOW COUNTS, UCS, and SOIL TYPE. Includes data for borings CB-07 and CB-08, showing soil layers like CLAY LOAM and SAND & GRAVEL.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

FILE NAME = W:\191-134\_IDOT\_IL\_53\_at\_IL\_56\CADD\_Sheets\Structural\04\_Culverts\160P75\_28\_Boring\_Logs\_3.dgn



Table with columns for USER NAME, DESIGNED, CHECKED, DRAWN, PLOT DATE, REVISED, and REVISIONS.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

BORING LOGS - III

SHEET NO. 28 OF 32 SHEETS

Table with columns for F.A.P. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., and CONTRACT NO.



### SOIL BORING LOG

GSI Job No. 12195  
Page 1 of 1  
Date 10/2/13

ROUTE F.A.P. RTE. 365 DESCRIPTION IL Route 56 at IL Route 53 Culverts, IDOT Project No. D-91-612-11, Contract No. 60P75 LOGGED BY NW  
SECTION 634X-N-3 LOCATION SE 1/4, SEC. 26, TWP. T39N, RNG. R10E, 3<sup>rd</sup> PM  
COUNTY DuPage DRILLING METHOD Hollow Stem Auger HAMMER TYPE Diedrich Automatic

STRUCT. NO. Station	DEPTH H	BLOW S	UCS Qu	MOIST T	Surface Water Elev. Stream Bed Elev.	DEPTH H	BLOW S	UCS Qu	MOIST T	Groundwater Elev.: First Encounter Upon Completion After	DEPTH H	BLOW S	UCS Qu	MOIST T
6.0" TOPSOIL-black					n/a					n/a				
CLAY LOAM-brown-very stiff to hard	7				n/a	2				669.8	2			
	8	4.5	15			3				666.8	3			
	9	P				5					4			
	2					3					4			
	5	5.4	18			10					7	4.5	17	
	-5	7	B			-25					4			
	3					4					5			
	4	3.3	16			12					8			
	7	B				12					12			
SAND & GRAVEL-brown-medium dense	6		9			8					12			
	6					12					15			
	-10	5				-30					7			
	4					5					6			
	5		11			6					7			
	6					6					7			
	4					13					13			
	5		11			14					14			
	-15	7				-35					13			
	5					10					12			
	4		10			11					11			
	6					11					12			
SILTY SAND & GRAVEL-brown-loose	2					12					14			
	3		13			14					14			
	4					17					17			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)



### SOIL BORING LOG

GSI Job No. 12195  
Page 1 of 1  
Date 10/2/13

ROUTE F.A.P. RTE. 365 DESCRIPTION IL Route 56 at IL Route 53 Culverts, IDOT Project No. D-91-612-11, Contract No. 60P75 LOGGED BY NW  
SECTION 634X-N-3 LOCATION SE 1/4, SEC. 26, TWP. T39N, RNG. R10E, 3<sup>rd</sup> PM  
COUNTY DuPage DRILLING METHOD Hollow Stem Auger HAMMER TYPE Diedrich Automatic

STRUCT. NO. Station	DEPTH H	BLOW S	UCS Qu	MOIST T	Surface Water Elev. Stream Bed Elev.	DEPTH H	BLOW S	UCS Qu	MOIST T	Groundwater Elev.: First Encounter Upon Completion After	DEPTH H	BLOW S	UCS Qu	MOIST T
6.0" TOPSOIL-black					n/a					n/a				
CLAY LOAM-brown-very stiff to hard	5				n/a	25				671.6	3			
	7	6.8	15			4				668.6	4			
	7	S				4					3			
	3					3					4			
	7	4.5	17			7					4			
	-5	7	P			-25					3			
	11					10					6			
	50/4*	3.5	17			5					5			
	11					11					6			
SAND & GRAVEL-brown-loose to medium dense	6					6					5			
	10		7			10					9	1.5	14	
	-10	11				-30					13	P		
	8					7					2			
	5		16			7					7			
	4					14					14			
	2					19					19			
	3		14			16					16			
	-15	4				-35					12			
	2					8					7			
	3		15			12					7			
	3					9					7			
	3					12					14			
	3					13					13			
	3					9					8			
	3		9			16					9			
	3					16					16			
	-20	3				-40					20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)



### SOIL BORING LOG

GSI Job No. 12195  
Page 1 of 1  
Date 10/2/13

ROUTE F.A.P. RTE. 365 DESCRIPTION IL Route 56 at IL Route 53 Culverts, IDOT Project No. D-91-612-11, Contract No. 60P75 LOGGED BY NW  
SECTION 634X-N-3 LOCATION SE 1/4, SEC. 26, TWP. T39N, RNG. R10E, 3<sup>rd</sup> PM  
COUNTY DuPage DRILLING METHOD Hollow Stem Auger HAMMER TYPE Diedrich Automatic

STRUCT. NO. Station	DEPTH H	BLOW S	UCS Qu	MOIST T	Surface Water Elev. Stream Bed Elev.	DEPTH H	BLOW S	UCS Qu	MOIST T	Groundwater Elev.: First Encounter Upon Completion After	DEPTH H	BLOW S	UCS Qu	MOIST T
6.0" TOPSOIL-dark brown to black					n/a					n/a				
CLAY LOAM-brown-very stiff (Fill)	6				n/a	19				671.9	6			
	7	3.3	14			13				664.9	7			
	9	P				28					9			
	2					19					2			
	4	2.1	19			12					4			
	5	B				10					5			
	2					11					2			
	5		24			18					5			
	5					18					5			
	2					17					2			
	3		21			13					3			
	5					12					5			
	5					10					5			
	10		8			12					10			
	12					14					12			
	4					11					4			
	5		9			13					5			
	5					19					5			
	-15	5				-35					19			
	5					45					5			
	4		15			28					4			
	4					18					4			
	3					10					3			
	3		32			10					3			
	10					12					10			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)

FILE NAME = W:\191-134\_IDOT\_IL\_53\_at\_IL\_56\CADD\_Sheets\Structure\104\_Culverts\160P75\_29\_Boring\_Logs\_4.dgn



USER NAME =	DESIGNED - TJ	REVISED -
PLOT SCALE =	CHECKED - JJI	REVISED -
PLOT DATE = 2/1/2024	DRAWN - TJ	REVISED -
	CHECKED - JJI	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BORING LOGS - IV

SHEET NO. 29 OF 32 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	384
CONTRACT NO. 60P75				

ILLINOIS FED. AID PROJECT





GSJ Job No. 12195

### SOIL BORING LOG

Page 1 of 1

Date 10/7/13

ROUTE F.A.P. RTE. 365 DESCRIPTION IL Route 56 at IL Route 53 Culverts, IDOT Project No. D-91-612-11, Contract No. 60P75 LOGGED BY NW

SECTION 634X-N-3 LOCATION SE 1/4, SEC. 26, TWP. T39N, RNG. R10E, 3<sup>rd</sup> PM

COUNTY DuPage DRILLING METHOD Hollow Stem Auger HAMMER TYPE Diedrich Automatic

STRUCT. NO.	STATION	BORING NO.	OFFSET	GROUND SURFACE ELEV.	DEPTH (ft)	BLOW COUNT (blows/ft)	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BLOW COUNT (blows/ft)	UCS (tsf)	MOISTURE (%)
SN 022-C005	Sta. 173+14.64 to Sta. 179+00	CB-16	78.80ft Right	685.70					Surface Water Elev. n/a ft Stream Bed Elev. n/a ft				
									Groundwater Elev.: First Encounter 671.7 ft Upon Completion 668.7 ft After Hrs. ft				
					685.20				SAND & GRAVEL-brown-loose to medium dense (continued)				
					682.70				CLAY LOAM-dark brown-hard (Fill)				
					682.70				CLAY-brown-very stiff				
					677.70				CLAYEY SAND & GRAVEL-brown-loose to medium dense				
					670.20				SAND & GRAVEL-brown-loose to medium dense				
					650.20				SILT SAND & GRAVEL-gray-medium dense				
					650.20				SILT LOAM-gray-dense				
					645.70				End Of Boring @ -40.0'. Boring backfilled with cuttings.				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)



GSJ Job No. 12195

### SOIL BORING LOG

Page 1 of 1

Date 10/7/13

ROUTE F.A.P. RTE. 365 DESCRIPTION IL Route 56 at IL Route 53 Culverts, IDOT Project No. D-91-612-11, Contract No. 60P75 LOGGED BY NW

SECTION 634X-N-3 LOCATION SE 1/4, SEC. 26, TWP. T39N, RNG. R10E, 3<sup>rd</sup> PM

COUNTY DuPage DRILLING METHOD Hollow Stem Auger HAMMER TYPE Diedrich Automatic

STRUCT. NO.	STATION	BORING NO.	OFFSET	GROUND SURFACE ELEV.	DEPTH (ft)	BLOW COUNT (blows/ft)	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BLOW COUNT (blows/ft)	UCS (tsf)	MOISTURE (%)
SN 022-C005	Sta. 173+14.64 to Sta. 179+00	CB-17	103.10ft Right	685.70					Surface Water Elev. n/a ft Stream Bed Elev. n/a ft				
									Groundwater Elev.: First Encounter 671.7 ft Upon Completion 671.7 ft After Hrs. ft				
					685.20				SAND & GRAVEL-brown-medium dense (continued)				
					682.70				CLAY LOAM-dark brown-loose (Fill)				
					680.20				SILTY CLAY-dark brown to black-stiff to very stiff				
					672.70				SILT LOAM to LOAM-brown-loose				
					670.20				SILT CLAY LOAM-gray-loose				
					667.70				SAND & GRAVEL-brown-medium dense				
					645.70				End Of Boring @ -40.0'. Boring backfilled with cuttings.				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)

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USER NAME =	DESIGNED - TJ	REVISED -
PLOT SCALE =	CHECKED - JJI	REVISED -
PLOT DATE = 2/1/2024	DRAWN - TJ	REVISED -
	CHECKED - JJI	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BORING LOGS - VI

SHEET NO. 31 OF 32 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	386
CONTRACT NO. 60P75			ILLINOIS FED. AID PROJECT	



GSI Job No. 12195

### SOIL BORING LOG

Page 1 of 1

Date 10/7/13

ROUTE F.A.P. RTE. 365 DESCRIPTION IL Route 56 at IL Route 53 Culverts, IDOT Project No. D-91-612-11, Contract No. 60P75 LOGGED BY NW

SECTION 634X-N-3 LOCATION SE 1/4, SEC. 26, TWP. T39N, RNG. R10E, 3<sup>rd</sup> PM

COUNTY DuPage DRILLING METHOD Hollow Stem Auger HAMMER TYPE Diedrich Automatic

STRUCT. NO. Station	BORING NO. Station Offset Ground Surface Elev.	DEPTH (ft)	BLOW (/6")	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BLOW (/6")	UCS (tsf)	MOISTURE (%)
SN 022-C005 Sta. 173+14.64 to Sta. 179+00	CB-18 178+68 72.70ft Right 682.70					6.0" TOPSOIL-black CLAY LOAM-dark brown & black-very stiff to hard (Fill)				
		2								
		3	3.0	20						
		5	P							
		4								
		5	4.5	16						
		6	P							
		3								
		4	2.8	23						
		4	P							
		3								
		3	1.5	27						
		3	P							
		10								
		2								
		2		6						
		3								
		2		25						
		2								
		15								
		7		11						
		5								
		15								
		11		8						
		9								
		20								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)



GSI Job No. 12195

### SOIL BORING LOG

Page 1 of 1

Date 10/9/13

ROUTE F.A.P. RTE. 365 DESCRIPTION IL Route 56 at IL Route 53 Culverts, IDOT Project No. D-91-612-11, Contract No. 60P75 LOGGED BY NW

SECTION 634X-N-3 LOCATION SE 1/4, SEC. 26, TWP. T39N, RNG. R10E, 3<sup>rd</sup> PM

COUNTY DuPage DRILLING METHOD Hollow Stem Auger HAMMER TYPE Diedrich Automatic

STRUCT. NO. Station	BORING NO. Station Offset Ground Surface Elev.	DEPTH (ft)	BLOW (/6")	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BLOW (/6")	UCS (tsf)	MOISTURE (%)
SN 022-C006 Sta. 173+00	CB-19 172+46 52.90ft Left 688.00					12.0" CRUSHED ASPHALT & STONE CLAY LOAM-stiff to very stiff (Fill)				
		4								
		4	3.0	22						
		6	P							
		2								
		3	1.5	15						
		6	P							
		2								
		2	1.3	22						
		3	P							
		2								
		4	3.0	11						
		5	P							
		5								
		6	4.5	15						
		7	P							
		9								
		6	1.8	13						
		6	P							
		4								
		6		14						
		7								
		15								
		4	1.0	14						
		5	B							
		20								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)  
BBS, from 137 (Rev. 8-99)

FILE NAME = W:\191-134\_IDOT\_IL\_53\_at\_IL\_56\CADD\_Sheets\Structural\04\_Culverts\ID160P75\_32\_Boring\_Logs\_7.dgn

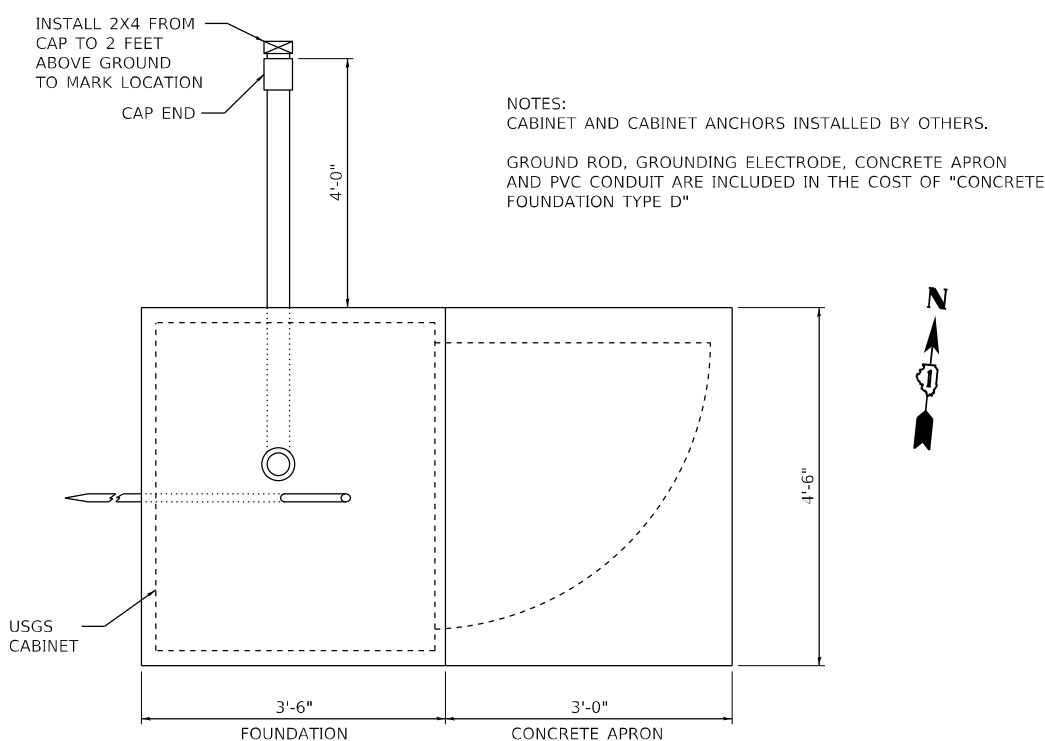


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CHECKED - JJI	REVISED -	
PLOT SCALE =	DRAWN - TJ	REVISED -
PLOT DATE = 2/1/2024	CHECKED - JJI	REVISED -

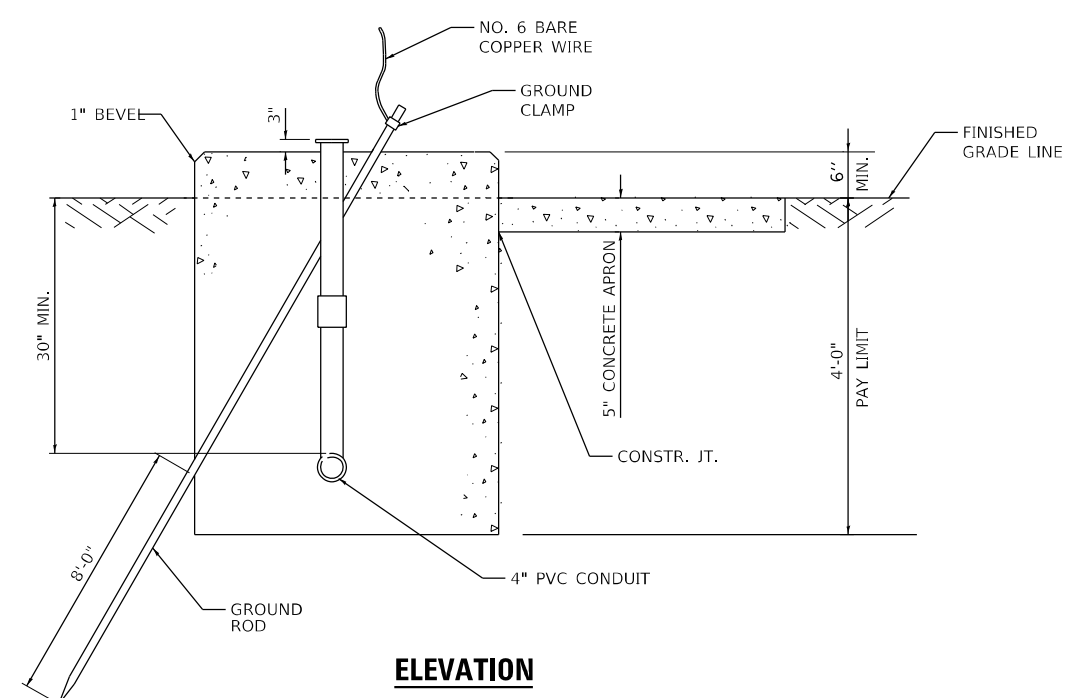
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BORING LOGS - VII  
SHEET NO. 32 OF 32 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DuPAGE	529	387
CONTRACT NO. 60P75				
ILLINOIS FED. AID PROJECT				

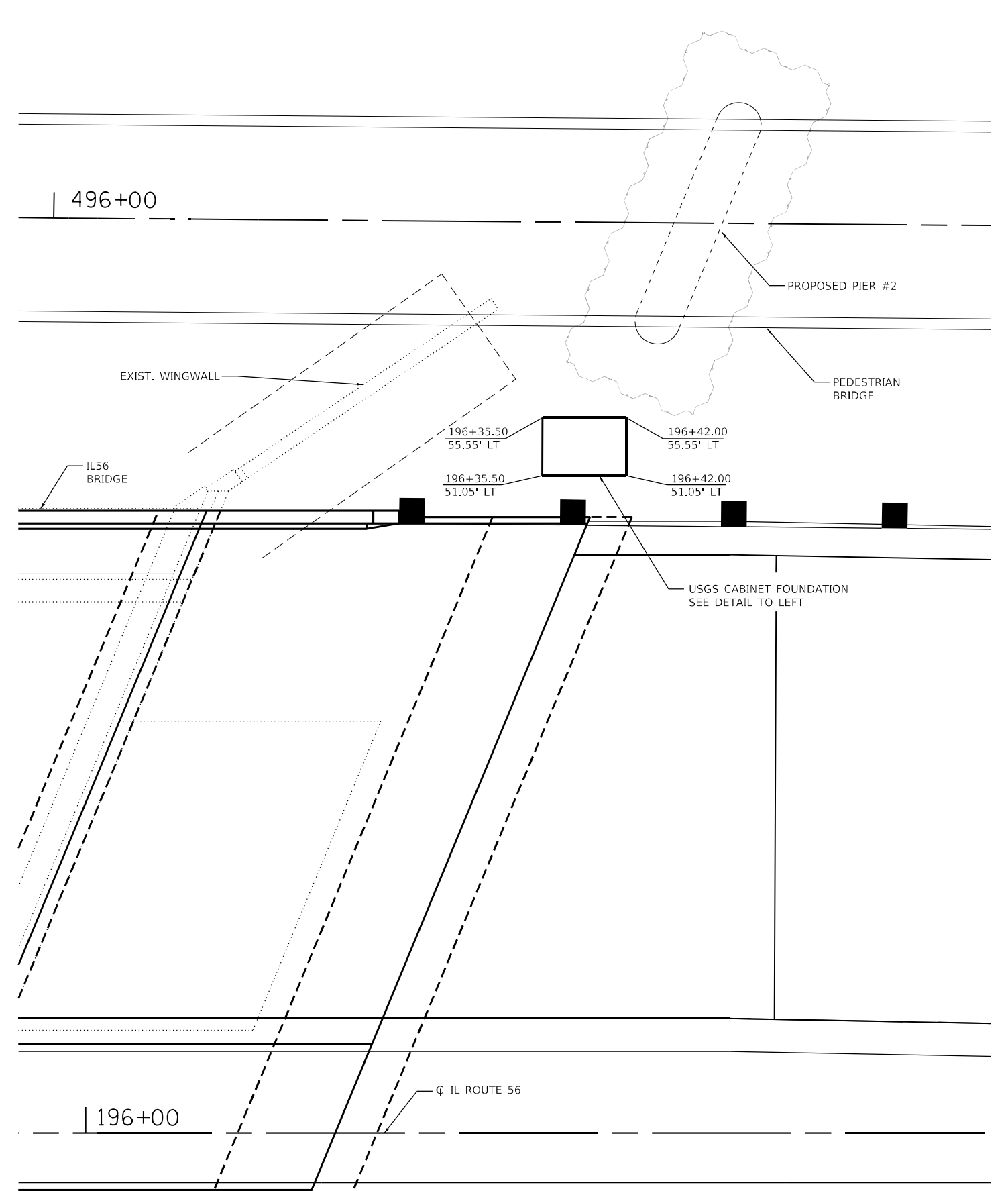


**TOP VIEW**



**ELEVATION**

**TYPE D  
FOR GROUND MOUNTED  
USGS CABINET**



**PLAN**

MODEL: D:\p7\it\11\11\DOT\_IL\_53\_AT\_IL\_56\CADD\_Sheets\160775\_SHT\_DETAIL\_USGS.dgn  
FILE NAME: W:\11\11\DOT\_IL\_53\_AT\_IL\_56\CADD\_Sheets\160775\_SHT\_DETAIL\_USGS.dgn



USER NAME = SUSER5	DESIGNED - JJI	REVISED -
PLOT SCALE = 10,0005 * / in.	DRAWN - GM	REVISED -
PLOT DATE = 2/1/2024	CHECKED - NC	REVISED -
	DATE - 01/18/2024	REVISED -

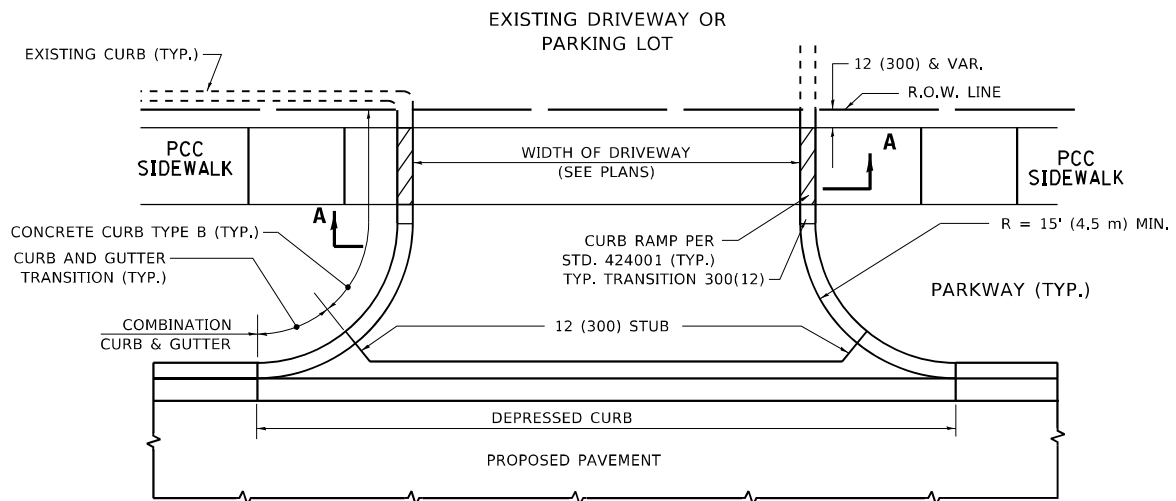
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 53 AT IL ROUTE 56  
USGS CABINET FOUNDATION**

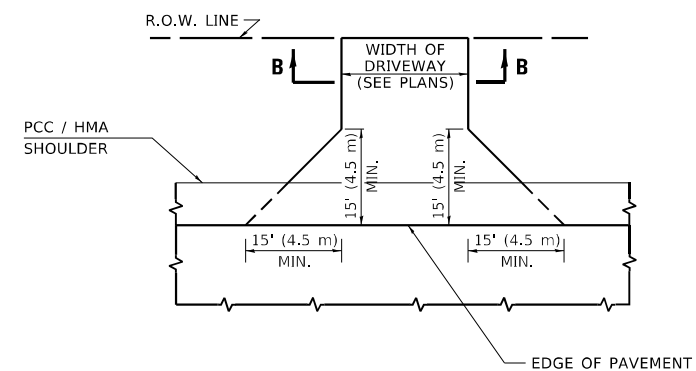
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DUPAGE	529	388
CONTRACT NO. 60P75				
ILLINOIS FED. AID PROJECT				

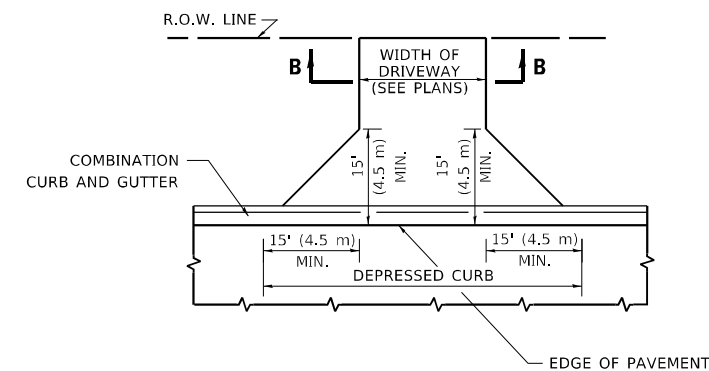




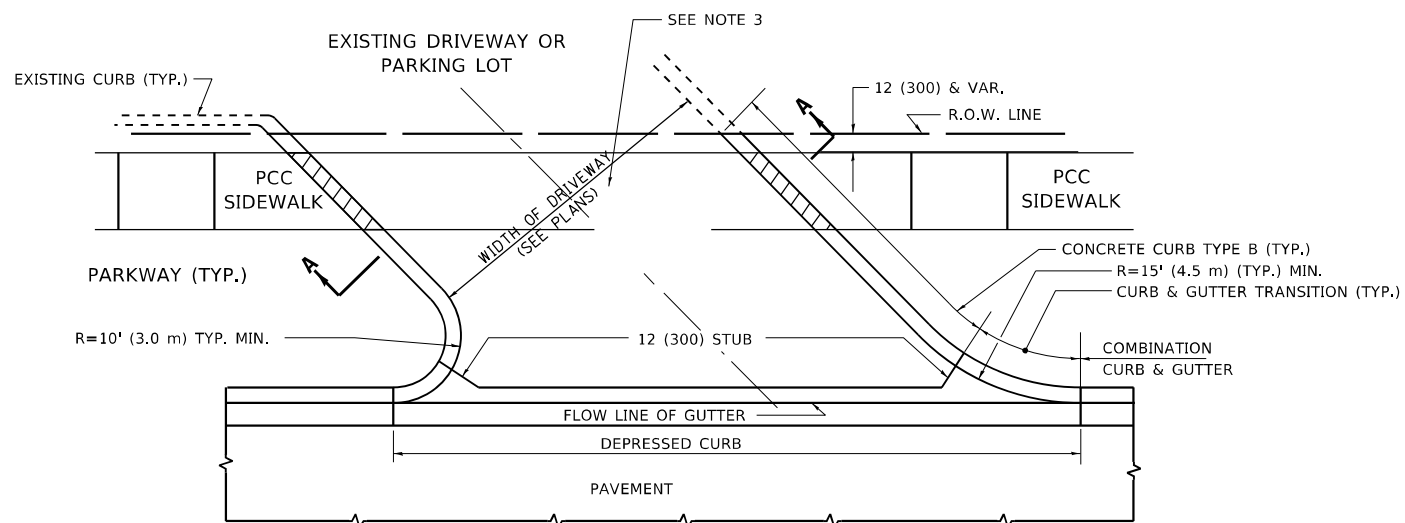
**WITH CONCRETE CURB, TYPE B**



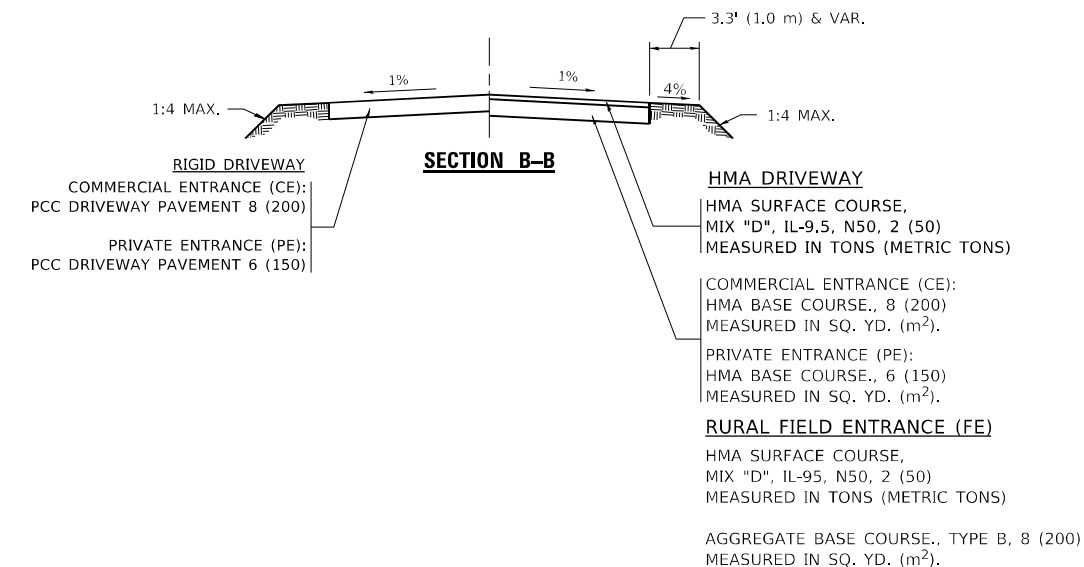
**ADJACENT TO PCC /HMA SHOULDER**



**ADJACENT TO CURB AND GUTTER**



**WITH CONCRETE CURB, TYPE B**



**RIGID DRIVEWAY**  
 COMMERCIAL ENTRANCE (CE):  
 PCC DRIVEWAY PAVEMENT 8 (200)  
 MEASURED IN SQ. YD. (m<sup>2</sup>)  
 PRIVATE ENTRANCE (PE):  
 PCC DRIVEWAY PAVEMENT 6 (150)  
 MEASURED IN SQ. YD. (m<sup>2</sup>)

**SECTION A-A**

**HMA DRIVEWAY**  
 HMA SURFACE COURSE,  
 MIX "D", IL-9,5, N50, 2 (50)  
 MEASURED IN TONS (METRIC TONS)  
 COMMERCIAL ENTRANCE (CE):  
 HMA BASE COURSE, 8 (200)  
 MEASURED IN SQ. YD. (m<sup>2</sup>).  
 PRIVATE ENTRANCE (PE):  
 HMA BASE COURSE, 6 (150)  
 MEASURED IN SQ. YD. (m<sup>2</sup>).  
 25 (1) PREFORMED  
 EXPANSION JOINT  
 FILLER (TYP.)

**GENERAL NOTES**

1. DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.
2. COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED.

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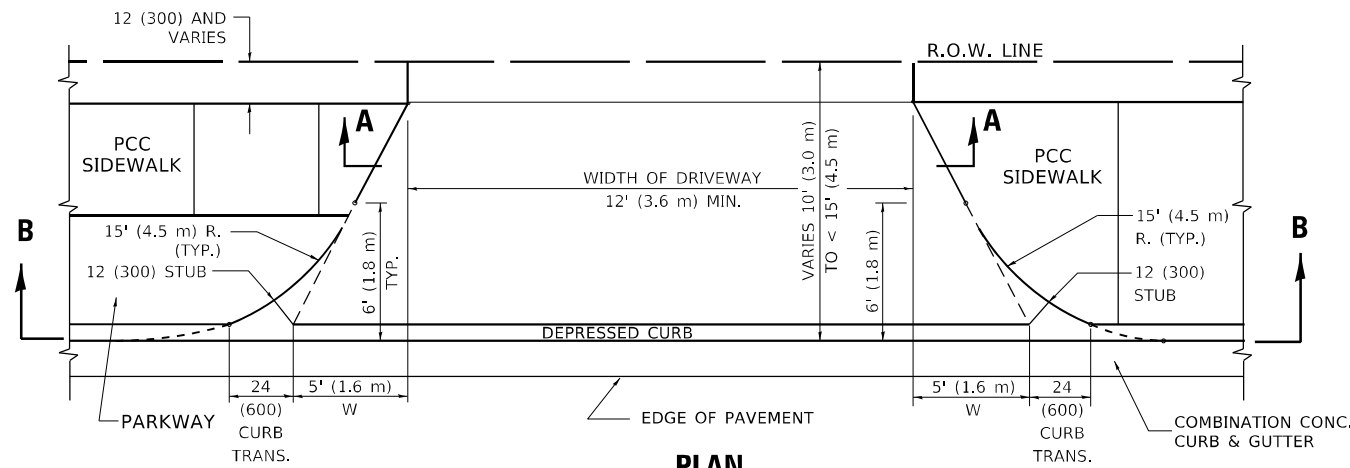
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	DRAWN -	REVISED - R. BORO 09-06-11
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED - K. SMITH 08-28-19
PLOT DATE = 11/18/2022	DATE - 11-04-95	REVISED - K. SMITH 11-18-22

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

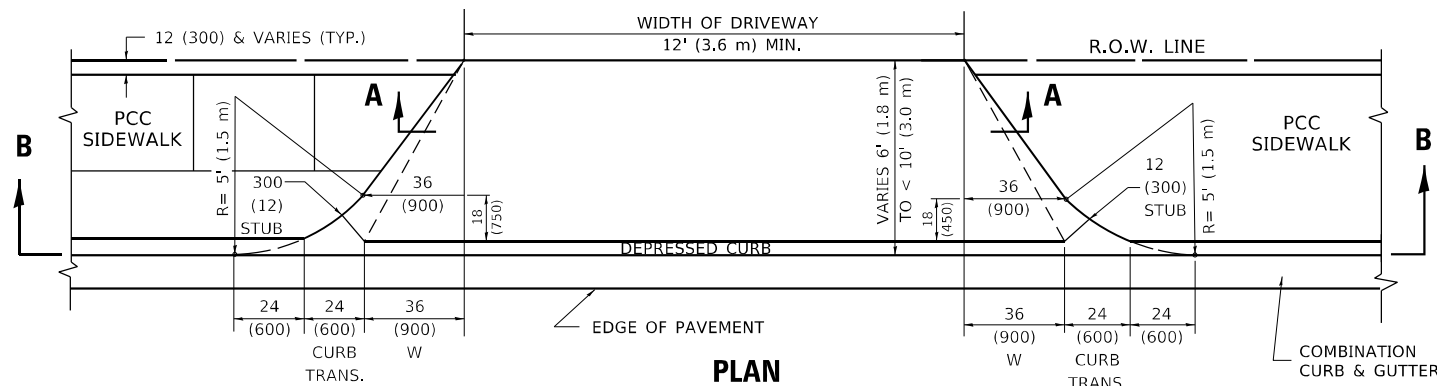
**DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W.  
 AND FACE OF CURB & EDGE OF SHOULDER ≥ 15'(4.5m)**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

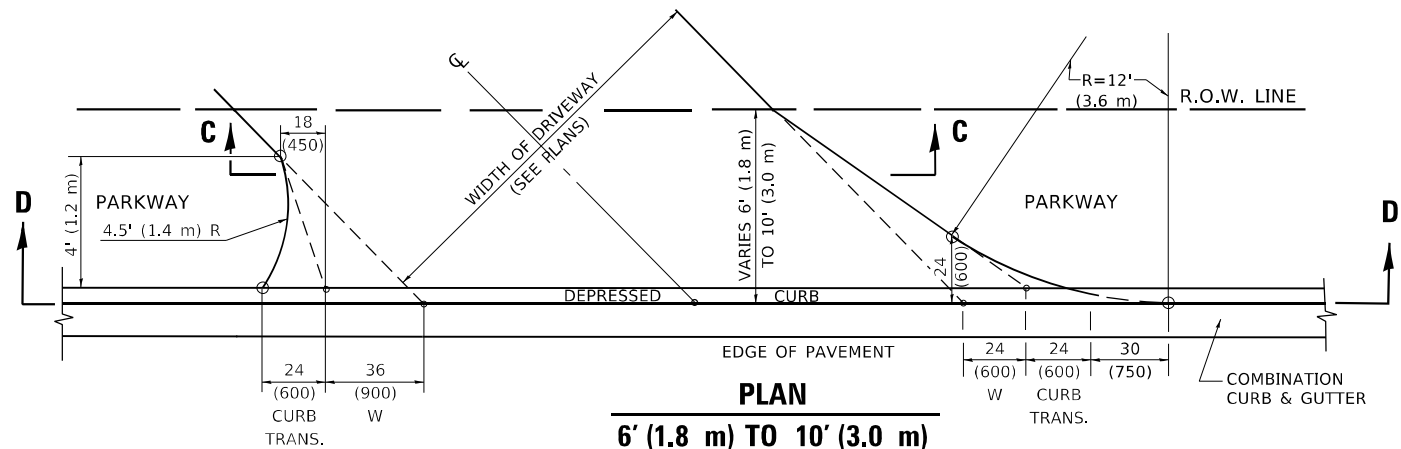
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BD400-01 (BD-01)			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				



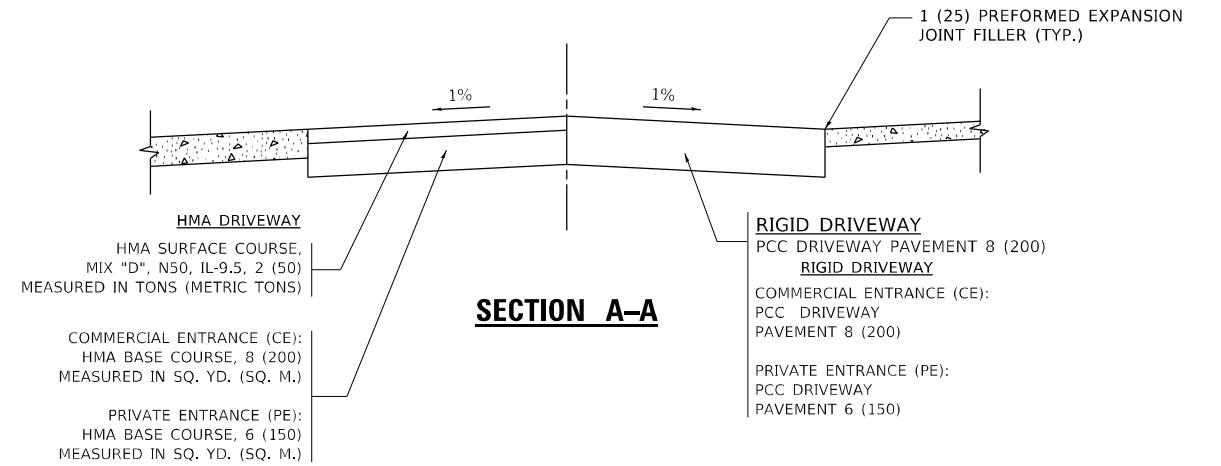
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10' (3.0 m) TO < 15' (4.5 m)



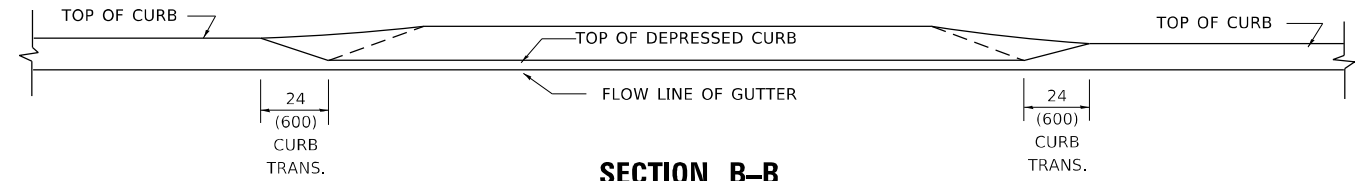
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6' (1.8 m) TO < 10' (3.0 m)



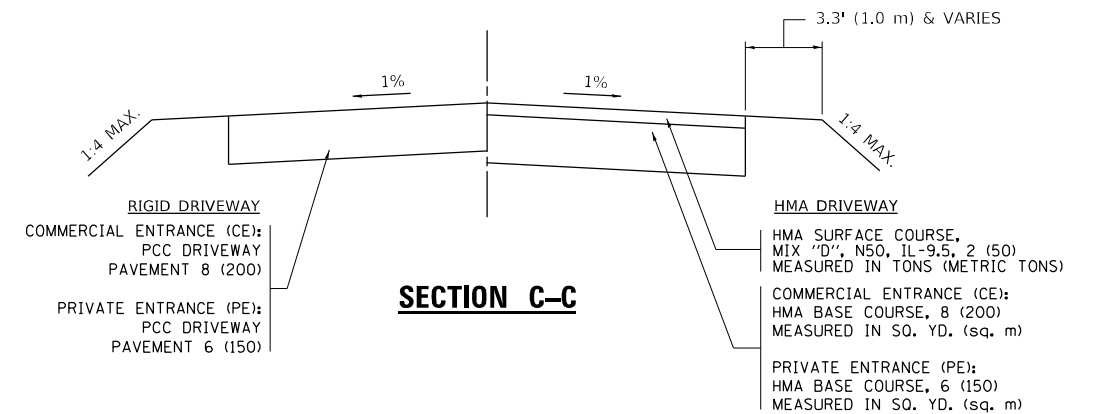
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6' (1.8 m) TO 10' (3.0 m)



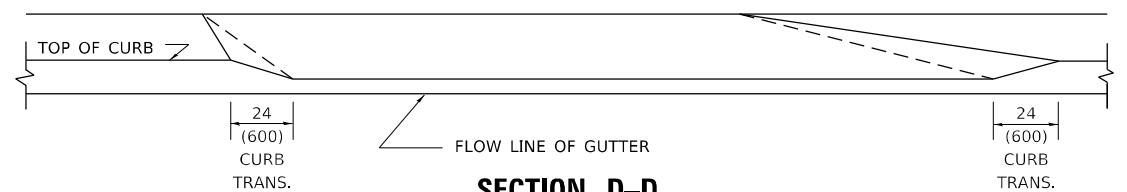
**SECTION A-A**



**SECTION B-B**



**SECTION C-C**



**SECTION D-D**

**GENERAL NOTES**

- DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.
- WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE PCC SIDEWALK SHALL EXTEND TO THE BACK OF CURB.
- "W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED.

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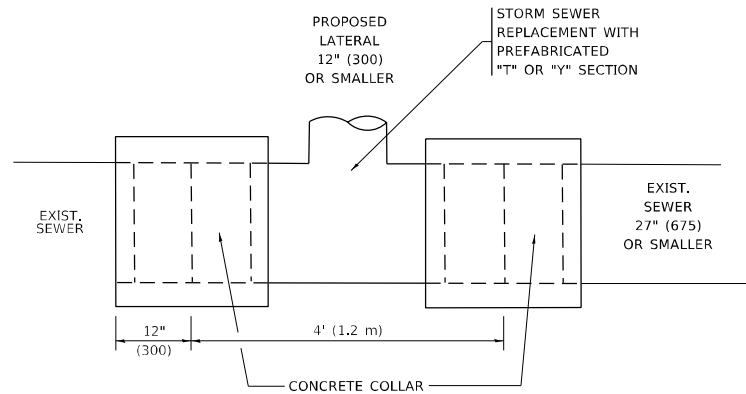
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PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED - K. SMITH 08-27-19
PLOT DATE = 11/18/2022	DATE - 11-06-95	REVISED - K. SMITH 11-18-22

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DRIVEWAY DETAILS**  
**DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5m)**

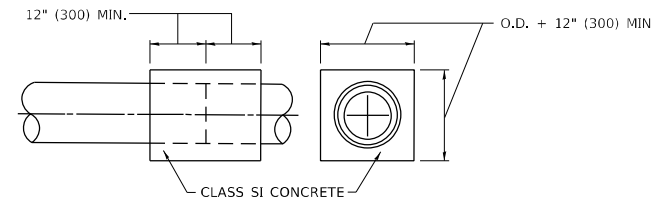
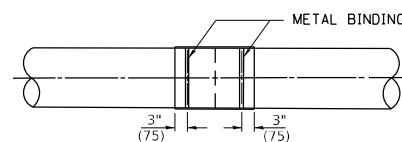
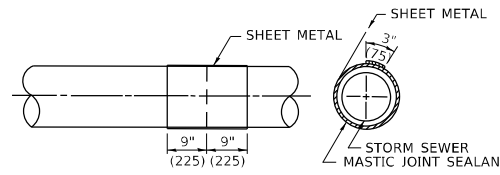
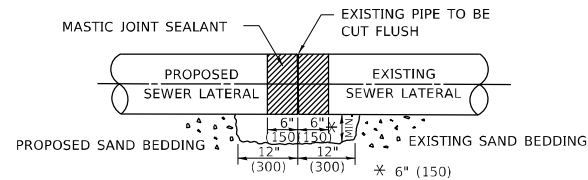
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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<b>BD400-02 (BD-02)</b>		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



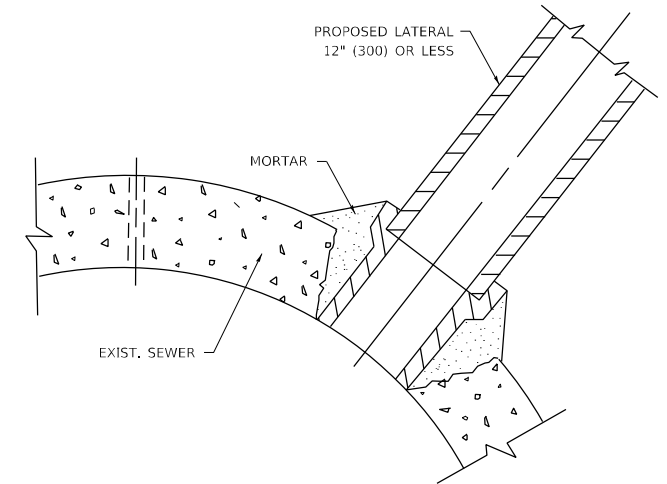
**DETAIL "A"**

LATERAL CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER



**DETAIL "B"**

CLASS SI CONCRETE COLLAR



**DETAIL "C"**

PROPOSED LATERAL CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER

**CONSTRUCTION SEQUENCE**

1. CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT, BRUSH AND CLEAN ALL PIPES.
2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
3. BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12' x 6' (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
4. CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERANCE OF THE PIPE PLUS 3" (75) LONG.
5. WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
6. LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
7. PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
8. WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
9. PLACE CLASS SI CONCRETE AROUND THE JOINT.

**NOTES:**

**MATERIAL**

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

**CONSTRUCTION METHODS**

- THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:
  - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".
  - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

**GENERAL**

- CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.
- CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

**BASIS OF PAYMENT**

- TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.
- REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.
- TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.
- CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

\* ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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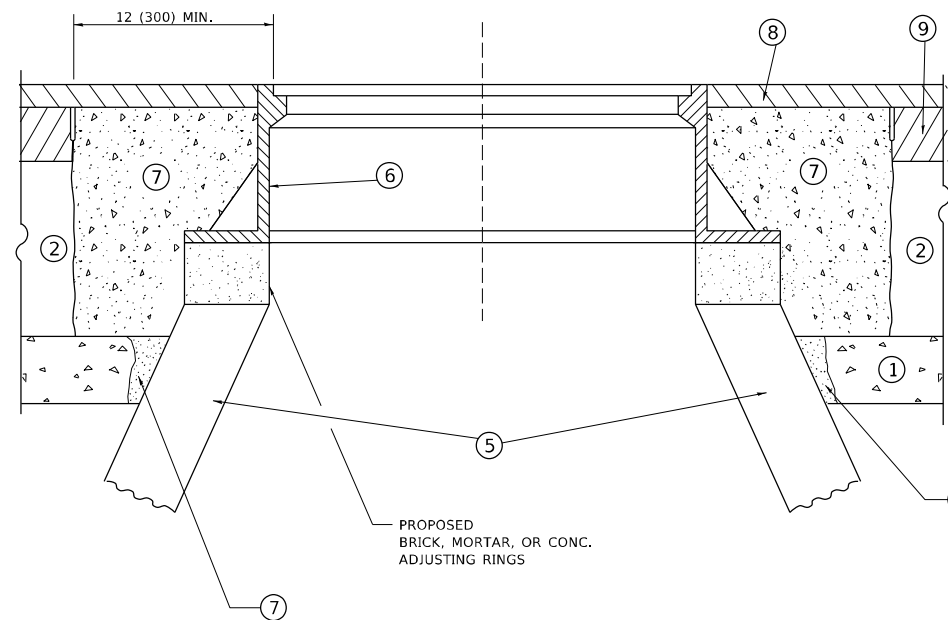
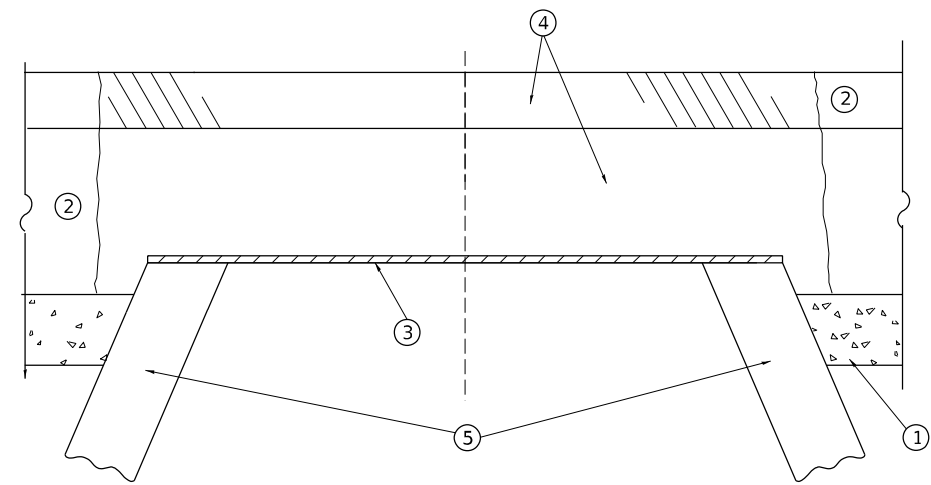
USER NAME = Lawrence,DeManche	DESIGNED - M. DE YONG	REVISED - R. SHAH 09-09-94
	DRAWN -	REVISED - R. SHAH 10-25-94
PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED - R. SHAH 06-12-96
PLOT DATE = 11/18/2022	DATE - 07-25-90	REVISED - K. SMITH 11-18-22

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAIL OF STORM SEWER  
CONNECTION TO EXISTING SEWER**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DUPAGE	529	391
BD500-01 (BD-07)			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				



**DETAILS FOR FRAMES AND LIDS ADJUSTMENT  
WITH MILLING**

**NOTES**

1. EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
2. IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.
3. CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.
4. THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
5. THE CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL DEVICES BY THE END OF EACH WORK SHIFT.

**CONSTRUCTION PROCEDURES**

**STAGE 1 (BEFORE PAVEMENT MILLING)**

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND HMA SURFACE MIX APPROVED BY THE ENGINEER. (MIN. 3 (80) HMA TO REMAIN AFTER MILLING).

**STAGE 2 (AFTER PAVEMENT MILLING)**

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-2\* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

\* UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

**LEGEND**

- |  |                               |
|--|-------------------------------|
| ① SUB-BASE GRANULAR MATERIAL                 | ⑥ FRAME AND LID (SEE NOTES)   |
| ② EXISTING PAVEMENT                          | ⑦ CLASS PP-2* CONCRETE        |
| ③ 36 (900) DIAMETER METAL PLATE              | ⑧ PROPOSED HMA SURFACE COURSE |
| ④ PROPOSED CRUSHED STONE AND HMA SURFACE MIX | ⑨ PROPOSED HMA BINDER COURSE  |
| ⑤ EXISTING STRUCTURE                         |                               |

**LOCATION OF STRUCTURES**

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

**BASIS OF PAYMENT**

1. REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."
2. THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.
3. NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.
4. WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

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	DRAWN -	REVISED - R. BORO 12-06-11
PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED - K. SMITH 11-18-22
PLOT DATE = 9/15/2023	DATE - 10-25-94	REVISED - K. SMITH 09-15-23

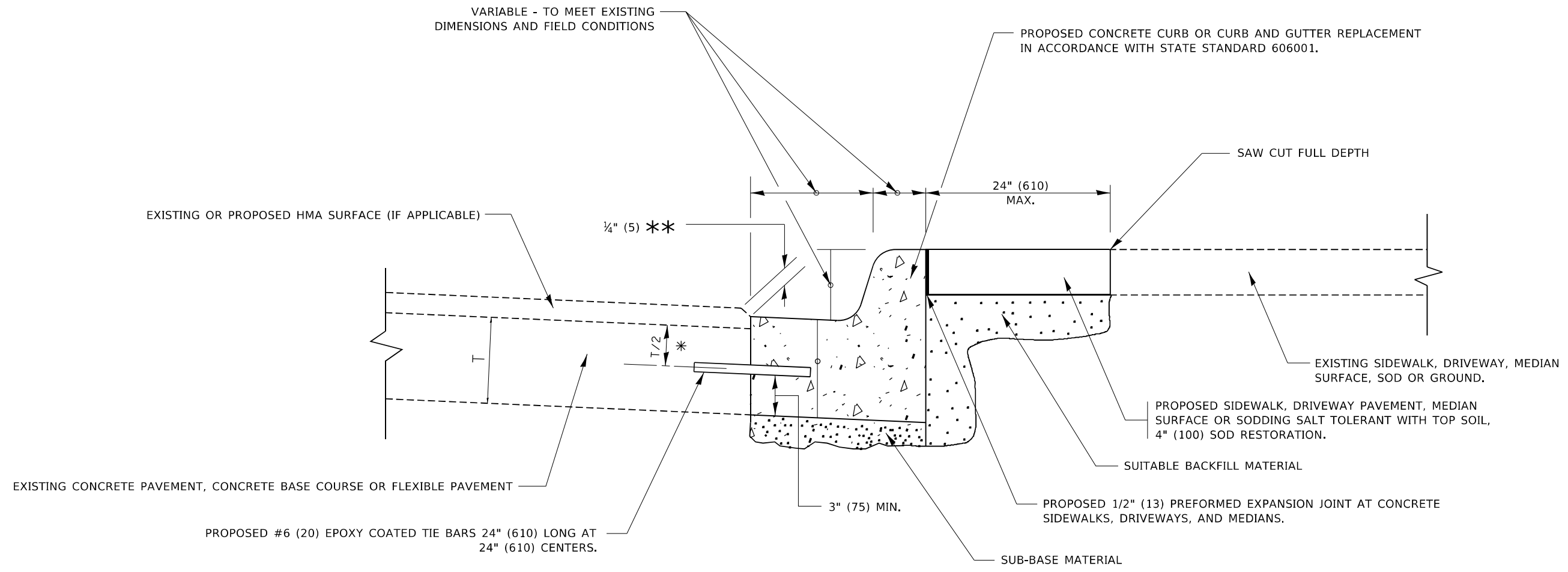
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAILS FOR  
FRAMES AND LIDS ADJUSTMENT WITH MILLING**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DUPAGE	529	392
BD600-03 (BD-08)			CONTRACT NO.	
ILLINOIS		FED. AID PROJECT		





- \* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
- \*\* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

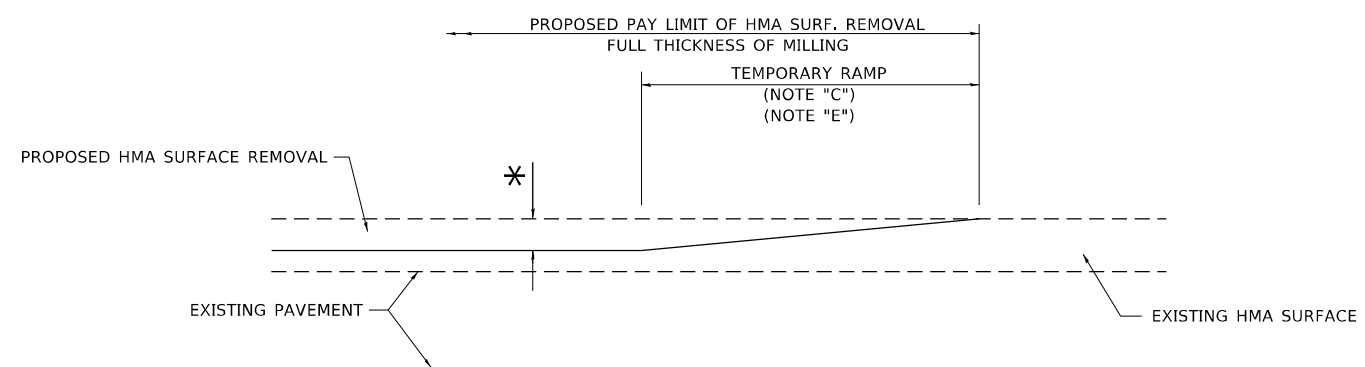
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	DRAWN -	REVISED - M. GOMEZ 01-22-01
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - R. BORO 12-15-09
PLOT DATE = 7/11/2019	DATE - 03-11-94	REVISED - K. SMITH 07-11-19

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT</b>			
SCALE: NONE	SHEET 1	OF 1 SHEETS	STA. TO STA.

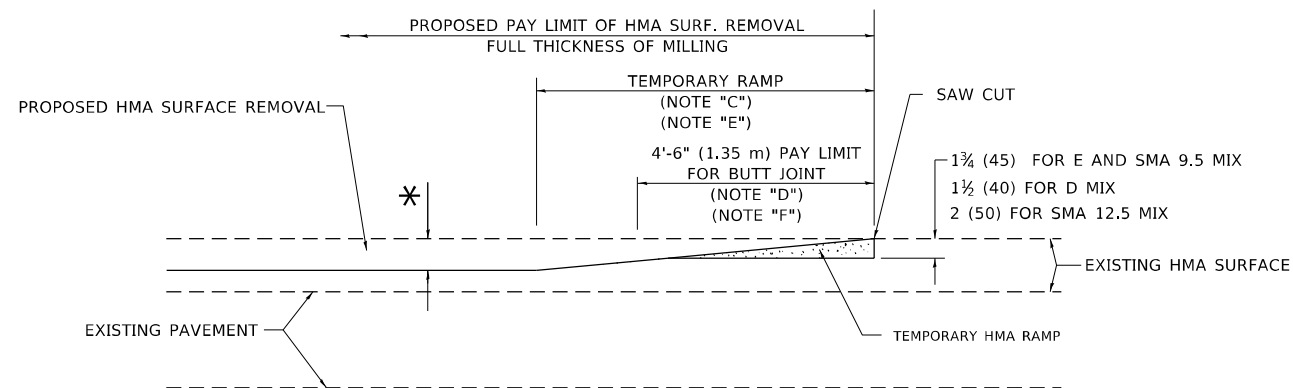
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365	(56&57)R-4	DUPAGE	529	394
<b>BD600-06 (BD-24)</b>			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				



**MILLED TEMPORARY RAMP**

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**OPTION 1**

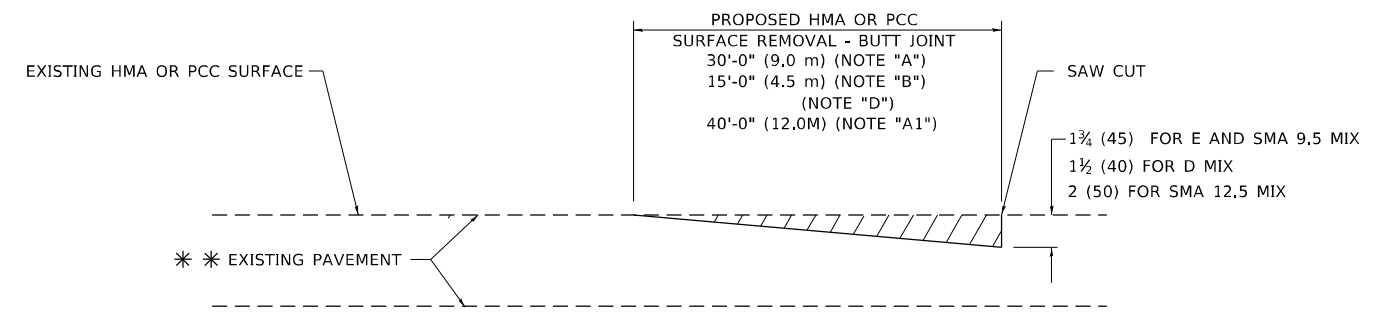


**HMA CONSTRUCTED TEMPORARY RAMP**

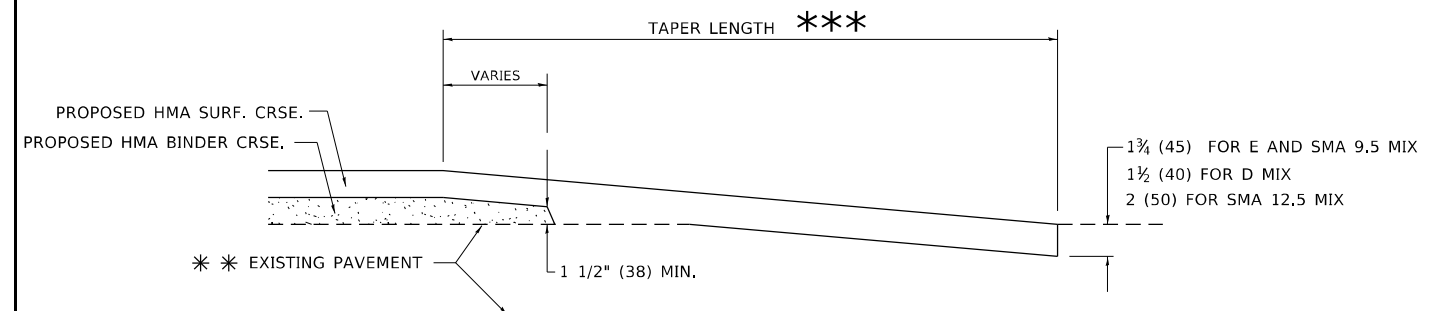
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

**OPTION 2**

**TYPICAL TEMPORARY RAMP**



**BUTT JOINT DETAIL**



**HMA TAPER DETAIL**

**TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY**

\*\*\* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

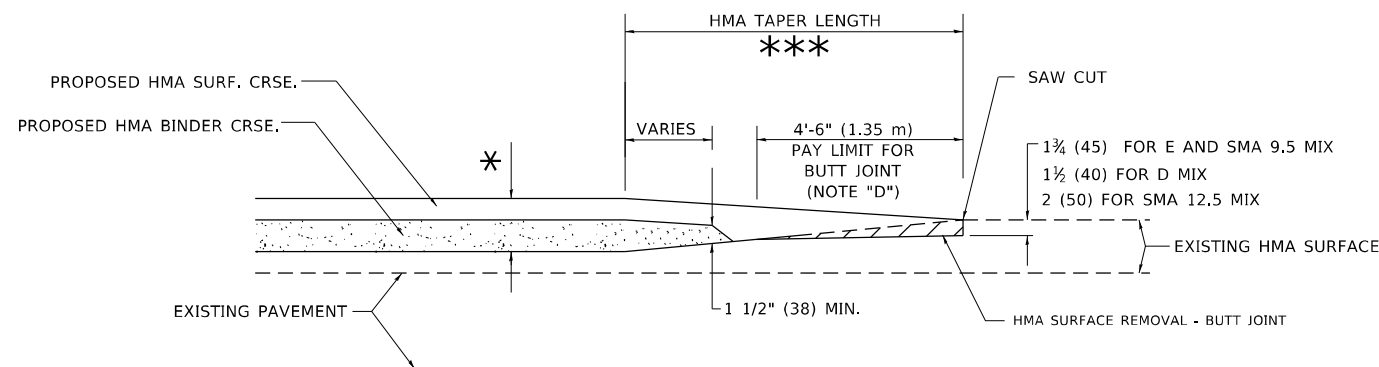
**GENERAL NOTES**

- A. MAINLINE ARTERIAL ROADWAYS AND MAJOR SIDE ROADS.
- A1. INTERSTATES
- B. MINOR SIDE ROADS.
- C. THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D. THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E. TAPER THE TEMP. RAMP AT A RATE OF 3' - 4" (1.02m) PER 1 INCH (25 mm) OF MILLING THICKNESS.  
\* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- F. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".  
\*\*\* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")  
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

**BASIS OF PAYMENT**

- 1. THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".
- 2. THE TEMPORARY RAMP AND SAW CUT SHALL BE INCLUDED IN THE UNIT COST FOR HMA OR PCC SURFACE REMOVAL-BUTT JOINT.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.



**BUTT JOINT AND HMA TAPER**

**TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING**

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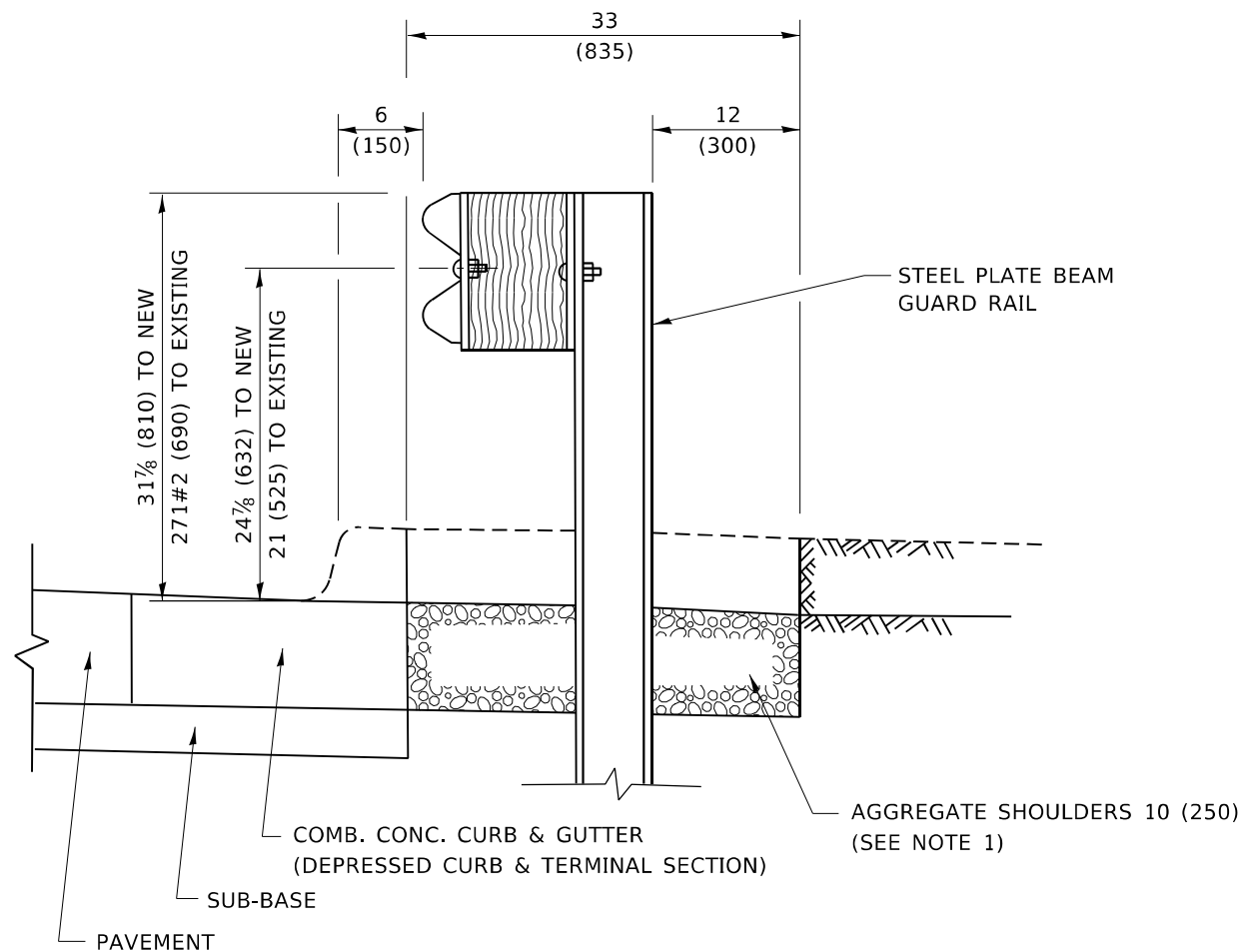
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	DRAWN -	REVISED - M. GOMEZ 04-06-01
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED - R. BORO 01-01-07
PLOT DATE = 11/18/2022	DATE - 06-13-90	REVISED - K. SMITH 11-18-22

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND  
HMA TAPER DETAILS

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DUPAGE	529	395
BD400-05 BD-32		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				



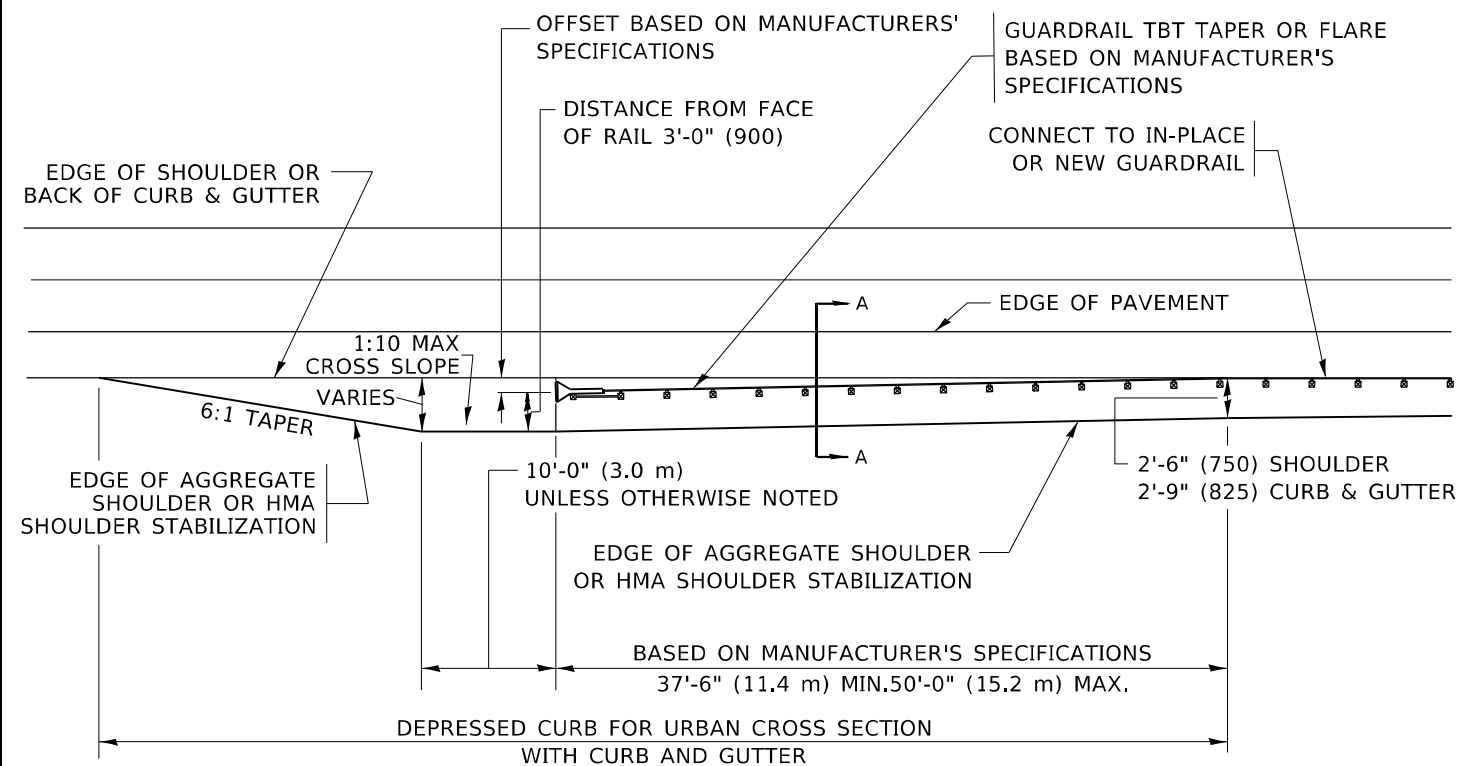
**SECTION A-A**

**NOTES:**

1. THE AGGREGATE SHOULDER, 10 (250) OR HMA SHOULDER, 6 (150) (IF REQUIRED) SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL.
2. "EXISTING" GUARDRAIL REFERS TO CONNECTING TERMINAL SECTION TO GUARD RAILING PRIOR TO THE MIDWEST GUARDRAIL SYSTEM.
3. THE CONTRACTOR SHALL VERIFY THE TYPE/HEIGHT OF GUARDRAIL IN-PLACE BEFORE ORDERING THE NEW TERMINAL SECTION. COST INCLUDED WITH THE COST OF THE TERMINAL. THE EXISTING GUARDRAIL HEIGHT SHALL TRANSITION TO MATCH THE NEW TERMINAL END SECTION AND SHALL BE PAID FOR AS VERTICAL ADJUSTMENT OF EXISTING GUARDRAIL.

**DETAILS FOR STEEL PLATE BEAM  
GUARD RAIL ADJACENT TO CURB AND GUTTER**

**[FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]**



**DEPRESSED CURB AND GUTTER AND  
SHOULDER TREATMENT AT TBT TY. 1 SPL.**

AGGREGATE SHOULDER, 10 (250) WILL BE PAID ACCORDING TO SECTION 481.

HMA SHOULDERS 6 (150) (IF REQUIRED) WILL BE PAID ACCORDING TO SECTION 482.

COMB. CONC. C&G, STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

TBT = TRAFFIC BARRIER TERMINAL  
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)  
UNLESS OTHERWISE SHOWN.

MODEL: Default  
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USER NAME = Lawrence,DeManche	DESIGNED - M. DE YONG	REVISED - R. BORO 09-14-2009
	DRAWN -	REVISED - R. BORO 08-06-2012
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED - R. BORO 05-08-2015
PLOT DATE = 11/18/2022	DATE - 09-22-90	REVISED - K. SMITH 11-18-22

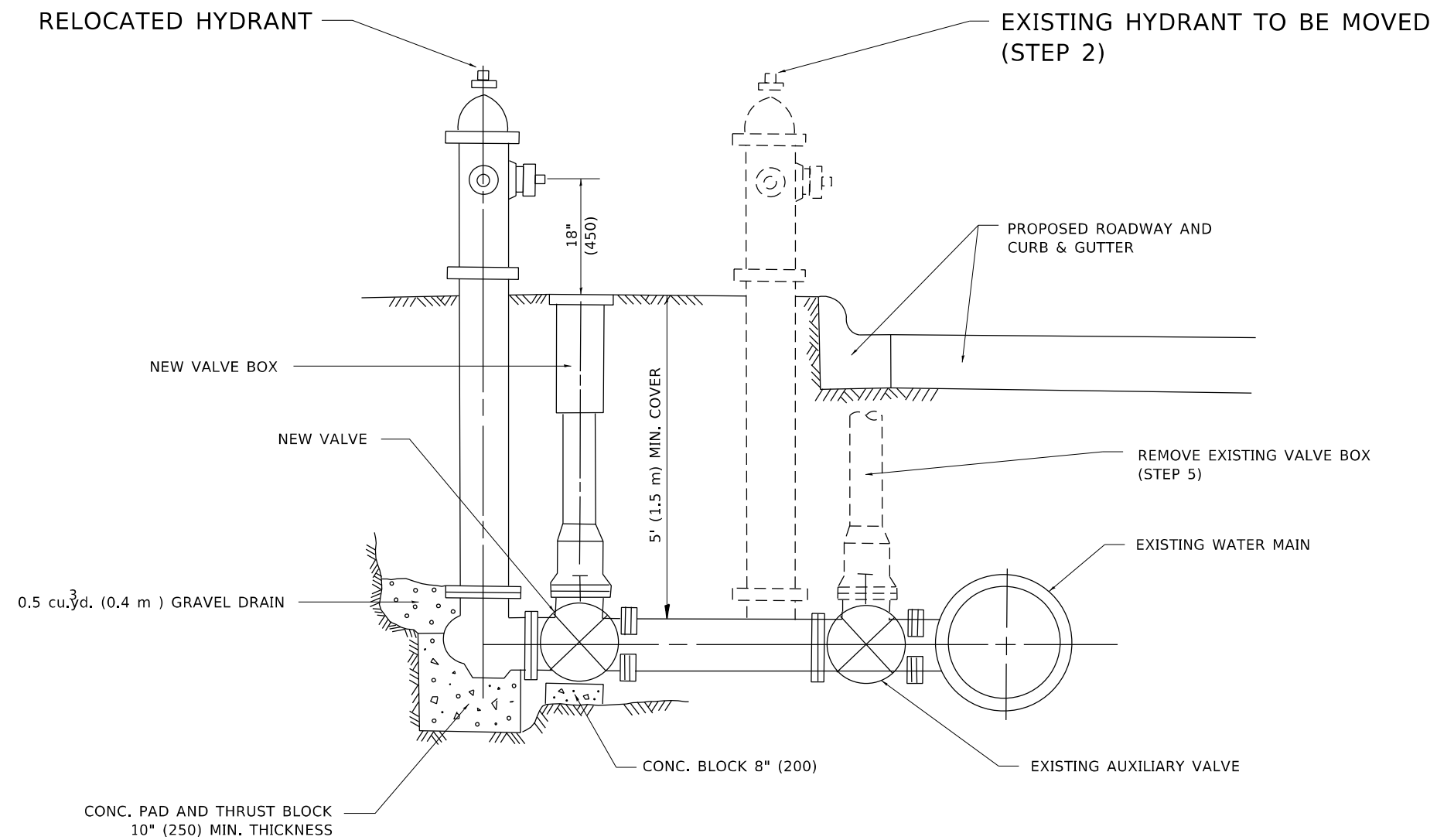
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAILS FOR DEPRESSED CURB & GUTTER AND  
SHOULDER TREATMENT AT TBT TY. 1 SPL.**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DUPAGE	529	396
<b>BD600-10 (BD-34)</b>		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				





**SEQUENCE OF CONSTRUCTION:**

1. CLOSE EXISTING VALVE.
2. REMOVE EXISTING HYDRANT.
3. INSTALL HYDRANT EXTENSION AND NEW VALVE.
4. RELOCATE EXISTING HYDRANT.
5. OPEN EXISTING VALVE, REMOVE BOX.
6. BACKFILL.
7. FLUSH AND TEST FOR CHLORIDE RESIDUAL AND PROVIDE TEST.

**NOTE:**

ALL WORK TO BE DONE IN ACCORDANCE WITH SECTION 564 OF THE STANDARD SPECIFICATIONS. NEW VALVE AND BOX SHALL BE SAME MAKE AND MODEL AS EXISTING.

# FIRE HYDRANT TO BE MOVED

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

MODEL: D:\default...  
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 PROJECT: ...  
 DATE: 11/18/2022

USER NAME = Lawrence,DeManche	DESIGNED -	REVISED - R. SHAH 09-09-94
	DRAWN -	REVISED - R. SHAH 10-25-94
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED - K. SMITH 11-18-22
PLOT DATE = 11/18/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**FIRE HYDRANT TO BE MOVED**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DUPAGE	529	397
<b>BD-36</b>			CONTRACT NO.	
ILLINOIS FED. AID PROJECT				

FRAME EXTENSION INTO PAVEMENT	INNER HOOP REINFORCEMENT DIAMETER	SEMI CIRCULAR FORM DIAMETER	OUTER HOOP REINFORCEMENT DIAMETER
UP TO 8" (200)	3'-6" (1.1 m)	4'-0" (1.2 m)	5'-0" (1.5 m)
> 8" (200) TO 14" (360)	4'-0" (1.2 m)	4'-6" (1.4 m)	5'-0" (1.5 m)

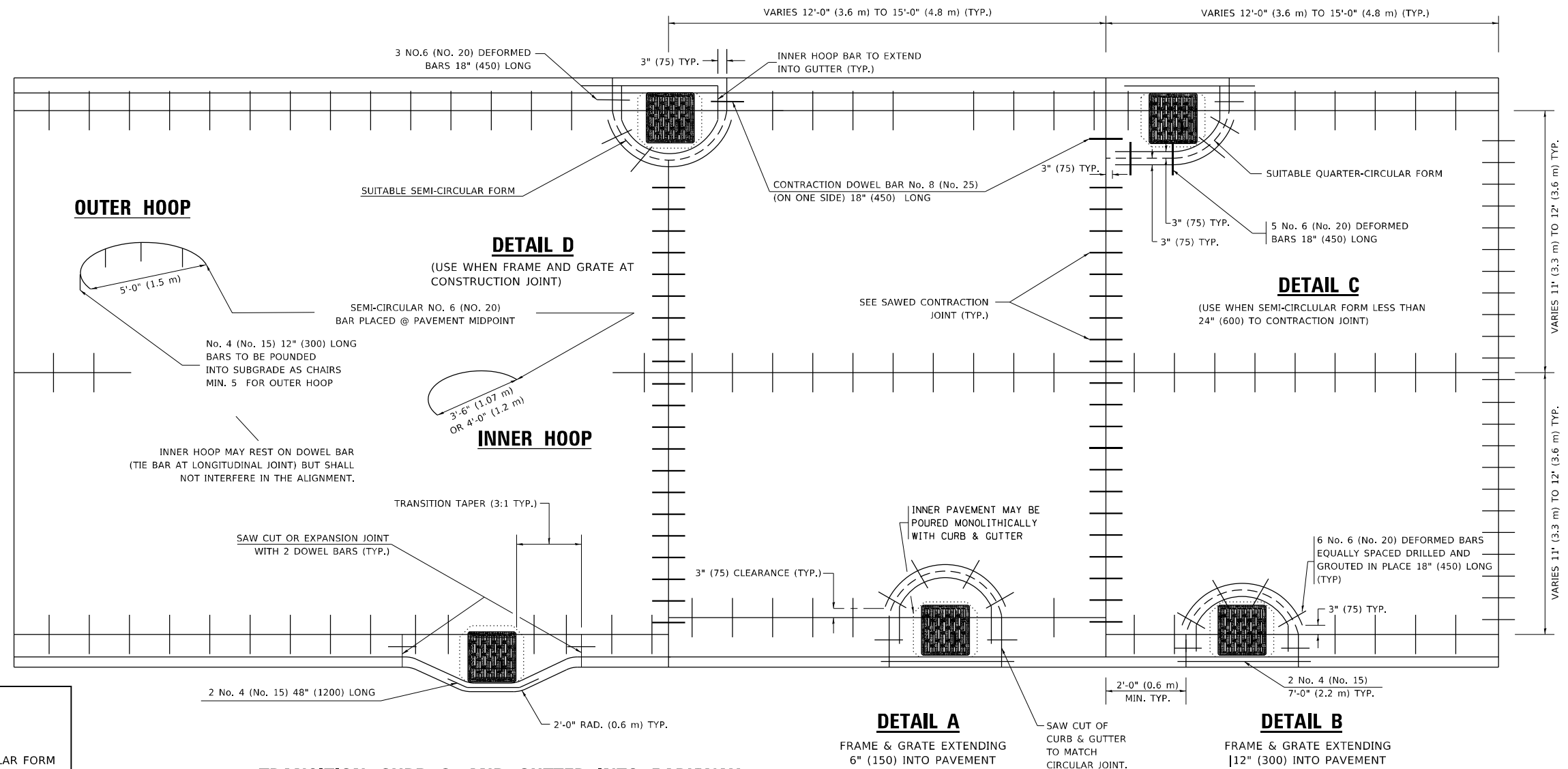
**GENERAL NOTES**

1. TRANSVERSE JOINTS MAY BE MOVED TO ACCOMMODATE ROUNDOUT, EDGE OF CIRCULAR JOINT SHALL BE MINIMUM 12" (300) FROM TRANSVERSE JOINT. RELOCATED TRANSVERSE JOINT SHALL BE CONTINUOUS FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
2. SEMI-CIRCULAR FORM SHALL BE REMOVED PRIOR TO DRILL AND GROUT OF TIE BARS.
3. ALL REINFORCED BARS SHALL BE EPOXY COATED.
4. DRILL AND GROUT IS PREFERRED, HOWEVER TIE BARS CAN BE POURED IN PLACE IF CLEARANCE IS PROVIDED TO OUTER EDGE OF FRAME. MINIMUM 2" (50) CLEARANCE.
5. WOOD SHIMS SHALL BE USED TO ADJUST ALL FRAMES. AFTER ADJUSTING MORTAR HAS CURED, THE WOOD SHIMS SHALL BE REMOVED AND THE VOIDS UNDER THE FRAMES FILLED WITH NON SHRINK GROUT.
6. HOOP REINFORCEMENT SHALL BE ONE PIECE CONSTRUCTION.
7. CIRCULAR FRAMES AND GRATES MAY BE SUBSTITUTED.
8. CURB DOWELS MUST BE PLACED LEVEL & TRUE TO ALLOW CONTRACTION MOVEMENT.

**BASIS OF PAYMENT**

1. THE ROUNDOUT AND ADDED REINFORCEMENT WILL NOT BE PAID SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE PAVEMENT.

**DESIGNER NOTE**  
THIS DETAIL IS TO BE USED WHEN THE GUTTER FLAG IS LESS THAN 24"



**TRANSITION CURB & AND GUTTER INTO PARKWAY  
(PREFERRED BECAUSE PAVING OF MAINLINE NOT AFFECTED.)**

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED

LEGEND	
.....	CASTING
-----	SUITABLE SEMI-CIRCULAR FORM

USER NAME = Lawrence,DeManche	DESIGNED - A. ABBAS	REVISED - T. MATOUSEK 10-02-00
	DRAWN - TOM MATOUSEK	REVISED - T. MATOUSEK 04-25-02
PLOT SCALE = 100,0000' / in.	CHECKED - A. ABBAS	REVISED - P. LAFLEUR 08-27-02
PLOT DATE = 11/18/2022	DATE - 01-04-99	REVISED - K. SMITH 11-18-22

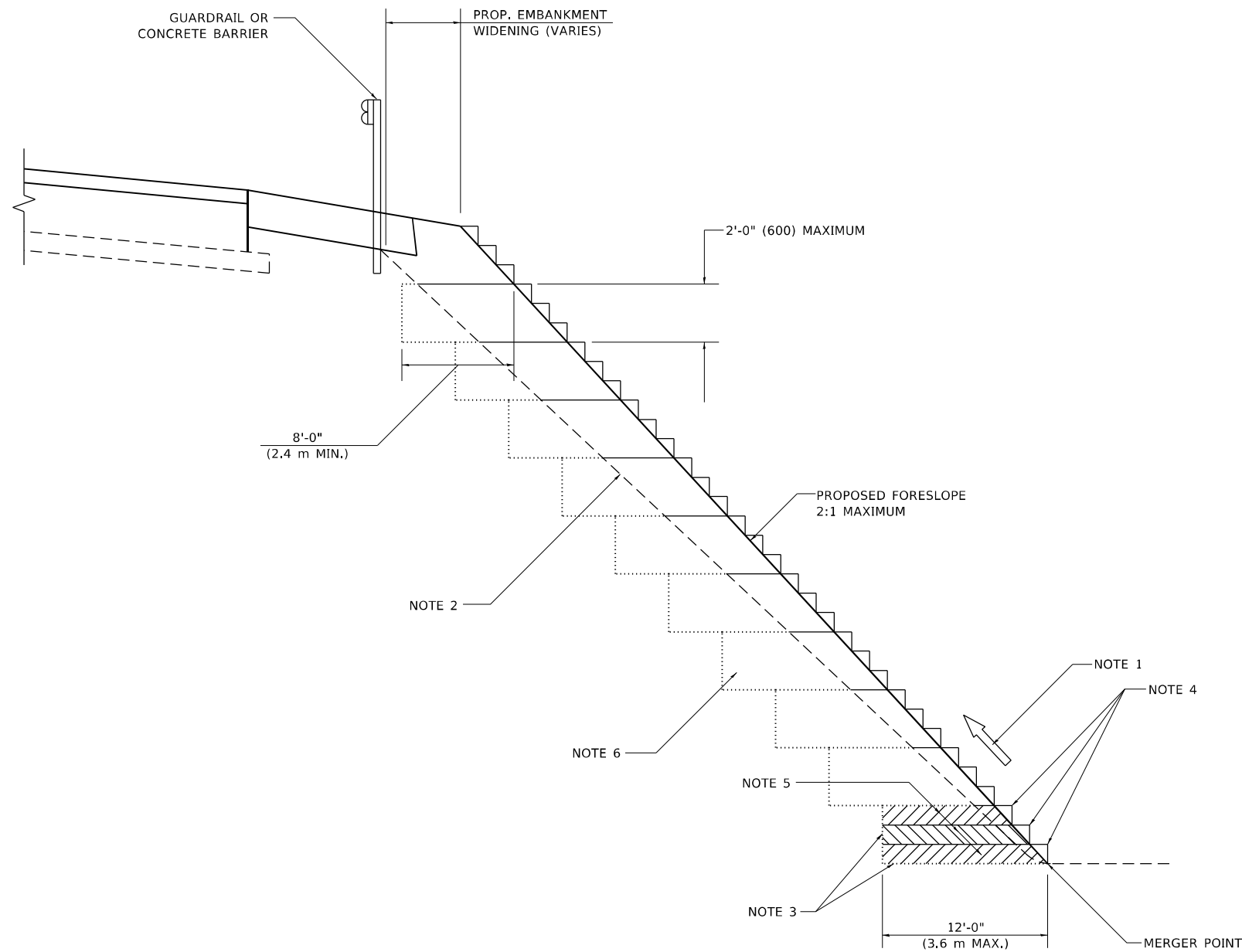
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PCC PAVEMENT ROUNDOUTS AT  
CURB AND GUTTER**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DUPAGE	529	398
<b>BD-48</b>			CONTRACT NO.	
ILLINOIS		FED. AID PROJECT		

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**TYPICAL BENCHING DETAIL  
FOR EMBANKMENT**

**GENERAL NOTES**

1. CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
2. EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
3. BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
4. TRIM TO FINAL SLOPE.
5. EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.

**BASIS OF PAYMENT**

1. EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)  
UNLESS OTHERWISE SHOWN.

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DRAWING: D:\...

USER NAME = Lawrence,DeManche	DESIGNED -	REVISED - K. SMITH 11-18-22
	DRAWN - CADD	REVISED -
PLOT SCALE = 100,0000 ' / in.	CHECKED - S.E.B.	REVISED -
PLOT DATE = 11/18/2022	DATE - 06-16-04	REVISED -

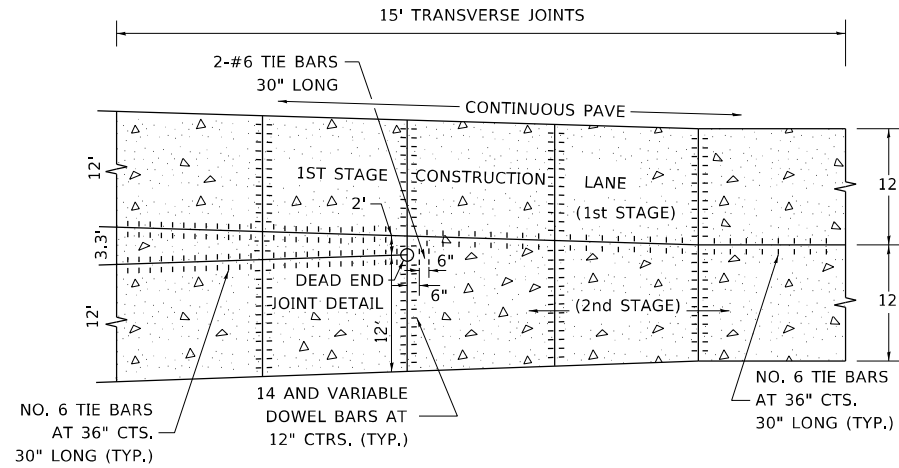
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BENCHING DETAIL  
FOR EMBANKMENT WIDENING**

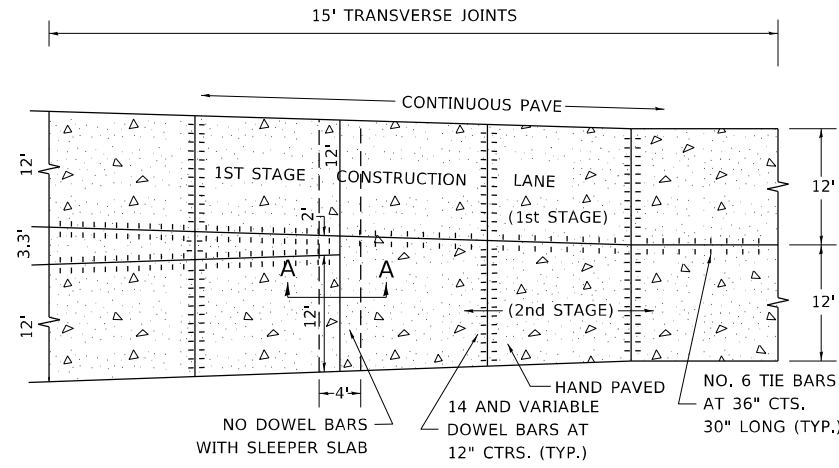
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DUPAGE	529	399
<b>BD-51</b>		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				

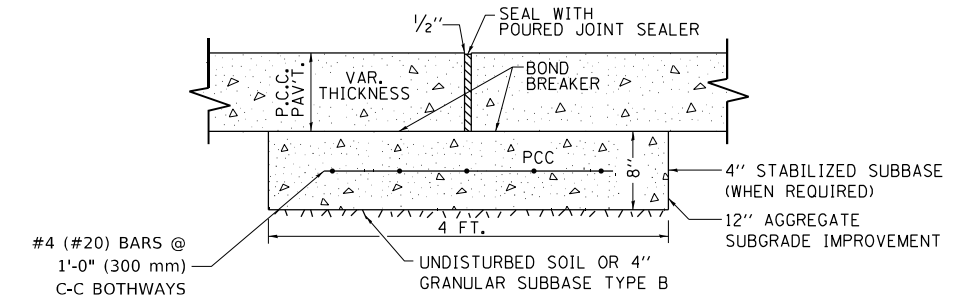
# LANE REDUCTION WITH A CONTINUOUS PAVEMENT FOR 1ST STAGE WITH DEAD END JOINT OR SLEEPER SLAB



**PLAN**



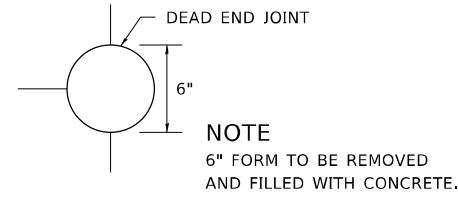
**PLAN**



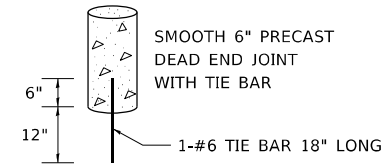
**PROPOSED SECTION A-A OF SLEEPER SLAB**



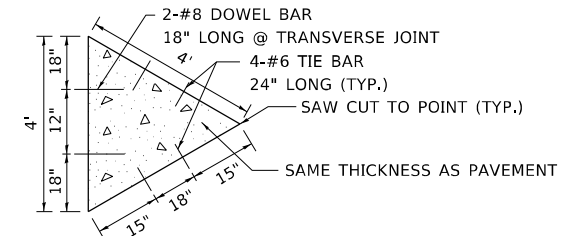
**DEAD END JOINT DETAIL  
SIDE VIEW**



**DEAD END JOINT DETAIL  
TOP VIEW**

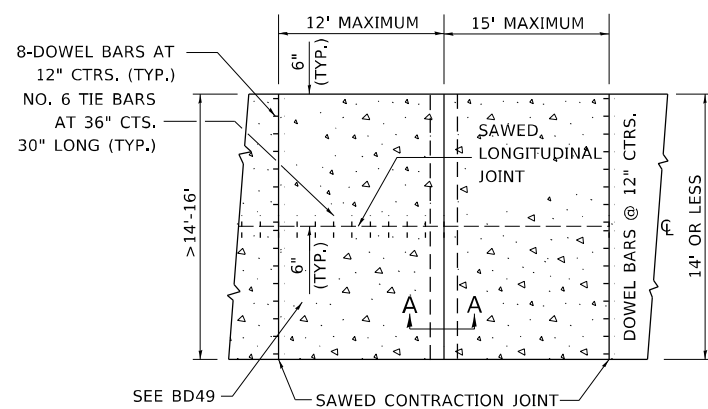


**DEAD END JOINT PRECAST DETAIL**

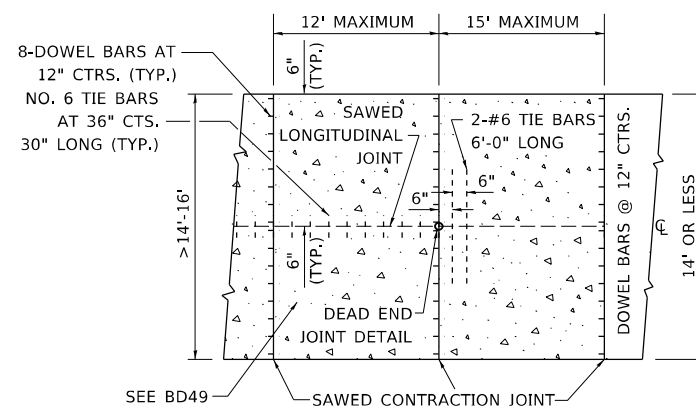


**SAW-CUT MERGE DETAIL**

## TRANSITION DETAILS FOR CENTERLINE SAW CUT FOR DEAD END JOINT OR SLEEPER SLAB FOR VARIABLE JOINTED PCC PAVEMENT FOR LANES OVER 14'

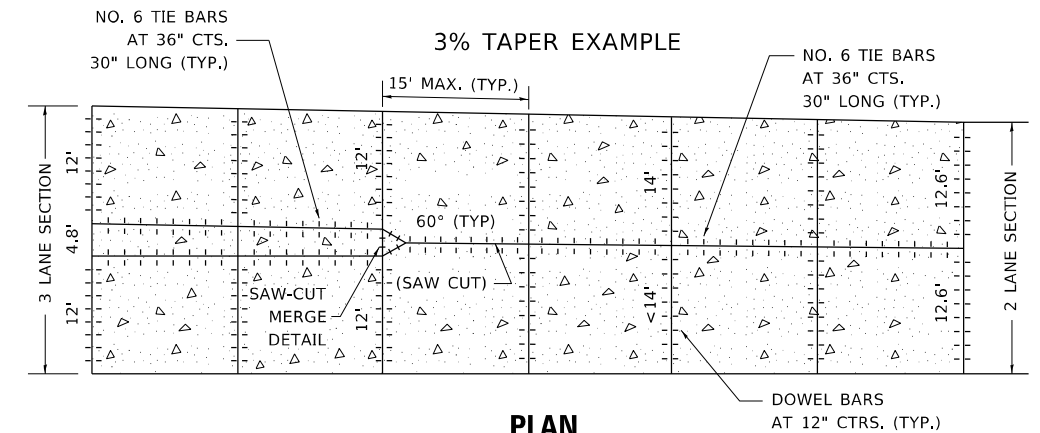


**PLAN USING SLEEPER SLAB**



**PLAN USING DEAD END JOINT**

## INTERIOR LANE REDUCTION FOR THREE LANE SECTION IN PCC PAVEMENT



**PLAN**

**NOTES:**

1. SAW-CUT MERGE DETAIL: THE 4' TRIANGLE SECTION COULD BE PRECAST OR CAST INPLACE AND PROPERLY PLACED WITH TIE BARS AND PROPERLY ALIGNED DOWEL BARS.
2. TRANSVERSE JOINT SPACING MAY DECREASE DEPENDING ON PAVEMENT THICKNESS BELOW 9.5". USE FORMULA JOINT SPACING IN (FT) = 2 X PAVEMENT THICKNESS IN (IN)-4.
3. USE SAW-CUT MERGE DETAIL IN SITUATIONS WHERE THERE IS NO STAGING.
4. PRECAST DEAD END JOINT SET IN PLACE WITH DRILLED HOLE INTO SUBBASE/SUBGRADE FOR #6 TIE BAR.
5. DEAD END JOINTS WILL NOT BE PAID SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PCC PAVEMENT.
6. SLEEPER SLAB WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR SLEEPER SLAB.

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USER NAME = Lawrence,DeManche	DESIGNED - TGM, EAJ	REVISED - CADD 05-02-12
PLOT SCALE = 100,0000' / in.	DRAWN - AM	REVISED - CADD 11-02-15
PLOT DATE = 11/18/2022	CHECKED - JD	REVISED - K. SMITH 11-18-22
	DATE - 03/07/12	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAIL OF VARIOUS TYPES OF LANE REDUCTION  
FOR PCC PAVEMENT**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
365	(56&57)R-4	DUPAGE	529	400
<b>BD-53</b>		CONTRACT NO.		
ILLINOIS FED. AID PROJECT				