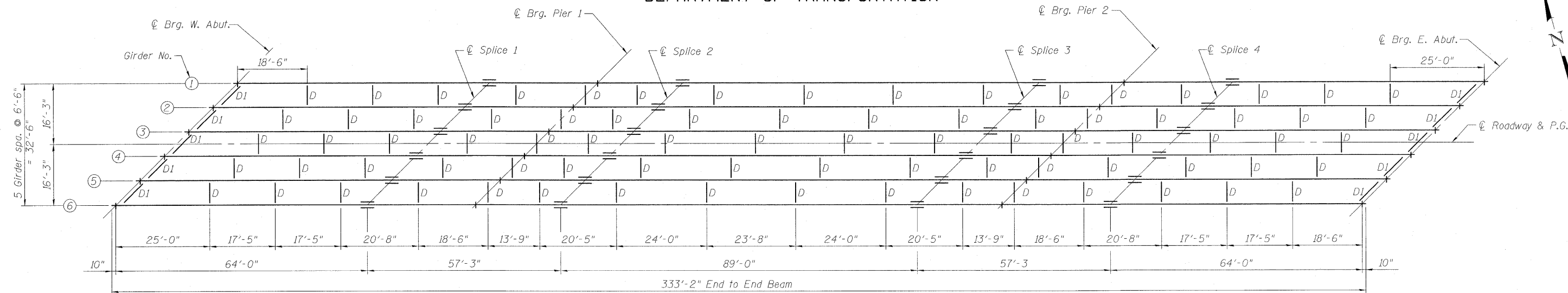
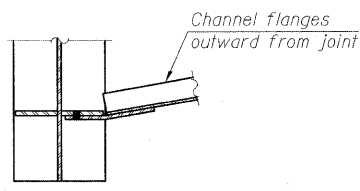
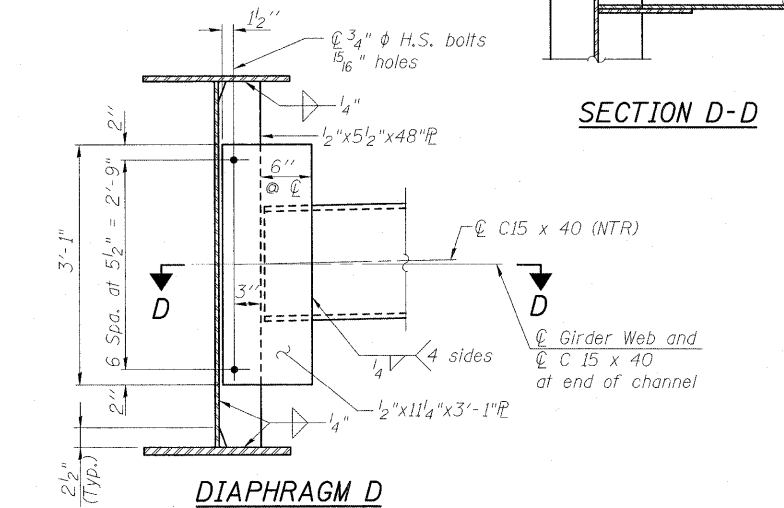
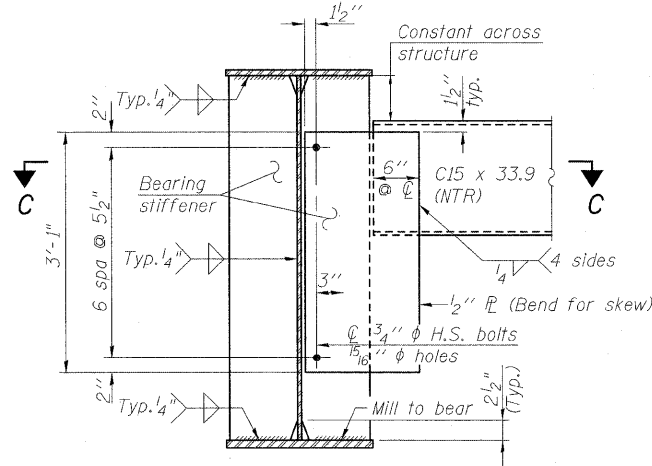
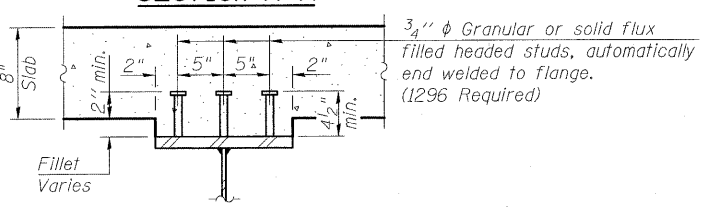
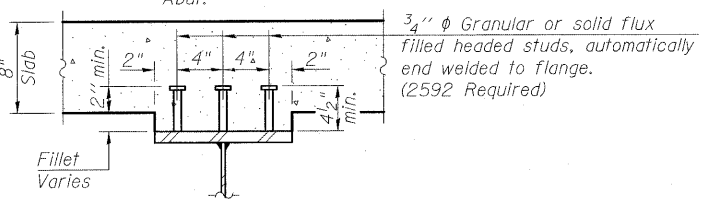
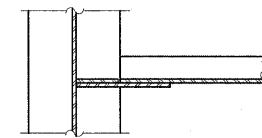
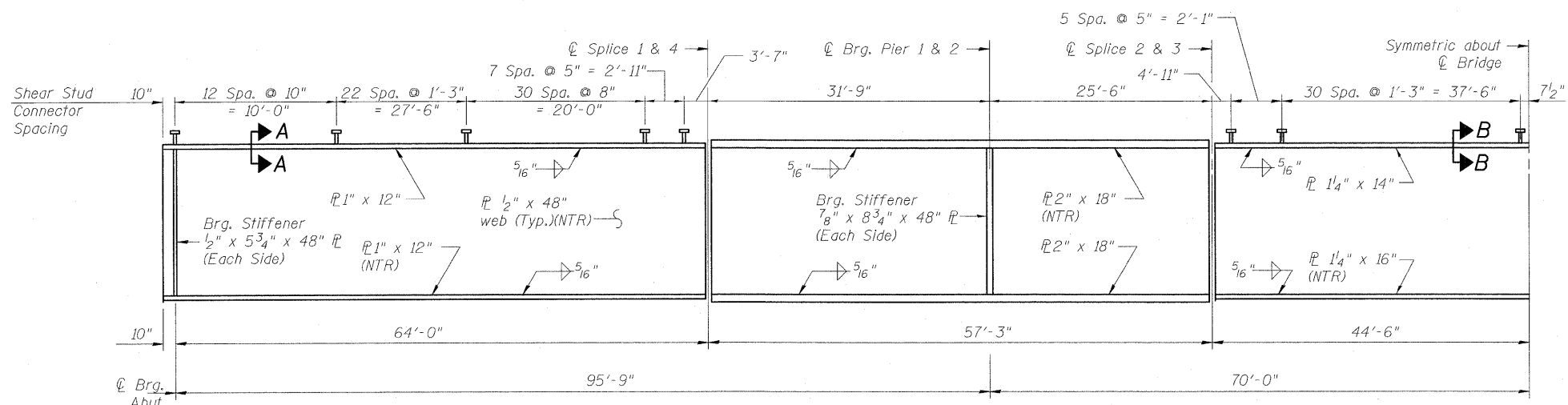


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



Notes:
Two hardened washers required for each set of oversized holes.
All diaphragms between beams or girders shall be installed with erection pins and bolts in accordance with the erection plan approved by the Engineer. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
See Sheet 13 of 27 for Bearing bolt hole placement.
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.
See sheet 12 of 27 for bearing Stiffeners.



* TOP OF WEB ELEVATIONS

Location	℄ Brg. W. Abut.	℄ Splice 1	℄ Pier 1	℄ Splice 2	℄ Splice 3	℄ Pier 2	℄ Splice 4	℄ Brg. E. Abut.
Girder 1	458.05	457.98	457.81	457.82	457.13	456.80	456.41	455.50
Girder 2	458.14	458.11	457.96	457.97	457.32	456.99	456.63	455.74
Girder 3	458.23	458.21	458.06	458.10	457.19	457.18	456.82	455.96
Girder 4	458.17	458.21	458.06	458.12	457.55	457.25	456.91	456.07
Girder 5	458.06	458.11	457.99	458.04	457.51	457.19	456.89	456.07
Girder 6	457.91	457.98	457.86	457.94	457.44	457.12	456.84	456.01

* "For Fabrication Only"

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	J.G.
CHECKED	C.J.F. & B.B.

Note: Two hardened washers required for each set of oversized holes.

BERNARDIN LOCHMUELLER & ASSOCIATES, INC.
3 Oak Drive
Maryville, IL 62062-5635
Local (618) 282-4665
Fax 618-282-4666

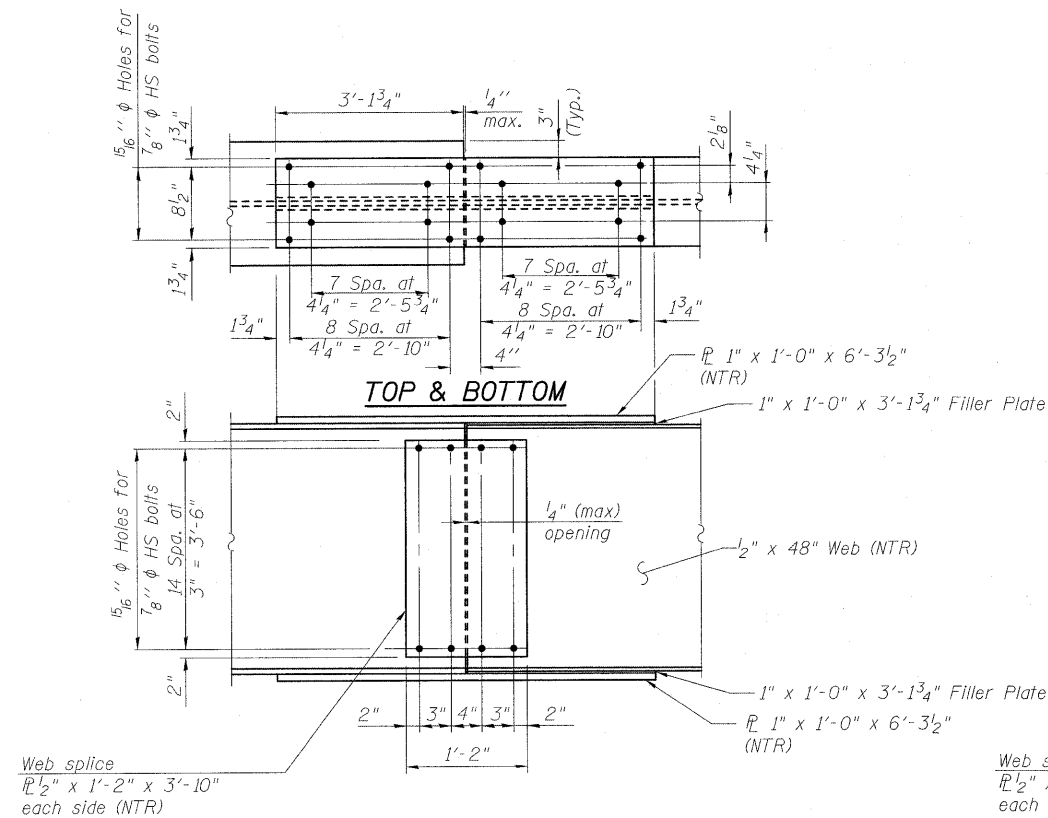
STRUCTURAL STEEL
ILLINOIS ROUTE 1
OVER NORFOLK SOUTHERN RR
STA. 757+97.66

Rev. Sheet 9-7-10

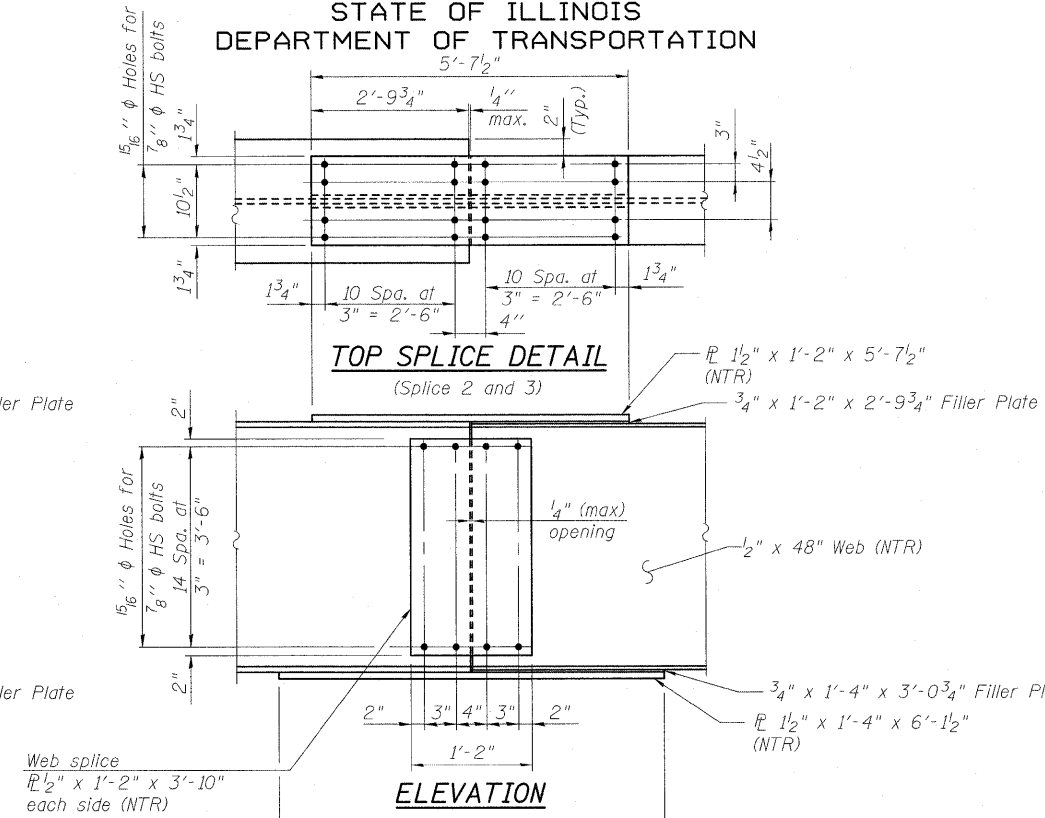
SHEET NO. 11	F.A.P. RTE. 332	SECTION 103B-1	COUNTY WABASH	TOTAL SHEETS 90	SHEET NO. 45
27 SHEETS	SN 093-0023		CONTRACT NO. 94754		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT 332					

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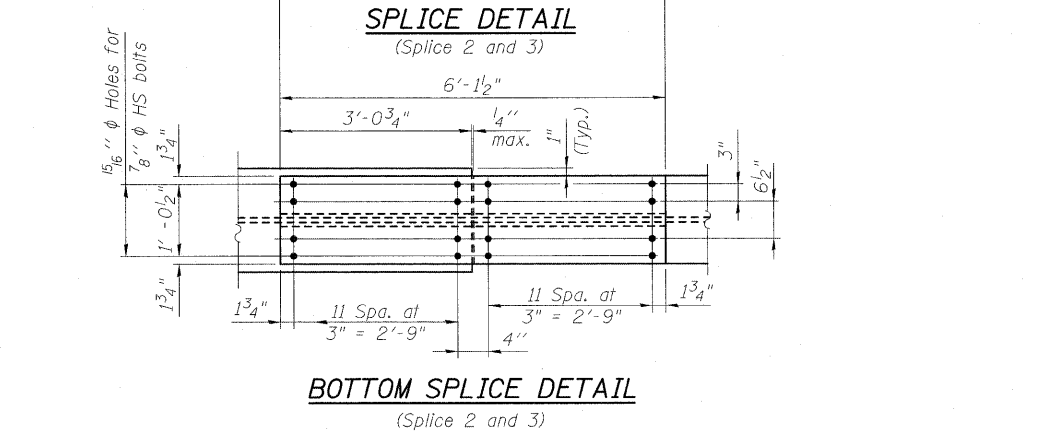
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



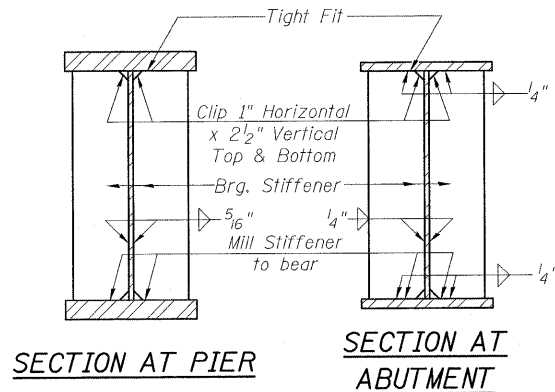
**ELEVATION
SPLICE DETAIL**
(Splice 1 and 4)



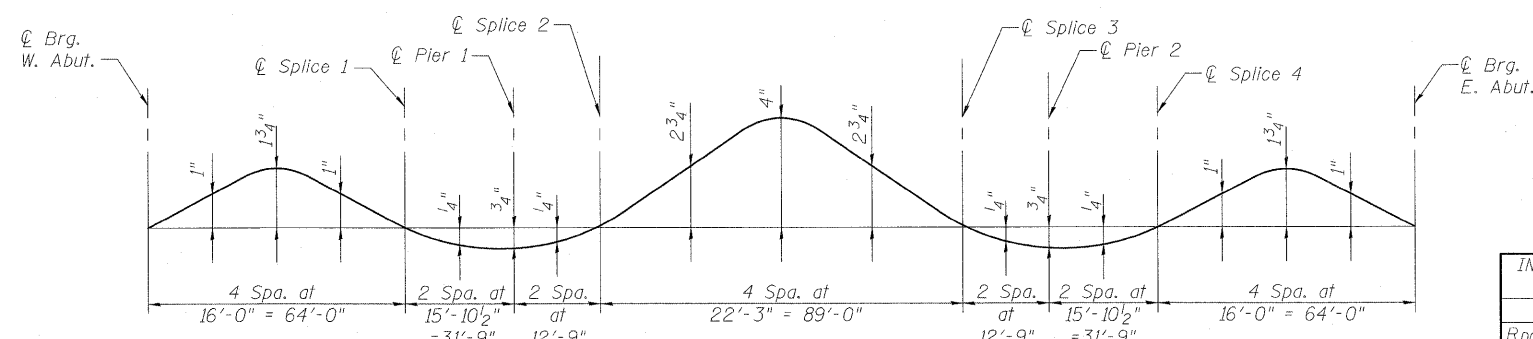
**TOP SPLICE DETAIL
ELEVATION
SPLICE DETAIL**
(Splice 2 and 3)



BOTTOM SPLICE DETAIL
(Splice 2 and 3)



**SECTION AT PIER
SECTION AT ABUTMENT**



CAMBER DIAGRAM

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	12
Anchor Bolts, 1"	Each	48

Notes:
Two hardened washers required for each set of oversized holes.
See Sheet 11 of 27 for "NTR"

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Fax 618-282-4666

- I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in^4 and in^3).
- $I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) due to short-term composite live loads (in^4 and in^3).
- $I_c(3n), S_c(3n)$: 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-Strength I, and Service II) due to long-term composite (superimposed) dead loads (in^4 and in^3).
- DC1: Un-factored non-composite dead load (kips/ft.).
- MDC1: Un-factored moment due to non-composite dead load (kip-ft.).
- DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
- MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
- DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
- MDW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
- $M\ddot{L} + Imp$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
- M_u (Strength I): Factored design moment (kip-ft.).
 $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M\ddot{L} + Imp$
- $\phi_r M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).
- $\phi_r M_{nc}$: Compact non-composite negative moment capacity computed according to Article A6.1.1 (kip-ft.).
- f_s (Service II): Sum of stresses as computed from the moments below (ksi).
 $M_{DC1} + M_{DC2} + M_{DW} + 1.3 M\ddot{L} + Imp$
- f_s (Total)(Strength I): Sum of stresses as computed from the moments below on non-compact section (ksi).
 $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M\ddot{L} + Imp$
- V_f : Factored shear range computed according to Article 6.10.10.

INTERIOR GIRDER MOMENT TABLE				
		0.4 Sp. 1 or 0.6 Sp. 3	Pier 1 or 2	0.5 SP 2
I_s	(in^4)	19016	49632	27291
$I_c(n)$	(in^4)	43289	-	57631
$I_c(3n)$	(in^4)	32268	-	42876
S_s	(in^3)	761	1909	1125
$S_c(n)$	(in^3)	1012	-	1394
$S_c(3n)$	(in^3)	928	-	1278
DC1	(k/ft)	0.849	1.040	0.903
MDC1	(k)	358	1611	719
DC2	(k/ft)	0.150	0.150	0.150
MDC2	(k)	71	234	134
DW	(k/ft)	0.325	0.325	0.325
MDW	(k)	155	507	289
$M\ddot{L} + Imp$	(k)	1177	1477	1468
M_u (Strength I)	(k)	2829	5651	4069
$\phi_r M_n, \phi_r M_{nc}$	(k)	5505	-	5949
f_s DC1	(ksi)	5.6	10.1	7.7
f_s DC2	(ksi)	0.9	1.5	1.3
f_s DW	(ksi)	2.0	3.2	2.7
f_s 1.3($\ddot{L} + I$)	(ksi)	18.1	12.1	16.4
f_s (Service II)	(ksi)	26.7	26.9	28.1
f_s (Total)(Strength I)	(ksi)	-	35.5	-
V_f	(k)	18.9	-	22.4

INTERIOR GIRDER REACTION TABLE HL93 Loading		
	Abut.	Pier 1 or 2
R_{DC1}	(k) 26.8	127.3
R_{DC2}	(k) 4.7	20.1
R_{DW}	(k) 10.3	43.7
$R\ddot{L} + Imp$	(k) 95.5	166.8
R_{Total}	(k) 137.3	357.9

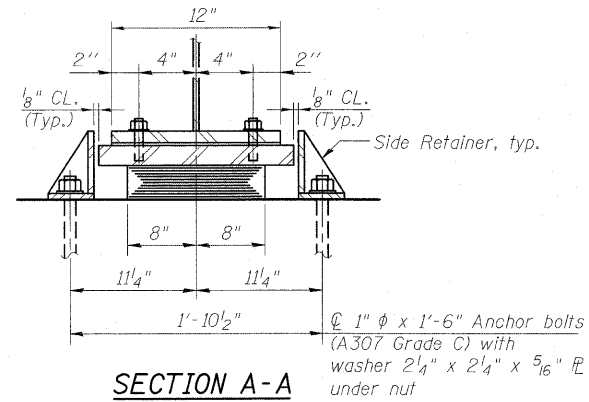
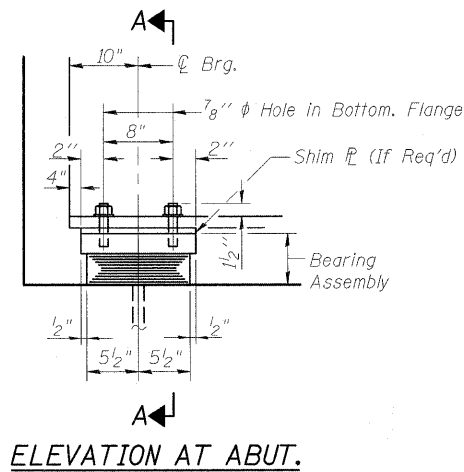
**STRUCTURAL STEEL
ILLINOIS ROUTE 1
OVER NORFOLK SOUTHERN RR
STA. 757+97.66**

SHEET NO. 12 27 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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SN 093-0023			CONTRACT NO. 94754		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT 332					

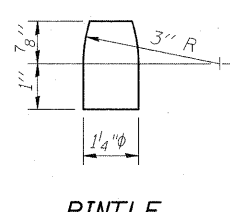
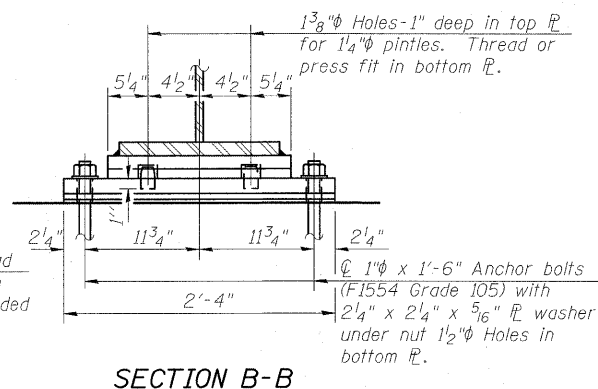
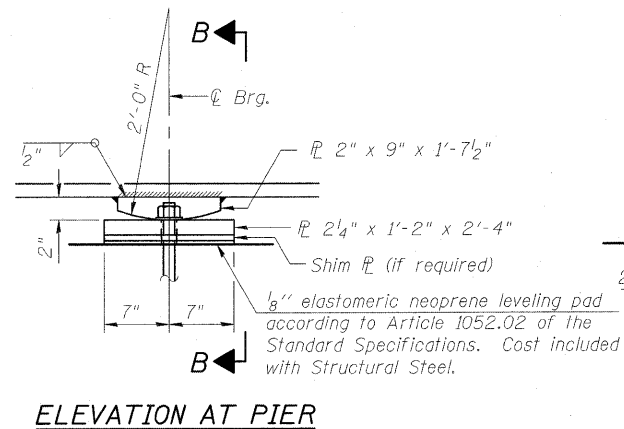
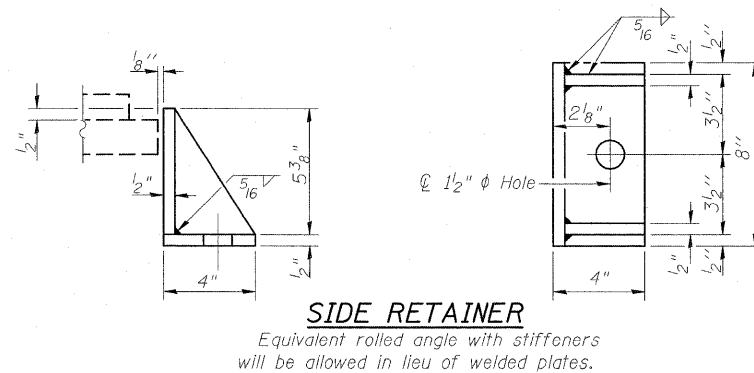
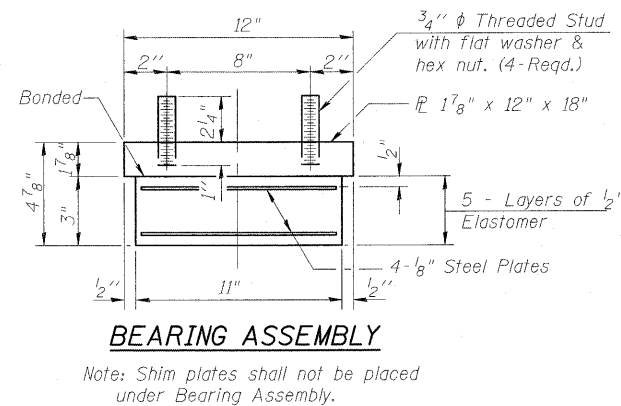
DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	J.G.
CHECKED	C.J.F. & B.B.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



TYPE I ELASTOMERIC EXP. BRG.
(12 Required)



FIXED BEARING
(12 Required)

Notes:
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.
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 bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.
See Sheets 14, 15, 18, & 19 of 27 for Anchor Bolt Location Details.
Two 3/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
The anchor bolt sizes and grades shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade anchor bolts will not be allowed.

**BEARING DETAILS
ILLINOIS ROUTE 1
OVER NORFOLK SOUTHERN RR
STA. 757+97.66**

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	J.G.
CHECKED	C.J.F. & B.B.



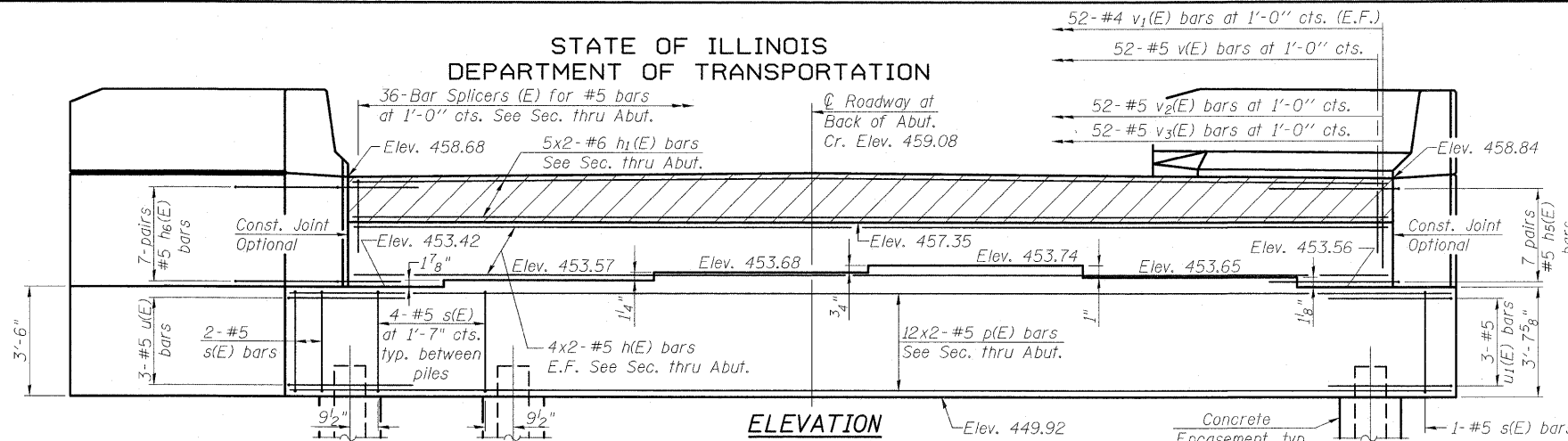
**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Marengo, IL 60149-5635
Local (618) 288-4665
Fax 618-288-4666

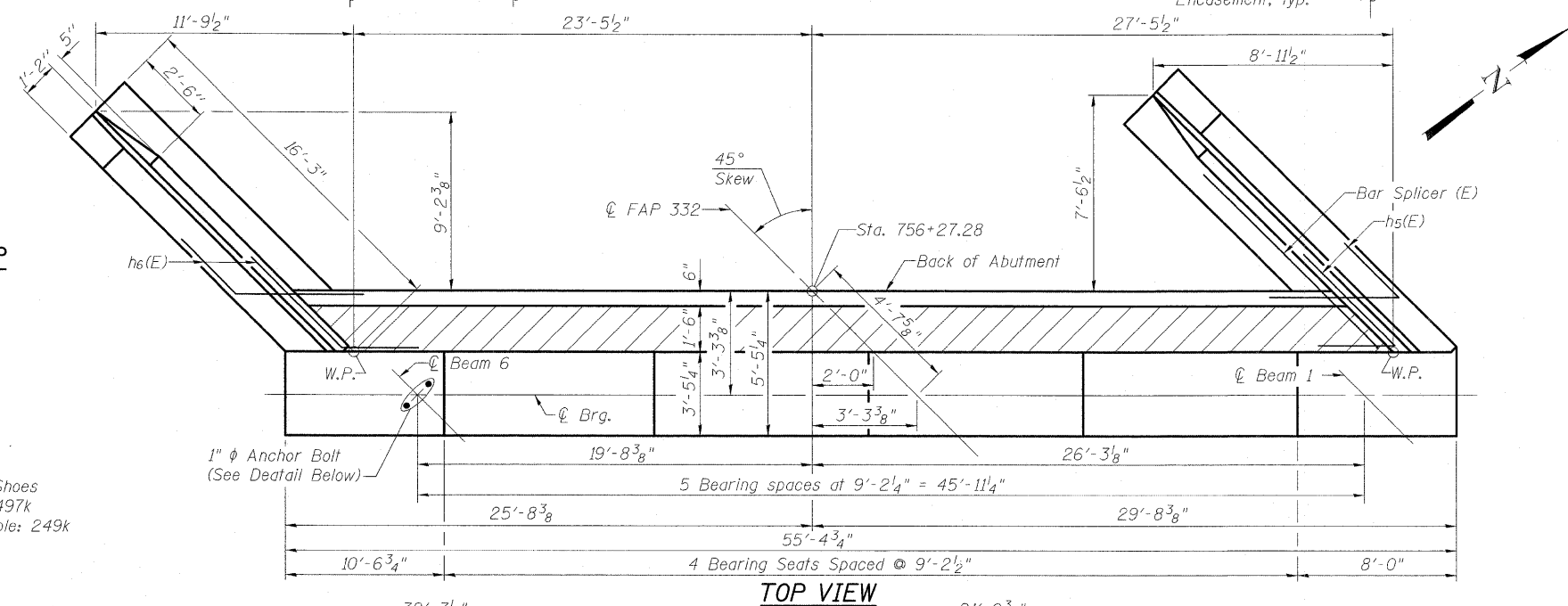
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SN 093-0023			CONTRACT NO. 94754		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT 332					

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

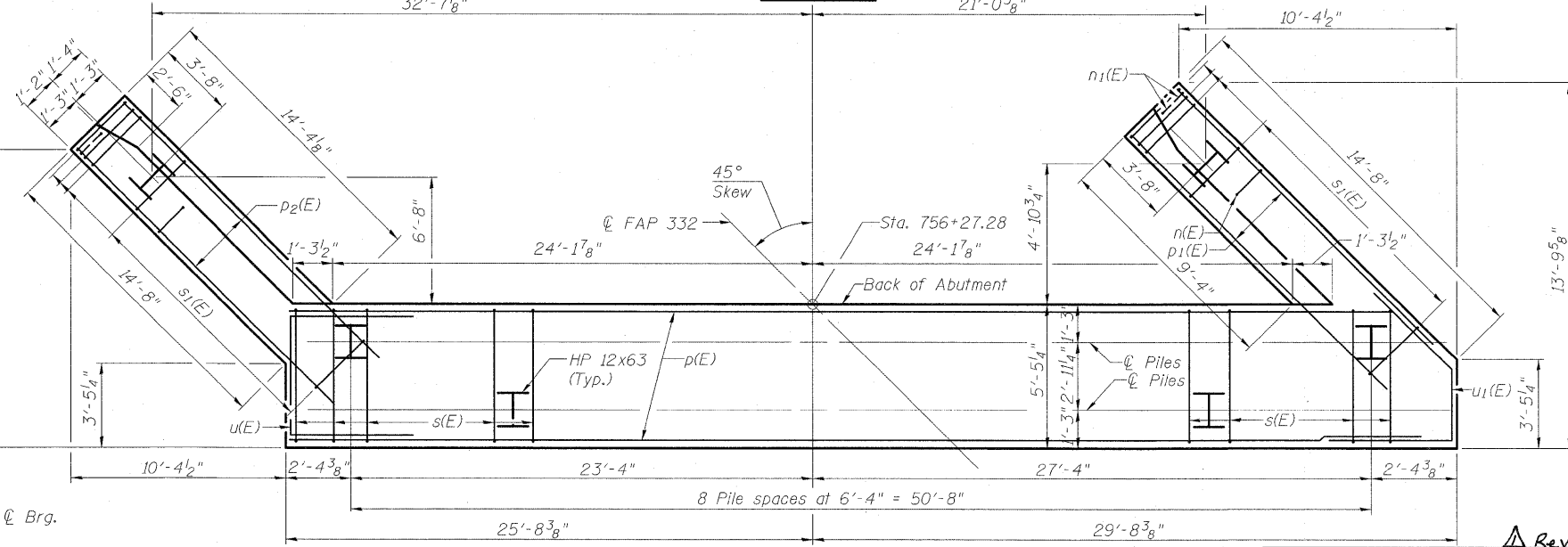


Notes:
Top of Pile Elev. = 451.92
For details of Bar Splicers, see sheet 21 of 27.
For details of piles and Concrete Encasement, see sheet 24 of 27.
For concrete sealer application see sheet 17 of 27.
E.F. indicates Each Face
For Section Thru Abutment and Wingwalls see sheet 16 of 27.

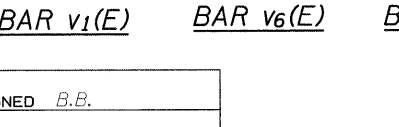
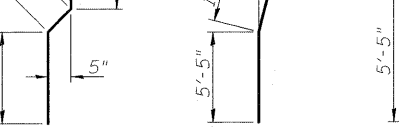
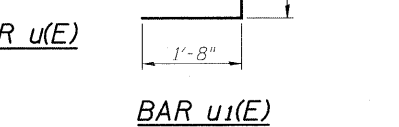
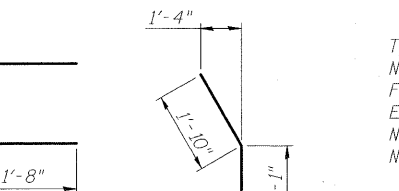
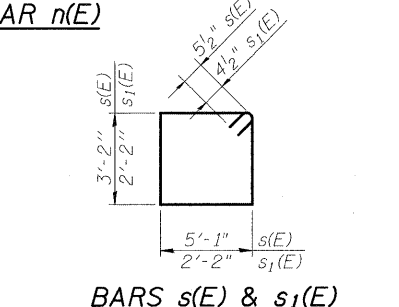
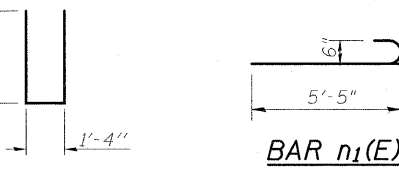
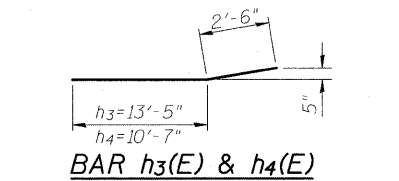
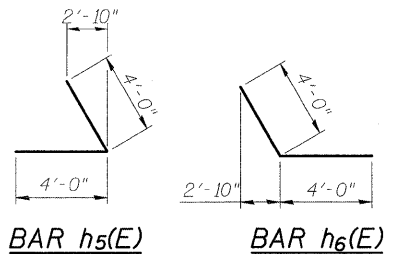


WEST ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	16	#5	26'-2"	—
h1(E)	10	#6	26'-4"	—
h2(E)	24	#4	14'-4"	—
h3(E)	8	#4	15'-11"	—
h4(E)	8	#4	13'-1"	—
h5(E)	14	#5	8'-0"	—
h6(E)	14	#5	8'-0"	—
n(E)	26	#6	12'-2"	—
n1(E)	12	#6	6'-1"	—
p(E)	24	#5	28'-7"	—
p1(E)	6	#7	14'-4"	—
p2(E)	6	#7	15'-11"	—
s(E)	35	#5	17'-5"	—
s1(E)	30	#4	9'-5"	—
u(E)	3	#5	8'-4"	—
u1(E)	3	#5	6'-7"	—
v(E)	52	#5	5'-7"	—
v1(E)	52	#4	3'-0"	—
v2(E)	52	#5	7'-2"	—
v3(E)	52	#5	2'-9"	—
v4(E)	32	#6	7'-9"	—
v5(E)	26	#6	8'-0"	—
v6(E)	6	#6	7'-4"	—
Structure Excavation		Cu. Yd.	124.9	
Concrete Structures		Cu. Yd.	72.3	
Reinforcement Bars, Epoxy Coated		Pound	5690	
Furnishing Steel Piles HP 12x63		Foot	418	
Driving Piles		Foot	418	
Concrete Encasement		Cu. Yd.	3.8	
Pile Shoes		Each	11	
Concrete Sealer		Sq. Ft.	542.0	
Bar Splicers		Each	36	

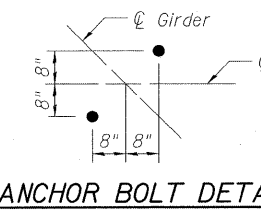


WEST ABUTMENT
ILLINOIS ROUTE 1
OVER NORFOLK SOUTHERN RR
STA. 757+97.66



MINIMUM BAR LAP
#5 bar = 1'-8"
#6 bar = 2'-0"

PILE DATA
Type: HP 12x63 with Pile Shoes
Nominal Required Bearing: 497k
Factored Resistance Available: 249k
Est. Length: 38'-0"
No. Production Piles: 11
No. Test Piles: None



PLAN-PILE CAP
BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.

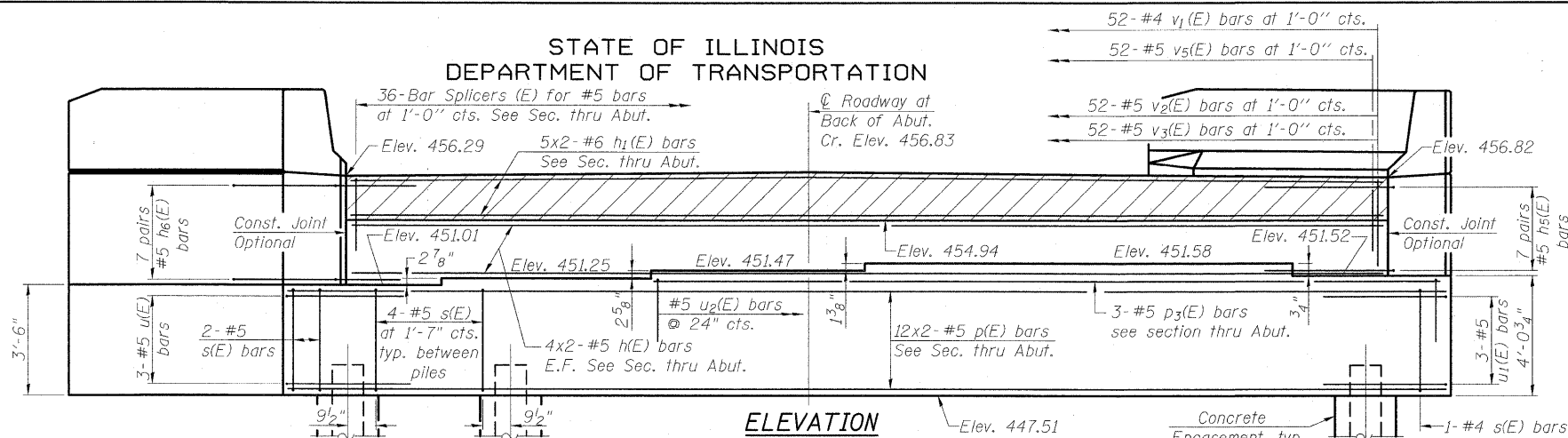
3 Oak Drive
Maryville, IL 62062-5636
Local (618) 288-4666
Fax 618-288-4666

SHEET NO. 14 27 SHEETS	F.A.P. RTE. 332	SECTION 103B-1	COUNTY WABASH	TOTAL SHEETS 90	SHEET NO. 48
	SN 093-0023		CONTRACT NO. 94754		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT 332					

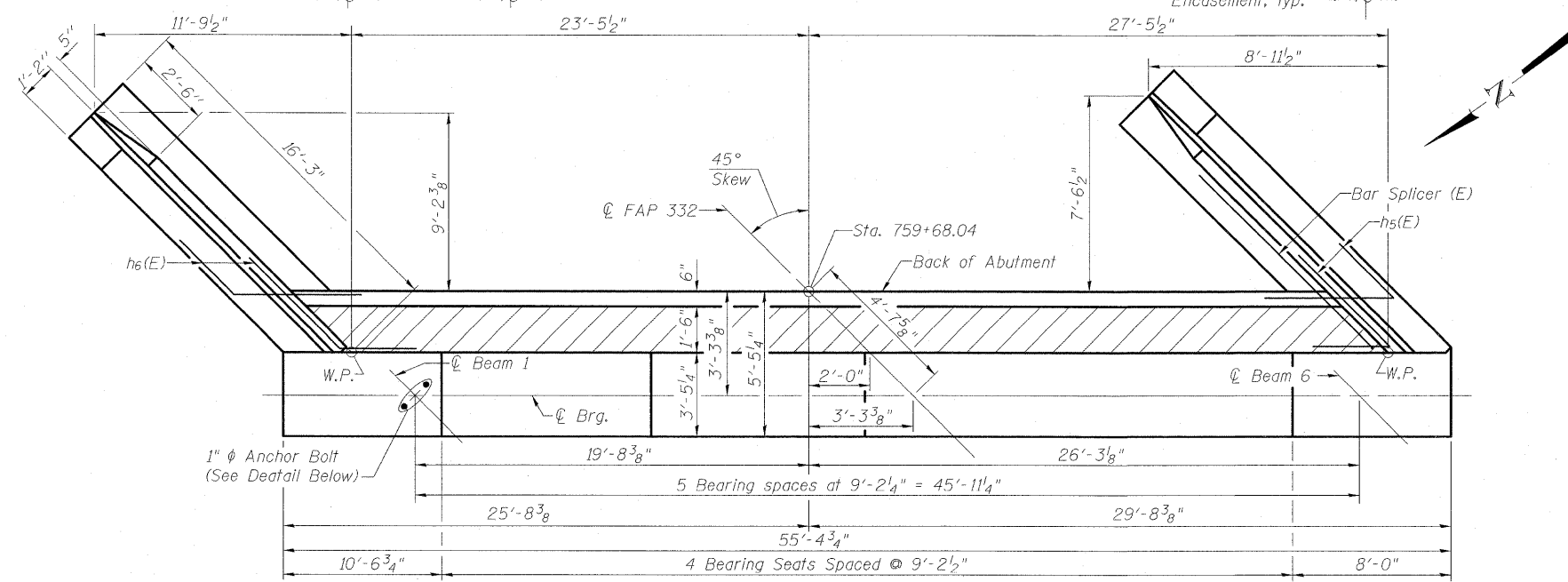
DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	J.G.
CHECKED	C.J.F. & B.B.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



Notes:
Top of Pile Elev. = 449.51
For details of Bar Splicers, see sheet 21 of 27.
For details of piles and Concrete Encasement, see sheet 24 of 27.
For additional details of reinforcement, see sheet 14 of 27.
For concrete sealer application see sheet 17 of 27.
For Section Thru Abutment and Wingwalls see sheet 17 of 27.
E.F. indicates Each Face



EAST ABUTMENT
BILL OF MATERIAL

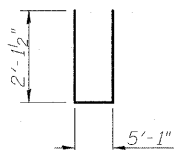
Bar	No.	Size	Length	Shape
h(E)	16	#5	26'-2"	—
h1(E)	10	#6	26'-4"	—
h2(E)	24	#4	14'-4"	—
h3(E)	8	#4	15'-11"	—
h4(E)	8	#4	13'-1"	—
h5(E)	14	#5	8'-0"	—
h6(E)	14	#5	8'-0"	—
n(E)	26	#6	12'-2"	—
n1(E)	12	#6	6'-1"	—
p(E)	24	#5	28'-7"	—
p1(E)	6	#7	14'-4"	—
p2(E)	6	#7	15'-11"	—
p3(E)	3	#5	35'-3"	—
s(E)	35	#5	17'-5"	—
s1(E)	30	#4	9'-5"	—
u(E)	3	#5	8'-4"	—
u1(E)	3	#5	6'-7"	—
u2(E)	19	#5	9'-4"	—
v(E)	52	#5	5'-7"	—
v1(E)	52	#4	3'-0"	—
v2(E)	52	#5	7'-2"	—
v3(E)	52	#5	2'-9"	—
v4(E)	32	#6	7'-9"	—
v5(E)	26	#6	8'-0"	—
v6(E)	6	#6	7'-4"	—
Structure Excavation		Cu. Yd.	155.1	
Concrete Structures		Cu. Yd.	73.1	
Reinforcement Bars, Epoxy Coated		Pound	5990	
Furnishing Steel Piles HP 12x63		Foot	506	
Driving Piles		Foot	506	
Concrete Encasement		Cu. Yd.	3.8	
Pile Shoes		Each	11	
Concrete Sealer		Sq. Ft.	542.0	
Bar Splicers		Each	36	

MINIMUM BAR LAP

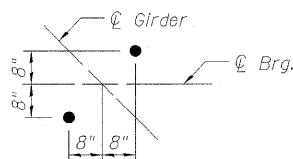
#5 bar = 1'-8"
#6 bar = 2'-0"

PILE DATA

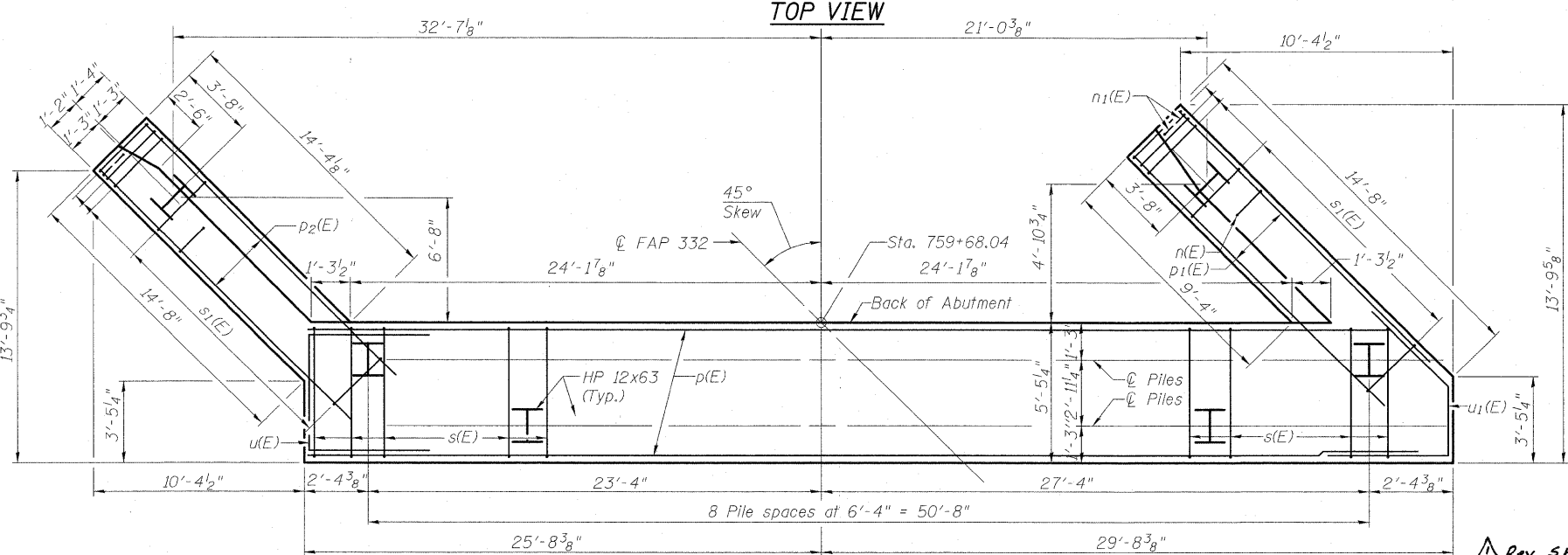
Type: HP 12x63
Nominal Required Bearing: 497k
Factored Resistance Available: 249k
Est. Length: 46'-0"
No. Production Piles: 11
No. Test Piles: None



BAR u2(E)



ANCHOR BOLT DETAIL



EAST ABUTMENT
ILLINOIS ROUTE 1
OVER NORFOLK SOUTHERN RR
STA. 757+97.66

PLAN-PILE CAP



BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.

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Local: (618) 288-4665
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DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	J.G.
CHECKED	C.J.F. & B.B.

SHEET NO. 15 27 SHEETS	F.A.P. RTE. 332	SECTION 103B-1	COUNTY WABASH	TOTAL SHEETS 90	SHEET NO. 49
	SN 093-0023		CONTRACT NO. 94754		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT 332					

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

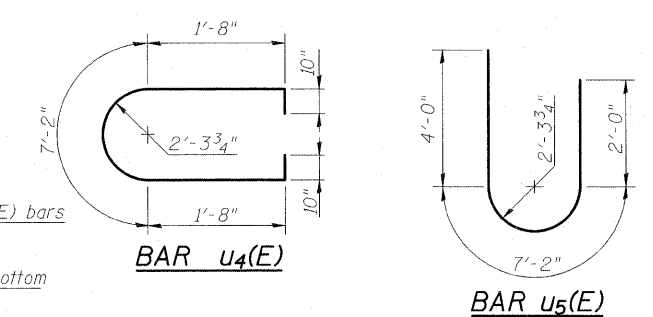
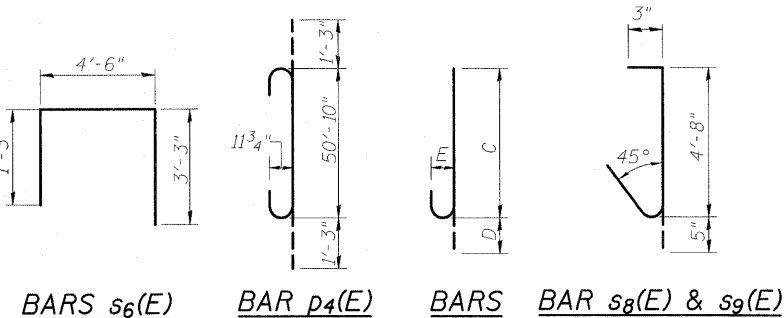
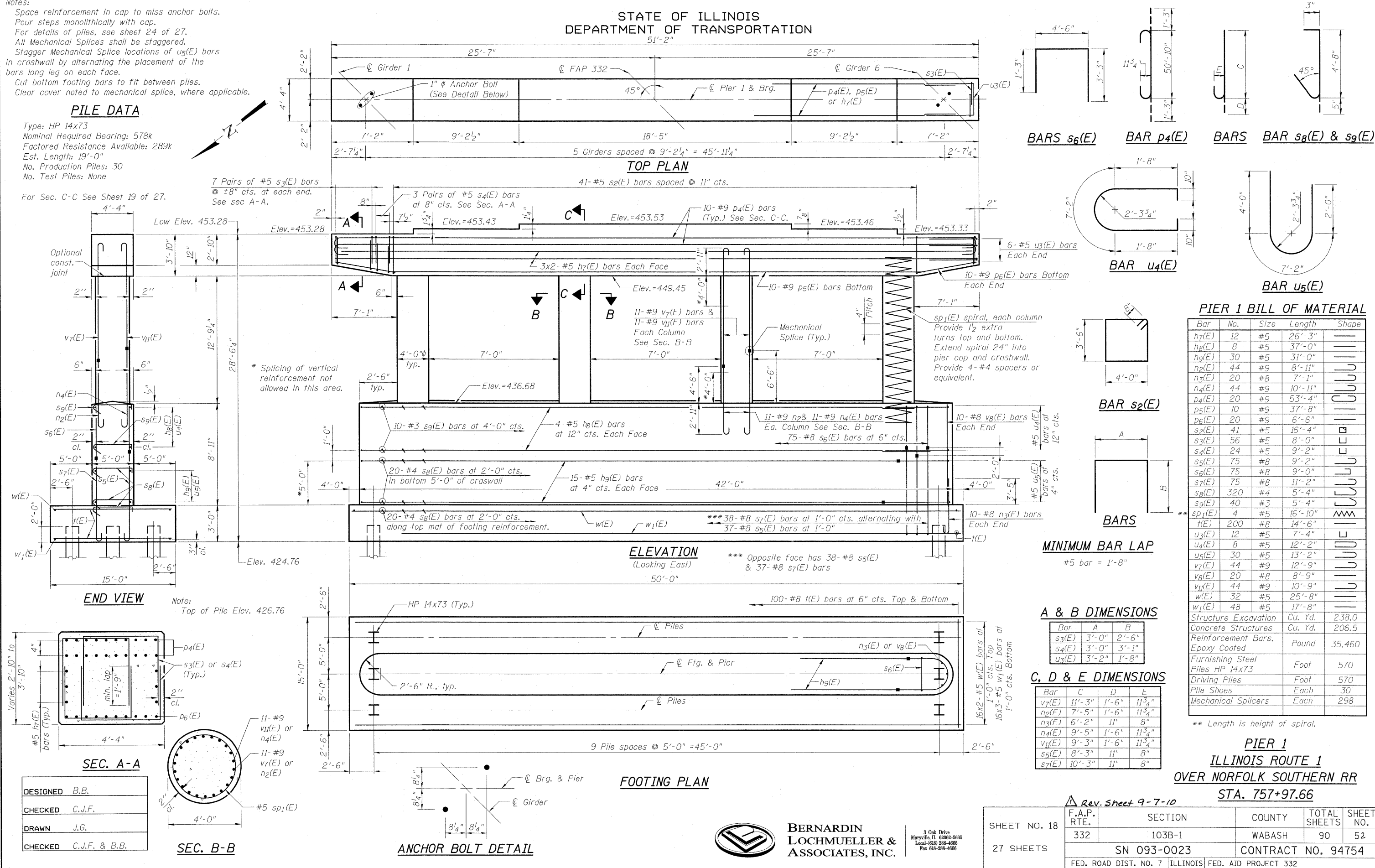
Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For details of piles, see sheet 24 of 27.
All Mechanical Splices shall be staggered.
Stagger Mechanical Splice locations of u₅(E) bars in crashwall by alternating the placement of the bars long leg on each face.
Cut bottom footing bars to fit between piles.
Clear cover noted to mechanical splice, where applicable.

PILE DATA

Type: HP 14x73
Nominal Required Bearing: 578k
Factored Resistance Available: 289k
Est. Length: 19'-0"
No. Production Piles: 30
No. Test Piles: None

For Sec. C-C See Sheet 19 of 27.

7 Pairs of #5 s₃(E) bars
@ 8" cts. at each end.
See sec A-A.



PIER 1 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h7(E)	12	#5	26'-3"	—
h8(E)	8	#5	37'-0"	—
h9(E)	30	#5	31'-0"	—
n2(E)	44	#9	8'-11"	—
n3(E)	20	#8	7'-1"	—
n4(E)	44	#9	10'-11"	—
p4(E)	20	#9	53'-4"	—
p5(E)	10	#9	37'-8"	—
p6(E)	20	#9	6'-6"	—
s2(E)	41	#5	16'-4"	—
s3(E)	56	#5	8'-0"	—
s4(E)	24	#5	9'-2"	—
s5(E)	75	#8	9'-2"	—
s6(E)	75	#8	9'-0"	—
s7(E)	75	#8	11'-2"	—
s8(E)	320	#4	5'-4"	—
s9(E)	40	#3	5'-4"	—
sp1(E)	4	#5	16'-10"	—
t(E)	200	#8	14'-6"	—
u3(E)	12	#5	7'-4"	—
u4(E)	8	#5	12'-2"	—
u5(E)	30	#5	13'-2"	—
v7(E)	44	#9	12'-9"	—
v8(E)	20	#8	8'-9"	—
v11(E)	44	#9	10'-9"	—
w(E)	32	#5	25'-8"	—
w1(E)	48	#5	17'-8"	—
Structure Excavation	Cu. Yd.		238.0	
Concrete Structures	Cu. Yd.		206.5	
Reinforcement Bars, Epoxy Coated	Pound		35,460	
Furnishing Steel Piles HP 14x73	Foot		570	
Driving Piles	Foot		570	
Pile Shoes	Each		30	
Mechanical Splicers	Each		298	

** Length is height of spiral.

PIER 1
ILLINOIS ROUTE 1
OVER NORFOLK SOUTHERN RR
STA. 757+97.66

MINIMUM BAR LAP

#5 bar = 1'-8"

A & B DIMENSIONS

Bar	A	B
s3(E)	3'-0"	2'-6"
s4(E)	3'-0"	3'-1"
u3(E)	3'-2"	1'-8"

C, D & E DIMENSIONS

Bar	C	D	E
v7(E)	11'-3"	1'-6"	11'-3"
n2(E)	7'-5"	1'-6"	11'-3"
n3(E)	6'-2"	11"	8"
n4(E)	9'-5"	1'-6"	11'-3"
v11(E)	9'-3"	1'-6"	11'-3"
s5(E)	8'-3"	11"	8"
s7(E)	10'-3"	11"	8"

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	J.G.
CHECKED	C.J.F. & B.B.

SHEET NO. 18 27 SHEETS	F.A.P. RTE. 332	SECTION 103B-1	COUNTY WABASH	TOTAL SHEETS 90	SHEET NO. 52
	SN 093-0023		CONTRACT NO. 94754		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT 332					

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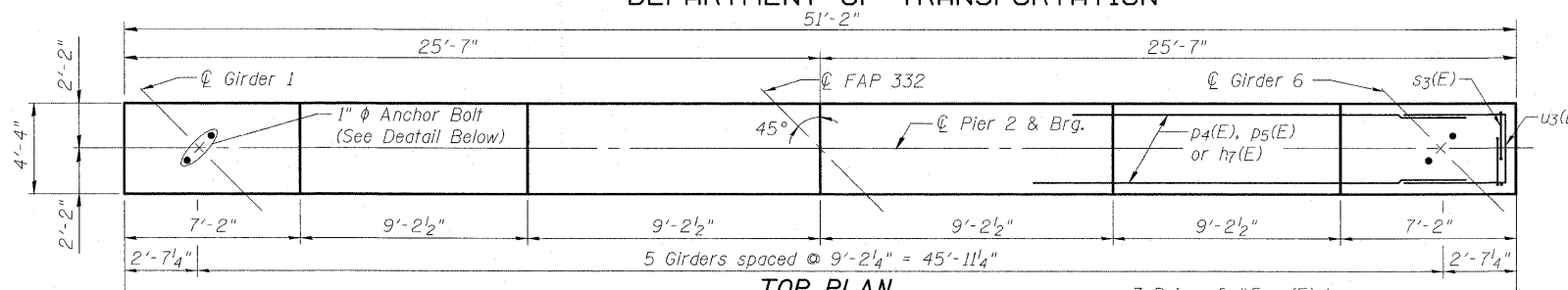
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

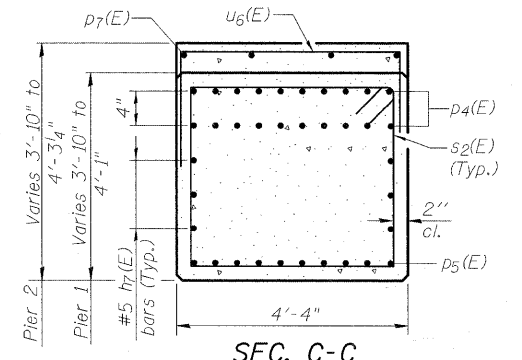
Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For details of piles, see sheet 24 of 27.
All Mechanical Splices shall be staggered.
Stagger Mechanical Splice locations of $u_5(E)$ bars in crashwall by alternating the placement of the bars long leg on each face.
Cut bottom footing bars to fit between piles.
Clear cover noted to mechanical splice, where applicable.

PILE DATA

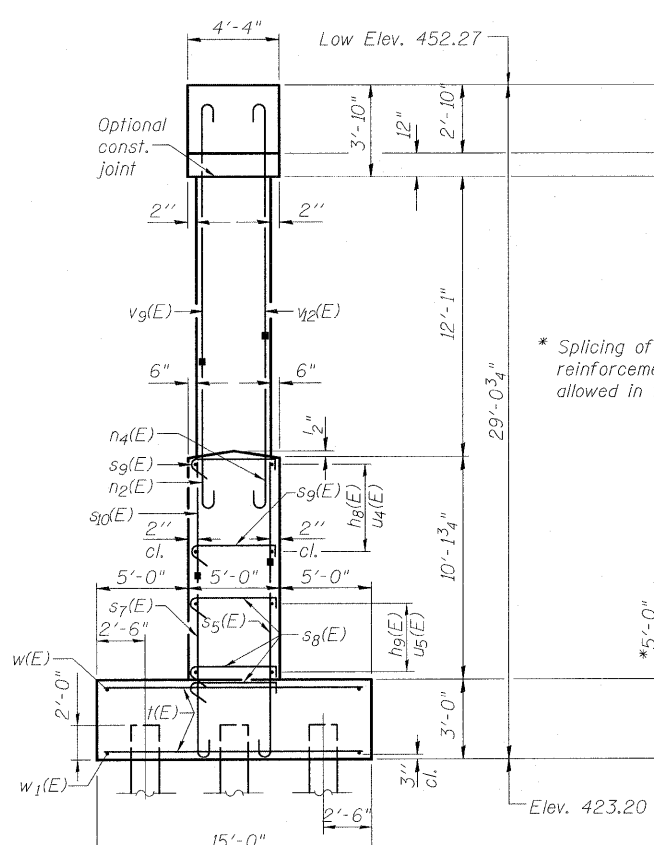
Type: HP 14x73
Nominal Required Bearing: 578k
Factored Resistance Available: 289k
Est. Length: 18'-0"
No. Production Piles: 30
No. Test Piles: None



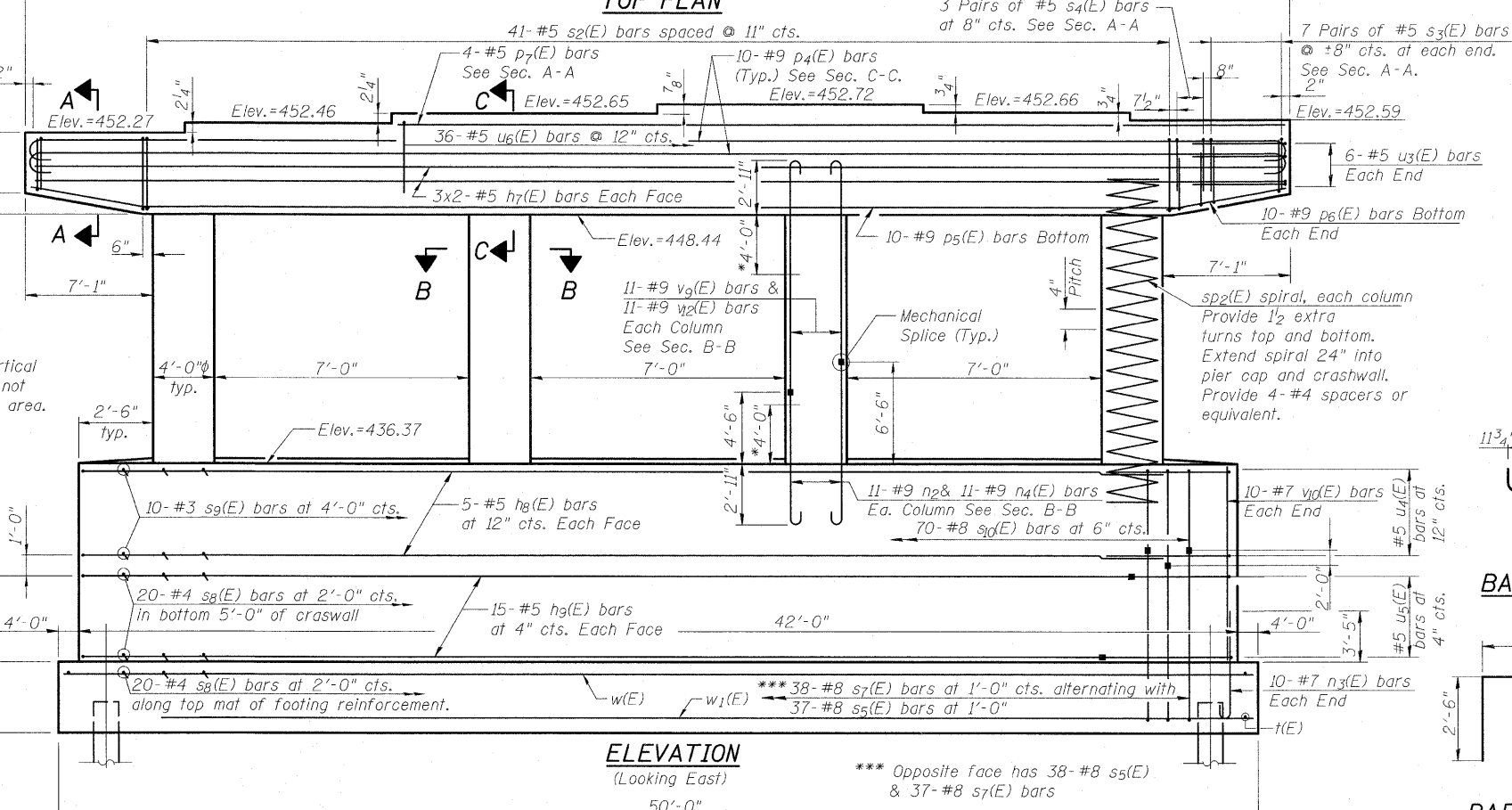
TOP PLAN



SEC. C-C



END VIEW



ELEVATION
(Looking East)

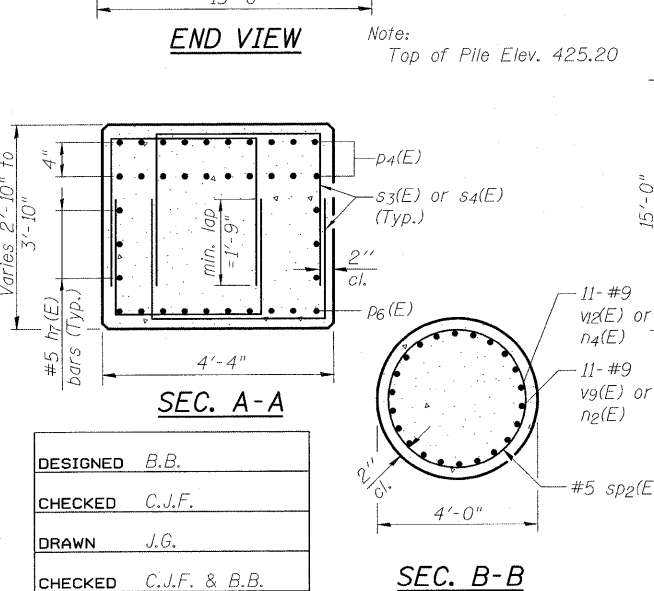
PIER 2 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_7(E)$	12	#5	26'-3"	—
$h_8(E)$	10	#5	37'-0"	—
$h_9(E)$	30	#5	31'-0"	—
$n_2(E)$	44	#9	8'-11"	—
$n_3(E)$	20	#8	7'-1"	—
$n_4(E)$	44	#9	10'-11"	—
$p_4(E)$	20	#9	53'-4"	—
$p_5(E)$	10	#9	37'-8"	—
$p_6(E)$	20	#9	6'-6"	—
$p_7(E)$	4	#5	34'-5"	—
$s_2(E)$	41	#5	16'-4"	—
$s_3(E)$	56	#5	8'-0"	—
$s_4(E)$	24	#5	9'-2"	—
$s_5(E)$	75	#8	9'-2"	—
$s_7(E)$	75	#8	11'-2"	—
$s_8(E)$	320	#4	5'-4"	—
$s_9(E)$	50	#3	5'-4"	—
$s_{10}(E)$	75	#8	11'-6"	—
$sp_2(E)$	4	#5	16'-1"	—
$t(E)$	200	#8	14'-6"	—
$u_3(E)$	12	#5	7'-4"	—
$u_4(E)$	10	#5	12'-2"	—
$u_5(E)$	30	#5	13'-2"	—
$u_6(E)$	36	#5	8'-1"	—
$v_9(E)$	44	#9	12'-0"	—
$v_{10}(E)$	20	#8	9'-11"	—
$v_{12}(E)$	44	#9	10'-0"	—
$w(E)$	32	#5	25'-8"	—
$w_1(E)$	48	#5	17'-8"	—
Structure Excavation		Cu. Yd.	238.0	
Concrete Structures		Cu. Yd.	215.5	
Reinforcement Bars, Epoxy Coated		Pound	36,280	
Furnishing Steel		Foot	540	
Piles, HP 14x73		Foot	540	
Driving Piles		Foot	540	
Pile Shoes		Each	30	
Mechanical Splicers		Each	298	

Structure	Unit	Quantity
Structure Excavation	Cu. Yd.	238.0
Concrete Structures	Cu. Yd.	215.5
Reinforcement Bars, Epoxy Coated	Pound	36,280
Furnishing Steel	Foot	540
Piles, HP 14x73	Foot	540
Driving Piles	Foot	540
Pile Shoes	Each	30
Mechanical Splicers	Each	298

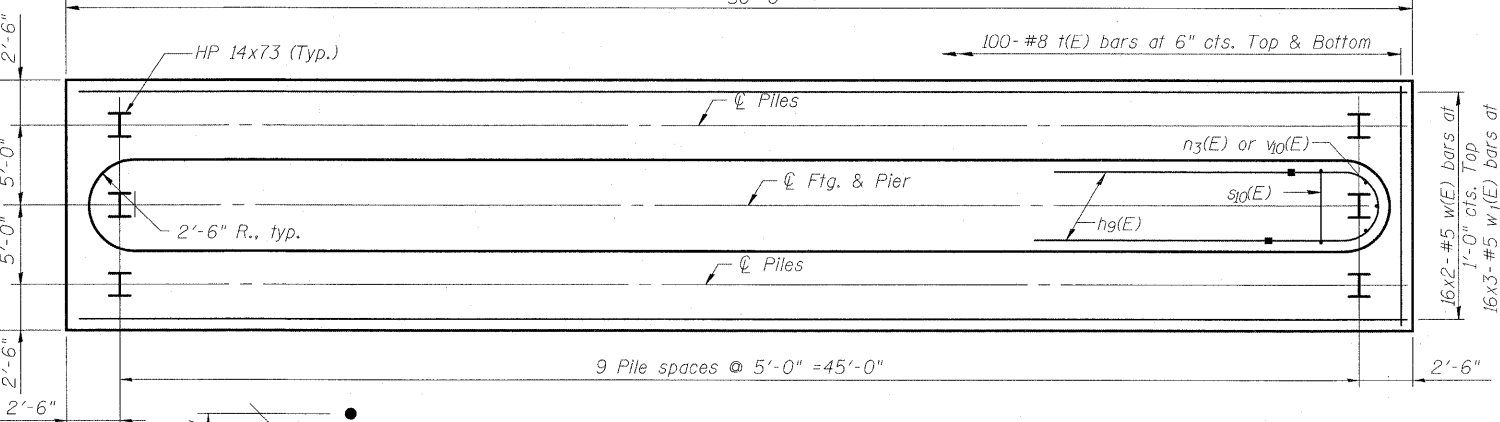
** Length is height of spiral.
For additional reinforcement details see sheet 18 of 27.

**PIER 2
ILLINOIS ROUTE 1
OVER NORFOLK SOUTHERN RR
STA. 757+97.66**



SEC. A-A

SEC. B-B



FOOTING PLAN

ANCHOR BOLT DETAIL

MINIMUM BAR LAP

#5 bar = 1'-8"

Rev. Sheet 9-7-10

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	J.G.
CHECKED	C.J.F. & B.B.

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SHEET NO. 19 27 SHEETS	F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	332	103B-1	WABASH	90	53
SN 093-0023			CONTRACT NO. 94754		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT 332					

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

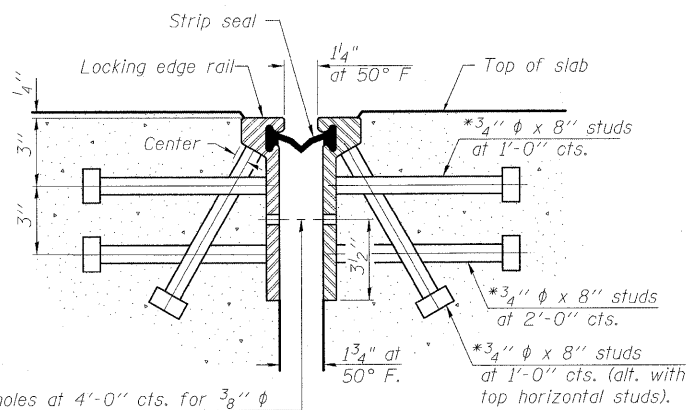
Notes:

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

The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.

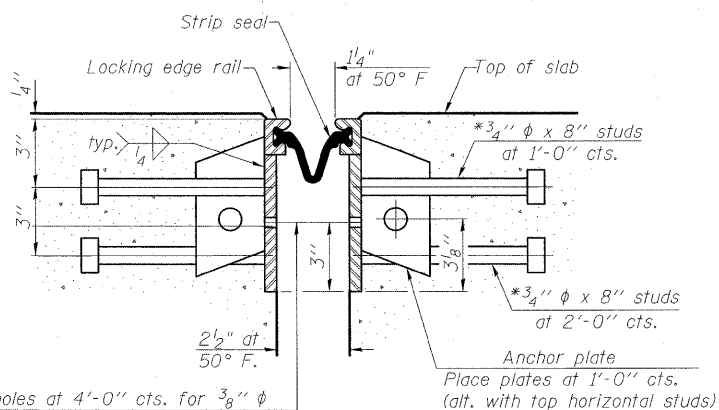
The manufacturer's recommended installation methods shall be followed. The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according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

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



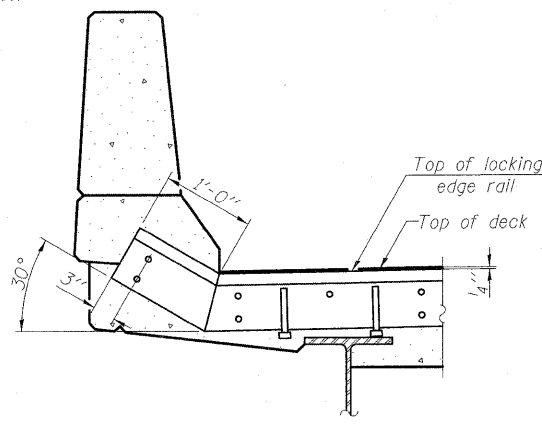
7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU ROLLED RAIL JOINT

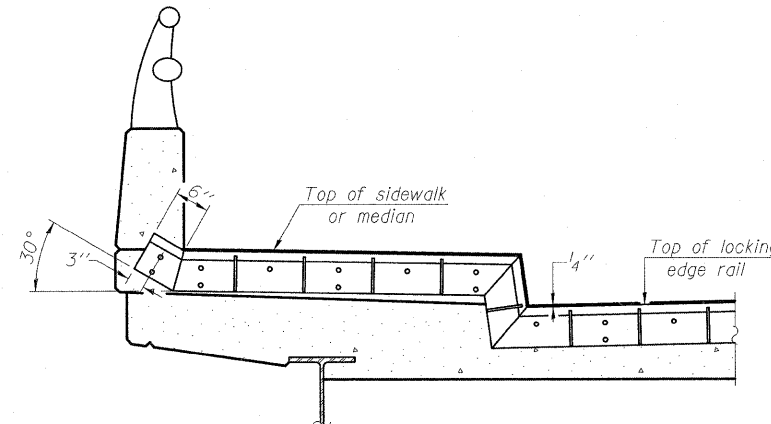


7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU WELDED RAIL JOINT

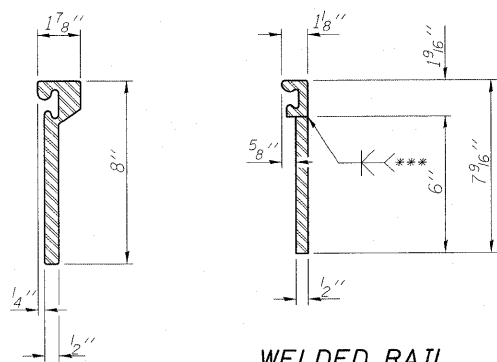


AT PARAPET

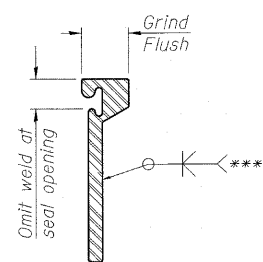


AT SIDEWALK OR MEDIAN

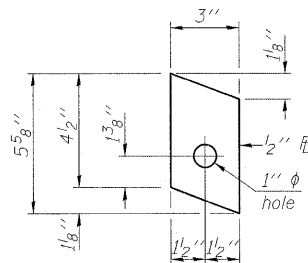
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



WELDED RAIL



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



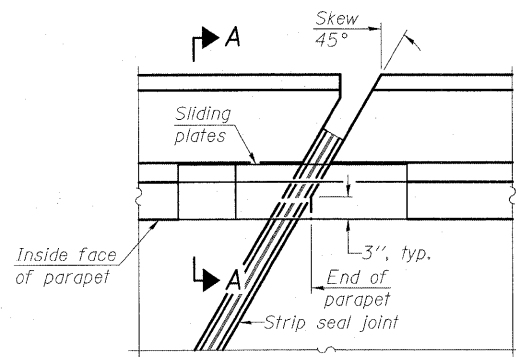
ANCHOR PLATE
(For welded rail)

ROLLED EXTRUDED RAIL

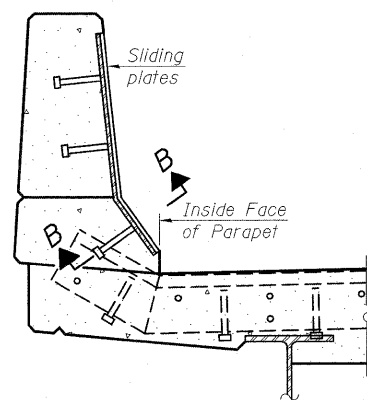
LOCKING EDGE RAIL SPLICE

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

LOCKING EDGE RAILS



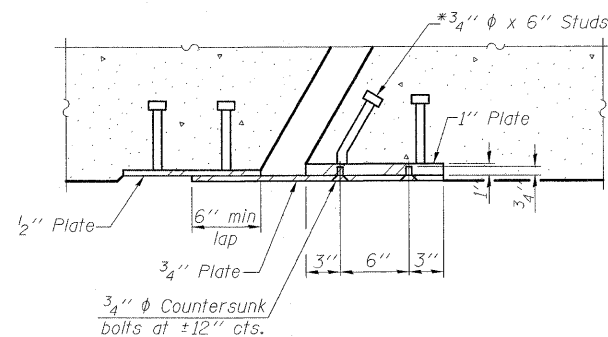
PLAN



SECTION A-A

POINT BLOCK DETAILS
(for skews > 30°)

TYPICAL END TREATMENTS



SECTION B-B

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	106'

PREFORMED JOINT STRIP SEAL
ILLINOIS ROUTE 1
OVER NORFOLK SOUTHERN RR
STA. 757+97.66

DESIGNED	
CHECKED	
DRAWN	J.G.
CHECKED	C.J.F. & B.B.

EJ-SSJ 5-16-08



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SHEET NO. 20 27 SHEETS	F.A.P. RTE. 332	SECTION 103B-1	COUNTY WABASH	TOTAL SHEETS 90	SHEET NO. 54
	SN 093-0023		CONTRACT NO. 94754		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT 332					