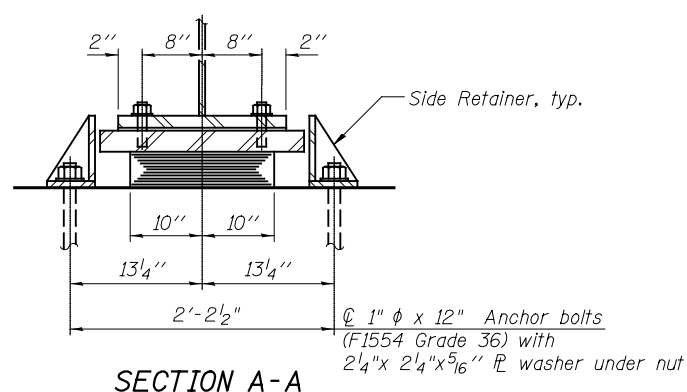
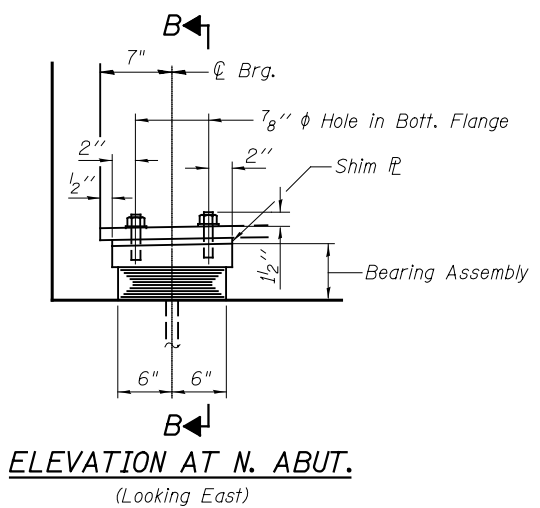


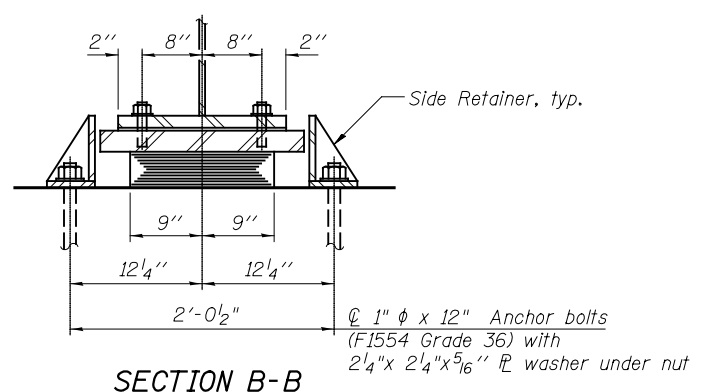
ELEVATION AT S. ABUT.
(Looking West)



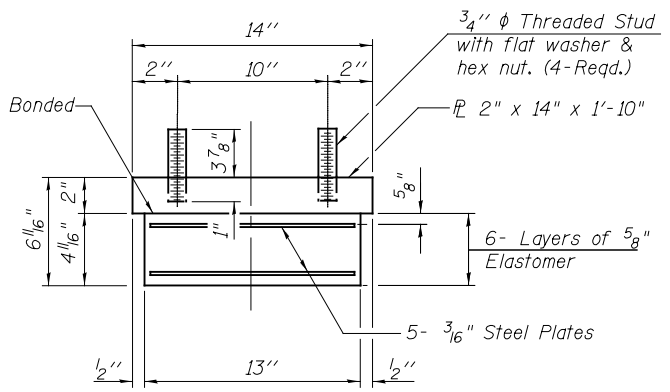
SECTION A-A



ELEVATION AT N. ABUT.
(Looking East)



SECTION B-B

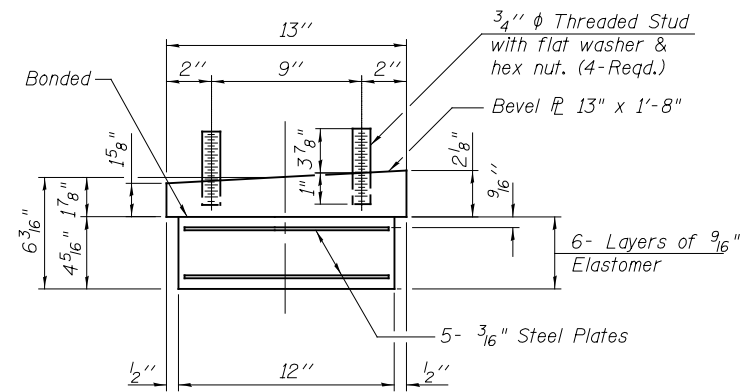


BEARING ASSEMBLY

TYPE I ELASTOMERIC EXP. BRG. AT SOUTH ABUTMENT

2 Required

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

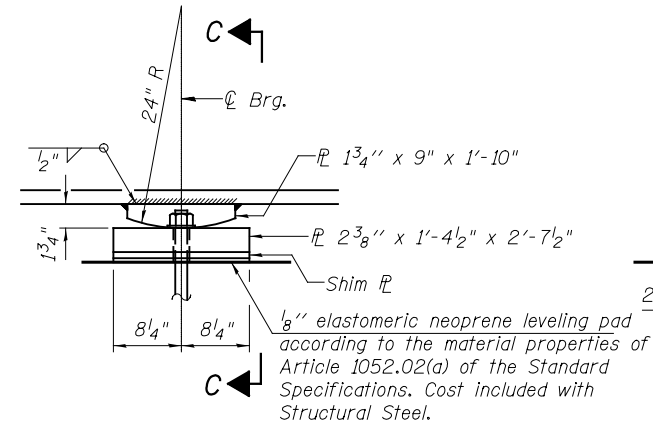


BEARING ASSEMBLY

TYPE I ELASTOMERIC EXP. BRG. AT NORTH ABUTMENT

2 Required

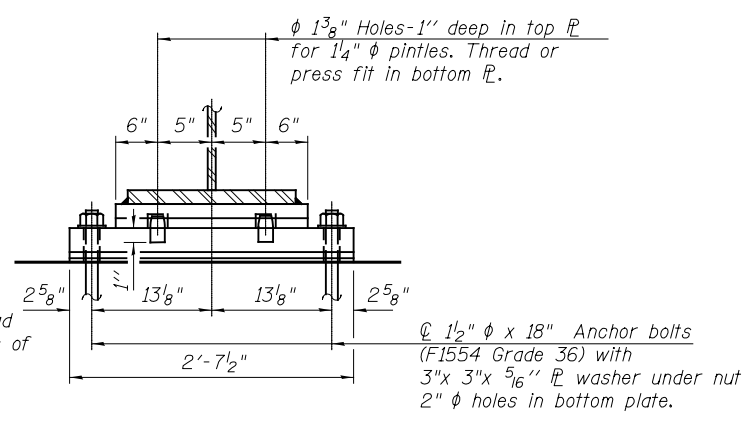
Note:
Shim plates shall not be placed under Bearing Assembly.



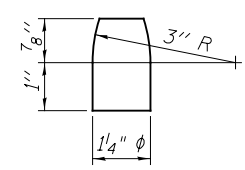
ELEVATION AT PIER

FIXED BEARING AT PIER

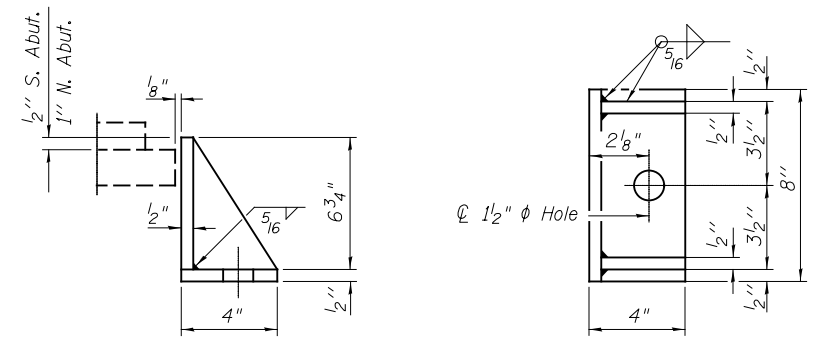
2 Required



SECTION C-C



PINTLE



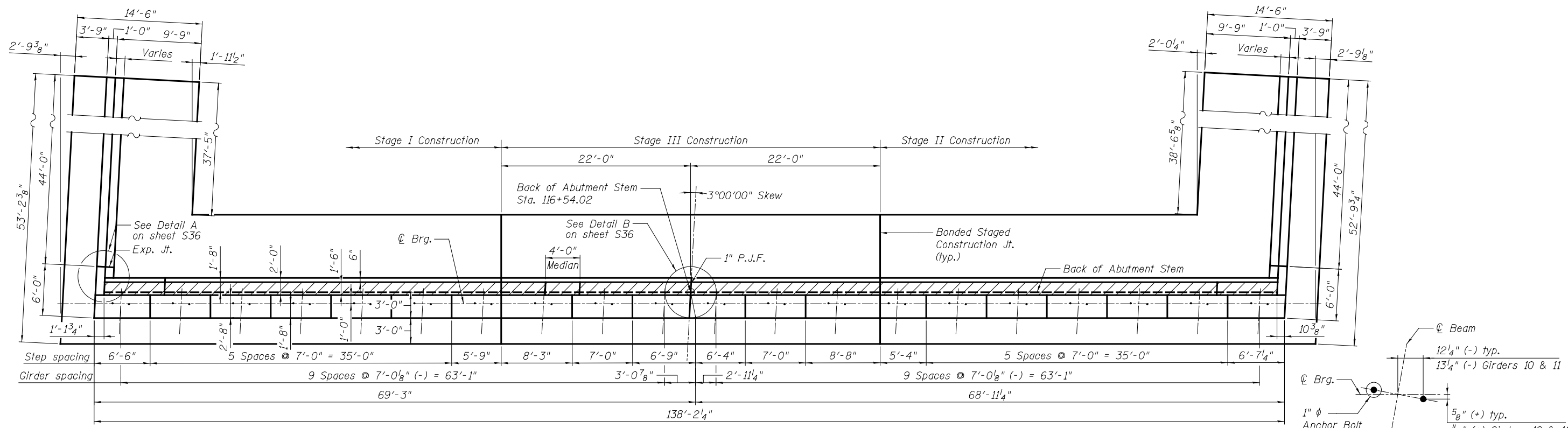
SIDE RETAINER

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

Notes:
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Anchor bolts 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 elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.
The structural steel plates of the Elastomeric and Fixed Bearing Assemblies, including pintles, shall conform to the requirements of AASHTO M 270 Grade 50.
Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

BILL OF MATERIAL

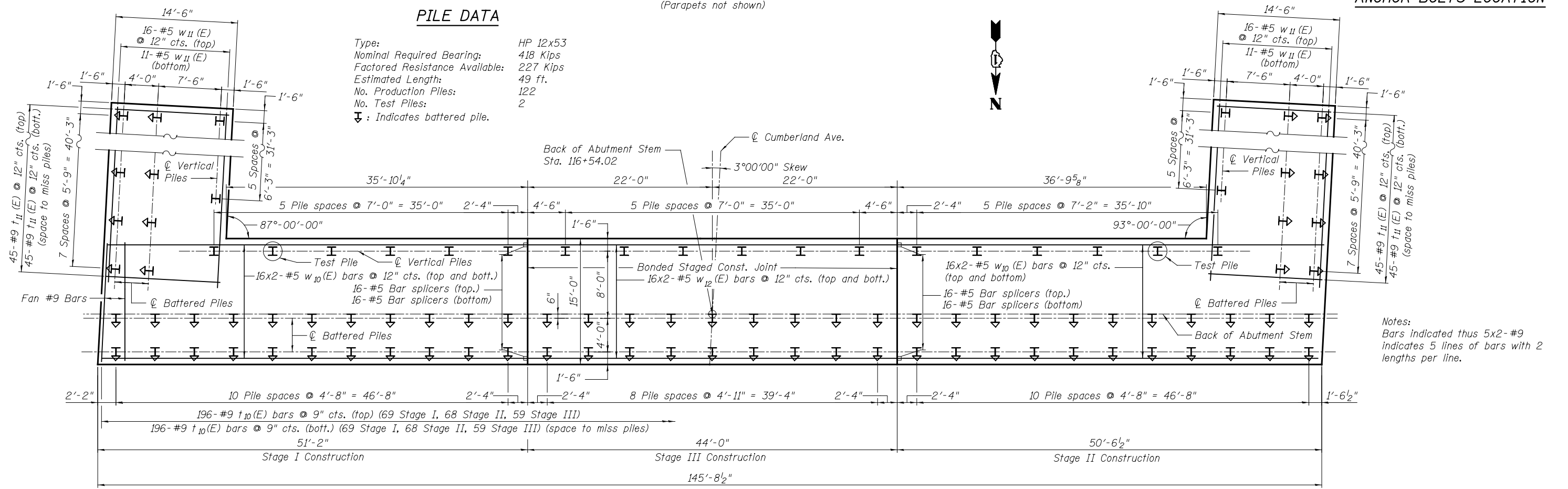
Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	4
Anchor Bolts, 1"	Each	8
Anchor Bolts, 1 1/2"	Each	4



TOP VIEW
(Parapets not shown)

PILE DATA

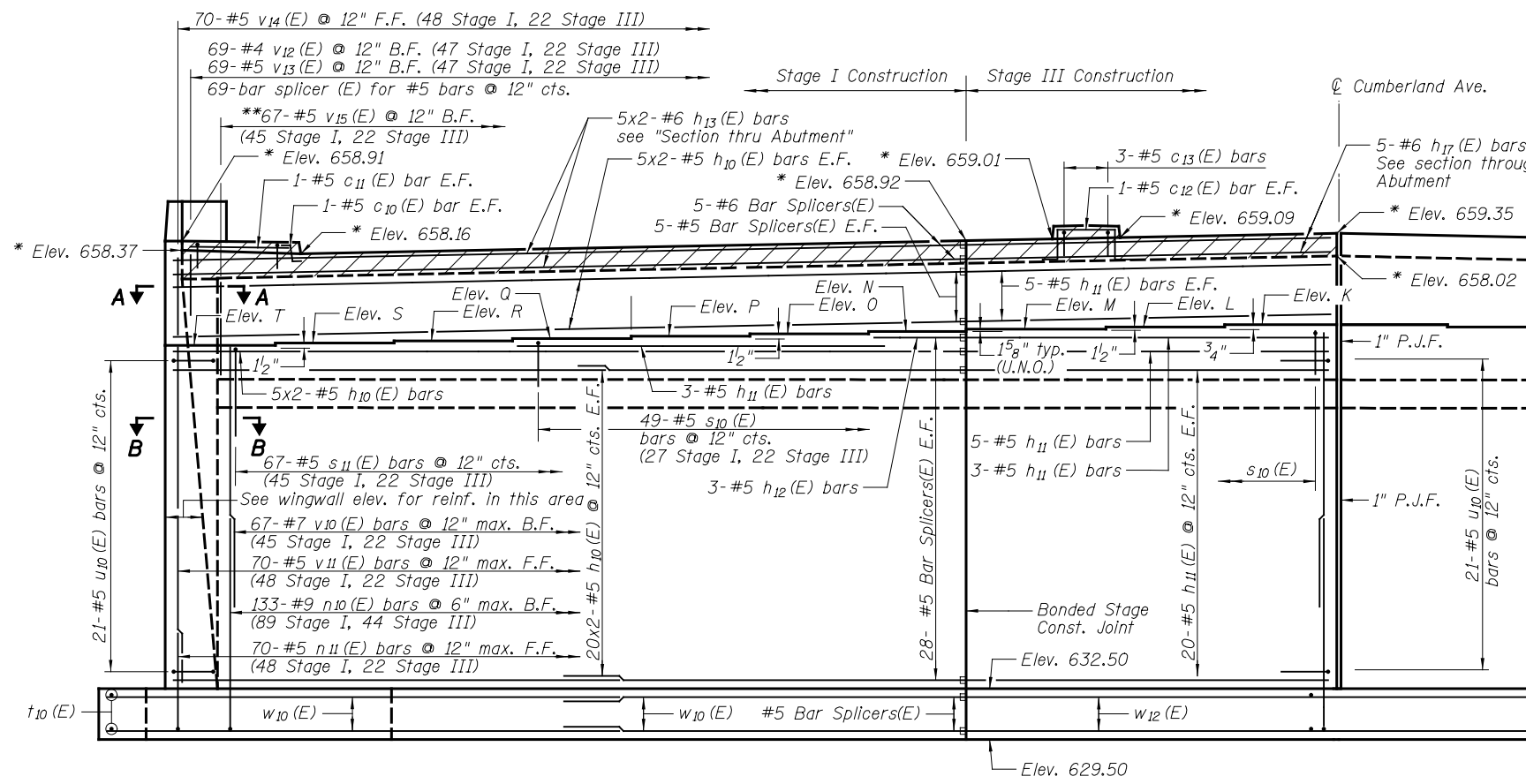
Type: HP 12x53
 Nominal Required Bearing: 418 Kips
 Factored Resistance Available: 227 Kips
 Estimated Length: 49 ft.
 No. Production Piles: 122
 No. Test Piles: 2
 ↓ : Indicates battered pile.



FOOTING PLAN
(For dimensions not shown see top view)

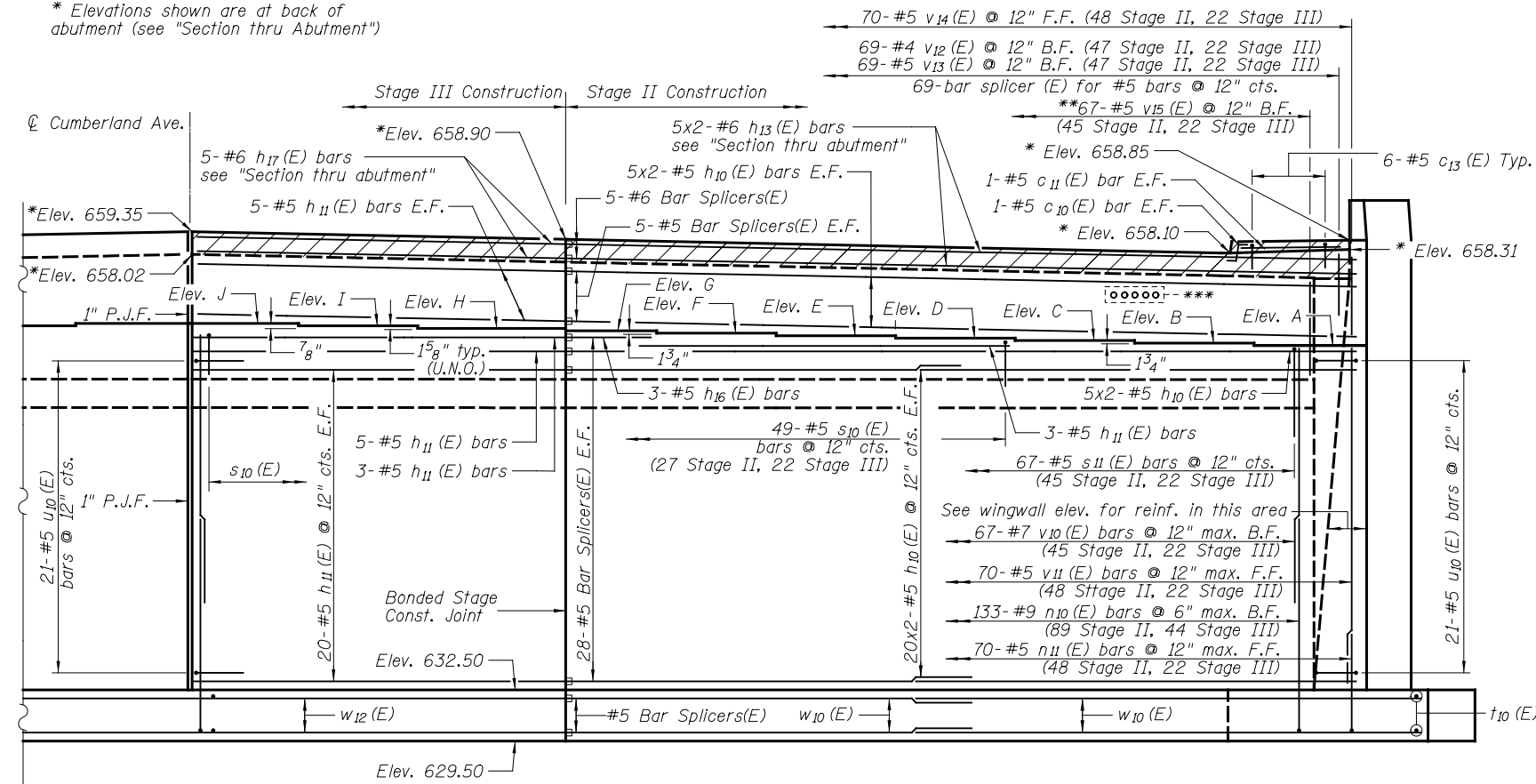
Notes:
 Bars indicated thus 5x2-#9 indicates 5 lines of bars with 2 lengths per line.

PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME =	DESIGNED - RDW	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOUTH ABUTMENT PLAN STRUCTURE NO. 016-1250	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	DRAWN - DM	REVISED			2746	1616B	COOK	404	302
	PLOT DATE =	CHECKED - AD	REVISED			CONTRACT NO. 60J14				
	DATE - 2/18/2013	REVIS	REVISED			ILLINOIS FED. AID PROJECT				

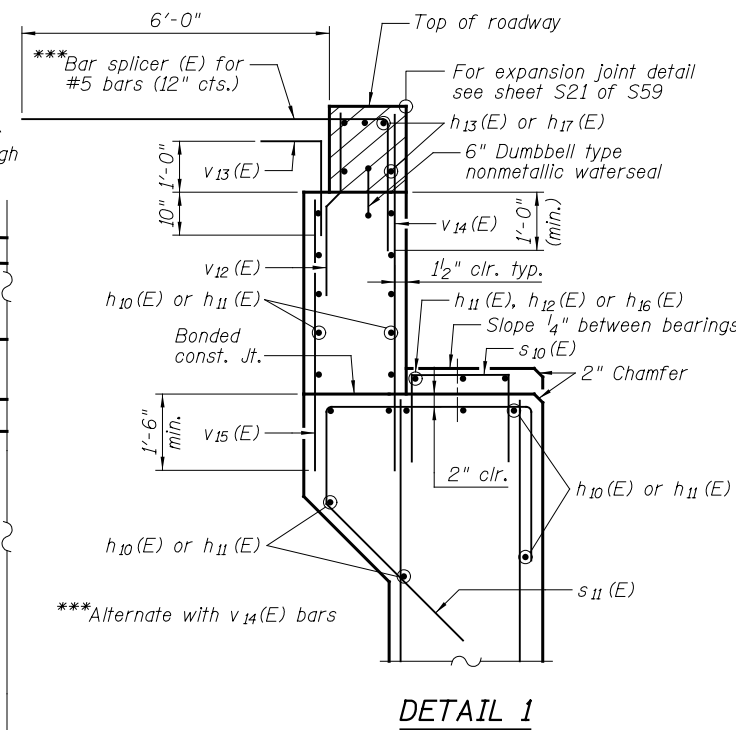


SOUTH ABUTMENT ELEVATION - EAST SIDE

* Elevations shown are at back of abutment (see "Section thru Abutment")



SOUTH ABUTMENT ELEVATION - WEST SIDE



DETAIL 1

BRIDGE SEAT ELEVATIONS

Elev. A	652.66
Elev. B	652.80
Elev. C	652.95
Elev. D	653.09
Elev. E	653.23
Elev. F	653.37
Elev. G	653.52
Elev. H	653.66
Elev. I	653.80
Elev. J	653.87
Elev. K	653.87
Elev. L	653.81
Elev. M	653.68
Elev. N	653.54
Elev. O	653.40
Elev. P	653.27
Elev. Q	653.13
Elev. R	652.99
Elev. S	652.85
Elev. T	652.72

MIN. BAR LAP

- #4 bar = 2'-4"
- #5 bar = 2'-11"
- #6 bar = 3'-10"
- #7 bar = 5'-2"

Notes:

Space reinforcement in cap to miss anchor bolts.

Pour steps monolithically with cap.

Bars indicated thus 5x2-#5 etc. indicates 5 lines of bars with 2 lengths per line.

For Bill of Material see sheet S36 of S59.

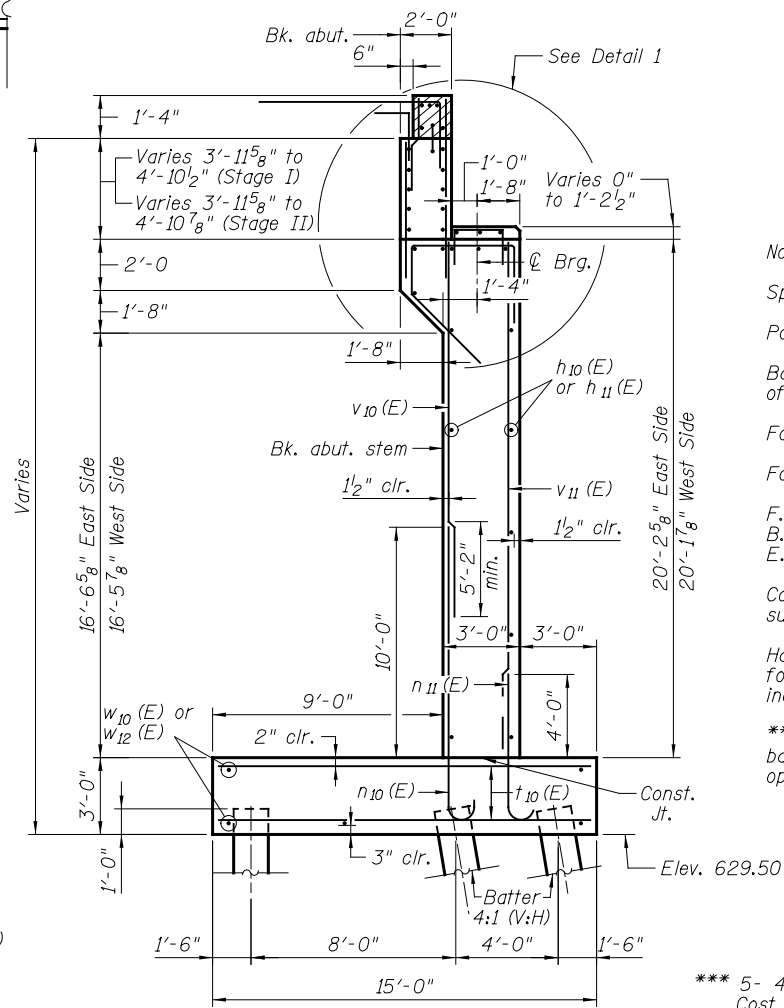
For Sections A-A & B-B see sheet S36 of S59.

F.F. = Front Face
B.F. = Back Face
E.F. = Each Face

Concrete sealer shall be applied to the exposed surface of the backwall & entire bridge seat.

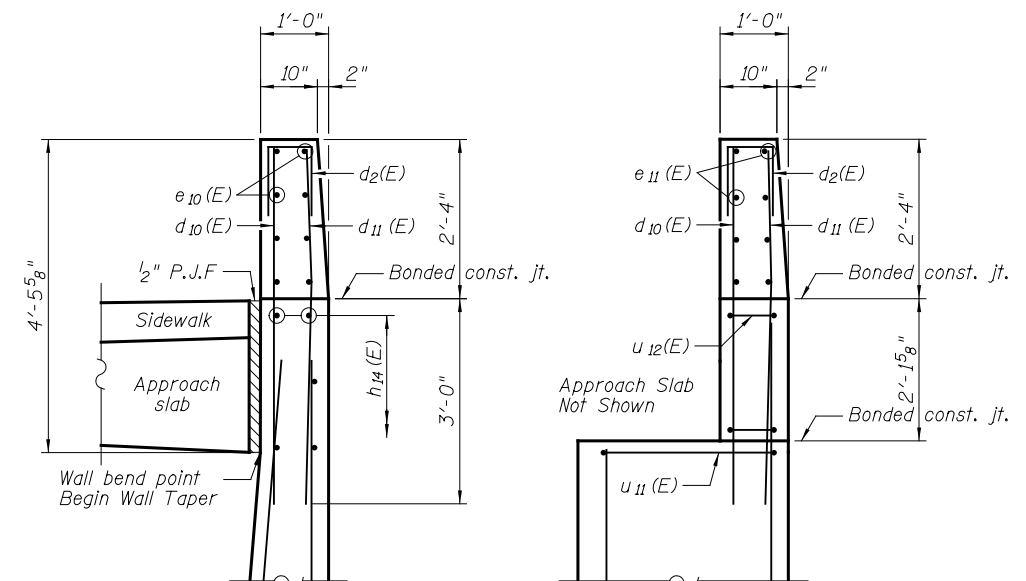
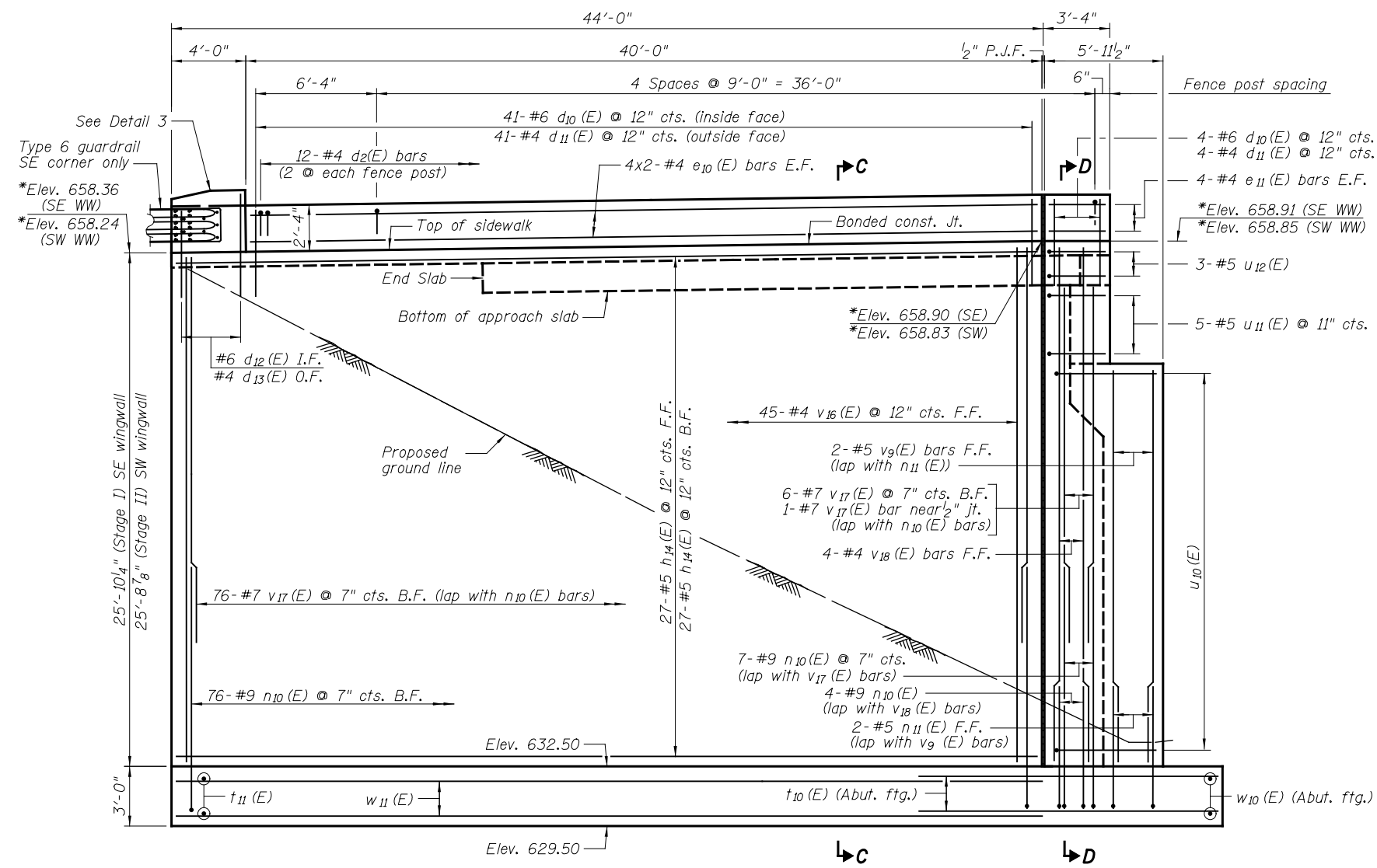
Hatched area to be poured after superstructure forms have been removed. Quantities of concrete included with concrete superstructure.

** Order v15(E) bars full length, cut to fit variable backwall height and use remainder of bars in opposite end.



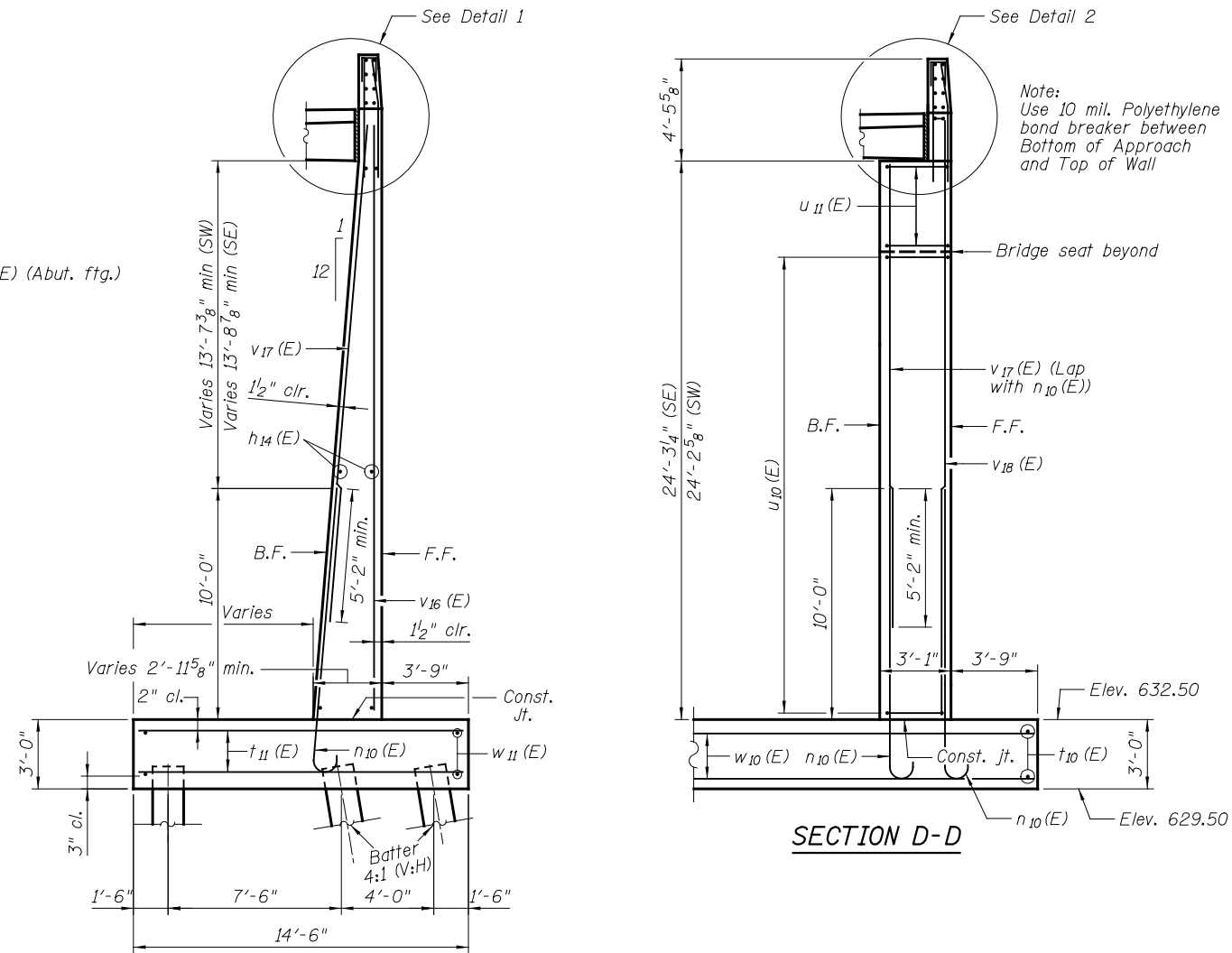
SECTION THRU ABUTMENT

*** 5- 4" Dia. Sleeves for Electrical Lighting Conduits. Cost included with the pay item "Concrete Structures". See Electrical Plans for details.



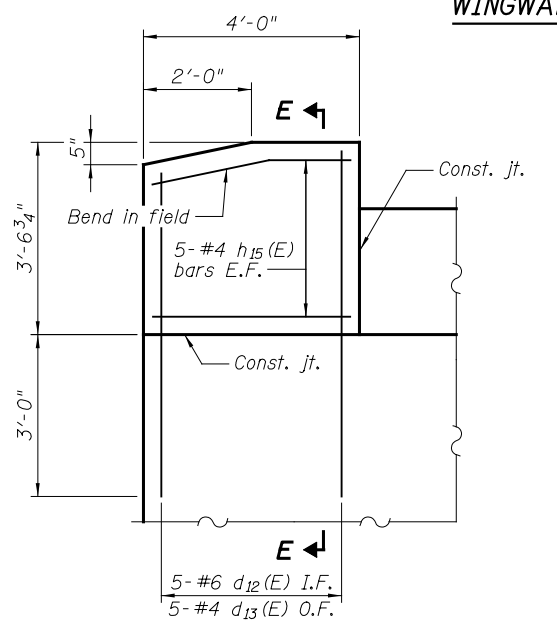
DETAIL 1

DETAIL 2

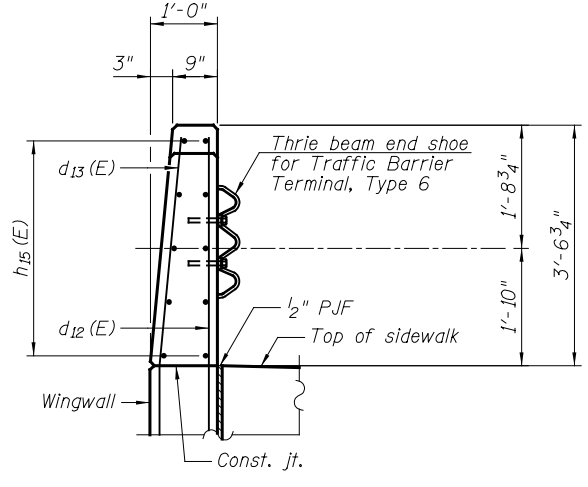


SECTION C-C

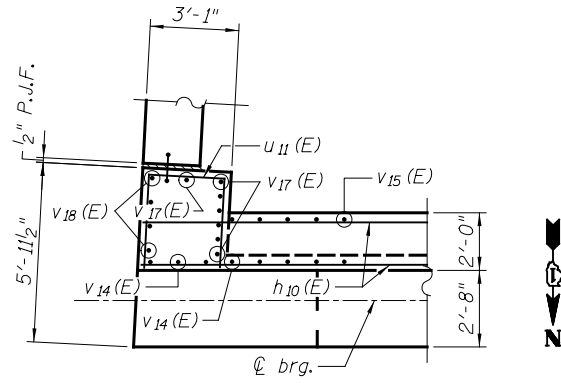
SECTION D-D



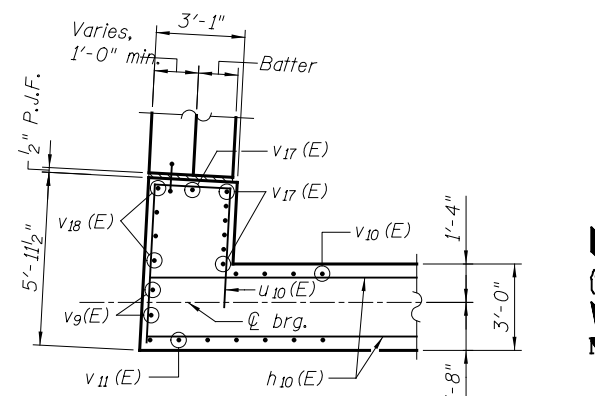
DETAIL 3



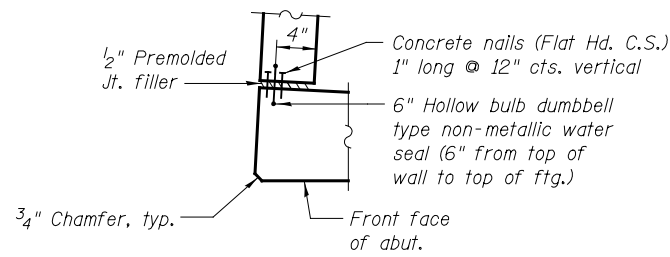
SECTION E-E



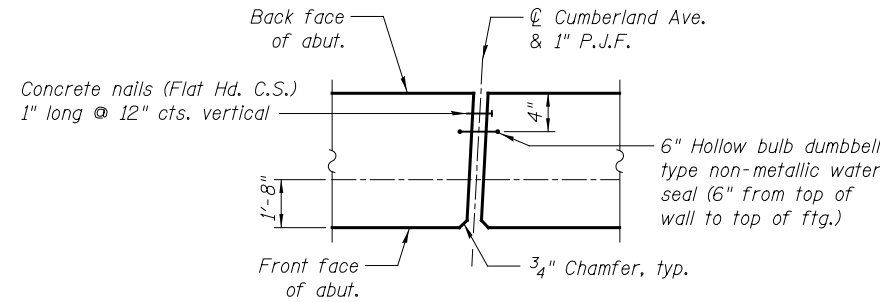
SECTION A-A
(Above bearing seat)



SECTION B-B
(Below bearing seat)

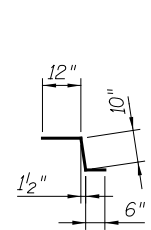


DETAIL A

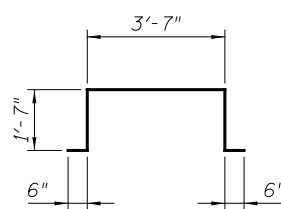


DETAIL B

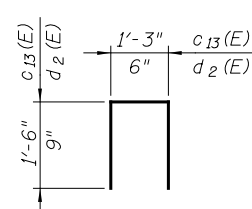
(Section below brg. seat shown, Backwall similar)



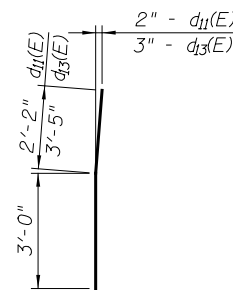
BAR c₁₀(E)



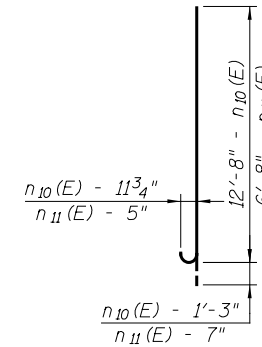
BAR c₁₂(E)



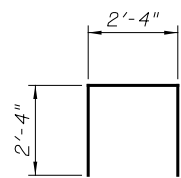
BAR c₁₃(E), d₂(E)



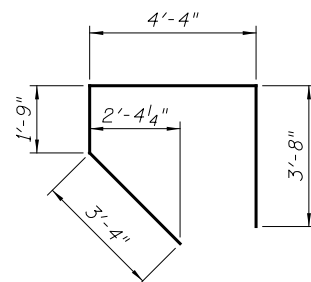
BAR d₁₁(E) & d₁₃(E)



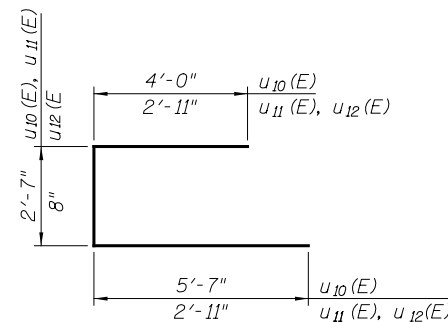
BAR n₁₀(E) & n₁₁(E)



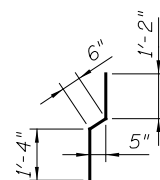
BAR s₁₀(E)



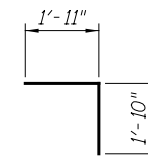
BAR s₁₁(E)



BAR u₁₀(E), u₁₁(E) & u₁₂(E)



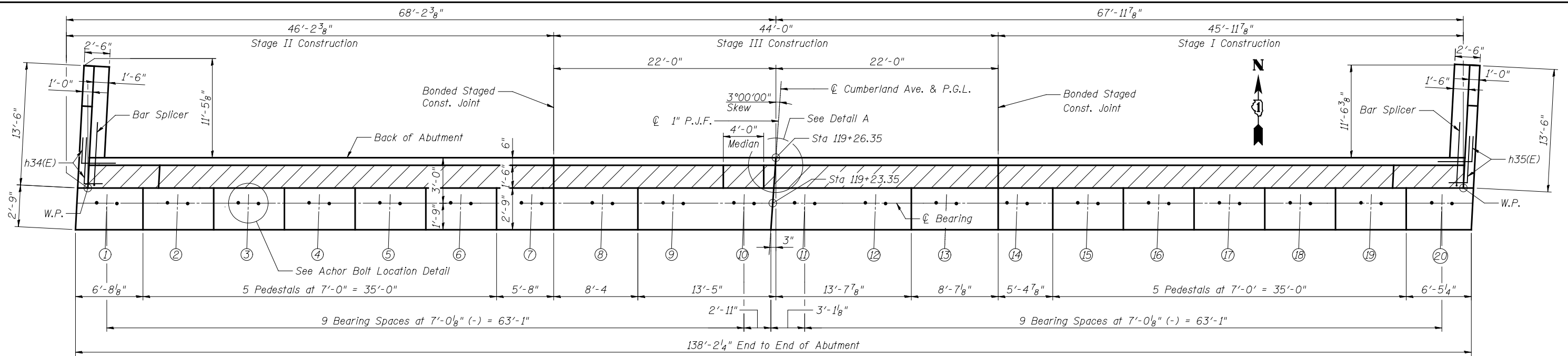
BAR v₁₂(E)



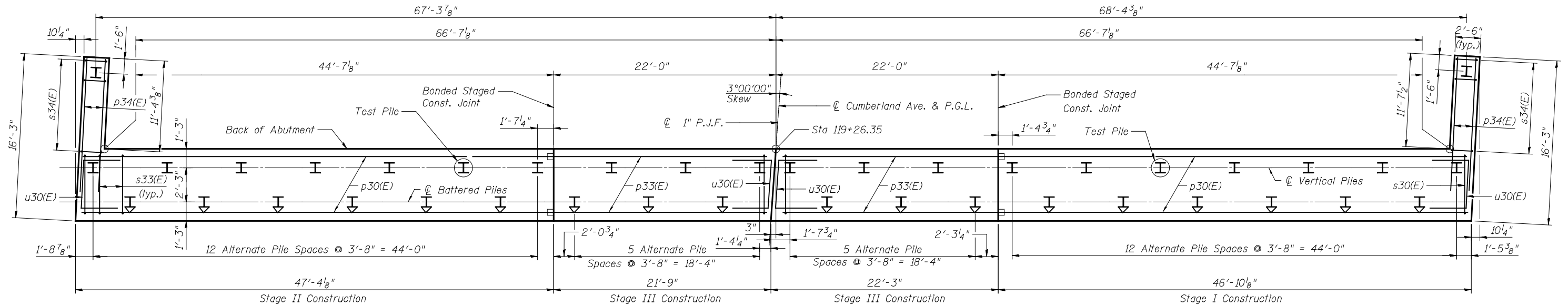
BAR v₁₃(E)

BILL OF MATERIAL

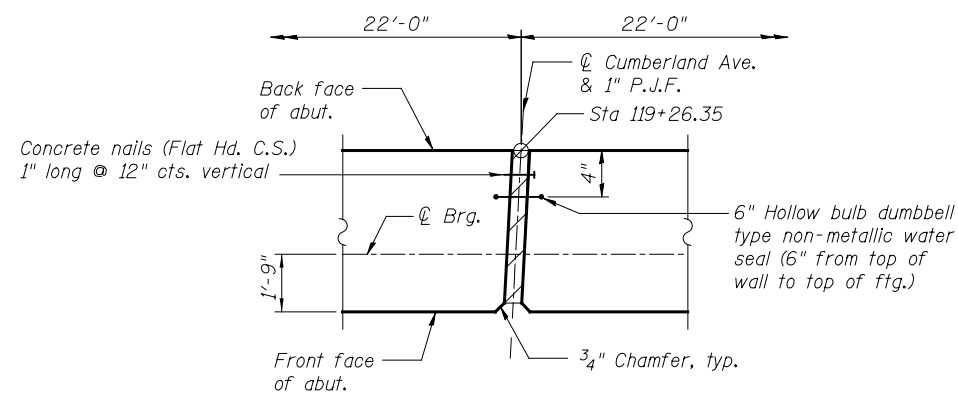
Bar	No.	Size	Length	Shape
c10(E)	4	#5	2'- 4"	
c11(E)	4	#5	6'- 8"	
c12(E)	2	#5	7'- 9"	
c13(E)	15	#5	4'- 3"	
d2(E)	24	#4	2'- 0"	
d10(E)	90	#6	5'- 2"	
d11(E)	90	#4	5'- 2"	
d12(E)	10	#6	6'- 5"	
d13(E)	10	#4	6'- 5"	
e10(E)	32	#4	21'- 3"	
e11(E)	16	#4	2'- 11"	
h10(E)	220	#5	25'- 0"	
h11(E)	122	#5	21'- 8"	
h12(E)	3	#5	5'- 5"	
h13(E)	20	#6	25'- 6"	
h14(E)	108	#5	43'- 8"	
h15(E)	20	#4	3'- 8"	
h16(E)	3	#5	5'- 0"	
h17(E)	10	#6	21'- 8"	
n10(E)	440	#9	13'- 11"	
n11(E)	144	#5	7'- 3"	
s10(E)	98	#5	7'- 0"	
s11(E)	134	#5	13'- 1"	
t10(E)	392	#9	14'- 8"	
t11(E)	180	#9	14'- 2"	
u10(E)	84	#5	12'- 2"	
u11(E)	10	#5	8'- 5"	
u12(E)	6	#5	6'- 6"	
v9(E)	4	#5	19'- 11"	
v10(E)	134	#7	15'- 3"	
v11(E)	140	#5	19'- 0"	
v12(E)	138	#4	3'- 0"	
v13(E)	138	#5	3'- 9"	
v14(E)	140	#5	8'- 0"	
v15(E)	68	#5	11'- 6"	
v16(E)	90	#4	25'- 6"	
v17(E)	166	#7	21'- 4"	
v18(E)	8	#4	26'- 0"	
w10(E)	128	#5	26'- 11"	
w11(E)	54	#5	44'- 0"	
w12(E)	64	#5	23'- 3"	
Structure Excavation	Cu. Yd.		3,581	
Concrete Structures	Cu. Yd.		942.5	
Reinforcement Bars, Epoxy Coated	Pound		96,610	
Furnishing Steel Piles, HP 12x53	Foot		5,978	
Driving Piles	Foot		5,978	
Test Pile Steel, HP 12x53	Each		2	
Concrete Sealer	Sq. Ft.		4,007	
Bar Splicers	Each		344	
Protective Coat	Sq. Yd.		33	



TOP VIEW
(Parapets not shown)



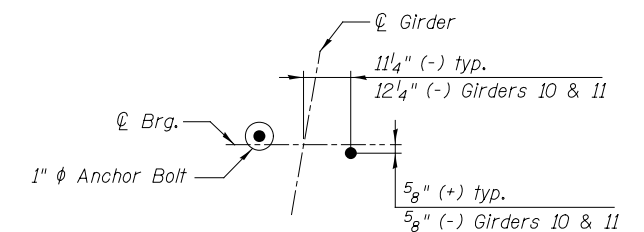
PLAN-PILE CAP



DETAIL A
(Section below brg. seat shown, above similar)

PILE DATA

Type: HP 12x53
 Nominal Required Bearing: 418 Kips
 Factored Resistance Available: 165 Kips
 Estimated Length: 35 ft.
 No. Production Piles: 38
 No. Test Piles: 2
 ⚡ : Indicates battered pile.



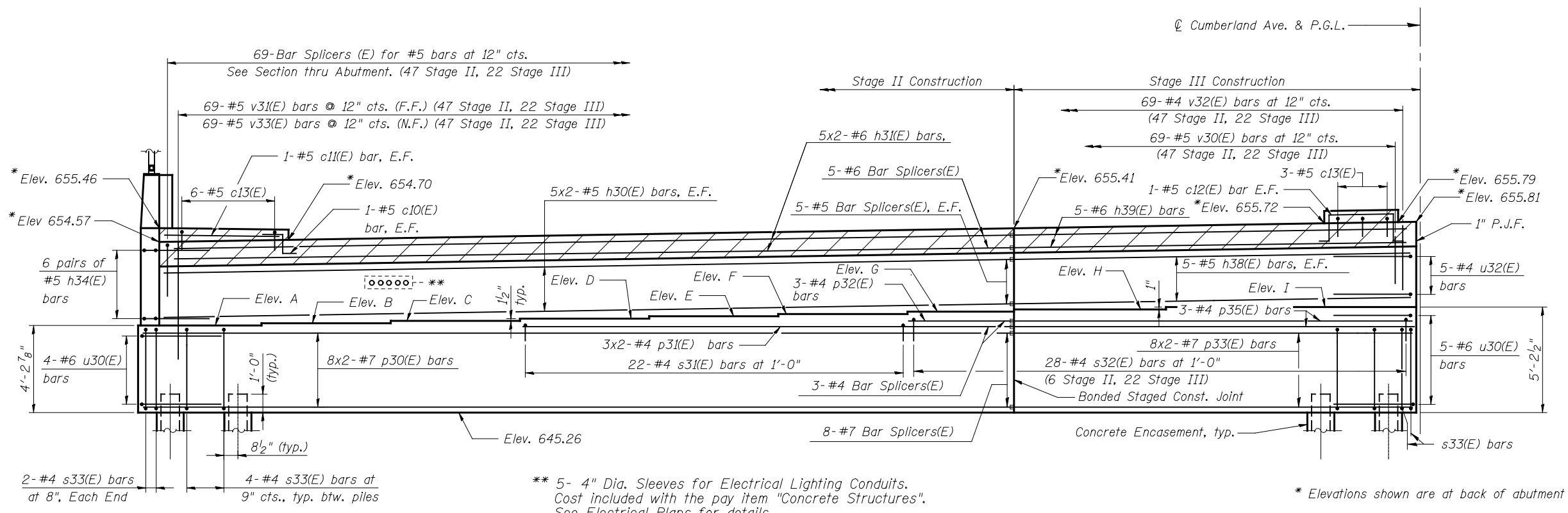
ANCHOR BOLTS LOCATION

PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME =	DESIGNED - AD	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	NORTH ABUTMENT PLAN STRUCTURE NO. 016-1250	F.A.U. R.T.E. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	DRAWN - AD	REVISED			2746	1616B	COOK	404	306
	PLOT DATE =	CHECKED - RDW	REVISED			CONTRACT NO. 60J14				
		DATE - 2/18/2013	REVISED			ILLINOIS FED. AID PROJECT				
SCALE: NONE					SHEET NO. S37 OF S59 SHEETS					

G:\IDOT\21850_006.CumberlandAve\Drawings\CADD Sheets\0160J14-sht-ts1-north-Abut-1.dgn

BRIDGE SEAT ELEVATIONS

Elev. A	649.50
Elev. B	649.63
Elev. C	649.76
Elev. D	649.88
Elev. E	650.01
Elev. F	650.14
Elev. G	650.27
Elev. H	650.39
Elev. I	650.47
Elev. J	650.45
Elev. K	650.33
Elev. L	650.18
Elev. M	650.03
Elev. N	649.87
Elev. O	649.72
Elev. P	649.57
Elev. Q	649.42
Elev. R	649.26



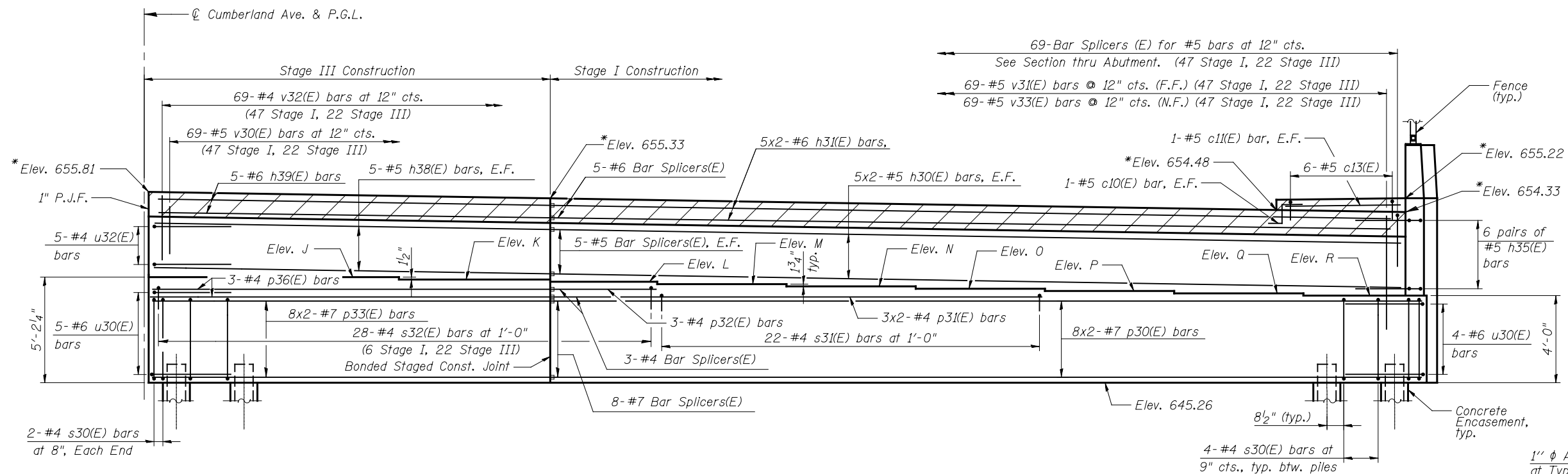
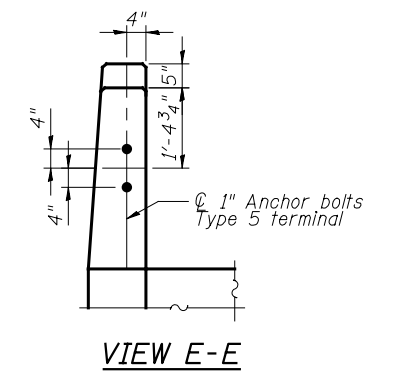
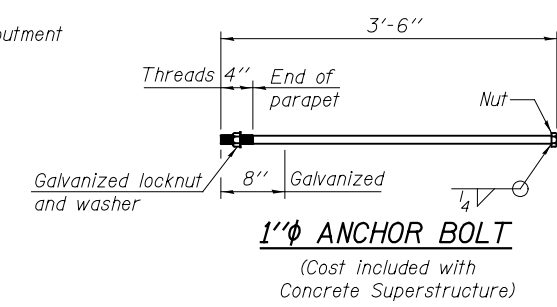
Note:
Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with concrete superstructure.

** 5- 4" Dia. Sleeves for Electrical Lighting Conduits.
Cost included with the pay item "Concrete Structures".
See Electrical Plans for details.

NORTH ABUTMENT ELEVATION - WEST END
(Wingwall Reinforcement not shown for clarity)

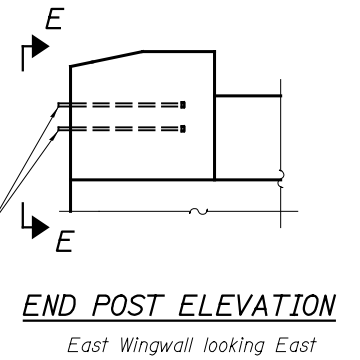
MIN. BAR LAP
#4 Bar = 2'-4"
#5 Bar = 2'-11"
#6 Bar = 3'-10"
#7 Bar = 5'-2"

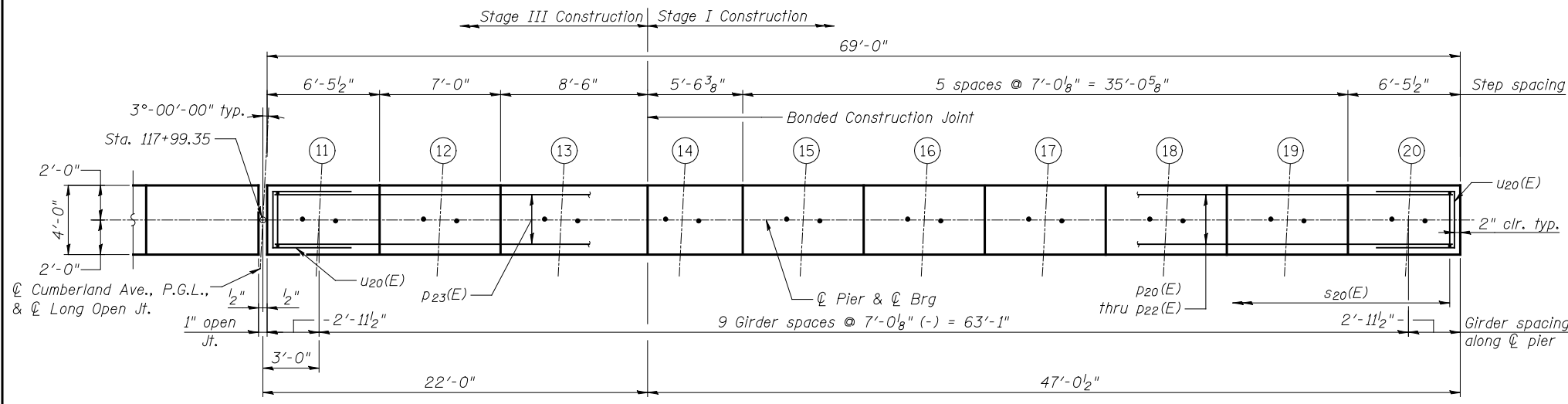
* Elevations shown are at back of abutment



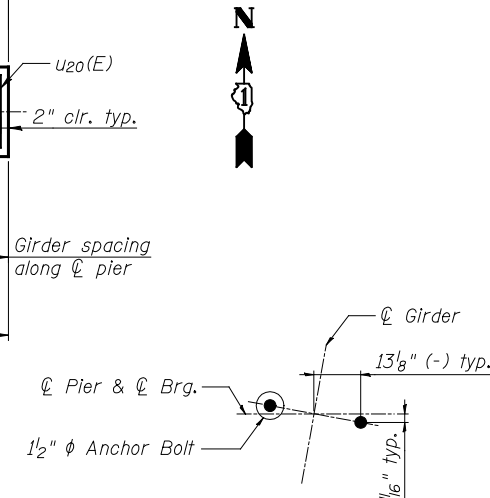
1" dia Anchor bolts at Type 5 terminal connections only See View E-E

NORTH ABUTMENT ELEVATION - EAST END
(Wingwall Reinforcement not shown for clarity)





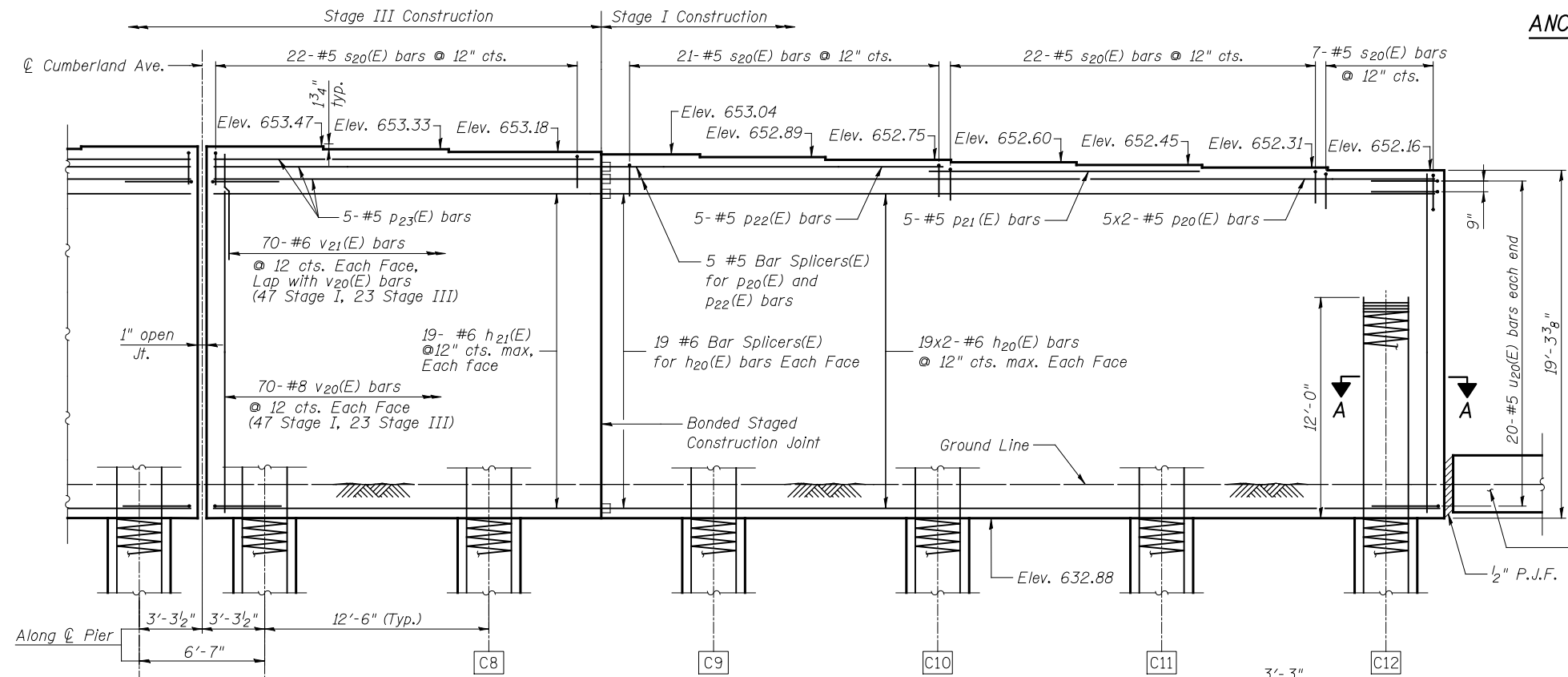
TOP PLAN



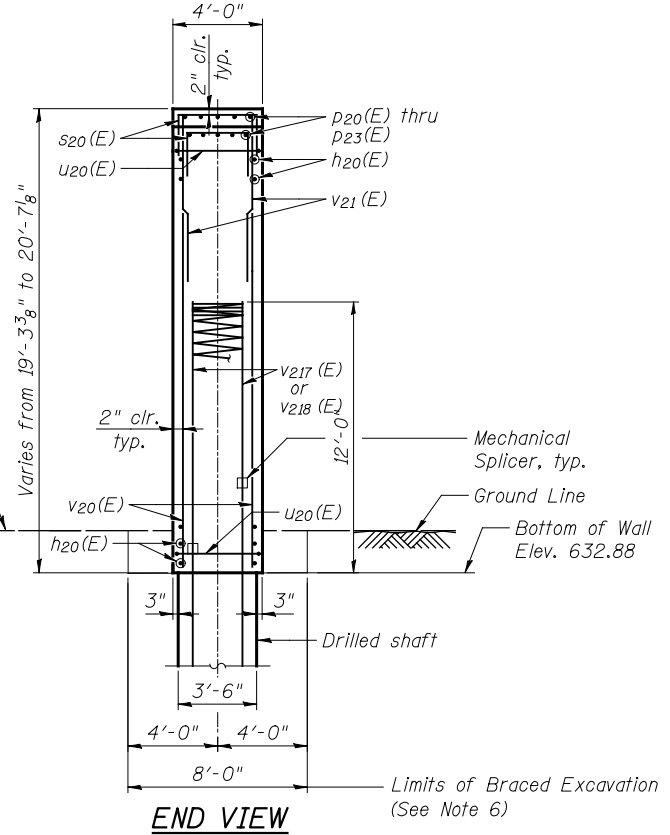
ANCHOR BOLTS LOCATION

BILL OF MATERIAL

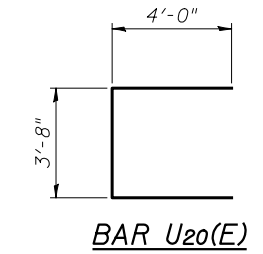
Bar No.	Size	Length	Shape
h20(E)	152	#6	25'- 2"
h21(E)	76	#6	21'- 8"
p20(E)	20	#5	24'- 10"
p21(E)	10	#5	14'- 10"
p22(E)	10	#5	19'- 3"
p23(E)	30	#5	21'- 8"
s20(E)	144	#5	7'- 8"
u20(E)	80	#5	11'- 8"
v20(E)	280	#8	19'- 0"
v21(E)	280	#6	6'- 0"
Concrete Structures	Cu. Yd.		408.2
Reinforcement Bars, Epoxy Coated	Pound		28,630
Concrete Sealer	Sq. Ft.		6261
Braced Excavation	Cu. Yd.		87
Bar Splicers	Each		96



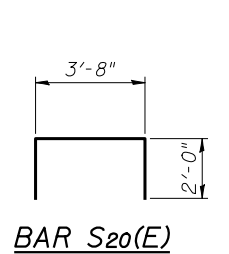
ELEVATION
(Looking North)



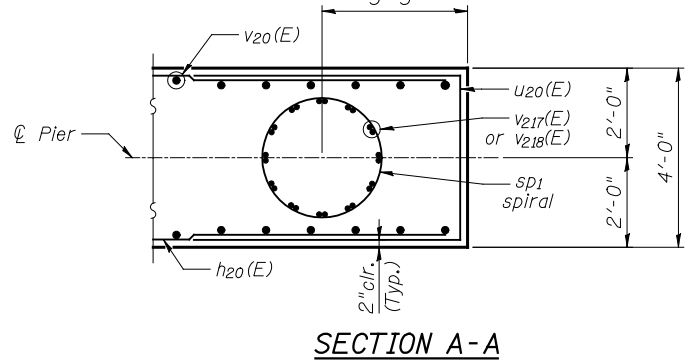
END VIEW



BAR U20(E)



BAR S20(E)



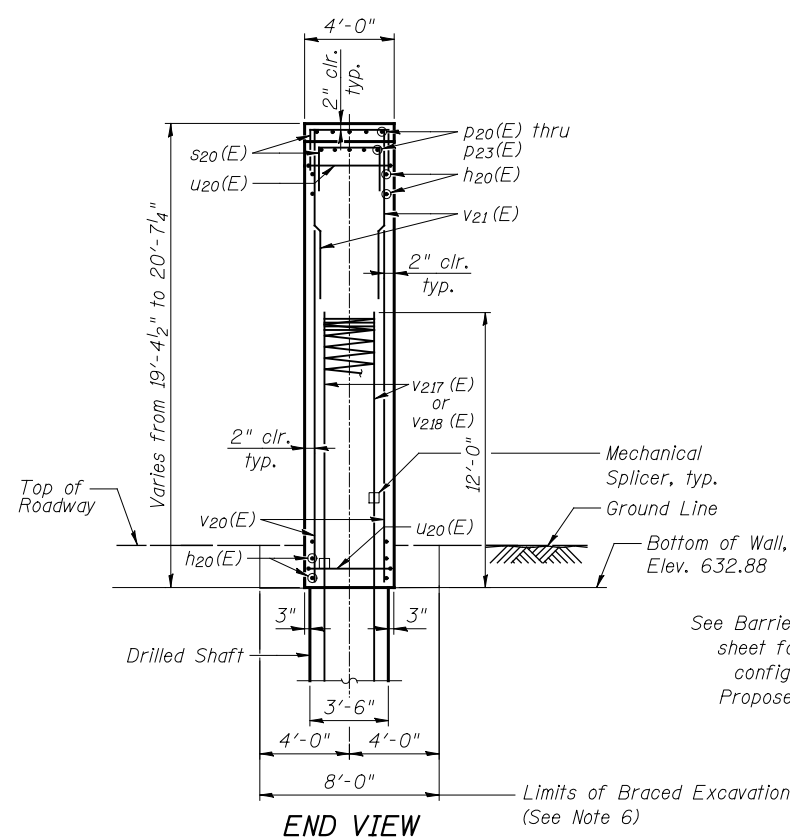
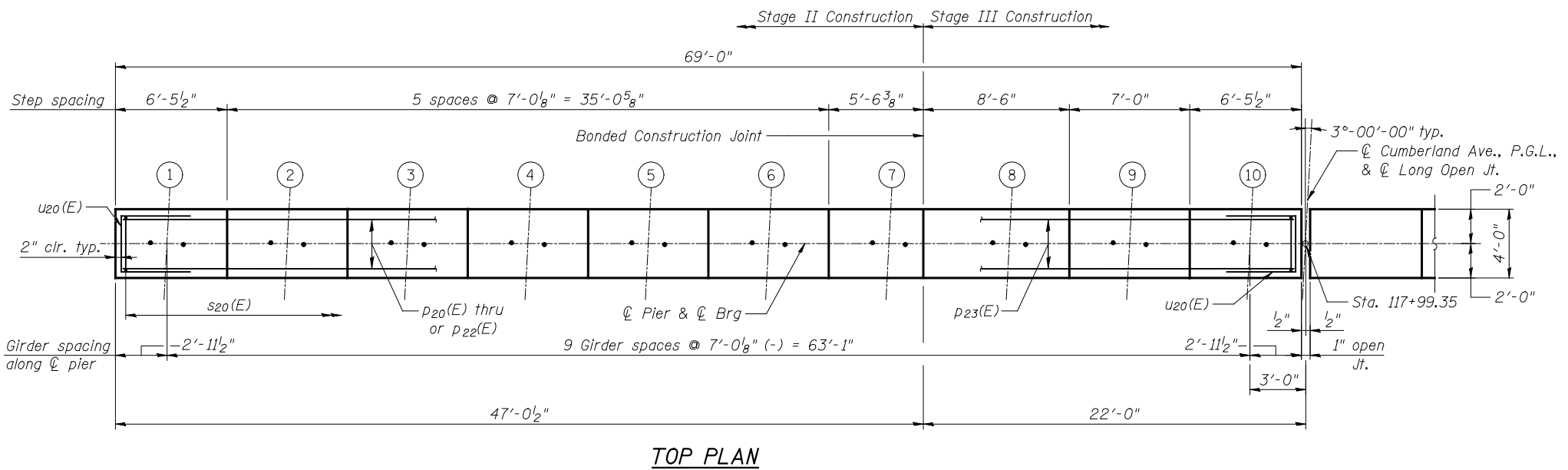
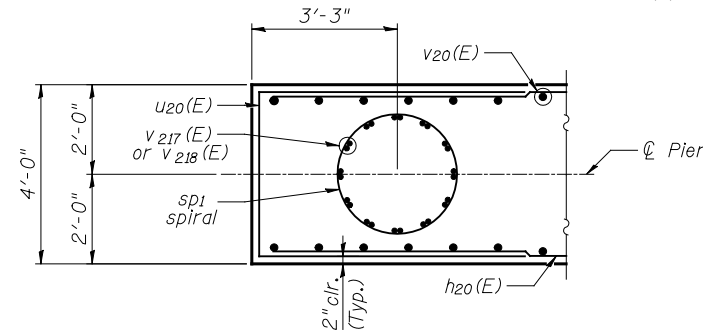
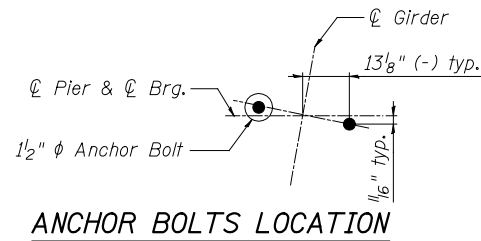
SECTION A-A

MIN. BAR LAP

#5 bar = 2'-11"
#6 bar = 3'-6"

Notes:

1. Space reinforcement in cap to miss anchor bolts.
2. Pour steps monolithically with cap.
3. Concrete Sealer shall be applied to the top, sides, and ends of the pier.
4. For Drilled Shaft reinforcement details see sheet S42 of S59.
5. Bars indicated thus 19x2-#6 etc. indicates 19 lines of bars with 2 lengths per line.
6. Braced Excavation shall extend 2'-0" from each end of the pier. See General Note 8 on Sheet S2 of S59.

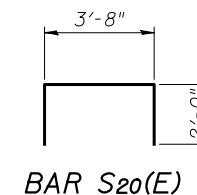
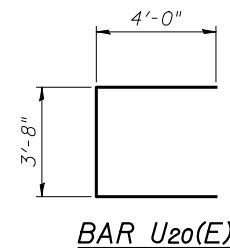
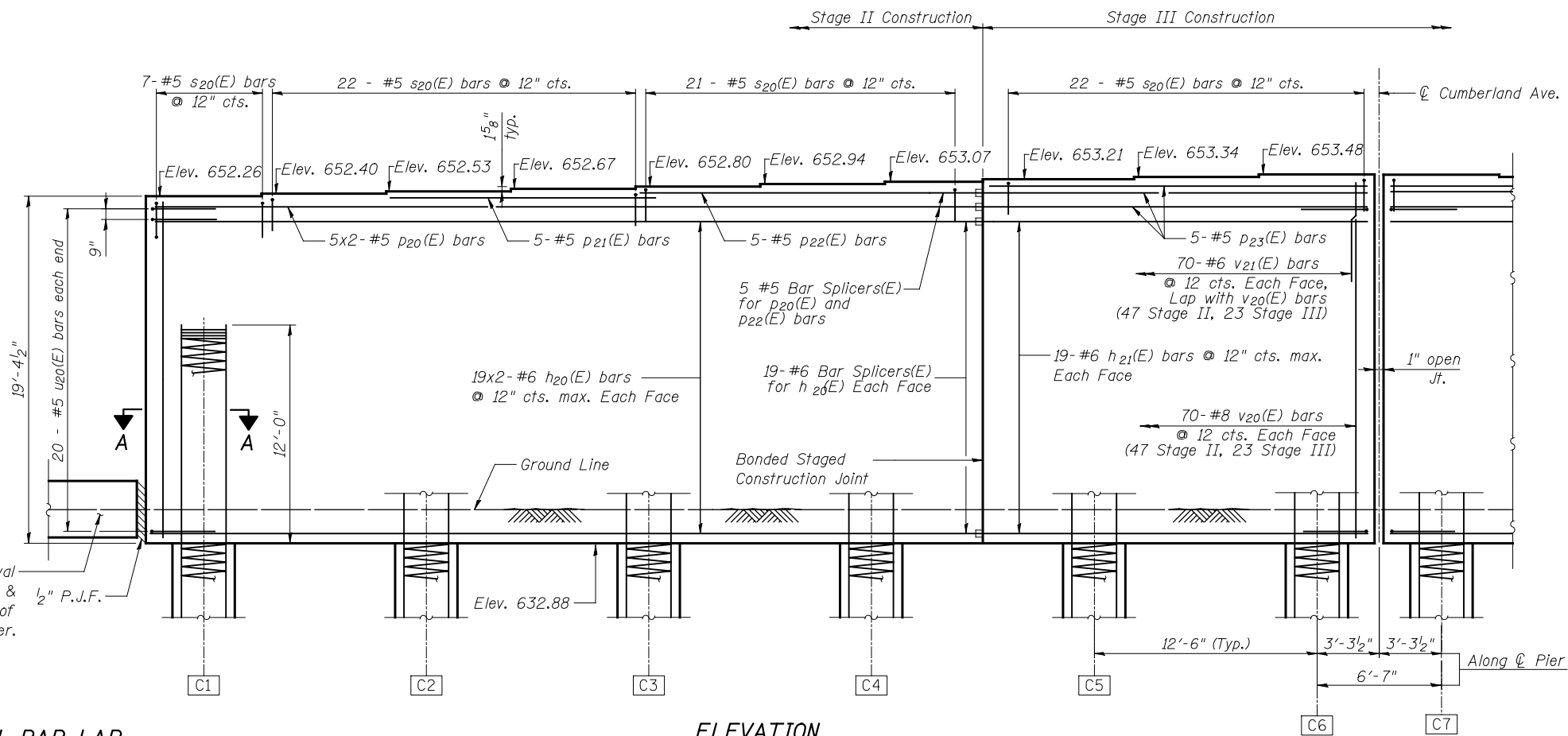


Notes:

1. Space reinforcement in cap to miss anchor bolts.
2. Pour steps monolithically with cap.
3. Concrete Sealer shall be applied to the top, sides, and ends of the pier.
4. For Drilled Shaft reinforcement & details see sheet S42 of S59.
5. Bars indicated thus 19x2-#6 etc. indicates 19 lines of bars with 2 lengths per line.
6. Braced Excavation shall extend 2'-0" from each end of the pier. See General Note 8 on Sheet S2 of S59.
7. For Bill of Material See Sheet S40 of S59.

MIN. BAR LAP

- #5 bar = 2'-11"
- #6 bar = 3'-6"



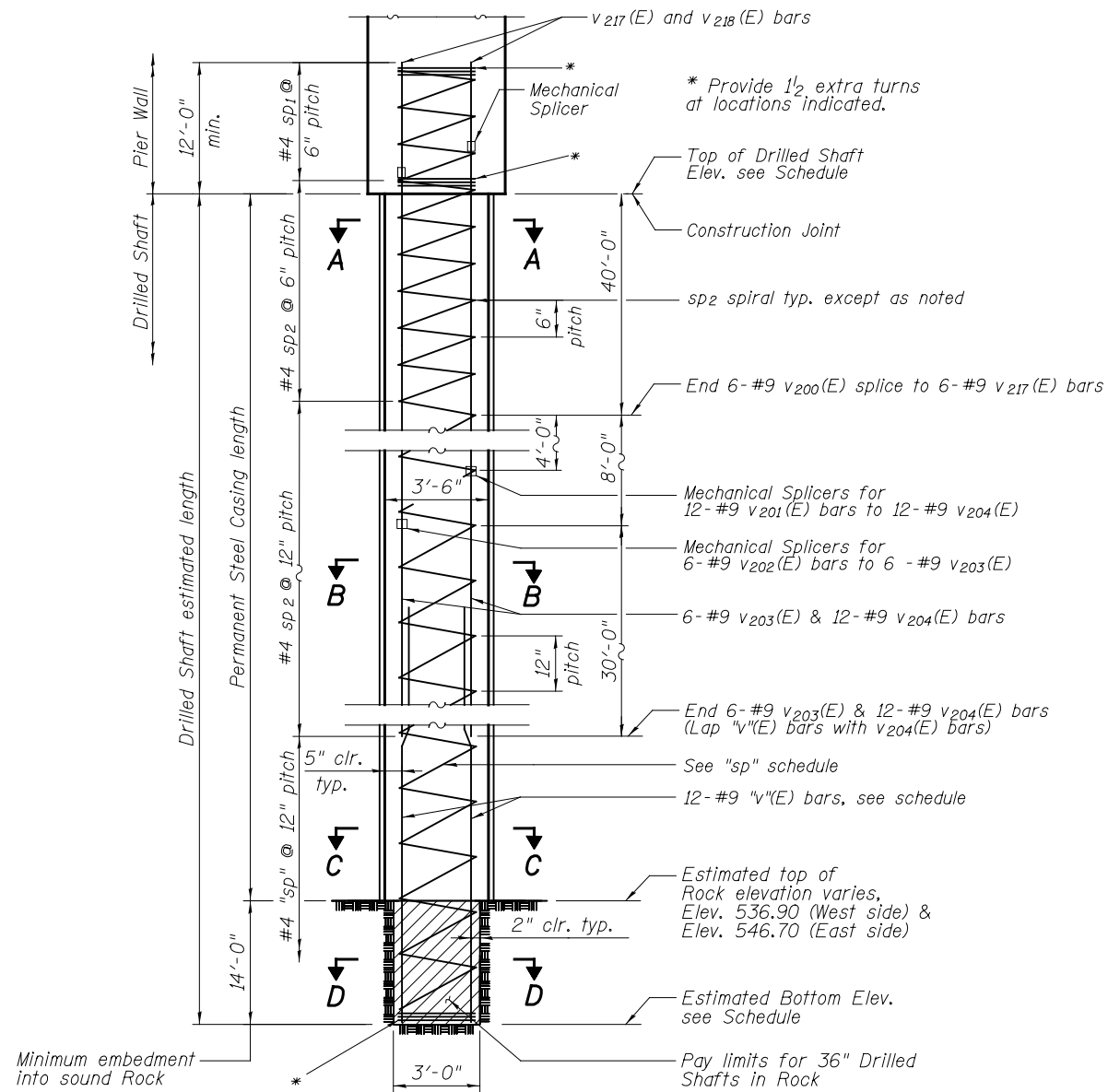
<p>PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com</p>	USER NAME =	DESIGNED - RDW	REVISED	<p align="center">STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p>	<p align="center">PIER DETAILS II STRUCTURE NO. 016-1250</p>	F.A.U. RTE. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	DRAWN - DM	REVISED			2746	1616B	COOK	404	310
	PLOT DATE =	CHECKED - RLD	REVISED			CONTRACT NO. 60J14				
		DATE - 2/18/2013	REVISED			ILLINOIS FED. AID PROJECT				

DRILLED SHAFT SCHEDULE

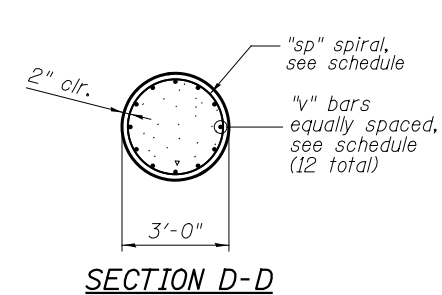
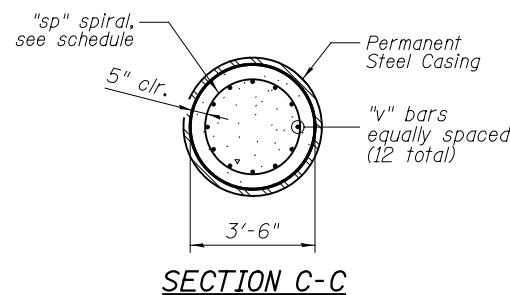
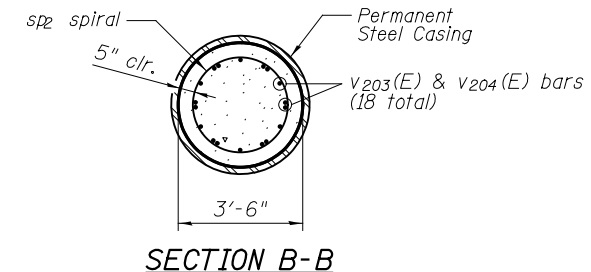
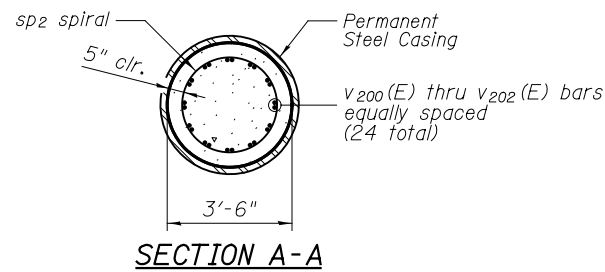
Caisson Mark	Top Of Drilled Shaft Elev. (ft.)	Estimated Bottom Elev. (ft.)	Estimated Length (ft.)	Permanent Casing Length (ft.)	Reinforcement Bars				
					"v" bars			"sp" bars	
					Mark	No.	Size	Mark	Size
C1	632.88	523.13	109.75	95.75	V205(E)	12	#9	sp3(E)	#4
C2	632.88	524.02	108.86	94.86	V206(E)	12	#9	sp4(E)	#4
C3	632.88	524.91	107.97	93.97	V207(E)	12	#9	sp5(E)	#4
C4	632.88	525.79	107.09	93.09	V208(E)	12	#9	sp6(E)	#4
C5	632.88	526.68	106.20	92.20	V209(E)	12	#9	sp7(E)	#4
C6	632.88	527.57	105.31	91.31	V210(E)	12	#9	sp8(E)	#4
C7	632.88	528.03	104.85	90.85	V211(E)	12	#9	sp9(E)	#4
C8	632.88	528.92	103.96	89.86	V212(E)	12	#9	sp10(E)	#4
C9	632.88	529.81	103.07	89.07	V213(E)	12	#9	sp11(E)	#4
C10	632.88	530.69	102.19	88.19	V214(E)	12	#9	sp12(E)	#4
C11	632.88	531.58	101.30	87.30	V215(E)	12	#9	sp13(E)	#4
C12	632.88	532.47	100.41	86.41	V216(E)	12	#9	sp14(E)	#4

Notes:

- The quantities and reinforcement detailing are based on the estimated elevations shown on the plans. The actual elevations may differ at each shaft and corresponding adjustments shall be made to the drilled shaft and reinforcement quantities and payment limits.
- Drilled Shafts factored resistance = 1,100 Kips
- Minimum Concrete $f'c = 4,000$ psi at 14 Days
Reinforcement $f_y = 60,000$ psi
- The Contractor shall be responsible for locating all utilities prior to drilling of shafts.
- Reinforcement bars designated (E) shall be epoxy coated.
- When splicing of spiral reinforcement is necessary, the spirals shall be provided with $1\frac{1}{2}$ extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4, or shall both terminate with a 135° standard hook.
- Each longitudinal bar shall be supported by a 3" high Bolster of non-corrosive, durable material.
- Drilled Shafts shall be constructed using permanent casing.
- See sheet S3 of S58 for drilled shaft layout.
- Pay limits for the permanent casing shall be based on the minimum lengths shown.
- Permanent $\frac{3}{8}$ " min. Steel Casing with min. inside diameter equal to or larger than Drilled Shaft diameter. Contractor is responsible for determining the casing thickness and actual tip elevation used.
- Place bars symmetrically about shaft.



TYPICAL DRILLED SHAFT SECTION



BAR LIST

Bar	No.	Size	Length	Shape
** sp1(E)	12	#4	12'-0"	W
** sp2(E)	24	#4	40'-0"	W
** sp3(E)	1	#4	29'-9"	W
** sp4(E)	1	#4	28'-11"	W
** sp5(E)	1	#4	28'-0"	W
** sp6(E)	1	#4	27'-2"	W
** sp7(E)	1	#4	26'-3"	W
** sp8(E)	1	#4	25'-4"	W
** sp9(E)	1	#4	24'-11"	W
** sp10(E)	1	#4	24'-0"	W
** sp11(E)	1	#4	23'-1"	W
** sp12(E)	1	#4	22'-3"	W
** sp13(E)	1	#4	21'-4"	W
** sp14(E)	1	#4	20'-5"	W
v200(E)	72	#9	41'-0"	—
v201(E)	144	#9	45'-0"	—
v202(E)	72	#9	49'-0"	—
v203(E)	72	#9	30'-0"	—
v204(E)	144	#9	34'-0"	—
v205(E)	12	#9	40'-6"	—
v206(E)	12	#9	39'-6"	—
v207(E)	12	#9	38'-8"	—
v208(E)	12	#9	37'-9"	—
v209(E)	12	#9	36'-10"	—
v210(E)	12	#9	36'-0"	—
v211(E)	12	#9	35'-8"	—
v212(E)	12	#9	34'-8"	—
v213(E)	12	#9	33'-9"	—
v214(E)	12	#9	32'-10"	—
v215(E)	12	#9	32'-0"	—
v216(E)	12	#9	31'-0"	—
v217(E)	144	#9	11'-0"	—
v218(E)	144	#9	7'-0"	—

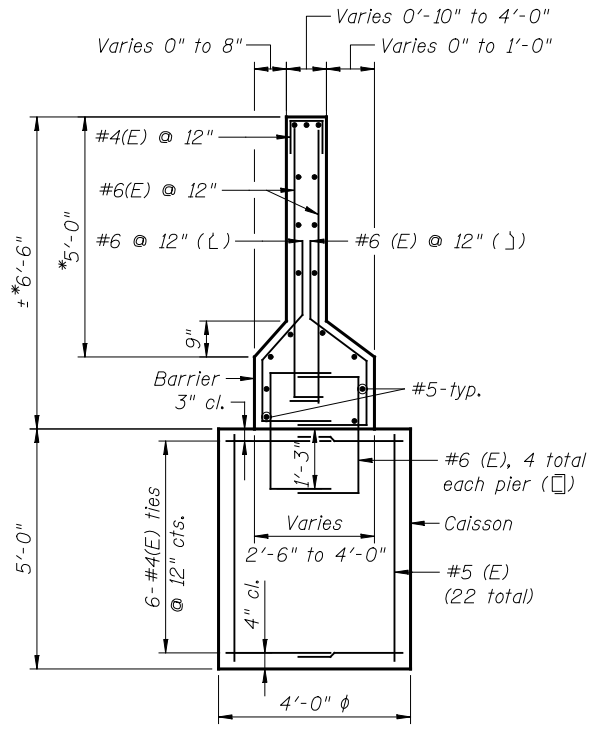
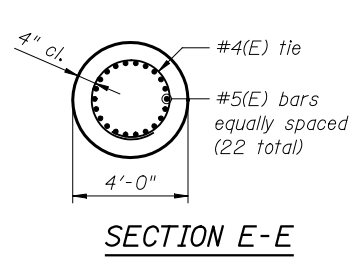
** - Length is Height of Spiral

BILL OF MATERIAL

Item	Unit	Total
Reinforcement Bars, Epoxy Coated	Pound	105,860
Drilled Shaft in Soil	Cu Yd.	389.5
Drilled Shaft in Rock	Cu Yd.	44.0
Permanent Casing	Foot	1093
Mechanical Splicer	Each	504

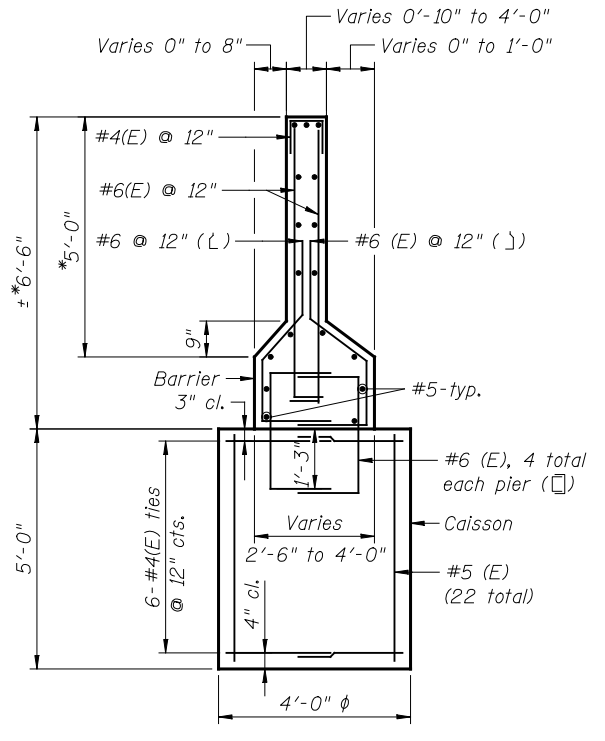
TYP. LAP SPLICE

Bar Size	Min. Lap
#4	2'-1"
#9	8'-7"

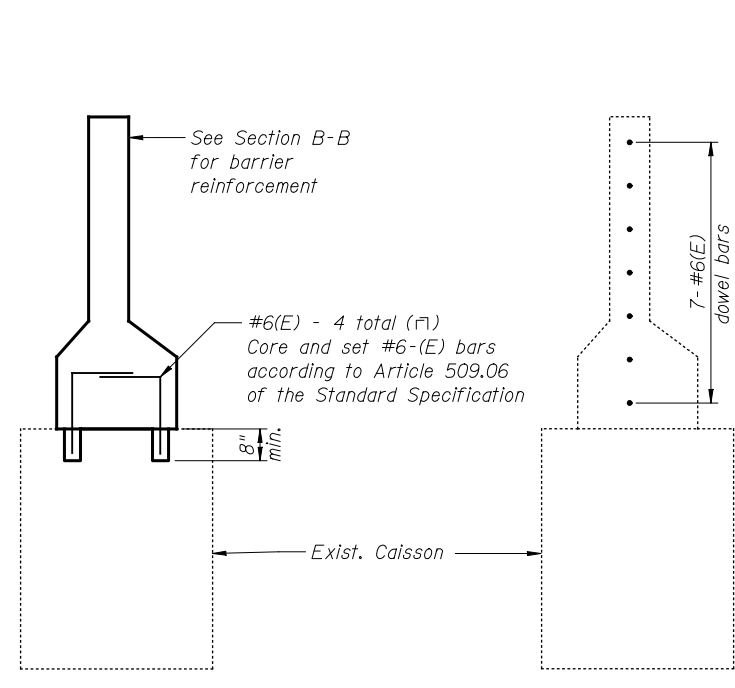


SECTION E-E

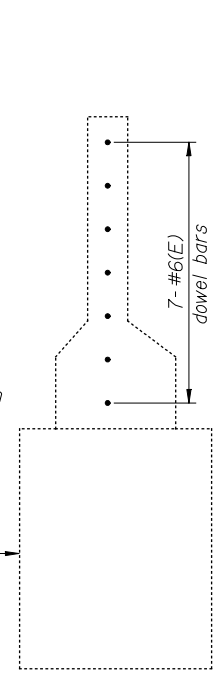
SECTION A-A



SECTION B-B



SECTION C-C

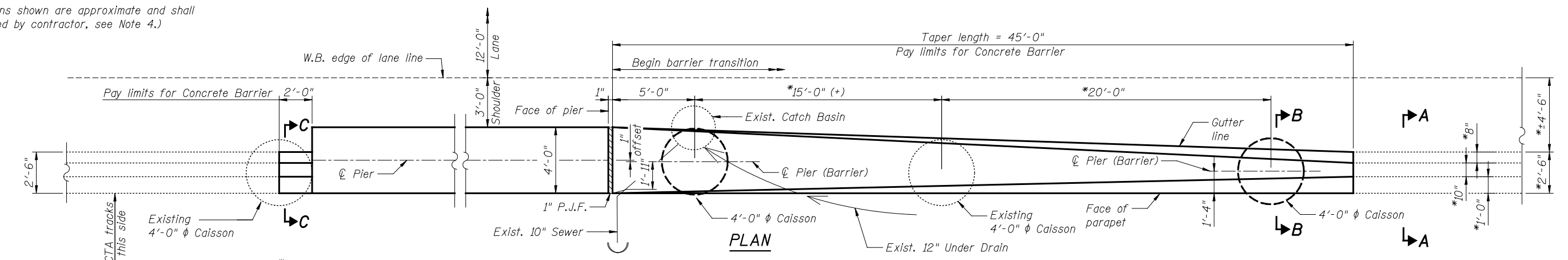


SECTION D-D

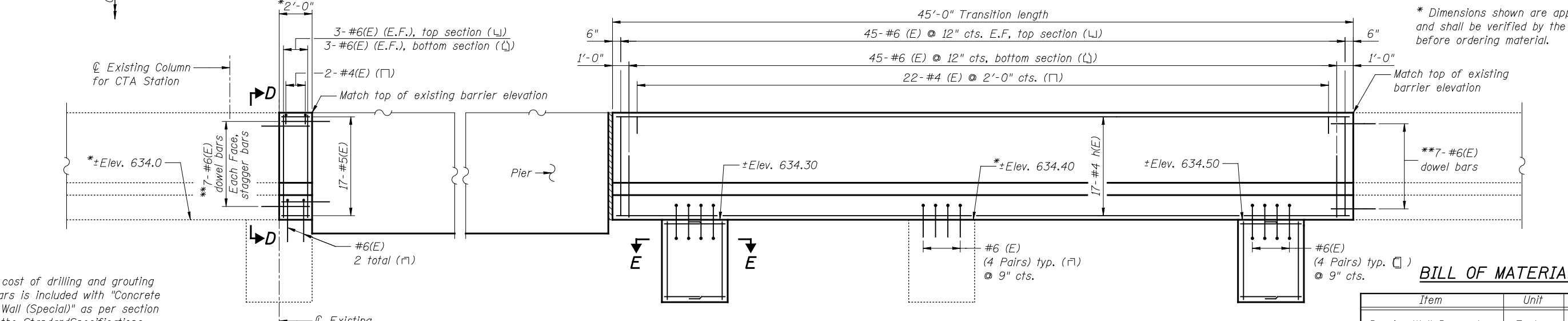
Notes:

1. Costs for demolition of the concrete barrier wall shall be included with "Barrier Wall Removal" and shall include, but not limited to, braced excavation, concrete removal, Caisson removal etc. that is necessary for the completion of the work.
2. Costs for construction of the new concrete barrier wall shall be included with "Concrete Barrier Wall (Special)" and shall include, but not limited to, reinforcement, concrete, drilling and grouting dowel bars, caisson construction etc. that is necessary for the completion of the work.
3. Reinforcement bars designated (E) shall be epoxy coated.
4. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Contractor shall submit a detailed plan & proposed layout for approval of the Engineer before ordering material.
5. Existing reinforcement shall be cleaned and incorporated into the new construction as appropriate. Cost included with "Concrete Barrier Wall (Special)".
6. Any damage done to the existing barrier or barrier caisson to be reused shall be repaired by the Contractor. Cost included with "Barrier Wall Removal".
7. Contractor shall submit shop drawings for the removal and replacement of the barrier wall showing all existing & proposed dimensions and tapers, as well as all reinforcement details. Costs are included with "Concrete Barrier Wall (Special)".
8. Existing concrete surface in contact with new concrete shall be roughened to a minimum amplitude of 1/4" and a bonding agent mixture applied before pouring new concrete. Costs included with "Concrete Barrier Wall (Special)".
9. Taper length for the barrier shall meet 30:1 minimum taper rate.
10. Edge of barrier base shall match existing top of shoulder at existing ground line elevations.

(Dimensions shown are approximate and shall be verified by contractor, see Note 4.)



PLAN



ELEVATION VIEW OF BARRIER WALL

* Dimensions shown are approximate and shall be verified by the Contractor before ordering material.

** The cost of drilling and grouting dowel bars is included with "Concrete Barrier Wall (Special)" as per section 584 of the Standard Specifications. Minimum depth of embedment equals 8".

BILL OF MATERIAL

Item	Unit	Total
Barrier Wall Removal	Foot	185.0
Concrete Barrier Wall (Special)	Foot	47.0

PATRICK ENGINEERING INC.
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LISLE, IL 60532
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USER NAME =
DESIGNED - RDW
DRAWN - DM
CHECKED - RLD
DATE - 2/18/2013

REVISED
REVISED
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REVISED

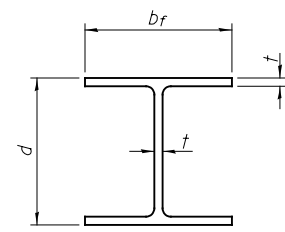
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BARRIER WALL
STRUCTURE NO. 016-1250

SCALE: NONE SHEET NO. S43 OF S59 SHEETS

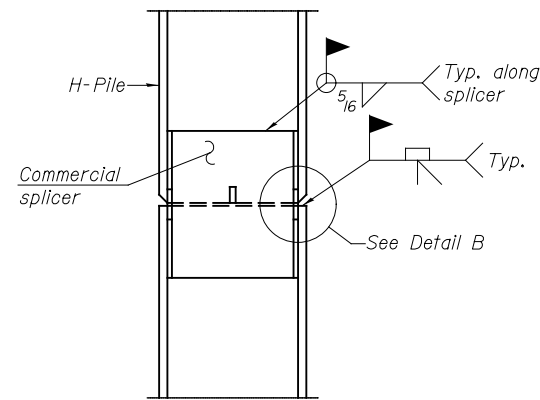
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2746	1616B	COOK	404	312

CONTRACT NO. 60J14
ILLINOIS FED. AID PROJECT

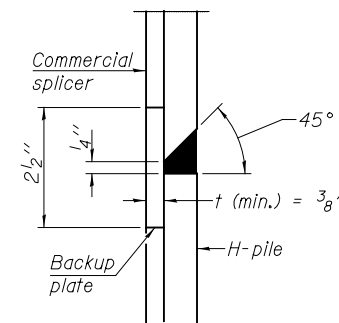


STEEL PILE TABLE

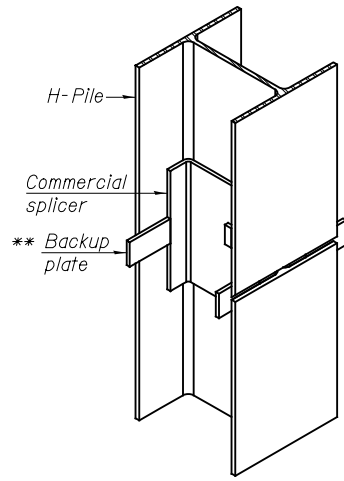
Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11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



ELEVATION

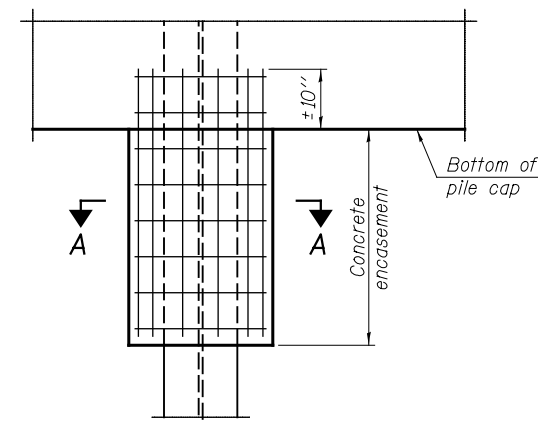


DETAIL "B"



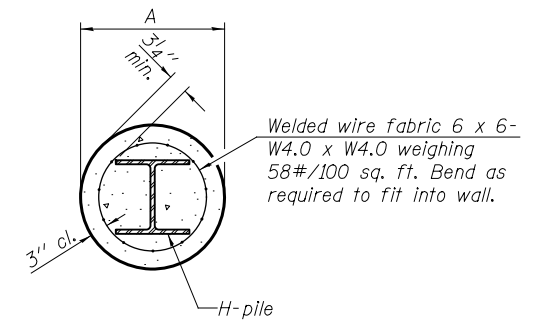
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



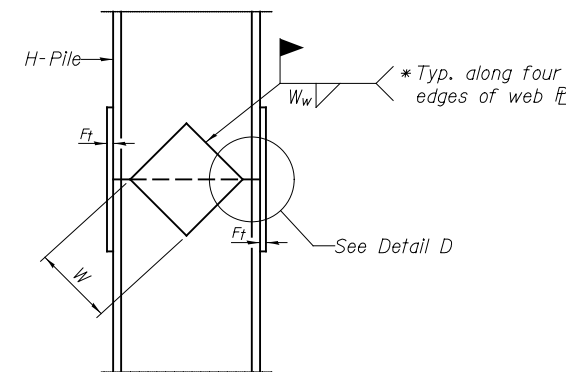
ELEVATION

PILE ENCASEMENT



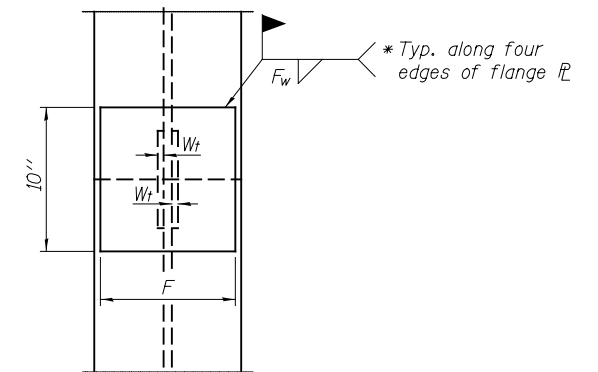
SECTION A-A

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

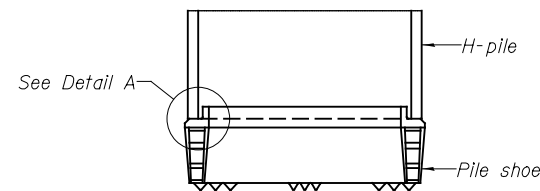


ELEVATION

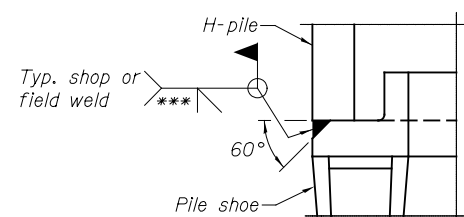
DETAIL D



END VIEW

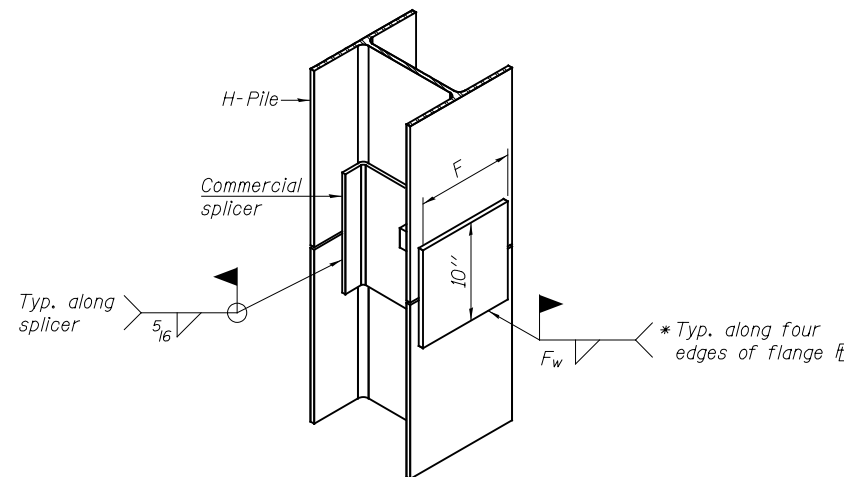


ELEVATION



DETAIL A

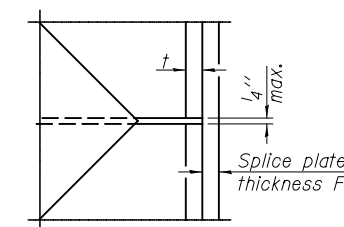
H-PILE SHOE ATTACHMENT



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

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



WELDED PLATE FIELD SPLICE

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"

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

F-HP 1-27-12

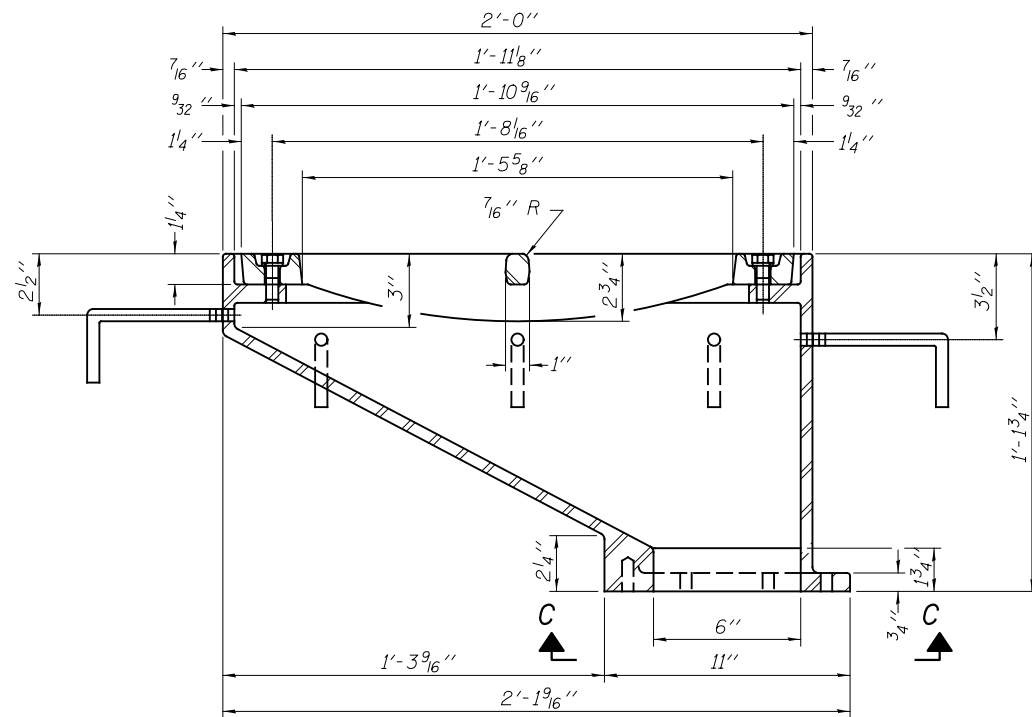
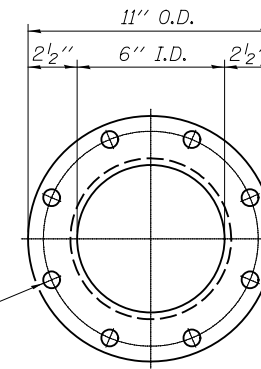
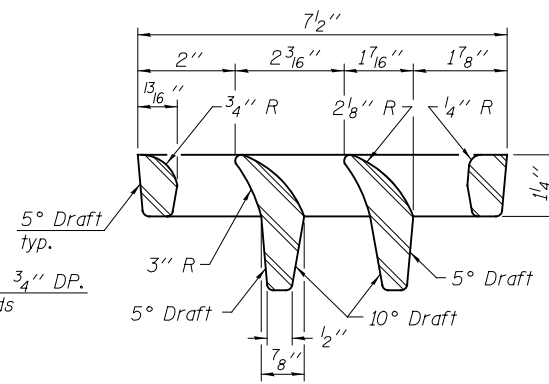
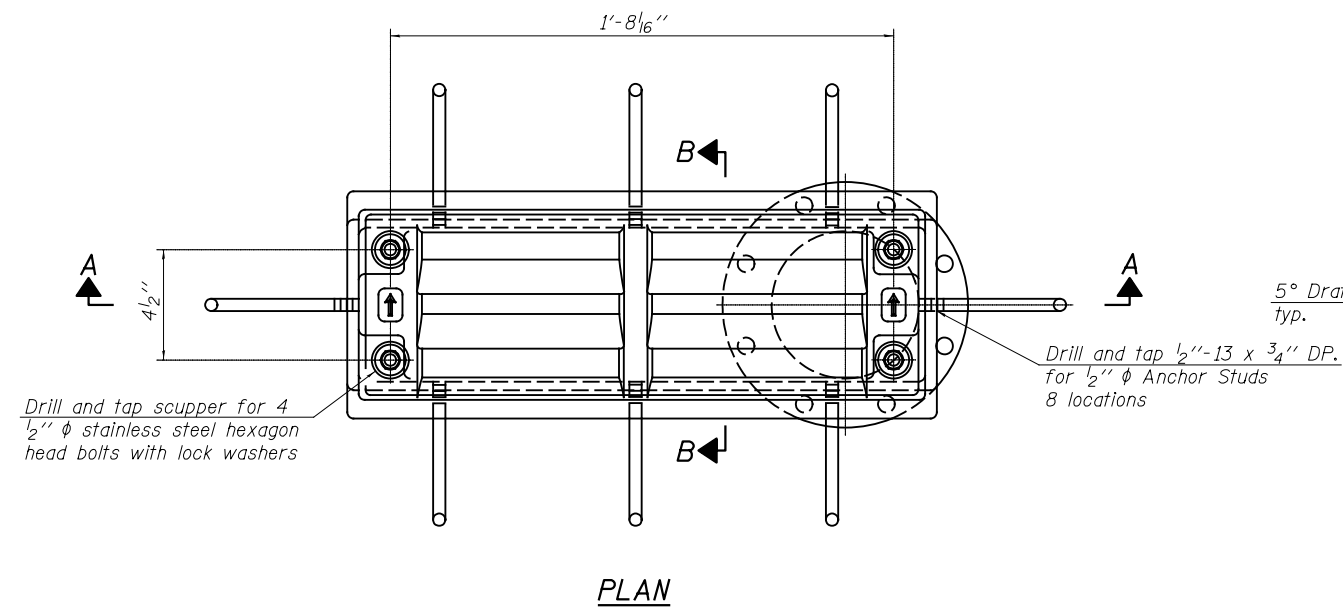
PATRICK ENGINEERING INC.
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LISLE, IL 60532
patrickengineering.com

USER NAME =	DESIGNED - AY	REVISED
DRAWN - AY	REVISION	
PLOT SCALE =	CHECKED - RLD	REVISION
PLOT DATE =	DATE - 2/18/2013	REVISION

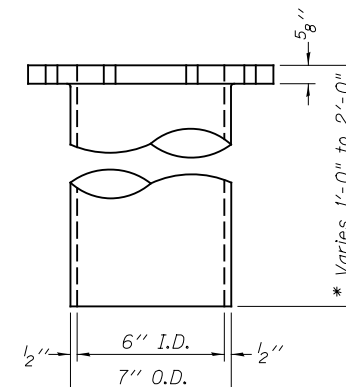
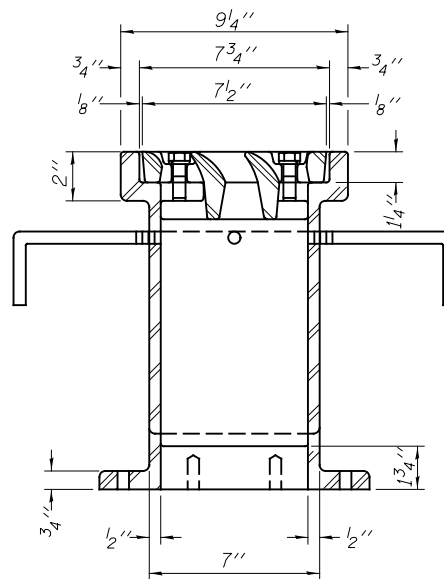
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PILE DETAILS
STRUCTURE NO. 016-1250
SCALE: NONE SHEET NO. S44 OF S59 SHEETS

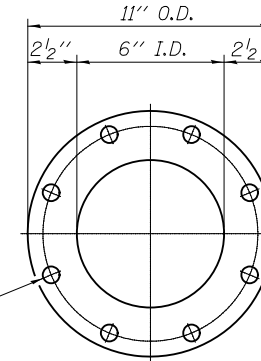
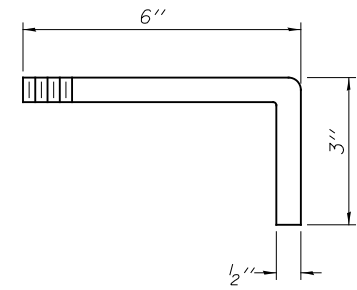
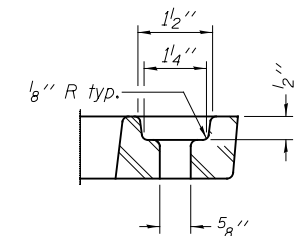
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2746	1616B	COOK	404	313
CONTRACT NO.			60J14	
ILLINOIS FED. AID PROJECT				



See sheet of for scupper location relative to parapet.



* Downspout dimension shall be adjusted in the field by the Engineer. See Sheet S46 of S58.



BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-12	Each	10

DS-12

7-1-10

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PLOT DATE =	CHECKED - RLD	REVISED
	DATE - 2/18/2013	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

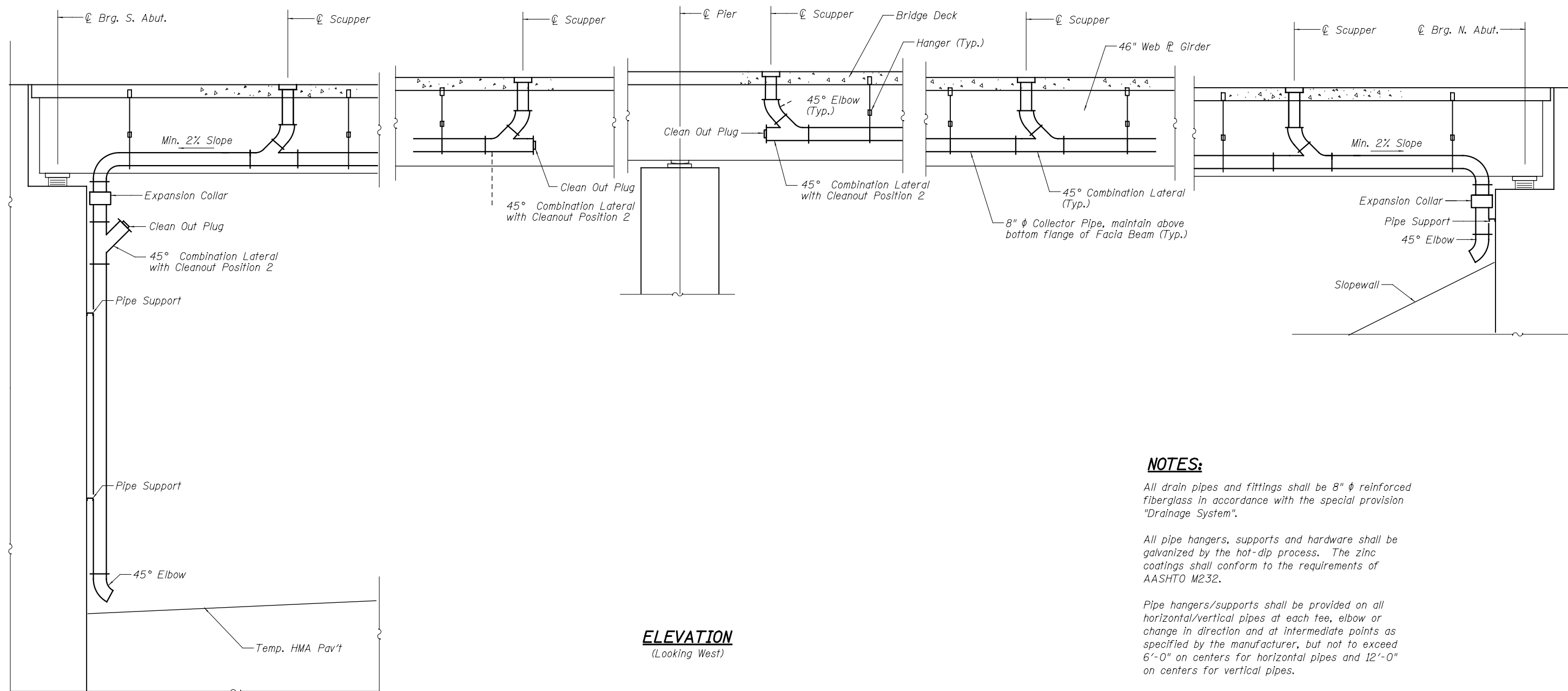
DRAINAGE SCUPPER, DS-12
STRUCTURE NO. 016-1250

SCALE: NONE

SHEET NO. S46 OF S59 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2746	1616B	COOK	404	315
CONTRACT NO. 60J14				

ILLINOIS FED. AID PROJECT



ELEVATION
(Looking West)

NOTES:

All drain pipes and fittings shall be 8" φ reinforced fiberglass in accordance with the special provision "Drainage System".

All pipe hangers, supports and hardware shall be galvanized by the hot-dip process. The zinc coatings shall conform to the requirements of AASHTO M232.

Pipe hangers/supports shall be provided on all horizontal/vertical pipes at each tee, elbow or change in direction and at intermediate points as specified by the manufacturer, but not to exceed 6'-0" on centers for horizontal pipes and 12'-0" on centers for vertical pipes.

Hanger dimensions shall be adjusted in the field by the Engineer to fit existing conditions and to maximize slope.

For scupper locations see Sheet S1.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage System	L. Sum	1

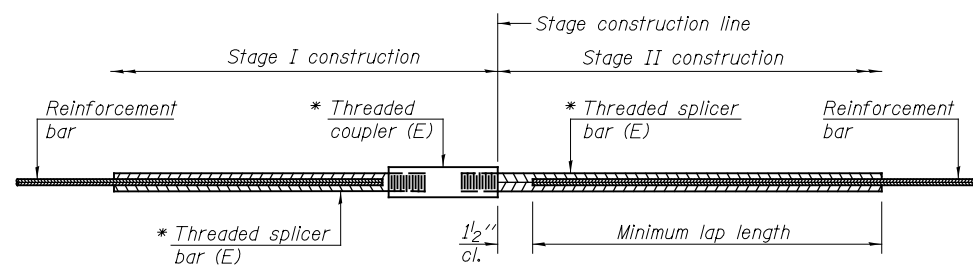
	PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME =	DESIGNED - AY	REVISED
			DRAWN - AY	REVISED
		PLOT SCALE =	CHECKED - RLD	REVISED
		PLOT DATE =	DATE - 2/18/2013	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK DRAINAGE SYSTEM
STRUCTURE NO. 016-1250

SCALE: NONE SHEET NO. S47 OF S59 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2746	1616	COOK	404	316
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60J14	



STANDARD BAR SPLICER ASSEMBLY

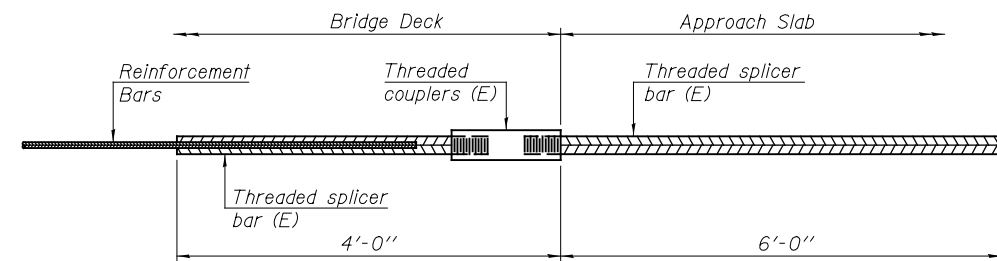
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"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

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

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

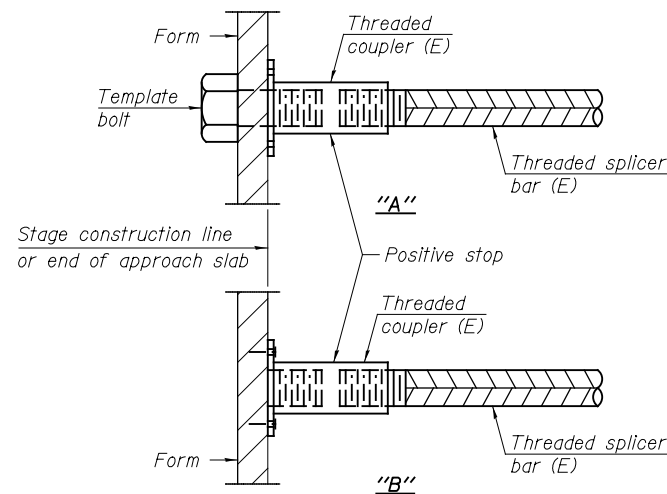
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
S. Abut Footing	#5	64	4
S. Abut Backwall	#5	132	4
S. Abut Backwall	#6	10	4
N. Abut Footing	#7	16	4
N. Abut Footing	#4	12	4
N. Abut Backwall	#5	20	4
N. Abut Backwall	#6	10	4
Pier Wall	#5	20	4
Pier Wall	#6	76	4
Deck	#5	1754	5
Approach Slab	#4	100	5
Approach Slab	#5	344	5



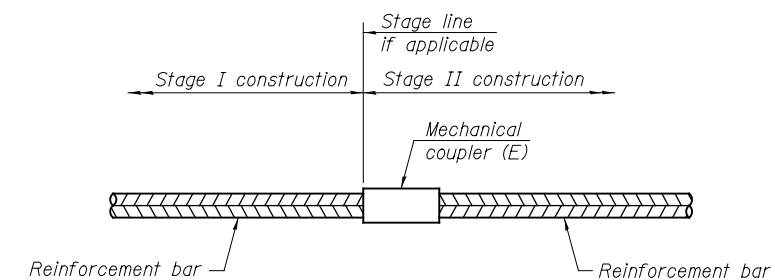
BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



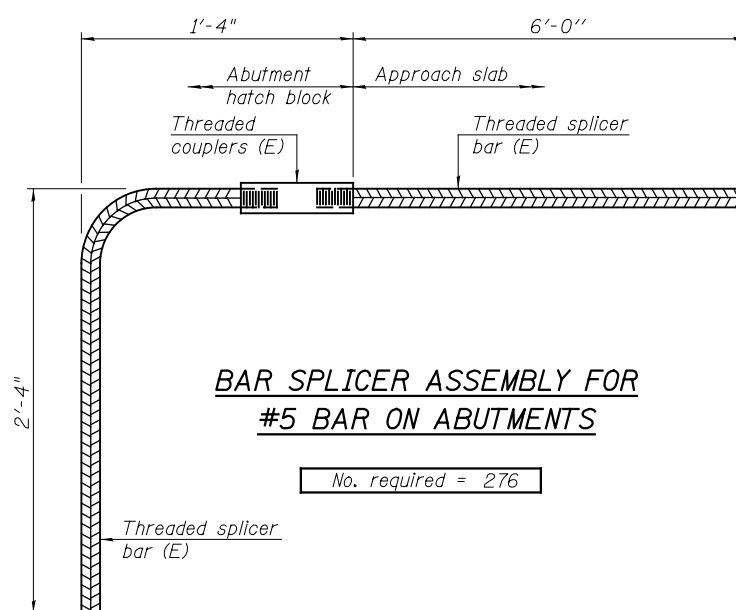
INSTALLATION AND SETTING METHODS

- "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
Drilled Shafts	#9	504



BAR SPLICER ASSEMBLY FOR #5 BAR ON ABUTMENTS

No. required = 276

NOTES

- Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
- All reinforcement shall be lapped and tied to the splicer bars.
- Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
- See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

1-27-12

PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME =	DESIGNED - AD/RDW	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BAR SPLICER ASSEMBLY DETAILS STRUCTURE NO. 016-1250	F.A.U. RTE. =	SECTION =	COUNTY =	TOTAL SHEETS =	SHEET NO. =
	PLOT SCALE =	CHECKED - RLD	REVISED			2746	1616B	COOK	404	317
PLOT DATE =	DATE - 2/18/2013	REVISED		SCALE: NONE	SHEET NO. S48 OF S59 SHEETS	CONTRACT NO. 60J14		ILLINOIS FED. AID PROJECT		

BLOOM COMPANIES, LLC.		BORING LOG				CHICAGO, ILLINOIS			
JOB NO: BM3-1272 CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION		BORING NO: B-1		STATION: 119+34		OFFSET: 44' RT		SURF ELEV: 653.3	
PROJECT: Bridge Replacement at Cumberland Avenue and I-90		LOCATION: Bridge North Abutment		BORING RIG & METHOD: Diedrich D-50 w/Hollow Stem Augers					
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %	
0.0-1.0		652.0	15" Bituminous Concrete		Auger				
1.3-2.8		650.3	FILL: Br Sand A-3	12	4-3			13.1	
3.5-5.0				10	2-4	1.4	15	19.4	
6.0-7.5				12	4-5	2.8	15	18.9	
8.5-10.0			FILL: Br to Gr Silty Clay A-6, trace Gravel	17	4-7	2.4	15	16.8	
11.0-12.5				16	4-6	2.4	15	24.2	
13.5-15.0				17	3				
16.0-17.5		635.3		16	5-10	2.7	15	16.2	
18.5-20.0			FILL: Green to Black Silty Clay A-7-6, trace Gravel and Organics	15	6-9	2.5	15	31.7	
21.0-22.5		631.3		17	5-8	2.7	15	22.3	
23.5-25.0			Very Stiff to Hard Green to Gr Silty Clay A-6, trace Gravel	17	6-6	2.9	15	23.8	
26.0-27.5		625.3		16	9-12	6.0	15	20.9	
28.5-30.0				17	5-6	1.7	15	23.0	
33.5-35.0			Stiff to Very Stiff Gr Silty Clay A-6, trace Gravel	18	4-6	1.9	15	23.7	
38.5-40.0				17	4-6	2.0	15	20.5	
REMARKS Automatic Hammer Used				() Denotes Calibrated Penetrometer Estimate					
WATER	75 FT. ELEV.	578.3	DURING DRILLING	∇	CORE SIZE	IN.	DATE:	Apr 13, 10	
WATER	FT. ELEV.		AT COMPLETION	∇	CASING LENGTH	FT.	DRILLER:	Shlmon	
WATER	caved@36 FT. ELEV.	617.3	AFTER 26 HRS.	∇	CASING DIAMETER	IN.	INSPECTOR:	Alsalam	

BLOOM COMPANIES, LLC.		BORING LOG				CHICAGO, ILLINOIS			
JOB NO: BM3-1272 CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION		BORING NO: B-1 (cont.)		STATION: 119+34		OFFSET: 44' RT		SURF ELEV: 653.3	
PROJECT: Bridge Replacement at Cumberland Avenue and I-90		LOCATION: Bridge North Abutment		BORING RIG & METHOD: Diedrich D-50 w/Hollow Stem Augers					
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %	
43.5-45.0			Stiff to Very Stiff Gr Silty Clay A-6, trace Gravel	18	4-6-7	2.6	15	22.6	
48.5-50.0		606.3		18	4-5-7	3.9	15	12.7	
53.5-55.0			Very Stiff to Stiff Gr Silty Clay A-6, trace Gravel	18	4-5-7	2.5	15	17.2	
58.5-60.0		596.3		18	5-8-10			10.3	
63.5-65.0			Medium Dense to Dense Gr Silt A-4, trace Gravel	18	10-11-20			17.6	
68.5-70.0				16	12-13-20			11.7	
73.5-75.0		581.3	Very Stiff Gr Clay Loam A-6, trace Gravel	18	12-13-17	3.8	15	12.9	
78.5-80.0		576.3	Hard Gr Silty Loam A-6, trace Gravel (Hardpan)	8	22-26-30	(+4.5)		13.5	
REMARKS Automatic Hammer Used				() Denotes Calibrated Penetrometer Estimate					
WATER	75 FT. ELEV.	578.3	DURING DRILLING	∇	CORE SIZE	IN.	DATE:	Apr 13, 10	
WATER	FT. ELEV.		AT COMPLETION	∇	CASING LENGTH	FT.	DRILLER:	Shlmon	
WATER	caved@36 FT. ELEV.	617.3	AFTER 26 HRS.	∇	CASING DIAMETER	IN.	INSPECTOR:	Alsalam	

BLOOM COMPANIES, LLC.		BORING LOG				CHICAGO, ILLINOIS			
JOB NO: BM3-1272 CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION		BORING NO: B-2		STATION: 119+18		OFFSET: 33' LT		SURF ELEV: 653.6	
PROJECT: Bridge Replacement at Cumberland Avenue and I-90		LOCATION: Bridge North Abutment		BORING RIG & METHOD: Diedrich D-50 w/Hollow Stem Augers					
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %	
0.0-1.0		652.6	3" Bituminous Concrete		Auger				1.5
1.0-2.5			9" P.C. Concrete	15	4-3-3			18.0	
3.5-5.0		649.1	FILL: Br to Gr Sand A-3, trace Clay	16	2-3-3	(1.3)		19.4	
6.0-7.5				12	2-3	1.2	15	19.3	
8.5-10.0				16	3-5	2.1	15	17.7	
11.0-12.5			FILL: Br to Gr Silty Clay A-6, trace Gravel	17	4-7	2.4	15	23.6	
13.5-15.0				17	3-4-7	2.1	15	22.0	
16.0-17.5				3	5-9-10	2.7	15	18.5	
18.5-20.0				15	3-5	1.0	15	18.3	
21.0-22.5		632.1		11	3-5	2.0	15	34.7	
23.5-25.0			FILL: Black to Gr Sand A-3, little Clay, trace Cinders	13	1-4			22.8	
26.0-27.5		628.1		18	6-8-13	4.7	15	21.4	
28.5-30.0			Hard to Very Stiff Gr Clay A-6, trace Gravel	16	3-5-6	2.5	15	19.3	
33.5-35.0		621.6		18	3-6-8	1.1	15	17.3	
38.5-40.0		619.1	Stiff Gr Silty Clay A-6, trace Gravel	18	3-6-8				
			Stiff Gr Clay A-6 (12), trace Gravel						
40		613.6		18	2-4-5	1.7	15	20.0	
REMARKS Automatic Hammer Used.				() Denotes Calibrated Penetrometer Estimate					
WATER	30 FT. ELEV.	623.6	DURING DRILLING	∇	CORE SIZE	IN.	DATE:	Apr 15, 10	
WATER	FT. ELEV.		AT COMPLETION	∇	CASING LENGTH	FT.	DRILLER:	Shlmon	
WATER	Caved@61 FT. ELEV.	592.6	AFTER 1/4 HRS.	∇	CASING DIAMETER	IN.	INSPECTOR:	Alsalam	

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS					
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-2 (cont.)				
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90	STATION:	119+18	OFFSET:	33' LT				
LOCATION:	Bridge North Abutment	BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers	SURF ELEV.:	653.6				
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %	
	43.5-45.0		Very Stiff Gr Clay A-6, trace Gravel	18	3 5-8	2.4	15	21.3	
		606.6							
50	48.5-50.0			18	5 6-9	2.7	15	13.1	
	53.5-55.0		Very Stiff Gr Silty Clay A-6, trace Gravel	18	5 6-9	2.3	15	16.4	
60	58.5-60.0			18	4 7-10	3.7	15	14.7	
	63.5-65.0			16	12 10-16	3.3	15	15.4	
		586.6							
70	68.5-70.0			17	9 12-18			17.1	
	73.5-75.0		Dense Gr Silt A-4, trace Gravel	18	10 11-19			11.7	
80	78.5-80.0			18	11 14-18			11.5	
REMARKS Automatic Hammer Used.						() Denotes Calibrated Penetrometer Estimate			
WATER	30 FT. ELEV.	623.6	DURING DRILLING	∇	CORE SIZE	IN.	DATE:	Apr 15, 10	
WATER	FT. ELEV.		AT COMPLETION	∇	CASING LENGTH	FT.	DRILLER:	Shlmon	
WATER	Caved@61 FT. ELEV.	592.6	AFTER 1/4 HRS.	∇	CASING DIAMETER	IN.	INSPECTOR:	Alsalam	

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS				
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-2 (cont.)			
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90	STATION:	119+18	OFFSET:	33' LT			
LOCATION:	Bridge North Abutment	BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers	SURF ELEV.:	653.6			
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
		571.6	Dense Gr Silt A-4, trace Gravel					
			Hard Gr Silty Clay A-6, trace Gravel		7			
	83.5-85.0	568.6		17	10-15	4.3	15	19.2
Boring terminated @ 85'								
REMARKS Automatic Hammer Used.						() Denotes Calibrated Penetrometer Estimate		
WATER	30 FT. ELEV.	623.6	DURING DRILLING	∇	CORE SIZE	IN.	DATE:	Apr 15, 10
WATER	FT. ELEV.		AT COMPLETION	∇	CASING LENGTH	FT.	DRILLER:	Shlmon
WATER	Caved@61 FT. ELEV.	592.6	AFTER 1/4 HRS.	∇	CASING DIAMETER	IN.	INSPECTOR:	Alsalam

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS				
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-3			
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90	STATION:	3384+06	OFFSET:	80' LT			
LOCATION:	I-90 Westbound Outside Shoulder	BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers	SURF ELEV.:	635.3			
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
	0.0-1.0	634.1	11" Bituminous Concrete					
	1.0-2.5		3" Sand A-1-a	17	Auger 17 5-6			
	3.5-5.0		Medium Stiff to Stiff Br Silty Clay A-6, trace Gravel	11	2-2	0.8	15	29.9
	6.0-7.5			7	1-2	(1.5)		23.7
10	8.5-10.0	627.3						
			Hard Gr Silty Clay A-6, trace Gravel	13	4 5-9	5.8	15	18.1
	11.0-12.5	624.3						
			Loose Gr Silt A-4	18	3 4-5			19.9
	13.5-15.0	622.3						
			Hard Gr Silty Clay A-6, trace Gravel	15	4 5-6	4.6	15	20.8
	16.0-17.5	619.3						
			Medium Dense Gr Silt A-4, trace Gravel	18	3 8-6			14.9
20	18.5-20.0	617.3						
				13	4 5-7	2.3	15	20.4
	21.0-22.5			18	3 4-7	1.9	15	22.3
	23.5-25.0		Very Stiff to Stiff Gr Clay A-6 (19), trace Gravel	17	4 5-7	1.5	15	24.6
	26.0-27.5			18	3 5-8	2.2	15	21.5
30	28.5-30.0			17	3 6-10	3.4	15	20.0
		603.3						
	33.5-35.0		Stiff Gr Sandy Clay A-6, trace Gravel	8	5 6-9	(1.3)		15.9
		598.3						
40	38.5-40.0		Very Stiff Gr Silty Clay A-6, trace Gravel	18	5 7-10	2.5	15	15.1
REMARKS Automatic Hammer Used.						() Denotes Calibrated Penetrometer Estimate		
WATER	33 FT. ELEV.	602.3	DURING DRILLING	∇	CORE SIZE	IN.	DATE:	Mar 15, 10
WATER	FT. ELEV.		AT COMPLETION	∇	CASING LENGTH	FT.	DRILLER:	Shlmon
WATER	51 FT. ELEV.	584.3	AFTER 1/4 HRS.	∇	CASING DIAMETER	IN.	INSPECTOR:	Alsalam

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS				
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-3 (cont.)			
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90			STATION:	3384+06			
LOCATION:	I-90 Westbound Outside Shoulder			OFFSET:	80' LT			
BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers			SURF ELEV.:	635.3			
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
		593.3	Very Stiff Gr Silty Clay A-6, trace Gravel					
	43.5-45.0			18	10 15-25			17.5
50	48.5-50.0		Dense to Medium Dense Gr Silt A-4, trace Gravel	16	9 13-17			17.4
	53.5-55.0			15	5 11-17			11.9
		577.3						
60	58.5-60.0	575.3	Extremely Dense Gr Loam A-6 (Hardpan)	12	16 49-46			18.1
Boring terminated @ 60'								
REMARKS Automatic Hammer Used.				() Denotes Calibrated Penetrometer Estimate				
WATER	33 FT. ELEV.	602.3	DURING DRILLING	∇	CORE SIZE	IN.	DATE:	Mar 15, 10
WATER	FT. ELEV.		AT COMPLETION	∇	CASING LENGTH	FT.	DRILLER:	Shlmon
WATER	51 FT. ELEV.	584.3	AFTER 1/4 HRS.	∇	CASING DIAMETER	IN.	INSPECTOR:	Alsalam

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS				
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-4			
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90			STATION:	3382+64			
LOCATION:	I-90 Westbound Outside Shoulder			OFFSET:	80' LT			
BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers			SURF ELEV.:	635.1			
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
	0.0-1.0	633.8	10" Bituminous Concrete					
	1.0-2.5		5" Sand A-1-a	2				
			Stiff Br Silty Clay A-6, trace Gravel					
	3.5-5.0	630.1		13	3 2-4	1.2	15	23.4
	6.0-7.5			16	3 3-8	4.1	15	23.9
10	8.5-10.0		Hard to Very Stiff Br Silty Clay A-6, trace Gravel	12	4 7-9	5.5	15	21.3
	11.0-12.5	622.1		18	3 4-4	2.7	15	17.1
	13.5-15.0		Medium Dense Gr Silt A-4	15	4 7-8			18.2
	17.0-18.5	619.1		16	3 6-8	3.1	15	19.7
	18.5-20.0			17	3 5-8	2.9	15	20.7
20	21.0-22.5			17	3 4-6	2.1	15	19.8
	23.5-25.0		Very Stiff Gr Silty Clay A-6, trace Gravel	5	3 5-6	(2.0)		17.2
	26.0-27.5			18	3 5-9	2.9	15	21.4
30	28.5-30.0			18	3 5-10	2.5	15	20.7
	33.5-35.0	602.1	Medium Dense Gr Sandy Loam A-2-4, trace Gravel	18	4 5-6			12.6
		598.1						
40	38.5-40.0		Very Stiff Gr Silty Clay A-6	18	9 6-8	3.8	15	15.3
REMARKS Automatic Hammer Used.				() Denotes Calibrated Penetrometer Estimate				
WATER	DRY FT. ELEV.		DURING DRILLING	∇	CORE SIZE	IN.	DATE:	Mar 15, 10
WATER	FT. ELEV.		AT COMPLETION	∇	CASING LENGTH	FT.	DRILLER:	Shlmon
WATER	DRY FT. ELEV.		AFTER 1/4 HRS.	∇	CASING DIAMETER	IN.	INSPECTOR:	Alsalam

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS				
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-4 (cont.)			
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90			STATION:	3382+64			
LOCATION:	I-90 Westbound Outside Shoulder			OFFSET:	80' LT			
BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers			SURF ELEV.:	635.1			
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
		593.1	Very Stiff Gr Silty Clay A-6					
	43.5-45.0			18	7 14-25			16.2
50	48.5-50.0			18	3 4-10			20.4
	53.5-55.0		Dense to Medium Dense Gr Silt A-4, trace Gravel	17	8 10-13			24.4
	58.5-60.0			18	10 9-14			12.5
	63.5-65.0			18	7 11-18			14.2
	66.0-67.5	567.6		18	8 11-18			17.1
Boring terminated @ 67.5'								
REMARKS Automatic Hammer Used.				() Denotes Calibrated Penetrometer Estimate				
WATER	DRY FT. ELEV.		DURING DRILLING	∇	CORE SIZE	IN.	DATE:	Mar 15, 10
WATER	FT. ELEV.		AT COMPLETION	∇	CASING LENGTH	FT.	DRILLER:	Shlmon
WATER	DRY FT. ELEV.		AFTER 1/4 HRS.	∇	CASING DIAMETER	IN.	INSPECTOR:	Alsalam

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BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS				
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-5			
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90	STATION:	3384+08	OFFSET:	27' LT			
LOCATION:	I-90 Westbound Inside Shoulder	SURF ELEV:	635.7					
BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers							
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
	0.0-1.0	634.2	4" Bituminous Concrete		Auger			
	1.0-2.5		8" P.C. Concrete	6	5			
			6" Sand A-1-a		2-4			26.6
			Very Stiff Br Silty Clay A-6		2			
	3.5-5.0	630.2		14	4-6	2.2	15	20.7
			Loose Br Sand A-1-a		2			
	6.0-7.5	627.7		13	1-4			20.6
			Hard Br Silty Clay A-6, trace Gravel		4			
	8.5-10.0			13	7-11	6.0	15	15.4
			Medium Dense Gr Silt A-4		5			
	11.0-12.5	622.7		16	7-8	5.2	15	22.3
			Medium Dense Gr Silt A-4		3			
	13.5-15.0	620.2		18	5-6			17.8
			Very Stiff Gr Silty Clay A-6, trace Gravel		3			
	16.0-17.5			15	3-7	3.2	15	19.8
			Very Stiff Gr Silty Clay A-6, trace Gravel		3			
	18.5-20.0			15	5-7	3.2	15	21.1
			Very Stiff Gr Silty Clay A-6, trace Gravel		3			
	21.0-22.5			18	3-5	2.0	15	21.1
			Very Stiff Gr Silty Clay A-6, trace Gravel		3			
	23.5-25.0			17	4-6	2.2	15	20.4
			Very Stiff Gr Silty Clay A-6, trace Gravel		3			
	26.0-27.5			18	4-5	2.3	15	20.2
			Very Stiff Gr Silty Clay A-6, trace Gravel		3			
	28.5-30.0			18	7-7	3.1	15	17.0
		603.7						
			Medium Dense to Dense Gr Silt A-4, trace Gravel		5			
	33.5-35.0			18	5-6			14.5
			Medium Dense to Dense Gr Silt A-4, trace Gravel		5			
	38.5-40.0			18	7-11			15.1
REMARKS Automatic Hammer Used. * Water introduced into borehole below 53' due to blowing Sand. () Denotes Calibrated Penetrometer Estimate								
WATER	50 FT. ELEV.	585.7	DURING DRILLING	☒	CORE SIZE	IN.	DATE:	Mar 16, 10
WATER	FT. ELEV.		AT COMPLETION	☒	CASING LENGTH	FT.	DRILLER:	Shlmon
WATER	* FT. ELEV.		AFTER 1/4 HRS.	☒	CASING DIAMETER	IN.	INSPECTOR:	Alsalam

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS				
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-5 (cont.)			
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90	STATION:	3384+08	OFFSET:	27' LT			
LOCATION:	I-90 Westbound Inside Shoulder	SURF ELEV:	635.7					
BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers							
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
	43.5-45.0		Medium Dense to Dense Gr Silt A-4, trace Gravel		9			
				0	10-31			
		587.7						
	48.5-50.0		Medium Dense to Very Dense Gr Sand A-1-b, trace to some Gravel		26			14.7
				16	23-8			
		578.7						
	53.5-55.0		Medium Dense to Very Dense Gr Sand A-1-b, trace to some Gravel		17			12.4
				8	25-42			
		570.7						
	63.5-65.0		Dense Gr Silt A-4		10			14.9
				16	13-21			
Boring terminated @ 65'								
REMARKS Automatic Hammer Used. * Water introduced into borehole below 53' due to blowing Sand. () Denotes Calibrated Penetrometer Estimate								
WATER	50 FT. ELEV.	585.7	DURING DRILLING	☒	CORE SIZE	IN.	DATE:	Mar 16, 10
WATER	FT. ELEV.		AT COMPLETION	☒	CASING LENGTH	FT.	DRILLER:	Shlmon
WATER	* FT. ELEV.		AFTER 1/4 HRS.	☒	CASING DIAMETER	IN.	INSPECTOR:	Alsalam

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS				
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-6			
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90	STATION:	3382+69	OFFSET:	27' LT			
LOCATION:	I-90 Westbound Inside Shoulder	SURF ELEV:	635.4					
BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers							
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
	0.0-1.0	633.9	4" Bituminous Concrete and 9" P.C. Concrete		Auger			
	1.0-2.5		6" Crushed Stone	11	5			
			Very Stiff Br Silty Clay A-6		4-6			
					3			
	3.5-5.0	630.4		12	6-9	(3.5)		21.5
			Medium Dense Br Sand A-1-a		3			
	6.0-7.5	627.4		15	7-6			12.2
			Stiff to Very Stiff Gr Clay A-4 (3), trace Gravel		4			
	8.5-10.0			15	5-7	2.0	15	18.7
			Stiff to Very Stiff Gr Silty Clay A-6, trace Gravel		3			
	11.0-12.5			17	3-6	1.7	15	23.6
			Stiff to Very Stiff Gr Silty Clay A-6, trace Gravel		3			
	13.5-15.0			17	5-5	2.7	15	19.0
			Stiff to Very Stiff Gr Silty Clay A-6, trace Gravel		3			
	16.0-17.5			14	5-7	2.4	15	17.0
			Stiff to Very Stiff Gr Silty Clay A-6, trace Gravel		3			
	18.5-20.0			14	4-5	2.5	15	17.1
			Stiff to Very Stiff Gr Silty Clay A-6, trace Gravel		3			
	21.0-22.5			17	3-7	1.2	15	17.6
			Stiff to Very Stiff Gr Silty Clay A-6, trace Gravel		3			
	23.5-25.0	610.4		18	3-4	1.4	15	20.2
			Stiff to Very Stiff Gr Silty Clay A-6, trace Gravel		2			
	26.0-27.5			15	3-4	0.8	15	18.1
			Medium Stiff Gr Silty Clay A-6, trace Gravel		3			
	28.5-30.0			3	5-6			19.9
		603.4						
			Stiff to Very Stiff Gr Silty Clay A-6, trace Gravel		3			
	33.5-35.0			17	3-4	1.9	15	14.1
			Stiff to Very Stiff Gr Silty Clay A-6, trace Gravel		5			
	38.5-40.0	595.4		18	6-9	3.1	15	16.3
REMARKS Automatic Hammer Used. () Denotes Calibrated Penetrometer Estimate								
WATER	60 FT. ELEV.	575.4	DURING DRILLING	☒	CORE SIZE	IN.	DATE:	Mar 19, 10
WATER	FT. ELEV.		AT COMPLETION	☒	CASING LENGTH	FT.	DRILLER:	Shlmon
WATER	46 FT. ELEV.	589.4	AFTER 1/4 HRS.	☒	CASING DIAMETER	IN.	INSPECTOR:	Alsalam

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS				
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-6 (cont.)			
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90			STATION:	3382+69			
LOCATION:	I-90 Westbound Inside Shoulder			OFFSET:	27' LT			
BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers			SURF ELEV:	635.4			
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
	43.5-45.0			18	12			14.7
	48.5-50.0		Dense to Very Dense Gr Silty A-4, trace Gravel	17	11			18.1
	53.5-55.0			18	12			10.3
	58.5-60.0	575.4		18	11			11.9
Boring terminated @ 60'								
REMARKS Automatic Hammer Used.						() Denotes Calibrated Penetrometer Estimate		
WATER	60 FT. ELEV.	575.4	DURING DRILLING	☒	CORE SIZE	IN.	DATE:	Mar 19, 10
WATER	FT. ELEV.		AT COMPLETION	☒	CASING LENGTH	FT.	DRILLER:	Shlimon
WATER	46 FT. ELEV.	589.4	AFTER 1/4 HRS.	☒	CASING DIAMETER	IN.	INSPECTOR:	Alsalam

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS				
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-7			
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90			STATION:	3383+93			
LOCATION:	I-90 Eastbound Inside Shoulder			OFFSET:	26' RT			
BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers			SURF ELEV:	635.6			
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
	0.0-1.0	634.8	4" Bituminous Concrete		Auger			
	1.0-2.5		6" P.C. Concrete	6	4			
			FILL: Br Sand A-1-a		2-2			
		631.6			2			
	3.5-5.0		FILL: Black Clay A-7-6, trace Organics	15	3-5	1.4	15	27.4
		629.6			4			
	6.0-7.5			10	7-10			21.2
					4			
	8.5-10.0		Hard to Very Stiff Gr Silty Clay A-6, trace Gravel	16	7-11	5.9	15	21.6
					3			
	11.0-12.5	622.6		18	3-5	3.7	15	20.6
			Medium Dense Gr Silty A-4, trace Gravel		4			
	13.5-15.0	620.1		18	7-9			13.4
					5			
	16.0-17.5	617.6	Hard Gr Silty Clay A-6, trace Gravel	18	5-7	4.0	15	17.2
					3			
	18.5-20.0			16	4-5	2.1	15	16.9
					4			
	21.0-22.5			18	4-7	2.0	15	17.9
					3			
	23.5-25.0		Very Stiff to Stiff Gr Silty Clay A-6, trace Gravel	18	4-7	1.9	15	18.6
					3			
	26.0-27.5			18	5-8	2.8	15	17.0
					5			
	28.5-30.0	605.6		18	8-10	3.9	15	23.2
					3			
	33.5-35.0	599.6	Loose Gr Sand A-3, trace Gravel	14	3-5			18.8
					4			
	38.5-40.0		Very Stiff Gr Silty Clay A-6, trace Gravel	18	6-12	3.3	15	16.6
REMARKS Automatic Hammer Used. * Water introduced into borehole below 50' due to blowing Sand.						() Denotes Calibrated Penetrometer Estimate		
WATER	32 FT. ELEV.	603.6	DURING DRILLING	☒	CORE SIZE	IN.	DATE:	Mar 18, 10
WATER	FT. ELEV.		AT COMPLETION	☒	CASING LENGTH	FT.	DRILLER:	Shlimon
WATER	* FT. ELEV.		AFTER 1/4 HRS.	☒	CASING DIAMETER	IN.	INSPECTOR:	Alsalam

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS				
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-7 (cont.)			
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90			STATION:	3383+93			
LOCATION:	I-90 Eastbound Inside Shoulder			OFFSET:	26' RT			
BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers			SURF ELEV:	635.6			
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
	43.5-45.0		Very Stiff Gr Silty Clay A-6, trace Gravel	18	8	3.1	15	17.9
		588.6			16			
	48.5-50.0			17	20-26			12.9
			Dense Gr Silty A-4, trace Gravel		0	No Sample		
	53.5-55.0			0	No Sample			
		578.6			18			
			Very Dense Gr Loam A-6 (7), trace Gravel (Hardpan)		14	24-32	7.2	15
	58.5-60.0	575.6		14	18			10.8
Boring terminated @ 60'								
REMARKS Automatic Hammer Used. * Water introduced into borehole below 50' due to blowing Sand.						() Denotes Calibrated Penetrometer Estimate		
WATER	32 FT. ELEV.	603.6	DURING DRILLING	☒	CORE SIZE	IN.	DATE:	Mar 18, 10
WATER	FT. ELEV.		AT COMPLETION	☒	CASING LENGTH	FT.	DRILLER:	Shlimon
WATER	* FT. ELEV.		AFTER 1/4 HRS.	☒	CASING DIAMETER	IN.	INSPECTOR:	Alsalam

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BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS					
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-8				
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90	STATION:	3382+54	OFFSET:	26' RT				
LOCATION:	I-90 Eastbound Inside Shoulder	BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers	SURF ELEV.:	635.3				
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %	
0.0-1.0		634.3	3" Bituminous Concrete		Auger				
1.0-2.5		633.3	8" P.C. Concrete	0	7				
			FILL: Crushed Concrete		5-6				
			FILL: Black Clay (A-6) and Sand (A-3), trace Gravel		3				
3.5-5.0		629.8		13	5-2			18.3	
6.0-7.5		627.3	Medium Dense Br Sand A-3, trace Gravel	13	2			9.8	
8.5-10.0			Stiff to Very Stiff Gr Silty Clay Loom A-6 (13), trace Gravel	17	4-6	1.1	15	21.2	
11.0-12.5		622.3		18	2-3	2.3	15	21.1	
13.5-15.0			Medium Dense Gr Silt A-4, trace Gravel	16	4			12.2	
16.0-17.5		617.3		15	7-8			11.2	
18.5-20.0			Very Stiff to Hard Gr Silty Clay A-6, trace Gravel	16	6			16.8	
21.0-22.5				18	3	2.3	15	18.6	
23.5-25.0				18	5-9	2.7	15	18.6	
26.0-27.5				18	4	3.5	15	20.9	
28.5-30.0				18	4-9	3.6	15	22.9	
33.5-35.0		603.8	Medium Dense Gr Silt A-4	18	3	4.2	15	24.7	
		598.8			4			13.5	
			Hard Gr Silty Clay A-6, trace Gravel		5				
38.5-40.0		595.3		17	7-11	4.0	15	18.3	
REMARKS: Automatic Hammer Used.						() Denotes Calibrated Penetrometer Estimate			
WATER	DRY FT. ELEV.	DURING DRILLING	CORE SIZE	IN.	DATE:	Mar 18, 10			
WATER	FT. ELEV.	AT COMPLETION	AS CASING LENGTH	FT.	DRILLER:	Shlmon			
WATER	Caved@ FT. ELEV.	AFTER 1/4 HRS.	AS CASING DIAMETER	IN.	INSPECTOR:	Alsalam			

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS					
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-8 (cont.)				
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90	STATION:	3382+54	OFFSET:	26' RT				
LOCATION:	I-90 Eastbound Inside Shoulder	BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers	SURF ELEV.:	635.3				
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %	
43.5-45.0					18	19		15.3	
					29-43				
48.5-50.0			Medium to Very Dense Gr Silt A-4	18	17			16.7	
					25-32				
53.5-55.0		580.3		18	13			11.0	
					20-27				
Boring terminated @ 55'									
REMARKS: Automatic Hammer Used.						() Denotes Calibrated Penetrometer Estimate			
WATER	DRY FT. ELEV.	DURING DRILLING	CORE SIZE	IN.	DATE:	Mar 18, 10			
WATER	FT. ELEV.	AT COMPLETION	AS CASING LENGTH	FT.	DRILLER:	Shlmon			
WATER	Caved@ FT. ELEV.	AFTER 1/4 HRS.	AS CASING DIAMETER	IN.	INSPECTOR:	Alsalam			

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS						
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-9					
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90	STATION:	3383+93	OFFSET:	74' RT					
LOCATION:	I-90 Eastbound Outside Shoulder	BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers	SURF ELEV.:	635.1					
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %		
0.0-1.0		634.1	8" Bituminous Concrete		Auger					
1.0-2.5			3" Br Sand A-1-a	14	6			12.4		
			FILL: Br Fine Sand A-3		5-3					
3.5-5.0		629.6		15	3			13.0		
6.0-7.5			Hard Br Clay A-6, trace Gravel	15	5	5.3	15	21.1		
8.5-10.0				17	6-9			21.1		
11.0-12.5		622.1		17	3			21.5		
13.5-15.0			Medium Dense Gr Silt A-4, trace Gravel	18	6-7	4.5	15	21.5		
16.0-17.5		617.1		18	4	4.6	15	20.8		
18.5-20.0		614.6	Very Stiff Gr Silty Clay A-6, trace Gravel	17	4-7			11.6		
21.0-22.5			Medium Dense Gr Silt A-4, trace Gravel	17	5			11.6		
23.5-25.0				17	10-11			11.6		
26.0-27.5			Very Stiff Gr Silty Clay A-6, trace Gravel	18	4	2.8	15	17.0		
28.5-30.0				18	5-8			12.6		
33.5-35.0			Very Stiff to Stiff Gr Silty Clay A-6, trace Gravel	17	6			16.9		
				17	3	2.1	15	16.9		
				17	5-7			19.1		
				17	4	3.2	15	19.1		
				17	5	2.7	15	19.7		
				17	4			20.9		
				17	5-8			20.9		
38.5-40.0		595.1		18	3	1.6	15	13.0		
					4-5					
					5					
40				18	6-9	2.3	15	15.1		
REMARKS: Automatic Hammer Used.						() Denotes Calibrated Penetrometer Estimate				
WATER	50 FT. ELEV.	585.1	DURING DRILLING	CORE SIZE	IN.	DATE:	Mar 17, 10			
WATER	FT. ELEV.	AT COMPLETION	AS CASING LENGTH	FT.	DRILLER:	Shlmon				
WATER	38 FT. ELEV.	597.1	AFTER 1/4 HRS.	AS CASING DIAMETER	IN.	INSPECTOR:	Alsalam			

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BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS				
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-9 (cont.)			
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90	STATION:	3383+93	OFFSET:	74' RT			
LOCATION:	I-90 Eastbound Outside Shoulder	SURF ELEV.:	635.1					
BORING RIG & METHOD:			Diedrich D-50 w/Hollow Stem Augers					
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
	43.5-45.0			18	19 15-19			13.9
50	48.5-50.0	▽	Dense Gr Silty A-4, trace Gravel	18	13 20-25			16.0
	53.5-55.0	578.4		18	13 19-23			12.5
60	58.5-60.0	575.1	Hard Br Silty Clay A-6, trace Gravel	18	6 9-13	5.9	15	14.9
Boring terminated @ 60'								
REMARKS			Automatic Hammer Used. () Denotes Calibrated Penetrometer Estimate					
WATER	50 FT. ELEV.	585.1	DURING DRILLING	▽	CORE SIZE	IN.	DATE:	Mar 17, 10
WATER	FT. ELEV.		AT COMPLETION	▽	CASING LENGTH	FT.	DRILLER:	Shlmon
WATER	38 FT. ELEV.	597.1	AFTER 1/4 HRS.	▽	CASING DIAMETER	IN.	INSPECTOR:	Alsalam

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS				
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-10			
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90	STATION:	3382+62	OFFSET:	74' RT			
LOCATION:	I-90 Eastbound Outside Shoulder	SURF ELEV.:	635.3					
BORING RIG & METHOD:			Diedrich D-50 w/Hollow Stem Augers					
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
	0.0-1.0	634.3	3.5" Bituminous Concrete					
	1.0-2.5	632.3	8" P.C. Concrete					
			FILL: Br Sand A-1-a, trace Organics	N/R				
	3.5-5.0	629.8	Very Stiff Gr Silty Clay A-6, trace Gravel	14	4 4-4	2.4		21.8
	6.0-7.5	627.3	Medium Dense Gr Sand A-3	15	3 6-7			7.7
10	8.5-10.0		Medium Dense Gr Silty A-4	18	4 7-7			15.5
	11.0-12.5	622.3		18	4 4-5			19.5
	13.5-15.0			18	4 6-7	2.0	15	10.8
	16.0-17.5			16	3 6-8	3.0	15	17.6
20	18.5-20.0			17	4 6-8	4.0	15	17.8
	21.0-22.5		Very Stiff to Hard Gr Silty Clay A-6, trace Gravel	18	3 6-9	3.2	15	17.6
	23.5-25.0			18	4 5-9	3.1	15	16.5
	26.0-27.5			18	4 7-10	3.2	15	18.7
30	28.5-30.0			17	4 7-10	4.0	15	20.1
	33.5-35.0	602.3	Loose Gr Silty A-4	18	6 3-6			18.5
		598.3						
40	38.5-40.0	595.3	Hard Gr Silty Clay A-6, trace Gravel	18	6 8-13	6.5	15	15.2
REMARKS			Automatic Hammer Used. * Water introduced into borehole below 55' due to blowing Sand. () Denotes Calibrated Penetrometer Estimate					
WATER	53.5 FT. ELEV.	581.8	DURING DRILLING	▽	CORE SIZE	IN.	DATE:	Mar 17, 10
WATER	FT. ELEV.		AT COMPLETION	▽	CASING LENGTH	FT.	DRILLER:	Shlmon
WATER	* FT. ELEV.		AFTER 1/4 HRS.	▽	CASING DIAMETER	IN.	INSPECTOR:	Alsalam

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS				
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-10 (cont.)			
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90	STATION:	3382+62	OFFSET:	74' RT			
LOCATION:	I-90 Eastbound Outside Shoulder	SURF ELEV.:	635.3					
BORING RIG & METHOD:			Diedrich D-50 w/Hollow Stem Augers					
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
	43.5-45.0			18	16 21-25			16.5
50	48.5-50.0	▽	Medium Dense Gr Silty A-4, trace Gravel	18	13 13-30			16.2
	53.5-55.0							
60	58.5-60.0			18	13 20-25			11.4
	63.5-65.0	573.3	Dense Gr Loam A-6 (Hardpan)	18	9 13-19	6.1	15	13.9
		570.3						
Boring terminated @ 65'								
REMARKS			Automatic Hammer Used. * Water introduced into borehole below 55' due to blowing Sand. () Denotes Calibrated Penetrometer Estimate					
WATER	53.5 FT. ELEV.	581.8	DURING DRILLING	▽	CORE SIZE	IN.	DATE:	Mar 17, 10
WATER	FT. ELEV.		AT COMPLETION	▽	CASING LENGTH	FT.	DRILLER:	Shlmon
WATER	* FT. ELEV.		AFTER 1/4 HRS.	▽	CASING DIAMETER	IN.	INSPECTOR:	Alsalam

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS				
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-11			
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90	STATION:	116+16	OFFSET:	42' RT			
LOCATION:	Bridge South Abutment	SURF ELEV.:	657.9					
BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers							
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
	0.0-1.0	656.9	FILL: Br Sand A-3, little Clay		Auger			13.8
	1.0-2.5	654.9	FILL: Br Sand A-1-a	12	3 6-8			4.2
	3.5-5.0			13	2 3-4	2.0	15	19.6
	6.0-7.5			12	2 2-3	1.7	15	20.5
	8.5-10.0		FILL: Br to Gr Silty Clay A-6, trace Gravel	15	2 2-3	1.4	15	21.9
	11.0-12.5			12	3 3-4	1.7	15	18.8
	13.5-15.0	642.4		16	3 6-8	3.9	15	20.4
	16.0-17.5			17	3 5-7	4.1	15	16.5
	18.5-20.0		FILL: Br to Gr Clay A-6, trace Gravel	15	3 4-6	2.6	15	18.6
	21.0-22.5			16	4 6-8	2.4	15	17.2
	23.5-25.0	633.9		16	5 7-10	3.5	15	17.0
	26.0-27.5	629.9	Very Stiff Green to Gr Clay Loam A-6, trace Gravel	17	4 7-10	2.4	15	19.3
	28.5-30.0	628.4	Medium Dense Br to Gr Sand A-3	18	6 10-8			10.6
	33.5-35.0			18	4 5-7	3.1	15	19.6
	38.5-40.0		Very Stiff to Stiff Gr Silty Clay A-6, trace Gravel	18	3 4-8	1.5	15	19.5
REMARKS			Automatic Hammer Used			() Denotes Calibrated Penetrometer Estimate		
WATER	77 FT. ELEV.	580.9	DURING DRILLING	∇	CORE SIZE	IN.	DATE:	Apr 14, 10
WATER	FT. ELEV.		AT COMPLETION	∇	CASING LENGTH	FT.	DRILLER:	Shlmon
WATER	Caved@66 FT. ELEV.	591.9	AFTER 1/4 HRS.	∇	CASING DIAMETER	IN.	INSPECTOR:	Alsalam

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS				
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-11 (cont.)			
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90	STATION:	116+16	OFFSET:	42' RT			
LOCATION:	Bridge South Abutment	SURF ELEV.:	657.9					
BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers							
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
	43.5-45.0			18	3 4-6	1.9	15	17.3
	48.5-50.0		Very Stiff to Stiff Gr Silty Clay A-6, trace Gravel	18	4 6-8	2.9	15	17.6
	53.5-55.0			18	3 5-6	1.7	15	16.4
	58.5-60.0			18	3 4-6	1.7	15	16.8
	63.5-65.0	595.9		18	9 13-22			14.1
	68.5-70.0		Dense Gr Silt A-4, trace Gravel	18	12 18-19			16.8
	73.5-75.0	580.9		18	10 24-25			9.8
	78.5-80.0	577.9	Hard Gr Silty Loam A-4, trace Gravel (Hardpan)	3	14 25-30	(4.5+)		12.4
REMARKS			Automatic Hammer Used			() Denotes Calibrated Penetrometer Estimate		
WATER	77 FT. ELEV.	580.9	DURING DRILLING	∇	CORE SIZE	IN.	DATE:	Apr 14, 10
WATER	FT. ELEV.		AT COMPLETION	∇	CASING LENGTH	FT.	DRILLER:	Shlmon
WATER	Caved@66 FT. ELEV.	591.9	AFTER 1/4 HRS.	∇	CASING DIAMETER	IN.	INSPECTOR:	Alsalam

BLOOM COMPANIES, LLC.		BORING LOG		CHICAGO, ILLINOIS				
JOB NO:	BM3-1272	CLIENT:	ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING NO:	B-12			
PROJECT:	Bridge Replacement at Cumberland Avenue and I-90	STATION:	116+15	OFFSET:	49' RT			
LOCATION:	Bridge South Abutment	SURF ELEV.:	657.2					
BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers							
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
	0.0-1.0	656.4	FILL: Br to Gr Silty Clay A-7-6, trace Gravel		Auger			35.3
	1.0-2.5			12	2 3-5	(2.5)		14.4
	3.5-5.0			12	3 4-3	2.1	15	16.8
	6.0-7.5			11	1 3-4	1.4	15	21.1
	8.5-10.0		FILL: Br to Gr Silty Clay A-6, trace Gravel	15	2 3-5	1.1	15	25.0
	11.0-12.5			15	2 4-6	2.1	15	18.3
	13.5-15.0	641.7		16	3 3-5	2.0	15	20.4
	16.0-17.5			16	3 7-10	3.2	15	19.4
	18.5-20.0		FILL: Br to Gr Clay A-6, trace Gravel	14	5 7-9	3.5	15	17.9
	21.0-22.5			17	4 5-10	3.4	15	18.1
	23.5-25.0	633.2		15	4 7-11	3.7	15	17.3
	26.0-27.5	629.2	Very Stiff Green to Gr Clay Loam A-6, trace Gravel	15	3 4-5	2.0	15	17.8
	28.5-30.0		Medium Dense Br Sand A-3	16	4 7-9			7.7
	33.5-35.0	625.2		18	3 3-3			20.8
	38.5-40.0	620.2	Loose Gr Silt A-4					
			Very Stiff to Stiff Gr Silty Clay A-6, trace Gravel	18	3 3-8	2.3	15	22.3
REMARKS			Automatic Hammer Used			() Denotes Calibrated Penetrometer Estimate		
WATER	37 FT. ELEV.	620.2	DURING DRILLING	∇	CORE SIZE	IN.	DATE:	Apr 9, 10
WATER	FT. ELEV.		AT COMPLETION	∇	CASING LENGTH	FT.	DRILLER:	Shlmon
WATER	32 FT. ELEV.	625.2	AFTER 72 HRS.	∇	CASING DIAMETER	IN.	INSPECTOR:	Alsalam

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BLOOM COMPANIES, LLC. CHICAGO, ILLINOIS
BORING LOG
 JOB NO: BM3-1272 CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION BORING NO: B-12 (cont.)
 PROJECT: Bridge Replacement at Cumberland Avenue and I-90 STATION: 116+15
 LOCATION: Bridge South Abutment OFFSET: 49' RT SURF ELEV: 657.2
 BORING RIG & METHOD: Diedrich D-50 w/Hollow Stem Augers

DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
43.5-45.0				5	3 5-7	1.4	15	23.6
48.5-50.0			Very Stiff to Stiff Gr Silty Clay A-6, trace Gravel	17	4 5-9	2.5	15	22.7
53.5-55.0				18	3 6-6	1.4	15	18.4
58.5-60.0		595.2		18	3 6-7	2.7	15	15.2
63.5-65.0		590.2	Very Dense Gr Silt A-4, trace Gravel	18	18 31-41			16.1
68.5-70.0		585.2	Very Loose Gr Sand A-3	18	1 1-1			17.9
73.5-75.0		579.2	Dense Gr Sand A-3, little Gravel	18	10 14-20			11.6
78.5-80.0		577.2	Hard Gr Silty Loom A-4, trace Gravel (Hardpan)	9	6 12-13	6.8	15	13.6

REMARKS Automatic Hammer Used
 () Denotes Calibrated Penetrometer Estimate
 WATER 37 FT. ELEV. 620.2 DURING DRILLING CORE SIZE IN. DATE: Apr 9, 10
 WATER FT. ELEV. AT COMPLETION CASING LENGTH FT. DRILLER: Shlimon
 WATER 32 FT. ELEV. 625.2 AFTER 72 HRS. CASING DIAMETER IN. INSPECTOR: Alsalami

BORING LOG B-5C Page 1 of 3
 wangeng@wangeng.com WEI Job No.: 555-14-01 Datum: NAVD88
 1145 N Main Street Elevation: 635.70 ft
 Lombard, IL 60148 Client: IDOT District One, Region One North: 1937315.23 ft
 Telephone: 630 953-9928 Project: Cumberland Avenue over Interstate 90 East: 1119380.94 ft
 Fax: 630 953-9938 Location: S1/2 Sec 2, T40N, R12E Station: 3384+02
 Offset: 29' LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	q _u (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	q _u (tsf)	Moisture Content (%)
657.2	2.5-2-inch thick, ASPHALT						657.2						
654.7	PAVEMENT						654.7						
654.7	4.5-13-inch thick, CONCRETE						654.7						
654.7	BLIND DRILL						654.7						

GENERAL NOTES
 Begin Drilling 10-03-2011 Complete Drilling 11-14-2011
 Drilling Contractor Wang Testing Service Drill Rig B-57, TMR
 Driller R&N Logger E. Datz Checked by C. Marin
 Drilling Method 3.25 IDA HSA; Boring backfilled upon completion
 WATER LEVEL DATA
 While Drilling 56.00 ft
 At Completion of Drilling WASH.
 Time After Drilling NA
 Depth to Water NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

BORING LOG B-5C Page 2 of 3
 wangeng@wangeng.com WEI Job No.: 555-14-01 Datum: NAVD88
 1145 N Main Street Elevation: 635.70 ft
 Lombard, IL 60148 Client: IDOT District One, Region One North: 1937315.23 ft
 Telephone: 630 953-9928 Project: Cumberland Avenue over Interstate 90 East: 1119380.94 ft
 Fax: 630 953-9938 Location: S1/2 Sec 2, T40N, R12E Station: 3384+02
 Offset: 29' LT

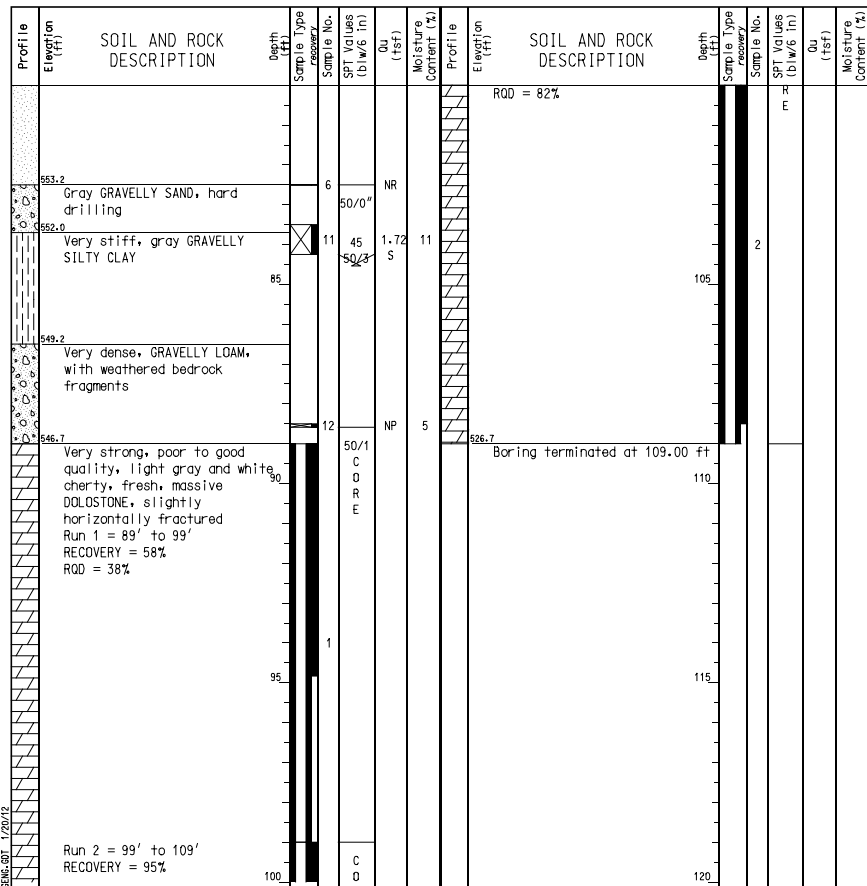
Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	q _u (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	q _u (tsf)	Moisture Content (%)
674.7	Hard, gray SILTY CLAY, little gravel	1	9 14 24	6.85 B	15		674.7						
665.2	---PMT#1, Appendix B---	2	10 19 25	7.95 B	14		665.2						
661.9	Very stiff to hard, gray CLAY, little gravel	3	10 14 17	5.08 B	9		661.9						
659.2	Very dense, gray fine to coarse SAND	4	6 8 11	3.12 B	21		659.2						
657.2	1-inch thick, hard gray CLAY	5	22 29 43	NP	15		657.2						

GENERAL NOTES
 Begin Drilling 10-03-2011 Complete Drilling 11-14-2011
 Drilling Contractor Wang Testing Service Drill Rig B-57, TMR
 Driller R&N Logger E. Datz Checked by C. Marin
 Drilling Method 3.25 IDA HSA; Boring backfilled upon completion
 WATER LEVEL DATA
 While Drilling 56.00 ft
 At Completion of Drilling WASH.
 Time After Drilling NA
 Depth to Water NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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BORING LOG B-5C Page 3 of 3

wangeng@wangeng.com WEI Job No.: 555-14-01 Datum: NAVD88
 1145 N Main Street Client: IDOT District One, Region One Elevation: 635.70 ft
 Lombard, IL 60148 Project: Cumberland Avenue over Interstate 90 North: 1937315.23 ft
 Telephone: 630 953-9928 Location: S1/2 Sec 2, T40N, R12E Station: 3384+02
 Fax: 630 953-9938 Offset: 29' LT

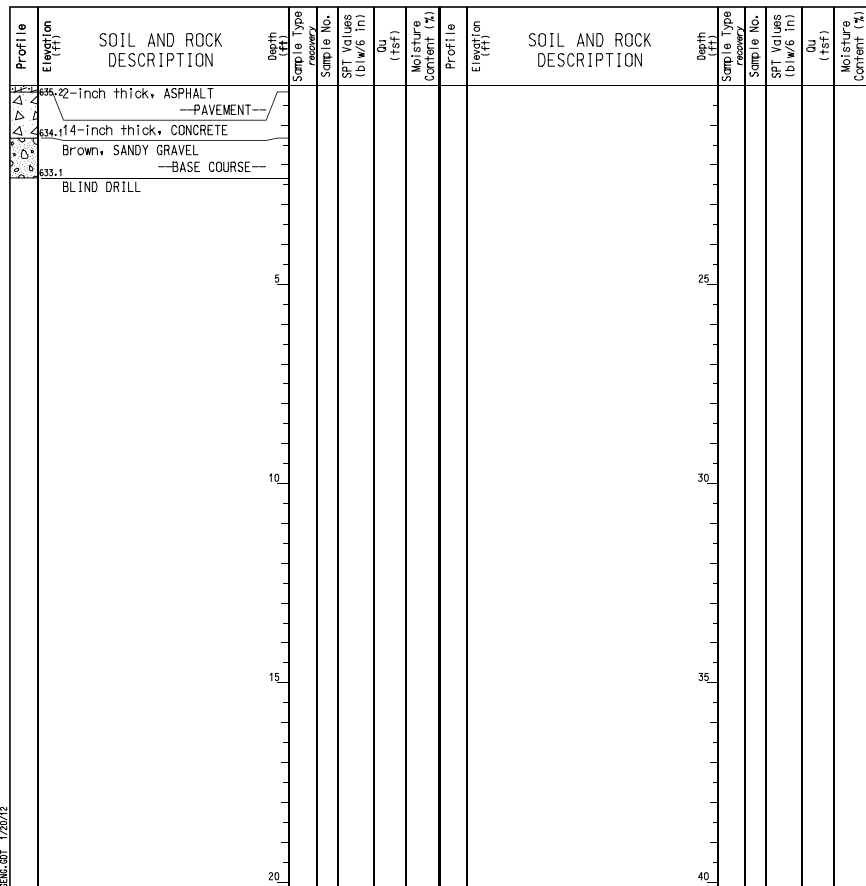


GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling 10-03-2011	Complete Drilling 11-14-2011	While Drilling	56.00 ft
Drilling Contractor Wang Testing Service	Drill Rig B-57, TMR	At Completion of Drilling	WASH
Driller R&N	Logger E. Datz	Time After Drilling	NA
Checked by C. Marin		Depth to Water	NA
Drilling Method 3.25 IDA HSA; Boring backfilled upon completion			

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

BORING LOG B-6C Page 1 of 3

wangeng@wangeng.com WEI Job No.: 555-14-01 Datum: NAVD88
 1145 N Main Street Client: IDOT District One, Region One Elevation: 635.40 ft
 Lombard, IL 60148 Project: Cumberland Avenue over Interstate 90 North: 1937308.13 ft
 Telephone: 630 953-9928 Location: S1/2 Sec 2, T40N, R12E Station: 3382+65
 Fax: 630 953-9938 Offset: 29' LT

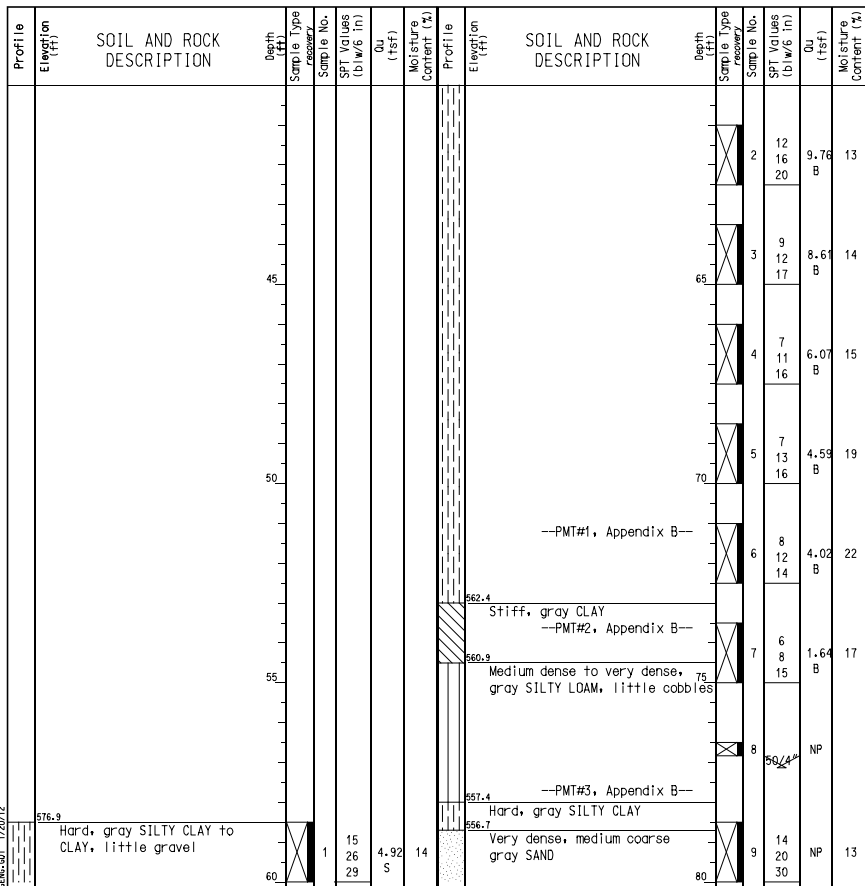


GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling 10-04-2011	Complete Drilling 11-15-2011	While Drilling	DRY
Drilling Contractor Wang Testing Service	Drill Rig B-57, TMR	At Completion of Drilling	DRY
Driller R&N	Logger E. Datz	Time After Drilling	NA
Checked by C. Marin		Depth to Water	NA
Drilling Method 3.25 IDA HSA; Boring backfilled upon completion			

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

BORING LOG B-6C Page 2 of 3

wangeng@wangeng.com WEI Job No.: 555-14-01 Datum: NAVD88
 1145 N Main Street Client: IDOT District One, Region One Elevation: 635.40 ft
 Lombard, IL 60148 Project: Cumberland Avenue over Interstate 90 North: 1937308.13 ft
 Telephone: 630 953-9928 Location: S1/2 Sec 2, T40N, R12E Station: 3382+65
 Fax: 630 953-9938 Offset: 29' LT



BORING LOG B-6C Page 3 of 3

wangengwangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

WEI Job No.: 555-14-01

Client: IDOT District One, Region One
Project: Cumberland Avenue over Interstate 90
Location: S1/2 Sec 2, T40N, R12E

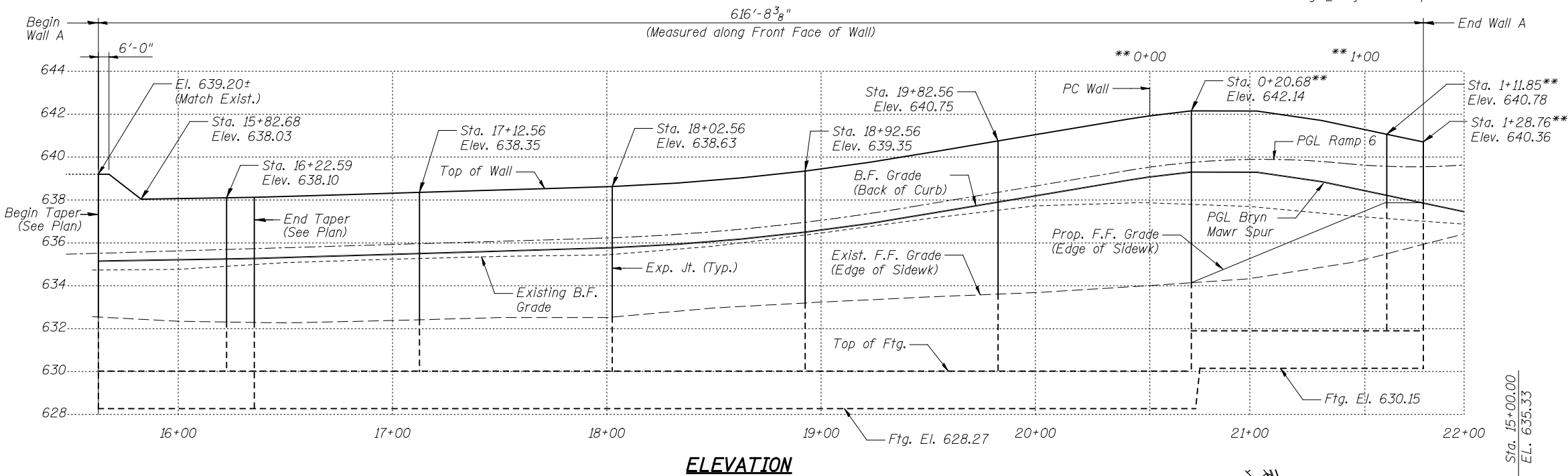
Datum: NAVD88
Elevation: 635.40 ft
North: 1937308.13 ft
East: 1119243.02 ft
Station: 3382+65
Offset: 29' LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/6 in)	Qu (tsf)	Moisture Content (%)
554.3	Hard, gray SILTY CLAY, some gravel	10		11 16 23	7.54 B		11	horizontally fractured. Run 1 = 98.5' to 108.5' RECOVERY = 100 ROD = 83%					
552.4	Very dense, gray SILTY LOAM	11		60/5	NP		22			1			13
550.4	Gray, coarse SAND	85							106				
546.4	Hard, gray SILTY CLAY, some gravel	12		33 35 38	4.43 S		8	Boring terminated at 108.50 ft					
542.4	Very dense, gray GRAVELLY SANDY LOAM with cobbles and weathered bedrock ---HARD DRILLING---	95							118				
536.9	Very strong, good quality, light gray and white cherty, fresh, massive DOLOSTONE, slightly	100		50/1"	NP C O				120				

GENERAL NOTES	WATER LEVEL DATA
Begin Drilling 10-04-2011 Complete Drilling 11-15-2011 Drilling Contractor Wang Testing Service Drill Rig B-57, TMR Driller R&N Logger E. Datz Checked by C. Marin Drilling Method 3.25 IDA HSA; Boring backfilled upon completion	While Drilling ∇ DRY At Completion of Drilling ∇ DRY Time After Drilling NA Depth to Water ∇ NA The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

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Benchmark: Cut Cross on bolt for traffic signal at northeast corner of Cumberland Avenue and the ramp from northbound Cumberland to Eastbound I-90. Mark is 40 feet north of centerline of the intersection, Elevation 645.68.
No Salvage.



ELEVATION

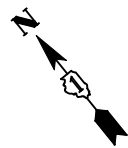
LEGEND

- ◆ Soil Boring
- F.F. Front Face of Wall
- B.F. Back Face of Wall

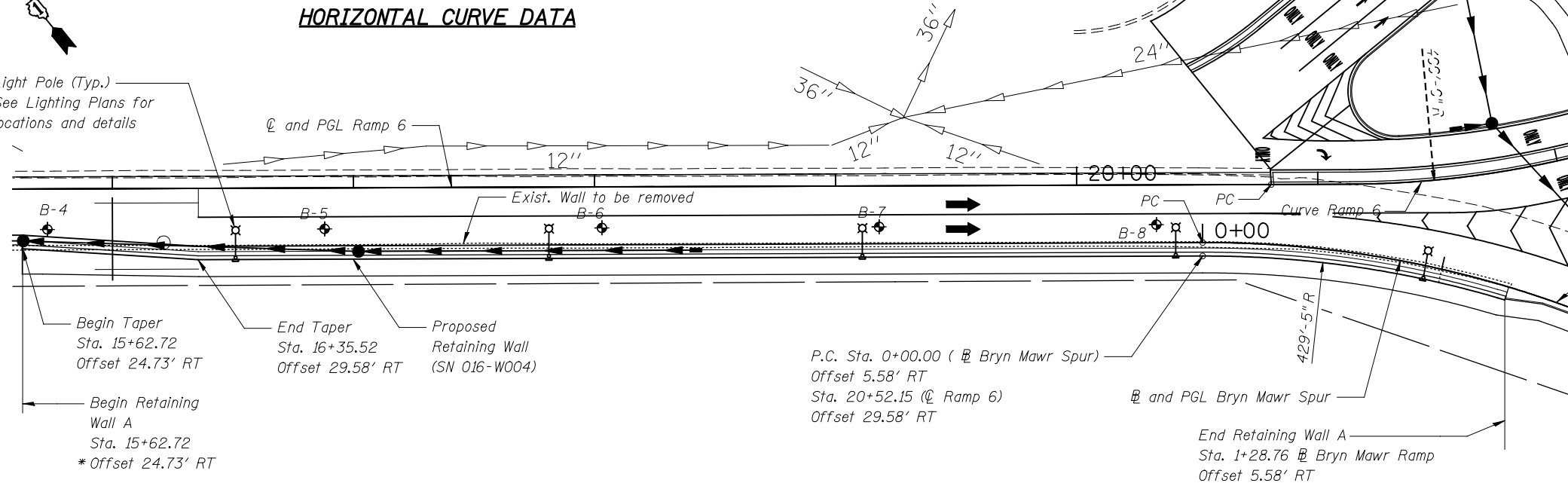
PROP. CURVE RAMP 6
PI STA. = 21+86.97
Δ = 20° 51' 00" (LT)
D = 14° 19' 26"
R = 400.00'
T = 73.59'
L = 145.56'
E = 6.71'
P.C. STA. = 21+13.38
P.T. STA. = 22+58.94

PROP. CURVE BRYN MAWR SPUR
PI STA. = 1+93.02
Δ = 47° 51' 25" (RT)
D = 13° 10' 17"
R = 435.00'
T = 193.02'
L = 363.34'
E = 40.90'
P.C. STA. = 0+00.00
P.T. STA. = 3+63.34

HORIZONTAL CURVE DATA



Light Pole (Typ.)
See Lighting Plans for locations and details



PLAN

* All offsets are to the front face of wall.

INDEX OF SHEETS

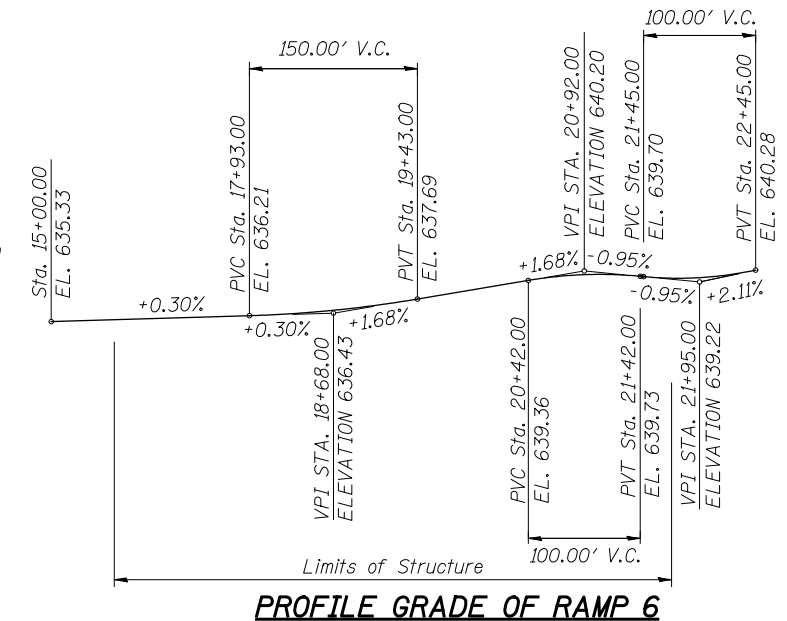
- SA-1 General Plan & Elevation
- SA-2 Plan & Elevation 1
- SA-3 Plan & Elevation 2
- SA-4 Plan & Elevation 3
- SA-5 Plan & Elevation 4
- SA-6 Wall Details & Bill of Materials
- SA-7 Boring Logs 1
- SA-8 Boring Logs 2

DESIGN SPECIFICATIONS

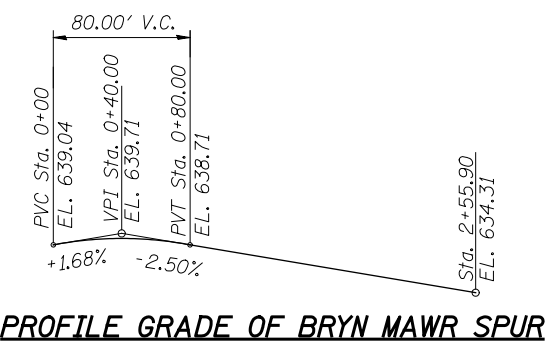
2010 AASHTO LRFD Bridge Design Specifications, 5th Ed. with 2010 Interims

DESIGN STRESSES

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



PROFILE GRADE OF RAMP 6

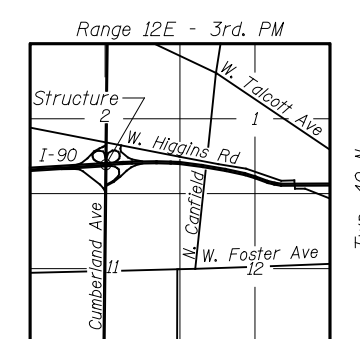


PROFILE GRADE OF BRYN MAWR SPUR

PATRICK ENGINEERING, INC.



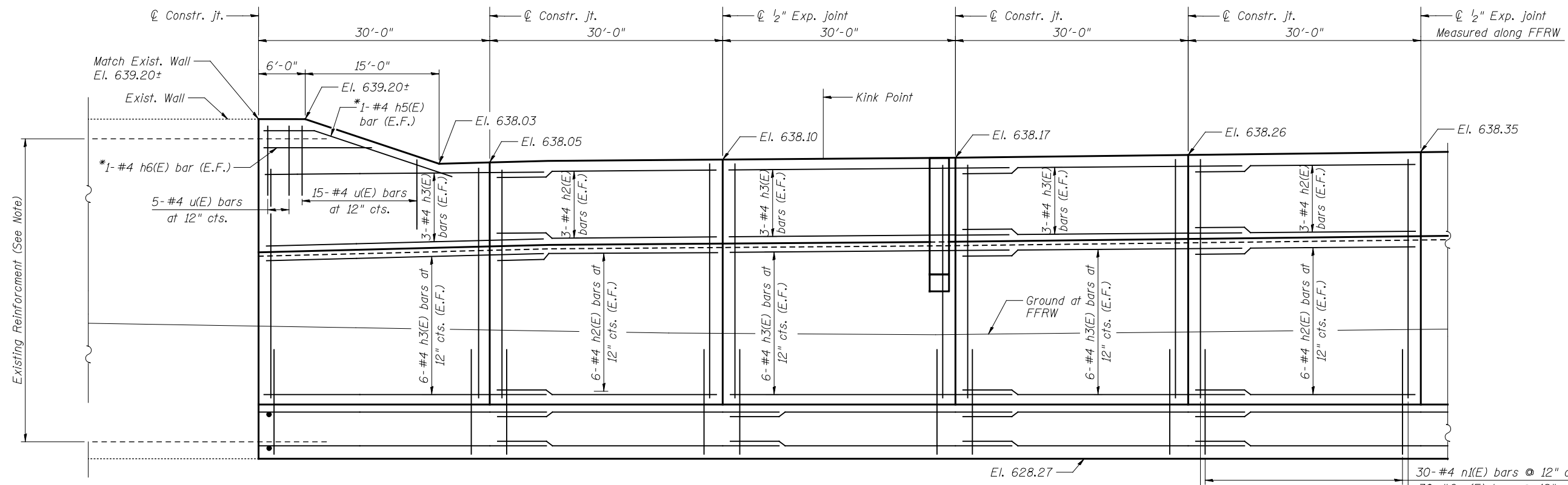
ATALAY YARGICOGLU, S.E.
081-005358
EXP 11/30/2014
DATE 2/18/2013



LOCATION SKETCH

<p>PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com</p>	USER NAME =	DESIGNED - AY	REVISED	<p align="center">STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p>	<p align="center">GENERAL PLAN AND ELEVATION RETAINING WALL A STRUCTURE NO. 016-W004</p>	F.A.U. RTE. =	SECTION =	COUNTY =	TOTAL SHEETS =	SHEET NO. =
	PLOT SCALE =	CHECKED - AD	REVISED			2746	1616B	COOK	404	329
PLOT DATE =	DATE - 2/18/2013	REVISED		SCALE: NONE	SHEET NO. SA1 OF SA8 SHEETS	ILLINOIS FED. AID PROJECT		CONTRACT NO. 60J14		

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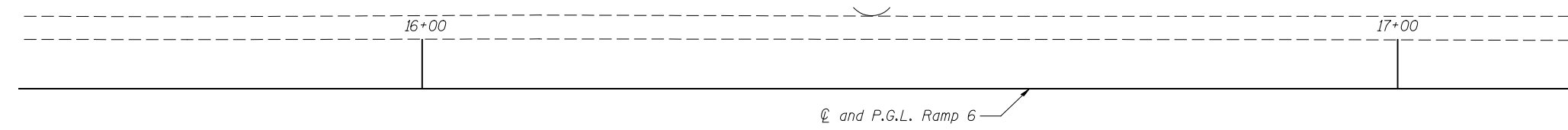
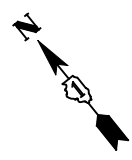


Note: Existing reinforcement shall be cleaned and incorporated into the new construction with a minimum lap of 2'-0". Cost included with Concrete Removal.

* Bend in field

30- #4 n(E) bars @ 12" cts. (F.F., typ. at 30' panels)
 30- #6 n(E) bars @ 12" cts. (B.F., typ. at 30' panels)
 30- #4 v4(E) bars at 12" cts. (F.F., typ. at 30' panels)
 30- #6 v(E) bars at 12" cts. (B.F., typ. at 30' panels)

ELEVATION



PLAN

PATRICK ENGINEERING INC.
 4970 VARSITY DRIVE
 LISLE, IL 60532
 patrickengineering.com

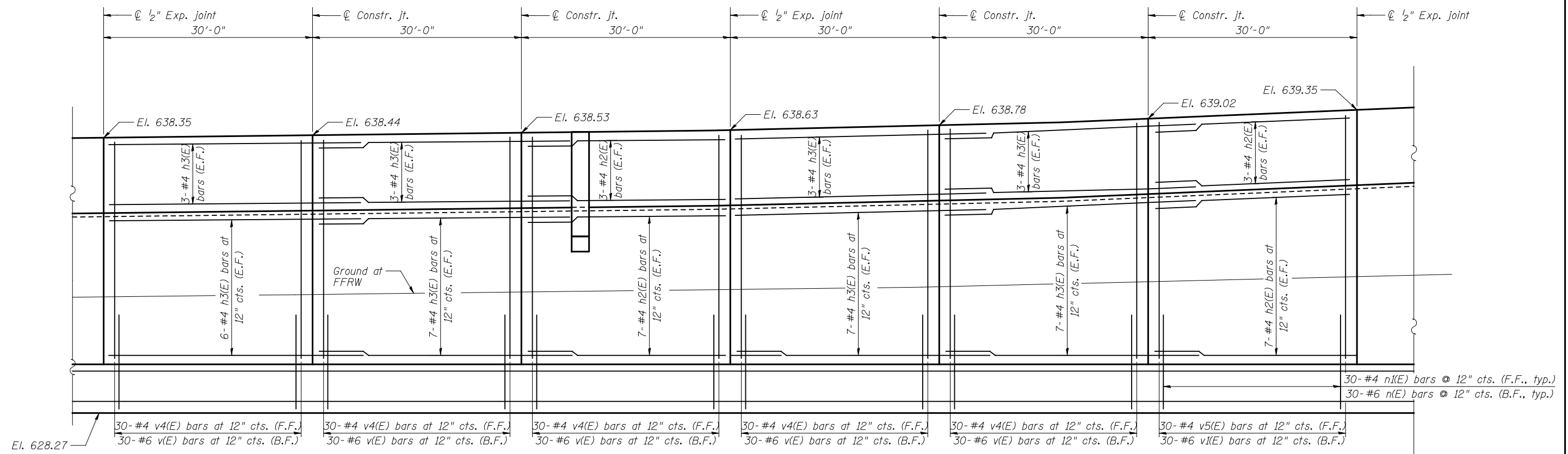
USER NAME =	DESIGNED - AD	REVISED
PLOT SCALE =	DRAWN - AD	REVISED
PLOT DATE =	CHECKED - AY	REVISED
	DATE - 2/18/2013	REVISED

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

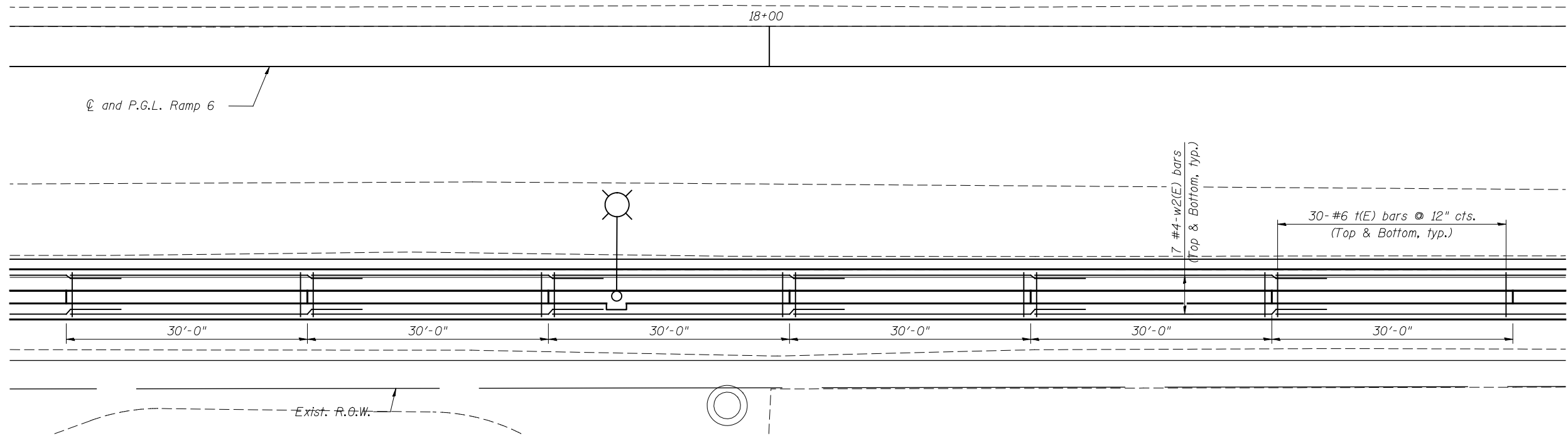
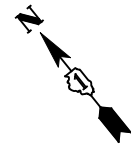
**PLAN AND ELEVATION 1
 RETAINING WALL A STRUCTURE NO. 016-W004**

SCALE: NONE SHEET NO. SA2 OF SA8 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2746	1616B	COOK	404	330
CONTRACT NO. 60J14				
ILLINOIS FED. AID PROJECT				



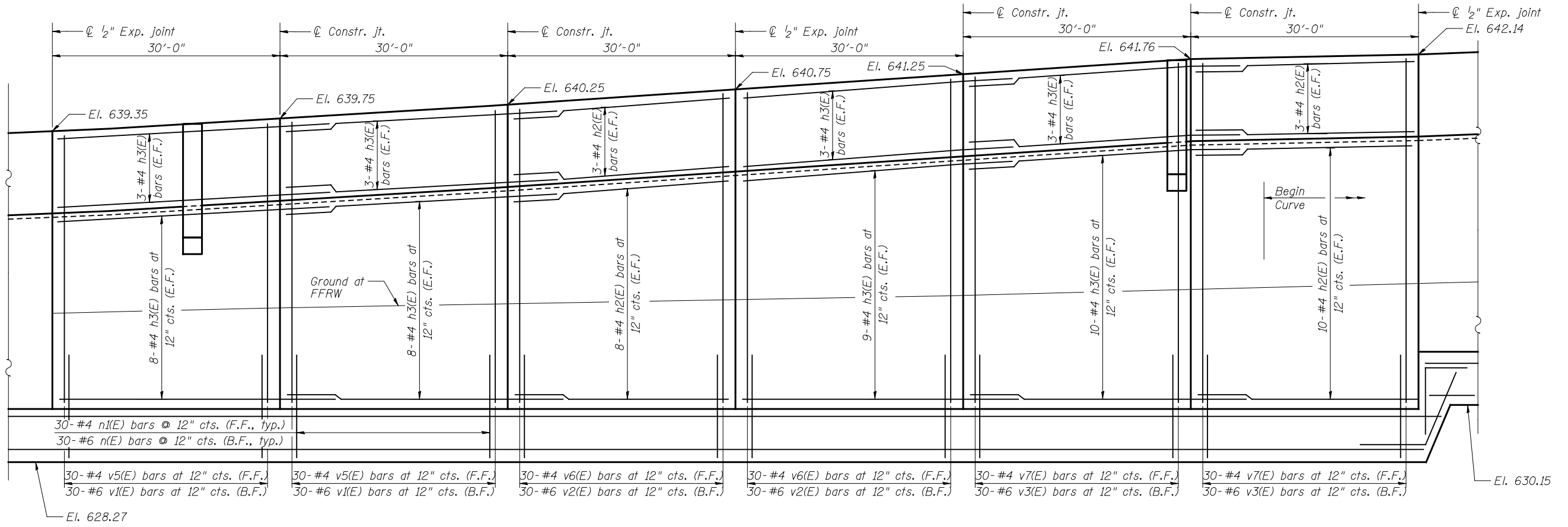
ELEVATION



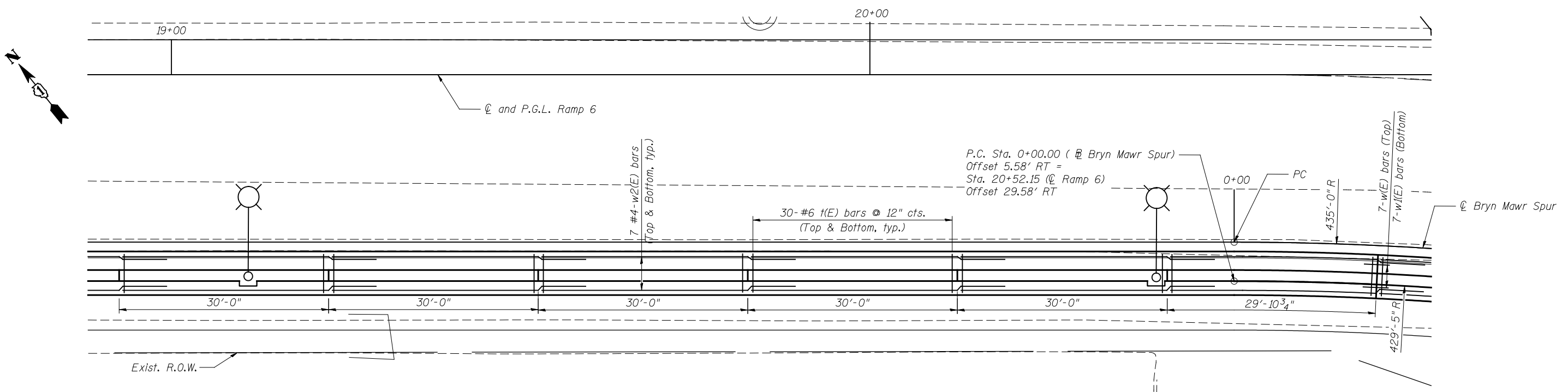
PLAN

PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME =	DESIGNED - AD	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN AND ELEVATION 2 RETAINING WALL A STRUCTURE NO. 016-W004	F.A.U. RTE. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - AD	REVISED	2746			1616B	COOK	404	331	
	PLOT SCALE =	CHECKED - AY	REVISED			CONTRACT NO. 60J14				
	PLOT DATE =	DATE - 2/18/2013	REVISED			ILLINOIS FED. AID PROJECT				

Q:\IDOT\21850_006.CumberlandAve\Drawings\CADD Sheets\DI60J14-sht-ts1-Wall.A.PE-2.dgn



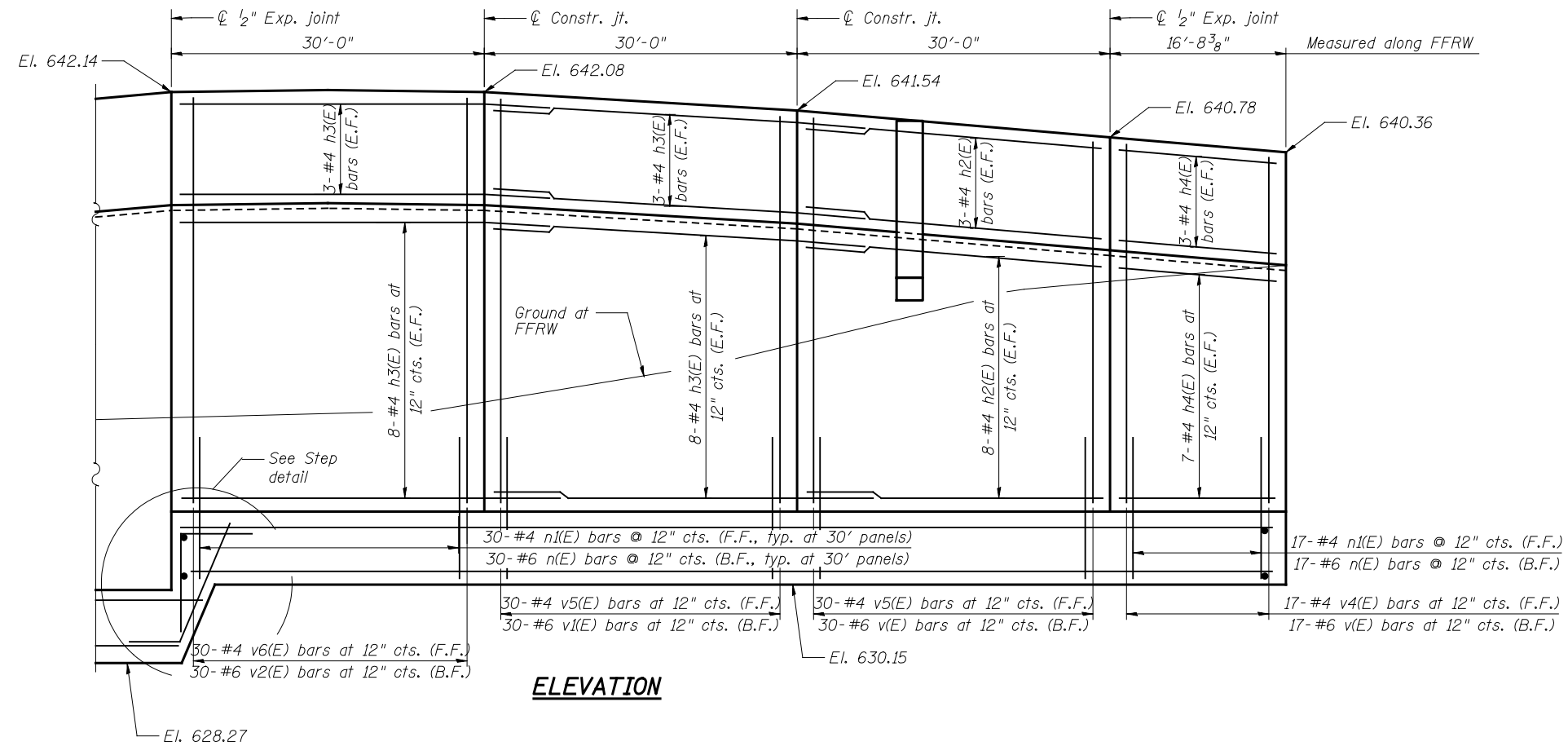
ELEVATION



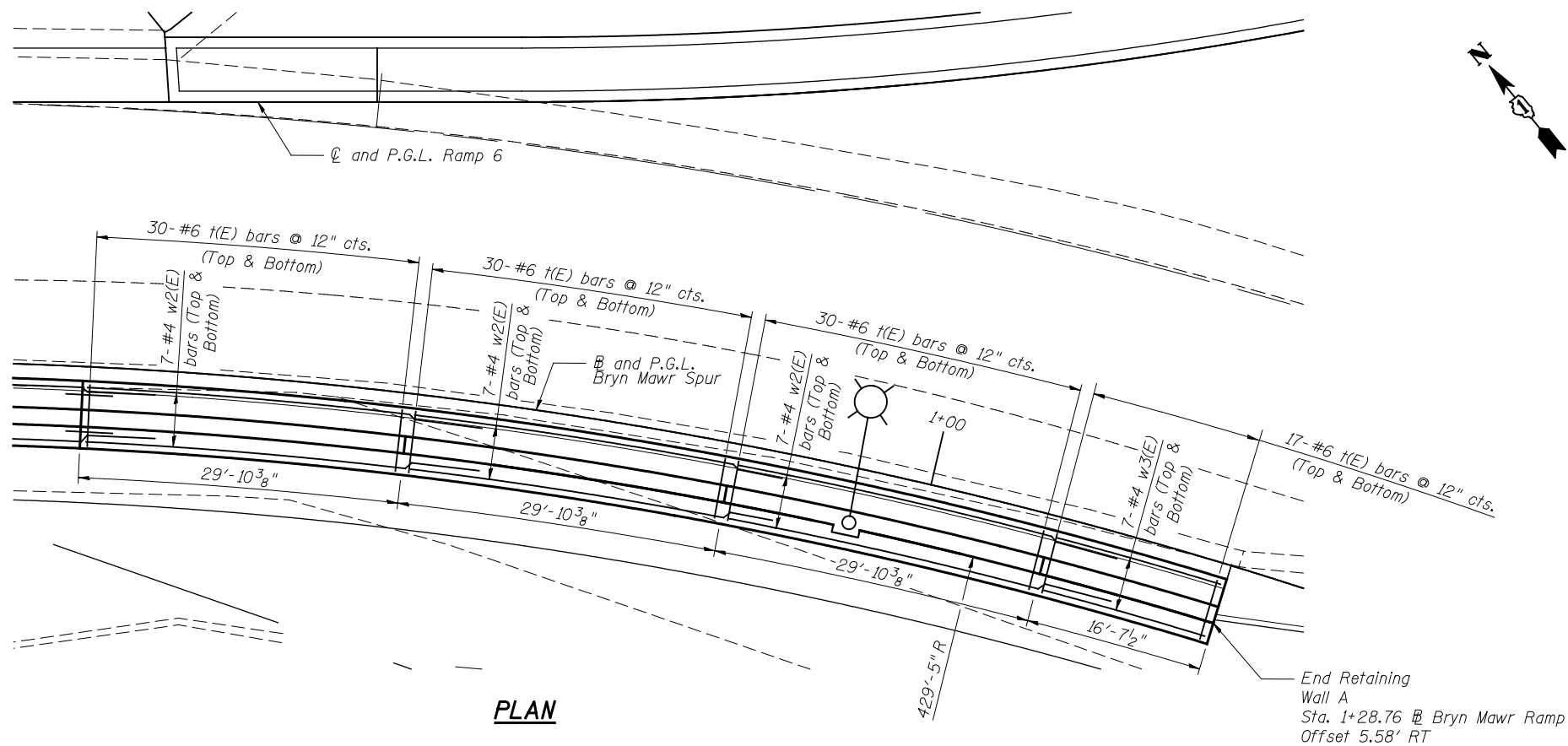
PLAN

PATRICK ENGINEERING INC. 4970 VARSITY DRIVE LISLE, IL 60532 patrickengineering.com	USER NAME =	DESIGNED - AD	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN AND ELEVATION 3 RETAINING WALL A STRUCTURE NO. 016-W004	F.A.U. RTE. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DESIGNED - AD	REVISED	2746			1616B	COOK	404	332	
	PLOT SCALE =	CHECKED - AY	REVISED			CONTRACT NO. 60J14				
	PLOT DATE =	DATE - 2/18/2013	REVISED			ILLINOIS FED. AID PROJECT				

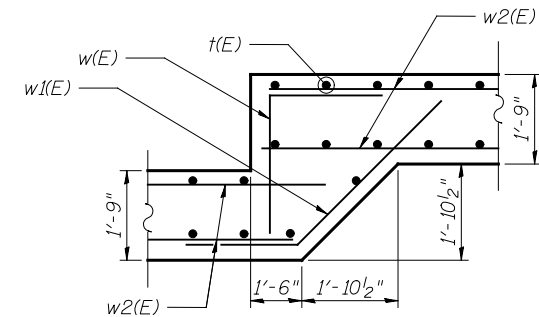
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ELEVATION



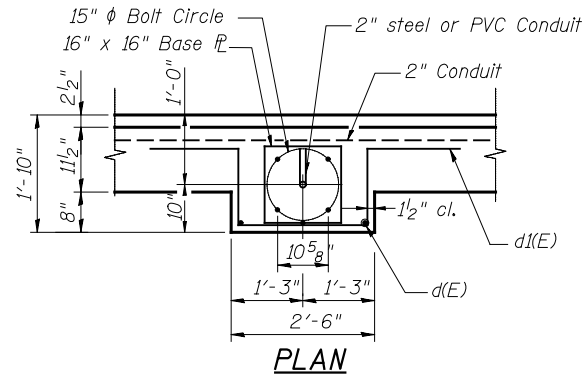
PLAN



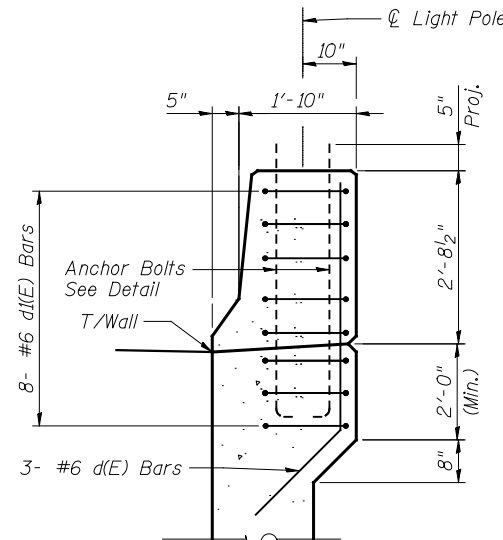
STEP DETAIL

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	15	#6	6'-6"	
d1(E)	40	#6	8'-11"	
h2(E)	146	#4	29'-8"	
h3(E)	270	#4	32'-3"	
h4(E)	20	#4	16'-4"	
h5(E)	2	#4	20'-7"	
h6(E)	2	#4	13'-2"	
n(E)	617	#6	7'-4"	
n1(E)	617	#4	5'-9"	
t(E)	1234	#6	5'-11"	
u(E)	20	#4	7'-0"	
w(E)	7	#4	5'-2"	
w1(E)	7	#4	6'-0"	
w2(E)	280	#4	32'-1"	
w3(E)	14	#4	16'-6"	
v(E)	347	#6	7'-9"	
v1(E)	120	#6	8'-9"	
v2(E)	90	#6	9'-8"	
v3(E)	60	#6	10'-8"	
v4(E)	317	#4	7'-8"	
v5(E)	150	#4	8'-7"	
v6(E)	90	#4	9'-11"	
v7(E)	60	#4	10'-11"	
Removal of Existing Structures	L. Sum		1	
Structure Excavation	Cu. Yd.		1,089	
Concrete Structures	Cu. Yd.		561.6	
Protective Coat	Sq. Yd.		272	
Reinforcement Bars, Epoxy Coated	Pound		47,490	
Geocomposite Wall Drain	Sq. Yd.		341	
Porous Granular Embankment, Special	Cu. Yd.		227	
Pipe Underdrains for Structures, 4"	Foot		620	



PLAN



SECTION

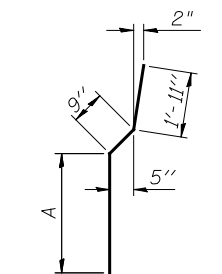
Notes:

1. For light pole locations and details, see Lighting Plans.
2. Cost of anchor bolts, nuts, washers, lighting conduit and expansion couplings is included in Concrete Structures.

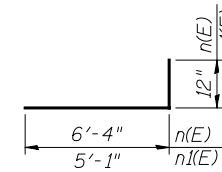
LIGHT POLE MOUNTING DETAILS

MINIMUM LAP

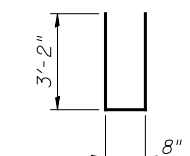
- #4 Bars = 2'-1"
- #6 Bars = 3'-1"



BAR v(E) THRU v3(E)



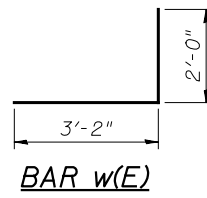
BARS n(E) & n1(E)



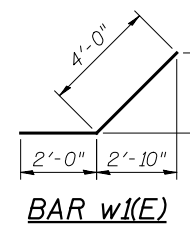
BAR u(E)

DIM A

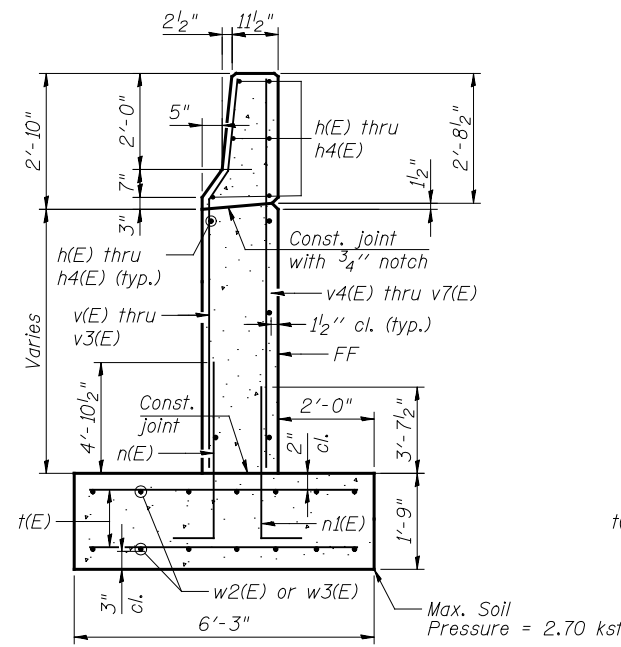
Bar	A
v(E)	5'-1"
v1(E)	6'-0"
v2(E)	7'-0"
v3(E)	8'-0"



BAR w(E)

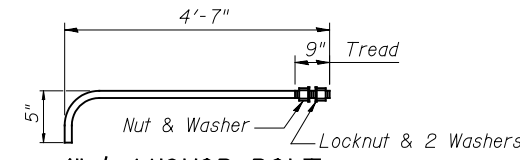


BAR w1(E)



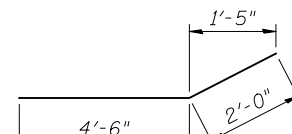
SECTION THRU WALL

(Typical)

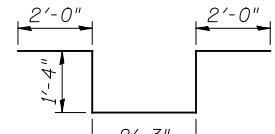


1" ANCHOR BOLT

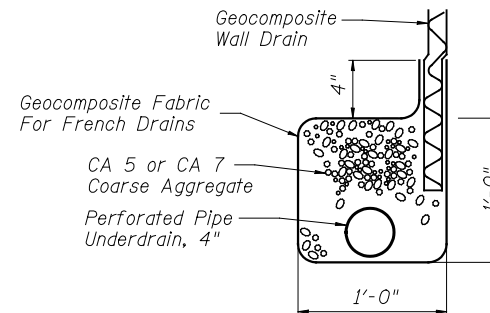
Full Length Hot Dipped Galvanized (ASTM F 1554 Grade 105)



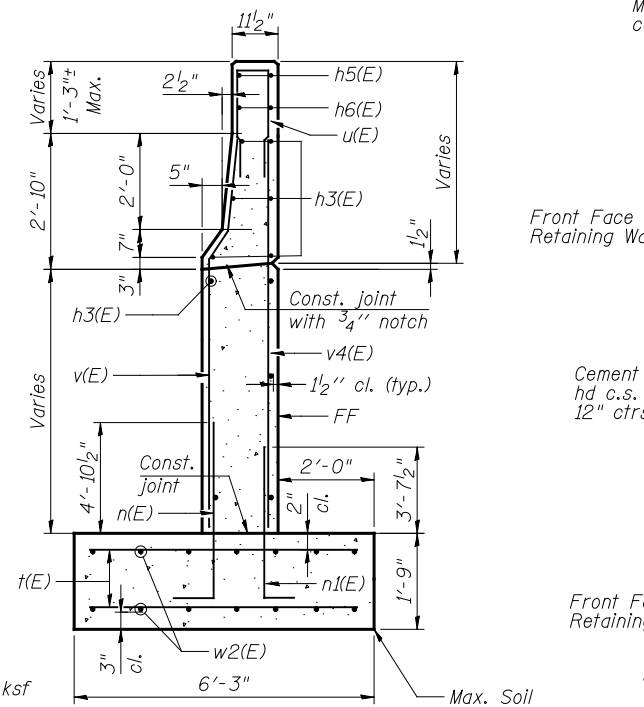
BAR d1(E)



BAR d(E)

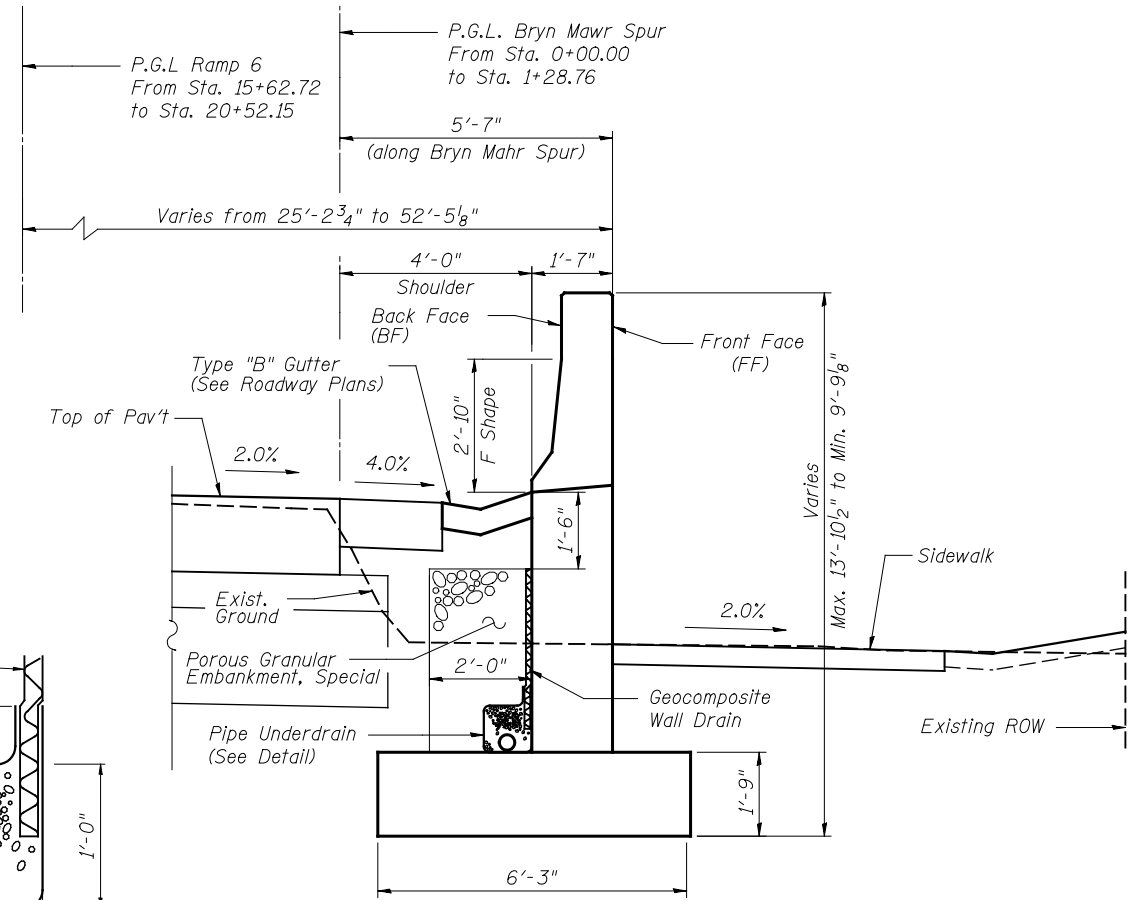


PIPE UNDERDRAIN DETAIL

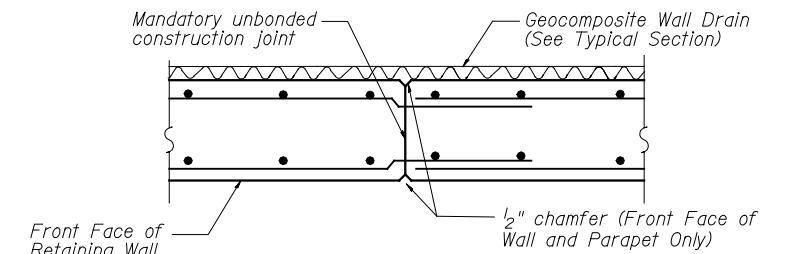


SECTION THRU WALL

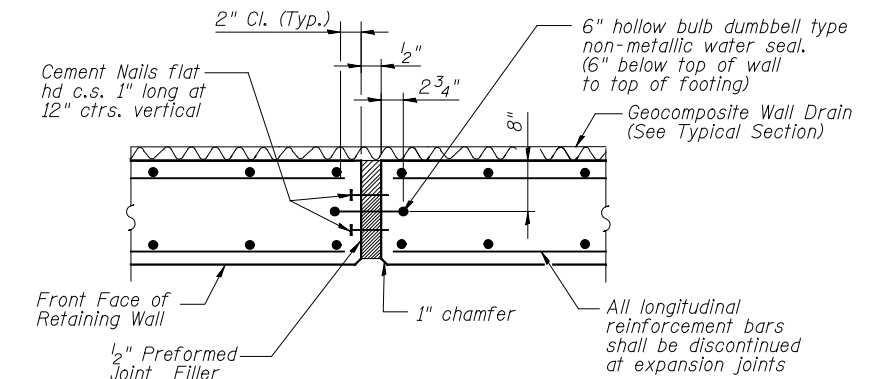
(Sta. 15+62.72 to 15+82.68 Ramp 6)



CROSS SECTION OF ROADWAY AND WALL



CONSTRUCTION JOINT DETAIL



EXPANSION JOINT DETAIL

BLOOM COMPANIES, LLC.		BORING LOG		Chicago, IL				
JOB NO:	BM3-1334	CLIENT:	Illinois Department of Transportation	BORING NO:	B-4			
PROJECT:	Proposed Retaining Wall and Sign Structure	STATION:	15+73	OFFSET:	16.8 RT			
LOCATION:	Cumberland Avenue Exit Ramp at I-90 East	OFFSET:	16.8 RT	SURF ELEV:	635.1			
BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers							
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
		634.5	6.0" Bituminous Concrete Pavement		Auger			11.2
	0.0-1.0		FILL: Gr Sand A-1-a, trace Gravel					
		633.1		12	5	(1.5)		18.3
	1.0-2.5							
5				13	2	1.0	15	16.6
	3.5-5.0		Stiff Gr Silty Clay A-6, trace Gravel					
		627.1		14	3	1.8	15	16.5
	6.0-7.5							
10			Medium Dense Gr Sand A-3, trace Gravel	16	5			9.2
	8.5-10.0	625.1						
				15	3	(2.2)		18.1
	11.0-12.5							
15			Stiff to Very Stiff Gr Silty Clay A-6, trace Gravel	14	3	3.2	15	22.5
	13.5-15.0							
				13	3	1.5	15	21.3
	16.0-17.5							
20		615.1		16	4	1.9	15	10.9
	18.5-20.0							
Boring Terminated @ 20 feet								
REMARKS Caved in at 5'. Backfilled w/soil cutting, Bentonite Chips and Cold Asphalt patch. - Automatic Hammer Used.						() Denotes Calibrated Penetrometer Estimate		
WATER	17.0 FT. ELEV.	618.1	DURING DRILLING	☒	CORE SIZE	IN.	DATE:	Nov 28, 11
WATER	Dry FT. ELEV.		AT COMPLETION	☒	CASING LENGTH	FT.	DRILLER:	G. Shlimon
WATER	FT. ELEV.		AFTER HRS.	☒	CASING DIAMETER	IN.	INSPECTOR:	M. Sanati

BLOOM COMPANIES, LLC.		BORING LOG		Chicago, IL				
JOB NO:	BM3-1334	CLIENT:	Illinois Department of Transportation	BORING NO:	B-5			
PROJECT:	Proposed Retaining Wall and Sign Structure	STATION:	16+88	OFFSET:	17.0 RT			
LOCATION:	Cumberland Avenue Exit Ramp at I-90 East	OFFSET:	17.0 RT	SURF ELEV:	635.5			
BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers							
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
		634.9	6.0" Bituminous Concrete Pavement		Auger			1.0
	0.0-1.0		FILL: Gr Sand A-3, trace Gravel					
				18	8			6.3
	1.0-2.5							
5				16	4	(1.0)		21.5
	3.5-5.0		FILL: Stiff Gr Silty Clay A-6, trace Gravel					
		630.0						
			Stiff Gr Silty Clay Loam A-6, trace Gravel (occasional sand seams)	15	2	(1.0)		19.8
	6.0-7.5							
10			Medium Dense Gr Sand A-3	18	3			21.7
	8.5-10.0							
		624.0		14	6	2.4	15	24.8
	11.0-12.5							
15			Very Stiff Gr Clay A-7-6(11), trace Gravel	18	3	3.6	15	23.1
	13.5-15.0							
				18	4	2.8	15	17.7
	16.0-17.5							
20		615.5		17	4	2.3	15	18.8
	18.5-20.0							
Boring Terminated @ 20 feet								
REMARKS Caved in at 5'. Backfilled w/soil cutting, Bentonite Chips and Cold Asphalt patch. - Automatic Hammer Used.						() Denotes Calibrated Penetrometer Estimate		
WATER	6.0 FT. ELEV.	629.5	DURING DRILLING	☒	CORE SIZE	IN.	DATE:	Nov 28, 11
WATER	Dry FT. ELEV.		AT COMPLETION	☒	CASING LENGTH	FT.	DRILLER:	G. Shlimon
WATER	FT. ELEV.		AFTER HRS.	☒	CASING DIAMETER	IN.	INSPECTOR:	M. Sanati

BLOOM COMPANIES, LLC.		BORING LOG		Chicago, IL				
JOB NO:	BM3-1334	CLIENT:	Illinois Department of Transportation	BORING NO:	B-6			
PROJECT:	Proposed Retaining Wall and Sign Structure	STATION:	18+03	OFFSET:	17.0 RT			
LOCATION:	Cumberland Avenue Exit Ramp at I-90 East	OFFSET:	17.0 RT	SURF ELEV:	636.0			
BORING RIG & METHOD:	Diedrich D-50 w/Hollow Stem Augers							
DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
		635.4	6.0" Bituminous Concrete Pavement		Auger			1.4
	0.0-1.0		FILL: Gr Sand A-1-a, trace Gravel					
		634.0		12	4	(0.6)		15.3
	1.0-2.5		FILL: Medium Stiff Gr Clay A-6, trace Gravel					
5				13	2	(0.8)		18.0
	3.5-5.0							
		630.5						
			Stiff Gr Silty Clay Loam A-6, trace Gravel	14	2	(1.1)		17.0
	6.0-7.5							
10			Stiff Gr Silty Clay A-6, trace Gravel (occasional sand seams)	18	2	1.4	15	16.6
	8.5-10.0	625.5						
			Medium Dense Gr Sand A-3, trace Gravel	18	3	7-7		17.8
	11.0-12.5	623.0						
15			Very Stiff Gr Silty Clay A-6, trace Gravel	18	7	3.9	15	23.0
	13.5-15.0							
				18	6	3.9	15	16.4
	16.0-17.5							
20		616.0		18	3	3.0	15	20.7
	18.5-20.0							
Boring Terminated @ 20 feet								
REMARKS Caved in at 5'. Backfilled w/soil cutting, Bentonite Chips and Cold Asphalt patch. - Automatic Hammer Used.						() Denotes Calibrated Penetrometer Estimate		
WATER	11.0 FT. ELEV.	625.0	DURING DRILLING	☒	CORE SIZE	IN.	DATE:	Nov 29, 11
WATER	Dry FT. ELEV.		AT COMPLETION	☒	CASING LENGTH	FT.	DRILLER:	G. Shlimon
WATER	FT. ELEV.		AFTER HRS.	☒	CASING DIAMETER	IN.	INSPECTOR:	M. Sanati

BLOOM COMPANIES, LLC. Chicago, IL
BORING LOG
 JOB NO: BM3-1334 CLIENT: Illinois Department of Transportation BORING NO: B-7
 PROJECT: Proposed Retaining Wall and Sign Structure STATION: 19+18
 LOCATION: Cumberland Avenue Exit Ramp at I-90 East OFFSET: 17.0 RT
 BORING RIG & METHOD: Diedrich D-50 w/Hollow Stem Augers SURF ELEV: 637.0

DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
		636.4	6.0" Bituminous Concrete Pavement		Auger			2.7
	0.0-1.0							
	1.3-2.8		FILL: Medium Dense Br Sand A-3, trace Gravel	14	8 7-3			6.2
		633.0						
5	3.5-5.0			13	3 1-1	(0.5)		11.5
	6.0-7.5		Medium Stiff Gr Silty Clay Loam A-6, trace Gravel	11	2 2-2	0.7	15	17.5
	8.5-10.0			16	2 2-5	0.9	15	14.8
		626.5						
	11.0-12.5		Medium Dense Gr Sand A-3, trace Gravel	11	5 7-8			18.6
		624.0						
	13.5-15.0		Stiff Gr Silty Clay A-6, trace Gravel	18	2 4-6	1.5	15	20.4
		621.5						
	16.0-17.5		Very Stiff to Hard Gr Silty Clay A-6, trace Gravel	15	4 6-9	4.2	15	24.1
	18.5-20.0	617.0		15	4 5-7	2.2	15	18.0

Boring Terminated @ 20 feet

REMARKS Caved in at 16'. Backfilled w/soil cutting, Bentonite Chips and Cold Asphalt patch. () Denotes Calibrated Penetrometer Estimate
 - Automatic Hammer Used.

WATER 11.0 FT. ELEV. 626.0 DURING DRILLING CORE SIZE IN. DATE: Nov 29, 11
 WATER 15.5 FT. ELEV. 621.5 AT COMPLETION CASING LENGTH FT. DRILLER: G. Shlmon
 WATER FT. ELEV. AFTER HRS. CASING DIAMETER IN. INSPECTOR: M. Sanati

BLOOM COMPANIES, LLC. Chicago, IL
BORING LOG
 JOB NO: BM3-1334 CLIENT: Illinois Department of Transportation BORING NO: B-8
 PROJECT: Proposed Retaining Wall and Sign Structure STATION: 20+33
 LOCATION: Cumberland Avenue Exit Ramp at I-90 East OFFSET: 16.5 RT
 BORING RIG & METHOD: Diedrich D-50 w/Hollow Stem Augers SURF ELEV: 638.3

DEPTH	SAMPLE FROM - TO	ELEV.	SOIL DESCRIPTION	REC.	BLOWS/6"	q _u	STRAIN %	WATER CONTENT %
		637.7	6.0" Bituminous Asphalt Pavement		Auger			2.4
	0.0-1.0							
	1.3-2.8		FILL: Medium Dense Br Sand A-3	13	9 9-8			7.6
		632.3						
5	3.5-5.0			10	2 3-3			7.7
	6.0-7.5		Stiff Br Silty Clay A-6, trace Gravel (occasional sand seams)	16	2 3-6	1.0	15	19.3
	8.5-10.0			15	4 4-6	1.1	15	14.9
		627.8						
	11.0-12.5		Medium Dense Gr Sand A-2-4	15	4 6-8			19.9
	13.5-15.0			16	3 6-9			22.7
		622.8						
	16.0-17.5		Very Stiff Gr Silty Clay A-6, trace Gravel	18	3 3-6	2.7	15	12.4
	18.5-20.0	618.3		18	3 4-7	2.9	15	23.4

Boring Terminated @ 20 feet

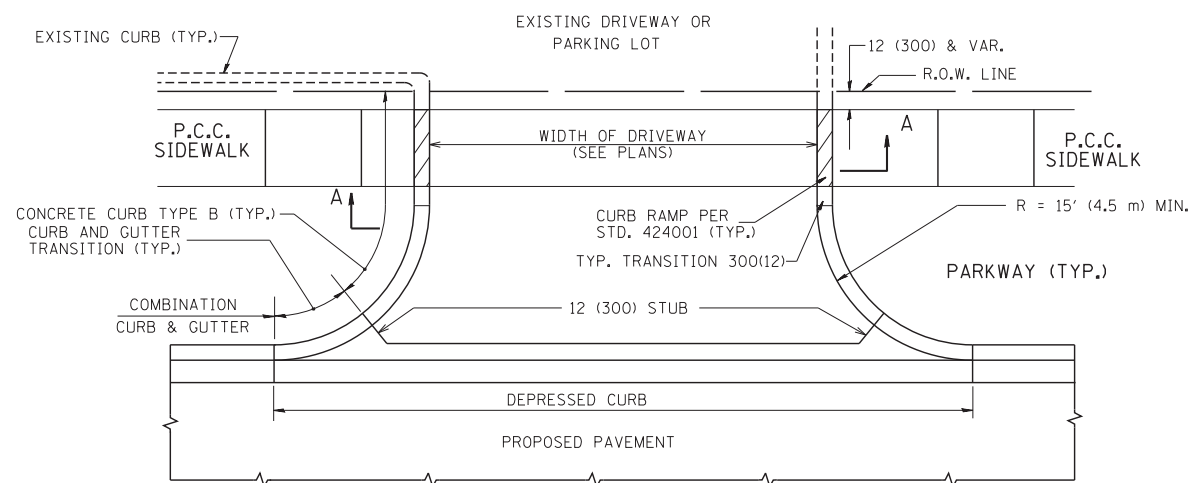
REMARKS Caved in at 14.5'. Backfilled w/soil cutting, Bentonite Chips and Cold Asphalt patch. () Denotes Calibrated Penetrometer Estimate
 - Automatic Hammer Used.

WATER Dry FT. ELEV. DURING DRILLING CORE SIZE IN. DATE: Nov 29, 11
 WATER Dry FT. ELEV. AT COMPLETION CASING LENGTH FT. DRILLER: G. Shlmon
 WATER FT. ELEV. AFTER HRS. CASING DIAMETER IN. INSPECTOR: M. Sanati

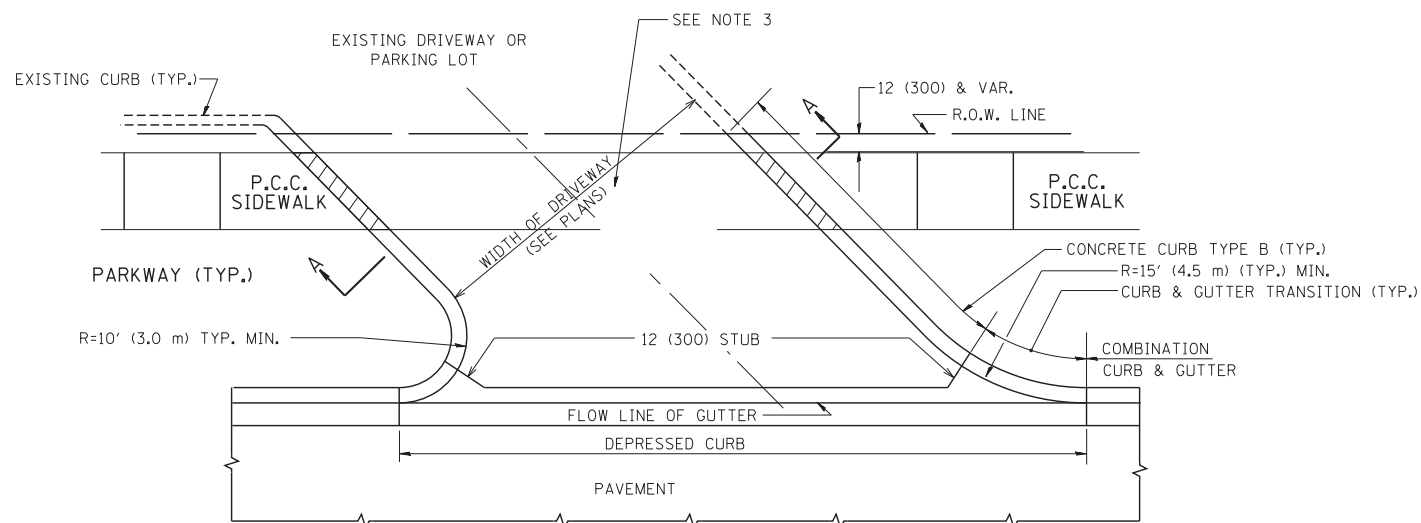
BLOOM COMPANIES, LLC. 1000 CUMBERLAND AVE. RETAINING WALL PROJ. 05/11/13

BLOOM COMPANIES, LLC. 1000 CUMBERLAND AVE. RETAINING WALL PROJ. 05/11/13

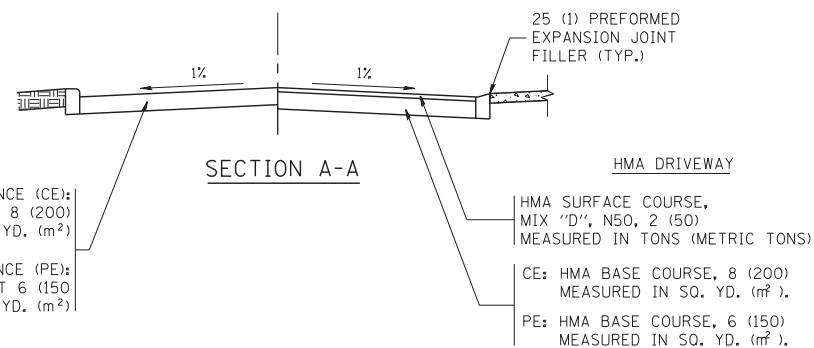
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WITH CONCRETE CURB, TYPE B



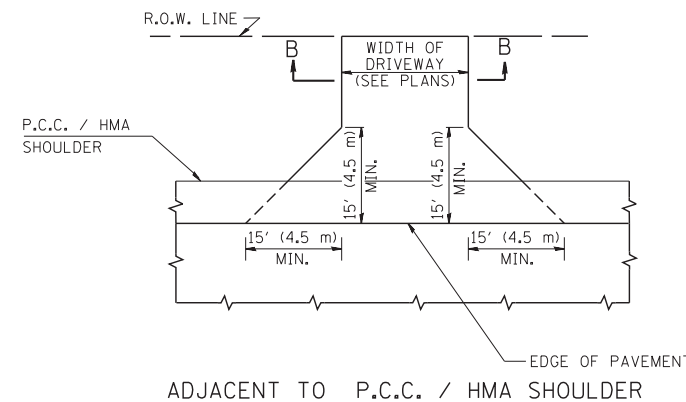
WITH CONCRETE CURB, TYPE B



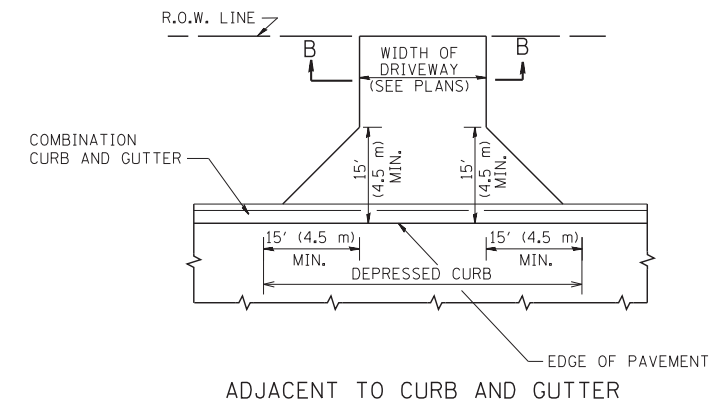
SECTION A-A

RIGID DRIVEWAY
 COMMERCIAL ENTRANCE (CE):
 P.C.C. DRIVEWAY PAVEMENT 8 (200)
 MEASURED IN SQ. YD. (m²)
 NON-COMMERCIAL ENTRANCE (PE):
 P.C.C. DRIVEWAY PAVEMENT 6 (150)
 MEASURED IN SQ. YD. (m²)

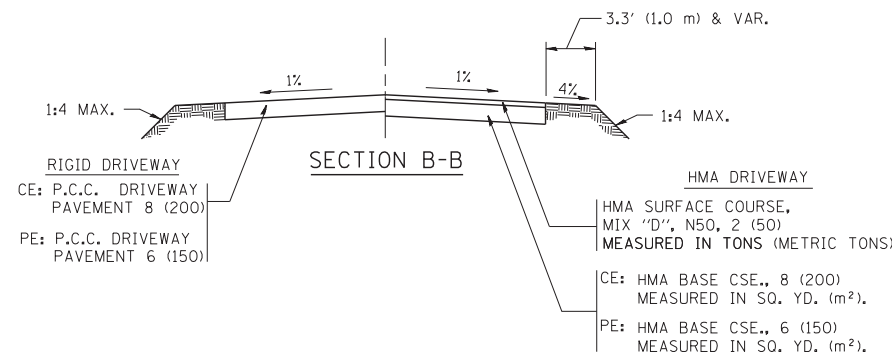
HMA DRIVEWAY
 HMA SURFACE COURSE,
 MIX "D", N50, 2 (50)
 MEASURED IN TONS (METRIC TONS)
 CE: HMA BASE COURSE, 8 (200)
 MEASURED IN SQ. YD. (m²),
 PE: HMA BASE COURSE, 6 (150)
 MEASURED IN SQ. YD. (m²).



ADJACENT TO P.C.C. / HMA SHOULDER



ADJACENT TO CURB AND GUTTER



SECTION B-B

RURAL FIELD ENTRANCE (FE)

HMA SURFACE COURSE,
 MIX "D", N50, 2 (50)
 MEASURED IN TONS (METRIC TONS)

AGGREGATE BASE CSE., TYPE B, 8 (200)
 MEASURED IN SQ. YD. (m²).

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 ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

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.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

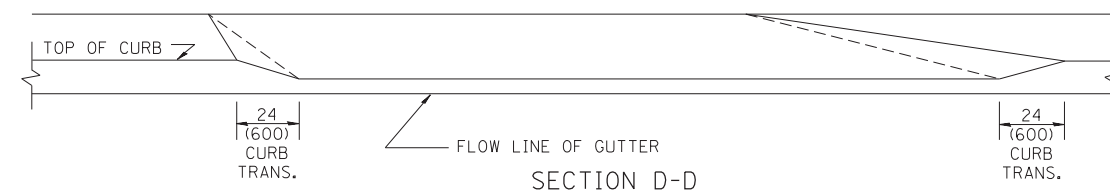
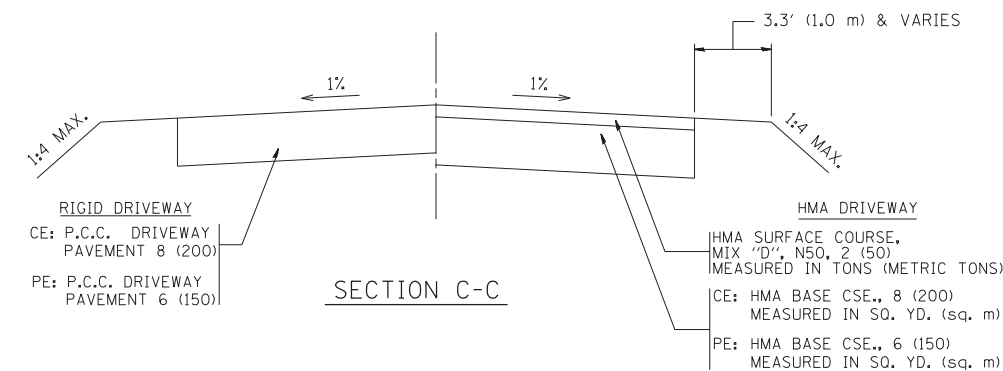
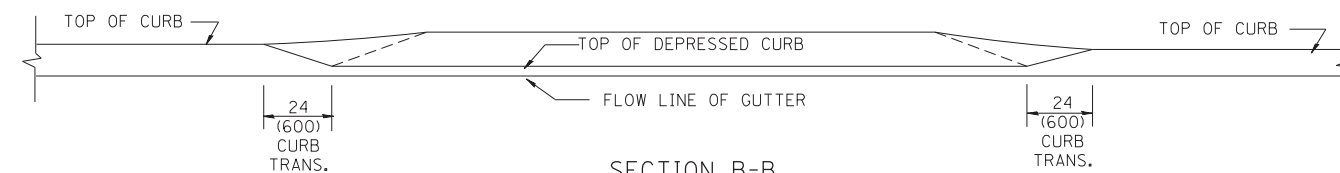
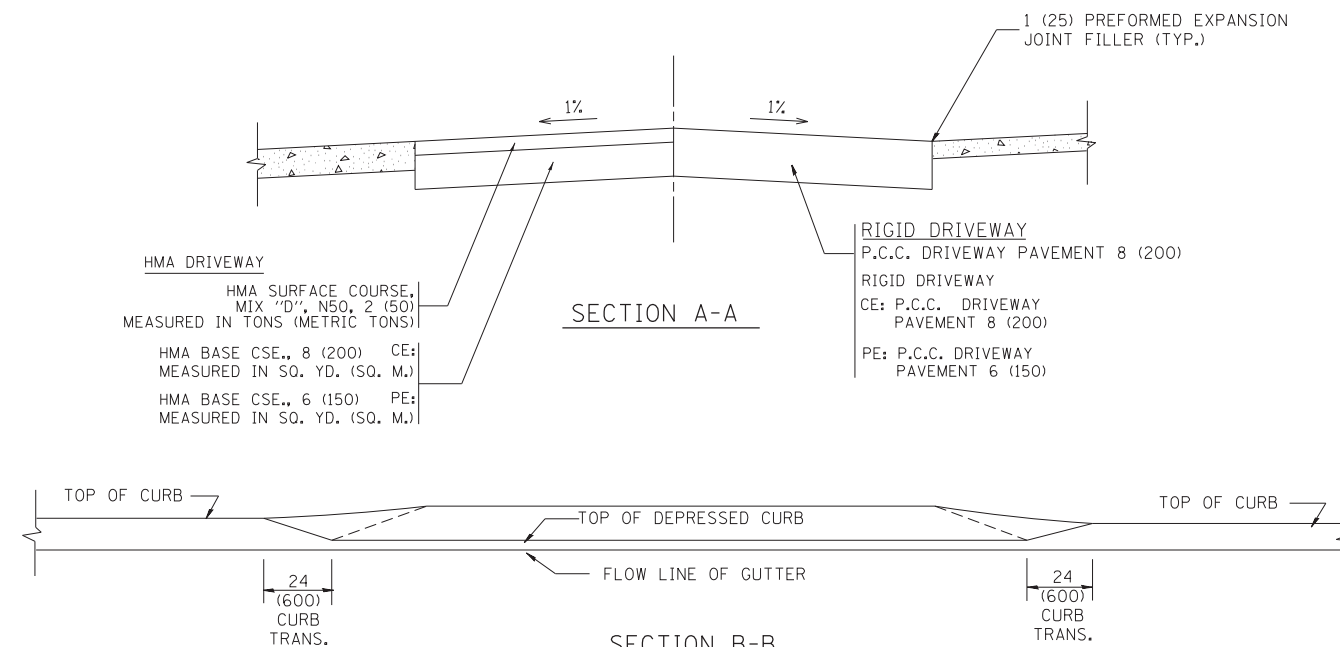
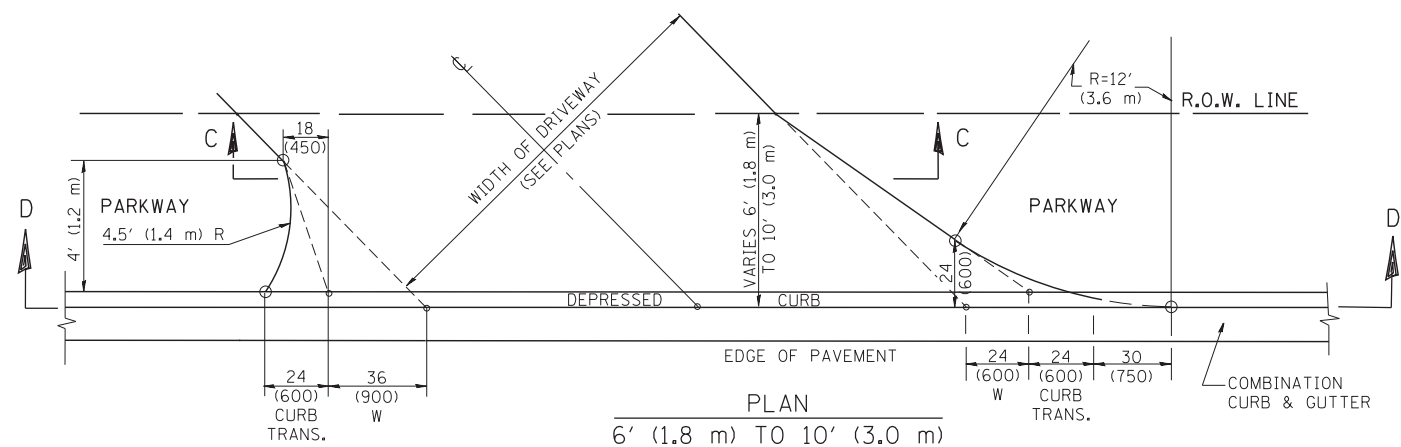
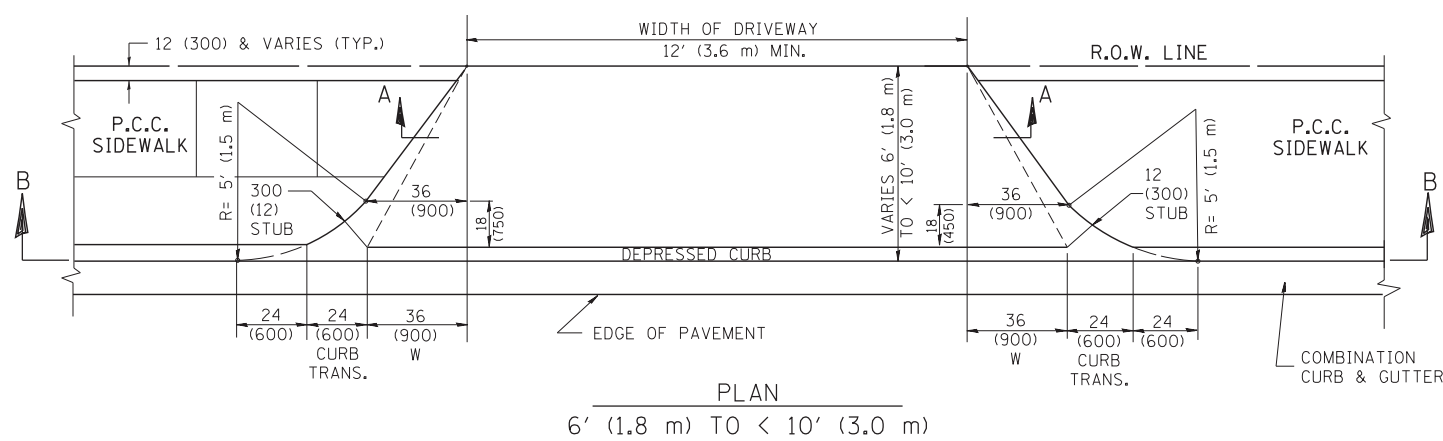
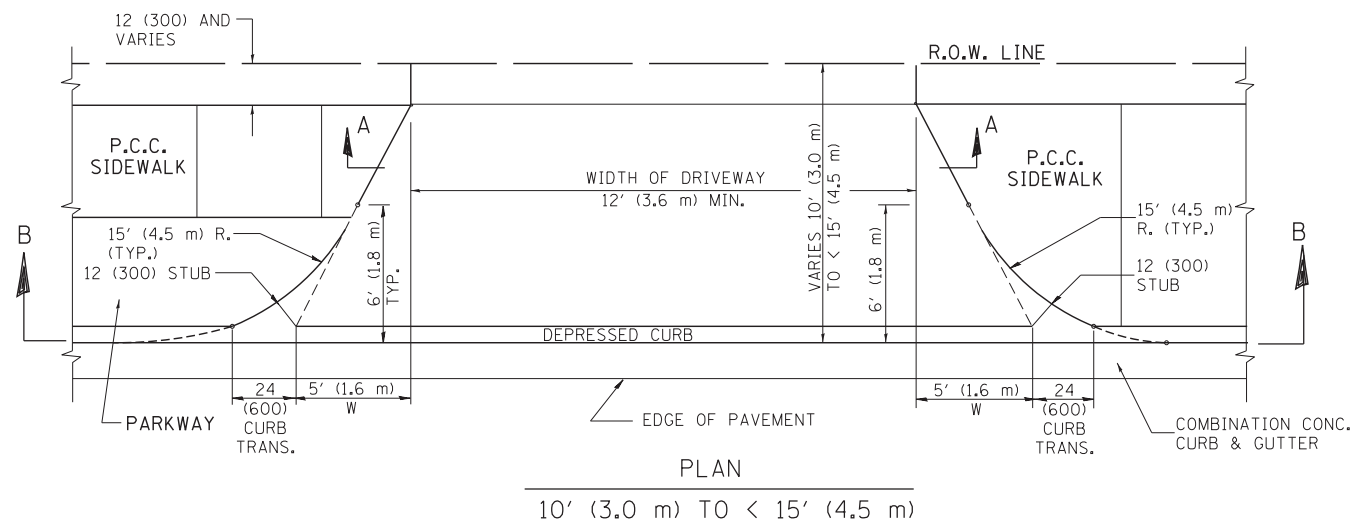
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	PLOT DATE = 9/6/2011	DATE - 11-04-95	REVISED - R. BORO 09-06-11

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

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

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			404	337
BD0156-07 (BD-01)		CONTRACT NO.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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 P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

THE 1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

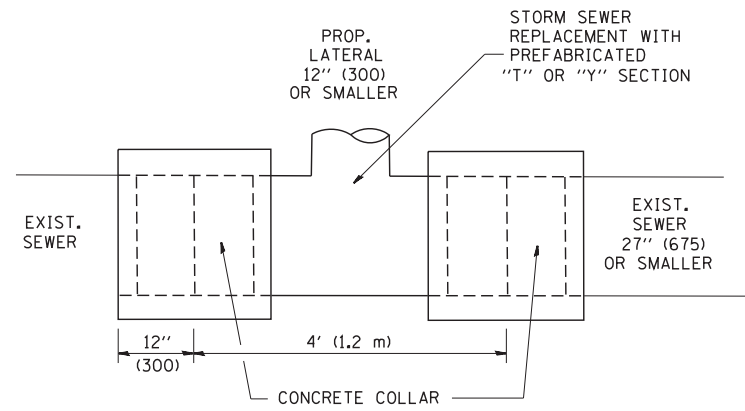
"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

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

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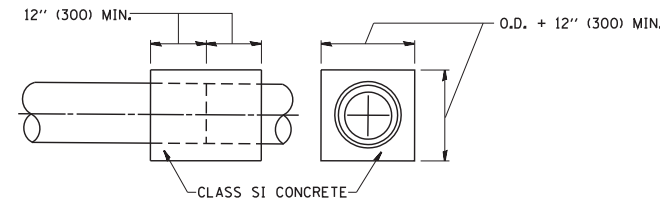
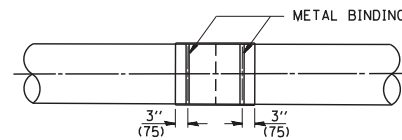
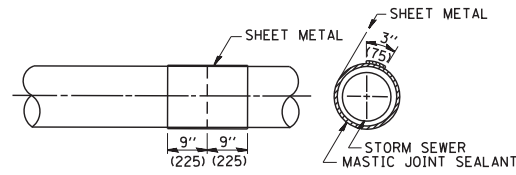
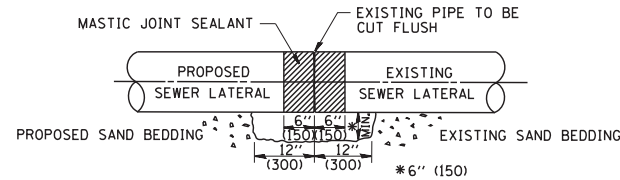
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)					404	338
SCALE: NONE		BD400-02 (BD-02)		CONTRACT NO.		
SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



DETAIL "A"

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

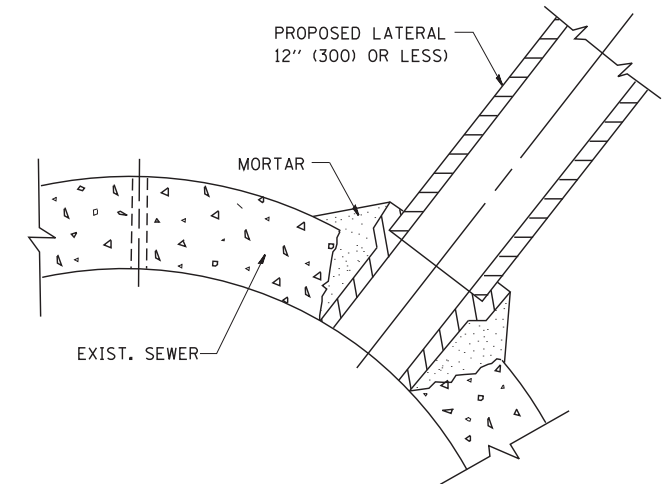


DETAIL "B"

CLASS SI CONCRETE COLLAR

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 CIRCUMFERENCE 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 OOOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
9. PLACE CLASS SI CONCRETE AROUND THE JOINT.



DETAIL "C"

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

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

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

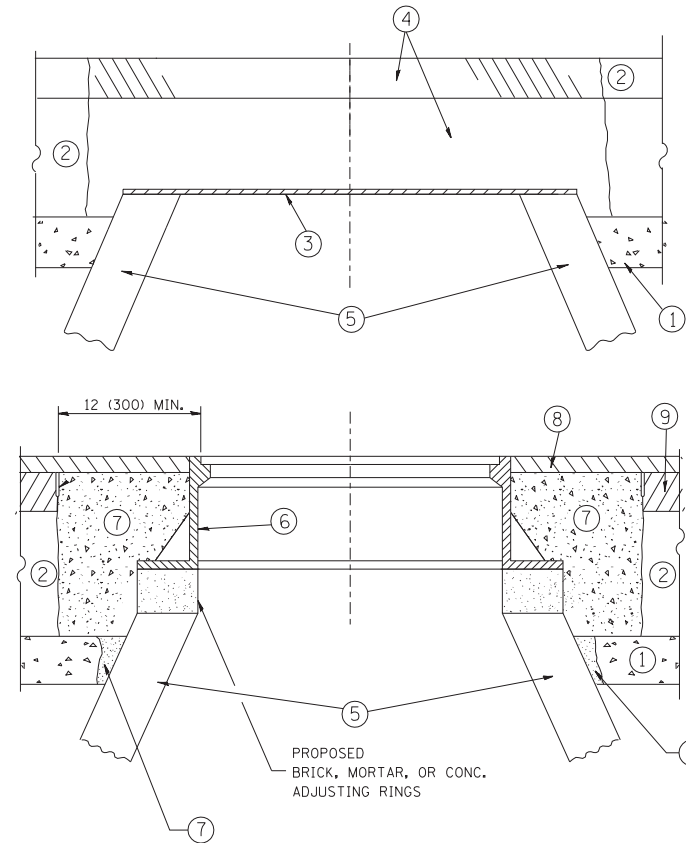
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	PLOT DATE = 1/4/2008	DATE - 07-25-90	REVISED - R. SHAH 06-12-96

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			404	339
BD500-01 (BD-7)			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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 A MINIMUM 1/2 (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

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-1* 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.

LEGEND

- ① SUB-BASE GRANULAR MATERIAL
- ⑥ FRAME AND LID (SEE NOTES)
- ② EXISTING PAVEMENT
- ⑦ CLASS PP-1* 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: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL" NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

NOTES:

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.

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.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

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.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

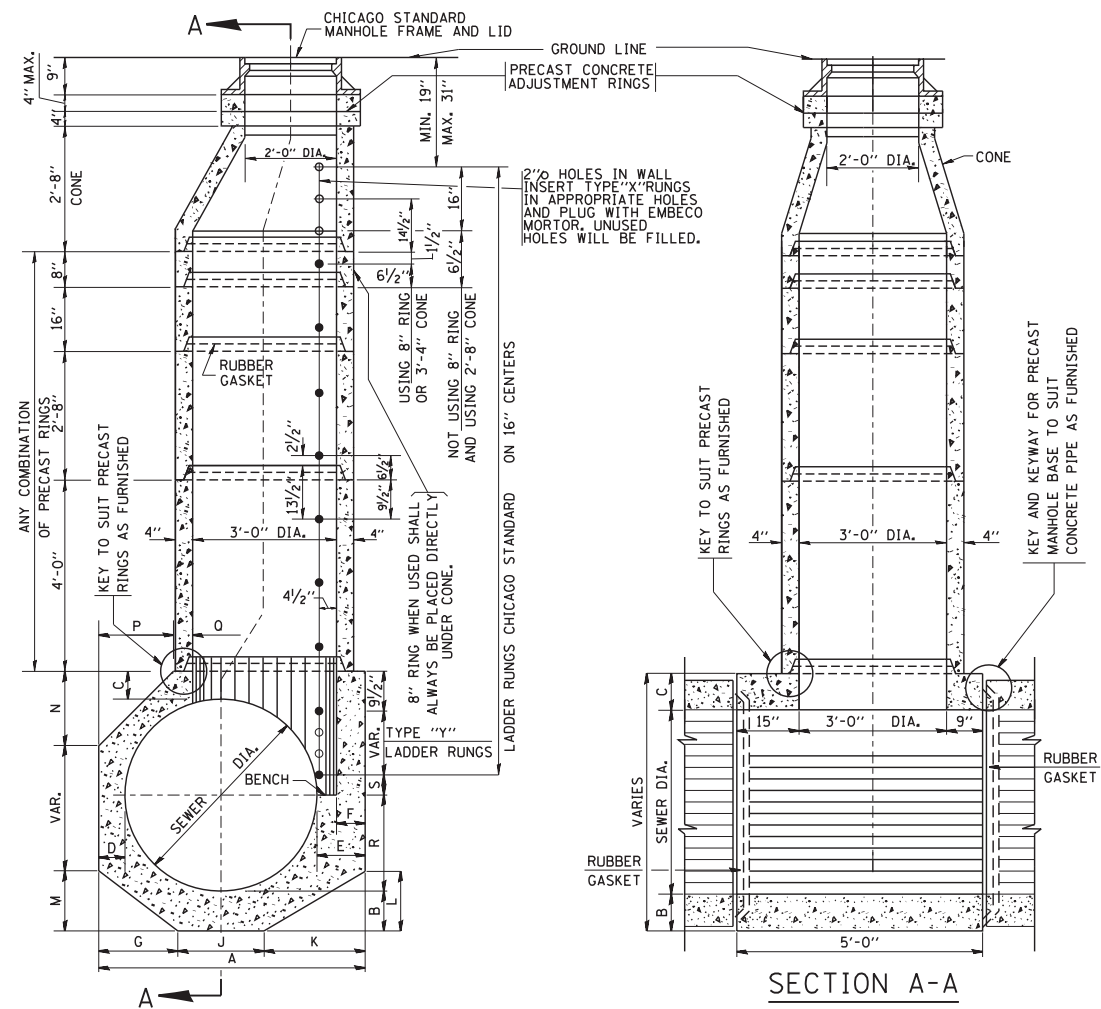
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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BD600-03 (BD-8)			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

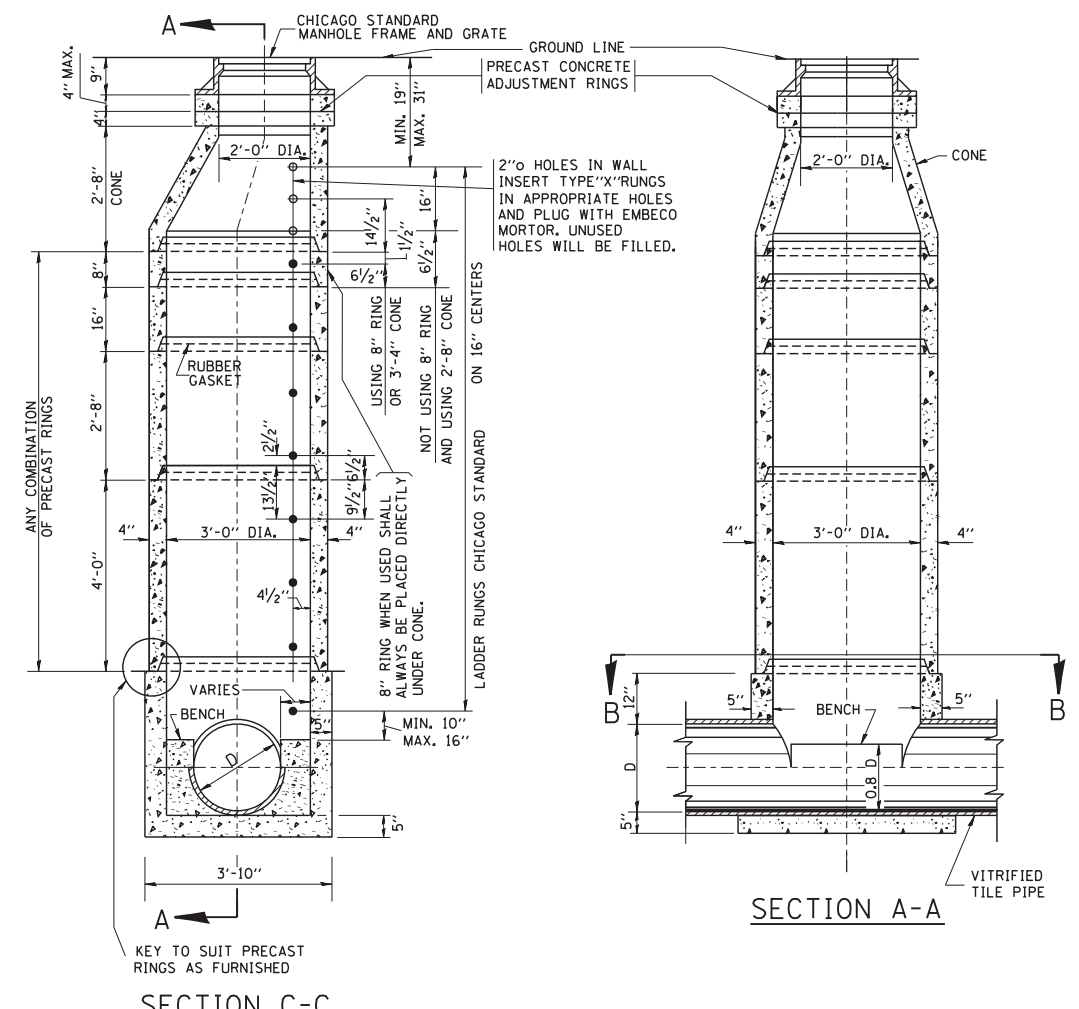


SECTION C-C

SECTION A-A

TYPE "A" MANHOLE

FOR SEWERS
24" TO 120" DIAMETER
PRECAST BASES AND RINGS

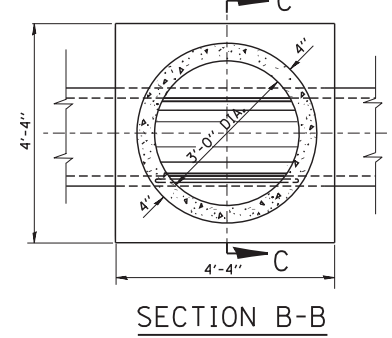


SECTION C-C

SECTION A-A

TYPE "A" MANHOLE

FOR SEWERS
21" DIAMETER AND SMALLER
PRECAST BASES AND RINGS



SECTION B-B

SCALE: 1/2" = 1'-0"

KEY AND KEYWAY FOR PRECAST MANHOLE BASE TO SUIT CONCRETE PIPE AS FURNISHED

MANHOLE OPENING MAY BE PLACED ON EITHER SIDE OF BASE TO SUIT SEWER ALIGNMENT AND/OR AS DIRECTED BY ENGINEER

FOR STATE CONTRACT ALL DIMENSIONS SHOULD BE PREPARED IN METRIC UNITS. SOFT CONVERSION METHOD SHOULD BE USED.

SEWER DIA.	PART OF ITEM	DIMENSIONS OF PRECAST MANHOLE BASE																NO. "Y" RINGS
		A	B	C	D	E	F	G	J	K	L	M	N	P	Q	R		
120"	----	12'-4 1/2"	12"	12"	12"	16 1/2"	12"	4'-0"	4'-0"	4'-4 1/2"	2'-7 1/2"	2'-5"	3'-7"	3'-7"	4'-8 1/2"	2'-0"	2 1/2"	7
108"	----	11'-4 1/2"	12"	12"	12"	16 1/2"	12"	3'-8"	3'-8"	4'-0 1/2"	2'-5"	2'-2"	3'-4"	3'-4"	4'-0 1/2"	2'-0"	6 1/2"	6
102"	----	10'-10 1/2"	12"	12"	12"	16 1/2"	12"	3'-6"	3'-6"	3'-10 1/2"	2'-4"	2'-1"	3'-2"	3'-2"	3'-8 1/2"	2'-0"	16 1/2"	5
96"	10-A	10'-2 1/2"	11"	11"	11"	15 1/2"	11"	3'-3"	3'-3"	3'-8 1/2"	2'-3"	23"	2'-11"	2'-11"	3'-4 1/2"	2'-0"	9 1/2"	5
90"	10-B	9'-8 1/2"	11"	11"	11"	15 1/2"	11"	3'-1"	3'-1"	3'-6 1/2"	2'-1 1/2"	22"	2'-10"	2'-10"	2'-11 1/2"	2'-0"	3 1/2"	5
84"	10-C	9'-0 1/2"	10"	10"	10"	14 1/2"	10"	2'-11"	2'-11"	3'-2 1/2"	23"	21"	2'-7"	2'-7"	2'-7 1/2"	2'-0"	12 1/2"	4
78"	10-D	8'-6 1/2"	10"	10"	10"	14 1/2"	10"	2'-9"	2'-9"	3'-0 1/2"	22"	20"	2'-6"	2'-6"	2'-2 1/2"	2'-0"	6 1/2"	4
72"	10	7'-10 1/2"	9"	9"	9"	13 1/2"	9"	2'-6"	2'-6"	2'-10 1/2"	21"	18"	2'-3"	2'-3"	22 1/2"	2'-0"	15 1/2"	3
66"	11	7'-4 1/2"	9"	9"	9"	13 1/2"	9"	2'-4"	2'-4"	2'-8 1/2"	19 1/2"	17"	2'-1"	2'-1"	18 1/2"	2'-0"	9 1/2"	3
60"	12	6'-8 1/2"	8"	8"	8"	12 1/2"	8"	2'-1 1/2"	2'-1 1/2"	2'-6"	18"	15"	23"	23"	13 1/2"	2'-0"	2 1/2"	3
54"	13	6'-2 1/2"	8"	8"	8"	12 1/2"	8"	23"	23"	2'-4"	17"	14"	21"	21"	9 1/2"	2'-0"	12 1/2"	2
48"	14	5'-6 1/2"	7"	7"	7"	11 1/2"	7"	20 1/2"	21"	2'-1"	15"	12 1/2"	18 1/2"	18 1/2"	5"	2'-0"	5 1/2"	2
42"	15	5'-0 1/2"	7"	7"	7"	11 1/2"	7"	18 1/2"	19"	23"	14"	11"	---	---	17 1/2"	21"	2 1/2"	2
36"	16	4'-4 1/2"	6"	6"	6"	10 1/2"	6"	16"	16"	20 1/2"	12 1/2"	9 1/2"	---	---	10 1/2"	18"	14 1/2"	1
30"	17	4'-0"	6"	6"	6"	12"	6"	14"	14"	20"	12"	8 1/2"	---	---	6"	15"	11 1/2"	1
24"	18	4'-0"	6"	6"	12"	12"	6"	16"	16"	16"	9 1/2"	9 1/2"	---	---	6"	12"	8 1/2"	1

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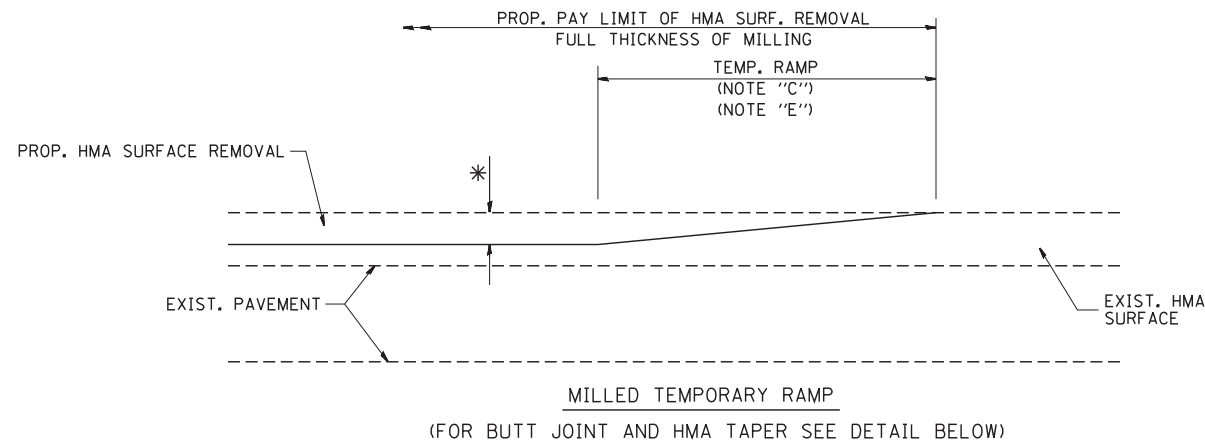
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

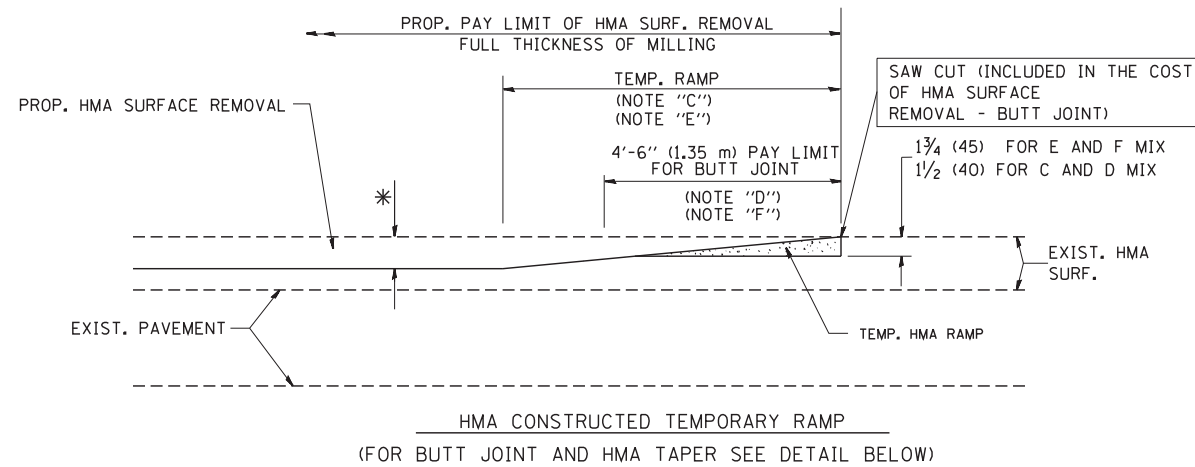
CITY OF CHICAGO
DRAINAGE DETAILS

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO. 404 341
BD600-12 (BD-9) CONTRACT NO.
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

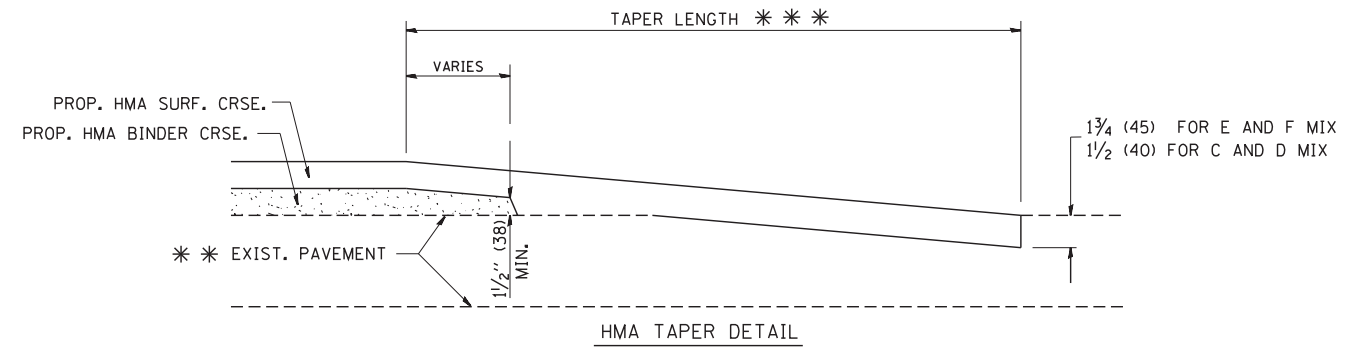
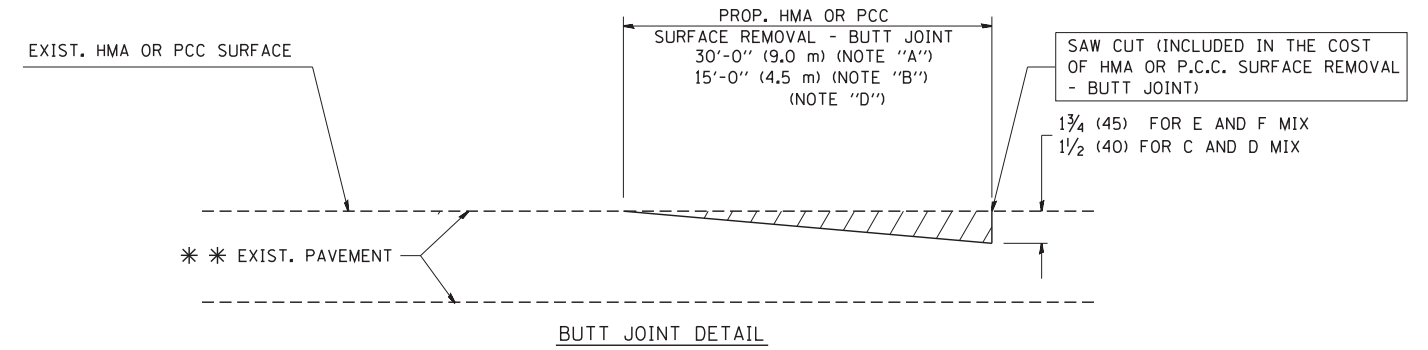


OPTION 1



OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

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

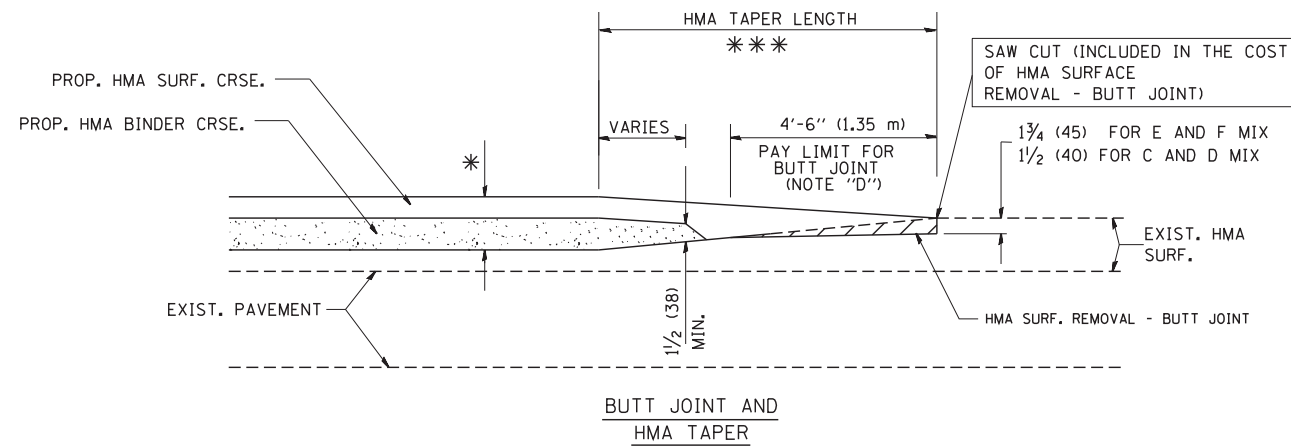
NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
 - 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'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
 - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
 - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- *** 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:

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".

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



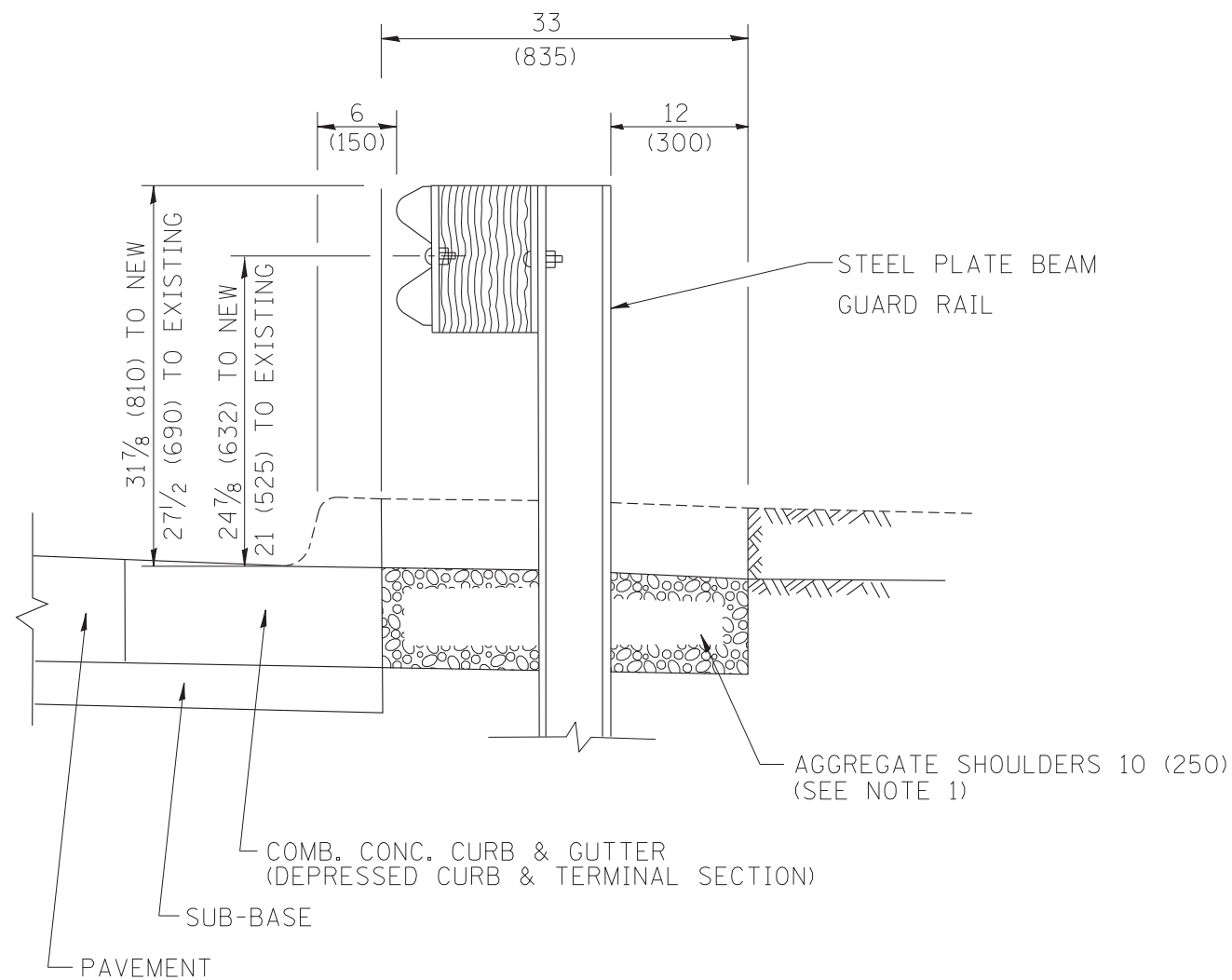
TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

FILE NAME = W:\diststd\22x34\bd32.dgn	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

BUTT JOINT AND HMA TAPER DETAILS	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
STA.	TO STA.

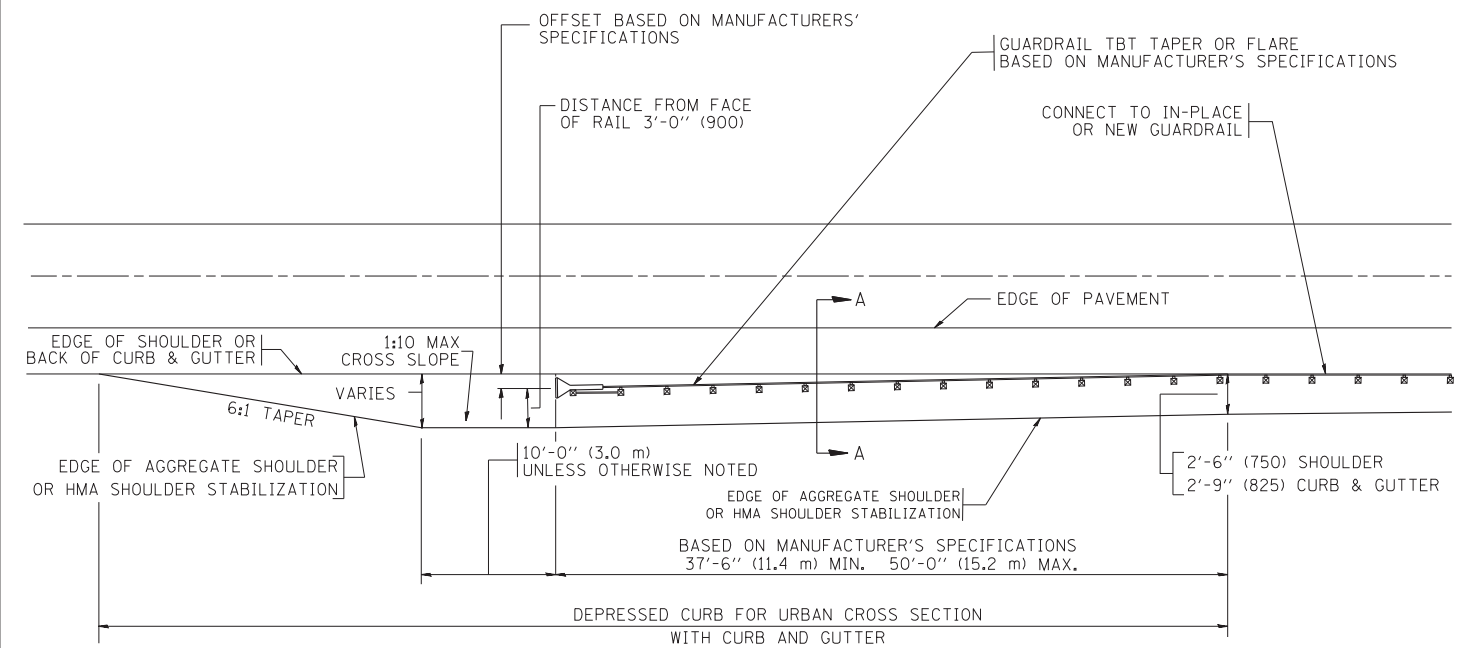
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			404	342
BD400-05 BD32		CONTRACT NO.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SECTION A-A

- NOTES:
1. THE AGGREGATE SHOULDER, 10" OR HMA SHOULDER, 6" (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 TERMINAL SECTION HEIGHT TO BE PLACED MUST MATCH THE HEIGHT OF THE IN-PLACE 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.

BASIS OF PAYMENT: HMA SHOULDERS 6 (150) (IF REQUIRED) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SHOULDERS 6" (150 mm)".

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.

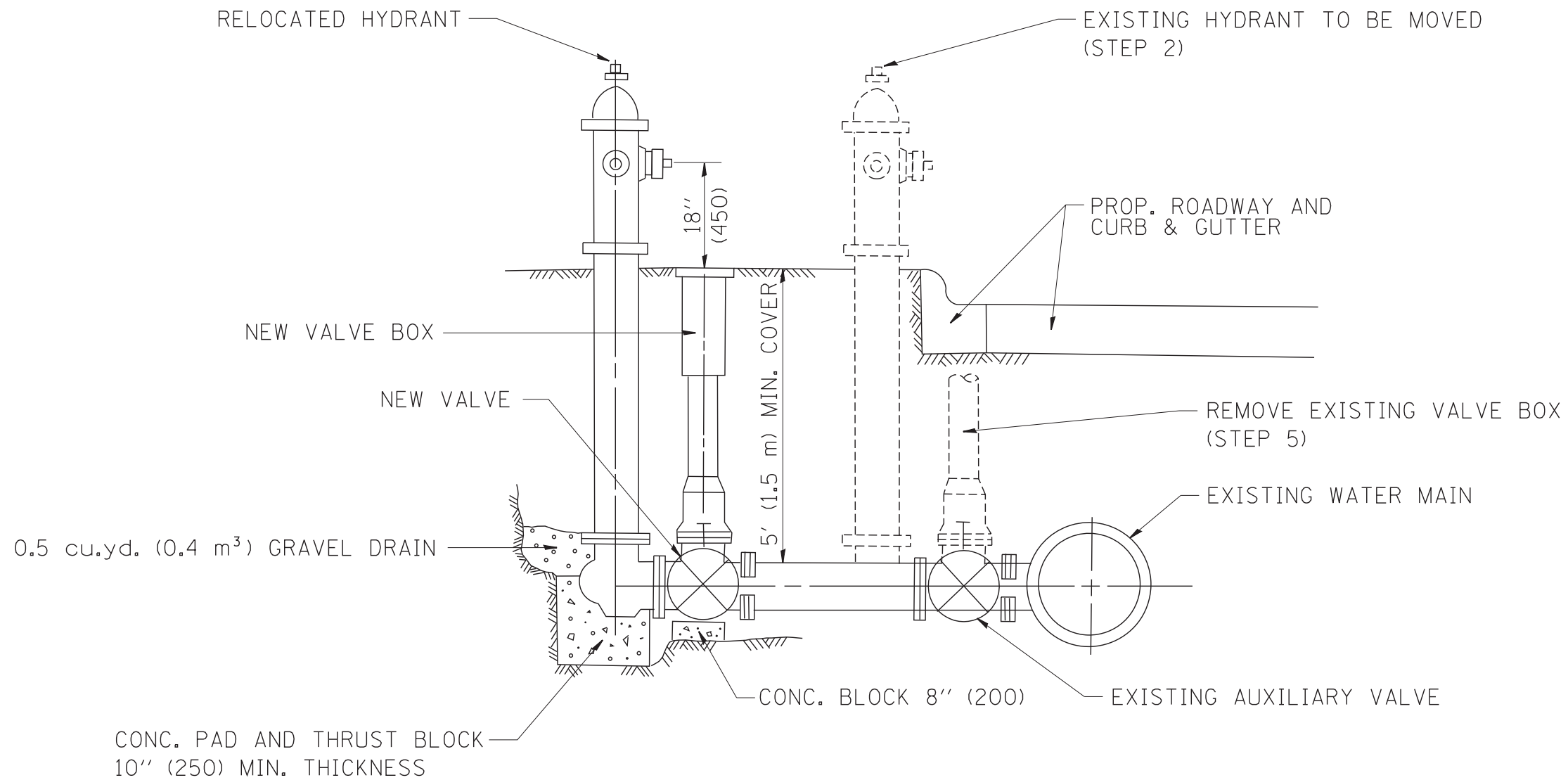
FILE NAME =	USER NAME = drivakosgn	DESIGNED - M. DE YONG	REVISED - E. GOMEZ 08-28-00
ct:\pwork\pwidot\DRIVAKOSGN\d0108315\bd34.dgn		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 49.9999 ' / IN.	CHECKED -	REVISED - R. BORO 12-08-2008
	PLOT DATE = 9/21/2009	DATE - 09-22-90	REVISED - R. BORO 09-14-2009

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

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

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			404	343
BD600-10 (BD 34)		CONTRACT NO.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SEQUENCE OF CONSTRUCTION:

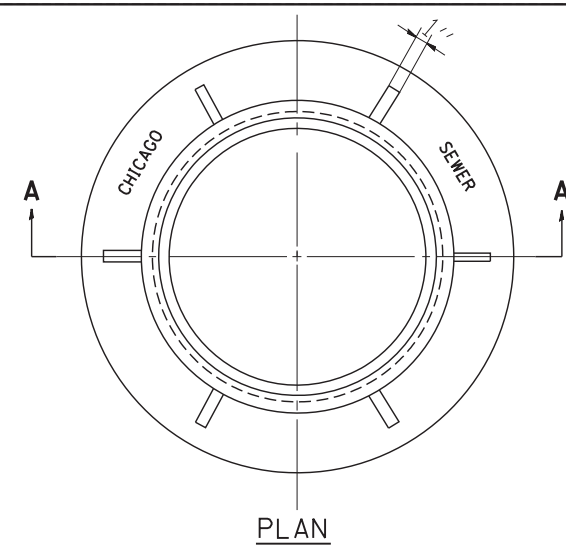
1. CLOSE EXISTING VALVE.
2. REMOVE EXISTING HYDRANT.
3. INSTALL HYDRANT EXTENSION AND NEW VALVE.
4. RELOCATE EXISTING HYDRANT.
5. OPEN EXISTING VALVE, REMOVE BOX.
6. BACKFILL.
7. FLUSH AND TEST FOR CHLORIDE RESIDUAL AND PROVIDE TEST.

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

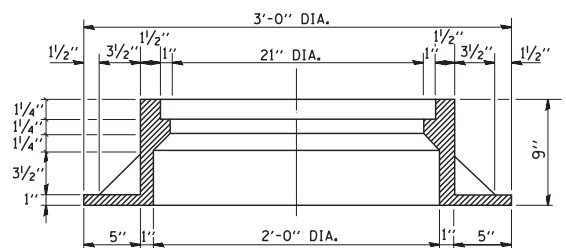
FIRE HYDRANT TO BE MOVED

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

FILE NAME = W:\diststd\22x34\bd36.dgn	USER NAME = gajlonobt	DESIGNED -	REVISED - R. SHAH 09-09-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FIRE HYDRANT TO BE MOVED			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.0000' / IN.	DRAWN -	REVISED - R. SHAH 10-25-94								404	344
PLOT DATE = 1/4/2008	CHECKED -	REVISED -	REVISED -	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	BD-36		CONTRACT NO.		
	DATE -	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT								



PLAN

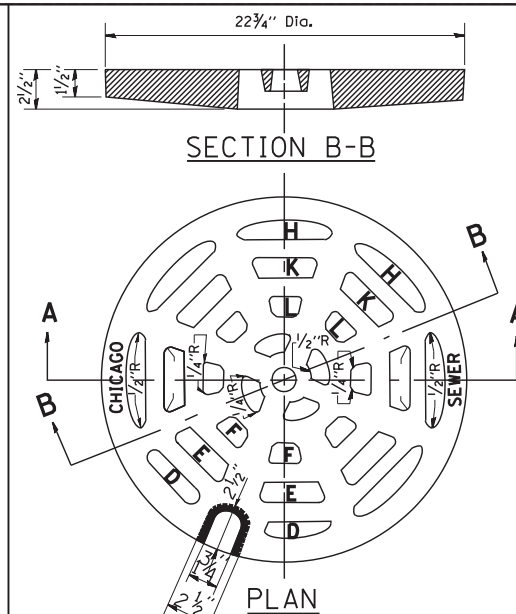


SECTION A-A

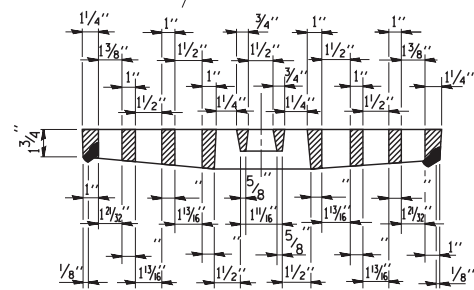
NOTE: METAL PLATES MUST BE FURNISHED FOR PERFORATED LIDS ON MANHOLES

CHICAGO STANDARD MANHOLE FRAME

SCALE: 1/2"=1'-0"
MATERIAL: CAST IRON



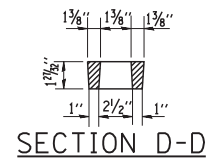
PLAN



SECTION A-A

PERFORATED LID FOR CATCH BASINS & MANHOLES

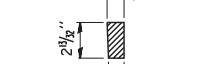
SCALE: 2"=1'-0"
MATERIAL: CAST IRON



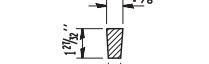
SECTION D-D



SECTION E-E



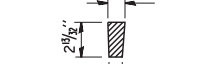
SECTION F-F



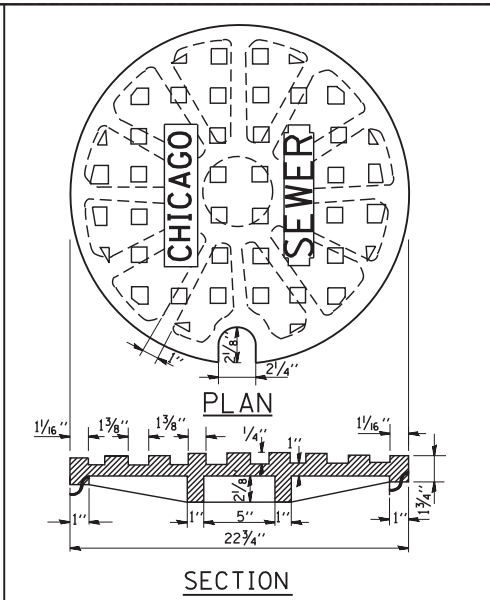
SECTION H-H



SECTION K-K



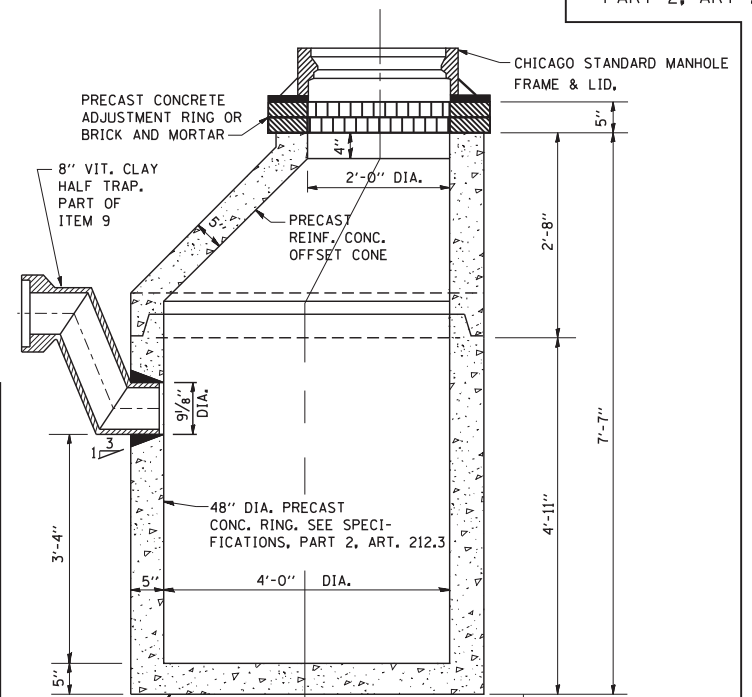
SECTION L-L



SECTION

SOLID LID FOR MANHOLES

SCALE: NONE
MATERIAL: CAST IRON

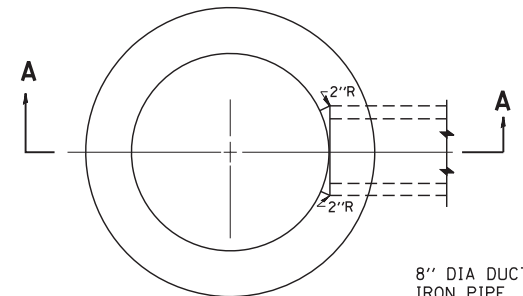


PRECAST

NOTE: 6" MINIMUM GRANULAR EMBEDMENT UNDER ALL CATCH BASINS

STANDARD CATCH BASINS

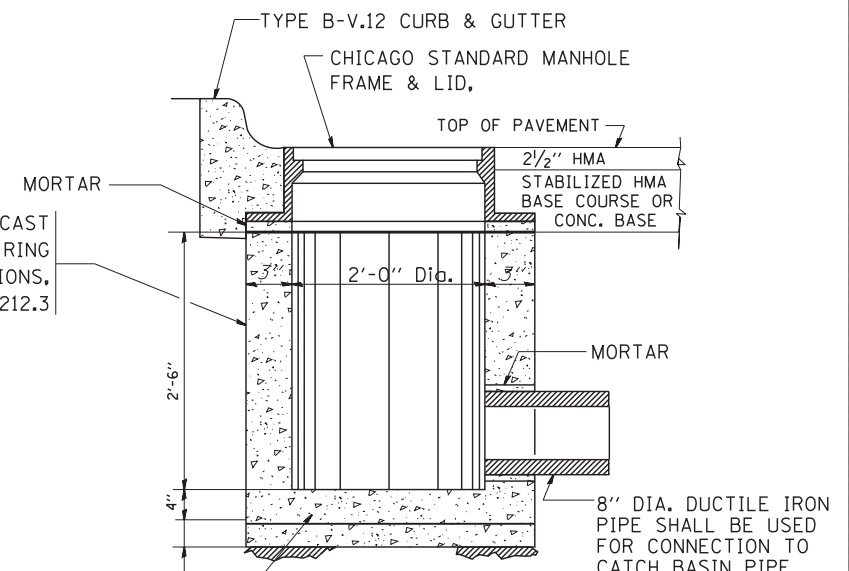
SCALE: 3/4"=1'-0"
ITEM 9



PLAN

(FRAME & LID NOT SHOWN)

8" DIA DUCTILE IRON PIPE, PART OF ITEM 7G



SECTION A-A

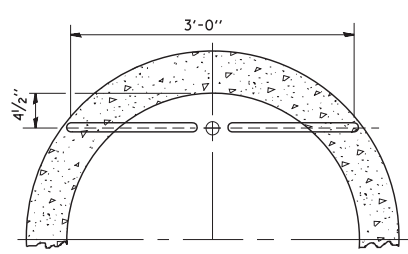
REINF. CONC. BASE CAST AS INTEGRAL PART OF 24" DIA. PRECAST CONC. RING
6" MINIMUM GRANULAR EMBEDMENT UNDER ALL INLETS. FURNISHING AND INSTALLING GRANULAR EMBEDMENT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 12

STANDARD INLETS

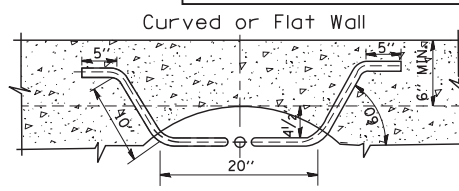
SCALE 1"=1'-0"
ITEM 12

THIS INLET DETAIL IS SOMETIMES REFERRED TO AS "CHICAGO STANDARD INLET, TYPE A"

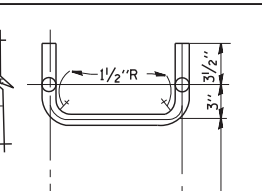
NOTE: INLETS SHALL NOT BE CONSTRUCTED UNLESS IT IS IMPOSSIBLE TO CONSTRUCT A CATCH BASIN. THE CONTRACTOR SHALL HAVE THE DEPARTMENT OF SEWERS APPROVAL BEFORE CONSTRUCTING INLETS.



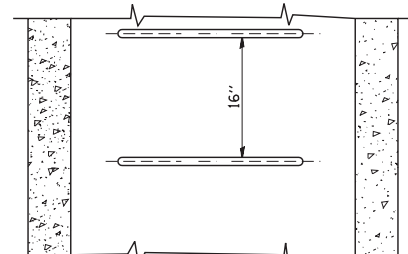
PLAN



PLAN

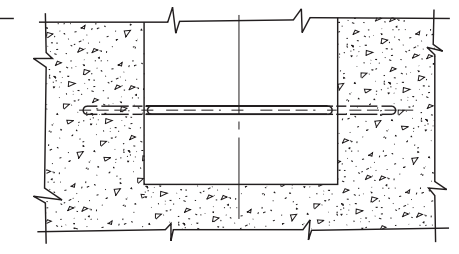


PLAN



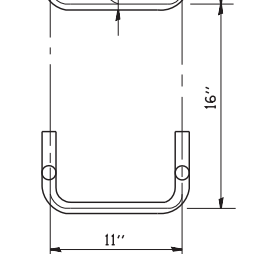
ELEVATION

TYPE X
SCALE: 1"=1'-0"



ELEVATION

TYPE Y
SCALE: 1"=1'-0"



SPACING

HANDHOLD-TYPE Z RUNG
Scale: 1/2"=1'-0"

STANDARD LADDER RUNGS

ALL LADDER RUNGS SHALL BE ALUMINUM OR GALVANIZED WROUGHT IRON AS SPECIFIED IN THE SPECIFICATIONS, PART 2, ARTICLE 214.2. RUNGS SHALL BE 1" DIAMETER OR OF A SHAPE HAVING AN EQUIVALENT CROSS-SECTIONAL AREA.

FILE NAME =	USER NAME = geglionobt
W:\diststd\22x34\bd47.dgn	

DESIGNED - M. GOMEZ	REVISIONS -
DRAWN -	REVISIONS -
CHECKED -	REVISIONS -
DATE - 01-25-01	REVISIONS -

DESIGNED - M. GOMEZ	REVISIONS -
DRAWN -	REVISIONS -
CHECKED -	REVISIONS -
DATE - 01-25-01	REVISIONS -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CITY OF CHICAGO	
CATCH BASIN, INLET AND MANHOLE DETAILS	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
STA.	TO STA.

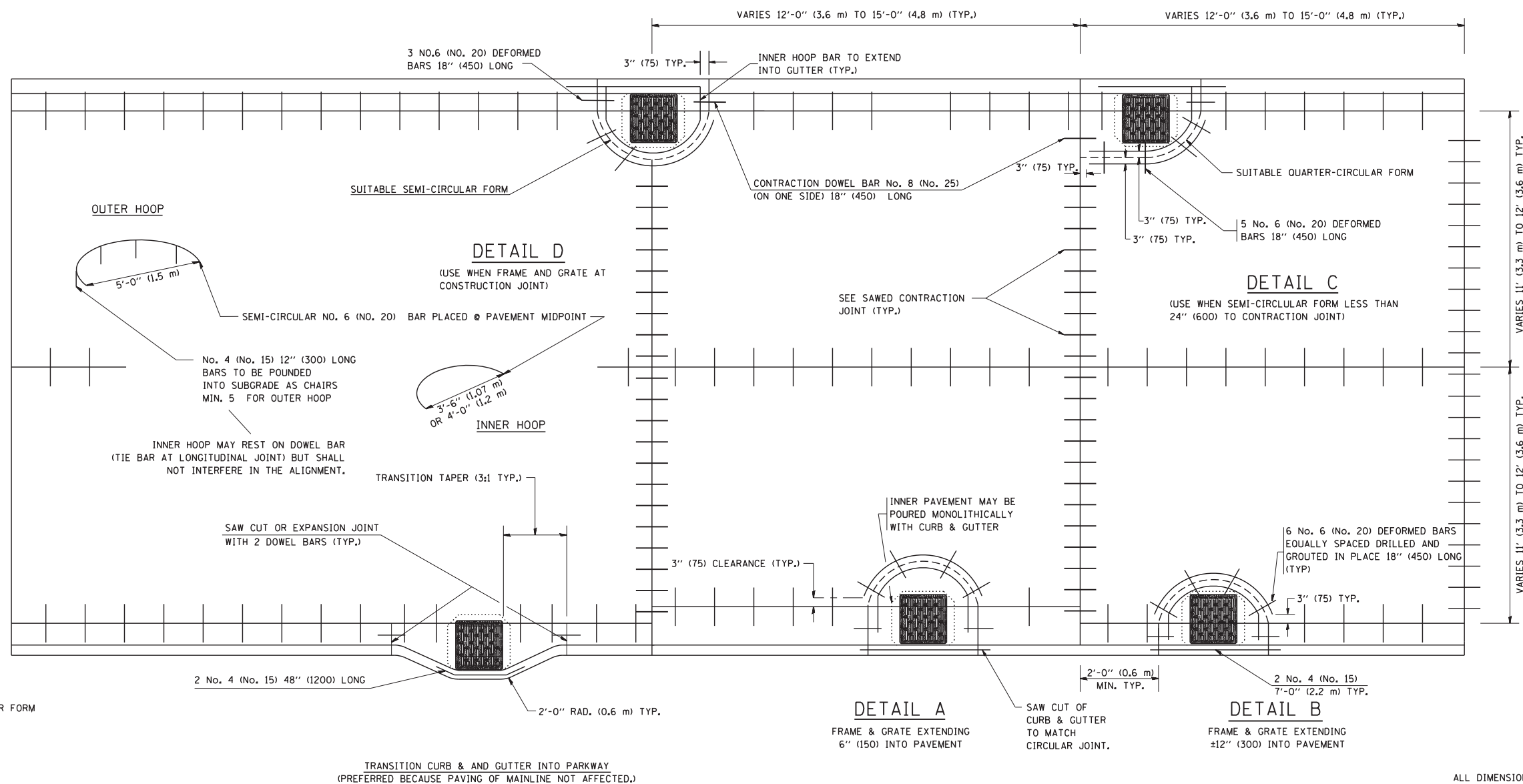
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			404	345
BD600-13 (BD47)		CONTRACT NO.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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)

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

NOTES :

1. THE ROUNDOUT AND ADDED REINFORCEMENT WILL NOT BE PAID SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE PAVEMENT.
2. 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.
3. SEMI-CIRCULAR FORM SHALL BE REMOVED PRIOR TO DRILL AND GROUT OF TIE BARS.
4. ALL REINFORCED BARS SHALL BE EPOXY COATED.
5. 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.
6. 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.
7. HOOP REINFORCEMENT SHALL BE ONE PIECE CONSTRUCTION.
8. CIRCULAR FRAMES AND GRATES MAY BE SUBSTITUTED.
9. CURB DOWELS MUST BE PLACED LEVEL & TRUE TO ALLOW CONTRACTION MOVEMENT.



LEGEND:

- CASTING
- SUITABLE SEMI-CIRCULAR FORM

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED

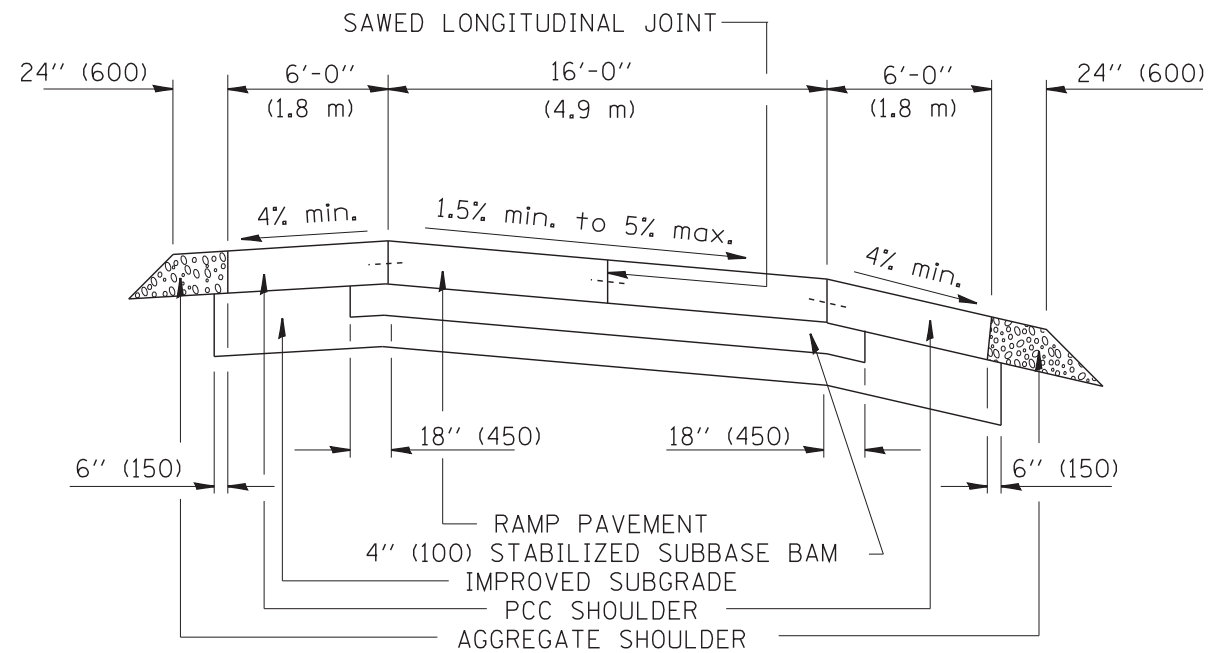
FILE NAME = W:\diststd\22x34\bd48.dgn	USER NAME = gaglionobt	DESIGNED - A. ABBAS	REVISED - T. MATOUSEK 08-28-00
		DRAWN - TOM MATOUSEK	REVISED - T. MATOUSEK 10-02-00
	PLOT SCALE = 50.0000' / IN.	CHECKED - A. ABBAS	REVISED - T. MATOUSEK 04-25-02
	PLOT DATE = 1/4/2008	DATE - 01-04-99	REVISED - P. LAFLEUR 08-27-02

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PCC PAVEMENT ROUNDOUTS AT
CURB AND GUTTER

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

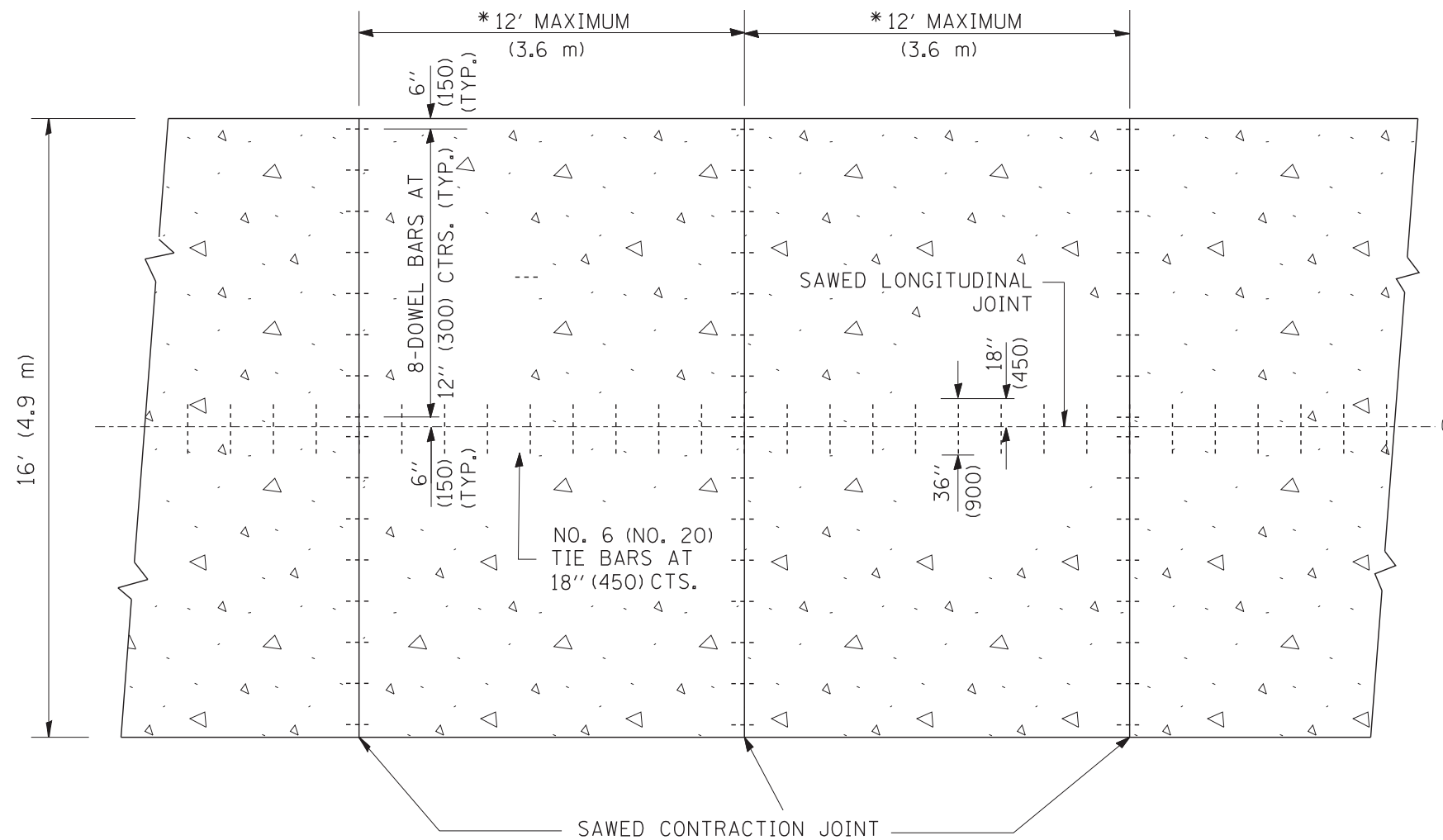
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BD-48		404	346
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO.	



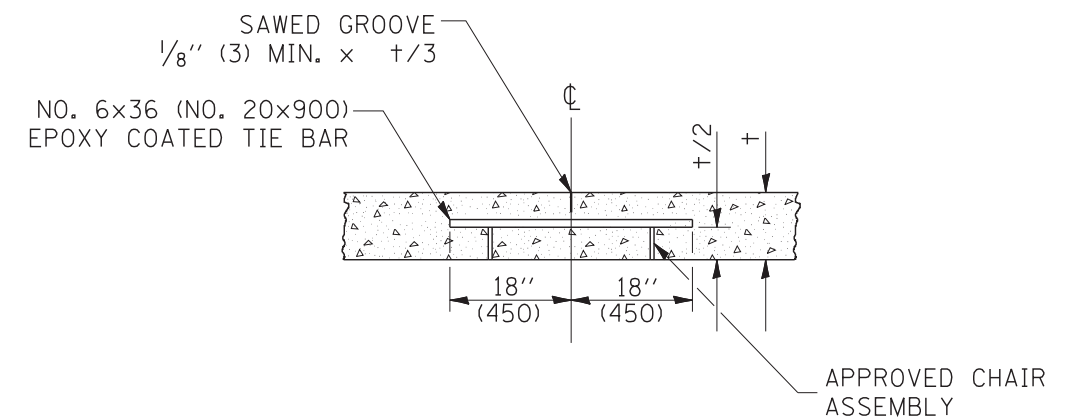
SECTION

NOTES:

1. CENTERLINE JOINT REMAINS IN THE CENTER WHEN RAMP TRANSITIONS TO TWO (2) RAMPS AT 12' (3.6 m).
2. ALL BARS TO BE EPOXY COATED.



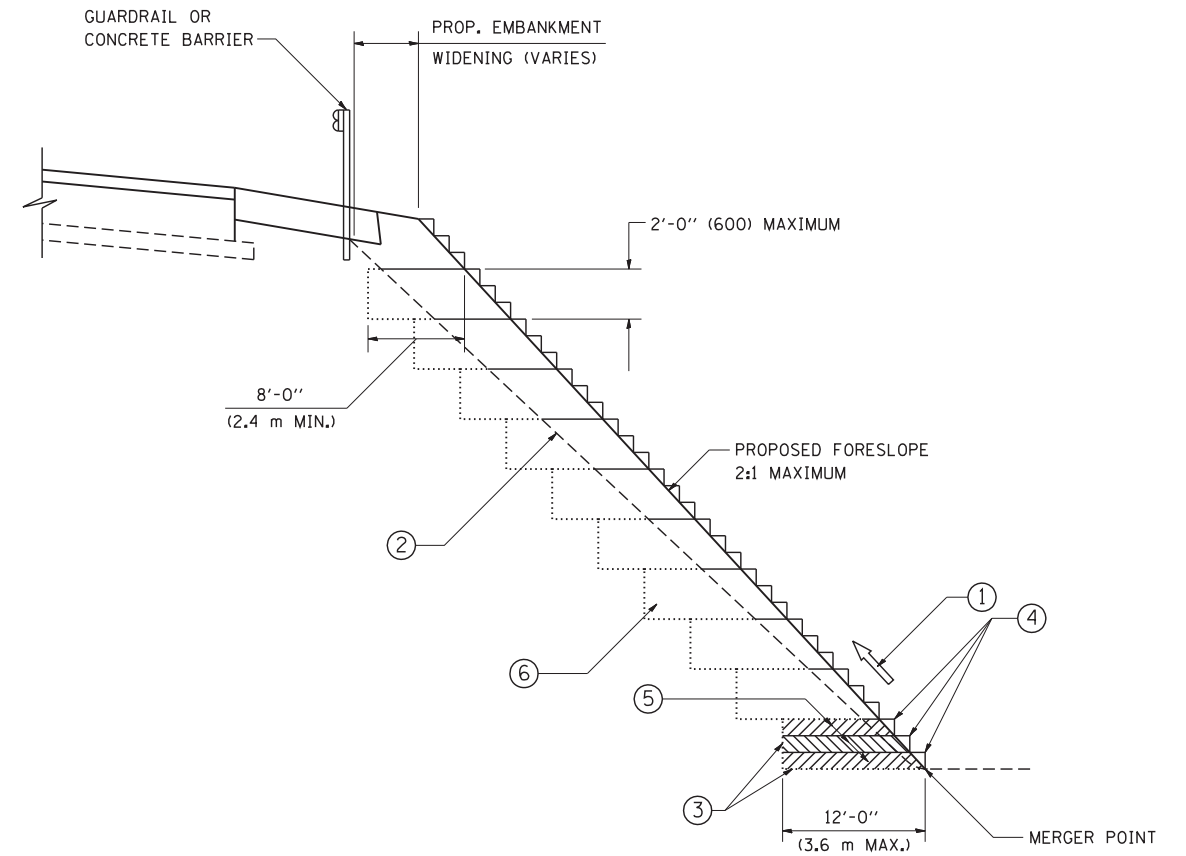
PLAN



SAWED LONGITUDINAL JOINT

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED

FILE NAME = W:\diststd\22x34\bd49.dgn	USER NAME = geglionobt	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAIL FOR CENTERLINE SAW CUT 16' (4.9 m) AND VARIABLE JOINTED PCC PAVEMENT FOR RAMPS		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.0000' / IN.	CHECKED - A. ABBAS	DATE - 10-18-02				REVISED -	REVISED -	REVISED -	REVISED -	BD49
PLOT DATE = 1/4/2008					SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		



TYPICAL BENCHING DETAIL
FOR EMBANKMENT

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.
- ⑥ 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.
- ⑦ SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

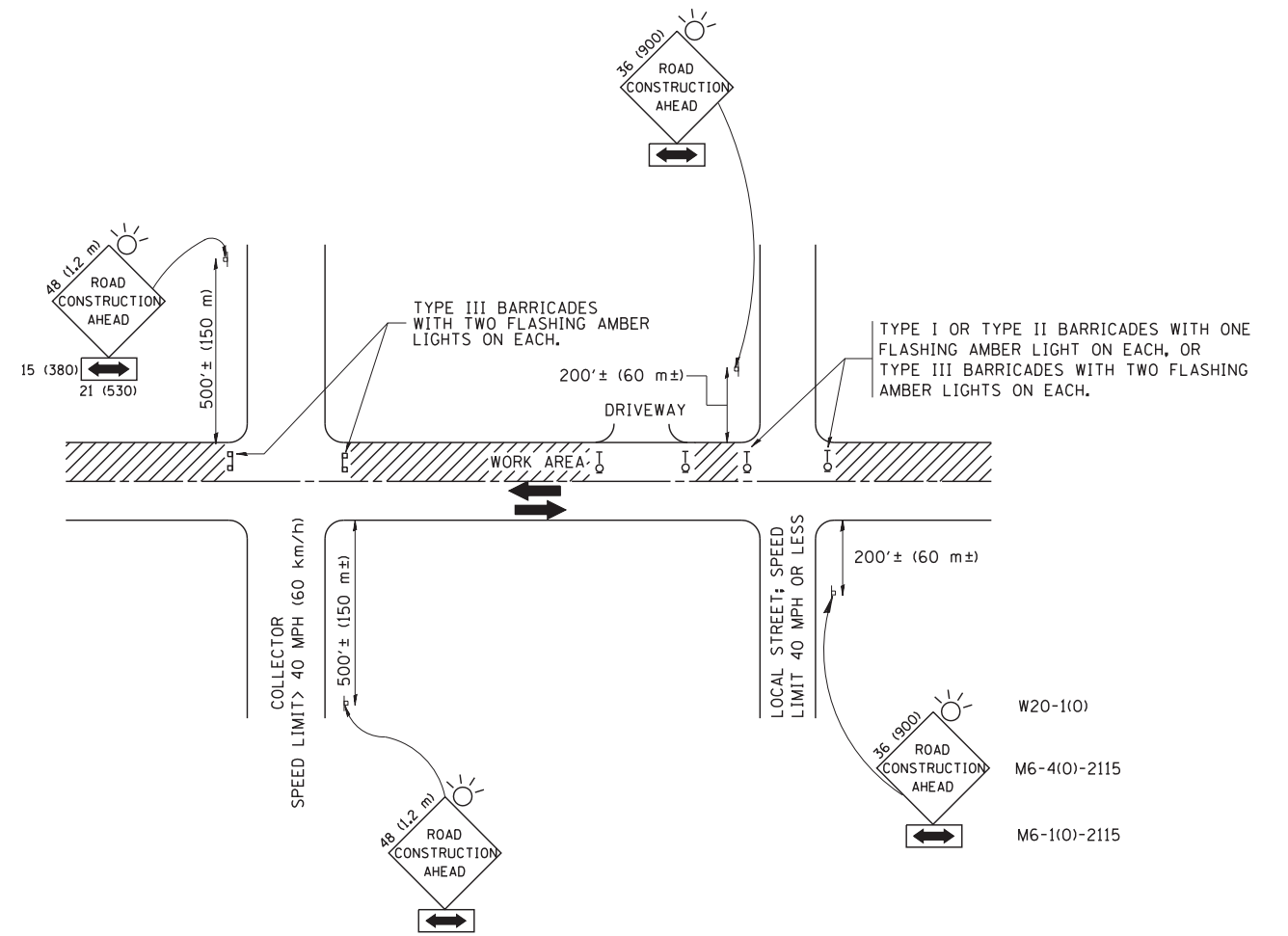
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\bd51.dgn	USER NAME = gegl1onobt	DESIGNED -	REVISED -
		DRAWN - CADD	REVISED -
		CHECKED - S.E.B.	REVISED -
		DATE - 06-16-04	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BENCHING DETAIL			
FOR EMBANKMENT WIDENING			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			404	348
BD-51		CONTRACT NO.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.

b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.

2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.

b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.

3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

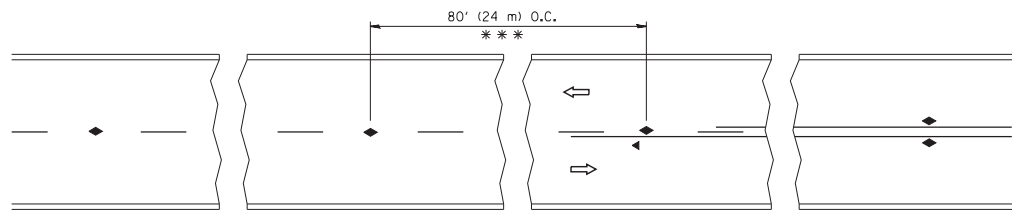
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		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACH 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

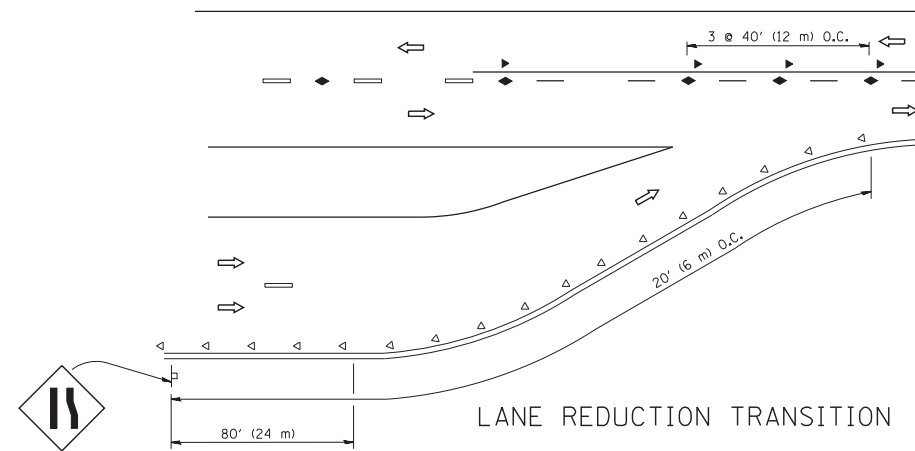
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			404	349
TC-10			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

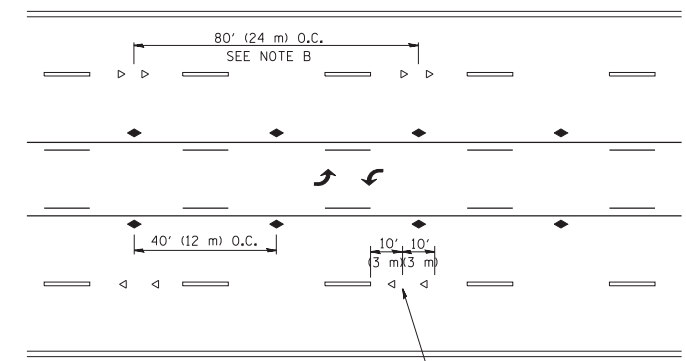


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

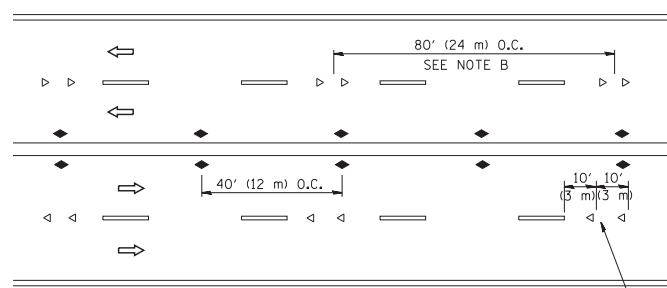
TWO-LANE/TWO-WAY



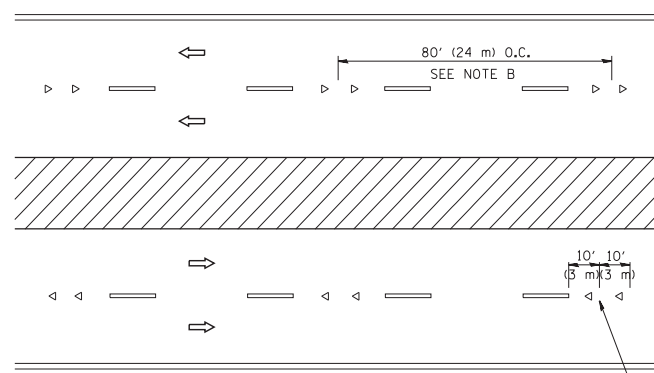
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

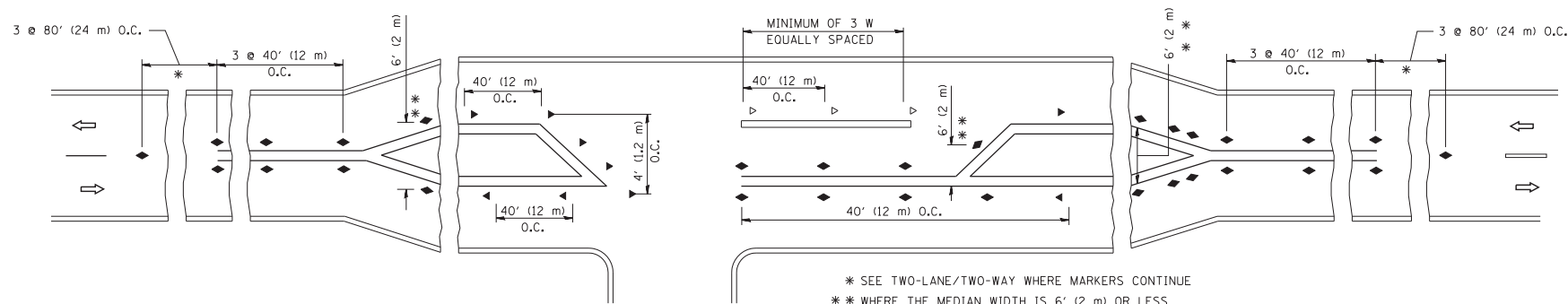
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

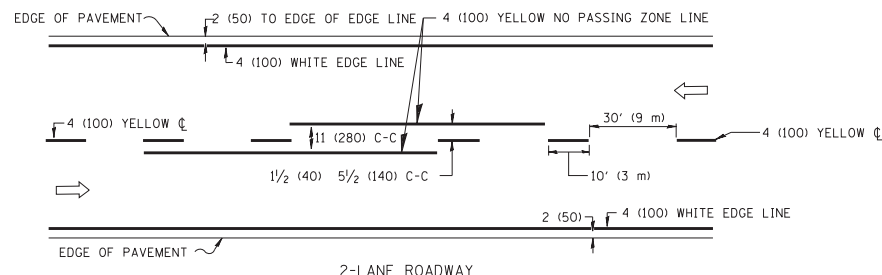
All dimensions are in inches (millimeters) unless otherwise shown.

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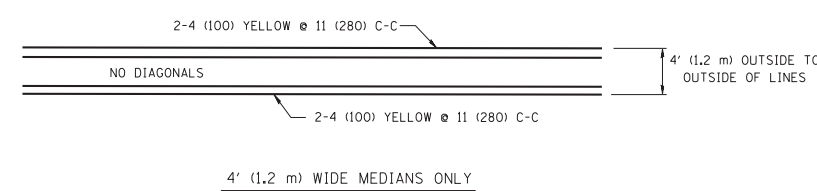
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS			
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			
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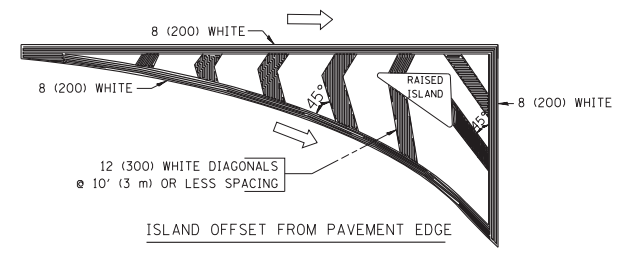
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TC-11			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



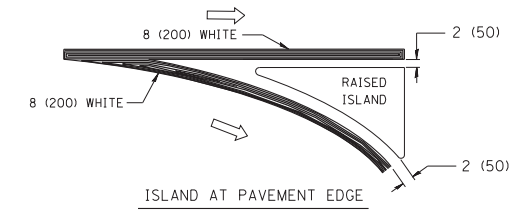
2-LANE ROADWAY



4' (1.2 m) WIDE MEDIANS ONLY

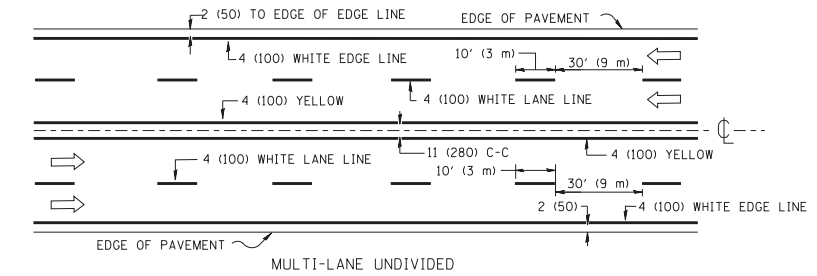


ISLAND OFFSET FROM PAVEMENT EDGE

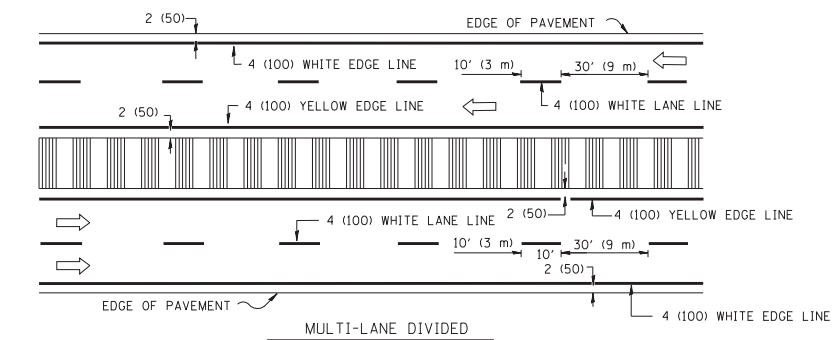


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING



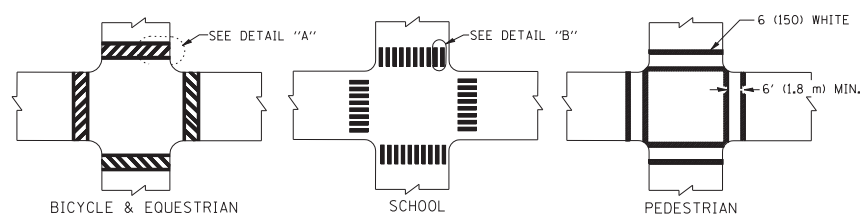
MULTI-LANE UNDIVIDED



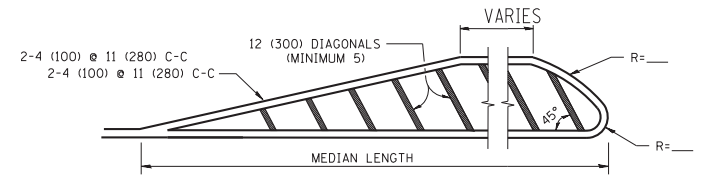
MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING



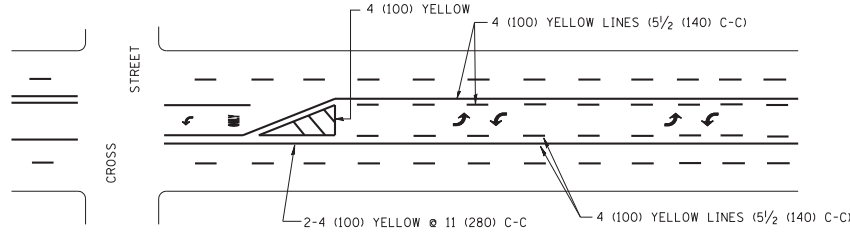
TYPICAL CROSSWALK MARKING



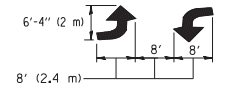
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

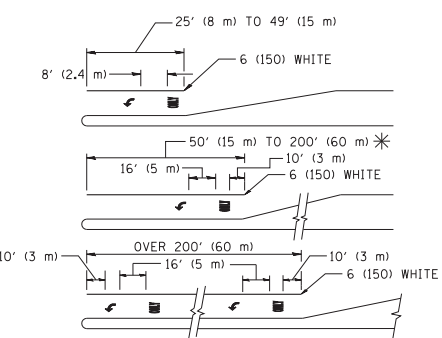


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

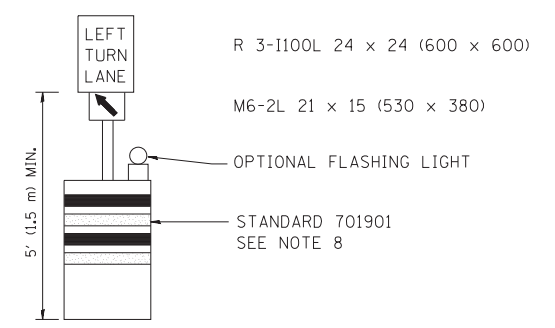
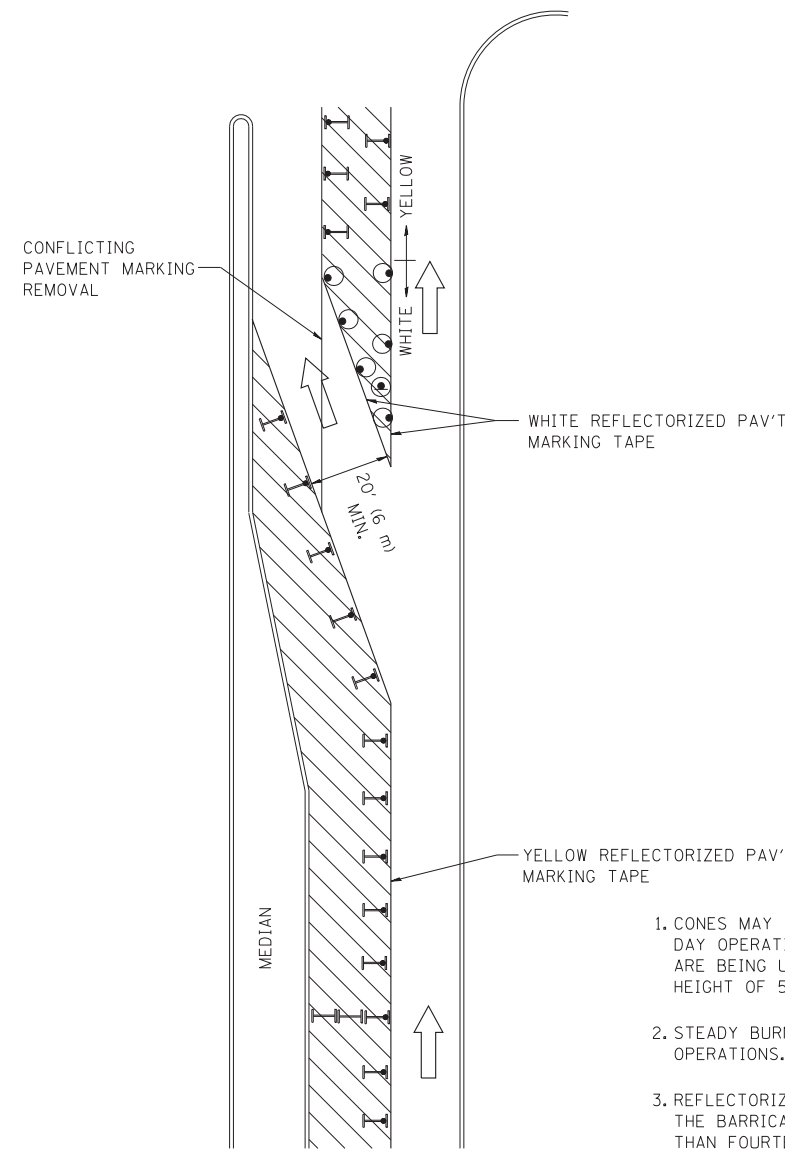
TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION	4 (100)	SOLID	YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES: FOR BOTH DIRECTIONS	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45°	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" 15' (4.5 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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









GENERAL NOTES

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM OPER 725 IS REQUIRED.
8. IF A DRUM OR TYPE II BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 PREQUIREMENTS.
9. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

LEGEND

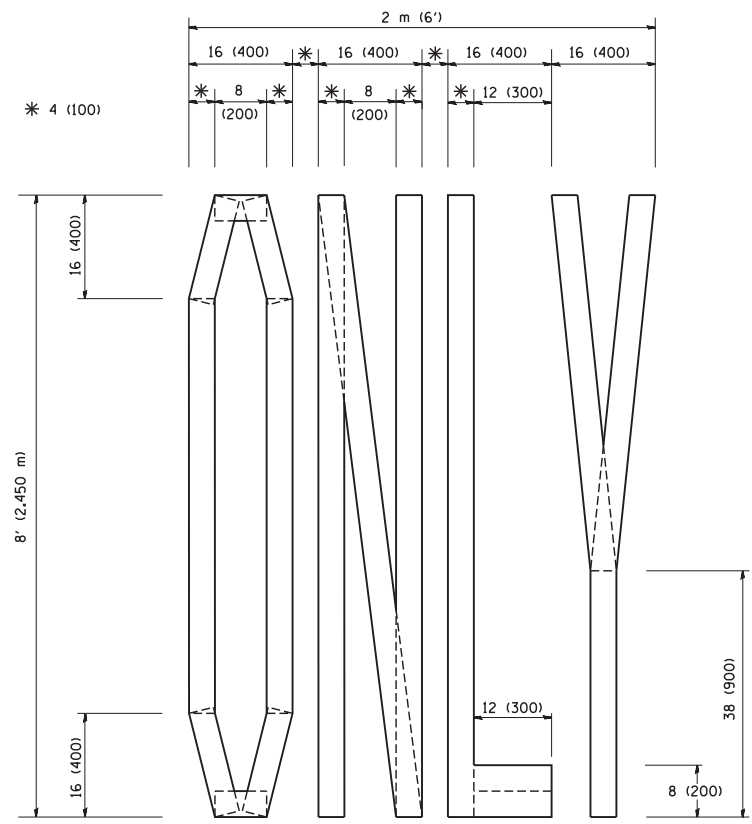
-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

FILE NAME =	USER NAME = drivakosgn	REVISED -T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09
ct:\pw\work\PWIDOT\DRIVAKOSGN\d0108315\14.dgn		REVISED - A. HOUSEH 11-07-95	REVISED -
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		REVISED -T. RAMMACHER 01-06-00	REVISED -

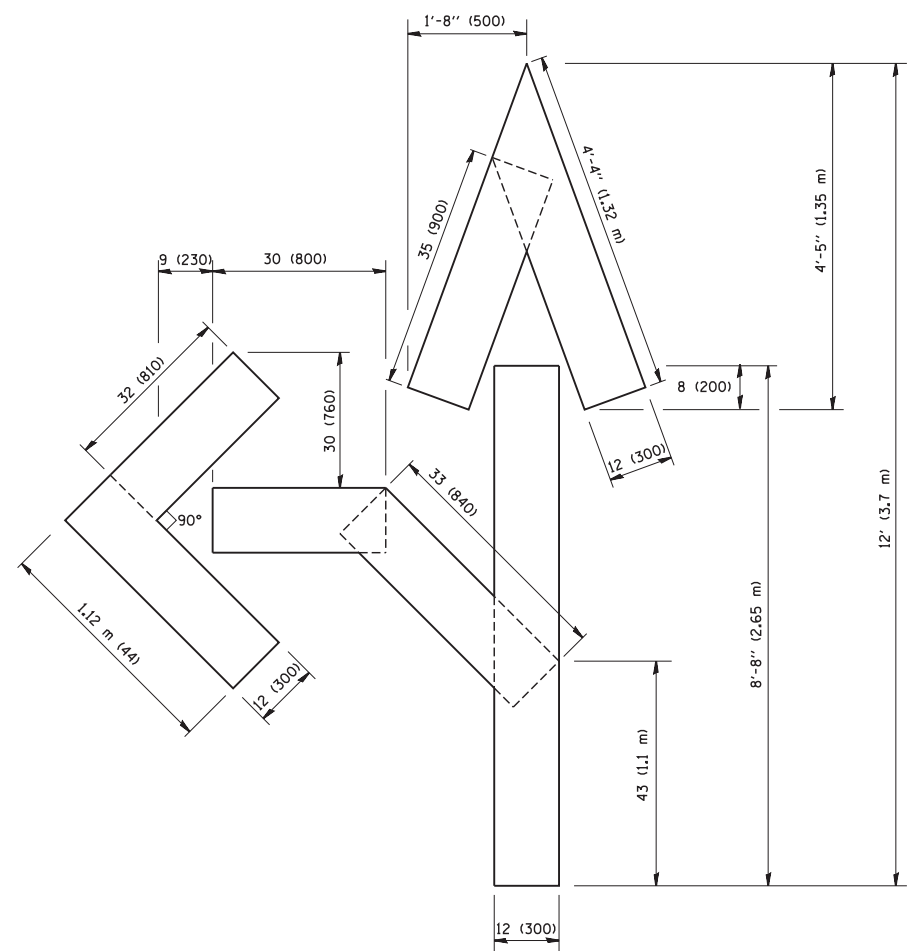
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

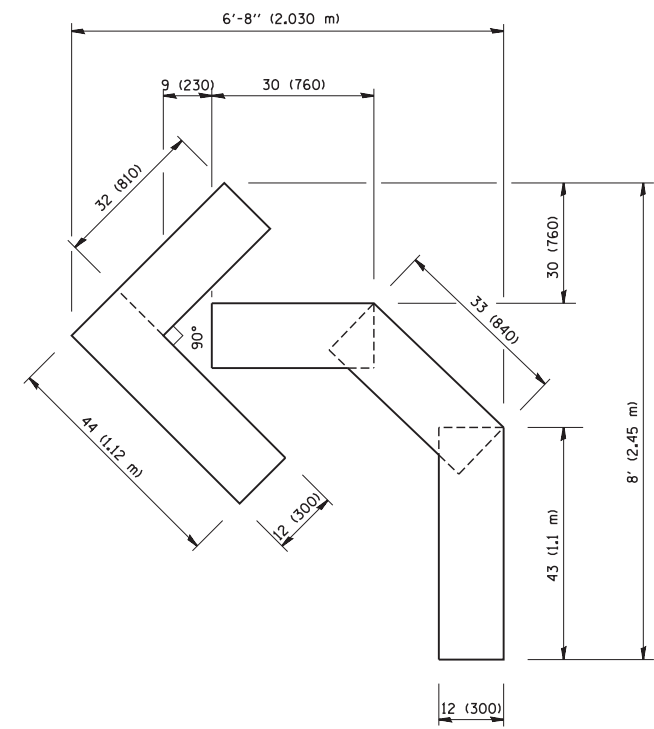
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			404	352
TC-14			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



QUANTITY
 4 (100) LINE = 64.1 ft. (19.7 m)
 21.1 sq. ft. (1.97 sq. m)



QUANTITY
 4 (100) LINE = 82.5 ft. (25.3 m)
 27.5 sq. ft. (2.53 sq. m)



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.39 sq. m)

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

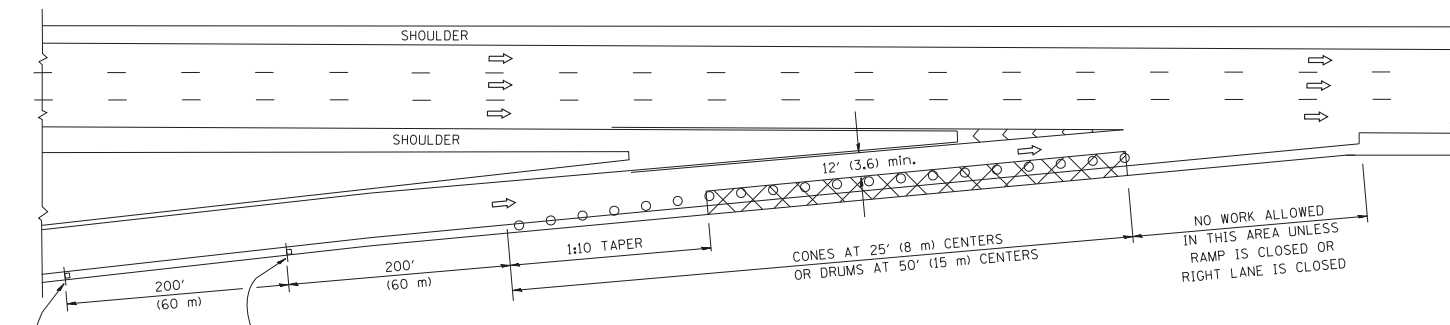
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	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

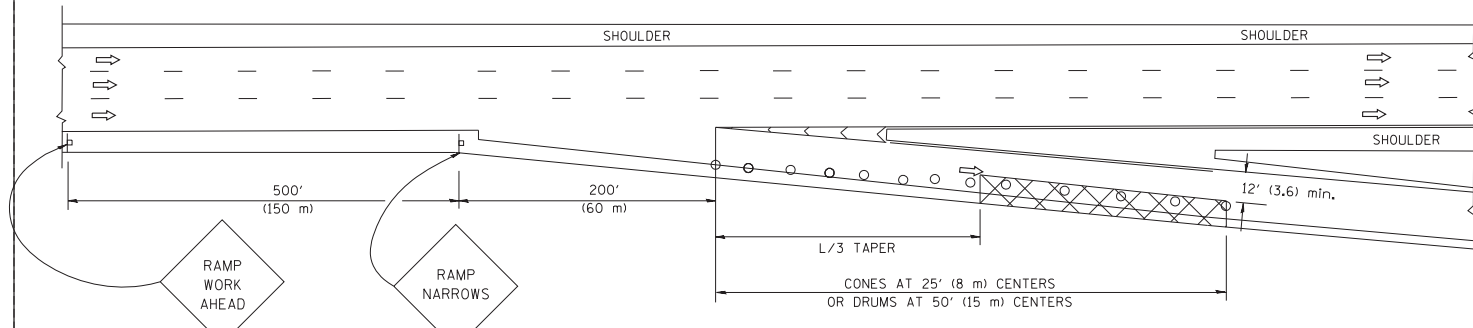
PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING			
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO.	

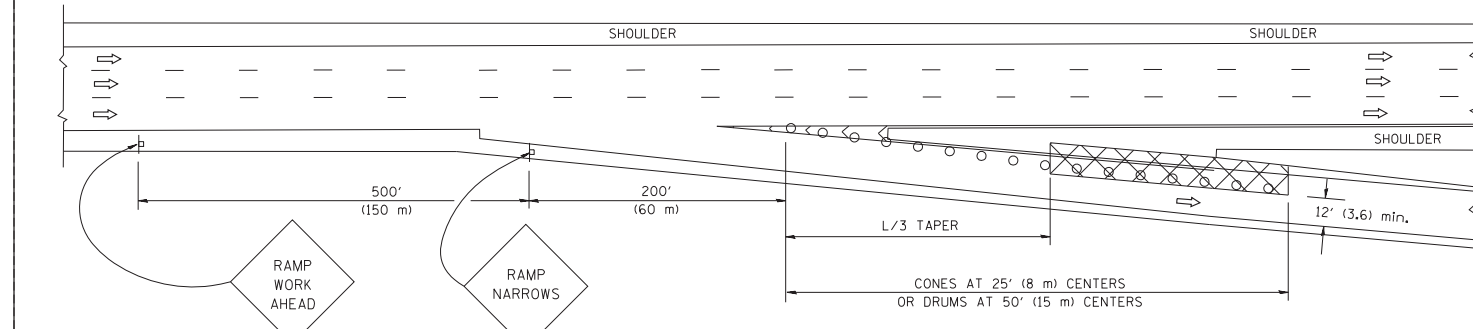
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

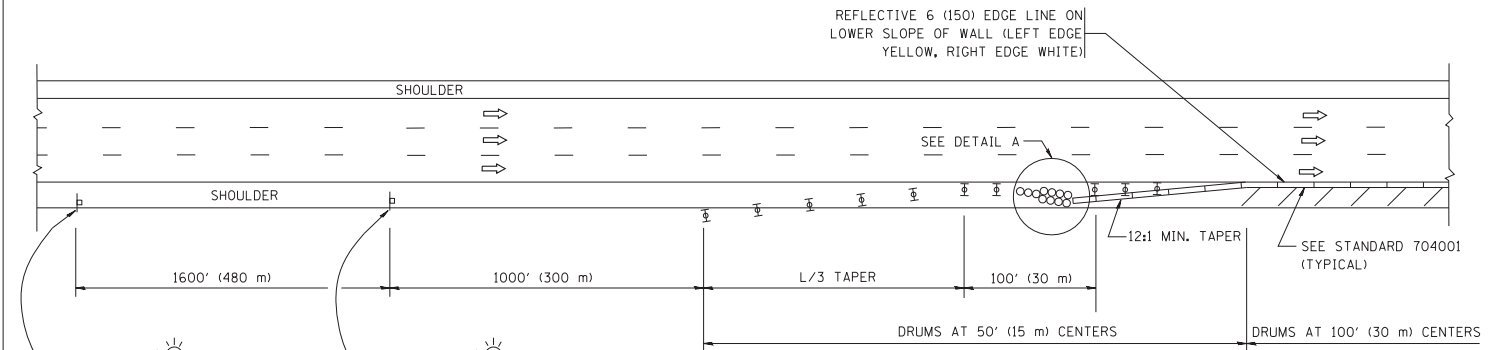
- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

GENERAL NOTES

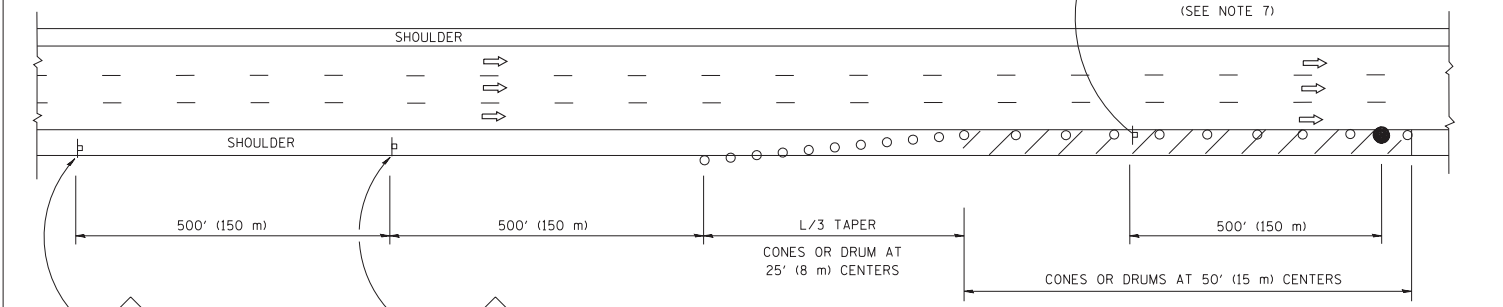
1. THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS
45 mph (80 km/h) OR GREATER:	METRIC ENGLISH L=0.65(W)(S) L=(W)(S)
W = WIDTH OF OFFSET IN FEET (METERS) S = NORMAL POSTED SPEED MPH (KM/H)	
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

SHOULDER CLOSURE DETAILS

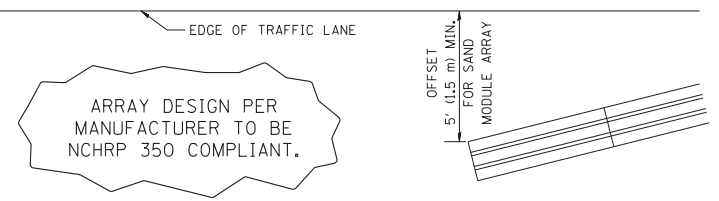


PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:
1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.



DETAIL "A"
IMPACT ATTENUATOR, TEMPORARY
(SEE NOTE 5)

5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
 - a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
 - b. THE WORK AVTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.

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

FILE NAME = W:\diststd\22x34\17.dgn	USER NAME = leuss	DESIGNED -	REVISED - 04-03
		DRAWN - D.W.S.	REVISED - J.A.F. 12-06
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - S.P.B. 01-07
	PLOT DATE = 1/26/2010	DATE - 11-96	REVISED - S.P.B. 12-09

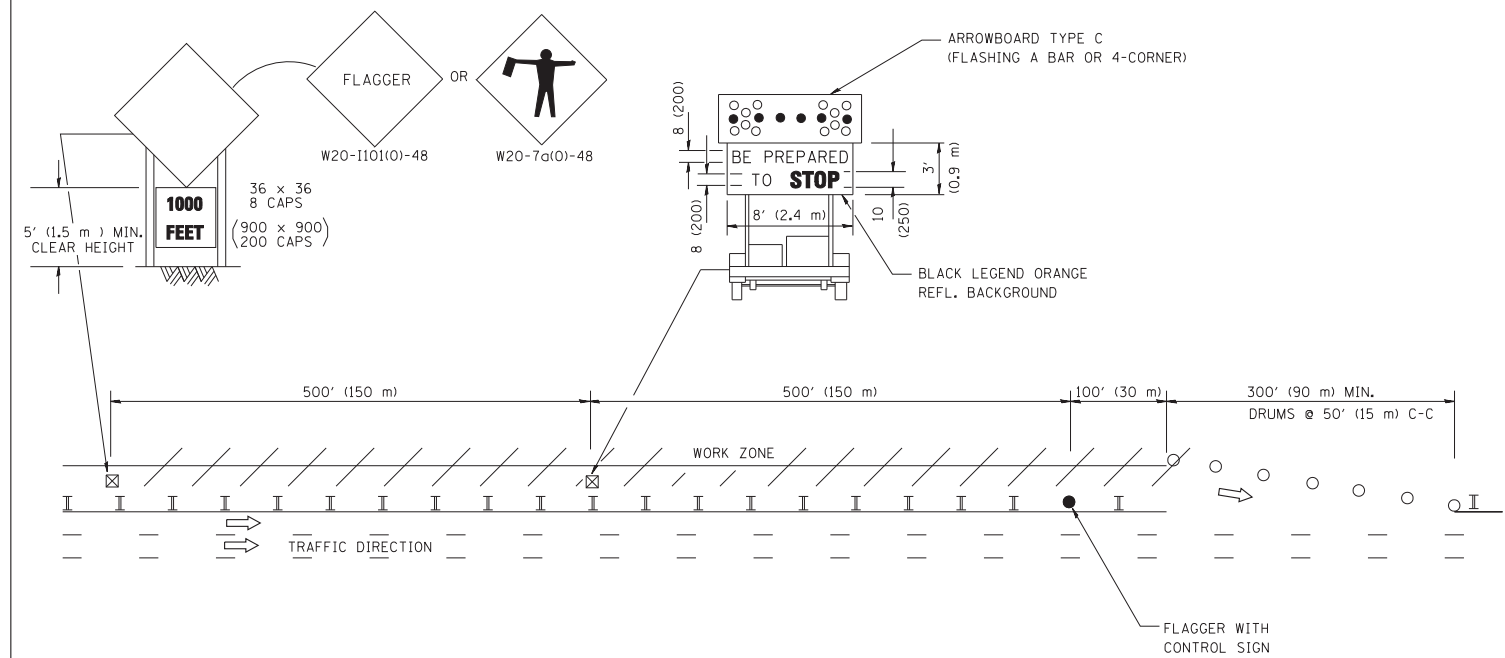
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

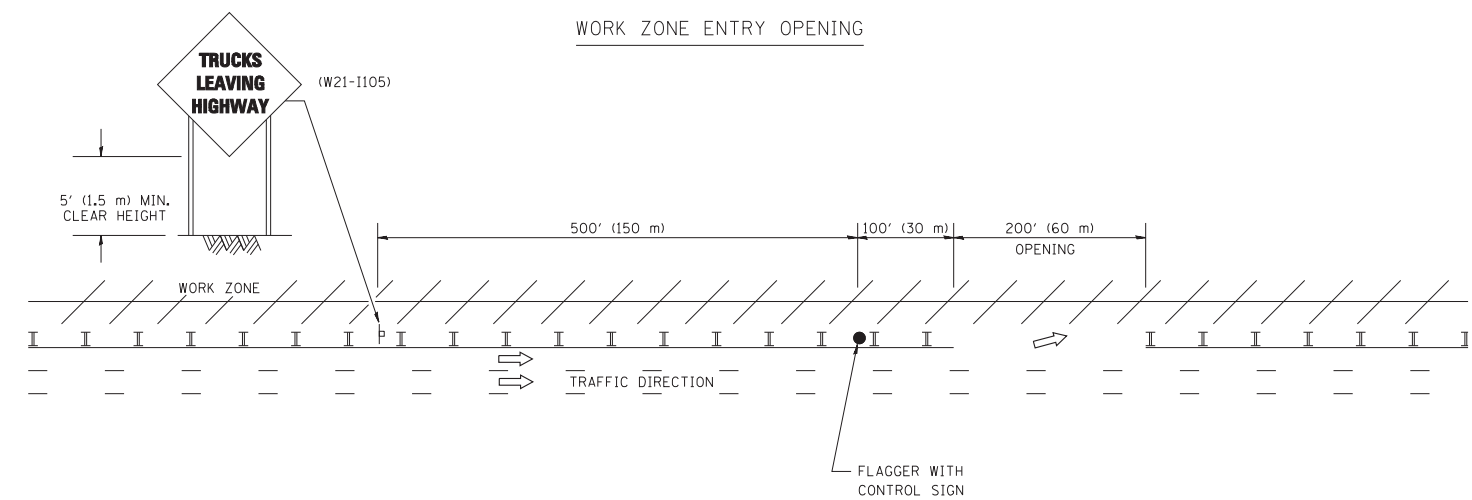
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TC-17		404	354
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO.	

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. THE ARROWBOARD, THE FLAGGER AHEAD SIGN AND THE TRUCKS LEAVING HIGHWAY SIGN SHALL BE REMOVED OR TURNED AWAY FROM TRAFFIC AND THE EXIT AND ENTRY OPENINGS SHALL BE CLOSED WHEN THE FLAGGING OPERATION CEASES. NON OPERATING EQUIPMENT SHALL COMPLY WITH ARTICLE 701.11
2. WORK ZONE EXIT OPENINGS SHOULD BE A MINIMUM OF ONE HALF MILE APART.
3. EXITING THE WORK ZONE AT ANY PLACE OTHER THAN AT A WORK ZONE EXIT OPENING WILL BE PROHIBITED.
4. ALL VEHICLES SHALL ENTER THE WORK ZONE AT ENTRY OPENINGS, USING THEIR TURN SIGNALS TO WARN MOTORISTS

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

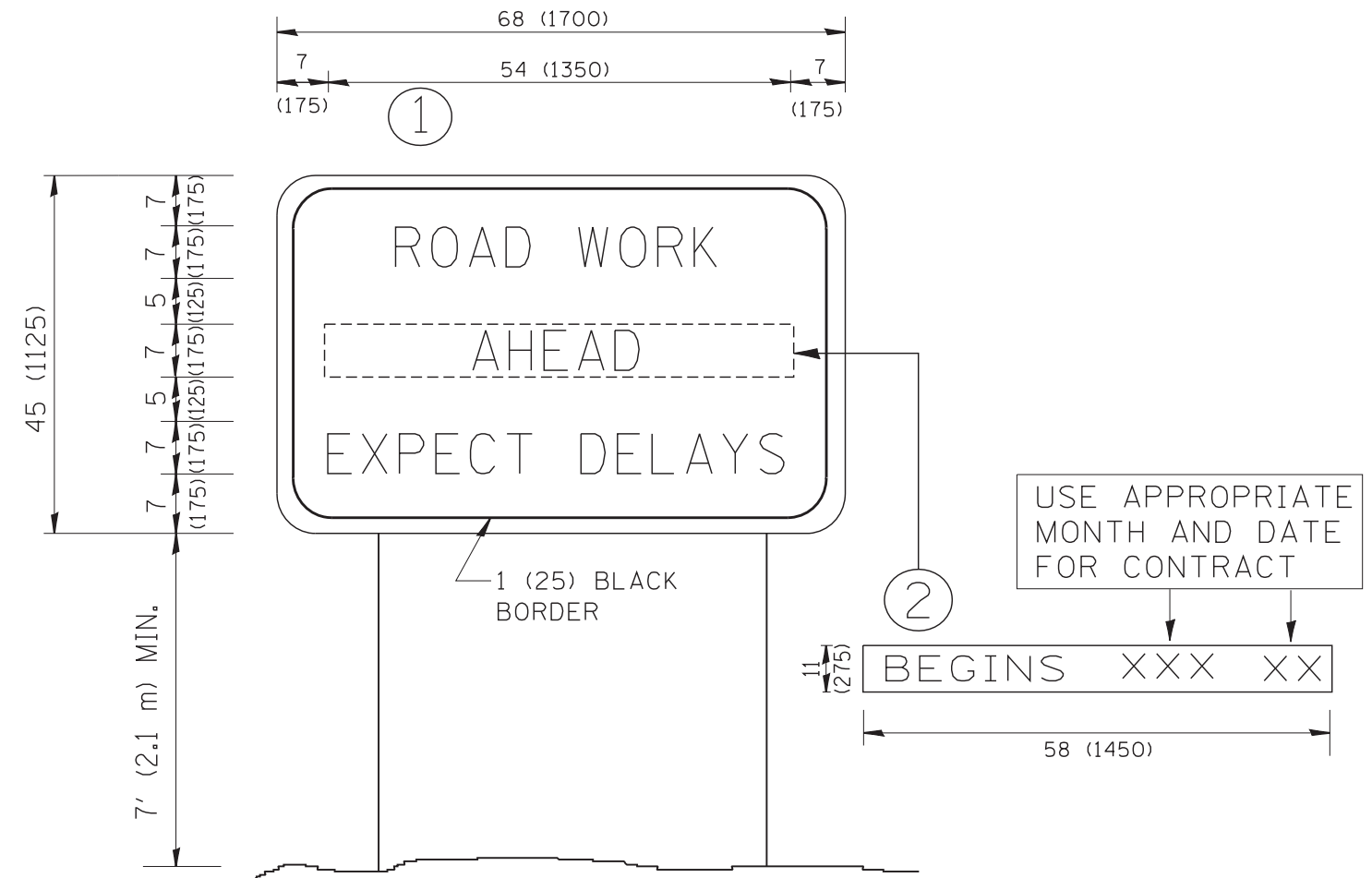
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	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - S.P.B. 01-07
	PLOT DATE = 1/26/2010	DATE -	REVISED - S.P.B. 12-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING FOR FLAGGING OPERATIONS
AT WORK ZONE OPENINGS

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TC-18		404	355
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO.	



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

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		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			404	356
TC-22		CONTRACT NO.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

NOT TO SCALE

6" (150 mm) X 6" (150 mm) X 16' (5.0 m)
WOOD POST

FLEXIBLE METAL CONDUIT
IN HOLE DRILLED THROUGH
WOOD POST

1 1/2 IN. (38.0 mm) GS-CONDUIT

FLEXIBLE METAL CONDUIT
IN HOLE DRILLED THROUGH
WOOD POST

2FT. (600 mm) MIN

5"
(130 mm)

1'-1.5"
(343 mm)

4'-6"
(1.4 m)

6'-0"
(1.80 m)

ADJUSTABLE ONE SECTION 8" (203 mm)
BEACON WITH AMBER LENS

6" (150 mm) X 6" (150 mm) X 16' (5.0 m)
WOOD POST

5" (130 mm)

A

SIGN TO BE PLACED BY STATE

A

6'-0"
(1.80 m)

NOTE:

- 1) SIGN WILL BE PLACED ON THE FRONT FACE OF WOOD POST BY STATE. 4'-6" (1.4 m) DIMENSION MUST BE KEPT FREE OF CONDUIT AND CONNECTIONS TO PREVENT INTERFERENCE WITH SIGN PLACEMENT.
- 2) WOOD POST SHALL NOT BE SET IN CONCRETE (REFER TO SPECIAL PROVISIONS).
- 3) A CLEAR LAMP ESPECIALLY DESIGNED FOR TRAFFIC SIGNAL SERVICE SHALL BE RATED AT 67 WATTS, 120 VOLTS.

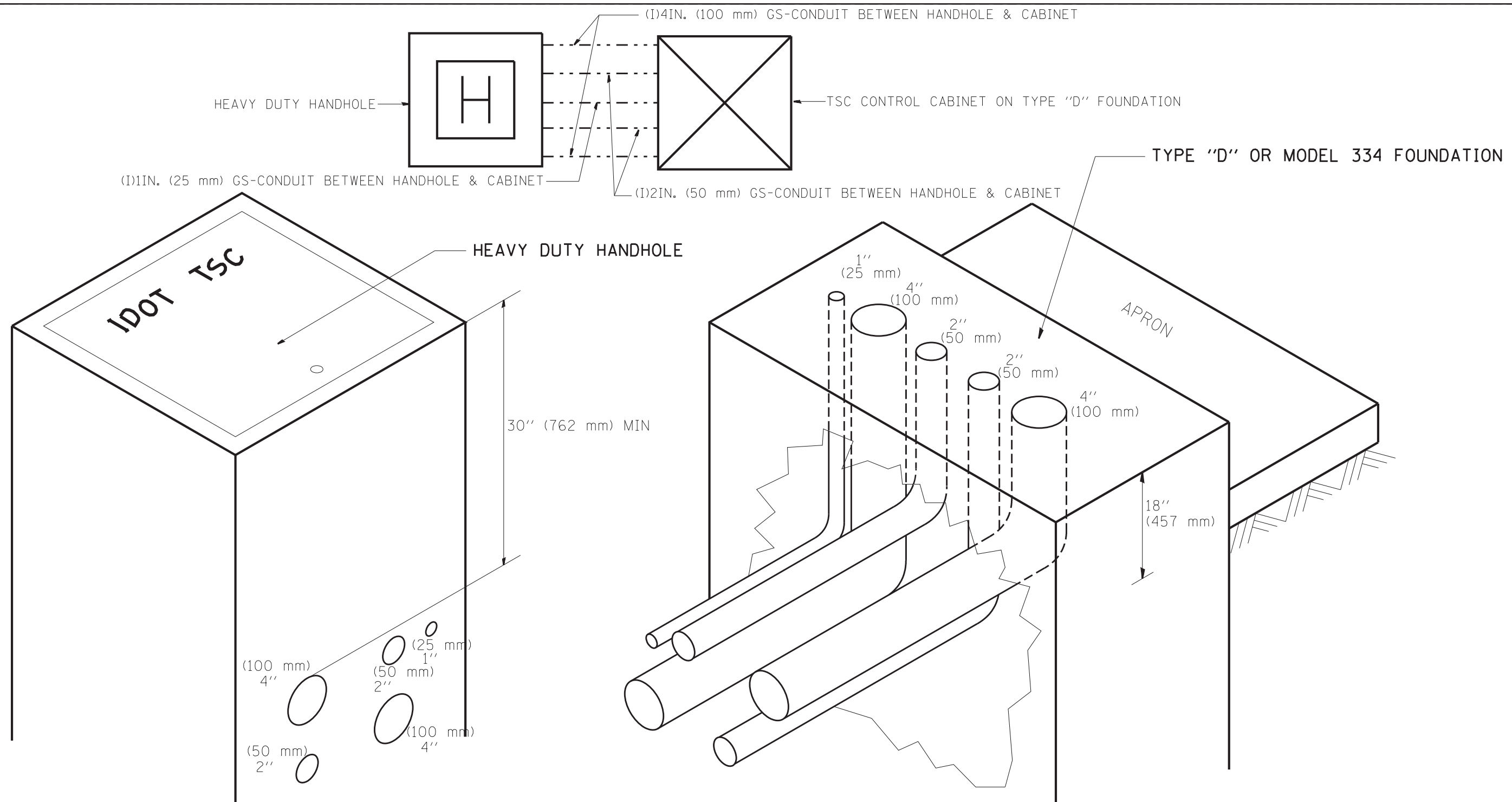
FILE NAME =	USER NAME = mezag	DESIGNED - R.L.	REVISED - 09/96
et:\pw\work\p1dot\mezag\d0287541\TSCTYP.dgn		DRAWN - G.M.	REVISED -
	PLOT SCALE = 100.0000' / 1in.	CHECKED - R.L.	REVISED -
	PLOT DATE = 7/26/2012	DATE - 12/12/94	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

FLASHER DETAIL SHEET

SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			404	358
CONTRACT NO.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

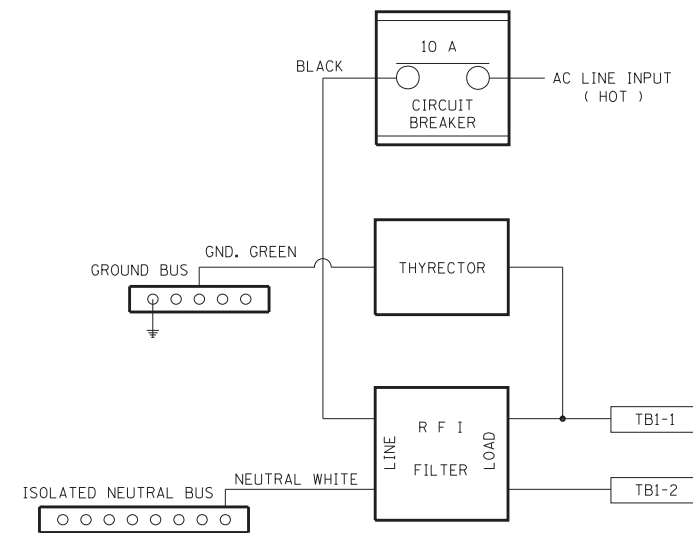
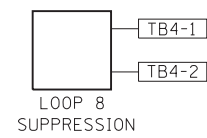
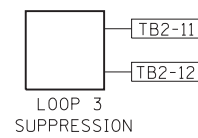
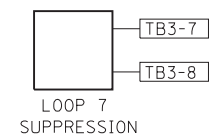
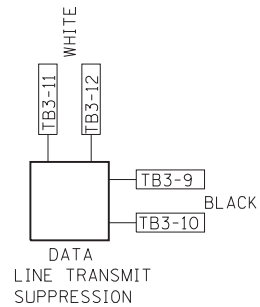
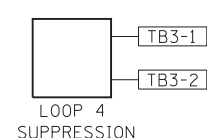
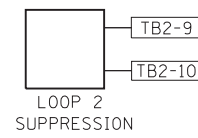
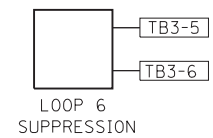
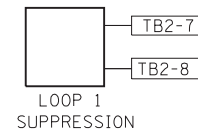
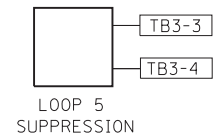
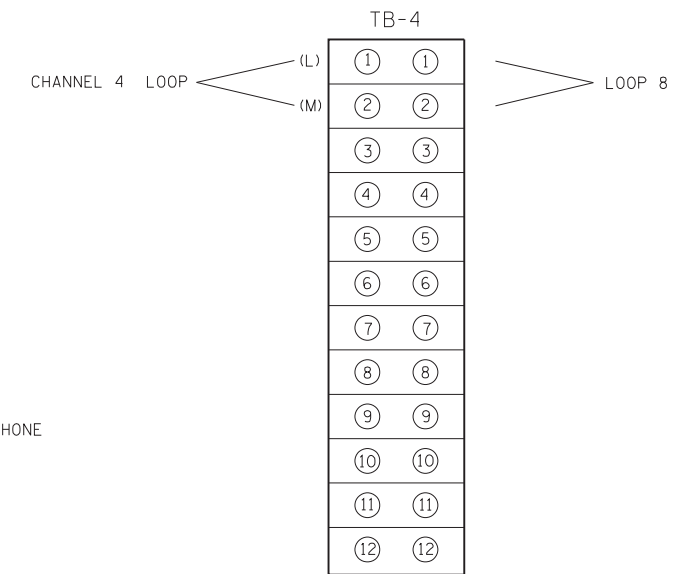
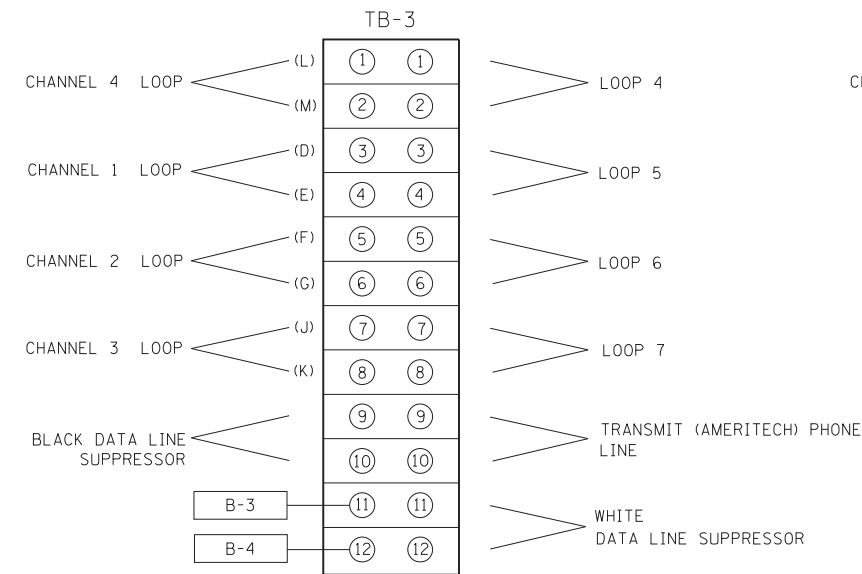
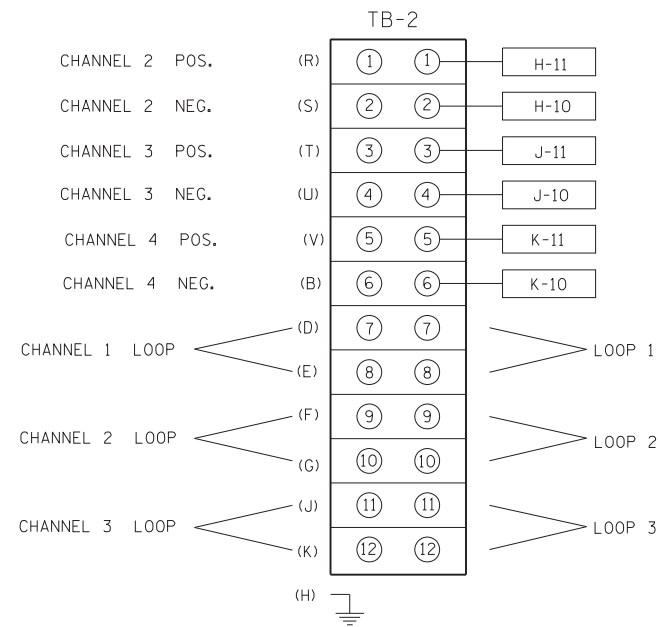
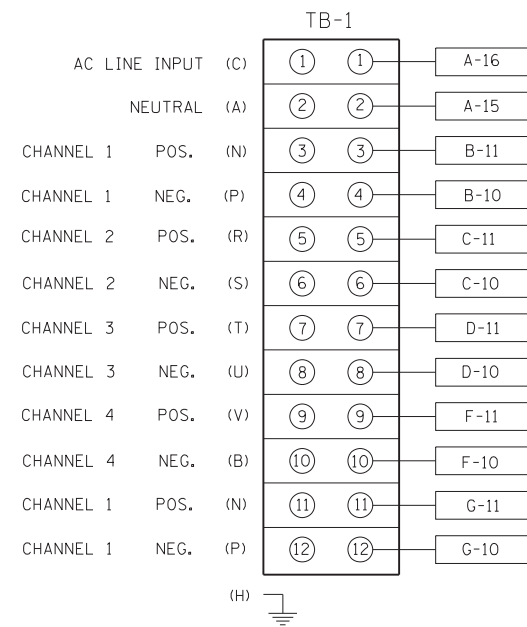
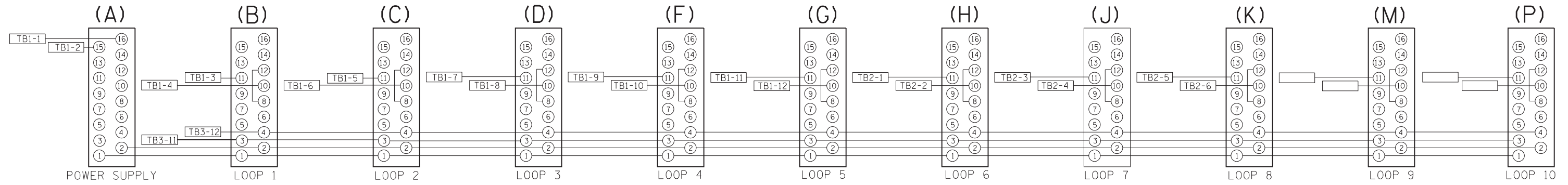


NOTES:

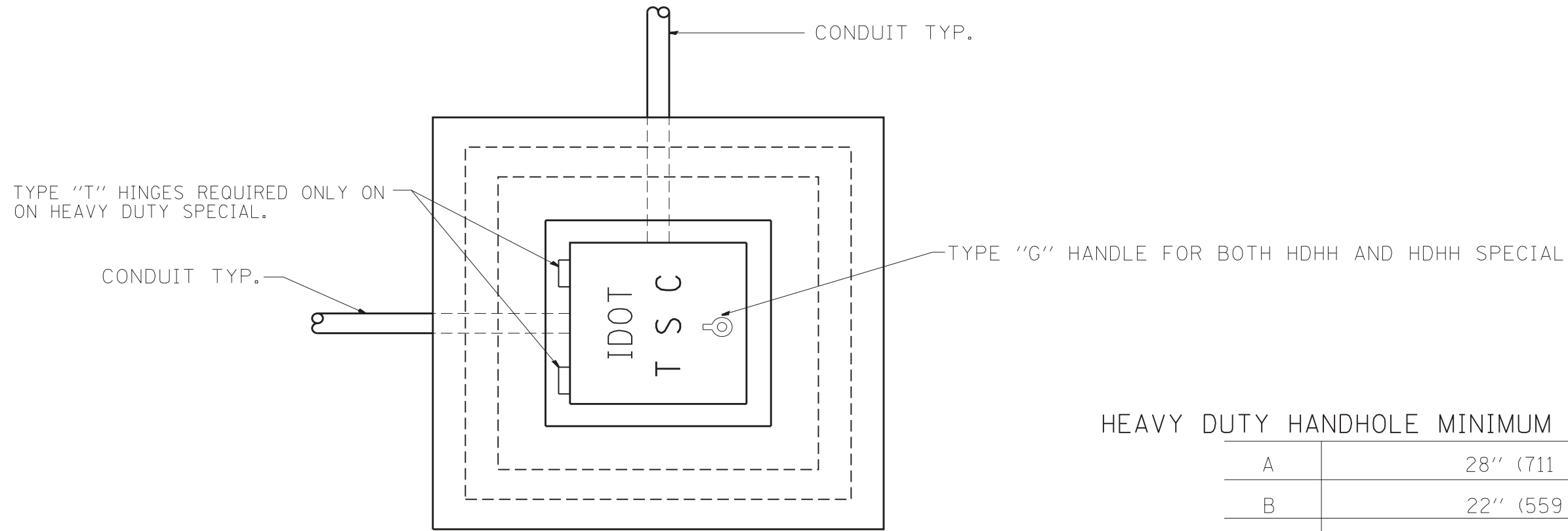
- 1) ALL DUCTS SHALL BE CONED IN HANDHOLES.
- 2) ALL DUCTS SHALL BE GS-CONDUIT & GS 90 DEG. ELBOWS USED WHERE NEEDED.
- 3) ALL DUCTS ENTER HANDHOLE AT MINIMUM DEPTH OF 30 INCH (762 mm)
- 4) ALL HANDHOLE COVERS SHALL READ "IDOT TSC".
- 5) ALL CABINET HANDHOLES SHALL BE HEAVY DUTY.
- 6) DUCTS SHALL BE CENTERED IN CABINET FOUNDATION/HANDHOLE AS SHOWN.
- 7) CONDUITS SHALL BE SPACED 305 mm (1 FOOT) CENTER TO CENTER IN HEAVY DUTY HANDHOLE.
- 8) INSTALL 3/4" X 10' (20 mm X 3 m) COPPER CLAD STEEL GROUND ROD IN HDHH PROVIDED AS CABINET PAD. EXOTHERMIC WELD CONNECTION FROM GROUND ROD TO #6 GROUND WIRE INSULATED (GREEN).
- 9) BOND ALL GSC CONDUITS IN CABINET FOUNDATION.
- 10) INSTALL #6 GROUND WIRE IN 1IN. (25 mm) GSC FROM HANDHOLE TO CABINET.
- 11) TYPE "D" FOUNDATION SHALL BE 18" FROM TOP OF FOUNDATION TO FINISHED GRADE.

FILE NAME =	USER NAME = mezag	DESIGNED - R.L.	REVISED - 09/96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC SYSTEMS CENTER	CABINET - HANDHOLE CONDUIT DETAIL			F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\pidot\mezag\d0287541\TSC.TYP.dgn	DRAWN - G.M.	REVISED - 03/99	SCALE: NONE					SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.
PLOT SCALE = 100.0000' / 1in.	CHECKED - R.L.	REVISED - 04/99	CONTRACT NO.									
PLOT DATE = 7/26/2012	DATE - 06/05/95	REVISED - 07/2010										

BACK VIEW OF TONE RACK



FILE NAME =	USER NAME = mezag	DESIGNED - R.L.	REVISED - 02-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC SYSTEMS CENTER	TYPE 3 CABINET WIRING DIAGRAM			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ca:\pw\work\p\idot\mezag\d0287541\TSCTYP.dgn		DRAWN - G.M.	REVISED - 05-99		SCALE: NONE	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	404	360
		CHECKED - R.L.	REVISED -					CONTRACT NO.					
		DATE - 10-17-95	REVISED -										

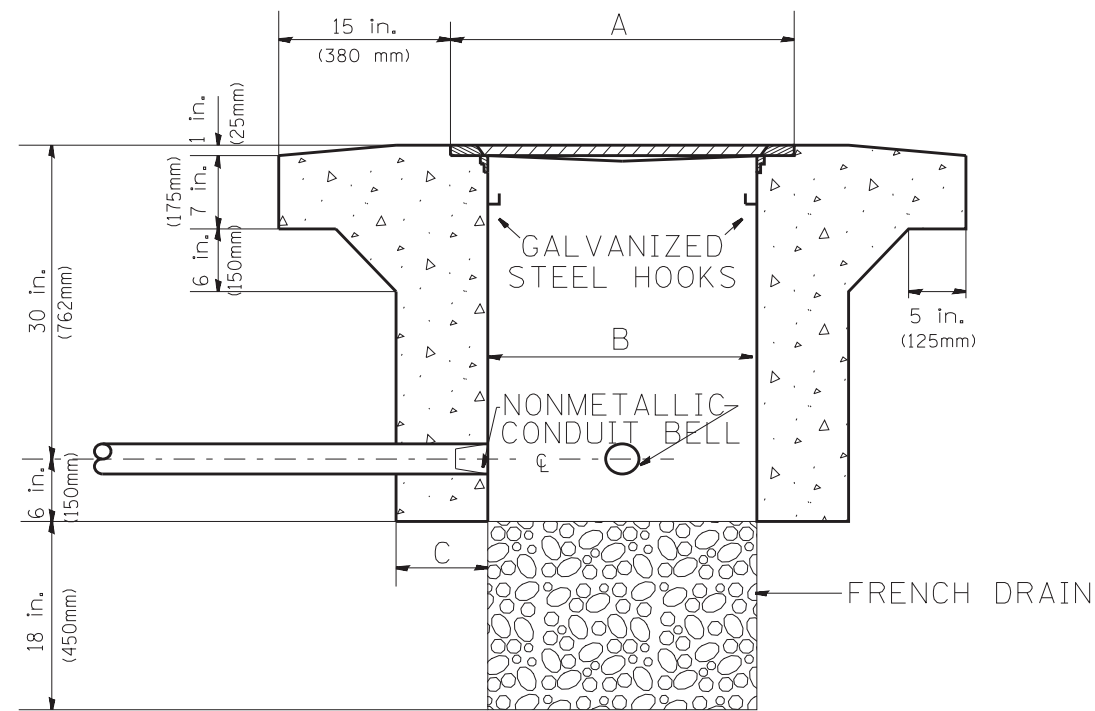


PLAN

HEAVY DUTY HANDHOLE MINIMUM DIMENSIONS (UNHINGED)

A	28" (711 mm)
B	22" (559 mm)
C	8" (200 mm)

(FRAME AND COVER 260 LBS. (118 Kg.) MIN.)



ELEVATION

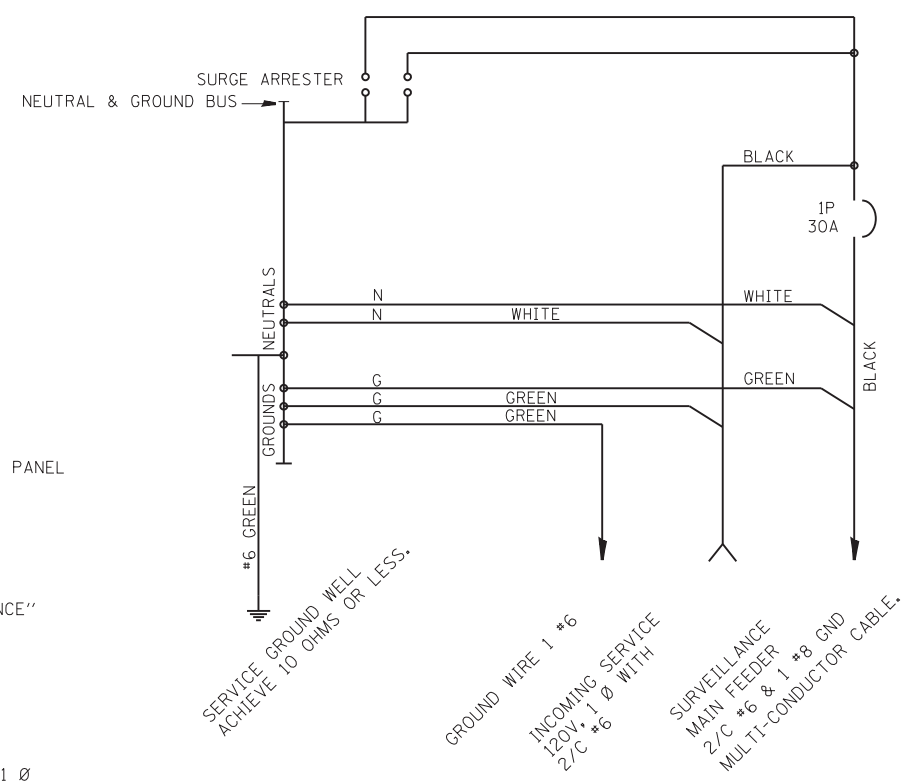
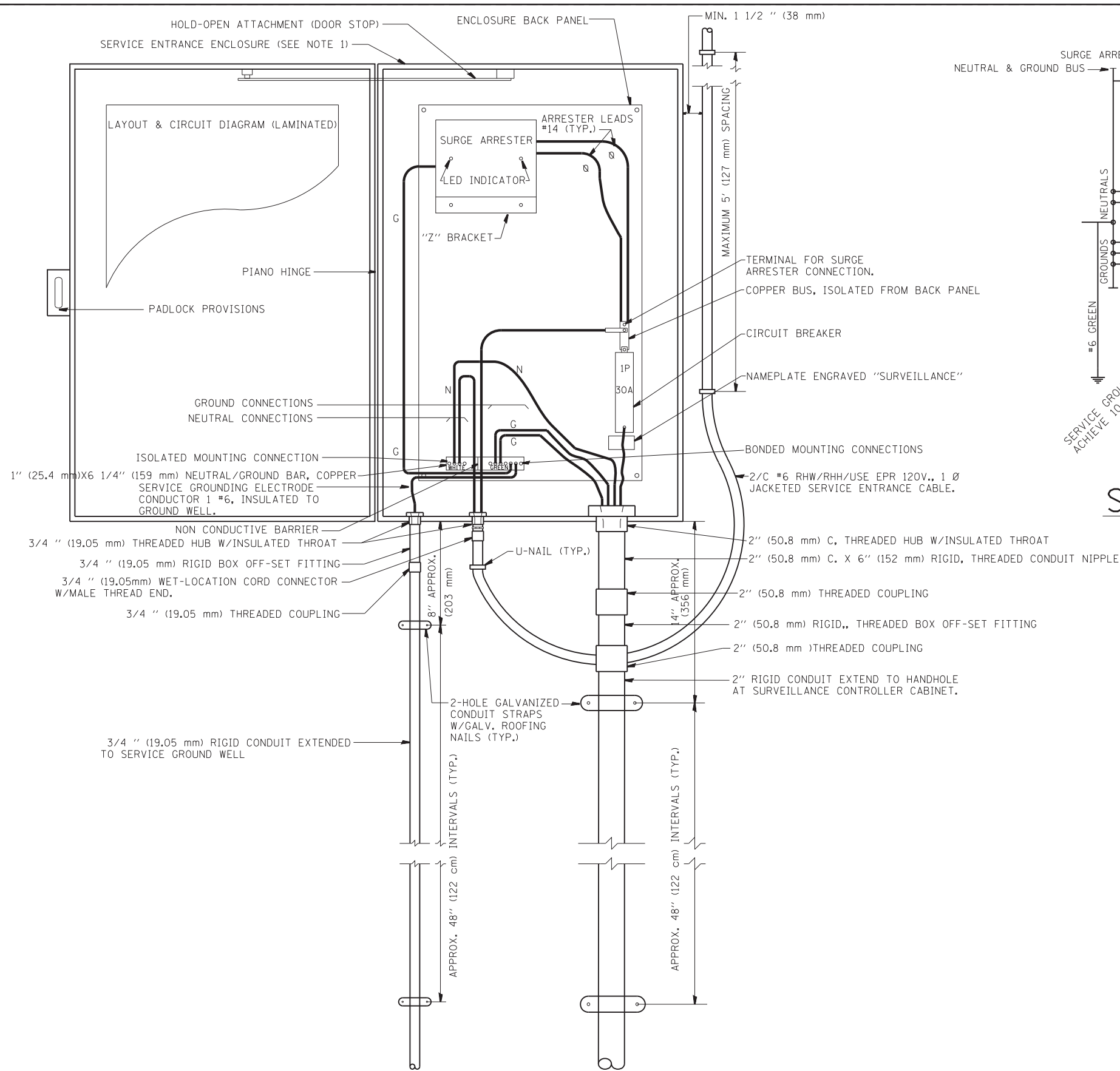
HEAVY DUTY HANDHOLE SPECIAL MINIMUM DIMENSIONS

A	31.5" (800 mm)
B	30.0" (762 mm)
C	10.0" (250 mm)

(FRAME AND COVER 405 LBS. (184 Kg. (405))

PC CONCRETE - HEAVY DUTY HAND HOLE

FILE NAME =	USER NAME = mezag	DESIGNED - R.L.	REVISED - 04/97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC SYSTEMS CENTER	PC CONCRETE - HEAVY DUTY HAND HOLE			F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
et:\pw\work\pidot\mezag\d0287541\TSCYP.dgn		DRAWN - G.M.	REVISED -		SCALE: NONE	SHEET NO.	OF SHEETS	STA.	TO STA.			404	361
PLOT SCALE = 100.0000' / in.		CHECKED - R.L.	REVISED -		CONTRACT NO.								
PLOT DATE = 7/26/2012		DATE - 09/11/96	REVISED -		TRAFFIC SYSTEMS CENTER (TY-1TSC-400#15)								

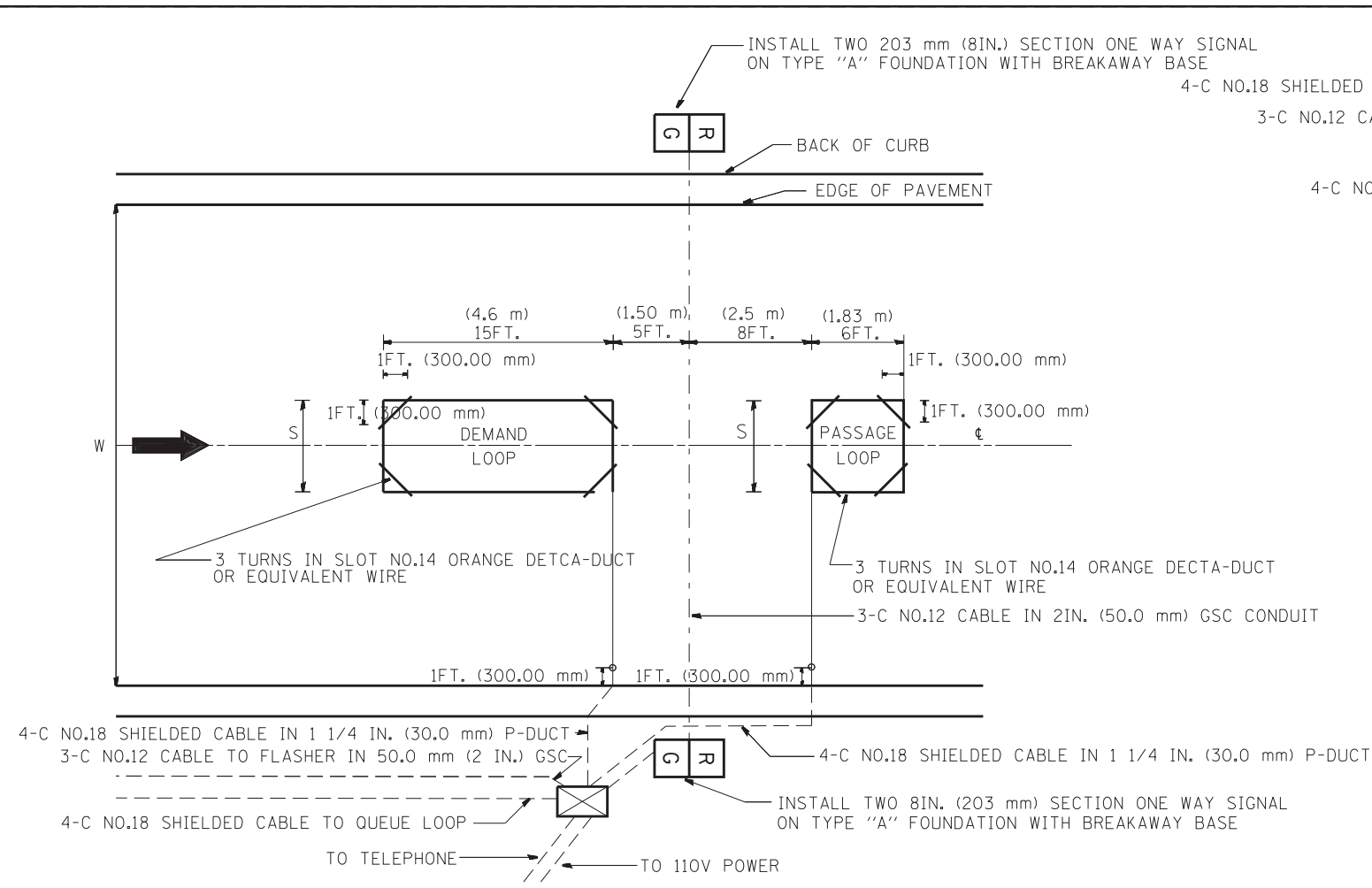


SCHEMATIC DIAGRAM

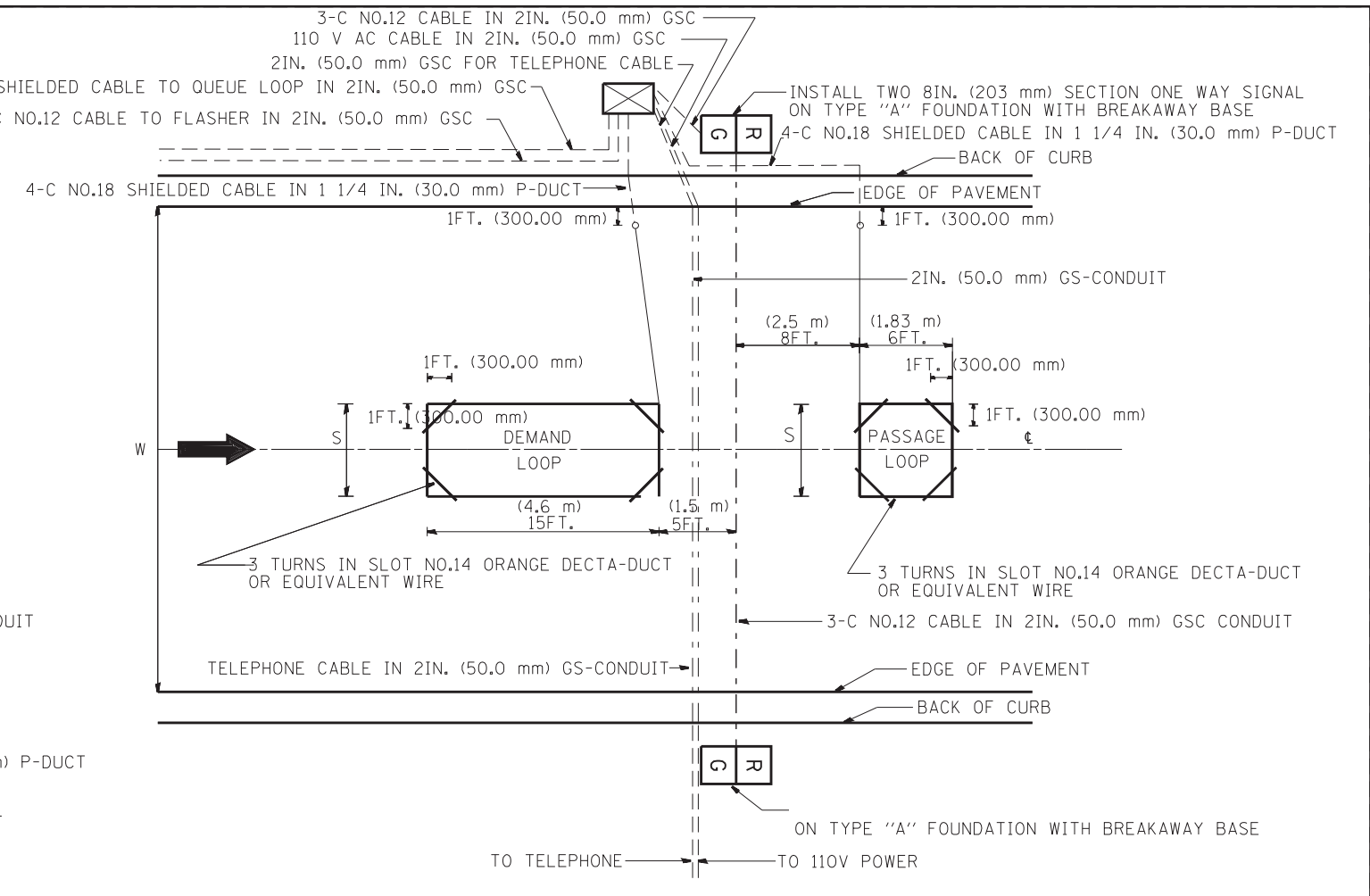
- NOTES:**
- 1.- ELECTRIC SERVICE SHALL BE OF THE VOLTAGE INDICATED. WHERE 120-VOLT SERVICE IS INDICATED, SERVICE DROP CABLE SHALL BE INSTALLED ACCORDINGLY AND LIGHTING MAIN FEEDER CABLE SHALL BE OMITTED.
 - 2.- THE ELECTRIC SERVICE BOX SHALL BE NEMA 4X STAINLESS STEEL, NOMINALLY 12" (305 mm) X 18" (457 mm) X 8" (203 mm), WITH PIANO HINGED DOOR, STEEL BACK PANEL, FAST-ACTING STAINLESS STEEL ENCLOSURE CLAMPS, PADLOCK PROVISIONS, DOOR STOP KIT AND STEEL BACK PANEL, HOFFMAN CATALOG A-16H120BSS6LP/A-16P2/A-DSTOPK/C-PMK12, OR APPROVED EQUAL.
 - 3.- THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LABELED, SUITABLE FOR USE AS SERVICE EQUIPMENT.
 - 4.- CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 25,000 SYMMETRICAL AMPERES AT 240 VOLTS. THEY SHALL BE LOCKABLE IN THE "OFF" POSITION FOR COMPLIANCE WITH OSHA LOCK-OUT/TAG-OUT REQUIREMENTS. HANDLES SHALL BE TRIP FREE.
 - 5.- THE SURGE PROTECTOR SHALL BE SUITABLE FOR 240/120 VOLT SINGLE PHASE 60HZ AC ELECTRICAL SERVICE, WITH A SURGE ENERGY CAPABILITY OF >3600 JOULES OR BETTER AT 8/20 MICROSECONDS, RATED -40 TO 65 DEGREES C., WITH LED OPERATING INDICATORS, AND SHALL BE UL LISTED PER UL 1449, CUTLER-HAMMER CMOV 230L065XST OR APPROVED EQUAL. SURGE PROTECTOR SHALL BE WIRED FOR 120 V SERVICE. FOLLOW MANUFACTURER RECOMMENDED WIRING SPECIFICATIONS.
 - 6.- BUS BARS, CONNECTORS AND LUGS SHALL BE COPPER, INSULATED AND ISOLATED AND CONFIGURED TO PREVENT SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS, ETC. THE OVERALL BUS SECTION SHALL BE CONFIGURED BEHIND AN INSULATING BARRIER SHIELD WHICH IS REMOVABLE FOR ACCESS TO CONNECTIONS.
 - 7.- THE COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTIONS AND SPARE TERMINALS AS INDICATED. THE HEADS OF GROUND SCREWS SHALL BE PAINTED GREEN. THE HEADS OF NEUTRAL SCREWS SHALL BE PAINTED WHITE.
 - 8.- A PLASTIC LAMINATED LAYOUT AND CIRCUIT DIAGRAM SHALL BE AFFIXED TO THE INTERIOR SIDE OF THE ENCLOSURE DOOR.
 - 9.- A 2-COLOR ENGRAVED PLASTIC NAMEPLATE, ATTACHED WITH SCREWS, AND ENGRAVED AS INDICATED, SHALL BE PROVIDED FOR EACH MAIN BREAKER.
 - 10.- PROVIDE ON LAYOUT AND CIRCUIT DIAGRAM A BILL OF MATERIALS USED WITH CATALOG NUMBERS.
 - 11.- REFER TO T.S.C. TYPICAL DRAWING TY-1TSC-400*20 FOR POLE MOUNTED DISCONNECT MOUNTING DETAILS.

ELECTRIC SERVICE
GENERAL LAYOUT DIAGRAM

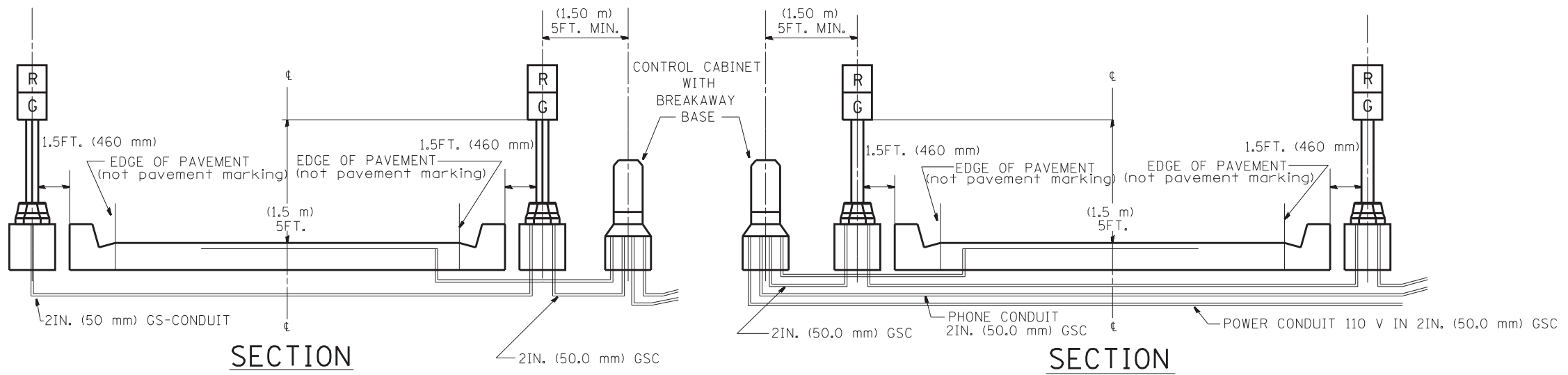
FILE NAME =	USER NAME = mezag	DESIGNED - R.L.	REVISED - 03/01/99	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC SYSTEMS CENTER	DISTRICT 1 SURVEILLANCE POLE-MOUNTED ELECTRIC SERVICE BOX DETAIL			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\pwork\mezag\d0287541\TSC.TYP.dgn		DRAWN - G.M.	REVISED - 03/30/99		SCALE: NONE	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	404	362
		CHECKED - R.L.	REVISED - 04/99					CONTRACT NO.					
		DATE - 02/24/99	REVISED - 04/12/99										



TYPICAL SIGNAL AND LOOP LAYOUT (TYPE I)



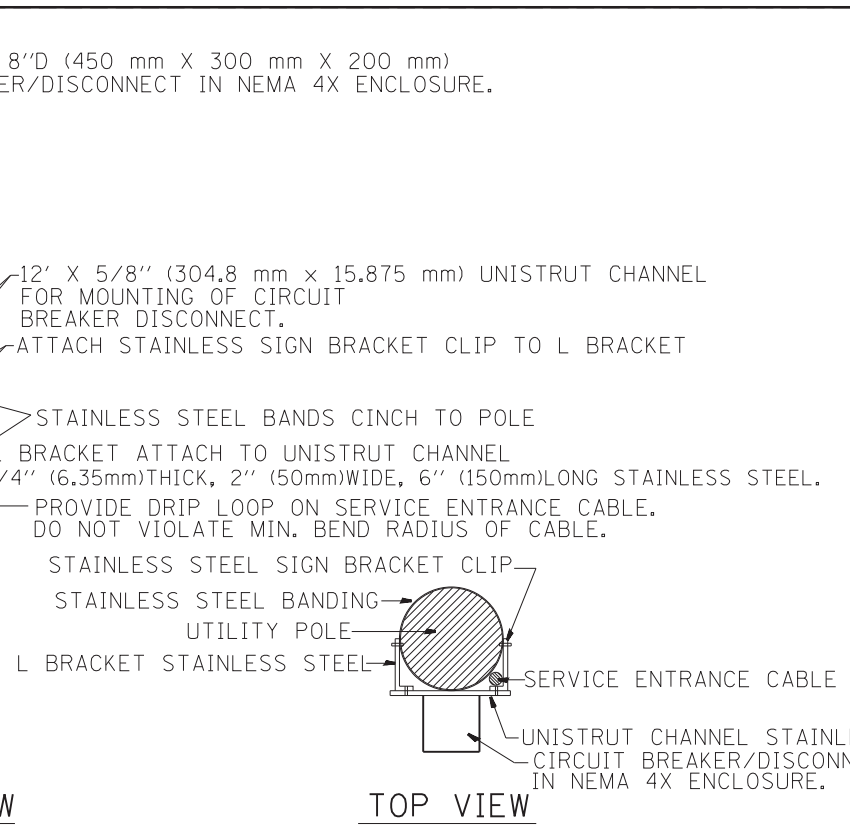
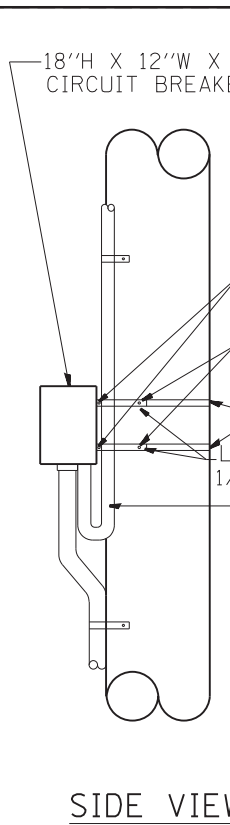
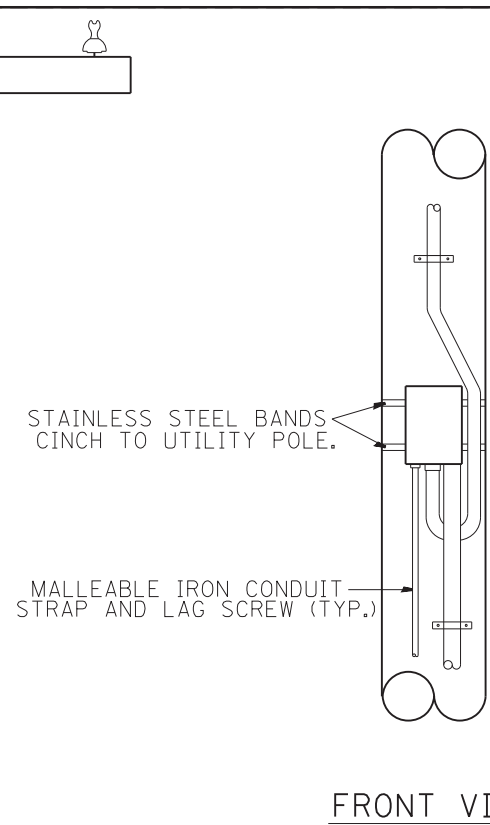
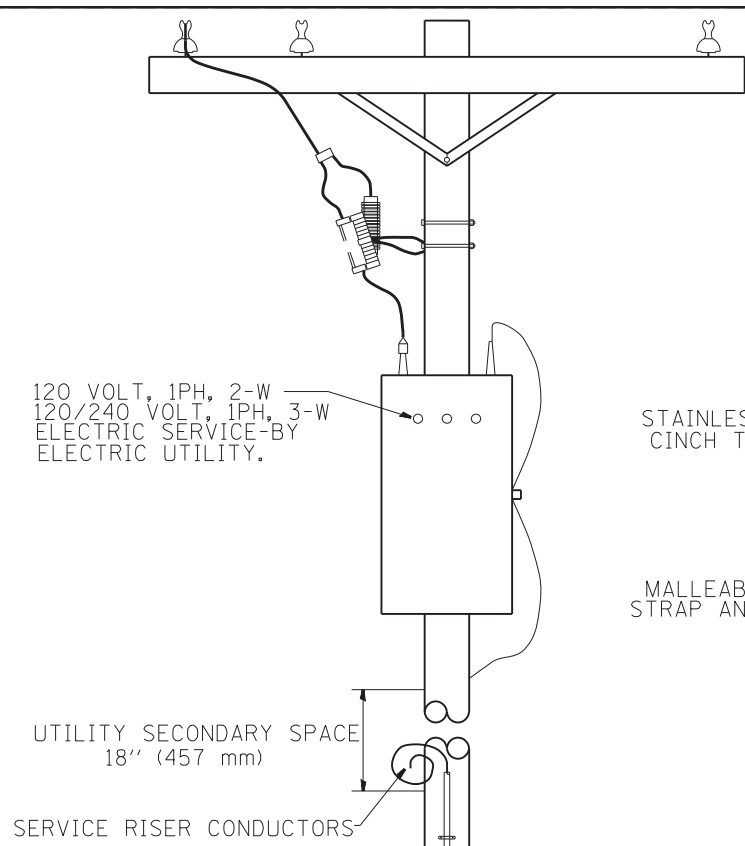
TYPICAL SIGNAL AND LOOP LAYOUT (TYPE II)



- NOTES:
1. EACH LOOP SHALL BE SPLICED TO A 4-C NO.18 TWISTED SHIELDED LEAD IN WHEN 150FT. (45 m) OR MORE FROM CABINET.
 2. LOOPS SHALL BE SPLICED IN HANDHOLES ONLY, OTHERWISE WRITTEN PERMISSION SHALL BE OBTAINED FROM TSC ENGINEER.
 3. LOOPS SHALL NOT BE SPLICED IN SERIES.
 4. EACH LOOP LEAD IN SHALL BE IDENTIFIED AND PERMANENTLY COLOR CODED IN THE COREHOLE, HANDHOLE & CABINETS THRU WHICH THEY ENTER OR PASS AND TAGGED WITH THE CORRECT NOMENCLATURES.

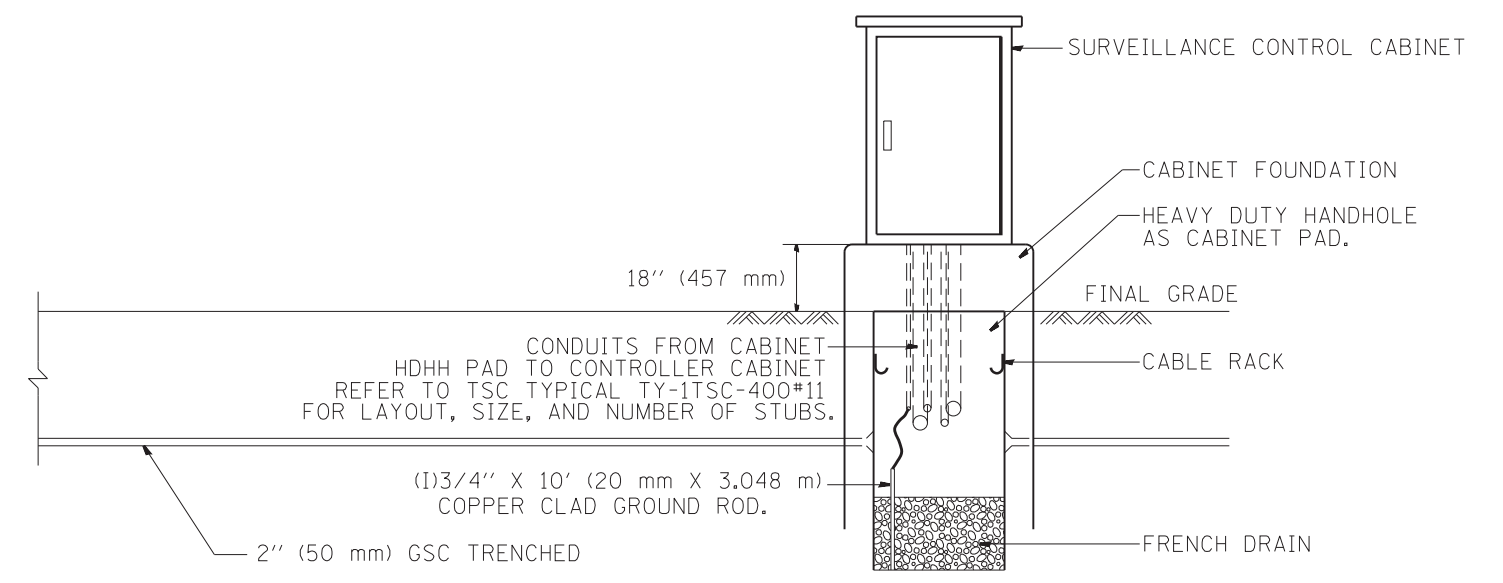
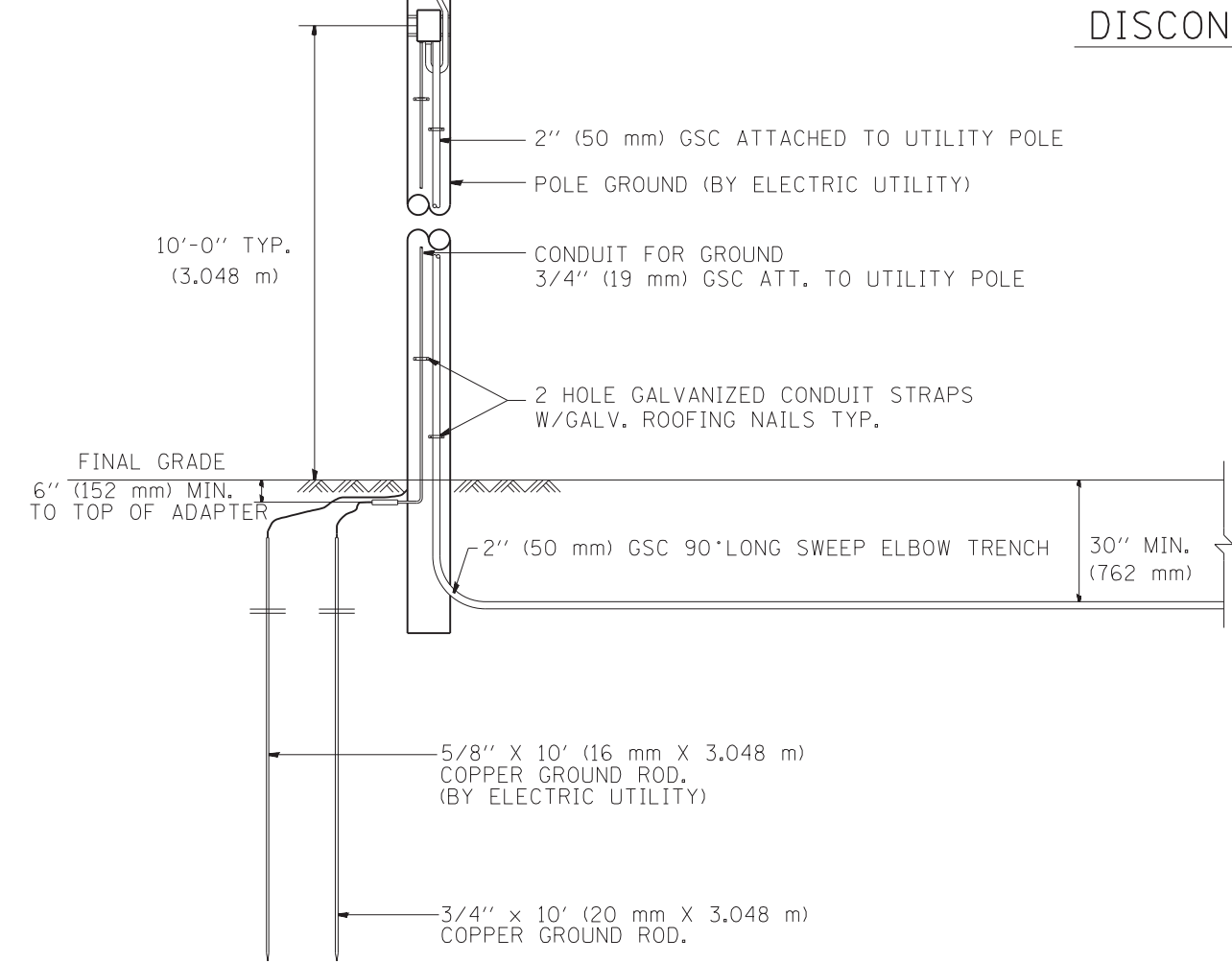
WIDTH (W)	WIDTH (S)
12' (3.7 m)	8' (2.5 m)
13' (4.0 m)	9' (2.8 m)
14' (4.3 m)	10' (3.1 m)
15' (4.6 m)	11' (3.4 m)
16' (4.9 m)	12' (3.7 m)
17' (5.2 m)	13' (4.0 m)
18' (5.5 m)	14' (4.3 m)
19' (5.8 m)	15' (4.6 m)
20' (6.1 m)	18' (4.9 m)
21' (6.4 m)	17' (5.2 m)
22' (6.7 m)	18' (5.5 m)
23' (7.0 m)	19' (5.8 m)
24' (7.3 m)	20' (6.1 m)
25' (7.6 m)	21' (6.4 m)

FILE NAME =	USER NAME = mezag	DESIGNED - R.L.	REVISED - 06/94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC SYSTEMS CENTER	TYPICAL RAMP METERING INSTALLATION TYPE I & II (WITH CURB & GUTTER)			F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
et:\pw\work\p\idot\mezag\d0287541\TSC1YP.dgn		DRAWN - G.M.	REVISED - 09/96		SCALE: NONE	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	404	363
		CHECKED - R.L.	REVISED - 02/98					CONTRACT NO.					
		DATE -	REVISED -										

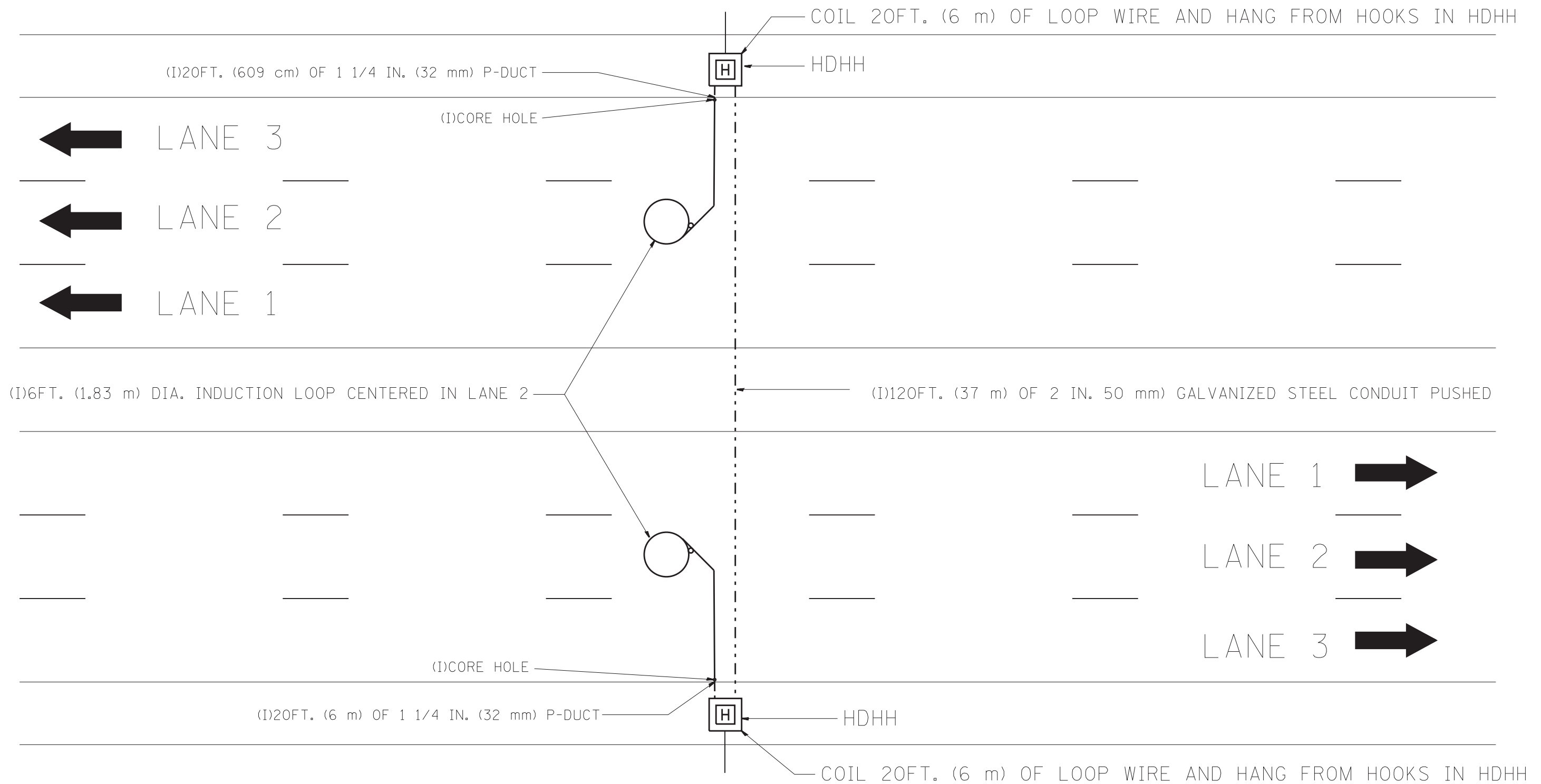


- NOTES:**
- 1.- ALL CONDUIT BUSHINGS SHALL HAVE AN ISOLATED THROAT.
 - 2.- PROVIDE HEAT SHRINK BOOT AT THE TOP OF THE SERVICE ENTRANCE CABLE FOR MOISTURE PROOFING.
 - 3.- ALL CONNECTIONS TO GROUND RODS SHALL BE EXOTHERMIC UNLESS OTHERWISE NOTED.
 - 4.- ATTACH INCOMING ELECTRIC SERVICE CABLE TO UTILITY POLE EVERY 5 FEET USING INSULATED U-NAIL.
 - 5.- PROVIDE CABLE RACK IN HANDHOLES.
 - 6.- ALL CONDUCTORS SHALL BE COPPER.
 - 7.- PROVIDE STAINLESS STEEL HARDWARE TO ATTACH L BRACKETS TO UNISTRUT AND TO SIGN HANGER.

**NTS
DISCONNECT MOUNTING DETAIL**



FILE NAME =	USER NAME = mezag	DESIGNED - R.L.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC SYSTEMS CENTER	POLE MOUNTED DISCONNECT MOUNTING DETAILS			F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
et:\pw\work\p\dot\mezag\d0287541\TSC.TYP.dgn		DRAWN - G.M.	REVISED -		SCALE: NONE	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	404	364
	PLOT SCALE = 100.0000' / 1in.	CHECKED - R.L.	REVISED -										
	PLOT DATE = 7/26/2012	DATE - 03/30/99	REVISED -										



NOTE:

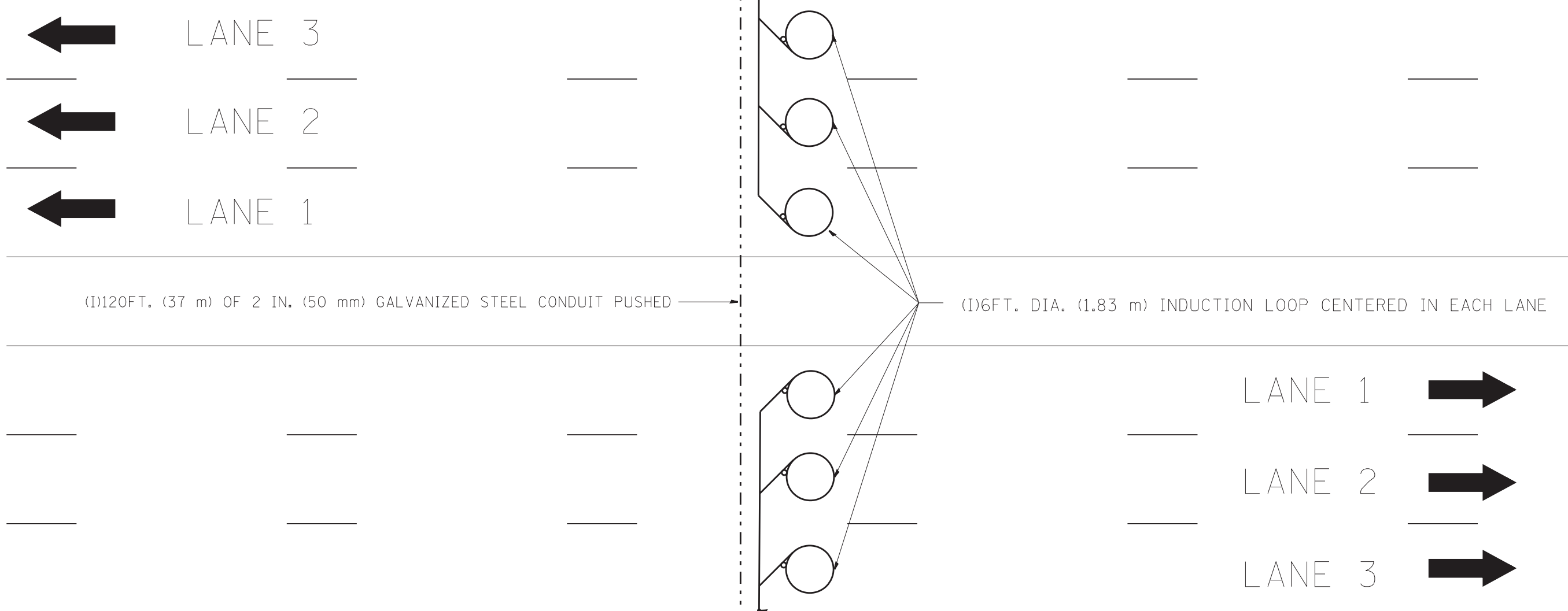
THE COST OF LOOP WIRE IN HDHH IS INCIDENTAL TO THE INDUCTION LOOP. IT SHALL NOT BE MEASURE FOR PAYMENT.

FILE NAME =	USER NAME = mezag	DESIGNED - J.G.	REVISED - 12-02-2010	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC SYSTEMS CENTER	ONE LANE COUNT STATION			F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p\dot\mezag\d0287541\TSCTYP.dgn	DRAWN - G.M.	REVISED -	SCALE: NONE					SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT NO.
PLOT SCALE = 100.0000' / in.	CHECKED - J.G.	REVISED -										
PLOT DATE = 7/26/2012	DATE - 01-31-07	REVISED -										

COIL 20FT. (6 m) OF LOOP WIRE AND HANG FROM HOOKS IN HDHH

HDHH WITH STUB OUT 1FT. (30.48 cm) PAST EDGE OF SHOULDER

(I)10FT. (3 m) OF 1 1/4 IN. (32 mm) (P-DUCT(TRENCHED))



(I)120FT. (37 m) OF 2 IN. (50 mm) GALVANIZED STEEL CONDUIT PUSHED

(I)6FT. DIA. (1.83 m) INDUCTION LOOP CENTERED IN EACH LANE

(I)CORE HOLE

(I)10FT. (3 m) OF 1 1/4 IN. (30.0 mm) P-DUCT(TRENCHED)

HDHH WITH STUB OUT 1FT. (30.48 cm) PAST EDGE OF SHOULDER

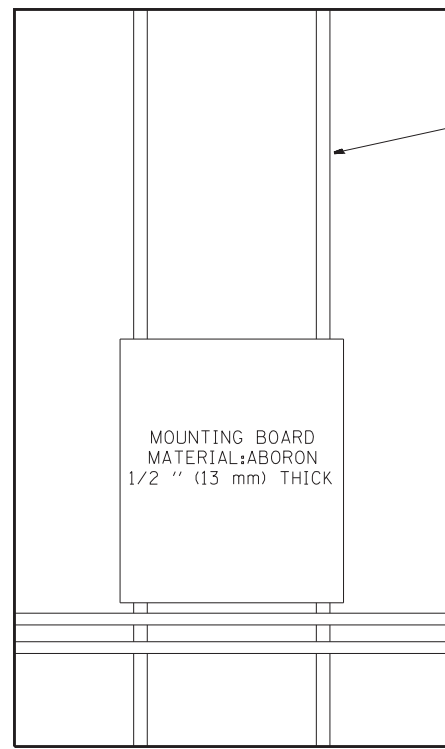
COIL 20FT. (6 m) OF LOOP WIRE AND HANG FROM HOOKS IN HDHH

NOTE:

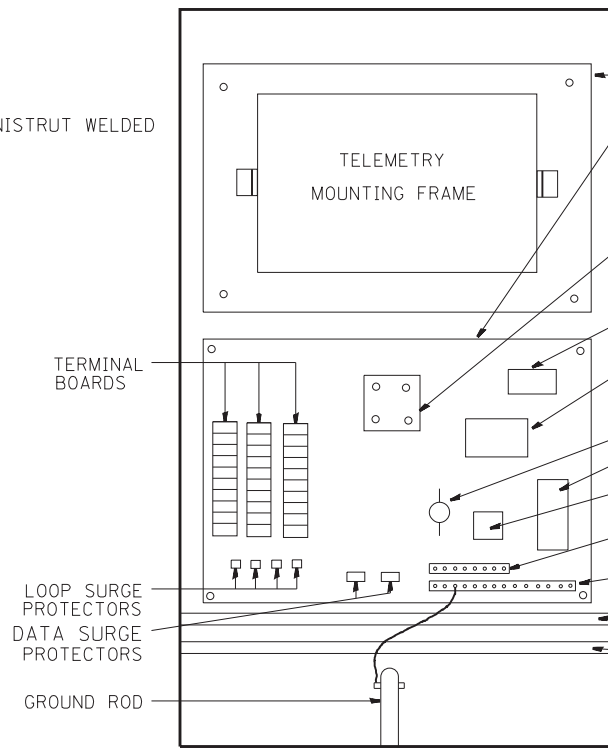
THE COST OF LOOP WIRE IN HDHH IS INCIDENTAL TO THE INDUCTION LOOP. IT SHALL NOT BE MEASURE FOR PAYMENT.

INSTALL AT STATIONS.

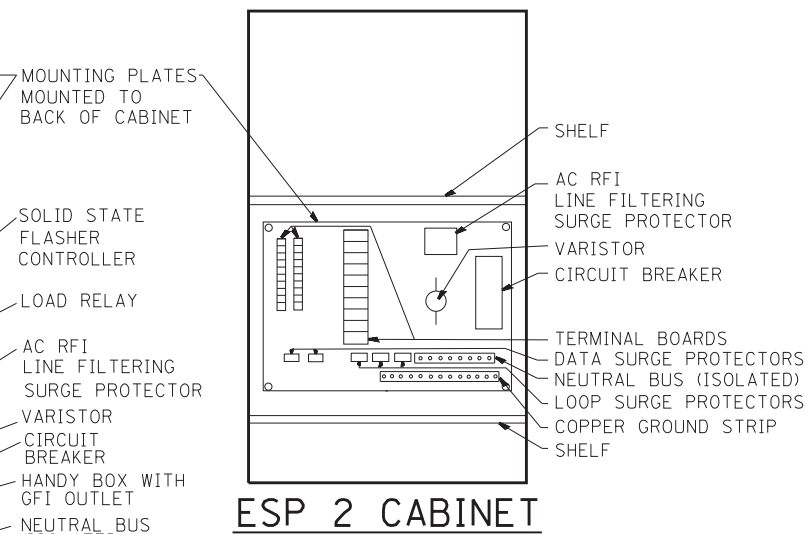
FILE NAME =	USER NAME = mezag	DESIGNED - J.G.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC SYSTEMS CENTER	3 LANE COUNT STATION			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p\idot\mezag\d0287541\TSCTYP.dgn	PLOT SCALE = 100.0000' / in.	DRAWN - G.M.	REVISED -								404	366
	PLOT DATE = 7/26/2012	CHECKED - J.G.	REVISED -		SCALE: NONE			CONTRACT NO.				
		DATE - 01-31-07	REVISED -		SHEET NO.	OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



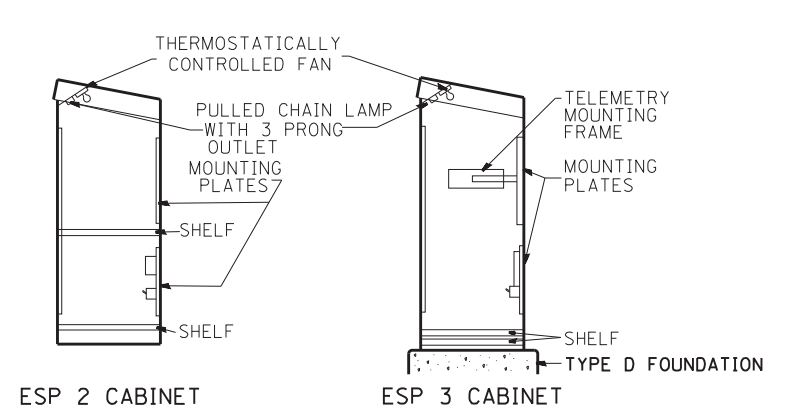
SIDE VIEW ESP 3 & 4 CABINET



ESP 3 CABINET



ESP 2 CABINET



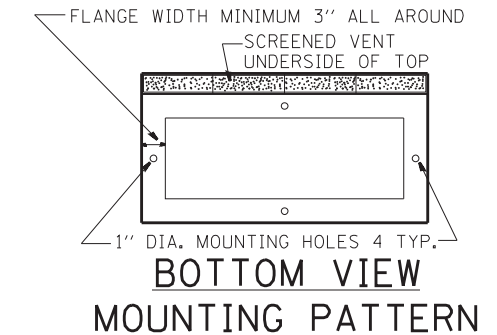
PROFILE VIEWS

NOTE: MOUNTING PLATES TO BE MOUNTED TO BACK PANEL OF CABINET

TYPICAL CABINET INTERIORS
STANDARD TRAFFIC SYSTEMS CENTER CABINETS

MINIMUM DIMENSIONS INSIDE

TYPE	HEIGHT (IN-mm)	WIDTH (IN-mm)	DEPTH (IN-mm)	THICKNESS (IN-mm)	MATERIAL
ESP1	22.5" (571.5 mm)	14.25" (361.95mm)	9.75" (247.65mm)	3/16" (4.76mm)	FABRICATED ALUMINUM
ESP2	36" (914.4mm)	20" (508.0mm)	15" (381.0mm)	73/16" (4.76mm)	FABRICATED ALUMINUM
ESP3	49.5" (1.26 m)	30" (762.0mm)	17" (431.8mm)	3/16" (4.76mm)	FABRICATED ALUMINUM
ESP4	55" (1.4 m)	44" (1.12 m)	26" (660.4mm)	3/16" (4.76mm)	FABRICATED ALUMINUM



NOTES:

- CABINETS, CABINET POSTS AND CABINET PEDESTALS SHALL BE PRIMED AND PAINTED IN ACCORDANCE WITH SECTION T637 OF THE "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS". THE FINAL COAT SHALL BE (X) IN COLOR. THE INTERIOR SHALL BE PAINTED WHITE. SIGNAL POSTS AND HEADS TO BE FEDERAL YELLOW 89-19(MAUTZ).
- CABINETS SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE PORTIONS OF SECTION T400 OF THE "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS".
- ALL CABINETS WHICH ARE SERVICED BY 117 VOLTS A.C. POWER SHALL BE EQUIPPED WITH A 10 AMP CIRCUIT BREAKER, A.C. R.F.I. LINE FILTERING SURGE PROTECTOR, VARIATOR, DATA SURGE AND LOOP SURGE PROTECTORS AS INCIDENTAL TO THE COST OF THE CABINET. CMS CABINETS TYPE IV SHALL HAVE A 60 AMP. CIRCUIT BREAKER MINIMUM.
- ESP 2/3/4 CABINETS SHALL BE FITTED WITH A THERMOSTATICALLY CONTROLLED FAN. IT SHALL BE MOUNTED AT THE TOP OF THE CABINET. THE FAN SHALL BE CAPABLE OF OPERATING AT 130 CPM AT 160' (48.8 m) OF STATIC WATER PRESSURE. A PORCLAIN BASED PULL CHAIN FIXTURE WITH 3 PRONG OUTLET SHALL ALSO BE PROVIDED.
- RAMP METERING ESP 3 TYPE CABINETS SHALL ALSO BE EQUIPPED WITH A LOAD RELAY AND 2 CIRCUIT FLASHER. LAMPS, FAN, LOAD RELAY, AND 2 CIRCUIT FLASHER SHALL BE INCIDENTAL TO THE COST OF THE CABINET
- INCIDENTAL TO THE COST OF EACH CABINET THE CONTRACTOR SHALL CONSTRUCT A 5 INCH (130mm) PCC SIDEWALK OF A RECTANGULAR AREA 3 FEET (915 mm) BY 4 FEET (1.25 m) IMMEDIATELY ADJACENT TO THE CABINET FOUNDATION ON THE SAME SIDE OF THE FOUNDATION AS THE CABINET DOOR TO PROVIDE FOOTING DURING INSTALLATION AND MAINTENANCE.
- ANCHOR BOLTS FOR PEDESTAL AND BASE MOUNTED CABINETS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE CABINET.
- ALL CABINETS SHALL HAVE TERMINAL BLOCKS AND SHELVES AS SHOWN. THESE ITEMS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE CABINET.
- THE CABINET DOOR SHALL BE HINGED ON THE RIGHT SIDE WHEN FACING THE CABINET. THE DOOR SHALL BE FURNISHED WITH A GASKET THAT SHALL FORM A WEATHER TIGHT SEAL BETWEEN THE CABINET AND DOOR. THE HINGES SHALL BE CONTINUOUS AND BOLTED TO THE CABINET AND DOOR UTILIZING 1/4-20 STAINLESS STEEL CARRIAGE BOLTS AND NY-LOCK NUTS. THE HINGES WILL BE MADE OF STAINLESS STEEL WITH A 0.25 INCH (6.35 mm) DIAMETER STAINLESS STEEL HINGE PIN. THE HINGE PIN SHALL BE CAPPED TOP AND BOTTOM BY WELD TO RENDER IT TAMPER PROOF.
- THE LATCHING MECHANISM SHALL BE A 3 POINT DRAW ROLLER TYPE. THE CENTER CATCH AND PUSHRODS SHALL BE EITHER CADMIUM OR ZINC PLATED, TYPE II CLASS I. PUSHRODS WILL BE TURNED EDGEWISE AT THE OUTWARD SUPPORTS AND SHALL BE 0.25 INCH (6.35 mm) BY 0.75 INCH (19.05 mm). MINIMUM. ROLLERS SHALL HAVE A MINIMUM DIAMETER OF 0.875 INCH (22.22 mm) AND WILL BE MADE OF NYLON. THE CENTER CATCH SHALL BE FABRICATED FROM 0.14 INCH (3.55 mm) STEEL, MINIMUM. WHEN THE DOOR IS CLOSED AND LATCHED, IT WILL BE LOCKED. THE LATCHING HANDLE SHALL HAVE A PROVISION FOR PADLOCKING IN THE CLOSED POSITION. AN OPERATING HANDLE SHALL BE FURNISHED WITH EACH LOCK. THE HANDLE WILL BE STAINLESS STEEL WITH A 0.75 INCH (19.05 mm) DIAMETER SHANK.
- THE ENCLOSURE SHALL BE EQUIPPED WITH TWO ADJUSTABLE "C" MOUNTING CHANNELS WELDED ON BOTH SIDE WALLS AND BACK WALL OF THE ENCLOSURE, ALLOWING VERSATILE POSITIONING OF SHELVES OR PANELS. MOUNTING CHANNELS SHALL BE FACTORY PAINTED SAME COLOR AS INTERIOR OF CABINET.
- CABINET DOOR SHALL NOT HAVE COMPARTMENT DOORS OR LOUVERS.
- ALL FIELD CABINETS SHALL BE FITTED WITH BRASS LOCKS.
- ESP TYPE 2 & 3 CABINETS FITTED WITH TWO SHELVES AS SHOWN.
- POST TOP MOUNTED CABINETS, SHALL HAVE A 0.25 INCH (6.3 mm) BOTTOM OF CABINET WELDED.
- THE CONTROL CABINET SHALL BE SET PLUMB ON THE FOUNDATION AND FASTENED TO THE ANCHOR BOLTS WITH NUTS AND WASHERS. FLAT WASHERS SHALL BE INSTALLED BELOW AND ABOVE THE BASE PLATE OF THE CONTROL CABINET. LOCKWASHERS SHALL BE INSTALLED ON TOP OF THE TOP FLAT WASHER.

(X)

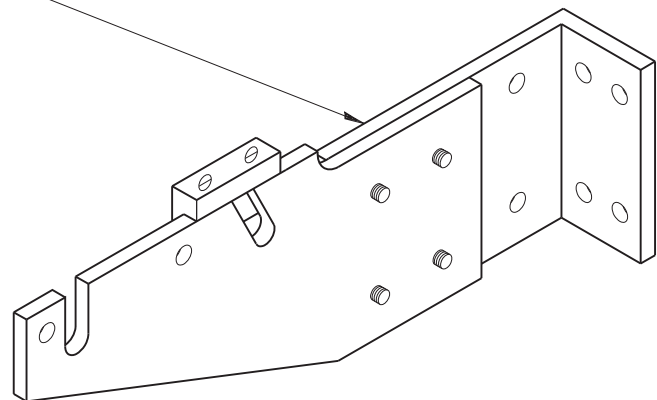
- | | |
|------------------|---------------------|
| EDENS | WALNUT * |
| KENNEDY | BLUE STREAK ** |
| EISENHOWER | CARIBBEAN BLUE * |
| I-290/IL53/I-355 | POST OFFICE BLUE ** |
| RYAN | YELLOW STONE II ** |
| I-55 | MEDIUM BRONZE * |
| I-57 | RED BARON ** |
| CAL-KING | BLUE STREAK ** |
| LAKE SHORE DR. | GREEN * |
| I-80 | STATUARY BRONZE ** |

ALL RAMP METERING CABINETS LIME GREEN ***. ALL POSTS, T.S. HEADS AND SERVICES WILL BE PAINTED FEDERAL YELLOW.
* MORTON POWDER PAINT COLOR OR EQUIVALENT.
** O'BRIEN POWDER PAINT COLOR OR EQUIVALENT.
*** BENJAMIN MOORE ENAMEL COLOR OR EQUIVALENT.

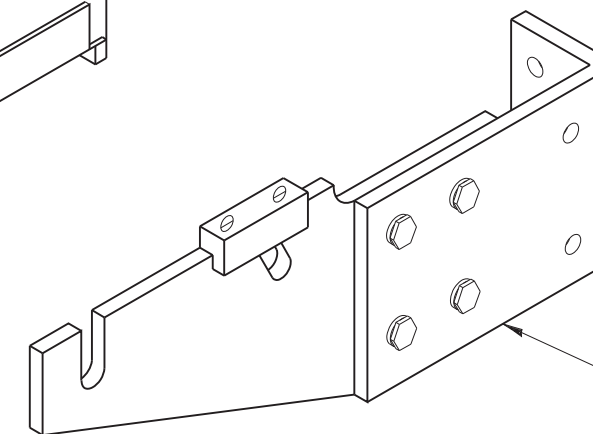
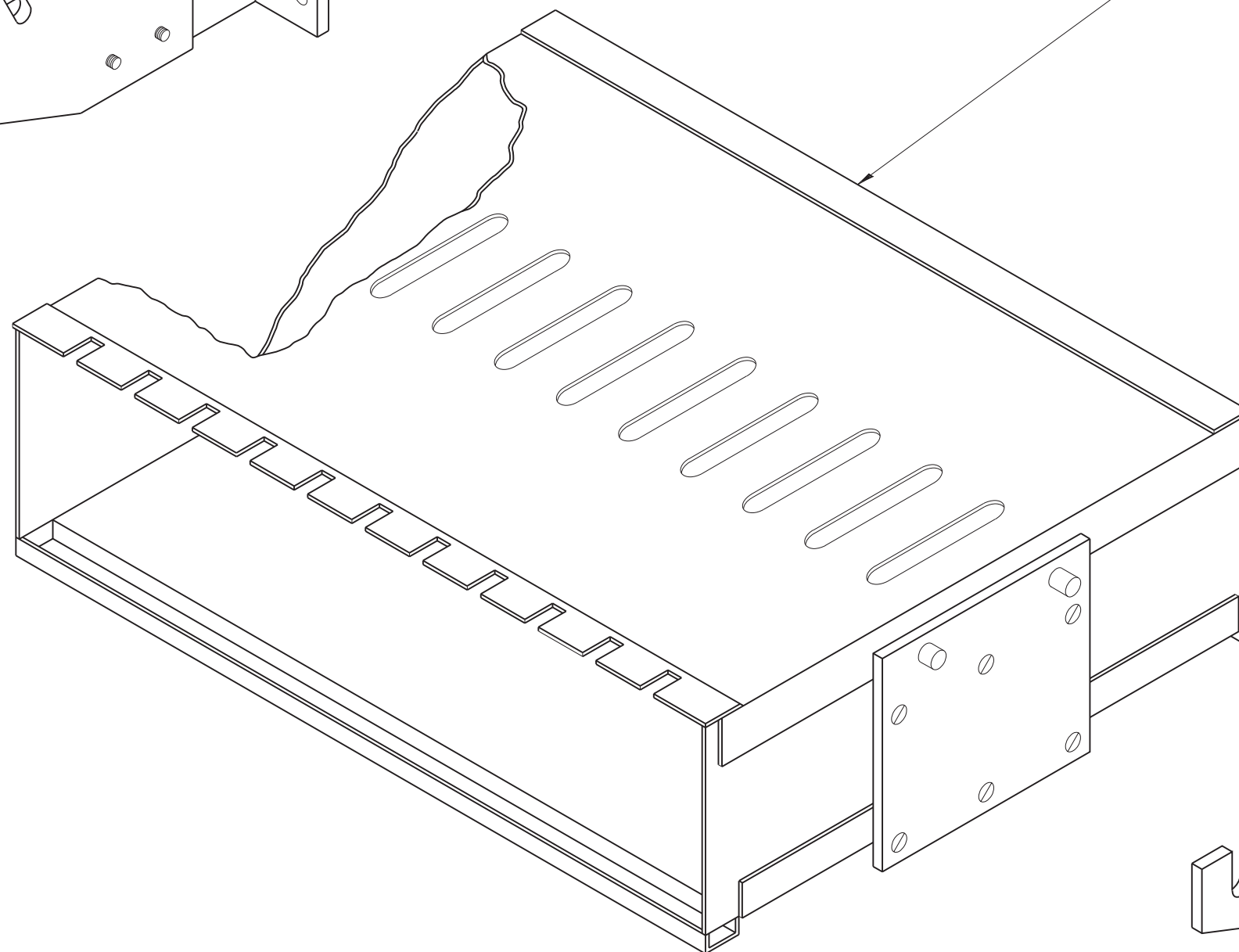
NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR CONFORMING TO COLOR REQUIREMENTS

FILE NAME =	USER NAME = mezag	DESIGNED - R.L.	REVISED - 12/94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC SYSTEMS CENTER	CABINET DETAIL SHEET			F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = 7/26/2012	DATE - 06/21/94	REVISED - 03/99	TRAFFIC SYSTEMS CENTER (TY-1TSC-400#4)									

CRADLE



II MODULE MOUNTING FRAME
(FOR II TYPE "A" PLUG-IN TYPE TONE MODULES)



CRADLE

NOTE:

TYPE "A" TONE MODULES ARE PLUG
IN UNIT MEASURING 5-7/32" (132.55 mm) X 1.5" (38.1 mm) X 13-3/4" (349.25 mm)

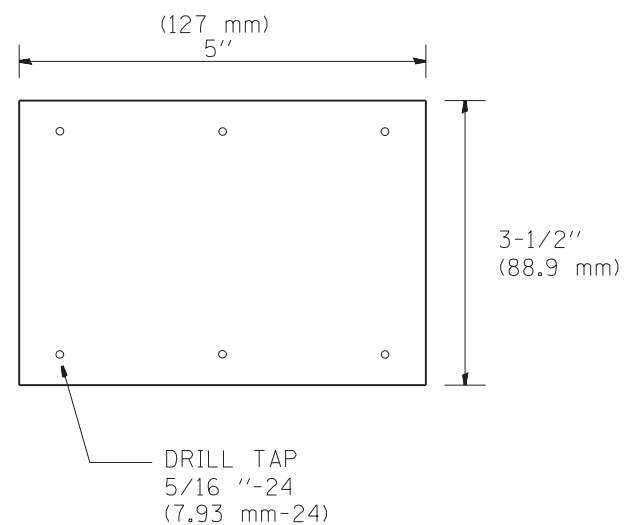
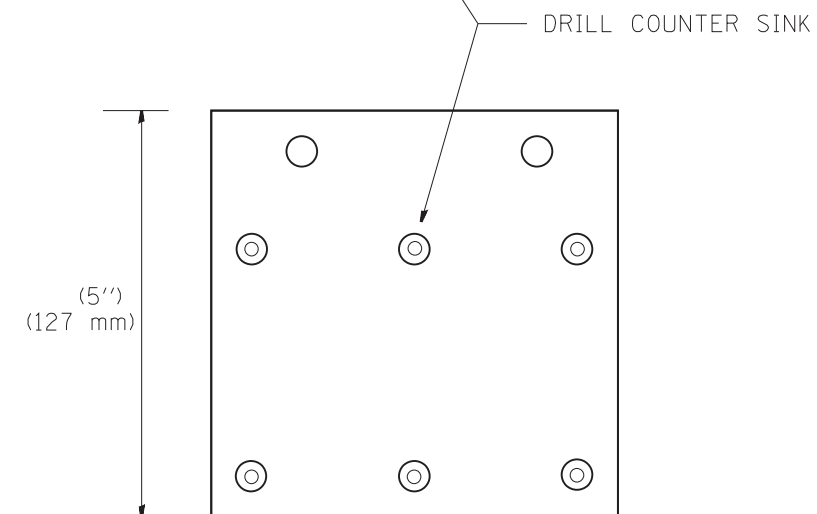
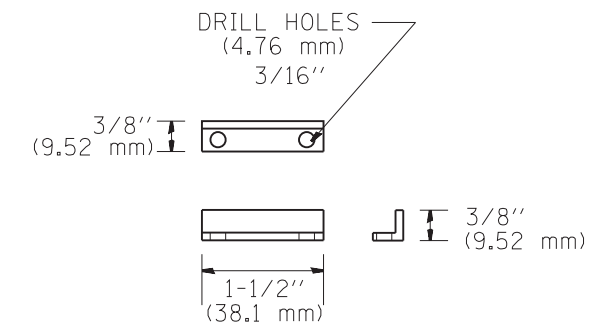
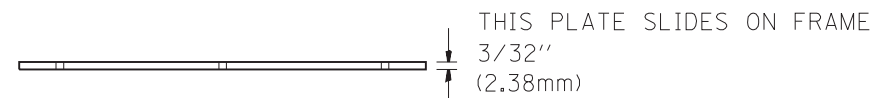
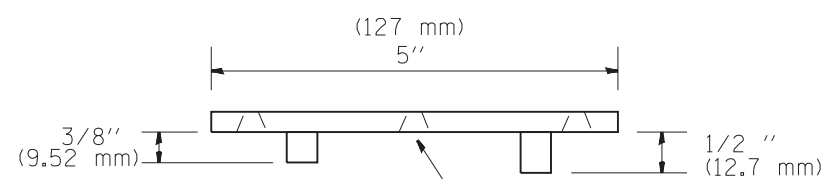
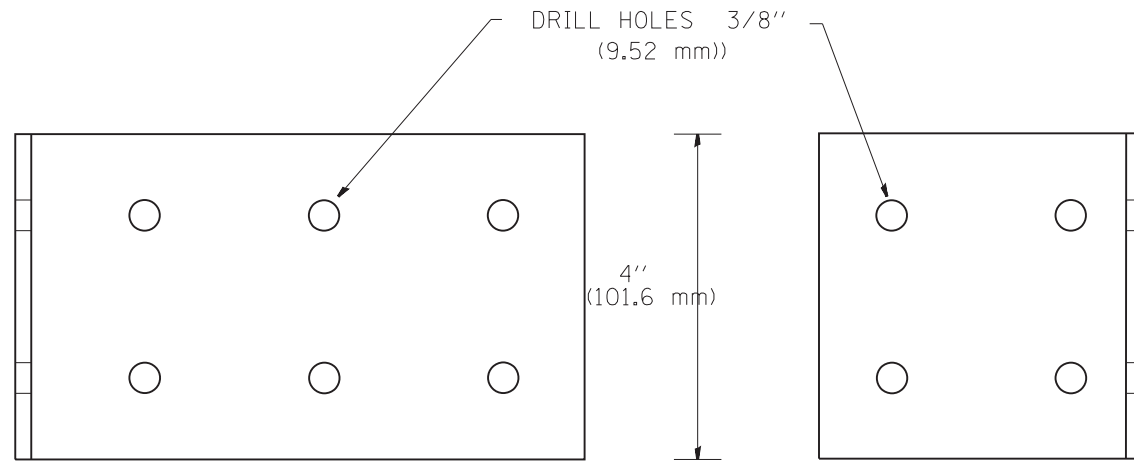
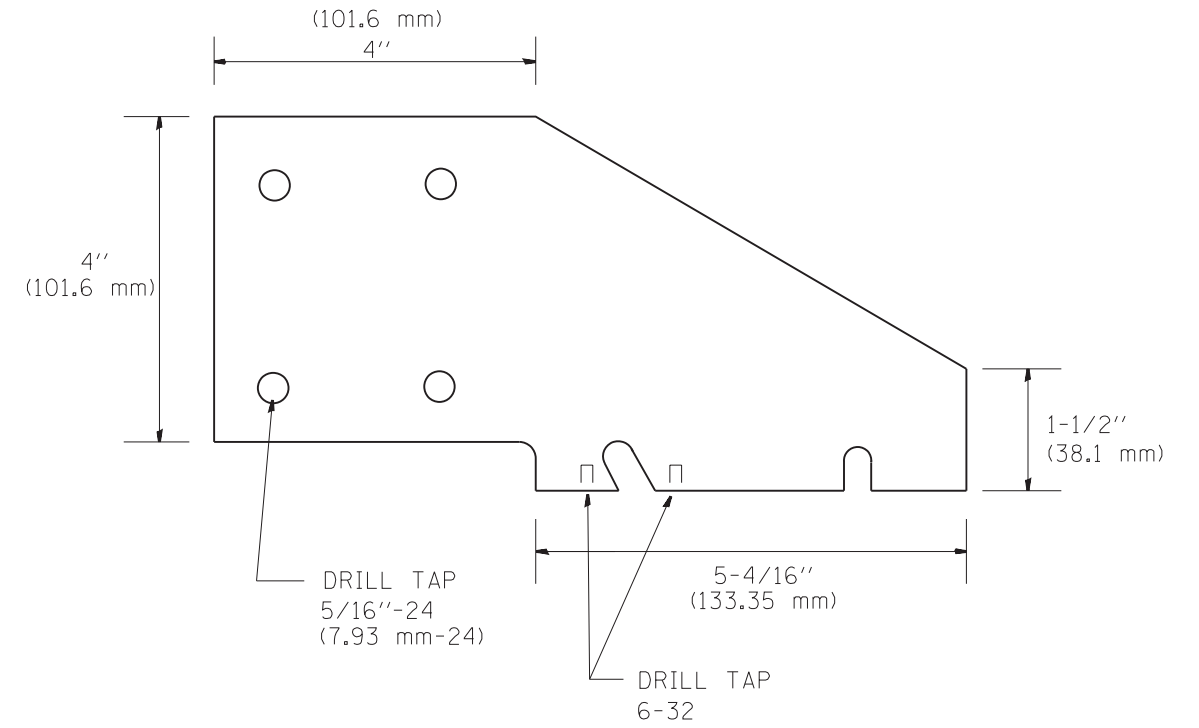
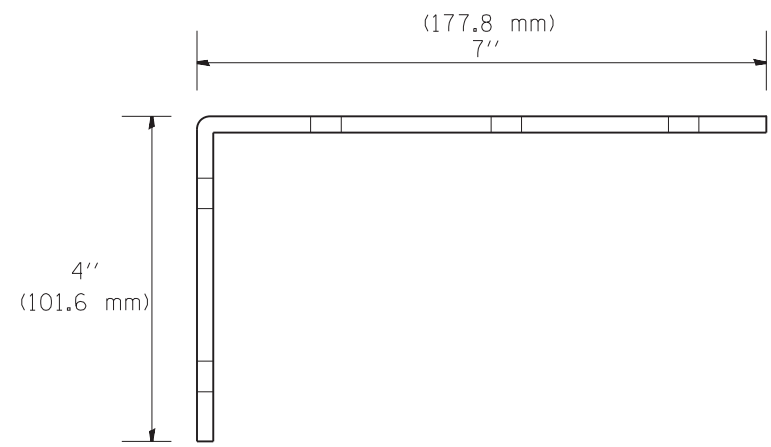
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	PLOT SCALE = 100.0000' / in.	CHECKED - R.L.	REVISED -
	PLOT DATE = 7/26/2012	DATE - 06/21/94	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

FIELD MOUNTING FRAME
WITH CRADLE ASSEMBLY

SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			404	368
CONTRACT NO.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



FILE NAME =	USER NAME = mezag	DESIGNED - R.L.	REVISED - 06/94
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	PLOT DATE = 7/26/2012	DATE - 06/21/94	REVISED -

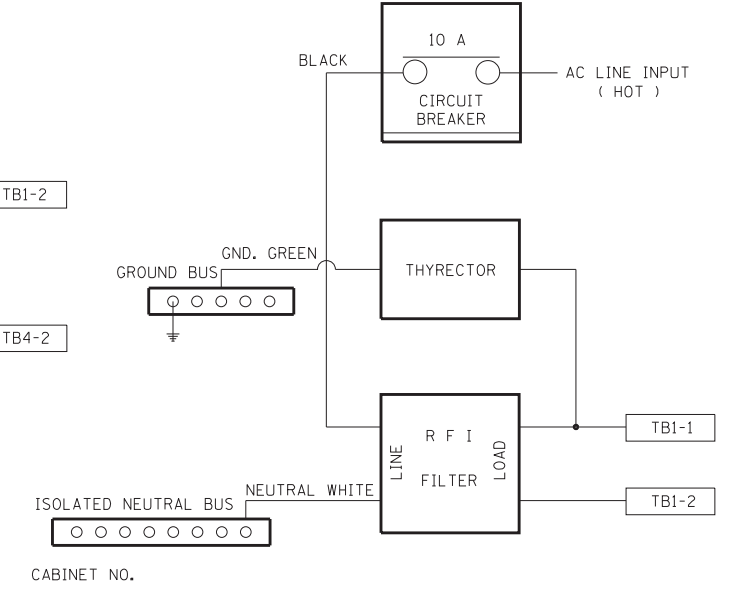
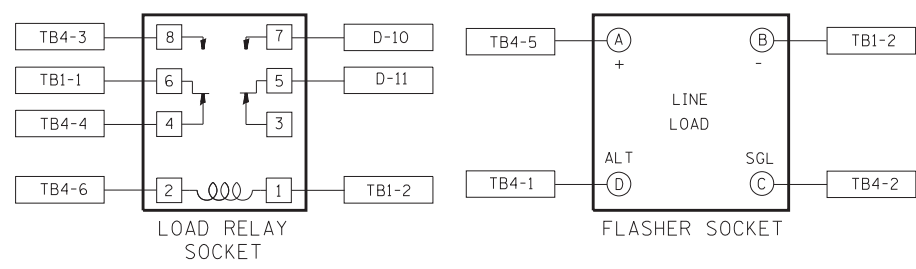
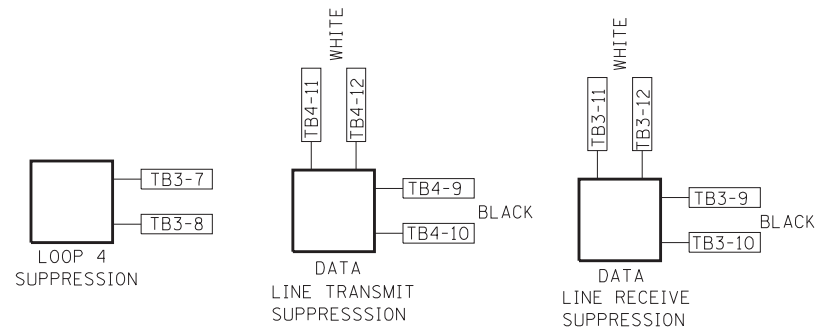
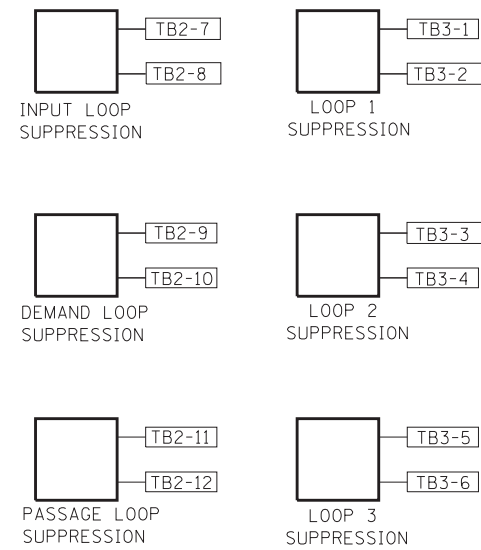
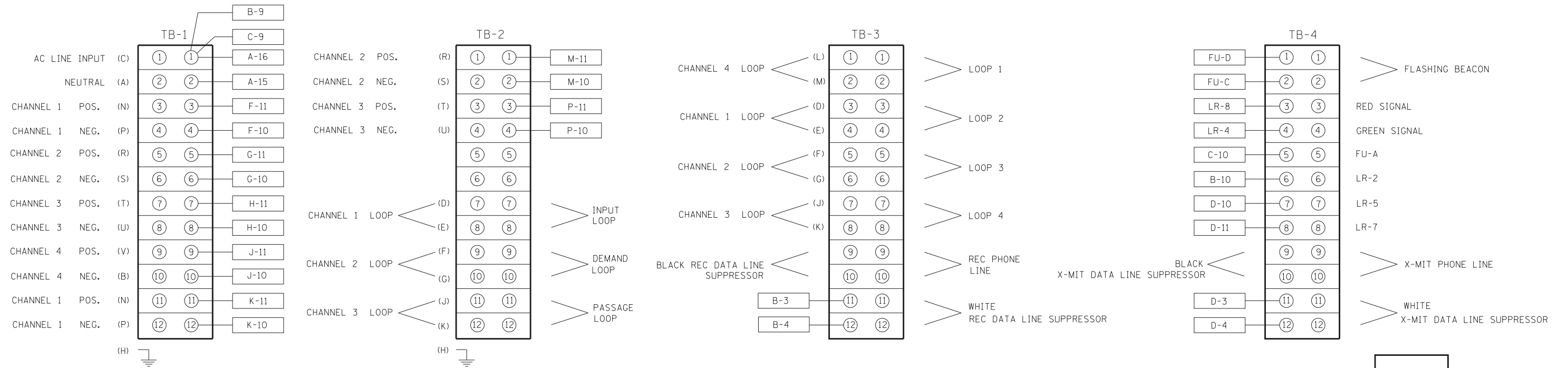
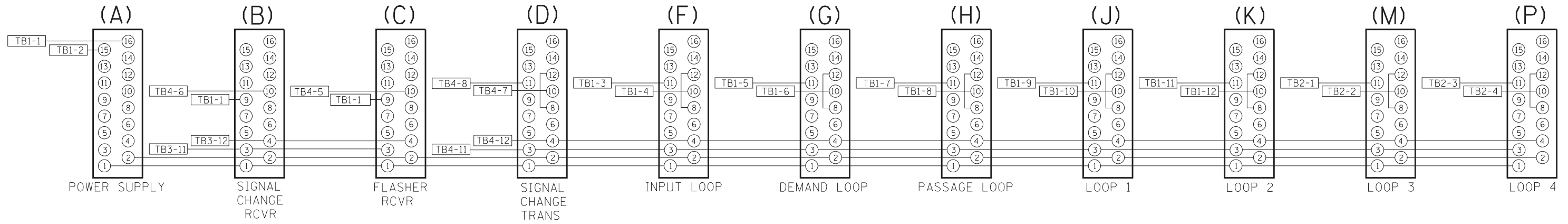
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER**

FIELD CRADLE ASSEMBLY

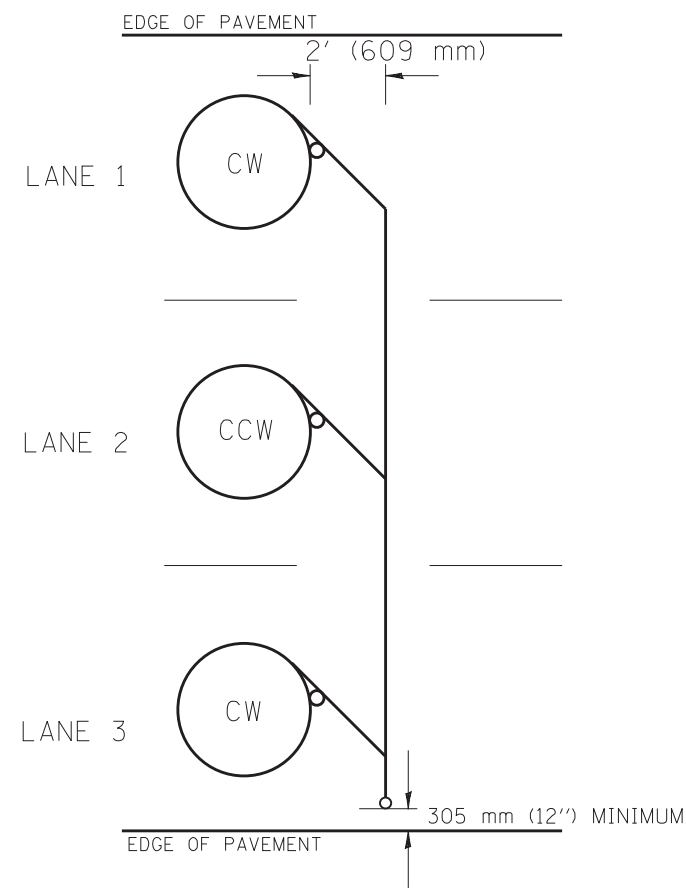
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F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

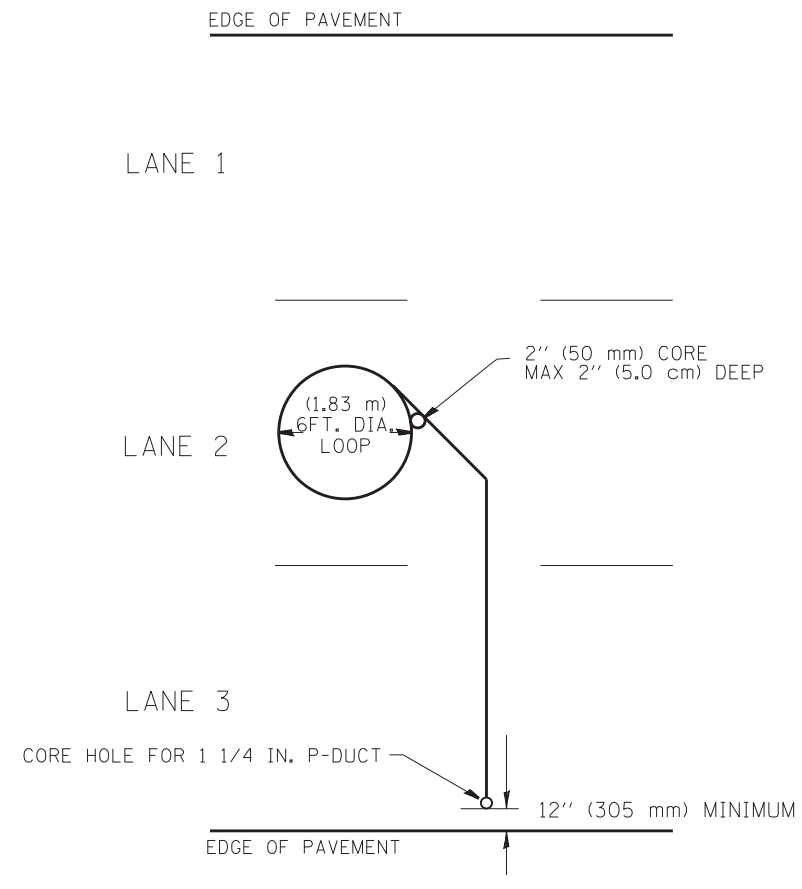
BACK VIEW OF TONE RACK



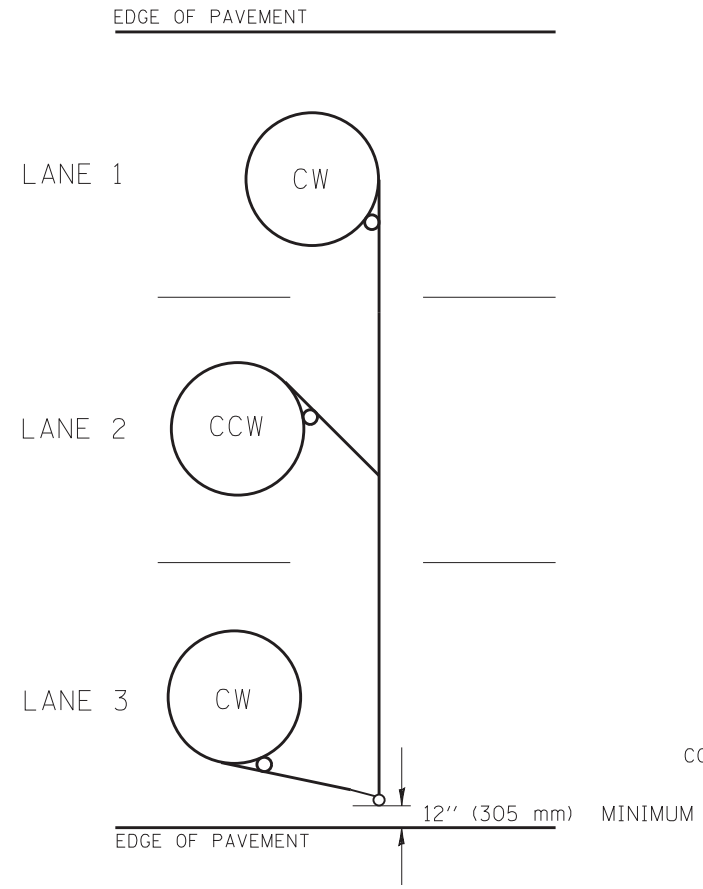
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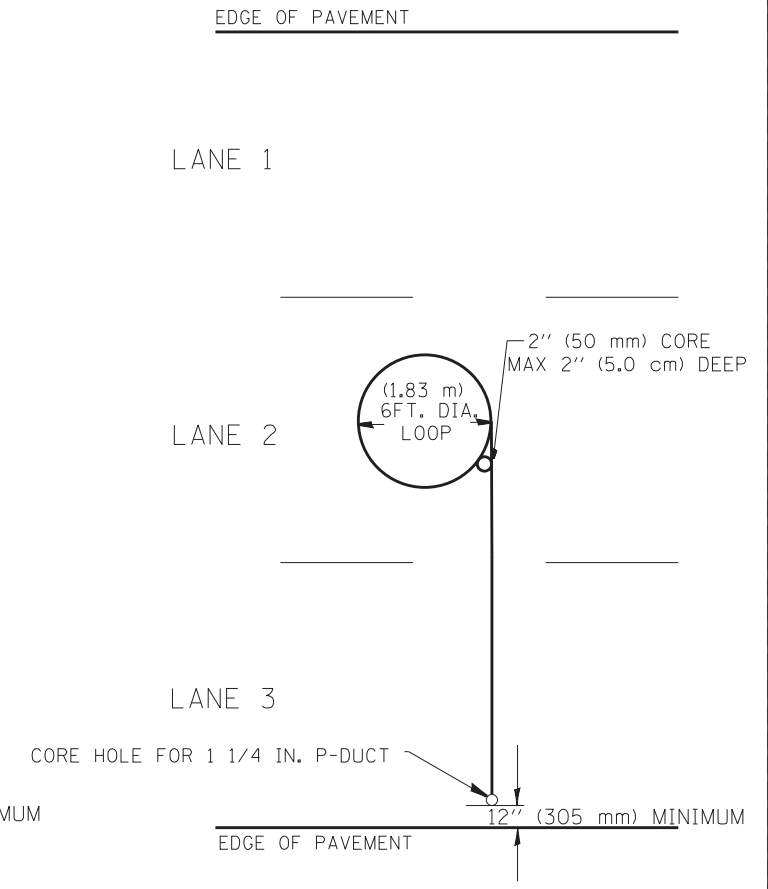
TYPICAL 6' (1.83 m) DIA. INDUCTION LOOP CORE DRILL
LAYOUT FOR MULTIPLE LANE ROADWAY



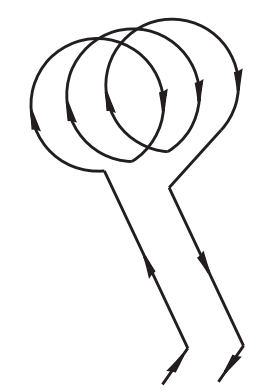
TYPICAL 6' (1.83 m) DIA. INDUCTION LOOP
LAYOUT FOR LANE 2



TYPICAL 6' (1.83 m) DIA. INDUCTION LOOP CORE DRILL
LAYOUT FOR MULTIPLE LANE ROADWAY



TYPICAL 6' (1.83 m) DIA. INDUCTION LOOP
LAYOUT FOR LANE 2



WIRING DETAILS

NOTES

1. EACH LOOP SHALL BE SPLICED TO A 4-C NO.18 TWISTED SHIELDED LEAD IN WHEN 150' (45 m) OR MORE FROM CABINET.
2. LOOPS SHALL BE SPLICED IN HANDHOLES ONLY, OTHERWISE WRITTEN PERMISSION SHALL BE OBTAINED FROM TSC ENGINEER.
3. LOOPS SHALL NOT BE SPLICED IN SERIES.
4. EACH LOOP LEAD IN SHALL BE IDENTIFIED AND PERMANENTLY COLOR CODED IN THE COREHOLE, HANDHOLE & CABINETS THRU WHICH THEY ENTER OR PASS AND TAGGED WITH THE CORRECT NOMENCLATURES.

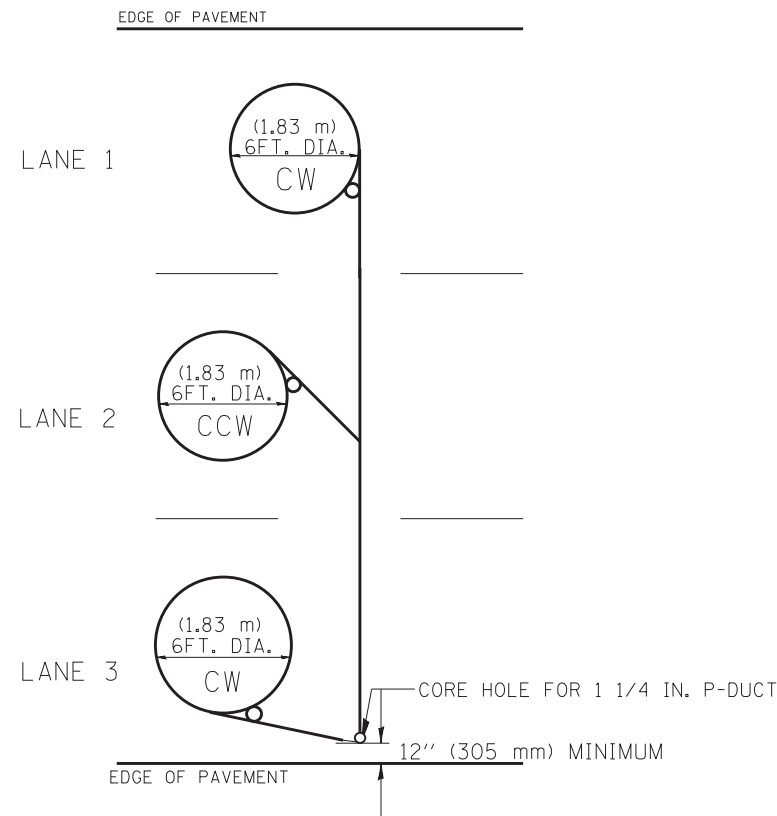
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

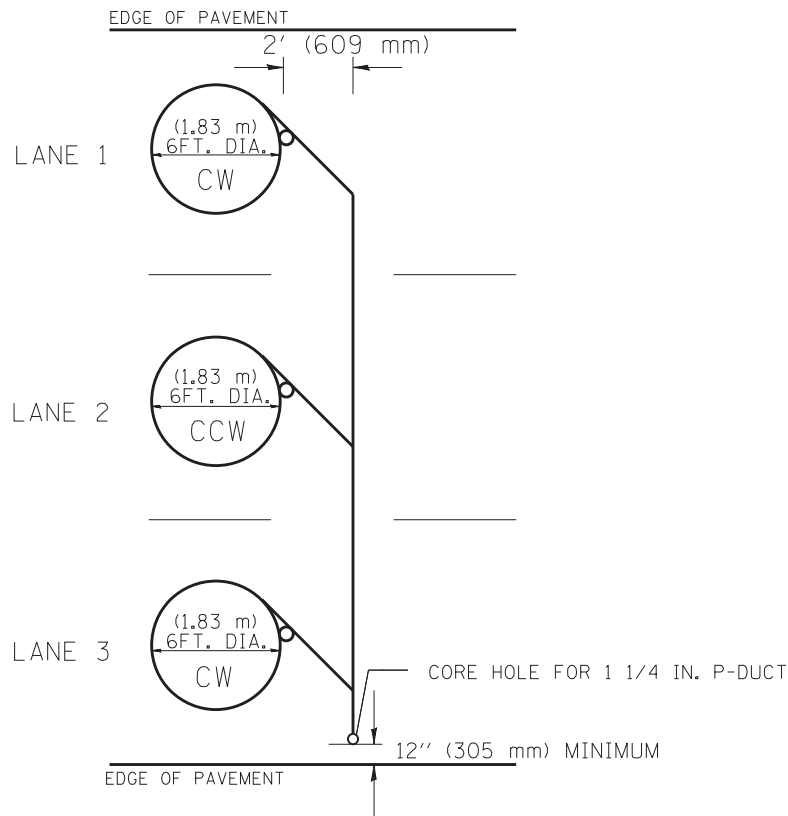
EXISTING ROUND LOOP
INSTALLATION

SCALE: NONE	SHEET NO.	OF SHEETS	STA.	TO STA.
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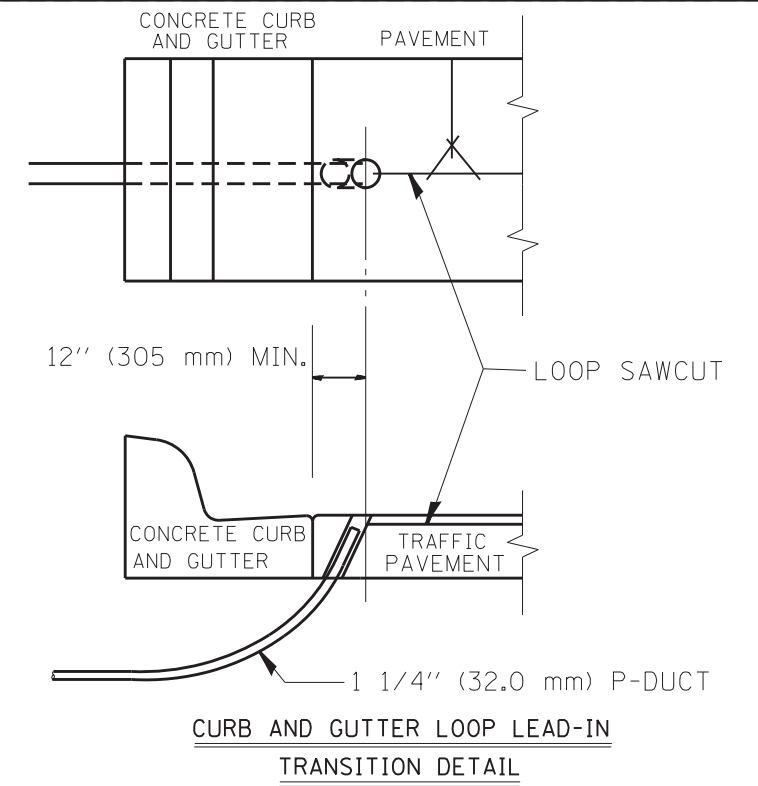
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			404	371
CONTRACT NO.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



TYPICAL 6FT. (1.83 m) DIA. INDUCTION LOOP CORE DRILL
LAYOUT FOR MULTIPLE LANE ROADWAY



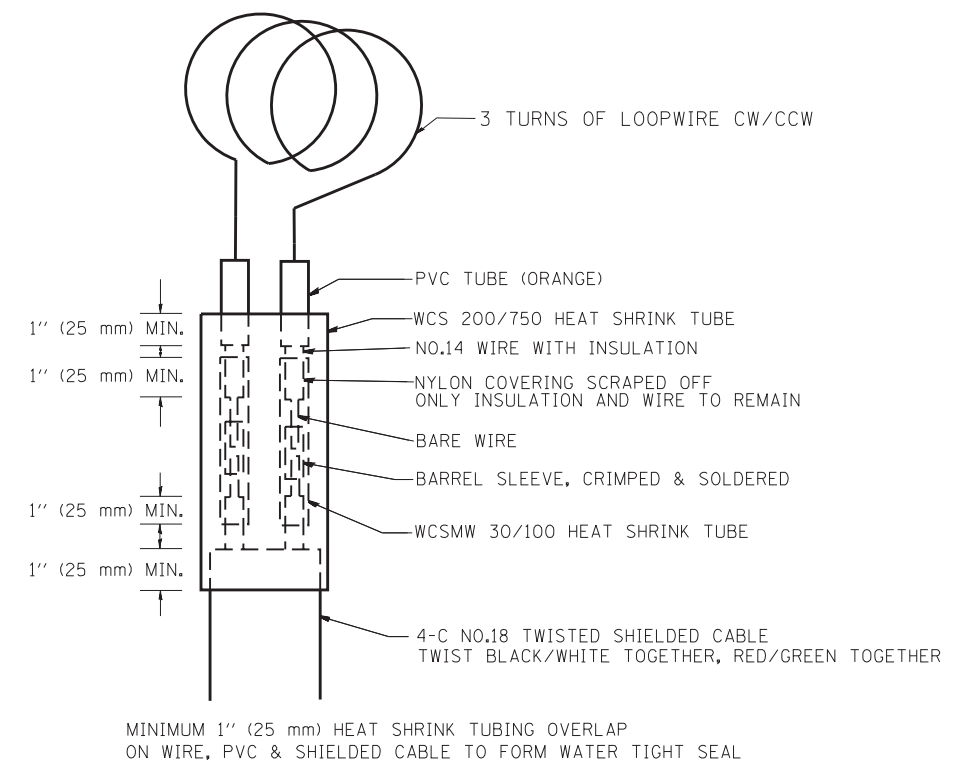
TYPICAL 6FT. (1.83 m) DIA. INDUCTION LOOP CORE DRILL
LAYOUT FOR MULTIPLE LANE ROADWAY



CURB AND GUTTER LOOP LEAD-IN
TRANSITION DETAIL

NOTES

1. EACH LOOP SHALL BE SPLICED TO A 4-C NO.18 TWISTED SHIELDED LEAD IN WHEN 150FT. (45 m) OR MORE FROM CABINET.
2. LOOPS SHALL BE SPLICED IN HANDHOLES ONLY, OTHERWISE WRITTEN PERMISSION SHALL BE OBTAINED FROM TSC ENGINEER.
3. LOOPS SHALL NOT BE SPLICED IN SERIES.
4. EACH LOOP LEAD IN SHALL BE IDENTIFIED AND PERMANENTLY COLOR CODED IN THE COREHOLE, HANDHOLE & CABINETS THRU WHICH THEY ENTER OR PASS AND TAGGED WITH THE CORRECT NOMENCLATURES.



LOOP SPLICING REQUIREMENTS

FILE NAME =	USER NAME = mezag	DESIGNED - R.L.	REVISED - 6/94
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	PLOT DATE = 7/26/2012	DATE - 6-22-94	REVISED -

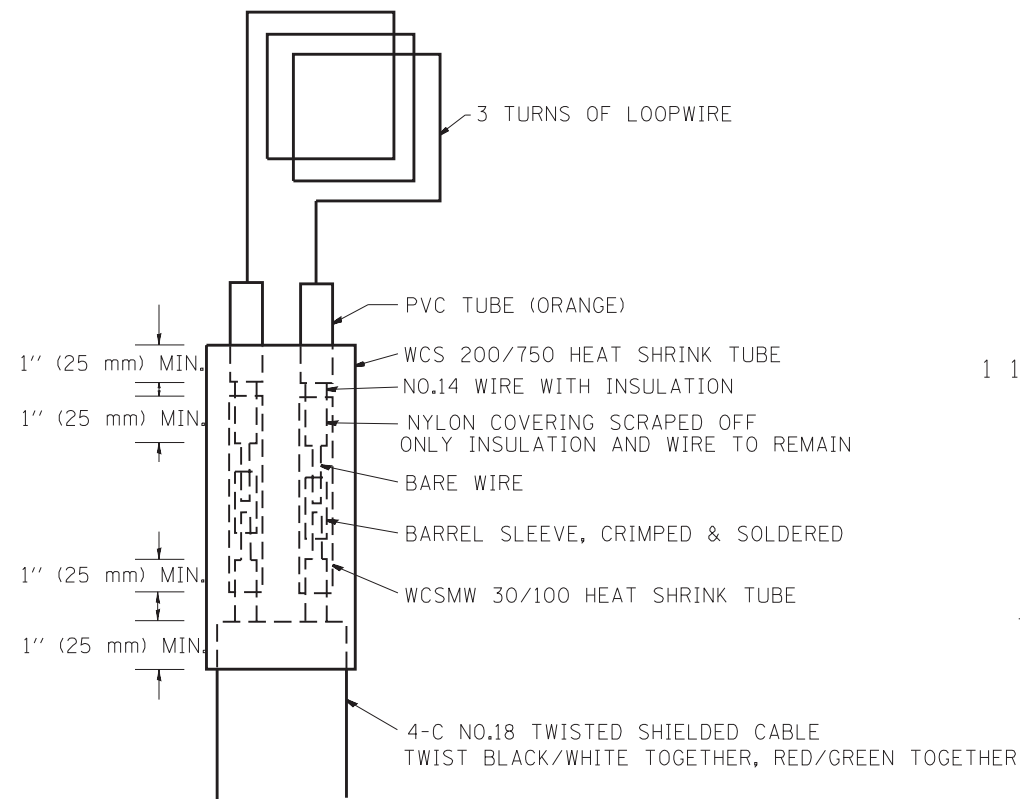
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

EXISTING
ROUND INDUCTION LOOP
TYPICALS

SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			404	372
CONTRACT NO.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

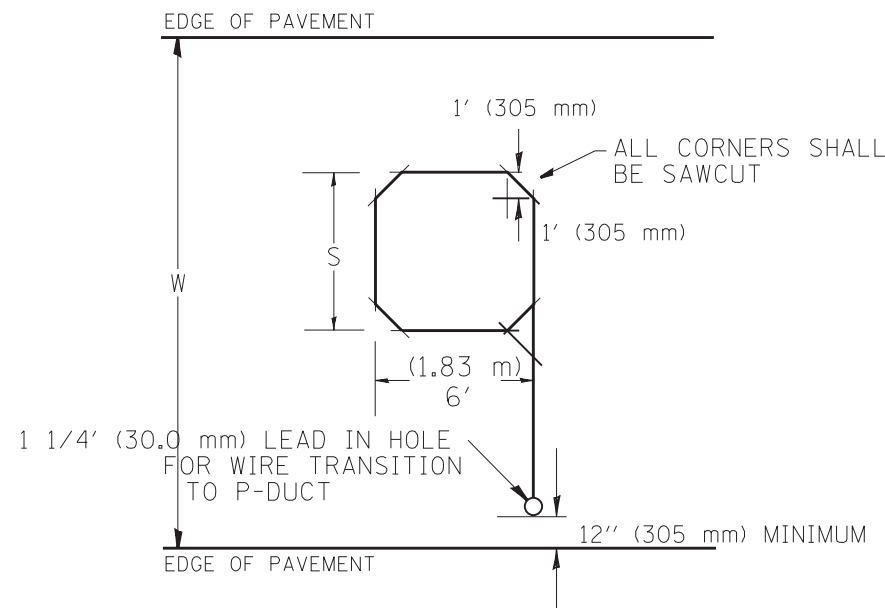
TRAFFIC SYSTEMS CENTER (TY-1TSC-418#2)



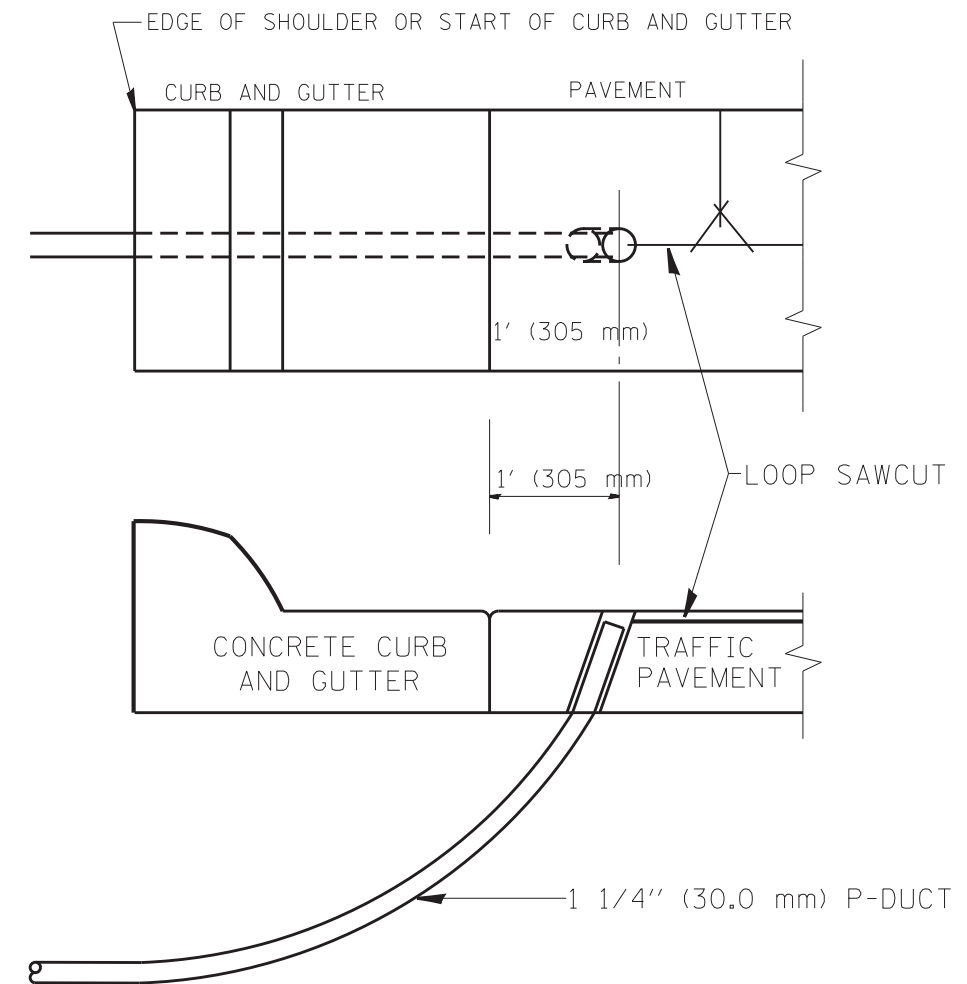
MINIMUM 1" (25 mm) HEAT SHRINK TUBING OVERLAP ON WIRE, PVC & SHIELDED CABLE TO FORM WATER TIGHT SEAL

LOOP SPLICING REQUIREMENTS

WIDTH (W)	WIDTH (S)
12' (3.7 m)	8' (2.5 m)
13' (4.0 m)	9' (2.8 m)
14' (4.3 m)	10' (3.1 m)
15' (4.6 m)	11' (3.4 m)
16' (4.9 m)	12' (3.7 m)
17' (5.2 m)	13' (4.0 m)
18' (5.5 m)	14' (4.3 m)
19' (5.8 m)	15' (4.6 m)
20' (6.1 m)	18' (4.9 m)
21' (6.4 m)	17' (5.2 m)
22' (6.7 m)	18' (5.5 m)
23' (7.0 m)	19' (5.8 m)
24' (7.3 m)	20' (6.1 m)
25' (7.6 m)	21' (6.4 m)



TYPICAL "S" FT. BY 6' (1.83 m) INDUCTION LOOP SAWCUT LAYOUT FOR RAMPS

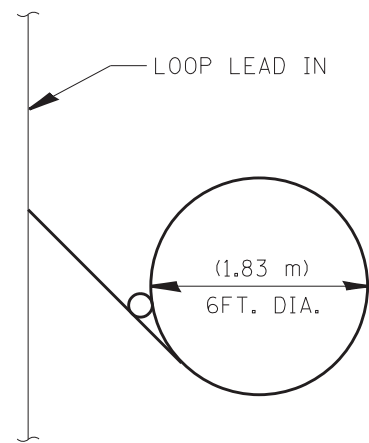


CURB AND GUTTER LOOP LEAD-IN TRANSITION DETAIL

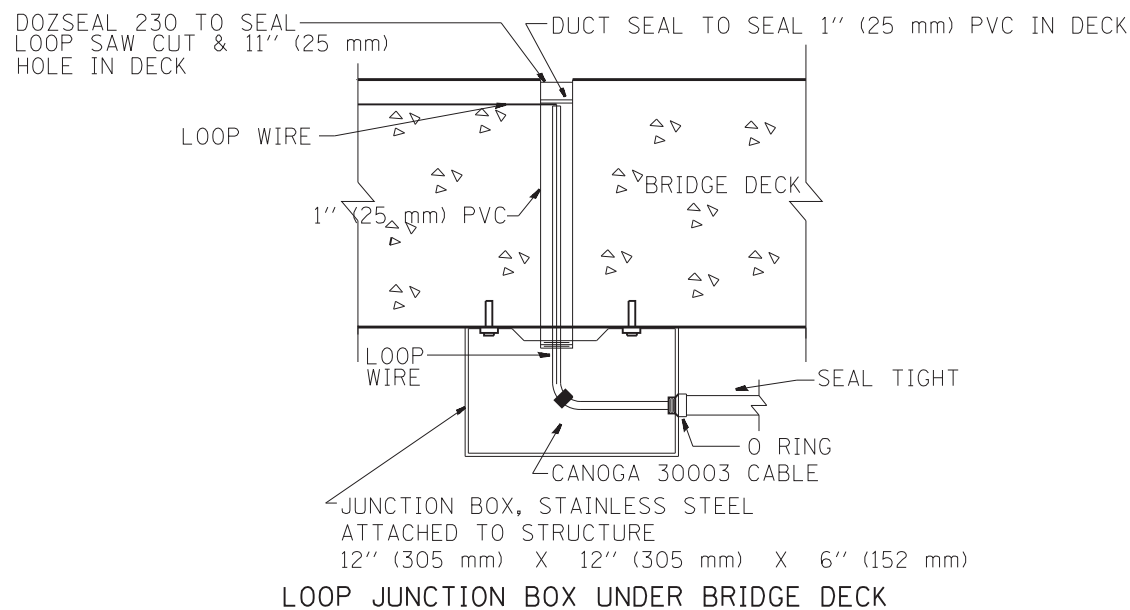
NOTES

1. EACH LOOP SHALL BE SPLICED TO A 4-C NO.18 TWISTED SHIELDED LEAD IN WHEN 150' (45 m) OR MORE FROM CABINET.
2. LOOPS SHALL BE SPLICED IN HANDHOLES ONLY, OTHERWISE WRITTEN PERMISSION SHALL BE OBTAINED FROM TSC ENGINEER.
3. LOOPS SHALL NOT BE SPLICED IN SERIES.
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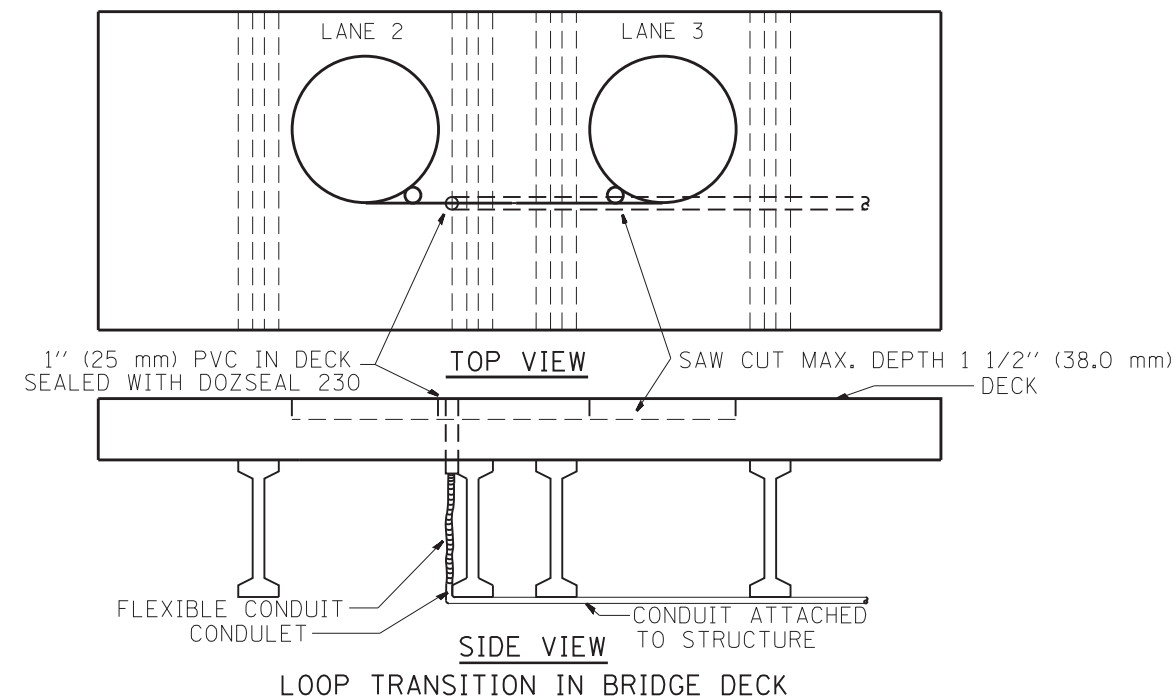
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		DATE - 6-22-94	REVISED - 10/96										



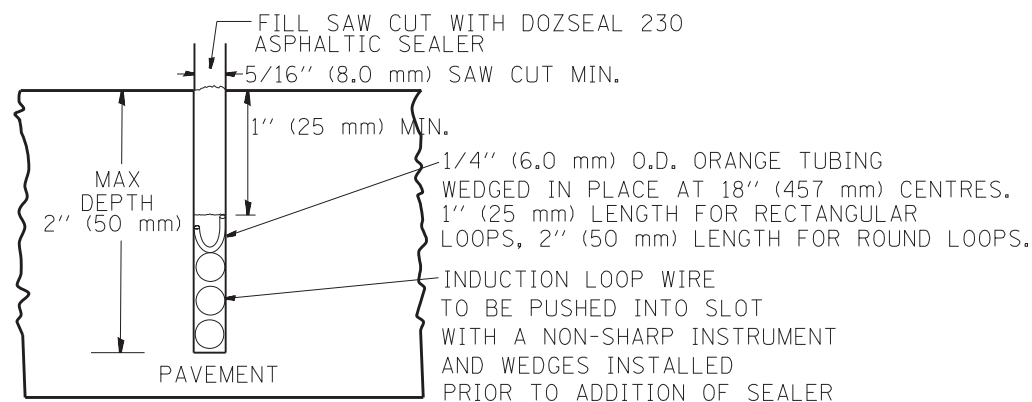
TYPICAL LOOP SAWCUT LAYOUT



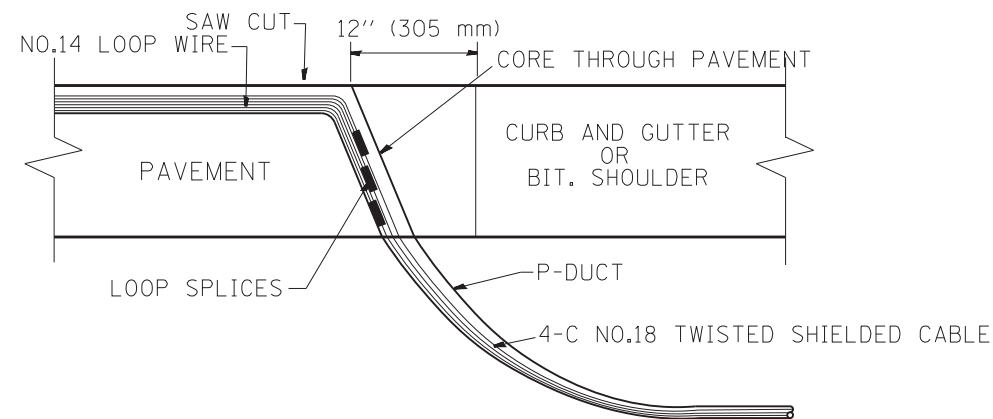
LOOP JUNCTION BOX UNDER BRIDGE DECK



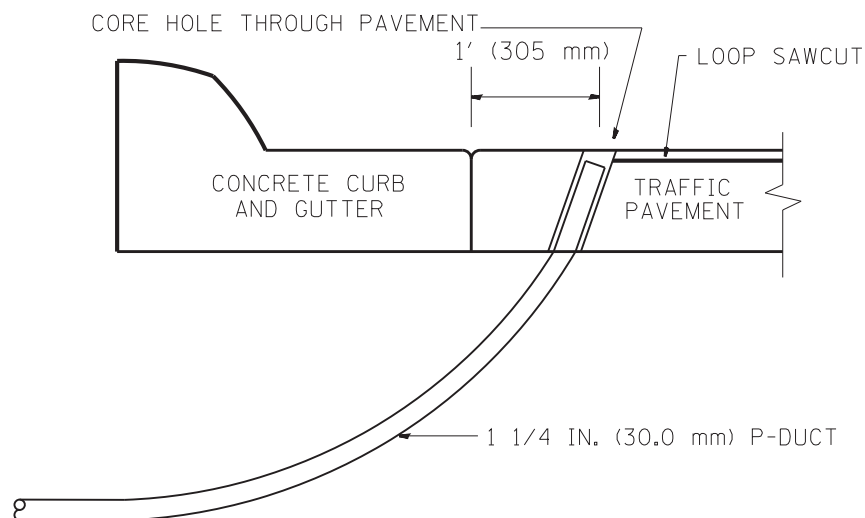
LOOP TRANSITION IN BRIDGE DECK



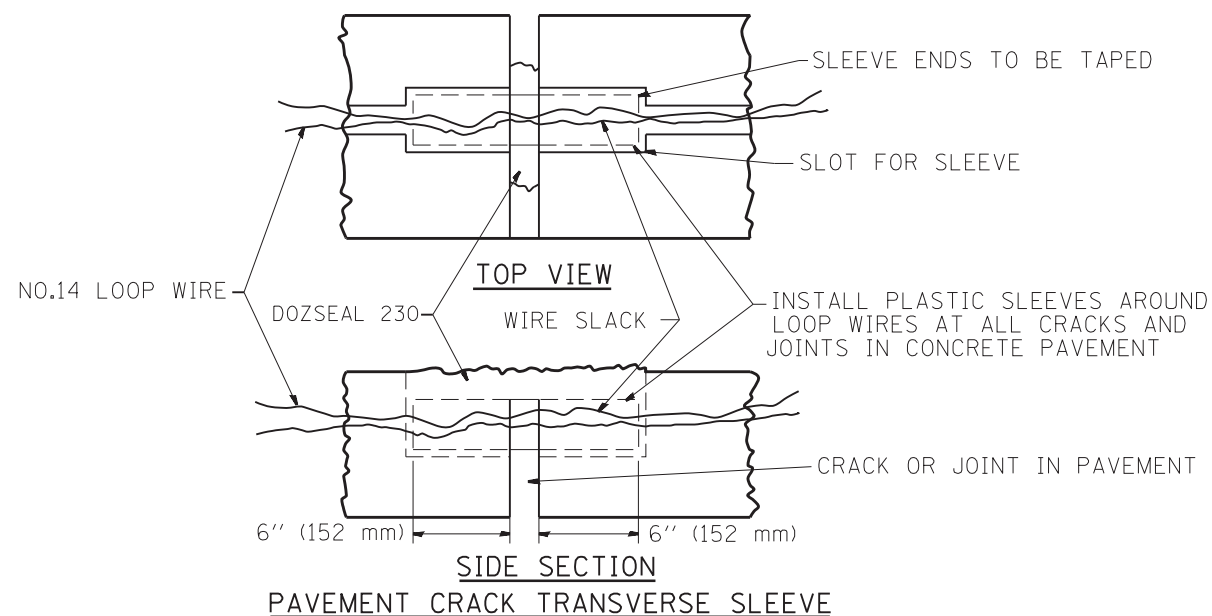
LOOP CROSS SECTION IN PAVEMENT



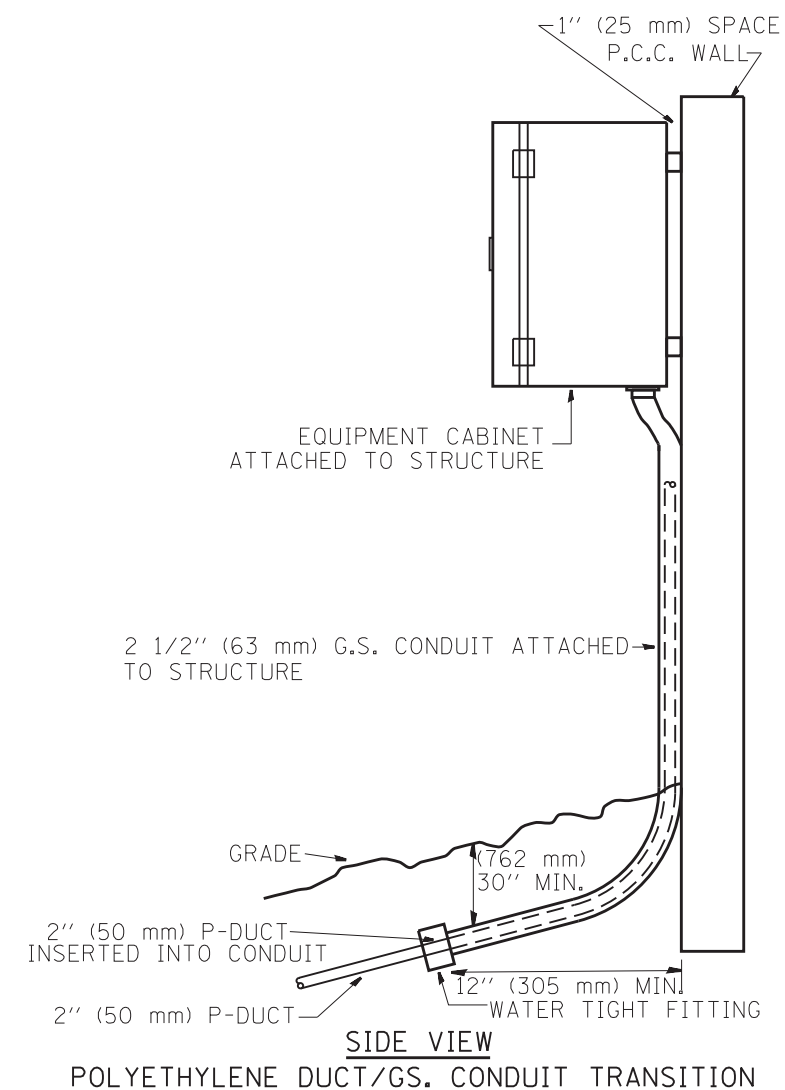
MULTIPLE LOOP SPLICING



SIDE SECTION LOOP LEAD-IN TRANSITION DETAIL

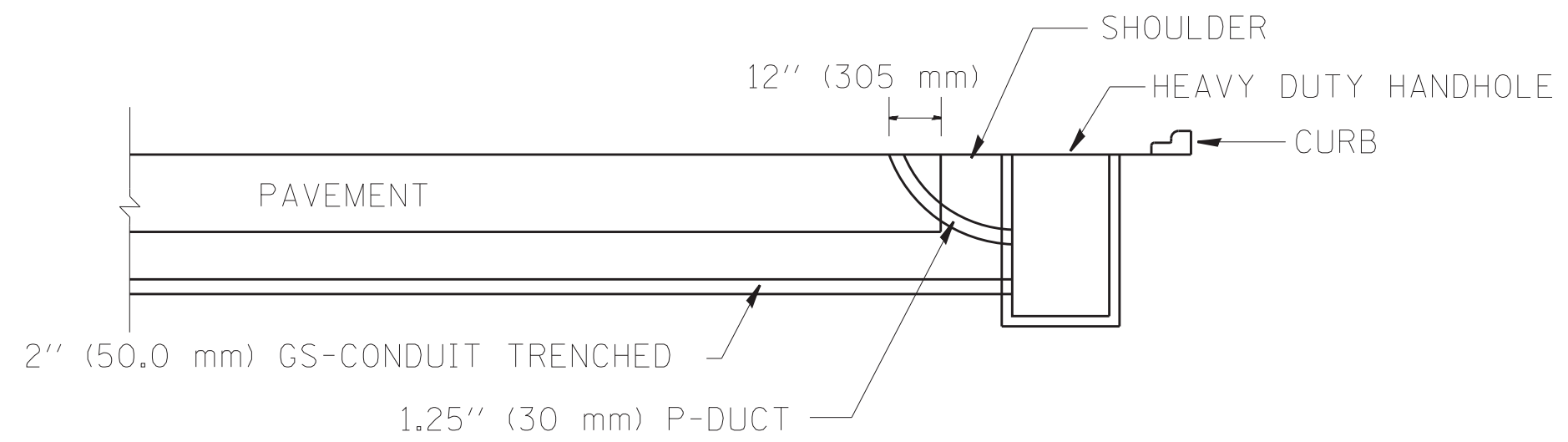
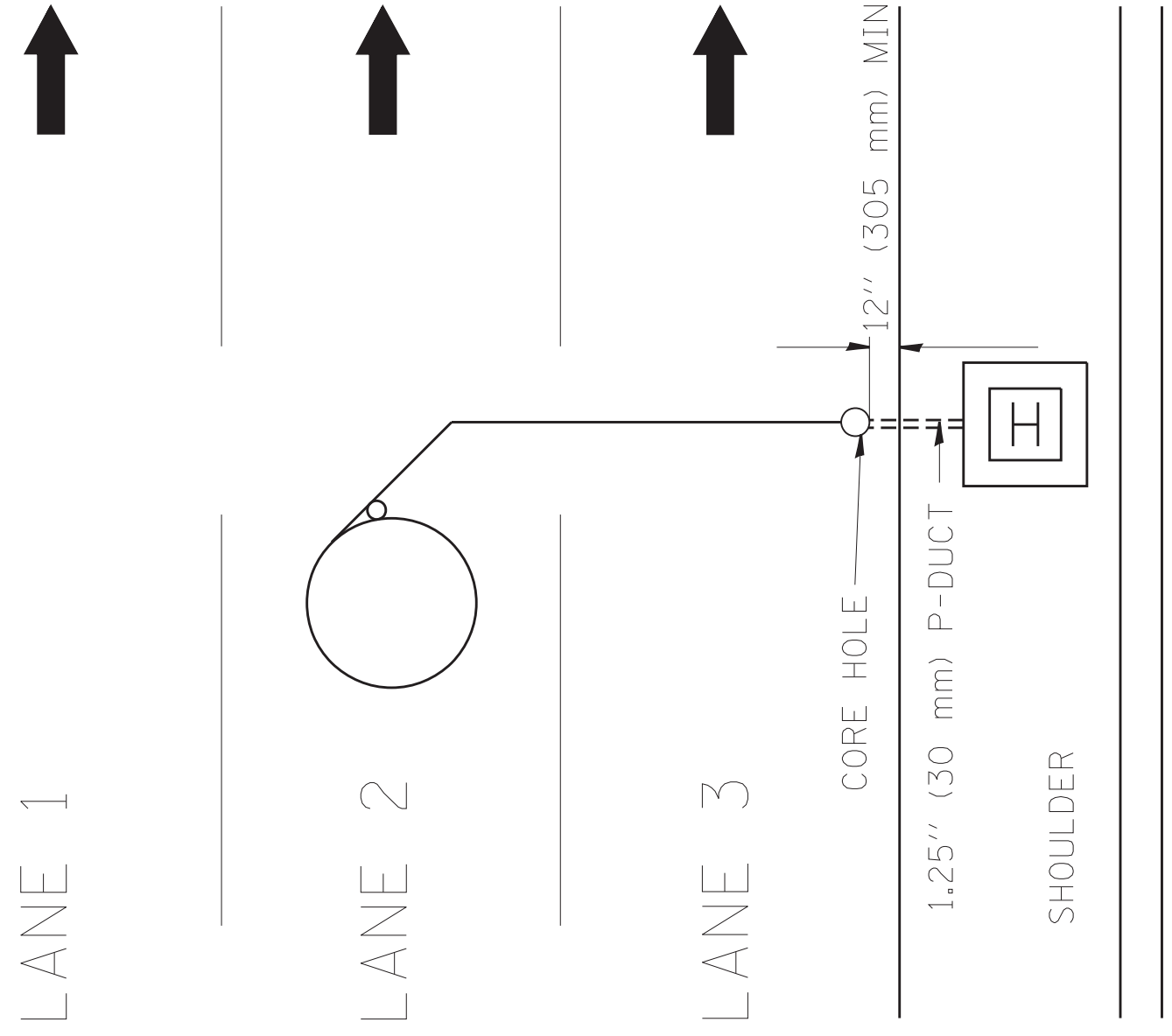


PAVEMENT CRACK TRANSVERSE SLEEVE

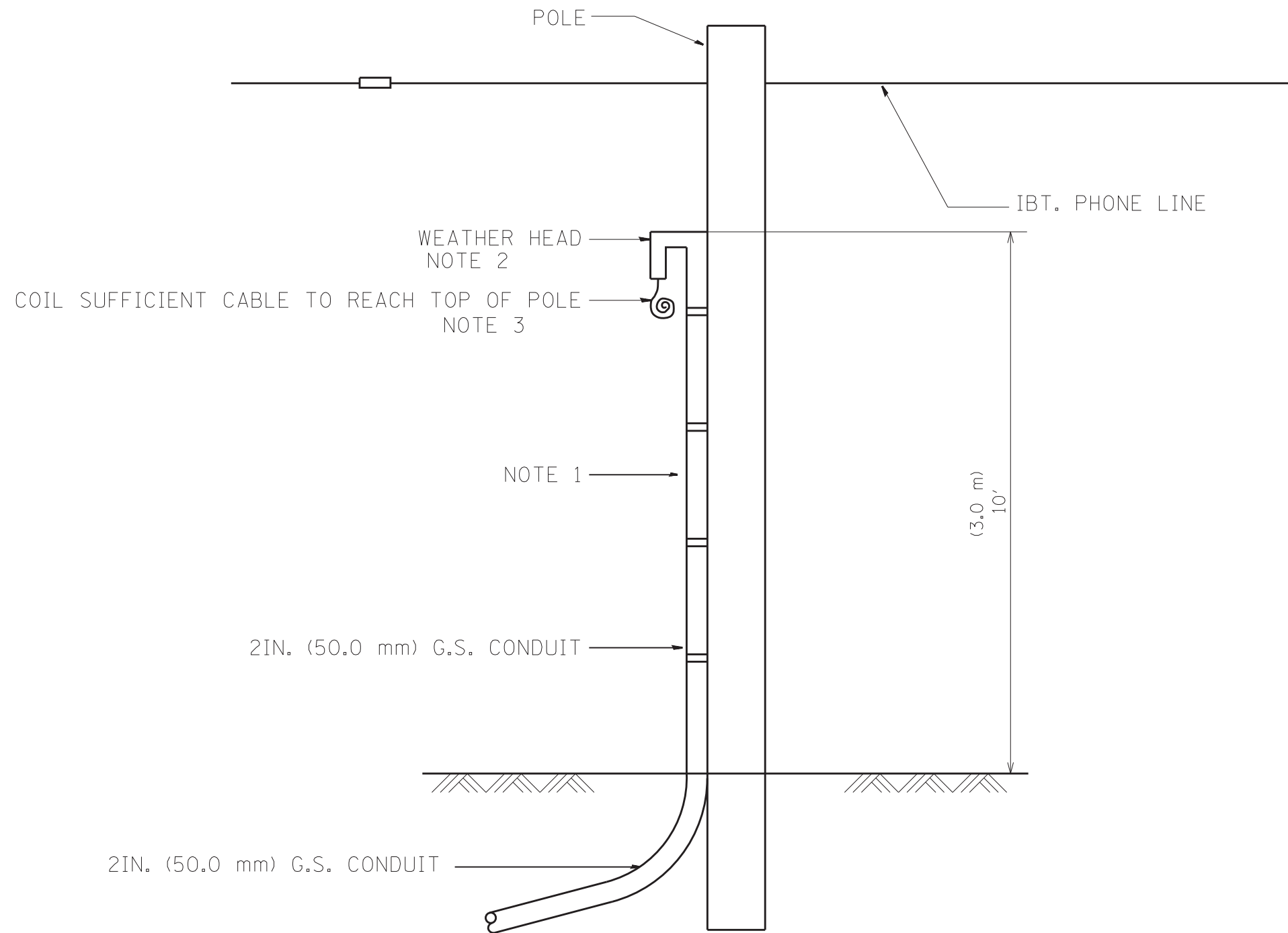


POLYETHYLENE DUCT/GS. CONDUIT TRANSITION

FILE NAME =	USER NAME = mezag	DESIGNED - R.L.	REVISED - 06/94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC SYSTEMS CENTER	LOOP, CONDUIT & DUCT INSTALLATION DETAILS			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
es:\pw\work\p\idot\mezag\d0287541\TSCTYP.dgn	PLOT SCALE = 100.0000' / 1"	DRAWN - G.M.	REVISED - 03/95								404	374
	PLOT DATE = 7/26/2012	CHECKED - R.L.	REVISED - 11/95		SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.			CONTRACT NO.				
		DATE - 06/22/94	REVISED - 10/96		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							



FILE NAME =	USER NAME = mezag	DESIGNED - R.L.	REVISED - R.L.	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC SYSTEMS CENTER	DIVE HOLE DUCT SYSTEM			F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p\dot\mezag\d0287541\TSCTYP.dgn	DRAWN - G.M.	REVISED - T.C.								404	376	
PLOT SCALE = 100.0000' / in.	CHECKED - R.L.	REVISED -	CONTRACT NO.									
PLOT DATE = 7/26/2012	DATE - 11/7/95	REVISED -	SCALE: NONE		SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		

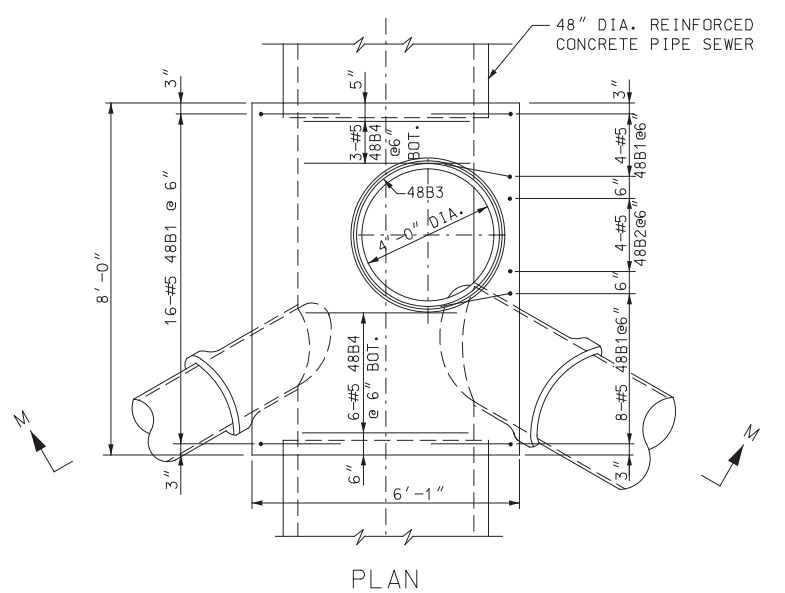


TELEPHONE SERVICE ON POLE

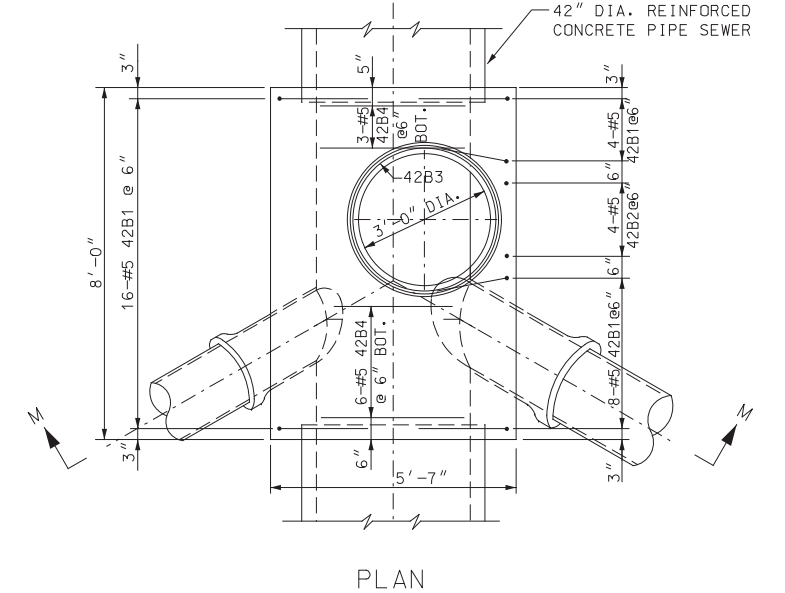
NOTES:

1. 2IN. (50 mm) DIAMETER 10 FT. (3.0 m) LONG G.S. CONDUIT SECTION, FURNISHED AND INSTALLED UNDER PAY ITEM FOR TELEPHONE SERVICE INSTALLATION.
2. WEATHER HEAD SHALL BE CONSIDERED INCIDENTAL TO TELEPHONE SERVICE INSTALLATION PAY ITEM.
3. SEE DRAWINGS FOR CABLE SIZE AND QUANTITY.

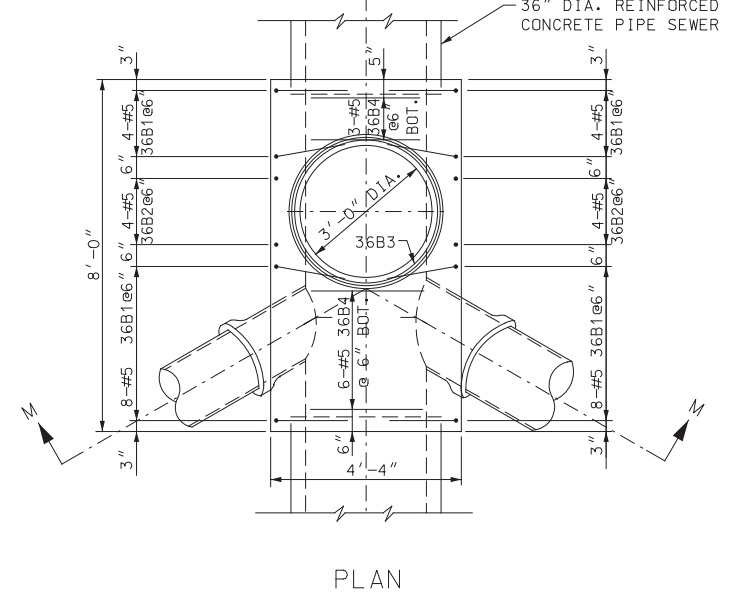
FILE NAME =	USER NAME = mezag	DESIGNED - R.L.	REVISED - 06/94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC SYSTEMS CENTER	TELEPHONE INSTALLATION DETAILS			F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - G.M.	REVISED -								404	377
		CHECKED - R.L.	REVISED -					CONTRACT NO.				
		DATE - 06/22/94	REVISED -		SCALE: NONE	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	



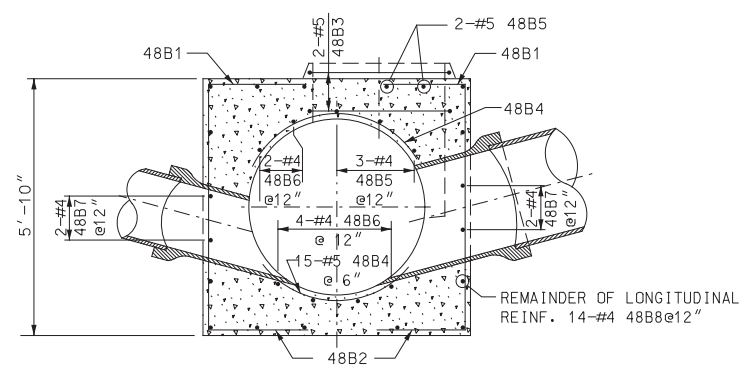
PLAN



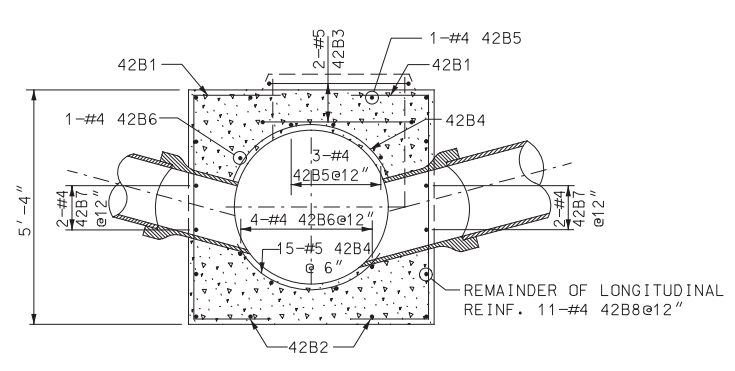
PLAN



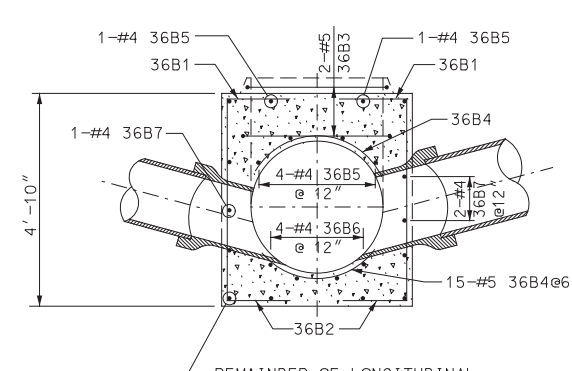
PLAN



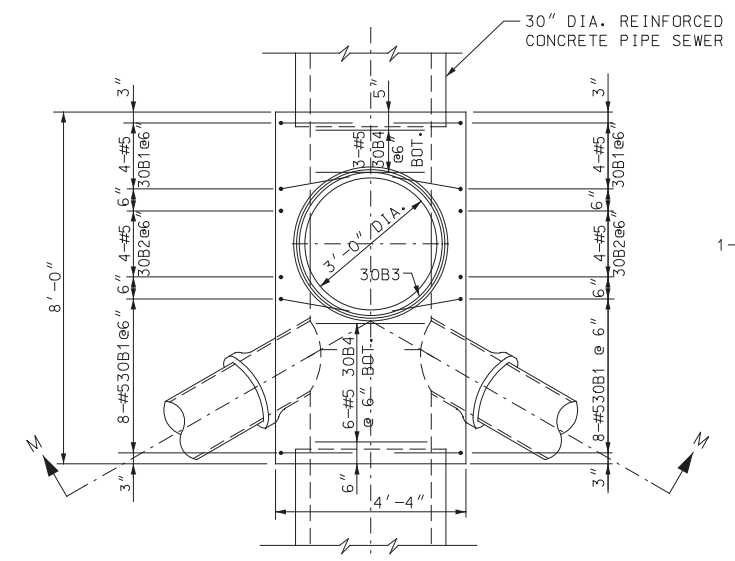
SECTION M-M
48" DIA. SEWER



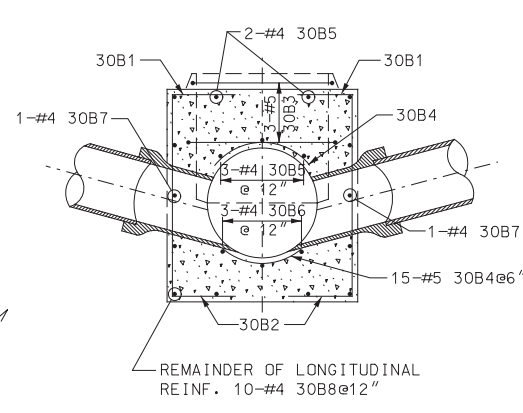
SECTION M-M
42" DIA. SEWER



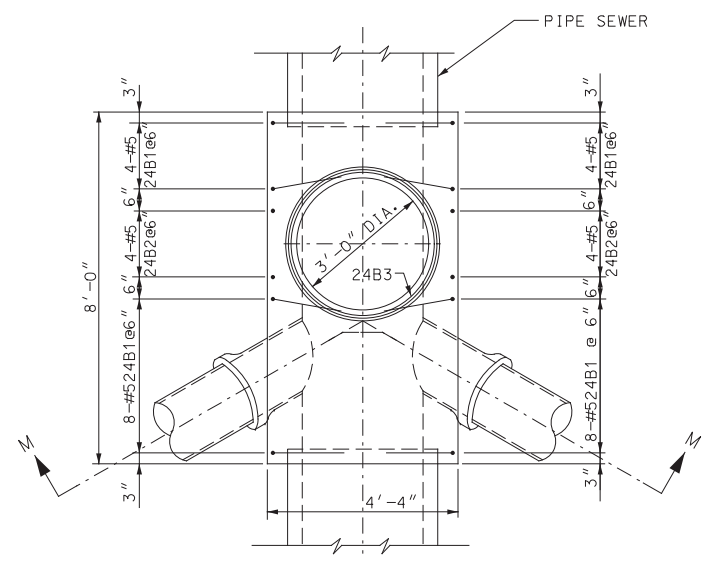
SECTION M-M
36" DIA. SEWER



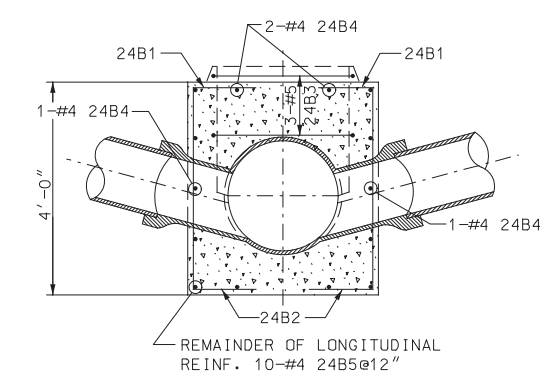
PLAN



SECTION M-M



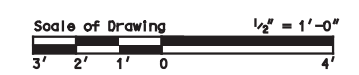
PLAN



SECTION M-M
24" DIA. SEWERS & SMALLER

DRAWN BY: SBW
DESIGNED BY:
CHECKED BY:

NOTES: FOR ADDITIONAL DETAILS OF THE MANHOLES SEE TYPE "B" MANHOLES DETAIL
FOR STRUCTURAL NOTES SEE REINFORCEMENT FOR TYPE "A" AND TYPE "B" MANHOLE BASES DETAIL



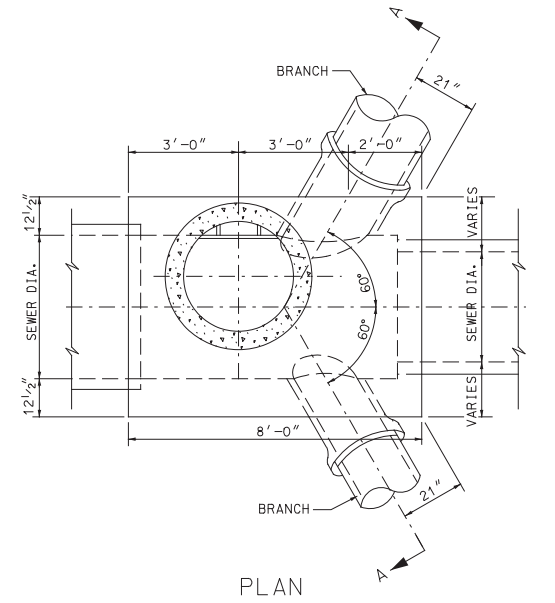
DATE	DESCRIPTION
12/7/09	APPROVED PLAN

CITY OF CHICAGO
DEPARTMENT OF WATER MANAGEMENT
BUREAU OF ENGINEERING SERVICES

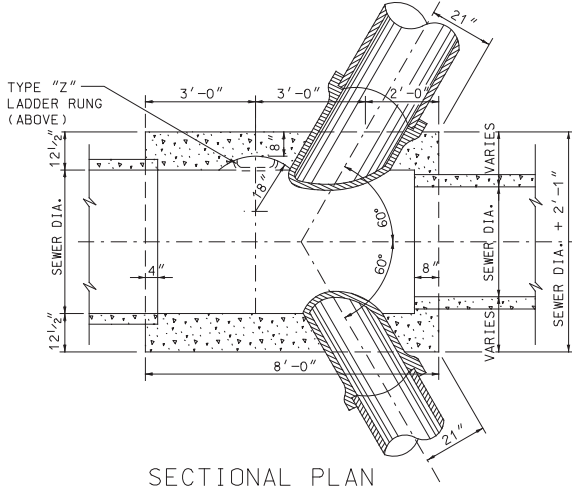
REINFORCEMENT FOR TYPE "B"
MANHOLE BASES

SCALE: AS SHOWN
SCALE: NONE

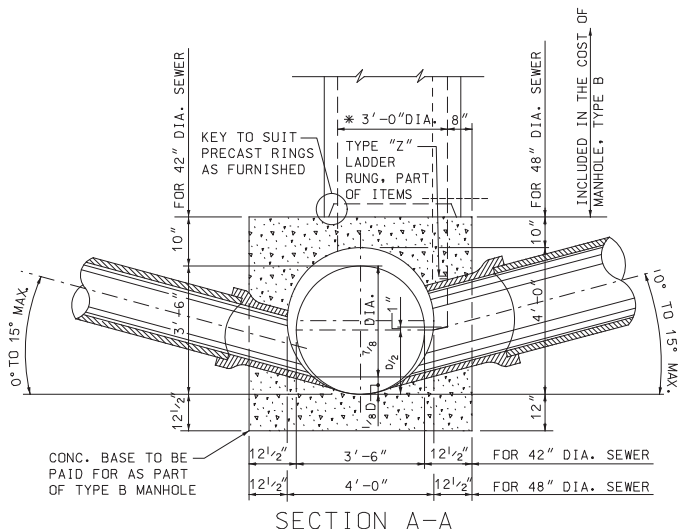
CONTRACT SHEET NO. X 404 378



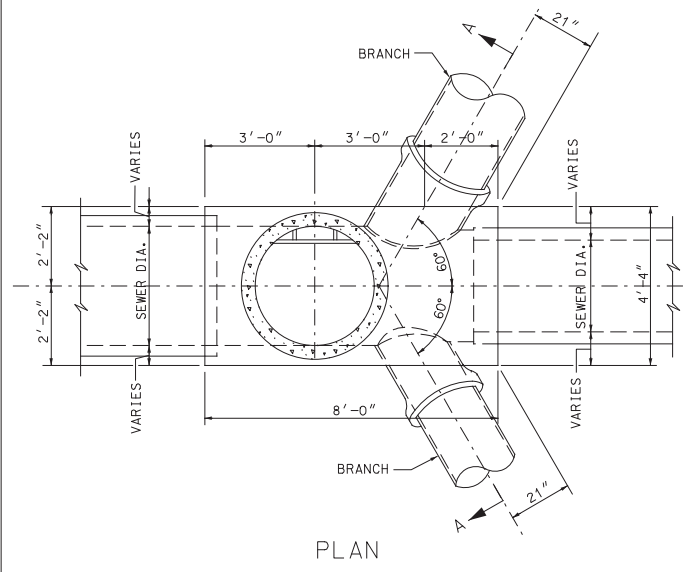
PLAN



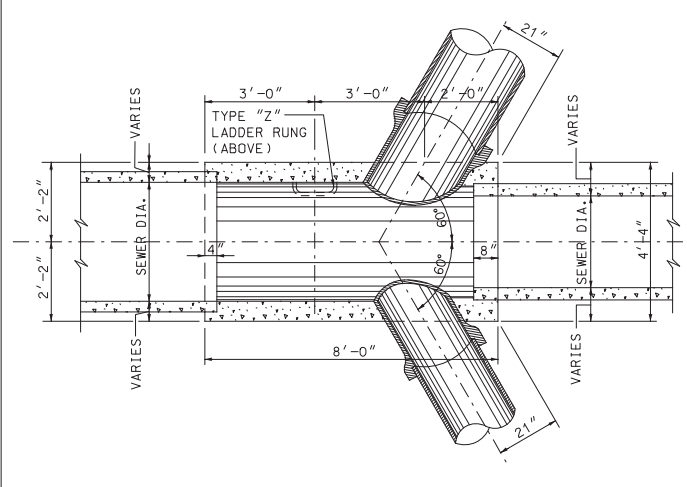
SECTIONAL PLAN



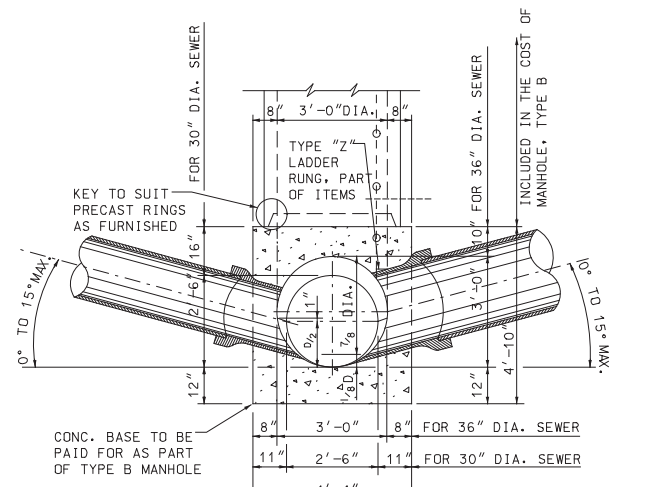
SECTION A-A
TYPE "B" MANHOLE
FOR SEWERS 48" DIA. & 42" DIA.
PART OF ITEM 8B



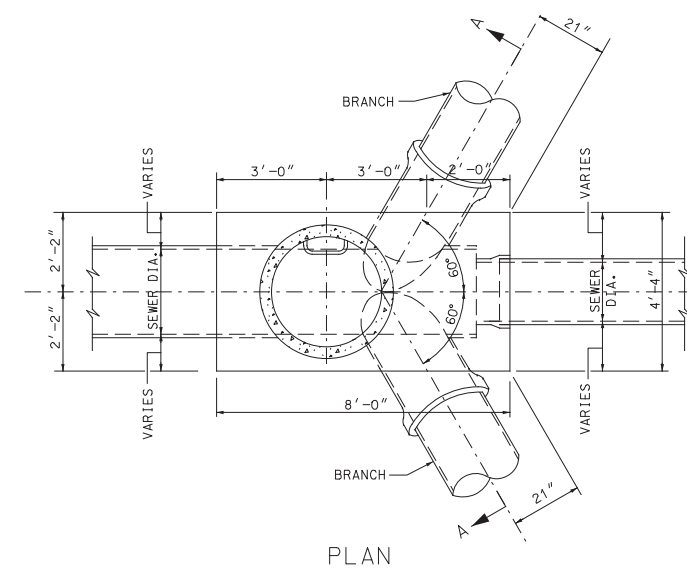
PLAN



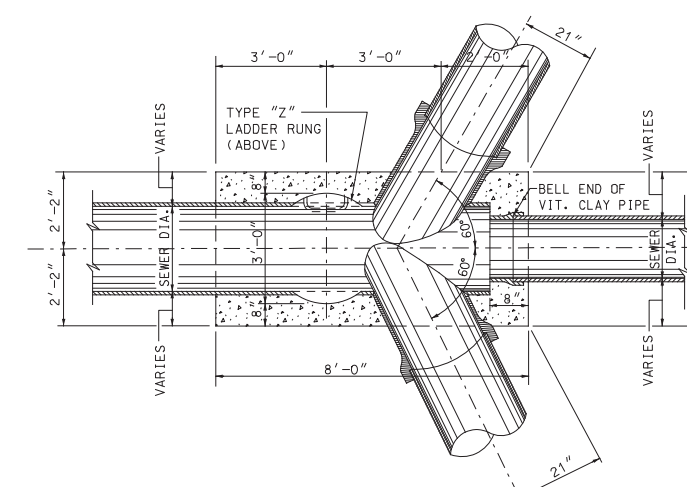
SECTIONAL PLAN



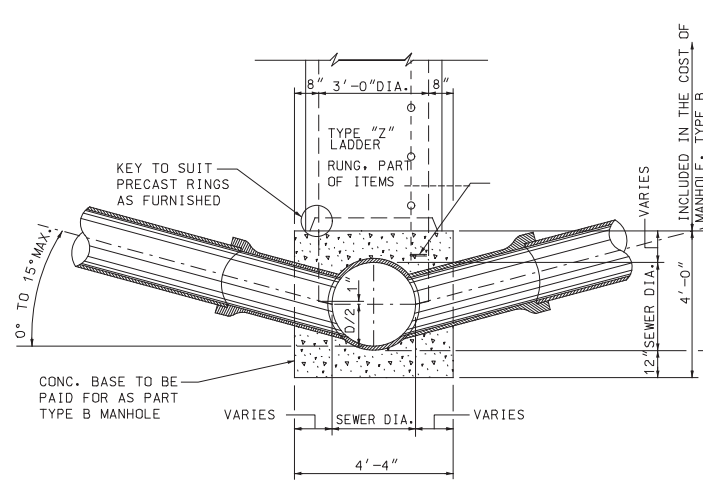
SECTION A-A
TYPE "B" MANHOLE
FOR SEWERS 36" DIA. & 30" DIA.
PART OF ITEM 8B



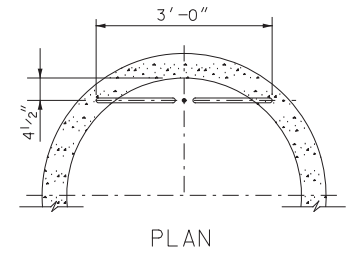
PLAN



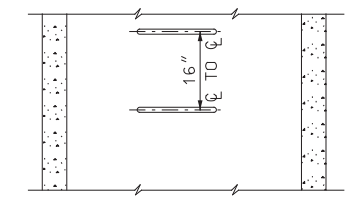
SECTIONAL PLAN



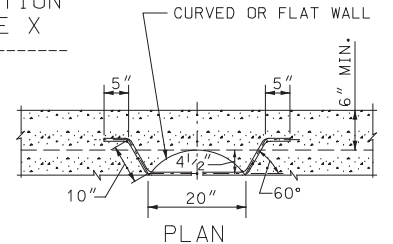
SECTION A-A
TYPE "B" MANHOLE
FOR SEWERS 24" DIA. & SMALLER
PART OF ITEM 8B



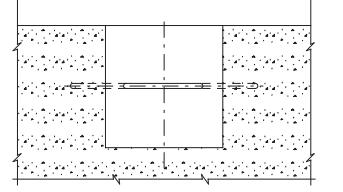
PLAN



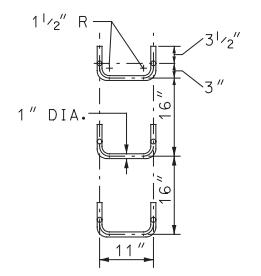
ELEVATION
TYPE X
ITEM -----



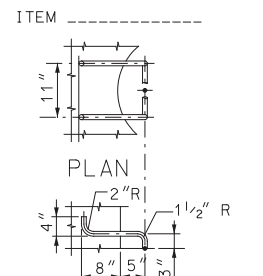
PLAN



ELEVATION
TYPE Y
ITEM -----



SPACING



ELEVATION

HANDHOLD-TYPE Z RUNG
ITEM -----
STANDARD LADDER RUNGS
ITEM -----

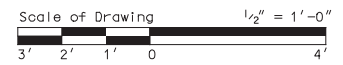
ALL LADDER RUNGS MUST BE ALUMINUM AS SPECIFIED IN THE SPECIFICATIONS. RUNGS MUST BE 1" DIAMETER OR OF A SHAPE HAVING AN EQUIVALENT CROSS-SECTIONAL AREA.

CITY OF CHICAGO
DEPARTMENT OF WATER MANAGEMENT
BUREAU OF ENGINEERING SERVICES

TYPE "B" MANHOLES

DRAWN BY SBW
DESIGNED BY
CHECKED BY

NOTES FOR TYPE "B" MANHOLES:
STUBS IN MANHOLE BASES TO BE PAID FOR AS PART OF THE TYPE B MANHOLE.
FOR REINFORCEMENT STEEL DETAILS OF MANHOLE BASE SEE DETAIL FOR REINFORCEMENT FOR TYPE B MANHOLE



DATE	DESCRIPTION
12/7/09	APPROVED PLAN

SCALE: AS SHOWN
SCALE: NONE

CONTRACT SHEET NO. X 404 379

Structural Notes:

Placing of Concrete - Concrete shall be placed in accordance with the method outlined in the Specifications.

Construction Joints - Joints not indicated on the Drawings shall be so made and located as not to impair the strength of the Structure and shall be approved by the Commissioner. Joints shall be constructed in accordance with the method outlined in the Specifications.

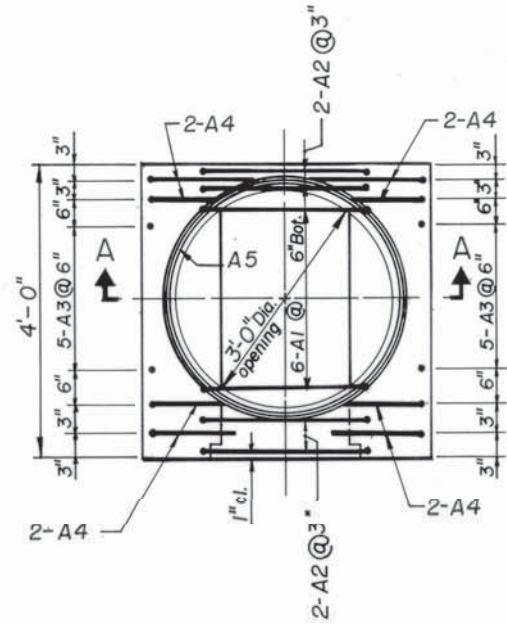
Concrete Protection for Reinforcement - All reinforcing steel shall have clear concrete covering as follows (unless otherwise noted):
 3" at exterior surfaces where concrete is deposited against the ground;
 2 1/2" at surfaces where concrete is formed but subsequently will be in contact with sewage; 2" at all other surfaces.

Reinforcing Steel - All reinforcing bars shall be accurately placed and securely supported by bar supports, spacers or high chairs. All laps in reinforcing steel shall be based upon the 1989ACI Building Code.

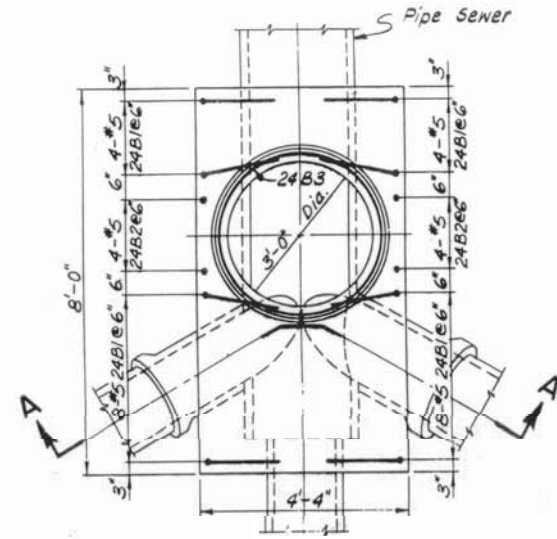
Unless otherwise noted, hooks and bends on bars shall conform to recommended details as given in the "Manual of Standard Practice", CR SI - 1990.

Following abbreviations are used to indicate the location of reinforcing bars:
 T. denotes Top N.F. denotes Near Face
 Bot. " Bottom F.F. " Far Face
 I.F. " Inside Face E.F. " Each Face
 O.F. " Outside Face E.W. " Each Way

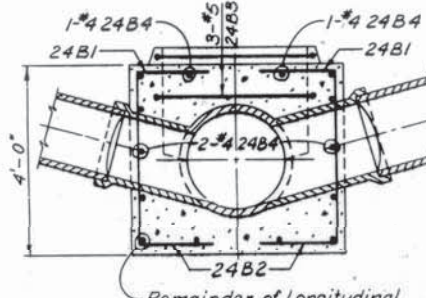
Placing Bar Supports - All reinforcing bars shall be supported, anchored and tied and shall conform to "Recommended Practice for placing Reinforcing Bars" 1986, Prepared by the Concrete Reinforcing Steel Institute.



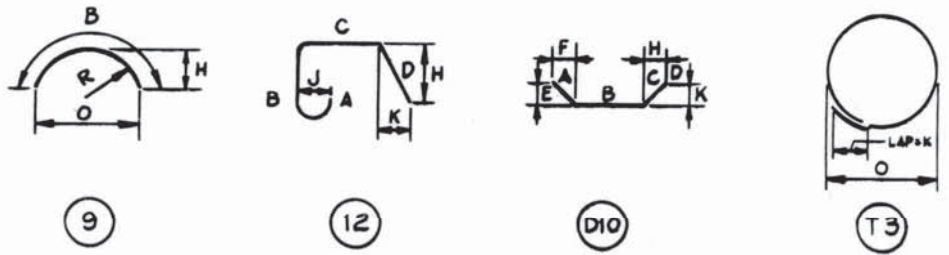
PLAN



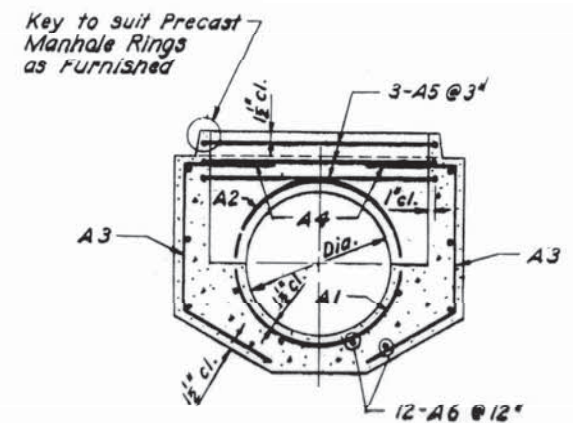
PLAN



SECTION A-A



Note:
 All Dimensions Are Out to Out of Bar.
 Bending Radii "R" to Outside of Bar.
 Numbers in Circles Denote Bar Type.



SECTION A-A

SCHEDULE OF REINFORCEMENT-ITEM 10

STRUCTURE	REINFORCEMENT BAR						BENDING DIMENSIONS										
	MARK	SIZE NO.	TYPE	LENGTH	NO. REQD.	WEIGHT LBS. EACH TOTAL	A	B	C	D	E	F	H	K	O	R	
24" DIA. & SMALLER	24B1	5	17	6'-7"	24	6.87 165		18"	3'-7"	18"							
	24B2	5	17	5'-0"	8	5.22 42		18"	3'-6"								
	24B3	5	T3	12'-7"	3	13.12 39								20"	3'-6"		
	24B4	5	Str.	3'-9"	4	3.91 16											
	24B5	4	Str.	7'-9"	10	5.18 52											
TOTAL						314											

TYPE "B" MANHOLE BASE FOR SEWERS 24" DIA. & SMALLER

SCHEDULE OF REINFORCEMENT-PART OF ITEMS 5

STRUCTURE	REINFORCEMENT BAR						BENDING DIMENSIONS												
	MARK	SIZE NO.	TYPE	LENGTH	NO. REQD.	WEIGHT - LBS. EACH TOTAL	A	B	C	D	E	F	G	H	J	K	O	R	
21" DIA. & SMALLER	24A1	6	9	3'-5"	6	8.13 51		3'-5"									15"	2'-3"	14"
	24A2	6	T3	3'-6"	7	14.02 98												22"	5'-4"
	24A3	6	12	3'-6"	10	3.85 37			2'-1"	17"					14"			8"	
	24A4	6	12	6'-9"	10	4.96 80		18"	2'-1"	17"					14"			8"	
	24A5	6	T3	11'-11"	3	12.83 37												20"	5'-5"
	24A6	4	STR.	6'-5"	12	3.12 37													
TOTAL						290													

TYPE "A" MANHOLE PRECAST BASE FOR SEWERS 21" DIA. & SMALLER

DRAWN BY Reproduction
 DESIGNED BY _____
 CHECKED BY _____

DATE	DESCRIPTION

CITY OF CHICAGO
 DEPARTMENT OF SEWERS
 ENGINEERING DIVISION

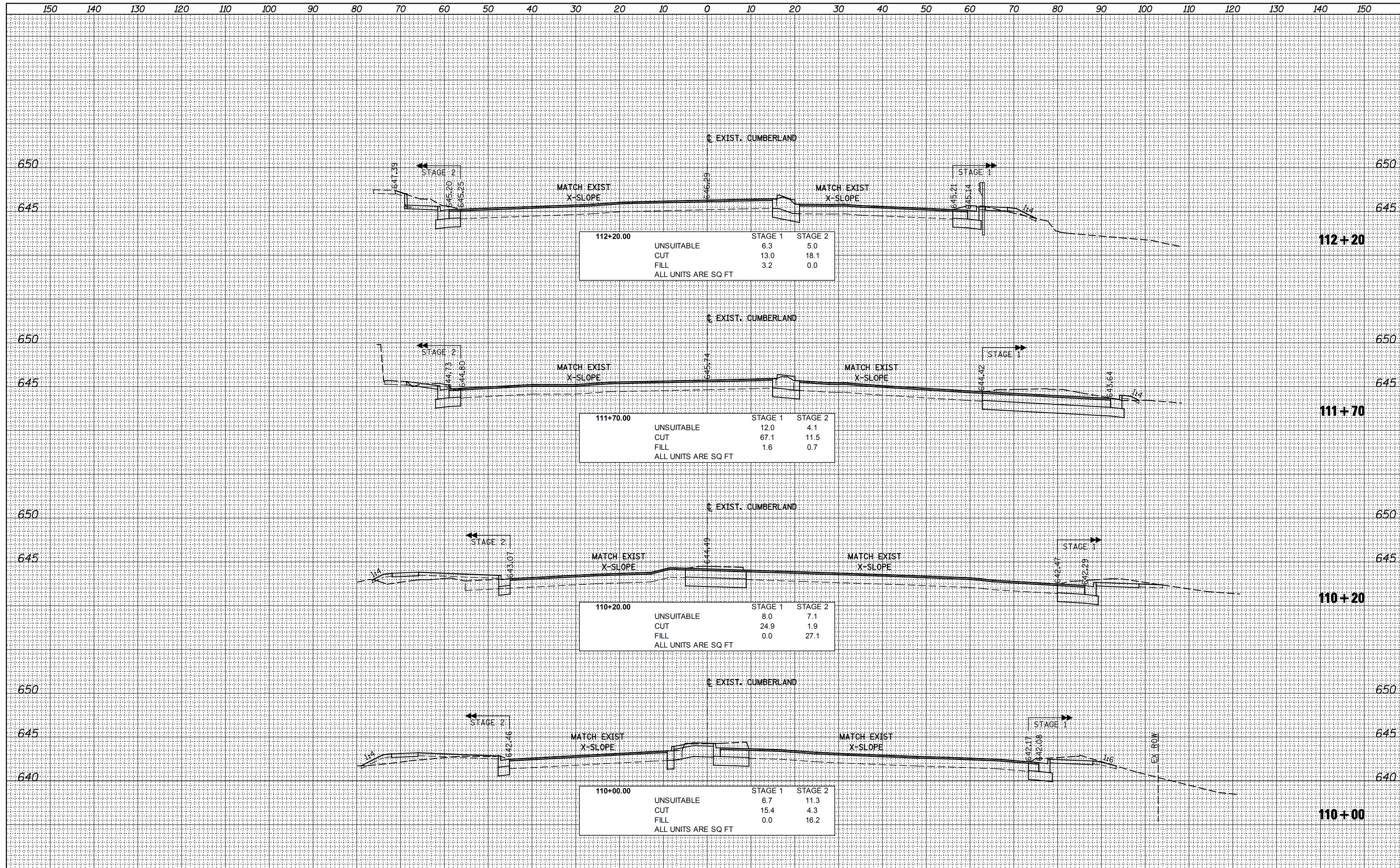
REINFORCEMENT FOR TYPE "A" AND TYPE "B" MANHOLE BASES

CONTRACT 404
 SHEET NO. 380

SCALE: AS SHOWN

DATE	
BY	
ORIGINAL SURVEY	
NO.:	
FINISHED SURVEY	
NO.:	
PLOTTED	
TEMPLATE	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
NO.:	
FINISHED SURVEY	
NO.:	
PLOTTED	
TEMPLATE	
AREAS CHECKED	



112+20.00	STAGE 1	STAGE 2
UNSUITABLE	6.3	5.0
CUT	13.0	18.1
FILL	3.2	0.0
ALL UNITS ARE SQ FT		

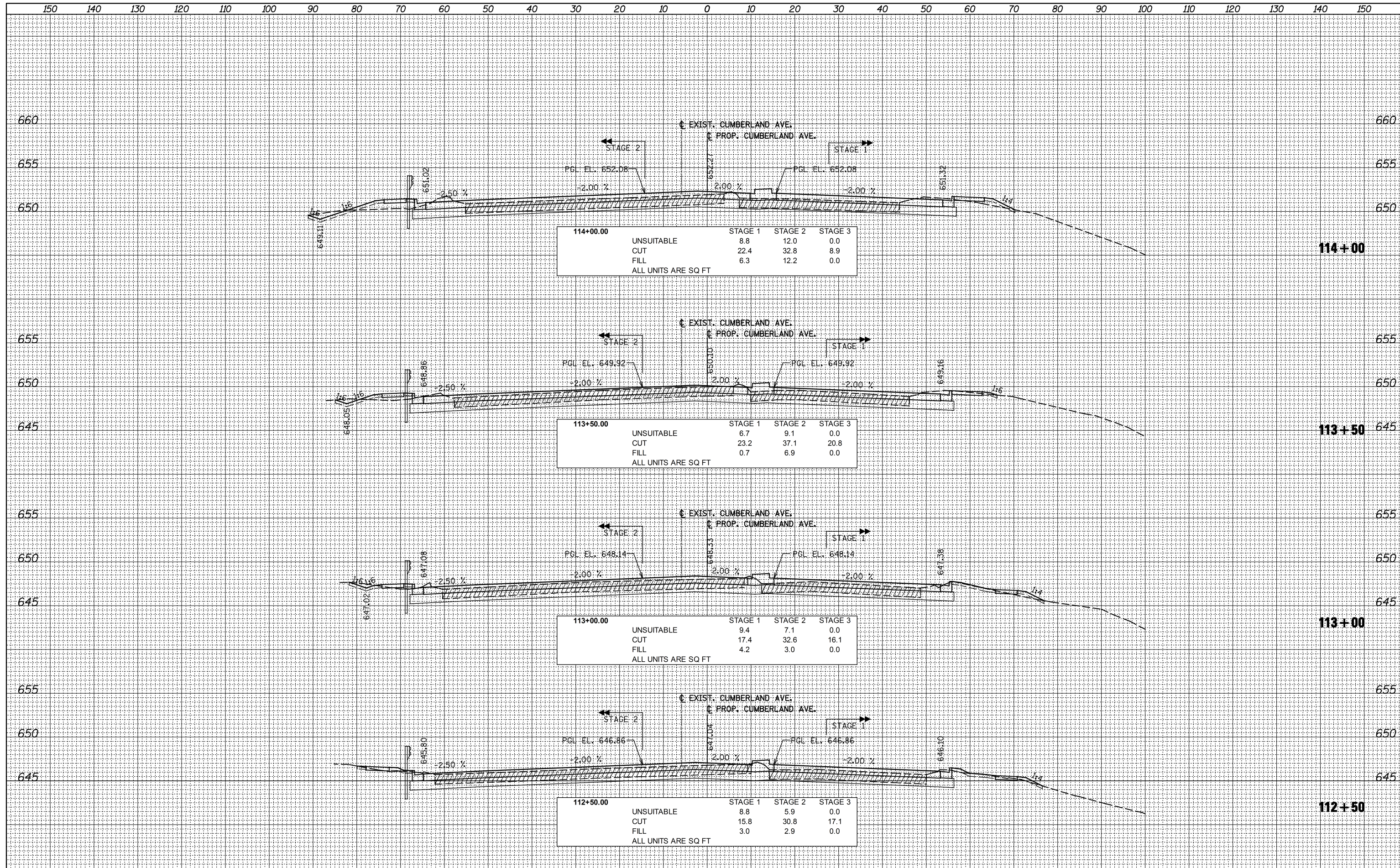
111+70.00	STAGE 1	STAGE 2
UNSUITABLE	12.0	4.1
CUT	67.1	11.5
FILL	1.6	0.7
ALL UNITS ARE SQ FT		

110+20.00	STAGE 1	STAGE 2
UNSUITABLE	8.0	7.1
CUT	24.9	1.9
FILL	0.0	27.1
ALL UNITS ARE SQ FT		

110+00.00	STAGE 1	STAGE 2
UNSUITABLE	6.7	11.3
CUT	15.4	4.3
FILL	0.0	16.2
ALL UNITS ARE SQ FT		

DATE _____
 BY _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____

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



STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

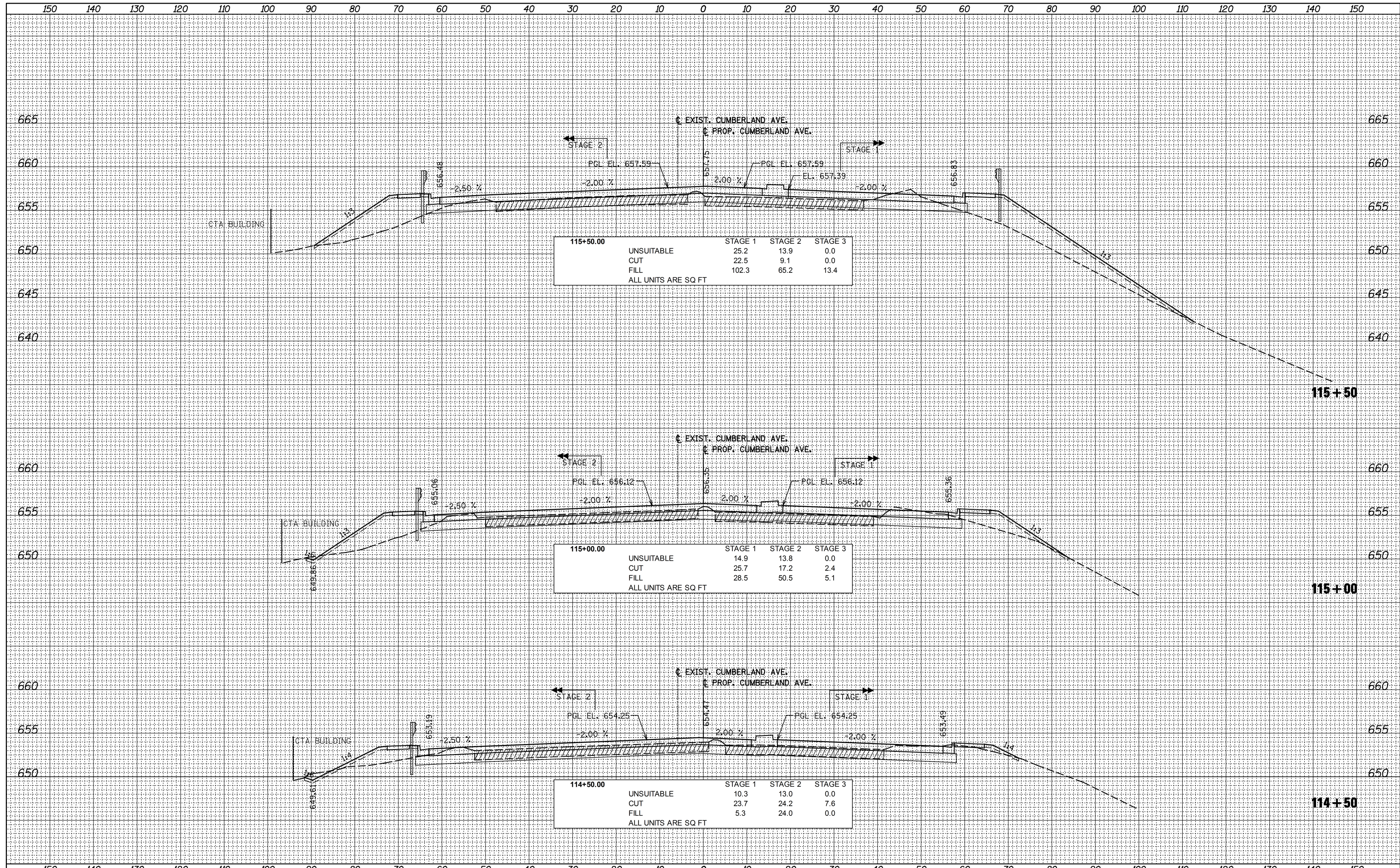
CROSS SECTIONS
 CUMBERLAND AVENUE

SCALE: SHEET OF SHEETS STA. 112+50 TO STA. 114+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2746	1616B	COOK	404	388
CONTRACT NO. 60J14			ILLINOIS FED. AID PROJECT	

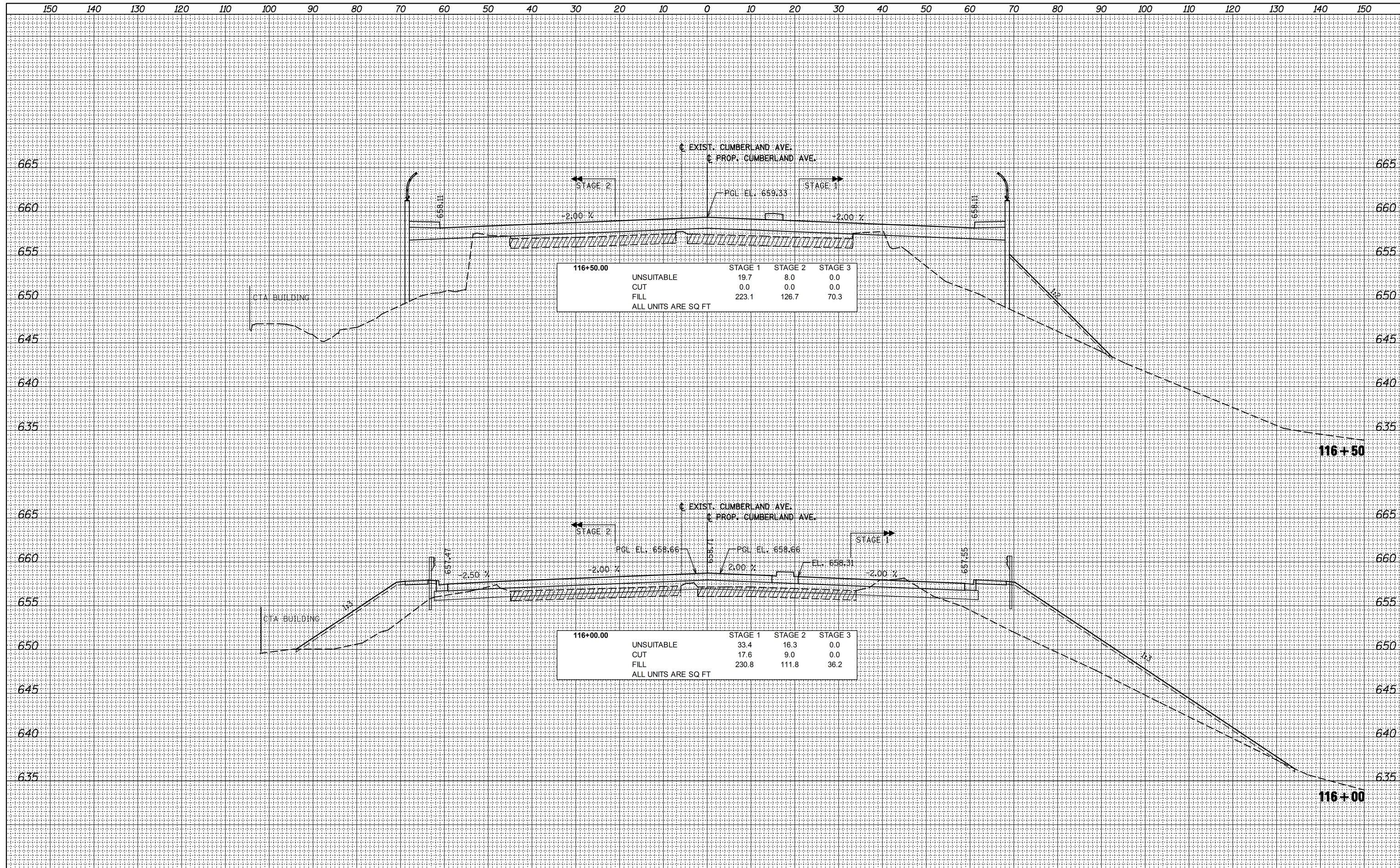
DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

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



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

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

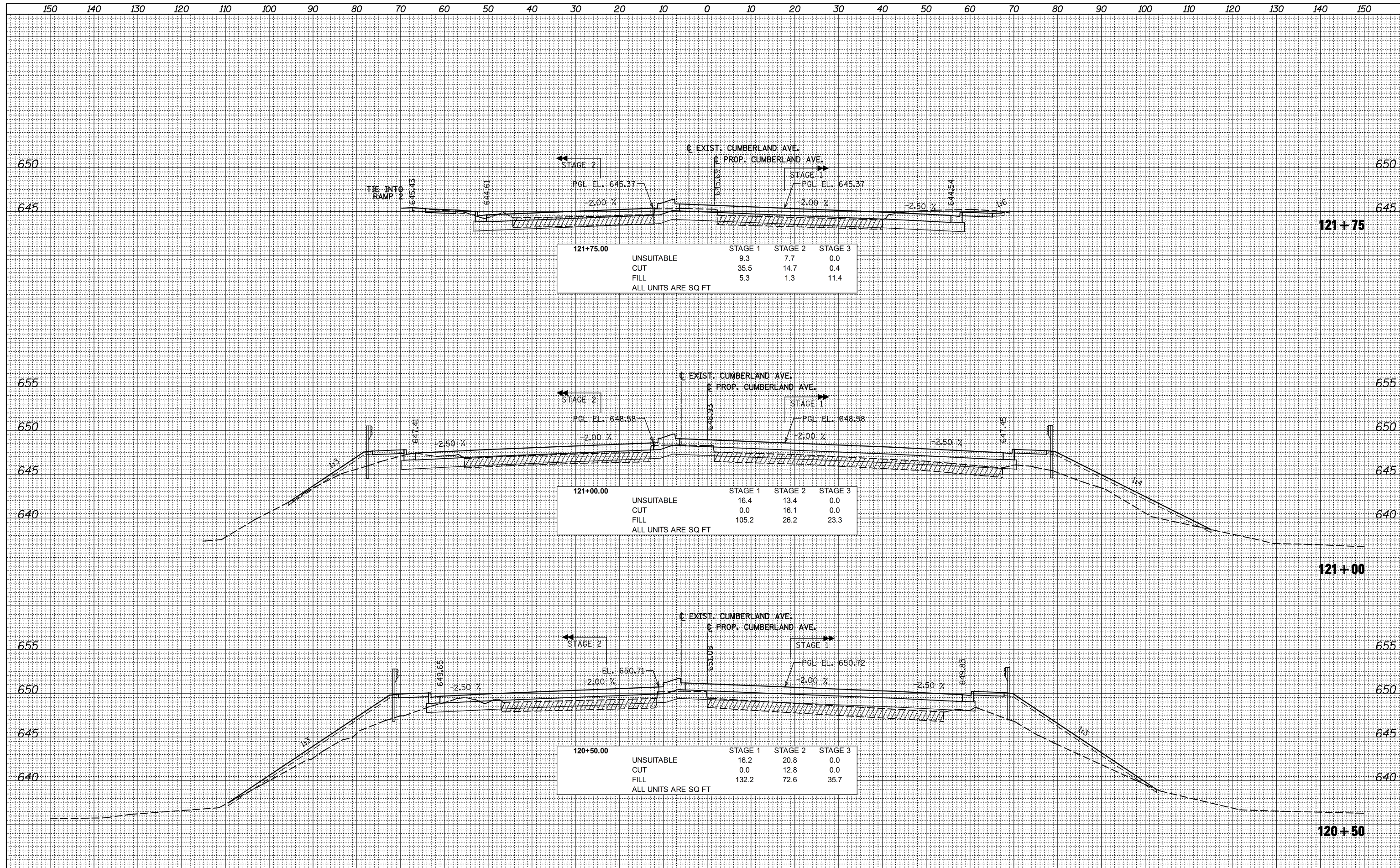


116+50.00	UNSUITABLE	STAGE 1	STAGE 2	STAGE 3
		19.7	8.0	0.0
	CUT	0.0	0.0	0.0
	FILL	223.1	126.7	70.3
	ALL UNITS ARE SQ FT			

116+00.00	UNSUITABLE	STAGE 1	STAGE 2	STAGE 3
		33.4	16.3	0.0
	CUT	17.6	9.0	0.0
	FILL	230.8	111.8	36.2
	ALL UNITS ARE SQ FT			

DATE	
BY	
ORIGINAL SURVEY	
SURVEYED	
NOTE BOOK	
NO.	
FINAL SURVEY	
NOTE BOOK	
NO.	
TEMPLATES	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
SURVEYED	
NOTE BOOK	
NO.	
TEMPLATES	
AREAS CHECKED	



121+75.00

	STAGE 1	STAGE 2	STAGE 3
UNSUITABLE	9.3	7.7	0.0
CUT	35.5	14.7	0.4
FILL	5.3	1.3	11.4

ALL UNITS ARE SQ FT

121+00.00

	STAGE 1	STAGE 2	STAGE 3
UNSUITABLE	16.4	13.4	0.0
CUT	0.0	16.1	0.0
FILL	105.2	26.2	23.3

ALL UNITS ARE SQ FT

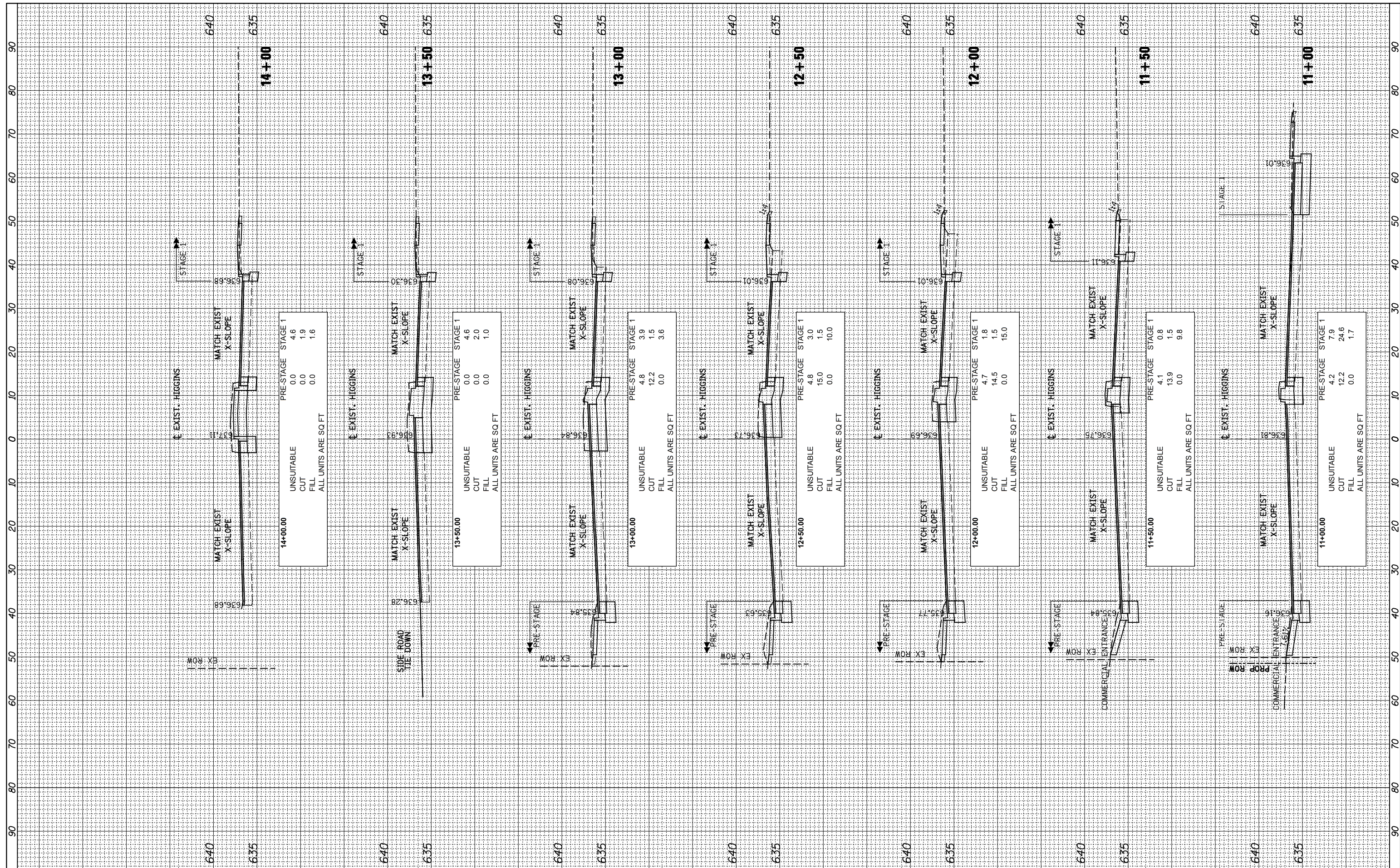
120+50.00

	STAGE 1	STAGE 2	STAGE 3
UNSUITABLE	16.2	20.8	0.0
CUT	0.0	12.8	0.0
FILL	132.2	72.6	35.7

ALL UNITS ARE SQ FT

BY	DATE
FINL SURVEY	SURVEYED
NO. 1	PLOTTED
	TEMPLATE
	NOTE BOOK
	AREAS CHECKED

BY	DATE
ORIGINAL SURVEY	SURVEYED
NO. 1	PLOTTED
	TEMPLATE
	NOTE BOOK
	AREAS CHECKED



USER NAME = *USER*	DESIGNED - MJP	REVISED -
PLOT SCALE = *SCALE*	DRAWN - MJP	REVISED -
PLOT DATE = *DATE*	CHECKED - JAH	REVISED -
	DATE - 2/18/2013	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

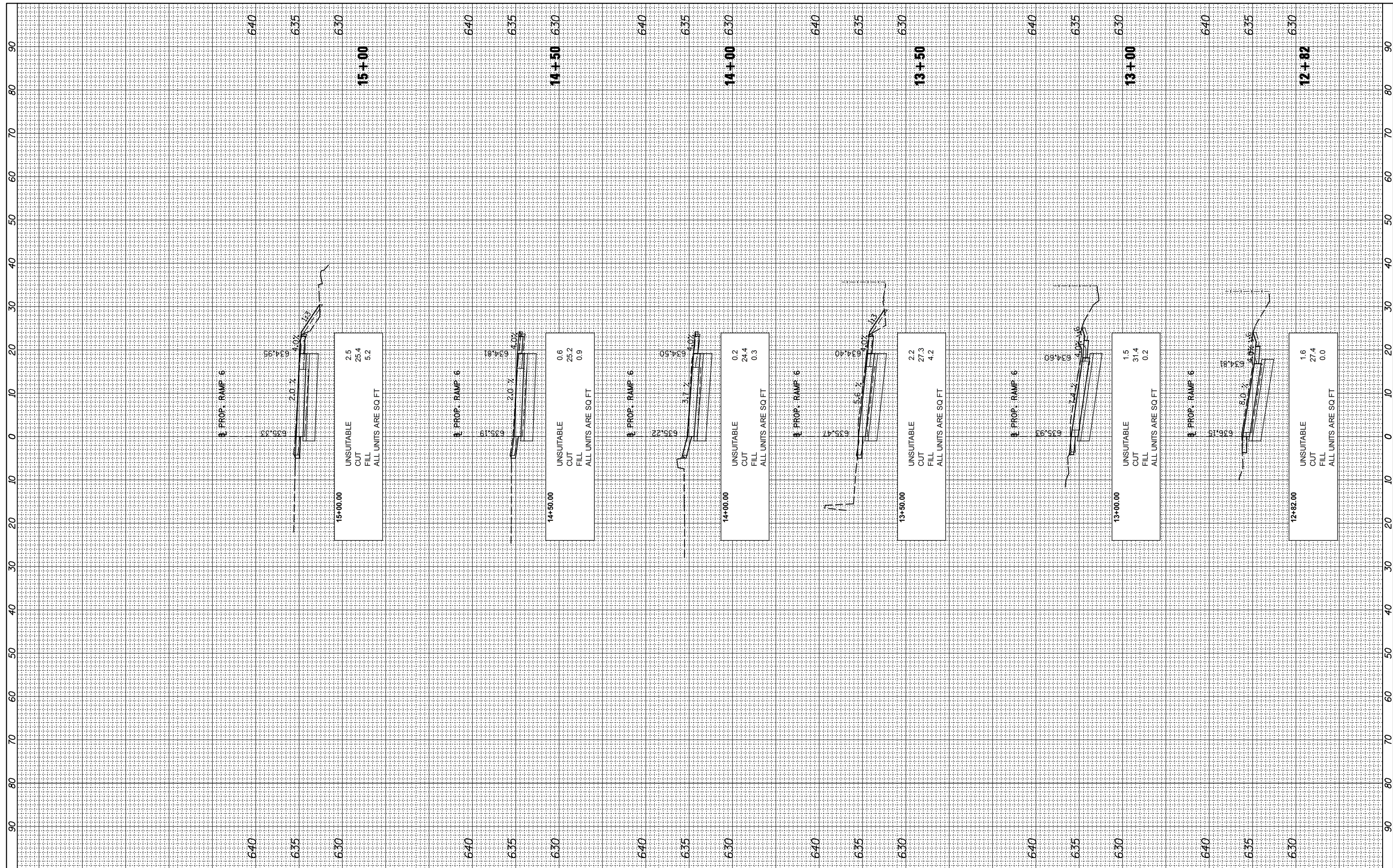
**CROSS SECTIONS
HIGGINS ROAD**

SCALE: SHEET OF SHEETS STA. 11+00 TO STA. 14+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2746	1616B	COOK	404	397
CONTRACT NO. 60J14			ILLINOIS FED. AID PROJECT	

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



USER NAME = *USER*	DESIGNED - MJP	REVISED -
PLOT SCALE = *SCALE*	DRAWN - MJP	REVISED -
PLOT DATE = *DATE*	CHECKED - JAH	REVISED -
	DATE - 2/18/2013	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

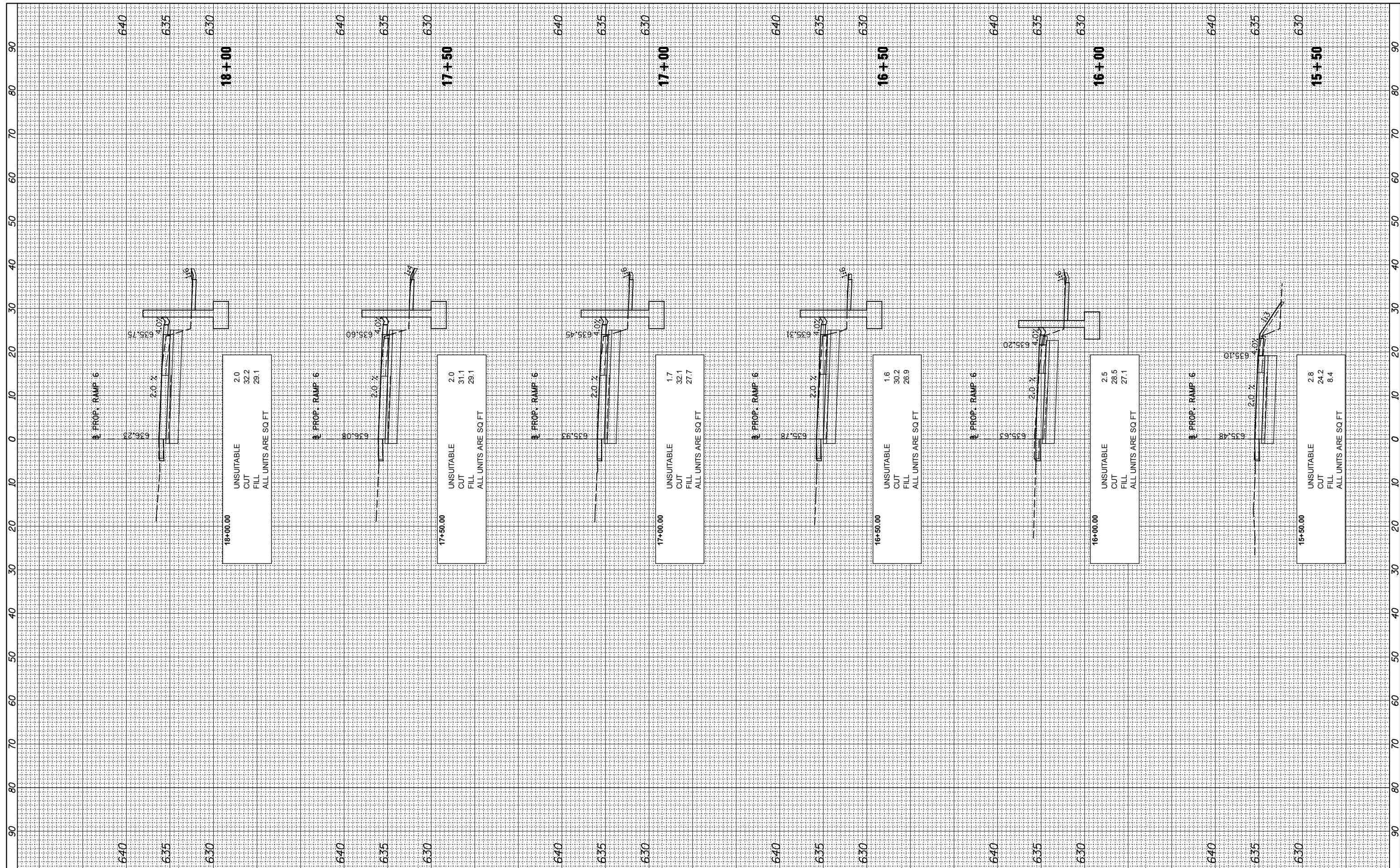
**CROSS SECTIONS
I-90 RAMP 6**

SCALE: SHEET OF SHEETS STA. 12+82 TO STA. 15+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2746	1616B	COOK	404	398
CONTRACT NO. 60J14			ILLINOIS FED. AID PROJECT	

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



USER NAME = *USER*	DESIGNED - MJP	REVISED -
	DRAWN - MJP	REVISED -
PLOT SCALE = *SCALE*	CHECKED - JAH	REVISED -
PLOT DATE = *DATE*	DATE - 2/18/2013	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

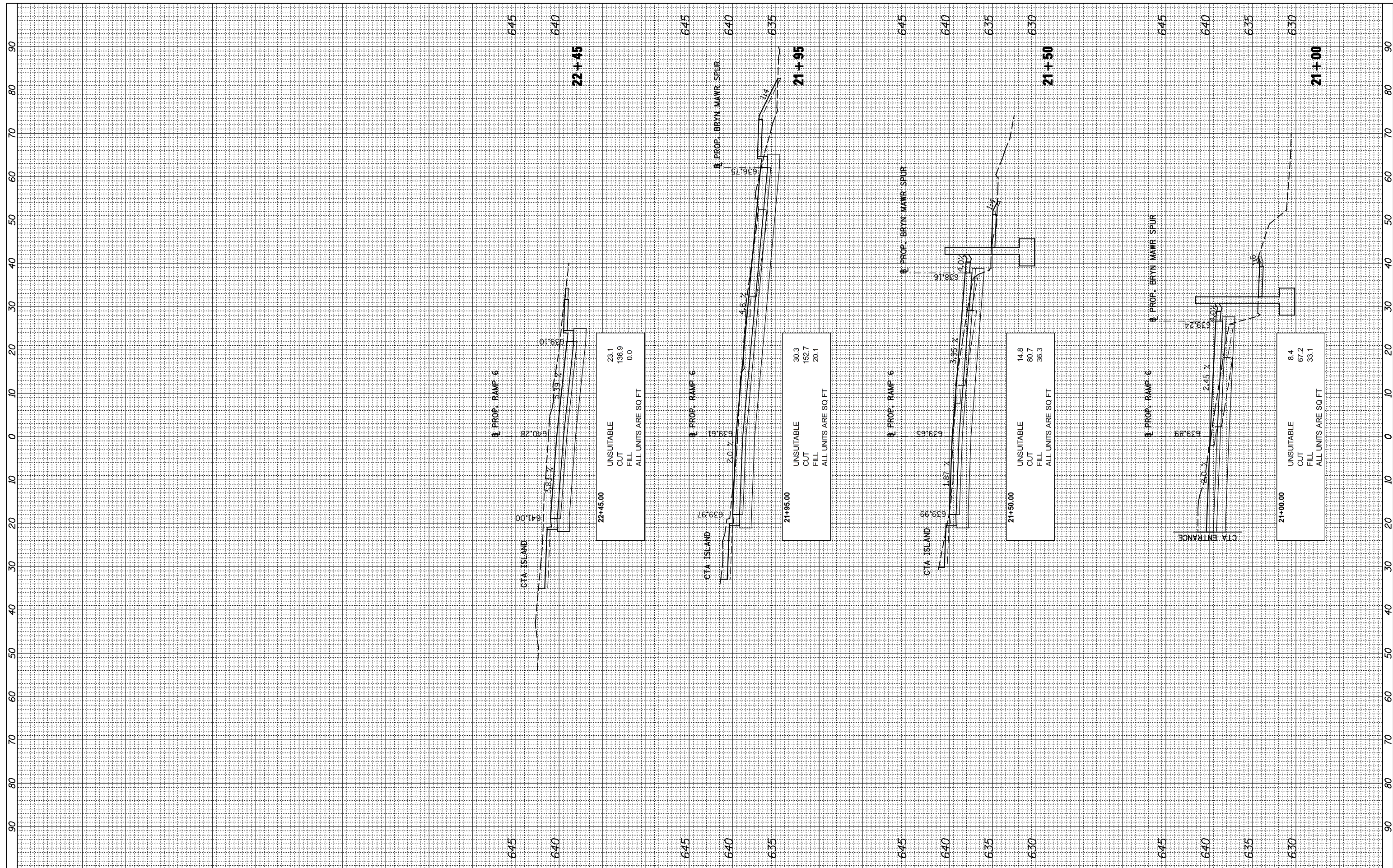
**CROSS SECTIONS
I-90 RAMP 6**

SCALE: SHEET OF SHEETS STA. 15+50 TO STA. 18+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2746	1616B	COOK	404	399
CONTRACT NO. 60J14				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



USER NAME = *USER*	DESIGNED - MJP	REVISED -
PLOT SCALE = *SCALE*	DRAWN - MJP	REVISED -
PLOT DATE = *DATE*	CHECKED - JAH	REVISED -
	DATE - 2/18/2013	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

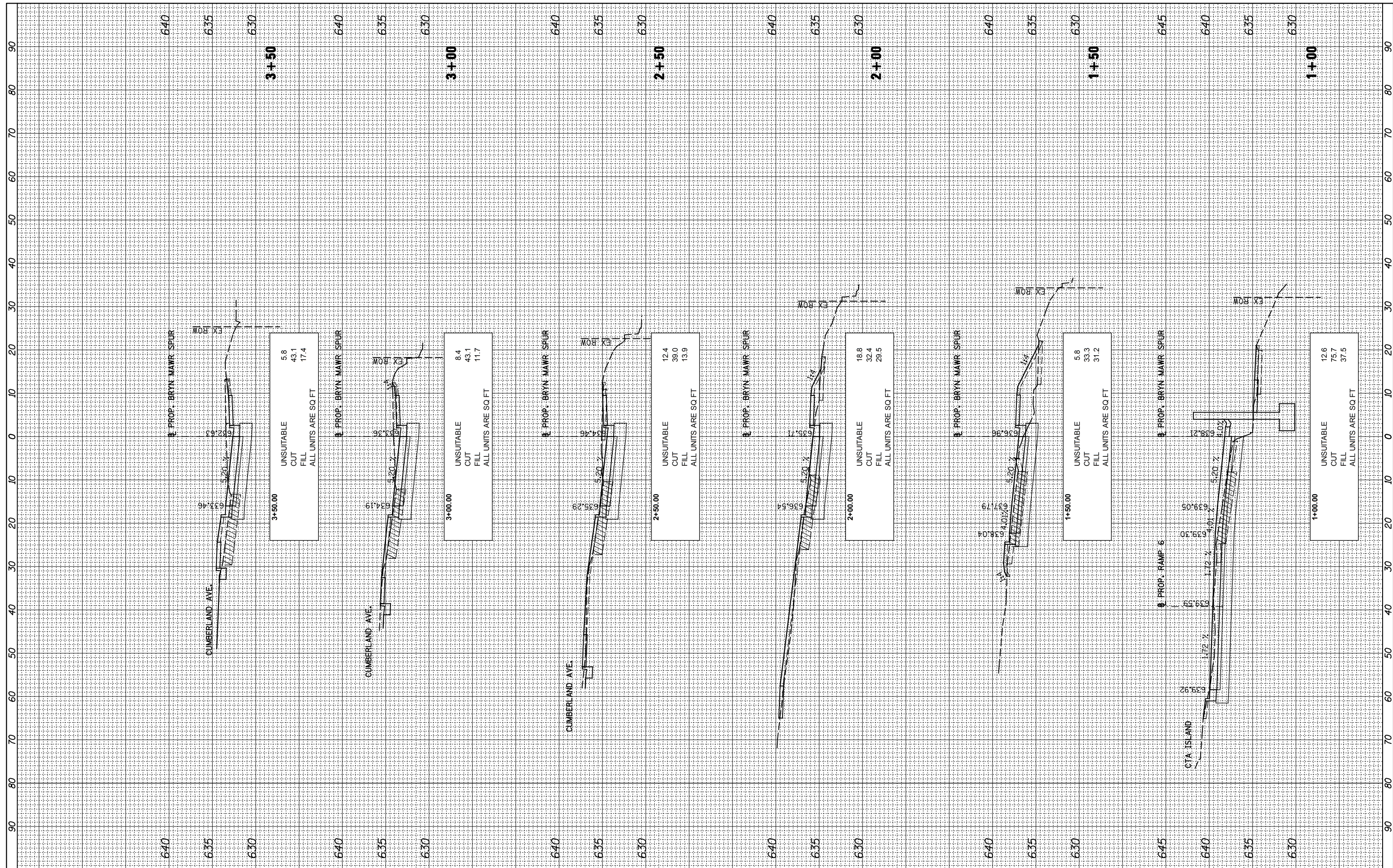
**CROSS SECTIONS
I-90 RAMP 6**

SCALE: SHEET OF SHEETS STA. 21+00 TO STA. 22+45

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2746	1616B	COOK	404	401
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60J14	

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

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



USER NAME = *USER*	DESIGNED - MJP	REVISED -
PLOT SCALE = *SCALE*	DRAWN - MJP	REVISED -
PLOT DATE = *DATE*	CHECKED - JAH	REVISED -
	DATE - 2/18/2013	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

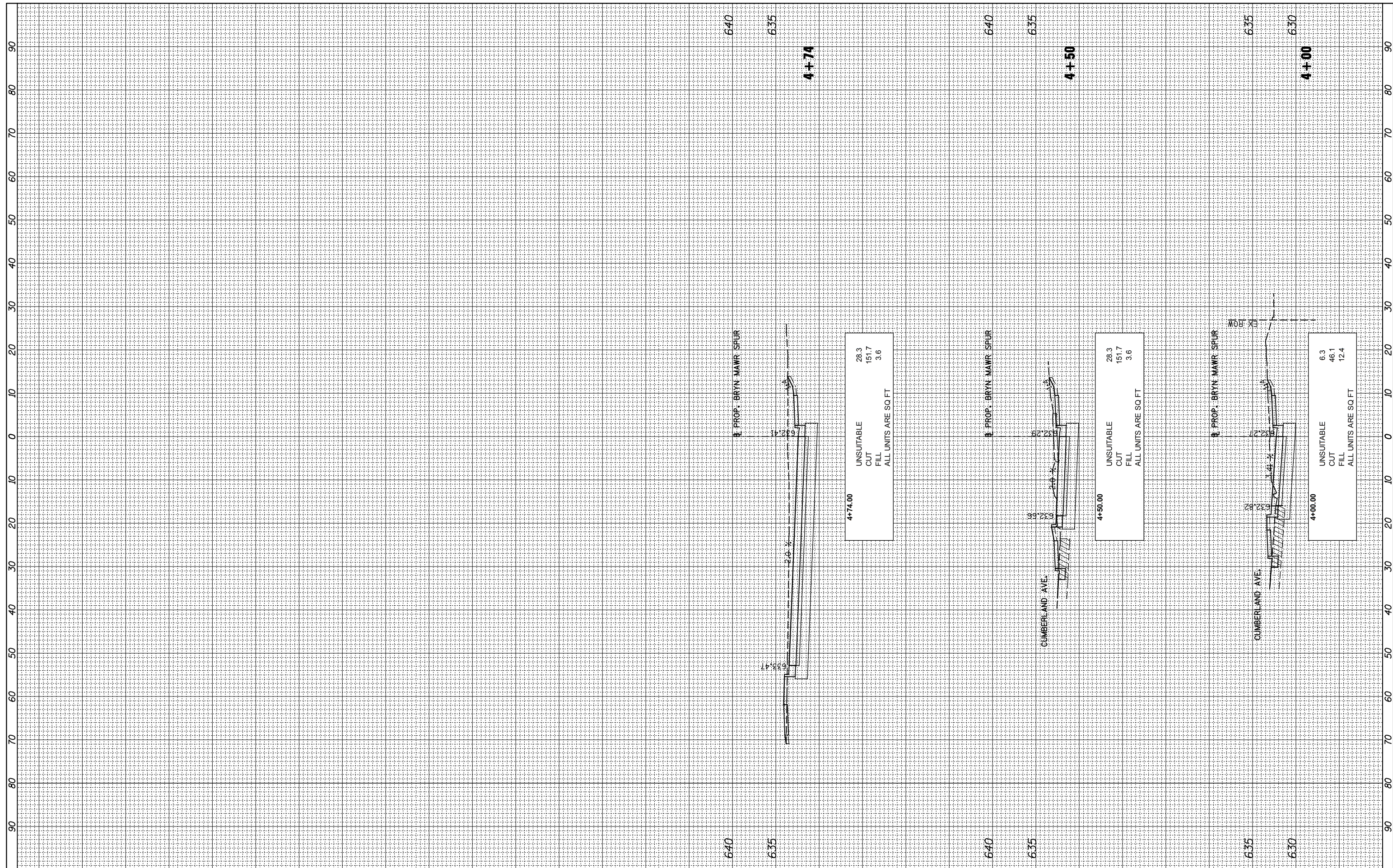
SCALE:	SHEET	OF	SHEETS	STA. 1+00	TO STA. 3+50
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**CROSS SECTIONS
BRYN MAWR SPUR**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2746	1616B	COOK	404	402
CONTRACT NO. 60J14			ILLINOIS FED. AID PROJECT	

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE



USER NAME = *USER*	DESIGNED - MJP	REVISED -
PLOT SCALE = *SCALE*	DRAWN - MJP	REVISED -
PLOT DATE = *DATE*	CHECKED - JAH	REVISED -
	DATE - 2/18/2013	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCALE:	SHEET	OF	SHEETS	STA. 4+00	TO STA. 4+74
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**CROSS SECTIONS
BRYN MAWR SPUR**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2746	1616B	COOK	404	403
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60J14	

PART OF THE WEST HALF OF THE SOUTHWEST QUARTER OF SECTION 2, TOWNSHIP 40 NORTH, RANGE 12 EAST OF THE 3rd P. M., COOK COUNTY, ILLINOIS.

PARCEL NUMBER	OWNER	TOTAL HOLDING ±		PART TAKEN ±		REMAINDER ±		PREVIOUS DEDICATION		EASEMENT		EASEMENT PURPOSE	PERMANENT TAX INDEX NUMBER	PROPERTY ACQUIRED BY
		HECTARES	ACRES	METRIC	ENGLISH	HECTARES	ACRES	SO. METERS	SO. FEET	SO. METERS	SO. FEET			
ODX0001DED	Cities Service Oil Company	0.1939	0.4791	42.0 SO. M. 0.0042 HA.	452 SO. FT. 0.0104 AC.	0.1939	0.4791	0	0	0	0	GRADING	12-02-400-058	12-02-400-058

LEGEND

SECTION CORNER
QUARTER SECTION CORNER

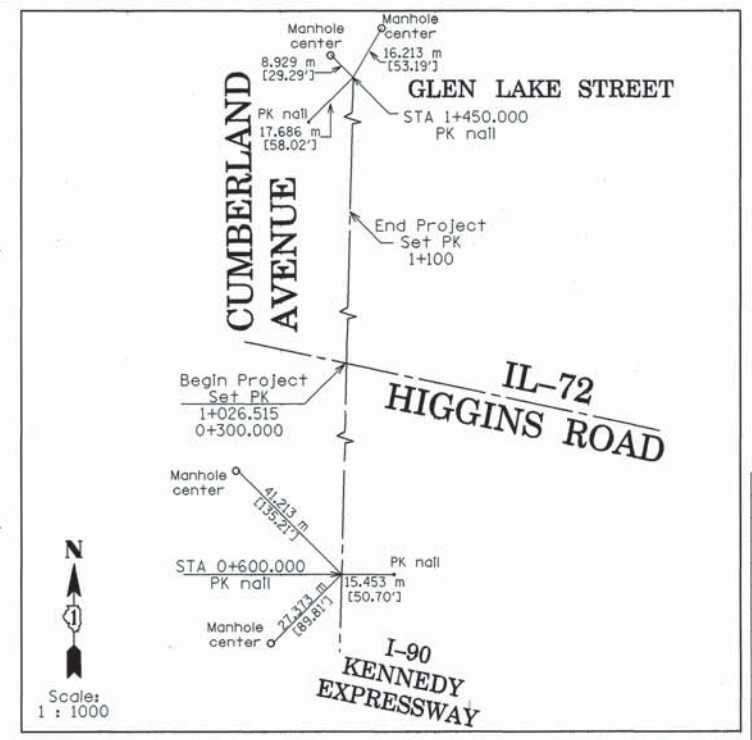
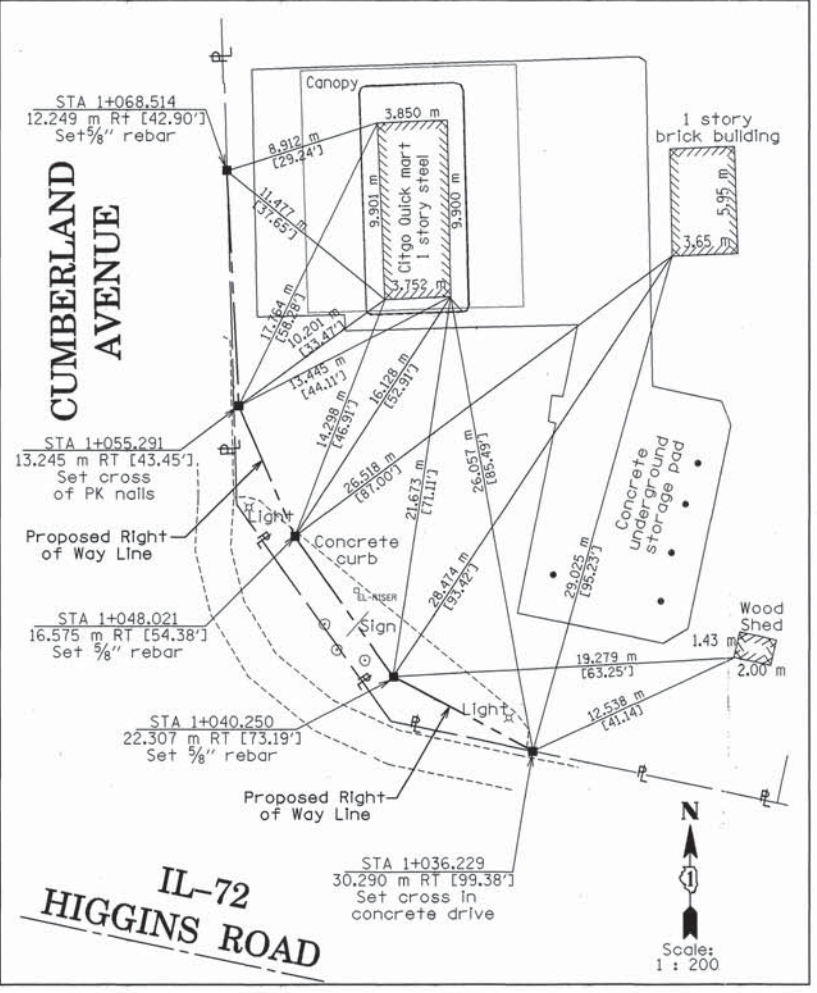
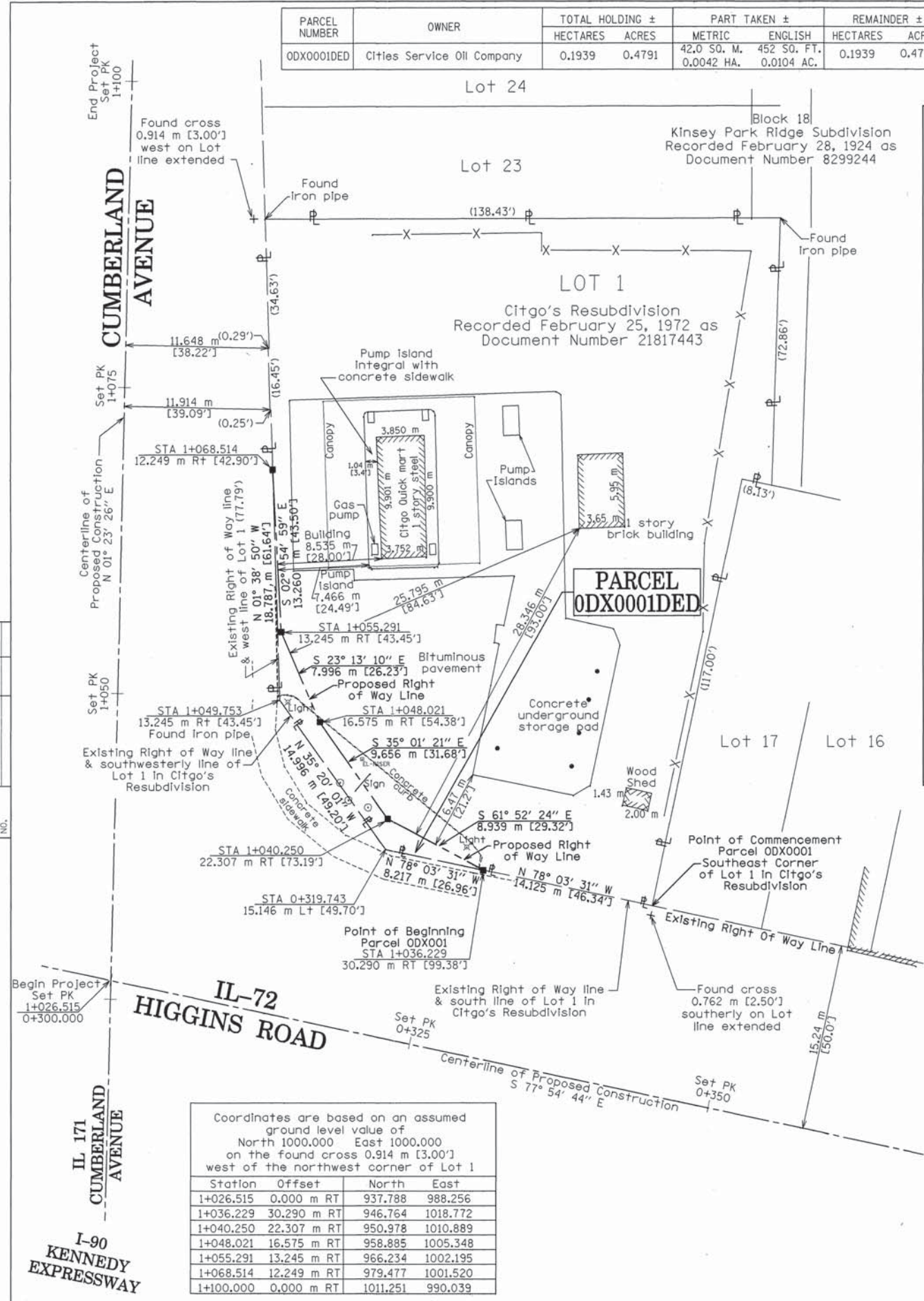
SECTION LINE
QUARTER SECTION LINE
QUARTER, QUARTER SECTION LINE
PLATTED LOT LINE
PROPERTY (DEED) LINE
APPARENT PROPERTY LINE
CENTERLINE
EXISTING RIGHT OF WAY LINE
PROPOSED RIGHT OF WAY LINE
PROPOSED EASEMENT LINE
MEASURED DIMENSION
COMPUTED DIMENSION
ENGLISH DIMENSION
RECORDED DATA
EXISTING BUILDING

Scale: 1 : 200

Bearings are based on an assumed value of N 78° 03' 31" W along the south line of Lot 1 in Citgo's Resubdivision

GRAPHIC SCALE - METERS

IRON PIPE OR ROD FOUND
CUT CROSS FOUND OR SET
TI IRON ROD FLUSH WITH GROUND TO THE FOUND IRON STAKE, IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
BTI THESE STAKES IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION, BURIED 3/4" INCH IRON ROD 20 INCHES BELOW GROUND TO THE FOUND IRON STAKE, IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
STAKING OF PROPOSED RIGHT OF WAY, SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS, BURIED 3/4" INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION, IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
PERMANENT SURVEY MARKER, I.D.O.T. STD. 2135 (TO BE SET BY OTHERS)
RIGHT OF WAY STAKING PROPOSED TO BE SET.



Coordinates are based on an assumed ground level value of North 1000.000 East 1000.000 on the found cross 0.914 m [3.00'] west of the northwest corner of Lot 1

Station	Offset	North	East
1+026.515	0.000 m RT	937.788	988.256
1+036.229	30.290 m RT	946.764	1018.772
1+040.250	22.307 m RT	950.978	1010.889
1+048.021	16.575 m RT	958.885	1005.348
1+055.291	13.245 m RT	966.234	1002.195
1+068.514	12.249 m RT	979.477	1001.520
1+100.000	0.000 m RT	1011.251	990.039

- IRON PIPE OR ROD FOUND
- CUT CROSS FOUND OR SET
- TI IRON ROD FLUSH WITH GROUND TO THE FOUND IRON STAKE, IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BTI THESE STAKES IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION, BURIED 3/4" INCH IRON ROD 20 INCHES BELOW GROUND TO THE FOUND IRON STAKE, IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- STAKING OF PROPOSED RIGHT OF WAY, SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
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- PERMANENT SURVEY MARKER, I.D.O.T. STD. 2135 (TO BE SET BY OTHERS)
- RIGHT OF WAY STAKING PROPOSED TO BE SET.

STATE OF ILLINOIS } S.S.
COUNTY OF COOK }

THIS IS TO CERTIFY THAT I, WILLIAM J. FLEMING, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 2, TOWNSHIP 40 NORTH, RANGE 12 EAST OF THE THIRD PRINCIPAL MERIDIAN, COOK COUNTY; THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

DATED AT CHICAGO, ILLINOIS THIS 27TH DAY OF DECEMBER, A.D. 2000.

Wm. J. Fleming
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-3226

RECORDING FEE 103.00
DATE 4/22/02
OK BY gm

STATE OF ILLINOIS
WILLIAM J. FLEMING
35-3226
PROFESSIONAL LAND SURVEYOR

0020457364
3/23/02 10:01 AM Page 1 of 1
2002-04-22 09:26:10
Cook County Recorder

Mail to: Illinois Department of Transportation
ATTN: Land Acquisition - 3rd Floor
201 W. Center Court
Schaumburg, IL 60196-1096

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631
(773) 399-0112

REVISION
DATE DESCRIPTION

PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
I-90 AT CUMBERLAND AVENUE

SECTION COOK COUNTY
PROJECT JOB NO. R-90-057-00
STATION 1+026.515 TO STATION 1+100.000
SCALE: 1 : 200 SHEET 2 OF 2

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196 - 1096

SHEET 1 OF 2 IS A COVER SHEET AND IS NOT RECORDED AS DOCUMENT NO.

DATE	BY

R.O.W. PLAT	NOTEBOOK NO.