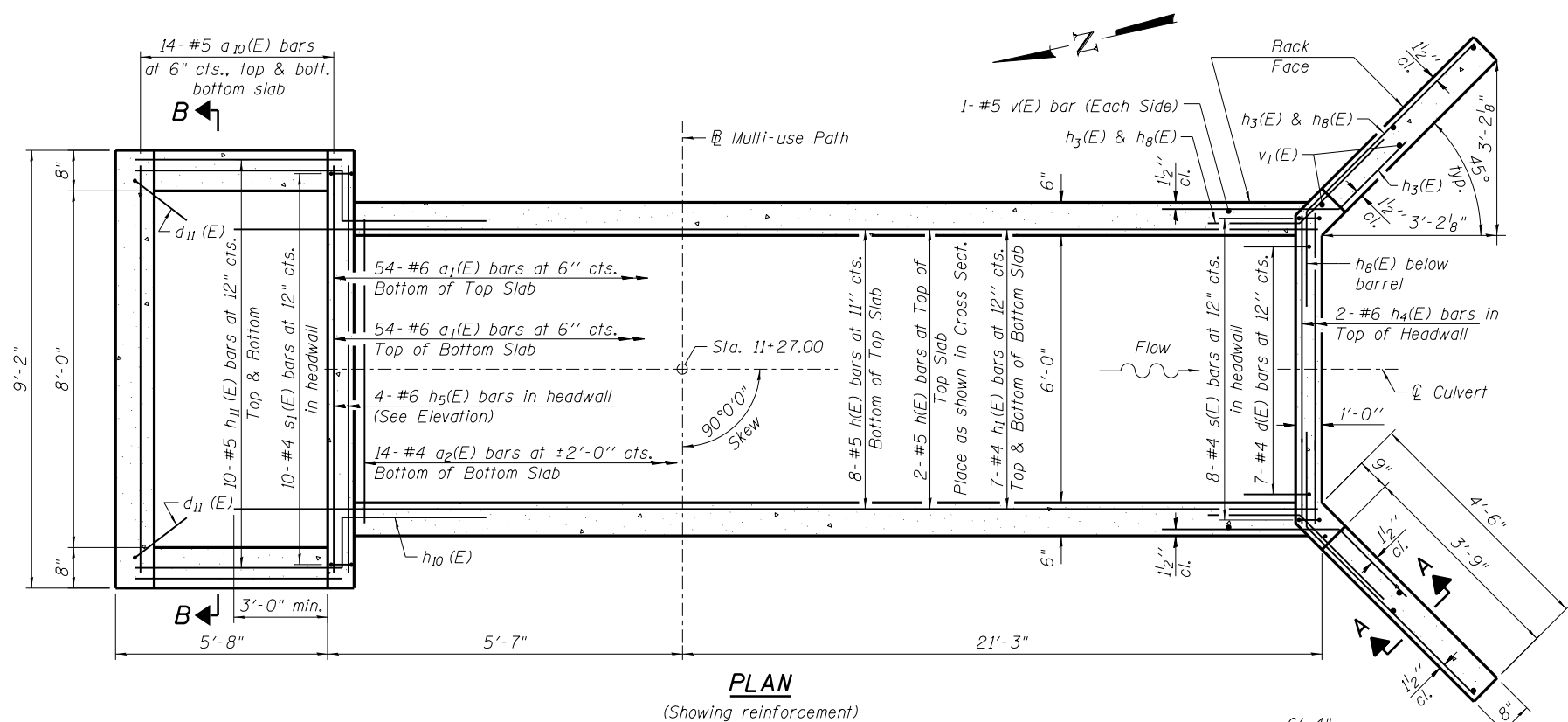


LONGITUDINAL SECTION

*See Field Cutting Diagram

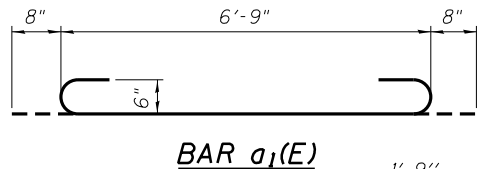


PLAN

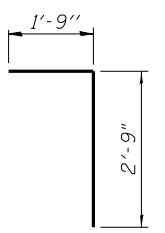
(Showing reinforcement)

NOTES

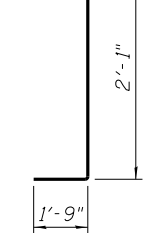
1. A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
2. Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
3. E.S. = Each Side, O.F. = Outside Face



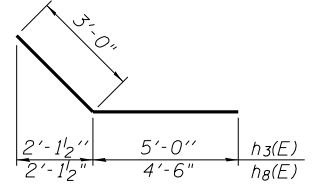
BAR a1(E)



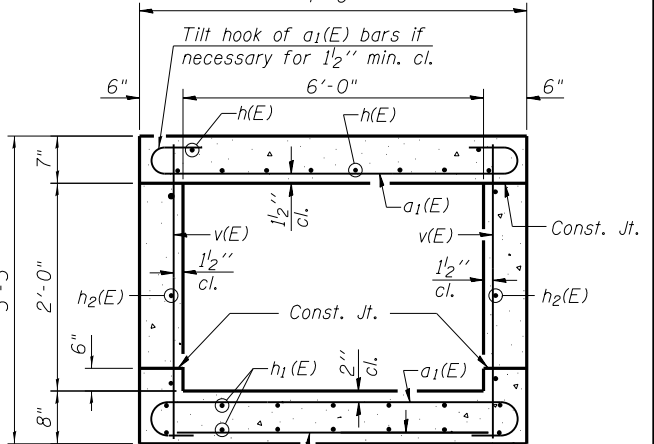
BAR d(E)



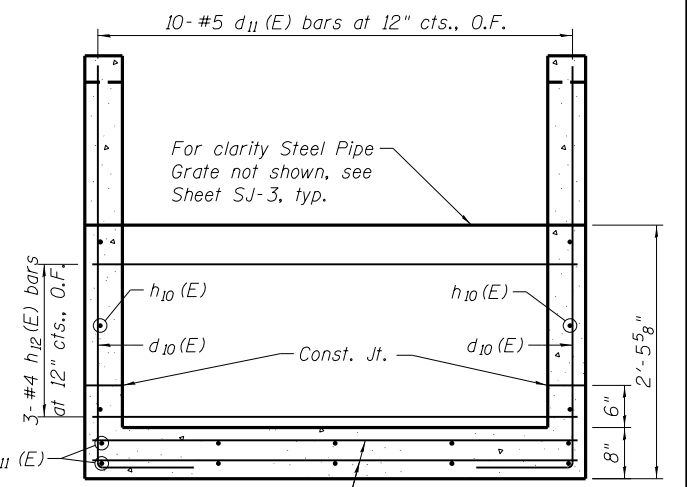
BAR d11(E)



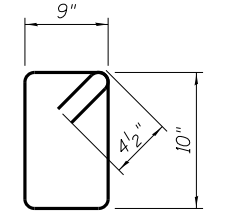
BARS h3(E) & h8(E)



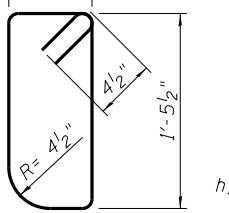
SECTION THRU BARREL



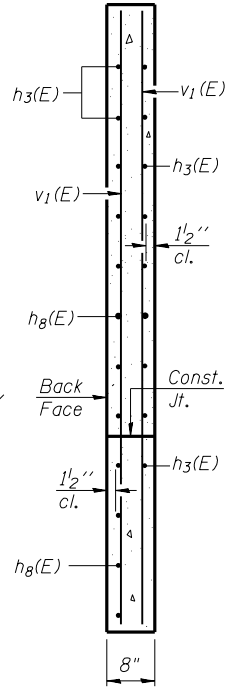
SECTION B-B



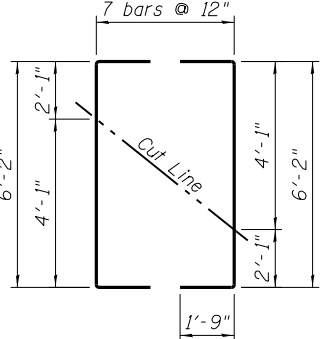
BAR s(E)



BAR s1(E)

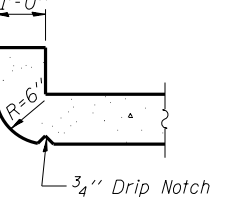


SECTION A-A



**FIELD CUTTING DIAGRAM
BAR d10(E)**

Order bars full length. Cut as shown and use remainder bars on opposite wall.



BAR h10(E)

SECTION THRU HEADWALL
(Up Stream End Only)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1(E)	108	# 6	8'-1"	U
a2(E)	15	# 4	6'-8"	U
a10(E)	28	# 5	8'-10"	U
d(E)	7	# 4	4'-6"	U
d10(E)	7	# 5	9'-8"	U
d11(E)	10	# 5	3'-10"	U
h(E)	10	# 5	26'-6"	U
h1(E)	14	# 4	29'-8"	U
h2(E)	6	# 4	26'-6"	U
h3(E)	10	# 4	8'-0"	U
h4(E)	2	# 6	6'-6"	U
h5(E)	4	# 6	8'-10"	U
h8(E)	10	# 4	7'-6"	U
h10(E)	6	# 4	10'-7"	U
h11(E)	20	# 5	6'-4"	U
h12(E)	3	# 4	8'-10"	U
h13(E)	2	# 4	5'-10"	U
s(E)	8	# 4	3'-11"	U
s1(E)	10	# 4	5'-2"	U
v(E)	56	# 5	2'-11"	U
v1(E)	8	# 4	5'-9"	U
Concrete Box Culverts		Cu. Yd.	15.5	
Reinforcement Bars		Pound	3,070	
Epoxy Coated				

N:\PROJECTS\00033333\CONTRACT_2\Design\Structural\CAD\Culvert.ctb Bike Path (081-P007)\081-P007-64883-002-Details-1.dgn
 08/17/2015 10:00:00 AM
 User: saillgood
 Plot Scale: 0.2000000 1" = 10'
 Plot Date: 3/17/2015



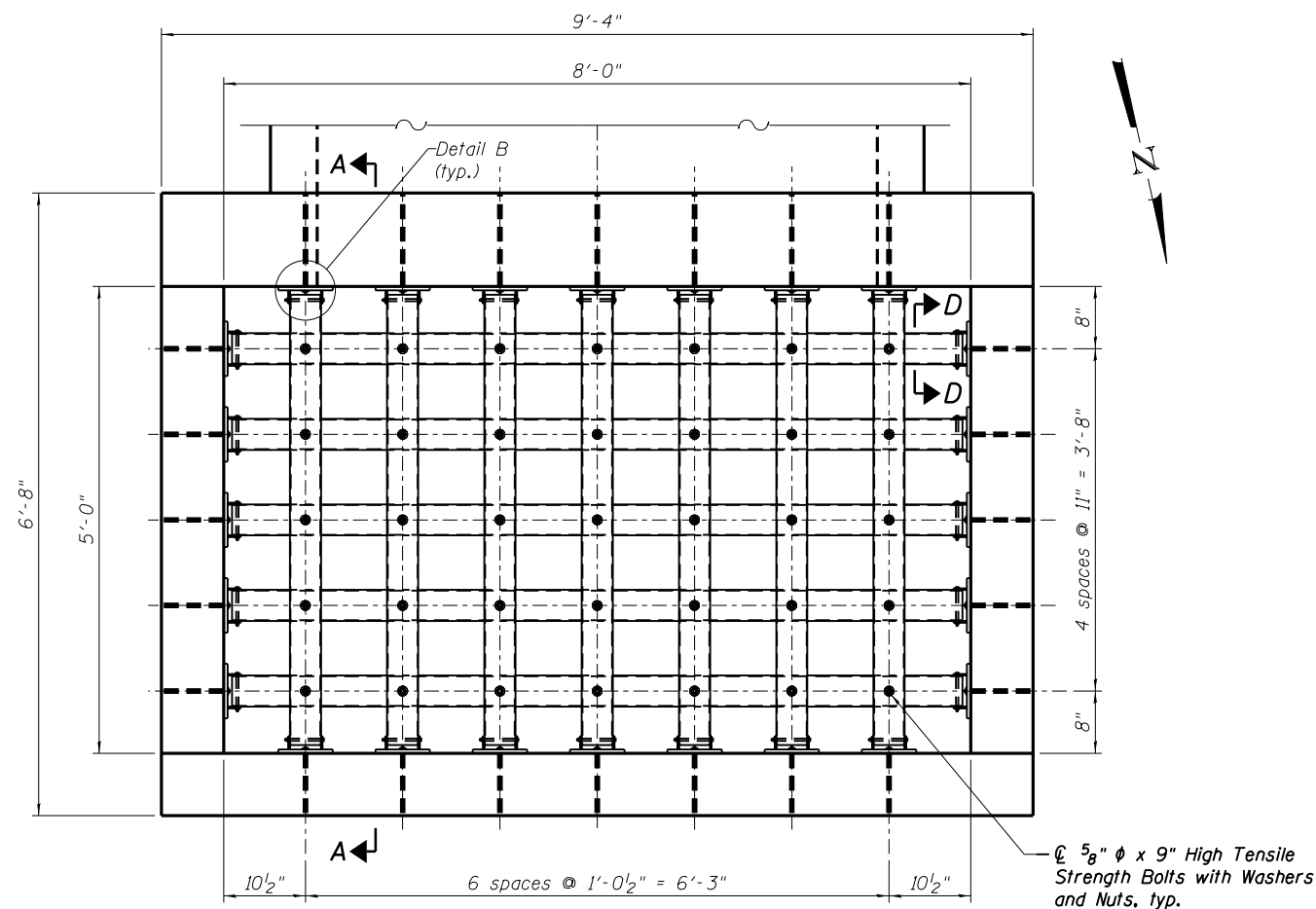
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	CHECKED - BWS	REVISED -
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PLOT DATE = 3/17/2015	CHECKED - JUH	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

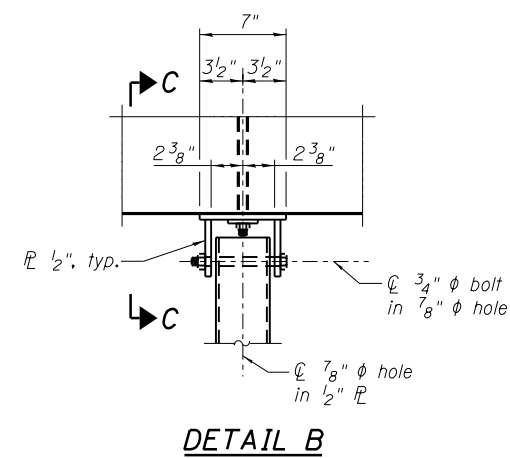
**DETAILS-1
S.N. 081-P007**

SHEET NO. SJ-2 OF SJ-4 SHEETS

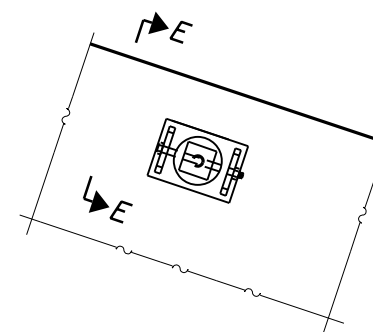
F.A.P. RT. 595	SECTION (142-1, 142)R	COUNTY ROCK ISLAND	TOTAL SHEETS 1353	SHEET NO. 1001
				CONTRACT NO. 64883
ILLINOIS FED. AID PROJECT				



PIPE GRATE PLAN

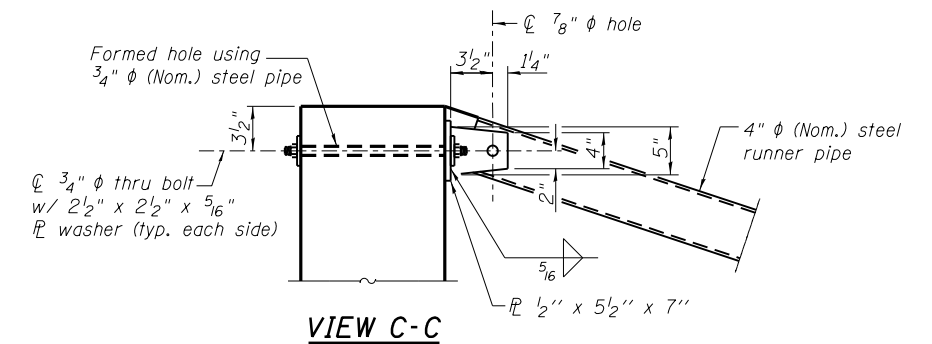


DETAIL B

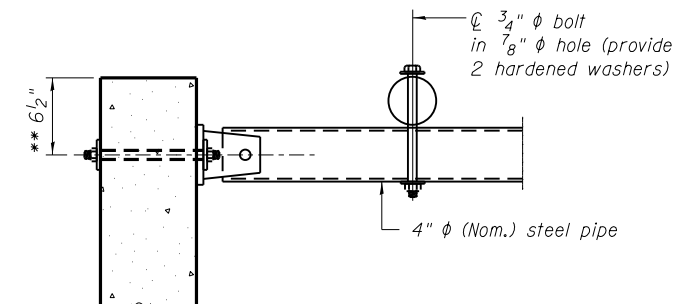


SECTION D-D

(See Detail B for dimensions and details not shown.)



VIEW C-C



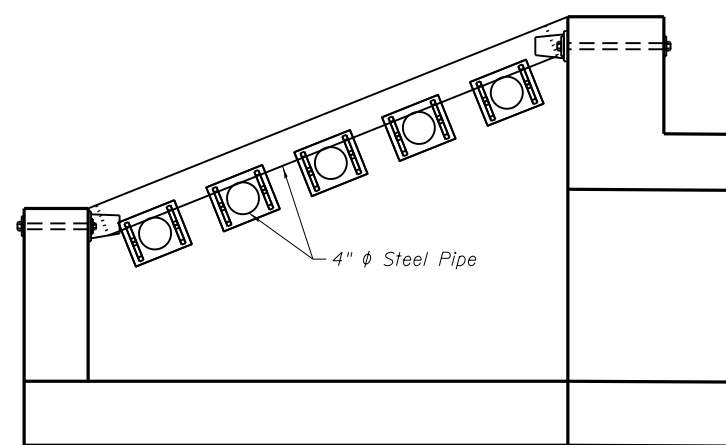
SECTION E-E

**Measured perpendicular to top of culvert wall. In addition, formed hole shall be located a minimum of 6" measured horizontally from any vertical joints necessary for construction of the culvert end section.

PIPE GRATE BRACKET DETAILS

NOTES

1. Cost of Galvanized Pipe, Bolts, Nuts, Washers, Pipe Grate Bracket and Steel Plates shall be included in the cost of Concrete Box Culverts.
2. Length of steel pipes shall be determined by the Contractor.
3. All components of the Pipe Grate shall be galvanized according to the requirements of AASHTO M 111 or M 232, as applicable.
4. Fabrication of the Pipe Grate shall conform to the requirements of section 505 of the Standard Specifications.
5. Structural steel shapes and plates shall conform to the requirements of Article 1006.04 of the Standard Specifications. Steel pipes shall conform to the requirements of ASTM A53 (Type E or S), Grade B, Standard Weight (Sch.40).
6. Bolts and thru bolts shall conform to the requirements of Article 1006.08 of the Standard Specifications. Threaded rods conforming to the requirements of ASTM F1554, Grade 105 may be used for thru bolts.
7. The minimum distance from the center of a hole to the free edge of a structural shape or plate shall be 1 1/2", unless noted otherwise. Bolts shall be snug tightened by a few impacts of an impact wrench or the full force of a worker using an ordinary spud wrench.



VIEW A-A

BILL OF MATERIAL - PIPE GRATE

(For information only)

ITEM	UNIT	TOTAL
4" Galvanized Steel Pipe	Each	12
5/8" Galvanized Bolts	Each	35
Pipe Grate Bracket	Each	24

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PLOT DATE = 3/17/2015	CHECKED - JUH	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DETAILS-2
S.N. 081-P007**

SHEET NO. SJ-3 OF SJ-4 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1002
CONTRACT NO. 64B83				

ILLINOIS FED. AID PROJECT

Soils Report

Bike Path along 38th Avenue
Retaining Wall West of 70th Street



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation/D-2

SOIL BORING LOG

Page 1 of 1

Date 7/14/11

ROUTE FAP 595 DESCRIPTION D92-004-96 Proposed bike path retaining wall, 38th Avenue E. of Blackhawk College LOGGED BY W. Garza
SECTION 142-R LOCATION S. Moline Twp. - 12SW. SEC., TWP. 17N. RNG. 1W
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. _____
Station _____
BORING NO. B-6a
Station 11+00
Offset 27.00ft Lt Existing CL
Ground Surface Elev. 597.50 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft
Groundwater Elev.:
First Encounter _____ ft
Upon Completion _____ ft
After _____ Hrs. _____ ft

SOIL DESCRIPTION	DEPTH (ft)	BLOWS (1/ft)	UCS (tsf)	MOISTURE (%)
SOFT gray SILTY LOAM	0 - 1		0.3 P	32.0
MEDIUM gray CLAY LOAM	1 - 2	1	0.7 B	26.0
MEDIUM light gray CLAY LOAM with SILT lens	14 - 16	15		14.0
VERY DENSE light gray weathered SHALE	100/10"			
VERY DENSE light gray weathered SHALE	100/8"			
VERY DENSE gray SHALE	100/4"			
End of Boring	584.00			

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

Lin Engineering, Ltd.

4 of 11

N:\PROJECTS\0003393\00\CONTRACT_2\Design\Structural\CAD\Culvert at Bike Path (081-P007)\081-P007-64B83-004_Boring_Log.dgn



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	CHECKED - BWS	REVISED -
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PLOT DATE = 3/17/2015	CHECKED - JJH	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOG
S.N. 081-P007**

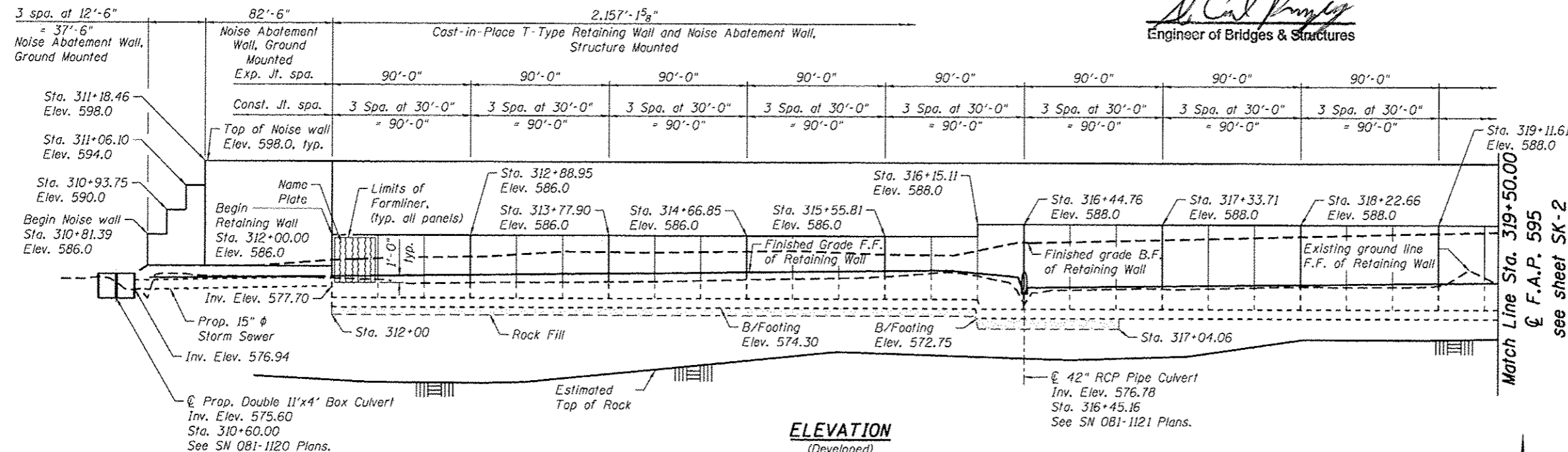
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 64B83			ILLINOIS FED. AID PROJECT	

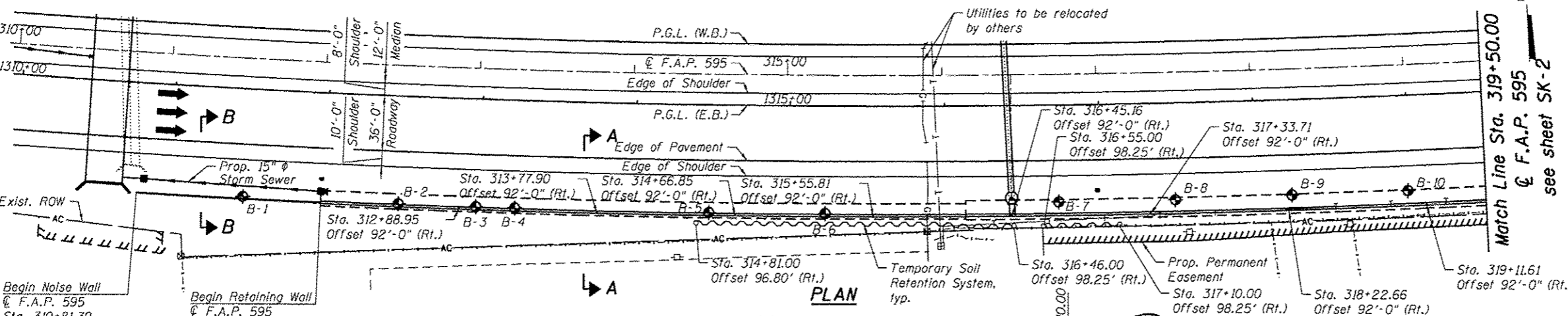
Benchmark: South Headwall, East End of Reinforced Concrete Box Culvert Sta. 303+18.18, o/s 74.12' Rt. Elev. 579.29.

Existing Structure: None. Traffic to be maintained using stage construction.

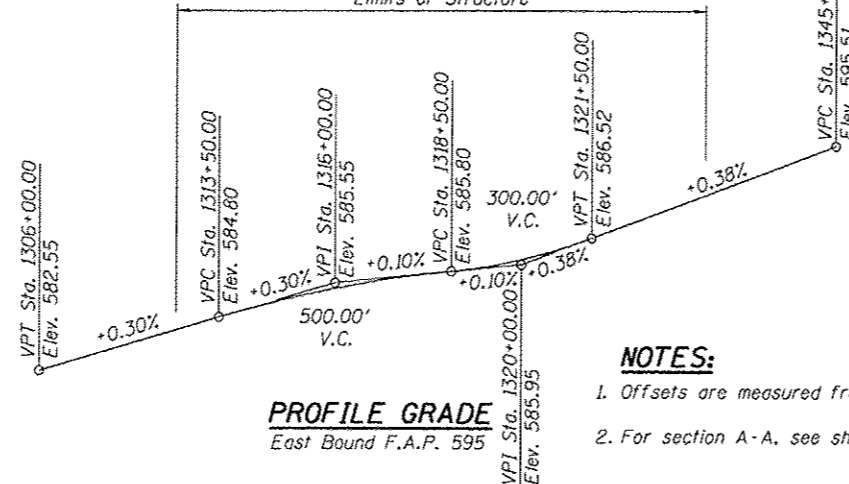
APPROVED
For Structural Adequacy Only
Joseph J. Hosanna Jr.
Engineer of Bridges & Structures



ELEVATION
(Developed)
Dimensions Measured along front face of wall,
(Looking at F.F. of wall)



PLAN



PROFILE GRADE
East Bound F.A.P. 595

CURVE DATA
@ F.A.P. 595

$\Delta = 26^\circ 26' 36''$ (LT)
 $D = 00^\circ 44' 03''$
 $T = 1,833.41'$
 $L = 3,601.50'$
 $E = 212.48'$
 $R = 7,803.53'$
 $S.E. = 2.0\%$
 $P.C. = Sta. 306+02.40$
 $P.T. = Sta. 342+03.89$
 $P.I. = Sta. 324+35.80$

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications
1989 AASHTO Guide Specification for Structural
Design of Sound Barriers with 1992 and 2002 Interims

DESIGN STRESS

FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 36,000$ psi (M270 Grade 36)

PRECAST UNITS
 $f'_c = 4,500$ psi (min.)
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 65,000$ psi (Welded Wire fabric)

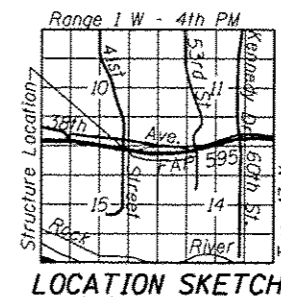
LOADING

Allow 35#/sq. ft. wind load for
structure mounted noise wall.
Allow 25#/sq. ft. wind load for
ground mounted noise wall
(See Special Provisions)

STATION 312+00
BUILT 2011 BY
STATE OF ILLINOIS
F.A.P. RTE. 595
SECTION (142-1, 142)R
STR. NO. 081-7001

NAME PLATE
See Std. 515001

GENERAL PLAN & ELEVATION - 1
JOHN DEERE ROAD (IL 5)
F.A.P. RTE. 595
SECTION (142-1, 142)R
ROCK ISLAND COUNTY
STATION 312+00.00 TO 333+32.00
S.N. 081-7001



LOCATION SKETCH

NOTES:

- Offsets are measured from @ F.A.P. 595 to F.F. of wall.
- For section A-A, see sheet SK-12. For section B-B, see sheet SK-4.

Joseph J. Hosanna Jr.
STATE OF ILLINOIS
LICENSED
JOSEPH J. HOSANNA JR.
ENGINEER
081-004654
STRUCTURAL ENGINEER

DATE: 3/17/2015
SEAL EXPIRES: 11/30/2016

LEGEND

- ◆ Boring Location
- Exist. Fence
- Exist. Sanitary Sewer
- Exist. Water Main
- Exist. Gas Main
- Exist. Aerial Telephone
- Exist. Underground Cable T.V.
- Exist. Access Control and Exist. ROW
- Prop. Permanent Easement
- Prop. Temporary Easement

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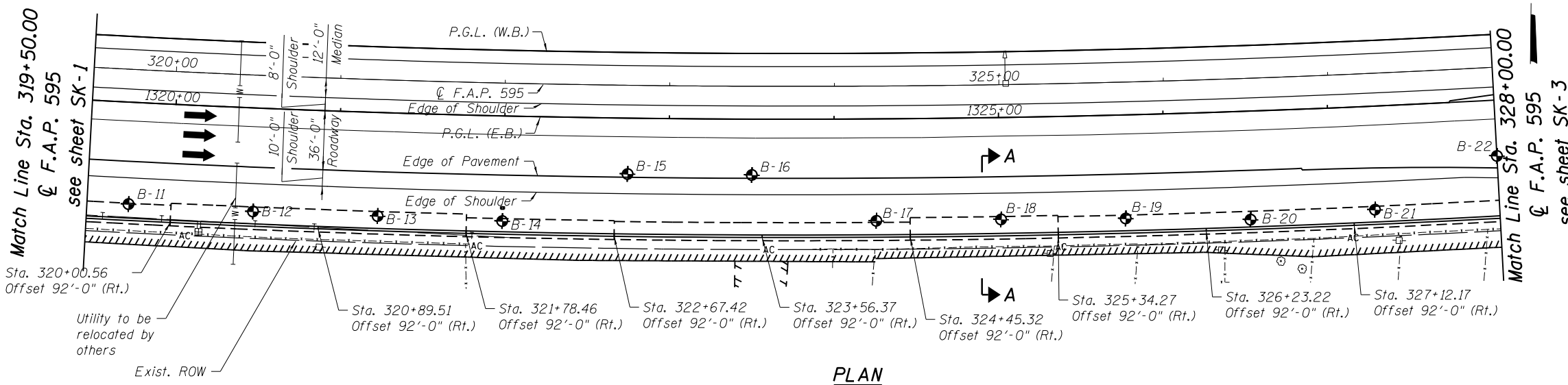
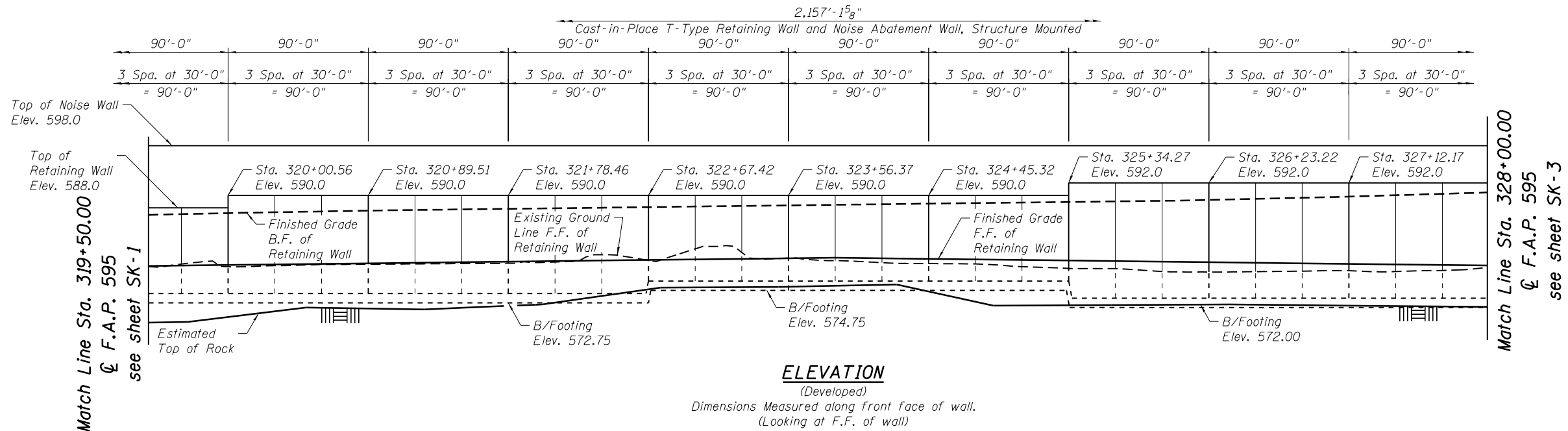


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PLOT DATE = 3/17/2015	DRAWN - RD	REVISED -
	CHECKED - J.J.H.	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. SK-1 OF SK-22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142) R	ROCK ISLAND	1353	1004
			CONTRACT NO. 64883	
ILLINOIS FED. AID PROJECT				



ELEVATION

(Developed)
Dimensions Measured along front face of wall.
(Looking at F.F. of wall)

PLAN

NOTES:

1. Offsets are measured from C.F.A.P. 595 to F.F. of wall.
2. For legend see sheet SK-1.
3. For Section A-A, see sheet SK-12.

GENERAL PLAN & ELEVATION - 2
ILLINOIS ROUTE 5
(JOHN DEERE ROAD)
ILLINOIS F.A.P. RTE. 595
SECTION (142-1, 142)R
ROCK ISLAND COUNTY
STATION 312+00.00 TO 333+32.00
STRUCTURE NO. 081-7001

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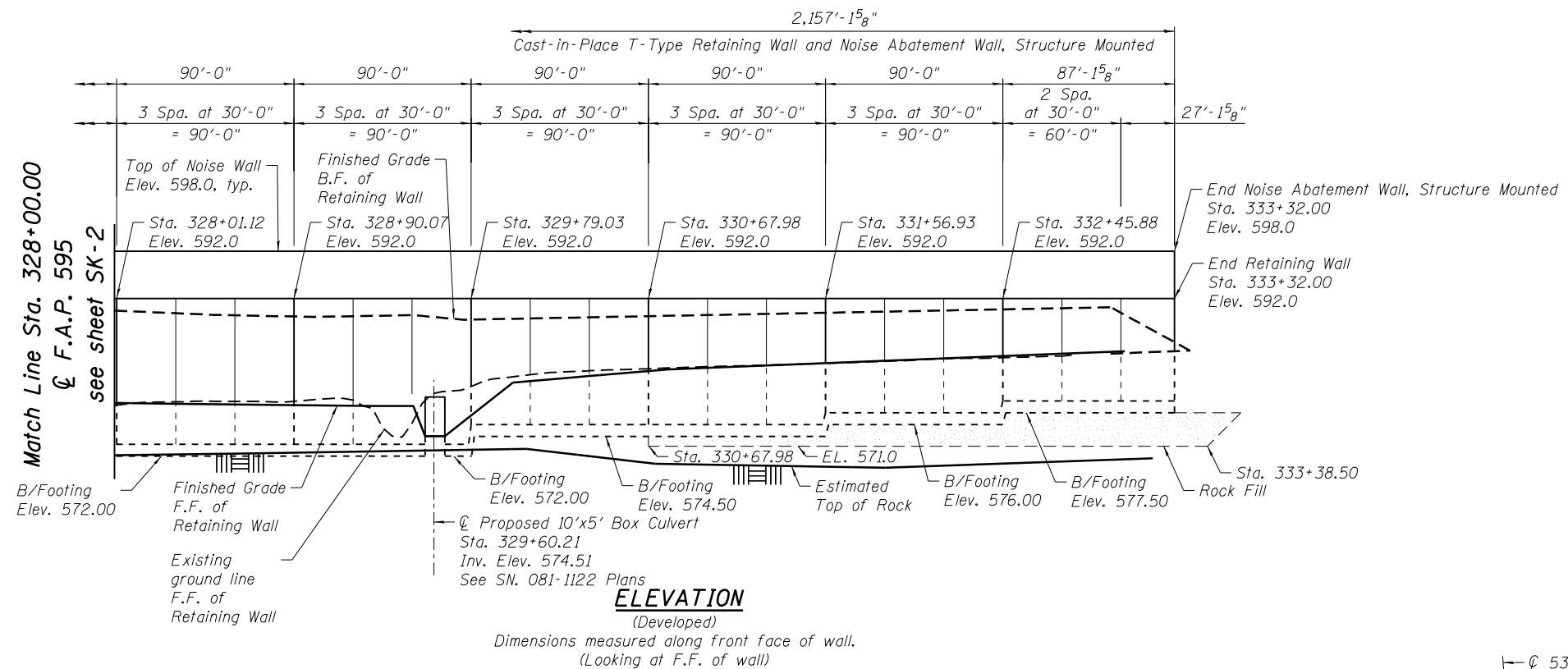
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PLOT DATE = 3/17/2015	CHECKED - JHJ	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. SK-2 OF SK-22 SHEETS

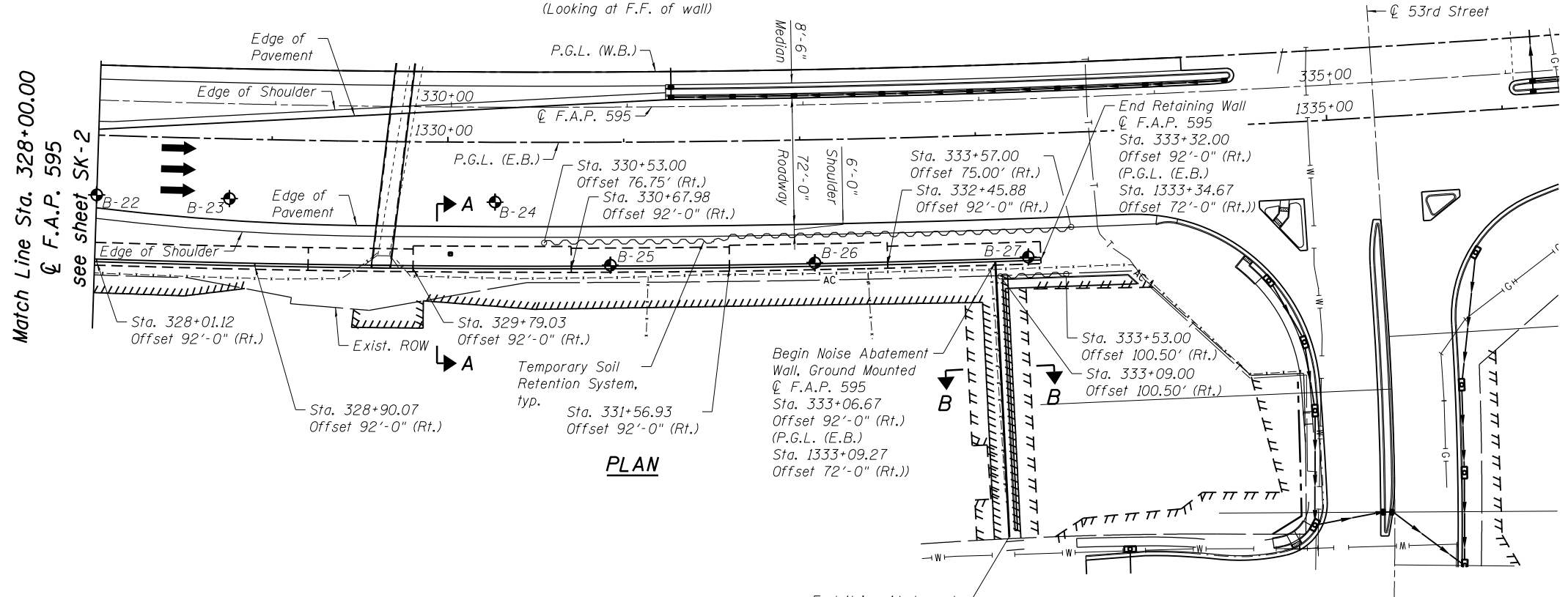
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142) R	ROCK ISLAND	1353	1005
CONTRACT NO. 64883				

ILLINOIS FED. AID PROJECT



ELEVATION
(Developed)

Dimensions measured along front face of wall.
(Looking at F.F. of wall)



PLAN

NOTES:

- Offsets are measured from C.F.A.P. 595 to F.F. of wall.
- For legend see sheet SK-1.
- For Section A-A, see sheet SK-12. For Section B-B, see sheet SK-4.

GENERAL PLAN & ELEVATION - 3
ILLINOIS ROUTE 5
(JOHN DEERE ROAD)
ILLINOIS F.A.P. RTE. 595
SECTION (142-1, 142)R
ROCK ISLAND COUNTY
STATION 312+00.00 TO 333+32.00
STRUCTURE NO. 081-7001

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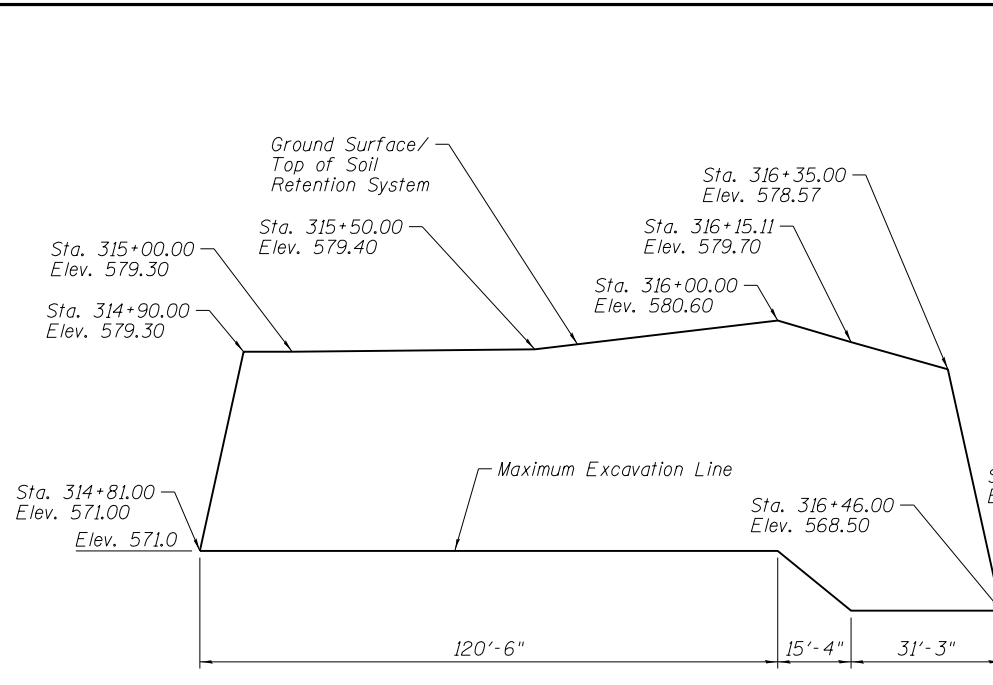


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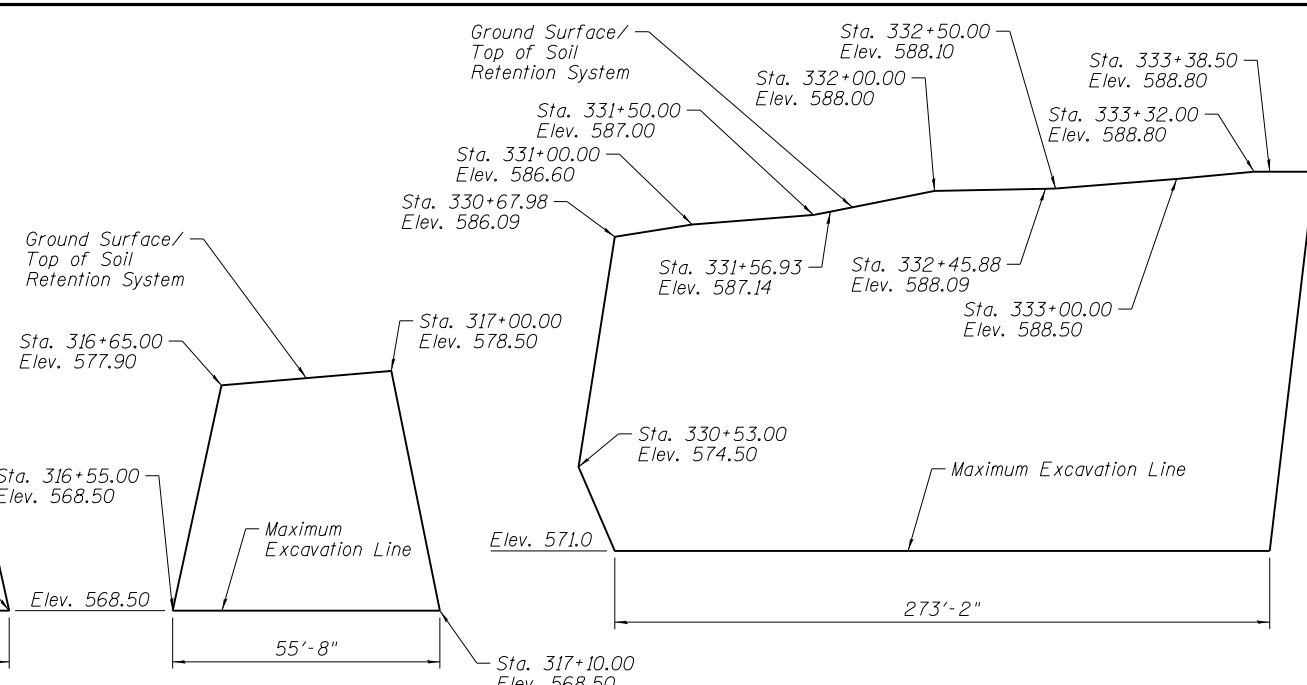
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. SK-3 OF SK-22 SHEETS

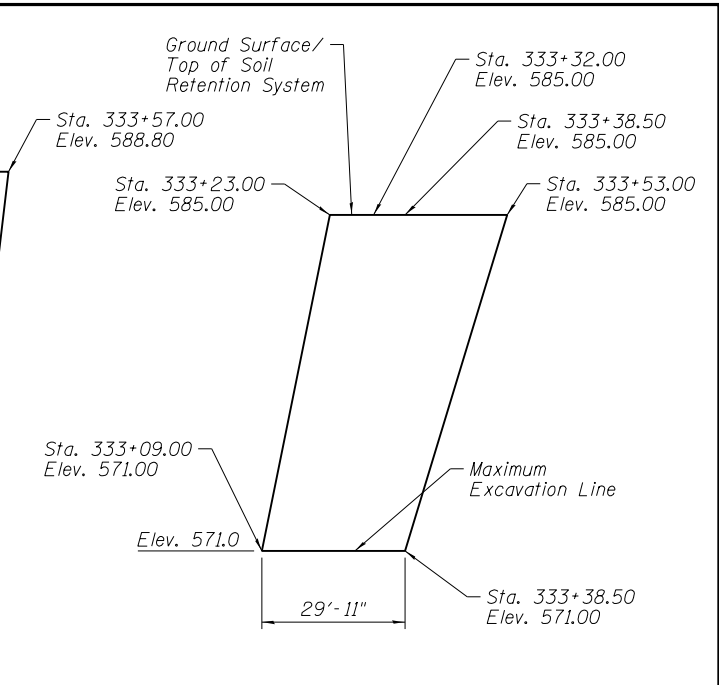
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CONTRACT NO. 64883				
ILLINOIS FED. AID PROJECT				



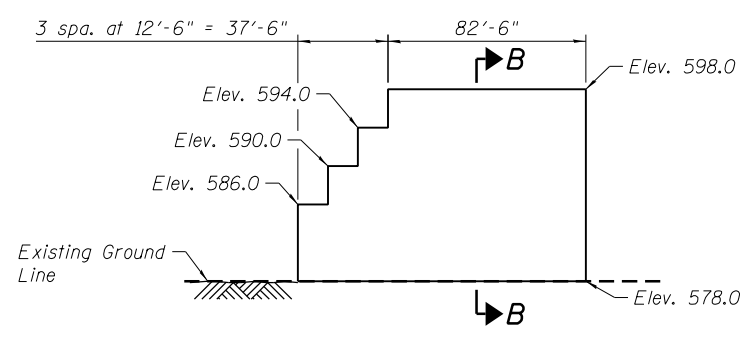
TEMPORARY SOIL RETENTION SYSTEM 1 - ELEVATION
(Looking North)



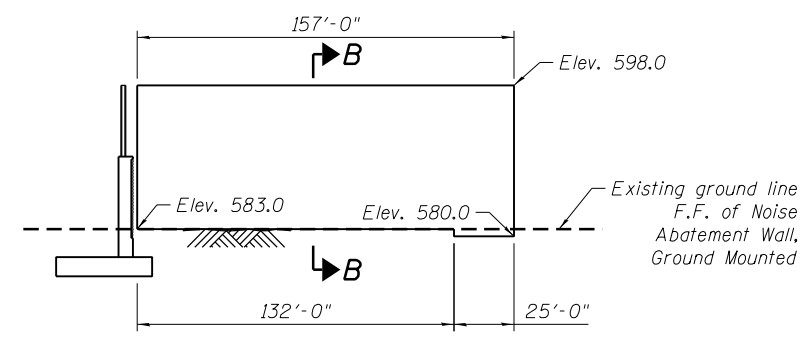
TEMPORARY SOIL RETENTION SYSTEM 2 - ELEVATION
(Looking North)



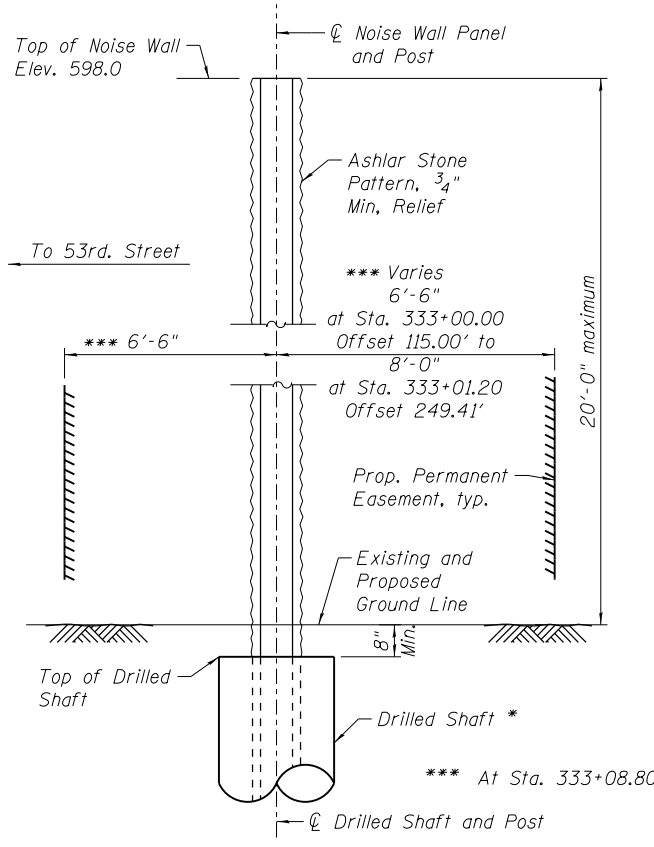
TEMPORARY SOIL RETENTION SYSTEM 3 - ELEVATION
(Looking North)



ELEVATION
NOISE ABATEMENT WALL, GROUND MOUNTED
(Sta. 310+81.39 to Sta. 312+00)
(Looking North)



ELEVATION
NOISE ABATEMENT WALL, GROUND MOUNTED
(Sta. 333+06.67 to Sta. 333+09.43)
(Looking East)



SECTION THRU NOISE ABATEMENT WALL, GROUND MOUNTED
SECTION B-B
(Looking South)

GENERAL NOTES:

- Reinforcement bars designated (E) shall be epoxy coated.
- The noise wall shall have an "Ashlar Stone" pattern on both faces of the wall, for the entire length of the noise wall. The front face of the concrete retaining wall shall have an "Ashlar Stone" pattern for the full length of the wall.

ABBREVIATIONS:

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

INDEX OF SHEETS:

SK-1	General Plan & Elevation - 1
SK-2	General Plan & Elevation - 2
SK-3	General Plan & Elevation - 3
SK-4	General Notes & Noise Abatement Wall Details
SK-5	Retaining Wall Reinforcement Details - 1
SK-6	Retaining Wall Reinforcement Details - 2
SK-7	Retaining Wall Reinforcement Details - 3
SK-8	Retaining Wall Reinforcement Details - 4
SK-9	Retaining Wall Reinforcement Details - 5
SK-10	Retaining Wall Reinforcement Details - 6
SK-11	CIP Retaining Wall Reinforcement Details - 1
SK-12	CIP Retaining Wall Reinforcement Details - 2
SK-13	CIP Retaining Wall Reinforcement Details - 3
SK-14	Soil Borings - 1
SK-15	Soil Borings - 2
SK-16	Soil Borings - 3
SK-17	Soil Borings - 4
SK-18	Soil Borings - 5
SK-19	Soil Borings - 6
SK-20	Soil Borings - 7
SK-21	Soil Borings - 8
SK-22	Soil Borings - 9

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structure Excavation	Cu. Yd.	9,943
Rock Excavation For Structures	Cu. Yd.	281
Removal And Disposal Of Unsuitable Material For Structures	Cu. Yd.	2,380
Concrete Structures	Cu. Yd.	3,651.1
Form Liner Textured Surface	Sq. Ft.	25,795
Reinforcement Bars, Epoxy Coated	Pound	383,860
Name Plates	Each	1
Geocomposite Wall Drain	Sq. Yd.	850
Noise Abatement Wall, Ground Mounted	Sq. Ft.	4,530
Noise Abatement Wall, Structure Mounted	Sq. Ft.	18,103
Granular Backfill For Structures	Cu. Yd.	1,134
Rock Fill	Ton	4,402
Temporary Soil Retention System	Sq. Ft.	7,168
Staining Concrete Structures	Sq. Ft.	27,952
Form Liner Textured Surface Test Sample	Each	2

N:\PROJECTS\030333\CONTRACT_2\Design\Structural\CAD\Retaining Wall-1 (081-7001)\081-7001-64883.04.dgn



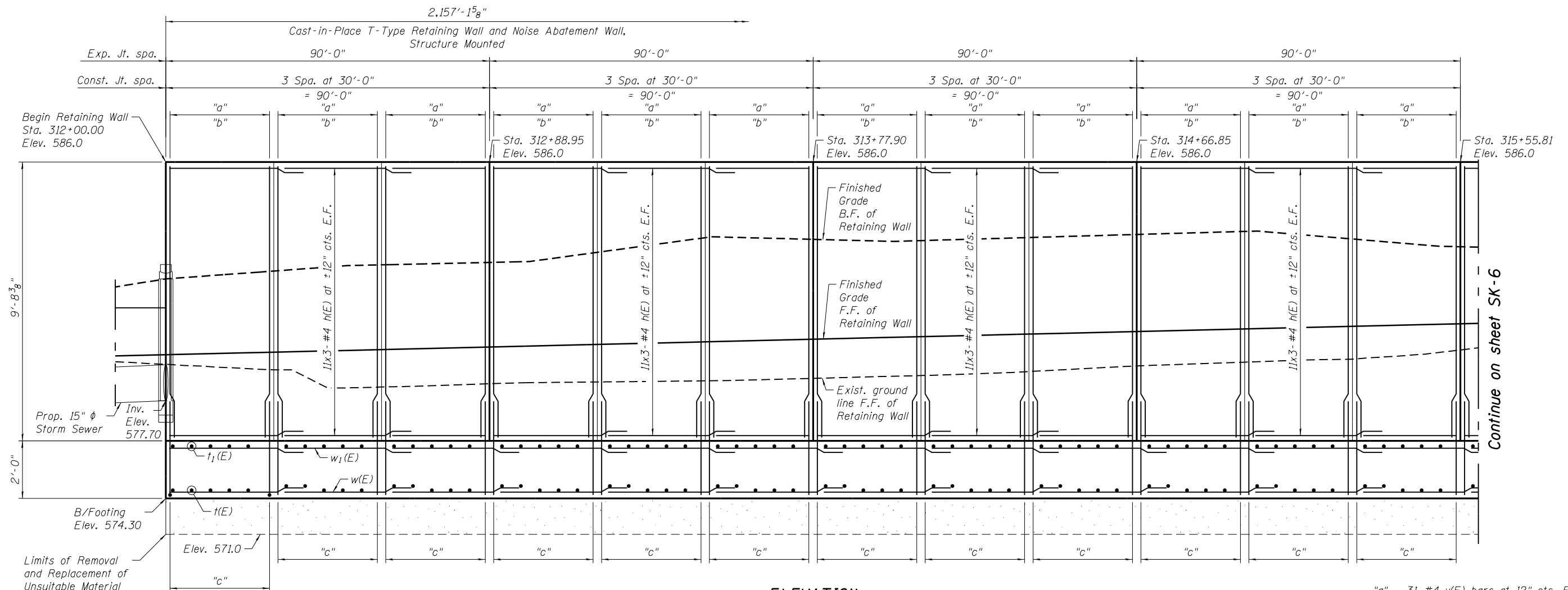
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	CHECKED - APD	REVISED -
PLOT SCALE = 4.000000' / 1" =	DRAWN - RD	REVISED -
PLOT DATE = 3/17/2015	CHECKED - JHJ	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES & NOISE ABATEMENT WALL DETAILS
S.N. 081-7001

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142) R	ROCK ISLAND	1353	1007
CONTRACT NO. 64883				
ILLINOIS FED. AID PROJECT				

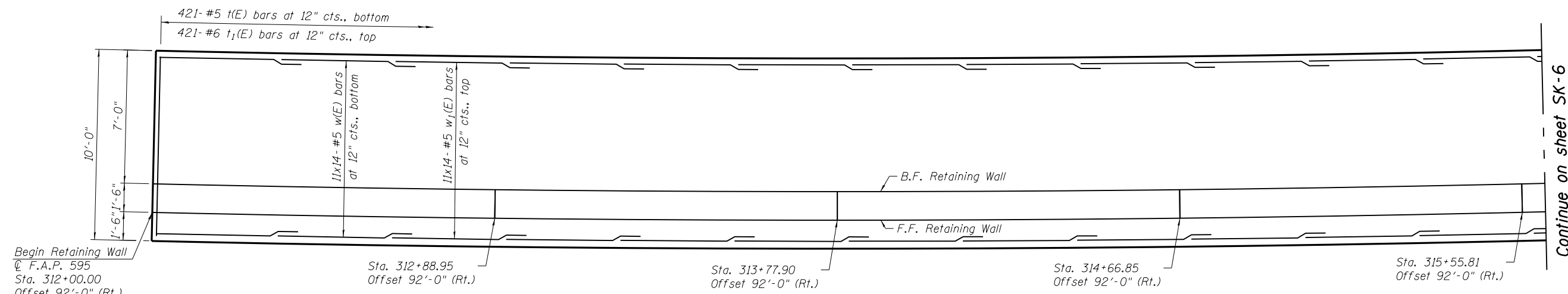
SHEET NO. SK-4 OF SK-22 SHEETS



ELEVATION
 (Developed view, looking F.F. of wall)
 (Dimensions measured along F.F. of wall)

"a" - 31-#4 v(E) bars at 12" cts. F.F.
 "b" - 31-#7 v2(E) bars at 12" cts. B.F.
 "c" - 31-#7 n(E) bars at 12" cts. B.F.

Maximum Applied Service Bearing Pressure:
 Sta. 312+00.00 to Sta. 315+55.81 = $O_{max} = 2.2$ ksf



PLAN

MIN. BAR LAP
 #4 bars = 2'-11"
 #5 bars = 2'-11" (Top)
 #5 bars = 2'-6"

NOTES:

- See Sheet SK-12 for Section Thru Wall.
- See Sheet SK-13 for reinforcement details and Bill of Material.
- Reinforcement bars noted 6x3 #5 etc. indicates 6 lines of bars with 3 lengths of bars per line.

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USER NAME = sailgood	DESIGNED - SMY	REVISED -
	CHECKED - APD	REVISED -
PLOT SCALE = 30.000287' / in.	DRAWN - RD	REVISED -
PLOT DATE = 3/17/2015	CHECKED - JHJ	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

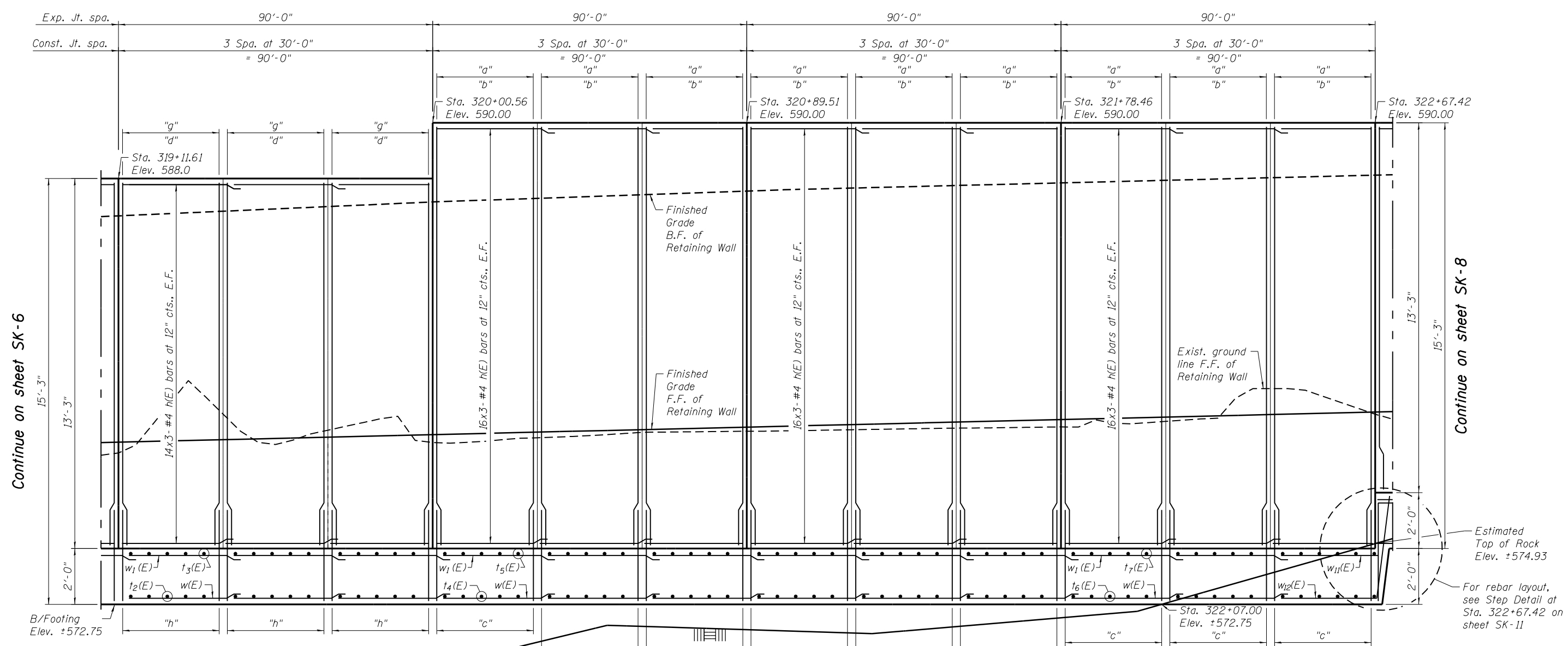
RETAINING WALL REINFORCEMENT DETAILS - 1
 S.N. 081-7001

SHEET NO. SK-5 OF SK-22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142) R	ROCK ISLAND	1353	1008
CONTRACT NO. 64883				

ILLINOIS FED. AID PROJECT

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 081-7001-64883.dwg



NOTES:

- See Sheet SK-12 for Section Thru Wall.
- See Sheet SK-13 for reinforcement details and Bill of Material.
- Reinforcement bars noted 6x3 #5 etc. indicates 6 lines of bars with 3 lengths of bars per line.

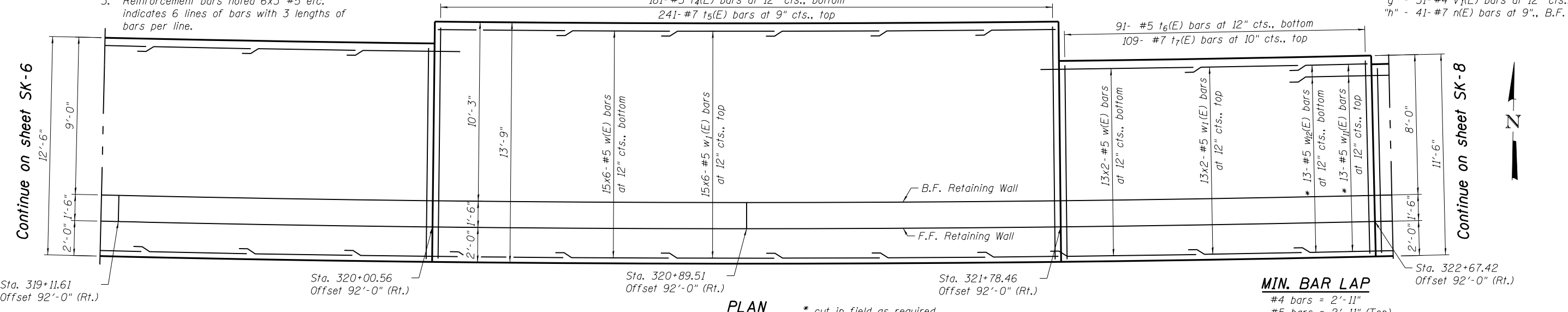
ELEVATION

(Developed view, looking F.F. of wall)
 (Dimensions measured along F.F. of wall)
 181- #5 t₄(E) bars at 12" cts., bottom
 241- #7 t₅(E) bars at 9" cts., top

Maximum Applied Service Bearing Pressure:
 Sta. 319+11.61 to Sta. 320+00.56 = Q_{max} = 2.3 ksf
 Sta. 320+00.56 to Sta. 321+78.46 = Q_{max} = 2.5 ksf
 Sta. 321+78.46 to Sta. 322+67.42 = Q_{max} = 3.8 ksf

"a" - 31- #4 v₄(E) bars at 12" cts., F.F.
 "b" - 41- #8 v₅(E) bars at 9" cts., B.F.
 "c" - 41- #8 n₁(E) bars at 9" cts., B.F.
 "d" - 41- #7 v₃(E) bars at 9" cts., B.F.
 "g" - 31- #4 v₁(E) bars at 12" cts., F.F.
 "h" - 41- #7 n₁(E) bars at 9", B.F.

Continue on sheet SK-6



PLAN

* cut in field as required.

MIN. BAR LAP

- #4 bars = 2'-11"
- #5 bars = 2'-11" (Top)
- #5 bars = 2'-6"



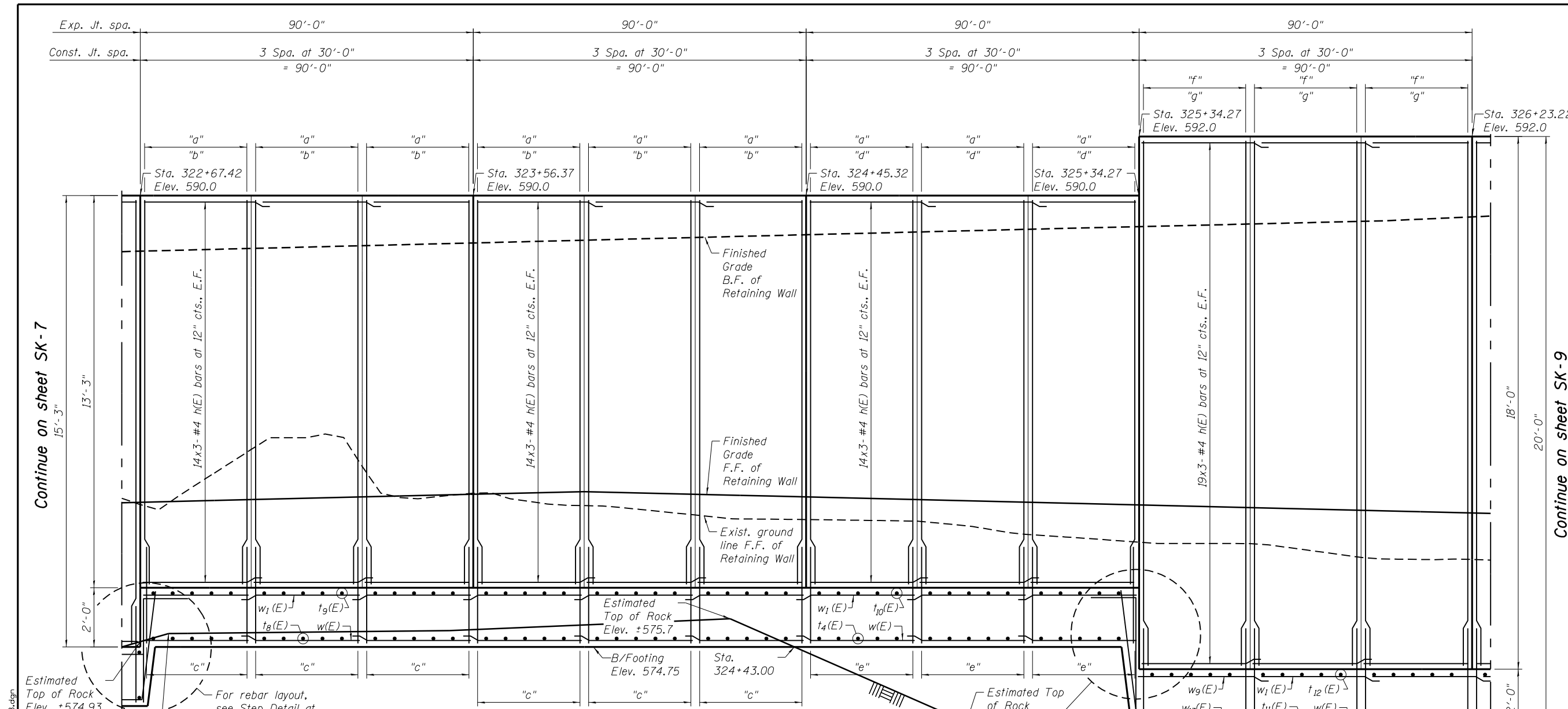
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	CHECKED - APD	REVISED -
PLOT SCALE = 30.000000' / in.	DRAWN - RD	REVISED -
PLOT DATE = 3/17/2015	CHECKED - JHJ	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

RETAINING WALL REINFORCEMENT DETAILS - 3
S.N. 081-7001

SHEET NO. SK-7 OF SK-22 SHEETS

F.A.P. RTE. 595	SECTION (142-1, 142) R	COUNTY ROCK ISLAND	TOTAL SHEETS 1353	SHEET NO. 1010
CONTRACT NO. 64883			ILLINOIS FED. AID PROJECT	



ELEVATION

(Developed view, looking F.F. of wall)
(Dimensions measured along F.F. of wall)

Maximum Applied Service Bearing Pressure:
Sta. 322+67.42 to Sta. 324+45.32 = $Q_{max} = 3.2$ ksf
Sta. 324+45.32 to Sta. 325+34.27 = $Q_{max} = 2.2$ ksf
Sta. 325+34.27 to Sta. 326+23.22 = $Q_{max} = 4.3$ ksf

For rebar layout, see Step Detail at Sta. 322+67.42 on sheet SK-11

For rebar layout, see Step Detail at Sta. 325+34.27 on sheet SK-11

Estimated Top of Rock Elev. +574.93

Estimated Top of Rock Elev. +575.2

Estimated Top of Rock Elev. +575.7

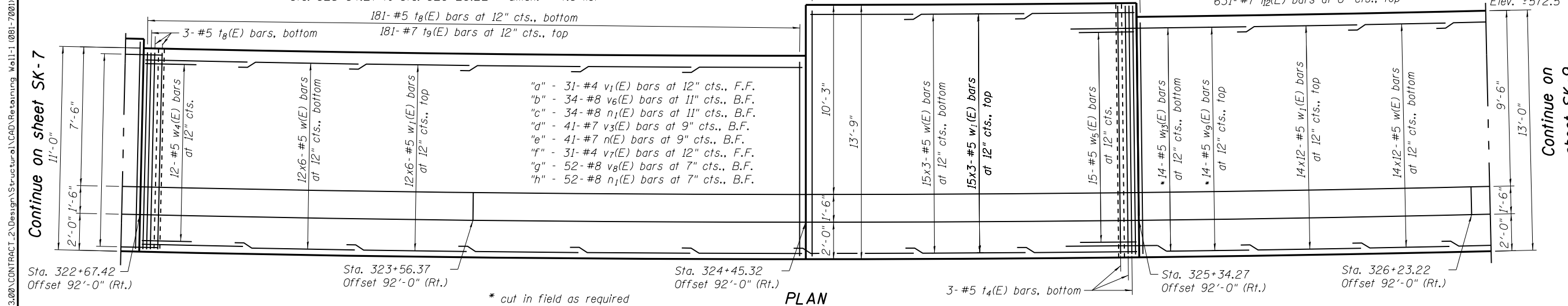
B/Footing Elev. 574.75

Sta. 324+43.00

Estimated Top of Rock Elev. +572.4

B/Footing Elev. 572.00

Estimated Top of Rock Elev. +572.5



PLAN

* cut in field as required

NOTES:

1. See Sheet SK-12 for Section Thru wall.
2. See Sheet SK-13 for reinforcement details and Bill of Material.
3. Reinforcement bars noted 6x3 #5 etc. indicates 6 lines of bars with 3 lengths of bars per line.



MIN. BAR LAP

- #4 bars = 2'-11"
- #5 bars = 2'-11" (Top)
- #5 bars = 2'-6"

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USER NAME = sailgood	DESIGNED - SMY	REVISED -
	CHECKED - APD	REVISED -
PLOT SCALE = 30.000000' / in.	DRAWN - RD	REVISED -
PLOT DATE = 3/17/2015	CHECKED - JHJ	REVISED -

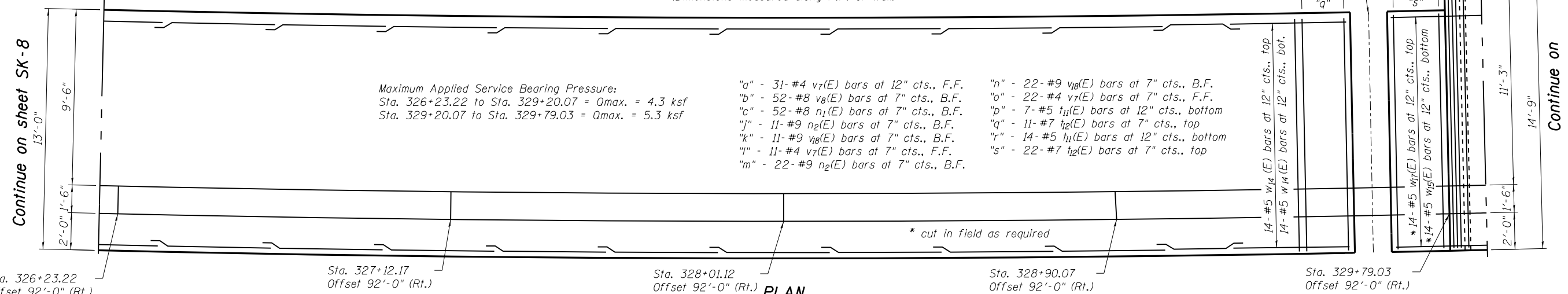
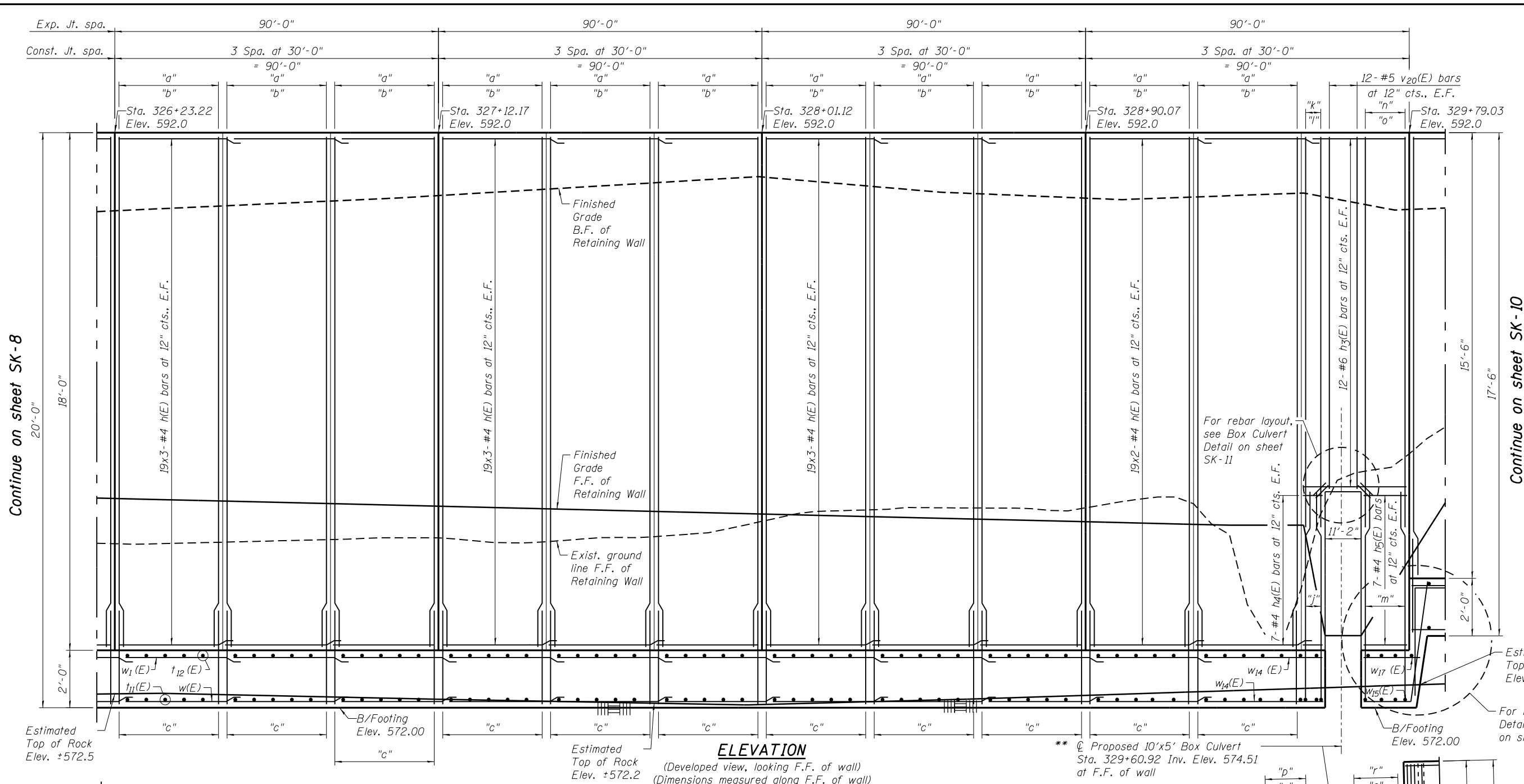
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

RETAINING WALL REINFORCEMENT DETAILS - 4
S.N. 081-7001

SHEET NO. SK-8 OF SK-22 SHEETS

F.A.P. RTE. 595	SECTION (142-1, 142) R	COUNTY ROCK ISLAND	TOTAL SHEETS 1353	SHEET NO. 1011
CONTRACT NO. 64883			ILLINOIS FED. AID PROJECT	

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CHECKED - APD	REVISIONS -	
PLOT SCALE = 30.000000' / in.	DRAWN - RD	REVISED -
PLOT DATE = 3/17/2015	CHECKED - JHJ	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RETAINING WALL REINFORCEMENT DETAILS - 5
S.N. 081-7001

F.A.P. RTE. 595	SECTION (142-1, 142) R	COUNTY ROCK ISLAND	TOTAL SHEETS 1353	SHEET NO. 1012
CONTRACT NO. 64883				
ILLINOIS FED. AID PROJECT				

Continue on sheet SK-8

Continue on sheet SK-8

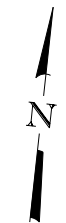
Continue on sheet SK-10

Continue on sheet SK-10

- NOTES:**
- See Sheet SK-12 for Section Thru Wall.
 - See Sheet SK-13 for reinforcement details and Bill of Material.
 - Reinforcement bars noted 6x3 #5 etc. indicates 6 lines of bars with 3 lengths of bars per line.

** For Box Culvert and Retaining Wall interface detailing see plans for SN 081-1122

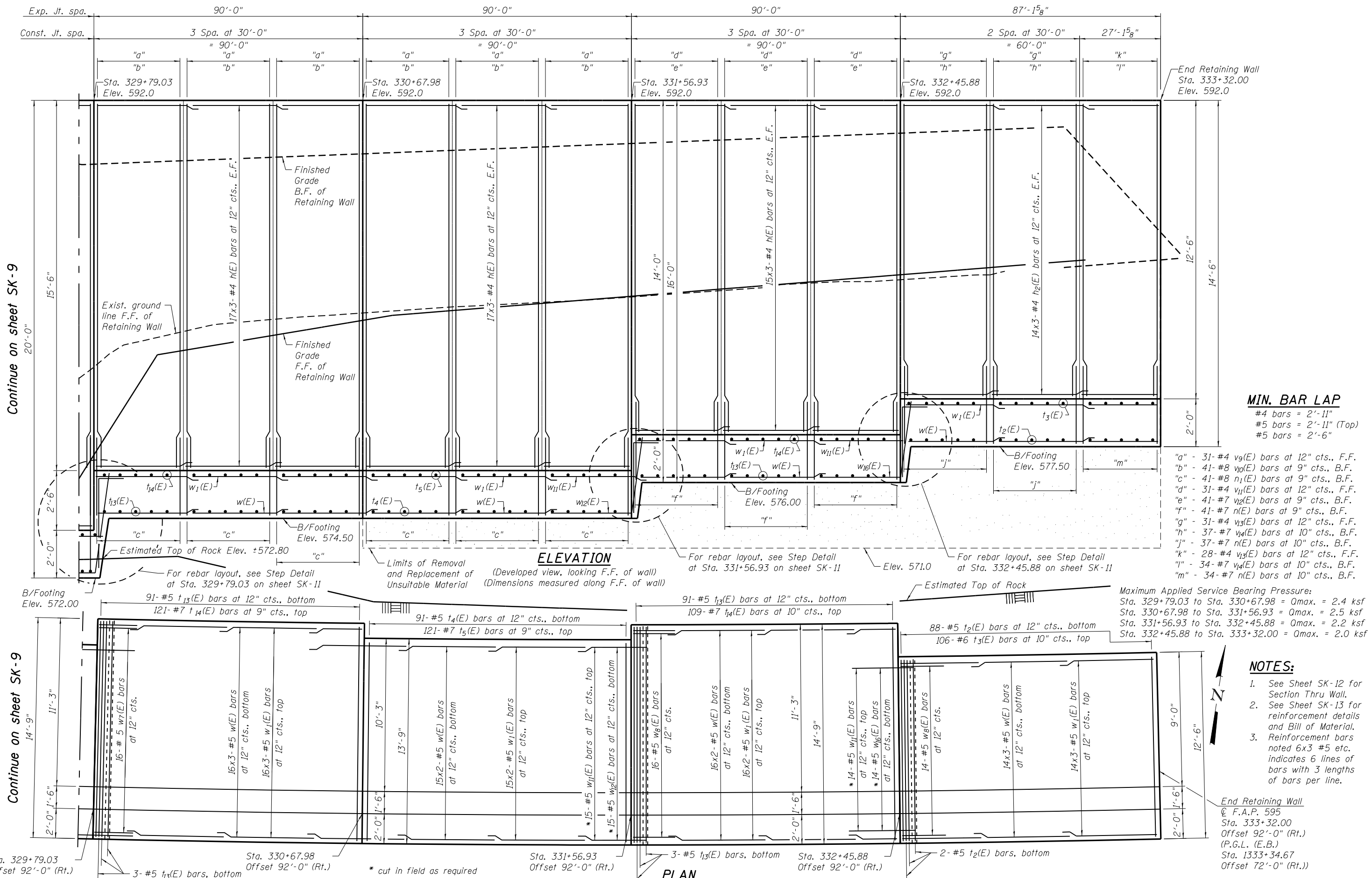
MIN. BAR LAP
 #4 bars = 2'-11"
 #5 bars = 2'-11" (Top)
 #5 bars = 2'-6"



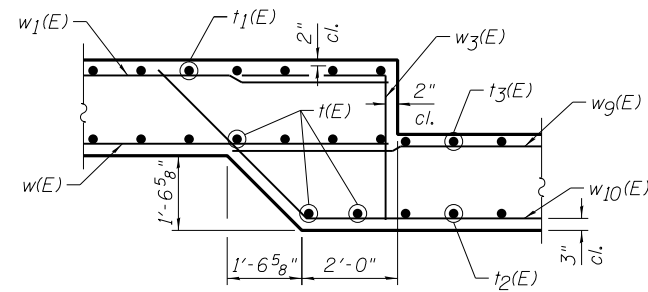
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Continue on sheet SK-9

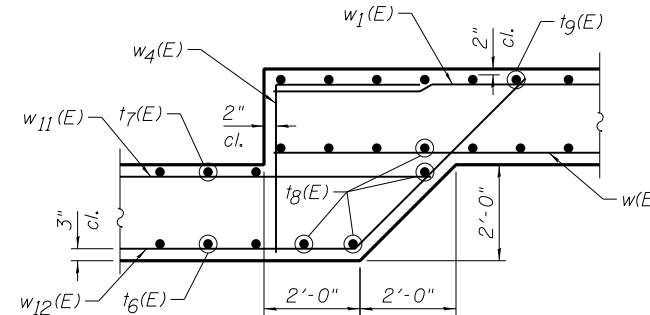
Continue on sheet SK-9



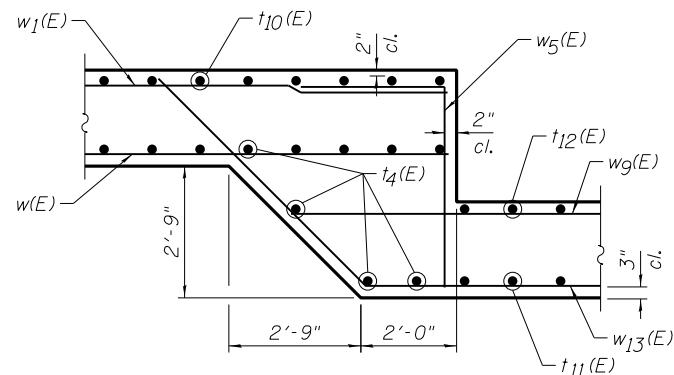
<p> Clorba Group, Inc. CONSULTING ENGINEERS 6501 North Cicero Avenue Suite 202 Chicago, Illinois 60656 Tel: 773-774-4000 Fax: 773-774-4014 Email: clorba@clorba.com </p>	USER NAME = sailgood	DESIGNED - SMY	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	RETAINING WALL REINFORCEMENT DETAILS - 6 S.N. 081-7001	F.A.P. RT. = 595	SECTION (142-1, 142) R	COUNTY ROCK ISLAND	TOTAL SHEETS 1353	SHEET NO. 1013
	PLOT SCALE = 30.000000' / 1"	DRAWN - RD	REVISED -			CONTRACT NO. 64883				
	PLOT DATE = 3/17/2015	CHECKED - JQH	REVISED -			ILLINOIS FED. AID PROJECT				
						SHEET NO. SK-10 OF SK-22 SHEETS				



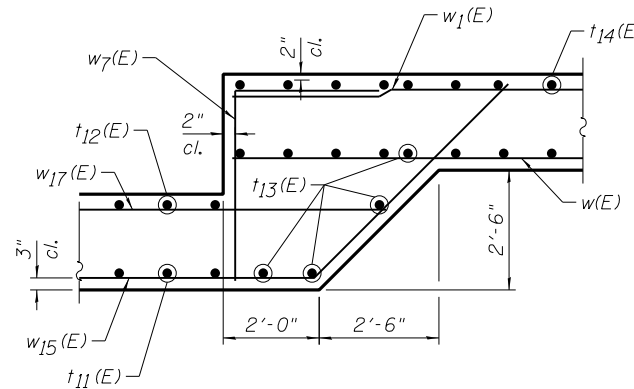
**STEP DETAIL
STA. 316+15.11**



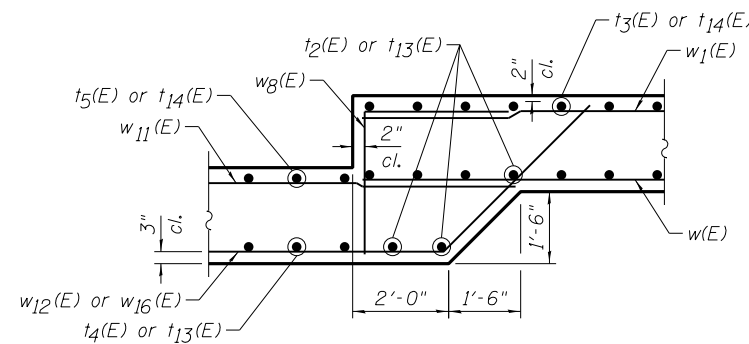
**STEP DETAIL
STA. 322+67.42**



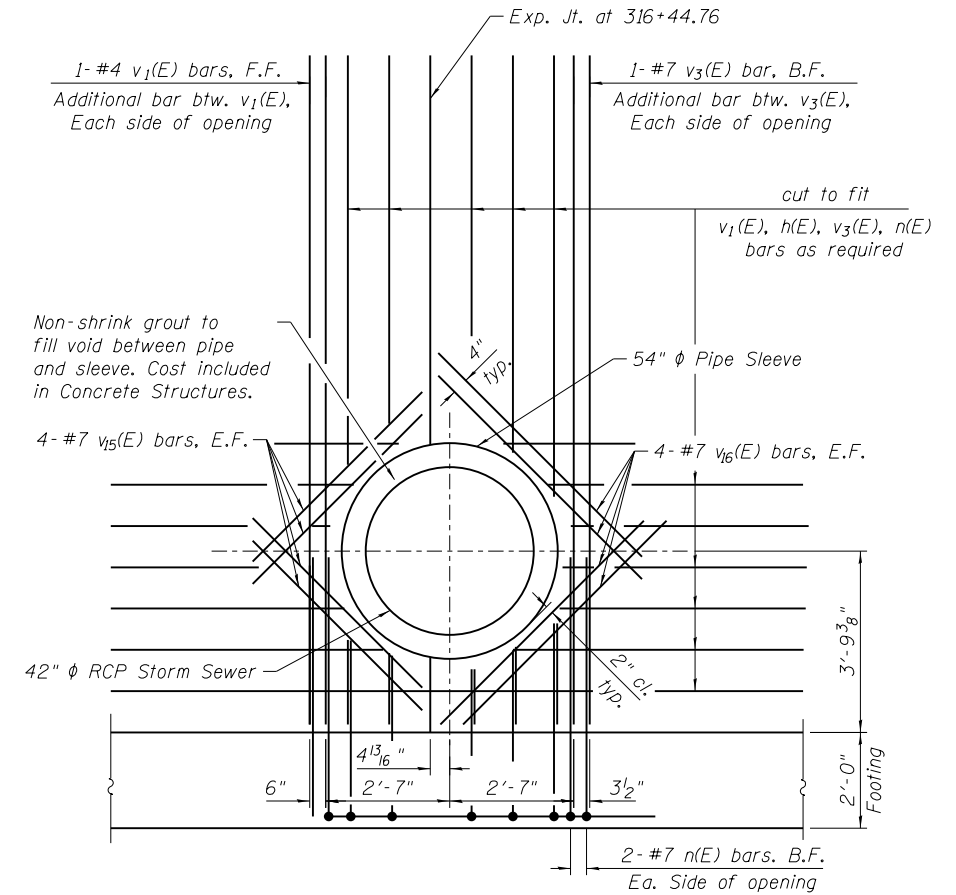
**STEP DETAIL
STA. 325+34.27**



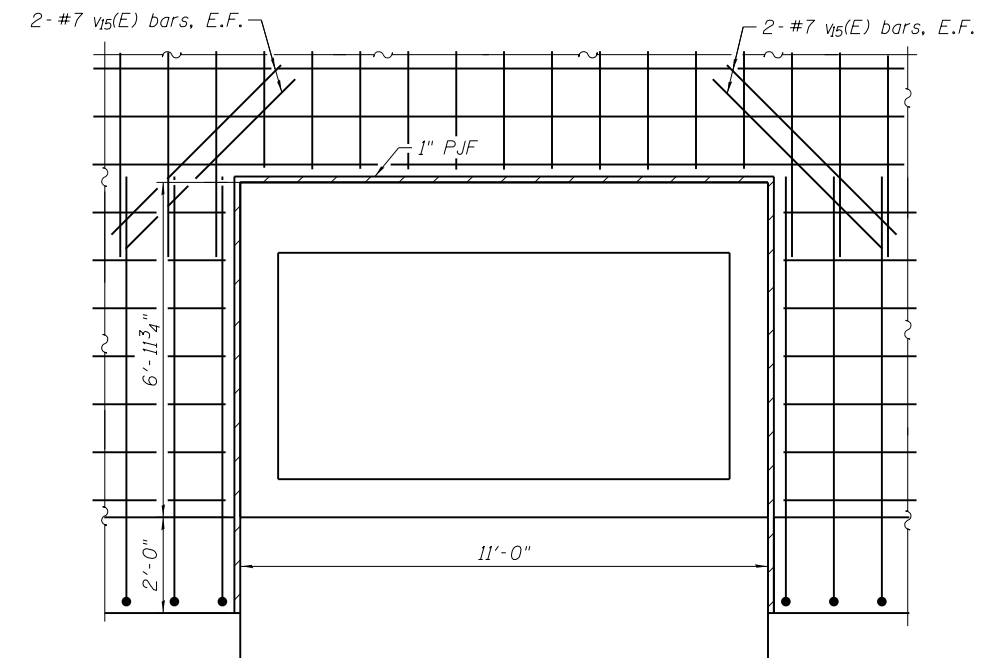
**STEP DETAIL
STA. 329+79.03**



**STEP DETAIL
STA. 331+56.93 & 332+45.88**



REINFORCED CONCRETE PIPE DETAIL



BOX CULVERT DETAIL

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USER NAME = sailgood	DESIGNED - SMY	REVISED -
	CHECKED - APD	REVISED -
PLOT SCALE = 4.000000' / 1" =	DRAWN - RD	REVISED -
PLOT DATE = 3/17/2015	CHECKED - JHJ	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CIP RETAINING WALL REINFORCEMENT DETAILS - 1
S.N. 081-7001**

SHEET NO. SK-11 OF SK-22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142) R	ROCK ISLAND	1353	1014
CONTRACT NO. 64883			ILLINOIS FED. AID PROJECT	

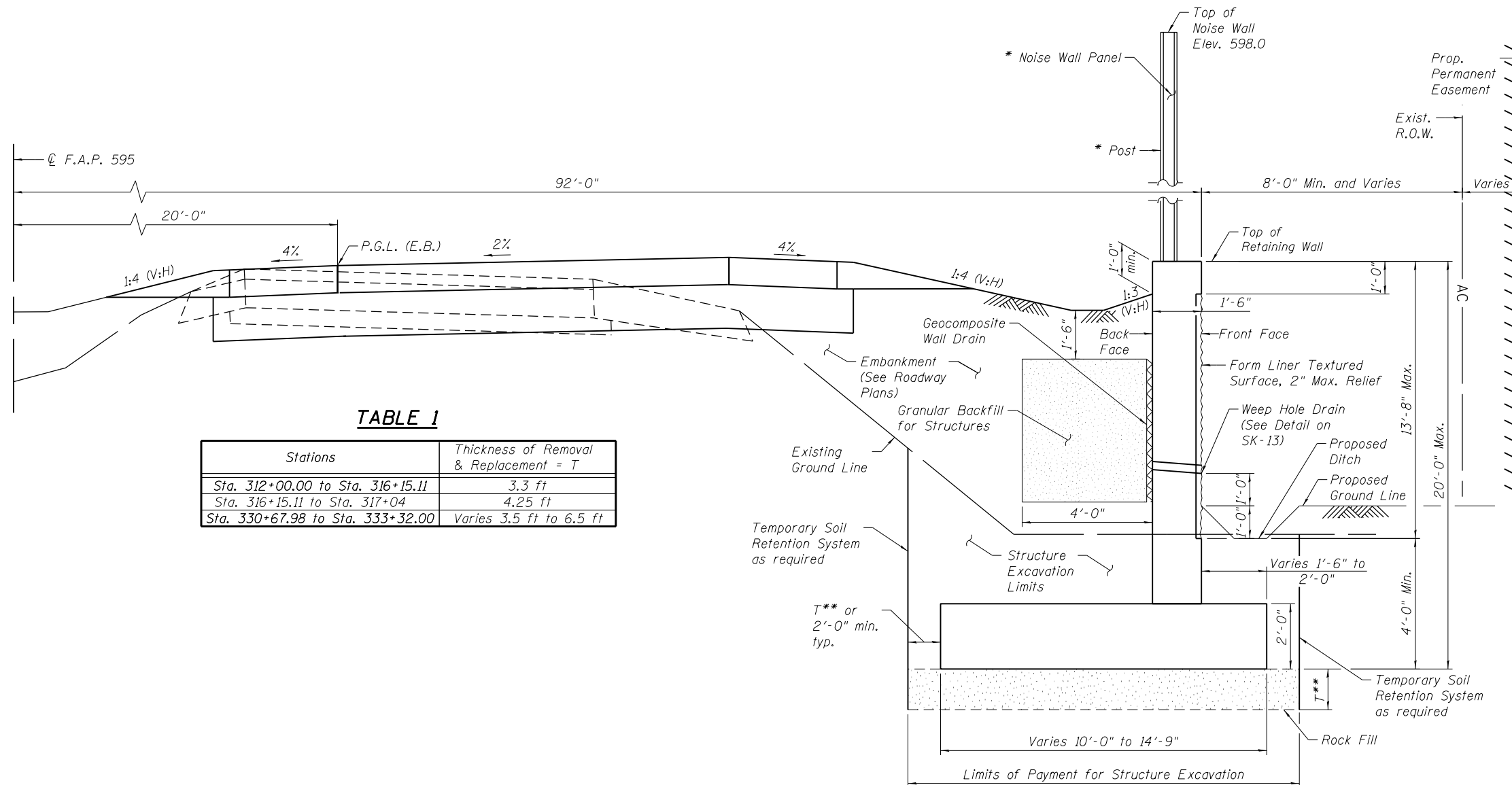


TABLE 1

Stations	Thickness of Removal & Replacement = T
Sta. 312+00.00 to Sta. 316+15.11	3.3 ft
Sta. 316+15.11 to Sta. 317+04	4.25 ft
Sta. 330+67.98 to Sta. 333+32.00	Varies 3.5 ft to 6.5 ft

* Type, size & spacing of posts, noise wall panels, and all connections to be determined by Contractor.

** See Table 1

Note:
The noise wall shall have an "Ashlar Stone" pattern on both faces of the wall, for the entire length of the noise wall. The front face of the concrete retaining wall shall have an "Ashlar Stone" pattern for the full length of the wall.

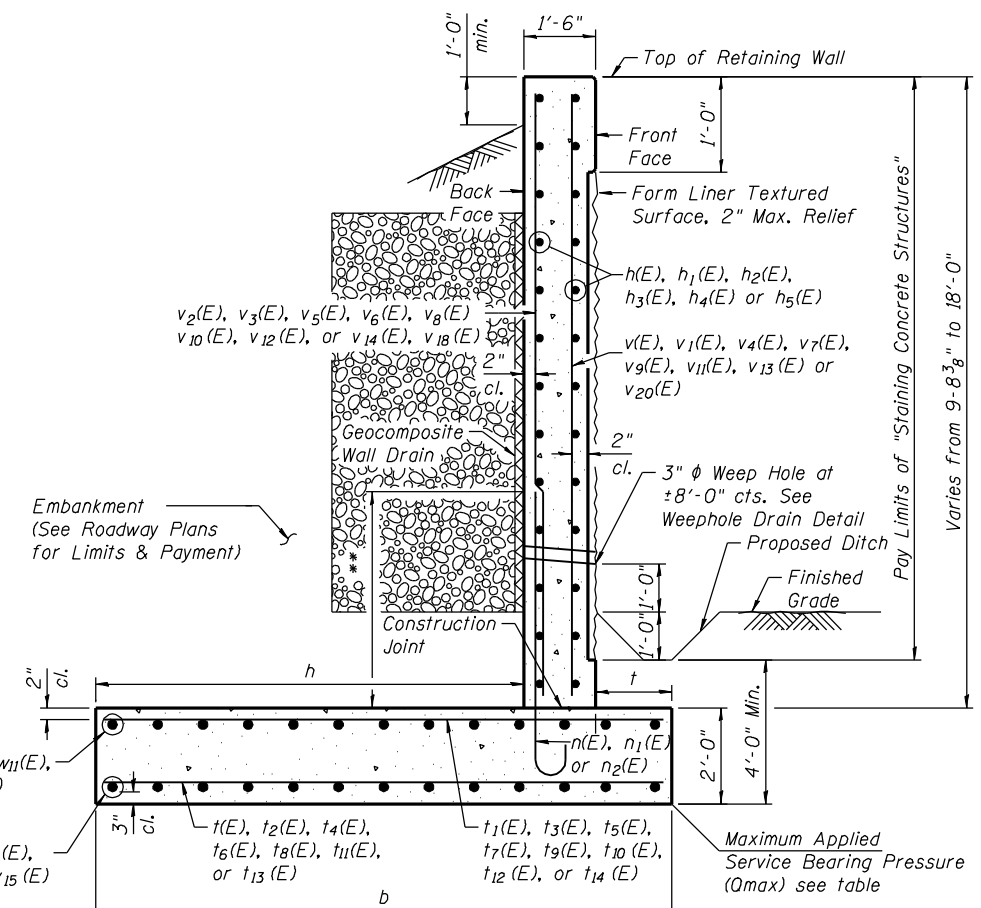
SECTION THRU ROADWAY & RETAINING WALL

N:\PROJECTS\0003393\00\CONTRACT_2\Design\Structural\CAD\Retaining Wall-1 (081-7001)\081-7001-64883.12.dgn

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 08/13/2015 10:54:14 AM
 User: espinosa



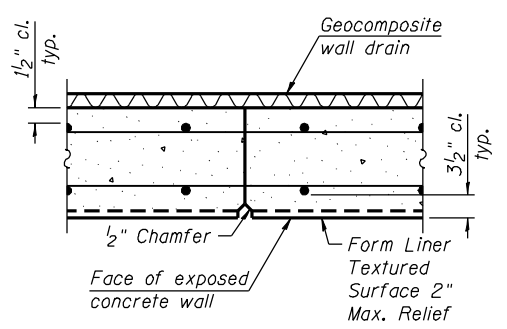
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PLOT DATE = 7/13/2015	DRAWN - RD	REVISED -
	CHECKED - JUH	REVISED -



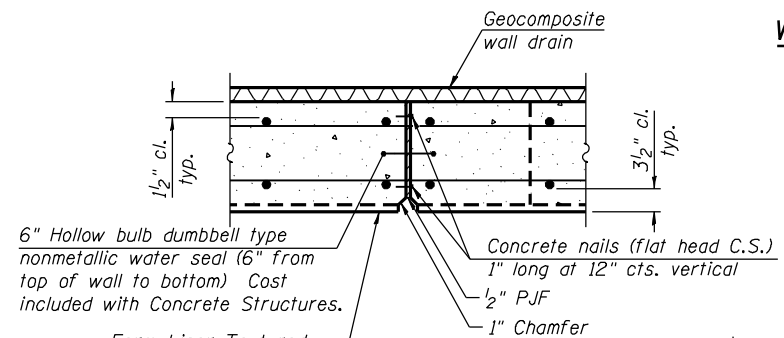
SECTION A-A

** n(E) = 5'-4"
 n₁(E) = 6'-11"
 n₂(E) = 8'-9"

Location	b	t	h	Q _{max} (ksf)	Rock Excavation (Cu. Yd.)
Sta 312+00.00 to 316+15.11	10.00	1.50	7.00	2.2	0
Sta 316+15.11 to 320+00.56	12.50	2.00	9.00	2.3	0
Sta 320+00.56 to 321+78.46	13.75	2.00	10.25	2.5	0
Sta 321+78.46 to 322+67.42	11.50	2.00	8.00	3.8	38
Sta 322+67.42 to 324+45.32	11.00	2.00	7.50	3.2	66.8
Sta 324+45.32 to 325+34.27	13.75	2.00	10.25	2.2	0
Sta 325+34.27 to 329+20.07	13.00	2.00	9.50	4.3	83.4
Sta 329+20.07 to 329+79.03	13.00	2.00	9.50	5.3	22.8
Sta 329+79.03 to 330+67.98	14.75	2.00	11.25	2.4	0
Sta 330+67.98 to 331+56.93	13.75	2.00	10.25	2.5	0
Sta 331+56.93 to 332+45.88	14.75	2.00	11.25	2.2	0
Sta 332+45.88 to 333+32.00	12.50	2.00	9.00	2.0	0



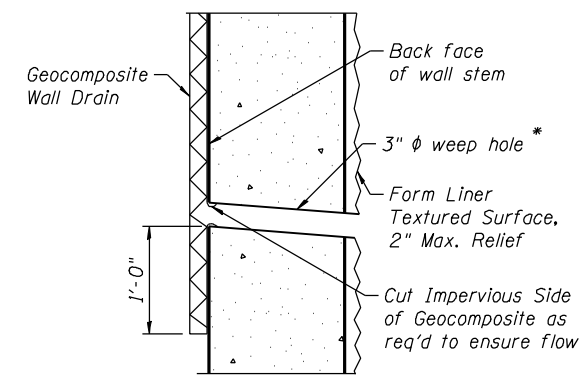
CONSTRUCTION JOINT DETAILS



EXPANSION JOINT DETAILS

BAR w₁₀(E), w₁₂(E), w₁₃(E), w₁₅(E) & w₁₆(E)

Bar	a	b	c
w ₁₀ (E)	3'-0 3/4"	4'-4"	31'-10"
w ₁₂ (E)	3'-6 7/8"	5'-0"	34'-4"
w ₁₃ (E)	4'-3 5/8"	6'-1"	31'-10"
w ₁₅ (E)	4'-6 1/2"	6'-4"	14'-3"
w ₁₆ (E)	3'-0"	4'-2"	34'-4"

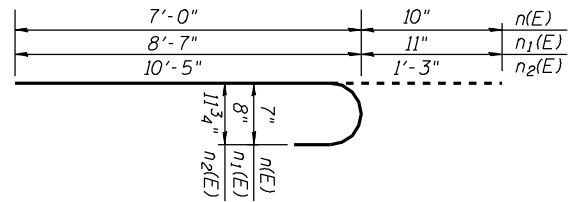


WEEP HOLE DRAIN DETAIL

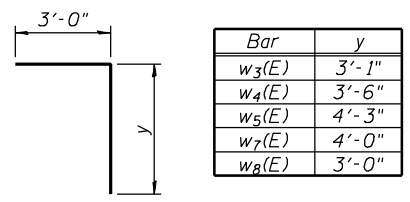
* Weep hole spacing shall be at ±8'-0" horizontally.

MIN. BAR LAPS

Basic Laps	Top Bar Layers
#4 - 2'-7"	#4 - 2'-11"
#5 - 3'-3"	#5 - 3'-8"
#7 - 5'-2"	
#8 - 6'-9"	



BAR n(E), n₁(E) & n₂(E)



Bar w₃(E) THRU w₈(E)

Bar	y
w ₃ (E)	3'-1"
w ₄ (E)	3'-6"
w ₅ (E)	4'-3"
w ₇ (E)	4'-0"
w ₈ (E)	3'-0"

Bar	No.	Size	Length	Shape
h(E)	2032	# 4	31'-10"	
h ₁ (E)	8	# 4	29'-8"	
h ₂ (E)	84	# 4	30'-11"	
h ₃ (E)	24	# 6	32'-3"	
h ₄ (E)	14	# 4	6'-0"	
h ₅ (E)	14	# 4	12'-3"	

n(E)	1325	# 7	7'-10"	
n ₁ (E)	1547	# 8	9'-6"	
n ₂ (E)	33	# 9	11'-8"	

t(E)	423	# 5	9'-8"	
t ₁ (E)	421	# 6	9'-8"	
t ₂ (E)	481	# 5	12'-2"	
t ₃ (E)	627	# 6	12'-2"	
t ₄ (E)	366	# 5	13'-5"	
t ₅ (E)	362	# 7	13'-5"	
t ₆ (E)	91	# 5	11'-2"	
t ₇ (E)	109	# 7	11'-2"	
t ₈ (E)	184	# 5	10'-8"	
t ₉ (E)	181	# 7	10'-8"	
t ₁₀ (E)	121	# 6	13'-5"	
t ₁₁ (E)	442	# 5	12'-8"	
t ₁₂ (E)	664	# 7	12'-8"	
t ₁₃ (E)	188	# 5	14'-5"	
t ₁₄ (E)	230	# 7	14'-5"	

v(E)	434	# 4	9'-5"	
v ₁ (E)	684	# 4	12'-11"	
v ₂ (E)	434	# 7	9'-5"	
v ₃ (E)	658	# 7	12'-11"	
v ₄ (E)	279	# 4	14'-11"	
v ₅ (E)	369	# 8	14'-11"	
v ₆ (E)	204	# 8	12'-11"	
v ₇ (E)	467	# 4	17'-8"	
v ₈ (E)	728	# 8	17'-8"	
v ₉ (E)	186	# 4	15'-2"	
v ₁₀ (E)	246	# 8	15'-2"	
v ₁₁ (E)	93	# 4	13'-8"	
v ₁₂ (E)	123	# 7	13'-8"	
v ₁₃ (E)	90	# 4	12'-2"	
v ₁₄ (E)	108	# 7	12'-2"	
v ₁₅ (E)	16	# 7	5'-0"	
v ₁₆ (E)	8	# 7	6'-0"	
v ₁₈ (E)	33	# 9	17'-8"	
v ₂₀ (E)	24	# 5	10'-8"	

w(E)	875	# 5	32'-6"	
w ₁ (E)	875	# 5	32'-10"	
w ₃ (E)	11	# 5	6'-1"	
w ₄ (E)	12	# 5	6'-6"	
w ₅ (E)	15	# 5	7'-3"	
w ₇ (E)	16	# 5	7'-6"	
w ₈ (E)	30	# 5	6'-0"	
w ₉ (E)	28	# 5	33'-4"	
w ₁₀ (E)	14	# 5	36'-2"	
w ₁₁ (E)	42	# 5	36'-2"	
w ₁₂ (E)	28	# 5	39'-4"	
w ₁₃ (E)	14	# 5	37'-11"	
w ₁₄ (E)	28	# 5	40'-9"	
w ₁₅ (E)	14	# 5	20'-7"	
w ₁₆ (E)	14	# 5	38'-6"	
w ₁₇ (E)	14	# 5	15'-9"	

Concrete Structures	Cu. Yd.	3,651.1
Reinforcement Bars, Epoxy Coated	Pound	383,860
Form Liner Textured Surface	Sq. Ft.	25,795
Granular Backfill For Structures	Cu. Yd.	1,134
Geocomposite Wall Drain	Sq. Yd.	850
Staining Concrete Structures	Sq. Ft.	27,952

Bars indicated thus: 14x3-#4 etc., indicates 14 lines of bars with 3 lengths per line.

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CIP RETAINING WALL REINFORCEMENT DETAILS - 3
S.N. 081-7001**

SHEET NO. SK-13 OF SK-22 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142) R	ROCK ISLAND	1353	1016

CONTRACT NO. 64883

ILLINOIS FED. AID PROJECT



Illinois Department of Transportation

SOIL BORING LOG

ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1000' E. of 41st Street LOGGED BY W. Garza SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

Table with columns for Soil Description, Depth (ft), and Blow Counts (D, B, U, M). Includes soil types like STIFF brown SILTY CLAY LOAM, VERY STIFF brown SILTY CLAY LOAM, SOFT light brown LOAM, etc.

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



Illinois Department of Transportation

SOIL BORING LOG

ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1000' E. of 41st Street LOGGED BY W. Garza SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

Table with columns for Soil Description, Depth (ft), and Blow Counts (D, B, U, M). Includes soil types like STIFF brown SILTY CLAY LOAM, STIFF light brown SILTY CLAY LOAM, MEDIUM gray/tan SILTY LOAM, etc.

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



Illinois Department of Transportation

SOIL BORING LOG

ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1000' E. of 41st Street LOGGED BY W. Garza SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

Table with columns for Soil Description, Depth (ft), and Blow Counts (D, B, U, M). Includes soil types like STIFF brown SILTY CLAY LOAM, MEDIUM brown SILTY CLAY LOAM, VERY SOFT brown SANDY LOAM, etc.

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

N:\PROJECTS\033333\CONTRACT_2\Design\Structural\CAD\Retaining Wall-1 (081-7001)\081-7001-64883-14.dgn



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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORINGS - 1 S.N. 081-7001

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



Illinois Department of Transportation

SOIL BORING LOG

ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1.000' E. of 41st Street LOGGED BY W. Garza

SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

Table with columns for Soil Description, Depth (ft), Blows (B), Penetration (P), and SPT (N) values. Includes soil types like SILTY CLAY LOAM, SILTY CLAY, and SHALE.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208) BBS, from 137 (Rev. 8-99)



Illinois Department of Transportation

SOIL BORING LOG

ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1.000' E. of 41st Street LOGGED BY M. Jacoby

SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

Table with columns for Soil Description, Depth (ft), Blows (B), Penetration (P), and SPT (N) values. Includes soil types like SILTY CLAY LOAM, SILTY CLAY, and SHALE.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208) BBS, from 137 (Rev. 8-99)



Illinois Department of Transportation

SOIL BORING LOG

ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1.000' E. of 41st Street LOGGED BY M. Jacoby

SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

Table with columns for Soil Description, Depth (ft), Blows (B), Penetration (P), and SPT (N) values. Includes soil types like SILTY CLAY LOAM, SILTY CLAY, and SANDSTONE.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208) BBS, from 137 (Rev. 8-99)

N:\PROJECTS\030333\03\CONTRACT_2\Design\Structural\CAD\Retaining Wall-1 (081-7001)\081-7001-64883-15.dgn



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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORINGS - 2 S.N. 081-7001 SHEET NO. SK-15 OF SK-22 SHEETS

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



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

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ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1,000' E. of 41st Street LOGGED BY W. Garza
SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	D E P T H H S	B L O W S Qu	U C S T	M O I S T	Surface Water Elev.		Groundwater Elev.:
					ft	ft	
B-7 316+75					575.50		565.5
Offset 83.00ft Rt Existing							565.5
Ground Surface Elev. 577.50							
SOFT light brown SILTY LOAM		0.3	10.0				
		P					
MEDIUM tan SILTY CLAY LOAM		4			575.50		
		4	0.5	23.0			
		B			574.00		
No Recovery		2					
		1					
		3			571.50		
VERY SOFT tan SILTY LOAM		0					
		1	0.2	30.0			
		3	P		568.50		
LOOSE tan fine moist SAND		3					
		1					
		8			566.00		
DENSE gray SHALE		11					
		11					
		21			564.00		
VERY DENSE gray SHALE with COAL lens		22					
		34					
Auger Refusal at 16.5'		36			561.00		
End of Boring							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208)
BBS, from 137 (Rev. 8-99)



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Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

Page 1 of 1

ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1,000' E. of 41st Street LOGGED BY W. Garza
SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	D E P T H H S	B L O W S Qu	U C S T	M O I S T	Surface Water Elev.		Groundwater Elev.:
					ft	ft	
B-8 317+50					578.10		566.1
Offset 83.00ft Rt Existing							566.1
Ground Surface Elev. 578.10							
STIFF light brown SILTY CLAY LOAM		4			578.10		
		3	1.8	20.0			
		4	P		574.60		
MEDIUM reddish brown CLAY LOAM		1					
		1	0.9	42.0			
		2	B		572.10		
STIFF tan SILT		1					
		3	1.1	25.0			
		4	B		569.10		
LOOSE tan SAND with medium GRAVEL		4					
		1					
		4			566.60		
VERY STIFF gray SHALE		6					
		10	3.3	14.0			
		18	S		564.60		
VERY DENSE gray SHALE		24					
		36					
Auger Refusal at 16'		40			562.10		
End of Boring							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208)
BBS, from 137 (Rev. 8-99)



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

Page 1 of 1

ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1,000' E. of 41st Street LOGGED BY W. Garza
SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	D E P T H H S	B L O W S Qu	U C S T	M O I S T	Surface Water Elev.		Groundwater Elev.:
					ft	ft	
B-9 318+25					578.40		557.40
Offset 82.00ft Rt Existing							
Ground Surface Elev. 578.40							
MEDIUM brown SILTY CLAY LOAM		0.5	14.0				
		P					
VERY STIFF brown SILTY CLAY LOAM		6			576.40		
		7	3.5	18.0			
		7	B		574.90		
VERY SOFT tan SILTY LOAM		2					
		3	0.2	27.0			
		3	P		572.40		
STIFF gray SHALEY CLAY		1					
		2	1.2	19.0			
		4	S		569.40		
MEDIUM gray SHALE		7					
		13					
		14			567.40		
VERY DENSE gray SHALE		14					
		22					
		38			564.90		
VERY DENSE gray SHALE		20					
		28					
		33			562.40		
VERY DENSE gray SHALE		18					
		100/11			559.90		
VERY DENSE gray SHALE		22					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208)
BBS, from 137 (Rev. 8-99)

N:\PROJECTS\030333\03\CONTRACT_2\Design\Structural\CAD\Retaining Wall-1 (081-7001)\081-7001-64883-16.dgn



USER NAME = sailgood	DESIGNED - SMY	REVISED -
	CHECKED - APD	REVISED -
PLOT SCALE = 0:2.0000 "/> <td>DRAWN - RD</td> <td>REVISED -</td>	DRAWN - RD	REVISED -
PLOT DATE = 3/17/2015	CHECKED - JHJ	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS - 3
S.N. 081-7001

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142) R	ROCK ISLAND	1353	1019
CONTRACT NO. 64883				



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

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ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1.000' E. of 41st Street LOGGED BY W. Garza
SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	D E P T H S	B L O W S	U C S Qu	M O I S T	Surface Water Elev.		D B U M	
					ft	ft	ft	ft
BORING NO. <u>B-10</u> Station <u>319+00</u> Offset <u>82.00ft Rt Existing</u> Ground Surface Elev. <u>578.30</u> ft								
STIFF brown SILTY CLAY LOAM			1.0	24.0				
			P					
STIFF tan SILTY LOAM	576.30	3						
		5	1.6	21.0				
	574.80	6	S					
MEDIUM light gray SILTY LOAM		2						
		4	0.9	25.0				
	572.30	5	B					
MEDIUM gray dirty SANDY GRAVEL with bottom 6" SHALEY CLAY		4						
		7	4.1	14.0				
	569.30	7	P					
MEDIUM gray SHALE		9						
		12						
	567.30	15						
VERY DENSE gray SHALE		16						
		25						
	564.80	43						
VERY DENSE gray SHALE		26						
		40						
	562.30	65						
VERY DENSE gray SHALE		22						
		42						
	559.80	58						
VERY DENSE gray SHALE		23						
		20						

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



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Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

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ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1.000' E. of 41st Street LOGGED BY W. Garza
SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	D E P T H S	B L O W S	U C S Qu	M O I S T	Surface Water Elev.		D B U M	
					ft	ft	ft	ft
BORING NO. <u>B-11</u> Station <u>319+75</u> Offset <u>82.00ft Rt Existing</u> Ground Surface Elev. <u>578.70</u> ft								
STIFF tan SILTY CLAY LOAM	576.70	7						
		5	1.8	24.0				
	575.20	6	P					
STIFF light gray SILTY LOAM		2						
		3	1.2	25.0				
	572.20	3	B					
MEDIUM gray clean SAND with medium moist GRAVEL		5						
		6						
	569.70	9						
VERY DENSE gray SHALE with DOLOMITE fragments		8						
		12						
	567.70	43						
VERY DENSE gray SHALE		32						
		42						
	565.20	50						
VERY DENSE gray SHALE		26						
		15						
	562.70	100/10						
End of Boring								

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



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

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ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1.000' E. of 41st Street LOGGED BY W. Garza
SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	D E P T H S	B L O W S	U C S Qu	M O I S T	Surface Water Elev.		D B U M	
					ft	ft	ft	ft
BORING NO. <u>B-12</u> Station <u>320+50</u> Offset <u>83.00ft Rt Existing</u> Ground Surface Elev. <u>578.50</u> ft								
STIFF brown SILTY CLAY LOAM			1.0	15.0				
			P					
STIFF light brown SILTY CLAY LOAM	576.50	3						
		2	1.0	22.0				
	575.00	3	P					
SOFT tan SILTY LOAM		1						
		2	0.2	29.0				
	572.00	2	P					
VERY DENSE gray SHALE		52						
		20						
	570.00	36						
MEDIUM/DENSE gray SHALE		14						
		13						
	567.50	17						
VERY DENSE gray SHALE		20						
		31						
	565.00	53						
VERY DENSE gray SHALE		24						
		39						
	562.50	65						
VERY DENSE gray SHALE		100/13						
End of Boring								

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

N:\PROJECTS\00033333\CONTRACT_2\Design\Structural\CAD\Retaining Wall-1 (081-7001)\081-7001-64883.17.dgn



USER NAME = <u>saillgood</u>	DESIGNED - <u>SMY</u>	REVISED -
	CHECKED - <u>APD</u>	REVISED -
PLOT SCALE = <u>0:2.0000</u> '1" / 1"	DRAWN - <u>RD</u>	REVISED -
PLOT DATE = <u>3/17/2015</u>	CHECKED - <u>JUH</u>	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS - 4
S.N. 081-7001

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142) R	ROCK ISLAND	1353	1020
CONTRACT NO. 64883				



Illinois Department of Transportation

SOIL BORING LOG

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ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1,000' E. of 41st Street LOGGED BY W. Garza SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

Table with columns for Soil Type, Depth (ft), Blows (B), Penetration (P), and SPT (N). Rows include STIFF light brown SILTY CLAY LOAM, MEDIUM gray/tan SILTY LOAM with CLAY LOAM lens, DENSE gray SHALE, VERY DENSE gray SHALE, and VERY DENSE gray SHALE with COAL lens.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208) BBS, from 137 (Rev. 8-99)



Illinois Department of Transportation

SOIL BORING LOG

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ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1,000' E. of 41st Street LOGGED BY W. Garza SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

Table with columns for Soil Type, Depth (ft), Blows (B), Penetration (P), and SPT (N). Rows include MEDIUM brown SILTY CLAY LOAM, STIFF tan SILTY CLAY LOAM, SOFT light gray SILTY LOAM with fine SAND lens, MEDIUM gray SHALE, VERY DENSE gray SHALE, and VERY DENSE gray SHALE.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208) BBS, from 137 (Rev. 8-99)



Illinois Department of Transportation

SOIL BORING LOG

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ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1,000' E. of 41st Street LOGGED BY W. Garza SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

Table with columns for Soil Type, Depth (ft), Blows (B), Penetration (P), and SPT (N). Rows include MEDIUM brown LOAM, VERY STIFF tan SILTY LOAM, VERY STIFF gray SILTY LOAM, STIFF gray SILTY CLAY LOAM, LOOSE gray dirty SAND, MEDIUM tan DOLOMITE, and VERY DENSE tan DOLOMITE.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208) BBS, from 137 (Rev. 8-99)

N:\PROJ\00033333\CONTRACT_2\Design\Structural\CAD\Retaining Wall-1 (081-7001)\081-7001-64883-1B.dgn



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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORINGS - 5 S.N. 081-7001

SHEET NO. SK-18 OF SK-22 SHEETS

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

ILLINOIS FED. AID PROJECT



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

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ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1,000' E. of 41st Street Date 9/27/11
SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W LOGGED BY W. Garza
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	DEPTH H T W S	B L O S I S	U C S	M O I S T	Surface Water Elev.		Groundwater Elev.:	
					ft	ft	ft	ft
BORING NO. <u>B-16</u> Station <u>323+50</u> Offset <u>54.00ft Rt Existing</u> Ground Surface Elev. <u>586.80</u> ft	(ft)	(ft)	(tsf)	(%)	ft	ft	ft	ft
VERY SOFT light brown SILTY LOAM			0.2 P	17.0				
584.80	7							
VERY STIFF light brown SILTY LOAM			2.4 P	16.0				
583.30	9							
STIFF dark brown LOAM			1.7 B	18.0				
580.80	6							
MEDIUM brown LOAM			0.7 P	17.0				
577.80	2							
VERY LOOSE light brown dirty SAND								
575.30	1							
VERY DENSE tan weathered LIMESTONE on DOLOMITE			100/1					
Auger Refusal @ 13.5' End of Boring	13.5							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208)
BBS, from 137 (Rev. 8-99)



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

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ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1,000' E. of 41st Street Date 10/3/11
SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W LOGGED BY W. Garza
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	DEPTH H T W S	B L O S I S	U C S	M O I S T	Surface Water Elev.		Groundwater Elev.:	
					ft	ft	ft	ft
BORING NO. <u>B-17</u> Station <u>324+25</u> Offset <u>82.00ft Rt Existing</u> Ground Surface Elev. <u>579.70</u> ft	(ft)	(ft)	(tsf)	(%)	ft	ft	ft	ft
MEDIUM brown SILTY CLAY LOAM			0.8 P	22.0				
577.70	3							
VERY STIFF brown SILTY CLAY LOAM			2.9 S	16.0				
575.70	5							
VERY DENSE tan weathered LIMESTONE			100/8					
Auger Refusal @ 6.5' End of Boring	6.5							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208)
BBS, from 137 (Rev. 8-99)



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

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ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1,000' E. of 41st Street Date 10/3/11
SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W LOGGED BY W. Garza
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	DEPTH H T W S	B L O S I S	U C S	M O I S T	Surface Water Elev.		Groundwater Elev.:	
					ft	ft	ft	ft
BORING NO. <u>B-18</u> Station <u>325+00</u> Offset <u>82.00ft Rt Existing</u> Ground Surface Elev. <u>579.30</u> ft	(ft)	(ft)	(tsf)	(%)	ft	ft	ft	ft
MEDIUM brown SILTY CLAY LOAM			0.8 P	19.0				
577.30	2							
STIFF light gray SILTY CLAY LOAM			1.6 P	23.0				
575.80	3							
MEDIUM light gray SILTY CLAY			0.7 B	29.0				
572.80	2							
572.30	3							
VERY DENSE tan/light gray weathered LIMESTONE Auger Refusal at 7.0' End of Boring	7.0		100/1					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208)
BBS, from 137 (Rev. 8-99)

N:\PROJ\00033333\CONTRACT_2\Design\Structural\CAD\Retaining Wall-1 (081-7001)\081-7001-64883-1.dgn



USER NAME = <u>saillgood</u>	DESIGNED - <u>SMY</u>	REVISED -
PLOT SCALE = <u>0:2.0000' = 1" = 10'</u>	CHECKED - <u>APD</u>	REVISED -
PLOT DATE = <u>3/17/2015</u>	DRAWN - <u>RD</u>	REVISED -
	CHECKED - <u>JUH</u>	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOIL BORINGS - 6
S.N. 081-7001**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142) R	ROCK ISLAND	1353	1022
CONTRACT NO. 64883				



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

Page 1 of 1

ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1.000' E. of 41st Street Date 10/2/11
SECTION 142-R LOCATION S. Moline Twp. - 15NE. SEC., TWP. 17N. RNG. 1W LOGGED BY W. Garza
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	DEPTH ft	BULGE (ft)	SHEAR (tsf)	PENETROMETER (%)	MATERIAL	Surface Water Elev.		Groundwater Elev.	
						ft	ft	ft	ft
					STIFF brown SILTY CLAY LOAM				
	576.90				MEDIUM light gray SILTY LOAM				
	575.40				SOFT light gray SILTY LOAM				
	572.40				VERY DENSE black COAL				
	569.90				Auger Refusal @ 9.0'				
					End of Boring				

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



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

Page 1 of 1

ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1.000' E. of 41st St. Date 10/4/11
SECTION 142-R LOCATION S. Moline Twp. - 15NE. SEC., TWP. 17N. RNG. 1W LOGGED BY W. Garza
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	DEPTH ft	BULGE (ft)	SHEAR (tsf)	PENETROMETER (%)	MATERIAL	Surface Water Elev.		Groundwater Elev.	
						ft	ft	ft	ft
					MEDIUM brown SILTY CLAY LOAM				
	577.00				MEDIUM light gray SILTY CLAY LOAM				
	575.50				Soft light gray SILTY LOAM				
	572.50				VERY DENSE tan weathered LIMESTONE				
					Auger Refusal at 6.5'				
					End of Boring				

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



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

Page 1 of 1

ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1.000' E. of 41st Street Date 10/4/11
SECTION 142-R LOCATION S. Moline Twp. - 15NE. SEC., TWP. 17N. RNG. 1W LOGGED BY W. Garza
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	DEPTH ft	BULGE (ft)	SHEAR (tsf)	PENETROMETER (%)	MATERIAL	Surface Water Elev.		Groundwater Elev.	
						ft	ft	ft	ft
					SOFT brown SILTY CLAY LOAM with 16% ORGANICS				
	576.80				STIFF light gray SILTY CLAY LOAM				
	575.30				STIFF light gray SILTY LOAM				
	572.30				VERY DENSE gray SHALE				
	571.30				Auger Refusal @ 7.5'				
					End of Boring				

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

N:\PROJ\00033333\CONTRACT_2\Design\Structural\CAD\Retaining Wall-1 (081-7001)\081-7001-64883-20.dgn



USER NAME = sailgood	DESIGNED - SMY	REVISED -
PLOT SCALE = 0:2.0000 '1" = 10'	CHECKED - APD	REVISED -
PLOT DATE = 3/17/2015	DRAWN - RD	REVISED -
	CHECKED - JHJ	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS - 7
S.N. 081-7001

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142) R	ROCK ISLAND	1353	1023
CONTRACT NO. 64883				



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1.000' E. of 41st Street Date 10/4/11
SECTION 142-R LOCATION S. Moline Twp. - 15NE. SEC., TWP. 17N. RNG. 1W LOGGED BY W. Garza
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	D E P T H S	B L O W S	U C S	M O I S T	Surface Water Elev. Stream Bed Elev.	ft	D E P T H S	B L O W S	U C S	M O I S T	ft	D E P T H S	B L O W S	U C S	M O I S T	
																(ft)
Shoulder Rock																
MEDIUM tan SILT	586.60	2														
	585.10	4	0.5	22.0												
STIFF gray SILT	582.90	3														
	582.90	5	1.1	19.0												
VERY STIFF brown/tan CLAY LOAM	580.10	6	3.7	19.0												
	577.60	4	1.0	25.0												
STIFF tan SILTY LOAM	575.10	2	1.0	26.0												
	572.10	3	0.4	33.0												
SOFT light gray SILTY LOAM with ORGANICS	570.10	9														
	570.10	16														
MEDIUM gray SHALE	570.10	9														
	570.10	16														
VERY DENSE gray SHALE	567.60	21														
	565.10	29														
VERY DENSE gray SHALE	562.60	29														
VERY DENSE gray SHALE (continued)	562.60	44														

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208)
BBS, from 137 (Rev. 8-99)



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1.000' E. of 41st Street Date 10/5/11
SECTION 142-R LOCATION S. Moline Twp. - 15NE. SEC., TWP. 17N. RNG. 1W LOGGED BY W. Garza
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	D E P T H S	B L O W S	U C S	M O I S T	Surface Water Elev. Stream Bed Elev.	ft	D E P T H S	B L O W S	U C S	M O I S T	ft	D E P T H S	B L O W S	U C S	M O I S T	
																(ft)
MEDIUM tan SILTY LOAM	586.80	0.5	19.0													
VERY SOFT tan SILTY LOAM	585.30	2	0.2	22.0												
	582.80	8	2.7	26.0												
VERY STIFF dark brown SILTY CLAY LOAM	580.30	5														
	577.80	6														
VERY STIFF tan SILTY LOAM	575.30	2	0.7	25.0												
	572.30	1														
VERY STIFF gray SILTY CLAY LOAM	570.30	2	0.3	32.0												
	570.30	3														
MEDIUM light gray SILTY LOAM	570.30	1														
	570.30	2														
SOFT gray SILTY LOAM	570.30	11														
	570.30	18														
MEDIUM gray SHALE	568.30	5														
	568.30	7														
VERY DENSE gray SHALE/SANDSTONE	568.30	100/2														
Auger Refusal at 20.5' (continued)																
End of Boring																

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208)
BBS, from 137 (Rev. 8-99)



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1.000' E. of 41st Street Date 10/5/11
SECTION 142-R LOCATION S. Moline Twp. - 15NE. SEC., TWP. 17N. RNG. 1W LOGGED BY W. Garza
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	D E P T H S	B L O W S	U C S	M O I S T	Surface Water Elev. Stream Bed Elev.	ft	D E P T H S	B L O W S	U C S	M O I S T	ft	D E P T H S	B L O W S	U C S	M O I S T	
																(ft)
Shoulder Rock																
STIFF light brown SANDY LOAM	587.40	4														
	585.90	7	1.1	13.0												
MEDIUM light brown dirty SAND	583.40	3														
	580.90	6														
HARD tan/gray CLAY LOAM	580.90	7	4.3	15.0												
	578.40	3	0.6	21.0												
MEDIUM light gray SILTY LOAM with SAND lens	575.90	2	0.7	26.0												
	572.90	3														
MEDIUM light gray SILTY LOAM	572.90	0														
	572.90	2														
SOFT gray SILT	570.90	1														
	570.90	2	0.5	32.0												
	570.90	5														
VERY DENSE gray SHALE	570.90	7														
	570.90	50														
	570.90	100/4														

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T208)
BBS, from 137 (Rev. 8-99)

N:\PROJECTS\00033333\CONTRACT_2\Design\Structural\CAD\Retaining Wall-1 (081-7001)\081-7001-64883-21.dgn



USER NAME = sailgood	DESIGNED - SMY	REVISED -
PLOT SCALE = 0:2.0000' = 1" / 10'	CHECKED - APD	REVISED -
PLOT DATE = 3/17/2015	DRAWN - RD	REVISED -
	CHECKED - JHJ	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS - 8
S.N. 081-7001

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142) R	ROCK ISLAND	1353	1024
CONTRACT NO. 64883				
ILLINOIS FED. AID PROJECT				

Structure Geotechnical Report

IL Route 5 (John Deere Road)
Retaining Wall



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

Page 1 of 1

ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1,000' E. of 41st Street Date 10/6/11
SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W LOGGED BY W. Garza
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev.	
					ft	ft
331+00						
BORING NO. <u>B-25</u> Station <u>330+90</u> Offset <u>90,00ft Rt Existing</u> Ground Surface Elev. <u>584.00</u> ft	(ft)	(/6")	(tsf)	(%)	First Encounter	ft
					Upon Completion	ft
					After	Hrs.
SOFT tan SILTY LOAM		0.3	19.0			
		P				
VERY STIFF tan SILTY LOAM	582.00					
		2.1	16.0			
	580.50					
		P				
MEDIUM brown SANDY LOAM						
		0.5	16.0			
	578.00					
		P				
VERY SOFT light gray SILT LOAM						
		0.2	29.0			
	575.50					
		P				
VERY SOFT gray SILT LOAM						
		0.2				
	573.00					
		P				
VERY SOFT gray SILT LOAM						
	571.00					
DENSE gray SHALE/SANDSTONE						
Hard Drilling						
Auger Refusal at 15.5'	568.50					
End of Boring						

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

Lin Engineering, Ltd.

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Exhibit C - Boring Logs

Structure Geotechnical Report

IL Route 5 (John Deere Road)
Retaining Wall



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

Page 1 of 1

ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1,000' E. of 41st Street Date 10/6/11
SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W LOGGED BY W. Garza
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev.	
					ft	ft
331+75/332+50						
BORING NO. <u>B-26</u> Station <u>332+05</u> Offset <u>90,00ft Rt Existing</u> Ground Surface Elev. <u>585.20</u> ft	(ft)	(/6")	(tsf)	(%)	First Encounter	ft
					Upon Completion	ft
					After	Hrs.
STIFF tan SILTY CLAY LOAM		1.8	22.0			
		P				
SOFT tan SILTY CLAY LOAM	583.20					
		0.3	24.0			
	581.70					
		P				
VERY SOFT tan SILTY LOAM						
		0.2	27.0			
	579.20					
		P				
VERY SOFT light gray SILTY LOAM						
		0.3	28.0			
	578.70					
		P				
VERY SOFT gray SILTY LOAM						
		0.2	35.0			
	575.70					
		P				
VERY SOFT gray SILTY LOAM						
	574.20					
VERY MOIST gray dirty SAND						
DENSE gray SANDSTONE						
Auger Refusal at 17'	571.20					
	568.20					
End of Boring						

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

Lin Engineering, Ltd.

35 of 44

Exhibit C - Boring Logs

Structure Geotechnical Report

IL Route 5 (John Deere Road)
Retaining Wall



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

Page 1 of 1

ROUTE FAP 595 DESCRIPTION D92-003-06 Retaining/Noise Wall on John Deere Road, 1,000' E. of 41st Street Date 10/6/11
SECTION 142-R LOCATION S. Moline Twp. - 15NE, SEC., TWP. 17N, RNG. 1W LOGGED BY W. Garza
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev.	
					ft	ft
BORING NO. <u>B-27</u> Station <u>333+25</u> Offset <u>90,00ft Rt Existing</u> Ground Surface Elev. <u>585.60</u> ft	(ft)	(/6")	(tsf)	(%)	First Encounter	ft
					Upon Completion	ft
					After	Hrs.
SOFT brown/tan SILTY CLAY LOAM		1.5	19.0			
		P				
SOFT tan SANDY LOAM	583.60					
		0.4	16.0			
	582.10					
VERY SOFT tan SANDY LOAM						
		0.0	24.0			
	579.60					
		P				
VERY SOFT light gray SILTY LOAM						
		0.2	26.0			
	578.60					
		P				
MEDIUM light gray SILTY LOAM						
	577.10					
MEDIUM light gray SILTY LOAM						
		0.8	35.0			
	576.10					
		P				
VERY SOFT gray SILTY LOAM						
		0.2	30.0			
	574.20					
	571.60					
First Encounter at 14.5'						
MEDIUM/DENSE gray SHALE						
	569.60					
Dry gray SHALE						
	565.60					
End of Boring						

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

Lin Engineering, Ltd.

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Exhibit C - Boring Logs

N:\PROJECTS\000333333\CONTRACT_2\Design\Structural\CAD\Retaining Wall-1 (081-7001)\081-7001-64883-22.dgn

<p>CONSULTING ENGINEERS 1501 North Cumberland Avenue Suite 202 Chicago, Illinois 60656 Tel: 773-724-4000 Fax: 773-775-4014 Email: clorba@clorba.com</p>	USER NAME = saillgood	DESIGNED - SMY	REVISED -	<p align="center">STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p>	<p align="center">SOIL BORINGS - 9 S.N. 081-7001</p>	F.A.P. RTE. 595	SECTION (142-1, 142) R	COUNTY ROCK ISLAND	TOTAL SHEETS 1353	SHEET NO. 1025
	PLOT SCALE = 0:2,000 1" = 10'	DRAWN - RD	REVISED -			CONTRACT NO. 64883				
	PLOT DATE = 3/17/2015	CHECKED - JHJ	REVISED -	SHEET NO. SK-22 OF SK-22 SHEETS		ILLINOIS FED. AID PROJECT				

Benchmark: "X" cut in NW corner of traffic signal foundation, Sta. 334+45.00, 63.99 Lt., Elev. 590.71

Existing Structure: None

GENERAL NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.
2. The Contractor is responsible for the design and performance of the lagging using no less than a 3 in. nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1,000 psi.
3. The formliner textured surface shall be a random Ashlar Stone pattern and shall be colored. The color shall be per the Special Provision "Staining Concrete Structures".

DESIGN SPECIFICATIONS

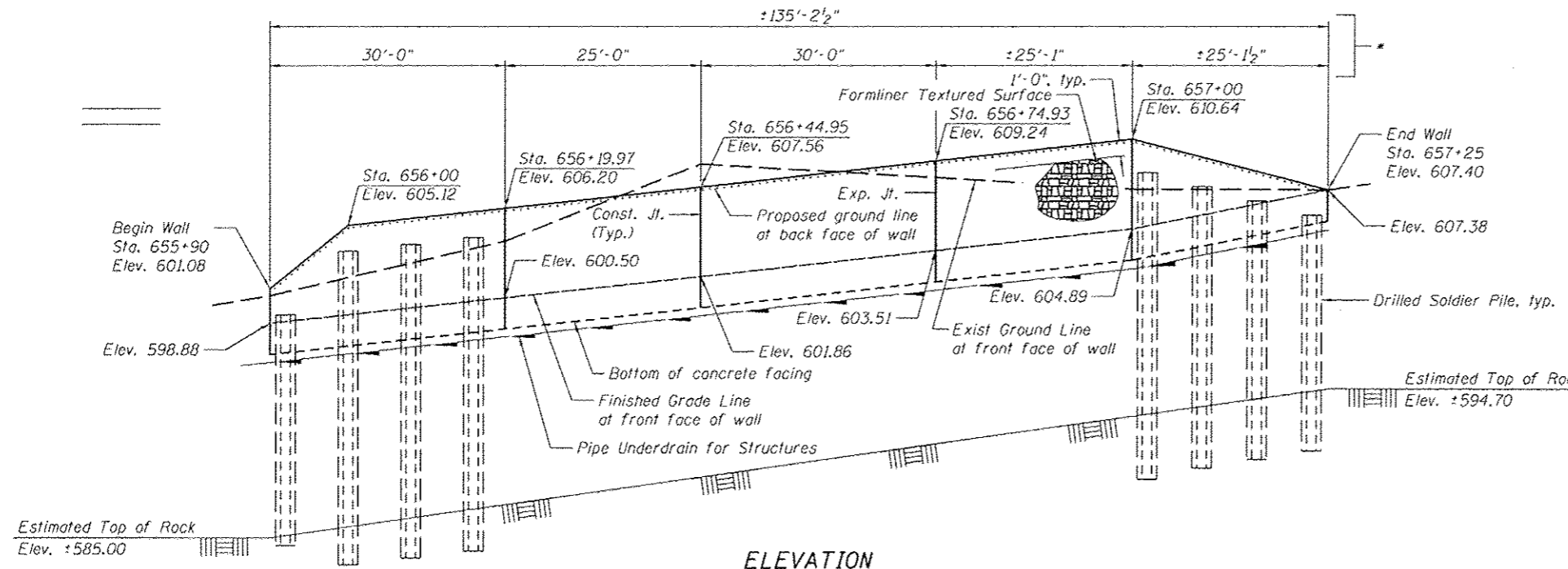
2012 AASHTO LRFD Bridge Design Specifications, 6th Edition with 2013 Interim Revisions

DESIGN STRESSES

FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 36,000$ psi (M270 Grade 36)

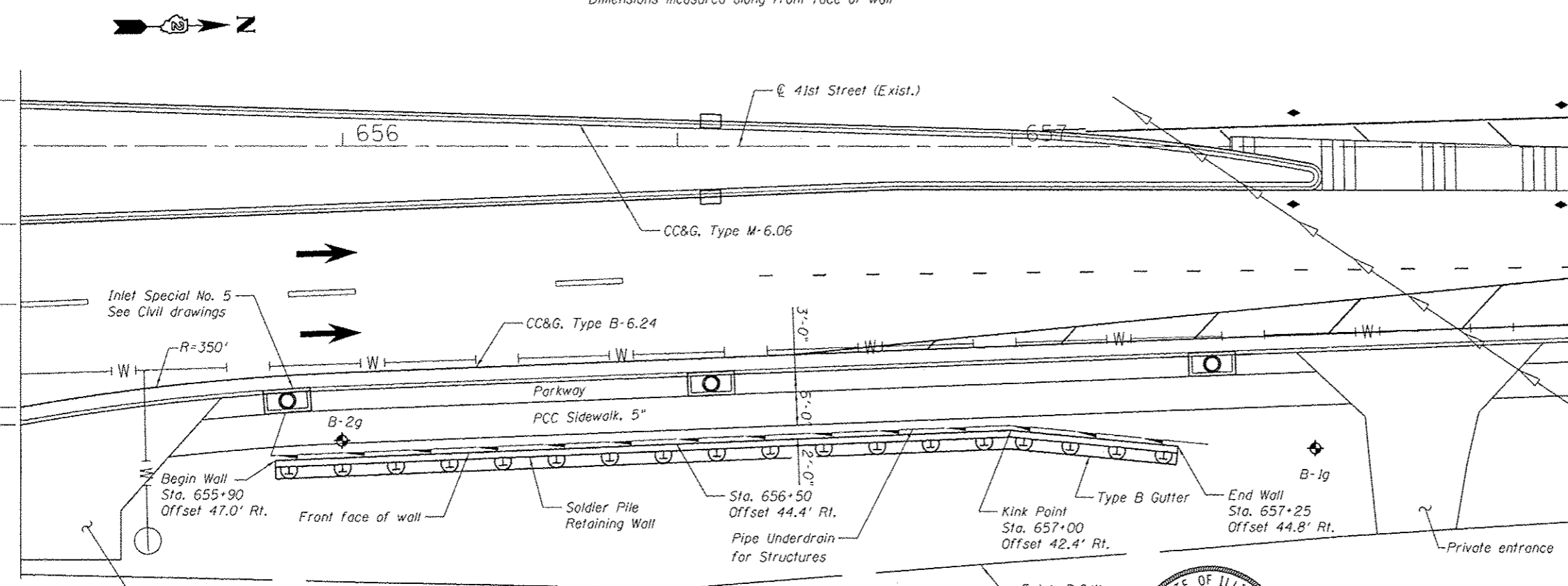
INDEX OF SHEETS

- SL-1 General Plan & Elevation
- SL-2 Typical Section & Bill of Materials
- SL-3 Soldier Pile Layout
- SL-4 Concrete Facing Details
- SL-5 Soldier Pile Retaining Wall Details
- SL-6 Soil Boring & Rock Core Logs



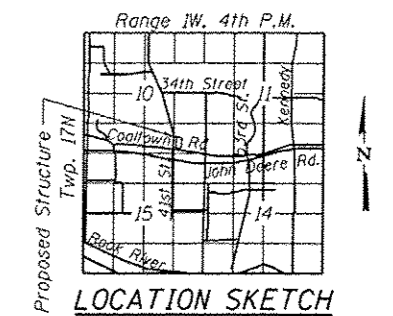
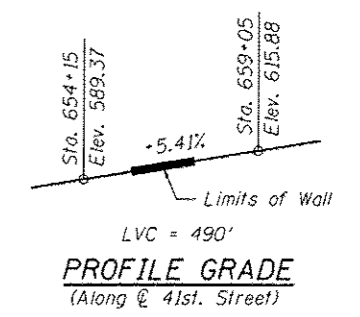
ELEVATION

Looking west at the back face of the wall
 *Dimensions measured along front face of wall



PLAN

Note: Offsets are measured from the centerline of 41st Street to the front face of the wall



LOCATION SKETCH

- LEGEND**
- Soil Boring Location
 - Exist. Underground Water
 - Exist. Storm Sewer



Signature: *Andrew E. Underwager*
 Date: 6-10-2014
 License Expires: 11-30-2016

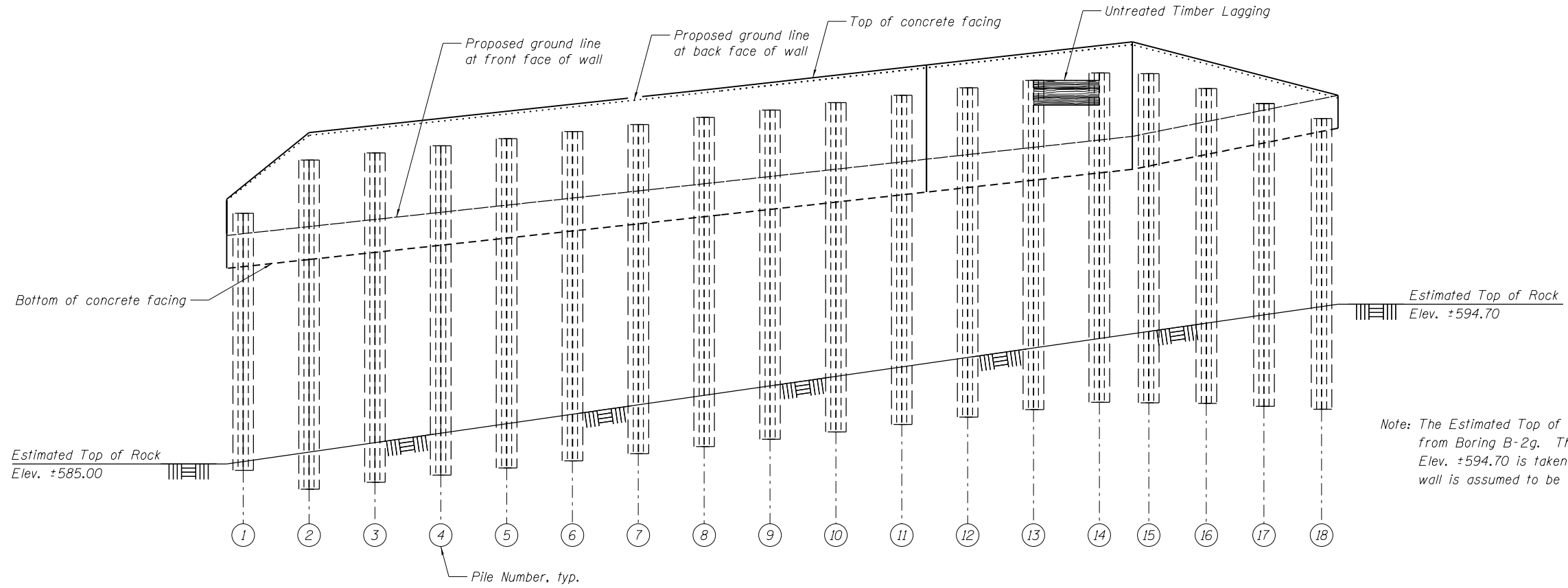
GENERAL PLAN & ELEVATION
41st STREET RETAINING WALL
 F.A.P. RTE. 595 - SECTION (142-1, 142)R
 ROCK ISLAND COUNTY
 STA. 655+90 TO 657+25
 STRUCTURE NO. 081-P100

FILE NAME: W:\P\projects\2010\080120_P18 137\25\cadd\Structural\Bgn\18 41st S. Retaining Wall - Mono-tube\1st St Retaining Wall\To Corbe 15.02.25\B8\180-64883-001-CP.E.dgn

<p>WILLS BURKE KELSEY ASSOCIATES LTD. 116 West Main Street, Suite 201 St. Charles, Illinois 60174</p>	USER NAME: underwager	DESIGNED: DLS	REVISIONS:	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SHEET NO. SL-1 OF SL-6 SHEETS
	PLOT SCALE: *SCALE*	CHECKED: AEU	REVISIONS:		
	PLOT DATE: 2/27/2015	DRAWN: DLS	REVISIONS:		
	CHECKED: AEU	REVISIONS:			

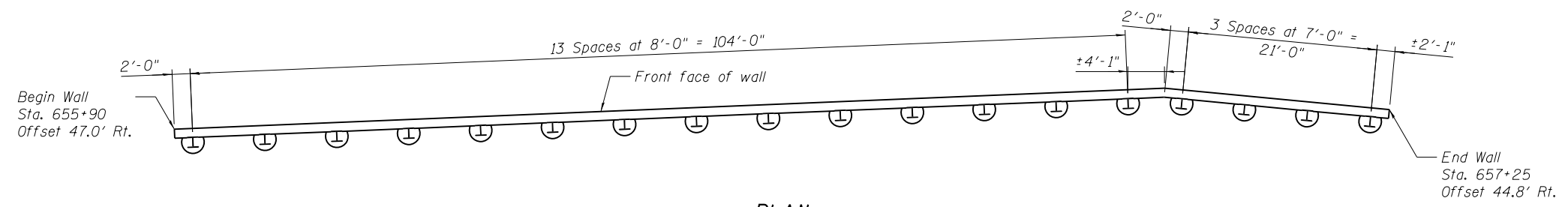
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	142-1, 142R	ROCK ISLAND	1353	1026
			CONTRACT NO. 64883	

FILE NAME = W:\Projects\2010\102120_PTB_157\25\cadd\Structural\Drawings\1B_41st_St_Retaining_Wall - Mono-tube\1st St Retaining Wall - Pile Layout.dgn
 15.02.25\081\00-64883-003-Soldier-Pile-Layout.dgn

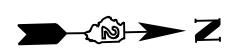


Note: The Estimated Top of Rock at the south end of the wall at Elev. ±585.00 is taken from Boring B-2g. The Estimated Top of Rock at the north end of the wall at Elev. ±594.70 is taken from Boring B-1g. The estimated top of rock along the wall is assumed to be a straight line between these two (2) elevations.

ELEVATION



PLAN



PILE SUMMARY

Pile No.	Station	Offset to C of Pile	Pile Designation	Length	Top of Pile Elevation	Pile Tip Elevation	Shaft Diameter
1	655+92.01	48.40	HP 14x89	15'-9"	600.22	584.47	2'-6"
2	656+00.00	48.07	HP 14x89	20'-0"	603.46	583.46	2'-6"
3	656+07.99	47.74	HP 14x89	20'-0"	603.90	583.90	2'-6"
4	656+15.98	47.40	HP 14x89	20'-0"	604.33	584.33	2'-6"
5	656+23.97	47.07	HP 14x89	20'-0"	604.76	584.76	2'-6"
6	656+31.96	46.74	HP 14x89	20'-0"	605.19	585.19	2'-6"
7	656+39.95	46.41	HP 14x89	20'-0"	605.62	585.62	2'-6"
8	656+47.94	46.08	HP 14x89	20'-0"	606.06	586.06	2'-6"
9	656+55.93	45.75	HP 14x89	20'-0"	606.50	586.50	2'-6"
10	656+63.92	45.42	HP 14x89	20'-0"	606.95	586.95	2'-6"
11	656+71.91	45.09	HP 14x89	20'-0"	607.40	587.40	2'-6"
12	656+79.90	44.76	HP 14x89	20'-0"	607.85	587.85	2'-6"
13	656+87.89	44.42	HP 14x89	20'-0"	608.30	588.30	2'-6"
14	656+95.88	44.09	HP 14x89	20'-0"	608.75	588.75	2'-6"
15	657+01.92	44.11	HP 14x89	20'-0"	608.71	588.71	2'-6"
16	657+08.89	44.77	HP 14x89	19'-3"	607.81	588.56	2'-6"
17	657+15.86	45.43	HP 14x89	18'-6"	606.90	588.40	2'-6"
18	657+22.83	46.40	HP 14x89	18'-6"	605.99	587.49	2'-6"



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PLOT SCALE = #SCALE#	CHECKED - AEU	REVISED -
PLOT DATE = 2/27/2015	DRAWN - DLS	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

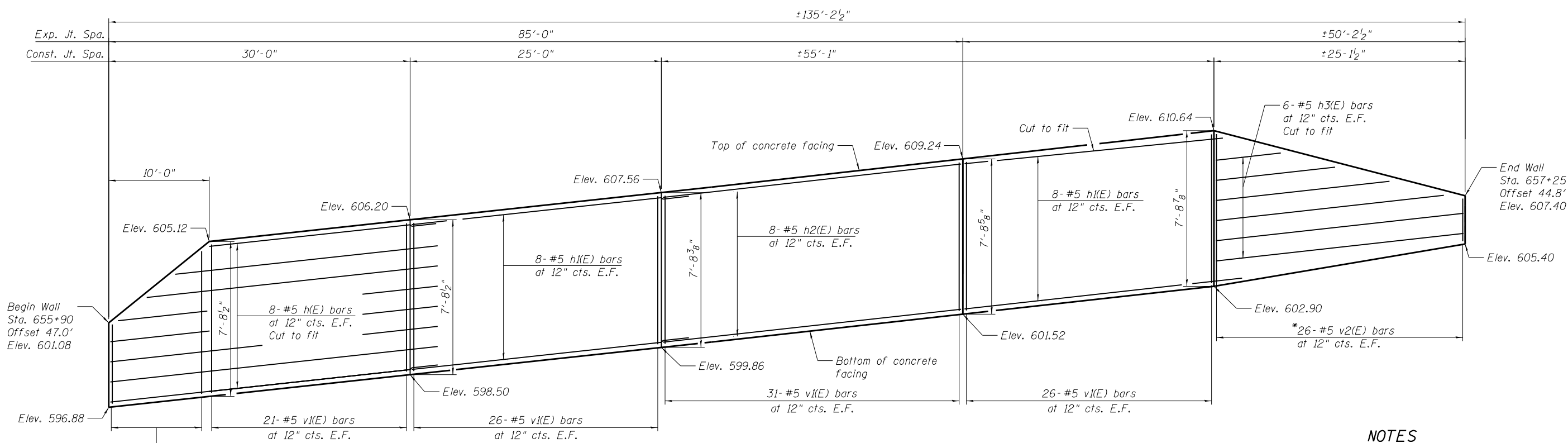
SOLDIER PILE LAYOUT
STRUCTURE NO. 081-P100

SHEET NO. SL-3 OF SL-6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1028
CONTRACT NO. 64883				

ILLINOIS FED. AID PROJECT

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ELEVATION

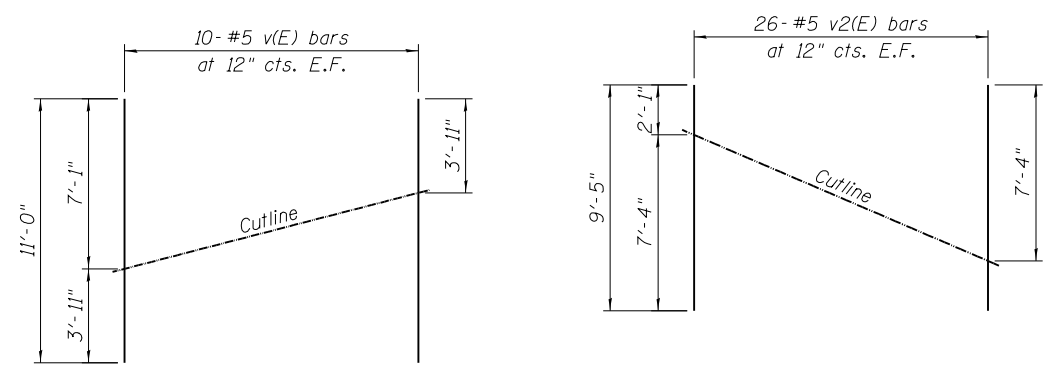
Looking west at the back face of the wall
 Dimensions measured along front face of wall
 * Denotes bars with bar cutting diagram

NOTES

1. For top of pile and pile tip elevations, see Sheet SL-3 of SL-6.
2. Space reinforcement to miss shear studs.

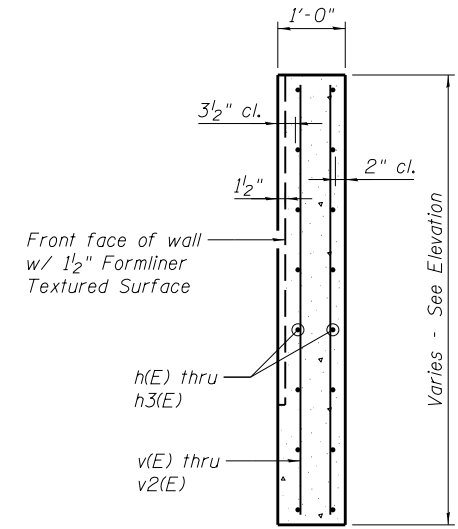
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	16	#5	32'-8"	—
h1(E)	32	#5	27'-8"	—
h2(E)	16	#5	29'-8"	—
h3(E)	12	#5	24'-8"	—
v(E)	10	#5	11'-0"	—
v1(E)	208	#5	7'-5"	—
v2(E)	26	#5	9'-5"	—
Concrete Structures			Cu. Yd.	35.4
Reinforcement Bars, Epoxy Coated			Pound	4,260



FIELD CUTTING DIAGRAMS

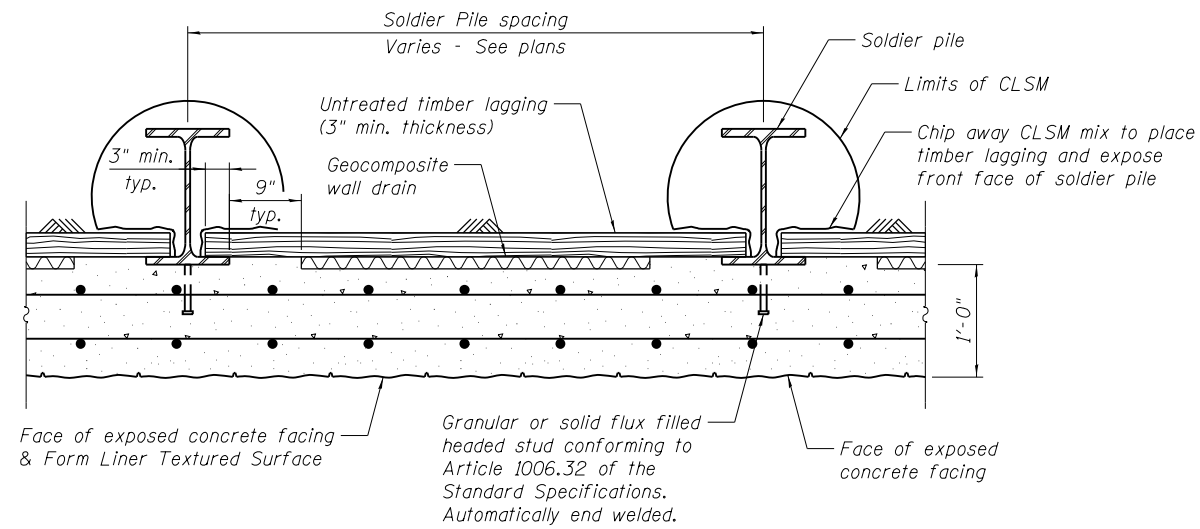
* Order v(E) and v2(E) bars full length. Cut to fit and use remainder of bars on opposite side.



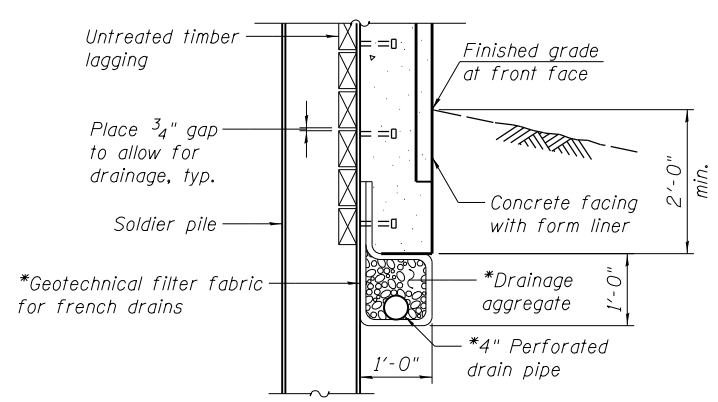
SECTION THRU CONCRETE FACING

MIN. BAR LAP

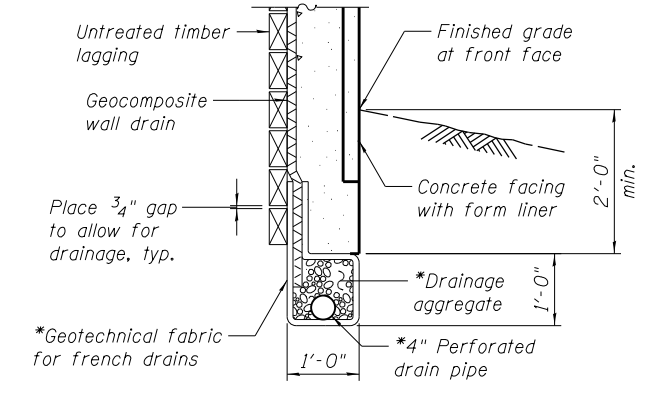
#5 bars = 2'-7"



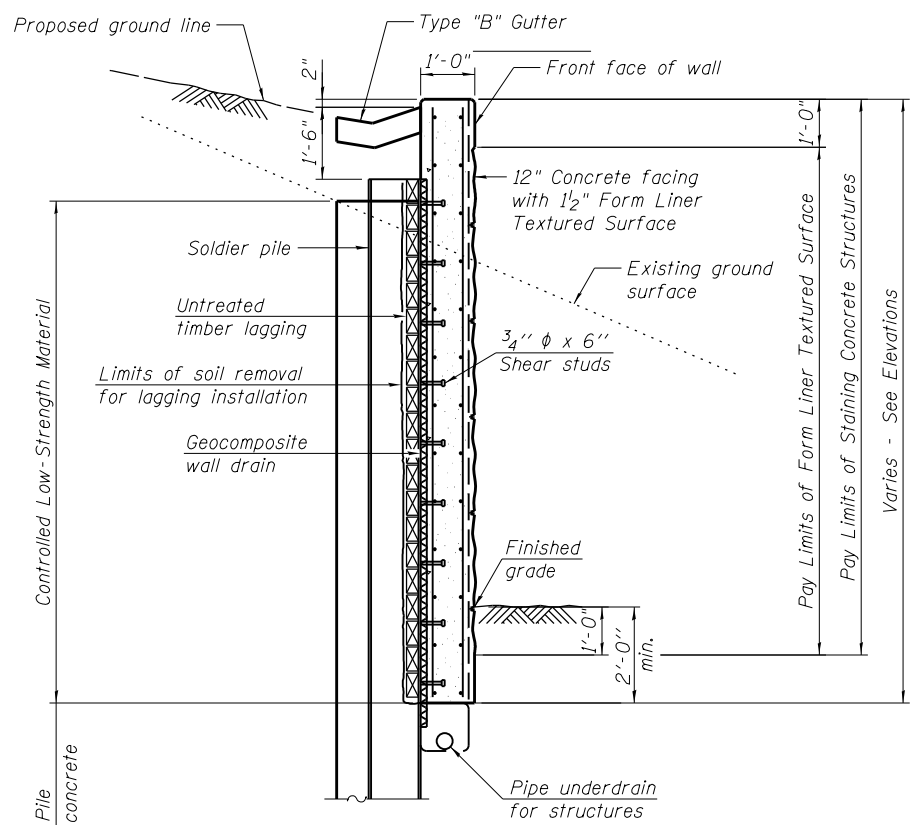
SECTION THRU DRILLED SOLDIER PILE WALL



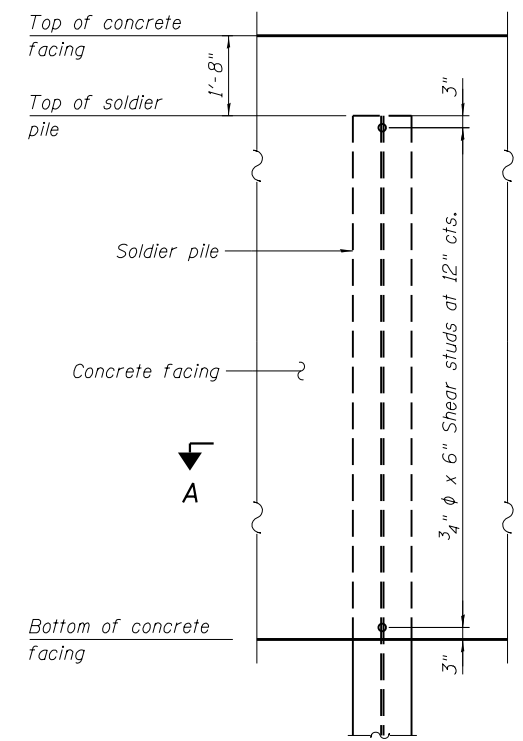
AT SOLDIER PILES



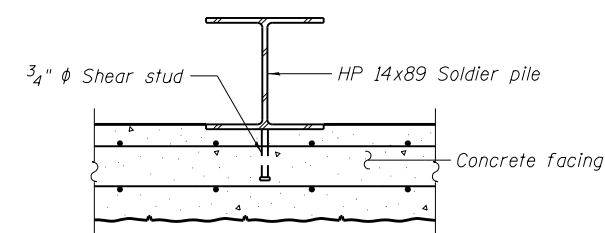
BETWEEN SOLDIER PILES



SECTION THRU SOLDIER PILE WALL



ELEVATION VIEW

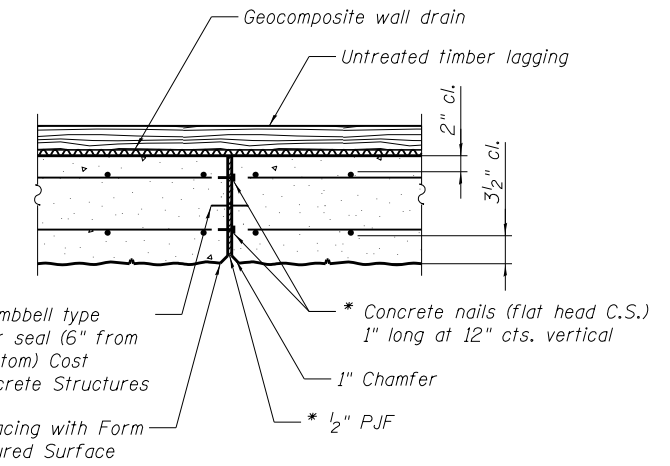


SECTION A-A

DETAIL OF SHEAR STUD PLACEMENT

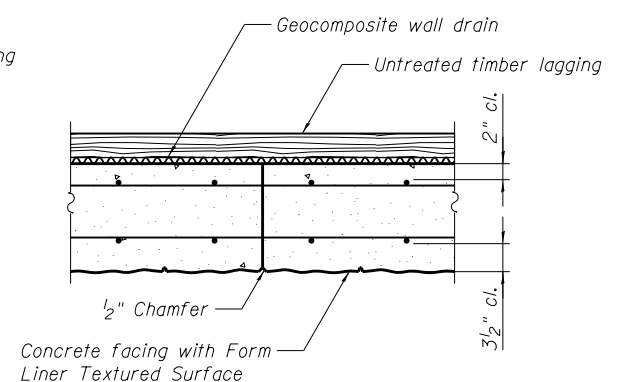
PIPE UNDERDRAIN DETAIL

*Cost included with Pipe Underdrains for Structures 4"



EXPANSION JOINT DETAIL

* Cost included with Concrete Structures



CONSTRUCTION JOINT DETAIL

FILE NAME = W:\Projects\2010\100120 PTB 157\25\cadd\Structural\Dgn\MO *1B 41st St. Retaining Wall - Mono-tube\41st St. Retaining Wall\10-64883-005-Details.dgn
 WILLS BURKE KELSEY ASSOCIATES LTD.
 116 West Main Street, Suite 201
 St. Charles, Illinois 60114

USER NAME = aunderwager	DESIGNED - DLS	REVISED -
PLOT SCALE = #SCALE#	CHECKED - AEU	REVISED -
PLOT DATE = 2/27/2015	DRAWN - DLS	REVISED -
	CHECKED - AEU	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOLDIER PILE RETAINING WALL DETAILS
STRUCTURE NO. 081-P100**

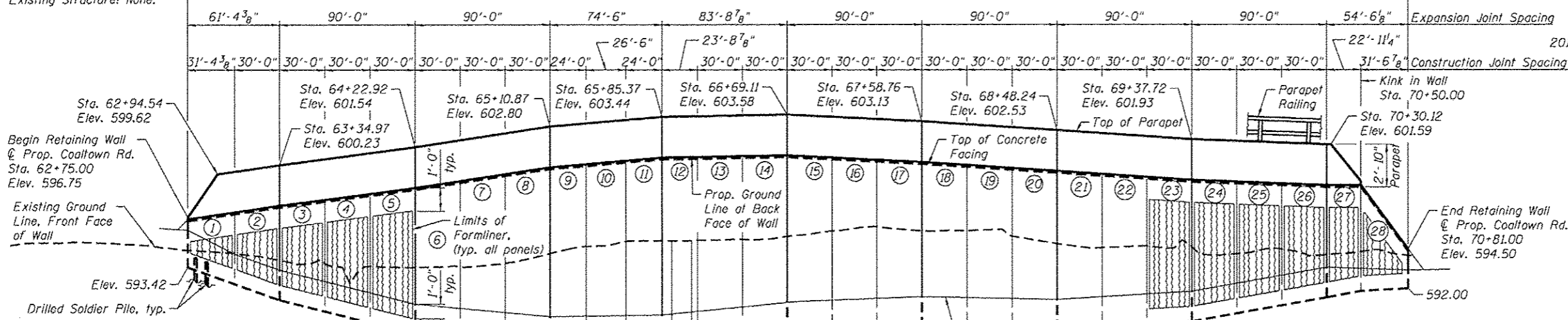
SHEET NO. SL-5 OF SL-6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1030
CONTRACT NO. 64883				
ILLINOIS FED. AID PROJECT				

Benchmark: "X" cut in NW Corner of traffic signal foundation, F.A.P. 595 Sta. 334+45.00 O/S 63.99' LI., Elev 590.71

Existing Structure: None.

814'-1³/₈"

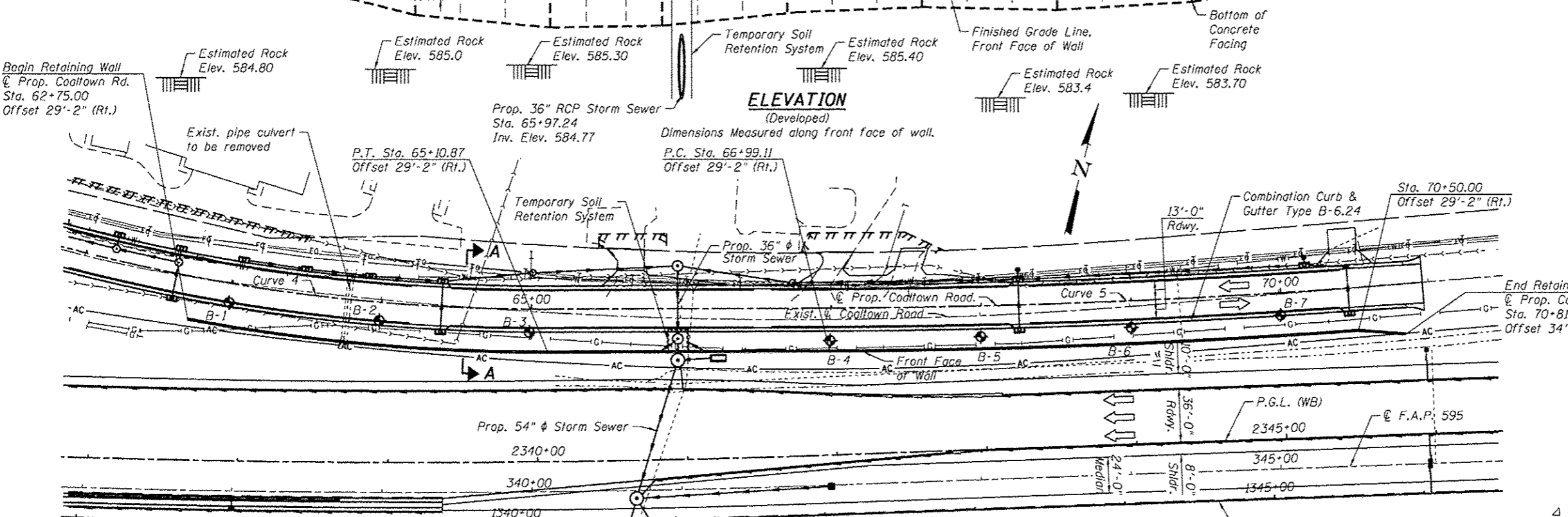


DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications with 2013 Interims

DESIGN STRESS

FIELD UNITS
 f'c = 3,500 psi
 fy = 60,000 psi (Reinforcement)
 fy = 50,000 psi (M270 Grade 50)



ELEVATION
(Developed)

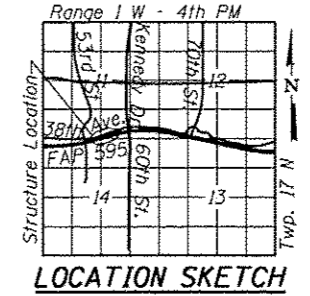
Dimensions Measured along front face of wall.

CURVE DATA

☉ Prop. Coal Town Road

Curve 4	Curve 5
Δ = 18°12'18" (LT)	Δ = 04°32'05" (LT)
D = 04°35'01"	D = 01°08'45"
T = 200.27'	T = 197.97'
L = 397.17'	L = 395.73'
E = 15.94'	E = 3.92'
R = 1,250.00'	R = 5,000.00'
P.C. = Sta. 61+13.70	P.C. = Sta. 66+99.11
P.T. = Sta. 65+10.87	P.T. = Sta. 70+94.83
P.I. = Sta. 63+13.97	P.I. = Sta. 68+97.07

GENERAL PLAN & ELEVATION
COALTOWN ROAD
SECTION (142-1, 142)R
ROCK ISLAND COUNTY
STATION 62+75.00 TO 70+81.00
S.N. 081-P004



NOTES:

- Wall to be built along straight chords between construction joints.
- Offsets are measured from ☉ Prop. Coal Town Rd. to F.F. of wall.
- For Section A-A, see sheet SM-10.
- F.F. = Front Face of wall
- Existing utilities including gas, watermain, and sanitary sewer to be adjusted or relocated by others as required.

LEGEND

- ◆ Boring Location
- +—+— Exist. Fiber Optic Cable
- — — — — Exist. ROW
- — — — — Prop. Storm Sewer
- — — — — Exist. ROW
- — — — — Exist. Sanitary Sewer
- — — — — Prop. Temporary Easement
- — — — — Exist. Water Main
- — — — — Exist. Access Control
- — — — — Exist. Gas Main
- — — — — Exist. Aerial Telephone

Joseph J. Hosanna Jr.



APPROVED
For Structural Adequacy Only

De Ann Rupp
Engineer of Bridges & Structures

DATE: 3/17/2015
SEAL EXPIRES: 11/30/2018

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. SM-1 OF SM-15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1032
				CONTRACT NO. 64883
ILLINOIS FED. AID PROJECT				

N:\PROJECTS\2013\081-P004\1-CAD\Retaining Wall-3.dwg
 USER NAME = wjlgood
 DESIGNED - APD
 CHECKED - BWS
 DRAWN - RD
 CHECKED - JJH
 REVISIONS:
 REVISIONS:
 REVISIONS:
 REVISIONS:
 DATE: 3/17/2015
 SEAL EXPIRES: 11/30/2018
 STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 SHEET NO. SM-1 OF SM-15 SHEETS
 CONTRACT NO. 64883
 ILLINOIS FED. AID PROJECT

GENERAL NOTES:

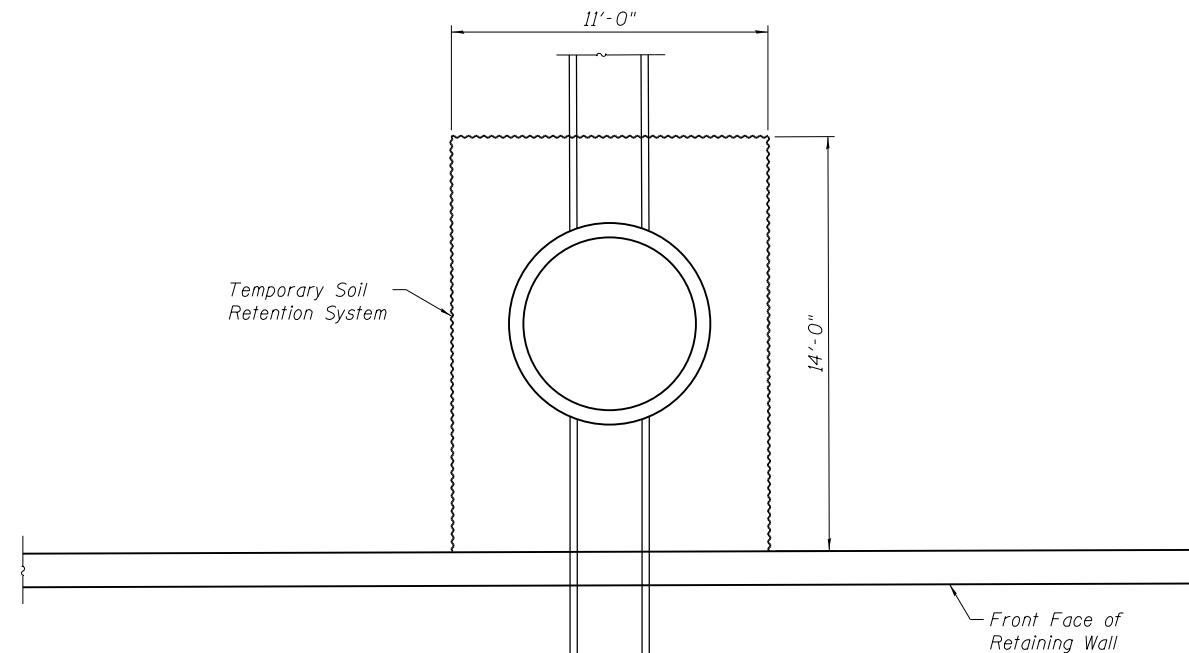
1. Reinforcement bars designated (E) shall be epoxy coated.
2. The front face of the retaining wall shall have an "Ashlar Stone" pattern for the full length of the wall.
3. The Contractor is responsible for the design and performance of the lagging using no less than a 3" nominal rough-sawn thickness and timber with minimum allowable bending stress of 1,000 psi.
4. Stations and offsets are measured from \bar{C} Prop. Coal Town Rd. to the front face of the retaining wall.
5. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

INDEX OF SHEETS:

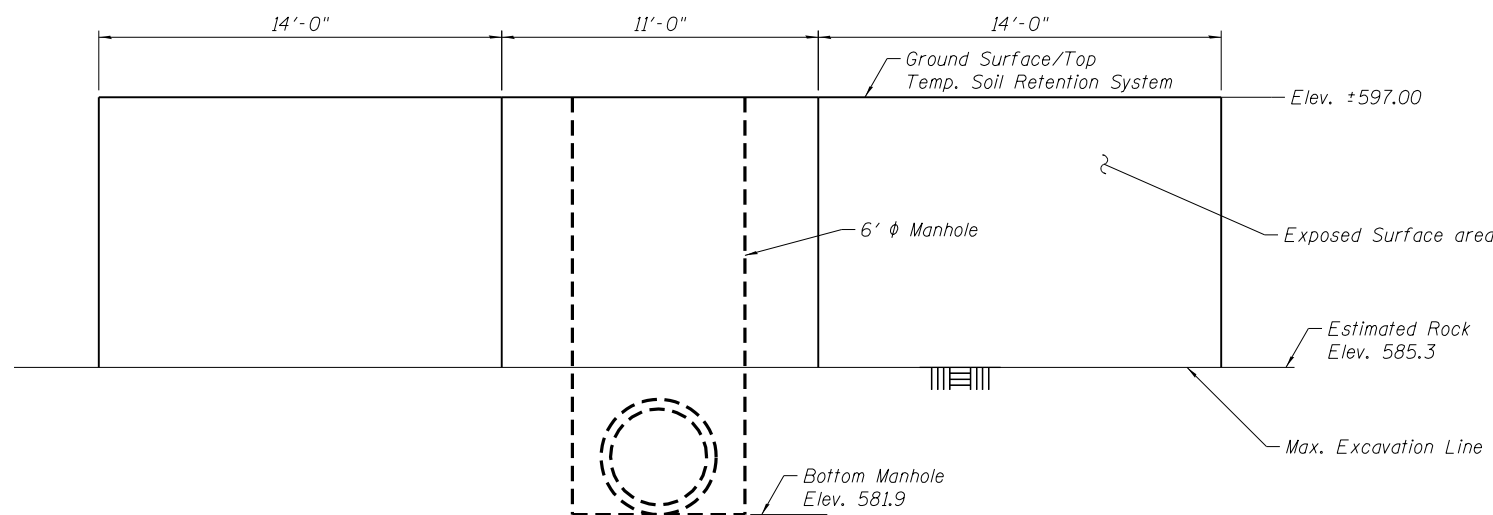
- SM-1 General Plan & Elevation
- SM-2 General Notes & Total Bill of Material
- SM-3 Soldier Pile Details
- SM-4 Soldier Pile Data
- SM-5 Soldier Pile Wall Reinforcement Details - 1
- SM-6 Soldier Pile Wall Reinforcement Details - 2
- SM-7 Soldier Pile Wall Reinforcement Details - 3
- SM-8 Soldier Pile Wall Reinforcement Details - 4
- SM-9 Soldier Pile Wall Reinforcement Details - 5
- SM-10 Soldier Pile Wall General Details - 1
- SM-11 Soldier Pile Wall General Details - 2
- SM-12 Bicycle Railing
- SM-13 Soil Boring Logs - 1
- SM-14 Soil Boring Logs - 2
- SM-15 Soil Boring Logs - 3

ABBREVIATIONS:

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

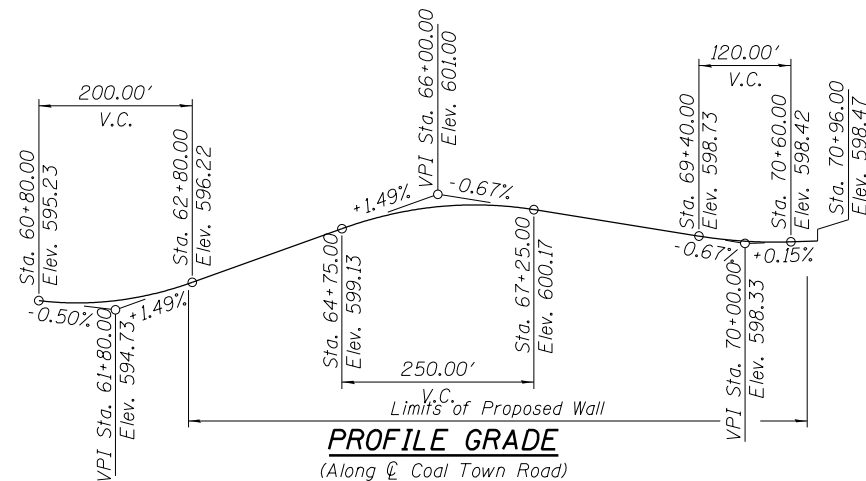
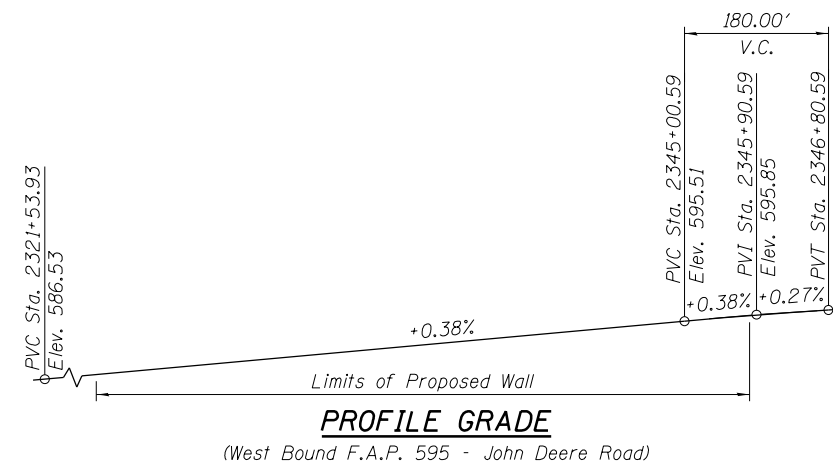


PLAN



TEMPORARY SOIL RETENTION SYSTEM ELEVATION

(Developed, Looking North)



TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Structures	Cu Yd	358.4
Concrete Superstructure	Cu Yd	91.3
Form Liner Textured Surface	Sq Ft	6,296
Protective Coat	Sq Yd	1,288
Stud Shear Connectors	Each	1,128
Reinforcement Bars, Epoxy Coated	Pound	68,610
Parapet Railing	Foot	727
Geocomposite Wall Drain	Sq Yd	233
Drilling And Setting Soldier Piles (In Soil)	Cu Ft	6,388
Drilling And Setting Soldier Piles (In Rock)	Cu Ft	8,134
Granular Backfill For Structures	Cu Yd	379
Untreated Timber Lagging	Sq Ft	5,892
Furnishing Soldier Piles (W Section)	Foot	4,297
Pipe Underdrains For Structures 4"	Foot	820
Temporary Soil Retention System	Sq Ft	457
Staining Concrete Structures	Sq Ft	9,315

N:\PROJECTS\00033933\00\CONTRACT_2\Design\Structural\CAD\Retaining_Wall-3.dwg

Clorba Group, Inc.
 CONSULTING ENGINEERS
 1001 North Cumberland Avenue
 Suite 202 Chicago, Illinois 60656
 Tel: 773-724-4000
 Fax: 773-774-4014
 Email: clorba@clorba.com

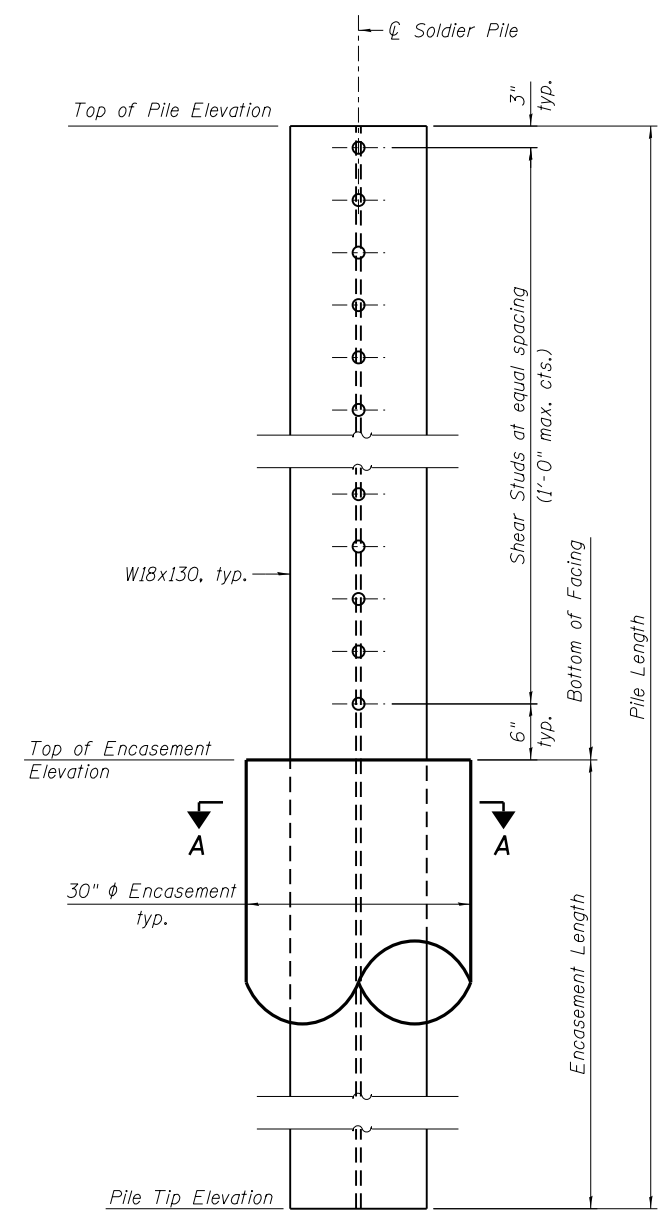
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PLOT DATE = 3/17/2015	DRAWN - RD	REVISED -
	CHECKED - JJH	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES & TOTAL BILL OF MATERIAL
 S.N. 081-P004**

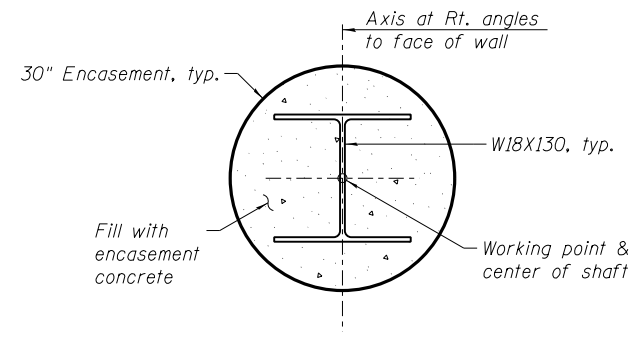
F.A.P. RTE. 595	SECTION (142-1, 142R)	COUNTY ROCK ISLAND	TOTAL SHEETS 1353	SHEET NO. 1033
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64883	

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SOLDIER PILE ELEVATION AND SHEAR STUD CONNECTION DETAILS

Note:
Work this sheet with sheet SM-4.



SECTION A-A



USER NAME = sailgood	DESIGNED - APD	REVISED -
	CHECKED - BWS	REVISED -
PLOT SCALE = 0.166667' / in.	DRAWN - RD	REVISED -
PLOT DATE = 3/17/2015	CHECKED - JJH	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOLDIER PILE DETAILS
S.N. 081-P004**

SHEET NO. SM-3 OF SM-15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1034
CONTRACT NO. 64B83				

ILLINOIS FED. AID PROJECT

SOLDIER PILE DATA

Table with columns: Panel, Soldier Pile Designation, Station, Offset (ft), Pile Size, Top of Soldier Pile Elevation, Pile Tip Elevation, Top of Encasement Concrete, Estimated Length of Soldier Pile, Est. Top of Rock Elevation, Number of Shear Connectors. Rows 1-15.

SOLDIER PILE DATA

Table with columns: Panel, Soldier Pile Designation, Station, Offset (ft), Pile Size, Top of Soldier Pile Elevation, Pile Tip Elevation, Top of Encasement Concrete, Estimated Length of Soldier Pile, Est. Top of Rock Elevation, Number of Shear Connectors. Rows 15-28.

NOTES:

- 1. Rock elevations at each pile are estimated by interpolating between rock elevations provided in soil boring logs.
2. Stations and offsets are measured from C Prop. Coal Town Rd. to the working point.
3. Work this sheet with sheet SM-3.

N:\PROJECTS\00033333\CONTRACT_2\Design\Structural\CAD\Retaining Wall-3_03A.dgn



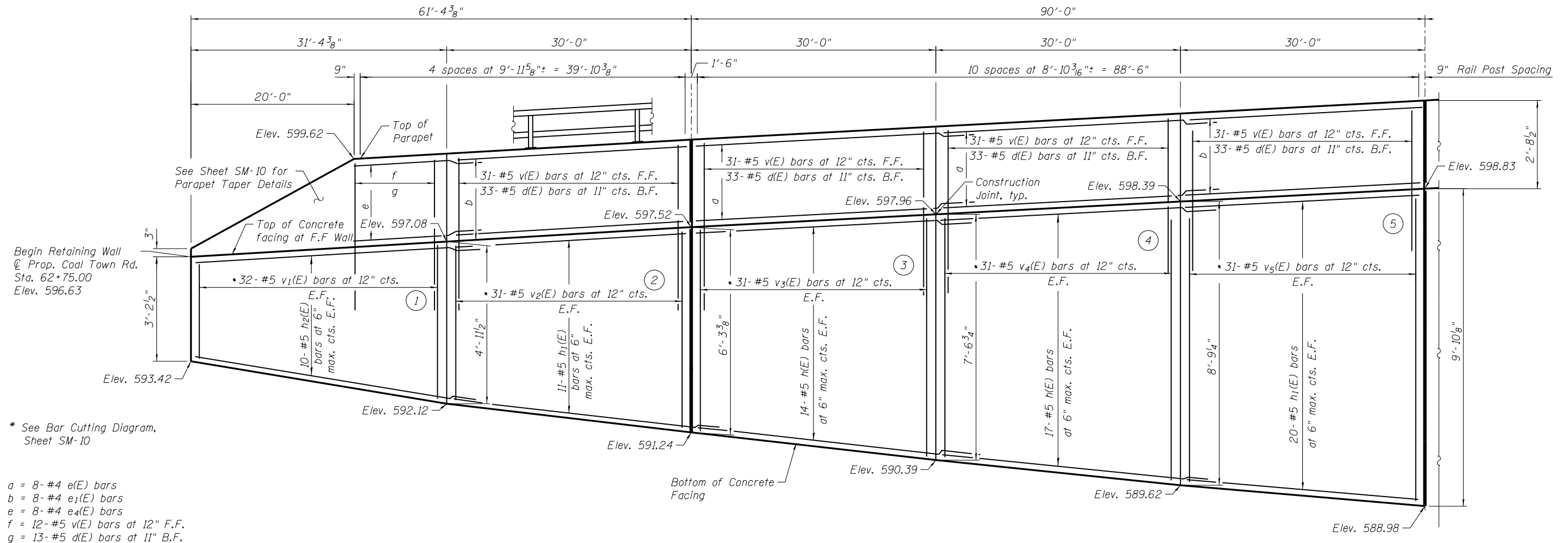
Table with columns: USER NAME, DESIGNED, CHECKED, PLOT SCALE, PLOT DATE, REVISED, DRAWN, CHECKED.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOLDIER PILE DATA S.N. 081-P004

SHEET NO. SM-4 OF SM-15 SHEETS

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



* See Bar Cutting Diagram, Sheet SM-10

- a = 8-#4 e(E) bars
- b = 8-#4 e₁(E) bars
- e = 8-#4 e₄(E) bars
- f = 12-#5 v(E) bars at 12" F.F.
- g = 13-#5 d(E) bars at 11" B.F.

Note:
See Sheet SM-11 for placement of parapet reinforcement.

ELEVATION

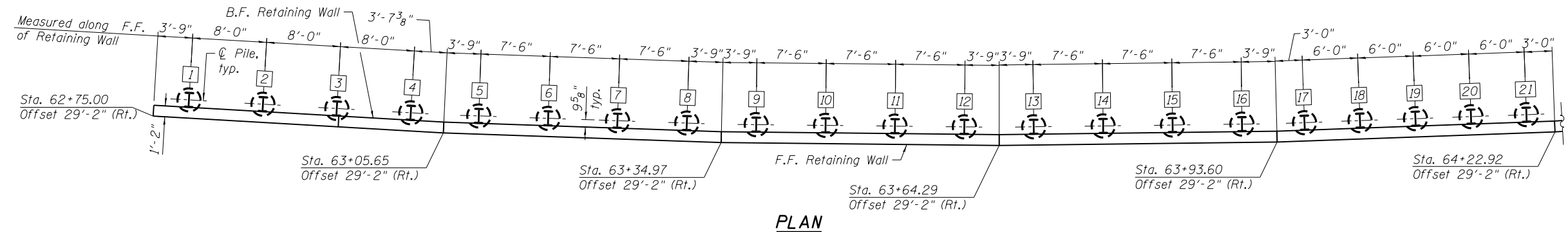
(Developed - Looking North at Front Face of Retaining Wall.)
(Dimensions Measured along front face of wall.)

LEGEND

- = Panel #
- = Pile #

MINIMUM BAR LAP

- #4 bar = 2'-11"
- #5 bar = 3'-8"



PLAN

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USER NAME = sailgood	DESIGNED - APD	REVISED -
	CHECKED - BWS	REVISED -
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PLOT DATE = 3/17/2015	CHECKED - JUH	REVISED -

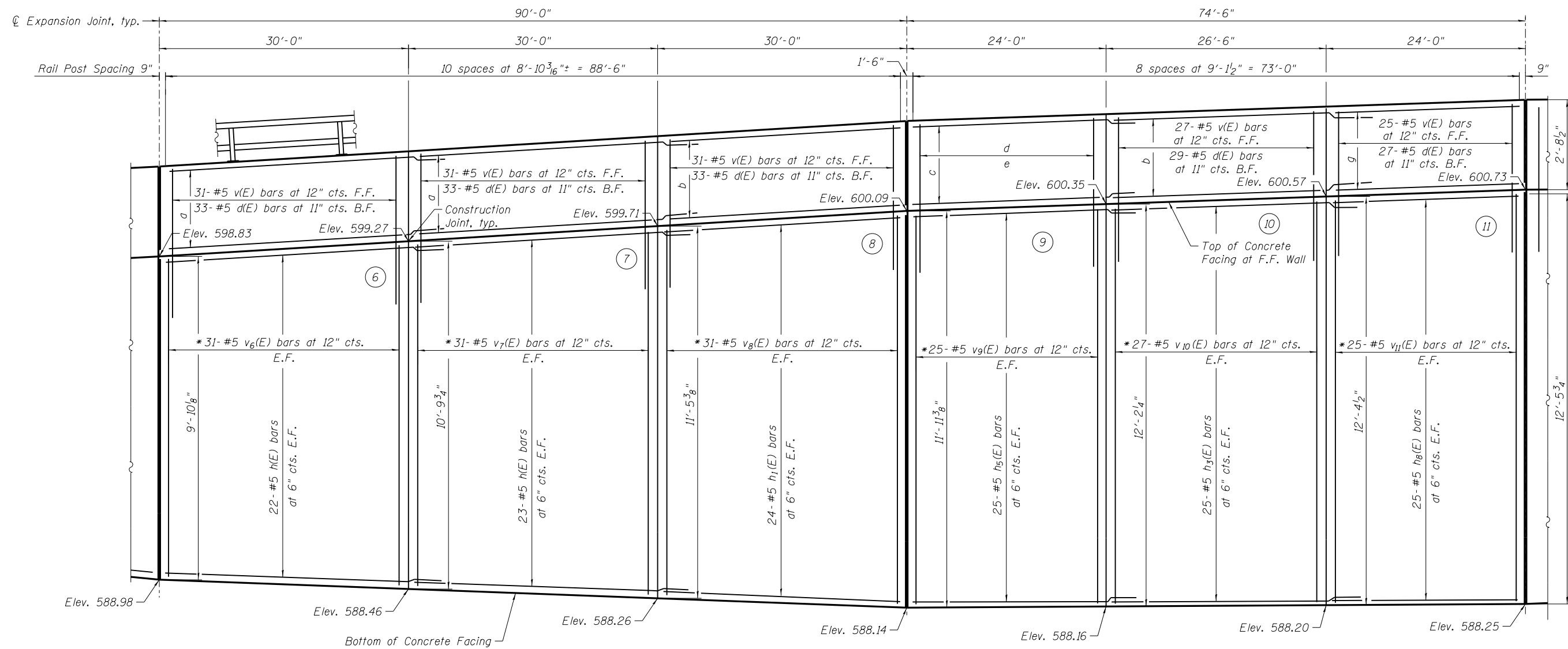
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SOLDIER PILE WALL REINFORCEMENT DETAILS - 1
S.N. 081-P004

SHEET NO. SM-5 OF SM-15 SHEETS

F.A.P. RTE. 595	SECTION (142-1, 142)R	COUNTY ROCK ISLAND	TOTAL SHEETS 1353	SHEET NO. 1036
CONTRACT NO. 64883			ILLINOIS FED. AID PROJECT	

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ELEVATION

(Developed - Looking North at Front Face of Retaining Wall.)
 (Dimensions Measured along front face of wall.)

- a = 8- #4 e(E) bars
- b = 8- #4 e₁(E) bars
- c = 8- #4 e₂(E) bars
- d = 25- #5 v(E) bars at 12" cts. F.F.
- e = 27- #5 d(E) bars at 11" cts. B.F.
- g = 8- #4 es(E) bars

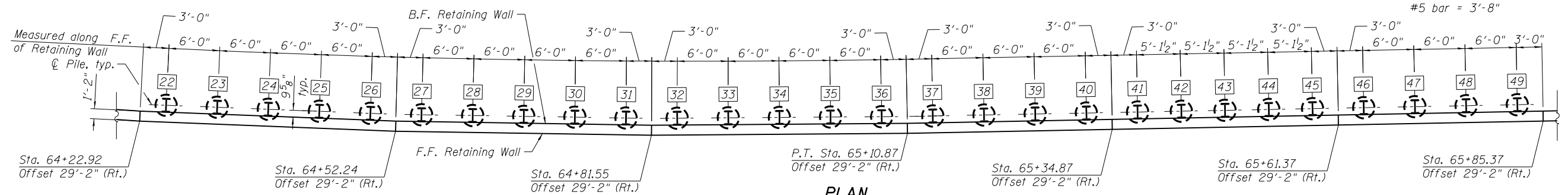
Note:
 See sheet SM-11 for placement of parapet reinforcement.
 * See Bar Cutting Diagram, Sheet SM-10

LEGEND

- = Panel #
- = Pile #

MINIMUM BAR LAP

- #4 bar = 2'-11"
- #5 bar = 3'-8"



PLAN



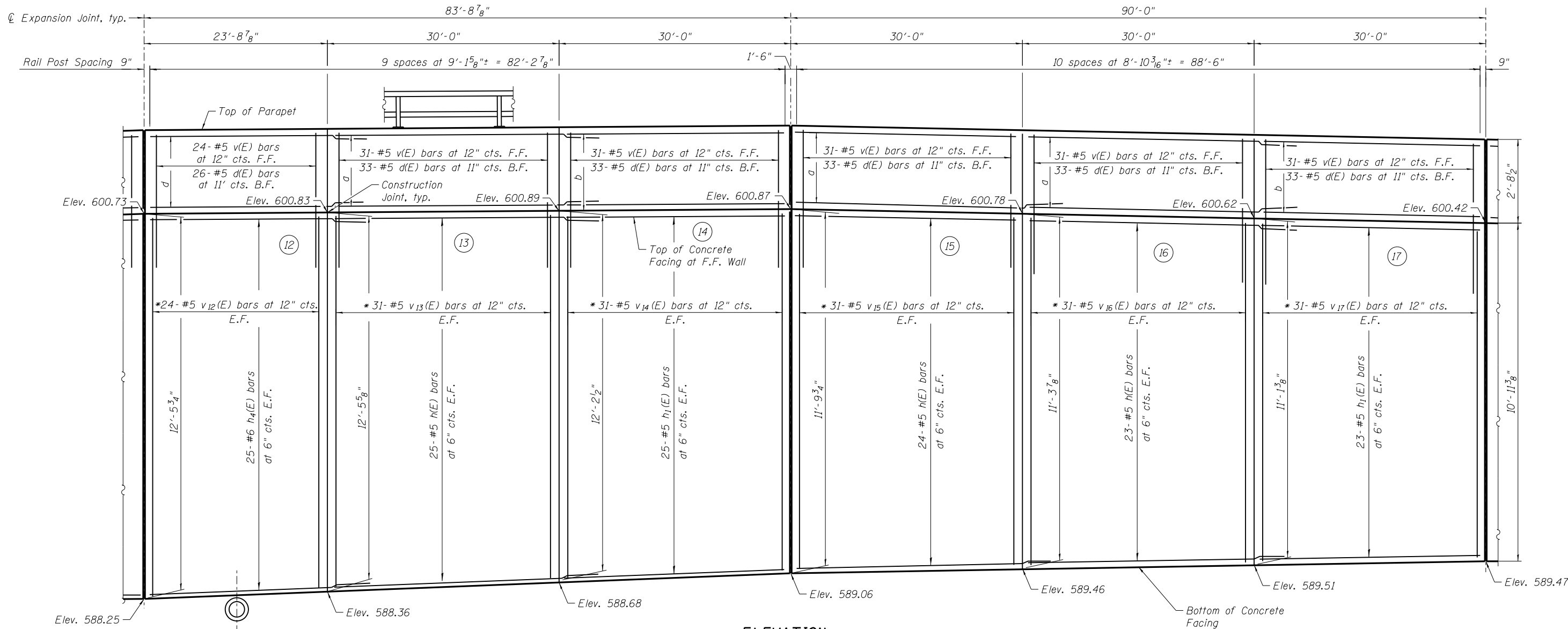
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PLOT DATE = 3/17/2015	CHECKED - JUH	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SOLDIER PILE WALL REINFORCEMENT DETAILS - 2
S.N. 081-P004

SHEET NO. SM-6 OF SM-15 SHEETS

F.A.P. RTE. 595	SECTION (142-1, 142)R	COUNTY ROCK ISLAND	TOTAL SHEETS 1353	SHEET NO. 1037
CONTRACT NO. 64883			ILLINOIS FED. AID PROJECT	



ELEVATION

(Developed - Looking North at Front Face of Retaining Wall.)
(Dimensions Measured along front face of wall.)

* See Bar Cutting Diagram, Sheet SM-10

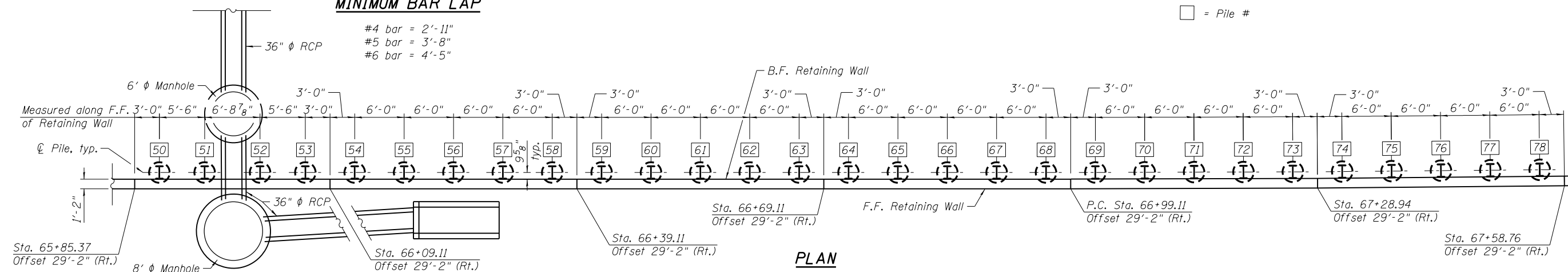
Note:
See sheet SM-11 for placement of parapet reinforcement.

LEGEND

- = Panel #
- = Pile #
- a = 8- #4 e(E) bars
- b = 8- #4 e₁(E) bars
- d = 8- #4 e₃(E) bars

MINIMUM BAR LAP

- #4 bar = 2'-11"
- #5 bar = 3'-8"
- #6 bar = 4'-5"



PLAN

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Clorba Group, Inc.
 CONSULTING ENGINEERS
 6501 North Cumberland Avenue
 Suite 202 Chicago, Illinois 60656
 Tel: 773-724-4000
 Fax: 773-774-4014
 Email: clorba@clorba.com

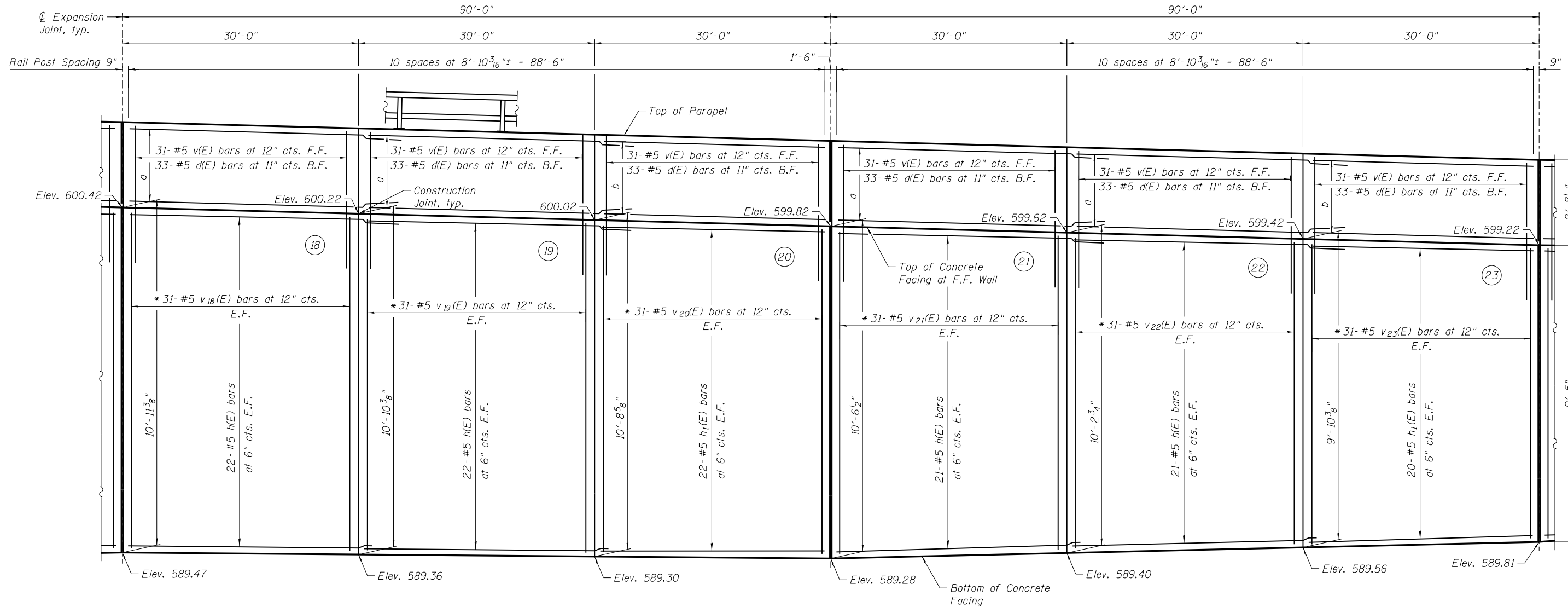
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PLOT DATE = 3/17/2015	CHECKED - JJH	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SOLDIER PILE WALL REINFORCEMENT DETAILS - 3
S.N. 081-P004

SHEET NO. SM-7 OF SM-15 SHEETS

F.A.P. RTE. 595	SECTION (142-1, 142)R	COUNTY ROCK ISLAND	TOTAL SHEETS 1353	SHEET NO. 1038
CONTRACT NO. 64B83			ILLINOIS FED. AID PROJECT	



a = 8- #4 e(E) bars
 b = 8- #4 e1(E) bars

Note:
 See Sheet SM-11 for placement
 of parapet reinforcement.

* See Bar Cutting Diagram,
 Sheet SM-10

ELEVATION

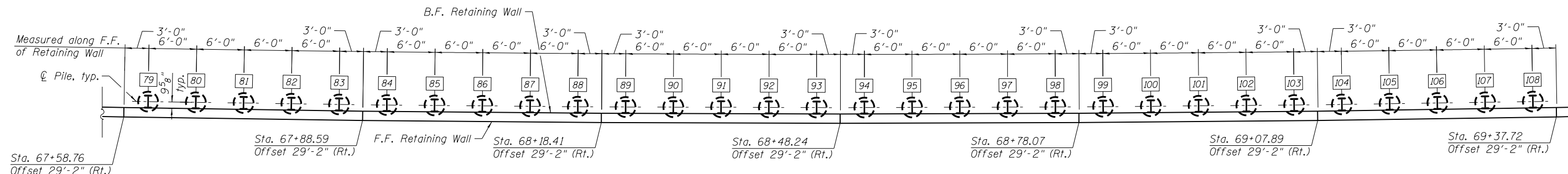
(Developed - Looking North at Front Face of Retaining Wall.)
 (Dimensions Measured along front face of wall.)

LEGEND

- = Panel #
- = Pile #

MINIMUM BAR LAP

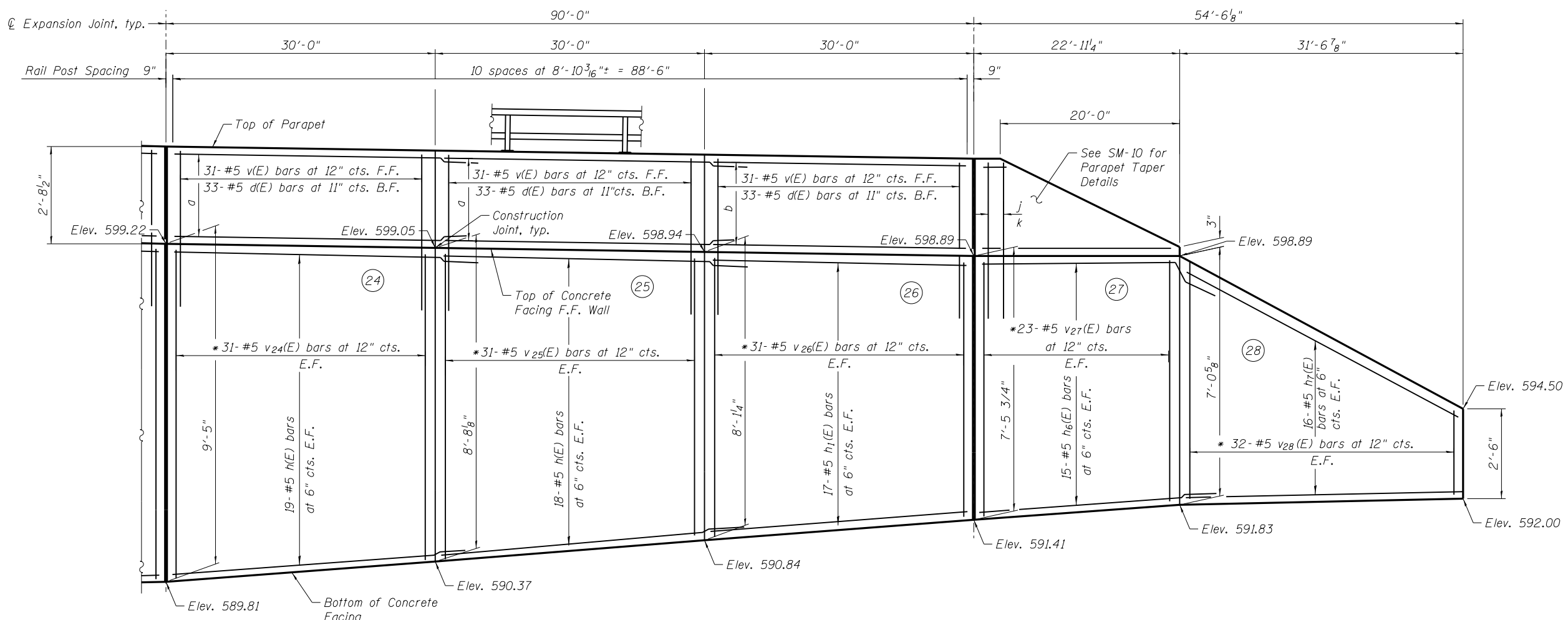
#4 bar = 2'-11"
 #5 bar = 3'-8"



PLAN

N:\PROJECTS\00033933\CONTRACT\2\Design\Structural\CAD\Retaining Wall-3 (081-P0004)\00033933\00_Retaining Wall-3.dgn

Clorba Group, Inc. CONSULTING ENGINEERS 6501 North Cumberland Avenue Suite 202 Chicago, Illinois 60656 Tel: 773-774-4000 Fax: 773-774-4014 Email: clorba@clorba.com	USER NAME = sailgood DESIGNED - APD CHECKED - BWS PLOT SCALE = 1/4" = 1' / in. DRAWN - RD CHECKED - JJH PLOT DATE = 3/17/2015	DESIGNED - APD CHECKED - BWS DRAWN - RD CHECKED - JJH REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOLDIER PILE WALL REINFORCEMENT DETAILS - 4 S.N. 081-P004	F.A.P. RTE. 595 SECTION (142-1, 142)R COUNTY ROCK ISLAND TOTAL SHEETS 1353 SHEET NO. 1039 CONTRACT NO. 64B83	SHEET NO. SM-8 OF SM-15 SHEETS ILLINOIS FED. AID PROJECT
---	---	--	---	--	---	---



* See Bar Cutting Diagram, Sheet SM-10

Note:
See Sheet SM-11 for placement of parapet reinforcement.

a = 8-#4 e(E) bars
 b = 8-#4 e₁(E) bars
 j = 3-#5 v(E) bars at 12" cts. F.F.
 k = 3-#5 d(E) bars at 12" cts. B.F.

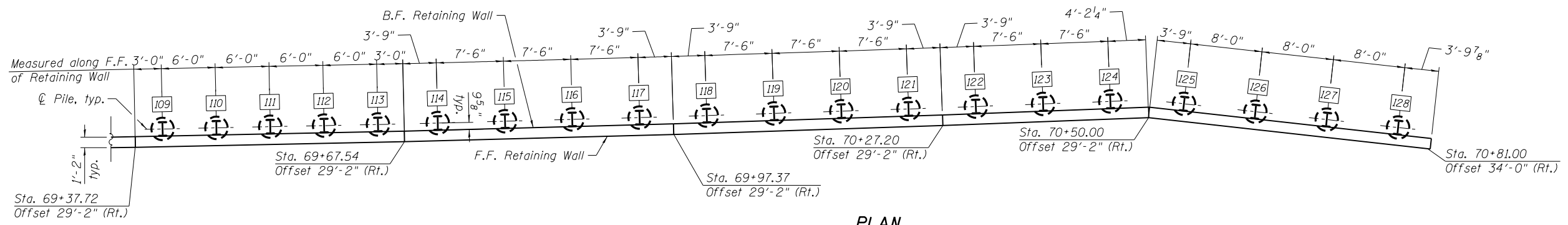
ELEVATION
 (Developed - Looking North at Front Face of Retaining Wall.)
 (Dimensions Measured along front face of wall.)

LEGEND

- = Panel #
- = Pile #

MINIMUM BAR LAP

- #4 bar = 2'-11"
- #5 bar = 3'-8"



PLAN

N:\PROJECTS\00033333\CONTRACT_2\Design\Structural\CAD\Retaining_Wall-3.dwg
 081-P0004\00033333\00033333\Retaining_Wall-3.dwg



USER NAME = sailgood	DESIGNED - APD	REVISED -
	CHECKED - BWS	REVISED -
PLOT SCALE = 1/4" = 1' / in.	DRAWN - RD	REVISED -
PLOT DATE = 3/17/2015	CHECKED - JJH	REVISED -

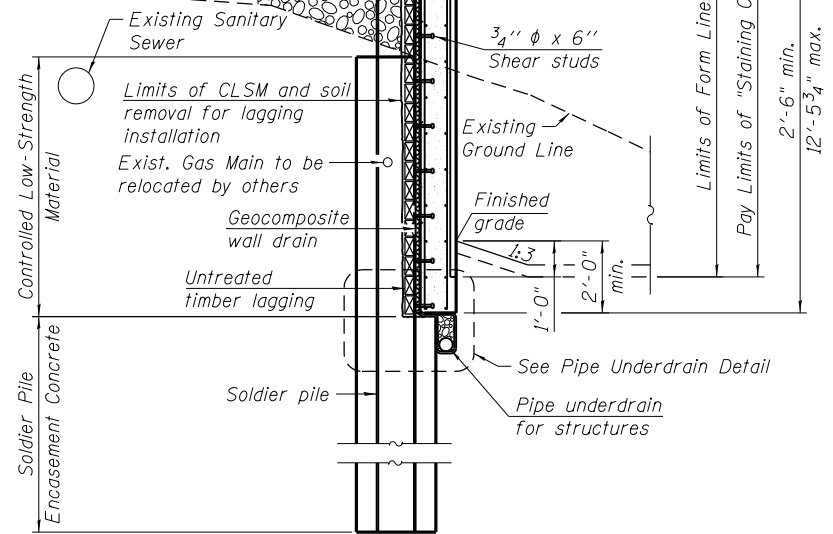
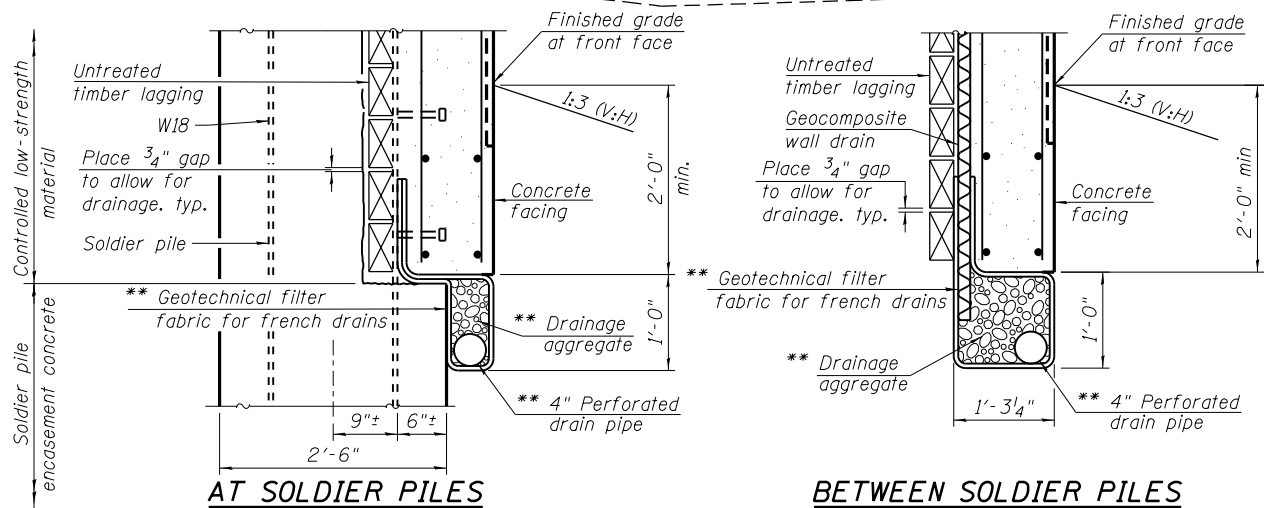
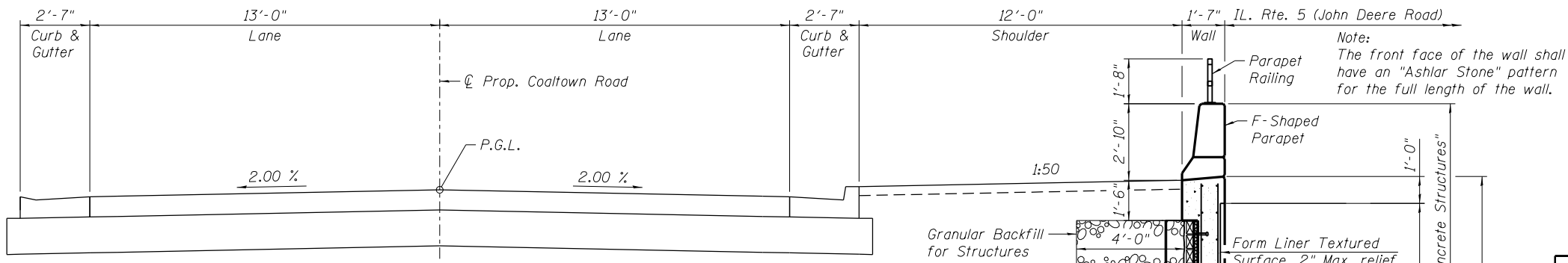
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SOLDIER PILE WALL REINFORCEMENT DETAILS - 5
S.N. 081-P004

SHEET NO. SM-9 OF SM-15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142R)	ROCK ISLAND	1353	1040
CONTRACT NO. 64883				

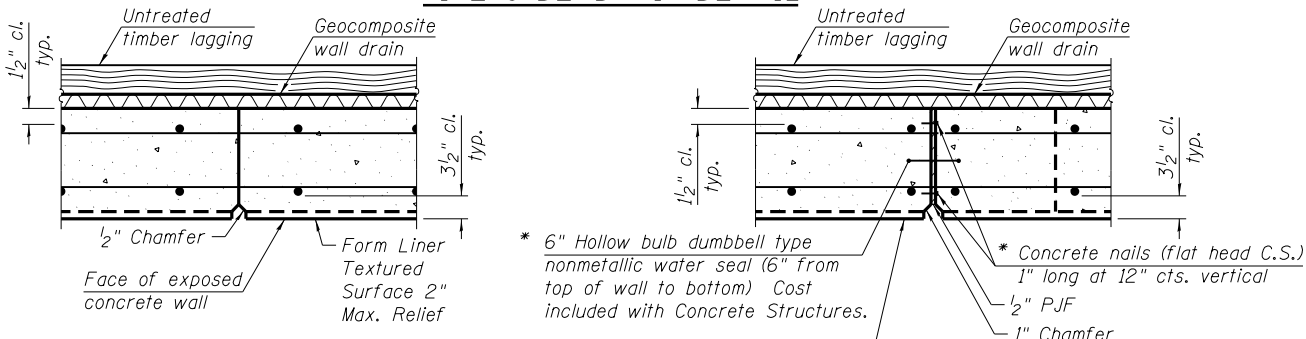
ILLINOIS FED. AID PROJECT



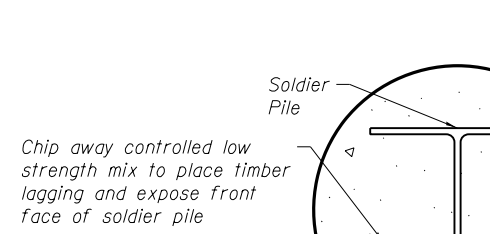
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	848	# 5	5'-4"	L
d ₁ (E)	6	# 5	5'-10"	D
e(E)	104	# 4	32'-11"	
e ₁ (E)	72	# 4	29'-8"	
e ₂ (E)	8	# 4	26'-11"	
e ₃ (E)	8	# 4	26'-8"	
e ₄ (E)	8	# 4	14'-4"	
e ₅ (E)	8	# 4	23'-8"	
e ₁₀ (E)	16	# 4	23'-1"	
h(E)	542	# 5	33'-8"	
h ₁ (E)	324	# 5	29'-8"	
h ₂ (E)	20	# 5	35'-1"	
h ₃ (E)	50	# 5	30'-2"	
h ₄ (E)	50	# 6	28'-2"	
h ₅ (E)	50	# 5	27'-8"	
h ₆ (E)	30	# 5	26'-7"	
h ₇ (E)	32	# 5	31'-2"	
h ₈ (E)	50	# 5	23'-8"	
v(E)	795	# 5	6'-0"	
v ₁ (E)	32	# 5	7'-5"	
v ₂ (E)	31	# 5	10'-6"	
v ₃ (E)	31	# 5	13'-1"	
v ₄ (E)	31	# 5	15'-7"	
v ₅ (E)	31	# 5	17'-11"	
v ₆ (E)	31	# 5	19'-11"	
v ₇ (E)	31	# 5	21'-6"	
v ₈ (E)	31	# 5	22'-8"	
v ₉ (E)	25	# 5	23'-5"	
v ₁₀ (E)	27	# 5	23'-10"	
v ₁₁ (E)	25	# 5	24'-1"	
v ₁₂ (E)	24	# 5	24'-2"	
v ₁₃ (E)	31	# 5	23'-11"	
v ₁₄ (E)	31	# 5	23'-3"	
v ₁₅ (E)	31	# 5	22'-4"	
v ₁₆ (E)	31	# 5	21'-8"	
v ₁₇ (E)	31	# 5	21'-4"	
v ₁₈ (E)	31	# 5	21'-1"	
v ₁₉ (E)	31	# 5	20'-10"	
v ₂₀ (E)	31	# 5	20'-6"	
v ₂₁ (E)	31	# 5	20'-0"	
v ₂₂ (E)	31	# 5	19'-4"	
v ₂₃ (E)	31	# 5	18'-7"	
v ₂₄ (E)	31	# 5	17'-5"	
v ₂₅ (E)	31	# 5	16'-1"	
v ₂₆ (E)	31	# 5	14'-10"	
v ₂₇ (E)	23	# 5	13'-9"	
v ₂₈ (E)	32	# 5	8'-10"	
Protective Coat	Sq. Yd.		1,288	
Form Liner Textured Surface	Sq. Ft.		6,296	
Concrete Structures	Cu. Yd.		358.4	
Reinforcement Bars, Epoxy Coated	Pound		68,610	
Pipe Underdrains for Structures 4"	Foot		820	
Concrete Superstructure	Cu. Yd.		91.3	
Staining Concrete Structures	Sq. Ft.		9,315	

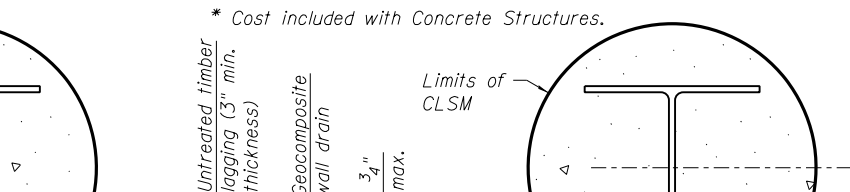
PIPE UNDERDRAIN DETAIL



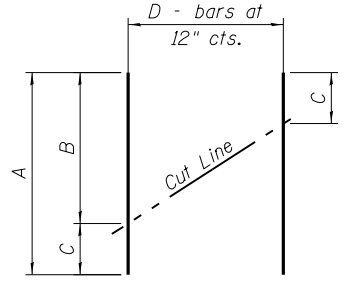
CONSTRUCTION JOINT DETAIL



EXPANSION JOINT DETAIL



BAR CUTTING DIAGRAM

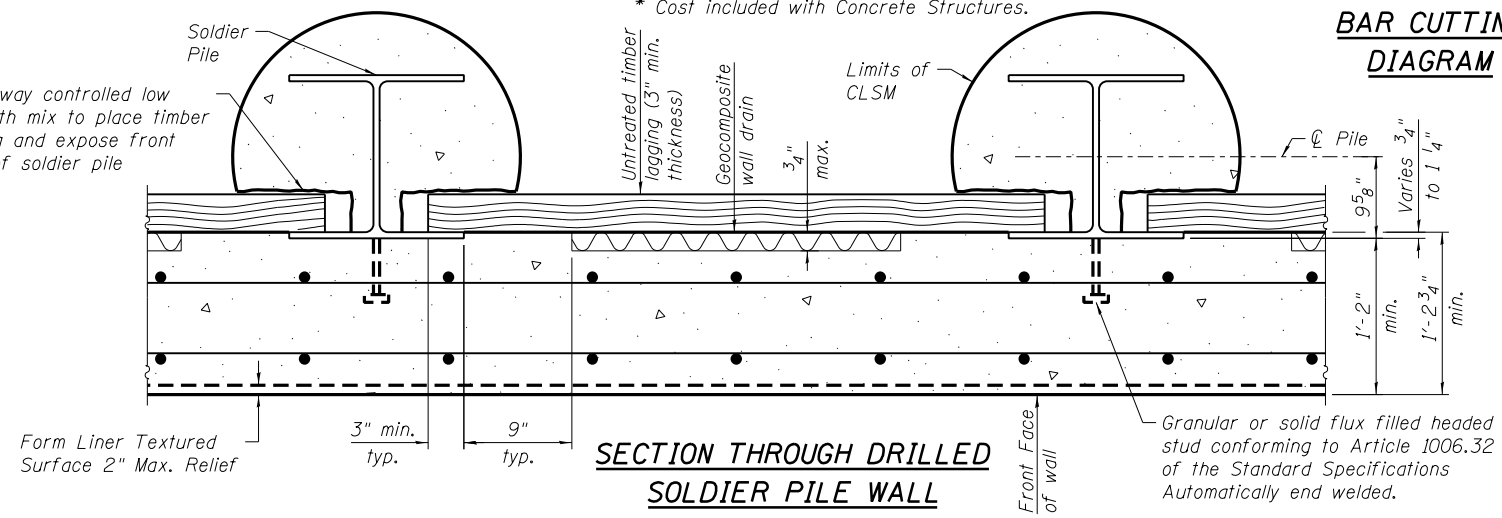


BAR CUTTING DIAGRAM TABLE

Bar	A	B	C	D
v ₁ (E)	7'-5"	4'-7"	2'-10"	32
v ₂ (E)	10'-6"	5'-11"	4'-7"	31
v ₃ (E)	13'-1"	7'-2"	5'-11"	31
v ₄ (E)	15'-7"	8'-5"	7'-2"	31
v ₅ (E)	17'-11"	9'-6"	8'-5"	31
v ₆ (E)	19'-11"	10'-5"	9'-6"	31
v ₇ (E)	21'-6"	11'-1"	10'-5"	31
v ₈ (E)	22'-8"	11'-7"	11'-1"	31
v ₉ (E)	23'-5"	11'-10"	11'-7"	25
v ₁₀ (E)	23'-10"	12'-0"	11'-10"	27
v ₁₁ (E)	24'-1"	12'-1"	12'-0"	25
v ₁₂ (E)	24'-2"	12'-1"	12'-1"	24
v ₁₃ (E)	23'-11"	11'-10"	12'-1"	31
v ₁₄ (E)	23'-3"	11'-5"	11'-10"	31
v ₁₅ (E)	22'-4"	10'-11"	11'-5"	31
v ₁₆ (E)	21'-8"	10'-9"	10'-11"	31
v ₁₇ (E)	21'-4"	10'-7"	10'-9"	31
v ₁₈ (E)	21'-1"	10'-6"	10'-7"	31
v ₁₉ (E)	20'-10"	10'-4"	10'-6"	31
v ₂₀ (E)	20'-6"	10'-2"	10'-4"	31
v ₂₁ (E)	20'-0"	9'-10"	10'-2"	31
v ₂₂ (E)	19'-4"	9'-6"	9'-10"	31
v ₂₃ (E)	18'-7"	9'-1"	9'-6"	31
v ₂₄ (E)	17'-5"	8'-4"	9'-1"	31
v ₂₅ (E)	16'-1"	7'-9"	8'-4"	31
v ₂₆ (E)	14'-10"	7'-1"	7'-9"	31
v ₂₇ (E)	13'-9"	6'-8"	7'-1"	23
v ₂₈ (E)	8'-10"	2'-2"	6'-8"	32

Order bars full length. Cut to fit and use remainder of bars on opposite side.

SECTION THROUGH DRILLED SOLDIER PILE WALL



N:\PROJECTS\000339333\CONTRACT_2\Design\Structural\CAD\Retaining Wall-3 (081-P004).DWG, Retaining Wall-3.dwg
 081-P004\000339333\000339333.dwg, Retaining Wall-3.dwg



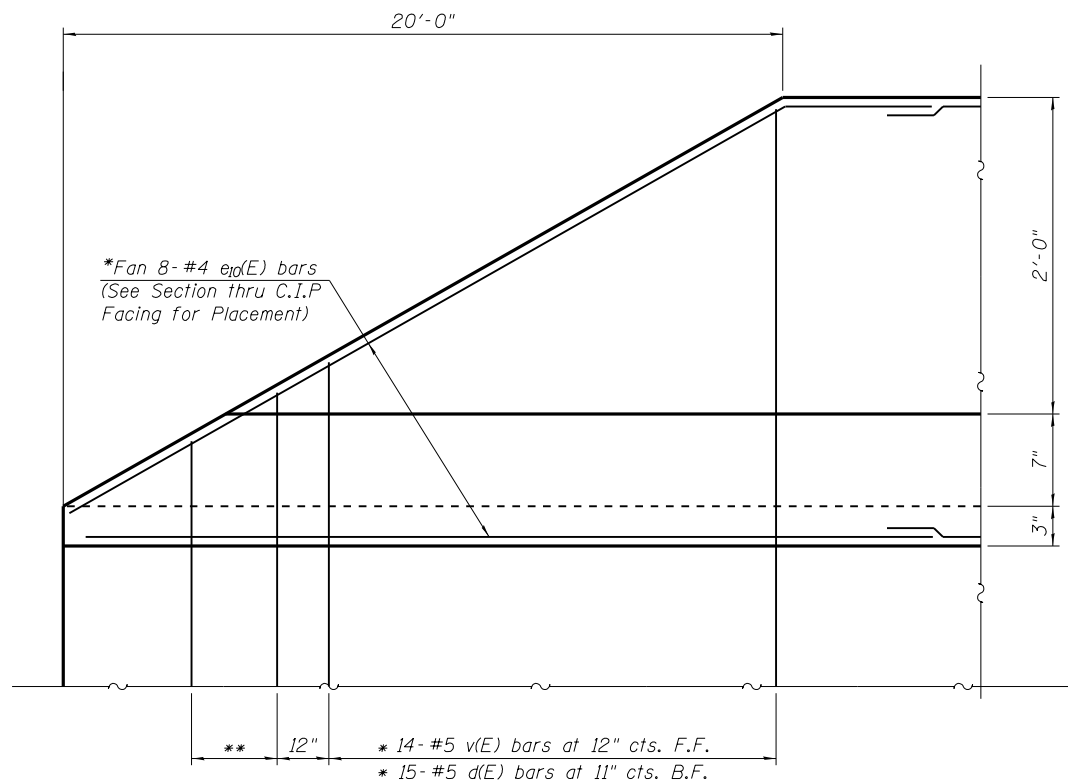
USER NAME = ngurgj	DESIGNED - APD	REVISED -
PLOT SCALE = 5/4,0000 1' = 1/4"	CHECKED - BWS	REVISED -
PLOT DATE = 8/12/2015	DRAWN - RD	REVISED -
	CHECKED - JUH	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOLDIER PILE WALL GENERAL DETAILS - 1
S.N. 081-P004**

SHEET NO. SM-10 OF SM-15 SHEETS

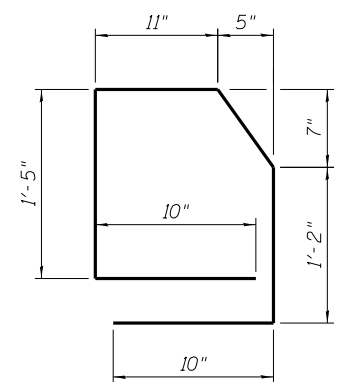
F.A.P. RTE. 595	SECTION (142-1, 142)R	COUNTY ROCK ISLAND	TOTAL SHEETS 1353	SHEET NO. 1041
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64883	



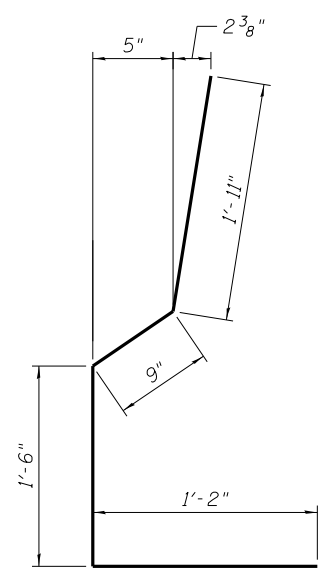
- * Cut to fit and bend as required
- ** 3- #5 d₁(E) bars at 12" cts.

PARAPET TAPER DETAIL

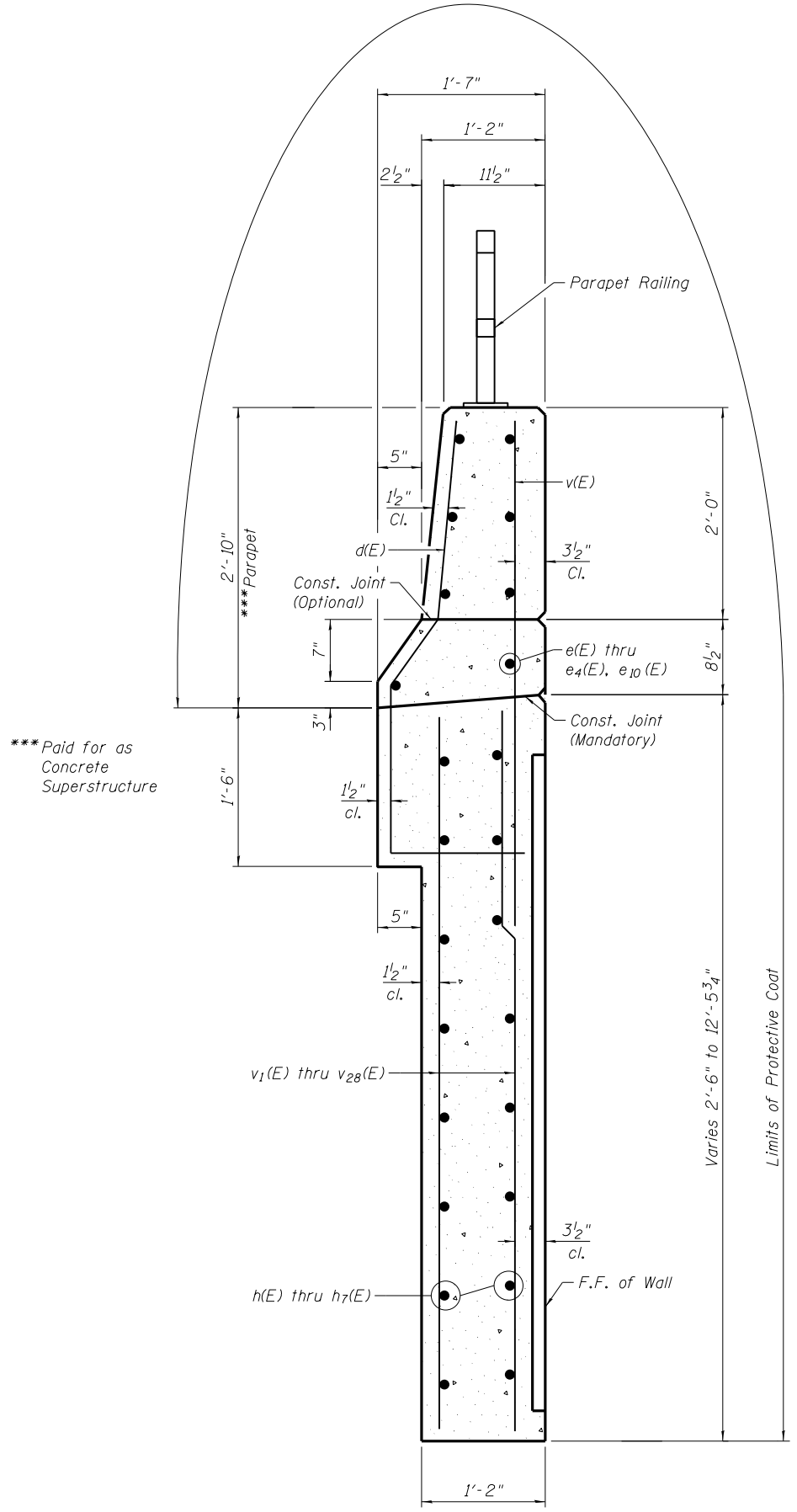
Looking north at F.F. of west end of wall. East end similar opposite hand.



BAR d₁(E)



BAR d(E)



SECTION THRU C.I.P. FACING

N:\PROJECTS\00033933\CONTRACT_2\Design\Structural\CAD\Retaining_Wall-3_10.dgn



USER NAME = sailgood	DESIGNED - APD	REVISED -
PLOT SCALE = 5:4.0000 1" = 1'	CHECKED - BWS	REVISED -
PLOT DATE = 3/17/2015	DRAWN - RD	REVISED -
	CHECKED - JJH	REVISED -

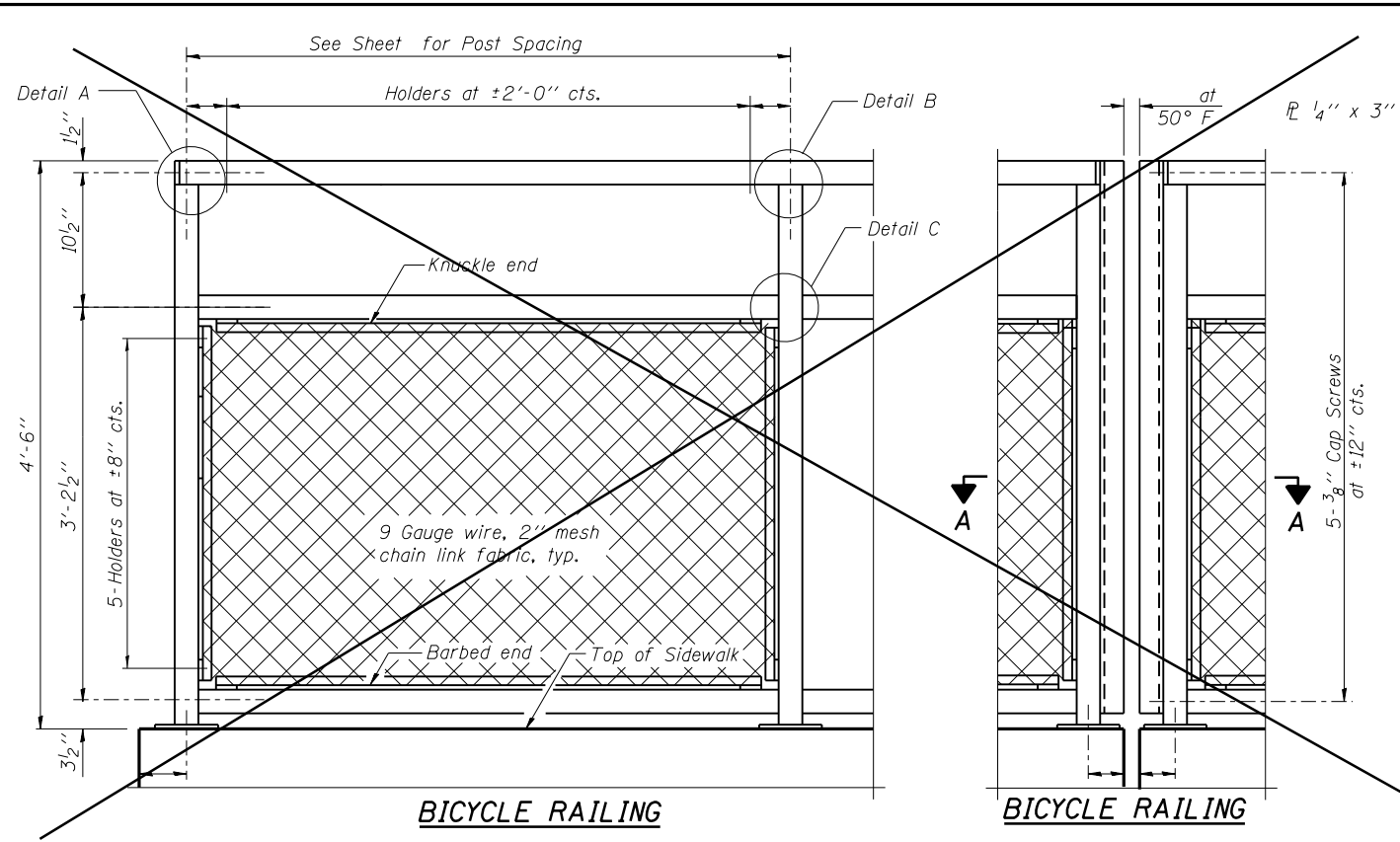
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOLDIER PILE WALL GENERAL DETAILS - 2
S.N. 081-P004**

SHEET NO. SM-11 OF SM-15 SHEETS

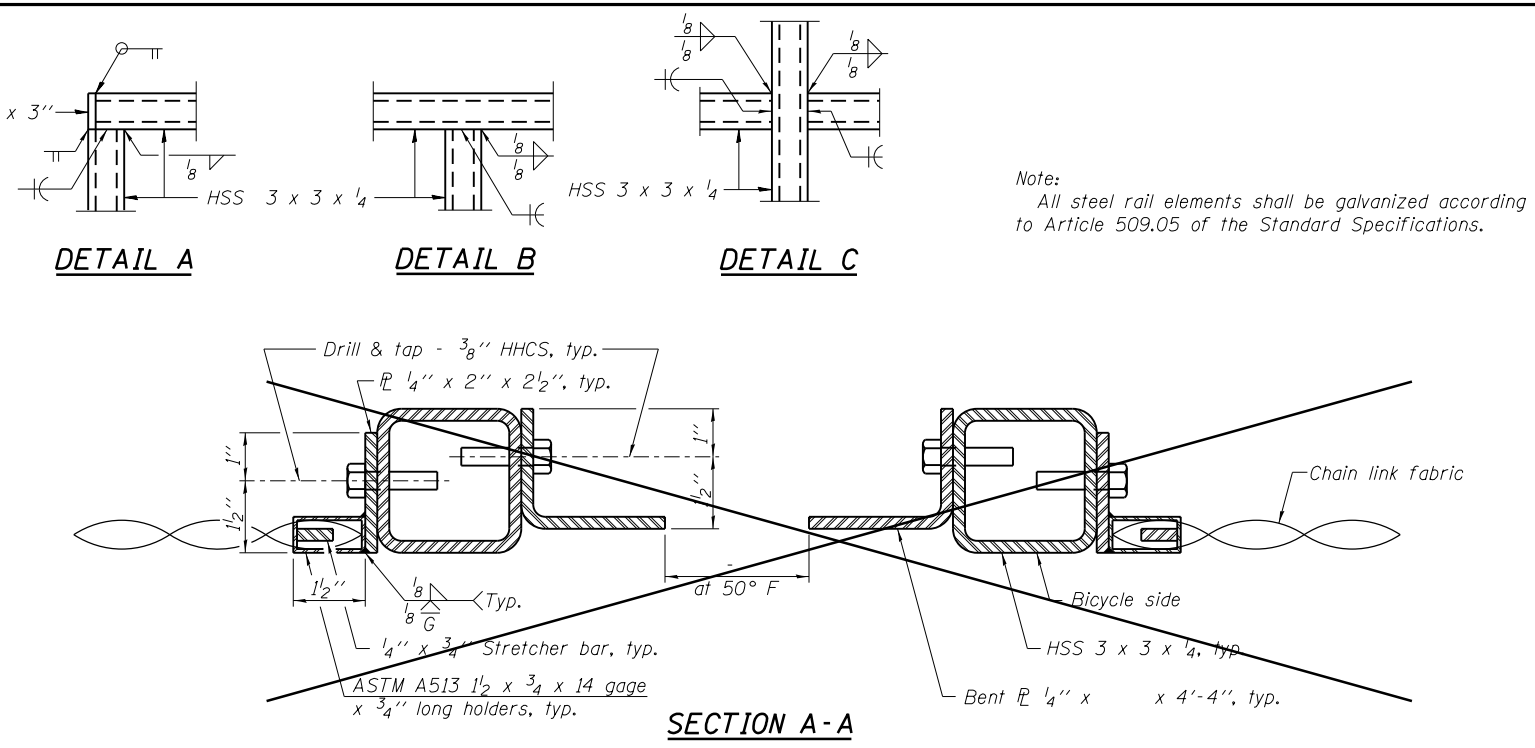
F.A.P. RTE. 595	SECTION (142-1, 142)R	COUNTY ROCK ISLAND	TOTAL SHEETS 1353	SHEET NO. 1042
CONTRACT NO. 64883				

ILLINOIS FED. AID PROJECT



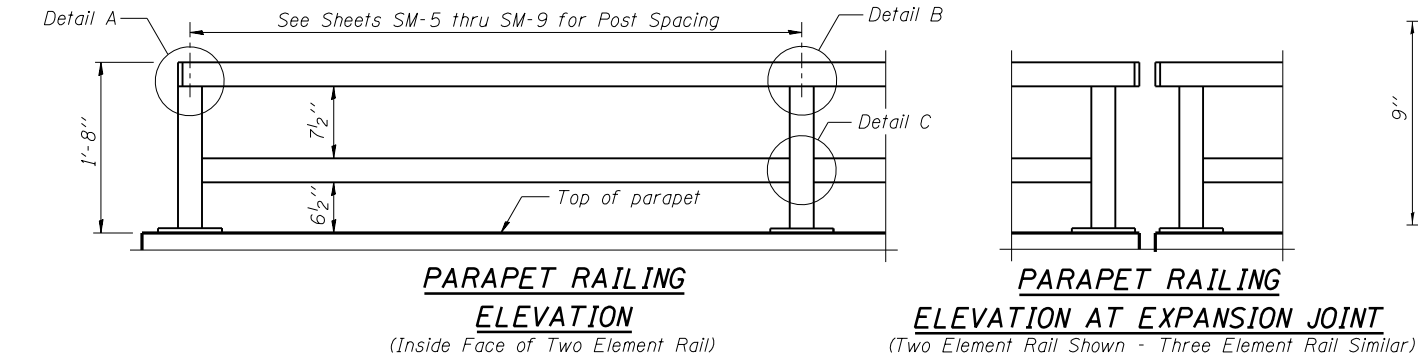
BICYCLE RAILING

BICYCLE RAILING



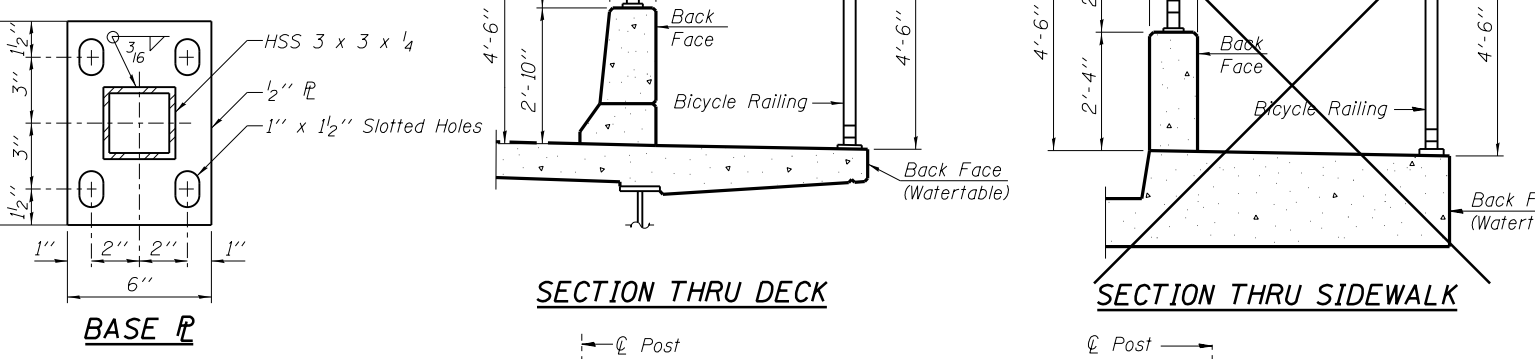
Note:
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

SECTION A-A



PARAPET RAILING ELEVATION
(Inside Face of Two Element Rail)

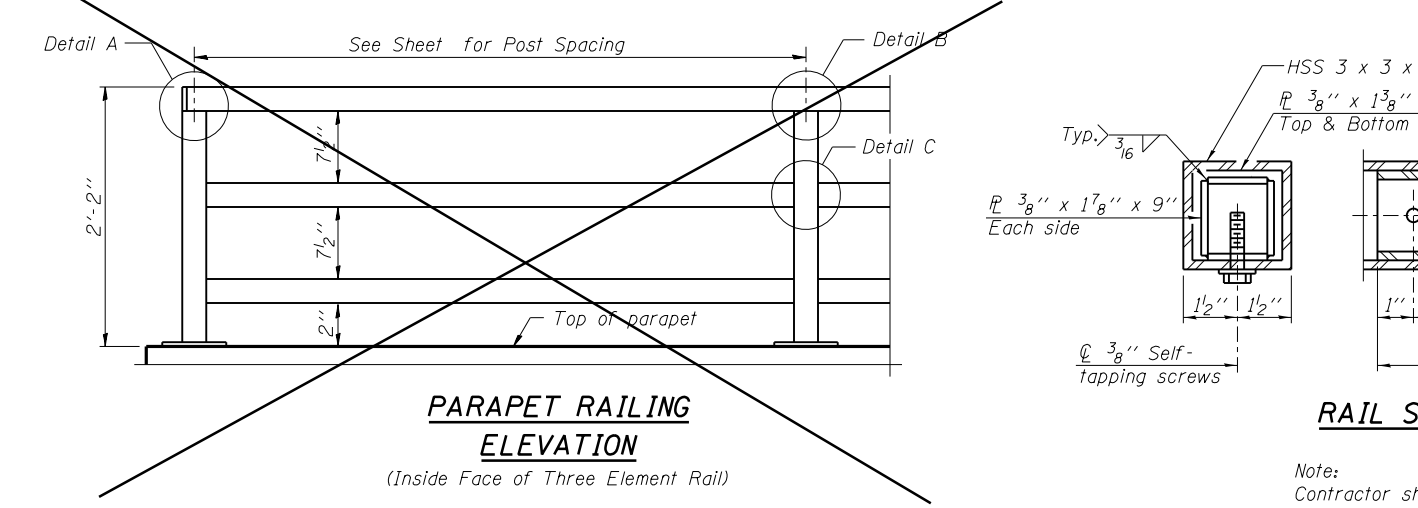
PARAPET RAILING ELEVATION AT EXPANSION JOINT
(Two Element Rail Shown - Three Element Rail Similar)



BASE PL

SECTION THRU DECK

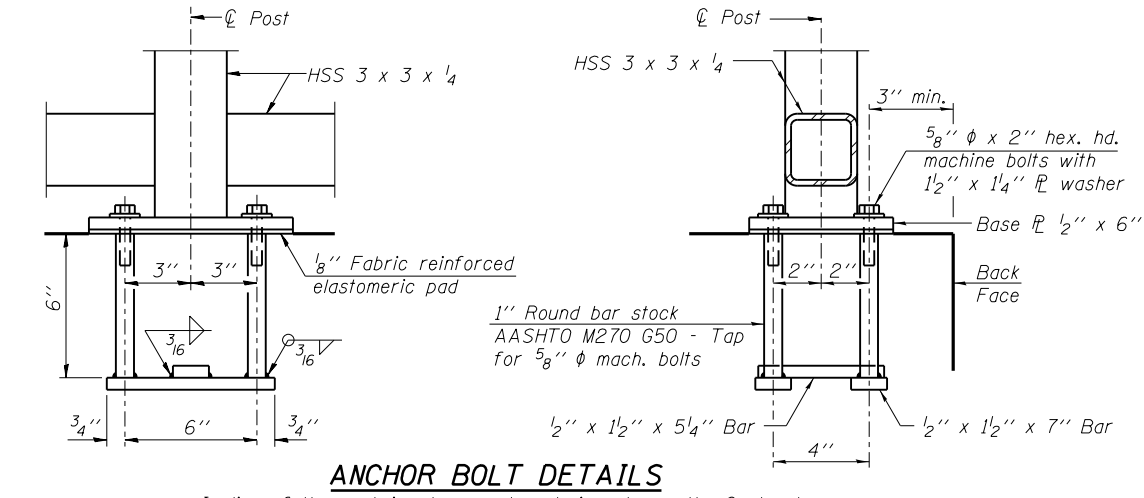
SECTION THRU SIDEWALK



PARAPET RAILING ELEVATION
(Inside Face of Three Element Rail)

RAIL SPLICE

Note:
Contractor shall fabricate rail to maintain 3" minimum clearance from edge of parapet to anchor bolts. This may be accomplished by modifying the rail splice detail or kinking rail at kinks in wall using full penetration weld.



ANCHOR BOLT DETAILS

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

BILL OF MATERIAL

Item	Unit	Quantity
Parapet Railing	Foot	727

R-29 1-12-15 (10'-0" Maximum Post Spacing)



USER NAME = sailgood	DESIGNED - APD	REVISED -
	CHECKED - BWS	REVISED -
PLOT SCALE = 5:4,000 1/4" = 1'	DRAWN - RD	REVISED -
PLOT DATE = 3/17/2015	CHECKED - JUH	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

BICYCLE RAILING S.N. 081-P004

SHEET NO. SM-12 OF SM-15 SHEETS

F.A.P. RTE. 595	SECTION (142-1, 142R)	COUNTY ROCK ISLAND	TOTAL SHEETS 1353	SHEET NO. 1043
				CONTRACT NO. 64B83
ILLINOIS FED. AID PROJECT				



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation/D-2

SOIL BORING LOG

Page 1 of 1

Date 7/11/11

ROUTE FAP 595 DESCRIPTION D92-004-06 Proposed retaining wall on 38th Avenue, E. of 53rd Street LOGGED BY W. Garza
SECTION 142-R LOCATION S. Moline Twp. - 11 S 1/2, SEC., TWP. 17N, RNG. 1W
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)	Surface Water Elev. _____ ft	
					Stream Bed Elev. _____ ft	
BORING NO. B-1 Station 63+00 Offset 13.50ft Rt CL Ground Surface Elev. 596.30 ft						
MEDIUM brown SILTY CLAY LOAM			0.9 P	12.0		
MEDIUM brown LOAM	594.30	1				
	592.80	5 2	0.5 P	13.0		
MEDIUM brown SILTY CLAY LOAM						
	590.30	2 3	0.7 B	24.0		
MEDIUM light brown SILTY CLAY LOAM						
	587.80	2 5	0.7 B	20.0		
SOFT light gray SILTY LOAM						
	584.80	1 3	0.4 B	28.0		
VERY STIFF gray SHALE						
	582.80	5 7 11	3.2 S	24.0		
gray SHALE						
	580.30	8 8 15				
End of Boring						

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



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation/D-2

SOIL BORING LOG

Page 1 of 1

Date 7/11/11

ROUTE FAP 595 DESCRIPTION D92-004-06 Proposed retaining wall on 38th Avenue, E. of 53rd Street LOGGED BY W. Garza
SECTION 142-R LOCATION S. Moline Twp. - 11 S 1/2, SEC., TWP. 17N, RNG. 1W
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)	Surface Water Elev. _____ ft	
					Stream Bed Elev. _____ ft	
BORING NO. B-2 Station 64+00 Offset 14.00ft Rt CL Ground Surface Elev. 596.50 ft						
Shoulder Rock						
MEDIUM brown LOAM	594.50	4				
	593.00	2 3	0.6 P	24.0		
MEDIUM brown SILTY CLAY LOAM						
	590.50	2 3	0.6 P	28.0		
STIFF brown SILTY CLAY LOAM						
	588.00	0 3 4	1.2 B	20.0		
VERY STIFF light gray CLAY						
	585.00	1 3 5	3.3 P	21.0		
VERY STIFF gray SHALE						
	583.00	4 5 10	3.2 S	23.0		
MEDIUM gray SHALE						
	580.50	9 9 10				
End of Boring						

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



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation/D-2

SOIL BORING LOG

Page 1 of 1

Date 7/11/11

ROUTE FAP 595 DESCRIPTION D92-004-06 Proposed retaining wall on 38th Avenue, E. of 53rd Street LOGGED BY W. Garza
SECTION 142-R LOCATION S. Moline Twp. - 11 S 1/2, SEC., TWP. 17N, RNG. 1W
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	DEPTH (ft)	BLOW (6")	UCS (tsf)	MOIST (%)	Surface Water Elev. _____ ft	
					Stream Bed Elev. _____ ft	
BORING NO. B-3 Station 65+00 Offset 14.00ft Rt CL Ground Surface Elev. 596.80 ft						
Shoulder Rock						
STIFF brown SILTY CLAY LOAM	594.80	3				
	593.30	2 3	1.5 P	23.0		
MEDIUM brown SILTY CLAY LOAM						
	590.80	2 3	0.6 P	23.0		
VERY STIFF brown CLAY LOAM						
	588.30	1 4 6	2.5 B	22.0		
MEDIUM tan SILTY LOAM with SAND lens						
	585.30	3 3 4	0.6 P	22.0		
VERY STIFF gray SHALE						
	583.30	4 5 9	3.2 S	24.0		
MEDIUM gray SHALE						
	580.80	8 13 16				
End of Boring						

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

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USER NAME = sailgood
DESIGNED - APD
CHECKED - BWS
DRAWN - RD
CHECKED - JHJ
PLOT SCALE = 0:2.0000 "/>

REVISER -
REVISER -
REVISER -
REVISER -
REVISER -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS - 1
S.N. 081-P004
SHEET NO. SM-13 OF SM-15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1044
CONTRACT NO.				64883
ILLINOIS FED. AID PROJECT				



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

Page 1 of 1

Date 7/11/11

ROUTE FAP 595 DESCRIPTION D92-004-06 Proposed retaining wall on 38th Avenue, E. of 53rd Street LOGGED BY W. Garza
SECTION 142-R LOCATION S. Moline Twp. - 11 S 1/2, SEC. TWP. 17N, RNG. 1W
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	DEPTH H	BLOW S	UCS Qu	MOIST S T	Surface Water Elev. _____ ft	
					Stream Bed Elev. _____ ft	Groundwater Elev.: First Encounter _____ ft Upon Completion _____ ft After _____ Hrs. _____ ft
Shoulder Rock						
MEDIUM brown LOAM	594.90	3				
	593.40	2	0.8	20.0		
		3	P			
MEDIUM brown SILTY LOAM		1				
	590.90	2	0.7	25.0		
		3	S			
MEDIUM brown SILTY CLAY LOAM		2				
	588.40	3	0.9	22.0		
		4	B			
SOFT tan SANDY LOAM with GRAVEL		3				
	585.40	3	0.4	18.0		
		4	B			
VERY STIFF tan CLAY LOAM SHALE		4				
	583.40	6	2.2	30.0		
		8	S			
MEDIUM/HARD gray SHALE		5				
	580.90	6	4.5	20.0		
		7	P			
End of Boring						

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



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

Page 1 of 1

Date 7/12/11

ROUTE FAP 595 DESCRIPTION D92-004-06 Proposed retaining wall on 38th Avenue, E. of 53rd Street LOGGED BY W. Garza
SECTION 142-R LOCATION S. Moline Twp. - 11 S 1/2, SEC. TWP. 17N, RNG. 1W
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	DEPTH H	BLOW S	UCS Qu	MOIST S T	Surface Water Elev. _____ ft	
					Stream Bed Elev. _____ ft	Groundwater Elev.: First Encounter _____ ft Upon Completion _____ ft After _____ Hrs. _____ ft
Shoulder Rock						
MEDIUM brown SILTY CLAY LOAM	595.40	3				
	593.90	2	0.8	22.0		
		4	P			
STIFF brown SILTY CLAY LOAM		2				
	591.40	4	1.1	21.0		
		5	B			
STIFF brown SILTY CLAY LOAM		3				
	588.90	4	1.8	21.0		
		6	B			
MEDIUM brown/tan SILTY CLAY LOAM with SILT lens		2				
	586.40	2	0.6	28.0		
		4	B			
No Recovery		6				
		3				
	583.40	7				
HARD gray SHALE		6				
	581.40	10	4.3	16.0		
		16	P			
End of Boring						

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



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation D-2

SOIL BORING LOG

Page 1 of 1

Date 7/12/11

ROUTE FAP 595 DESCRIPTION D92-004-06 Proposed retaining wall on 38th Avenue, E. of 53rd Street LOGGED BY W. Garza
SECTION 142-R LOCATION S. Moline Twp. - 11 S 1/2, SEC. TWP. 17N, RNG. 1W
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	DEPTH H	BLOW S	UCS Qu	MOIST S T	Surface Water Elev. _____ ft	
					Stream Bed Elev. _____ ft	Groundwater Elev.: First Encounter _____ ft Upon Completion _____ ft After _____ Hrs. _____ ft
Shoulder Rock						
STIFF brown SILTY CLAY LOAM	595.70	2				
	594.20	5	1.1	13.0		
		9	S			
HARD brown SILTY CLAY LOAM		7				
	591.70	8	4.5	15.0		
		9	P			
STIFF brown SILTY CLAY LOAM		2				
	589.20	3	1.3	21.0		
		6	B			
STIFF brown LOAM with SILT lens		2				
	586.70	5	1.4	21.0		
		4	B			
VERY STIFF light gray SILTY CLAY		2				
	583.70	4	2.0	22.0		
		7	B			
VERY STIFF gray SHALE		4				
	581.70	4	3.3	24.0		
		6	P			
End of Boring						

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

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USER NAME = sailgood
PLOT SCALE = 0:2.0000' = 1" / 10'
PLOT DATE = 3/17/2015

DESIGNED - APD	REVISED -
CHECKED - BWS	REVISED -
DRAWN - RD	REVISED -
CHECKED - JUH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS - 2
S.N. 081-P004
SHEET NO. SM-14 OF SM-15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142R)	ROCK ISLAND	1353	1045
CONTRACT NO.			64883	
ILLINOIS FED. AID PROJECT				



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation ID-2

SOIL BORING LOG

Page 1 of 1

Date 7/12/11

ROUTE FAP 595 DESCRIPTION D92-004-06 Proposed retaining wall on 38th Avenue, E. of 53rd Street LOGGED BY W. Garza
SECTION 142-R LOCATION S. Moline Twp. - 11 S 1/2, SEC. 17N, RNG. 1W
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO.	D	B	U	M	Surface Water Elev.
Station	E	L	C	O	Stream Bed Elev.
BORING NO.	P	O	S	I	Groundwater Elev.:
Station	T	W	Qu	S	First Encounter
Offset	H	S		T	Upon Completion
Ground Surface Elev.		(ft)	(/ft)	(tsf)	(%)
Shoulder Rock					
MEDIUM brown LOAM	596.00	2			
		4	0.9	14.0	
	594.50	7	P		
VERY STIFF brown LOAM		8			
		8	3.6	15.0	
	592.00	7	P		
STIFF brown SILTY CLAY LOAM		3			
		5	1.0	21.0	
	589.50	7	S		
HARD tan SAND lens with SANDSTONE		4			
		5	4.5	15.0	
	587.00	8	P		
VERY STIFF light gray CLAY LOAM		4			
		5	3.0	21.0	
	584.50	9	S		
VERY STIFF light gray CLAY		5			
		5	3.5	17.0	
	582.00	8	S		
End of Boring					

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

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	CHECKED - BWS	REVISED -
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PLOT DATE = 3/17/2015	CHECKED - JJH	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS - 3
S.N. 081-P004**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1046
CONTRACT NO. 64B83				

SHEET NO. SM-15 OF SM-15 SHEETS

ILLINOIS FED. AID PROJECT

Benchmark: BM 407 "X" cut in NW corner of traffic signal foundation.
John Deere Road Sta. 334+45.00, 63.99' Lt. Elev. 590.71

* 350'-0" Soldier Pile and Logging Wall

Existing Structure: None

Begin Retaining Wall
Multi-use Path
Sta. 11+50.00
Elev. 602.75

Elev. 599.25

Prop. 6"x2'
Box Culvert
Sta. 11+27.00
Inv. Elev. 595.03
S.N. 081-P007

Comb. Curb & Gutter
Type B-6.12

Proposed Culvert,
See sheets SJ-1
thru SJ-4
11+00

80'-0" 90'-0" 90'-0" 90'-0"

20'-0" 30'-0" 30'-0" 30'-0" 30'-0" 30'-0" 30'-0" 30'-0" 30'-0" 30'-0" 30'-0"

Sta. 12+30.00 Elev. 606.17 Sta. 13+20.00 Elev. 606.02 Sta. 14+10.00 Elev. 603.36 PC Multi-use Path Sta. 14+88.46 Elev. 602.15

Expansion Joint, typ. Construction Joint, typ. Existing Ground Line, F.F. Top of Concrete Facing Finished Grade Line, B.F.

Top of Curb Line & Finished Grade F.F. of Wall

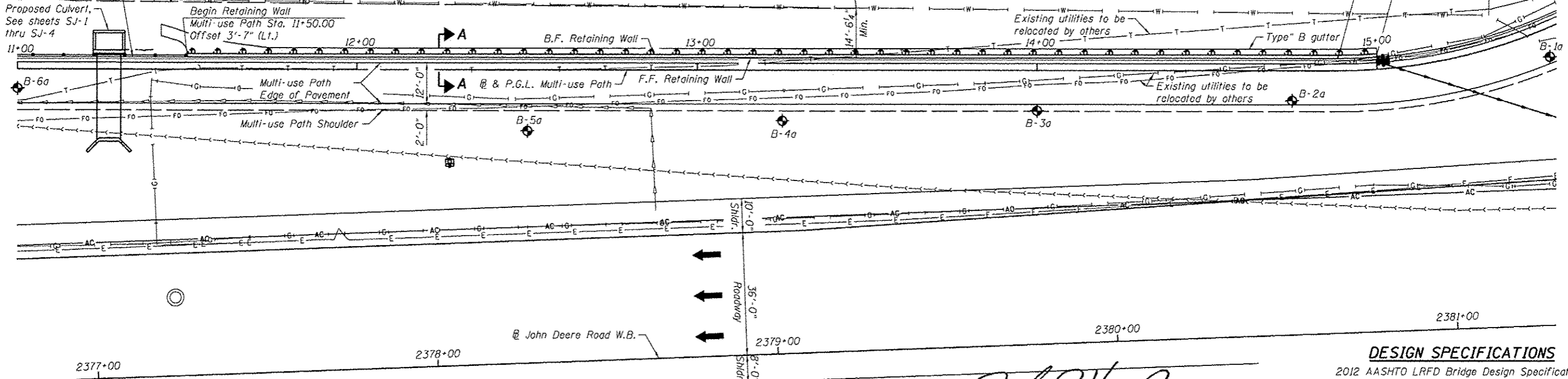
Elev. 599.72 Elev. 600.17 Elev. 600.62 Elev. 601.08

Drilled Soldier Pile, typ. Pipe Underdrain for Structures, 4" Bottom of Concrete Facing

Estimated Rock Elev. 591.0 Estimated Rock Elev. 592.0 Estimated Rock Elev. 592.4 Estimated Rock Elev. 592.4 Estimated Rock Elev. 589.7

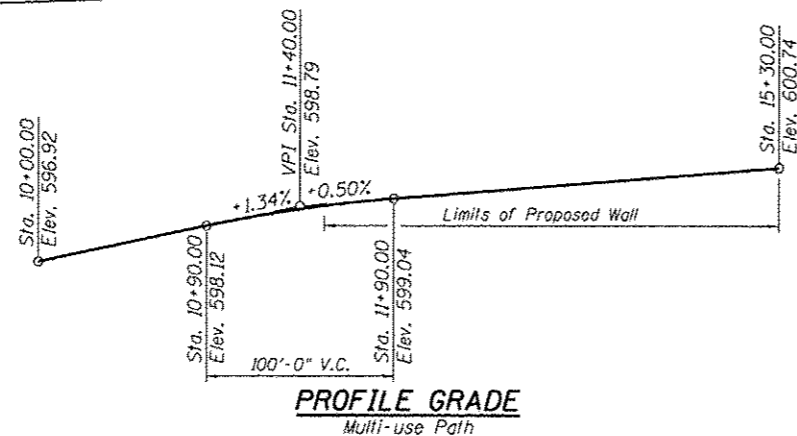
ELEVATION

(Developed - Looking North at Front Face of Retaining Wall.)
(Dimensions Measured along front face of wall.)



LEGEND

- ⊙ Panel Number
- ◆ Boring Location
- - - - - Exist. Sanitary Sewer
- W- - - - - Exist. Water Main
- G- - - - - Exist. Gas Main
- T- - - - - Exist. Aerial Telephone
- FO- - - - - Exist. Underground Fiber Optic
- E- - - - - Existing Electrical
- - - - - Exist. ROW



PLAN

CURVE DATA

$\Delta = 77^\circ 29' 37''$ (L.T.)
 $D = 36^\circ 43' 41''$
 $T = 125.19'$
 $L = 210.99'$
 $E = 44.02'$
 $R = 156.00'$
 $S.E. = 2.0\%$
 $P.C. = Sta. 14+88.46$
 $P.T. = Sta. 16+99.45$
 $P.I. = Sta. 16+13.64$

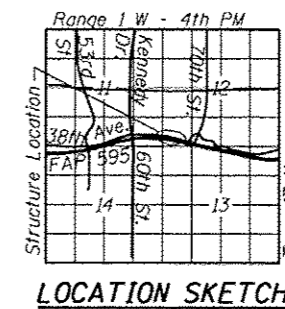
NOTES:

1. Offsets are measured from \mathcal{C} of Multi-use Path to F.F. of wall.
2. For Section A-A, see sheet SN-2.
3. F.F. - Front Face
B.F. - Back Face

Joseph J. Hosanna Jr.



DATE: 3/17/2015
SEAL EXPIRES: 11/30/2018



DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications
with 2013 Interims

DESIGN STRESS

FIELD UNITS

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

GENERAL PLAN & ELEVATION

MULTI-USE PATH
SECTION (142-1, 142)R
ROCK ISLAND COUNTY
STATION 11+40.00 TO 15+00.27
S.N. 081-P005



USER NAME: jellgood	DESIGNED: APO	REVISED:
PLDT SCALE: 3/8"=1'-0"	CHECKED: BWS	REVISED:
PLDT DATE: 3/17/2015	DRAWN: RD	REVISED:
	CHECKED: JJH	REVISED:

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. SN-1 OF SN-9 SHEETS

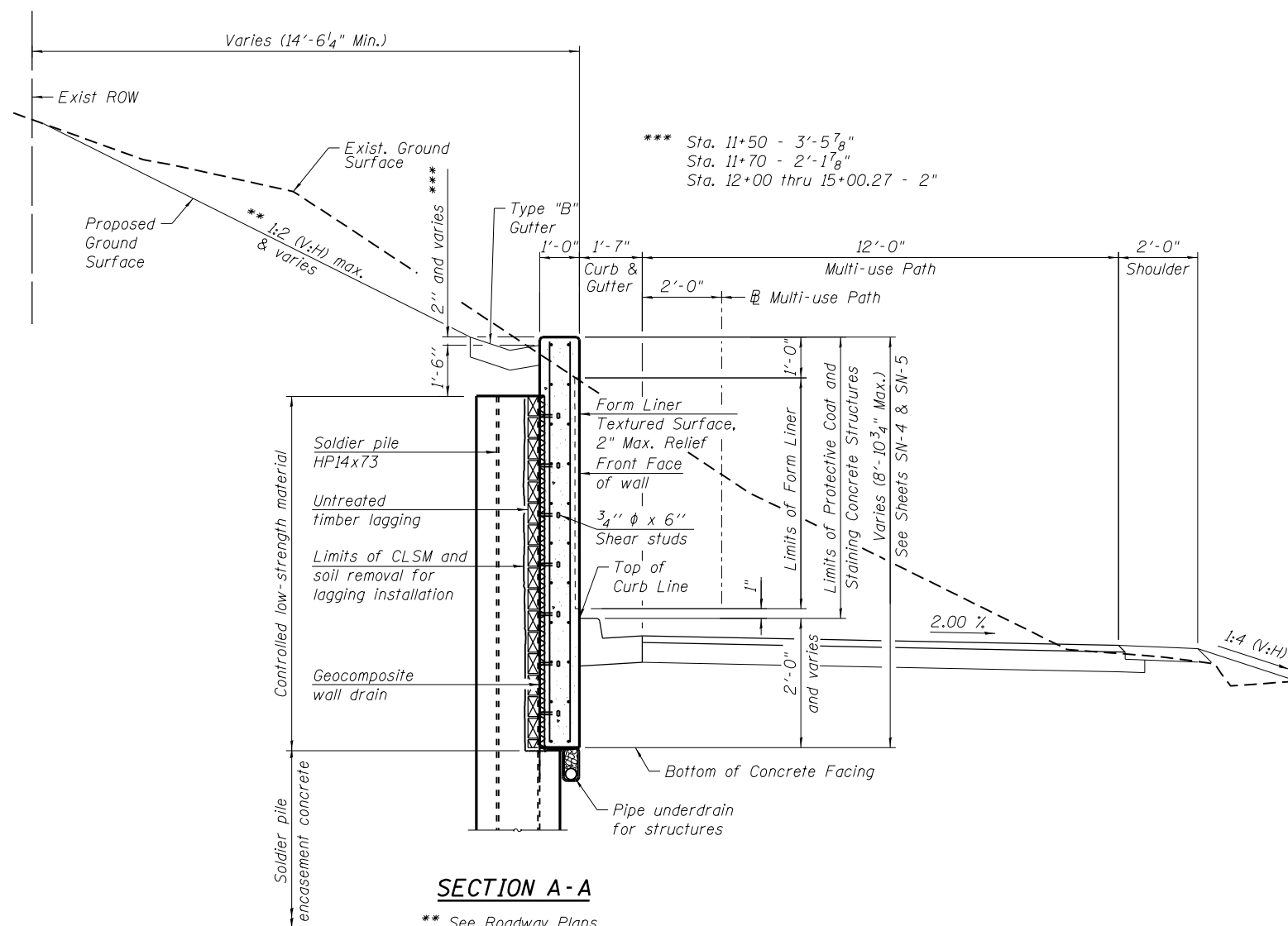
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142) R	ROCK ISLAND	1353	1047
				CONTRACT NO. 64883
ILLINOIS FED. AID PROJECT				

GENERAL NOTES:

1. Reinforcement bars designated (E) shall be epoxy coated.
2. The front face of the retaining wall shall have an "Ashlar Stone" pattern for the full length of the wall.
3. The Contractor is responsible for the design and performance of the lagging using no less than a 3" nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1,000 psi.
4. Stations and offsets are measured from M Multi-use Path to the front face of the retaining wall.

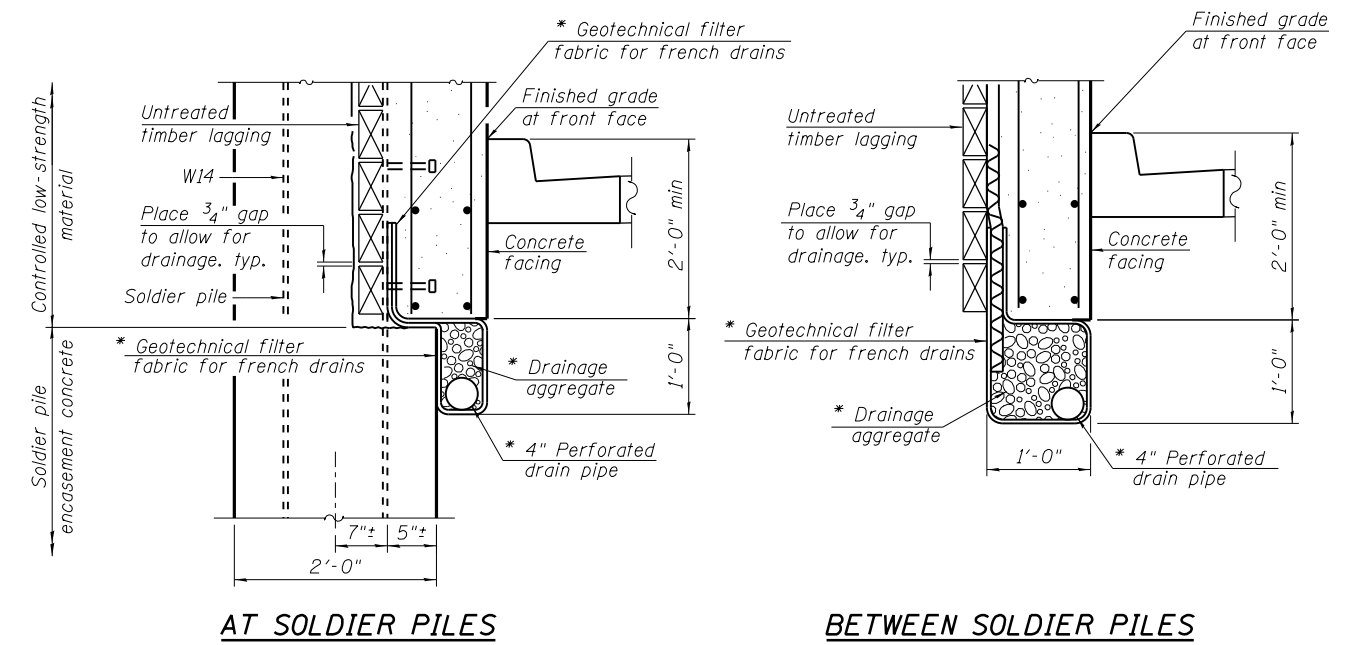
INDEX OF SHEETS:

- SN-1 General Plan & Elevation
- SN-2 General Notes & Total Bill of Material
- SN-3 Soldier Pile Details
- SN-4 Soldier Pile Wall Reinforcement Details - 1
- SN-5 Soldier Pile Wall Reinforcement Details - 2
- SN-6 Soldier Pile Wall General Details
- SN-7 Soil Boring Logs - 1
- SN-8 Soil Boring Logs - 2
- SN-9 Soil Boring Logs - 3



SECTION A-A

** See Roadway Plans



AT SOLDIER PILES

BETWEEN SOLDIER PILES

DRAINAGE DETAIL

* Included in the cost of Pipe Underdrains for Structures, 4".

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Structures	Cu Yd	84.7
Form Liner Textured Surface	Sq Ft	1,208
Protective Coat	Sq Yd	177
Stud Shear Connectors	Each	248
Reinforcement Bars, Epoxy Coated	Pound	14,030
Geocomposite Wall Drain	Sq Yd	122
Drilling And Setting Soldier Piles (In Soil)	Cu Ft	1,754
Drilling And Setting Soldier Piles (In Rock)	Cu Ft	1,208
Untreated Timber Lagging	Sq Ft	1,476
Furnishing Soldier Piles (Hp Section)	Foot	911
Pipe Underdrains For Structures 4"	Foot	372
Staining Concrete Structures	Sq Ft	1,587

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	CHECKED - BWS	REVISED -
PLOT SCALE = 0:2.0000 1' = 1"	DRAWN - RD	REVISED -
PLOT DATE = 3/17/2015	CHECKED - JUH	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES AND TOTAL BILL OF MATERIAL
S.N. 081-P005**

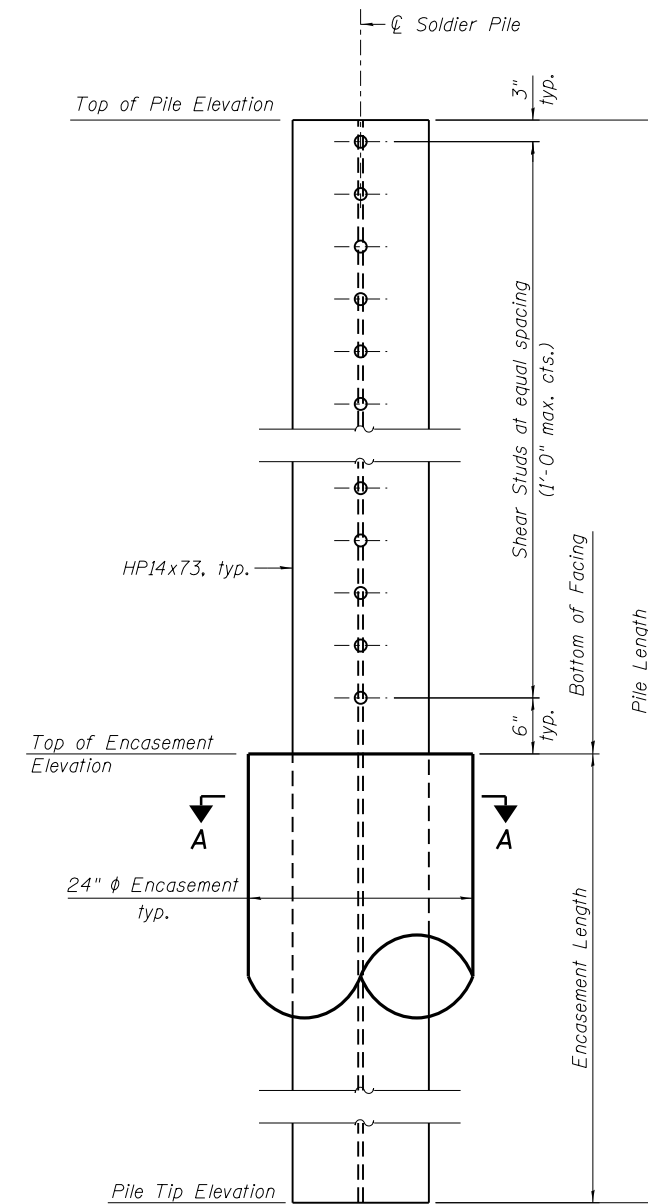
SHEET NO. SN-2 OF SN-9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO.			64883	
ILLINOIS FED. AID PROJECT				

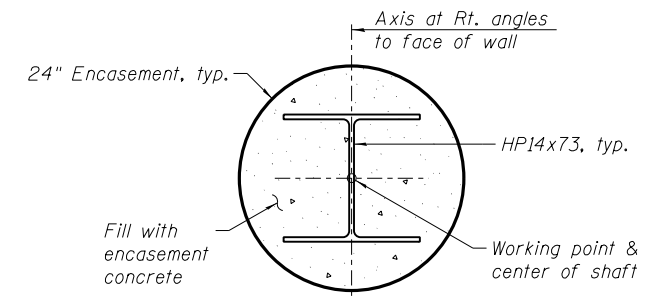
SOLDIER PILE DATA

Panel	Soldier Pile Designation	Station	Offset (ft)	Pile Size	Top of Soldier Pile Elevation	Pile Tip Elevation	Top of Encasement Concrete	Estimated Length of Soldier Pile	Est. Top of Rock Elevation	Number of Shear Connectors
1	1	11+53.33	-5.15	HP14x73	598.14	584.16	596.01	13.98	591.36	3
	2	11+60.00	-5.15	HP14x73	598.90	584.20	596.24	14.70	591.40	3
	3	11+66.67	-5.15	HP14x73	599.65	584.24	596.46	15.41	591.44	4
2	4	11+73.75	-5.15	HP14x73	600.46	584.29	596.70	16.16	591.49	4
	5	11+81.25	-5.15	HP14x73	601.31	584.34	596.95	16.97	591.54	5
	6	11+88.75	-5.15	HP14x73	602.16	584.39	597.20	17.77	591.59	5
	7	11+96.25	-5.15	HP14x73	603.01	584.44	597.45	18.57	591.64	6
3	8	12+03.75	-5.15	HP14x73	603.74	584.19	597.59	21.55	591.69	7
	9	12+11.25	-5.15	HP14x73	604.00	582.24	597.63	21.76	591.74	7
	10	12+18.75	-5.15	HP14x73	604.27	582.29	597.67	21.98	591.79	7
4	11	12+26.25	-5.15	HP14x73	604.54	582.34	597.71	22.19	591.84	7
	12	12+33.75	-5.15	HP14x73	604.74	582.39	597.74	22.35	591.89	8
	13	12+41.25	-5.15	HP14x73	604.90	582.44	597.78	22.45	591.94	8
	14	12+48.75	-5.15	HP14x73	605.05	582.49	597.82	22.56	591.99	8
5	15	12+56.25	-5.15	HP14x73	605.20	582.53	597.86	22.67	592.03	8
	16	12+63.75	-5.15	HP14x73	605.24	582.57	597.89	22.66	592.07	8
	17	12+71.25	-5.15	HP14x73	605.16	582.61	597.93	22.55	592.11	8
	18	12+78.75	-5.15	HP14x73	605.08	582.65	597.97	22.43	592.15	8
6	19	12+86.25	-5.15	HP14x73	605.01	582.69	598.01	22.31	592.19	8
	20	12+93.75	-5.15	HP14x73	604.91	582.73	598.04	22.18	592.23	7
	21	13+01.25	-5.15	HP14x73	604.80	582.77	598.08	22.03	592.27	7
7	22	13+08.75	-5.15	HP14x73	604.69	582.81	598.12	21.87	592.31	7
	23	13+16.25	-5.15	HP14x73	604.57	582.85	598.16	21.72	592.35	7
	24	13+23.75	-5.15	HP14x73	604.45	582.89	598.19	21.56	592.39	7
8	25	13+31.25	-5.15	HP14x73	604.32	582.90	598.23	21.42	592.40	7
	26	13+38.75	-5.15	HP14x73	604.19	582.90	598.27	21.29	592.40	6
	27	13+46.25	-5.15	HP14x73	604.06	582.90	598.31	21.16	592.40	6
9	28	13+53.75	-5.15	HP14x73	603.85	585.20	598.34	18.65	592.40	6
	29	13+61.25	-5.15	HP14x73	603.55	585.20	598.38	18.35	592.40	6
	30	13+68.75	-5.15	HP14x73	603.25	585.20	598.42	18.05	592.40	5
	31	13+76.25	-5.15	HP14x73	602.96	585.20	598.46	17.76	592.40	5
10	32	13+83.75	-5.15	HP14x73	602.69	585.20	598.49	17.49	592.40	5
	33	13+91.25	-5.15	HP14x73	602.45	585.20	598.53	17.25	592.40	4
	34	13+98.75	-5.15	HP14x73	602.22	585.20	598.57	17.02	592.40	4
	35	14+06.25	-5.15	HP14x73	601.98	584.98	598.61	17.01	592.18	4
11	36	14+13.75	-5.15	HP14x73	601.80	584.71	598.64	17.10	591.91	4
	37	14+21.25	-5.15	HP14x73	601.69	584.44	598.68	17.25	591.64	4
	38	14+28.75	-5.15	HP14x73	601.57	584.17	598.72	17.41	591.37	3
	39	14+36.25	-5.15	HP14x73	601.46	583.90	598.76	17.56	591.10	3
12	40	14+43.75	-5.15	HP14x73	601.34	583.63	598.79	17.72	590.83	3
	41	14+51.25	-5.15	HP14x73	601.23	583.36	598.83	17.87	590.56	3
	42	14+58.75	-5.15	HP14x73	601.11	583.09	598.87	18.03	590.29	3
	43	14+66.25	-5.15	HP14x73	601.00	582.82	598.91	18.18	590.02	3
12	44	14+73.75	-5.15	HP14x73	600.88	582.55	598.94	18.34	589.75	2
	45	14+81.25	-5.15	HP14x73	600.76	582.28	598.98	18.49	589.48	2
	46	14+88.75	-5.15	HP14x73	600.65	582.01	599.02	18.64	589.21	2
	47	14+96.25	-5.15	HP14x73	600.53	581.74	599.06	18.80	588.94	2

- Notes:
1. Rock elevations at each pile are estimated by interpolating between rock elevations provided in soil boring logs.
 2. Stations and offsets are measured from Multi-use Path to the working point.



SOLDIER PILE ELEVATION AND SHEAR STUD CONNECTION DETAILS



SECTION A-A

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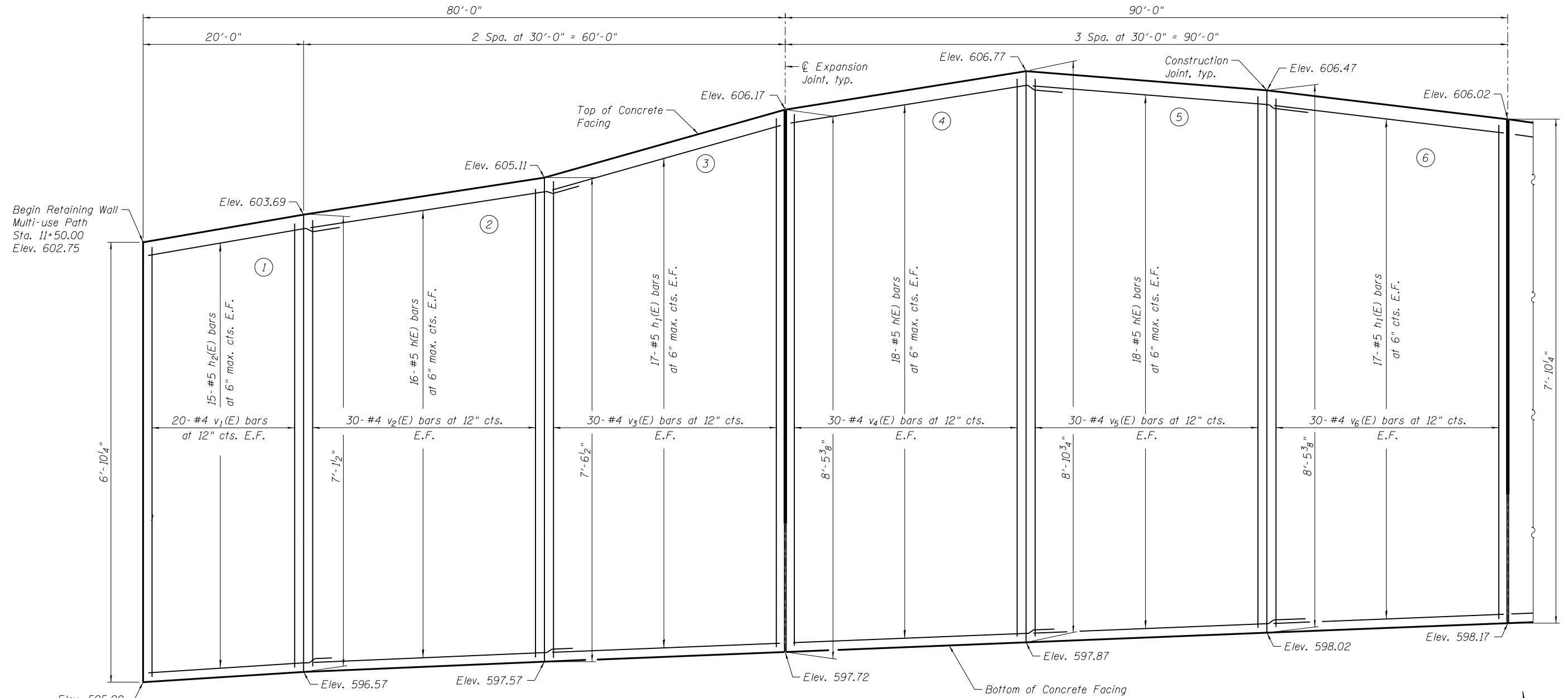


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	CHECKED - JUH	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

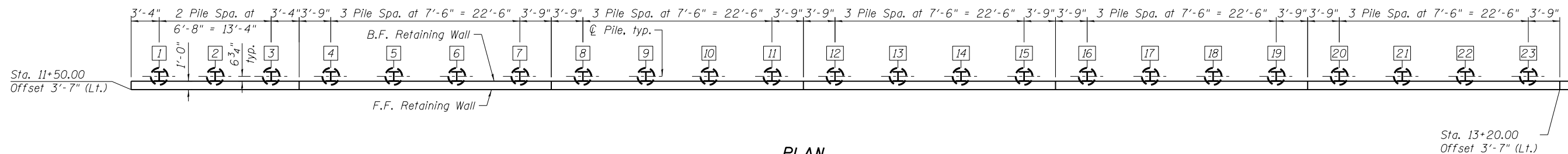
**SOLDIER PILE DETAILS
S.N. 081-P005**
SHEET NO. SN-3 OF SN-9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142) R	ROCK ISLAND	1353	1049
CONTRACT NO. 64883			ILLINOIS FED. AID PROJECT	



ELEVATION

(Developed - Looking North at Front Face of Retaining Wall.)
 (Dimensions Measured along front face of wall.)



PLAN

LEGEND:

- ② = Panel No.
- ⑤ = Pile No.

E.F. = Each Face

MIN. BAR LAP

#5 bar = 3'-3"

NOTE:

For Bill of Material, Field Cutting Diagram, Construction and Expansion Joint Details and Section Thru CIP Facing, See Sheet SN-6.

N:\PROJECTS\081-P005\Structural\CAD\Retaining Wall-4 Multi-use Path (081-P005)\00033333.00_Retaining Wall-Bike Path_04.dgn



USER NAME = sailgood
 PLOT SCALE = 13.333333 1/16"
 PLOT DATE = 3/17/2015

DESIGNED - APD
 CHECKED - BWS
 DRAWN - RD
 CHECKED - JUH

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

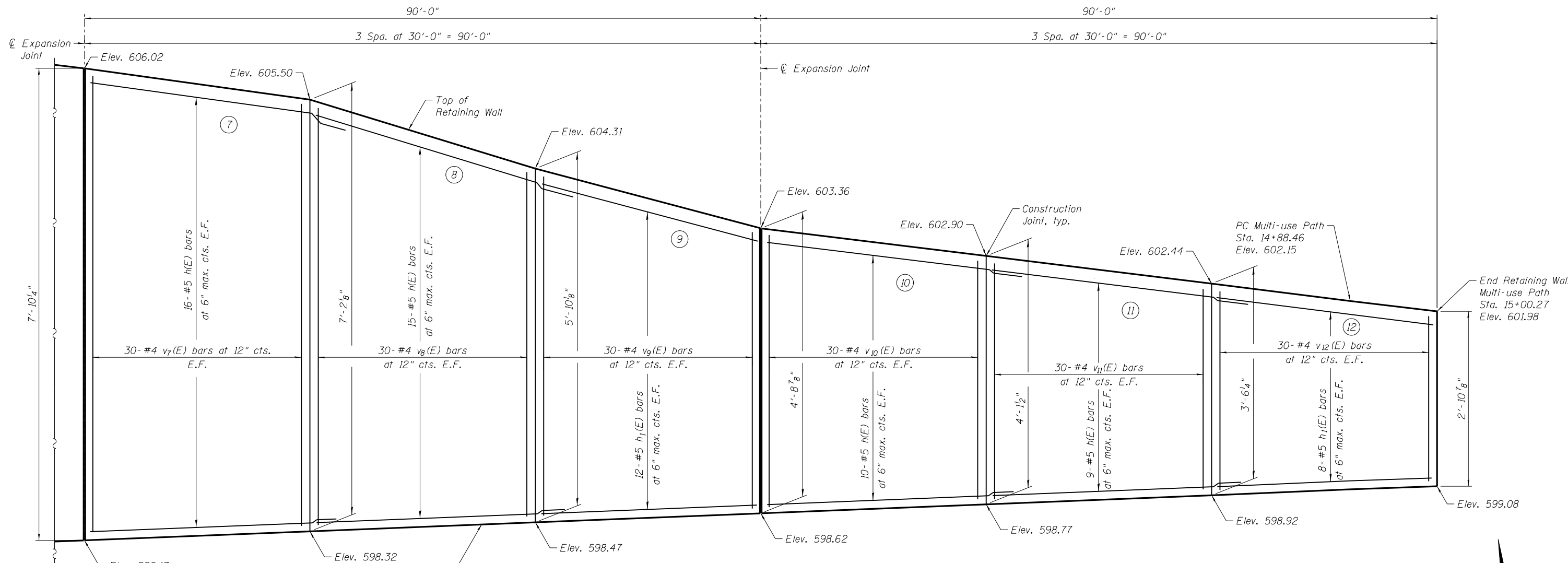
SOLDIER PILE WALL REINFORCEMENT DETAILS - 1
S.N. 081-P005

SHEET NO. SN-4 OF SN-9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142) R	ROCK ISLAND	1353	1050
CONTRACT NO.			64883	

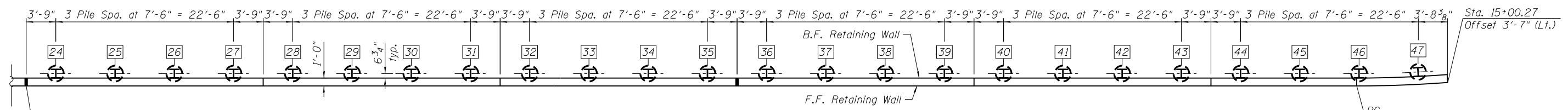
ILLINOIS FED. AID PROJECT

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ELEVATION

(Developed - Looking North at Front Face of Retaining Wall.)
 (Dimensions Measured along front face of wall.)



PLAN

LEGEND:

- ② = Panel No.
- ⑤ = Pile No.

E.F. = Each Face

MIN. BAR LAP

#5 bar = 3'-3"

NOTE:

For Bill of Material, Field Cutting Diagram, Construction and Expansion Joint Details and Section Thru CIP Facing, See Sheet SN-6.



USER NAME = sailgood	DESIGNED - APD	REVISED -
	CHECKED - BWS	REVISED -
PLOT SCALE = 13.333333' / 1"	DRAWN - RD	REVISED -
PLOT DATE = 3/17/2015	CHECKED - JUH	REVISED -

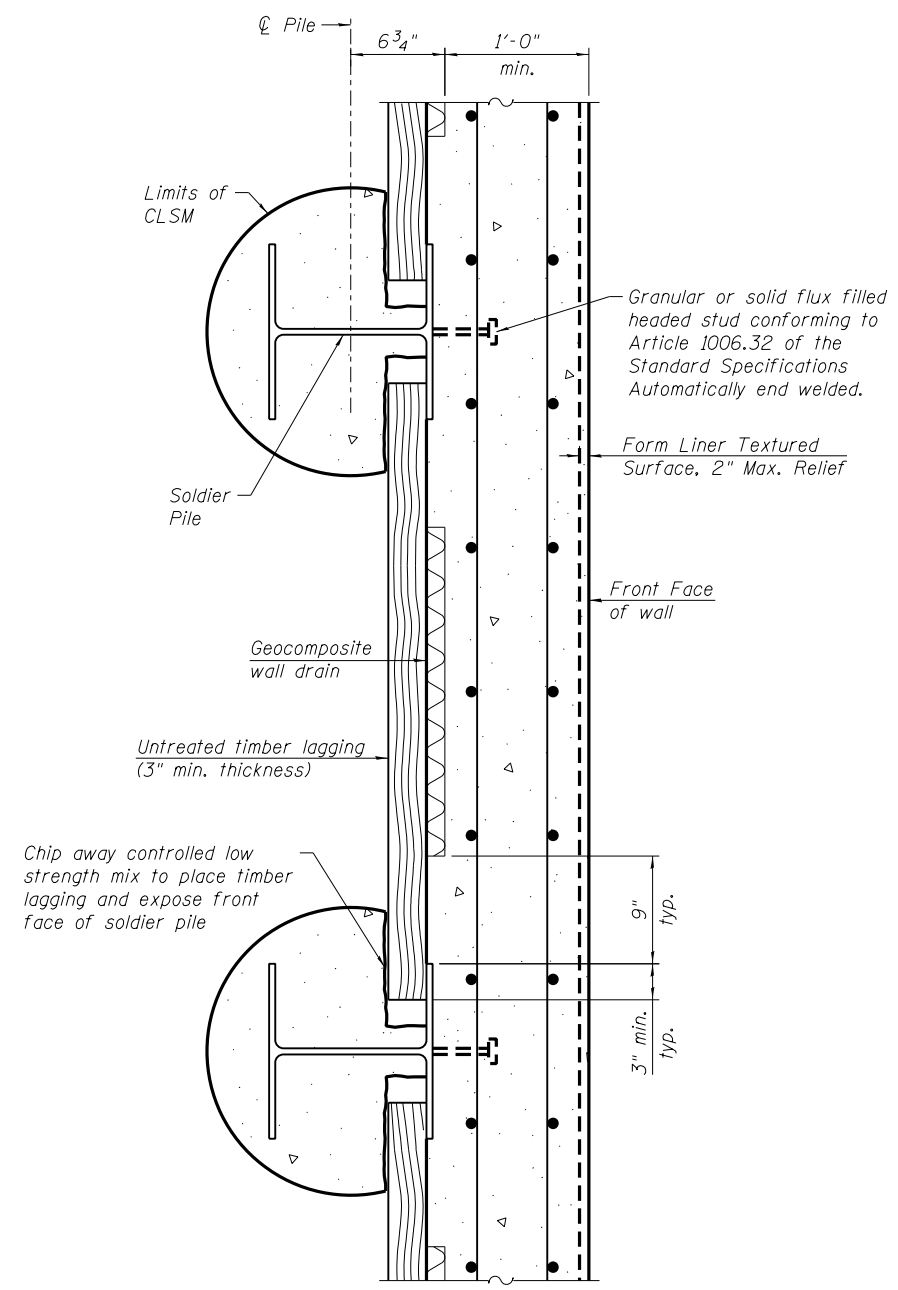
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SOLDIER PILE WALL REINFORCEMENT DETAILS - 2
S.N. 081-P005

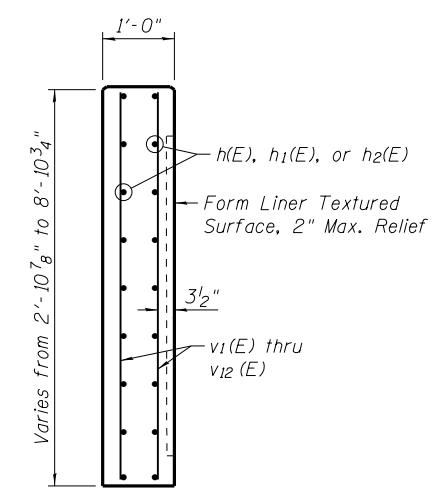
SHEET NO. SN-5 OF SN-9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142) R	ROCK ISLAND	1353	1051
CONTRACT NO. 64883			ILLINOIS FED. AID PROJECT	

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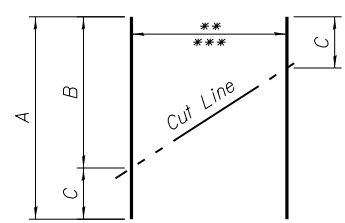


SECTION THROUGH DRILLED SOLDIER PILE WALL



SECTION THRU CIP FACING

** 30 bars v₂(E) thru v₁₂(E)
 *** 20 bars v₁(E)

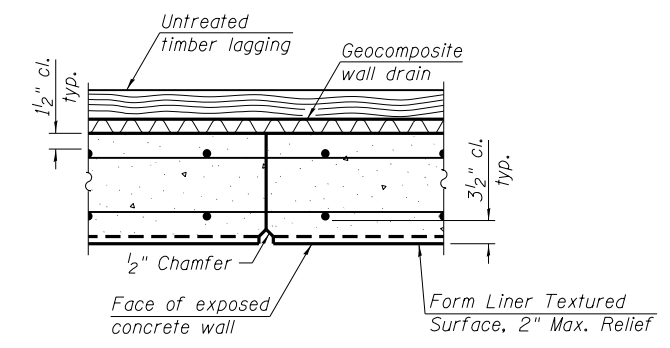


FIELD CUTTING DIAGRAM

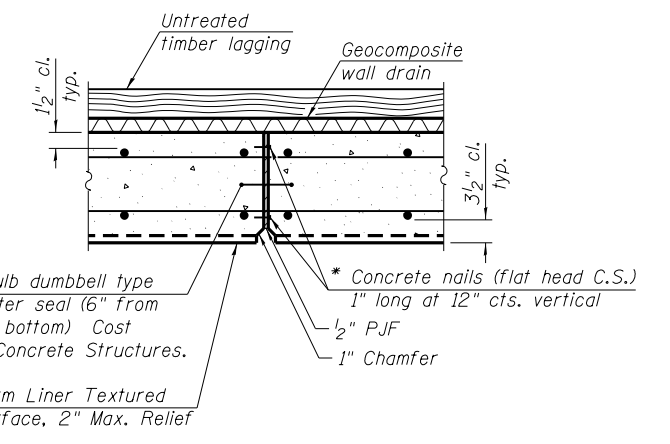
FIELD CUTTING DIAGRAM TABLE

Bar	A	B	C
v ₁ (E)	13'-3"	6'-9"	6'-6"
v ₂ (E)	13'-11"	6'-9"	7'-2"
v ₃ (E)	13'-11"	7'-2"	8'-1"
v ₄ (E)	13'-11"	8'-1"	8'-6"
v ₅ (E)	13'-11"	8'-6"	8'-1"
v ₆ (E)	13'-11"	8'-1"	7'-6"
v ₇ (E)	13'-11"	7'-6"	6'-10"
v ₈ (E)	13'-11"	6'-10"	5'-6"
v ₉ (E)	13'-11"	5'-6"	4'-4"
v ₁₀ (E)	13'-11"	4'-4"	3'-9"
v ₁₁ (E)	13'-11"	3'-9"	3'-2"
v ₁₂ (E)	13'-11"	3'-2"	2'-6"

Order bars full length. Cut as shown and use remainder of bars in opposite face.



CONSTRUCTION JOINT DETAIL



EXPANSION JOINT DETAIL

* 6" Hollow bulb dumbbell type nonmetallic water seal (6" from top of wall to bottom) Cost included with Concrete Structures.
 * Concrete nails (flat head C.S.) 1" long at 12" cts. vertical
 1/2" P.J.F.
 1" Chamfer

* Cost included with Concrete Structures

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	204	# 5	33'-3"	————
h ₁ (E)	108	# 5	29'-8"	————
h ₂ (E)	30	# 5	23'-3"	————
v ₁ (E)	20	# 4	13'-3"	————
v ₂ (E)	30	# 4	13'-11"	————
v ₃ (E)	30	# 4	15'-3"	————
v ₄ (E)	30	# 4	16'-7"	————
v ₅ (E)	30	# 4	16'-7"	————
v ₆ (E)	30	# 4	15'-7"	————
v ₇ (E)	30	# 4	14'-4"	————
v ₈ (E)	30	# 4	12'-4"	————
v ₉ (E)	30	# 4	9'-10"	————
v ₁₀ (E)	30	# 4	8'-1"	————
v ₁₁ (E)	30	# 4	6'-11"	————
v ₁₂ (E)	30	# 4	5'-8"	————
Protective Coat			Sq. Yd.	177
Form Liner Textured Surface			Sq. Ft.	1,208
Concrete Structures			Cu. Yd.	84.7
Reinforcement Bars, Epoxy Coated			Pound	14,030
Staining Concrete Structures			Sq. Ft.	1,587



USER NAME = sailgood	DESIGNED - APD	REVISED -
PLOT SCALE = 0:2.0000 1' = 1"	CHECKED - BWS	REVISED -
PLOT DATE = 3/17/2015	DRAWN - RD	REVISED -
	CHECKED - JUH	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOLDIER PILE WALL GENERAL DETAILS
S.N. 081-P005

SHEET NO. SN-6 OF SN-9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142) R	ROCK ISLAND	1353	1052
CONTRACT NO.			64883	
ILLINOIS FED. AID PROJECT				

N:\PROJECTS\00033333333333333333\CONTRACT_2\Design\Structural\CAD\Retaining_Wall-Bike_Path_07_Boring_Log.dgn

Soils Report

Bike Path along 38th Avenue
Retaining Wall West of 70th Street



SOIL BORING LOG

Page 1 of 1

Date 7/14/11

ROUTE FAP 595 DESCRIPTION D92-004-96 Proposed bike path retaining wall, 38th Avenue E. of Blackhawk College LOGGED BY W. Garza
SECTION 142-R LOCATION S. Moline Twp. - 12SW, SEC., TWP. 17N, RNG. 1W
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	DE PTH	BL WS	UC S Qu	MO I T	Surface Water Elev. ft	
					ft	ft
BORING NO. <u>B-6a</u> Station <u>11+00</u> Offset <u>27.00ft LI Existing CL</u> Ground Surface Elev. <u>597.50</u> ft					0.3	32.0
SFT gray SILTY LOAM						
MEDIUM gray CLAY LOAM	1				0.7	26.0
MEDIUM light gray CLAY LOAM with SILT lens	2					
	16				14.0	
VERY DENSE light gray weathered SHALE						
	100/10					
VERY DENSE light gray weathered SHALE						
	20					
VERY DENSE gray SHALE						
	100/4					
End of Boring						

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

Soils Report

Bike Path along 38th Avenue
Retaining Wall West of 70th Street



SOIL BORING LOG

Page 1 of 1

Date 7/14/11

ROUTE FAP 595 DESCRIPTION D92-004-96 Proposed bike path retaining wall, 38th Avenue E. of Blackhawk College LOGGED BY W. Garza
SECTION 142-R LOCATION S. Moline Twp. - 12SW, SEC., TWP. 17N, RNG. 1W
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	DE PTH	BL WS	UC S Qu	MO I T	Surface Water Elev. ft	
					ft	ft
BORING NO. <u>B-5a</u> Station <u>12+50</u> Offset <u>10.00ft LI Existing CL</u> Ground Surface Elev. <u>598.50</u> ft						
Concrete Pavement						
STIFF gray CLAY LOAM	1				1.5	20.0
	6					
HARD tan/light gray CLAY LOAM	14				7.0	12.0
	21					
VERY DENSE tan weathered SHALE						
	11					
VERY DENSE gray SHALE						
	100/7					
Borehole continued with rock coring.						

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

Soils Report

Bike Path along 38th Avenue
Retaining Wall West of 70th Street



ROCK CORE LOG

Page 1 of 1

Date 7/14/11

ROUTE FAP 595 DESCRIPTION D92-004-96 Proposed bike path retaining wall, 38th Avenue E. of Blackhawk College LOGGED BY W. Garza
SECTION 142-R LOCATION S. Moline Twp. - 12SW, SEC., TWP. 17N, RNG. 1W
COUNTY Rock Island CORING METHOD _____

STRUCT. NO. Station	CORING BARREL TYPE & SIZE	DE PTH (ft)	COR E (#)	REC OVE RY (%)	R Q (%)	CORE T I M E (min/ft)	ST R E N G T H (tsf)
Siltstone: mottled tan-gray, calcareous, thin to moderately bedded, to 582.5		588.00	1	100	35	2.2	240.0
t.s.f.: 585.5 to 585.0							
Dolomite: gray, banded, argillaceous, dense, with metallic mineralogic inclusions.		583.00	2	100	72	2	805.0
t.s.f.: 581.0 to 579.3							
End of Boring		578.00					

Color pictures of the cores _____
Cores will be stored for examination until _____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)
BBS, form 138 (Rev. 8-99)



USER NAME = <u>sallgood</u>	DESIGNED - <u>APD</u>	REVISED -
	CHECKED - <u>BWS</u>	REVISED -
PLOT SCALE = <u>0:2.0000" = 1' / 1in.</u>	DRAWN - <u>RD</u>	REVISED -
PLOT DATE = <u>3/17/2015</u>	CHECKED - <u>JJH</u>	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS - 1
S.N. 081-P005

SHEET NO. SN-7 OF SN-9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142) R	ROCK ISLAND	1353	1053
CONTRACT NO.			64883	
ILLINOIS FED. AID PROJECT				

Soils Report

Bike Path along 38th Avenue
Retaining Wall West of 70th Street



Illinois Department
of Transportation
Division of Highways
Illinois Department of Transportation-D-2

SOIL BORING LOG

Page 1 of 1

Date 7/13/11

ROUTE FAP 595 DESCRIPTION D92-004-96 Proposed bike path retaining wall,
38th Avenue E. of Blackhawk College LOGGED BY J. Strating
SECTION 142-R LOCATION S. Moline Twp. - 12SW, SEC. TWP. 17N, RNG. 1W
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev. _____ ft Stream Bed Elev. _____ ft
BORING NO. <u>B-4a</u> Station <u>13+25</u> Offset <u>10.00ft Lt Existing CL</u> Ground Surface Elev. <u>598.90</u> ft					Groundwater Elev.: First Encounter _____ ft Upon Completion _____ ft After _____ Hrs. _____ ft
Concrete Pavement					
VERY STIFF tan/gray CLAY LOAM	596.90	1	2.4	23.0	
	595.40	4	S		
VERY STIFF tan/gray CLAY LOAM		5	3.7	20.0	
	592.40	9	S		
DENSE gray SHALE		9			
	590.40	18			
		23			
VERY DENSE gray SHALE		18			
	587.90	40			
		37			
VERY DENSE gray SHALE		100/7			
	585.40				
DENSE black COAL		100/4			
		15			
End of Boring	582.90				

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

Lin Engineering, Ltd.

7 of 11

Soils Report

Bike Path along 38th Avenue
Retaining Wall West of 70th Street



Illinois Department
of Transportation
Division of Highways
Illinois Department of Transportation-D-2

SOIL BORING LOG

Page 1 of 1

Date 7/13/11

ROUTE FAP 595 DESCRIPTION D92-004-96 Proposed bike path retaining wall,
38th Avenue E. of Blackhawk College LOGGED BY W. Garza
SECTION 142-R LOCATION S. Moline Twp. - 12SW, SEC. TWP. 17N, RNG. 1W
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev. _____ ft Stream Bed Elev. _____ ft
BORING NO. <u>B-3a</u> Station <u>14+00</u> Offset <u>10.00ft Lt Existing CL</u> Ground Surface Elev. <u>598.90</u> ft					Groundwater Elev.: First Encounter _____ ft Upon Completion _____ ft After _____ Hrs. _____ ft
Concrete Pavement					
HARD gray/tan CLAY LOAM	596.90	5	5.2	19.0	
	595.40	10	S		
HARD gray/tan CLAY LOAM		8	6.1	12.0	
	592.40	11	S		
		14			
VERY DENSE light gray SANDSTONE		100/1			
	590.40				
VERY DENSE light gray SANDSTONE		100/1			
	587.90				
VERY DENSE gray SHALE		100/1.5			
	585.40				
End of Boring					

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

Lin Engineering, Ltd.

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Soils Report

Bike Path along 38th Avenue
Retaining Wall West of 70th Street



Illinois Department
of Transportation
Division of Highways
Illinois Department of Transportation-D-2

SOIL BORING LOG

Page 1 of 1

Date 7/13/11

ROUTE FAP 595 DESCRIPTION D92-004-96 Proposed bike path retaining wall,
38th Avenue E. of Blackhawk College LOGGED BY W. Garza
SECTION 142-R LOCATION S. Moline Twp. - 12SW, SEC. TWP. 17N, RNG. 1W
COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev. _____ ft Stream Bed Elev. _____ ft
BORING NO. <u>B-2a</u> Station <u>14+75</u> Offset <u>10.00ft Lt Existing CL</u> Ground Surface Elev. <u>598.20</u> ft					Groundwater Elev.: First Encounter _____ ft Upon Completion _____ ft After _____ Hrs. _____ ft
Concrete Pavement					
VERY STIFF gray/tan CLAY LOAM	596.20	3	3.9	20.0	
	594.70	9	S		
HARD gray/tan CLAY LOAM		11	7.0	13.0	
	591.70	13	S		
		22			
VERY DENSE gray/tan CLAY LOAM		20			
	589.70	39			
		43			
VERY DENSE gray SHALE		23			
	587.20	21			
		33			
VERY DENSE gray SHALE with COAL lens		31			
	584.70	100/12			
VERY DENSE gray SHALE		15	100/6		
	582.20				
Borehole continued with rock coring.					

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

Lin Engineering, Ltd.

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N:\PROJECTS\00033333\CONTRACT_2\Design\Structural\CAD\Retaining Wall-4 Multi-use Path (081-P005)\00033333\00-Retaining Wall-Bike Path_08_Boring_Log.dgn



USER NAME = sailgood
DESIGNED - APD
CHECKED - BWS
DRAWN - RD
CHECKED - JJH
PLOT SCALE = 0:2.0000 1" = 10'
PLOT DATE = 3/17/2015

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS - 2
S.N. 081-P005

SHEET NO. SN-8 OF SN-9 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142) R	ROCK ISLAND	1353	1054
CONTRACT NO.			64883	
ILLINOIS FED. AID PROJECT				

N:\PROJECTS\000333\33\CONTRACT_2\Design\Structural\CAD\Retaining_Wall-Bike_Path_09_Boring_Log.dgn

Bike Path along 38th Avenue
Retaining Wall West of 70th Street

Soils Report

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation/D-2

ROCK CORE LOG Page 1 of 1

Date 7/13/11

ROUTE FAP 595 DESCRIPTION D92-004-96 Proposed bike path retaining wall, 38th Avenue E. of Blackhawk College LOGGED BY W. Garza

SECTION 142-R LOCATION S. Moline Twp. - 12SW, SEC., TWP. 17N, RNG. 1W

COUNTY Rock Island CORING METHOD _____

STRUCT. NO. Station	CORING BARREL TYPE & SIZE Core Diameter _____ in	RECOVERY				CORE D I M E N S I O N S T H (ft) (#) (%) (%) (min/ft) (tsf)	
		D E P T H (ft)	R E C O V E R Y (%)	R . Q . (%)	S T R E N G T H (tsf)		
BORING NO. <u>B-2a</u> Station <u>14+75</u> Offset <u>10.00ft Lt Existing CL</u> Ground Surface Elev. <u>598.20</u> ft	Top of Rock Elev. <u>599.70</u> ft Begin Core Elev. <u>592.20</u> ft						
Dark gray to gray shale, massively bedded. t.s.f.: 579.8 to 579.2		582.20	1	100	77	2.6	82.1
Siltstone: buff-white to gray, chalky, calcareous with blocky structure to 574.0, turning to shale: light and dark gray banded, dense, tenacious t.s.f.: 575.8 to 575.4; 573.9 to 572.6		577.20	2	100	65	3.6	484.0
End of Boring		572.20					

Color pictures of the cores _____
Cores will be stored for examination until _____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)
BBS, form 138 (Rev. 8-99)

Lin Engineering, Ltd. 10 of 11

Bike Path along 38th Avenue
Retaining Wall West of 70th Street

Soils Report

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation/D-2

SOIL BORING LOG Page 1 of 1

Date 7/13/11

ROUTE FAP 595 DESCRIPTION D92-004-96 Proposed bike path retaining wall, 38th Avenue E. of Blackhawk College LOGGED BY W. Garza

SECTION 142-R LOCATION S. Moline Twp. - 12SW, SEC., TWP. 17N, RNG. 1W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. Station	DESCRIPTION	DEPTH (ft)	B L U G (ft)	C O S (ft)	M O I S T (%)	Qu	Surface Water Elev. _____ ft		
							Stream Bed Elev. _____ ft	Groundwater Elev.: First Encounter _____ ft Upon Completion _____ ft After _____ Hrs. _____ ft	
	Concrete Pavement								
	VERY LOOSE tan/gray BACKFILL (FA 20)	597.50	1						
		596.00	0						
	VERY STIFF tan/gray CLAY LOAM		0	2	3.0	24.0			
		593.00	5		S				
	DENSE dark gray SHALE		10	20	9.1				
		591.00	25		S				
	DENSE gray SHALE		11	20	9.1				
		588.50	22		S				
	VERY DENSE gray SHALE		100/7						
		586.00							
	VERY DENSE gray SHALE		100/8						
		583.50							
	End of Boring								

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

Lin Engineering, Ltd. 11 of 11

GENERAL NOTES

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

DESIGN STRESSES:
Field Units
f_c = 3,500 p.s.i.
f_y = 60,000 p.s.i. (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specifications.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B or A500 Grade B or C. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53. All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 or Gr. 50W*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer.
The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASHTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if Members interfere) must satisfy the requirements of ASTM A449, ASTM A193, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240 Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to ASTM F1554 Gr. 105.

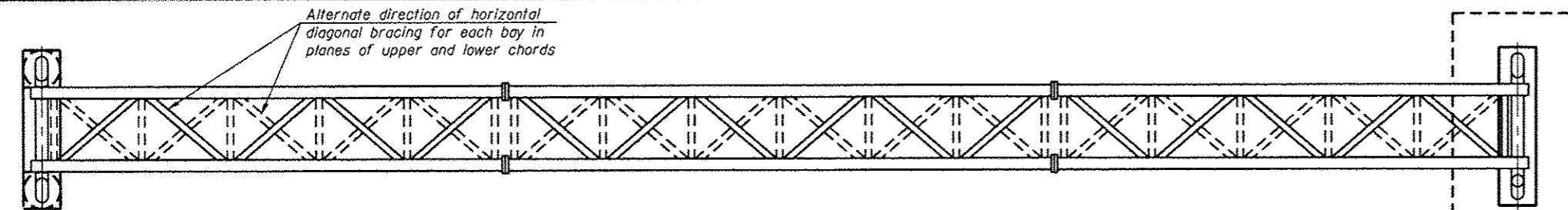
CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Bridge Seat Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

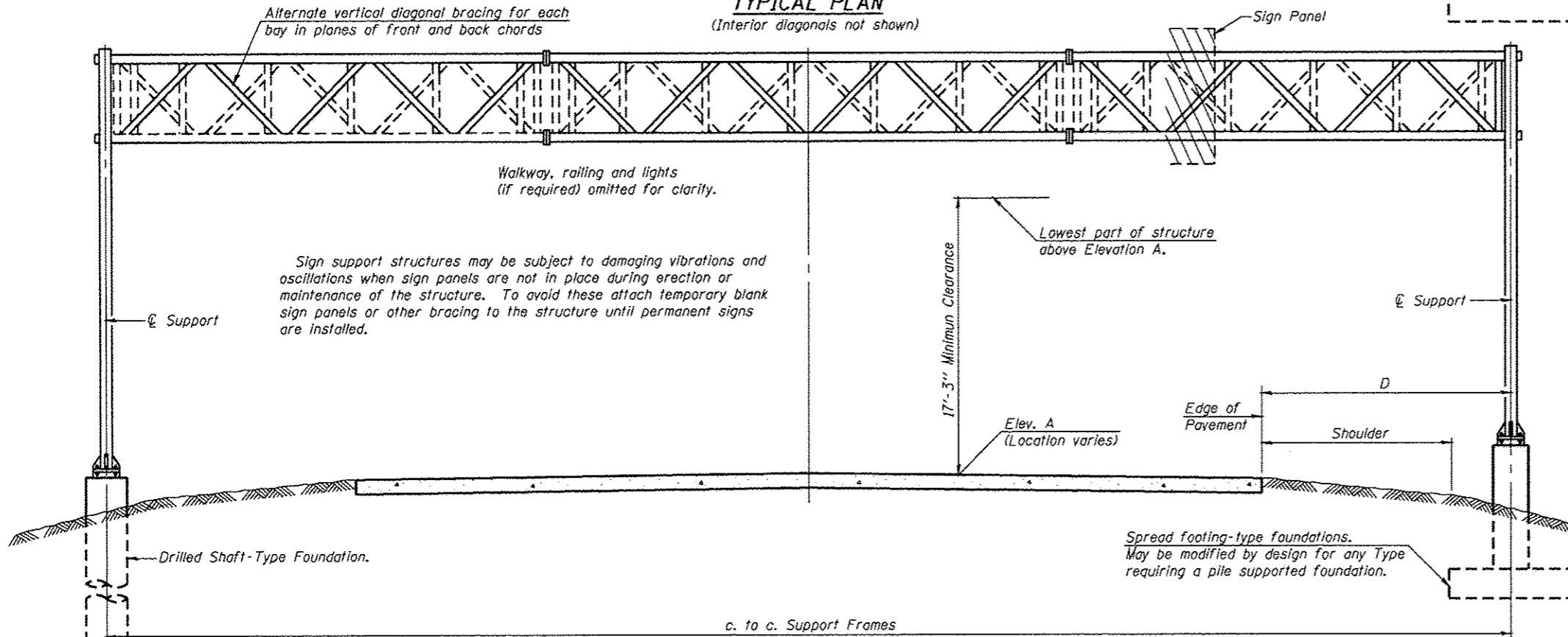
FOUNDATIONS: The contract unit price for Concrete Foundations and Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE SPAN TYPE III-A	Foot	110
OVERHEAD SIGN STRUCTURE WALKWAY TYPE A	Foot	48.5
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	21.0



TYPICAL PLAN
(Interior diagonals not shown)



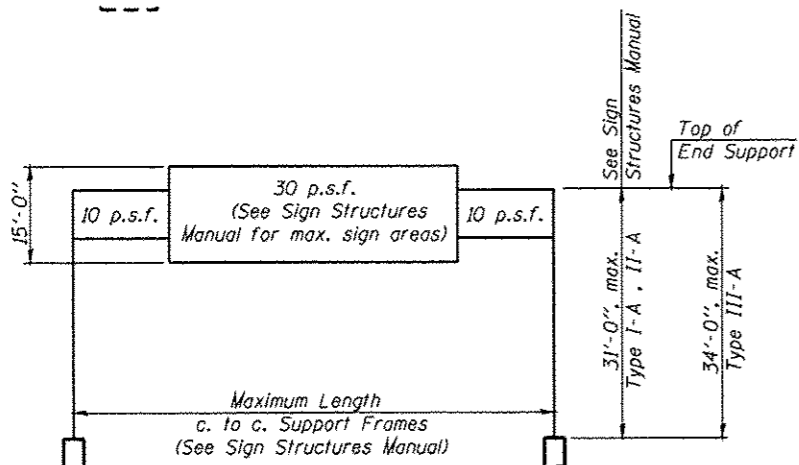
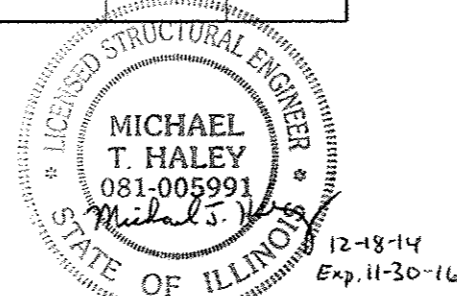
TYPICAL ELEVATION
(Looking at Face of Signs)**

Elev. A = Elevation at point of minimum clearance to sign, walkway support or truss.

Structure Number	Station	Design Truss Type	c. to c. Supports	Elev. A	Dim. D	Height of Tallest Sign	Total Sign Area
2S081S005L005.2	273+00	III-A	110'-0"	574.89	57'-6"	10'-0"	425 sf

**Looking upstation for structures with signs both sides.

* If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.



DESIGN WIND LOADING DIAGRAM

Parameters shown are basis for I.D.O.T. Standards and Sign Manual Tables. Installations not within dimensional limits shown require special analysis for all components.

OS-A-1 8-21-13



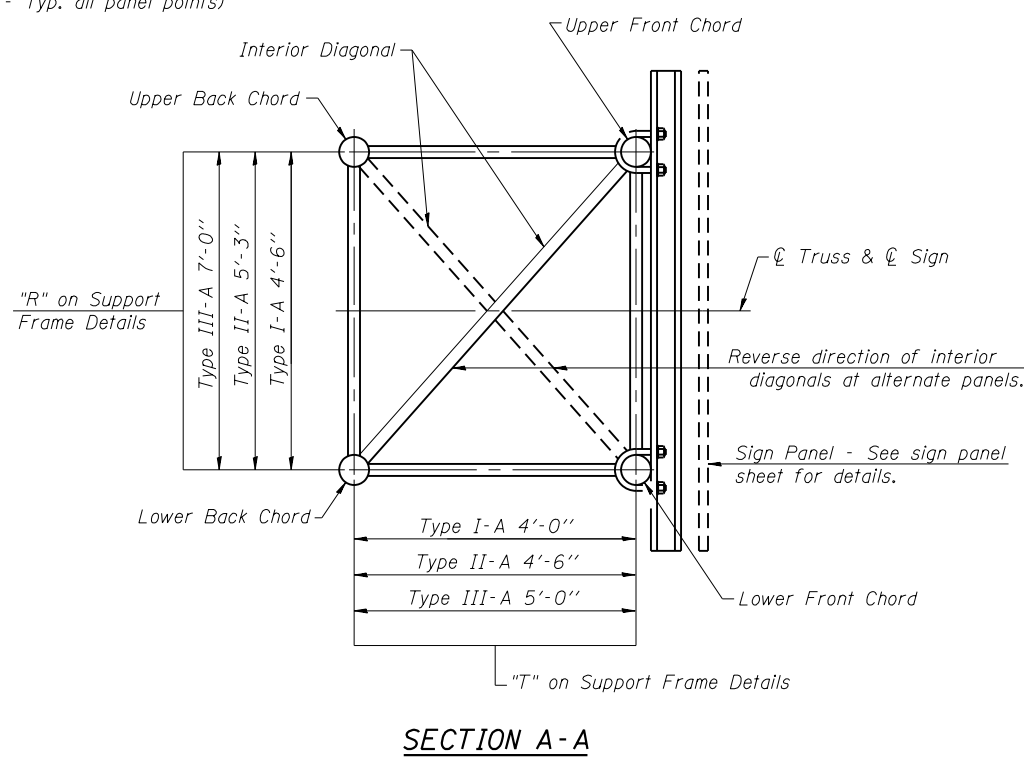
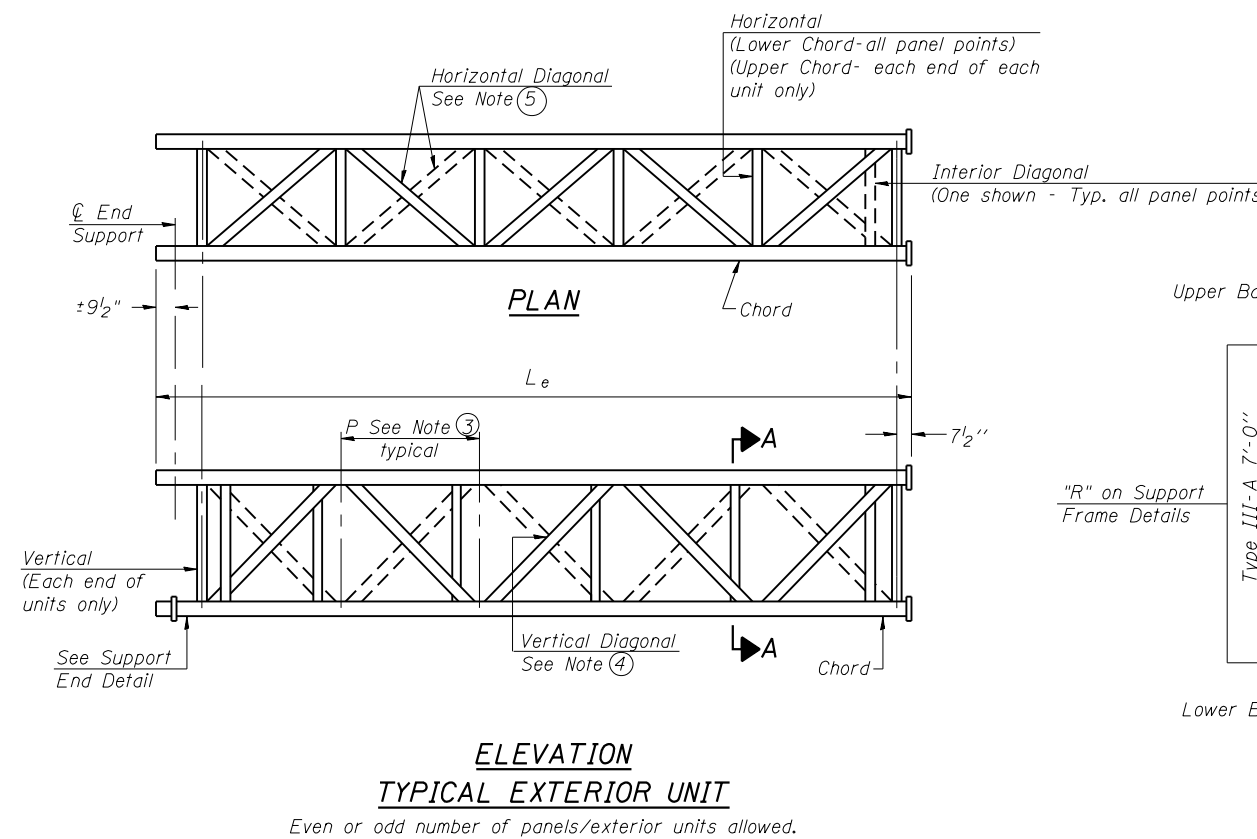
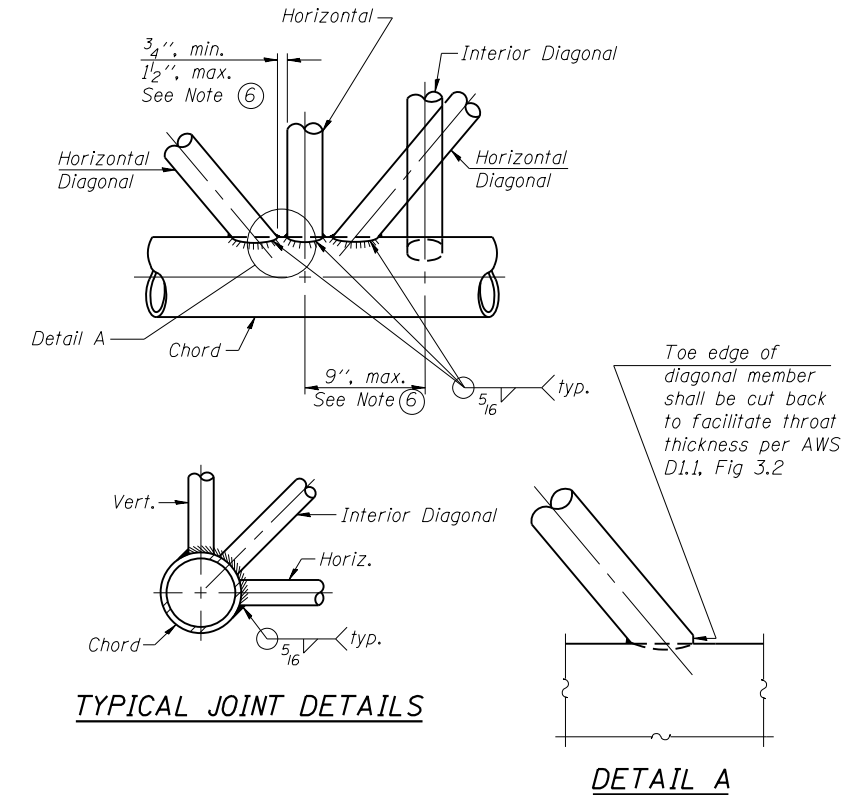
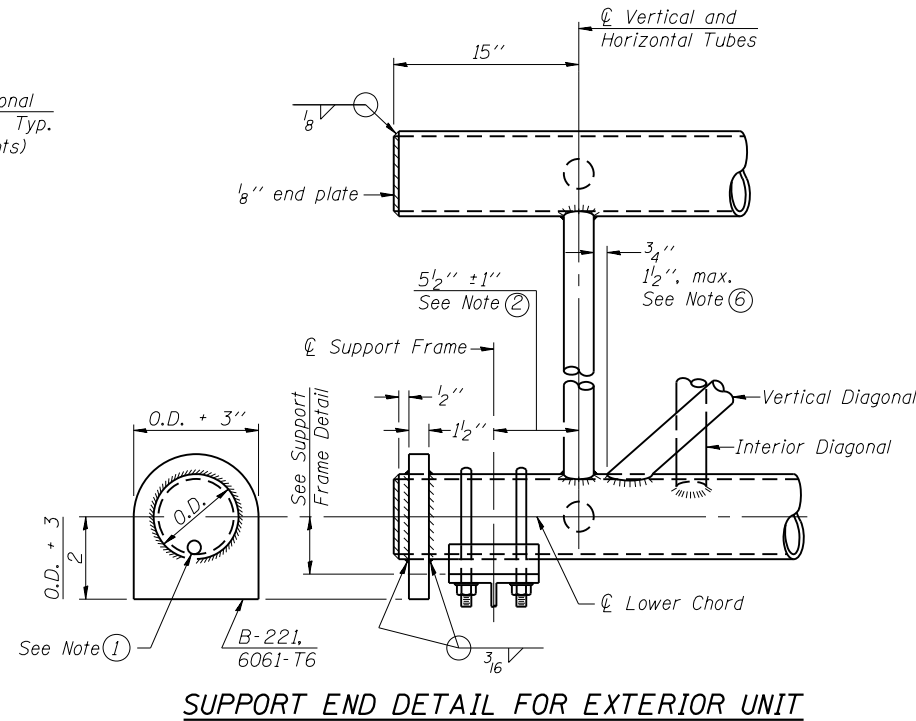
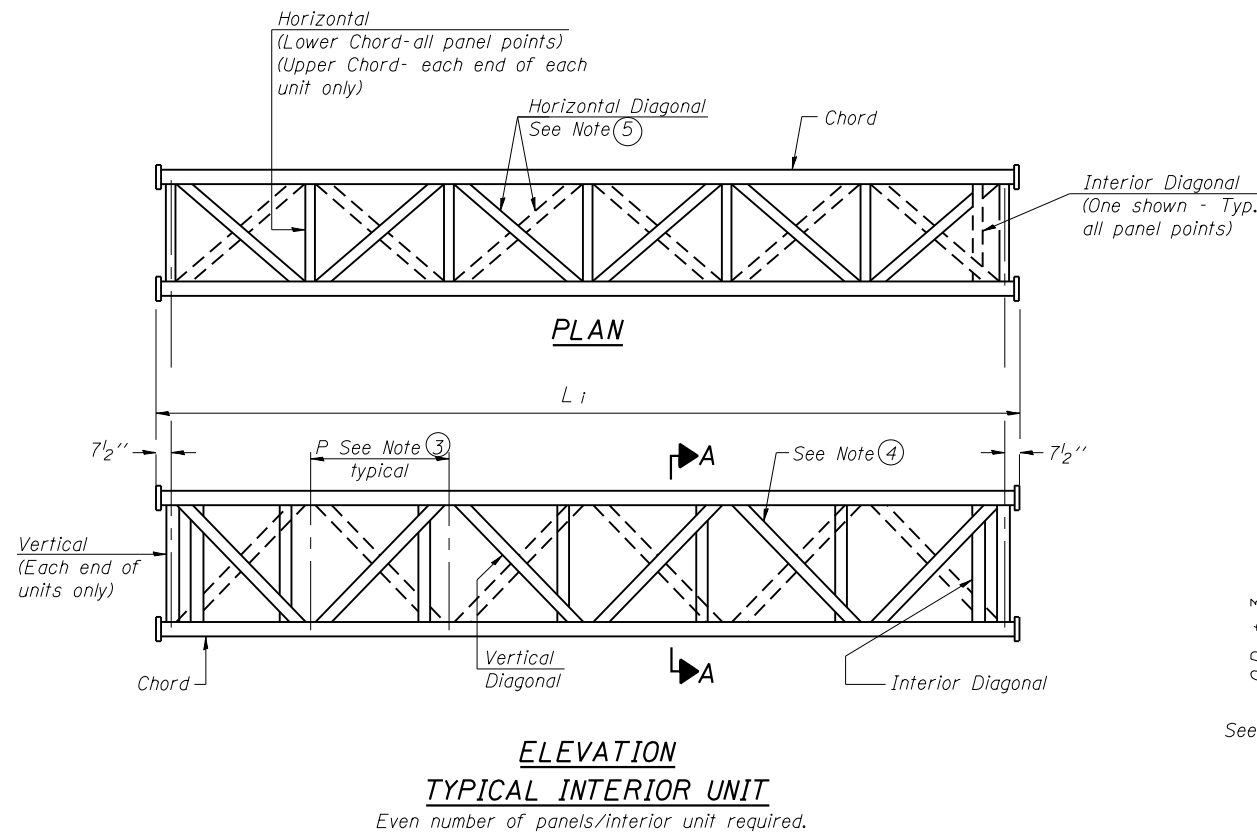
USER NAME :	DESIGNED - PSS	REVISED -
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PLOT SCALE :	DRAWN - AJF	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES - GENERAL PLAN & ELEVATION - ALUMINUM TRUSS & STEEL SUPPORTS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
695	142-R	ROCK ISLAND	1353	1056
CONTRACT NO. 64B83				(ILLINOIS) FED. AID PROJECT

SHEET NO. 50-01 OF 50-11 SHEETS



- ① Contractor may alternatively use standard aluminum drive-fit cap to close end. 1/2" ϕ drain hole in end plate/drive-fit cap. (Typ. at ends of all chords)
- ② 5 1/2" end dimension may vary by $\pm 1"$ to provide uniform panel spacing (P).
- ③ Panel spacing (P) shall be uniform for entire truss and between 4'-0" and 5'-0" for Type I-A or 4'-0" and 5'-6" for Types II-A and III-A.
- ④ Vertical Diagonals in front and back face shall alternate.
- ⑤ Hidden lines show wind bracing alternates direction between planes of top and bottom chords.
- ⑥ All diagonals shall be detailed for minimum offset from the panel point based on the following: Offset shall be such as to provide a 3/4" minimum to 1 1/2" maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.

OS-A-2

6-1-12

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**OVERHEAD SIGN STRUCTURES - ALUMINUM TRUSS
DETAILS FOR TRUSS TYPES I-A, II-A AND III-A**

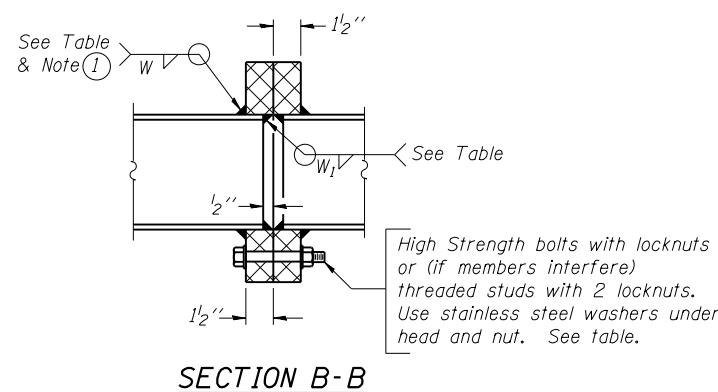
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	142-R	ROCK ISLAND	1353	1057
CONTRACT NO. 64B83				

SHEET NO. S0-02 OF S0-11 SHEETS

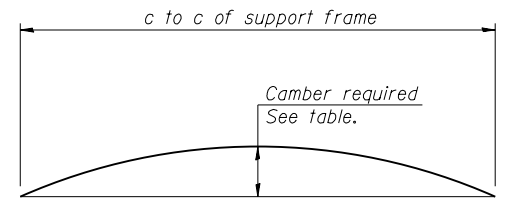
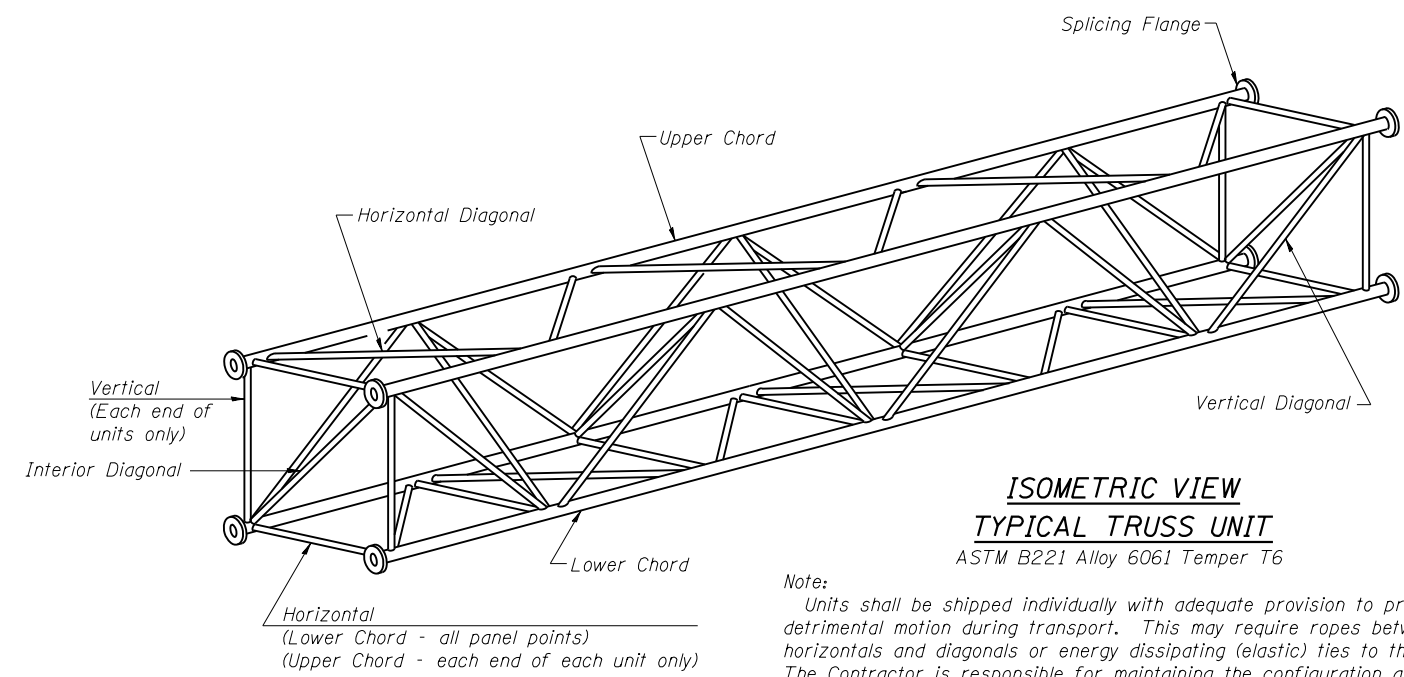
ILLINOIS FED. AID PROJECT

TRUSS UNIT TABLE

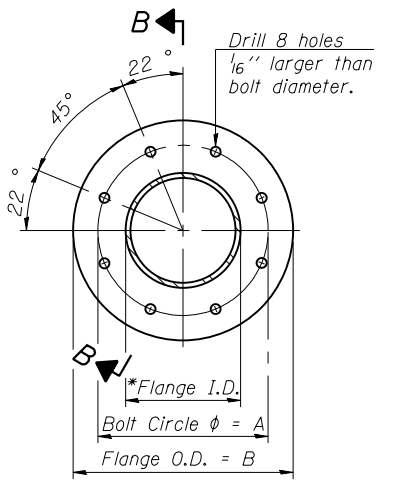
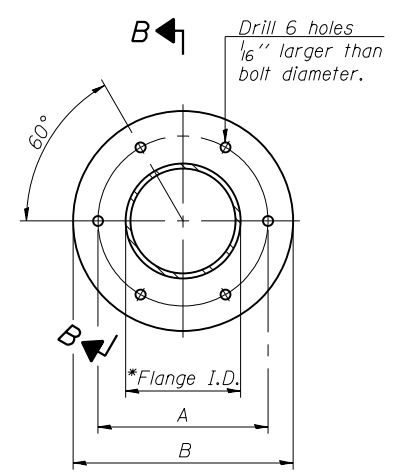
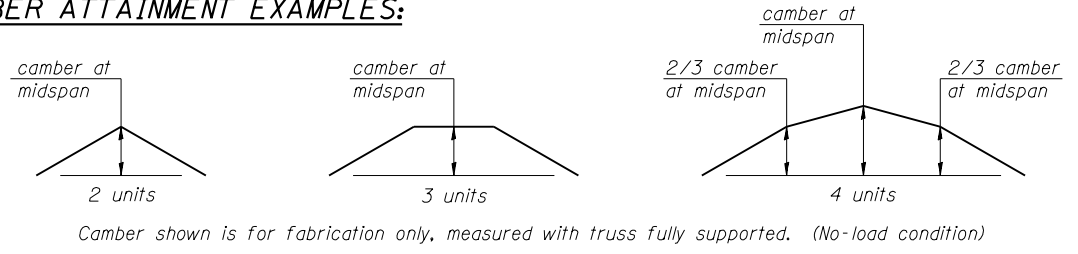
Structure Number	Station	Design Truss Type	Exterior Units (2)			Interior Unit				Upper & Lower Chord		Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals		Camber at Midspan	Splicing Flange							
			No. Panels per Unit	Unit Lgth.(L _e)	Panel Lgth.(P)	No. Req'd.	No. Panels per Unit	Unit Lgth.(L _i)	Panel Lgth.(P)	O.D.	Wall	O.D.	Wall		Bolts		Weld Sizes		A	B		
															No./Splice	Dia.	W	W ₁				
2S08IS005L005.2	273+00	III-A	7	39'-2 1/2"	5'-4"	1	6	33'-3"	5'-4"	8 1/2"	1/2"	3 1/2"	5 5/16"	2 1/2"	8	1 1/4"	9/16"	7/16"	13"	16 1/2"		



① Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or tacks shall be made to secure flanges until remaining welds are made after disassembly. Adjacent flanges shall be "match marked" to insure proper field assembly.



CAMBER ATTAINMENT EXAMPLES:



SPLICING FLANGES

ASTM B221, Alloy 6061-T6 or ASTM B209, Alloy 6061-T651
*To fit O.D. of Chord with maximum gap of 1/16".

OS4-A-2

6-1-12

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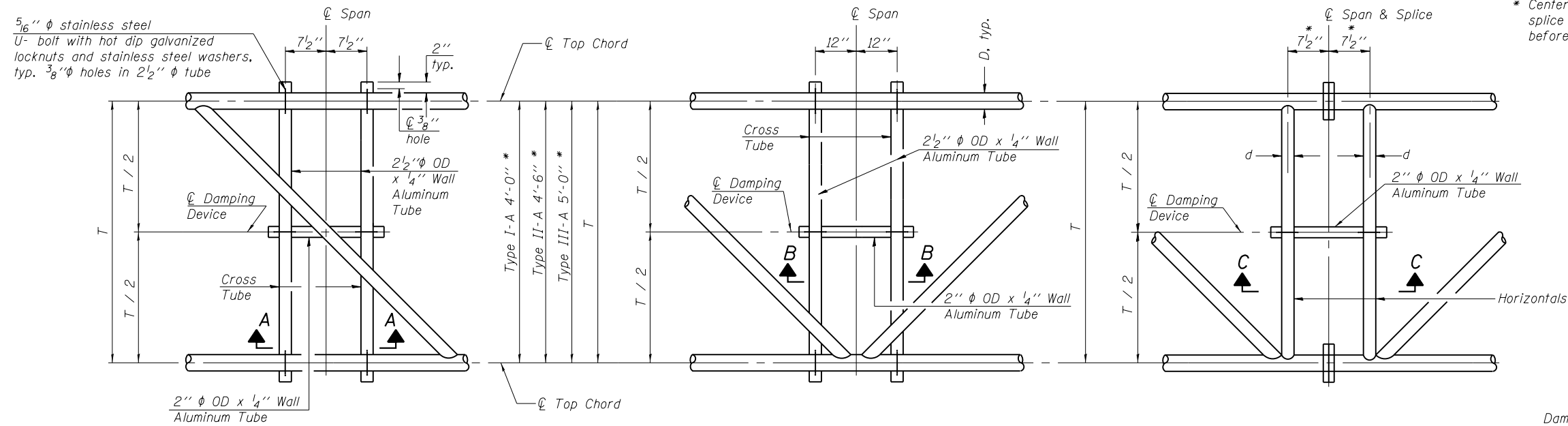
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**OVERHEAD SIGN STRUCTURES - ALUMINUM TRUSS DETAILS
FOR TRUSS TYPES I-A, II-A AND III-A**

SHEET NO. S0-03 OF S0-11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	142-R	ROCK ISLAND	1353	1058
CONTRACT NO. 64B83				

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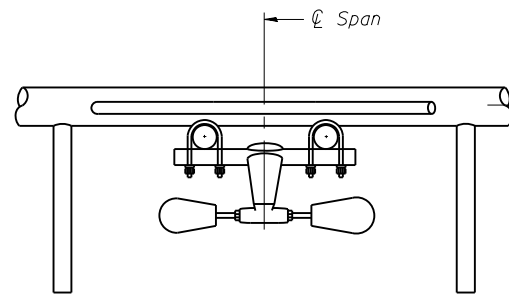
PLAN DETAIL "A"
 ☉ Span between Panel Points

PLAN DETAIL "B"
 ☉ Span at Panel Point

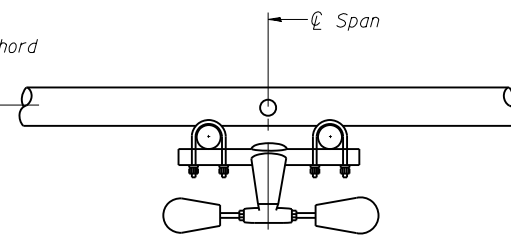
PLAN DETAIL "C"
 ☉ Span at ☉ Chord Splice

* Center of horizontal to center of splice dimension may vary. Verify before drilling holes in mounting tube.

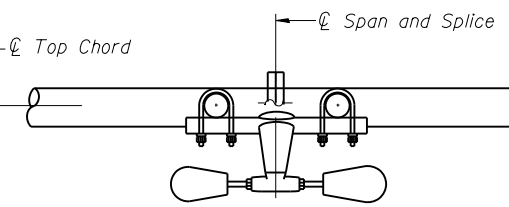
- NOTES**
- Damper: One damper per truss. (31 lbs. minimum Stockbridge-Type Aluminum - 29" minimum between ends of weights) Cost included in Overhead Sign Structure...
 - Materials: Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in Overhead Sign Structure...



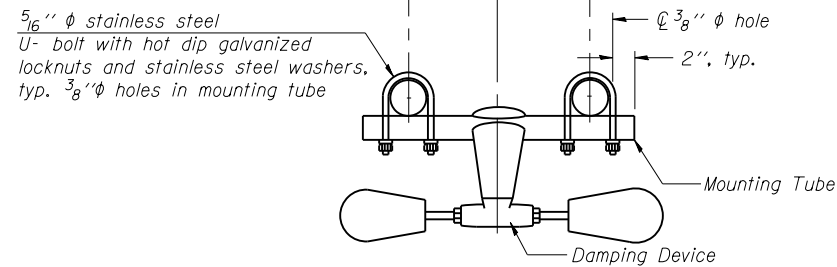
SECTION A-A



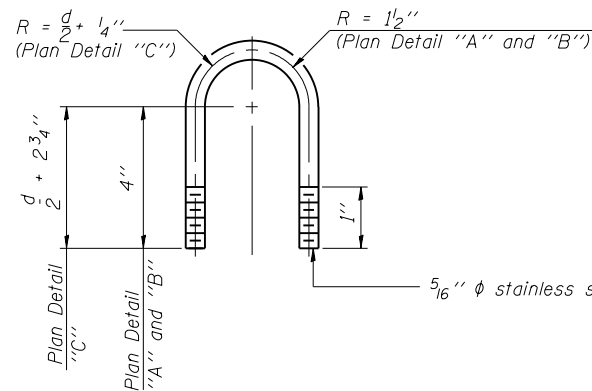
SECTION B-B



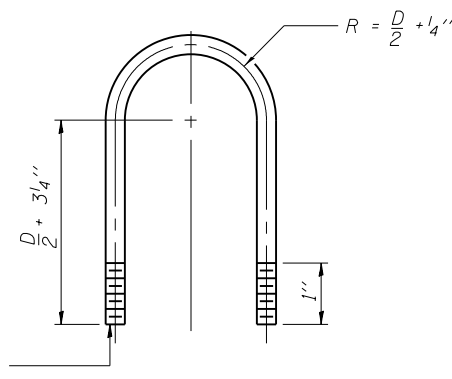
SECTION C-C



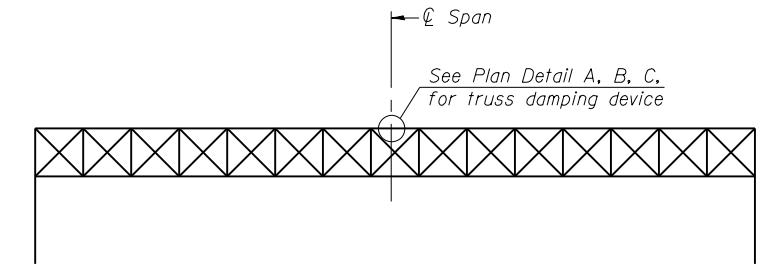
TRUSS DAMPING DEVICE CONNECTION DETAIL
 (Typical)



DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL
 (Typical)



TOP CHORD TO CROSS TUBE U-BOLT DETAIL
 (Typical - Detail "A" and "B")



ELEVATION
 Aluminum Overhead Sign Truss

OS-A-D

6-1-12

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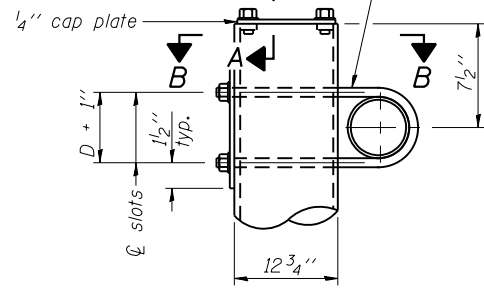
**OVERHEAD SIGN STRUCTURE
 DAMPING DEVICE**

SHEET NO. S0-04 OF S0-11 SHEETS

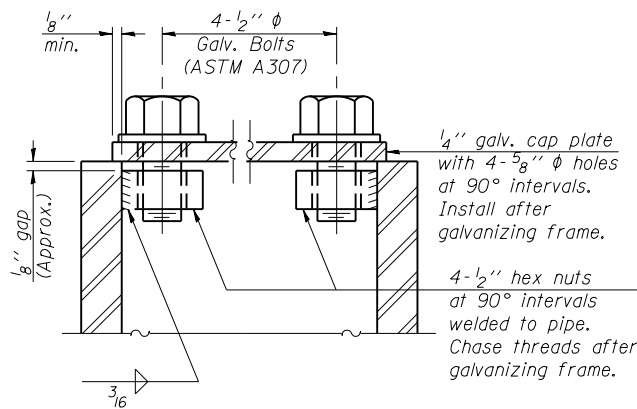
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	142-R	ROCK ISLAND	1353	1059
CONTRACT NO. 64B83				

ILLINOIS FED. AID PROJECT

3/4" φ stainless steel U-bolt.
Provide two washers and two hexagon locknuts. (4)
1 3/16" x 2" slots on 12" φ pipe.
(4 slots required per pipe)

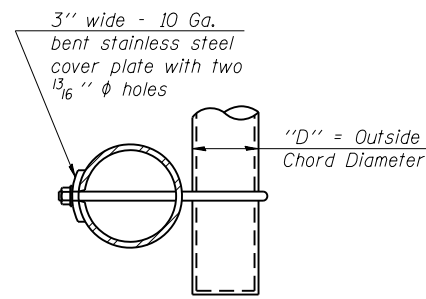


DETAIL A

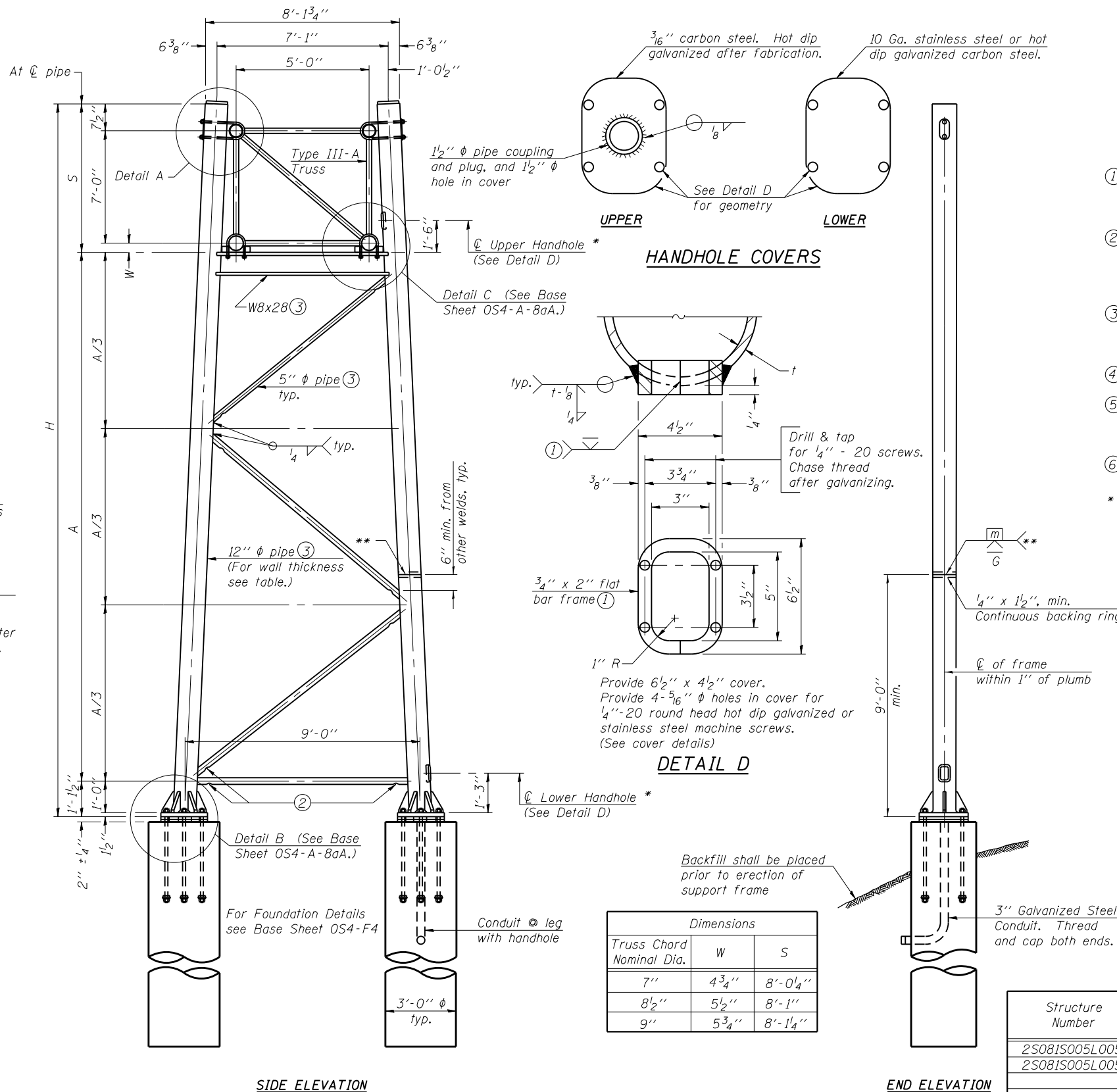


SECTION A-A

As an alternate to bolts, may use galvanized drive-fit caps installed after galvanizing frame.



SECTION B-B



SIDE ELEVATION

END ELEVATION

TRUSS SUPPORT DETAILS

(12" φ Pipe-Type III-A Truss)
** One butt welded joint is allowed only on one post per support frame. If used, weld procedure must be pre-approved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

Support Design Loads: See Base Sheet OS-A-1 for design and loading criteria.
Load combinations checked include deadload plus:
a) 100% wind normal to sign, 20% parallel to sign
b) 60% wind normal to sign, 30% parallel to sign

- ① In lieu of fabricated handhole frame as shown, may cut from 2" plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500 μin or less.
- ② Galvanizing vent holes of adequate size shall be provided on underside at each end of bracing pipes. Alternately, holes may be provided in wall of pipe column. All vent holes shall be drilled and de-burred, typ.
- ③ Steel pipe, plate, carbon steel handhole covers and rolled sections shall be hot dip galvanized after fabrication. Painting is not permitted. See Base Sheet OS-A-1.
- ④ See General Notes for fasteners.
- ⑤ Dimensions shown are based on selection criteria in the Sign Structures Manual. Nonstandard applications must have dimensions verified or amended as appropriate.
- ⑥ "H" based on 15'-0" or actual sign height, whichever is greater.

* For dynamic message sign installations, provide upper and lower handholes in both legs of each support frame.

Structure Number	Station	Support		Pipe Wall Thickness	H (6)	A
		Left	Right			
2S08IS005L005.2	273+00	-	x	0.50	34'-0"	24'-9 1/2"
2S08IS005L005.2	273+00	x	-	0.50	27'-7"	18'-4 1/2"

OS4-A-8a

6-1-12

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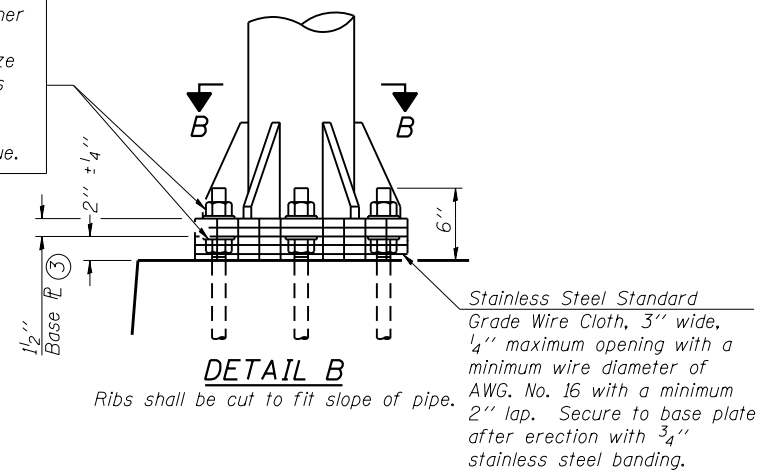
OVERHEAD SIGN STRUCTURES - SUPPORT FRAME
FOR TYPE III-A ALUMINUM TRUSS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	142-R	ROCK ISLAND	1353	1060
CONTRACT NO. 64B83				

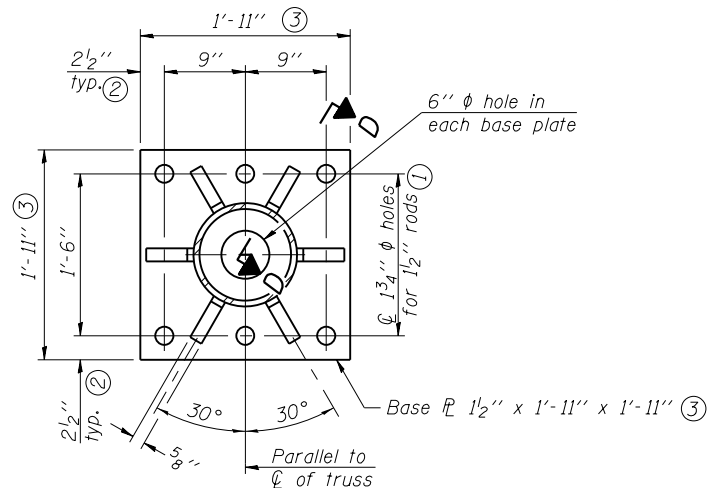
SHEET NO. S0-05 OF S0-11 SHEETS

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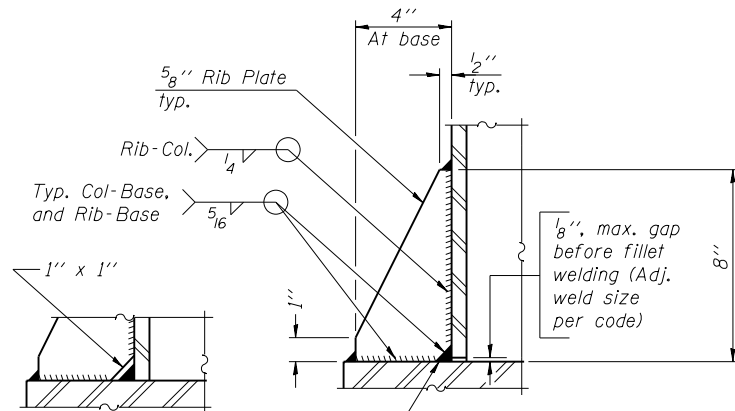
Hexagon locknut and washer (top), leveling nut and washer (bottom). Galvanize per AASHTO M232. Nuts shall each be tightened against base plate with 200 lb.-ft. minimum torque.



DETAIL B
Ribs shall be cut to fit slope of pipe.



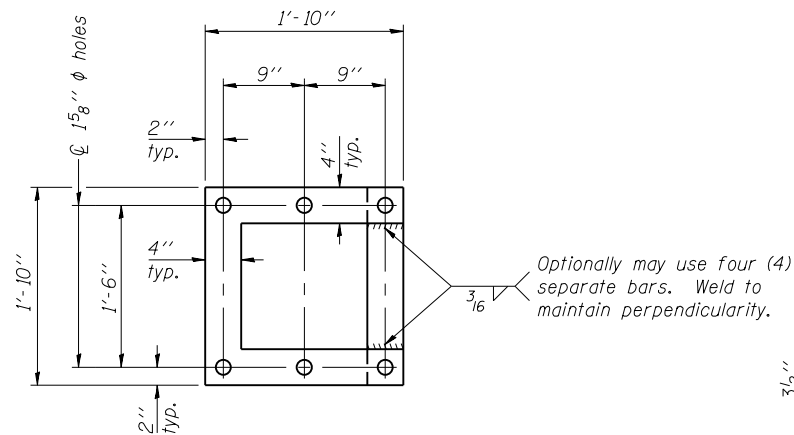
SECTION B-B



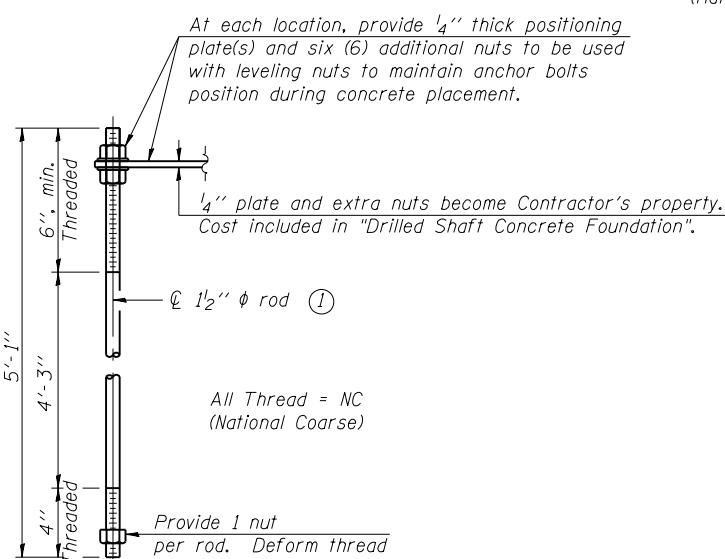
** Alternate detail if welding col. to base plate first, then snip inside corner of ribs. Terminate weld on rib 1/4" from snip.

SECTION D-D

Stainless Steel Standard Grade Wire Cloth, 3" wide, 1/4" maximum opening with a minimum wire diameter of AWG. No. 16 with a minimum 2" lap. Secure to base plate after erection with 3/4" stainless steel banding.



POSITIONING PLATE(S)



ANCHOR ROD DETAIL

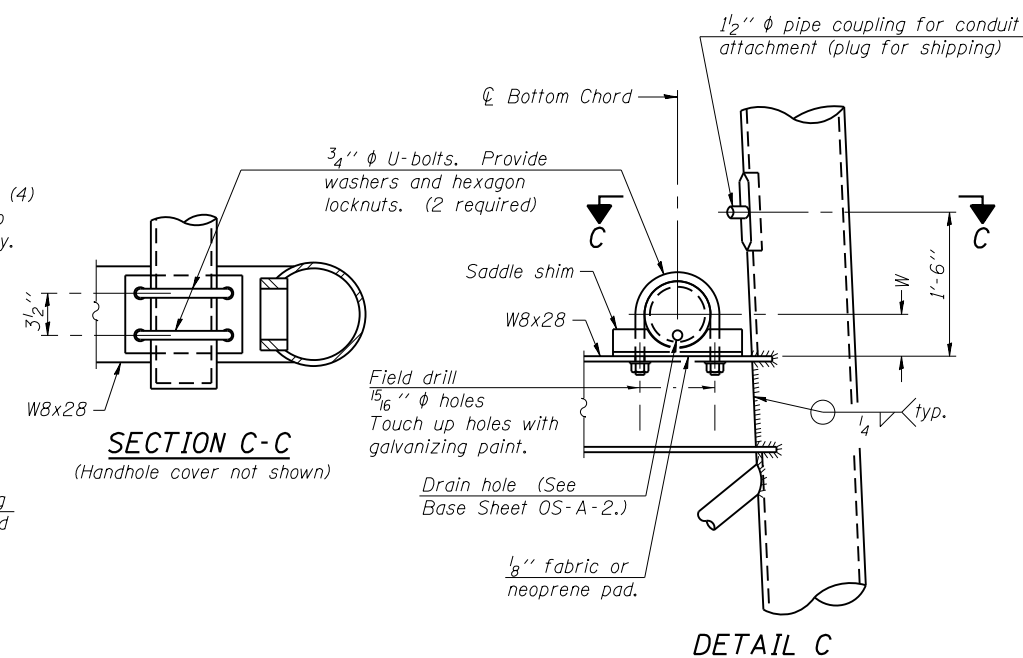
Anchor rods shall conform to ASTM F1554 Grade 105 Galvanize upper 12" minimum per AASHTO M232. No welding shall be permitted on rods.

TYPE III-A TRUSS

12" φ PIPE SUPPORT FRAME DETAILS

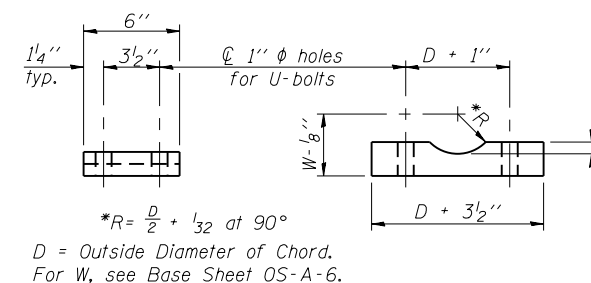
Notes:
For Type III-A Truss spans greater than 150 ft. and up to 160 ft.:

- ① 1 3/4" φ rod, 2" φ holes
- ② 2 3/4" edge distance
- ③ Base Pl. 1 5/8" x 1'-11 1/2" x 1'-11 1/2"



SECTION C-C
(Handhole cover not shown)

DETAIL C



SADDLE SHIM DETAIL

ASTM B26 Alloy 356-F
or
ASTM B209 Alloy 6061-T651
(4 required per sign truss)

Truss Chord Nominal Dia.	a
7"	1"
8 1/2"	1 1/4"
9"	1 3/8"

OS4-A-8aA

6-1-12

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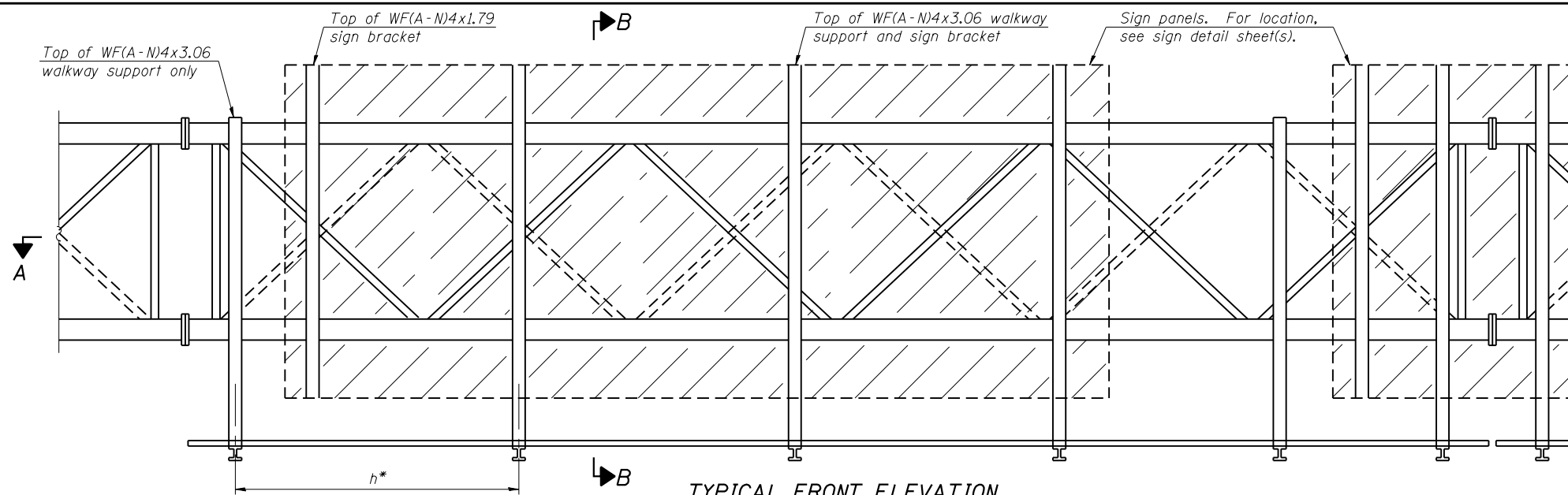
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
SUPPORT FRAME FOR TYPE III-A ALUMINUM TRUSS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	142-R	ROCK ISLAND	1353	1061
CONTRACT NO. 64B83				

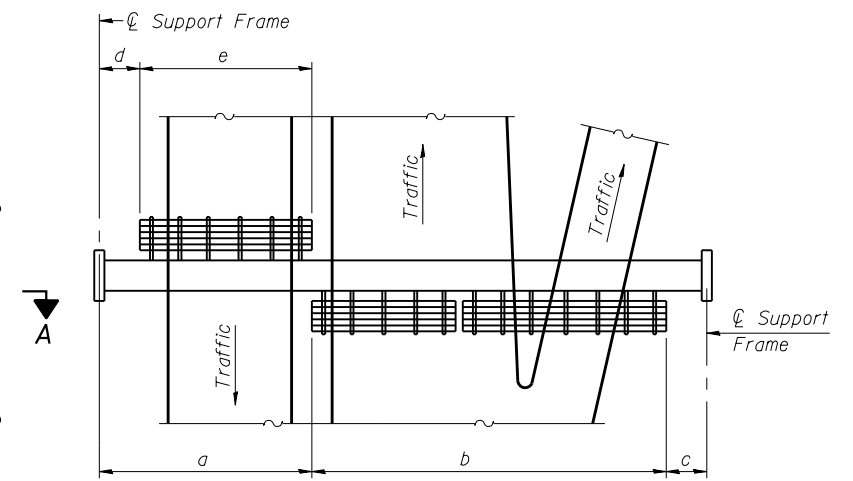
SHEET NO. S0-06 OF S0-11 SHEETS

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TYPICAL FRONT ELEVATION

With lights and handrail omitted for clarity.
For Section B-B, see Base Sheet OS-A-10.



PLAN WALKWAY AND HANDRAIL SKETCH
(Road plan beneath truss varies)

BRACKET TABLE

WF(A-N)4x1.79 or WF(A-N)4x3.06 ASTM B308, Alloy 6061-T6		
Sign Width		Number Brackets Required
Greater Than	Less Than or Equal To	
	8'-0"	2
8'-0"	14'-0"	3
14'-0"	20'-0"	4
20'-0"	26'-0"	5
26'-0"	32'-0"	6

Notes:

* Space walkway brackets WF(A-N)4x3.06 and sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:

f = 12" maximum, 4" minimum (End of sign to ϕ of nearest bracket)
g = 12" maximum, 4" minimum (End of walkway grating to ϕ of nearest support bracket)

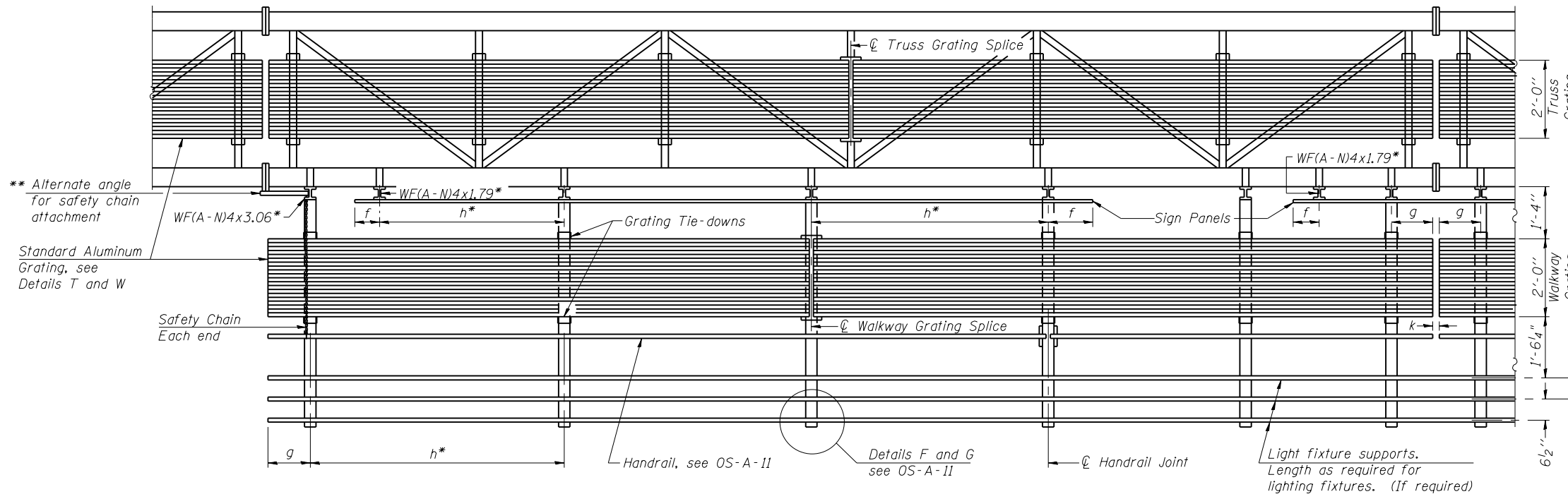
h = 6'-0" maximum (ϕ to ϕ sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)

k = 2" maximum gap between adjacent walkway grating sections and handrail ends

** If walkway bracket at safety chain location is behind sign, add angle to bracket, see Alternate Safety Chain Attachment on Base Sheet OS-A-11.

For Details T and W, Section B-B and Grating Splice Details see Base Sheet OS-A-10.

For Handrail Details see Base Sheet OS-A-11.



SECTION A-A

Handrail and walkway shall span a minimum of three brackets between splices and/or gap joints.
Place all sign and walkway brackets as close to panel points as practical.
Handrail joints, grating, and light support splices placed as needed.

Structure Number	Station	a	b	c	d	e	Walkway Grating and Handrail Lengths
2S081S005L005.2	273+00	57'-6"	48'-6"	4'-0"	-	-	48'-6"

Truss grating to facilitate inspection shall run full length (center to center of support frames) $\pm 12"$ on overhead trusses.
Cost of truss grating is included in "Overhead Sign Structure".

Walkway and Truss Grating width dimensions are nominal and may vary $\pm 1/2"$ based on available standard widths.

OS-A-9

6-1-12

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REVISED -

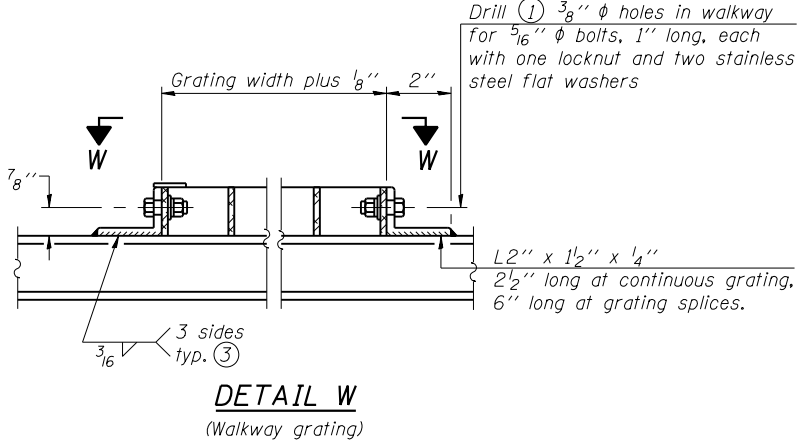
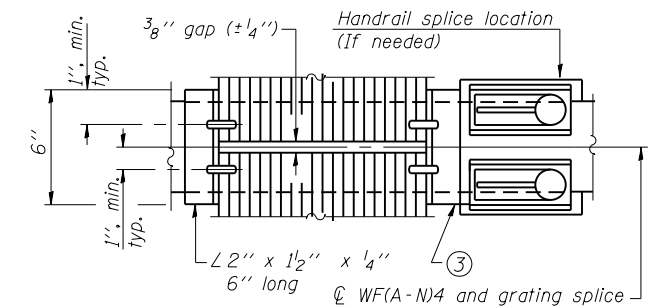
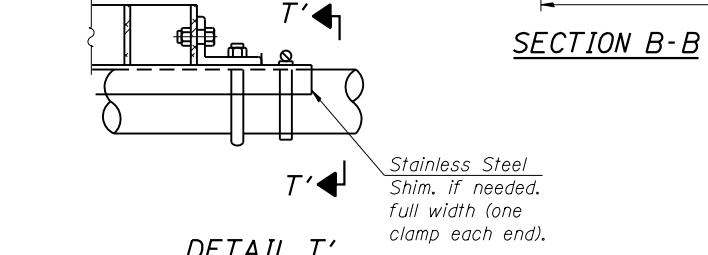
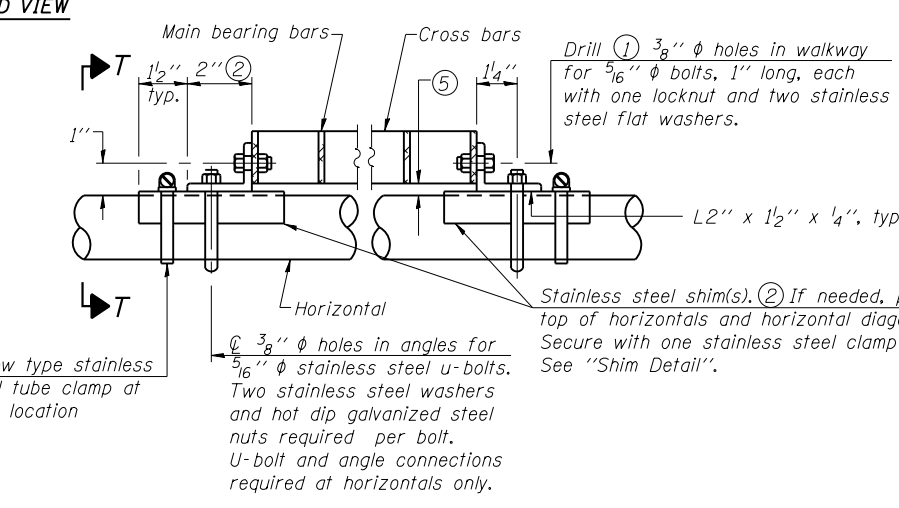
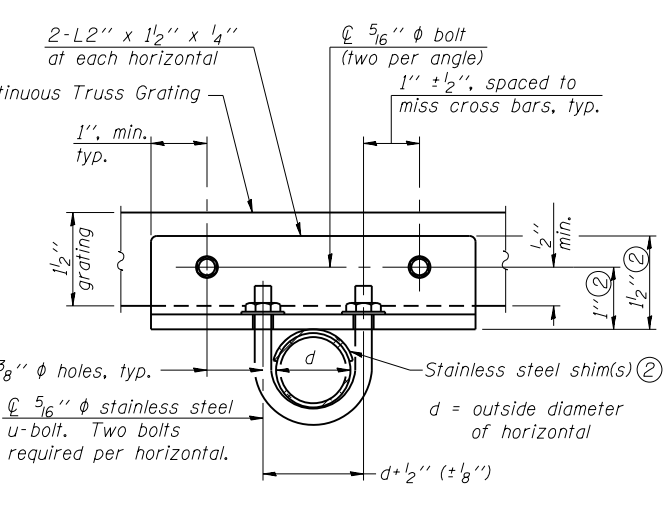
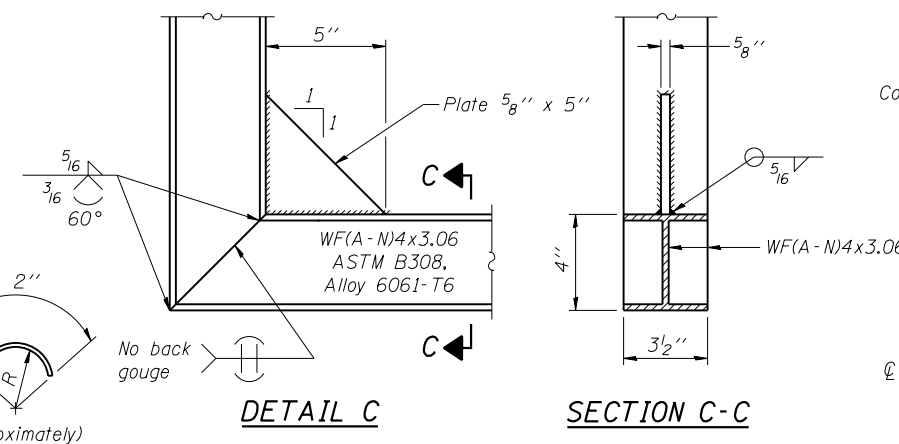
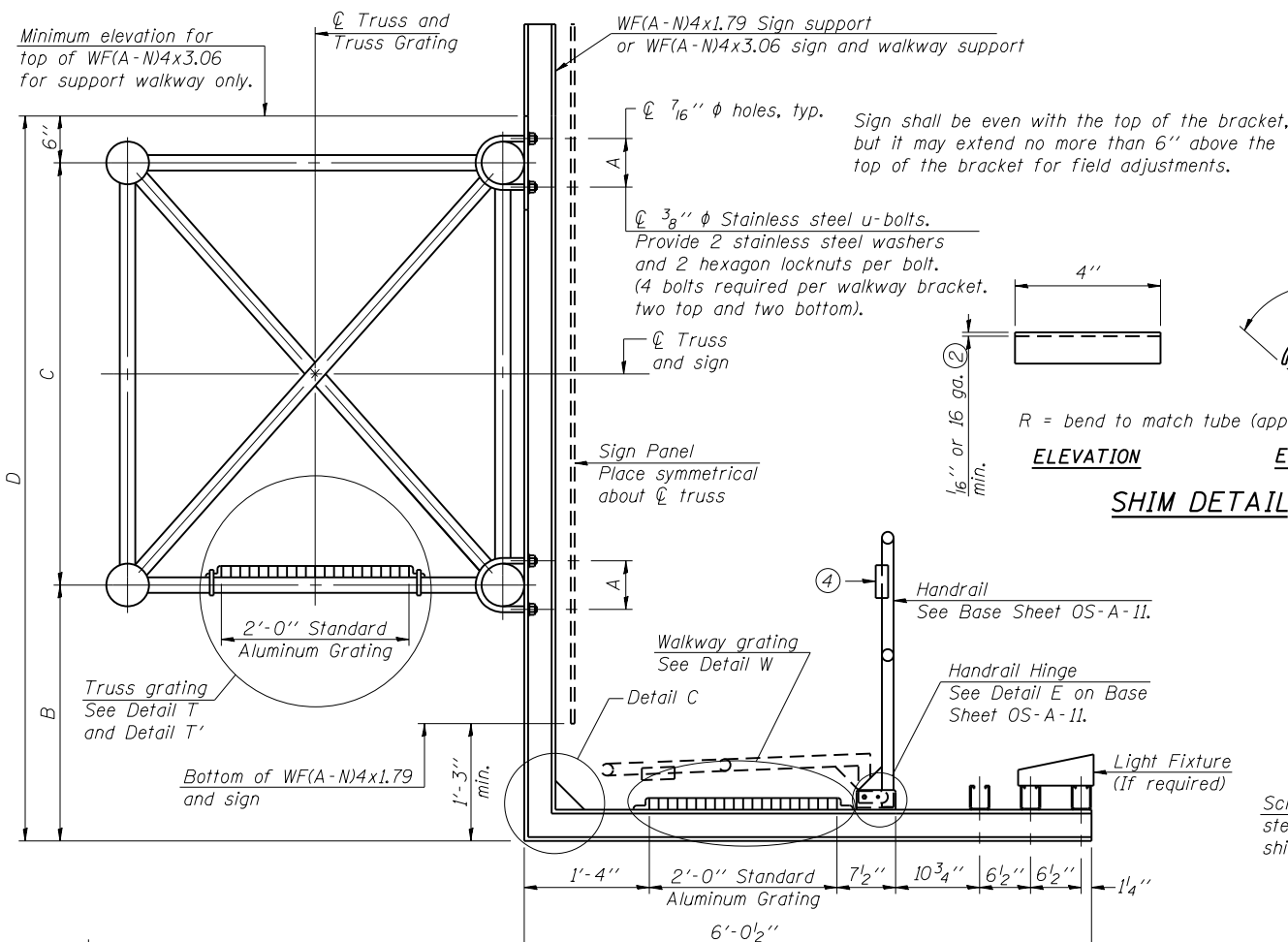
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**OVERHEAD SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS**

SHEET NO. S0-07 OF S0-11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	142-R	ROCK ISLAND	1353	1062
CONTRACT NO. 64B83				

ILLINOIS FED. AID PROJECT



SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars shall be 3/16" x 1 1/2" on 1 3/16" centers and conform to ASTM B221 Alloy 6061-T6.

Cross bars shall be 3/16" x 1 1/2" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

OR

Aluminum Grating with modified "4" sections for main bearing bars shall meet the following requirements:

Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in.³ per bar, a depth of 1 1/2", spaced on 1 3/16" centers.

Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.

Structure Number	Station	A	⑥ B	C	⑥ D
2S08IS005L005.2	273+00	9'-2"	2'-9"	7'-0"	10'-3"

- ① Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- ② Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.
- ③ If Handrail Joint present, weld angle to WF(A-N)4 and 1/4" extension bars. (See Base Sheet OS-A-II.)
- ④ 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.
- ⑤ Tube to grating gap may vary from 0 to 1/2", max. to align walkway, allow for camber, etc.
- ⑥ Based on actual height of tallest sign given on OS-A-1.

OS-A-10

6-1-12



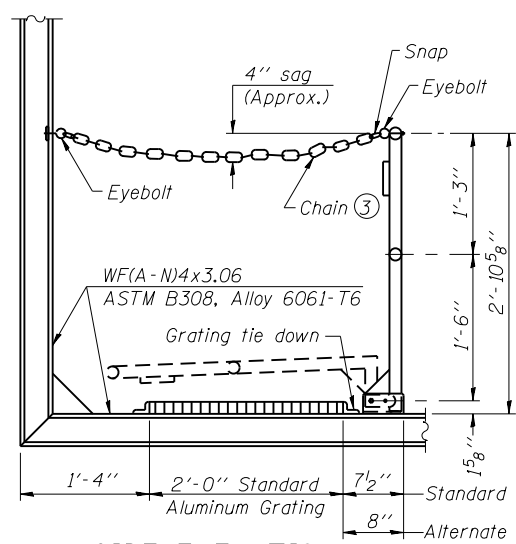
USER NAME =	DESIGNED - PSS	REVISED -
FILE NAME =	CHECKED - TBP	REVISED -
PLOT SCALE =	DRAWN - AJF	REVISED -
PLOT DATE =	CHECKED - BDC	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

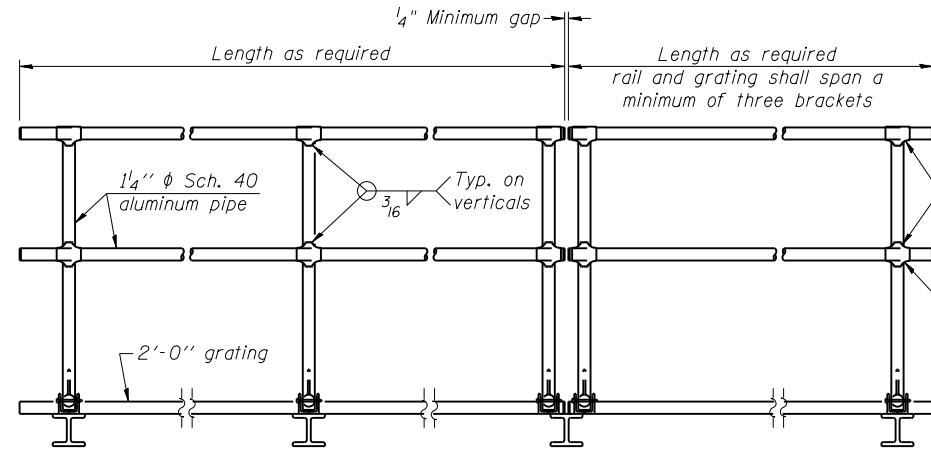
OVERHEAD SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS

SHEET NO. SO-08 OF SO-11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	142-R	ROCK ISLAND	1353	1063
CONTRACT NO. 64B83				
ILLINOIS FED. AID PROJECT				



SIDE ELEVATION
(Showing safety chain w/o sign)



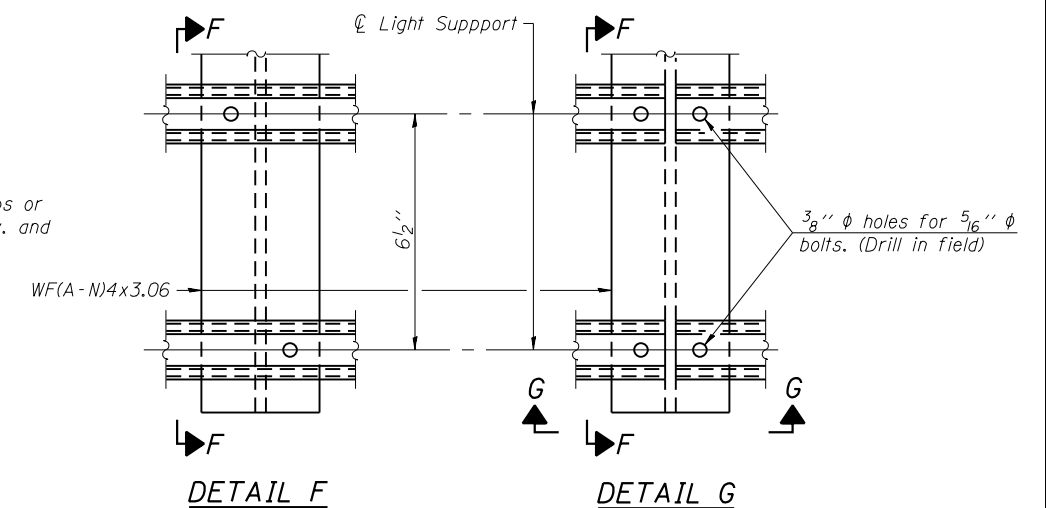
FRONT ELEVATION

HANDRAIL DETAILS

Handrail pipe shall be ASTM B241 or B429, Alloy 6063-T6 or Alloy 6061-T6.

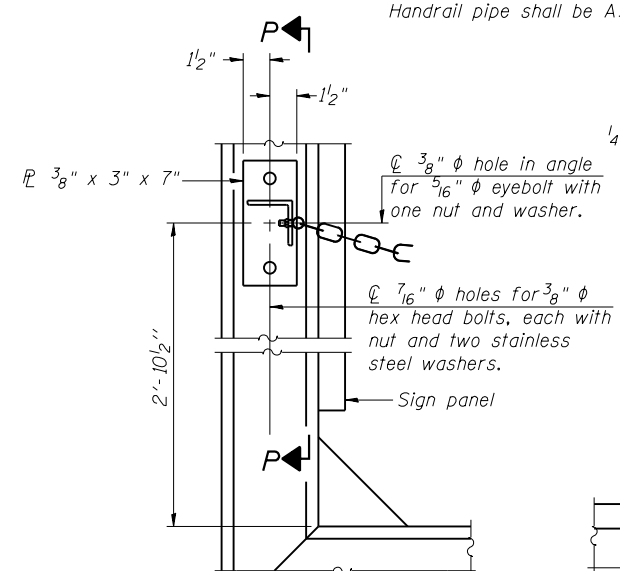
- ① Install standard force-fit end caps or weld 3/8" end plates with 3/8" c.f.w. and grind smooth. (All rail ends)
- Fittings-ASTM B26, Alloy 356-T7 or 1/2" diameter aluminum pipe

- ② Horizontal handrail member shall be continuous thru fitting. Provide 7/16" hole in fitting for 3/8" bolt. Field drill 7/16" hole in horizontal rail member. Provide locknut and two stainless steel washers for bolt. (Use 5/16" eyebolts in 7/16" holes on top rail at ends only.)



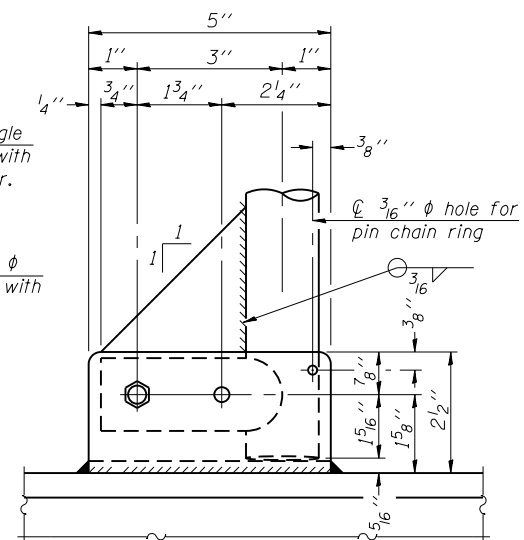
DETAIL F

DETAIL G

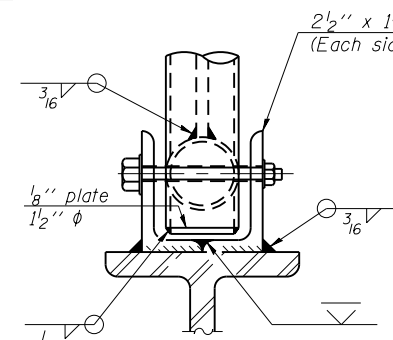


ALTERNATE SAFETY CHAIN ATTACHMENT

(With Sign Present)
Items not shown same as "Side Elevation" of "Handrail Details"

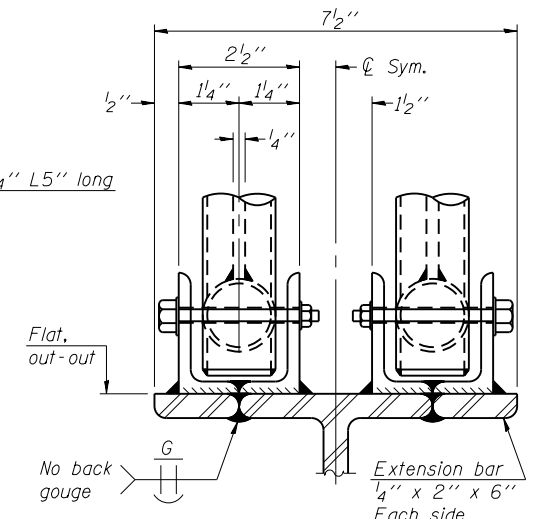


SIDE ELEVATION

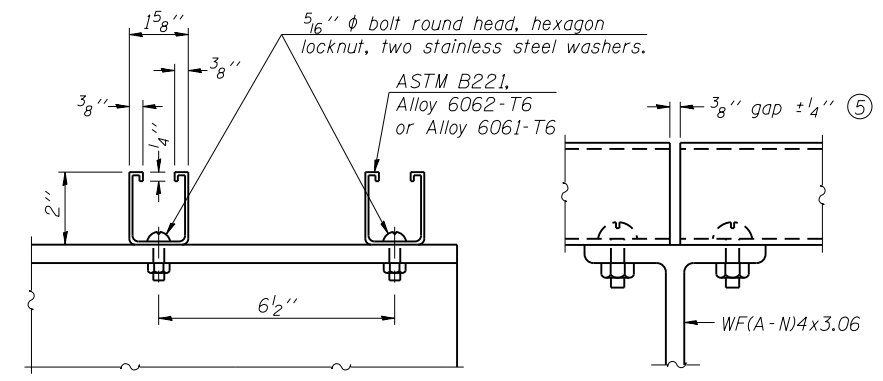


FRONT ELEVATION

See "Elevation" at right for dimensions.



ELEVATION AT HANDRAIL JOINT

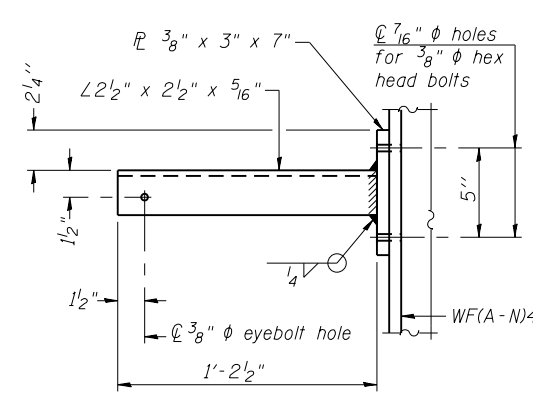


SECTION F-F

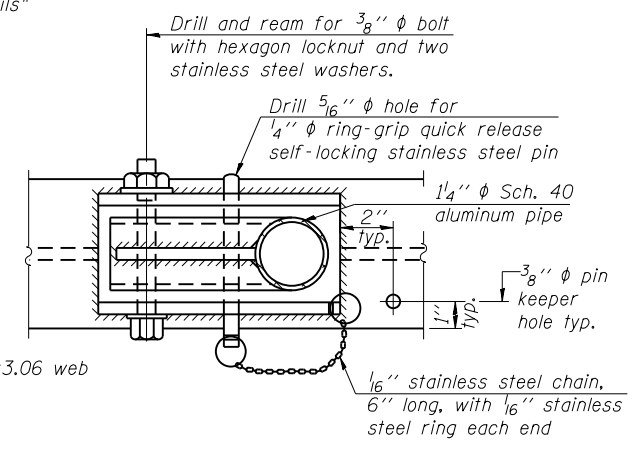
SECTION G-G

LIGHTING FIXTURE MOUNTS (IF REQUIRED)

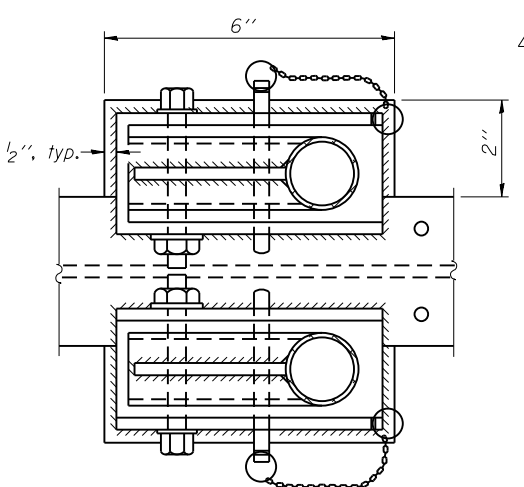
- ⑤ Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.



SECTION P-P

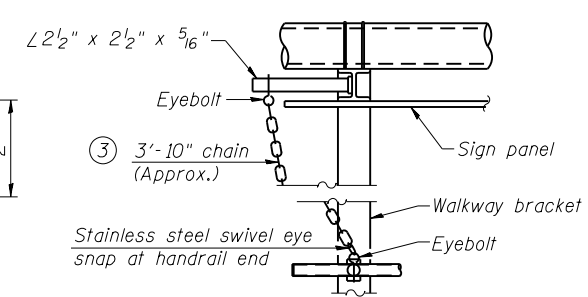


PLAN DETAIL E HANDRAIL HINGE



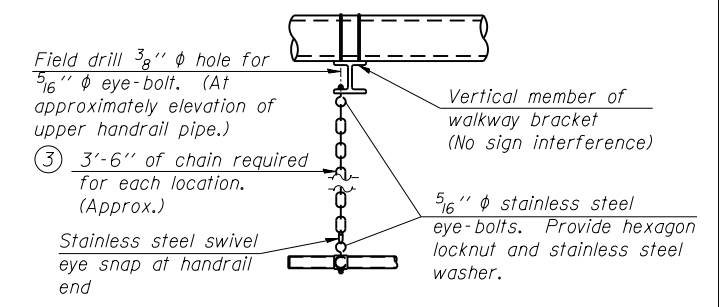
PLAN AT HANDRAIL JOINT

Details not shown same as "PLAN"



ALTERNATE SAFETY CHAIN ATTACHMENT

Details not shown similar to "Safety Chain" Details (Walkway omitted for clarity)



SAFETY CHAIN

One required for each end of each walkway.

- ③ 3/16" Type 304L stainless steel chain, approximately 12 links per foot.
- ④ Extrusions may be used in lieu of the details shown, with approval of the Engineer.

OS-A-11

6-1-12

LE LIN ENGINEERING, LTD.
Consulting Engineers
Springfield, Illinois

USER NAME =	DESIGNED - PSS	REVISED -
FILE NAME =	CHECKED - TBP	REVISED -
PLOT SCALE =	DRAWN - AJF	REVISED -
PLOT DATE =	CHECKED - BDC	REVISED -

DESIGNED - PSS	REVISED -
CHECKED - TBP	REVISED -
DRAWN - AJF	REVISED -
CHECKED - BDC	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
ALUMINUM HANDRAIL DETAILS

SHEET NO. S0-09 OF S0-11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	142-R	ROCK ISLAND	1353	1064
CONTRACT NO. 64B83				

ILLINOIS FED. AID PROJECT

BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
v4(E)	24	#9	F less 5"	—
#4 bar spiral (E) - see Side Elevation				

NOTES:

The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.

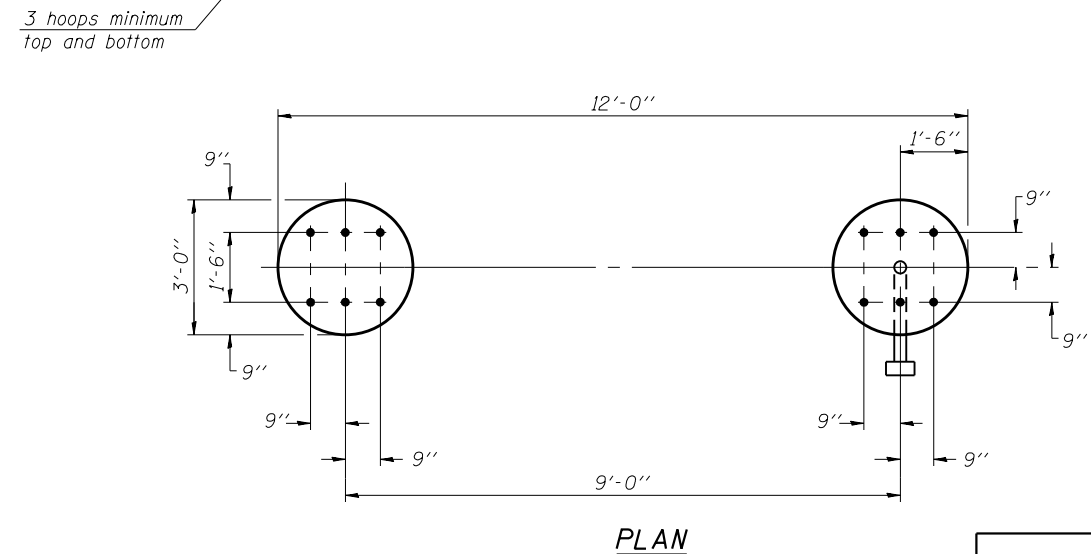
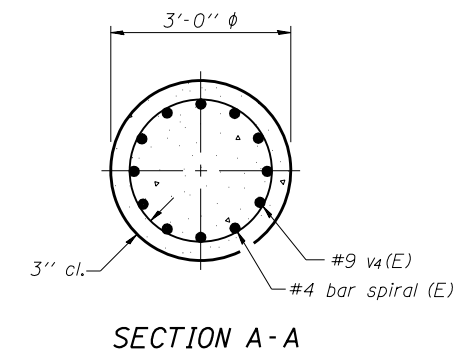
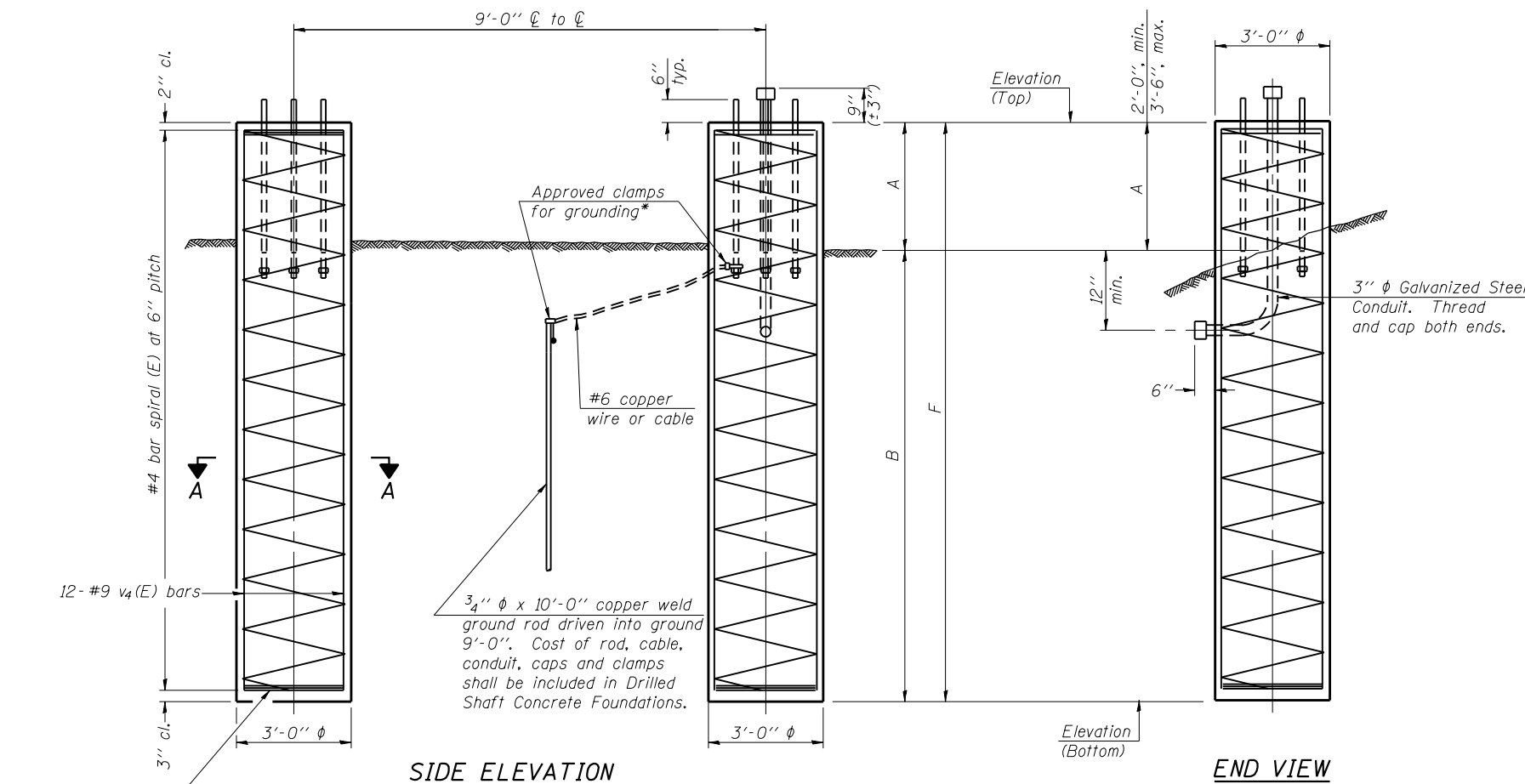
If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.



For anchor rod size and placement, see Support Frame Detail Sheet.

* Anchor rod shall be ground or filed to bright metal at clamp and cable connection location.

DETAILS FOR 12" Ø SUPPORT FRAME TYPE III-A TRUSS

Structure Number	Station	Left Foundation					Right Foundation					Class DS Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	A	B	F	Elevation Top	Elevation Bottom	A	B	F	
2S081S005L005.2	273+00	-	-	-	-	-	570.80	549.80	3'-0"	18'-0"	21'-0"	11.0

OS4-F4

6-1-12

Lin Engineering, Ltd.
Consulting Engineers
Springfield, Illinois

USER NAME =	DESIGNED - PSS	REVISED -
FILE NAME =	CHECKED - TBP	REVISED -
PLOT SCALE =	DRAWN - AJF	REVISED -
PLOT DATE =	CHECKED - BDC	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**OVERHEAD SIGN STRUCTURES
DRILLED SHAFT DETAILS**

SHEET NO. S0-10 OF S0-11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	142-R	ROCK ISLAND	1353	1065
CONTRACT NO. 64B83				
ILLINOIS FED. AID PROJECT				

NOTES:

The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.

If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.

BAR LIST - EACH FOUNDATION

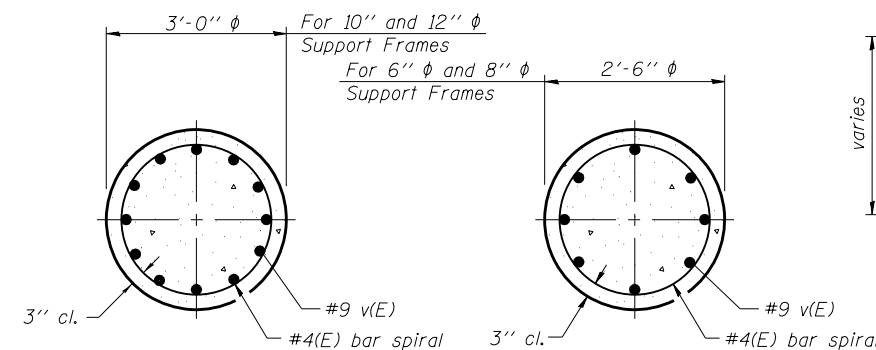
Bar	Number	Size	Length	Shape
h(E)	10	#5	M less 4"	—
s(E)	Varies	#5	Varies	□
v(E)	16	#9	F less 0'-5"	—
v(E)	24	#9	F less 0'-5"	—

#4(E) bar spiral - see Side Elevation

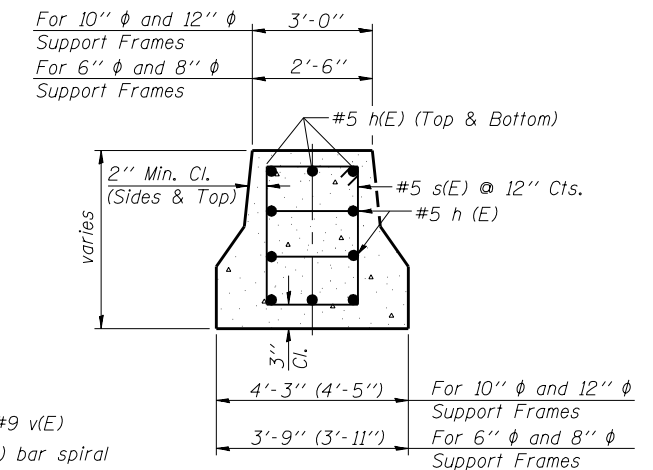
6" φ and 8" φ Support Frame
10" φ and 12" φ Support Frame

Pipe Support Frames	cc	M	a	a/2
6" φ	7'-0"	9'-6"	0'-11"	5 1/2"
8" φ	7'-6"	10'-0"	1'-1 1/2"	6 3/4"
10" φ	8'-3"	11'-3"	1'-3"	7 1/2"
12" φ	9'-0"	12'-0"	1'-6"	9"

All dimensions in parenthesis are for 42" high barrier.

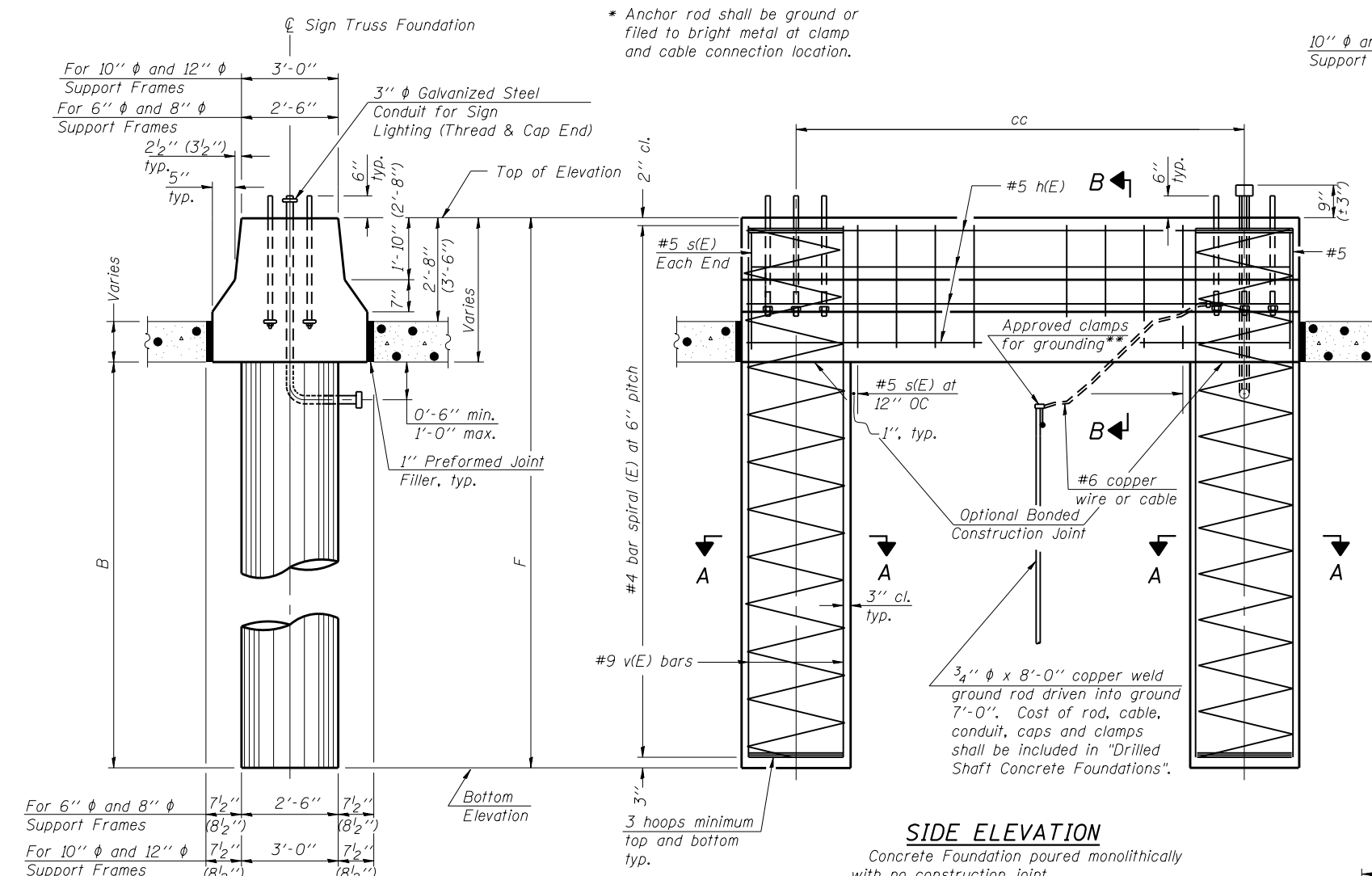


SECTION A-A



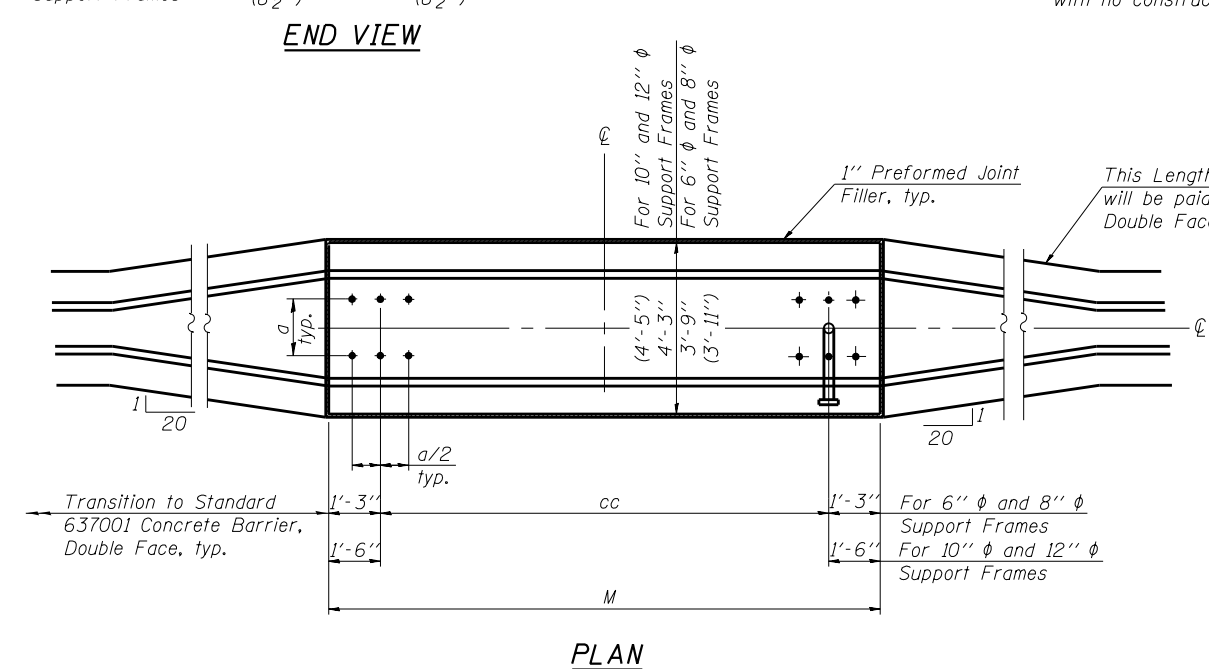
SECTION B-B

Structure Number	Station	Left Foundation				Right Foundation				Class DS Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	B	F	Elevation Top	Elevation Bottom	B	F	
2S08IS005L005.2	273+00	577.28	553.95	19'-0"	23'-4"	-	-	-	-	10.0



SIDE ELEVATION

Concrete Foundation poured monolithically with no construction joint.



PLAN

OS4-MED

8-21-13

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Consulting Engineers
Springfield, Illinois

USER NAME =	DESIGNED - PSS	REVISED -
FILE NAME =	CHECKED - TBP	REVISED -
PLOT SCALE =	DRAWN - AJF	REVISED -
PLOT DATE =	CHECKED - BDC	REVISED -

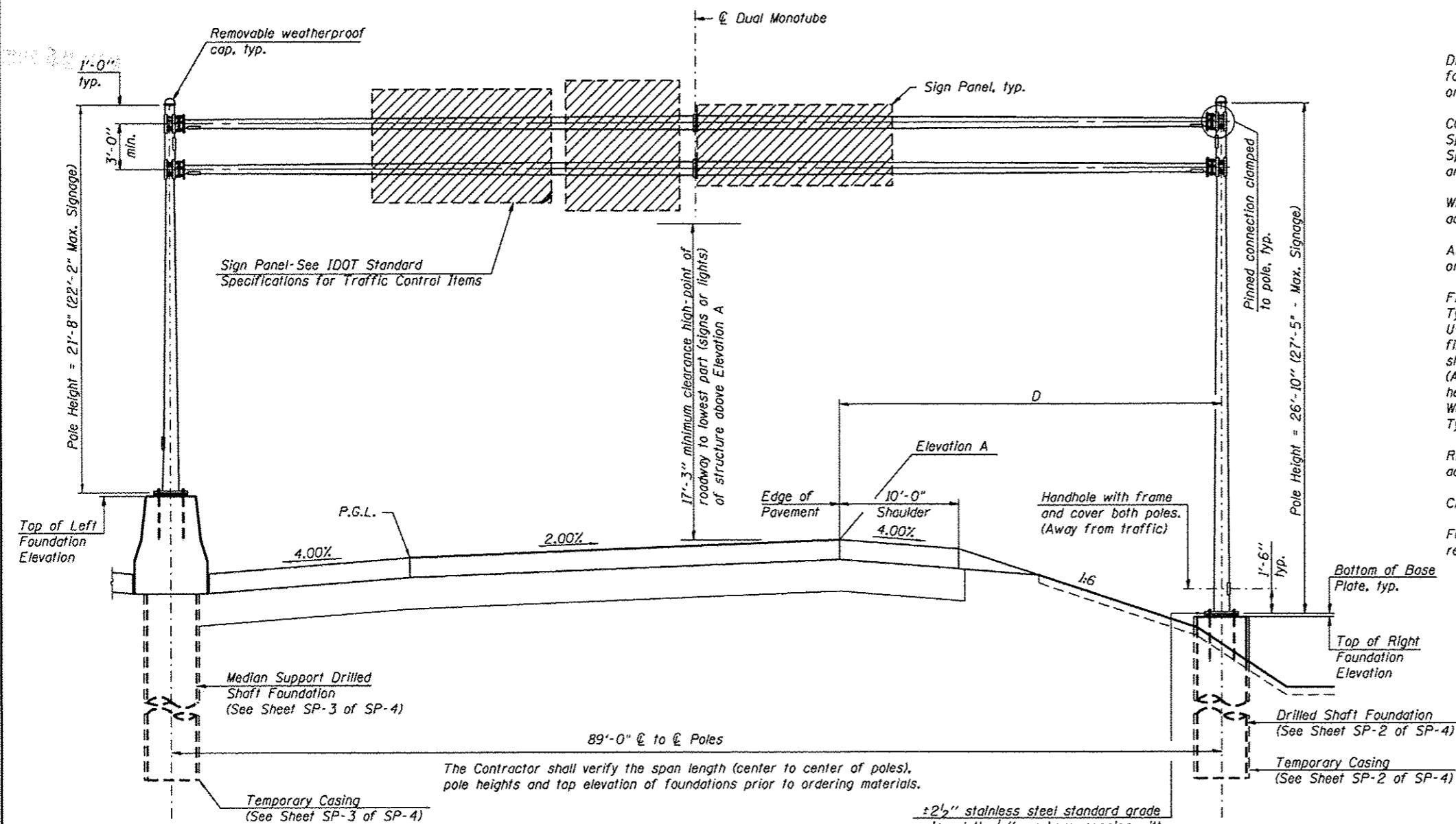
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**OVERHEAD SIGN STRUCTURES
MEDIAN SUPPORT FOUNDATION DETAILS**

SHEET NO. S0-11 OF S0-11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	142-R	ROCK ISLAND	1353	1066
CONTRACT NO. 64B83				

ILLINOIS FED. AID PROJECT



GENERAL NOTES

DESIGN: Current (at time of letting) AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals (Fatigue Category II - natural wind gust only).

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Recurring Special Provisions. ("Standard Specifications") All references to "Mast Arm Assembly and Pole" are applicable, unless otherwise noted.

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 Structural Welding Code and the Standard Specifications.

ANCHOR RODS: Shall conform to ASTM F1554 Grade 105. No welding shall be permitted on rods.

FASTENERS: All connection bolts shall be High Strength Bolts M164, Galvanize M232 (A153), Type 3, or stainless steel heavy hex conforming to ASTM A193, Grade B8 or B8M, Class 1. U-bolts shall be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished, or an equivalent material acceptable to the Engineer. Nuts for stainless steel bolts shall be stainless steel conforming to ASTM A194, Grade 8 (AISI Type 304) or Grade 8F (AISI Type 303). All nuts shall be "locknuts" with nylon or steel inserts and semifinished hexagonal heads equivalent to the finished heavy hex series of the American National Standard. Washers for stainless steel bolts shall be stainless steel conforming to ASTM A240, Type 302 or 304.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

CAMBER: Minimum AASHTO camber = $L / 1000 + \text{dead load camber}$

FOUNDATIONS: The contract unit price for Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place and temporary casing.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE - SPAN, DUAL MONOTUBE	Foot	89.0
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	16.5

ELEVATION
Looking West on the Westbound Lanes

±2 1/2" stainless steel standard grade wire cloth, 1/4" maximum opening with minimum wire diameter of AWG No. 16 with 2" lap. Secure to the base plate with 3/4" stainless steel bonding after anchor bolt nuts are fully tightened. Add bolt covers or shrouds where applicable.

SIGN STRUCTURE DATA TABLE

Structure Number	Station	℄ to ℄ Poles	Elevation A	Dimension D	Actual Sign/Signal Area	Right Foundation			Class SI Concrete (Cu. Yds.)		
						Elevation Top	Elev. Bottom	F			
2MOBIS005L005.4	285+30	89.0	573.75	33.0	193.0	570.44	545.44	1'-8"	23'-4"	25'-0"	6.5

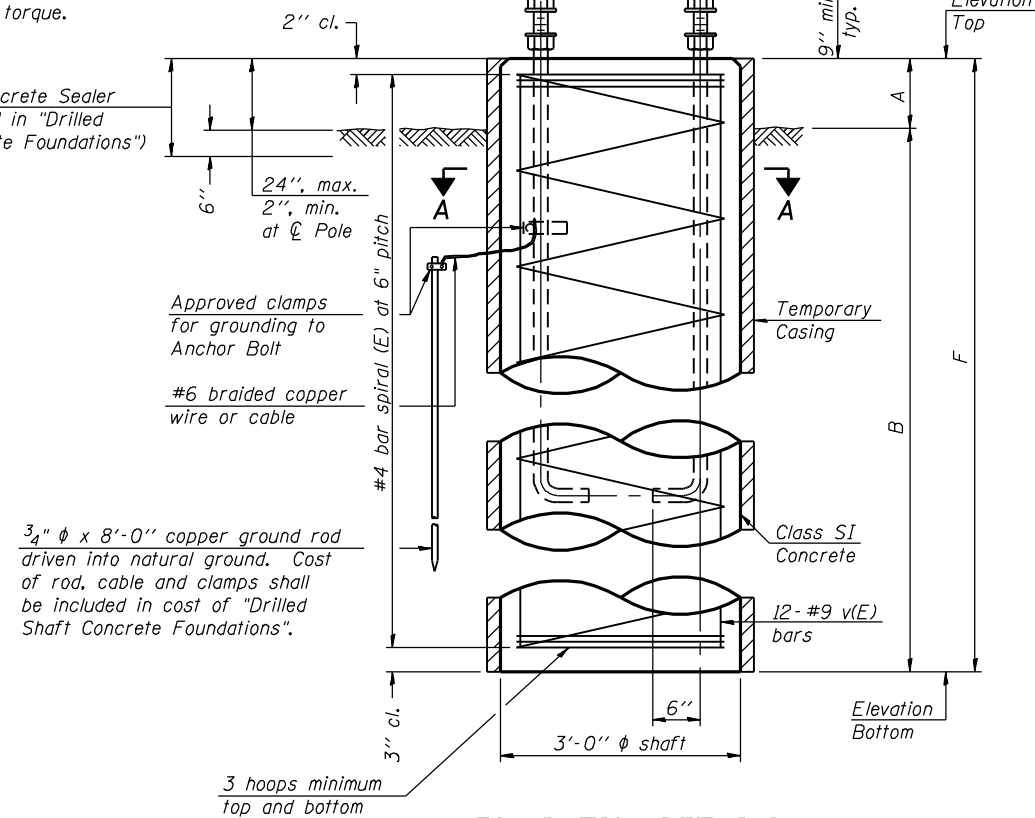


Signature: *Andrew E. Underwager*
Date: 6-10-2014
License Expires: 11-30-2016

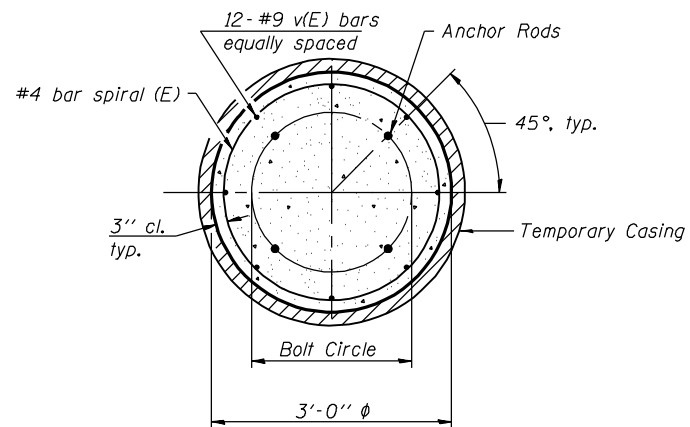
FILE NAME: N:\PROJ\88833\SP4\SP4-1.dwg; USER: WBS; DATE: 11/18/2014; TIME: 10:10:11; PLOT DATE: 11/18/2014

Anchor rod. Thread upper 8". Galvanize upper 19" per AASHTO M232. Provide one hexagon locknut and washer (top) and one leveling nut and washer (bottom). Galvanize per AASHTO M232. Nuts shall each be tightened against base plate with 200 lb-ft torque.

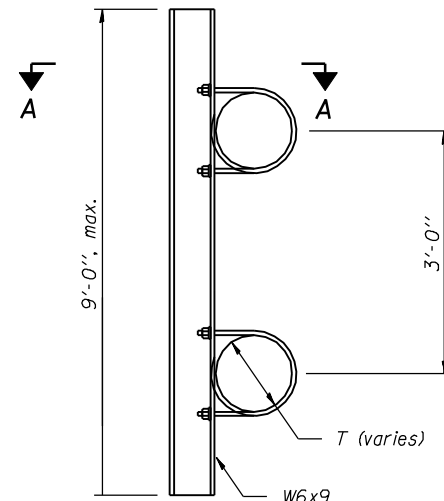
Limits of Concrete Sealer (Cost included in "Drilled Shaft Concrete Foundations")



FOUNDATION DETAILS

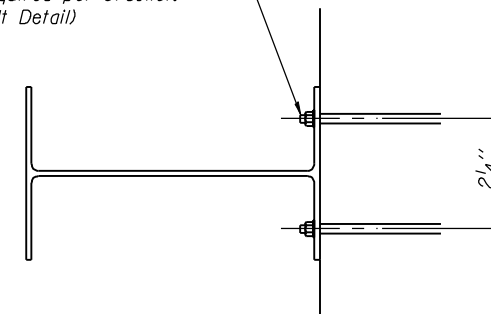


SECTION A-A



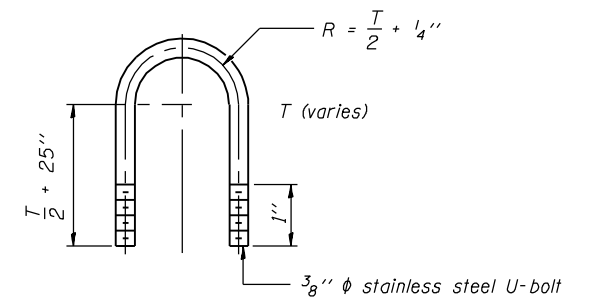
SIGN MOUNTING BRACKET

$\frac{3}{8}$ " ϕ stainless steel U-bolt (Provide 2 stainless steel washers and 2 hex locknuts per bolt.) 2 bolts required per bracket. (See U-Bolt Detail)



SECTION A-A

6'-0" maximum spacing. 2'-0" maximum sign overhang beyond end bracket.



U-BOLT DETAIL (Typical)

FOUNDATIONS:

The foundation dimensions shown are based on the presence of soils with an average Unconfined Compressive Strength (Q_u) LESS THAN 1.25 tsf, which was determined by previous soil investigations at the jobsite.

If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in "Drilled Shaft Concrete Foundation".

FILE NAME = N:\PROJ\0003393\00\Transmittal\Received\WBK\To Clorbe 14.1104\14.1104\2\0815\0051\005.4-64883-002.dgn



USER NAME = *USERNAME*	DESIGNED - AEU	REVISED -
	CHECKED - DLS	REVISED -
PLOT SCALE = 0:2.0000 1/2" = 1"	DRAWN - AEU	REVISED -
PLOT DATE = 12/18/2014	CHECKED - DLS	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DUAL MONOTUBE SIGN STRUCTURE
FOUNDATION DETAILS**

SHEET NO. SP-2 OF SP-4 SHEETS

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1068
				CONTRACT NO. 64883

ILLINOIS FED. AID PROJECT



SOIL BORING LOG

Date 11/25/13

ROUTE FAP 595 DESCRIPTION D92-004-06 Sign Truss on John Deere Road, 1,000' E. of 38th Street LOGGED BY W. Garza

SECTION 142-R LOCATION S. Moline Twp. - 10SW, SEC. , TWP. 17N, RNG. 1W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

Table with columns for STRUCT. NO., BORING NO., Station, Offset, Ground Surface Elev., and soil layers with depth, description, and test results.

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

BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

Date 11/26/13

ROUTE FAP 595 DESCRIPTION D92-004-06 Sign Truss on John Deere Road, 1,000' E. of 38th Street LOGGED BY W. Garza

SECTION 142-R LOCATION S. Moline Twp. - 10SW, SEC. , TWP. 17N, RNG. 1W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

Table with columns for STRUCT. NO., BORING NO., Station, Offset, Ground Surface Elev., and soil layers with depth, description, and test results.

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

BBS, from 137 (Rev. 8-99)

FILE NAME = N:\PROJ\0003393\00\T-emit\m\Received\WBK\To Clorbe 14.1104\14.1104\24\0815\005L\005.4-64883-004_Borings.dgn



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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DUAL MONTUBE SIGN STRUCTURE BORING LOGS

SHEET NO. SP-4 OF SP-4 SHEETS

Table with columns for FAP RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., CONTRACT NO., and ILLINOIS FED. AID PROJECT.

Benchmark: Traffic Signal Foundation, Sta. 334+45.00, 63.99' Lt. Elev. 590.71

Existing Structure: The existing structure is a 36" reinforced concrete pipe culvert approximately 156' long.

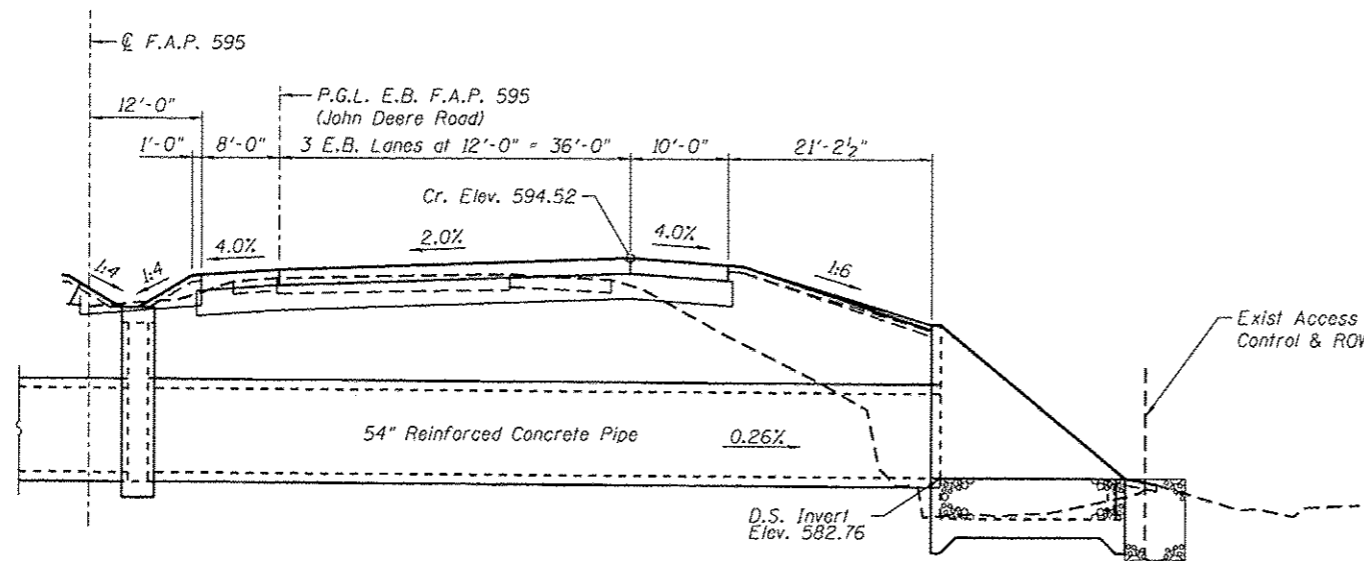
CURVE DATA

℄ F.A.P. 595

Δ = 26°26'36" (LT)
 D = 00°44'03"
 T = 1,833.41'
 L = 3,601.50'
 E = 212.48'
 R = 7,803.53'
 S.E. = 2.0%
 P.C. = Sta. 306+02.40
 P.T. = Sta. 342+03.89
 P.I. = Sta. 324+35.80

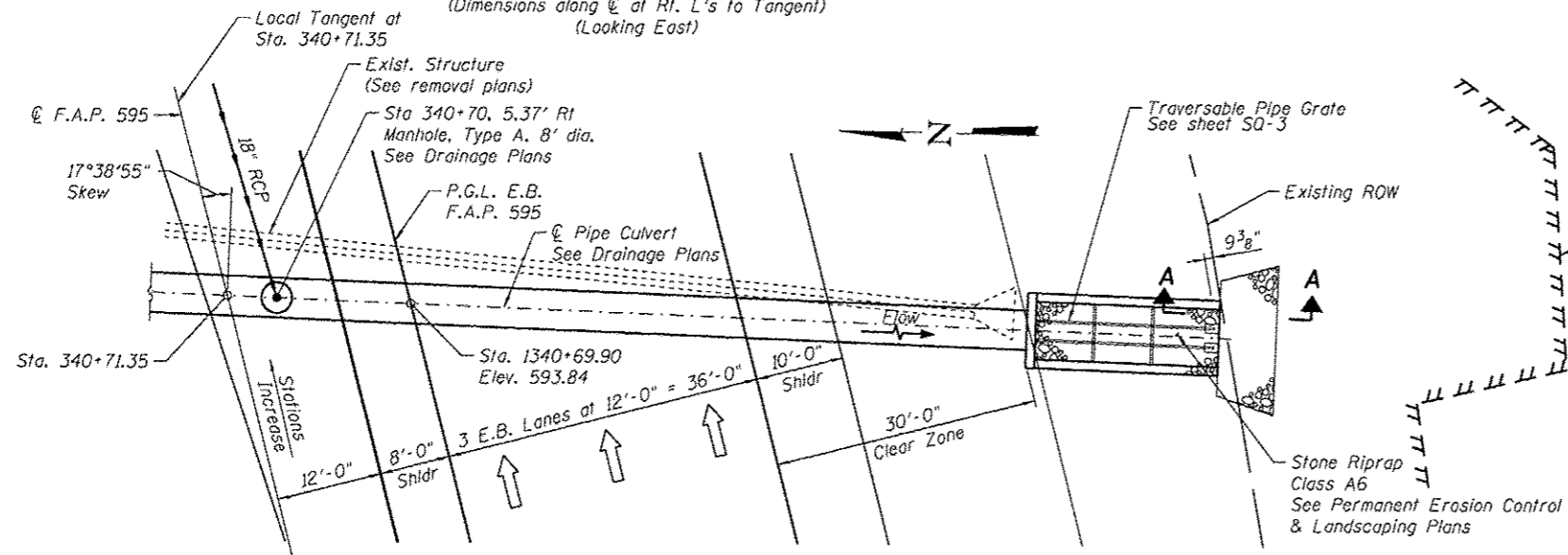
INDEX OF SHEETS:

SO-1 General Plan & Elevation
 SO-2 Details-1
 SO-3 Details-2

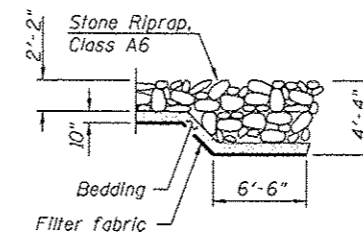


LONGITUDINAL SECTION

(Dimensions along ℄ at Rt. L's to Tangent)
 (Looking East)



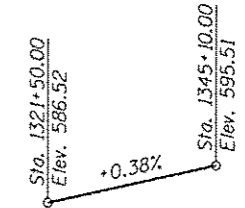
PLAN



SECTION A-A

PROPOSED PROFILE GRADE

(P.G.L. E.B. F.A.P. 595)



DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications,
 6th Edition with 2013 Interims

DESIGN STRESSES

FIELD UNITS

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

TOTAL BILL OF MATERIAL

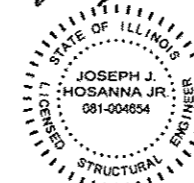
ITEM	UNIT	TOTAL
Reinforcement Bars, Epoxy Coated	Pound	2,290
Concrete Structures	Cu Yd	19.5

Trench Backfill is shown with drainage schedule pay items.

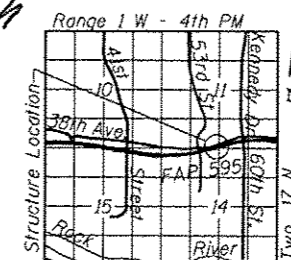
GENERAL NOTES:

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Precast alternative will not be allowed.

Joseph J. Hosanna Jr.



DATE: 3/17/2015
 SEAL EXPIRES: 11/30/2016



LOCATION SKETCH

GENERAL PLAN & ELEVATION
JOHN DEERE ROAD (IL 5) OVER
DRAINAGE DITCH
F.A.P. RTE. 595
SECTION (142-1, 142)R
ROCK ISLAND COUNTY
STATION 340+70.00
S.N. 081-1123

N:\PROJ\2023\393\20\CONTRACT_2\Design\Structure\CRD\Culvert.Sta. 340+71.35.20.081-1123\1231\201-1123-64883-201.DWG

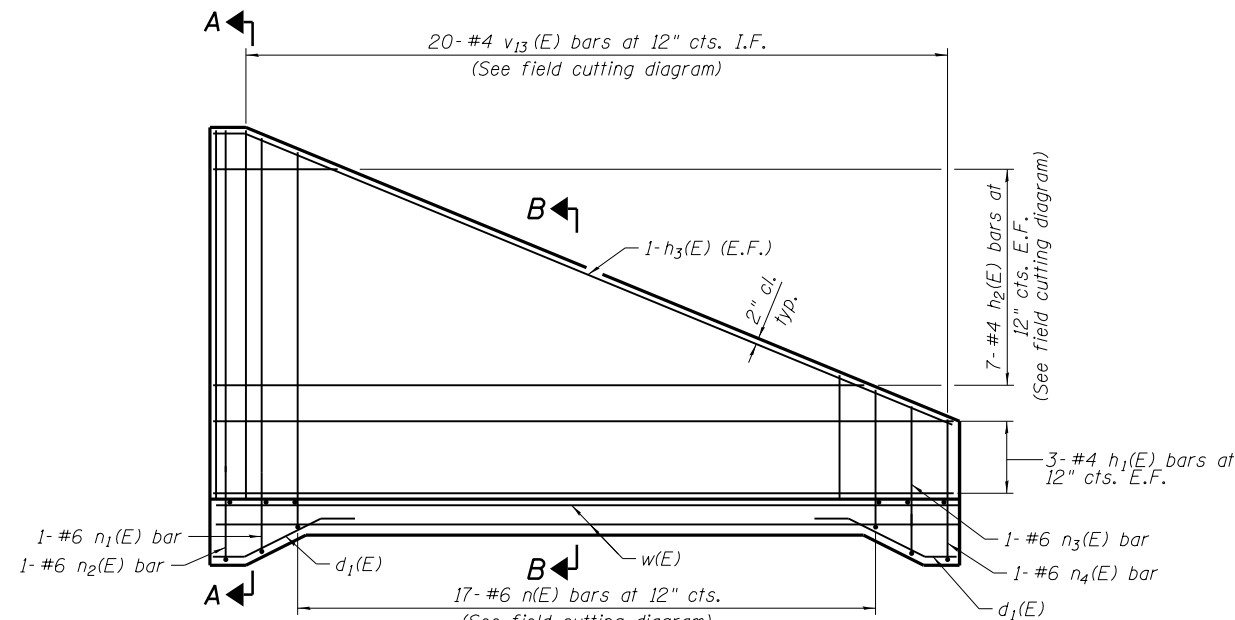
CG **Clorin Group, Inc.**
 CONSULTING ENGINEERS
 601 West Commercial Avenue
 Peoria, IL 61604
 Tel: 317 715 4000
 Fax: 317 715 4001
 Email: info@clorin.com

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PLLOT DATE = 3/17/2015	DRAWN SBA	REVISED -
	CHECKED APD	REVISED -

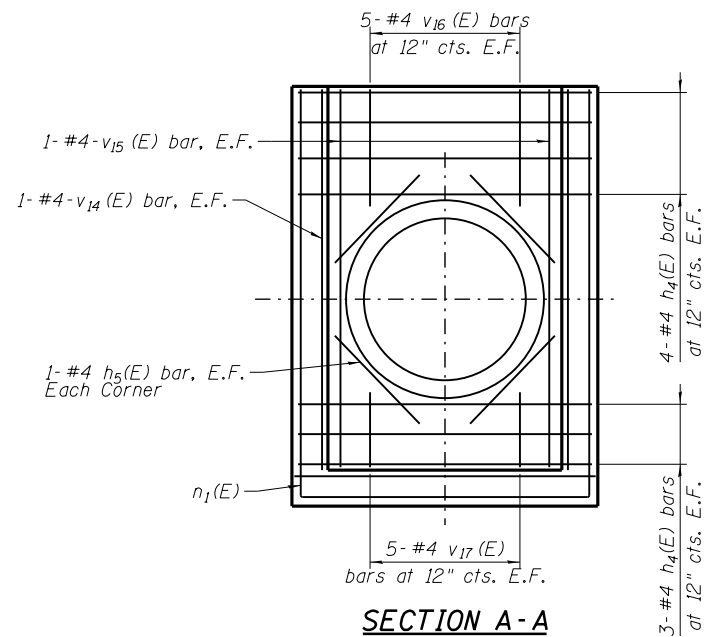
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE. 595	SECTION (142-1, 142)R	COUNTY ROCK ISLAND	TOTAL SHEETS 1353	SHEET NO. 1071
SHEET NO. SO-1 OF SO-3 SHEETS				CONTRACT NO. 64883

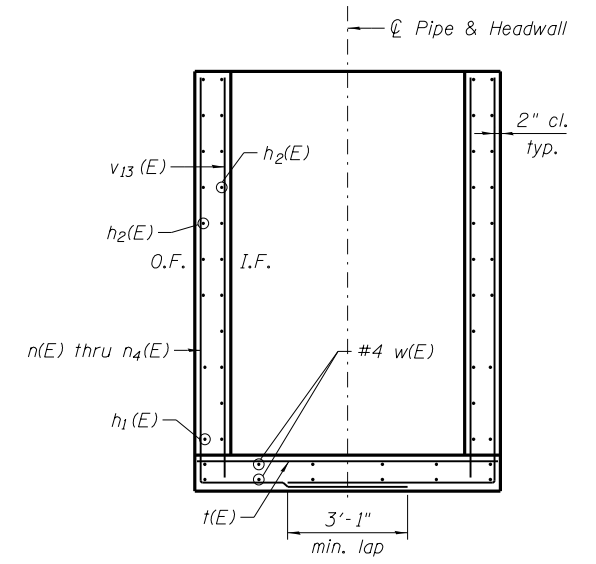
ILLINOIS FED. AID PROJECT



WINGWALL REINFORCEMENT
(West Wingwall shown, East Wingwall similar)



SECTION A-A



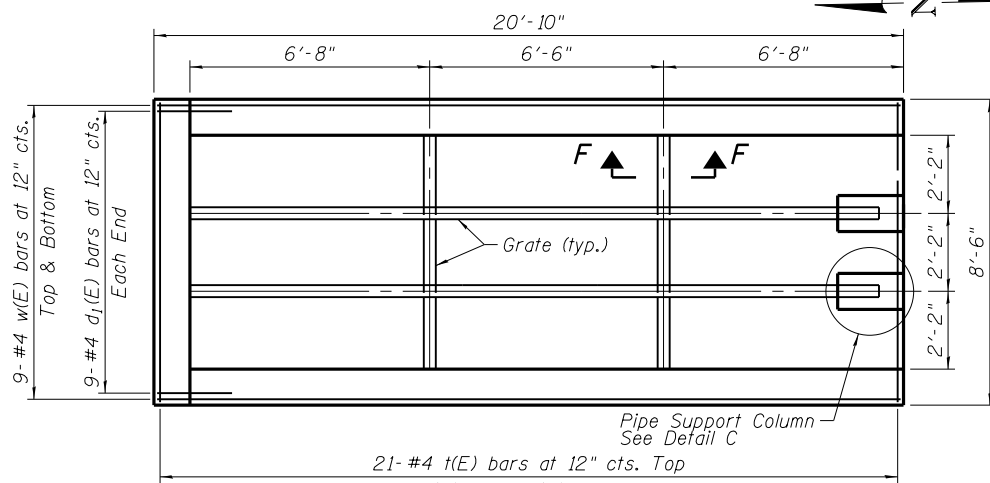
SECTION B-B

NOTES

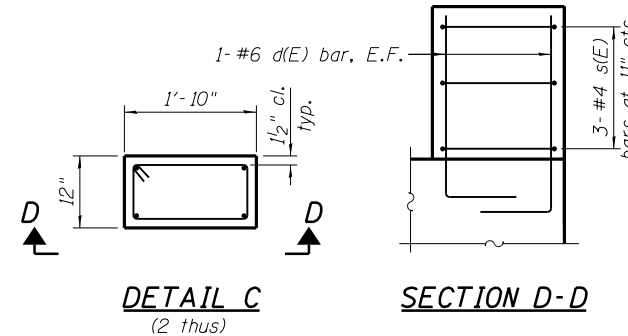
1. For view F-F, see sheet SQ-3.
2. For field cutting diagram and bar bending diagram, see sheet SQ-3.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	8	#6	4'-6"	┌
d1(E)	18	#4	3'-8"	┌
h1(E)	12	#4	20'-4"	—
h2(E)	28	#4	21'-6"	—
h3(E)	4	#4	22'-0"	┌
h4(E)	14	#4	8'-2"	—
h5(E)	8	#4	3'-6"	—
n(E)	17	#6	25'-7"	┌
n1(E)	2	#6	16'-6"	┌
n2(E)	2	#6	17'-5"	┌
n3(E)	2	#6	9'-3"	┌
n4(E)	2	#6	9'-3"	┌
s(E)	6	#4	5'-5"	┌
t(E)	21	#4	8'-2"	—
v13(E)	20	#4	13'-8"	—
v14(E)	4	#4	10'-11"	—
v15(E)	4	#4	10'-11"	—
v16(E)	10	#4	3'-3"	—
v17(E)	10	#4	2'-1"	—
w(E)	18	#4	20'-6"	—
Concrete Structures			Cu. Yd.	19.5
Reinforcement Bars, Epoxy Coated			Pound	2,290

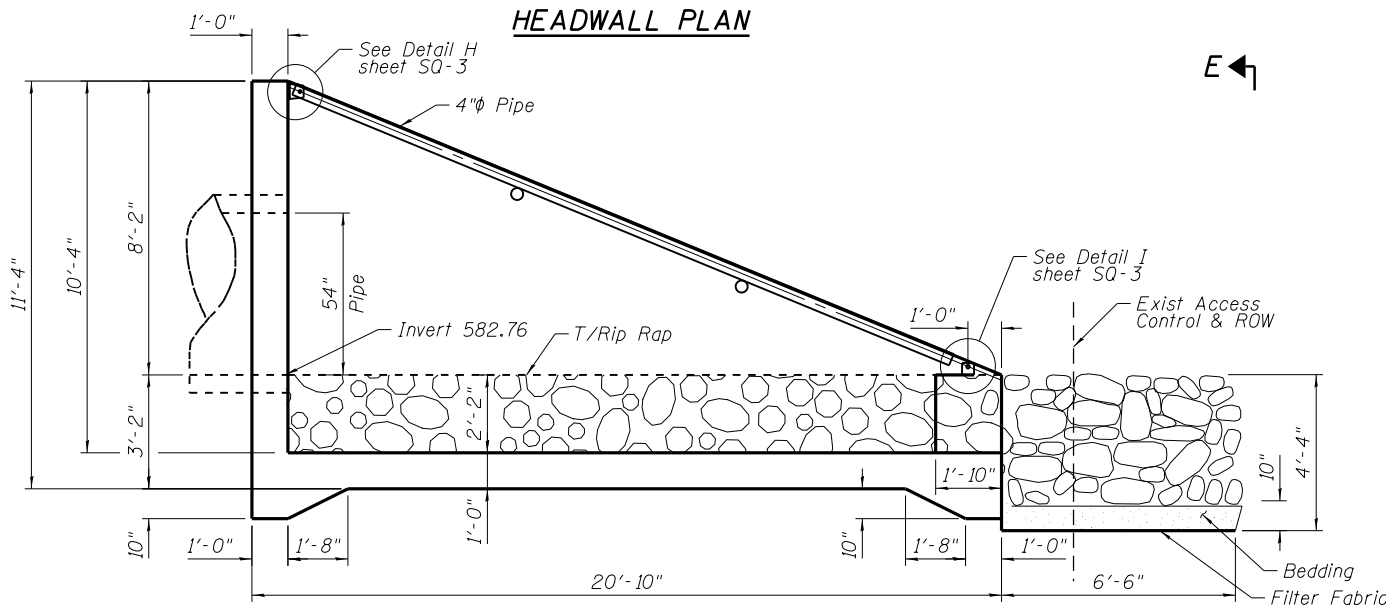


HEADWALL PLAN

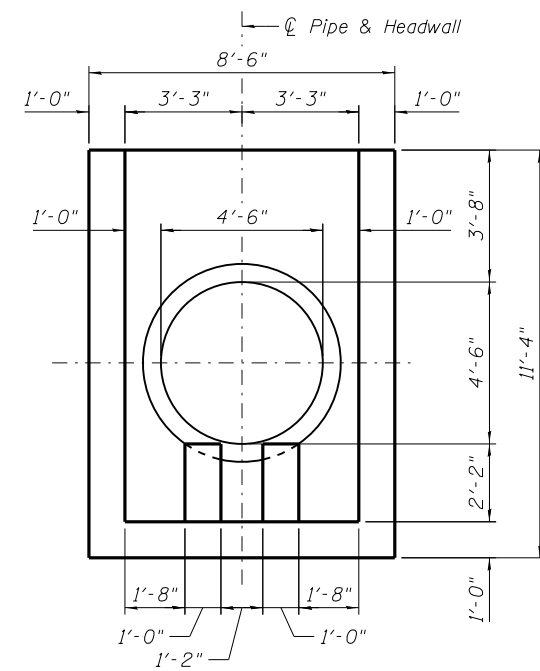


DETAIL C
(2 thus)

SECTION D-D



HEADWALL ELEVATION
(Looking West)



VIEW E-E

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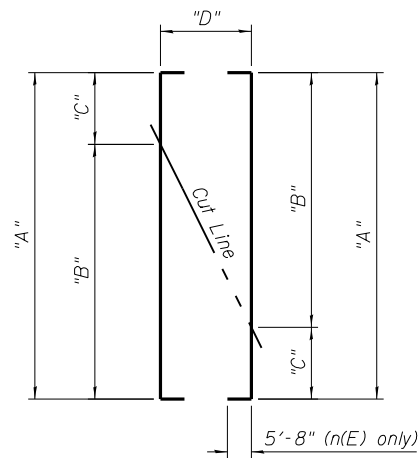
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS - 1
S.N. 081-1123

SHEET NO. SQ-2 OF SQ-3 SHEETS

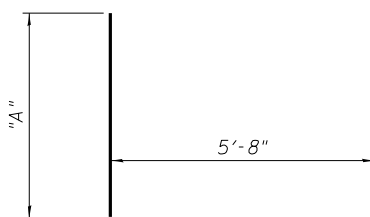
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1072
CONTRACT NO. 64883			ILLINOIS FED. AID PROJECT	



FIELD CUTTING DIAGRAM
BARS $h_2(E)$, $n(E)$ & $v_{13}(E)$

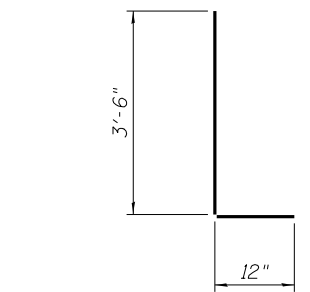
Order bars full length.
Cut as shown and use remainder bars on opposite wingwall.

BAR	"A"	"B"	"C"	"D"
$h_2(E)$	21'-6"	18'-1"	3'-5"	6 Spa. @ 12"
$n(E)$	14'-3"	10'-7"	3'-8"	16 Spa. @ 12"
$v_{13}(E)$	13'-8"	10'-11"	2'-9"	19 Spa. @ 12"

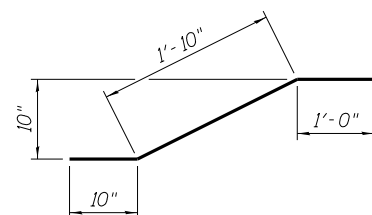


BARS $n_1(E)$ THRU $n_4(E)$

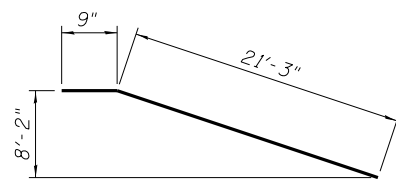
BAR	"A"
$n_1(E)$	10'-10"
$n_2(E)$	11'-9"
$n_3(E)$	3'-7"
$n_4(E)$	3'-7"



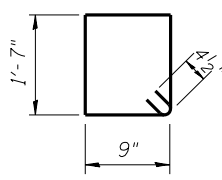
BAR $d_1(E)$



BAR $d_1(E)$



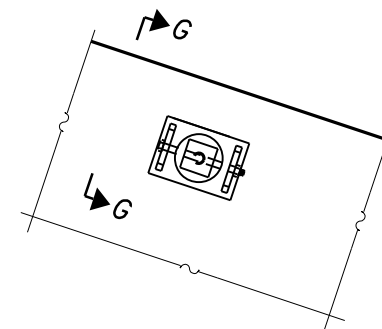
BAR $h_3(E)$



BAR $s(E)$

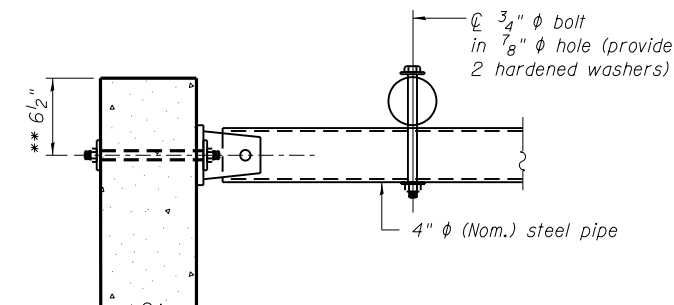
NOTES

- Cost of Galvanized Pipe, Bolts, Nuts, Washers, Anchor Rods, Drilling and Grouting, Pipe Grate Bracket and Steel Plates shall be included in the cost of Concrete Structures.
- Length of steel pipes shall be determined by the Contractor.
- All components of the Pipe Grate shall be galvanized according to the requirements of AASHTO M 111 or M 232, as applicable.
- Fabrication of the Pipe Grate shall conform to the requirements of section 505 of the Standard Specifications.
- Structural steel shapes and plates shall conform to the requirements of Article 1006.04 of the Standard Specifications. Steel pipes shall conform to the requirements of ASTM A53 (Type E or S), Grade B, Standard Weight (Sch.40).
- Bolts and thru bolts shall conform to the requirements of Article 1006.08 of the Standard Specifications. Threaded rods conforming to the requirements of ASTM F1554, Grade 105 may be used for thru bolts.
- The minimum distance from the center of a hole to the free edge of a structural shape or plate shall be 1 1/2", unless noted otherwise. Bolts shall be snug tightened by a few impacts of an impact wrench or the full force of a worker using an ordinary spud wrench.
- Anchor rods shall conform to the requirements of ASTM F1554, Grade 105. Anchor rods shall be drilled and epoxy grouted according to the requirements of Section 584 of the Standard Specifications.



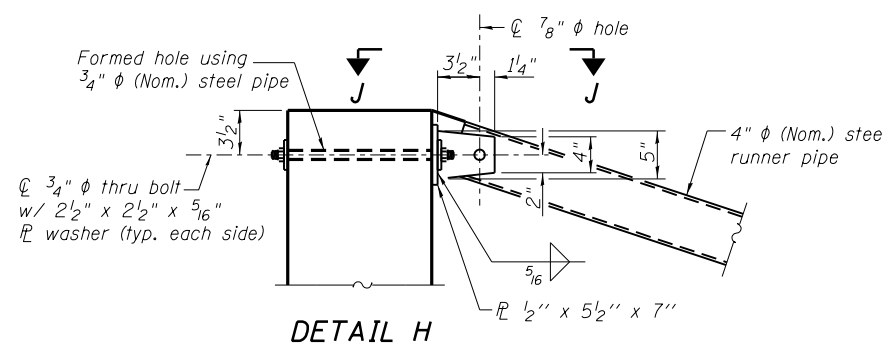
VIEW F-F

(See Detail A for dimensions and details not shown.)

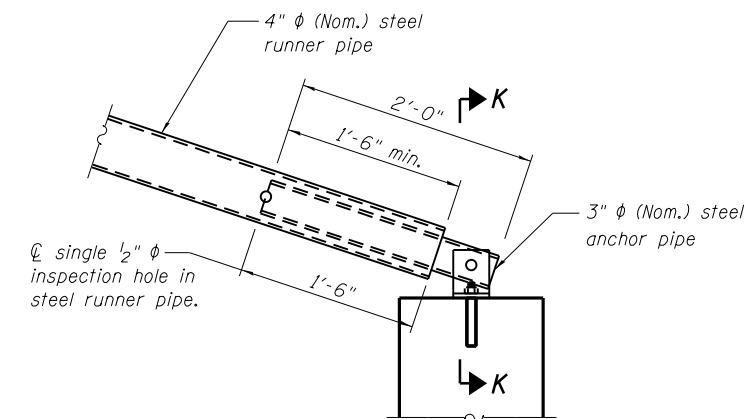


SECTION G-G

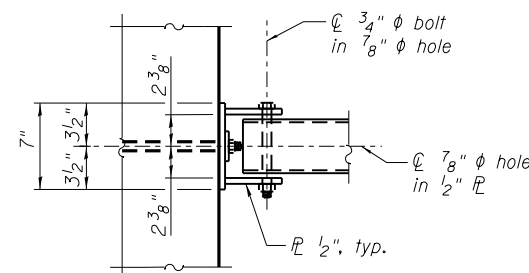
** Measured perpendicular to top of culvert wall. In addition, formed hole shall be located a minimum of 6" measured horizontally from any vertical joints necessary for construction of the culvert end section.



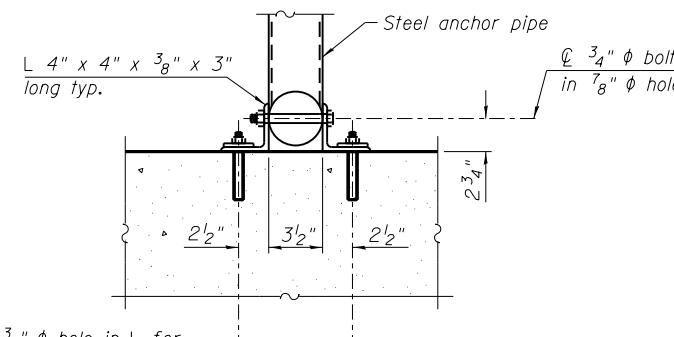
DETAIL H



DETAIL I



VIEW J-J



SECTION K-K

PIPE GRATE BRACKET DETAILS

BILL OF MATERIAL - PIPE GRATE

(For information only)

ITEM	UNIT	TOTAL
4" Galvanized Steel Pipe	Each	4
Pipe Grate Bracket	Each	8
3/4" Galvanized Bolt	Each	4

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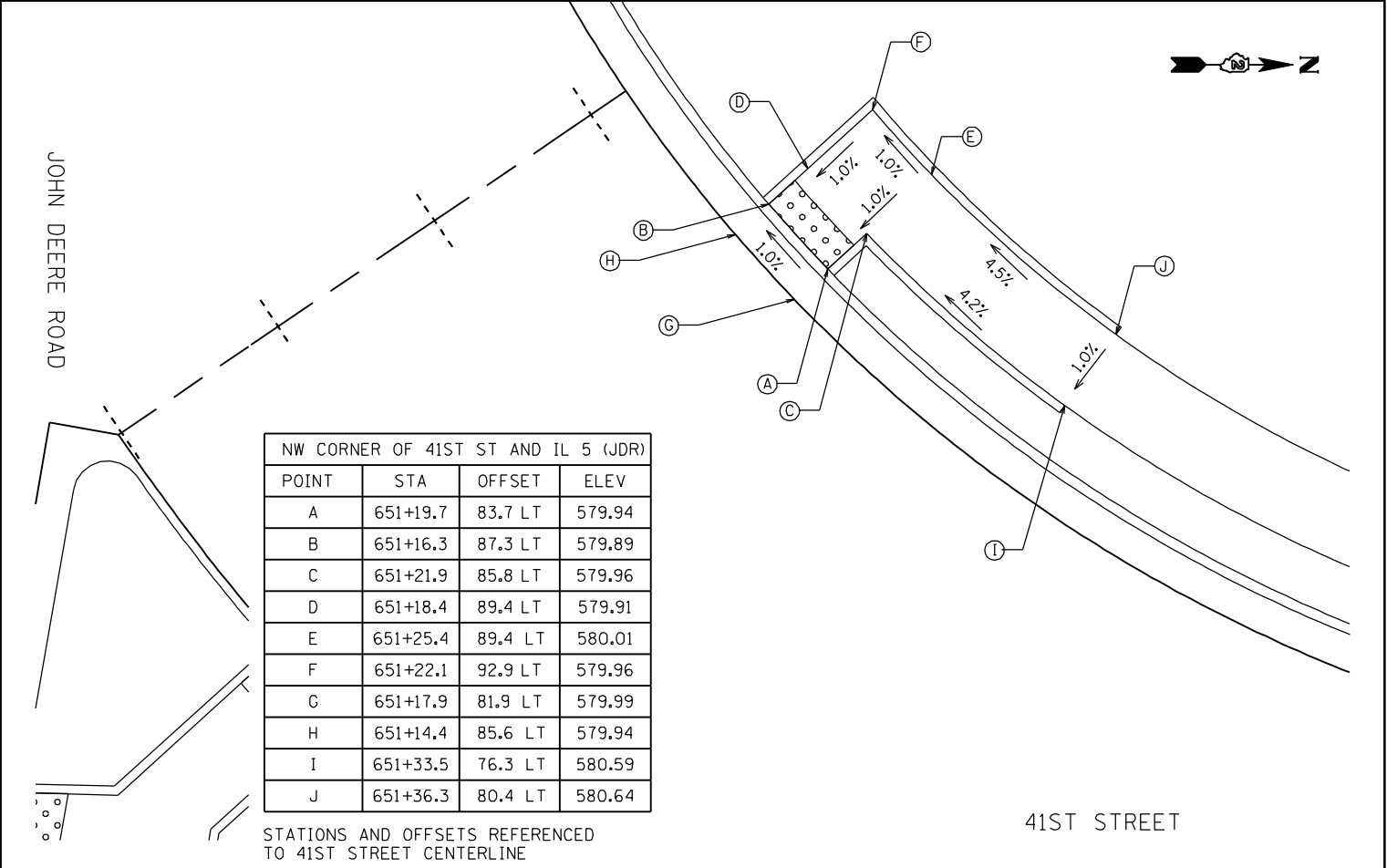
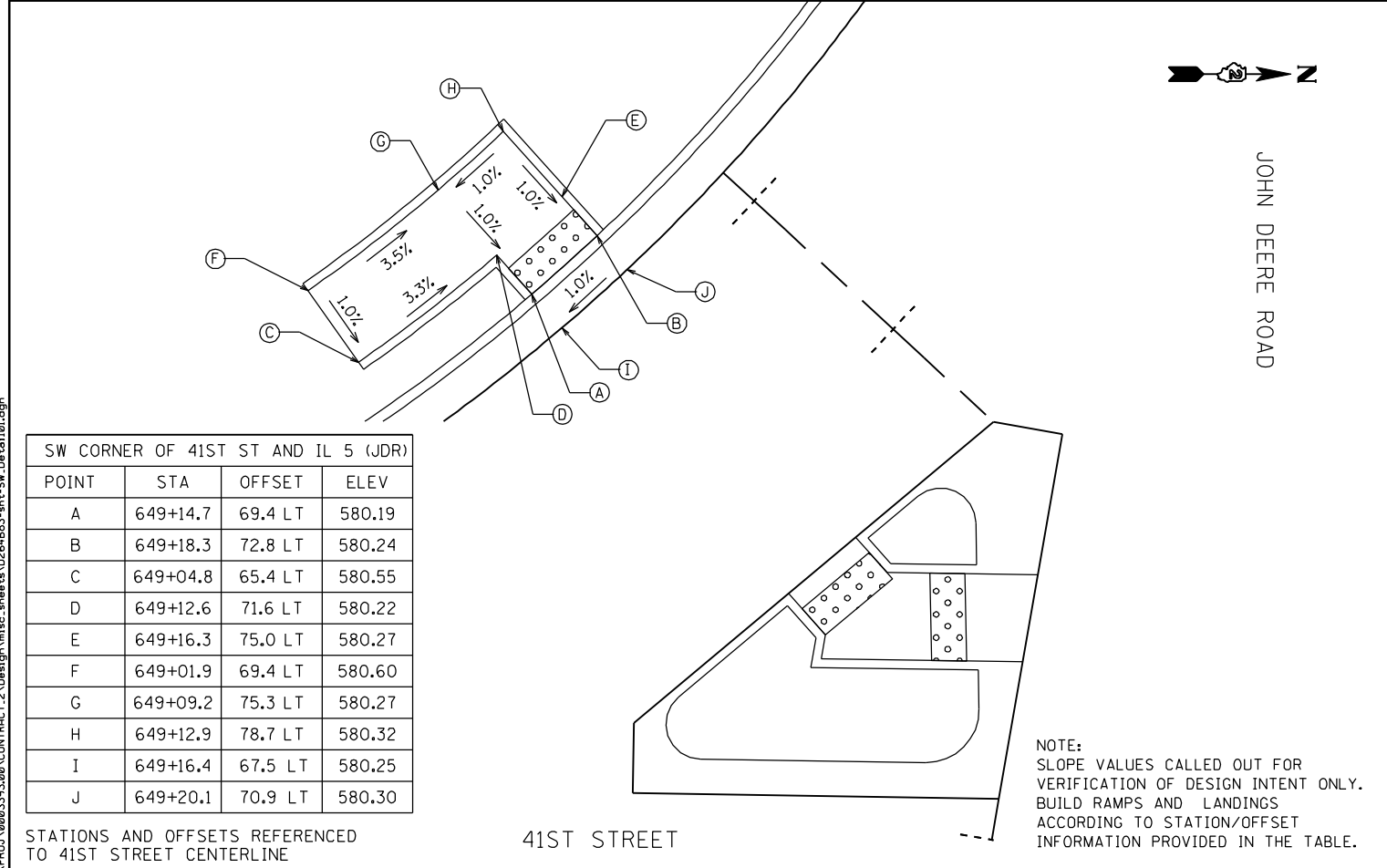
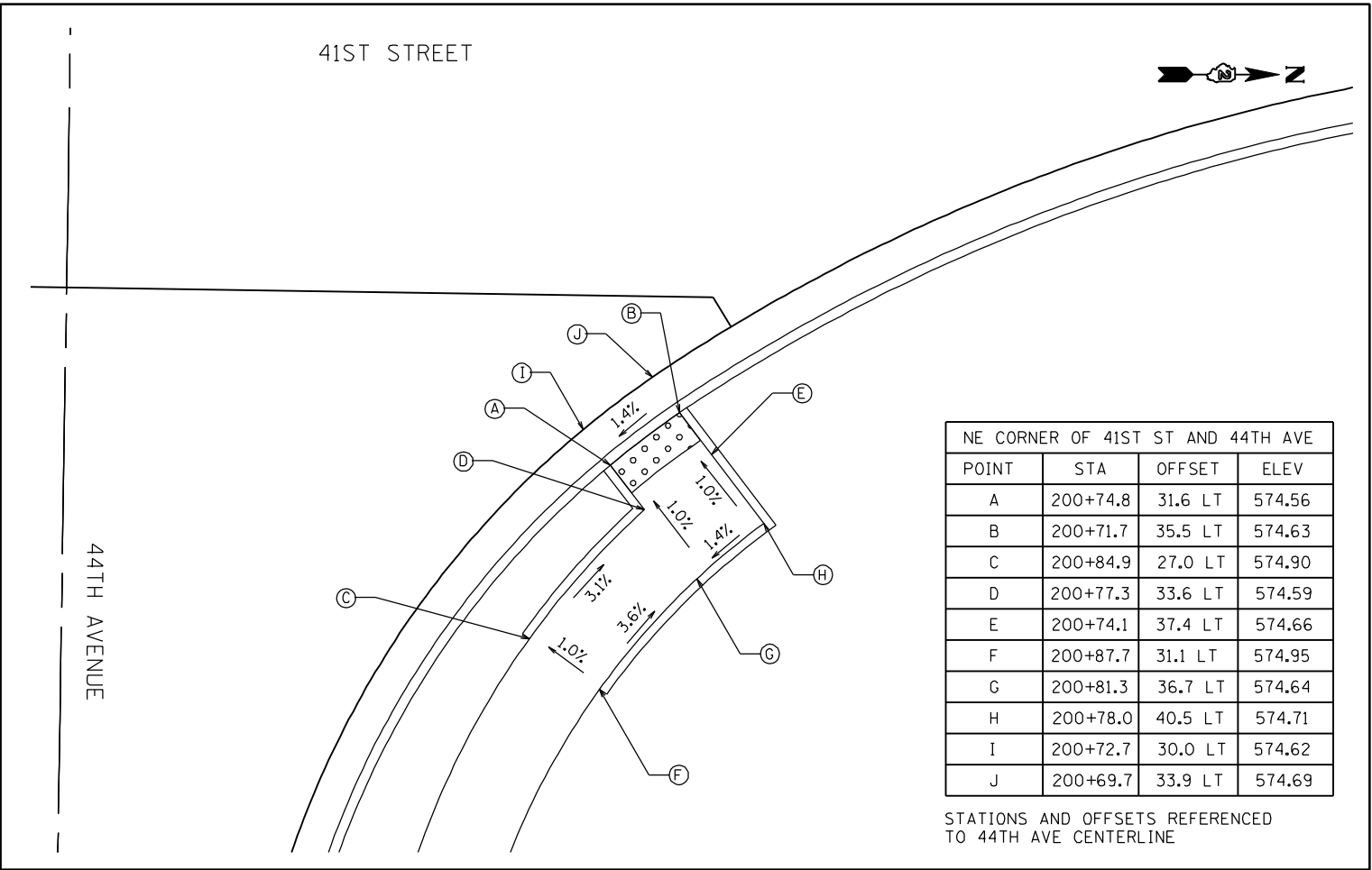
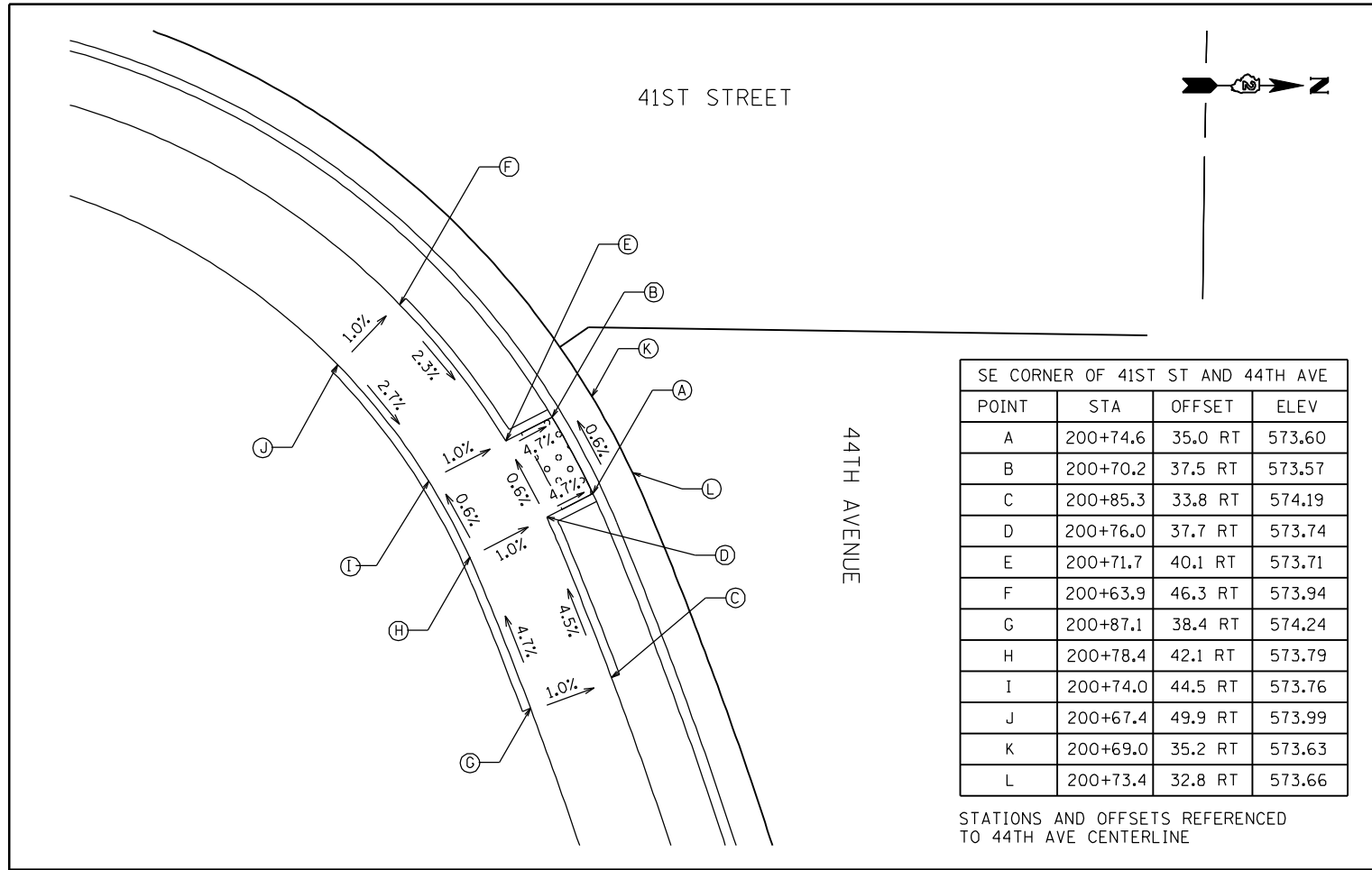
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PLOT DATE = 3/17/2015	CHECKED APD	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS - 2
S.N. 081-1123

SHEET NO. S0-3 OF S0-3 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1073
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64883	



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Ciorba Group, Inc.
CONSULTING ENGINEERS
6507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.776.4009 Fax 773.776.4014

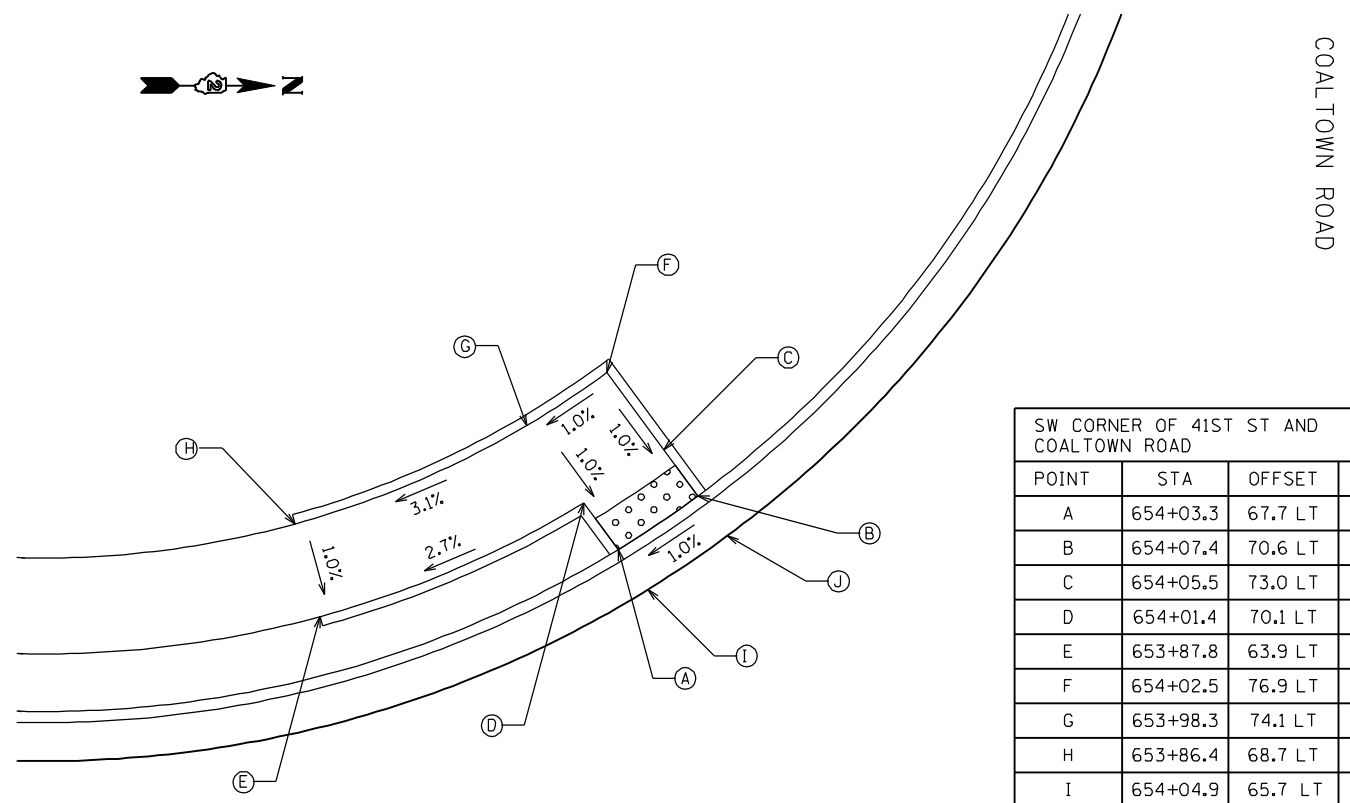
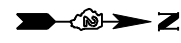
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	DATE - 12/19/2014	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK DETAILS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 64B83				
ILLINOIS FED. AID PROJECT				

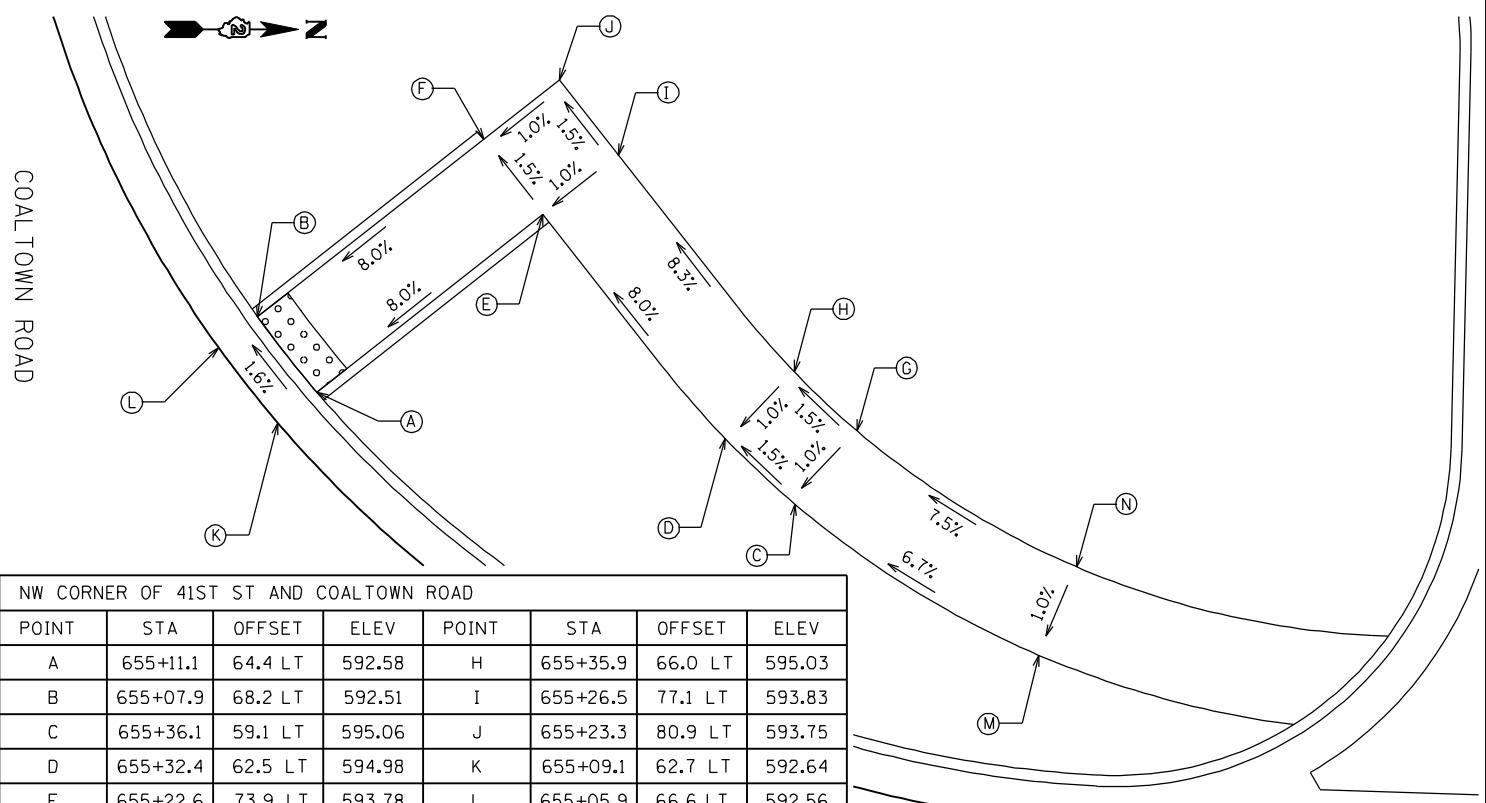


SW CORNER OF 41ST ST AND COALTOWN ROAD			
POINT	STA	OFFSET	ELEV
A	654+03.3	67.7 LT	587.86
B	654+07.4	70.6 LT	587.91
C	654+05.5	73.0 LT	587.93
D	654+01.4	70.1 LT	587.88
E	653+87.8	63.9 LT	587.47
F	654+02.5	76.9 LT	587.98
G	653+98.3	74.1 LT	587.93
H	653+86.4	68.7 LT	587.52
I	654+04.9	65.7 LT	587.91
J	654+08.9	68.6 LT	587.96

STATIONS AND OFFSETS REFERENCED TO 41ST ST CENTERLINE

41ST STREET

COALTOWN ROAD



NW CORNER OF 41ST ST AND COALTOWN ROAD							
POINT	STA	OFFSET	ELEV	POINT	STA	OFFSET	ELEV
A	655+11.1	64.4 LT	592.58	H	655+35.9	66.0 LT	595.03
B	655+07.9	68.2 LT	592.51	I	655+26.5	77.1 LT	593.83
C	655+36.1	59.1 LT	595.06	J	655+23.3	80.9 LT	593.75
D	655+32.4	62.5 LT	594.98	K	655+09.1	62.7 LT	592.64
E	655+22.6	73.9 LT	593.78	L	655+05.9	66.6 LT	592.56
F	655+19.5	77.7 LT	593.70	M	655+49.0	51.5 LT	596.07
G	655+39.2	63.0 LT	695.11	N	655+50.8	56.2 LT	596.12

STATIONS AND OFFSETS REFERENCED TO 41ST ST CENTERLINE

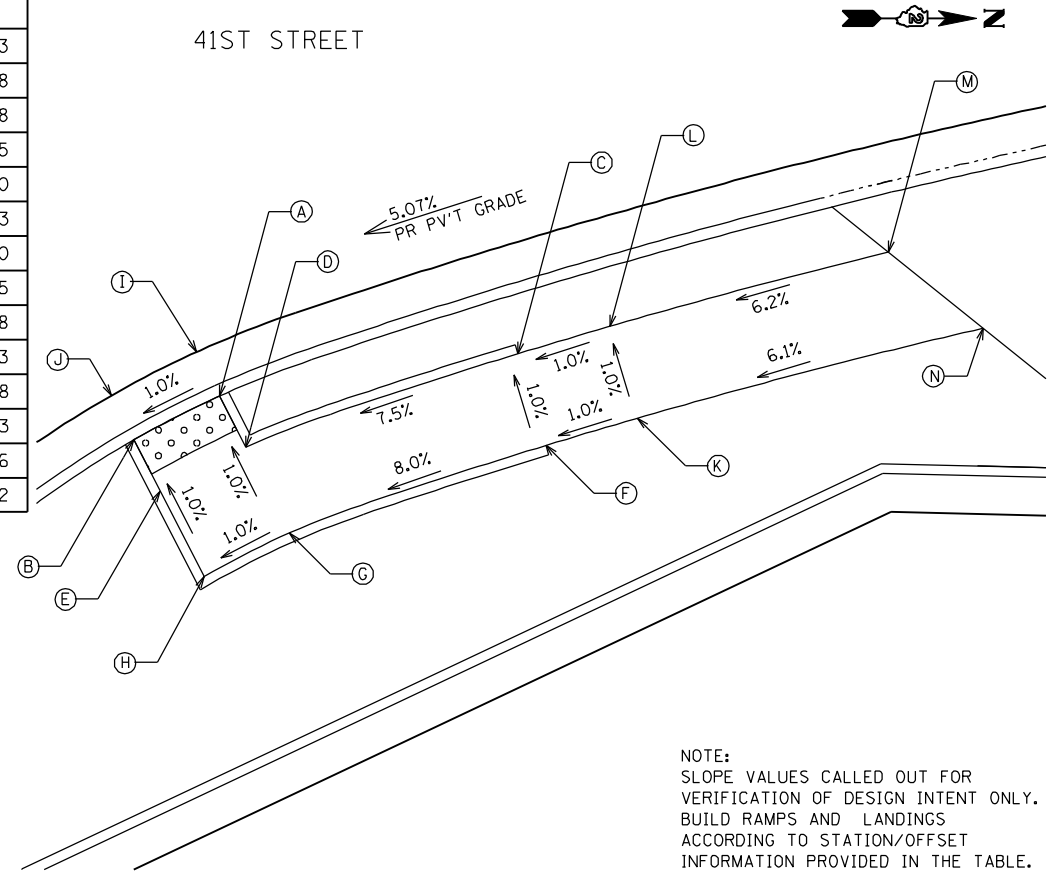
41ST STREET

NE CORNER OF 41ST ST AND COALTOWN ROAD			
POINT	STA	OFFSET	ELEV
A	654+90.1	59.1 RT	592.83
B	654+85.7	61.5 RT	592.78
C	655+05.6	56.5 RT	593.98
D	654+91.6	61.7 RT	592.85
E	654+87.2	64.1 RT	592.80
F	655+07.2	61.3 RT	594.03
G	654+93.9	66.1 RT	592.90
H	654+89.5	68.5 RT	592.85
I	654+88.9	56.8 RT	592.88
J	654+84.5	59.2 RT	592.83
K	655+11.9	59.8 RT	594.08
L	655+10.4	55.0 RT	594.03
M	655+24.8	50.8 RT	594.96
N	655+29.9	54.7 RT	595.22

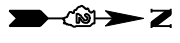
STATIONS AND OFFSETS REFERENCED TO 41ST ST CENTERLINE

COALTOWN ROAD

41ST STREET



NOTE:
SLOPE VALUES CALLED OUT FOR VERIFICATION OF DESIGN INTENT ONLY.
BUILD RAMPS AND LANDINGS ACCORDING TO STATION/OFFSET INFORMATION PROVIDED IN THE TABLE.



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Ciorba Group, Inc.
CONSULTING ENGINEERS
6507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.776.4009 Fax 773.776.4014

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK DETAILS

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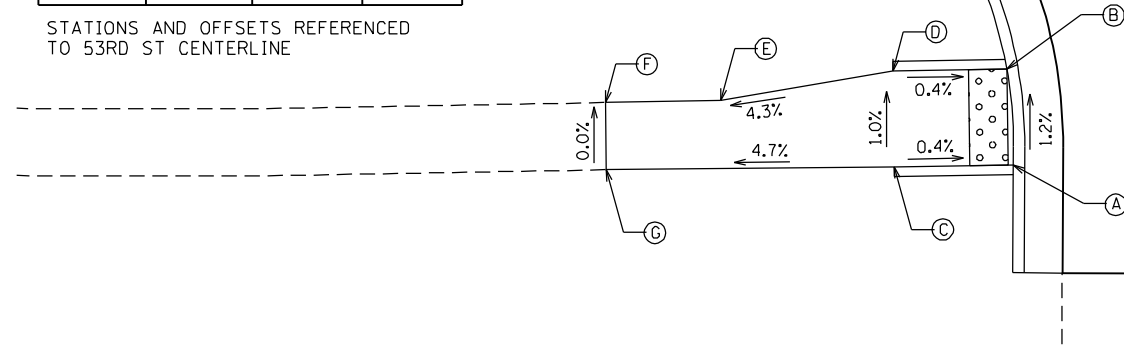
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595	(142-1, 142)R	ROCK ISLAND	1353	1075
CONTRACT NO. 64B83				
ILLINOIS FED. AID PROJECT				



53RD STREET

SE CORNER OF 53RD ST AND HILAND TOYOTA ENTRANCE			
POINT	STA	OFFSET	ELEV
A	693+36.2	48.1 RT	580.05
B	693+35.8	43.1 RT	579.99
C	693+30.0	48.2 RT	580.03
D	693+29.9	43.2 RT	579.97
E	693+20.9	44.7 RT	579.59
F	693+14.9	44.8 RT	EX 579.32
G	693+15.0	48.3 RT	EX 579.32

STATIONS AND OFFSETS REFERENCED TO 53RD ST CENTERLINE



HILAND TOYOTA ENTRANCE

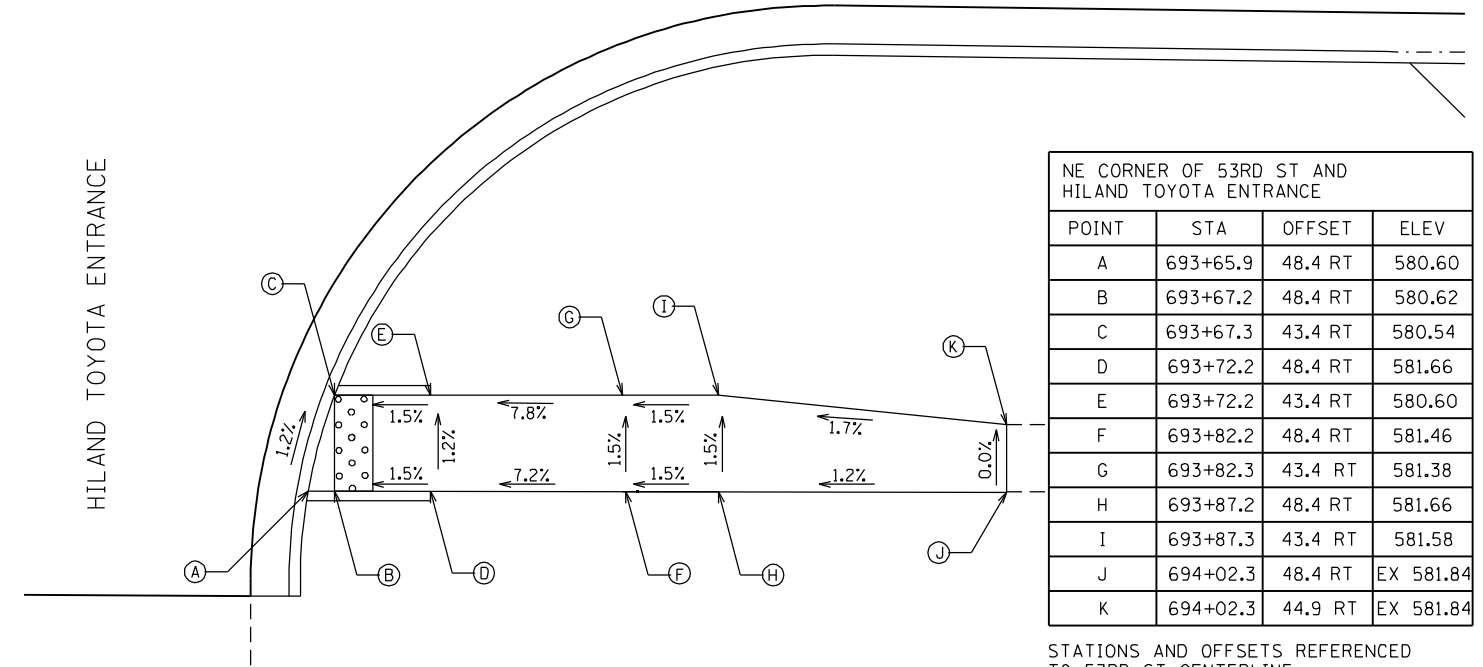


53RD STREET

NE CORNER OF 53RD ST AND HILAND TOYOTA ENTRANCE			
POINT	STA	OFFSET	ELEV
A	693+65.9	48.4 RT	580.60
B	693+67.2	48.4 RT	580.62
C	693+67.3	43.4 RT	580.54
D	693+72.2	48.4 RT	581.66
E	693+72.2	43.4 RT	580.60
F	693+82.2	48.4 RT	581.46
G	693+82.3	43.4 RT	581.38
H	693+87.2	48.4 RT	581.66
I	693+87.3	43.4 RT	581.58
J	694+02.3	48.4 RT	EX 581.84
K	694+02.3	44.9 RT	EX 581.84

STATIONS AND OFFSETS REFERENCED TO 53RD ST CENTERLINE

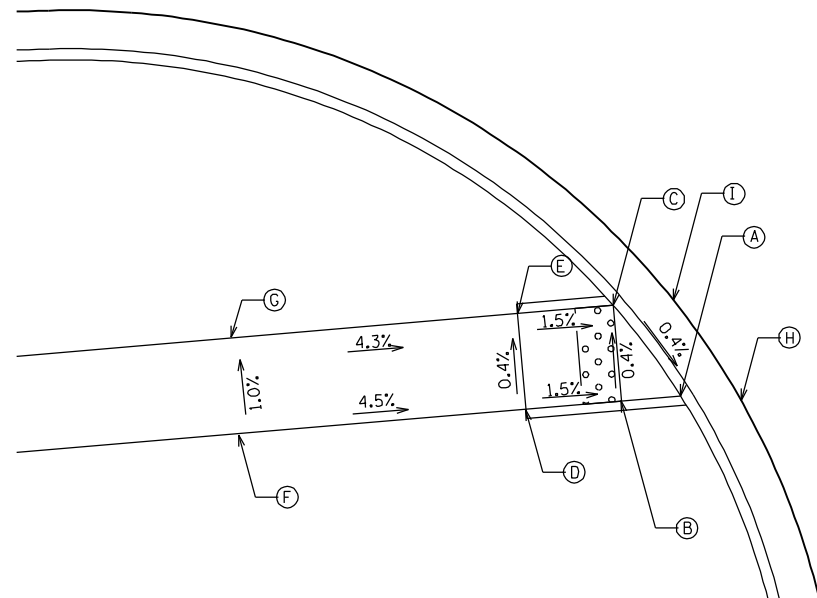
HILAND TOYOTA ENTRANCE



53RD STREET

SE CORNER OF 53RD ST AND 44TH AVENUE			
POINT	STA	OFFSET	ELEV
A	696+46.0	47.7 RT	582.70
B	696+43.0	47.7 RT	582.74
C	696+43.0	42.7 RT	582.72
D	696+38.1	47.6 RT	582.82
E	696+38.2	42.7 RT	582.79
F	696+23.5	47.5 RT	583.49
G	696+23.5	42.5 RT	583.44
H	696+48.8	47.8 RT	582.76
I	696+46.1	42.8 RT	582.78

STATIONS AND OFFSETS REFERENCED TO 53RD ST CENTERLINE



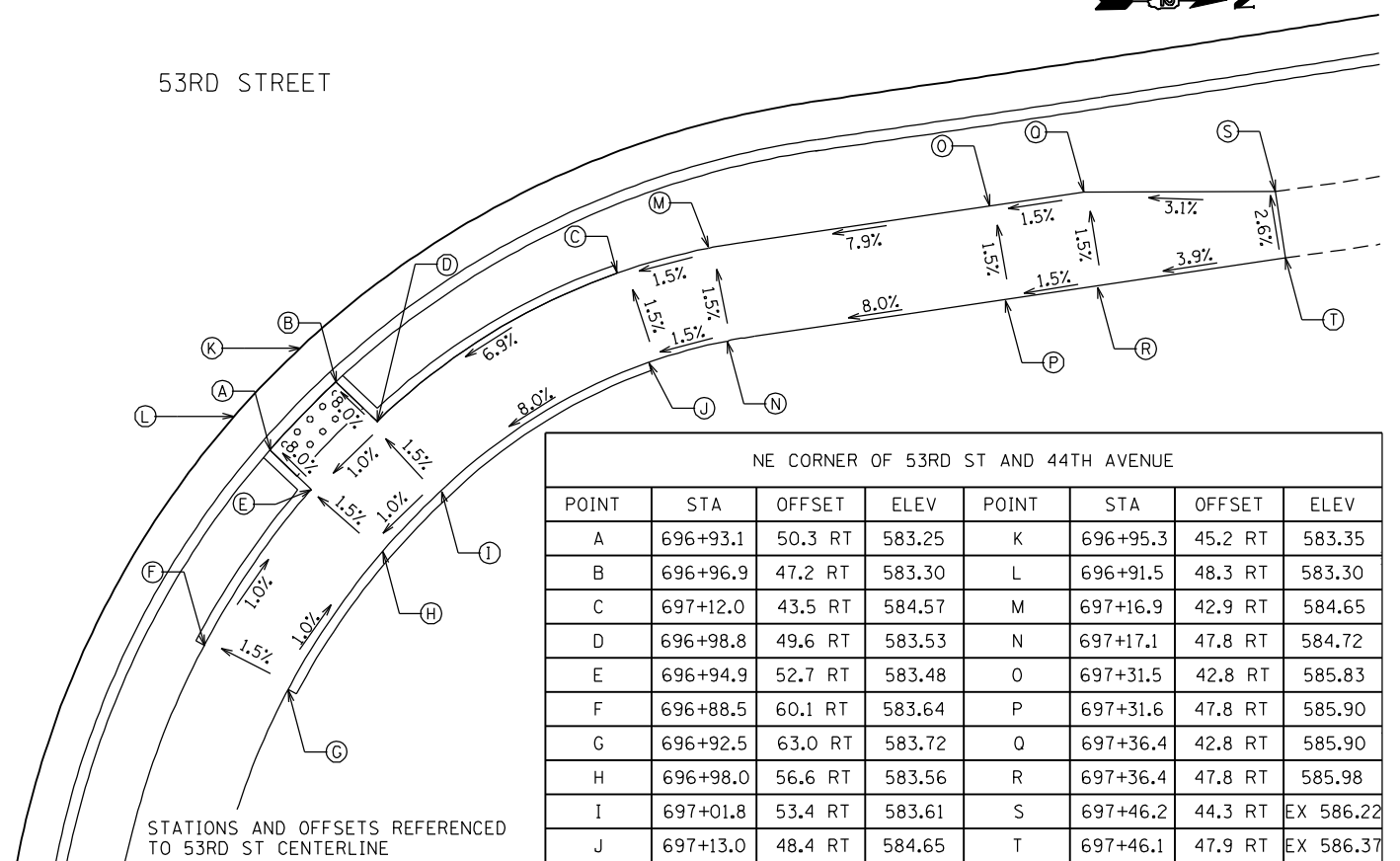
44TH AVENUE

NOTE: SLOPE VALUES CALLED OUT FOR VERIFICATION OF DESIGN INTENT ONLY. BUILD RAMP AND LANDINGS ACCORDING TO STATION/OFFSET INFORMATION PROVIDED IN THE TABLE.



53RD STREET

44TH AVENUE



NE CORNER OF 53RD ST AND 44TH AVENUE							
POINT	STA	OFFSET	ELEV	POINT	STA	OFFSET	ELEV
A	696+93.1	50.3 RT	583.25	K	696+95.3	45.2 RT	583.35
B	696+96.9	47.2 RT	583.30	L	696+91.5	48.3 RT	583.30
C	697+12.0	43.5 RT	584.57	M	697+16.9	42.9 RT	584.65
D	696+98.8	49.6 RT	583.53	N	697+17.1	47.8 RT	584.72
E	696+94.9	52.7 RT	583.48	O	697+31.5	42.8 RT	585.83
F	696+88.5	60.1 RT	583.64	P	697+31.6	47.8 RT	585.90
G	696+92.5	63.0 RT	583.72	Q	697+36.4	42.8 RT	585.90
H	696+98.0	56.6 RT	583.56	R	697+36.4	47.8 RT	585.98
I	697+01.8	53.4 RT	583.61	S	697+46.2	44.3 RT	EX 586.22
J	697+13.0	48.4 RT	584.65	T	697+46.1	47.9 RT	EX 586.37

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 CONSULTING ENGINEERS
 6507 North Cumberland Avenue, Suite 402
 Chicago, Illinois 60656
 Tel. 773.776.4009 Fax 773.776.4014

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	DATE - 12/19/2014	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

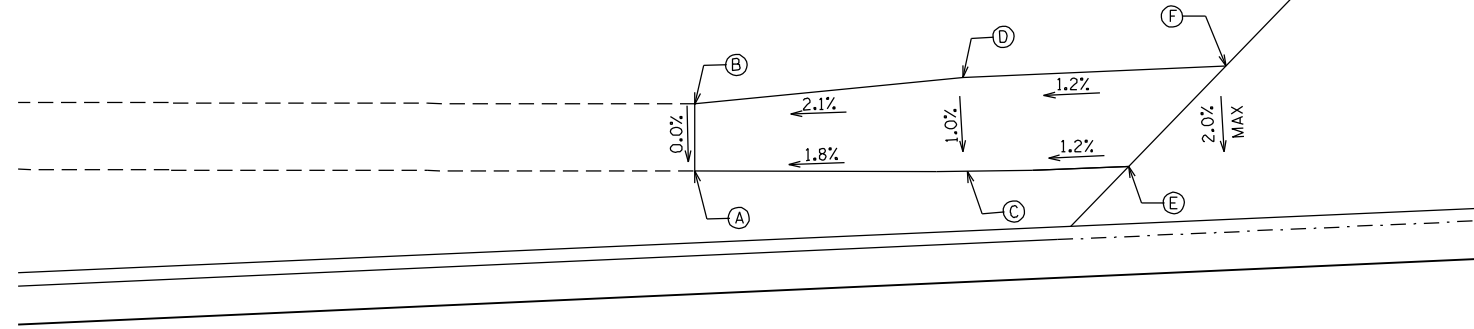
SIDEWALK DETAILS

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

F.A.P. RTE. 595	SECTION (142-1, 142)R	COUNTY ROCK ISLAND	TOTAL SHEETS 1353	SHEET NO. 1076
CONTRACT NO. 64B83			ILLINOIS FED. AID PROJECT	

SIDEWALK @ PE STA 694+11 LT SOUTH RAMP			
POINT	STA	OFFSET	ELEV
A	693+64.6	30.6 LT	EX 580.86
B	693+64.6	34.1 LT	EX 580.86
C	693+78.8	30.8 LT	581.11
D	693+78.6	35.4 LT	581.16
E	693+87.2	30.8 LT	581.21
F	693+92.3	36.1 LT	581.32

STATIONS AND OFFSETS REFERENCED
TO 53RD ST CENTERLINE

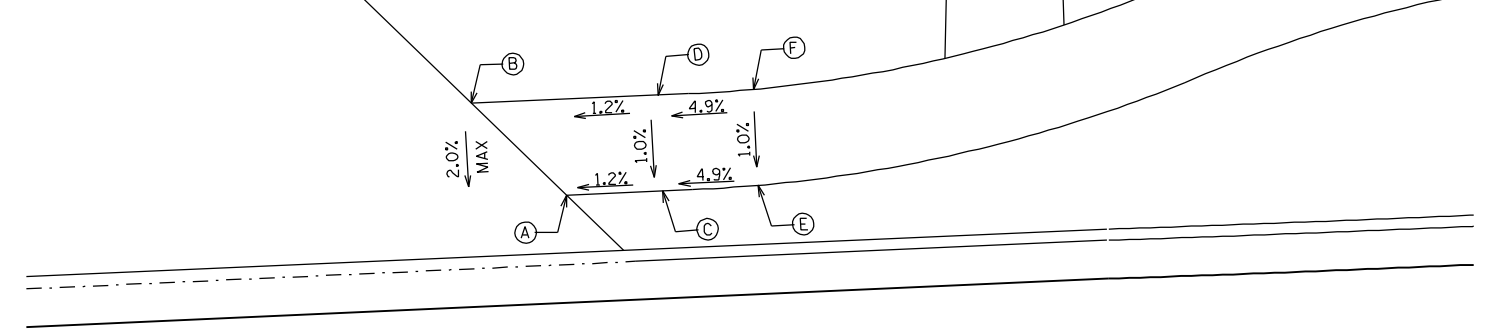


53RD STREET

NOTE:
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BUILD RAMPS AND LANDINGS
ACCORDING TO STATION/OFFSET
INFORMATION PROVIDED IN THE TABLE.

SIDEWALK @ PE STA 694+11 LT NORTH RAMP			
POINT	STA	OFFSET	ELEV
A	694+35.3	32.9 LT	582.01
B	694+30.4	37.7 LT	582.01
C	694+40.3	33.2 LT	582.07
D	694+40.1	38.2 LT	582.13
E	694+45.3	33.5 LT	582.32
F	694+45.1	38.5 LT	582.37

STATIONS AND OFFSETS REFERENCED
TO 53RD ST CENTERLINE



53RD STREET

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK DETAILS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1077
CONTRACT NO. 64B83			ILLINOIS FED. AID PROJECT	

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

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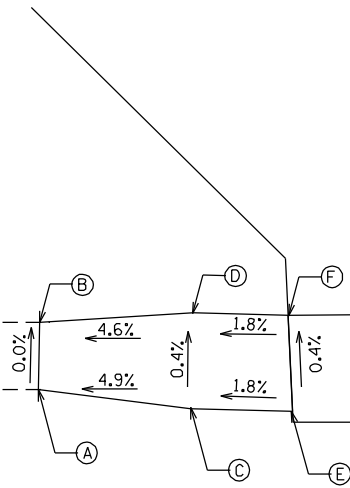
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PLOT DATE = 7/16/2015	DATE - 12/19/2014	REVISED -

SIDEWALK RAMPS @ PE STA 694+51 RT 53RD STREET			
POINT	STA	OFFSET	ELEV
A	694+26.1	48.4 RT	EX 582.46
B	694+26.2	44.9 RT	EX 582.46
C	694+34.0	49.4 RT	582.85
D	694+34.2	44.4 RT	582.83
E	694+39.4	49.5 RT	EX 582.94
F	694+39.1	44.5 RT	582.92



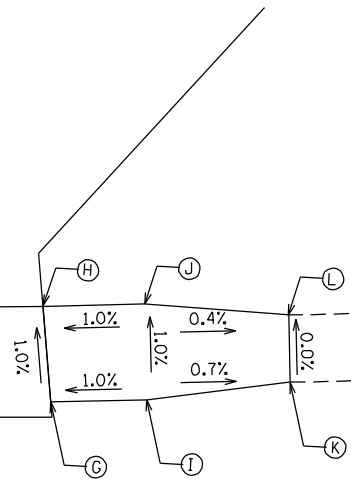
53RD STREET

STATIONS AND OFFSETS REFERENCED TO 53RD ST CENTERLINE



SIDEWALK RAMPS @ PE STA 694+51 RT 53RD STREET			
POINT	STA	OFFSET	ELEV
G	694+63.8	49.3 RT	EX 583.03
H	694+63.4	44.3 RT	582.98
I	694+68.7	49.2 RT	583.05
J	694+68.6	44.2 RT	583.03
K	694+75.9	48.3 RT	EX 583.00
L	694+75.9	44.8 RT	EX 583.00

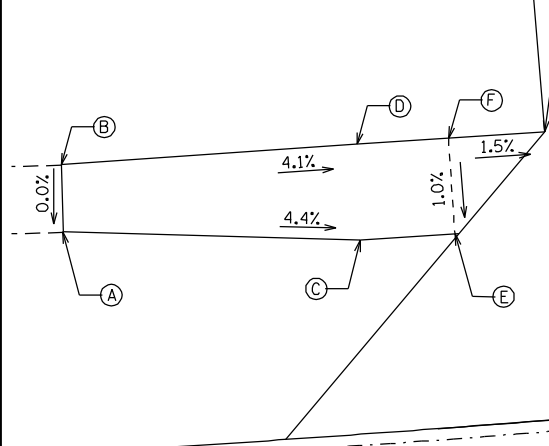
STATIONS AND OFFSETS REFERENCED TO 53RD ST CENTERLINE



SIDEWALK RAMPS @ PE STA 695+54 LT 53RD STREET			
POINT	STA	OFFSET	ELEV
A	695+16.5	44.4 LT	EX 584.16
B	695+16.6	47.9 LT	EX 584.16
C	695+32.4	43.5 LT	583.53
D	695+32.4	48.5 LT	583.59
E	695+37.5	43.6 LT	583.29
F	695+37.3	48.6 LT	583.34
G	695+42.5	48.7 LT	583.27

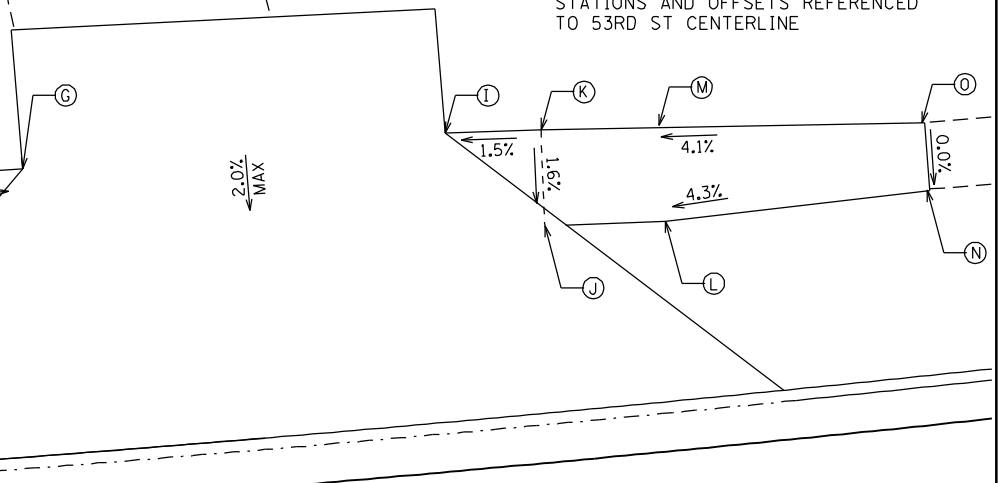


STATIONS AND OFFSETS REFERENCED TO 53RD ST CENTERLINE



SIDEWALK RAMPS @ PE STA 695+54 LT 53RD STREET			
POINT	STA	OFFSET	ELEV
I	695+65.2	49.5 LT	583.36
J	695+70.2	44.4 LT	583.39
K	695+70.3	49.4 LT	583.43
L	695+76.6	44.2 LT	583.68
M	695+76.6	49.2 LT	583.72
N	695+90.8	44.9 LT	EX 584.24
O	695+90.8	48.5 LT	EX 584.23

STATIONS AND OFFSETS REFERENCED TO 53RD ST CENTERLINE

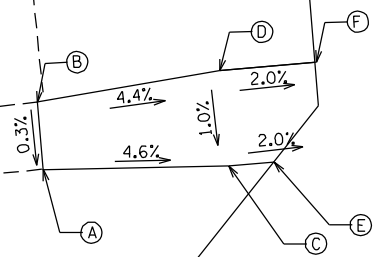


53RD STREET

SIDEWALK RAMPS @ PE STA 694+51 LT 53RD STREET			
POINT	STA	OFFSET	ELEV
A	696+24.8	45.0 LT	EX 584.34
B	696+24.8	48.6 LT	EX 584.35
C	696+34.6	44.3 LT	583.57
D	696+34.7	49.3 LT	583.58
E	696+37.1	44.3 LT	583.42
F	696+39.8	44.3 LT	583.48



STATIONS AND OFFSETS REFERENCED TO 53RD ST CENTERLINE



53RD STREET

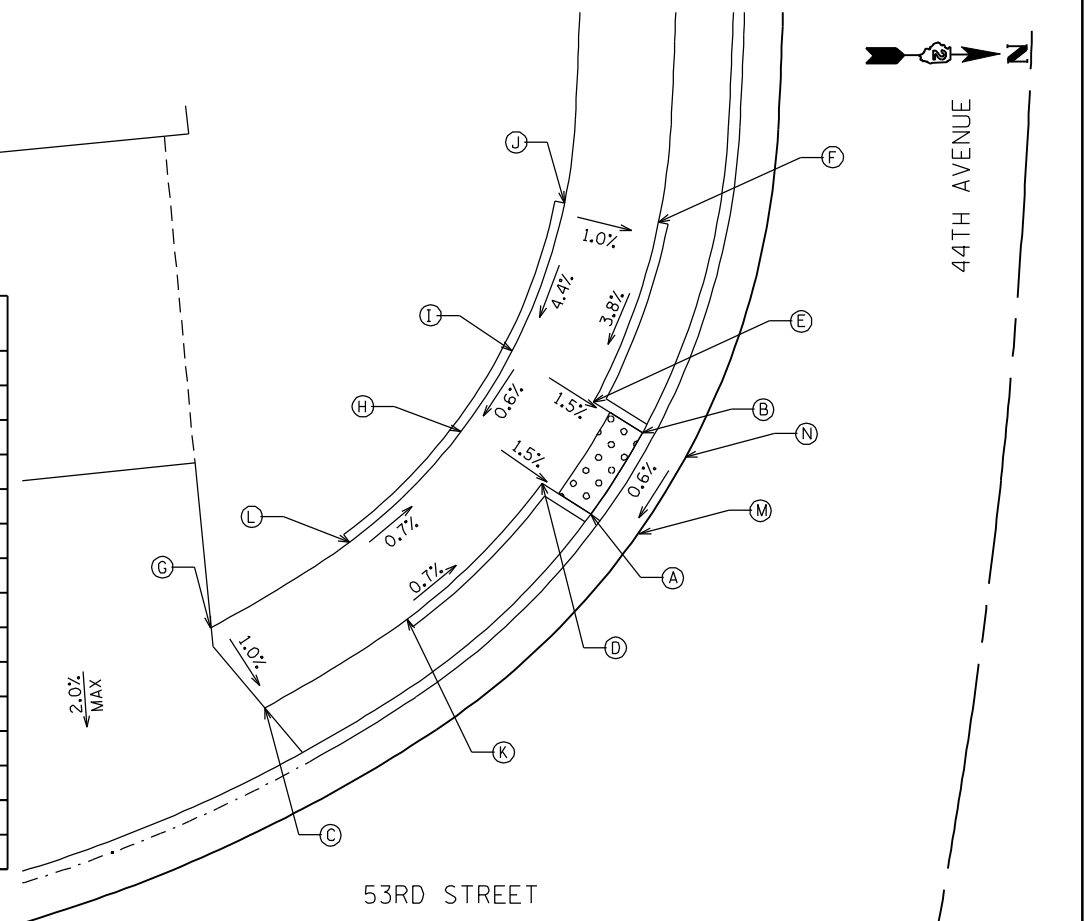
NOTE:
SLOPE VALUES CALLED OUT FOR VERIFICATION OF DESIGN INTENT ONLY. BUILD RAMPS AND LANDINGS ACCORDING TO STATION/OFFSET INFORMATION PROVIDED IN THE TABLE.

SW CORNER OF 53RD ST AND 44TH AVENUE			
POINT	STA	OFFSET	ELEV
A	479+52.5	21.0 RT	583.03
B	479+47.7	18.8 RT	583.06
C	479+66.0	36.5 RT	583.22
D	479+51.1	23.7 RT	583.08
E	479+46.3	21.5 RT	583.11
F	479+36.0	18.9 RT	583.49
G	479+61.8	39.9 RT	583.27
H	479+48.7	28.2 RT	583.15
I	479+43.8	26.0 RT	583.18
J	479+35.3	23.9 RT	583.54
K	479+59.7	29.8 RT	583.15
L	479+55.8	33.3 RT	583.21
M	479+47.8	30.0 RT	583.09
N	479+44.0	26.8 RT	583.12



44TH AVENUE

STATIONS AND OFFSETS REFERENCED TO 44TH AVENUE CENTERLINE



53RD STREET

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK DETAILS

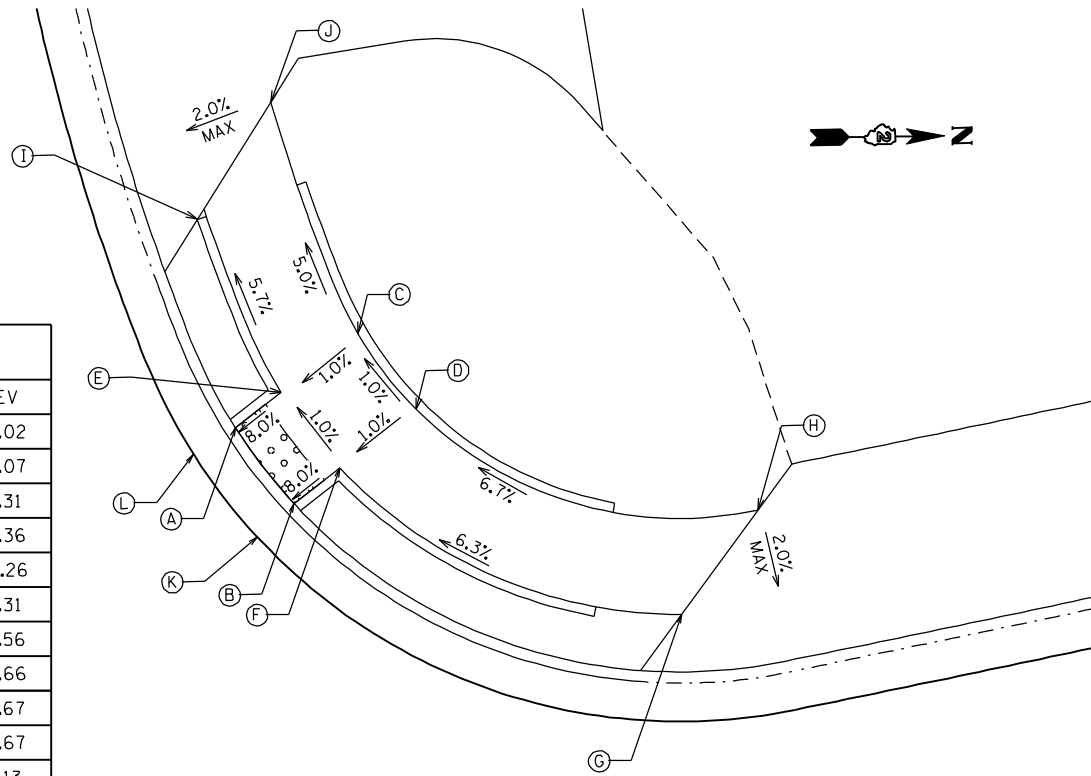
SCALE: *ADASCALE SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1078
CONTRACT NO. 64B83				
ILLINOIS FED. AID PROJECT				

NW CORNER OF 53RD ST AND 44TH AVENUE

POINT	STA	OFFSET	ELEV
A	697+34.3	57.6 LT	584.02
B	697+36.8	53.2 LT	584.07
C	697+41.6	61.4 LT	584.31
D	697+44.0	57.0 LT	584.36
E	697+37.0	59.0 LT	584.26
F	697+39.5	54.6 LT	584.31
G	697+56.4	44.3 LT	585.56
H	697+61.3	49.0 LT	585.66
I	697+33.9	68.6 LT	583.67
J	697+38.8	74.0 LT	583.67
K	697+34.4	51.9 LT	584.13
L	697+31.9	56.3 LT	584.08

STATIONS AND OFFSETS REFERENCED TO 53RD STREET CENTERLINE



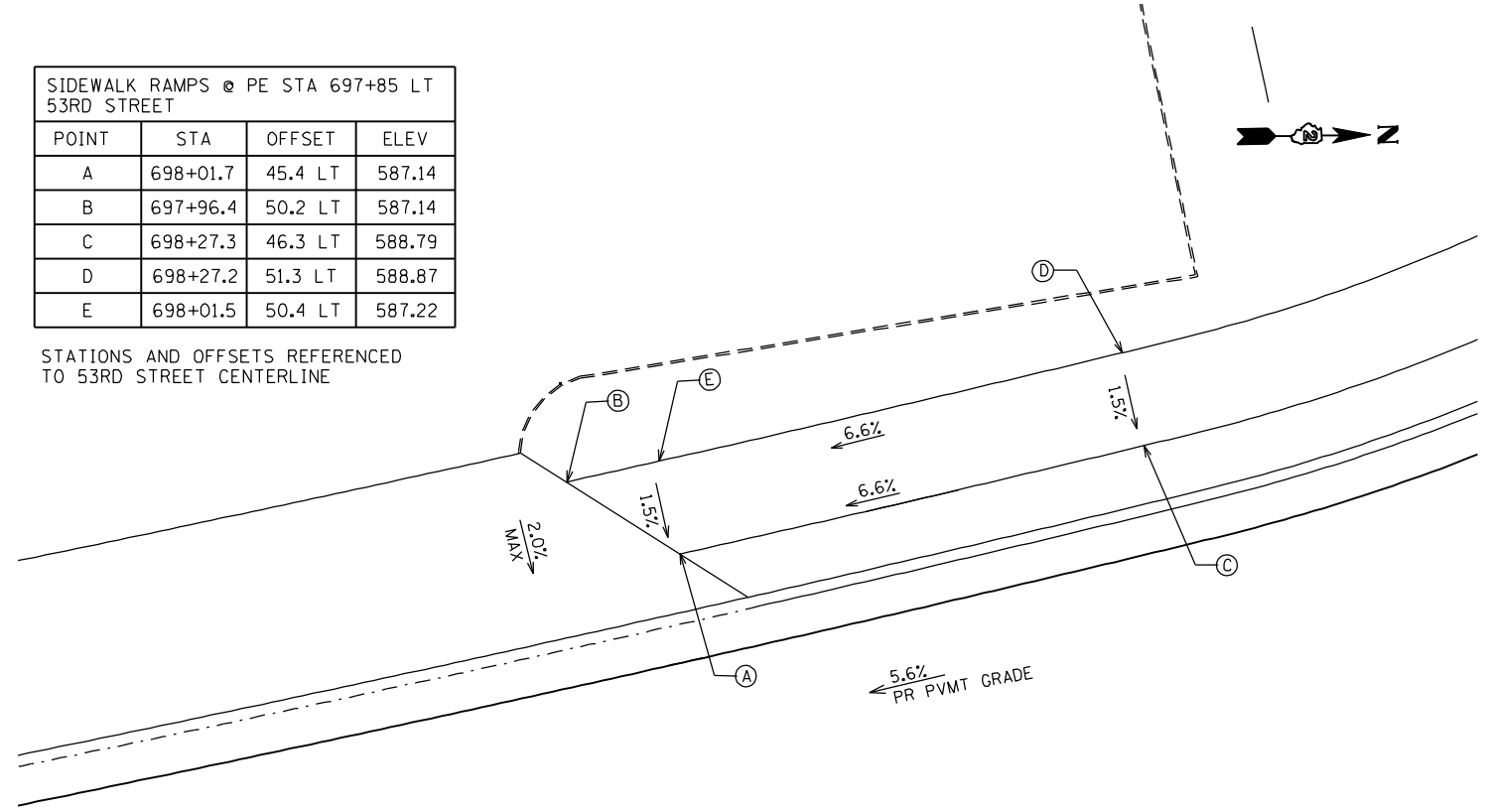
53RD STREET

NOTE:
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SIDEWALK RAMPS @ PE STA 697+85 LT 53RD STREET

POINT	STA	OFFSET	ELEV
A	698+01.7	45.4 LT	587.14
B	697+96.4	50.2 LT	587.14
C	698+27.3	46.3 LT	588.79
D	698+27.2	51.3 LT	588.87
E	698+01.5	50.4 LT	587.22

STATIONS AND OFFSETS REFERENCED TO 53RD STREET CENTERLINE



53RD STREET

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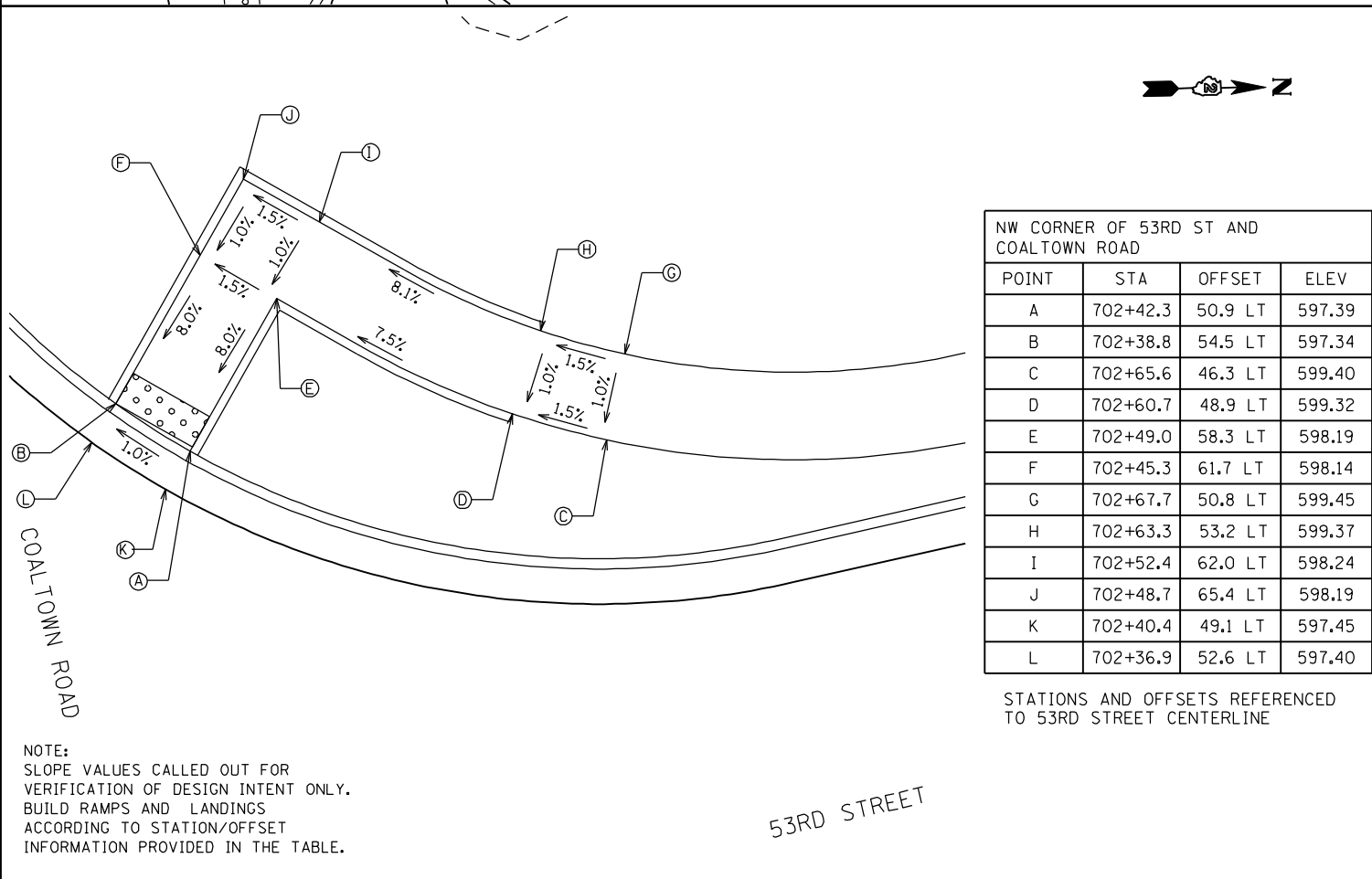
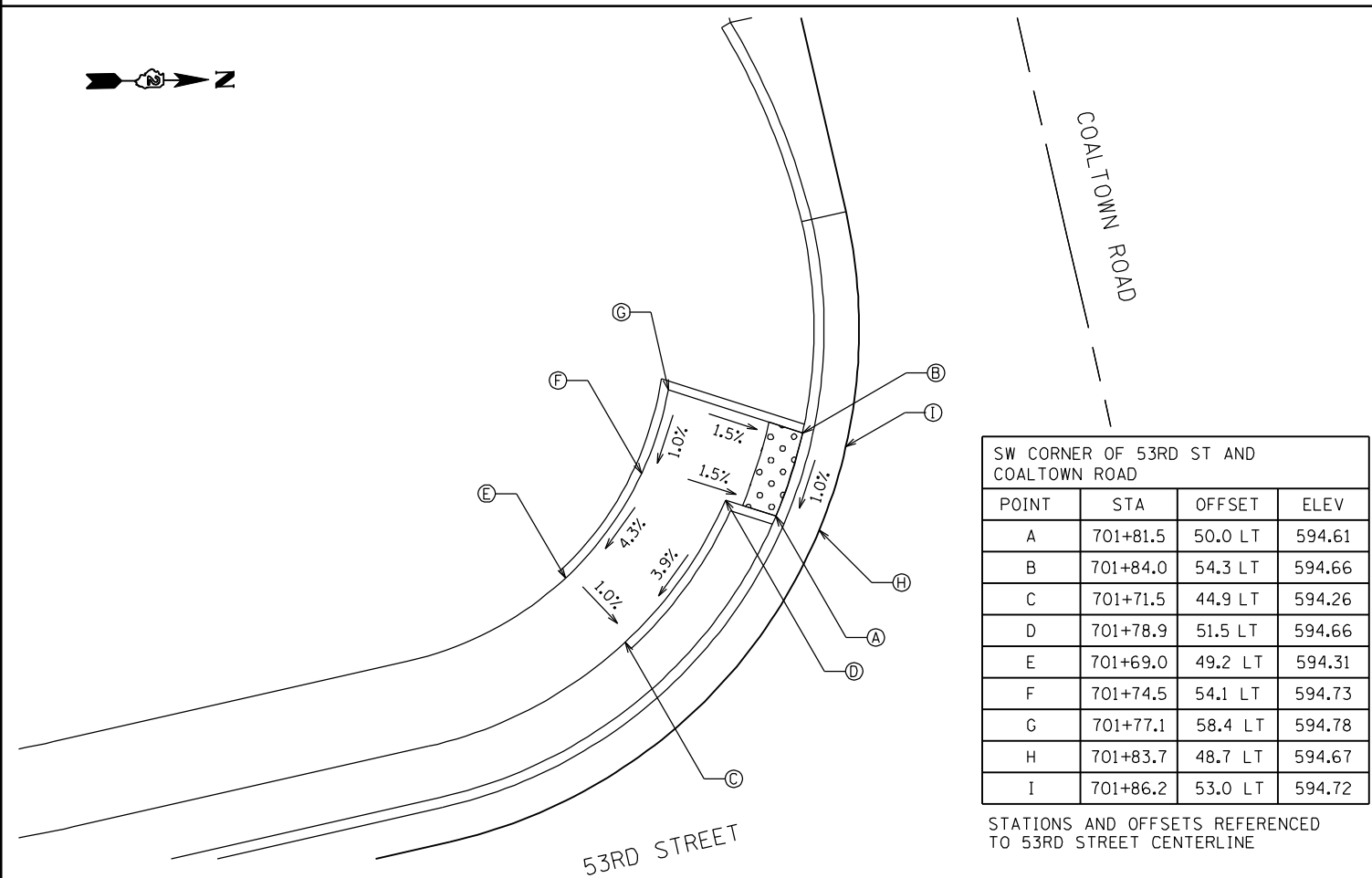
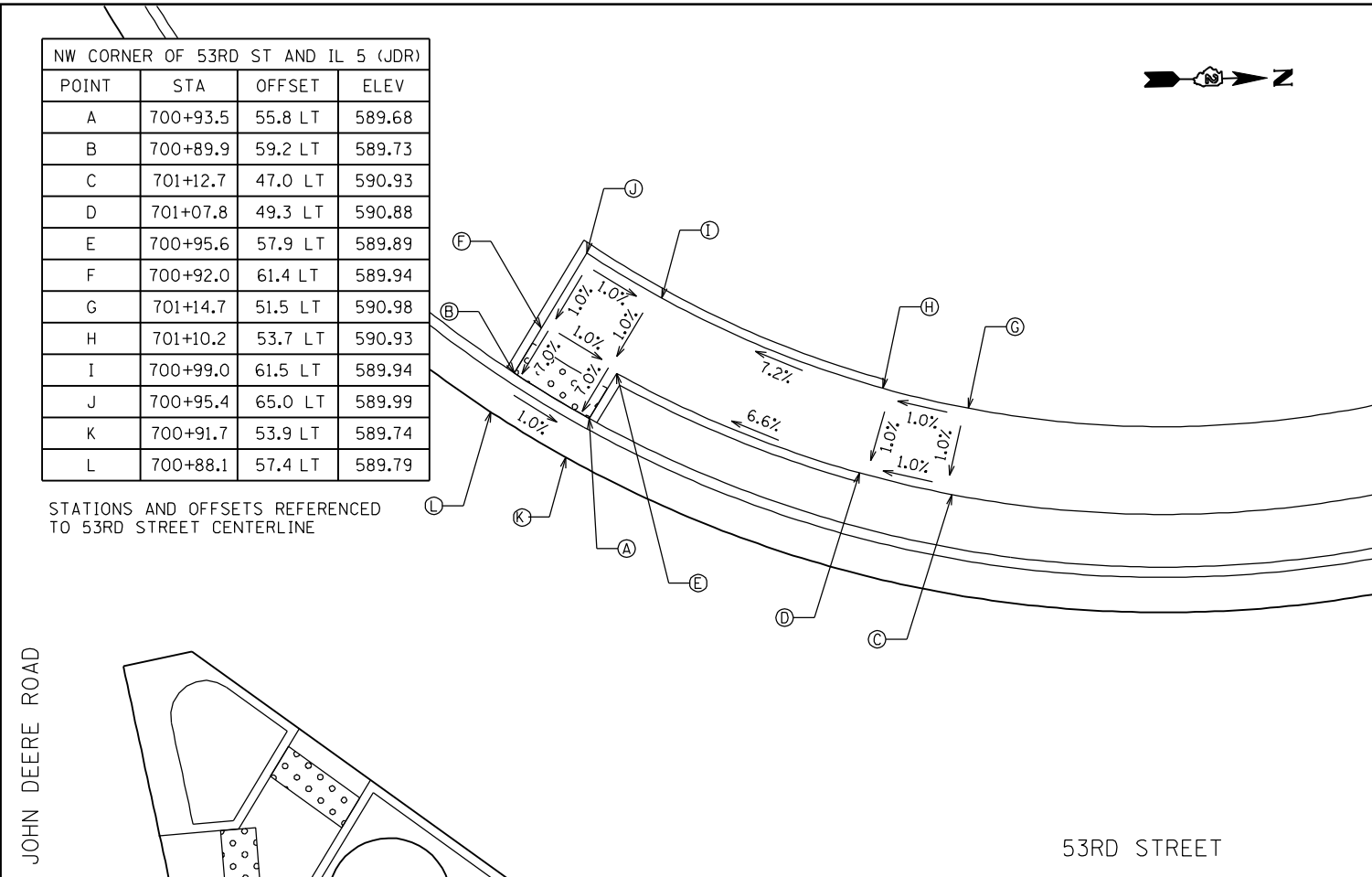
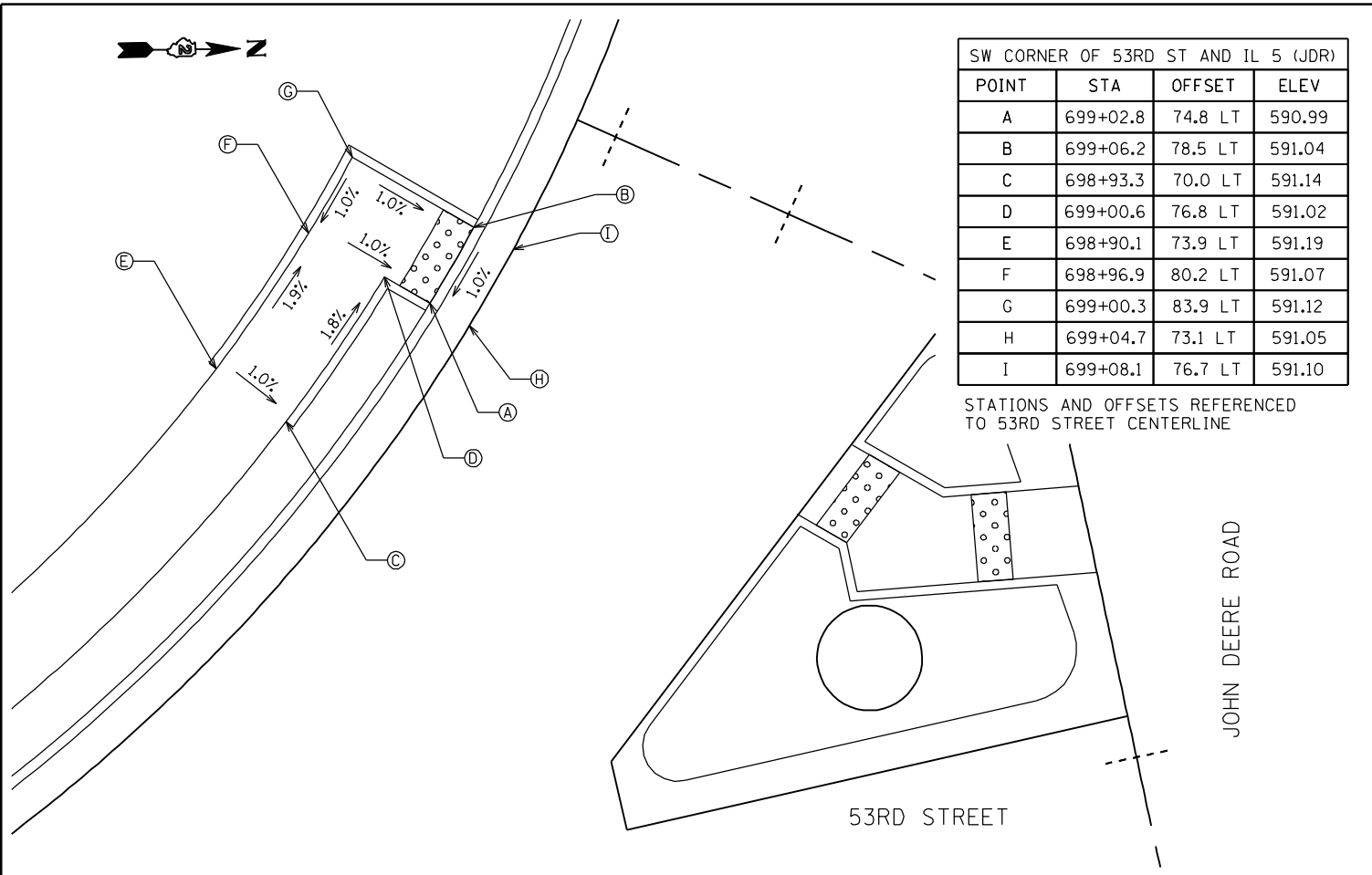
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK DETAILS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1079
CONTRACT NO. 64B83			ILLINOIS FED. AID PROJECT	



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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SIDEWALK DETAILS

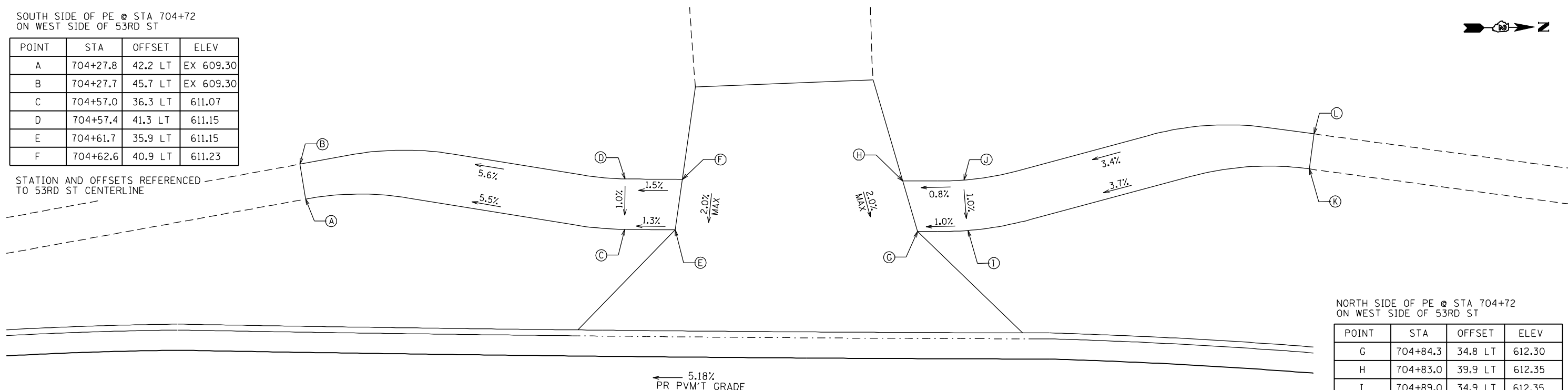
SCALE: *ADASCALE SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1080
CONTRACT NO. 64B83				
ILLINOIS FED. AID PROJECT				

SOUTH SIDE OF PE @ STA 704+72
ON WEST SIDE OF 53RD ST

POINT	STA	OFFSET	ELEV
A	704+27.8	42.2 LT	EX 609.30
B	704+27.7	45.7 LT	EX 609.30
C	704+57.0	36.3 LT	611.07
D	704+57.4	41.3 LT	611.15
E	704+61.7	35.9 LT	611.15
F	704+62.6	40.9 LT	611.23

STATION AND OFFSETS REFERENCED
TO 53RD ST CENTERLINE



53RD STREET

NOTE:
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BUILD RAMPS AND LANDINGS
ACCORDING TO STATION/OFFSET
INFORMATION PROVIDED IN TABLE.

NORTH SIDE OF PE @ STA 704+72
ON WEST SIDE OF 53RD ST

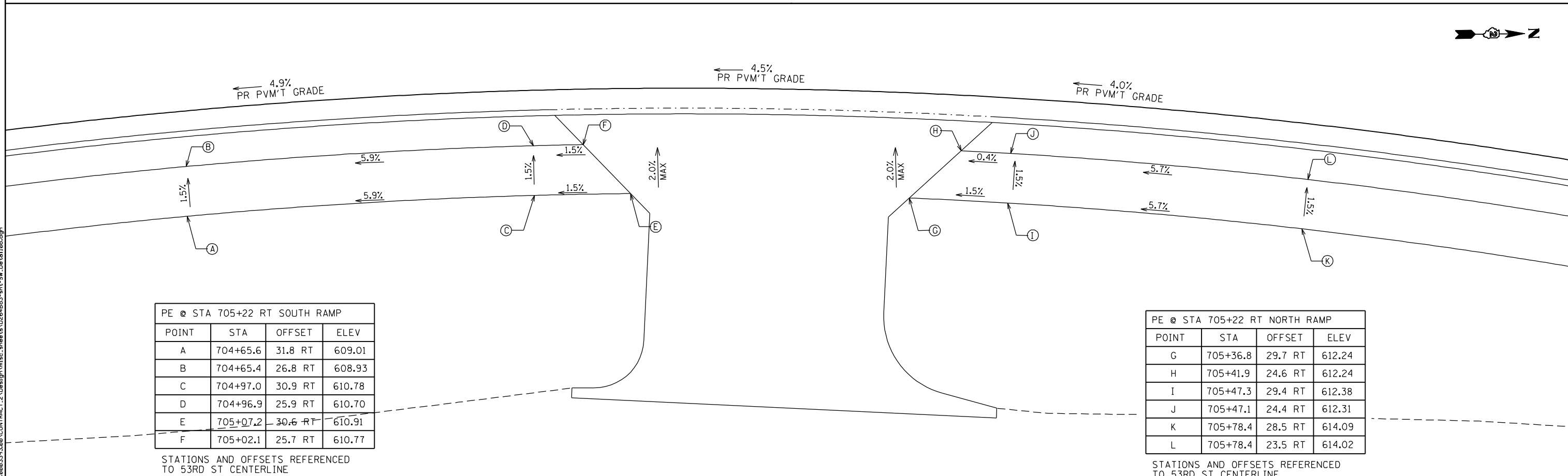
POINT	STA	OFFSET	ELEV
G	704+84.3	34.8 LT	612.30
H	704+83.0	39.9 LT	612.35
I	704+89.0	34.9 LT	612.35
J	704+88.8	39.8 LT	612.40
K	705+20.6	41.5 LT	EX 613.61
L	705+20.9	45.0 LT	EX 613.61

STATION AND OFFSETS REFERENCED
TO 53RD ST CENTERLINE

4.5%
PR PVM'T GRADE

4.9%
PR PVM'T GRADE

4.0%
PR PVM'T GRADE



PE @ STA 705+22 RT SOUTH RAMP			
POINT	STA	OFFSET	ELEV
A	704+65.6	31.8 RT	609.01
B	704+65.4	26.8 RT	608.93
C	704+97.0	30.9 RT	610.78
D	704+96.9	25.9 RT	610.70
E	705+07.2	30.6 RT	610.91
F	705+02.1	25.7 RT	610.77

STATIONS AND OFFSETS REFERENCED
TO 53RD ST CENTERLINE

PE @ STA 705+22 RT NORTH RAMP			
POINT	STA	OFFSET	ELEV
G	705+36.8	29.7 RT	612.24
H	705+41.9	24.6 RT	612.24
I	705+47.3	29.4 RT	612.38
J	705+47.1	24.4 RT	612.31
K	705+78.4	28.5 RT	614.09
L	705+78.4	23.5 RT	614.02

STATIONS AND OFFSETS REFERENCED
TO 53RD ST CENTERLINE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK DETAILS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1081
CONTRACT NO. 64B83				

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

ILLINOIS FED. AID PROJECT

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481

SIDEWALK RAMPS @ PE STA 481+45 LT 44TH AVENUE			
POINT	STA	OFFSET	ELEV
A	481+17.2	18.6 LT	583.51
B	481+17.2	23.6 LT	583.46
C	481+27.8	18.6 LT	583.28
D	481+27.8	23.6 LT	583.33
E	481+30.4	18.6 LT	583.25
F	481+33.2	23.6 LT	583.33

STATIONS AND OFFSETS REFERENCED TO 44TH AVENUE CENTERLINE

NOTE:
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SIDEWALK RAMPS @ PE STA 481+45 LT 44TH AVENUE			
POINT	STA	OFFSET	ELEV
A	481+70.1	18.0 LT	583.16
B	481+67.2	23.2 LT	583.22
C	481+82.2	17.1 LT	583.32
D	481+82.2	22.1 LT	583.37

STATIONS AND OFFSETS REFERENCED TO 44TH AVENUE CENTERLINE

NE CORNER OF 53RD ST AND COALTOWN RD

POINT	STA	OFFSET	ELEV
A	702+41.5	26.8 RT	597.47
B	702+36.5	27.6 RT	597.42
C	702+56.5	29.6 RT	598.70
D	702+41.5	29.6 RT	597.50
E	702+36.5	29.6 RT	597.44
F	702+56.5	34.6 RT	598.75
G	702+41.5	34.6 RT	597.55
H	702+36.5	34.6 RT	597.49
I	702+41.5	24.2 RT	597.53
J	702+36.5	25.0 RT	597.48
K	702+61.5	29.6 RT	598.78
L	702+61.5	34.6 RT	598.83
M	702+81.5	34.6 RT	600.02
N	702+81.5	29.6 RT	600.07

STATION AND OFFSETS REFERENCED TO 53RD ST CENTERLINE

NOTE:
SLOPE VALUES CALLED OUT FOR VERIFICATION OF DESIGN ONLY. BUILD RAMPS AND LANDINGS ACCORDING TO STATION/OFFSET INFORMATION PROVIDED IN TABLE.

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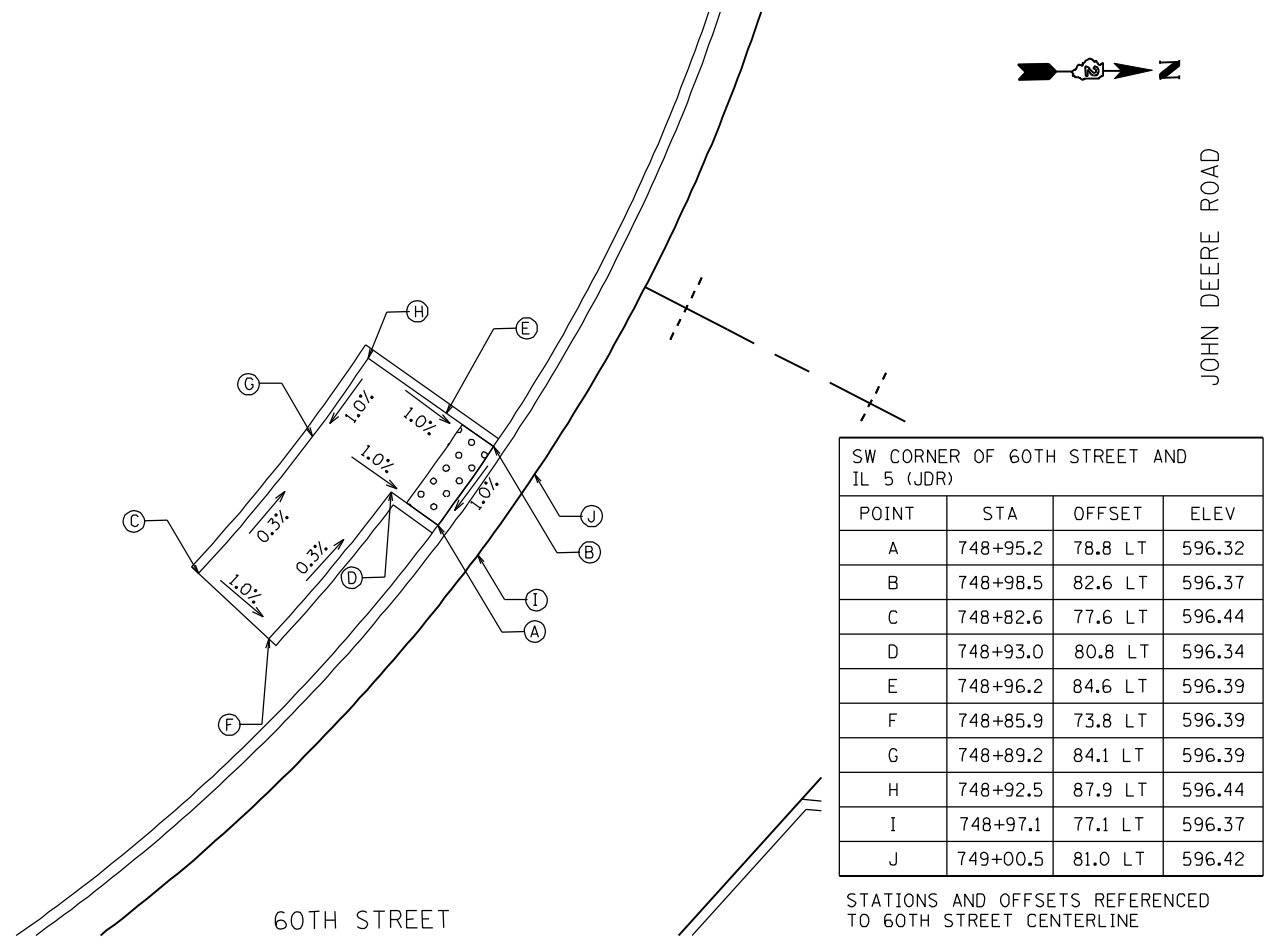
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SIDEWALK DETAILS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1082
CONTRACT NO. 64B83				

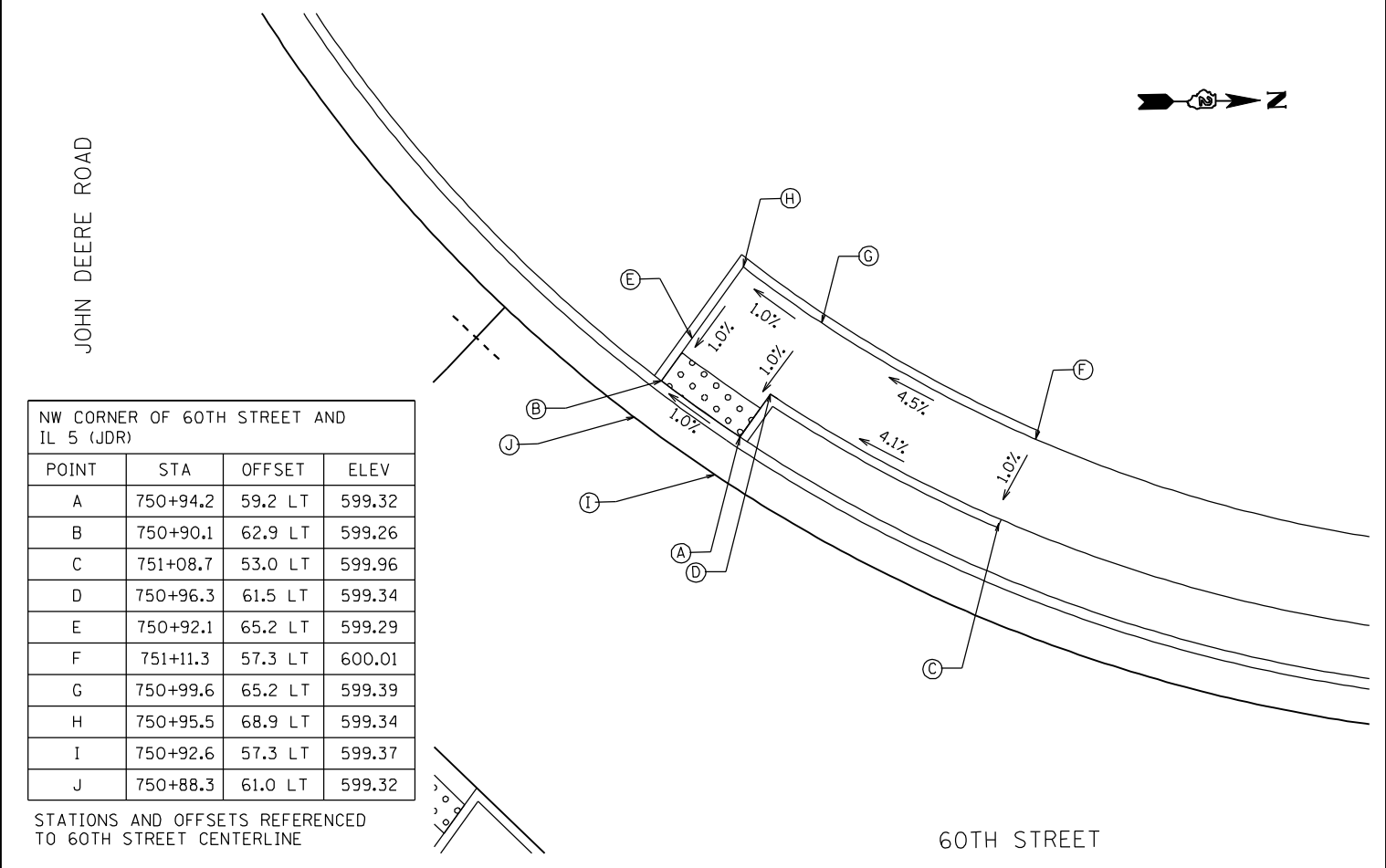
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SW CORNER OF 60TH STREET AND IL 5 (JDR)

POINT	STA	OFFSET	ELEV
A	748+95.2	78.8 LT	596.32
B	748+98.5	82.6 LT	596.37
C	748+82.6	77.6 LT	596.44
D	748+93.0	80.8 LT	596.34
E	748+96.2	84.6 LT	596.39
F	748+85.9	73.8 LT	596.39
G	748+89.2	84.1 LT	596.39
H	748+92.5	87.9 LT	596.44
I	748+97.1	77.1 LT	596.37
J	749+00.5	81.0 LT	596.42

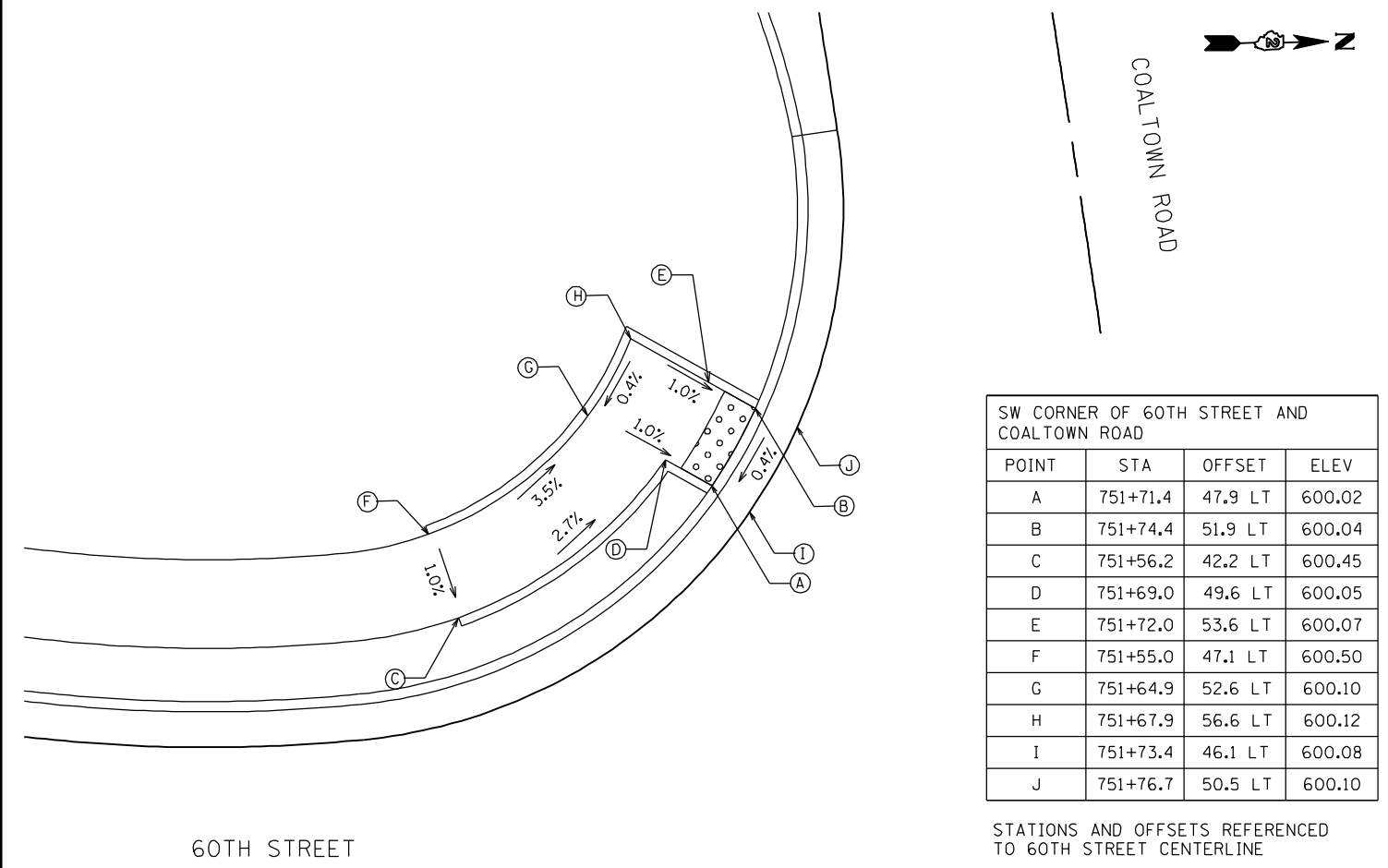
STATIONS AND OFFSETS REFERENCED TO 60TH STREET CENTERLINE



NW CORNER OF 60TH STREET AND IL 5 (JDR)

POINT	STA	OFFSET	ELEV
A	750+94.2	59.2 LT	599.32
B	750+90.1	62.9 LT	599.26
C	751+08.7	53.0 LT	599.96
D	750+96.3	61.5 LT	599.34
E	750+92.1	65.2 LT	599.29
F	751+11.3	57.3 LT	600.01
G	750+99.6	65.2 LT	599.39
H	750+95.5	68.9 LT	599.34
I	750+92.6	57.3 LT	599.37
J	750+88.3	61.0 LT	599.32

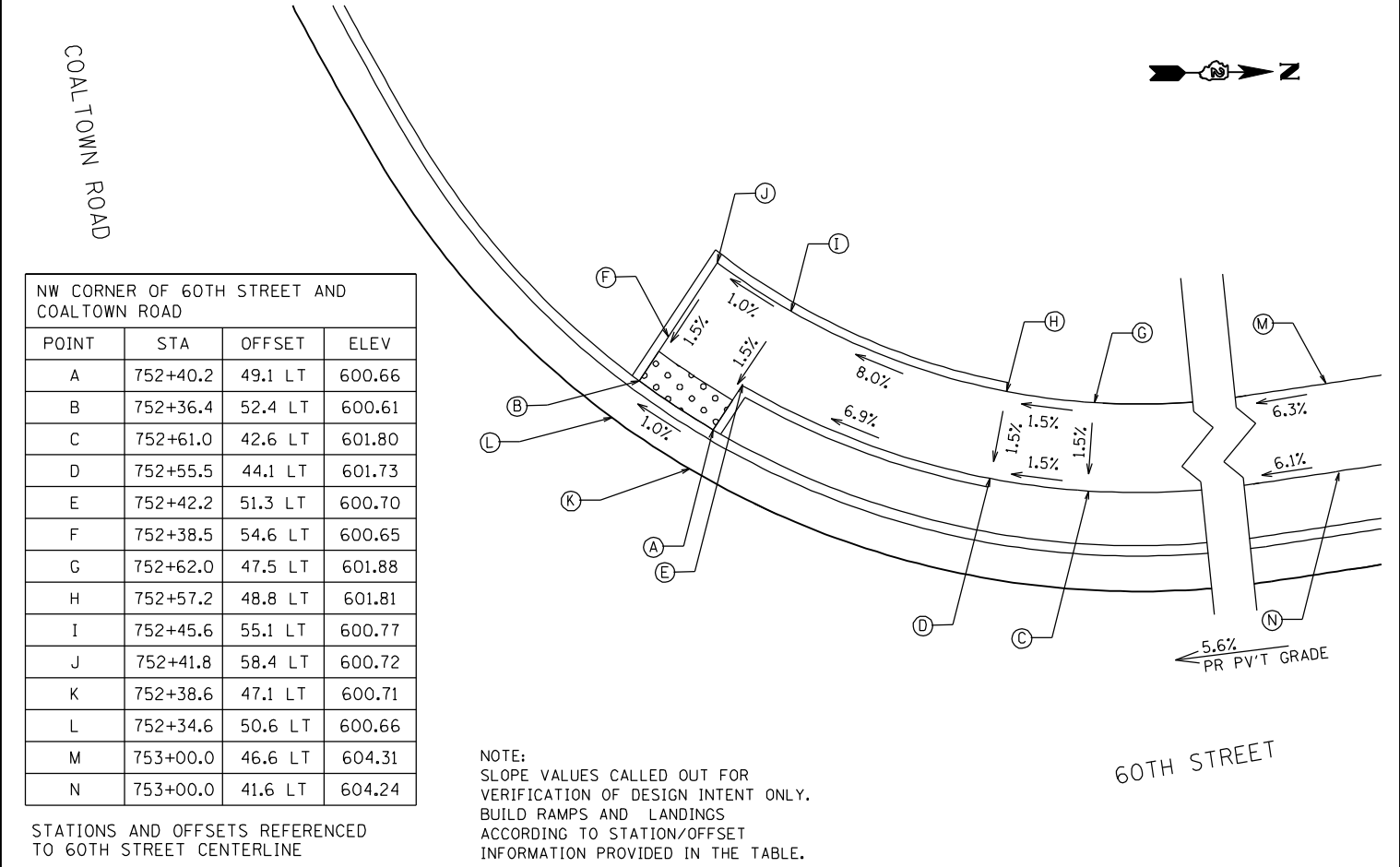
STATIONS AND OFFSETS REFERENCED TO 60TH STREET CENTERLINE



SW CORNER OF 60TH STREET AND COALTOWN ROAD

POINT	STA	OFFSET	ELEV
A	751+71.4	47.9 LT	600.02
B	751+74.4	51.9 LT	600.04
C	751+56.2	42.2 LT	600.45
D	751+69.0	49.6 LT	600.05
E	751+72.0	53.6 LT	600.07
F	751+55.0	47.1 LT	600.50
G	751+64.9	52.6 LT	600.10
H	751+67.9	56.6 LT	600.12
I	751+73.4	46.1 LT	600.08
J	751+76.7	50.5 LT	600.10

STATIONS AND OFFSETS REFERENCED TO 60TH STREET CENTERLINE



NW CORNER OF 60TH STREET AND COALTOWN ROAD

POINT	STA	OFFSET	ELEV
A	752+40.2	49.1 LT	600.66
B	752+36.4	52.4 LT	600.61
C	752+61.0	42.6 LT	601.80
D	752+55.5	44.1 LT	601.73
E	752+42.2	51.3 LT	600.70
F	752+38.5	54.6 LT	600.65
G	752+62.0	47.5 LT	601.88
H	752+57.2	48.8 LT	601.81
I	752+45.6	55.1 LT	600.77
J	752+41.8	58.4 LT	600.72
K	752+38.6	47.1 LT	600.71
L	752+34.6	50.6 LT	600.66
M	753+00.0	46.6 LT	604.31
N	753+00.0	41.6 LT	604.24

STATIONS AND OFFSETS REFERENCED TO 60TH STREET CENTERLINE

NOTE:
SLOPE VALUES CALLED OUT FOR VERIFICATION OF DESIGN INTENT ONLY. BUILD RAMPS AND LANDINGS ACCORDING TO STATION/OFFSET INFORMATION PROVIDED IN THE TABLE.

FILE NAME: N:\PROJ\0803393\CONTRACT_2\Design\misc_sheets\0264683-sht-SW-Detail.dgn

Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.776.4009 Fax 773.776.4014

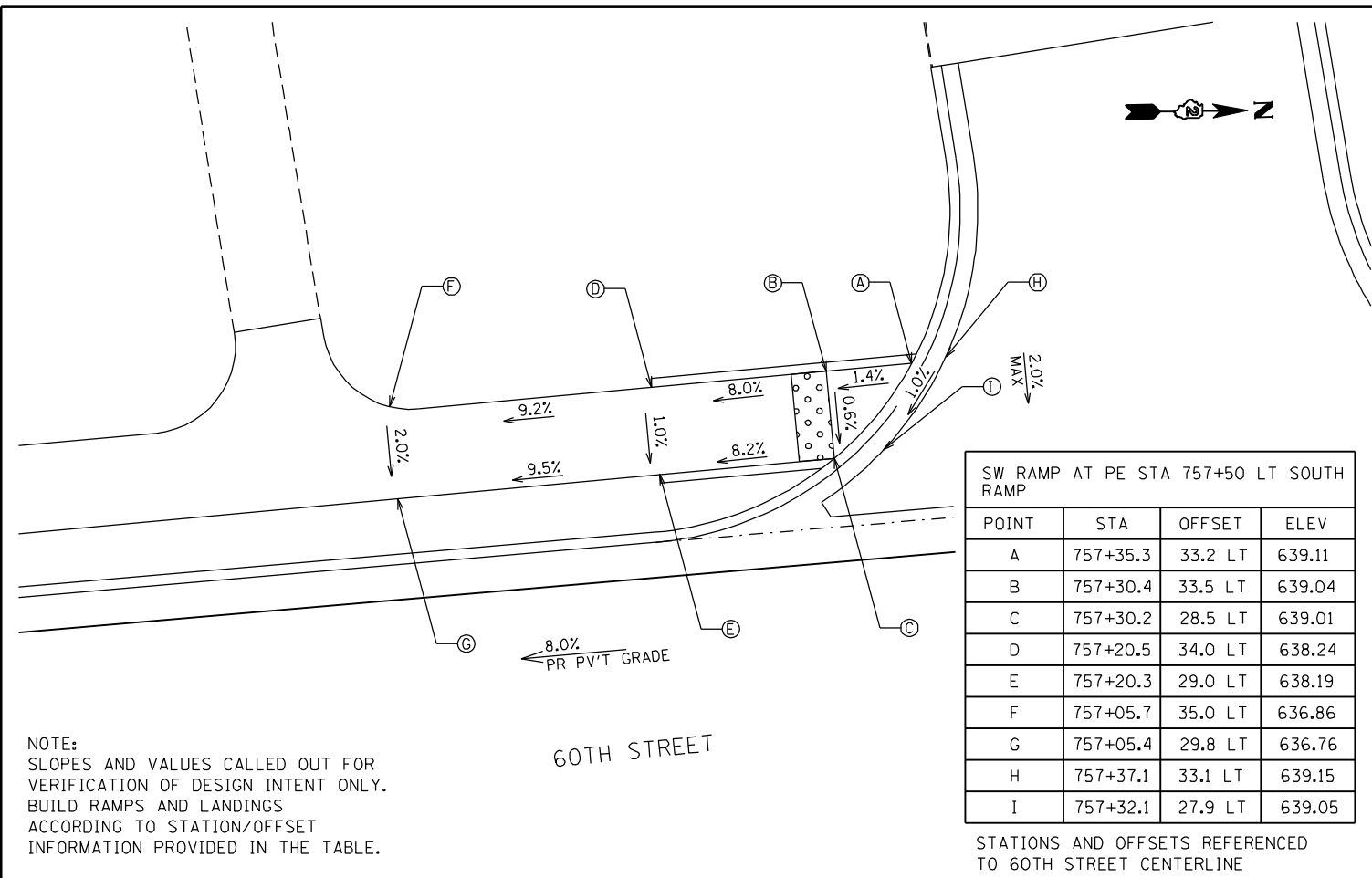
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	DATE - 12/19/2014	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SIDEWALK DETAILS

SCALE: *ADASCALE	SHEET NO.	OF SHEETS	STA.	TO STA.
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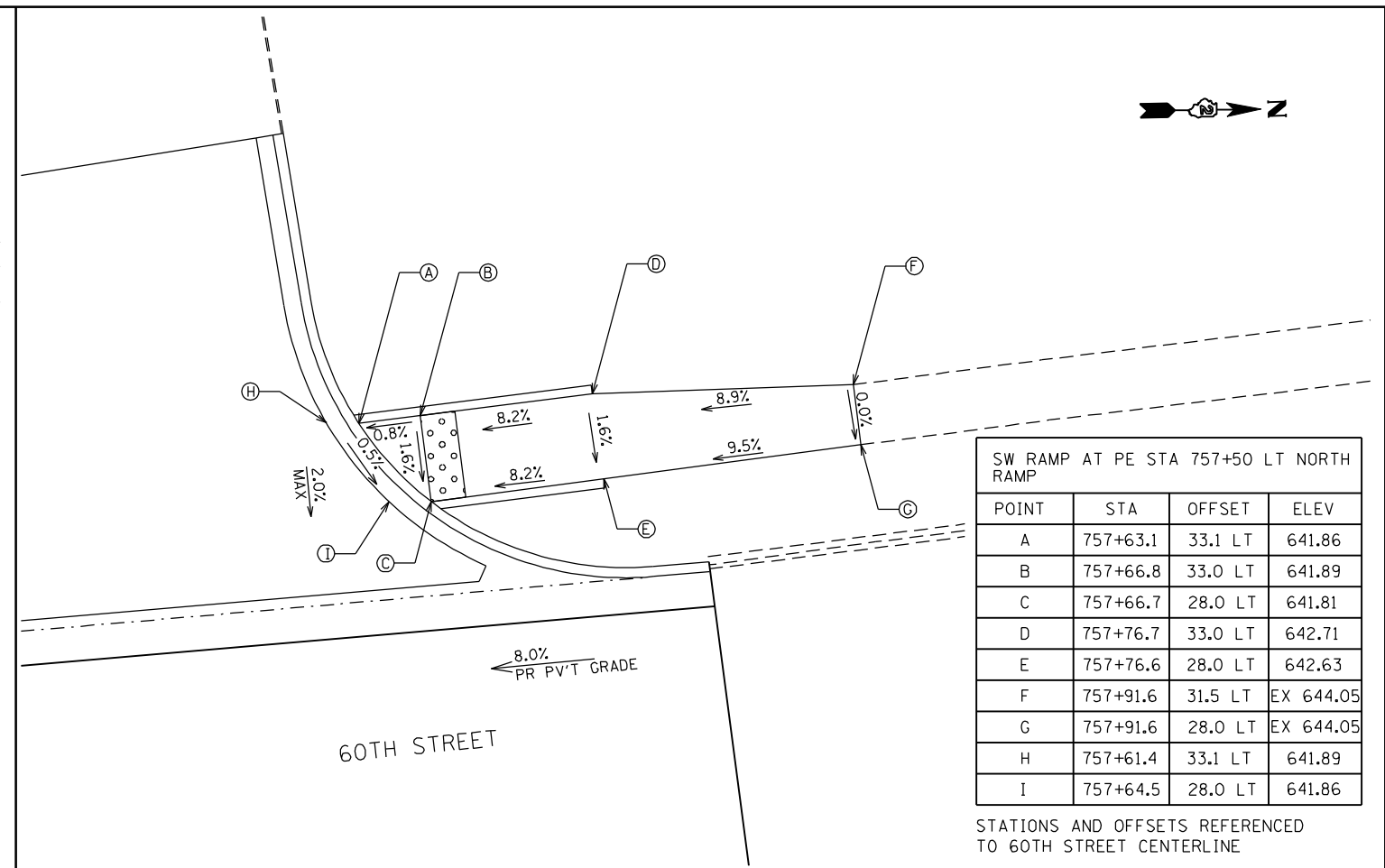
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1083
CONTRACT NO. 64B83				
ILLINOIS FED. AID PROJECT				



SW RAMP AT PE STA 757+50 LT SOUTH RAMP

POINT	STA	OFFSET	ELEV
A	757+35.3	33.2 LT	639.11
B	757+30.4	33.5 LT	639.04
C	757+30.2	28.5 LT	639.01
D	757+20.5	34.0 LT	638.24
E	757+20.3	29.0 LT	638.19
F	757+05.7	35.0 LT	636.86
G	757+05.4	29.8 LT	636.76
H	757+37.1	33.1 LT	639.15
I	757+32.1	27.9 LT	639.05

STATIONS AND OFFSETS REFERENCED TO 60TH STREET CENTERLINE



SW RAMP AT PE STA 757+50 LT NORTH RAMP

POINT	STA	OFFSET	ELEV
A	757+63.1	33.1 LT	641.86
B	757+66.8	33.0 LT	641.89
C	757+66.7	28.0 LT	641.81
D	757+76.7	33.0 LT	642.71
E	757+76.6	28.0 LT	642.63
F	757+91.6	31.5 LT	EX 644.05
G	757+91.6	28.0 LT	EX 644.05
H	757+61.4	33.1 LT	641.89
I	757+64.5	28.0 LT	641.86

STATIONS AND OFFSETS REFERENCED TO 60TH STREET CENTERLINE

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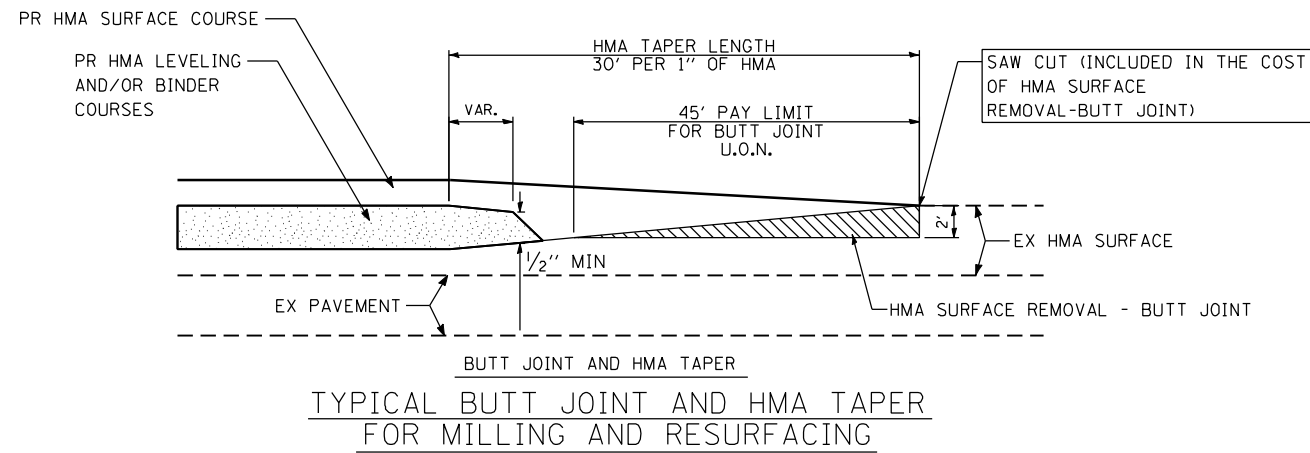
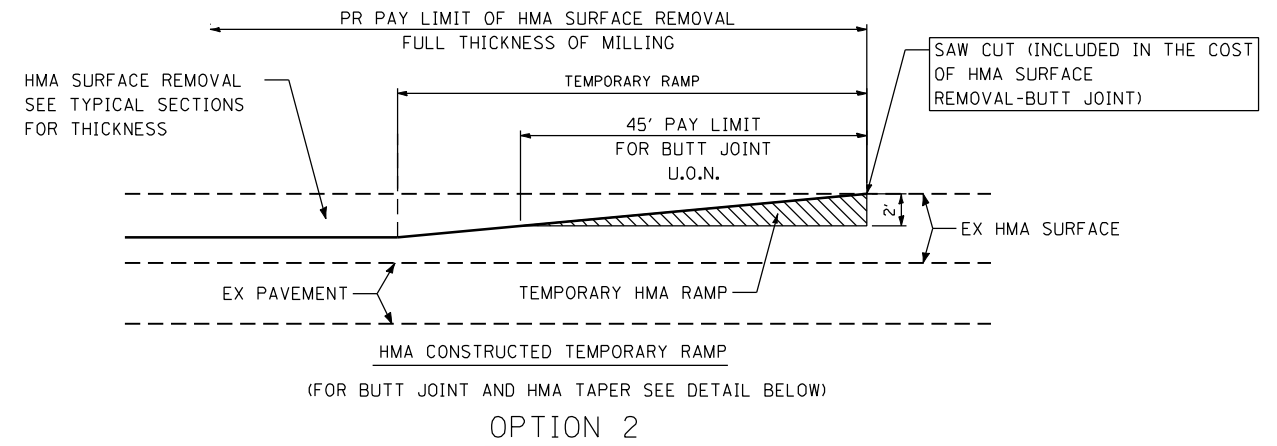
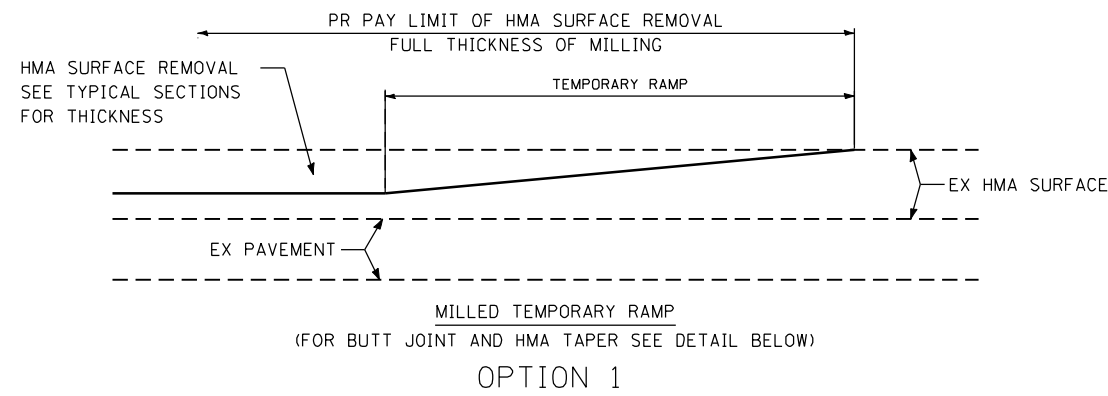
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	DATE - 12/19/2014	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SIDEWALK DETAILS

SCALE: 1 : 20 SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1084
CONTRACT NO. 64B83				
ILLINOIS FED. AID PROJECT				



NOTES:

1. THE TEMPORARY RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
2. THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
3. TEMPORARY RAMP LENGTH = 40 X SURFACE REMOVAL THICKNESS.
4. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARDS SPECIFICATIONS FOR "HMA SURFACE REMOVAL, BUTT JOINT".
5. THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT".

HMA SURFACE REMOVAL - BUTT JOINT DETAIL

NTS

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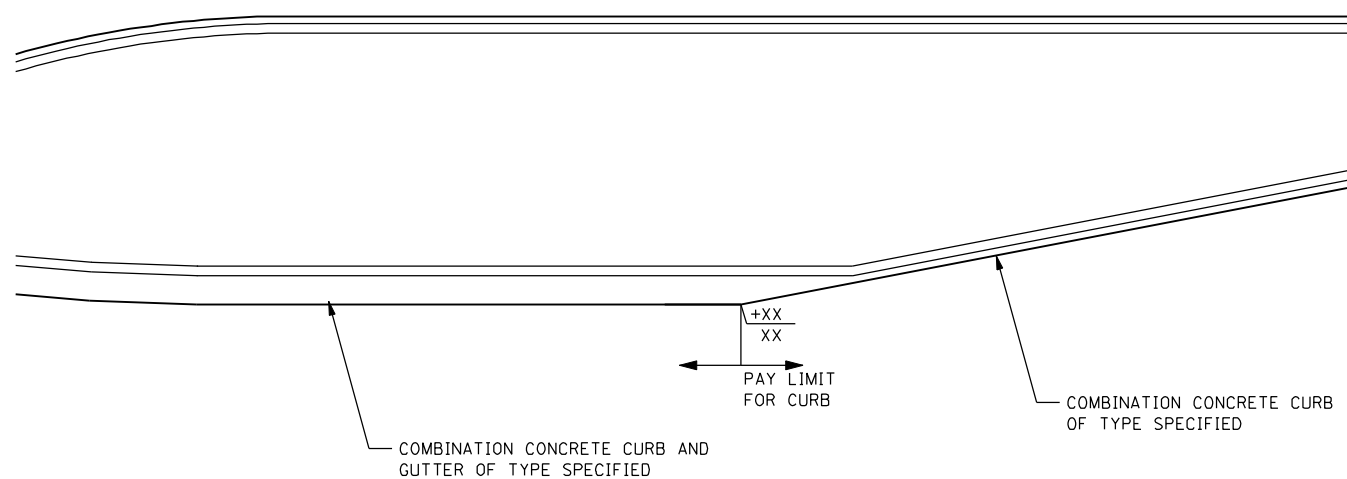
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	DATE - 12/19/2014	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

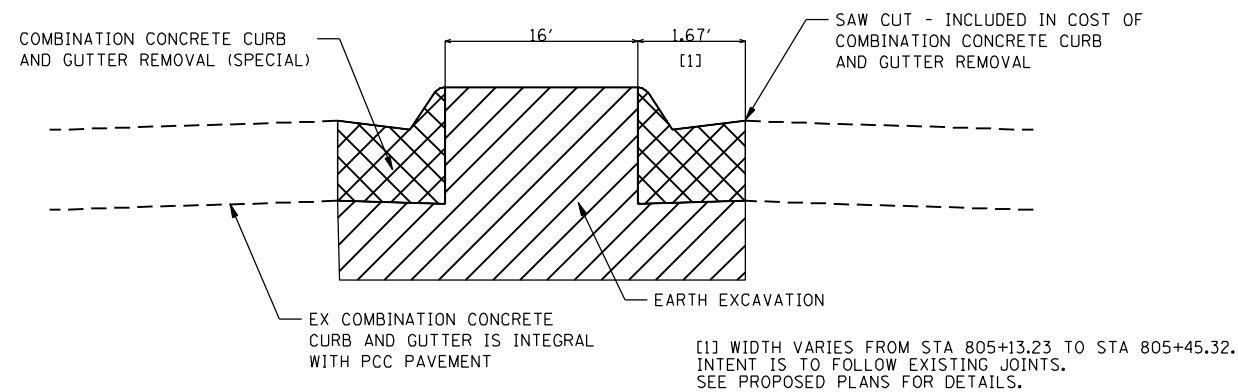
DETAILS	
SCALE:	SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 64B83			ILLINOIS FED. AID PROJECT	

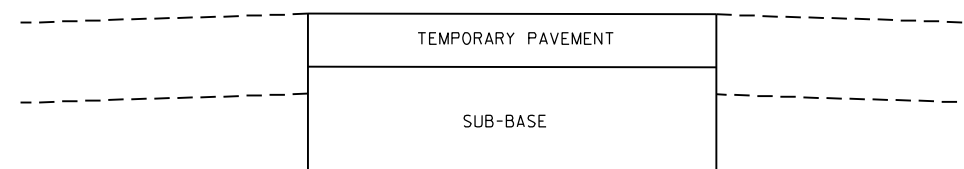


*FLAG TRANSITION INCLUDED IN COST OF COMBINATION CONCRETE CURB AND GUTTER SPECIFIED

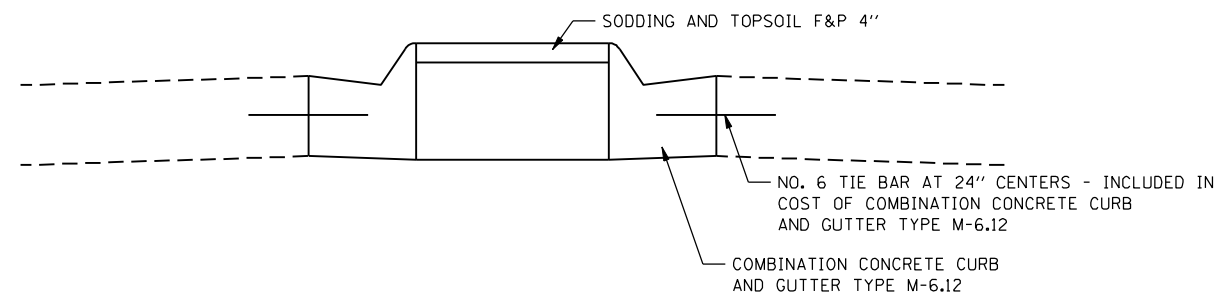
COMBINATION CONCRETE CURB AND GUTTER TRANSITION DETAIL
NTS



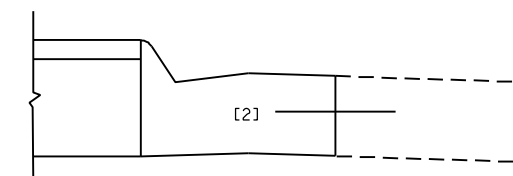
REMOVAL LIMITS



DURING CONSTRUCTION



[2] ADDITIONAL PAVEMENT WIDTH FROM STA 805+13.23 TO STA 805+45.32 INCLUDED IN COST OF COMBINATION CONCRETE CURB AND GUTTER TYPE M-6.12



PROPOSED IMPROVEMENT

GRASSED MEDIAN AT 70TH STREET DETAIL
NTS

FILE NAME = N:\PROD\080331308\CONTRACT_2\Design\misc_sheets\0264683-sht-Detail1a.dgn

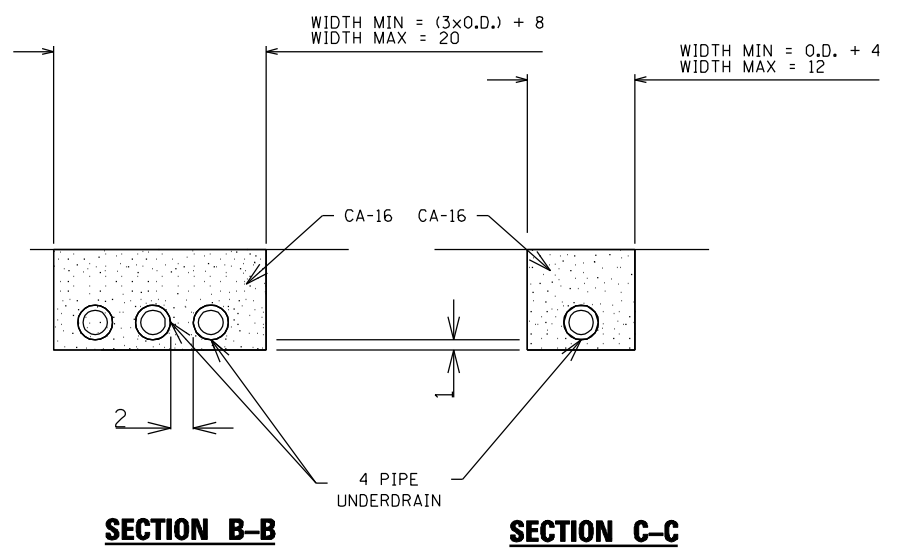
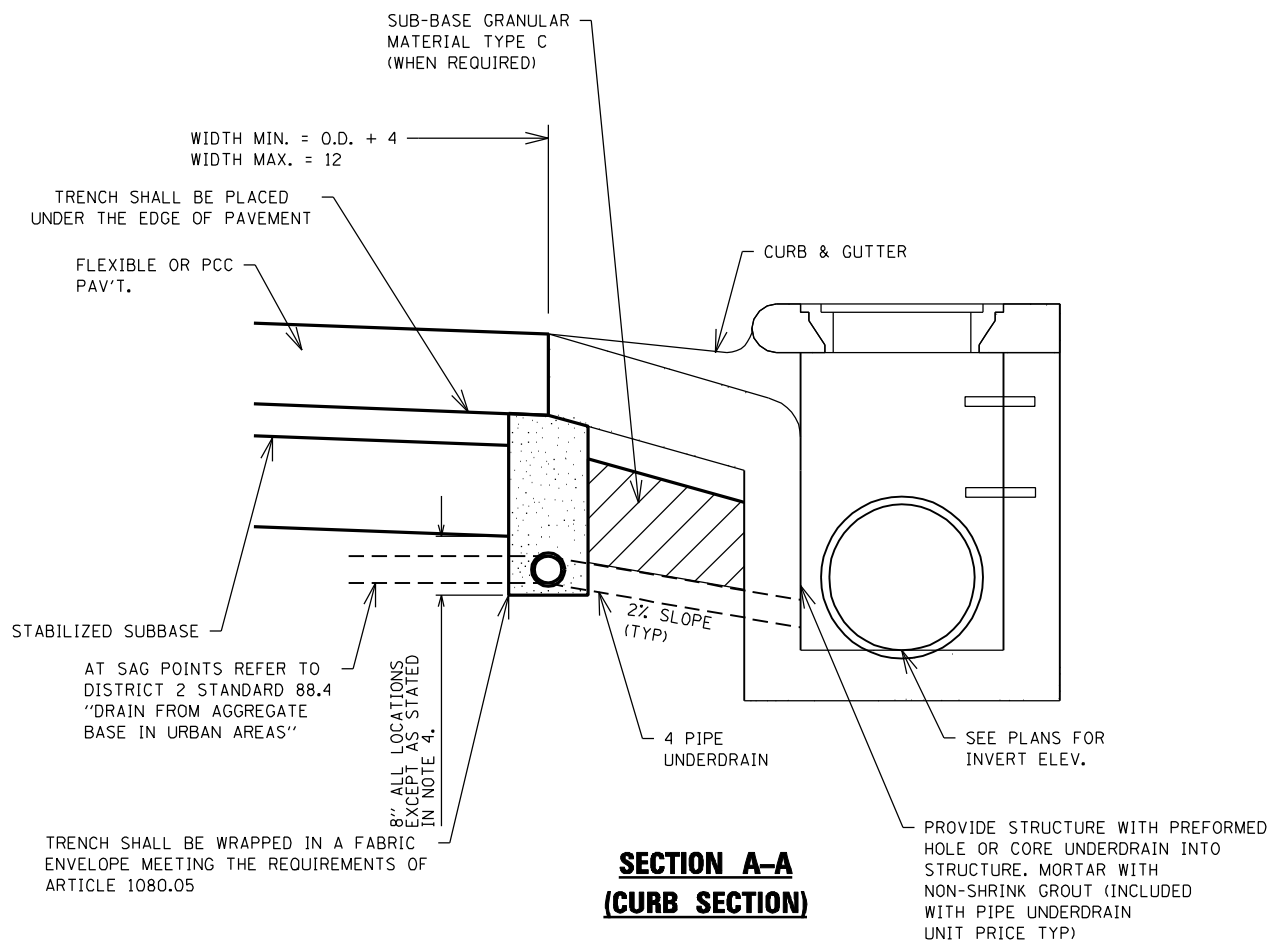
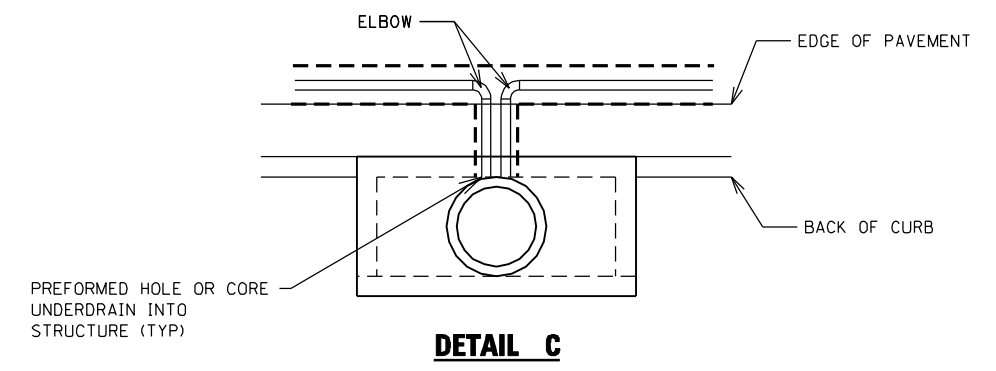
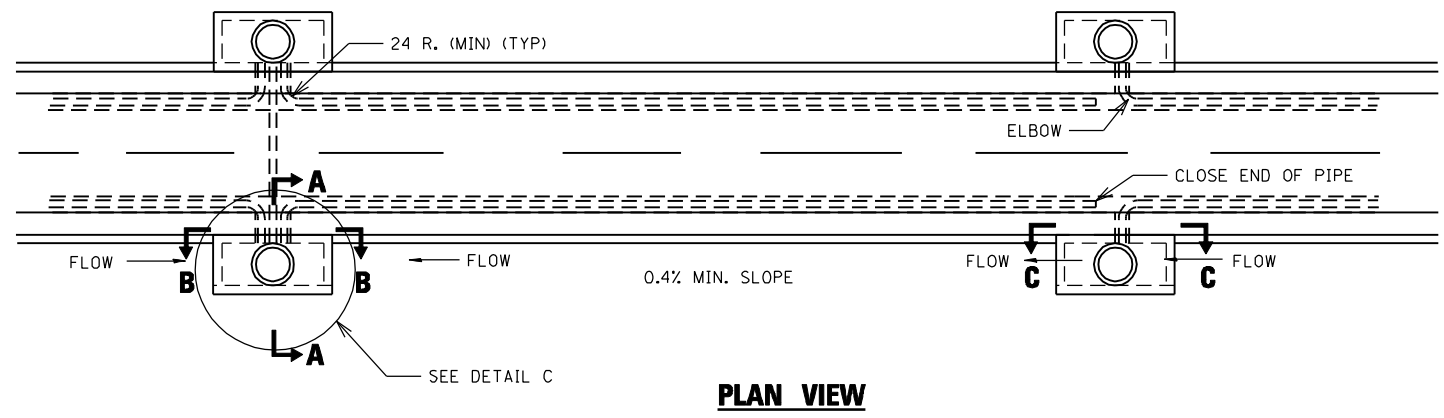
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USER NAME = jberendzen	DESIGNED - EPS	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1086
CONTRACT NO. 64B83				
ILLINOIS FED. AID PROJECT				



NOTES:

1. THE 24 RADIUS ON THE DRAINAGE FITTING IS ONLY A MINIMUM, LARGER RADII MEETING THE APPROVAL OF THE ENGINEER MAY BE SUBSTITUTED.
2. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SHOWN.
3. REFER TO TYPICAL SECTIONS AND DRAINAGE & UTILITY PLAN FOR HORIZONTAL ALIGNMENT OF UNDERDRAINS, INCLUDING NON-CURB SECTIONS.
4. TRENCH DEPTH FROM THE TOP OF SUBGRADE TO THE BOTTOM OF THE UNDERDRAIN TRENCH SHALL BE 4" ON THE INSIDE LANES OF JOHN DEERE ROAD WITHIN THE FOLLOWING STATION RANGES:
 285+74.12 - 297+22.96
 306+33.46 - 331+21.88
 343+16.10 - 352+17.82

SUB-SURFACE DRAIN DETAILS
NTS

FILE NAME: c:\p\proj\080319108\contract\2\design\misc\sheet\0264883-ah\DetailA.dgn

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	DATE - 12/19/2014	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

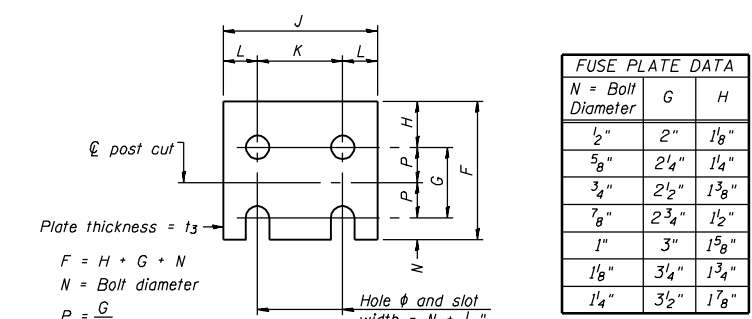
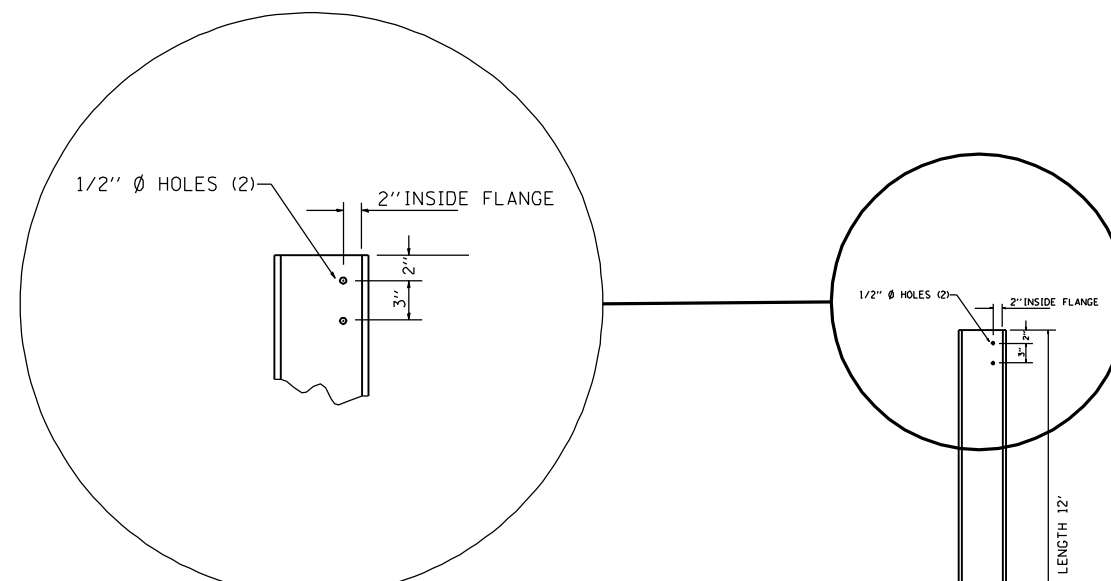
FAP 595 (JOHN DEERE ROAD)				
DETAILS				
SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1087
CONTRACT NO. 64B83			ILLINOIS FED. AID PROJECT	

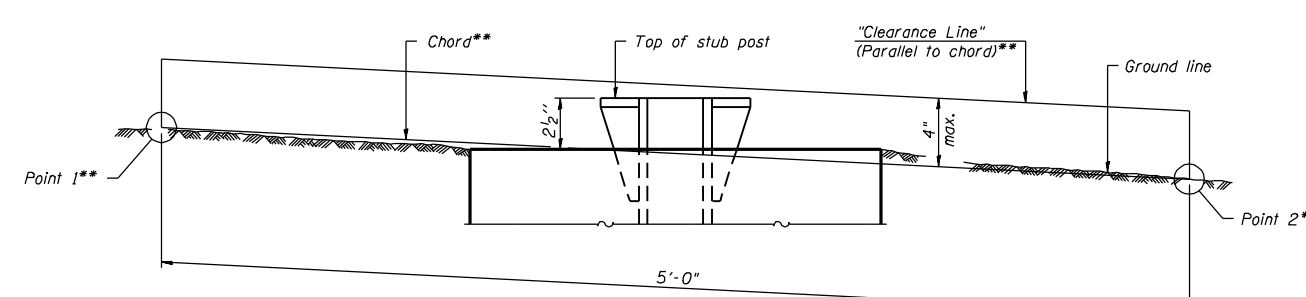
BILL OF MATERIAL			
CODE NO.	ITEM	UNIT	QUANTITY
① 72700100	STRUCTURAL STEEL SIGN SUPPORT - BREAKAWAY	POUND	1131
② 73400100	CONCRETE FOUNDATION	CU. YD.	78
X0323388	TRAFFIC COUNTER	EACH	1

*Dimensional changes required for varying site conditions shall be approved by the Engineer.

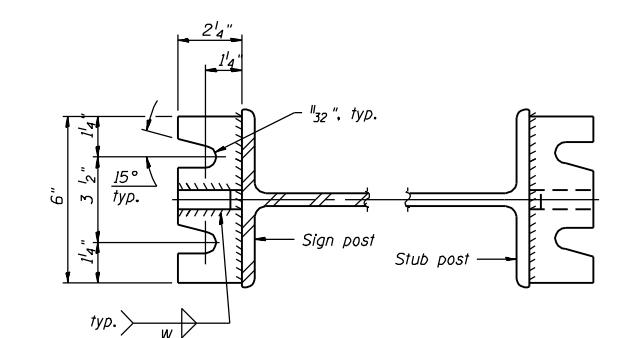
- ① Includes reinforcement bars and spiral hooping for one foundation.
- ② Quantity includes all concrete necessary for one foundation.



FUSE PLATE DETAIL
(Install with notches down.)

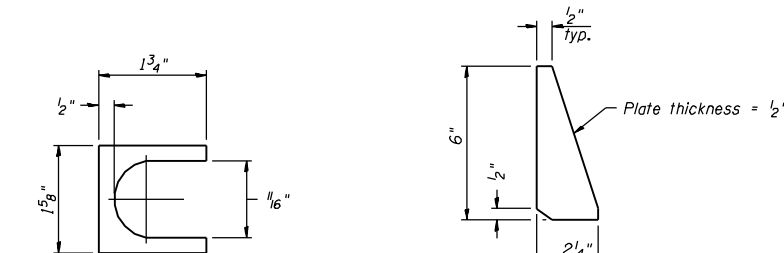


ELEVATION GROUND LINE & STUB POST
** For all "Point 1" and "Point 2" locations, "Clearance Line" must be at or above top of stub post.



SECTION A-A

SECTION B-B



SHIM DETAIL

STIFFENER PLATE DETAIL

Furnish two 0.01" thick and two 0.03" thick stainless steel or brass (ASTM B36) shims per post.

GENERAL NOTES

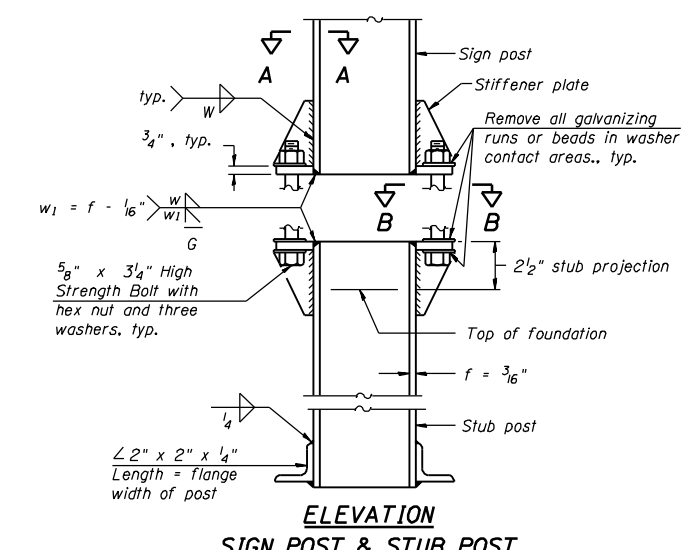
Posts shall be plumbed by using shims with post-to-stub post connection bolts snug tight only. Final tightening of all High Strength Bolts shall be in accordance with Article T27.05 and threads at the junction of the bolt and nut shall be burred or center punched to prevent the nut from loosening.

LOADING: 80 m.p.h. wind with 30% gust factor, normal to sign.

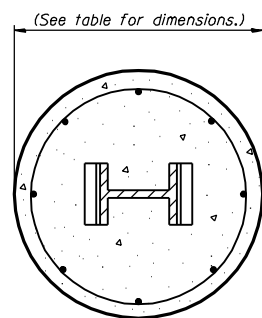
DESIGN STRESSES:
 Structural steel - 20,000 p.s.i.
 Reinforcing steel - 20,000 p.s.i.
 Concrete - 1,400 p.s.i.
 Footing soil pressure - 2,000 p.s.f.

After fabrication, the post, fuse plate and upper 6", min. of the stub post shall be hot-dip galvanized in accordance with AASHTO M111. All bolts, nuts and washers shall be hot-dip galvanized in accordance with AASHTO M232.

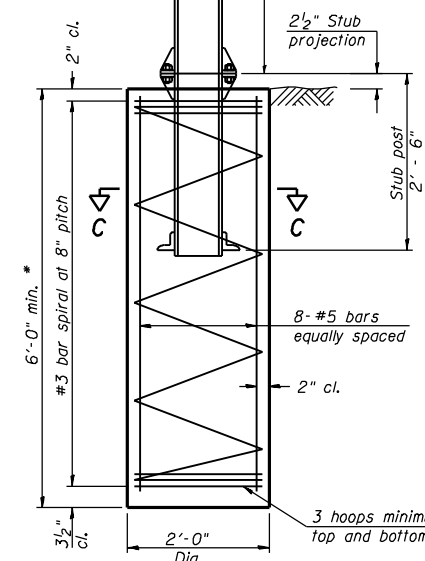
Work this sheet with Base Sheet BAW-A-2.



ELEVATION SIGN POST & STUB POST



SECTION C-C



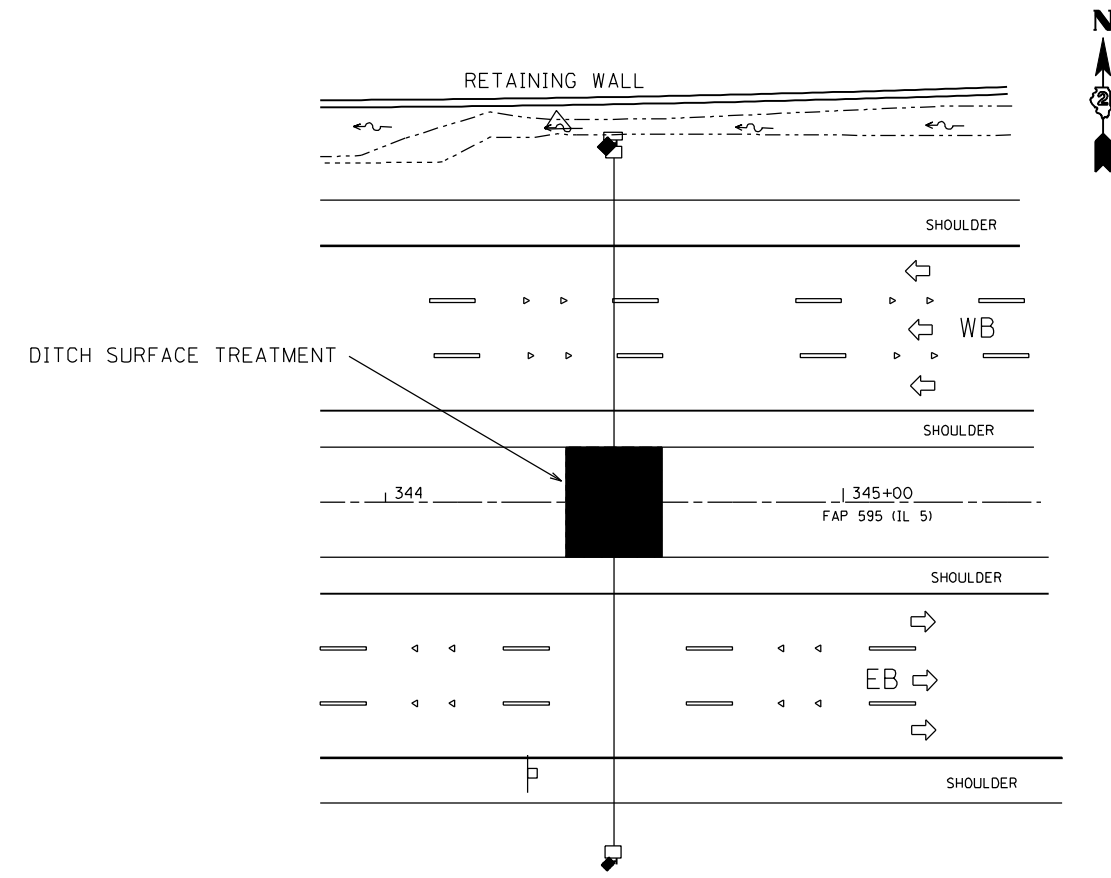
SECTION D-D

(Sheet 2 of 2)
BREAK-AWAY WIDE FLANGE STEEL POST DETAILS

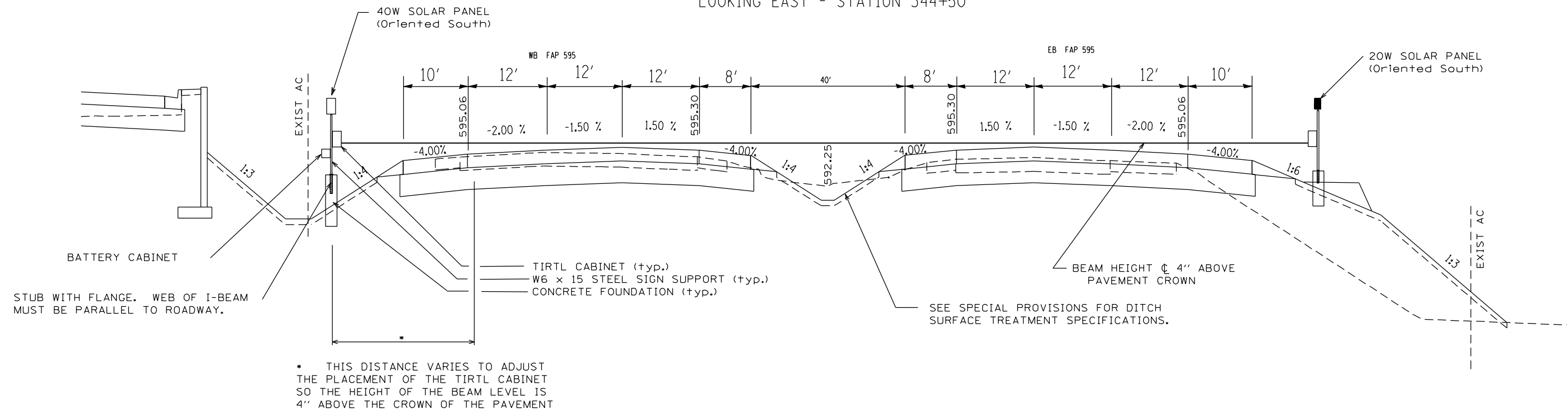
TIRTL TRAFFIC DATA COLLECTION SYSTEM Includes		
RAVEN XT EVDO Rev A VZW P/N V2221-VD	EACH	1
PHANTOM DUAL BAND ANTENNA P/N RF-ART18305SP/281	EACH	1
TIRTL CABINET 16.5" x 27" x 16"	EACH	2
BATTERY CABINET 16.5" x 16" x 11.5"	EACH	1
SOLAR PANEL 40W, 12v DC	EACH	1
SOLAR PANEL 20W, 12v DC	EACH	1
SOLAR CHARGING REGULATOR, 6 AMP, 12v DC	EACH	2
BATTERY - 33 AH ABSORBED ELECTOLYTE 8" x 5.5" x 7" (DEEP CYCLE)	EACH	1
BATTERY - 80 AH ABSORBED ELECTOLYTE 10" x 6" x 8" (DEEP CYCLE)	EACH	1

NOTES:

1. SYSTEM CONSISTS OF TWO W6x15 I-BEAM SIGN SUPPORTS WITH CONCRETE FOUNDATIONS AND A FLANGE WITH BREAKAWAY BOLTS.
2. THE I-BEAMS ARE 12 FOOT LONG AND DRILLED AS PER THE I-BEAM DETAIL TO ACCOMODATE A PIPE TO ALLOW THE MOUNTING OF THE SOLAR PANEL.
3. THE WEB OF THE I-BEAM IS TO BE PLACED PARALLEL TO THE TRAVEL LANES.
4. THE TWO POSTS MUST BE PLACED DIRECTLY ACROSS FROM EACH OTHER AND PERPENDICULAR TO THE TRAVEL LANES.
5. TWO POSTS ARE REQUIRES AT THE LOCATIONS PER THE DRAWING.
6. THE CABINETS ARE ATTACHED TO THE I-BEAM USING 8 INCH GALVANIZED J-BOLTS.
7. THE BOTTOM OF THE CABINET HEIGHT MUST BE NO LOWER THAN FOUR (4) INCHES ABOVE THE GROUND AND NO GREATER THAN FOUR (4) INCHES ABOVE BE ABLE TO VIEW ACROSS ALL LANES AT THE CROWN OF THE PAVEMENT.
8. THE IDOT OFFICE OF PLANNING AND PROGRAMMING DATA MANAGEMENT LAB (RAMON TAYLOR or RICH MARX, 217.782.2065) SHALL BE NOTICIFIED TWO (2) WEEKS PRIOR TO THE LAYOUT AND SHALL BE PRESENT DURING THE PLACEMENT OF THE POST FOUNDATIONS.



ILLINOIS ROUTE 5 - NORMAL SECTION
LOOKING EAST - STATION 344+50



* THIS DISTANCE VARIES TO ADJUST THE PLACEMENT OF THE TIRTL CABINET SO THE HEIGHT OF THE BEAM LEVEL IS 4" ABOVE THE CROWN OF THE PAVEMENT

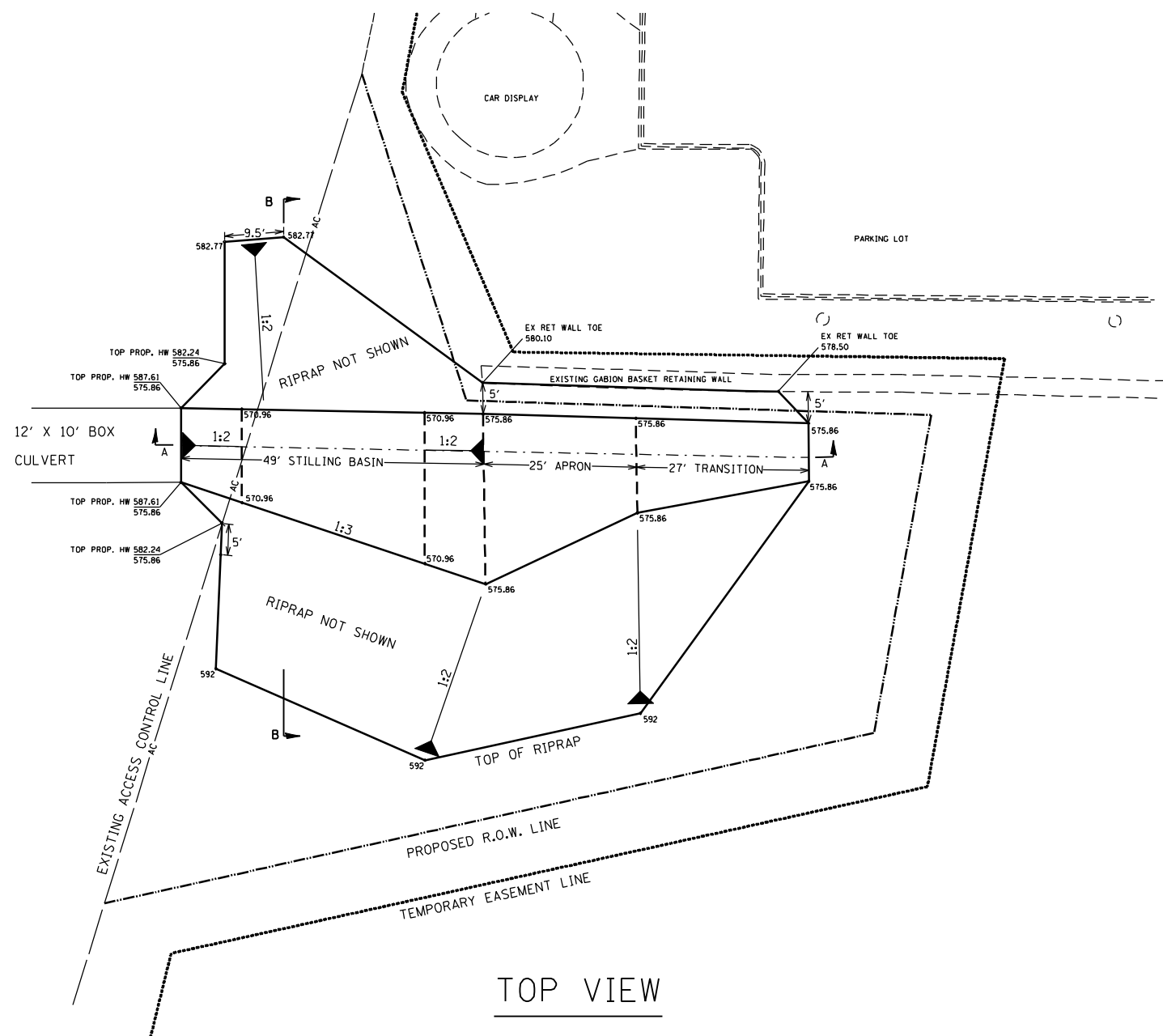
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

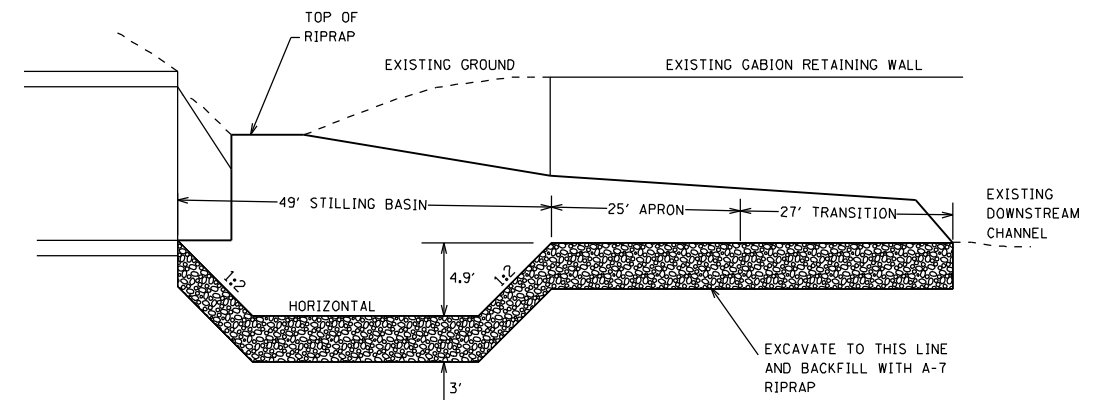
DETAILS
TRAFFIC COUNTER
TIRTL TRAFFIC DATA COLLECTION SYSTEM

SCALE: SHEET OF SHEETS STA. TO STA.

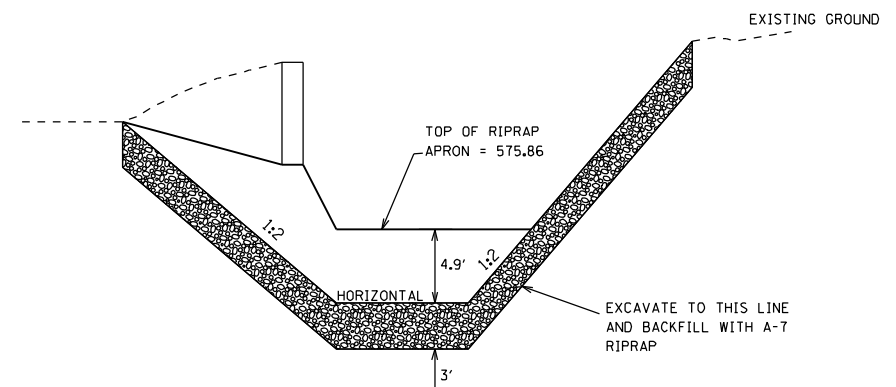
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1089
CONTRACT NO. 64883				
ILLINOIS FED. AID PROJECT				



TOP VIEW



SECTION A-A



SECTION B-B

ITEM	UNIT	TOTAL
ROCK EXCAVATION	CU YD	205
STONE RIPRAP, CLASS A7	SQ YD	614

SCHEDULE OF QUANTITIES

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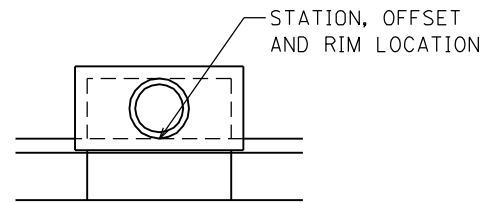
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

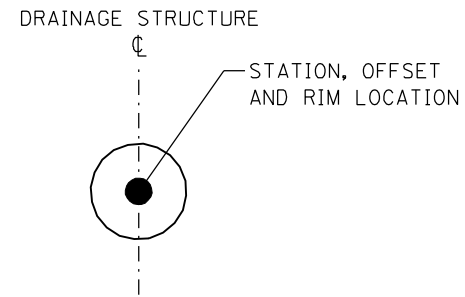
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SN 081-1136

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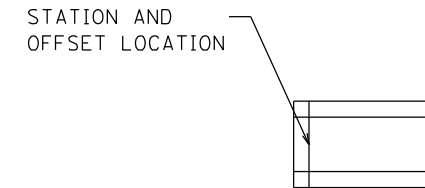
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CONTRACT NO. 64B83			ILLINOIS FED. AID PROJECT	



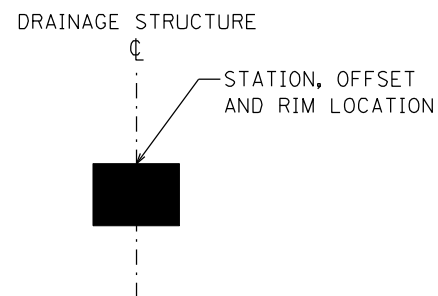
INLETS, SPECIAL,
NOS. 5 & 6



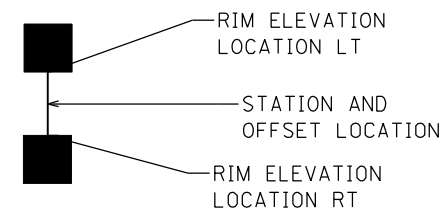
MANHOLES, TYPE A,
VARIOUS SIZES



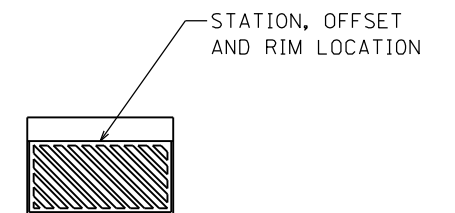
CONCRETE END SECTION,
STANDARD 542001,
VARIOUS SIZES



INLETS, SPECIAL



DRAINAGE STRUCTURES,
TYPE 4 WITH TWO TYPE 20
FRAME AND GRATES



INLETS, SPECIAL,
NO. 1

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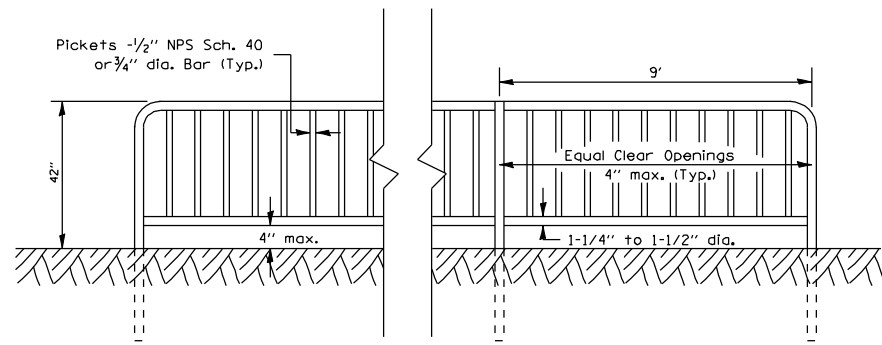
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PLOT DATE = 12/18/2014	DATE - 12/19/2014	REVISED -

STATE OF ILLINOIS
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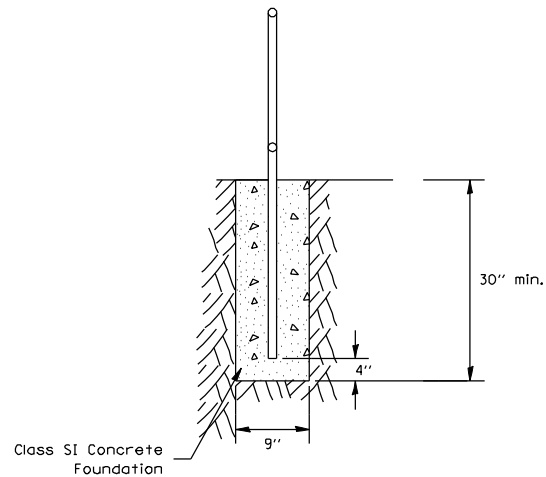
DETAILS
DRAINAGE STRUCTURE STA, OS AND ELEVATIONS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1091
CONTRACT NO. 64B83			ILLINOIS FED. AID PROJECT	



ELEVATION



SECTION

Notes:

Gripping surfaces shall be uninterrupted by construction elements, or obstructions.

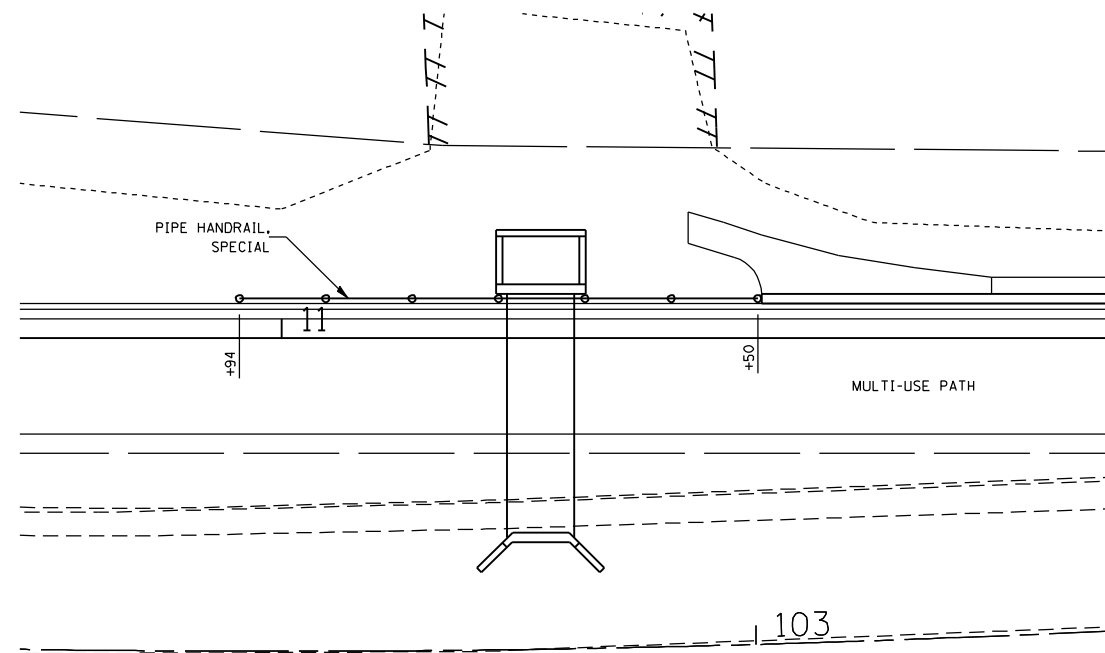
Ends of handrail shall be rounded.

Handrail shall not rotate within their fittings.

Handrail shall conform to Section 509 with the exception that all pipe and connections shall be welded galvanized or aluminum according to Article 1006.30, or 1006.34.

The diameter of the gripping surface of the handrail shall be 1-1/4" to 1-1/2"

This work shall consist of furnishing and placing foundations, furnishing and erecting Handrails as listed above and according to this detail. This work shall be paid for at the contract UNIT price per FOOT for PIPE HANDRAIL, SPECIAL.



PLAN

FILE NAME: c:\proj\080319108\contract\2\design\misc\sheet\0264883-ah\Detail107.dgn

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 Chicago, Illinois 60656
 Tel. 773.776.4009 Fax 773.776.4014

USER NAME = jberendzen	DESIGNED - EPS	REVISED -
	DRAWN - NT	REVISED -
PLOT SCALE = 48.0000" / IN.	CHECKED - DJO	REVISED -
PLOT DATE = 12/18/2014	DATE - 12/19/2014	REVISED -

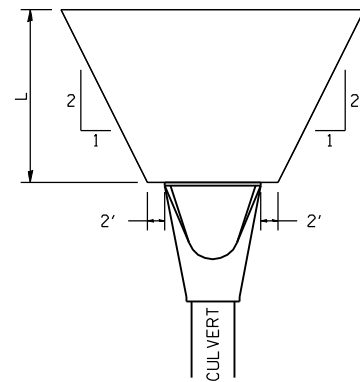
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PIPE HANDRAIL, SPECIAL DETAIL

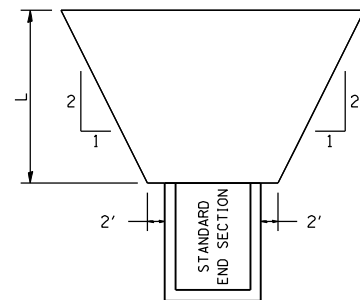
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
595	(142-1, 142)R	ROCK ISLAND	1353	1092
CONTRACT NO. 64B83			ILLINOIS FED. AID PROJECT	

RIPRAP AT END SECTIONS



FLARED END SECTION



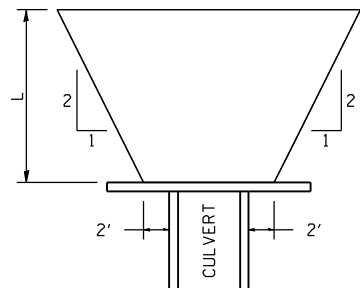
STANDARD END SECTION

REVISED - 11-12-14
2-10-14

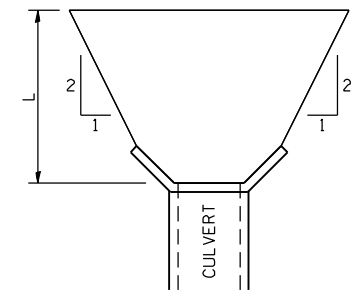
THE LENGTH OF RIPRAP (L) IS TO BE THREE (3) TIMES THE 10 YEAR CULVERT OUTLET VELOCITY, FROM THE WATERWAY INFORMATION TABLE (WIT).

IF THE CULVERT OUTLETS INTO A DEFINED CHANNEL, RIPRAP BANK TO BANK FOR LENGTH (L).

STANDARD END SECTION:
542001 (PIPE), 542011 (ELLIPTICAL)
DISTRICT STANDARD 10.1 (BOX).



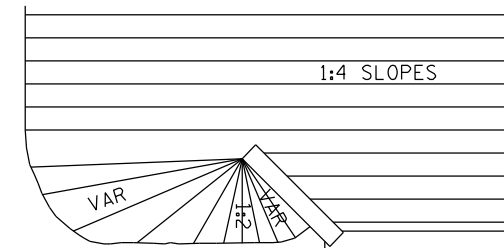
CULVERT WITH HEADWALL



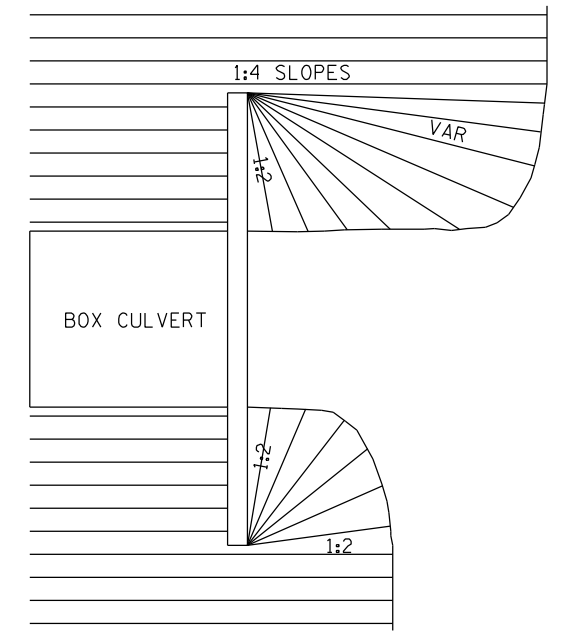
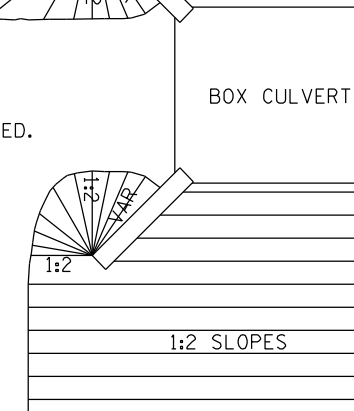
CULVERT WITH WING WALLS

RIPRAP AT END SECTIONS 19.4

GRADING AROUND WINGWALLS



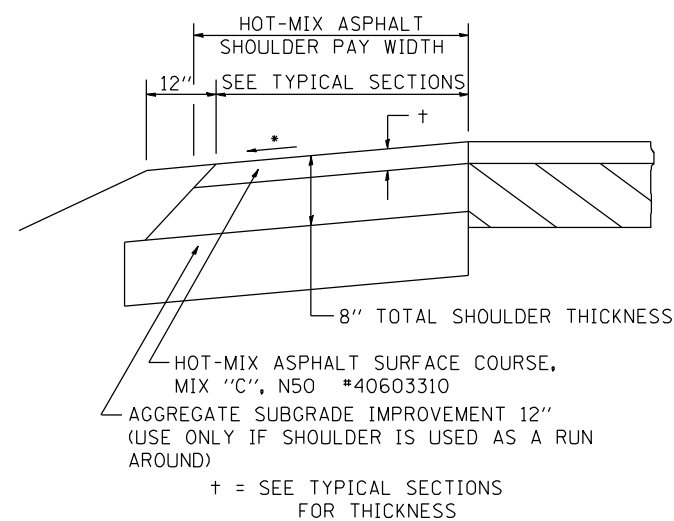
NOTES
SEE CROSS SECTIONS
FOR THE APPROPRIATE
FRONTSLOPE TO BE USED.



5-27-09

GRADING AROUND WINGWALLS 20.4

HOT-MIX ASPHALT SHOULDER



GENERAL NOTES

THE HOT-MIX ASPHALT SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310 AND SQUARE YARD FOR HOT-MIX ASPHALT SHOULDERS OF THE THICKNESS SPECIFIED.

USE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310. WHEN RESURFACING EXISTING HOT-MIX ASPHALT SHOULDERS, THE THICKNESS IS SHOWN ON THE TYPICAL SECTIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 #40603310.

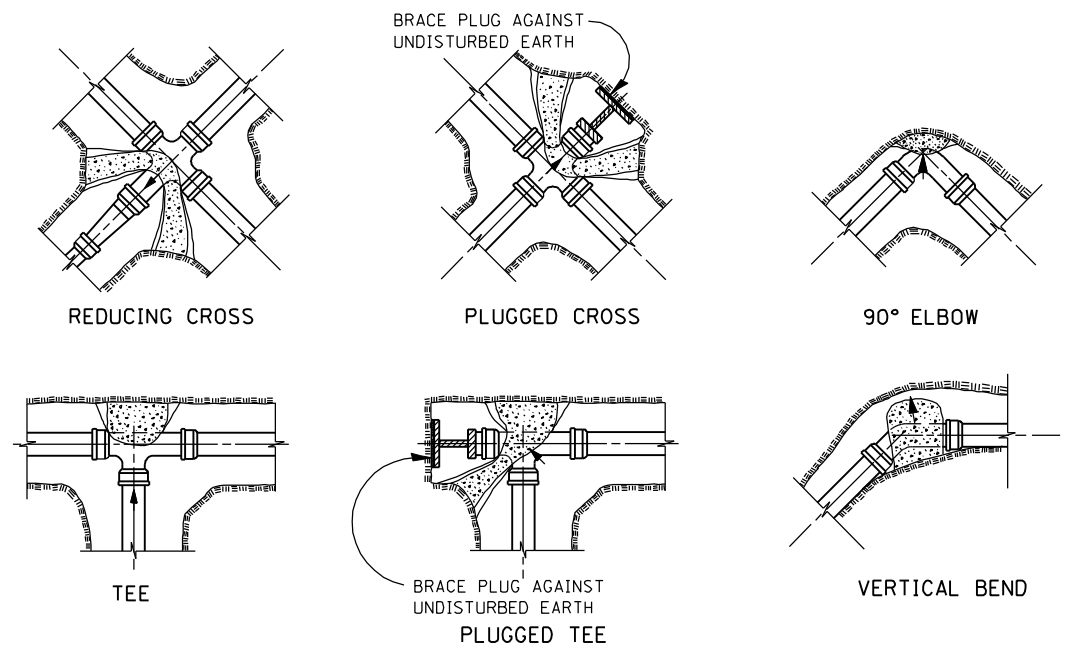
REMOVAL OF MATERIAL FOR PLACEMENT OF THE HOT-MIX ASPHALT SHOULDER TO BE PAID FOR IN UNITS FOR EXCAVATING AND GRADING EXISTING SHOULDERS OR IN CUBIC YARDS FOR EARTH EXCAVATION OR EARTH EXCAVATION WIDENING.

* 4% WHEN MAINLINE IS ON TANGENT. FOR CROSS SLOPE ON SUPERELEVATION SECTION, SEE HIGHWAY STANDARD 482001 OR 482006.

REVISED - 3-13-13

HOT-MIX ASPHALT SHOULDER 23.4a

THRUST BLOCK DETAILS



NOTES:
ALL BLOCKS TO BEAR AGAINST UNDISTURBED EARTH.
ARROWS INDICATE DIRECTION OF THRUST.
ALL BLOCKS TO BE CLASS SI CONCRETE.
ALL FITTINGS SHOWN IN PLAN EXCEPT VERTICAL BEND.

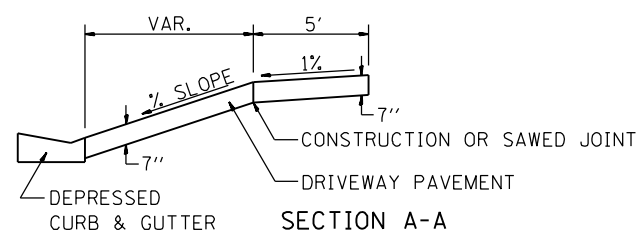
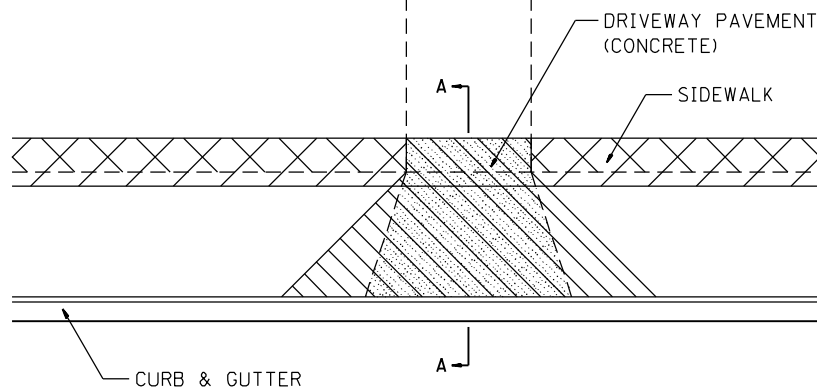
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 10-03-11	REGION 2 / DISTRICT 2 STANDARD		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -	SCALE: 100.0000' / IN.	SHEET NO. OF SHEETS	STA.	TO STA.		1353	1093
REVISED -	CONTRACT NO.						
REVISED -	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT						

THRUST BLOCK DETAILS 34.4

SIDEWALK AND DRIVEWAY PAVEMENT PAY AREAS

- PAY FOR AS
- SIDEWALK REMOVAL
 - DRIVEWAY PAVEMENT REMOVAL
 - PCC SIDEWALK 5
 - PCC DRIVEWAY PAVEMENT 7

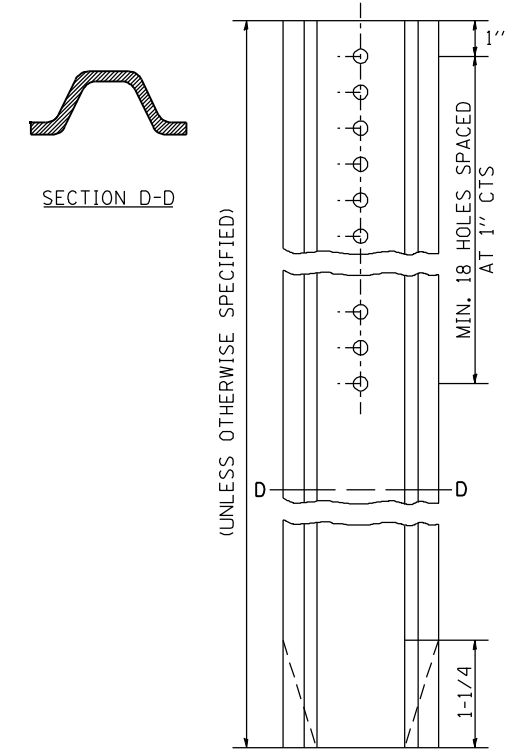
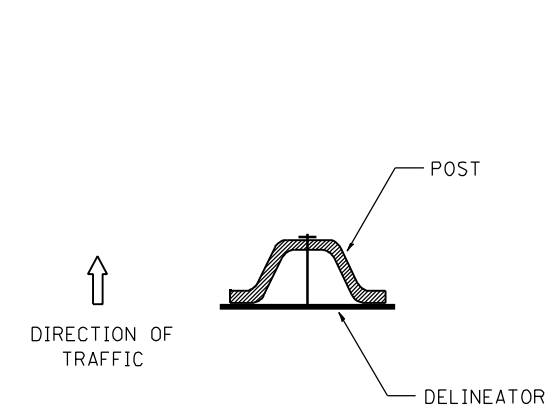


FOR DETAILS ON DIMENSIONS AND GRADES, SEE DISTRICT STANDARD 25.1 OR PLANS.
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 6-27-14
10-03-11

SIDEWALK AND DRIVEWAY PAVEMENT PAY AREAS 35.4

DELINEATOR AND POST ORIENTATION



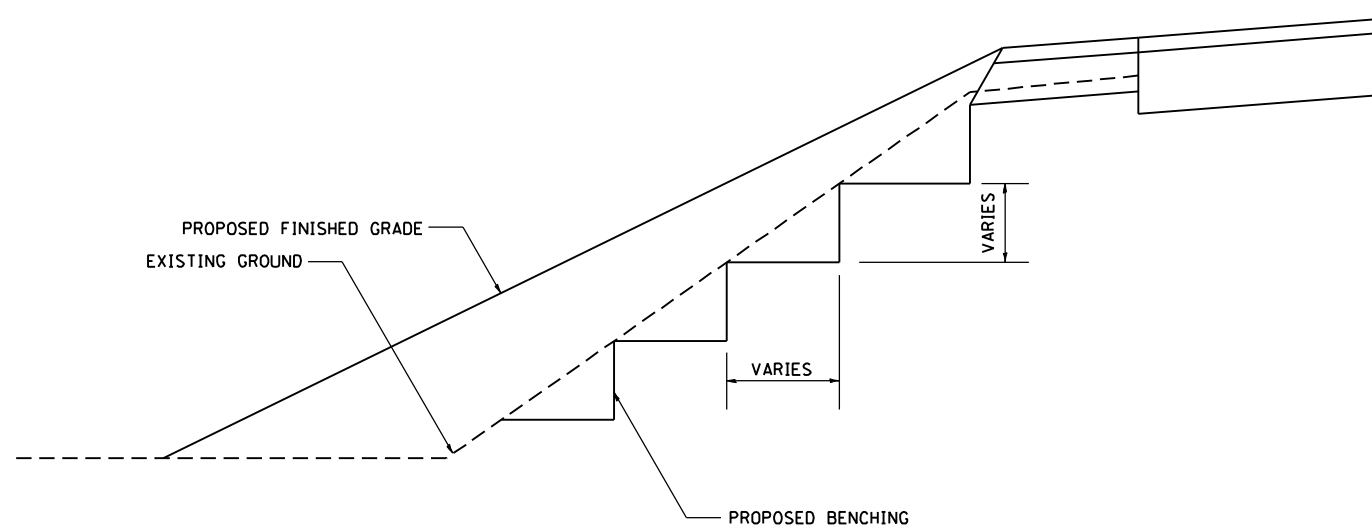
DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180°. THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE DELINEATOR ATTACHED AS SHOWN ABOVE.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 10-03-11

DELINEATOR AND POST ORIENTATION 37.4

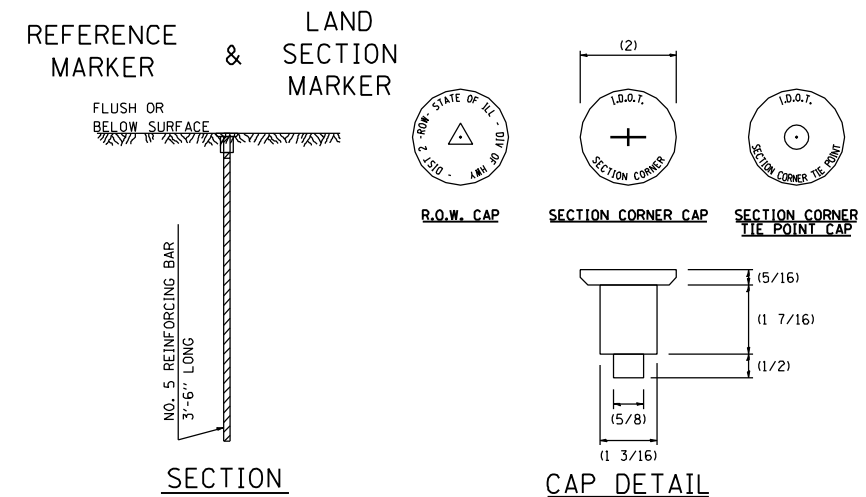
TYPICAL BENCHING ON EXISTING EMBANKMENT



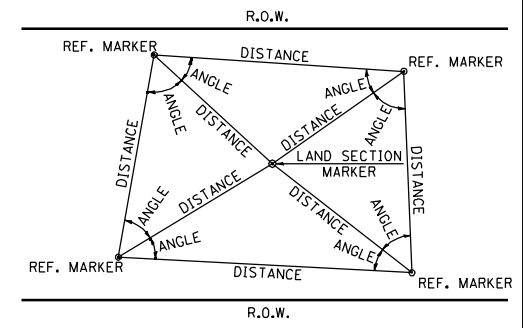
REVISED - 2-22-06

TYPICAL BENCHING ON EXISTING EMBANKMENT 50.4

LAND SECTION & REFERENCE MARKERS



METHOD OF REFERENCING MARKERS



METHOD OF REFERENCING POINTS
REFERENCE MARKERS SHALL BE USED TO TIE IN PERMANENT LAND SECTION AND 1/4 SECTION CORNERS. WHERE LAND SECTION MARKERS FALL IN THE SHOULDERS OR GRAVEL SURFACES, THE TOP OF THE BAR SHALL BE KEPT 3" BELOW THE SURFACE. LAND SECTION MARKERS LOCATED IN TRAFFIC LANES SHALL BE REPLACED BY CORE DRILL AND RESETTING PIN.

ALUMINUM CAPS SHALL BE PLACED ON TOP OF THE REINFORCEMENT BAR. THERE ARE 3 TYPES OF CAPS, ONE FOR THE RIGHT-OF-WAY CORNERS, ONE FOR THE SECTION CORNERS AND ONE FOR THE SECTION CORNER TIE POINTS. THE CAPS WILL BE SUPPLIED BY THE SURVEYOR WHO IS RESPONSIBLE FOR MONUMENTING CORNERS.

- USE INSTRUMENT TIES TO NEARBY LAND-MARKS (STEEPLES, TOWERS, SILOS, ETC...)
- IN CULTIVATED FIELDS, SET 28" OR MORE BELOW GROUND SURFACE.
- IN FENCE LINE OR PROTECTED AREA SET TOP AT GROUND LEVEL SO AS NOT TO BE DISTURBED BY MOWING.

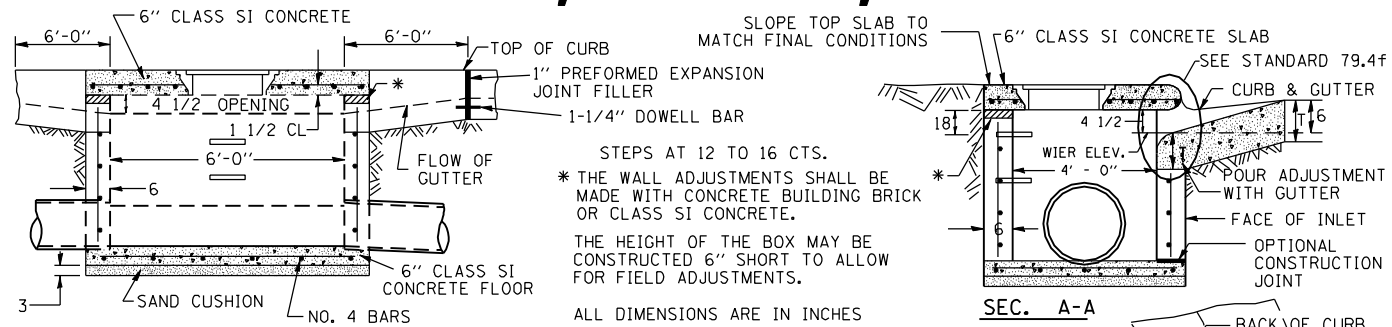
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 3-05-10	REGION 2 / DISTRICT 2 STANDARD		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
REVISED -					1353	1094		
REVISED -			CONTRACT NO.					
REVISED -			SCALE: 100.0000' / 1" =	SHEET NO.	OF	SHEETS	STA.	TO STA.

LAND SECTION & REFERENCE MARKERS 63.4

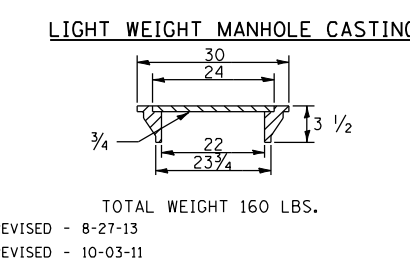
PLOT DATE = 12/18/2014

INLETS, SPECIAL, NO. 3

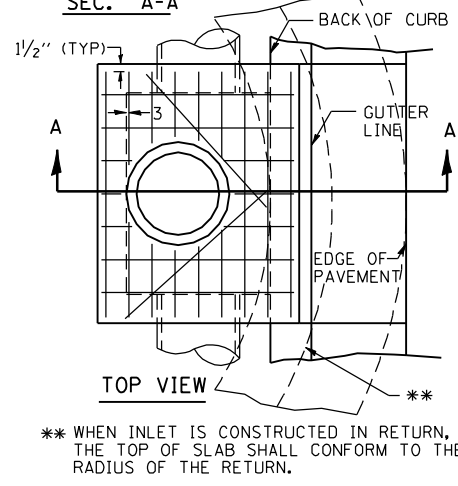


STEPS AT 12 TO 16 CTS.
 * THE WALL ADJUSTMENTS SHALL BE MADE WITH CONCRETE BUILDING BRICK OR CLASS SI CONCRETE.
 THE HEIGHT OF THE BOX MAY BE CONSTRUCTED 6" SHORT TO ALLOW FOR FIELD ADJUSTMENTS.
 ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

FRONT VIEW
 SEE STANDARD 602701 FOR DETAILS OF STEPS. 1" PREFORMED EXPANSION JOINTS AS SHOWN SHALL BE PROVIDED ON EACH SIDE OF INLET. CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT. THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTAL SECTIONS. REINFORCEMENT FOR INLETS, SPECIAL, NO. 3 SHALL BE ACCORDING TO DISTRICT STANDARD 79.4g

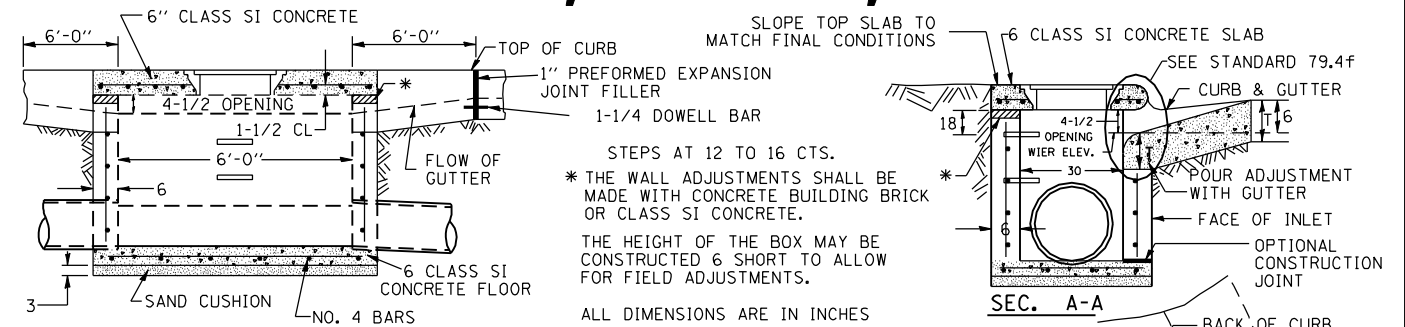


NOTES
 STEPS SHALL BE OMITTED WHEN DEPTH OF INLET IS LESS THAN 5 FOOT
 THE INLET SHALL BE CAST IN PLACE OR PRECAST.
 EXCEPT AS NOTED HEREON INLETS, SPECIAL, NO. 3 SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.
 THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL NO. 3 SHALL INCLUDE THE COST OF FURNISHING AND INSTALLING THE FRAME, LID, REINFORCEMENT BARS, FLOOR AND TOP SLABS, CAST IRON STEPS (IF USED).
 THE CURB AND GUTTER WILL BE PAID FOR SEPARATELY AND WILL BE MEASURED THROUGH THE INLET.
 THE CURB AND GUTTER ADJACENT TO AND 6 FOOT ON EITHER SIDE OF THE INLET SHALL BE CONSTRUCTED AS SHOWN WITH NO ADDITIONAL COMPENSATION FOR THE TRANSITION.
 ALL PIPE UNDERDRAIN CONNECTIONS WHEN SPECIFIED SHALL BE DONE IN ACCORDANCE WITH ART. 601 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER (FOOT) FOR PIPE UNDERDRAINS OR PIPE UNDERDRAINS (SPECIAL) OF THE DIAMETER SPECIFIED WHICH PRICE SHALL INCLUDE THE CA7 OR CA16 AND THE CONNECTION TO THE INLET.



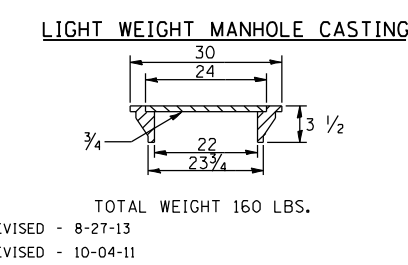
INLETS, SPECIAL, NO. 3 79.4

INLETS, SPECIAL, NO. 5

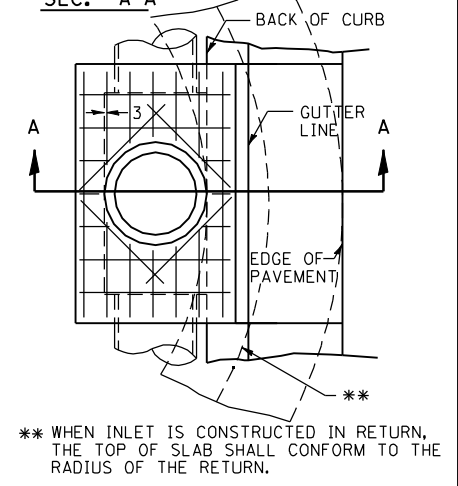


STEPS AT 12 TO 16 CTS.
 * THE WALL ADJUSTMENTS SHALL BE MADE WITH CONCRETE BUILDING BRICK OR CLASS SI CONCRETE.
 THE HEIGHT OF THE BOX MAY BE CONSTRUCTED 6" SHORT TO ALLOW FOR FIELD ADJUSTMENTS.
 ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

FRONT VIEW
 SEE STANDARD 602701 FOR DETAILS OF STEPS. 1" PREFORMED EXPANSION JOINTS AS SHOWN SHALL BE PROVIDED ON EACH SIDE OF INLET. CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT. THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTAL SECTIONS. REINFORCEMENT FOR INLETS, SPECIAL, NO. 5 SHALL BE ACCORDING TO DISTRICT STANDARD 79.4g

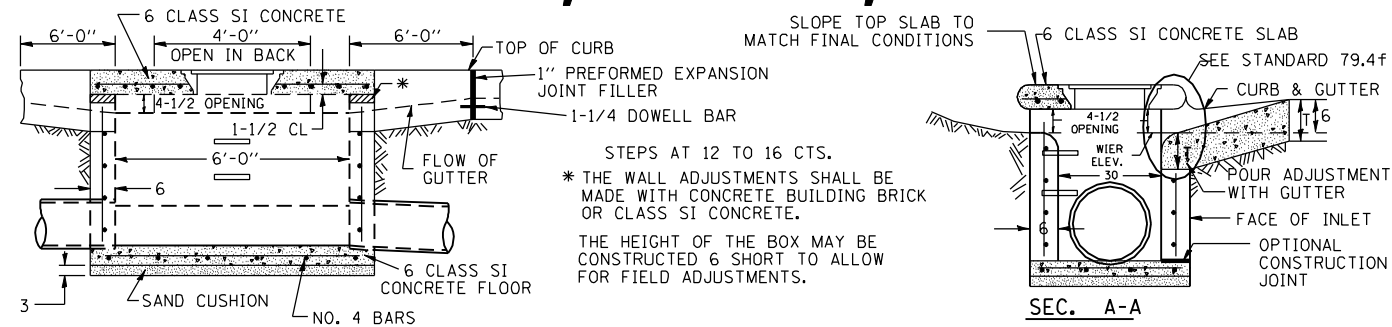


NOTES
 STEPS SHALL BE OMITTED WHEN DEPTH OF INLET IS LESS THAN 5 FOOT
 THE INLET SHALL BE CAST IN PLACE OR PRECAST.
 EXCEPT AS NOTED HEREON INLETS, SPECIAL, NO. 5 SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.
 THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL NO. 5 SHALL INCLUDE THE COST OF FURNISHING AND INSTALLING THE FRAME, LID, REINFORCEMENT BARS, FLOOR AND TOP SLABS, CAST IRON STEPS (IF USED).
 THE CURB AND GUTTER WILL BE PAID FOR SEPARATELY AND WILL BE MEASURED THROUGH THE INLET.
 THE CURB AND GUTTER ADJACENT TO AND 6 FOOT ON EITHER SIDE OF THE INLET SHALL BE CONSTRUCTED AS SHOWN WITH NO ADDITIONAL COMPENSATION FOR THE TRANSITION.
 ALL PIPE UNDERDRAIN CONNECTIONS WHEN SPECIFIED SHALL BE DONE IN ACCORDANCE WITH ART. 601 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER (FOOT) FOR PIPE UNDERDRAINS OR PIPE UNDERDRAINS (SPECIAL) OF THE DIAMETER SPECIFIED WHICH PRICE SHALL INCLUDE THE CA7 OR CA16 AND THE CONNECTION TO THE INLET.



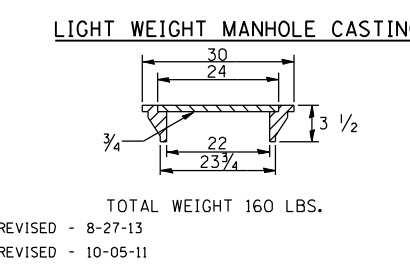
INLETS, SPECIAL, NO. 5 79.4b

INLETS, SPECIAL, NO. 6

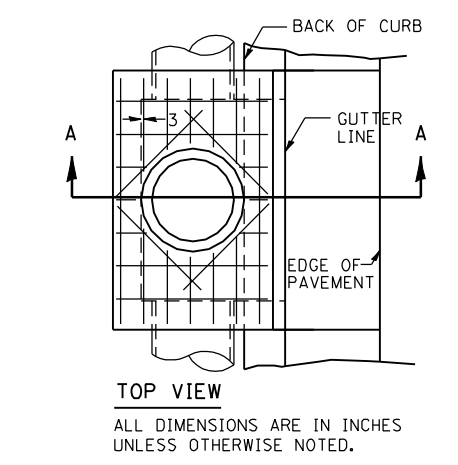


STEPS AT 12 TO 16 CTS.
 * THE WALL ADJUSTMENTS SHALL BE MADE WITH CONCRETE BUILDING BRICK OR CLASS SI CONCRETE.
 THE HEIGHT OF THE BOX MAY BE CONSTRUCTED 6" SHORT TO ALLOW FOR FIELD ADJUSTMENTS.
 ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

FRONT VIEW
 SEE STANDARD 602701 FOR DETAILS OF STEPS. 1" PREFORMED EXPANSION JOINTS AS SHOWN SHALL BE PROVIDED ON EACH SIDE OF INLET. CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT. THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTAL SECTIONS. REINFORCEMENT FOR INLETS, SPECIAL, NO. 6 SHALL BE ACCORDING TO DISTRICT STANDARD 79.4g

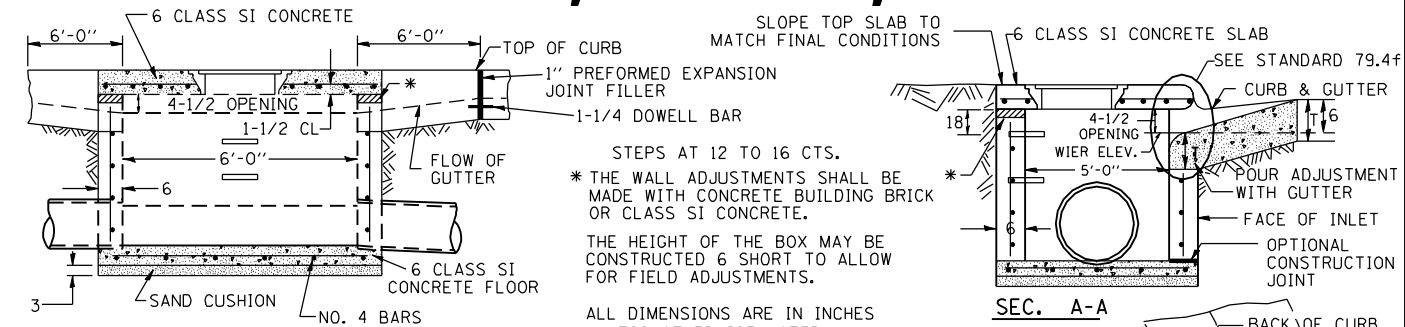


NOTES
 STEPS SHALL BE OMITTED WHEN DEPTH OF INLET IS LESS THAN 5 FOOT
 THE INLET SHALL BE CAST IN PLACE OR PRECAST.
 EXCEPT AS NOTED HEREON INLETS, SPECIAL, NO. 6 SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.
 THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL NO. 6 SHALL INCLUDE THE COST OF FURNISHING AND INSTALLING THE FRAME, LID, REINFORCEMENT BARS, FLOOR AND TOP SLABS, CAST IRON STEPS (IF USED).
 THE CURB AND GUTTER WILL BE PAID FOR SEPARATELY AND WILL BE MEASURED THROUGH THE INLET.
 THE CURB AND GUTTER ADJACENT TO AND 6 FOOT ON EITHER SIDE OF THE INLET SHALL BE CONSTRUCTED AS SHOWN WITH NO ADDITIONAL COMPENSATION FOR THE TRANSITION.
 ALL PIPE UNDERDRAIN CONNECTIONS WHEN SPECIFIED SHALL BE DONE IN ACCORDANCE WITH ART. 601 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER (FOOT) FOR PIPE UNDERDRAINS OR PIPE UNDERDRAINS (SPECIAL) OF THE DIAMETER SPECIFIED WHICH PRICE SHALL INCLUDE THE CA7 OR CA16 AND THE CONNECTION TO THE INLET.



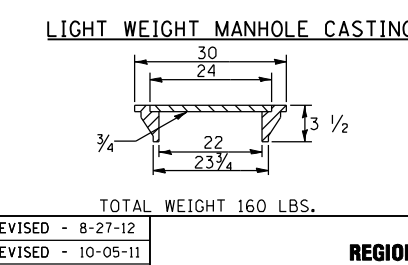
INLETS, SPECIAL, NO. 6 79.4c

INLETS, SPECIAL, NO. 7

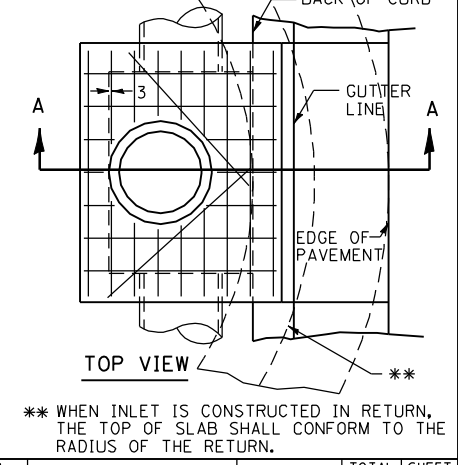


STEPS AT 12 TO 16 CTS.
 * THE WALL ADJUSTMENTS SHALL BE MADE WITH CONCRETE BUILDING BRICK OR CLASS SI CONCRETE.
 THE HEIGHT OF THE BOX MAY BE CONSTRUCTED 6" SHORT TO ALLOW FOR FIELD ADJUSTMENTS.
 ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

FRONT VIEW
 SEE STANDARD 602701 FOR DETAILS OF STEPS. 1" PREFORMED EXPANSION JOINTS AS SHOWN SHALL BE PROVIDED ON EACH SIDE OF INLET. CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT. THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTAL SECTIONS. REINFORCEMENT FOR INLETS, SPECIAL, NO. 7 SHALL BE ACCORDING TO DISTRICT STANDARD 79.4h



NOTES
 STEPS SHALL BE OMITTED WHEN DEPTH OF INLET IS LESS THAN 5 FOOT
 THE INLET SHALL BE CAST IN PLACE OR PRECAST.
 EXCEPT AS NOTED HEREON INLETS, SPECIAL, NO. 7 SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.
 THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL NO. 7 SHALL INCLUDE THE COST OF FURNISHING AND INSTALLING THE FRAME, LID, REINFORCEMENT BARS, FLOOR AND TOP SLABS, CAST IRON STEPS (IF USED).
 THE CURB AND GUTTER WILL BE PAID FOR SEPARATELY AND WILL BE MEASURED THROUGH THE INLET.
 THE CURB AND GUTTER ADJACENT TO AND 6 FOOT ON EITHER SIDE OF THE INLET SHALL BE CONSTRUCTED AS SHOWN WITH NO ADDITIONAL COMPENSATION FOR THE TRANSITION.
 ALL PIPE UNDERDRAIN CONNECTIONS WHEN SPECIFIED SHALL BE DONE IN ACCORDANCE WITH ART. 601 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER (FOOT) FOR PIPE UNDERDRAINS OR PIPE UNDERDRAINS (SPECIAL) OF THE DIAMETER SPECIFIED WHICH PRICE SHALL INCLUDE THE CA7 OR CA16 AND THE CONNECTION TO THE INLET.

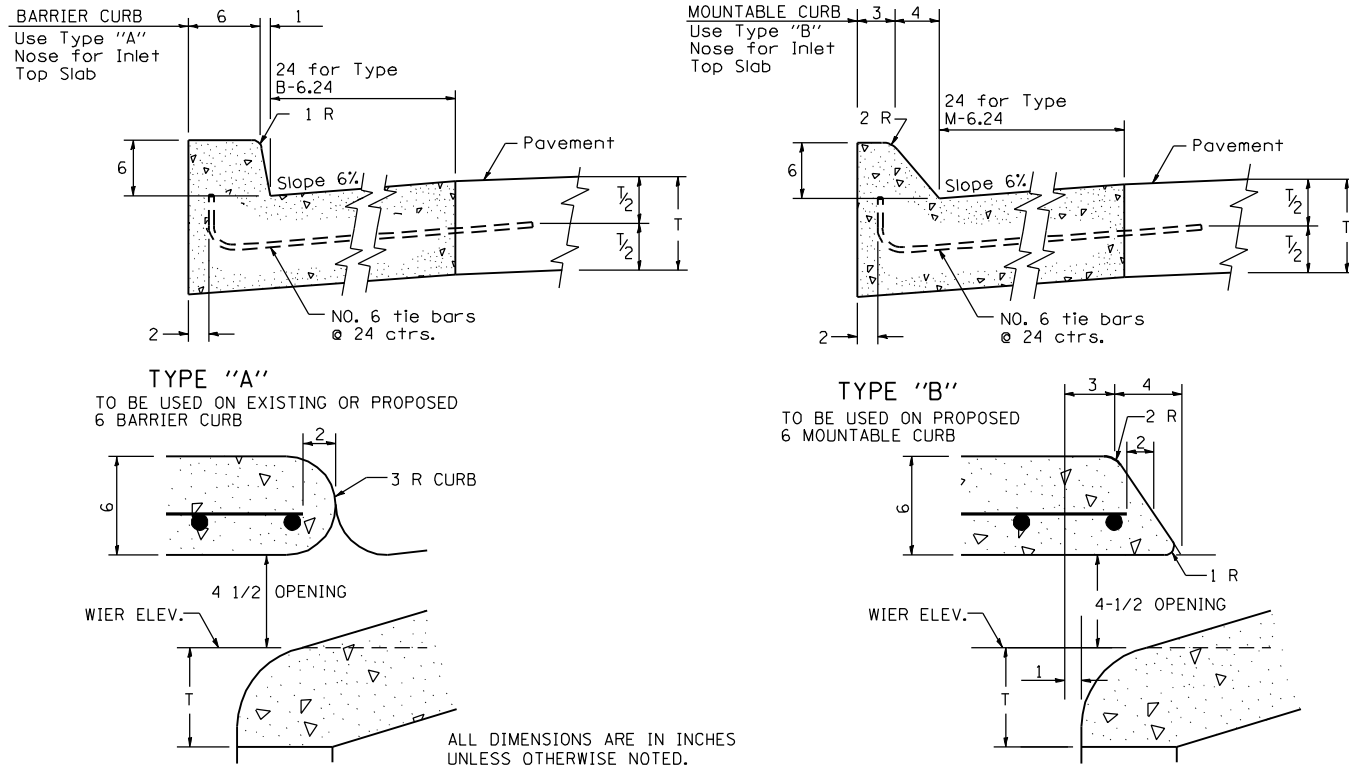


INLETS, SPECIAL, NO. 7 79.4d

REVISED - 8-27-12	REGION 2 / DISTRICT 2 STANDARD		F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 10-05-11					1353	1095	
REVISED -	SCALE: 100.0000' / 1" SHEET NO. OF SHEETS STA. TO STA.		CONTRACT NO.				
REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

PLOT DATE = 12/18/2014

NOSE TYPE FOR INLET TOP SLAB

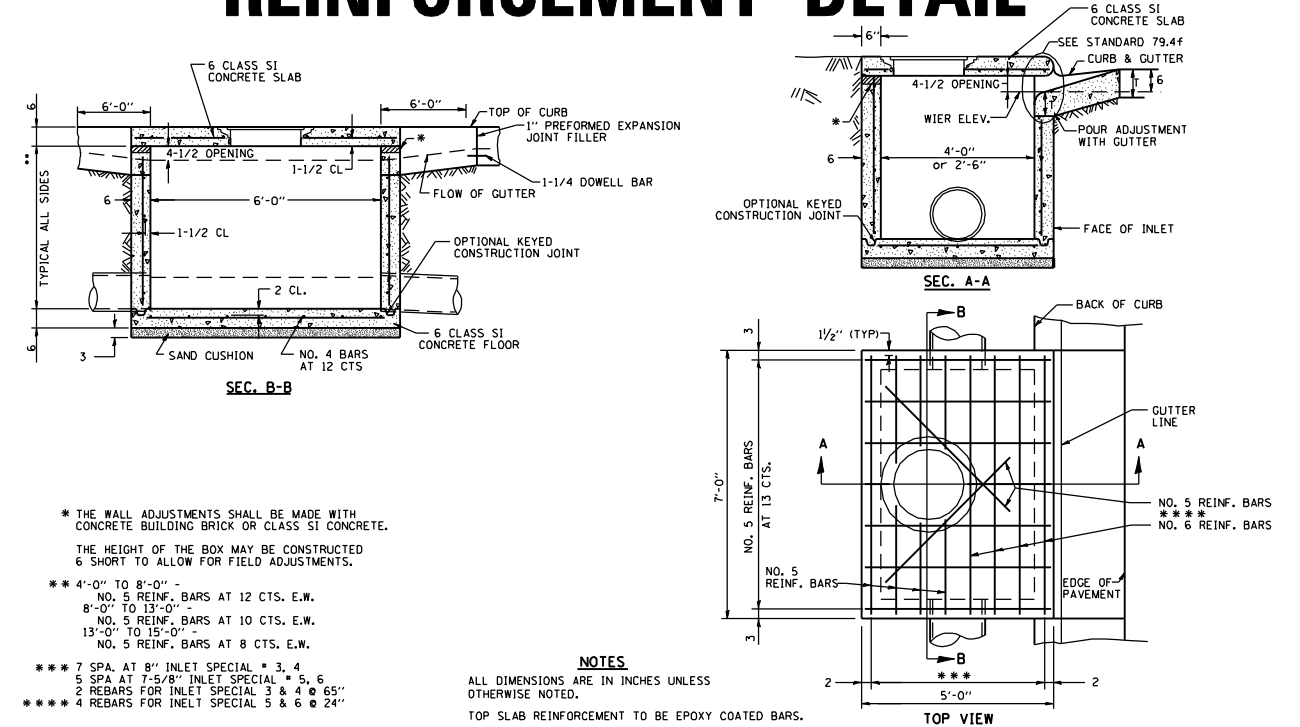


REVISED - 4-14-15
10-05-11

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

NOSE TYPE FOR INLET TOP SLAB 79.4f

INLETS, SPECIAL, NO. 3, 4, 5, 6 REINFORCEMENT DETAIL

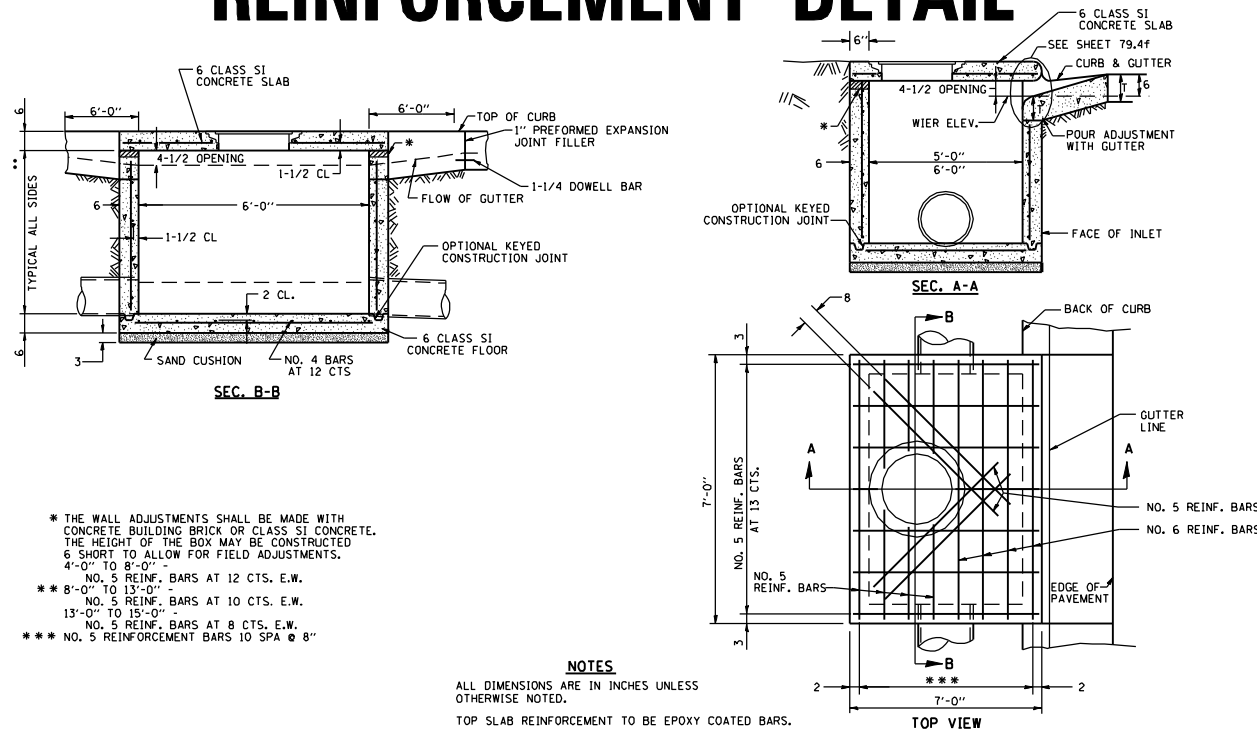


REVISED - 8-27-13
10-05-11

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
TOP SLAB REINFORCEMENT TO BE EPOXY COATED BARS.

INLETS, SPECIAL, NO. 3, 4, 5, 6 REINFORCEMENT DETAIL 79.4g

INLETS, SPECIAL, NO. 7 & 8 REINFORCEMENT DETAIL

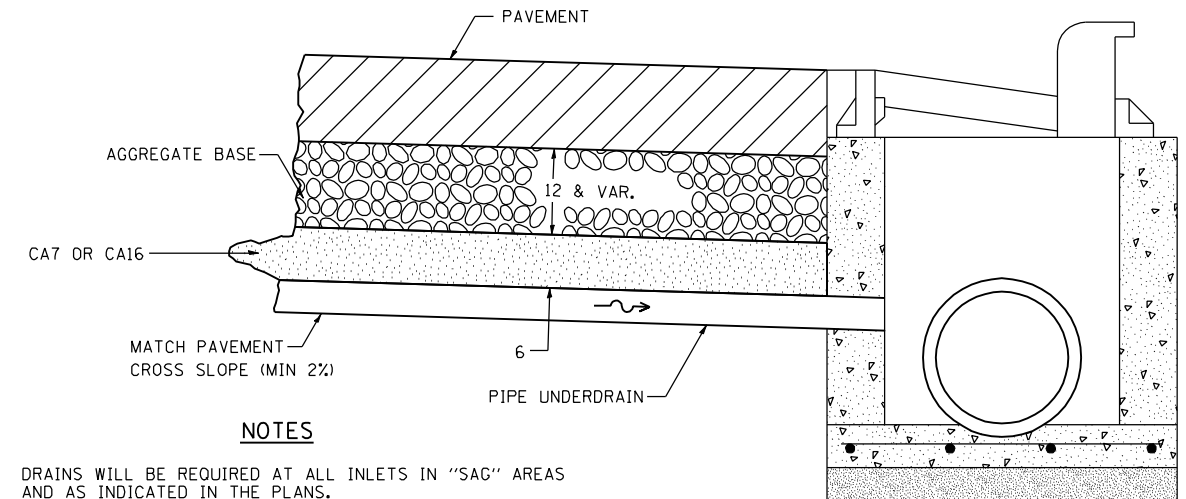


REVISED - 8-27-13
10-05-11

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
TOP SLAB REINFORCEMENT TO BE EPOXY COATED BARS.

INLETS, SPECIAL, NO. 7 & 8 REINFORCEMENT DETAIL 79.4h

DRAIN FOR AGGREGATE BASES IN URBAN AREAS



DRAINS WILL BE REQUIRED AT ALL INLETS IN "SAG" AREAS AND AS INDICATED IN THE PLANS.

THIS WORK SHALL BE COMPLETED ACCORDING TO SECTION 601 OF THE STANDARD SPECIFICATIONS.

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR PIPE UNDERDRAINS OF THE DIAMETER SPECIFIED WHICH PRICE SHALL INCLUDE THE CA7 OR CA16 AND THE CONNECTION TO THE INLET.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 10-05-11	REGION 2 / DISTRICT 2 STANDARD		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -						1353	1096
REVISED -			CONTRACT NO.				
REVISED -	SCALE: 100.0000' / 1" =	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			

DRAIN FOR AGGREGATE BASES IN URBAN AREAS 88.4

PLOT DATE = 7/13/2015

TYPICAL MEDIAN CROSSOVER CLOSURE

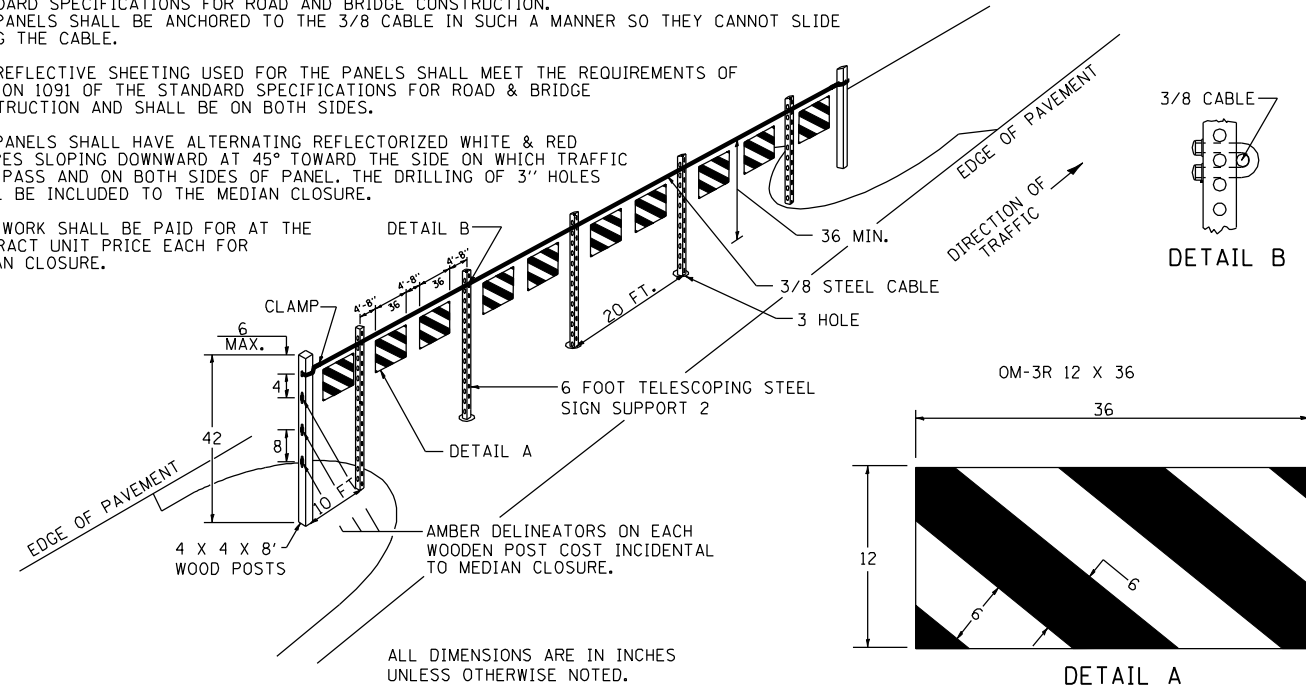
GENERAL NOTES

WOOD POSTS, CABLE, AND SIGN SUPPORTS SHALL BE IN ACCORDANCE WITH SECTION 634 & 636 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE PANELS SHALL BE ANCHORED TO THE 3/8 CABLE IN SUCH A MANNER SO THEY CANNOT SLIDE ALONG THE CABLE.

THE REFLECTIVE SHEETING USED FOR THE PANELS SHALL MEET THE REQUIREMENTS OF SECTION 1091 OF THE STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION AND SHALL BE ON BOTH SIDES.

ALL PANELS SHALL HAVE ALTERNATING REFLECTORIZED WHITE & RED STRIPES SLOPING DOWNWARD AT 45° TOWARD THE SIDE ON WHICH TRAFFIC WILL PASS AND ON BOTH SIDES OF PANEL. THE DRILLING OF 3" HOLES SHALL BE INCLUDED TO THE MEDIAN CLOSURE.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR MEDIAN CLOSURE.



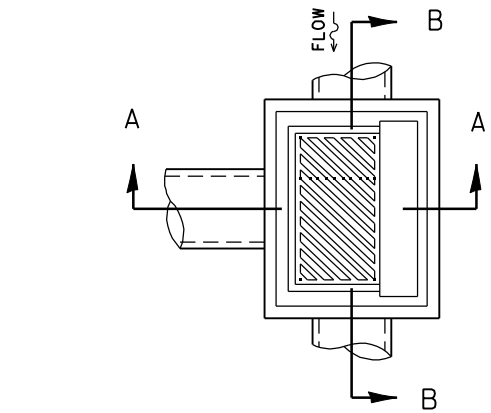
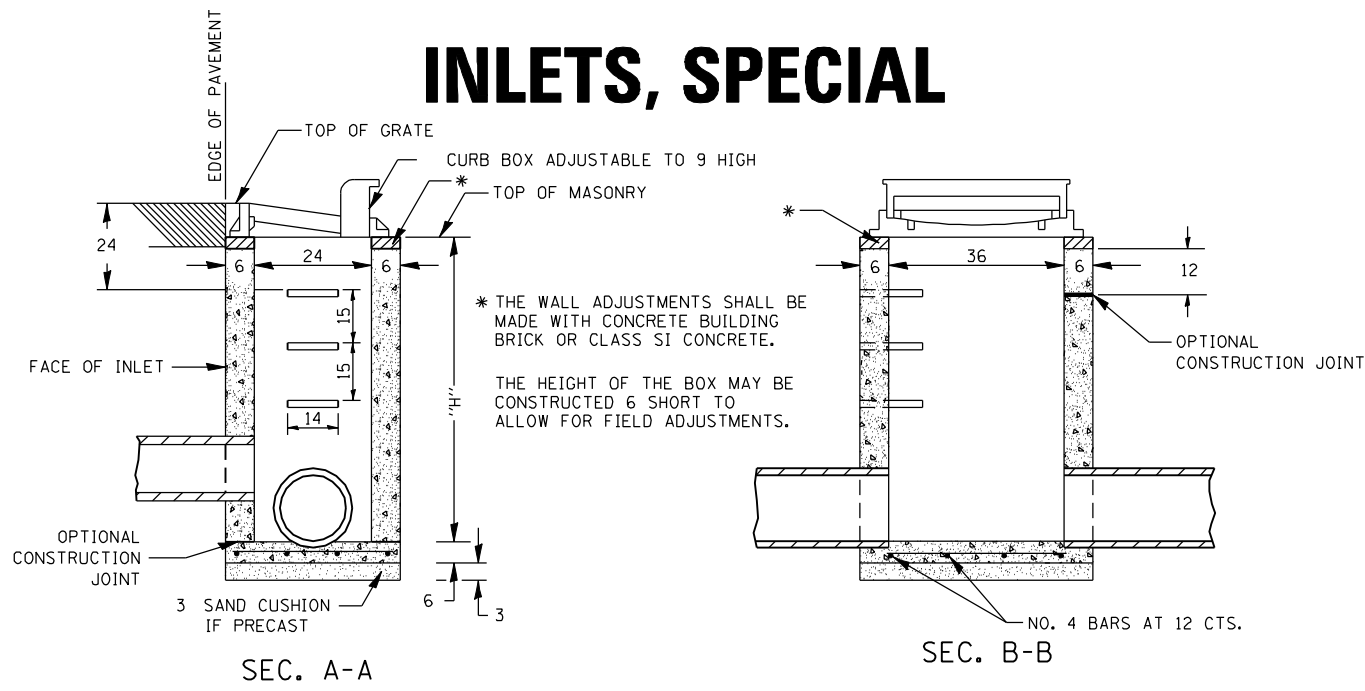
REVISED - 1-16-12

TYPICAL MEDIAN CROSSOVER CLOSURE 98.4

PLOT DATE = 12/18/2014

REVISED -	REGION 2 / DISTRICT 2 STANDARD	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
REVISED -					1353	1097	
REVISED -		CONTRACT NO.					
REVISED -		SCALE: 100.0000' / 1" SHEET NO.	OF	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.
REVISED -							ILLINOIS FED. AID PROJECT

INLETS, SPECIAL



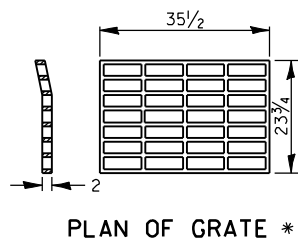
NOTES

- SEE STANDARD 602701 FOR DETAILS OF STEPS.
- EXCEPT AS NOTED HEREON INLET SPECIAL SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.
- THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTED SECTIONS.
- ALL VOIDS AROUND PIPE ENTRANCE, BOTH INSIDE AND OUTSIDE, SHALL BE SEALED WITH MORTAR.
- WEIGHT OF CAST IRON FRAME & GRATE = 530 lbs. ± . STEPS SHALL BE OMITTED WHEN DEPTH OF "H" IS LESS THAN 5 FT.

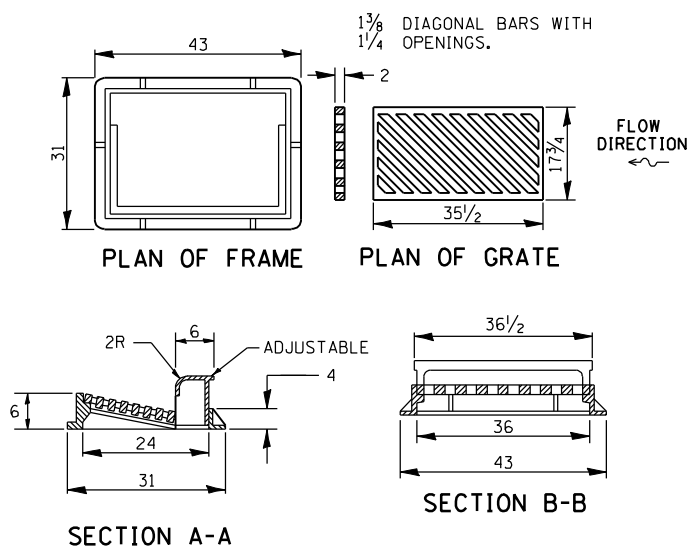
DETAIL OF FRAME & GRATE

NOTES

- CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT. PRECAST CONCRETE SHALL BE IN ACCORDANCE WITH SECTION 504.01 THRU 504.05 OF THE STANDARD SPECIFICATIONS EXCEPT THAT CONCRETE STRENGTH SHALL BE 4,000 psi AFTER 28 DAYS.
- THE CONTRACT UNIT PRICE EACH FOR INLETS, SPECIAL SHALL INCLUDE THE COST OF CONSTRUCTING THE INLET BOX, FURNISHING AND INSTALLING THE FRAME AND GRATE, THE CAST IRON STEPS (IF USED), THE PRECAST FLOOR SLABS, SAND CUSHION (WHEN USED) AND REINFORCEMENT BARS.



PLAN OF GRATE *



SECTION A-A

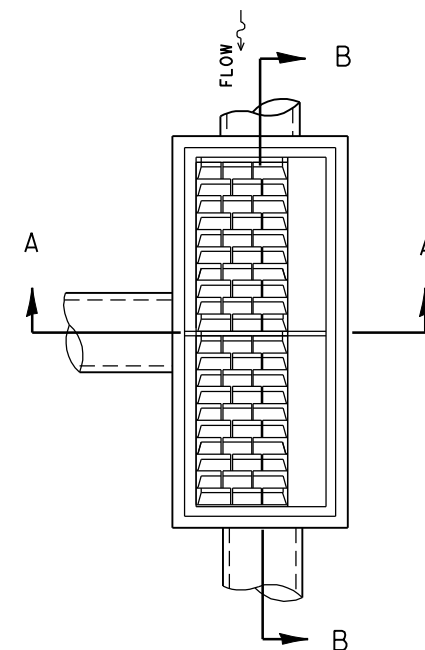
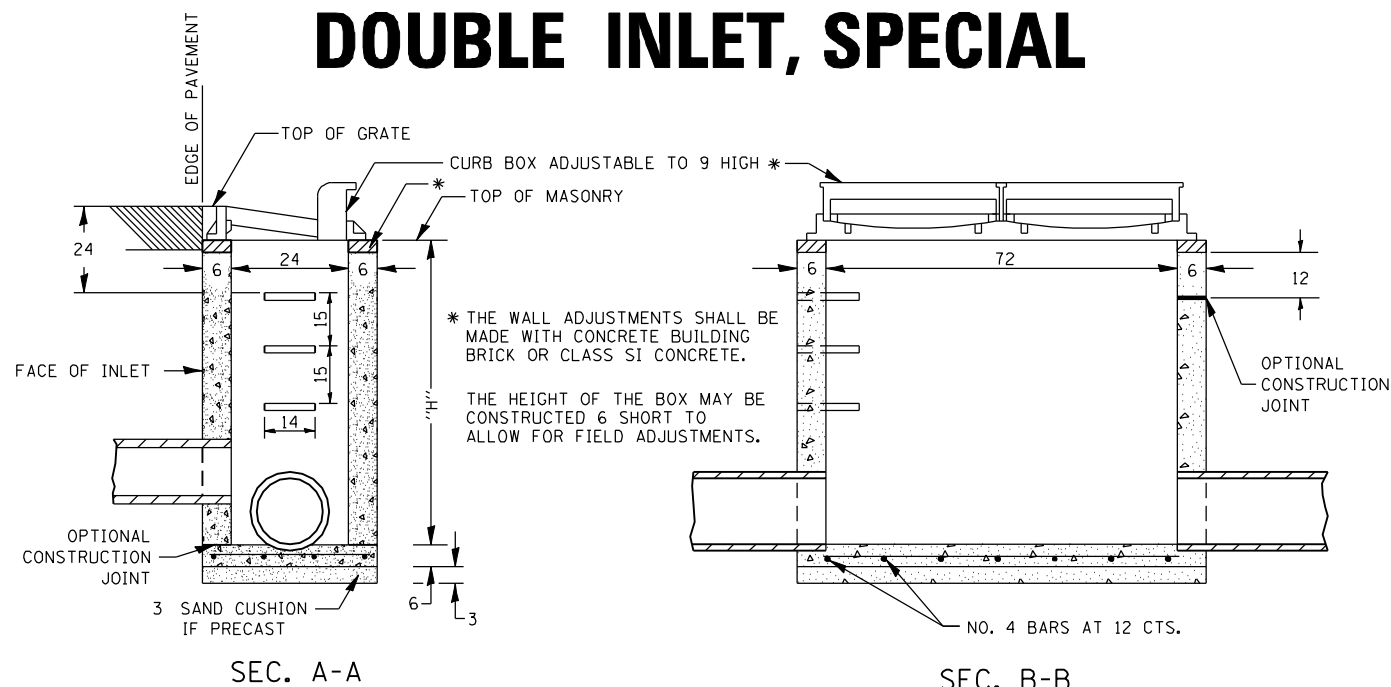
SECTION B-B

* THIS GRATE TO BE USED WITHOUT CURB BOX WHEN INLET IS IN DRIVEWAY.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 6-27-14
10-13-11

DOUBLE INLET, SPECIAL



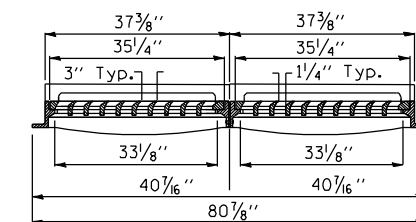
NOTES

- SEE STANDARD 602701 FOR DETAILS OF STEPS.
- EXCEPT AS NOTED HEREON DOUBLE INLET SPECIAL SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.
- THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTED SECTIONS.
- ALL VOIDS AROUND PIPE ENTRANCE, BOTH INSIDE AND OUTSIDE, SHALL BE SEALED WITH MORTAR.
- R-3295-2 DOUBLE UNIT STEPS SHALL BE OMITTED WHEN DEPTH OF "H" IS LESS THAN 5 FOOT.

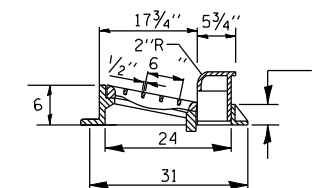
DETAIL OF FRAME & GRATE

NOTES

- CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT. PRECAST CONCRETE SHALL BE IN ACCORDANCE WITH SECTION 504.01 THRU 504.05 OF THE STANDARD SPECIFICATIONS EXCEPT THAT CONCRETE STRENGTH SHALL BE 4,000 psi AFTER 28 DAYS.
- THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL SHALL INCLUDE THE COST OF CONSTRUCTING THE INLET BOX, FURNISHING AND INSTALLING THE FRAME AND GRATE, THE CAST IRON STEPS (IF USED), THE PRECAST FLOOR SLABS, SAND CUSHION (WHEN USED) AND REINFORCEMENT BARS.



SECTION B-B

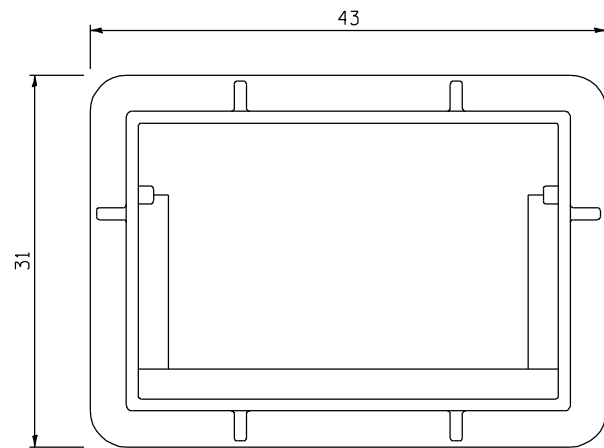


SECTION A-A

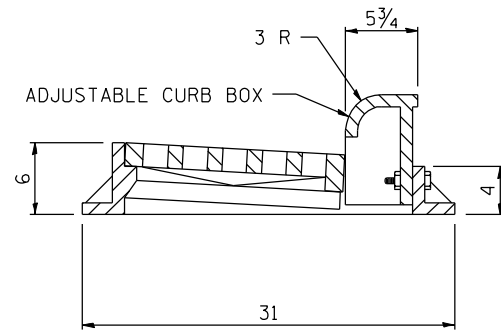
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 10-13-11	REGION 2 / DISTRICT 2 STANDARD	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
REVISED -					1353	1098	
REVISED -						CONTRACT NO.	
REVISED -		SCALE: 100.0000' / IN.	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

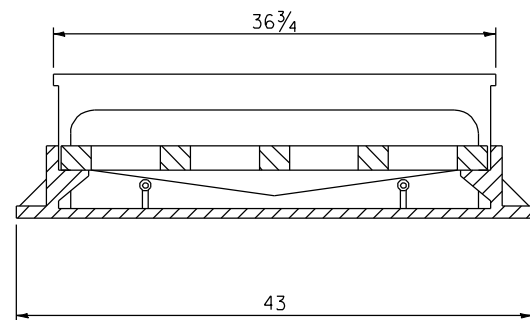
FRAME AND GRATE FOR INLETS, SPECIAL



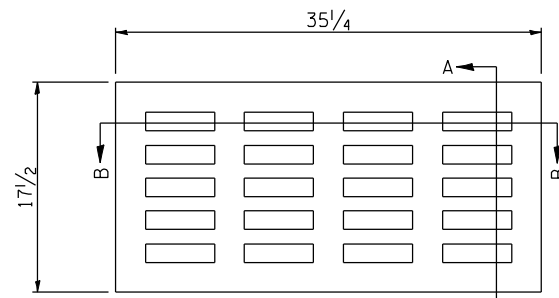
PLAN OF FRAME
WITHOUT GRATE AND CURB BOX



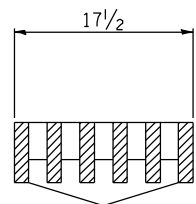
TRANSVERSE SECTION



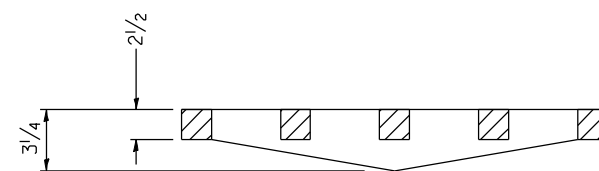
LONGITUDINAL SECTION



PLAN OF GRATE



SECTION A-A



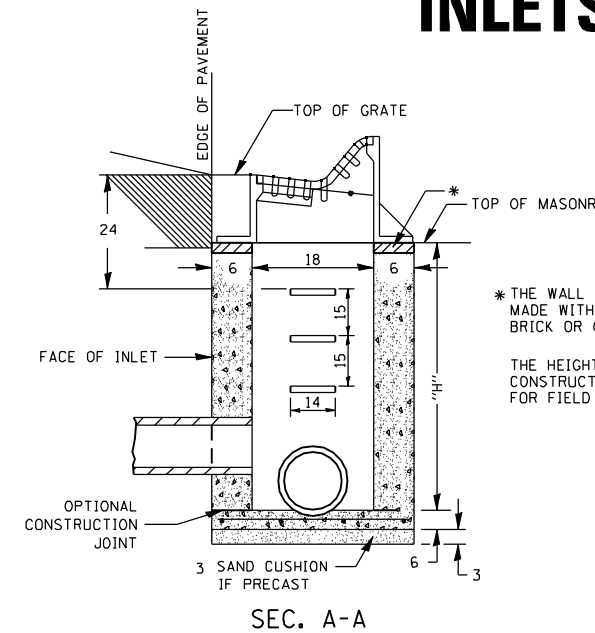
SECTION B-B

R 3246 OR EQUIVALENT
APPROXIMATE WEIGHT - 495 LBS.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

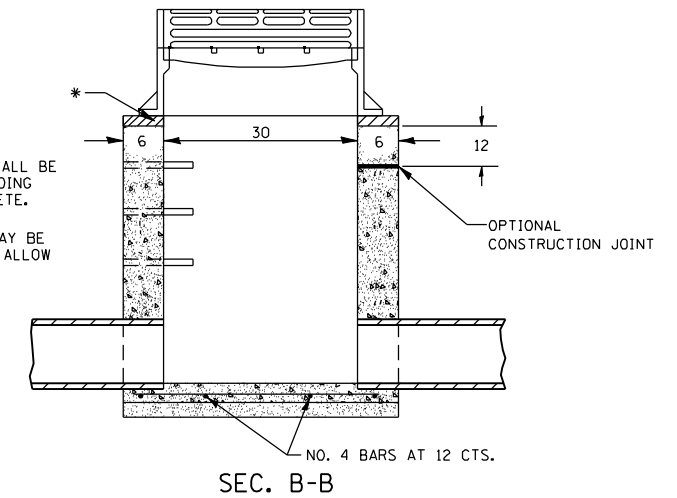
REVISED - 6-27-14
10-13-11

INLETS, SPECIAL, NO. 1



SEC. A-A

* THE WALL ADJUSTMENTS SHALL BE MADE WITH CONCRETE BUILDING BRICK OR CLASS SI CONCRETE.
THE HEIGHT OF THE BOX MAY BE CONSTRUCTED 6 SHORT TO ALLOW FOR FIELD ADJUSTMENTS.



SEC. B-B

NOTES

- SEE STANDARD 602701 FOR DETAILS OF STEPS.
- EXCEPT AS NOTED HEREON INLET SPECIAL SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.
- THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTED SECTIONS.
- ALL VOIDS AROUND PIPE ENTRANCE, BOTH INSIDE AND OUTSIDE, SHALL BE SEALED WITH MORTAR.
- STEPS SHALL BE OMITTED WHEN DEPTH OF "H" IS LESS THAN 5 FOOT.
- BOTH INLET SPECIAL NO. 1 SHALL DRAIN VERTICALLY TO THE ACROSS ROAD CULVERT LOCATED BENEATH.

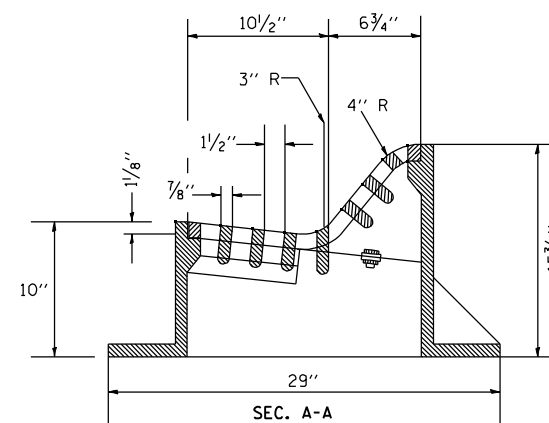
DETAIL OF FRAME & GRATE

NOTES

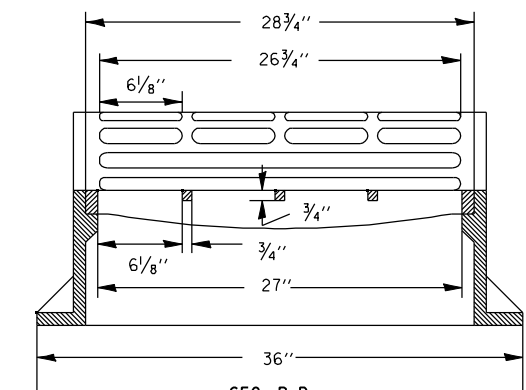
CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT. PRECAST CONCRETE SHALL BE IN ACCORDANCE WITH SECTION 504.01 THRU 504.05 OF THE STANDARD SPECIFICATIONS EXCEPT THAT CONCRETE STRENGTH SHALL BE 4,000 psi AFTER 28 DAYS.

THE CONTRACT UNIT PRICE EACH FOR INLETS, SPECIAL, NO.1 SHALL INCLUDE THE COST OF CONSTRUCTING THE INLET BOX, FURNISHING AND INSTALLING THE FRAME AND GRATE, THE CAST IRON STEPS (IF USED), THE PRECAST FLOOR SLABS, SAND CUSHION (WHEN USED) AND REINFORCEMENT BARS.

NEENAH * R-3503-B OR EQUIVALENT



SEC. A-A



SEC. B-B

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 6-27-14
REVISED - 10-14-11
REVISED -
REVISED -

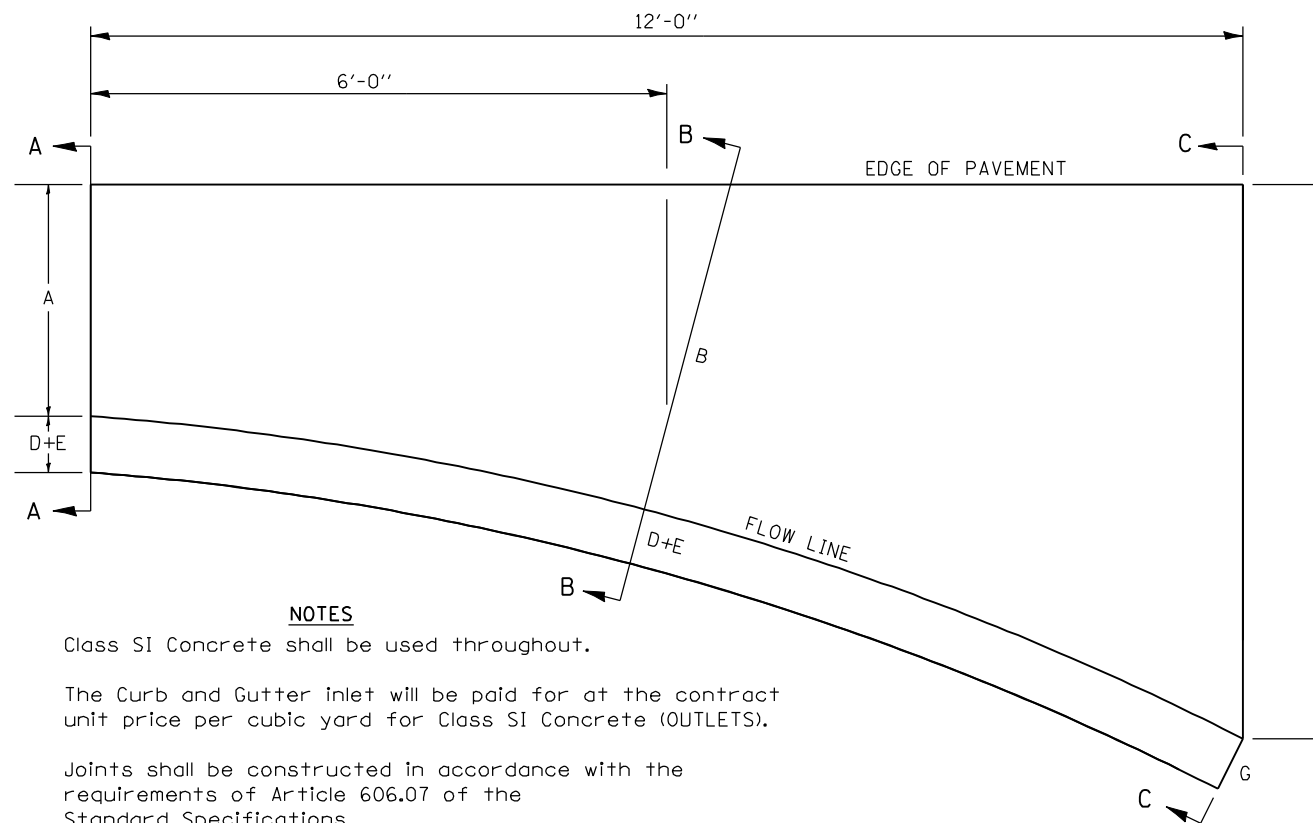
REGION 2 / DISTRICT 2 STANDARD

SCALE: 100.0000' / 1" SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			1353	1099
CONTRACT NO.				

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

STANDARD INLET FOR CURB & GUTTER



NOTES

Class SI Concrete shall be used throughout.

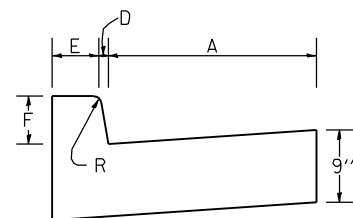
The Curb and Gutter inlet will be paid for at the contract unit price per cubic yard for Class SI Concrete (OUTLETS).

Joints shall be constructed in accordance with the requirements of Article 606.07 of the Standard Specifications.

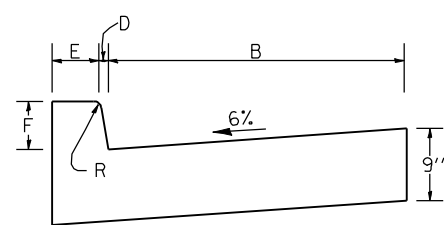
When curb and gutter is constructed adjacent to flexible pavement, a 1" expansion joint shall be installed at construction joints.

All dimensions are in inches unless otherwise noted.

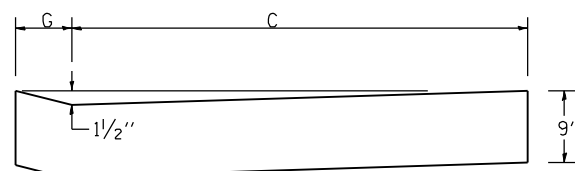
TYPE OF CURB & GUTTER	TABLE OF DIMENSIONS									CONCRETE QUANTITY A-A TO C-C (CU YDS)
	A	B	C	D	E	F	G	R		
B-6.06	6	15	4'	1	6	6	7	1	0.87	
B-6.12	12	18.25	4'	1	6	6	7	1	0.95	
B-6.18	18	27.25	4' 9"	1	6	6	7	1	1.18	
B-6.24	24	32.4	4' 9"	1	6	6	7	1	1.30	
M-4.06	6	17.8	3' 9"	4	3	4	7	3	0.75	
M-4.12	12	18.25	4'	4	3	4	7	3	0.91	
M-4.18	18	27.25	4' 9"	4	3	4	7	3	1.14	
M-4.24	24	32.4	4' 9"	4	3	4	7	3	1.25	
M-6.06	6	17.8	3' 9"	6	2	6	8	3	0.86	
M-6.12	12	18.25	4'	6	2	6	8	2	0.96	
M-6.18	18	27.25	4' 9"	6	2	6	8	2	1.20	
M-6.24	24	32.4	4' 9"	6	2	6	8	2	1.30	



SECTION A-A



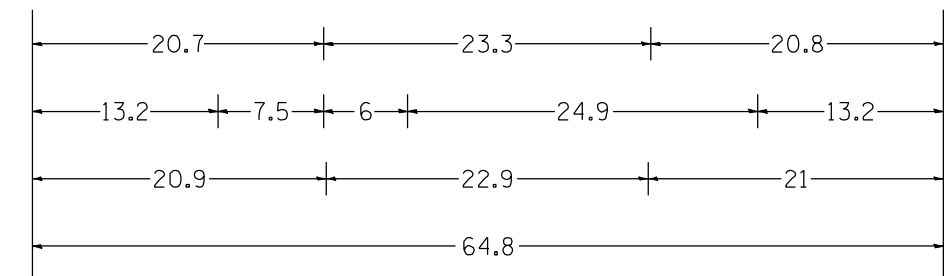
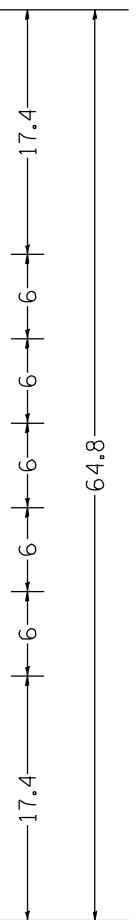
SECTION B-B



SECTION C-C

REVISED - 11-12-14
 REVISED - 8-27-13
 10-10-06

STAY IN YOUR LANE SIGN DETAILS



48.0" across sides 3.8" Radius, 1.0" Border, 0.6" Indent, Black on Orange "STAY" E Mod; "IN YOUR" E Mod; "LANE" E Mod;

Table of letter and object lefts.

S	T	A	Y
20.7	26.8	31.6	38.0

I	N	Y	O	U	R
13.2	15.9	26.7	33.9	40.5	46.8

L	A	N	E
20.9	25.8	33.1	39.4

REVISED - 4-04-11	REGION 2 / DISTRICT 2 STANDARD			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -							1353	1100
REVISED -				CONTRACT NO.				
REVISED -	SCALE: 100.0000' / 1"	SHEET NO.	OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		