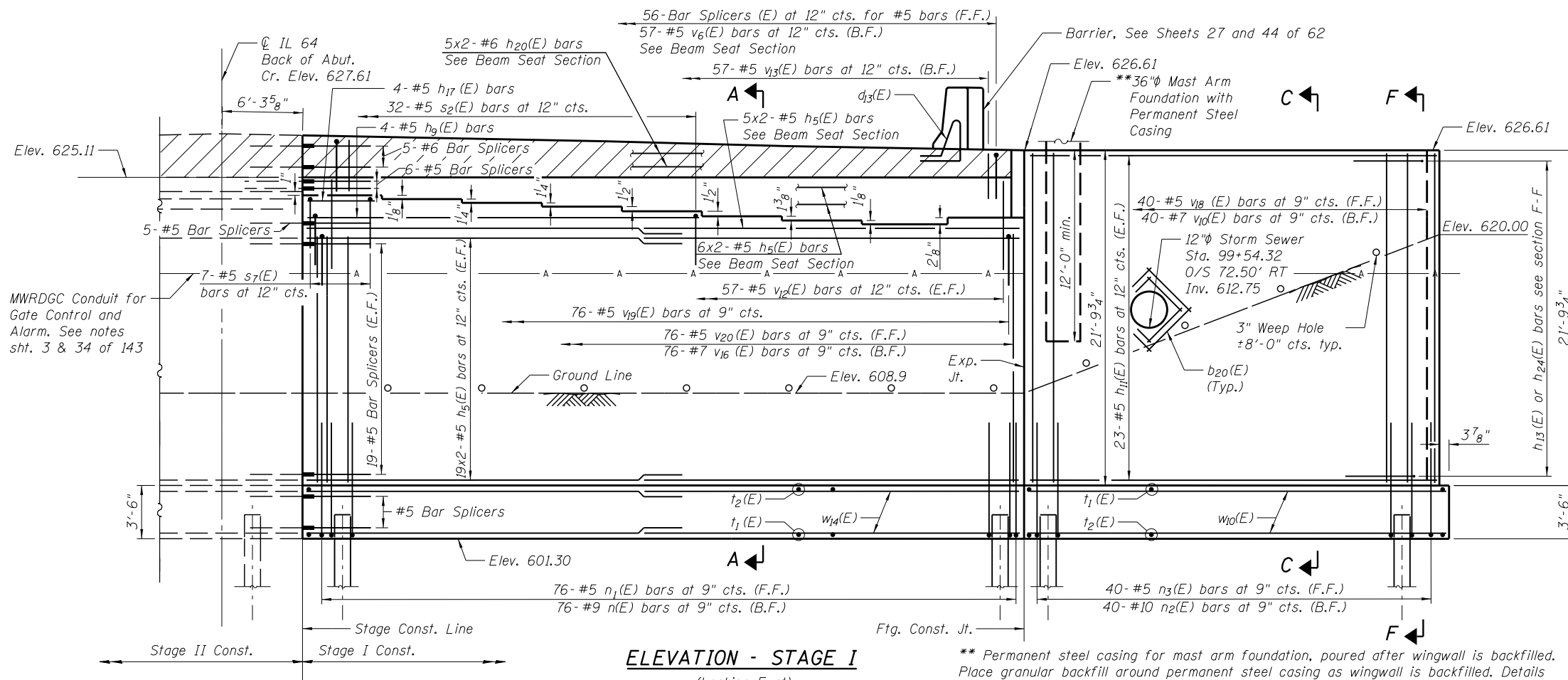


**BEARING SEAT
ELEVATION TABLE-STAGE I**

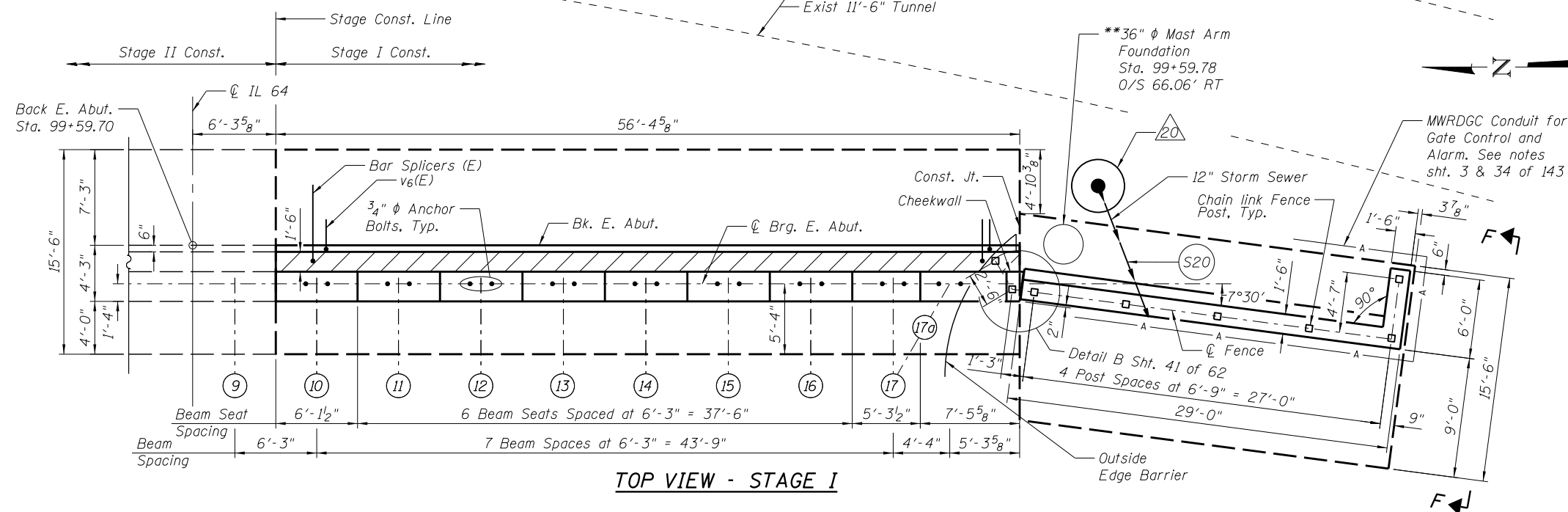
Beam No.	℄ Brg.
9	624.07
10	623.97
11	623.88
12	623.78
13	623.68
14	623.56
15	623.43
16	623.32
17	623.23
17a	623.41



ELEVATION - STAGE I
(Looking East)

** Permanent steel casing for mast arm foundation, poured after wingwall is backfilled. Place granular backfill around permanent steel casing as wingwall is backfilled. Details for mast arm assembly can be found in Highway Standard 877006-04. Top of casing shall be sealed and secured until the mast arm foundation is placed. Contractor is responsible for determining casing thickness, length, strength & diameter. See Art. 1006.05(d) of Std. Specifications for Permanent Steel Casing. Alternate methods of constructing mast arm foundation shall be approved by the Engineer. Pay limits for the Permanent Casing are based on the minimum length shown. Coordinate with traffic signal plans. Cost for Permanent Steel Casing and associated work is included in the pay item "Permanent Casing."

- Notes:
- Space reinf. in cap to miss anchor bolts.
 - Pour steps monolithically with cap.
 - B.F. Denotes Back Face.
 - E.F. Denotes Each Face.
 - F.F. Denotes Front Face.
 - See Sheet 30 of 62 for Expansion Joint Details.
 - Hatched area to be poured after Superstructure falsework has been removed. Concrete quantity is included with Concrete Superstructure.
 - See Sheet 45 of 62 for Cheekwall Details, Anchor Bolt Location Detail, Section F-F, Details of reinforcement and Bill of Material.
 - Work Sheets 40 thru 45 of 62 together.
 - Bars indicated thus 20x2-#5 etc. indicates 20 lines of bars with 2 lengths per line.
 - See Sheet 44 of 62 for Weep Hole Details and beam seat section.
 - See Sheet 29 of 62 for Chain link fence details.
 - See Sheet 53 of 62 for Bar Splicer Details.
 - Install Drainage Structure 20 and Pipe S20 during Wingwall construction.



TOP VIEW - STAGE I

MINIMUM BAR LAP
#5 bars = 2'-3"
#6 bars = 2'-8"

FILE NAME = \$FILES\$



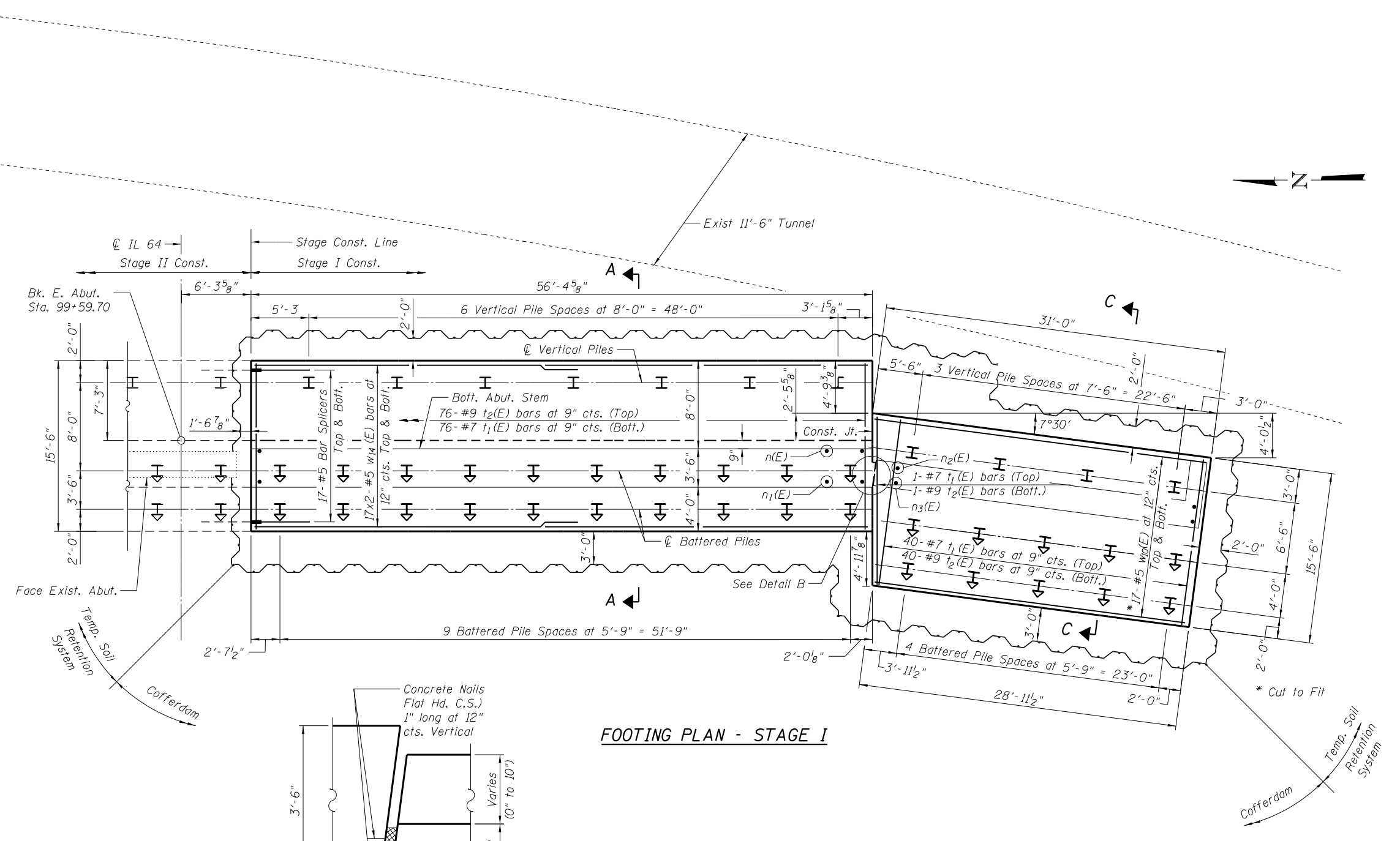
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PLOT SCALE =	CHECKED - JJI	REVISED
PLOT DATE = \$DATE\$	DRAWN - GM	REVISED
	CHECKED - JJI	REVISED

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DEPARTMENT OF TRANSPORTATION**

**EAST ABUTMENT-STAGE I
STRUCTURE NO. 016-3035**
SHEET NO. 40 OF 62 SHEETS

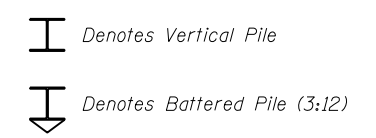
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	541Y-3-B	COOK	143	101
CONTRACT NO. 60J11				
ILLINOIS FED. AID PROJECT				

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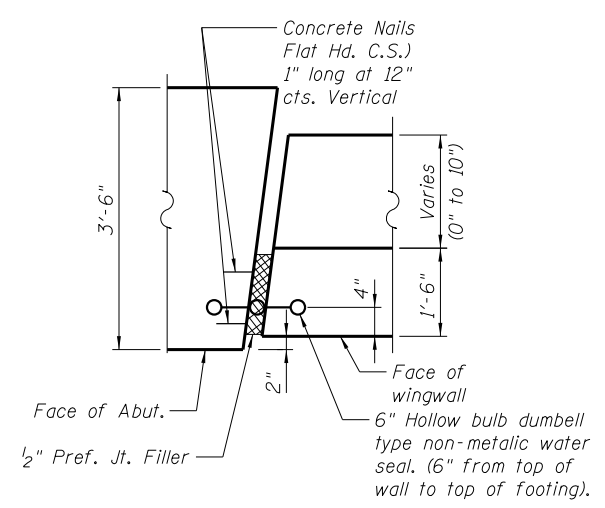


PILE DATA - STAGE I

Type: HP 12x53 with Pile Shoes
 Nominal Required Bearing: 419 kips
 Factored Resistance Available: 230 kips
 Est. Length: 31'
 No. Production Piles: 40
 No. Test Piles: 1



Notes:
 E.F. Denotes Each Face.
 See Sheet 52 of 62 for Pile Details.
 See Sections A-A, B-B, C-C, and F-F on Sheets 44 and 45 of 62 for Limits of Seal Coat.
 Bars indicated thus 17x2-#5 etc. indicates 17 lines of bars with 2 lengths per line.
 Work Sheets 40 thru 45 of 62 together.
 See Sheet 53 of 62 for Bar Splicer Details.



FOOTING PLAN - STAGE I

MINIMUM BAR LAP

#5 bars = 2'-11"



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PLOT SCALE =	DRAWN - GJE	REVISED
PLOT DATE = 8/16/2013	CHECKED - JJI	REVISED

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EAST ABUTMENT FOOTING-STAGE I
 STRUCTURE NO. 016-3035

SHEET NO. 41 OF 62 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	541Y-3-B	COOK	143	102
CONTRACT NO. 60J11				

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**BEARING SEAT
ELEVATION TABLE-STAGE II**

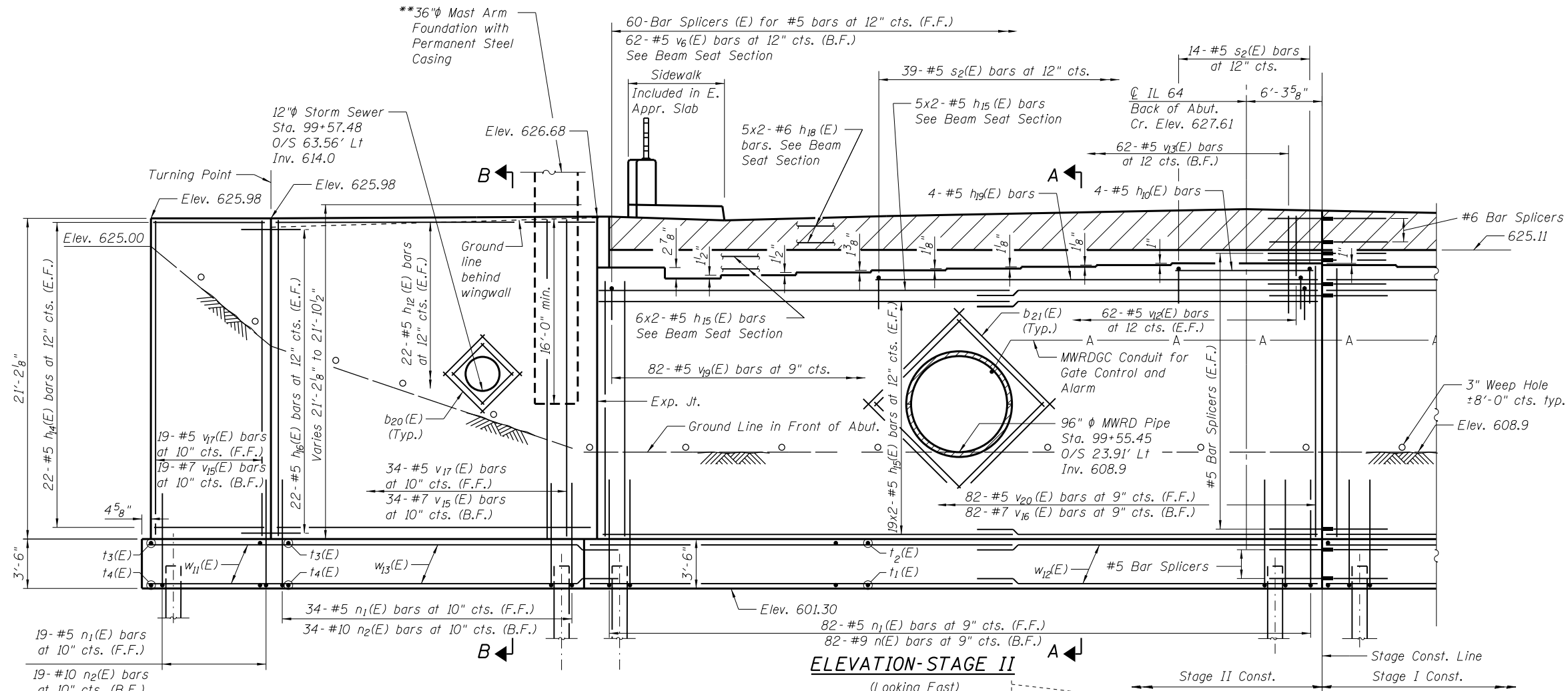
Beam No.	℄ Brg.
1a	623.54
1	623.30
2	623.43
3	623.56
4	623.68
5	623.78
6	623.87
7	623.97
8	624.07
9	624.07
10	623.97

Notes:

- Space reinf. in cap to miss anchor bolts.
- Pour steps monolithically with cap.
- B.F. Denotes Back Face.
- E.F. Denotes Each Face.
- F.F. Denotes Front Face.
- See Sheet 30 of 62 for Expansion Joint Details.
- Hatched area to be poured after Superstructure falsework has been removed. Concrete quantity is included with Concrete Superstructure.
- See Sheet 9 of 62 for MWRD Outfall Structure.
- See Sheet 45 of 62 for Anchor Bolt Location Detail, Details of reinforcement and Bill of Material.
- Work Sheets 40 thru 45 of 62 Together.
- Bars indicated thus 20x2- #5 etc. indicates 20 lines of bars with 2 lengths per line.
- See Sheet 44 of 62 for Weep Hole Details and beam seat sections.
- See Sheet 29 of 62 for Chain link fence detail.
- See Sheet 53 of 62 for Bar Splicer Details.
- Install Drainage Structure 17 and Pipe S17 during Wingwall construction.

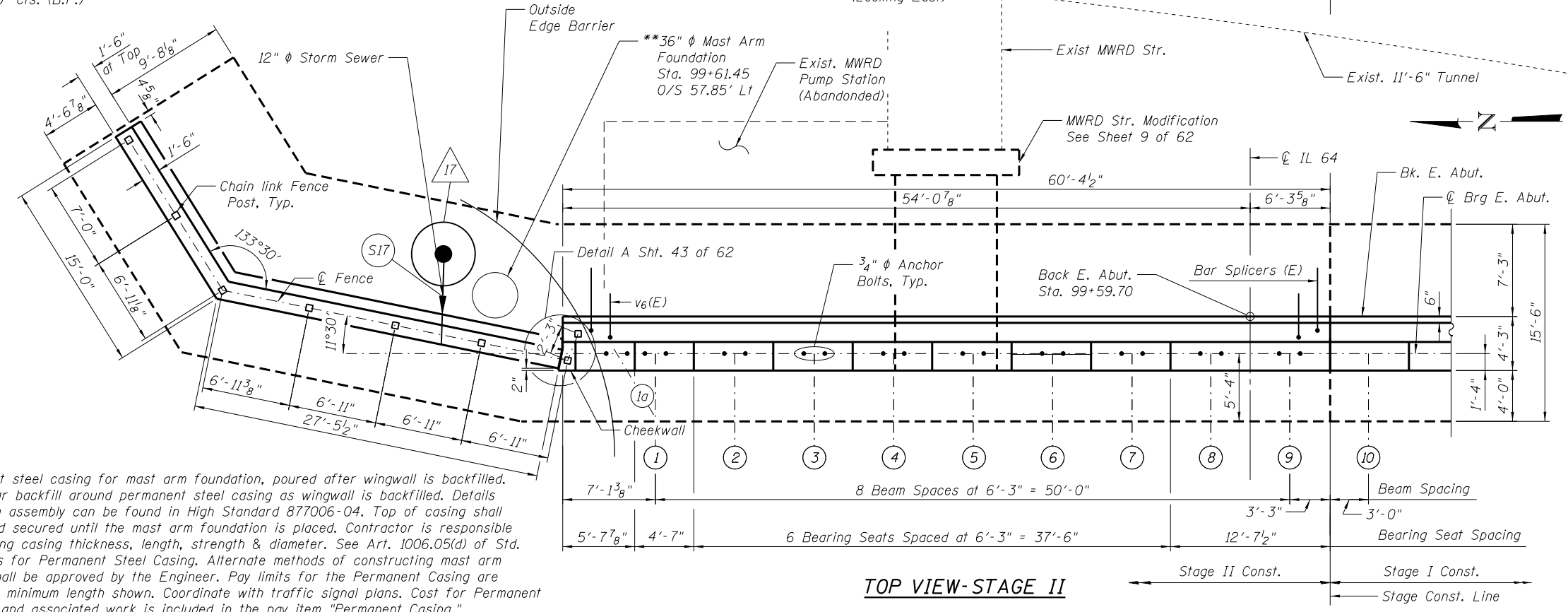
MINIMUM BAR LAP

#5 bars = 2'-3"
#6 bars = 2'-8"



ELEVATION-STAGE II

(Looking East)



TOP VIEW-STAGE II

** Permanent steel casing for mast arm foundation, poured after wingwall is backfilled. Place granular backfill around permanent steel casing as wingwall is backfilled. Details for mast arm assembly can be found in High Standard 877006-04. Top of casing shall be sealed and secured until the mast arm foundation is placed. Contractor is responsible for determining casing thickness, length, strength & diameter. See Art. 1006.05(d) of Std. Specifications for Permanent Steel Casing. Alternate methods of constructing mast arm foundation shall be approved by the Engineer. Pay limits for the Permanent Casing are based on the minimum length shown. Coordinate with traffic signal plans. Cost for Permanent Steel Casing and associated work is included in the pay item "Permanent Casing."

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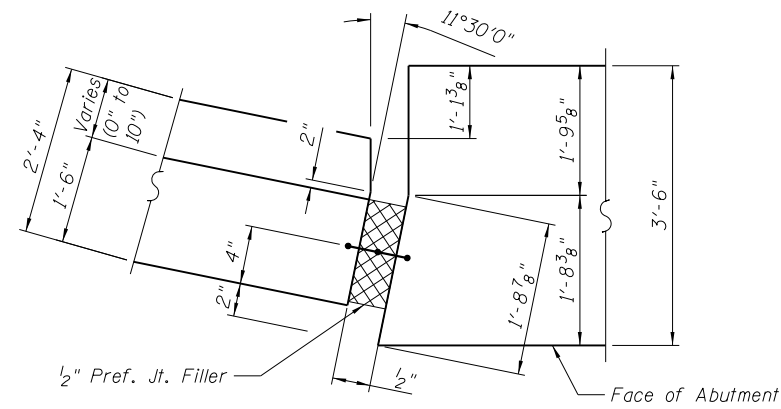
Bollinger, Lach & Associates, Inc.
ITASCA, ILLINOIS

USER NAME =	DESIGNED - JMT	REVISED
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PLOT DATE = 8/16/2013	CHECKED - JJI	REVISED

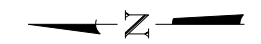
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DEPARTMENT OF TRANSPORTATION**

**EAST ABUTMENT-STAGE II
STRUCTURE NO. 016-3035**
SHEET NO. 42 OF 62 SHEETS

F.A.P. RTE. 307	SECTION 541Y-3-B	COUNTY COOK	TOTAL SHEETS 143	SHEET NO. 103
CONTRACT NO. 60J11				
ILLINOIS FED. AID PROJECT				

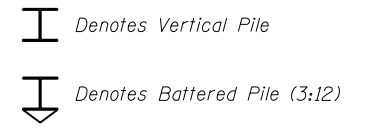


*Any attachments to MWRD Structure must be approved by MRWD.



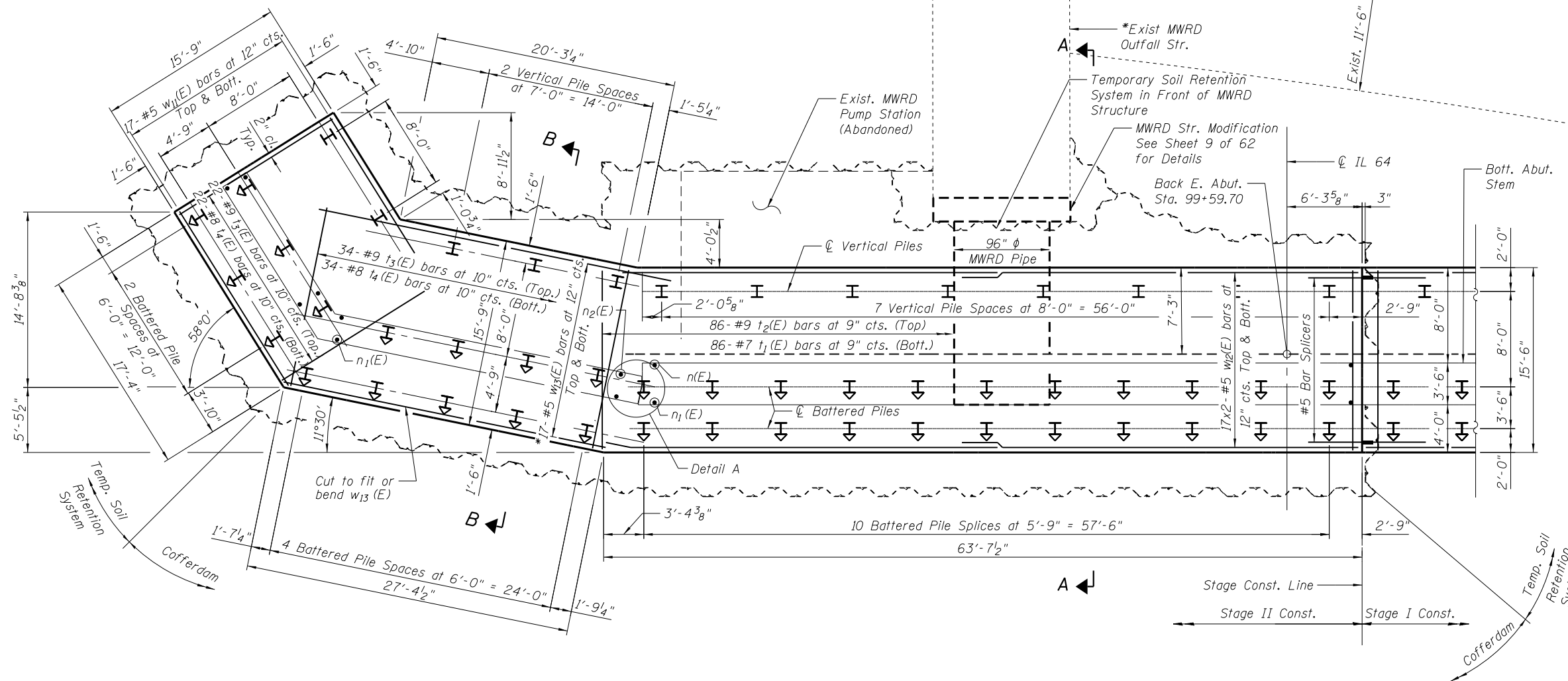
PILE DATA - STAGE II

Type: HP 12x53 with Pile Shoes
Nominal Required Bearing: 419 kips
Factored Resistance Available: 230 kips
Est. Length: 35'
No. Production Piles: 49
No. Test Piles: 1



Notes:

- E.F. Denotes Each Face.
- See Sheet 52 of 62 for Pile Details.
- Bars indicated thus 17x2-#5 etc. indicates 17 lines of bars with 2 lengths per line.
- Work Sheets 40 thru 45 of 62 together.
- See Sections A-A, B-B, C-C, and F-F on Sheets 44 and 45 of 62 for limits of Seal Coat.
- See Sheet 53 of 62 for Bar Splicer Details.



MINIMUM BAR LAP

#5 bars = 2'-11"

FILE NAME = W:\191-130-100T-IL64\CADD_Sheets\Structure\160J11-ht-34a.E.abutElev.dgn

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PLOT SCALE =	DRAWN - GM	REVISED
PLOT DATE = 8/16/2013	CHECKED - JJI	REVISED

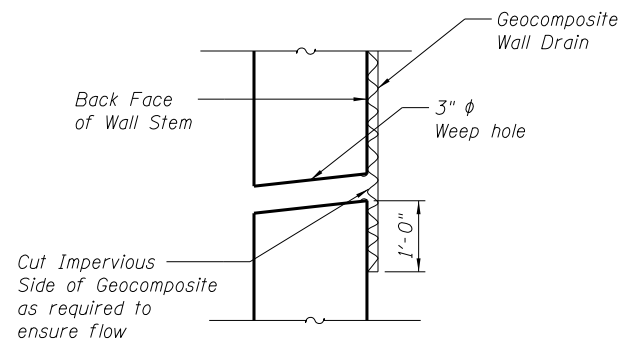
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EAST ABUTMENT FOOTING-STAGE II
STRUCTURE NO. 016-3035**

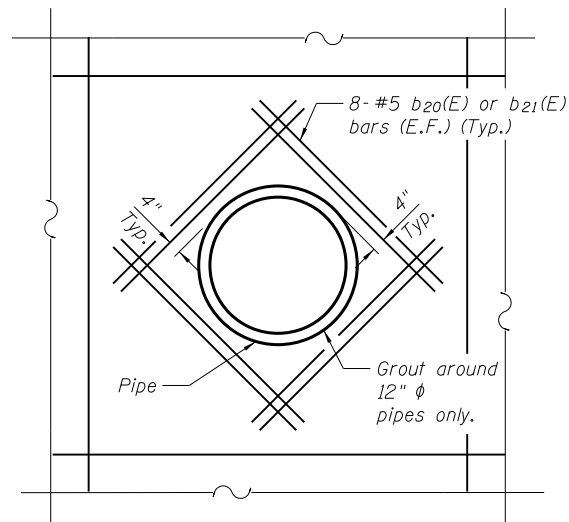
SHEET NO. 43 OF 62 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 60J11				

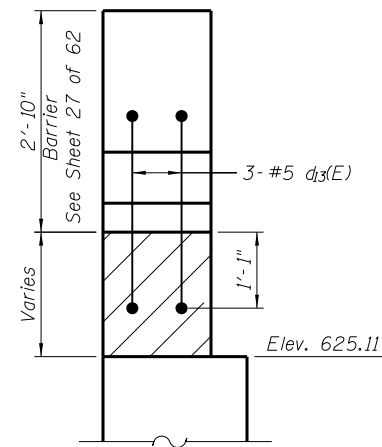
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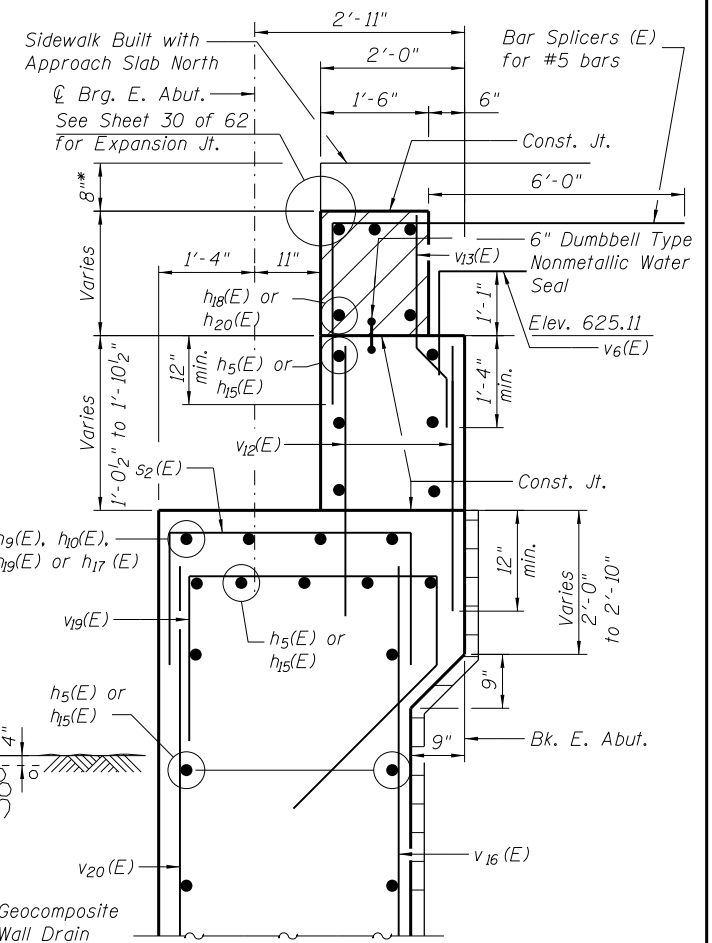
WEEP HOLE DRAIN DETAIL



TYPICAL SECTION AROUND PIPES



BARRIER ON SE CORNER OF HEADER



BEAM SEAT SECTION (NTS)

* At North edge of E. Abut. only.

Notes:

Additional bars in steps not shown in Section A-A.

Reinf. bars at pipe openings shall be adjusted or cut as approved by the Engineer.

Abutment wall stem shall be cast against 96" MWRD pipe.

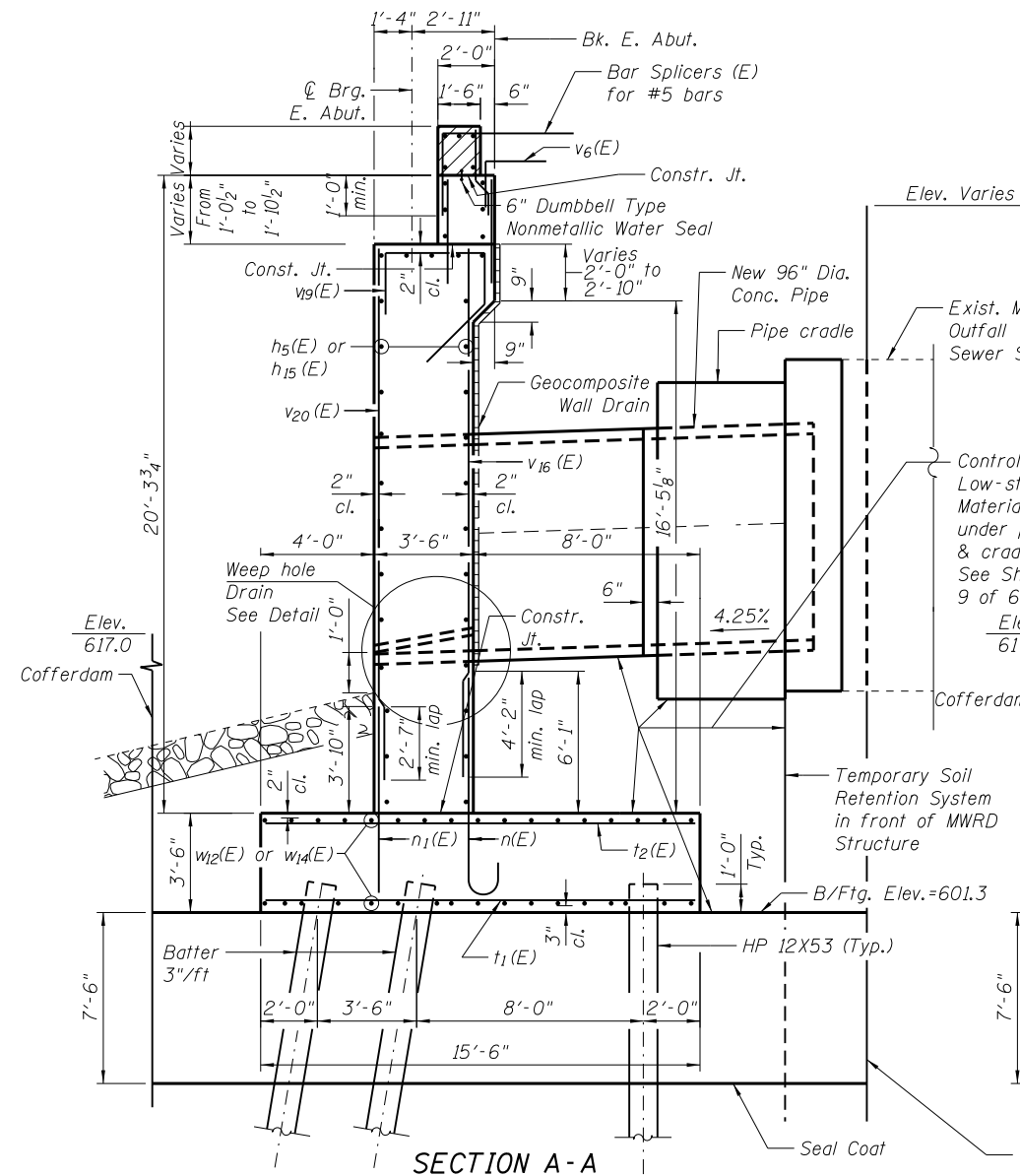
12" ϕ Pipe connections to the Wingwalls shall be made by providing a formed circular void 2" larger than the outside diameter of the pipe. After forms are removed, the annular space shall be filled with grout. Mastic joint sealer shall be applied to the backface of the connection. Walls shall not be cast against the 12" ϕ pipe. Cost included with Concrete Structures.

E.F. denotes Each Face.

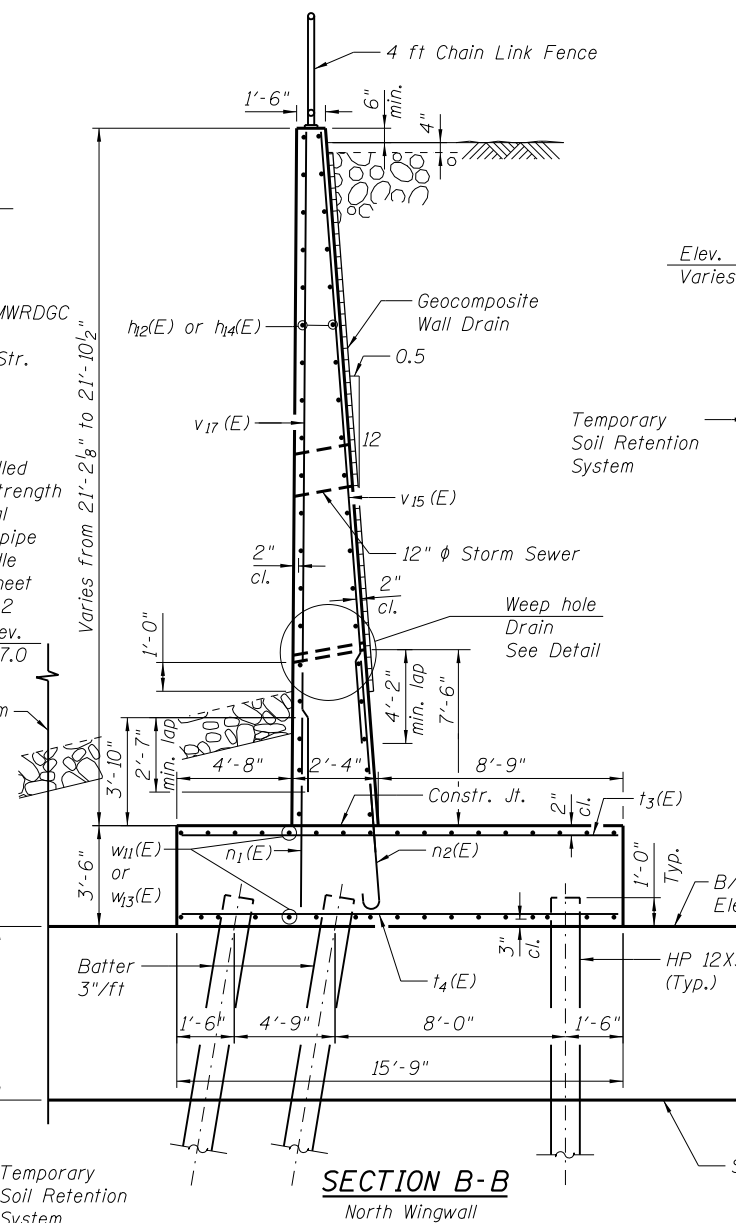
Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructures.

Work sheets 40 thru 45 of 62 together.

See Sheet 9 of 62 for pipe cradle details.

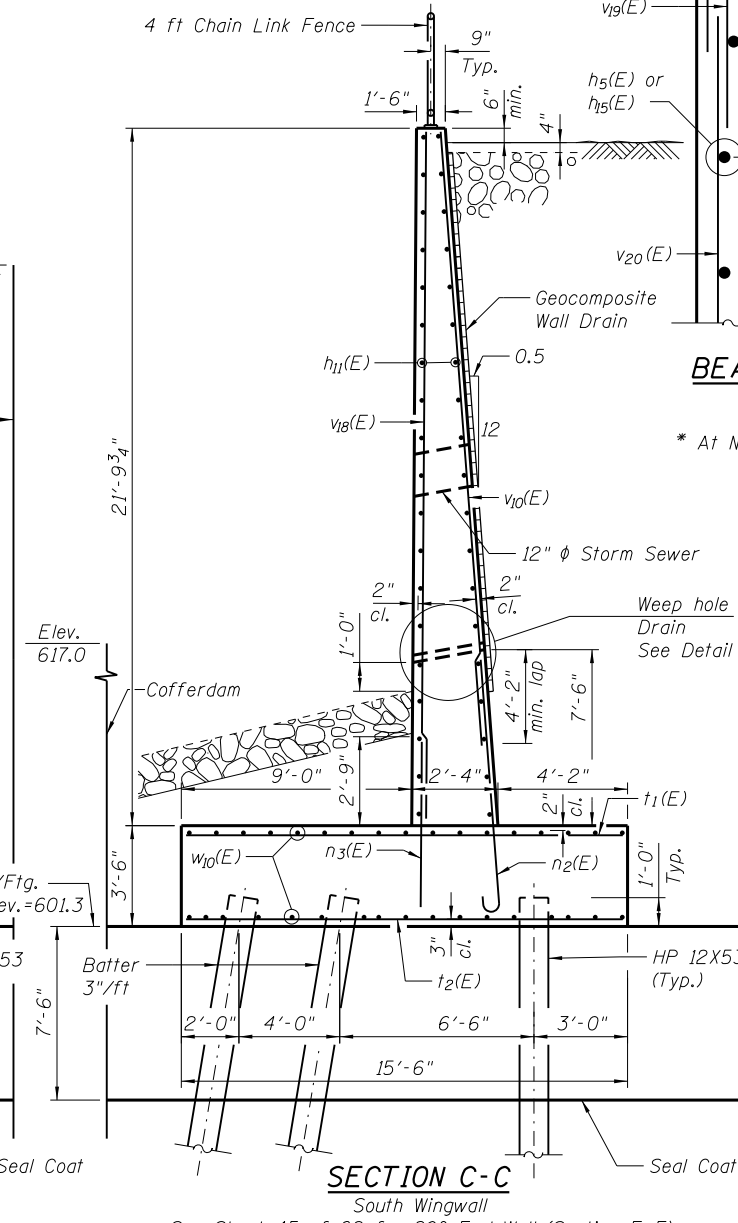


SECTION A-A



SECTION B-B

North Wingwall



SECTION C-C

South Wingwall

See Sheet 45 of 62 for 90° End Wall (Section F-F)

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PLOT DATE = 8/16/2013	DRAWN - GM	REVISD
	CHECKED - JJI	REVISD

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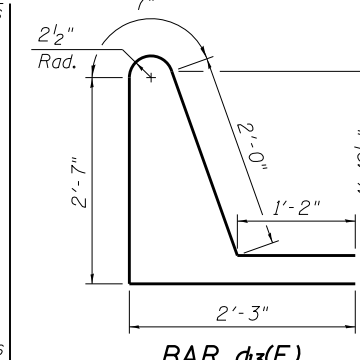
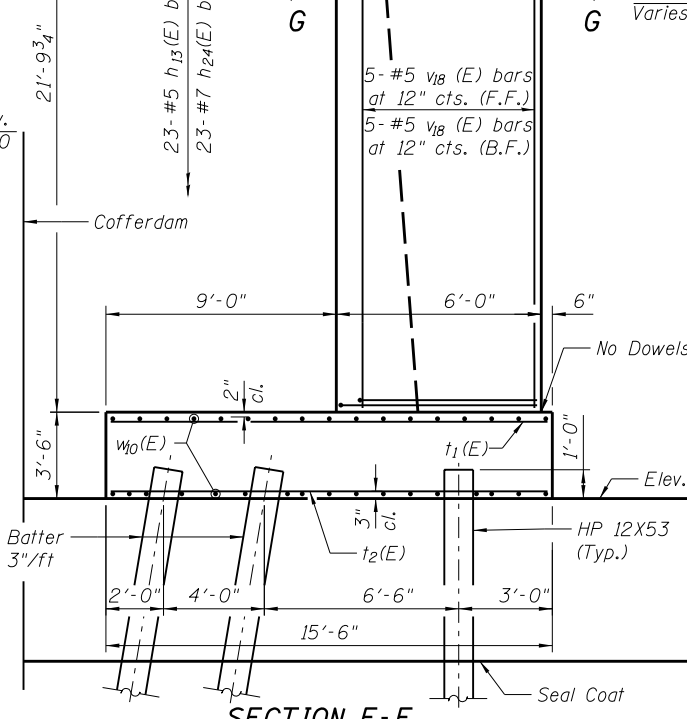
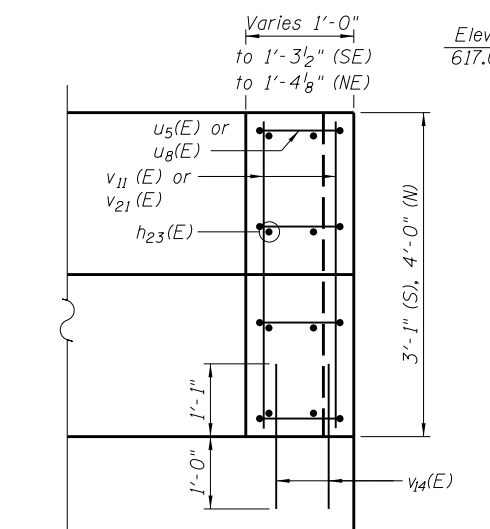
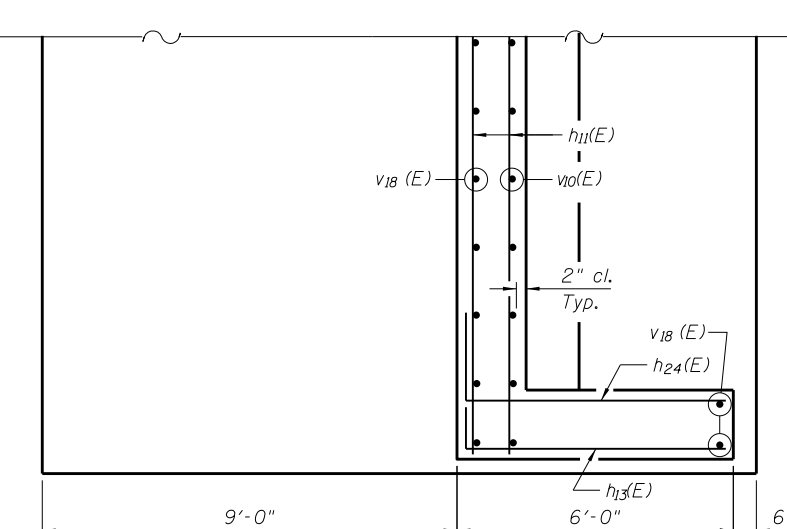
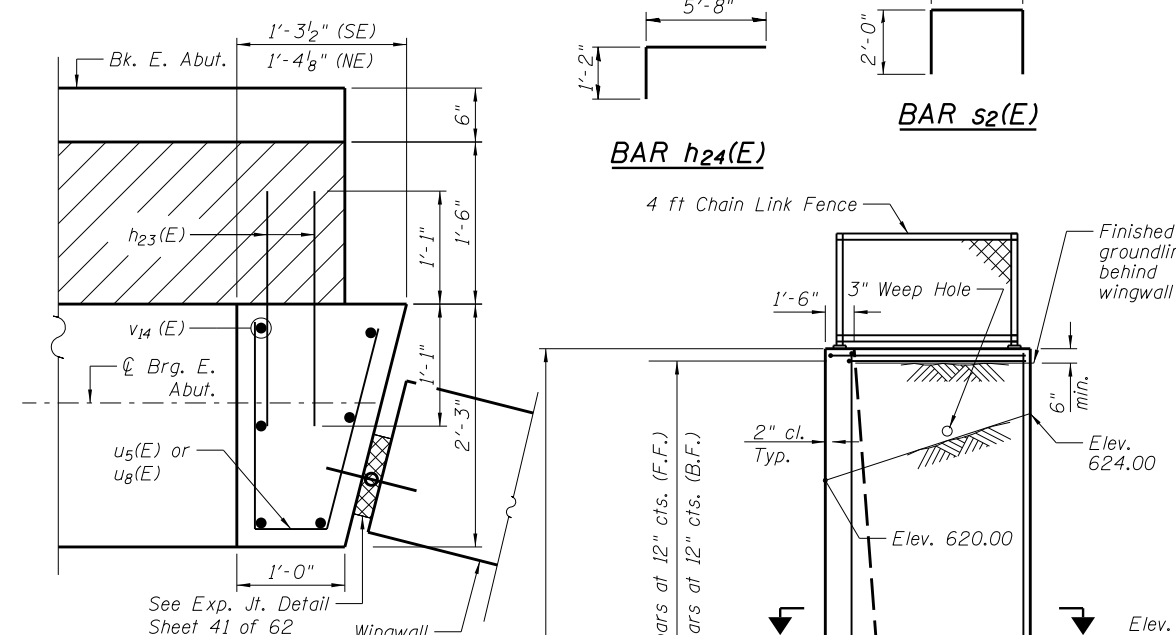
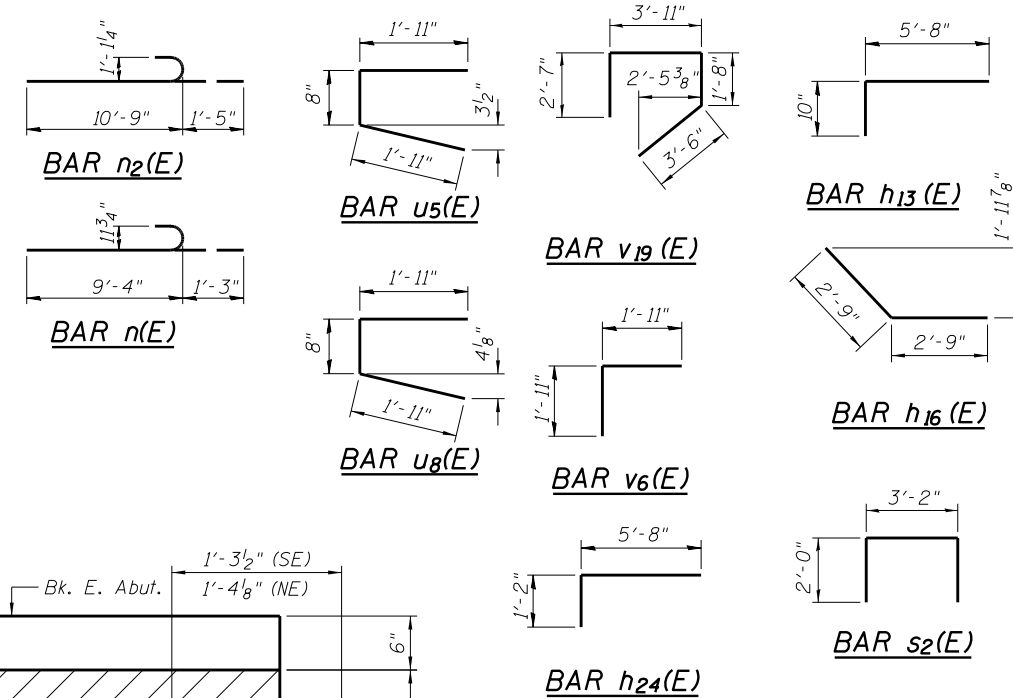
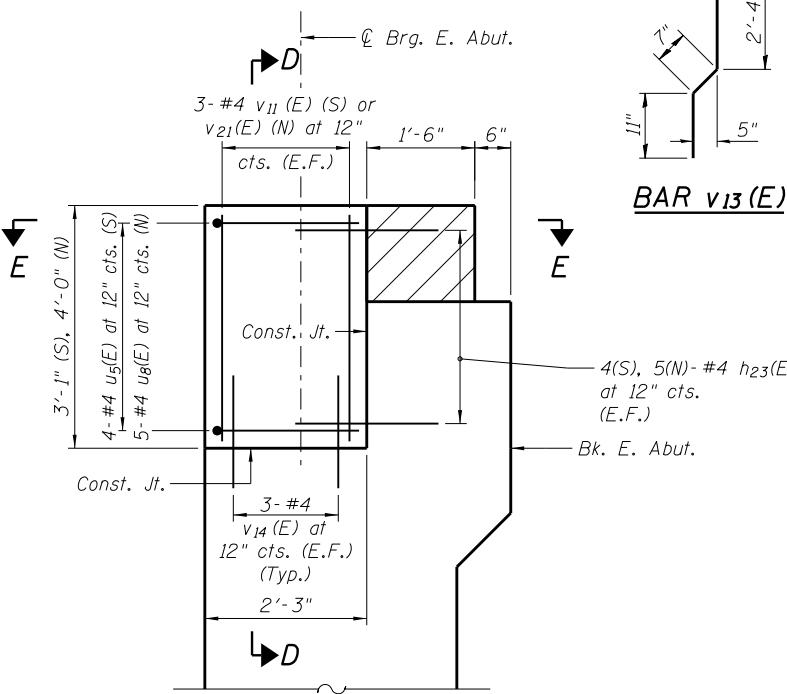
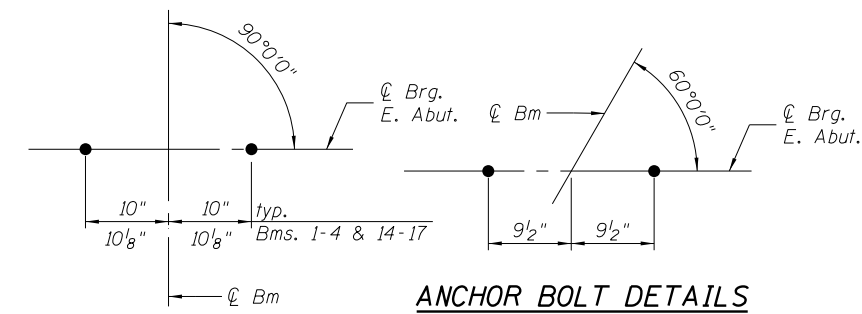
EAST ABUTMET DETAILS I
STRUCTURE NO. 016-3035
SHEET NO. 44 OF 62 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	541Y-3-B	COOK	143	105
CONTRACT NO. 60J11				
ILLINOIS FED. AID PROJECT				

**EAST ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
b ₂₀ (E)	32	#5	4'-4"	—
b ₂₁ (E)	16	#5	13'-0"	—
d ₁₃ (E)	3	#5	8'-7"	⌒
h ₅ (E)	98	#5	29'-4"	—
h ₉ (E)	4	#5	30'-10"	—
h ₁₀ (E)	4	#5	12'-3"	—
h ₁₁ (E)	46	#5	28'-8"	—
h ₁₂ (E)	44	#5	27'-1"	—
h ₁₃ (E)	23	#5	6'-6"	⌒
h ₁₄ (E)	44	#5	14'-8"	—
h ₁₅ (E)	98	#5	31'-4"	—
h ₁₆ (E)	44	#5	5'-6"	—
h ₁₇ (E)	4	#5	5'-10"	—
h ₁₈ (E)	10	#6	31'-8"	—
h ₁₉ (E)	4	#5	37'-3"	—
h ₂₀ (E)	10	#6	29'-8"	—
h ₂₃ (E)	18	#4	2'-2"	—
h ₂₄ (E)	23	#7	6'-10"	⌒
n(E)	158	#9	10'-7"	—
n ₁ (E)	211	#5	7'-1"	—
n ₂ (E)	93	#10	12'-2"	—
n ₃ (E)	40	#5	6'-0"	—
s ₂ (E)	92	#5	7'-2"	⌒
t ₁ (E)	203	#7	15'-2"	—
t ₂ (E)	203	#9	15'-2"	—
t ₃ (E)	56	#9	15'-5"	—
t ₄ (E)	56	#8	15'-5"	—
u ₅ (E)	4	#4	4'-6"	—
u ₈ (E)	5	#4	4'-6"	—
v ₆ (E)	120	#5	3'-10"	⌒
v ₁₀ (E)	40	#7	18'-7"	—
v ₁₁ (E)	6	#4	2'-9"	—
v ₁₂ (E)	240	#5	2'-9"	—

Bar	No.	Size	Length	Shape
v ₁₃ (E)	120	#5	3'-10"	⌒
v ₁₄ (E)	12	#4	2'-1"	—
v ₁₅ (E)	53	#7	18'-4"	—
v ₁₆ (E)	158	#7	17'-6"	—
v ₁₇ (E)	53	#5	20'-10"	—
v ₁₈ (E)	50	#5	21'-5"	—
v ₁₉ (E)	158	#5	11'-8"	⌒
v ₂₀ (E)	158	#5	18'-1"	—
v ₂₁ (E)	6	#4	3'-8"	—
w ₁₀ (E)	34	#5	30'-8"	—
w ₁₁ (E)	34	#5	17'-0"	—
w ₁₂ (E)	68	#5	33'-2"	—
w ₁₃ (E)	34	#5	29'-11"	—
w ₁₄ (E)	68	#5	29'-6"	—
Cofferdam Excavation		Cu. Yd.	3800	
Concrete Structures		Cu. Yd.	792.4	
Reinforcement Bars, Epoxy Coated		Pound	72,220	
Furnishing Steel Piles HP 12X53		Foot	2955	
Driving Piles		Foot	2955	
Test Pile Steel HP 12X53		Each	2	
Concrete Sealer		Sq. Ft.	2555	
Cofferdam (Type 2) (Location-3)		Each	1	
Pile Shoes		Each	91	
Seal Coat Concrete		Cu. Yd.	1225.5	
Geocomposite Wall Drain		Sq. Yd.	350	
Chain Link Fence, 4' Attached to Structure		Foot	80	
Storm Sewers, Class A, Type 3, 96"		Foot	16	
Protective Coat		Sq. Yd.	198	
Permanent Casing		Foot	28	
Controlled Low-Strength Material		Cu. Yd.	19.0	
Granular Backfill for Structures		Cu. Yd.	1720	



Notes:
For details of Bar Splicers, see sheet 53 of 62.
For details of piles, see sheet 52 of 62.
Hatched area to be poured after Superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.
Pour steps monolithically with cap.
B.F. Denotes Back Face.
E.F. Denotes Each Face.
F.F. Denotes Front Face.
Work sheets 40 thru 45 of 62 together.
Excavation for East Abutment and Wingwalls included with Cofferdam Excavation.
See Sheet 44 of 62 for Weep Hole Details.
Apply Protective Coat to exposed areas of wingwalls.

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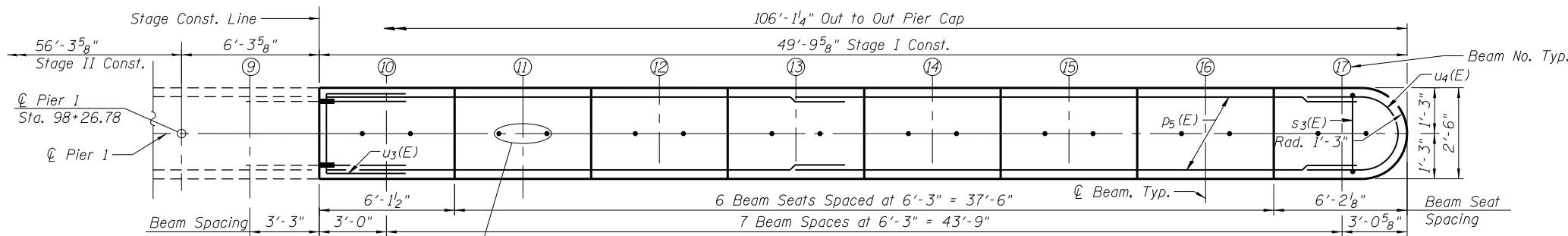
Bollinger, Lach & Associates, Inc.
ITASCA, ILLINOIS

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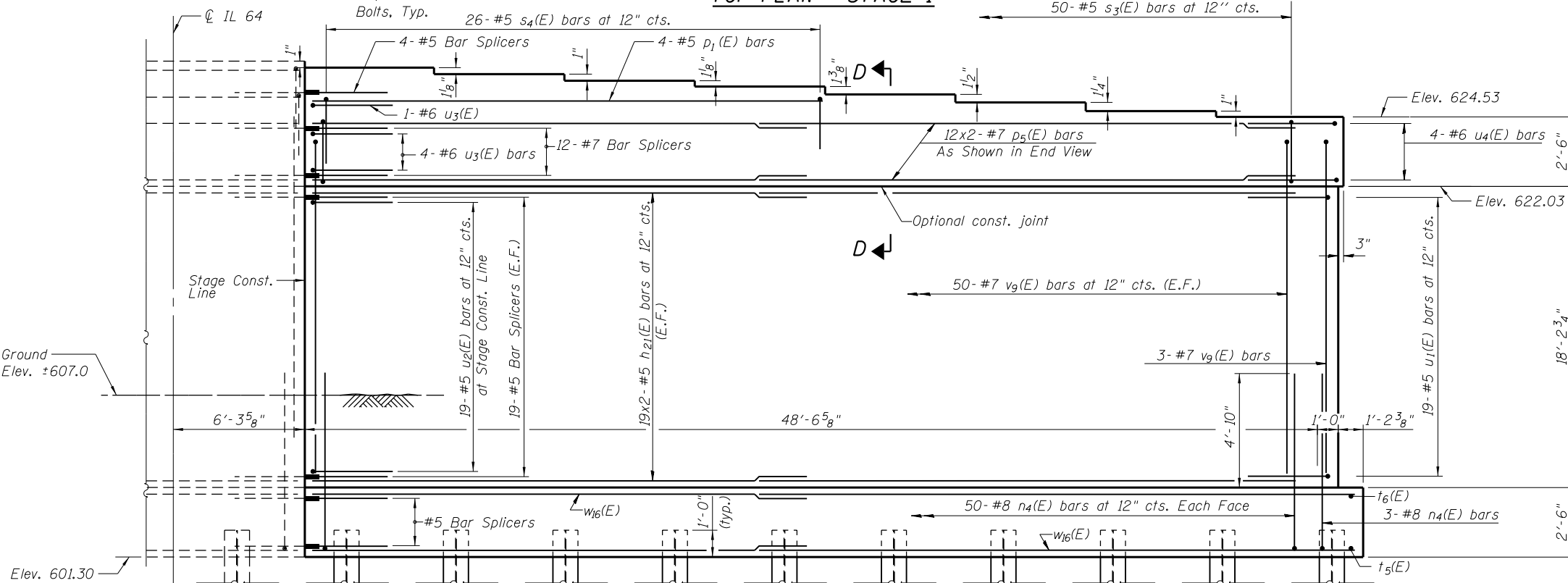
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EAST ABUTMET DETAILS II
STRUCTURE NO. 016-3035**
SHEET NO. 45 OF 62 SHEETS

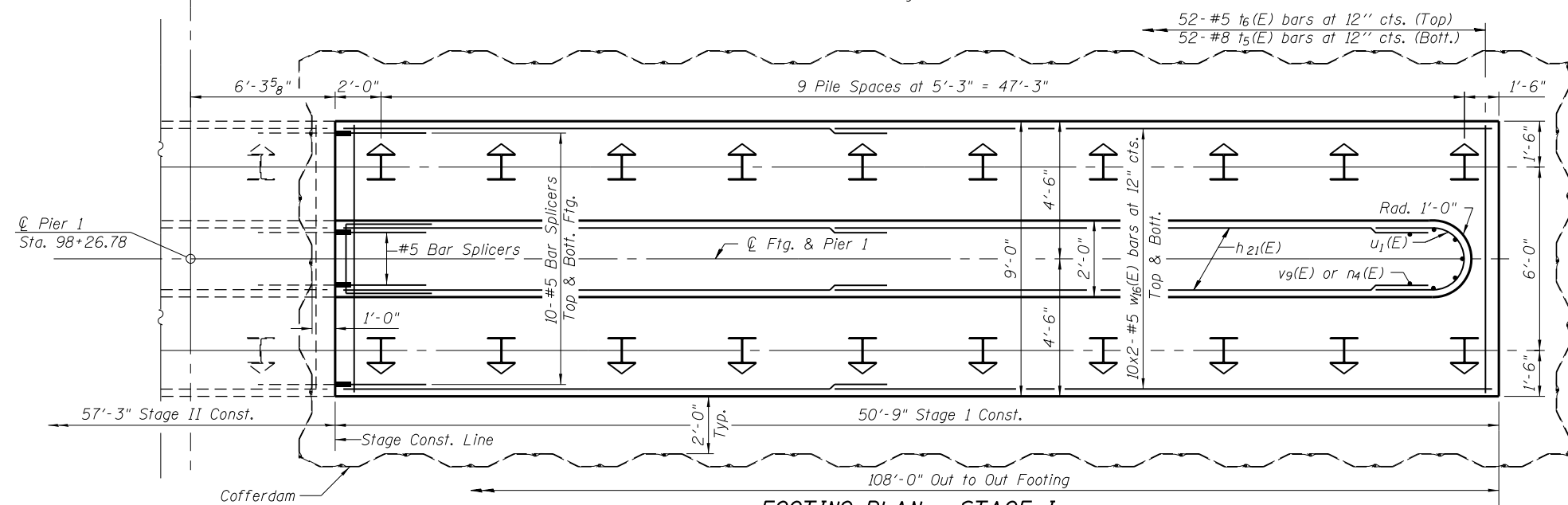
F.A.P. RTE. 307	SECTION 541Y-3-B	COUNTY COOK	TOTAL SHEETS 143	SHEET NO. 106
CONTRACT NO. 60J11				
ILLINOIS FED. AID PROJECT				



TOP PLAN - STAGE I



ELEVATION - STAGE I
(Looking East)



FOOTING PLAN - STAGE I

**BEARING SEAT
ELEVATION TABLE - STAGE I**

Beam No.	℄ Brg.
9	625.36
10	625.26
11	625.16
12	625.06
13	624.97
14	624.85
15	624.72
16	624.61
17	624.52

PILE DATA - STAGE I

Type: HP 12x53 with Pile Shoes
 Nominal Required Bearing: 419 kips
 Factored Resistance Available: 230 kips
 Est. Length: 40'
 No. Production Piles: 19
 No. Test Piles: 1

↓ Denotes Battered Pile (1:12)

Notes:
 Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 See sheet 52 of 62 for details of piles.
 See sheet 53 of 62 for Bar Splicer details.
 See sheet 48 of 62 for anchor bolt locations.
 End View and Section D-D.
 Bars indicated thus 4x2-#7 etc. indicates 4 lines of bars with 2 lengths per line.
 E.F. Denotes Each Face.

MINIMUM BAR LAP

#5 Bars = 2'-11"
 #7 Bars = 4'-8"

FILE NAME = W:\191-130-1001-IL64-CADD-Sheets\Structure\166011-Str-37-Pier-1.dgn

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 ITASCA, ILLINOIS

USER NAME =
 PLOT SCALE =
 PLOT DATE = 8/16/2013

DESIGNED - JMT
 CHECKED - JJI
 DRAWN - GM
 CHECKED - JJI

REVISED
 REVISED
 REVISED
 REVISED

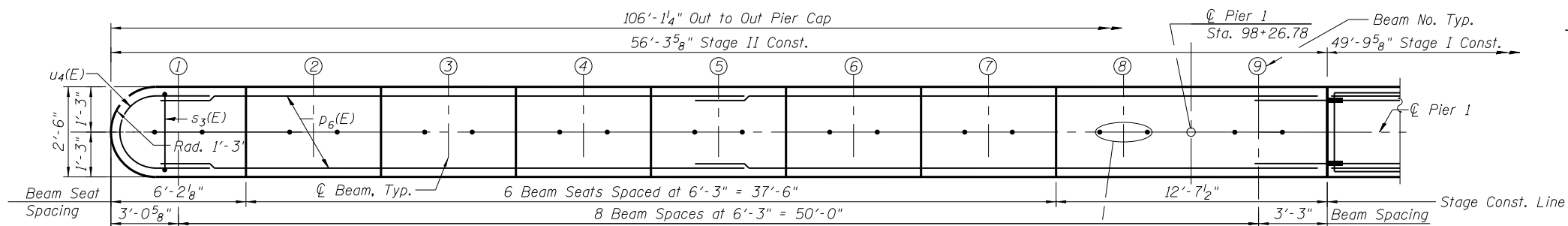
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**PIER 1 - STAGE I
 STRUCTURE NO. 016-3035**

SHEET NO. 46 OF 62 SHEETS

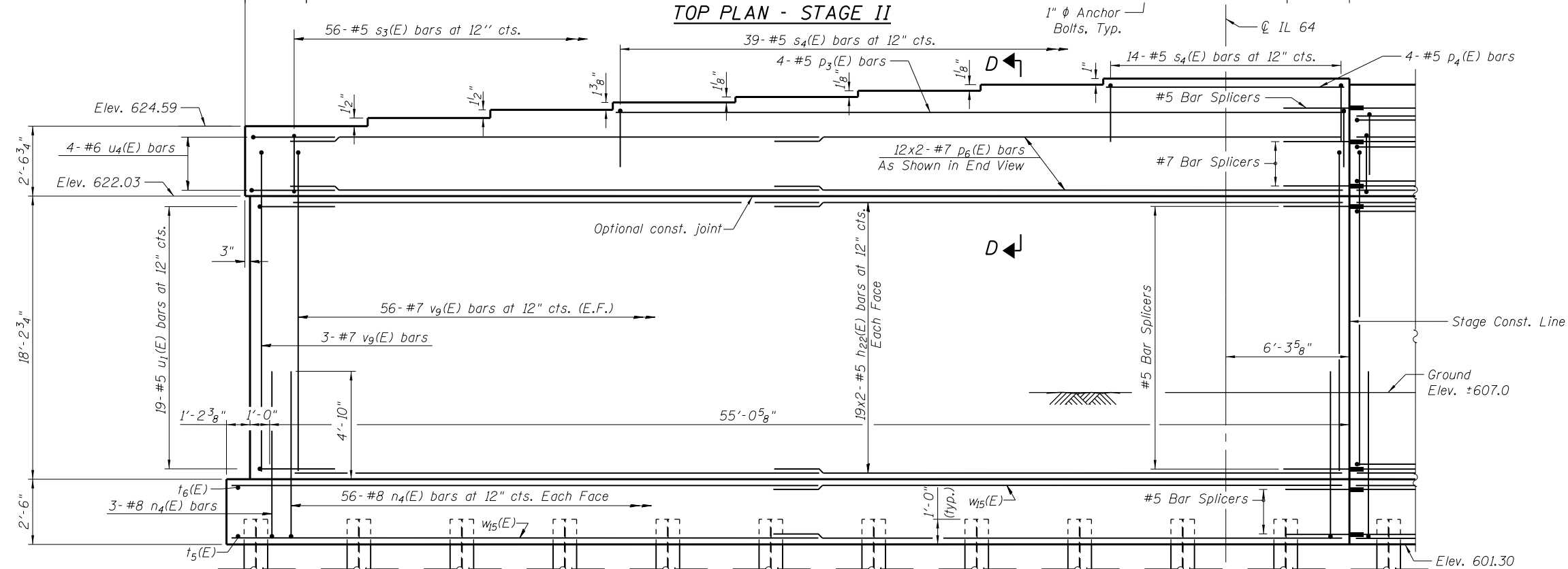
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	541Y-3-B	COOK	143	107
CONTRACT NO. 60J11				

ILLINOIS FED. AID PROJECT



**BEARING SEAT
ELEVATION TABLE - STAGE II**

Beam No.	℄ Brg.
1	624.58
2	624.71
3	624.84
4	624.96
5	625.06
6	625.16
7	625.26
8	625.36
9	625.36
10	625.26

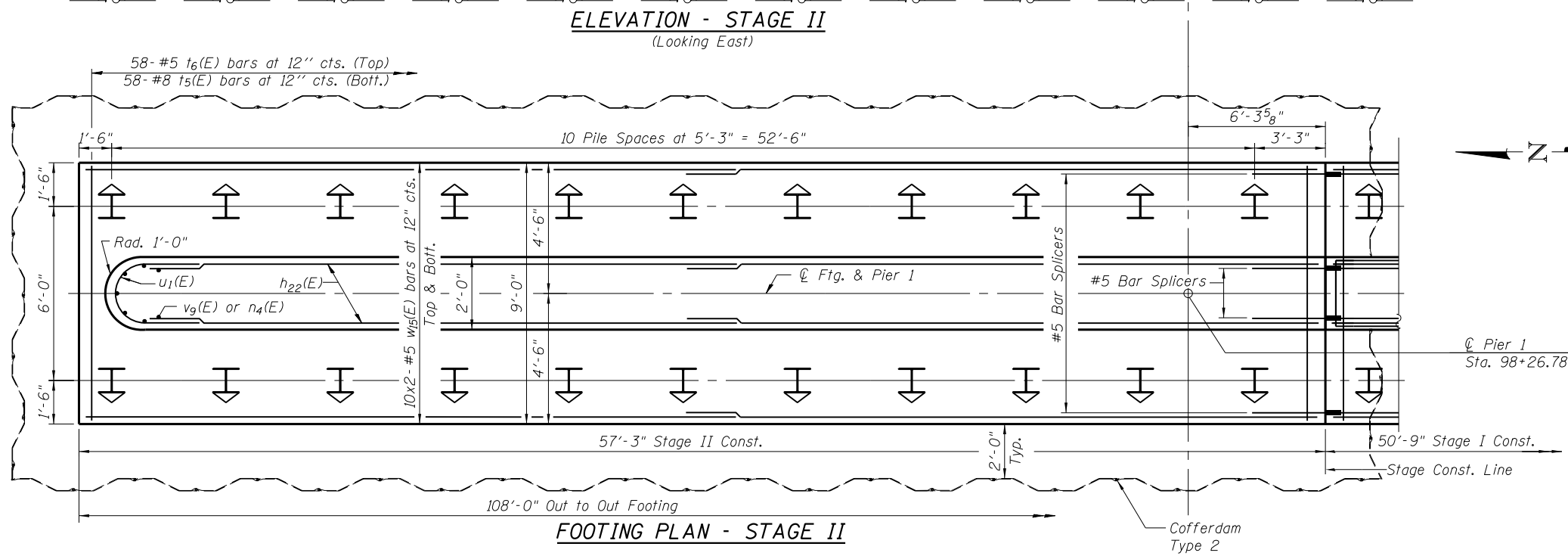


PILE DATA - STAGE II

Type: HP 12x53 with Pile Shoes
 Nominal Required Bearing: 419 kips
 Factored Resistance Available: 230 kips
 Est. Length: 40'
 No. Production Piles: 22
 No. Test Piles: 0

↓ Denotes Battered Pile (1:12)

Notes:
 Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 See sheet 52 of 62 for details of piles.
 See sheet 53 of 62 for Bar Splicer details.
 See sheet 48 of 62 for anchor bolt locations.
 End View and Section D-D.
 Bars indicated thus 12x2-#7 etc. indicates 12 lines of bars with 2 lengths per line.
 E.F. Denotes Each Face.



MINIMUM BAR LAP

#5 Bars = 2'-11"
 #7 Bars = 4'-8"

FILE NAME = W:\191-130-1001-1164\CADD_Sheets\Structure\1164011-Str-37A_Pier 1.dgn

Bollinger, Lach & Associates, Inc.
 ITASCA, ILLINOIS

USER NAME =	DESIGNED - JMT	REVISED
PLOT SCALE =	CHECKED - JJI	REVISED
PLOT DATE = 8/16/2013	DRAWN - GM	REVISED
	CHECKED - JJI	REVISED

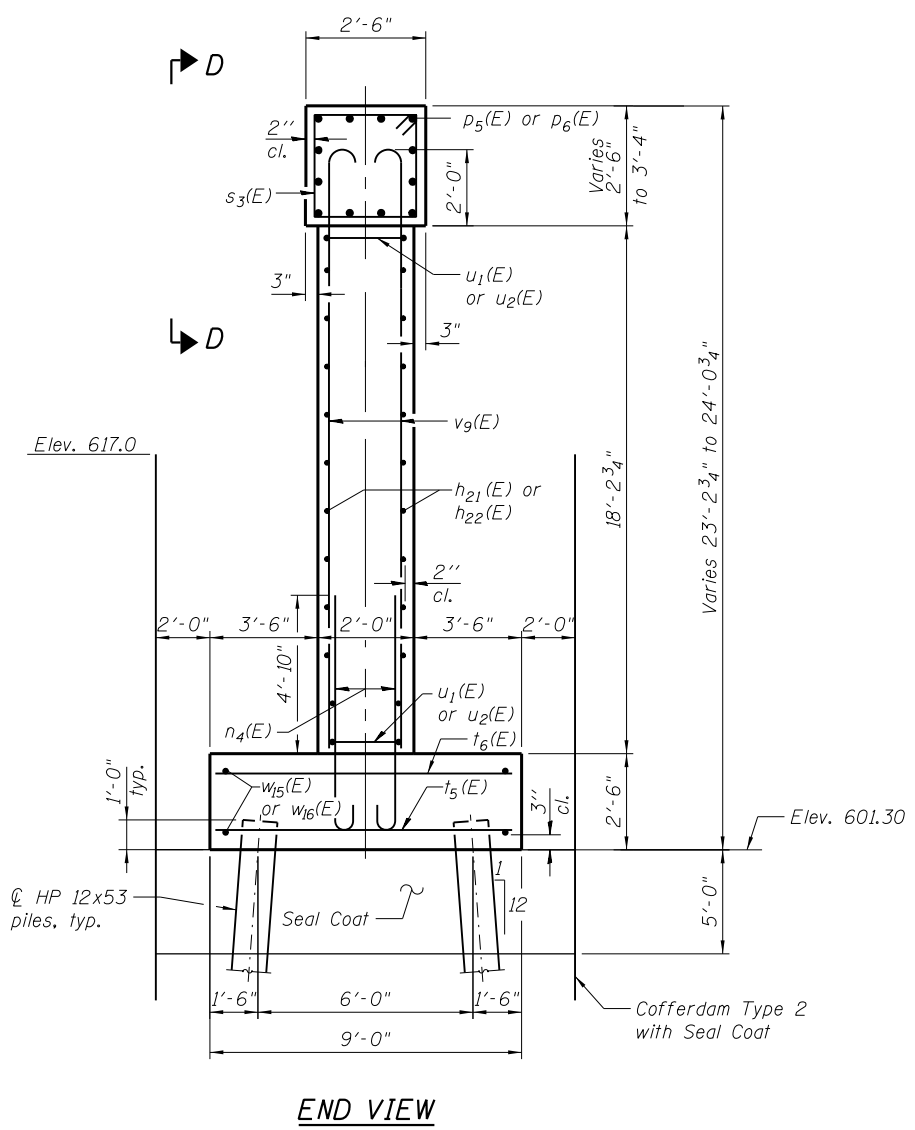
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PIER 1 - STAGE II
STRUCTURE NO. 016-3035**

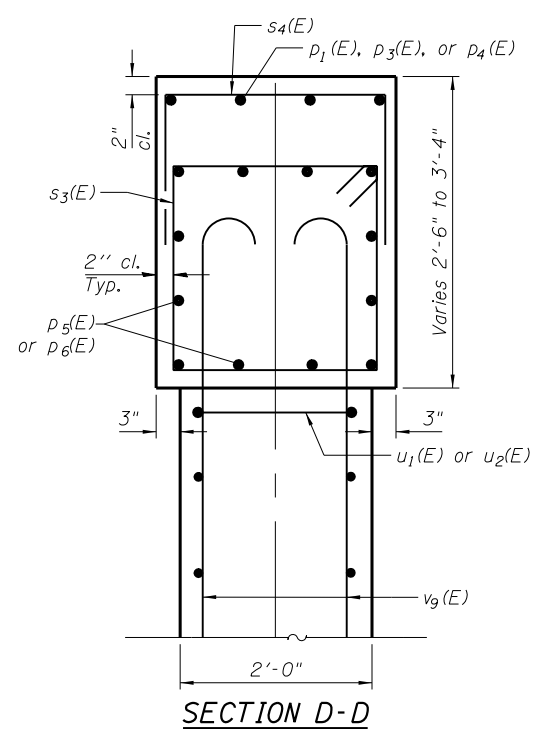
SHEET NO. 47 OF 62 SHEETS

F.A.P. RT. = 307	SECTION = 541Y-3-B	COUNTY = COOK	TOTAL SHEETS = 143	SHEET NO. = 108
CONTRACT NO. 60J11				
ILLINOIS FED. AID PROJECT				

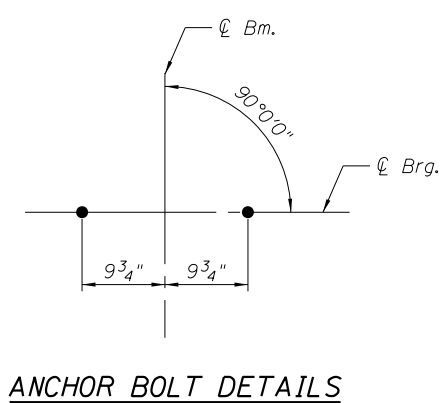
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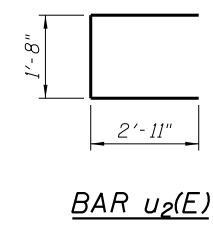
END VIEW



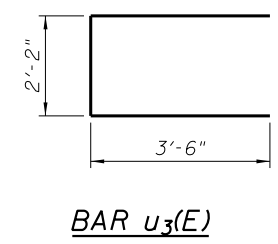
SECTION D-D



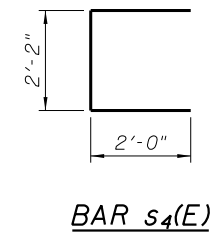
ANCHOR BOLT DETAILS



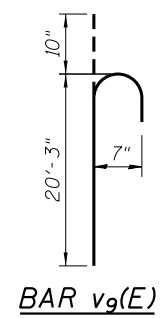
BAR u₂(E)



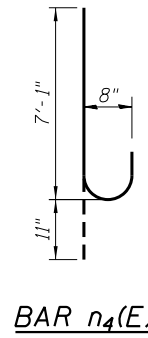
BAR u₃(E)



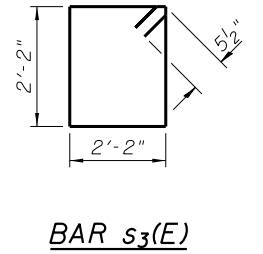
BAR s₄(E)



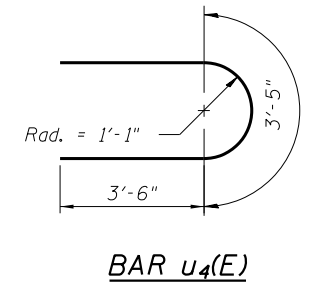
BAR v₉(E)



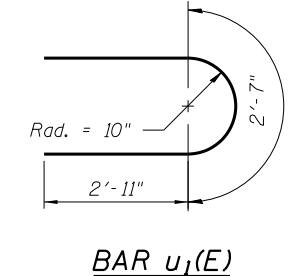
BAR n₄(E)



BAR s₃(E)



BAR u₄(E)



BAR u₁(E)

**PIER 1
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h ₂₁ (E)	76	#5	25'-8"	—
h ₂₂ (E)	76	#5	28'-11"	—
n ₄ (E)	218	#8	8'-0"	U
p ₁ (E)	4	#5	24'-6"	—
p ₃ (E)	4	#5	37'-3"	—
p ₄ (E)	4	#5	12'-3"	—
p ₅ (E)	24	#7	26'-7"	—
p ₆ (E)	24	#7	29'-10"	—
s ₃ (E)	106	#5	9'-7"	□
s ₄ (E)	79	#5	6'-2"	U
t ₅ (E)	110	#8	8'-8"	—
t ₆ (E)	110	#5	8'-8"	—
u ₁ (E)	38	#5	8'-5"	U
u ₂ (E)	19	#5	7'-6"	U
u ₃ (E)	5	#6	9'-2"	U
u ₄ (E)	8	#6	10'-5"	U
v ₉ (E)	218	#7	21'-1"	U
w ₁₅ (E)	40	#5	29'-11"	—
w ₁₆ (E)	40	#5	26'-8"	—
Cofferdam Excavation		Cu. Yd.	577	
Concrete Structures		Cu. Yd.	261.7	
Reinforcement Bars, Epoxy Coated		Pound	29,600	
Furnishing Steel Piles HP 12x53		Foot	1640	
Driving Piles		Foot	1640	
Test Pile Steel HP 12x53		Each	1	
Pile Shoes		Each	42	
Cofferdam (Type 2) (Location -1)		Each	1	
Seal Coat Concrete		Cu. Yd.	269.6	

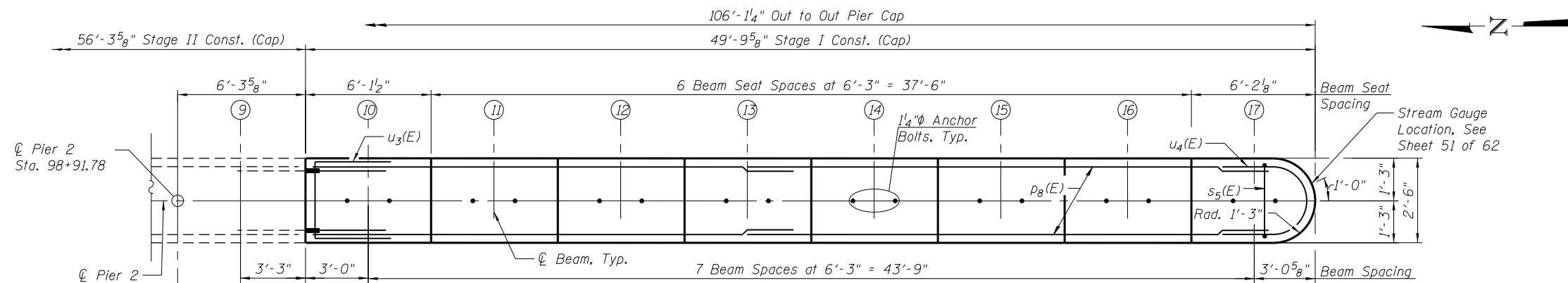
Bollinger, Lach & Associates, Inc.
ITASCA, ILLINOIS

USER NAME =	DESIGNED - JMT	REVISED
PLOT SCALE =	CHECKED - JJI	REVISED
PLOT DATE = 8/16/2013	DRAWN - GJE	REVISED
	CHECKED - JJI	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PIER 1 DETAILS
STRUCTURE NO. 016-3035**
SHEET NO. 48 OF 62 SHEETS

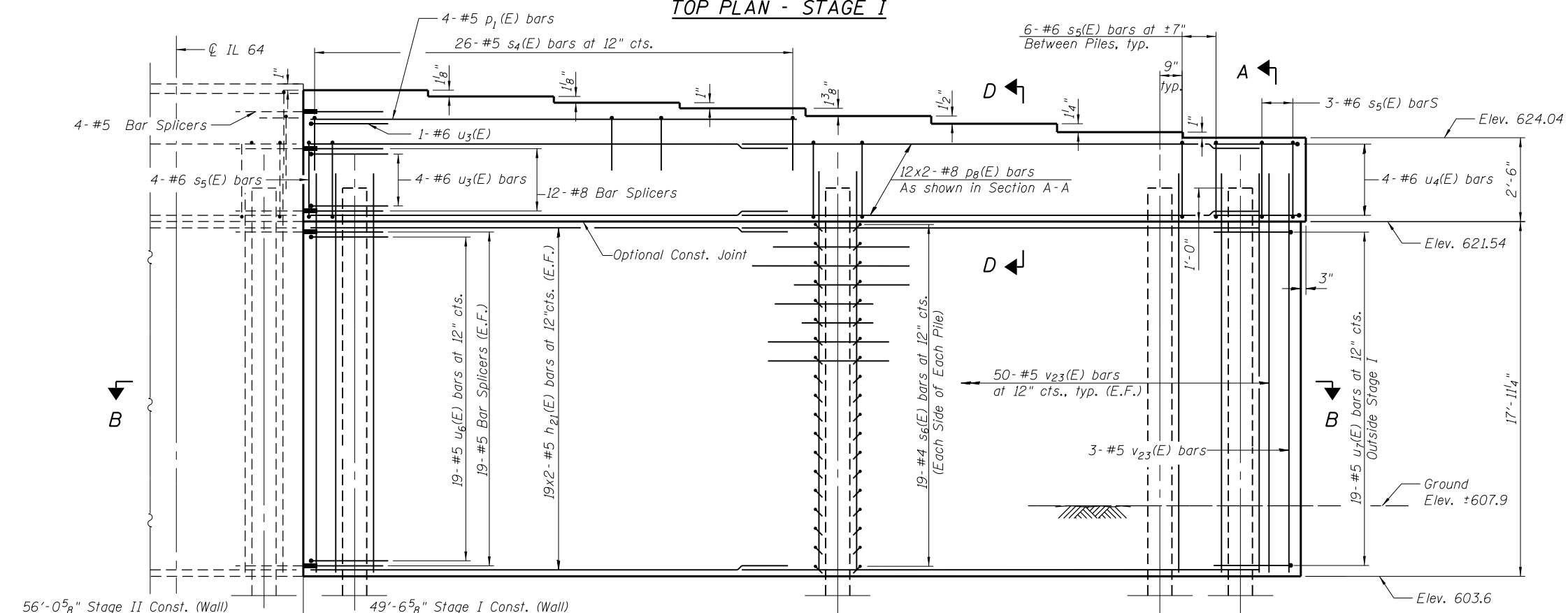
F.A.P. RTE. 307	SECTION 541Y-3-B	COUNTY COOK	TOTAL SHEETS 143	SHEET NO. 109
CONTRACT NO. 60J11				
ILLINOIS FED. AID PROJECT				



TOP PLAN - STAGE I

**BEARING SEAT
ELEVATION TABLE - STAGE I**

Beam No.	℄ Brg.
9	624.88
10	624.79
11	624.69
12	624.59
13	624.50
14	624.38
15	624.25
16	624.13
17	624.05



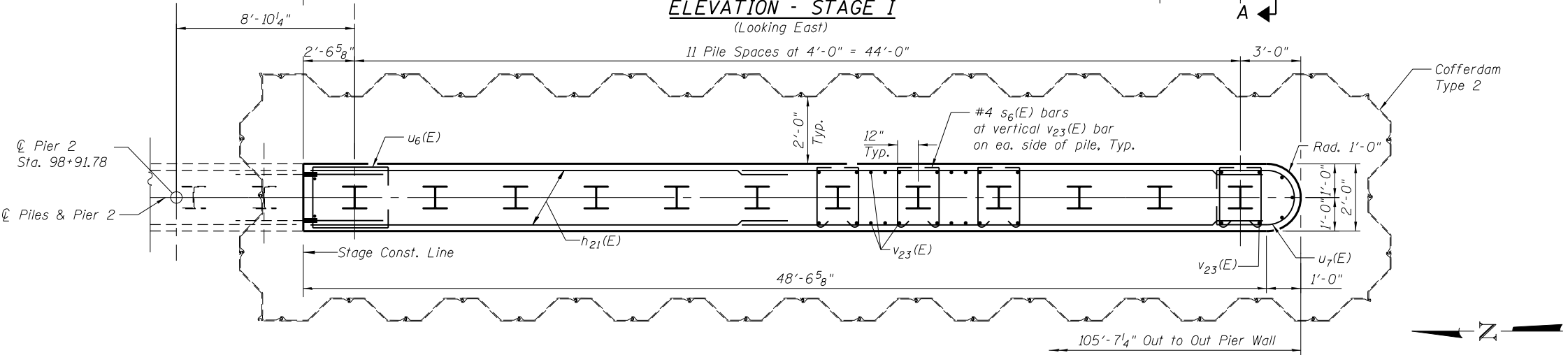
**ELEVATION - STAGE I
(Looking East)**

PILE DATA - STAGE I

Type: HP 12x53 with Pile Shoes
 Nominal Required Bearing: 419 kips
 Factored Resistance Available: 230 kips
 Est. Length: 46'
 No. Production Piles: 11
 No. Test Piles: 1

Notes:
 Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 See sheet 52 of 62 for details of piles.
 See sheet 53 of 62 for Bar Splicer Details.
 See sheet 51 of 62 for Section A-A, D-D.
 Anchor Bolt Layout and Stream Gauge Details.
 Bars indicated thus 19x2-#5 etc. indicates 19 line of bars with 2 lengths per line.
 E.F. Denotes Each Face.

MINIMUM BAR LAP
 #5 Bars = 2'-11"
 #8 Bars = 6'-2"



SECTION B-B - STAGE I

FILE NAME = W:\191-130-1001-1164\CADD_Sheets\Structure\1160J11-Str-39-Pier-2.dgn

Bollinger, Lach & Associates, Inc.
 ITASCA, ILLINOIS

USER NAME =
 PLOT SCALE =
 PLOT DATE = 8/16/2013

DESIGNED - JMT
 CHECKED - JJI
 DRAWN - GM
 CHECKED - JJI

REVISED
 REVISED
 REVISED
 REVISED

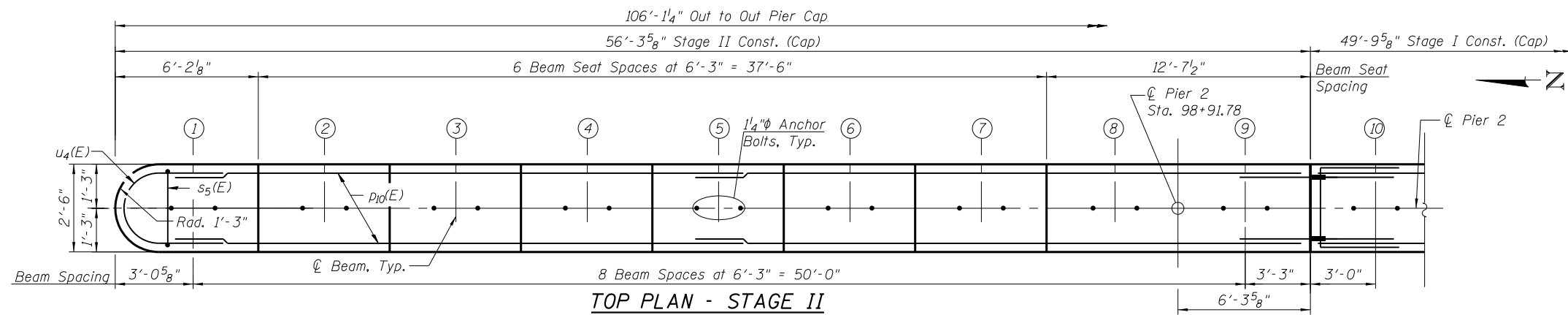
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PIER 2 - STAGE I
 STRUCTURE NO. 016-3035**

SHEET NO. 49 OF 62 SHEETS

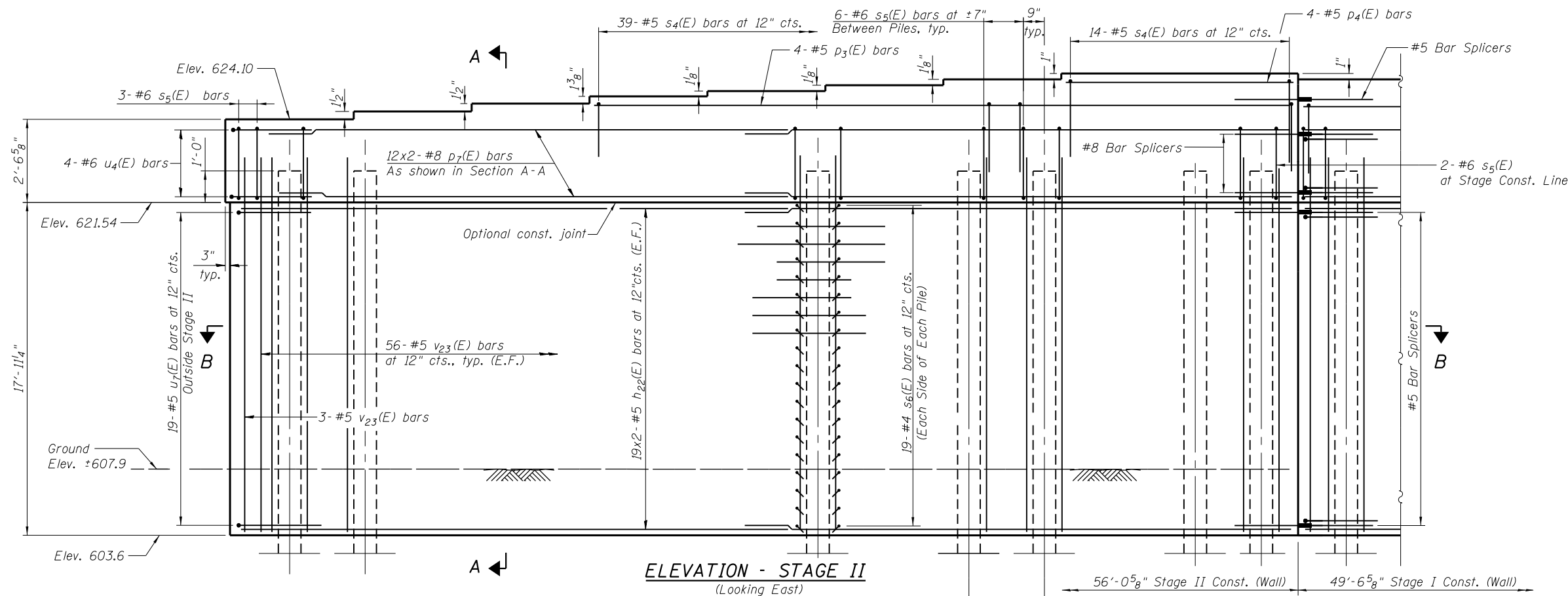
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	541Y-3-B	COOK	143	110
CONTRACT NO. 60J11				

ILLINOIS FED. AID PROJECT



BEARING SEAT
 ELEVATION TABLE - STAGE II

Beam No.	℄ Brg.
1	624.11
2	624.24
3	624.37
4	624.49
5	624.59
6	624.69
7	624.79
8	624.88
9	624.88



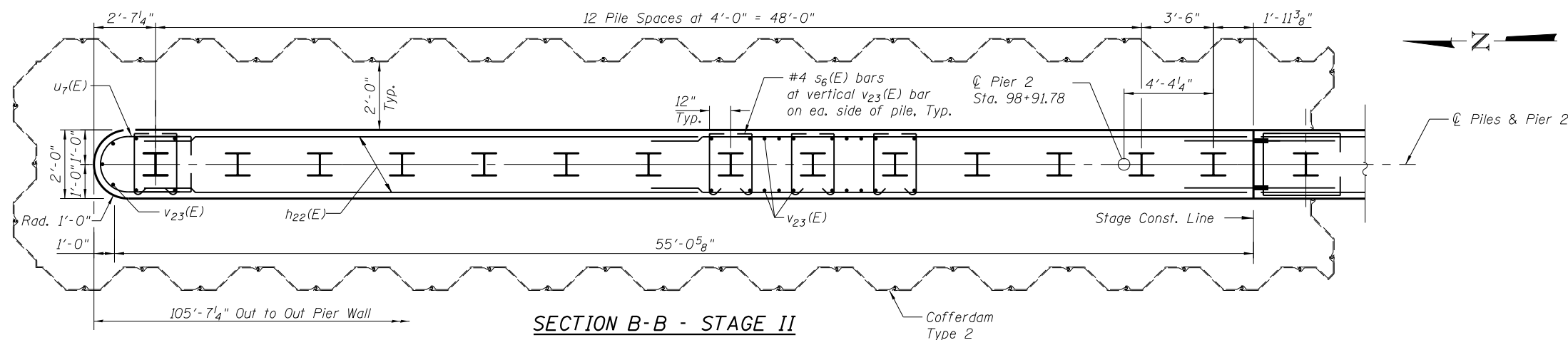
PILE DATA - STAGE II

Type: HP 12x53 with Pile Shoes
 Nominal Required Bearing: 419 kips
 Factored Resistance Available: 230 kips
 Est. Length: 46'
 No. Production Piles: 14
 No. Test Piles: 0

Notes:
 Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 See sheet 52 of 62 for details of piles.
 See Sheet 53 of 62 for Bar Splicer Details.
 See sheet 51 of 62 for Section A-A and Anchor Bolt Layout.
 Bars indicated thus 19x2- #5 etc. indicates 19 line of bars with 2 lengths per line.
 E.F. Denotes Each Face.

MINIMUM BAR LAP

#5 Bars = 2'-11"
 #8 Bars = 6'-2"



FILE NAME = W:\191-130-100T-IL64\CADD_Sheets\Structure\160J11-st-39a-Pier-2.dgn

Bollinger, Lach & Associates, Inc.
 ITASCA, ILLINOIS

USER NAME =	DESIGNED - JMT	REVISED
PLOT SCALE =	CHECKED - JJI	REVISED
PLOT DATE = 8/16/2013	DRAWN - GM	REVISED
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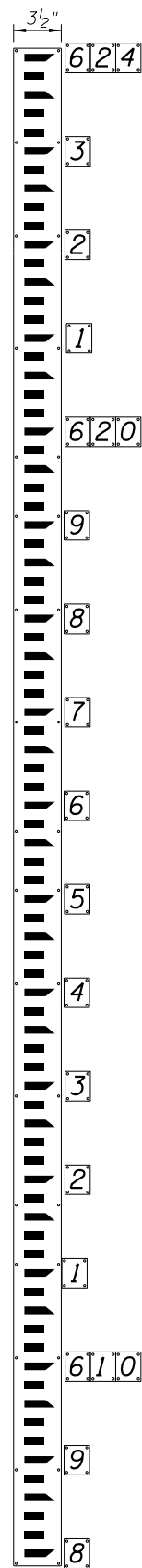
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PIER 2 - STAGE II
 STRUCTURE NO. 016-3035

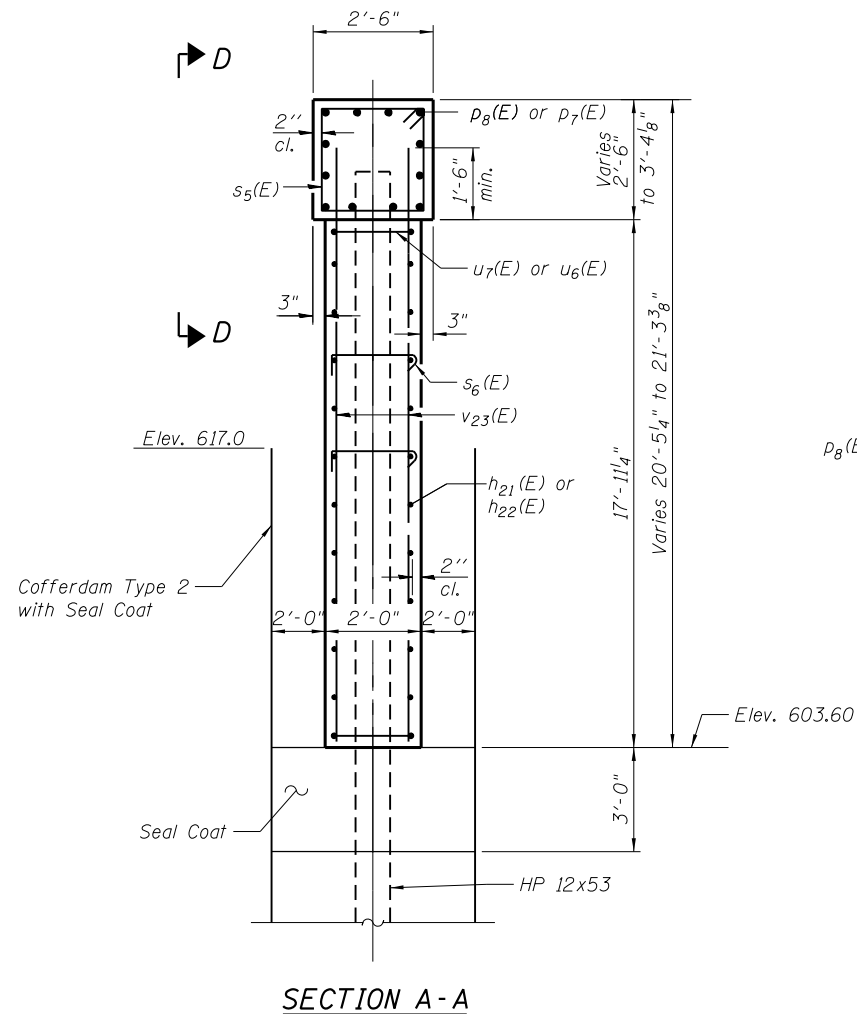
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	541Y-3-B	COOK	143	111
CONTRACT NO. 60J11				

SHEET NO. 50 OF 62 SHEETS

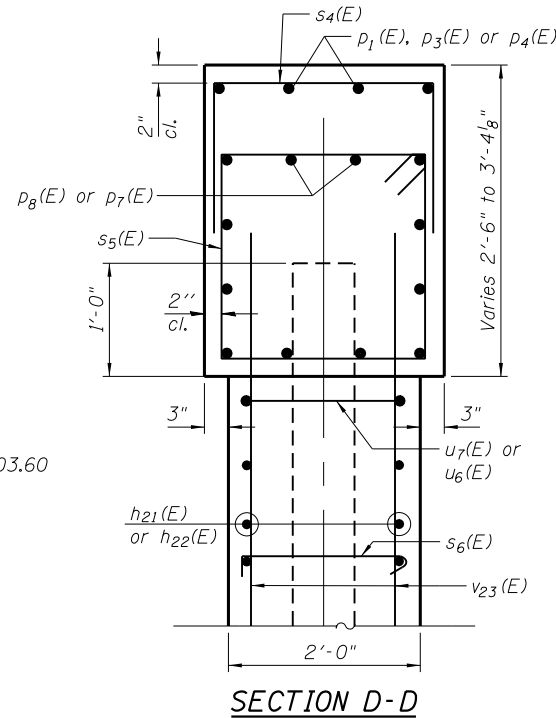
ILLINOIS FED. AID PROJECT



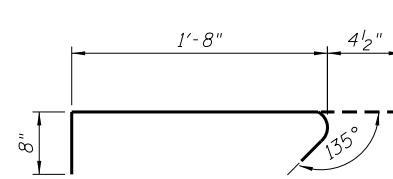
Order separate section for pier cap



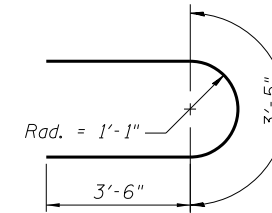
SECTION A-A



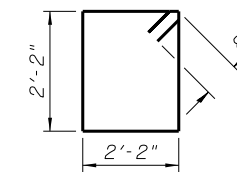
SECTION D-D



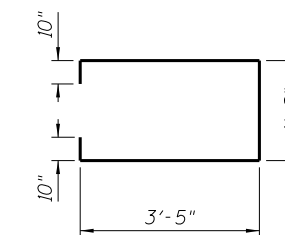
BAR s6(E)



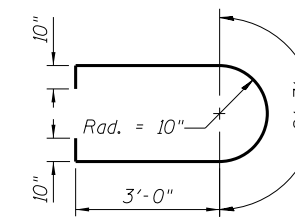
BAR u4(E)



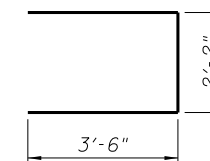
BAR s5(E)



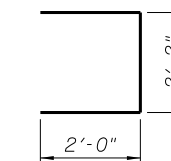
BAR u6(E)



BAR u7(E)



BAR u3(E)



BAR s4(E)

PIER 2
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h21(E)	76	#5	25'-8"	—
h22(E)	76	#5	28'-11"	—
p1(E)	4	#5	24'-6"	—
p3(E)	4	#5	37'-3"	—
p4(E)	4	#5	12'-3"	—
p7(E)	24	#8	30'-7"	—
p8(E)	24	#8	27'-4"	—
s4(E)	79	#5	6'-2"	U
s5(E)	156	#6	10'-0"	U
s6(E)	988	#4	2'-9"	U
u3(E)	5	#6	9'-2"	U
u4(E)	8	#6	10'-5"	U
u6(E)	19	#5	10'-2"	U
u7(E)	38	#5	10'-3"	U
v23(E)	218	#5	19'-6"	—
Cofferdam Excavation		Cu. Yd.	178	
Concrete Structures		Cu. Yd.	168.7	
Reinforcement Bars, Epoxy Coated		Pound	18,250	
Furnishing Steel Piles HP 12x53		Foot	1150	
Driving Piles		Foot	1150	
Test Pile Steel HP 12x53		Each	1	
Pile Shoes		Each	26	
Cofferdam (Type 2) (Location -2)		Each	1	
Seal Coat Concrete		Cu. Yd.	73.1	
Furnish and Install Stream Gauge		Each	1	

STREAM GAUGE NOTES:

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

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

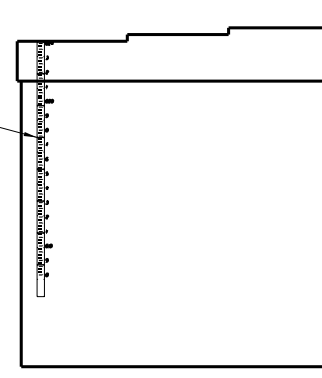
Both the gauge plates and number plates shall be fastened directly to the pier with a 1/4" diameter, 1 1/2" long masonry screw with a hex washer head.

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

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

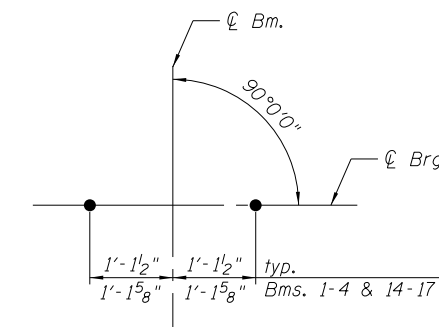
See Special Provisions.

Stream Gauge
See Detail.
See Plan on
Sheet 49 of 62.



PARTIAL ELEVATION
PIER 2

(Looking West)



ANCHOR BOLT DETAILS

STREAM GAUGE DETAIL

FILE NAME = W:\191-130-100T-11.641-CADD-Sheets\Structure\1166011-Str-40-Pier-2-De.t.dgn

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ITASCA, ILLINOIS

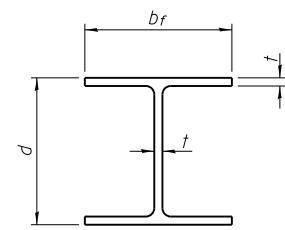
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PLOT SCALE =	CHECKED - JJI	REVISED
PLOT DATE = 8/16/2013	DRAWN - GJE	REVISED
	CHECKED - JJI	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS
STRUCTURE NO. 016-3035

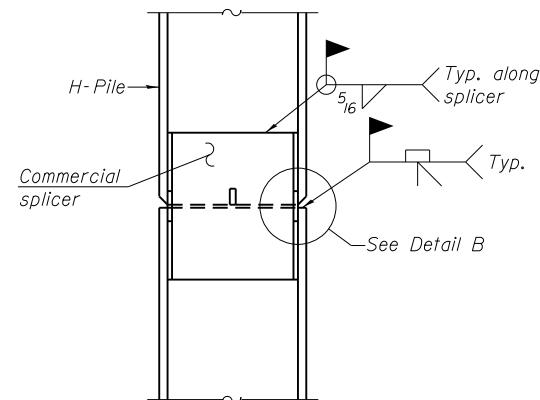
SHEET NO. 51 OF 62 SHEETS

F.A.P. RT. 307	SECTION 541Y-3-B	COUNTY COOK	TOTAL SHEETS 143	SHEET NO. 112
				CONTRACT NO. 60J11
ILLINOIS FED. AID PROJECT				

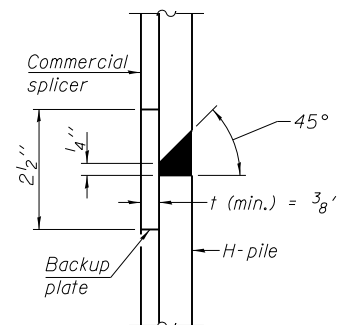


STEEL PILE TABLE

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

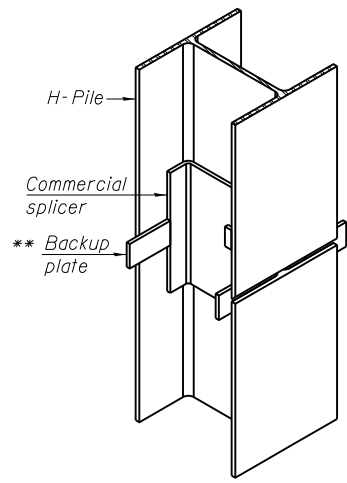


ELEVATION

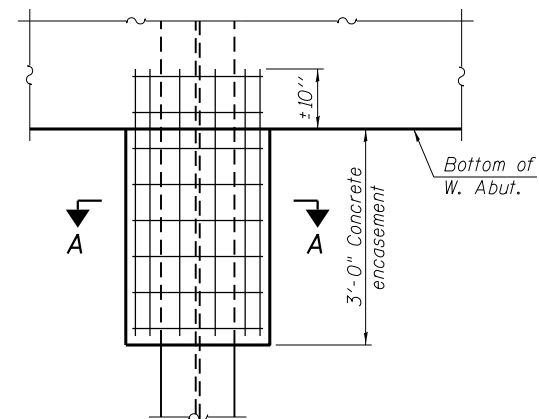


DETAIL "B"

WELDED COMMERCIAL SPLICE

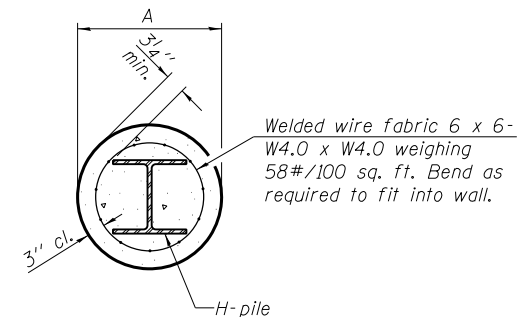


ISOMETRIC VIEW



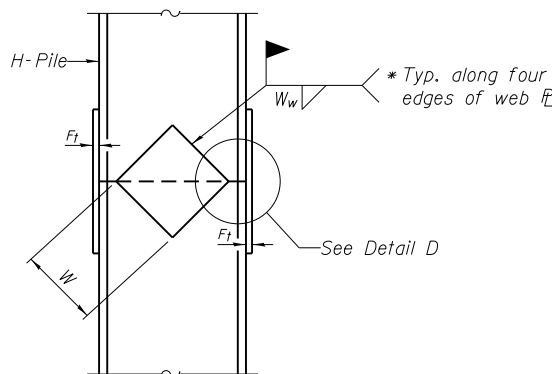
ELEVATION

PILE ENCASEMENT

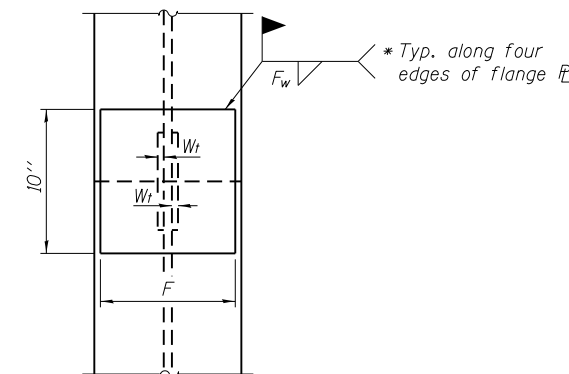


SECTION A-A

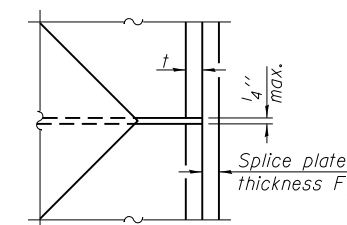
Note:
Forms for encasement may be omitted when soil conditions permit.



ELEVATION



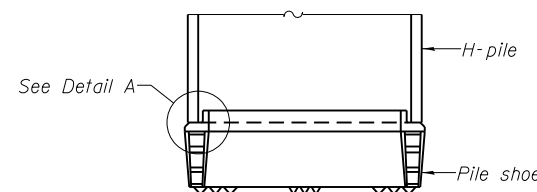
END VIEW



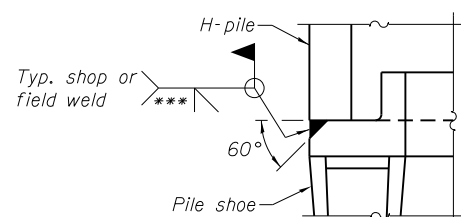
DETAIL D

WELDED PLATE FIELD SPLICE

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

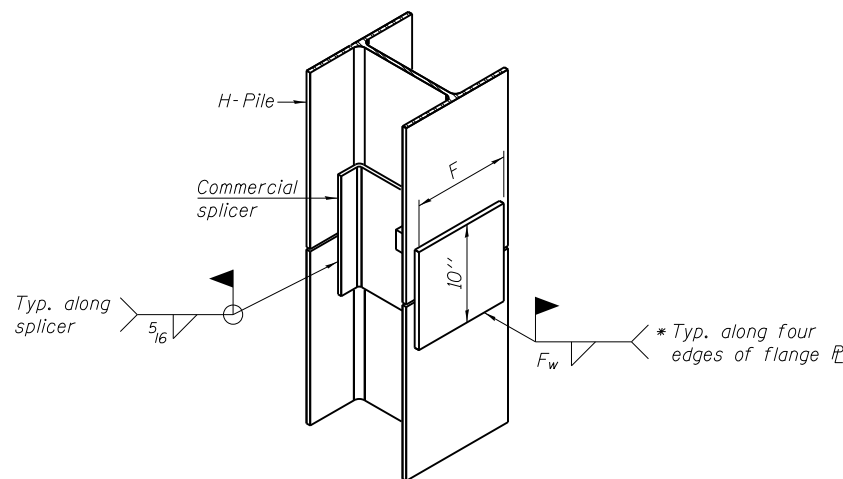


ELEVATION



DETAIL A

H-PILE SHOE ATTACHMENT



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

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

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

FILE NAME = W:\191-130-100T-1164-CADD-Sheets\Structure\1166011-1164-H-HP-1166.dgn

F-HP 1-27-12

	DESIGNED - JMT	REVISED
	CHECKED - JJI	REVISED
	DRAWN - GM	REVISED
	CHECKED - JJI	REVISED

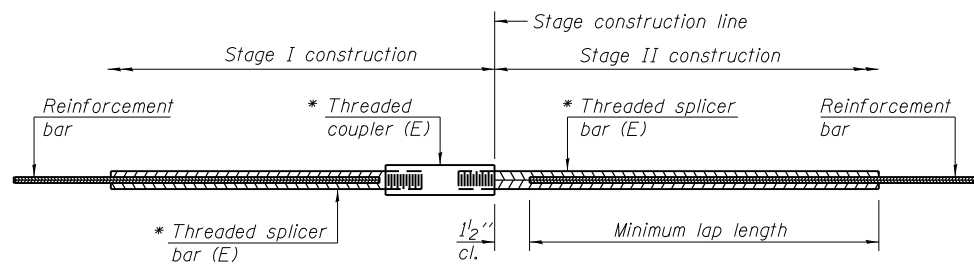
USER NAME =	DESIGNED - JMT	REVISED
PLOT SCALE =	CHECKED - JJI	REVISED
PLOT DATE = 8/15/2013	DRAWN - GM	REVISED
	CHECKED - JJI	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**HP-PILES (F-HP)
STRUCTURE NO. 016-3035**

SHEET NO. 52 OF 62 SHEETS

F.A.P. RTE. 307	SECTION 541Y-3-B	COUNTY COOK	TOTAL SHEETS 143	SHEET NO. 113
CONTRACT NO. 60J11				
ILLINOIS FED. AID PROJECT				



STANDARD BAR SPLICER ASSEMBLY

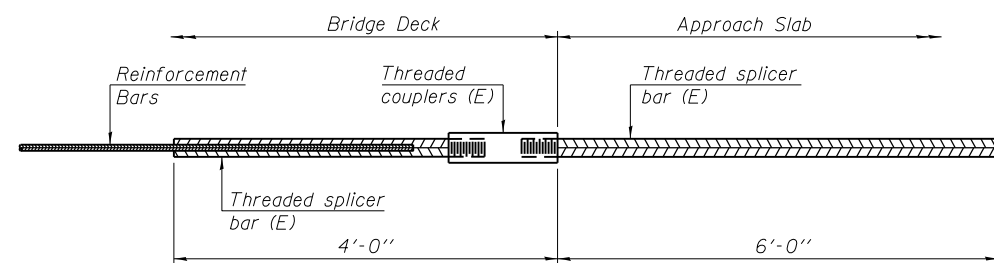
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"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

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

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

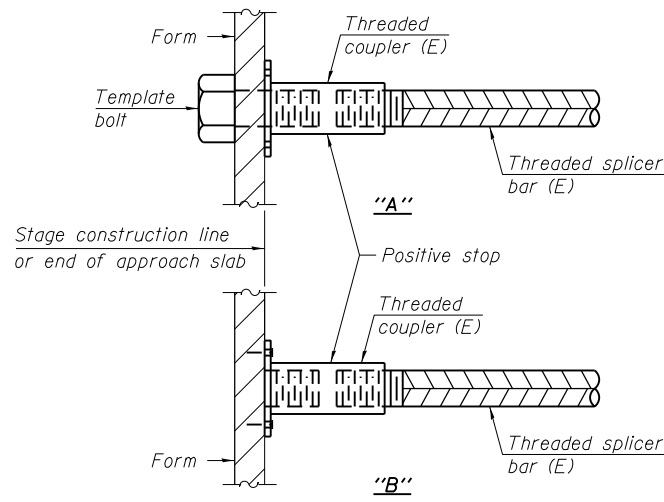
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Superstructure	#5	586	Table 3
West Appr. Slab	#4	25	Table 4
West Appr. Slab	#5	86	Table 4
East Appr. Slab	#4	24	Table 4
East Appr. Slab	#5	65	Table 4
East Appr. Slab	#8	16	Table 4
West Abut.	#5	9	Table 6
West Abut.	#6	5	Table 6
West Abut.	#7	8	Table 6
East Abut.	#5	83	Table 6
East Abut.	#6	5	Table 6
Pier 1	#5	62	Table 6
Pier 1	#7	12	Table 6
Pier 2	#5	42	Table 6
Pier 2	#8	12	Table 6



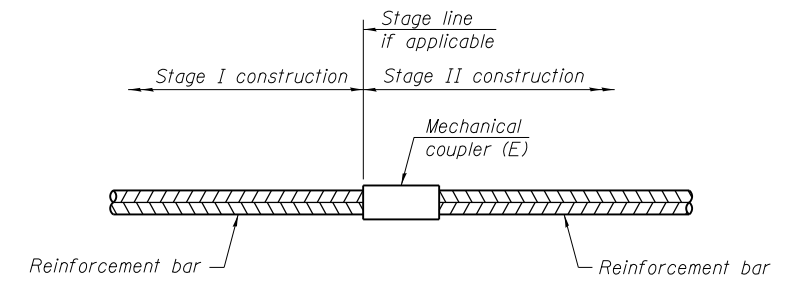
BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required = 0



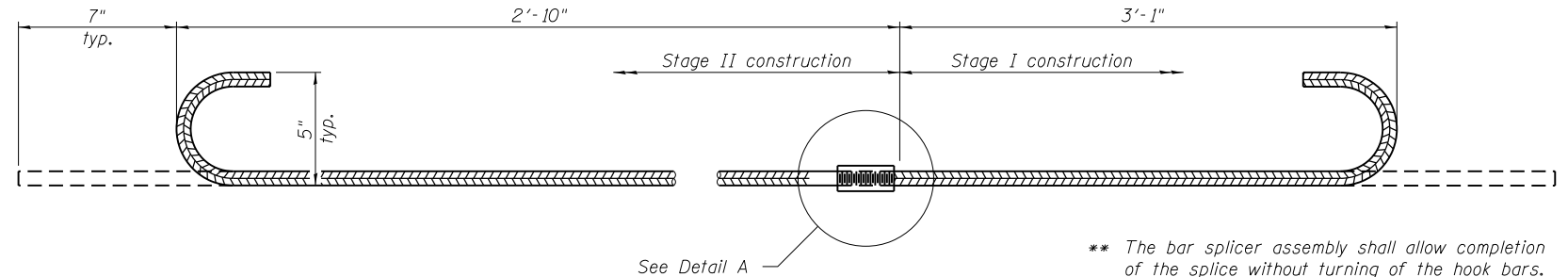
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

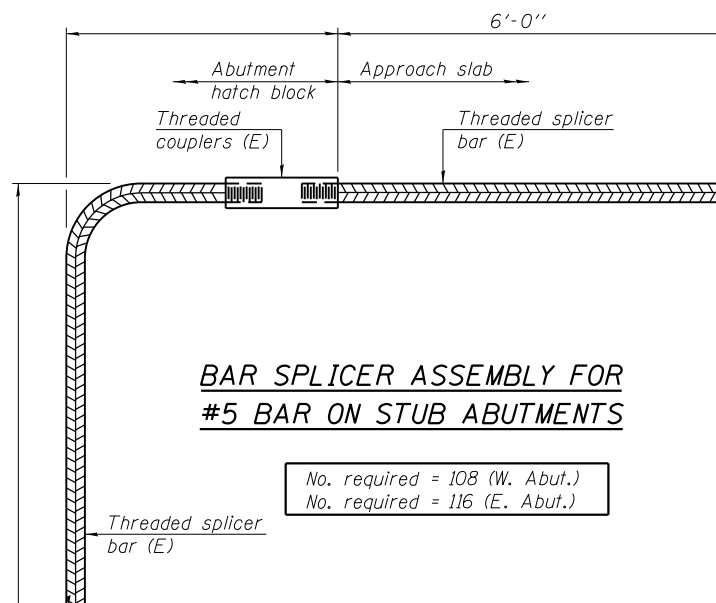
Location	Bar size	No. assemblies required



#5 #3(E) BAR SPLICER ASSEMBLY FOR EDGE BEAMS AT STAGE CONSTRUCTION JOINT

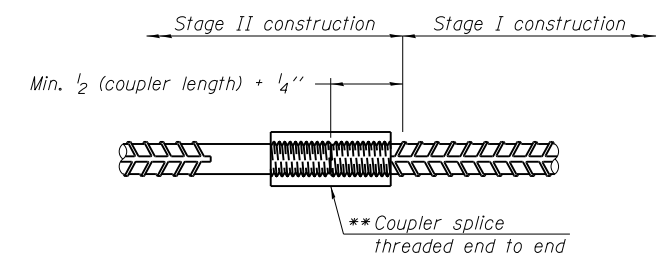
No. required = 6

** The bar splicer assembly shall allow completion of the splice without turning of the hook bars. The stage II splice bar shall be threaded such that the entire coupler can be threaded onto the splice bar.



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 108 (W. Abut.)
 No. required = 116 (E. Abut.)

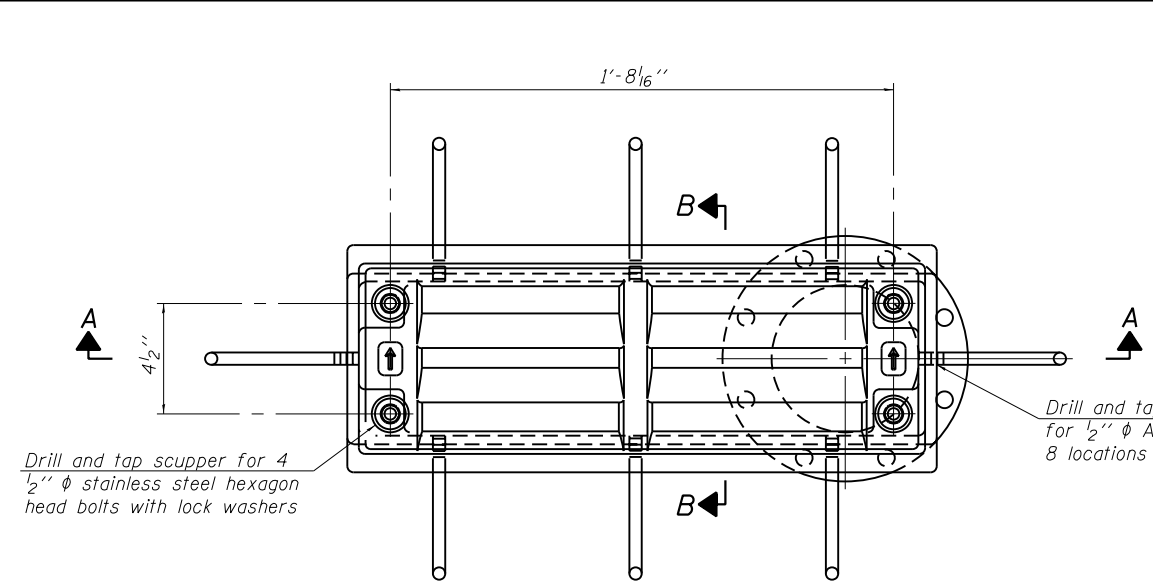


DETAIL A

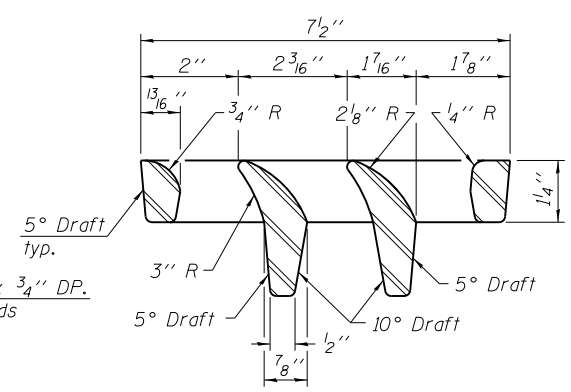
NOTES

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

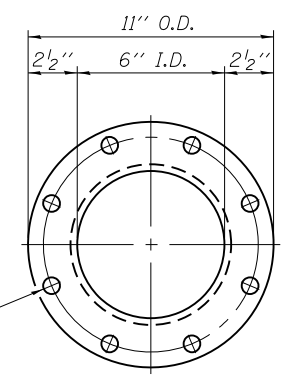
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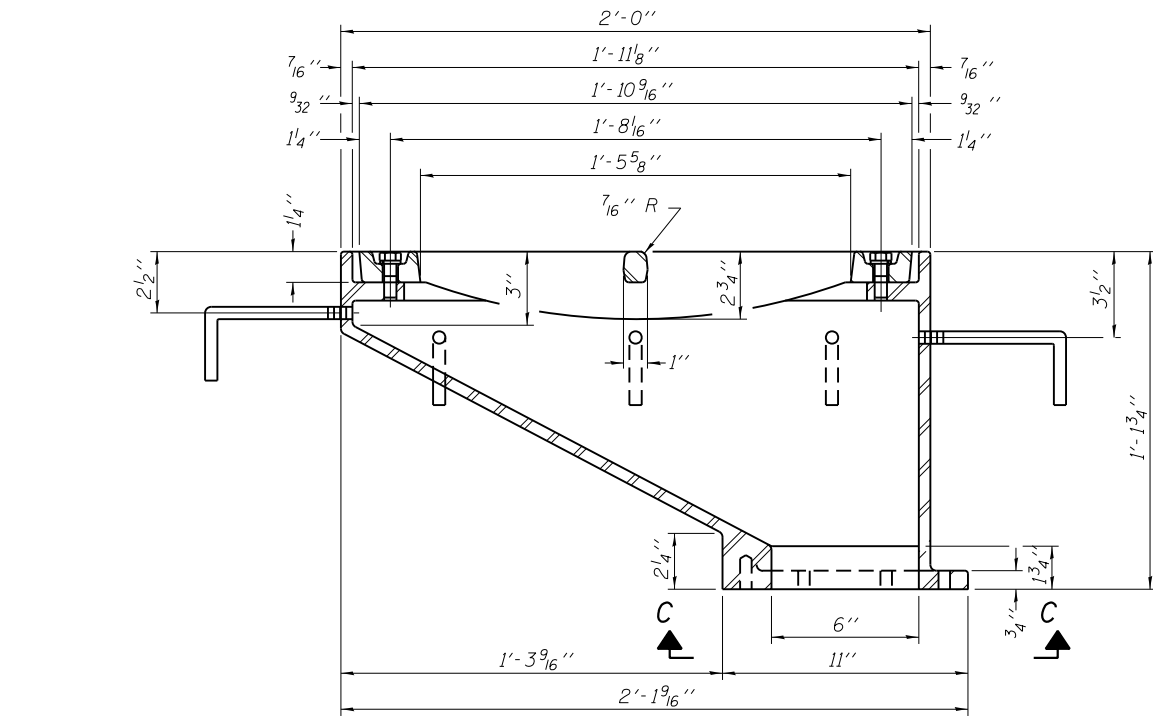
PLAN



VANE GRATE DETAIL

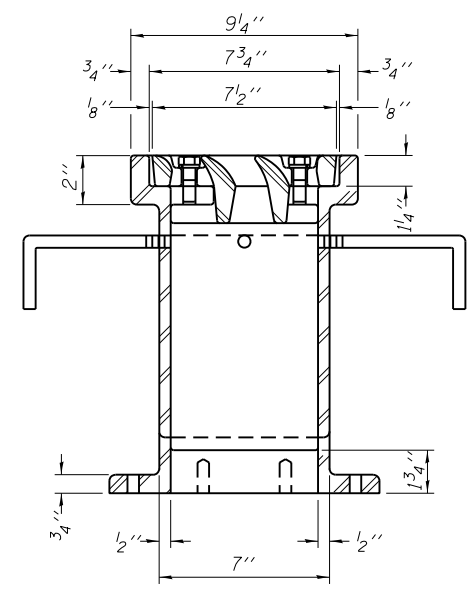


VIEW C-C

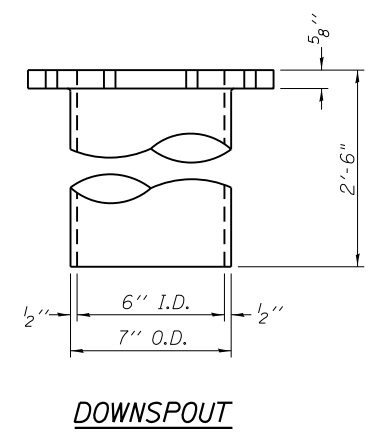


SECTION A-A

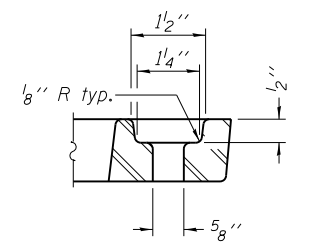
See sheets 17 and 18 of 62 for scupper location relative to parapet.



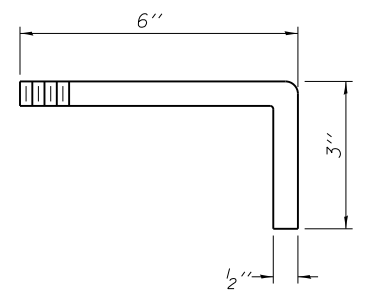
SECTION B-B



DOWNSPOUT



BOLT HOLE DETAIL



ANCHOR STUD DETAIL

Drill and tap 8 holes for 1/2"-13 bolts on a 9 1/2" φ bolt circle. (2 blind holes are 1/4" deep, 6 thru holes)

Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.

Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.

Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.

As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.

The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-12.

Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scuppers, DS-12	Each	6

DS-12

7-1-10

FILE NAME = W:\191-130-100T-11.64\CADD_Sheets\Structure\1166011-11-43_Scupper\Det.dgn

Bollinger, Lach & Associates, Inc.
ITASCA, ILLINOIS

USER NAME =	DESIGNED -	REVISED
PLOT SCALE =	CHECKED -	REVISED
PLOT DATE = 8/15/2013	DRAWN - GM	REVISED
	CHECKED - JJI	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCUPPER DETAILS
STRUCTURE NO. 016-3035
SHEET NO. 54 OF 62 SHEETS

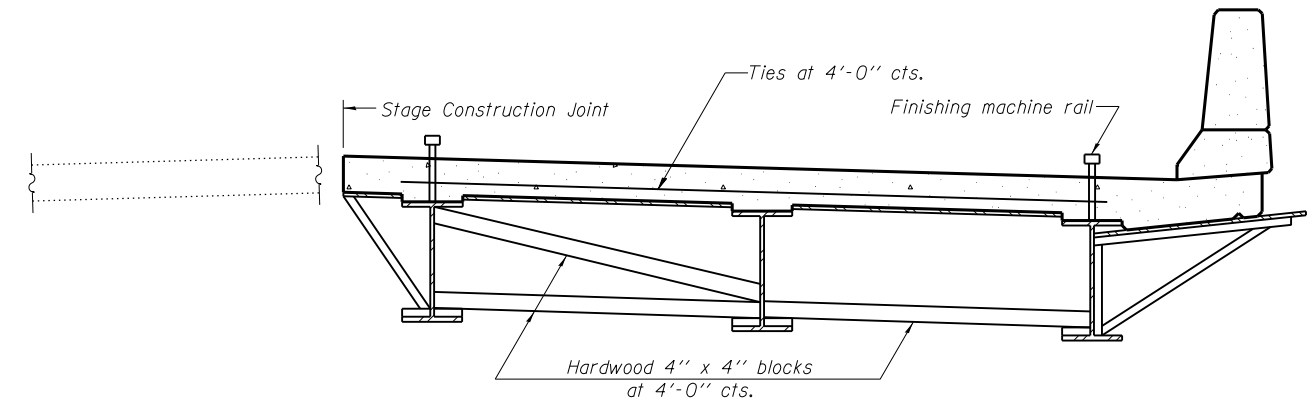
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	541Y-3-B	COOK	143	115
CONTRACT NO. 60J11				
ILLINOIS FED. AID PROJECT				

When cantilever forming brackets are used, the work shall be done according to Article 503.06(b) of the Standard Specifications, except as modified below and in the details shown on this sheet.

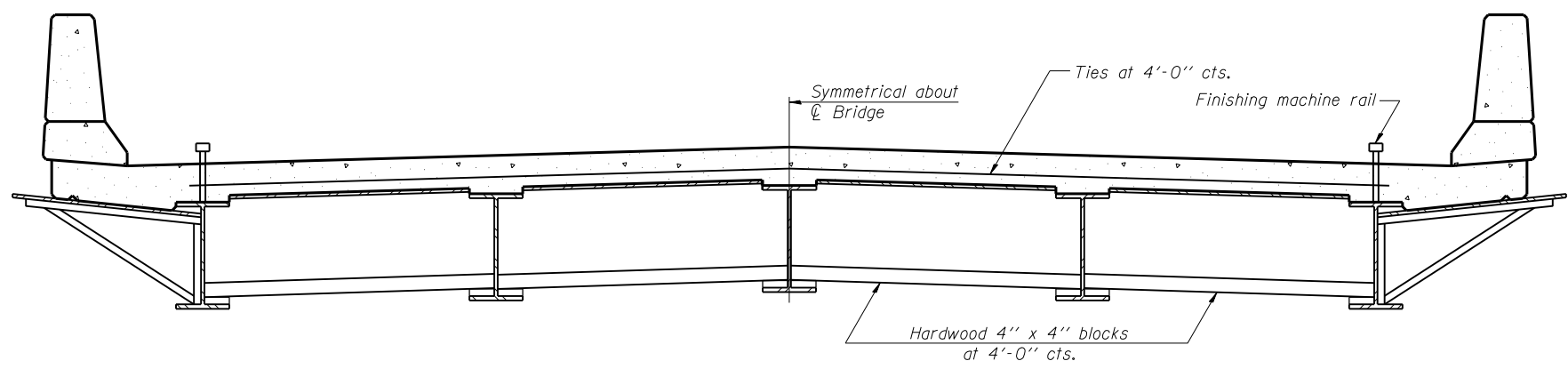
The finishing machine rails shall be placed on the top flange of the exterior beams.

The beams or girders, supporting cantilever forming brackets, shall be tied together at 4 foot intervals.

For Standard construction, or Stage Construction the Hardwood bracing materials shall be placed as shown between webs of beams in each bay.



**FORM BRACES FOR
STAGE CONSTRUCTION**



**FORM BRACES FOR
STANDARD CONSTRUCTION**

FILE NAME = W:\191-130-1001-IL64\CADD_Sheets\Structure\166011-ht-44_CantBrackets.dgn

SB-1

7-1-10

Bollinger, Lach & Associates, Inc.
ITASCA, ILLINOIS

USER NAME =	DESIGNED -	REVISED
	CHECKED - JJI	REVISED
PLOT SCALE =	DRAWN - GM	REVISED
PLOT DATE = 8/15/2013	CHECKED - JJI	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CANTILEVER FORMING BRACKETS
STRUCTURE NO. 016-3035**

SHEET NO. 55 OF 62 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	541Y-3-B	COOK	143	116
CONTRACT NO. 60J11				

ILLINOIS FED. AID PROJECT

PAGE 1 of 2

SOIL BORING LOG

DATE 6/4/2010

LOGGED BY DR

GSI JOB No. 10024

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amberst Court, Suite 204
Naperville, Illinois 60563
(630) 355-2838

ROUTE FAP 0307 DESCRIPTION IL 64 Bridge Over Des Plaines River, IDOT Job No. D-91-183-10IL-64

SECTION 541-Y-3 LOCATION Riverside Township SEC. 1, TWP. 39 N, RNG. 12 E, 3rd P.M.

COUNTY Cook DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. 016-0501 Station 120+43.0

BORING NO. B-01 Station: 97+84 Offset: 42.7' Left Ground Surface Elev. 624.6

DEPTH TH H	B L O W S	U C S Qu	M O I S T (%)	Surface Water Elev. <u>n/a</u> Stream Bed Elev. <u>n/a</u>	Groundwater Elevation: First Encounter <u>n/a</u> Upon Completion <u>n/a</u> After _____ Hrs. <u>n/a</u>	DEPTH TH H	B L O W S	U C S Qu	M O I S T (%)
6.0" ASPHALT, 8.0" CONCRETE					SILTY CLAY LOAM—dark gray—loose (A-4) Apparent Fill				
	3					2			108
	2					3			
	3	1.8P	19			5	2.75P	21	
SANDY CLAY LOAM—dark brown & gray—medium stiff to stiff (Fill)									
	1		118			3			108
	3					5			
	4	0.8B	16			8	2.5B	20	
CLAY—gray—very stiff (A-6)									
	3					4			108
	3	1.75P	22			7	2.4B	20	
CLAY LOAM—dark brown & gray—medium stiff to stiff (Fill)									
	3		110			4			110
	3					7			
	4	1.8B	18			9	3.0B	20	
	2		107						
	3								
	3	0.8B	21						
	1		98			9			
	2					15			
	2	0.8B	27			19		25	
	1		98						
	1								
	2	0.6B	26						587.6
SILTY CLAY LOAM—dark gray—loose (A-4) Apparent Fill					CLAY LOAM—gray—very stiff to hard (A-6)				
	3					4			121
	3					13			
	3					20	2.75P	15	

PAGE 2 of 2

SOIL BORING LOG

DATE 6/4/2010

LOGGED BY DR

GSI JOB No. 10024

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amberst Court, Suite 204
Naperville, Illinois 60563
(630) 355-2838

ROUTE FAP 0307 DESCRIPTION IL 64 Bridge Over Des Plaines River, IDOT Job No. D-91-183-10IL-64

SECTION 541-Y-3 LOCATION Riverside Township SEC. 1, TWP. 39 N, RNG. 12 E, 3rd P.M.

COUNTY Cook DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. 016-0501 Station 120+43.0

BORING NO. B-01 Station: 97+84 Offset: 42.7' Left Ground Surface Elev. 624.6

DEPTH TH H	B L O W S	U C S Qu	M O I S T (%)	Surface Water Elev. <u>n/a</u> Stream Bed Elev. <u>n/a</u>	Groundwater Elevation: First Encounter <u>n/a</u> Upon Completion <u>n/a</u> After _____ Hrs. <u>n/a</u>	DEPTH TH H	B L O W S	U C S Qu	M O I S T (%)
End Of Boring @ -60.0' Hollow Stem Augers To -10.0' Rotary Drilling To Completion 10.0' 4.0" Casing Used CME Automatic Hammer									
	18		128						
	20								
CLAY LOAM—gray—very stiff to hard (A-6)									
	23	4.5+P	12						
	16		138						
	36								
	37	4.5+P	10						
SILTY CLAY LOAM—gray—dense (A-4)									
	32		128						
	24								
	27	5.8B	11						
Drillers Observation: Possible Bedrock									
	32		128						
	24								
	27	5.8B	11						

PAGE 1 of 2

SOIL BORING LOG

DATE 5/18/2010

LOGGED BY DR

GSI JOB No. 10024

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amberst Court, Suite 204
Naperville, Illinois 60563
(630) 355-2838

ROUTE FAP 0307 DESCRIPTION IL 64 Bridge Over Des Plaines River, IDOT Job No. D-91-183-10IL-64

SECTION 541-Y-3 LOCATION Riverside Township SEC. 1, TWP. 39 N, RNG. 12 E, 3rd P.M.

COUNTY Cook DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. 016-0501 Station 120+43.0

BORING NO. B-02 Station: 97+74 Offset: 42.4' Right Ground Surface Elev. 624.5

DEPTH TH H	B L O W S	U C S Qu	M O I S T (%)	Surface Water Elev. <u>n/a</u> Stream Bed Elev. <u>n/a</u>	Groundwater Elevation: First Encounter <u>616.0</u> Upon Completion <u>n/a</u> After _____ Hrs. <u>n/a</u>	DEPTH TH H	B L O W S	U C S Qu	M O I S T (%)
5.0" Asphalt, 9.0" Concrete					SANDY LOAM—gray—very loose (A-2)				
	2								
	3					3			101
	3					6			
	3		28			7	3.0P	24	
CLAY LOAM—dark brown, gray & black—loose (Fill)									
	2		108			5			108
	3					6			
	4	1.1B	20			9	2.75B	20	
CLAY—gray—very stiff (A-6)									
	3					5			108
	3	NP	30			7			
	3					11	3.1B	20	
Cinders, Sand & Stone—dark gray—loose (Fill)									
	1					5			111
	0					7			
	0	0.5P	34			10	3.25B	19	
SILTY CLAY—dark brown & black—medium stiff (A-6) Wet									
	2		81						
	3	0.8B	31						592.5
CLAY LOAM—brown—soft to medium stiff (A-6) Wet									
	0		89			10			
	1					11			
	2	0.4B	30			14		19	
SILT—gray—medium dense to dense (A-4)									
	2		102						
	2								
	1	0.3B	24						
SANDY LOAM—gray—very loose (A-2)									
	1					23			
	1					32			
	2	NP	24			34	NP	16	

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

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

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

FILE NAME = W:\191-130-1001-IL64-CADD-Sheets\Structure\1160J11-shr-45-SoilBoringLog.dgn



USER NAME =	DESIGNED - JMT	REVISED
PLOT SCALE =	CHECKED - JJI	REVISED
PLOT DATE = 8/15/2013	DRAWN - GM	REVISED
	CHECKED - JJI	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS I
STRUCTURE NO. 016-3035**

SHEET NO. 56 OF 62 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	541Y-3-B	COOK	143	117
CONTRACT NO. 60J11				
ILLINOIS FED. AID PROJECT				

PAGE 2 of 2

SOIL BORING LOG

DATE 5/18/2010
 LOGGED BY DR
 GSI JOB No. 10024

ROUTE FAP 0307 DESCRIPTION IL 64 Bridge Over Des Plaines River, IDOT Job No. D-91-183-10IL-64
 SECTION 541-Y-3 LOCATION Riverside Township SEC. 1, TWP. 39 N, RNG. 12 E, 3rd P.M.
 COUNTY Cook DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. 016-0501 SURFACE WATER ELEV. n/a
 Station 120+43.0 Stream Bed Elev. n/a
 BORING NO. B-02 GROUNDWATER ELEVATION:
 Station: 97+74 First Encounter 616.0 (ft) / (6" (tsf) (%)
 Offset: 42.4' Right Upon Completion n/a (ft) / (6" (tsf) (%)
 Ground Surface Elev. 624.5 After _____ Hrs. _____ (ft) / (6" (tsf) (%)

DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)	DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)
582.5							
12	125						
15							
-45	21	4.2B	13				
557.0							
13	127						
50/5							
-50	8.5B	12					
568.0							
567.0							
21							
50/5							
-55	4.5+P	12					
60							

Recovery=100.0%
R.Q.D.=12.5%

CLAY LOAM-gray-hard (A-6)

End Of Boring @ -67.5'
Hollow Stem Augers To -10.0'
Rotary Drilling To Completion
10.0' 4.0" Casing Used
60.0' 3.0" Casing Used
CME Automatic Hammer

Drillers Observation: Apparent Bedrock
567.0

Silurian System, Niagara Series Dolomite
RUN 1 (-57.5' to -67.5')
Light gray to gray, fine grained with horizontal to wavy bedding. Porous & weathered with numerous horizontal & vertical fractures throughout.

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

PAGE 1 of 1

ROCK CORE LOG


DATE 5/18/2010
 LOGGED BY DR
 GSI JOB No. 10024

ROUTE FAP 0307 DESCRIPTION IL 64 Bridge Over Des Plaines River, IDOT Job No. D-91-183-10IL-64
 SECTION 541-Y-3 LOCATION Riverside Township SEC. 1, TWP. 39 N, RNG. 12 E, 3rd P.M.
 COUNTY Cook CORING METHOD Rotary Wash

STRUCT. NO. 016-0501 CORING BARREL TYPE & SIZE NX Double Swivel-5 ft
 Station 120+43.0 Core Diameter 2.0 in
 BORING NO. B-02 Top of Rock Elev. 567.0
 Station: 97+74 Begin Core Elev. 568.0
 Offset: 42.4' Right
 Ground Surface Elev. 624.5

DEPTH (ft)	RECOVERY (%)	ROQ (%)	CORRECTION (min)	STRENGTH (tsf)
568.0	100.0	12.5	n/a	8720
64.5				
62.5				
67.5				

Silurian System, Niagara Series Dolomite
RUN 1 (-57.5' to -67.5')
Light gray to gray, fine grained with horizontal to wavy bedding. Porous & weathered with numerous horizontal & vertical fractures throughout.



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

PAGE 1 of 2

SOIL BORING LOG

DATE 5/27/2010
 LOGGED BY DR
 GSI JOB No. 10024

ROUTE FAP 0307 DESCRIPTION IL 64 Bridge Over Des Plaines River, IDOT Job No. D-91-183-10IL-64
 SECTION 541-Y-3 LOCATION Riverside Township SEC. 1, TWP. 39 N, RNG. 12 E, 3rd P.M.
 COUNTY Cook DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. 016-0501 SURFACE WATER ELEV. 610.3
 Station 120+43.0 Stream Bed Elev. 607.8
 BORING NO. B-03 GROUNDWATER ELEVATION:
 Station: 98+42 First Encounter n/a (ft) / (6" (tsf) (%)
 Offset: 43.2' Left Upon Completion n/a (ft) / (6" (tsf) (%)
 Ground Surface Elev. 624.8 After _____ Hrs. _____ (ft) / (6" (tsf) (%)

DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)	DEPTH (ft)	BLOW COUNT (blows/6")	UCS (tsf)	MOISTURE (%)
623.8							
603.8							
601.8							
610.3							
607.8							
592.8							
610.3							
607.8							
60							

12.0" Bridge Deck
CRUSHED STONE-loose to medium dense (Fill) 8
3 - 34
9
15 128
12
601.8 12 4.0B 13
6
7 107
7
-25 6 2.75P 21
4
6 108
11
12 4.5P 22
4
7
-30 11 3.75P 20
592.8
5
13
-35 17 NP 19
610.3
-15
607.8
7
18
4
3 NP 13
5
1
13
-20 3
-40 17 NP 17

CLAY-gray-very stiff to hard (A-6)

SILTY CLAY LOAM-dark gray to black-medium dense (Fill)

SILTY LOAM-gray-dense (A-4)

CRUSHED STONE-loose to medium dense (Fill)

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

FILE NAME = W:\191-130-1001-IL64-CADD-Sheets\Structure\1160J11-ht-46-SoilBoringLog_11.dgn



USER NAME =	DESIGNED - JMT	REVISED
PLOT SCALE =	CHECKED - JJI	REVISED
PLOT DATE = 8/15/2013	DRAWN - GM	REVISED
	CHECKED - JJI	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS II
STRUCTURE NO. 016-3035**

SHEET NO. 57 OF 62 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	541Y-3-B	COOK	143	118
CONTRACT NO. 60J11				
ILLINOIS FED. AID PROJECT				

SOIL BORING LOG

PAGE 2 of 2

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60563
(800) 355-2838

DATE 5/27/2010
LOGGED BY DR
GSI JOB No. 10024

ROUTE FAP 0307 DESCRIPTION IL 64 Bridge Over Des Plaines River, IDOT Job No. D-91-183-10IL-64
SECTION 541-Y-3 LOCATION Riverside Township SEC. 1, TWP. 39 N, RNG. 12 E, 3rd P.M.
COUNTY Cook DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. 016-0501
Station 120+43.0
BORING NO. B-03
Station: 98+42
Offset: 43.2' Left
Ground Surface Elev. 624.8

DEPTH	B	U	M	Surface Water Elev.	DEPTH	B	U	M
(ft)	(tsf)	(pcf)	(%)	Stream Bed Elev.	(ft)	(tsf)	(pcf)	(%)
582.8				610.3				
				607.8				
				Groundwater Elevation:				
				First Encounter				
				Upon Completion				
				After _____ Hrs.				
SILTY LOAM—gray—dense (A-4)								
Light gray to gray with horizontal to wavy bedding. Porous & weathered with numerous horizontal fractures throughout & some thin clay partings.								
CLAY LOAM—gray—hard (A-6)								
Recovery=99.0% R.Q.D.=80.0% 100.0% water loss @ -61.0'								
End Of Boring @ -68.0' Hollow Stem Augers To -25.0' Rotary Drilling To Completion 25.0' 4.0" Casing Used 57.0' 3.0" Casing Used CME Automatic Hammer								
SILTY CLAY LOAM—gray—dense to very dense (A-4)								
Drillers Observation: Possible bedrock. 566.8								
Silurian System, Niagaran Series Dolomite RUN 1 (-58.0' to -68.0')								

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

ROCK CORE LOG

PAGE 1 of 1

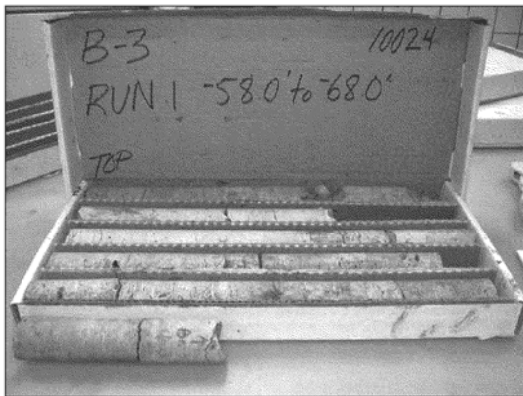
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60563
(800) 355-2838

DATE 5/27/2010
LOGGED BY DR
GSI JOB No. 10024

ROUTE FAP 0307 DESCRIPTION IL 64 Bridge Over Des Plaines River, IDOT Job No. D-91-183-10IL-64
SECTION 541-Y-3 LOCATION Riverside Township SEC. 1, TWP. 39 N, RNG. 12 E, 3rd P.M.
COUNTY Cook CORING METHOD Rotary Wash

STRUCT. NO. 016-0501
Station 120+43.0
BORING NO. B-03
Station: 98+42
Offset: 43.2' Left
Ground Surface Elev. 624.8

DEPTH	CORE	R	R	C	S
(ft)	(#)	(%)	(%)	(min /ft)	(tsf)
566.8	1	99.0	80.0	n/a	7990
					58.4'
Silurian System, Niagaran Series Dolomite RUN 1 (-58.0' to -68.0')					
Light gray to gray with horizontal to wavy bedding. Porous & weathered with numerous horizontal fractures throughout & some thin clay partings.					
100.0% water loss @ -61.0'					



B-3
RUN 1 -58.0' to -68.0'
TOP

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

SOIL BORING LOG

PAGE 1 of 2

Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60563
(800) 355-2838

DATE 5/19/2010
LOGGED BY DR
GSI JOB No. 10024

ROUTE FAP 0307 DESCRIPTION IL 64 Bridge Over Des Plaines River, IDOT Job No. D-91-183-10IL-64
SECTION 541-Y-3 LOCATION Riverside Township SEC. 1, TWP. 39 N, RNG. 12 E, 3rd P.M.
COUNTY Cook DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. 016-0501
Station 120+43.0
BORING NO. B-04
Station: 98+60
Offset: 42.7' Right
Ground Surface Elev. 624.8

DEPTH	B	U	M	Surface Water Elev.	DEPTH	B	U	M
(ft)	(tsf)	(pcf)	(%)	Stream Bed Elev.	(ft)	(tsf)	(pcf)	(%)
623.8				614.3				
				606.8				
				Groundwater Elevation:				
				First Encounter				
				Upon Completion				
				After _____ Hrs.				
12.0" Bridge Deck								
Sand, Stone & Clay—very loose to loose (A-2)								
Drillers Observation: Concrete Obstruction								
Air								
CLAY—gray—very stiff (A-6)								
Silty Clay Loam to Silty Loam—gray—medium dense to dense (A-4)								
Sand, Stone & Clay—very loose to loose (A-2)								

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

FILE NAME = W:\191-130-IDOT-IL64-CADD-Sheets\structure\1166011-1st-47-SoilBoringLog III.dgn

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering 805 Amherst Court, Suite 204 Naperville, Illinois 60563 (830) 355-2838		SOIL BORING LOG		PAGE 2 of 2	
ROUTE FAP 0307		DESCRIPTION Il. 64 Bridge Over Des Plaines River, IDOT Job No. D-91-183-10IL-64		DATE 5/19/2010	
SECTION 541-Y-3		LOCATION Riverside Township SEC. 1, TWP. 39 N, RNG. 12 E, 3rd P.M.		LOGGED BY DR	
COUNTY Cook		DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic		GSI JOB No. 10024	
STRUCT. NO. 016-0501		Surface Water Elev. 614.3		D B U M	
Station 120+43.0		Stream Bed Elev. 606.8		E P L O S	
BORING NO. B-04		Groundwater Elevation:		T H W S	
Station: 98+60		First Encounter n/a		Qu	
Offset: 42.7' Right		Upon Completion n/a		M O I S T	
Ground Surface Elev. 624.8		After Hrs.		(ft) (/6") (tsf) (%)	
SILTY CLAY LOAM to SILTY LOAM- gray-medium dense to dense (A-4)		Drillers Observation: Possible Bedrock			
582.8		563.3			
End Of Boring @ -61.5' Hollow Stem Augers To -25.0' Rotary Drilling To Completion 25.0' 4.0" Casing Used CME Automatic Hammer					
CLAY LOAM-gray-very stiff (A-6)					
15 124					
15					
-45 24 3.08 13					
14 129					
27					
-50 20 2.48 13					
21 129					
21					
-55 23 3.58 11					
587.8					
CLAY LOAM with Fractured Rock- gray-very dense (A-2)					
565.8 50/5"					
Drillers Observation: Possible Bedrock					
-60					

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

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering 805 Amherst Court, Suite 204 Naperville, Illinois 60563 (830) 355-2838		SOIL BORING LOG		PAGE 1 of 2	
ROUTE FAP 0307		DESCRIPTION Il. 64 Bridge Over Des Plaines River, IDOT Job No. D-91-183-10IL-64		DATE 5/20-21/2010	
SECTION 541-Y-3		LOCATION Riverside Township SEC. 1, TWP. 39 N, RNG. 12 E, 3rd P.M.		LOGGED BY DR	
COUNTY Cook		DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic		GSI JOB No. 10024	
STRUCT. NO. 016-0501		Surface Water Elev. 613.8		D B U M	
Station 120+43.0		Stream Bed Elev. 606.8		E P L O S	
BORING NO. B-05		Groundwater Elevation:		T H W S	
Station: 99+13		First Encounter n/a		Qu	
Offset: 43.1' Right		Upon Completion n/a		M O I S T	
Ground Surface Elev. 624.8		After Hrs.		(ft) (/6") (tsf) (%)	
12.0" Bridge Deck					
623.8					
CRUSHED STONE- loose to medium dense (Fill)					
2					
2					
3 NR					
11					
10					
8					
4 NP 10					
-5					
-25					
598.8					
5					
8					
10					
11 4.5P 20					
4					
7					
12 NP 22					
-10					
-30					
613.8					
SILTY LOAM-gray- medium dense to dense (A-4)					
5					
10					
-35 14 NP 19					
-15					
7					
19					
14					
-20 3 NP 14					
-40 33 NP 15					
606.8					
CRUSHED STONE- loose to medium dense (Fill)					
20					
31					
-60					

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

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering 805 Amherst Court, Suite 204 Naperville, Illinois 60563 (830) 355-2838		SOIL BORING LOG		PAGE 2 of 2	
ROUTE FAP 0307		DESCRIPTION Il. 64 Bridge Over Des Plaines River, IDOT Job No. D-91-183-10IL-64		DATE 5/20-21/2010	
SECTION 541-Y-3		LOCATION Riverside Township SEC. 1, TWP. 39 N, RNG. 12 E, 3rd P.M.		LOGGED BY DR	
COUNTY Cook		DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic		GSI JOB No. 10024	
STRUCT. NO. 016-0501		Surface Water Elev. 613.8		D B U M	
Station 120+43.0		Stream Bed Elev. 606.8		E P L O S	
BORING NO. B-05		Groundwater Elevation:		T H W S	
Station: 99+13		First Encounter n/a		Qu	
Offset: 43.1' Right		Upon Completion n/a		M O I S T	
Ground Surface Elev. 624.8		After Hrs.		(ft) (/6") (tsf) (%)	
SILTY LOAM-gray- medium dense to dense (A-4)		Drillers Observation: Possible bedrock. 565.8			
582.8					
Light gray to gray with horizontal to wavy bedding. Porous & weathered with numerous horizontal fractures throughout & some thin clay partings.					
CLAY LOAM-gray-hard (A-6)					
11					
18					
-45 21 4.5+P 13					
577.8					
Recovery=98.5% R.Q.D.=73.0%				RUN 1	
21					
40					
-50 42 - 11					
-70					
End Of Boring @ -69.0' Hollow Stem Augers To -25.0' Rotary Drilling To Completion 25.0' 4.0" Casing Used 60.0' 3.0" Casing Used CME Automatic Hammer					
SILTY CLAY LOAM-gray- dense to very dense (A-4)					
16					
21					
-55 23 - 11					
-75					
566.3					
Drillers Observation: Possible bedrock. 565.8					
Silurian System, Niagaran Series Dolomite RUN 1 (-59.0' to -69.0')				RUN 1	
-60					
-80					

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

FILE NAME = W:\191-130-1001-IL64\CADD_Sheets\Structure\1160J11-ht-48_SoilBoringLog_1V.dgn



USER NAME =	DESIGNED - JMT	REVISED
PLOT SCALE =	CHECKED - JJI	REVISED
PLOT DATE = 8/15/2013	DRAWN - GM	REVISED
	CHECKED - JJI	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS IV
STRUCTURE NO. 016-3035**

F.A.P. RTE. 307	SECTION 541Y-3-B	COUNTY COOK	TOTAL SHEETS 143	SHEET NO. 120
CONTRACT NO. 60J11				ILLINOIS FED. AID PROJECT

SHEET NO. 59 OF 62 SHEETS

ROCK CORE LOG

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60563
(630) 355-2838

PAGE 1 of 1
DATE 5/20-21/2010
LOGGED BY DR
GSI JOB No. 10024


ROUTE FAP 0307 DESCRIPTION II. 64 Bridge Over Des Plaines River, IDOT Job No. D-91-183-10IL-64
SECTION 541-Y-3 LOCATION Riverside Township SEC. 1, TWP. 39 N, RNG. 12 E, 3rd P.M.
COUNTY Cook CORING METHOD Rotary Wash

STRUCT. NO. 016-0501 CORING BARREL TYPE & SIZE NX Double Swivel-5 ft
Station 120+43.0 Core Diameter 2.0 in
BORING NO. B-05 Top of Rock Elev. 566.3
Station: 99+13 Begin Core Elev. 565.8
Offset: 43.1 Right
Ground Surface Elev. 624.8

DEPTH (ft)	RECOVERED (%)	R.Q.D. (%)	CORING RATE (min/ft)	STRENGTH (tsf)
0	1	98.5	73.0	n/a
565.8				3360
				59.3

Silurian System, Niagaran Series Dolomite
RUN 1 (-59.0' to -69.0')

Light gray to gray with horizontal to wavy bedding. Porous & weathered with numerous horizontal fractures throughout & some thin clay partings.



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

SOIL BORING LOG

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60563
(630) 355-2838

PAGE 1 of 2
DATE 5/28/2010
LOGGED BY DR
GSI JOB No. 10024

ROUTE FAP 0307 DESCRIPTION II. 64 Bridge Over Des Plaines River, IDOT Job No. D-91-183-10IL-64
SECTION 541-Y-3 LOCATION Riverside Township SEC. 1, TWP. 39 N, RNG. 12 E, 3rd P.M.
COUNTY Cook DRILLING METHOD Hollow Stem Auger/Rotary, HAMMER TYPE CME Automatic

STRUCT. NO. 016-0501
Station 120+43.0
BORING NO. B-06
Station: 99+73
Offset: 54.6' Left
Ground Surface Elev. 625.1

DEPTH (ft)	UCS (tsf)	MOIST (%)	Surface Water Elev.	Stream Bed Elev.	Groundwater Elevation:	DEPTH (ft)	UCS (tsf)	MOIST (%)
5.0" ASPHALT, 9.0" CONCRETE			n/a	n/a	First Encounter 619.1			
CRUSHED CONCRETE & STONE-medium dense (FIII)	8		n/a	n/a	Upon Completion n/a			
	6 NP	8			After ____ Hrs.			
SILTY CLAY-brown & gray-stiff (A-6)	3	111						
	4							
	7 1.8B	19						
	9							
SAND & GRAVEL-brown-medium dense (A-1)	8							
	4 NP	10						
	3	118						
	6							
	8 4.4B	18						
	5	120						
	8							
CLAY-gray-very stiff to hard (A-6)	10	4.1B						
	3	111						
	6							
	8 2.8B	19						
	4	118						
	7							
	9 5.0B	16						
	4	118						
	5							
	7 2.5B	15						

5.0" ASPHALT, 9.0" CONCRETE

CRUSHED CONCRETE & STONE-medium dense (FIII)

SILTY CLAY-brown & gray-stiff (A-6)

SAND & GRAVEL-brown-medium dense (A-1)

CLAY-gray-very stiff to hard (A-6)

SILTY CLAY LOAM-gray-medium dense (A-4)

Drillers Observation: Apparent bedrock. 566.6

Silurian System, Niagaran Series Dolomite
RUN 1 (-58.5' to -68.5')

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

SOIL BORING LOG

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60563
(630) 355-2838

PAGE 2 of 2
DATE 5/28/2010
LOGGED BY DR
GSI JOB No. 10024

ROUTE FAP 0307 DESCRIPTION II. 64 Bridge Over Des Plaines River, IDOT Job No. D-91-183-10IL-64
SECTION 541-Y-3 LOCATION Riverside Township SEC. 1, TWP. 39 N, RNG. 12 E, 3rd P.M.
COUNTY Cook DRILLING METHOD Hollow Stem Auger/Rotary, HAMMER TYPE CME Automatic

STRUCT. NO. 016-0501
Station 120+43.0
BORING NO. B-06
Station: 99+73
Offset: 54.6' Left
Ground Surface Elev. 625.1

DEPTH (ft)	UCS (tsf)	MOIST (%)	Surface Water Elev.	Stream Bed Elev.	Groundwater Elevation:	DEPTH (ft)	UCS (tsf)	MOIST (%)
SILTY CLAY LOAM-gray-medium dense (A-4)			n/a	n/a	First Encounter 619.1			
	4	108			Upon Completion n/a			
	6				After ____ Hrs.			
	8 3.0B	24						
	5	111						
	7							
	11 4.0B	19						
	4	108						
	4							
	8 2.9B	21						
	3	118						
	6							
	8 4.4B	18						
	5	120						
	8							
CLAY LOAM-gray-hard (A-6)	10	4.1B						
	3	111						
	6							
	8 2.8B	19						
	4	118						
	7							
	9 5.0B	16						
	4	118						
	5							
	7 2.5B	15						

5.0" ASPHALT, 9.0" CONCRETE

CRUSHED CONCRETE & STONE-medium dense (FIII)

SILTY CLAY-brown & gray-stiff (A-6)

SAND & GRAVEL-brown-medium dense (A-1)

CLAY LOAM-gray-hard (A-6)

SILTY CLAY LOAM-gray-medium dense (A-4)

Drillers Observation: Apparent bedrock. 566.6

Silurian System, Niagaran Series Dolomite
RUN 1 (-58.5' to -68.5')

End of Boring @ -68.5'
Hollow Stem Augers To -10.0'
Rotary Drilling To Completion
10.0' 4.0" Casing Used
60.0' 3.0" Casing Used
CME Automatic Hammer

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

FILE NAME = W:\191-130-10DOT-11.64\CADD_Sheets\Structure\1160J11-11-49_SoilBoringLogs_V.dgn



USER NAME =	DESIGNED - JMT	REVISED
PLOT SCALE =	CHECKED - JJI	REVISED
PLOT DATE = 8/15/2013	DRAWN - GM	REVISED
	CHECKED - JJI	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS V
STRUCTURE NO. 016-3035**

SHEET NO. 60 OF 62 SHEETS

F.A.P. RTE. 307	SECTION 541Y-3-B	COUNTY COOK	TOTAL SHEETS 143	SHEET NO. 121
CONTRACT NO. 60J11			ILLINOIS FED. AID PROJECT	

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60563
(630) 355-2838

ROCK CORE LOG

PAGE 1 of 1
DATE 5/28/2010
LOGGED BY DR
GSI JOB No. 10024

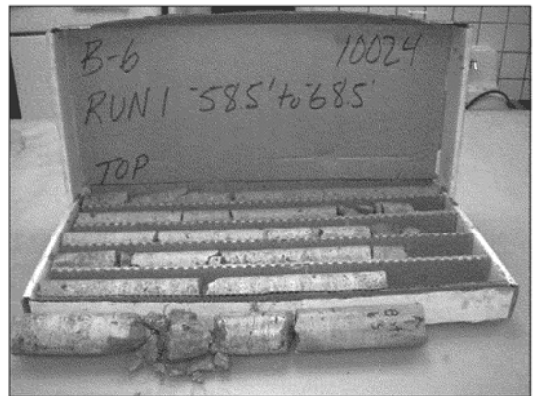
ROUTE FAP 0307 DESCRIPTION IL 64 Bridge Over Des Plaines River, IDOT Job No. D-91-183-10IL-64
SECTION 541-Y-3 LOCATION Riverside Township SEC. 1, TWP. 39 N, RNG. 12 E, 3rd P.M.
COUNTY Cook CORING METHOD Rotary Wash

STRUCT. NO. 016-0501 CORING BARREL TYPE & SIZE NX Double Swivel-5 ft
Station 120+43.0 Core Diameter 2.0 in
Top of Rock Elev. 567.1
BORING NO. B-06 Begin Core Elev. 566.6
Station: 99+73
Offset: 54.6' Left
Ground Surface Elev. 625.1

DEPTH (ft)	CORING RECOVERY (%)	R.Q.D. (%)	CORING TIME (min)	STRENGTH (tsf)
566.6	100.0	65.5	n/a	6420 59.4'

Silurian System, Niagaran Series Dolomite
RUN 1 (-58.5' to -68.5')

Light gray to gray with horizontal to wavy bedding. Porous & weathered with numerous horizontal fractures throughout & some thin clay partings.



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

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60563
(630) 355-2838

SOIL BORING LOG

PAGE 1 of 1
DATE 5/25/2010
LOGGED BY DR
GSI JOB No. 10024

ROUTE FAP 0307 DESCRIPTION IL 64 Bridge Over Des Plaines River, IDOT Job No. D-91-183-10IL-64
SECTION 541-Y-3 LOCATION Riverside Township SEC. 1, TWP. 39 N, RNG. 12 E, 3rd P.M.
COUNTY Cook DRILLING METHOD Hollow Stem Auger/Rotary, HAMMER TYPE CME Automatic

STRUCT. NO. 016-0501
Station 120+43.0
BORING NO. B-07
Station: 99+69
Offset: 55.9' Right
Ground Surface Elev. 624.4

DEPTH (ft)	BLU (tsf)	UCS (tsf)	MOIST (%)	Surface Water Elev.	Stream Bed Elev.	Groundwater Elevation:	DEPTH (ft)	BLU (tsf)	UCS (tsf)	MOIST (%)
623.2	4			n/a	n/a	n/a	3			111
601.4	3	18				6	2.1B	19		
618.4	7					-25				
611.4	4									111
608.9	5									107
	8	2.6B	19							
	4									118
	6									114
	8	2.6B	18							

5.0" ASPHALT, 10.0" ASPHALT
CLAY-gray-stiff to very stiff (A-6)
SANDY LOAM-brown-loose (A-2) Apparent Fill
CLAY-gray-very stiff (A-6)
SILTY CLAY LOAM-gray-medium dense (A-4/A-6)
CLAY-gray-stiff to very stiff (A-6)

Auger Refusal @ -23.0'
Boring Offset 3 Times With Refusal @ -23.0' Each Attempt
End Of Boring
Hollow Stem Augers To -10.0'
Rotary Drilling To Completion
10.0' 4.0" Casing Used
CME Automatic Hammer

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

SMC SOIL AND MATERIAL CONSULTANTS, INC.
8 West College Drive Arlington Heights, Illinois
Off: (708) 870-0544 Fax: (708) 870-0661

ILLINOIS DEPARTMENT OF TRANSPORTATION BORING LOG 601

Location IL 64/Des Plaines River Sheet 1 of 3
Station 120+64 CL Offset 35' N. Date 10/26/94
Route F.A. 136 Project Bridge No. 016-0501 Drilled By MH, DB
Section County Cook Sect. 36 Range 12E Twp. 40N Logged By DA
625.17 CME 45B H.A. Other SMC File No. 13108

Elev., ft.	Description	Depth, ft.	0	S	T	R	B	N	Pen.	W	Uw	Qu	Str
45.8	Bituminous concrete - 4.5"												
	Concrete - 7.5"												
	Air												
28.8		608.2											
	Water												
26.3		605.7											
	Gray-black silt, some sand & gravel												
	saturated-very damp												

Water Level - depth, ft. elev., ft.
- while drilling: _____
- after drilling: _____
- hrs. after drilling: _____

S - sample T - type: J(Jar), SS(split-spoon), ST(shelby tube) R - recovery length, in.
B - Standard Penetration Test (SPT), blows/6" interval. W - water content, %
N - SPT, blows/foot to drive 2" O.D. split-spoon sampler with 140 lb. hammer falling 30".
Pen. - pocket penetrometer reading, tons/ sq. ft. Uw - dry unit weight of soil, lbs./ cu.ft.
Qu - unconfined compressive strength, tons/ sq. ft. Str. - % strain at Qu

FILE NAME = W:\191-130-1001-IL64-CADD-Sheets\Structure\1160J11-ht-50-SoilBoringLog_V1.dgn



USER NAME =	DESIGNED - JMT	REVISED
PLOT SCALE =	CHECKED - JJI	REVISED
PLOT DATE = 8/15/2013	DRAWN - GM	REVISED
	CHECKED - JJI	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS VI
STRUCTURE NO. 016-3035
SHEET NO. 61 OF 62 SHEETS

F.A.P. RTE. 307	SECTION 541Y-3-B	COUNTY COOK	TOTAL SHEETS 143	SHEET NO. 122
CONTRACT NO. 60J11				
ILLINOIS FED. AID PROJECT				



ILLINOIS DEPARTMENT OF TRANSPORTATION BORING LOG 601

Location IL 64/Des Plaines River Sheet 2 of 3
8 West College Drive Arlington Heights, Illinois
Off: (708) 870 - 0544 Fax: (708) 870 - 0661
Station 120+64 CL Offset 35' N. Date 10/26/94
Route F.A. 136 Project Bridge No. 016-0501 Drilled By MEI,DB
Section County Cook Sect. 36 Range 12E Twp. 40N Logged By DA
SMC File No. 13108

Table with columns: Elev. ft., Description, Depth, ft., S, T, R, B, N, Pen., W, Uw, Qu, Str.
Rows include: Gray-black silt, some sand & gravel, 24.8 saturated-very damp; Gravel; Gray clay, some silt, trace sand & gravel, damp, very stiff; Gray silt, some clay, trace sand, damp, dense; Weathered bedrock.

Water Level - depth, ft. elev., ft.
- while drilling:
- after drilling:
- hrs. after drilling:
S - sample T - type: J(Jar), SS(split-spoon), ST(shelby tube) R - recovery length, in.
B - Standard Penetration Test (SPT), blows/ 6" interval. W - water content, %
N - SPT, blows/ foot to drive 2" O.D. split-spoon sampler with 140 lb. hammer falling 30".
Pen. - pocket penetrometer reading, tons/ sq. ft. Uw - dry unit weight of soil, lbs/ cu.ft.
Qu - unconfined compressive strength, tons/ sq. ft. Str. - % strain at Qu



ILLINOIS DEPARTMENT OF TRANSPORTATION BORING LOG 601

Location IL 64/Des Plaines River Sheet 3 of 3
8 West College Drive Arlington Heights, Illinois
Off: (708) 870 - 0544 Fax: (708) 870 - 0661
Station 120+64 CL Offset 35' N. Date 10/26/94
Route F.A. 136 Project Bridge No. 016-0501 Drilled By MEI,DB
Section County Cook Sect. 36 Range 12E Twp. 40N Logged By DA
SMC File No. 13108

Table with columns: Elev. ft., Description, Depth, ft., S, T, R, B, N, Pen., W, Uw, Qu, Str.
Rows include: Gray silt, some clay, trace sand, damp, dense; Gray clay & silt, trace sand & gravel, damp, hard; Gray silt, some clay, trace sand & gravel, damp, very dense; Gray silt & fine sand, some gravel, damp-very damp, very dense; Weathered bedrock.

Water Level - E.O.B. depth, ft. elev., ft.
- while drilling:
- after drilling:
- hrs. after drilling:
S - sample T - type: J(Jar), SS(split-spoon), ST(shelby tube) R - recovery length, in.
B - Standard Penetration Test (SPT), blows/ 6" interval. W - water content, %
N - SPT, blows/ foot to drive 2" O.D. split-spoon sampler with 140 lb. hammer falling 30".
Pen. - pocket penetrometer reading, tons/ sq. ft. Uw - dry unit weight of soil, lbs/ cu.ft.
Qu - unconfined compressive strength, tons/ sq. ft. Str. - % strain at Qu

FILE NAME = W:\191-130-1001-IL64\CADD_Sheets\Structure\166011-ht-51-SoilBoringLogs_VII.dgn



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

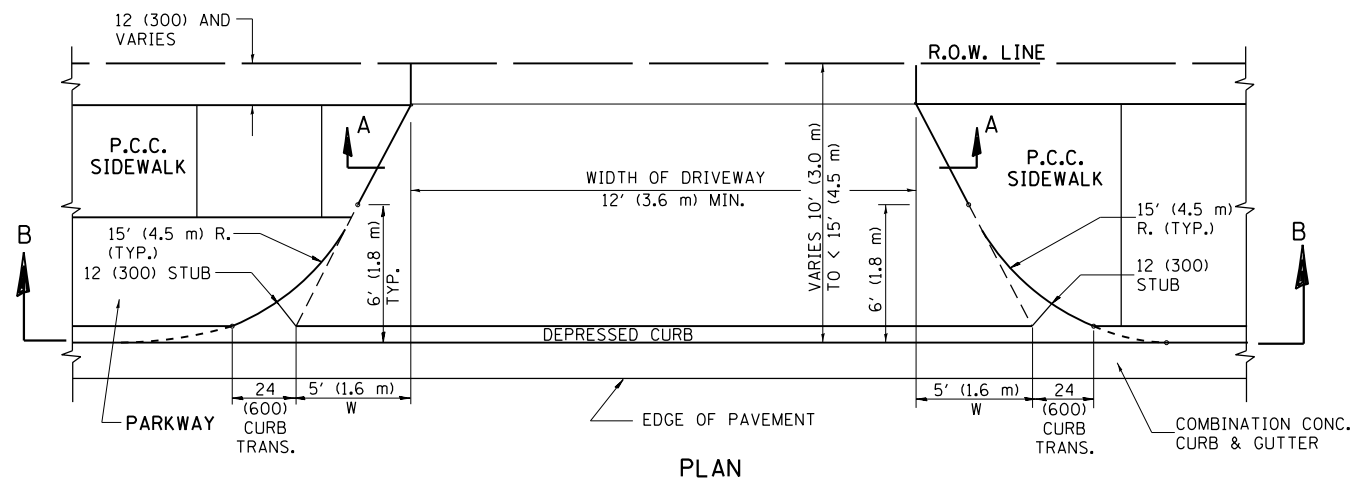
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS VII STRUCTURE NO. 016-3035

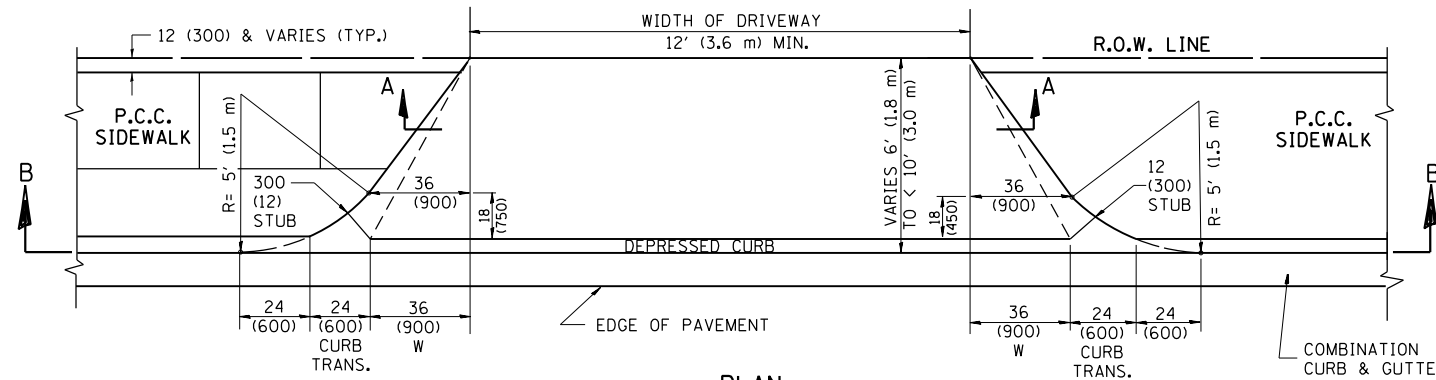
SHEET NO. 62 OF 62 SHEETS

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

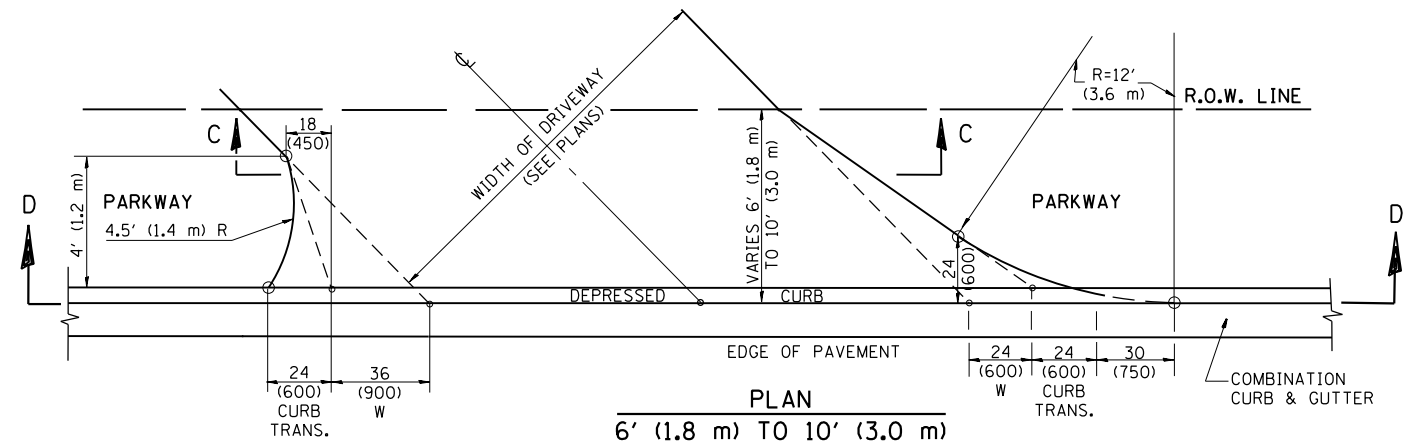
ILLINOIS FED. AID PROJECT



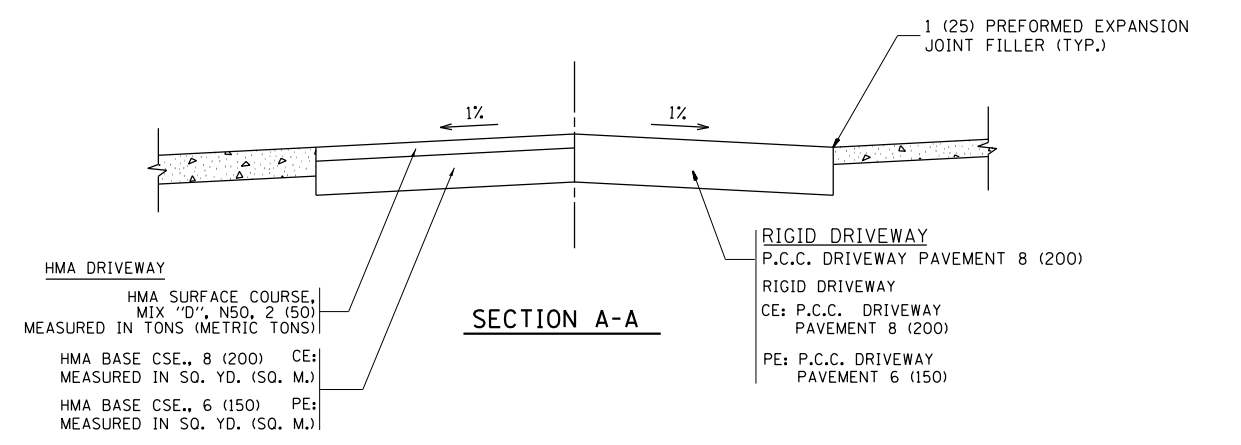
PLAN
10' (3.0 m) TO < 15' (4.5 m)



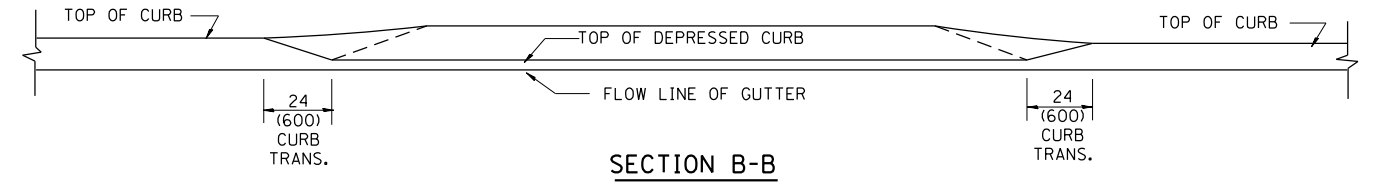
PLAN
6' (1.8 m) TO < 10' (3.0 m)



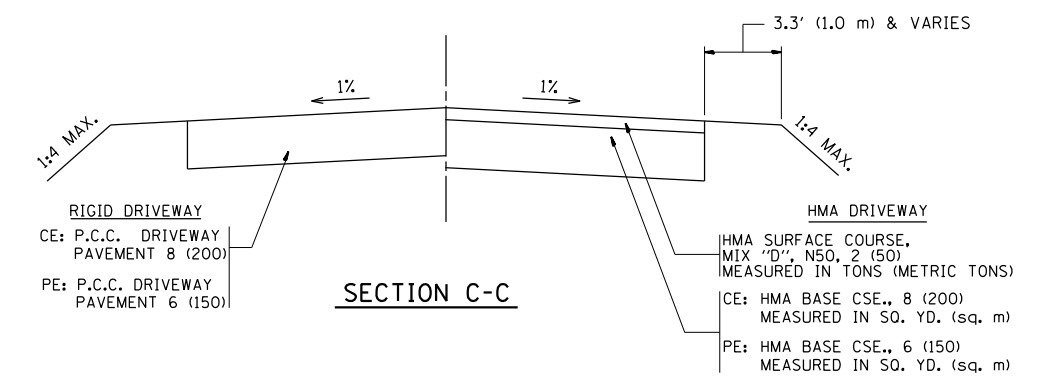
PLAN
6' (1.8 m) TO 10' (3.0 m)



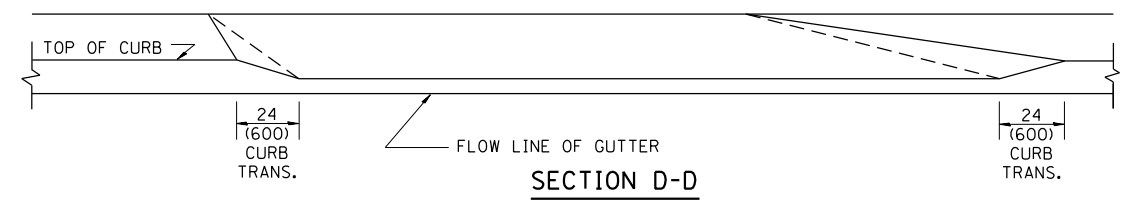
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

GENERAL NOTES

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

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

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

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

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

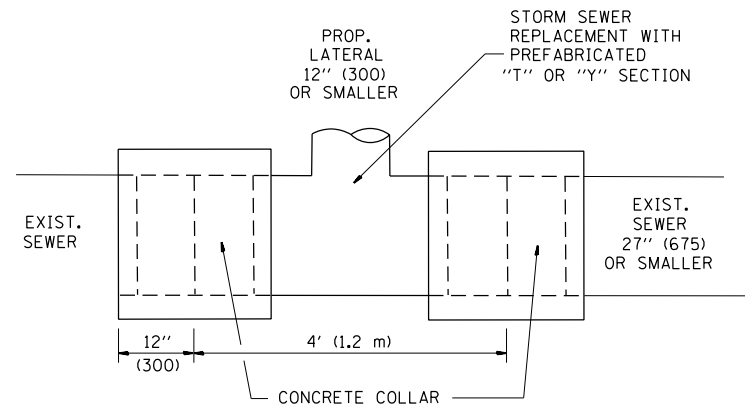
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED.

FILE NAME = W:\191-130.IDOT.IL64\CADD.Sheets\0160J11-ht-Details-bd02.dgn	USER NAME = cesario	DESIGNED - R. SHAH	REVISED - M. GOMEZ 04-06-01
		DRAWN -	REVISED - P. LaFLEUR 04-15-03
	PLOT SCALE = 99.9998' / in.	CHECKED -	REVISED - R. BORO 01-01-07
	PLOT DATE = 8/15/2013	DATE - 11-06-95	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

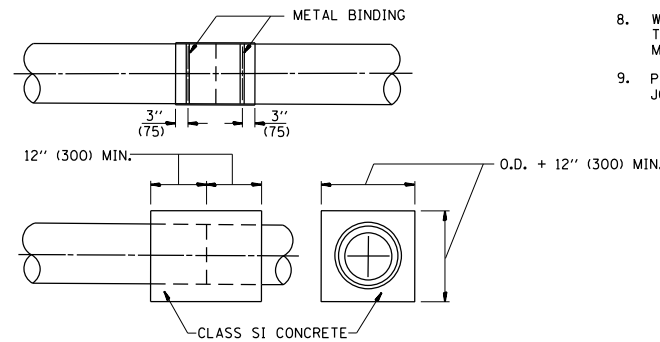
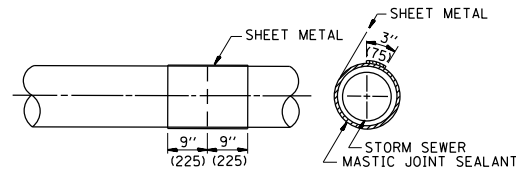
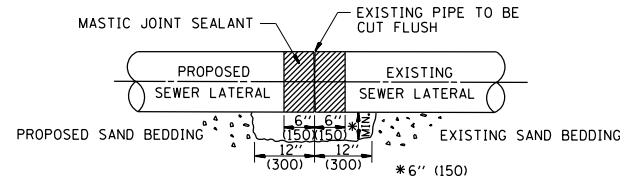
DRIVEWAY DETAILS			
DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)			
SCALE: NONE	SHEET NO. 1 OF 11 SHEETS	STA. TO STA.	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	541Y-3-B	COOK	143	124
BD400-02 (BD-02)		CONTRACT NO. 60J11		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



DETAIL "A"

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



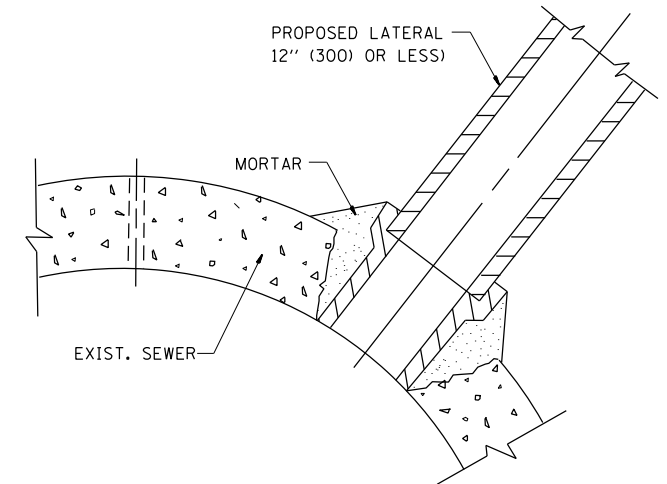
DETAIL "B"

CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

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

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



DETAIL "C"

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

NOTES

MATERIAL

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

CONSTRUCTION METHODS

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

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

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

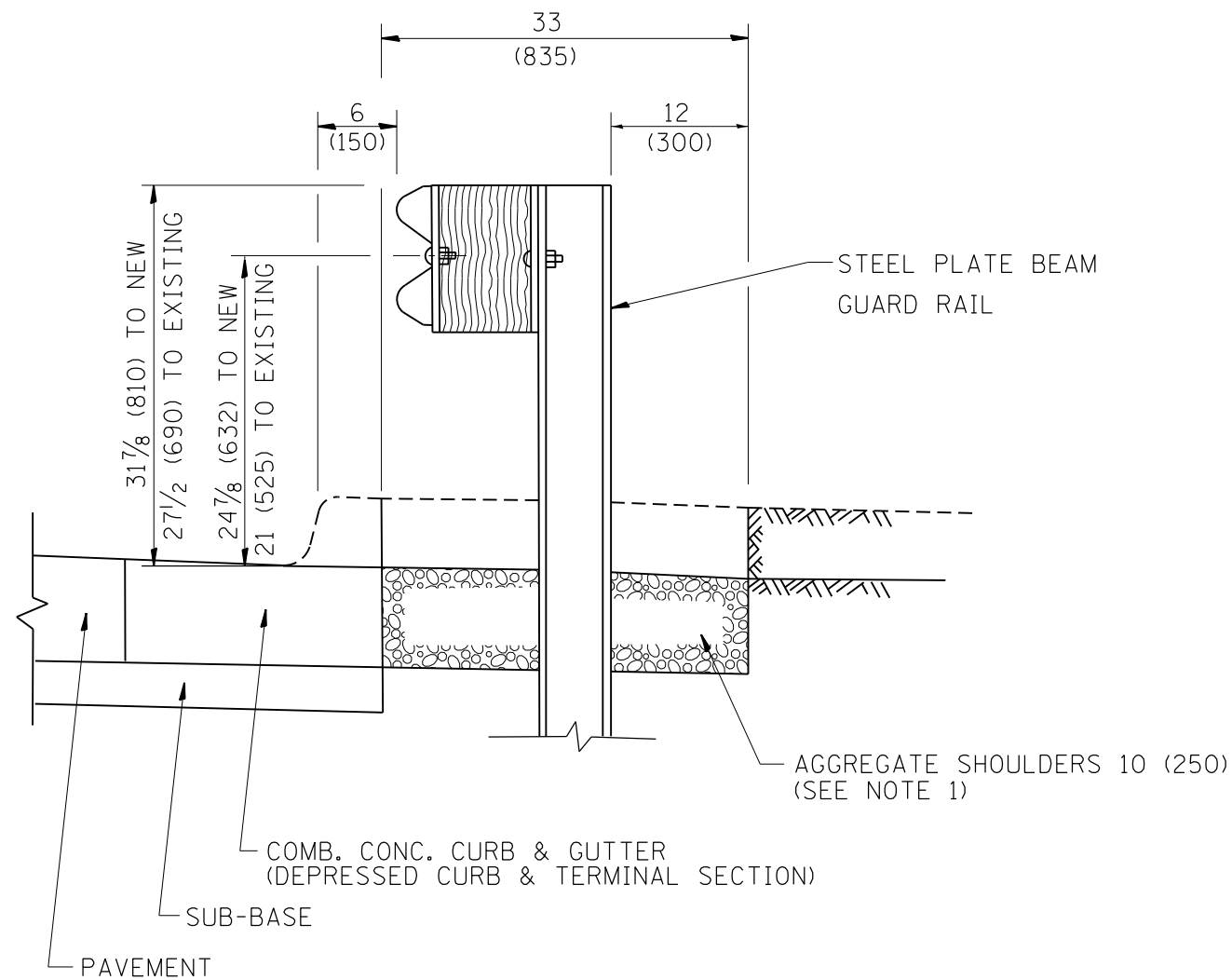
CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

FILE NAME = W:\191-130.IDOT.IL64\CADD.Sheets\0160J11-ht-Details-bd07.dgn	USER NAME = cesario	DESIGNED - M. DE YONG	REVISED - M. DE YONG 05-08-92
		DRAWN -	REVISED - R. SHAH 09-09-94
	PLOT SCALE = 100.000 / in.	CHECKED -	REVISED - R. SHAH 10-25-94
	PLOT DATE = 8/15/2013	DATE - 07-25-90	REVISED - R. SHAH 06-12-96

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER			
SCALE: NONE	SHEET NO. 2 OF 11 SHEETS	STA.	TO STA.

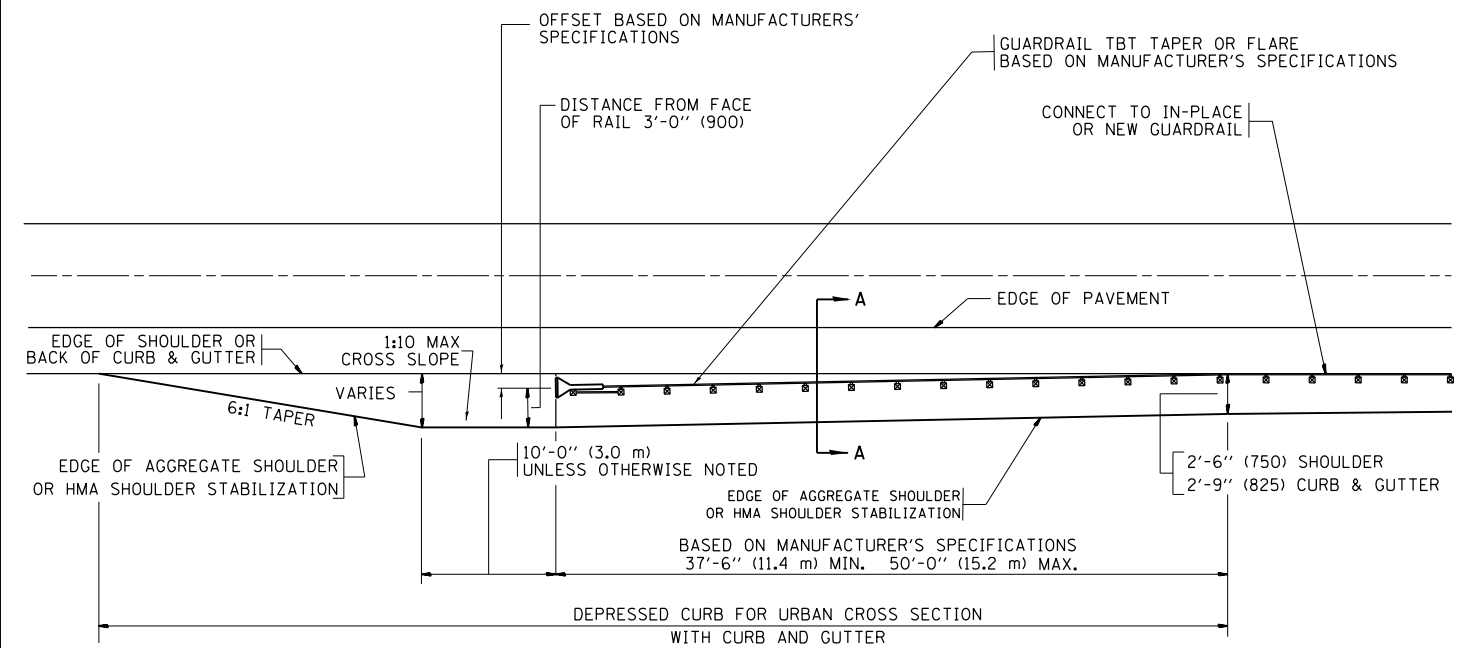
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	541Y-3-B	COOK	143	125
BD500-01 (BD-7)			CONTRACT NO. 60J11	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SECTION A-A

- NOTES:
1. THE AGGREGATE SHOULDER, 10" OR HMA SHOULDER, 6" (IF REQUIRED) SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL.
 2. "EXISTING" GUARDRAIL REFERS TO CONNECTING TERMINAL SECTION TO GUARD RAILING PRIOR TO THE MIDWEST GUARDRAIL SYSTEM.
 3. THE CONTRACTOR SHALL VERIFY THE TYPE/HEIGHT OF GUARDRAIL IN-PLACE BEFORE ORDERING THE NEW TERMINAL SECTION. COST INCLUDED WITH THE COST OF THE TERMINAL. THE TERMINAL SECTION HEIGHT TO BE PLACED MUST MATCH THE HEIGHT OF THE IN-PLACE GUARDRAIL.

**DETAILS FOR STEEL PLATE BEAM
GUARD RAIL ADJACENT TO CURB AND GUTTER
[FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]**



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

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

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

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

FILE NAME = W:\191-130.IDOT.IL64\CAADD.Sheets\0160J11-ht-Details-bd34.dgn	USER NAME = cesario	DESIGNED - M. DE YONG	REVISED - E. GOMEZ 08-28-00
		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED - R. BORO 12-08-2008
	PLOT DATE = 8/15/2013	DATE - 09-22-90	REVISED - R. BORO 09-14-2009

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

SCALE: NONE SHEET NO. 3 OF 11 SHEETS STA. TO STA.

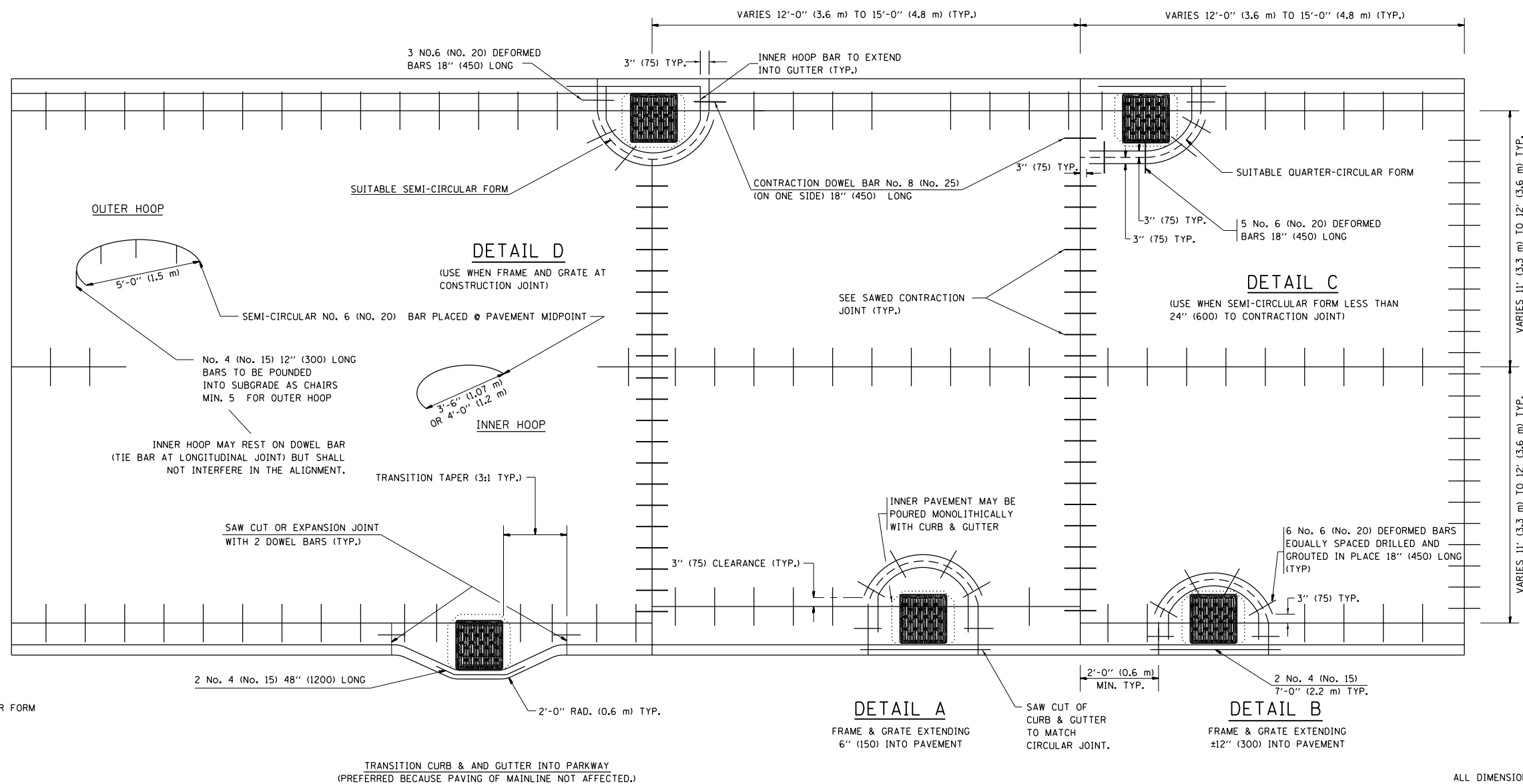
F.A.P. RTE. 307	SECTION 541Y-3-B	COUNTY COOK	TOTAL SHEETS 143	SHEET NO. 126
BD600-10 (BD 34)		CONTRACT NO. 60J11		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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

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

NOTES :

1. THE ROUNDOUT AND ADDED REINFORCEMENT WILL NOT BE PAID SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE PAVEMENT.
2. TRANSVERSE JOINTS MAY BE MOVED TO ACCOMMODATE ROUNDOUT. EDGE OF CIRCULAR JOINT SHALL BE MINIMUM 12" (300) FROM TRANSVERSE JOINT. RELOCATED TRANSVERSE JOINT SHALL BE CONTINUOUS FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
3. SEMI-CIRCULAR FORM SHALL BE REMOVED PRIOR TO DRILL AND GROUT OF TIE BARS.
4. ALL REINFORCED BARS SHALL BE EPOXY COATED.
5. DRILL AND GROUT IS PREFERRED, HOWEVER TIE BARS CAN BE POURED IN PLACE IF CLEARANCE IS PROVIDED TO OUTER EDGE OF FRAME. MINIMUM 2" (50) CLEARANCE.
6. WOOD SHIMS SHALL BE USED TO ADJUST ALL FRAMES. AFTER ADJUSTING MORTAR HAS CURED, THE WOOD SHIMS SHALL BE REMOVED AND THE VOIDS UNDER THE FRAMES FILLED WITH NON SHRINK GROUT.
7. HOOP REINFORCEMENT SHALL BE ONE PIECE CONSTRUCTION.
8. CIRCULAR FRAMES AND GRATES MAY BE SUBSTITUTED.
9. CURB DOWELS MUST BE PLACED LEVEL & TRUE TO ALLOW CONTRACTION MOVEMENT.



LEGEND:

- CASTING
- SUITABLE SEMI-CIRCULAR FORM

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED

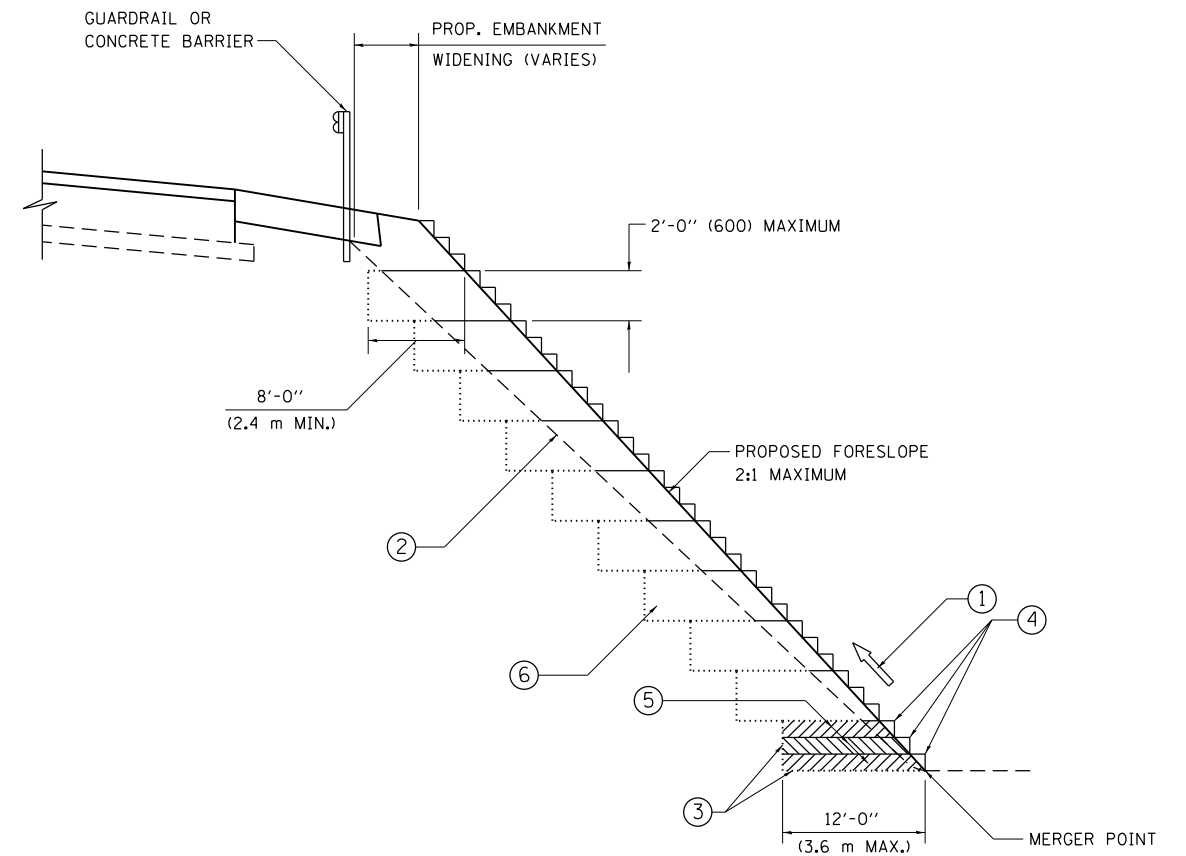
FILE NAME = W:\191-130.IDOT.IL64\CAADD.Sheets\0160J11-ht-Details-bd48.dgn	USER NAME = cesario	DESIGNED - A. ABBAS	REVISED - T. MATOUSEK 08-28-00
		DRAWN - TOM MATOUSEK	REVISED - T. MATOUSEK 10-02-00
	PLOT SCALE = 100.0000' / 1in.	CHECKED - A. ABBAS	REVISED - T. MATOUSEK 04-25-02
	PLOT DATE = 8/15/2013	DATE - 01-04-99	REVISED - P. LAFLEUR 08-27-02

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PCC PAVEMENT ROUNDOUTS AT
CURB AND GUTTER

SCALE: NONE SHEET NO. 4 OF 11 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	541Y-3-B	COOK	143	127
BD-48			CONTRACT NO. 60J11	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**TYPICAL BENCHING DETAIL
FOR EMBANKMENT**

NOTES:

- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- ② EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- ⑥ EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ⑦ SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

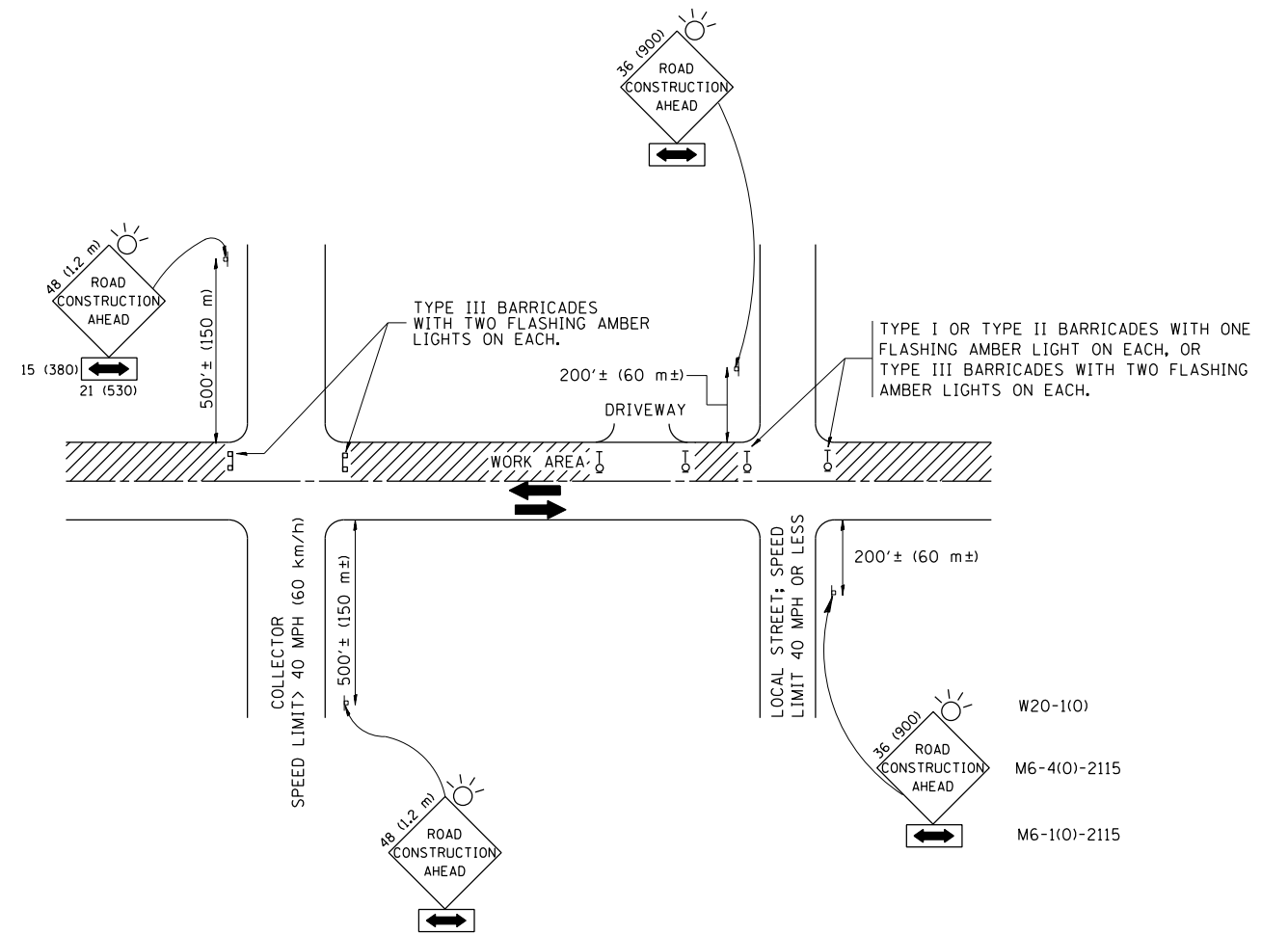
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = cesario	DESIGNED -	REVISED -
W:\191-130.IDOT.IL64\CADD.Sheets\0160J11-ht-Details-bd51.dgn		DRAWN - CADD	REVISED -
	PLOT SCALE = 100.0000' / in.	CHECKED - S.E.B.	REVISED -
	PLOT DATE = 8/15/2013	DATE - 06-16-04	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

BENCHING DETAIL FOR EMBANKMENT WIDENING		
SCALE: NONE	SHEET NO. 5 OF 11 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	541Y-3-B	COOK	143	128
BD-51		CONTRACT NO. 60J11		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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

NOTES:

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

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

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

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

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

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

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

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

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

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

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

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

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

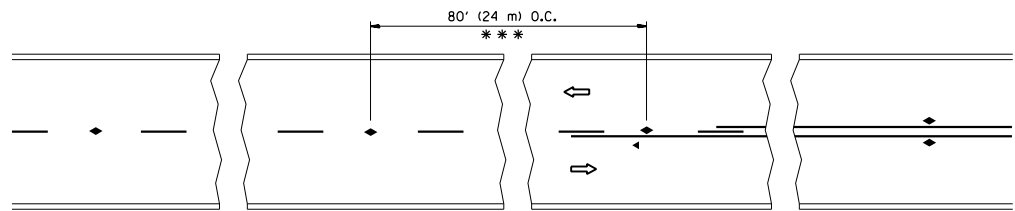
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	PLOT SCALE = 100.000 / in.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 8/15/2013	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

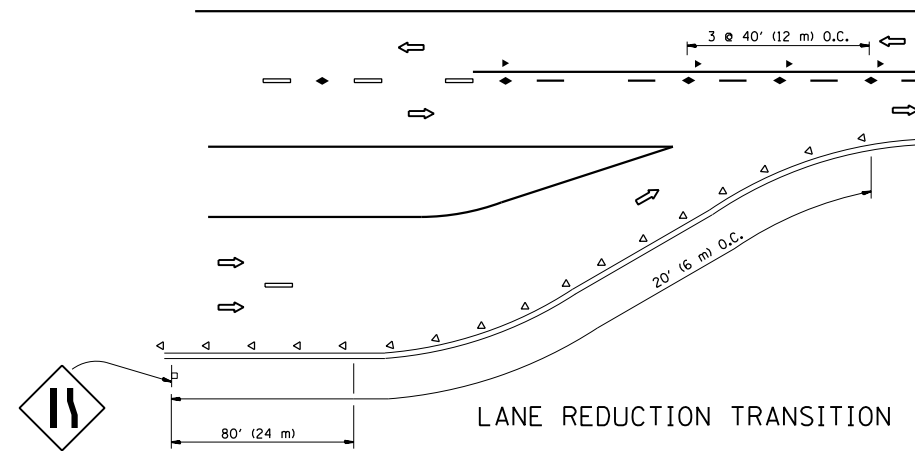
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	541Y-3-B	COOK	143	129
TC-10			CONTRACT NO. 60J11	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

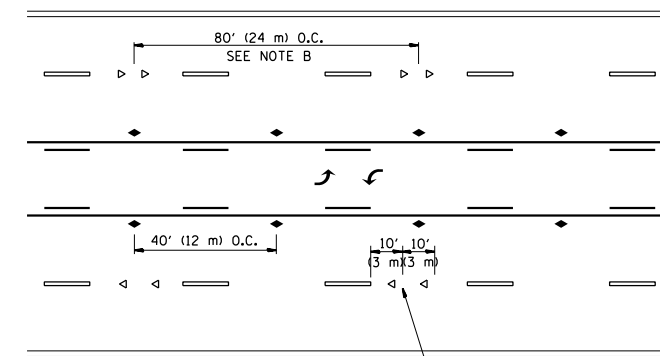


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

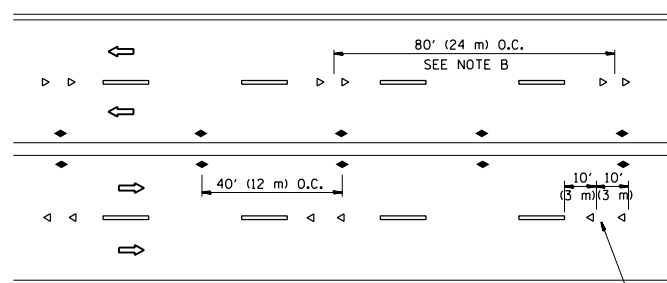
TWO-LANE/TWO-WAY



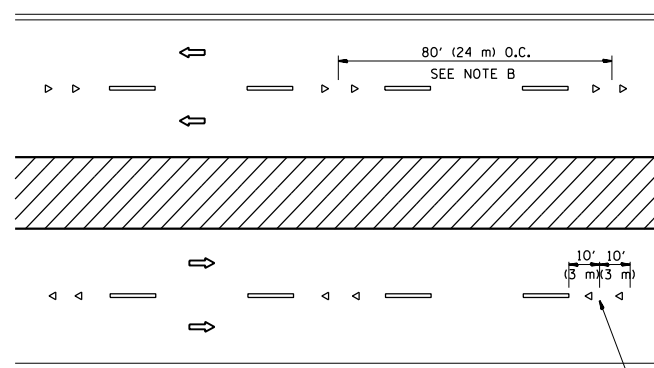
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

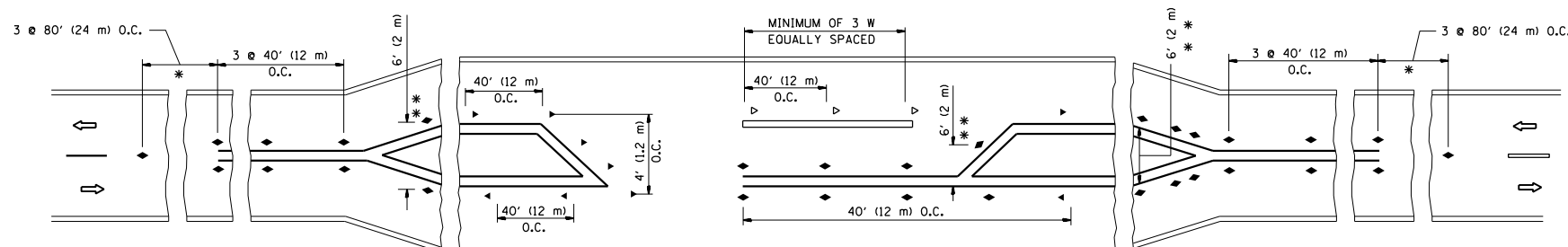
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◀ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

DESIGN NOTES

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



LEFT TURN

* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
 ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

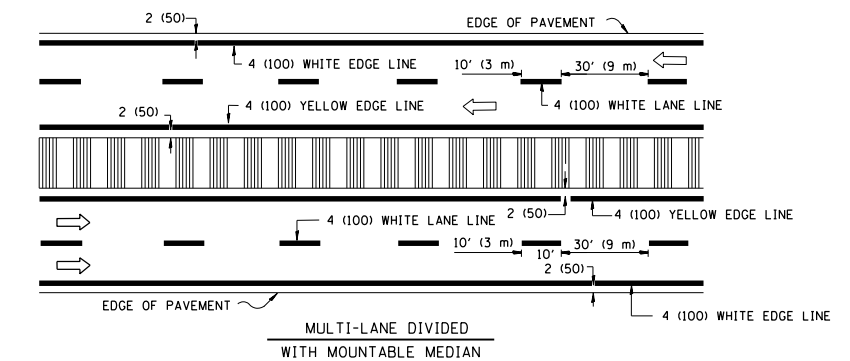
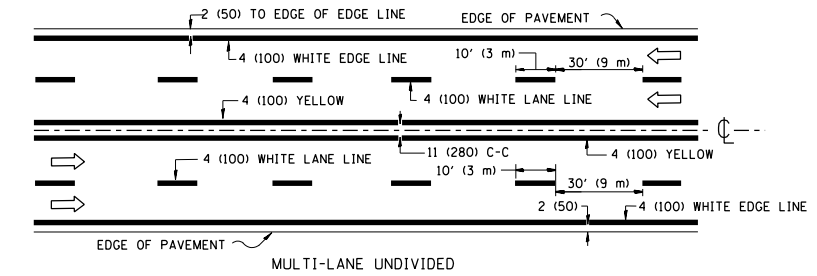
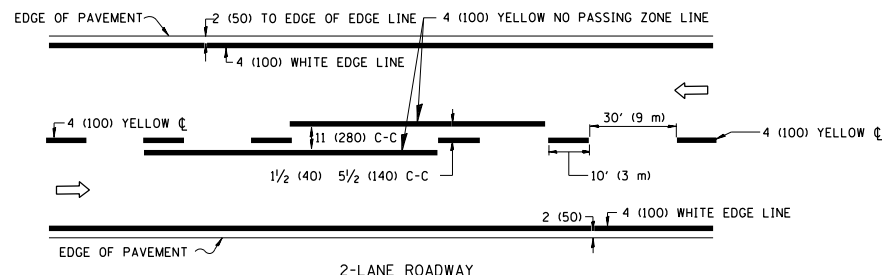
All dimensions are in inches (millimeters) unless otherwise shown.

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		DRAWN -	REVISED - T. RAMMACHER 03-12-99
	PLOT SCALE = 100.000' / in.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 8/15/2013	DATE -	REVISED - C. JUCIUS 09-09-09

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

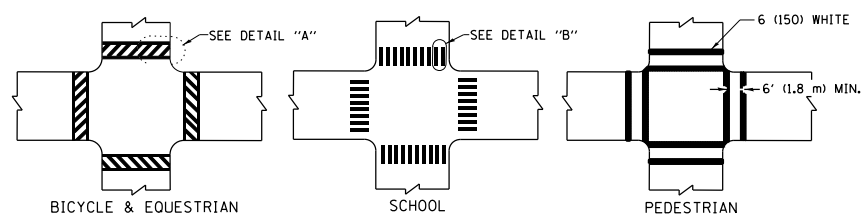
TYPICAL APPLICATIONS			
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)			
SCALE: NONE	SHEET NO. 7 OF 11 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	541Y-3-B	COOK	143	130
TC-11			CONTRACT NO. 60J11	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

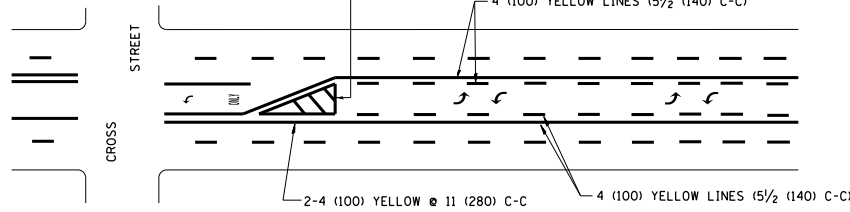
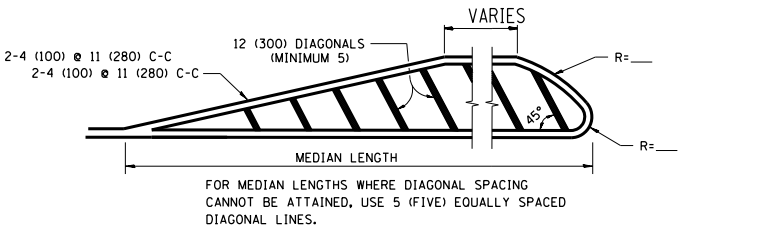
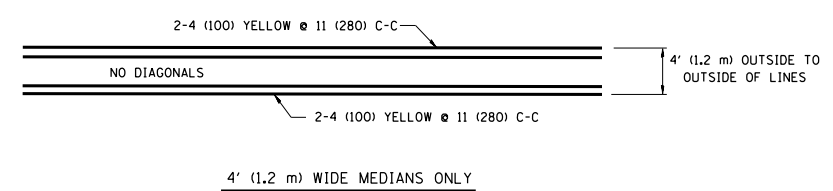


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

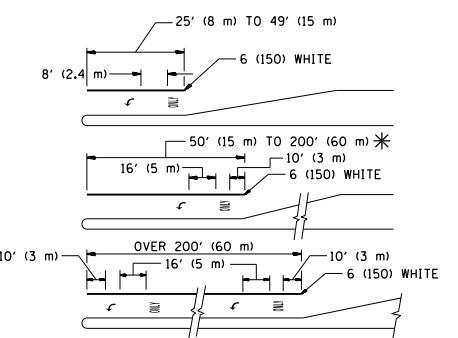
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

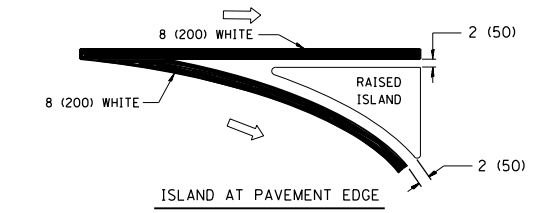
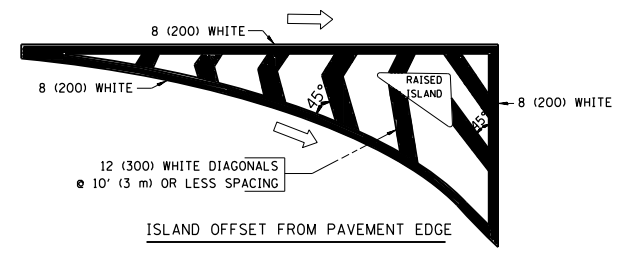


TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
 AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)
 * TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

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

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

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

FILE NAME = W:\191-130.1DOT_IL64\CADD_Sheets\0160J11-ht-Details-tcl3.dgn	USER NAME = cesario	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94
PLOT SCALE = 100.000 / in.	CHECKED -	DRAWN -	REVISED -C. JUCIUS 09-09-09
PLOT DATE = 8/15/2013	DATE - 03-19-90	CHECKED -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE			
TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET NO. 8 OF 11 SHEETS	STA.	TO STA.

F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	541Y-3-B	COOK	143	131
TC-13		CONTRACT NO. 60J11		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

ROUTE MARKERS

FOR U.S. ROUTES
M1-40-2424

FOR ILLINOIS ROUTES
M1-50-2424

R.R. UNMARKED ROUTES
SPECIAL 24" x 18" VARIABLE
4" BLACK LETTERS ON WHITE
REFLECTIVE BACKGROUND

ARROWS SIGNS

M5-1L-2115

M5-1R-2115

M6-1-2115

M6-1-2115

M6-3-2115

CARDINAL DIRECTION & DETOUR SIGNS

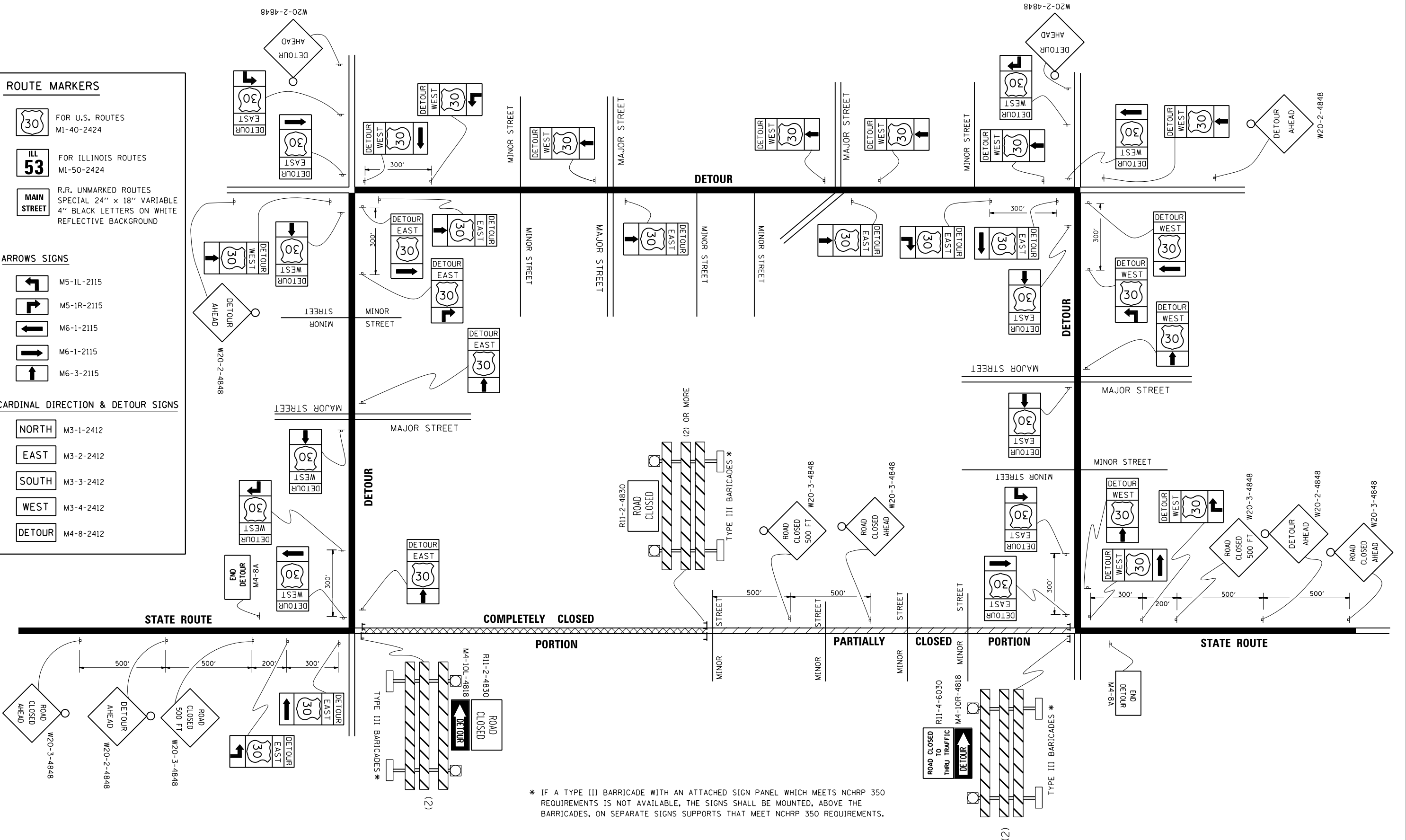
NORTH M3-1-2412

EAST M3-2-2412

SOUTH M3-3-2412

WEST M3-4-2412

DETOUR M4-8-2412

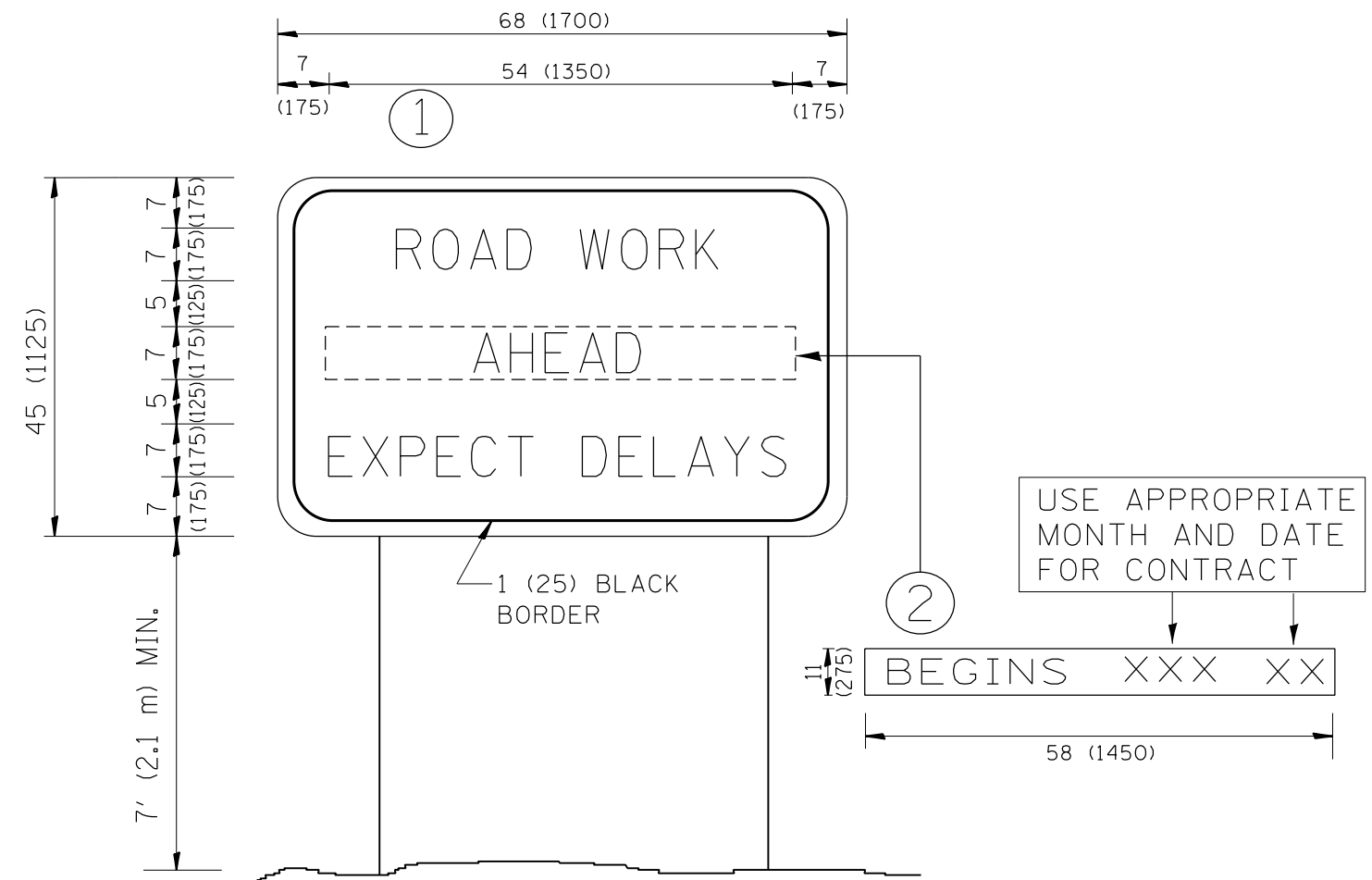


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PLOT DATE = 8/15/2013	DATE -		REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETOUR SIGNING FOR CLOSING STATE HIGHWAYS	
SCALE: NONE	STA. TO STA.
SHEET NO. 9 OF 11 SHEETS	

F.A.P. RTE. 307	SECTION 541Y-3-B	COUNTY COOK	TOTAL SHEETS 143	SHEET NO. 132
TC-21		CONTRACT NO. 60J11		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

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

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

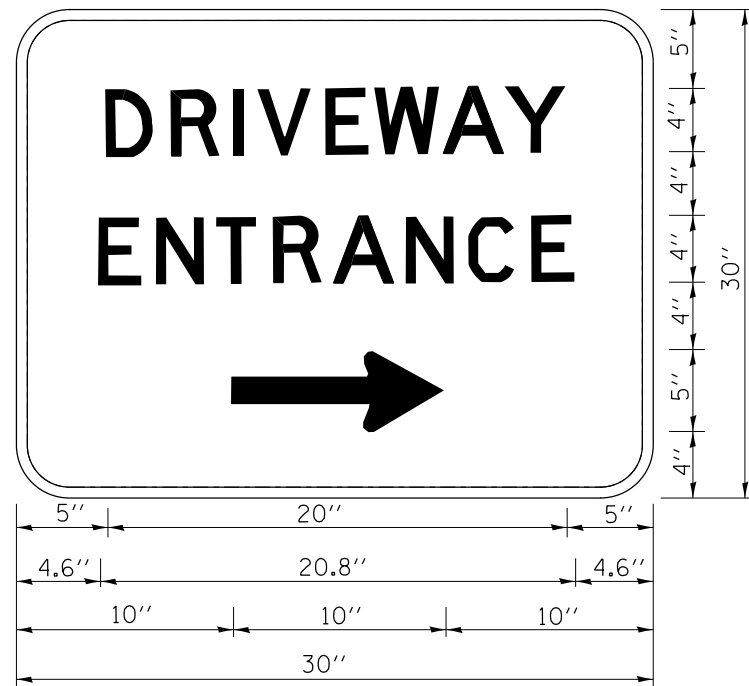
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	PLOT DATE = 8/15/2013	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

SCALE: NONE SHEET NO. 10 OF 11 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	541Y-3-B	COOK	143	133
TC-22		CONTRACT NO. 60J11		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE
 PLACED BACK-TO-BACK; ONE WITH A RIGHT HAND ARROW (SHOWN)
 SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY
 AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE
 FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME =	USER NAME = cesario	DESIGNED -	REVISED - C. JUCIUS 02-15-07
W:\191-130.IDOT.IL64\CADD.Sheets\0160J11-ht-Details-tc26.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -
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	PLOT DATE = 8/15/2013		

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

DRIVEWAY ENTRANCE SIGNING

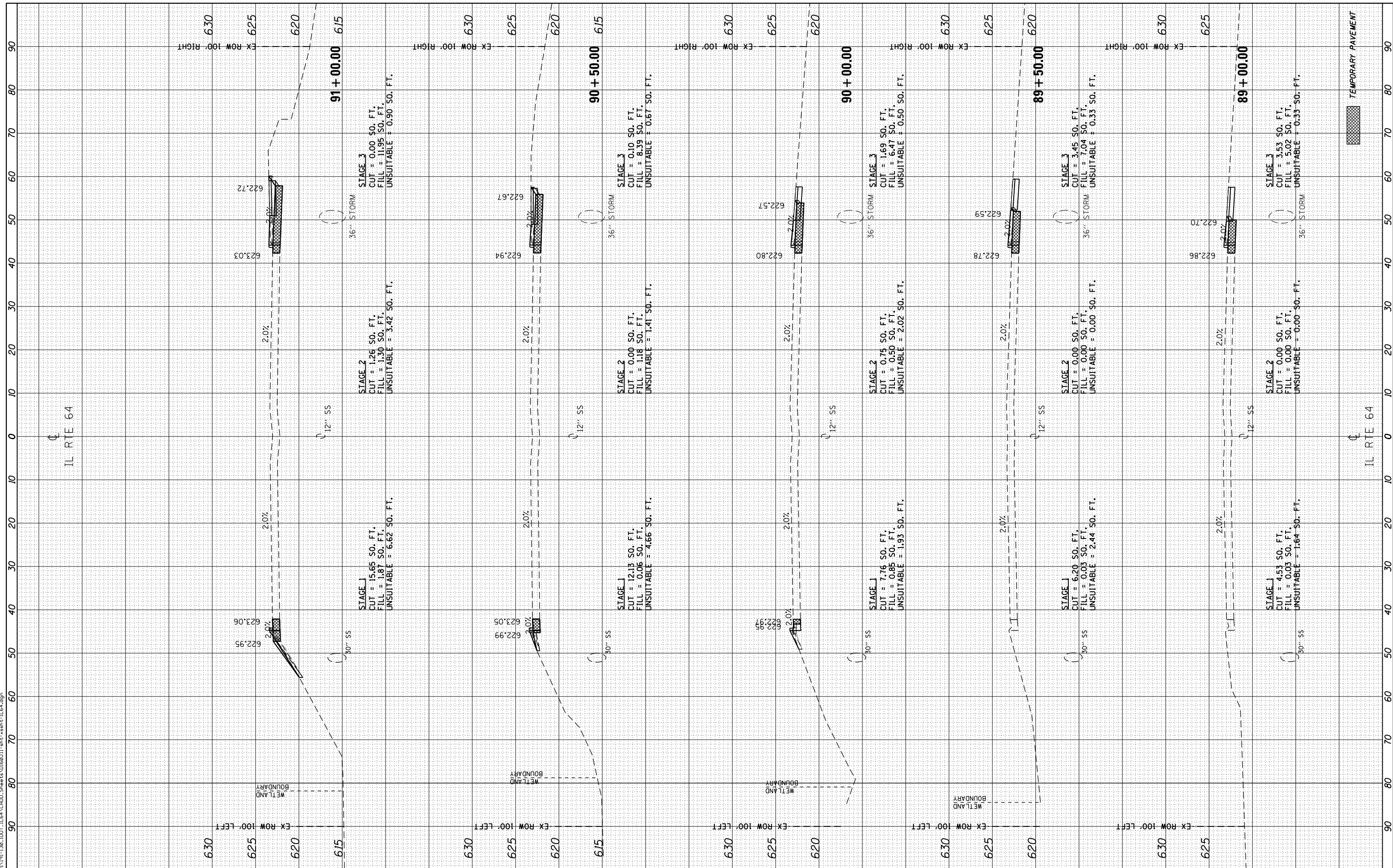
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	541Y-3-B	COOK	143	134
TC-26			CONTRACT NO. 60J11	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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

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

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Bollinger, Lach & Associates, Inc.
ITASCA, ILLINOIS

USER NAME = cesario	DESIGNED - MTC	REVISOR -
PLOT SCALE = 20.0000' / in.	DRAWN - MTC	REVISOR -
PLOT DATE = 8/15/2013	CHECKED - JIP	REVISOR -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

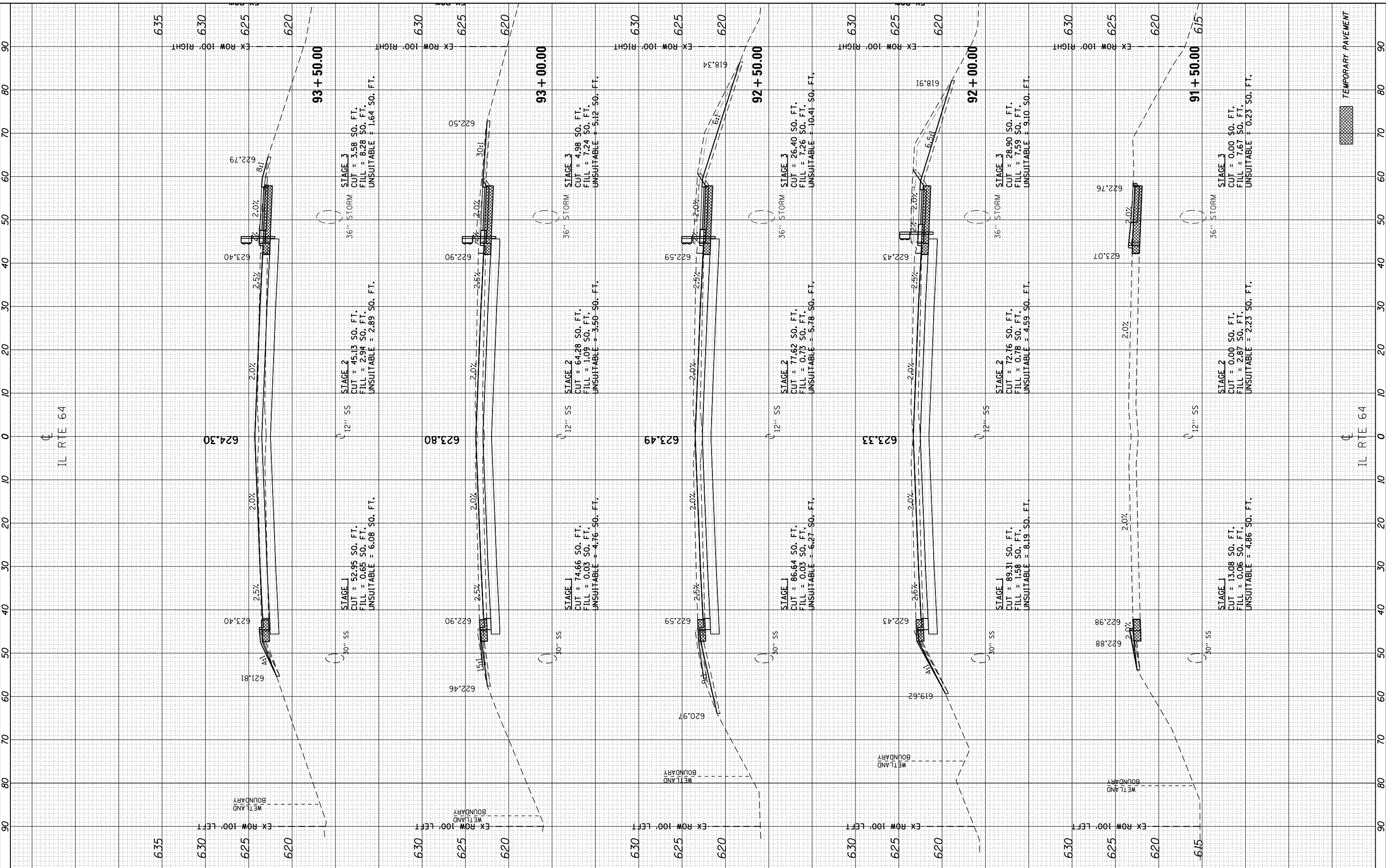
ILLINOIS ROUTE 64 (NORTH AVE) OVER THE DES PLAINES RIVER	
CROSS SECTIONS	
HORZ. 1"=10'	SCALE: VERT. 1"=5'
SHEET NO. 1 OF 9 SHEETS	STA. 89+00.00 TO STA. 91+00.00

F.A.P. RTE. 307	SECTION 541Y-3-B	COUNTY COOK	TOTAL SHEETS 143	SHEET NO. 135
CONTRACT NO. 60J11			ILLINOIS FED. AID PROJECT	

BY	DATE

ORIGINAL SURVEY	SURVEYED	DATE
NOTE BOOK	PLOTTED	
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	AREAS CHECKED	
	AREAS CHECKED	

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ITASCA, ILLINOIS

USER NAME = cesario	DESIGNED - MTC	REVISED -
PLOT SCALE = 20.0000' / 1" IN.	DRAWN - MTC	REVISED -
PLOT DATE = 8/15/2013	CHECKED - JIP	REVISED -
	DATE - 06/07/2013	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ILLINOIS ROUTE 64 (NORTH AVE) OVER THE DES PLAINES RIVER
CROSS SECTIONS**

HORZ. 1"=10'
SCALE: VERT. 1"=5' SHEET NO. 2 OF 9 SHEETS STA. 91+50.00 TO STA. 93+50.00

F.A.P. RTE. 307	SECTION 541Y-3-B	COUNTY COOK	TOTAL SHEETS 143	SHEET NO. 136
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60J11	

BY	DATE

BY	DATE

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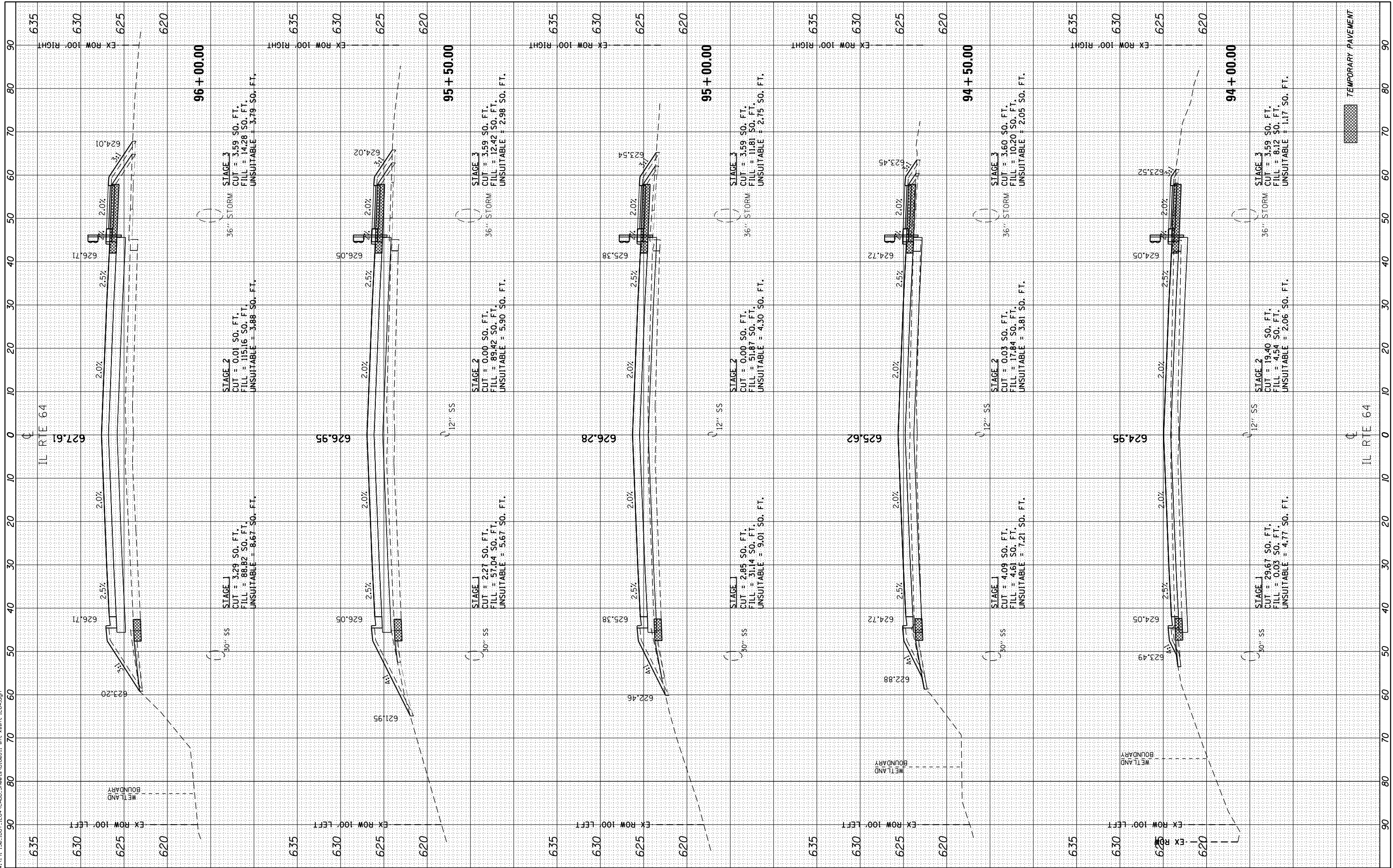
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PLOT SCALE = 20.0000' / in.	DRAWN - MTC	REVISED -
PLOT DATE = 8/15/2013	CHECKED - JIP	REVISED -
	DATE - 06/07/2013	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ILLINOIS ROUTE 64 (NORTH AVE) OVER THE DES PLAINES RIVER
CROSS SECTIONS**

HORZ. 1"=10'
SCALE: VERT. 1"=5' SHEET NO. 3 OF 9 SHEETS STA. 94+00.00 TO STA. 96+00.00

F.A.P. RTE. 307	SECTION 541Y-3-B	COUNTY COOK	TOTAL SHEETS 143	SHEET NO. 137
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60J11	



TEMPORARY PAVEMENT

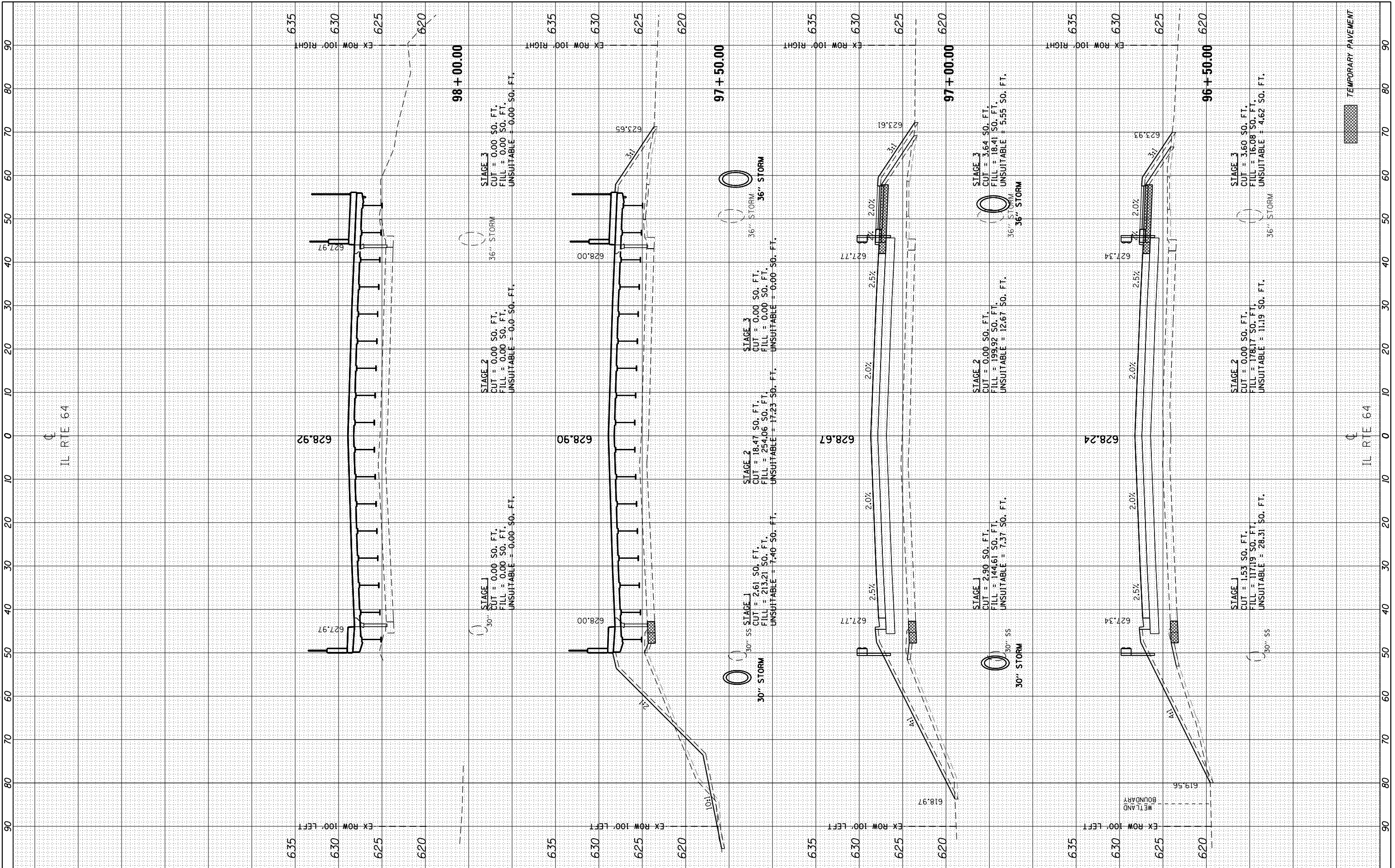
BY	DATE

BY	DATE

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ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
	TEMPLATE
	AREAS CHECKED
	AREAS CHECKED

FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
	TEMPLATE
	AREAS CHECKED
	AREAS CHECKED



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USER NAME = cesario	DESIGNED - MTC	REVISED -
PLOT SCALE = 20.0000' / in.	DRAWN - MTC	REVISED -
PLOT DATE = 8/15/2013	CHECKED - JIP	REVISED -
	DATE - 06/07/2013	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

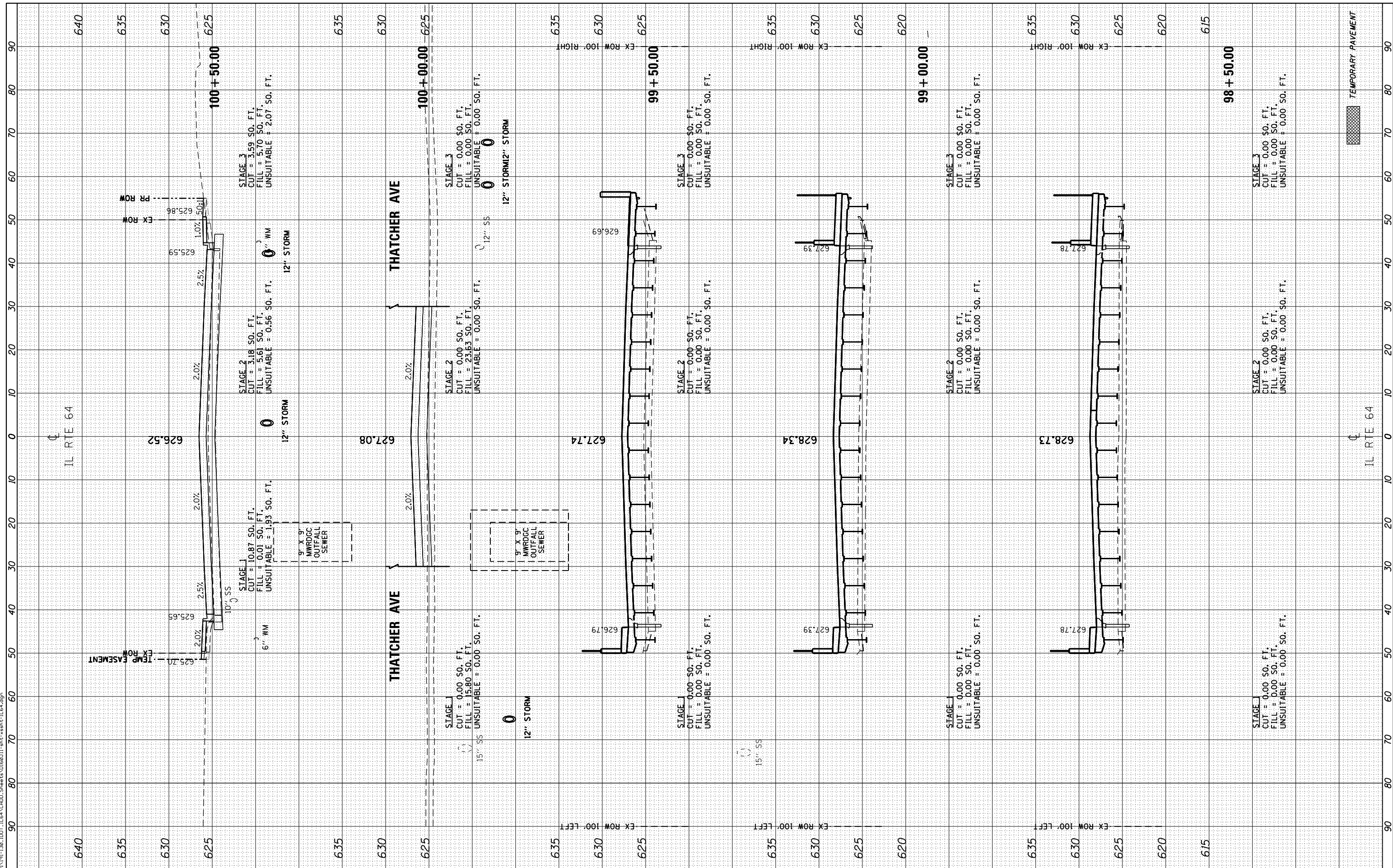
ILLINOIS ROUTE 64 (NORTH AVE) OVER THE DES PLAINES RIVER	
CROSS SECTIONS	
HORZ. 1"=10'	SCALE: VERT. 1"=5'
SHEET NO. 4 OF 9 SHEETS	STA. 96+50.00 TO STA. 98+00.00

F.A.P. RTE. 307	SECTION 541Y-3-B	COUNTY COOK	TOTAL SHEETS 143	SHEET NO. 138
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60J11	

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

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

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Bollinger, Lach & Associates, Inc.
ITASCA, ILLINOIS

USER NAME = cesario	DESIGNED - MTC	REvised -
PLOT SCALE = 20.0000' / in.	DRAWN - MTC	REvised -
PLOT DATE = 8/15/2013	CHECKED - JIP	REvised -
	DATE - 06/07/2013	REvised -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 64 (NORTH AVE) OVER THE DES PLAINES RIVER
CROSS SECTIONS
HORZ. 1"=10'
SCALE: VERT. 1"=5' | SHEET NO. 5 OF 9 SHEETS | STA. 98+50.00 TO STA. 100+50.00

F.A.P. RTE. 307	SECTION 541Y-3-B	COUNTY COOK	TOTAL SHEETS 143	SHEET NO. 139
CONTRACT NO. 60J11				ILLINOIS FED. AID PROJECT

BY	DATE
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
NO.	

BY	DATE
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
NO.	

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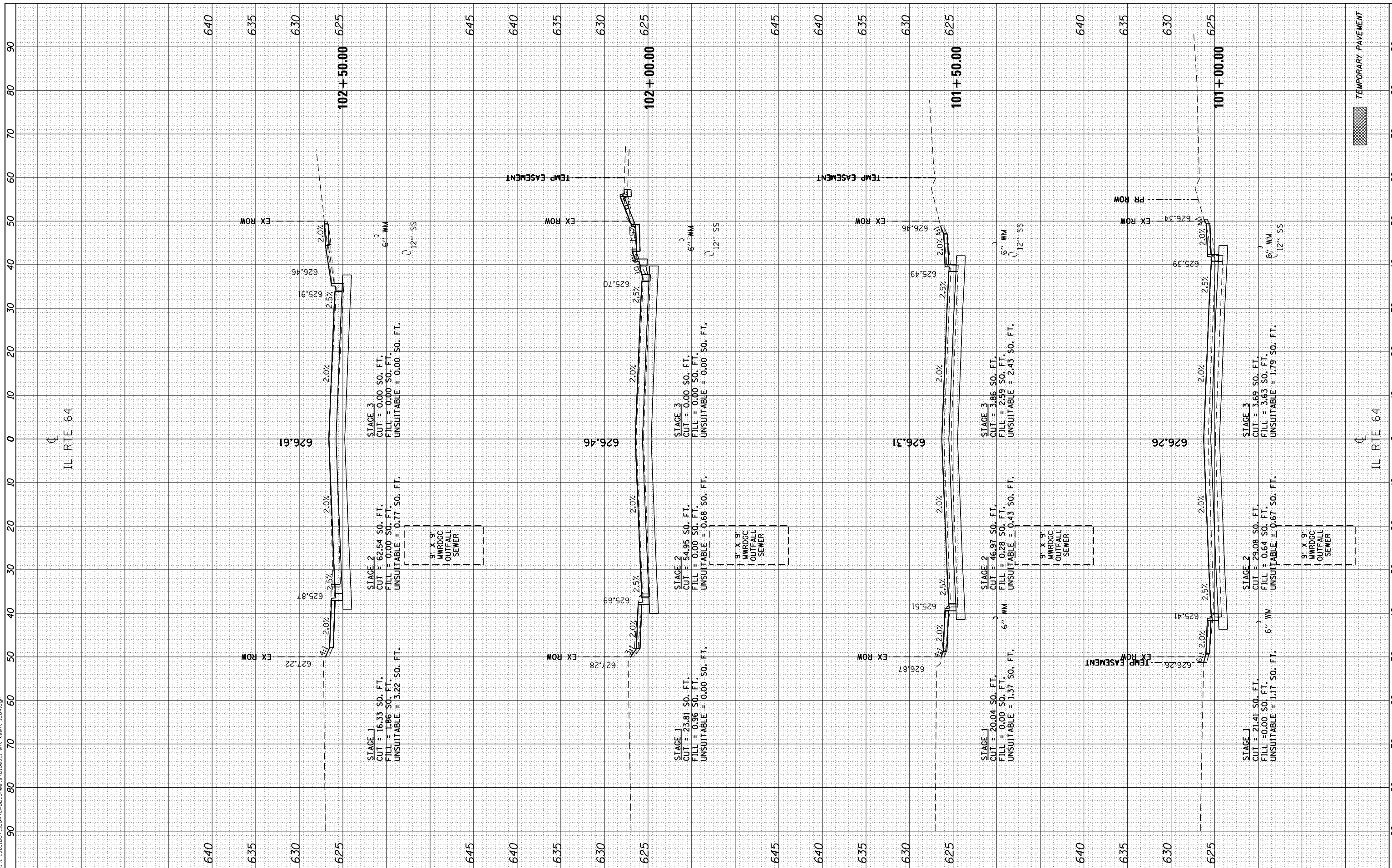


USER NAME = cesario	DESIGNED - MTC	REVISED -
	DRAWN - MTC	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - JIP	REVISED -
PLOT DATE = 8/15/2013	DATE - 06/07/2013	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ILLINOIS ROUTE 64 (NORTH AVE) OVER THE DES PLAINES RIVER		
CROSS SECTIONS		
HORZ. 1"=10'		
SCALE: VERT. 1"=5'	SHEET NO. 6 OF 9 SHEETS	STA. 101+00.00 TO STA. 102+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	541Y-3-B	COOK	143	140
CONTRACT NO. 60J11				
ILLINOIS FED. AID PROJECT				

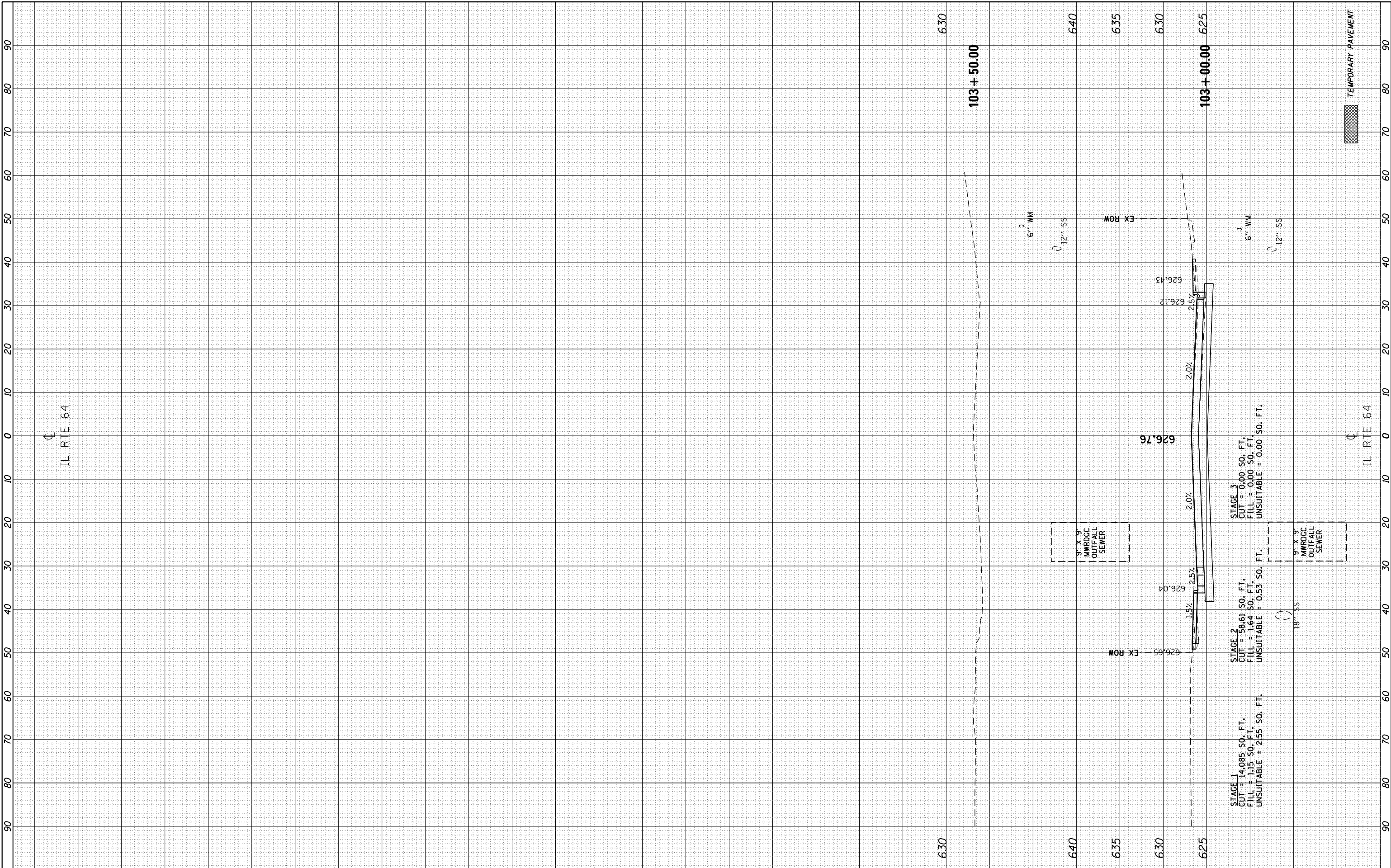


TEMPORARY PAVEMENT

FINL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE

FILE NAME = \\M191-130-1001_IL64\ADD_Sheet3\0160111-ht-2013-IL64.dwg



Bollinger, Lach & Associates, Inc.
 ITASCA, ILLINOIS

USER NAME = cesario	DESIGNED - MTC	REVISED -
PLOT SCALE = 20.0000' / in.	DRAWN - MTC	REVISED -
PLOT DATE = 8/15/2013	CHECKED - JIP	REVISED -
	DATE - 06/07/2013	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

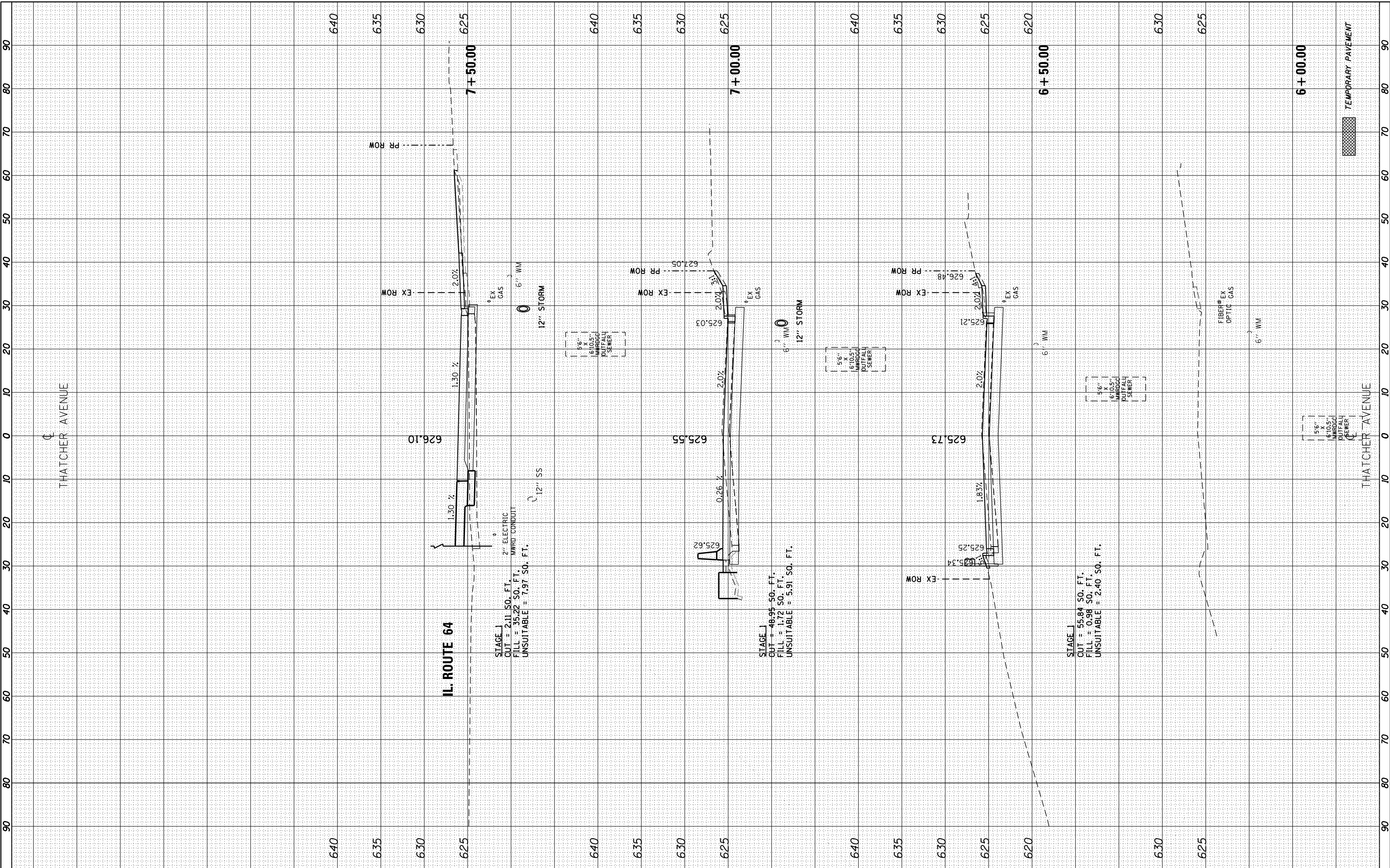
**ILLINOIS ROUTE 64 (NORTH AVE) OVER THE DES PLAINES RIVER
 CROSS SECTIONS**
 HORZ. 1"=10'
 SCALE: VERT. 1"=5' | SHEET NO. 7 OF 9 SHEETS | STA. 103+00.00 TO STA. 103+50.00

F.A.P. RTE. 307	SECTION 541Y-3-B	COUNTY COOK	TOTAL SHEETS 143	SHEET NO. 141
CONTRACT NO. 60J11			ILLINOIS FED. AID PROJECT	

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

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

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USER NAME = cesario	DESIGNED - MTC	REVISED -
PLOT SCALE = 20.0000' / in.	DRAWN - MTC	REVISED -
PLOT DATE = 8/15/2013	CHECKED - JIP	REVISED -
	DATE - 06/07/2013	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

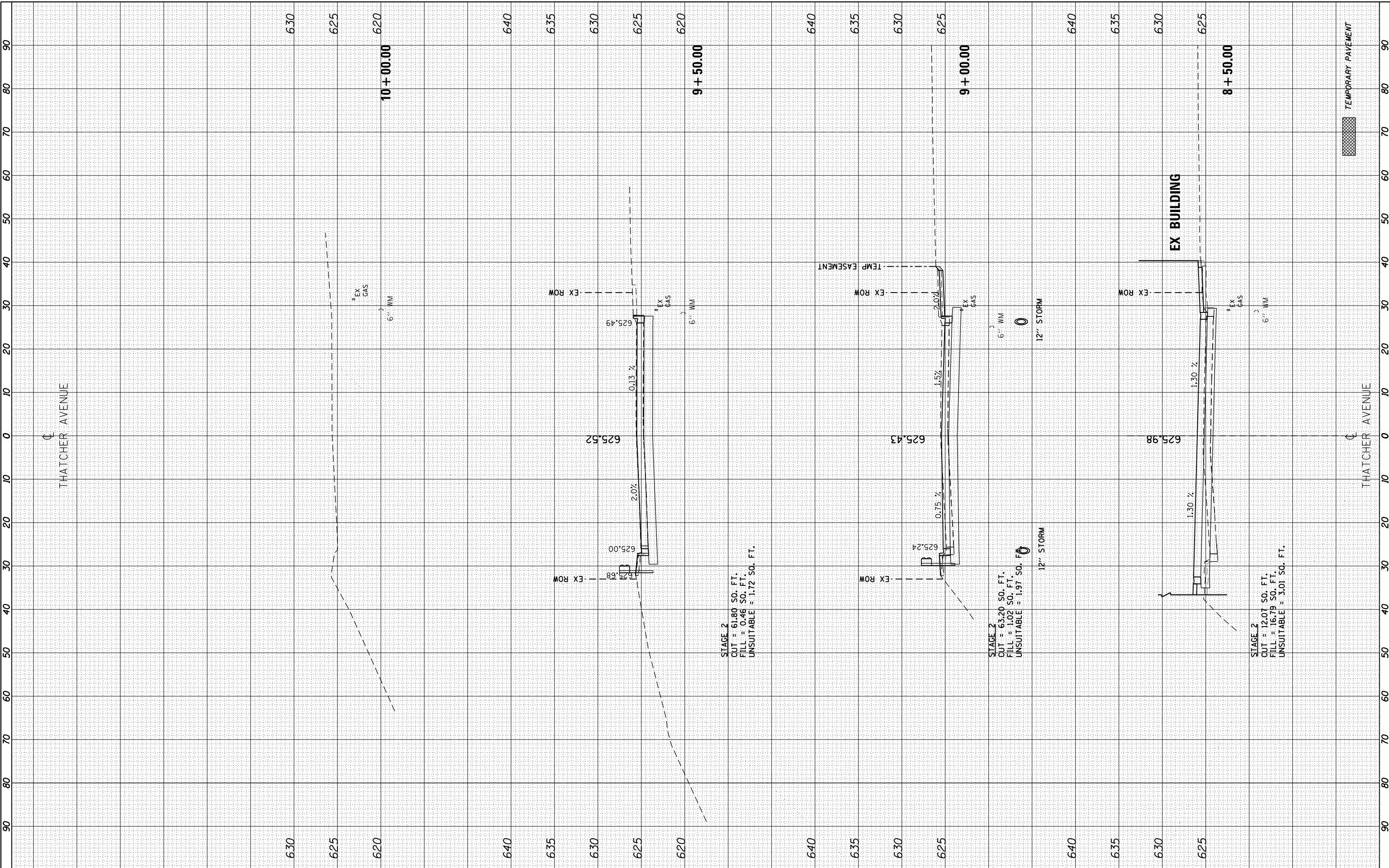
THATCHER AVENUE CROSS SECTIONS		
HORZ. 1"=10'		
SCALE: VERT. 1"=5'	SHEET NO. 8 OF 9 SHEETS	STA. 6+00.00 TO STA. 6+00.00

F.A.P. RTE. 307	SECTION 541Y-3-B	COUNTY COOK	TOTAL SHEETS 143	SHEET NO. 142
CONTRACT NO. 60J11				
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

FILE NAME = M:\191-130-1001_ILGA\ADD_Sheets\01603111-INT-CROSS-THATCHER.dgn



Bollinger, Lach & Associates, Inc.
 ITASCA, ILLINOIS

USER NAME = cesario	DESIGNED - MTC	REVISIONS
PLOT SCALE = 20.0000' / in.	DRAWN - MTC	REVISIONS
PLOT DATE = 8/15/2013	CHECKED - JIP	REVISIONS
	DATE - 06/07/2013	REVISIONS

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**THATCHER AVENUE
 CROSS SECTIONS**

HORZ. 1"=10'
 SCALE: VERT. 1"=5' SHEET NO. 9 OF 9 SHEETS STA. 8+60.00 TO STA. 8+60.000

F.A.P. RTE. 307	SECTION 541Y-3-B	COUNTY COOK	TOTAL SHEETS 143	SHEET NO. 143
ILLINOIS FED. AID PROJECT			CONTRACT NO. 60J11	