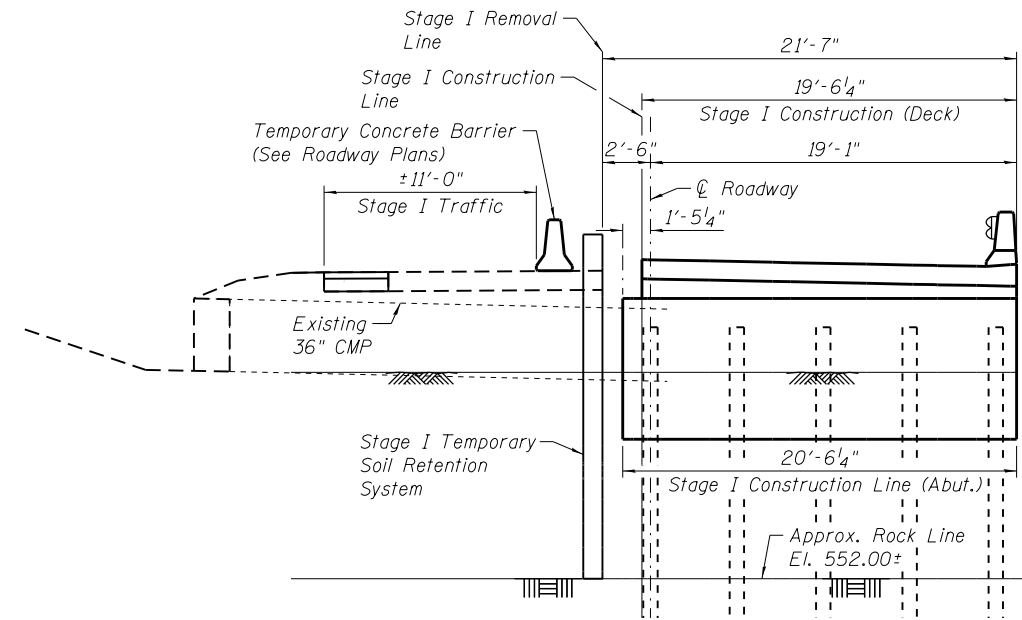


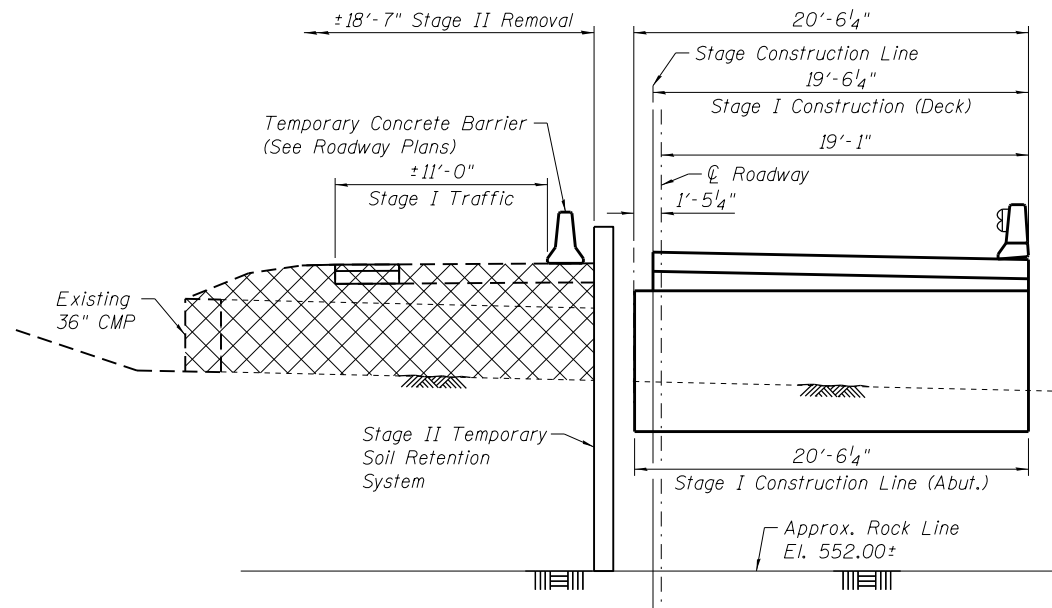
STAGE I REMOVAL
(Looking East)
(Horizontal Dimensions @ Rt. L's to CL Rdwy.)



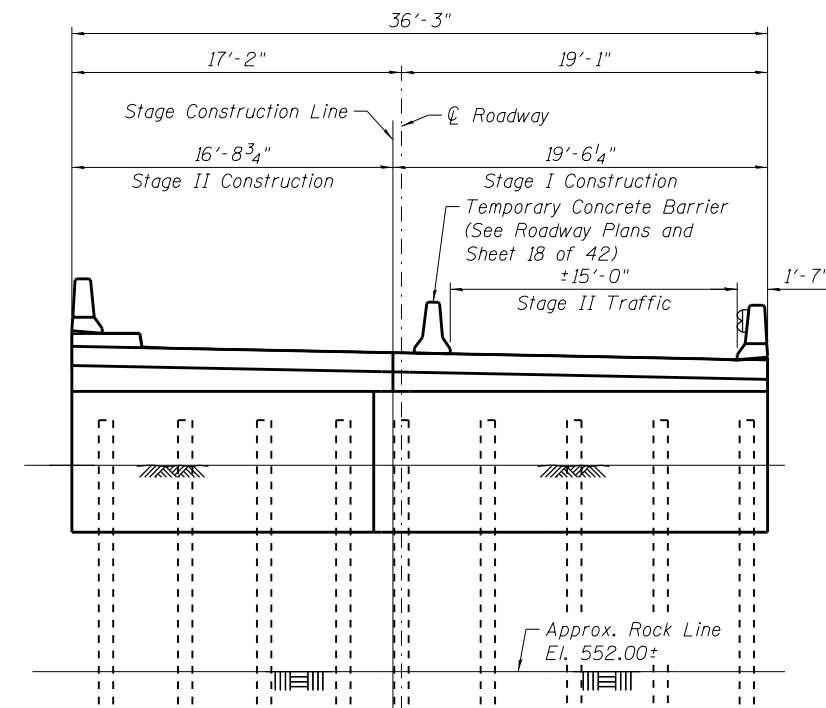
STAGE I CONSTRUCTION
(Looking East)
(Horizontal Dimensions @ Rt. L's to CL Rdwy.)

NOTES:

Stage I and Stage II refer to the Structural Stages and coincide with Stage II and Stage III of the Roadway Plans, respectively.



STAGE II REMOVAL
(Looking East)
(Horizontal Dimensions @ Rt. L's to CL Rdwy.)



STAGE II CONSTRUCTION
(Looking East)
(Horizontal Dimensions @ Rt. L's to CL Rdwy.)

FILE = S:\PROJECTS\2016\1189J16_RK_Moen\DESIGN\STRUCT\2D_Drawings\Station 212+82\1189J16_Stage Construction Details.dgn

REVISION	DATE	BY	REMARKS

DRAWN	RDA
CHECKED	EEL
APPROVED	MRL

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ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLIET, IL 60435
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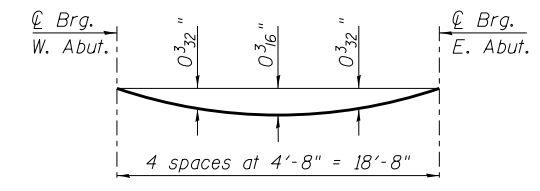
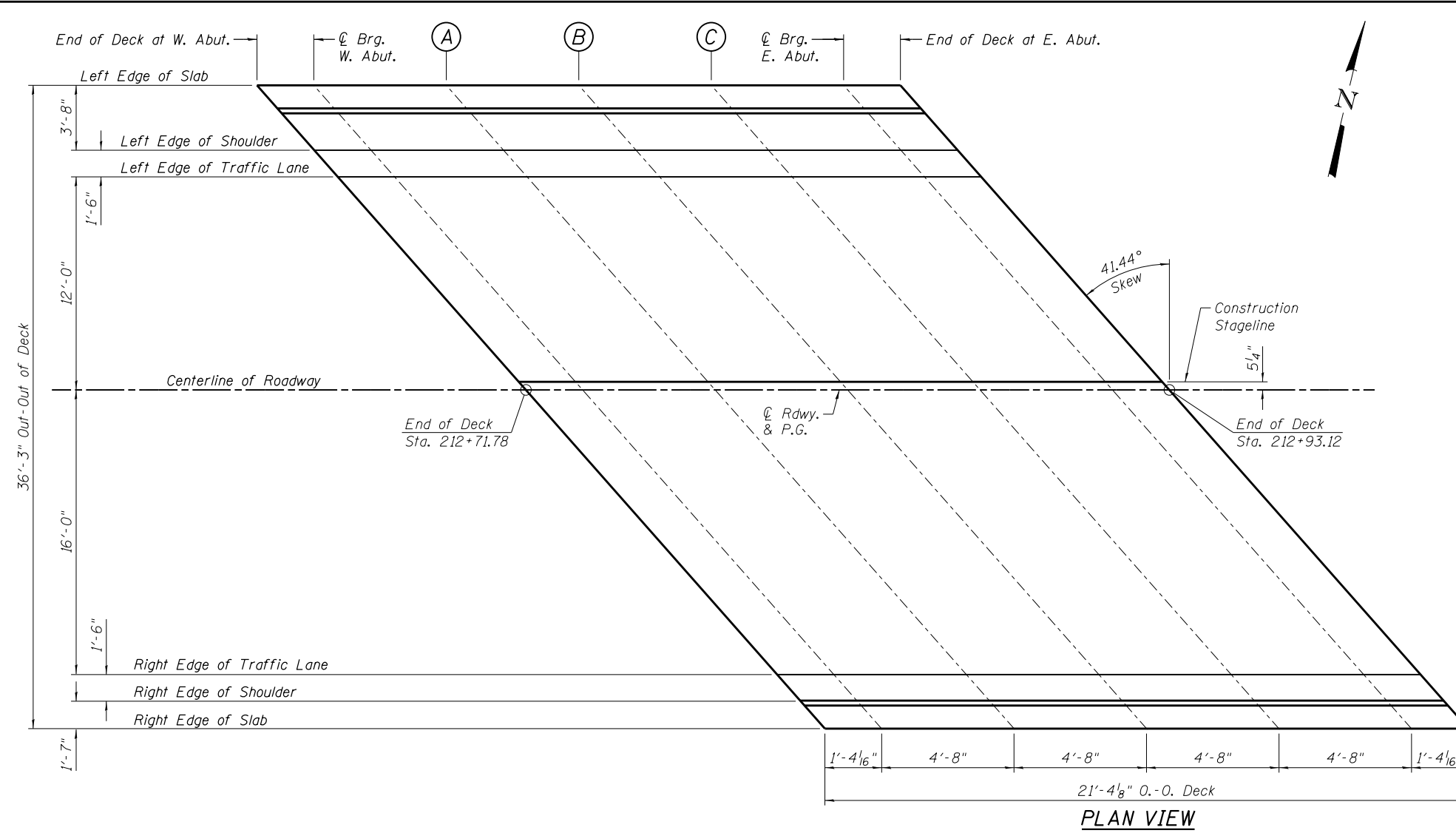


79 MOEN AVENUE
ROCKDALE, IL 60436

CONSTRUCTION STAGING
STRUCTURE AT STATION 212+82.45

STRUCTURAL SHEET NO. 4 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	201
WHA* 1189J16 ILLINOIS			CONTRACT 61E00	



DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete slab only)

NOTE:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.

CENTERLINE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
End of Deck at W. Abut.	212+71.78	0.000'	568.48	568.48
C Brg. W. Abut.	212+73.11	0.000'	568.48	568.48
A	212+77.78	0.000'	568.50	568.51
B	212+82.45	0.000'	568.51	568.53
C	212+87.12	0.000'	568.52	568.53
C Brg. E. Abut.	212+91.79	0.000'	568.53	568.53
End of Deck at E. Abut.	212+93.12	0.000'	568.54	568.54

CONSTRUCTION STAGELINE

Location	Station	Offset Lt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
End of Deck at W. Abut.	212+71.39	0.438'	568.48	568.48
C Brg. W. Abut.	212+72.73	0.438'	568.49	568.49
A	212+77.40	0.438'	568.50	568.51
B	212+82.06	0.438'	568.52	568.53
C	212+86.73	0.438'	568.53	568.54
C Brg. E. Abut.	212+91.40	0.438'	568.54	568.54
End of Deck at E. Abut.	212+92.74	0.438'	568.54	568.54

LEFT EDGE OF SLAB

Location	Station	Offset Lt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
End of Deck at W. Abut.	212+56.93	17.167'	568.87	568.87
C Brg. W. Abut.	212+58.18	17.167'	568.87	568.87
A	212+62.63	17.167'	568.86	568.87
B	212+67.30	17.167'	568.85	568.86
C	212+71.97	17.167'	568.83	568.84
C Brg. E. Abut.	212+76.63	17.167'	568.84	568.84
End of Deck at E. Abut.	212+77.97	17.167'	568.84	568.84

LEFT EDGE OF SHOULDER

Location	Station	Offset Lt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
End of Deck at W. Abut.	212+59.95	13.500'	568.77	568.77
C Brg. W. Abut.	212+61.19	13.500'	568.77	568.77
A	212+65.85	13.500'	568.77	568.78
B	212+70.52	13.500'	568.76	568.78
C	212+75.18	13.500'	568.76	568.77
C Brg. E. Abut.	212+79.87	13.500'	568.77	568.77
End of Deck at E. Abut.	212+81.20	13.500'	568.78	568.78

LEFT EDGE OF TRAFFIC LANE

Location	Station	Offset Lt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
End of Deck at W. Abut.	212+61.20	12.000'	568.74	568.74
C Brg. W. Abut.	212+65.52	12.000'	568.73	568.73
A	212+67.19	12.000'	568.73	568.74
B	212+71.86	12.000'	568.73	568.74
C	212+76.53	12.000'	568.73	568.74
C Brg. E. Abut.	212+81.20	12.000'	568.75	568.75
End of Deck at E. Abut.	212+82.53	12.000'	568.75	568.75

RIGHT EDGE OF TRAFFIC

Location	Station	Offset Rt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
End of Deck at W. Abut.	212+85.90	16.000'	568.20	568.20
C Brg. W. Abut.	212+87.24	16.000'	568.20	568.20
A	212+91.91	16.000'	568.21	568.22
B	212+96.58	16.000'	568.22	568.24
C	213+01.24	16.000'	568.23	568.23
C Brg. E. Abut.	212+05.91	16.000'	568.23	568.23
End of Deck at E. Abut.	212+07.25	16.000'	568.23	568.23

RIGHT EDGE OF SHOULDER

Location	Station	Offset Rt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
End of Deck at W. Abut.	212+87.23	17.500'	568.17	568.17
C Brg. W. Abut.	212+88.56	17.500'	568.18	568.18
A	212+93.23	17.500'	568.18	568.19
B	212+97.90	17.500'	568.19	568.21
C	213+02.57	17.500'	568.20	568.21
C Brg. E. Abut.	213+07.24	17.500'	568.20	568.20
End of Deck at E. Abut.	213+08.57	17.500'	568.20	568.20

RIGHT EDGE OF SLAB

Location	Station	Offset Rt.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
End of Deck at W. Abut.	212+88.63	19.083'	568.14	568.14
C Brg. W. Abut.	212+89.96	19.083'	568.15	568.15
A	212+94.63	19.083'	568.16	568.16
B	212+99.30	19.083'	568.16	568.18
C	213+03.97	19.083'	568.17	568.18
C Brg. E. Abut.	213+08.63	19.083'	568.17	568.17
End of Deck at E. Abut.	213+09.97	19.083'	568.17	568.17

FILE = S:\PROJECTS\2016\1189J16.RK.Moen\DESIGN\STRUCT\20.Drawings\Station 212+82\1189J16_Top of Slab Elevations.dgn

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DRAWN	RDA
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APPROVED	MRL

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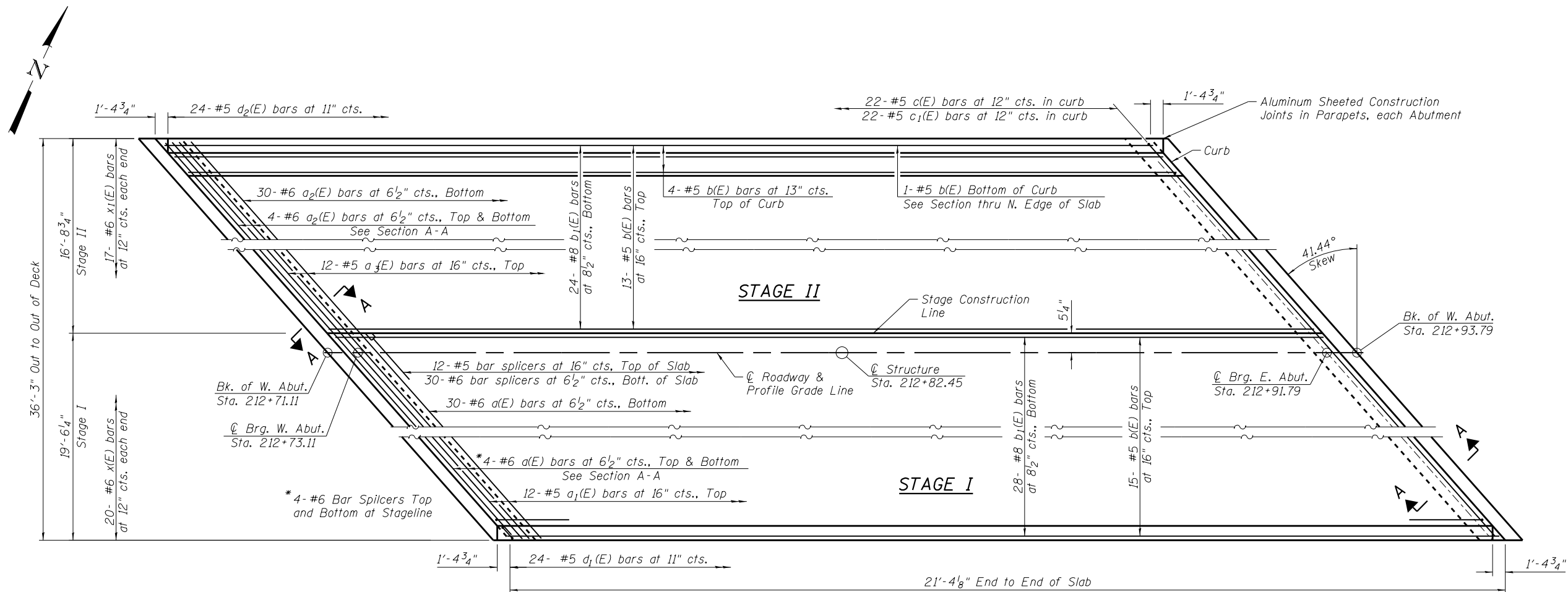


TOP OF SLAB ELEVATIONS
STRUCTURE AT STATION 212+82.45
STRUCTURAL SHEET NO. 5 OF 42 SHEETS

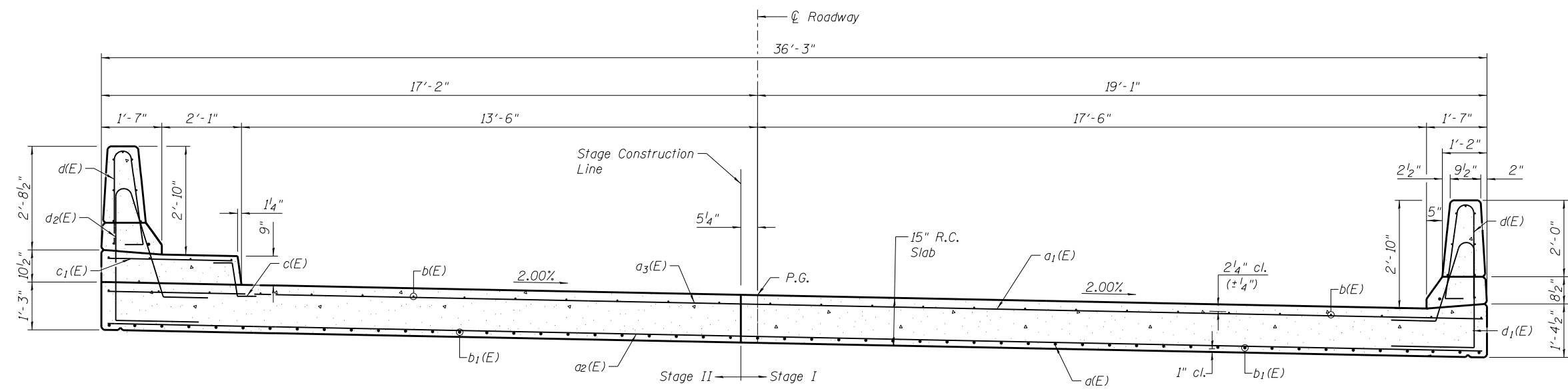
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	202

CONTRACT 61E00

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PLAN VIEW



SECTION THRU DECK
(Looking East)
Dimensions @ Rt. Δ's to Rdwy.

NOTES:
See Structural Sheet 7 of 42 for Section A-A, superstructure details, parapet reinforcement, and Bill of Material.

FILE = S:\PROJECTS\2016\1189J16_RK_Moen\DESIGN\STRUCT\2D_Drawings\Station 212+82\1189J16_Superstructure.dgn

REVISION	DATE	BY	REMARKS

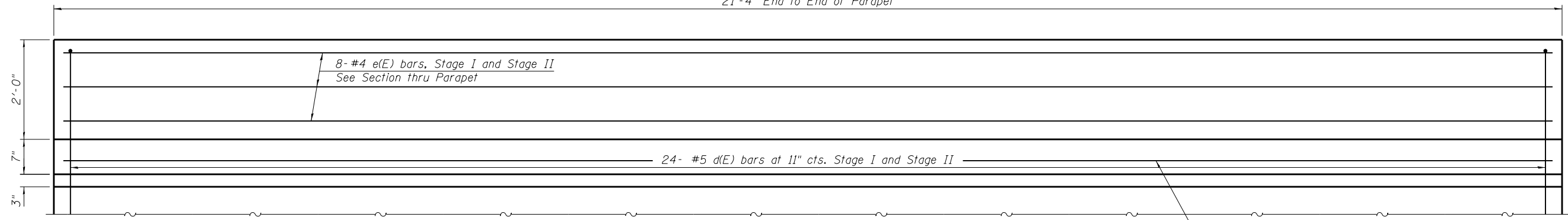
DRAWN	RDA
CHECKED	EEL
APPROVED	MRL

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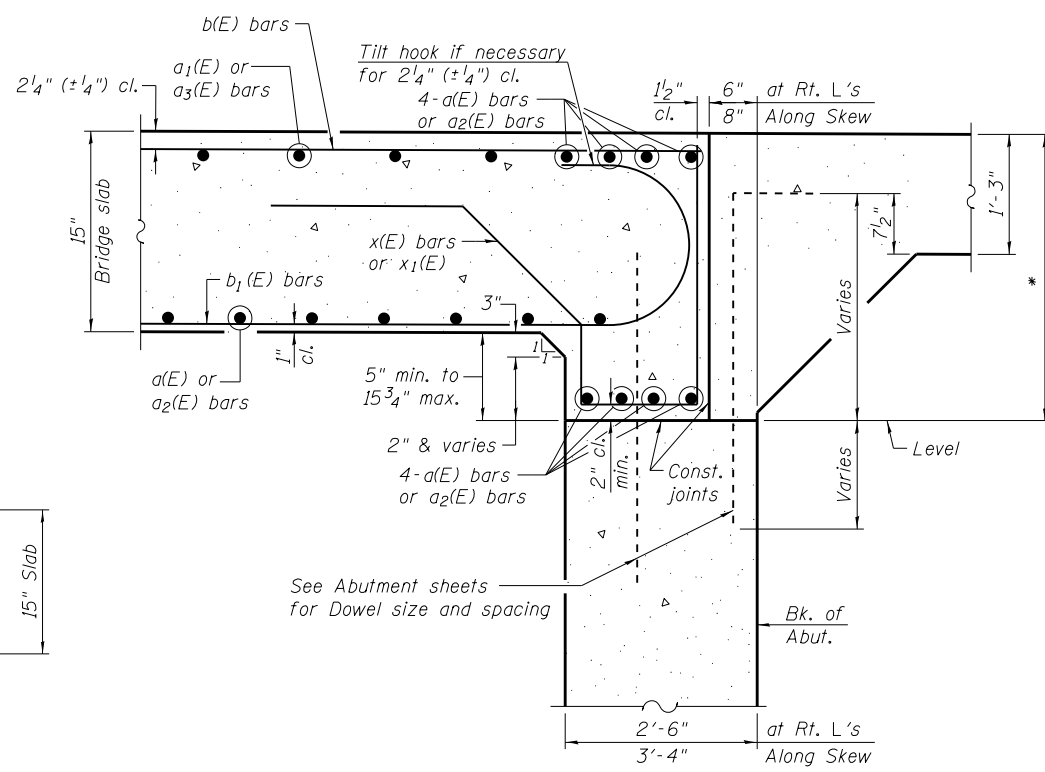
SUPERSTRUCTURE
STRUCTURE AT STATION 212 + 82.45
STRUCTURAL SHEET NO. 6 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT 61E00			WHA* 1189J16 ILLINOIS	

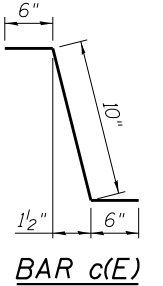
21'-4" End to End of Parapet



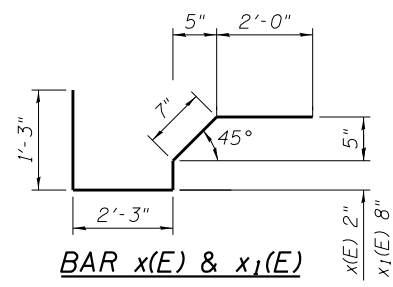
INSIDE ELEVATION OF PARAPET



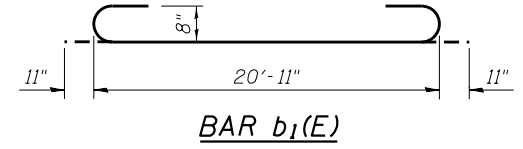
1- #4 e(E) bar (Back Face), Stage I and Stage II
1- #8 e1(E) bar (Front Face), Stage I and Stage II



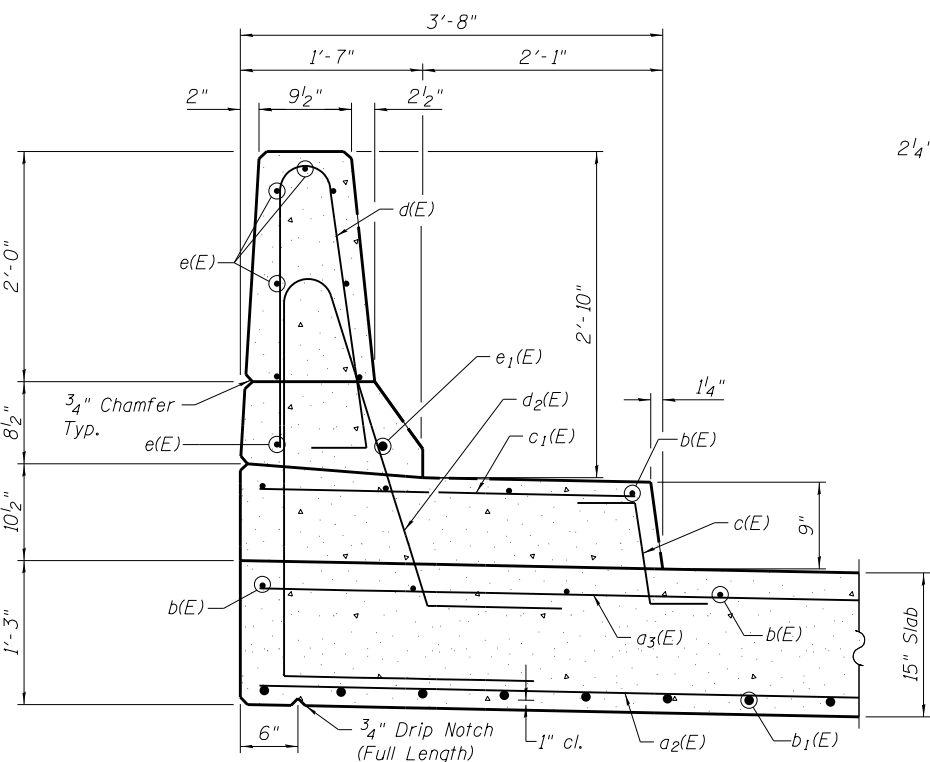
BAR c(E)



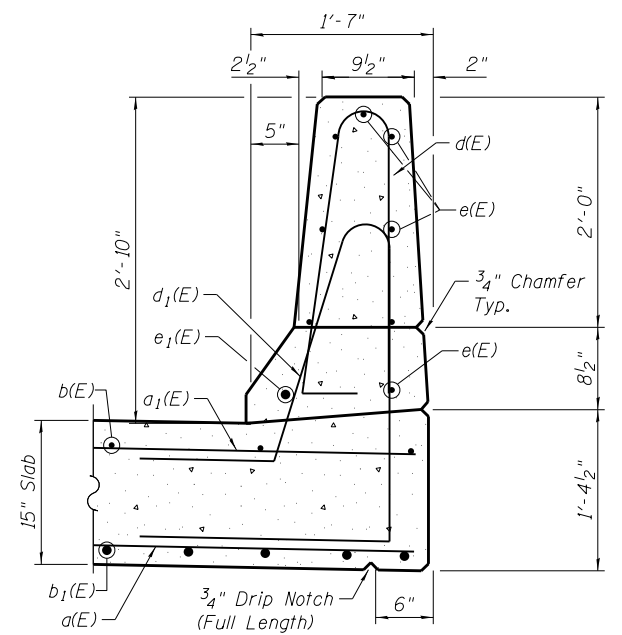
BAR x(E) & x1(E)



BAR b1(E)



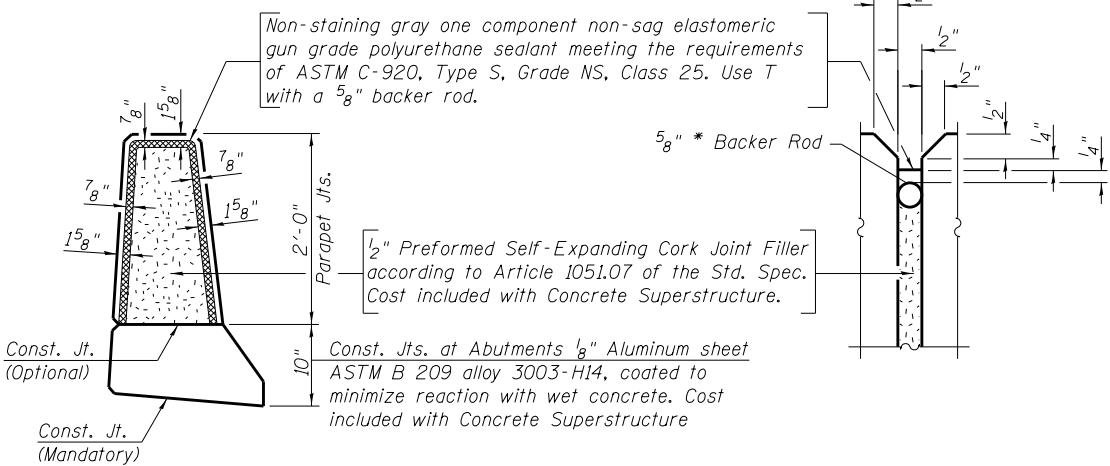
SECTION THRU NORTH EDGE OF SLAB



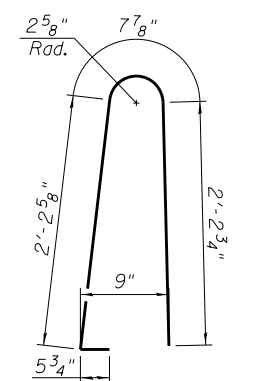
SECTION THRU SOUTH EDGE OF SLAB

SECTION A-A

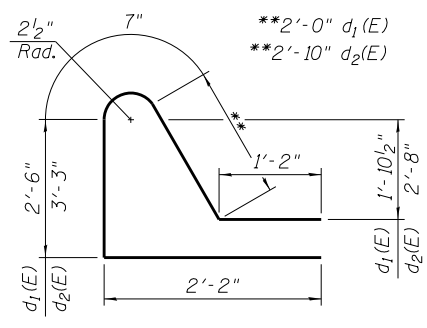
* Pour bridge slab before pouring approach slab.
Dimensions are at Rt. L's to cap



PARAPET JOINT DETAILS



BAR d(E)



BAR d1(E) and d2(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	38	#6	25'-10"	—
a1(E)	12	#5	25'-10"	—
a2(E)	38	#6	22'-1"	—
a3(E)	12	#5	22'-1"	—
b(E)	33	#5	20'-11"	—
b1(E)	52	#8	22'-9"	U
c(E)	22	#5	1'-10"	~
c1(E)	22	#5	3'-5"	—
d(E)	48	#5	5'-7"	U
d1(E)	24	#5	8'-5"	~
d2(E)	24	#5	10'-0"	~
e(E)	16	#4	21'-0"	—
e1(E)	2	#8	21'-0"	—
x(E)	40	#6	6'-3"	~
x1(E)	34	#6	6'-9"	~
Concrete Superstructure			Cu. Yd.	48.8
Bridge Deck Grooving			Sq. Yd.	69
Protective Coat			Sq. Yd.	96
Reinforcement Bars, Epoxy Coated			Pound	9,130
Bar Splicers			Each	50

NOTES:

All edges shall have 3/4 inch chamfers unless otherwise noted.

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REVISION	DATE	BY	REMARKS

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APPROVED	MRL

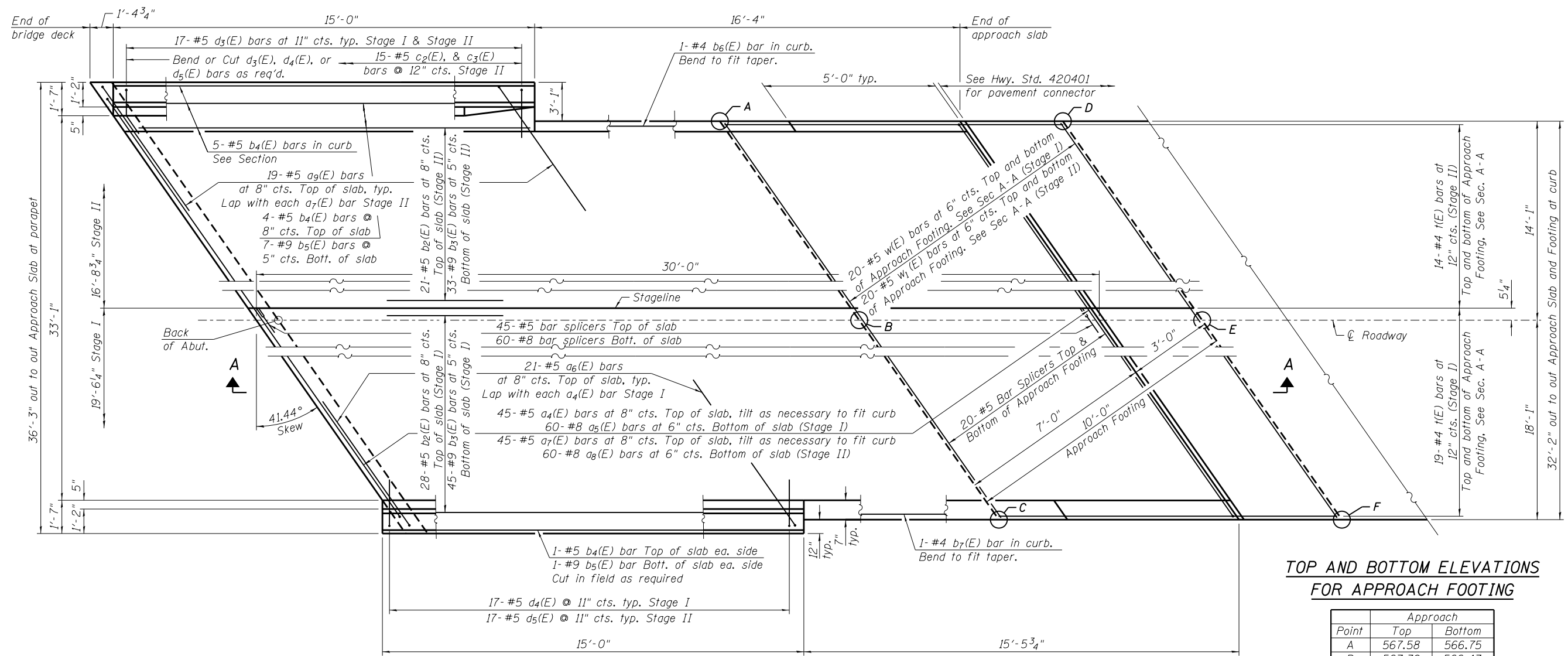
STATE OF ILLINOIS
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ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLIET, IL 60435
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ROCKDALE
79 MOEN AVENUE
ROCKDALE, IL 60436

SUPERSTRUCTURE DETAILS
STRUCTURE AT STATION 212+82.45
STRUCTURAL SHEET NO. 7 OF 42 SHEETS

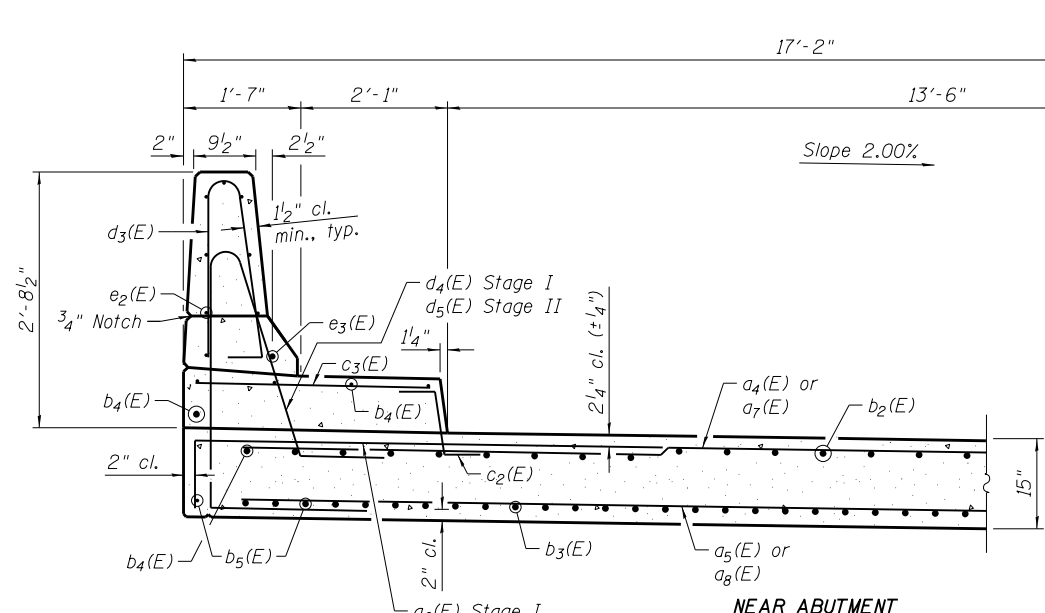
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	204
CONTRACT 61E00				
WHA* 1189J16	ILLINOIS			



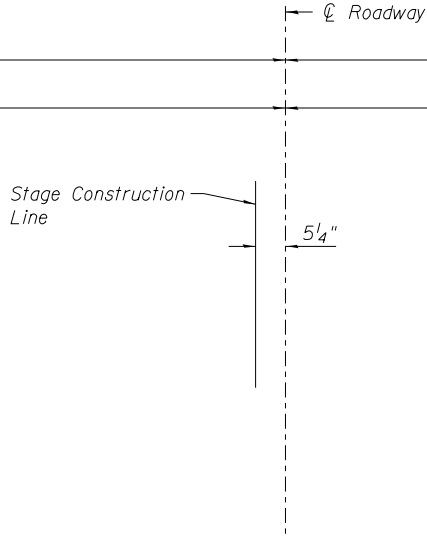
PLAN VIEW

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

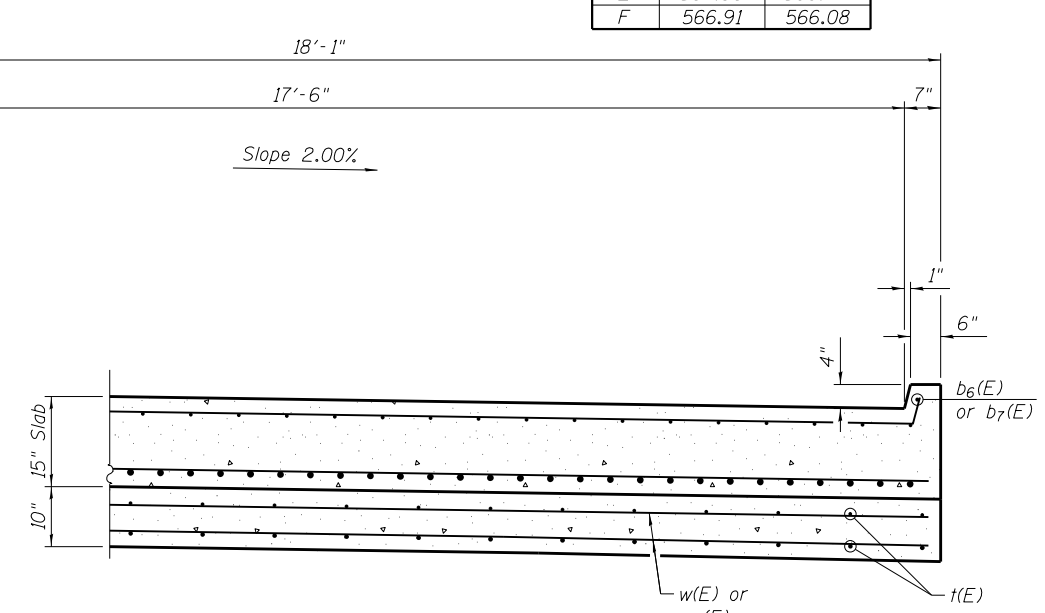
Point	Approach	
	Top	Bottom
A	567.58	566.75
B	567.30	566.47
C	566.93	566.10
D	567.59	566.76
E	567.30	566.47
F	566.91	566.08



NEAR ABUTMENT



CROSS SECTION (Looking East)



AT APPROACH FOOTING

NOTE:
Stage II shown, Stage I similar, with no curb.

NOTE:
Stage I shown, Stage II similar. See plan for dimensions.

(Sheet 1 of 2)

FILE = S:\PROJECTS\2016\1189J16.RK.Moen\DESIGN\STRUCT\2D.Dwg\Station 212+82\1189J16.East Approach Slab Details.dgn

REVISION	DATE	BY	REMARKS

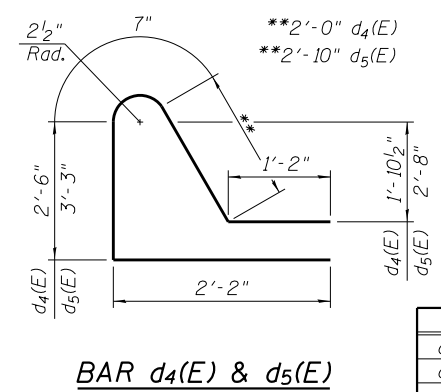
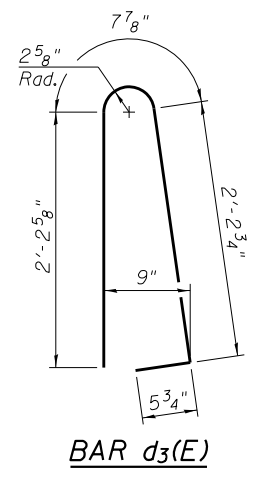
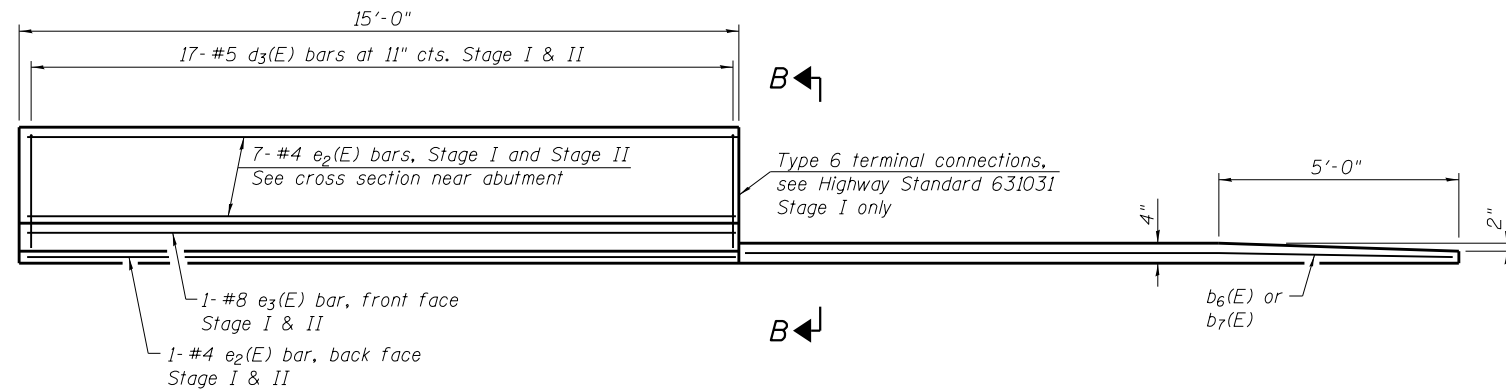
DRAWN	RDA
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APPROVED	MRL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST APPROACH SLAB DETAILS
STRUCTURE AT STATION 212+82.45

STRUCTURAL SHEET NO. 8 OF 42 SHEETS

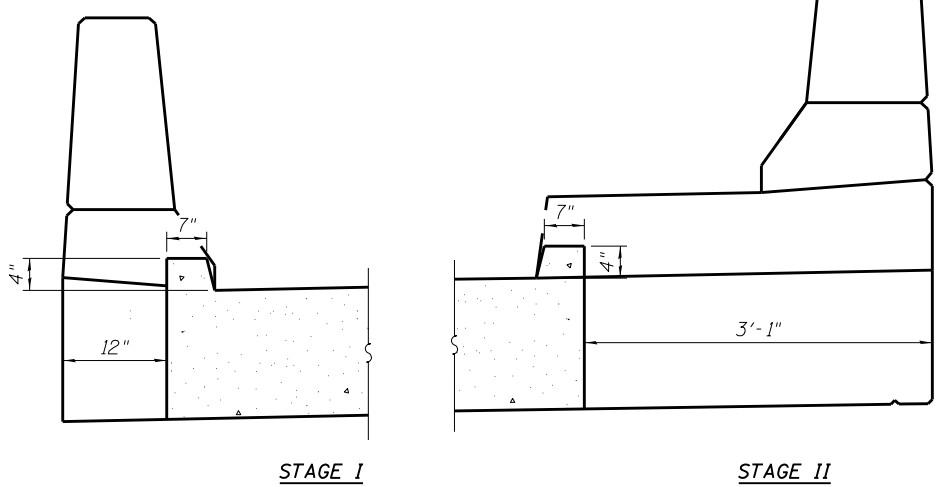
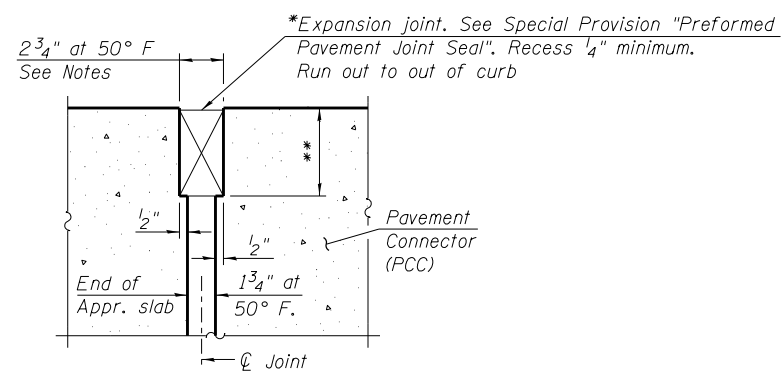
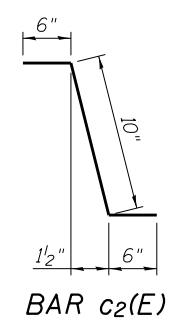
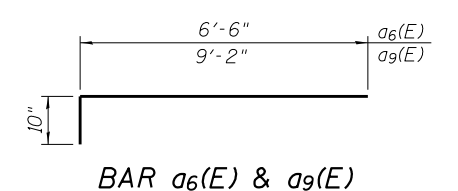
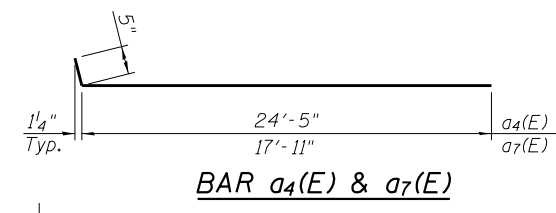
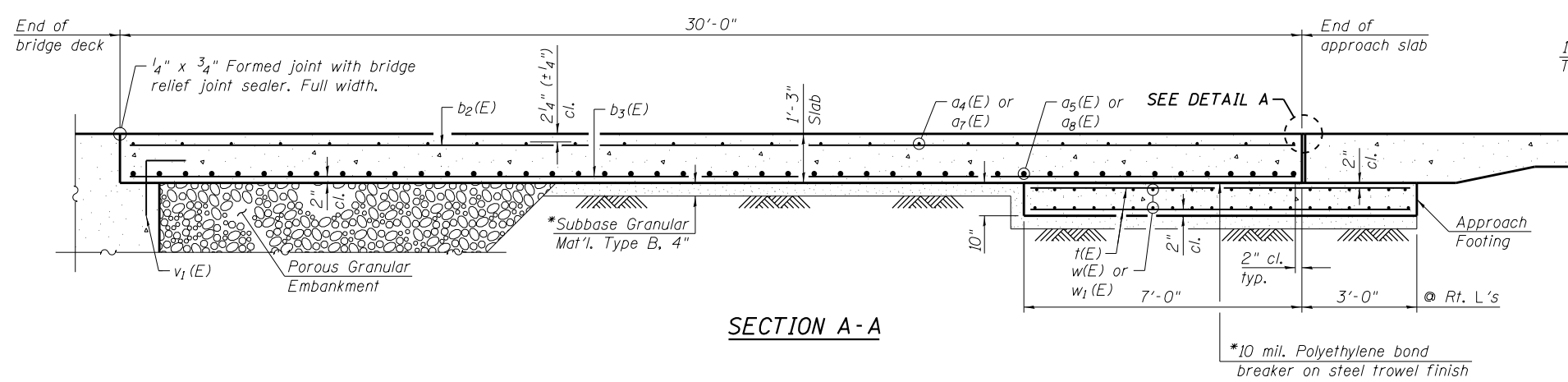
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	205
CONTRACT 61E00			WHA* 1189J16 ILLINOIS	



**E. APPROACH SLAB
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a4(E)	45	#5	24'-10"	—
a5(E)	60	#8	24'-5"	—
a6(E)	21	#5	7'-4"	—
a7(E)	45	#5	18'-4"	—
a8(E)	60	#8	17'-11"	—
a9(E)	19	#5	10'-0"	—
b2(E)	49	#5	29'-8"	—
b3(E)	78	#9	29'-8"	—
b4(E)	11	#5	14'-8"	—
b5(E)	9	#9	14'-8"	—
b6(E)	1	#4	16'-2"	—
b7(E)	1	#4	15'-4"	—
c2(E)	15	#5	1'-10"	—
c3(E)	15	#5	3'-5"	—
d3(E)	34	#5	5'-7"	—
d4(E)	17	#5	8'-5"	—
d5(E)	17	#5	10'-0"	—
e2(E)	16	#4	14'-9"	—
e3(E)	2	#8	14'-9"	—
t(E)	66	#4	12'-7"	—
w(E)	40	#5	24'-5"	—
w1(E)	40	#5	17'-11"	—
Protective Coat		Sq. Ft.	125	
Concrete Superstructure		Cu. Yd.	4.8	
Bridge Deck Grooving		Sq. Ft.	97	
Concrete Superstructure (Approach Slab)		Cu. Yd.	48.9	
Concrete Structures		Cu. Yd.	13.2	
Reinforcement Bars, Epoxy Coated		Pound	22,350	
Bar Splicers		Each	145	

INSIDE ELEVATION OF PARAPET AND CURB



* Cost of excavation & subbase material included with Concrete Superstructure (Approach Slab).
** Per manufacturer recommendations

GENERAL NOTES:
The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.
Parapet concrete shall be paid for as Concrete Superstructure.
Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
Approach footing concrete shall be paid for as Concrete Structures.
The approach footing maximum applied service bearing pressure (Omax) = 2.0 ksf.
Cost of excavation and subbase material for approach footing included with Concrete Structures.
For Porous Granular Backfill, see Structural Sheet 14 & 15 of 42.

FILE = S:\PROJECTS\2016\1189J16.RK.Moen\DESIGN\STRUCT\20.Drawings\Station 212+82.1189J16.East Approach Slab Detail.dgn

REVISION	DATE	BY	REMARKS

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APPROVED	MRL

STATE OF ILLINOIS
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ROCKDALE
79 MOEN AVENUE
ROCKDALE, IL 60436

**EAST APPROACH SLAB DETAILS
STRUCTURE AT STATION 212+82.45**
STRUCTURAL SHEET NO. 9 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	206
WHA* 1189J16			ILLINOIS	
CONTRACT 61E00				

LEFT EDGE OF APPROACH PAVEMENT

Location	Station	Offset Lt.	Theoretical Grade Elevations
A	212+77.97	17.167'	568.84
B	212+87.97	17.167'	568.87
C	213+00.69	14.083'	568.83
D	213+10.69	14.083'	568.84

LEFT EDGE OF SHOULDER

Location	Station	Offset Lt.	Theoretical Grade Elevations
A	212+81.21	13.500'	568.78
B	212+91.21	13.500'	568.80
C	213+01.21	13.500'	568.82
D	213+11.21	13.500'	568.82

LEFT EDGE OF TRAFFIC LANE

Location	Station	Offset Lt.	Theoretical Grade Elevations
A	212+82.53	12.000'	568.75
B	212+92.53	12.000'	568.77
C	213+02.53	12.000'	568.79
D	213+12.53	12.000'	568.79

CONSTRUCTION STAGELINE

Location	Station	Offset Lt.	Theoretical Grade Elevations
A	212+92.74	0.438'	568.54
B	213+02.74	0.438'	568.56
C	213+12.74	0.438'	568.56
D	213+22.74	0.438'	568.56

CENTERLINE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
A	212+93.12	0.000'	568.54
B	213+03.12	0.000'	568.55
C	213+13.12	0.000'	568.55
D	213+23.12	0.000'	568.55

RIGHT EDGE OF TRAFFIC LANE

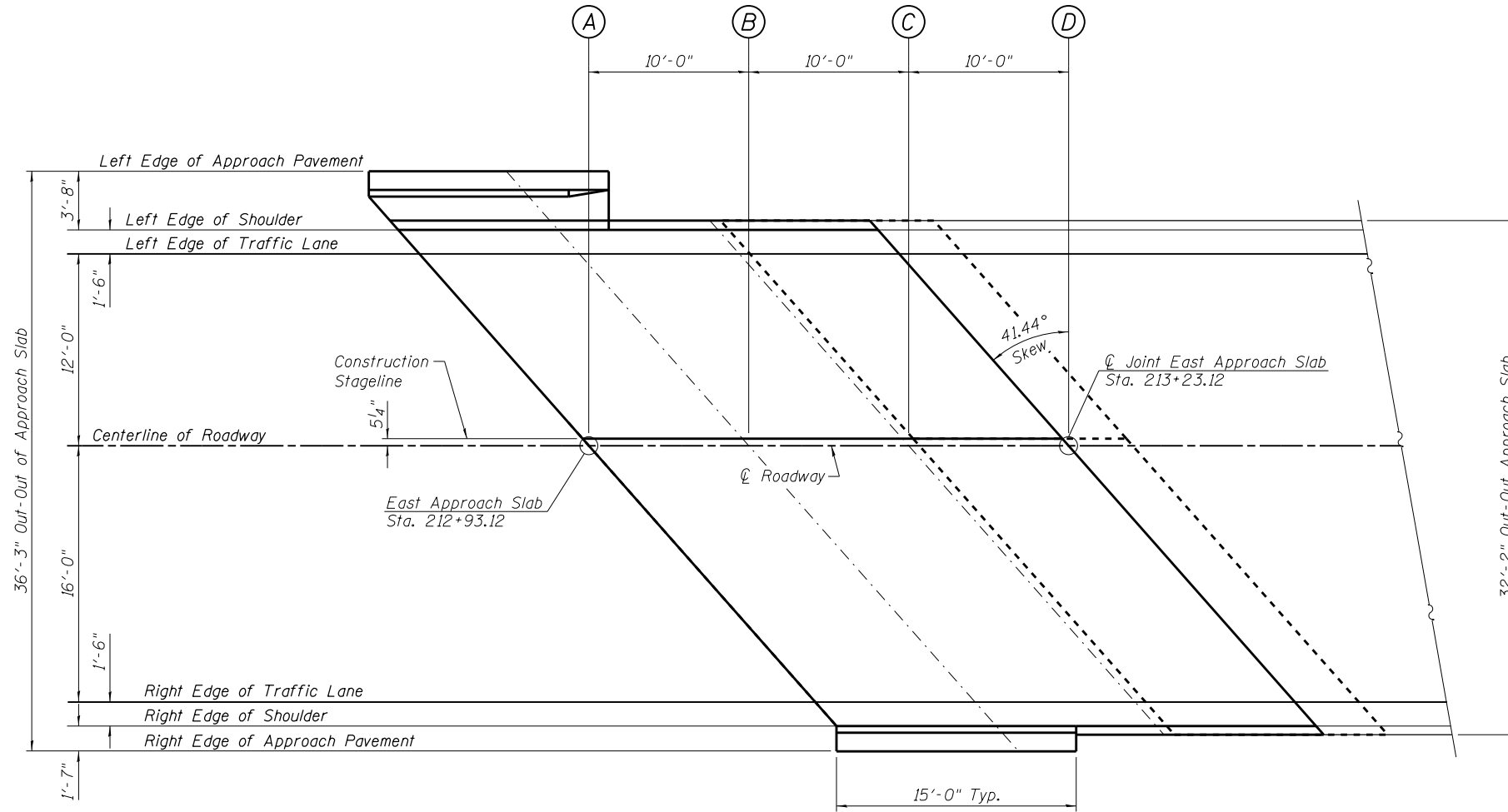
Location	Station	Offset Rt.	Theoretical Grade Elevations
A	213+07.25	16.000'	568.23
B	213+17.25	16.000'	568.23
C	213+27.25	16.000'	568.23
D	213+37.25	16.000'	568.21

RIGHT EDGE OF SHOULDER

Location	Station	Offset Rt.	Theoretical Grade Elevations
A	213+08.57	17.500'	568.20
B	213+18.57	17.500'	568.20
C	213+28.57	17.500'	568.20
D	213+38.57	17.500'	568.18

RIGHT EDGE OF APPROACH PAVEMENT

Location	Station	Offset Rt.	Theoretical Grade Elevations
A	213+09.97	19.083'	568.17
B	213+19.97	19.083'	568.17
C	213+29.08	18.083'	568.19
D	213+39.08	18.083'	568.17



PLAN VIEW

FILE = S:\PROJECTS\2016\1189J16_RK_Moen\DESIGN\STRUCT\2D_Drawings\Station 212+82.1189J16_Top of East Approach Slab Elevations.dgn

REVISION	DATE	BY	REMARKS

DRAWN	RDA
CHECKED	EEL
APPROVED	MRL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

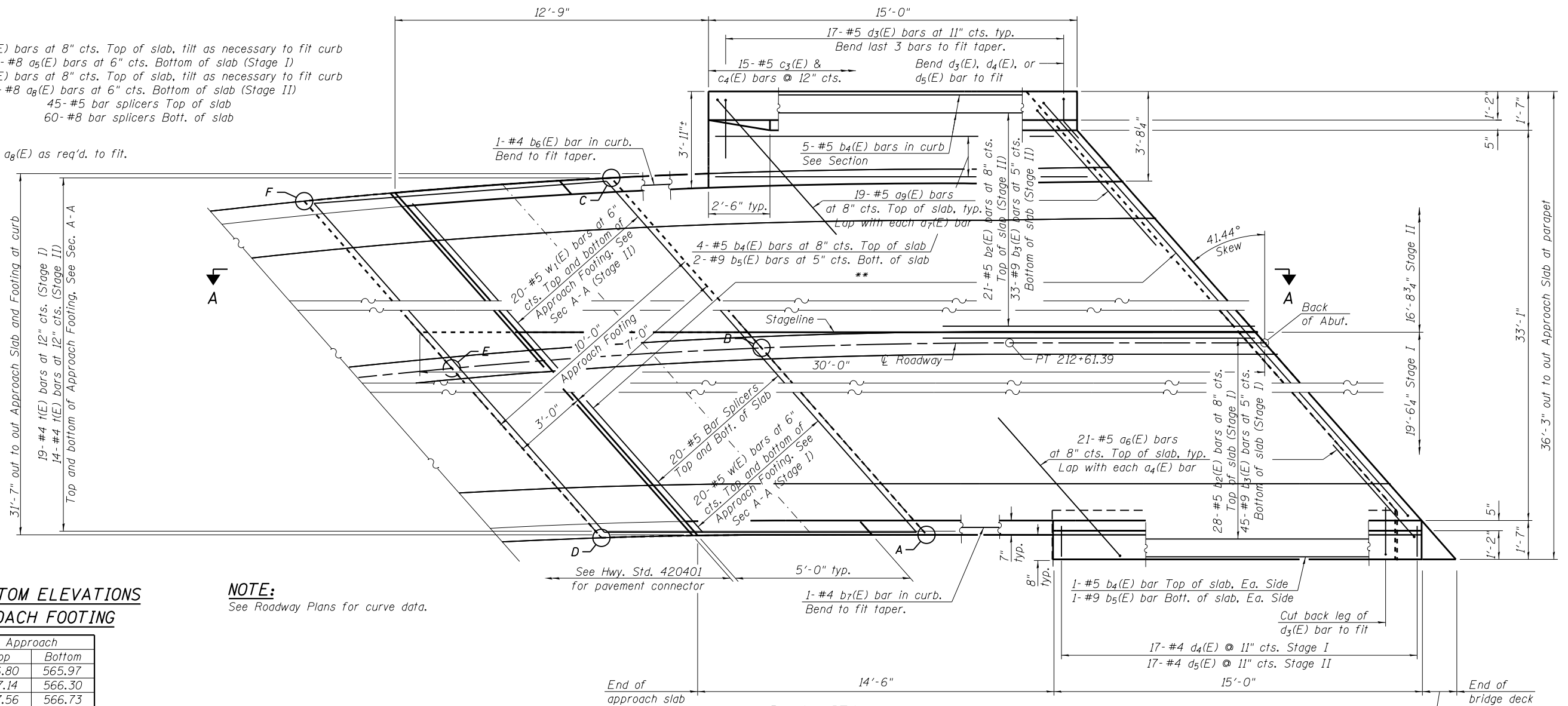
TOP OF EAST APPROACH SLAB ELEVATIONS
STRUCTURE AT STATION 212+82.45

STRUCTURAL SHEET NO. 10 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	207
CONTRACT 61E00			WHA* 1189J16 ILLINOIS	

**45-#5 a₄(E) bars at 8" cts. Top of slab, tilt as necessary to fit curb
 60-#8 a₅(E) bars at 6" cts. Bottom of slab (Stage I)
 45-#5 a₇(E) bars at 8" cts. Top of slab, tilt as necessary to fit curb
 60-#8 a₈(E) bars at 6" cts. Bottom of slab (Stage II)
 45-#5 bar splicers Top of slab
 60-#8 bar splicers Bott. of slab

NOTE:
 Cut a₇(E) & a₈(E) as req'd. to fit.

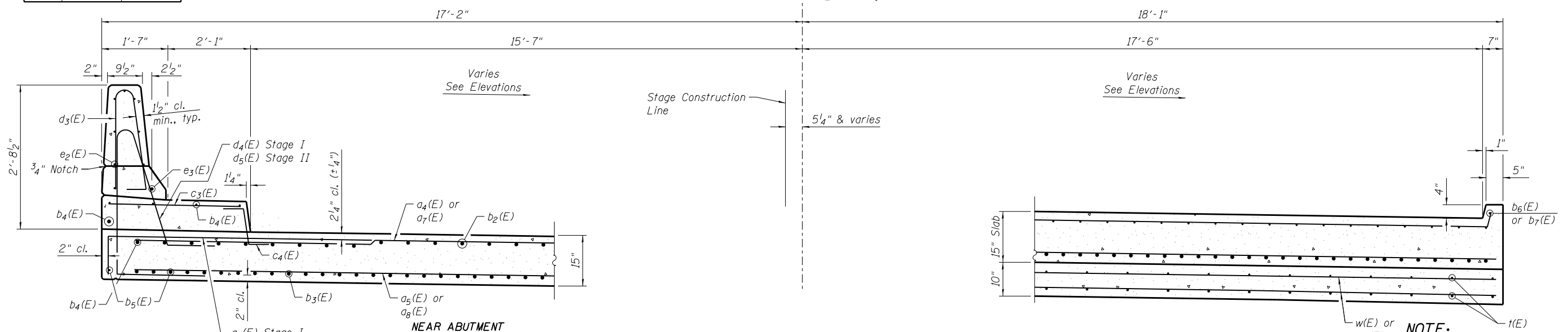


TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

Point	Approach	
	Top	Bottom
A	566.80	565.97
B	567.14	566.30
C	567.56	566.73
D	566.63	565.80
E	567.06	566.23
F	567.53	566.69

NOTE:
 See Roadway Plans for curve data.

PLAN VIEW



NOTE:
 Stage II shown, Stage I similar, with no curb.

NOTE:
 Stage I shown, Stage II similar. See plan for dimensions.

FILE = S:\PROJECTS\2016\1189J16.RK.Moen\DESIGN\STRUCT\2D_Drawings\Station 212+82\1189J16.West Approach Slab Details.dgn

REVISION	DATE	BY	REMARKS

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APPROVED	MRL

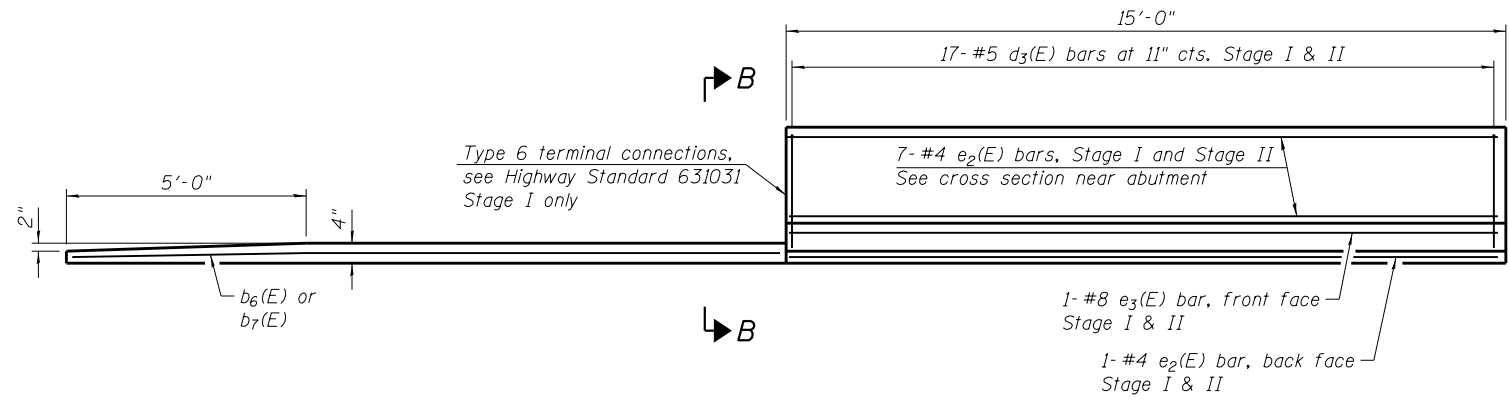
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION



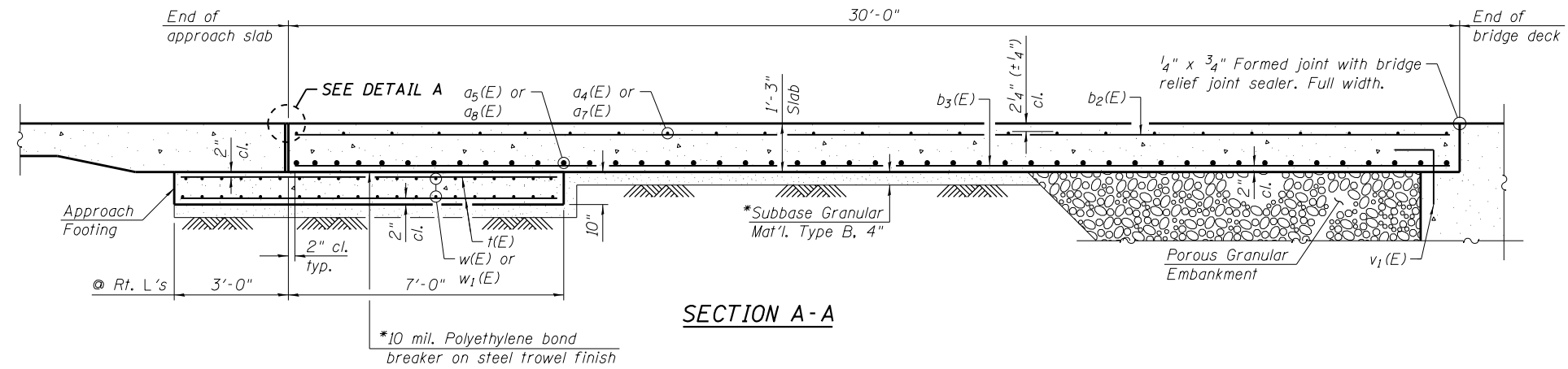
WEST APPROACH SLAB DETAILS
 STRUCTURE AT STATION 212 + 82.45

STRUCTURAL SHEET NO. 11 OF 42 SHEETS

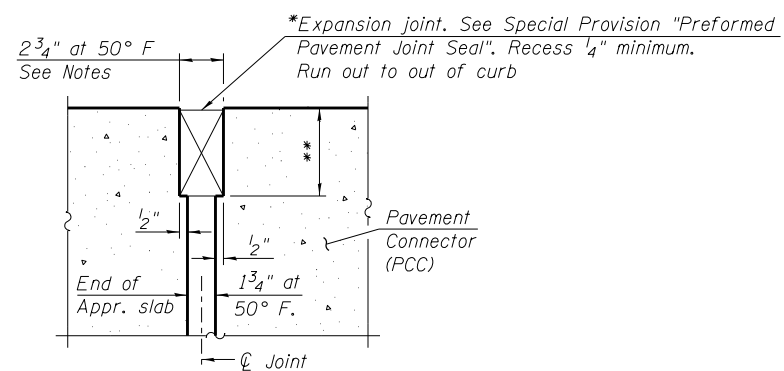
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	208
CONTRACT 61E00			WHA* 1189J16 ILLINOIS	



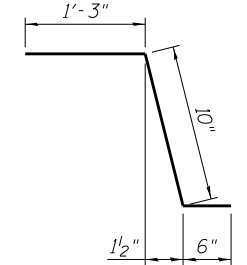
INSIDE ELEVATION OF PARAPET AND CURB



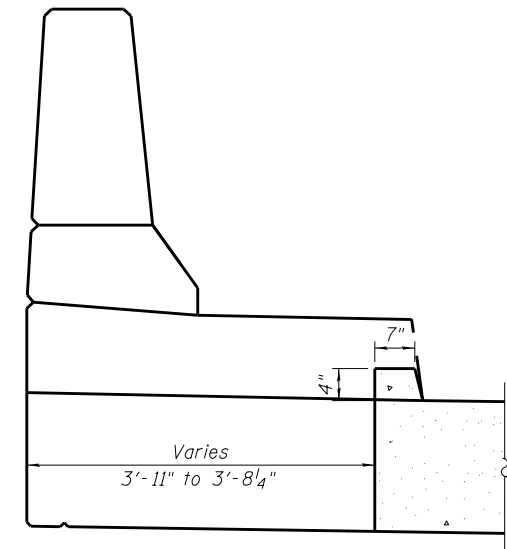
SECTION A-A



DETAIL A
(© Rt. L's)

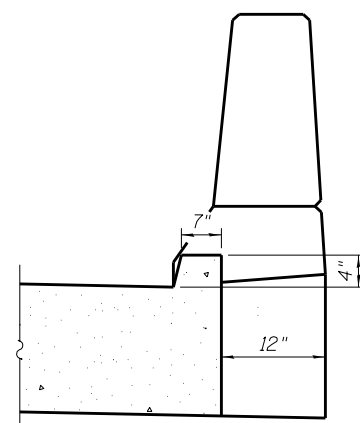


BAR c4(E)



STAGE II

VIEW B-B



STAGE I

**W. APPROACH SLAB
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a4(E)	45	#5	24'-10"	—
a5(E)	60	#8	24'-5"	—
a6(E)	21	#5	7'-4"	—
a7(E)	45	#5	18'-4"	—
a8(E)	60	#8	17'-11"	—
a9(E)	19	#5	10'-0"	—
b2(E)	49	#5	29'-8"	—
b3(E)	78	#9	29'-8"	—
b4(E)	11	#5	14'-8"	—
b5(E)	9	#9	14'-8"	—
b6(E)	1	#4	16'-2"	—
b7(E)	1	#4	15'-4"	—
c3(E)	15	#5	3'-5"	—
c4(E)	15	#5	2'-7"	—
d3(E)	34	#5	5'-7"	—
d4(E)	17	#5	8'-5"	—
d5(E)	17	#5	10'-0"	—
e2(E)	16	#4	14'-9"	—
e3(E)	2	#8	14'-9"	—
f(E)	66	#4	12'-7"	—
w(E)	40	#5	24'-5"	—
w1(E)	40	#5	17'-11"	—
Protective Coat		Sq. Ft.	124	
Concrete Superstructure		Cu. Yd.	5.0	
Bridge Deck Grooving		Sq. Ft.	96	
Concrete Superstructure (Approach Slab)		Cu. Yd.	48.5	
Concrete Structures		Cu. Yd.	12.8	
Reinforcement Bars, Epoxy Coated		Pound	22,360	
Bar Splicers		Each	145	

GENERAL NOTES:

The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.

Parapet concrete shall be paid for as Concrete Superstructure.

Approach slab shall be paid for as Concrete Superstructure (Approach Slab).

Approach footing concrete shall be paid for as Concrete Structures.

The approach footing maximum applied service bearing pressure (Omax) = 2.0 ksf.

Cost of excavation and subbase material for approach footing included with Concrete Structures.

For Porous Granular Backfill details, see Structural Sheet 14 & 15 of 42.

See Structural Sheet 9 of 42 for a4(E), a6(E), a7(E), a9(E), d3(E), d4(E), & d5(E) bar details.

* Cost of excavation & subbase material included with Concrete Superstructure (Approach Slab).
** Per manufacturer recommendations

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REVISION	DATE	BY	REMARKS	DRAWN	RDA	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION 79 MOEN AVENUE ROCKDALE, IL 60436	WEST APPROACH SLAB DETAILS STRUCTURE AT STATION 212 + 82.45 STRUCTURAL SHEET NO. 12 OF 42 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				CHECKED	EEL			3795	12-00029-00-PV	WILL	344	209
				APPROVED	MRL			CONTRACT 61E00				
								WHA* 1189J16 ILLINOIS				

LEFT EDGE OF APPROACH PAVEMENT

Location	Station	Offset Lt.	Theoretical Grade Elevations
A	212+31.95	14.877'	568.79
B	212+40.88	14.569'	568.81
C	212+47.59	17.574'	568.90
D	212+56.93	17.209'	568.88

LEFT EDGE OF SHOULDER

Location	Station	Offset Lt.	Theoretical Grade Elevations
A	212+32.34	14.283'	568.77
B	212+41.30	13.974'	568.79
C	212+50.53	13.655'	568.78
D	212+59.95	13.500'	568.77

LEFT EDGE OF TRAFFIC LANE

Location	Station	Offset Lt.	Theoretical Grade Elevations
A	212+33.35	12.747'	568.72
B	212+42.40	12.435'	568.74
C	212+51.73	12.113'	568.74
D	212+61.20	12.000'	568.74

CONSTRUCTION STAGELINE

Location	Station	Offset Lt.	Theoretical Grade Elevations
A	212+41.47	1.123'	568.37
B	212+51.42	0.637'	568.41
C	212+61.39	0.438'	568.45
D	212+71.39	0.438'	568.48

CENTERLINE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
A	212+42.40	0.000'	568.34
B	212+51.94	0.000'	568.39
C	212+61.78	0.000'	568.44
D	212+71.78	0.000'	568.48

RIGHT EDGE OF TRAFFIC LANE

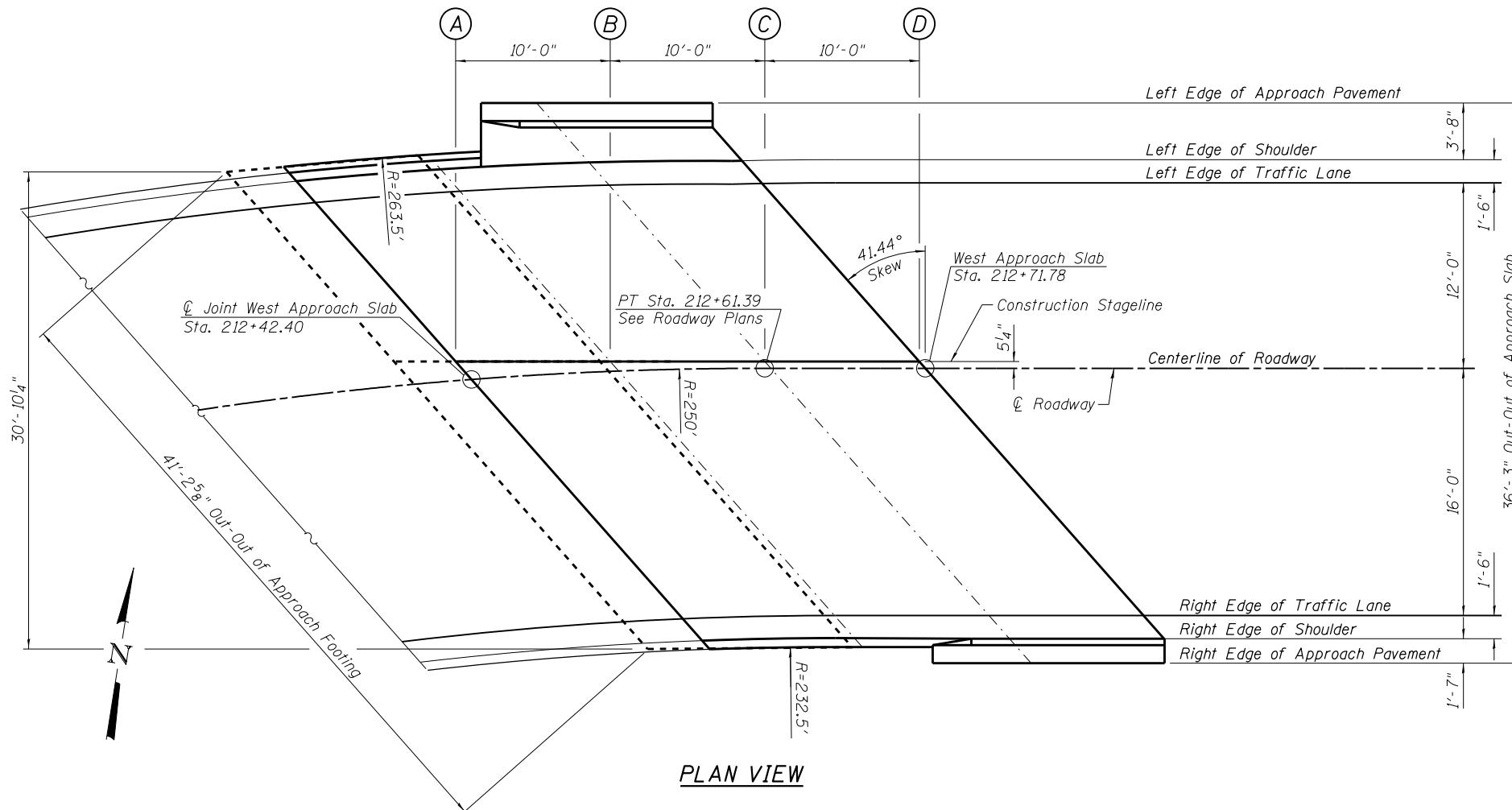
Location	Station	Offset Rt.	Theoretical Grade Elevations
A	212+55.59	16.000'	567.97
B	212+65.90	16.000'	568.08
C	212+75.90	16.000'	568.17
D	212+85.90	16.000'	568.20

RIGHT EDGE OF SHOULDER

Location	Station	Offset Rt.	Theoretical Grade Elevations
A	212+56.95	17.500'	567.95
B	212+67.23	17.500'	568.06
C	212+77.23	17.500'	568.15
D	212+87.23	17.500'	568.17

RIGHT EDGE OF APPROACH PAVEMENT

Location	Station	Offset Lt.	Theoretical Grade Elevations
A	212+57.48	18.083'	567.94
B	212+67.74	18.083'	568.06
C	212+78.63	19.083'	568.12
D	212+88.63	19.083'	568.14



PLAN VIEW

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REVISION	DATE	BY	REMARKS

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APPROVED	MRL

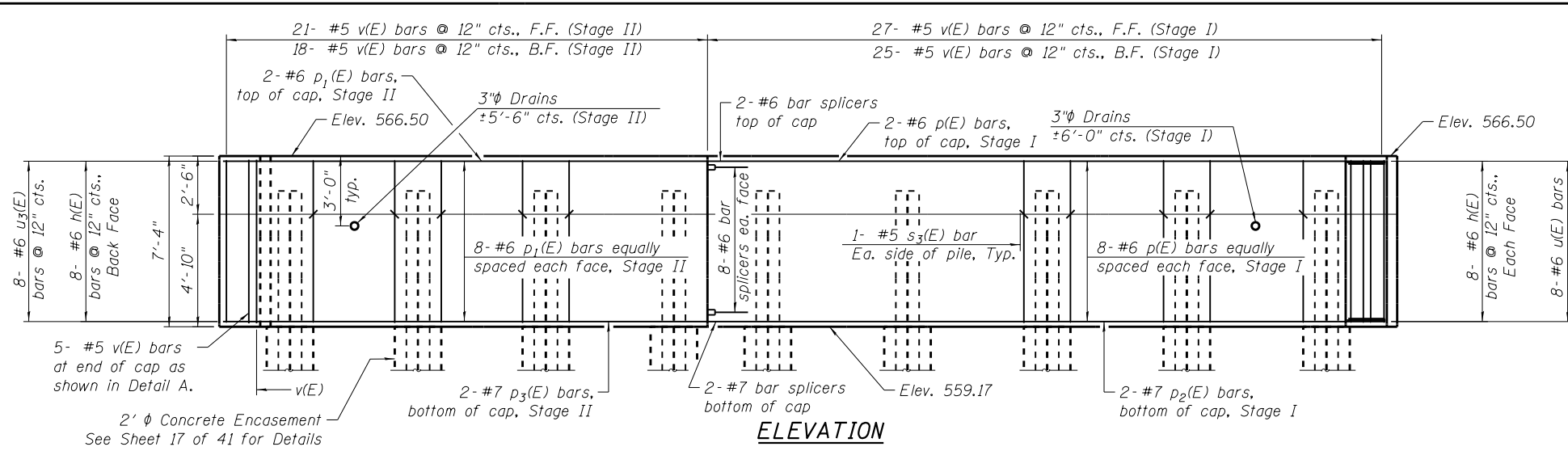
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**



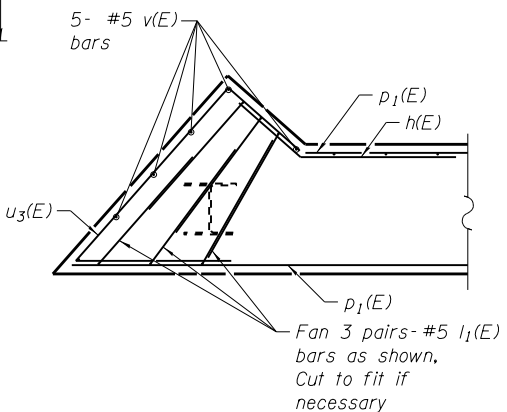
**TOP OF WEST APPROACH SLAB ELEVATIONS
STRUCTURE AT STATION 212+82.45**

STRUCTURAL SHEET NO. 13 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	210
CONTRACT 61E00			WHA* 1189J16 ILLINOIS	

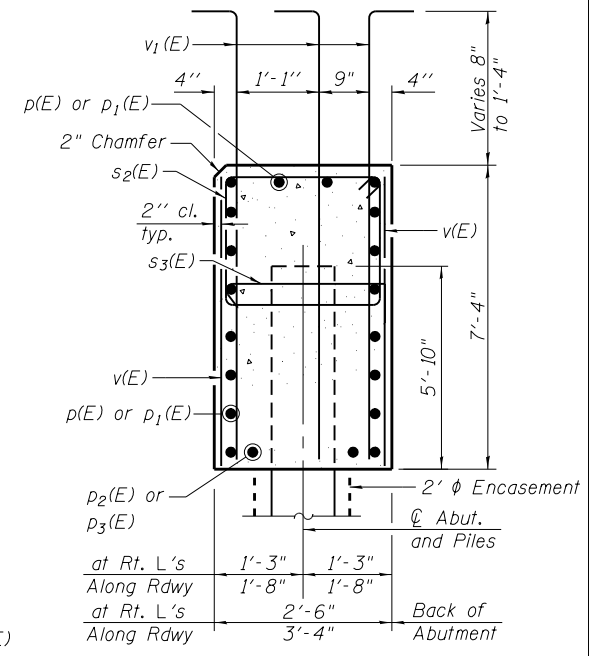


ELEVATION

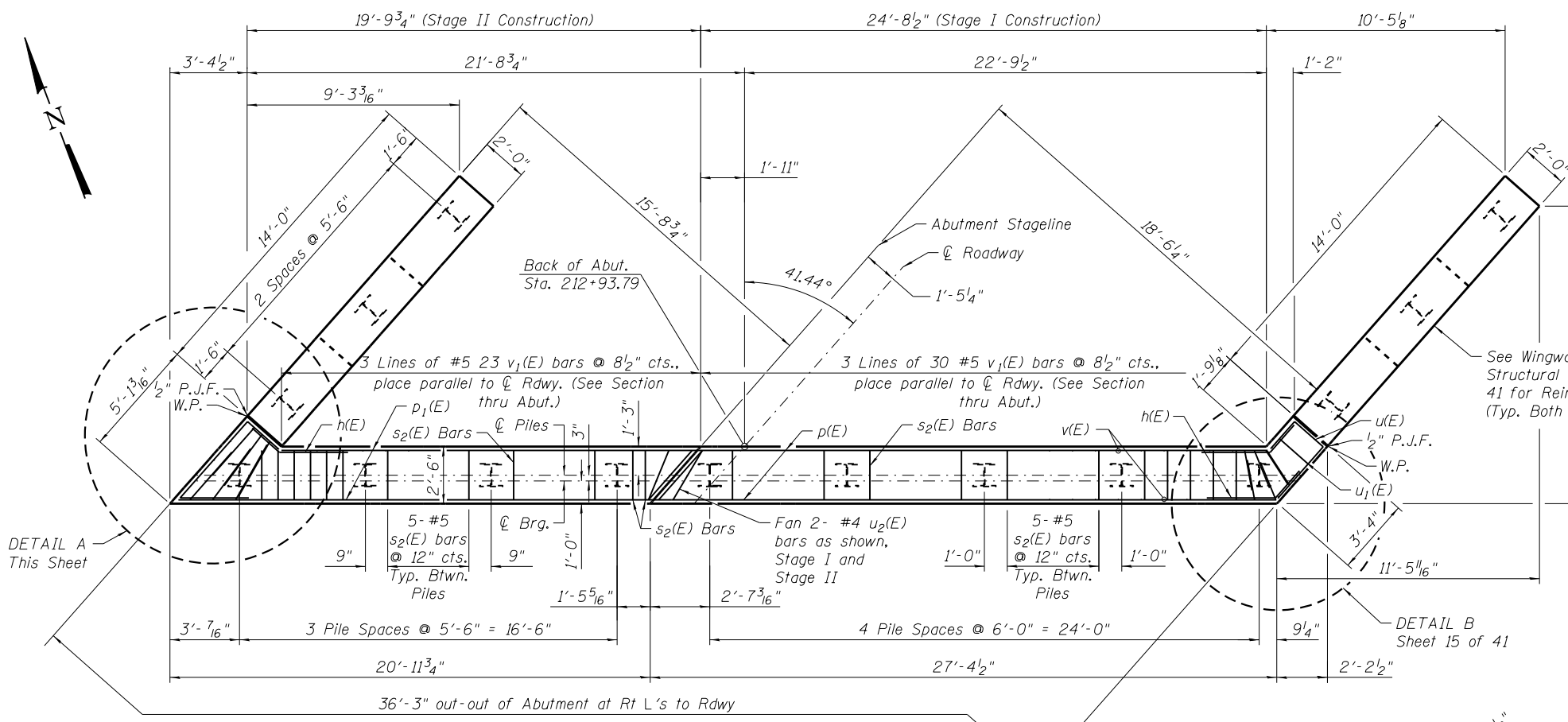


DETAIL A

s₂(E) bars not shown for clarity.

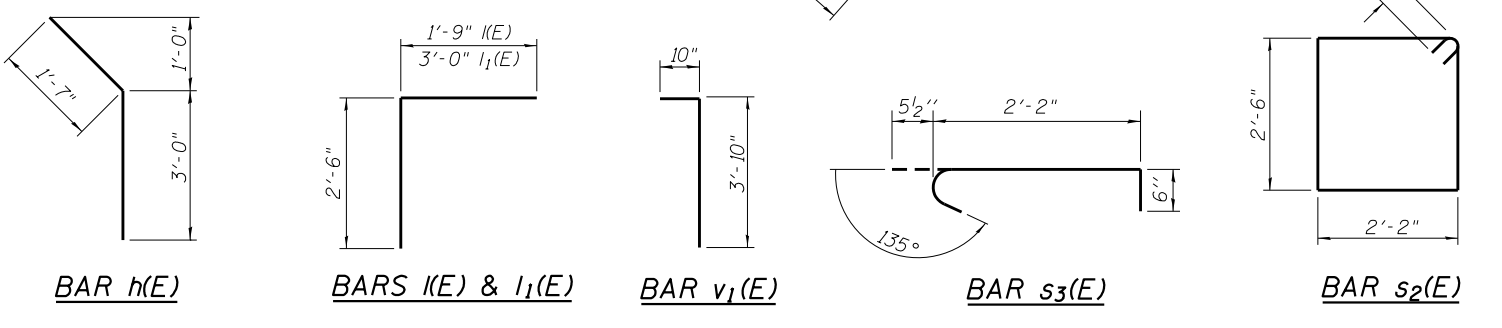


SEC. THRU ABUT.



PLAN

PILE DATA
 Type: HP 12x53
 Nominal Required Bearing: Set in Rock
 Factored Resistance Available: N/A
 Est. Length: 17'-0"
 No. Production Piles: 9
 No. Test Piles: 0
 Min. Rock Embedment = 4'-0"
 See Special Provisions for Subsurface Exploration Requirements

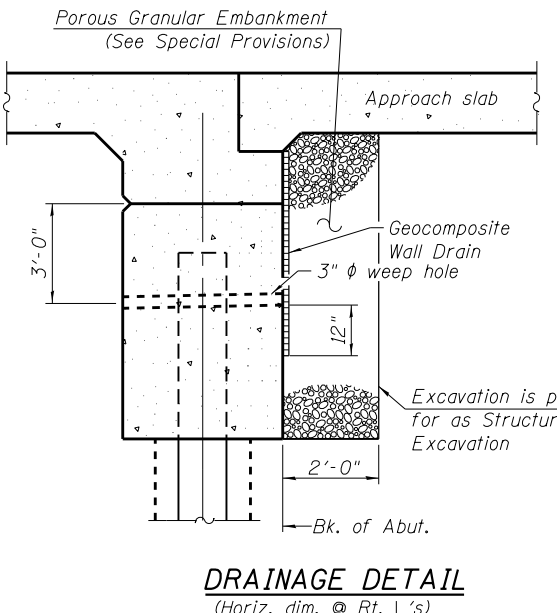


BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	24	#6	4'-7"	
p(E)	18	#6	27'-3"	
p ₁ (E)	18	#6	20'-9"	
p ₂ (E)	2	#7	27'-3"	
p ₃ (E)	2	#7	20'-9"	
k(E)	6	#5	4'-3"	L
l ₁ (E)	6	#5	5'-6"	L
s ₂ (E)	37	#5	10'-3"	
s ₃ (E)	18	#5	3'-2"	
u(E)	8	#6	6'-3"	
u ₁ (E)	1	#5	6'-8"	
u ₂ (E)	4	#5	6'-8"	
u ₃ (E)	8	#6	9'-3"	
v(E)	101	#5	7'-0"	
v ₁ (E)	159	#5	4'-8"	

Structure Excavation	Cu. Yd.	93.6
Concrete Structures	Cu. Yd.	33.8
Concrete Encasement	Cu. Yd.	7.3
Porous Granular Embankment	Cu. Yd.	23.7
Reinforcement Bars, Epoxy Coated	Pound	3,910
Bar Splicers	Each	20
Furnishing HP 12x53 Piles	Foot	153
Setting Piles in Rock	Each	9

For details of piles see Sheet 17 of 42.
NOTES:
 See Structural Sheet 15 for Bars: u(E), u₁(E), u₂(E) and u₃(E) Details.



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

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REVISION	DATE	BY	REMARKS

DRAWN: DAN
 CHECKED: EEL
 APPROVED: MRL

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DEPARTMENT OF TRANSPORTATION

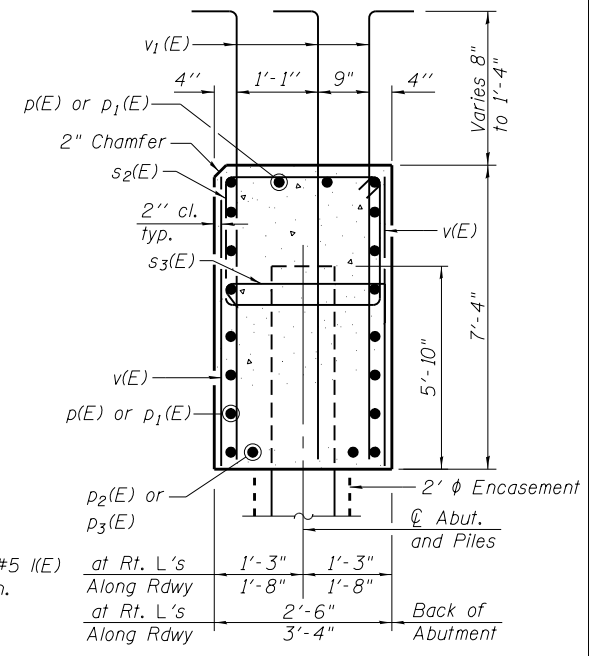
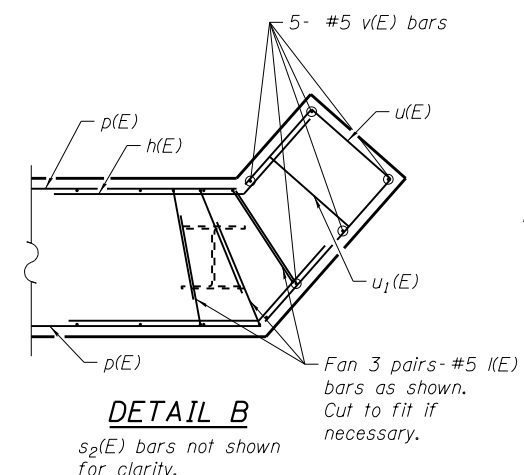
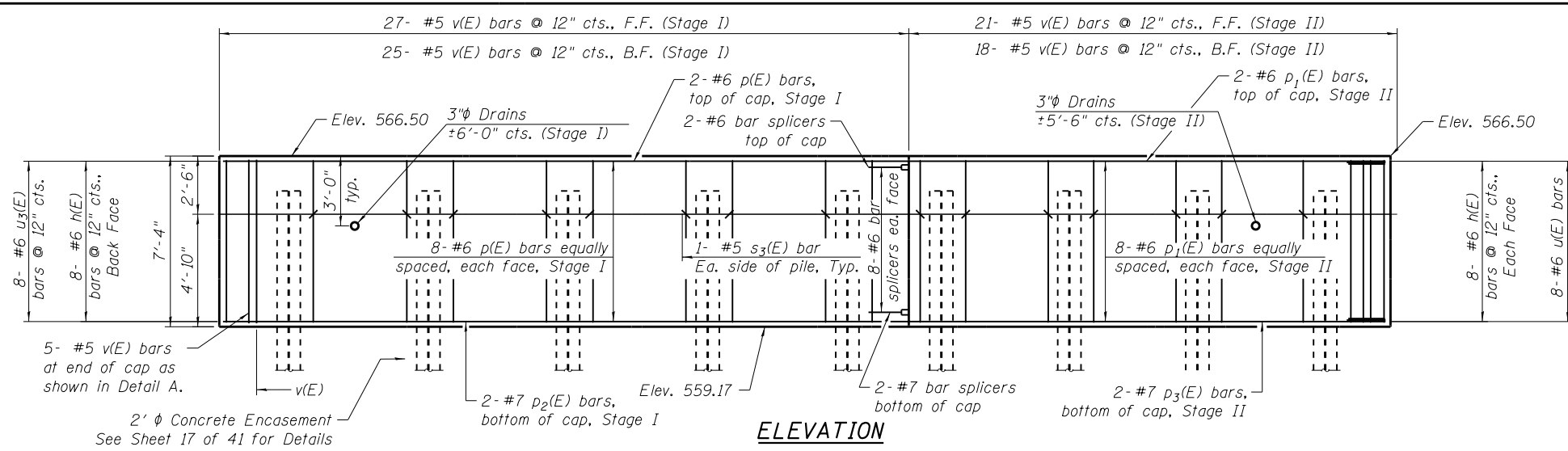
WILLETT HOFMANN & ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 1000 ESSLINGTON ROAD, JOLIET, IL 60435
 T: 815-729-2229 DESIGN FIRM: #184-000918

ROCKDALE
 79 MOEN AVENUE
 ROCKDALE, IL 60436

EAST ABUTMENT SHEET
STRUCTURE AT STATION 212+82.45
 STRUCTURAL SHEET NO. 14 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	211

CONTRACT 61E00

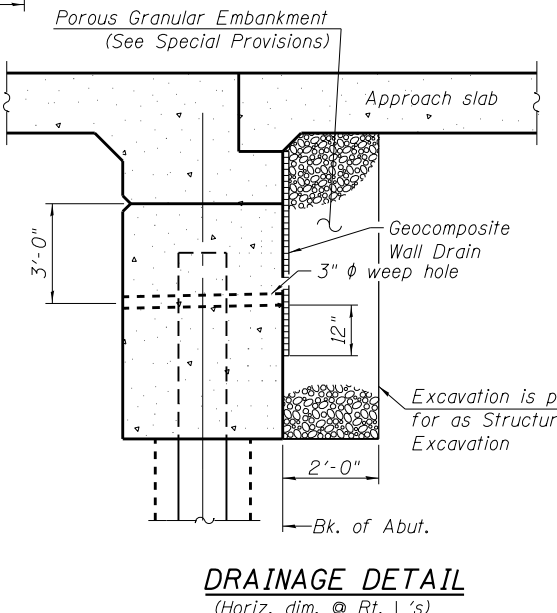
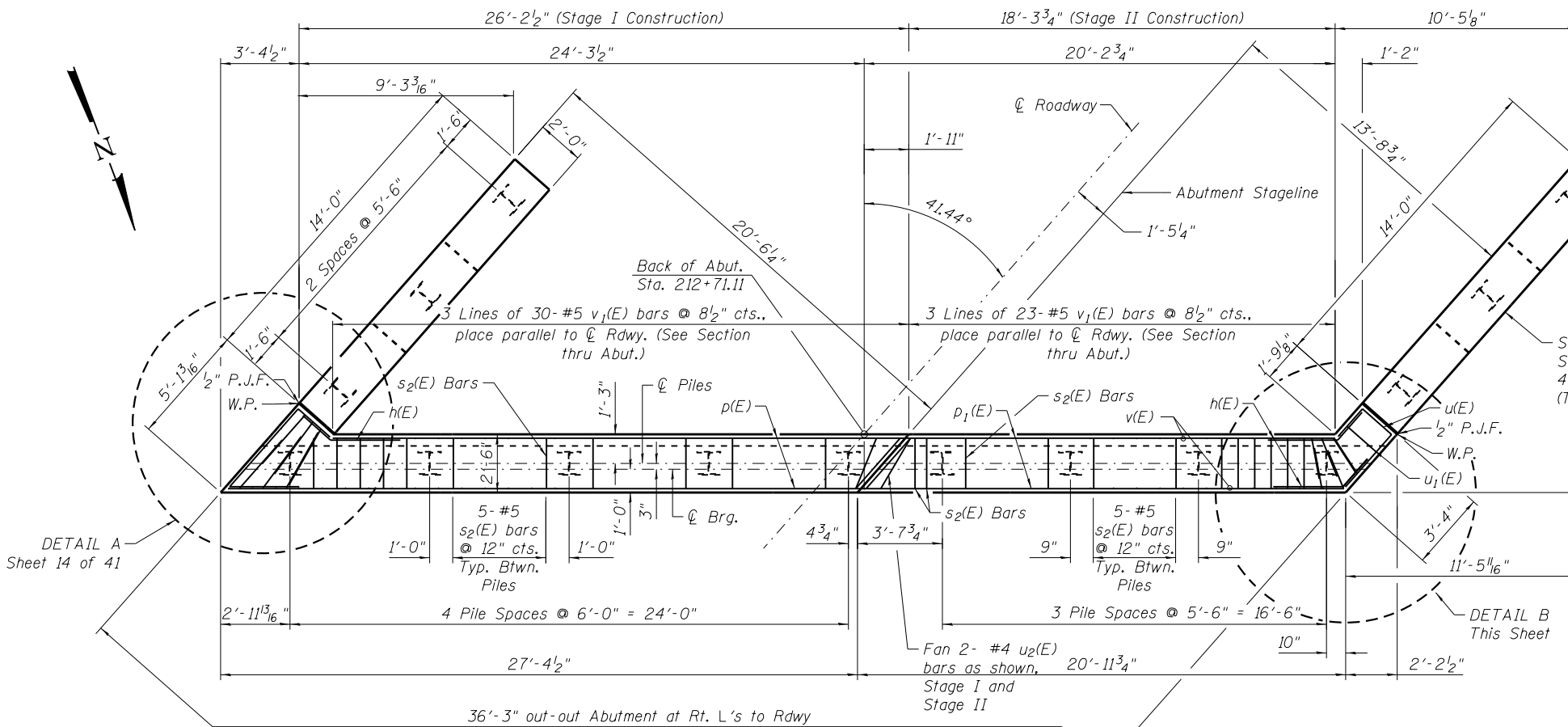


BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	24	#6	4'-7"	
p(E)	18	#6	27'-3"	
p ₁ (E)	18	#6	20'-9"	
p ₂ (E)	2	#7	27'-3"	
p ₃ (E)	2	#7	20'-9"	
(E)	6	#5	4'-3"	L
l ₁ (E)	6	#5	5'-6"	L
s ₂ (E)	37	#5	10'-3"	□
s ₃ (E)	18	#5	3'-2"	┌
u(E)	8	#6	6'-3"	┌
u ₁ (E)	1	#5	6'-8"	┌
u ₂ (E)	4	#5	6'-8"	┌
u ₃ (E)	8	#6	9'-3"	┌
v(E)	101	#5	7'-0"	
v ₁ (E)	159	#5	4'-8"	
Structure Excavation		Cu. Yd.	93.6	
Concrete Structures		Cu. Yd.	33.8	
Concrete Encasement		Cu. Yd.	7.3	
Porous Granular Embankment		Cu. Yd.	23.7	
Reinforcement Bars, Epoxy Coated		Pound	3,910	
Bar Splicers		Each	20	
Furnishing HP 12x53 Piles		Foot	153	
Setting Piles in Rock		Each	9	

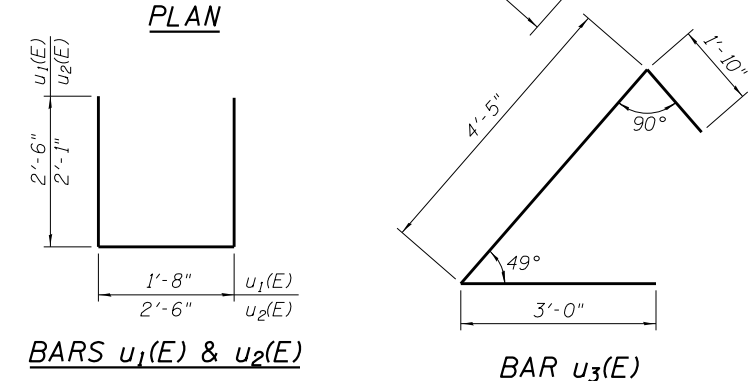
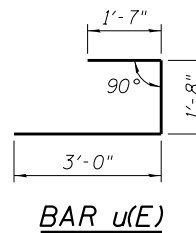
For details of piles see Sheet 17 of 42.

NOTES:
 See Structural Sheet 14 for Bars: h(E), (E), l₁(E), s₂(E), s₃(E) & v₁(E) Details.



PILE DATA

Type: HP 12x53
 Nominal Required Bearing: Set in Rock
 Factored Resistance Available: N/A
 Est. Length: 17'-0"
 No. Production Piles: 9
 No. Test Piles: 0
 Min. Rock Embedment = 4'-0"
 See Special Provisions for Subsurface Exploration Requirements



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REVISION	DATE	BY	REMARKS

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 1000 ESSINGTON ROAD, JOLIET, IL 60435
 T: 815-729-2229 DESIGN FIRM: #184-000918

ROCKDALE
 79 MOEN AVENUE
 ROCKDALE, IL 60436

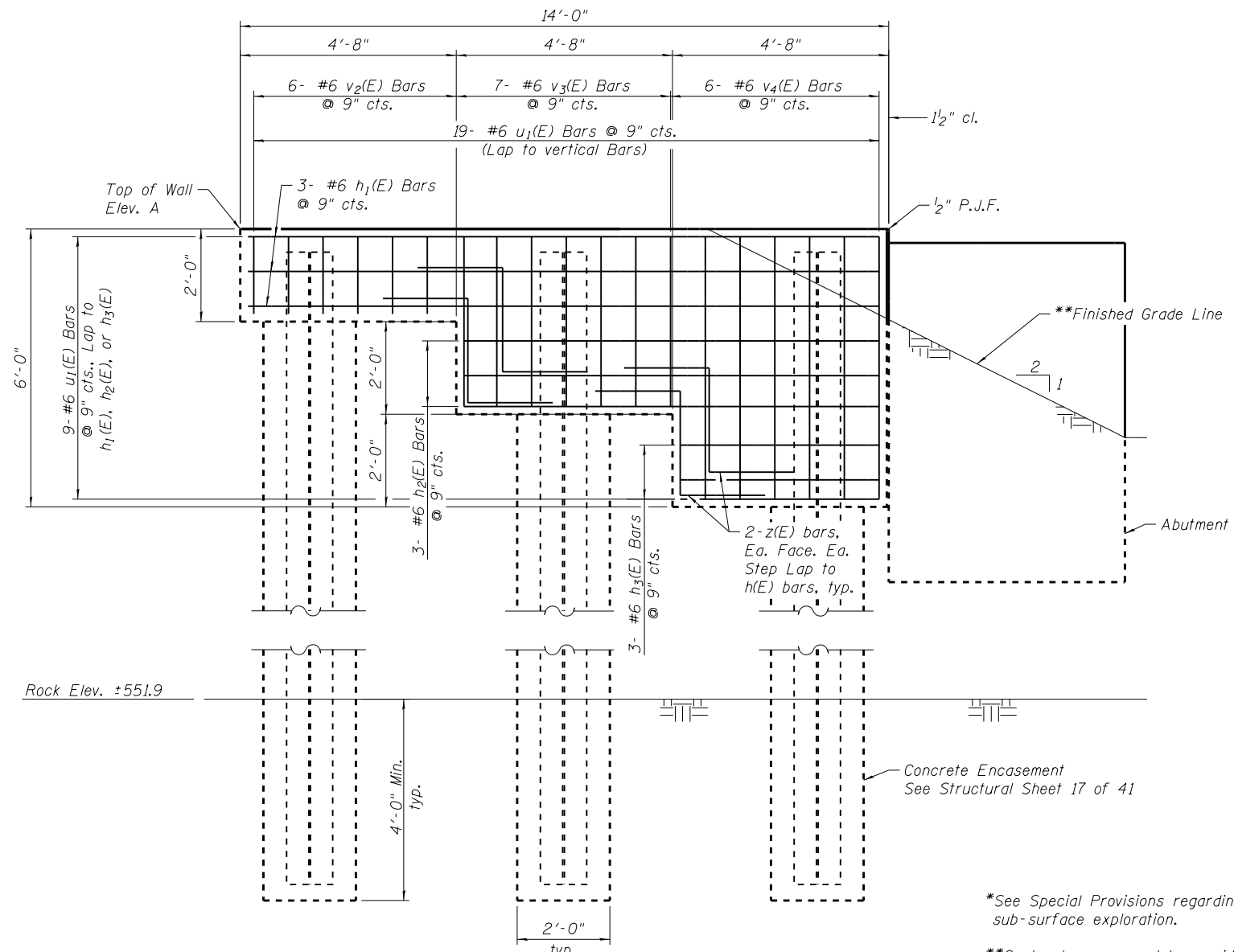
**WEST ABUTMENT SHEET
 STRUCTURE AT STATION 212+82.45**

STRUCTURAL SHEET NO. 15 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	212

CONTRACT 61E00

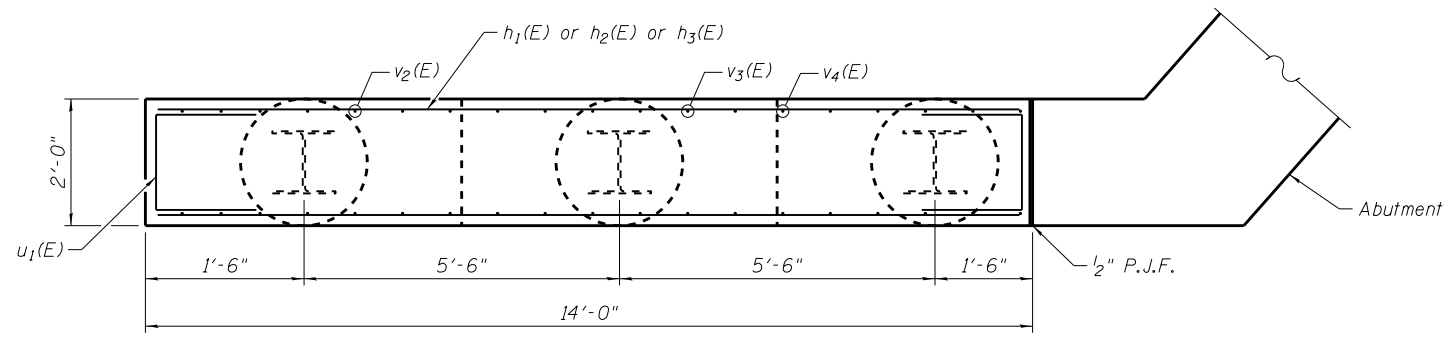
WHA* 1189J16 ILLINOIS



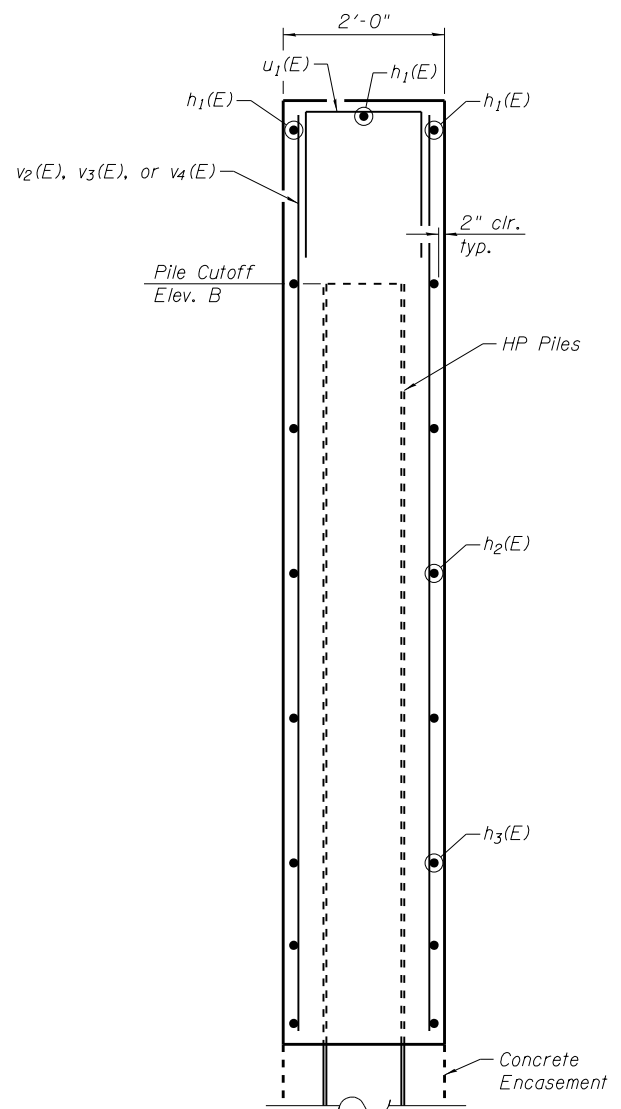
PILE DATA (Per Wingwall)
 Type: HP 12x53
 Nominal Required Bearing: Set in Rock
 Factored Resistance Available: N/A
 Est. Length: 19'-0"
 No. Production Piles: 3
 No. Test Piles: 0

WINGWALL ELEVATION

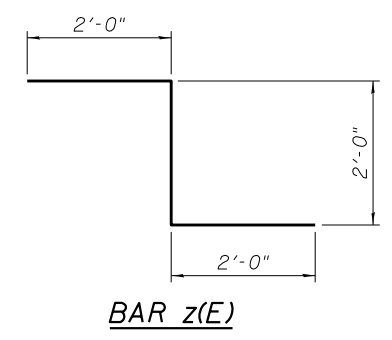
*See Special Provisions regarding sub-surface exploration.
 **Contractor may need to provide temporary soil retention on north side of structure. Cost considered incidental to Concrete Structures.



WINGWALL DETAIL - PLAN
 Northwest & Southeast corner shown
 Southwest & Northeast corner similar



SECTION THRU WINGWALL



BAR z(E)

NOTE:
 Approach slab to be poured over top of wingwalls.
 Provide rough top finish for wings.

WINGWALL ELEVATIONS

Location	Top of Wingwall A	Pile Cut Off B
NE	567.67	567.17
NW	567.55	567.05
SE	566.94	566.44
SW	566.78	566.28

BILL OF MATERIAL - (Per Wingwall)

Bar	No.	Size	Length	Shape
h1(E)	7	#6	13'-8"	—
h2(E)	6	#6	9'-0"	—
h3(E)	6	#6	4'-4"	—
u1(E)	28	#6	6'-8"	□
v2(E)	12	#6	1'-8"	—
v3(E)	14	#6	3'-9"	—
v4(E)	12	#6	5'-8"	—
z(E)	8	#6	6'-0"	┌
Structure Excavation			Cu. Yd.	13.3
Concrete Structures			Cu. Yd.	4.3
Concrete Encasement			Cu. Yd.	5.3
Porous Granular Embankment			Cu. Yd.	4.2
Reinforcement Bars, Epoxy Coated			Pound	830
Furnishing HP 12x53 Piles			Foot	57
Setting Piles in Rock			Each	3

NOTES:
 For details of piles see Structural Sheet 17 of 42.
 See Structural Sheet 15 of 42 for u1(E) bar detail.

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REVISION	DATE	BY	REMARKS

DRAWN DAN
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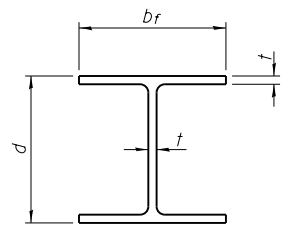
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WILLET HOFMANN & ASSOCIATES INC
 ENGINEERING ARCHITECTURE LAND SURVEYING
 1000 ESSINGTON ROAD, JOLIET, IL 60435
 T: 815-729-2229 DESIGN FIRM: #184-000918

ROCKDALE
 79 MOEN AVENUE
 ROCKDALE, IL 60436

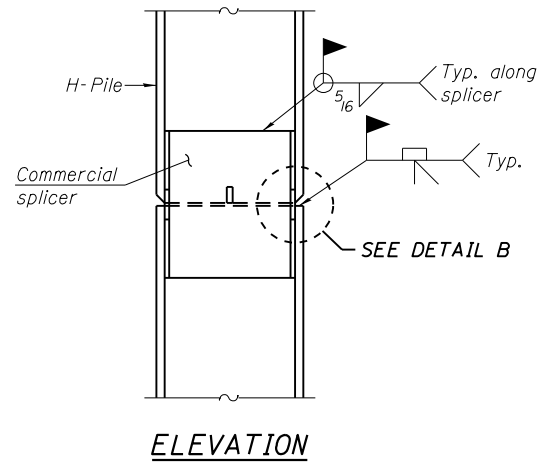
WINGWALL DETAILS
 STRUCTURE AT STATION 212+82.45
 STRUCTURAL SHEET NO. 16 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	213
CONTRACT 61E00				
WHA* 1189J16		ILLINOIS		

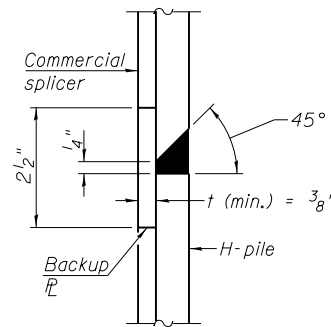


STEEL PILE TABLE

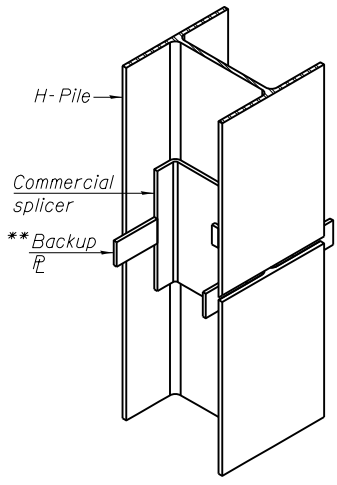
Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"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



ELEVATION

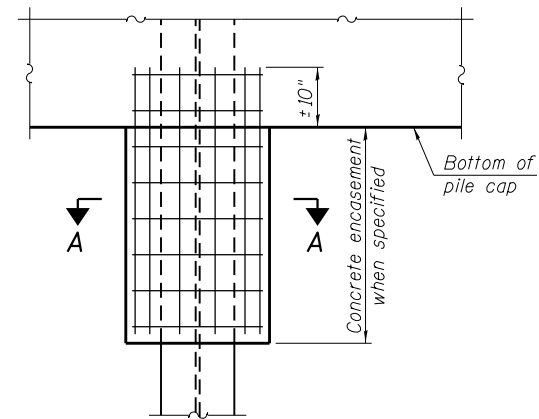


DETAIL "B"

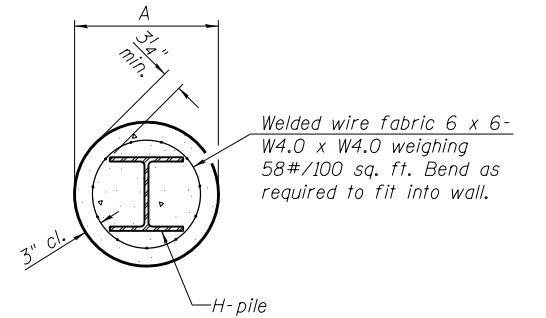


ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE

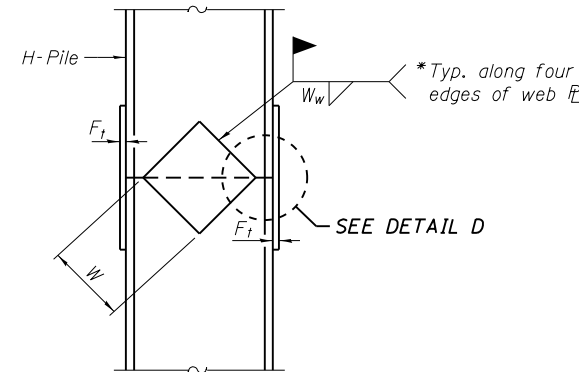


ELEVATION

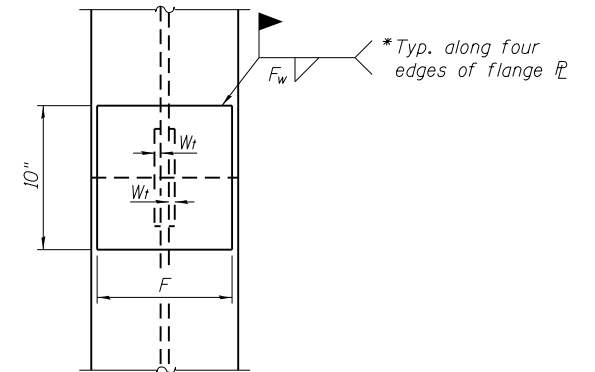


SECTION A-A

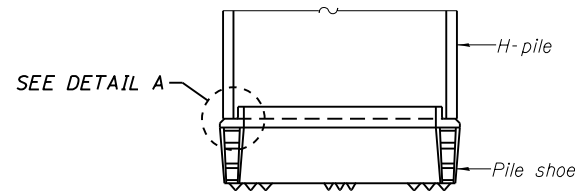
INDIVIDUAL PILE CONCRETE ENCASUREMENT
(Forms for encasement may be omitted when soil conditions permit).



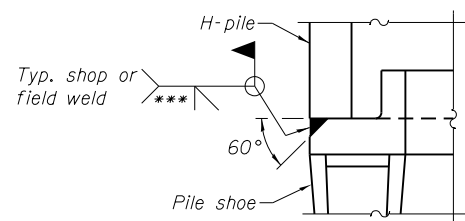
ELEVATION



END VIEW

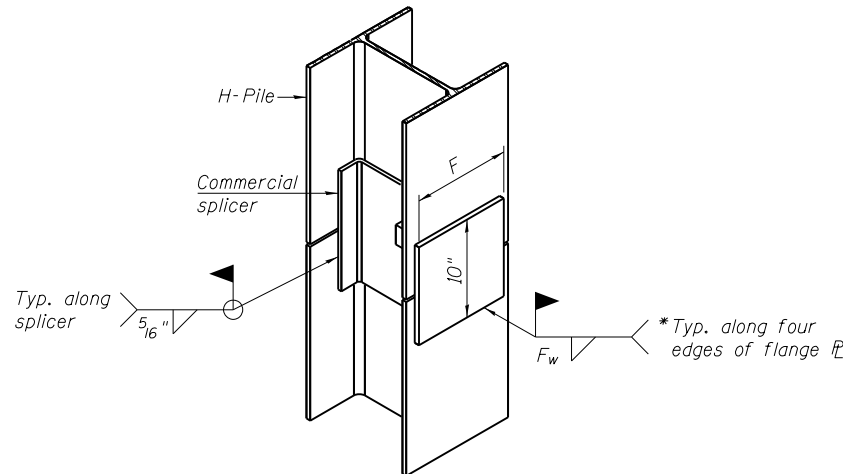


ELEVATION



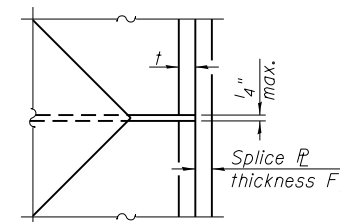
DETAIL A

H-PILE SHOE ATTACHMENT



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE



DETAIL D

WELDED PLATE FIELD SPLICE

Designation	F	F _t	F _w	W	W _t	W _w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5 1/2"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5 1/2"	1/2"
x89	12 1/2"	3/4"	1 1/16"	7 3/4"	5 1/2"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5 1/2"	1/2"
HP 12x84	10"	7/8"	1 1/16"	6 1/2"	5 1/2"	1/2"
x74	10"	7/8"	1 1/16"	6 1/2"	5 1/2"	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"

GENERAL NOTES:

- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plate 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 = S:\PROJECTS\2016\1189J16_RK_Moen\DESIGN\STRUCT\20_Drawings\Station 212+82\1189J16_HP_Pile_Details.dgn

REVISION	DATE	BY	REMARKS	DRAWN
				RDA
				EEL
				MRL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLET HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLIET, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-000918

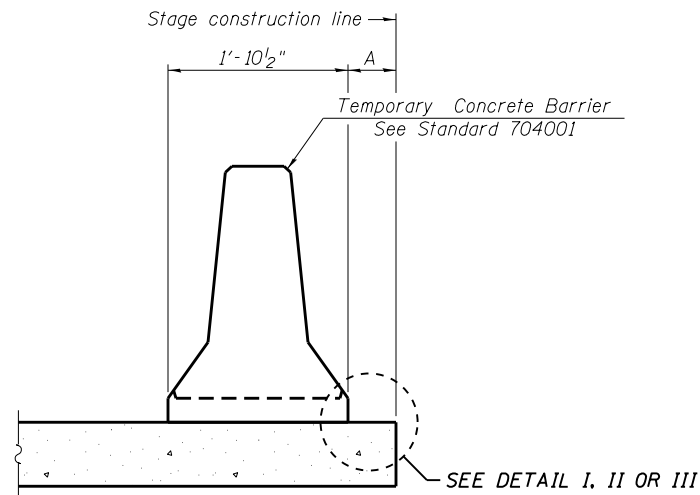
ROCKDALE
79 MOEN AVENUE
ROCKDALE, IL 60436

HP PILE DETAILS
STRUCTURE AT STATION 212 + 82.45
STRUCTURAL SHEET NO. 17 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	214

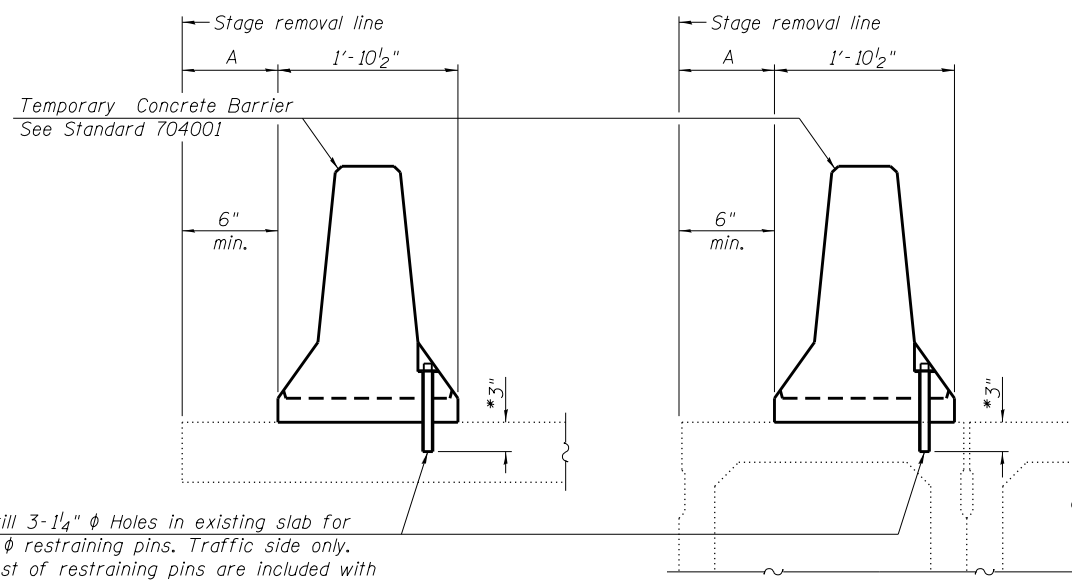
CONTRACT 61E00

WHA* 1189J16 ILLINOIS



When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

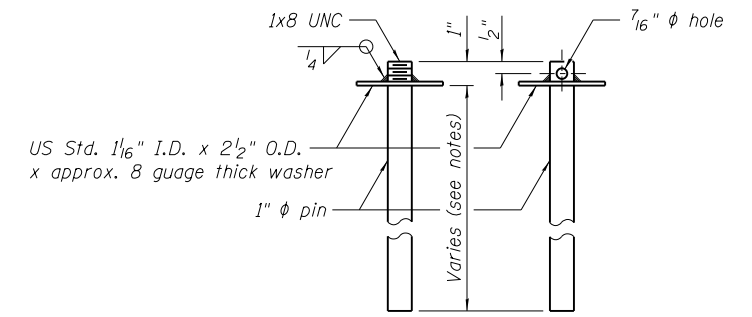
NEW SLAB OR NEW DECK BEAM



Drill 3-1/4" ϕ Holes in existing slab for 1" ϕ restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

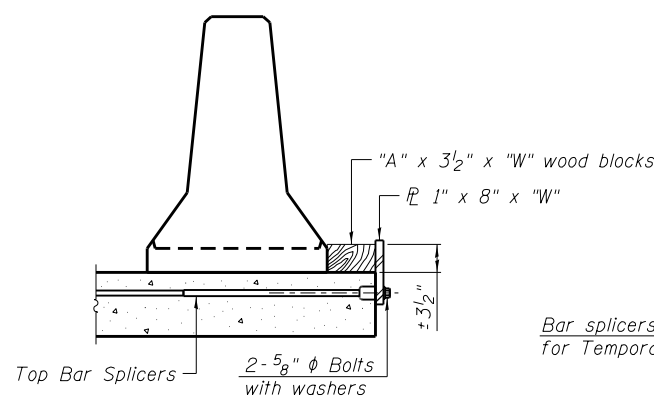
EXISTING DECK BEAM



RESTRAINING PIN

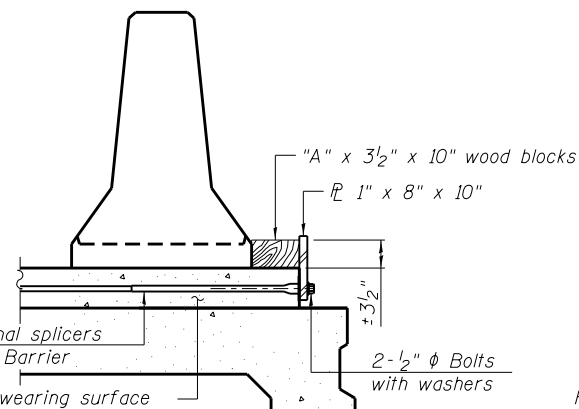
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

SECTIONS THRU SLAB OR DECK BEAM

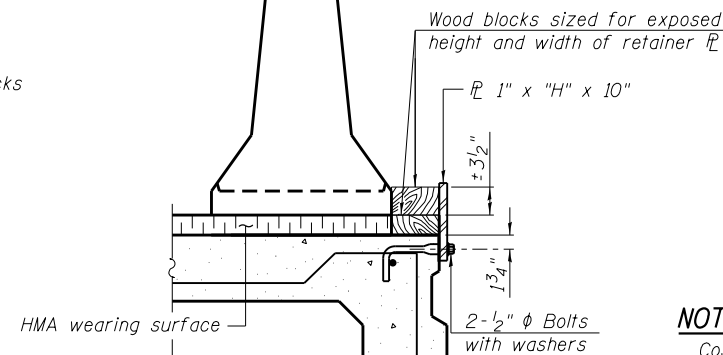


DETAIL I

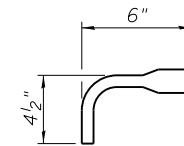
Bar splicers and additional splicers for Temporary Concrete Barrier



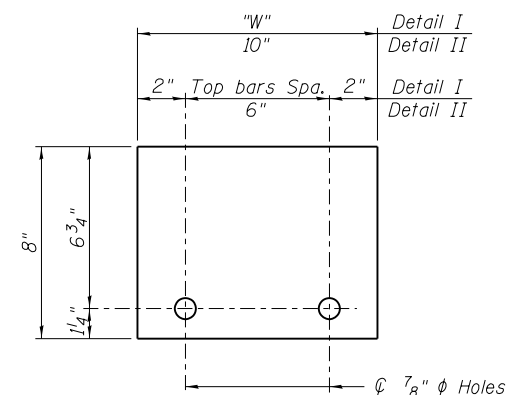
DETAIL II



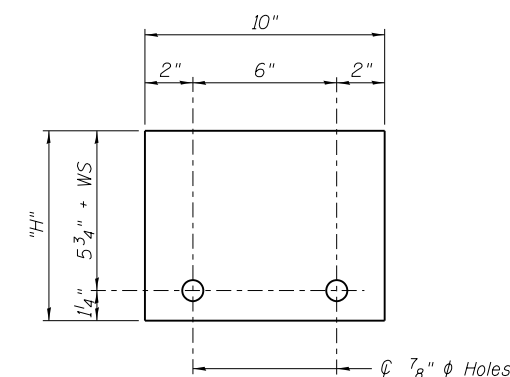
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER 1" x 8" x "W"
(Detail I and II)



STEEL RETAINER 1" x "H" x 10"
(Detail III)

NOTES:

- Cost of retainer assembly is included with Temporary Concrete Barrier.
- A retainer assembly shall be located at the approximate ϕ of each temporary concrete barrier.
- The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
- When the 'A' dimension is less than 1'2", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.
- Detail I - Installation for a new bridge deck or bridge slab.
- Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
- Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

R-27 8-11-2017

FILE = S:\PROJECTS\2016\1189J16_RK_Moen\DESIGN\STRUCT\20_Drawings\Station 212+82\1189J16_Temporary Concrete Barrier For Stage Construction.dgn

REVISION	DATE	BY	REMARKS

DRAWN	RDA
CHECKED	EEL
APPROVED	MRL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

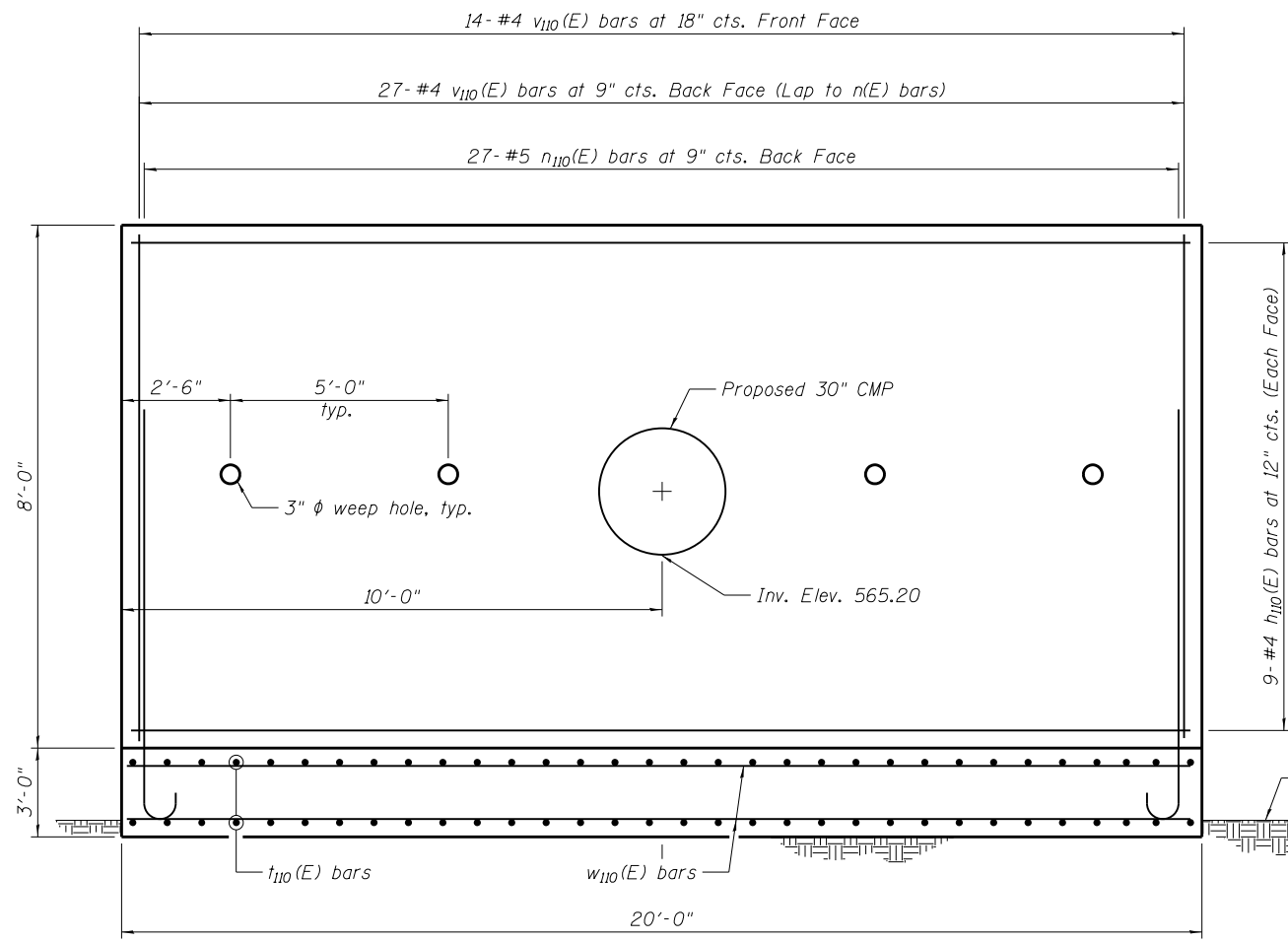


TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE AT STATION 212+82.45

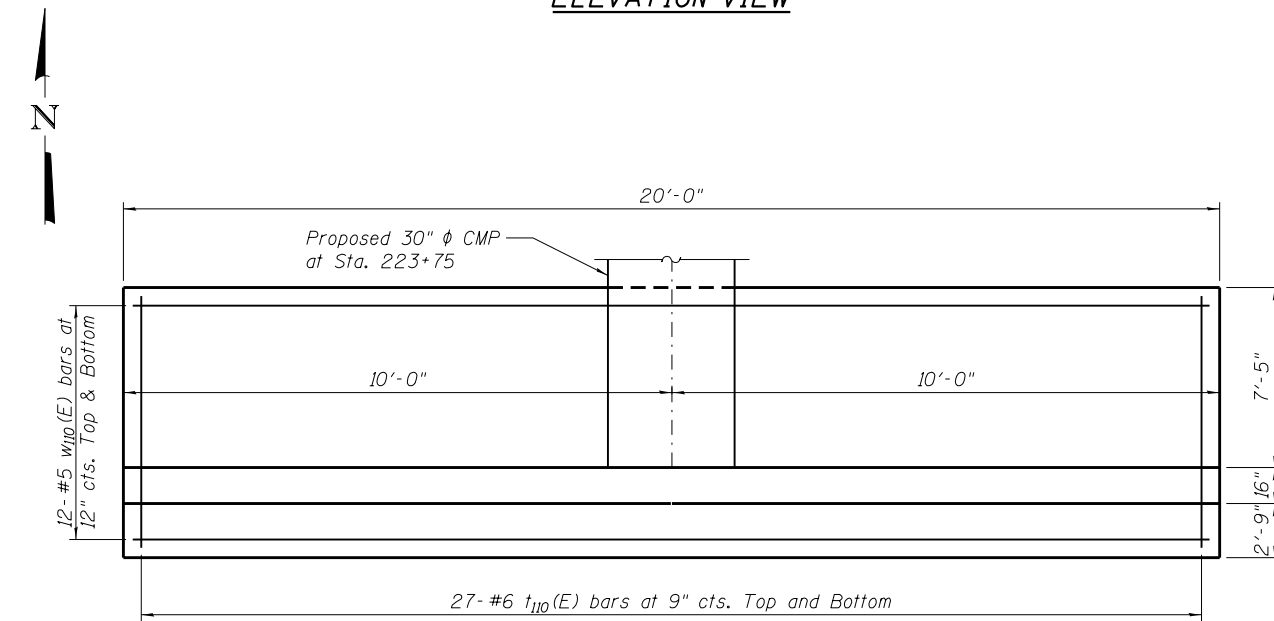
STRUCTURAL SHEET NO. 18 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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WHA* 1189J16 ILLINOIS			CONTRACT 61E00	

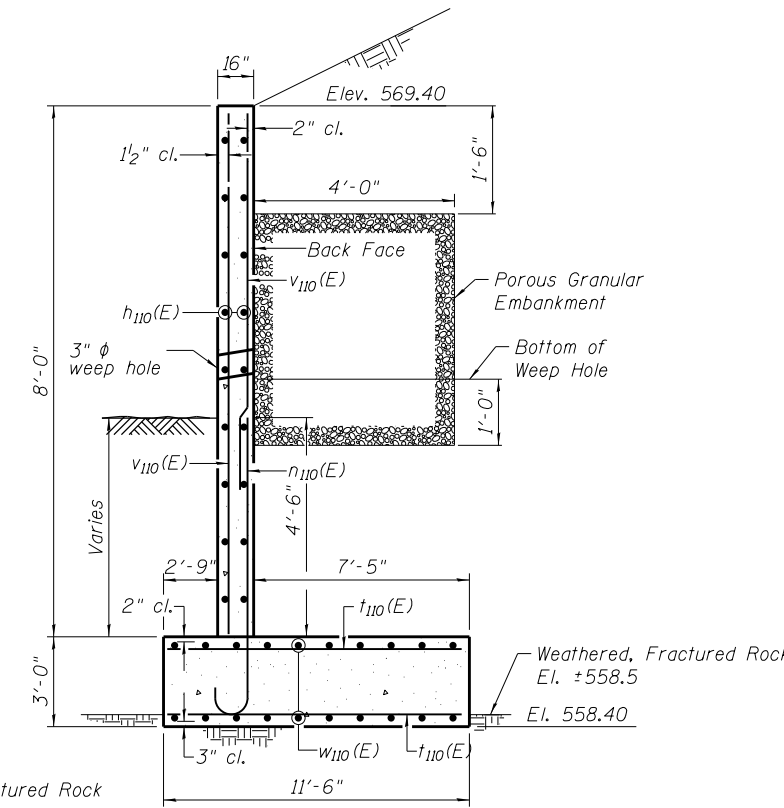
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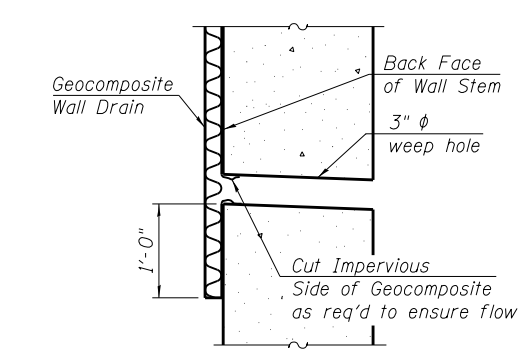
ELEVATION VIEW



PLAN VIEW



SECTION VIEW

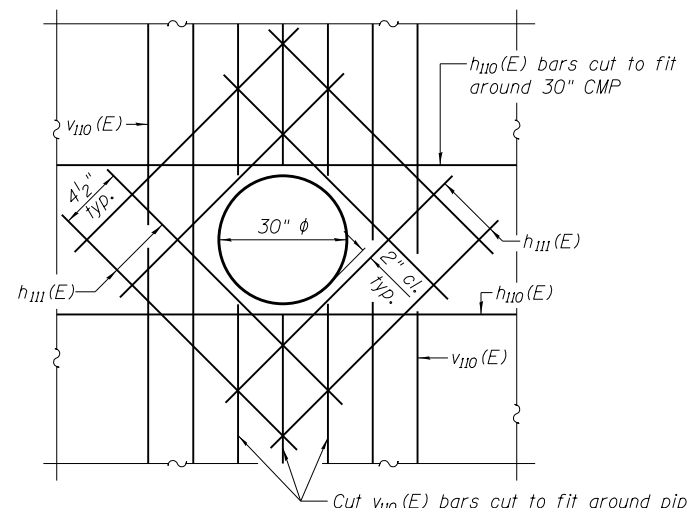


WEEP HOLE DRAIN DETAIL

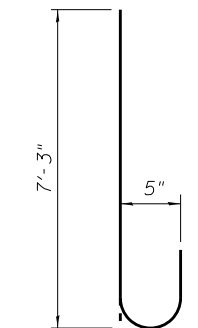
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_{110}(E)$	18	#4	19'-8"	—
$h_{111}(E)$	16	#4	4'-6"	—
$n_{110}(E)$	27	#5	7'-10"	⌋
$t_{110}(E)$	54	#6	11'-2"	—
$v_{110}(E)$	41	#4	7'-10"	—
$w_{110}(E)$	24	#5	19'-8"	—
Porous Granular Embankment			Cu. Yd.	6
Structure Excavation			Cu. Yd.	113
Reinforcement Bars, Epoxy Coated			Pound	2,120
Concrete Structures (Retaining Wall)			Cu. Yd.	33.5
Geocomposite Wall Drain			Sq. Yd.	34.3

NOTES:
 Max. Applied Service Bearing Pressure (Q_{max}) = 2,000 psf
 All exposed edges shall be chamfered $\frac{3}{4}$ " unless otherwise noted.
 Groundwater Elevation at Completion of Boring
 Approximateley 565.0



30" PIPE PENETRATION DETAIL



BAR $n_{110}(E)$
MIN. LAP
 #4 bar = 2'-7"
 #5 bar = 3'-4"



DATE: 3/1/18
 EXPIRES 11/30/18

REVISION	DATE	BY	REMARKS

DRAWN: RDA
 CHECKED: EEL
 APPROVED: MRL

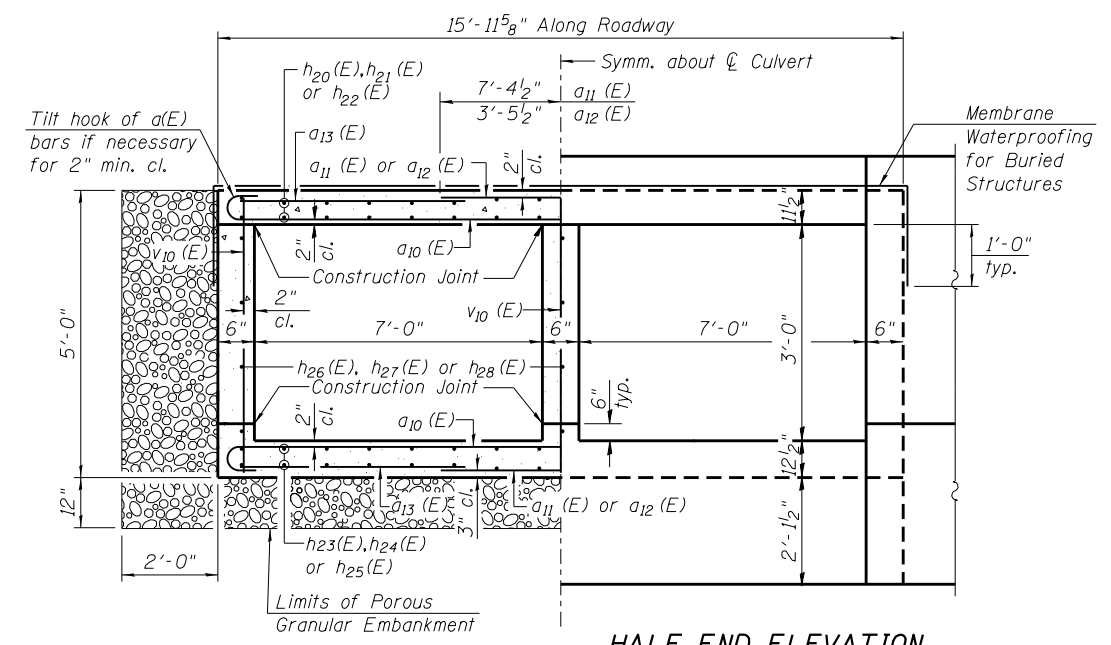
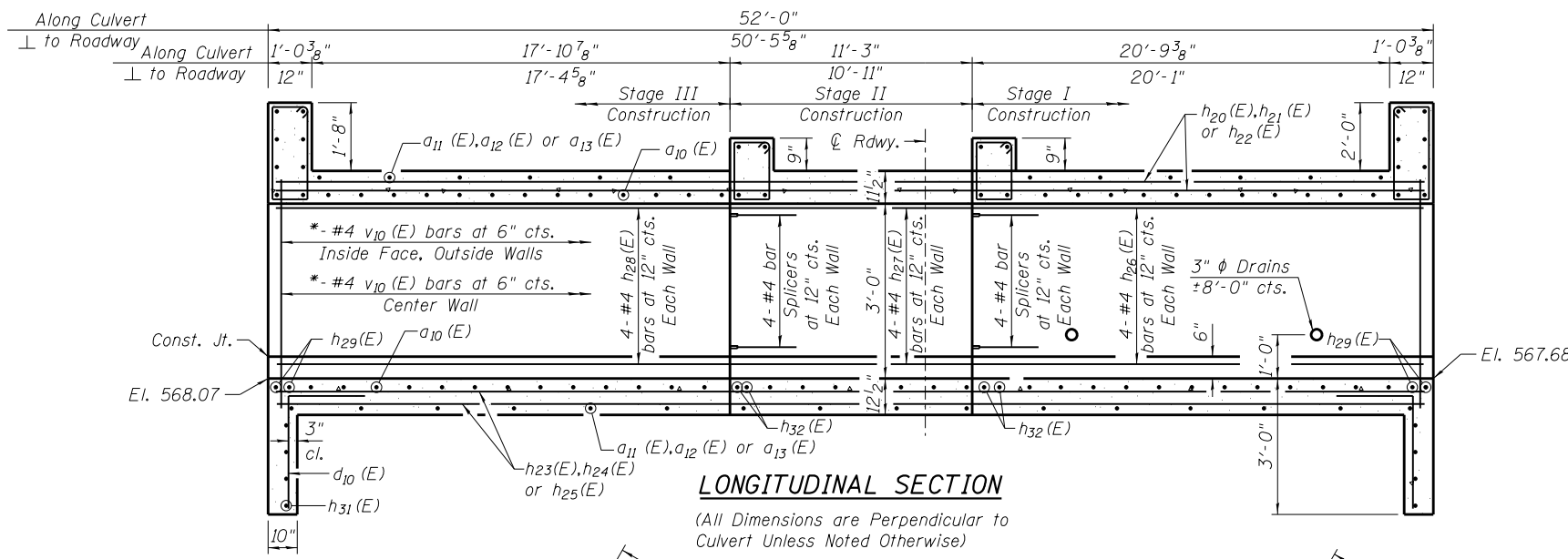
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLET HOFMANN & ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 1000 ESSINGTON ROAD, JOLIET, IL 60435
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ROCKDALE
 79 MOEN AVENUE
 ROCKDALE, IL 60436

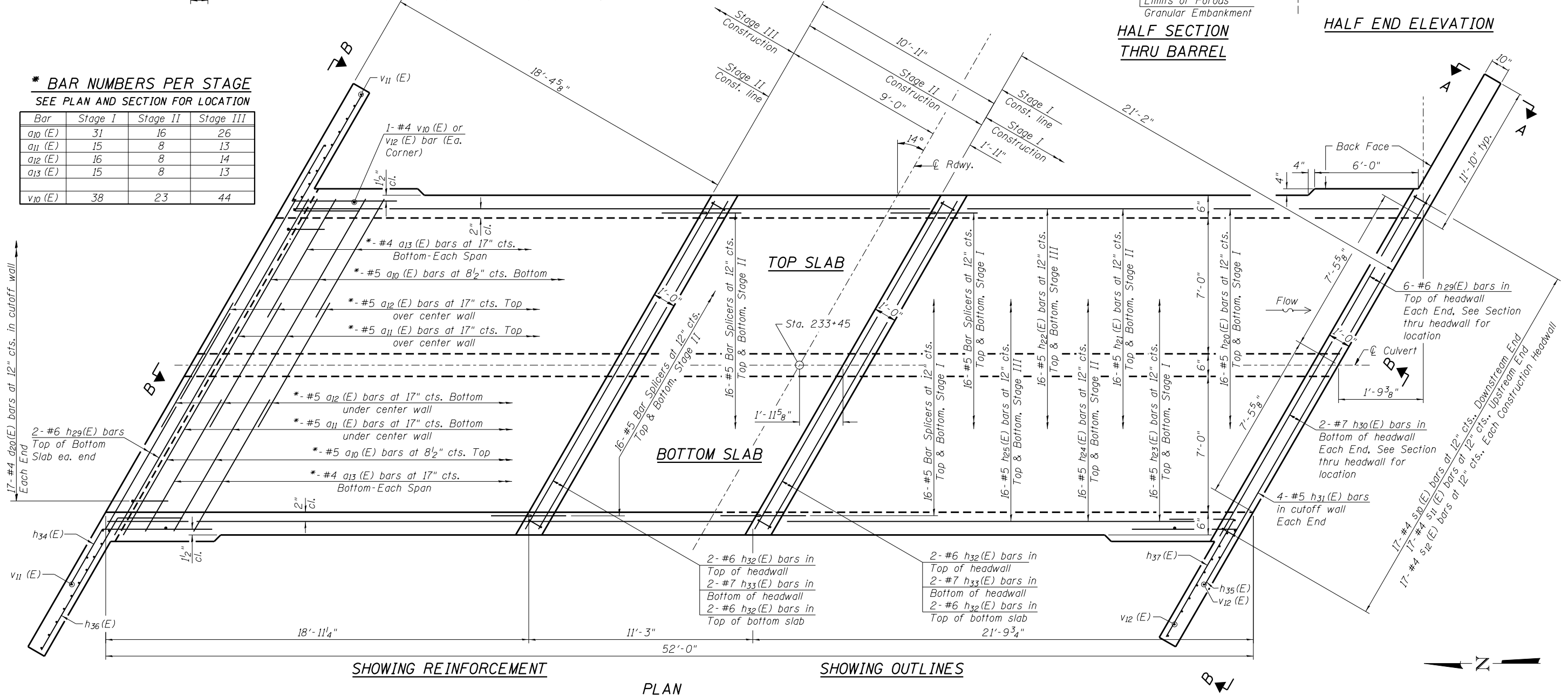
RETAINING WALL DETAILS
STA. 223 + 75
 STRUCTURAL SHEET NO. 19 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	216
WHA* 1189J16 ILLINOIS			CONTRACT 61E00	



*** BAR NUMBERS PER STAGE**
SEE PLAN AND SECTION FOR LOCATION

Bar	Stage I	Stage II	Stage III
a ₁₀ (E)	31	16	26
a ₁₁ (E)	15	8	13
a ₁₂ (E)	16	8	14
a ₁₃ (E)	15	8	13
v ₁₀ (E)	38	23	44



SHOWING REINFORCEMENT

SHOWING OUTLINES

PLAN

FILE = S:\PROJECTS\2016\1189J16.RK.Moen\DESIGN\STRUCT\20.DRAWINGS\Station 233+45\1189J16.Culvert_Details.dgn

REVISION	DATE	BY	REMARKS

DRAWN RDA
CHECKED EEL
APPROVED MRL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLET HOFMANN & ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLIET, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-000918

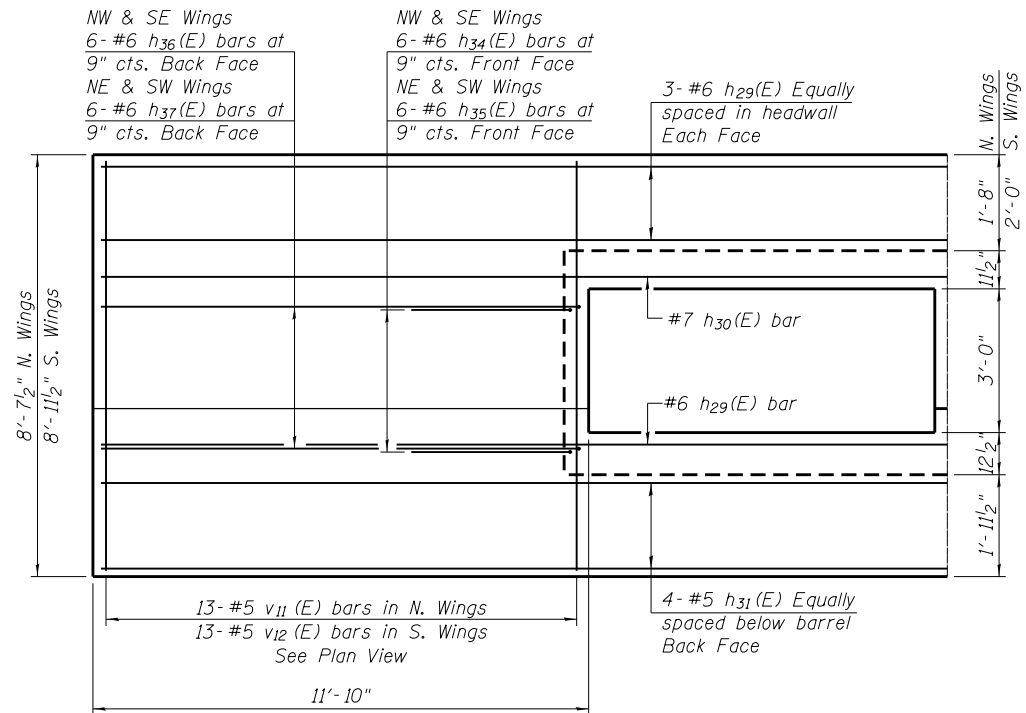
ROCKDALE
79 MOEN AVENUE
ROCKDALE, IL 60436

CULVERT DETAILS
STATION 233 + 45

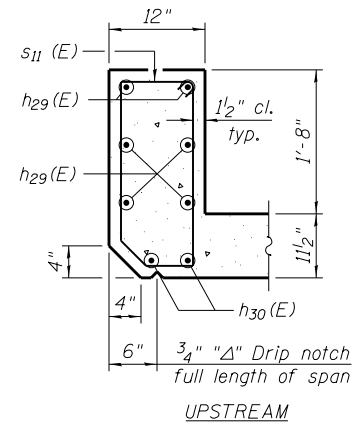
STRUCTURAL SHEET NO. 20 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	217

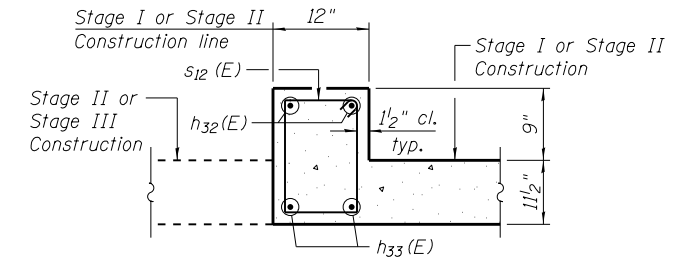
CONTRACT 61E00



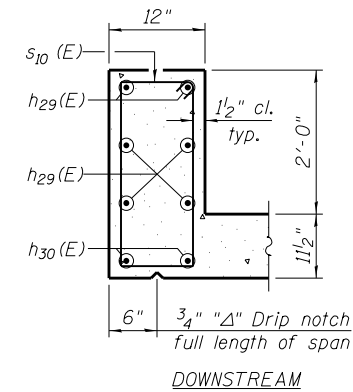
SECTION B-B



UPSTREAM

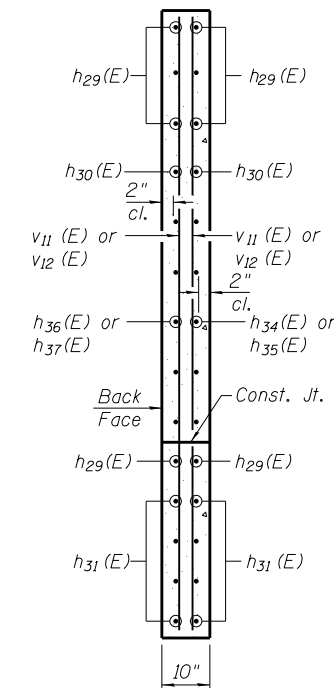


STAGE CONSTRUCTION HEADWALL



DOWNSTREAM

SECTION THRU HEADWALL

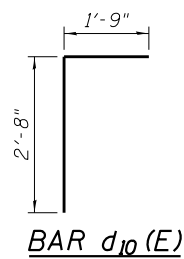


SECTION A-A

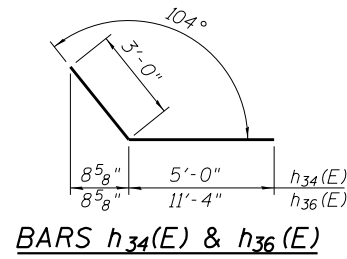
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a10 (E)	146	#5	16'-10"	U
a11 (E)	72	#5	14'-9"	—
a12 (E)	76	#5	6'-11"	—
a13 (E)	144	#4	6'-2"	—
d10 (E)	34	#4	4'-5"	L
h20 (E)	32	#5	21'-6"	—
h21 (E)	32	#5	11'-0"	—
h22 (E)	32	#5	18'-8"	—
h23 (E)	32	#5	21'-6"	—
h24 (E)	32	#5	11'-0"	—
h25 (E)	32	#5	18'-8"	—
h26 (E)	12	#4	21'-6"	—
h27 (E)	12	#4	11'-0"	—
h28 (E)	12	#4	18'-8"	—
h29 (E)	16	#6	38'-3"	—
h30 (E)	4	#7	38'-3"	—
h31 (E)	8	#5	38'-3"	—
h32 (E)	8	#6	15'-7"	—
h33 (E)	4	#7	15'-7"	—
h34 (E)	12	#6	8'-0"	—
h35 (E)	12	#6	8'-0"	—
h36 (E)	12	#6	14'-4"	—
h37 (E)	12	#6	13'-11"	—
s10 (E)	17	#4	7'-7"	□
s11 (E)	17	#4	6'-9"	□
s12 (E)	34	#4	5'-1"	□
v10 (E)	319	#4	4'-8"	—
v11 (E)	26	#5	8'-4"	—
v12 (E)	26	#5	8'-8"	—
Porous Granular Embankment			Cu. Yd.	86
Reinforcement Bars, Epoxy Coated			Pound	13,140
Bar Splicers			Each	152
Concrete Box Culverts			Cu. Yd.	86.1
* Membrane Waterproofing for Buried Structures			Sq. Yd.	107.5

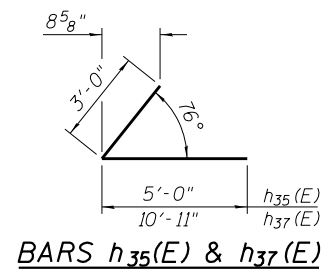
*See Special Provisions



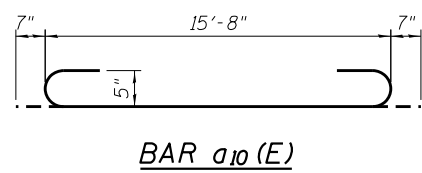
BAR d10 (E)



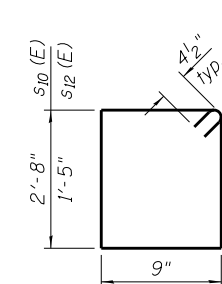
BARS h34 (E) & h36 (E)



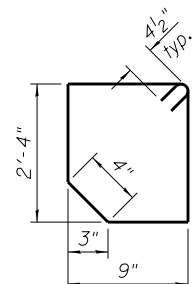
BARS h35 (E) & h37 (E)



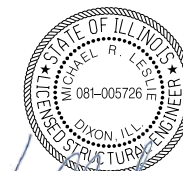
BAR a10 (E)



BAR s10 (E) & s12 (E)



BAR s11 (E)



DATE: 3/1/18
EXPIRES 11/30/18

"I certify that to the best of my knowledge, information and belief, this Culvert Design is structurally adequate for the design loading shown on the plans, the design is an economical one for the style of structure and complies with requirements of the current 'AASHTO Standard Specifications for Highway Bridges'."

DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2016 Interims

LOADING HL - 93

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

DESIGN STRESSES

FIELD UNITS

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

NOTES

NO PRECAST OPTION ALLOWED.

A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.

All exposed edges shall be chamfered 3/4" unless otherwise noted.

FILE = S:\PROJECTS\2016\1189J16_RK_Moen\DESIGN\STRUCT\2D_Drawings\Station 233+45\1189J16_Culvert_Details.dgn

REVISION	DATE	BY	REMARKS

DRAWN	RDA
CHECKED	EEL
APPROVED	MRL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

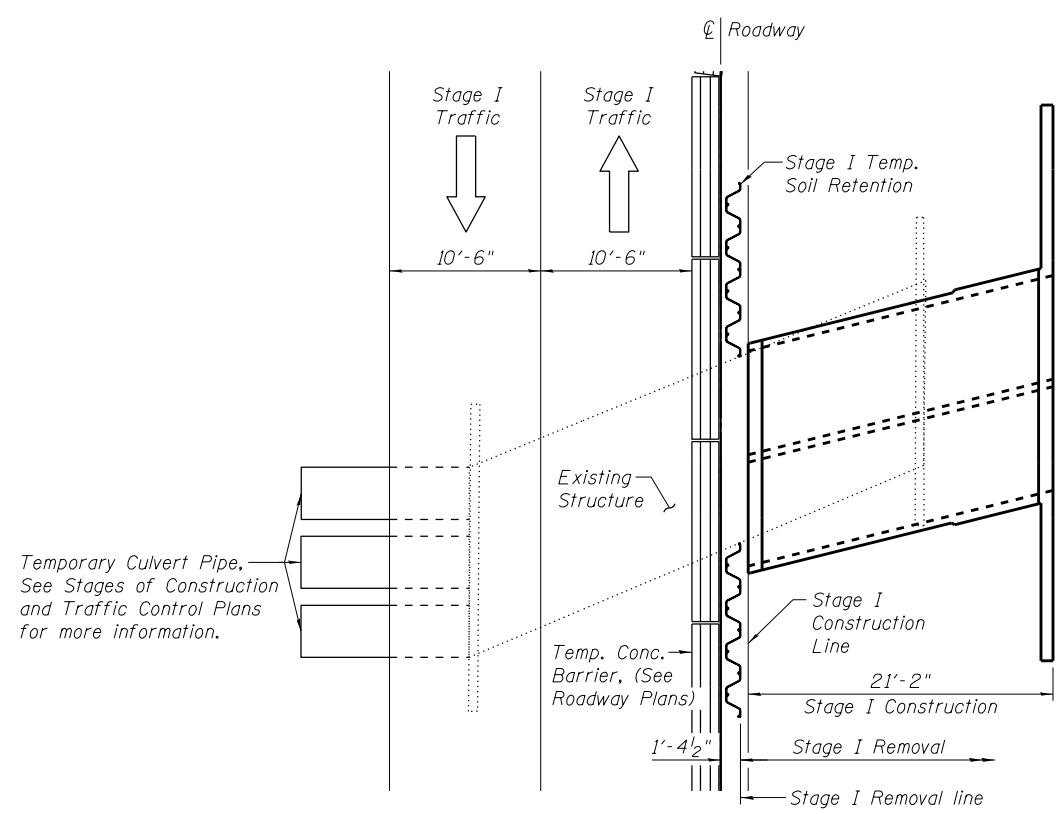


ROCKDALE
79 MOEN AVENUE
ROCKDALE, IL 60436

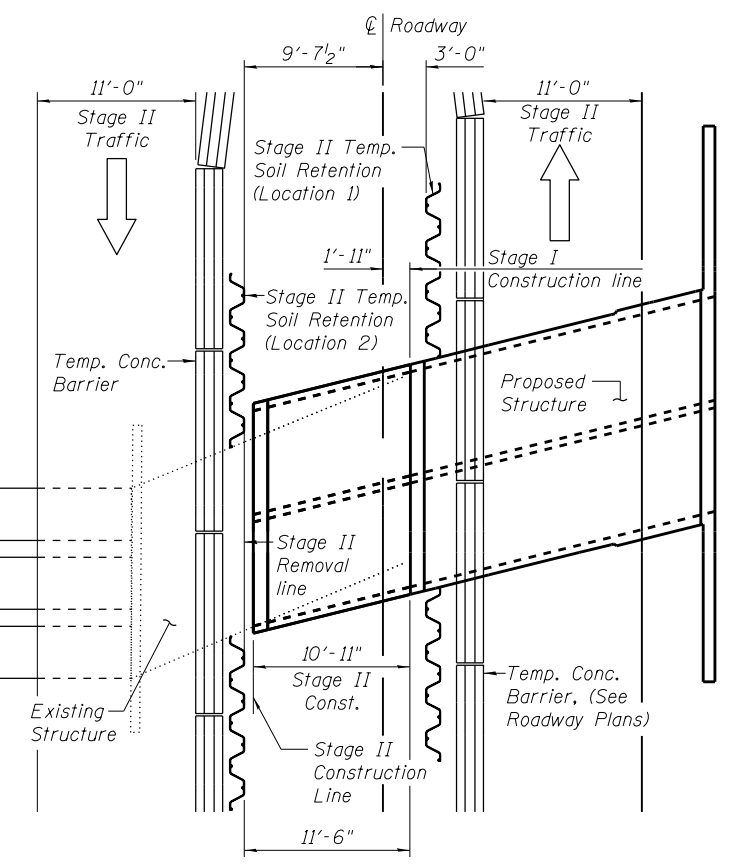
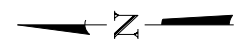
CULVERT DETAILS
STATION 233 + 45
STRUCTURAL SHEET NO. 21 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	218
CONTRACT 61E00			WHA* 1189J16 ILLINOIS	

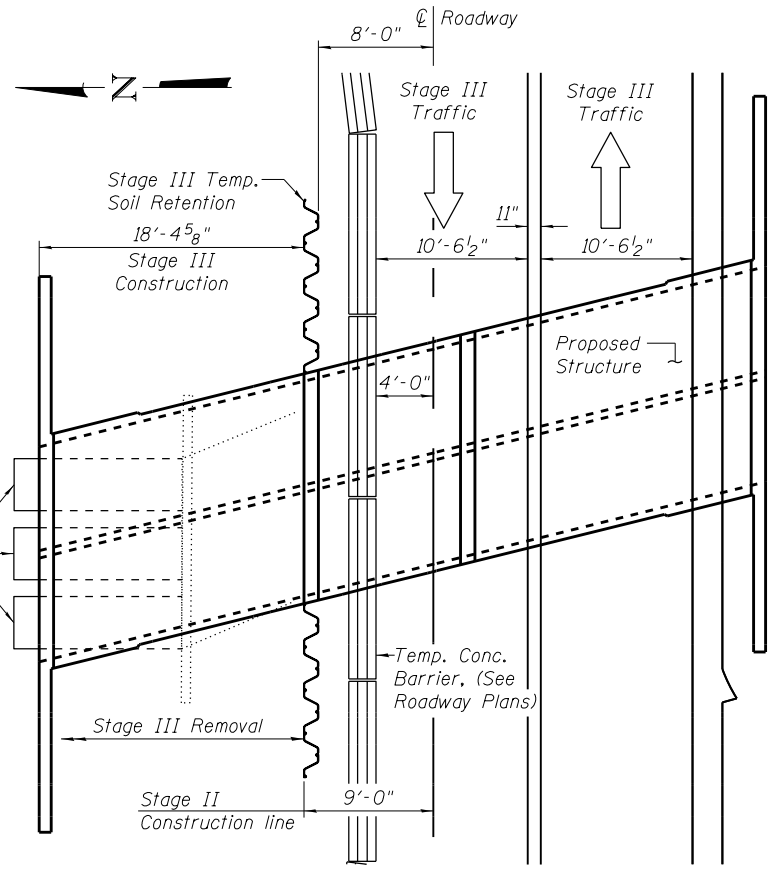
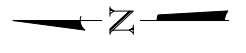
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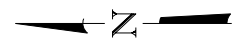
PLAN VIEW - STAGE I



PLAN VIEW - STAGE II



PLAN VIEW - STAGE III



NOTES:

See Structural Sheet 24 of 42 for information on Temporary Soil Retention System.
 Stage I, Stage II and Stage III refer to the Structural Stages and coincide with Stage IV, Stage V and Stage VI of the Roadway plans, respectively.
 Temporary Concrete Barriers shall be provided for stage construction, see Standard 704001. Pay item for "Temporary Concrete Barrier" is included in the roadway plans. See Stages of Construction and Traffic Control Plans for additional details.

SEQUENCE OF CONSTRUCTION:

- 1). Install Temporary Barriers as shown in roadway plans.
- 2). Install Stage I Temporary Soil Retention System and begin Stage I Removal and Excavation.
- 3). After completion of Stage I Removal, begin Stage I Construction.
- 4). Install Stage II Temporary Soil Retention System at Location 1 after completion of Step 3.
- 5). Install Temporary Barriers and switch to Stage II Traffic Configuration.
- 6). Install Temporary Soil Retention System for Stage II at Location 2.
- 7). After completion of Step 6, begin Stage II Removal and Construction.
- 8). Install Stage III Temporary Soil Retention System.
- 9). After completion of Step 8, install Temporary Barriers and switch traffic to Stage III configuration.
- 10). After completion of Step 9, Begin Stage III Removal.
- 11). After completion of Step 10, begin Stage III Construction.
- 12). After completion of Step 11, remove Stage III Temporary Soil Retention.

REVISION	DATE	BY	REMARKS

DRAWN	RDA
CHECKED	EEL
APPROVED	MRL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

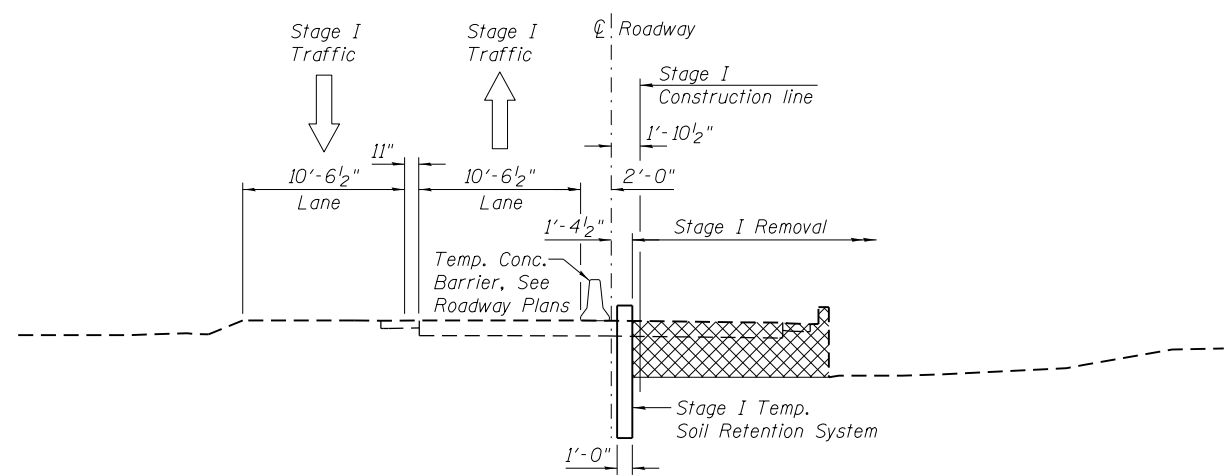
CONSTRUCTION STAGING
STATION 233 + 45

STRUCTURAL SHEET NO. 22 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT 61E00				

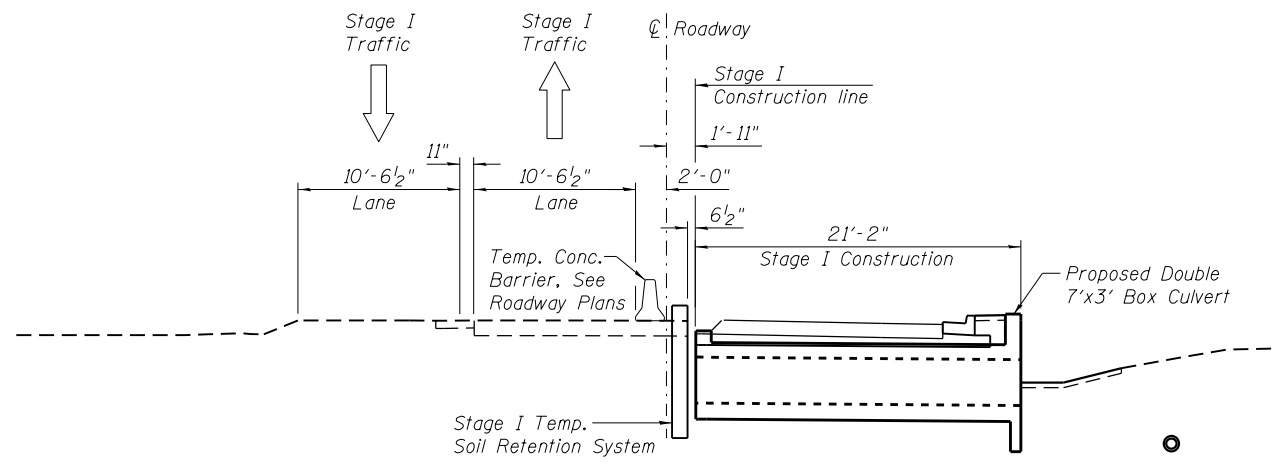
WHA* 1189J16 ILLINOIS

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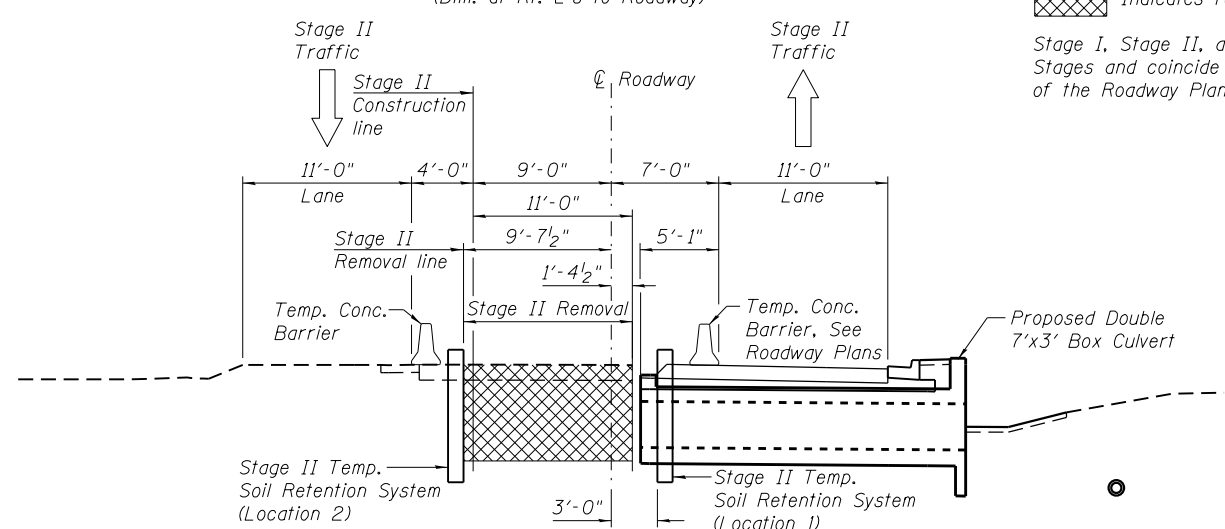


STAGE I REMOVAL
(Looking East)
(Dim. at Rt. L's to Roadway)

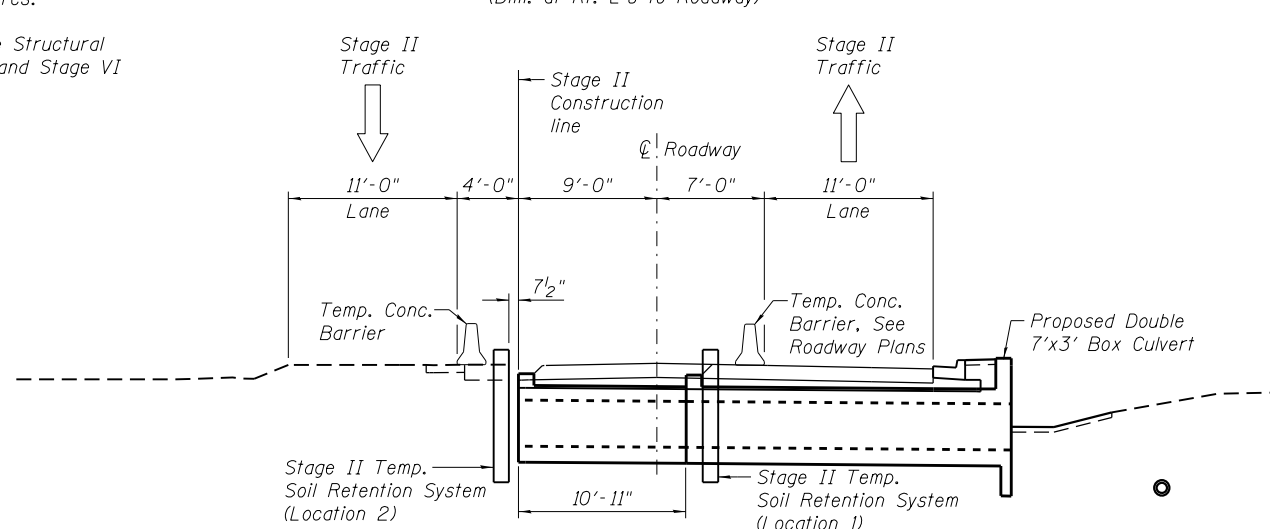
NOTE:
 Indicates removal of existing structures.
 Stage I, Stage II, and Stage III refer to the Structural Stages and coincide with Stage IV, Stage V, and Stage VI of the Roadway Plans, respectively.



STAGE I CONSTRUCTION
(Looking East)
(Dim. at Rt. L's to Roadway)



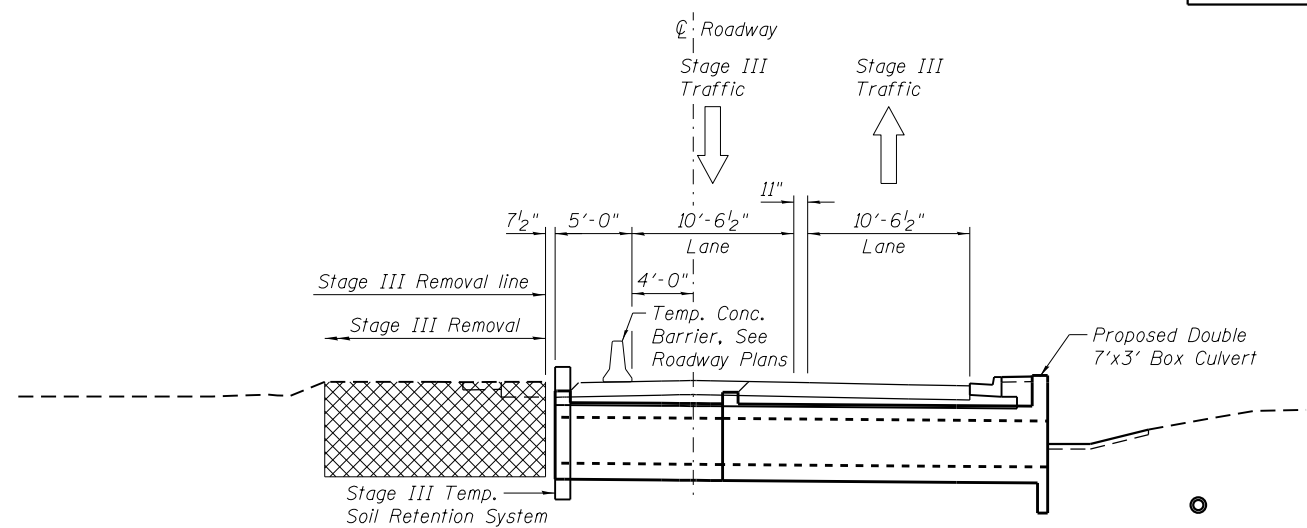
STAGE II REMOVAL
(Looking East)
(Dim. at Rt. L's to Roadway)



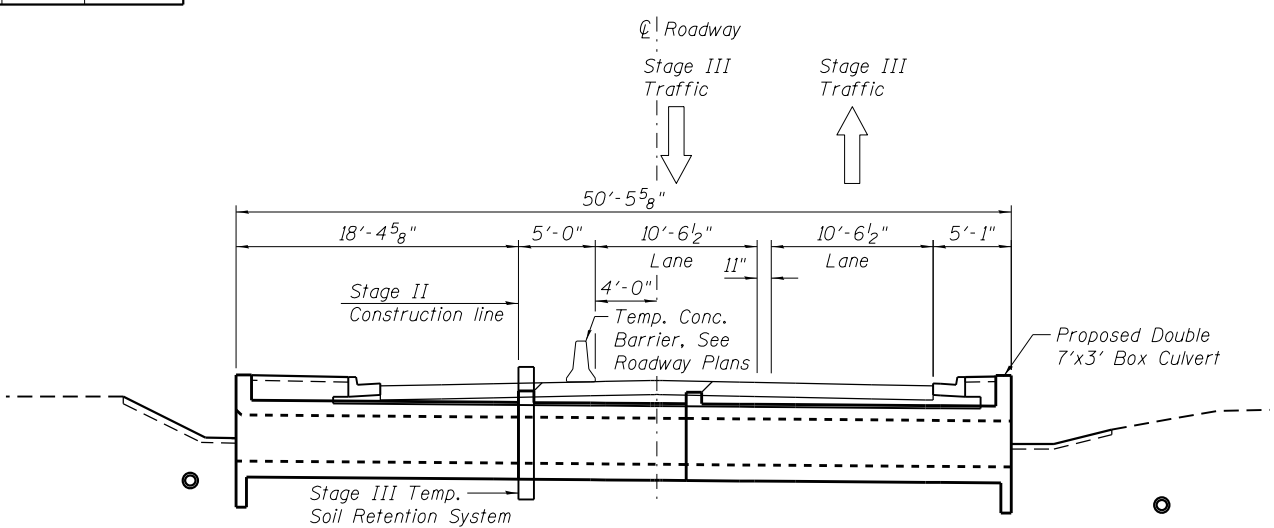
STAGE II CONSTRUCTION
(Looking East)
(Dim. at Rt. L's to Roadway)

BILL OF MATERIAL

Item	Unit	Quantity
Removal of Existing Structures No. 1	Each	1



STAGE III REMOVAL
(Looking East)
(Dim. at Rt. L's to Roadway)



STAGE III CONSTRUCTION
(Looking East)
(Dim. at Rt. L's to Roadway)

REVISION	DATE	BY	REMARKS

DRAWN	RDA
CHECKED	EEL
APPROVED	MRL

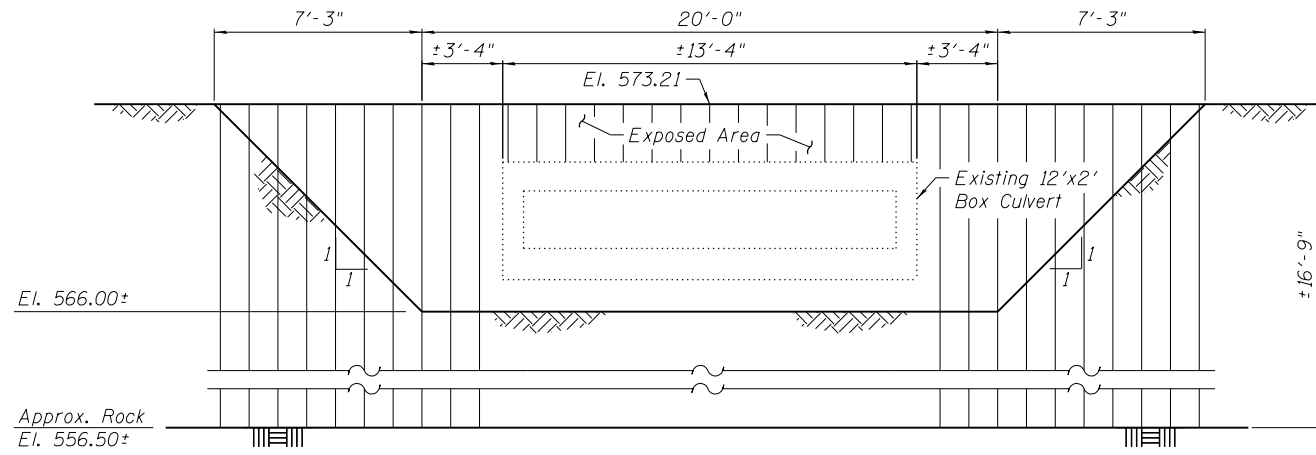
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLET HOFMANN & ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLIET, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-000918

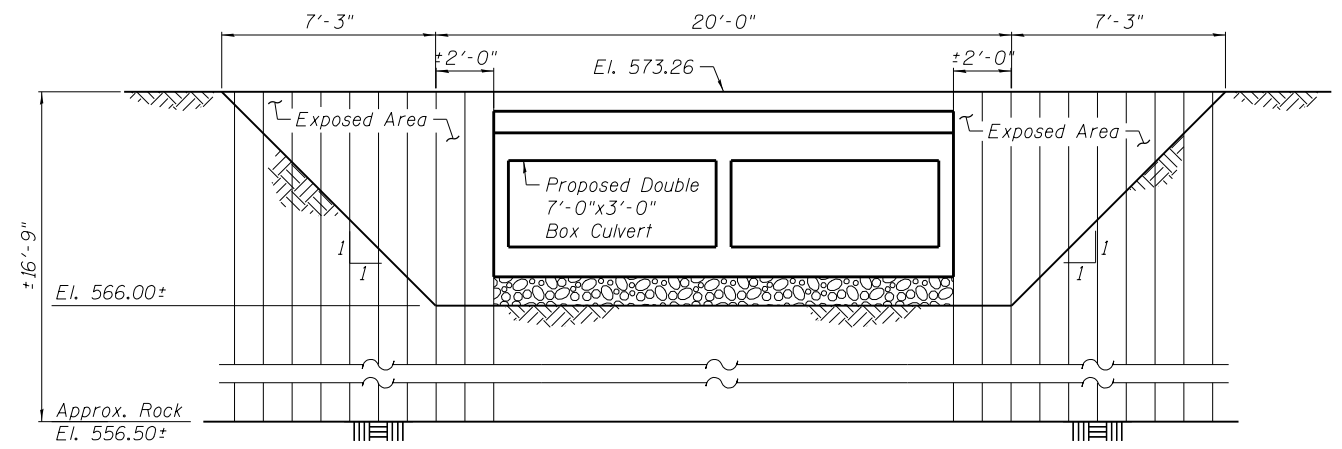
ROCKDALE CONSTRUCTION
79 MOEN AVENUE
ROCKDALE, IL 60436

CONSTRUCTION STAGING
STATION 233 + 45
STRUCTURAL SHEET NO. 23 OF 42 SHEETS

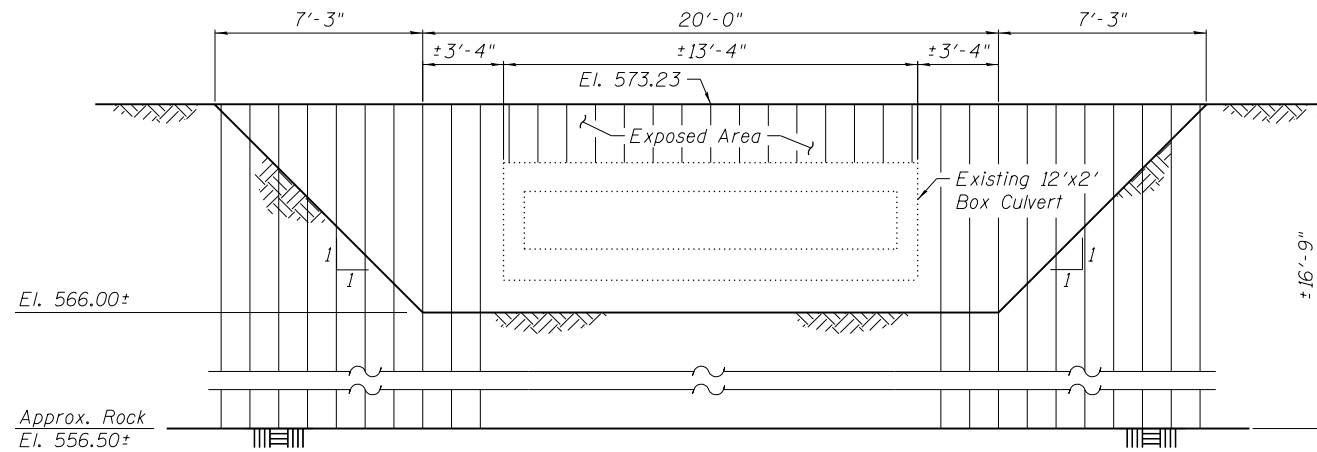
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CONTRACT 61E00			WHA* 1189J16 ILLINOIS	



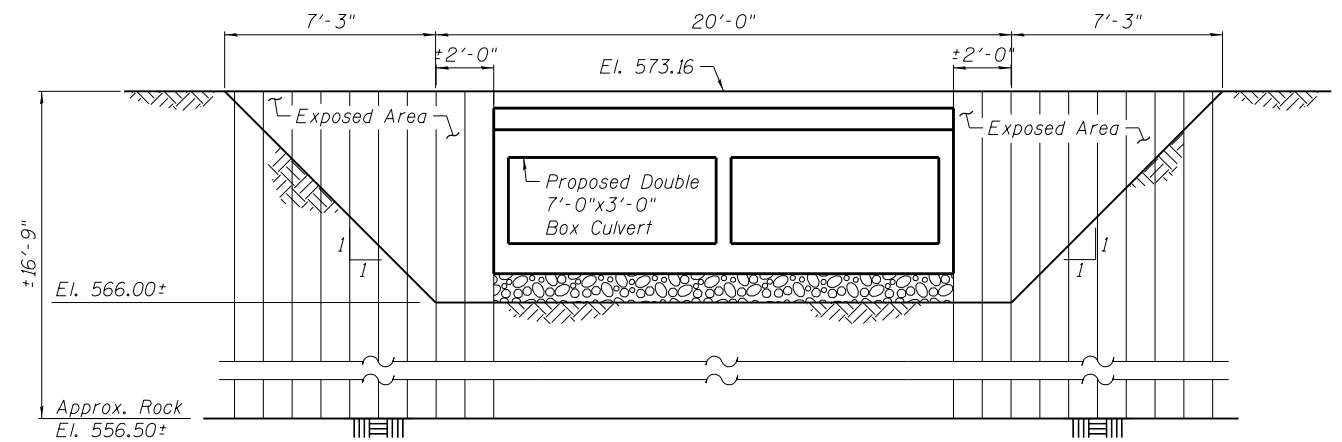
TEMPORARY SOIL RETENTION SYSTEM - STAGE I



TEMPORARY SOIL RETENTION SYSTEM - STAGE II - LOCATION 1



TEMPORARY SOIL RETENTION SYSTEM - STAGE II - LOCATION 2



TEMPORARY SOIL RETENTION SYSTEM - STAGE III

BILL OF MATERIAL

Item	Unit	Quantity
Temporary Soil Retention System	Sq. Ft.	474.0

NOTES:

A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

FILE = S:\PROJECTS\2016\1189J16_RK_Moen\DESIGN\STRUCT\2D_Drawings\Station_233+45\1189J16_Temporary Retention Systems.dgn

REVISION	DATE	BY	REMARKS

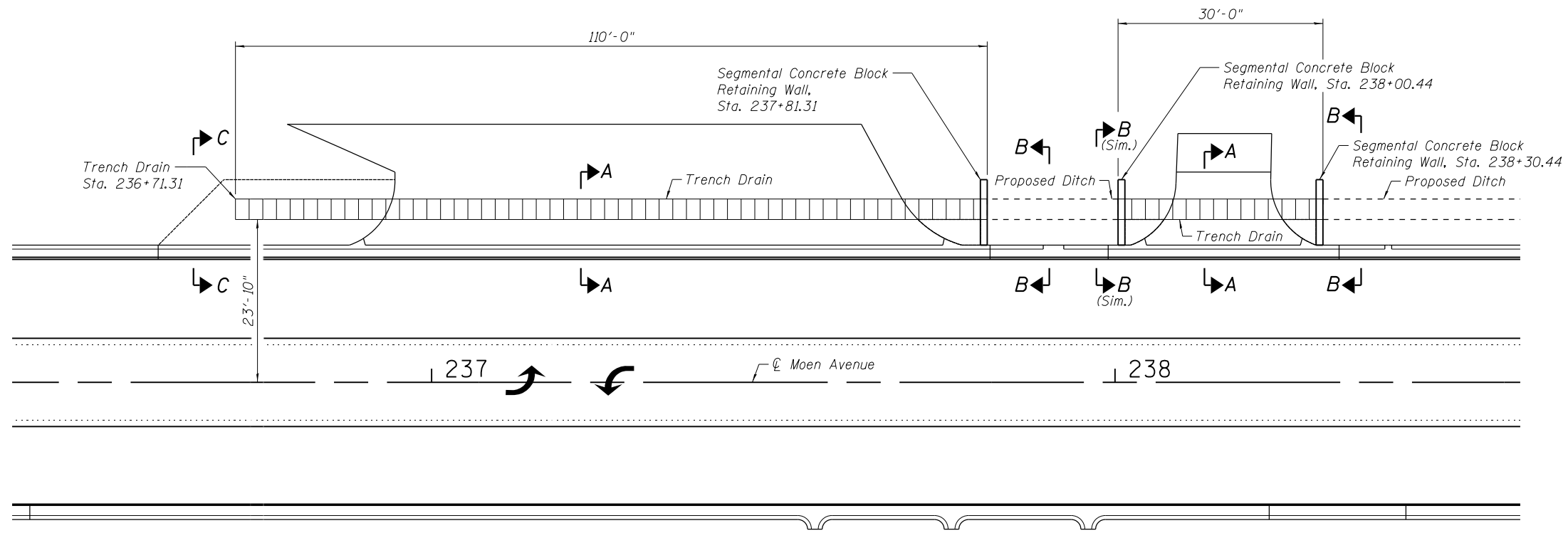
DRAWN	RDA
CHECKED	EEL
APPROVED	MRL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

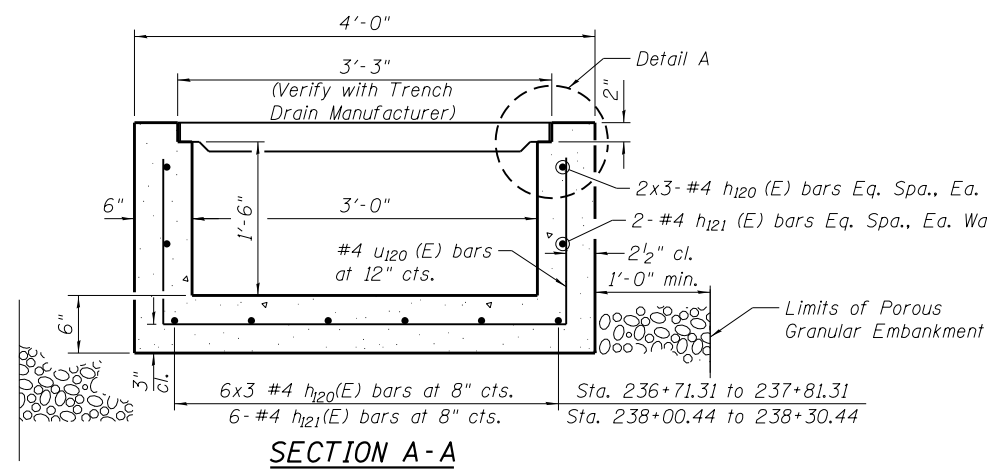
TEMPORARY SOIL RETENTION DETAILS
STATION 233+45

STRUCTURAL SHEET NO. 24 OF 42 SHEETS

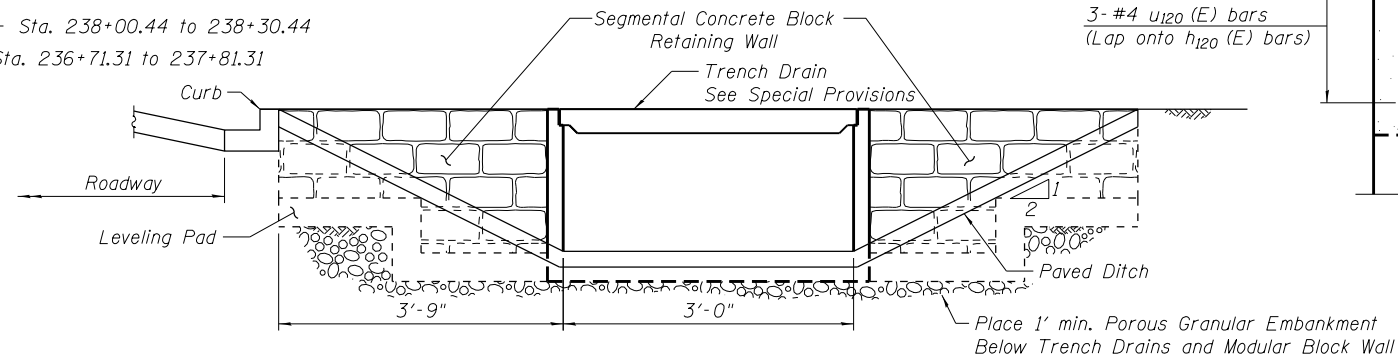
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WHA* 1189J16 ILLINOIS			CONTRACT 61E00	



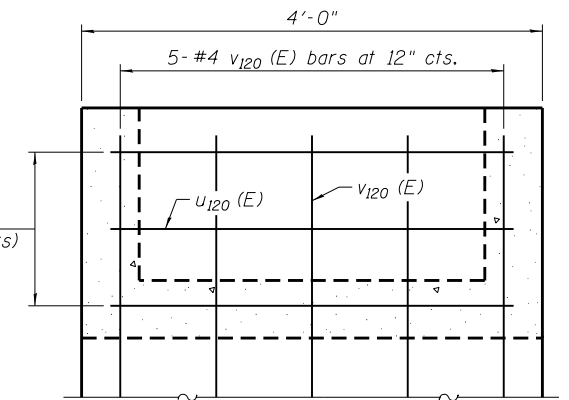
PLAN VIEW - TRENCH DRAINS



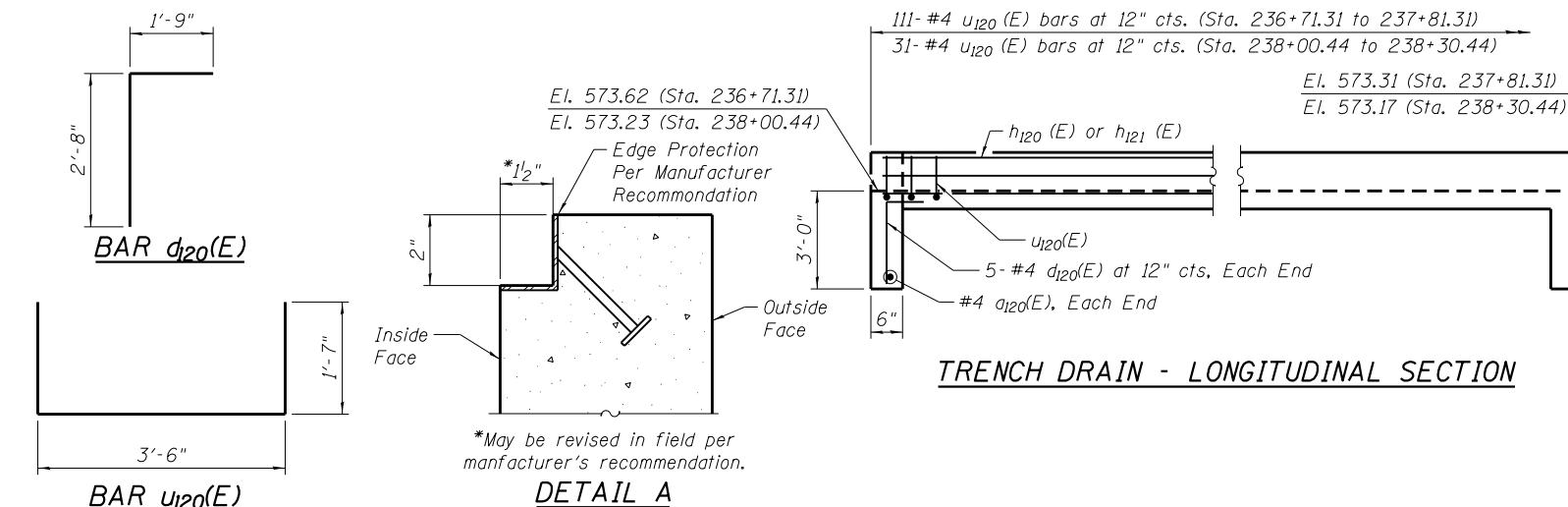
SECTION A-A



SECTION B-B



SECTION C-C



TRENCH DRAIN - LONGITUDINAL SECTION

DETAIL A

MIN. LAP

#4 bar = 2'-7"

NOTES:

Bars indicated thus 2x3-#4 etc. indicates 2 lines of bars with 3 lengths per line.

Contractor shall be responsible for maintaining open entrances while constructing Trench Drains.

Contractor shall use bar splicers or provide 1'-7" min. lap at construction joints required to maintain access at entrances. Bar lengths in Bill of Material are based on monolithic pours. Any modification to lengths or cost of bar splicers shall be incidental to reinforcement bars, epoxy coated.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a ₁₂₀ (E)	4	#4	3'-8"	—
d ₁₂₀ (E)	20	#4	4'-5"	┌
h ₁₂₀ (E)	30	#4	38'-4"	—
h ₁₂₁ (E)	10	#4	29'-8"	—
u ₁₂₀ (E)	145	#4	6'-8"	└
v ₁₂₀ (E)	5	#4	4'-8"	—
Porous Granular Embankment			Cu. Yd.	83
Structure Excavation			Cu. Yd.	131
Concrete Structures			Cu. Yd.	19.0
Reinforcement Bars, Epoxy Coated			Pound	1,700
Segmental Concrete Block Retaining Wall			Sq. Ft.	31.6
Trench Drain			Foot	140

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REVISION	DATE	BY	REMARKS

DRAWN	RDA
CHECKED	EEL
APPROVED	MRL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



79 MOEN AVENUE
ROCKDALE, IL 60436

TRENCH DRAIN DETAILS

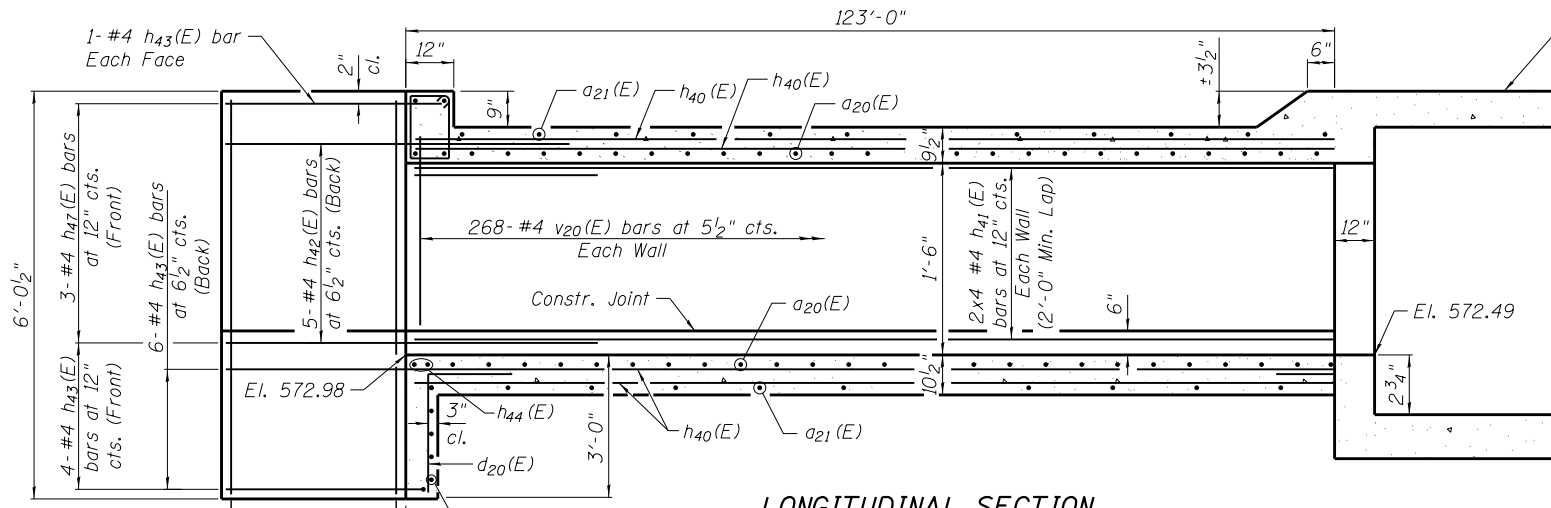
STRUCTURAL SHEET NO. 25 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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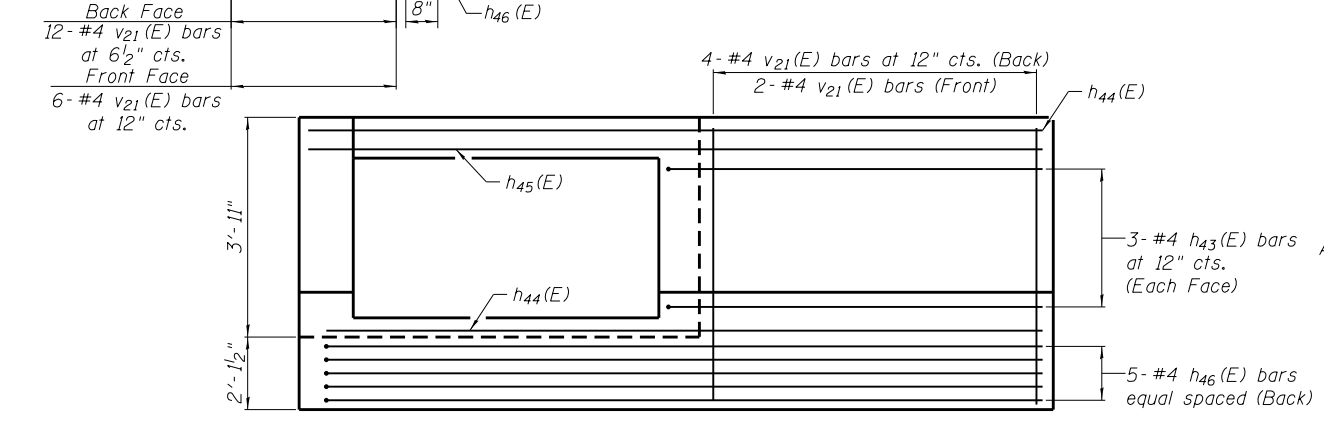
CONTRACT 61E00

WHA* 1189J16 ILLINOIS

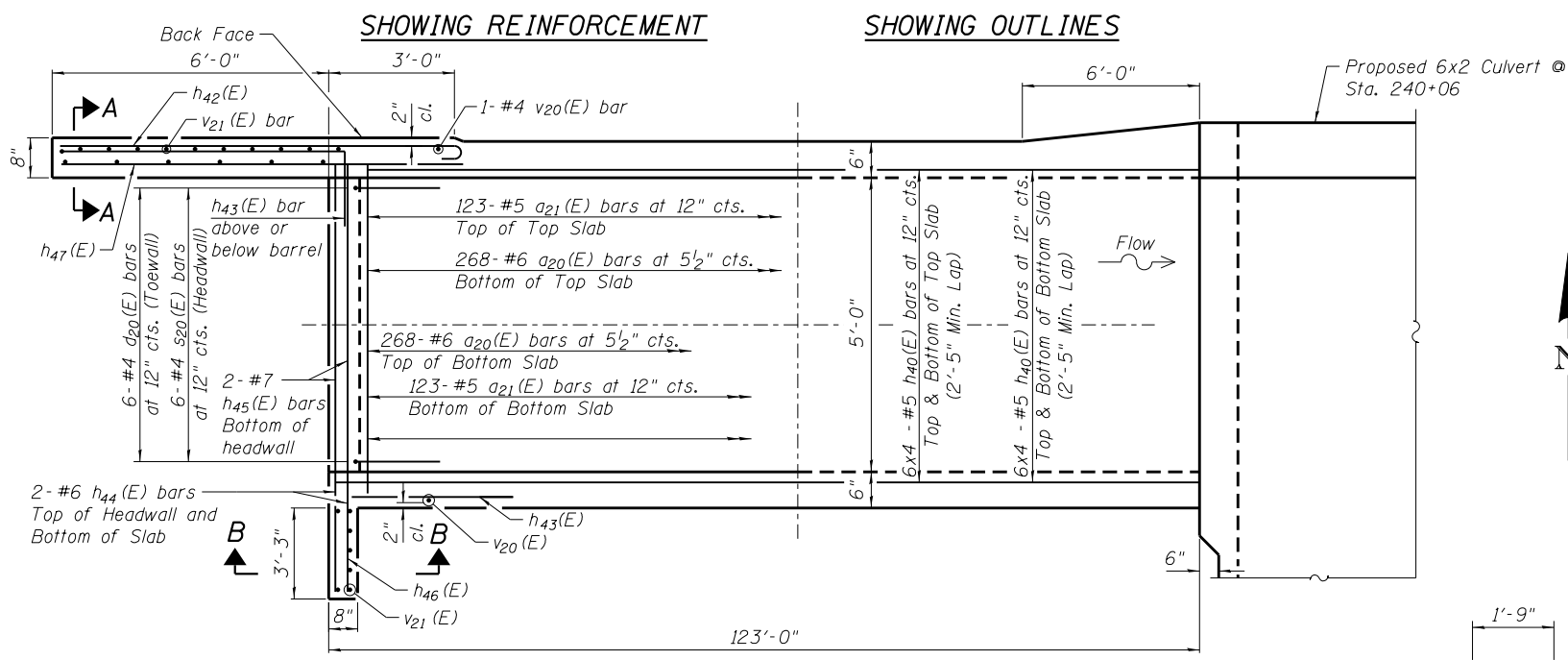
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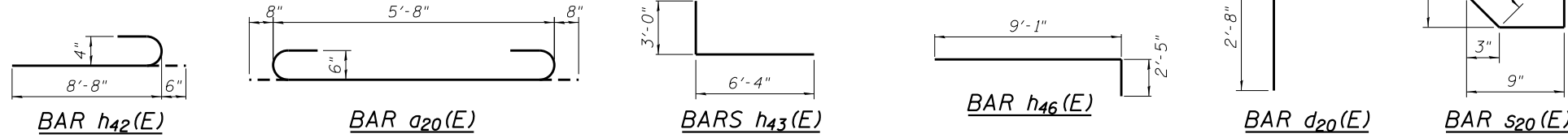
LONGITUDINAL SECTION



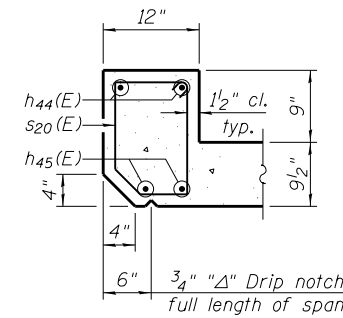
END VIEW



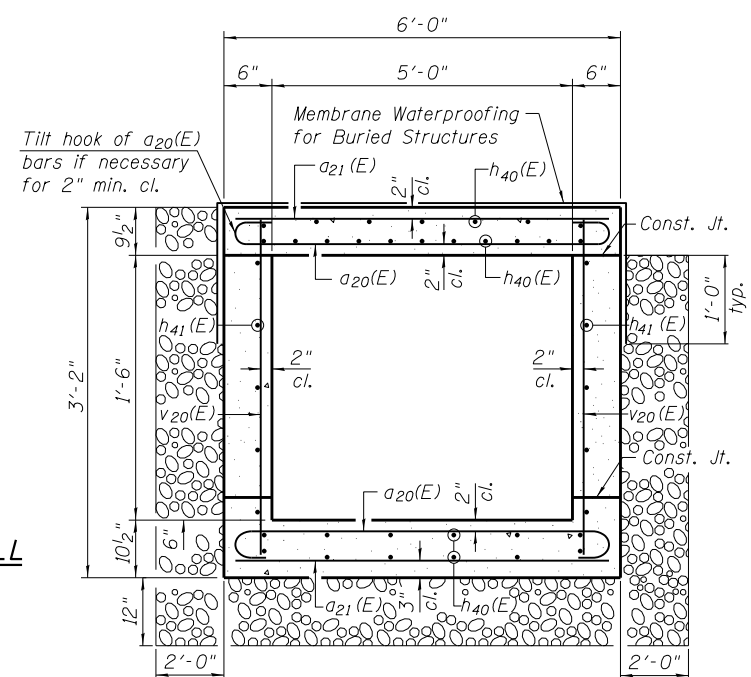
PLAN



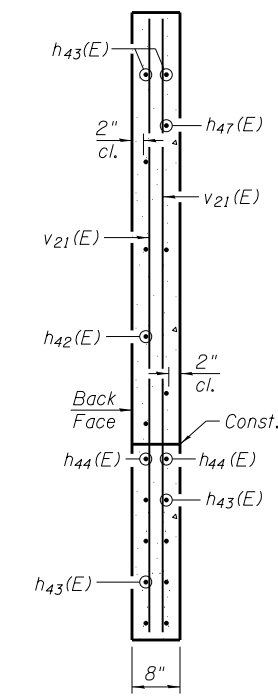
DESIGN SPECIFICATIONS
 2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2016 Interims
LOADING HL-93
 Allow 50#/sq. ft. for future wearing surface.
DESIGN STRESSES
FIELD UNITS
 $f'c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)



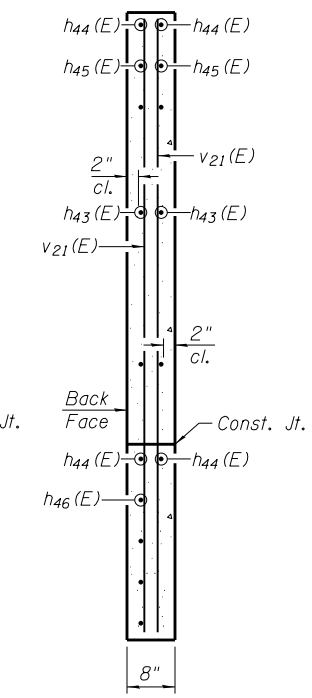
SECTION THRU HEADWALL



SECTION THRU BARREL



SECTION A-A



SECTION B-B

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a20(E)	536	#6	7'-0"	U
a21(E)	246	#5	5'-8"	—
d20(E)	6	#4	4'-5"	L
h40(E)	96	#5	32'-9"	—
h41(E)	16	#4	32'-5"	—
h42(E)	5	#4	9'-2"	U
h43(E)	18	#4	9'-4"	L
h44(E)	4	#6	8'-9"	—
h45(E)	2	#7	8'-9"	—
h46(E)	5	#4	11'-6"	U
h47(E)	3	#4	8'-8"	—
s20(E)	6	#4	4'-7"	□
v20(E)	538	#4	2'-10"	—
v21(E)	24	#4	5'-8"	—
Porous Granular Embankment			Cu. Yd.	105
Reinforcement Bars, Epoxy Coated			Pound	12,150
Concrete Box Culverts			Cu. Yd.	54.5
* Membrane Waterproofing for Buried Structures			Sq. Yd.	130

DATE: 3/1/18
 EXPIRES 11/30/18
 MICHAEL R. LEWIS
 LICENSED PROFESSIONAL ENGINEER
 STATE OF ILLINOIS
 NO. 081-005726

NOTES:
 NO PRECAST OPTION ALLOWED.
 A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
 Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.

"I certify that to the best of my knowledge, information and belief, this Culvert Design is structurally adequate for the design loading shown on the plans, the design is an economical one for the style of structure and complies with requirements of the current AASHTO Standard Specifications for Highway Bridges."

REVISION	DATE	BY	REMARKS

DRAWN: RDA
 CHECKED: EEL
 APPROVED: MRL
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

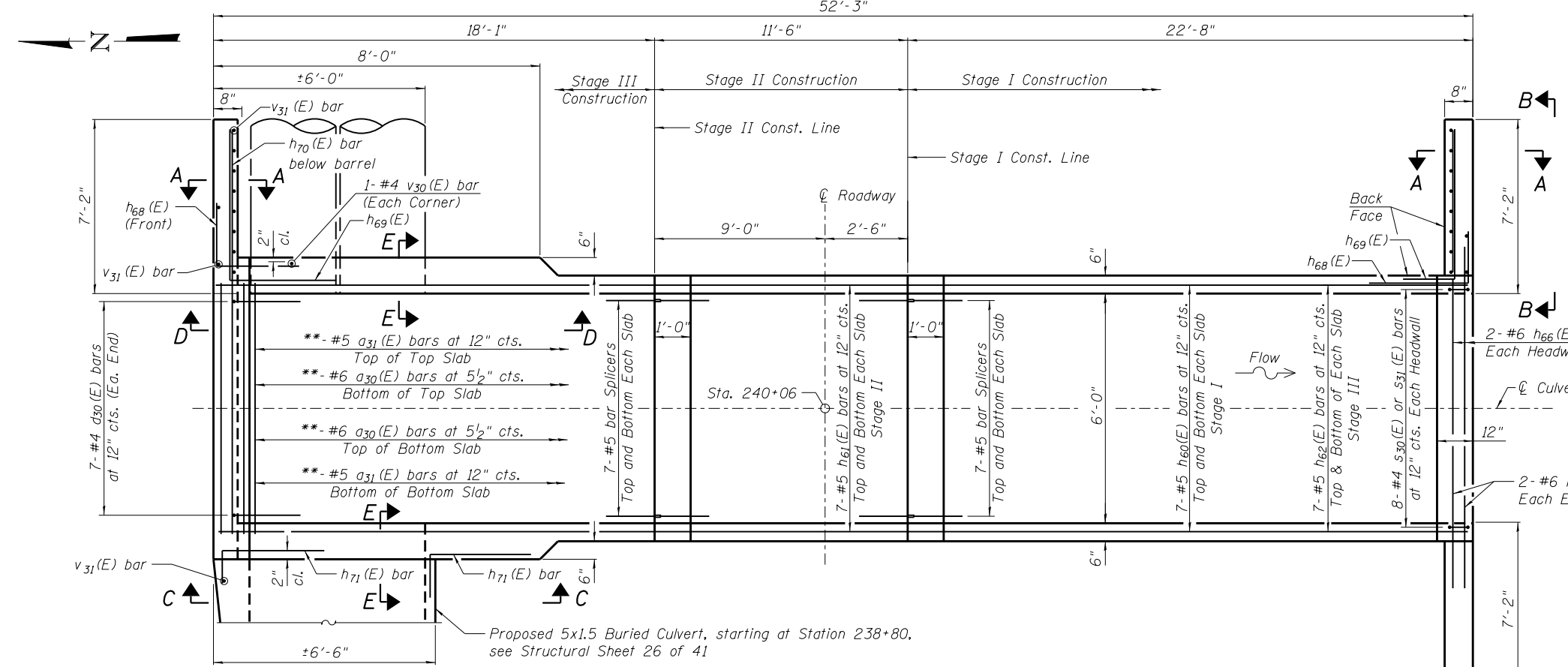
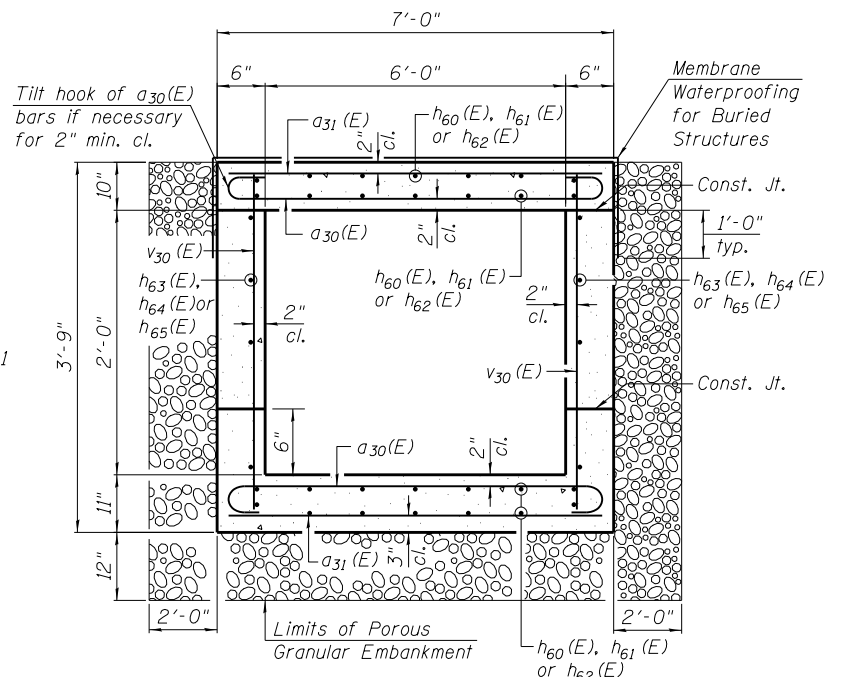
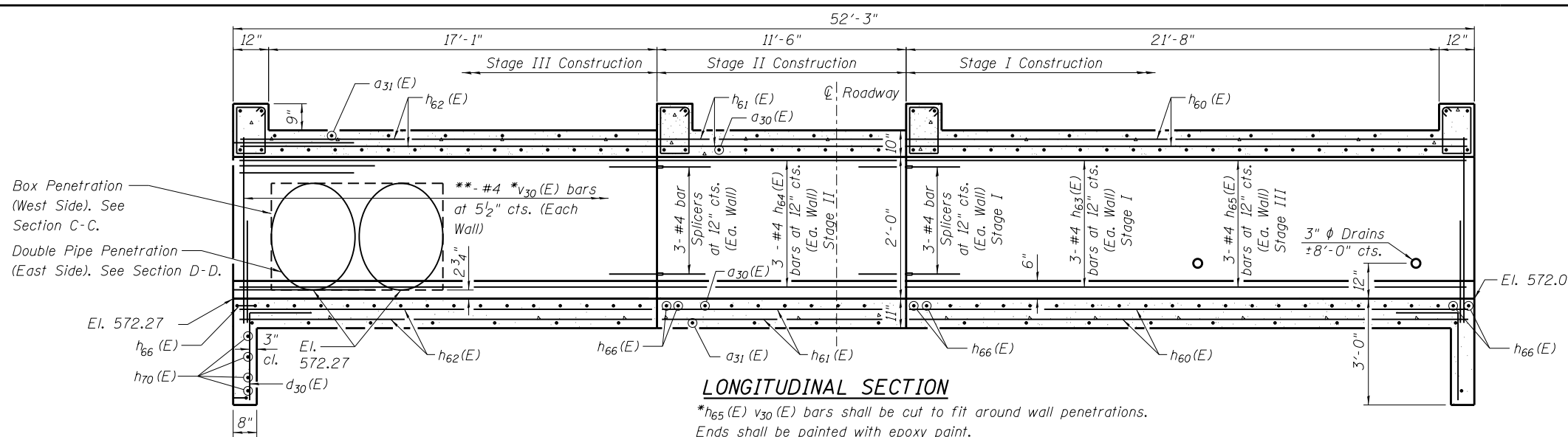
WILLETT HOFMANN & ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 1000 ESSINGTON ROAD, JOLIET, IL 60435
 T: 815-229-2229 DESIGN FIRM: #184-000918
ROCKDALE
 79 MOEN AVENUE
 ROCKDALE, IL 60436

CULVERT DETAILS
STATION 238+80.00
 STRUCTURAL SHEET NO. 26 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	223

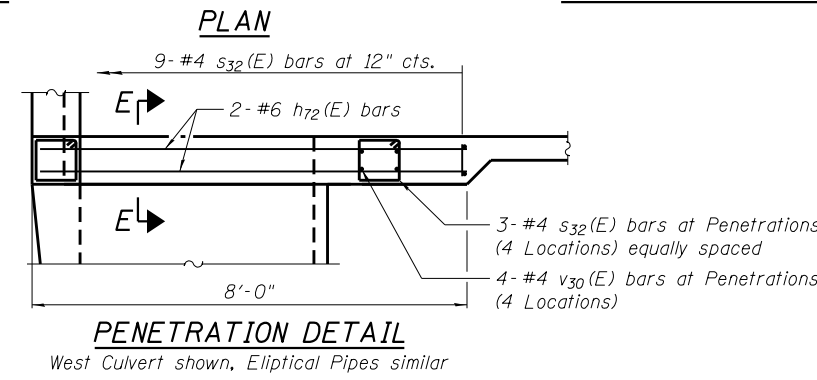
CONTRACT 61E00
 WHA* 1189J16 ILLINOIS

FILE = S:\PROJECTS\2016\1189J16_RK_Moen\DESIGN\STRUCT\20_Drawings\Station 240+06\1189J16_Culvert_Details.dgn



**** BAR NUMBERS PER STAGE**
SEE PLAN AND SECTION FOR LOCATION

Bar	Stage I	Stage II	Stage III
a30(E)	48	23	38
a31(E)	22	11	18
v30(E)	50	26	40



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a30(E)	218	#6	8'-0"	┌
a31(E)	102	#5	6'-8"	┌
d30(E)	14	#4	4'-5"	┌
h60(E)	28	#5	22'-5"	┌
h61(E)	28	#5	11'-3"	┌
h62(E)	28	#5	17'-10"	┌
h63(E)	6	#4	22'-5"	┌
h64(E)	6	#4	11'-3"	┌
h65(E)	6	#4	17'-10"	┌
h66(E)	16	#6	6'-8"	┌
h67(E)	8	#7	6'-8"	┌
h68(E)	15	#4	8'-0"	┌
h69(E)	15	#4	10'-2"	┌
h70(E)	8	#4	20'-2"	┌
h71(E)	5	#4	12'-0"	┌
h72(E)	4	#6	7'-8"	┌
h73(E)	6	#4	1'-0"	┌
h74(E)	1	#4	2'-0"	┌
h75(E)	4	#4	2'-8"	┌
s30(E)	24	#4	4'-11"	┌
s31(E)	8	#4	4'-9"	┌
s32(E)	30	#4	3'-9"	┌
v30(E)	244	#4	3'-5"	┌
v31(E)	30	#4	3'-5"	┌
Porous Granular Embankment		Cu. Yd.	48	
Reinforcement Bars, Epoxy Coated		Pound	6,540	
Bar Splicers		Each	68	
Concrete Box Culverts		Cu. Yd.	32.3	
Membrane Waterproofing for Buried Structures		Sq. Yd.	59.5	

NOTES:
 NO PRECAST OPTION ALLOWED.
 A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.

REVISION	DATE	BY	REMARKS

DRAWN RDA
 CHECKED EEL
 APPROVED MRL

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WILLET HOFMANN & ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 1000 ESSINGTON ROAD, JOLIET, IL 60435
 T: 815-729-2229 DESIGN FIRM: #184-000918

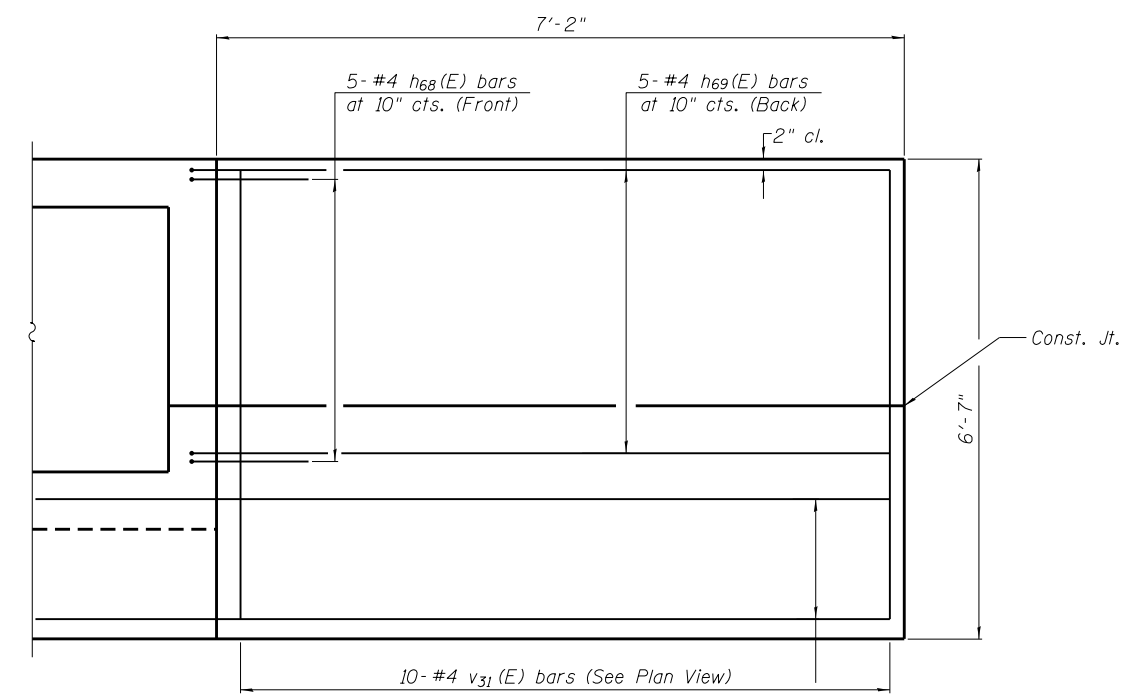
ROCKDALE
 79 MOEN AVENUE
 ROCKDALE, IL 60436

CULVERT DETAILS
 STATION 240+06.00
 STRUCTURAL SHEET NO. 27 OF 42 SHEETS

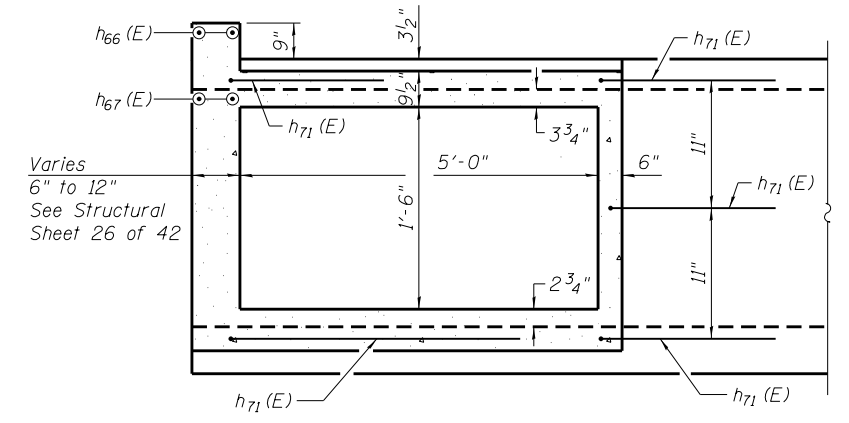
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	224

CONTRACT 61E00
 WHA* 1189J16 ILLINOIS

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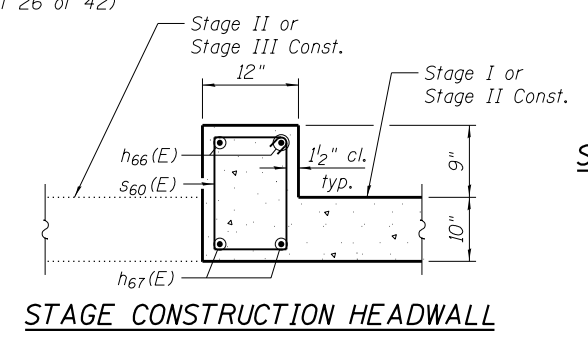
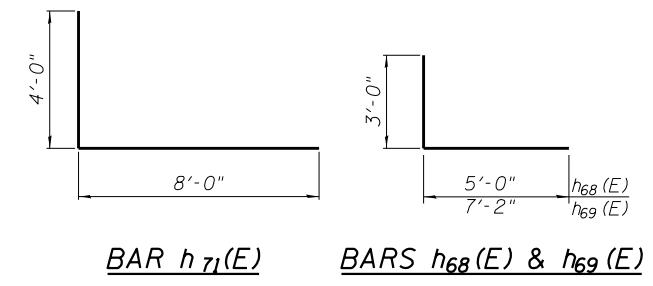
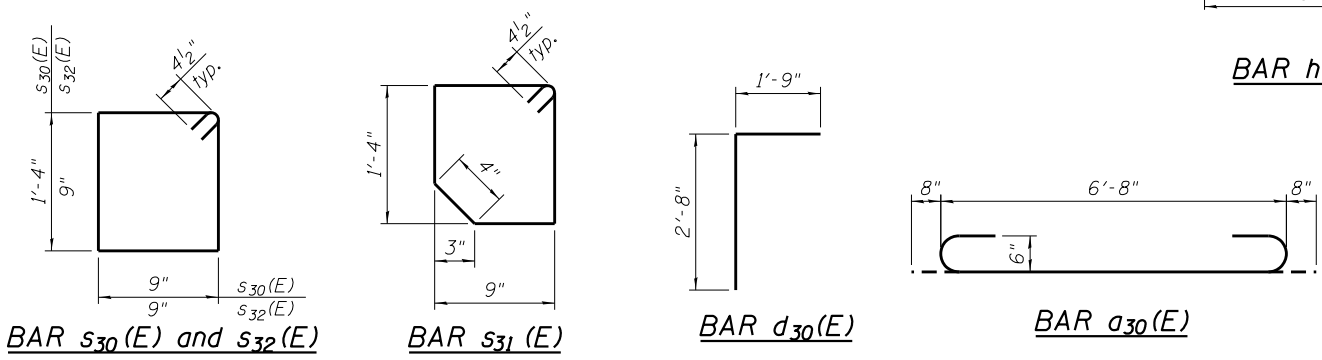


SECTION B-B

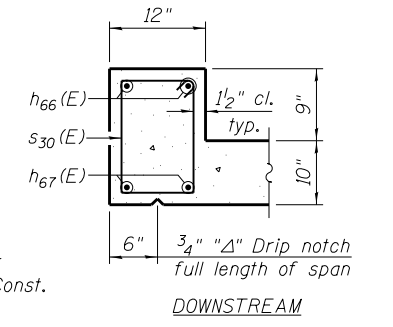
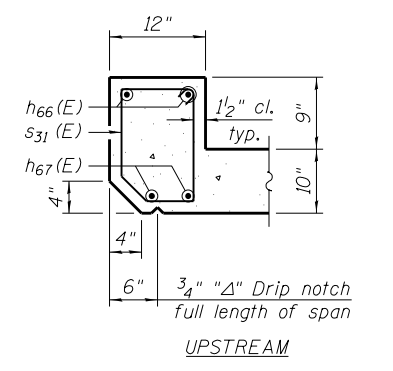


SECTION C-C

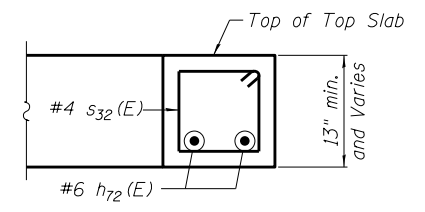
(For reinforcing in 5x1.5 Box, See Structural Sheet 26 of 42)



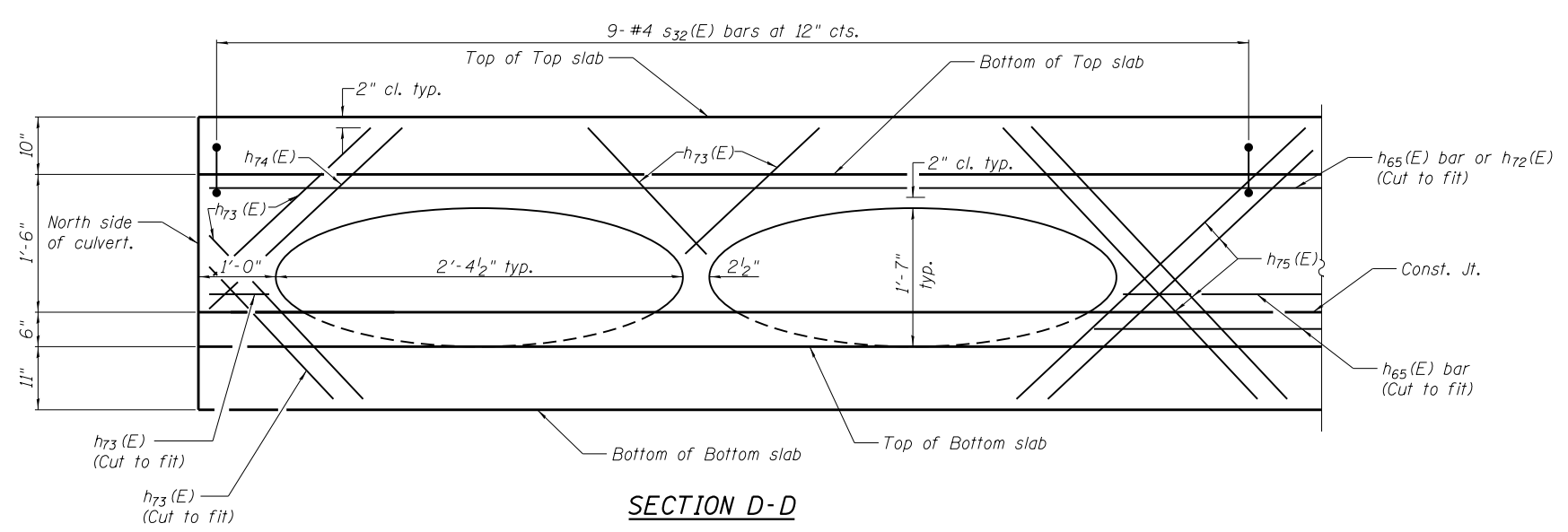
STAGE CONSTRUCTION HEADWALL



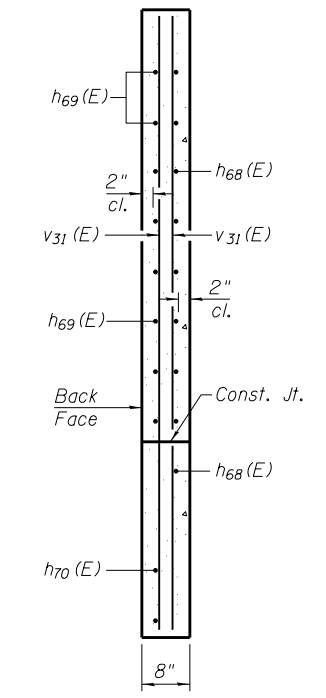
SECTION THRU HEADWALL



SECTION E-E (OVER PENETRATIONS)



SECTION D-D



SECTION A-A

DESIGN SPECIFICATIONS
 2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2016 Interims
LOADING HL-93
 Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES
FIELD UNITS
 $f'c = 3,500 \text{ psi}$
 $f_y = 60,000 \text{ psi (Reinforcement)}$



DATE: 3/1/18
 EXPIRES 11/30/18

"I certify that to the best of my knowledge, information and belief, this Culvert Design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current 'AASHTO Standard Specifications for Highway Bridges'."

REVISION	DATE	BY	REMARKS

DRAWN	RDA
CHECKED	EEL
APPROVED	MRL

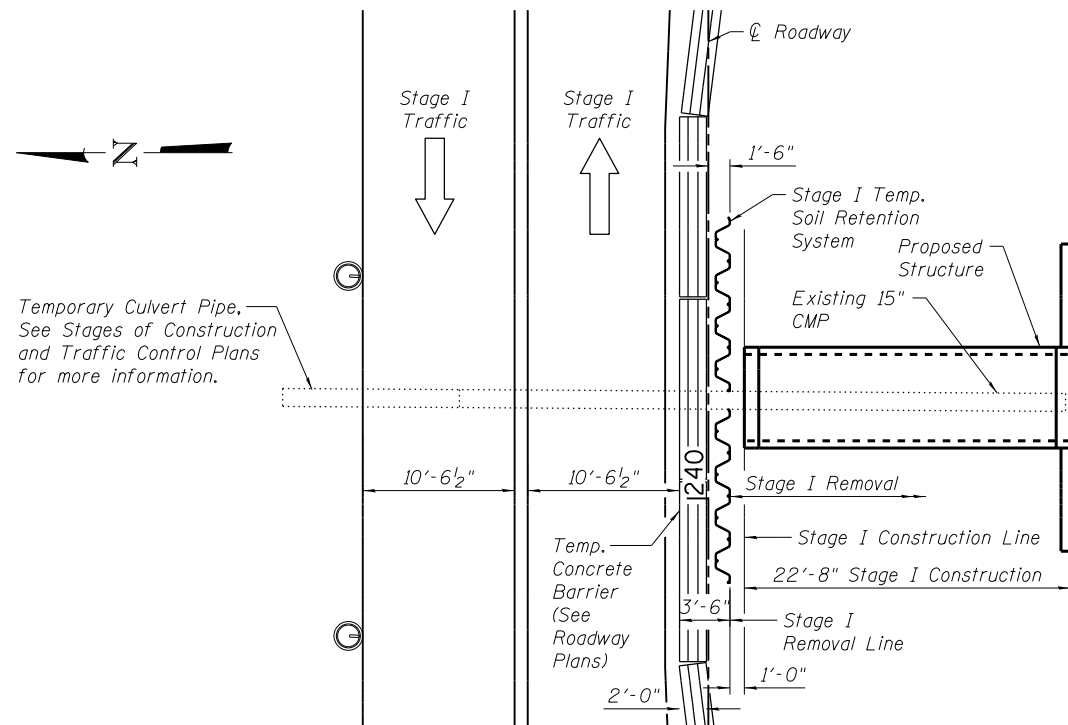
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION



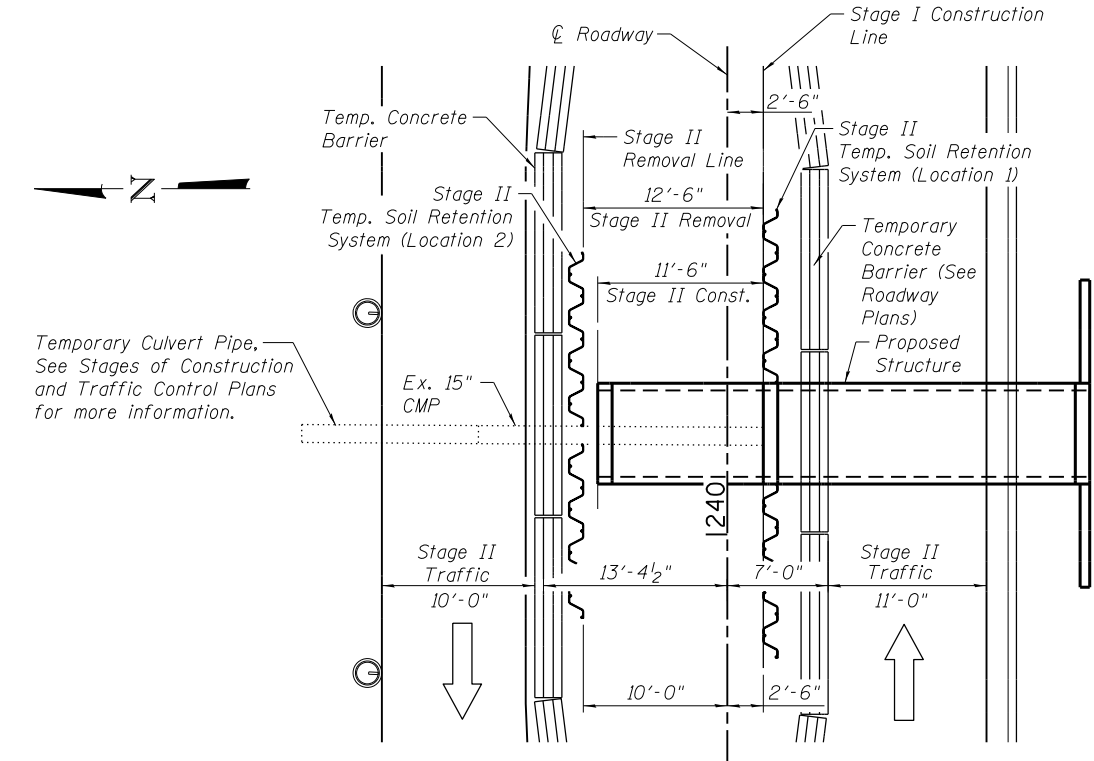
CULVERT DETAILS
STATION 240+06.00
 STRUCTURAL SHEET NO. 28 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	225

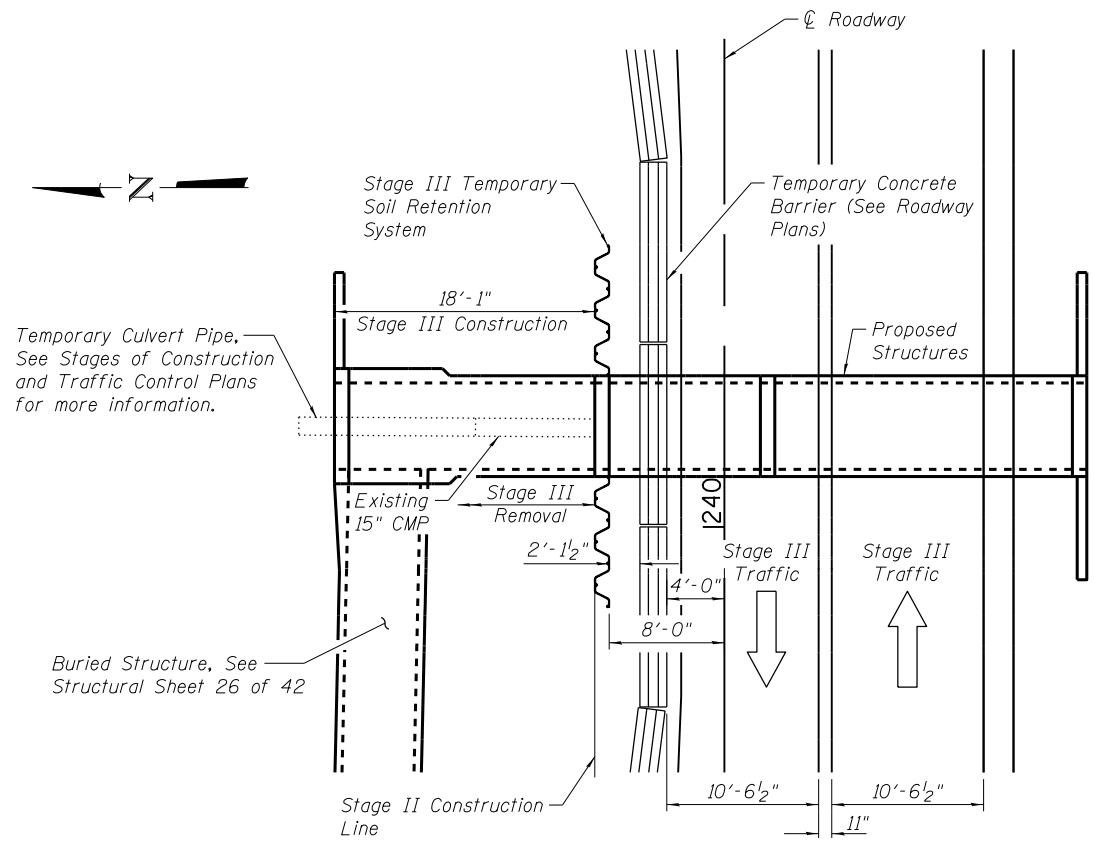
CONTRACT 61E00



PLAN VIEW STAGE I



PLAN VIEW STAGE II



PLAN VIEW STAGE III

NOTES:

Commonwealth Edison will be impacted by the construction and temporary construction easements. The location of the properties can be found on plan sheet 188. The Commonwealth Edison special provision and Exhibit C found in the special provisions, shall be reviewed and followed by the Contractor.

See Structural Sheet 31 of 42 for information on Temporary Soil Retention System.

Stage I, Stage II and Stage III refer to the Structural Stages and coincide with Stage IV, Stage V and Stage VI of the Roadway plans, respectively.

Temporary Concrete Barriers shall be provided for stage construction, see Standard 704001. Pay item for "Temporary Concrete Barrier" is included in the roadway plans. See Stages of Construction and Traffic Control Plans for additional details.

SEQUENCE OF CONSTRUCTION:

- 1). Install Temporary Barriers as shown in roadway plans.
- 2). Install Stage I Temporary Soil Retention System and begin Stage I Removal and Excavation.
- 3). After completion of Stage I Removal, complete Stage I Construction.
- 4). Install Stage II Temporary Soil Retention System at Location 1 after completion of Step 3.
- 5). Install Temporary Barriers and switch to Stage II Traffic Configuration.
- 6). Install Temporary Soil Retention System for Stage II at Location 2 and begin Stage II Removal.
- 7). After completion of Step 7, complete Stage II Construction.
- 8). After completion of Step 7, install Temporary Barriers and switch traffic to Stage III configuration.
- 9). After completion of Step 8, Begin Stage III Removal.
- 10). After completion of Step 9, begin Stage III Construction.
- 11). After completion of Step 10, remove Stage III Temporary Soil Retention.

FILE = S:\PROJECTS\2016\1189J16_RK_Moen\DESIGN\STRUCT\2D_Drawings\Station 240+06\1189J16_Staging Plan View.dgn

REVISION	DATE	BY	REMARKS

DRAWN	RDA
CHECKED	EEL
APPROVED	MRL

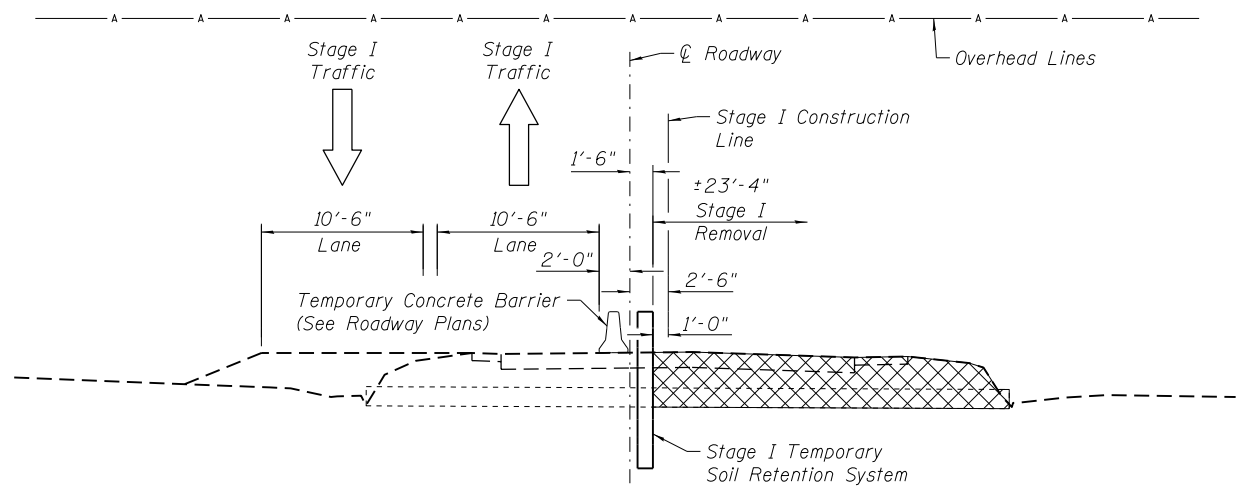
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGING PLAN VIEW
STATION 240+06.00**

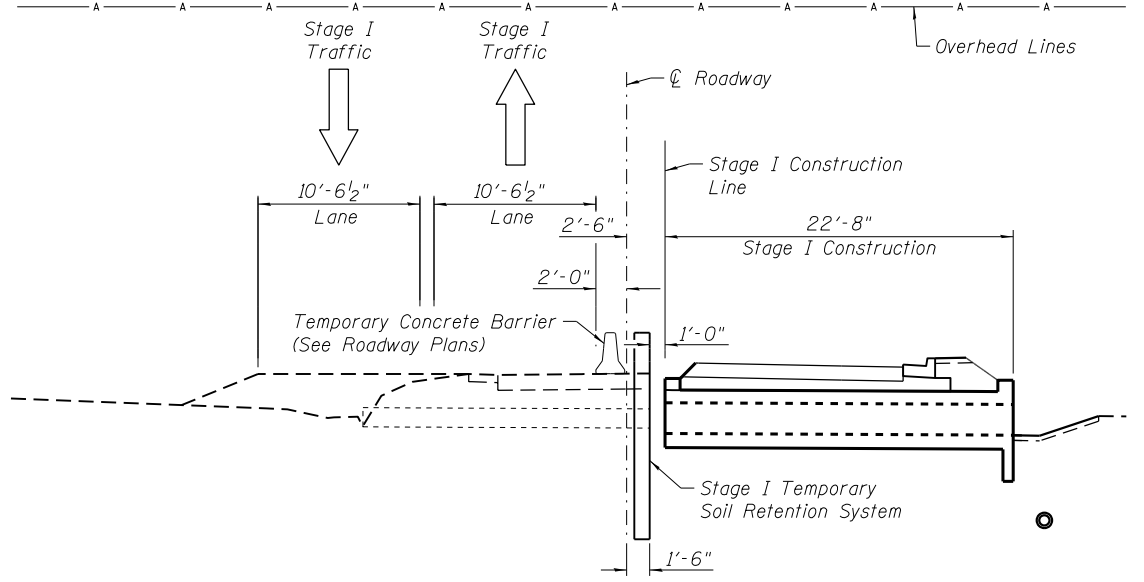
STRUCTURAL SHEET NO. 29 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	226
CONTRACT 61E00				

WHA* 1189J16 ILLINOIS



STAGE I - REMOVAL
(Looking East)



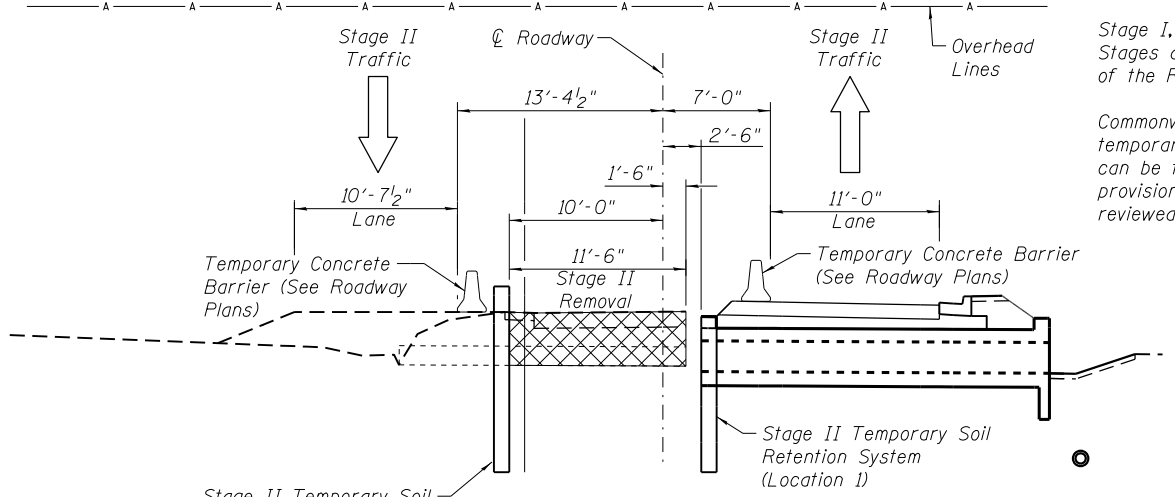
STAGE I - CONSTRUCTION
(Looking East)

NOTES:

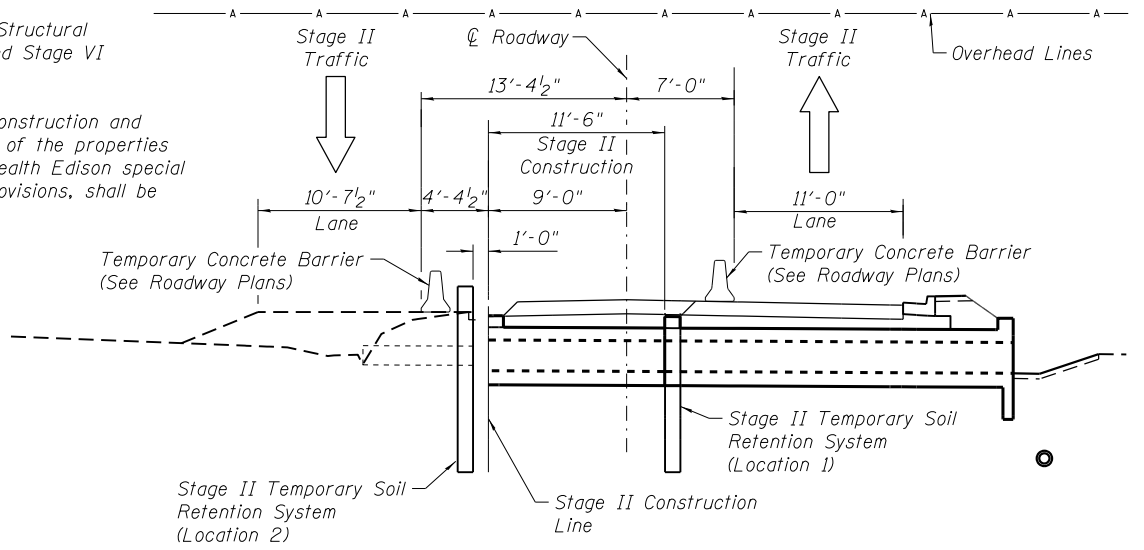
Indicates removal of existing structures.

Stage I, Stage II, and Stage III refer to the Structural Stages and coincide with Stage IV, Stage V, and Stage VI of the Roadway Plans, respectively.

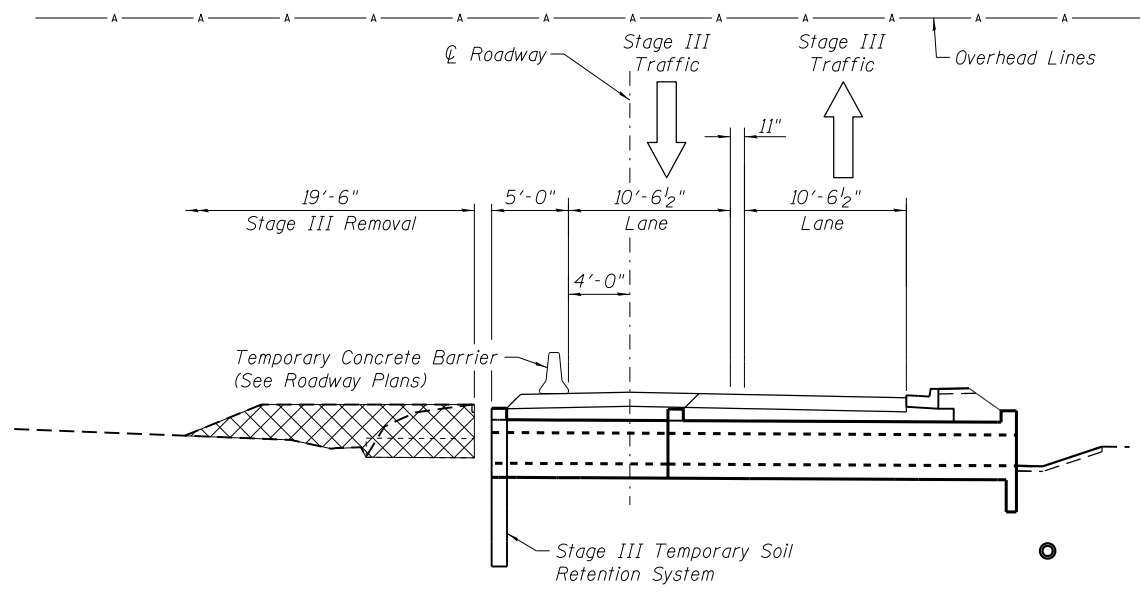
Commonwealth Edison will be impacted by the construction and temporary construction easements. The location of the properties can be found on plan sheet 188. The Commonwealth Edison special provision and Exhibit C found in the special provisions, shall be reviewed and followed by the Contractor.



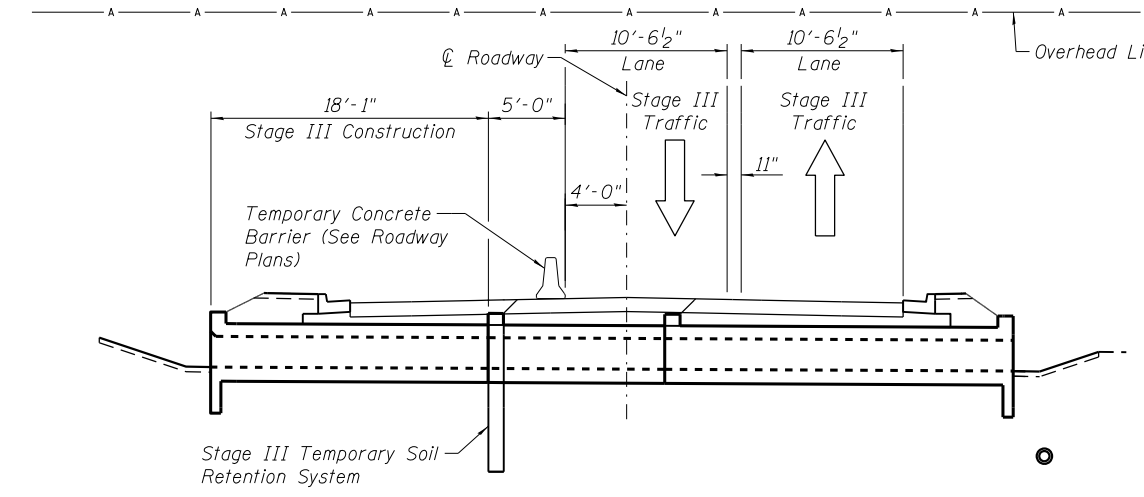
STAGE II - REMOVAL
(Looking East)



STAGE II - CONSTRUCTION
(Looking East)



STAGE III - REMOVAL
(Looking East)



STAGE III - CONSTRUCTION
(Looking East)

FILE = S:\PROJECTS\2016\1189J16_RK_Moen\DESIGN\STRUCT\2D_Drawings\Station 240+06\1189J16_Construction Staging.dgn

REVISION	DATE	BY	REMARKS

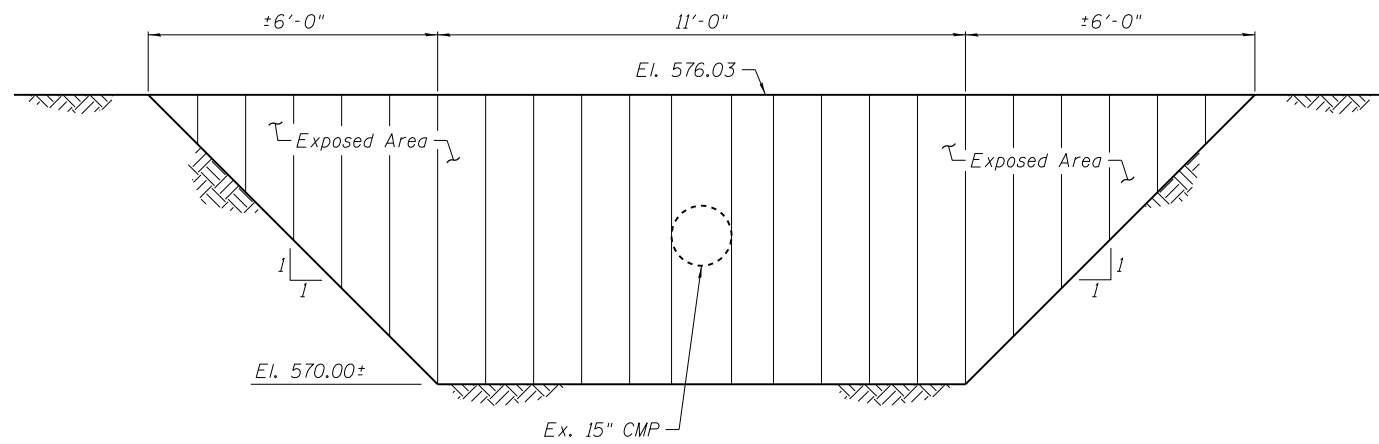
DRAWN	RDA
CHECKED	EEL
APPROVED	MRL

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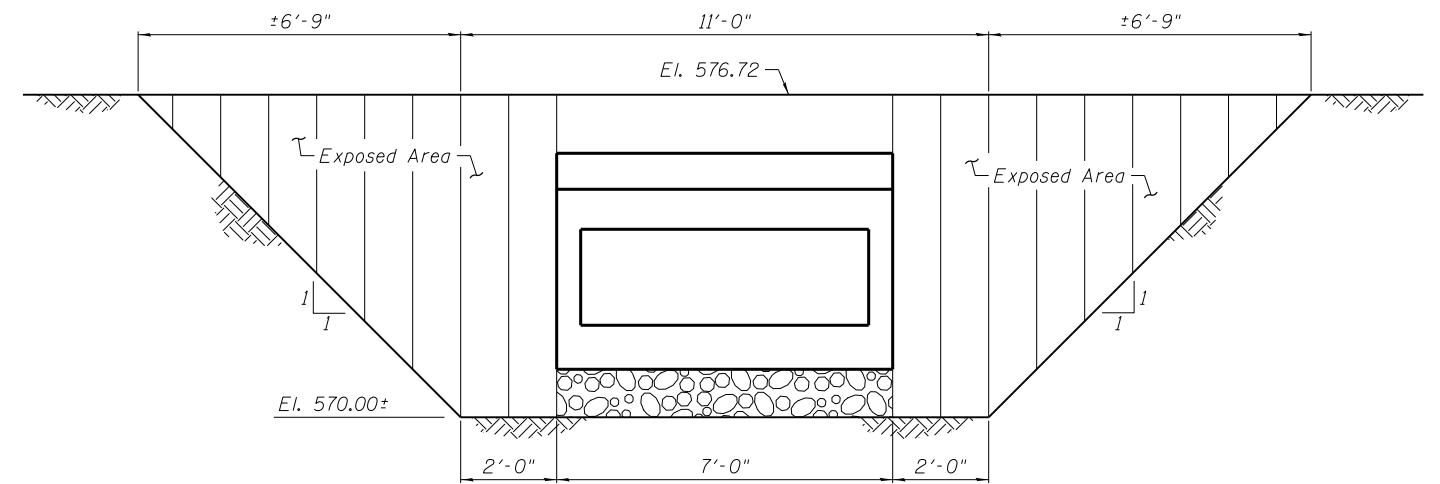
CONSTRUCTION STAGING
STATION 240+06.00
STRUCTURAL SHEET NO. 30 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT 61E00			WHA* 1189J16 ILLINOIS	

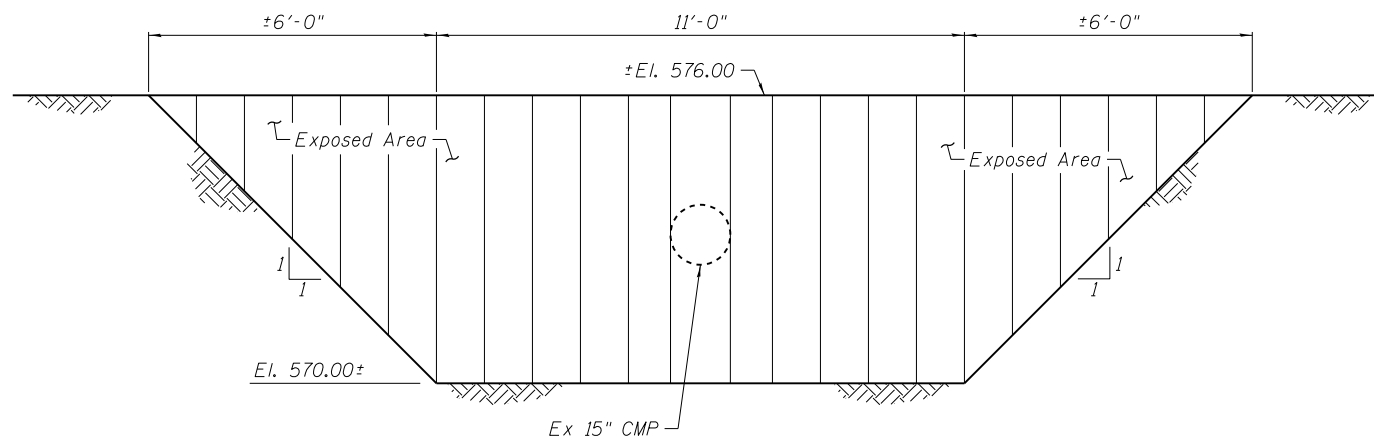
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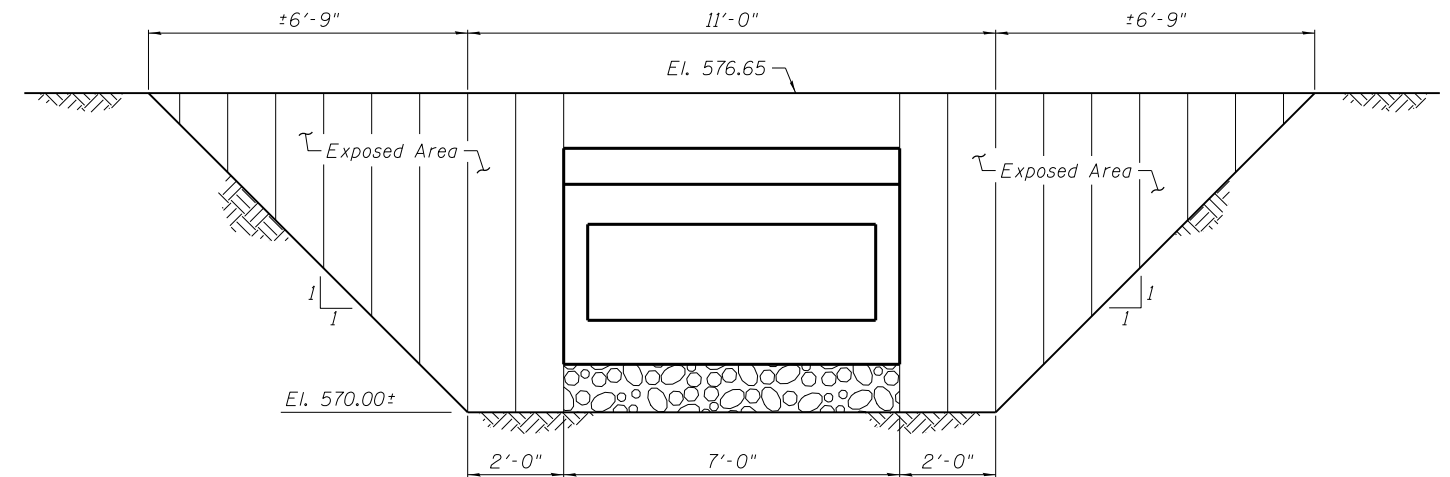
TEMPORARY SOIL RETENTION SYSTEM - STAGE I



TEMPORARY SOIL RETENTION SYSTEM - STAGE II - LOCATION 1



TEMPORARY SOIL RETENTION SYSTEM - STAGE II - LOCATION 2



TEMPORARY SOIL RETENTION SYSTEM - STAGE III

BILL OF MATERIAL

Item	Unit	Quantity
Temporary Soil Retention System	Sq. Ft.	346.0

NOTES:

A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

Commonwealth Edison will be impacted by the construction and temporary construction easements. The location of the properties can be found on plan sheet 188. The Commonwealth Edison special provision and Exhibit C found in the special provisions, shall be reviewed and followed by the Contractor.

REVISION	DATE	BY	REMARKS

DRAWN	RDA
CHECKED	EEL
APPROVED	MRL

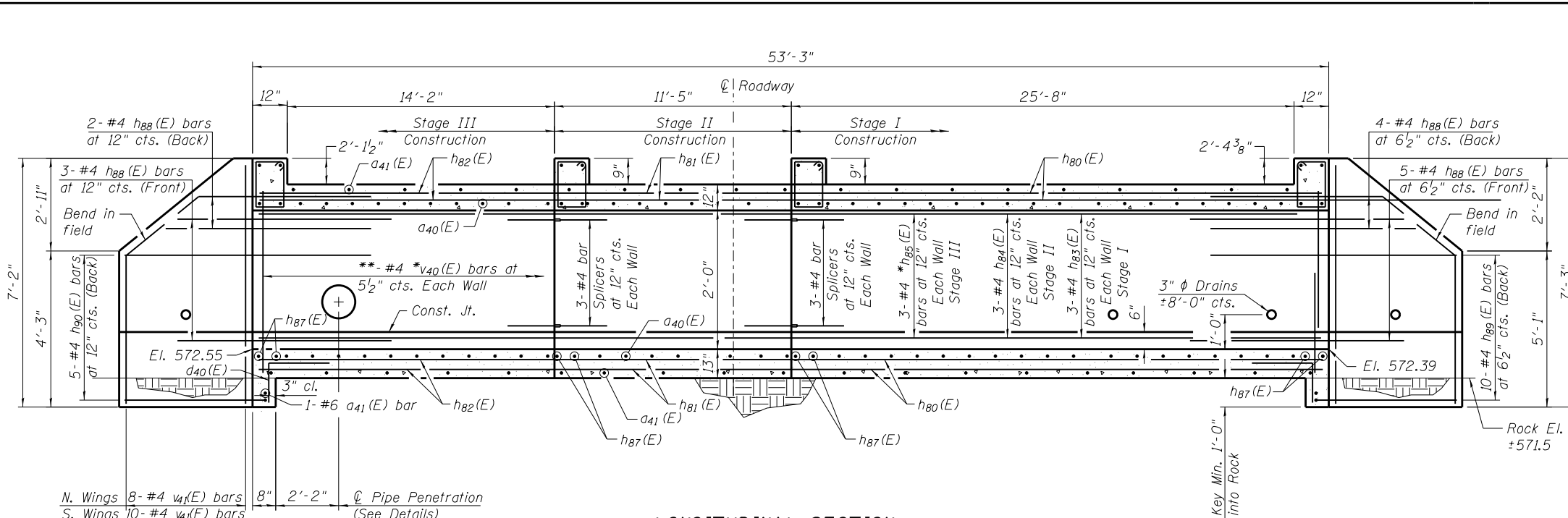
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



TEMPORARY SOIL RETENTION DETAILS
STATION 240+06.00

STRUCTURAL SHEET NO. 31 OF 42 SHEETS

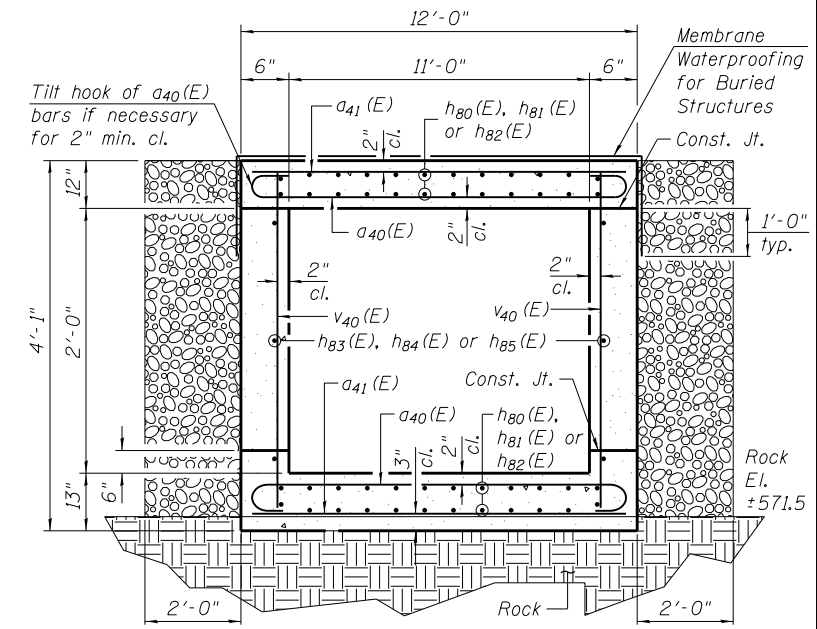
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	228
WHA* 1189J16 ILLINOIS			CONTRACT 61E00	



N. Wings 8- #4 v₄₁(E) bars
S. Wings 10- #4 v₄₁(E) bars
See Plan View

LONGITUDINAL SECTION

*h₈₅(E) and v₄₀(E) bars shall be cut to fit in field around wall penetrations. Ends shall be painted with epoxy paint.



SECTION THRU BARREL

BILL OF MATERIAL

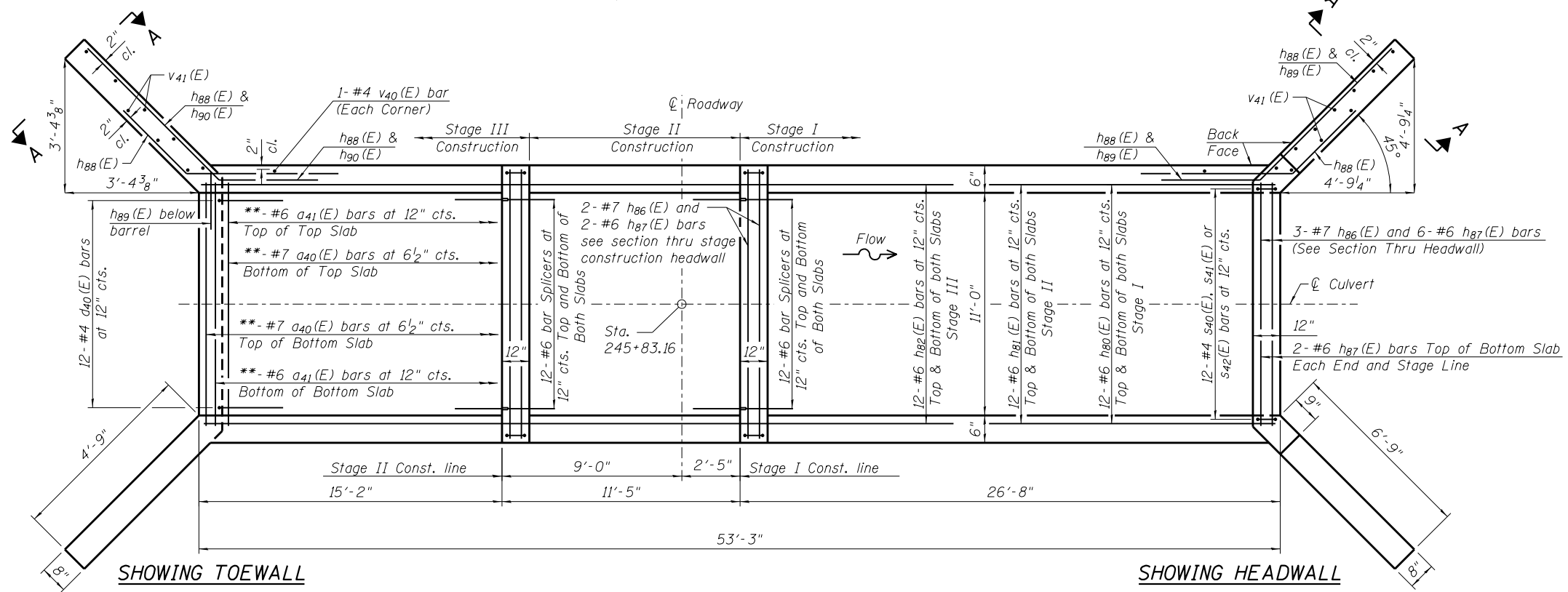
Bar	No.	Size	Length	Shape
a ₄₀ (E)	190	#7	13'-4"	┌
a ₄₁ (E)	112	#6	11'-8"	┌
d ₄₀ (E)	24	#4	4'-5"	┌
h ₈₀ (E)	48	#6	26'-5"	—
h ₈₁ (E)	48	#6	11'-2"	—
h ₈₂ (E)	48	#6	14'-11"	—
h ₈₃ (E)	6	#4	26'-5"	—
h ₈₄ (E)	6	#4	11'-2"	—
h ₈₅ (E)	6	#4	14'-11"	—
h ₈₆ (E)	12	#7	11'-8"	—
h ₈₇ (E)	24	#6	11'-8"	—
h ₈₈ (E)	28	#4	8'-0"	—
h ₈₉ (E)	20	#4	9'-9"	—
h ₉₀ (E)	10	#4	7'-9"	—
h ₉₁ (E)	4	#4	6'-10"	—
h ₉₂ (E)	16	#4	2'-4"	—
s ₄₀ (E)	12	#4	8'-5"	□
s ₄₁ (E)	12	#4	7'-9"	□
s ₄₂ (E)	24	#4	5'-3"	□
v ₄₀ (E)	240	#4	3'-9"	—
v ₄₁ (E)	36	#4	6'-10"	—
Porous Granular Embankment			Cu. Yd.	41
Rock Excavation for Structures			Cu. Yd.	4
Reinforcement Bars, Epoxy Coated			Pound	13,270
Bar Splicers			Each	108
Concrete Box Culverts			Cu. Yd.	59.5
* Membrane Waterproofing for Buried Structures			Sq. Yd.	91.5

*See Special Provisions

NOTES:
NO PRECAST OPTION ALLOWED.

A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.

All exposed edges shall be chamfered 3/4" unless otherwise noted.



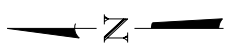
SHOWING TOEWALL

SHOWING HEADWALL

PLAN

**** BAR NUMBERS PER STAGE**
SEE PLAN AND SECTION FOR LOCATION

Bar	Stage I	Stage II	Stage III
a ₄₀ (E)	48	20	27
a ₄₁ (E)	27	12	16
v ₄₀ (E)	59	25	34



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REVISION	DATE	BY	REMARKS

DRAWN	CHECKED	APPROVED
RDA	EEL	MRL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

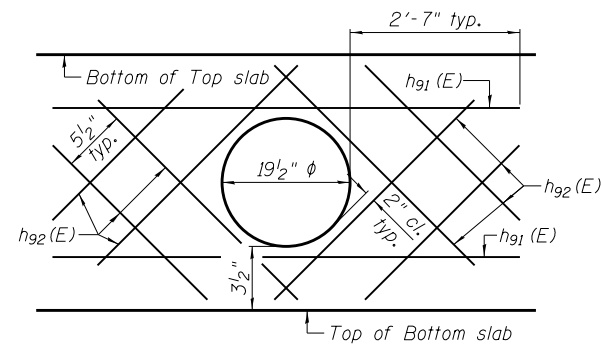


79 MOEN AVENUE
ROCKDALE, IL 60436

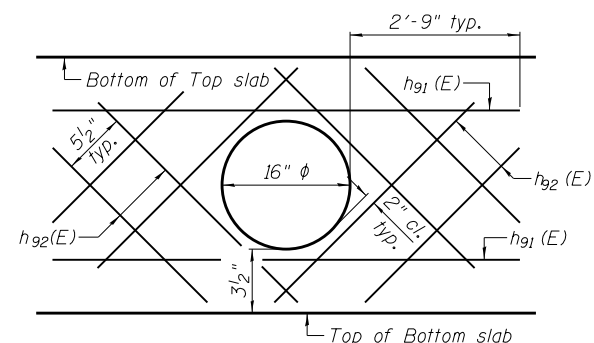
CULVERT DETAILS
STATION 245 + 83
STRUCTURAL SHEET NO. 32 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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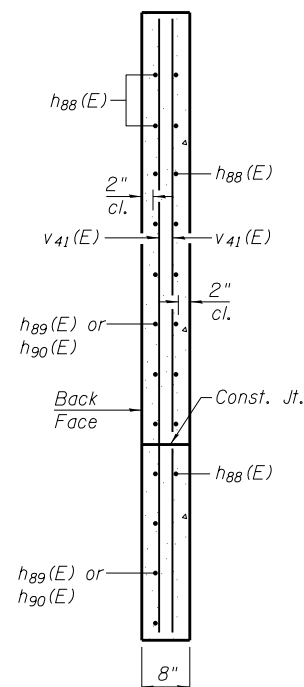
CONTRACT 61E00



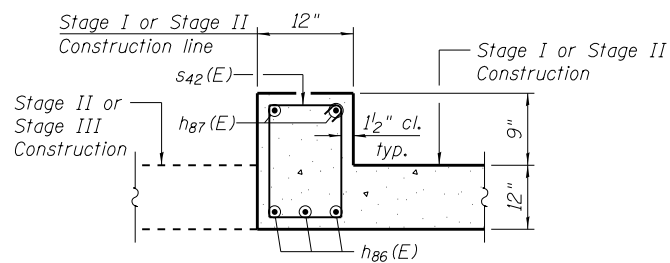
WEST WALL PENETRATION DETAIL



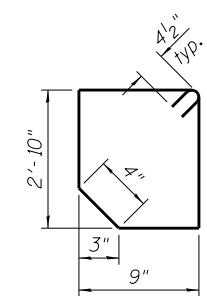
EAST WALL PENETRATION DETAIL



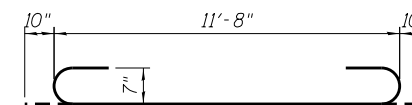
SECTION A-A



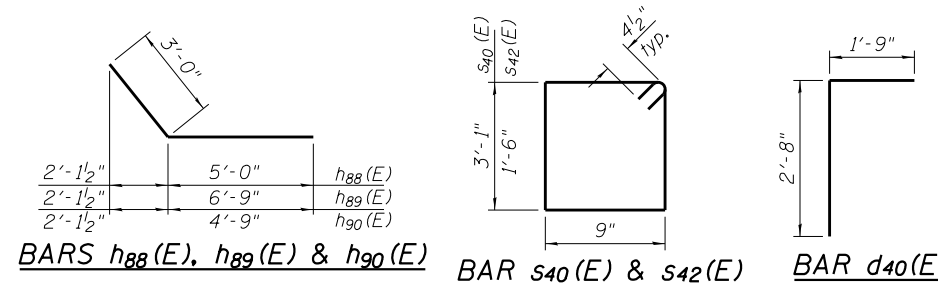
STAGE CONSTRUCTION HEADWALL



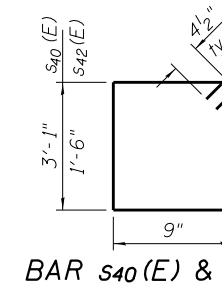
BAR s41(E)



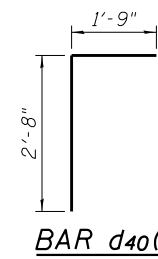
BAR d40(E)



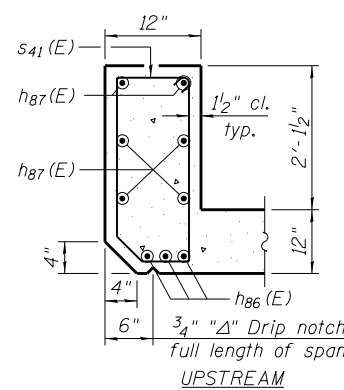
BARS h88(E), h89(E) & h90(E)



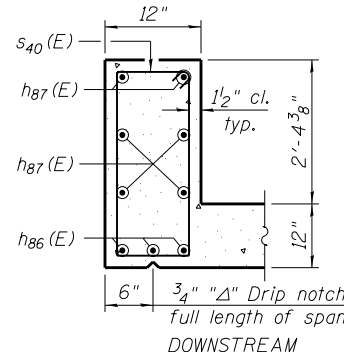
BAR s40(E) & s42(E)



BAR d40(E)



SECTION THRU HEADWALL UPSTREAM



SECTION THRU HEADWALL DOWNSTREAM

DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2016 Interims

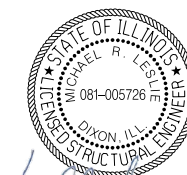
LOADING HL-93

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

DESIGN STRESSES

FIELD UNITS

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



DATE: 3/1/18

EXPIRES 11/30/18

"I certify that to the best of my knowledge, information and belief, this Culvert Design is structurally adequate for the design loading shown on the plans, the design is an economical one for the style of structure and complies with requirements of the current 'AASHTO Standard Specifications for Highway Bridges'."

FILE = S:\PROJECTS\2016\1189J16_RK_Moen\DESIGN\STRUCT\2D_Drawings\Station_245+83\1189J16_Culvert_Details.dgn

REVISION	DATE	BY	REMARKS

DRAWN	RDA
CHECKED	EEL
APPROVED	MRL

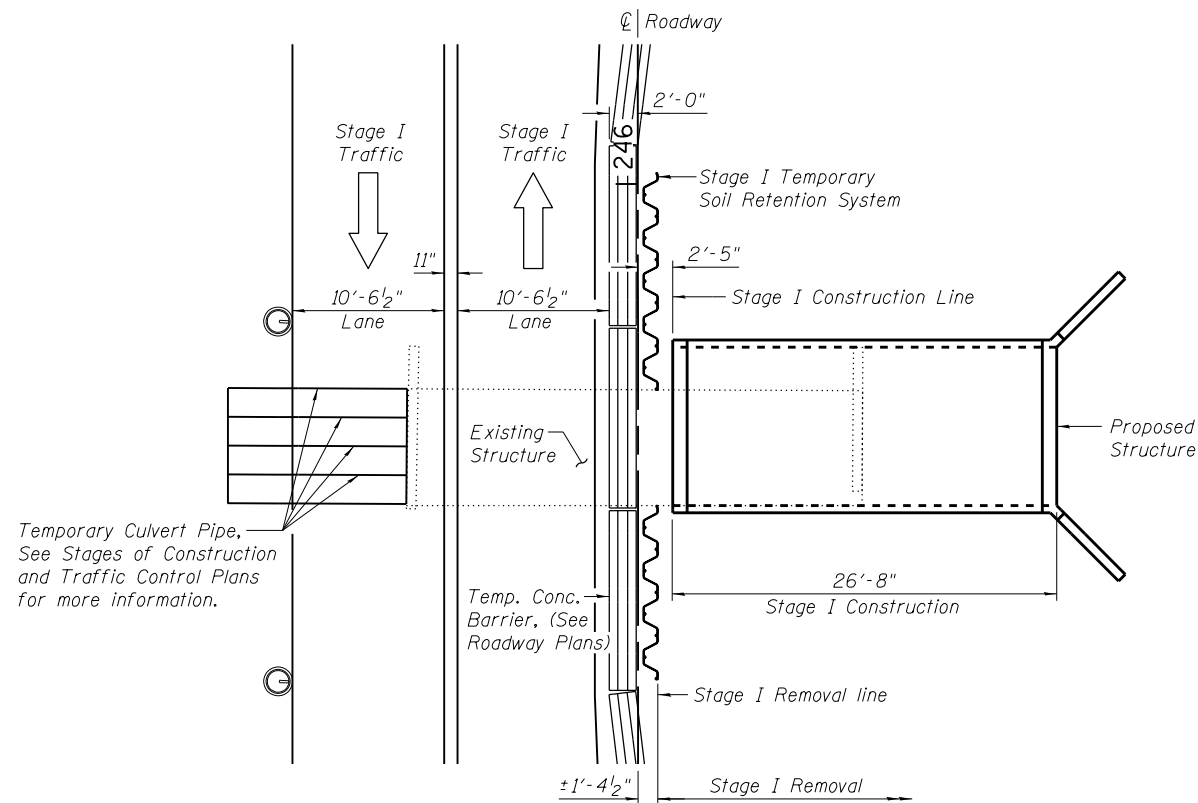
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



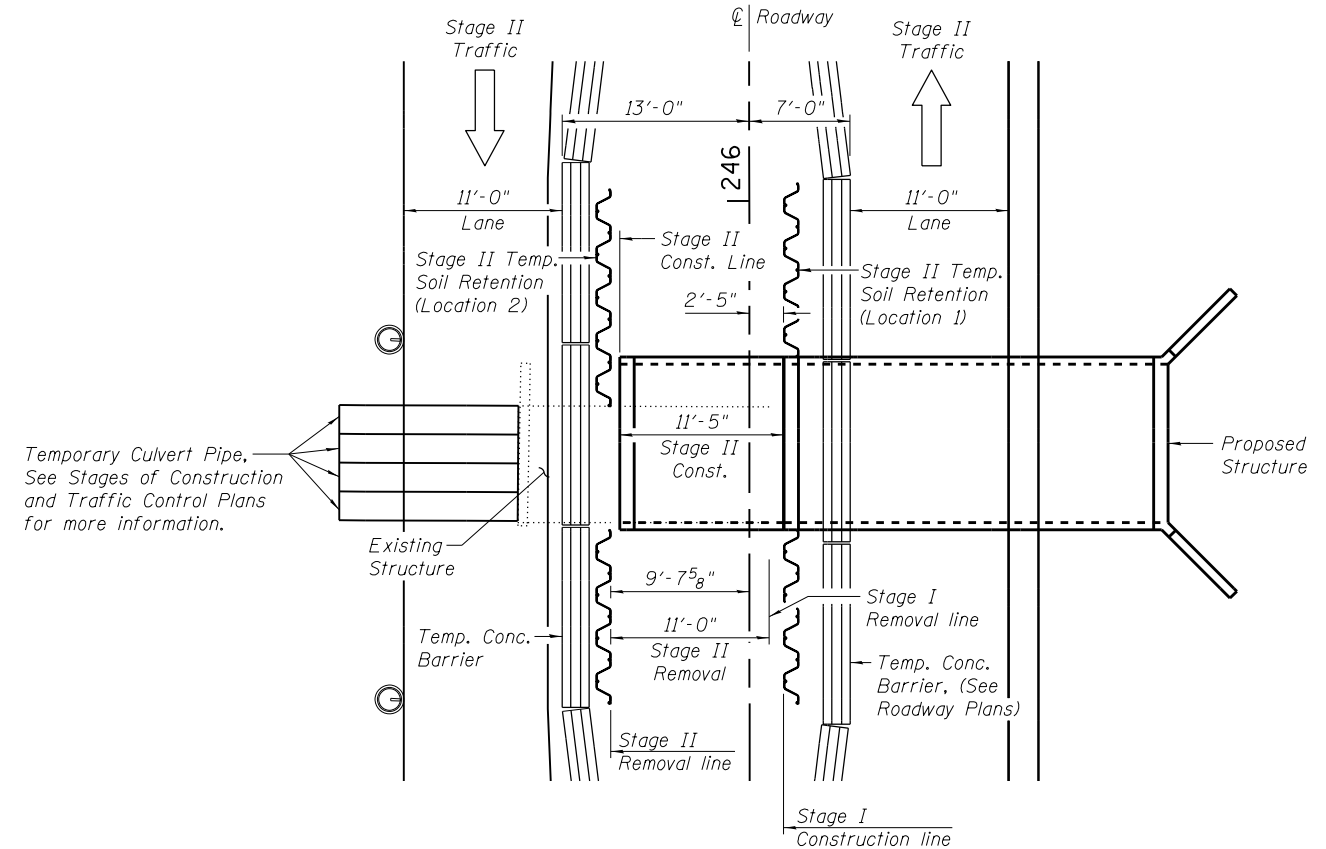
ROCKDALE
79 MOEN AVENUE
ROCKDALE, IL 60436

CULVERT DETAILS
STATION 245+83
STRUCTURAL SHEET NO. 33 OF 42 SHEETS

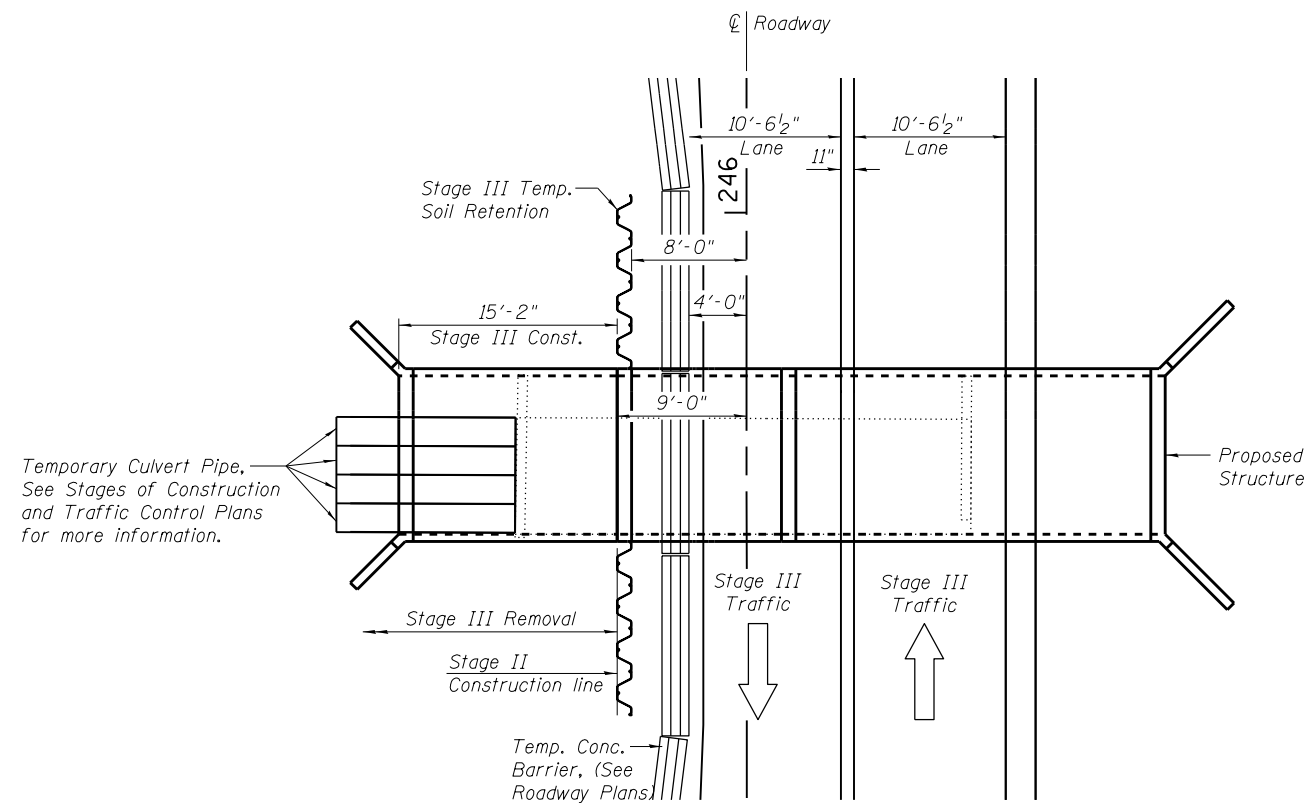
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	230
WHA* 1189J16 ILLINOIS			CONTRACT 61E00	



PLAN VIEW - STAGE I



PLAN VIEW - STAGE II



PLAN VIEW - STAGE III

NOTES:

See Structural Sheet 36 of 42 for information on Temporary Soil Retention System.

Stage I, Stage II and Stage III refer to the Structural Stages and coincide with Stage IV, Stage V and Stage VI of the Roadway plans, respectively.

Temporary Concrete Barriers shall be provided for stage construction, see Standard 704001. Pay item for "Temporary Concrete Barrier" is included in the roadway plans. See Stages of Construction and Traffic Control Plans for additional details.

SEQUENCE OF CONSTRUCTION:

- 1). Install Temporary Barriers as shown in roadway plans.
- 2). Installation of Stage I Temporary Soil Retention System and begin Stage I Removal and Excavation.
- 3). After Completion of Stage I Removal, begin Stage I Construction.
- 4). Drive Stage II Sheeting at Location 1 after Completion of Step 3.
- 5). Install Temporary Barriers and Switch to Stage II Traffic.
- 6). Install Temporary Soil Retention System for Stage II at Location 2.
- 7). After completion of Step 7, begin Stage II Construction.
- 8). After Step 8, install Temporary Barriers and Switch Traffic to Stage II Configuration.
- 9). Begin Stage III Removal.
- 10). Begin Stage III Construction.
- 11). Remove Stage III Temporary Soil Retention.

FILE = S:\PROJECTS\2016\1189J16_RK_Moen\DESIGN\STRUCT\2D_Drawings\Station 245+83\1189J16_245+83_Staging Plan Views.dgn

REVISION	DATE	BY	REMARKS

DRAWN	RDA
CHECKED	EEL
APPROVED	MRL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLET HOFMANN
& ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLIET, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-000918

ROCKDALE
79 MOEN AVENUE
ROCKDALE, IL 60436

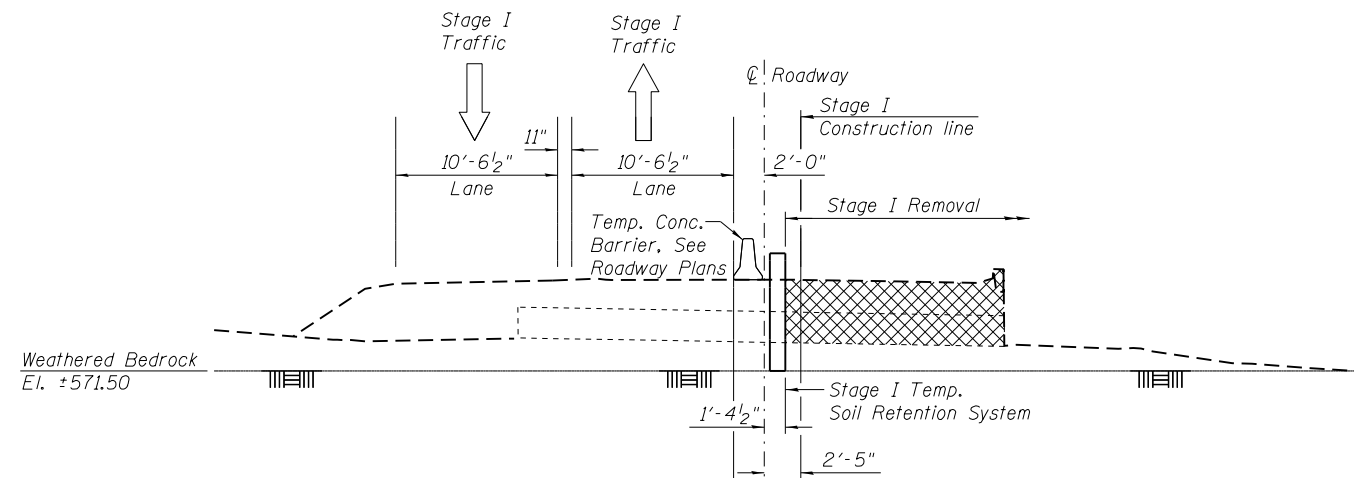
CONSTRUCTION STAGING
STATION 245 + 83

STRUCTURAL SHEET NO. 34 OF 42 SHEETS

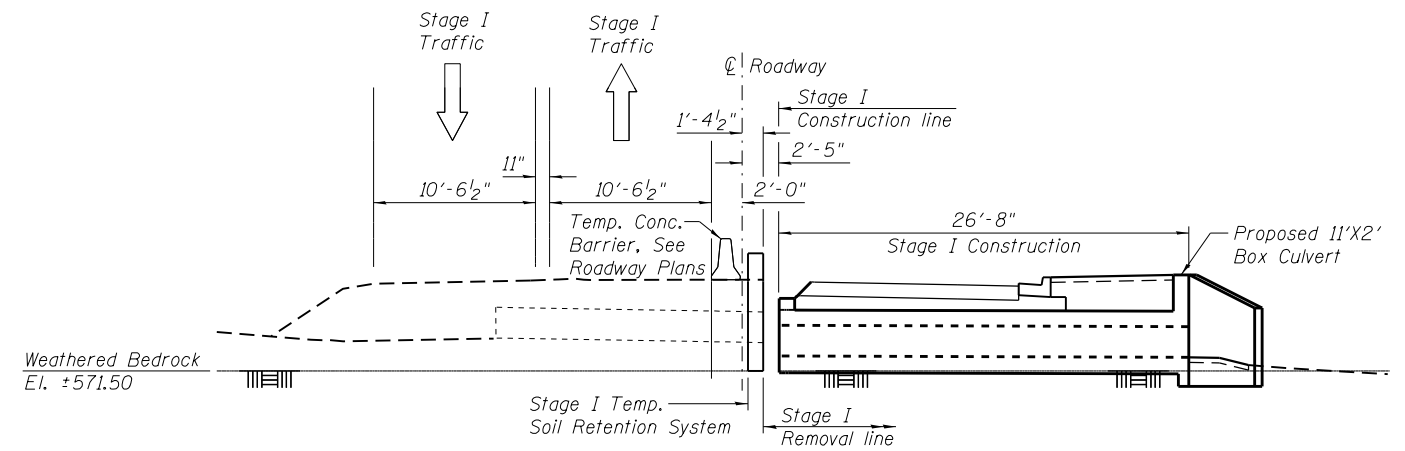
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	231
CONTRACT 61E00				

WHA* 1189J16 ILLINOIS

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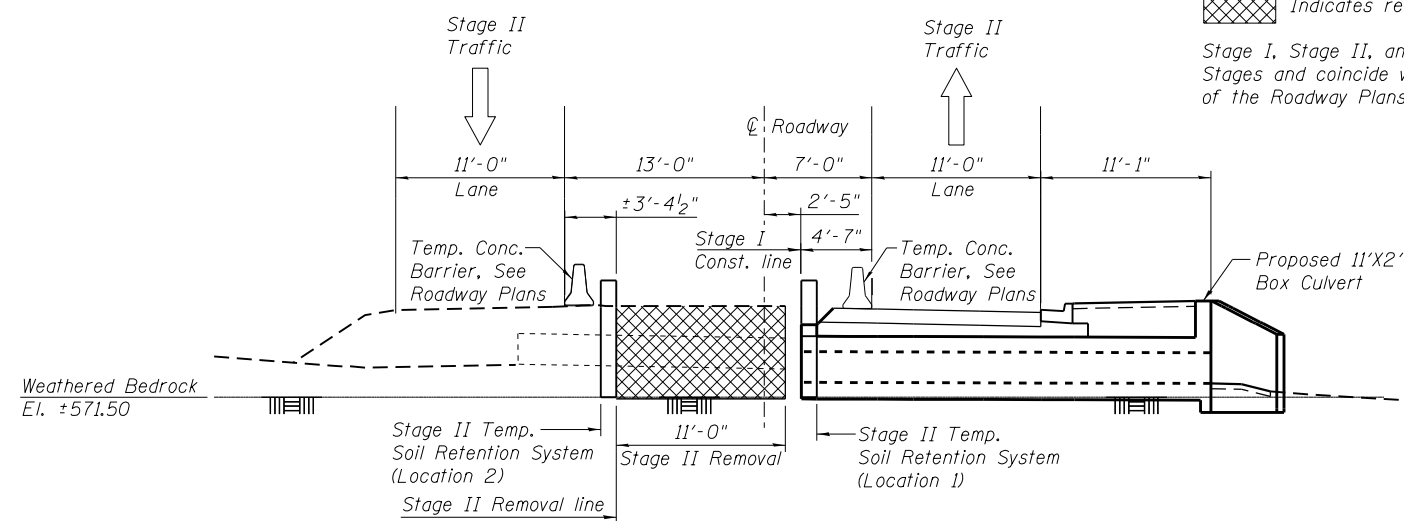
STAGE I REMOVAL
(Looking East)
(Dim. at Rt. L's to Roadway)



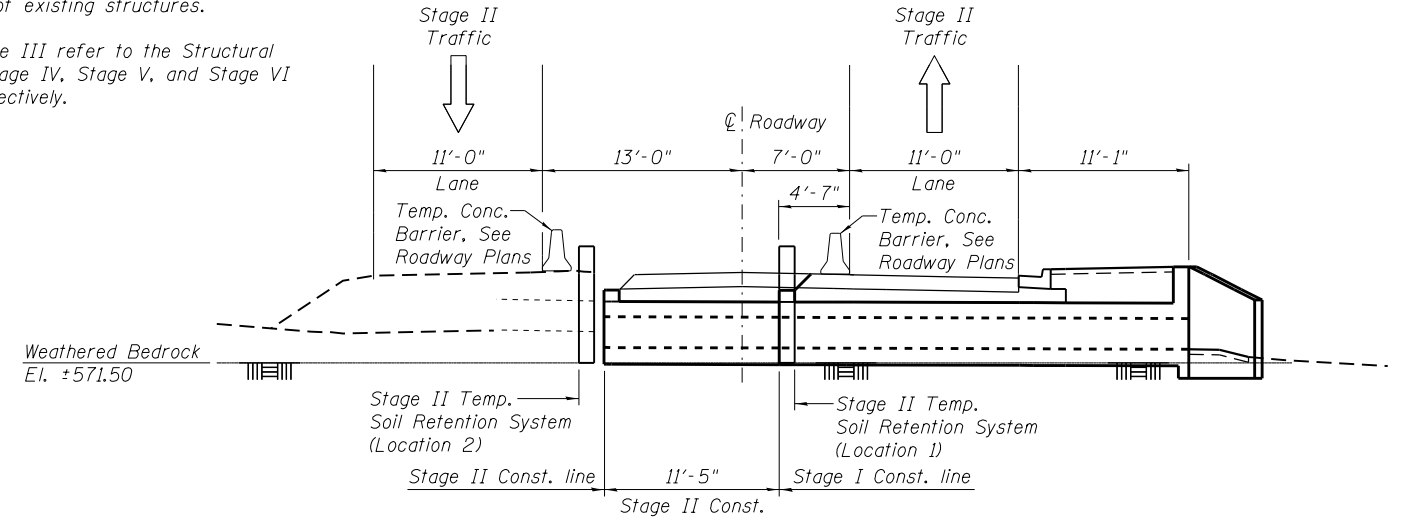
STAGE I CONSTRUCTION
(Looking East)
(Dim. at Rt. L's to Roadway)

NOTES:

- Indicates removal of existing structures.
- Stage I, Stage II, and Stage III refer to the Structural Stages and coincide with Stage IV, Stage V, and Stage VI of the Roadway Plans, respectively.



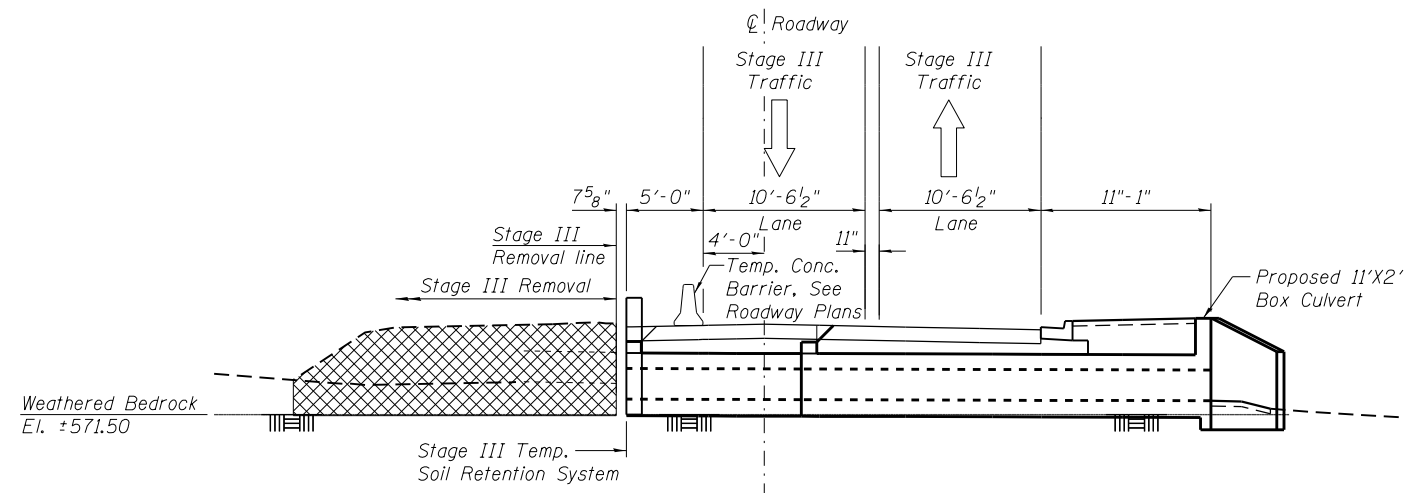
STAGE II REMOVAL
(Looking East)
(Dim. at Rt. L's to Roadway)



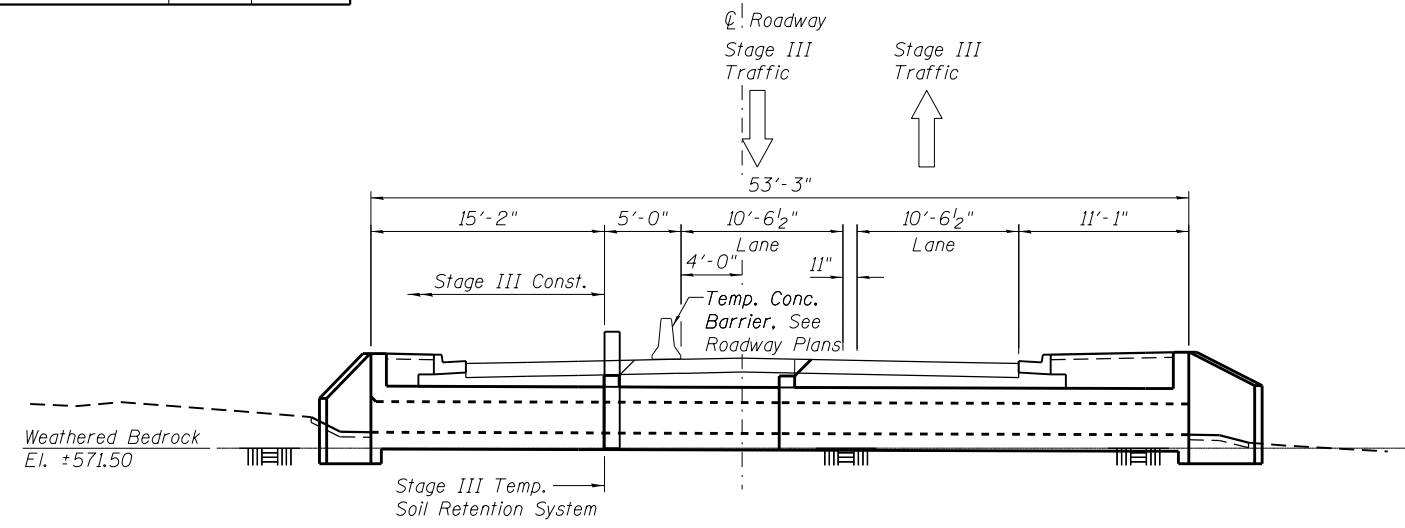
STAGE II CONSTRUCTION
(Looking East)
(Dim. at Rt. L's to Roadway)

BILL OF MATERIAL

Item	Unit	Quantity
Removal of Existing Structures No. 2	Each	1



STAGE III REMOVAL
(Looking East)
(Dim. at Rt. L's to Roadway)



STAGE III CONSTRUCTION
(Looking East)
(Dim. at Rt. L's to Roadway)

REVISION	DATE	BY	REMARKS

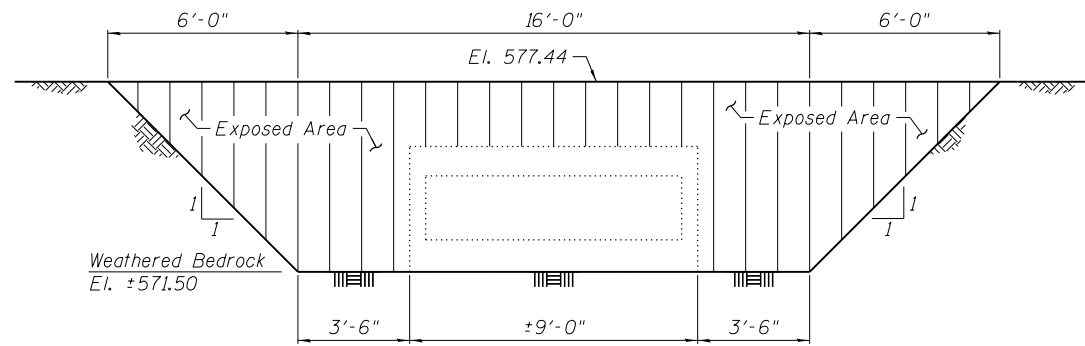
DRAWN	RDA
CHECKED	EEL
APPROVED	MRL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

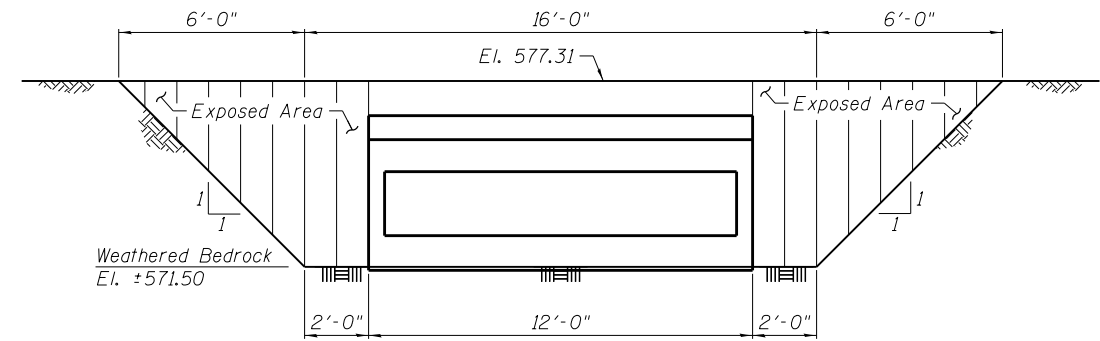
CONSTRUCTION STAGING
STATION 245 + 83

STRUCTURAL SHEET NO. 35 OF 42 SHEETS

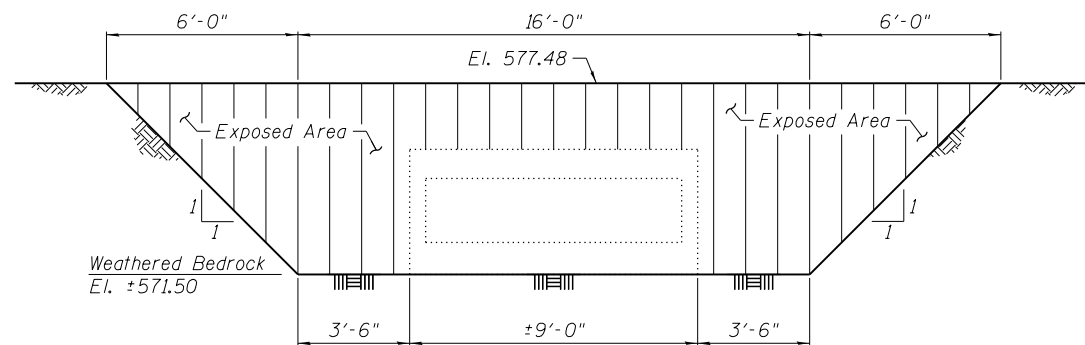
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	232
WHA* 1189J16 ILLINOIS			CONTRACT 61E00	



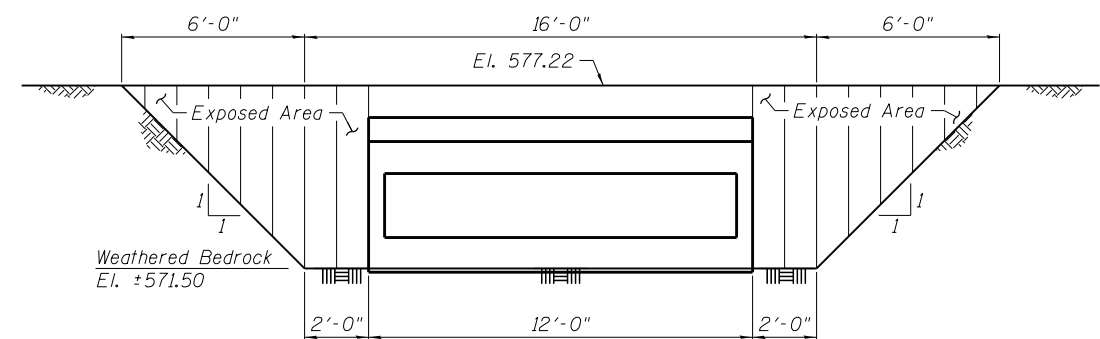
TEMPORARY SOIL RETENTION SYSTEM - STAGE I



TEMPORARY SOIL RETENTION SYSTEM - STAGE II - LOCATION 1



TEMPORARY SOIL RETENTION SYSTEM - STAGE II - LOCATION 2



TEMPORARY SOIL RETENTION SYSTEM - STAGE III

BILL OF MATERIAL

Item	Unit	Quantity
Temporary Soil Retention System	Sq. Ft.	320.4

NOTES:

A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a Temporary Soil Retention System design including plan details and calculations for review and acceptance by the Engineer.

FILE = S:\PROJECTS\2016\1189J16_RK_Moen\DESIGN\STRUCT\2D_Drawings\Station 245+83\1189J16_Temporary Retention Systems.dgn

REVISION	DATE	BY	REMARKS

DRAWN	RDA
CHECKED	EEL
APPROVED	MRL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



WILLETT HOFMANN
& ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLIET, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-000918

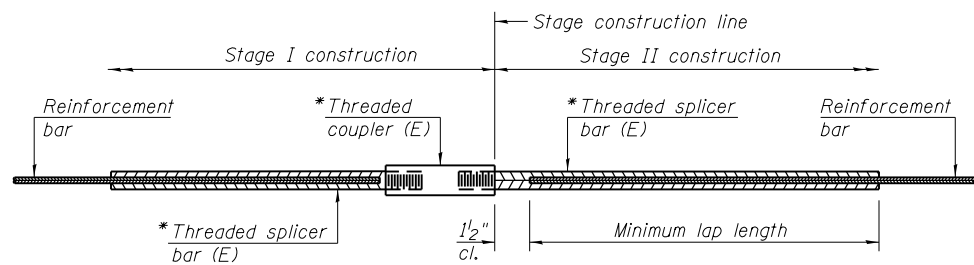


79 MOEN AVENUE
ROCKDALE, IL 60436

TEMPORARY SOIL RETENTION DETAILS
STATION 245 + 83

STRUCTURAL SHEET NO. 36 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	233
WHA* 1189J16 ILLINOIS			CONTRACT 61E00	

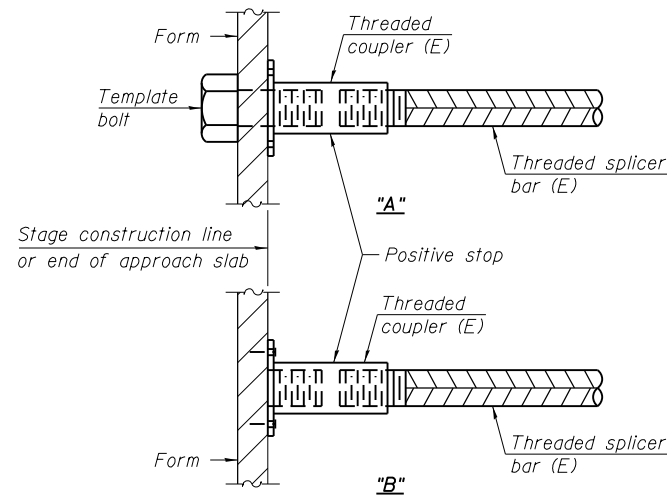


STANDARD BAR SPLICER ASSEMBLY

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

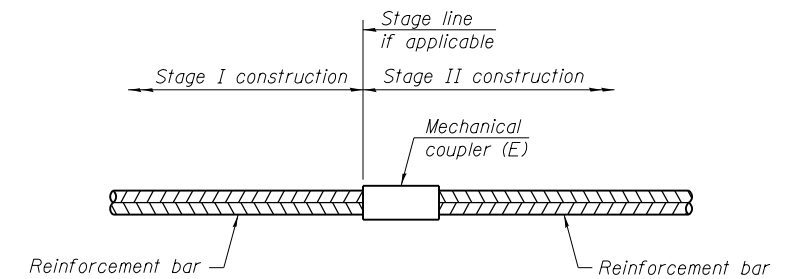
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Sta. 212+82	#5	182	3'-4"
	#6	74	4'-9"
	#7	4	5'-6"
	#8	120	7'-2"
Sta. 233+45	#4	24	2'-7"
	#5	128	3'-4"
Sta. 240+06	#4	12	2'-7"
	#5	56	3'-4"
Sta. 245+83	#4	12	2'-7"
	#6	96	4'-9"



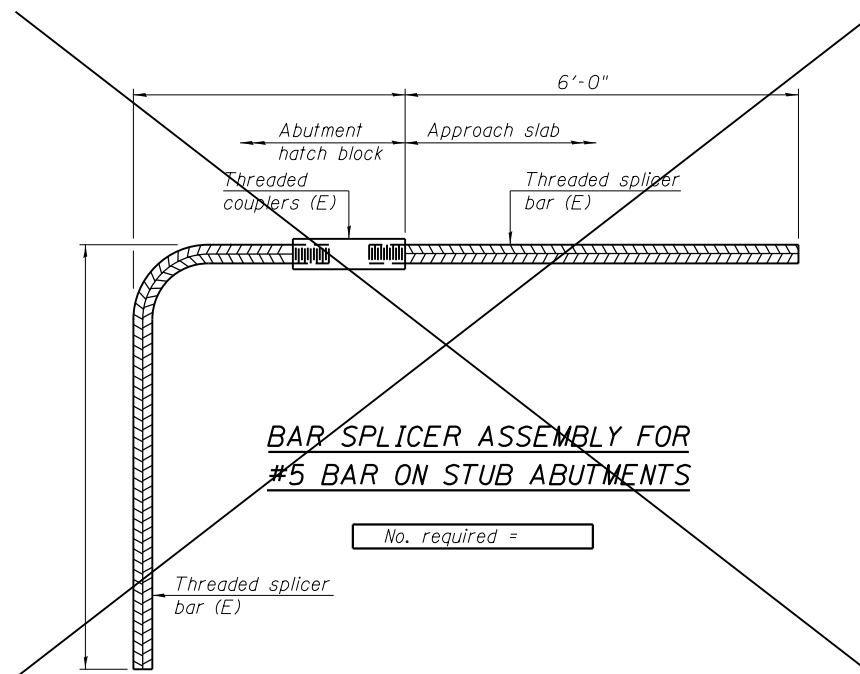
INSTALLATION AND SETTING METHODS

"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



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES:

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

FILE = S:\PROJECTS\2016\1189J16_RK_Moen\DESIGN\STRUCT\2D_Drawings\1189J16_Bar_Splicer_Assembly_and_Mechanical_Splicer_Details.dgn

REVISION	DATE	BY	REMARKS

DRAWN	RDA
CHECKED	EEL
APPROVED	MRL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
ALL STRUCTURES**

STRUCTURAL SHEET NO. 37 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	234
WHA* 1189J16 ILLINOIS			CONTRACT 61E00	

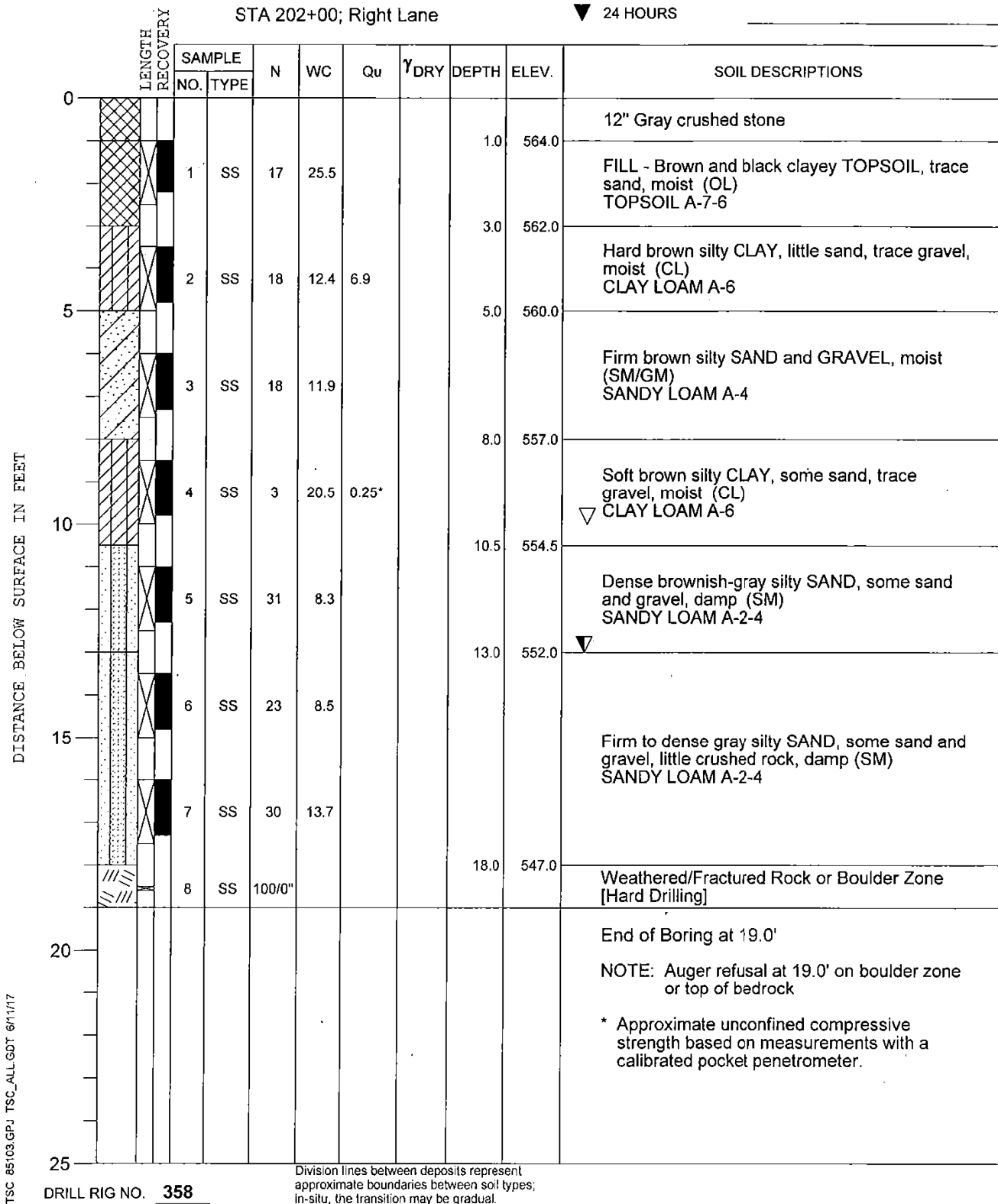
PROJECT **Moenn Avenue/Mound Road Re-Construction**
 CLIENT **Willett, Hofmann and Associates**
 BORING **B-1** DATE STARTED **3-2-17** DATE COMPLETED **3-2-17** JOB **L-85,103**



ELEVATIONS
 GROUND SURFACE **565.0**
 END OF BORING **546.0**

WATER LEVEL OBSERVATIONS
 WHILE DRILLING **13.0'**
 AT END OF BORING **10.0'**
 24 HOURS

STA 202+00; Right Lane



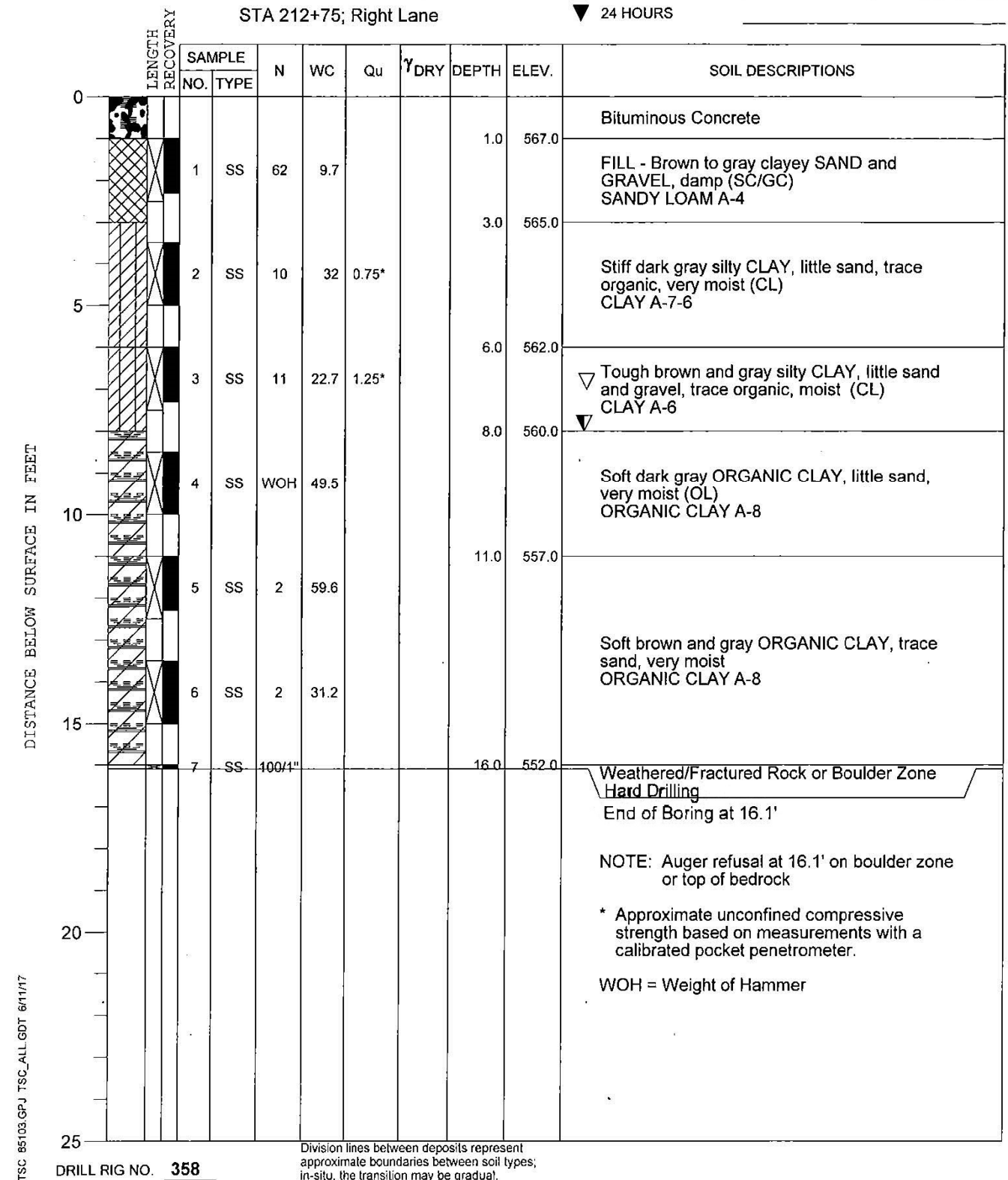
PROJECT **Moenn Avenue/Mound Road Re-Construction**
 CLIENT **Willett, Hofmann and Associates**
 BORING **B-2** DATE STARTED **3-22-17** DATE COMPLETED **3-22-17** JOB **L-85,103**



ELEVATIONS
 GROUND SURFACE **568.0**
 END OF BORING **551.9**

WATER LEVEL OBSERVATIONS
 WHILE DRILLING **8.0'**
 AT END OF BORING **7.0'**
 24 HOURS

STA 212+75; Right Lane



FILE = S:\PROJECTS\2016\1189J16_RK_Moenn\DESIGN\STRUCT\20_Drawings\1189J16_Boring_Logs.dgn

REVISION	DATE	BY	REMARKS

DRAWN RDA
 CHECKED EEL
 APPROVED MRL

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION



79 MOEN AVENUE
 ROCKDALE, IL 60436

PROJECT BORING LOGS

STRUCTURAL SHEET NO. 38 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	235

CONTRACT 61E00

WHA* 1189J16 ILLINOIS

PROJECT **Moen Avenue/Mound Road Re-Construction**

CLIENT **Willett, Hofmann and Associates**

BORING **B-3** DATE STARTED **3-22-17** DATE COMPLETED **3-22-17** JOB **L-85,103**



ELEVATIONS

GROUND SURFACE **568.0**

END OF BORING **548.0**

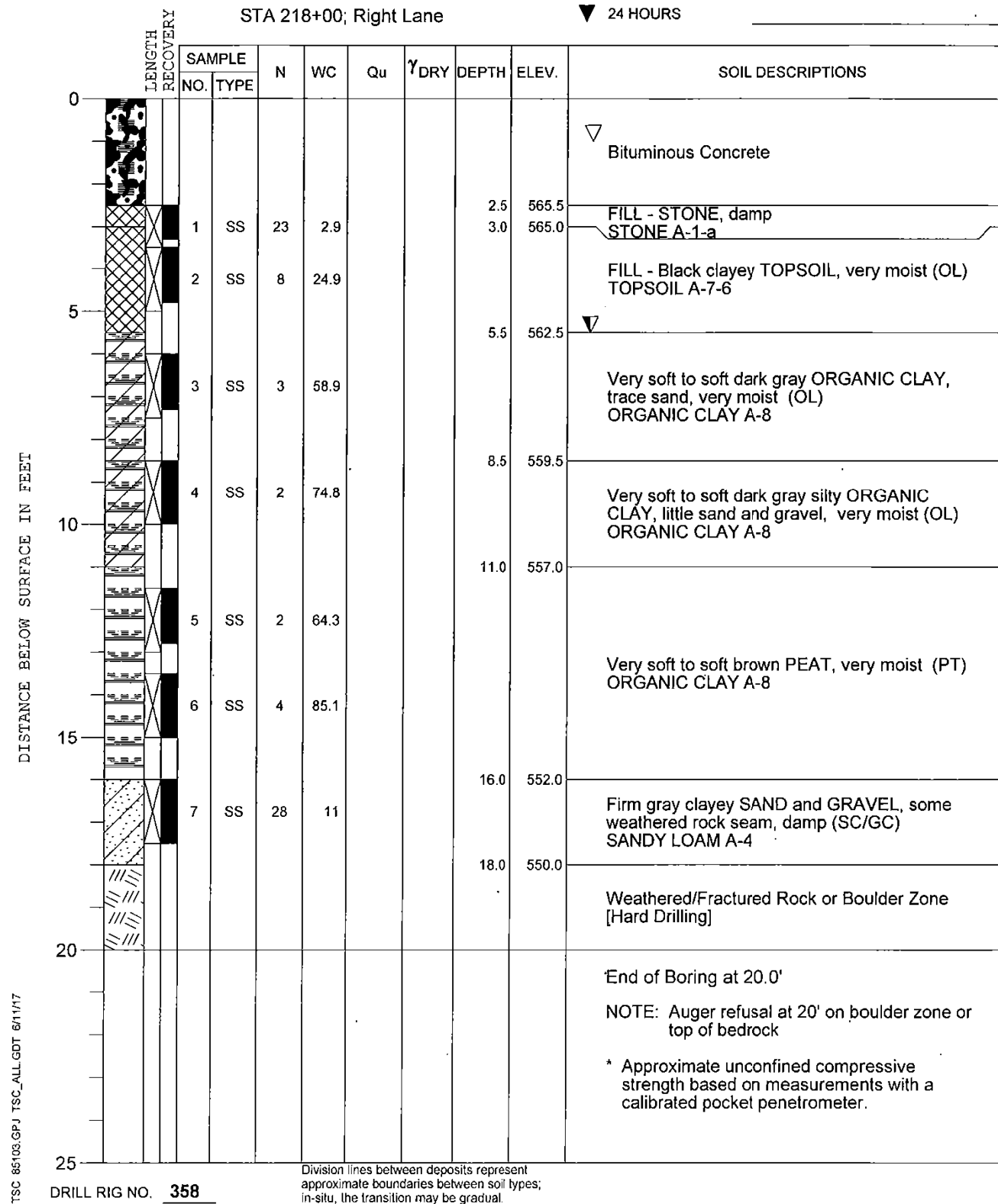
WATER LEVEL OBSERVATIONS

▽ WHILE DRILLING **5.5'**

▽ AT END OF BORING **1.0'**

▽ 24 HOURS

STA 218+00; Right Lane



PROJECT **Moen Avenue/Mound Road Re-Construction**

CLIENT **Willett, Hofmann and Associates**

BORING **B-4** DATE STARTED **3-22-17** DATE COMPLETED **3-22-17** JOB **L-85,103**



ELEVATIONS

GROUND SURFACE **570.0**

END OF BORING **552.9**

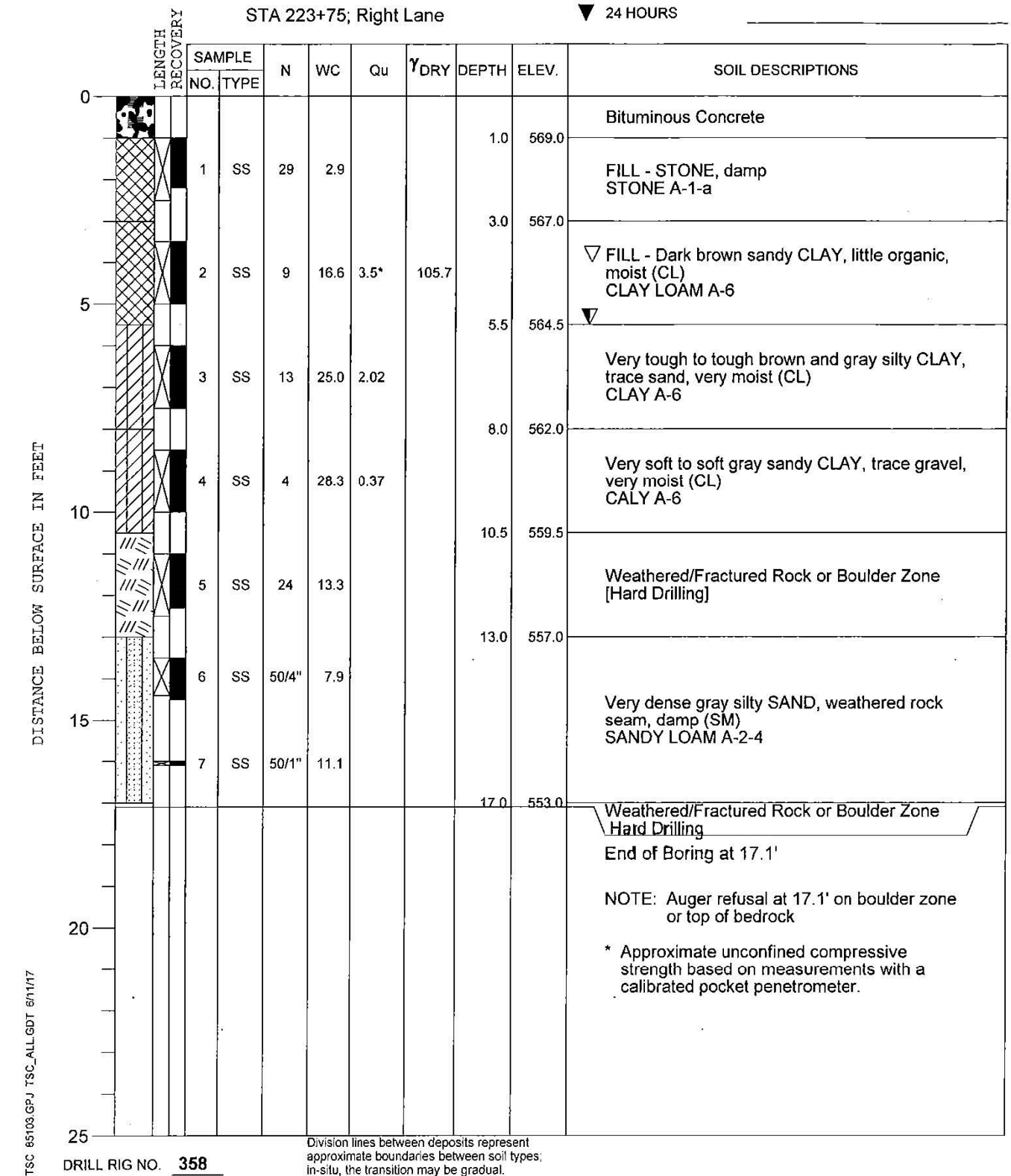
WATER LEVEL OBSERVATIONS

▽ WHILE DRILLING **5.5'**

▽ AT END OF BORING **4.0'**

▽ 24 HOURS

STA 223+75; Right Lane



FILE = S:\PROJECTS\2016\1189J16_RK_Moen\DESIGN\STRUCT\20_Drawings\1189J16_Boring_Logs.dgn

REVISION	DATE	BY	REMARKS

DRAWN RDA
 CHECKED EEL
 APPROVED MRL

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION



PROJECT BORING LOGS

STRUCTURAL SHEET NO. 39 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	236

CONTRACT 61E00

WHA* 1189J16 ILLINOIS

PROJECT **Moen Avenue/Mound Road Re-Construction**

CLIENT **Willett, Hofmann and Associates**

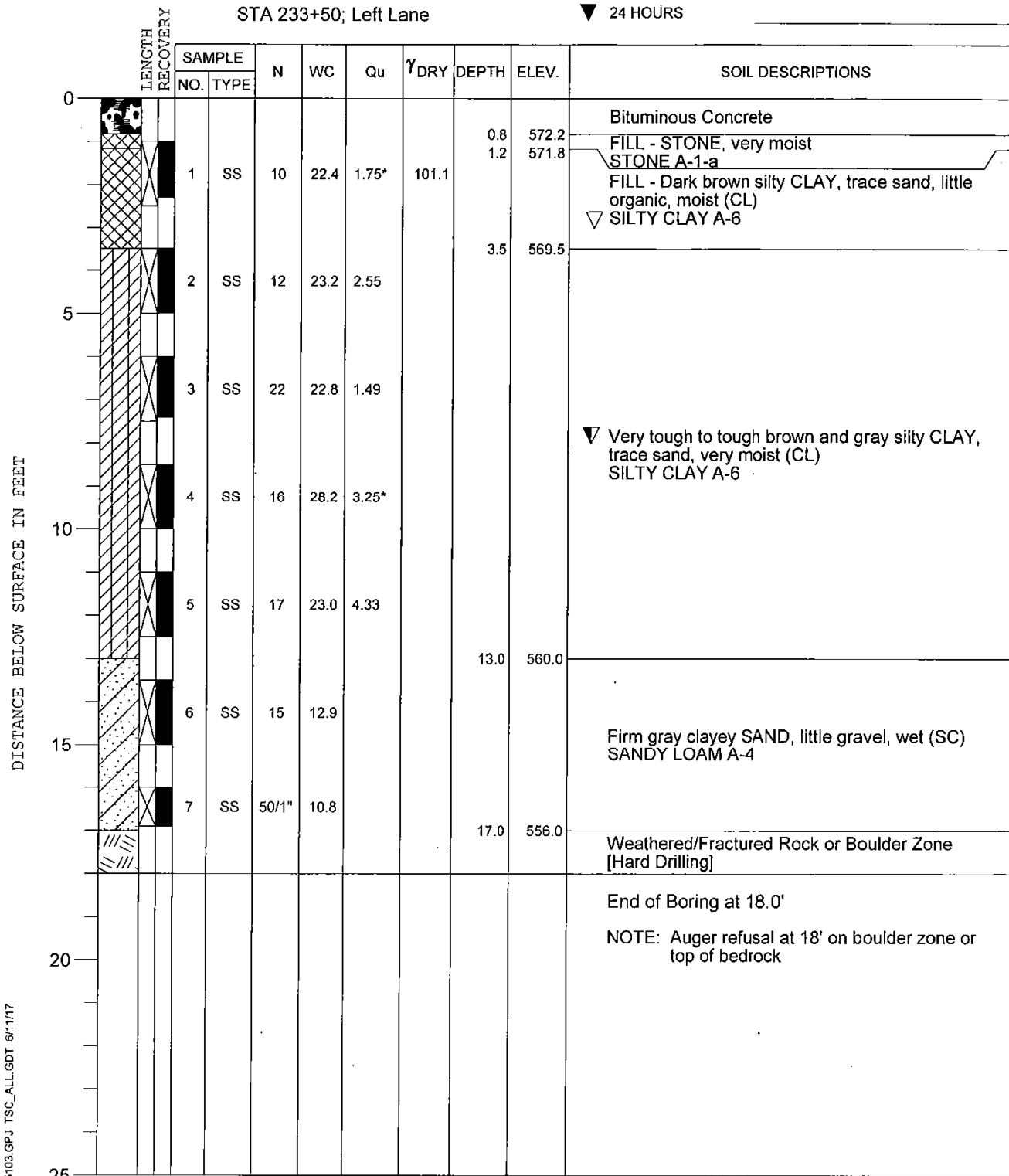
BORING **B-5** DATE STARTED **3-22-17** DATE COMPLETED **3-22-17** JOB **L-85,103**



ELEVATIONS
 GROUND SURFACE **573.0**
 END OF BORING **555.0**

WATER LEVEL OBSERVATIONS
 WHILE DRILLING **8.0'**
 AT END OF BORING **3.0'**
 24 HOURS

STA 233+50; Left Lane



DRILL RIG NO. **358**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

PROJECT **Moen Avenue/Mound Road Re-Construction**

CLIENT **Willett, Hofmann and Associates**

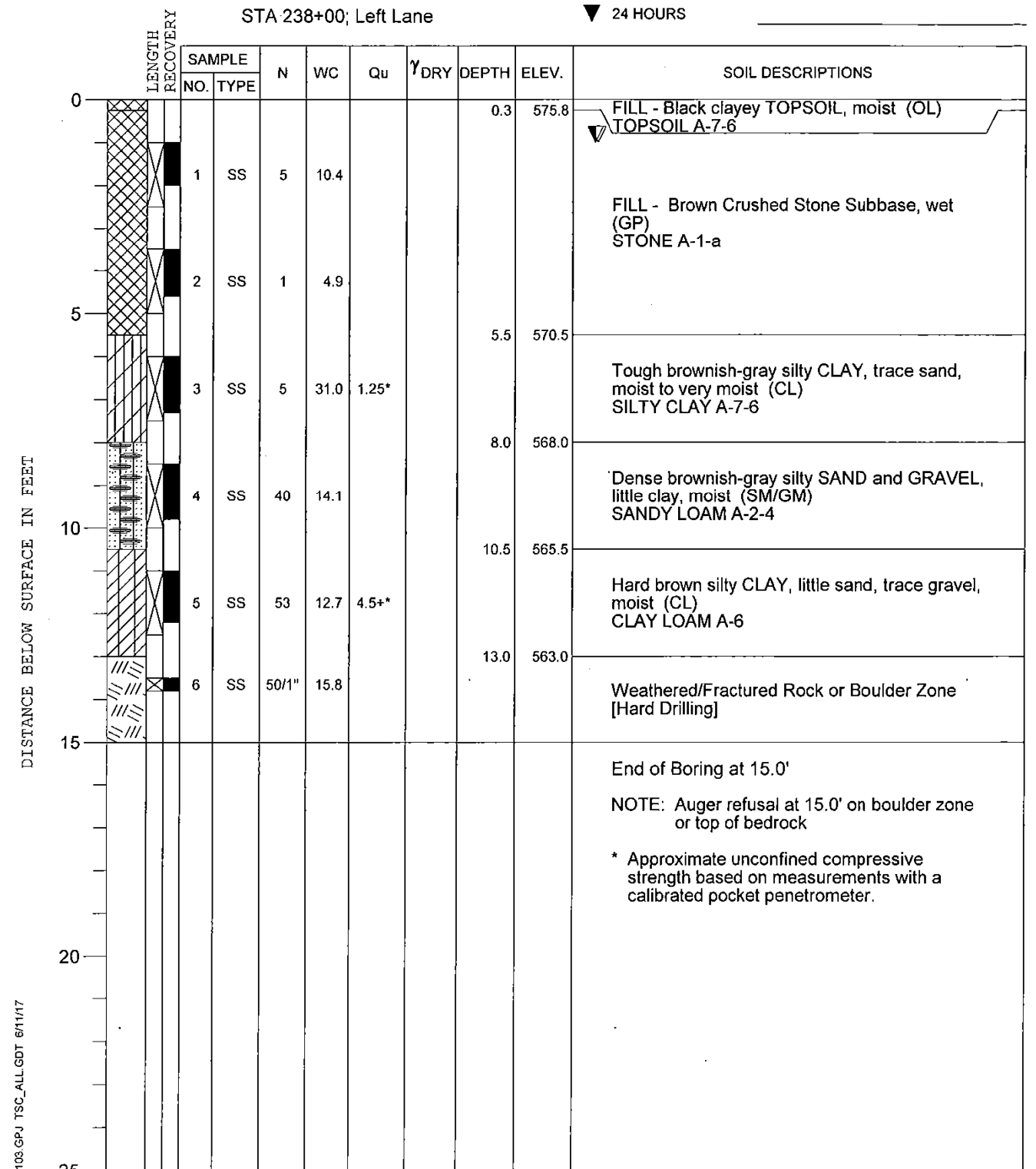
BORING **B-6** DATE STARTED **3-2-17** DATE COMPLETED **3-2-17** JOB **L-85,103**



ELEVATIONS
 GROUND SURFACE **576.0**
 END OF BORING **561.0**

WATER LEVEL OBSERVATIONS
 WHILE DRILLING **1.0'**
 AT END OF BORING **1.0'**
 24 HOURS

STA 238+00; Left Lane



DRILL RIG NO. **358**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

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REVISION	DATE	BY	REMARKS

DRAWN RDA
 CHECKED EEL
 APPROVED MRL

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION



79 MOEN AVENUE
 ROCKDALE, IL 60436

PROJECT BORING LOGS
 STRUCTURAL SHEET NO. 40 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	237

CONTRACT 61E00

WHA* 1189J16 ILLINOIS

PROJECT **Moen Avenue/Mound Road Re-Construction**

CLIENT **Willett, Hofmann and Associates**

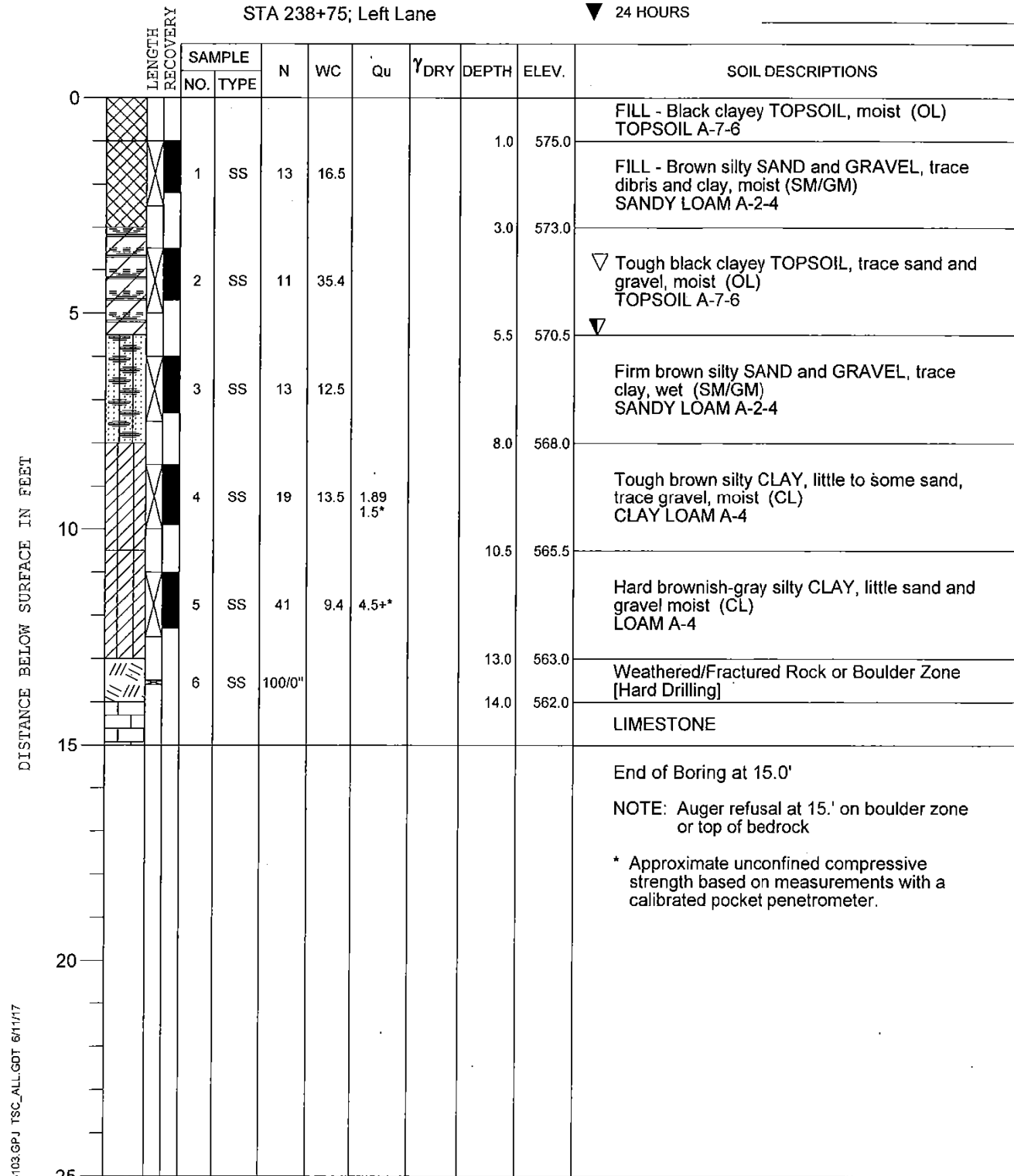
BORING **B-7** DATE STARTED **3-2-17** DATE COMPLETED **3-2-17** JOB **L-85,103**



ELEVATIONS
 GROUND SURFACE **576.0**
 END OF BORING **561.0**

WATER LEVEL OBSERVATIONS
 WHILE DRILLING **5.5'**
 AT END OF BORING **4.0'**
 24 HOURS

STA 238+75; Left Lane



DRILL RIG NO. **358**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.

PROJECT **Moen Avenue/Mound Road Re-Construction**

CLIENT **Willett, Hofmann and Associates**

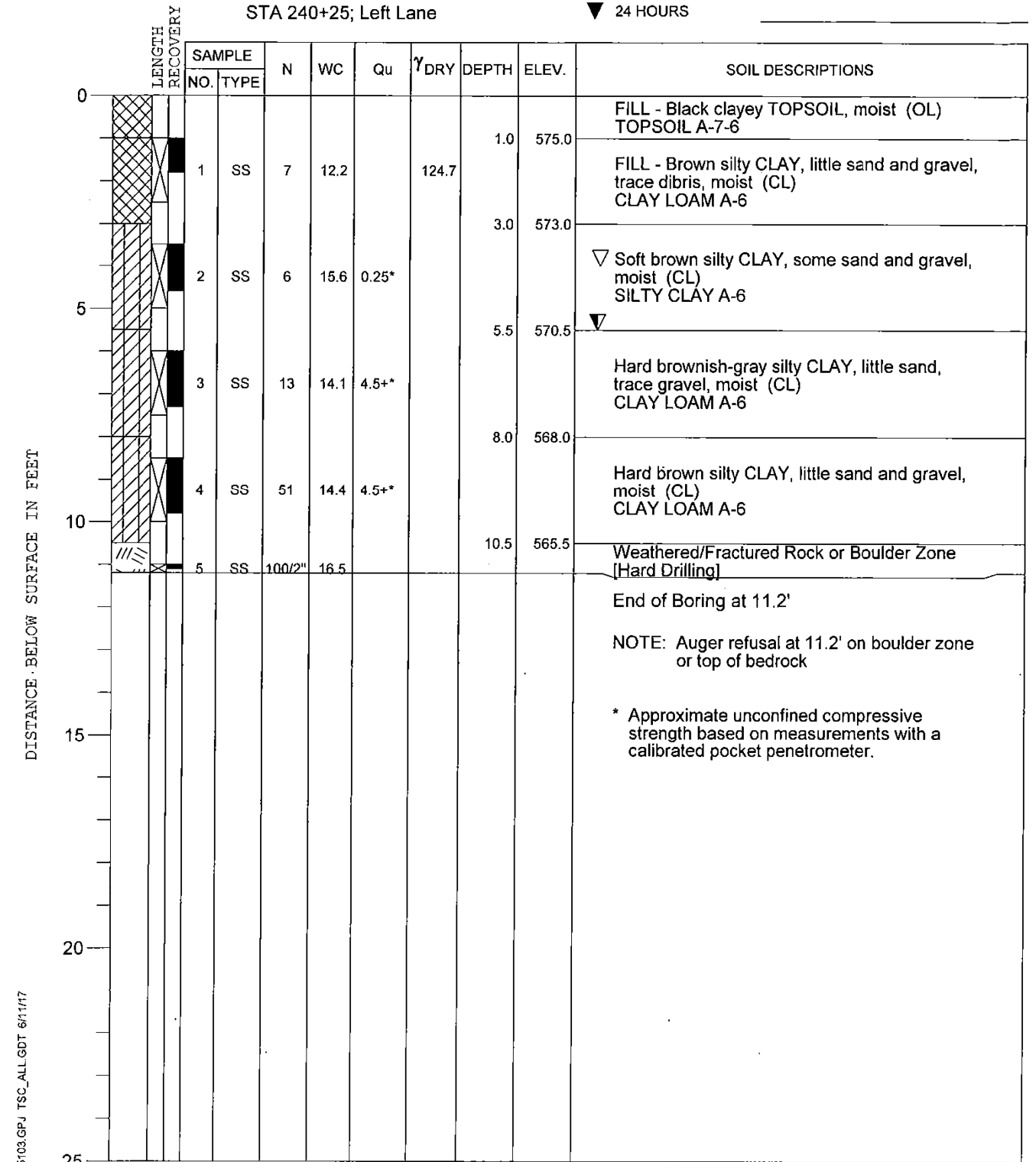
BORING **B-8** DATE STARTED **3-2-17** DATE COMPLETED **3-2-17** JOB **L-85,103**



ELEVATIONS
 GROUND SURFACE **576.0**
 END OF BORING **564.8**

WATER LEVEL OBSERVATIONS
 WHILE DRILLING **5.5'**
 AT END OF BORING **4.0'**
 24 HOURS

STA 240+25; Left Lane



DRILL RIG NO. **358**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.

FILE = S:\PROJECTS\2016\1189J16_RK_Moen\DESIGN\STRUCT\2D_Drawings\1189J16_Boring_Logs.dgn

REVISION	DATE	BY	REMARKS

DRAWN	RDA
CHECKED	EEL
APPROVED	MRL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



79 MOEN AVENUE
ROCKDALE, IL 60436

PROJECT BORING LOGS

STRUCTURAL SHEET NO. 41 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	238

CONTRACT 61E00

WHA* 1189J16 ILLINOIS

PROJECT: **Moen Avenue/Mound Road Re-Construction**

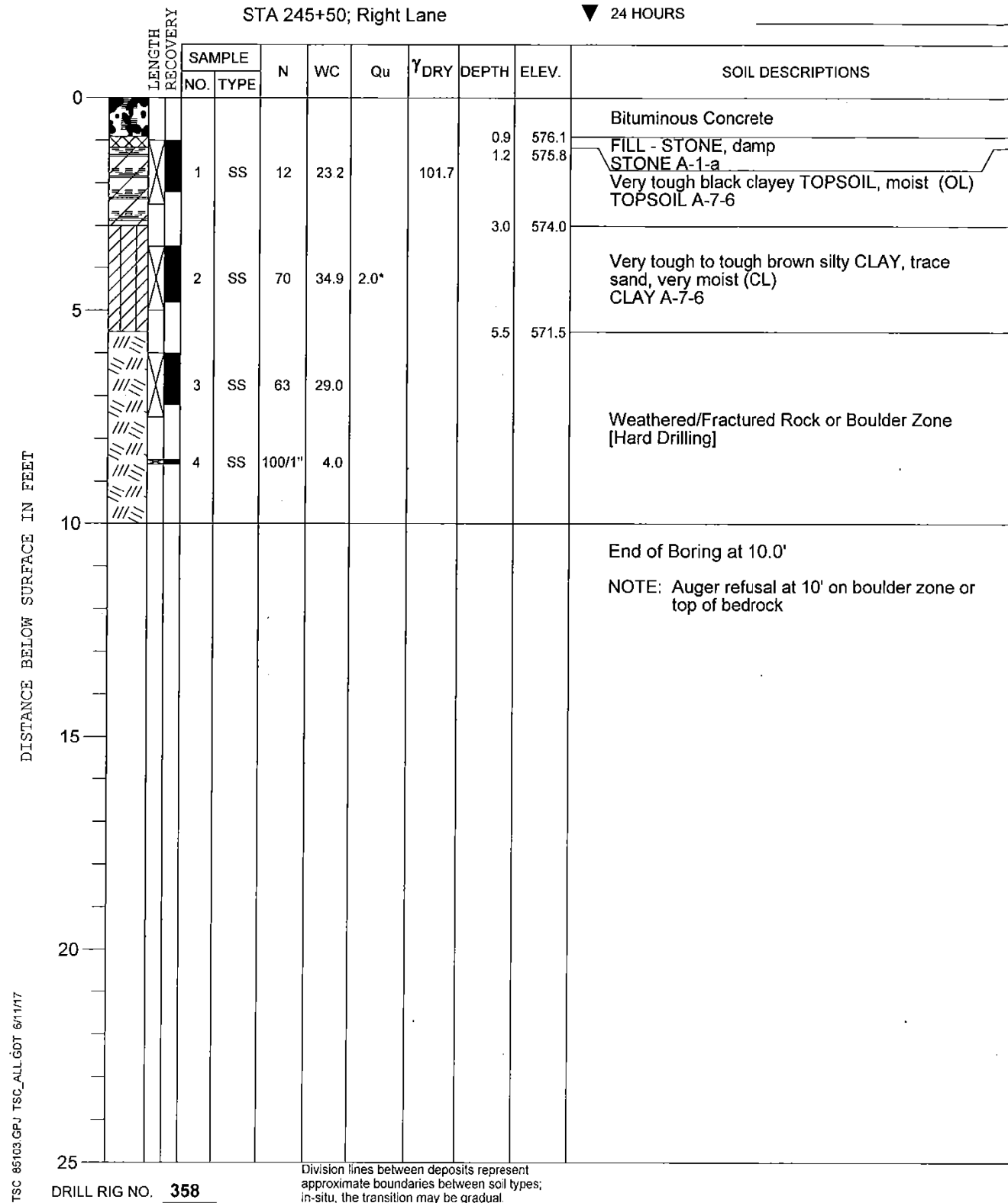
CLIENT: **Willett, Hofmann and Associates**



BORING: **B-9** DATE STARTED: **3-22-17** DATE COMPLETED: **3-22-17** JOB: **L-85,103**

ELEVATIONS: GROUND SURFACE **577.0** END OF BORING **567.0**
 WATER LEVEL OBSERVATIONS: WHILE DRILLING **Dry** AT END OF BORING **Dry** 24 HOURS

STA 245+50; Right Lane



DRILL RIG NO. **358**

Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual.

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REVISION	DATE	BY	REMARKS

DRAWN	RDA
CHECKED	EEL
APPROVED	MRL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



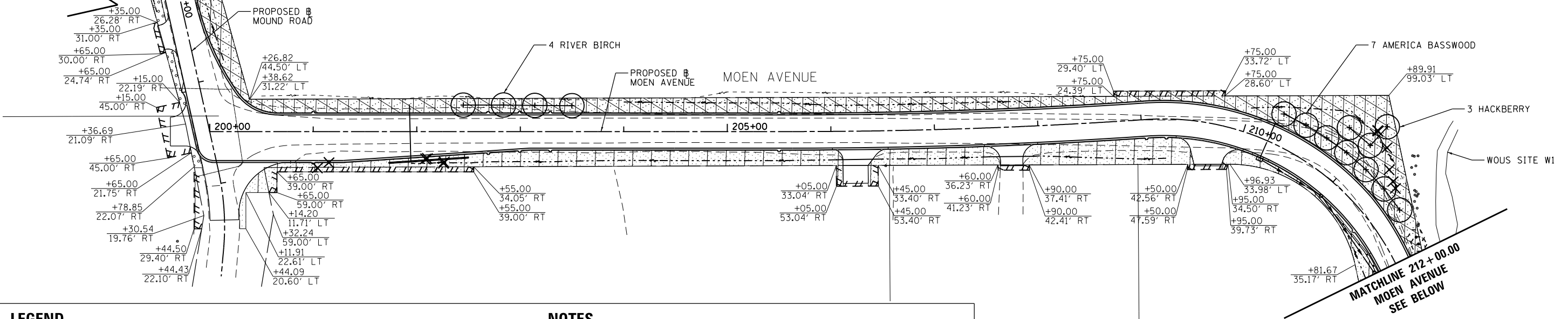
PROJECT BORING LOGS
STRUCTURAL SHEET NO. 42 OF 42 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	239
CONTRACT 61E00				

WHA* 1189J16 ILLINOIS



SEE PLAN
MOUND ROAD
SHEET 3 OF 3



LEGEND

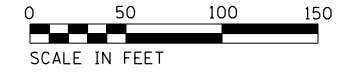
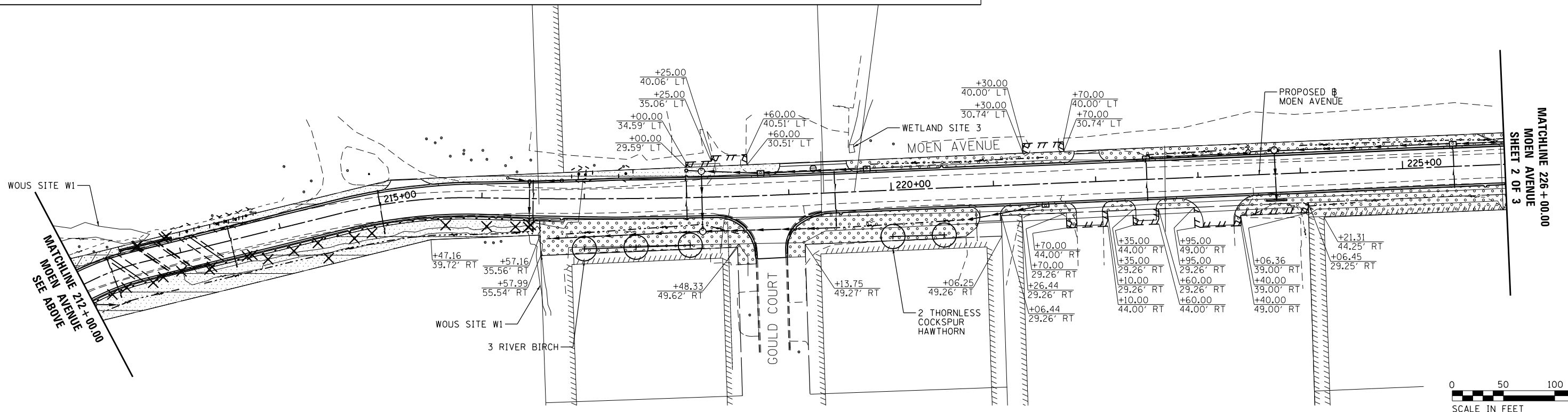
- SEEDING, CLASS 2A
- SEEDING, CLASS 4A
- SEEDING, CLASS 5A
- TREE REMOVAL

- RUNOFF FLOW DIRECTION
- TREE PROTECTION
- PROPOSED TREE

NOTES

THE SEEDING SHALL BE SOWN IN ACCORDANCE WITH SECTION 250. ALL SEEDING NOT SOWN NOT ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT THEIR EXPENSE.

WOODY PLANTS SHALL BE PLANTED IN IN ACCORDANCE TO WITH SECTION 253. ALL PLANTING NOT ACCORDING TO THE SPECIFICATIONS SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE PLANTINGS AND REPLACEMENT BY THE CONTRACTOR AT THEIR EXPENSE.



FILE = S:\PROJECTS\2016\1189J16-Rk_Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-1.landscape.dgn

REVISION	DATE	BY	REMARKS

DRAWN	JSH
CHECKED	GFS
APPROVED	GFS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



WILLETT HOFMANN
& ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLET, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-000918

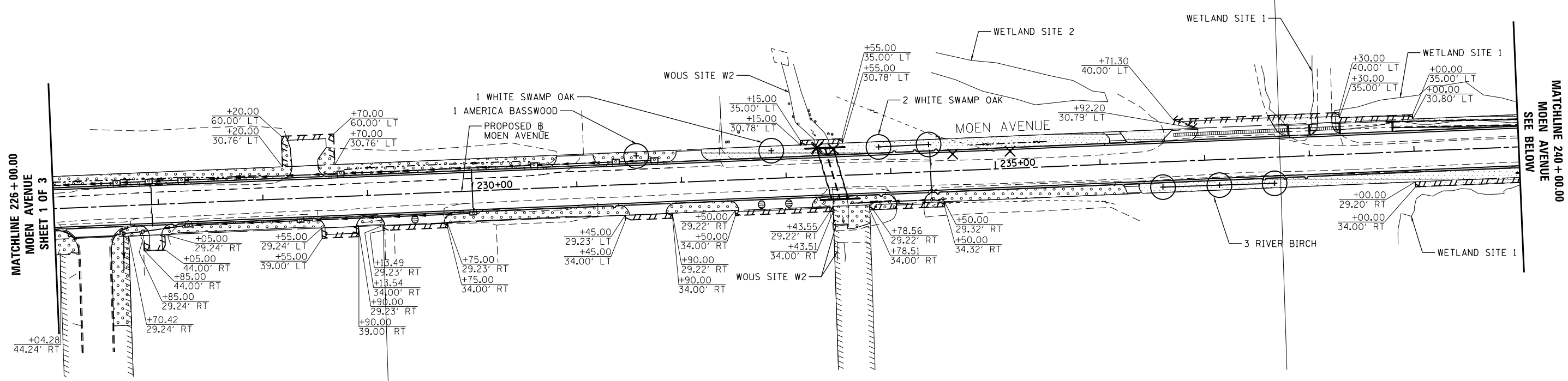


79 MOEN AVENUE
ROCKDALE, IL 60436

LANDSCAPING
MOEN AVENUE PLAN SHEET - SHEET 1 OF 3

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	240
CONTRACT 61E00				
WHA* 1189J16		ILLINOIS		

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LEGEND

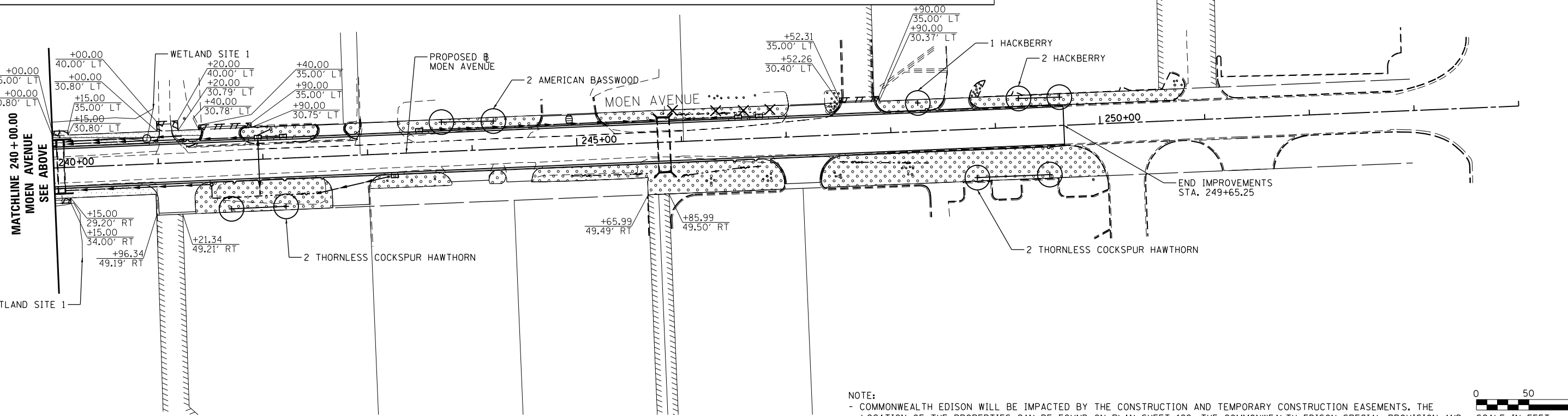
	SEEDING, CLASS 2A		RUNOFF FLOW DIRECTION
	SEEDING, CLASS 4A		TREE PROTECTION
	SEEDING, CLASS 5A		PROPOSED TREE
	TREE REMOVAL		

NOTES

THE SEEDING SHALL BE SOWN IN ACCORDANCE WITH SECTION 250. ALL SEEDING NOT SOWN NOT ACCORDING TO THE SPECIFIED SEASONAL DATE SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE SEEDING AND REPLACEMENT BY THE CONTRACTOR AT THEIR EXPENSE.

WOODY PLANTS SHALL BE PLANTED IN IN ACCORDANCE TO WITH SECTION 253. ALL PLANTING NOT ACCORDING TO THE SPECIFICATIONS SHALL REQUIRE PRIOR WRITTEN APPROVAL FROM THE ENGINEER. FAILURE TO SECURE SUCH APPROVAL SHALL RESULT IN THE REJECTION OF THE PLANTINGS AND REPLACEMENT BY THE CONTRACTOR AT THEIR EXPENSE.

NOTE:
 - COMMONWEALTH EDISON WILL BE IMPACTED BY THE CONSTRUCTION AND TEMPORARY CONSTRUCTION EASEMENTS. THE LOCATION OF THE PROPERTIES CAN BE FOUND ON PLAN SHEET 188. THE COMMONWEALTH EDISON SPECIAL PROVISION AND EXHIBIT C, FOUND IN THE SPECIAL PROVISIONS, SHALL BE REVIEWED AND FOLLOWED BY THE CONTRACTOR.



NOTE:
 - COMMONWEALTH EDISON WILL BE IMPACTED BY THE CONSTRUCTION AND TEMPORARY CONSTRUCTION EASEMENTS. THE LOCATION OF THE PROPERTIES CAN BE FOUND ON PLAN SHEET 188. THE COMMONWEALTH EDISON SPECIAL PROVISION AND EXHIBIT C, FOUND IN THE SPECIAL PROVISIONS, SHALL BE REVIEWED AND FOLLOWED BY THE CONTRACTOR.

0 50 100 150
 SCALE IN FEET

REVISION	DATE	BY	REMARKS

DRAWN JSH
 CHECKED GFS
 APPROVED GFS

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

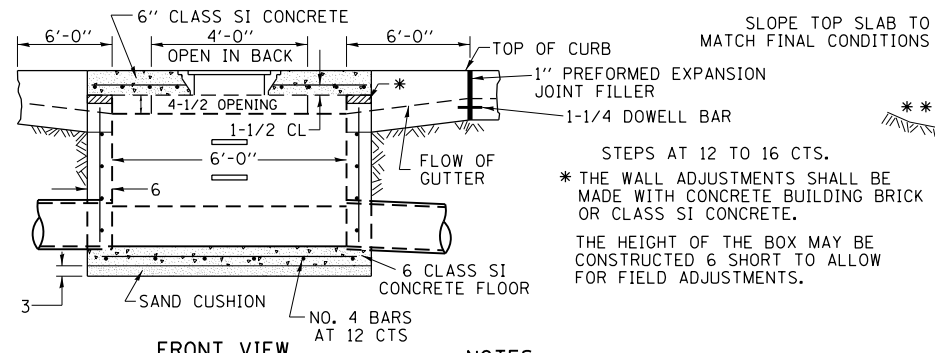
WILLETT HOFMANN & ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 1000 ESSINGTON ROAD, JOUET, IL 60415
 T: 315-729-2229 DESIGN FIRM: #184-00018

ROCKDALE
 79 MOEN AVENUE
 ROCKDALE, IL 60436

LANDSCAPING
MOEN AVENUE PLAN SHEET - SHEET 2 OF 3

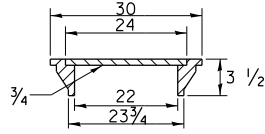
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	241
CONTRACT 61E00				
WHA* 1189J16		ILLINOIS		

INLETS, SPECIAL, NO. 4



SEE STANDARD 602701 FOR DETAILS OF STEPS. 1" PREFORMED EXPANSION JOINTS AS SHOWN SHALL BE PROVIDED ON EACH SIDE OF INLET. CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT. THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTAL SECTIONS. REINFORCEMENT FOR INLETS, SPECIAL, NO. 4 SHALL BE ACCORDING TO DISTRICT STANDARD 79.4g

LIGHT WEIGHT MANHOLE CASTING

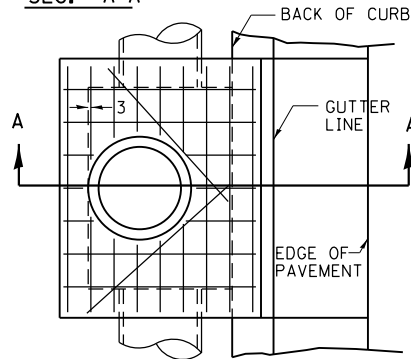
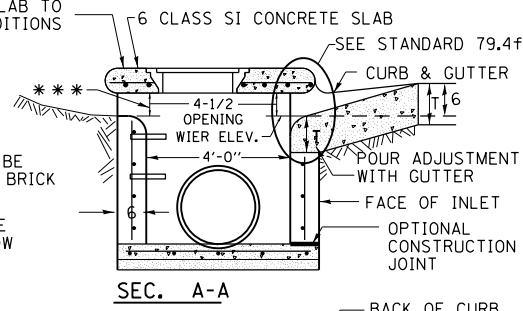


TOTAL WEIGHT 160 LBS.

NOTES

STEPS SHALL BE OMITTED WHEN DEPTH OF INLET IS LESS THAN 5 FOOT. THE INLET SHALL BE CAST IN PLACE OR PRECAST. EXCEPT AS NOTED HEREON INLETS, SPECIAL, NO. 4 SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS. THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL NO. 4 SHALL INCLUDE THE COST OF FURNISHING AND INSTALLING THE FRAME, LID, REINFORCEMENT BARS, FLOOR AND TOP SLABS, CAST IRON STEPS (IF USED). THE CURB AND GUTTER WILL BE PAID FOR SEPARATELY AND WILL BE MEASURED THROUGH THE INLET. THE CURB AND GUTTER ADJACENT TO AND 6 FOOT ON EITHER SIDE OF THE INLET SHALL BE CONSTRUCTED AS SHOWN WITH NO ADDITIONAL COMPENSATION FOR THE TRANSITION. ALL PIPE UNDERDRAIN CONNECTIONS WHEN SPECIFIED SHALL BE DONE IN ACCORDANCE WITH ART. 601 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER (FOOT) FOR PIPE UNDERDRAINS OR PIPE UNDERDRAINS (SPECIAL) OF THE DIAMETER SPECIFIED WHICH PRICE SHALL INCLUDE THE CA7 OR CA16 AND THE CONNECTION TO THE INLET.

*** THE STRUCTURE OPENING FOR THE STATION 219+77 STRUCTURE SHALL BE 16.5 INCHES ON THE BACK SIDE OF THE STRUCTURE.

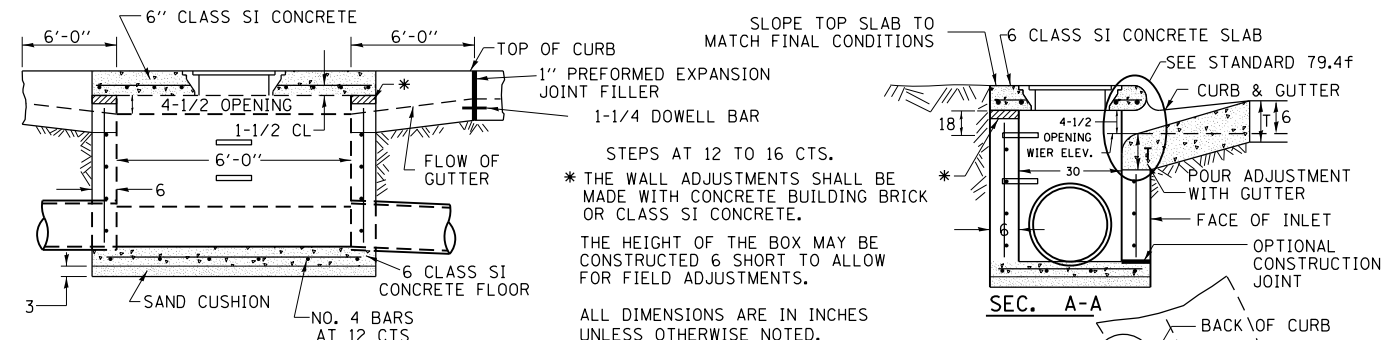


TOP VIEW

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

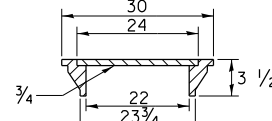
INLETS, SPECIAL, NO. 4

INLETS, SPECIAL, NO. 5



SEE STANDARD 602701 FOR DETAILS OF STEPS. 1" PREFORMED EXPANSION JOINTS AS SHOWN SHALL BE PROVIDED ON EACH SIDE OF INLET. CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT. THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTAL SECTIONS. REINFORCEMENT FOR INLETS, SPECIAL, NO. 5 SHALL BE ACCORDING TO DISTRICT STANDARD 79.4g

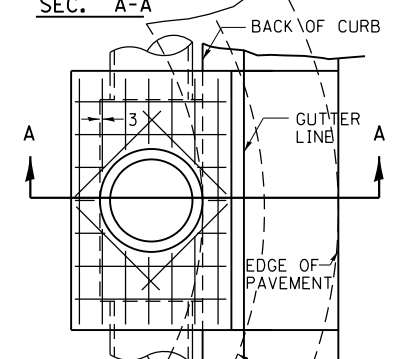
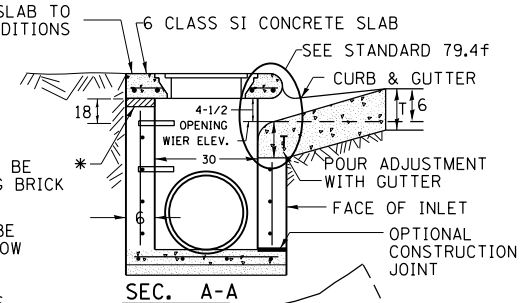
LIGHT WEIGHT MANHOLE CASTING



TOTAL WEIGHT 160 LBS.

NOTES

STEPS SHALL BE OMITTED WHEN DEPTH OF INLET IS LESS THAN 5 FOOT. THE INLET SHALL BE CAST IN PLACE OR PRECAST. EXCEPT AS NOTED HEREON INLETS, SPECIAL, NO. 5 SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS. THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL NO. 5 SHALL INCLUDE THE COST OF FURNISHING AND INSTALLING THE FRAME, LID, REINFORCEMENT BARS, FLOOR AND TOP SLABS, CAST IRON STEPS (IF USED). THE CURB AND GUTTER WILL BE PAID FOR SEPARATELY AND WILL BE MEASURED THROUGH THE INLET. THE CURB AND GUTTER ADJACENT TO AND 6 FOOT ON EITHER SIDE OF THE INLET SHALL BE CONSTRUCTED AS SHOWN WITH NO ADDITIONAL COMPENSATION FOR THE TRANSITION. ALL PIPE UNDERDRAIN CONNECTIONS WHEN SPECIFIED SHALL BE DONE IN ACCORDANCE WITH ART. 601 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER (FOOT) FOR PIPE UNDERDRAINS OR PIPE UNDERDRAINS (SPECIAL) OF THE DIAMETER SPECIFIED WHICH PRICE SHALL INCLUDE THE CA7 OR CA16 AND THE CONNECTION TO THE INLET.

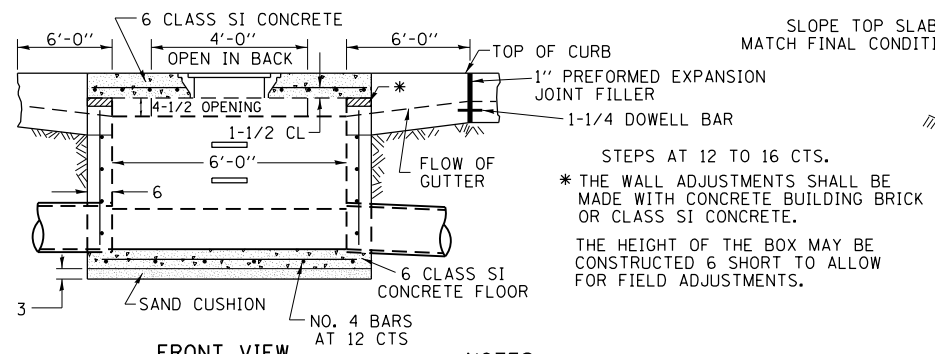


TOP VIEW

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

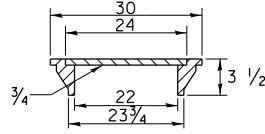
INLETS, SPECIAL, NO. 5

INLETS, SPECIAL, NO. 6



SEE STANDARD 602701 FOR DETAILS OF STEPS. 1" PREFORMED EXPANSION JOINTS AS SHOWN SHALL BE PROVIDED ON EACH SIDE OF INLET. CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT. THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTAL SECTIONS. REINFORCEMENT FOR INLETS, SPECIAL, NO. 6 SHALL BE ACCORDING TO DISTRICT STANDARD 79.4g

LIGHT WEIGHT MANHOLE CASTING

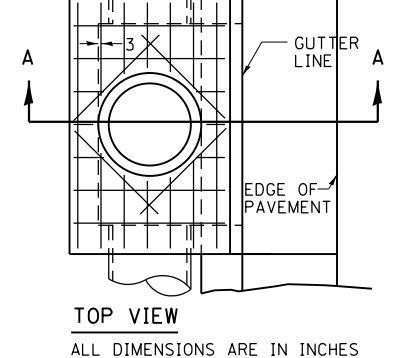
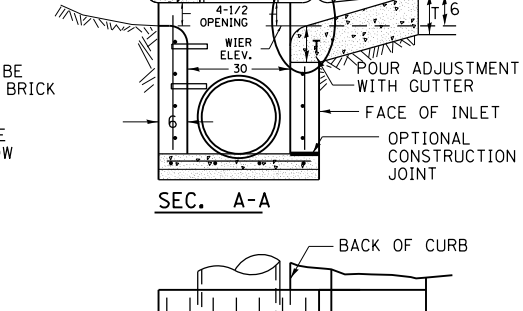


TOTAL WEIGHT 160 LBS.

NOTES

STEPS SHALL BE OMITTED WHEN DEPTH OF INLET IS LESS THAN 5 FOOT. THE INLET SHALL BE CAST IN PLACE OR PRECAST. EXCEPT AS NOTED HEREON INLETS, SPECIAL, NO. 6 SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS. THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL NO. 6 SHALL INCLUDE THE COST OF FURNISHING AND INSTALLING THE FRAME, LID, REINFORCEMENT BARS, FLOOR AND TOP SLABS, CAST IRON STEPS (IF USED). THE CURB AND GUTTER WILL BE PAID FOR SEPARATELY AND WILL BE MEASURED THROUGH THE INLET. THE CURB AND GUTTER ADJACENT TO AND 6 FOOT ON EITHER SIDE OF THE INLET SHALL BE CONSTRUCTED AS SHOWN WITH NO ADDITIONAL COMPENSATION FOR THE TRANSITION. ALL PIPE UNDERDRAIN CONNECTIONS WHEN SPECIFIED SHALL BE DONE IN ACCORDANCE WITH ART. 601 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER (FOOT) FOR PIPE UNDERDRAINS OR PIPE UNDERDRAINS (SPECIAL) OF THE DIAMETER SPECIFIED WHICH PRICE SHALL INCLUDE THE CA7 OR CA16 AND THE CONNECTION TO THE INLET.

*** THE STRUCTURE OPENING FOR THE STATION 219+77 STRUCTURE SHALL BE 16.5 INCHES ON THE BACK SIDE OF THE STRUCTURE.



TOP VIEW

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

INLETS, SPECIAL, NO. 6

FILE = S:\PROJECTS\2016\1189J16-RK_Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-details-drain-special_inlets.dgn

REVISION	DATE	BY	REMARKS

DRAWN	JSH
CHECKED	GFS
APPROVED	GFS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



WILLETT HOFMANN
& ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLET, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-00918

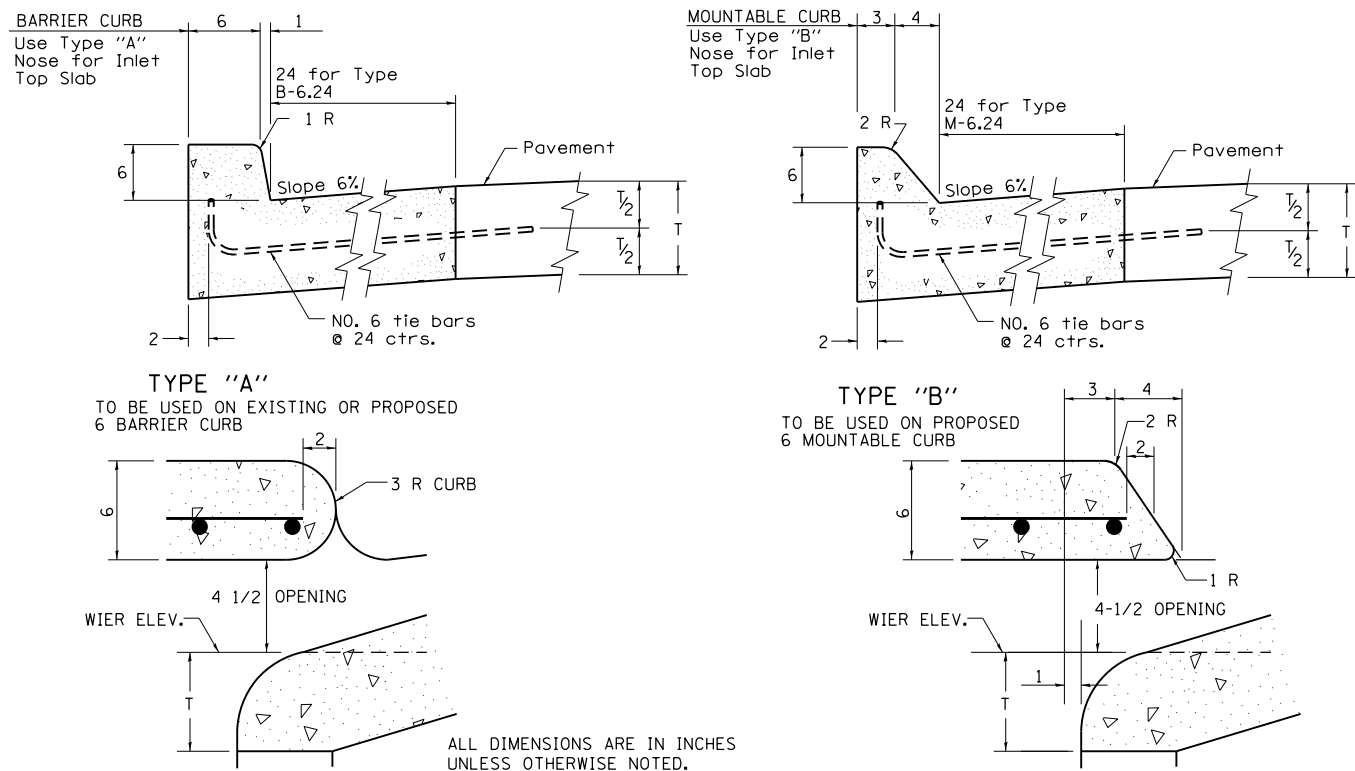


79 MOEN AVENUE
ROCKDALE, IL 60436

SPECIAL INLET DETAILS
SHEET 1 OF 2

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	243
CONTRACT 61E00				
WHA* 1189J16		ILLINOIS		

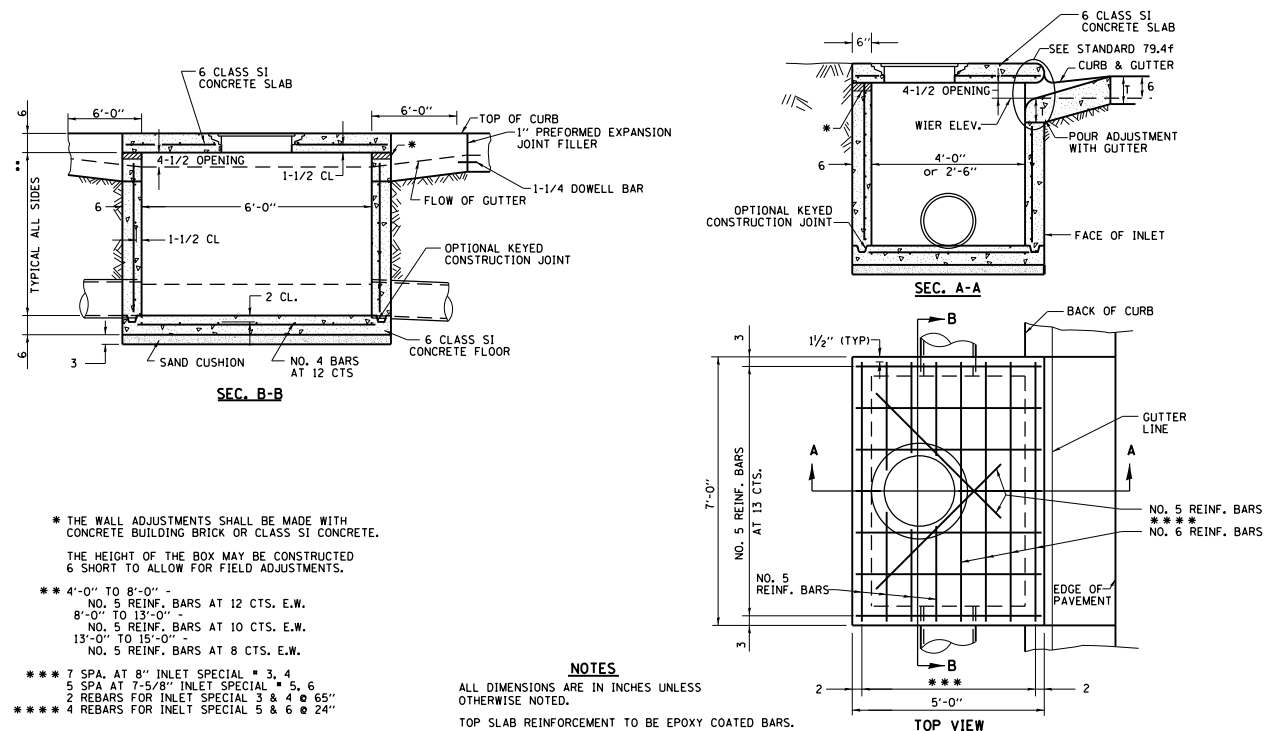
NOSE TYPE FOR INLET TOP SLAB



REVISED - 4-14-15
10-05-11

NOSE TYPE FOR INLET TOP SLAB 79.4f

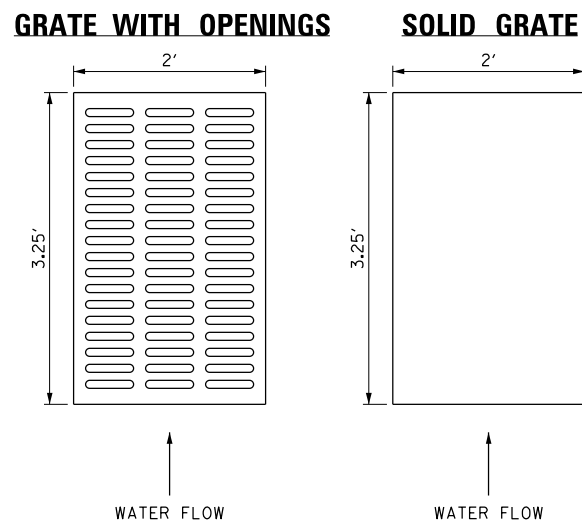
INLETS, SPECIAL, NO. 3, 4, 5, 6 REINFORCEMENT DETAIL



REVISED - 8-27-13
10-05-11

INLETS, SPECIAL, NO. 3, 4, 5, 6 REINFORCEMENT DETAIL 79.4g

TRENCH DRAIN
MOEN AVENUE STA. 236+71.31 TO 237+81.31 LT
MOEN AVENUE STA. 238+00.44 TO 238+30.44 LT

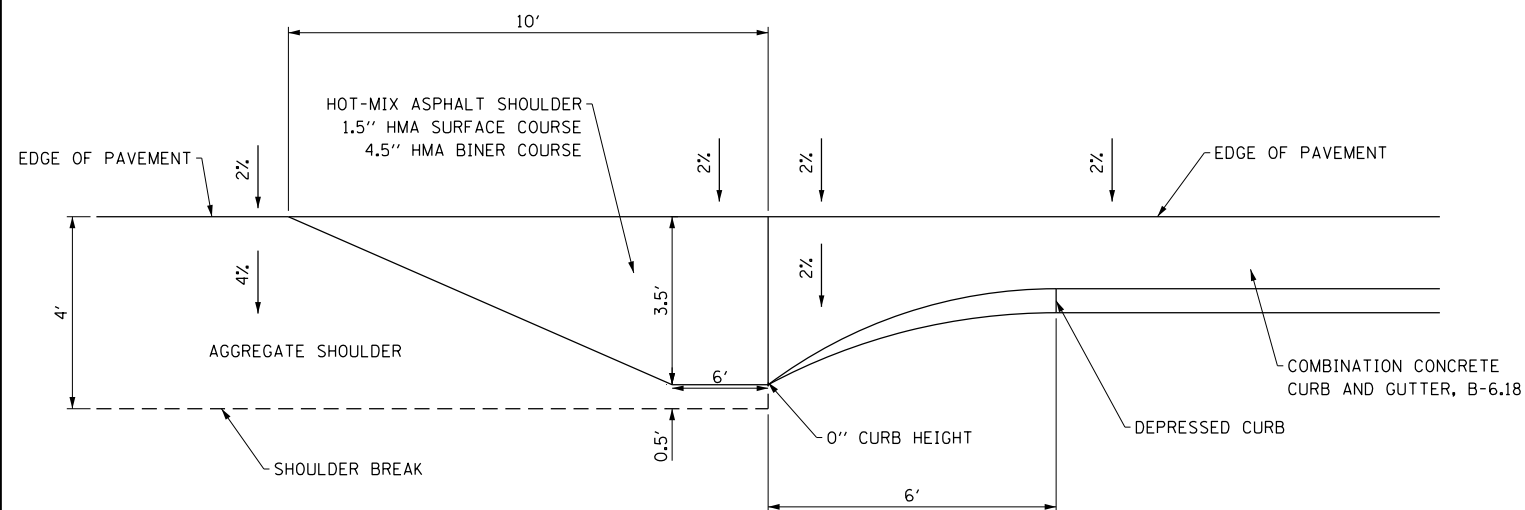


NOTES

TRENCH DRAIN SHALL BE CONSTRUCTED ACCORDING TO THE TRENCH DRAIN DETAILS LOCATED IN THE STRUCTURAL PLANS.

THE TRENCH DRAIN GRATES SHALL HAVE OPENINGS IN LOCATIONS DETERMINED BY THE ENGINEER. IT IS ANTICIPATED THAT GRATES WITH OPENINGS SHALL BE USED WHEN THE FULL GRATE WILL BE WITHIN THE DRIVEWAY, WHILE SOLID GRATES SHALL BE USED OUTSIDE OF THE DRIVEWAY AND WHEN THE GRATE IS ON THE DRIVEWAY EDGE.

TRANSITION FROM AGGREGATE SHOULDER TO B-6.18 COMBINATION CONCRETE CURB AND GUTTER ON MOUND ROAD (STA. 106+06.34, RT)



FILE = S:\PROJECTS\2016\1189J16.RK.Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-detail\is-dm\2-special.inlet.s.dgn

REVISION	DATE	BY	REMARKS

DRAWN	JSH
CHECKED	GFS
APPROVED	GFS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



WILLETT HOFMANN & ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLET, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-000918

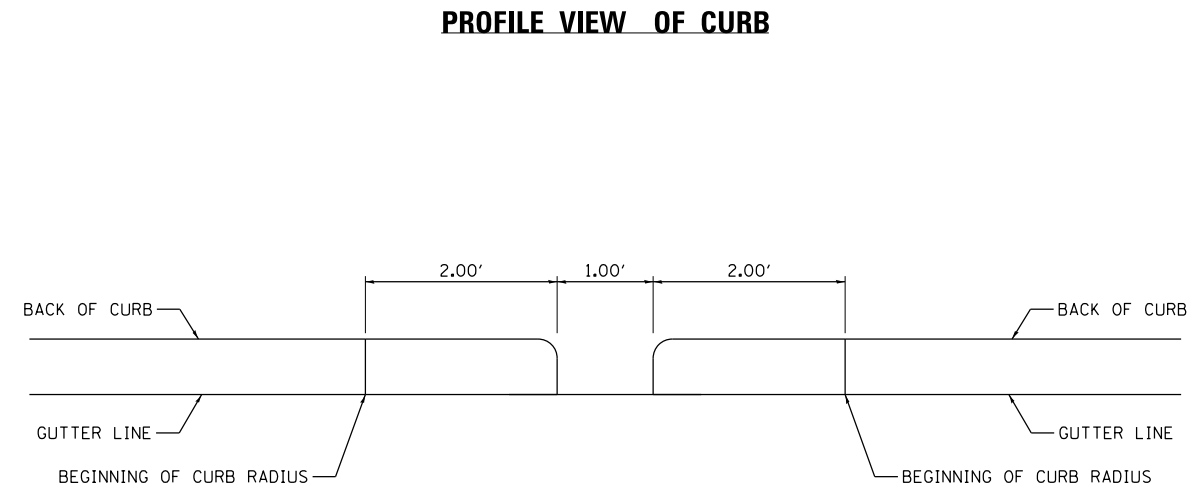
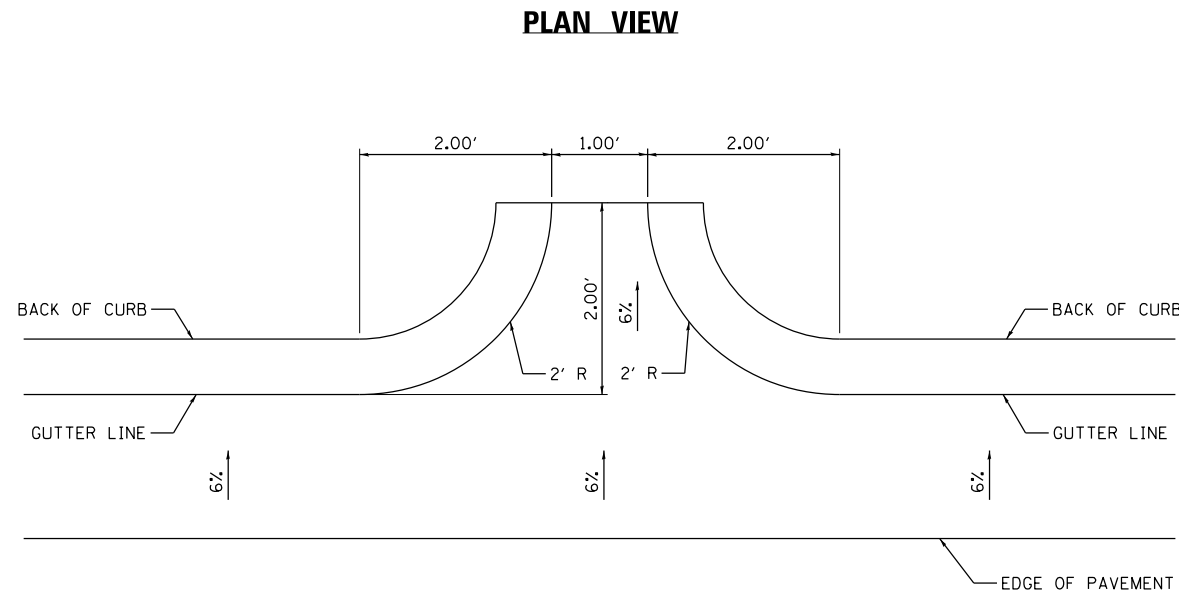


79 MOEN AVENUE
ROCKDALE, IL 60436

SPECIAL INLET DETAILS
SHEET 2 OF 2

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	244
CONTRACT 61E00				
WHA* 1189J16		ILLINOIS		

**BACK OF CURB OPENING
1-FOOT OPENING WITH SHOOT**



LOCATIONS

- 103+75.00 LT
- 201+00.00 LT & RT
- 202+69.00 LT & RT
- 202+99.33 LT & RT
- 203+29.00 LT & RT
- 205+50.00 LT & RT
- 209+04.00 RT
- 209+24.58 RT
- 211+50.00 RT
- 214+65.00 RT
- 215+50.00 RT
- 216+14.00 RT
- 216+46.43 RT
- 216+78.00 RT
- 218+00.00 LT & RT
- 218+57.85 RT
- 219+02.97 RT
- 219+50.00 RT
- 220+50.00 LT
- 225+80.00 RT
- 226+15.68 RT
- 226+59.63 RT
- 231+35.00 RT
- 233+90.00 RT
- 234+04.00 LT
- 234+23.64 LT
- 234+44.00 LT & RT
- 237+56.09 RT
- 237+76.09 RT
- 237+96.09 RT
- 241+28.57 LT
- 241+72.00 RT
- 241+95.83 RT
- 242+20.00 RT
- 246+50.00 RT
- 246+70.00 RT
- 248+35.00 LT
- 249+50.00 RT

NOTE

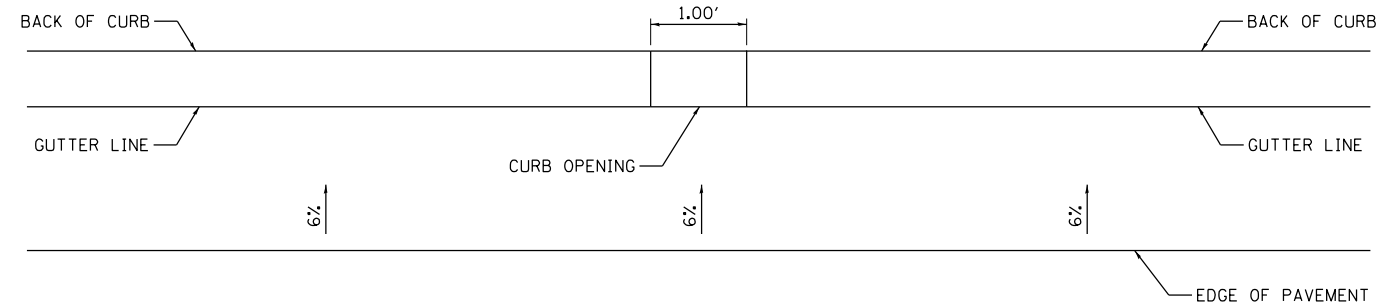
ALL BACK OF CURB OPENING CONSTRUCTION WILL MEASURED FOR PAYMENT IN FEET IN THE FLOW LINE OF THE GUTTER AND PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18.

**BACK OF CURB OPENING
1-FOOT OPENING**

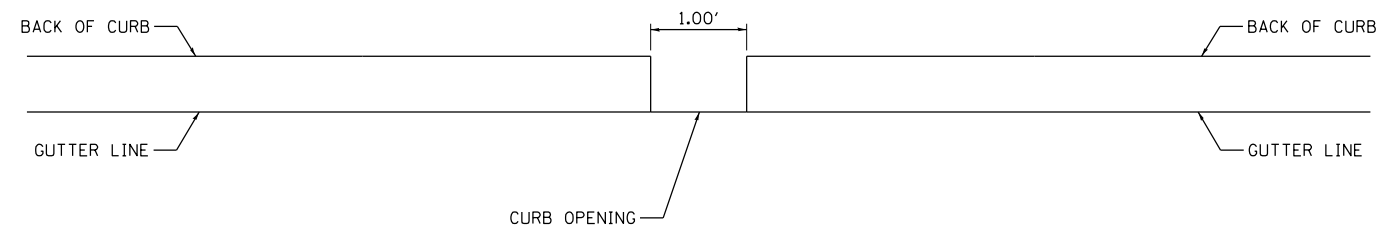
LOCATIONS

STA. 238+40.00 LT

PLAN VIEW



PROFILE VIEW OF CURB

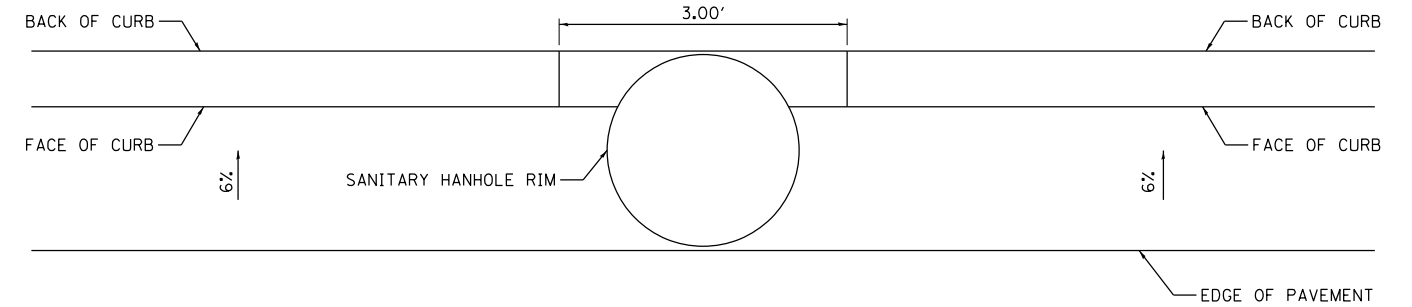


**BACK OF CURB OPENING
3-FOOT OPENING**

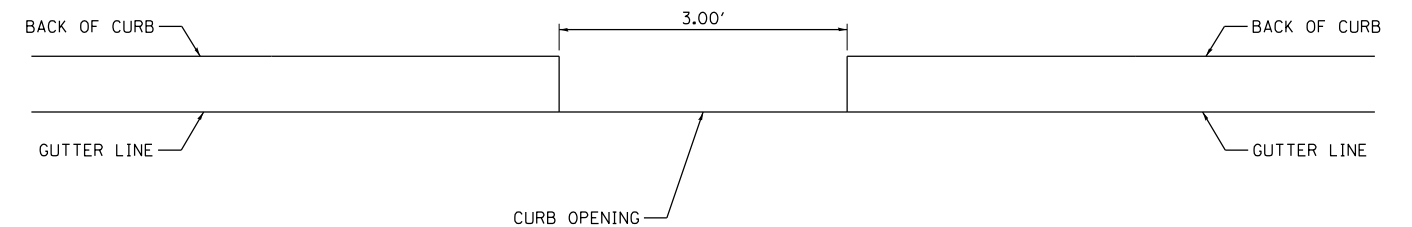
LOCATIONS

STA. 237+91.00 LT

PLAN VIEW



PROFILE VIEW OF CURB



FILE = S:\PROJECTS\2016\1189J16.RK.Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-details-drain3-boc opening.dgn

REVISION	DATE	BY	REMARKS

DRAWN	JSH
CHECKED	GFS
APPROVED	GFS

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**



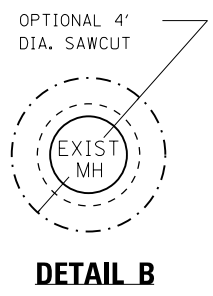
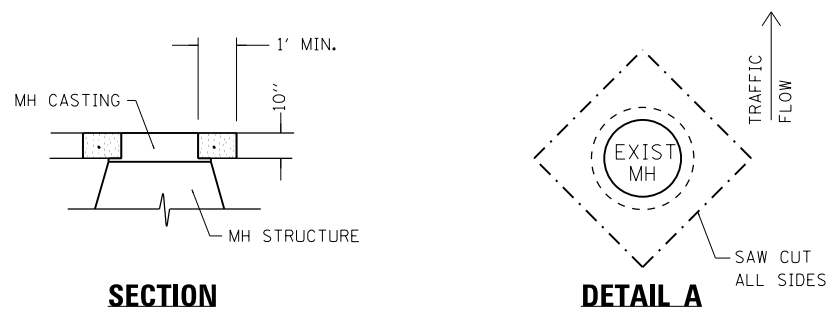
**WILLETT HOFMANN
& ASSOCIATES INC.**
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLET, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-000918



**79 MOEN AVENUE
ROCKDALE, IL 60436**

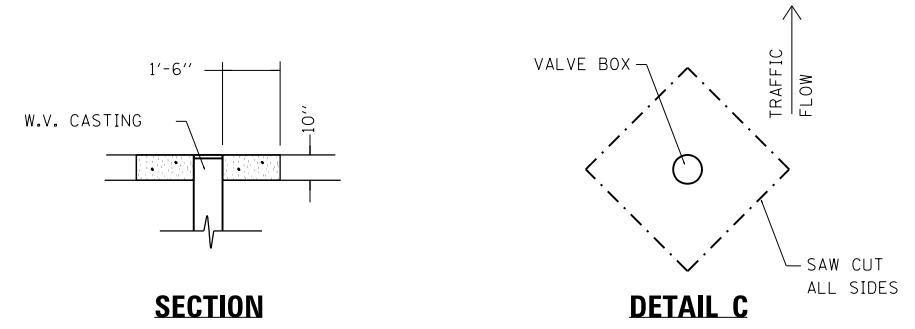
**BACK OF CURB OPENING DETAILS
SHEET 1 OF 1**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	245
CONTRACT 61E00				
WHA* 1189J16		ILLINOIS		



MANHOLE ADJUSTMENT DETAIL

- ADJUST MANHOLE AFTER PAVING OPERATION IS COMPLETE.
- THE CONTRACTOR SHALL MARK THE LOCATION OF EVERY MANHOLE PRIOR TO PAVING BY A METHOD APPROVED BY THE ENGINEER. THIS WORK SHALL BE INCIDENTAL TO THE MANHOLE ADJUSTMENT.
- SAW CUT SQUARE OPENING AS SHOWN IN DETAIL A OR A CIRCULAR OPENING AS SHOWN IN DETAIL B WITH THE MANHOLE CENTERED IN THE MIDDLE OF THE OPENING.
- REMOVE ALL PAVEMENT MATERIAL AND ADJUST THE MANHOLE TO WITHIN 5/8" BELOW THE TOP OF THE NEW PAVEMENT. IN NO CASE SHALL THE MANHOLE BE ABOVE THE PAVEMENT SURFACE. THE REMOVAL SHALL INCLUDE ALL TYPES OF MATERIALS, AND NO ADDITIONAL COMPENSATION WILL BE GIVEN DEPENDING ON THE TYPE OF MATERIAL. NO ADJUSTMENTS SHALL BE MADE WITH WOOD SCHIMS.
- FILL VOID WITH MINIMUM OF 10" OF CONCRETE, THIS WORK SHALL MEET THE REQUIREMENTS OF ARTICLE 442.02 NOTE #1 AND ARTICLE 701.17(e)(2)&(3). TROWEL OFF CONCRETE FLUSH WITH NEW PAVEMENT AND BROOM FINISH. MANHOLE FRAME SHALL BE RECESSED FROM CONCRETE NO MORE THAN 3/8".
- IF THE ENGINEER DETERMINES A MANHOLE DOES NOT NEED ADJUSTED, THE CONTRACTOR SHALL PAVE AROUND THE MANHOLE AND NO ADJUSTMENT WILL BE PAID.
- THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL MANHOLES BEING PAVED OVER OR AROUND. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES OCCURRED DURING CONSTRUCTION.
- CONTRACTOR SHALL CLEAN OUT ANY CONSTRUCTION DEBRIS INSIDE THE MANHOLE DURING THE ADJUSTMENT OF THE CASTING. THIS WORK SHALL BE INCIDENTAL TO THE MANHOLE ADJUSTMENT.



VALVE BOX ADJUSTMENT DETAIL

- ADJUST WATER VALVE AFTER PAVING OPERATION IS COMPLETE.
- THE CONTRACTOR SHALL MARK THE LOCATION OF EVERY WATER VALVE PRIOR TO PAVING BY A METHOD APPROVED BY THE ENGINEER. THIS WORK SHALL BE INCIDENTAL TO THE WATER VALVE ADJUSTMENT.
- SAW CUT SQUARE OPENING AS SHOWN IN DETAIL A OR A CIRCULAR OPENING AS SHOWN IN DETAIL B WITH THE WATER VALVE CENTERED IN THE MIDDLE OF THE OPENING.
- REMOVE ALL PAVEMENT MATERIAL AND ADJUST THE WATER VALVE TO WITHIN 5/8" BELOW THE TOP OF THE NEW PAVEMENT. IN NO CASE SHALL THE WATER VALVE BE ABOVE THE PAVEMENT SURFACE. THE REMOVAL SHALL INCLUDE ALL TYPES OF MATERIALS, AND NO ADDITIONAL COMPENSATION WILL BE GIVEN DEPENDING ON THE TYPE OF MATERIAL.
- FILL VOID WITH MINIMUM OF 10" OF CONCRETE, THIS WORK SHALL MEET THE REQUIREMENTS OF ARTICLE 442.02 NOTE #1 AND ARTICLE 701.17(e)(2)&(3). TROWEL OFF CONCRETE FLUSH WITH NEW PAVEMENT AND BROOM FINISH. WATER VALVE BOX FRAME SHALL BE RECESSED FROM CONCRETE NO MORE THAN 3/8".
- IF THE ENGINEER DETERMINES A WATER VALVE DOES NOT NEED ADJUSTED, THE CONTRACTOR SHALL PAVE AROUND THE WATER VALVE AND NO ADJUSTMENT WILL BE PAID.
- THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL WATER VALVES BEING PAVED OVER OR AROUND. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES OCCURRED DURING CONSTRUCTION.
- CONTRACTOR SHALL CLEAN OUT ANY CONSTRUCTION DEBRIS INSIDE THE WATER VALVE DURING THE ADJUSTMENT OF THE CASTING. THIS WORK SHALL BE INCLUDED IN THE COST OF THE WATER VALVE ADJUSTMENT.

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REVISION	DATE	BY	REMARKS

DRAWN	JSH
CHECKED	GFS
APPROVED	GFS

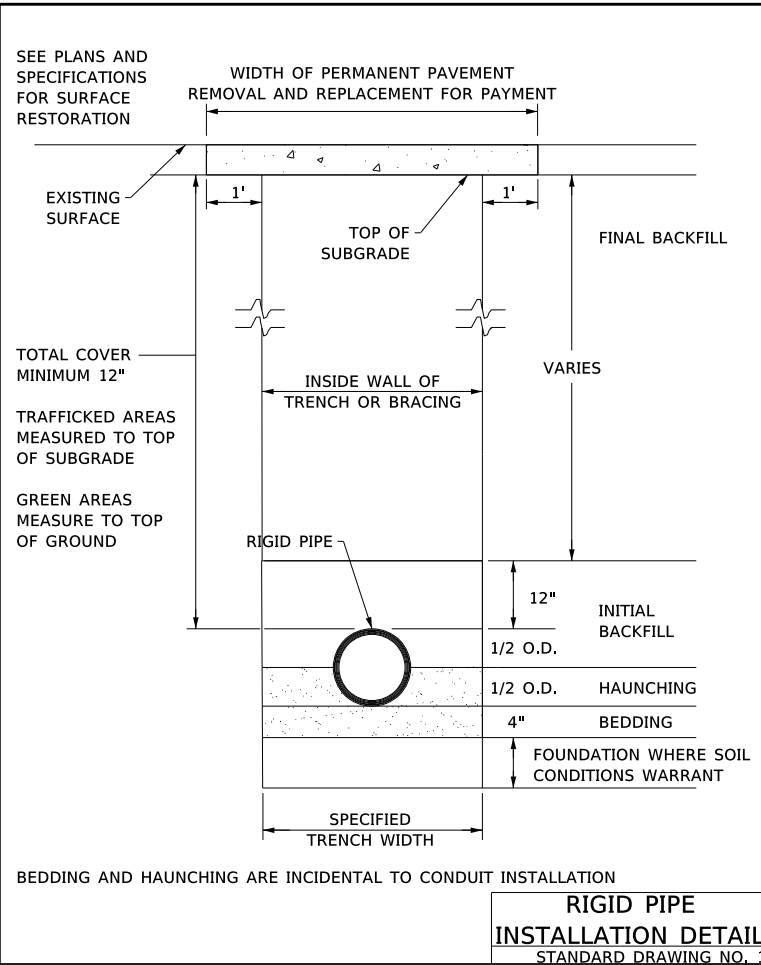
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

WILLET HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLET, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-000918

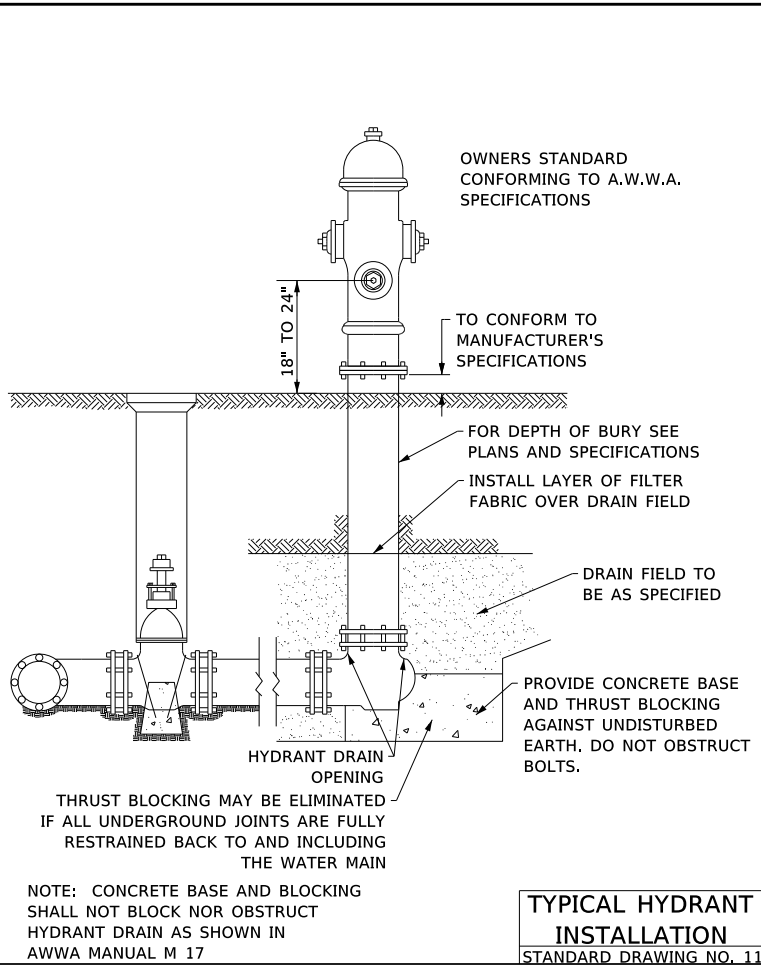
ROCKDALE
79 MOEN AVENUE
ROCKDALE, IL 60436

**MANHOLE AND WATER VALVE ADJUSTMENT DETAILS
SHEET 1 OF 1**

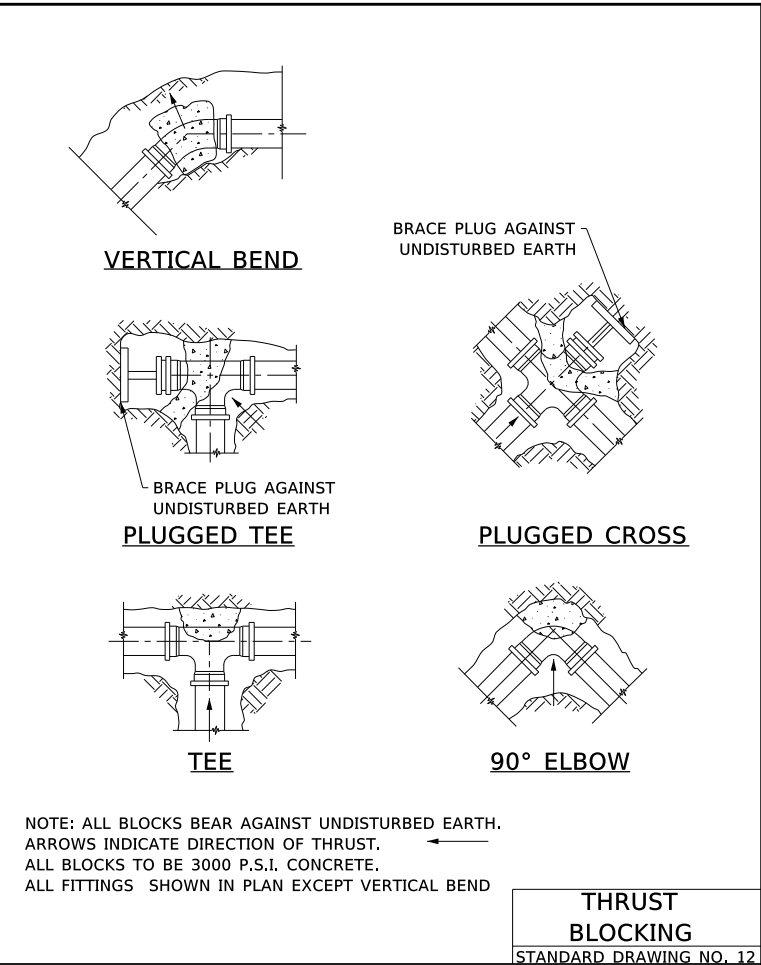
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	246
CONTRACT 61E00				
WHA* 1189J16		ILLINOIS		



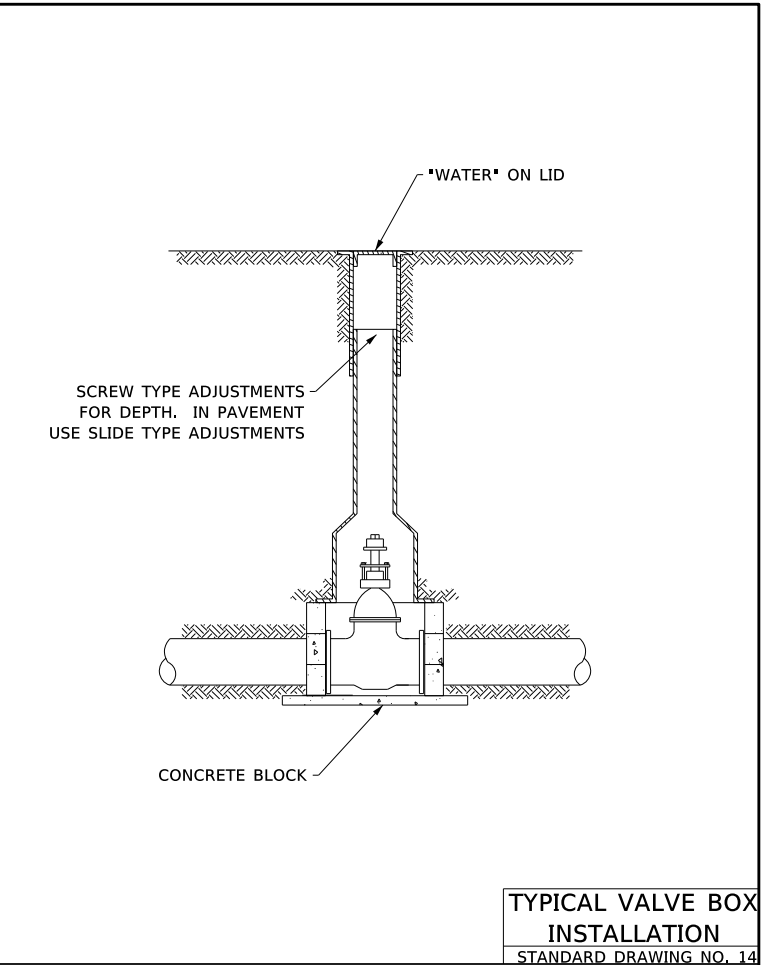
**RIGID PIPE
INSTALLATION DETAIL**
STANDARD DRAWING NO. 1



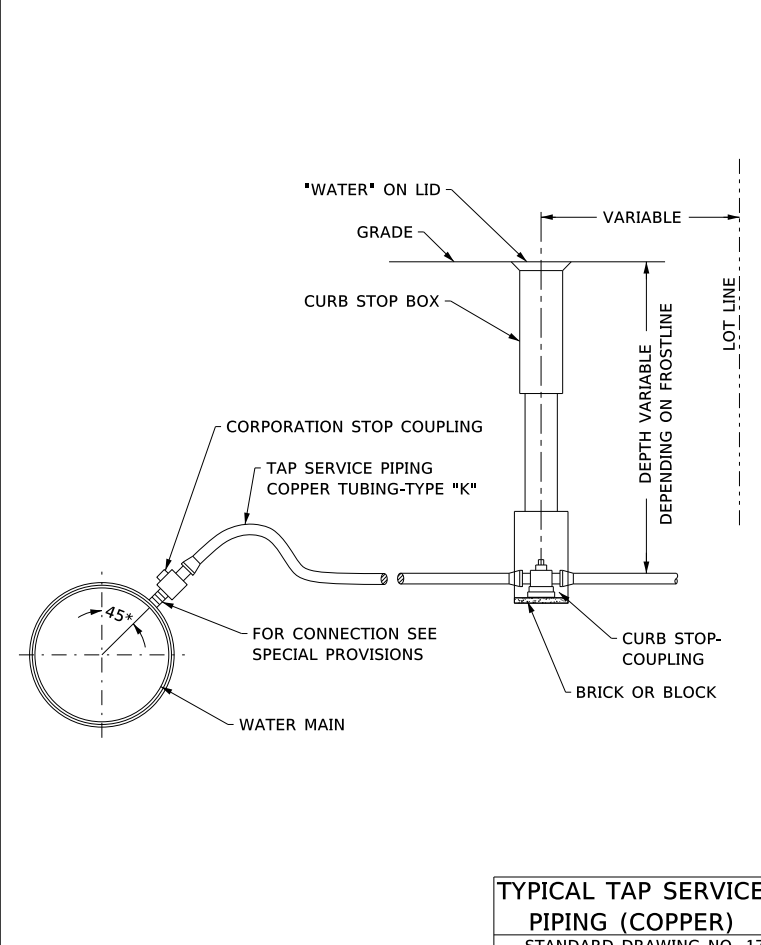
**TYPICAL HYDRANT
INSTALLATION**
STANDARD DRAWING NO. 11



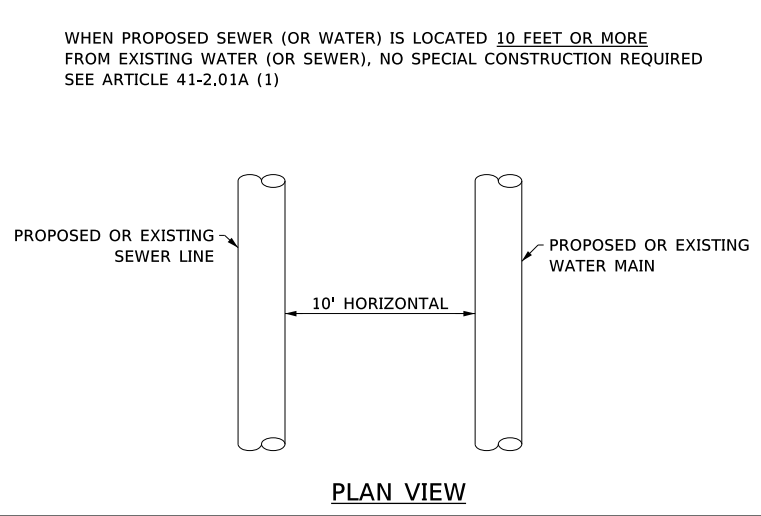
**THRUST
BLOCKING**
STANDARD DRAWING NO. 12



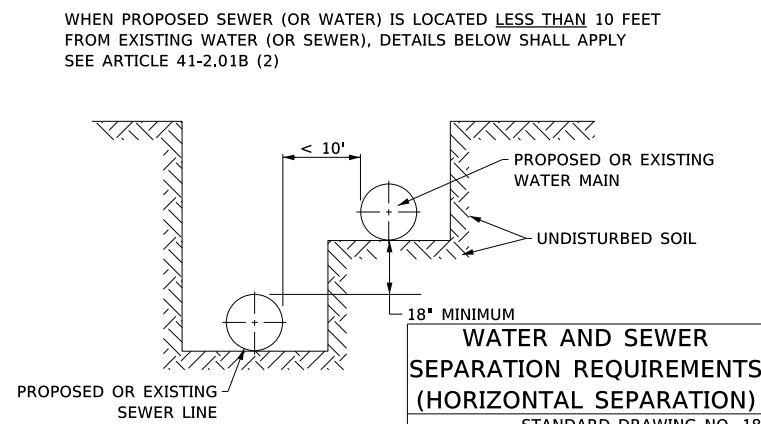
**TYPICAL VALVE BOX
INSTALLATION**
STANDARD DRAWING NO. 14



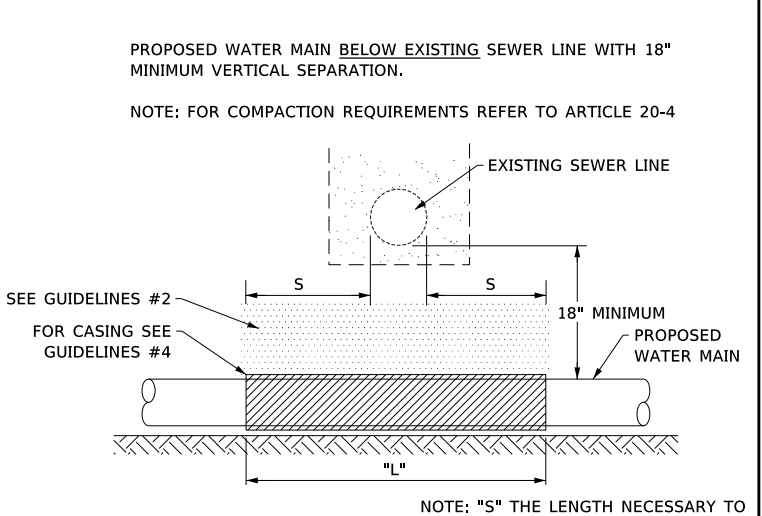
**TYPICAL TAP SERVICE
PIPING (COPPER)**
STANDARD DRAWING NO. 17



**WATER AND SEWER
SEPARATION REQUIREMENTS
(HORIZONTAL SEPARATION)**
STANDARD DRAWING NO. 18



**WATER AND SEWER
SEPARATION REQUIREMENTS
(VERTICAL SEPARATION)**
STANDARD DRAWING NO. 19



**WATER AND SEWER
SEPARATION REQUIREMENTS
(VERTICAL SEPARATION)**
STANDARD DRAWING NO. 23

REVISION	DATE	BY	REMARKS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLET HOFMANN & ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLET, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-00918

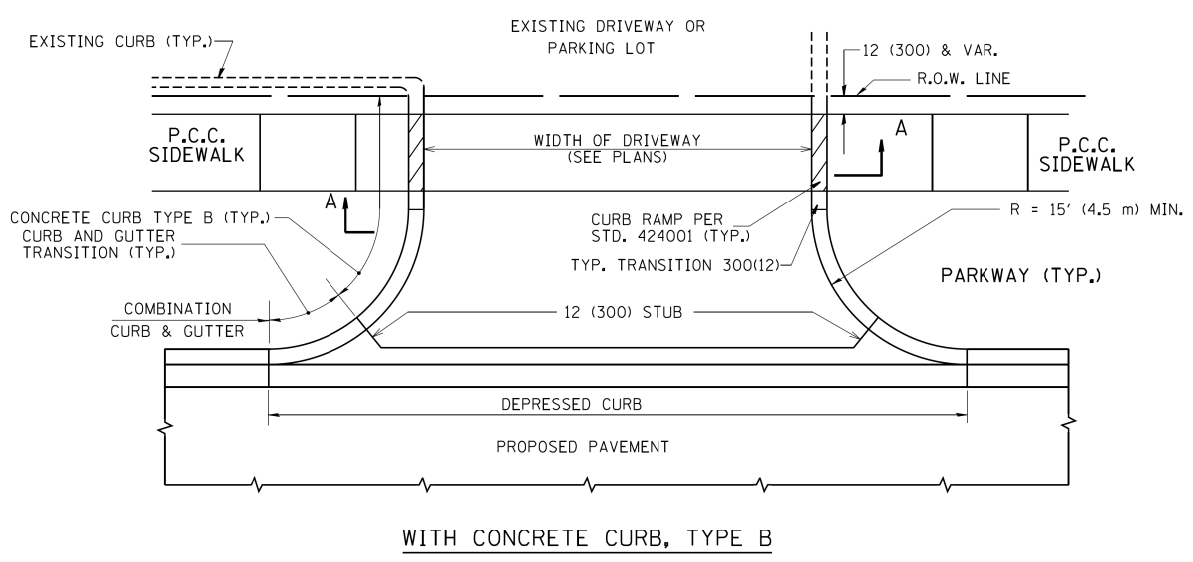
ROCKDALE
79 MOEN AVENUE
ROCKDALE, IL 60436

**WATER MAIN DETAILS
SHEET 1 OF 1**

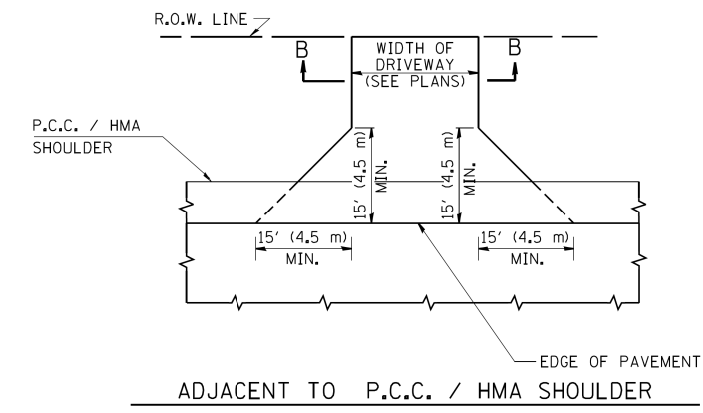
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	247
CONTRACT 61E00				

WHA* 1189J16 | ILLINOIS

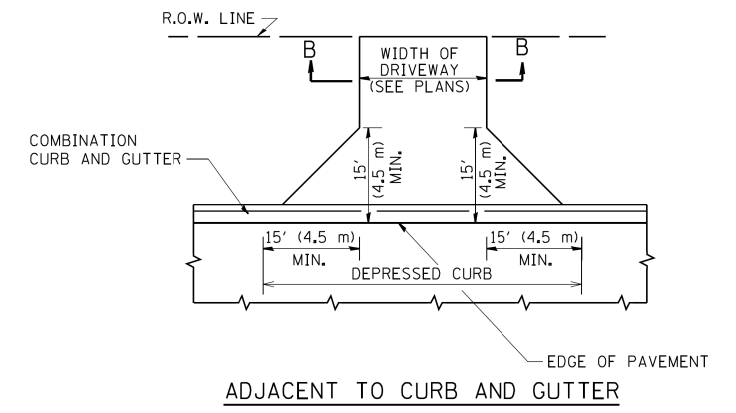
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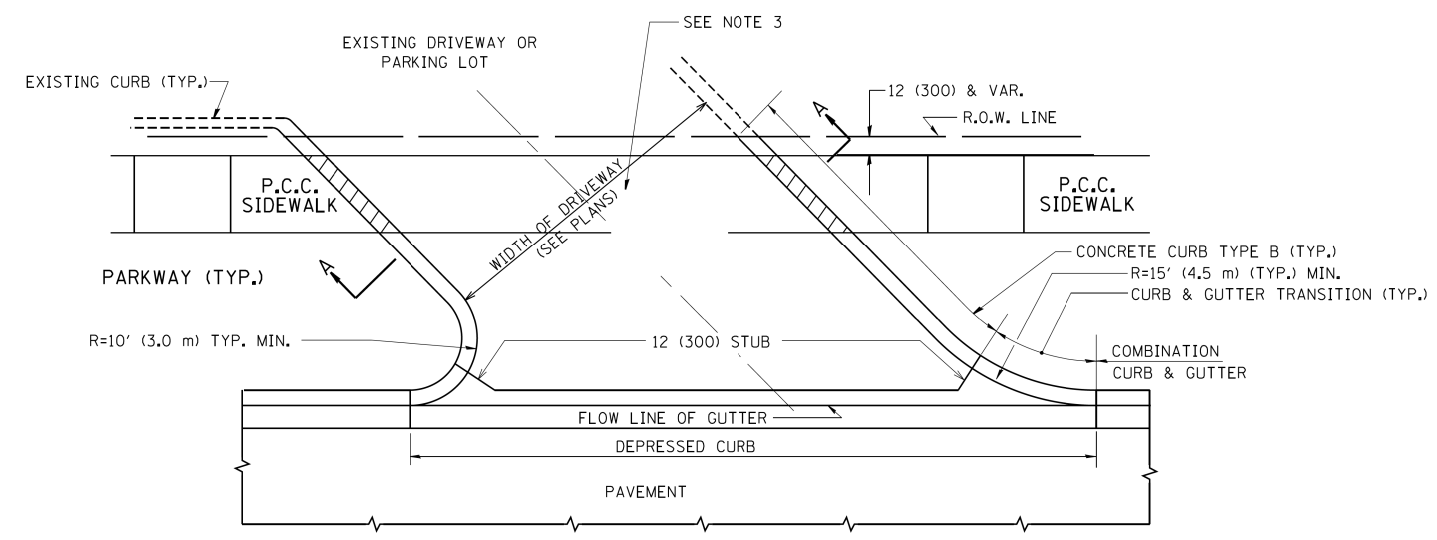
WITH CONCRETE CURB, TYPE B



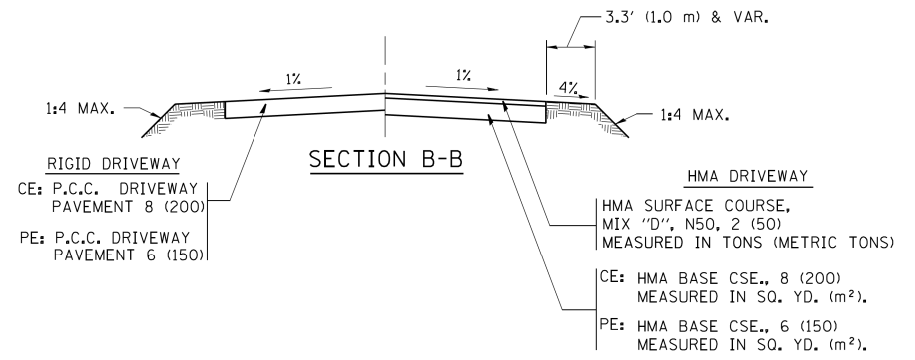
ADJACENT TO P.C.C. / HMA SHOULDER



ADJACENT TO CURB AND GUTTER



WITH CONCRETE CURB, TYPE B



SECTION B-B

GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

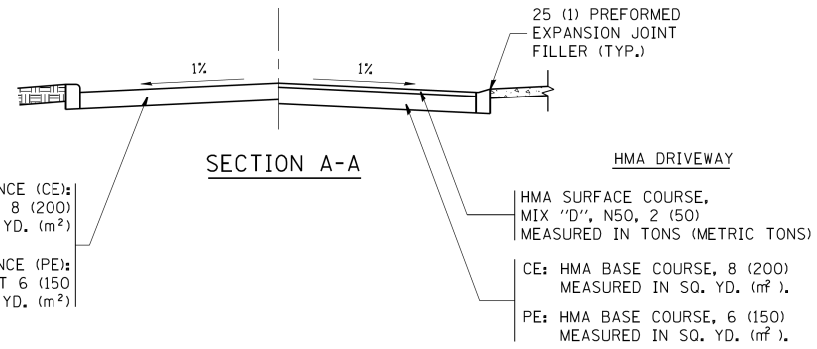
COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

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

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

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

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



SECTION A-A

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

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

FILE = S:\PROJECTS\2016\1189J16-RK_Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-detail\1189J16.dgn

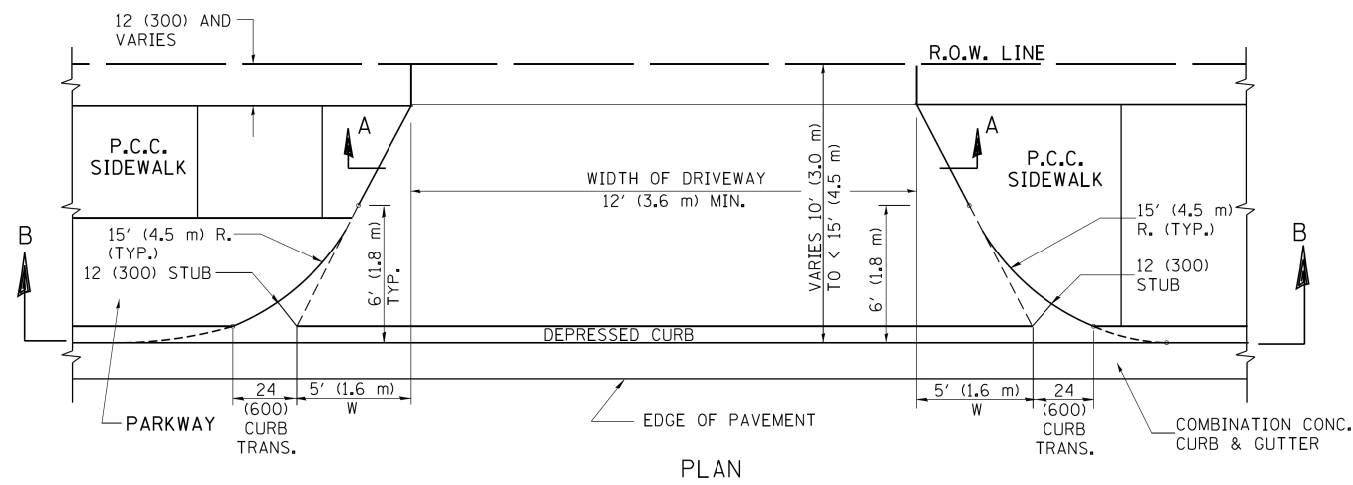
REVISION	DATE	BY	REMARKS
LATEST	09-06-11	R. BORO	

DRAWN	JSH
CHECKED	GFS
APPROVED	GFS

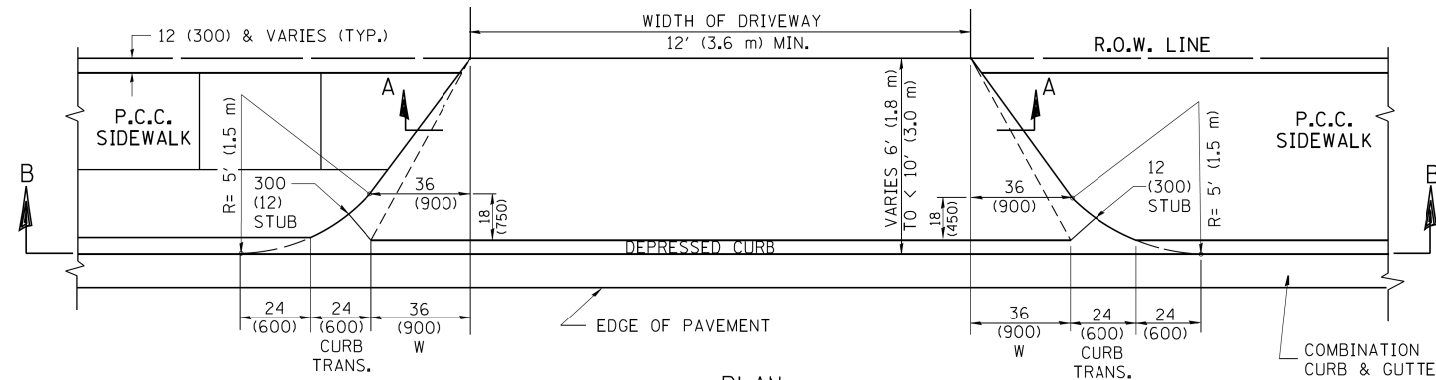
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)
 SHEET 1 OF 1

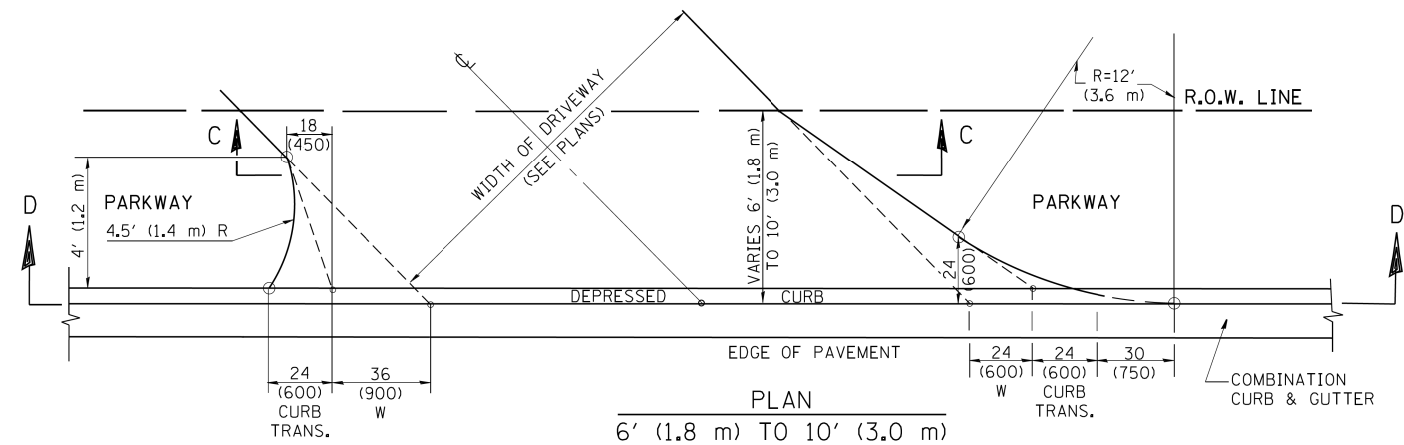
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	248
BD-01		CONTRACT 61E00		
WHA* 1189J16		ILLINOIS		



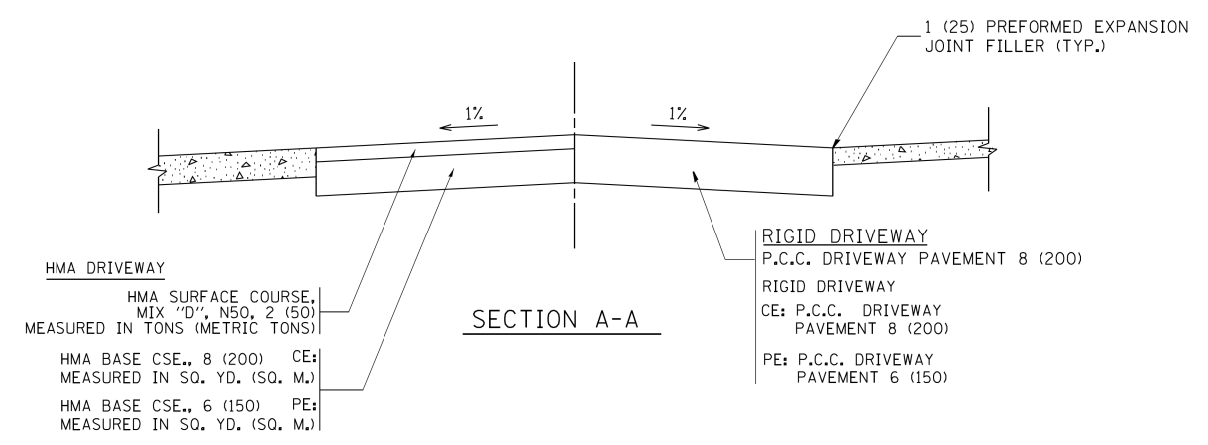
PLAN
10' (3.0 m) TO < 15' (4.5 m)



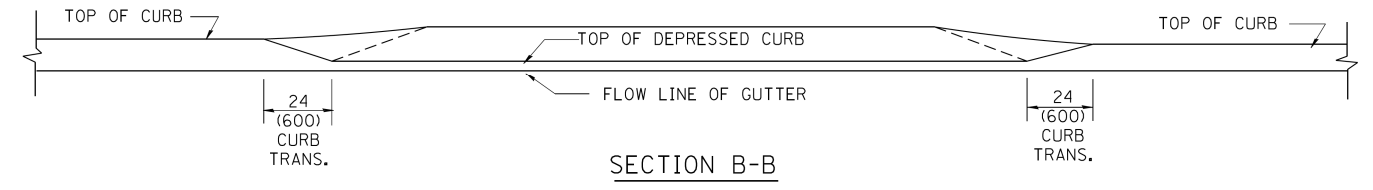
PLAN
6' (1.8 m) TO < 10' (3.0 m)



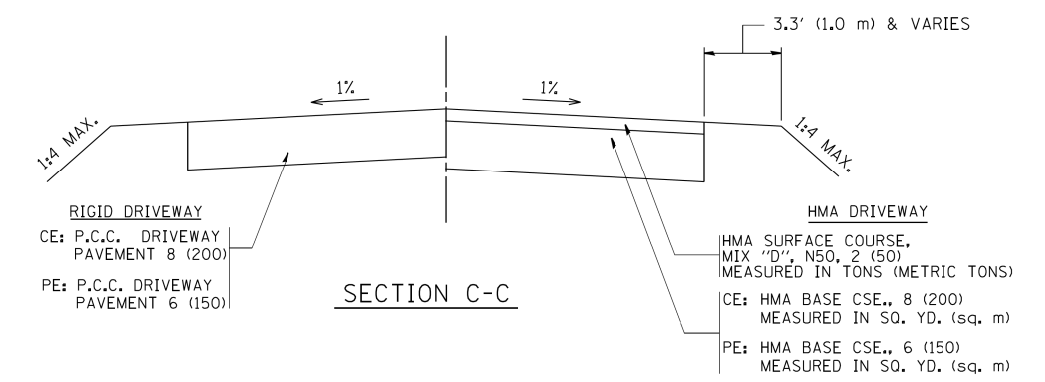
PLAN
6' (1.8 m) TO 10' (3.0 m)



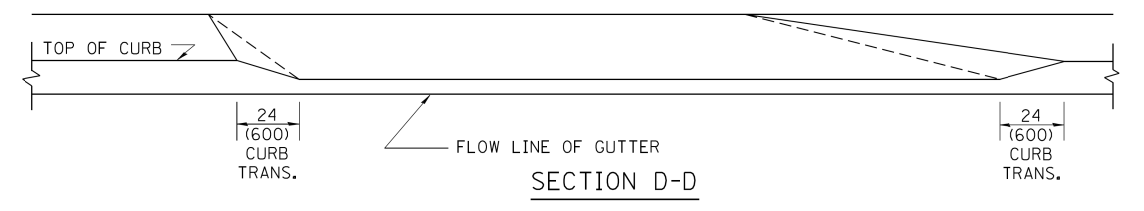
SECTION A-A



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.

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LATEST	09-06-11	R. BORO	

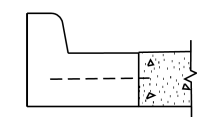
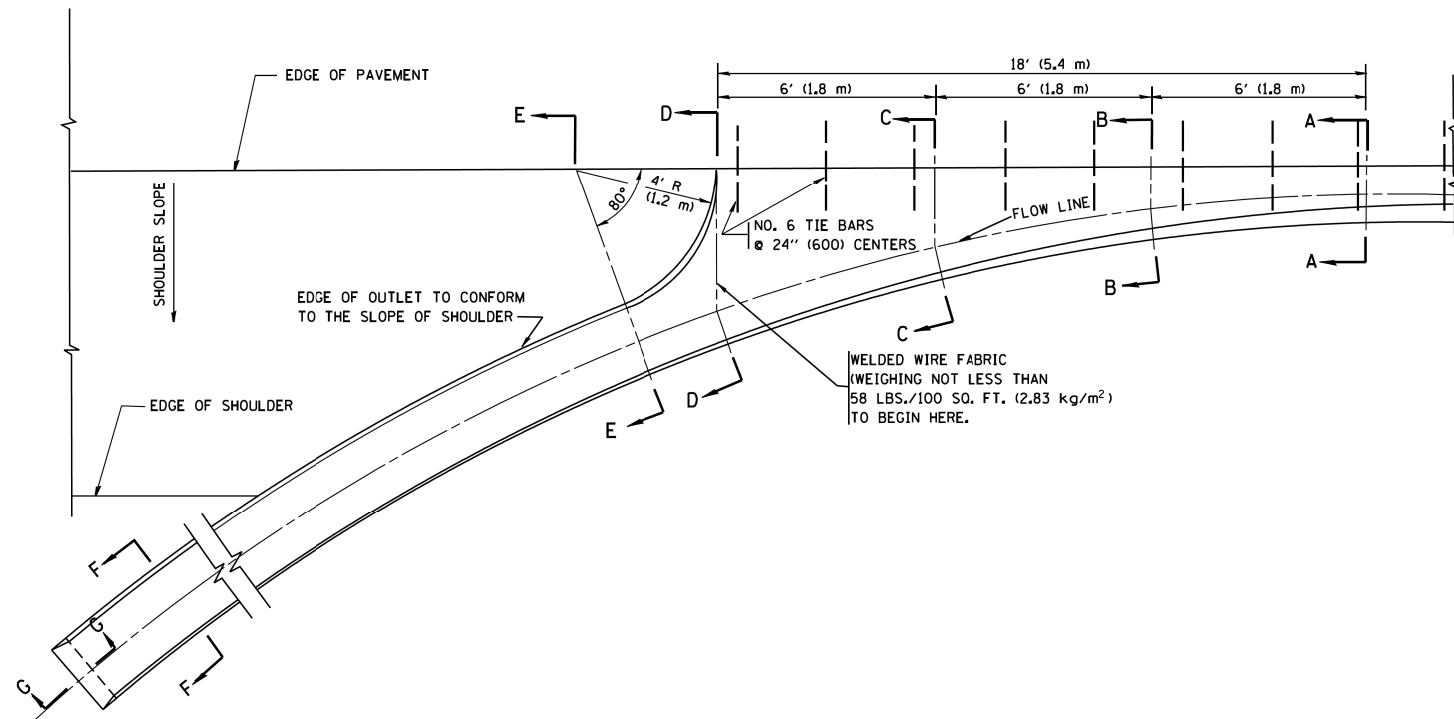
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CHECKED	GFS
APPROVED	GFS

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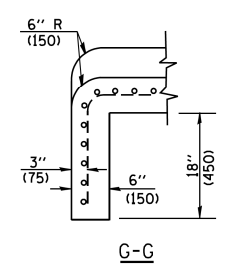
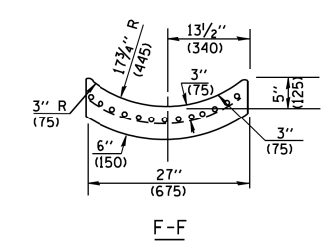
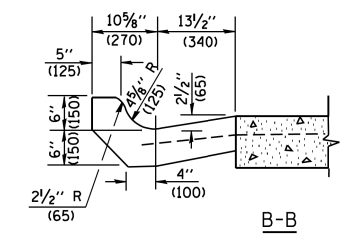
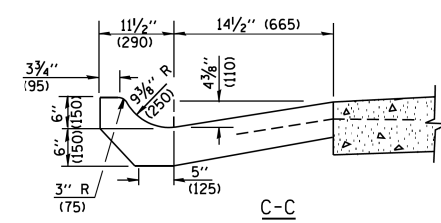
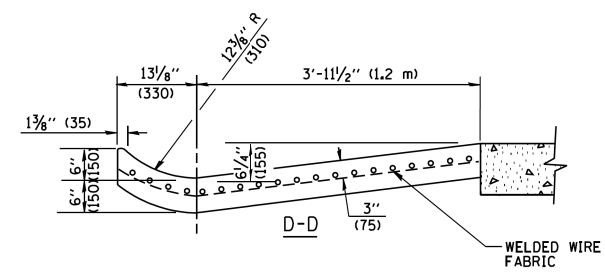
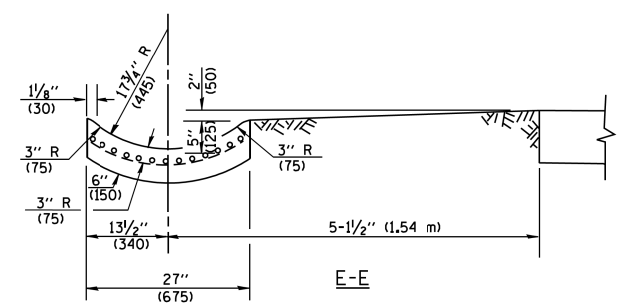
DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER < 15' (4.5 m)
SHEET 1 OF 1

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	249
BD-02		CONTRACT 61E00		
WHA 1189J16		ILLINOIS		



A-A *

* DIMENSIONS OF THE CURB & GUTTER AT SECTION A-A ARE SHOWN ON STATE STANDARD 606001. FOR DETAILS OF OUTLET FOR CONCRETE CURB & GUTTER, TYPE B-6.24 (B-15.60) SEE STATE STANDARD 606006.



GENERAL NOTES

GUTTER OUTLET SHALL BE TIED TO THE PAVEMENT IN ACCORDANCE WITH DETAILS FOR LONGITUDINAL CONSTRUCTION JOINT SHOWN ON STANDARD 420001.

TIE BARS SHALL BE NO. 20 (NO.6) AT 24\"/>

IF THE AVERAGE GRADE OF PAVEMENT FOR THE DISTANCE FROM SECTION A-A TO D-D EXCEEDS 2%, THIS DISTANCE SHALL BE INCREASED 6\"/>

QUANTITIES

FOR SECTION A-A TO E-E AND CURTAIN WALL =
 1.25 CU. YDS. (0.96 m³) CLASS SI CONCRETE (OUTLET) FOR 9\"/>

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

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DETAIL - OUTLET FOR CONCRETE CURB AND GUTTER
SHEET 1 OF 1

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

18" (450) MAX.

1/4" (5) **

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE, SOD OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SODDING SALT TOLERANT WITH TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

3" (75) MIN.

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

BASIS OF PAYMENT:

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY,

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

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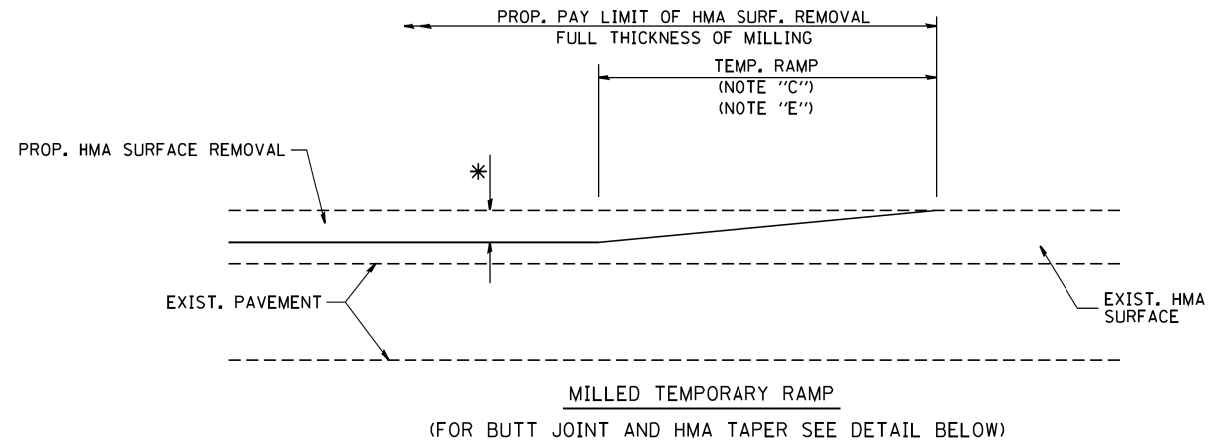


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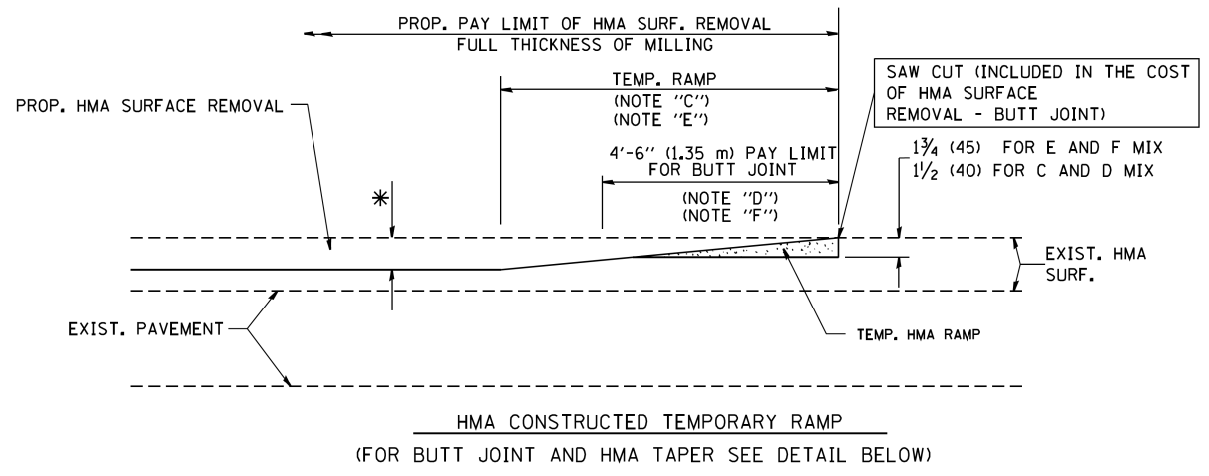
DETAIL - CURB OR CURB AND GUTTER
REMOVAL AND REPLACEMENT

SHEET 1 OF 1

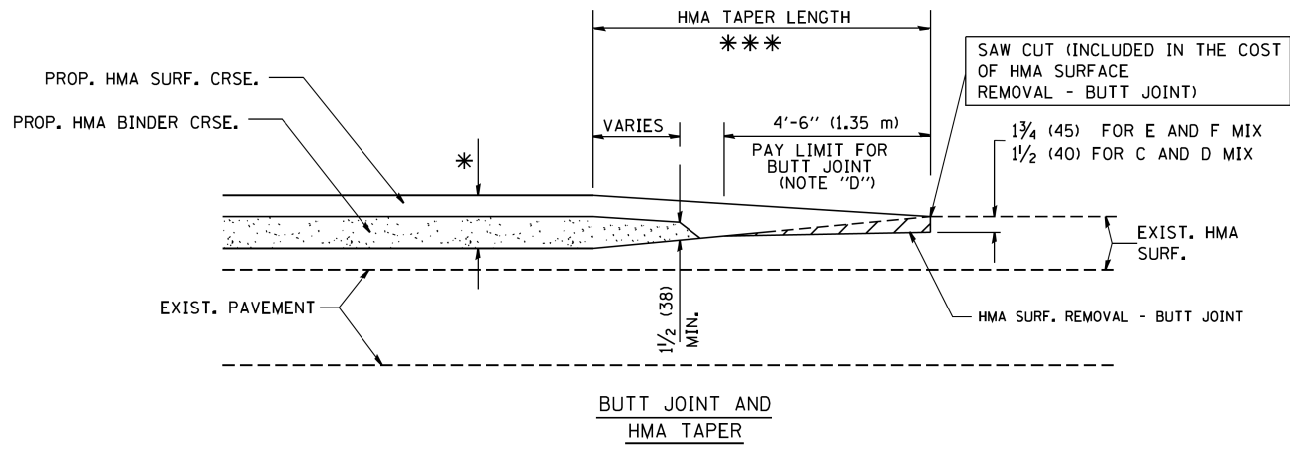
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	251
BD-24		CONTRACT 61E00		
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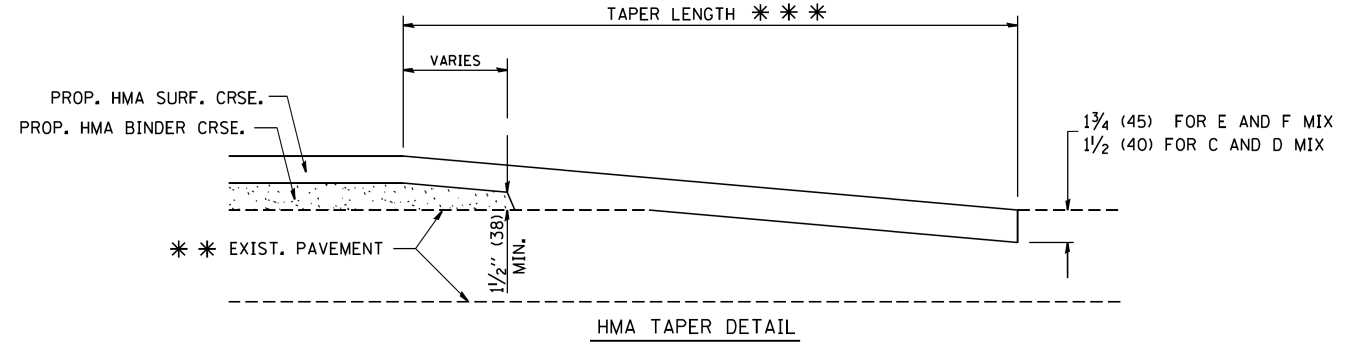
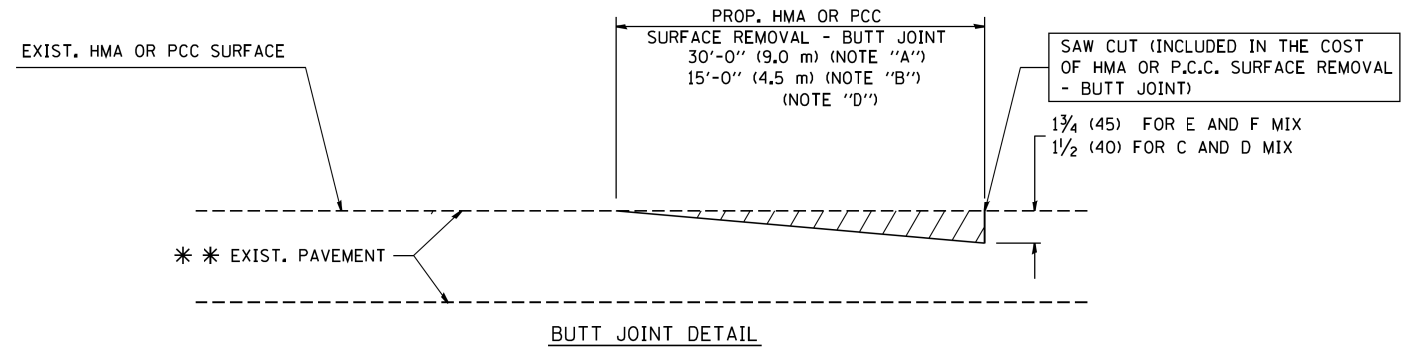
OPTION 1



**OPTION 2
TYPICAL TEMPORARY RAMP**



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



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

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

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
 - B: MINOR SIDE ROADS.
 - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
 - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
 - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
 - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
 - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- *** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

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

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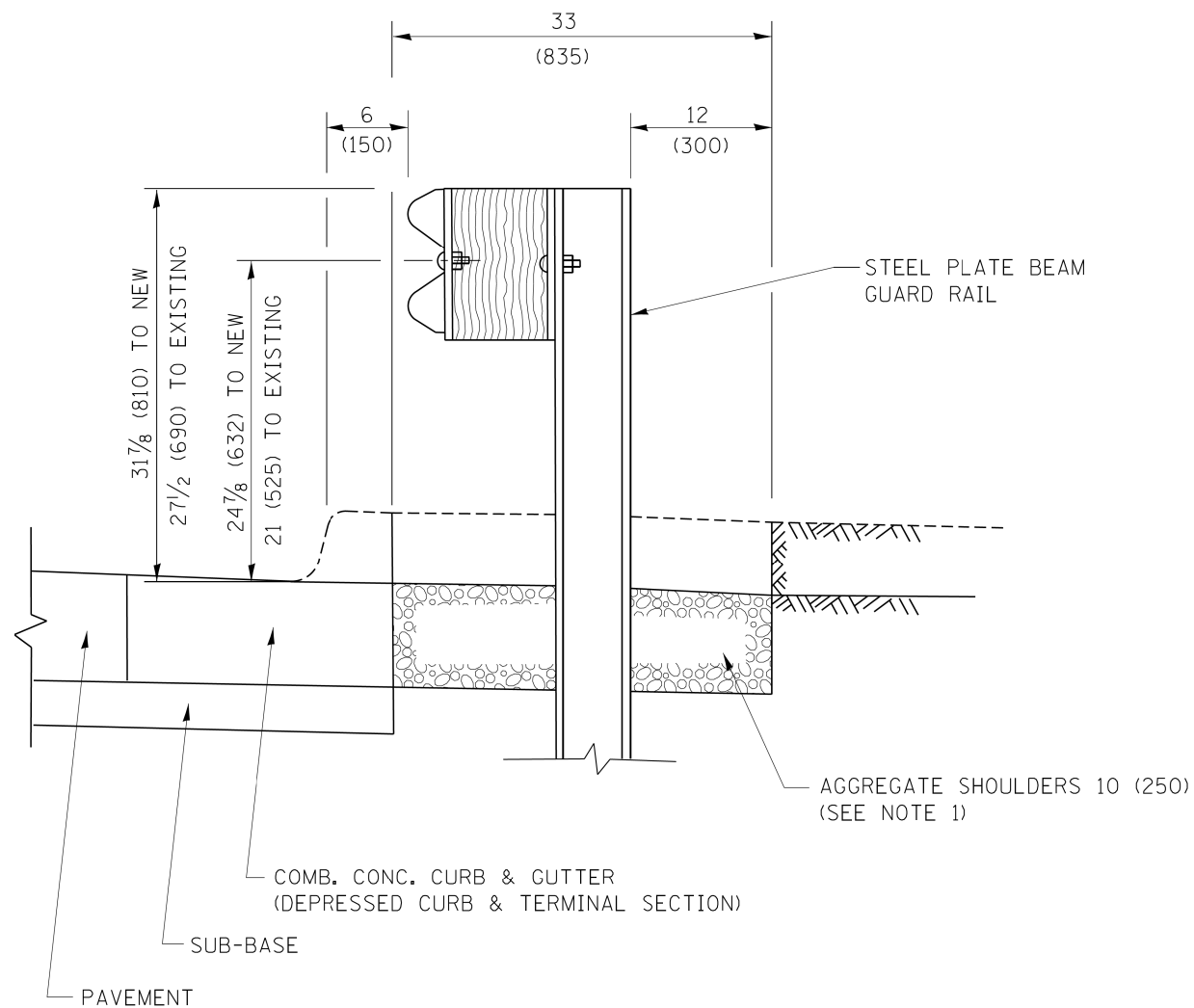


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ROCKDALE, IL 60436**

**BUTT JOINT AND
HMA TAPER DETAILS**

SHEET 1 OF 1

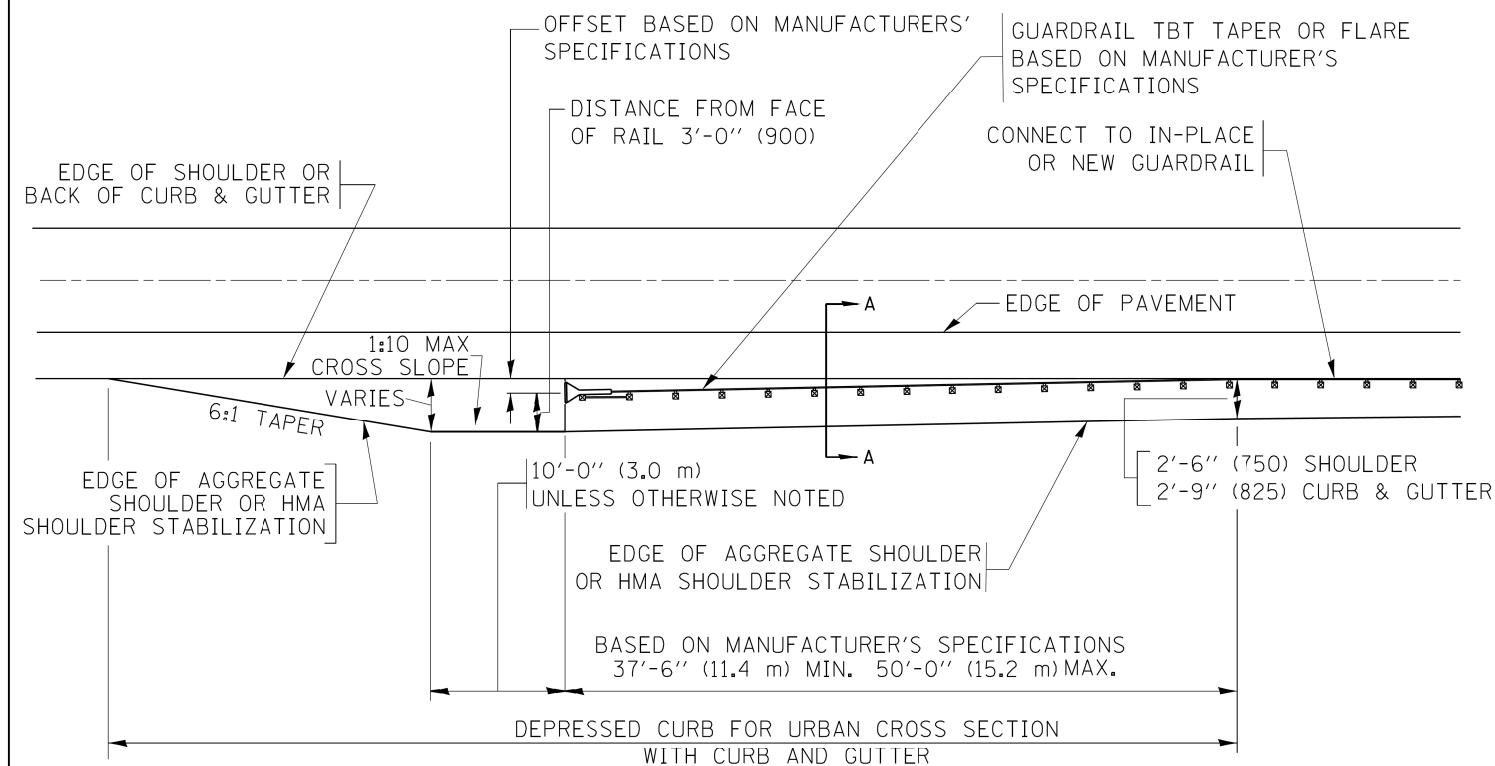
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3795	12-00029-00-PV	WILL	344	252
BD-32		CONTRACT 61E00		
WHA* 1189J16	ILLINOIS			



SECTION A-A

- NOTES:
1. THE AGGREGATE SHOULDER, 10 (250) OR HMA SHOULDER, 6 (150) (IF REQUIRED) SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL.
 2. "EXISTING" GUARDRAIL REFERS TO CONNECTING TERMINAL SECTION TO GUARD RAILING PRIOR TO THE MIDWEST GUARDRAIL SYSTEM.
 3. THE CONTRACTOR SHALL VERIFY THE TYPE/HEIGHT OF GUARDRAIL IN-PLACE BEFORE ORDERING THE NEW TERMINAL SECTION. COST INCLUDED WITH THE COST OF THE TERMINAL. THE 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.**

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

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

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

TBT = TRAFFIC BARRIER TERMINAL
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
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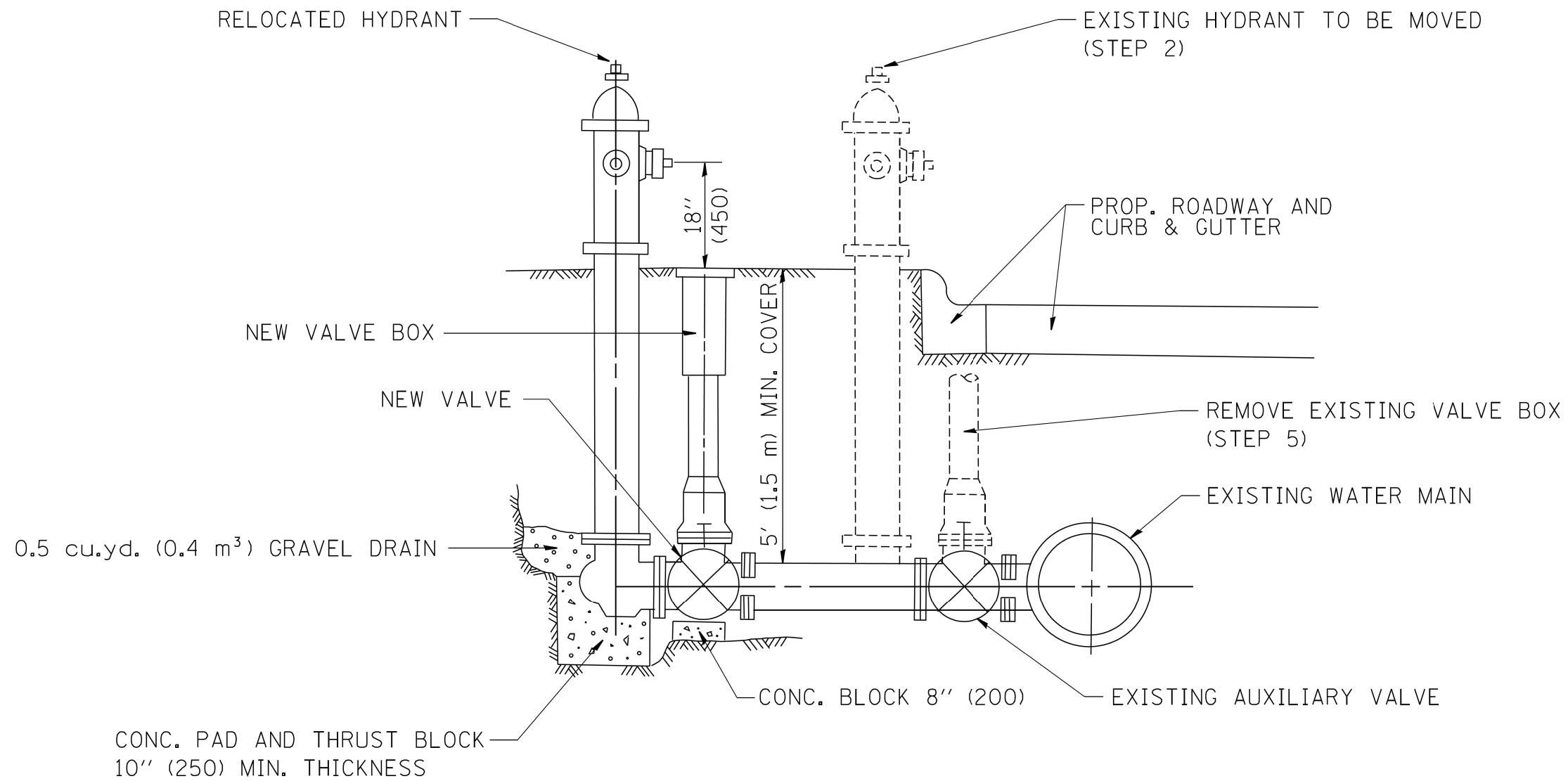


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DETAILS FOR DEPRESSED CURB & GUTTER AND
SHOULDER TREATMENT AT TBT TY, 1 SPL.

SHEET 1 OF 1

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	253
BD-34		CONTRACT 61E00		
WHA* 1189J16		ILLINOIS		



SEQUENCE OF CONSTRUCTION:

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

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

FIRE HYDRANT TO BE MOVED

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

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DETAIL - FIRE HYDRANT TO BE MOVED

SHEET 1 OF 1

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	254
BD-36			CONTRACT 61E00	
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GENERAL NOTES

ALTERNATE MATERIAL FOR THE WALLS MAY BE CONCRETE MASONRY UNITS, PRECAST REINFORCED CONCRETE SECTIONS OR CAST-IN-PLACE CONCRETE. THE CAST IRON STEPS AS DETAILED HEREON ARE TYPICAL. STEPS OF OTHER DESIGN AND MATERIAL THAT CONFORM TO THE MINIMUM REQUIREMENTS OF THE STEPS SHOWN MAY BE USED WHEN APPROVED BY THE ENGINEER.

CAST IRON STEPS SHALL BE GRAY IRON CONFORMING TO THE REQUIREMENTS OF ARTICLE 1006.14 OF THE STANDARD SPECIFICATIONS.

STEPS SHALL BE EMBEDDED INTO THE WALL A MINIMUM OF THREE (3) INCHES. STEPS SHALL NOT BE EXTENDED ON THE OUTSIDE.

STEPS SHALL BE OMITTED FOR WORK IN COOK COUNTY WHEN THE DEPTH OF THE MANHOLE IS TEN (10') OR LESS.

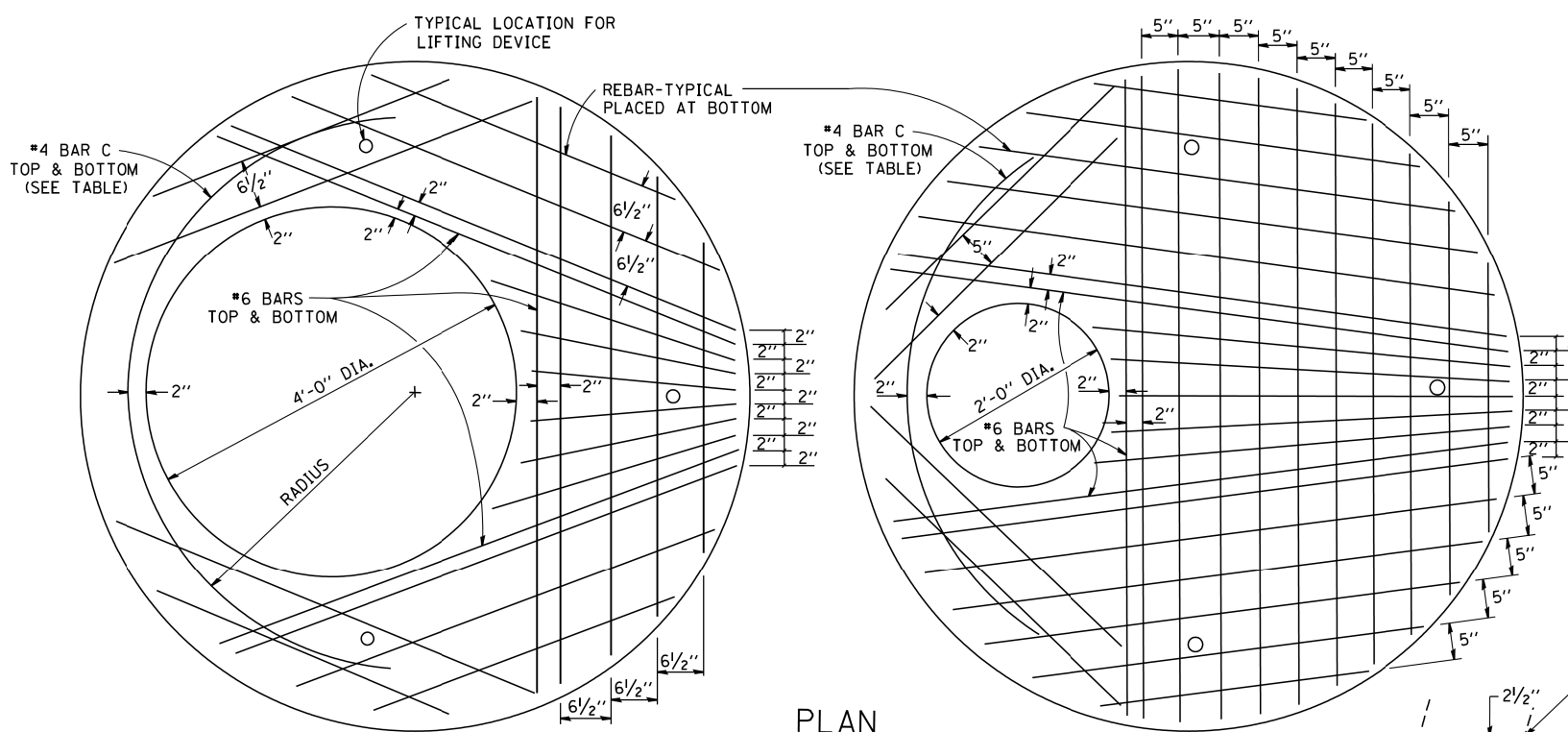
IN ADDITION TO THE REQUIREMENTS OF ARTICLE 612.13 OF THE STANDARD SPECIFICATIONS, THE CONTRACT UNIT PRICE FOR MANHOLES, TYPE A, 7'-DIAMETER SHALL INCLUDE THE SAND CUSHION WHEN REQUIRED, FURNISHING AND INSTALLING STEPS WHEN REQUIRED, FURNISHING AND COMPACTING THE SPECIFIED BACKFILL MATERIAL, AND FURNISHING AND INSTALLING FLAT SLAB TOP.

PRECAST FLAT SLAB TOP SHALL CONFORM TO ARTICLES 505.01 THRU 505.05 OF THE STANDARD SPECIFICATIONS EXCEPT THAT THE CONCRETE STRENGTH SHALL BE 4,000 PSI AFTER 28 DAYS. REINFORCEMENT BARS AND WELDED WIRE FABRIC SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 1006.10. ONLY GRADE 60 REINFORCEMENT BARS WILL BE PERMITTED.

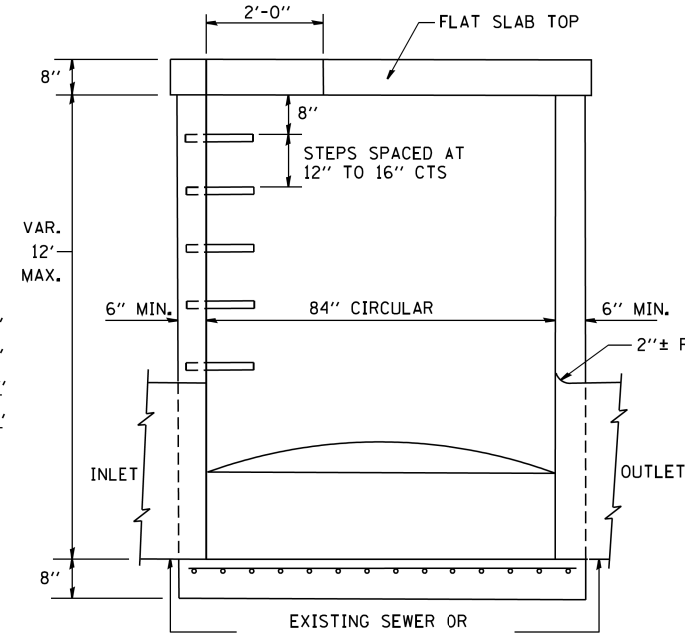
BOTTOM SLAB SHALL BE REINFORCED BY EITHER REINFORCEMENT BARS OR WELDED WIRE FABRIC. THE MINIMUM REINFORCEMENT SHALL BE 0.46 SQUARE INCH PER LINEAR FOOT IN BOTH DIRECTIONS.

JOINT CONFIGURATION AND DIMENSIONS OF FLAT SLAB TOP SHALL MATCH AND FIT THE RISER JOINT DETAIL.

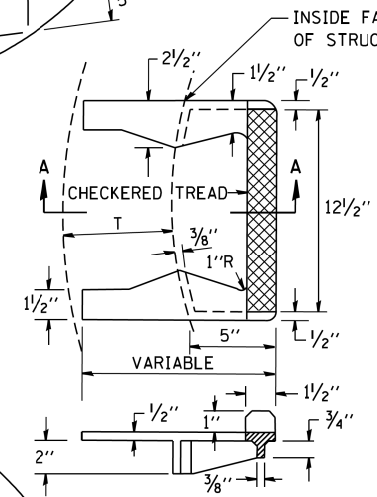
LIFTING DEVICES SHALL BE APPROVED BY THE ENGINEER.



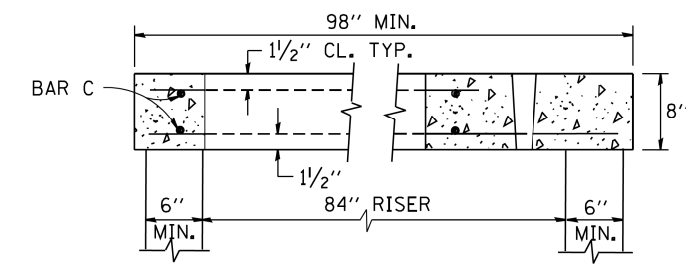
PLAN
SHOWING REBAR REINFORCEMENT



ELEVATION

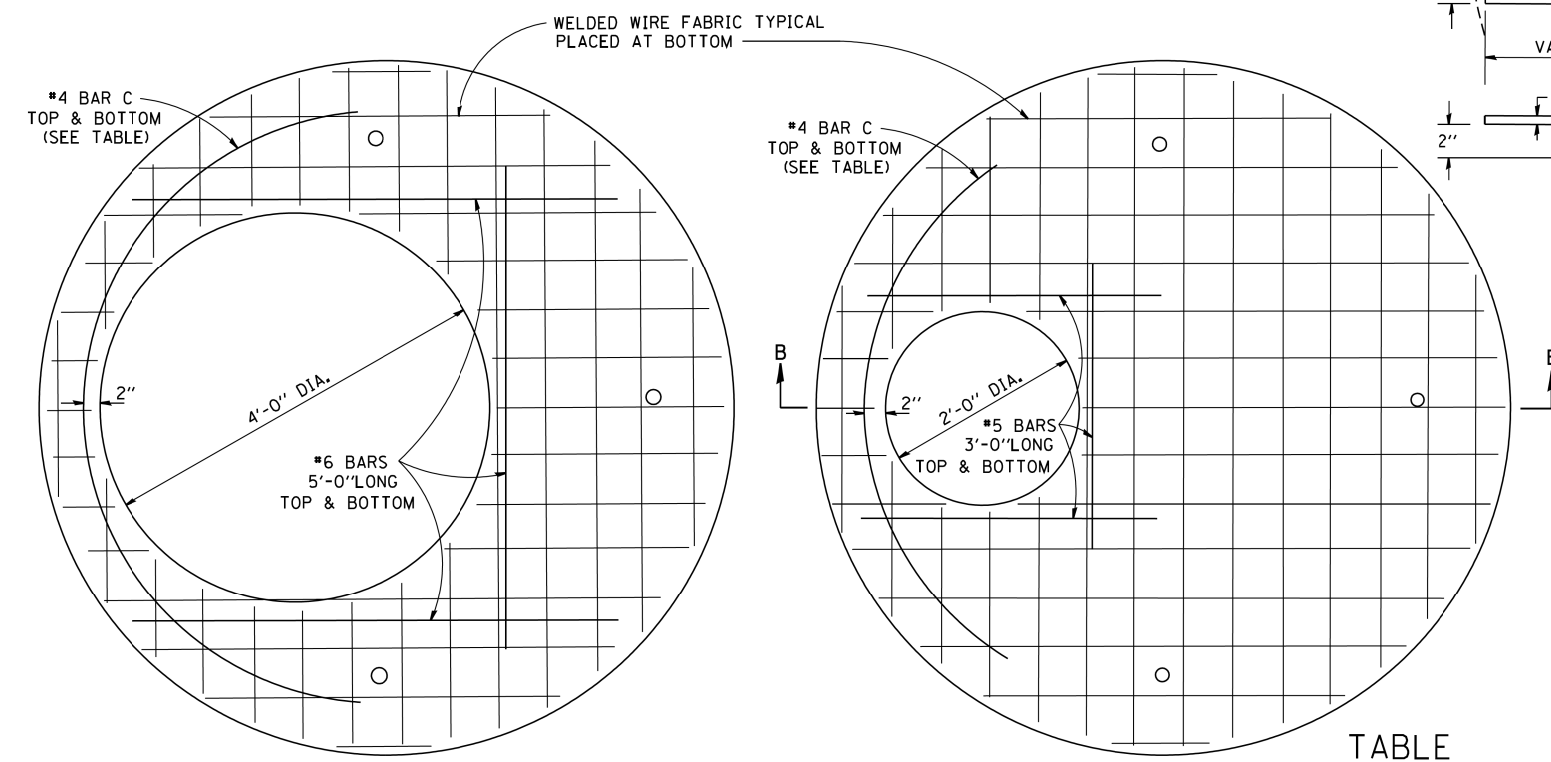


SEC. A-A
CAST IRON STEPS

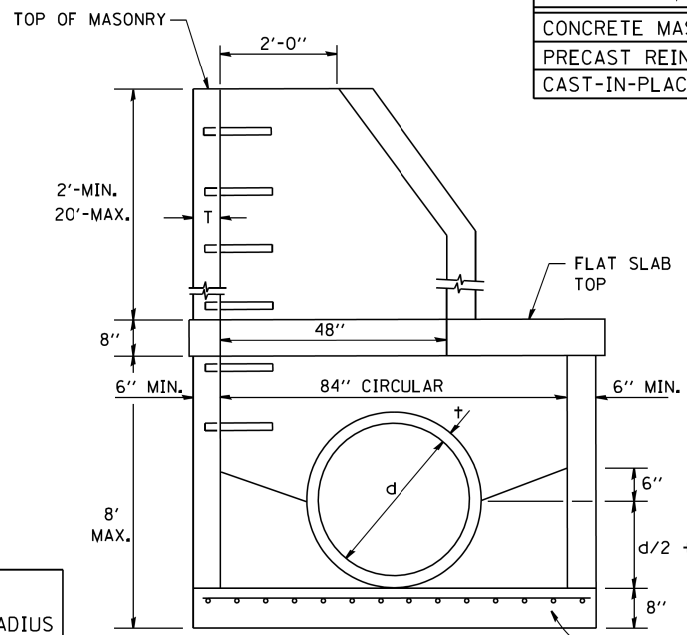


SECTION B-B

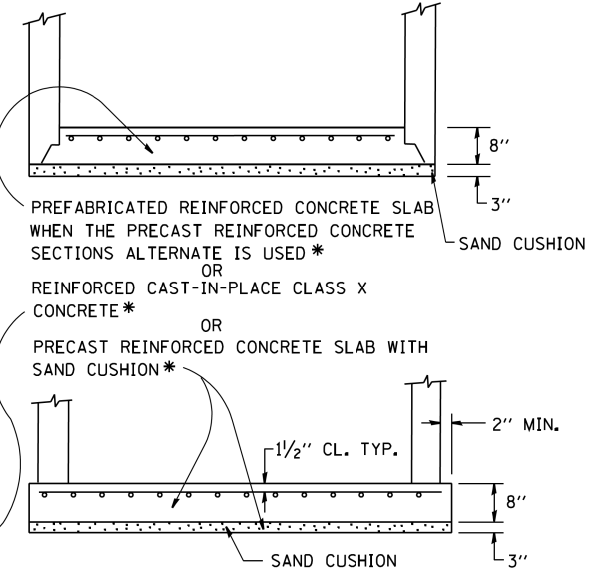
ALTERNATE MATERIALS FOR RISERS	T (MIN.)
CONCRETE MASONRY UNITS	5"
PRECAST REINFORCED CONCRETE SECTIONS	4"
CAST-IN-PLACE CONCRETE	6"



PLAN
SHOWING WELDED WIRE FABRIC REINFORCEMENT



ELEVATION



DETAIL - MANHOLE TYPE A
7 FOOT DIAMETER

DIAMETER OF OPENING	REINFORCEMENT "A" WWF OR EACH DIRECTION	BAR SIZE	BAR C		
			SIZE	LENGTH	RADIUS
2'-0"	1.06 SQ.IN./LIN.FT.	#6	#4	6'-0"	38"
4'-0"	0.82 SQ.IN./LIN.FT.	#6	#4	9'-0"	38"

NOTE: THIS STRUCTURE SHOULD BE USED WITH PIPES SIZE 54" DIA. OR SMALLER.

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ROCKDALE
79 MOEN AVENUE
ROCKDALE, IL 60436

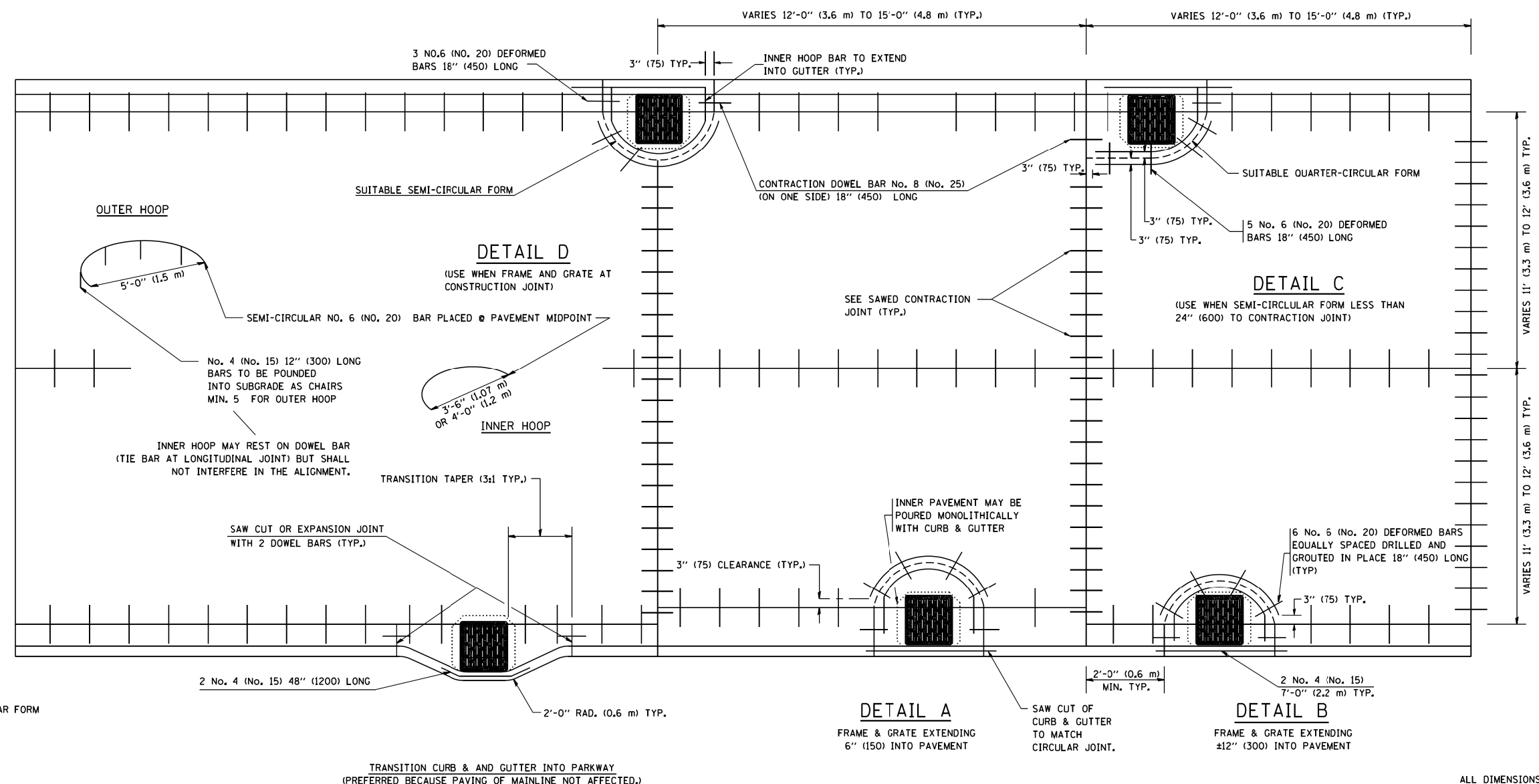
DETAIL - MANHOLE TYPE A
7 FOOT DIAMETER
SHEET 1 OF 1

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	255
BD-37		CONTRACT 61E00		

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

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REVISION	DATE	BY	REMARKS
LATEST	08-27-02	PL	

DRAWN	JSH
CHECKED	GFS
APPROVED	GFS

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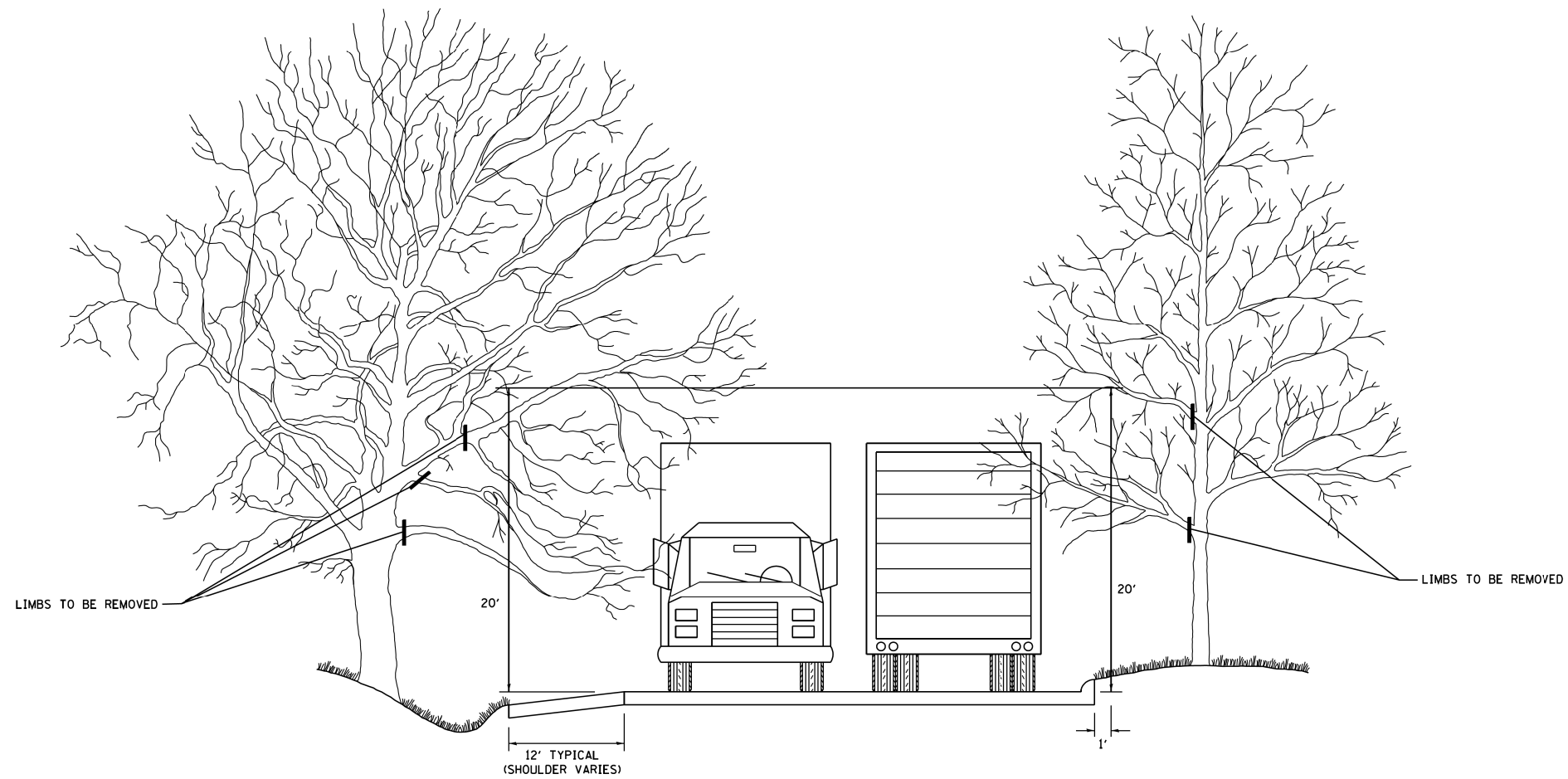
WILLET HOFMANN & ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLET, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-000918

ROCKDALE
79 MOEN AVENUE
ROCKDALE, IL 60436

DETAIL - PCC PAVEMENT ROUNDABOUTS AT CURB AND GUTTER
SHEET 1 OF 1

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	256
BD-48		CONTRACT 61E00		
WHA* 1189J16	ILLINOIS			

FILE = S:\PROJECTS\2016\1189J16.RK.Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-detail-is-BM20.dgn



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LATEST	10-31-06	R. BORO	

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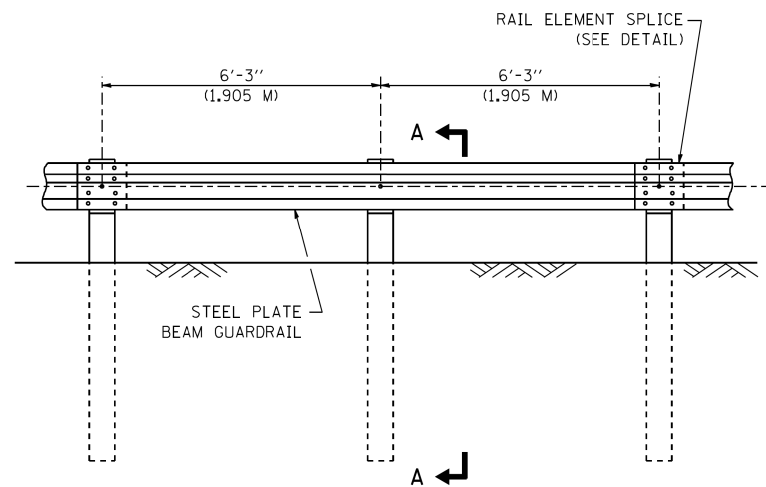


79 MOEN AVENUE
ROCKDALE, IL 60436

DETAIL - PRUNING FOR SAFETY AND
EQUIPMENT CLEARANCE

SHEET 1 OF 1

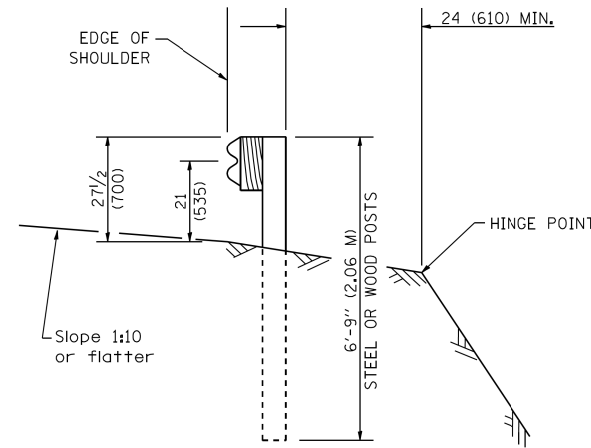
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BM-20		CONTRACT 61E00		
WHA* 1189J16	ILLINOIS			



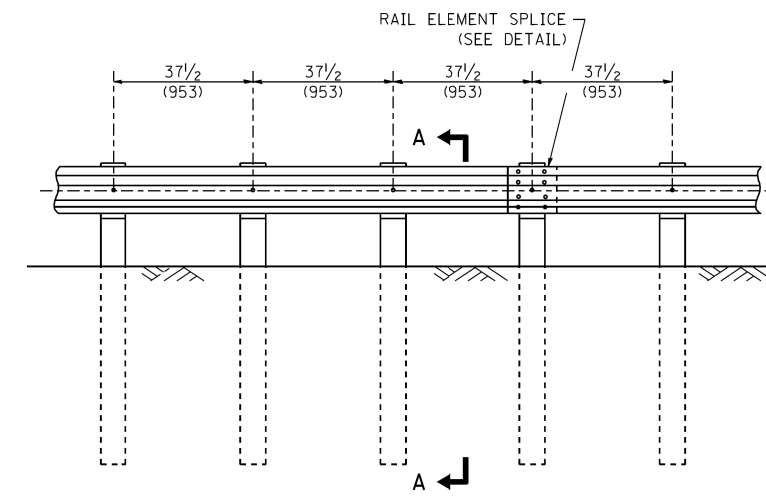
ELEVATION

TYPE A

6'-3" (1.905 M) TYPICAL POST SPACING



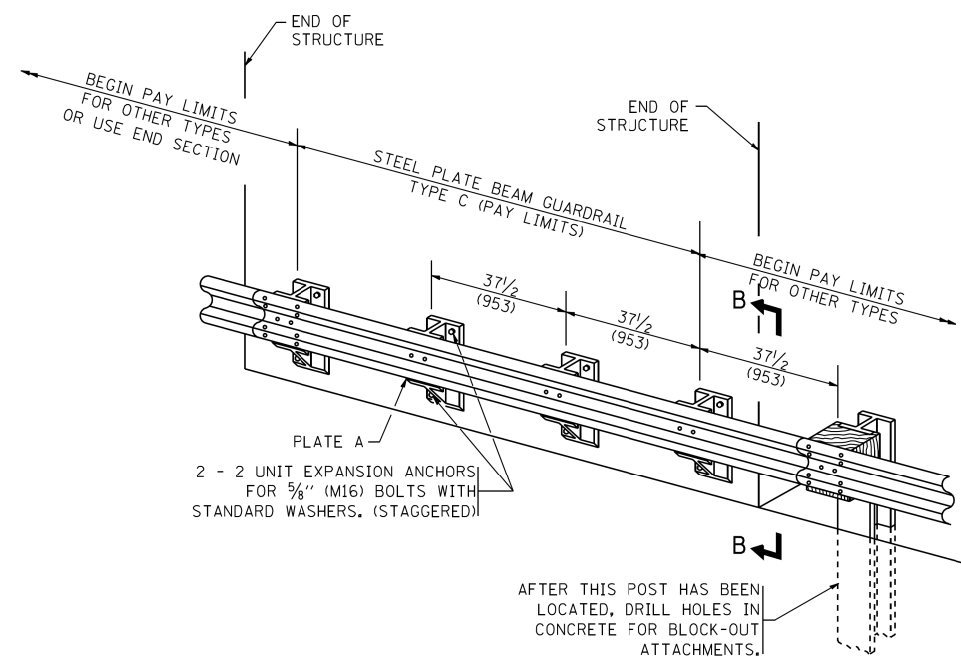
SECTION A-A



ELEVATION

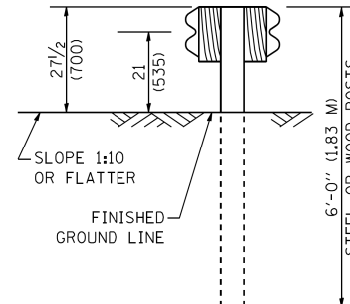
TYPE A

37 1/2 (953) CLOSED POST SPACING

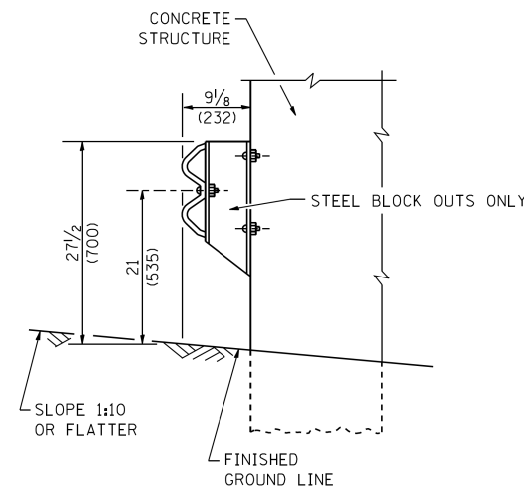


TYPE C

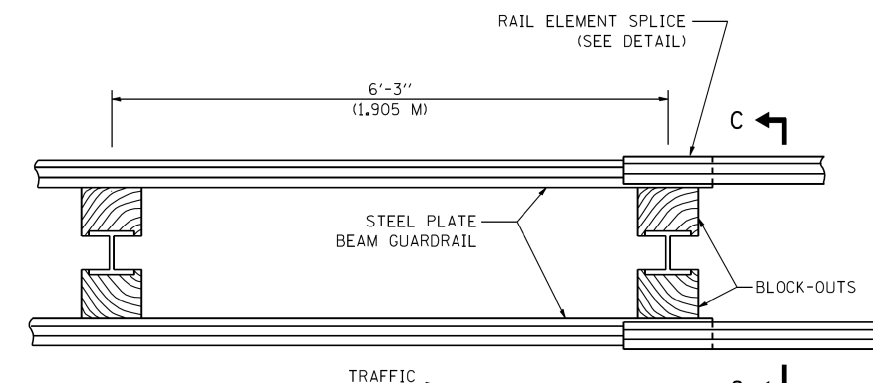
37 1/2 (953) BLOCK-OUT SPACING



SECTION C-C



SECTION B-B



TRAFFIC

PLAN

TYPE D

DOUBLE STEEL PLATE BEAM GUARDRAIL
6'-3" (1.905 M) TYPICAL POST SPACING

GENERAL NOTES

ALL SLOPE RATIOS ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

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

THE EXISTING STEEL POSTS MAY BE DRILLED TO MATCH THE BOLT PATTERN SHOWN HEREIN FOR THE WOOD BLOCK-OUT, OR A NEW STEEL POST SHALL BE PROVIDED.

THIS DETAIL IS APPLICABLE TO THE GUARDRAIL SYSTEM USED PRIOR TO JANUARY 1, 2007. FOR DETAILS ON THE MIDWEST GUARDRAIL SYSTEM, SEE STANDARD 630001.

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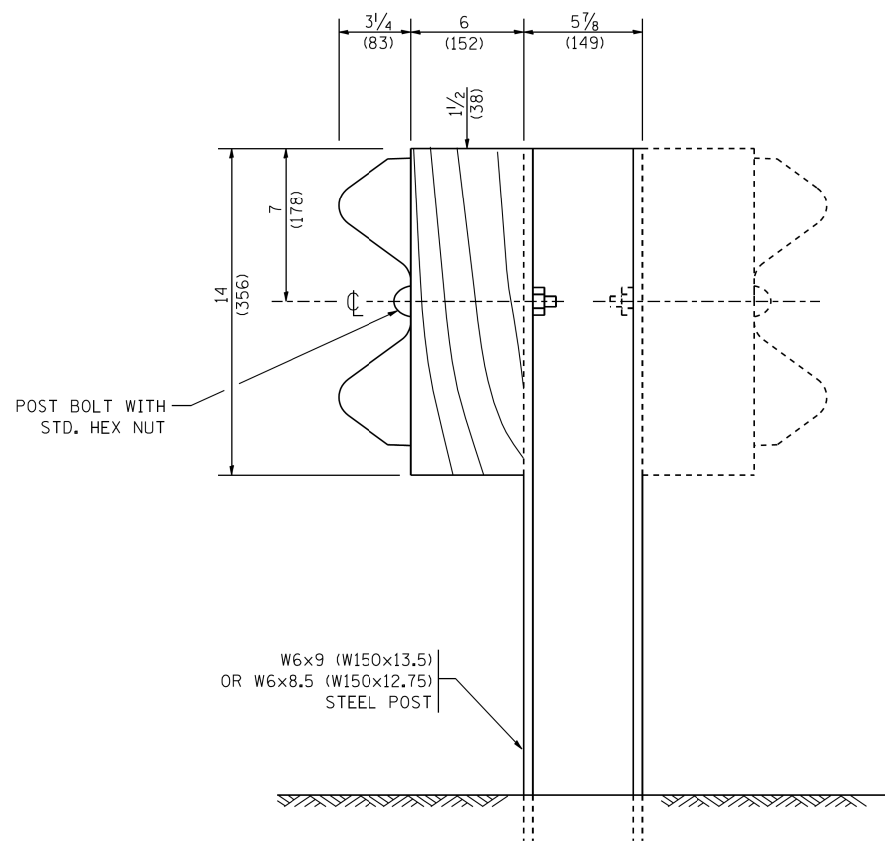


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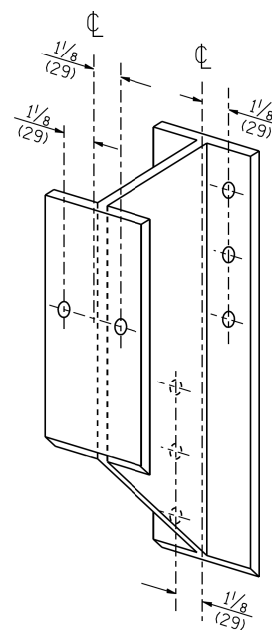
DETAILS - REMOVE AND REERECT
STEEL PLATE BEAM GUARDRAIL

SHEET 1 OF 4

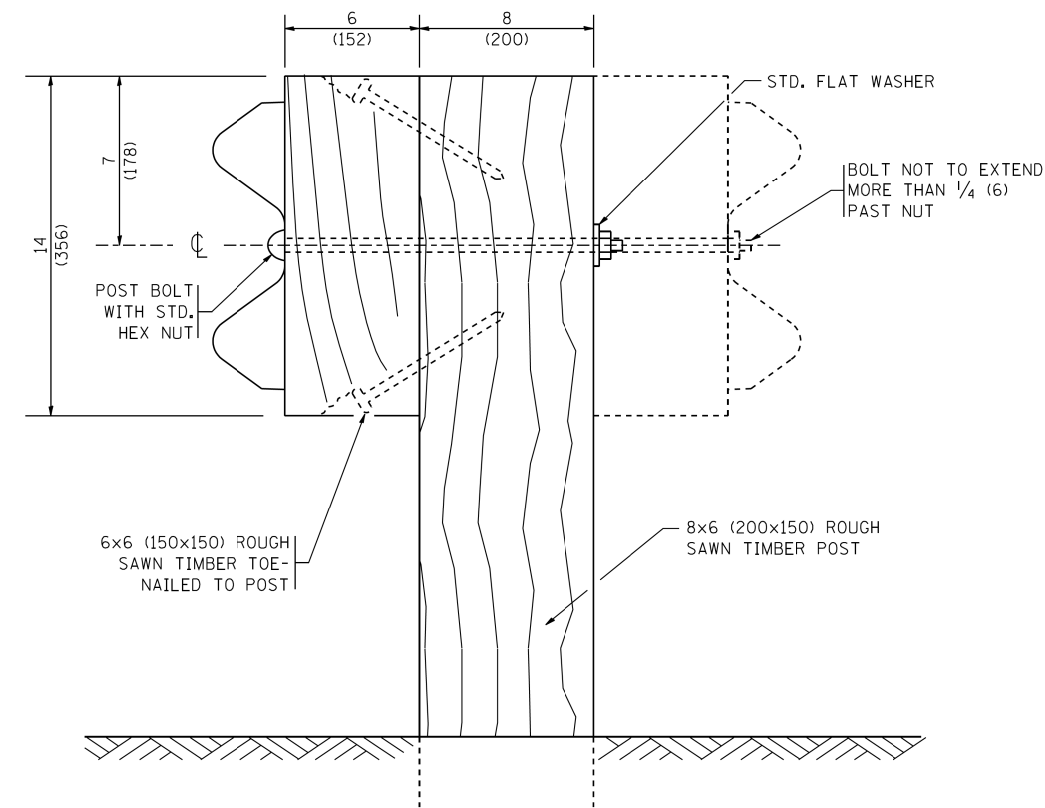
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	258
BM-21		CONTRACT 61E00		
WHA* 1189J16		ILLINOIS		



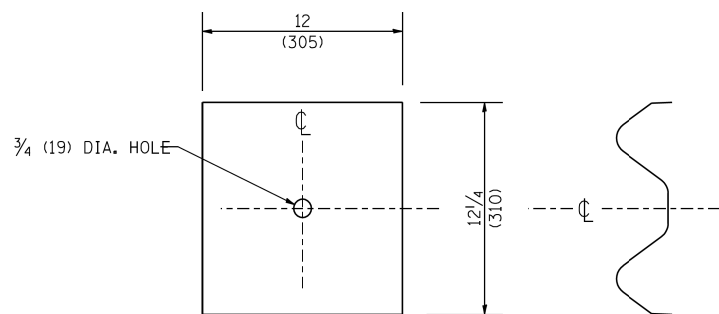
STEEL POST CONSTRUCTION



STEEL BLOCK-OUT DETAIL



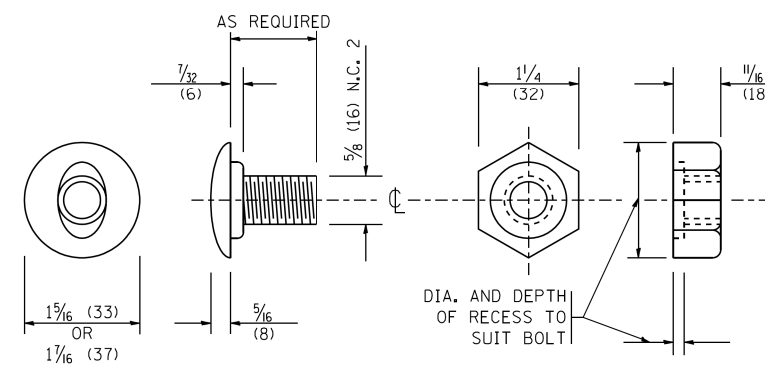
WOOD POST CONSTRUCTION



NOTE:

PLATE A SHALL BE PLACED BETWEEN RAIL ELEMENT AND BLOCK-OUT AT NON-SPLICE MOUNTING POINTS ONLY WHEN STEEL BLOCK-OUTS ARE USED.

PLATE A



POST OR SPLICE BOLT & NUT

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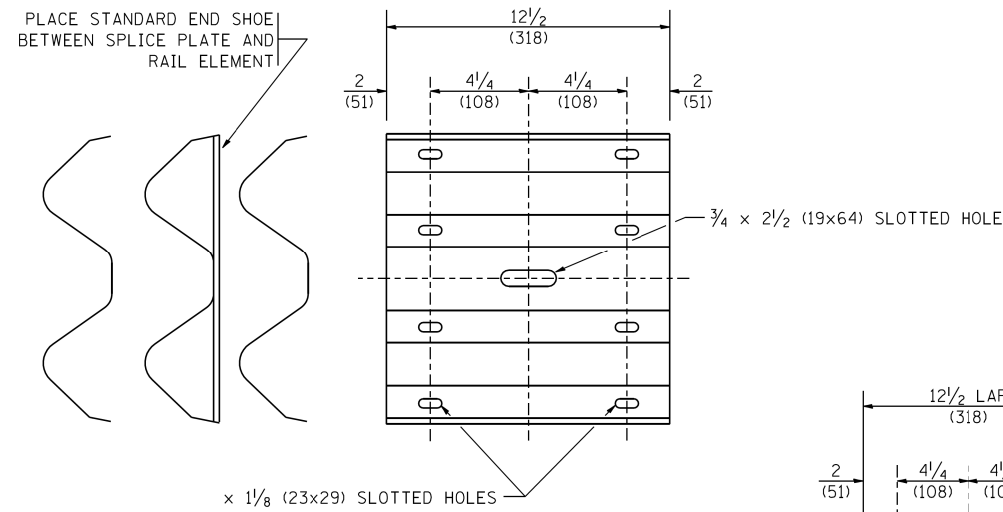


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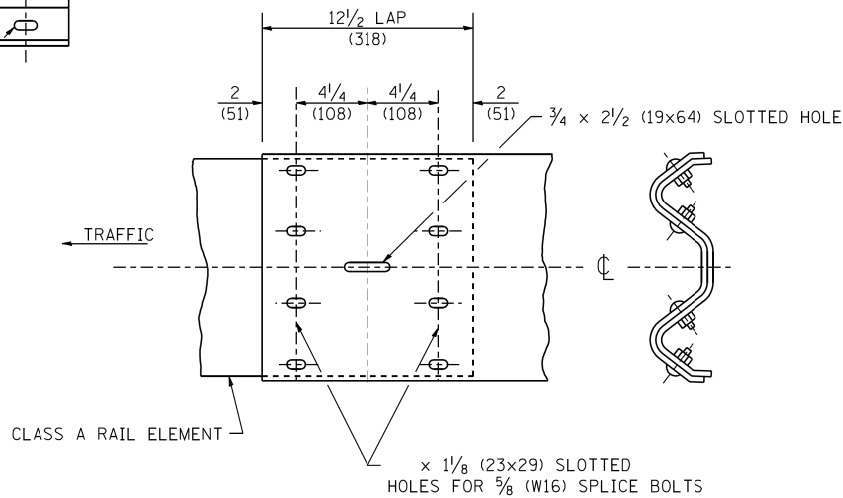
DETAILS - REMOVE AND REERECT
STEEL PLATE BEAM GUARDRAIL

SHEET 2 OF 4

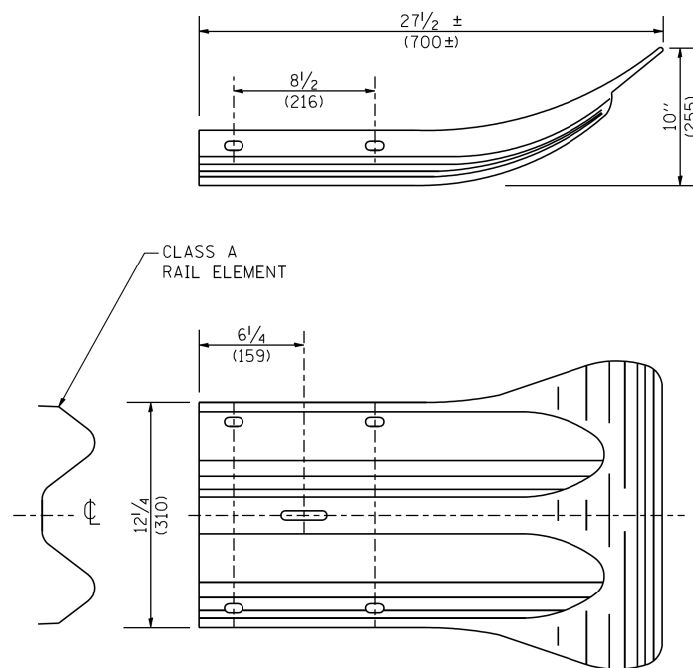
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	259
BM-21		CONTRACT 61E00		
WHA* 1189J16	ILLINOIS			



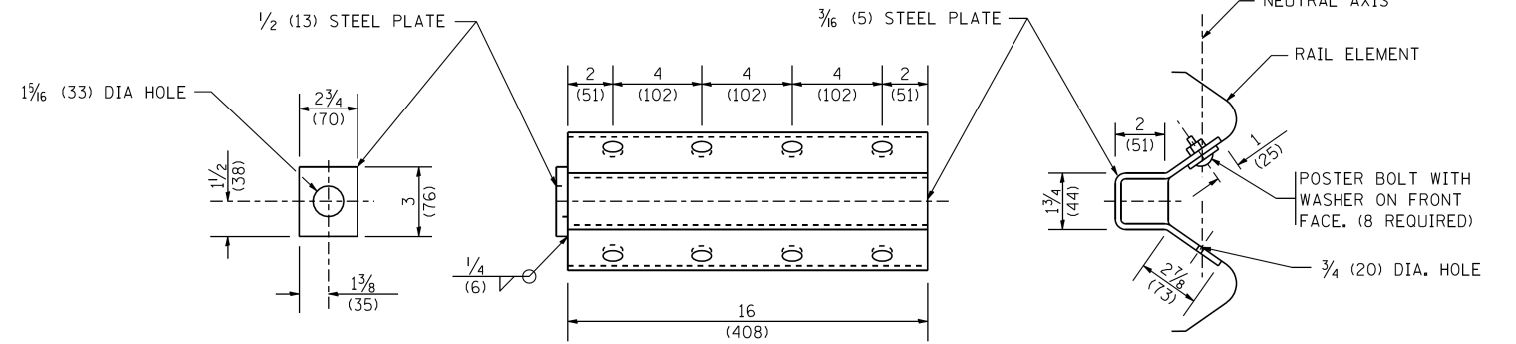
SPLICE PLATE



RAIL ELEMENT SPLICE



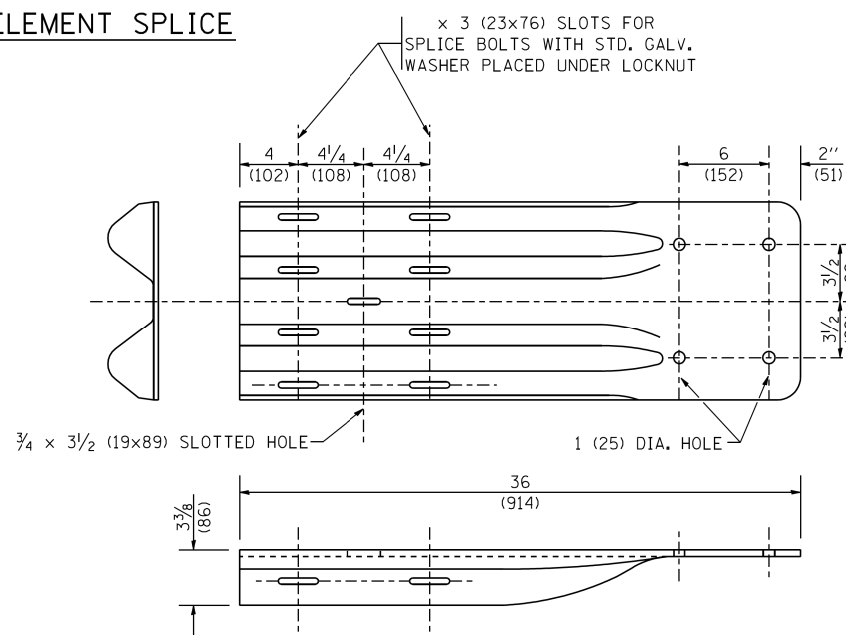
END SECTION



NOTE:

ANCHOR PLATE T SHALL BE USED TO ATTACH CABLE ASSEMBLY TO GUARDRAIL WHEN REQUIRED ON TRAFFIC BARRIER TERMINALS.

ANCHORE PLATE T DETAILS



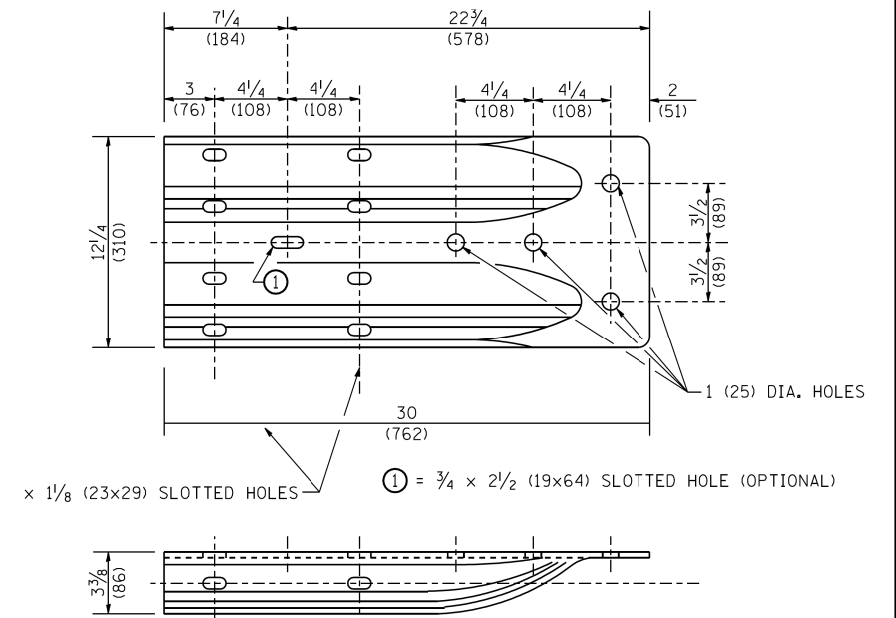
END SHOE

NOTE:

WHEN END SHOE IS ATTACHED TO A BRIDGE PARAPET WHICH HAS AN EXPANSION JOINT, THE BOLTS SHALL BE PROVIDED WITH A LOCKNUT OR DOUBLE NUT AND SHALL BE TIGHTENED ONLY TO A POINT THAT WILL ALLOW GUARDRAIL MOVEMENT.

THE STANDARD END SHOE SHALL BE ATTACHED TO THE CONCRETE WITH PRE-DRILLED OR SELF-DRILLING ANCHOR BOLTS. THE ANCHOR CONE SHALL BE SET FLUSH WITH THE SURFACE OF THE CONCRETE.

EXTERNALLY THREADED STUDS PROTRUDING FROM THE SURFACE OF THE CONCRETE WILL NOT BE PERMITTED.



ALTERNATE END SHOE

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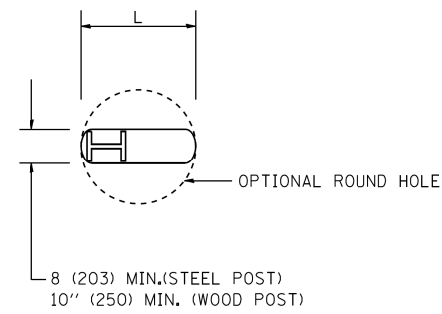


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ROCKDALE, IL 60436

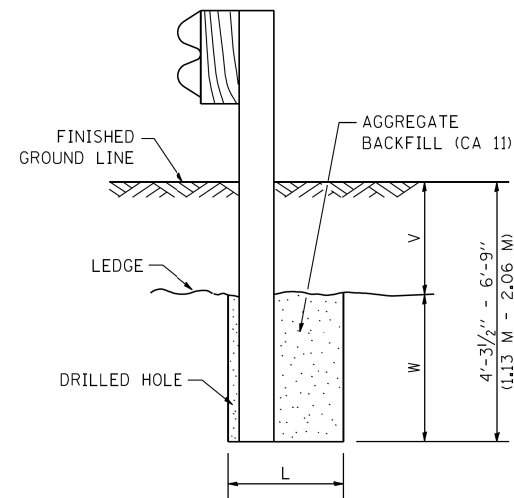
DETAILS - REMOVE AND REERECT
STEEL PLATE BEAM GUARDRAIL

SHEET 3 OF 4

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	260
BM-21		CONTRACT 61E00		
WHA* 1189J16	ILLINOIS			



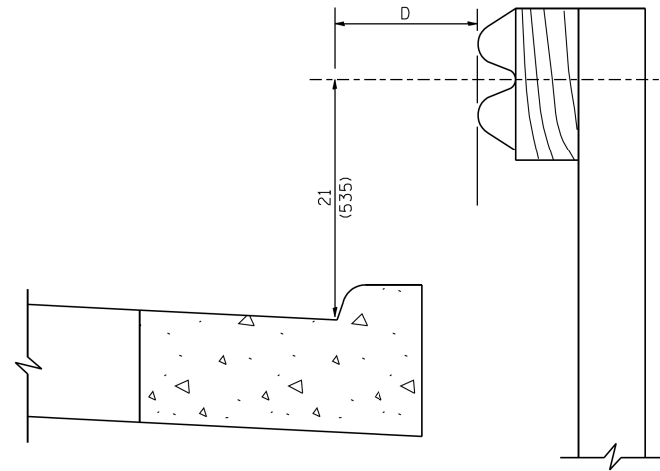
PLAN



NOTE:
LEGE LINE IS TOP OF ROCK
LEGE OR HARD SLAG FILL.

ELEVATION

FOOTING FOR POST WHEN IMPERVIOUS
MATERIAL IS ENCOUNTERED



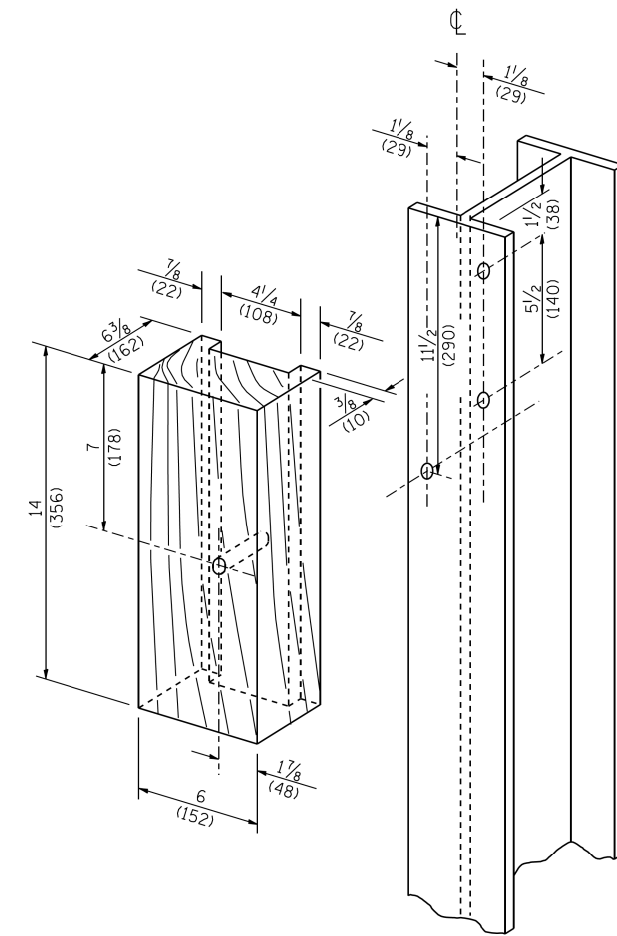
NOTE:

IF IT IS NECESSARY FOR D TO BE MORE THAN 12 (300) AND LESS THAN 10'-0" (3.0 M) TYPE M-2 (M-5) CURB AND GUTTER (STD. 606001) SHALL BE USED IN FRONT OF AND IN ADVANCE OF THE GUARDRAIL.

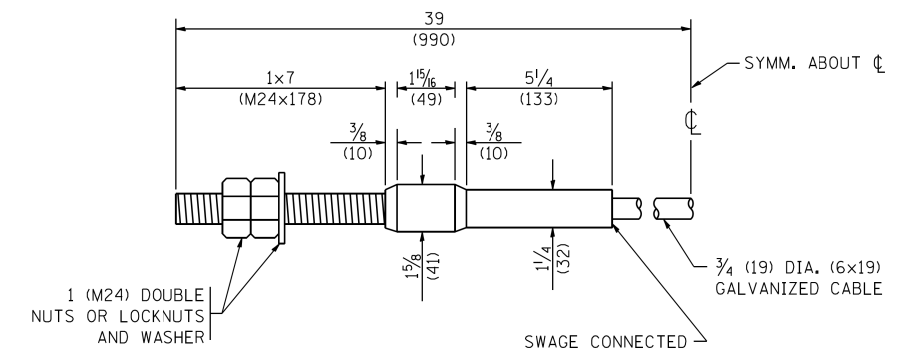
GUARDRAIL PLACED BEHIND CURB

(D = 0 DESIRABLE TO 12 (300) MAXIMUM)

V	W	L	
		STEEL POST	WOOD POST
0 - 18 (0 - 460)	24 (610)	21 (530)	23 (580)
>18 - 41.5 (> 460 - 825)	12 (305)	8 (203)	10 (250)
>41.5 - 53.5 (> 825 - 1.13 M)	12 - 0 (350 - 0)	8 (203)	10 (250)



WOOD BLOCK-OUT AND
STEEL POST DETAILS



CABLE ASSEMBLY

(40,000 LBS (18,100 KG) MIN. BREAKING STRENGTH)
TIGHTEN TO TAUT TENSION

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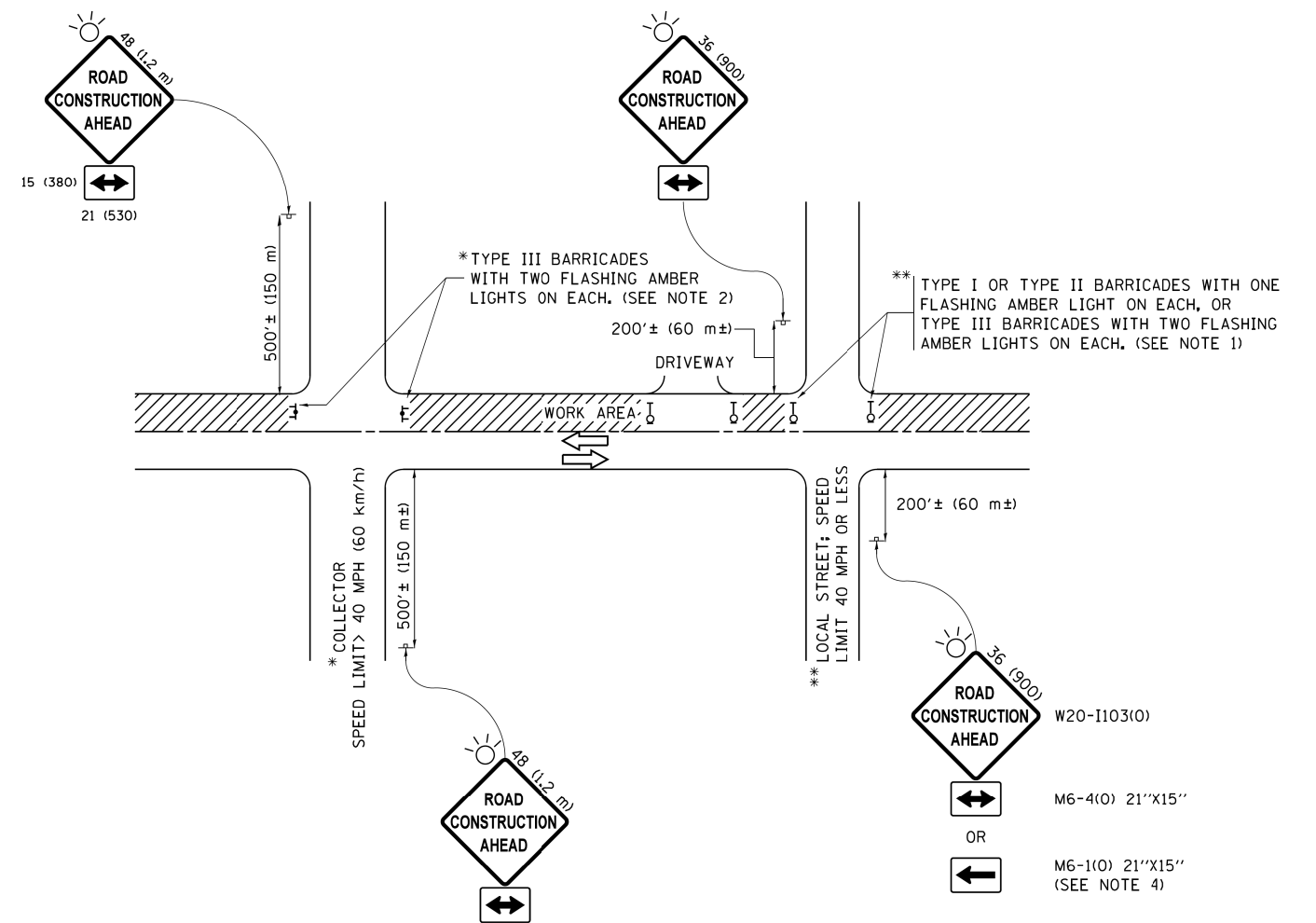
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DETAILS - REMOVE AND REERECT
STEEL PLATE BEAM GUARDRAIL

SHEET 4 OF 4

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	261
BM-21		CONTRACT 61E00		
WHA* 1189J16	ILLINOIS			

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NOTES:

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 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. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. 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).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

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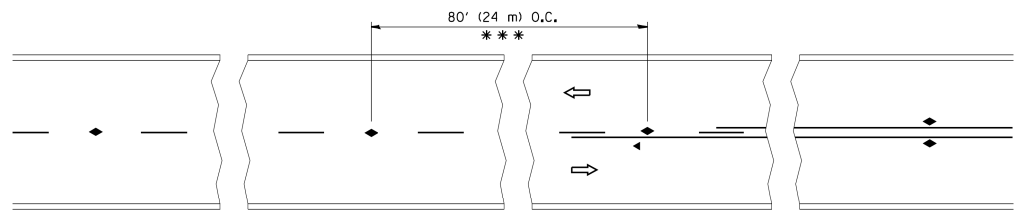
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APPROVED	GFS

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

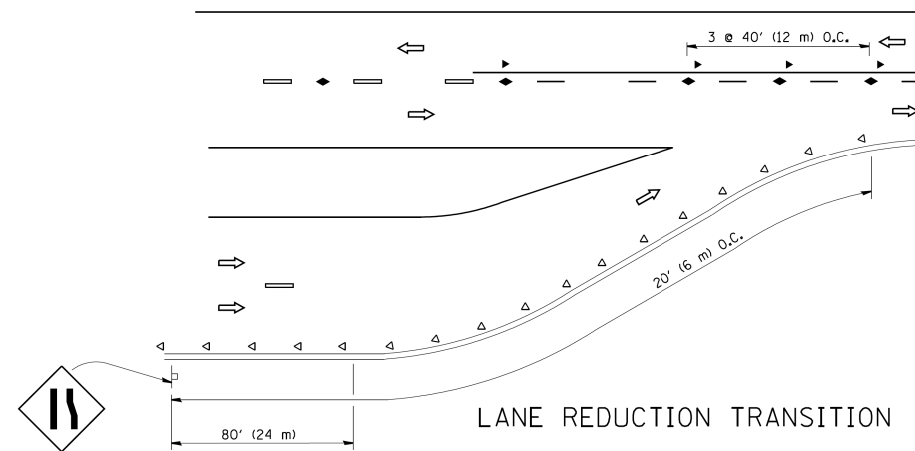
SHEET 1 OF 1

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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WHA* 1189J16	ILLINOIS			

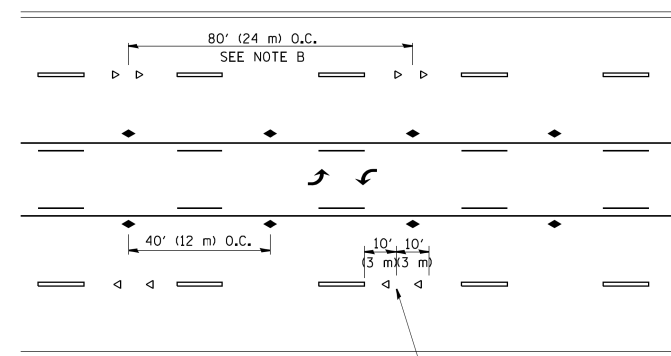


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

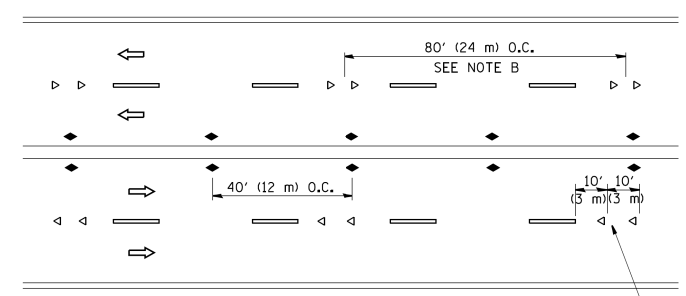
TWO-LANE/TWO-WAY



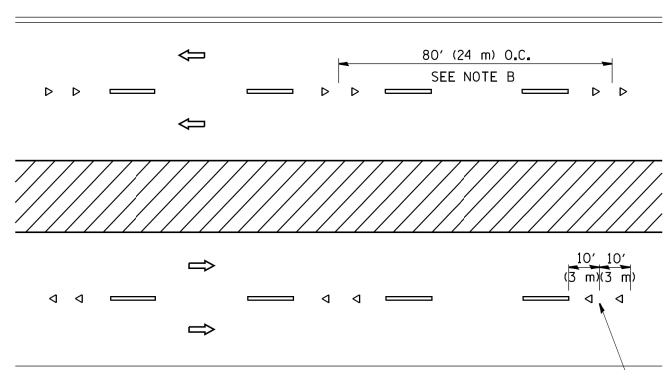
LANE REDUCTION TRANSITION



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

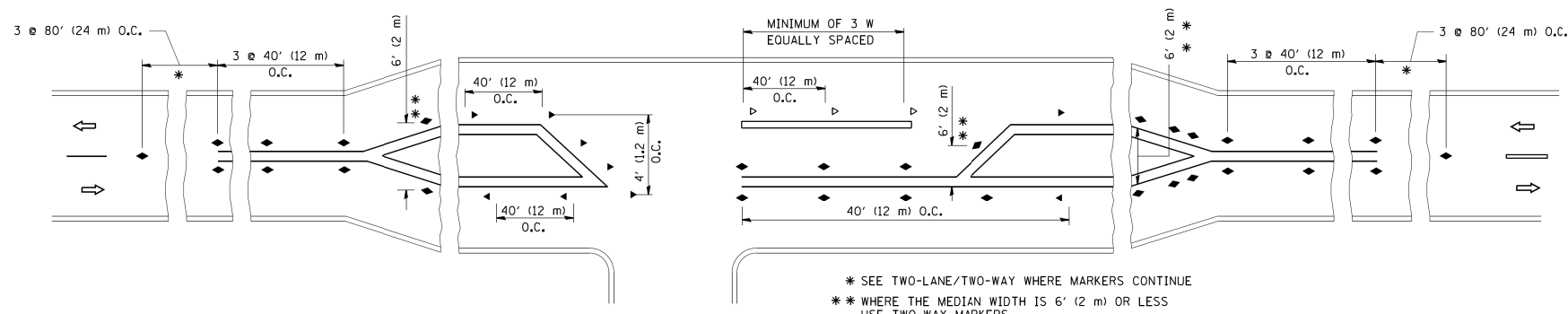
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

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.



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

LEFT TURN

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

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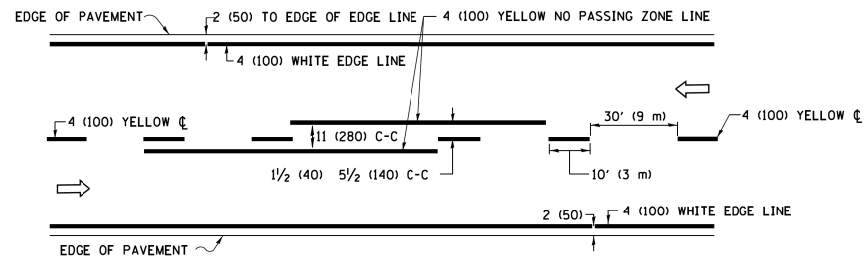


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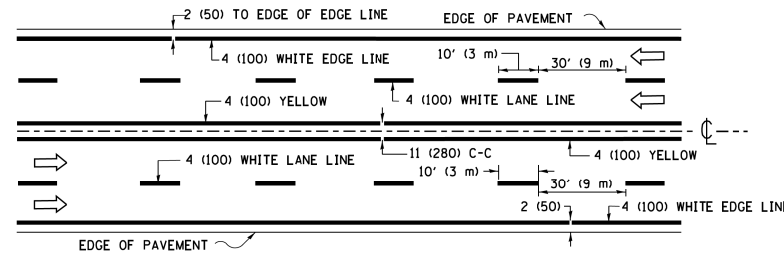
DETAIL - TYPICAL APPLICATIONS FOR RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

SHEET 1 OF 1

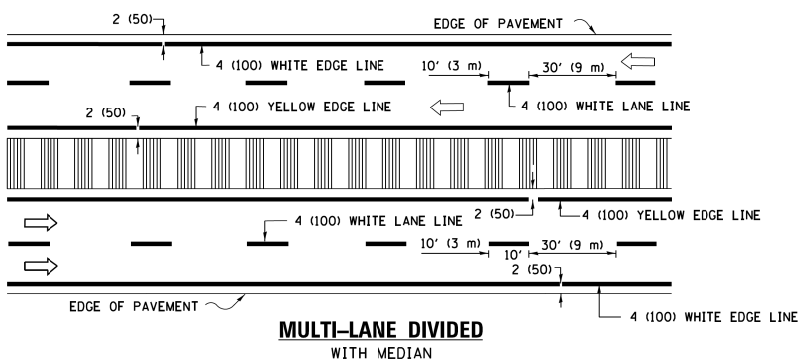
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	263
TC-11		CONTRACT 61E00		
WHA* 1189J16	ILLINOIS			



2-LANE ROADWAY

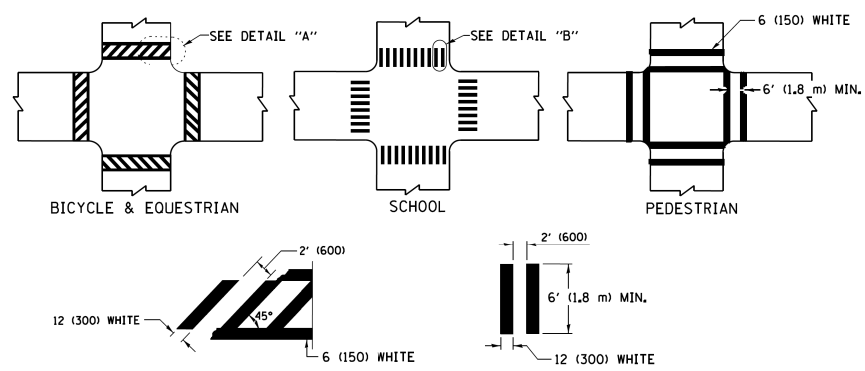


MULTI-LANE UNDIVIDED



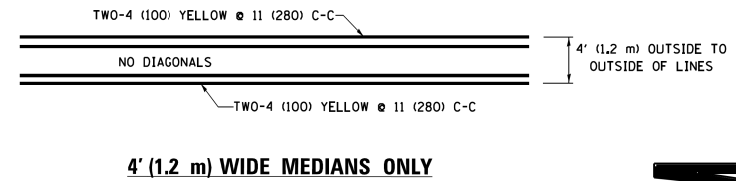
MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

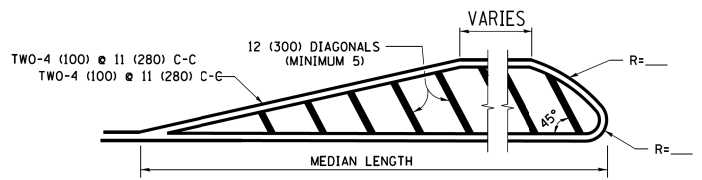


TYPICAL CROSSWALK MARKING

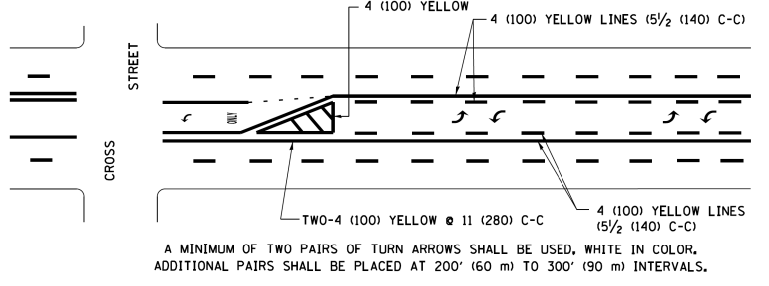
* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



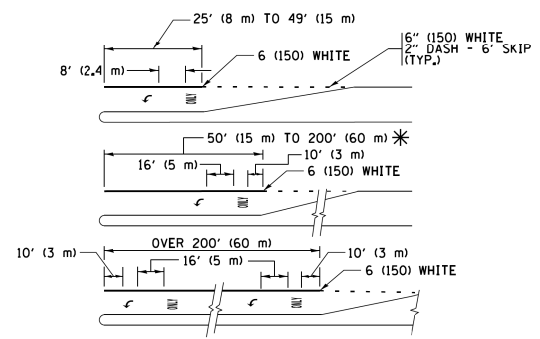
4' (1.2 m) WIDE MEDIANS ONLY



MEDIANS OVER 4' (1.2 m) WIDE



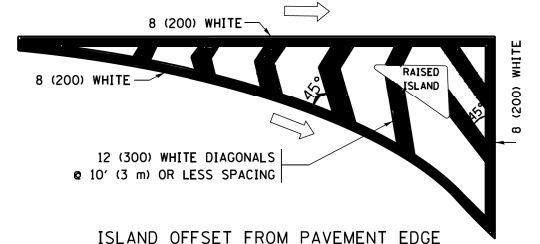
MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING



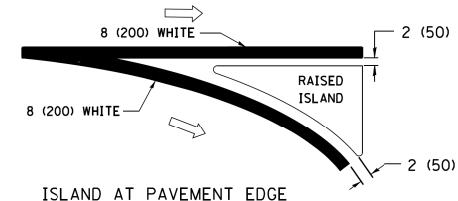
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

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

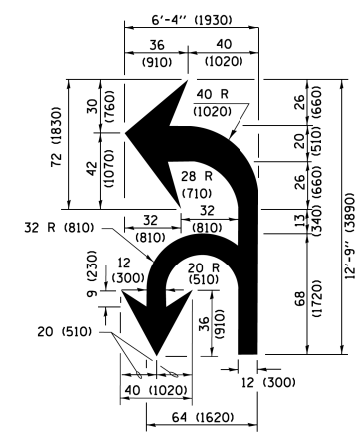
TYPICAL LEFT (OR RIGHT) TURN LANE TYPICAL TURN LANE MARKING



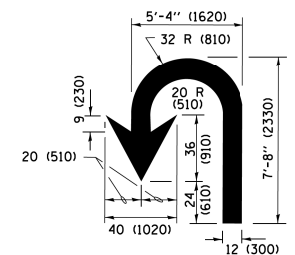
ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN

LANE REDUCTION TRANSITION

* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

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 FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 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 MEDIANS IN YELLOW
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" IS 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 (REQUIRED FOR SHOULDERS ≥ 8')	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))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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 = S:\PROJECTS\2016\1189J16_RK_Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-deta1.s-T013.dgn

REVISION	DATE	BY	REMARKS
LATEST	04-12-16	CJ	

DRAWN JSH
CHECKED GFS
APPROVED GFS

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

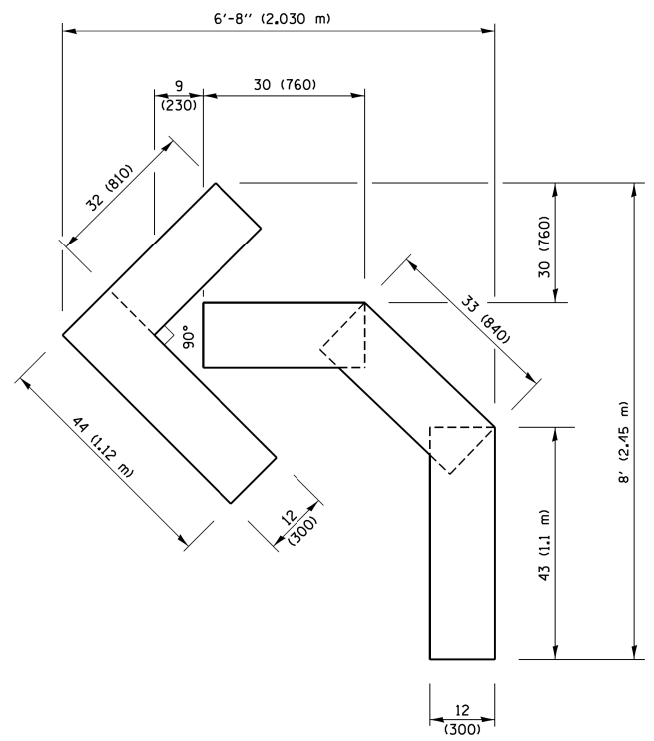
WILLET HOFMANN & ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLET, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-00918

ROCKDALE
79 MOEN AVENUE
ROCKDALE, IL 60436

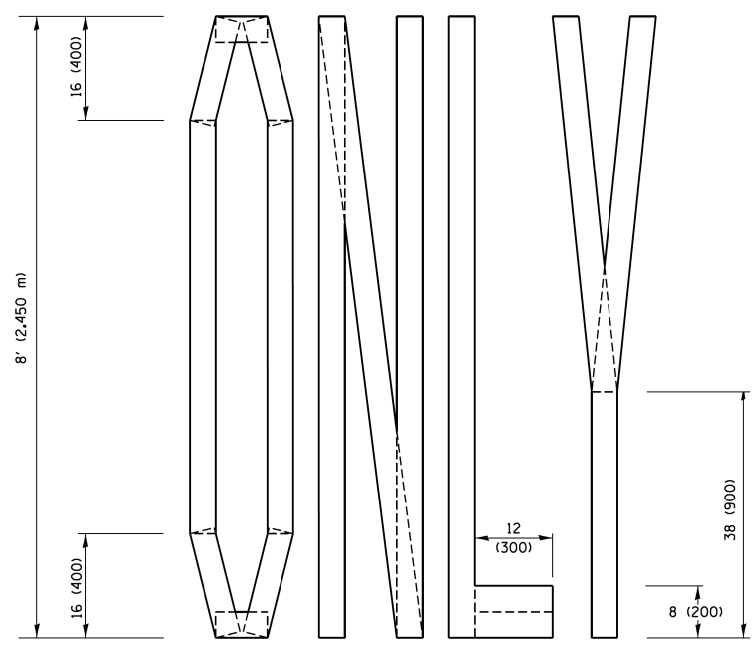
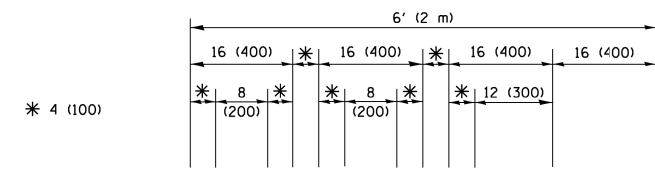
**DETAIL - DISTRICT ONE
TYPICAL PAVEMENT MARKINGS**

SHEET 1 OF 1

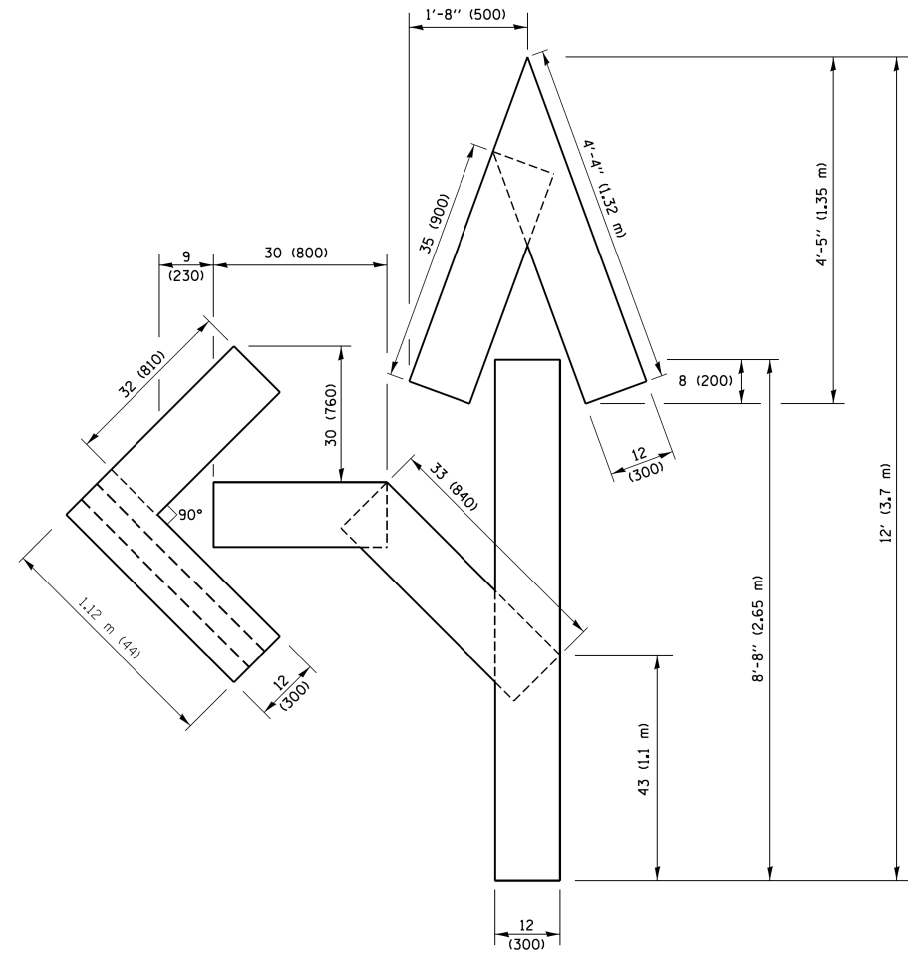
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	264
TC-13		CONTRACT 61E00		
WHA 1189J16		ILLINOIS		



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.41 sq. m)

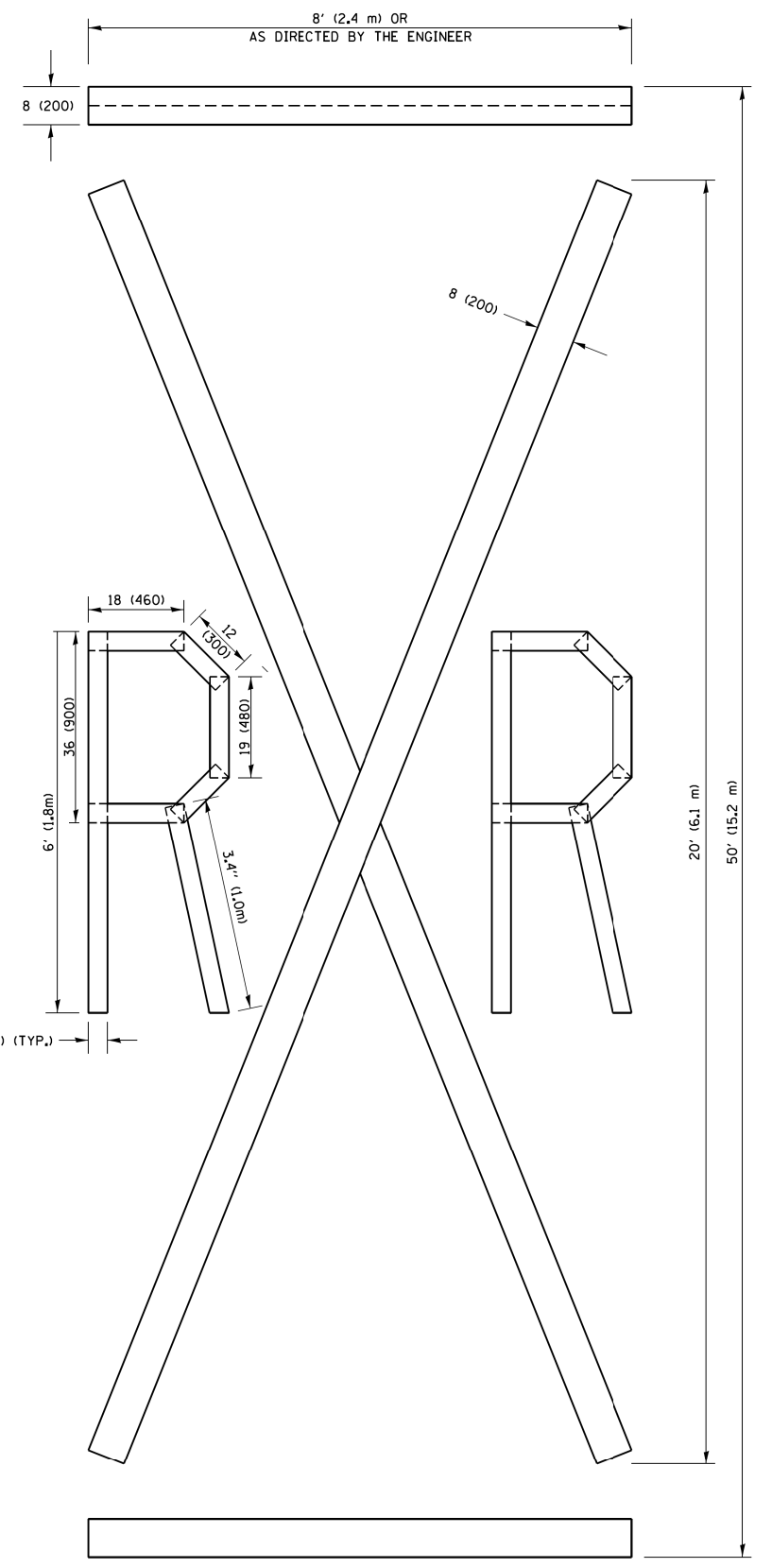


QUANTITY
 4 (100) LINE = 64.1 ft. (19.5 m)
 21.4 sq. ft. (1.99 sq. m)



QUANTITY
 4 (100) LINE = 82.5 ft. (25.1 m)
 27.5 sq. ft. (2.53 sq. m)

NOTE:
 ALL QUANTITIES OF PLACEMENT ARE REPRESENTED
 IN LINEAR FEET OF 4" LINES TO MATCH THE
 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS
 THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



QUANTITY
 4 (100) LINE = 225.9 ft. (68.9 m)
 75.3 sq. ft. (6.99 sq. m)

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

FILE = S:\PROJECTS\2016\1189J16-RK_Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-detail1-TC16.dgn

REVISION	DATE	BY	REMARKS
LATEST	09-15-16	AS	

DRAWN	JSH
CHECKED	GFS
APPROVED	GFS

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION



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 & ASSOCIATES INC
 ENGINEERING ARCHITECTURE LAND SURVEYING
 1000 ESSINGTON ROAD, JOLET, IL 60435
 T: 815-729-2229 DESIGN FIRM: #184-000918



79 MOEN AVENUE
 ROCKDALE, IL 60436

DETAIL - SHORT TERM PAVEMENT MARKING
 LETTERS AND SYMBOLS

SHEET 1 OF 1

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	265
TC-16		CONTRACT 61E00		
WHA* 1189J16	ILLINOIS			

FILE = S:\PROJECTS\2016\1189J16-RK_Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-detail-1-TC21.dgn

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

M6-2-2115

M6-3-2115

CARDINAL DIRECTION & DETOUR SIGNS

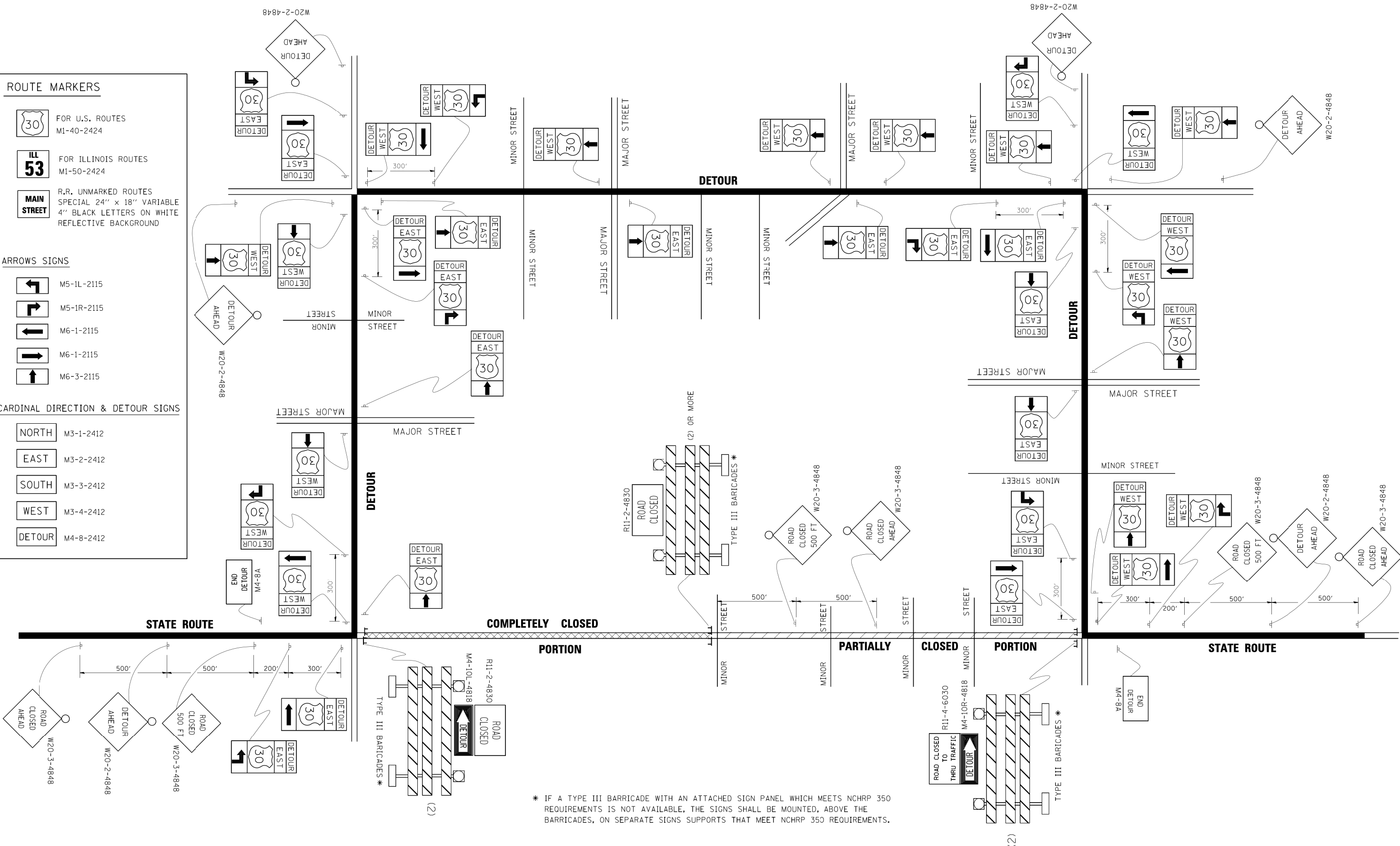
NORTH M3-1-2412

EAST M3-2-2412

SOUTH M3-3-2412

WEST M3-4-2412

DETOUR M4-8-2412



* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

REVISION	DATE	BY	REMARKS
LATEST	09-14-09	R. BORO	

DRAWN	JSH
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APPROVED	GFS

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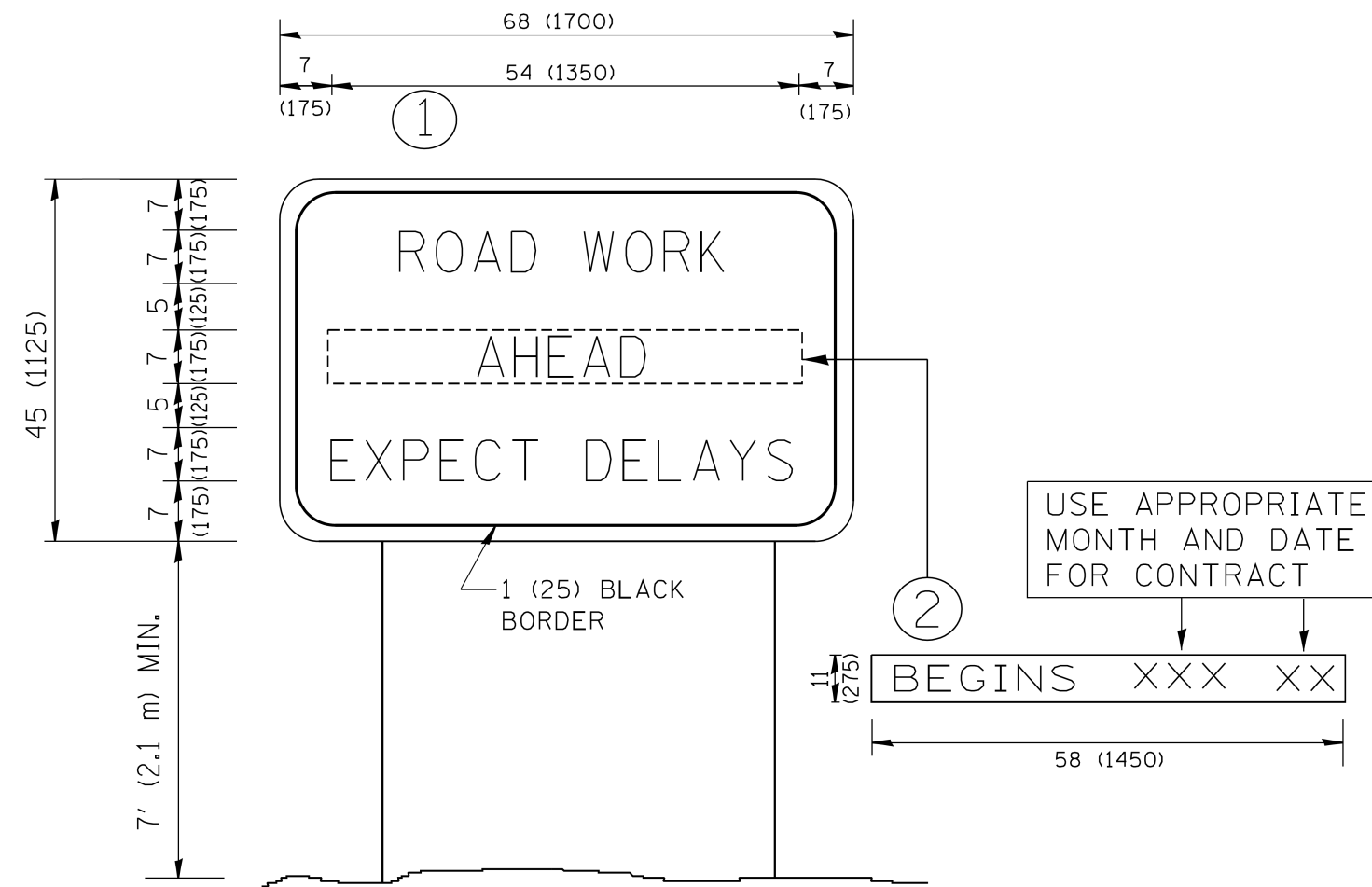
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**DETAIL - DETOUR SIGNING
FOR CLOSING STATE HIGHWAYS**

SHEET 1 OF 1

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	266
TC-21		CONTRACT 61E00		
WHA* 1189J16	ILLINOIS			

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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.

REVISION	DATE	BY	REMARKS
LATEST	01-31-07	CJ	

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JSH	GFS	GFS

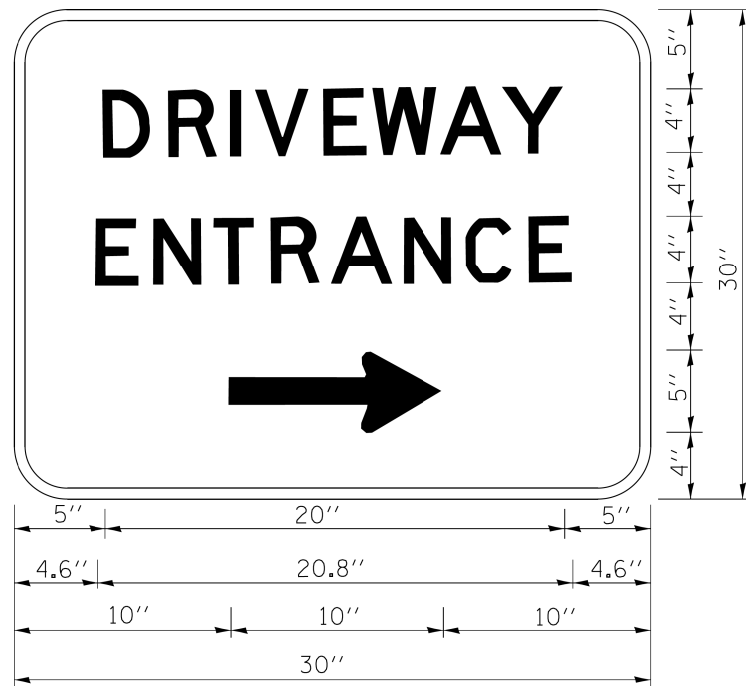
STATE OF ILLINOIS
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ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLET, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-000918

ROCKDALE
79 MOEN AVENUE
ROCKDALE, IL 60436

**DETAIL - ARTERIAL ROAD
INFORMATION SIGN**
SHEET 1 OF 1

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	267
TC-22		CONTRACT 61E00		
WHA* 1189J16		ILLINOIS		



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".

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REVISION	DATE	BY	REMARKS
LATEST	02-15-07	CJ	

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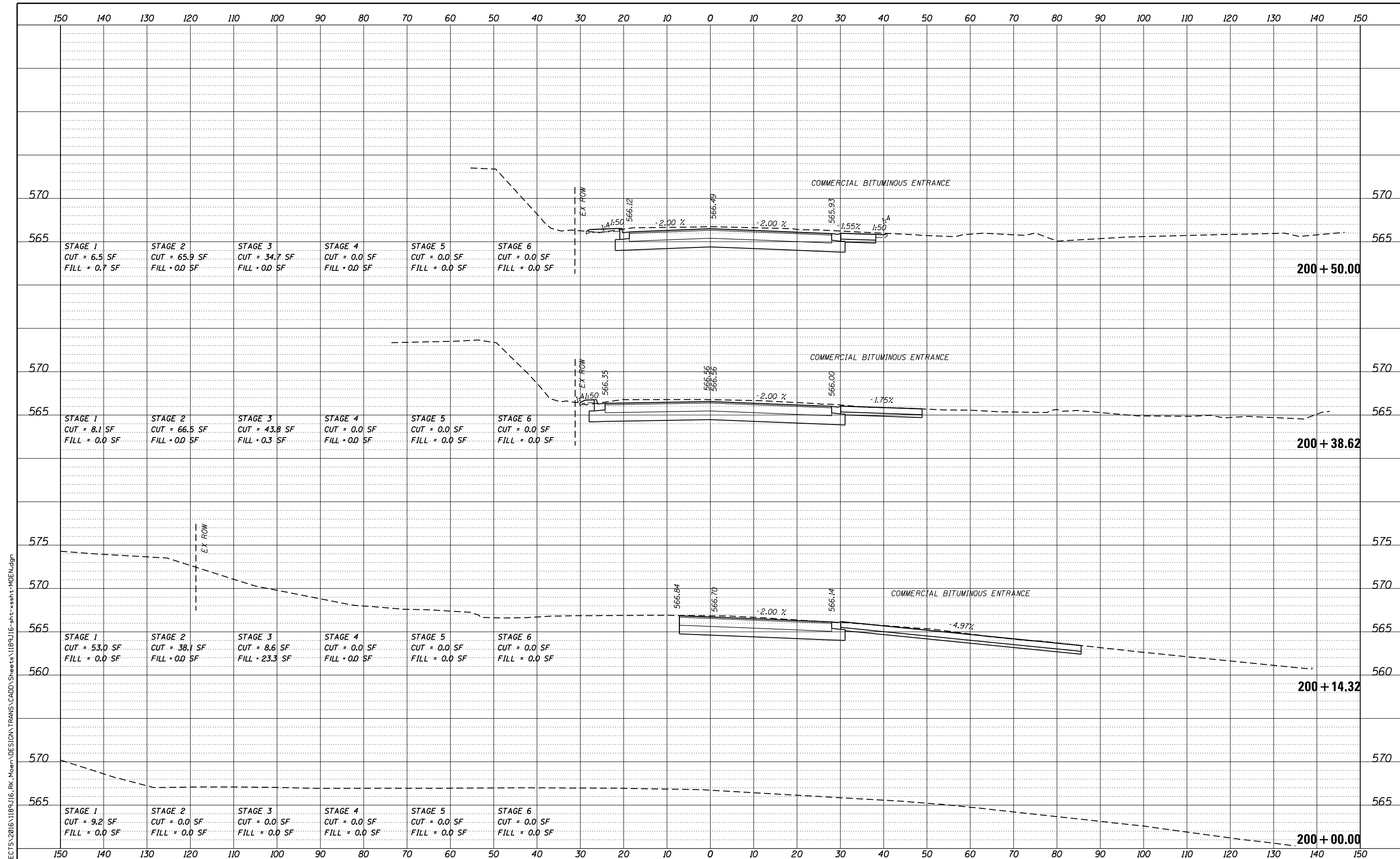


79 MOEN AVENUE
 ROCKDALE, IL 60436

DETAIL - DRIVEWAY ENTRANCE SIGNING

SHEET 1 OF 1

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	268
TC-26			CONTRACT 61E00	
WHA* 1189J16	ILLINOIS			



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REVISION	DATE	BY	REMARKS

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CHECKED	GFS
APPROVED	GFS

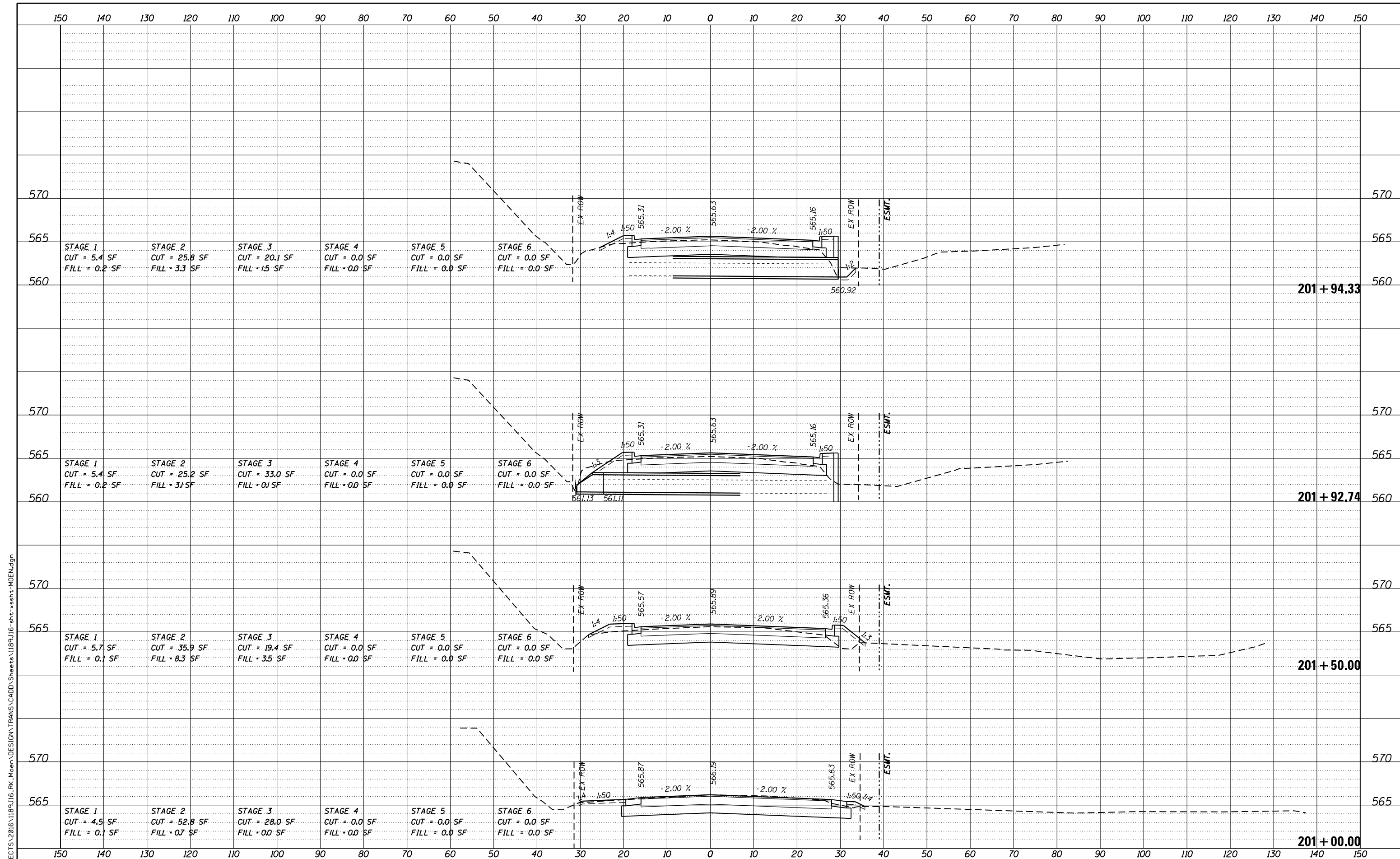
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 1000 ESSINGTON ROAD, JOLET, IL 60435
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 ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
SHEET 1 OF 66
STA. 200+00.00 TO 200+50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	269
WHA*1189J16			ILLINOIS	
			CONTRACT 61E00	



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REVISION	DATE	BY	REMARKS

DRAWN JSH
 CHECKED GFS
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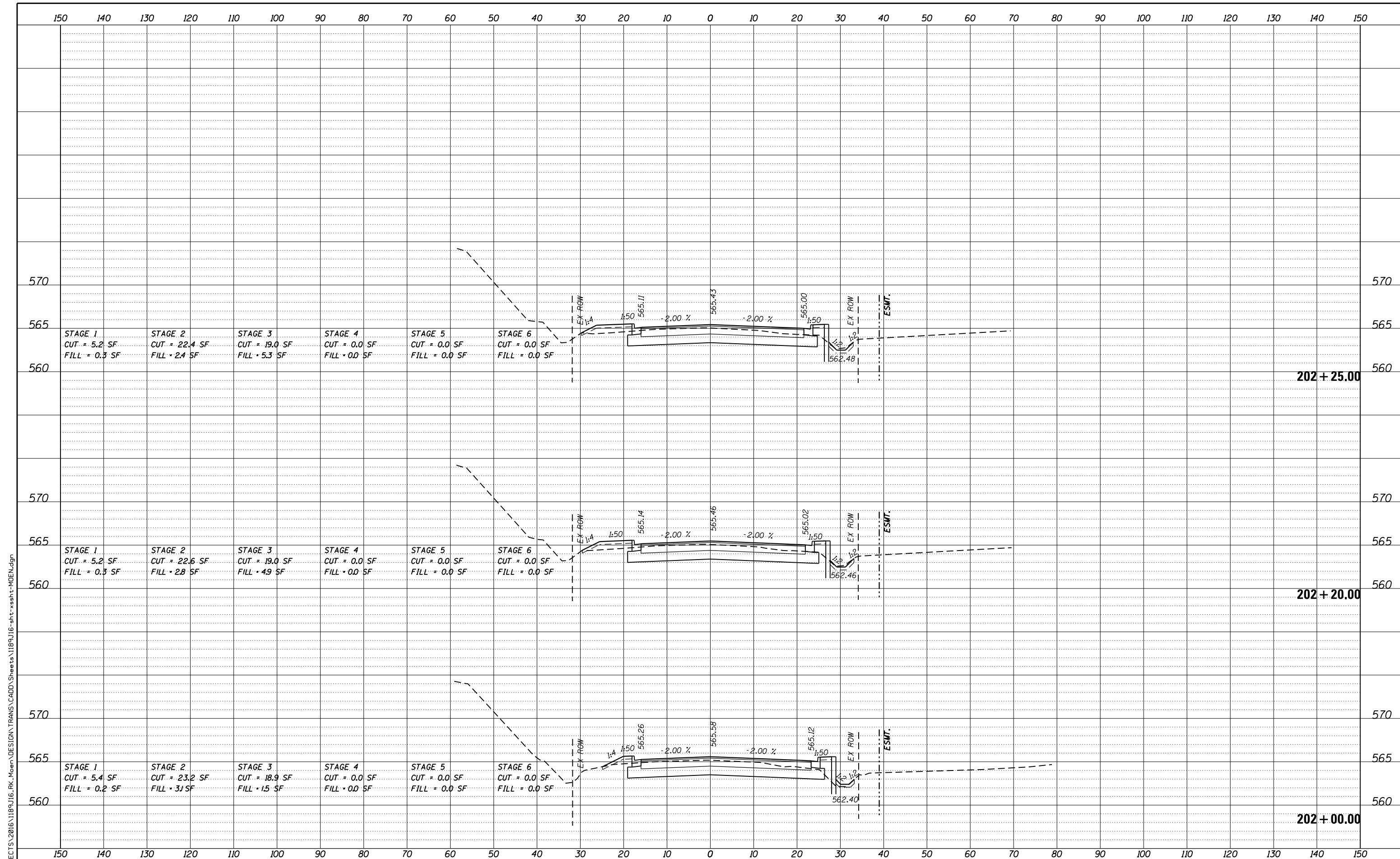


79 MOEN AVENUE
 ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
 SHEET 2 OF 66

STA. 201+00.00 TO 201+94.33

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	270
WHA*1189J16			ILLINOIS	
			CONTRACT 61E00	



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REVISION	DATE	BY	REMARKS

DRAWN	JSH
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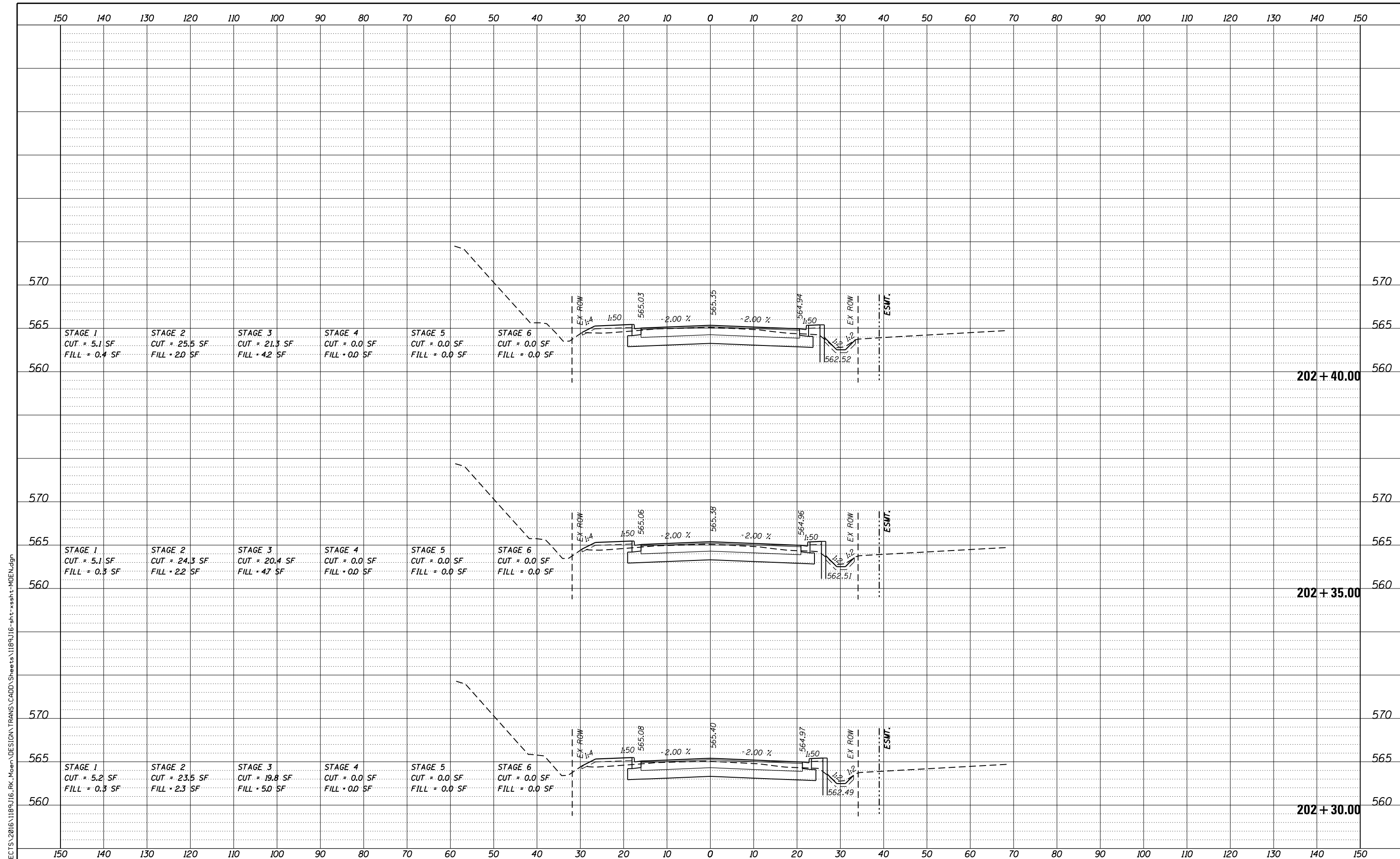
STATE OF ILLINOIS
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ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLET, IL 60435
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ROCKDALE
79 MOEN AVENUE
ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
SHEET 3 OF 43
STA. 202+00.00 TO 202+25.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	271
CONTRACT 61E00			WHA*1189J16 ILLINOIS	



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REVISION	DATE	BY	REMARKS

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APPROVED	GFS

STATE OF ILLINOIS
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ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLETT, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-000918

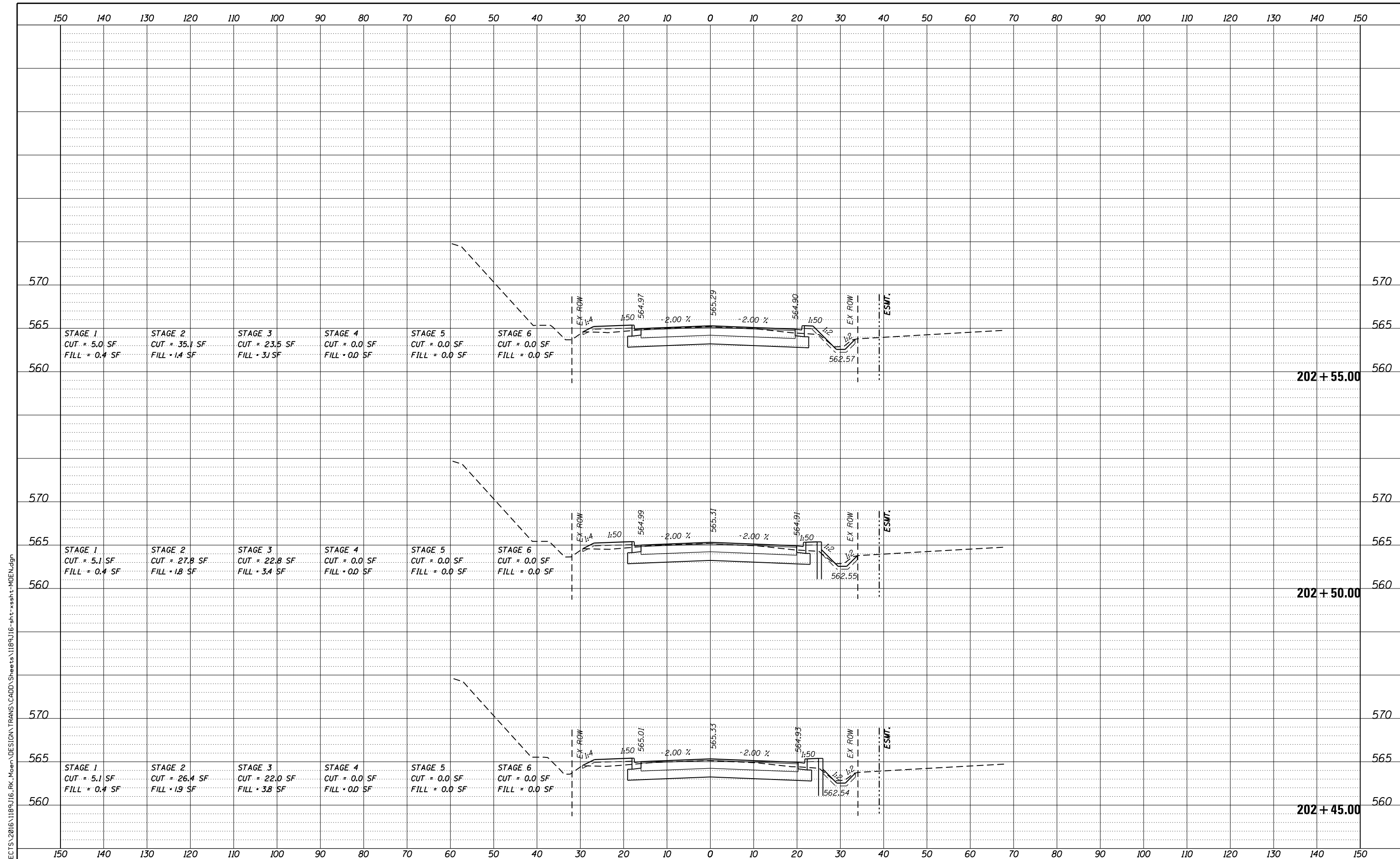


79 MOEN AVENUE
ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
SHEET 4 OF 66

STA. 202+30.00 TO 202+40.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	272
CONTRACT 61E00			WHA*1189J16 ILLINOIS	



FILE = S:\PROJECTS\2016\1189J16-RK_Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-xasht-MOEN.dgn
 DRAWN JSH
 CHECKED GFS
 APPROVED GFS

REVISION	DATE	BY	REMARKS

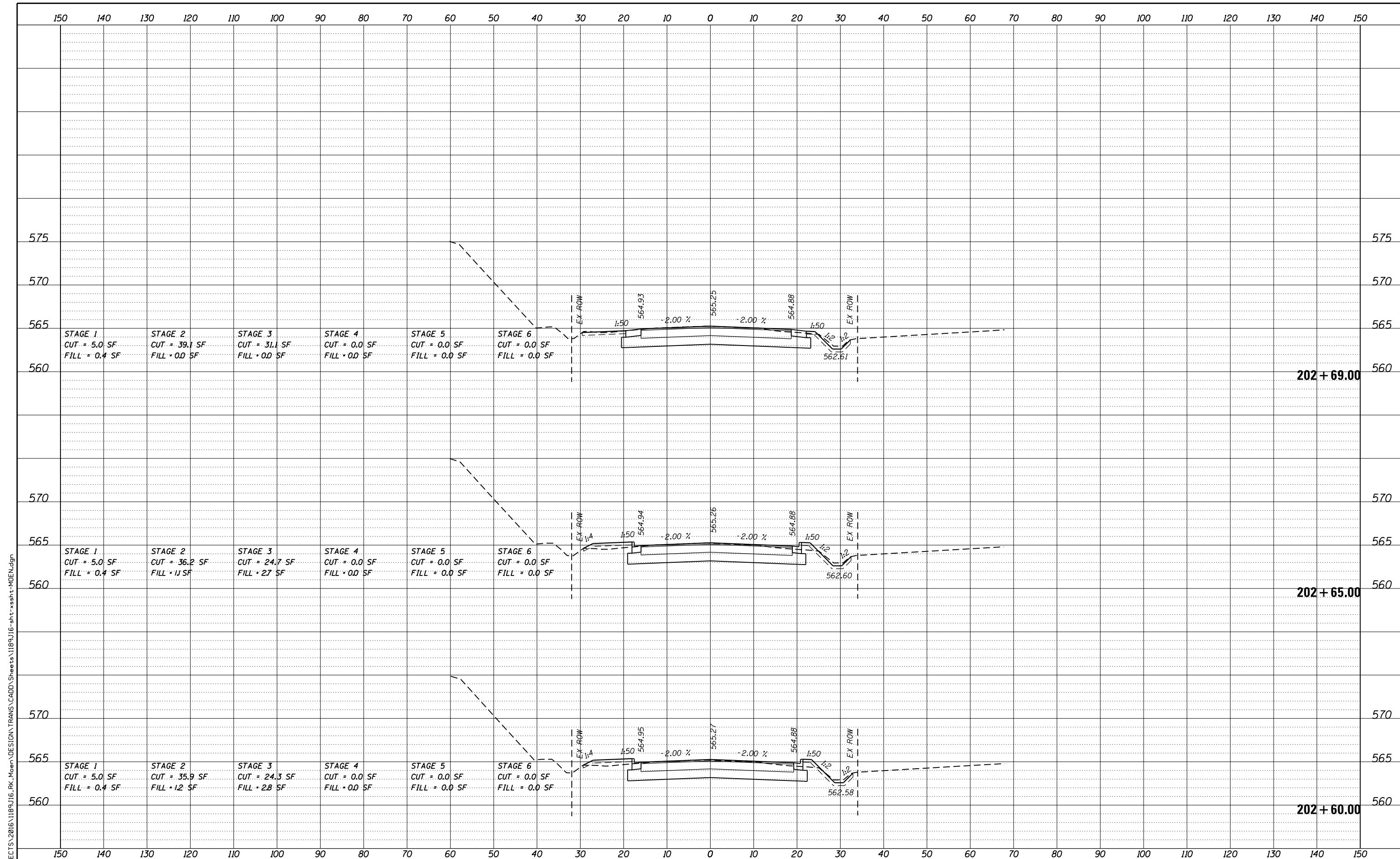
STATE OF ILLINOIS
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 1000 ESSINGTON ROAD, JOLET, IL 60435
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ROCKDALE
 ENGINEERING GROUP
 79 MOEN AVENUE
 ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
SHEET 5 OF 66
STA. 204 + 45.00 TO 202 + 55.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	273
WHA*1189J16			ILLINOIS	



FILE = S:\PROJECTS\2016\1189J16-RK_Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-xasht-MOEN.dgn

REVISION	DATE	BY	REMARKS

DRAWN	JSH
CHECKED	GFS
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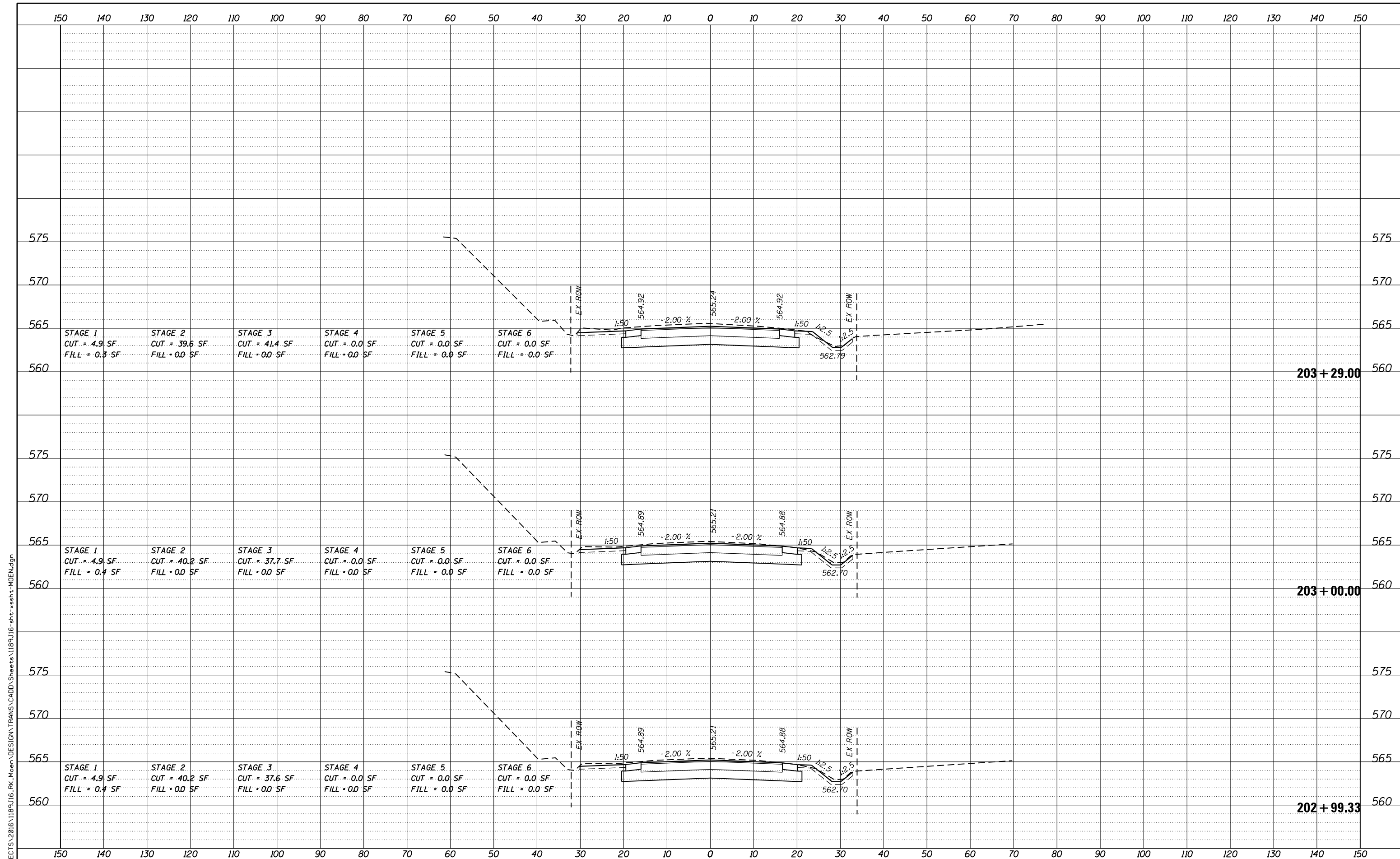


79 MOEN AVENUE
ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
SHEET 6 OF 66

STA. 206+60.00 TO 202+69.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	274
CONTRACT 61E00				
WHA*1189J16	ILLINOIS			



STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6
CUT = 4.9 SF FILL = 0.3 SF	CUT = 39.6 SF FILL = 0.0 SF	CUT = 41.4 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF

STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6
CUT = 4.9 SF FILL = 0.4 SF	CUT = 40.2 SF FILL = 0.0 SF	CUT = 37.7 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF

STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6
CUT = 4.9 SF FILL = 0.4 SF	CUT = 40.2 SF FILL = 0.0 SF	CUT = 37.6 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF

FILE = S:\PROJECTS\2016\1189J16-RK_Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-xasht-MOEN.dgn

REVISION	DATE	BY	REMARKS

DRAWN JSH
CHECKED GFS
APPROVED GFS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



WILLET HOFMANN & ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLET, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-000918

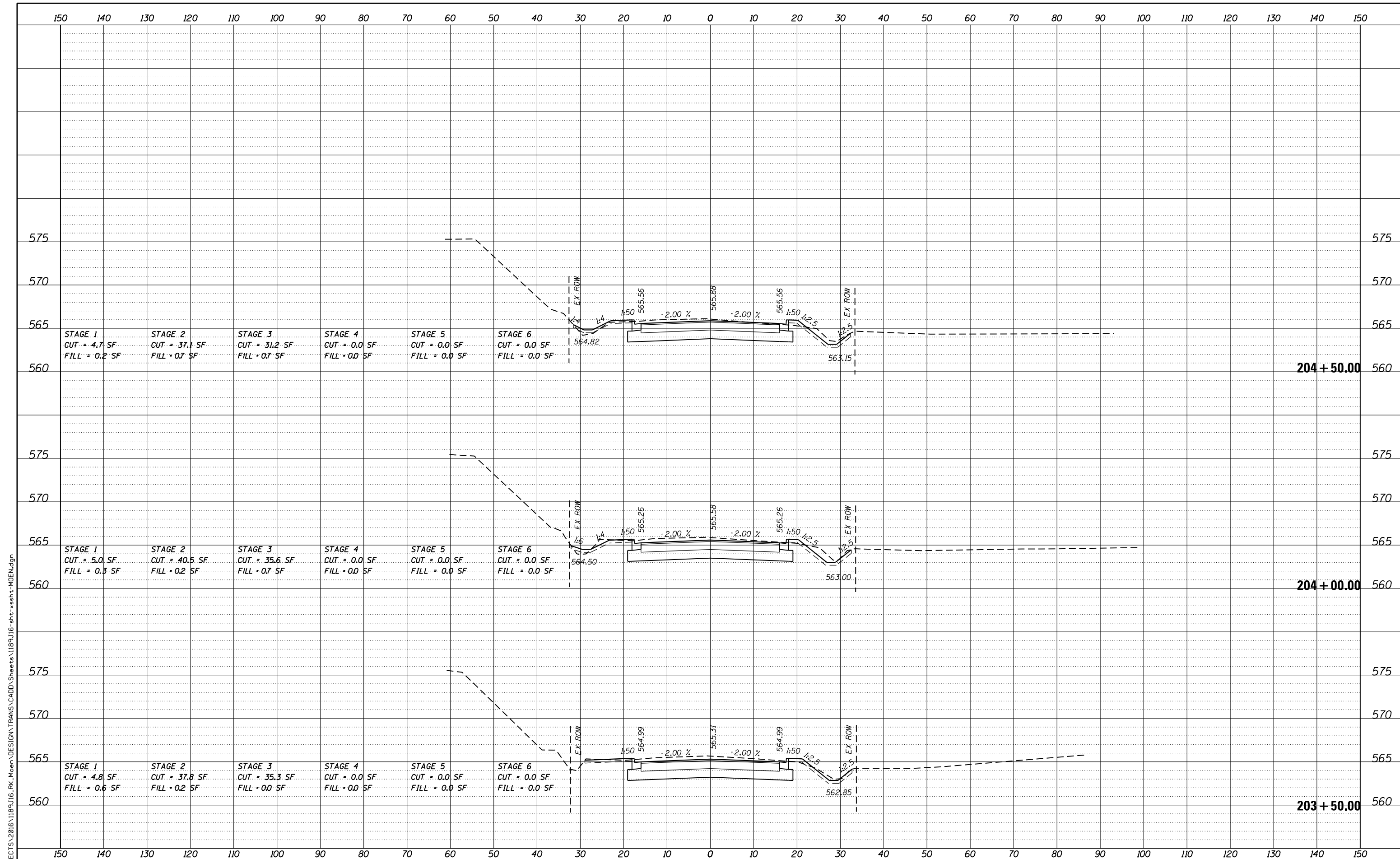


79 MOEN AVENUE
ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
SHEET 7 OF 66

STA. 202 + 99.33 TO 203 + 29.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	275
CONTRACT 61E00				
WHA*1189J16		ILLINOIS		



FILE = S:\PROJECTS\2016\1189J16-RK_Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-xasht-MOEN.dgn

REVISION	DATE	BY	REMARKS

DRAWN	JSH
CHECKED	GFS
APPROVED	GFS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



WILLET HOFMANN & ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 1000 ESSINGTON ROAD, JOLETT, IL 60435
 T: 815-729-2229 DESIGN FIRM: #184-000918

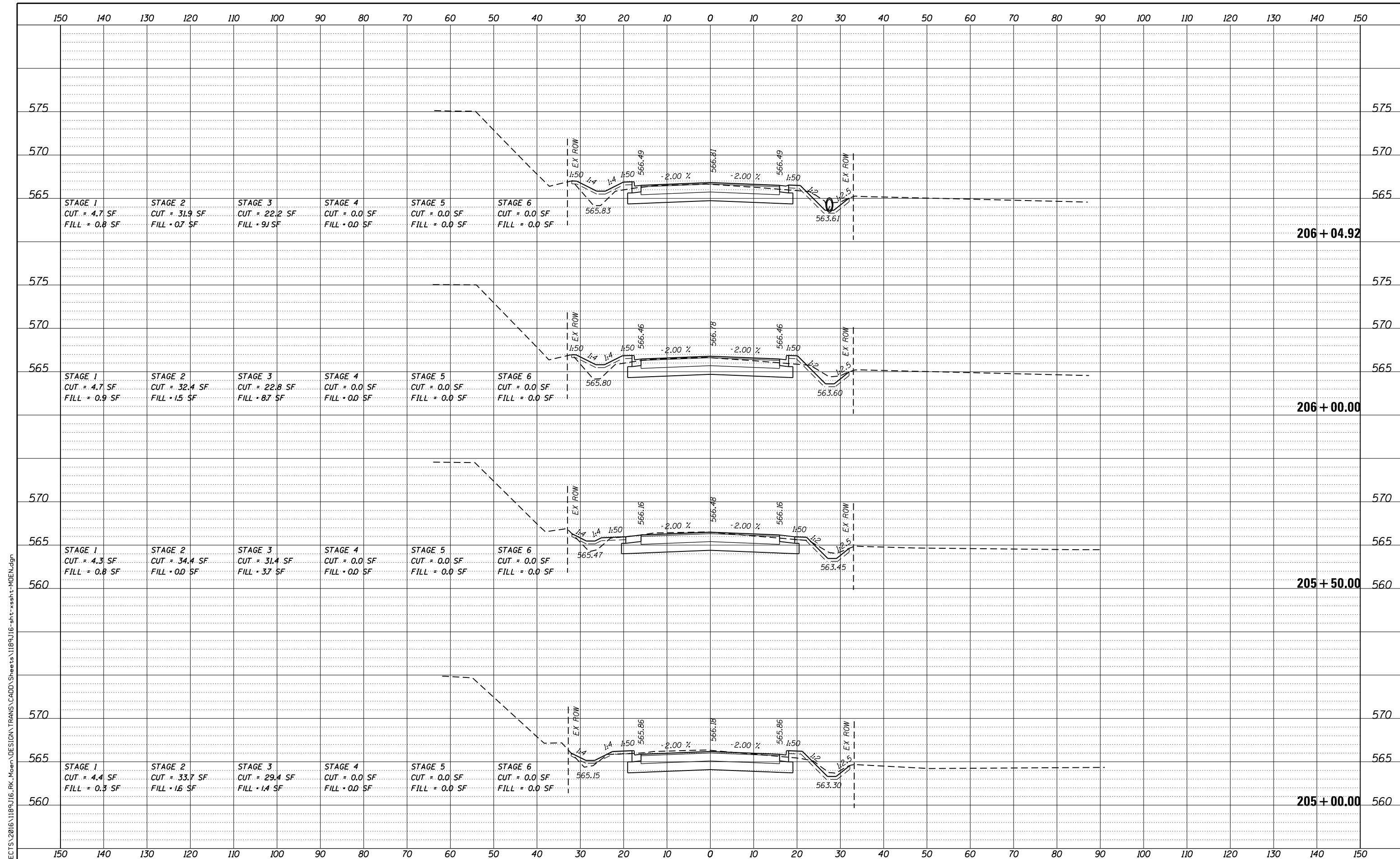


79 MOEN AVENUE
ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
SHEET 8 OF 66

STA. 203 + 50.00 TO 204 + 50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	276
CONTRACT 61E00				
WHA*1189J16		ILLINOIS		



STAGE 1 CUT = 4.7 SF FILL = 0.8 SF	STAGE 2 CUT = 31.9 SF FILL = 0.7 SF	STAGE 3 CUT = 22.2 SF FILL = 9.1 SF	STAGE 4 CUT = 0.0 SF FILL = 0.0 SF	STAGE 5 CUT = 0.0 SF FILL = 0.0 SF	STAGE 6 CUT = 0.0 SF FILL = 0.0 SF
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STAGE 1 CUT = 4.7 SF FILL = 0.9 SF	STAGE 2 CUT = 32.4 SF FILL = 1.5 SF	STAGE 3 CUT = 22.8 SF FILL = 8.7 SF	STAGE 4 CUT = 0.0 SF FILL = 0.0 SF	STAGE 5 CUT = 0.0 SF FILL = 0.0 SF	STAGE 6 CUT = 0.0 SF FILL = 0.0 SF
--	---	---	--	--	--

STAGE 1 CUT = 4.3 SF FILL = 0.8 SF	STAGE 2 CUT = 34.4 SF FILL = 0.0 SF	STAGE 3 CUT = 31.4 SF FILL = 3.7 SF	STAGE 4 CUT = 0.0 SF FILL = 0.0 SF	STAGE 5 CUT = 0.0 SF FILL = 0.0 SF	STAGE 6 CUT = 0.0 SF FILL = 0.0 SF
--	---	---	--	--	--

STAGE 1 CUT = 4.4 SF FILL = 0.3 SF	STAGE 2 CUT = 33.7 SF FILL = 1.6 SF	STAGE 3 CUT = 29.4 SF FILL = 1.4 SF	STAGE 4 CUT = 0.0 SF FILL = 0.0 SF	STAGE 5 CUT = 0.0 SF FILL = 0.0 SF	STAGE 6 CUT = 0.0 SF FILL = 0.0 SF
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REVISION	DATE	BY	REMARKS

DRAWN JSH	CHECKED GFS	APPROVED GFS
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

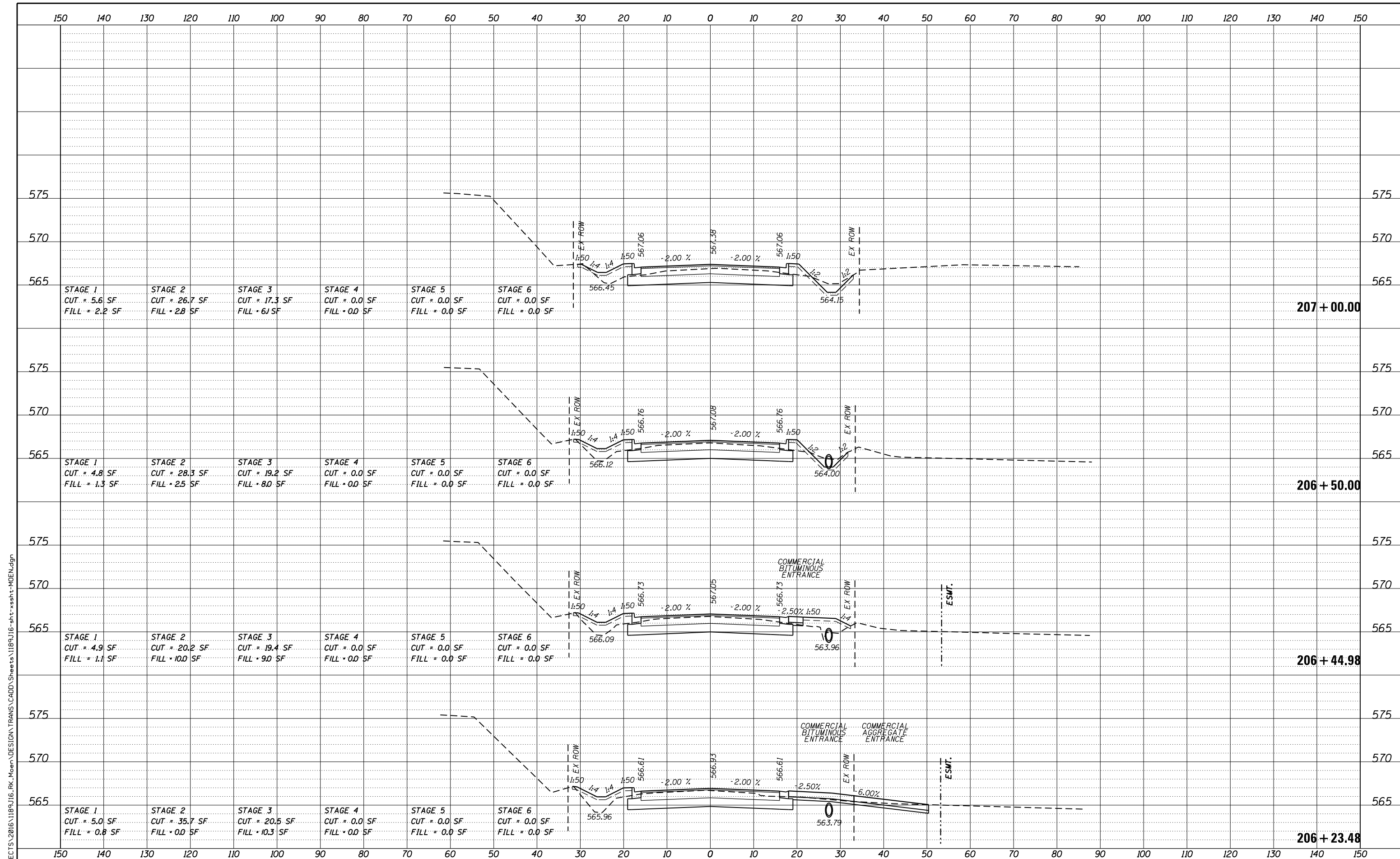


CROSS SECTIONS - MOEN AVENUE
SHEET 9 OF 66

STA. 205 + 00.00 TO 206 + 04.92

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	277
CONTRACT 61E00			WHA*1189J16 ILLINOIS	

FILE = S:\PROJECTS\2016\1189J16-RK_Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-xasht-MOEN.dgn



STAGE 1
CUT = 5.6 SF
FILL = 2.2 SF

STAGE 2
CUT = 26.7 SF
FILL = 2.8 SF

STAGE 3
CUT = 17.3 SF
FILL = 6.1 SF

STAGE 4
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 5
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 6
CUT = 0.0 SF
FILL = 0.0 SF

207 + 00.00

STAGE 1
CUT = 4.8 SF
FILL = 1.3 SF

STAGE 2
CUT = 28.3 SF
FILL = 2.5 SF

STAGE 3
CUT = 19.2 SF
FILL = 8.0 SF

STAGE 4
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 5
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 6
CUT = 0.0 SF
FILL = 0.0 SF

206 + 50.00

STAGE 1
CUT = 4.9 SF
FILL = 1.1 SF

STAGE 2
CUT = 20.2 SF
FILL = 10.0 SF

STAGE 3
CUT = 19.4 SF
FILL = 9.0 SF

STAGE 4
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 5
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 6
CUT = 0.0 SF
FILL = 0.0 SF

206 + 44.98

STAGE 1
CUT = 5.0 SF
FILL = 0.8 SF

STAGE 2
CUT = 35.7 SF
FILL = 0.0 SF

STAGE 3
CUT = 20.5 SF
FILL = 10.3 SF

STAGE 4
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 5
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 6
CUT = 0.0 SF
FILL = 0.0 SF

206 + 23.48

FILE = S:\PROJECTS\2016\1189J16-RK-Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-xasht-MOEN.dgn

REVISION	DATE	BY	REMARKS

DRAWN JSH
CHECKED GFS
APPROVED GFS

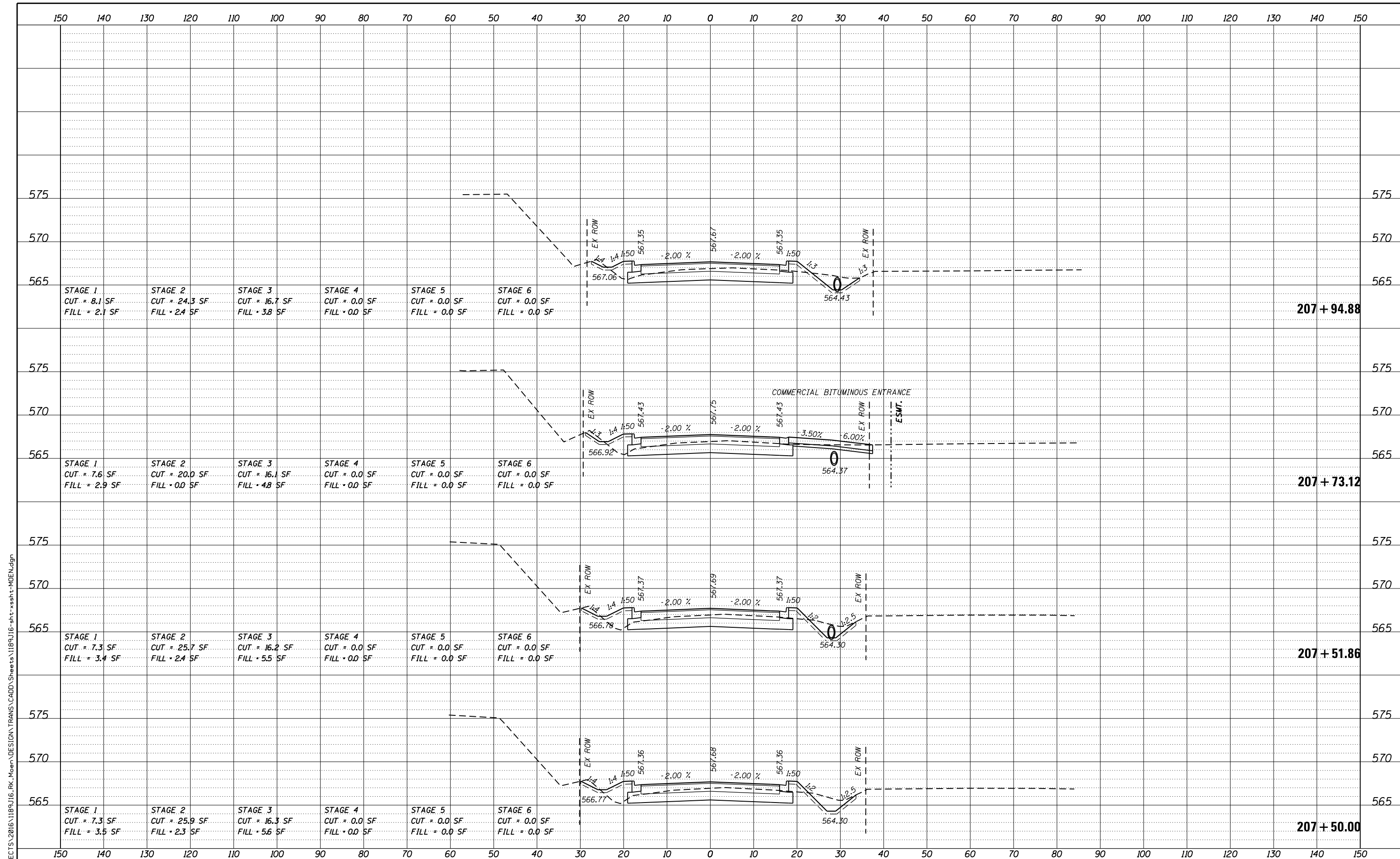
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLET HOFMANN & ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLET, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-000918

ROCKDALE
79 MOEN AVENUE
ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
SHEET 10 OF 66
STA. 206 + 23.48 TO 207 + 00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	278
CONTRACT 61E00			WHA*1189J16 ILLINOIS	



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

STATION	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6	STATION
207+94.88	CUT = 8.1 SF FILL = 2.1 SF	CUT = 24.3 SF FILL = 2.4 SF	CUT = 16.7 SF FILL = 3.8 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	207+94.88
207+73.12	CUT = 7.6 SF FILL = 2.9 SF	CUT = 20.0 SF FILL = 0.0 SF	CUT = 16.1 SF FILL = 4.8 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	207+73.12
207+51.86	CUT = 7.3 SF FILL = 3.4 SF	CUT = 25.7 SF FILL = 2.4 SF	CUT = 16.2 SF FILL = 5.5 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	207+51.86
207+50.00	CUT = 7.3 SF FILL = 3.5 SF	CUT = 25.9 SF FILL = 2.3 SF	CUT = 16.3 SF FILL = 5.6 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	207+50.00

REVISION	DATE	BY	REMARKS

DRAWN JSH
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 ENGINEERING ARCHITECTURE LAND SURVEYING
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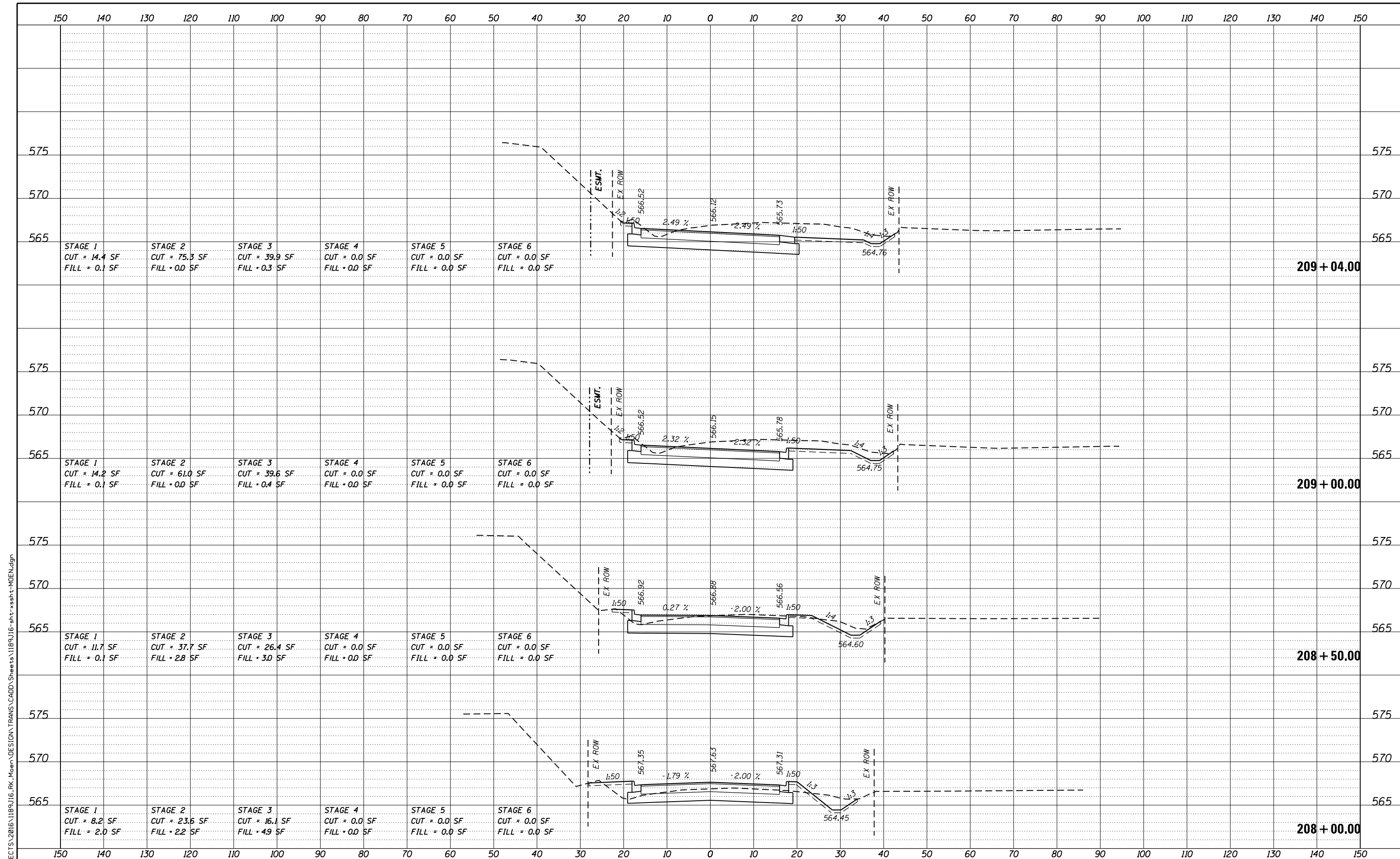
ROCKDALE
 79 MOEN AVENUE
 ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
SHEET 11 OF 66
 STA. 207+50.00 TO 207+94.88

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	279

CONTRACT 61E00
 WHA*1189J16 ILLINOIS

FILE = S:\PROJECTS\2016\1189J16-RK_Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-xasht-MOEN.dgn



STAGE 1
CUT = 14.4 SF
FILL = 0.1 SF

STAGE 2
CUT = 75.3 SF
FILL = 0.0 SF

STAGE 3
CUT = 39.9 SF
FILL = 0.3 SF

STAGE 4
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 5
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 6
CUT = 0.0 SF
FILL = 0.0 SF

209 + 04.00

STAGE 1
CUT = 14.2 SF
FILL = 0.1 SF

STAGE 2
CUT = 61.0 SF
FILL = 0.0 SF

STAGE 3
CUT = 39.6 SF
FILL = 0.4 SF

STAGE 4
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 5
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 6
CUT = 0.0 SF
FILL = 0.0 SF

209 + 00.00

STAGE 1
CUT = 11.7 SF
FILL = 0.1 SF

STAGE 2
CUT = 37.7 SF
FILL = 2.8 SF

STAGE 3
CUT = 26.4 SF
FILL = 3.0 SF

STAGE 4
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 5
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 6
CUT = 0.0 SF
FILL = 0.0 SF

208 + 50.00

STAGE 1
CUT = 8.2 SF
FILL = 2.0 SF

STAGE 2
CUT = 23.6 SF
FILL = 2.2 SF

STAGE 3
CUT = 16.1 SF
FILL = 4.9 SF

STAGE 4
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 5
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 6
CUT = 0.0 SF
FILL = 0.0 SF

208 + 00.00

REVISION	DATE	BY	REMARKS

DRAWN JSH
CHECKED GFS
APPROVED GFS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLET HOFMANN & ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLET, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-000918

79 MOEN AVENUE
ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
SHEET 12 OF 66
STA. 208 + 00.00 TO 209 + 04.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	280

CONTRACT 61E00

WHA*1189J16 ILLINOIS

FILE = S:\PROJECTS\2016\1189J16-RK_Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-xasht-MOEN.dgn



STAGE 1 CUT = 6.9 SF FILL = 3.1 SF	STAGE 2 CUT = 47.9 SF FILL = 11 SF	STAGE 3 CUT = 38.5 SF FILL = 0.8 SF	STAGE 4 CUT = 0.0 SF FILL = 0.0 SF	STAGE 5 CUT = 0.0 SF FILL = 0.0 SF	STAGE 6 CUT = 0.0 SF FILL = 0.0 SF	210 + 00.00
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STAGE 1 CUT = 13.2 SF FILL = 0.0 SF	STAGE 2 CUT = 77.8 SF FILL = 0.0 SF	STAGE 3 CUT = 35.6 SF FILL = 1.5 SF	STAGE 4 CUT = 0.0 SF FILL = 0.0 SF	STAGE 5 CUT = 0.0 SF FILL = 0.0 SF	STAGE 6 CUT = 0.0 SF FILL = 0.0 SF	209 + 73.00
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STAGE 1 CUT = 15.7 SF FILL = 0.1 SF	STAGE 2 CUT = 62.8 SF FILL = 0.0 SF	STAGE 3 CUT = 37.4 SF FILL = 1.4 SF	STAGE 4 CUT = 0.0 SF FILL = 0.0 SF	STAGE 5 CUT = 0.0 SF FILL = 0.0 SF	STAGE 6 CUT = 0.0 SF FILL = 0.0 SF	209 + 50.00
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STAGE 1 CUT = 13.4 SF FILL = 0.7 SF	STAGE 2 CUT = 85.1 SF FILL = 0.0 SF	STAGE 3 CUT = 40.2 SF FILL = 0.0 SF	STAGE 4 CUT = 0.0 SF FILL = 0.0 SF	STAGE 5 CUT = 0.0 SF FILL = 0.0 SF	STAGE 6 CUT = 0.0 SF FILL = 0.0 SF	209 + 24.58
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REVISION	DATE	BY	REMARKS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

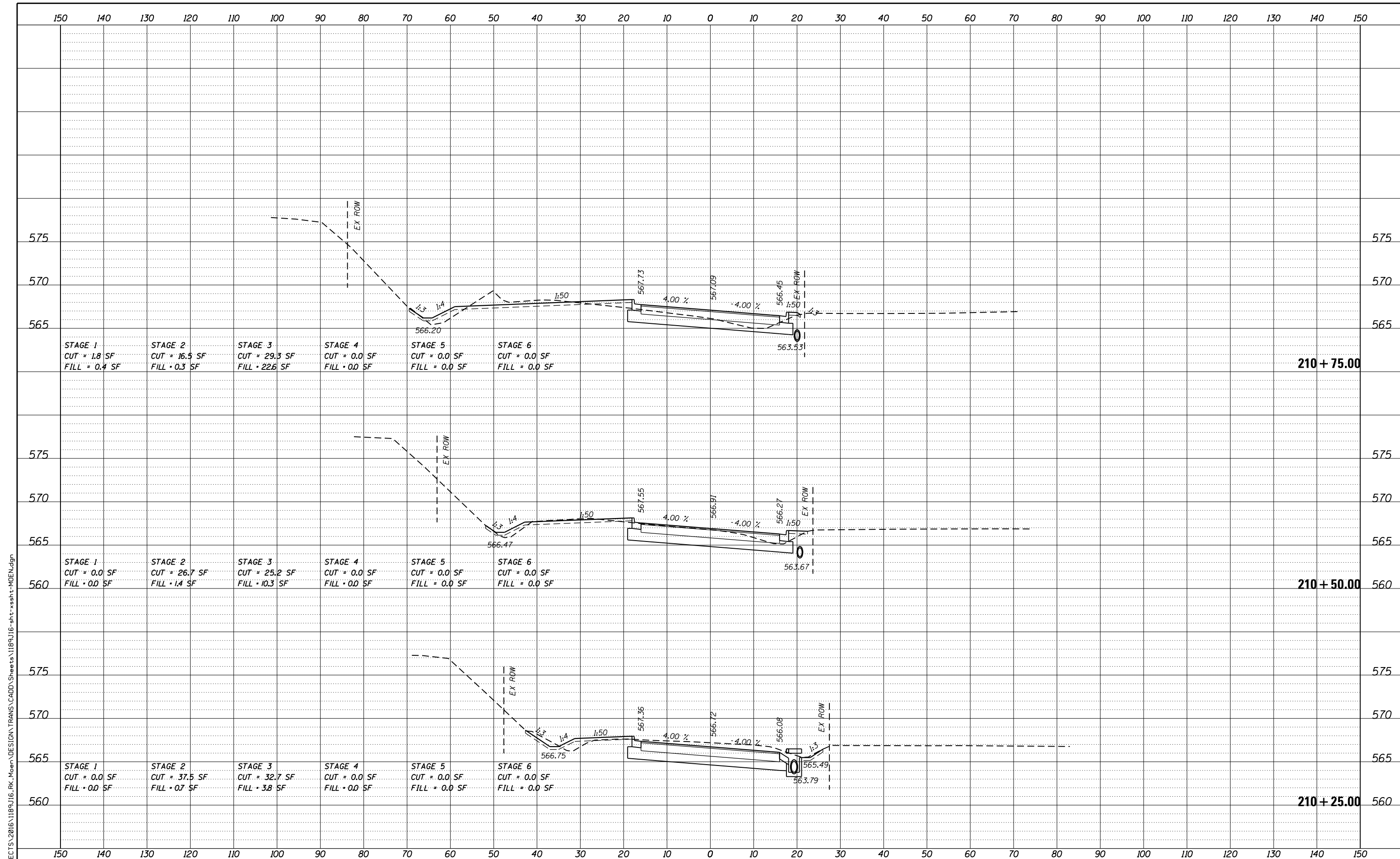
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CHECKED: GFS
APPROVED: GFS

WILLETT HOFMANN & ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLETT, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-000918

ROCKDALE
79 MOEN AVENUE
ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
SHEET 13 OF 66
STA. 209 + 24.58 TO 210 + 00.00

F.A.U. RTE. 3795	SECTION 12-00029-00-PV	COUNTY WILL	TOTAL SHEETS 344	SHEET NO. 281
WHA*1189J16			ILLINOIS	



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REVISION	DATE	BY	REMARKS

DRAWN	JSH
CHECKED	GFS
APPROVED	GFS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



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& ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLETT, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-000918

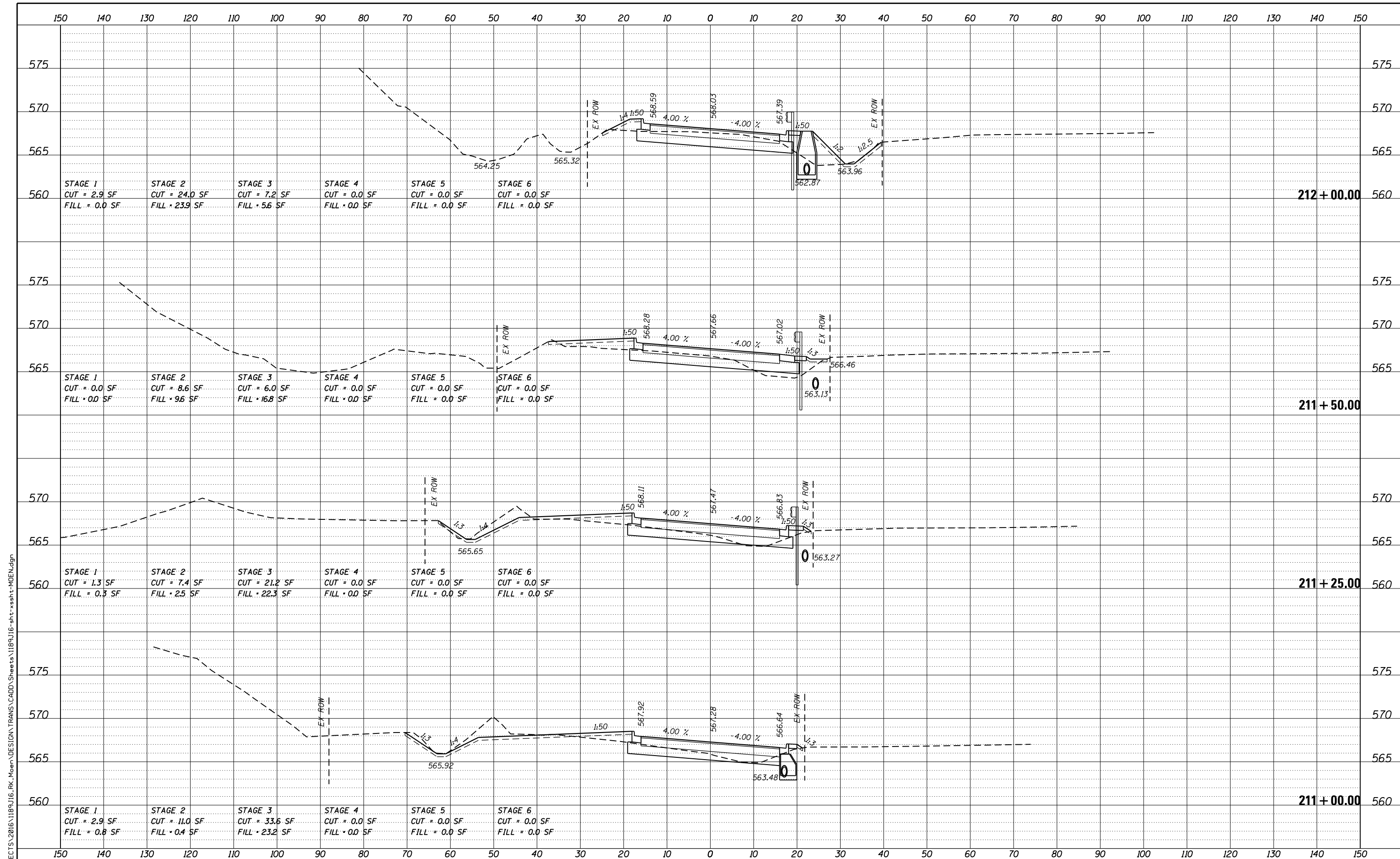


79 MOEN AVENUE
ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
SHEET 14 OF 66

STA. 210+25.00 TO 210+75.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	282
CONTRACT 61E00			WHA*1189J16 ILLINOIS	



FILE = S:\PROJECTS\2016\1189J16-RK_Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-xasht-MOEN.dgn

REVISION	DATE	BY	REMARKS

DRAWN	JSH
CHECKED	GFS
APPROVED	GFS

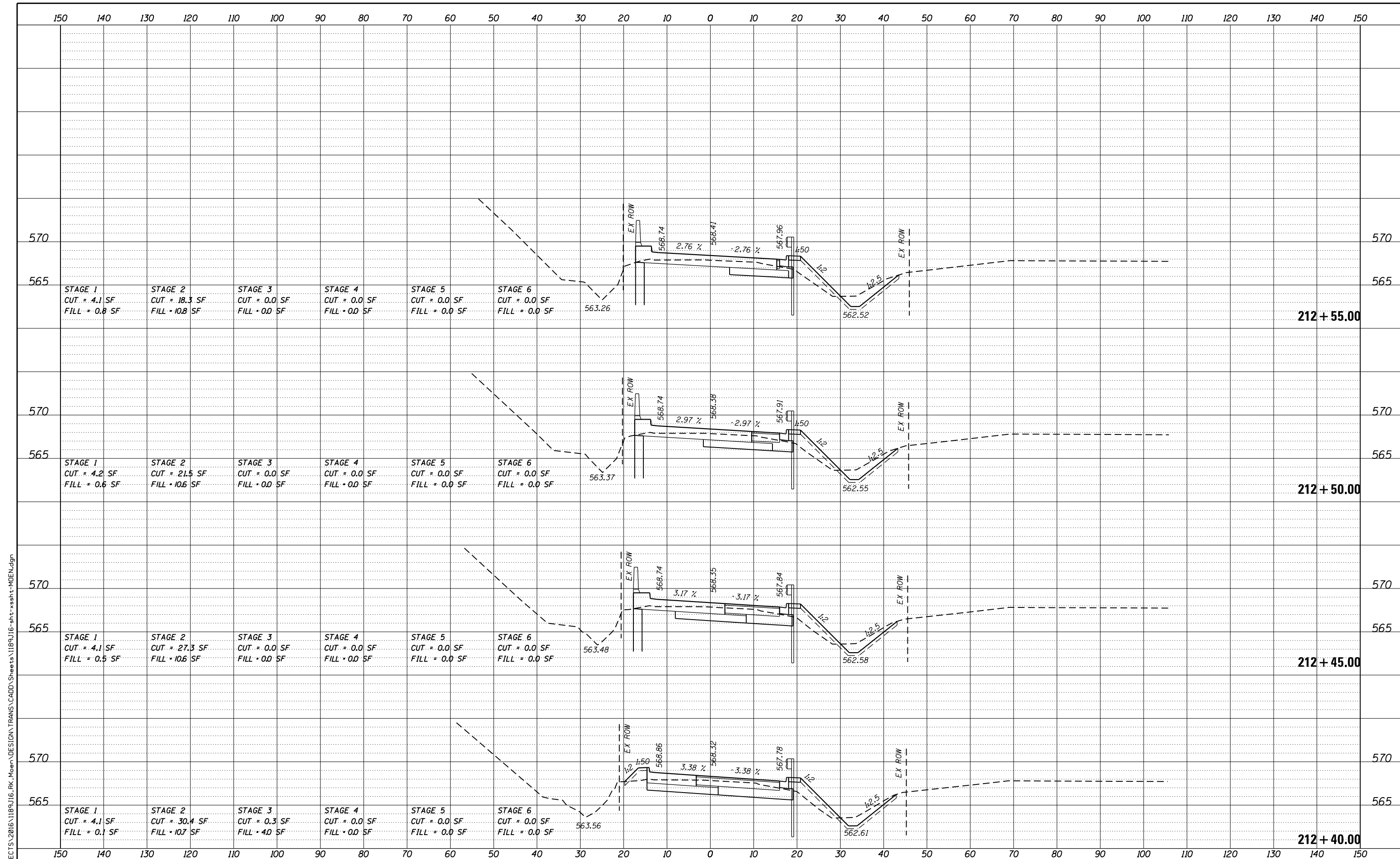
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CROSS SECTIONS - MOEN AVENUE
SHEET 15 OF 66

STA. 211 + 00.00 TO 212 + 00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	283
CONTRACT 61E00			WHA*1189J16 ILLINOIS	



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

570 570 570 570

565 565 565 565

STAGE 1 CUT = 4.1 SF FILL = 0.8 SF STAGE 2 CUT = 18.3 SF FILL = 10.8 SF STAGE 3 CUT = 0.0 SF FILL = 0.0 SF STAGE 4 CUT = 0.0 SF FILL = 0.0 SF STAGE 5 CUT = 0.0 SF FILL = 0.0 SF STAGE 6 CUT = 0.0 SF FILL = 0.0 SF

212 + 55.00

570 570 570 570

565 565 565 565

STAGE 1 CUT = 4.2 SF FILL = 0.6 SF STAGE 2 CUT = 21.5 SF FILL = 10.6 SF STAGE 3 CUT = 0.0 SF FILL = 0.0 SF STAGE 4 CUT = 0.0 SF FILL = 0.0 SF STAGE 5 CUT = 0.0 SF FILL = 0.0 SF STAGE 6 CUT = 0.0 SF FILL = 0.0 SF

212 + 50.00

570 570 570 570

565 565 565 565

STAGE 1 CUT = 4.1 SF FILL = 0.5 SF STAGE 2 CUT = 27.3 SF FILL = 10.6 SF STAGE 3 CUT = 0.0 SF FILL = 0.0 SF STAGE 4 CUT = 0.0 SF FILL = 0.0 SF STAGE 5 CUT = 0.0 SF FILL = 0.0 SF STAGE 6 CUT = 0.0 SF FILL = 0.0 SF

212 + 45.00

570 570 570 570

565 565 565 565

STAGE 1 CUT = 4.1 SF FILL = 0.1 SF STAGE 2 CUT = 30.4 SF FILL = 10.7 SF STAGE 3 CUT = 0.3 SF FILL = 4.0 SF STAGE 4 CUT = 0.0 SF FILL = 0.0 SF STAGE 5 CUT = 0.0 SF FILL = 0.0 SF STAGE 6 CUT = 0.0 SF FILL = 0.0 SF

212 + 40.00

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REVISION	DATE	BY	REMARKS

DRAWN JSH
 CHECKED GFS
 APPROVED GFS

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION



WILLET HOFMANN & ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 1000 ESSINGTON ROAD, JOLET, IL 60435
 T: 815-729-2229 DESIGN FIRM: #184-000918

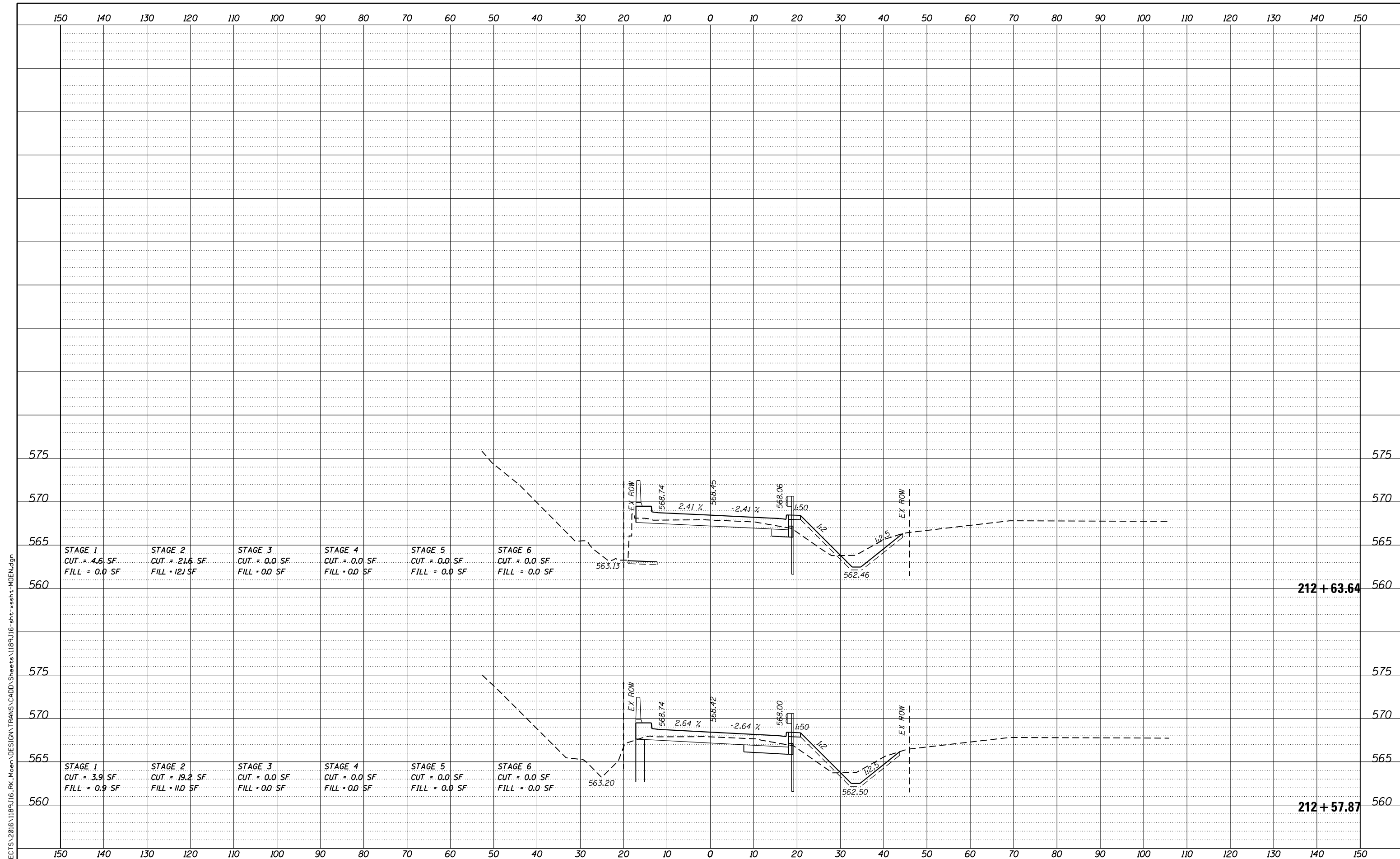


79 MOEN AVENUE
 ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
 SHEET 16 OF 66

STA. 212 + 40.00 TO 212 + 55.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	284
WHA*1189J16			ILLINOIS	



STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6
CUT = 4.6 SF	CUT = 21.6 SF	CUT = 0.0 SF	CUT = 0.0 SF	CUT = 0.0 SF	CUT = 0.0 SF
FILL = 0.0 SF	FILL = 121 SF	FILL = 0.0 SF	FILL = 0.0 SF	FILL = 0.0 SF	FILL = 0.0 SF

STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6
CUT = 3.9 SF	CUT = 19.2 SF	CUT = 0.0 SF	CUT = 0.0 SF	CUT = 0.0 SF	CUT = 0.0 SF
FILL = 0.9 SF	FILL = 11.0 SF	FILL = 0.0 SF	FILL = 0.0 SF	FILL = 0.0 SF	FILL = 0.0 SF

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REVISION	DATE	BY	REMARKS

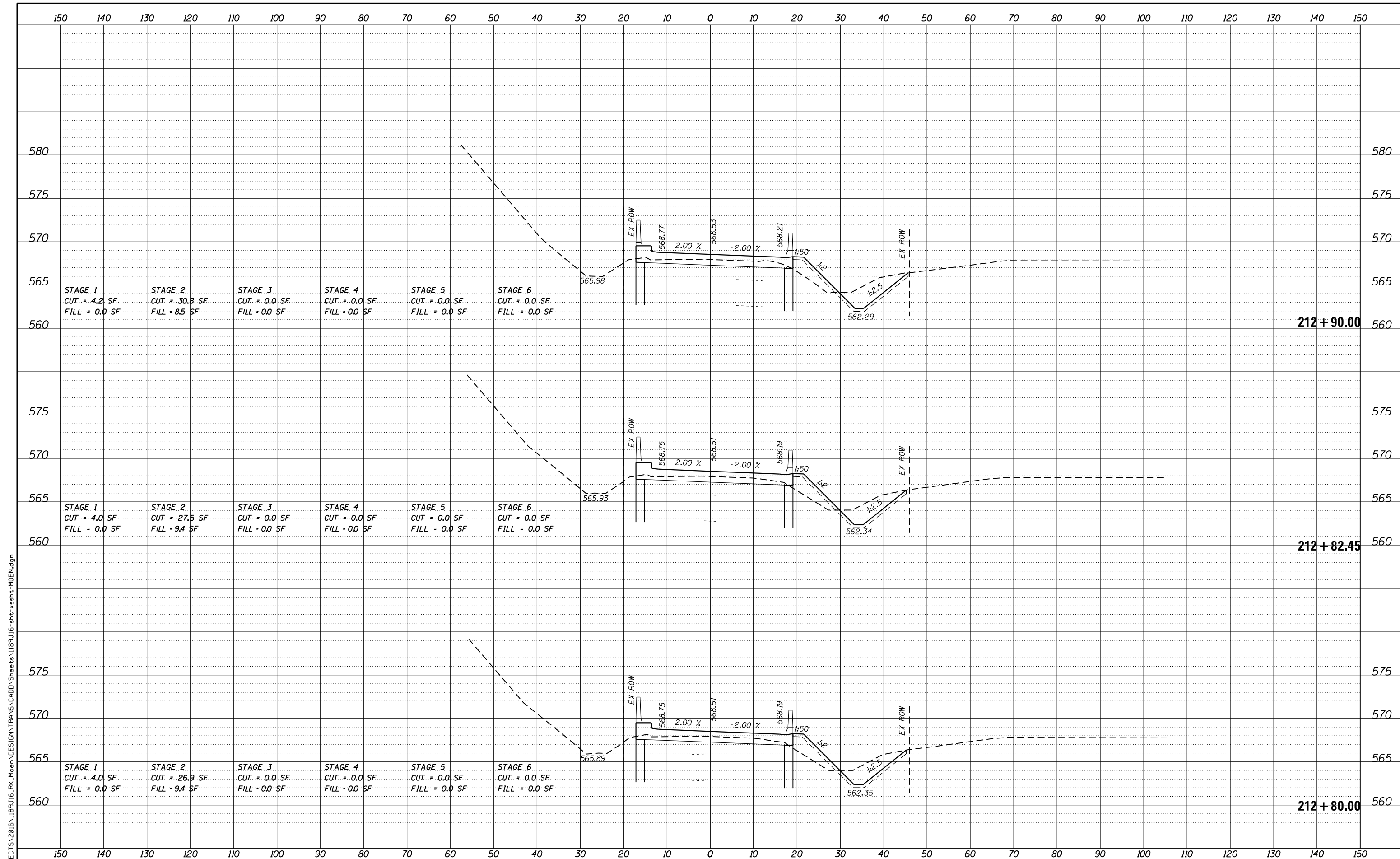
DRAWN	JSH
CHECKED	GFS
APPROVED	GFS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CROSS SECTIONS - MOEN AVENUE
SHEET 17 OF 66
STA. 212 + 57.87 TO 212 + 73.61

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	285
WHA*1189J16			ILLINOIS	
			CONTRACT 61E00	



STAGE 1
CUT = 4.2 SF
FILL = 0.0 SF

STAGE 2
CUT = 30.8 SF
FILL = 8.5 SF

STAGE 3
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 4
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 5
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 6
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 1
CUT = 4.0 SF
FILL = 0.0 SF

STAGE 2
CUT = 27.5 SF
FILL = 9.4 SF

STAGE 3
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 4
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 5
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 6
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 1
CUT = 4.0 SF
FILL = 0.0 SF

STAGE 2
CUT = 26.9 SF
FILL = 9.4 SF

STAGE 3
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 4
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 5
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 6
CUT = 0.0 SF
FILL = 0.0 SF

REVISION	DATE	BY	REMARKS

DRAWN
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GFS
APPROVED
GFS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



WILLETT HOFMANN
& ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLET, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-000918



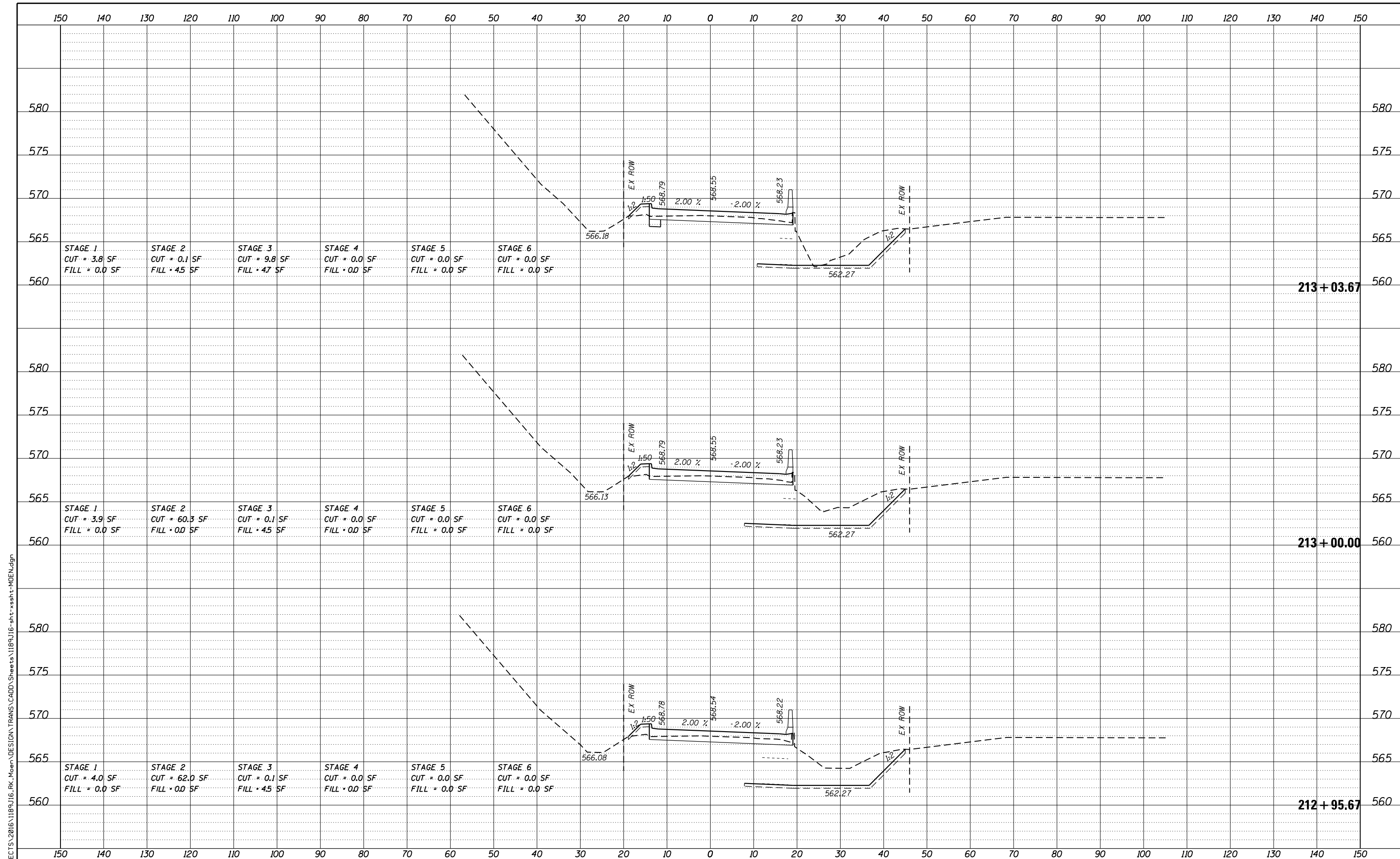
79 MOEN AVENUE
ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
SHEET 18 OF 66

STA. 212 + 80.00 TO 212 + 90.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	286
WHA*1189J16			ILLINOIS	
			CONTRACT 61E00	

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FILE = S:\PROJECTS\2016\1189J16-RK_Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-xasht-MOEN.dgn

REVISION	DATE	BY	REMARKS

DRAWN	JSH
CHECKED	GFS
APPROVED	GFS

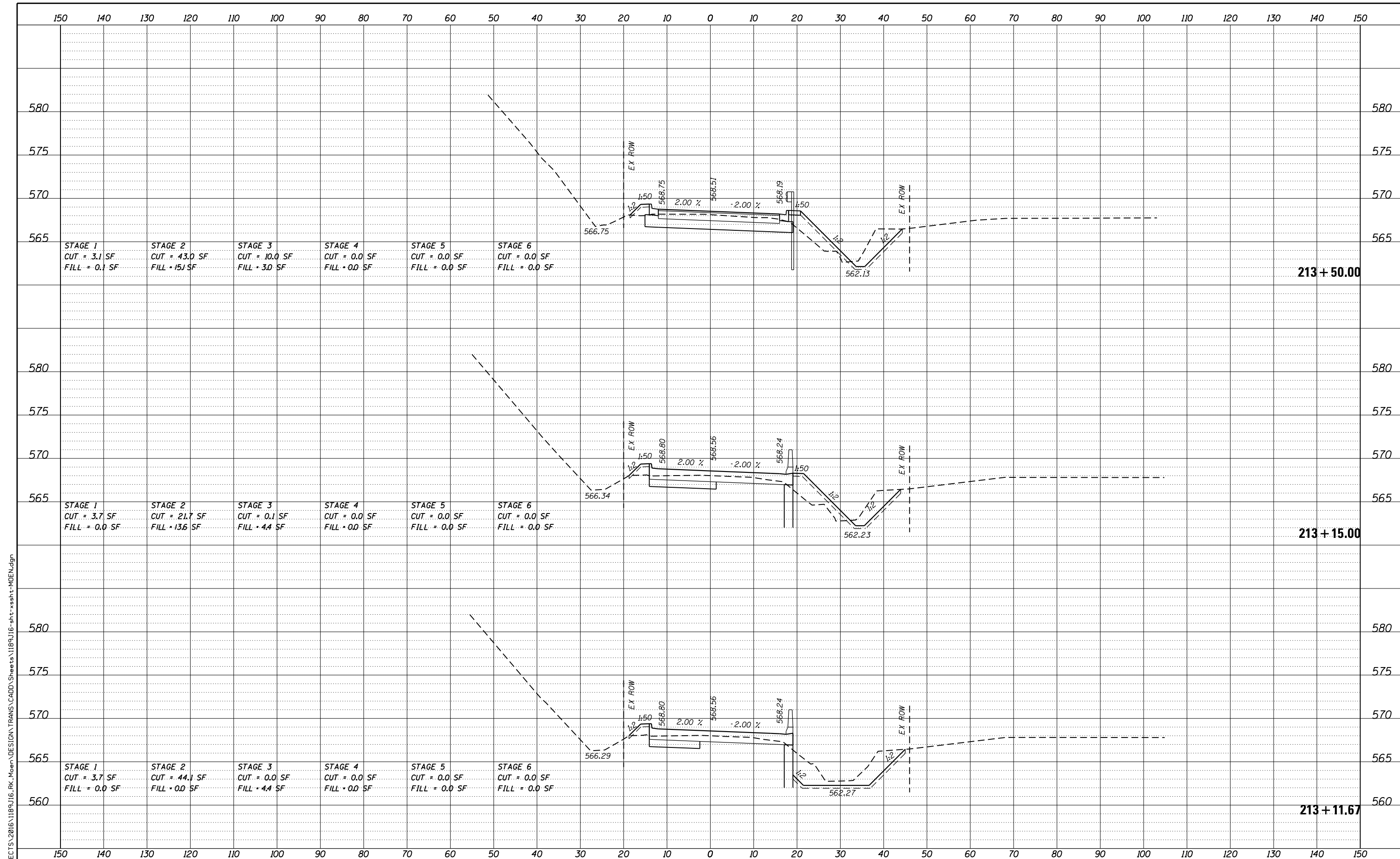
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CROSS SECTIONS - MOEN AVENUE
SHEET 19 OF 66

STA. 212 + 95.67 TO 213 + 03.67

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	287
CONTRACT 61E00			WHA*1189J16 ILLINOIS	



STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6
CUT = 3.1 SF	CUT = 43.0 SF	CUT = 10.0 SF	CUT = 0.0 SF	CUT = 0.0 SF	CUT = 0.0 SF
FILL = 0.1 SF	FILL = 15.1 SF	FILL = 3.0 SF	FILL = 0.0 SF	FILL = 0.0 SF	FILL = 0.0 SF

STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6
CUT = 3.7 SF	CUT = 21.7 SF	CUT = 0.1 SF	CUT = 0.0 SF	CUT = 0.0 SF	CUT = 0.0 SF
FILL = 0.0 SF	FILL = 13.6 SF	FILL = 4.4 SF	FILL = 0.0 SF	FILL = 0.0 SF	FILL = 0.0 SF

STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6
CUT = 3.7 SF	CUT = 44.1 SF	CUT = 0.0 SF	CUT = 0.0 SF	CUT = 0.0 SF	CUT = 0.0 SF
FILL = 0.0 SF	FILL = 0.0 SF	FILL = 4.4 SF	FILL = 0.0 SF	FILL = 0.0 SF	FILL = 0.0 SF

FILE = S:\PROJECTS\2016\1189J16-RK_Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-xasht-MOEN.dgn

REVISION	DATE	BY	REMARKS

DRAWN	JSH
CHECKED	GFS
APPROVED	GFS

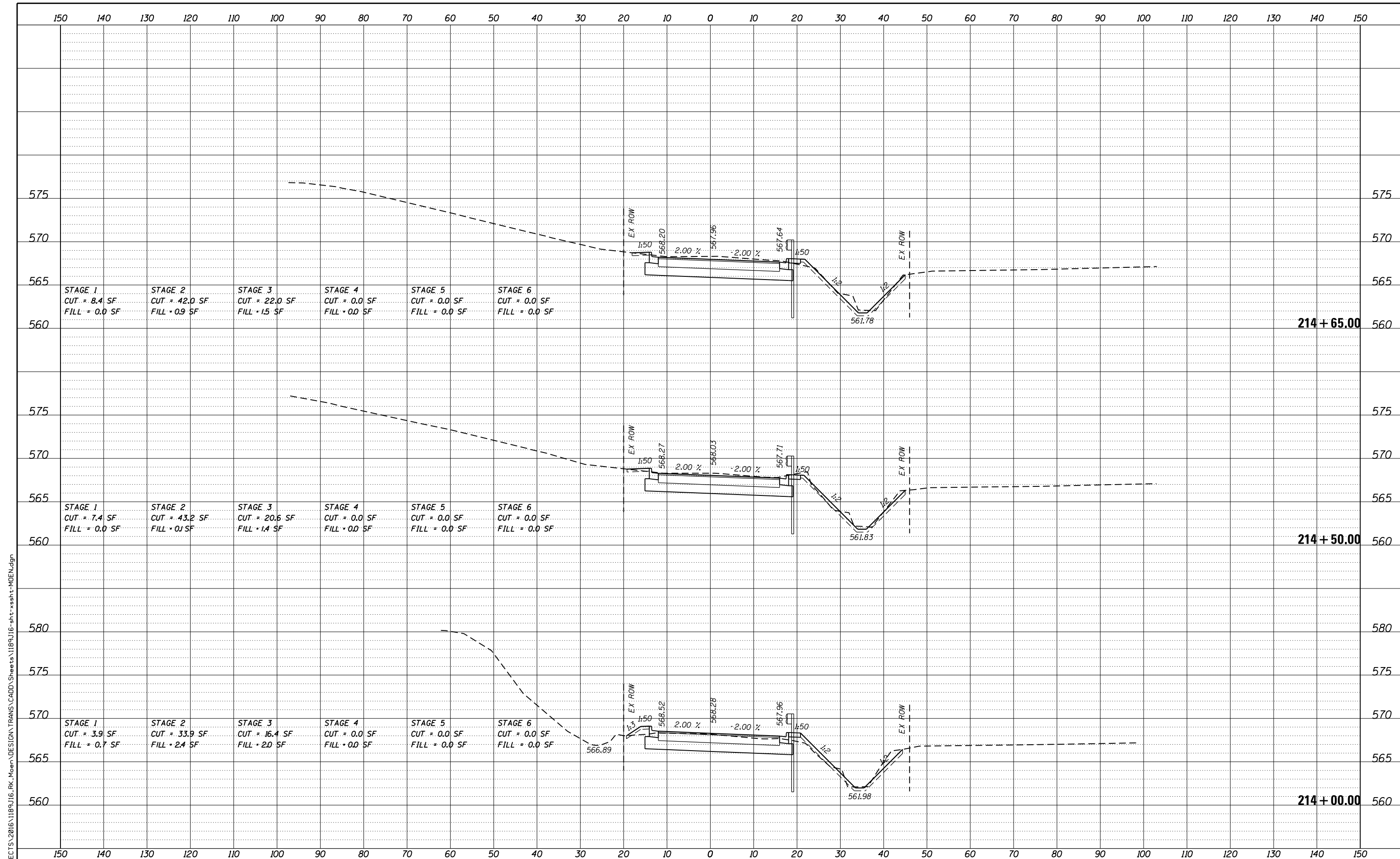
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CROSS SECTIONS - MOEN AVENUE
SHEET 20 OF 66

STA. 213 + 11.67 TO 213 + 50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	288
CONTRACT 61E00			WHA*1189J16 ILLINOIS	



FILE = S:\PROJECTS\2016\1189J16-RK_Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-xasht-MOEN.dgn

REVISION	DATE	BY	REMARKS

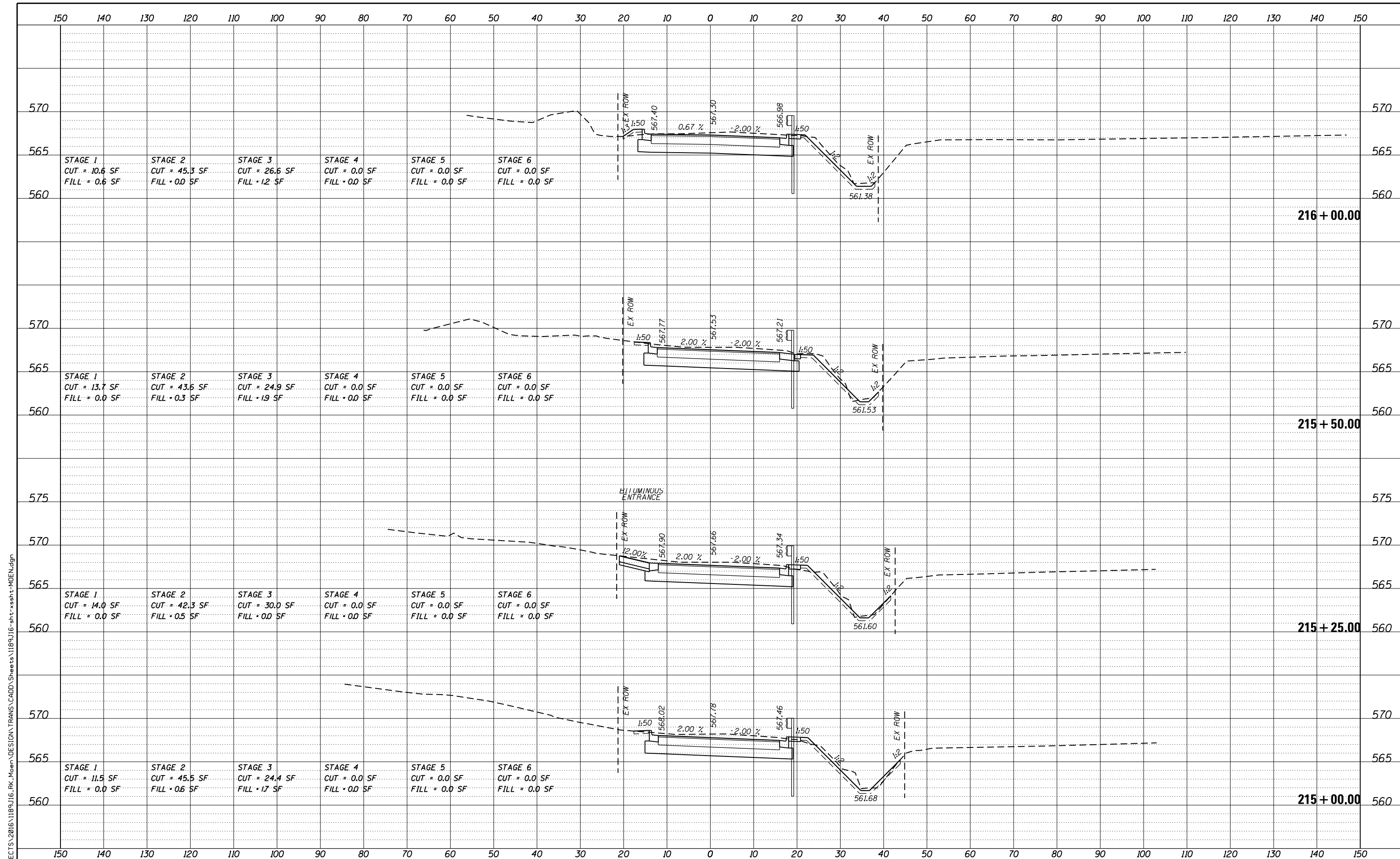
DRAWN	JSH
CHECKED	GFS
APPROVED	GFS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CROSS SECTIONS - MOEN AVENUE
SHEET 21 OF 66
STA. 214 + 00.00 TO 214 + 65.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	289
CONTRACT 61E00			WHA*1189J16 ILLINOIS	



STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6
CUT = 10.6 SF FILL = 0.6 SF	CUT = 45.3 SF FILL = 0.0 SF	CUT = 26.6 SF FILL = 12.5 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF

STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6
CUT = 13.7 SF FILL = 0.0 SF	CUT = 43.6 SF FILL = 0.3 SF	CUT = 24.9 SF FILL = 19.5 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF

STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6
CUT = 14.0 SF FILL = 0.0 SF	CUT = 42.3 SF FILL = 0.5 SF	CUT = 30.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF

STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6
CUT = 11.5 SF FILL = 0.0 SF	CUT = 45.5 SF FILL = 0.6 SF	CUT = 24.4 SF FILL = 17.5 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF

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REVISION	DATE	BY	REMARKS

DRAWN	JSH
CHECKED	GFS
APPROVED	GFS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



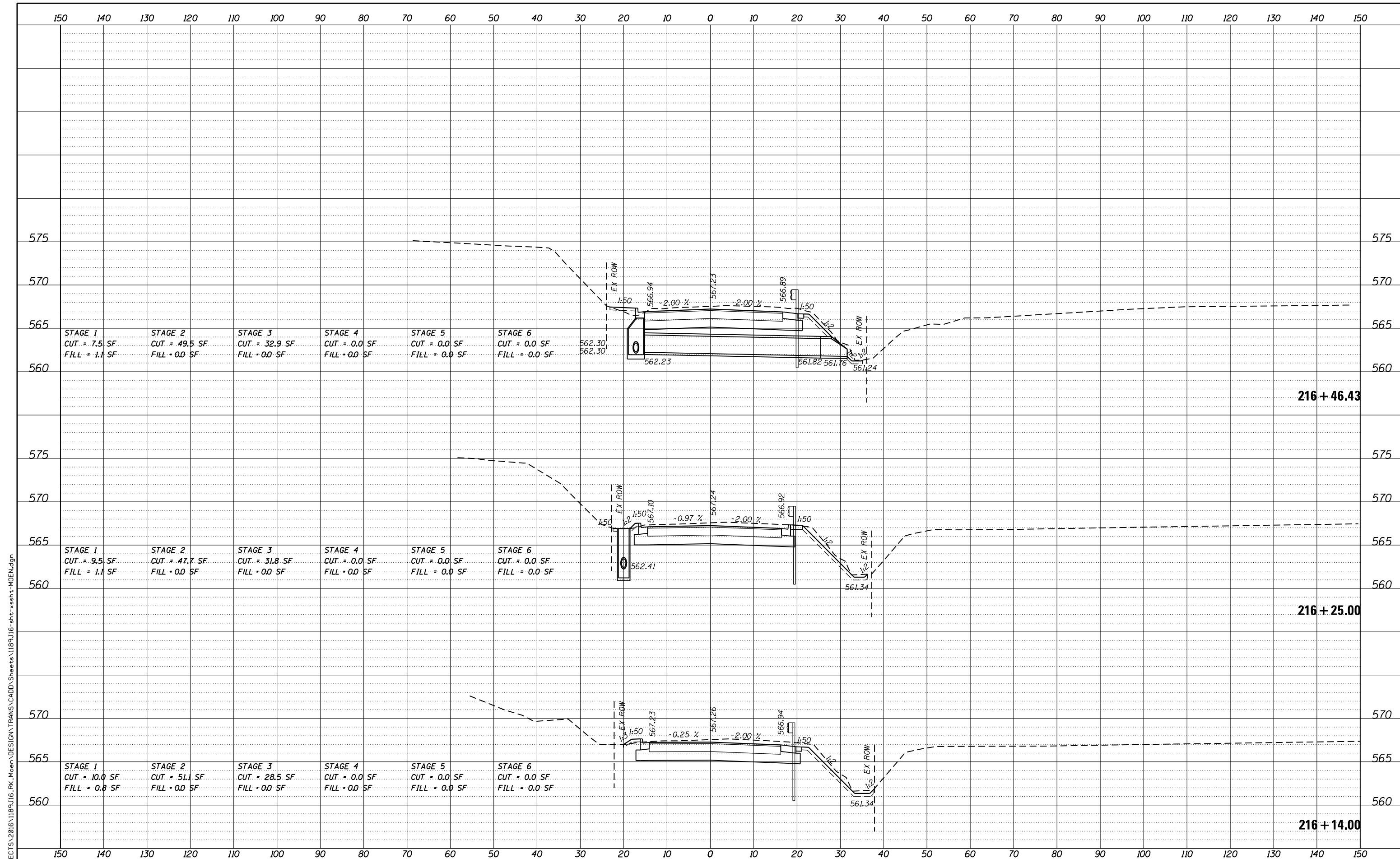
WILLET HOFMANN & ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLET, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-000918



79 MOEN AVENUE
ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
SHEET 22 OF 66
STA. 215+00.00 TO 216+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	290
CONTRACT 61E00			WHA*1189J16 ILLINOIS	



FILE = S:\PROJECTS\2016\1189J16-RK_Moen\DESIGN\TRANS\CADD\Sheets\1189J16-sht-xasht-MOEN.dgn

REVISION	DATE	BY	REMARKS

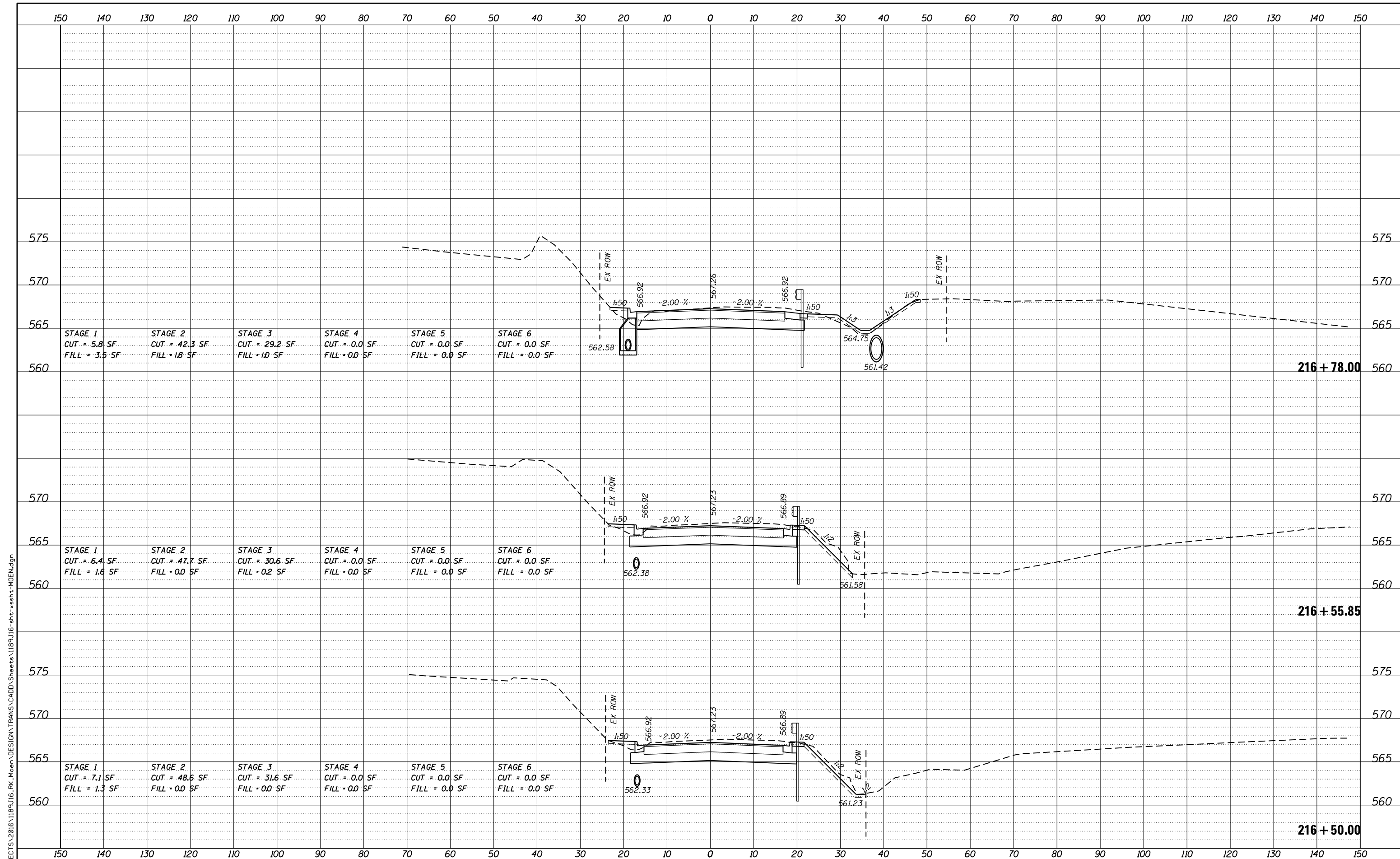
DRAWN	JSH
CHECKED	GFS
APPROVED	GFS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CROSS SECTIONS - MOEN AVENUE
SHEET 23 OF 66
STA. 216 + 14.00 TO 216 + 46.43

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	291
CONTRACT 61E00			WHA*1189J16 ILLINOIS	



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REVISION	DATE	BY	REMARKS

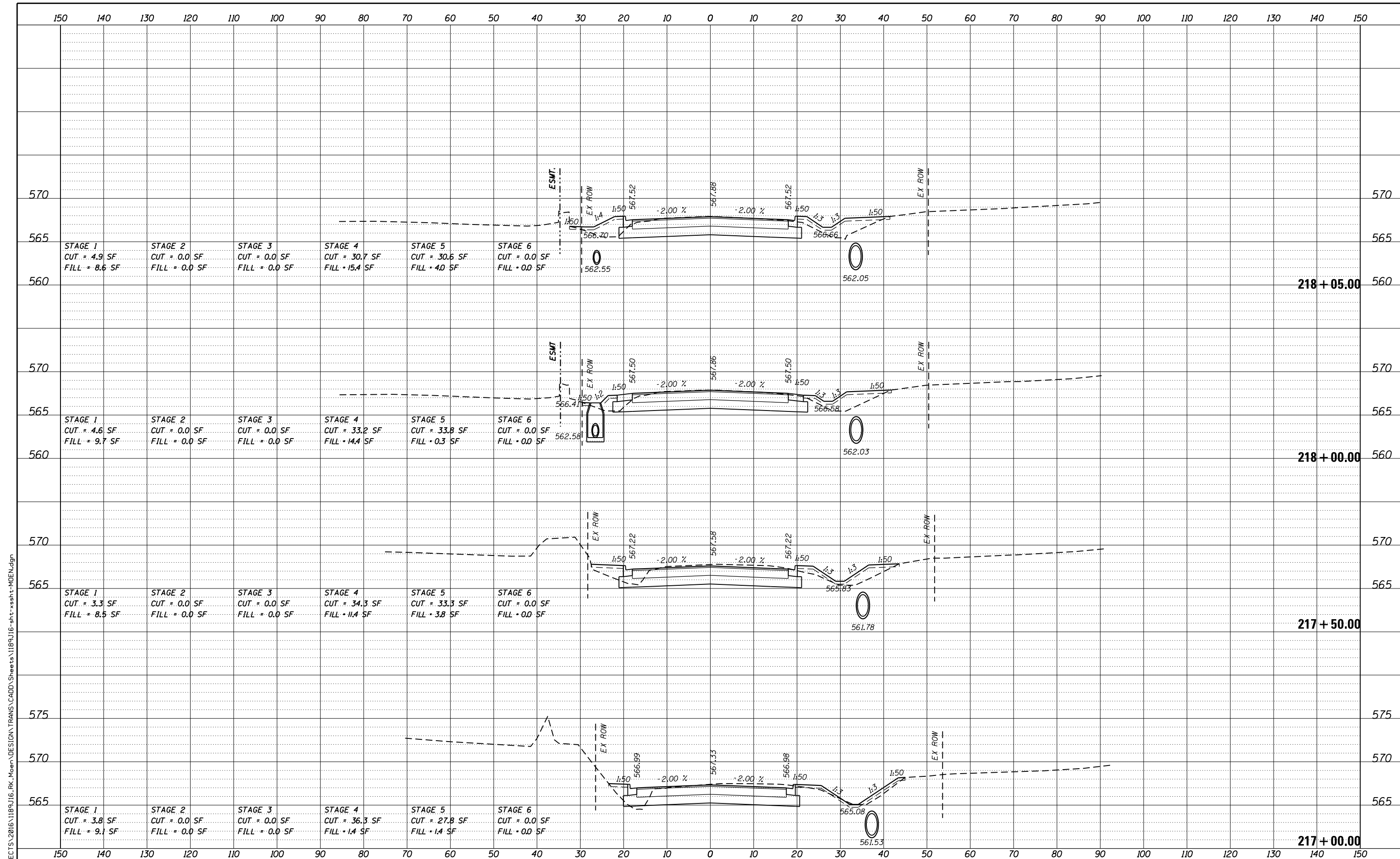
DRAWN	JSH
CHECKED	GFS
APPROVED	GFS

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CROSS SECTIONS - MOEN AVENUE
SHEET 24 OF 66
STA. 216 + 50.00 TO 216 + 78.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	292
CONTRACT 61E00				
WHA*1189J16		ILLINOIS		



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REVISION	DATE	BY	REMARKS

DRAWN	JSH
CHECKED	GFS
APPROVED	GFS

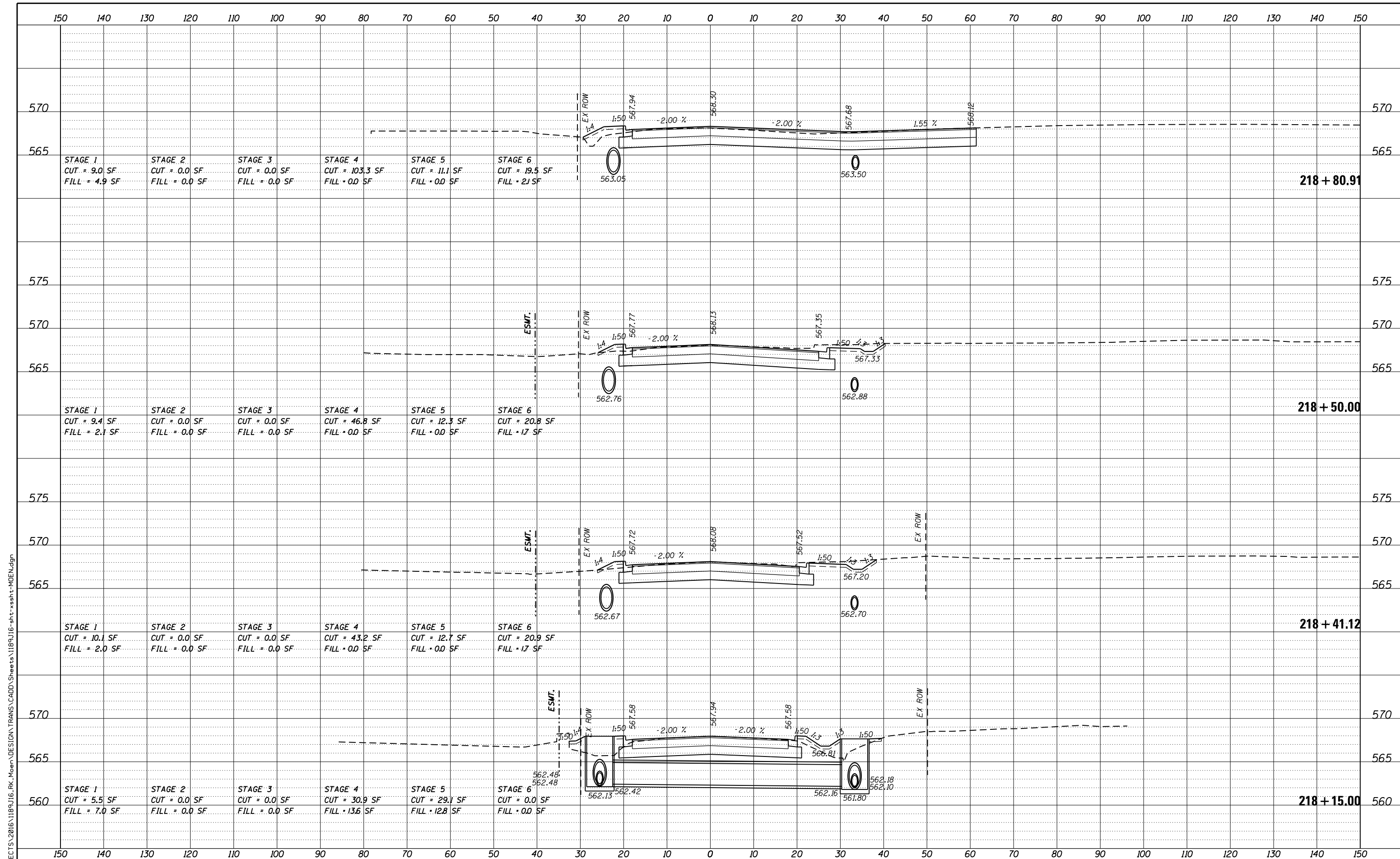
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CROSS SECTIONS - MOEN AVENUE
SHEET 25 OF 66

STA. 217 + 00.00 TO 218 + 05.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	293
CONTRACT 61E00				
WHA*1189J16		ILLINOIS		



STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6
CUT = 9.0 SF FILL = 4.9 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 103.3 SF FILL = 0.0 SF	CUT = 11.1 SF FILL = 0.0 SF	CUT = 19.5 SF FILL = 2.1 SF

STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6
CUT = 9.4 SF FILL = 2.1 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 46.8 SF FILL = 0.0 SF	CUT = 12.3 SF FILL = 0.0 SF	CUT = 20.8 SF FILL = 1.7 SF

STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6
CUT = 10.1 SF FILL = 2.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 43.2 SF FILL = 0.0 SF	CUT = 12.7 SF FILL = 0.0 SF	CUT = 20.9 SF FILL = 1.7 SF

STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	STAGE 6
CUT = 5.5 SF FILL = 7.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 0.0 SF FILL = 0.0 SF	CUT = 30.9 SF FILL = 13.6 SF	CUT = 29.1 SF FILL = 12.8 SF	CUT = 0.0 SF FILL = 0.0 SF

REVISION	DATE	BY	REMARKS

DRAWN JSH
 CHECKED GFS
 APPROVED GFS

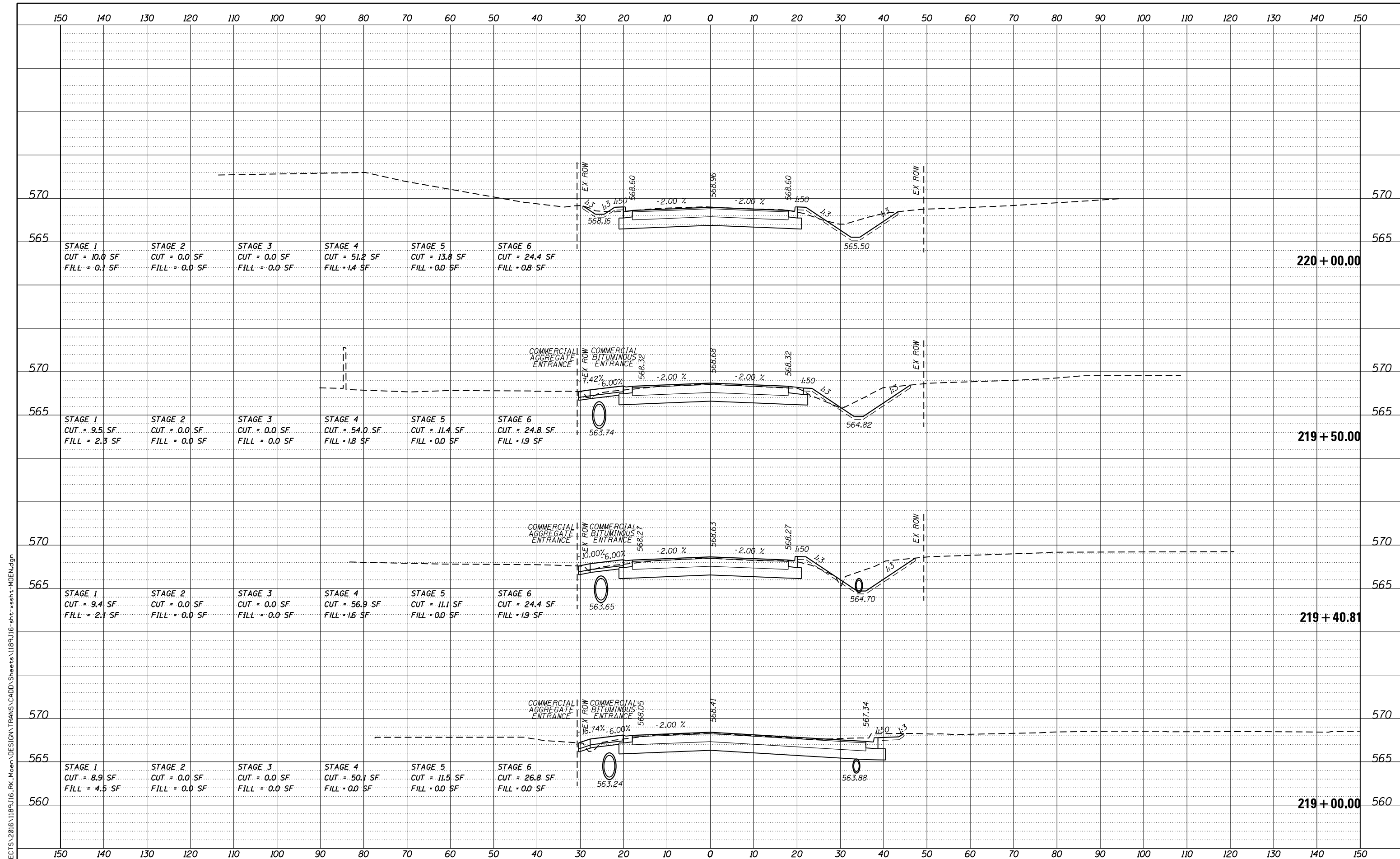
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION



CROSS SECTIONS - MOEN AVENUE
 SHEET 26 OF 66
 STA. 218 + 15.00 TO 218 + 80.91

F.A.U. RTE. 3795	SECTION 12-00029-00-PV	COUNTY WILL	TOTAL SHEETS 344	SHEET NO. 294
CONTRACT 61E00			WHA*1189J16 ILLINOIS	

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REVISION	DATE	BY	REMARKS

DRAWN JSH
 CHECKED GFS
 APPROVED GFS

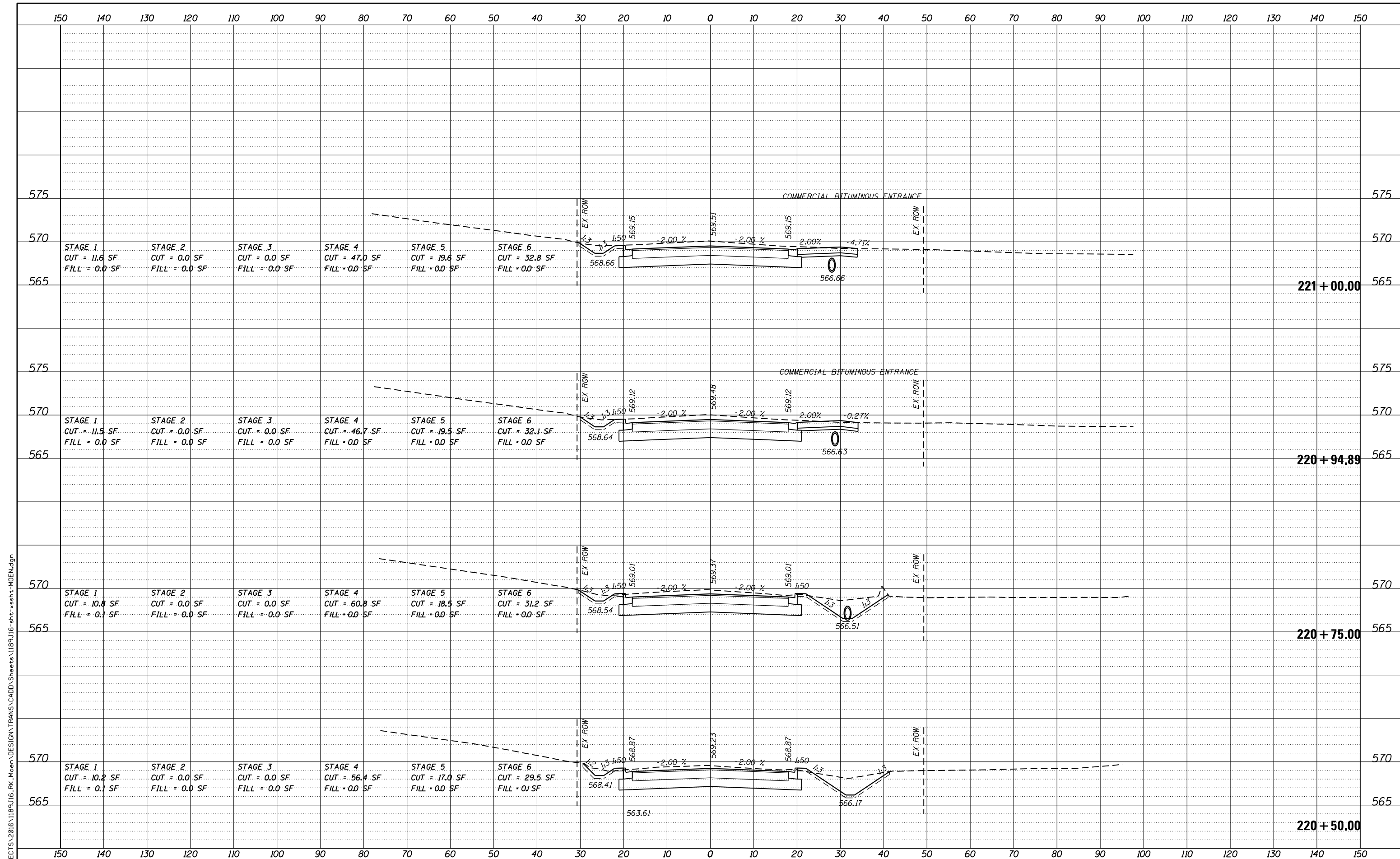
STATE OF ILLINOIS
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CROSS SECTIONS - MOEN AVENUE
 SHEET 27 OF 66
 STA. 219+00.00 TO 220+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	295

CONTRACT 61E00
 WHA*1189J16 ILLINOIS



STAGE 1
CUT = 11.6 SF
FILL = 0.0 SF

STAGE 2
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 3
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 4
CUT = 47.0 SF
FILL = 0.0 SF

STAGE 5
CUT = 19.6 SF
FILL = 0.0 SF

STAGE 6
CUT = 32.8 SF
FILL = 0.0 SF

STAGE 1
CUT = 10.8 SF
FILL = 0.1 SF

STAGE 2
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 3
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 4
CUT = 60.8 SF
FILL = 0.0 SF

STAGE 5
CUT = 18.5 SF
FILL = 0.0 SF

STAGE 6
CUT = 31.2 SF
FILL = 0.0 SF

STAGE 1
CUT = 10.2 SF
FILL = 0.1 SF

STAGE 2
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 3
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 4
CUT = 56.4 SF
FILL = 0.0 SF

STAGE 5
CUT = 17.0 SF
FILL = 0.0 SF

STAGE 6
CUT = 29.5 SF
FILL = 0.1 SF

REVISION	DATE	BY	REMARKS

DRAWN
JSH
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GFS
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GFS

STATE OF ILLINOIS
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WILLET HOFMANN
& ASSOCIATES INC
ENGINEERING ARCHITECTURE LAND SURVEYING
1000 ESSINGTON ROAD, JOLETT, IL 60435
T: 815-729-2229 DESIGN FIRM: #184-000918



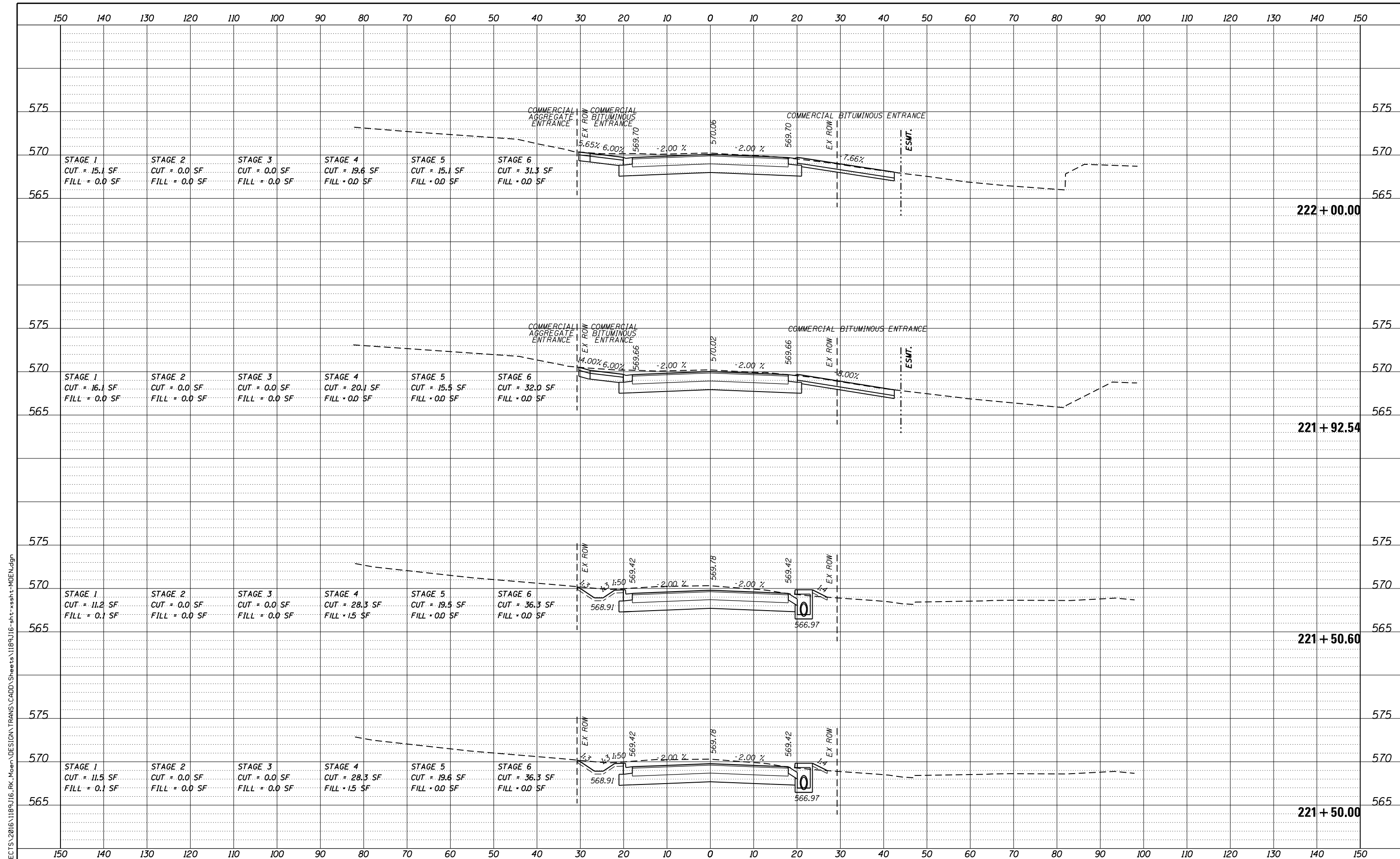
79 MOEN AVENUE
ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
SHEET 28 OF 66

STA. 220 + 50.00 TO 221 + 00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	296
WHA*1189J16			ILLINOIS	

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REVISION	DATE	BY	REMARKS

DRAWN JSH
 CHECKED GFS
 APPROVED GFS

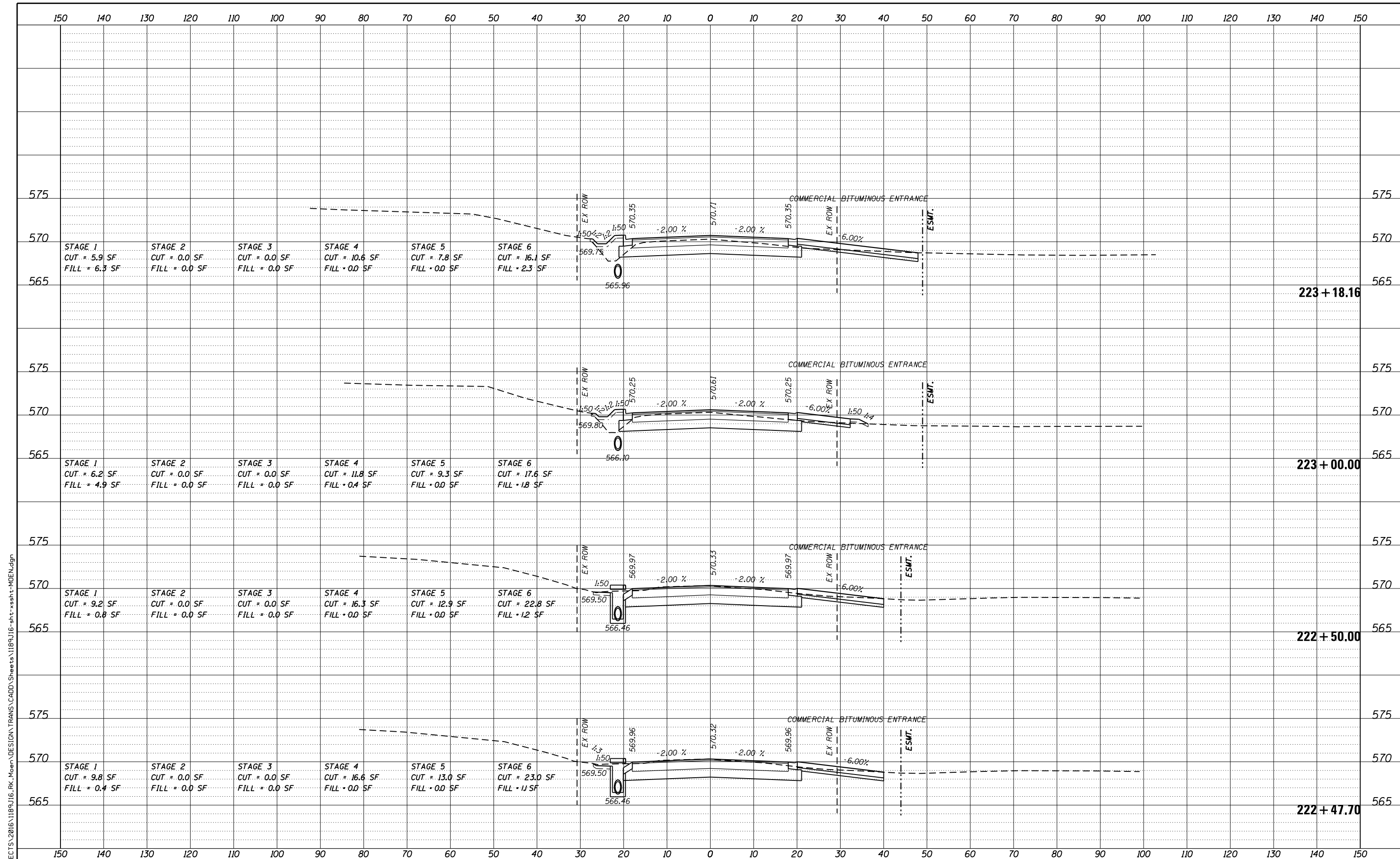
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLET HOFMANN & ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 1000 ESSINGTON ROAD, JOLET, IL 60435
 T: 815-729-2229 DESIGN FIRM: #184-000918

ROCKDALE
 79 MOEN AVENUE
 ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
SHEET 29 OF 66
STA. 221 + 50.00 TO 222 + 00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	297
CONTRACT 61E00				
WHA*1189J16		ILLINOIS		



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REVISION	DATE	BY	REMARKS

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CHECKED	GFS
APPROVED	GFS

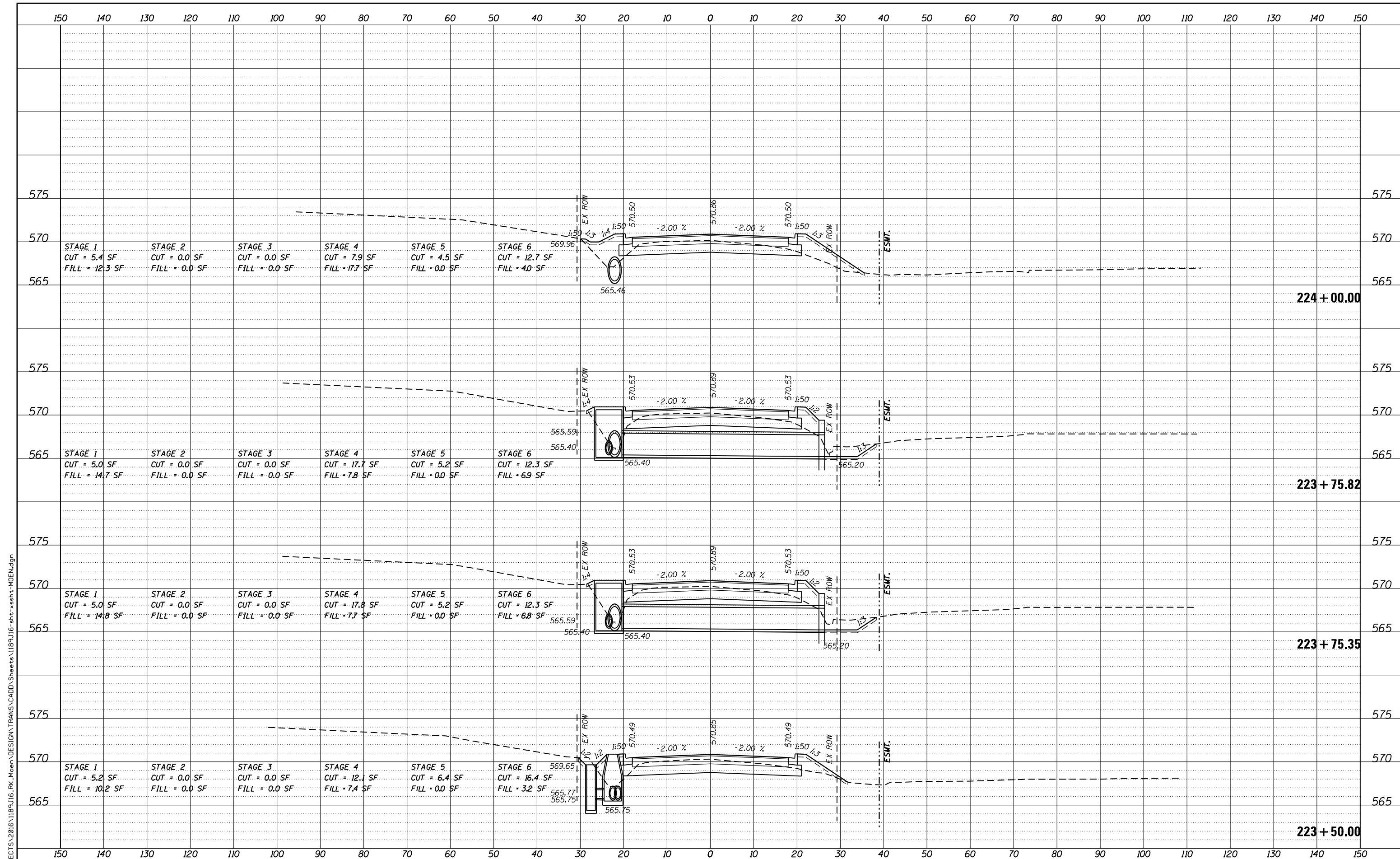
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLET HOFMANN & ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 1000 ESSINGTON ROAD, JOLET, IL 60435
 T: 815-729-2229 DESIGN FIRM: #184-000918

ROCKDALE
 79 MOEN AVENUE
 ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
SHEET 30 OF 66
 STA. 222 + 47.70 TO 223 + 18.16

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	298
CONTRACT 61E00			WHA*1189J16 ILLINOIS	



STAGE 1
CUT = 5.4 SF
FILL = 12.3 SF

STAGE 2
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 3
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 4
CUT = 7.9 SF
FILL = 17.7 SF

STAGE 5
CUT = 4.5 SF
FILL = 0.0 SF

STAGE 6
CUT = 12.7 SF
FILL = 4.0 SF

224 + 00.00

STAGE 1
CUT = 5.0 SF
FILL = 14.7 SF

STAGE 2
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 3
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 4
CUT = 17.7 SF
FILL = 7.8 SF

STAGE 5
CUT = 5.2 SF
FILL = 0.0 SF

STAGE 6
CUT = 12.3 SF
FILL = 6.9 SF

223 + 75.82

STAGE 1
CUT = 5.0 SF
FILL = 14.8 SF

STAGE 2
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 3
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 4
CUT = 17.8 SF
FILL = 7.7 SF

STAGE 5
CUT = 5.2 SF
FILL = 0.0 SF

STAGE 6
CUT = 12.3 SF
FILL = 6.8 SF

223 + 75.35

STAGE 1
CUT = 5.2 SF
FILL = 10.2 SF

STAGE 2
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 3
CUT = 0.0 SF
FILL = 0.0 SF

STAGE 4
CUT = 12.1 SF
FILL = 7.4 SF

STAGE 5
CUT = 6.4 SF
FILL = 0.0 SF

STAGE 6
CUT = 16.4 SF
FILL = 3.2 SF

223 + 50.00

REVISION	DATE	BY	REMARKS

DRAWN JSH
CHECKED GFS
APPROVED GFS

STATE OF ILLINOIS
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1000 ESSINGTON ROAD, JOLET, IL 60435
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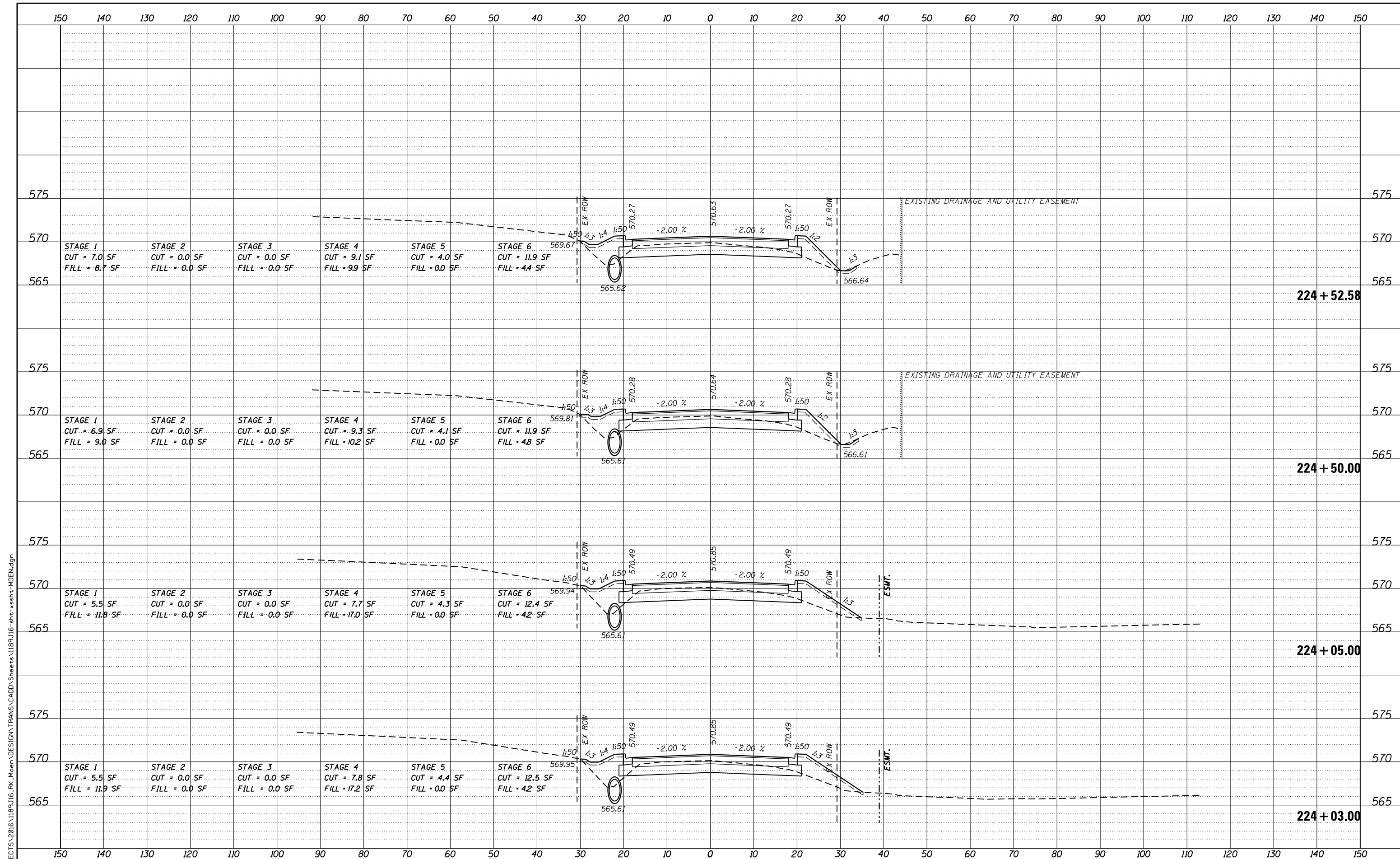
ROCKDALE
79 MOEN AVENUE
ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
SHEET 31 OF 66
STA. 223 + 50.00 TO 224 + 00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	299

CONTRACT 61E00
WHA*1189J16 ILLINOIS

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DRAWN	JSH
CHECKED	GFS
APPROVED	GFS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLET HOFMANN & ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 1000 ESSINGTON ROAD, JOLET, IL 60435
 T: 815-729-2229 DESIGN FIRM: #184-000918

ROCKDALE
 79 MOEN AVENUE
 ROCKDALE, IL 60436

CROSS SECTIONS - MOEN AVENUE
SHEET 32 OF 66
STA. 224 + 03.00 TO 224 + 52.58

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3795	12-00029-00-PV	WILL	344	300
WHA*1189J16			ILLINOIS	