

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End West Appr. Slab	299+37.05	-6.63	749.68	749.70
A1	299+47.05	-6.63	749.77	749.79
A2	299+57.05	-6.63	749.86	749.88
E. End West Appr. Slab	299+67.05	-6.63	749.95	749.97

NORTH EDGE OF PAVEMENT & PG

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End West Appr. Slab	299+25.03	0.00	749.72	749.74
A1	299+35.03	0.00	749.80	749.82
A2	299+45.03	0.00	749.89	749.91
E. End West Appr. Slab	299+55.03	0.00	749.98	750.00

STAGE CONST. JOINT 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End West Appr. Slab	299+06.14	10.42	749.77	749.79
A1	299+16.14	10.42	749.86	749.88
A2	299+26.14	10.42	749.94	749.96
E. End West Appr. Slab	299+36.14	10.42	750.03	750.05

LANE 1/LANE 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End West Appr. Slab	299+03.27	12.00	749.78	749.80
A1	299+13.27	12.00	749.86	749.88
A2	299+23.27	12.00	749.95	749.97
E. End West Appr. Slab	299+33.27	12.00	750.04	750.06

CROWN

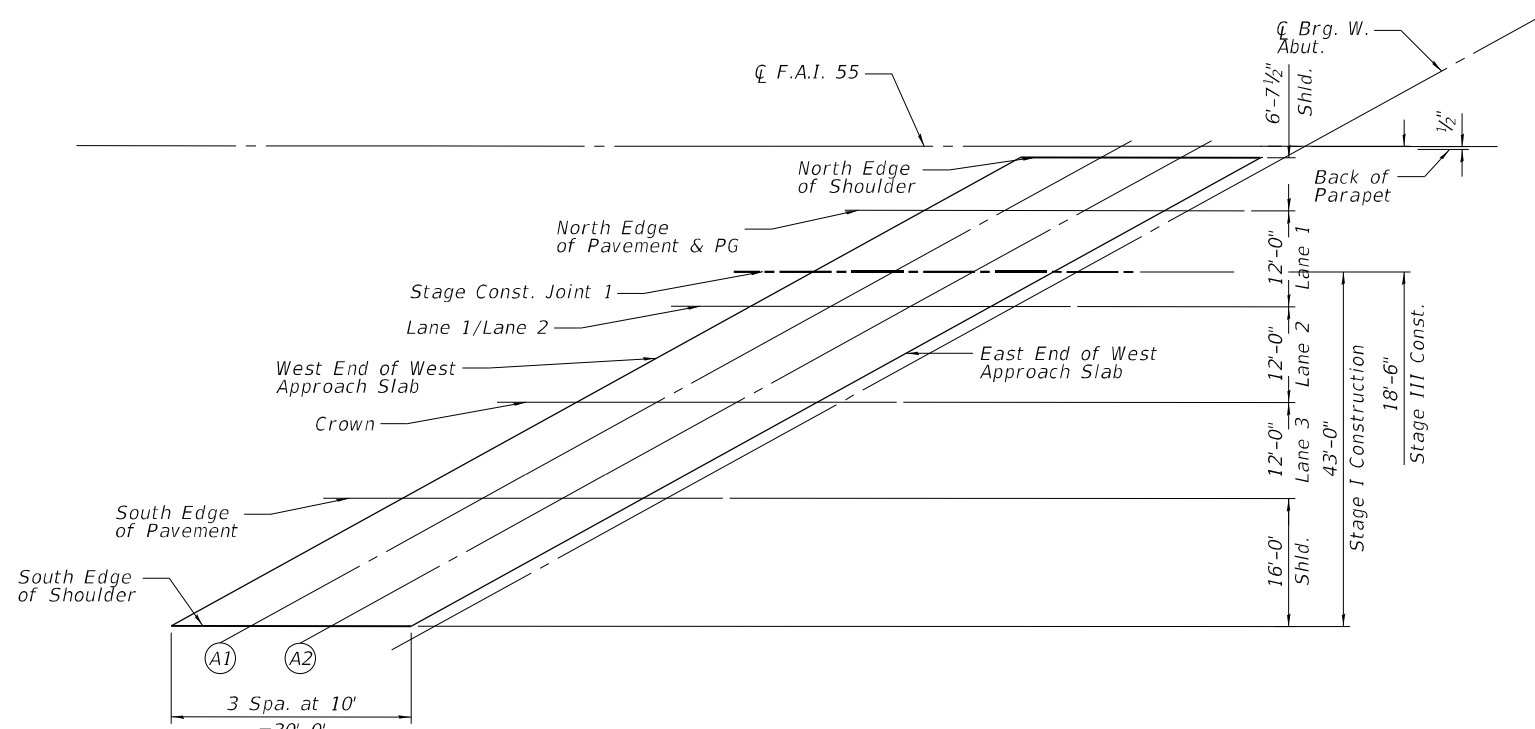
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End West Appr. Slab	298+81.50	24.00	749.77	749.79
A1	298+91.50	24.00	749.86	749.88
A2	299+01.50	24.00	749.95	749.97
E. End West Appr. Slab	299+11.50	24.00	750.04	750.06

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End West Appr. Slab	298+59.74	36.00	749.40	749.42
A1	298+69.74	36.00	749.48	749.50
A2	298+79.74	36.00	749.57	749.59
E. End West Appr. Slab	298+89.74	36.00	749.66	749.68

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End West Appr. Slab	298+30.72	52.00	748.81	748.83
A1	298+40.72	52.00	748.90	748.92
A2	298+50.72	52.00	748.98	749.00
E. End West Appr. Slab	298+60.72	52.00	749.07	749.09



NB - WEST APPROACH SLAB PLAN

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-095-0028-60H03-502.1-TAE.dgn

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End East Appr. Slab	301+77.71	-6.63	751.79	751.81
A1	301+87.71	-6.63	751.88	751.90
A2	301+97.71	-6.63	751.96	751.98
E. End East Appr. Slab	302+07.71	-6.63	752.05	752.07

NORTH EDGE OF PAVEMENT & PG

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End East Appr. Slab	301+65.69	0.00	751.82	751.84
A1	301+75.69	0.00	751.91	751.93
A2	301+85.69	0.00	752.00	752.02
E. End East Appr. Slab	301+95.69	0.00	752.08	752.10

STAGE CONST. JOINT 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End East Appr. Slab	301+46.80	10.42	751.87	751.89
A1	301+56.80	10.42	751.96	751.98
A2	301+66.80	10.42	752.05	752.07
E. End East Appr. Slab	301+76.80	10.42	752.14	752.16

LANE 1/LANE 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End East Appr. Slab	301+43.93	36.00	751.88	751.90
A1	301+53.93	36.00	751.97	751.99
A2	301+63.93	36.00	752.06	752.08
E. End East Appr. Slab	301+73.93	36.00	752.14	752.16

CROWN

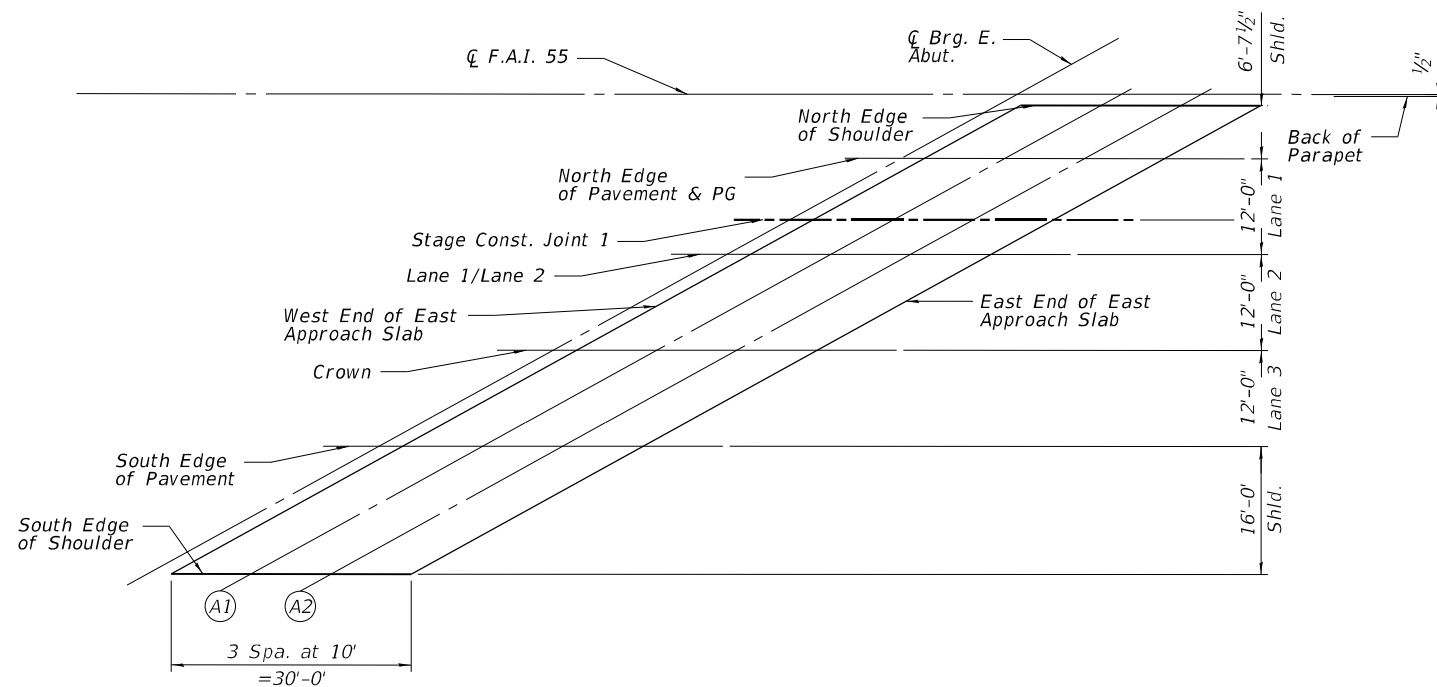
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End East Appr. Slab	301+22.16	52.00	751.69	751.71
A1	301+32.16	52.00	751.78	751.80
A2	301+42.16	52.00	751.87	751.89
E. End East Appr. Slab	301+52.16	52.00	752.14	752.16

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End East Appr. Slab	301+00.40	36.00	751.50	751.52
A1	301+10.40	36.00	751.59	751.61
A2	301+20.40	36.00	751.68	751.70
E. End East Appr. Slab	301+30.40	36.00	751.76	751.78

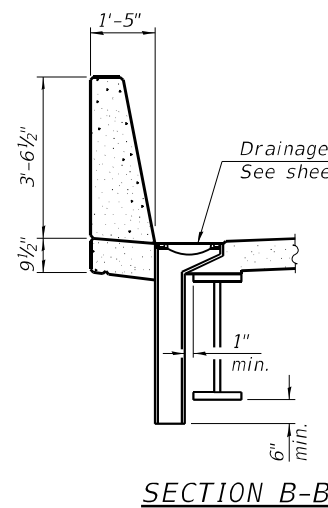
SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End East Appr. Slab	300+71.38	52.00	750.91	750.93
A1	300+81.38	52.00	751.00	751.02
A2	300+91.38	52.00	751.09	751.11
E. End East Appr. Slab	301+01.38	52.00	751.18	751.20

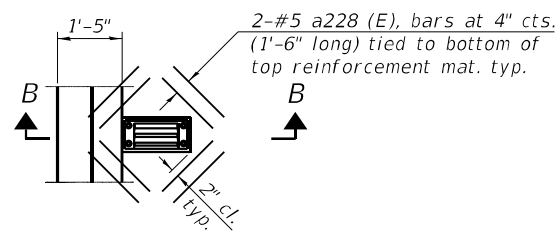


NB - EAST APPROACH SLAB PLAN

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-095-028-60H03-5022-TAE.dgn
5/4/2021 3:02:11 PM

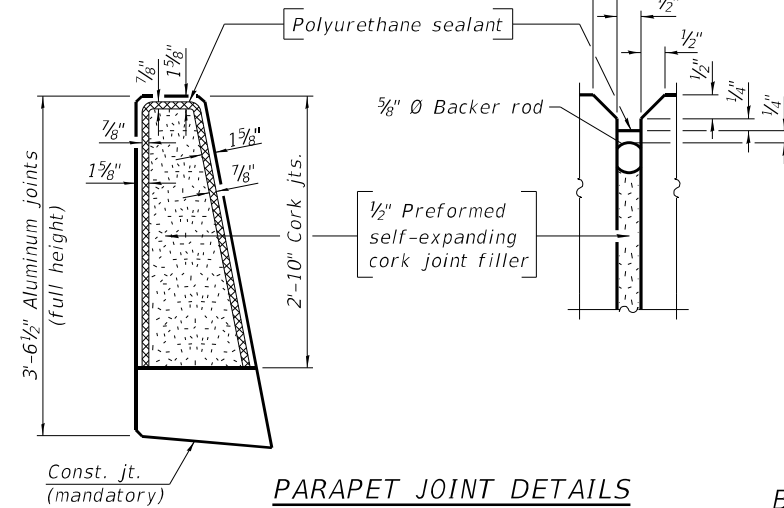


SECTION B-B

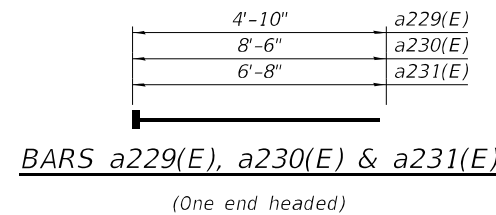


PLAN

Note:
Cut longitudinal reinforcement to clear drainage scuppers.

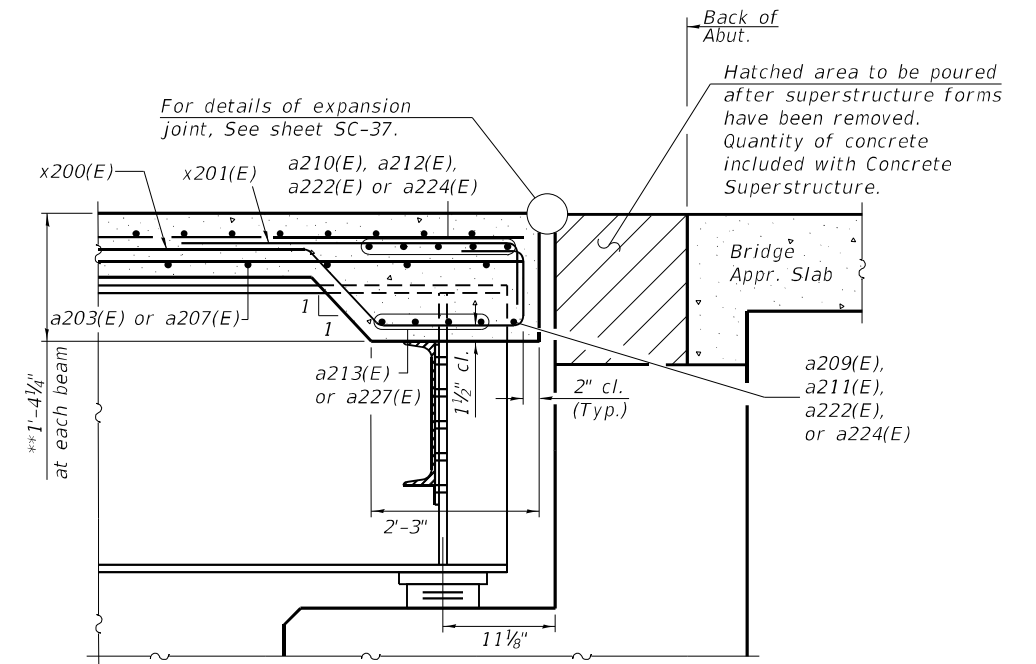


PARAPET JOINT DETAILS



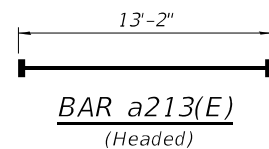
BARS a229(E), a230(E) & a231(E)

(One end headed)

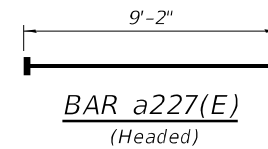


SECTION A-A

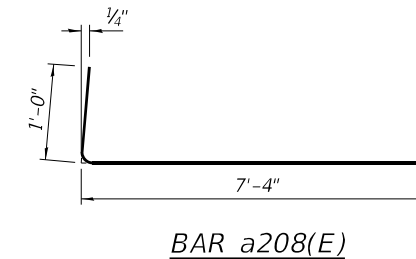
(Horizontal Dimensions at Rt. L's to Abutment)



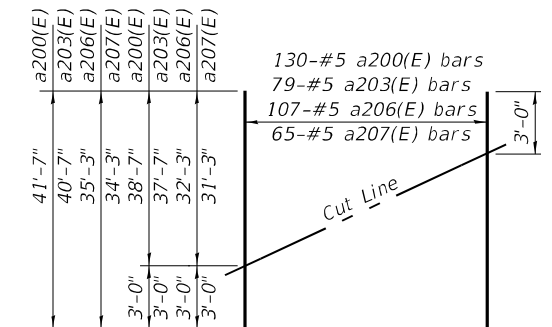
BAR a213(E)
(Headed)



BAR a227(E)
(Headed)

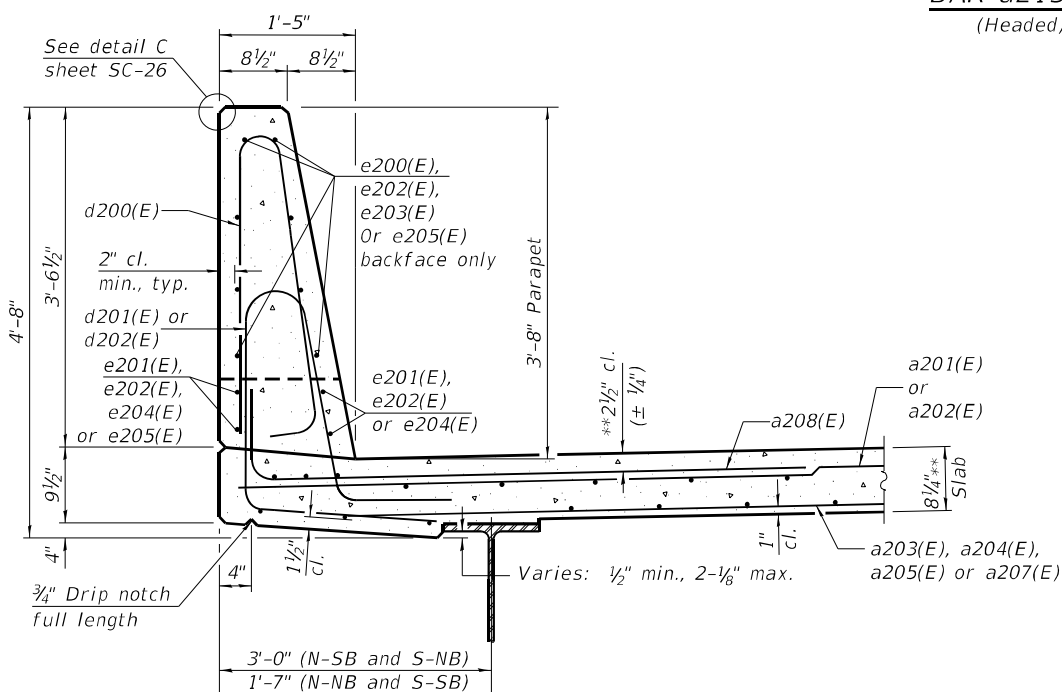


BAR a208(E)



FIELD CUTTING DIAGRAM

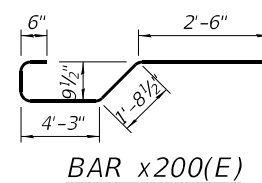
Order a200(E), a203(E), a206(E) and a207(E) bars full length. Cut as shown and use remainder of bars in opposite end of deck.



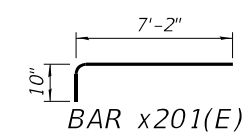
SECTION THRU PARAPET

Notes:

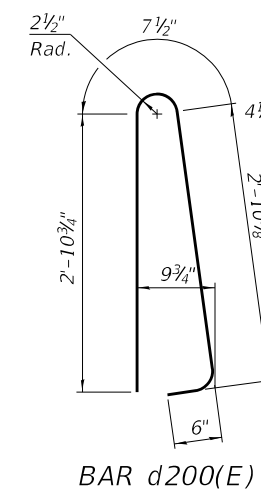
- The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
- The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.
- Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.



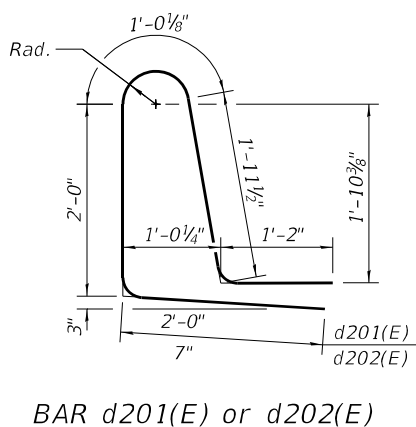
BAR x200(E)



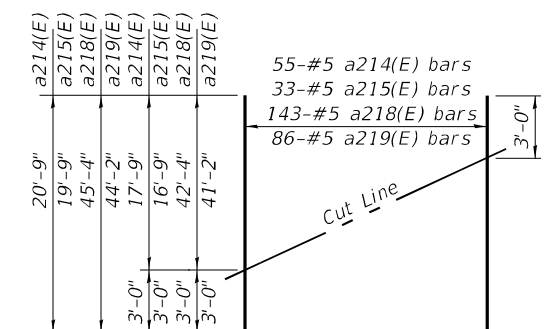
BAR x201(E)



BAR d200(E)



BAR d201(E) or d202(E)



FIELD CUTTING DIAGRAM

Order a214(E), a215(E), a218(E) and a219(E) bars full length. Cut as shown and use remainder of bars in opposite end of deck.

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Sheets\030-099-0028-60H03-5025-DET.dgn

GR&EF
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631; (773) 399-0112

USER NAME =	Structural	DESIGNED -	J.A.Z.	REVISED -	
PLOT SCALE =	N.T.S.	CHECKED -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	DRAWN -	O.M.	REVISED -	
		CHECKED -	J.A.Z.	REVISED -	

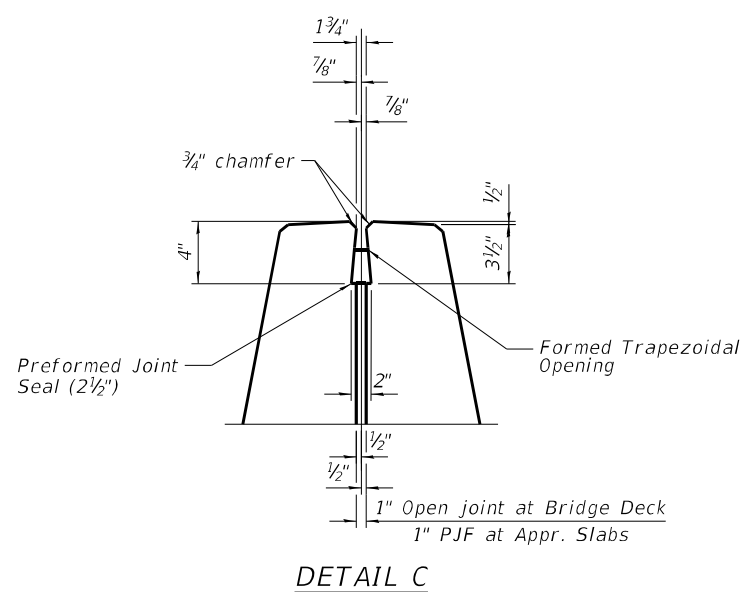
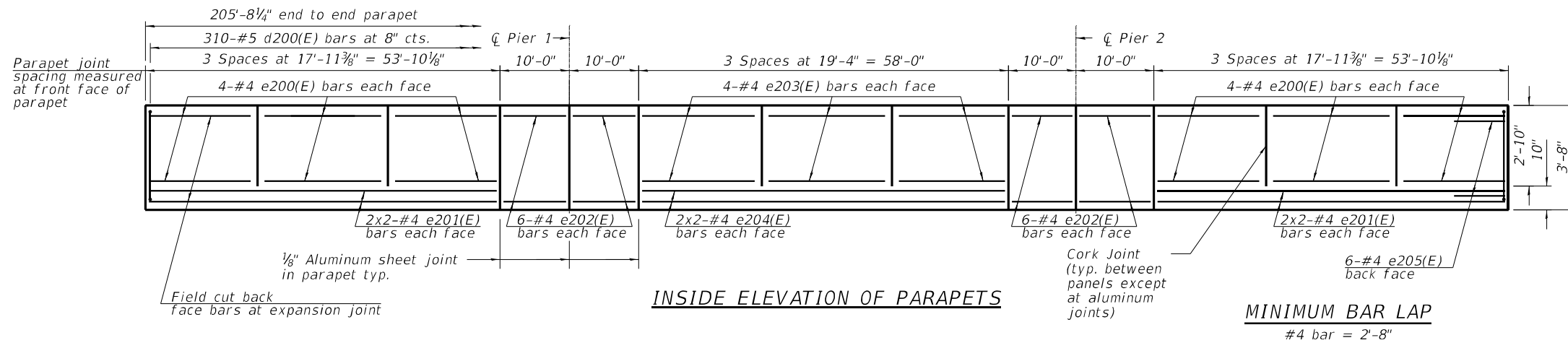
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS I
SN 099-0028

SHEET SC-25 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	305
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				

5/4/2021 3:02:14 PM



MODEL: Default
 FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-60H03-5026-DET.dgn
 5/4/2021 3:02:15 PM

GR&EF 8501 W. Higgins Road, Suite 280 Chicago, Illinois 60631; (773) 399-0112	USER NAME = Structural	DESIGNED - J.A.Z.	REVISED -
	PLOT SCALE = N.T.S.	CHECKED - O.M.	REVISED -
	PLOT DATE = 5/4/2021	DRAWN - O.M.	REVISED -
		CHECKED - J.A.Z.	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS II
SN 099-0028
 SHEET SC-26 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	306
CONTRACT NO. 62H03				
ILLINOIS		FED. AID PROJECT		

SB SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a200 (E)	130	# 5	41'-7"	—————
a201 (E)	270	# 5	38'-10"	—————
a202 (E)	293	# 5	32'-6"	—————
a203 (E)	79	# 5	40'-7"	—————
a204 (E)	162	# 5	37'-10"	—————
a205 (E)	176	# 5	31'-6"	—————
a206 (E)	107	# 5	35'-3"	—————
a207 (E)	65	# 5	34'-3"	—————
a208 (E)	808	# 6	8'-4"	┌—————
a209 (E)	8	# 8	24'-10"	—————
a210 (E)	30	# 8	31'-1"	—————
a211 (E)	8	# 8	21'-6"	—————
a212 (E)	30	# 8	26'-8"	—————
a213 (E)	72	# 8	13'-2"	┌—————
a228 (E)	32	# 5	1'-6"	—————
a229 (E)	8	# 8	4'-10"	┌—————
a230 (E)	8	# 8	8'-6"	┌—————
b200 (E)	616	# 5	28'-9"	—————
b201 (E)	594	# 5	26'-0"	—————
b202 (E)	148	# 6	42'-0"	—————
d200 (E)	620	# 5	7'-0"	┌—————
d201 (E)	310	# 5	8'-2"	┌—————
d202 (E)	310	# 5	6'-9"	┌—————
e200 (E)	96	# 4	17'-7"	—————
e201 (E)	32	# 4	28'-3"	—————
e202 (E)	96	# 4	9'-8"	—————
e203 (E)	48	# 4	19'-0"	—————
e204 (E)	16	# 4	30'-2"	—————
e205 (E)	12	# 4	5'-0"	—————
x200 (E)	136	# 5	9'-9"	┌—————
x201 (E)	154	# 5	8'-0"	┌—————
Concrete Superstructure			Cu. Yds.	454.4
Protective Coat			Sq. Yds.	2,353
Reinforcement Bars, Epoxy Coated			Pounds	126,130
Preformed Joint Seal 2½"			Foot	211
Bridge Deck Grooving (Longitudinal)			Sq. Yds.	1,455
Diamond Grinding (Bridge Section)			Sq. Yds.	2,034

NB SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a208 (E)	808	# 6	8'-4"	┌—————
a213 (E)	48	# 8	13'-2"	┌—————
a214 (E)	55	# 5	20'-9"	—————
a215 (E)	33	# 5	19'-9"	—————
a216 (E)	345	# 5	18'-2"	—————
a217 (E)	207	# 5	17'-2"	—————
a218 (E)	143	# 5	45'-4"	—————
a219 (E)	86	# 5	44'-4"	—————
a220 (E)	256	# 5	42'-7"	—————
a221 (E)	154	# 5	41'-7"	—————
a222 (E)	12	# 8	37'-7"	—————
a224 (E)	36	# 8	33'-6"	—————
a227 (E)	16	# 8	9'-2"	┌—————
a228 (E)	32	# 5	1'-6"	—————
a231 (E)	16	# 8	6'-8"	┌—————
b200 (E)	528	# 5	28'-9"	—————
b201 (E)	504	# 5	26'-0"	—————
b202 (E)	126	# 6	42'-0"	—————
d200 (E)	620	# 5	7'-0"	┌—————
d201 (E)	310	# 5	8'-2"	┌—————
d202 (E)	310	# 5	6'-9"	┌—————
e200 (E)	96	# 4	17'-7"	—————
e201 (E)	32	# 4	28'-3"	—————
e202 (E)	96	# 4	9'-8"	—————
e203 (E)	48	# 4	19'-0"	—————
e204 (E)	16	# 4	30'-2"	—————
e205 (E)	12	# 4	5'-0"	—————
x200 (E)	114	# 5	9'-9"	┌—————
x201 (E)	132	# 5	8'-0"	┌—————
Concrete Superstructure			Cu. Yds.	395.1
Protective Coat			Sq. Yds.	2,033
Reinforcement Bars, Epoxy Coated			Pounds	110,230
Bridge Deck Grooving (Longitudinal)			Sq. Yds.	1,063
Diamond Grinding (Bridge Section)			Sq. Yds.	1,722

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-60H03-5027-DET.dgn
5/6/2021 2:41:46 PM

GRÄEF
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631; (773) 399-0112

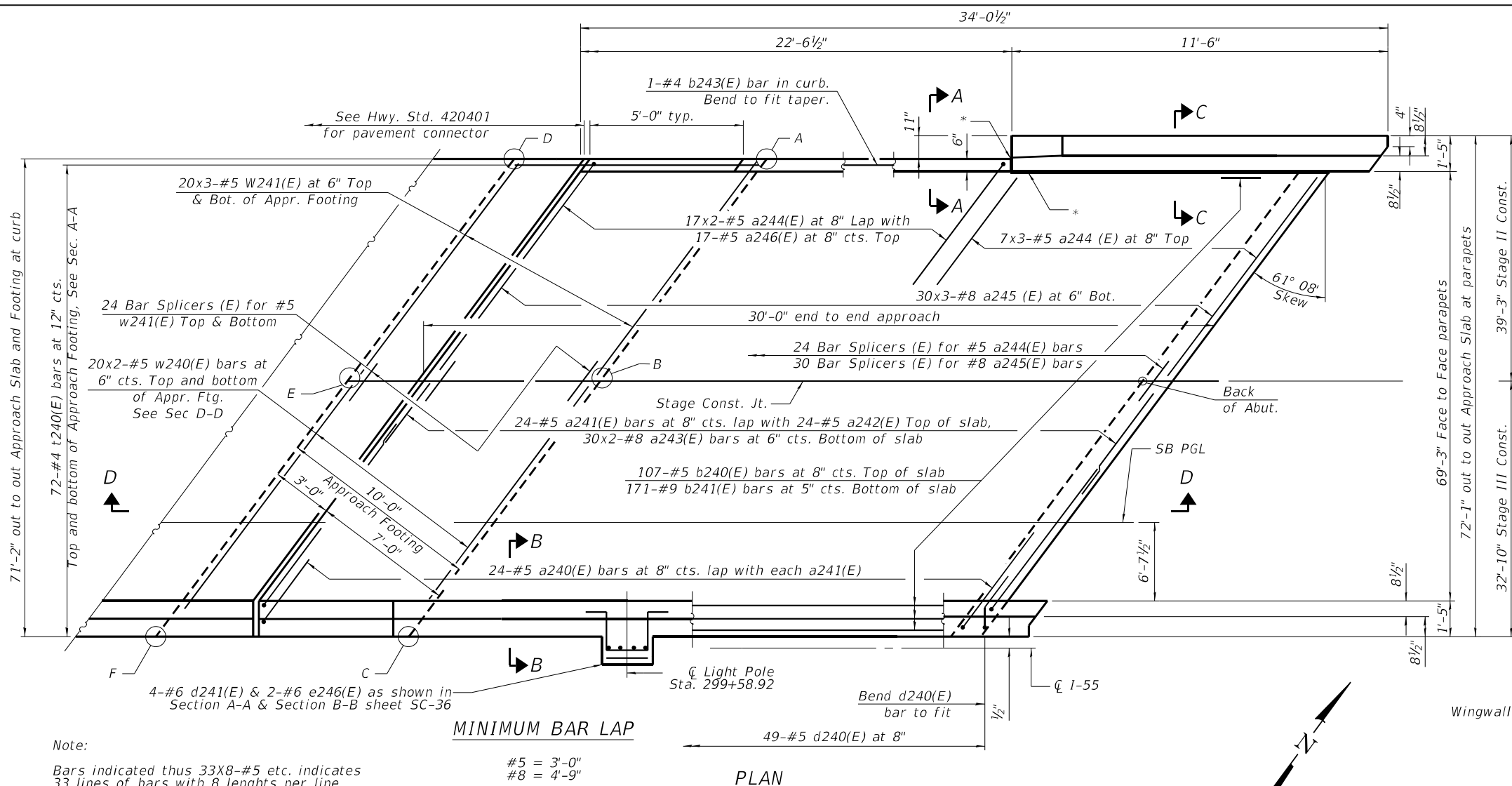
USER NAME =	Structural	DESIGNED -	J.A.Z.	REVISED -	
PLOT SCALE =	N.T.S.	CHECKED -	O.M.	REVISED -	
PLOT DATE =	5/6/2021	DRAWN -	O.M.	REVISED -	
		CHECKED -	J.A.Z.	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS III
SN 099-0028**

SHEET SC-27 OF SC-73 SHEETS

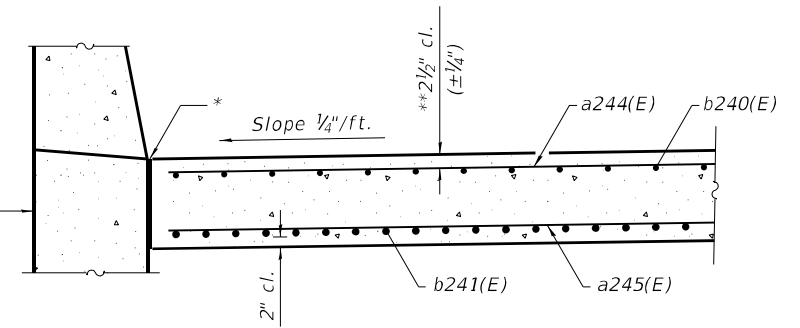
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	307
CONTRACT NO. 62H03				
		ILLINOIS	FED. AID PROJECT	



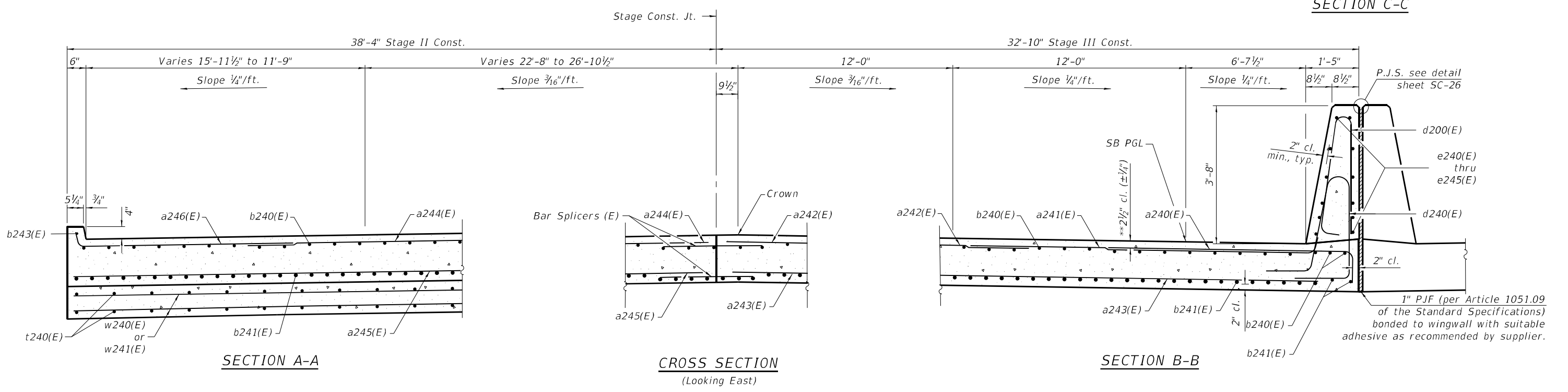
TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

SB - W. Approach		
Point	Top	Bottom
A	749.74	748.90
B	749.82	748.99
C	748.72	747.88
D	749.56	748.73
E	749.64	748.81
F	748.54	747.70

* 1/2" Preformed Expansion Joint Filler according to Article 1051.09 of the Standard Specifications; full depth of slab, full length of parapet.
 ** Prior to Grinding



SECTION C-C



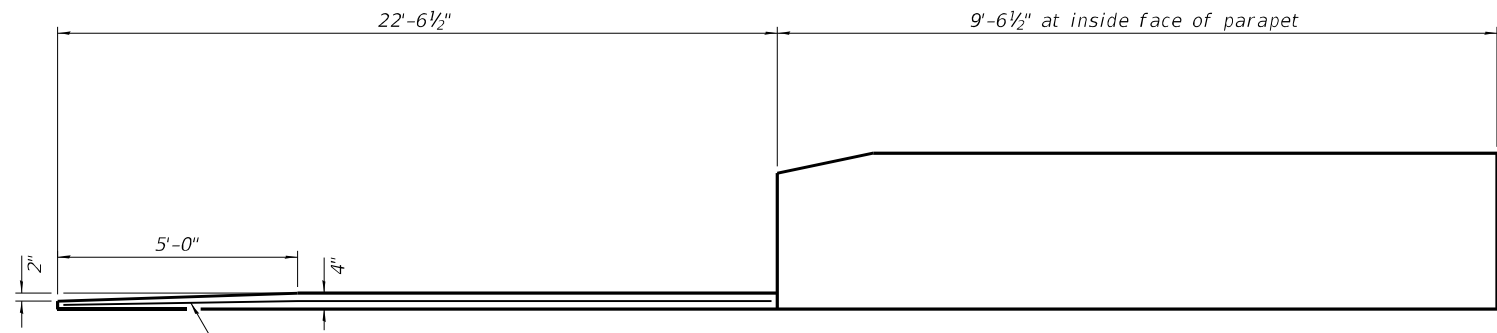
SECTION A-A

CROSS SECTION
(Looking East)

SECTION B-B

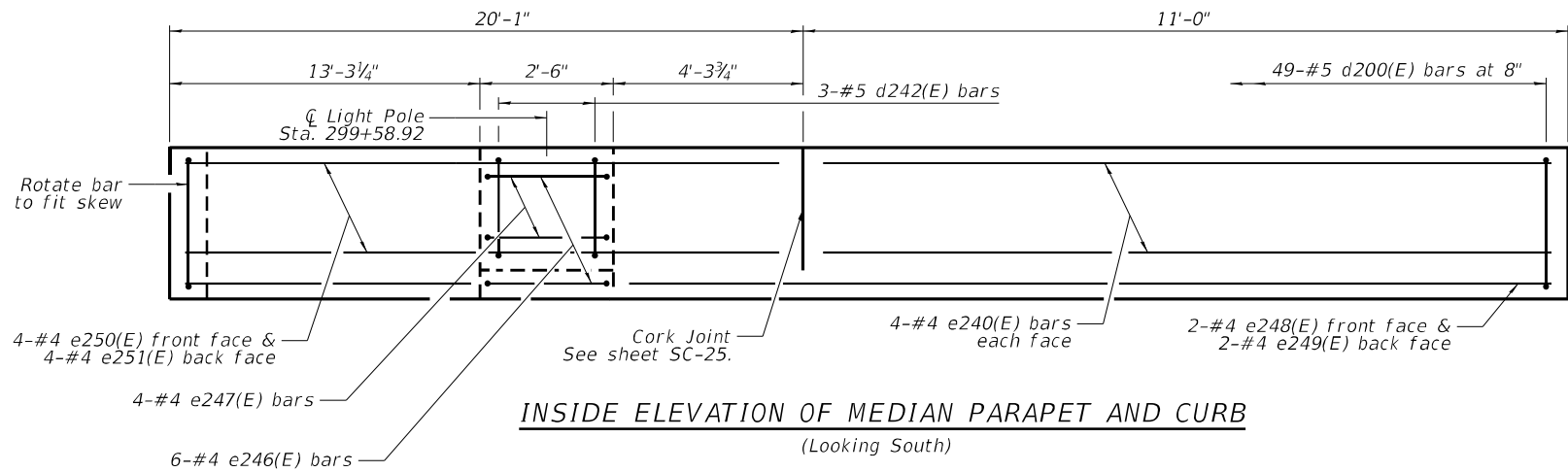
MODEL: Default
 FILE NAME: X:\OH\2019\20190308-03\Design\Design Files\62H03\CAD_Sheets\030-095-0028-60H03-5028-BAR.dgn
 5/4/2021 3:02:17 PM

<p>8501 W. Higgins Road, Suite 280 Chicago, Illinois 60631; (773) 399-0112</p>	USER NAME = Structural PLOT SCALE = N.T.S. PLOT DATE = 5/4/2021	DESIGNED - J.A.Z. CHECKED - O.M. DRAWN - O.M. CHECKED - J.A.Z.	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SB WEST APPROACH SLAB DETAILS I SN 099-0028	F.A.I. RTE. = 55 SECTION = 2018-043-BD&BJR	COUNTY = WILL CONTRACT NO. = 62H03	TOTAL SHEETS = 430 SHEET NO. = 308
	SHEET SC-28 OF SC-73 SHEETS					ILLINOIS FED. AID PROJECT		



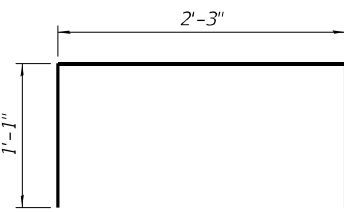
INSIDE ELEVATION OF OUTSIDE PARAPET AND CURB

(Looking North)

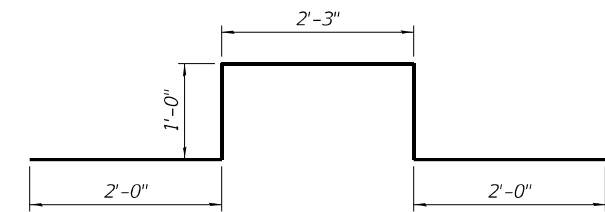


INSIDE ELEVATION OF MEDIAN PARAPET AND CURB

(Looking South)



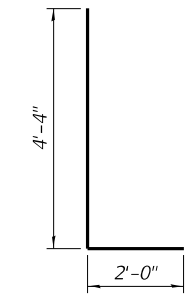
BAR e247(E)



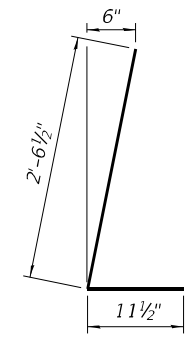
BAR e246(E)

**S.B. W. APPROACH
BILL OF MATERIAL**

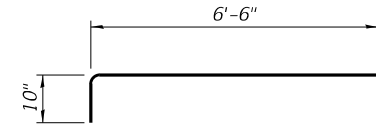
Bar	No.	Size	Length	
a240 (E)	24	# 5	7'-4"	
a241 (E)	24	# 5	34'-10"	
a242 (E)	24	# 5	34'-4"	
a243 (E)	60	# 8	36'-8"	
a244 (E)	55	# 5	28'-0"	
a245 (E)	90	# 8	29'-4"	
a246 (E)	17	# 5	28'-6"	
b240 (E)	107	# 5	29'-8"	
b241 (E)	171	# 9	29'-8"	
b243 (E)	1	# 4	22'-4"	
d200 (E)	49	# 5	7'-0"	
d240 (E)	49	# 5	8'-6"	
d241 (E)	4	# 6	6'-4"	
d242 (E)	3	# 5	3'-6"	
e240 (E)	8	# 4	10'-8"	
e246 (E)	8	# 4	8'-3"	
e247 (E)	4	# 4	4'-5"	
e248 (E)	2	# 4	30'-8"	
e249 (E)	2	# 4	28'-8"	
e250 (E)	4	# 4	19'-8"	
e251 (E)	4	# 4	17'-8"	
t240 (E)	144	# 4	20'-0"	
w240 (E)	80	# 5	35'-6"	
w241 (E)	120	# 5	28'-2"	
Concrete Superstructure			Cu. Yd.	5.8
Concrete Superstructure (Approach Slab)			Cu. Yd.	100.1
Concrete Structures			Cu. Yd.	46.1
Reinforcement Bars, Epoxy Coated			Pound	47,070
Preformed Joint Seal 2 1/2"			Foot	30



BAR d241(E)

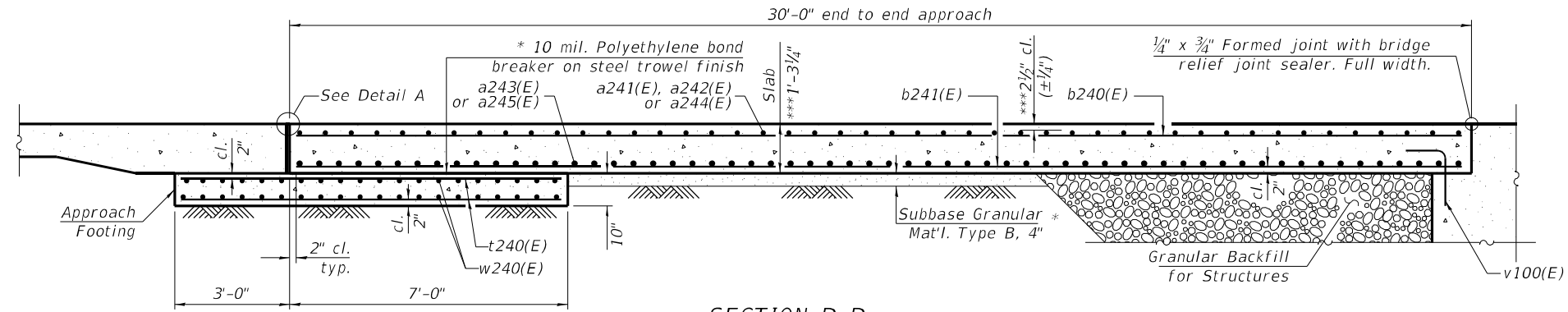


BAR a241(E) & a246(E)

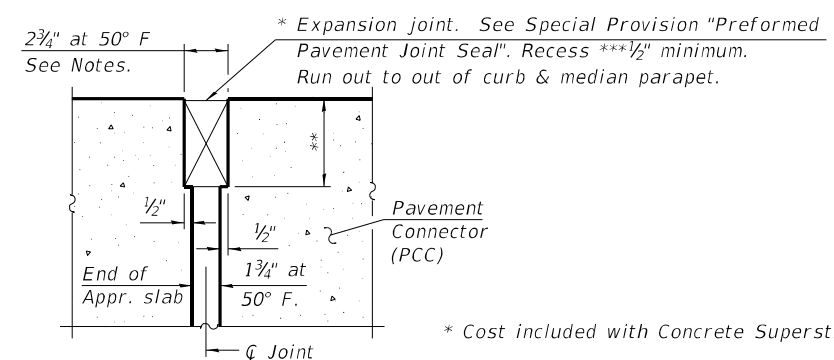


BAR a240(E)

BAR d242(E)



SECTION D-D



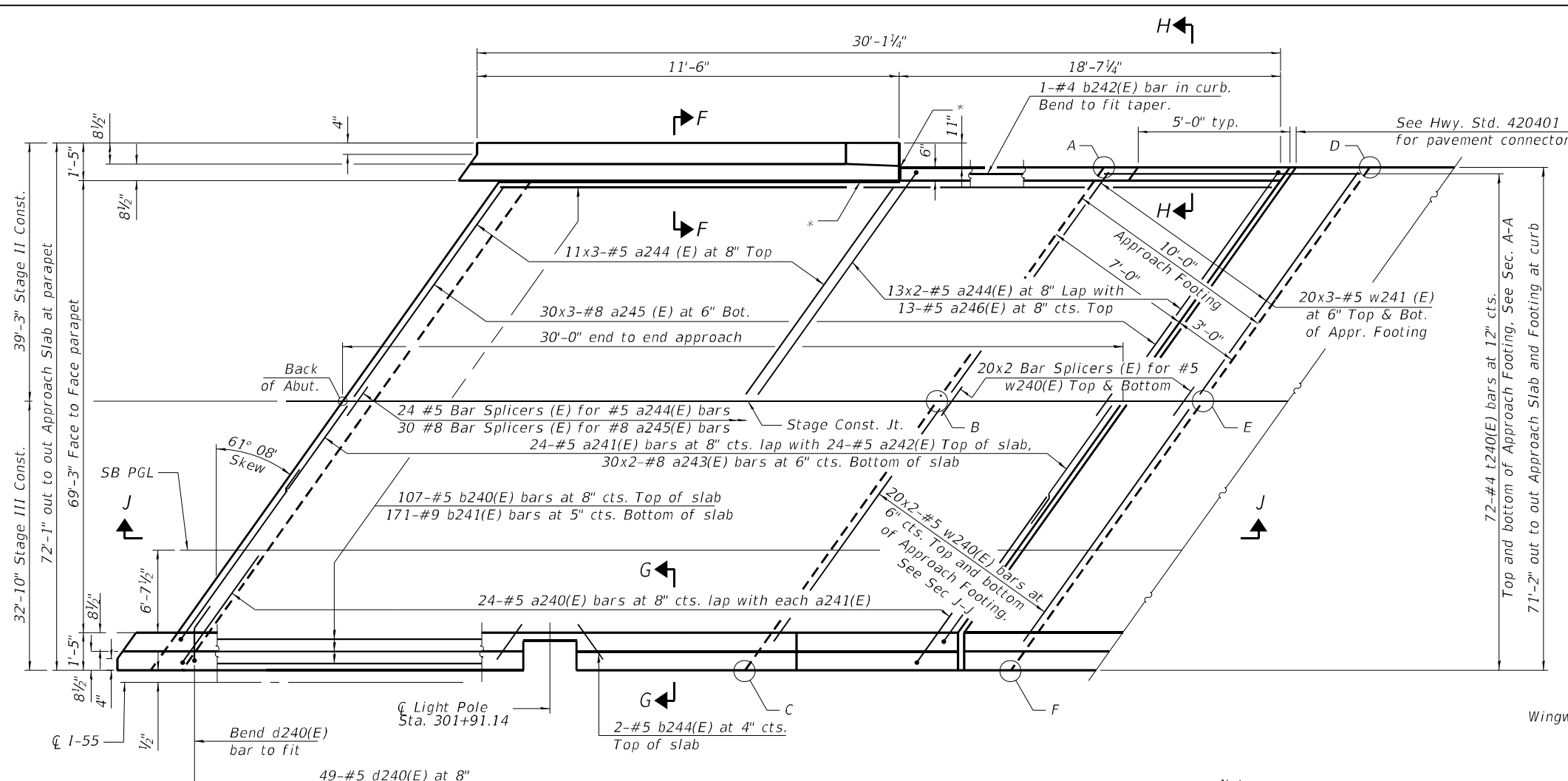
DETAIL A

(@ Rt. L's)

* Cost included with Concrete Superstructure (Approach Slab)
** Per manufacturer recommendations
*** Prior to Grinding

- Notes:
1. 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.
 2. Parapet concrete shall be paid for as Concrete Superstructure.
 3. Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
 4. Approach footing concrete shall be paid for as Concrete Structures.
 5. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
 6. Cost of excavation for approach footing included with Concrete Structures.
 7. For Granular Backfill for Structures and drainage treatment details, see sheet SC-03.
 8. For d200(E) or d240(E) bar bend diagrams see sheet SC-31.

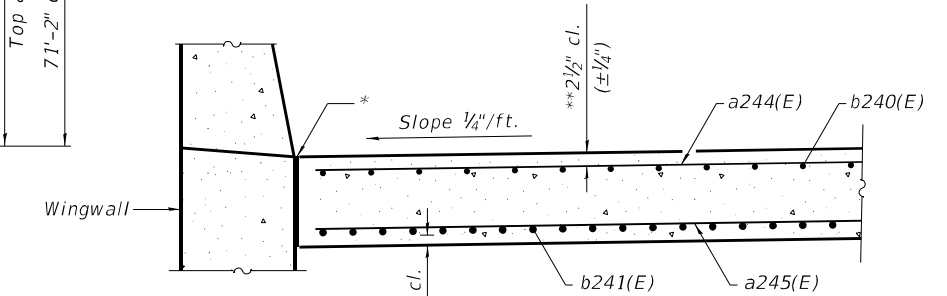
MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-095-0028-60H03-5029-BAR.dgn
5/4/2021 3:02:18 PM



**TOP AND BOTTOM ELEVATIONS
FOR APPROACH FOOTING**

SB - E. Approach		
Point	Top	Bottom
A	751.82	750.99
B	751.91	751.08
C	750.80	749.97
D	752.00	751.17
E	752.09	751.25
F	750.98	750.15

* 1/2" Preformed Expansion Joint Filler according to Article 1051.09 of the Standard Specifications; full depth of slab, full length of parapet.
** Prior to Grinding



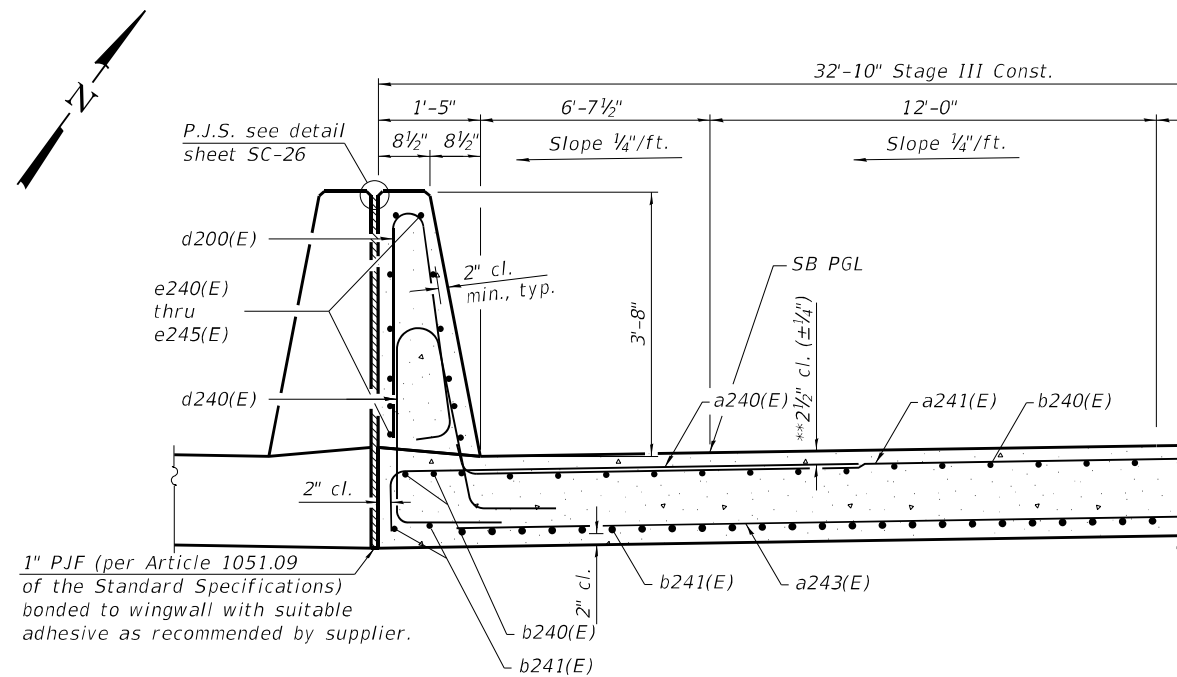
SECTION F-F

PLAN

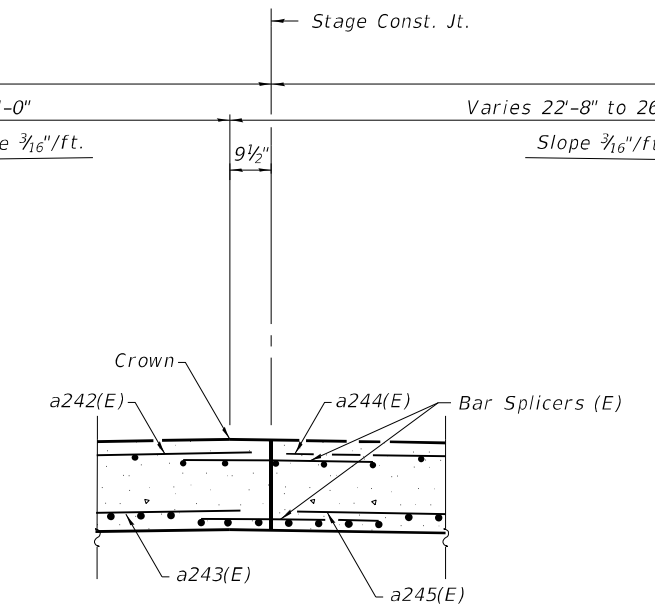
MINIMUM BAR LAP

#5 = 3'-0"
#8 = 4'-9"

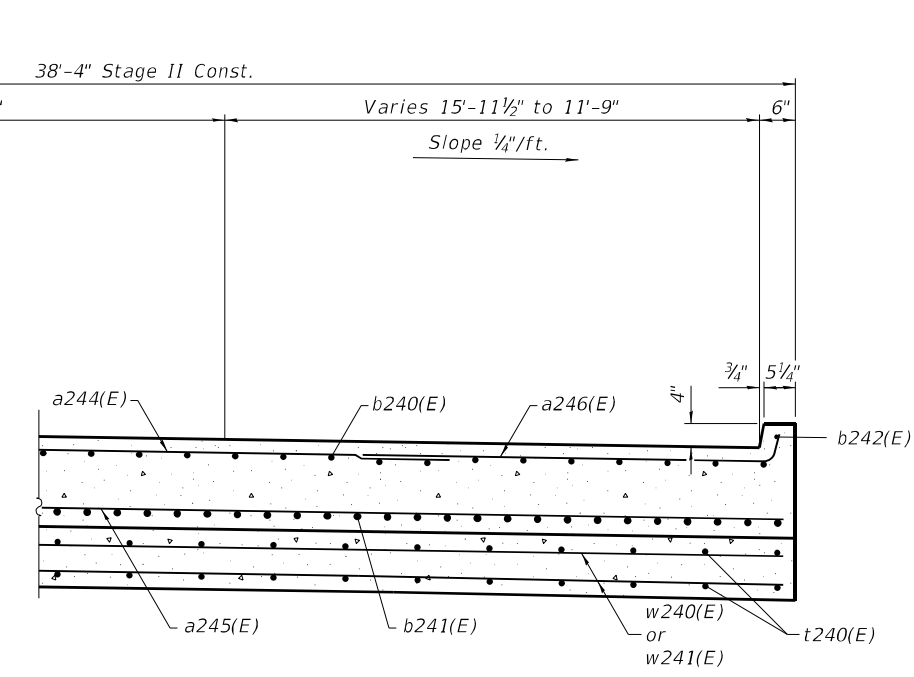
Note:
Bars indicated thus 30X3-#5 etc. indicates 30 lines of bars with 3 lengths per line.



SECTION G-G



**CROSS SECTION
(Looking West)**



SECTION H-H

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-095-0028-60H03-5030-BAR.dgn

GR&E
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631; (773) 399-0112

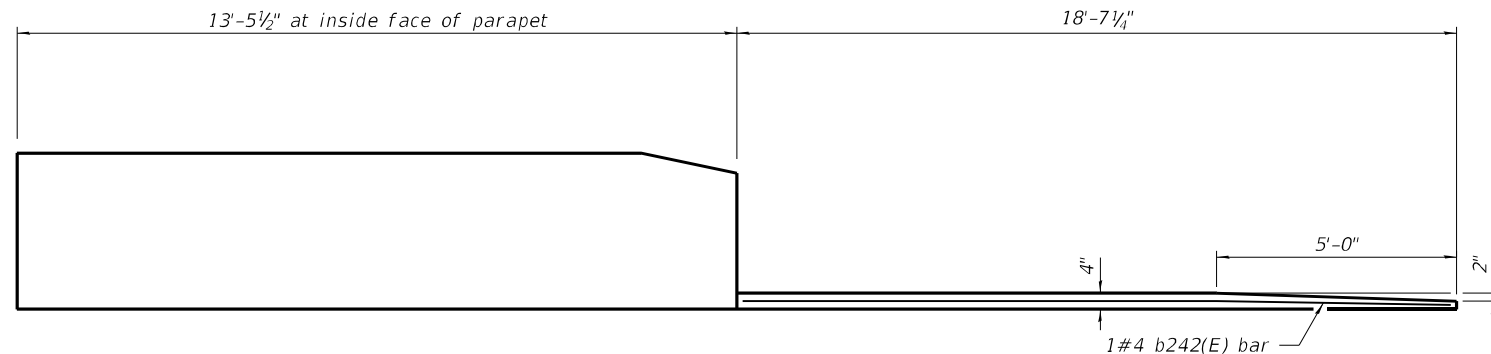
USER NAME =	Structural	DESIGNED -	J.A.Z.	REVISED -	
PLOT SCALE =	N.T.S.	CHECKED -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	DRAWN -	O.M.	REVISED -	
		CHECKED -	J.A.Z.	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SB EAST APPROACH SLAB DETAILS I
SN 099-0028**

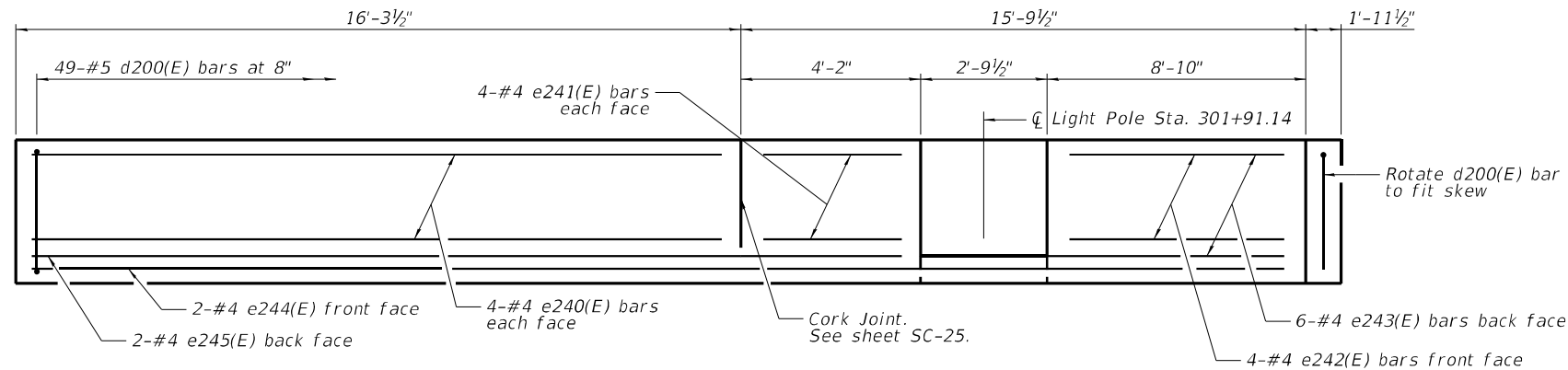
SHEET SC-30 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	310
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				



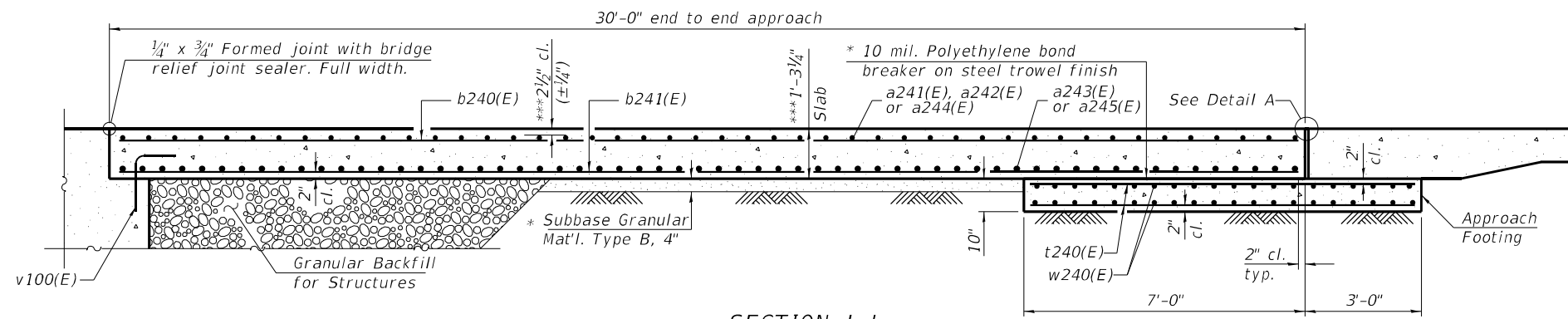
INSIDE ELEVATION OF OUTSIDE PARAPET AND CURB

(Looking North)

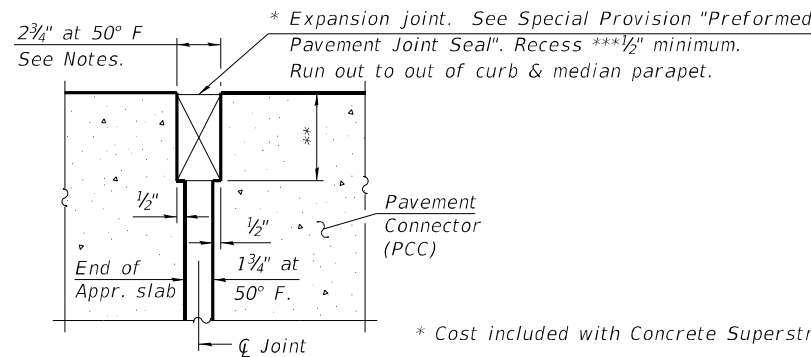


INSIDE ELEVATION OF MEDIAN PARAPET AND CURB

(Looking South)



SECTION J-J



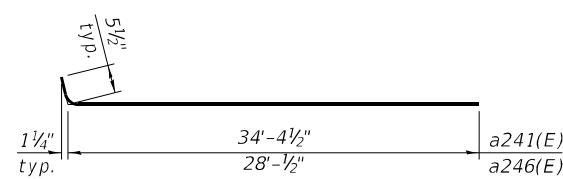
DETAIL A

(@ Rt. L's)

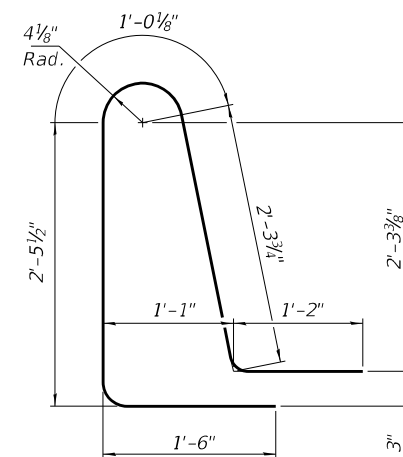
* Cost included with Concrete Superstructure (Approach Slab)

** Per manufacturer recommendations

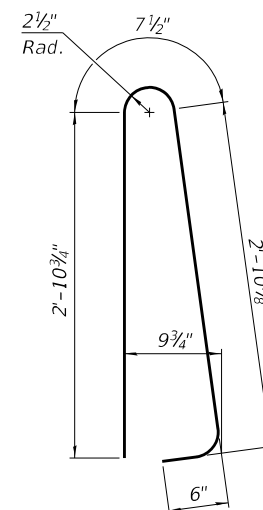
*** Prior to Grinding



BAR a241(E) & a246(E)



BAR d240(E)



BAR d200(E)

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 (Q_{max}) = 2.0 ksf.
- Cost of excavation for approach footing included with Concrete Structures.
- For Granular Backfill for Structures and drainage treatment details, see sheet SC-03.

**SB E. APPROACH
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a240 (E)	24	# 5	7'-4"	U
a241 (E)	24	# 5	34'-10"	U
a242 (E)	24	# 5	34'-4"	U
a243 (E)	60	# 8	36'-8"	U
a244 (E)	59	# 5	28'-0"	U
a245 (E)	90	# 8	29'-4"	U
a246 (E)	13	# 5	28'-6"	U
b240 (E)	107	# 5	29'-8"	U
b241 (E)	171	# 9	29'-8"	U
b242 (E)	1	# 4	18'-2"	U
b244 (E)	4	# 5	4'-0"	U
d200 (E)	49	# 5	7'-0"	U
d240 (E)	49	# 5	8'-6"	U
e240 (E)	8	# 4	15'-11"	U
e241 (E)	8	# 4	3'-10"	U
e242 (E)	4	# 4	8'-7"	U
e243 (E)	6	# 4	10'-6"	U
e244 (E)	2	# 4	31'-10"	U
e245 (E)	2	# 4	20'-1"	U
t240 (E)	144	# 4	20'-0"	U
w240 (E)	80	# 5	35'-6"	U
w241 (E)	120	# 5	28'-2"	U
Concrete Superstructure		Cu. Yd.	6.1	
Concrete Superstructure (Approach Slab)		Cu. Yd.	100.1	
Concrete Structures		Cu. Yd.	46.1	
Reinforcement Bars, Epoxy Coated		Pound	46,980	
Preformed Joint Seal 2 1/2"		Foot	30	

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-095-0028-60H03-5031-1-BAR.dgn
5/4/2021 3:02:19 PM

GR&E
8501 N. Higgins Road, Suite 280
Chicago, Illinois 60631; (773) 399-0112

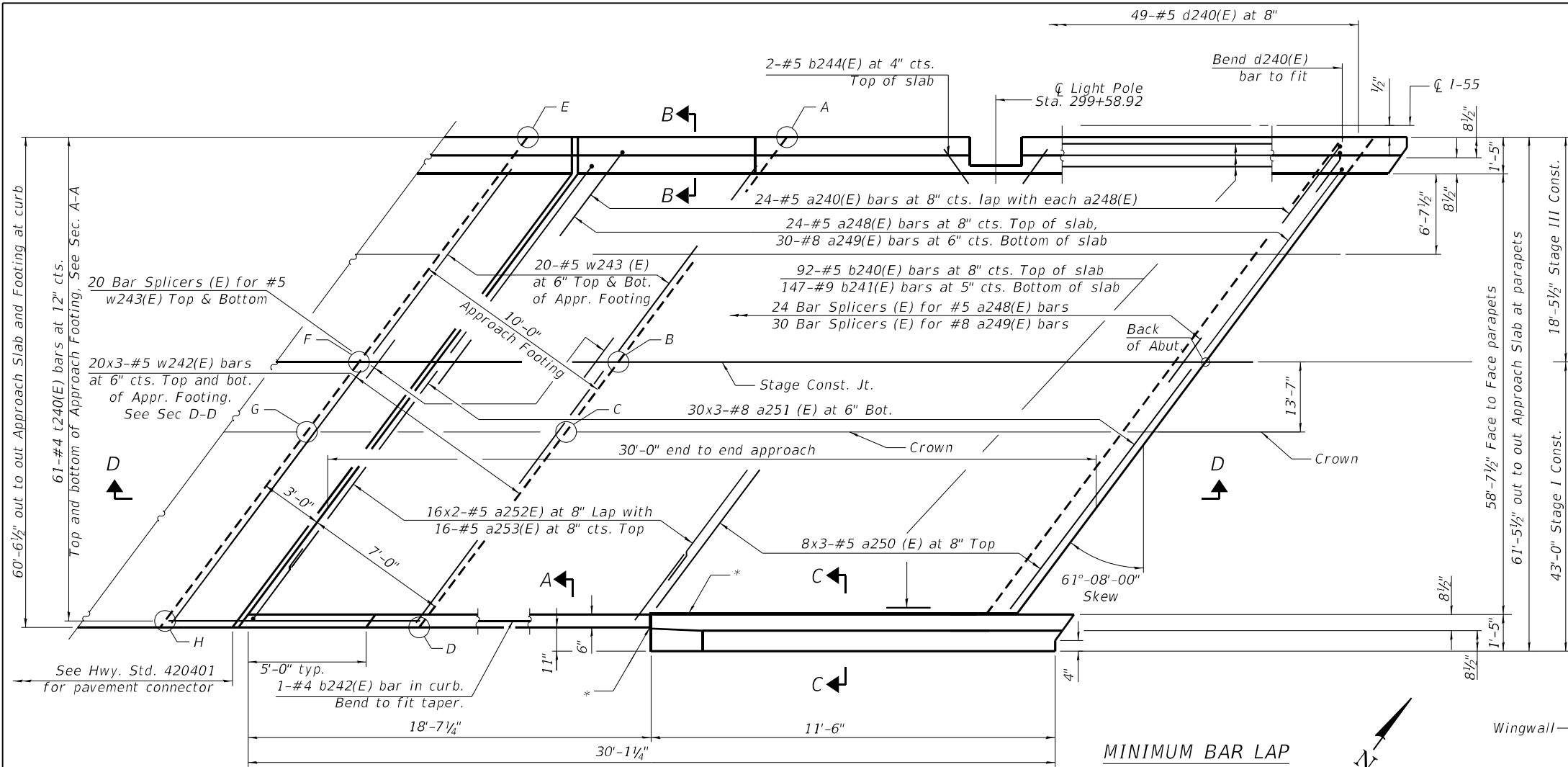
USER NAME	DESIGNED	REVISIONS
Structural	J.A.Z.	
	O.M.	
	O.M.	
	J.A.Z.	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SB EAST APPROACH SLAB DETAILS II
SN 099-0028**

SHEET SC-31 OF SC-73 SHEETS

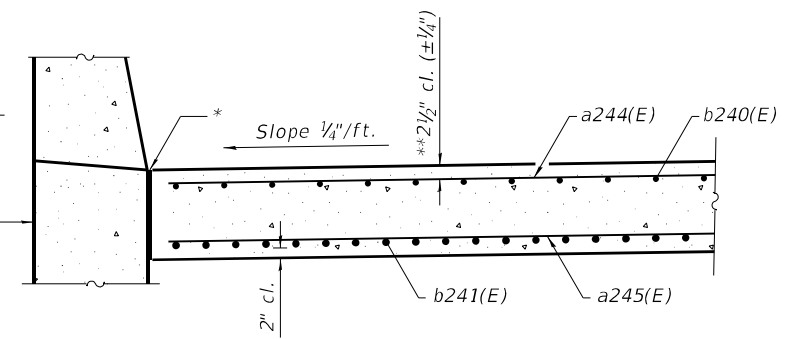
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	311
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				



TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

NB - W. Approach		
Point	Top	Bottom
A	748.55	747.72
B	748.65	747.81
C	748.65	747.82
D	747.67	746.83
E	748.37	747.54
F	748.46	747.63
G	748.47	747.64
H	747.50	746.66

* 1/2" Preformed Expansion Joint Filler according to Article 1051.09 of the Standard Specifications; full depth of slab, full length of parapet.
 ** Prior to Grinding



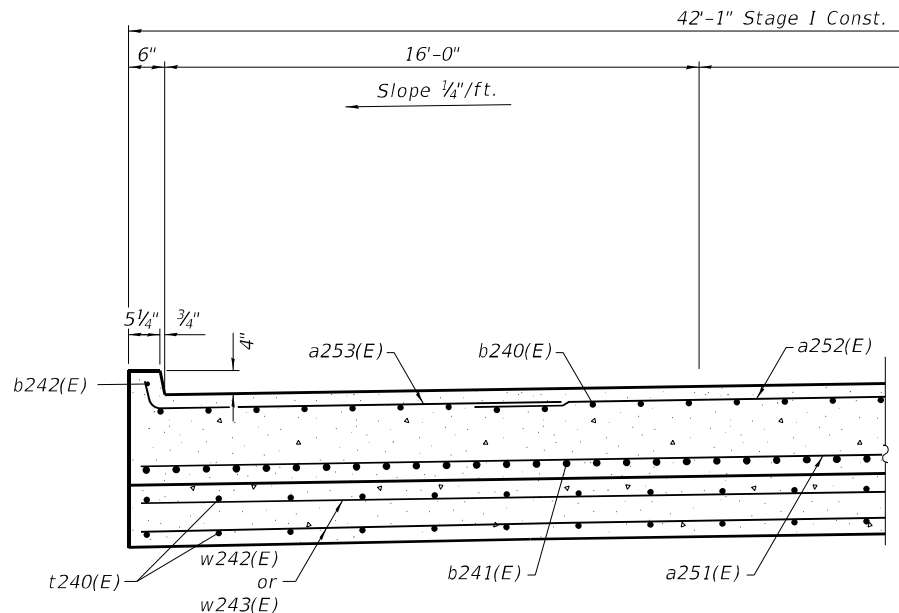
SECTION C-C

MINIMUM BAR LAP

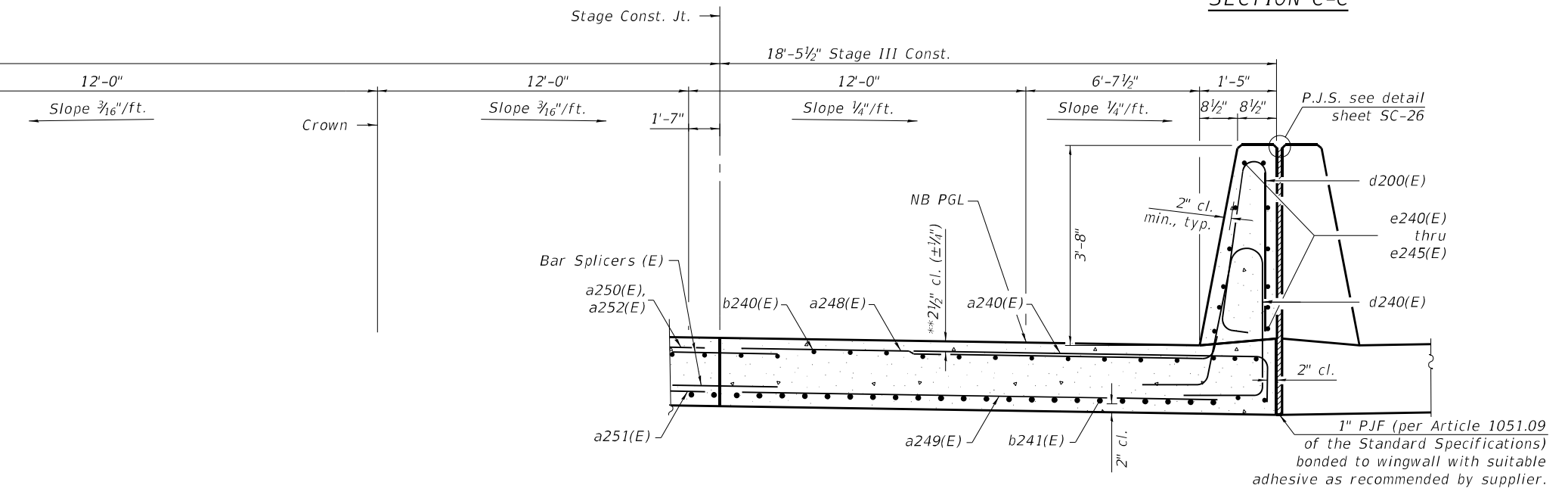
#5 = 3'-0"
 #8 = 4'-9"

Note:
 Bars indicated thus 30x3-#5 etc. indicates 30 lines of bars with 3 lengths per line.

PLAN



SECTION A-A



CROSS SECTION (Looking West)

SECTION B-B

MODEL: Default
 FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-095-0028-60H03-5032-BAR.dgn
 5/4/2021 3:02:20 PM

GR&EF
 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631; (773) 399-0112

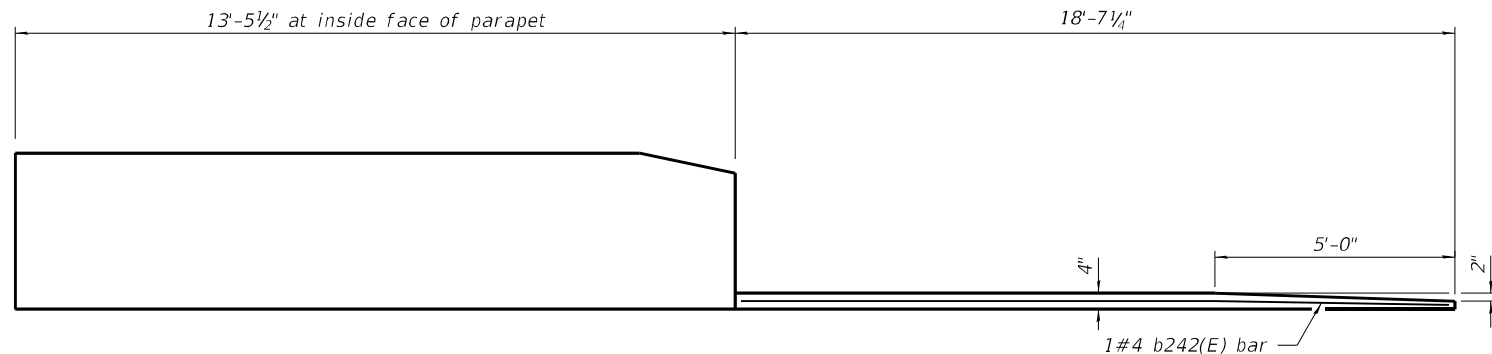
USER NAME = Structural	DESIGNED - O.M.	REVISIONS -
PLOT SCALE = N.T.S.	CHECKED - J.A.Z.	REVISIONS -
PLOT DATE = 5/4/2021	DRAWN - O.M.	REVISIONS -
	CHECKED - J.A.Z.	REVISIONS -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

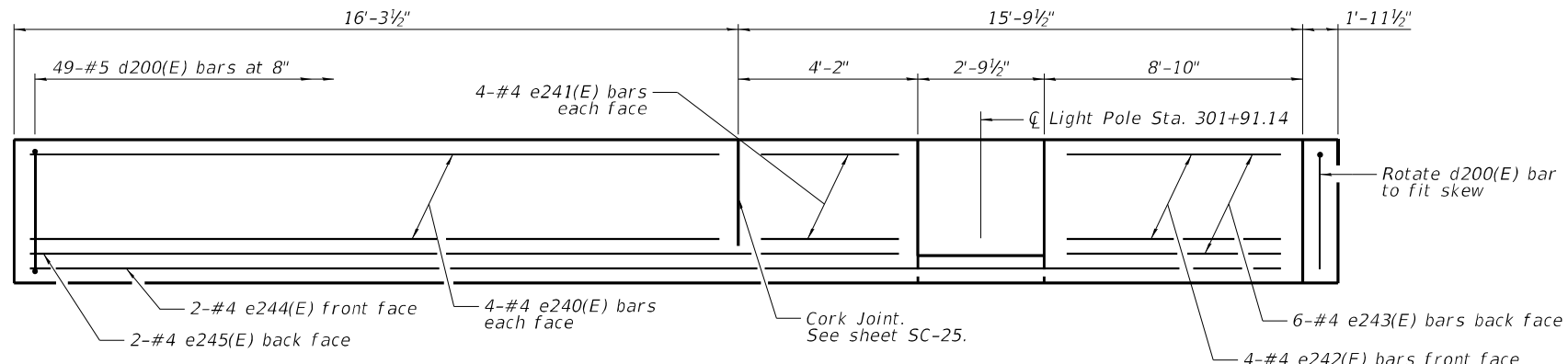
**NB WEST APPROACH SLAB DETAILS I
 SN 099-0028**

F.A.I. RTE. 55	SECTION 2018-043-BD&BJR	COUNTY WILL	TOTAL SHEETS 430	SHEET NO. 312
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				

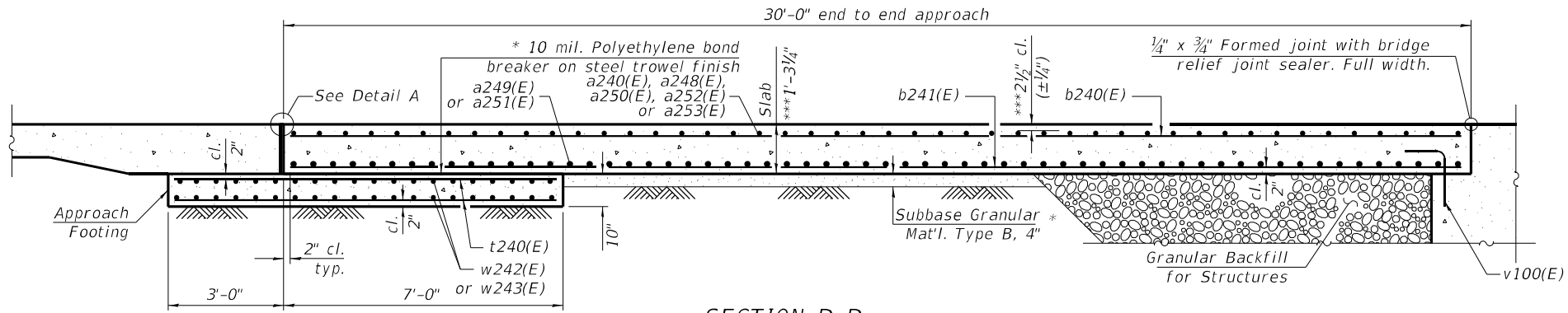
SHEET SC-32 OF SC-73 SHEETS



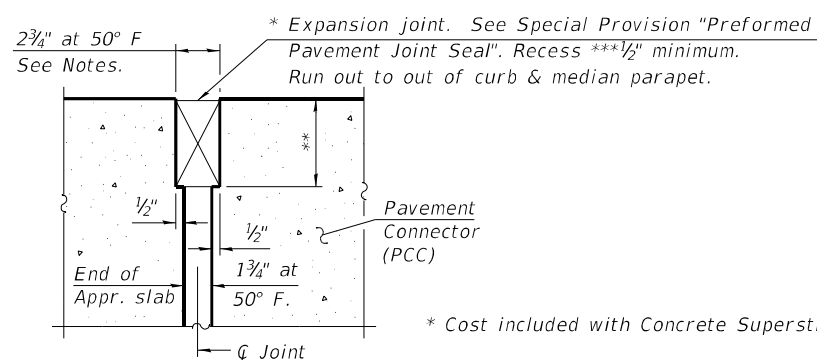
INSIDE ELEVATION OF OUTSIDE PARAPET AND CURB
(Looking South)



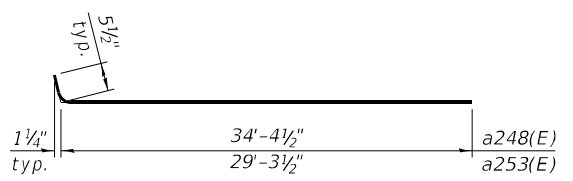
INSIDE ELEVATION OF MEDIAN PARAPET AND CURB
(Looking North)



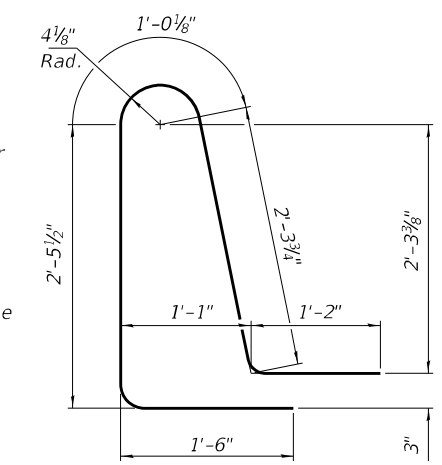
SECTION D-D



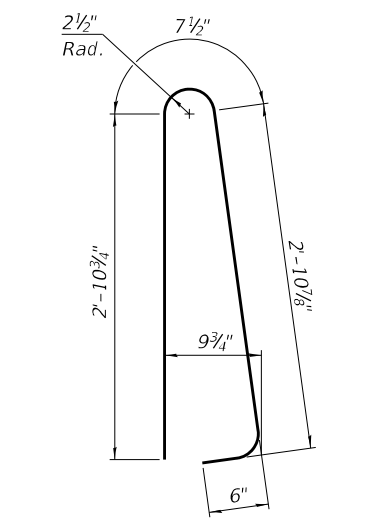
DETAIL A
(@ Rt. L's)



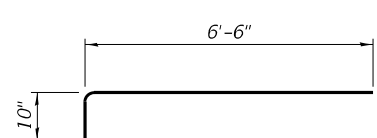
BAR a248(E) & a253(E)



BAR d240(E)



BAR d200(E)



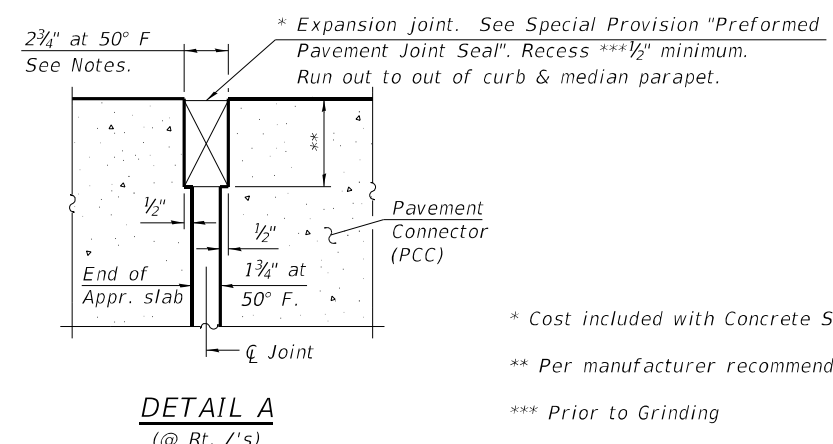
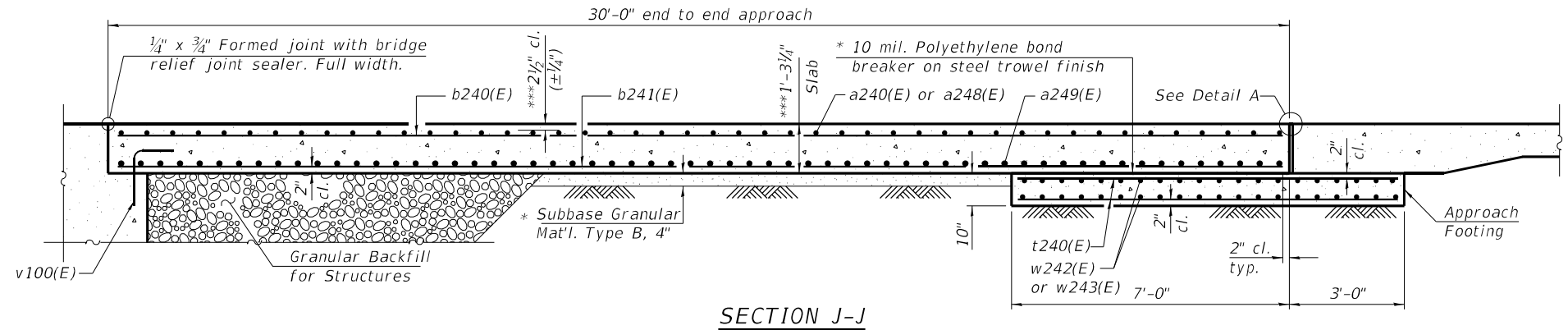
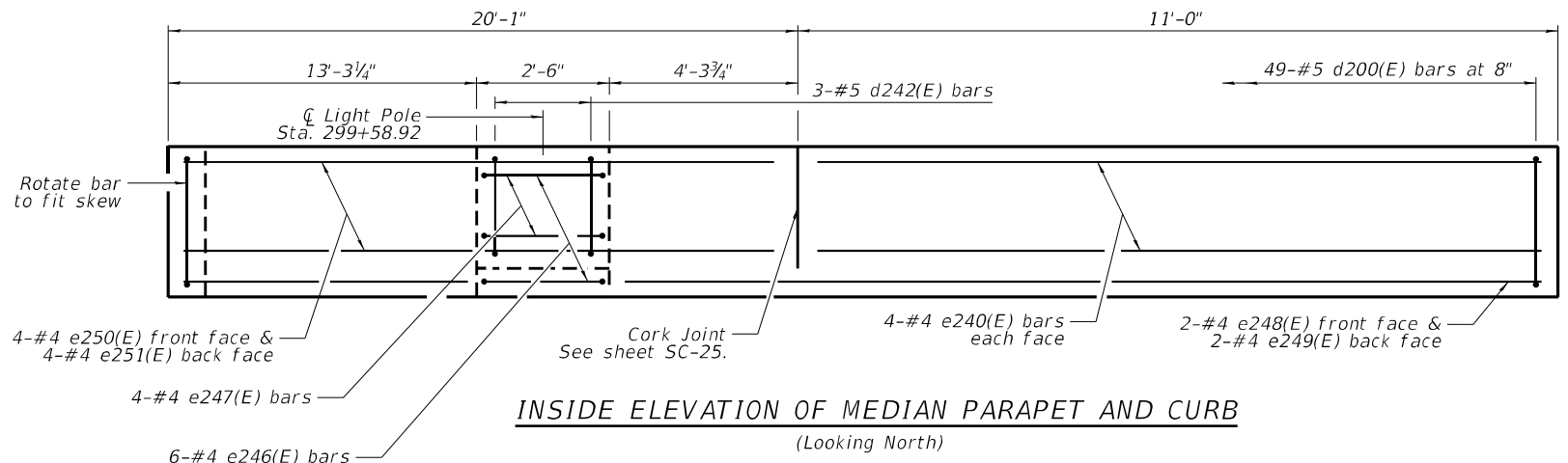
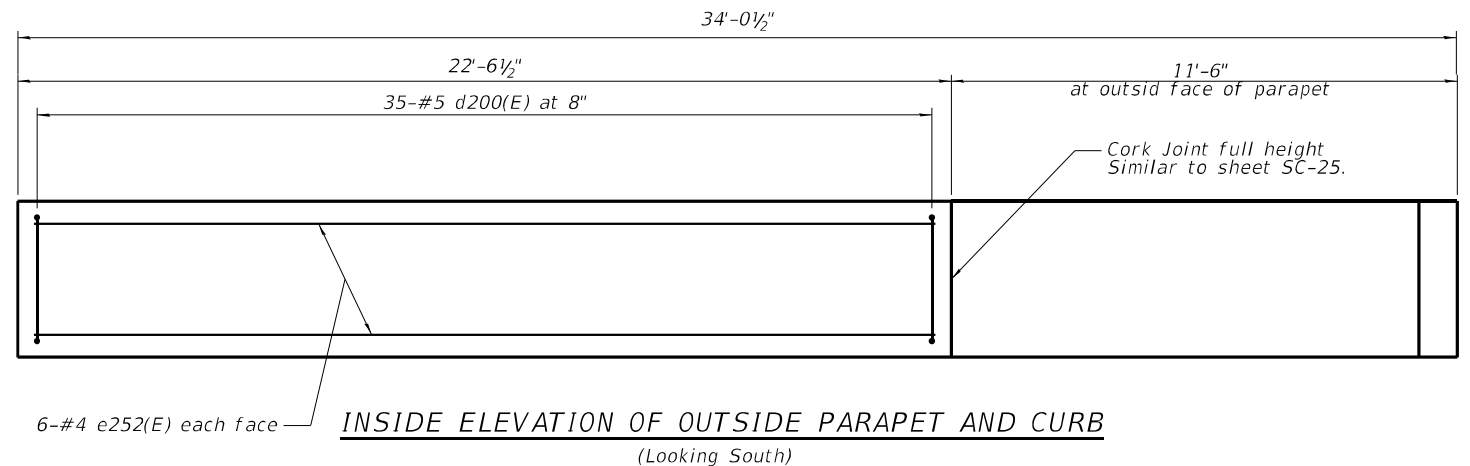
BAR a240(E)

- Notes:
1. 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.
 2. Parapet concrete shall be paid for as Concrete Superstructure.
 3. Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
 4. Approach footing concrete shall be paid for as Concrete Structures.
 5. The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
 6. Cost of excavation for approach footing included with Concrete Structures.
 7. For Granular Backfill for Structures and drainage treatment details, see sheet SC-03.

**N.B. W. APPROACH
BILL OF MATERIAL**

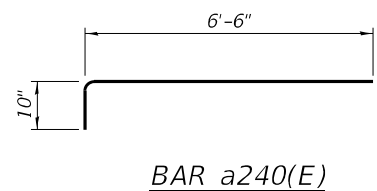
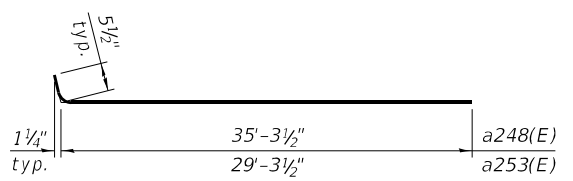
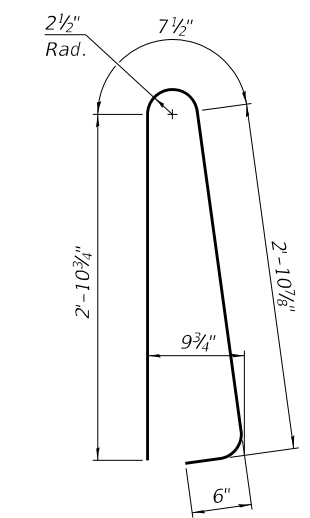
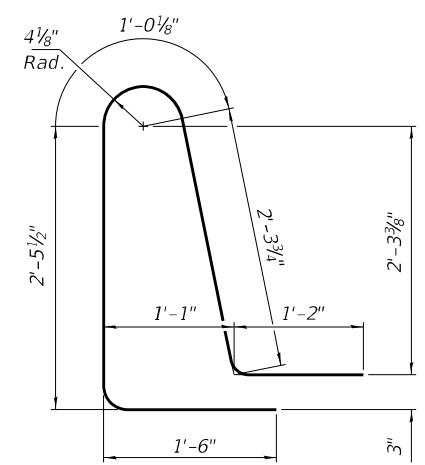
Bar	No.	Size	Length	Shape
a240 (E)	24	# 5	7'-4"	U
a248 (E)	24	# 5	35'-9"	U
a249 (E)	30	# 8	37'-6"	U
a250 (E)	24	# 5	30'-8"	U
a251 (E)	90	# 8	32'-9"	U
a252 (E)	32	# 5	32'-9"	U
a253 (E)	16	# 5	29'-9"	U
b240 (E)	92	# 5	29'-8"	U
b241 (E)	147	# 9	29'-8"	U
b242 (E)	1	# 4	18'-2"	U
b244 (E)	4	# 5	4'-0"	U
d200 (E)	49	# 5	7'-0"	U
d240 (E)	49	# 5	8'-6"	U
e240 (E)	8	# 4	15'-11"	U
e241 (E)	8	# 4	3'-10"	U
e242 (E)	4	# 4	8'-7"	U
e243 (E)	6	# 4	10'-6"	U
e244 (E)	2	# 4	31'-10"	U
e245 (E)	2	# 4	20'-1"	U
t240 (E)	122	# 4	20'-0"	U
w242 (E)	120	# 5	31'-9"	U
w243 (E)	40	# 5	37'-11"	U
Concrete Superstructure			Cu. Yd.	6.1
Concrete Superstructure (Approach Slab)			Cu. Yd.	85.4
Concrete Structures			Cu. Yd.	39.3
Reinforcement Bars, Epoxy Coated			Pound	40,230

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-095-0028-60H03-5033-BAR.dgn
5/4/2021 3:02:21 PM



* Cost included with Concrete Superstructure (Approach Slab)
 ** Per manufacturer recommendations
 *** Prior to Grinding

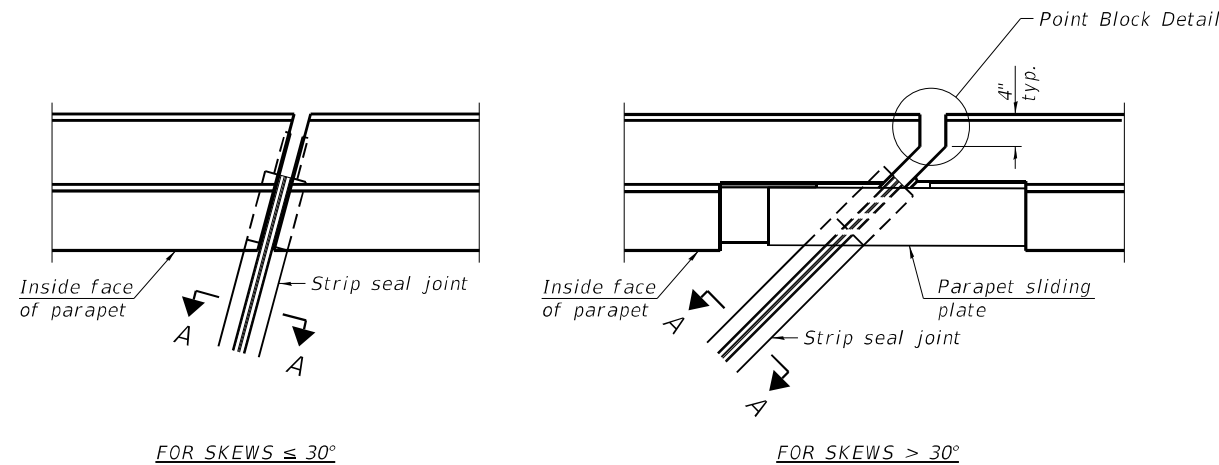
- Notes:
1. The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.
 2. Parapet concrete shall be paid for as Concrete Superstructure.
 3. Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
 4. Approach footing concrete shall be paid for as Concrete Structures.
 5. The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
 6. Cost of excavation for approach footing included with Concrete Structures.
 7. For Granular Backfill for Structures and drainage treatment details, see sheet SC-03.
 8. For e246(E) or e247(E) bar bend diagrams see sheet SC-29.



**NB E. APPROACH
BILL OF MATERIAL**

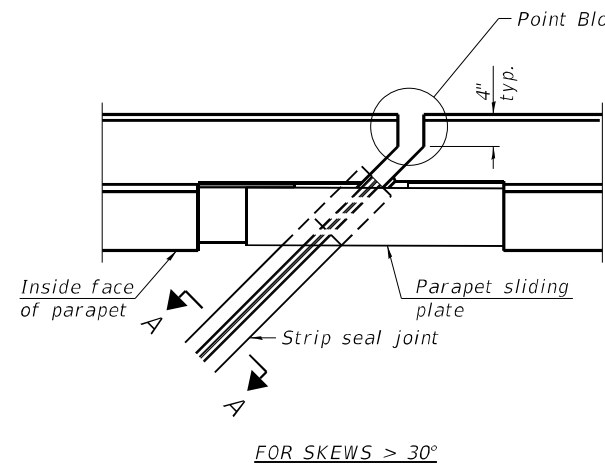
Bar	No.	Size	Length	Shape
a240 (E)	40	# 5	7'-4"	U
a248 (E)	24	# 5	35'-9"	U
a249 (E)	30	# 8	37'-6"	U
a250 (E)	24	# 5	30'-8"	U
a251 (E)	90	# 8	32'-9"	U
a252 (E)	32	# 5	32'-9"	U
a253 (E)	16	# 5	29'-9"	U
b240 (E)	92	# 5	29'-8"	U
b241 (E)	147	# 9	29'-8"	U
d200 (E)	84	# 5	7'-0"	U
d240 (E)	84	# 5	8'-6"	U
d241 (E)	4	# 6	6'-4"	L
d242 (E)	3	# 5	3'-6"	L
e240 (E)	8	# 4	15'-11"	U
e246 (E)	8	# 4	8'-3"	U
e247 (E)	4	# 4	4'-5"	U
e248 (E)	2	# 4	30'-8"	U
e249 (E)	2	# 4	28'-8"	U
e250 (E)	4	# 4	19'-8"	U
e251 (E)	4	# 4	17'-8"	U
e252 (E)	12	# 4	22'-2"	U
t240 (E)	124	# 4	20'-0"	U
w242 (E)	120	# 5	31'-9"	U
w243 (E)	40	# 5	37'-11"	U
Concrete Superstructure		Cu. Yd.	8.7	
Concrete Superstructure (Approach Slab)		Cu. Yd.	85.4	
Concrete Structures		Cu. Yd.	39.3	
Reinforcement Bars, Epoxy Coated		Pound	41,220	

MODEL: Default
FILE NAME: X:\OH\19\2019\3008-03\Design\Design Files\62H03\CAD_Sheets\030-095-0028-60H03-5035-BAR.dgn
5/4/2021 3:02:23 PM

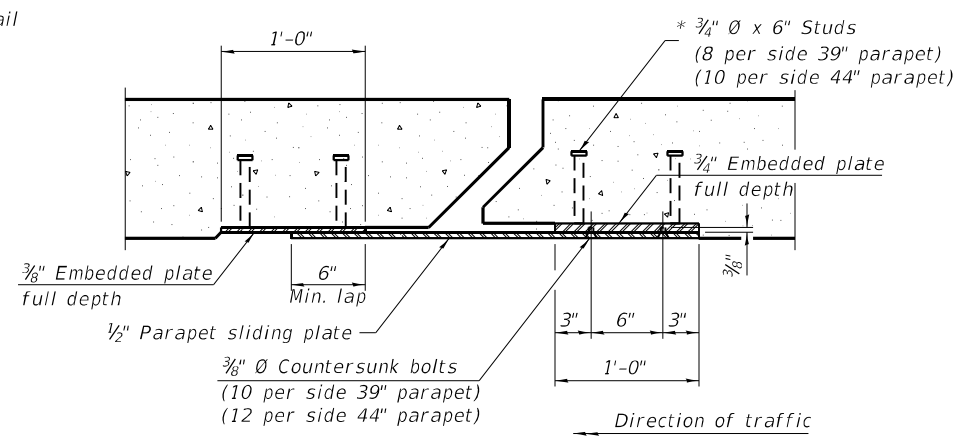


FOR SKEWS $\leq 30^\circ$

PLAN AT PARAPET



FOR SKEWS $> 30^\circ$



SECTION B-B

Direction of traffic

Notes:

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

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4 1/2" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

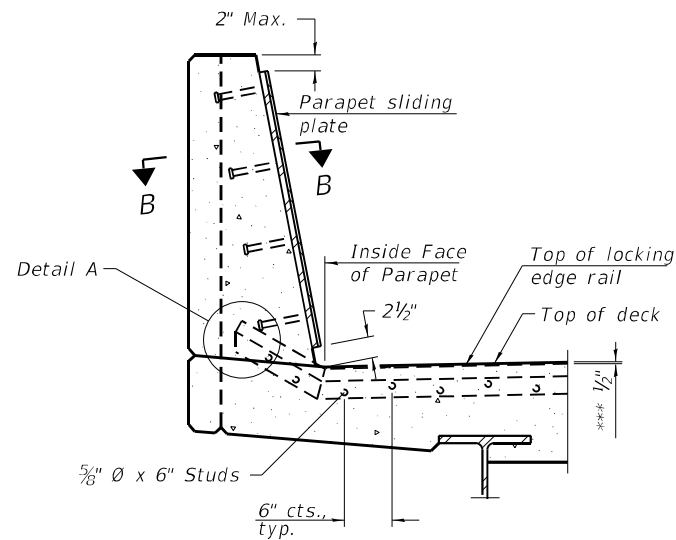
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

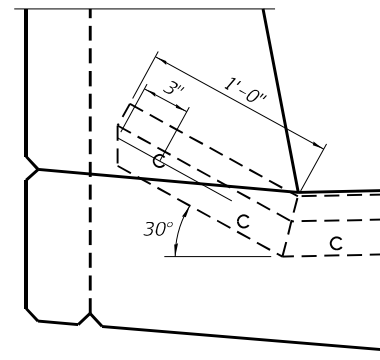
39" constant slope barrier shown, 44" constant slope barrier similar as noted.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

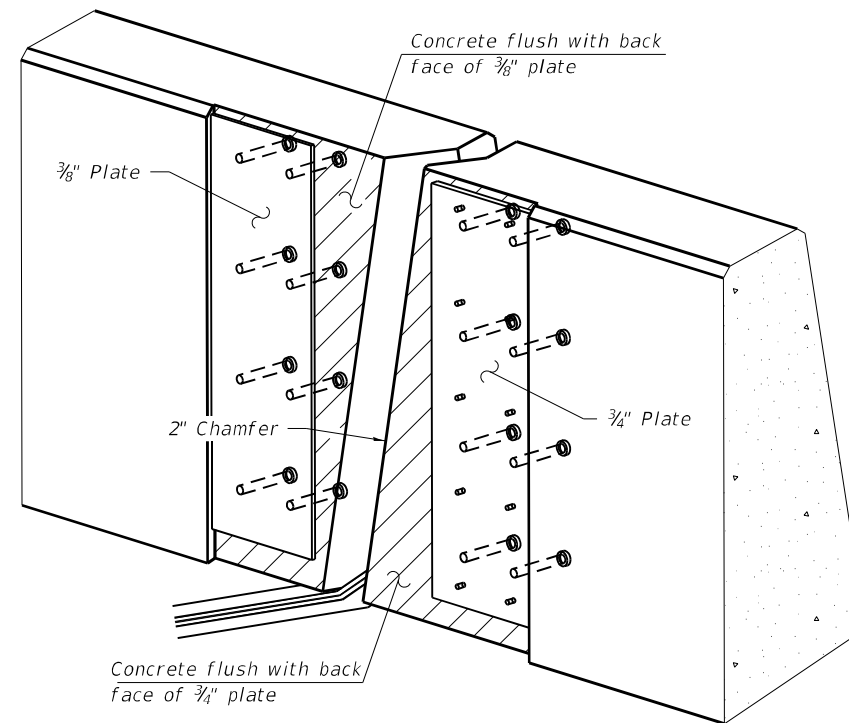


SECTION AT PARAPET

(Skews $> 30^\circ$ shown. Skews $\leq 30^\circ$ similar except as shown in plan view.)

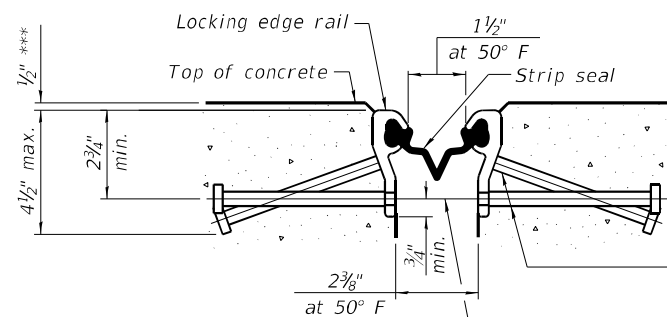


DETAIL A



TRIMETRIC VIEW

(Showing embedded plates only)



SHOWING ROLLED RAIL JOINT

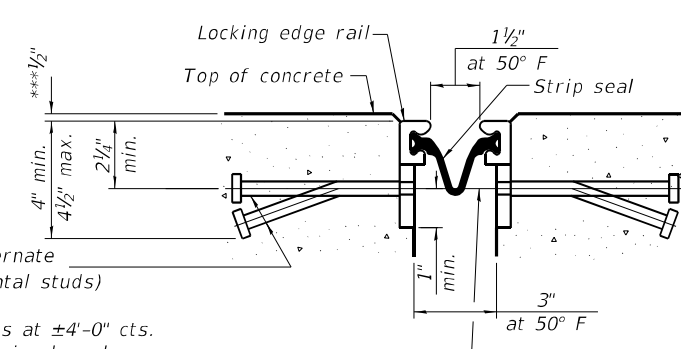
* 3/8" ϕ x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

3/8" ϕ threaded rods in 1/16" ϕ holes at ± 4 -0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

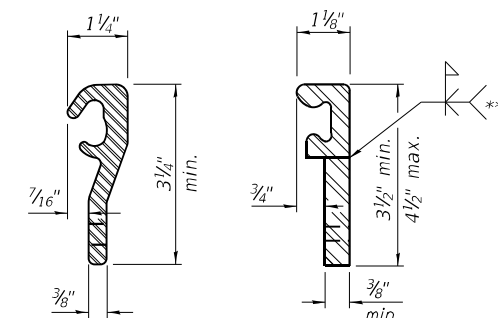
SECTION A-A

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

*** Prior to Grinding



SHOWING WELDED RAIL JOINT

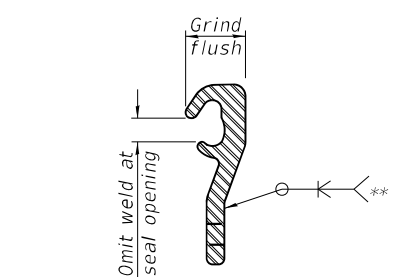


ROLLED (EXTRUDED) RAIL

WELDED RAIL

LOCKING EDGE RAILS

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



LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	546

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5037-EXP.dgn

GR&E
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631; (773) 399-0112

USER NAME =	Structural
PLOT SCALE =	N.T.S.
PLOT DATE =	5/4/2021

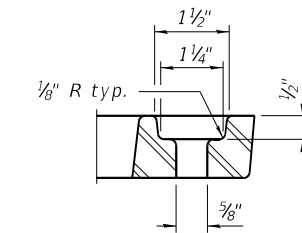
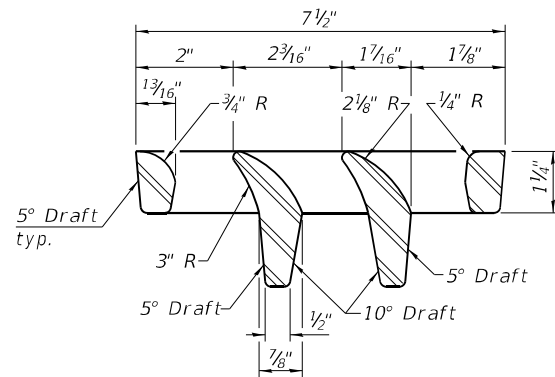
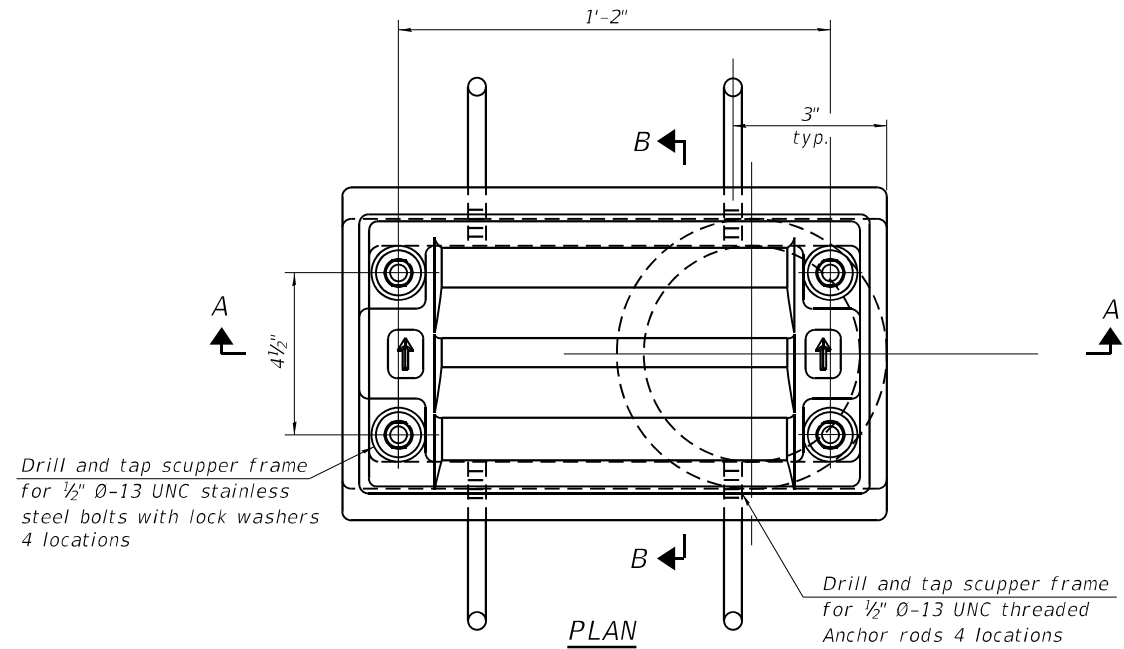
DESIGNED -	J.A.Z.	REVISED -	
CHECKED -	H.A.	REVISED -	
DRAWN -	O.M.	REVISED -	
CHECKED -	J.A.Z.	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PREFORMED JOINT STRIP SEAL
SN 099-0028**

SHEET SC-37 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	317
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				



Drill and tap scupper frame for 1/2" Ø-13 UNC stainless steel bolts with lock washers 4 locations

Drill and tap scupper frame for 1/2" Ø-13 UNC threaded Anchor rods 4 locations

Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M105, Class 35B and AASHTO M306.

Bolts, anchor rods, nuts and washers shall be according to ASTM A307 and shall be galvanized according to AASHTO M232. As an alternate stainless steel may be used.

Stainless steel hardware shall be according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frames and downspouts; however, the scupper grates shall remain cast iron. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval.

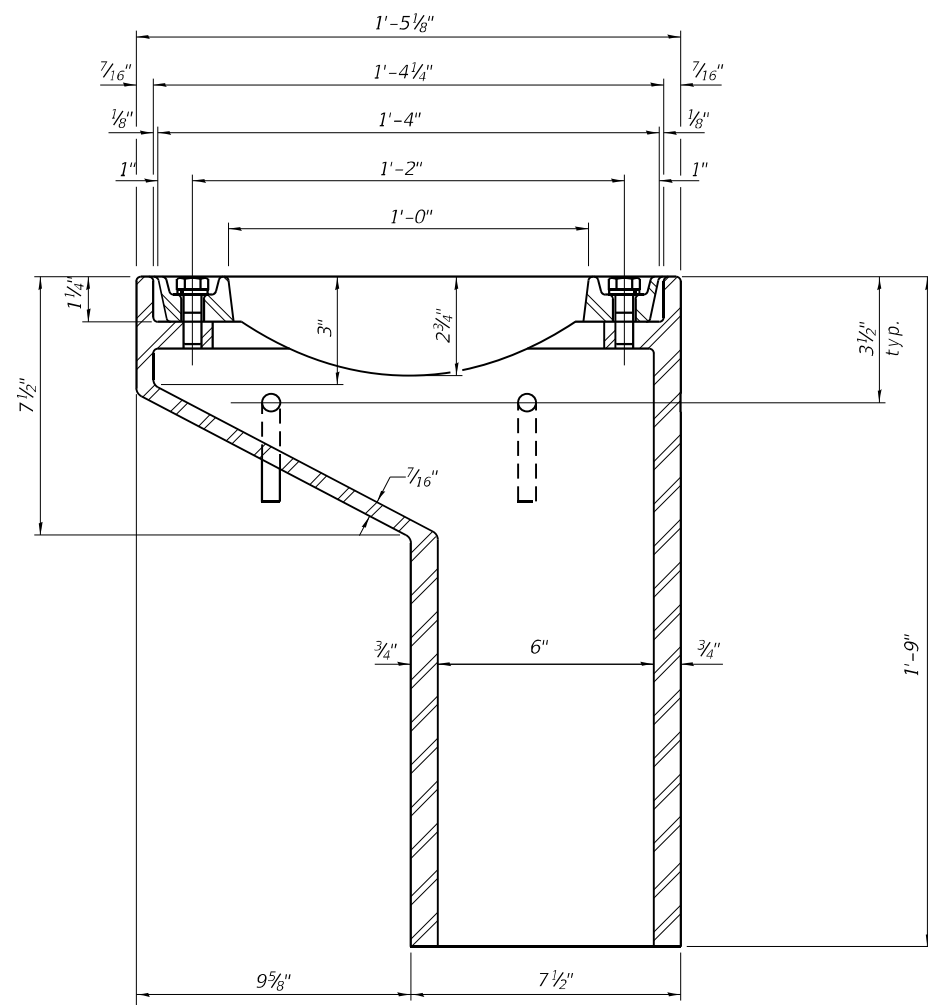
Structural steel scupper frames and downspouts, when utilized, shall be galvanized according to AASHTO M111.

As an alternate, fiberglass may be used for downspouts according to ASTM D2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. in lieu of the cast iron or structural steel.

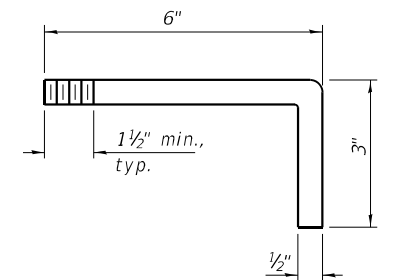
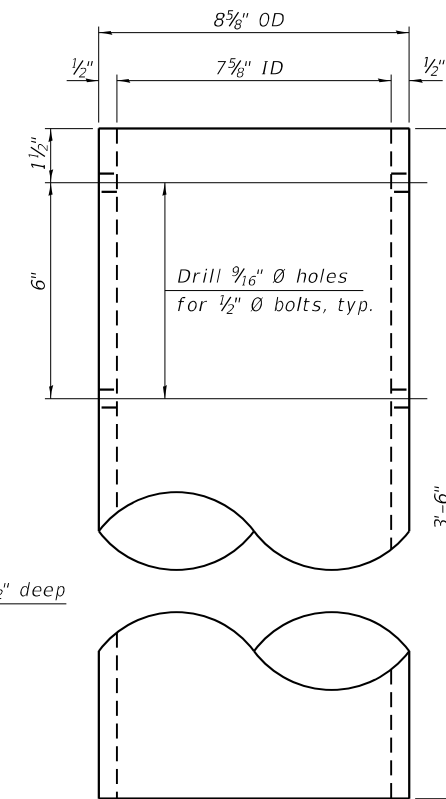
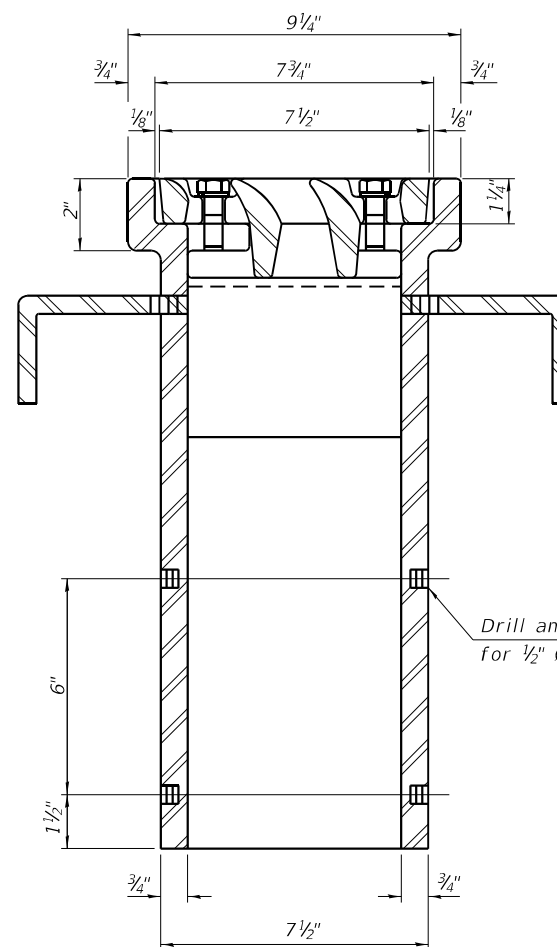
Exterior surfaces of downspouts and exterior exposed surfaces of the scupper frame below deck shall be treated as specified on sheet SC-01.

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

Cost of the grate, frame, downspout, anchor rods, nuts and washers including complete installation of the scupper shall be paid for at the contract unit price for Drainage Scupper, DS-11.



SECTION A-A
See sheet SC-25 for scupper location relative to parapet.



BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	4.0

DS-11

1-1-2020

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5038-DRN.dgn

GR&E
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631; (773) 399-0112

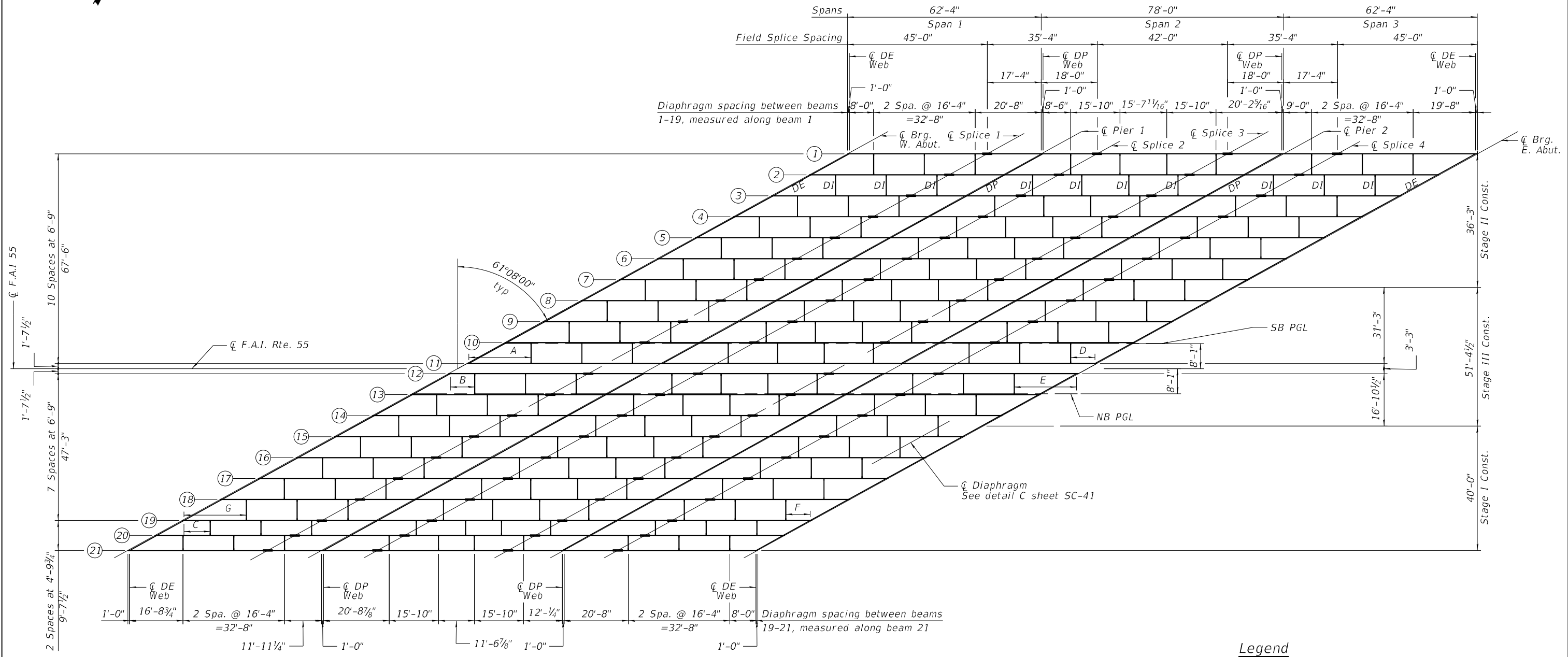
USER NAME =	Structural	DESIGNED -	J.A.Z.	REVISED -	
		CHECKED -	H.A.	REVISED -	
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	CHECKED -	H.A.	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER DS-11
SN 099-0028

SHEET SC-38 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	318
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				



A	20'-2 15/16"
B	8'-0"
C	8'-0"
D	7'-5 1/16"
E	19'-8"
F	7'-5 1/16"
G	19'-8"

FRAMING PLAN

Legend

- DE = End Diaphragm, See sheet SC-41.
- DI = Interior Diaphragm, See sheet SC-41.
- DP = Pier Diaphragm, See sheet SC-41.

Note:
 All diaphragms between beams shall be installed with erection pins and bolts in accordance with the erection plan approved by the Engineer. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

MODEL: Default
 FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5039-FRM.dgn
 5/4/2021 3:02:27 PM

GR&EF
 8501 W. Higgins Road, Suite 280
 Chicago, Illinois 60631; (773) 399-0112

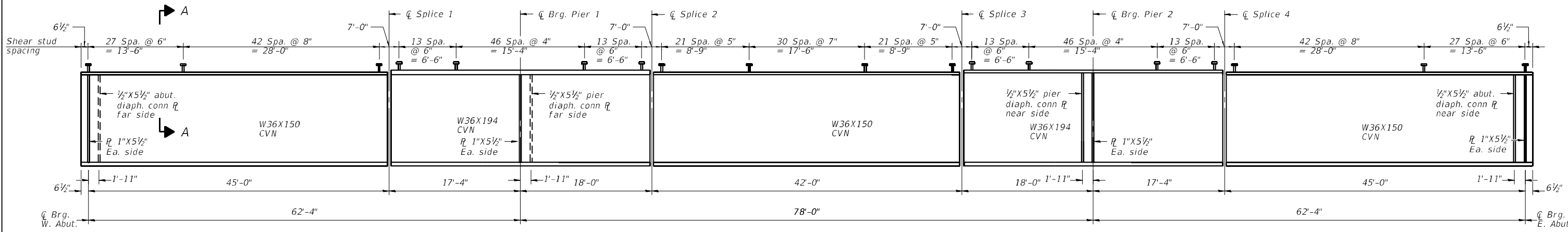
USER NAME =	Structural	DESIGNED -	K.W.	REVISED -	
CHECKED -		H.A.	REVISED -		
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	CHECKED -	K.W.	REVISED -	

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

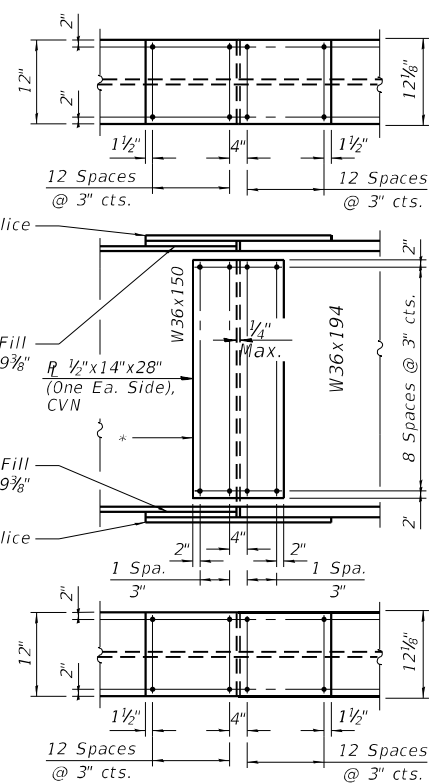
**FRAMING PLAN
 SN 099-0028**

SHEET SC-39 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	319
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				



BEAM ELEVATION

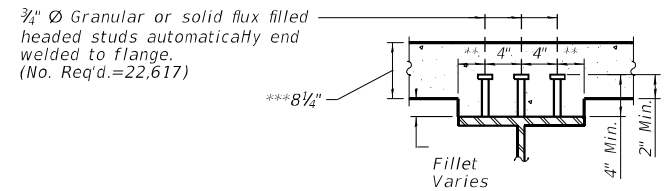


FIELD SPLICE DETAIL

TOP OF BEAM ELEVATIONS (For Fabrication Only)								
	℄ Brg. W. Abut.	℄ Splice #1	℄ Brg. Pier 1	℄ Splice #2	℄ Splice #3	℄ Brg. Pier 2	℄ Splice #4	℄ Brg. E. Abut.
Beam 1	750.33	750.83	750.88	751.14	751.50	751.55	751.80	752.05
Beam 2	750.36	750.87	750.92	751.17	751.53	751.58	751.83	752.09
Beam 3	750.40	750.90	750.96	751.21	751.57	751.62	751.87	752.13
Beam 4	750.40	750.91	750.97	751.22	751.58	751.64	751.89	752.15
Beam 5	750.40	750.91	750.97	751.22	751.58	751.64	751.89	752.15
Beam 6	750.40	750.91	750.97	751.22	751.58	751.64	751.89	752.15
Beam 7	750.29	750.81	750.86	751.11	751.48	751.53	751.78	752.04
Beam 8	750.08	750.60	750.65	750.90	751.27	751.32	751.57	751.83
Beam 9	749.85	750.36	750.41	750.66	751.03	751.08	751.33	751.60
Beam 10	749.60	750.11	750.16	750.42	750.78	750.84	751.08	751.35
Beam 11	749.35	749.87	749.92	750.17	750.54	750.59	750.84	751.10
Beam 12	749.14	749.66	749.71	749.97	750.34	750.40	750.65	750.92
Beam 13	749.18	749.69	749.75	750.01	750.37	750.43	750.67	750.95
Beam 14	749.21	749.73	749.78	750.04	750.41	750.46	750.71	750.98
Beam 15	749.23	749.75	749.81	750.06	750.43	750.49	750.74	751.01
Beam 16	749.23	749.75	749.80	750.06	750.43	750.49	750.74	751.01
Beam 17	749.13	749.65	749.70	749.96	750.32	750.38	750.63	750.90
Beam 18	748.92	749.43	749.49	749.74	750.11	750.17	750.42	750.69
Beam 19	748.68	749.20	749.25	749.50	749.87	749.93	750.18	750.45
Beam 20	748.50	749.02	749.07	749.33	749.70	749.76	750.00	750.27
Beam 21	748.33	748.84	748.90	749.15	749.52	749.58	749.83	750.10

- Notes:
- Load carrying components designated "CVN" shall conform to the Charpy-V-Notch impact energy requirements, zone 2.
 - All Beams and Splice Plates Shall be M 270 Grade 50.

* Web filler plate (Req'd at both sides of W36x150 web).
℄ 1/16"x6 7/8"x28"



SECTION A-A

** 2" - W36x150, 2-1/16" - W36x194
*** Prior to Grinding

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5040-DET.dgn

GR&E
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631; (773) 399-0112

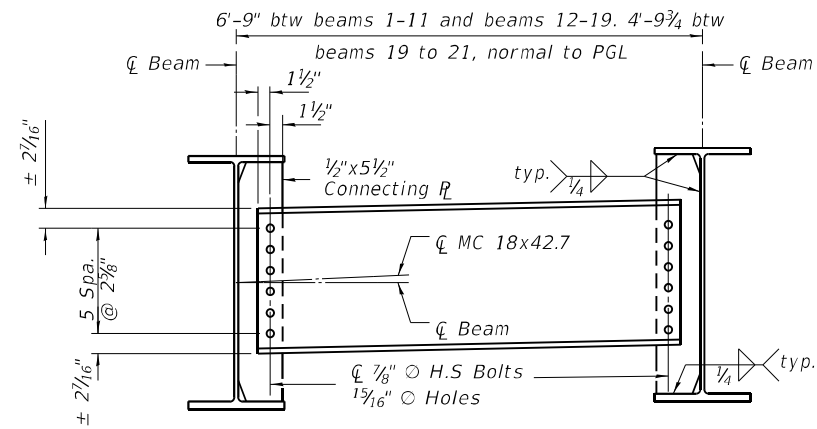
USER NAME =	Structural	DESIGNED -	K.W.	REVISED -	
CHECKED -	H.A.	REVISOR -			
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	CHECKED -	K.W.	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE STEEL DETAILS I
SN 099-0028

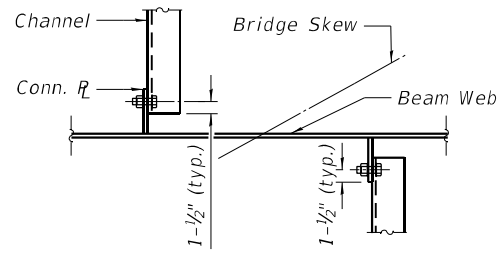
SHEET SC-40 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	320
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				

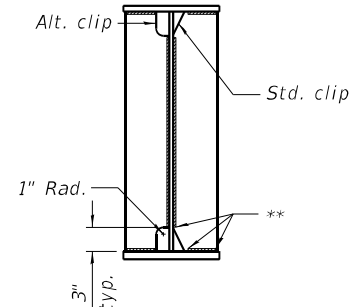


INTERIOR DIAPHRAGM "DI" CONNECTION DETAILS

Note:
Two hardened washers required for each set of standard size holes. Oversized holes are not allowed at interior diaphragm connections. Alternate channels of equal depth, and larger weight are permitted to facilitate material acquisition. Alternate channels, if utilized, shall be provided at no additional cost to the Department. See Detail C for connection plate orientation.

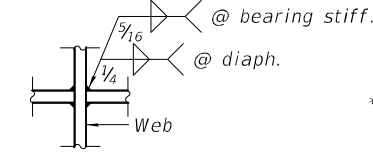


**DETAIL C
INTERIOR DIAPHRAGM
"DI" CONNECTION**

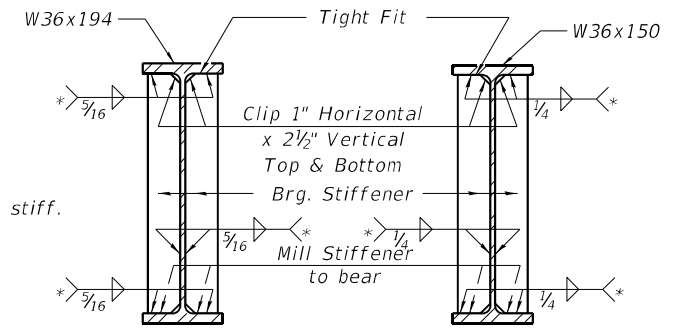


**WELD LIMITS
AND CLIP DETAILS**

** Stop welds 1/4" (± 1/8") from edges as shown. Typical.



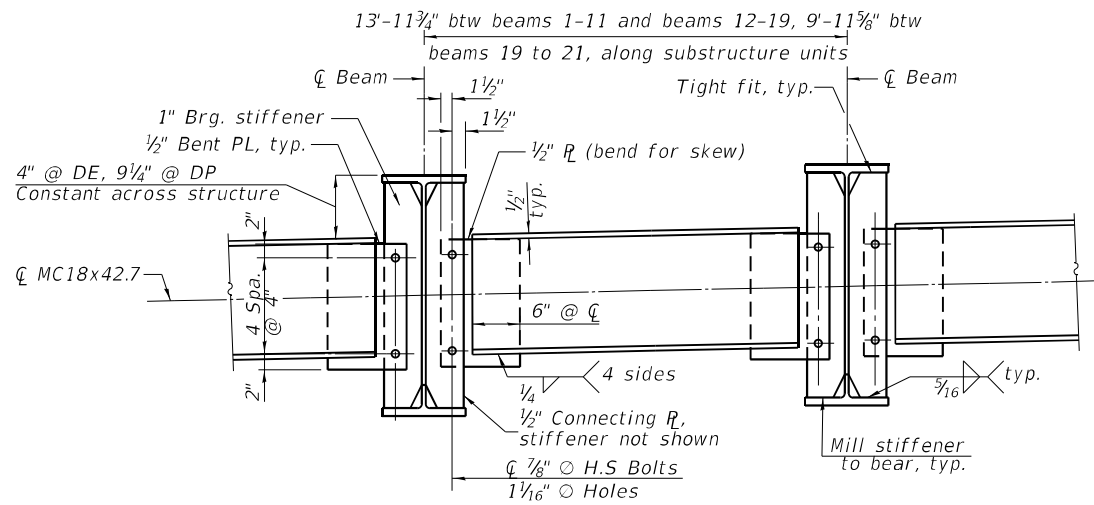
WEB WELD DETAIL



**SECTION
AT PIER**

**SECTION
AT ABUTMENT**

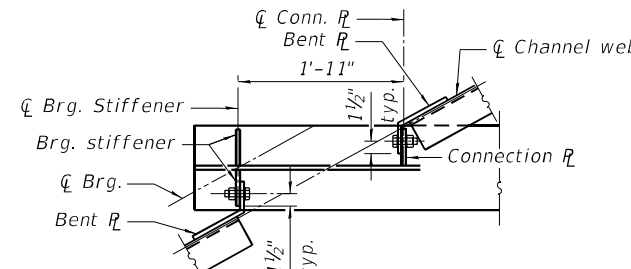
* Terminate 1/4" (± 1/8") from the end of plate intersects.



**END DIAPHRAGM "DE" &
PIER DIAPHRAGM "DP" CONNECTION DETAILS**

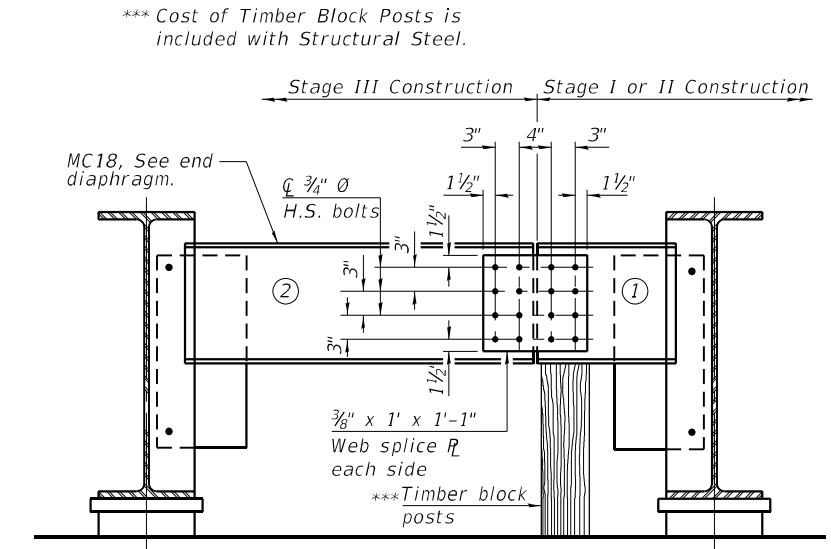
Looking West at the West Abutment & Pier 1.
Pier 2 & East Abutment Similar.

Note:
Two hardened washers required for each set of oversized holes. Alternate channels of equal depth, larger strength and larger weight are permitted to facilitate material acquisition. Alternate channels, if utilized, shall be provided at no additional cost to the Department. See Detail B for connection plate orientation.



**DETAIL B
END DIAPHRAGM "DE" &
PIER DIAPHRAGM "DP" CONNECTION**

End diaphragm shown, pier diaphragm similar



END DIAPHRAGM AT STAGE CONSTRUCTION

**END DIAPHRAGM STAGE
CONSTRUCTION SEQUENCE**

- 1.) Order diaphragm in two sections.
- 2.) Attach section ① of diaphragm to beam
- 3.) Place timber block posts between section ① of diaphragm and abutment bearing section.
- 4.) Attach section ② of diaphragm to both beam and section ① of diaphragm during stage III construction with splice plates.
- 5.) Remove timber block posts.

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5041-DET.dgn

USER NAME =	Structural	DESIGNED -	K.W.	REVISED -	
CHECKED -		H.A.	REVISED -		
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	CHECKED -	K.W.	REVISED -	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	321
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				

DEFINITIONS

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing *f_s*(Total-Strength I, and Service II) due to non-composite dead loads (*in*⁴ and *in*³).

I_c(n), S_c(n): Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing *f_s*(Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (*in*⁴ and *in*³).

I_c(3n), S_c(3n): Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing *f_s*(Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (*in*⁴ and *in*³).

I_c(cr), S_c(cr): Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing *f_s* (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (*in*⁴ and *in*³).

DC1: Un-factored non-composite dead load (kips/ft.).

MDC1: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

MDW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

M_{LL+IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

Mu (Strength I): Factored design moment (kip-ft.).
1.25 (MDC1 + MDC2) + 1.5 MDW + 1.75 M_{LL+IM}

Øf Mn: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).

f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
MDC1/ S_n

f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
MDC2/ S_c(3n) or MDC2/ S_c(cr) as applicable.

f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
MDW/ S_c(3n) or MDW/ S_c(cr) as applicable.

f_s (LL+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).
M_{LL+IM} / S_c(n) or M_{LL+IM} / S_c(cr) as applicable.

f_s (Service II): Sum of stresses as computed below (ksi).
f_sDC1 + f_sDC2 + f_sDW + 1.3 f_s(LL+IM)

0.95RhFyf: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
1.25 (f_sDC1 + f_sDC2) + 1.5 f_sDW + 1.75 f_s(LL+IM)

Øf Fn: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

V_f: Maximum factored shear range in span computed according to Article 6.10.10.

	0.4 Sp. 1 or 0.6 Sp. 3	Piers 1 & 2	0.5 Span 2
<i>I_s</i> (in ⁴)	9,040	12,100	9,040
<i>I_c (n)</i> (in ⁴)	30,563		30,563
<i>I_c (3n)</i> (in ⁴)	22,175		22,175
<i>I_c (cr)</i> (in ⁴)		14,853	
<i>S_s</i> (in ³)	504.0	664.0	504.0
<i>S_c (n)</i> (in ³)	951.7		951.7
<i>S_c (3n)</i> (in ³)	855.4		855.4
<i>S_c (cr)</i> (in ³)		918.7	
<i>DC1</i> (k/')	0.89	0.94	0.90
<i>MDC1</i> (k')	214	451	196
<i>DC2</i> (k/')	0.11	0.11	0.11
<i>MDC2</i> (k')	25	49	21
<i>DW</i> (k/')	0.16	0.16	0.16
<i>MDW</i> (k')	37	73	32
<i>LLDF</i>	**	**	**
<i>M_{LL+IM}</i> (k')	422	542	415
<i>f_i (Strength I)</i> (ksi)	0.49	4.79	0.28
<i>Mu + 1/3 f_scc</i> (k')	1,106	1,805	1,052
<i>Øf Mn</i> (k')	3,871		3,886
<i>f_s DC1</i> (ksi)	5.10	8.15	4.67
<i>f_s DC2</i> (ksi)	0.35	0.64	0.30
<i>f_s DW</i> (ksi)	0.52	0.95	0.44
<i>f_s (LL+IM)</i> (ksi)	5.32	7.08	5.23
<i>f_i (Service II)</i> (ksi)	0.36	3.56	0.20
<i>f_s + f_i/2 (Service II)</i> (ksi)	5.50	8.86	5.33
<i>0.95 Rh Fyf</i> (ksi)	47.50	47.50	47.50
<i>f_s + f_i/3 (Total)(Strength I)</i> (ksi)	17.07	26.40	16.11
<i>Øf Fn</i> (ksi)		50.00	
<i>V_f</i> (k)	59.43	130.7	53.04

* Factors are already included. *f_i* is as per design.
** Finite Element Analysis Model.

	0.4 Sp. 1 or 0.6 Sp. 3	Piers 1 & 2	0.5 Span 2
<i>I_s</i> (in ⁴)	9,040	12,100	9,040
<i>I_c (n)</i> (in ⁴)	30,119		30,119
<i>I_c (3n)</i> (in ⁴)	21,786		21,786
<i>I_c (cr)</i> (in ⁴)		14,472	
<i>S_s</i> (in ³)	504.0	664.0	504.0
<i>S_c (n)</i> (in ³)	947.4		947.4
<i>S_c (3n)</i> (in ³)	849.9		849.9
<i>S_c (cr)</i> (in ³)		880.1	
<i>DC1</i> (k/')	0.92	0.96	0.92
<i>MDC1</i> (k')	203	427	184
<i>DC2</i> (k/')	0.11	0.11	0.11
<i>MDC2</i> (k')	23	50	23
<i>DW</i> (k/')	0.16	0.16	0.16
<i>MDW</i> (k')	33	74	35
<i>LLDF</i>	**	**	**
<i>M_{LL+IM}</i> (k')	411	616	482
<i>f_i (Strength I)</i> (ksi)	0.35	5.89	0.36
<i>Mu + 1/3 f_scc</i> (k')	1,060	1,929	1,164
<i>Øf Mn</i> (k')	3,832		3,832
<i>f_s DC1</i> (ksi)	4.83	7.72	4.38
<i>f_s DC2</i> (ksi)	0.32	0.68	0.33
<i>f_s DW</i> (ksi)	0.47	1.01	0.49
<i>f_s (LL+IM)</i> (ksi)	5.21	8.40	6.11
<i>f_s (Service II)</i> (ksi)	12.39	20.33	13.14
<i>f_i (Service II)</i> (ksi)	0.26	2.58	0.27
<i>f_s + f_i/2 (Service II)</i> (ksi)	12.52	21.62	13.27
<i>0.95 Rh Fyf</i> (ksi)	47.50	47.50	47.50
<i>f_s + f_i/3 (Total)(Strength I)</i> (ksi)	16.37	28.68	17.43
<i>Øf Fn</i> (ksi)		50.00	
<i>V_f</i> (k)	25.73	95.43	27.91

* Factors are already included. *f_i* is as per design.
** Finite Element Analysis Model.

	W. Abut	Pier 1	Pier 2	E. Abut
<i>LLDF</i>	**	**	**	**
<i>OCF</i>	N/A**	N/A**	N/A**	N/A**
<i>RDC1</i> (k)	18.6	69.4	68.7	21.0
<i>RDC2</i> (k)	2.4	8.4	8.3	2.4
<i>RDW</i> (k)	3.6	12.4	12.3	3.6
<i>R_L</i> (k)	64.0	116.7	116.4	67.4
<i>R_r</i> (k)	17.9	28.4	28.6	18.9
<i>R Total</i> (k)	106.5	235.3	234.3	113.3

** Finite Element Analysis Model.

	W. Abut	Pier 1	Pier 2	E. Abut
<i>LLDF</i>	**	**	**	**
<i>OCF</i>	N/A**	N/A**	N/A**	N/A**
<i>RDC1</i> (k)	24.9	76.5	77.6	22.0
<i>RDC2</i> (k)	2.6	8.4	8.5	2.5
<i>RDW</i> (k)	3.9	12.4	12.5	3.6
<i>R_L</i> (k)	40.8	75.7	74.3	28.5
<i>R_r</i> (k)	9.2	13.7	13.5	6.7
<i>R Total</i> (k)	81.4	186.7	186.4	63.3

** Finite Element Analysis Model.

Note:

Beam section properties listed are software-generated output values which consider rolled shapes as built-up members.

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5042-DET.dgn



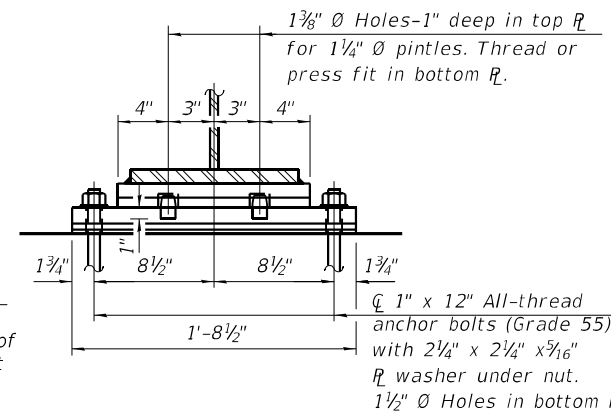
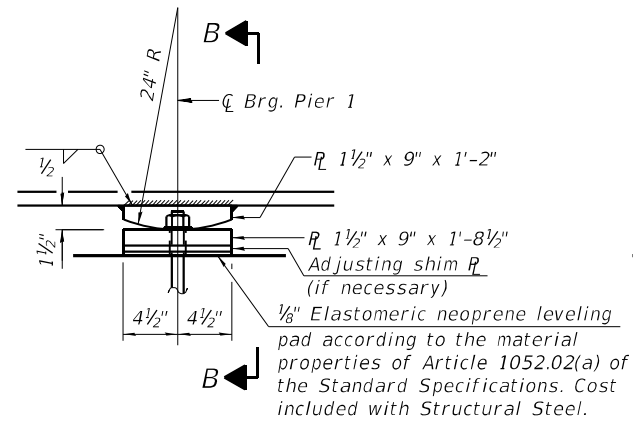
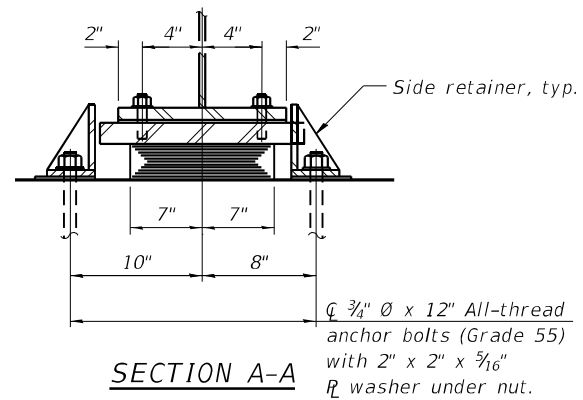
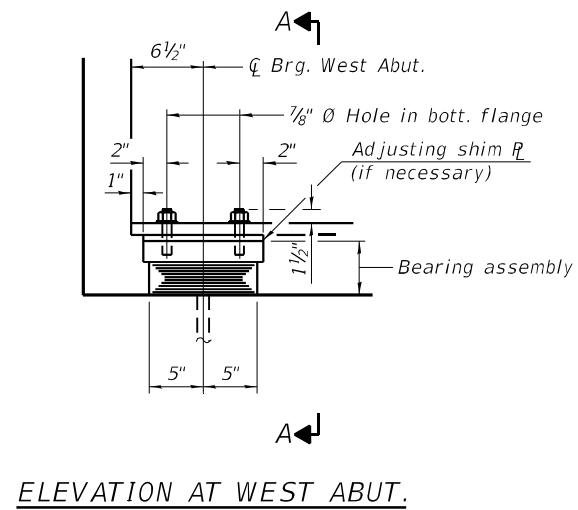
USER NAME = Structural	DESIGNED - K.W.	REVISED -
PLOT SCALE = N.T.S.	CHECKED - H.A.	REVISED -
PLOT DATE = 5/4/2021	DRAWN - O.M.	REVISED -
	CHECKED - H.A.	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE STEEL DETAILS III
SN 099-0028

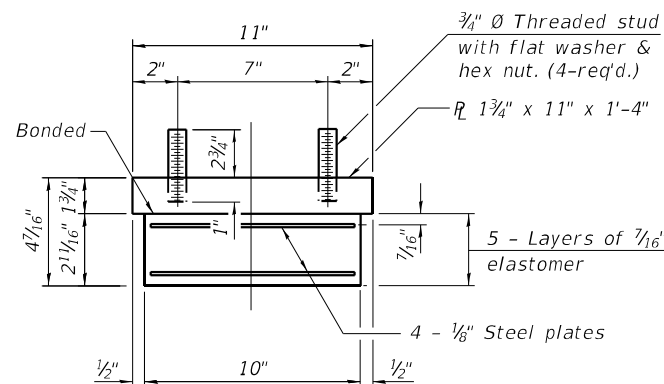
SHEET SC-42 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	322
CONTRACT NO. 62H03				
ILLINOIS		FED. AID PROJECT		



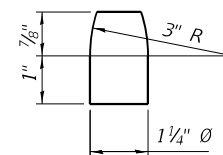
TYPE I ELASTOMERIC EXP. BRG. AT WEST ABUT.
(21 Required)

FIXED BEARING AT PIER 1
(21 Required)



Notes:

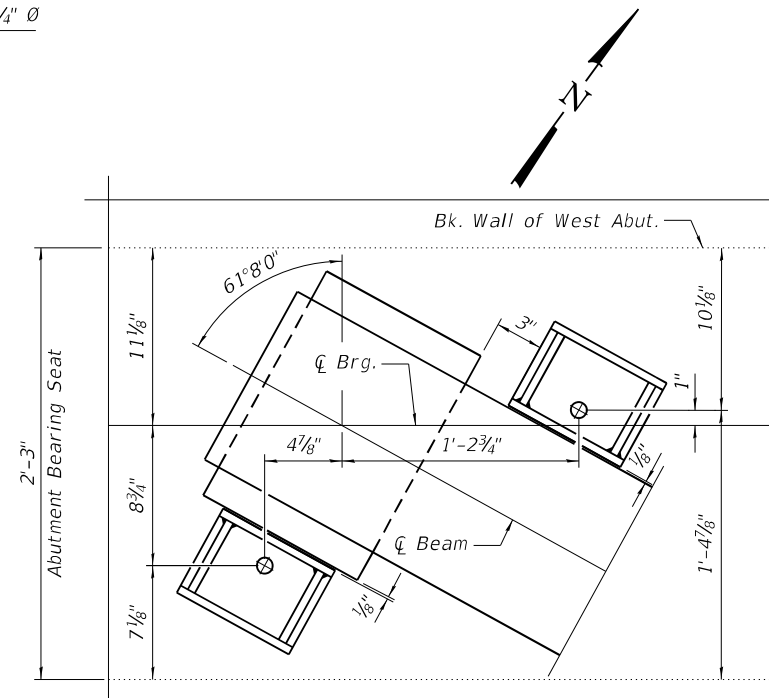
- Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.
- Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.
- The structural steel plates and pintles of the fixed Bearing and the structural steel plates of the expansion Bearing Assemblies shall conform to the requirements of AASHTO M 270 Grade 50.
- Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
- All (embedded and separate) bearing plates, side retainers, anchor bolts, nuts, washers and pintles shall be galvanized according to AASHTO M111 or M232 as applicable.



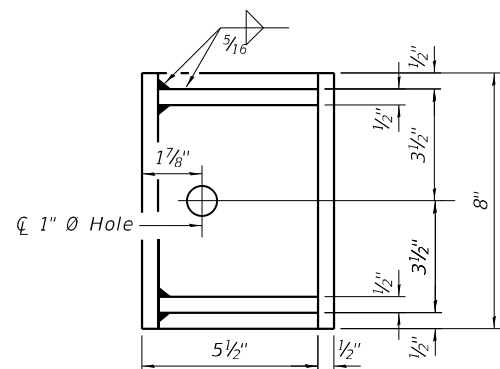
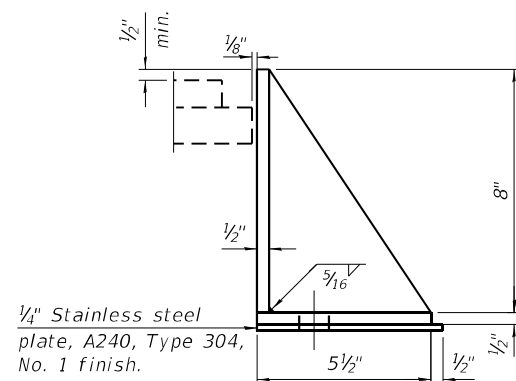
PINTLE

BEARING ASSEMBLY

Note:
Shim plates shall not be placed under bearing assembly.



SIDE RETAINER LOCATION AT WEST ABUTMENT



SIDE RETAINER

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

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	21
Anchor Bolts, 3/4"	Each	42
Anchor Bolts, 1"	Each	42

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-095-0028-62H03-5043-BRG.dgn

GR&E
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631; (773) 399-0112

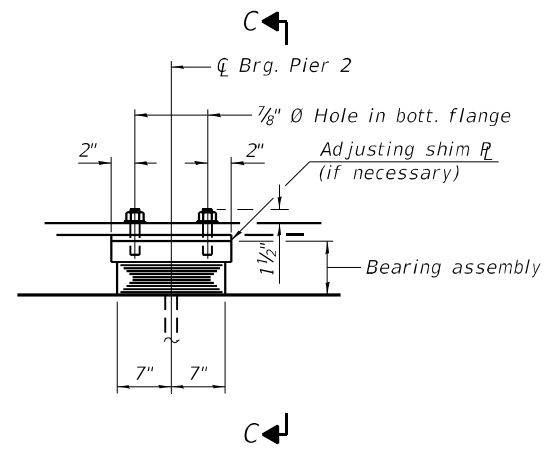
USER NAME =	Structural	DESIGNED -	J.A.Z.	REVISED -	
		CHECKED -	H.A.	REVISED -	
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	CHECKED -	H.A.	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

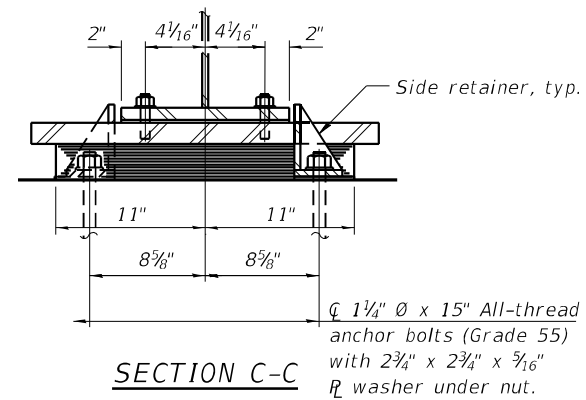
**BEARING DETAILS I
SN 099-0028**

SHEET SC-43 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	323
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				

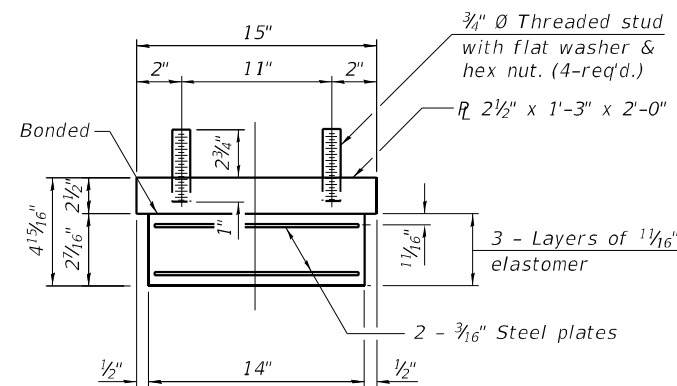


ELEVATION AT PIER 2

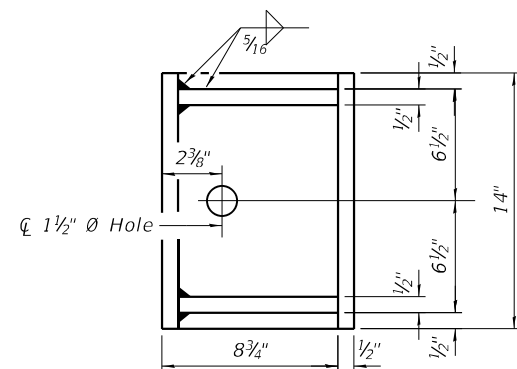
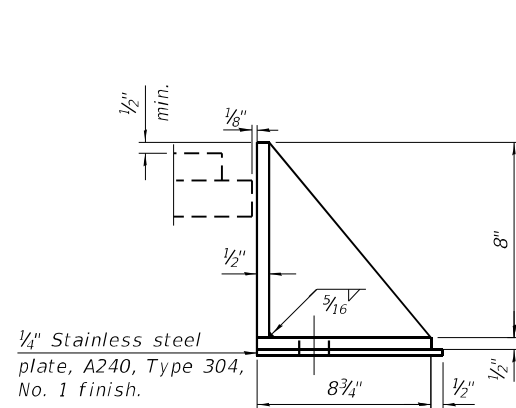


SECTION C-C

TYPE I ELASTOMERIC EXP. BRG. AT PIER 2
(21 Required)



BEARING ASSEMBLY

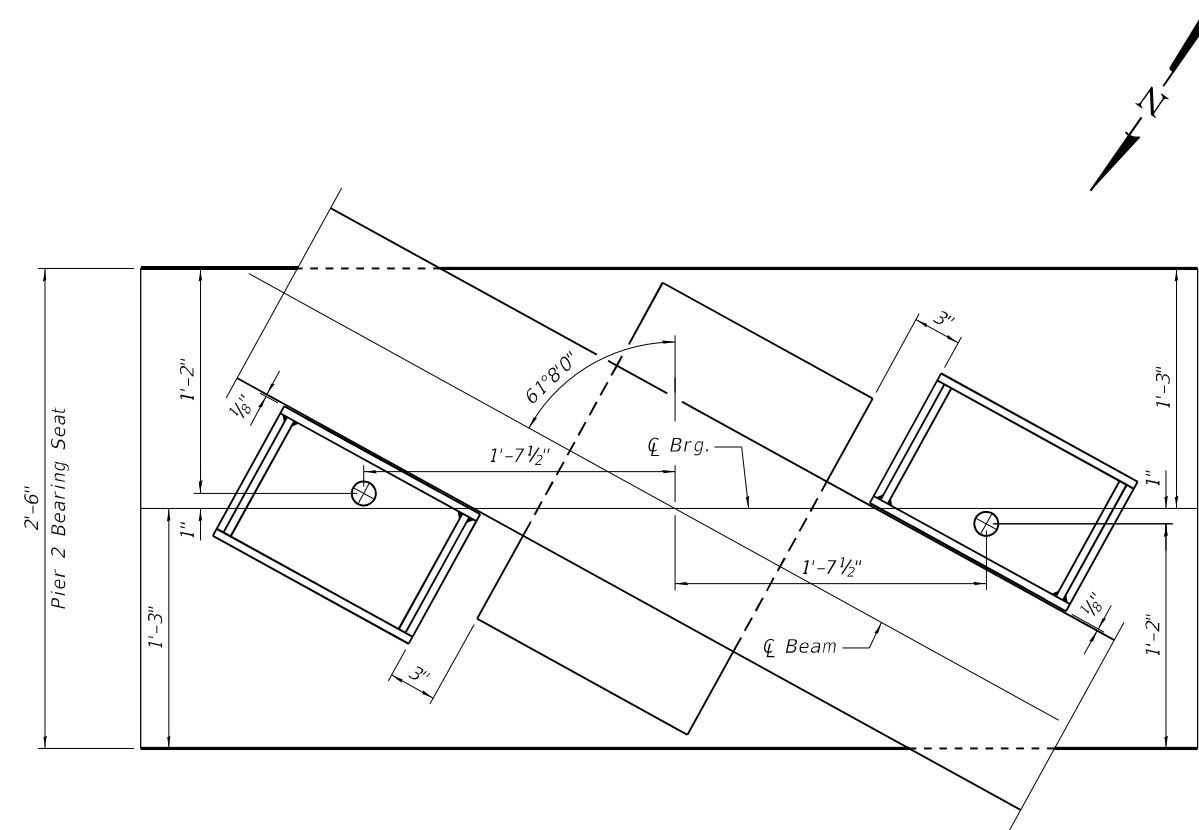


SIDE RETAINER

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

Notes:

1. Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.
2. Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.
3. Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
4. All (embedded and separate) bearing plates, side retainers, anchor bolts, nuts, washers and pintles shall be galvanized according to AASHTO M111 or M232 as applicable.
5. The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.



SIDE RETAINERS LOCATION AT PIER 2

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	21
Anchor Bolts, 1 1/4"	Each	42

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5044-BRG.dgn

GR&E
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631; (773) 399-0112

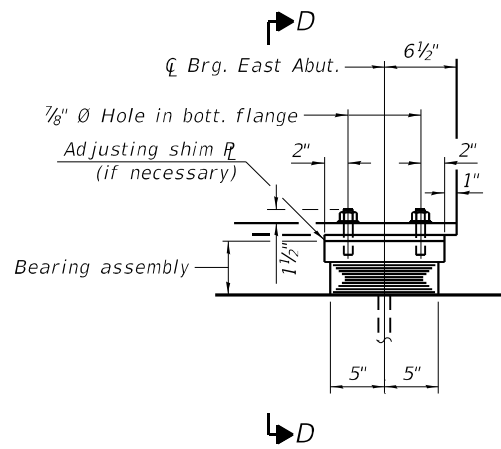
USER NAME =	Structural	DESIGNED -	J.A.Z.	REVISED -	
PLOT SCALE =	N.T.S.	CHECKED -	H.A.	REVISED -	
PLOT DATE =	5/4/2021	DRAWN -	O.M.	REVISED -	
		CHECKED -	H.A.	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

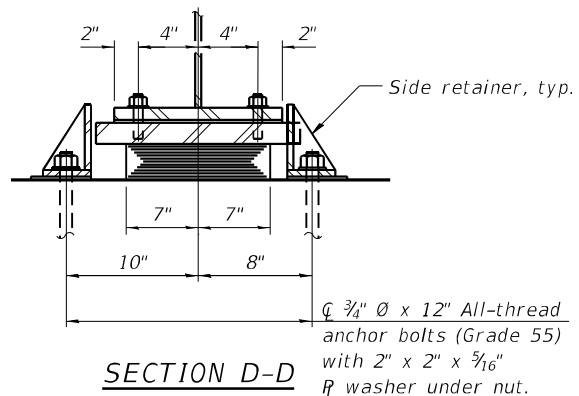
BEARING DETAILS II
SN 099-0028

SHEET SC-44 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	324
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				

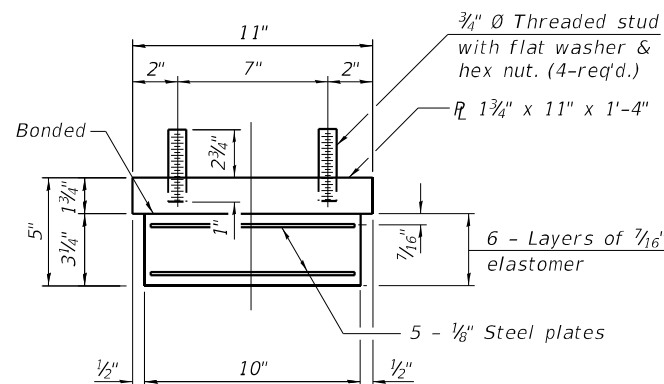


ELEVATION AT EAST ABUT.



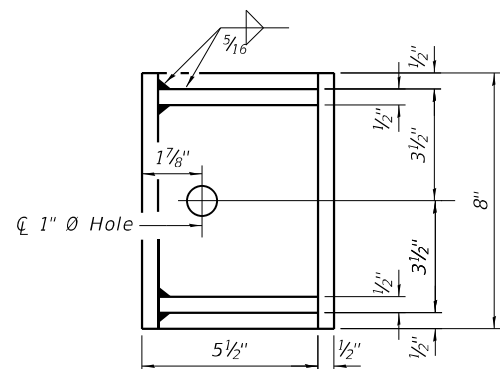
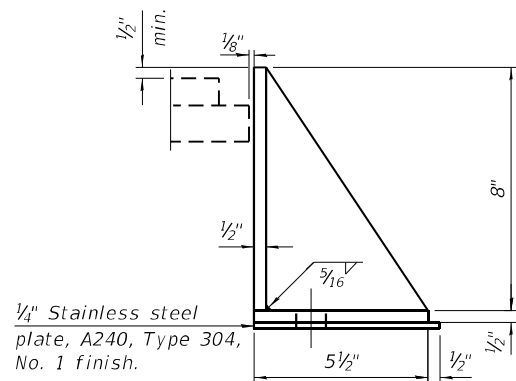
SECTION D-D

TYPE I ELASTOMERIC EXP. BRG. AT EAST ABUT.
(21 Required)



BEARING ASSEMBLY

Note:
Shim plates shall not be placed under bearing assembly.

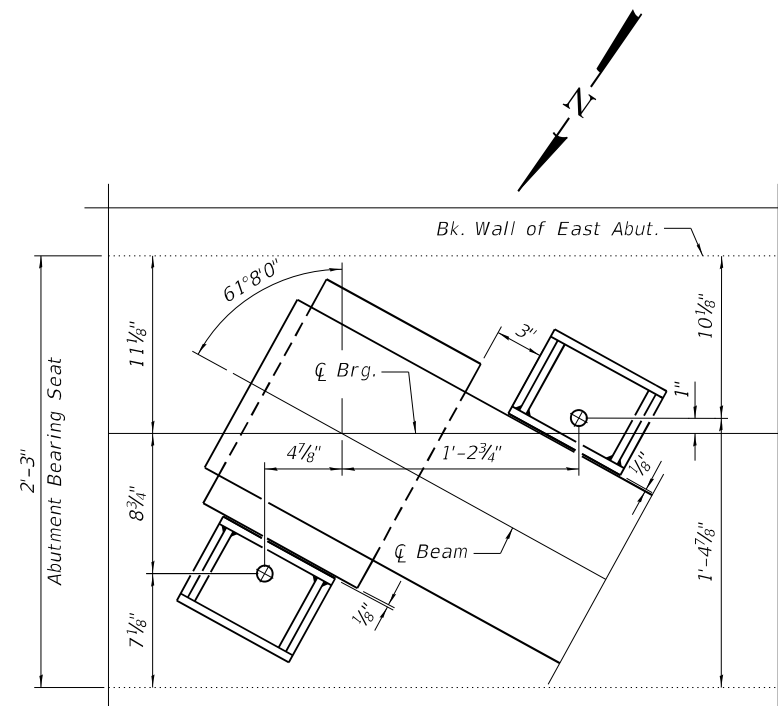


SIDE RETAINER

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

Notes:

- Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.
- Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.
- Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
- All (embedded and separate) bearing plates, side retainers, anchor bolts, nuts, washers and pintles shall be galvanized according to AASHTO M111 or M232 as applicable.
- The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.



SIDE RETAINERS LOCATION AT EAST ABUTMENT

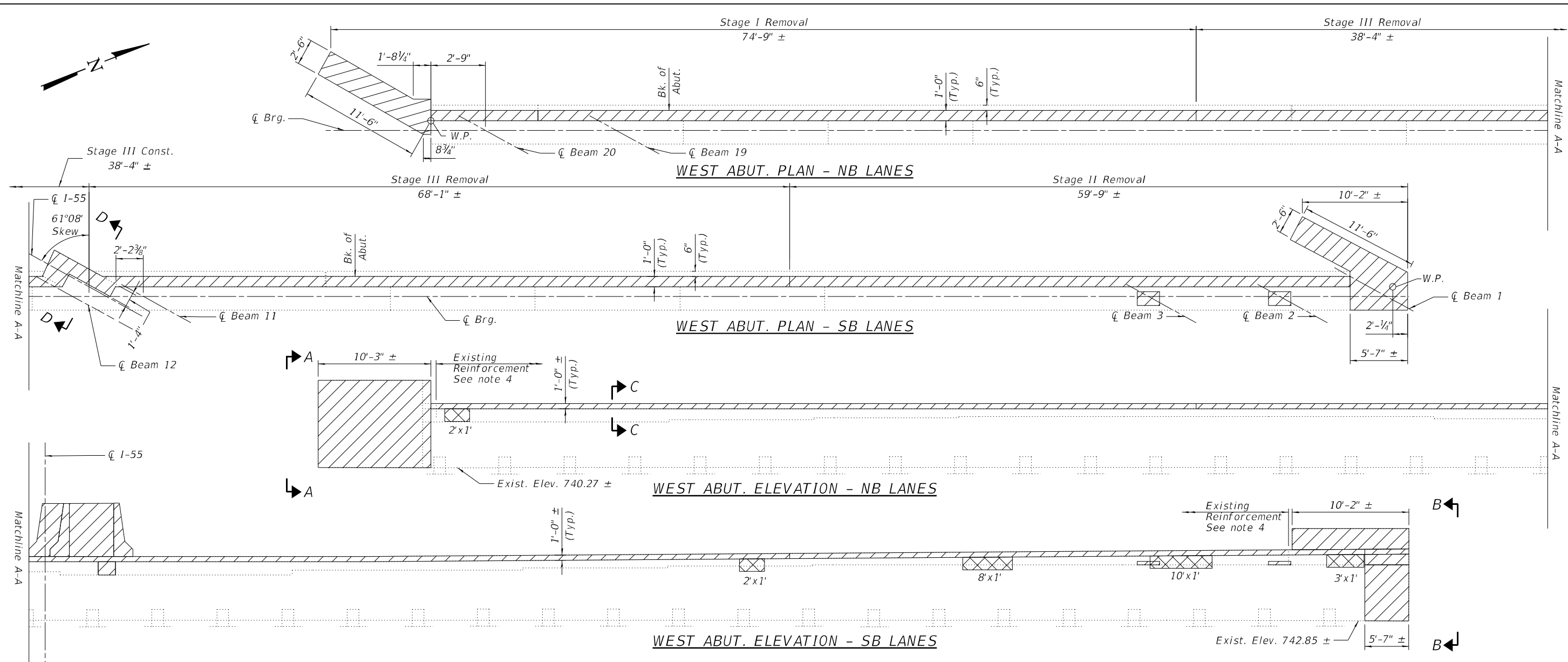
BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	21
Anchor Bolts, 3/4"	Each	42

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5045-BRG.dgn

USER NAME =	Structural	DESIGNED -	J.A.Z.	REVISED -	
PLOT SCALE =	N.T.S.	CHECKED -	H.A.	REVISED -	
PLOT DATE =	5/4/2021	DRAWN -	O.M.	REVISED -	
		CHECKED -	H.A.	REVISED -	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	325
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				



BILL OF MATERIAL

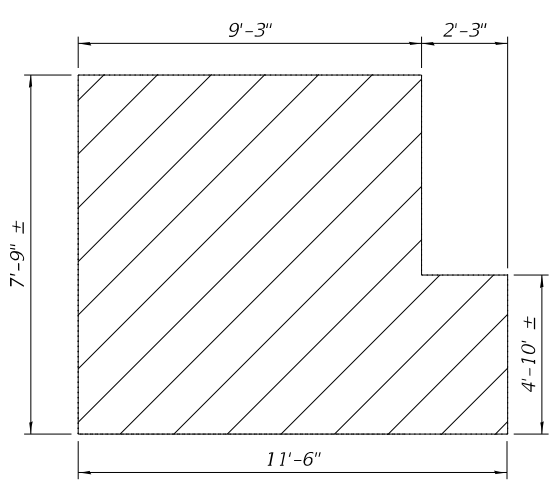
Item	Unit	Total
Structural Repair of Concrete (Depth equal to or less than 5 Inches)	Sq. Yd.	25
Concrete Removal	Cu. Yd.	28.2

Notes:

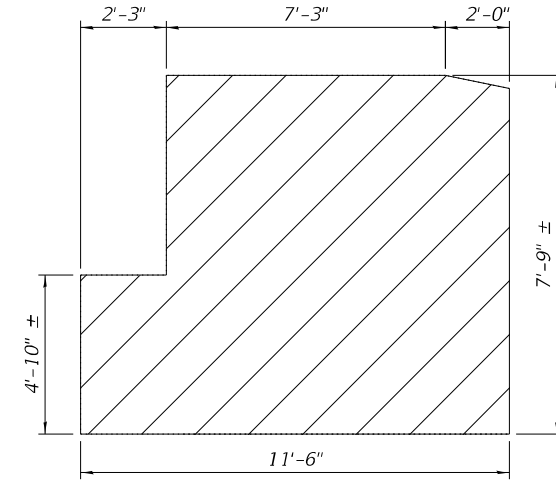
- All saw cuts shall be to such a depth that when concrete is removed, a clean, neat edge will result with no spalling of the remaining concrete.
- Saw cuts cost included with "Concrete Removal".
- For Proposed underdrain and drainage components, see Sheet SC-03.
- Existing Reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

Legend

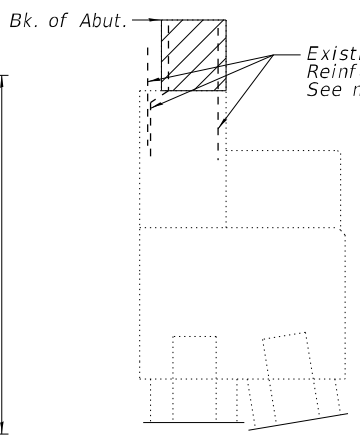
- Limits of Concrete Removal
- Structural Repair of Concrete (Depth equal to or less than 5 Inches)



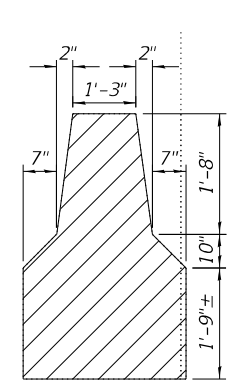
VIEW A-A



VIEW B-B



SECTION C-C



SECTION D-D

MODEL: Default
 FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-095-0028-62H03-5046-IVABR.dgn
 5/4/2021 3:02:34 PM

GR&EF
 8501 W. Higgins Road, Suite 280
 Chicago, Illinois 60631; (773) 399-0112

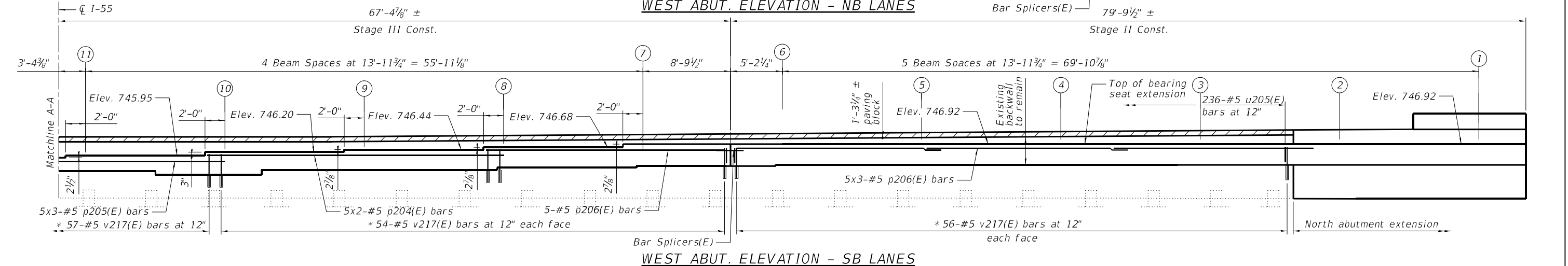
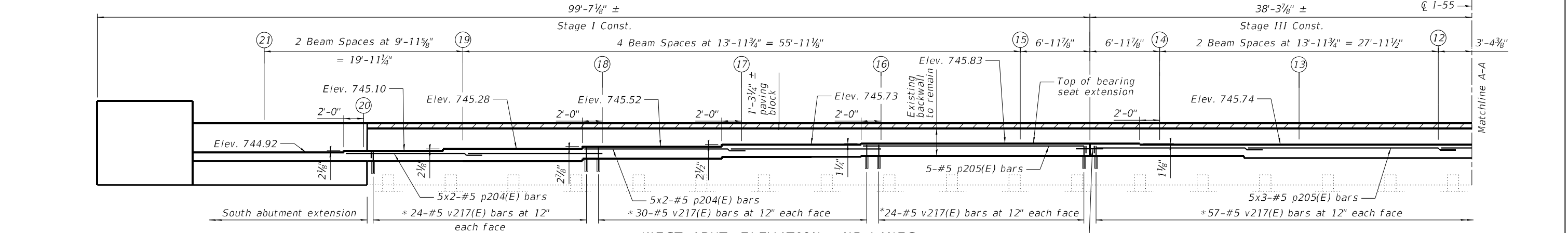
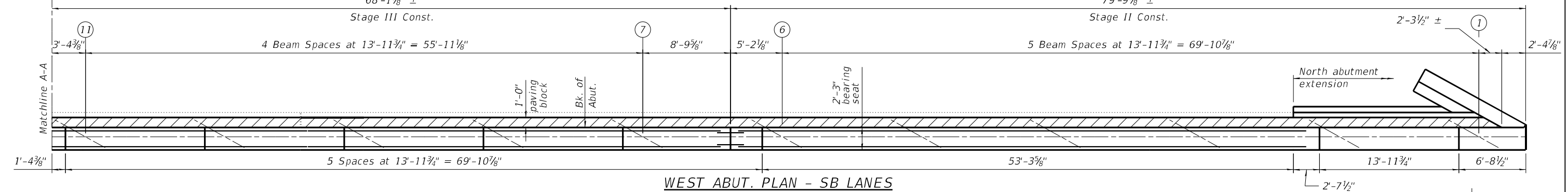
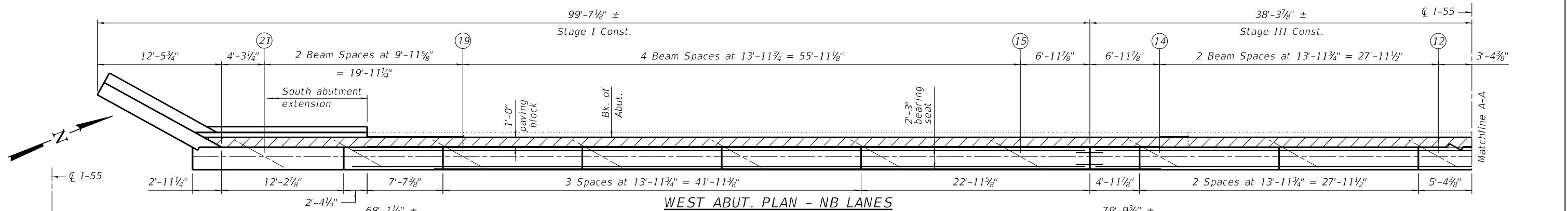
USER NAME =	Structural	DESIGNED -	V.G.	REVISED -	
		CHECKED -	H.A.	REVISED -	
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	CHECKED -	H.A.	REVISED -	

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WEST ABUTMENT REPAIRS AND REMOVAL
 SN 099-0028**

SHEET SC-46 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	326
CONTRACT NO. 62H03				
		ILLINOIS	FED. AID PROJECT	



MINIMUM BAR LAP

- #4 = 2'-11"
- #5 = 3'-8"
- #6 = 4'-5"
- #7 = 5'-10"

* Bars shall be drilled and grouted according to Article 584 of the Standard Specifications. Adjust bar spacing as required to clear existing reinforcement. Holes shall be drilled a minimum of 9" deep.

Notes:

1. See sheet SC-48 & SC-49 for abutment extension and wingwall dimension and reinforcing.
2. Concrete sealer shall be applied to all exposed surfaces of new concrete.
3. For anchor bolt detail, see sheet SC-48.

4. For details of bar splicers, see sheet SC-66.
5. Bars indicated thus 5x3-#5 etc. indicates 5 lines of bars with 3 lengths per line.
6. Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.

MODEL: Default
FILE NAME: X:\OH\2019\201903008-03\Design\Design\Files\62H03\CAD_Sheets\030-099-0028-62H03-5047-1VAB.dgn
5/4/2021 3:02:36 PM



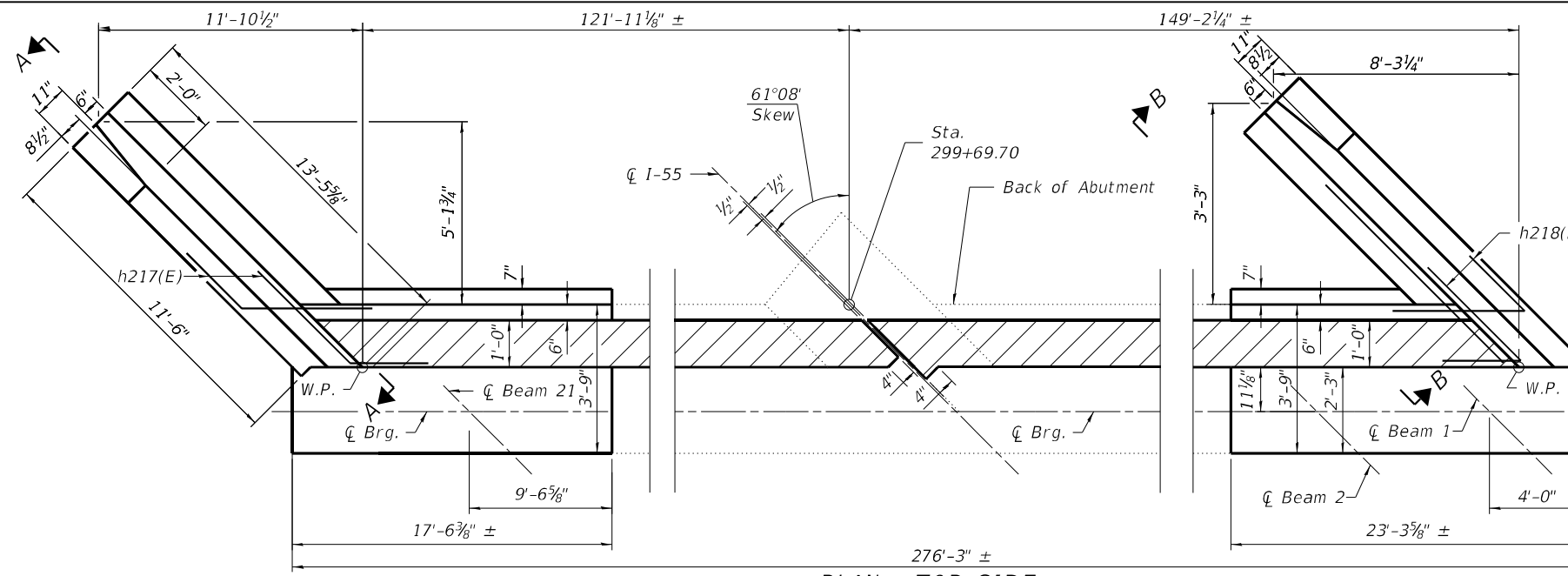
USER NAME = Structural	DESIGNED - V.G.	REVISED -
PLOT SCALE = N.T.S.	CHECKED - H.A.	REVISED -
PLOT DATE = 5/4/2021	DRAWN - O.M.	REVISED -
	CHECKED - H.A.	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

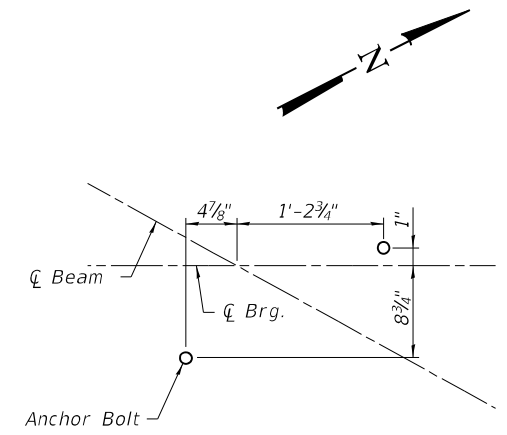
**WEST ABUTMENT MODIFICATIONS I
SN 099-0028**

SHEET SC-47 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	327
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				

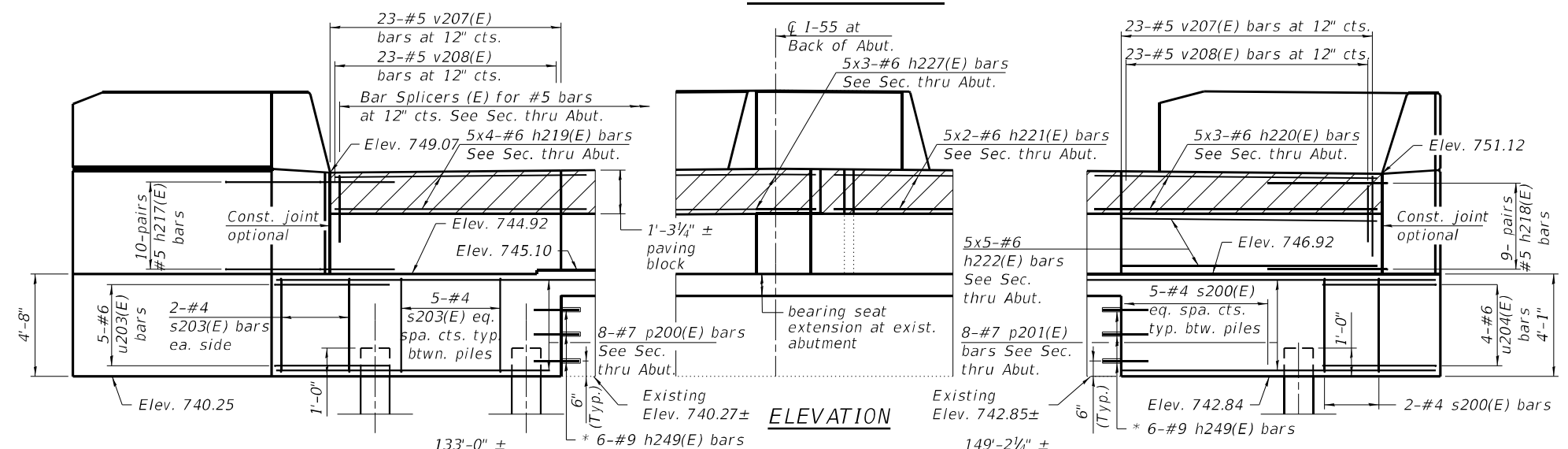


PLAN - TOP SIDE



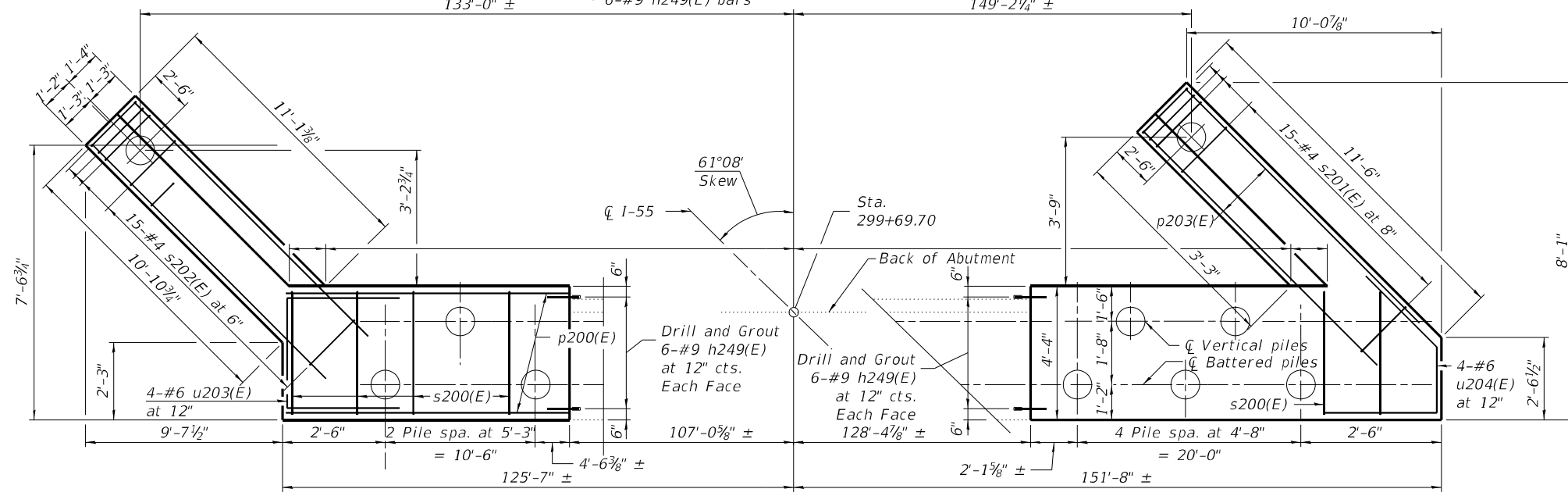
ANCHOR BOLT LAYOUT

See Sheet SC-43 for details



ELEVATION

- Notes:
1. See sheet SC-49 for Sec. A-A & Sec. B-B.
 2. For pile details, see sheet SC-67.
 3. Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.



PLAN-PILE CAP

* Bars shall be drilled and grouted according to Article 584 of the Standard Specifications. Adjust bar spacing as required to clear existing reinforcement. Holes shall be drilled a minimum of 9" deep.

PILE DATA

Type: Metal Shell 14"Ø w/0.312" walls with pile shoes
 Nominal Required Bearing: 182 kips
 Factored Resistance Available: 100 kips
 Est. Length: 19 ft.
 No. Production Piles: 9
 No. Test Piles: 1

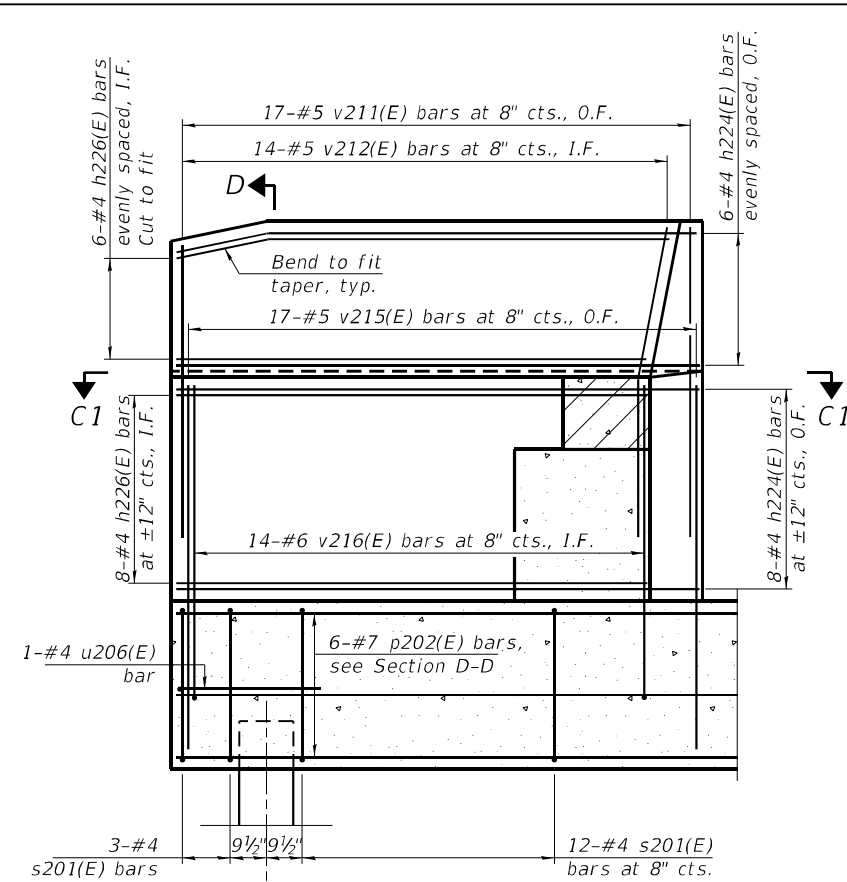
MINIMUM BAR LAP

- #4 = 2'-11"
- #5 = 3'-8"
- #6 = 4'-5"
- #7 = 5'-10"

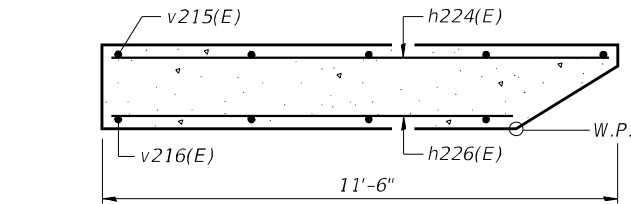
MODEL: Default
 FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5048-IVAB.dgn
 5/4/2021 3:02:37 PM

 8501 W. Higgins Road, Suite 280 Chicago, Illinois 60631; (773) 399-0112	USER NAME = Structural	DESIGNED - V.G.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WEST ABUTMENT MODIFICATIONS II SN 099-0028	F.A.I. RTE. 55	SECTION 2018-043-BD&BJR	COUNTY WILL	TOTAL SHEETS 430	SHEET NO. 328	
	PLOT SCALE = N.T.S.	DRAWN - O.M.	REVISED -			CONTRACT NO. 62H03					
	PLOT DATE = 5/4/2021	CHECKED - H.A.	REVISED -			ILLINOIS FED. AID PROJECT					
	SHEET SC-48 OF SC-73 SHEETS										

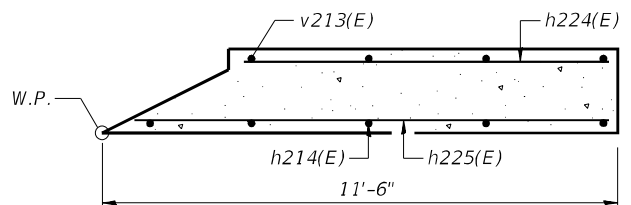
MODEL: Default
 FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5049-DET.dgn



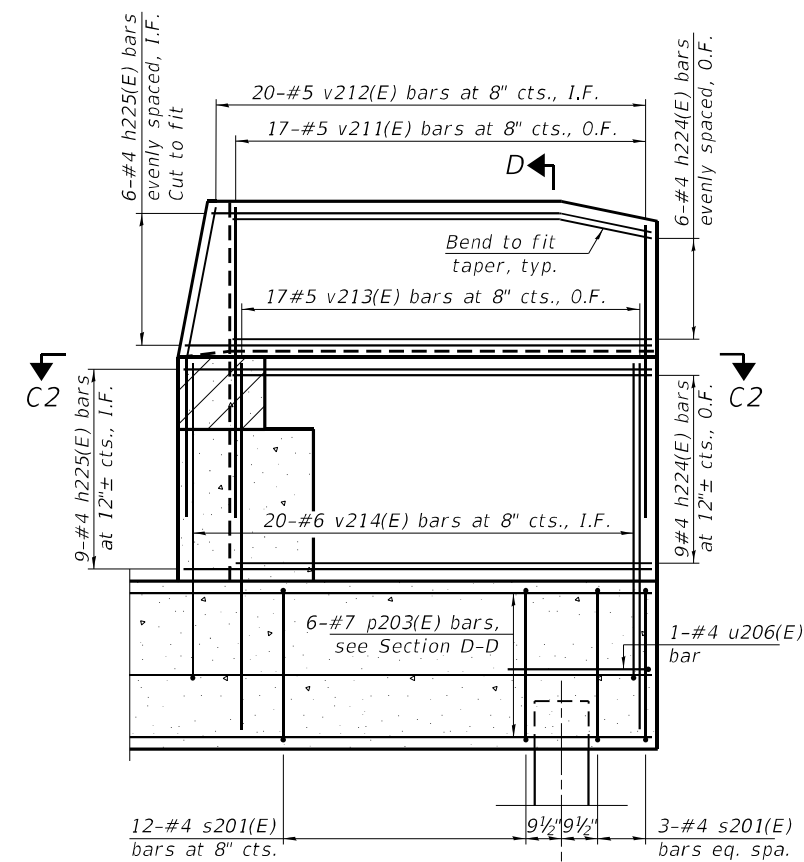
SECTION B-B (Showing reinforcement)



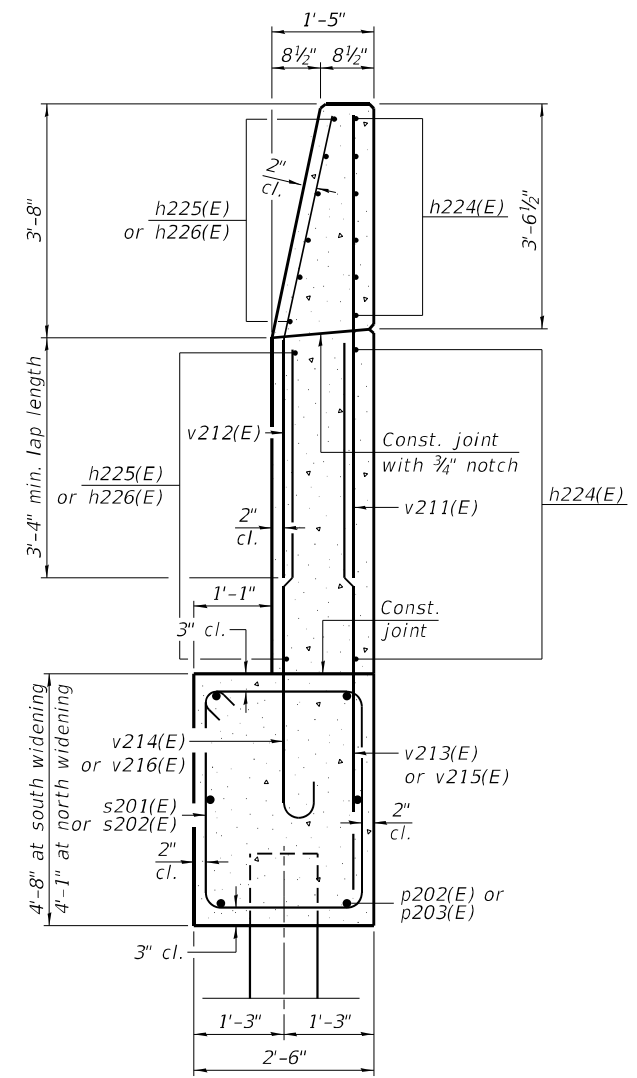
SECTION C1-C1



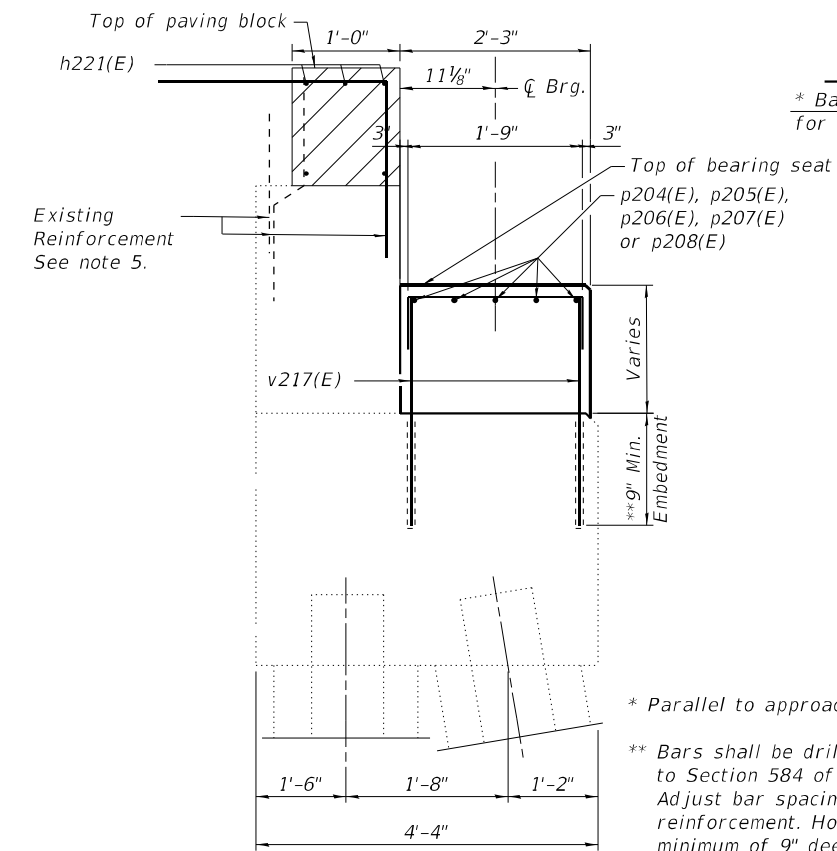
SECTION C2-C2



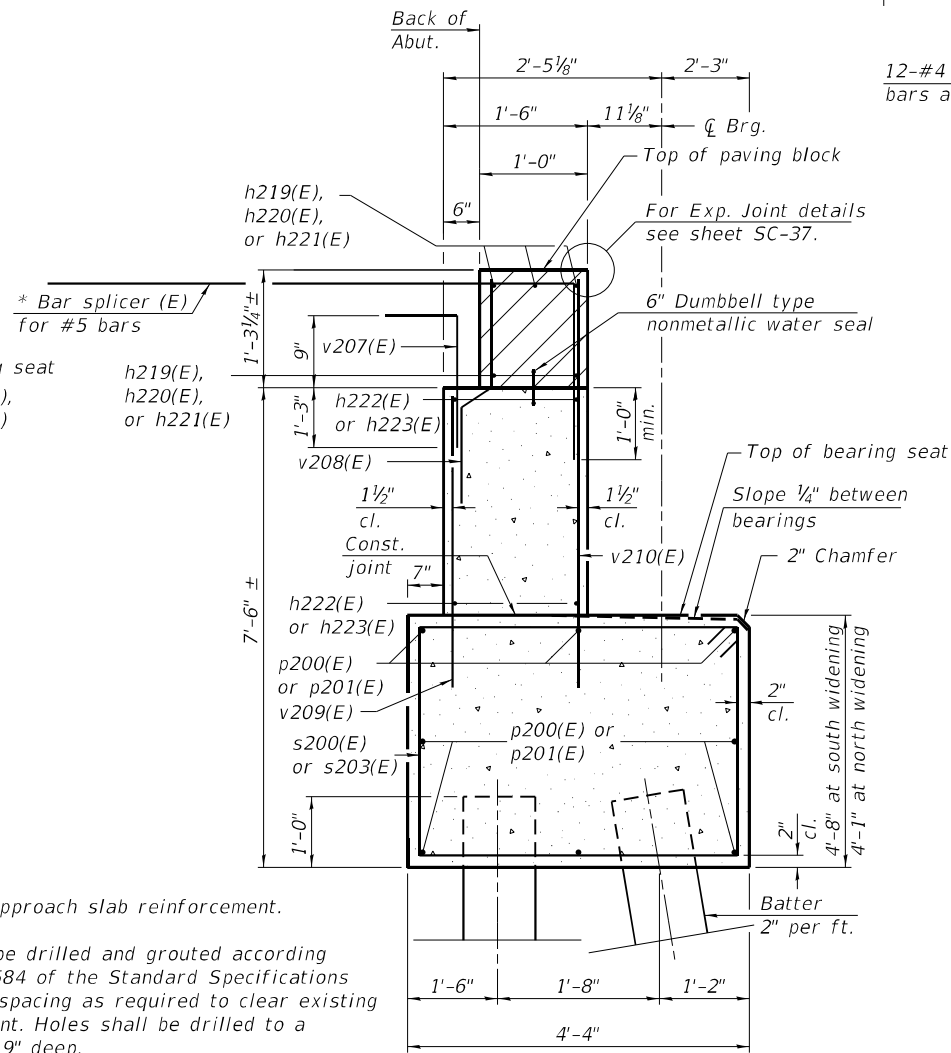
SECTION A-A (Showing reinforcement)



SECTION D-D (At Rt. L's)



SEC. THRU EXISTING ABUT.



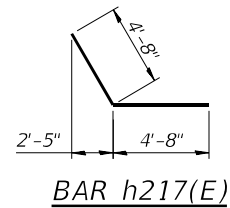
SEC. THRU ABUT. EXTENSION

Notes:

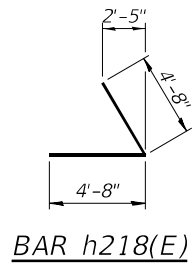
1. Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.
2. Space reinforcement in cap to miss anchor bolts.
3. Pour steps monolithically with cap for proposed Abutment.
4. Quantity of concrete in end post included with Concrete Superstructure on sheet SC-29, SC-31, SC-33 and SC-35.
5. Existing Reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

USER NAME =	Structural	DESIGNED -	V.G.	REVISED -	
CHECKED -	H.A.	REVISOR -		REVISED -	
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	CHECKED -	H.A.	REVISED -	

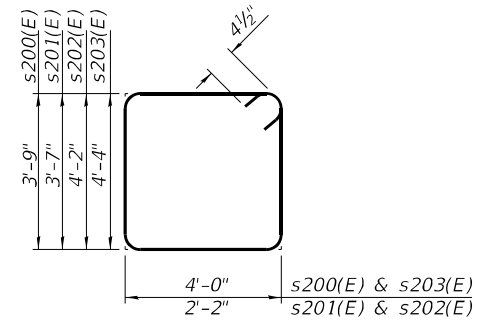
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	329
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				



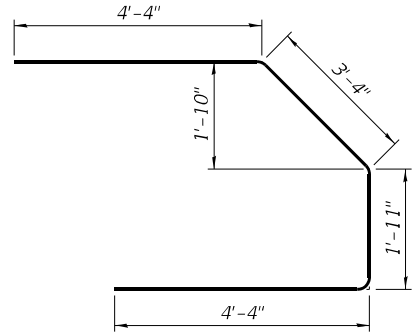
BAR h217(E)



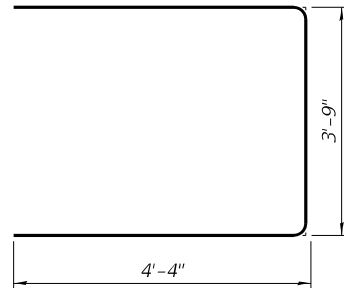
BAR h218(E)



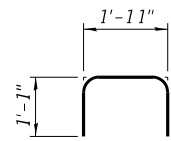
BARS s200(E), s201(E), s202(E) & s203(E)



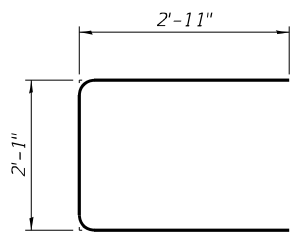
BAR u203(E)



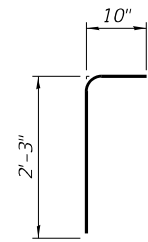
BAR u204(E)



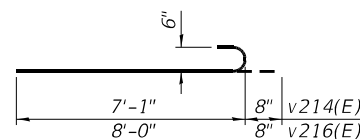
BAR u205(E)



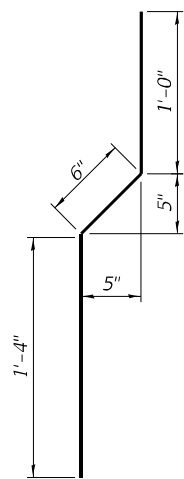
BAR u206(E)



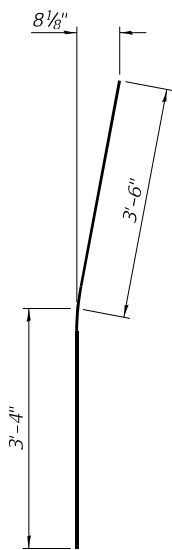
BAR v207(E)



BAR v214(E) & v216(E)



BAR v208(E)



BAR v212(E)

WEST ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h217(E)	20	# 6	9'-4"	↙
h218(E)	18	# 6	9'-4"	↘
h219(E)	20	# 6	25'-6"	—
h220(E)	15	# 6	29'-1"	—
h221(E)	10	# 6	21'-6"	—
h222(E)	32	# 5	24'-4"	—
h223(E)	24	# 5	28'-1"	—
h224(E)	29	# 4	11'-2"	—
h225(E)	15	# 4	13'-2"	—
h226(E)	14	# 4	9'-2"	—
h227(E)	15	# 6	25'-11"	—
h249(E)	12	# 9	6'-10"	—
P200(E)	8	# 7	17'-3"	—
P201(E)	8	# 7	19'-8"	—
P202(E)	12	# 7	6'-10"	—
P203(E)	12	# 7	11'-0"	—
P204(E)	30	# 5	18'-11"	—
P205(E)	20	# 5	22'-11"	—
P206(E)	35	# 5	24'-5"	—
s200(E)	12	# 4	15'-11"	□
s201(E)	15	# 4	16'-9"	□
s202(E)	15	# 4	15'-7"	□
s203(E)	17	# 4	17'-1"	□
u203(E)	5	# 6	13'-11"	U
u204(E)	4	# 6	12'-5"	U
u205(E)	236	# 5	4'-1"	U
u206(E)	2	# 4	7'-11"	U
v207(E)	41	# 5	3'-1"	V
v208(E)	41	# 5	2'-10"	V
v209(E)	41	# 5	4'-0"	V
v210(E)	41	# 5	5'-0"	V
v211(E)	34	# 5	6'-9"	V
v212(E)	34	# 5	6'-10"	V
v213(E)	17	# 5	8'-4"	V
v214(E)	20	# 6	7'-9"	V
v215(E)	17	# 5	9'-3"	V
v216(E)	14	# 6	8'-8"	V
v217(E)	472	# 5	2'-3"	V
Structure Excavation	Cu. Yd.		329	
Concrete Structures	Cu. Yd.		43.1	
Reinforcement Bars, Epoxy Coated	Pound		12,890	
Furnishing Metal Shell Pile 14" X 0.312"	Foot		190	
Driving Piles	Foot		190	
Concrete Sealer	Sq. Ft.		384	
Test Pile Metal Shell	Each		1	
Pile Shoes	Each		10	

For details of Bar Splicers, see sheet SC-66.

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5050-DET.dgn

GRAEF
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631; (773) 399-0112

USER NAME = Structural
DESIGNED - V.G.
CHECKED - H.A.
PLOT SCALE = N.T.S.
DRAWN - O.M.
PLOT DATE = 5/4/2021
CHECKED - H.A.

DESIGNED - V.G.
CHECKED - H.A.
DRAWN - O.M.
CHECKED - H.A.

REVISED -
REVISED -
REVISED -
REVISED -

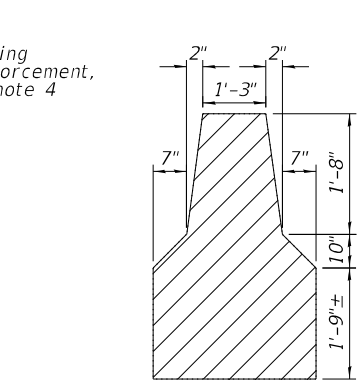
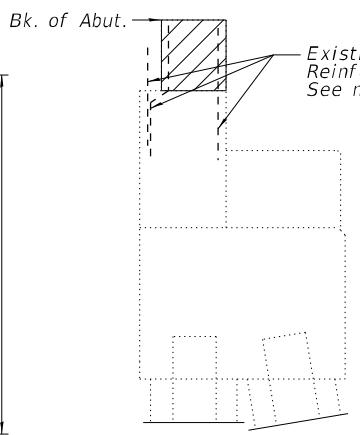
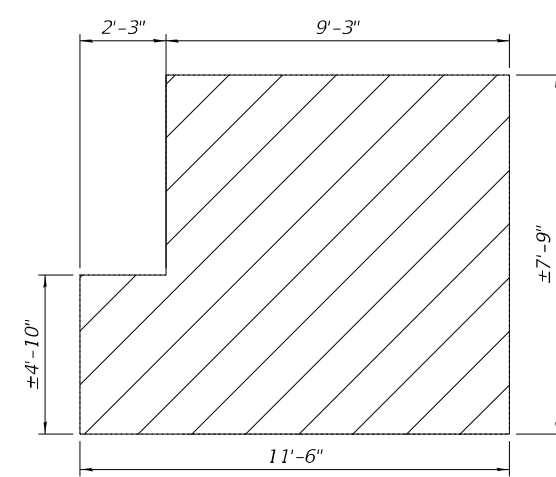
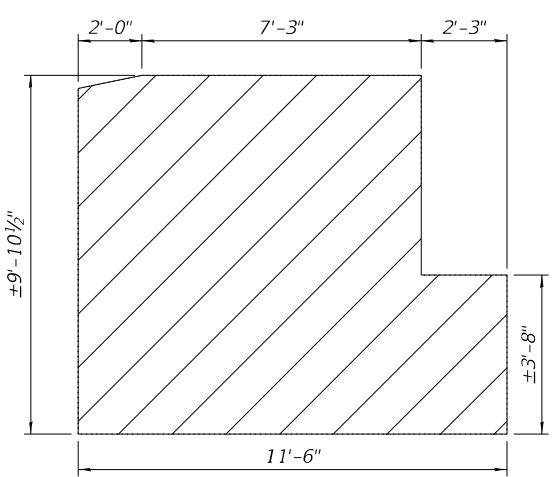
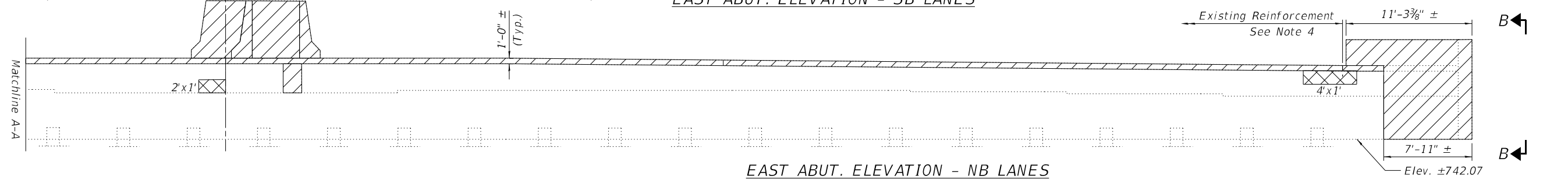
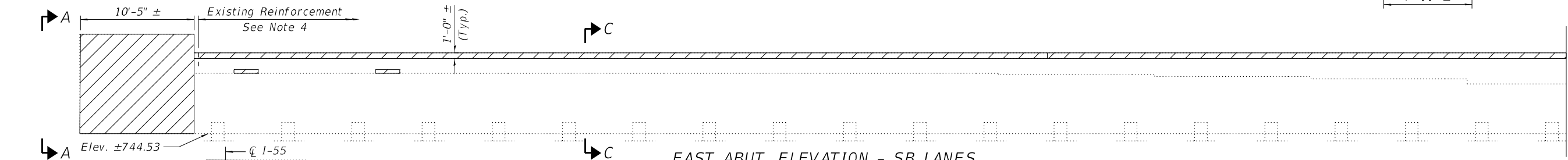
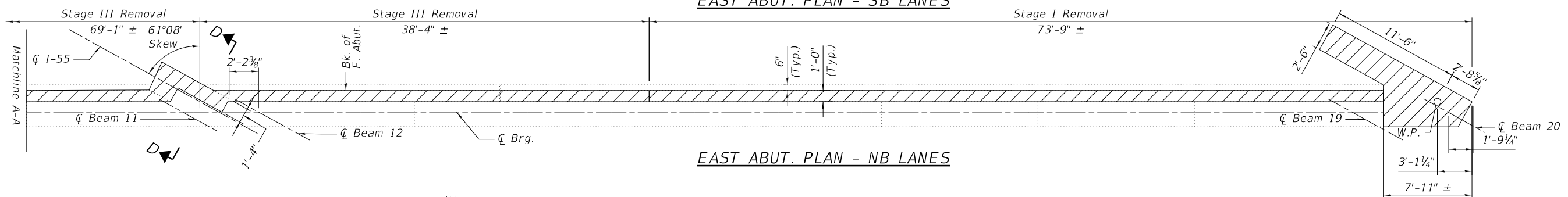
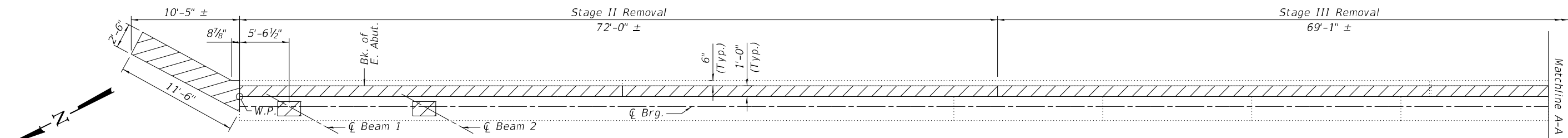
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT DETAILS II
SN 099-0028

SHEET SC-50 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	330
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				

5/4/2021 3:02:39 PM



BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth equal to or less than 5 Inches)	Sq. Yd.	6
Concrete Removal	Cu. Yd.	32.1

- Notes:
- All saw cuts shall be to such a depth that when concrete is removed, a clean, neat edge will result with no spalling of the remaining concrete.
 - Saw cuts cost included with "Concrete Removal".
 - For Proposed underdrain and drainage components, see Sheet SC-03.
 - Existing Reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

Legend

- Limits of Concrete Removal
- Structural Repair of Concrete (Depth equal to or less than 5 Inches)

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-503.1-EABR.dgn
5/4/2021 3:02:40 PM

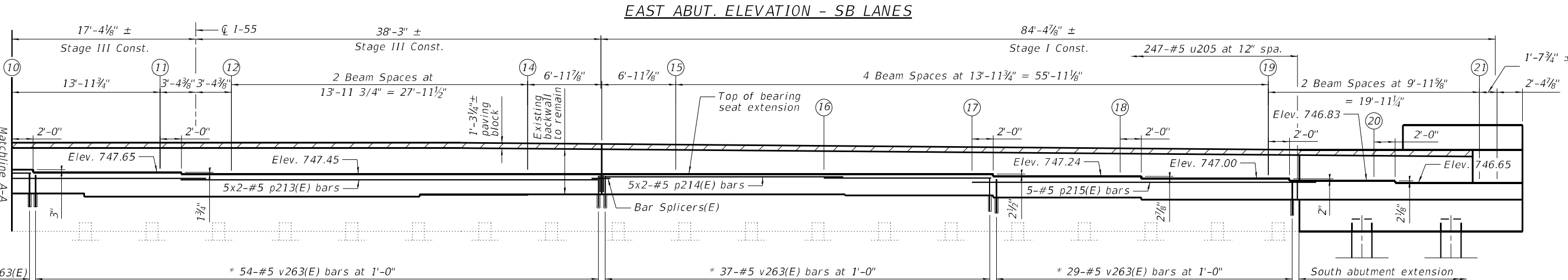
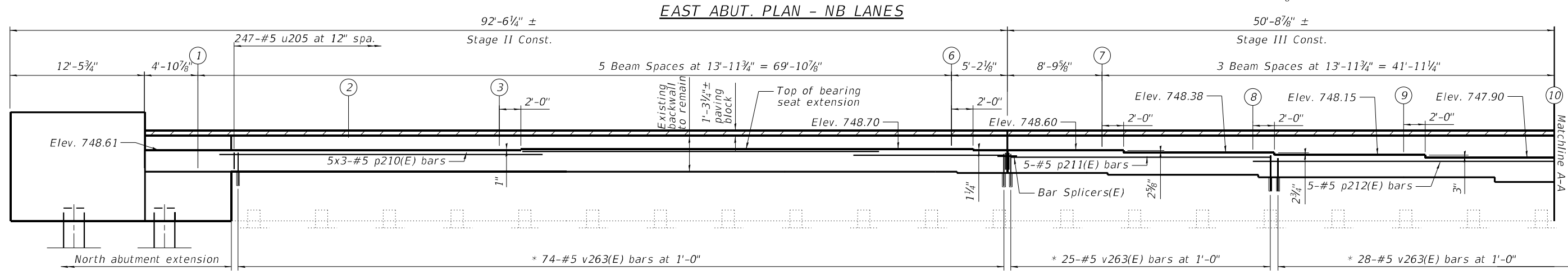
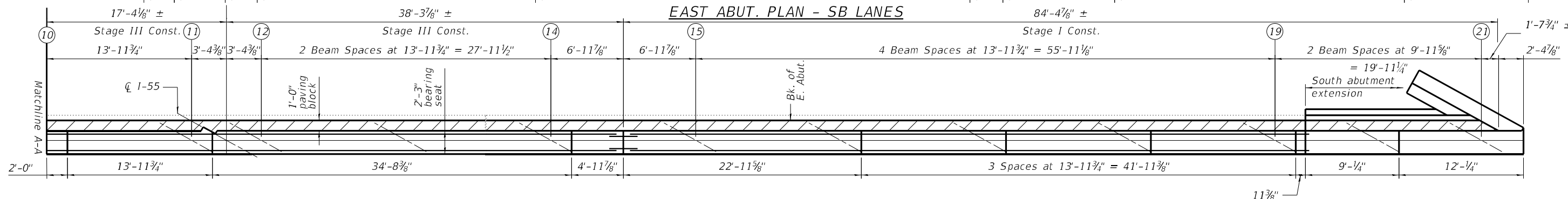
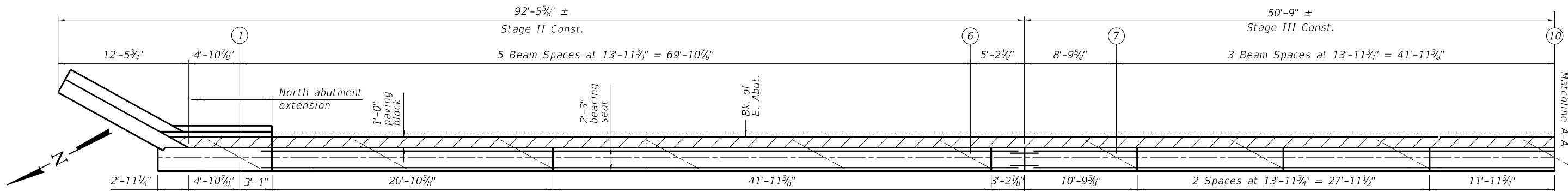
GR&E
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631; (773) 399-0112

USER NAME =	Structural	DESIGNED -	V.G.	REVISED -	
PLOT SCALE =	N.T.S.	CHECKED -	H.A.	REVISED -	
PLOT DATE =	5/4/2021	DRAWN -	O.M.	REVISED -	
		CHECKED -	H.A.	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EAST ABUTMENT REPAIRS AND REMOVAL
SN 099-0028**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	331
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				



MINIMUM BAR LAP

- #4 = 2'-11"
- #5 = 3'-8"
- #6 = 4'-5"
- #7 = 5'-10"

* Bars shall be drilled and grouted according to Article 584 of the Standard Specifications. Adjust bar spacing as required to clear existing reinforcement. Holes shall be drilled a minimum of 9" deep.

- Notes:**
1. See sheet SC-53 & SC-54 for abutment extension and wingwall dimension and reinforcing.
 2. Concrete sealer shall be applied to all exposed surfaces of new concrete.
 3. For anchor bolt detail, see sheet SC-53.

4. For details of bar splicers, see sheet SC-66.
5. Bars indicated thus 5x3-#5 etc. indicates 5 lines of bars with 3 lengths per line.
6. Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.

MODEL: Default
FILE NAME: X:\OH\2019\20190308-03\Design\Design Sheets\030-099-002-62H03-CAD_Sheets\030-099-002-62H03-5052-EAB.dgn



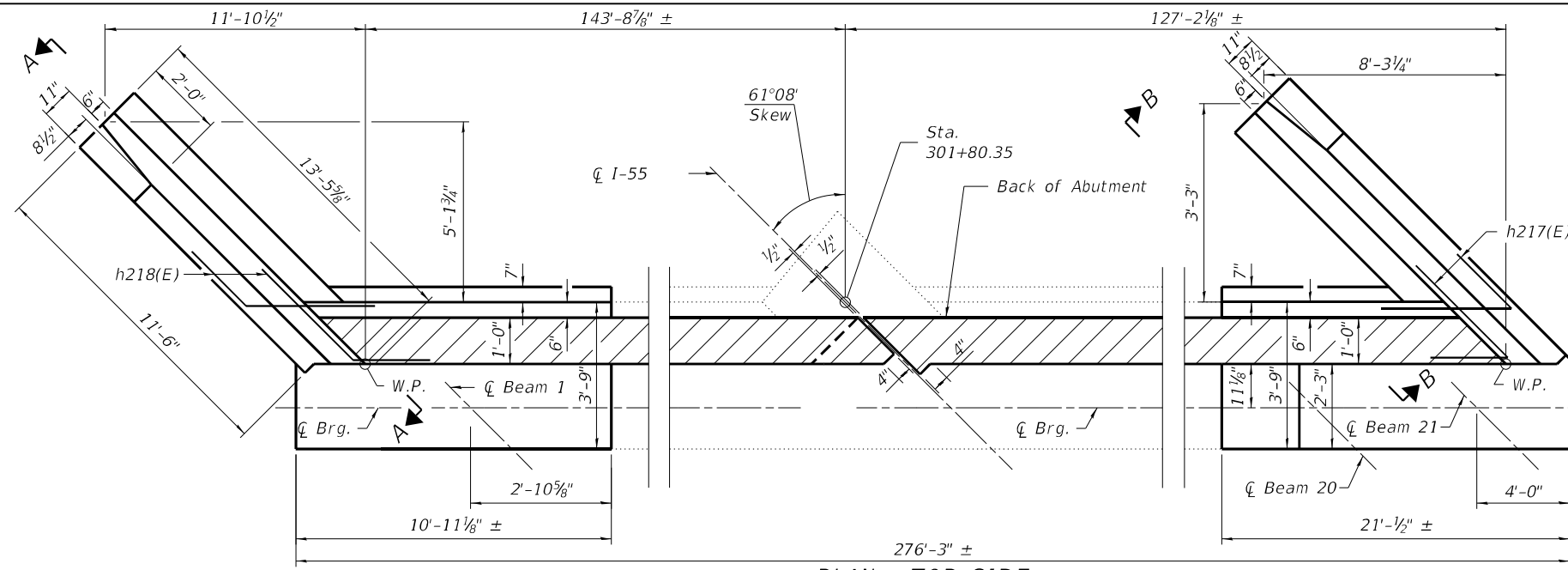
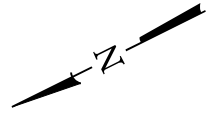
USER NAME =	Structural	DESIGNED -	V.G.	REVISED -	
		CHECKED -	H.A.	REVISED -	
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	CHECKED -	H.A.	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

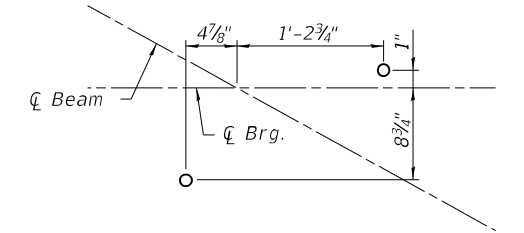
**EAST ABUTMENT MODIFICATIONS I
SN 099-0028**

SHEET SC-52 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	332
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				

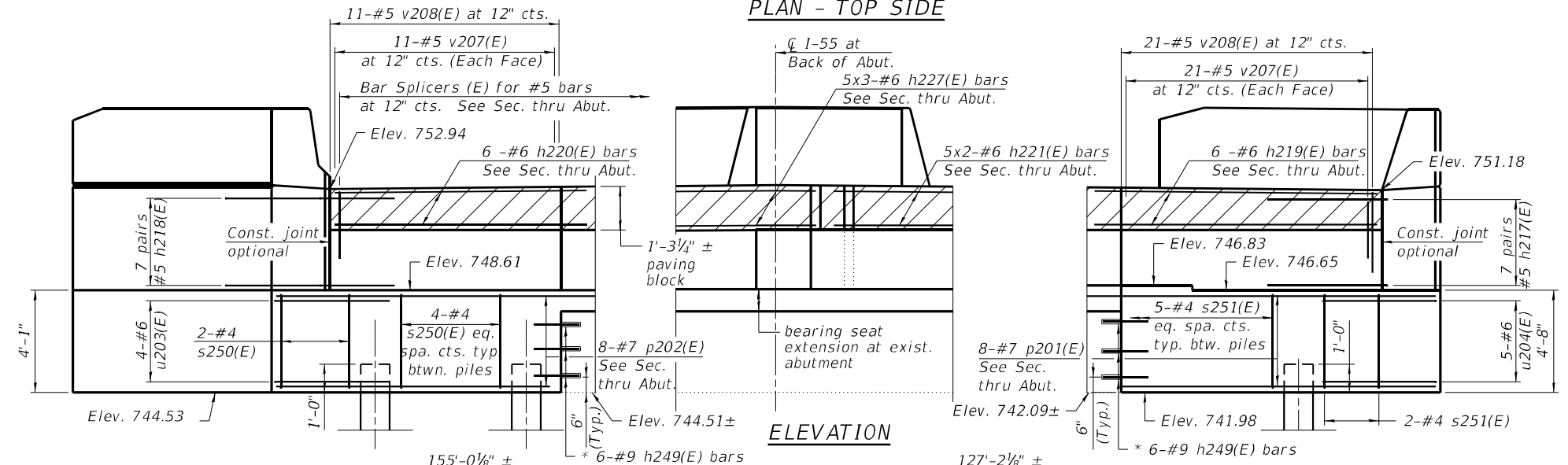


PLAN - TOP SIDE



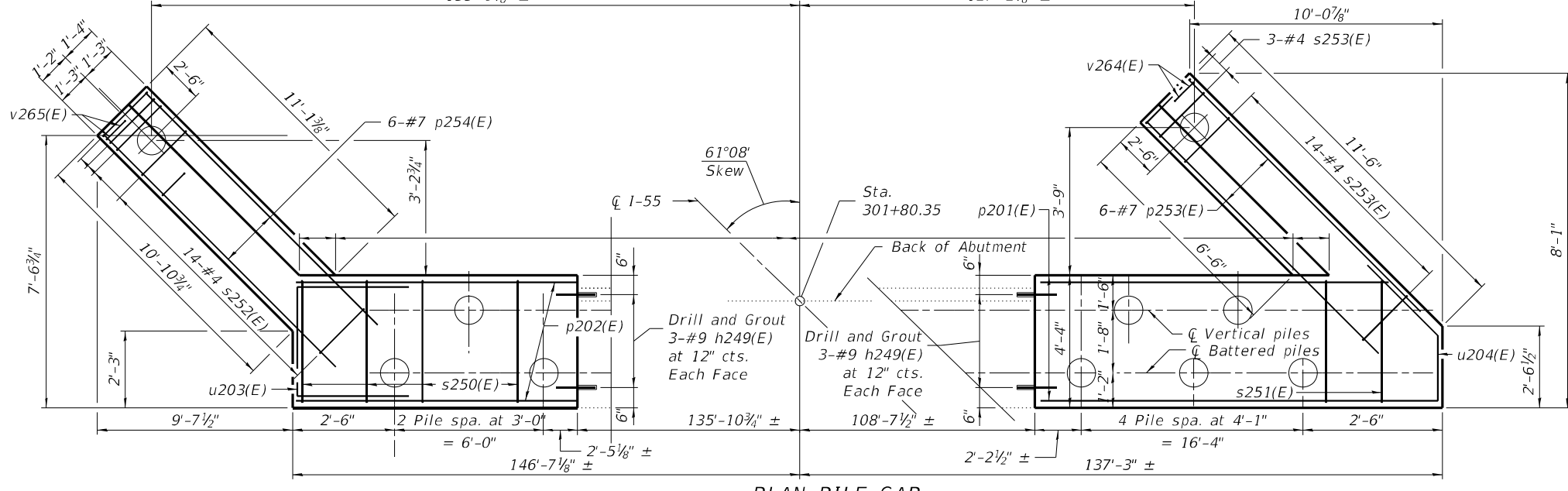
ANCHOR BOLT LAYOUT

See Sheet SC-45 for details



ELEVATION

* Bars shall be drilled and grouted according to Section 584 of the Standard Specifications. Adjust bar spacing as required to clear existing reinforcement. Holes shall be drilled a minimum of 9" deep.



PLAN-PILE CAP

Notes:

1. See sheet SC-54 for Section A-A & Section B-B.
2. For details of piles see sheet SC-67.
3. Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.

PILE DATA

Type: Metal Shell 14"Ø w/0.312" walls with pile shoes
 Nominal Required Bearing: 182 kips
 Factored Resistance Available: 100 kips
 Est. Length: 19 ft.
 No. Production Piles: 9
 No. Test Piles: 1

MINIMUM BAR LAP

- #4 = 2'-11"
- #5 = 3'-8"
- #6 = 4'-5"
- #7 = 5'-10"

MODEL: Default
 FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5053-EAB.dgn
 5/4/2021 3:02:43 PM



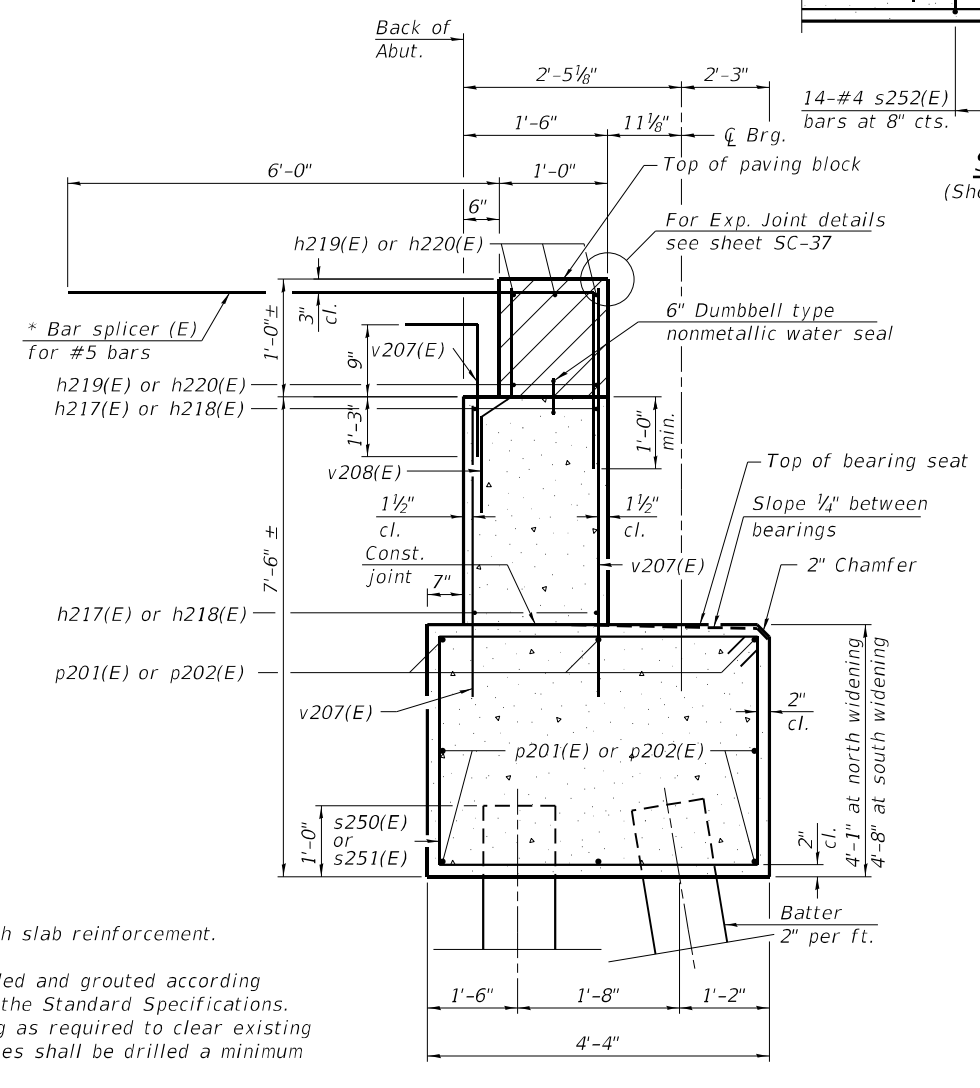
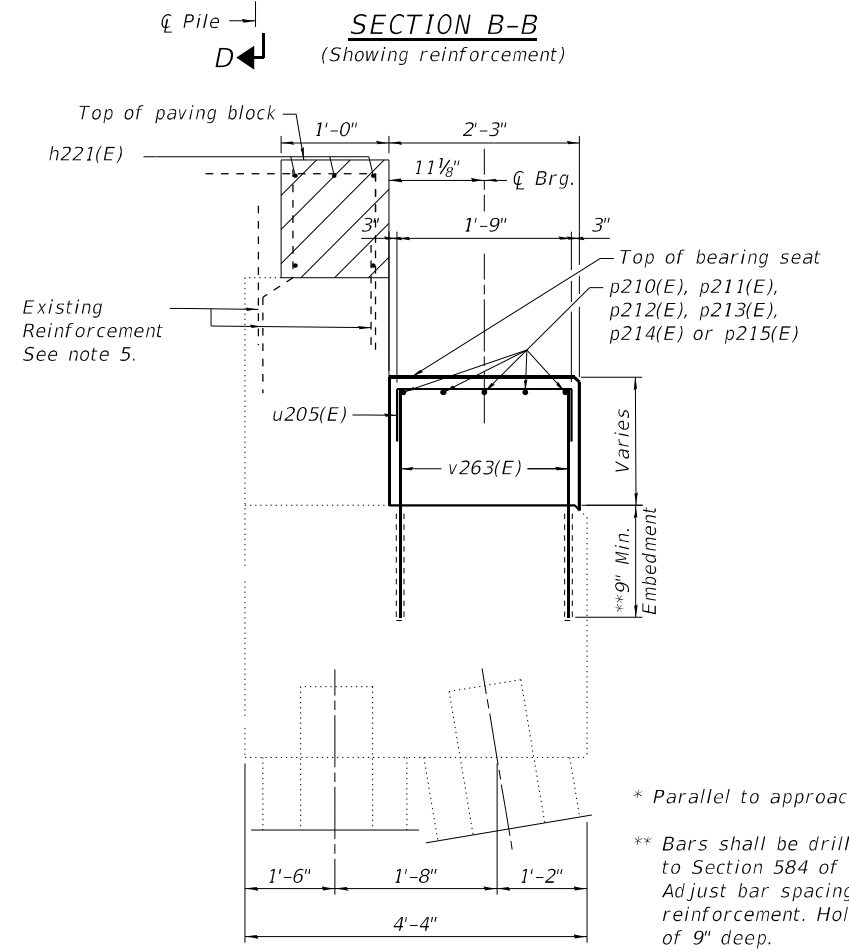
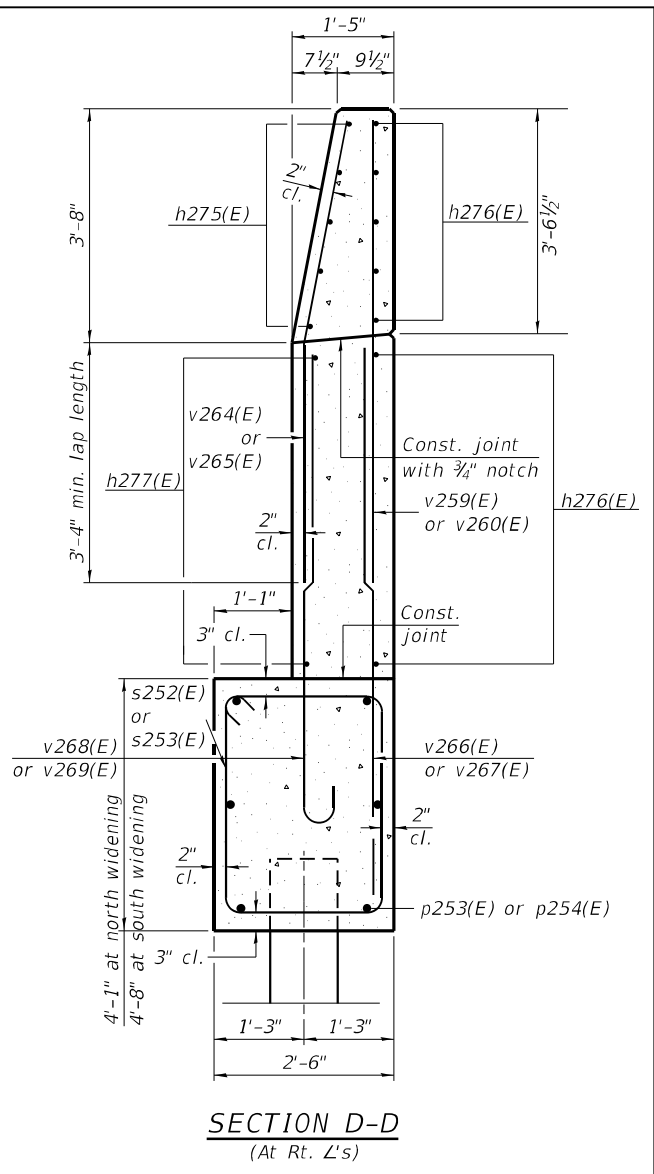
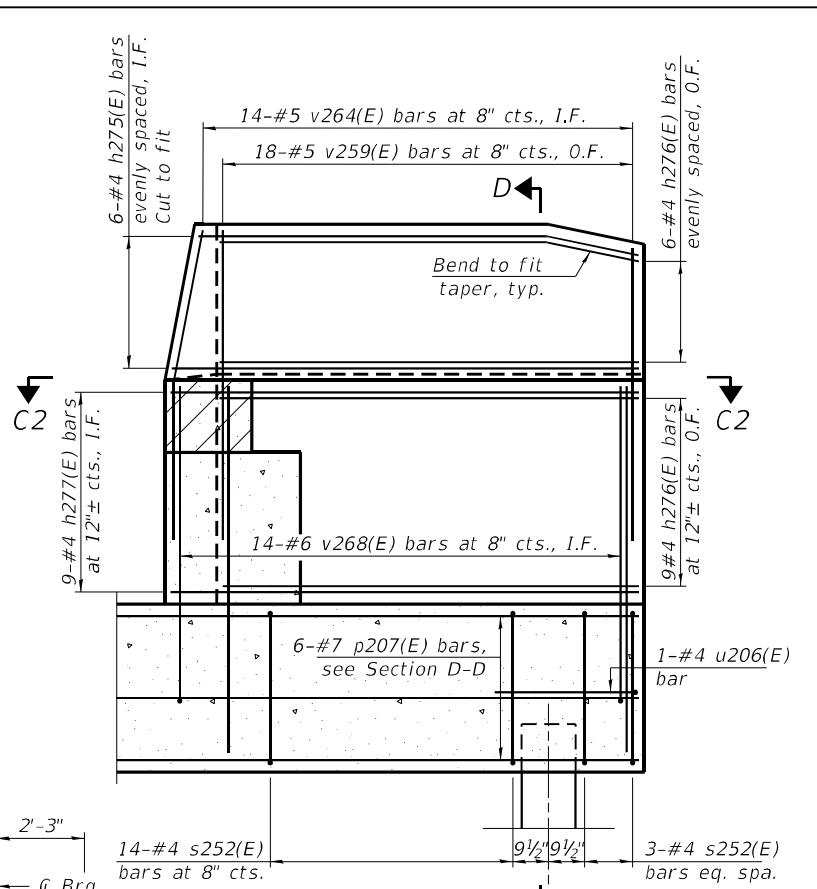
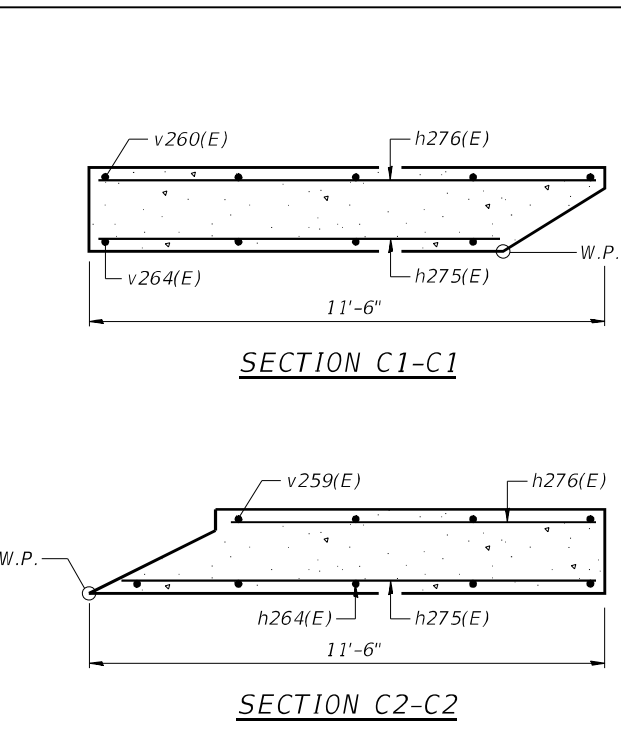
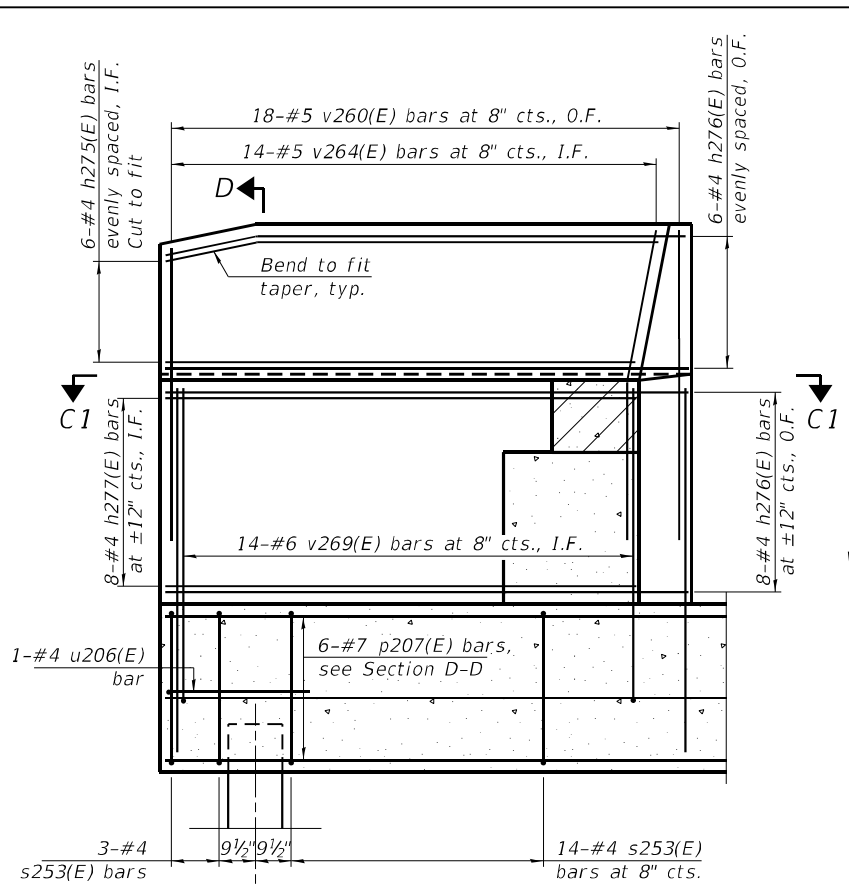
USER NAME =	Structural	DESIGNED -	V.G.	REVISED -	
CHECKED -		H.A.	REVISED -		
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	CHECKED -	H.A.	REVISED -	

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EAST ABUTMENT MODIFICATIONS II
 SN 099-0028**

SHEET SC-53 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	333
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				



- Notes:
1. Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.
 2. Space reinforcement in cap to miss anchor bolts.
 3. Pour steps monolithically with cap for proposed Abutment.
 4. Quantity of concrete in end post included with Concrete Superstructure on sheet SC-29, SC-31, SC-33 and SC-35.
 5. Existing Reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

* Parallel to approach slab reinforcement.

** Bars shall be drilled and grouted according to Section 584 of the Standard Specifications. Adjust bar spacing as required to clear existing reinforcement. Holes shall be drilled a minimum of 9" deep.

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5054-DET.dgn

GRAEF
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631; (773) 399-0112

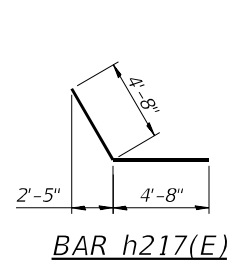
USER NAME =	Structural	DESIGNED -	V.G.	REVISED -	
PLOT SCALE =	N.T.S.	CHECKED -	H.A.	REVISED -	
PLOT DATE =	5/4/2021	DRAWN -	O.M.	REVISED -	
		CHECKED -	H.A.	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

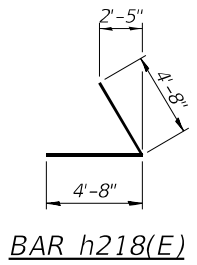
EAST ABUTMENT DETAILS I
SN 099-0028

SHEET SC-54 OF SC-73 SHEETS

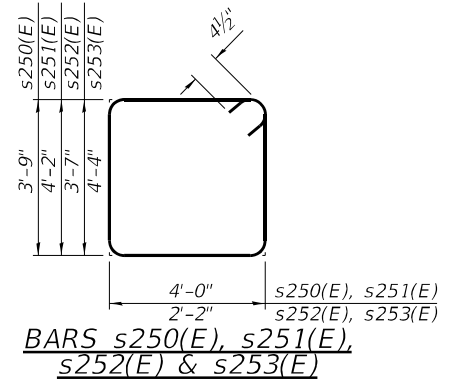
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	334
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				



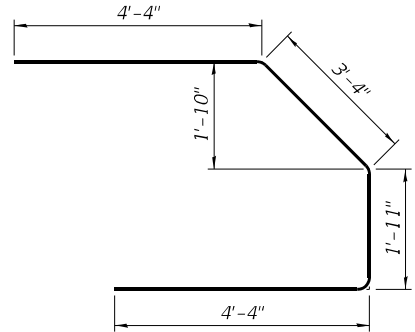
BAR h217(E)



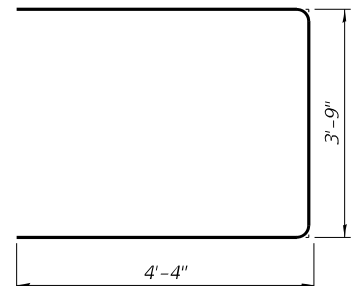
BAR h218(E)



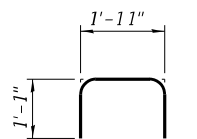
BARS s250(E), s251(E), s252(E) & s253(E)



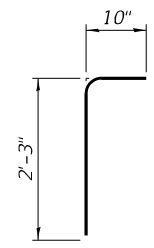
BAR u203(E)



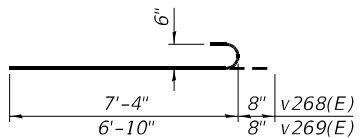
BAR u204(E)



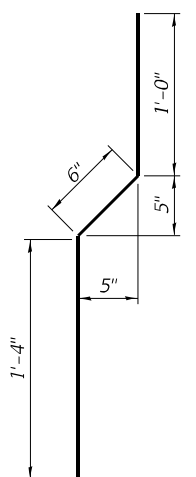
BAR u205(E)



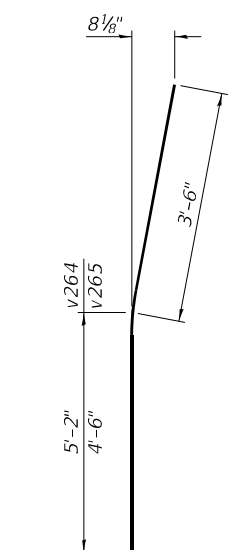
BAR v207(E)



BAR v268(E) & v269(E)



BAR v208(E)



BAR v264(E) & v265(E)

**EAST ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h217(E)	14	# 6	20'-8"	└─┘
h218(E)	14	# 6	10'-7"	└─┘
h219(E)	6	# 6	20'-8"	└─┘
h220(E)	6	# 6	10'-7"	└─┘
h221(E)	10	# 6	21'-6"	└─┘
h227(E)	15	# 6	25'-11"	└─┘
h275(E)	5	# 4	11'-2"	└─┘
h276(E)	12	# 4	11'-2"	└─┘
h277(E)	7	# 4	11'-2"	└─┘
h249(E)	12	# 9	6'-10"	└─┘
p201(E)	8	# 7	20'-8"	└─┘
p202(E)	8	# 7	10'-7"	└─┘
p253(E)	6	# 7	11'-2"	└─┘
p254(E)	6	# 7	12'-0"	└─┘
p210(E)	15	# 5	27'-9"	└─┘
p211(E)	5	# 5	24'-6"	└─┘
p212(E)	5	# 5	31'-2"	└─┘
p213(E)	10	# 5	30'-2"	└─┘
p214(E)	10	# 5	20'-14"	└─┘
p215(E)	5	# 5	35'-8"	└─┘
s250(E)	10	# 4	15'-11"	□
s251(E)	22	# 4	16'-9"	□
s252(E)	17	# 4	15'-7"	□
s253(E)	17	# 4	17'-1"	□
u203(E)	4	# 6	13'-11"	└─┘
u204(E)	5	# 6	12'-5"	└─┘
u205(E)	247	# 5	4'-1"	└─┘
v207(E)	32	# 5	3'-1"	└─┘
v208(E)	32	# 5	2'-10"	└─┘
v259(E)	18	# 5	8'-10"	└─┘
v260(E)	18	# 5	8'-2"	└─┘
v263(E)	494	# 5	2'-0"	└─┘
v264(E)	14	# 5	8'-8"	└─┘
v265(E)	14	# 5	8'-0"	└─┘
v266(E)	4	# 5	7'-4"	└─┘
v267(E)	4	# 5	6'-8"	└─┘
v268(E)	18	# 6	8'-0"	└─┘
v269(E)	18	# 6	7'-6"	└─┘
Structure Excavation	Cu. Yd.		291	
Concrete Structures	Cu. Yd.		40.1	
Reinforcement Bars, Epoxy Coated	Pound		8,760	
Furnishing Metal Shell Pile 14" X 0.312"	Foot		190	
Driving Piles	Foot		190	
Concrete Sealer	Sq. Ft.		367	
Test Pile Metal Shell	Each		1	
Pile Shoes	Each		10	

For details of Bar Splicers, see sheet SC-66.

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5035-DET.dgn



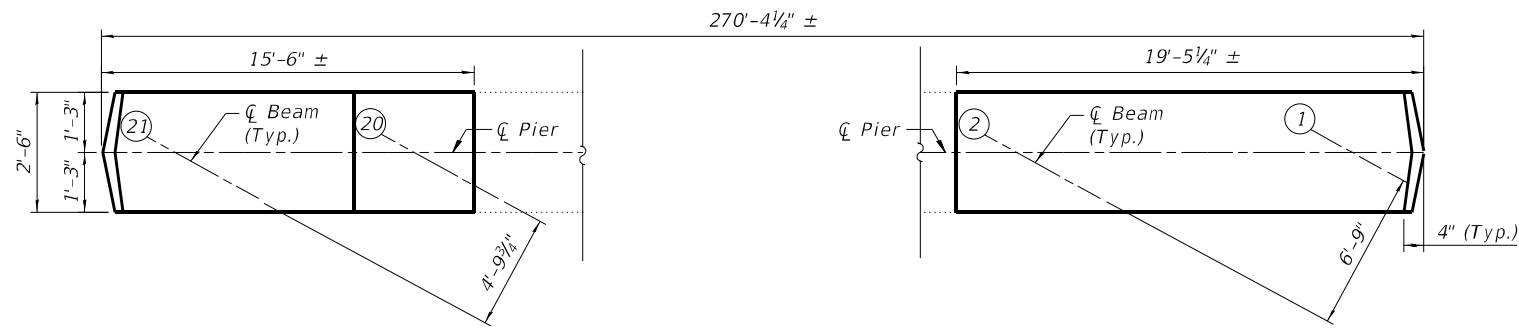
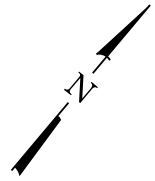
USER NAME =	Structural	DESIGNED -	V.G.	REVISED -	
CHECKED -		H.A.	REVISED -		
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	CHECKED -	H.A.	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

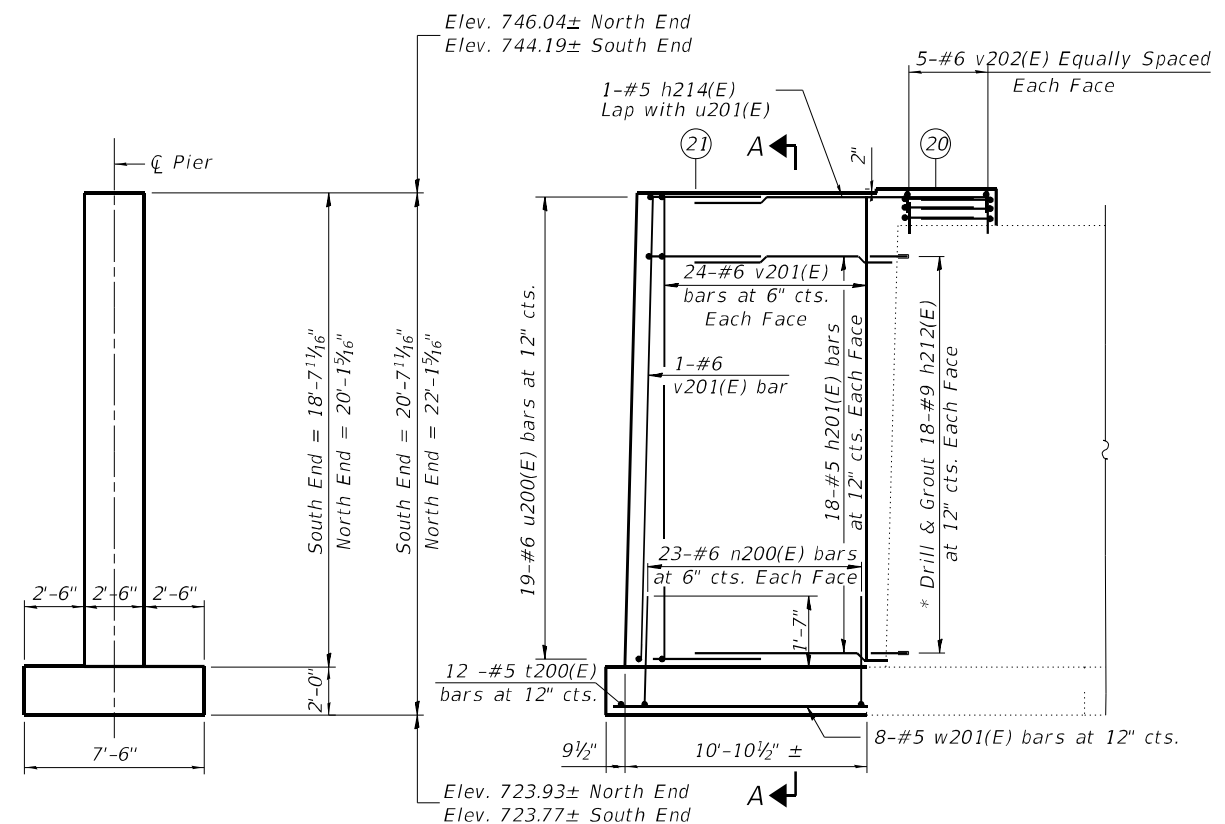
EAST ABUTMENT DETAILS II
SN 099-0028

SHEET SC-55 OF SC-73 SHEETS

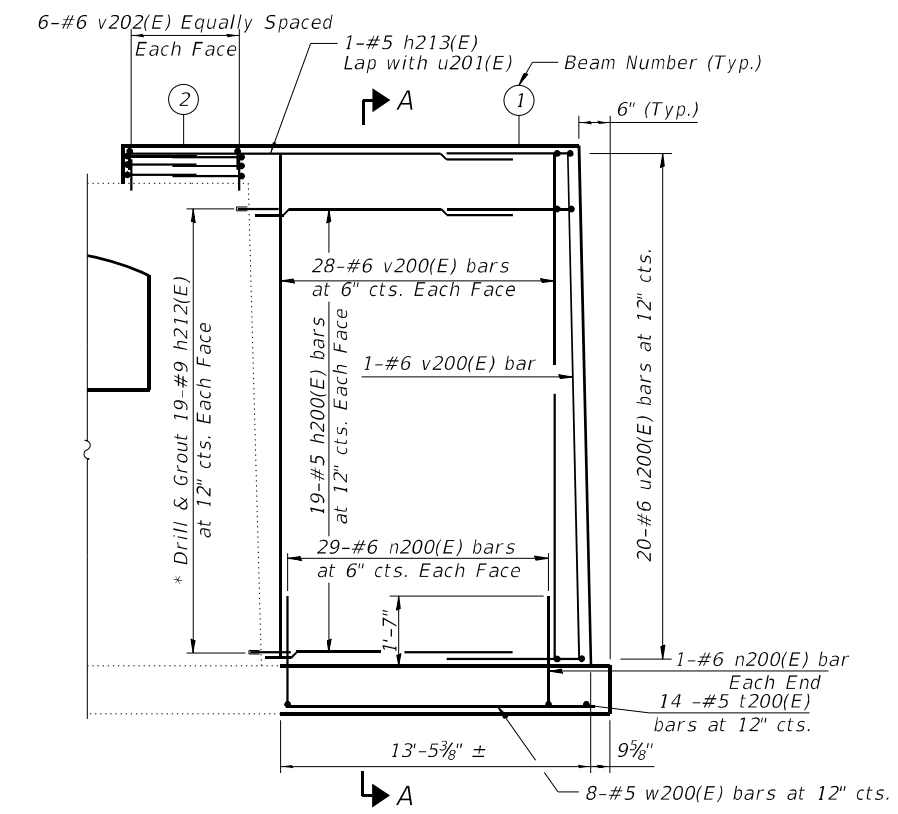
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	335
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				



TOP PLAN

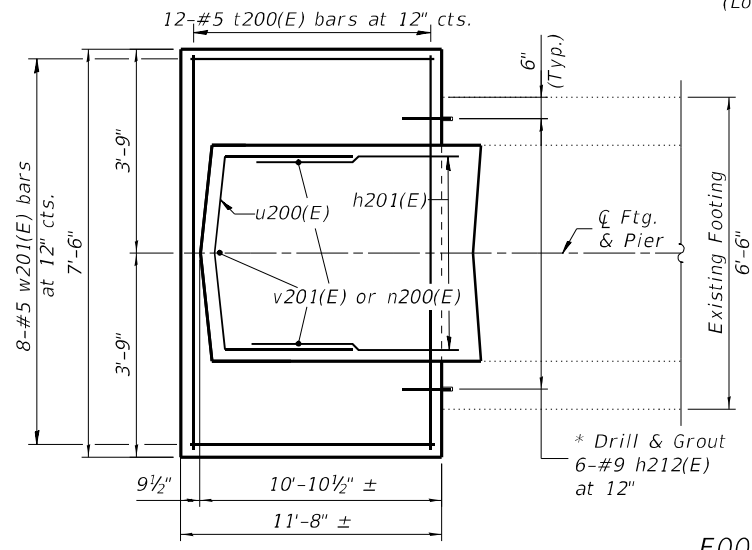


ELEVATION
(Looking West)

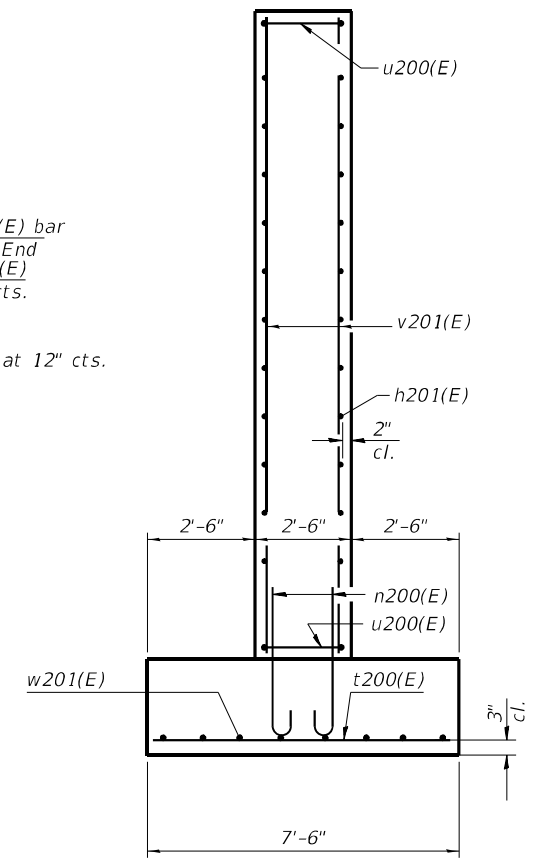
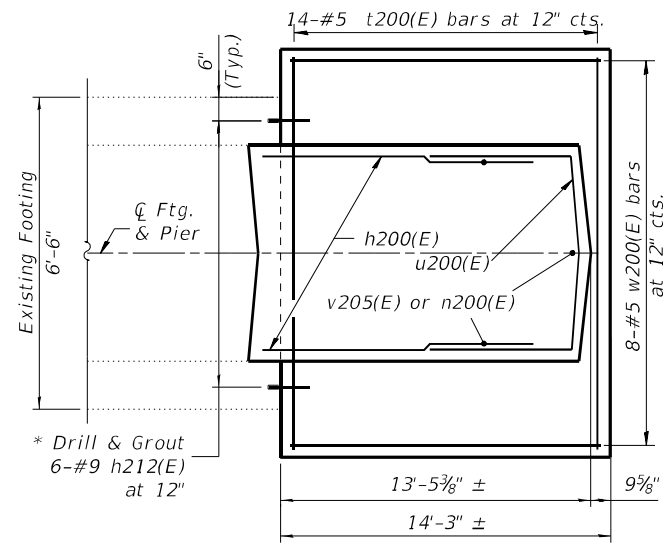


MINIMUM BAR LAP
 #5 = 3'-8"
 #6 = 4'-5"

END VIEW



FOOTING PLAN



SECTION A-A
 Maximum applied service soil pressure
 Q_{max} = 4000 psf

- Notes:
- See sheet SC-57 for beam seat elevations and pedestal heights.
 - Concrete Sealer shall be applied to all exposed surface areas of new concrete.
 - For anchor bolt layout, see sheet SC-57.
 - For Bill of Materials and bar bending diagrams, see sheet SC-58.
 - Space reinforcement in cap to miss anchor bolt.
- * Bars shall be drilled and grouted according to Section 584 of the Standard Specifications. Adjust bar spacing as required to clear existing reinforcing. Holes shall be drilled a minimum of 9" deep.

MODEL: Default
 FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5056-PRW.dgn
 5/4/2021 4:34:07 PM

GR&E
 8501 W. Higgins Road, Suite 280
 Chicago, Illinois 60631; (773) 399-0112

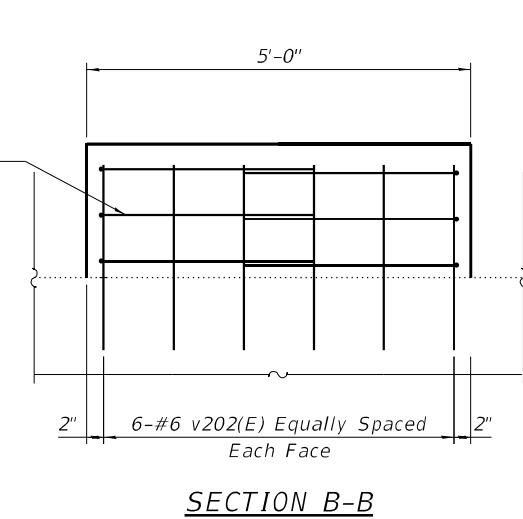
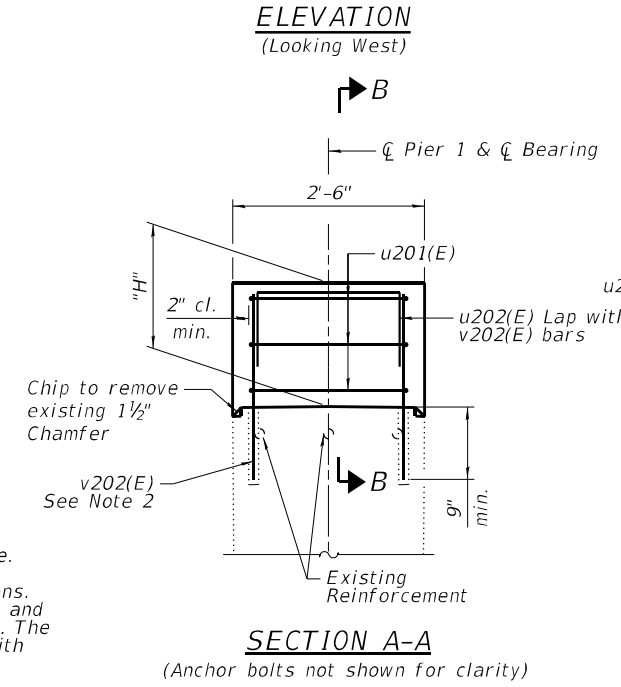
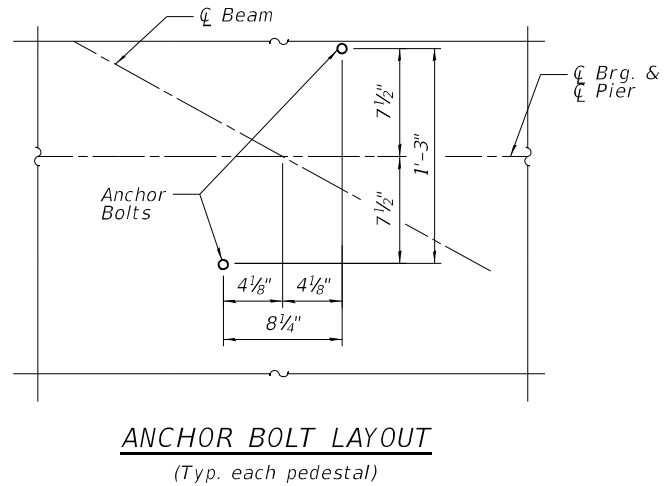
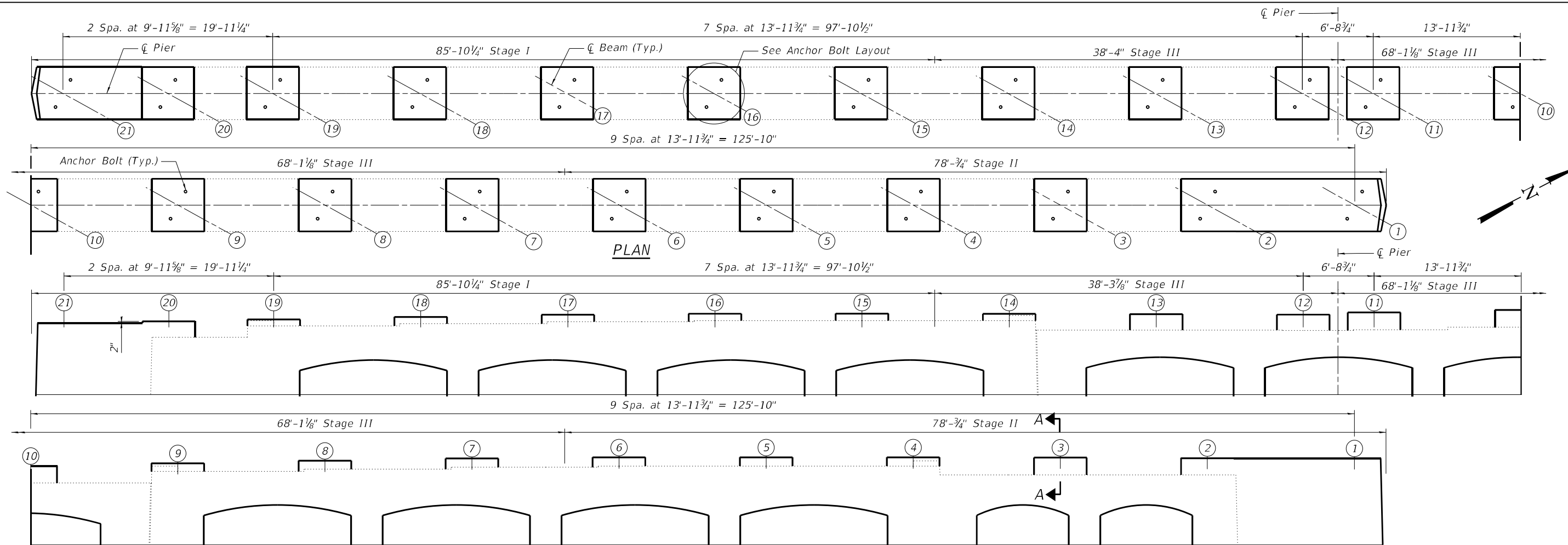
USER NAME =	Structural	DESIGNED -	V.G.	REVISED -	
CHECKED -		H.A.	REVISED -		
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	CHECKED -	H.A.	REVISED -	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PIER 1 WIDENING I
 SN 099-0028

SHEET SC-56 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	336
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				



BEAM SEAT ELEVATION PEDESTAL HEIGHT, "H"

Beam	Pier 1
1	746.04
2	746.04
3	746.04
4	746.87
5	746.87
6	746.87
7	746.78
8	746.61
9	746.38
10	745.19

Beam	Pier 1
1	1'-6 7/8"
2	1'-7 3/8"
3	1'-7 3/4"
4	0'-9 7/8"
5	0'-9 7/8"
6	0'-9 7/8"
7	0'-9 5/8"
8	0'-9 1/8"
9	0'-9 1/8"
10	1'-8 3/8"

BEAM SEAT ELEVATION PEDESTAL HEIGHT, "H"

Beam	Pier 1
11	744.93
12	744.88
13	744.91
14	745.76
15	745.76
16	745.76
17	745.63
18	745.48
19	745.27
20	744.19
21	744.19

Beam	Pier 1
11	1'-8 1/2"
12	1'-6 3/4"
13	1'-6 7/8"
14	0'-9"
15	0'-9 1/4"
16	0'-9 1/4"
17	0'-9 1/2"
18	0'-8 7/8"
19	0'-8 1/2"
20	1'-7 3/8"
21	1'-5 1/4"

- Notes:
- Concrete Sealer shall be applied to all exposed surface areas of new concrete.
 - Drill and grout #5 bars according to Section 584 of the Standard Specifications. Depth of the hole shall be 9" min. The Contractor shall make efforts to locate and miss existing reinforcement with minor adjustments in bar locations permitted. The bars shall be placed a minimum 6" from the edge of concrete. Cost included with Reinforcement Bars, Epoxy coated.
 - Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.
 - Prior to constructing pedestals the Contractor shall roughen the concrete surfaces of existing caps and clear all the loose debris.
 - Concrete Sealer shall be applied to all exposed surface areas of new concrete.
 - For Bill of Materials and bar bending diagrams, see sheet SC-58.
 - Space reinforcement in cap to miss anchor bolt.

MINIMUM BAR LAP

#5 = 3'-8"
#6 = 4'-5"

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5057-PRW.dgn

GR&EF
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631; (773) 399-0112

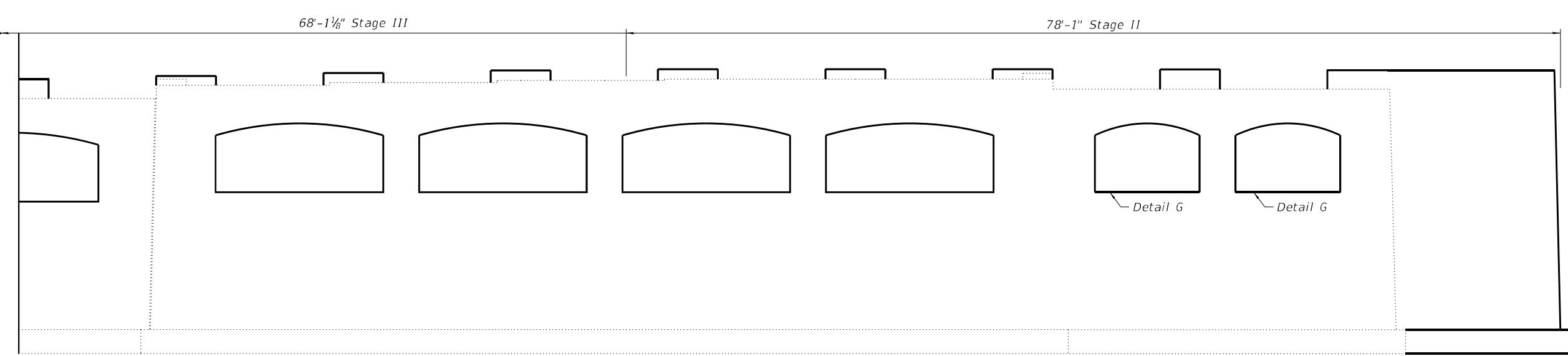
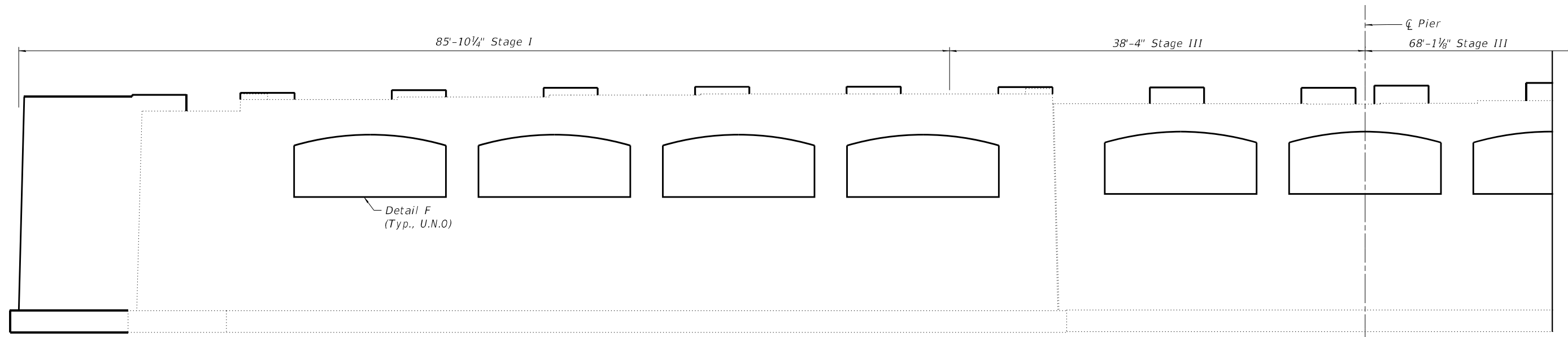
USER NAME =	Structural	DESIGNED -	O.M.	REVISED -	
		CHECKED -	H.A.	REVISED -	
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	CHECKED -	H.A.	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 WIDENING II
SN 099-0028

SHEET SC-57 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	337
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				



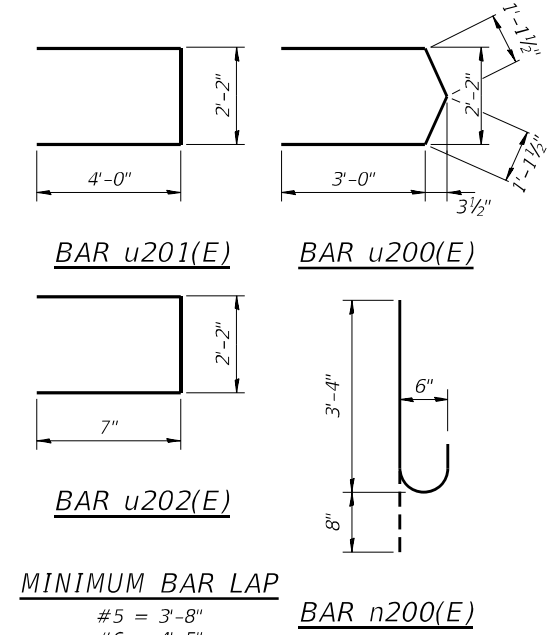
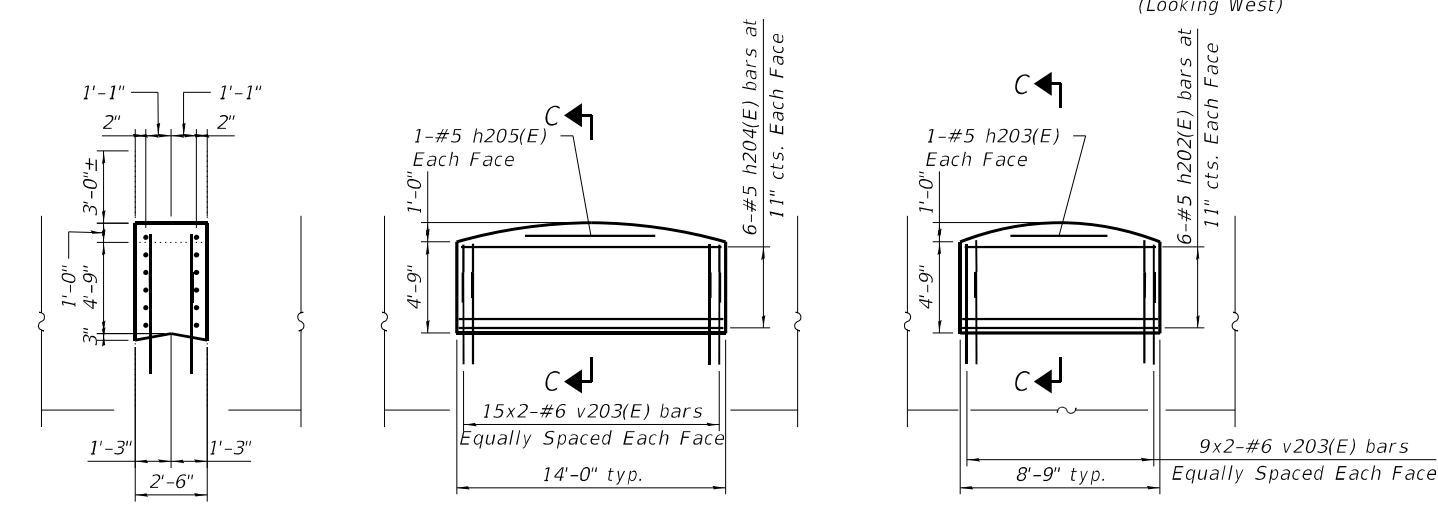
PIER 1 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h200(E)	38	# 5	14'-5"	—
h201(E)	36	# 5	11'-10"	—
h202(E)	24	# 5	8'-5"	—
h203(E)	4	# 5	4'-3"	—
h204(E)	132	# 5	13'-8"	—
h205(E)	24	# 5	6'-10"	—
h212(E)	86	# 9	4'-0"	—
h213(E)	1	# 5	18'-6"	—
h214(E)	1	# 5	14'-6"	—
n200(E)	106	# 6	4'-0"	U
t200(E)	26	# 5	7'-0"	—
u200(E)	39	# 6	8'-3"	U
u201(E)	114	# 5	10'-2"	U
u202(E)	114	# 5	3'-4"	U
v200(E)	57	# 6	19'-11"	—
v201(E)	49	# 6	18'-5"	—
v202(E)	228	# 5	2'-4"	—
v203(E)	792	# 6	3'-11"	—
w200(E)	8	# 5	13'-11"	—
w201(E)	8	# 5	11'-4"	—
Structure Excavation			Cu. Yd.	154
Concrete Structures			Cu. Yd.	155.6
Reinforcement Bars, Epoxy Coated			Pound	15,900
Concrete Sealer			Sq. Ft.	632

ELEVATION
(Looking West)

Notes:

1. Drill and grout #6 bars according to Section 584 of the standard Specifications. Depth of the hole shall be 9" min. The Contractor shall make efforts to locate and miss existing reinforcement with minor adjustments in bar locations permitted. The bars shall be placed a minimum 6" from the edge of concrete. Cost included with Reinforcement Bars, Epoxy coated.
2. Concrete Sealer shall be applied to all exposed surface areas of new concrete.
3. Bars indicated thus 5x2-#5 etc. indicates 5 lines of bars with 2 lengths per line.
4. See sheet SC-57 for beam seat elevations and pedestal heights.
5. Concrete Sealer shall be applied to all exposed surface areas of new concrete.
6. For anchor bolt layout, see sheet SC-57.
7. Space reinforcement in cap to miss anchor bolt.



PROPOSED PIER 1 WINDOWS RETROFIT

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PIER 1 WIDENING III
SN 099-0028**

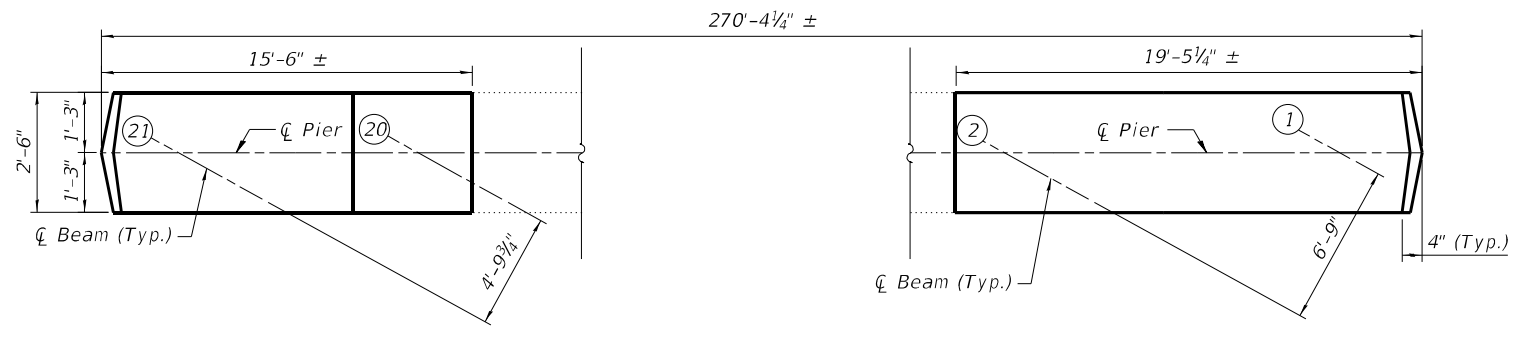
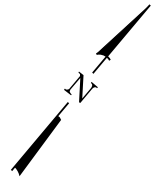
SHEET SC-58 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	338
CONTRACT NO. 62H03				

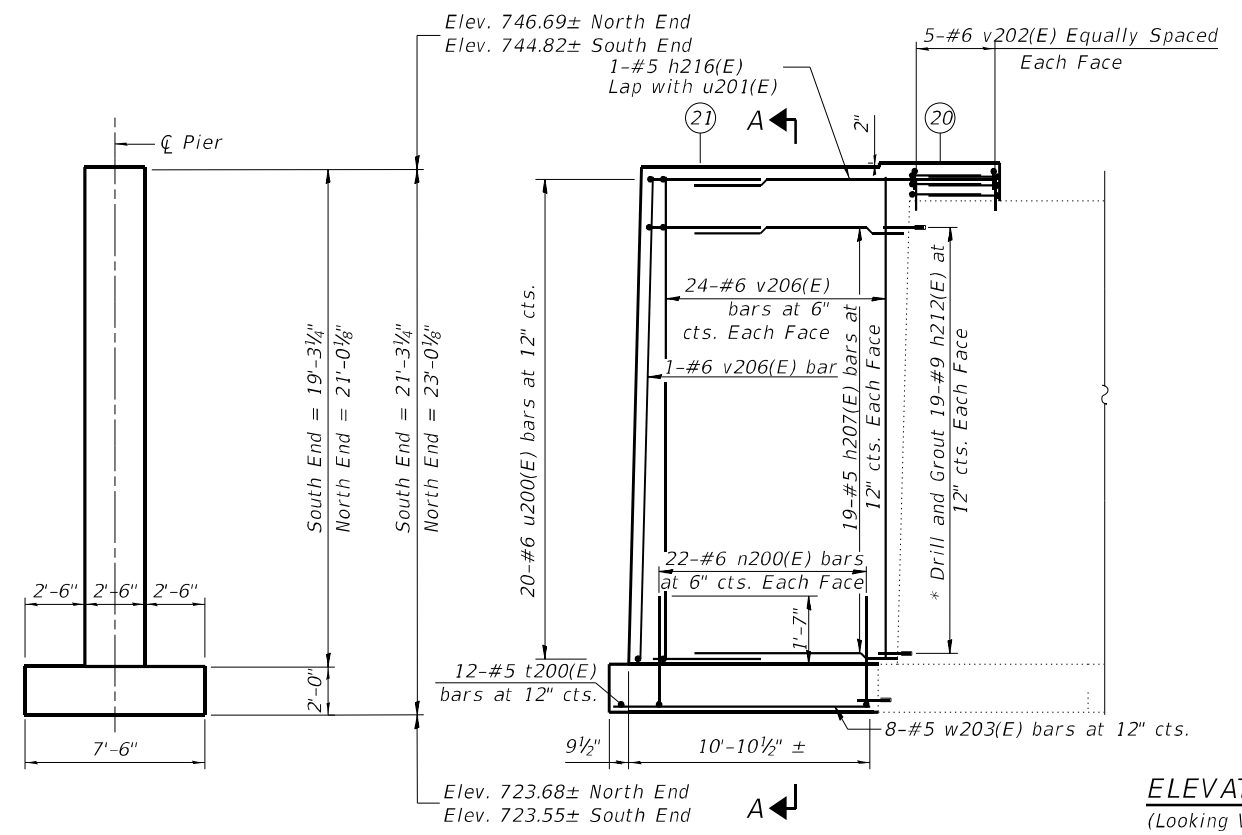
MODEL: Default
 FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5058-PRW.dgn
 5/6/2021 2:37:19 PM

GRÄEF
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631; (773) 399-0112

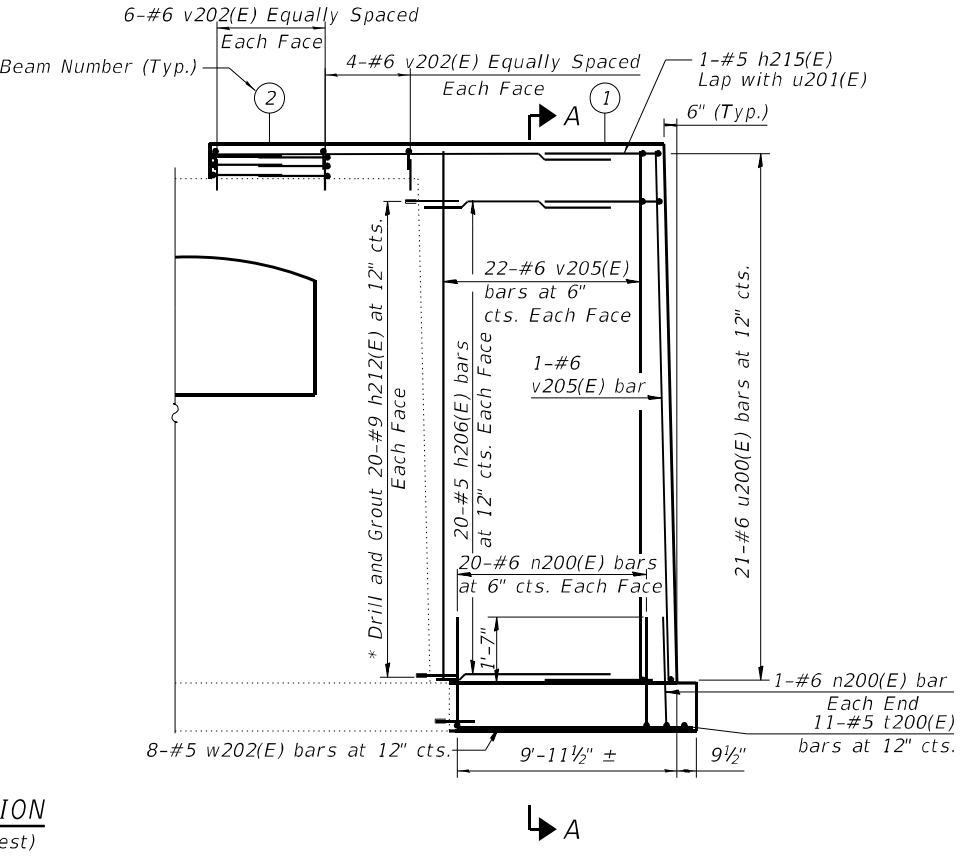
USER NAME =	Structural	DESIGNED -	V.G.	REVISED -	
		CHECKED -	H.A.	REVISED -	
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/6/2021	CHECKED -	H.A.	REVISED -	



TOP PLAN



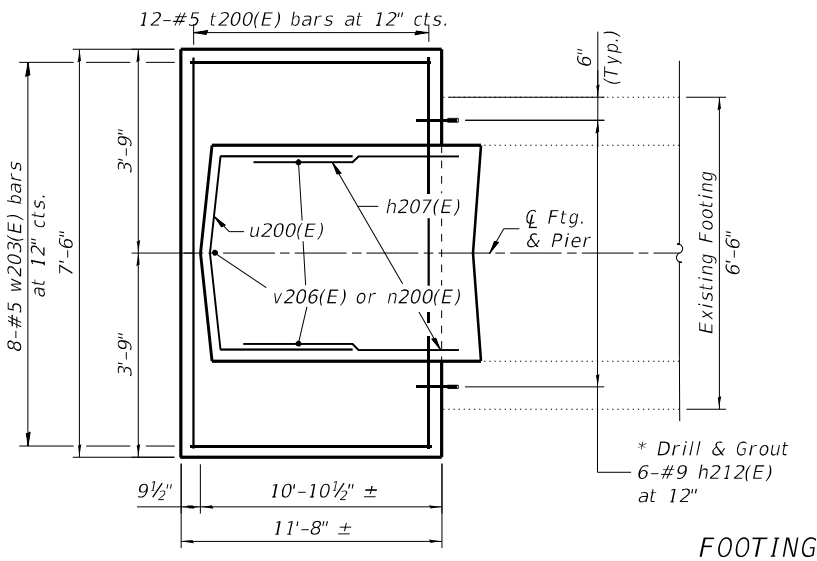
ELEVATION
(Looking West)



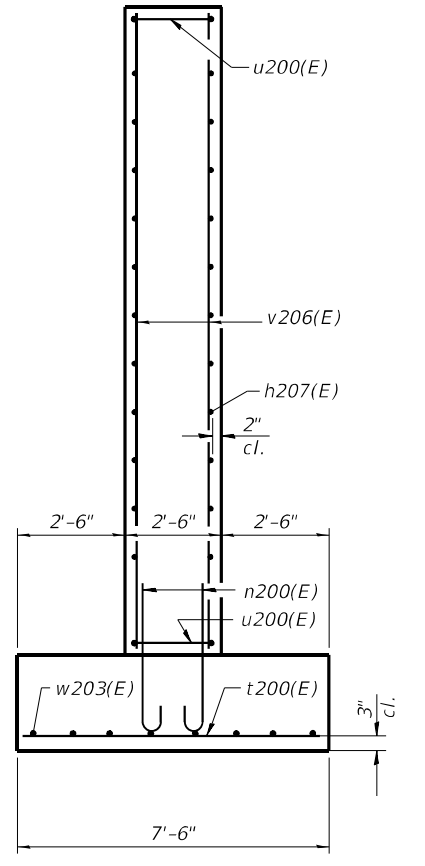
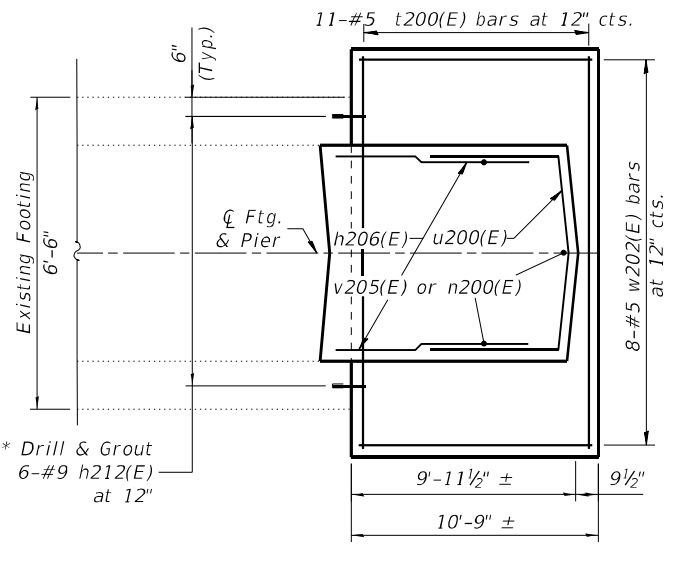
A

MINIMUM BAR LAP
 #5 = 3'-8"
 #6 = 4'-5"

END VIEW



FOOTING PLAN



SECTION A-A

Maximum applied service soil pressure
 $Q_{max} = 4000$ psf

- Notes:
- See sheet SC-60 for beam seat elevations and pedestal heights.
 - Concrete Sealer shall be applied to all exposed surface areas of new concrete.
 - For anchor bolt layout, see sheet SC-60.
 - For Bill of Materials and bar bending diagrams, see sheet SC-61.
 - Space reinforcement in cap to miss anchor bolt.
- * Bars shall be drilled and grouted according to Section 584 of the Standard Specifications. Adjust bar spacing as required to clear existing reinforcing. Holes shall be drilled a minimum of 9" deep.

MODEL: Default
 FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5059-PRW.dgn

GR&E
 8501 W. Higgins Road, Suite 280
 Chicago, Illinois 60631; (773) 399-0112

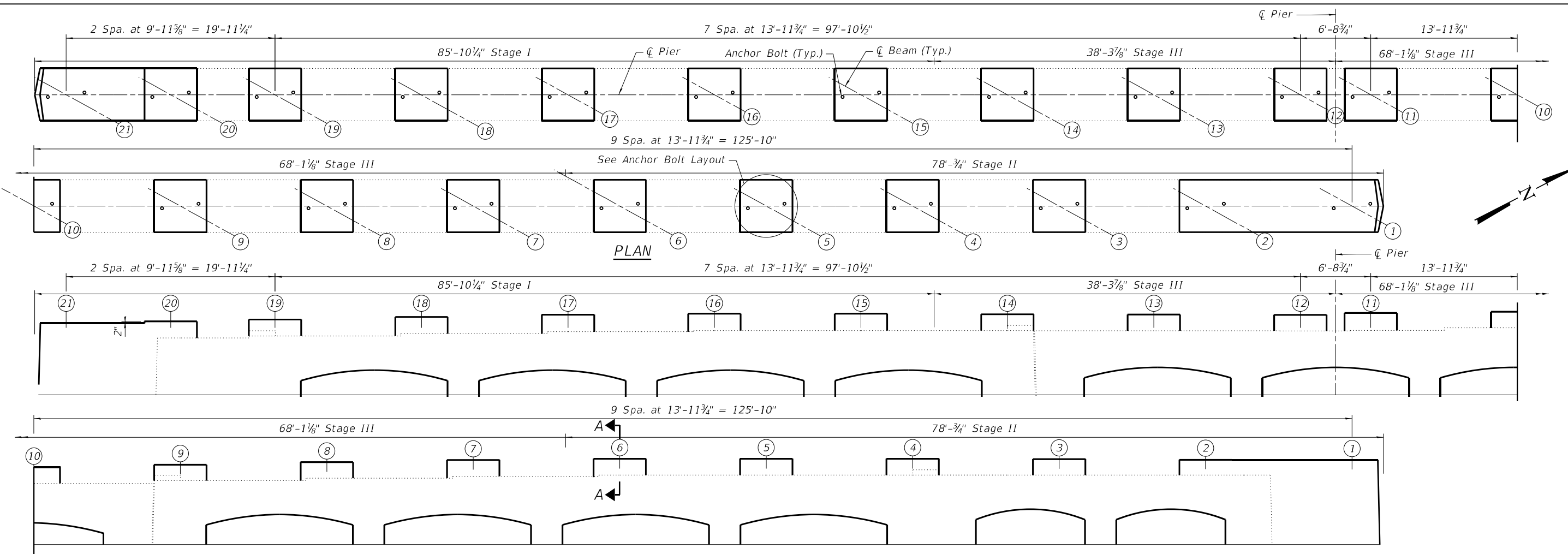
USER NAME =	Structural	DESIGNED -	V.G.	REVISED -	
CHECKED -		H.A.	REVISED -		
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	CHECKED -	H.A.	REVISED -	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

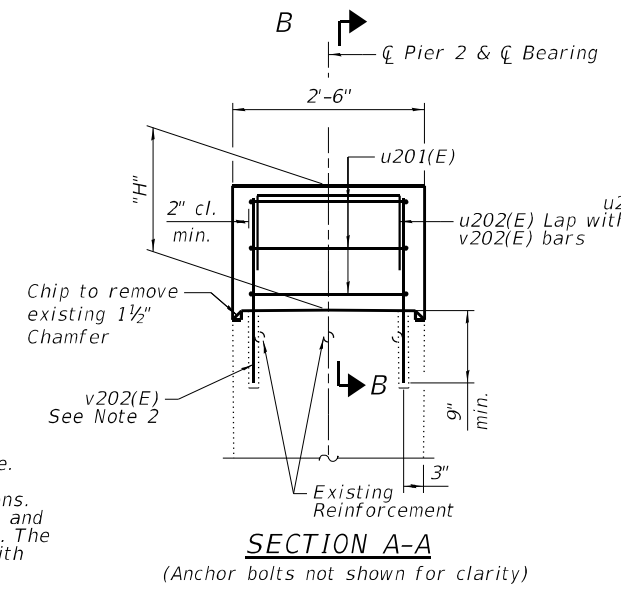
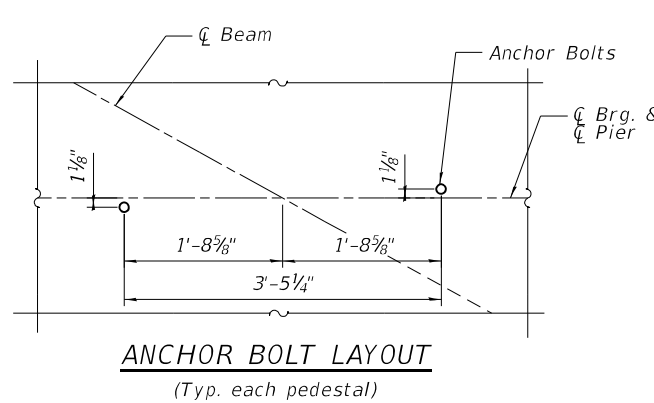
PIER 2 WIDENING I
 SN 099-0028

SHEET SC-59 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	339
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				



ELEVATION
(Looking West)



MINIMUM BAR LAP

#5 = 3'-8"
#6 = 4'-5"

BEAM SEAT ELEVATION PEDESTAL HEIGHT, "H"

Beam	Pier 2
1	746.69
2	746.69
3	746.69
4	746.72
5	746.72
6	746.72
7	746.58
8	746.43
9	746.18
10	745.89

Beam	Pier 2
1	1'-5 1/2"
2	1'-5 7/8"
3	1'-6 3/8"
4	1'-6 1/8"
5	1'-6 1/8"
6	1'-6 1/8"
7	1'-6 5/8"
8	1'-5 7/8"
9	1'-6"
10	1'-6 5/8"

BEAM SEAT ELEVATION PEDESTAL HEIGHT, "H"

Beam	Pier 2
11	745.63
12	745.60
13	745.63
14	745.56
15	745.56
16	745.56
17	745.44
18	745.28
19	745.05
20	744.82
21	744.82

Beam	Pier 2
11	1'-6 3/4"
12	1'-4 3/4"
13	1'-4 3/4"
14	1'-6"
15	1'-6 1/4"
16	1'-6 1/2"
17	1'-6 1/2"
18	1'-5 7/8"
19	1'-5 3/4"
20	1'-6 3/8"
21	1'-4 1/4"

- Notes:
- Concrete Sealer shall be applied to all exposed surface areas of new concrete.
 - Drill and grout #5 bars according to Section 584 of the Standard Specifications. Depth of the hole shall be 9" min. The Contractor shall make efforts to locate and miss existing reinforcement with minor adjustments in bar locations permitted. The bars shall be placed a minimum 6" from the edge of concrete. Cost included with Reinforcement Bars, Epoxy coated.
 - Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.
 - Prior to constructing pedestals the Contractor shall roughen the concrete surfaces of existing caps and clear all the loose debris.
 - Concrete Sealer shall be applied to all exposed surface areas of new concrete.
 - For Bill of Materials and bar bending diagrams, see sheet SC-61.
 - Space reinforcement in cap to miss anchor bolt.

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-095-0028-62H03-5060-PRW.dgn
5/4/2021 3:02:50 PM



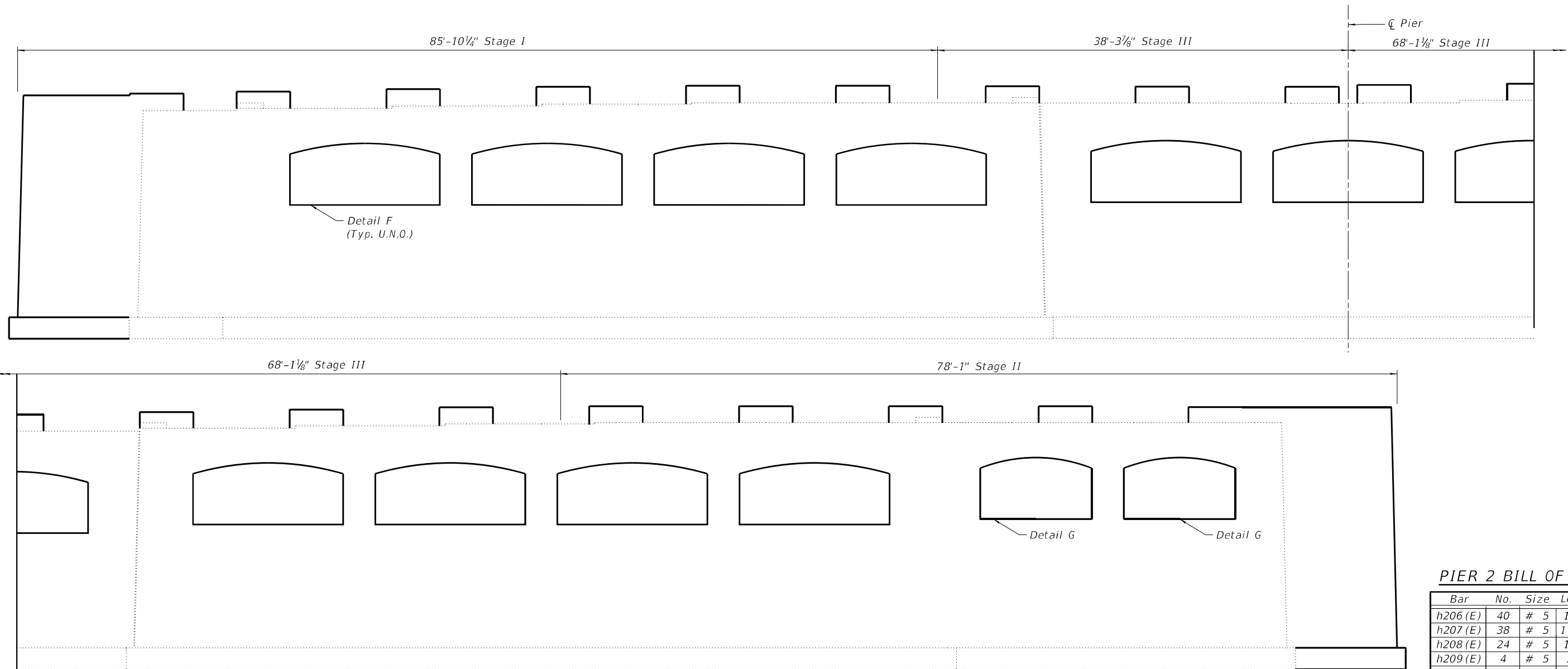
USER NAME =	Structural	DESIGNED -	O.M.	REVISED -	
		CHECKED -	H.A.	REVISED -	
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	CHECKED -	H.A.	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 WIDENING II
SN 099-0028

SHEET SC-60 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	340
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				



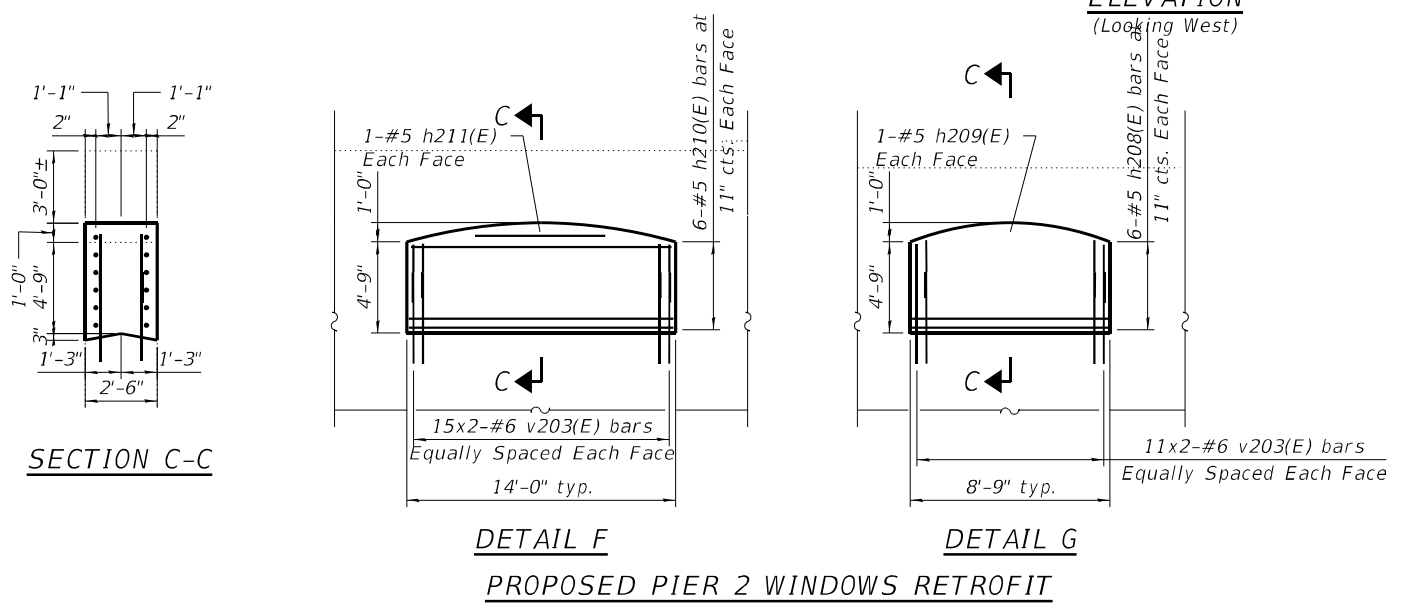
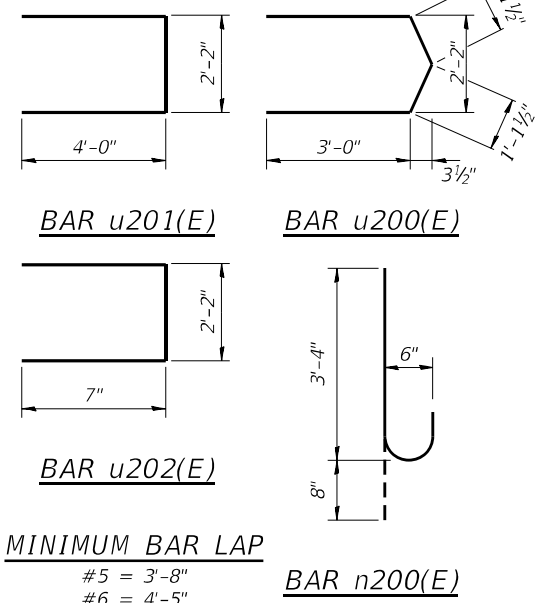
PIER 2 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h206 (E)	40	# 5	11'-1"	—
h207 (E)	38	# 5	11'-10"	—
h208 (E)	24	# 5	10'-1"	—
h209 (E)	4	# 5	5'-1"	—
h210 (E)	132	# 5	13'-8"	—
h211 (E)	24	# 5	6'-10"	—
h212 (E)	90	# 9	4'-0"	—
h215 (E)	1	# 5	19'-2"	—
h216 (E)	1	# 5	15'-2"	—
n200 (E)	86	# 6	4'-0"	U
t200 (E)	23	# 5	7'-0"	—
u200 (E)	41	# 6	8'-3"	U
u201 (E)	114	# 5	10'-2"	U
u202 (E)	114	# 5	3'-4"	U
v202 (E)	228	# 5	2'-6"	—
v203 (E)	808	# 6	3'-11"	—
v205 (E)	45	# 6	20'-10"	—
v206 (E)	49	# 6	19'-1"	—
w202 (E)	8	# 5	10'-5"	—
w203 (E)	8	# 5	11'-4"	—
Structure Excavation			Cu. Yd.	138
Concrete Structures			Cu. Yd.	149.1
Reinforcement Bars, Epoxy Coated			Pound	15,660
Concrete Sealer			Sq. Ft.	571

Notes:

1. Drill and grout #6 bars according to Section 584 of the standard Specifications. Depth of the hole shall be 9" min. The Contractor shall make efforts to locate and miss existing reinforcement with minor adjustments in bar locations permitted. The bars shall be placed a minimum 6" from the edge of concrete. Cost included with Reinforcement Bars, Epoxy coated.
2. Concrete Sealer shall be applied to all exposed surface areas of new concrete.
3. Bars indicated thus 5x2-#5 etc. indicates 5 lines of bars with 2 lengths per line.
4. See sheet SC-60 for beam seat elevations and pedestal heights.
5. Concrete Sealer shall be applied to all exposed surface areas of new concrete.
6. For anchor bolt layout, see sheet SC-60.
7. Space reinforcement in cap to miss anchor bolt.

ELEVATION
(Looking West)



MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design_Sheets\030-099-0028-62H03-5061-PRW.dgn
5/6/2021 2:37:22 PM

GR&EF
8501 N. Higgins Road, Suite 280
Chicago, Illinois 60631; (773) 399-0112

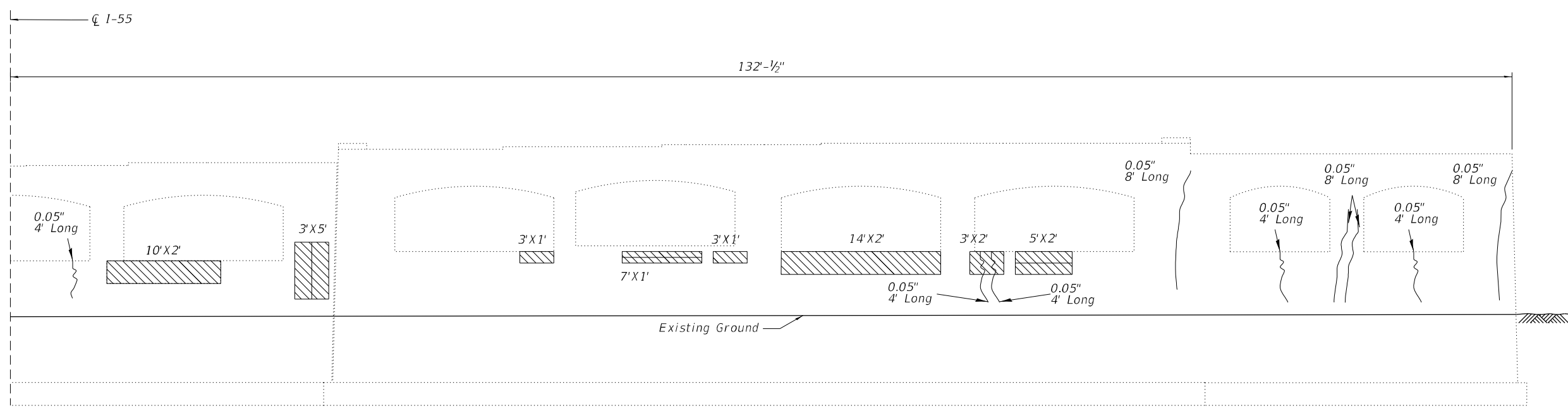
USER NAME =	Structural	DESIGNED -	V.G.	REVISED -	
PLOT SCALE =	N.T.S.	CHECKED -	H.A.	REVISED -	
PLOT DATE =	5/6/2021	DRAWN -	O.M.	REVISED -	
		CHECKED -	H.A.	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

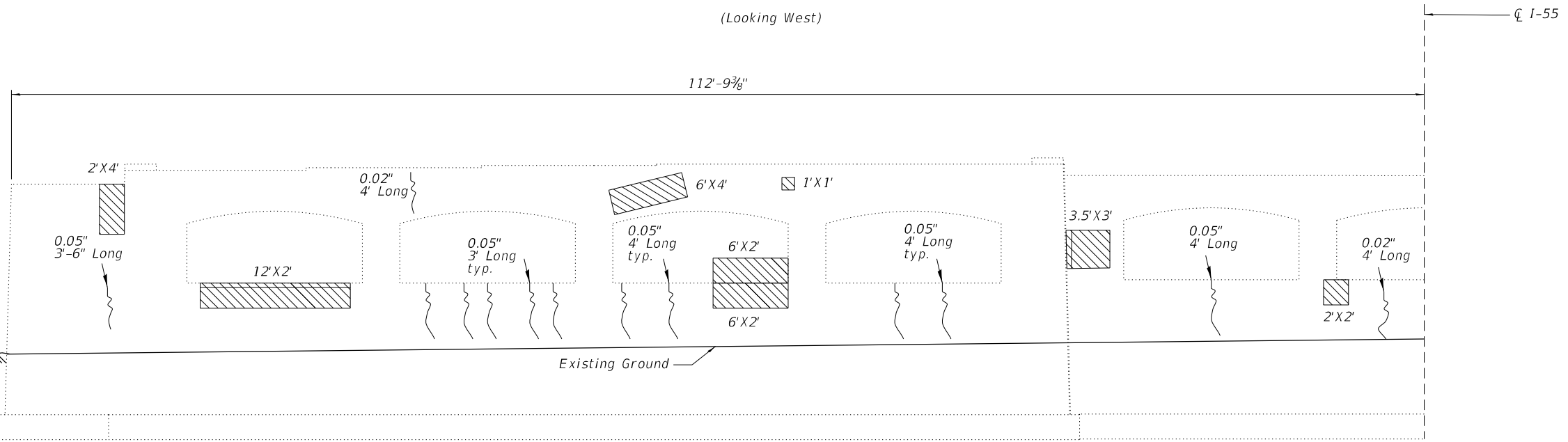
PIER 2 WIDENING III
SN 099-0028

SHEET SC-61 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	341
			CONTRACT NO. 62H03	
		ILLINOIS FED. AID PROJECT		



PIER 1 ELEVATION
(Looking West)



PIER 1 ELEVATION
(Looking West)

- Notes:
1. Area of pier repairs shown are estimated based on inspections performed in March 2018.
 2. The Engineer shall record the actual pier repair areas in the "As Built" plans. Changes in repair areas shall not be cause for additional compensation for a change in scope of the work, however, the contractor will be paid for the quantity furnished at the unit bid price for the work.
 3. For bill of material see sheet SC-63.

Legend

- Structural Repair of Concrete (Depth equal to or less than 5 Inches)
- Crack (CC = Crack Closed)
- Exposed Reinforcement

MODEL: Default
 FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-095-0028-62H03-5062-PRR.dgn
 5/4/2021 3:02:51 PM

GR&EF
 8501 W. Higgins Road, Suite 280
 Chicago, Illinois 60631; (773) 399-0112

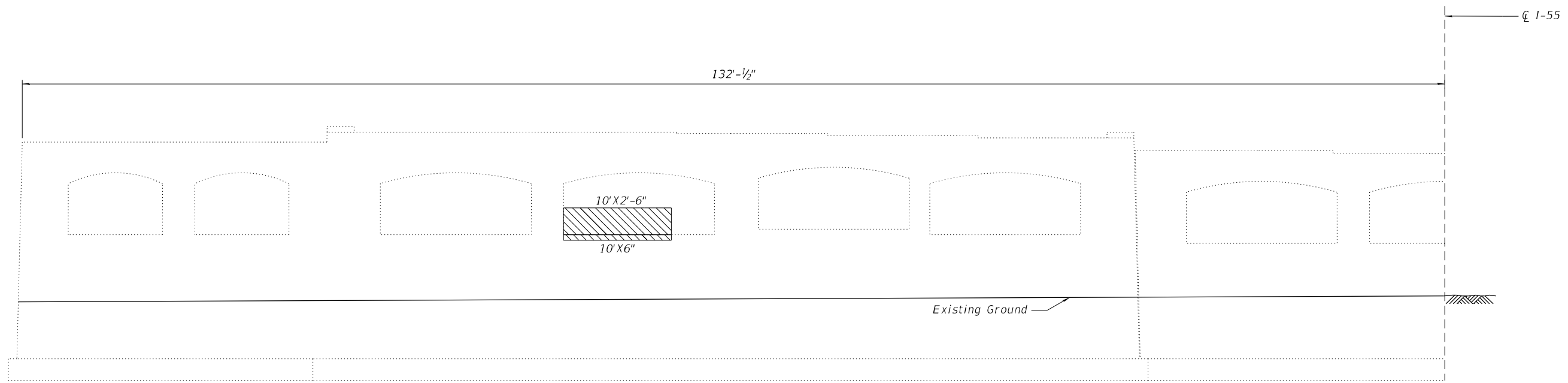
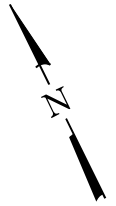
USER NAME =	Structural	DESIGNED -	O.M.	REVISED -	
CHECKED -	H.A.	REVISED -			
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	CHECKED -	H.A.	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

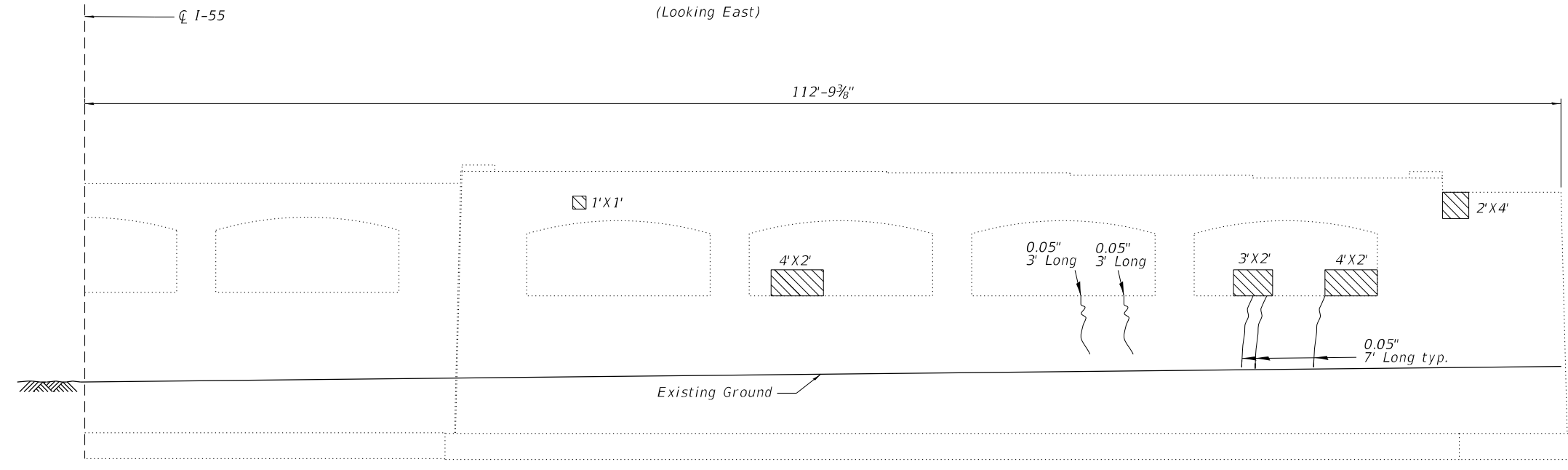
PIER REPAIR DETAILS I
SN 099-0028

SHEET SC-62 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	342
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				



PIER 1 ELEVATION
(Looking East)



PIER 1 ELEVATION
(Looking East)

- Notes:
1. Area of pier repairs shown are estimated based on inspections performed in March 2018.
 2. The Engineer shall record the actual pier repair areas in the "As Built" plans. Changes in repair areas shall not be cause for additional compensation for a change in scope of the work, however, the contractor will be paid for the quantity furnished at the unit bid price for the work.

- Legend**
- Structural Repair of Concrete (Depth equal to or less than 5 Inches)
 - Crack (CC = Crack Closed)
 - Exposed Reinforcement

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth equal to or less than 5 Inches)	Sq. Ft.	246

MODEL: Default
 FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-095-0028-62H03-5063-PRR.dgn
 5/4/2021 3:02:52 PM

GRAEF
 8501 W. Higgins Road, Suite 280
 Chicago, Illinois 60631; (773) 399-0112

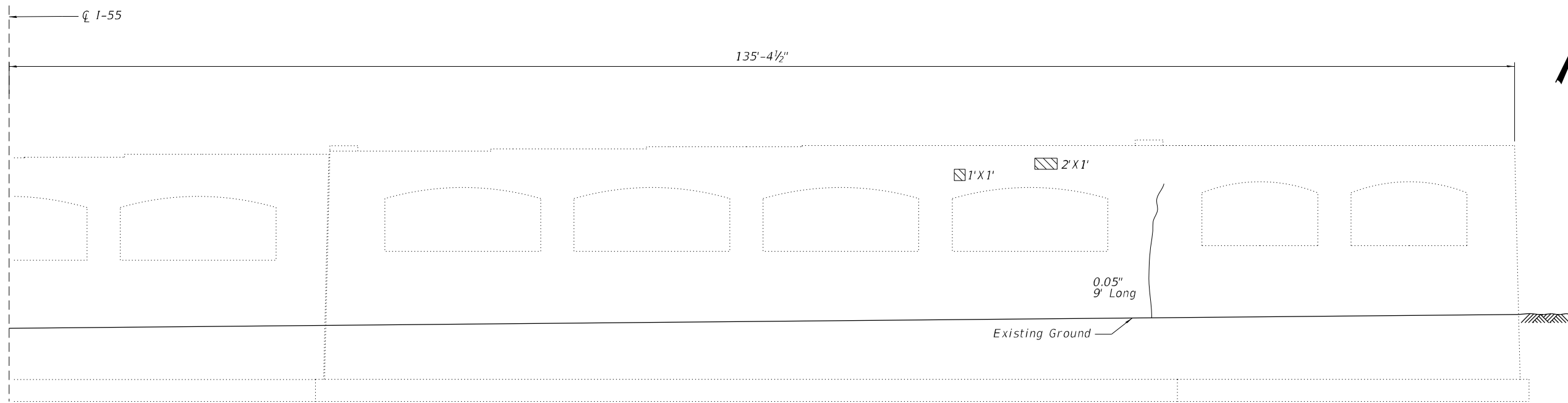
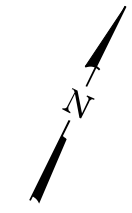
USER NAME =	Structural	DESIGNED -	O.M.	REVISED -	
		CHECKED -	H.A.	REVISED -	
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	CHECKED -	H.A.	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

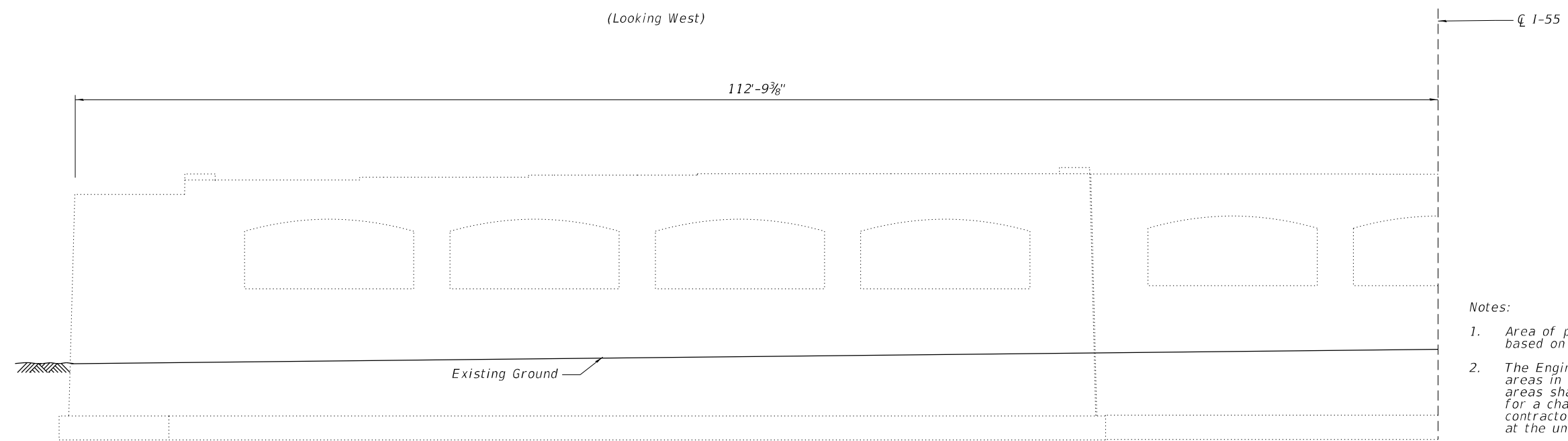
PIER REPAIR DETAILS II
SN 099-0028

SHEET SC-63 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	343
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				



PIER 2 ELEVATION
(Looking West)



PIER 2 ELEVATION
(Looking West)

- Notes:
1. Area of pier repairs shown are estimated based on inspections performed in March 2018.
 2. The Engineer shall record the actual pier repair areas in the "As Built" plans. Changes in repair areas shall not be cause for additional compensation for a change in scope of the work, however, the contractor will be paid for the quantity furnished at the unit bid price for the work.
 3. For bill of material see sheet SC-65.

- Legend**
- Structural Repair of Concrete (Depth equal to or less than 5 Inches)
 - Crack (CC = Crack Closed)
 - Exposed Reinforcement

MODEL: Default
 FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-095-028-62H03-5064-PRR.dgn
 5/4/2021 3:02:52 PM

GR̄EF
 8501 W. Higgins Road, Suite 280
 Chicago, Illinois 60631; (773) 399-0112

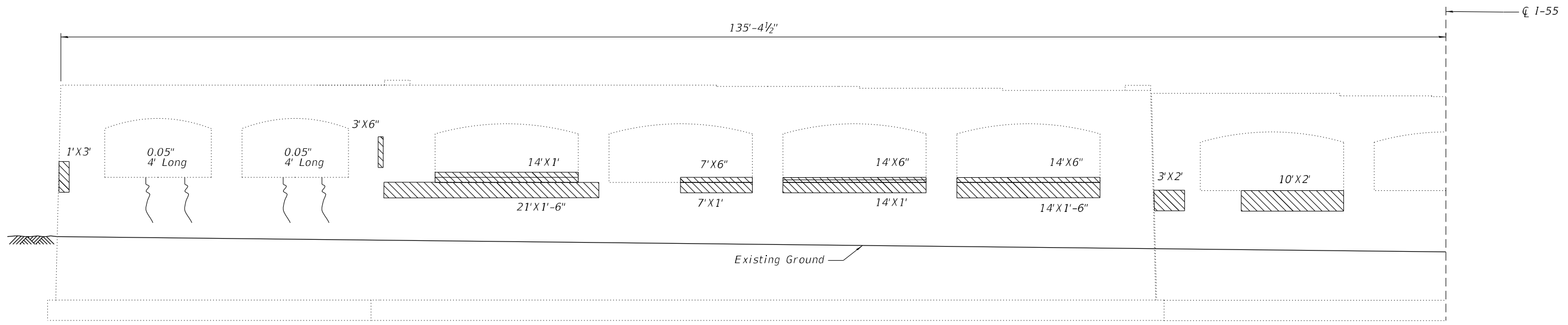
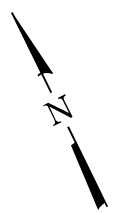
USER NAME =	Structural	DESIGNED -	O.M.	REVISED -	
		CHECKED -	H.A.	REVISED -	
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	CHECKED -	H.A.	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

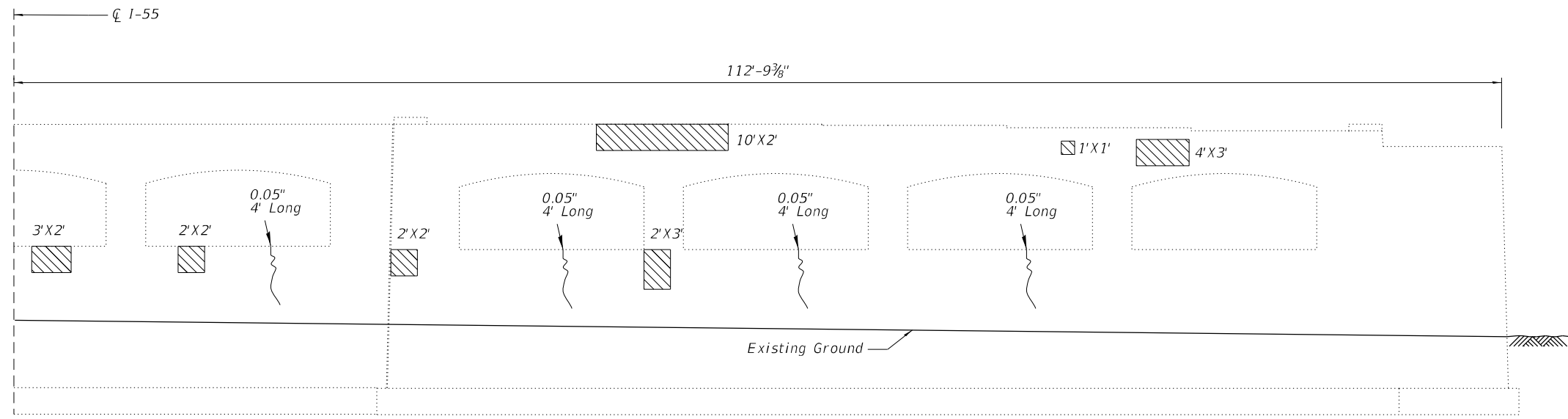
**PIER REPAIR DETAILS III
SN 099-0028**

SHEET SC-64 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	344
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				



PIER 2 ELEVATION
(Looking East)



PIER 2 ELEVATION
(Looking East)

- Notes:
1. Area of pier repairs shown are estimated based on inspections performed in March 2018.
 2. The Engineer shall record the actual pier repair areas in the "As Built" plans. Changes in repair areas shall not be cause for additional compensation for a change in scope of the work, however, the contractor will be paid for the quantity furnished at the unit bid price for the work.

Legend

- Structural Repair of Concrete (Depth equal to or less than 5 Inches)
- Crack (CC = Crack Closed)
- Exposed Reinforcement

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth equal to or less than 5 Inches)	Sq. Ft.	189

MODEL: Default
 FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-095-0028-62H03-5065-PRR.dgn
 5/4/2021 3:02:53 PM

GR&EF
 8501 W. Higgins Road, Suite 280
 Chicago, Illinois 60631; (773) 399-0112

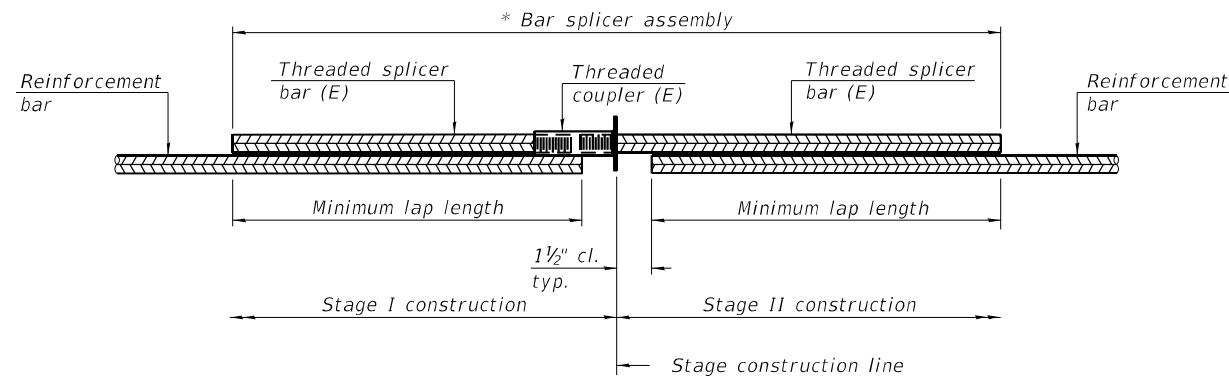
USER NAME =	Structural	DESIGNED -	O.M.	REVISED -	
		CHECKED -	H.A.	REVISED -	
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	CHECKED -	H.A.	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER REPAIR DETAILS IV
SN 099-0028

SHEET SC-65 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	345
CONTRACT NO. 62H03			ILLINOIS FED. AID PROJECT	

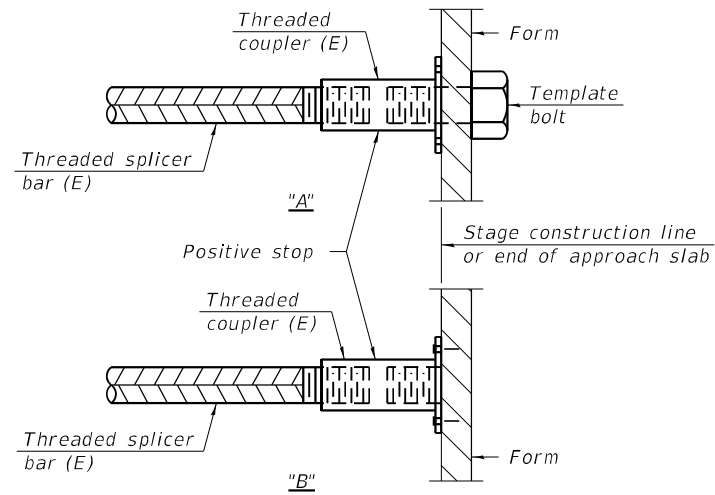


STANDARD BAR SPLICER ASSEMBLY PLAN
 (All components shall be provided from one supplier)

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

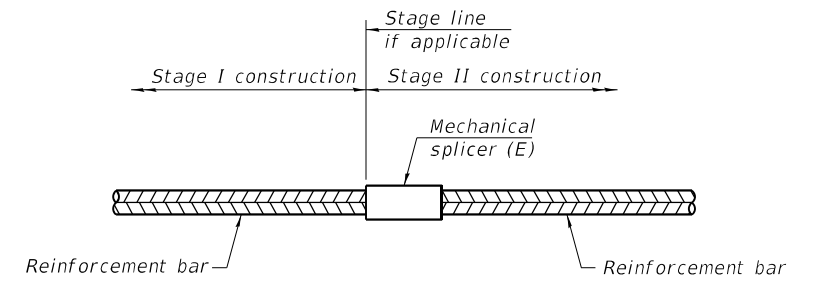
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
SB Deck	#5	641	3'-6"
NB Deck	#5	640	3'-6"
SB W. Appr.	#5	64	3'-0"
SB W. Appr.	#8	30	4'-9"
SB E. Appr.	#5	64	3'-0"
SB E. Appr.	#8	30	4'-9"
NB W. Appr.	#5	64	3'-0"
NB W. Appr.	#8	30	4'-9"
NB E. Appr.	#5	64	3'-0"
NB E. Appr.	#8	30	4'-9"
W Abut.	#5	10	3'-6"
E Abut.	#5	10	3'-6"



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

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.

MODEL: Default
 FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5065-BAR.dgn

BSD-1

1-1-2020

GR&EF
 8501 W. Higgins Road, Suite 280
 Chicago, Illinois 60631; (773) 399-0112

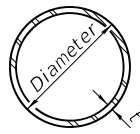
USER NAME =	Structural	DESIGNED -	O.M.	REVISED -	
		CHECKED -	H.A.	REVISED -	
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	CHECKED -	H.A.	REVISED -	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 SN 099-0028

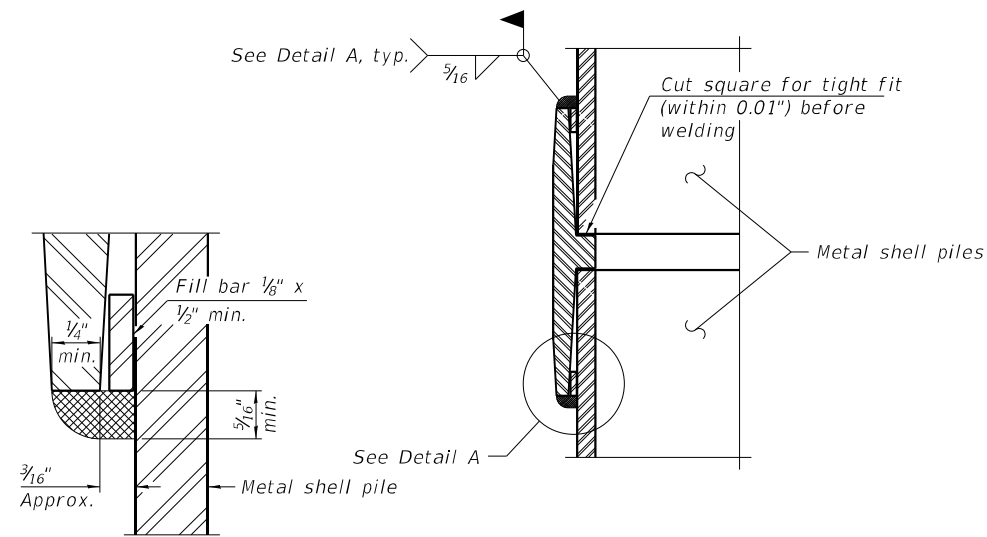
SHEET SC-66 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	346
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				

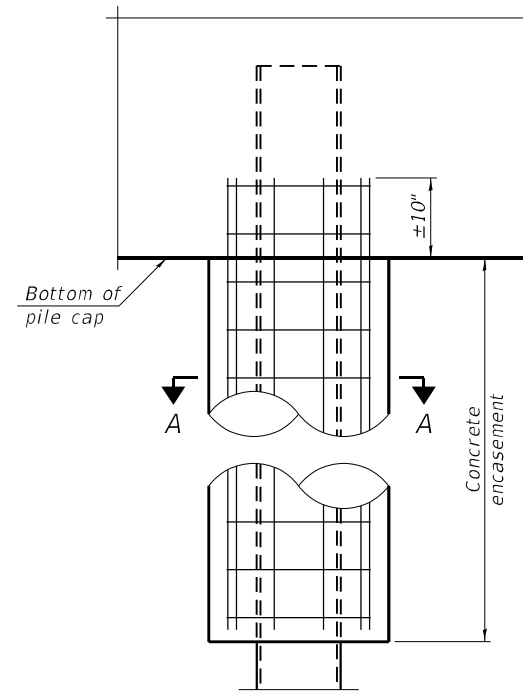


METAL SHELL PILE TABLE

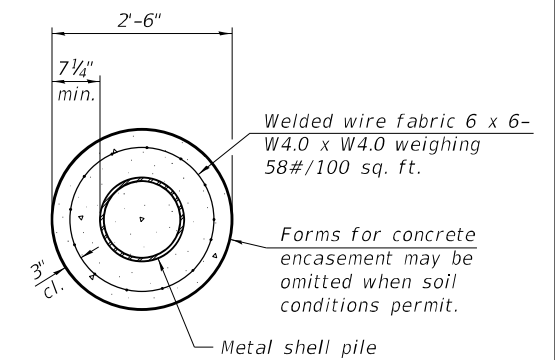
Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. ³ /ft.)
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361
PP16	0.312"	52.32	0.0478
PP16	0.375"	62.64	0.0470



DETAIL A

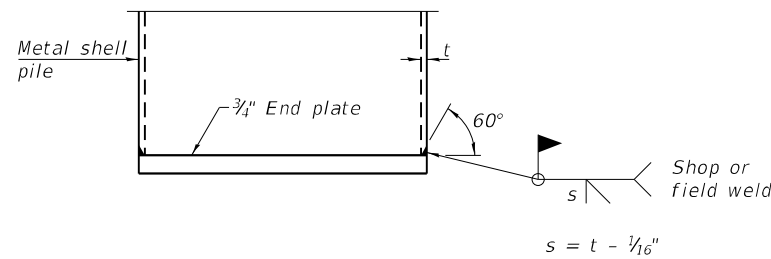


ELEVATION



SECTION A-A

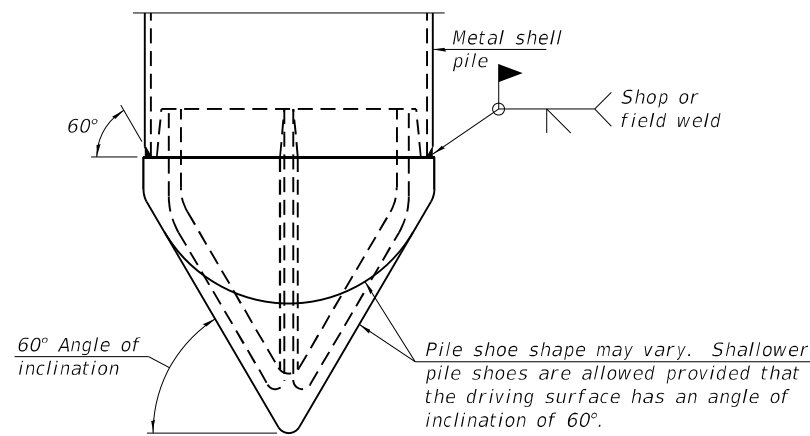
INDIVIDUAL PILE CONCRETE ENCASUREMENT
(When specified)



END PLATE ATTACHMENT

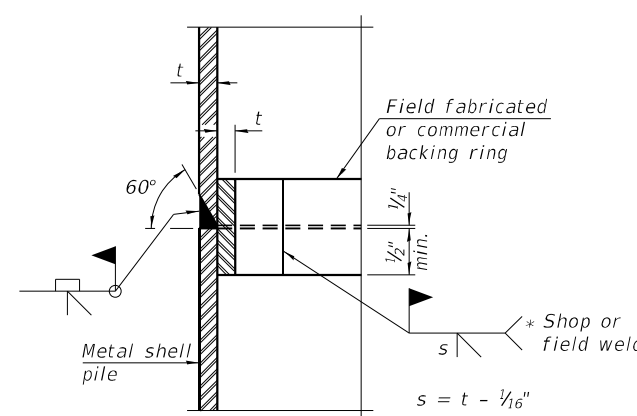
WELDED COMMERCIAL SPLICE

Notes:
The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them.
Pile segments shall be driven to solid contact with splicer before welding.



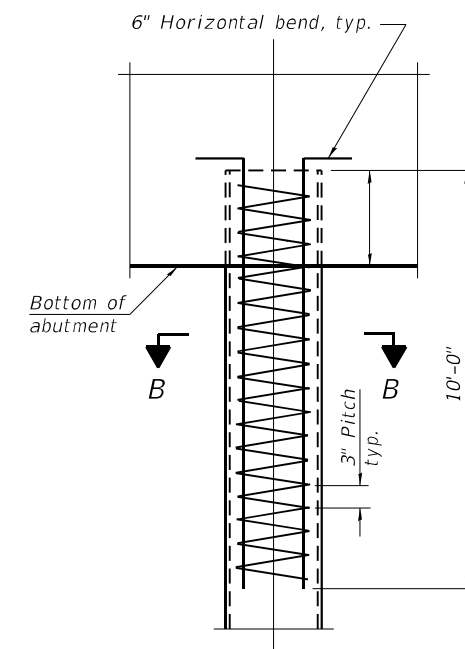
PILE SHOE ATTACHMENT

(When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 80-50 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld).

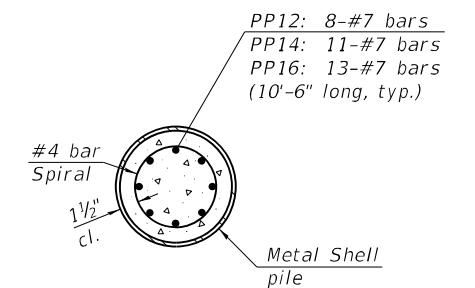


COMPLETE PENETRATION WELD SPLICE

* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



ELEVATION



SECTION B-B

REINFORCEMENT AT ABUTMENTS
(Omit when concrete encasement is specified)

Note:
The metal shell piles shall be according to Article 1006.05 of the Standard Specifications.

MODEL: Default
FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5067-PILE.dgn

F-MS 1-1-2020

GR&E
8501 W. Higgins Road, Suite 280
Chicago, Illinois 60631; (773) 399-0112

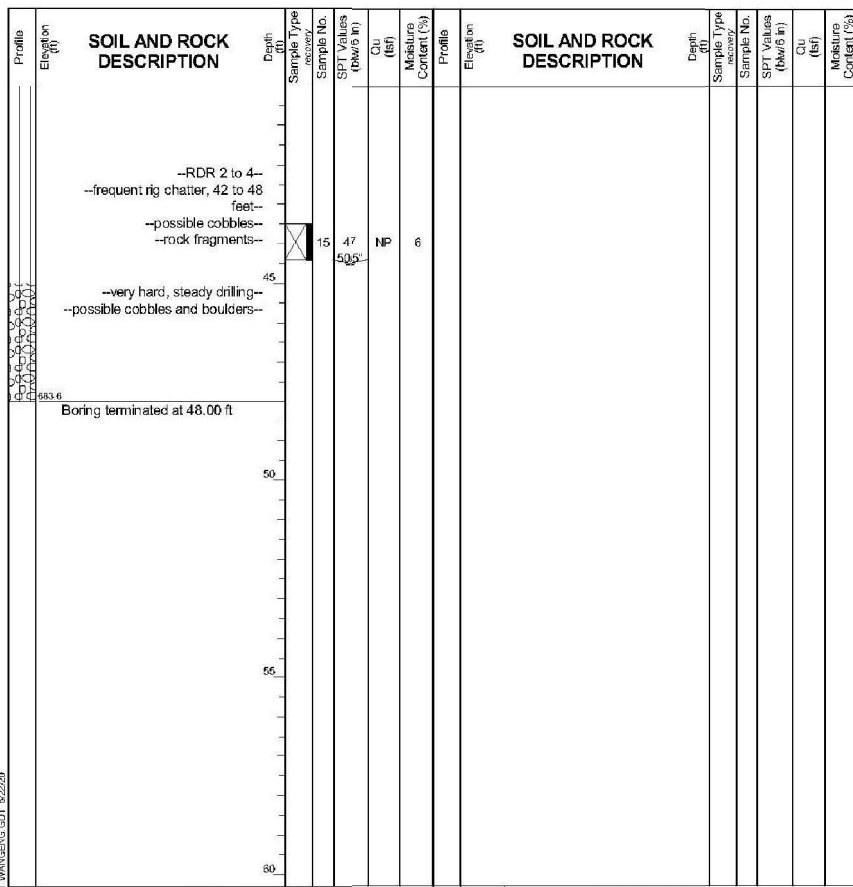
USER NAME =	Structural	DESIGNED -	V.G.	REVISED -	
PLOT SCALE =	N.T.S.	CHECKED -	H.A.	REVISED -	
PLOT DATE =	5/4/2021	DRAWN -	O.M.	REVISED -	
		CHECKED -	H.A.	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

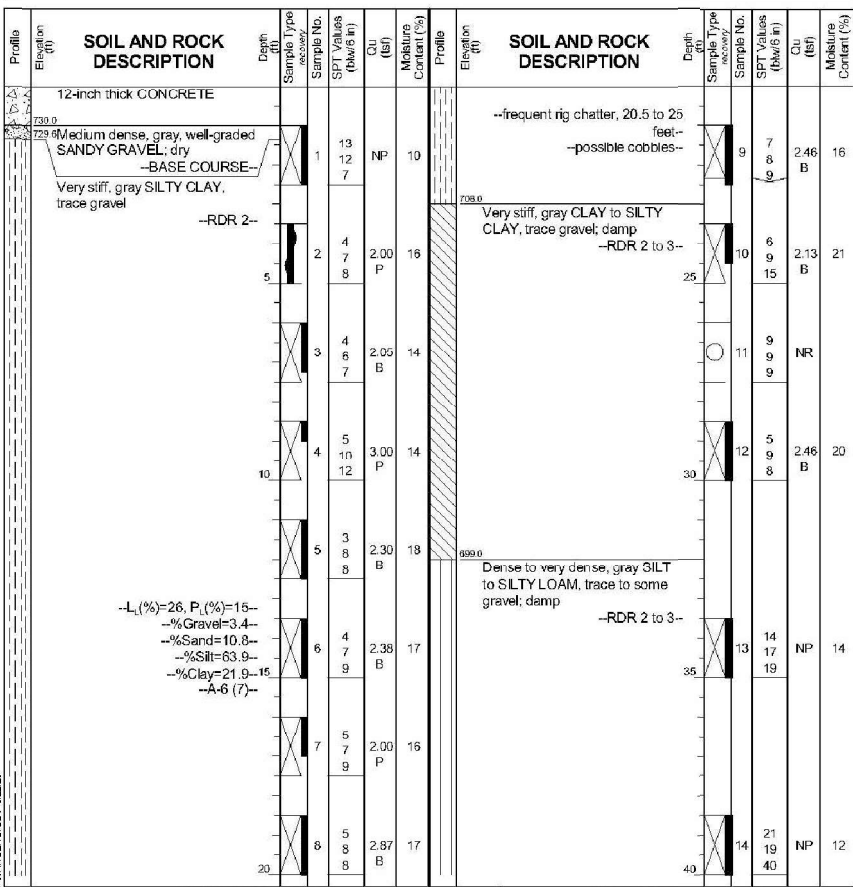
**METAL SHELL PILE DETAILS
SN 099-0028**

SHEET SC-67 OF SC-73 SHEETS

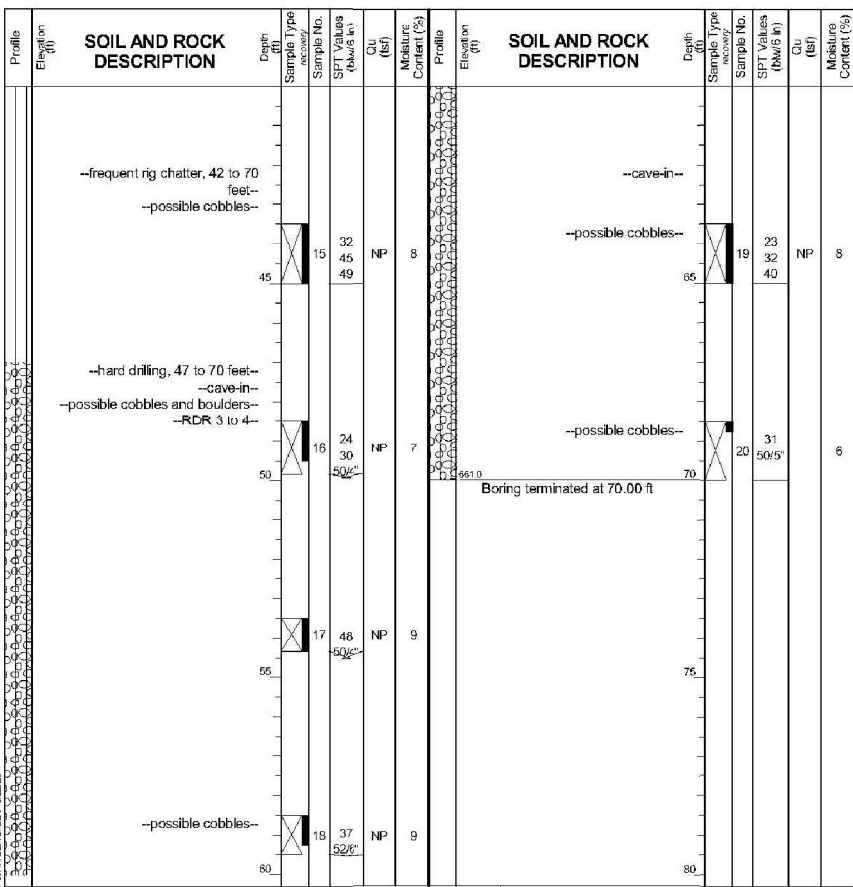
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	347
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				



GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	04-22-2020	Complete Drilling	04-22-2020
Drilling Contractor	Wang Testing Services	Drill Rig	B57 TMR [100%]
Driller	N&K	Logger	M. Sadowski
Checked by	C. Marin	Drilling Method	3.25" ID HSA; boring backfilled upon completion
While Drilling	DRY	At Completion of Drilling	DRY
Time After Drilling	NA	Depth to Water	NA



GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	04-23-2020	Complete Drilling	04-24-2020
Drilling Contractor	Wang Testing Services	Drill Rig	B57 TMR [100%]
Driller	N&K	Logger	M. Sadowski
Checked by	C. Marin	Drilling Method	3.25" ID HSA; mud rotary after 10 feet; boring backfilled upon completion
While Drilling	DRY	At Completion of Drilling	Mud in borehole
Time After Drilling	NA	Depth to Water	NA



GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	04-23-2020	Complete Drilling	04-24-2020
Drilling Contractor	Wang Testing Services	Drill Rig	B57 TMR [100%]
Driller	N&K	Logger	M. Sadowski
Checked by	C. Marin	Drilling Method	3.25" ID HSA; mud rotary after 10 feet; boring backfilled upon completion
While Drilling	DRY	At Completion of Drilling	Mud in borehole
Time After Drilling	NA	Depth to Water	NA

Note:
 Station and offset are measured along
 C I-55

MODEL: Default
 FILE NAME: X:\OH\2019\20190308-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5069-BOR.dgn
 5/4/2021 3:03:00 PM

Wang Engineering
 wangeng@wangeng.com
 1145 N. Main Street
 Lombard, IL 60148
 Telephone: 6309539928
 Fax: 6309539938

BORING LOG SB-05
 WEI Job No.: 498-01-03
 Client: Lin Engineering
 Project: I-55 at Joliet Supplement
 Location: Bolingbrook, IL

Datum: NAVD 88
 Elevation: 750.80 ft
 North: 1833190.15 ft
 East: 1064171.34 ft
 Station: 300+37.44
 Offset: 56.57 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/in)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/in)	Cu (tsf)	Moisture Content (%)
738.6	11-inch thick CONCRETE -PAVEMENT-														
731.6	Gray SANDY GRAVEL, damp -AGGREGATE BASE-														
	Very stiff to hard, gray SILTY CLAY, trace gravel														
	-FILL- -RDR 2 to 3-														
	-rig chatter, possible cobbles-														
	Very stiff to hard, gray SILTY CLAY, trace gravel														
	-RDR 2 to 3-														
	-rig chatter, possible cobbles-														
	Medium dense to very dense, gray SILTY LOAM, trace gravel, damp														
	-RDR 2 to 3-														
	-rig chatter, possible cobbles-														
	Very stiff to hard, gray SILTY CLAY, trace gravel														
	-RDR 2-														
	-rig chatter, possible cobbles-														
	Gray SILTY LOAM, trace gravel, wet to saturated														
	-RDR 2-														
	Very stiff to hard, gray SILTY CLAY, trace gravel														
	-RDR 2-														
	-rig chatter, possible cobbles-														
	Dense to very dense, gray SILTY LOAM, trace gravel, damp														
	-RDR 2 to 4-														
	-rig chatter, possible cobbles-														
	-L _c (%)=30, P _c (%)=15 -%Gravel=3.3 -%Sand=9.9 -%Silt=68.6 -%Clay=28.3														
	-rig chatter, possible cobbles-														
	Boring terminated at 78.92 ft														

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	11-18-2020	Complete Drilling	11-19-2020
Drilling Contractor	Wang Testing Services	Drill Rig	CME55 TMR [85%]
Driller	R & M	Logger	E. Yin
Checked by	NSB	Depth to Water	NA
Drilling Method	2.25" ID HSA; mud rotary; after 10 feet; boring backfilled upon completion	At Completion of Drilling	Mud
		Time After Drilling	NA
		The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual	

Wang Engineering
 wangeng@wangeng.com
 1145 N. Main Street
 Lombard, IL 60148
 Telephone: 6309539928
 Fax: 6309539938

BORING LOG SB-06
 WEI Job No.: 498-01-03
 Client: Lin Engineering
 Project: I-55 at Joliet Supplement
 Location: Bolingbrook, IL

Datum: NAVD 88
 Elevation: 733.04 ft
 North: 1833300.96 ft
 East: 1064292.65 ft
 Station: 302+00.28
 Offset: 78.35' LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/in)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/in)	Cu (tsf)	Moisture Content (%)
	11-inch thick CONCRETE -PAVEMENT-														
	Gray SANDY GRAVEL, damp -AGGREGATE BASE-														
	Very stiff to hard, gray SILTY CLAY, trace gravel														
	-FILL- -RDR 2 to 3-														
	-rig chatter, possible cobbles-														
	Very stiff to hard, gray SILTY CLAY, trace gravel														
	-RDR 2 to 3-														
	-rig chatter, possible cobbles-														
	Medium dense, gray SILTY LOAM, trace gravel, moist														
	Very stiff, gray SILTY CLAY, trace gravel														
	-RDR 2-														
	-rig chatter, possible cobbles-														
	Gray SILTY LOAM, trace gravel, wet to saturated														
	-RDR 2-														
	Very stiff to hard, gray SILTY CLAY, trace gravel														
	-RDR 2-														
	-rig chatter, possible cobbles-														
	Dense to very dense, gray SILTY LOAM, trace gravel, damp														
	-RDR 2 to 4-														
	-rig chatter, possible cobbles-														
	-L _c (%)=30, P _c (%)=15 -%Gravel=3.3 -%Sand=9.9 -%Silt=68.6 -%Clay=28.3														
	-rig chatter, possible cobbles-														
	Boring terminated at 59.00 ft														

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	11-19-2020	Complete Drilling	11-20-2020
Drilling Contractor	Wang Testing Services	Drill Rig	CME55 TMR [85%]
Driller	R & M	Logger	E. Yin
Checked by	NSB	Depth to Water	NA
Drilling Method	2.25" ID HSA; boring backfilled upon completion	At Completion of Drilling	DRY
		Time After Drilling	NA
		The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual	

Wang Engineering
 wangeng@wangeng.com
 1145 N. Main Street
 Lombard, IL 60148
 Telephone: 6309539928
 Fax: 6309539938

BORING LOG SB-06
 WEI Job No.: 498-01-03
 Client: Lin Engineering
 Project: I-55 at Joliet Supplement
 Location: Bolingbrook, IL

Datum: NAVD 88
 Elevation: 733.04 ft
 North: 1833300.96 ft
 East: 1064292.65 ft
 Station: 302+00.28
 Offset: 78.35' LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/in)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/in)	Cu (tsf)	Moisture Content (%)
	11-inch thick CONCRETE -PAVEMENT-														
	Gray SANDY GRAVEL, damp -AGGREGATE BASE-														
	Very stiff to hard, gray SILTY CLAY, trace gravel														
	-FILL- -RDR 2 to 3-														
	-rig chatter, possible cobbles-														
	Very stiff to hard, gray SILTY CLAY, trace gravel														
	-RDR 2 to 3-														
	-rig chatter, possible cobbles-														
	Medium dense, gray SILTY LOAM, trace gravel, moist														
	Very stiff, gray SILTY CLAY, trace gravel														
	-RDR 2-														
	-rig chatter, possible cobbles-														
	Gray SILTY LOAM, trace gravel, wet to saturated														
	-RDR 2-														
	Very stiff to hard, gray SILTY CLAY, trace gravel														
	-RDR 2-														
	-rig chatter, possible cobbles-														
	Dense to very dense, gray SILTY LOAM, trace gravel, damp														
	-RDR 2 to 4-														
	-rig chatter, possible cobbles-														
	-L _c (%)=30, P _c (%)=15 -%Gravel=3.3 -%Sand=9.9 -%Silt=68.6 -%Clay=28.3														
	-rig chatter, possible cobbles-														
	Boring terminated at 59.00 ft														

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	11-19-2020	Complete Drilling	11-20-2020
Drilling Contractor	Wang Testing Services	Drill Rig	CME55 TMR [85%]
Driller	R & M	Logger	E. Yin
Checked by	NSB	Depth to Water	NA
Drilling Method	2.25" ID HSA; boring backfilled upon completion	At Completion of Drilling	DRY
		Time After Drilling	NA
		The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual	

Note:
 Station and offset are measured along C I-55

MODEL: Default
 FILE NAME: X:\OH\2019\20190308-03\Design\Design Files\62H03\CAD_Sheets\030-095-0028-62H03-5071-BOR.dgn
 5/4/2021 3:03:11 PM



USER NAME =	Structural	DESIGNED -	O.M.	REVISED -	
PLOT SCALE =	N.T.S.	CHECKED -	H.A.	REVISED -	
PLOT DATE =	5/4/2021	DRAWN -	O.M.	REVISED -	
		CHECKED -	H.A.	REVISED -	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BORING LOGS IV
 SN 099-0028

SHEET SC-71 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	351
CONTRACT NO. 62H03				
ILLINOIS FED. AID PROJECT				

Wang Engineering
 wangeng@wangeng.com
 1145 N. Main Street
 Lombard/IL/60148
 Telephone: 6309539928
 Fax: 6309539938

BORING LOG SB-07
 WEI Job No.: 498-01-03
 Client: Lin Engineering
 Project: I-55 at Joliet Supplement
 Location: Bolingbrook, IL

Datum: NAVD 88
 Elevation: 733.62 ft
 North: 1833329.65 ft
 East: 1064317.19 ft
 Station: 302+36.81
 Offset: 87.92' LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	SPT Values (blows/ft)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	SPT Values (blows/ft)	Cu (tsf)	Moisture Content (%)
732.7	11-inch thick CONCRETE -PAVEMENT-														
	Medium dense, gray SANDY GRAVEL, damp -AGGREGATE BASE- -RDR 2-	1	10	NP	10		5				9	7		NR	
		2	8	NP	5						10	6		3.53	21
		3	4	NP	5						11	13			
728.1	Very stiff, gray SILTY CLAY, trace gravel -RDR 2-	4	5	NP	2.71	16					12	8		4.18	16
		5	7	NP	2.00	21					13	13			
		6	9	NP	11						14	16			
723.1	Gray SILTY LOAM, moist	7	5	NP	3.77	15					15	20			
		8	6	NP	8	16					16	30			
		9	8	NP	16						17	45			
721.6	Very stiff to hard, gray SILTY CLAY, trace gravel -RDR 2-	10	3	NP	1.23	17					18	50			
		11	4	NP	3.81	15					19	38			
		12	8	NP	16						20	37			
		13	5	NP	13						21	50.5"			
		14	6	NP	11						22	31			
		15	8	NP	11						23	32			
		16	11	NP	13						24	33			

GENERAL NOTES
 Begin Drilling: 11-17-2020 Complete Drilling: 11-18-2020
 Drilling Contractor: Wang Testing Services Drill Rig: CME55 TMR [85%]
 Driller: R & M Logger: E. Yim Checked by: NSB
 Drilling Method: 2.25" ID HSA; mud rotary after 10 feet; boring
 backfilled upon completion

WATER LEVEL DATA
 While Drilling: 3.50 ft
 At Completion of Drilling: Mud
 Time After Drilling: NA
 Depth to Water: NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Wang Engineering
 wangeng@wangeng.com
 1145 N. Main Street
 Lombard/IL/60148
 Telephone: 6309539928
 Fax: 6309539938

BORING LOG SB-07
 WEI Job No.: 498-01-03
 Client: Lin Engineering
 Project: I-55 at Joliet Supplement
 Location: Bolingbrook, IL

Datum: NAVD 88
 Elevation: 733.62 ft
 North: 1833329.65 ft
 East: 1064317.19 ft
 Station: 302+36.81
 Offset: 87.92' LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	SPT Values (blows/ft)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	SPT Values (blows/ft)	Cu (tsf)	Moisture Content (%)
	-rig chatter, possible cobbles-	15	20	NP	25		10				15	20			
		16	11	NP	13						16	13			
		17	13	NP	20						17	20			
		18	11	NP	13						18	13			
		19	16	NP	16						19	16			
		20	30	NP	50.5"						20	30			

GENERAL NOTES
 Begin Drilling: 11-17-2020 Complete Drilling: 11-18-2020
 Drilling Contractor: Wang Testing Services Drill Rig: CME55 TMR [85%]
 Driller: R & M Logger: E. Yim Checked by: NSB
 Drilling Method: 2.25" ID HSA; mud rotary after 10 feet; boring
 backfilled upon completion

WATER LEVEL DATA
 While Drilling: 3.50 ft
 At Completion of Drilling: Mud
 Time After Drilling: NA
 Depth to Water: NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Wang Engineering
 wangeng@wangeng.com
 1145 N. Main Street
 Lombard/IL/60148
 Telephone: 6309539928
 Fax: 6309539938

BORING LOG SB-08
 WEI Job No.: 498-01-03
 Client: Lin Engineering
 Project: I-55 at Joliet Supplement
 Location: Bolingbrook, IL

Datum: NAVD 88
 Elevation: 753.33 ft
 North: 1833361.31 ft
 East: 1064410.74 ft
 Station: 303+31.71
 Offset: 60.59' LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	SPT Values (blows/ft)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	SPT Values (blows/ft)	Cu (tsf)	Moisture Content (%)
	12-inch thick ASPHALT -SHOULDER PAVEMENT-														
	Medium dense, gray SANDY GRAVEL, damp -AGGREGATE BASE-	1	9	NP	6		5				9	4		2.05	20
		2	4	NP	4						10	16		1.97	18
		3	2	NP	2						11	9		4.25	19
		4	4	NP	4						12	9		4.35	17
		5	3	NP	4						13	8		NA	19
		6	4	NP	5						14	8		2.13	17
		7	3	NP	3						15	11			
		8	5	NP	7						16	10			
		9	7	NP	15						17	14			

GENERAL NOTES
 Begin Drilling: 11-16-2020 Complete Drilling: 11-16-2020
 Drilling Contractor: Wang Testing Services Drill Rig: CME55 TMR [85%]
 Driller: R & G Logger: E. Yim Checked by: NSB
 Drilling Method: 2.25" ID HSA; mud rotary after 10 feet; boring
 backfilled upon completion

WATER LEVEL DATA
 While Drilling: DRY
 At Completion of Drilling: Mud
 Time After Drilling: NA
 Depth to Water: NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Note:
 Station and offset are measured along C I-55

MODEL: Default
 FILE NAME: X:\OH\2019\20190308-03\Design\Design Files\62H03\CAD_Sheets\030-095-0028-62H03-5072-BOR.dgn
 5/4/2021 3:03:17 PM

GRAEF 8501 W. Higgins Road, Suite 280 Chicago, Illinois 60631; (773) 399-0112	USER NAME = Structural	DESIGNED - O.M.	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING LOGS V SN 099-0028	F.A.I. RTE. 55	SECTION 2018-043-BD&BJR	COUNTY WILL	TOTAL SHEETS 430	SHEET NO. 352
	PLOT SCALE = N.T.S.	DRAWN - O.M.	REVISED -			CONTRACT NO. 62H03				
	PLOT DATE = 5/4/2021	CHECKED - H.A.	REVISED -	SHEET SC-72 OF SC-73 SHEETS			ILLINOIS		FED. AID PROJECT	

Wang Engineering
 wangeng@wangeng.com
 1145 N. Main Street
 Lombard, IL 60148
 Telephone: 6309539928
 Fax: 6309539938

BORING LOG SB-08
 WEI Job No.: 498-01-03
 Client: Lin Engineering
 Project: I-55 at Joliet Supplement
 Location: Bolingbrook, IL

Datum: NAVD 88
 Elevation: 753.33 ft
 North: 1833361.31 ft
 East: 1064410.74 ft
 Station: 303+31.71
 Offset: 60.59' LT

Page 2 of 2

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/in)	Cu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blows/in)	Cu (tsf)	Moisture Content (%)
46		15		18	18	2.00		16		65		19	25	3.00	14
		16		16	16							23			
		19		19	19							16			
50	-rig chatter, possible cobbles-	8		8	8	1.80		17		70		20	23	3.00	10
		10		10	10							40			
		12		12	12							50/4'			
55	Dense to very dense, gray SILT to SILTY LOAM, trace gravel, damp to moist -RDR 2 to 4-	12		12	35	1.50		13		75		21	34	2.50	9
		35		35	35							50/4'			
		44		44	44										
60	-rig chatter, possible cobbles-	21		21	23	1.00		16		80		22	50/6'	NP	9
		23		23	28										
		28		28	28										

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	11-16-2020	Complete Drilling	11-16-2020
Drilling Contractor	Wang Testing Services	Drill Rig	CME55 TMR (85%)
Driller	R & G	Logger	E. Yin
Checked by	NSB	While Drilling	DRY
Drilling Method	2.25" ID HSA mud rotary after 10 feet; boring backfilled upon completion	At Completion of Drilling	Mud
		Time After Drilling	NA
		Depth to Water	NA

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

MANAGER: JAMES G. WANGERS GDT 12/16/20

Note:
 Station and offset are measured along
 C 1-55

MODEL: Default
 FILE NAME: X:\OH\2019\20193008-03\Design\Design Files\62H03\CAD_Sheets\030-099-0028-62H03-5073-BOR.dgn
 5/4/2021 3:03:24 PM



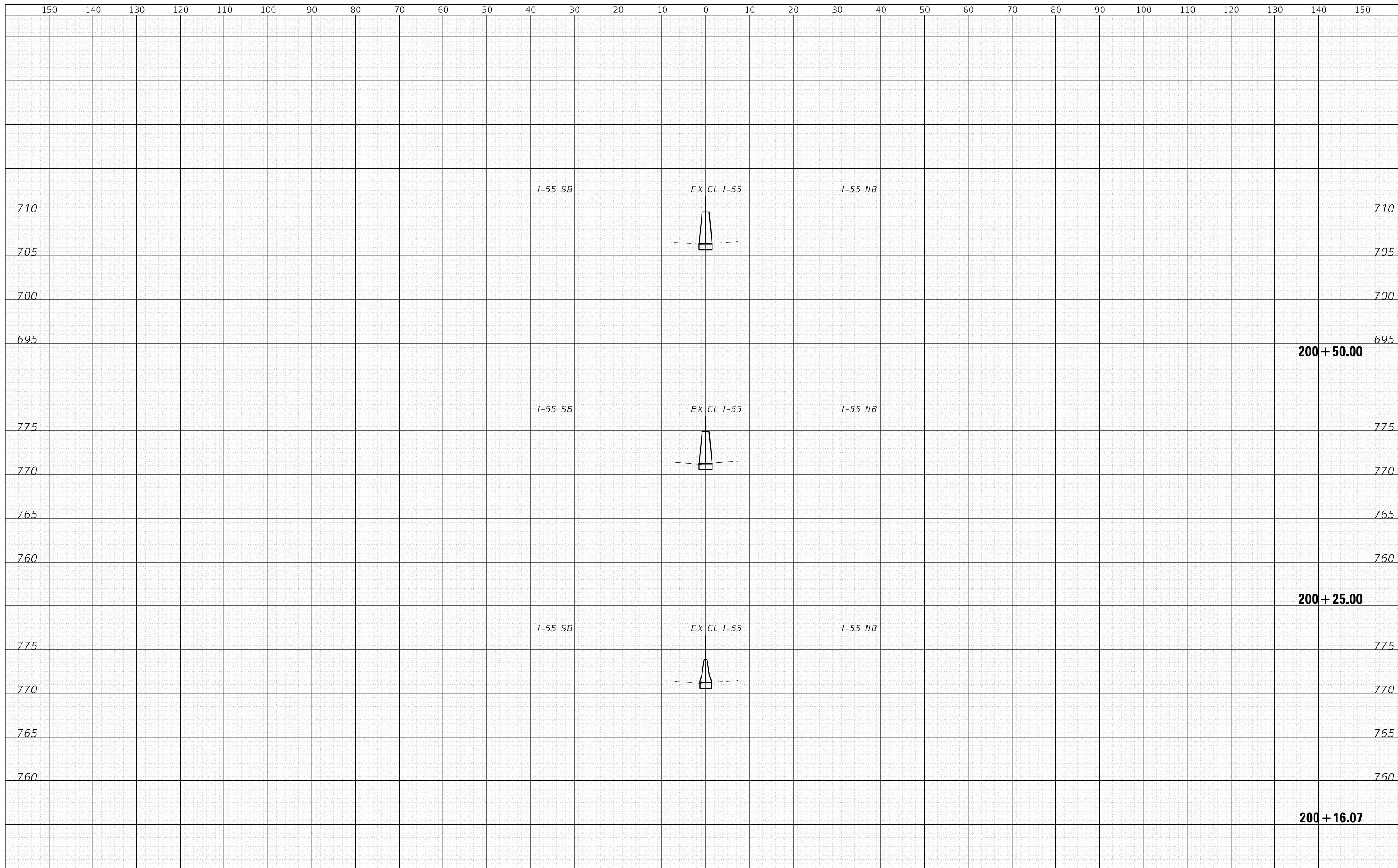
USER NAME =	Structural	DESIGNED -	O.M.	REVISED -	
		CHECKED -	H.A.	REVISED -	
PLOT SCALE =	N.T.S.	DRAWN -	O.M.	REVISED -	
PLOT DATE =	5/4/2021	CHECKED -	H.A.	REVISED -	

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BORING LOGS VI
 SN 099-0028

SHEET SC-73 OF SC-73 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	353
CONTRACT NO. 62H03				
ILLINOIS		FED. AID PROJECT		



LI ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

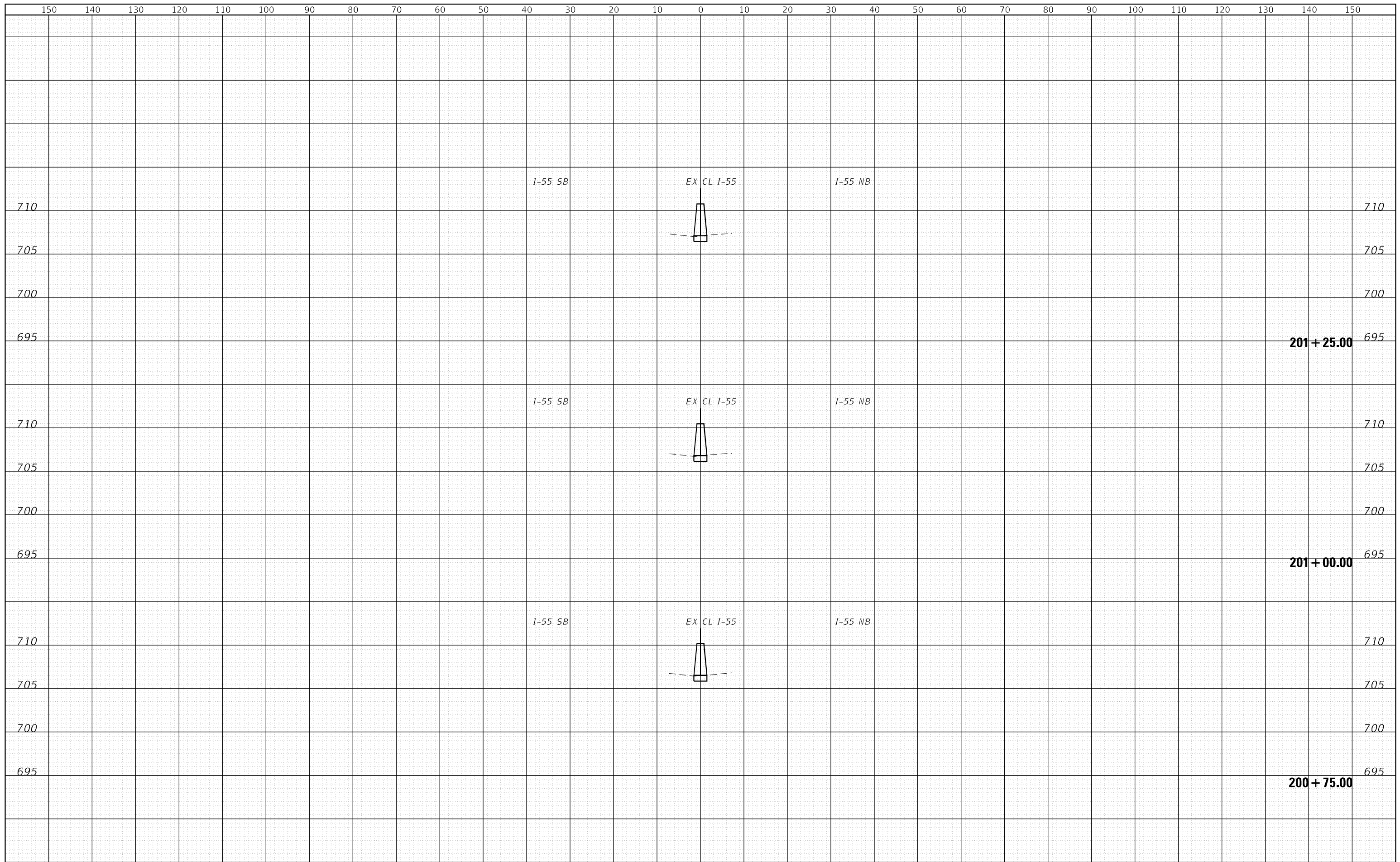
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 1 OF 25 SHEETS STA. 200+16.07 TO STA. 200+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	354
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



Lin Engineering, Ltd.
 Consulting Engineers
 Westmont, Illinois

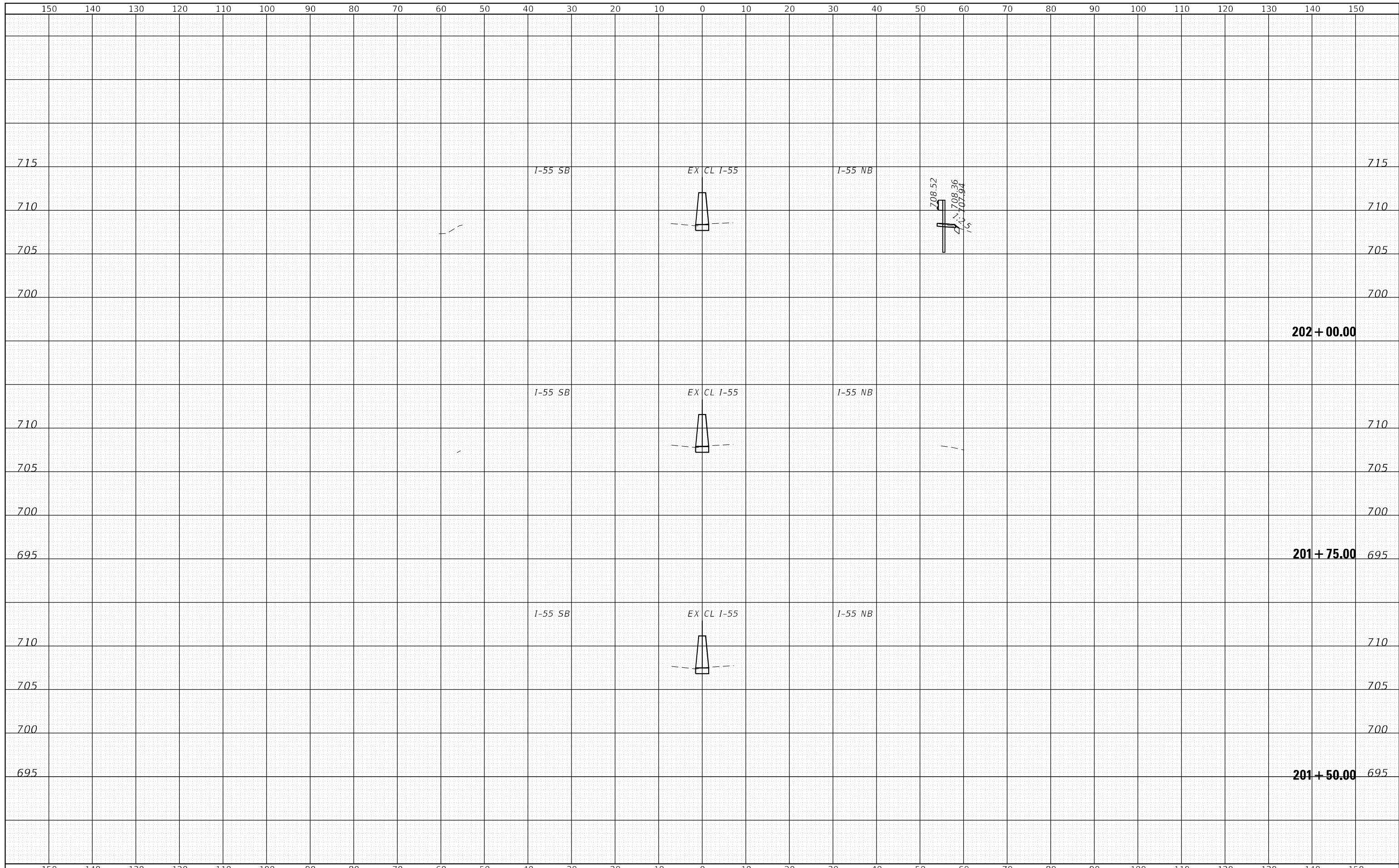
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 2 OF 25 SHEETS STA. 200+75.00 TO STA. 201+25.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	355
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



LI ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

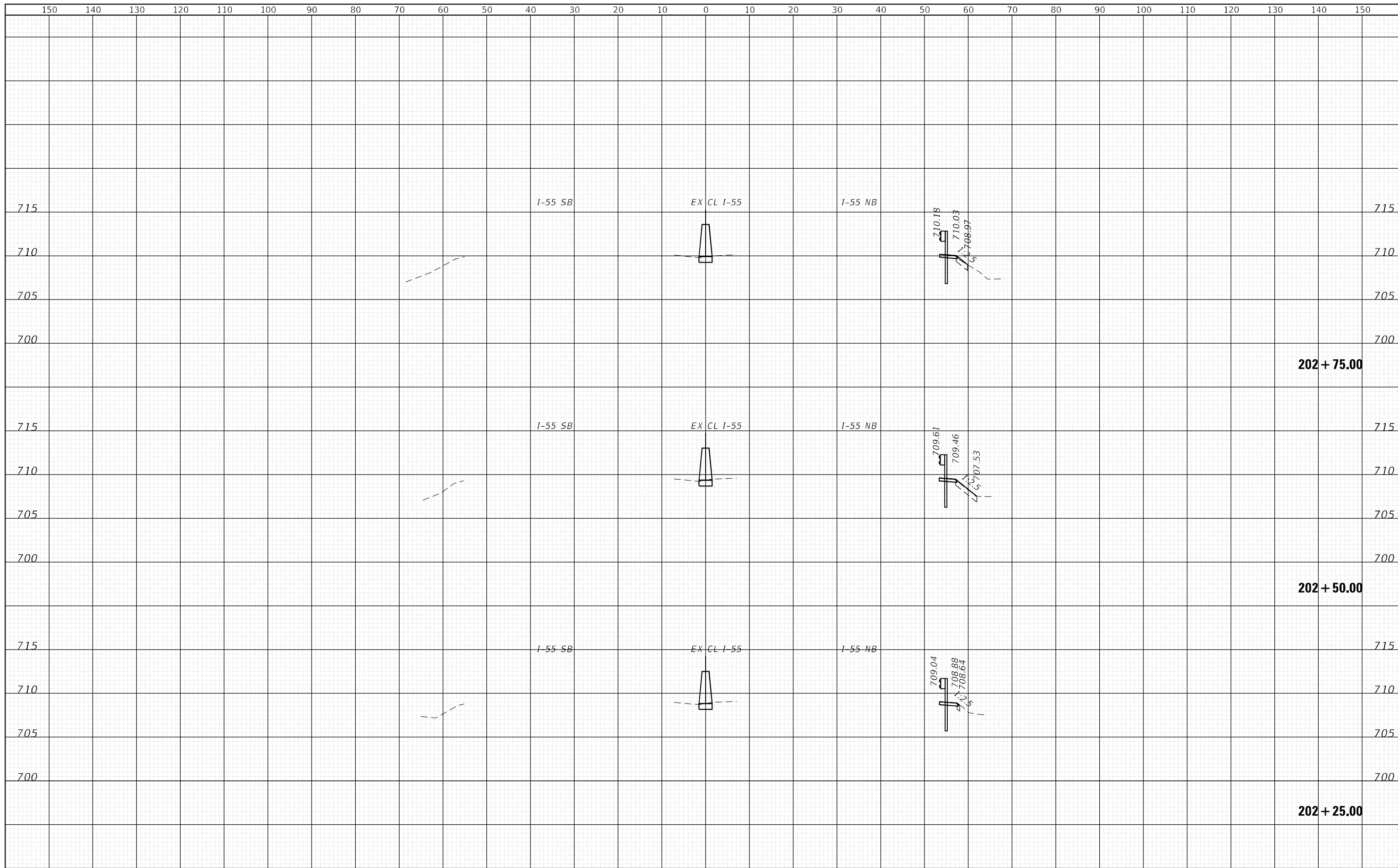
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 3 OF 25 SHEETS STA. 201+50.00 TO STA. 202+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	356
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



LI ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

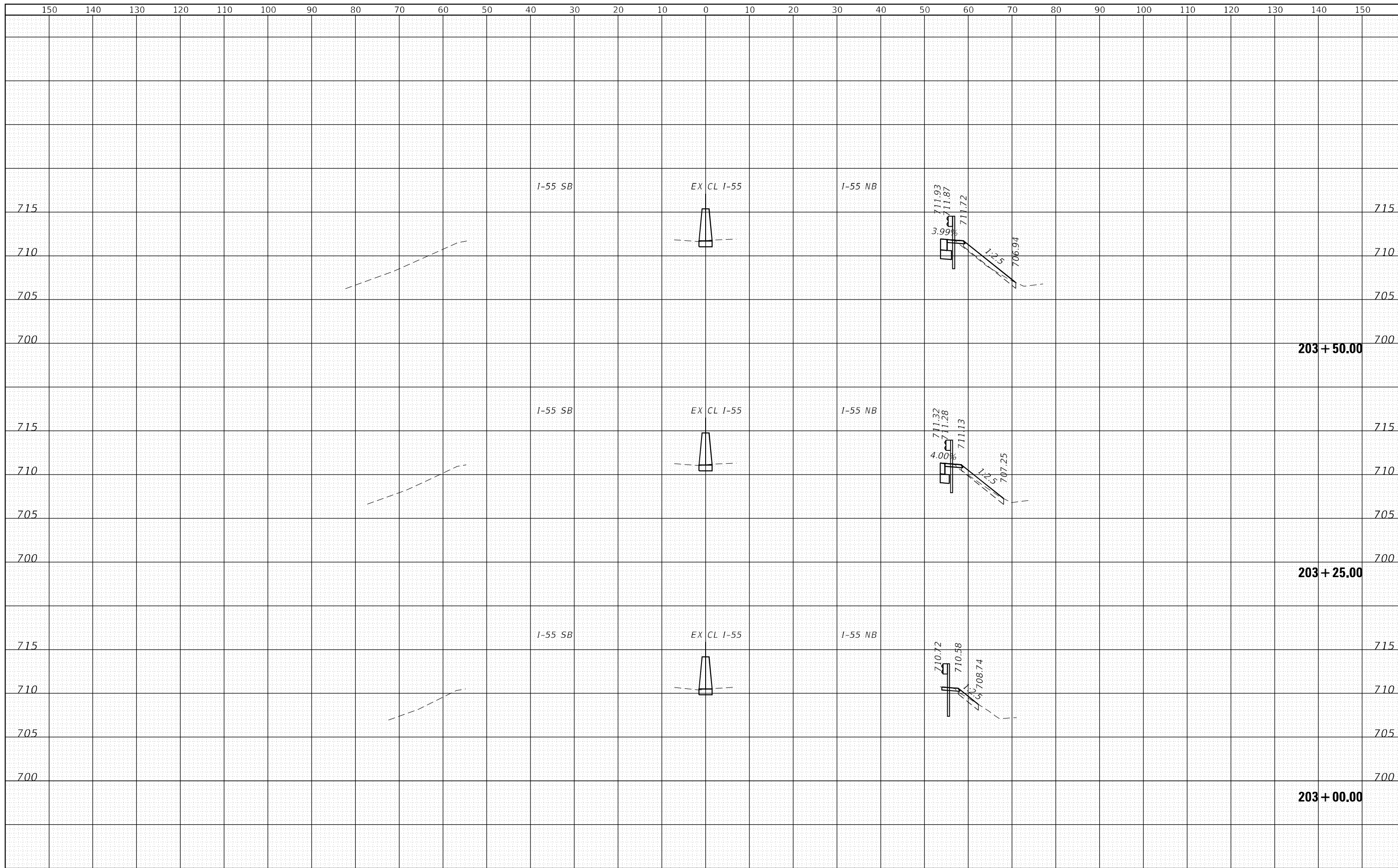
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 4 OF 25 SHEETS STA. 202+25.00 TO STA. 202+75.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	357
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



Lin Engineering, Ltd.
 Consulting Engineers
 Westmont, Illinois

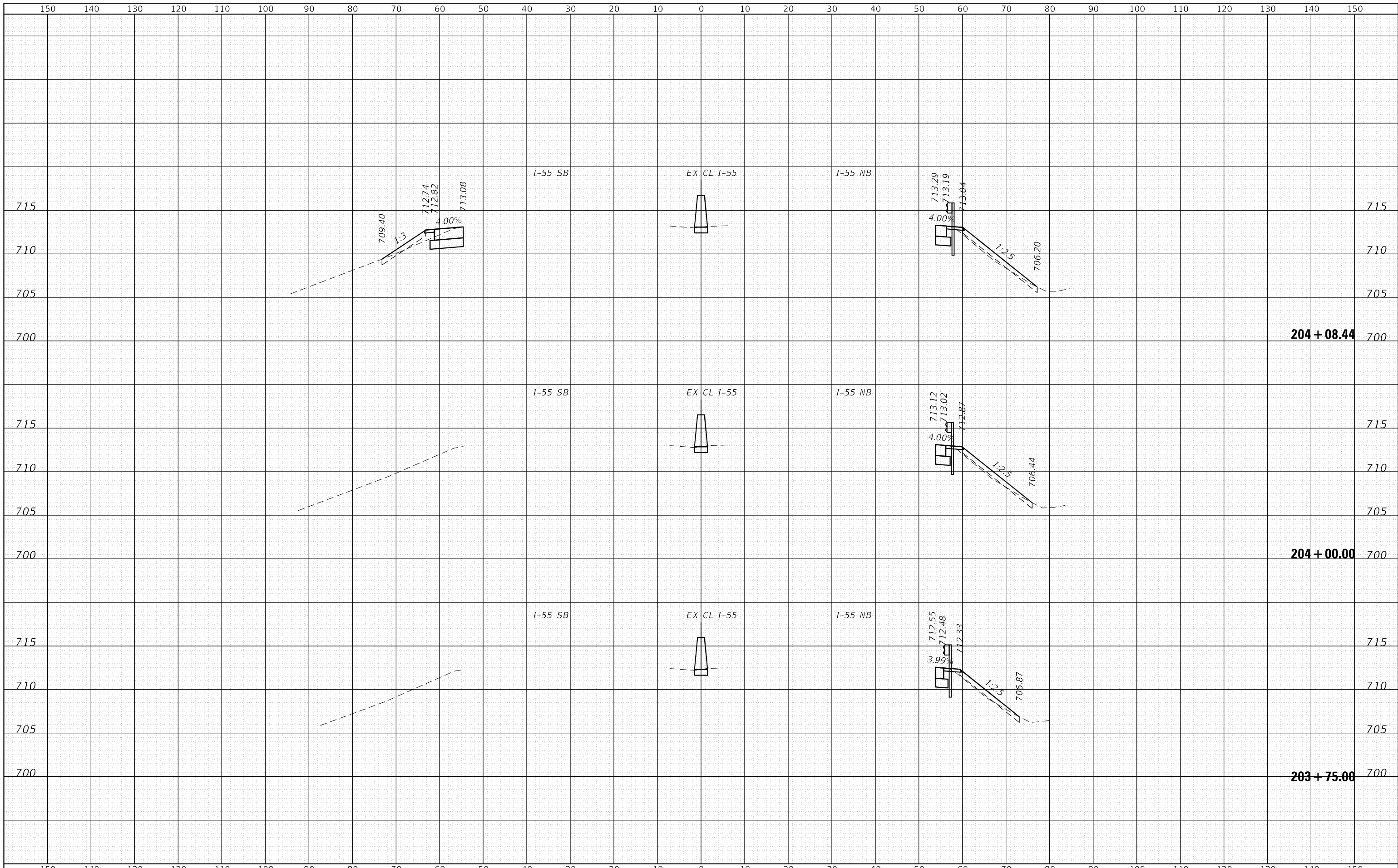
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 5 OF 25 SHEETS STA. 203+00.00 TO STA. 203+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	358
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



LIN ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

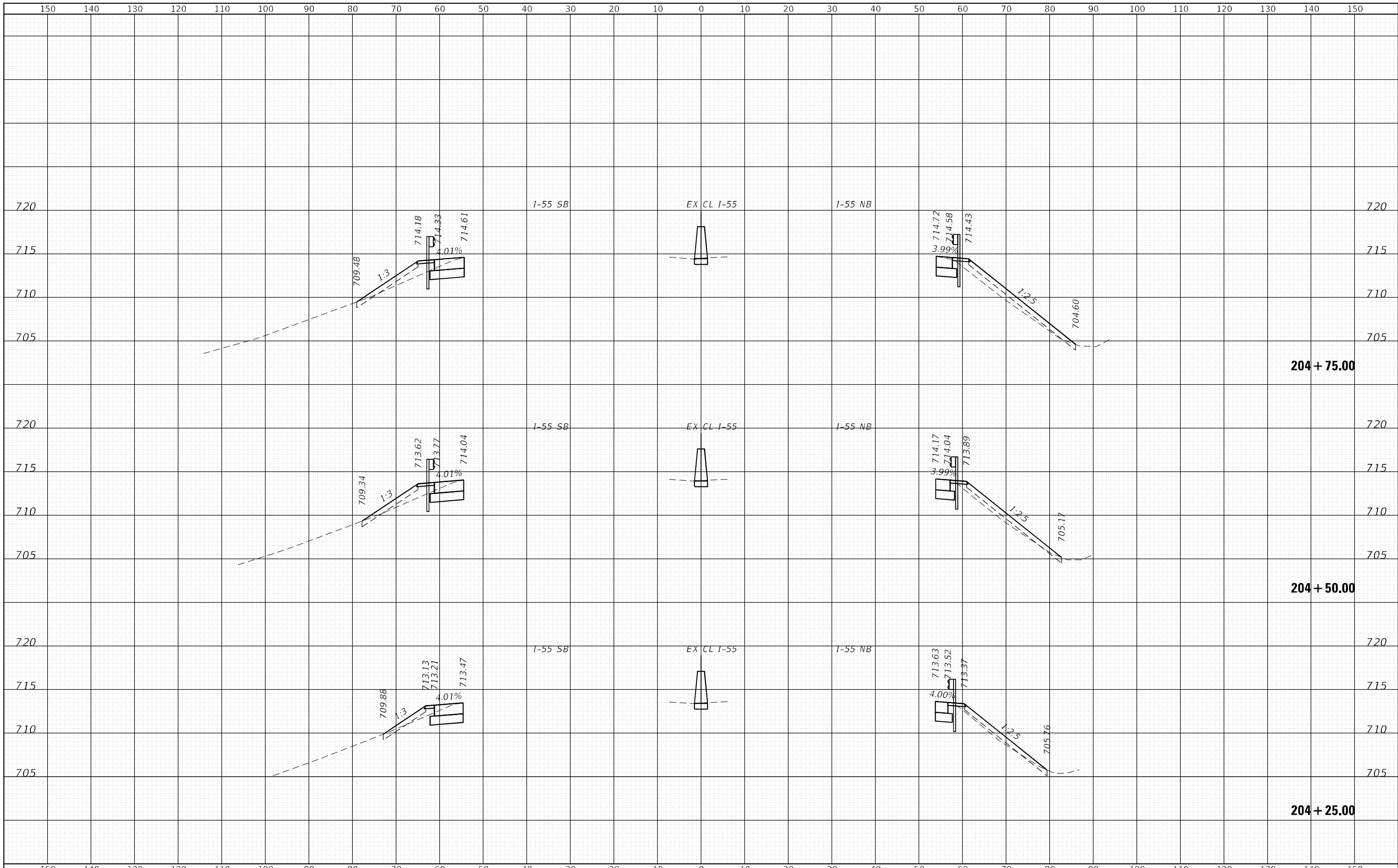
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 6 OF 25 SHEETS STA. 203+75.00 TO STA. 204+08.44

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	359
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



LIN ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

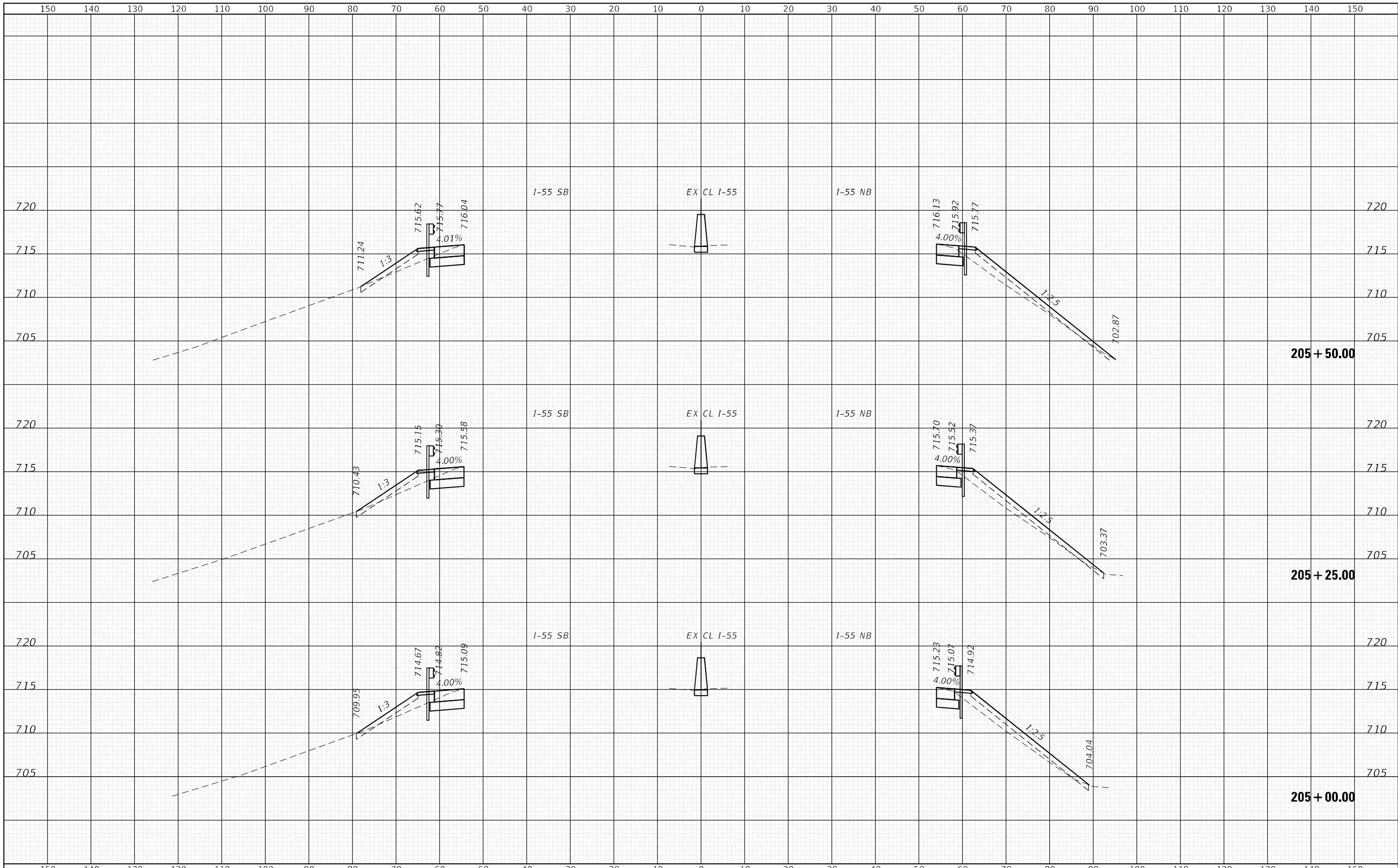
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 7 OF 25 SHEETS STA. 204+25.00 TO STA. 204+75.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	360
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



Lin Engineering, Ltd.
 Consulting Engineers
 Westmont, Illinois

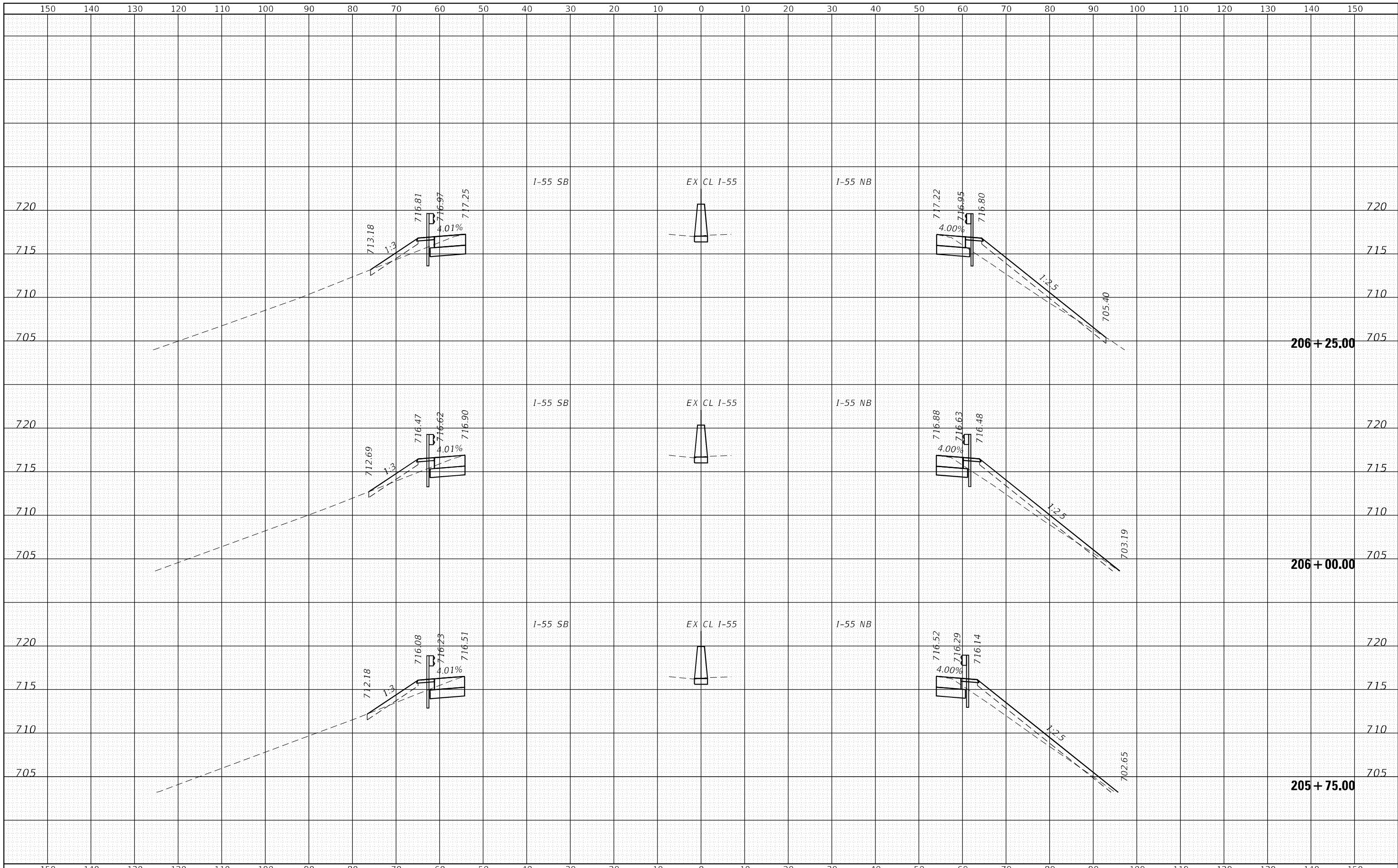
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

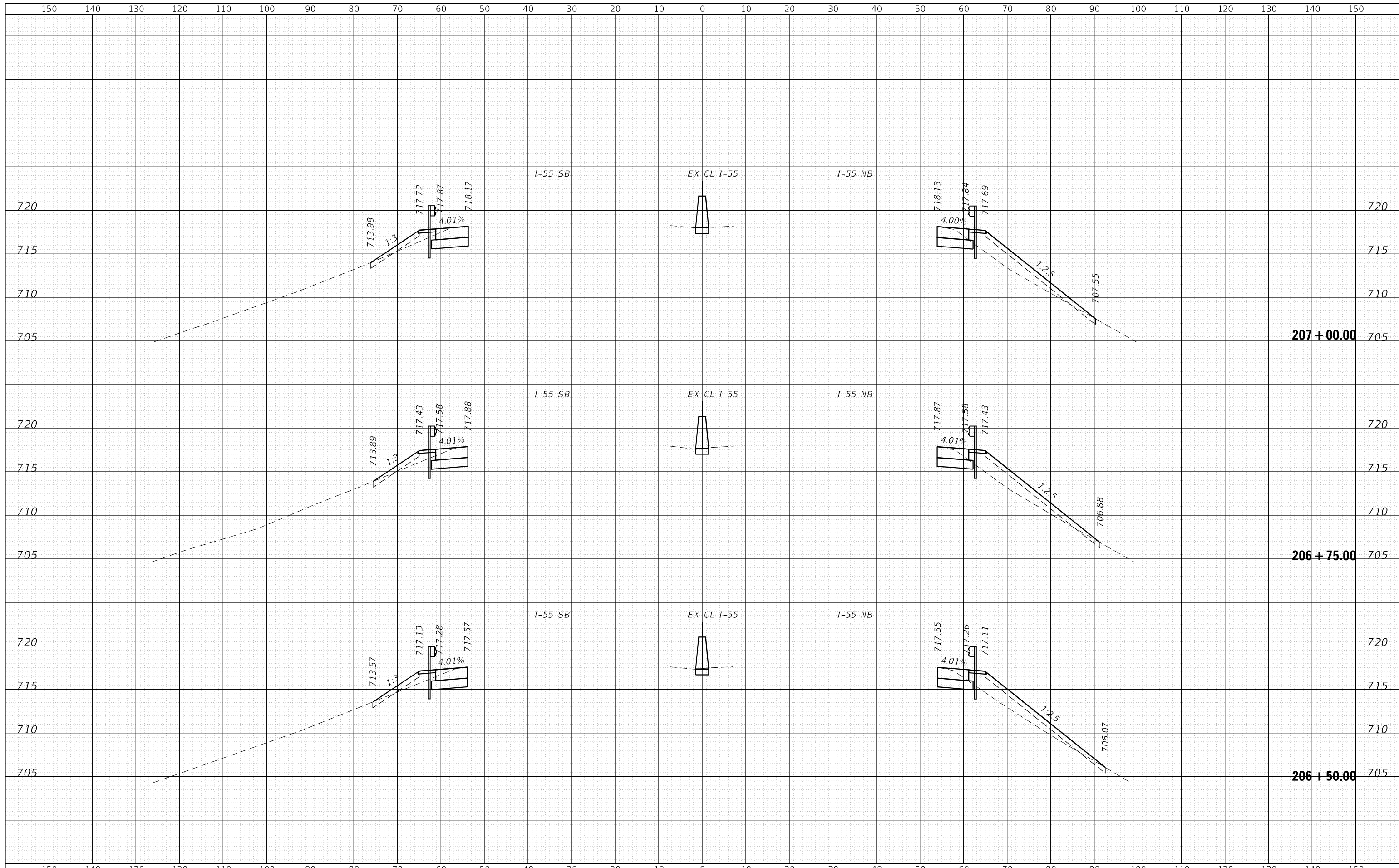
SCALE: 1"=10'H, 5'V SHEET 8 OF 25 SHEETS STA. 205+00.00 TO STA. 205+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	361
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	362
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



LIN ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

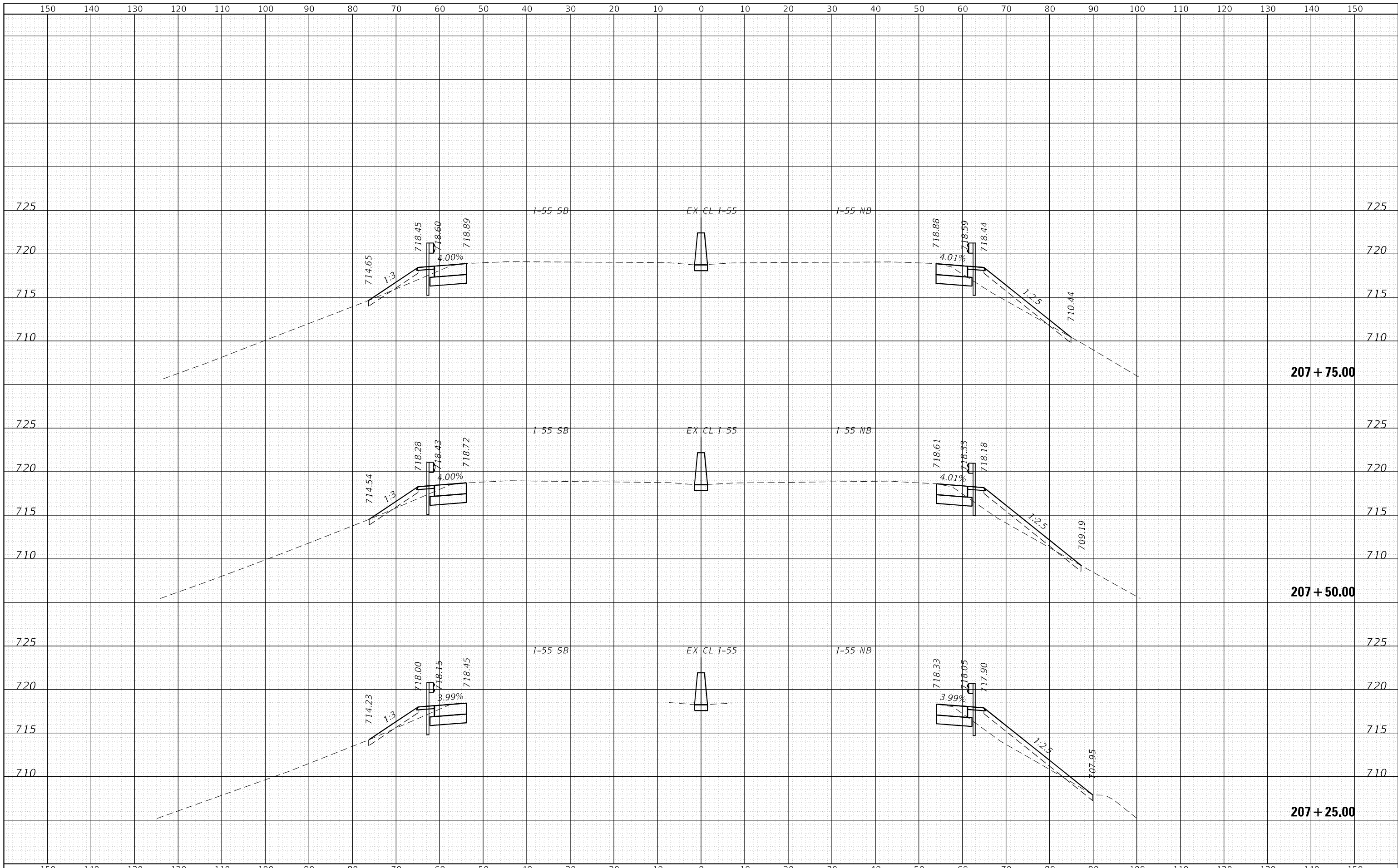
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 10 OF 25 SHEETS STA. 206+50.00 TO STA. 207+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	363
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



Lin Engineering, Ltd.
 Consulting Engineers
 Westmont, Illinois

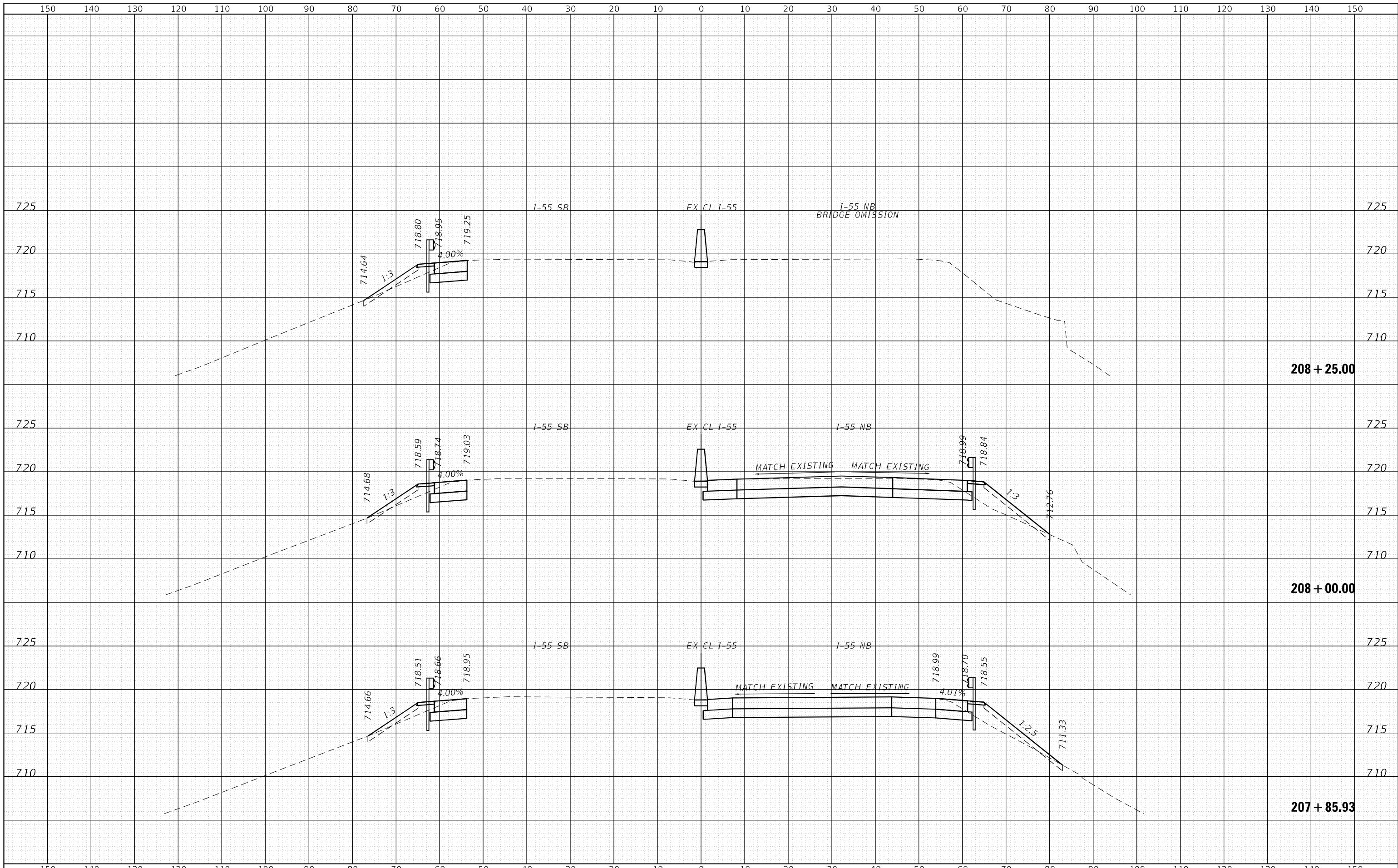
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 11 OF 25 SHEETS STA. 207+25.00 TO STA. 207+75.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	364
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



LIN ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

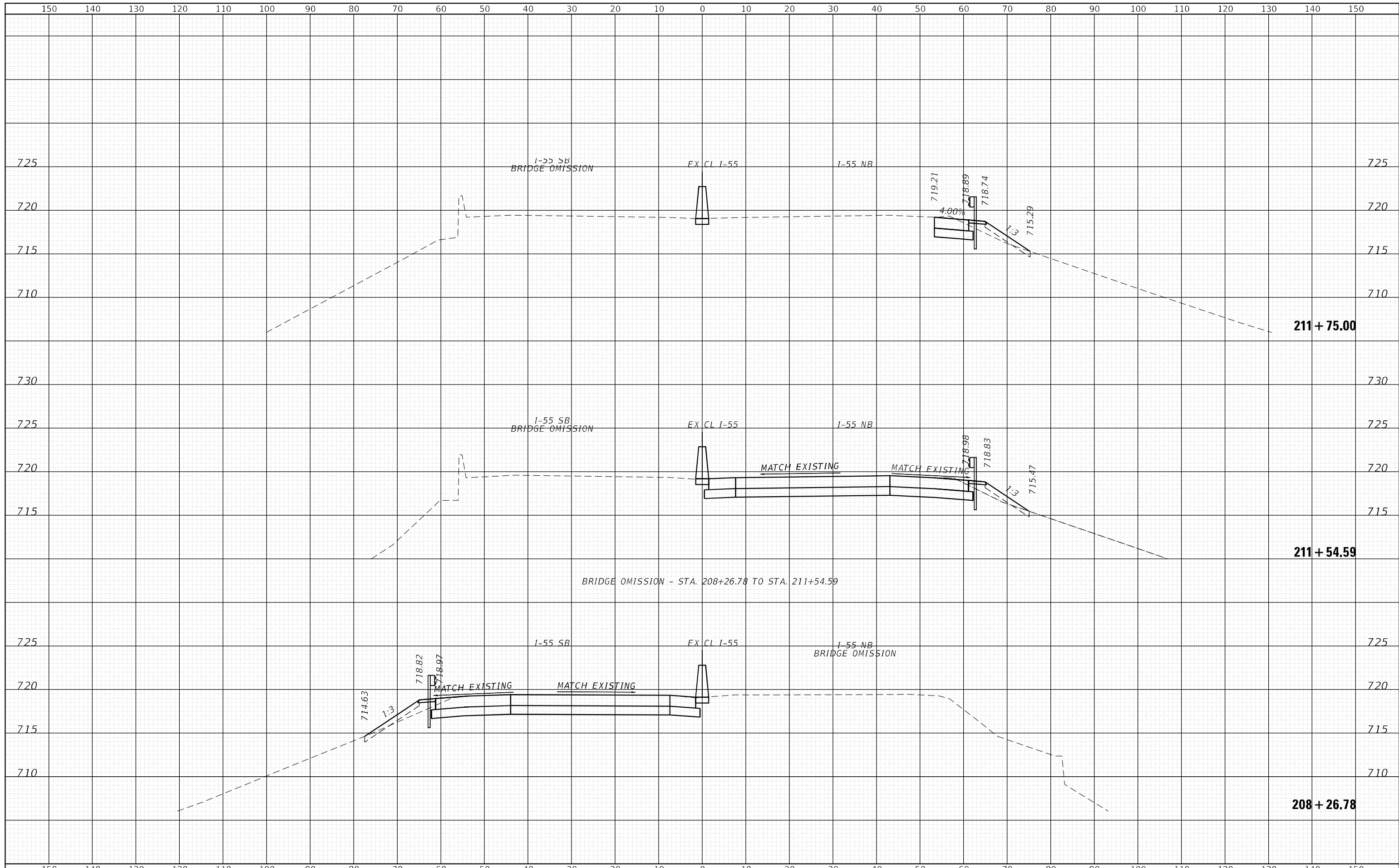
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 12 OF 25 SHEETS STA. 207+85.93 TO STA. 208+25.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	365
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



Lin Engineering, Ltd.
 Consulting Engineers
 Westmont, Illinois

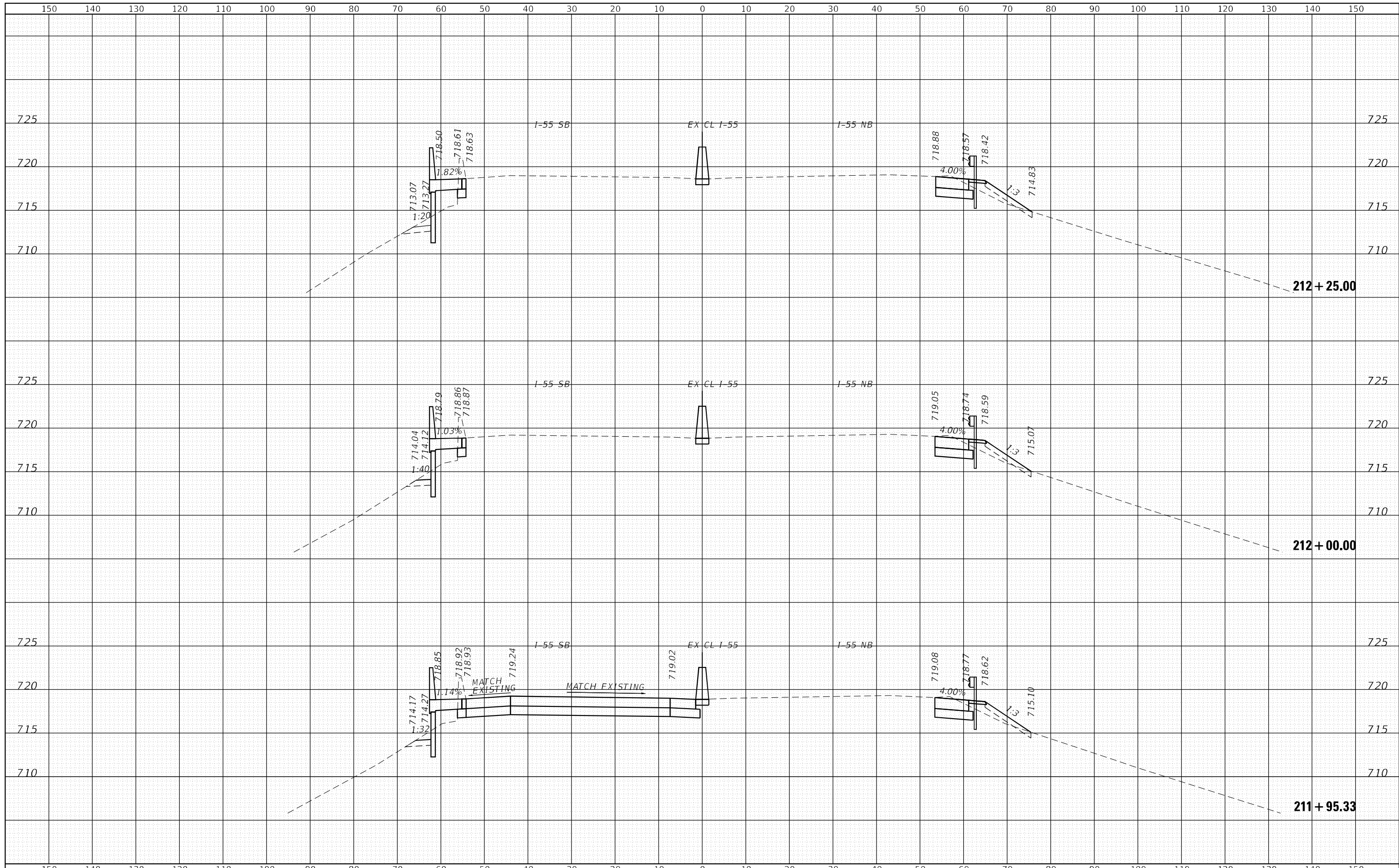
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

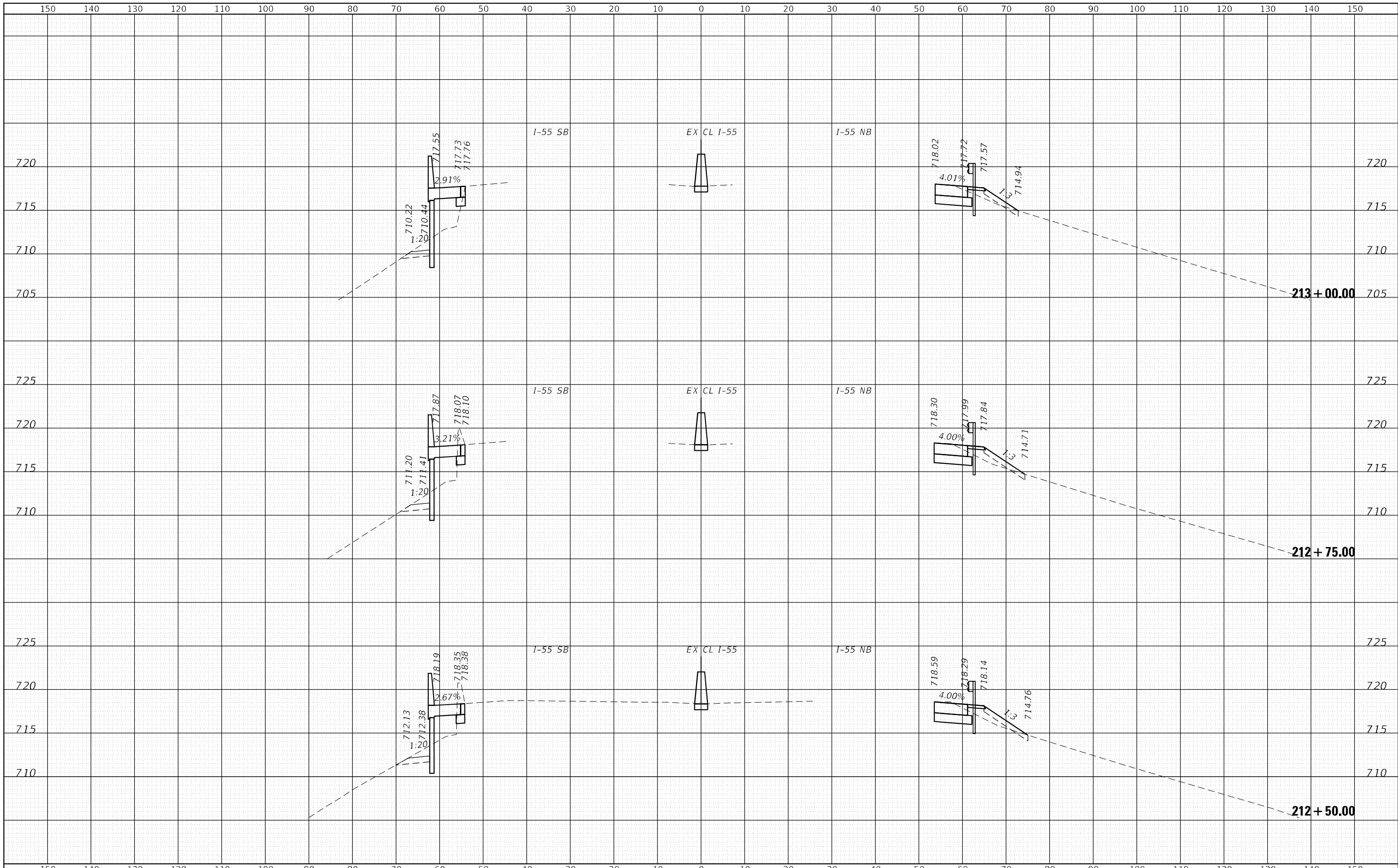
SCALE: 1"=10'H, 5'V SHEET 13 OF 25 SHEETS STA. 208+26.78 TO STA. 211+75.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	366
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	367
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



LIN ENGINEERING, LTD.
Consulting Engineers
Westmont, Illinois

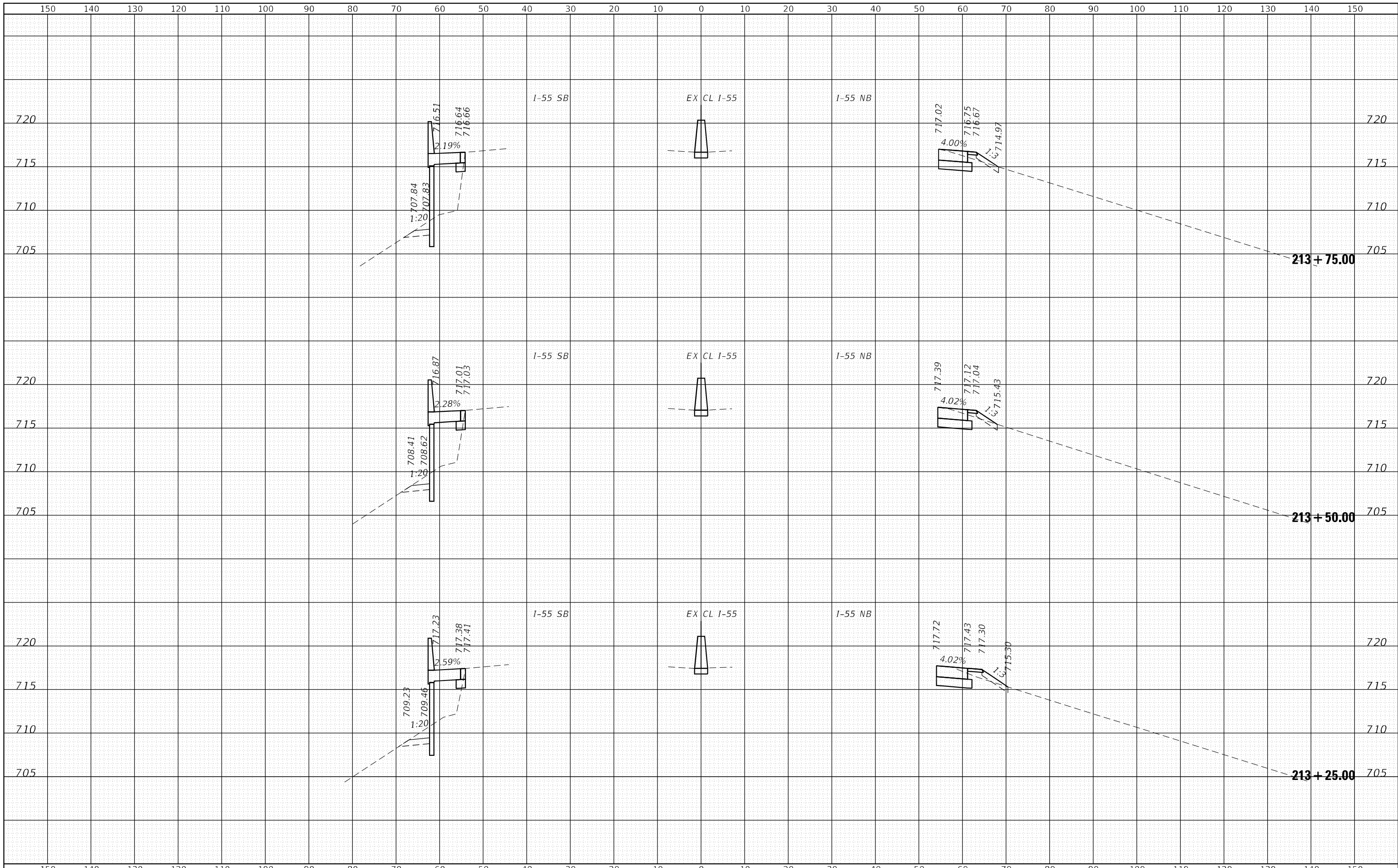
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 15 OF 25 SHEETS STA. 212+50.00 TO STA. 213+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	368
				CONTRACT NO. 62H03
ILLINOIS FED. AID PROJECT				



Lin Engineering, Ltd.
 Consulting Engineers
 Westmont, Illinois

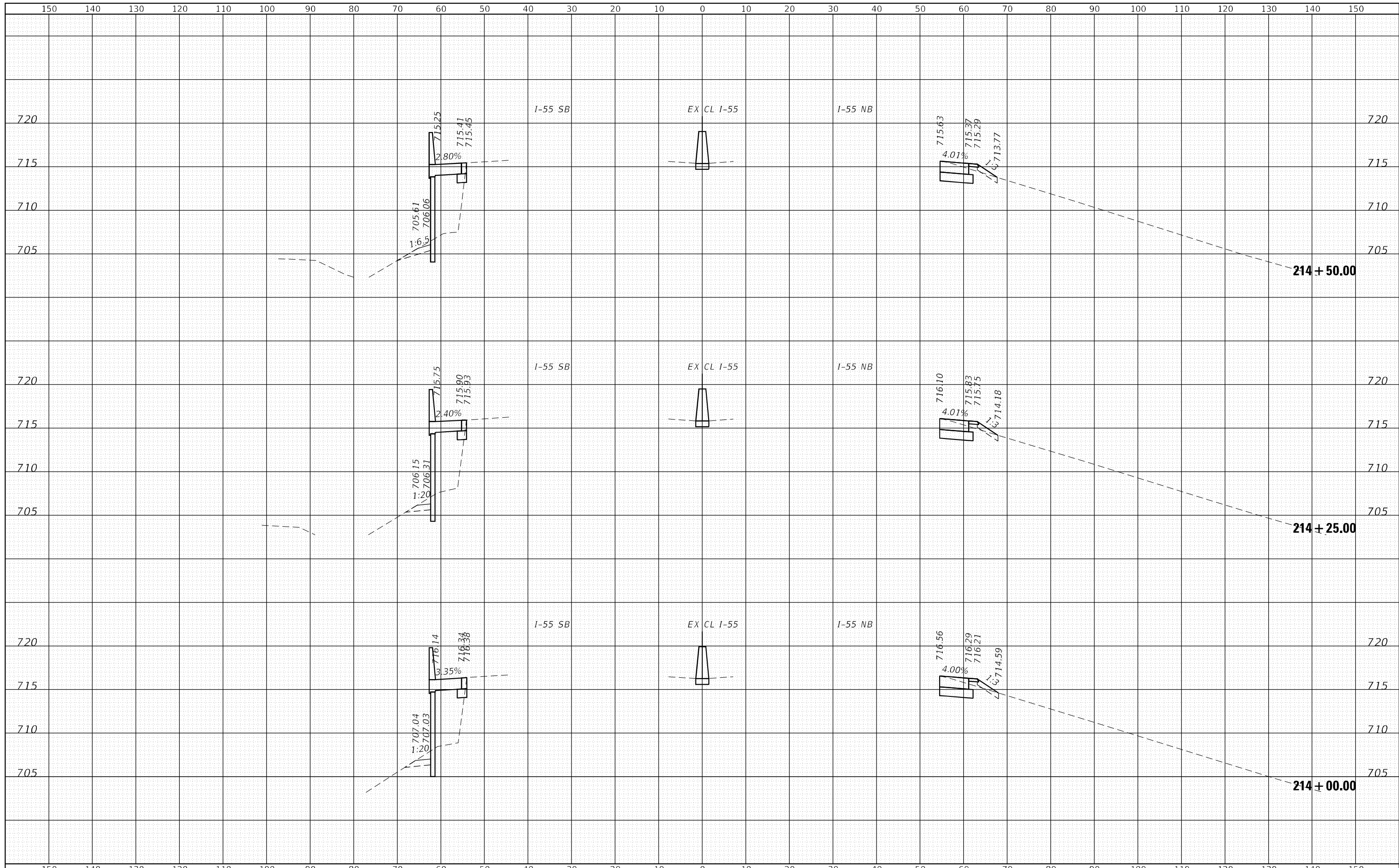
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 16 OF 25 SHEETS STA. 213+25.00 TO STA. 213+75.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	369
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



Lin Engineering, Ltd.
 Consulting Engineers
 Westmont, Illinois

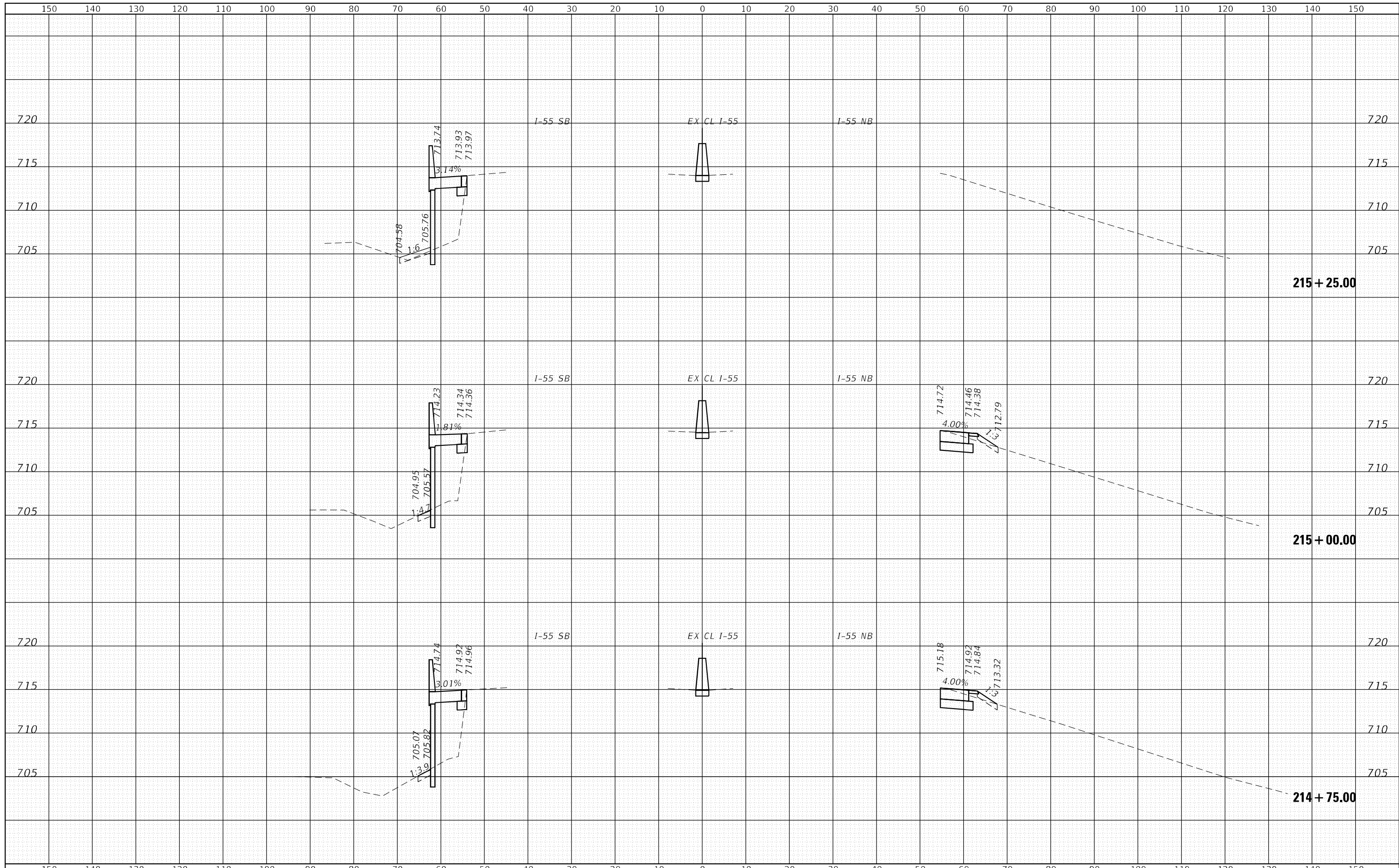
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 17 OF 25 SHEETS STA. 214+00.00 TO STA. 214+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	370
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



LIN ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

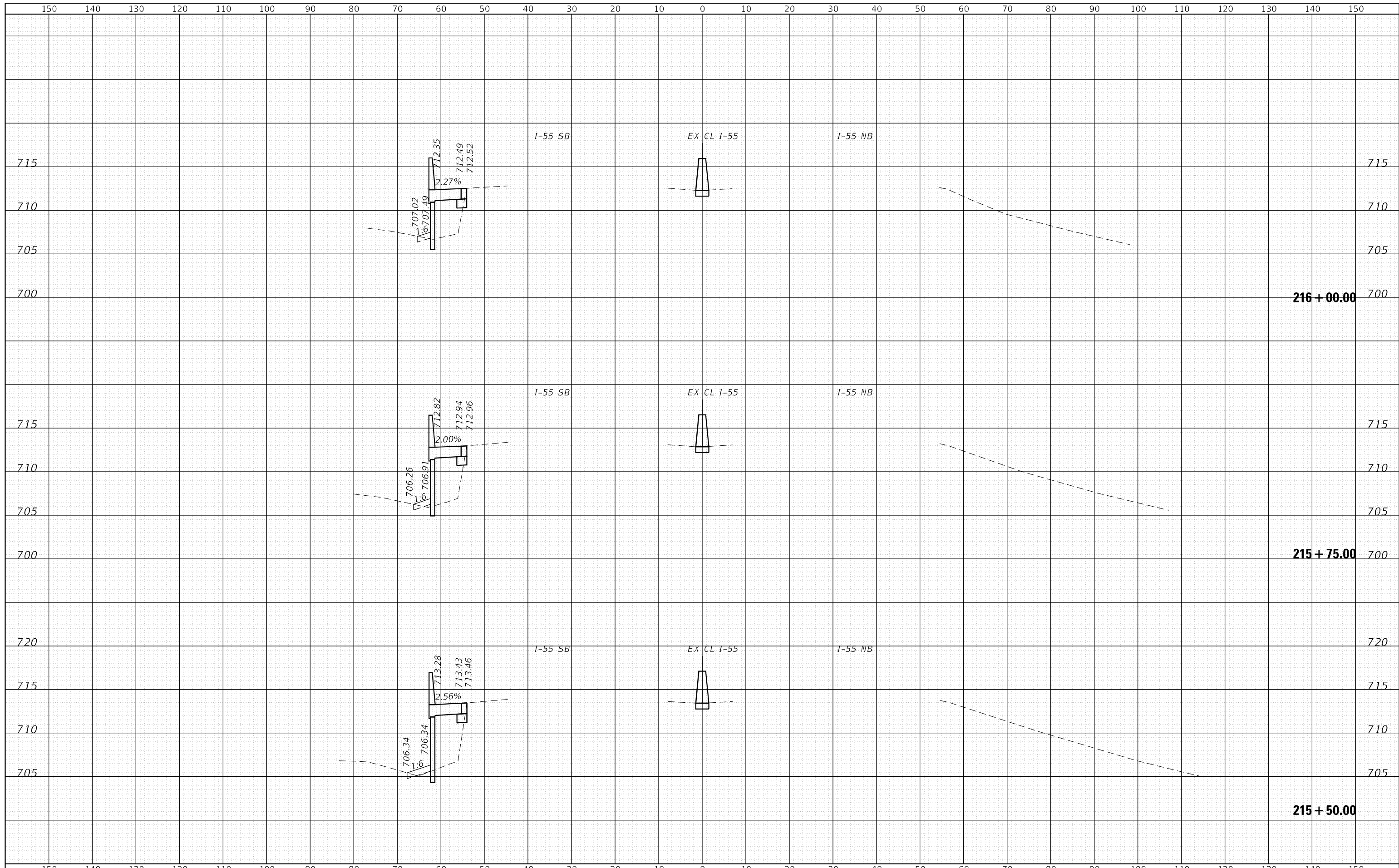
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 18 OF 25 SHEETS STA. 214+75.00 TO STA. 215+25.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	371
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



Lin Engineering, Ltd.
 Consulting Engineers
 Westmont, Illinois

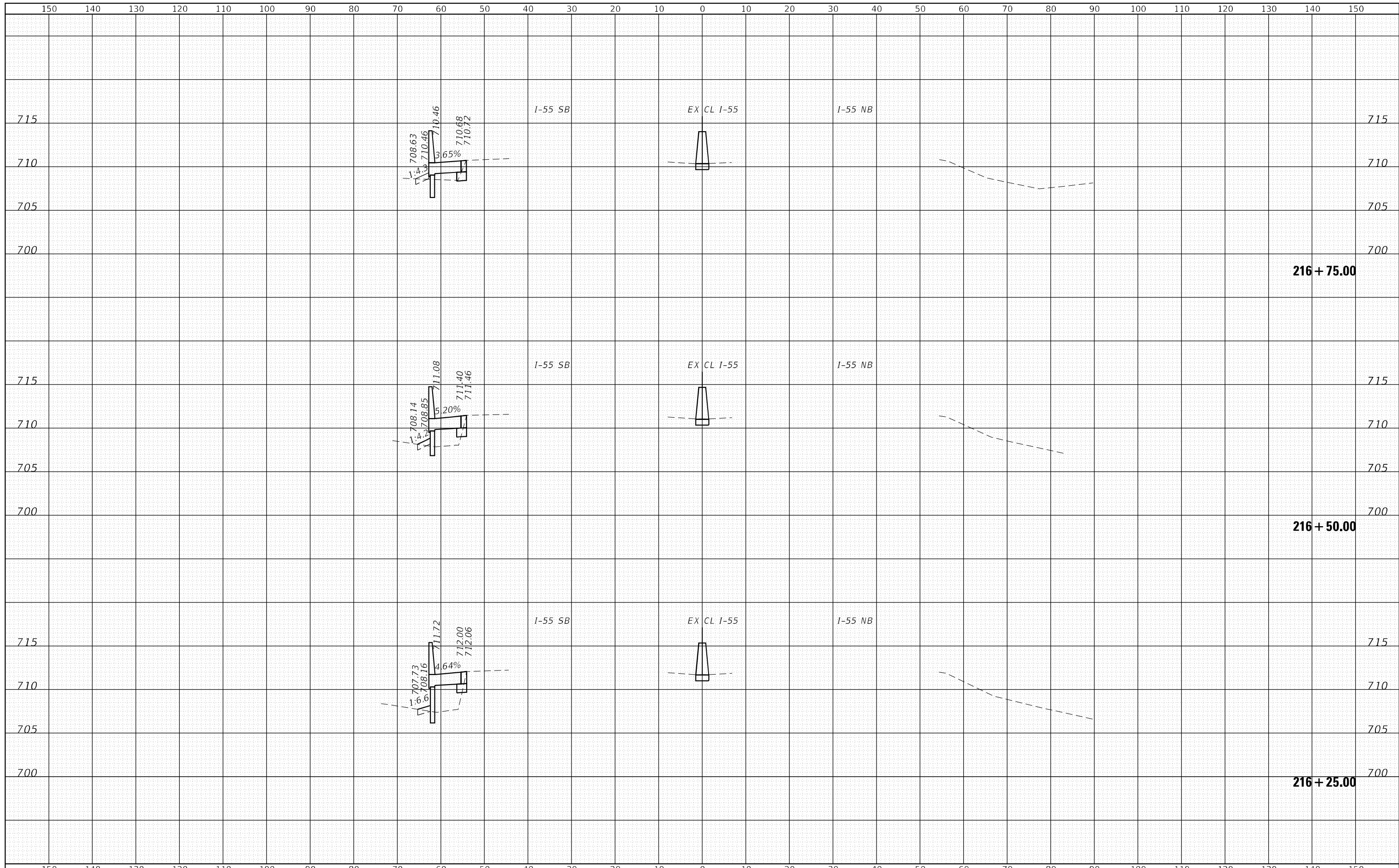
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 19 OF 25 SHEETS STA. 215+50.00 TO STA. 216+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	372
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



LIN ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

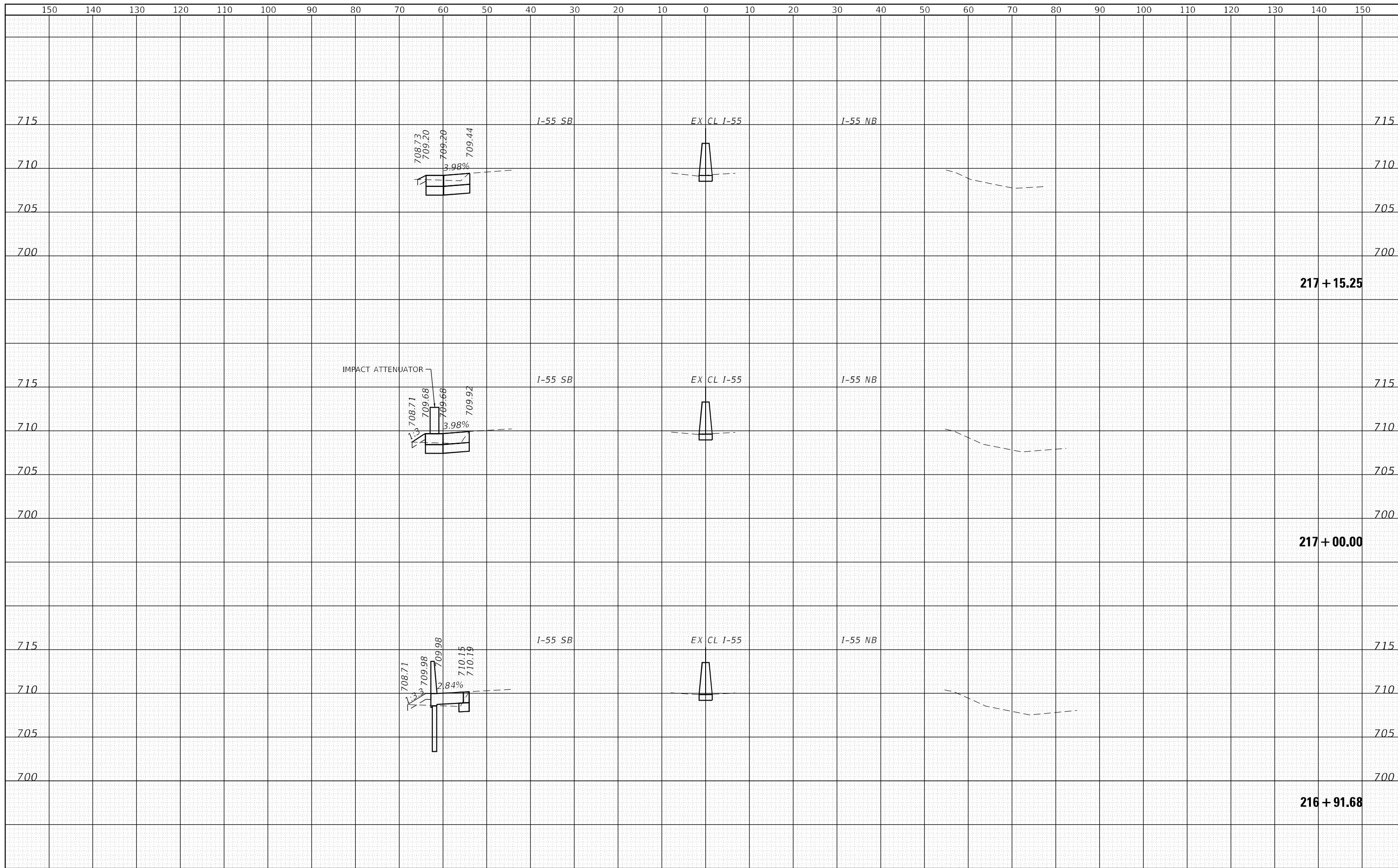
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 20 OF 25 SHEETS STA. 216+25.00 TO STA. 216+75.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	373
				CONTRACT NO. 62H03
ILLINOIS FED. AID PROJECT				



LIN ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

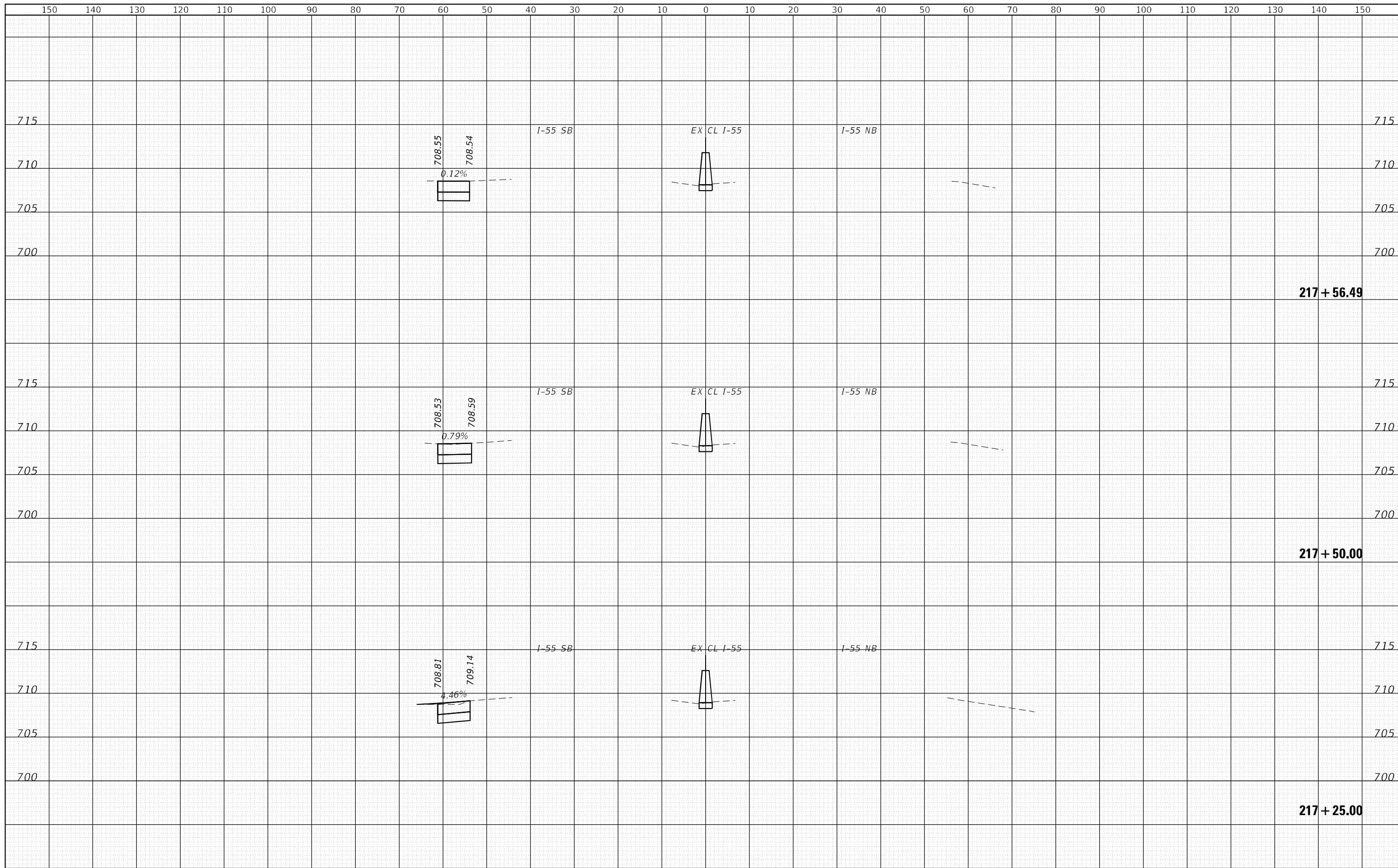
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 21 OF 25 SHEETS STA. 216+91.68 TO STA. 217+15.25

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	374
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



Lin Engineering, Ltd.
 Consulting Engineers
 Westmont, Illinois

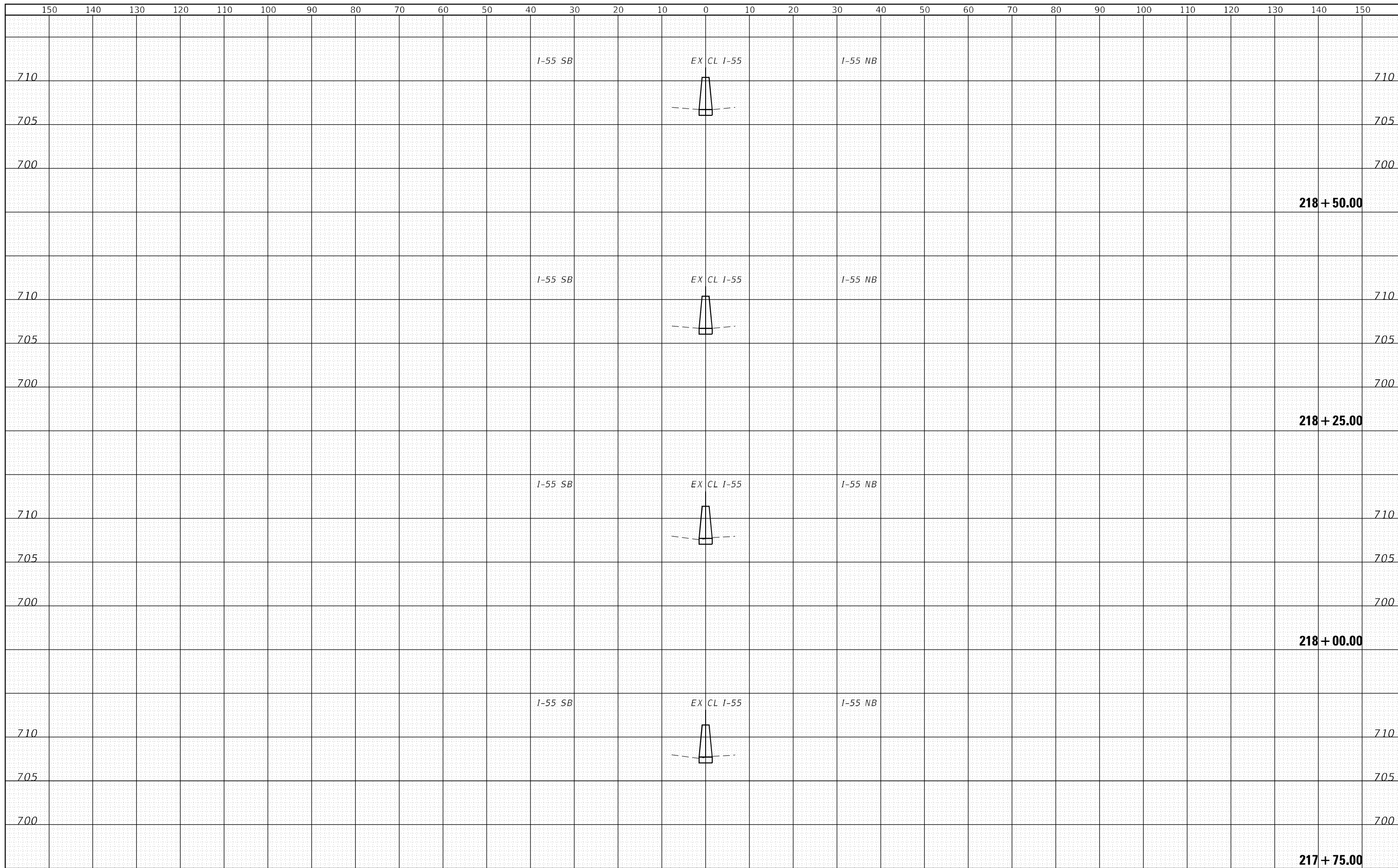
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 22 OF 25 SHEETS STA. 217+25.00 TO STA. 217+56.49

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	375
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



Lin Engineering, Ltd.
 Consulting Engineers
 Westmont, Illinois

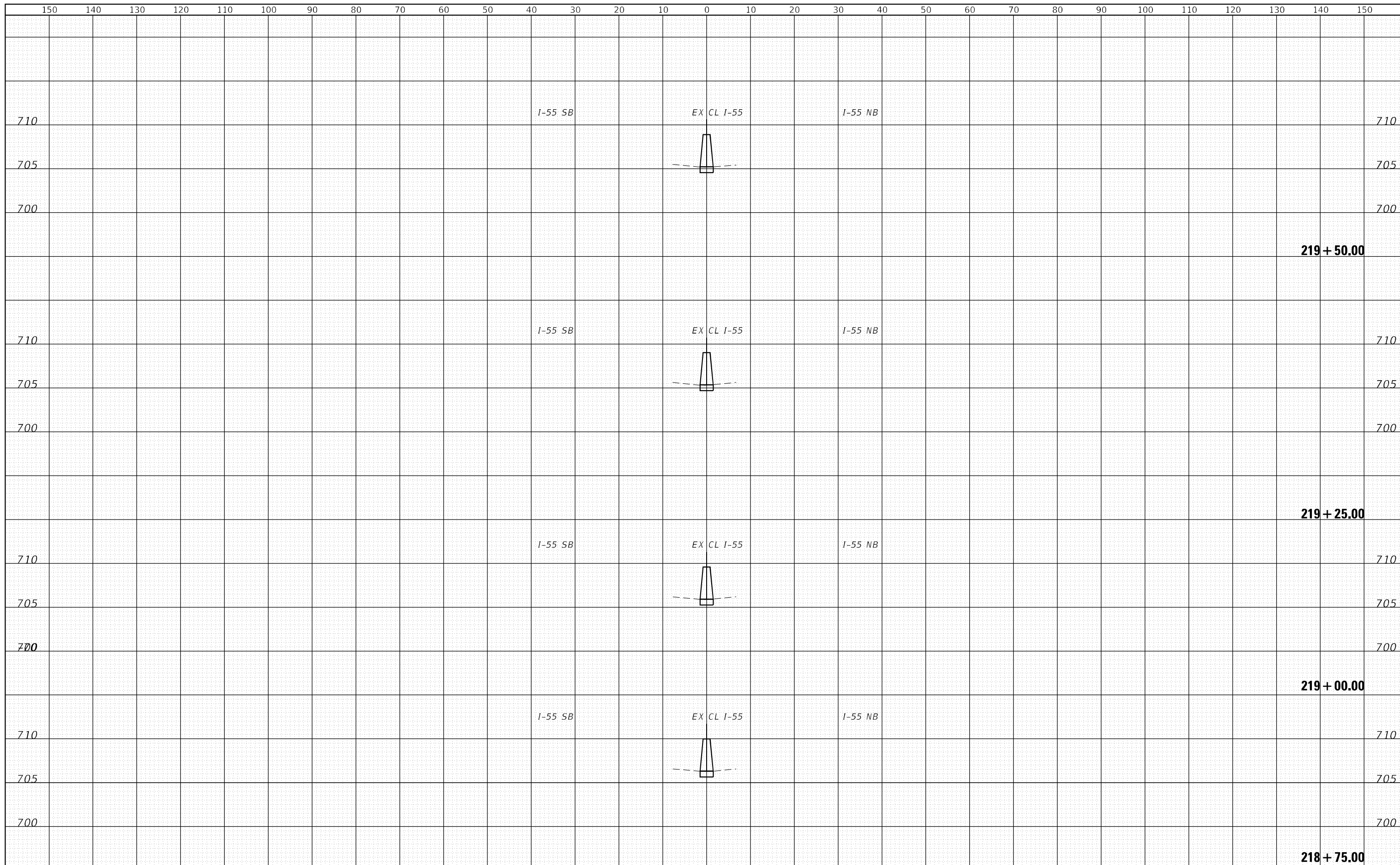
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 23 OF 25 SHEETS STA. 217+75.00 TO STA. 218+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	376
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



Lin Engineering, Ltd.
 Consulting Engineers
 Westmont, Illinois

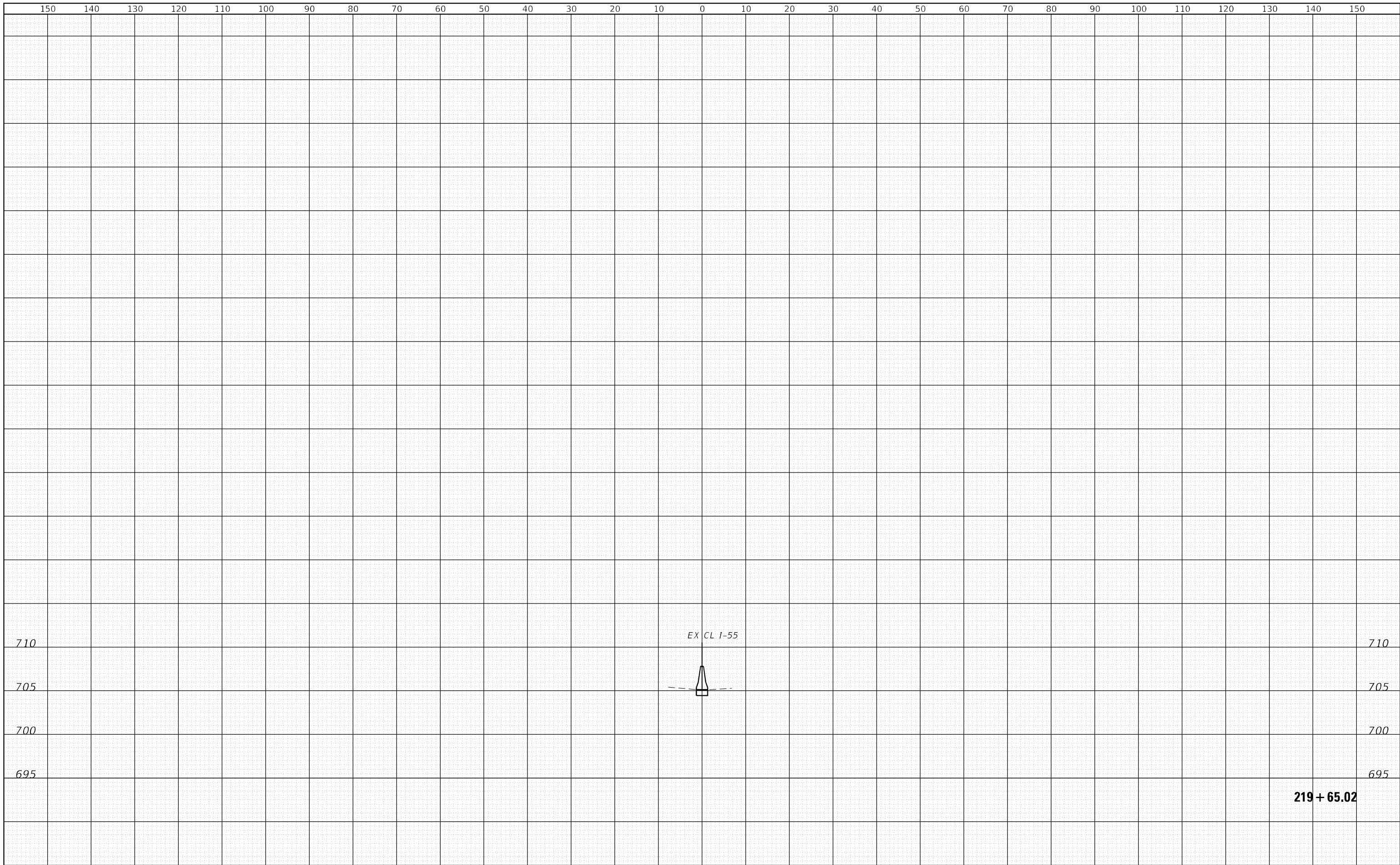
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 24 OF 25 SHEETS STA. 218+75.00 TO STA. 219+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	377
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



LI ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

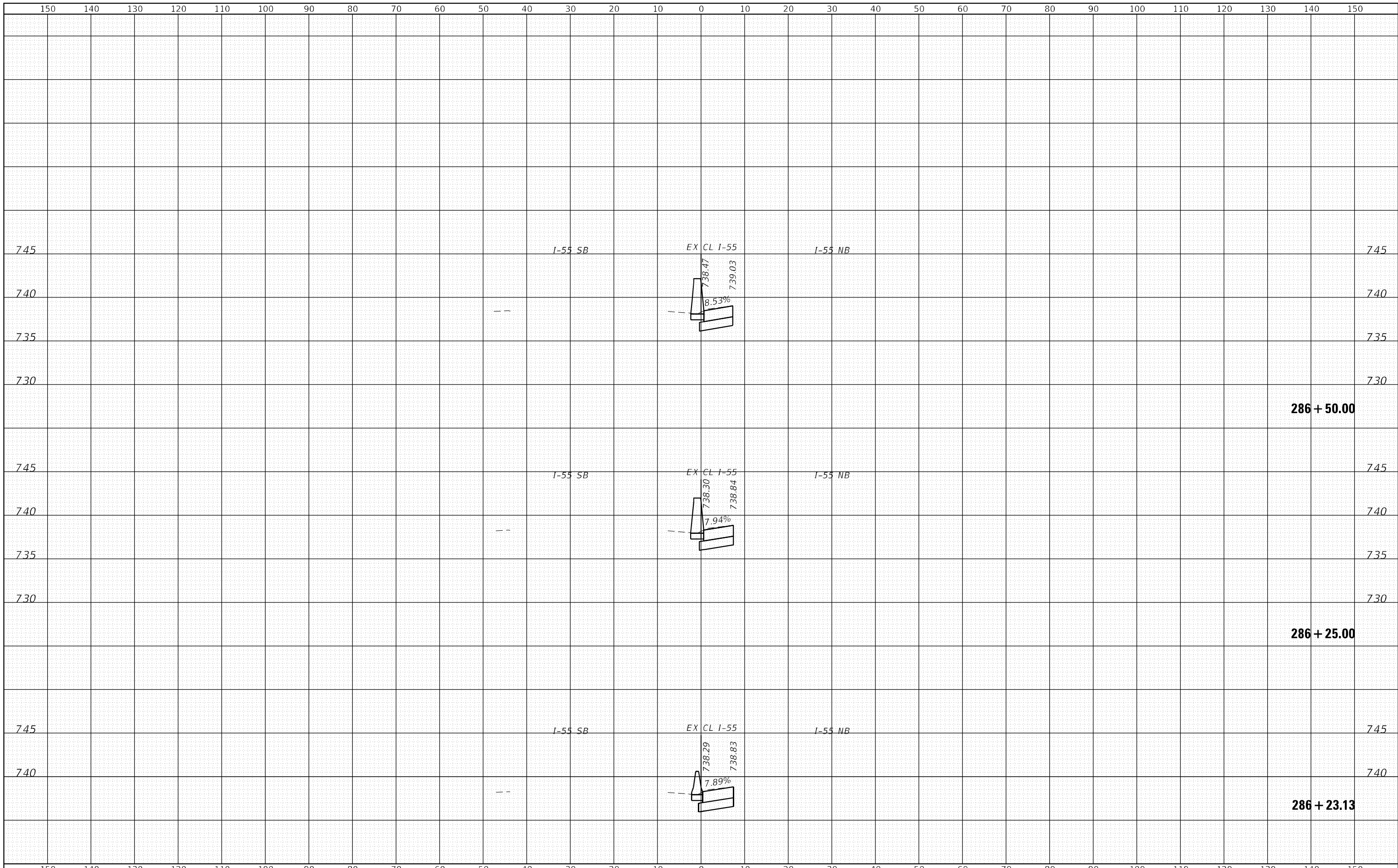
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0260 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 25 OF 25 SHEETS STA. 219+65.02 TO STA. 219+65.02

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	378
			CONTRACT NO. 62H03	
		ILLINOIS FED. AID PROJECT		



Lin Engineering, Ltd.
 Consulting Engineers
 Westmont, Illinois

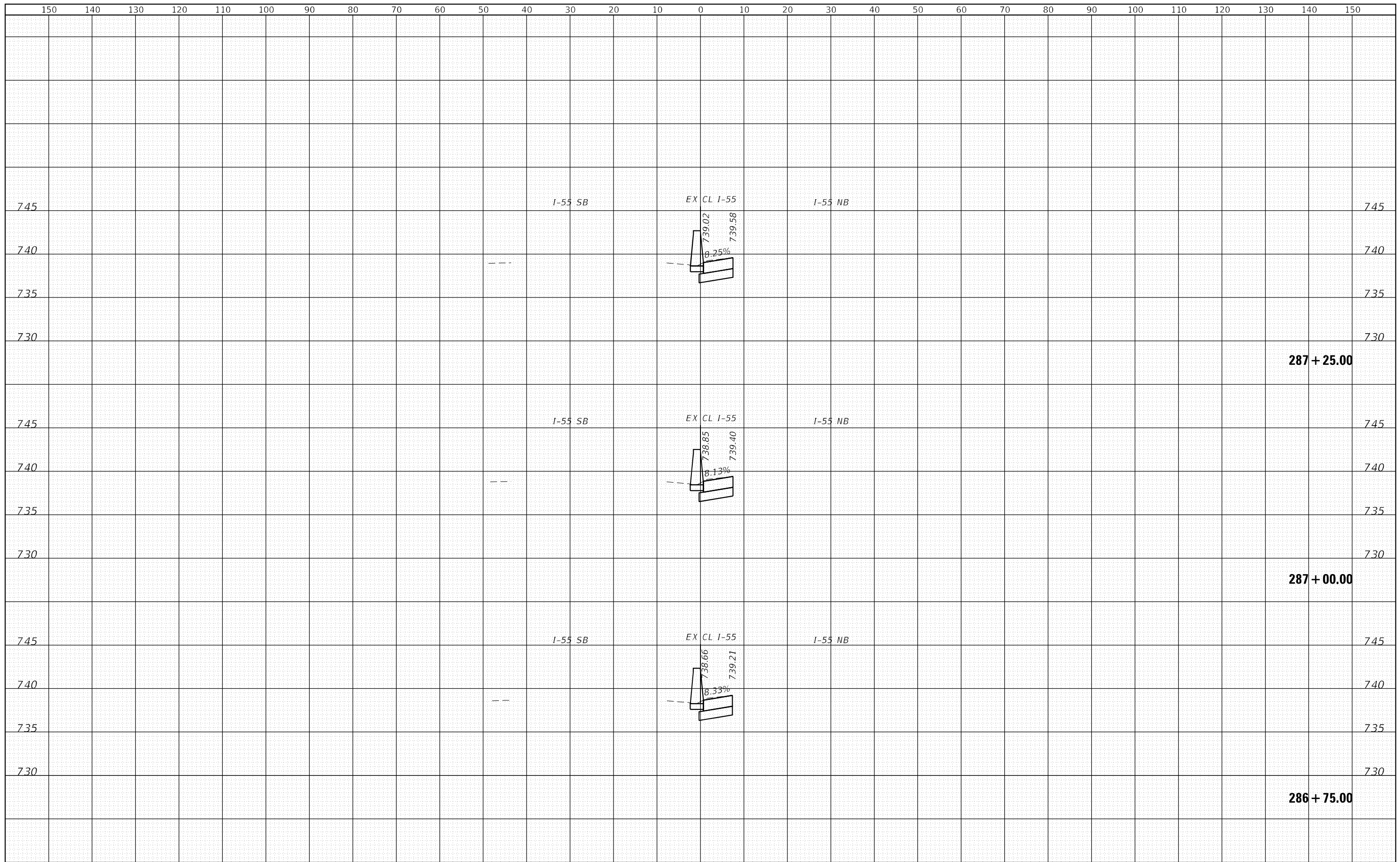
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0028 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 1 OF 37 SHEETS STA. 286+23.20 TO STA. 286+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	379
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



LI ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

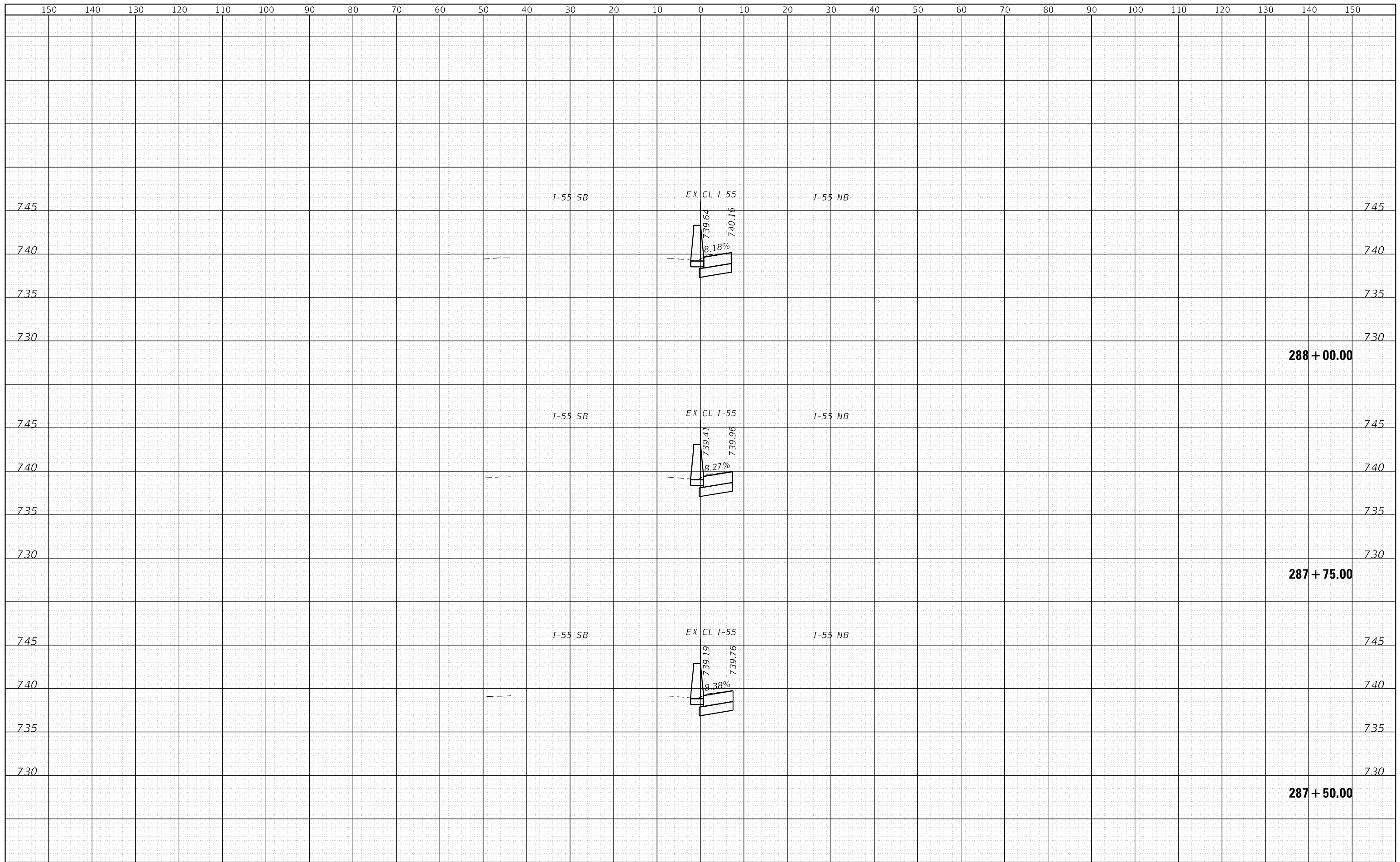
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0028 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 2 OF 37 SHEETS STA. 286+75.00 TO STA. 287+25.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	380
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



Lin Engineering, Ltd.
 Consulting Engineers
 Westmont, Illinois

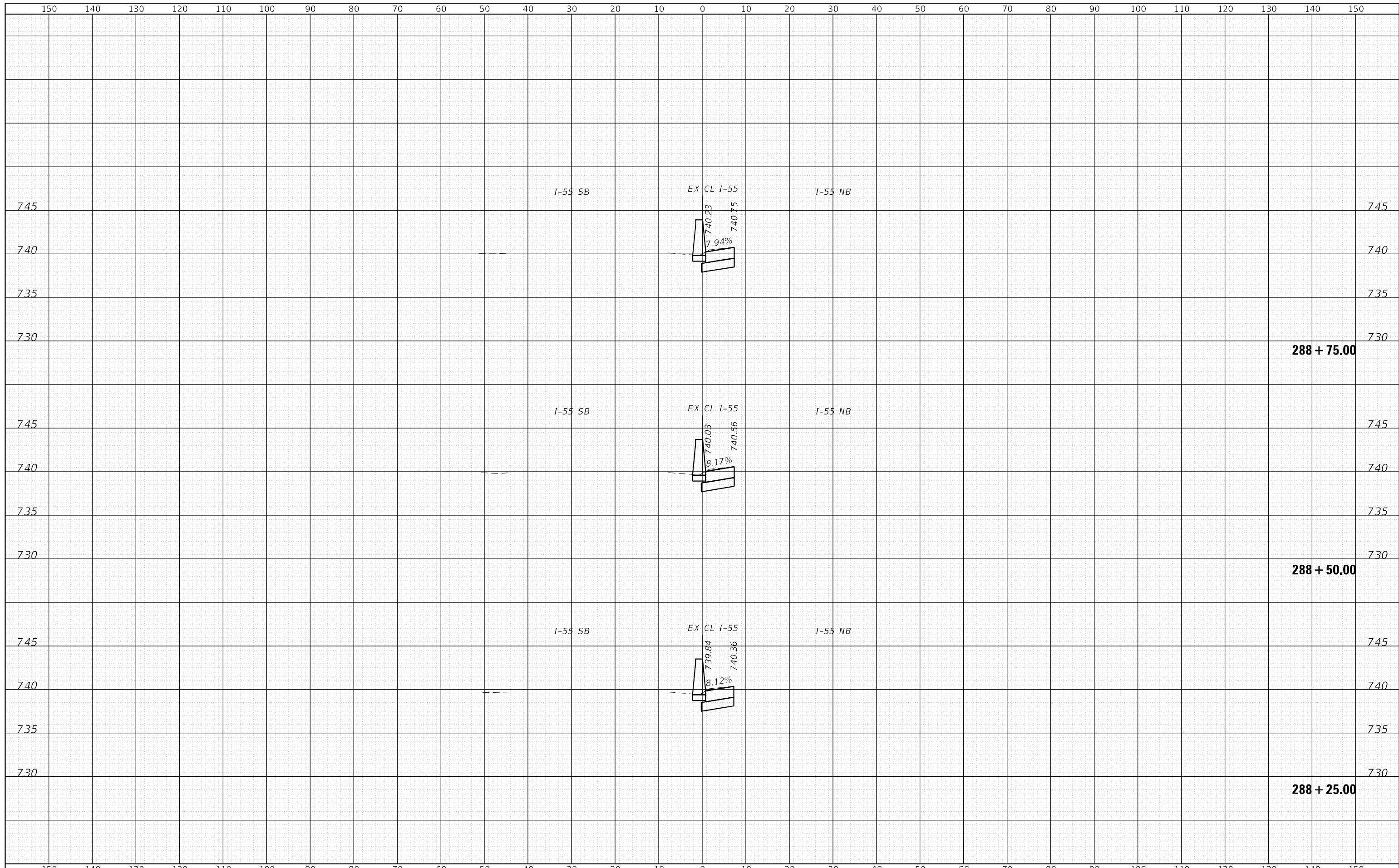
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0028 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 3 OF 37 SHEETS STA. 287+50.00 TO STA. 288+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	381
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



Lin Engineering, Ltd.
 Consulting Engineers
 Westmont, Illinois

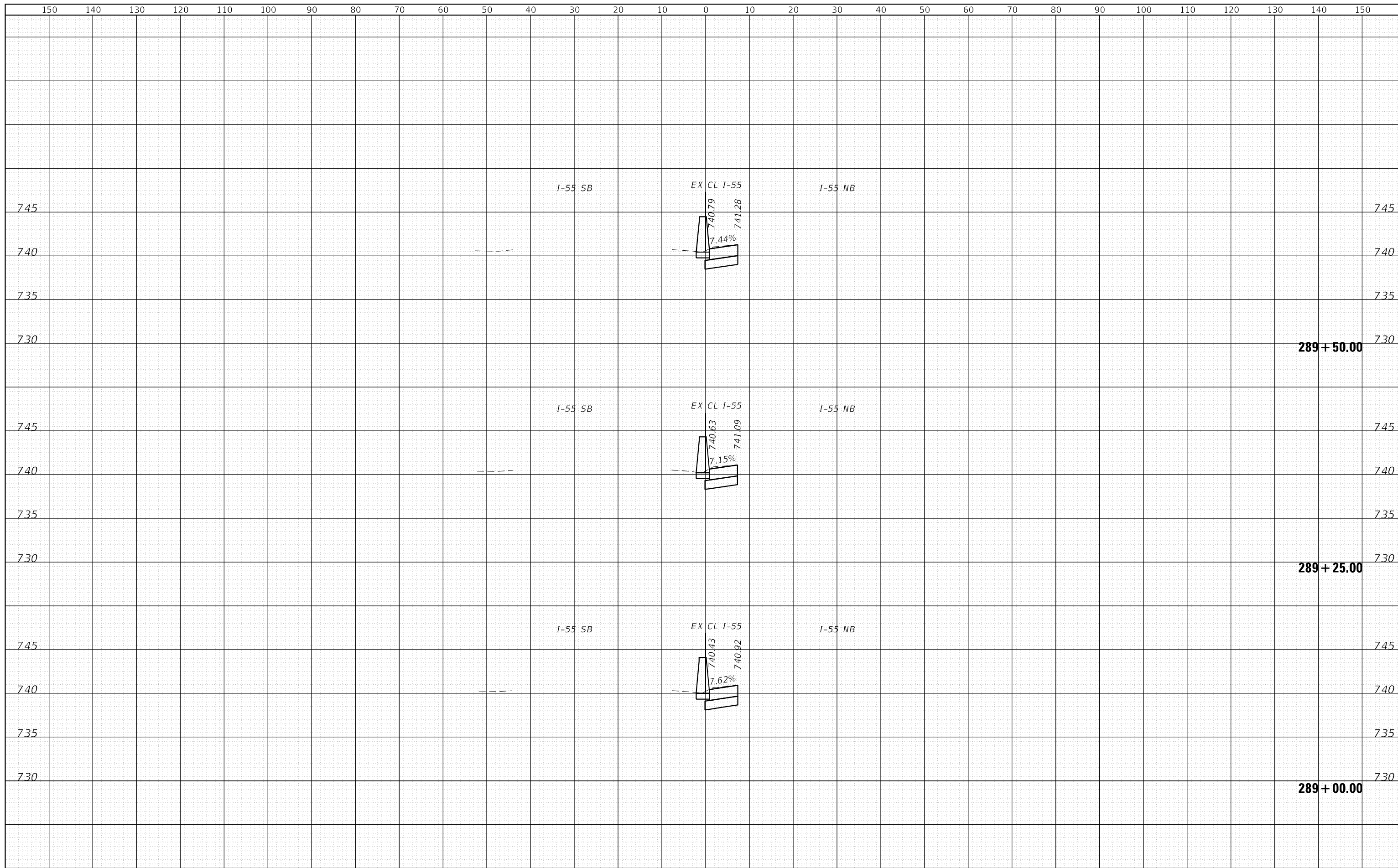
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

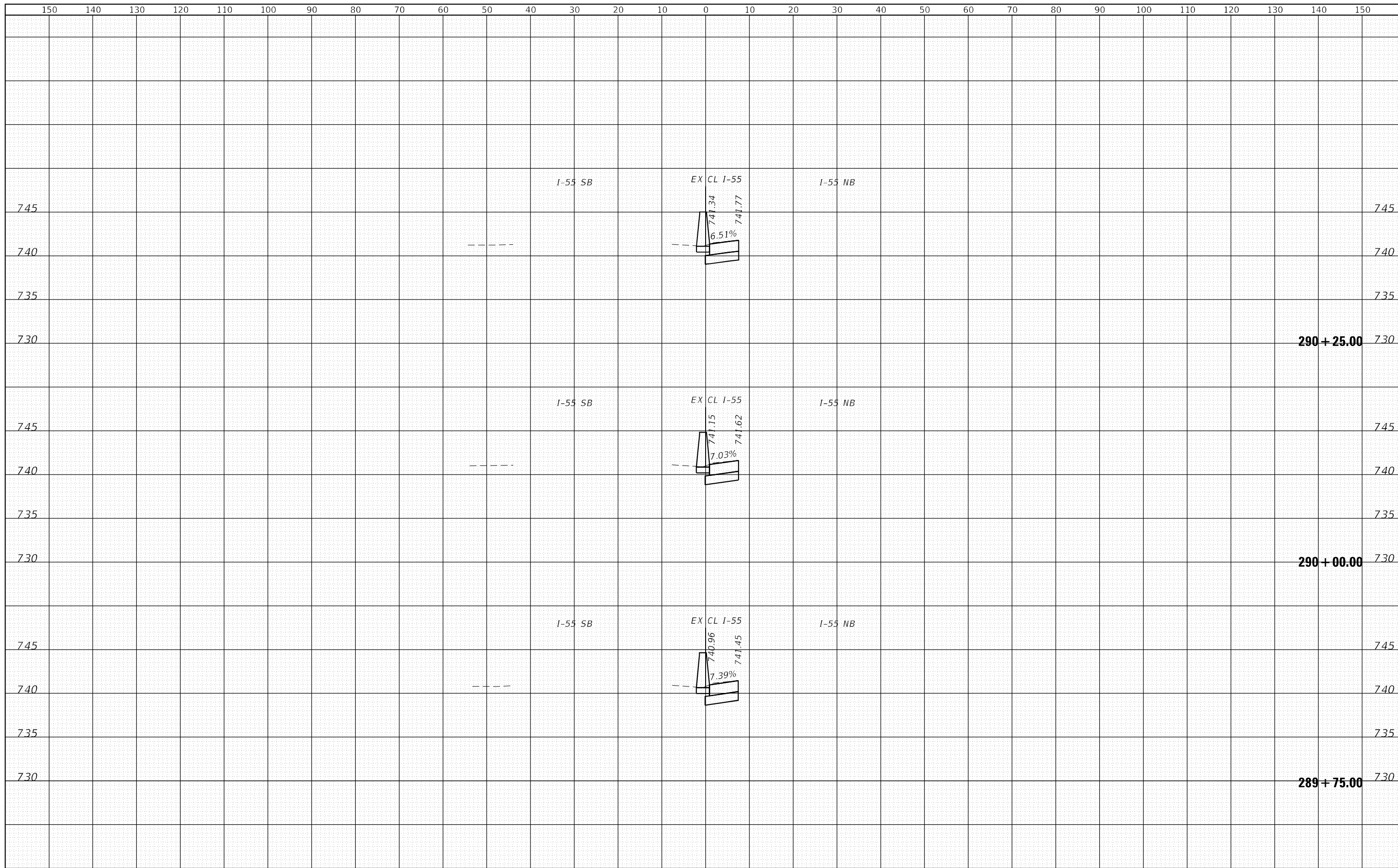
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0028 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 4 OF 37 SHEETS STA. 288+25.00 TO STA. 288+75.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	382
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				





LI ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

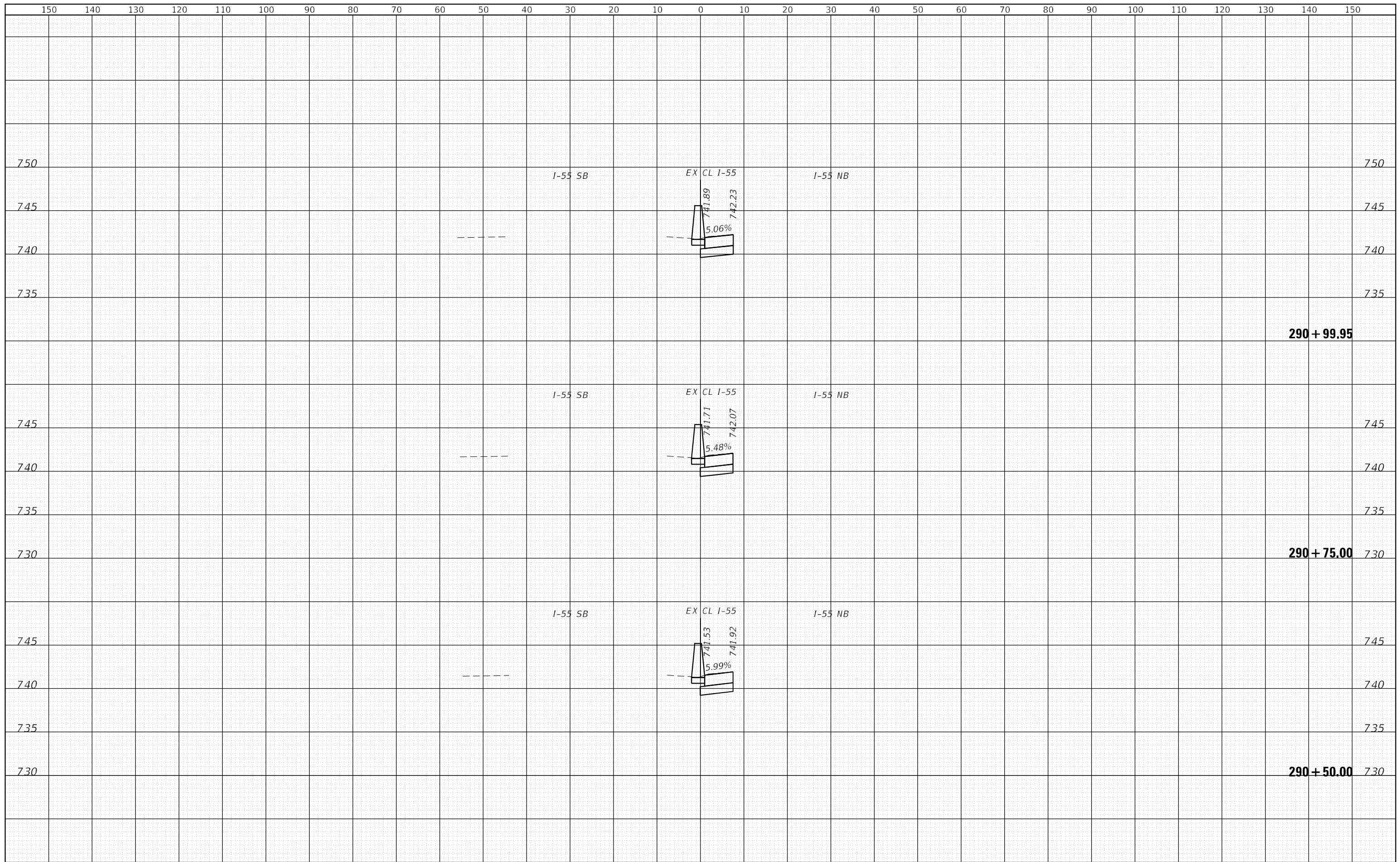
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0028 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 6 OF 37 SHEETS STA. 289+75.00 TO STA. 290+25.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	384
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



Lin Engineering, Ltd.
 Consulting Engineers
 Westmont, Illinois

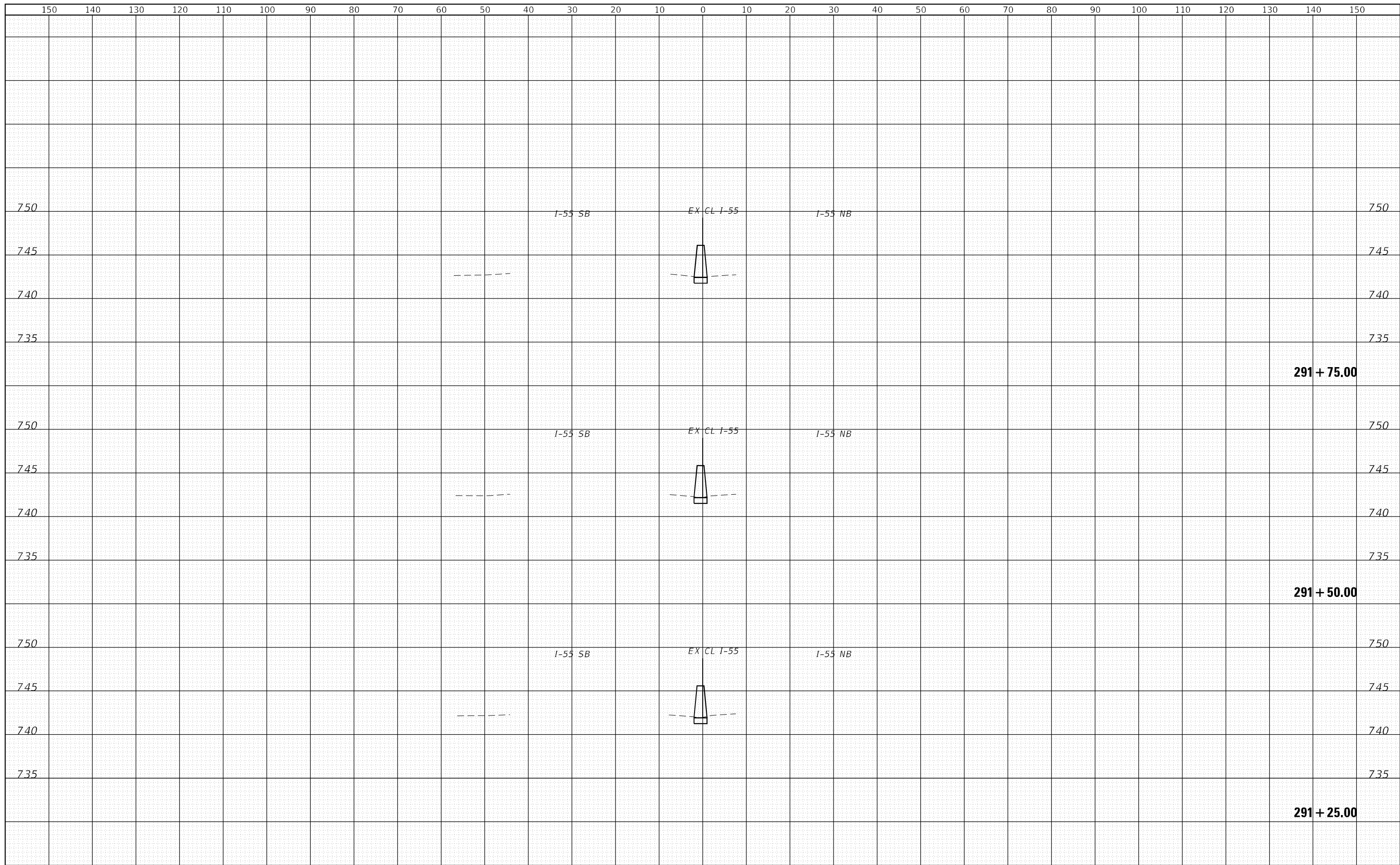
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0028 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 7 OF 37 SHEETS STA. 290+50.00 TO STA. 290+99.95

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	385
				CONTRACT NO. 62H03
ILLINOIS FED. AID PROJECT				



LIN ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

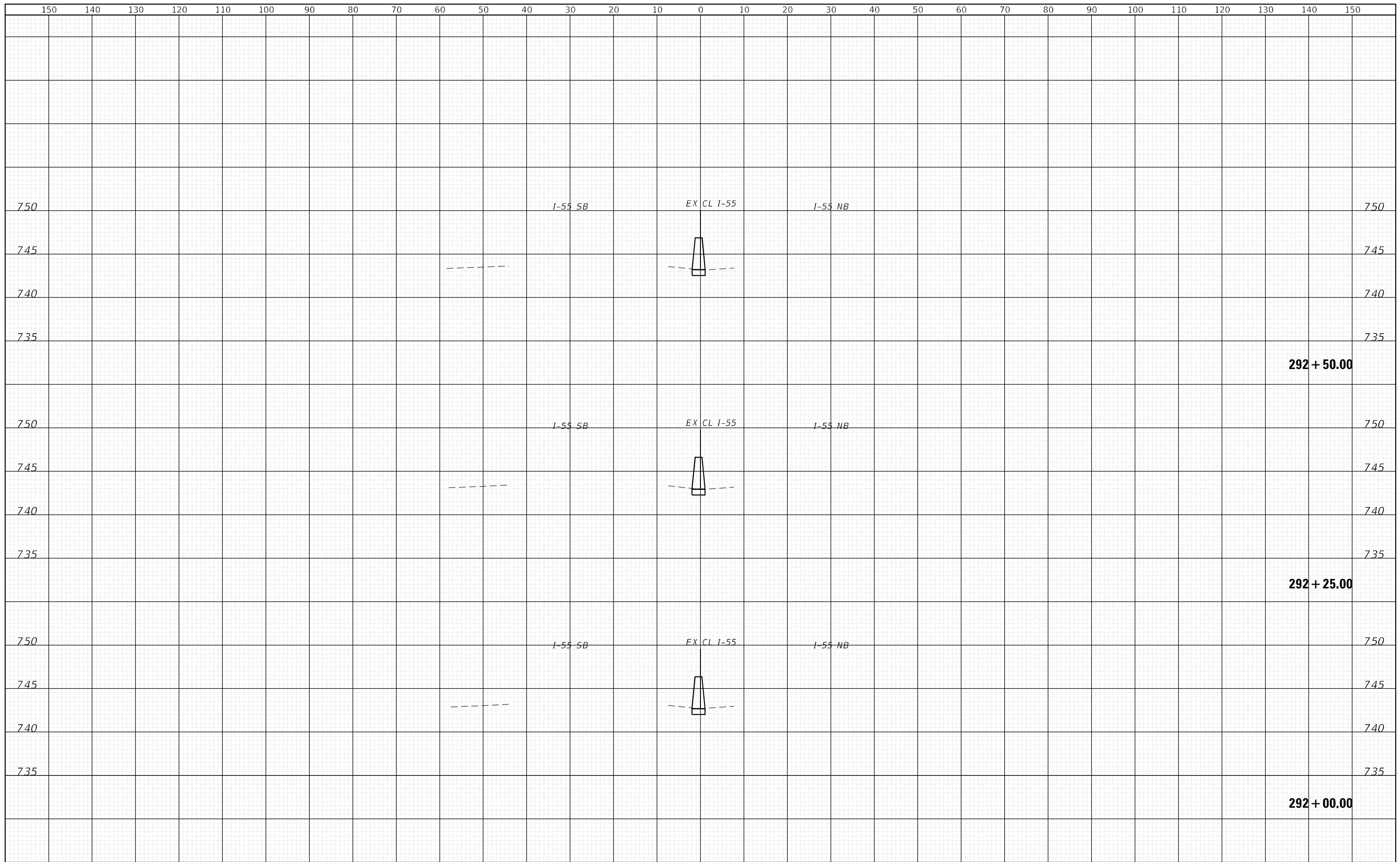
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0028 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 8 OF 37 SHEETS STA. 291+25.00 TO STA. 291+75.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	386
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



LI LIN ENGINEERING, LTD.
Consulting Engineers
Westmont, Illinois

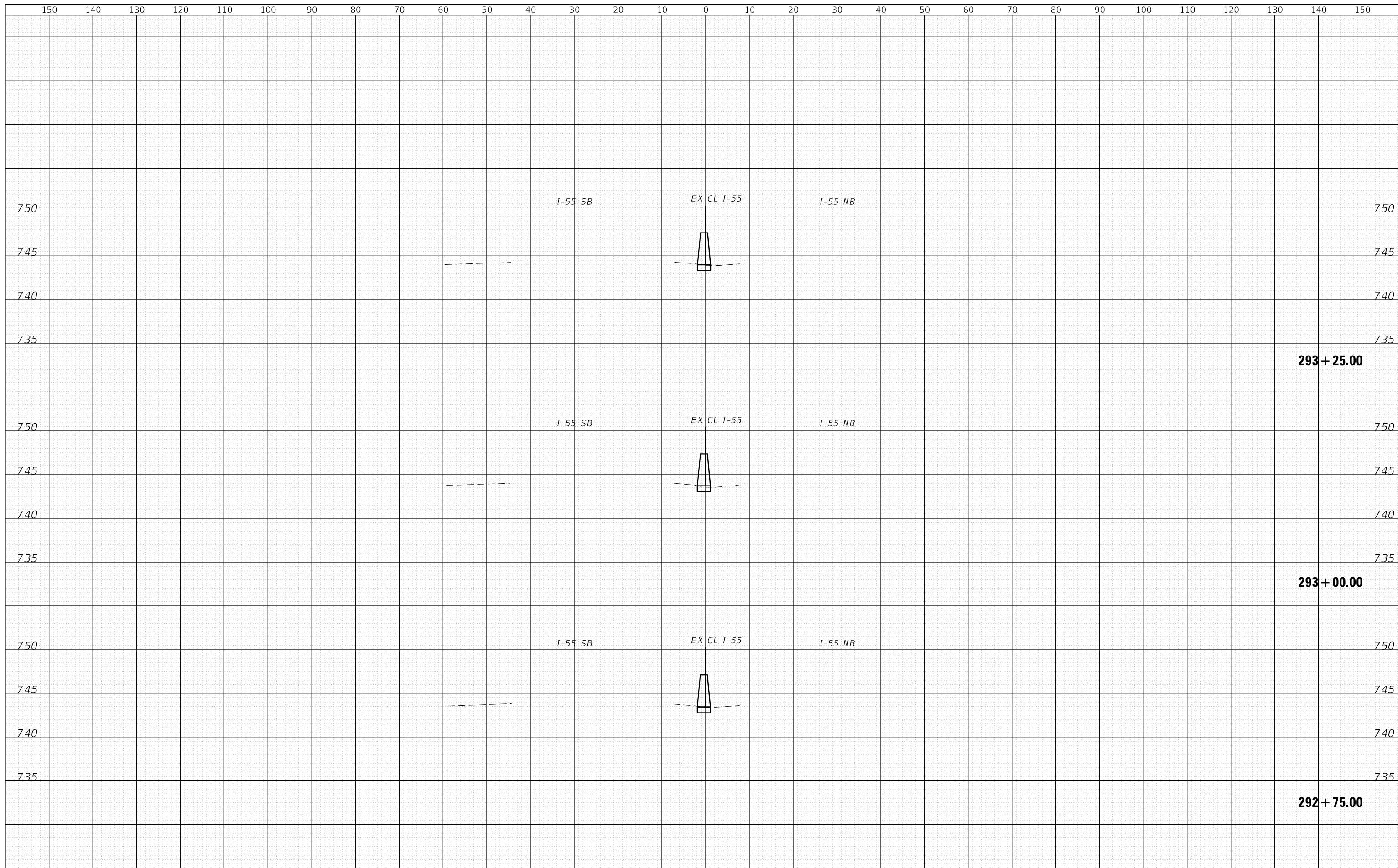
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
S.N. 099-0028 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 9 OF 37 SHEETS STA. 292+00.00 TO STA. 292+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	387
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



LIN ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

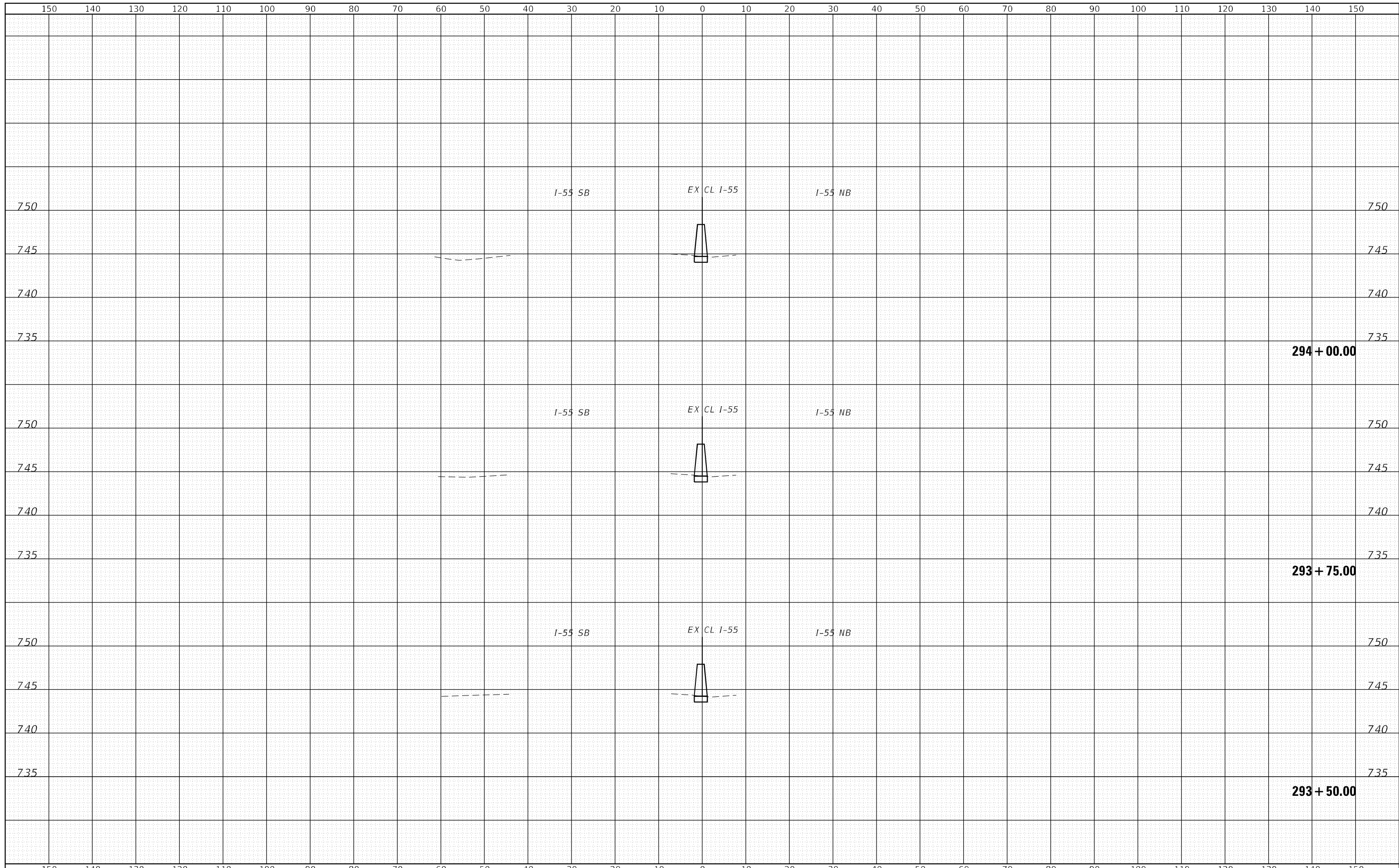
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0028 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 10 OF 37 SHEETS STA. 292+75.00 TO STA. 293+25.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	388
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



LIN ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

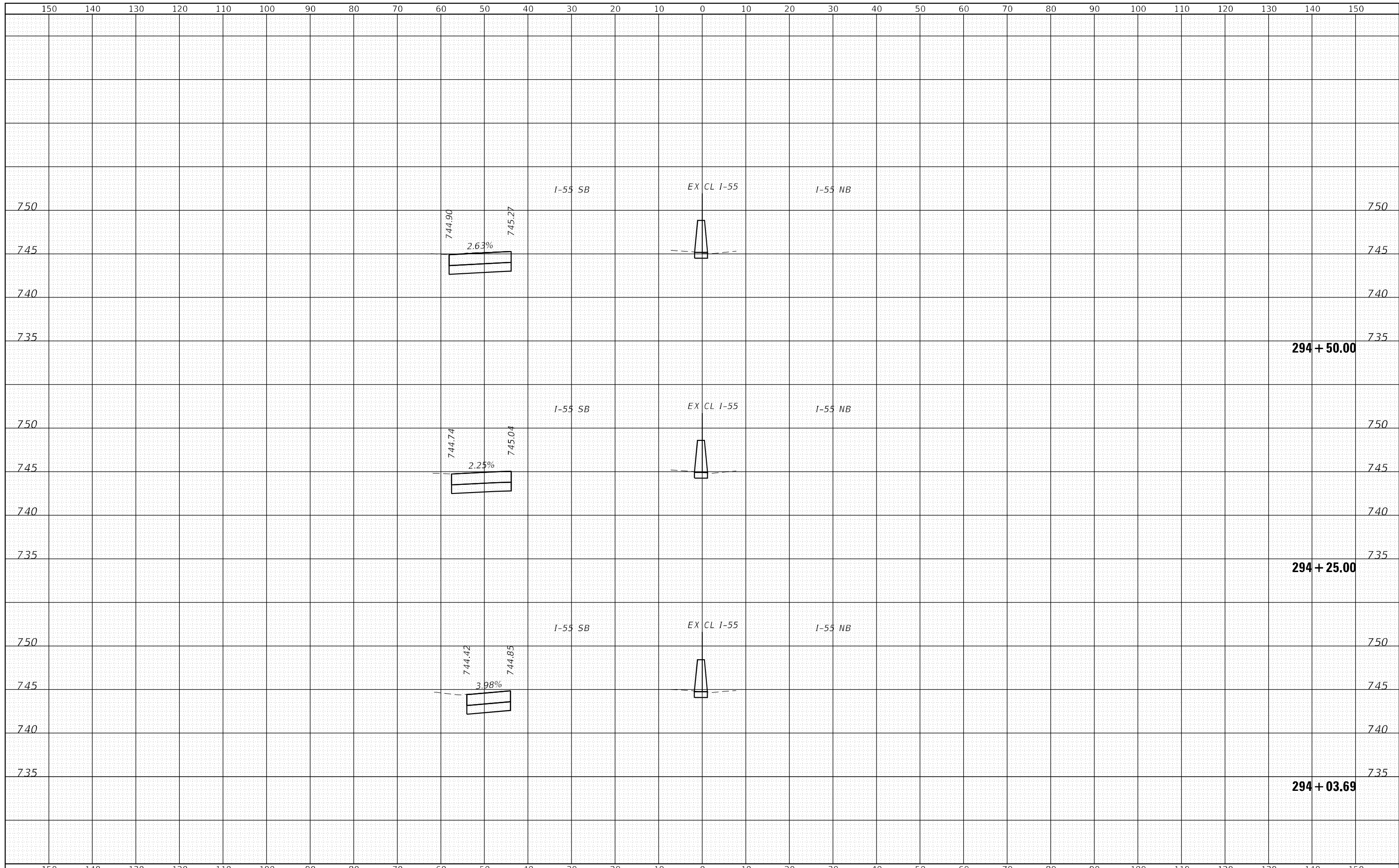
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0028 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 11 OF 37 SHEETS STA. 293+50.00 TO STA. 294+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	389
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



LI ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

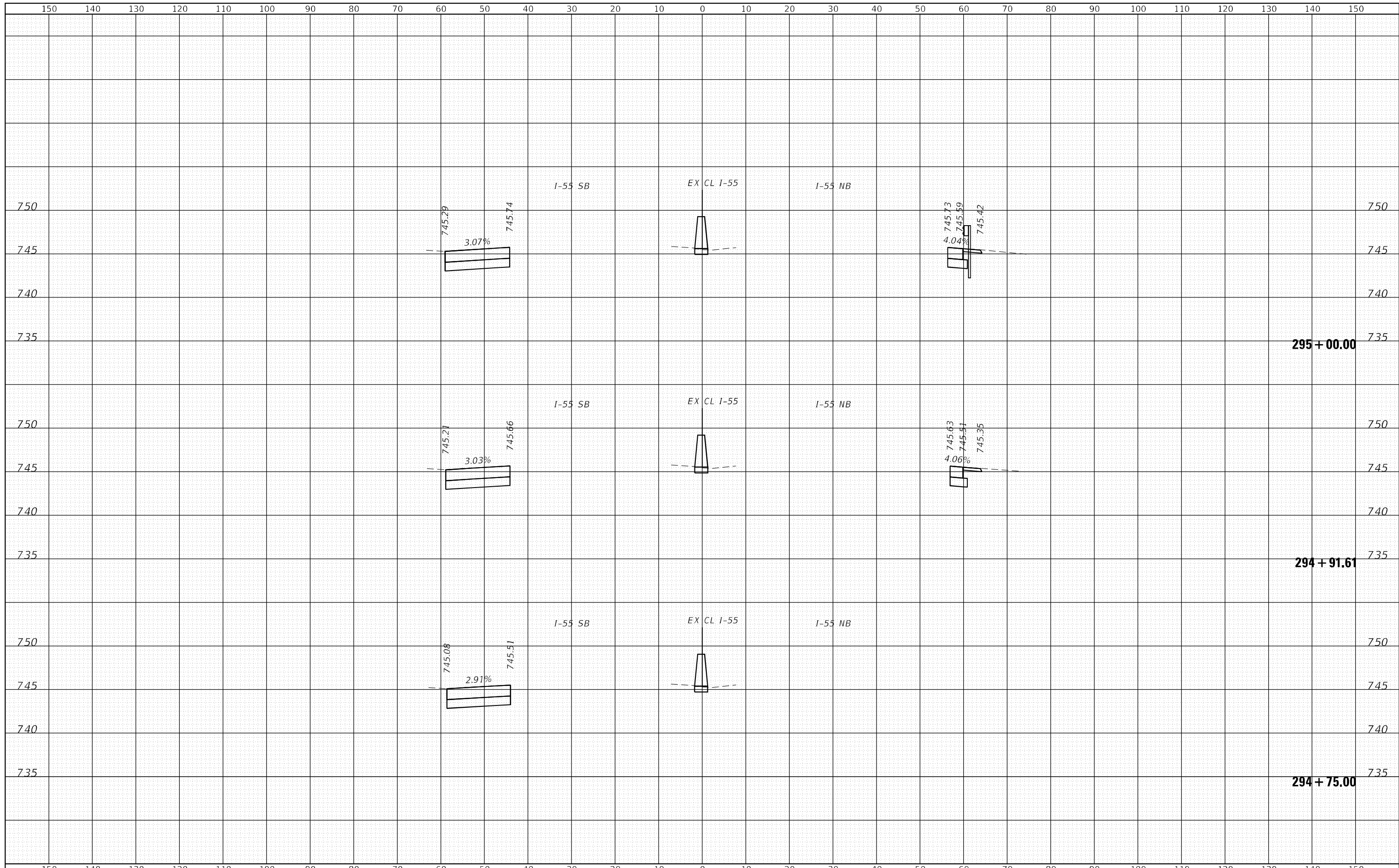
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

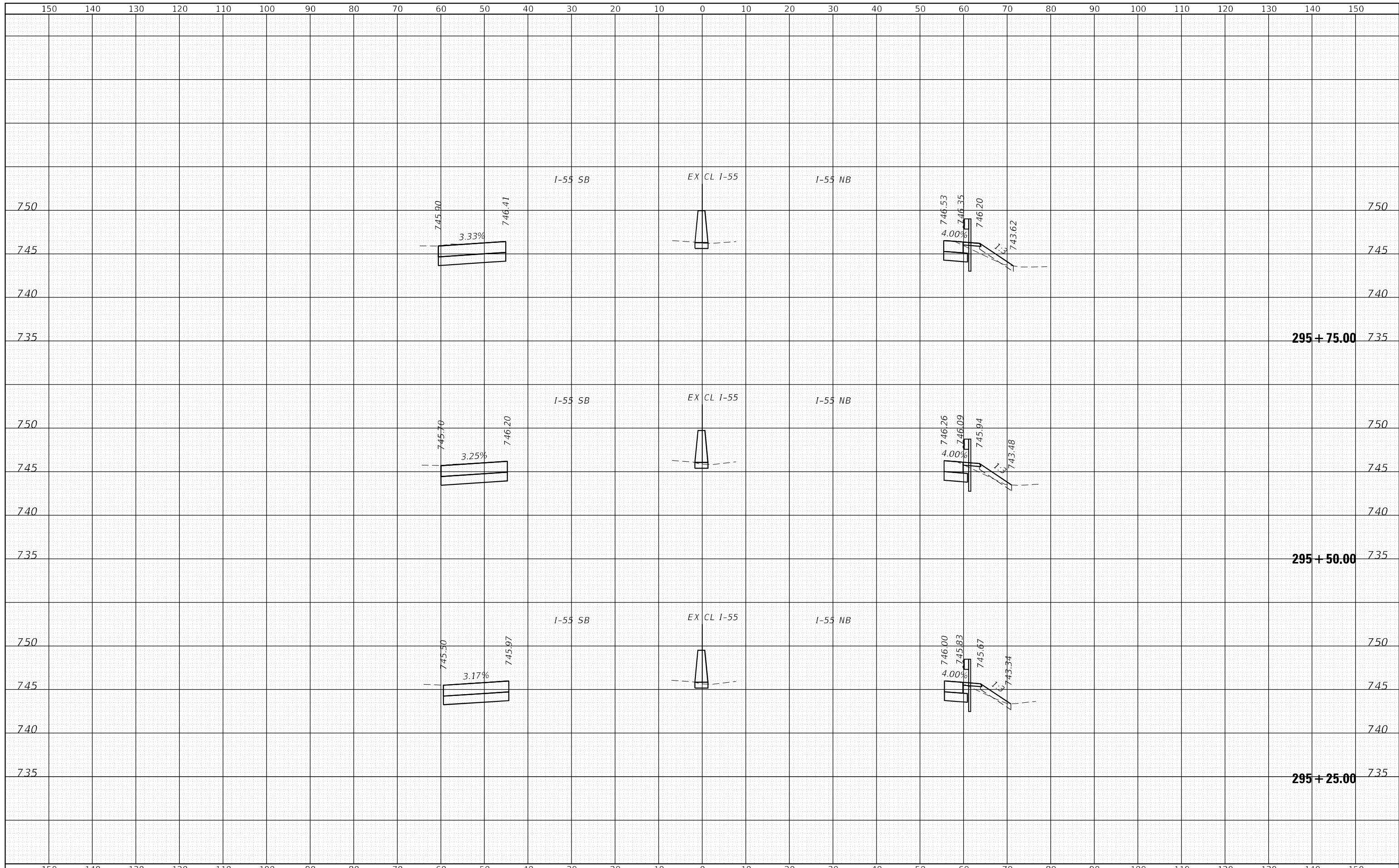
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0028 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 12 OF 37 SHEETS STA. 294+03.69 TO STA. 294+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	390
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				





LIN ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

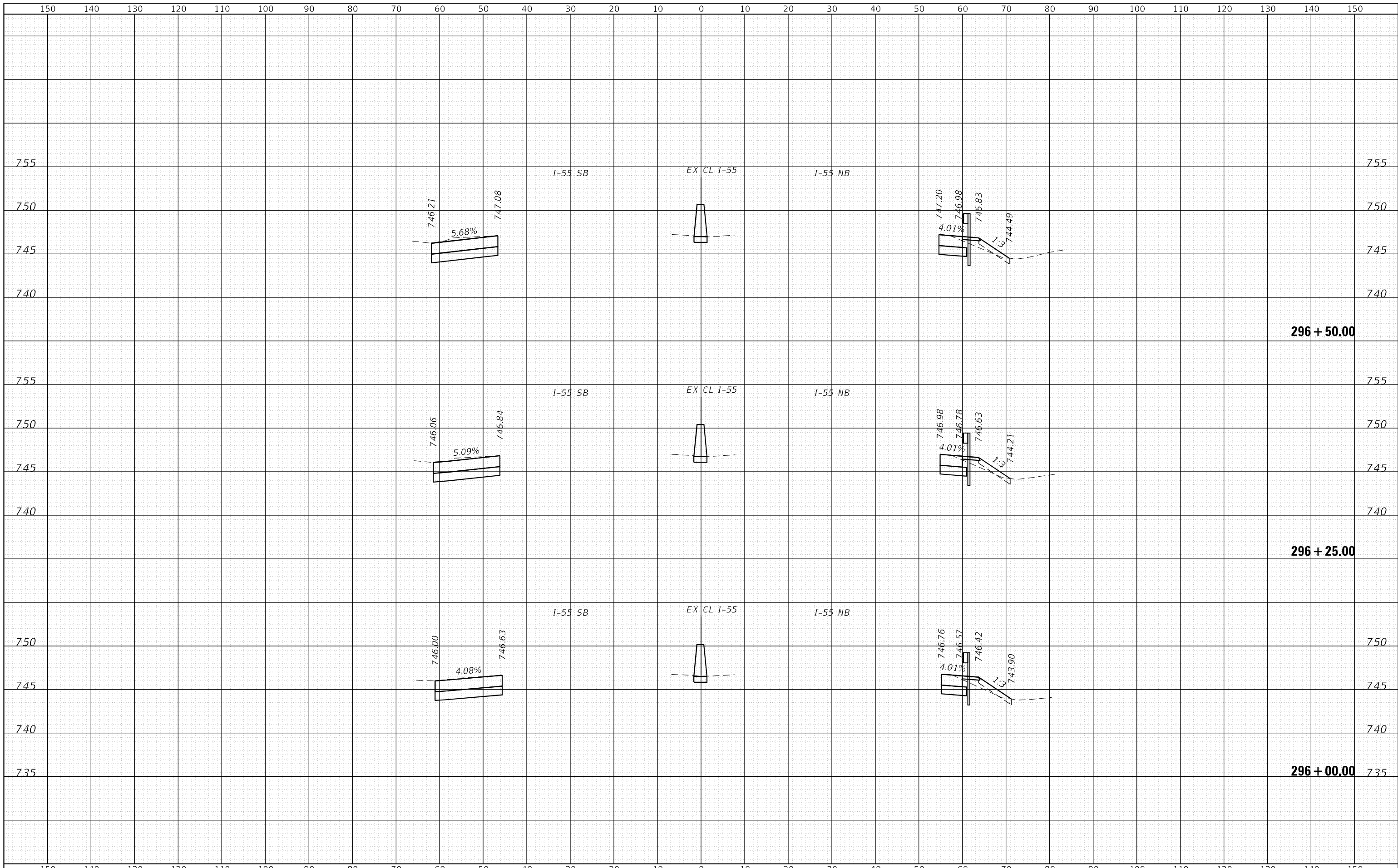
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0028 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 14 OF 37 SHEETS STA. 295+25.00 TO STA. 295+75.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	392
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



LIN ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

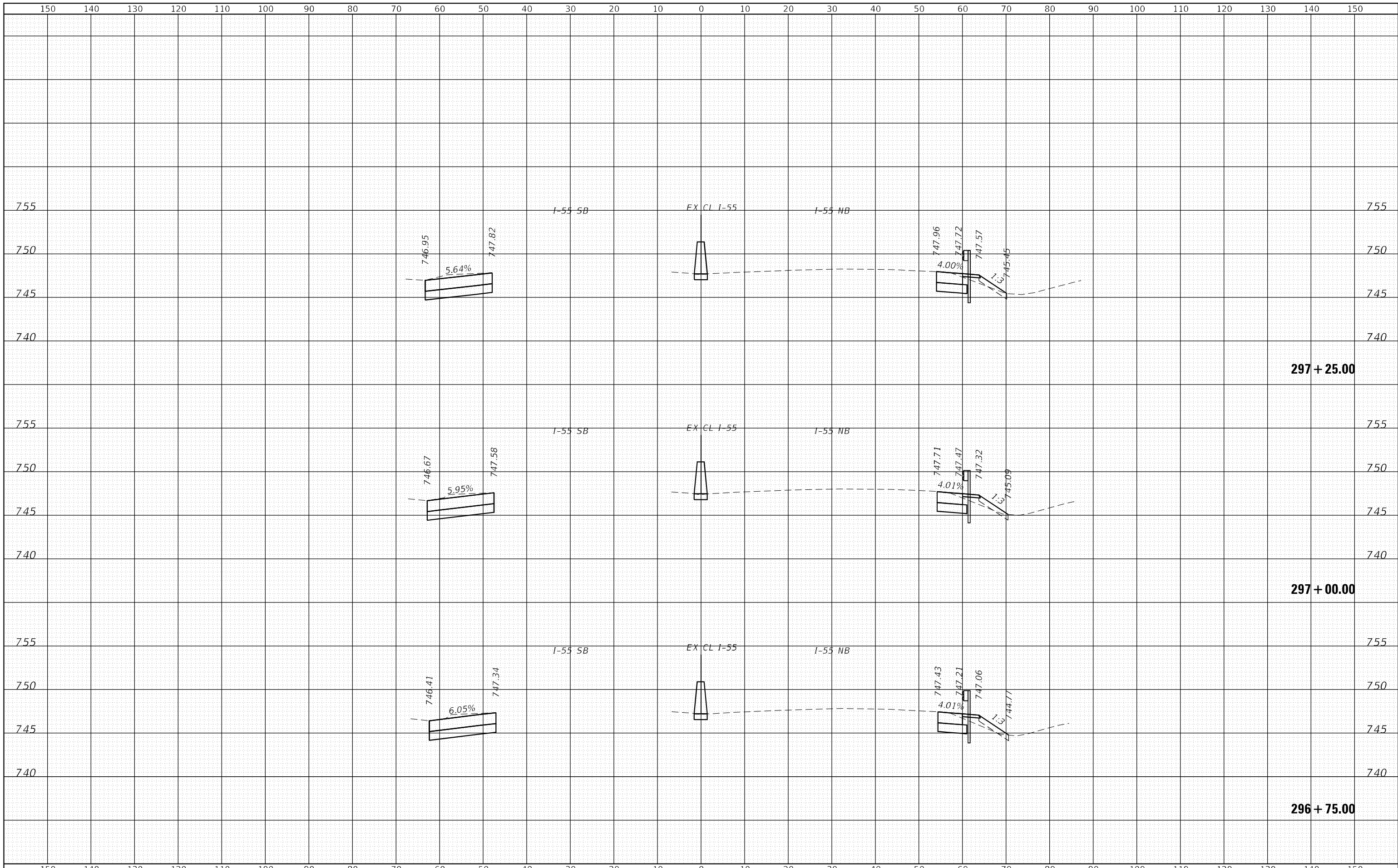
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0028 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 15 OF 37 SHEETS STA. 296+00.00 TO STA. 296+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	393
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



Lin Engineering, Ltd.
 Consulting Engineers
 Westmont, Illinois

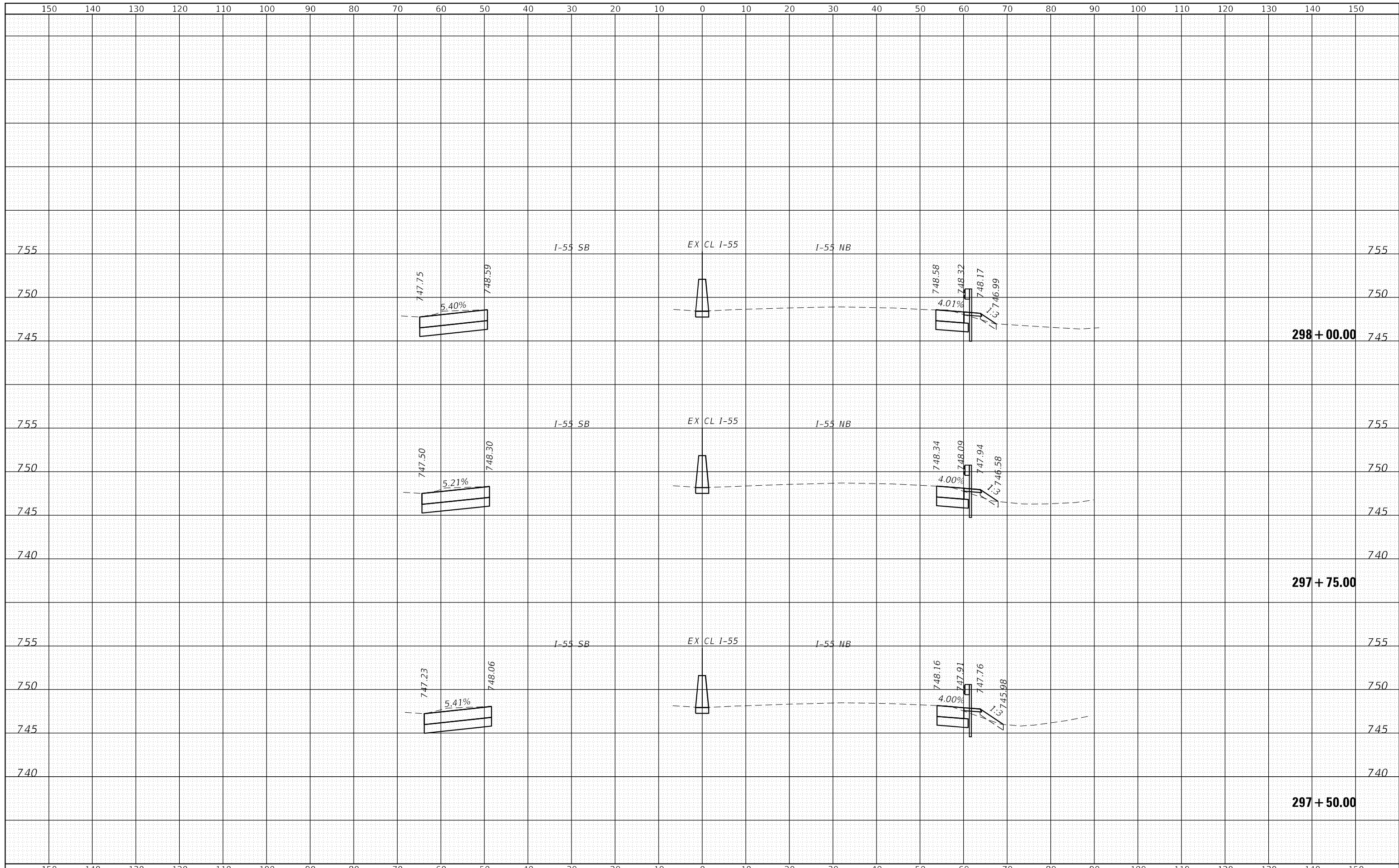
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0028 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 16 OF 37 SHEETS STA. 296+75.00 TO STA. 297+25.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	394
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



LIN ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

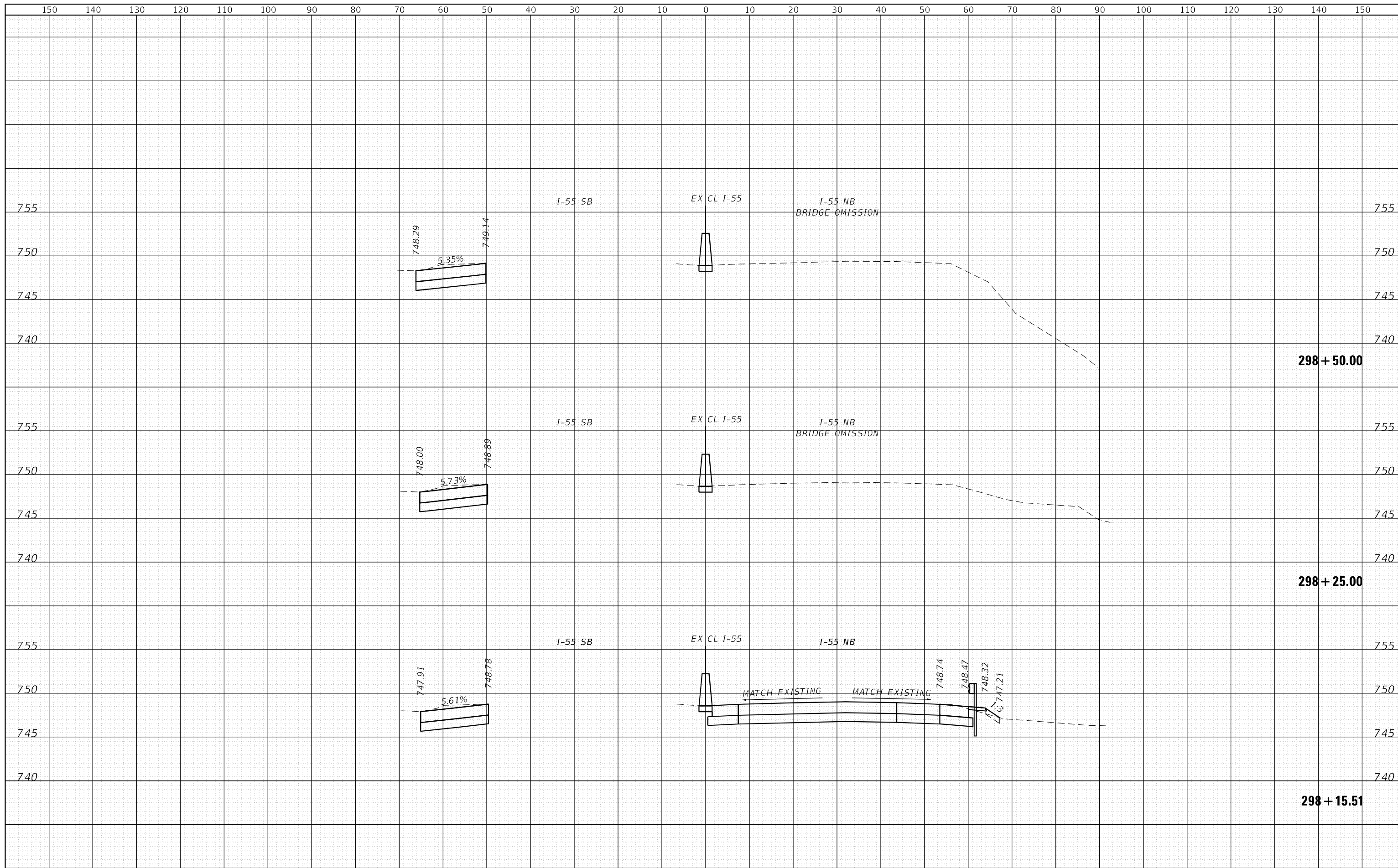
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0028 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 17 OF 37 SHEETS STA. 297+50.00 TO STA. 298+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	395
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



Lin Engineering, Ltd.
 Consulting Engineers
 Westmont, Illinois

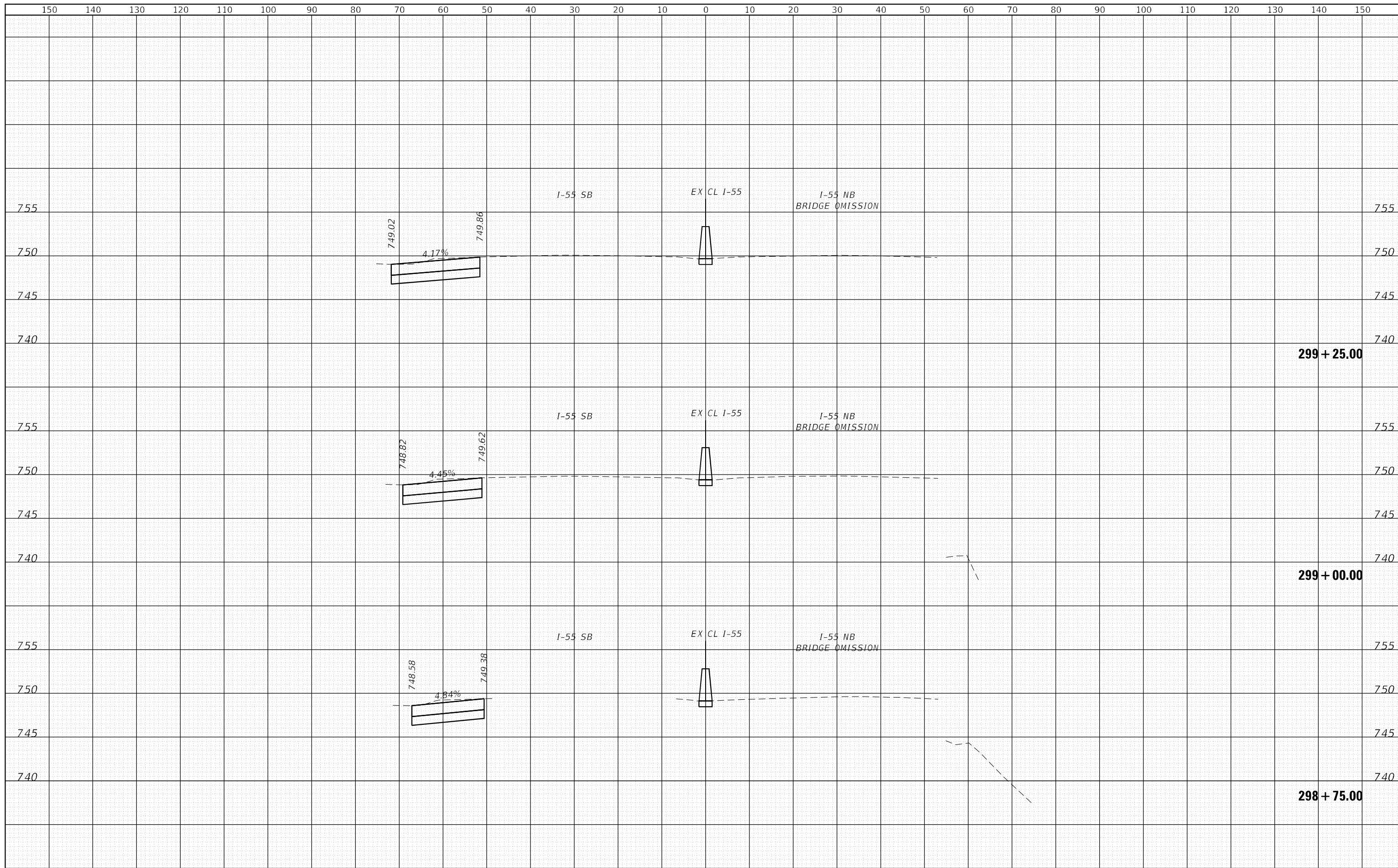
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

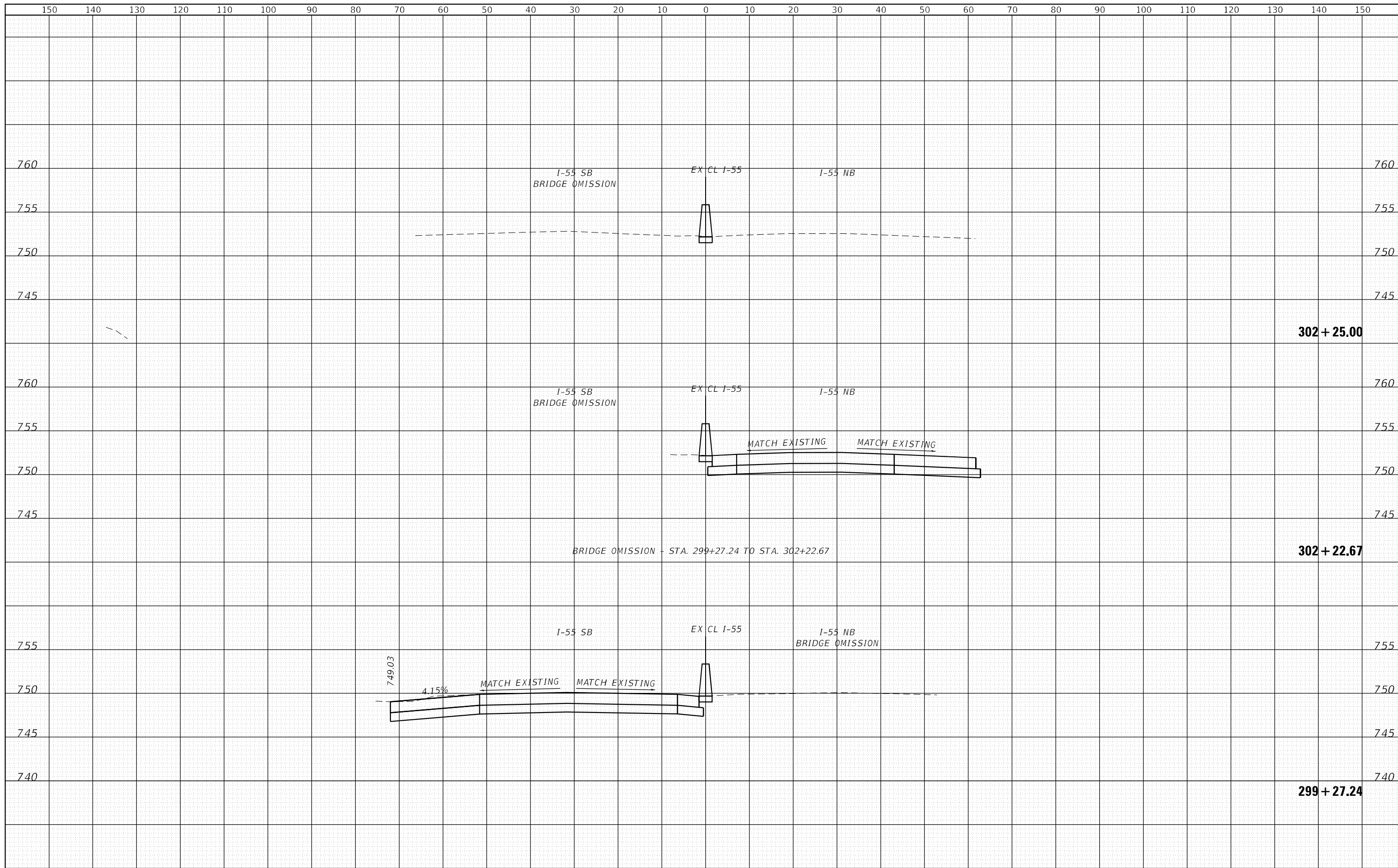
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0028 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 18 OF 37 SHEETS STA. 298+15.51 TO STA. 298+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	396
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				





Lin Engineering, Ltd.
 Consulting Engineers
 Westmont, Illinois

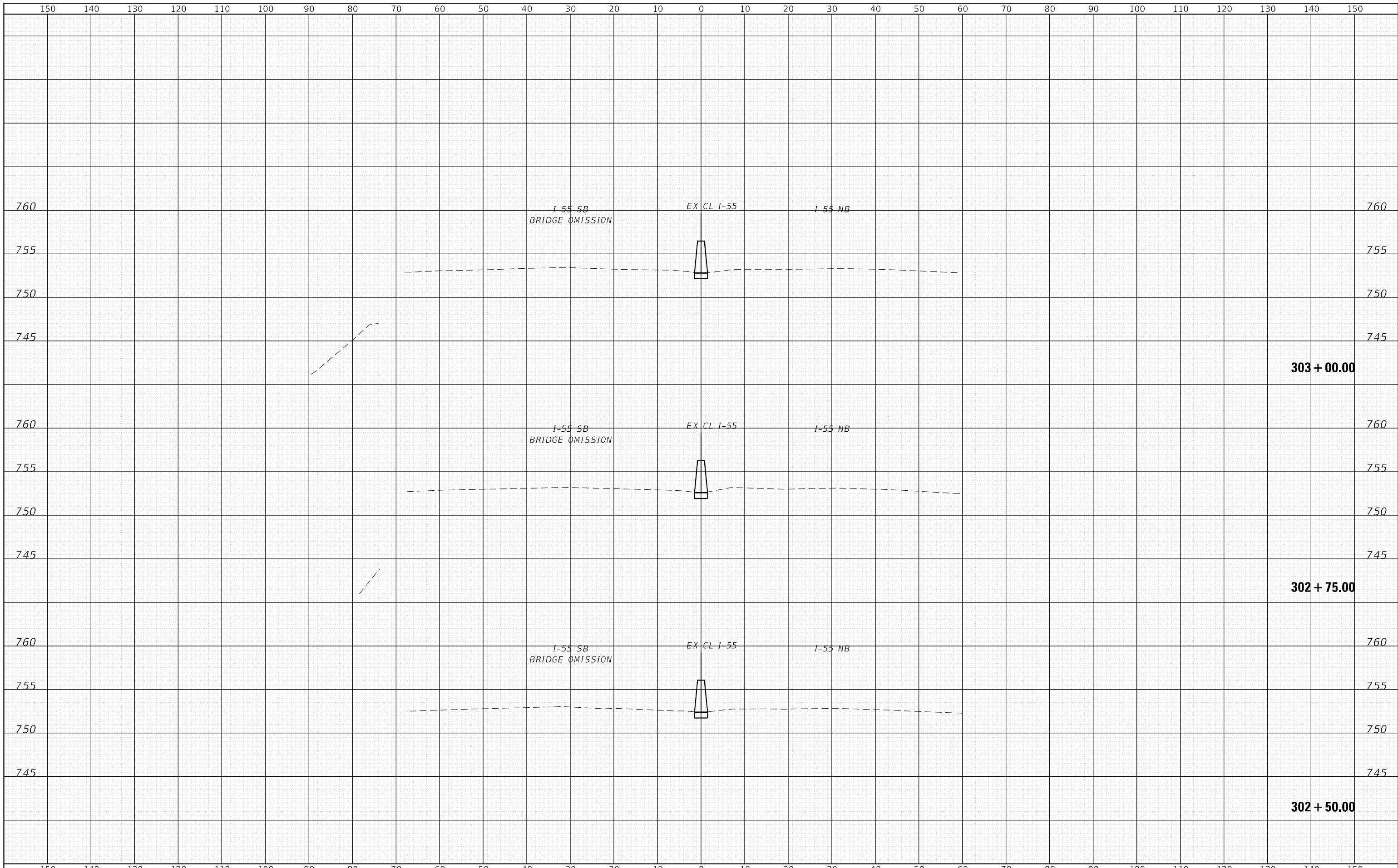
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0028 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 20 OF 37 SHEETS STA. 299+26.84 TO STA. 302+25.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	398
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



Lin Engineering, Ltd.
 Consulting Engineers
 Westmont, Illinois

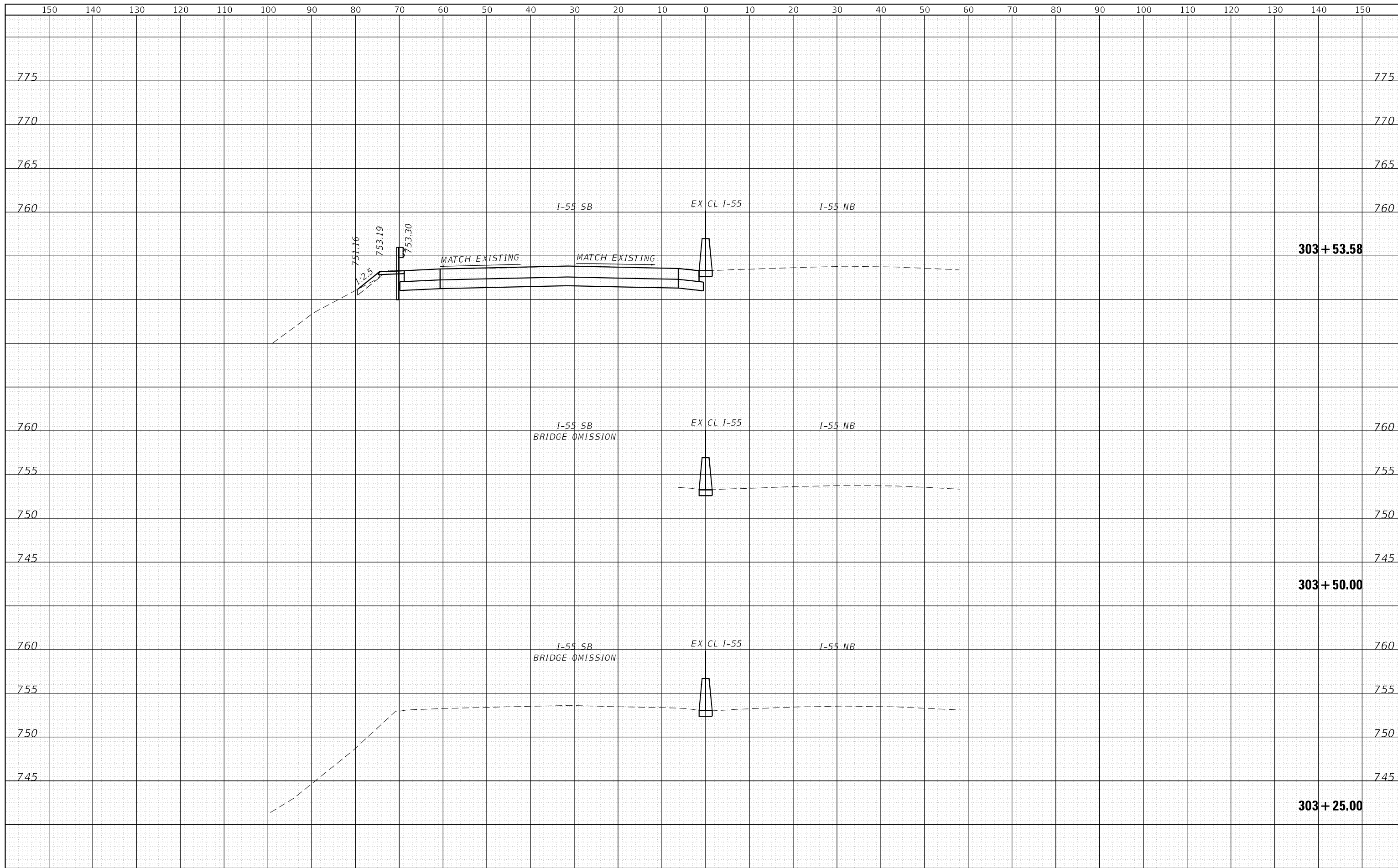
USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0028 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 21 OF 37 SHEETS STA. 302+50.00 TO STA. 303+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	399
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				



LIN ENGINEERING, LTD.
 Consulting Engineers
 Westmont, Illinois

USER NAME = r0ber	DESIGNED - IS	REVISED -
	DRAWN - IS	REVISED -
PLOT SCALE = 20,0000 * / in.	CHECKED - ST	REVISED -
PLOT DATE = 4/14/2021	DATE - 4/2021	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 55 (I-55)
 S.N. 099-0028 CROSS SECTIONS**

SCALE: 1"=10'H, 5'V SHEET 22 OF 37 SHEETS STA. 303+25.00 TO STA. 303+53.58

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2018-043-BD&BJR	WILL	430	400
			CONTRACT NO. 62H03	
ILLINOIS FED. AID PROJECT				