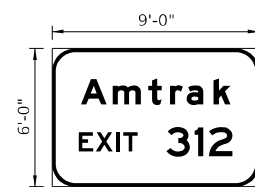


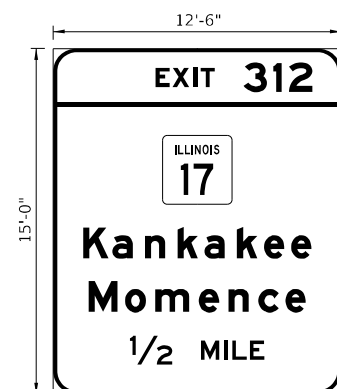
SIGNING LEGEND



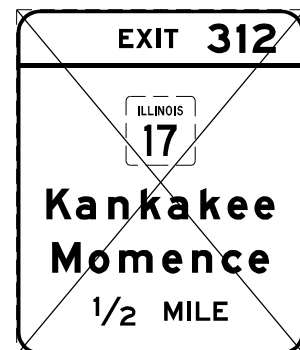
SB-57-BS-003-P
108"X72"
152+35.00, 60.6' RT
OFFSET MEASURED TO
CENTER OF SIGN PANEL



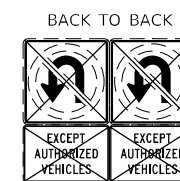
SB-57-BS-003A-R
108"X72"
152+35.00



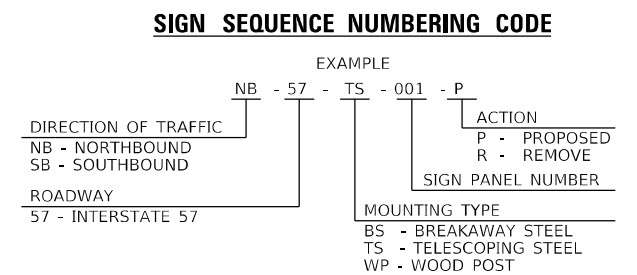
SB-57-BS-004-P
150"X180"
159+50.00, 74.3' RT
OFFSET MEASURED TO
CENTER OF SIGN PANEL



SB-57-BS-004A-R
150"X180"
159+50.00



SB-57-WP-005A-P
NB-57-WP-002A-P
R3-4
36"X36"
R3-1101
36"X24"
165+73.13



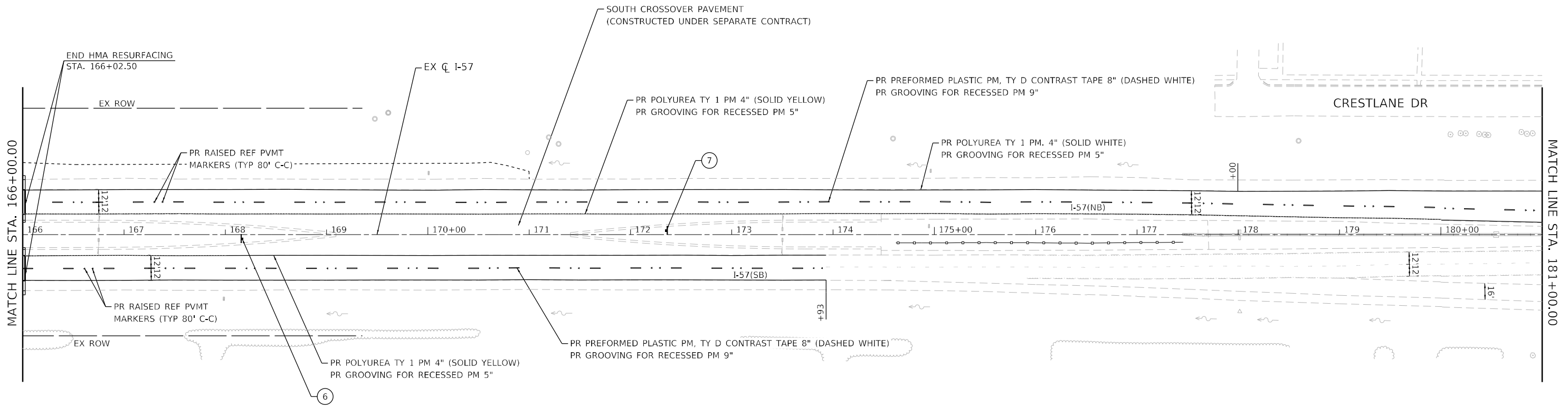
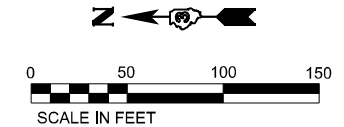
USER NAME = rober	DESIGNED - NH	REVISED -
	DRAWN - NH	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 8/5/2020	DATE - 07/31/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

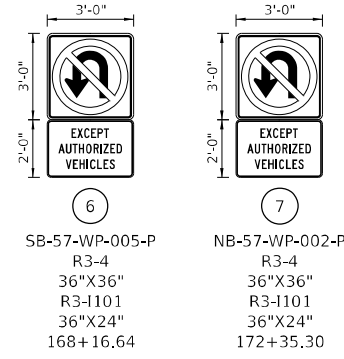
F.A.I. ROUTE 57 (I-57)
PAVEMENT MARKING AND SIGNING PLAN

SCALE: 1"=50' SHEET 6 OF 12 SHEETS STA. 151+00.00 TO STA. 166+00.00

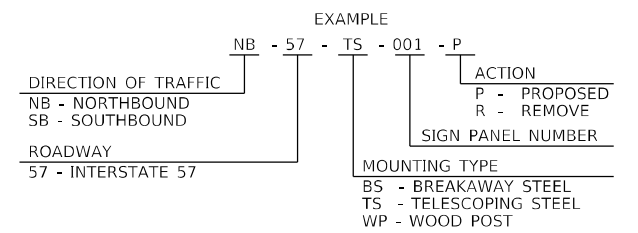
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB, HB-3]BR, 139R	KANKAKEE	252	101
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				



SIGNING LEGEND



SIGN SEQUENCE NUMBERING CODE



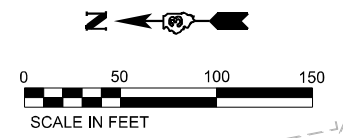
USER NAME = rober	DESIGNED - NH	REVISED -
PLOT SCALE = 100,000' / in.	DRAWN - NH	REVISED -
PLOT DATE = 8/5/2020	CHECKED - ST	REVISED -
	DATE - 07/31/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

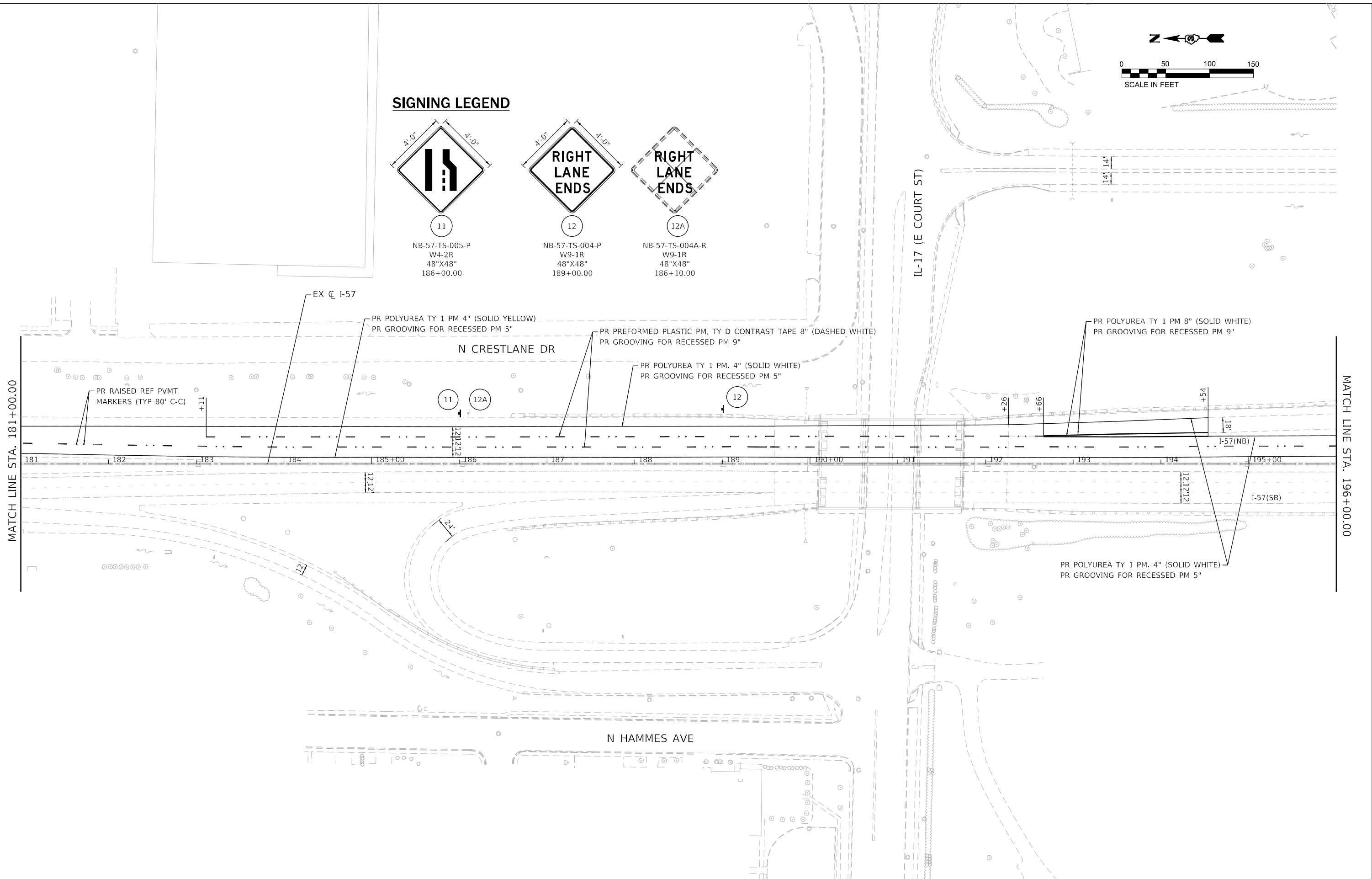
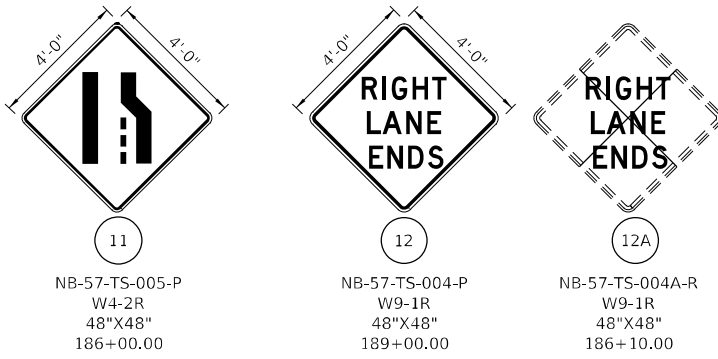
**F.A.I. ROUTE 57 (I-57)
PAVEMENT MARKING AND SIGNING PLAN**

SCALE: 1"=50' SHEET 7 OF 12 SHEETS STA. 166+00.00 TO STA. 181+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	I(139)VB, HB-3IBR, 139R	KANKAKEE	252	102
CONTRACT NO. 66F74			ILLINOIS FED. AID PROJECT	



SIGNING LEGEND



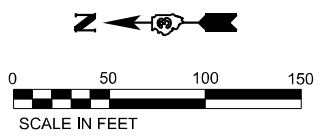
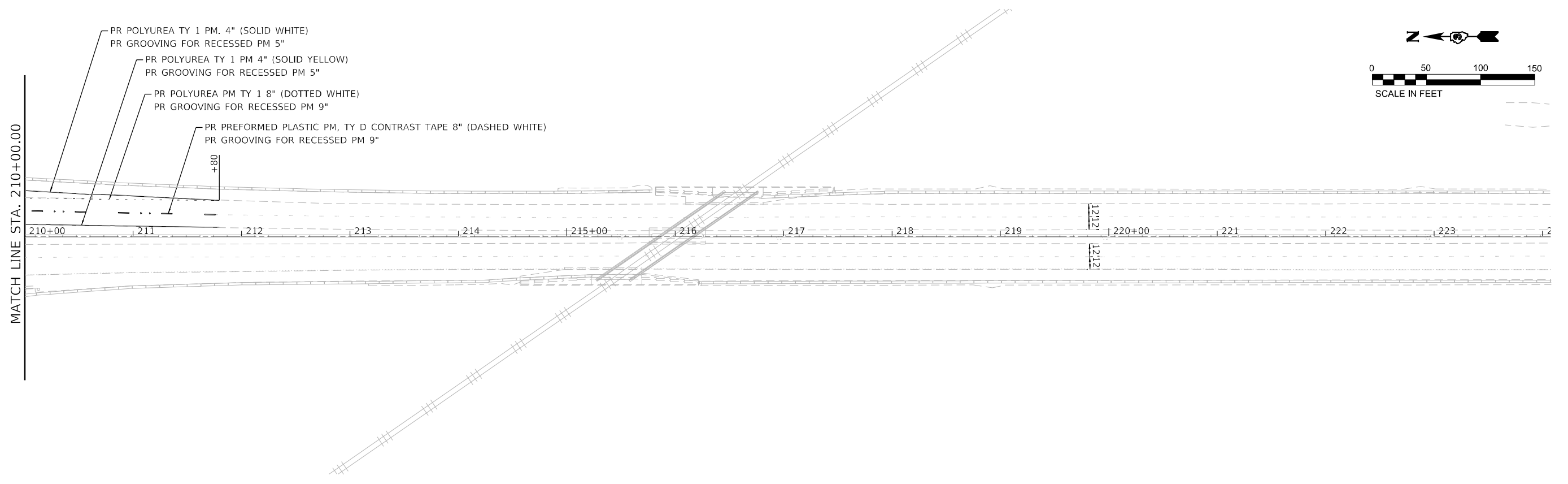
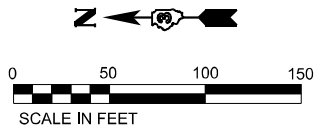
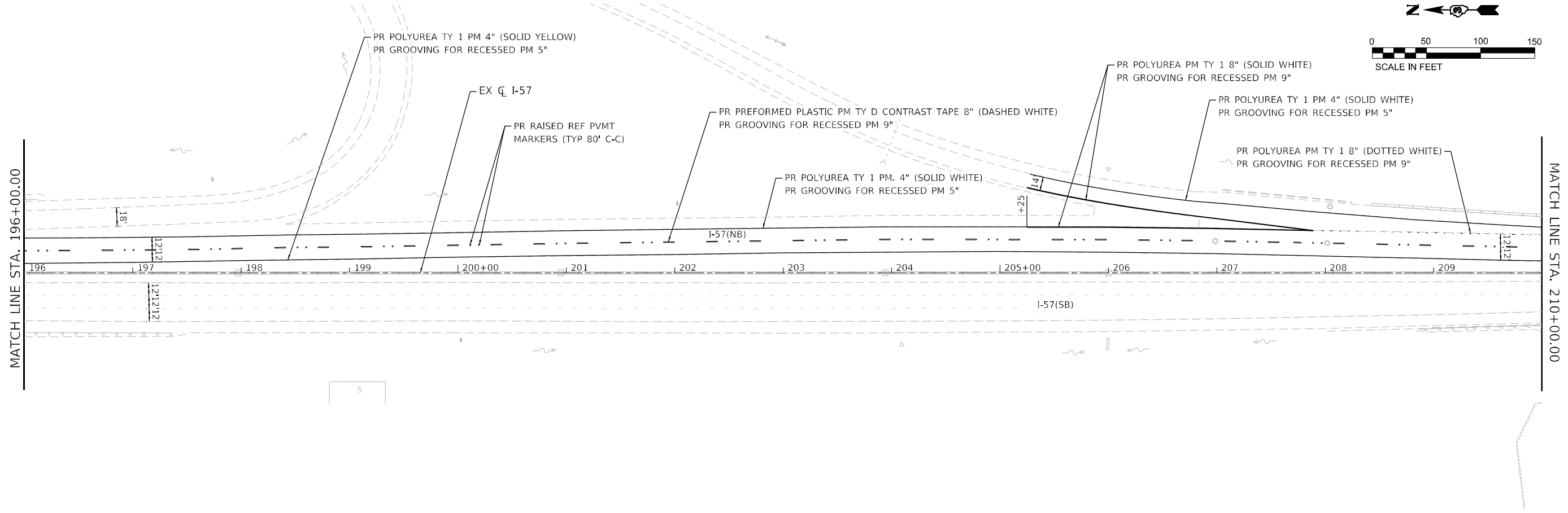
USER NAME = rober	DESIGNED - NH	REVISED - LC 8-14-2020
	DRAWN - NH	REVISED -
PLOT SCALE = 100,000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 8/13/2020	DATE - 07/31/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 57 (I-57)
PAVEMENT MARKING AND SIGNING PLAN**

SCALE: 1"=50' SHEET 8 OF 12 SHEETS STA. 181+00.00 TO STA. 196+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	I(139)VB, HB-3IBR, 139R	KANKAKEE	252	103
ILLINOIS FED. AID PROJECT			CONTRACT NO. 66F74	



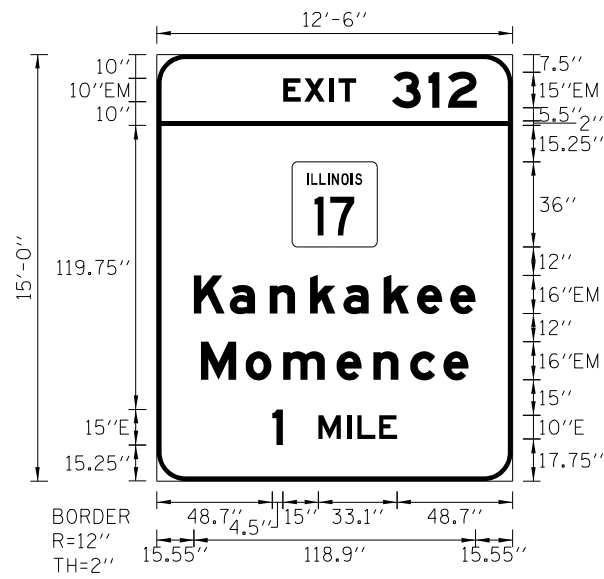
USER NAME = rober	DESIGNED - NH	REVISED -
	DRAWN - NH	REVISED -
PLOT SCALE = 100,000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 8/5/2020	DATE - 07/31/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

F.A.I. ROUTE 57 (I-57) PAVEMENT MARKING AND SIGNING PLAN		
SCALE: 1"=50'	SHEET 9 OF 12 SHEETS	STA. 196+00.00 TO STA. 211+80.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB, HB-3]BR, 139R	KANKAKEE	252	104
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				

SIGN DETAIL
1:75



Panel Style: Guide Sign.ssi
Dimensions are in inches, tenths

Letter locations are panel edge to lower left corner

SIGN NUMBER	SB-57-BS-002-P
WIDTH x HGHT.	12'-6" x 15'-0"
BORDER WIDTH	2"
CORNER RADIUS	12"
MOUNTING	Ground
BACKGROUND	TYPE: ZZ Sheeting
	COLOR: Green
LEGEND/BORDER	TYPE: ZZ Sheeting
	COLOR: White/White

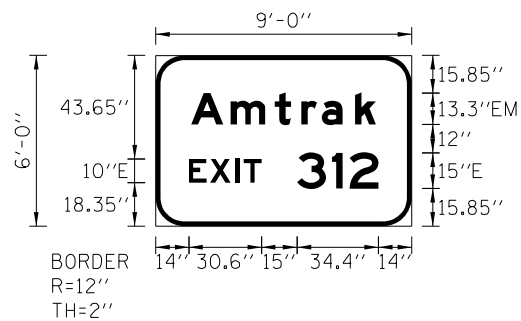
SYMBOL	ROT	X	Y	WD	HT
M1-1100A	0	57	98.7	36	36

LETTER POSITIONS (X)

LETTER POSITIONS (X)																		LENGTH	SERIESSIZE
E	X	I	T		3	1	2											EM 2000	
53.3	62.2	73	76.7		99.1	114.6	122.8											81.7 10,15	
K	a	n	k	a	k	e	e											EM 2000	
15.6	30.8	47.7	64.7	78.8	95.7	109.8	123.9											118.9 1612	
M	o	m	e	n	c	e												EM 2000	
18.5	37.4	53.2	75.8	91.3	106.8	120.9												113 1612	
1		M	I	L	E													E 2000	
48.7		68.2	80.2	84.6	93.8													52.6 15,10	

SIGN DETAIL

1:75



Panel Style: Guide Sign.ssi
Dimensions are in inches,tenths

Letter locations are panel edge to lower left corner

SIGN NUMBER	SB-57-BS-003-P
WIDTH x HGHT.	9'-0" x 6'-0"
BORDER WIDTH	2"
CORNER RADIUS	12"
MOUNTING	Ground
BACKGROUND	TYPE: ZZ Sheeting
	COLOR: Green
LEGEND/BORDER	TYPE: ZZ Sheeting
	COLOR: White/White

SYMBOL	ROT	X	Y	WD	HT

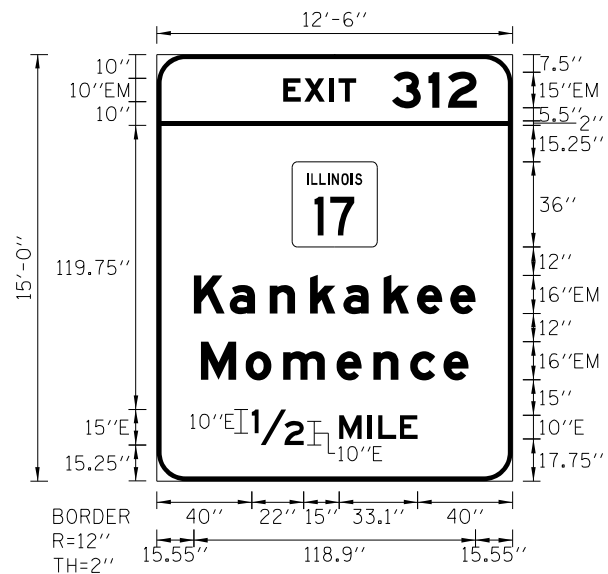
LETTER POSITIONS (X)

LENGTH SERIESSIZE

LETTER	POSITION (X)	LENGTH	SERIESSIZE
A	31.7	77.9	EM 2000
m	50.3	77.9	13,310
t	61.4	77.9	13,310
r	70.1	77.9	13,310
a	84.2	77.9	13,310
k	84.2	77.9	13,310
E	22.9	80	E 2000
X	33.6	80	10,15
I	37.1	80	10,15
T	37.1	80	10,15
3	59.6	80	10,15
1	74.3	80	10,15
2	81.8	80	10,15

SIGN DETAIL

1:75



Panel Style: Guide Sign.ssi
 Dimensions are in inches, tenths

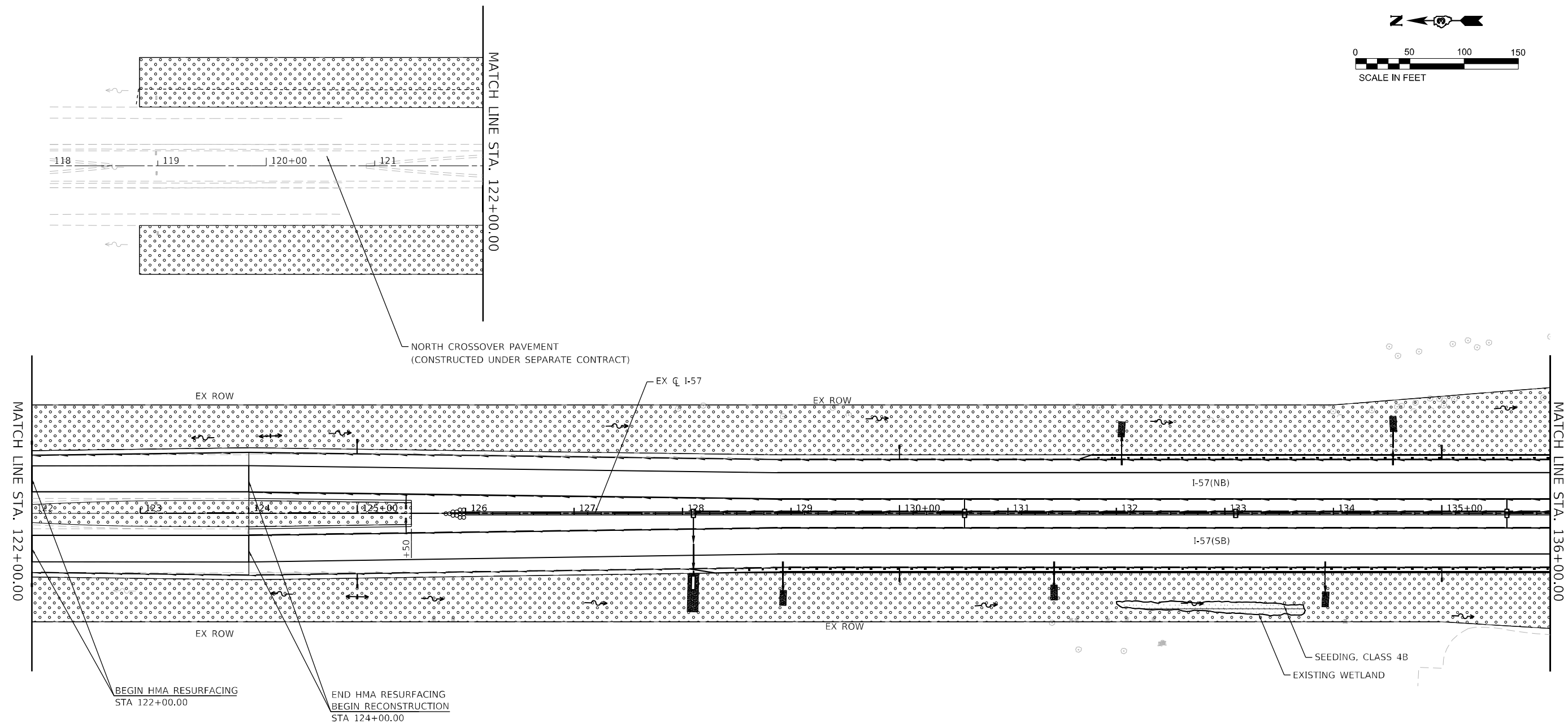
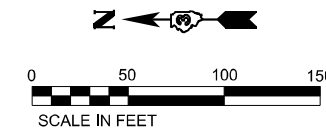
Letter locations are panel edge to lower left corner

SIGN NUMBER	SB-57-BS-004-P
WIDTH x HGHT.	12'-6" x 15'-0"
BORDER WIDTH	2"
CORNER RADIUS	12"
MOUNTING	Ground
BACKGROUND	TYPE: ZZ Sheeting
	COLOR: Green
LEGEND/BORDER	TYPE: ZZ Sheeting
	COLOR: White/White

SYMBOL	ROT	X	Y	WD	HT
M1-I100A	0	57	98.7	36	36

LETTER POSITIONS (X)

																				LENGTH	SERIES	SIZE
E	X	I	T		3	1	2													EM	2000	
53.4	62.2	73	76.8		99.2	114.6	122.9													81.7	10,15	
K	a	n	k	a	k	e	e													EM	2000	
15.6	30.8	47.7	64.7	78.8	95.7	109.8	123.9													118.9	1612	
M	o	m	e	n	c	e														EM	2000	
18.5	37.4	53.2	75.8	91.3	106.8	120.9														113	1612	
1/2		M	I	L	E															E	2000	
40		76.9	88.9	93.3	102.5															70.1	15,10	



BEGIN HMA RESURFACING
STA 122+00.00

END HMA RESURFACING
BEGIN RECONSTRUCTION
STA 124+00.00

NOTE:
CLASS 4B SEEDING IS PROPOSED ONLY WITHIN THE LIMITS OF EXISTING WETLAND AREAS THAT ARE BEING IMPACTED BY CONSTRUCTION ACTIVITIES.

- SEEDING, CLASS 2A
- SEEDING, CLASS 4B
- AGGREGATE SURFACE COURSE, TYPE B 6"

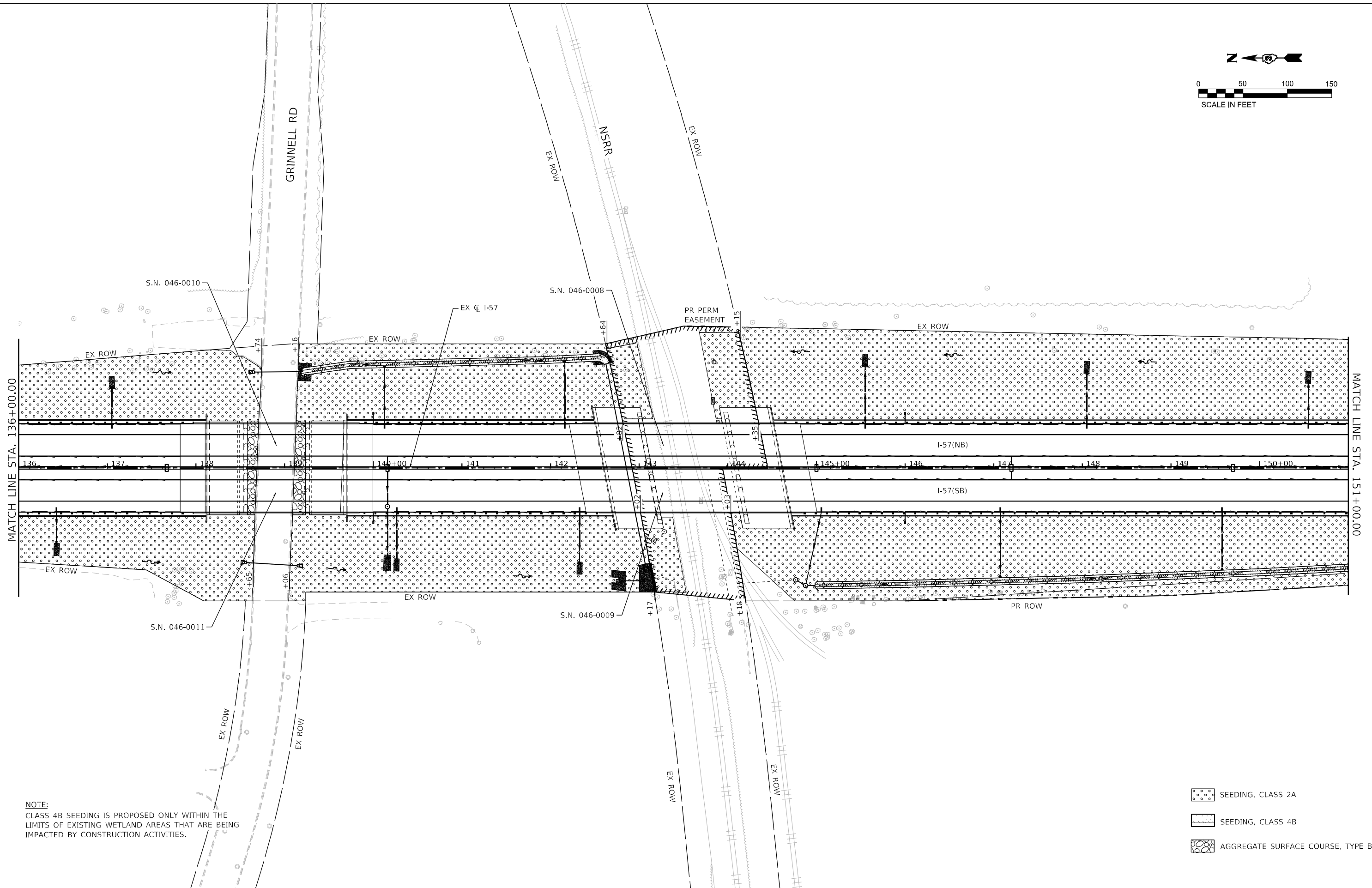
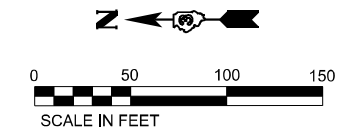


USER NAME = rober	DESIGNED - NH	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN - NH	REVISED -
PLOT DATE = 8/6/2020	CHECKED - ST	REVISED -
	DATE - 07/31/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

F.A.I. ROUTE 57 (I-57) LANDSCAPING PLAN	
SCALE: 1"=50'	SHEET 1 OF 3 SHEETS
STA. 118+00.00	TO STA. 136+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139VB,HB-3)BR,139R	KANKAKEE	252	108
CONTRACT NO. 66F74			ILLINOIS FED. AID PROJECT	



NOTE:
 CLASS 4B SEEDING IS PROPOSED ONLY WITHIN THE LIMITS OF EXISTING WETLAND AREAS THAT ARE BEING IMPACTED BY CONSTRUCTION ACTIVITIES.

- SEEDING, CLASS 2A
- SEEDING, CLASS 4B
- AGGREGATE SURFACE COURSE, TYPE B 6"

Lin Engineering, Ltd.
 Consulting Engineers
 Westmont, Illinois

USER NAME = rober	DESIGNED - NH	REVISED -
	DRAWN - NH	REVISED -
PLOT SCALE = 100,000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 8/6/2020	DATE - 07/31/2020	REVISED -

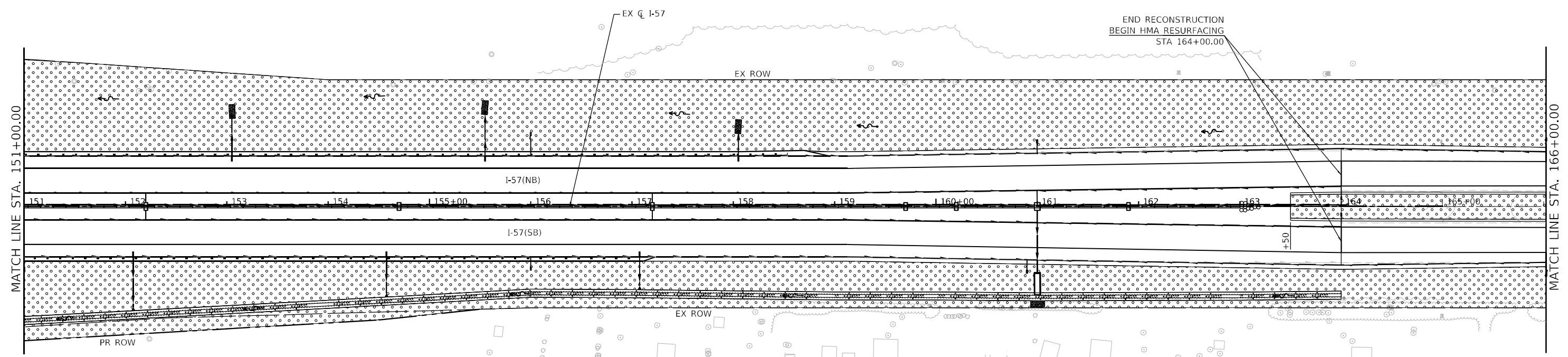
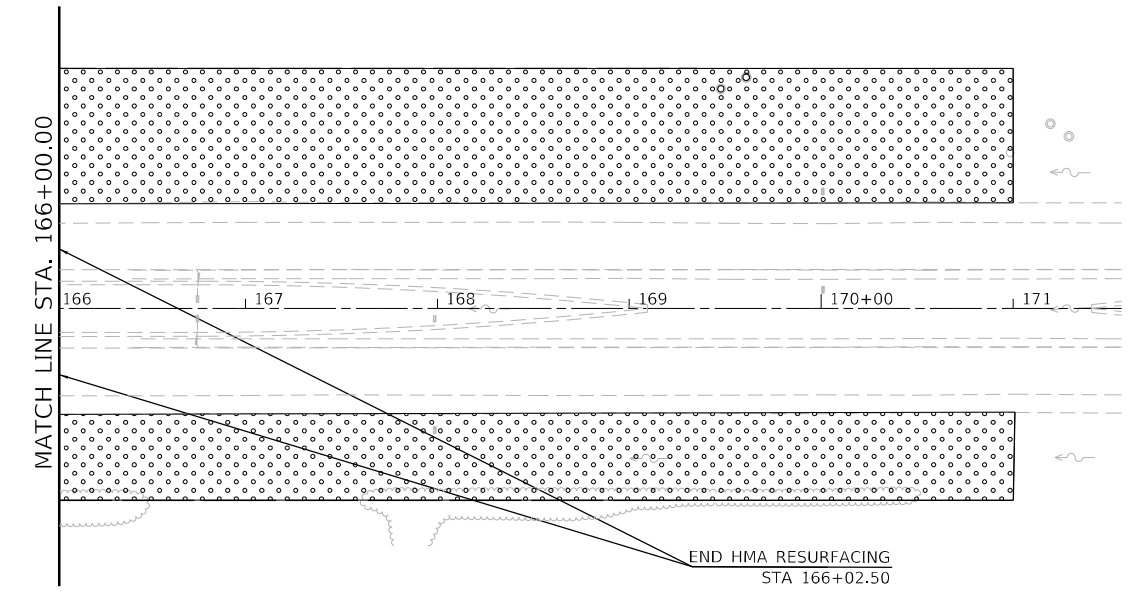
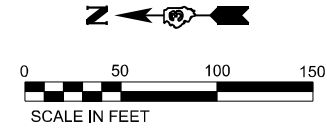
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 57 (I-57)
 LANDSCAPING PLAN**

SCALE: 1"=50' SHEET 2 OF 3 SHEETS STA. 136+00.00 TO STA. 151+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139VB,HB-3)BR,139R	KANKAKEE	252	109
			CONTRACT NO. 66F74	

ILLINOIS FED. AID PROJECT



NOTE:
CLASS 4B SEEDING IS PROPOSED ONLY WITHIN THE LIMITS OF EXISTING WETLAND AREAS THAT ARE BEING IMPACTED BY CONSTRUCTION ACTIVITIES.

- SEEDING, CLASS 2A
- SEEDING, CLASS 4B
- AGGREGATE SURFACE COURSE, TYPE B 6"



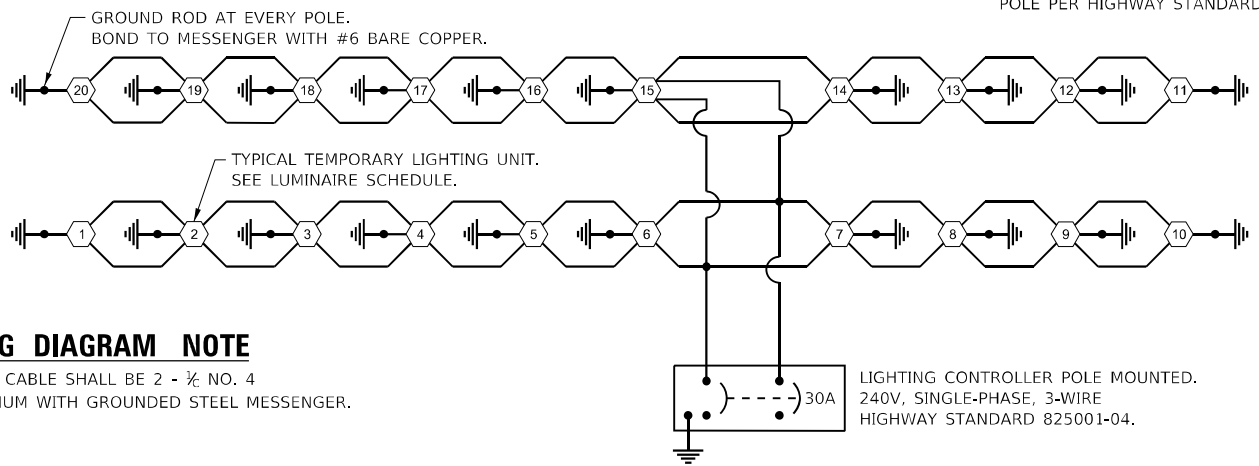
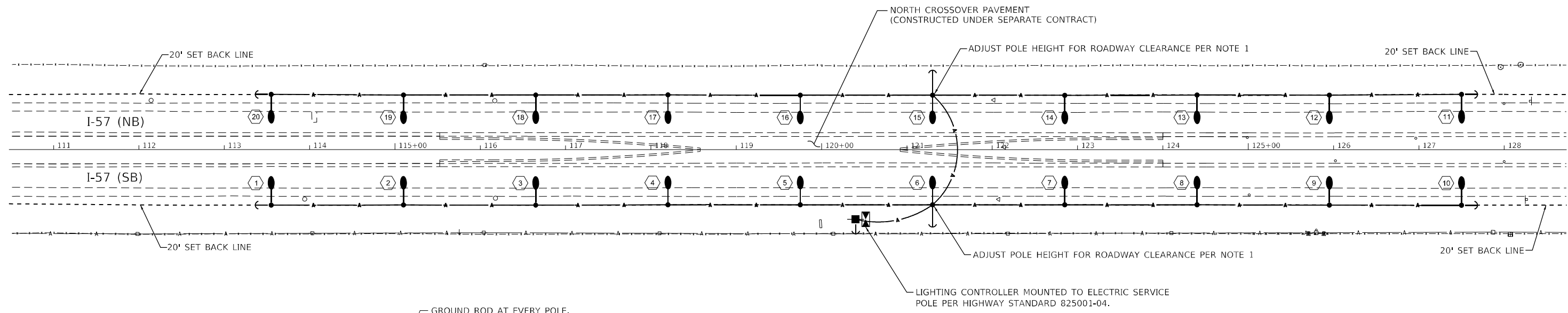
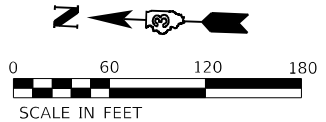
USER NAME = r0ber	DESIGNED - NH	REVISED -
PLOT SCALE = 100,000' / in.	DRAWN - NH	REVISED -
PLOT DATE = 8/6/2020	CHECKED - ST	REVISED -
	DATE - 07/31/2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 57 (I-57)
LANDSCAPING PLAN**

SCALE: 1"=50' SHEET 3 OF 3 SHEETS STA. 151+00.00 TO STA. 171+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139VB,HB-3)BR,139R	KANKAKEE	252	110
ILLINOIS FED. AID PROJECT			CONTRACT NO. 66F74	



WIRING DIAGRAM NOTE

1. AERIAL CABLE SHALL BE 2 - 1/2 NO. 4 ALUMINUM WITH GROUNDED STEEL MESSENGER.

WIRING DIAGRAM

NOTES

- POLE HEIGHT SHALL BE INCREASED AS NECESSARY TO MAINTAIN A MINIMUM CLEARANCE OF 20' OF AERIAL CABLE OVER ROADWAY AT ALL TIMES.
- GUYS AND ANCHORS ARE SHOWN AS AN EXAMPLE AND SHALL BE INSTALLED AS NECESSARY TO THE SATISFACTION OF THE ENGINEER.
- TEMPORARY WOOD POLES SHALL BE SET BACK WITH CLEARANCE MINIMUM OF 20' FROM EXISTING EDGE OF PAVEMENT AND OUTSIDE THE CLEAR ZONE.

GENERAL NOTES

- ELECTRIC SERVICE SHALL BE 120/240 VOLT, SINGLE-PHASE, 30-AMPS OVERHEAD (AERIAL) ACCORDING TO STANDARD SPECIFICATION SECTION 804. PROVIDE METER SOCKET AND ALL OWNER PROVIDED EQUIPMENT REQUIRED ACCORDING TO ELECTRIC UTILITY REQUIREMENTS. PROVIDE CONDUCTORS, RACEWAYS, SERVICE ENTRANCE DISCONNECT, ELECTRICAL SYSTEM GROUNDING AND MISCELLANEOUS EQUIPMENT INDICATED ACCORDING TO HIGHWAY STANDARD 825001-04 FOR A 30-AMP, 240-VOLT POLE MOUNTED LIGHTING CONTROLLER.
- LIGHTING CONTROLLER SHALL BE A 30-AMP, 240-VOLT POLE MOUNTED LIGHTING CONTROLLER ACCORDING TO HIGHWAY STANDARD 825001-04 AND STANDARD SPECIFICATION SECTION 825. LIGHTING BRANCH CIRCUIT BREAKER SHALL BE 30 AMP, 2-POLE (NOT 20 AMP PER HIGHWAY STANDARD).
- ROADWAY LUMINAIRE SHALL BE ARM MOUNTED COBRA HEAD STYLE WITH LED LIGHT SOURCE. LUMINAIRE SHALL BE SUITABLE FOR A 240 VOLT, SINGLE-PHASE SUPPLY WITH SURGE ARRESTER INTEGRAL TO LUMINAIRE. SEE LUMINAIRE SCHEDULE ON THE PLANS FOR ACCEPTABLE EQUIPMENT. PROVIDE FUSE HOLDER ACCORDING TO STANDARD SPECIFICATION ARTICLE 1065.01 AND HIGHWAY STANDARD 830026-01, BUSS HEX WITH WATERPROOF BOOTS AND BUSS FNQ-R FUSES (5 AMPS OR AS RECOMMENDED BY LUMINAIRE MANUFACTURER). POLE WIRING FROM AERIAL CABLE TO LUMINAIRE SHALL BE ACCORDING TO HIGHWAY STANDARD 830026-01 (#10 XLP-USE COPPER) AND APPLICABLE MATERIALS AND INSTALLATION DETAILS OF STANDARD SPECIFICATION SECTION 821.

- WOOD POLE SHALL BE ACCORDING TO STANDARD SPECIFICATION ARTICLE 1069.04 AND AS INDICATED ON THE PLANS. POLE SETTING SHALL BE AS REQUIRED BY STANDARD SPECIFICATION ARTICLE 830.03(C) AND AS NEEDED FOR LUMINAIRE MOUNTING HEIGHT INDICATED IN THE LIGHTING PERFORMANCE SCHEDULE ON THE PLANS. MOUNTING HEIGHT SHALL BE FROM THE ROADWAY ELEVATION AT THE LIGHT POLE POSITION TO THE LUMINAIRE LIGHT SOURCE. ARM SHALL BE STEEL MAST ARM STYLE, GALVANIZED FINISH AND SUITABLE FOR WOOD POLE MOUNTING, AS SPECIFIED IN STANDARD SPECIFICATION ARTICLES 1069.03 AND 1077.03(A)(2). PROVIDE CANTILEVER STYLE ARM WITH 15-FOOT ARM LENGTH. WOOD POLES SHALL BE NEW OR IF PREVIOUSLY USED SHALL COMPLY WITH STANDARD SPECIFICATION ARTICLE 830.04.
- PROVIDE ELECTRIC SYSTEM (ELECTRIC SERVICE) GROUNDING ACCORDING TO STANDARD SPECIFICATION SECTION 804 AND GROUNDING AT EACH LIGHT POLE ACCORDING TO STANDARD SPECIFICATION SECTION 806 AND AS INDICATED ON THE PLANS. GROUNDING SHALL NOT BE MEASURED SEPARATELY FOR PAYMENT AND INCLUDED IN THE LUMP SUM PRICE FOR THE TEMPORARY LIGHTING SYSTEM.
- PROVIDE AERIAL CABLE WITH MESSENGER WIRE FOR LIGHTING ACCORDING TO STANDARD SPECIFICATION SECTION 818 AND AS INDICATED ON THE PLANS. AERIAL CABLE SHALL NOT BE MEASURED SEPARATELY FOR PAYMENT AND INCLUDED IN THE LUMP SUM PRICE FOR THE TEMPORARY LIGHTING SYSTEM.

LIGHTING LEGEND

- AERIAL CABLE, 2 - 1/2 NO. 4 ALUMINUM WITH MESSAGE WIRE
- TEMPORARY LIGHTING UNIT, 55 FT WOOD POLE, CLASS 3 WITH 15FT ARM AND LED COBRA HEAD LUMINAIRE.
- TEMPORARY LIGHTING UNIT ID NUMBER
- TEMPORARY LIGHTING CONTROLLER, POLE MOUNTED, 30A, 240V, AS PER HIGHWAY STANDARD 825001-04
- ELECTRIC SERVICE 1 PHASE, 3 WIRE, AS PER HIGHWAY STANDARD 825001-04
- GROUND ROD, COPPER CLAD STEEL 10"x3/4"
- GUYS OR ANCHORS
- SET BACK LINE

LIGHT POLE LOCATIONS	
NORTH CROSSOVER	
POLE	STATION
1	113 + 55 RT
2	115 + 10 RT
3	116 + 65 RT
4	118 + 20 RT
5	119 + 75 RT
6	121 + 30 RT
7	122 + 85 RT
8	124 + 40 RT
9	125 + 95 RT
10	127 + 50 RT
11	127 + 50 LT
12	125 + 95 LT
13	124 + 40 LT
14	122 + 85 LT
15	121 + 30 LT
16	119 + 75 LT
17	118 + 20 LT
18	116 + 65 LT
19	115 + 10 LT
20	113 + 55 LT
LTG CONT	120 + 52 RT

MODEL: D:\p\h\p\... FILE NAME: 102011901190218.00 - D00T.PTB 10/10/04 D:\win\p\DCN\CAD_Sheet\102011901190218.00.dwg



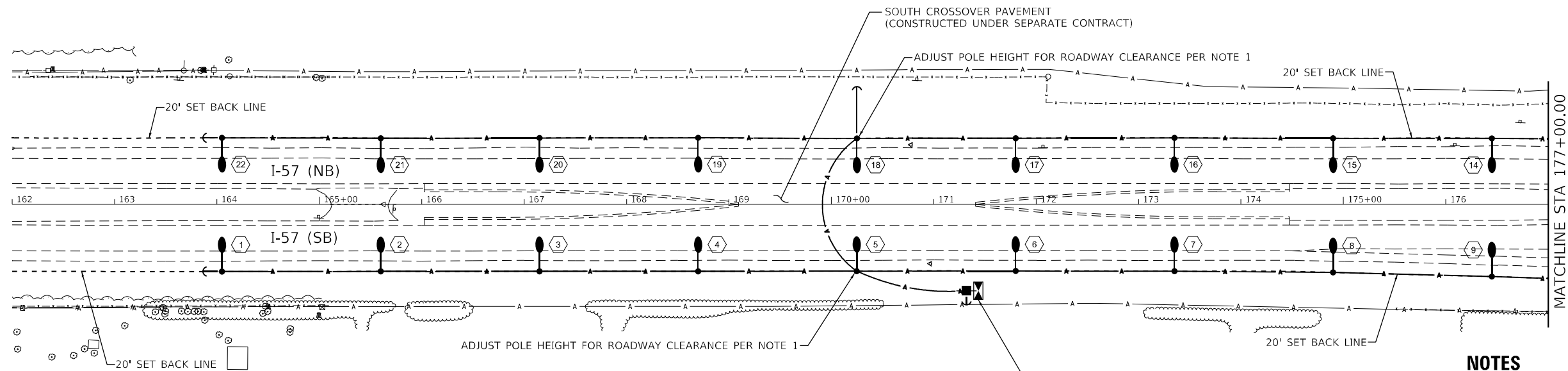
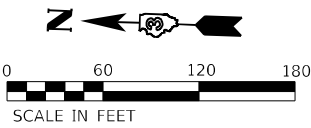
USER NAME = dreimer	DESIGNED - DAR	REVISED -
PLOT SCALE = 2,000' / in.	DRAWN - RJT	REVISED -
PLOT DATE = 8/7/2020	CHECKED - GAC	REVISED -
	DATE - 07-31-2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 57 (I-57)
NORTH CROSSOVER LIGHTING PLAN**

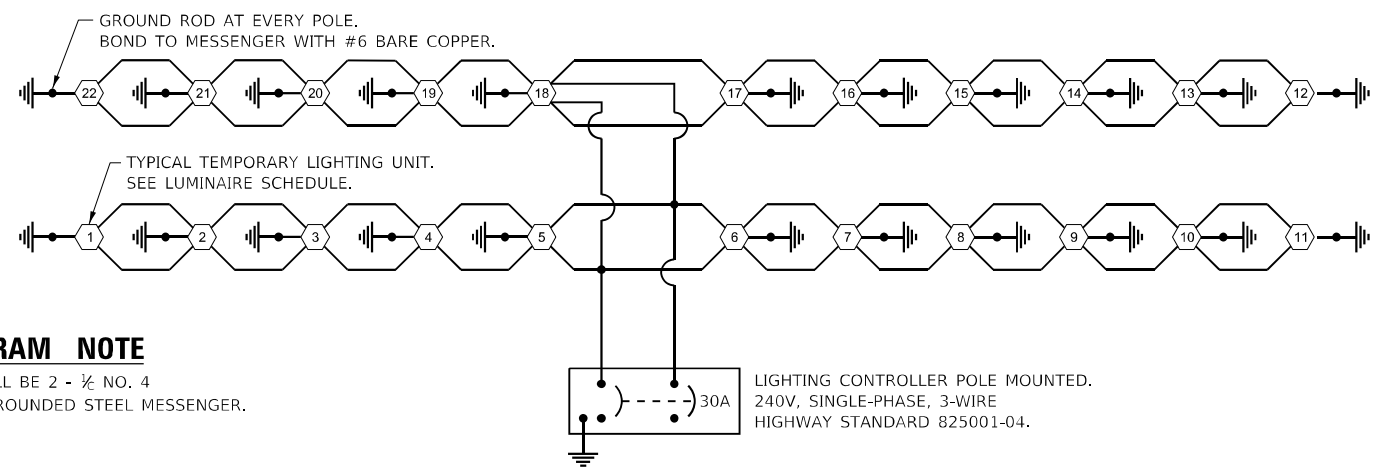
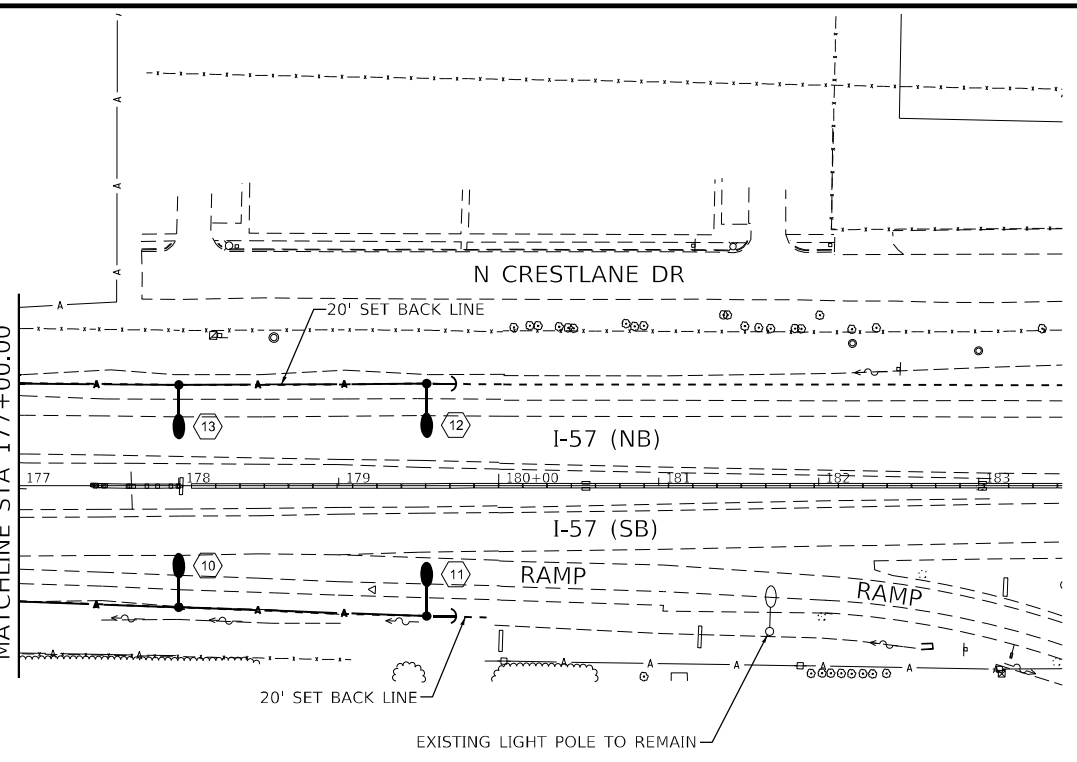
SCALE: 1"=60' SHEET 1 OF 3 SHEETS STA. 113+55.00 TO STA. 127+50.00

F.A.I. RTE. 57	SECTION [(139)VB, HB-3JBR,139R]	COUNTY KANKAKEE	TOTAL SHEETS 252	SHEET NO. 111
			CONTRACT NO. 66F74	
ILLINOIS FED. AID PROJECT				



LIGHT POLE LOCATIONS		
SOUTH CROSSOVER		
POLE	STATION	
1	164 + 05	RT
2	165 + 60	RT
3	167 + 15	RT
4	168 + 70	RT
5	170 + 25	RT
6	171 + 80	RT
7	173 + 35	RT
8	174 + 90	RT
9	176 + 45	RT
10	178 + 00	RT
11	179 + 55	RT
12	179 + 55	LT
13	178 + 00	LT
14	176 + 45	LT
15	174 + 90	LT
16	173 + 35	LT
17	171 + 80	LT
18	170 + 25	LT
19	168 + 70	LT
20	167 + 15	LT
21	165 + 60	LT
22	164 + 05	LT
LTG CONT	171 + 44	RT

- NOTES**
- POLE HEIGHT SHALL BE INCREASED AS NECESSARY TO MAINTAIN A MINIMUM CLEARANCE OF 20' OF AERIAL CABLE OVER ROADWAY AT ALL TIMES.
 - GUYS AND ANCHORS ARE SHOWN AS AN EXAMPLE AND SHALL BE INSTALLED AS NECESSARY TO THE SATISFACTION OF THE ENGINEER.
 - TEMPORARY WOOD POLES SHALL BE SET BACK WITH CLEARANCE MINIMUM OF 20 FT FROM EXISTING EDGE OF PAVEMENT AND OUTSIDE THE CLEAR ZONE.



- WIRING DIAGRAM NOTE**
- AERIAL CABLE SHALL BE 2 - 1/2 NO. 4 ALUMINUM WITH GROUNDED STEEL MESSENGER.

WIRING DIAGRAM

LIGHTING LEGEND

- AERIAL CABLE, 2 - 1/2 NO. 4 ALUMINUM WITH MESSAGE WIRE
- TEMPORARY LIGHTING UNIT, 55 FT WOOD POLE, CLASS 3 WITH 15FT ARM AND LED COBRA HEAD LUMINAIRE.
- TEMPORARY LIGHTING UNIT ID NUMBER
- TEMPORARY LIGHTING CONTROLLER, POLE MOUNTED, 30A, 240V, AS PER HIGHWAY STANDARD 825001-04
- ELECTRIC SERVICE 1 PHASE, 3 WIRE, AS PER HIGHWAY STANDARD 825001-04
- GROUND ROD, COPPER CLAD STEEL 10"x3/4"
- GUYS OR ANCHORS
- SET BACK LINE

MODEL: D:\m\p\110011901190218.00 - IDOT.FTB.19.11.04.D:\m\p\11001190218.00_Sheet\11001190218.00.dwg

Farnsworth GROUP
2709 MCGRAW DRIVE
BLOOMINGTON, ILLINOIS 61704
(309) 663-9435 / info@f-w.com

USER NAME = dreimer	DESIGNED - DAR	REVISED -
PLOT SCALE = 2,000' / in.	DRAWN - RJT	REVISED -
PLOT DATE = 8/7/2020	CHECKED - GAC	REVISED -
	DATE - 07-31-2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 57 (I-57)
SOUTH CROSSOVER LIGHTING PLAN**

SCALE: 1"=60' SHEET 2 OF 3 SHEETS STA. 164+05.00 TO STA. 179+55.00

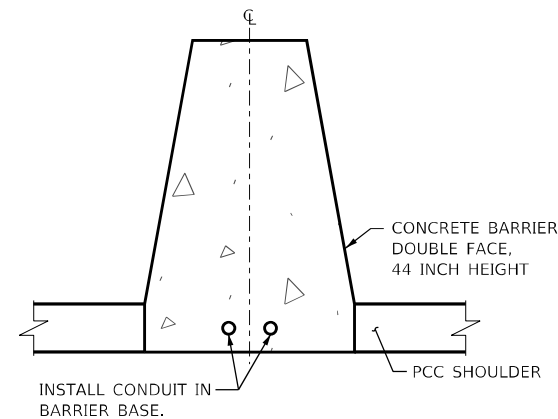
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB, HB-3]BR,139R	KANKAKEE	252	112
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				

TOTAL BILL OF MATERIALS			
PAY CODE	DESCRIPTION	UNIT	TOTAL QUANTITY
X8410102	TEMPORARY LIGHTING SYSTEM	L SUM	1
81200230	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	7,400

CONDUIT SCHEDULE			
STATION			CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC NOTE 1 (FOOT)
FROM	TO	C-C LENGTH	
126+00	137+82.12	1182.12	2364.24
137+82.12	139+99.37	217.25	434.5
139+99.37	142+30.53	231.16	462.32
142+30.53	144+91.00	260.47	520.94
144+91.00	163+00	1809	3618
			0
TOTAL BID			7,400

NOTE 1. EACH FROM/TO DIMENSION IS FOR TWO CONDUITS LAID IN PARALLEL.

LIGHTING PERFORMANCE SCHEDULE				
PROJECT				
Date	Contract Number	Section Number	County	
12/9/2019	66F74	[(139)VB, HB-3]BR, 139R	Kankakee	
Marked Route Number		Municipality		
FAI - 57		Kankakee		
ROADWAY				
Lane Width	# of Lanes	Median Width	I.E.S. Surface Class	Q-Zero Value
12.0 ft	2	N/A	R3	0.07
STRUCTURE				
Mounting Height	Arm Length	Set-Back	Number of Luminaires (Highmast & Sign only)	
45 ft	15 ft	20 ft	N/A	
LUMINAIRE Description		I.E.S. Lateral Distribution	I.E.S. Vertical Distribution	
Roadway Output Designation H		Type III	Medium	
Total Light Loss Factor (LLF)				
0.7	B-U-G Rating U = 0	Shields N/A	Dimming Protocol 0-10V	
LAYOUT				
Spacing (to nearest 5 ft)	Configuration (Opposite, Staggered, 1 Sided or Median)			
155 ft	1 Sided			
PERFORMANCE				
Average Illuminance, Eave (fc)	Uniformity Ratio Eave (fc) Eave/Lmin			
1.3 - 1.7	3.0:1			
Average Luminance, Lave/Lmin	Uniformity Ratio, Lmax/Lmin	Uniformity Ratio, Lv/Lave	Veiling Luminance Ratio, Lave (cd/m2)	
0.9 - 1.2	3.0:1	5.0:1	0.3:1	
LIGHT TRESSPASS				
Distance to ROW (behind pole)	Max. Horizontal Illuminance at ROW, Eh	Max. Vertical Illuminance at ROW, Ev		
N/A	N/A	N/A		
NOTES:				
1. SET-BACK IS FROM EDGE OF PAVEMENT (WHITE LINE).				
2. LIGHTING CALCULATIONS SHALL BE PERFORMED WITH ALL LUMINAIRES ORIENTED TOWARD AND PERPENDICULAR TO THE ROADWAY.				
3. LLF = LLD (0.9), LDD (0.8), AND EF (0.95)				
4. PERFORMANCE REQUIREMENTS SHALL BE THE MINIMUM ACCEPTABLE STANDARDS OF PHOTOMETRIC PERFORMANCE FOR THE LUMINAIRE, BASED ON THE GIVEN CONDITIONS LISTED ABOVE.				
5. CALCULATIONS SHALL BE PERFORMED IN ONE DIRECTION ONLY.				
6. INITIAL LUMEN OUTPUT MAY EXCEED THE VALUE SPECIFIED IN THE TABLE IN ARTICLE 1067.06 OF THE BDE SPECIAL PROVISION FOR LED LUMINAIRES (25,200 LUMENS).				



NOTES:

1. ALIGN BARRIER CONDUITS WITH CONDUITS IN PARAPETS BEFORE TRANSITION FROM BARRIER TO PARAPET. SEE STRUCTURAL PLANS FOR PARAPET CONDUIT LOCATIONS.
2. PROVIDE COMBINATION EXPANSION / DEFLECTION FITTINGS WHEN CROSSING EXPANSION JOINTS. FITTINGS SHALL BE ACCORDING TO STANDARD SPECIFICATION ARTICLE 811.03(C)(1). AND HIGHWAY STANDARD 812001-01.
3. EXPANSION / DEFLECTION FITTINGS SHALL NOT BE MEASURED SEPARATELY FOR PAYMENT AND WILL BE INCLUDED IN THE CONDUIT EMBEDDED IN STRUCTURE PAY ITEM.
4. EXTEND CONDUITS 4" BEYOND END OF BARRIER AT EACH END (STA. 126+00 AND STA. 163+00) AND CAP WATER TIGHT.
5. PROVIDE CONDUITS EMPTY WITH PULL STRINGS FOR FUTURE USE.

CONCRETE BARRIER SECTION

N.T.S.

MODEL: Default
FILE NAME: 20211910190218.00 - IDOT FTB 191104 Drawings\DCM\CAD_Sheets\1266674-57k-light_Schedule.dgn



USER NAME = dreimer	DESIGNED - DAR	REVISED -
	DRAWN - RJT	REVISED -
PLOT SCALE = 2.0001' / in.	CHECKED - GAC	REVISED -
PLOT DATE = 8/7/2020	DATE - 07-31-2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**F.A.I. ROUTE 57 (I-57)
LIGHTING PLAN SCHEDULES**

SCALE: N.T.S. SHEET 3 OF 3 SHEETS STA. 113+55.00 TO STA. 179+55.00

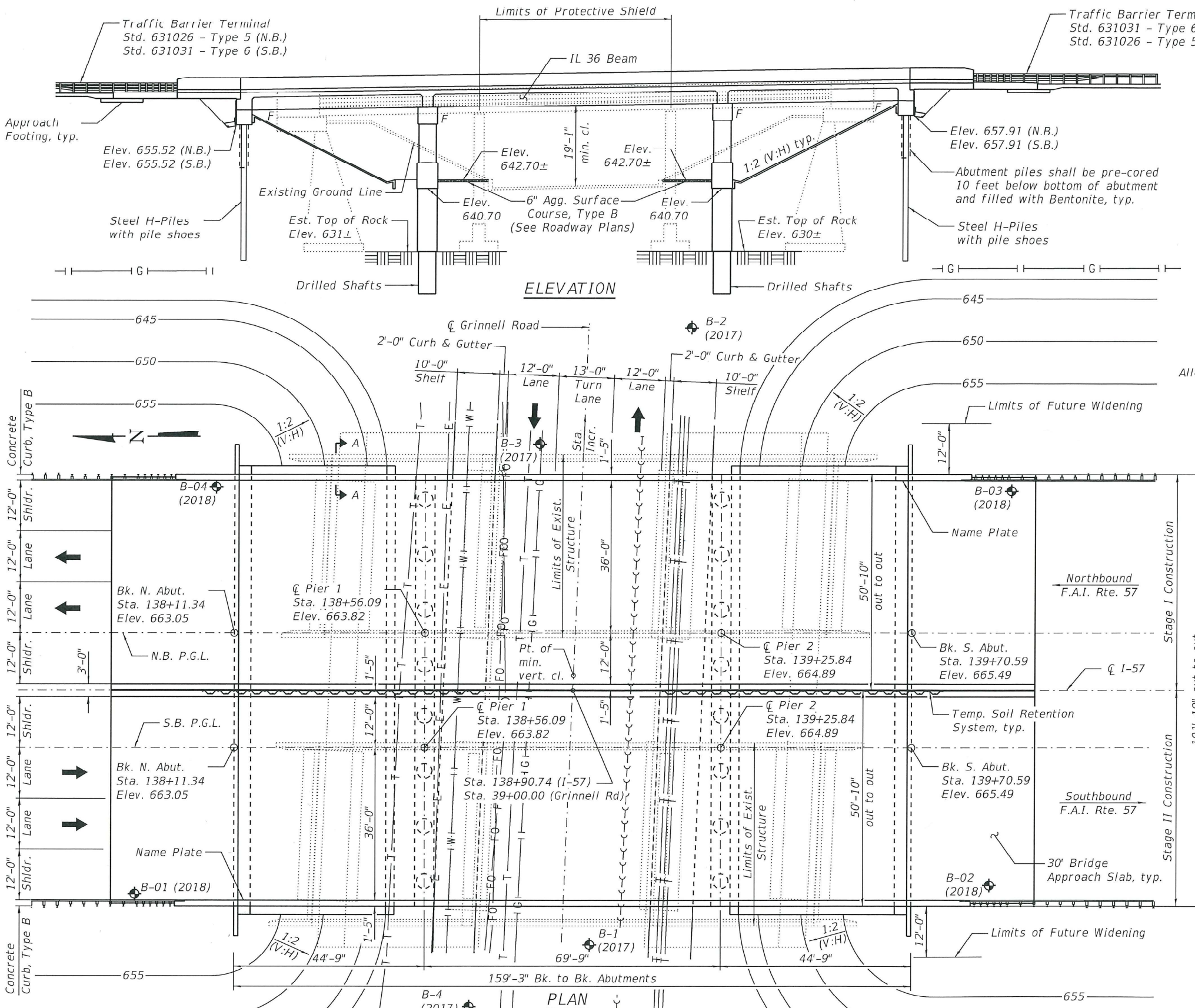
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB, HB-3]BR, 139R	KANKAKEE	252	113
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				

Bench Mark (BM 140): Chiseled "I" top of curb at southeast end of east parapet wall SN 046-0010, Sta. 139+63.89, 54.47' Left, Elev. 663.320.
 Existing Structures: S.N. 046-0010 (N.B.) and S.N. 046-0011 (S.B.), built in 1954 as F.A. Rte 26, Section 139-HB3-HF3, at station 138+90.96. The bridge decks were replaced and structures widened in 1990 under F.A.I. Rte 57, Section 139HBR-3. The existing dual structures are 3-span bridges with rolled steel beams supported on spill-thru counterfort abutments and multi-column concrete piers on spread footings. 120'-2" back to back abutments, 43'-2" out to out deck with a 2'-21'-00" left ahead skew. Structures to be removed and replaced. Traffic shall be maintained utilizing crossovers during construction.
 No Salvage.

Note: Up to 1/4" may be ground off the bridge deck, the approach slabs, and the pavement connectors.

INDEX OF SHEETS

- 1 General Plan & Elevation
- 2 General Data
- 3 Foundation Layout
- 4-7 Slage Construction Details
- 8 Temporary Concrete Barrier For Stage Construction
- 9-12 Top of Slab Elevations
- 13-14 Top of Approach Slab Elevations
- 15-16 Superstructure
- 17-18 Superstructure Details
- 19-20 Diaphragm Details
- 21-25 Bridge Approach Slab Details
- 26-27 Framing Details
- 28-29 IL36N Beam
- 30 IL36N Beam Details
- 31-32 North Abutment
- 33-34 South Abutment
- 35-36 Pier 1 Details
- 37-38 Pier 2 Details
- 39 HP Pile Details
- 40 Bar Splicer Assembly and Mechanical Splicer Details
- 41-44 Soil Boring Data



LOADING HL-93
 Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
 2017 MSHTO LRFD Bridge Design Specifications, 8th Edition

DESIGN STRESSES

FIELD UNITS
 f'c = 3,500 psi
 f'c = 4,000 psi (Superstructure Concrete)
 fy = 60,000 psi (Reinforcement)
PRECAST PRESTRESSED UNITS
 f'c = 8,500 psi
 f'ci = 6,500 psi
 fpu = 270,000 psi (0.6" Ø low lax. strands)
 fpbt = 202,300 psi (0.6" Ø low lax. strands)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec. (SD1) = 0.072 g
 Design Spectral Acceleration at 0.2 sec. (SDS) = 0.125 g
 Soil Site Class = C



Michael T. Haley 5/6/2021
 Michael T. Haley
 Licensed Structural Engineer
 State of Illinois No. 081-005991
 Expires 11/30/2022



GENERAL PLAN & ELEVATION
I-57 OVER GRINNELL ROAD
F.A.I. RTE 57 - SEC. [(139)VB,HB-3]BR,139R
KANKAKEE COUNTY
STATION 138+90.74
STRUCTURE NO. 046-0158 (N.B.)
STRUCTURE NO. 046-0159 (S.B.)

APPROVED
 For Structural Adequacy Only
 [Signature]
 Engineer of Bridges & Structures

MODEL: Default
 FILE NAME: E:\1903\StructFinal Design\Design Plans\CADD_Sheets\159-001-GPE.dgn

LIN ENGINEERING, L.T.D.
 Consulting Engineers
 Springfield, Illinois

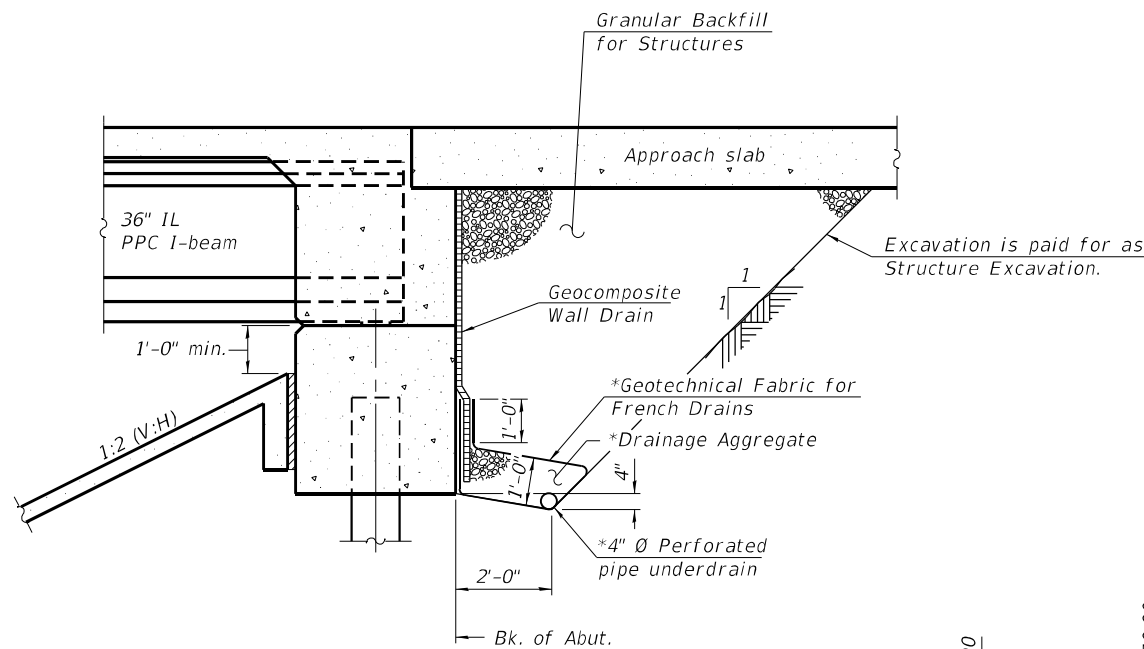
USER NAME	-	DESIGNED	- CL
PLOT SCALE	-	CHECKED	- MTH
PLOT DATE	- 5/6/21	DRAWN	- CGY
		CHECKED	- MTH

REVISD	-
REVISD	-
REVISD	-
REVISD	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	114
CONTRACT NO. 66F74				

ILLINOIS FED. AID PROJECT	
---------------------------	--

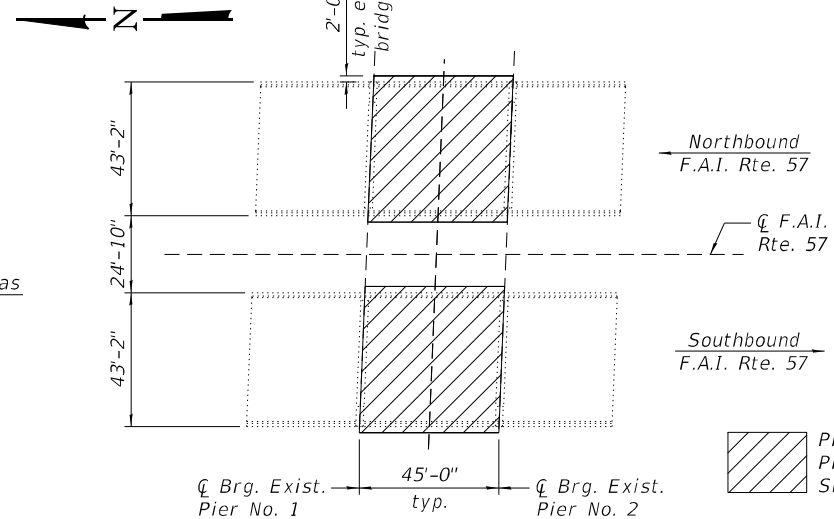


SECTION THRU INTEGRAL ABUTMENT

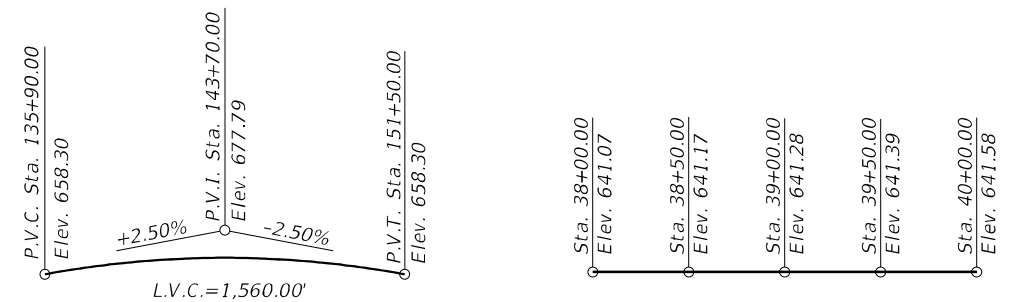
*Included in the cost of Pipe Underdrains for Structures.

Note:

All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



PLAN
(Limits of Protective Shield)



I-57 PROFILE GRADE

(Along inside edge of pavement)
(PG shows final elevations after grinding)

GRINNELL ROAD PROFILE GRADE

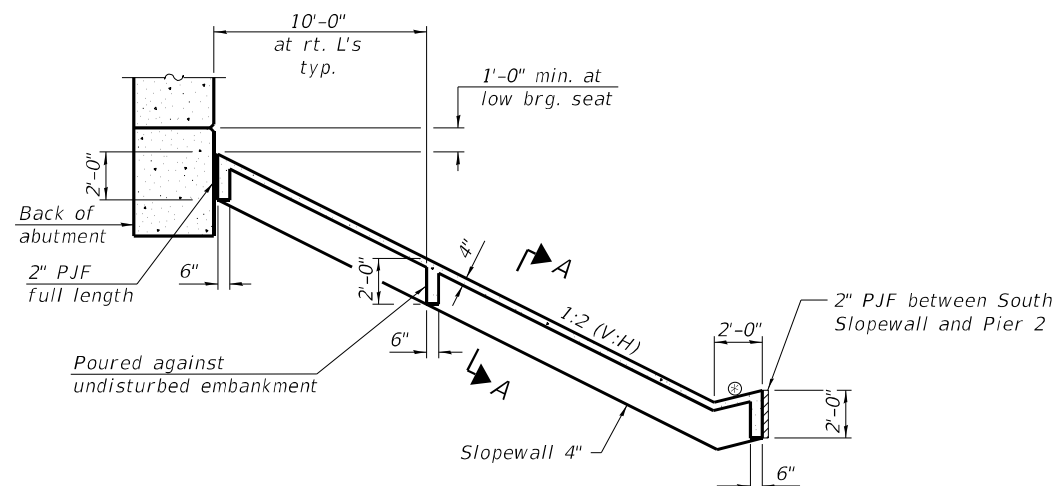
(Along centerline roadway)

GENERAL NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Concrete Sealer shall be applied to the designated areas of the piers.
3. The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
4. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
5. For Removal of Existing Structures, the existing northbound bridge (SN 046-0010) is considered "No. 3" while the existing southbound bridge (SN 046-0011) is considered "No. 4".
6. Slipforming of the parapets is not allowed.
7. Deck Slab Repair shall be completed on the existing Southbound bridge (SN 046-0011) during Pre-Stage I. The repair quantities are estimated and the actual repair quantities required shall be verified per the special provisions.

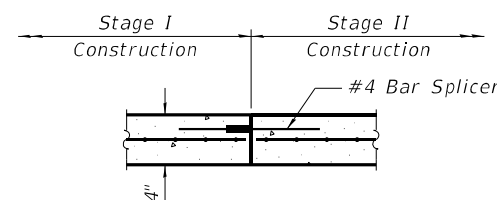
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures No. 3	Each	-	-	1
Removal of Existing Structures No. 4	Each	-	-	1
Protective Shield	Sq. Yd.	472	-	472
Structure Excavation	Cu. Yd.	-	470	470
Concrete Structures	Cu. Yd.	-	557.6	557.6
Concrete Superstructure	Cu. Yd.	685.0	-	685.0
Protective Coat	Sq. Yd.	2724	-	2724
Concrete Superstructure (Approach Slab)	Cu. Yd.	283.2	-	283.2
Furnishing and Erecting Precast Prestressed Concrete Beams, IL36N	Foot	1855	-	1855
Reinforcement Bars	Pound	-	27580	27580
Reinforcement Bars, Epoxy Coated	Pound	272880	91330	364210
Bar Splicers	Each	-	55	55
Slope Wall 4 Inch	Sq. Yd.	-	944	944
Furnishing Steel Piles HP14x89	Foot	-	654	654
Driving Piles	Foot	-	654	654
Test Pile Steel HP14x89	Each	-	2	2
Pile Shoes	Each	-	24	24
Name Plates	Each	2	-	2
Drilled Shaft in Soil	Cu. Yd.	-	76.2	76.2
Drilled Shaft in Rock	Cu. Yd.	-	77.2	77.2
Preformed Joint Seal 3 1/2"	Foot	218	-	218
Temporary Soil Retention System	Sq. Ft.	-	887	887
Granular Backfill for Structures	Cu. Yd.	-	314	314
Concrete Sealer	Sq. Ft.	-	4904	4904
Geocomposite Wall Drain	Sq. Yd.	-	174	174
Thermal Integrity Profile Testing	Each	-	16	16
Thermal Integrity Profile Data Collection	Foot	-	380	380
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	1160	-	1160
Deck Slab Repair (Partial)	Sq. Yd.	26	-	26
Diamond Grinding (Bridge Section)	Sq. Yd.	2420	-	2420
Pipe Underdrains for Structures 4"	Foot	-	240	240

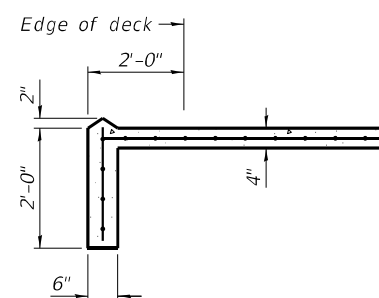


SECTION THRU CONCRETE SLOPEWALL

(Slopewall shall be reinforced with welded wire fabric, 6" x 6" - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.)



SECTION THRU SLOPEWALL AT STAGE CONSTRUCTION LINE



SECTION A-A

STATION 138+90.74
BUILT 20 BY
STATE OF ILLINOIS
F.A.I. RT. 57
SEC. [(139)VB, HB-3]BR, 139R
LOADING HL-93
STRUCTURE NO. 046-0158 (N.B.)

NAME PLATE - N.B. STRUCTURE
See Std. 515001

STATION 138+90.74
BUILT 20 BY
STATE OF ILLINOIS
F.A.I. RT. 57
SEC. [(139)VB, HB-3]BR, 139R
LOADING HL-93
STRUCTURE NO. 046-0159 (S.B.)

NAME PLATE - S.B. STRUCTURE
See Std. 515001

MODEL: Default
FILE NAME: E:\1903\Struct\Final Design\Design Plans\CADD_Sheets\0366F74-046-0158&0159-002-General\0366F74.dgn

LE LIN ENGINEERING, LTD.
Consulting Engineers
Springfield, Illinois

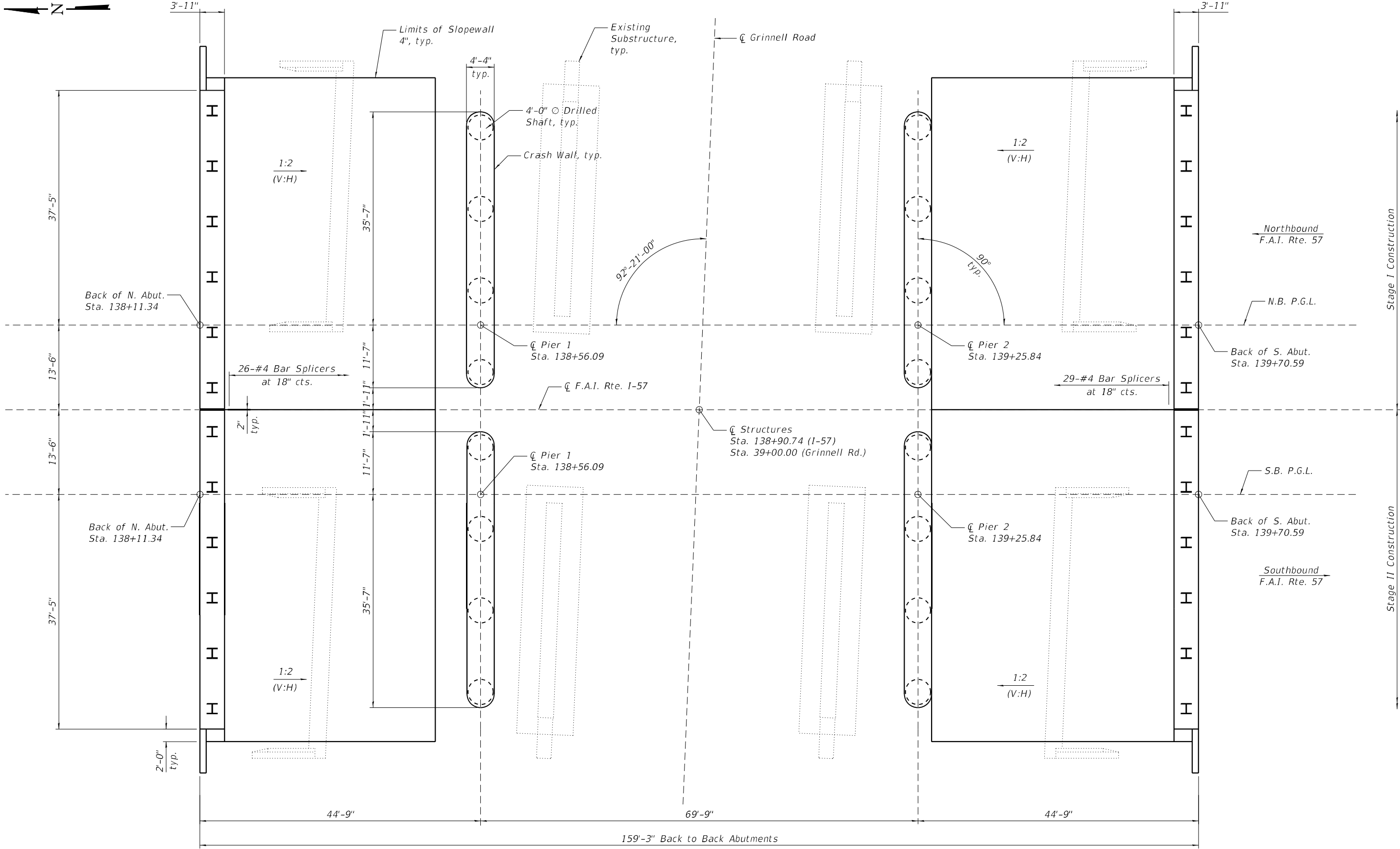
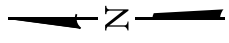
USER NAME =	DESIGNED - CL	REVISED -
PLOT SCALE =	CHECKED - MTH	REVISED -
PLOT DATE = 5/6/21	DRAWN - CGY	REVISED -
	CHECKED - MTH	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL DATA
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)**

SHEET 2 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB, HB-3]BR, 139R	KANKAKEE	252	115
CONTRACT NO. 66F74				
		ILLINOIS	FED. AID PROJECT	



PLAN

MODEL: Default
 FILE NAME: E:\1903\Struct\Final Design\Plans\CADD_Sheets\0366F74-046-0158&0159-003-FoundationLayout.dgn

LE LIN ENGINEERING, LTD.
 Consulting Engineers
 Springfield, Illinois

USER NAME =	DESIGNED - CL	REVISED -
PLOT SCALE =	CHECKED - MTH	REVISED -
PLOT DATE = 5/6/21	DRAWN - CGY	REVISED -
	CHECKED - MTH	REVISED -

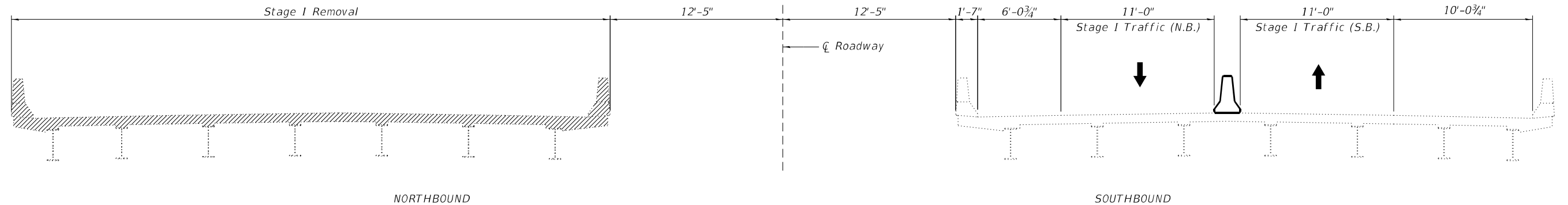
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FOUNDATION LAYOUT
 STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)**

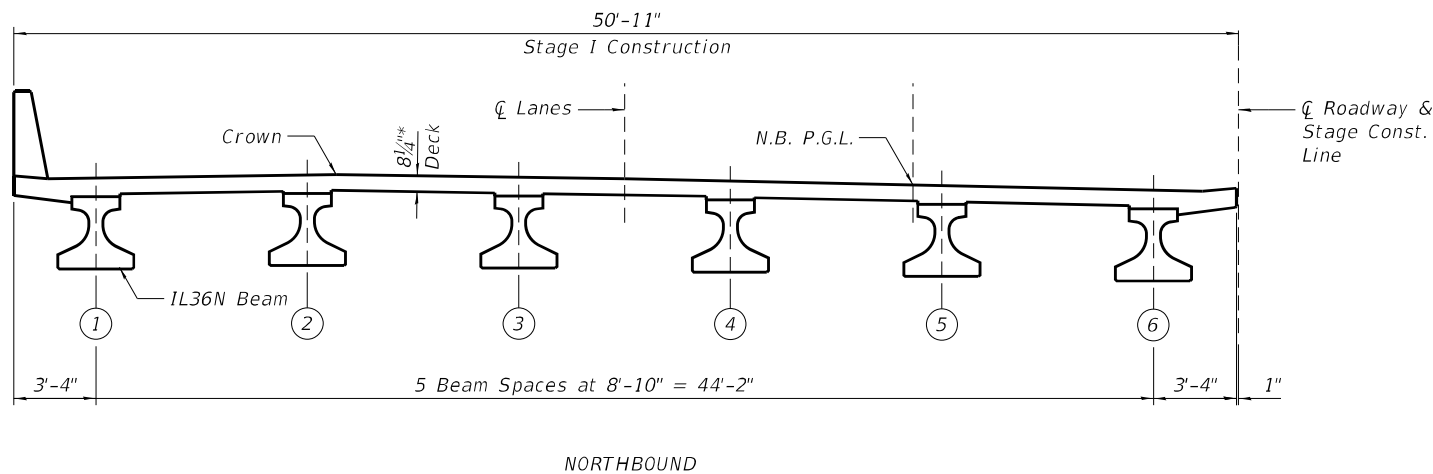
SHEET 3 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	116
CONTRACT NO. 66F74				

ILLINOIS FED. AID PROJECT



STAGE I REMOVAL
(Looking South)



STAGE I CONSTRUCTION
(Looking South)

Notes:
See Sheet 8 of 44 for Temporary Concrete Barrier details.
See roadway plans for quantity.
Hatched area indicates Removal of Existing Structures.

*Dimension prior to grinding. Up to 1/4" will be ground off the bridge deck.

(Sheet 1 of 4)

MODEL: Default
FILE NAME: E:\1903\Struct\Final Design\Design\Plans\CADD_Sheets\0366F74-046-0158&0159-004-5\StageConstDetails.dgn



USER NAME =	DESIGNED - CL	REVISED -
	CHECKED - MTH	REVISED -
PLOT SCALE =	DRAWN - CGY	REVISED -
PLOT DATE = 5/6/21	CHECKED - MTH	REVISED -

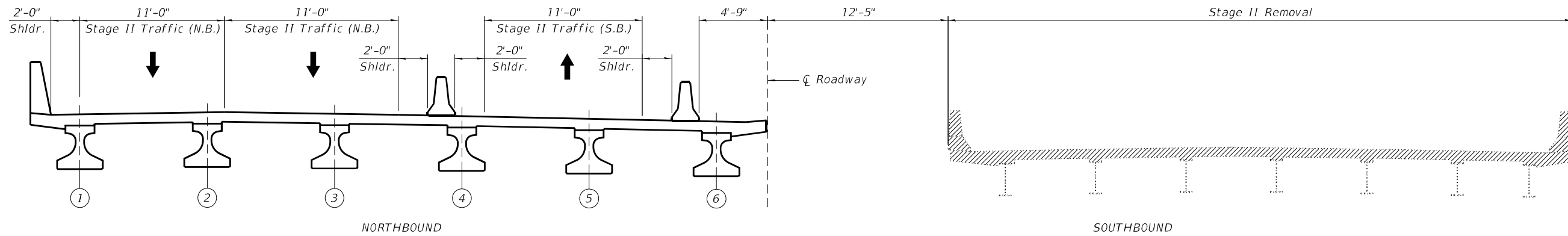
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)

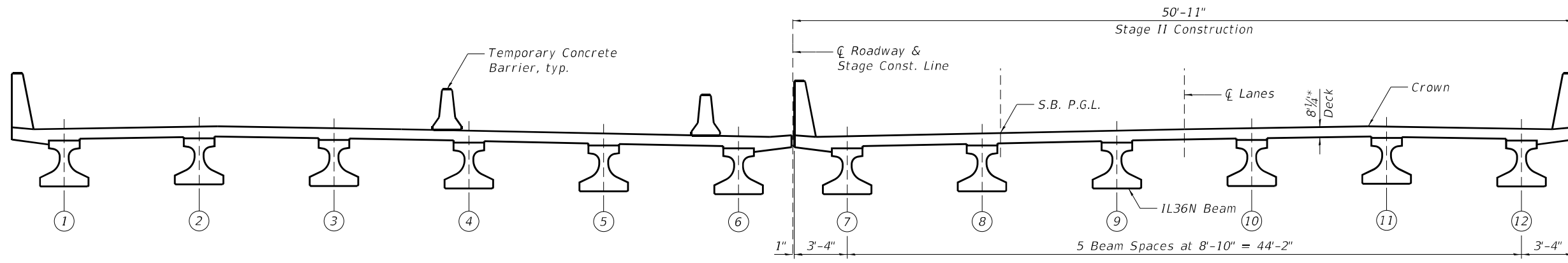
SHEET 4 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	117
CONTRACT NO. 66F74				

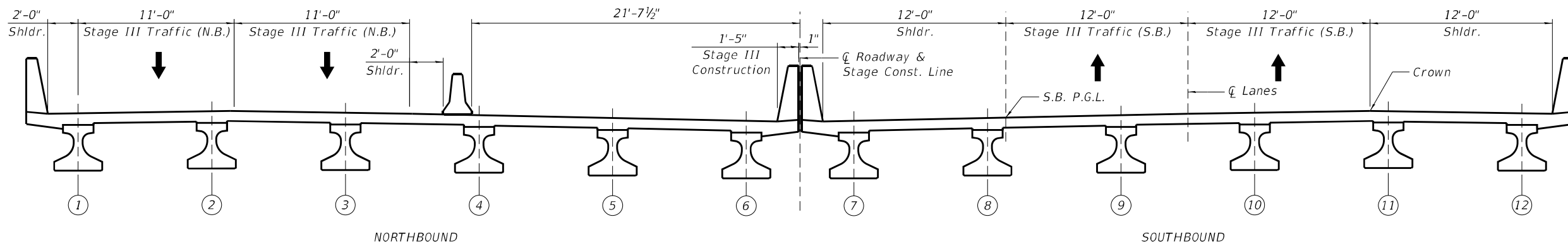
ILLINOIS FED. AID PROJECT



STAGE II REMOVAL
(Looking South)



STAGE II CONSTRUCTION
(Looking South)



STAGE III CONSTRUCTION
(Looking South)

*Dimension prior to grinding. Up to 1/4" will be ground off the bridge deck.

Notes:
See Sheet 8 of 44 for Temporary Concrete Barrier details.
See roadway plans for quantity.
Hatched area indicates Removal of Existing Structures.

(Sheet 2 of 4)

MODEL: Default
FILE NAME: E:\1903\Struct\Final_Design\Design_Plans\CADD_Sheets\0366F74-046-0158&0159-005-StageConstDetails.dgn

LIN ENGINEERING, LTD.
Consulting Engineers
Springfield, Illinois

USER NAME =	DESIGNED - CL	REVISED -
PLOT SCALE =	CHECKED - MTH	REVISED -
PLOT DATE = 5/6/21	DRAWN - CGY	REVISED -
	CHECKED - MTH	REVISED -

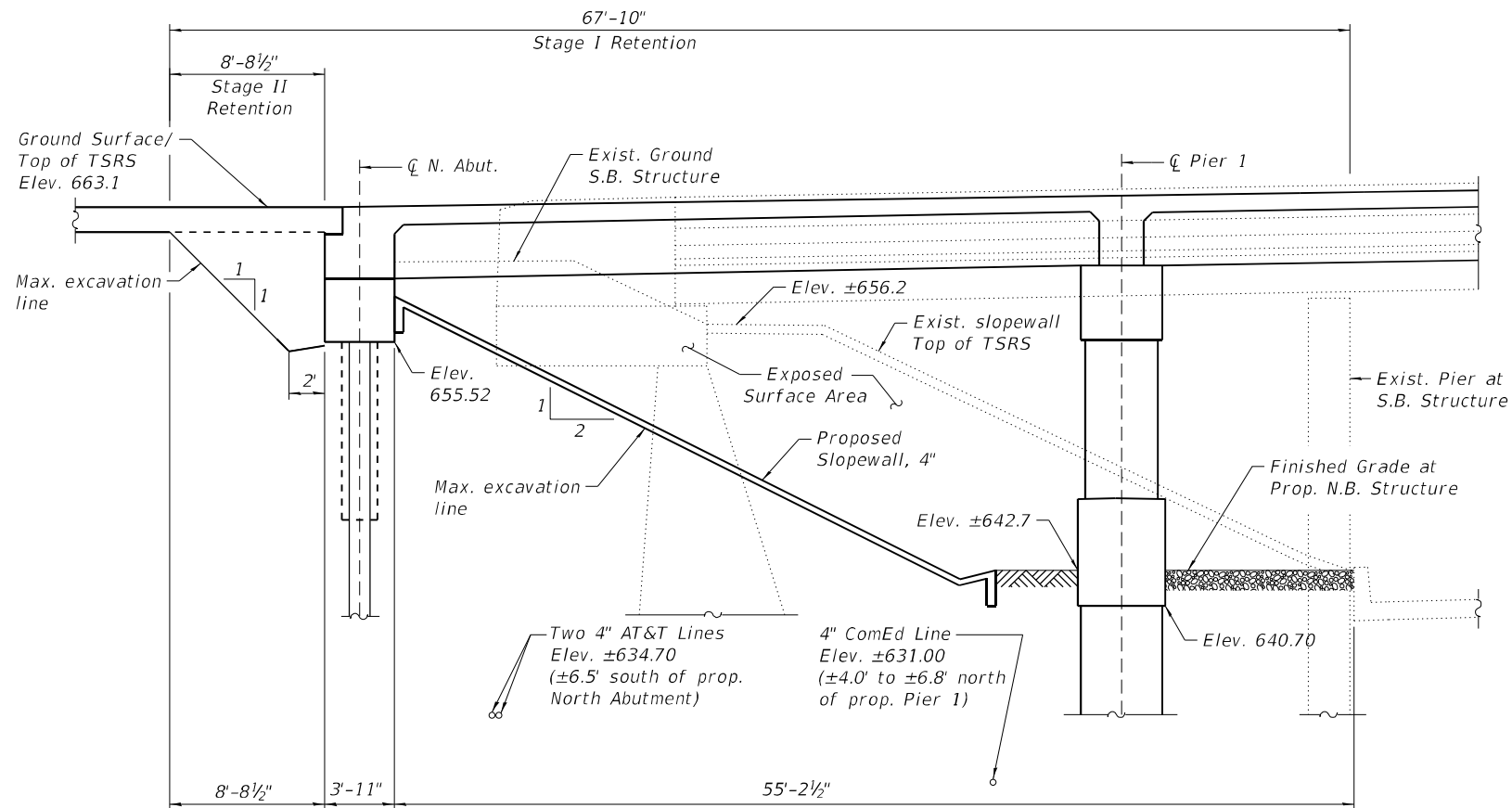
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)**

SHEET 5 OF 44 SHEETS

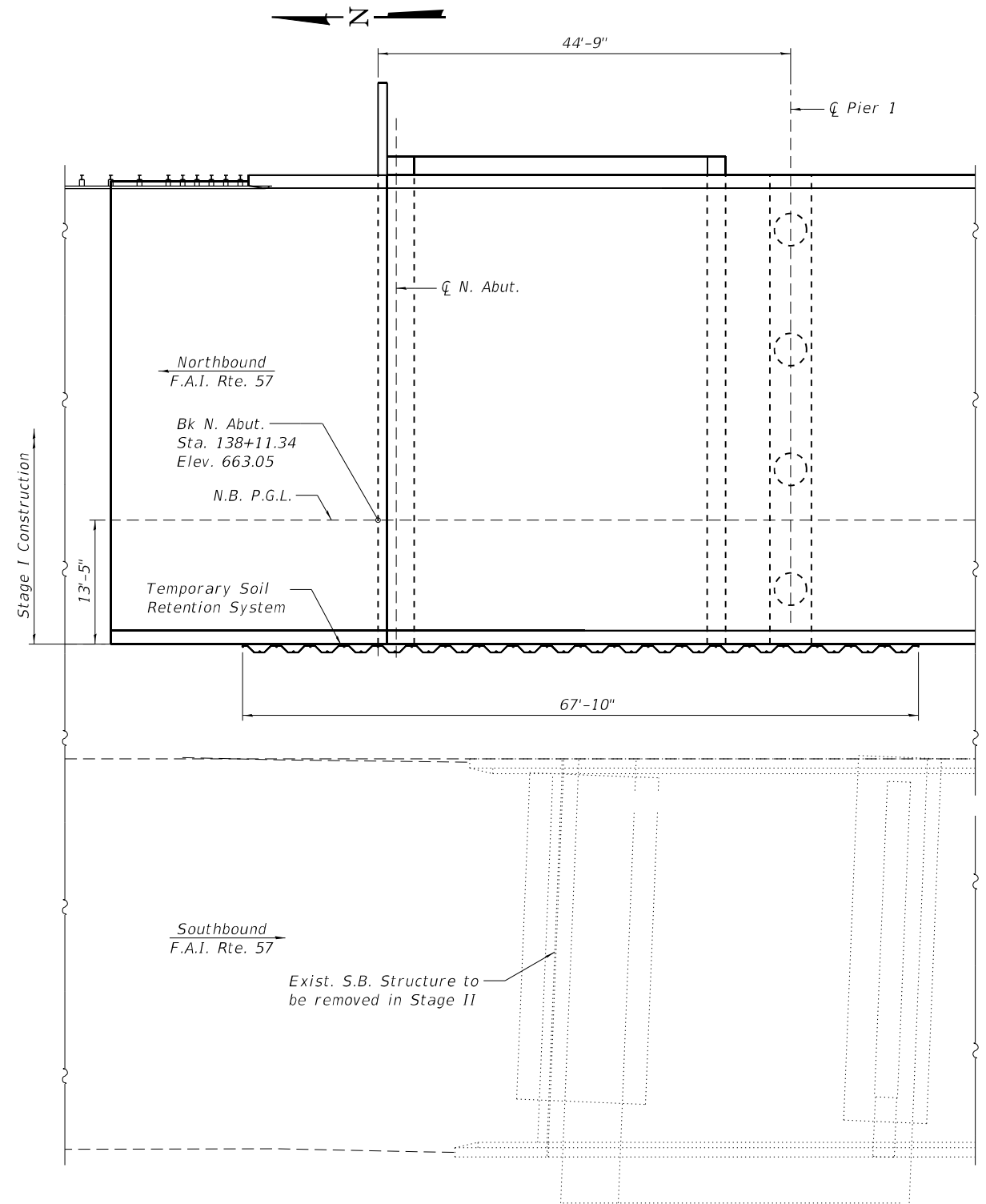
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	118
CONTRACT NO. 66F74				

ILLINOIS FED. AID PROJECT



ELEVATION
(North Abutment looking East)

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



PLAN
TEMPORARY SOIL RETENTION SYSTEM AT NORTH ABUTMENT

(Sheet 3 of 4)

MODEL: Default
FILE NAME: E:\1903\Struct\Final Design\Design Plans\CADD_Sheets\366F74-046-0158&0159-006-StageConstDetails.dgn

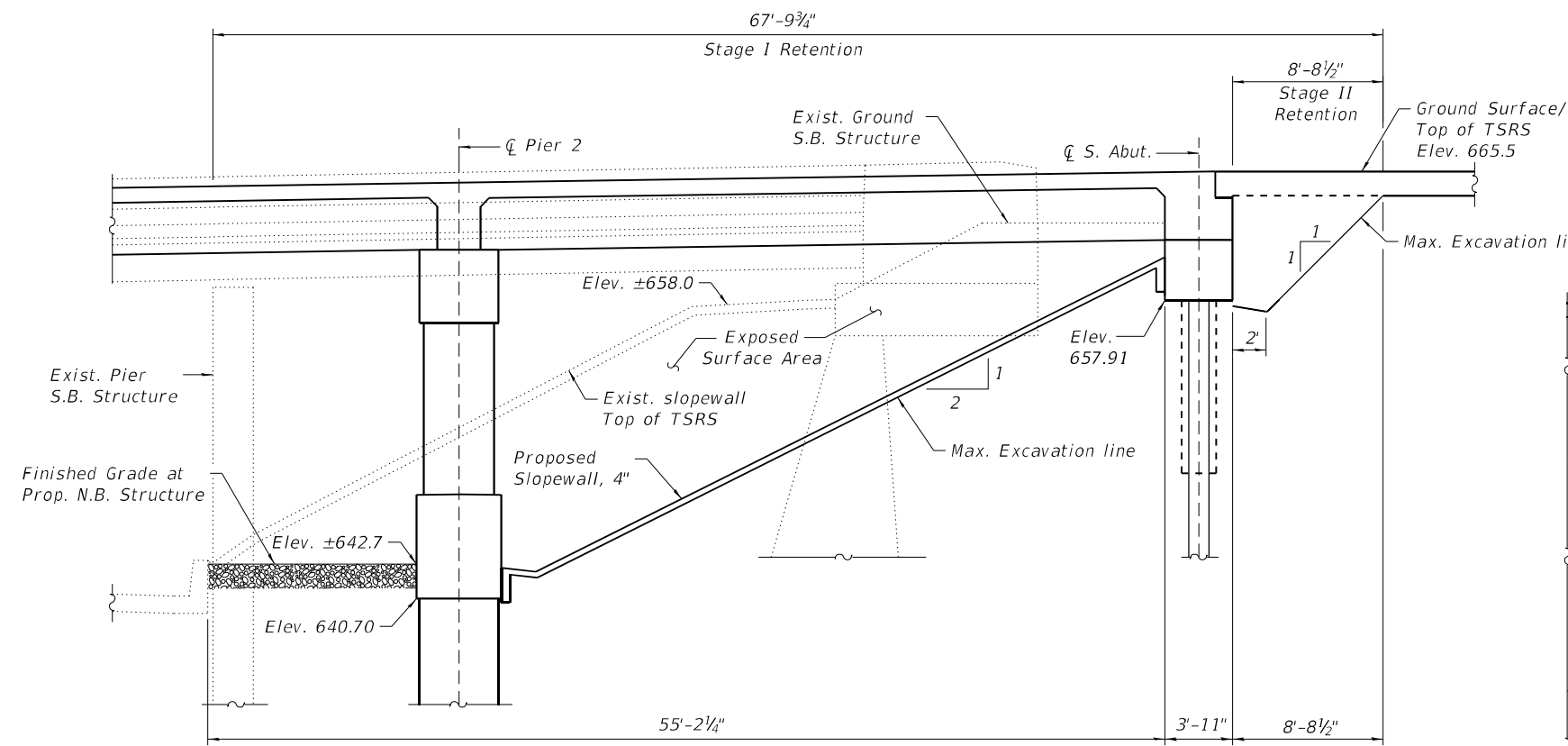
LE LIN ENGINEERING, LTD. Consulting Engineers Springfield, Illinois	USER NAME =	DESIGNED - CL	REVISED -
		CHECKED - MTH	REVISED -
	PLOT SCALE =	DRAWN - CGY	REVISED -
	PLOT DATE = 5/6/21	CHECKED - MTH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

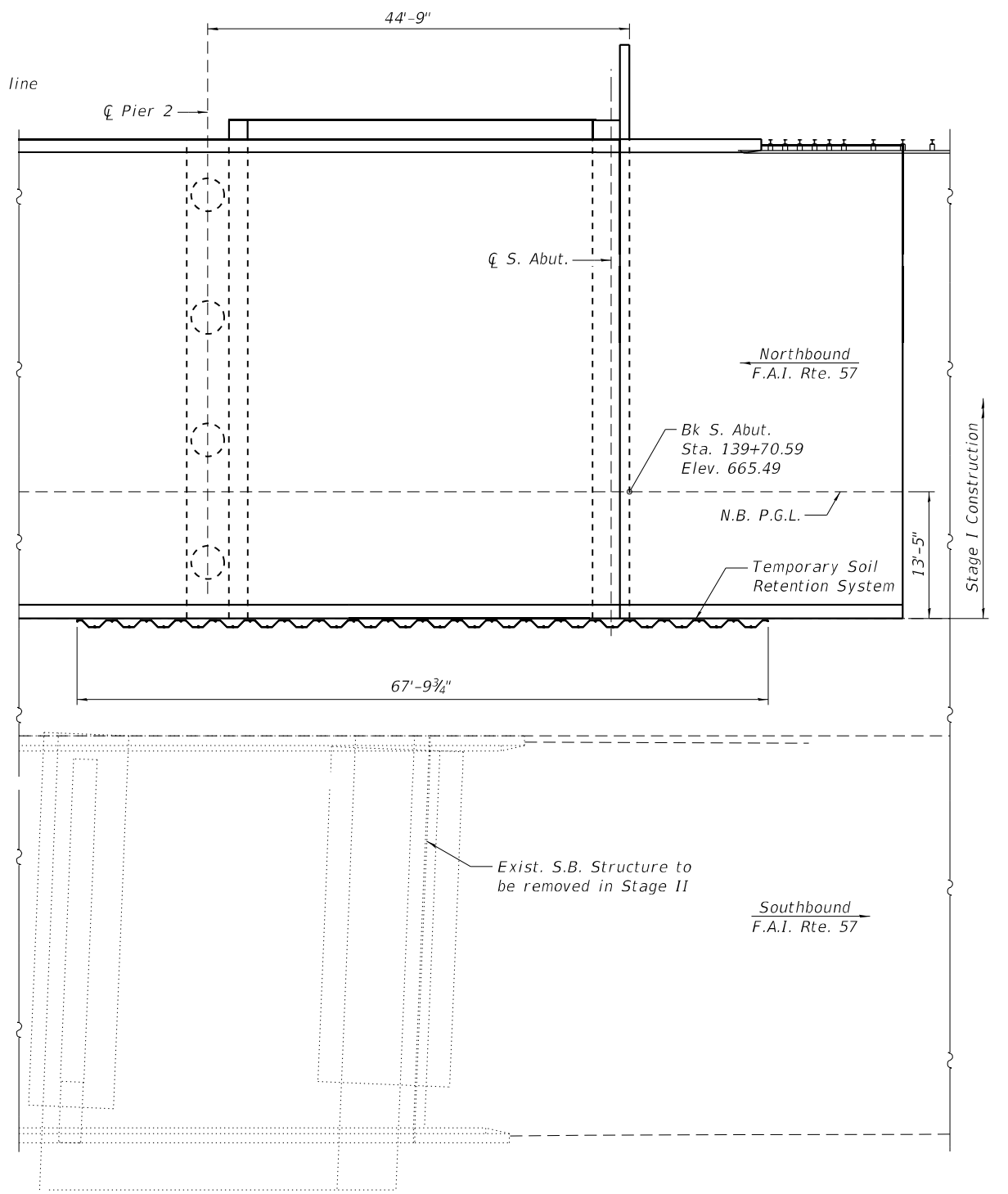
STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	119
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				

SHEET 6 OF 44 SHEETS



ELEVATION
(South Abutment looking East)



PLAN
TEMPORARY SOIL RETENTION SYSTEM AT SOUTH ABUTMENT

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

(Sheet 4 of 4)

MODEL: Default
FILE NAME: E:\1903\Struct\Final_Design\Design_Plans\CADD_Sheets\0158&0159-007-StageConstDetails.dgn



USER NAME =	DESIGNED - CL	REVISED -
	CHECKED - MTH	REVISED -
PLOT SCALE =	DRAWN - CGY	REVISED -
PLOT DATE = 5/6/21	CHECKED - MTH	REVISED -

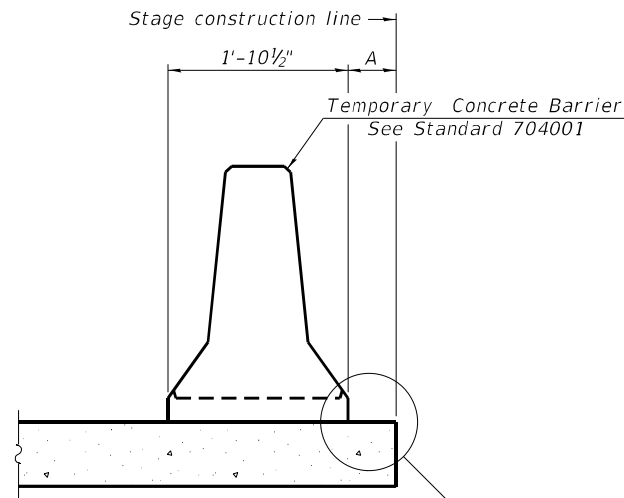
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	120
CONTRACT NO. 66F74				

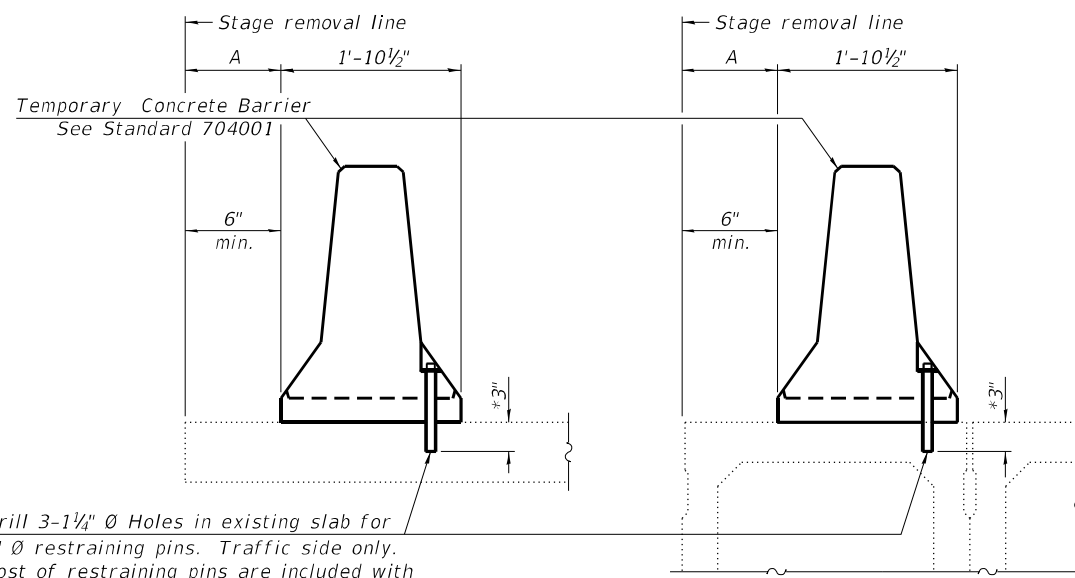
SHEET 7 OF 44 SHEETS

ILLINOIS FED. AID PROJECT



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

NEW SLAB OR NEW DECK BEAM



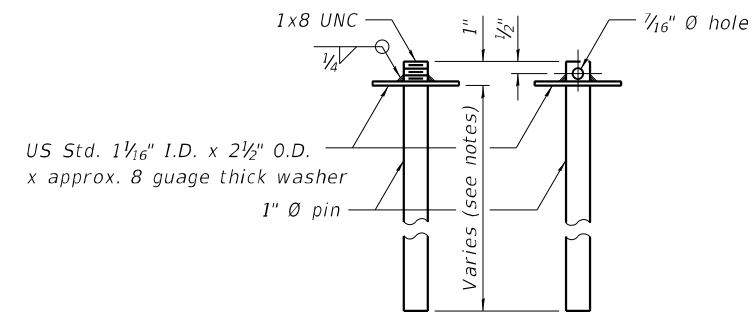
Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

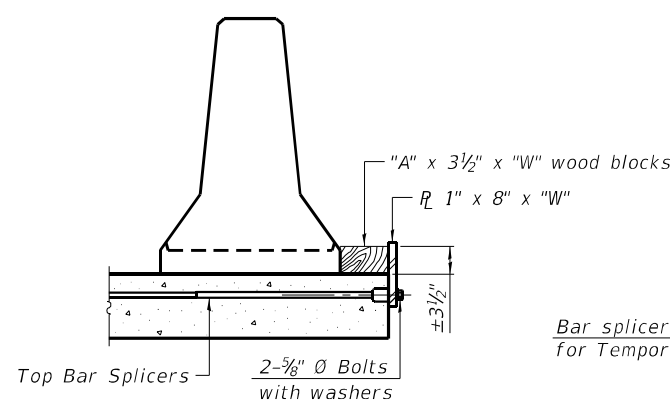
EXISTING DECK BEAM

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

SECTIONS THRU SLAB OR DECK BEAM

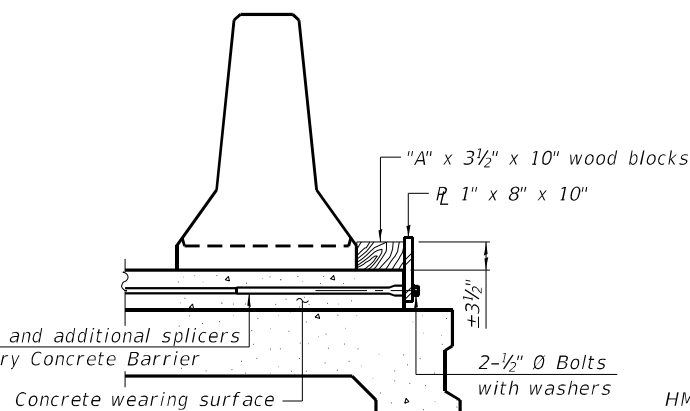


RESTRAINING PIN

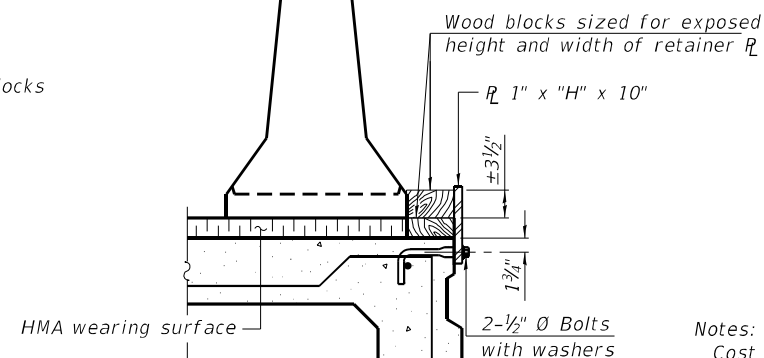


DETAIL I

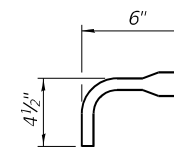
Bar splicers and additional splicers for Temporary Concrete Barrier



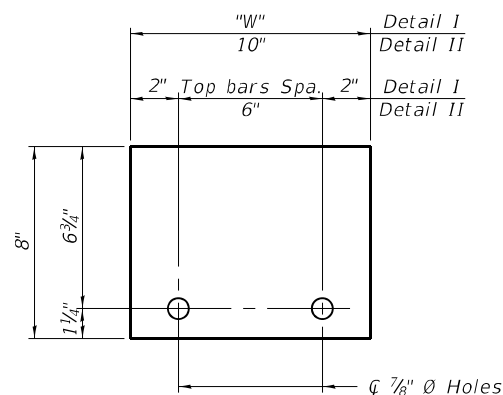
DETAIL II



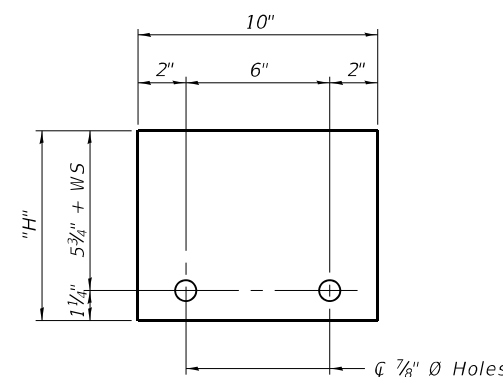
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



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



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

Notes:
 Cost of retainer assembly is included with Temporary Concrete Barrier.
 A retainer assembly shall be located at the approximate \bar{C} of each temporary concrete barrier.
 The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
 When the 'A' dimension is less than 1 1/2', the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.
 Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
 Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

MODEL: Default
 FILE NAME: E:\1903\Struct\Final Design\Design\Plans\CADD_Sheets\01598&01599-008-TempConcreteBarrier.dgn

R-27 2-17-2017

LE LIN ENGINEERING, LTD.
 Consulting Engineers
 Springfield, Illinois

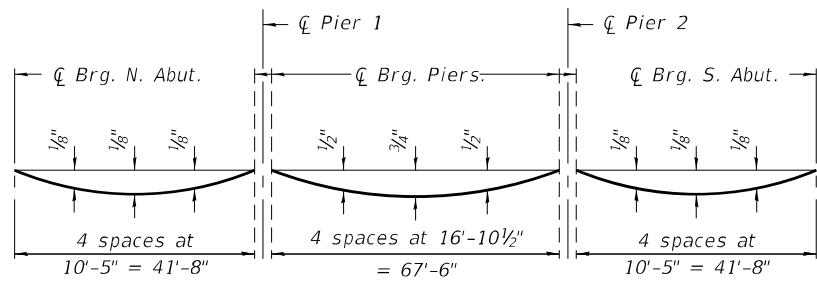
USER NAME =	DESIGNED - CL	REVISED -
PLOT SCALE =	CHECKED - MTH	REVISED -
PLOT DATE = 5/6/21	DRAWN - CGY	REVISED -
	CHECKED - MTH	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
 STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)**

SHEET 8 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	121
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				

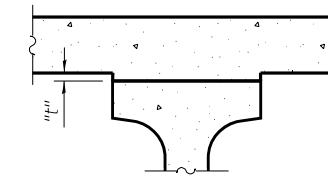


DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete, excluding beams)

Note:

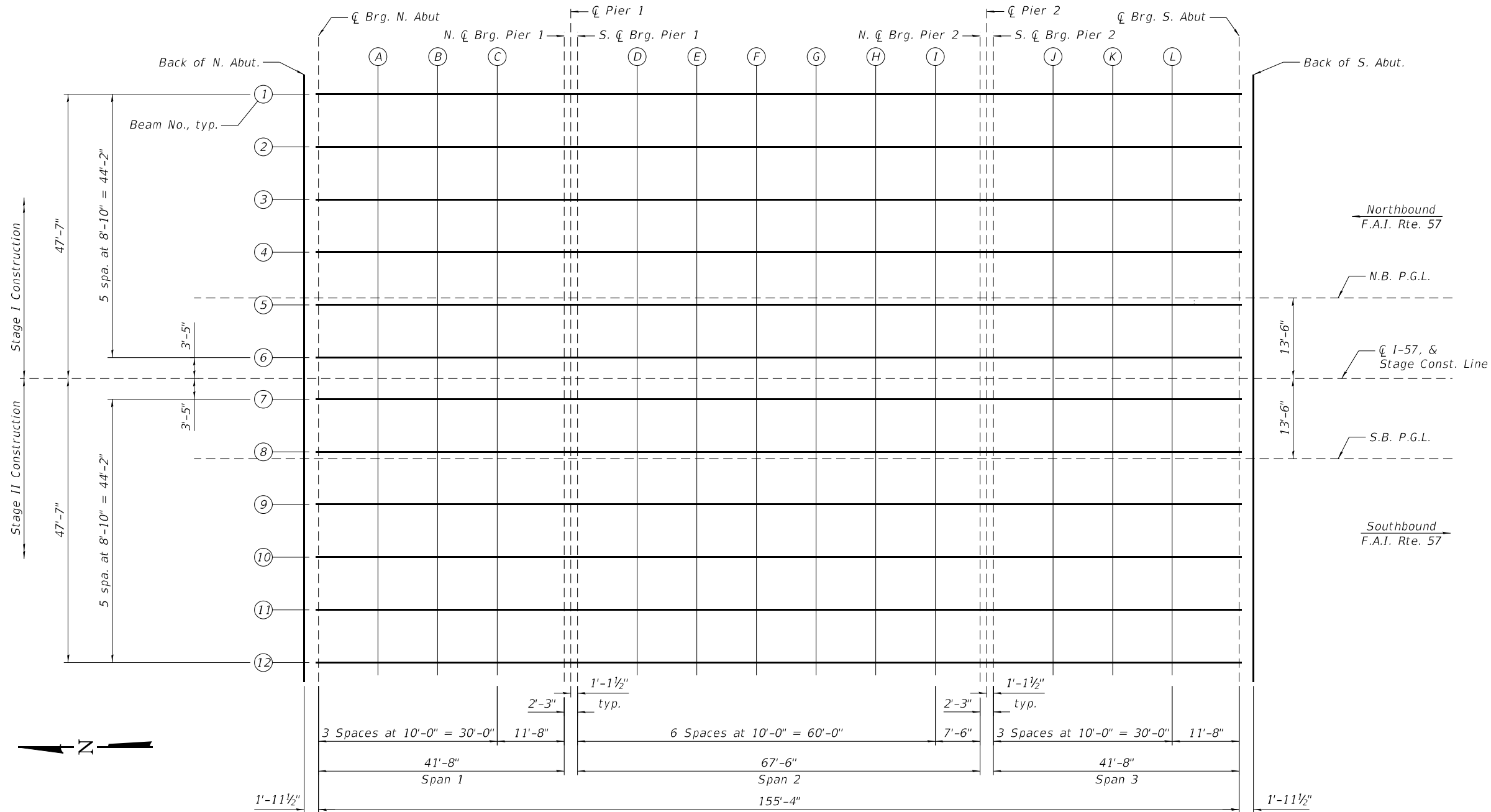
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections and grinding as shown on sheets 10 thru 12 of 44.



To determine "t": After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding" shown on sheets 10 thru 12 of 44, minus the initial slab thickness prior to grinding, equals the fillet heights "t" above top flanges of beams.

The slab is to be ground after curing to achieve smoothness, but the slab is not to be ground to elevations below the "Theoretical Grade Elevations" shown on sheets 10 thru 12 of 44. For grinding the deck, see Special Provisions.

FILLET HEIGHTS



PLAN

(Sheet 1 of 4)

MODEL: Default
FILE NAME: E:\1903\Struct\Design\Plans\CADD_Sheets\0158&0159-009-TopOfSlabElevs.dgn



USER NAME =	DESIGNED - CL	REVISED -
PLOT SCALE =	CHECKED - MTH	REVISED -
PLOT DATE = 5/6/21	DRAWN - CGY	REVISED -
	CHECKED - MTH	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	122
CONTRACT NO. 66F74				

SHEET 9 OF 44 SHEETS

ILLINOIS FED. AID PROJECT

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of N. Abut.	138+11.34	-47.58	663.32	663.34
☐ Brg. N. Abut.	138+13.30	-47.58	663.35	663.37
A	138+23.30	-47.58	663.53	663.56
B	138+33.30	-47.58	663.70	663.73
C	138+43.30	-47.58	663.87	663.90
N. ☐ Brg. Pier 1	138+54.97	-47.58	664.07	664.09
☐ Pier 1	138+56.09	-47.58	664.09	664.11
S. ☐ Brg. Pier 1	138+57.22	-47.58	664.10	664.13
D	138+67.22	-47.58	664.27	664.32
E	138+77.22	-47.58	664.43	664.49
F	138+87.22	-47.58	664.58	664.66
G	138+97.22	-47.58	664.74	664.81
H	139+07.22	-47.58	664.89	664.95
I	139+17.22	-47.58	665.03	665.08
N. ☐ Brg. Pier 2	139+24.72	-47.58	665.14	665.16
☐ Pier 2	139+25.84	-47.58	665.16	665.18
S. ☐ Brg. Pier 2	139+26.97	-47.58	665.17	665.19
J	139+36.97	-47.58	665.31	665.34
K	139+46.97	-47.58	665.45	665.48
L	139+56.97	-47.58	665.58	665.61
☐ Brg. S. Abut.	139+68.63	-47.58	665.74	665.76
Bk. of S. Abut.	139+70.59	-47.58	665.76	665.78

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of N. Abut.	138+11.34	-38.75	663.45	663.47
☐ Brg. N. Abut.	138+13.30	-38.75	663.48	663.51
A	138+23.30	-38.75	663.66	663.69
B	138+33.30	-38.75	663.84	663.87
C	138+43.30	-38.75	664.01	664.03
N. ☐ Brg. Pier 1	138+54.97	-38.75	664.20	664.22
☐ Pier 1	138+56.09	-38.75	664.22	664.24
S. ☐ Brg. Pier 1	138+57.22	-38.75	664.24	664.26
D	138+67.22	-38.75	664.40	664.45
E	138+77.22	-38.75	664.56	664.63
F	138+87.22	-38.75	664.72	664.80
G	138+97.22	-38.75	664.87	664.95
H	139+07.22	-38.75	665.02	665.09
I	139+17.22	-38.75	665.17	665.21
N. ☐ Brg. Pier 2	139+24.72	-38.75	665.27	665.29
☐ Pier 2	139+25.84	-38.75	665.29	665.31
S. ☐ Brg. Pier 2	139+26.97	-38.75	665.31	665.33
J	139+36.97	-38.75	665.45	665.47
K	139+46.97	-38.75	665.58	665.61
L	139+56.97	-38.75	665.72	665.75
☐ Brg. S. Abut.	139+68.63	-38.75	665.87	665.89
Bk. of S. Abut.	139+70.59	-38.75	665.89	665.91

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of N. Abut.	138+11.34	-29.92	663.35	663.37
☐ Brg. N. Abut.	138+13.30	-29.92	663.39	663.41
A	138+23.30	-29.92	663.57	663.59
B	138+33.30	-29.92	663.74	663.77
C	138+43.30	-29.92	663.91	663.94
N. ☐ Brg. Pier 1	138+54.97	-29.92	664.11	664.13
☐ Pier 1	138+56.09	-29.92	664.12	664.14
S. ☐ Brg. Pier 1	138+57.22	-29.92	664.14	664.16
D	138+67.22	-29.92	664.31	664.36
E	138+77.22	-29.92	664.46	664.54
F	138+87.22	-29.92	664.62	664.71
G	138+97.22	-29.92	664.77	664.86
H	139+07.22	-29.92	664.92	664.99
I	139+17.22	-29.92	665.07	665.12
N. ☐ Brg. Pier 2	139+24.72	-29.92	665.18	665.20
☐ Pier 2	139+25.84	-29.92	665.19	665.22
S. ☐ Brg. Pier 2	139+26.97	-29.92	665.21	665.23
J	139+36.97	-29.92	665.35	665.38
K	139+46.97	-29.92	665.49	665.52
L	139+56.97	-29.92	665.62	665.65
☐ Brg. S. Abut.	139+68.63	-29.92	665.77	665.80
Bk. of S. Abut.	139+70.59	-29.92	665.80	665.82

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of N. Abut.	138+11.34	-21.08	663.20	663.22
☐ Brg. N. Abut.	138+13.30	-21.08	663.23	663.26
A	138+23.30	-21.08	663.41	663.44
B	138+33.30	-21.08	663.59	663.62
C	138+43.30	-21.08	663.76	663.78
N. ☐ Brg. Pier 1	138+54.97	-21.08	663.95	663.97
☐ Pier 1	138+56.09	-21.08	663.97	663.99
S. ☐ Brg. Pier 1	138+57.22	-21.08	663.99	664.01
D	138+67.22	-21.08	664.15	664.20
E	138+77.22	-21.08	664.31	664.38
F	138+87.22	-21.08	664.47	664.55
G	138+97.22	-21.08	664.62	664.70
H	139+07.22	-21.08	664.77	664.84
I	139+17.22	-21.08	664.92	664.96
N. ☐ Brg. Pier 2	139+24.72	-21.08	665.02	665.04
☐ Pier 2	139+25.84	-21.08	665.04	665.06
S. ☐ Brg. Pier 2	139+26.97	-21.08	665.06	665.08
J	139+36.97	-21.08	665.20	665.22
K	139+46.97	-21.08	665.33	665.36
L	139+56.97	-21.08	665.47	665.50
☐ Brg. S. Abut.	139+68.63	-21.08	665.62	665.64
Bk. of S. Abut.	139+70.59	-21.08	665.65	665.66

NORTHBOUND P.G.L.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of N. Abut.	138+11.34	-13.50	663.05	663.07
☐ Brg. N. Abut.	138+13.30	-13.50	663.08	663.10
A	138+23.30	-13.50	663.26	663.29
B	138+33.30	-13.50	663.43	663.46
C	138+43.30	-13.50	663.60	663.63
N. ☐ Brg. Pier 1	138+54.97	-13.50	663.80	663.82
☐ Pier 1	138+56.09	-13.50	663.82	663.84
S. ☐ Brg. Pier 1	138+57.22	-13.50	663.84	663.86
D	138+67.22	-13.50	664.00	664.05
E	138+77.22	-13.50	664.16	664.23
F	138+87.22	-13.50	664.31	664.40
G	138+97.22	-13.50	664.47	664.55
H	139+07.22	-13.50	664.62	664.69
I	139+17.22	-13.50	664.76	664.81
N. ☐ Brg. Pier 2	139+24.72	-13.50	664.87	664.89
☐ Pier 2	139+25.84	-13.50	664.89	664.91
S. ☐ Brg. Pier 2	139+26.97	-13.50	664.90	664.92
J	139+36.97	-13.50	665.04	665.07
K	139+46.97	-13.50	665.18	665.21
L	139+56.97	-13.50	665.32	665.34
☐ Brg. S. Abut.	139+68.63	-13.50	665.47	665.49
Bk. of S. Abut.	139+70.59	-13.50	665.49	665.51

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of N. Abut.	138+11.34	-12.25	663.02	663.04
☐ Brg. N. Abut.	138+13.30	-12.25	663.06	663.08
A	138+23.30	-12.25	663.24	663.26
B	138+33.30	-12.25	663.41	663.44
C	138+43.30	-12.25	663.58	663.61
N. ☐ Brg. Pier 1	138+54.97	-12.25	663.77	663.79
☐ Pier 1	138+56.09	-12.25	663.79	663.81
S. ☐ Brg. Pier 1	138+57.22	-12.25	663.81	663.83
D	138+67.22	-12.25	663.97	664.03
E	138+77.22	-12.25	664.13	664.21
F	138+87.22	-12.25	664.29	664.38
G	138+97.22	-12.25	664.44	664.53
H	139+07.22	-12.25	664.59	664.66
I	139+17.22	-12.25	664.74	664.79
N. ☐ Brg. Pier 2	139+24.72	-12.25	664.85	664.87
☐ Pier 2	139+25.84	-12.25	664.86	664.88
S. ☐ Brg. Pier 2	139+26.97	-12.25	664.88	664.90
J	139+36.97	-12.25	665.02	665.05
K	139+46.97	-12.25	665.16	665.19
L	139+56.97	-12.25	665.29	665.32
☐ Brg. S. Abut.	139+68.63	-12.25	665.44	665.46
Bk. of S. Abut.	139+70.59	-12.25	665.47	665.49

Note:
Offsets measured from ☐ of I-57.

(Sheet 2 of 4)

MODEL: Default
FILE NAME: E:\1903\Struct\Final Design\Design Plans\CADD_Sheets\1386674-046-0158&0159-010-TopOfSlabElevs.dgn



USER NAME =	DESIGNED - CL	REVISED -
PLOT SCALE =	CHECKED - MTH	REVISED -
PLOT DATE = 5/6/21	DRAWN - CGY	REVISED -
	CHECKED - MTH	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	123
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				

SHEET 10 OF 44 SHEETS

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of N. Abut.	138+11.34	-3.42	662.85	662.87
☐ Brg. N. Abut.	138+13.30	-3.42	662.88	662.90
A	138+23.30	-3.42	663.06	663.09
B	138+33.30	-3.42	663.23	663.26
C	138+43.30	-3.42	663.40	663.43
N. ☐ Brg. Pier 1	138+54.97	-3.42	663.60	663.62
☐ Pier 1	138+56.09	-3.42	663.62	663.64
S. ☐ Brg. Pier 1	138+57.22	-3.42	663.63	663.66
D	138+67.22	-3.42	663.80	663.85
E	138+77.22	-3.42	663.96	664.02
F	138+87.22	-3.42	664.11	664.19
G	138+97.22	-3.42	664.27	664.34
H	139+07.22	-3.42	664.42	664.48
I	139+17.22	-3.42	664.56	664.61
N. ☐ Brg. Pier 2	139+24.72	-3.42	664.67	664.69
☐ Pier 2	139+25.84	-3.42	664.69	664.71
S. ☐ Brg. Pier 2	139+26.97	-3.42	664.70	664.72
J	139+36.97	-3.42	664.84	664.87
K	139+46.97	-3.42	664.98	665.01
L	139+56.97	-3.42	665.11	665.14
☐ Brg. S. Abut.	139+68.63	-3.42	665.27	665.29
Bk. of S. Abut.	139+70.59	-3.42	665.29	665.31

BEAM 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of N. Abut.	138+11.34	3.42	662.85	662.87
☐ Brg. N. Abut.	138+13.30	3.42	662.88	662.90
A	138+23.30	3.42	663.06	663.09
B	138+33.30	3.42	663.23	663.26
C	138+43.30	3.42	663.40	663.43
N. ☐ Brg. Pier 1	138+54.97	3.42	663.60	663.62
☐ Pier 1	138+56.09	3.42	663.62	663.64
S. ☐ Brg. Pier 1	138+57.22	3.42	663.63	663.66
D	138+67.22	3.42	663.80	663.85
E	138+77.22	3.42	663.96	664.02
F	138+87.22	3.42	664.11	664.19
G	138+97.22	3.42	664.27	664.34
H	139+07.22	3.42	664.42	664.48
I	139+17.22	3.42	664.56	664.61
N. ☐ Brg. Pier 2	139+24.72	3.42	664.67	664.69
☐ Pier 2	139+25.84	3.42	664.69	664.71
S. ☐ Brg. Pier 2	139+26.97	3.42	664.70	664.72
J	139+36.97	3.42	664.84	664.87
K	139+46.97	3.42	664.98	665.01
L	139+56.97	3.42	665.11	665.14
☐ Brg. S. Abut.	139+68.63	3.42	665.27	665.29
Bk. of S. Abut.	139+70.59	3.42	665.29	665.31

BEAM 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of N. Abut.	138+11.34	12.25	663.02	663.04
☐ Brg. N. Abut.	138+13.30	12.25	663.06	663.08
A	138+23.30	12.25	663.24	663.26
B	138+33.30	12.25	663.41	663.44
C	138+43.30	12.25	663.58	663.61
N. ☐ Brg. Pier 1	138+54.97	12.25	663.77	663.79
☐ Pier 1	138+56.09	12.25	663.79	663.81
S. ☐ Brg. Pier 1	138+57.22	12.25	663.81	663.83
D	138+67.22	12.25	663.97	664.03
E	138+77.22	12.25	664.13	664.21
F	138+87.22	12.25	664.29	664.38
G	138+97.22	12.25	664.44	664.53
H	139+07.22	12.25	664.59	664.66
I	139+17.22	12.25	664.74	664.79
N. ☐ Brg. Pier 2	139+24.72	12.25	664.85	664.87
☐ Pier 2	139+25.84	12.25	664.86	664.88
S. ☐ Brg. Pier 2	139+26.97	12.25	664.88	664.90
J	139+36.97	12.25	665.02	665.05
K	139+46.97	12.25	665.16	665.19
L	139+56.97	12.25	665.29	665.32
☐ Brg. S. Abut.	139+68.63	12.25	665.44	665.46
Bk. of S. Abut.	139+70.59	12.25	665.47	665.49

SOUTHBOUND P.G.L.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of N. Abut.	138+11.34	13.50	663.05	663.07
☐ Brg. N. Abut.	138+13.30	13.50	663.08	663.10
A	138+23.30	13.50	663.26	663.29
B	138+33.30	13.50	663.43	663.46
C	138+43.30	13.50	663.60	663.63
N. ☐ Brg. Pier 1	138+54.97	13.50	663.80	663.82
☐ Pier 1	138+56.09	13.50	663.82	663.84
S. ☐ Brg. Pier 1	138+57.22	13.50	663.84	663.86
D	138+67.22	13.50	664.00	664.05
E	138+77.22	13.50	664.16	664.23
F	138+87.22	13.50	664.31	664.40
G	138+97.22	13.50	664.47	664.55
H	139+07.22	13.50	664.62	664.69
I	139+17.22	13.50	664.76	664.81
N. ☐ Brg. Pier 2	139+24.72	13.50	664.87	664.89
☐ Pier 2	139+25.84	13.50	664.89	664.91
S. ☐ Brg. Pier 2	139+26.97	13.50	664.90	664.93
J	139+36.97	13.50	665.04	665.07
K	139+46.97	13.50	665.18	665.21
L	139+56.97	13.50	665.32	665.34
☐ Brg. S. Abut.	139+68.63	13.50	665.47	665.49
Bk. of S. Abut.	139+70.59	13.50	665.49	665.51

BEAM 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of N. Abut.	138+11.34	21.08	663.20	663.22
☐ Brg. N. Abut.	138+13.30	21.08	663.23	663.26
A	138+23.30	21.08	663.41	663.44
B	138+33.30	21.08	663.59	663.62
C	138+43.30	21.08	663.76	663.78
N. ☐ Brg. Pier 1	138+54.97	21.08	663.95	663.97
☐ Pier 1	138+56.09	21.08	663.97	663.99
S. ☐ Brg. Pier 1	138+57.22	21.08	663.99	664.01
D	138+67.22	21.08	664.15	664.20
E	138+77.22	21.08	664.31	664.38
F	138+87.22	21.08	664.47	664.55
G	138+97.22	21.08	664.62	664.70
H	139+07.22	21.08	664.77	664.84
I	139+17.22	21.08	664.92	664.96
N. ☐ Brg. Pier 2	139+24.72	21.08	665.02	665.04
☐ Pier 2	139+25.84	21.08	665.04	665.06
S. ☐ Brg. Pier 2	139+26.97	21.08	665.06	665.08
J	139+36.97	21.08	665.20	665.22
K	139+46.97	21.08	665.33	665.36
L	139+56.97	21.08	665.47	665.50
☐ Brg. S. Abut.	139+68.63	21.08	665.62	665.64
Bk. of S. Abut.	139+70.59	21.08	665.65	665.66

BEAM 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of N. Abut.	138+11.34	29.92	663.35	663.37
☐ Brg. N. Abut.	138+13.30	29.92	663.39	663.41
A	138+23.30	29.92	663.57	663.59
B	138+33.30	29.92	663.74	663.77
C	138+43.30	29.92	663.91	663.94
N. ☐ Brg. Pier 1	138+54.97	29.92	664.11	664.13
☐ Pier 1	138+56.09	29.92	664.12	664.14
S. ☐ Brg. Pier 1	138+57.22	29.92	664.14	664.16
D	138+67.22	29.92	664.31	664.36
E	138+77.22	29.92	664.46	664.54
F	138+87.22	29.92	664.62	664.71
G	138+97.22	29.92	664.77	664.86
H	139+07.22	29.92	664.92	664.99
I	139+17.22	29.92	665.07	665.12
N. ☐ Brg. Pier 2	139+24.72	29.92	665.18	665.20
☐ Pier 2	139+25.84	29.92	665.19	665.22
S. ☐ Brg. Pier 2	139+26.97	29.92	665.21	665.23
J	139+36.97	29.92	665.35	665.38
K	139+46.97	29.92	665.49	665.52
L	139+56.97	29.92	665.62	665.65
☐ Brg. S. Abut.	139+68.63	29.92	665.77	665.80
Bk. of S. Abut.	139+70.59	29.92	665.80	665.82

Note:
Offsets measured from ☐ of I-57.

(Sheet 3 of 4)

MODEL: Default
FILE NAME: E:\1903\Struct\Final_Design\Design_Plans\CADD_Sheets\366F74-046-0158&0159-011-TopOfSlabElevs.dgn



USER NAME =	DESIGNED - CL	REVISED -
PLOT SCALE =	CHECKED - MTH	REVISED -
PLOT DATE = 5/6/21	DRAWN - CGY	REVISED -
	CHECKED - MTH	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)**

SHEET 11 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	124
CONTRACT NO. 66F74				
ILLINOIS		FED. AID PROJECT		

BEAM 11

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of N. Abut.	138+11.34	38.75	663.45	663.47
☐ Brg. N. Abut.	138+13.30	38.75	663.48	663.51
A	138+23.30	38.75	663.66	663.69
B	138+33.30	38.75	663.84	663.87
C	138+43.30	38.75	664.01	664.03
N. ☐ Brg. Pier 1	138+54.97	38.75	664.20	664.22
☐ Pier 1	138+56.09	38.75	664.22	664.24
S. ☐ Brg. Pier 1	138+57.22	38.75	664.24	664.26
D	138+67.22	38.75	664.40	664.45
E	138+77.22	38.75	664.56	664.63
F	138+87.22	38.75	664.72	664.80
G	138+97.22	38.75	664.87	664.95
H	139+07.22	38.75	665.02	665.09
I	139+17.22	38.75	665.17	665.21
N. ☐ Brg. Pier 2	139+24.72	38.75	665.27	665.29
☐ Pier 2	139+25.84	38.75	665.29	665.31
S. ☐ Brg. Pier 2	139+26.97	38.75	665.31	665.33
J	139+36.97	38.75	665.45	665.47
K	139+46.97	38.75	665.58	665.61
L	139+56.97	38.75	665.72	665.75
☐ Brg. S. Abut.	139+68.63	38.75	665.87	665.89
Bk. of S. Abut.	139+70.59	38.75	665.89	665.91

BEAM 12

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. of N. Abut.	138+11.34	47.58	663.32	663.34
☐ Brg. N. Abut.	138+13.30	47.58	663.35	663.37
A	138+23.30	47.58	663.53	663.56
B	138+33.30	47.58	663.70	663.73
C	138+43.30	47.58	663.87	663.90
N. ☐ Brg. Pier 1	138+54.97	47.58	664.07	664.09
☐ Pier 1	138+56.09	47.58	664.09	664.11
S. ☐ Brg. Pier 1	138+57.22	47.58	664.10	664.13
D	138+67.22	47.58	664.27	664.32
E	138+77.22	47.58	664.43	664.49
F	138+87.22	47.58	664.58	664.66
G	138+97.22	47.58	664.74	664.81
H	139+07.22	47.58	664.89	664.95
I	139+17.22	47.58	665.03	665.08
N. ☐ Brg. Pier 2	139+24.72	47.58	665.14	665.16
☐ Pier 2	139+25.84	47.58	665.16	665.18
S. ☐ Brg. Pier 2	139+26.97	47.58	665.17	665.19
J	139+36.97	47.58	665.31	665.34
K	139+46.97	47.58	665.45	665.48
L	139+56.97	47.58	665.58	665.61
☐ Brg. S. Abut.	139+68.63	47.58	665.74	665.76
Bk. of S. Abut.	139+70.59	47.58	665.76	665.78

Note:
Offsets measured from ☐ of I-57.

(Sheet 4 of 4)

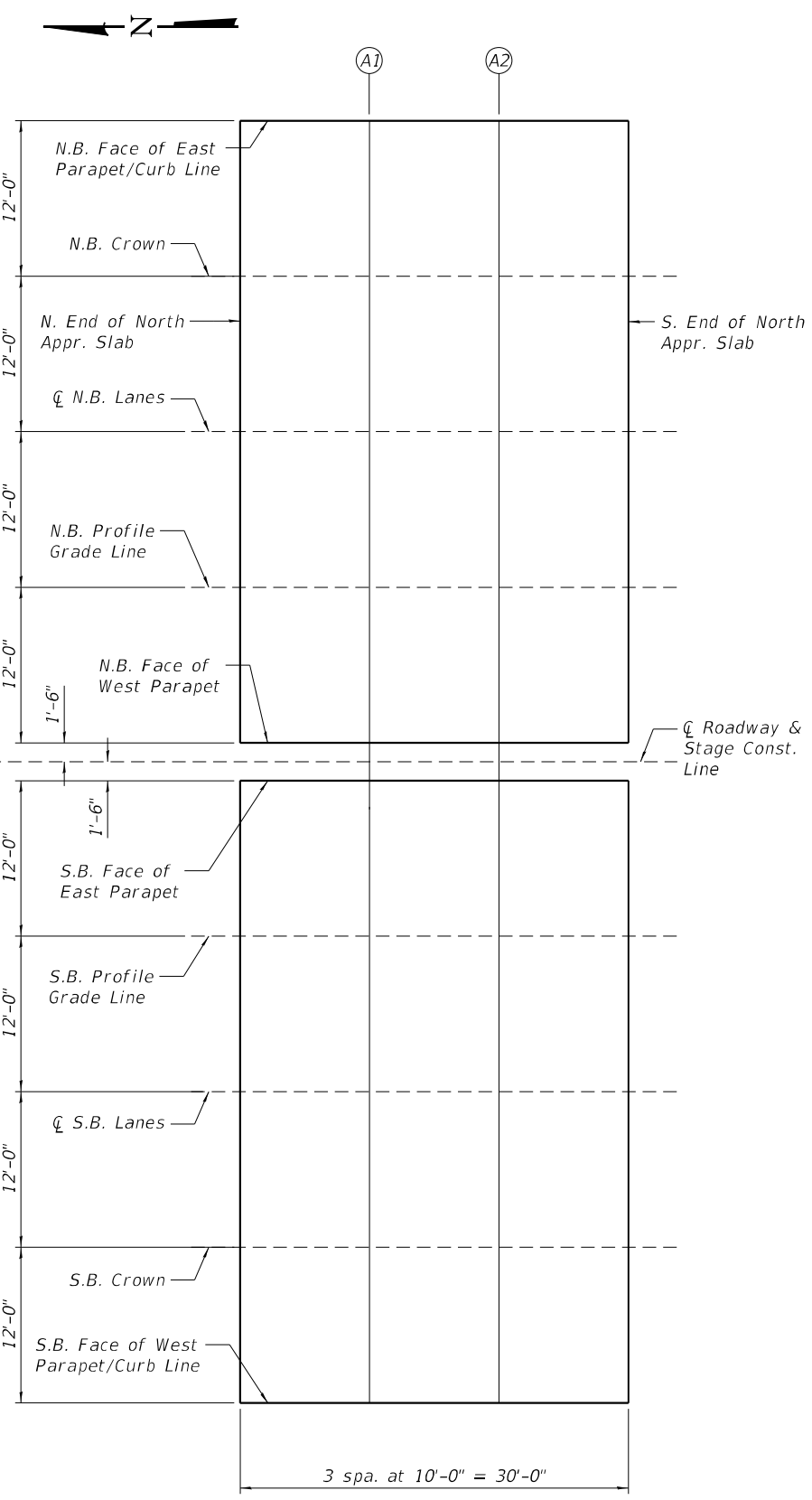
MODEL: Default
FILE NAME: E:\1903\Struct\Final_Design\Design_Plans\CADD_Sheets\139+0159-012-TopOfSlabElevations.dgn

LE LIN ENGINEERING, LTD. Consulting Engineers Springfield, Illinois	USER NAME =	DESIGNED - CL	REVISED -
		CHECKED - MTH	REVISED -
	PLOT SCALE =	DRAWN - CGY	REVISED -
	PLOT DATE = 5/6/21	CHECKED - MTH	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	125
			CONTRACT NO. 66F74	
		ILLINOIS	FED. AID PROJECT	



NORTH APPROACH SLAB PLANS

NORTHBOUND FACE OF EAST PARAPET/CURB LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
N. End of North Appr. Slab	137+82.34	-49.50	662.76	662.78
A1	137+92.34	-49.50	662.94	662.96
A2	138+02.34	-49.50	663.13	663.15
S. End of North Appr. Slab	138+12.34	-49.50	663.31	663.33

NORTHBOUND CROWN

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
N. End of North Appr. Slab	137+82.34	-37.50	662.94	662.96
A1	137+92.34	-37.50	663.12	663.14
A2	138+02.34	-37.50	663.31	663.33
S. End of North Appr. Slab	138+12.34	-37.50	663.49	663.51

☐ NORTHBOUND LANES

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
N. End of North Appr. Slab	137+82.34	-25.50	662.76	662.78
A1	137+92.34	-25.50	662.94	662.96
A2	138+02.34	-25.50	663.13	663.15
S. End of North Appr. Slab	138+12.34	-25.50	663.31	663.33

NORTHBOUND PROFILE GRADE LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
N. End of North Appr. Slab	137+82.34	-13.50	662.52	662.54
A1	137+92.34	-13.50	662.70	662.72
A2	138+02.34	-13.50	662.89	662.91
S. End of North Appr. Slab	138+12.34	-13.50	663.07	663.09

NORTHBOUND FACE OF WEST PARAPET

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
N. End of North Appr. Slab	137+82.34	-1.50	662.28	662.30
A1	137+92.34	-1.50	662.46	662.48
A2	138+02.34	-1.50	662.65	662.67
S. End of North Appr. Slab	138+12.34	-1.50	662.83	662.85

SOUTHBOUND FACE OF EAST PARAPET

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
N. End of North Appr. Slab	137+82.34	1.50	662.28	662.30
A1	137+92.34	1.50	662.46	662.48
A2	138+02.34	1.50	662.65	662.67
S. End of North Appr. Slab	138+12.34	1.50	662.83	662.85

SOUTHBOUND PROFILE GRADE LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
N. End of North Appr. Slab	137+82.34	13.50	662.52	662.54
A1	137+92.34	13.50	662.70	662.72
A2	138+02.34	13.50	662.89	662.91
S. End of North Appr. Slab	138+12.34	13.50	663.07	663.09

☐ SOUTHBOUND LANES

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
N. End of North Appr. Slab	137+82.34	25.50	662.76	662.78
A1	137+92.34	25.50	662.94	662.96
A2	138+02.34	25.50	663.13	663.15
S. End of North Appr. Slab	138+12.34	25.50	663.31	663.33

SOUTHBOUND CROWN

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
N. End of North Appr. Slab	137+82.34	37.50	662.94	662.96
A1	137+92.34	37.50	663.12	663.14
A2	138+02.34	37.50	663.31	663.33
S. End of North Appr. Slab	138+12.34	37.50	663.49	663.51

SOUTHBOUND FACE OF WEST PARAPET/CURB LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
N. End of North Appr. Slab	137+82.34	49.50	662.76	662.78
A1	137+92.34	49.50	662.94	662.96
A2	138+02.34	49.50	663.13	663.15
S. End of North Appr. Slab	138+12.34	49.50	663.31	663.33

Note:
Offsets measured from ☐ I-57.

(Sheet 1 of 2)

MODEL: Default
FILE NAME: E:\1903\Struct\Final Design\Design Plans\CADD_Sheets\1366F74-046-0158&0159-013-Top\ApproachSlabElevs.dgn



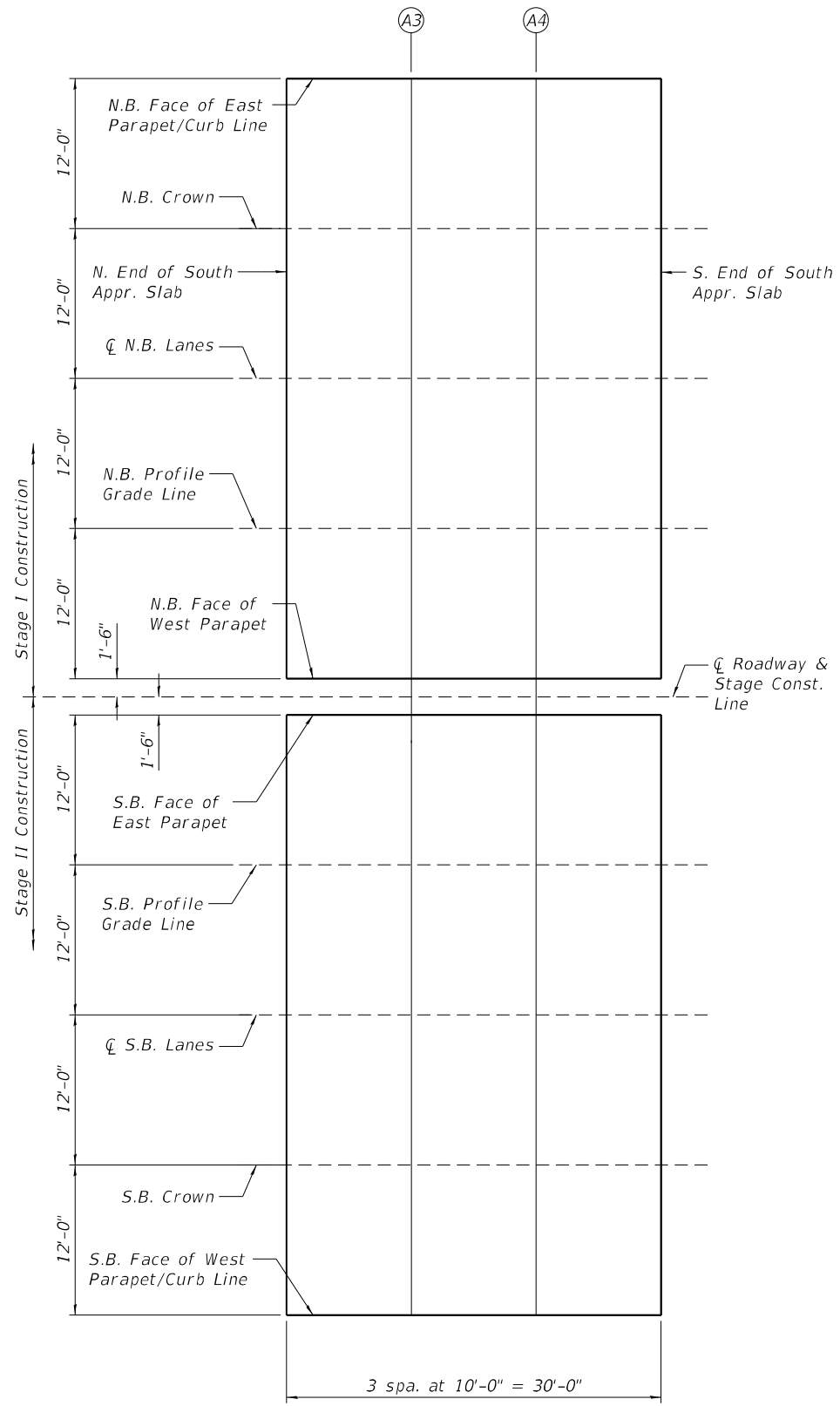
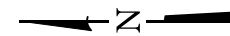
USER NAME =	DESIGNED - CL	REVISIONS -
	CHECKED - MTH	REVISIONS -
PLOT SCALE =	DRAWN - CGY	REVISIONS -
PLOT DATE = 5/6/21	CHECKED - MTH	REVISIONS -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF APPROACH SLAB ELEVATIONS
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)**

SHEET 13 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	126
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				



SOUTH APPROACH SLAB PLANS

NORTHBOUND FACE OF EAST PARAPET/CURB LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
N. End of South Appr. Slab	139+69.59	-49.50	665.72	665.74
A3	139+79.59	-49.50	665.85	665.87
A4	139+89.59	-49.50	665.97	665.99
S. End of South Appr. Slab	139+99.59	-49.50	666.09	666.11

NORTHBOUND CROWN

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
N. End of South Appr. Slab	139+69.59	-37.50	665.90	665.92
A3	139+79.59	-37.50	666.03	666.05
A4	139+89.59	-37.50	666.15	666.17
S. End of South Appr. Slab	139+99.59	-37.50	666.27	666.29

☐ NORTHBOUND LANES

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
N. End of South Appr. Slab	139+69.59	-25.50	665.72	665.74
A3	139+79.59	-25.50	665.85	665.87
A4	139+89.59	-25.50	665.97	665.99
S. End of South Appr. Slab	139+99.59	-25.50	666.09	666.11

NORTHBOUND PROFILE GRADE LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
N. End of South Appr. Slab	139+69.59	-13.50	665.48	665.50
A3	139+79.59	-13.50	665.61	665.63
A4	139+89.59	-13.50	665.73	665.75
S. End of South Appr. Slab	139+99.59	-13.50	665.85	665.87

NORTHBOUND FACE OF WEST PARAPET

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
N. End of South Appr. Slab	139+69.59	-1.50	665.24	665.26
A3	139+79.59	-1.50	665.37	665.39
A4	139+89.59	-1.50	665.49	665.51
S. End of South Appr. Slab	139+99.59	-1.50	665.61	665.63

SOUTHBOUND FACE OF EAST PARAPET

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
N. End of South Appr. Slab	139+69.59	1.50	665.24	665.26
A3	139+79.59	1.50	665.37	665.39
A4	139+89.59	1.50	665.49	665.51
S. End of South Appr. Slab	139+99.59	1.50	665.61	665.63

SOUTHBOUND PROFILE GRADE LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
N. End of South Appr. Slab	139+69.59	13.50	665.48	665.50
A3	139+79.59	13.50	665.61	665.63
A4	139+89.59	13.50	665.73	665.75
S. End of South Appr. Slab	139+99.59	13.50	665.85	665.87

☐ SOUTHBOUND LANES

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
N. End of South Appr. Slab	139+69.59	25.50	665.72	665.74
A3	139+79.59	25.50	665.85	665.87
A4	139+89.59	25.50	665.97	665.99
S. End of South Appr. Slab	139+99.59	25.50	666.09	666.11

SOUTHBOUND CROWN

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
N. End of South Appr. Slab	139+69.59	37.50	665.90	665.92
A3	139+79.59	37.50	666.03	666.05
A4	139+89.59	37.50	666.15	666.17
S. End of South Appr. Slab	139+99.59	37.50	666.27	666.29

SOUTHBOUND FACE OF WEST PARAPET/CURB LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
N. End of South Appr. Slab	139+69.59	49.50	665.72	665.74
A3	139+79.59	49.50	665.85	665.87
A4	139+89.59	49.50	665.97	665.99
S. End of South Appr. Slab	139+99.59	49.50	666.09	666.11

Note:
Offsets measured from ☐ I-57.

(Sheet 2 of 2)

MODEL: Default
FILE NAME: E:\1903\Struct\Final Design\Design\Plans\CADD_Sheets\1366F74-046-0158&0159-014-TopOfApproachSlabElevs.dgn



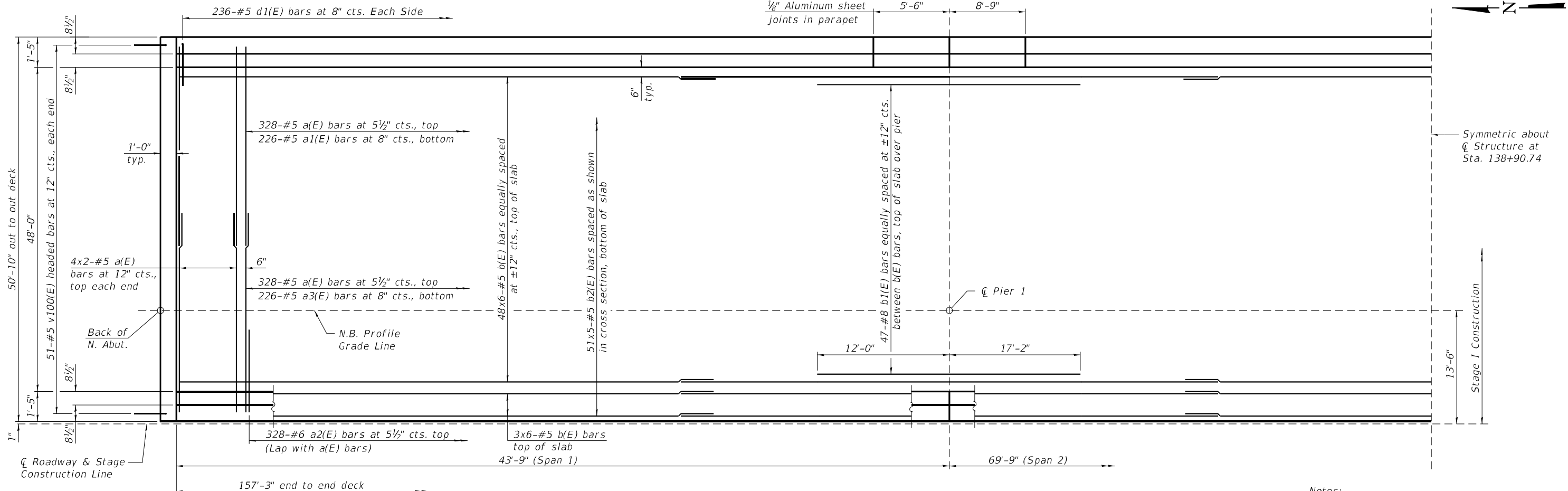
USER NAME =	DESIGNED - CL	REVISIONS -
CHECKED - MTH	REVISIONS -	
PLOT SCALE =	DRAWN - CGY	REVISIONS -
PLOT DATE = 5/6/21	CHECKED - MTH	REVISIONS -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF APPROACH SLAB ELEVATIONS
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)**

SHEET 14 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	127
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				

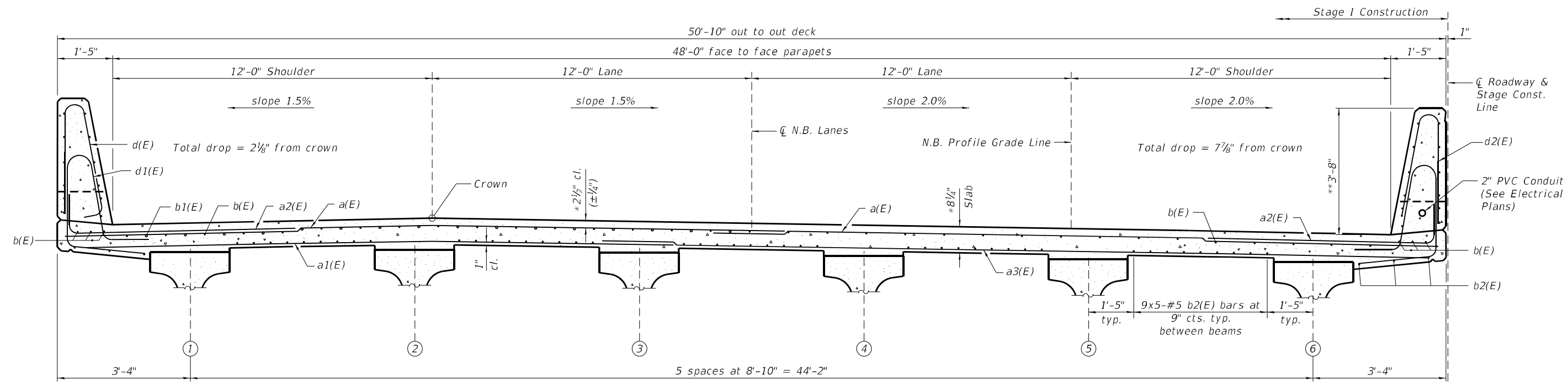


MINIMUM BAR LAP
#5 bar = 3'-6"

PARTIAL PLAN - NORTHBOUND BRIDGE

* Prior to grinding
** After grinding

Notes:
See sheets 17 and 18 of 44 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.



CROSS SECTION - NORTHBOUND BRIDGE
(Looking South)

MODEL: Default
FILE NAME: E:\1903\Struct\Final Design\CADD_Sheets\0366F74-046-0158&0159-015-Superstructure.dgn

LE LIN ENGINEERING, LTD.
Consulting Engineers
Springfield, Illinois

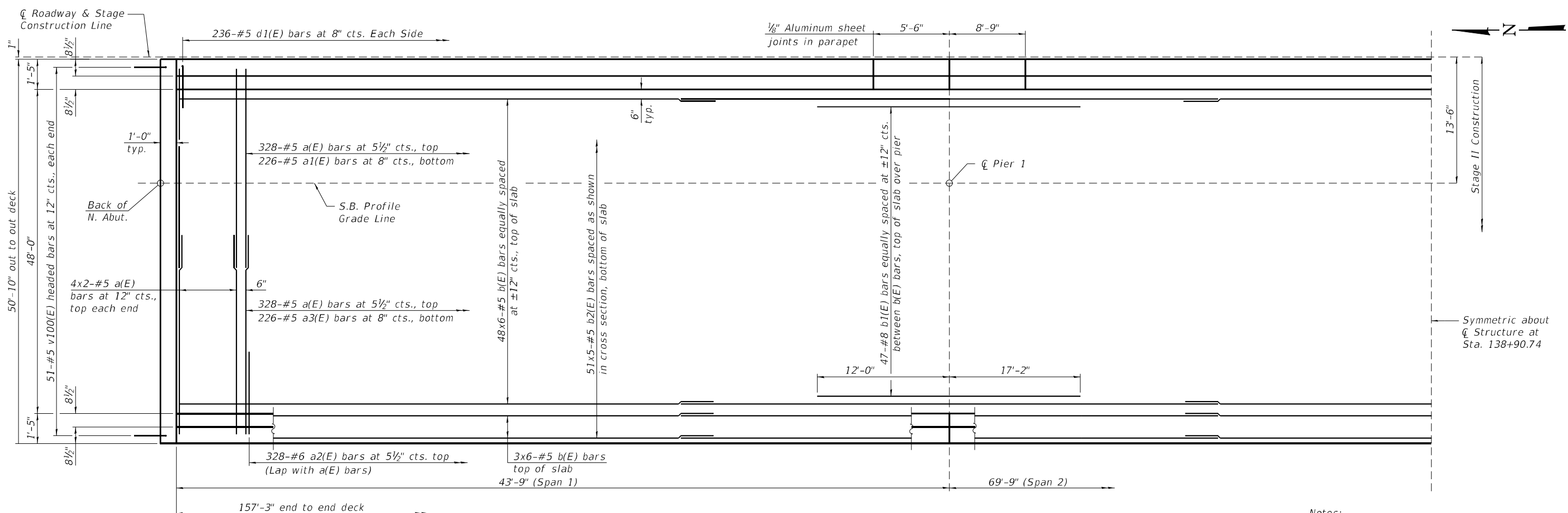
USER NAME =	DESIGNED - CL	REVISED -
CHECKED - MTH	REVISED -	
PLOT SCALE =	DRAWN - CGY	REVISED -
PLOT DATE = 5/6/21	CHECKED - MTH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE - N.B.
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)

SHEET 15 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	128
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				

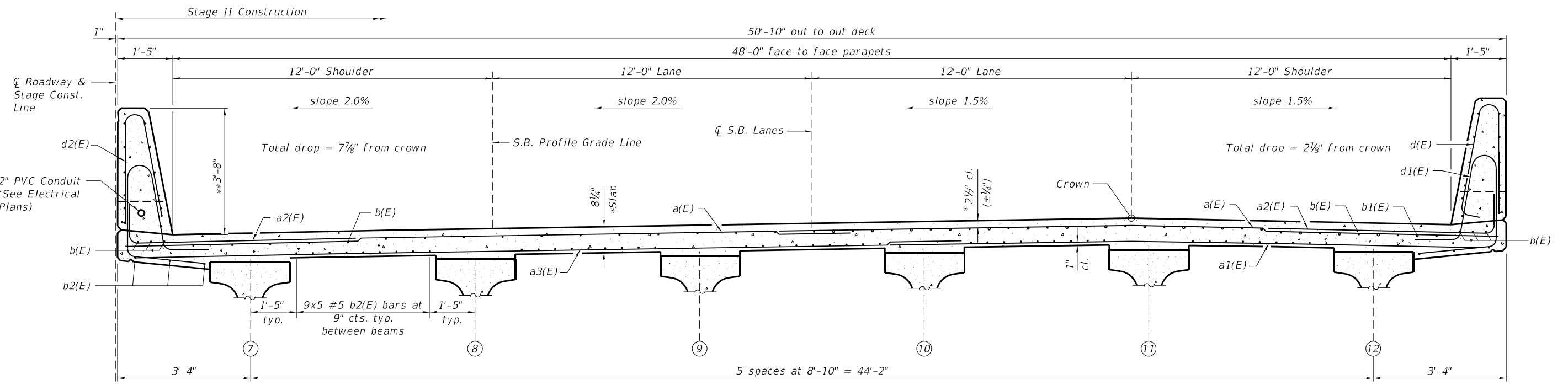


MINIMUM BAR LAP
#5 bar = 3'-6"

PARTIAL PLAN - SOUTHBOUND BRIDGE

* Prior to grinding
** After grinding

Notes:
See sheets 17 and 18 of 44 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.



CROSS SECTION - SOUTHBOUND BRIDGE
(Looking South)

MODEL: Default
FILE NAME: E:\1903\Struct\Final Design\CADD_Sheets\0158&0159-016-5-Superstructure.dgn

LE LIN ENGINEERING, LTD.
Consulting Engineers
Springfield, Illinois

USER NAME =	DESIGNED - CL	REVISED -
PLOT SCALE =	CHECKED - MTH	REVISED -
PLOT DATE = 5/6/21	DRAWN - CGY	REVISED -
	CHECKED - MTH	REVISED -

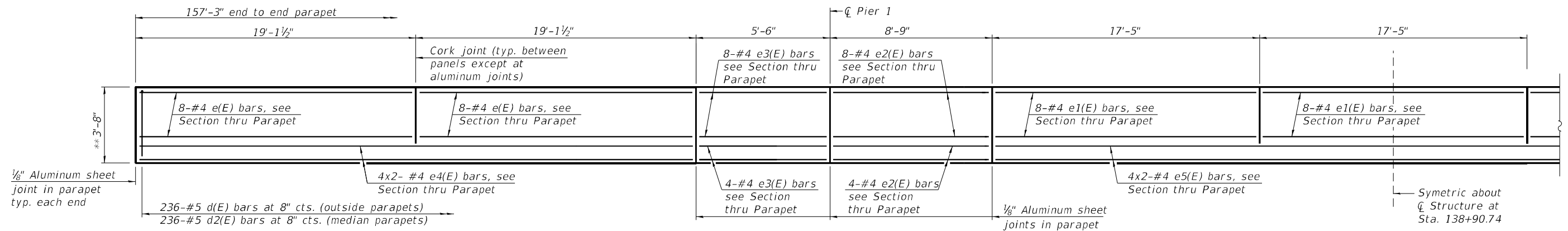
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE - S.B.
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)

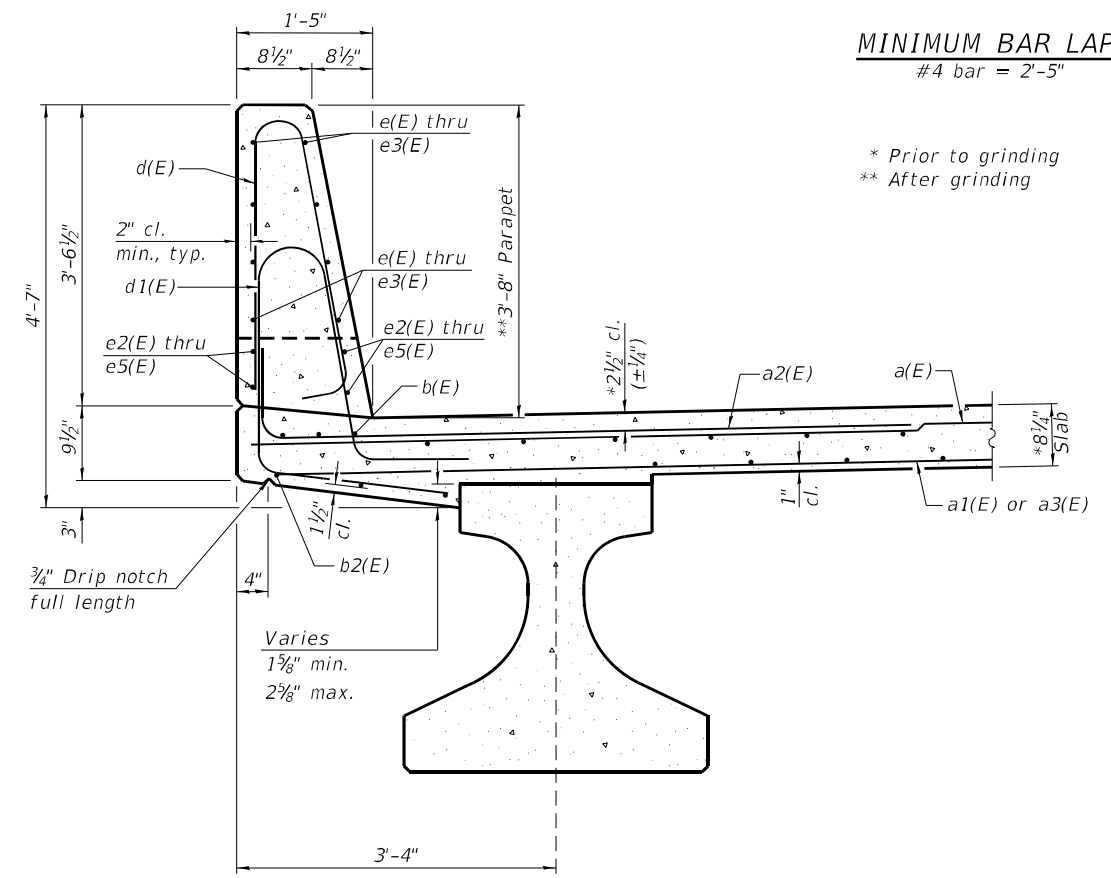
SHEET 16 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	129
CONTRACT NO. 66F74				

ILLINOIS FED. AID PROJECT



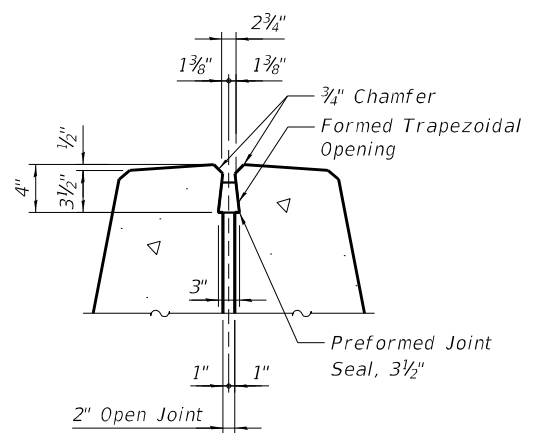
INSIDE ELEVATION OF PARAPET



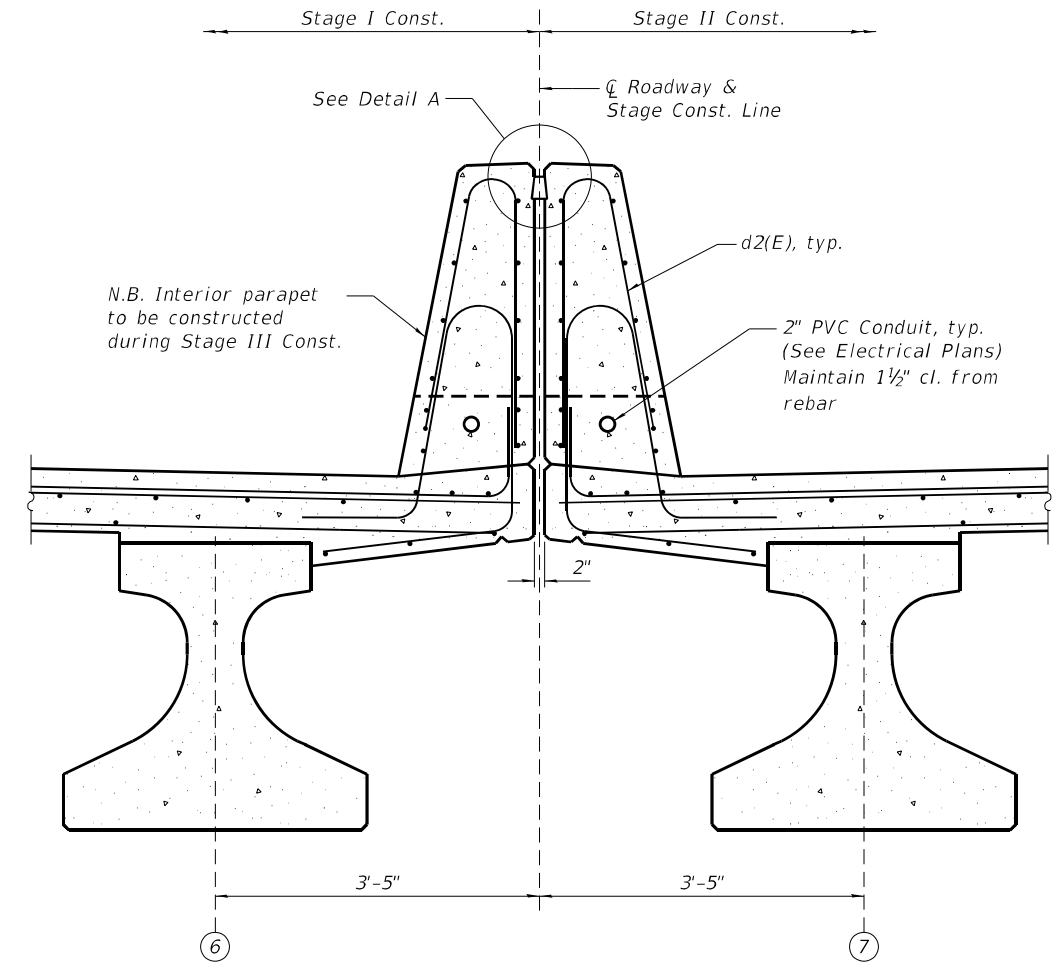
SECTION THRU EXTERIOR PARAPET

MINIMUM BAR LAP
 #4 bar = 2'-5"

* Prior to grinding
 ** After grinding

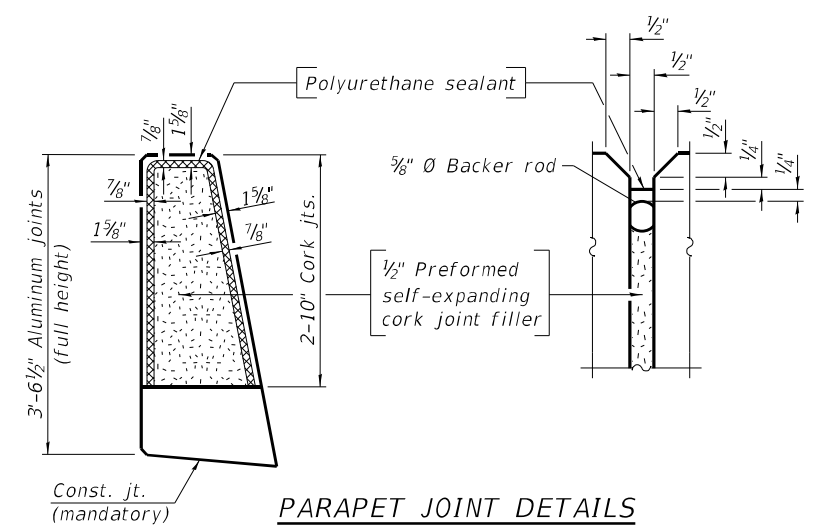


DETAIL A



SECTION THRU INTERIOR PARAPETS

(Looking South)
 (See Section Thru Exterior Parapet for additional dimensions and reinforcement)



PARAPET JOINT DETAILS

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.
 Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

MODEL: Default
 FILE NAME: E:\1903\Struct\Final Design\Design Plans\CADD_Sheets\0366F74-046-0158&0159-017-5_SuperstructureDetails.dgn

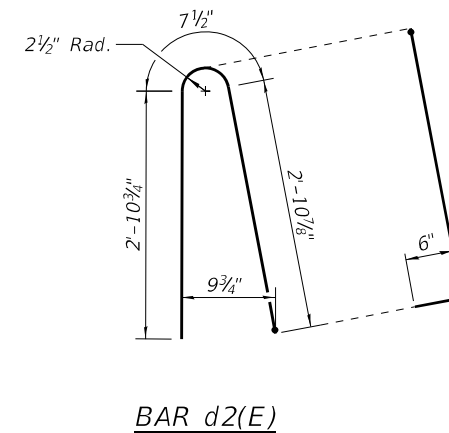
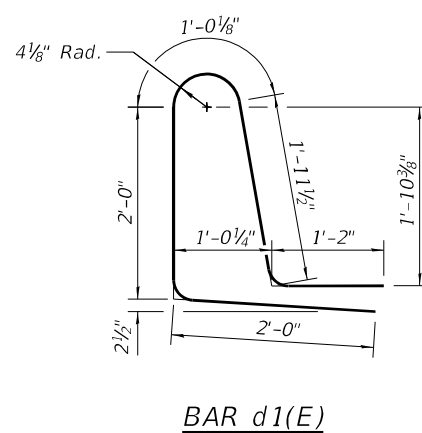
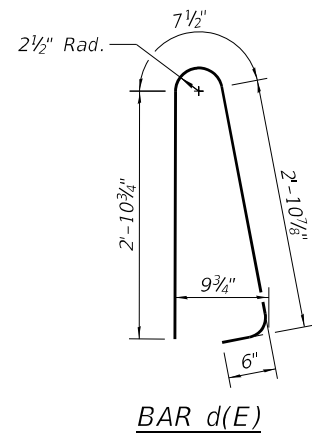


USER NAME =	DESIGNED - CL	REVISED -
	CHECKED - MTH	REVISED -
PLOT SCALE =	DRAWN - CGY	REVISED -
PLOT DATE = 5/6/21	CHECKED - MTH	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
 STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)

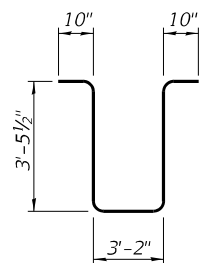
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	130
CONTRACT NO. 66F74				



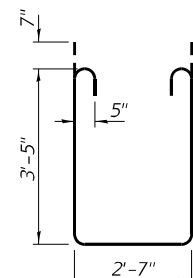
BAR d(E)

BAR d1(E)

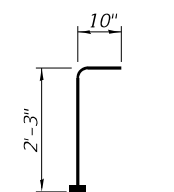
BAR d2(E)



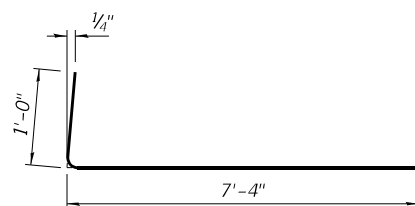
BARS s20(E)



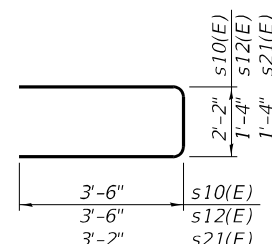
BAR s11(E)



BAR v100(E)
(Headed)



BAR a2(E)



BARS s10(E), s12(E) & s21(E)

**TWO SUPERSTRUCTURES
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	1344	#5	27'-0"	—
a1(E)	452	#5	21'-8"	—
a2(E)	1312	#6	8'-4"	—
a3(E)	452	#5	32'-0"	—
b(E)	648	#5	29'-1"	—
b1(E)	188	#8	29'-2"	—
b2(E)	510	#5	34'-3"	—
d(E)	472	#5	6'-5"	—
d1(E)	944	#5	8'-2"	—
d2(E)	472	#5	6'-5"	—
e(E)	128	#4	18'-10"	—
e1(E)	96	#4	17'-1"	—
e2(E)	96	#4	8'-5"	—
e3(E)	96	#4	5'-2"	—
e4(E)	64	#4	20'-2"	—
e5(E)	32	#4	27'-2"	—
m10(E)	32	#6	27'-0"	—
m11(E)	40	#6	7'-6"	—
m12(E)	16	#6	2'-7"	—
m13(E)	20	#6	5'-4"	—
m14(E)	8	#6	1'-6"	—
m15(E)	48	#5	4'-0"	—
m20(E)	40	#6	5'-4"	—
m21(E)	80	#6	7'-6"	—
m22(E)	48	#5	4'-0"	—
s10(E)	144	#5	9'-2"	—
s11(E)	144	#5	10'-7"	—
s12(E)	96	#5	8'-4"	—
s20(E)	120	#5	11'-9"	—
s21(E)	80	#5	7'-8"	—
v100(E)	204	#5	3'-1"	—
Reinforcement Bars, Epoxy Coated		Pound	161650	
Concrete Superstructure		Cu. Yd.	659.6	
Protective Coat		Sq. Yd.	1988	
Preformed Joint Seal 3 1/2"		Foot	158	
Diamond Grinding (Bridge Section)		Sq. Yd.	1538	
Bridge Deck Grooving (Longitudinal)		Sq. Yd.	840	

Bars indicated thus 1 x 2-#4 etc. indicates 1 line of bars with 2 lengths per line.

Notes:
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.

MODEL: Default
FILE NAME: E:\1903\Struct\Final Design\Design Sheets\0158&0159-018-5-SuperstructureDetails.dgn

LE LIN ENGINEERING, LTD.
Consulting Engineers
Springfield, Illinois

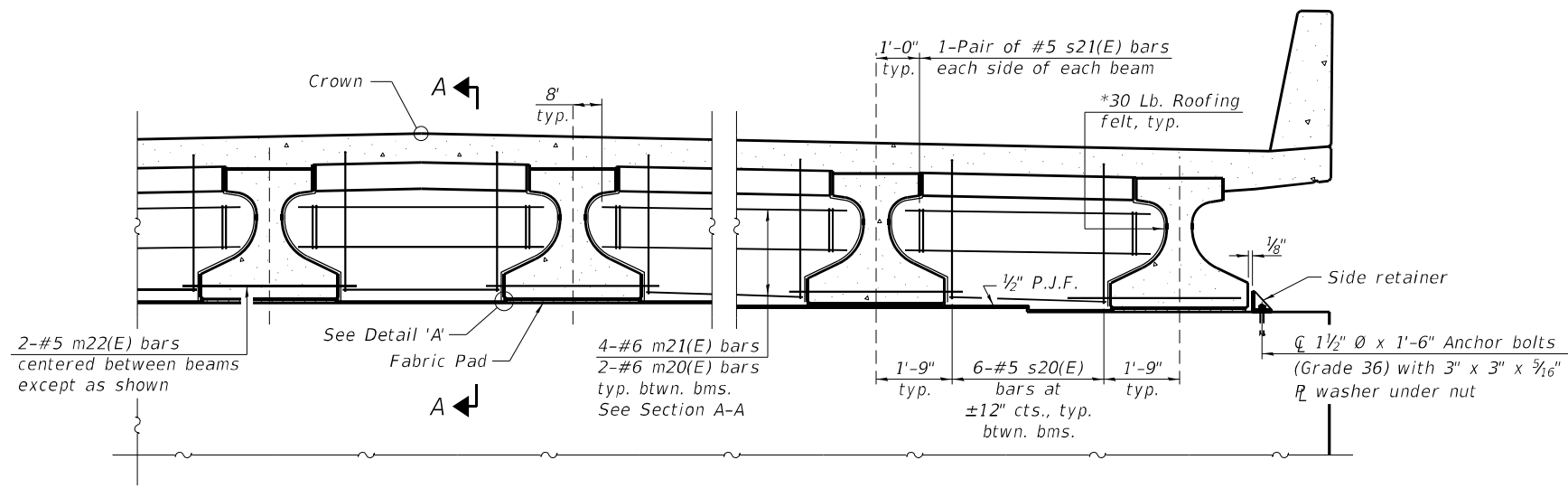
USER NAME =	DESIGNED - CL	REVISED -
	CHECKED - MTH	REVISED -
PLOT SCALE =	DRAWN - CGY	REVISED -
PLOT DATE = 5/6/21	CHECKED - MTH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)

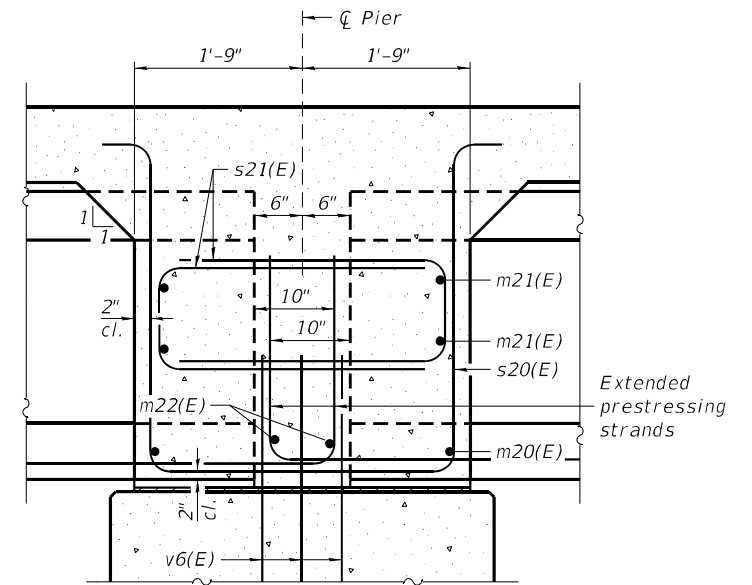
SHEET 18 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	131
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				

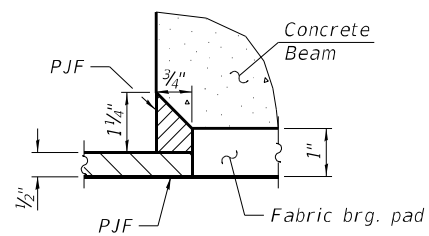


DIAPHRAGM AT PIER

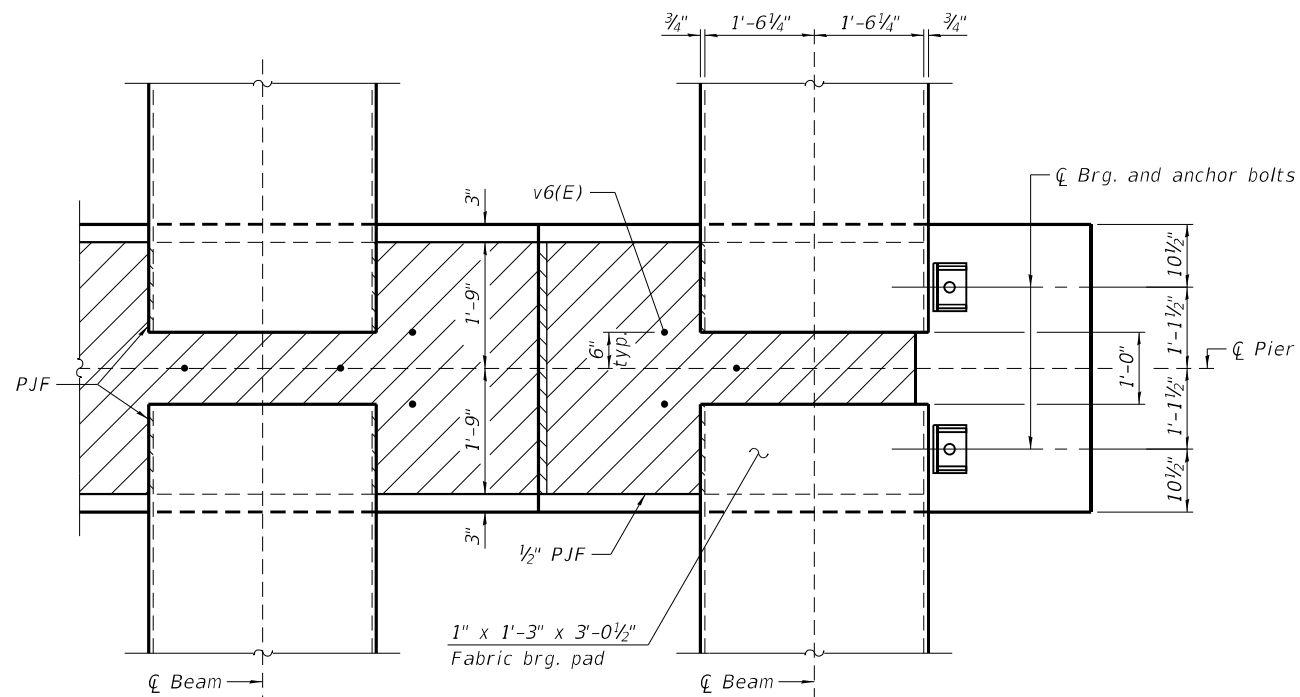
*Bonded to sides of beams embedded into diaphragm.



SECTION A-A

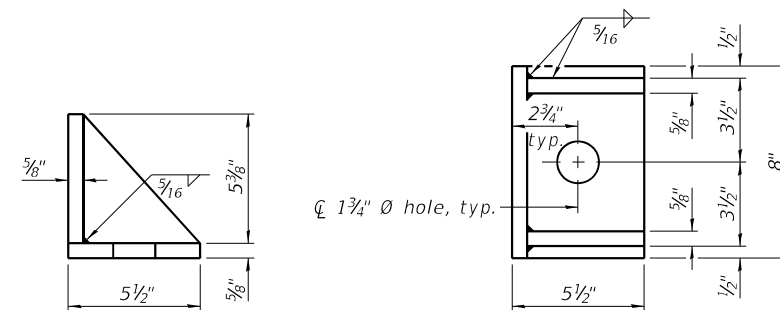


DETAIL 'A'



PLAN AT PIER

(Showing bearing pads and P.J.F. details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

Notes:

- See sheet 18 of 44 for superstructure details and Bill of Material.
- Cost of 30 Lb. roofing felt is included with Concrete Superstructure.
- Cost of side retainer and anchor bolts shall be included with Concrete Structures.
- Anchor bolts and side retainers shall be according to Article 521.06 of the Standard Specifications. Side retainers shall be hot dip galvanized.
- Anchor bolts and side retainers shall be installed as each exterior beam is erected unless an equivalent temporary means of lateral restraint is used.

MODEL: Default
FILE NAME: E:\1903\Struct\Final_Design\Design_Plans\CADD_Sheets\0158&0159-019-DiaphragmDetails.dgn

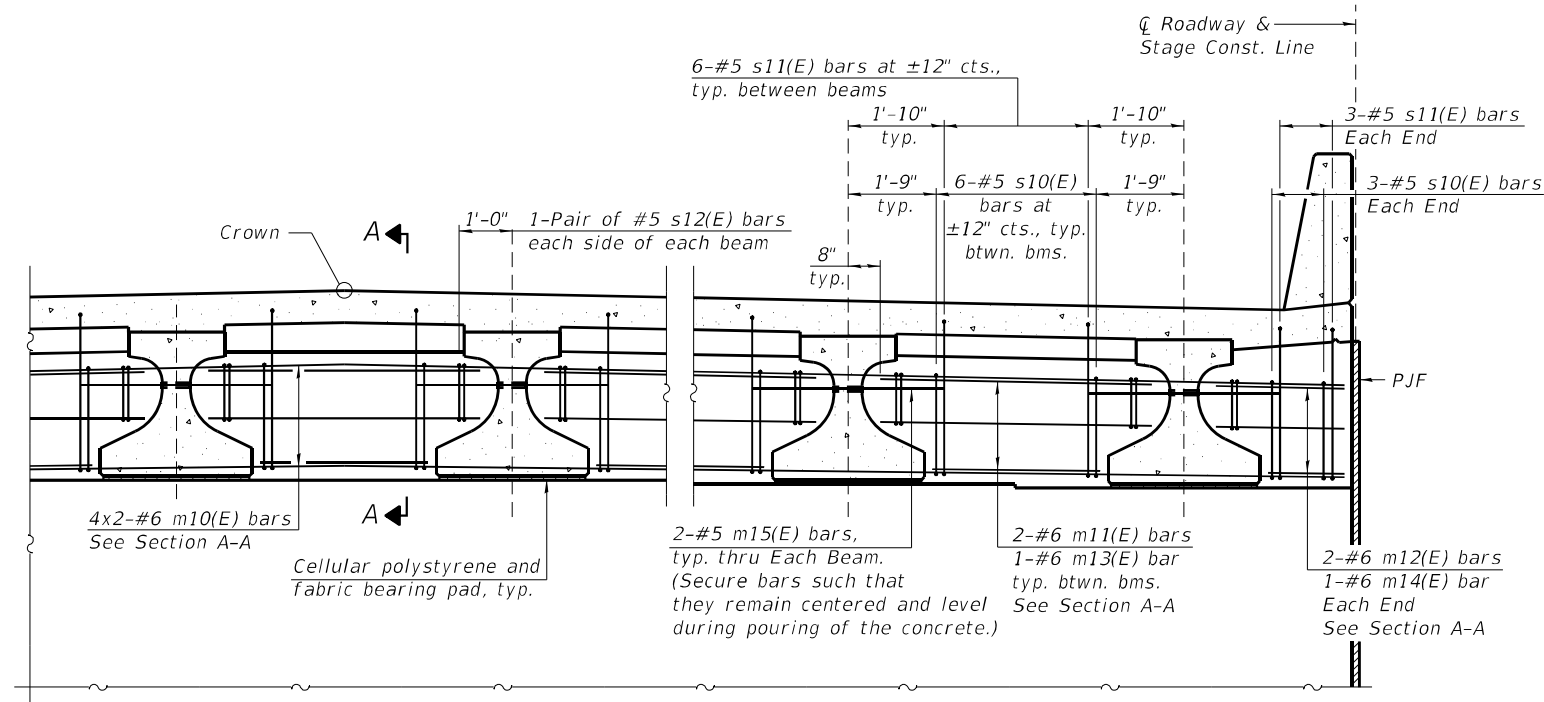
LE LIN ENGINEERING, LTD.
Consulting Engineers
Springfield, Illinois

USER NAME =	DESIGNED - CL	REVISED -
PLOT SCALE =	CHECKED - MTH	REVISED -
PLOT DATE = 5/6/21	DRAWN - CGY	REVISED -
	CHECKED - MTH	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

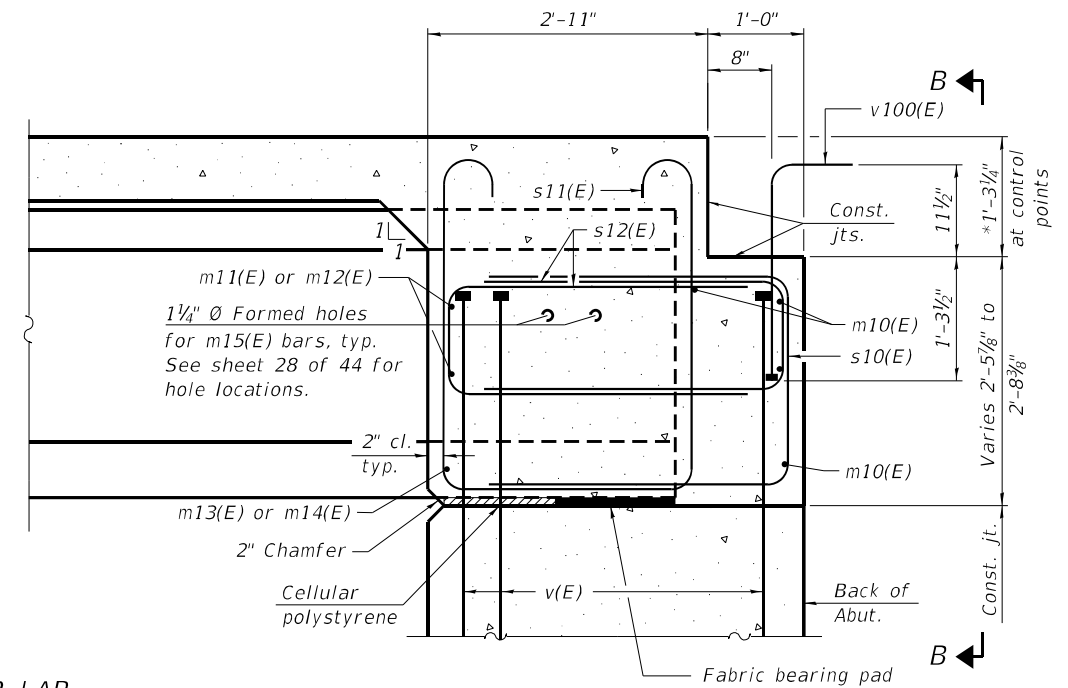
**DIAPHRAGM DETAILS
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	132
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				



DIAPHRAGM AT ABUTMENT

(N.B. South Abutment looking south shown; other abutments similar)



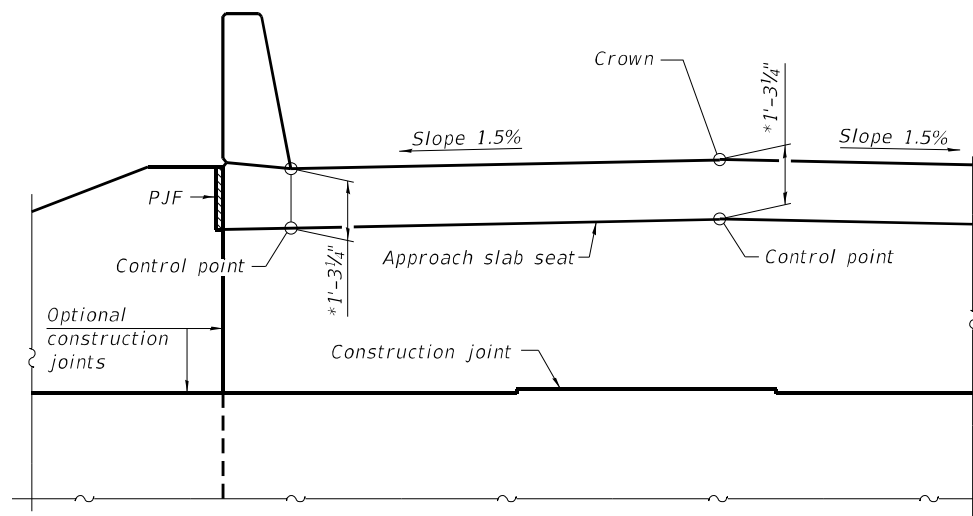
SECTION A-A

MIN. BAR LAP
#6 bar = 4'-0"

Notes:

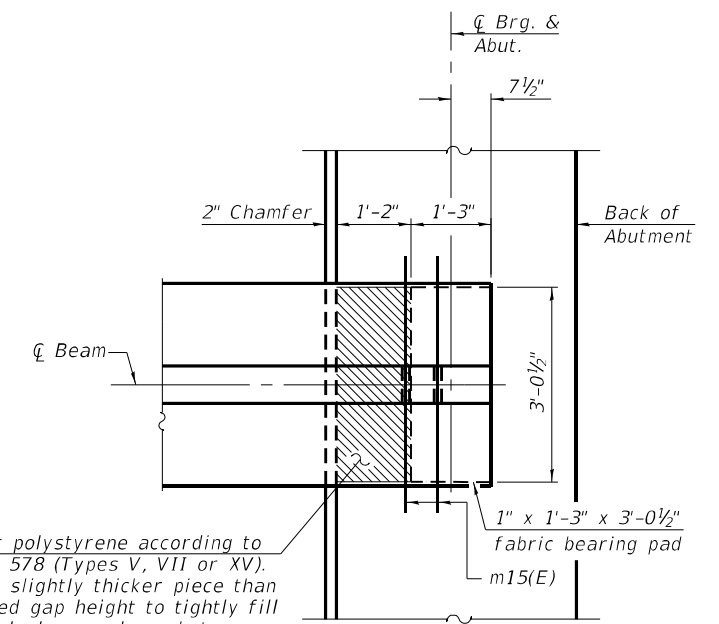
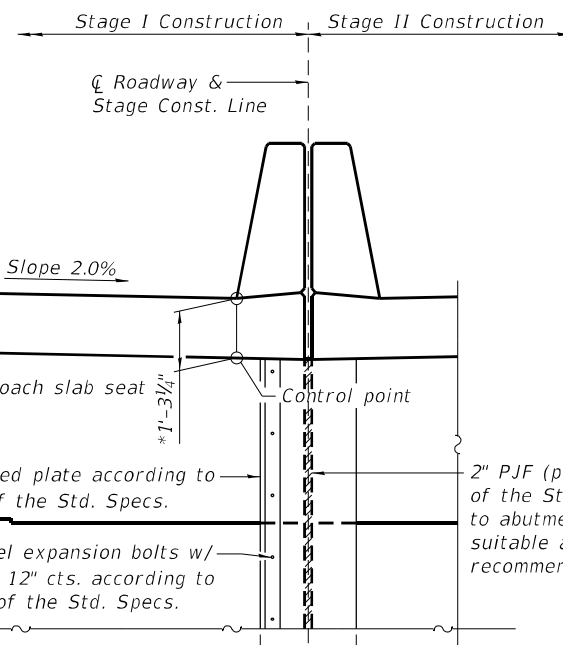
- See sheet 18 of 44 for superstructure details and Bill of Material.
- See sheets 21 thru 24 of 44 for P.J.F. details.
- The approach slab seat shall have a constant slope determined from the control points shown.
- Cost of cellular polystyrene is included with Concrete Superstructure.
- Bars indicated thus 4x2-#6 etc. indicates 4 lines of bars with 2 lengths per line.
- Cost of fabric reinforced elastomeric mat, galvanized plate, stainless steel expansion bolts with nuts & washers and installation are included with Concrete Superstructure.

* Prior to grinding



VIEW B-B

(N.B. North Abutment looking south shown; other abutments similar)



PLAN AT ABUTMENT

(Showing bottom flange of beam)

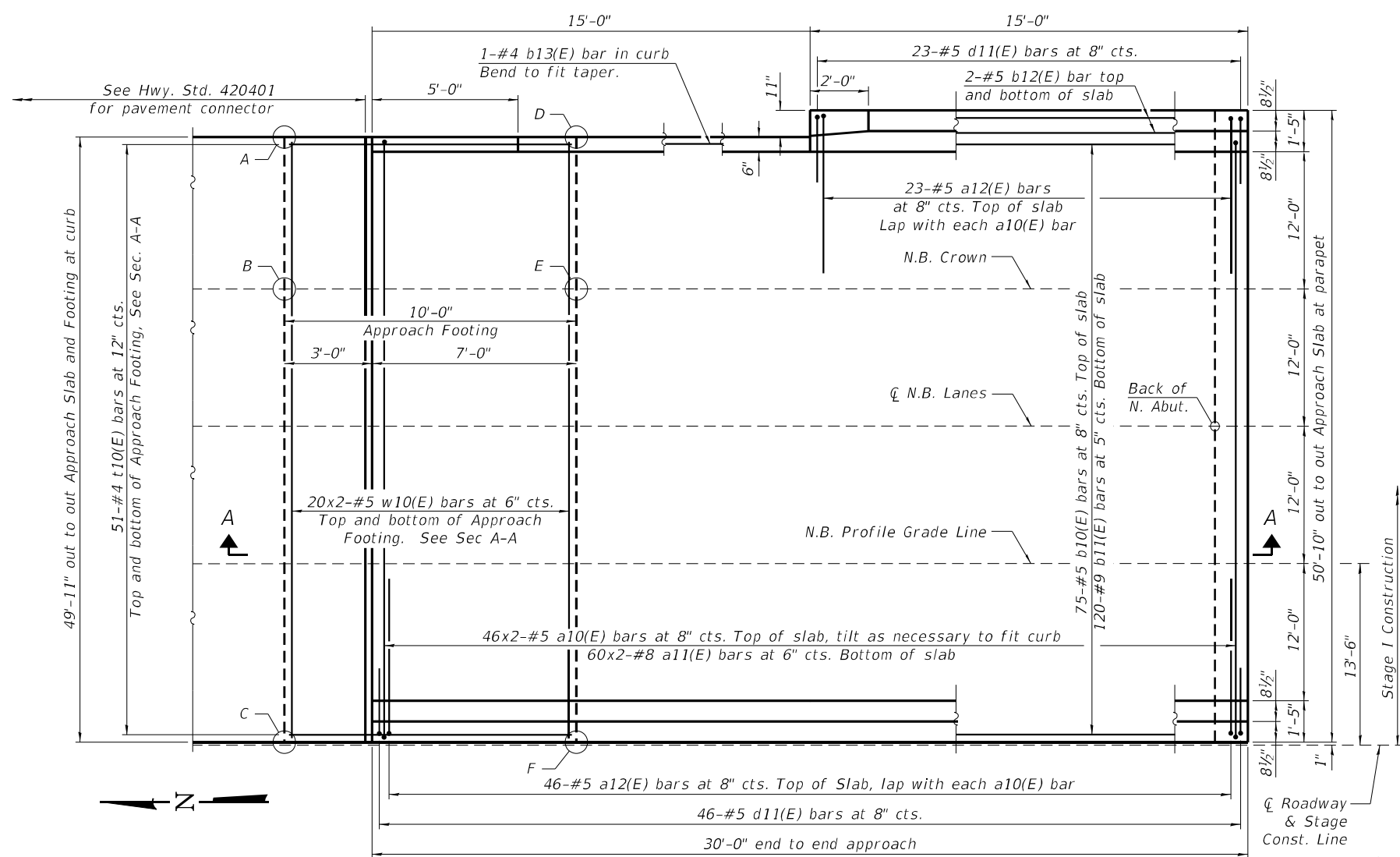
Cellular polystyrene according to ASTM C 578 (Types V, VII or XV). Provide slightly thicker piece than measured gap height to tightly fill the hatched area shown between abutment cap and bottom of beam.

Limits of fabric reinforced elastomeric mat according to Section 1028 of the Std. Specs. and installed according to applicable requirements of Article 520.09 of the Std. Specs.

MODEL: Default
FILE NAME: E:\1903\Struct\Final Design\Design\CADD_Sheets\0366F74-046-0158&0159-020-DiaphragmDetails.dgn

USER NAME =	DESIGNED - CL	REVISED -
PLOT SCALE =	CHECKED - MTH	REVISED -
PLOT DATE = 5/6/21	DRAWN - CGY	REVISED -
	CHECKED - MTH	REVISED -

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	133
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				



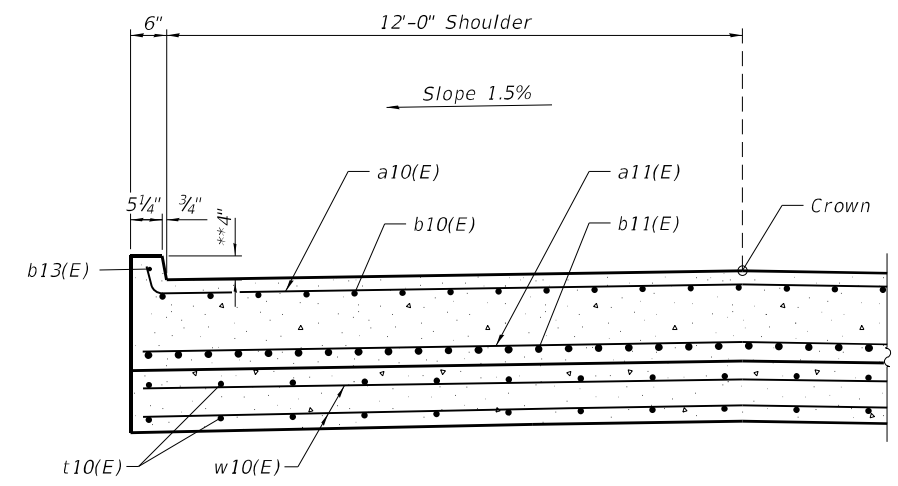
NORTH APPROACH PLAN - NORTHBOUND

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

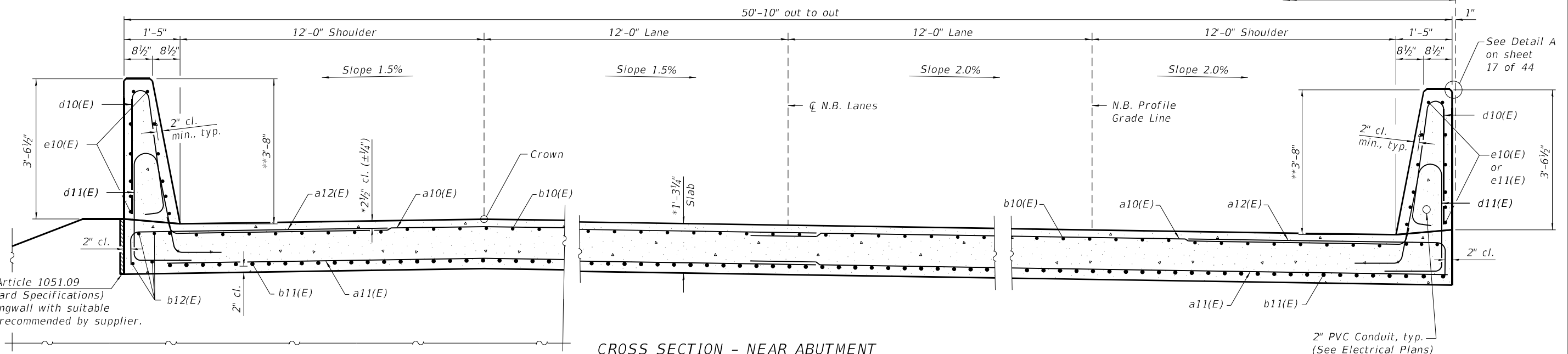
Point	North Approach	
	Top	Bottom
A	661.44	660.61
B	661.63	660.80
C	660.94	660.11
D	661.63	660.80
E	661.82	660.98
F	661.13	660.30

MIN. BAR LAP

#5 bar = 3'-6"
#8 bar = 4'-9"



PARTIAL CROSS SECTION - NEAR APPROACH FOOTING
(Looking South)



CROSS SECTION - NEAR ABUTMENT
(Looking South)

(Sheet 1 of 5)

MODEL: Default
FILE NAME: E:\1903\Struct\Final Design\Design Sheets\0366F74-046-0158&0159-021-BridgeApproachSlabDetails.dgn



USER NAME =	DESIGNED - CL	REVISED -
PLOT SCALE =	CHECKED - MTH	REVISED -
PLOT DATE = 5/6/21	DRAWN - CGY	REVISED -
	CHECKED - MTH	REVISED -

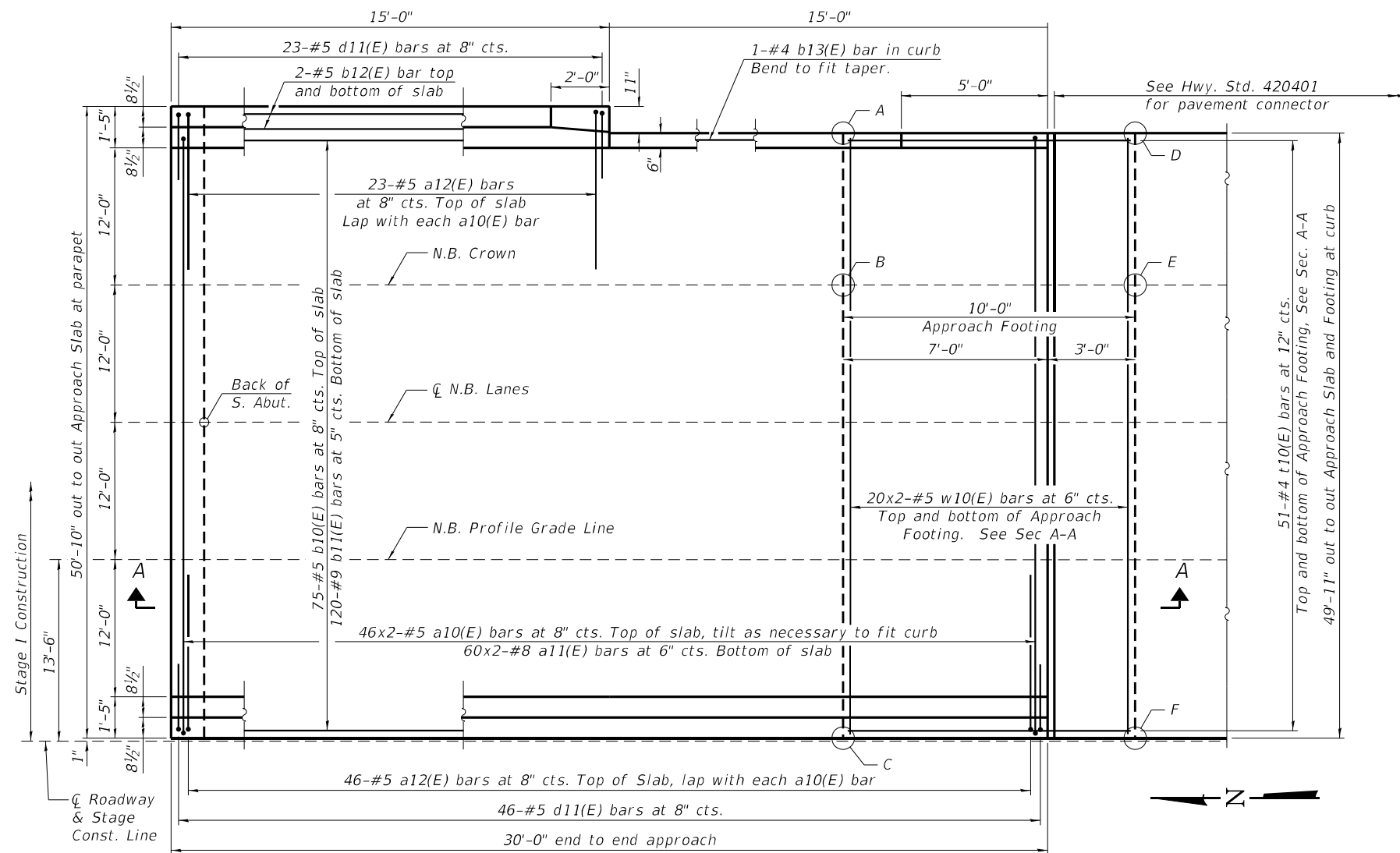
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)**

SHEET 21 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	134
CONTRACT NO. 66F74				

ILLINOIS FED. AID PROJECT

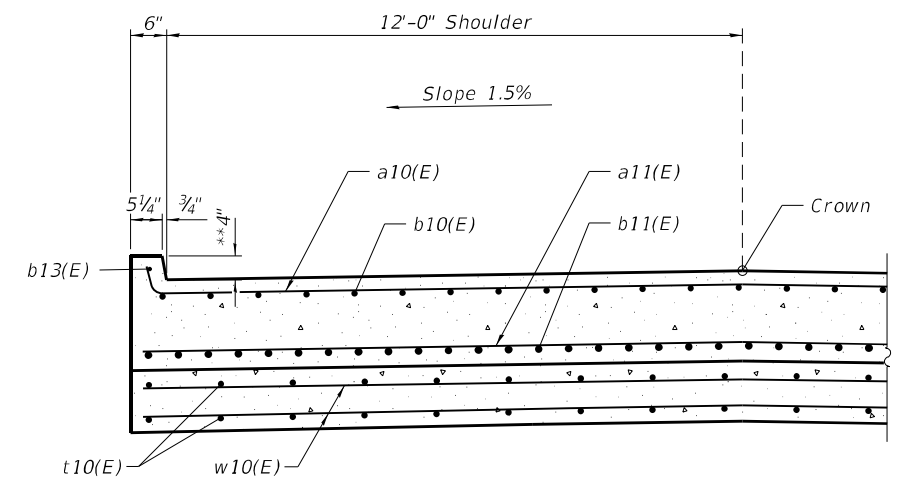


SOUTH APPROACH PLAN - NORTHBOUND

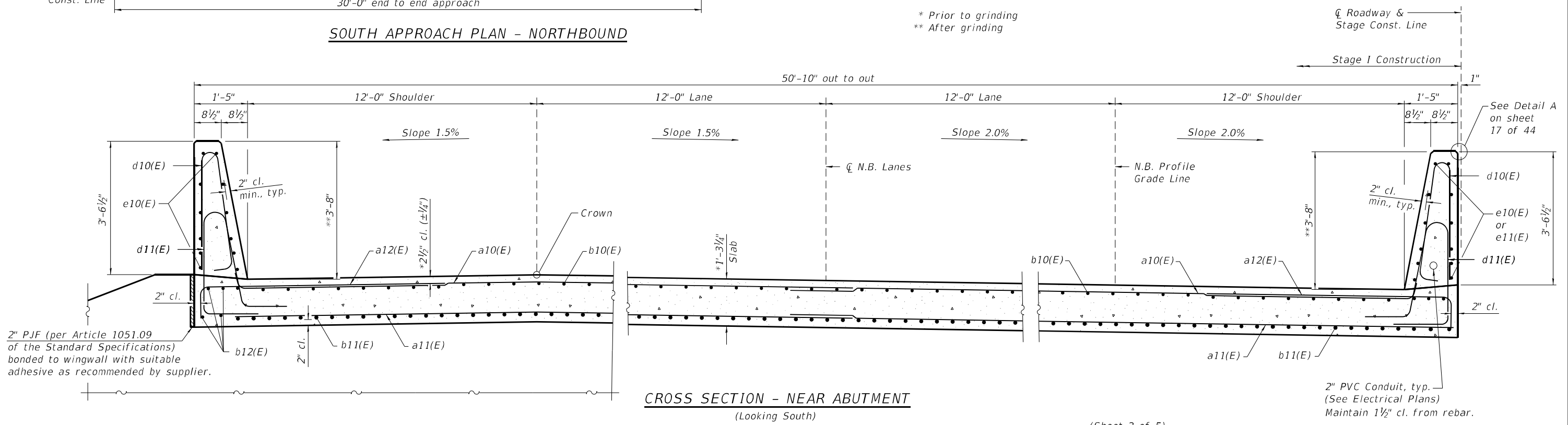
TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

South Approach		
Point	Top	Bottom
A	664.75	663.92
B	664.94	664.10
C	664.25	663.42
D	664.87	664.04
E	665.06	664.22
F	664.37	663.54

MIN. BAR LAP
 #5 bar = 3'-6"
 #8 bar = 4'-9"



PARTIAL CROSS SECTION - NEAR APPROACH FOOTING
 (Looking South)



CROSS SECTION - NEAR ABUTMENT
 (Looking South)

(Sheet 2 of 5)

MODEL: Default
 FILE NAME: E:\1903\Struct\Final Design\CADD_Sheets\0158&0159-022-BridgeApproachSlabDetails.dgn
 5/6/2021 2:27:00 PM

LE LIN ENGINEERING, LTD.
 Consulting Engineers
 Springfield, Illinois

USER NAME =	DESIGNED - CL	REVISED -
PLOT SCALE =	CHECKED - MTH	REVISED -
PLOT DATE = 5/6/21	DRAWN - CGY	REVISED -
	CHECKED - MTH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)

SHEET 22 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	135
CONTRACT NO. 66F74				

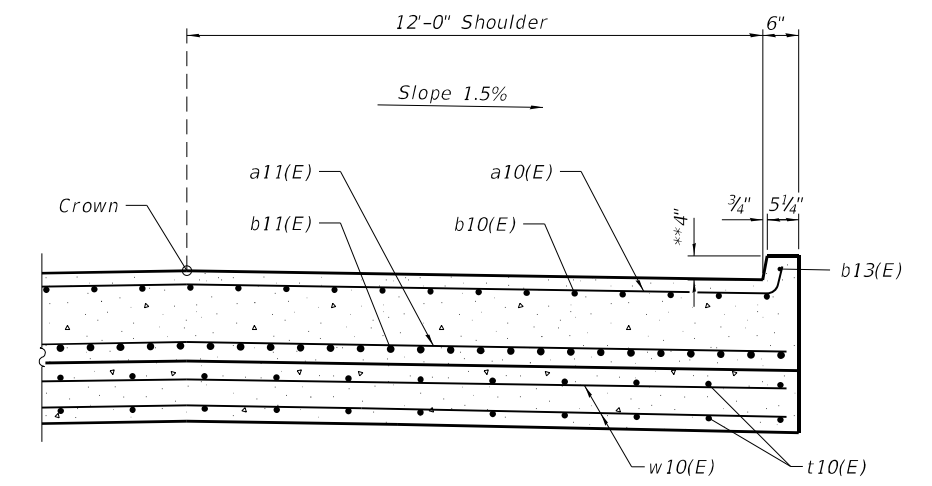
ILLINOIS FED. AID PROJECT

**TOP AND BOTTOM ELEVATIONS
FOR APPROACH FOOTING**

Point	North Approach	
	Top	Bottom
A	660.94	660.11
B	661.63	660.80
C	661.44	660.61
D	661.13	660.30
E	661.82	660.98
F	661.63	660.80

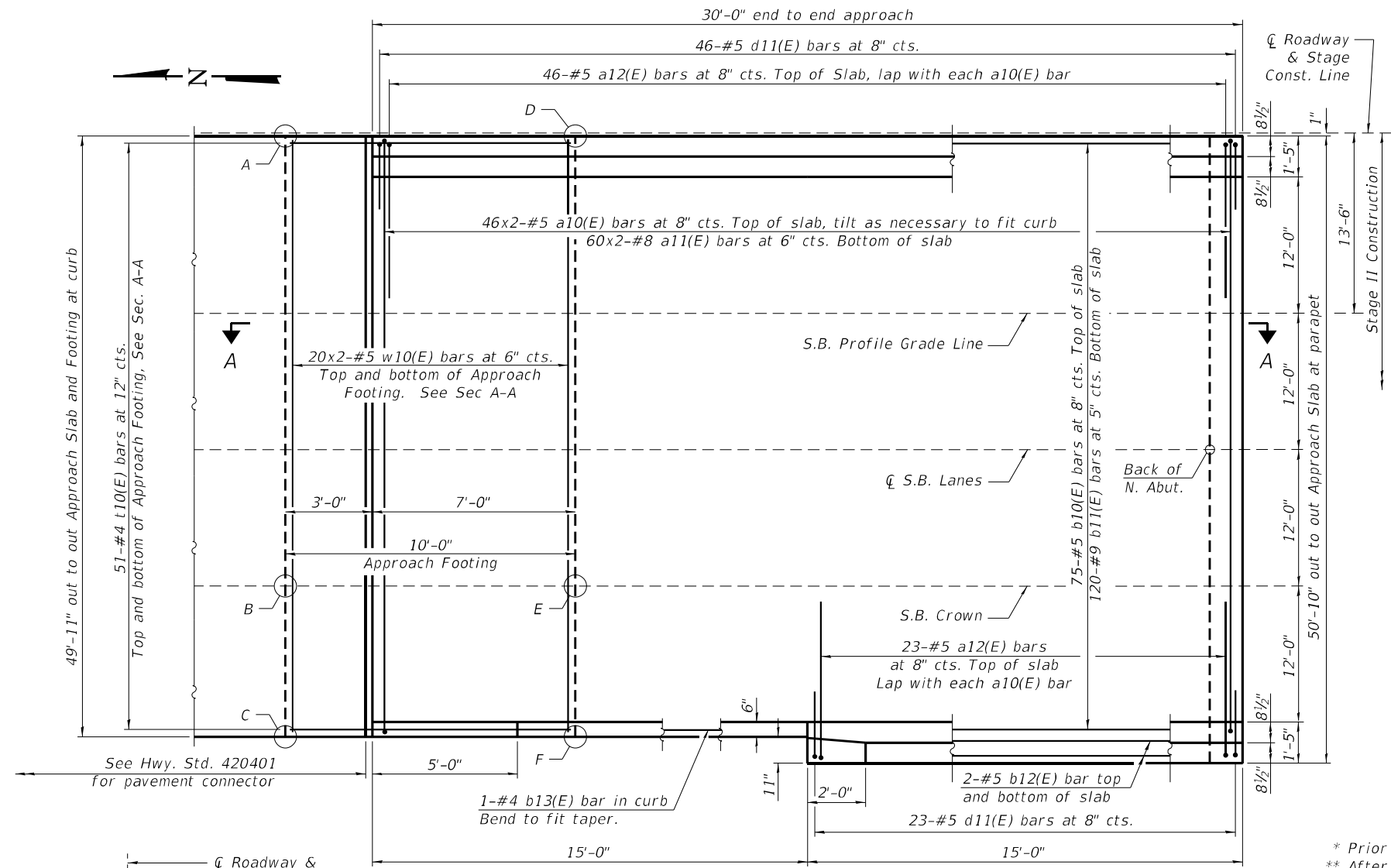
MIN. BAR LAP

#5 bar = 3'-6"
#8 bar = 4'-9"

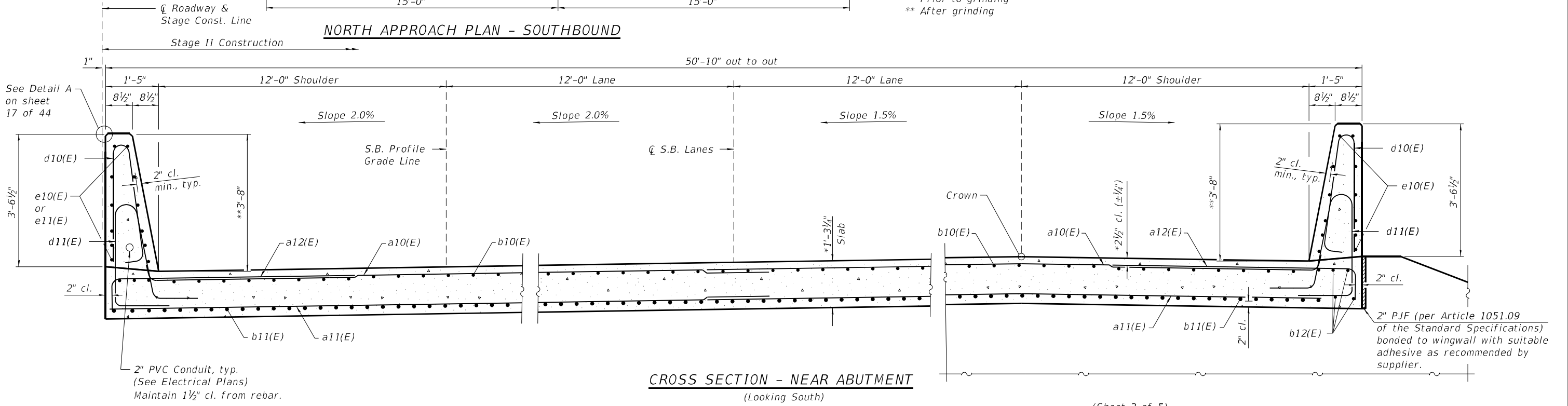


PARTIAL CROSS SECTION - NEAR APPROACH FOOTING
(Looking South)

* Prior to grinding
** After grinding



NORTH APPROACH PLAN - SOUTHBOUND



CROSS SECTION - NEAR ABUTMENT
(Looking South)

(Sheet 3 of 5)

MODEL: Default
 FILE NAME: E:\1903\Struct\Final Design\Design Plans\CADD_Sheets\0366F74-046-0158&0159-023-8-RidgeApproachSlabDetails.dgn



USER NAME =	DESIGNED - CL	REVISED -
PLOT SCALE =	CHECKED - MTH	REVISED -
PLOT DATE = 5/6/21	DRAWN - CGY	REVISED -
	CHECKED - MTH	REVISED -

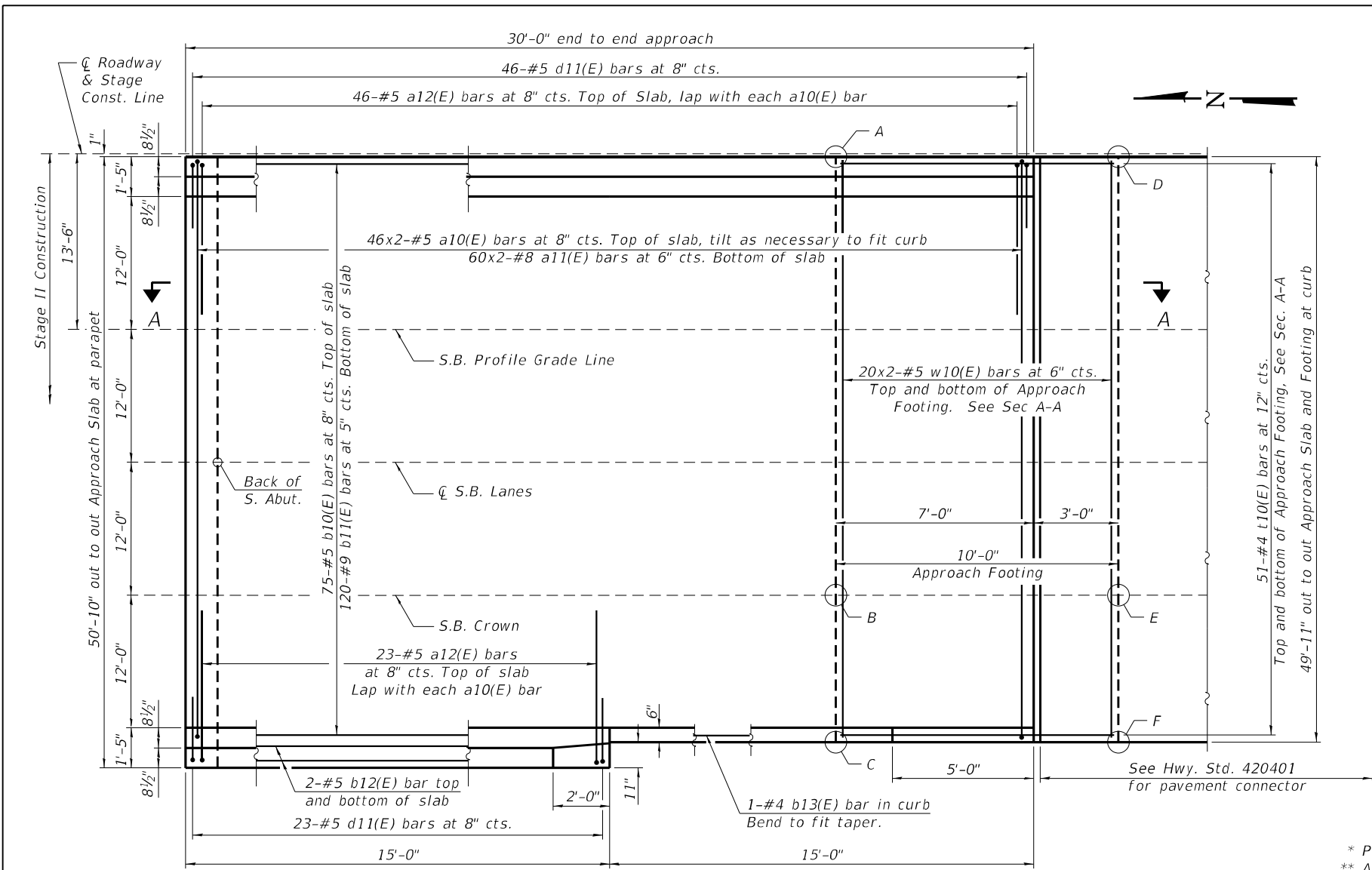
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)**

SHEET 23 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	136
CONTRACT NO. 66F74				

ILLINOIS FED. AID PROJECT

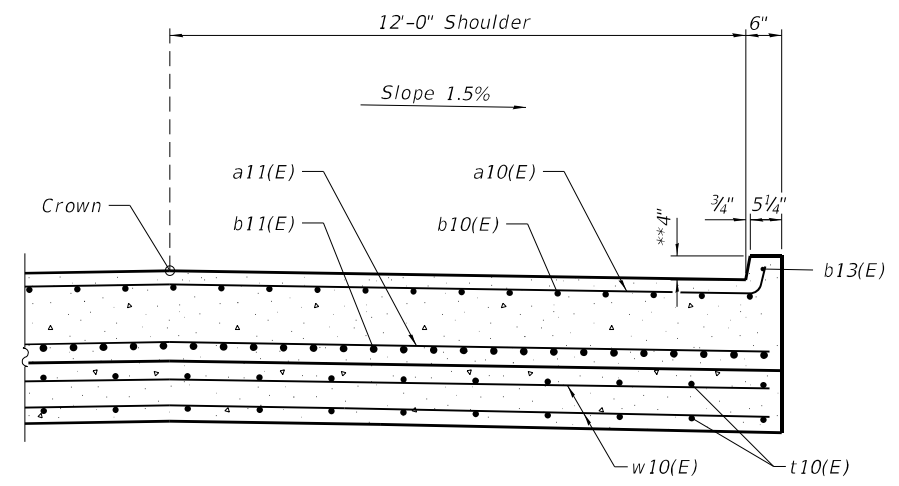


SOUTH APPROACH PLAN - SOUTHBOUND

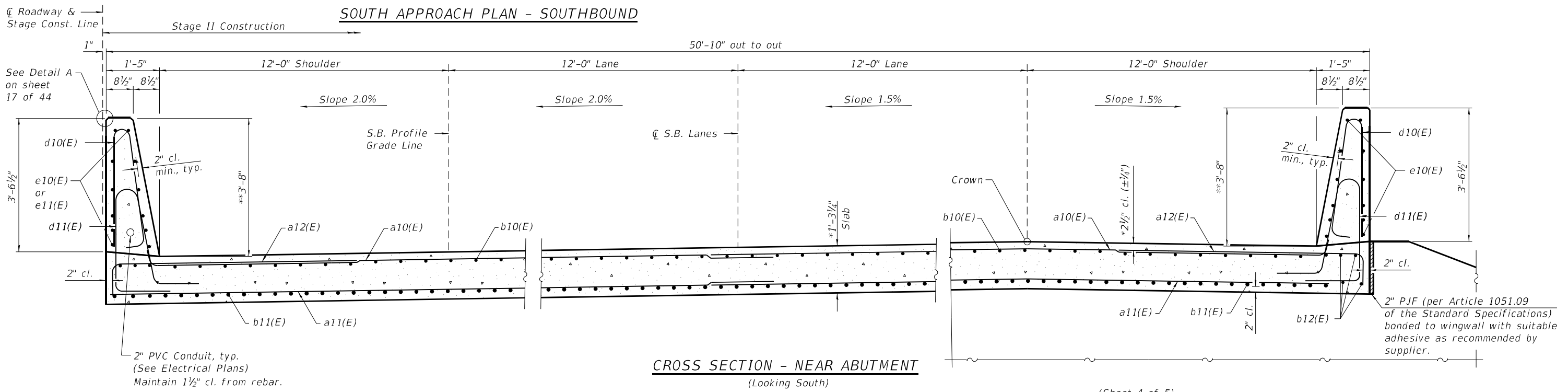
TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

Point	South Approach	
	Top	Bottom
A	664.25	663.42
B	664.94	664.10
C	664.75	663.92
D	664.37	663.54
E	665.06	664.22
F	664.87	664.04

MIN. BAR LAP
 #5 bar = 3'-6"
 #8 bar = 4'-9"



PARTIAL CROSS SECTION - NEAR APPROACH FOOTING
(Looking South)



CROSS SECTION - NEAR ABUTMENT
(Looking South)

(Sheet 4 of 5)

MODEL: Default
 FILE NAME: E:\1903\Struct\Final Design\Plans\CADD_Sheets\0366F74-046-0158&0159-024-BridgeApproachSlabDetails.dgn

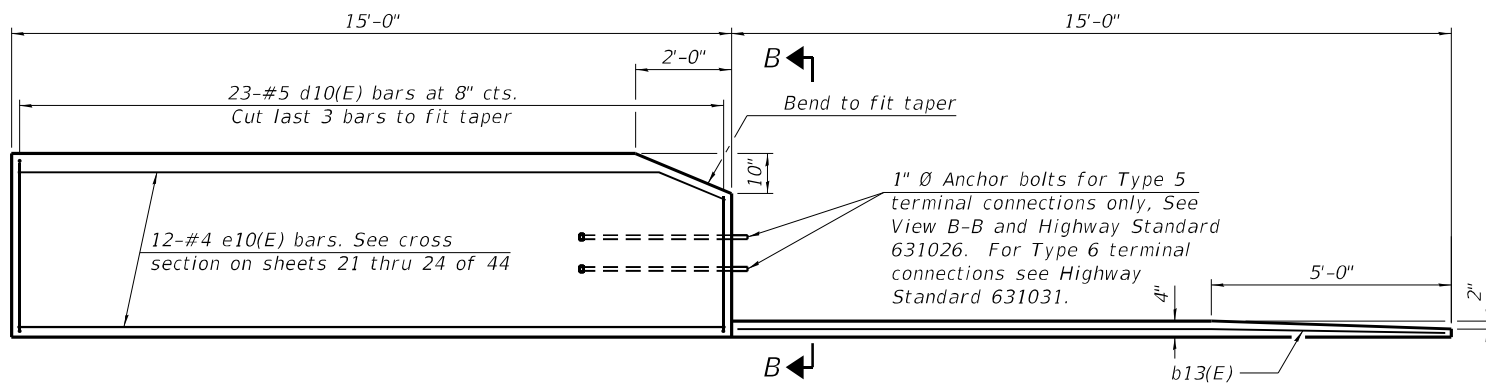
	USER NAME =	DESIGNED - CL	REVISED -
	CONSULTING ENGINEERS	CHECKED - MTH	REVISED -
	Springfield, Illinois	DRAWN - CGY	REVISED -
		CHECKED - MTH	REVISED -
	PLOT SCALE =		
	PLOT DATE = 5/6/21		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

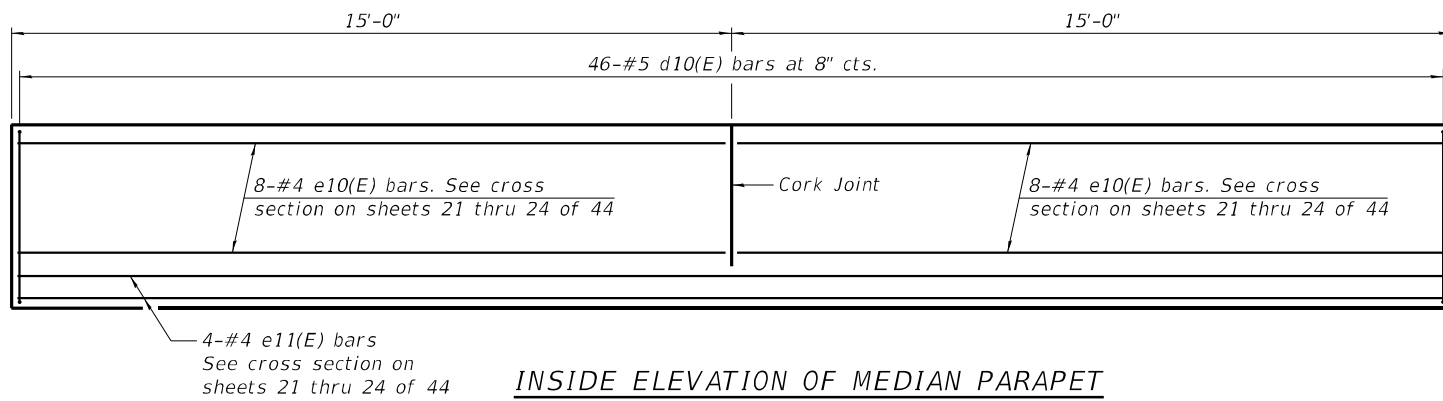
BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	137
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				

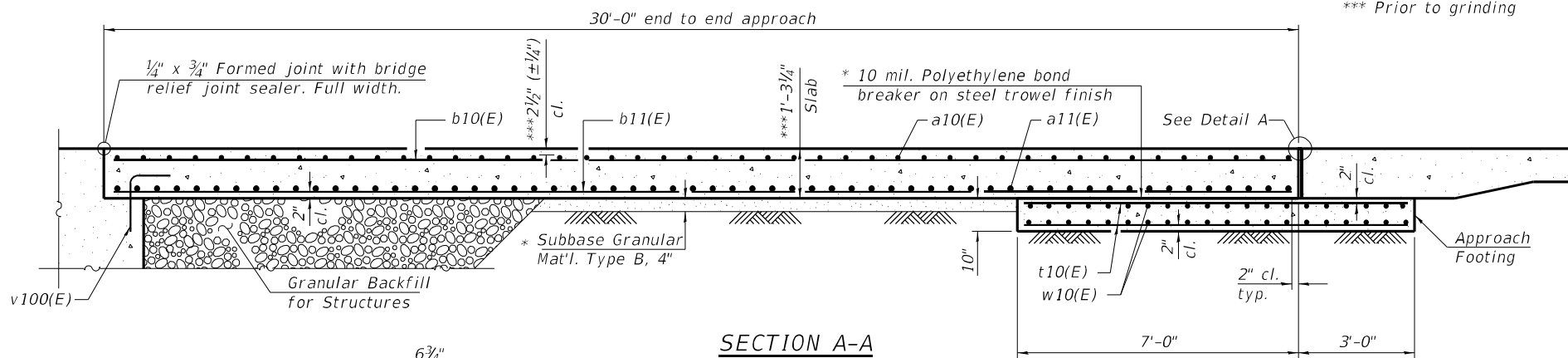
SHEET 24 OF 44 SHEETS



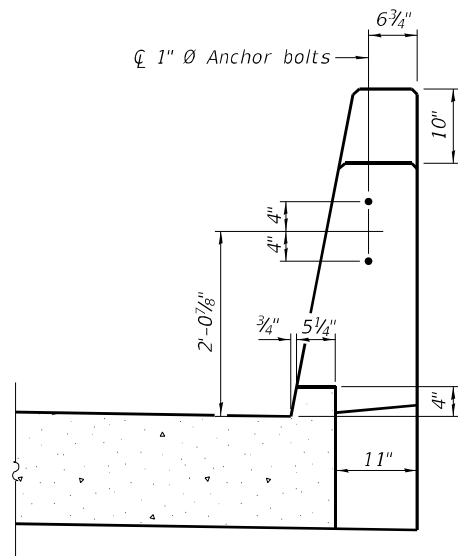
INSIDE ELEVATION OF EXTERIOR PARAPET AND CURB



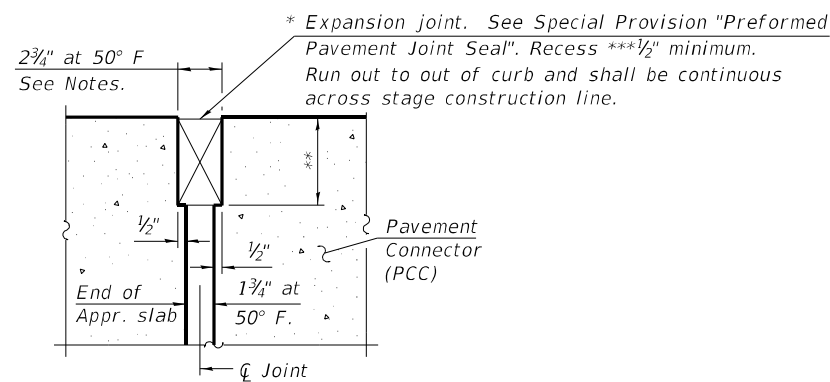
INSIDE ELEVATION OF MEDIAN PARAPET



SECTION A-A

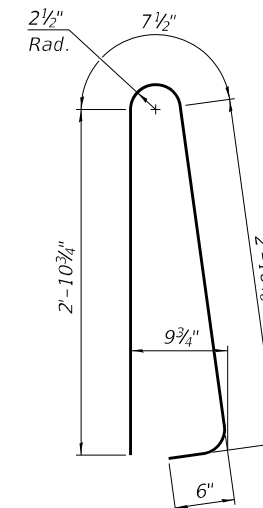


VIEW B-B

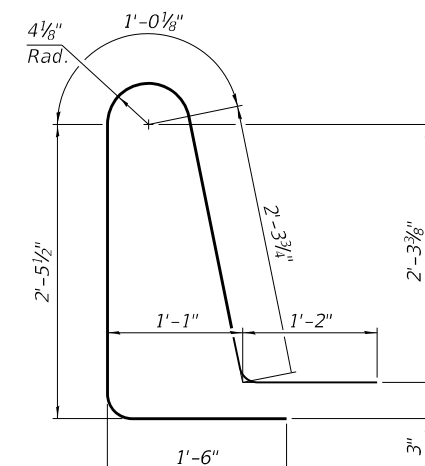


DETAIL A

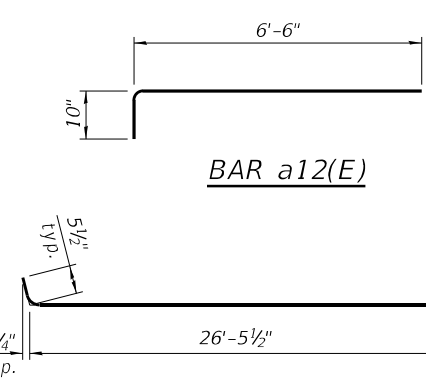
Notes:
 The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach 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 (Qmax) = 2.0 ksf.
 Cost of excavation for approach footing included with Concrete Structures.
 For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 44.
 See sheet 17 of 44 for parapet joint details.
 The pay item Diamond Grinding (Bridge Section) includes quantity for grinding the approach pavement connectors. See special provisions.



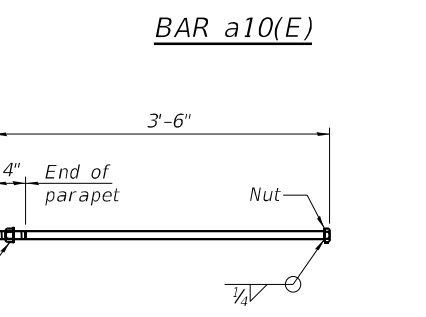
BAR d10(E)



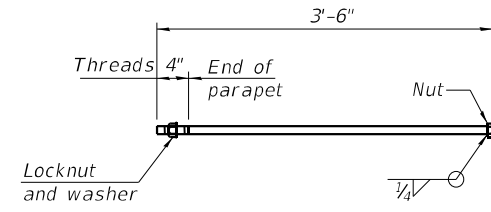
BAR d11(E)



BAR a12(E)



BAR a10(E)



*** 1" Ø ANCHOR BOLT**
 (Anchor bolt assemblies shall be galvanized according to Article 1006.09 of the Standard Specifications)

**FOUR APPROACHES
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a10(E)	368	#5	26'-11"	—
a11(E)	480	#8	27'-3"	—
a12(E)	276	#5	7'-4"	—
b10(E)	300	#5	29'-8"	—
b11(E)	480	#9	29'-8"	—
b12(E)	16	#5	14'-8"	—
b13(E)	4	#4	14'-8"	—
d10(E)	276	#5	7'-0"	U
d11(E)	276	#5	8'-6"	U
e10(E)	112	#4	14'-8"	—
e11(E)	16	#4	29'-8"	—
t10(E)	408	#4	9'-8"	—
w10(E)	320	#5	26'-7"	—
Concrete Superstructure			Cu. Yd.	25.4
Concrete Superstructure (Approach Slab)			Cu. Yd.	283.2
Concrete Structures			Cu. Yd.	61.8
Reinforcement Bars, Epoxy Coated			Pound	122740
Protective Coat			Sq. Yd.	736
Preformed Joint Seal 3/2"			Foot	60
Diamond Grinding (Bridge Section)			Sq. Yd.	882
Bridge Deck Grooving (Longitudinal)			Sq. Yd.	320

(Sheet 5 of 5)

MODEL: Default
 FILE NAME: E:\1903\Struct\Final Design\Design Plans\CADD_Sheets\0158&0159-025-BridgeApproachSlabDetails.dgn

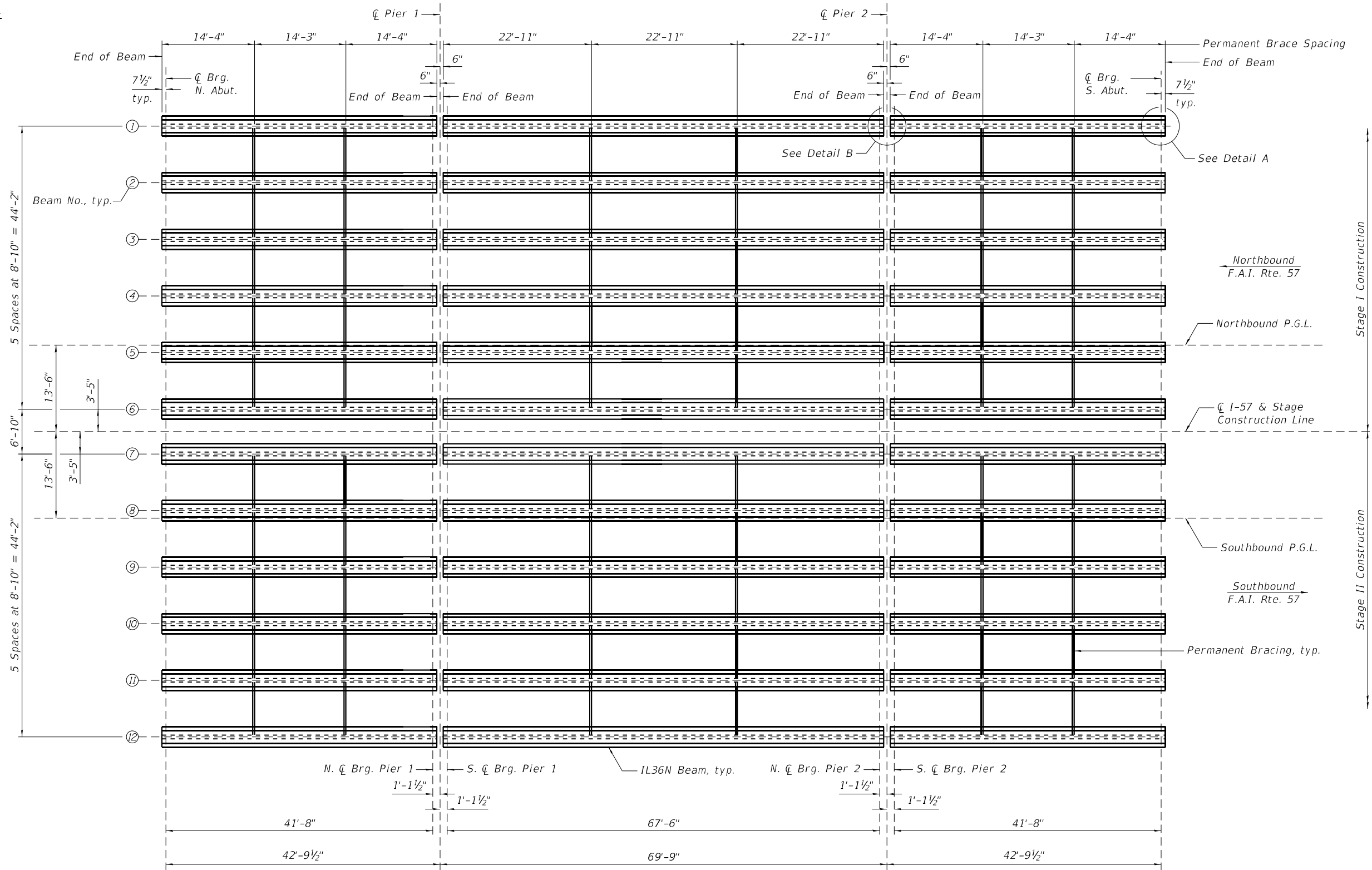
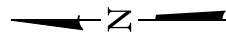
LE LIN ENGINEERING, LTD.
 Consulting Engineers
 Springfield, Illinois

USER NAME =	DESIGNED - CL	REVISED -
PLOT SCALE =	CHECKED - MTH	REVISED -
PLOT DATE = 5/6/21	DRAWN - CGY	REVISED -
	CHECKED - MTH	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS
 STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	138
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				



FRAMING PLAN

Note:
See Sheet 27 of 44 for Permanent Bracing Details, Detail A, Detail B, Interior Beam Moment Table and Beam Reaction Table.

(Sheet 1 of 2)

MODEL: Default
FILE NAME: E:\1903\Struct\Final Design\Design\Plans\CADD_Sheets\0366F74-046-0158&0159-026-FramingDetails.dgn

LE LIN ENGINEERING, LTD.
Consulting Engineers
Springfield, Illinois

USER NAME =	DESIGNED - CL	REVISED -
CHECKED - MTH	CHECKED - MTH	REVISED -
PLOT SCALE =	DRAWN - CGY	REVISED -
PLOT DATE = 5/6/21	CHECKED - MTH	REVISED -

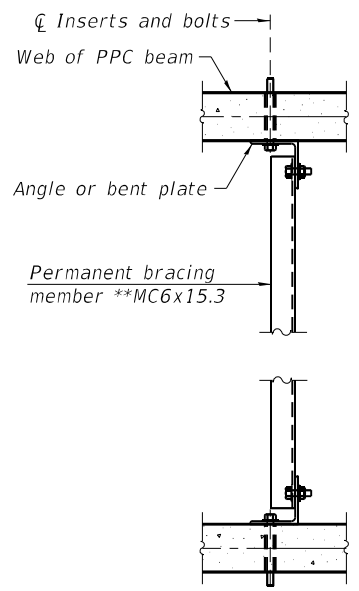
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING DETAILS
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)

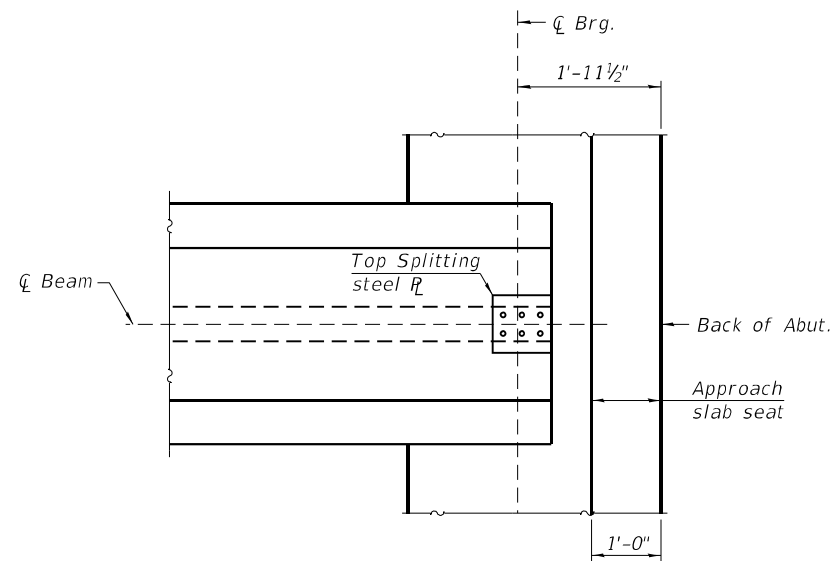
SHEET 26 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	139
CONTRACT NO. 66F74				

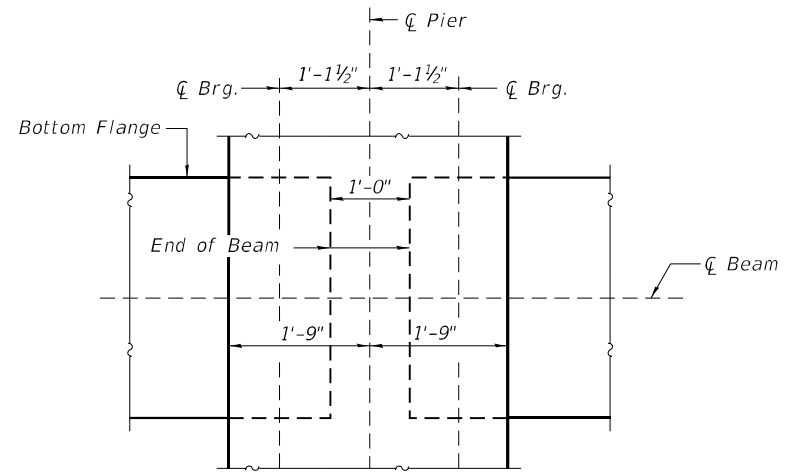
ILLINOIS FED. AID PROJECT



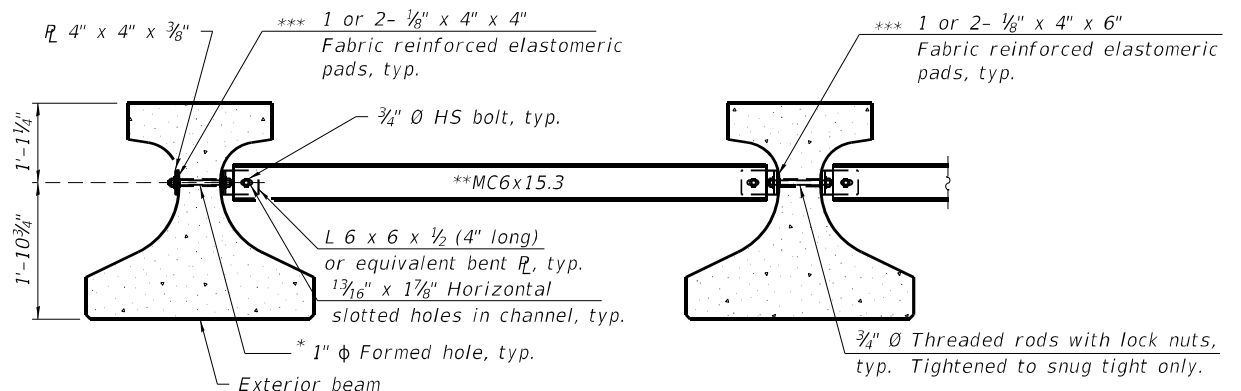
PLAN



DETAIL A



DETAIL B



PERMANENT BRACING DETAILS FOR IL36N BEAMS

Notes:
 All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted.
 Two hardened washers are required for each set of oversized holes.
 All holes shall be 1 5/16" Ø unless otherwise noted.
 3/16" x 3" x 3" plate washers are required over all slotted holes.
 All bolts, threaded rods, and hardware shall be galvanized according to AASHTO M232.
 Threaded rods shall be ASTM F 1554 Grade 55.
 Bracing shall be installed as beams are erected and tightened as soon as possible during erection.
 Permanent bracing shall not be paid for separately, but shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete Beams, IL36N.

* Fabricator shall locate to miss strands within permissible tolerances.
 ** Alternate MC6x18 channels are permitted to facilitate material acquisition.
 *** Place pads as necessary to provide a flat mounting surface between the steel and concrete.

INTERIOR BEAM MOMENT TABLE				
		0.4 Sp. 1 0.6 Sp. 3	Pier 1 or 2	0.5 Sp. 2
I	(in ⁴)	100433	100433	100433
I'	(in ⁴)	325758	325758	325758
Sb	(in ³)	6832	6832	6832
Sb'	(in ³)	12182	12182	12182
St	(in ³)	4715	4715	4715
St'	(in ³)	35179	35179	35179
DC1	(k/')	1.700	1.700	1.700
MDC1	('k)	354	0	968
DC2	(k/')	0.190	0.190	0.190
MDC2	('k)	16	-64	50
DW	(k/')	0.442	0.442	0.442
MDW	('k)	33	-134	106
LLDF		0.847	0.847	0.745
M _L + IM	('k)	560	-622	717

I: Non-composite moment of inertia of beam section (in.⁴).
 I': Composite moment of inertia of beam section (in.⁴).
 Sb: Non-composite section modulus for the bottom fiber of the prestressed beam (in.³).
 Sb': Composite section modulus for the bottom fiber of the prestressed beam (in.³).
 St: Non-composite section modulus for the top fiber of the prestressed beam (in.³).
 St': Composite section modulus for the top fiber of the prestressed beam (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_L + IM: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
 LLDF: Live Load Distribution Factor.

BEAM REACTION TABLE							
		Abut.		Pier 1 Span 1 Pier 2 Span 3		Pier 1 Span 2 Pier 2 Span 2	
		Interior	Exterior	Interior	Exterior	Interior	Exterior
LLDF		0.885	0.781	0.885	0.781	0.885	0.781
RDC1	(k)	35.4	33.1	35.4	33.1	57.3	53.5
RDC2	(k)	2.5	2.5	6.1	6.1	6.1	6.1
RDW	(k)	5.3	5.3	12.9	12.9	12.9	12.9
R _L + IM	(k)	74.4	65.7	60.3	53.2	60.3	53.2
RTotal	(k)	117.6	106.6	114.7	105.3	136.6	125.7

⊕ At continuous piers, reactions from composite loads are assumed to be equally distributed to each bearing line.

(Sheet 2 of 2)

MODEL: Default
 FILE NAME: E:\1903\Struct\Final Design\Design Plans\CADD_Sheets\0366F74-046-0158&0159-027-FramingDetails.dgn

LE LIN ENGINEERING, LTD. Consulting Engineers Springfield, Illinois	USER NAME =	DESIGNED - CL	REVISED -
	PLOT SCALE =	CHECKED - MTH	REVISED -
	PLOT DATE = 5/6/21	DRAWN - CGY	REVISED -
		CHECKED - MTH	REVISED -

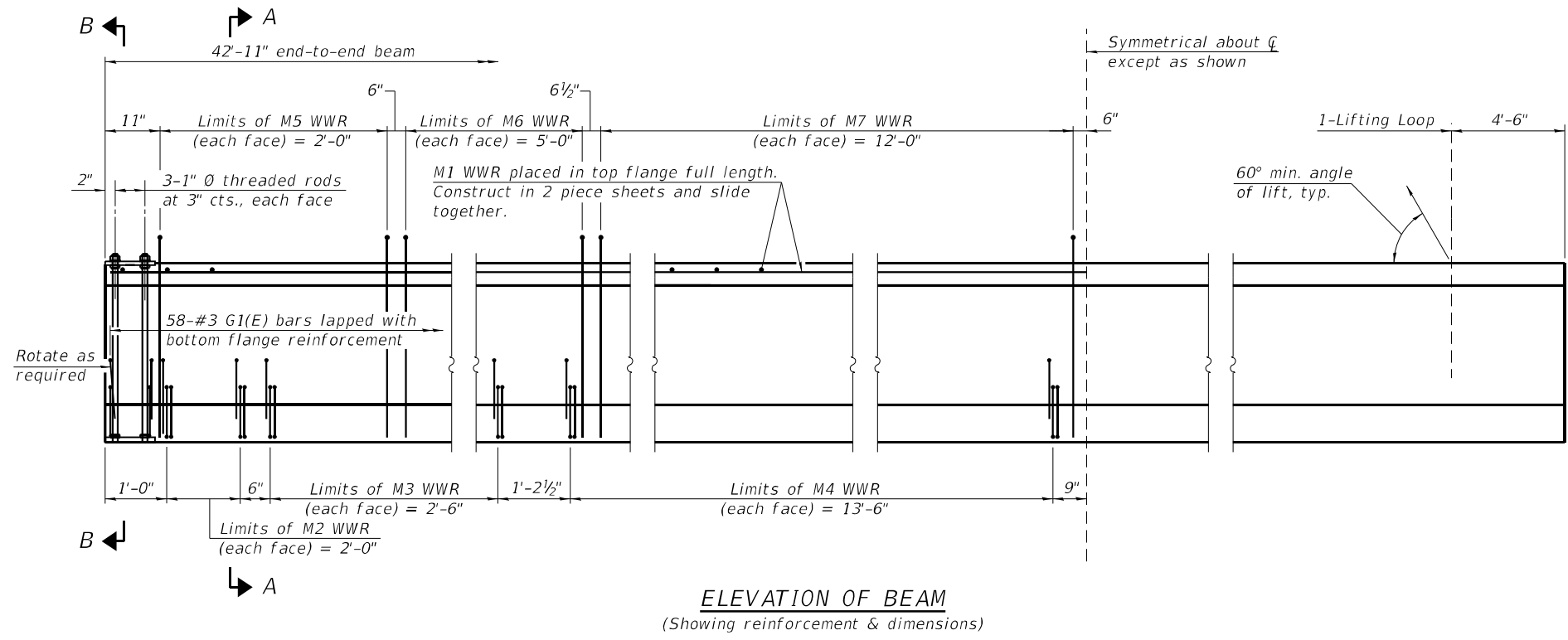
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

FRAMING DETAILS
 STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)

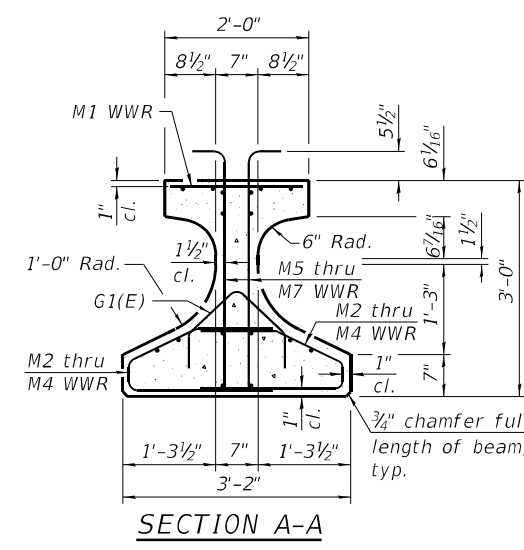
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	140
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				

SHEET 27 OF 44 SHEETS

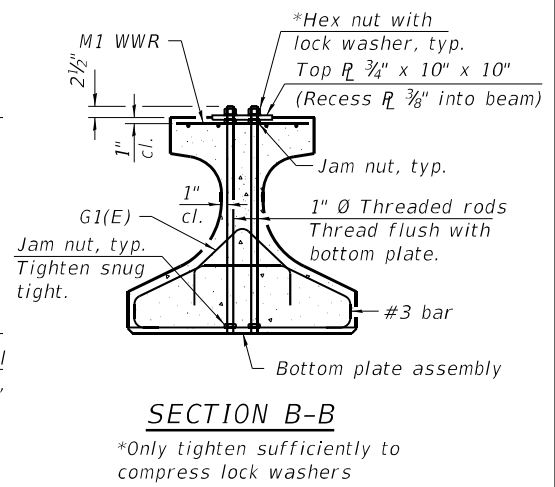
MODEL: Default
 FILE NAME: E:\1903\Struct\Final Design\CADD_Sheets\1L36Beam.dgn



ELEVATION OF BEAM
 (Showing reinforcement & dimensions)

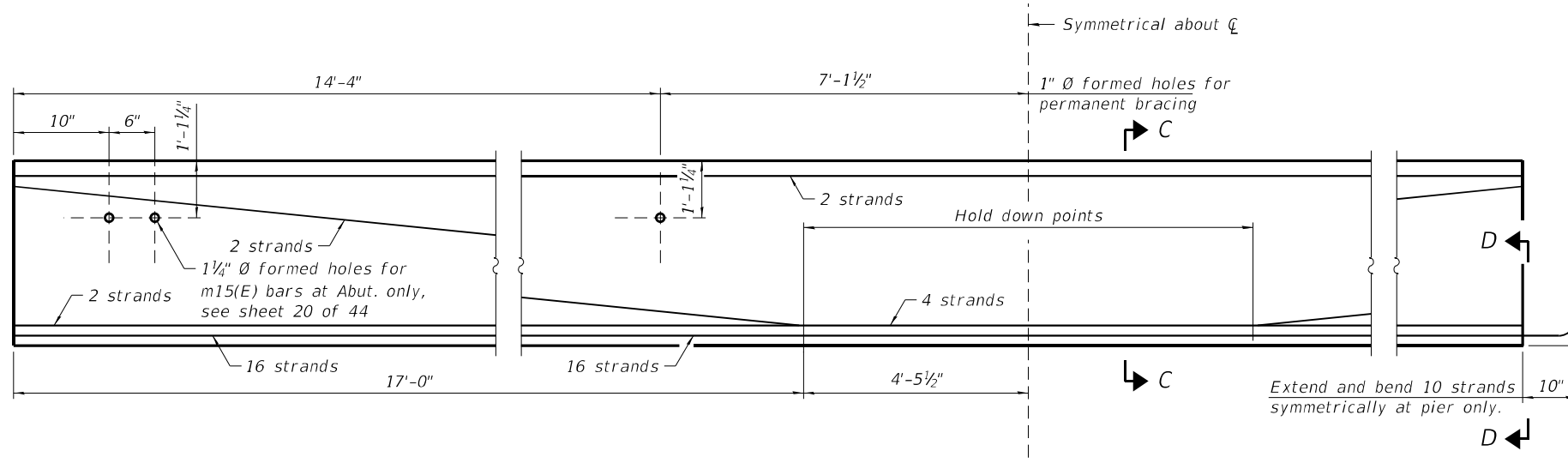


SECTION A-A

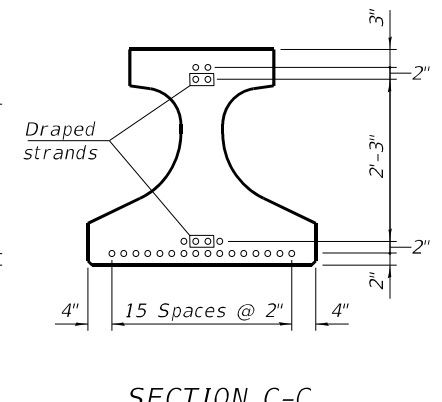


SECTION B-B

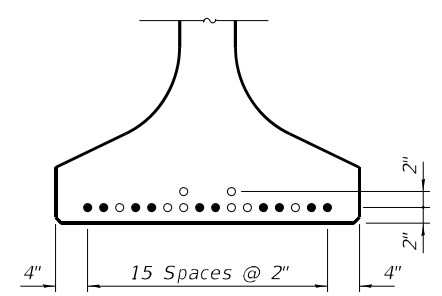
*Only tighten sufficiently to compress lock washers



ELEVATION OF BEAM
 (Showing prestressing steel)



SECTION C-C
 (22-0.6" Ø 270 ksi strands)



VIEW D-D

- Fully bonded strand
- Extended and bent strand (at pier only)

SPANS 1 AND 3
 1L36-2438 Beam
 Strand Pattern = 20B-2T-0db-2d

Note:
 See sheet 30 of 44 for additional details and Bill of Material.



USER NAME =	DESIGNED - CL	REvised -
PLOT SCALE =	CHECKED - MTH	REvised -
PLOT DATE = 5/6/21	DRAWN - CGY	REvised -
	CHECKED - MTH	REvised -

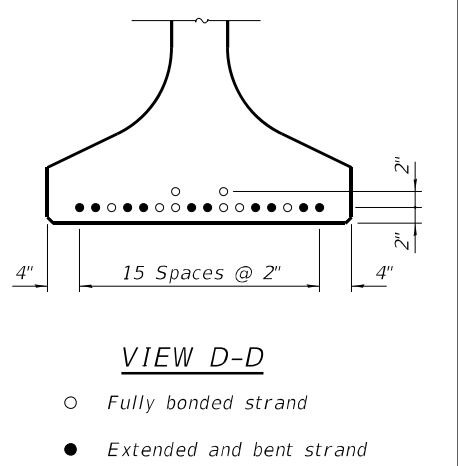
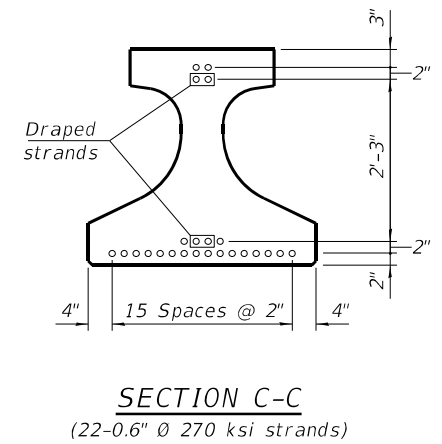
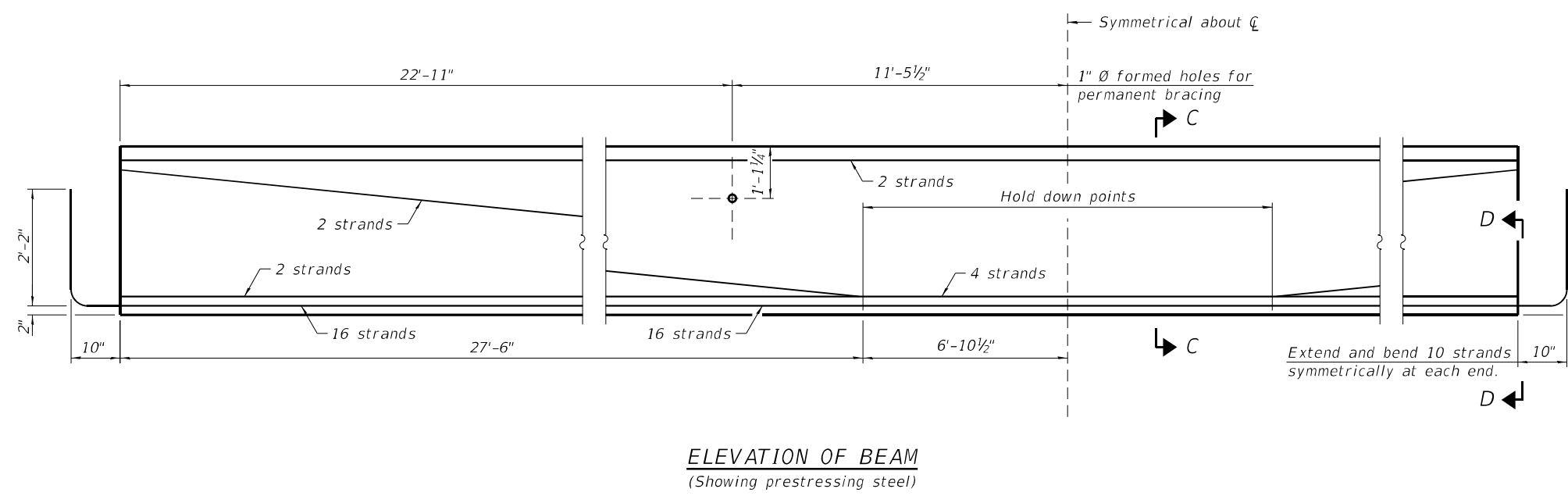
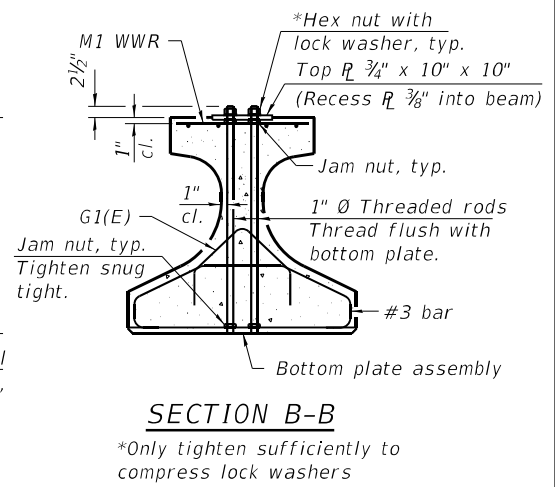
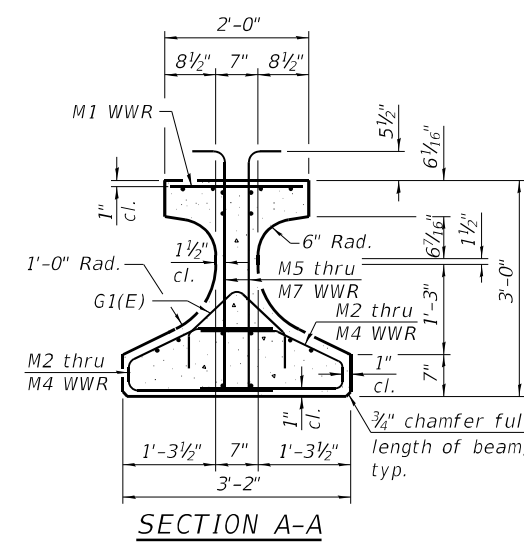
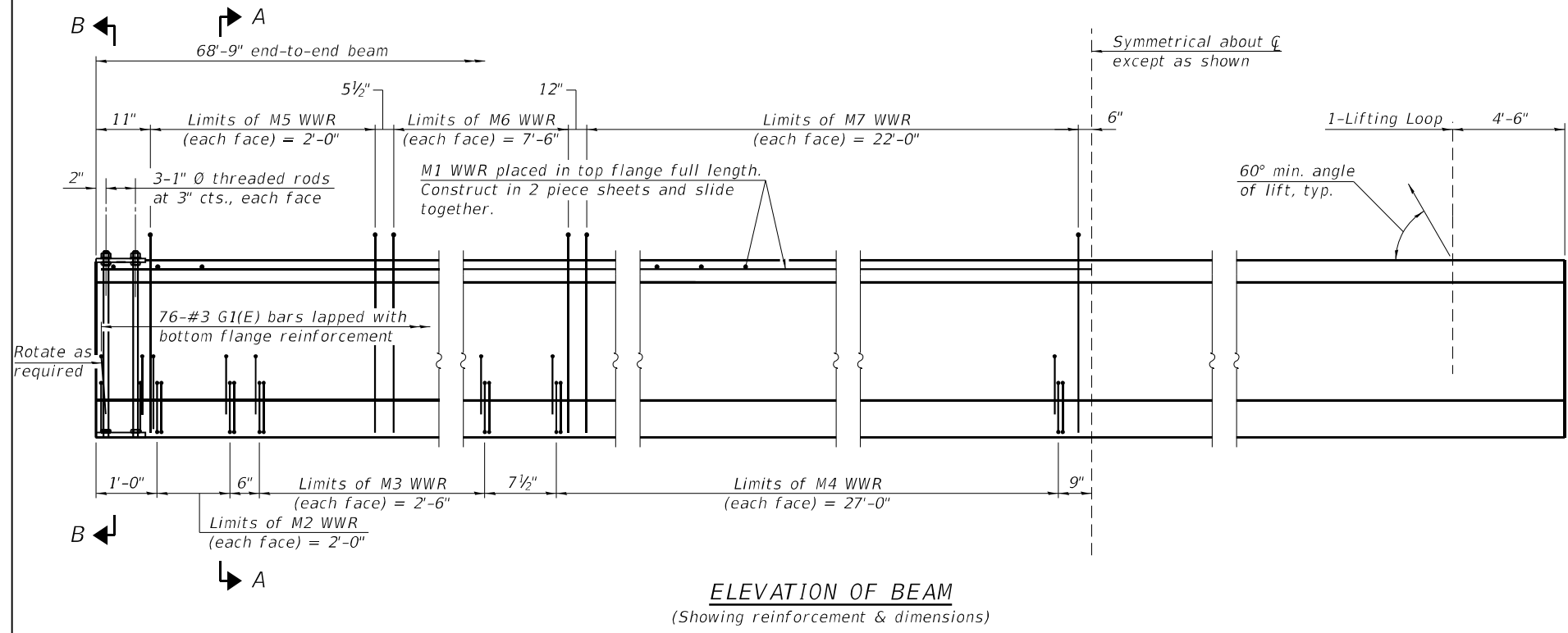
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL36N BEAM SPANS 1 AND 3
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)

SHEET 28 OF 44 SHEETS

F.A.I. RTE. 57	SECTION [(139)VB,HB-3]BR,139R	COUNTY KANKAKEE	TOTAL SHEETS 252	SHEET NO. 141
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				

MODEL: Default
 FILE NAME: E:\1903\Struct\Final Design\Sheets\0158&0159-029-IL36Beam.dgn



SPAN 2
 IL36-2438 Beam
 Strand Pattern = 20B-2T-0db-2d

Note:
 See sheet 30 of 44 for additional details and Bill of Material.

LE LIN ENGINEERING, LTD.
 Consulting Engineers
 Springfield, Illinois

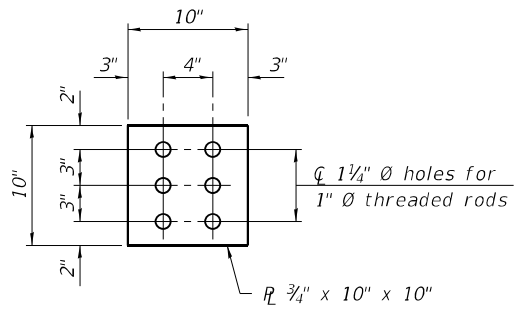
USER NAME =	DESIGNED - CL	REVISED -
PLOT SCALE =	CHECKED - MTH	REVISED -
PLOT DATE = 5/6/21	DRAWN - CGY	REVISED -
	CHECKED - MTH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

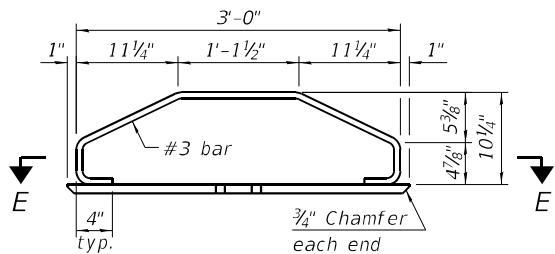
IL36N BEAM SPAN 2
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)

SHEET 29 OF 44 SHEETS

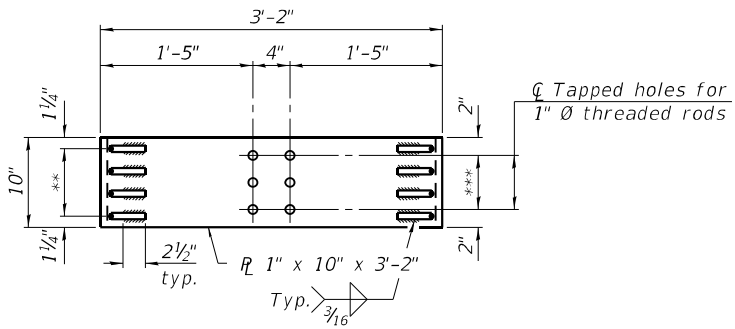
F.A.I. RTE. 57	SECTION [(139)VB,HB-3]BR,139R	COUNTY KANKAKEE	TOTAL SHEETS 252	SHEET NO. 142
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				



PLAN - TOP PLATE

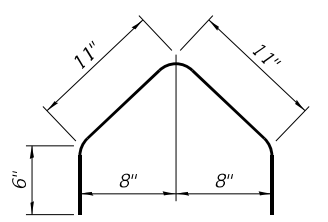


ELEVATION - BOTTOM PLATE ASSEMBLY

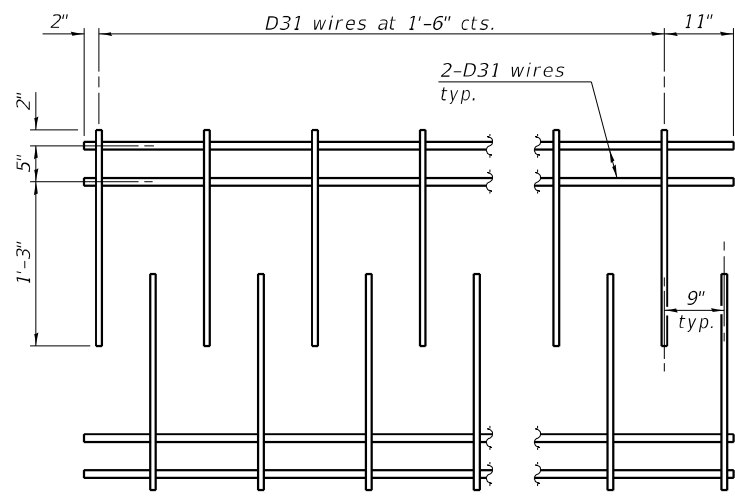


SECTION E-E

** 3 Spaces at 2 1/2" = 7 1/2"
 *** 2 Spaces at 3" = 6"

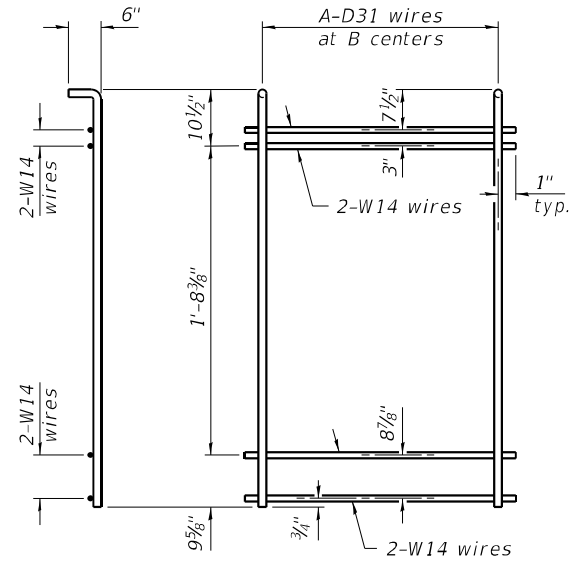


BAR G1(E)



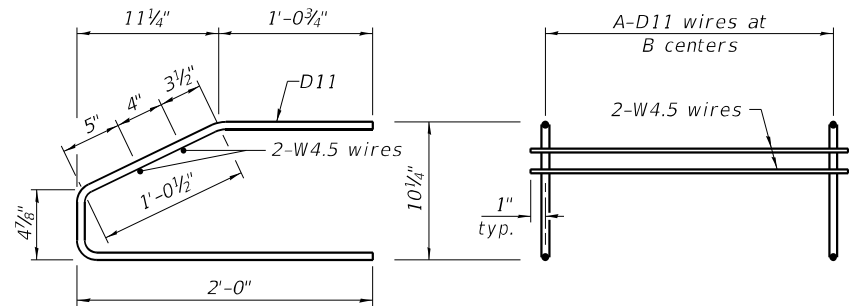
M1 WWR DETAIL

When multiple sheets of M1 WWR are required along the beam length, #5(E) bars (5'-0" long) shall be used to splice the longitudinal D31 wires together (Min. Lap 2'-2").



M5 THRU M7 WWR DETAIL

(See Table of Dimensions)



M2 THRU M4 WWR DETAIL

(See Table of Dimensions)

TABLE OF DIMENSIONS

(WWR tables are based on Grade 60.)

SPANS 1 & 3

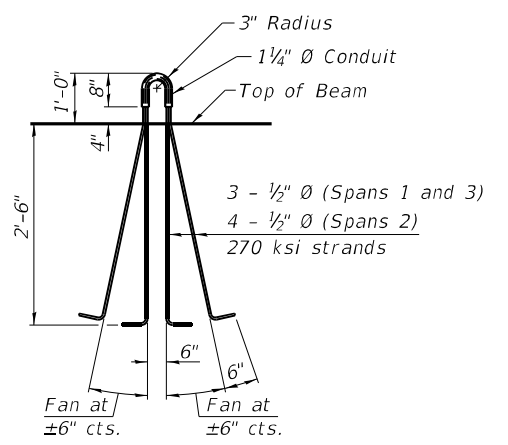
WWR	A	B
M2	9	3"
M3	6	6"
M4	10	1'-6"
M5	9	3"
M6	11	6"
M7	13	1'-0"

SPAN 2

WWR	A	B
M2	9	3"
M3	6	6"
M4	19	1'-6"
M5	9	3"
M6	16	6"
M7	23	1'-0"

NOTES

Inserts for 3/4" Ø threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter for beam strands shall be 0.6" and the nominal cross-sectional area shall be 0.217 sq. in. The nominal diameter for lifting loops shall be 1/2" and the nominal cross sectional area shall be 0.153 sq. in. The beams shall have a final concrete compressive strength, f'c, of 8500 psi and a release concrete compressive strength, f'ci, of 6500 psi. A minimum 2 1/2" Ø lifting pin shall be used to engage the lifting loops during handling. Bend the extended strands inward on the fascia beams to maintain 1 1/2" clearance inside the pier diaphragm. The top and bottom plates shall be AASHTO M270 Grade 50. The top plates and bottom plate assemblies shall be galvanized according to AASHTO M111. The threaded rods, nuts and washers shall be galvanized according to AASHTO M232. Threaded rods shall be ASTM F 1554 Grade 55. Welded Wire Reinforcement (WWR) shall conform to ASTM A884 with a Class A, Type 1 epoxy coating or ASTM A1060, Table 3 galvanized coating.



LIFTING LOOP DETAIL

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete Beams, IL36N	Ft.	1855

MODEL: Default
 FILE NAME: E:\1903\Struct\Final Design\Design Plans\CADD_Sheets\366F74-046-0158&0159-030-IL36BeamDetails.dgn



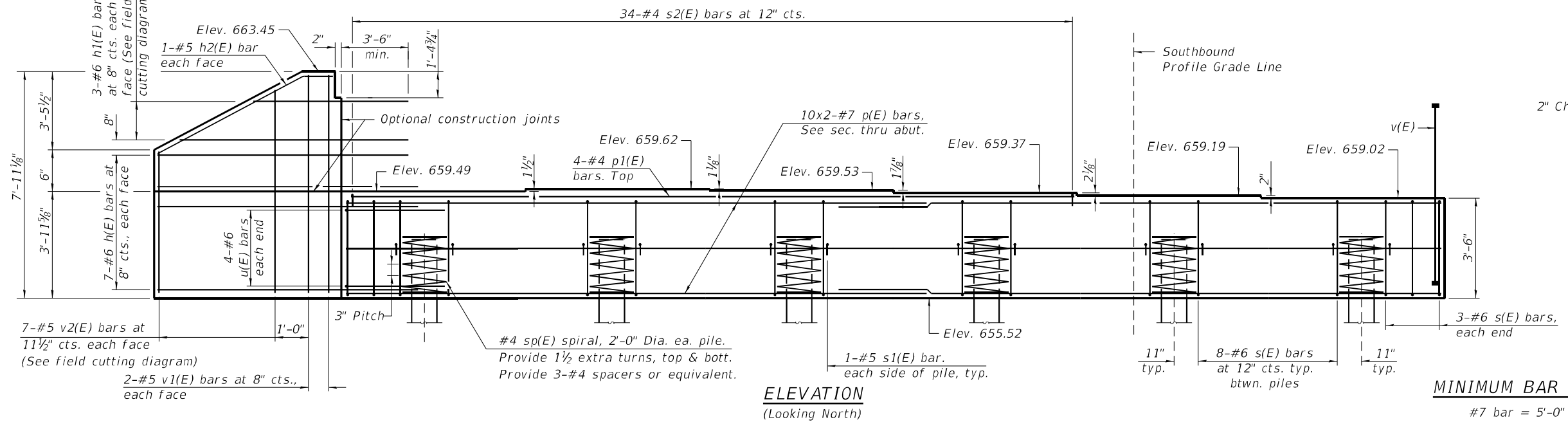
USER NAME =	DESIGNED - CL	REVISED -
PLOT SCALE =	CHECKED - MTH	REVISED -
PLOT DATE = 5/6/21	DRAWN - CGY	REVISED -
	CHECKED - MTH	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

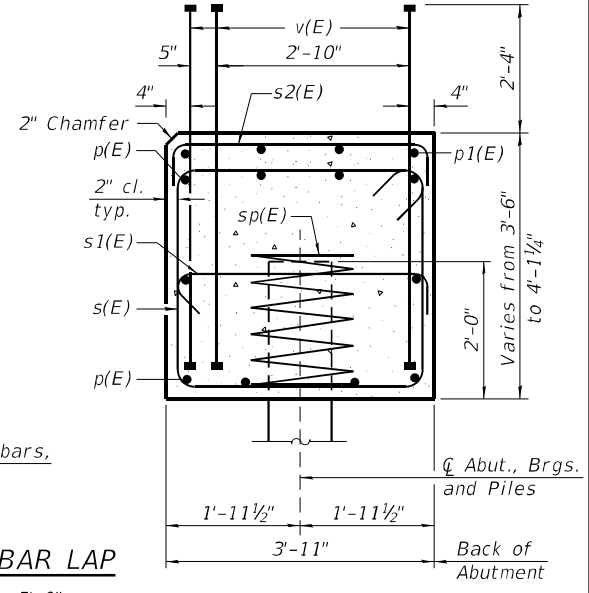
IL36N BEAM DETAILS
 STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)

SHEET 30 OF 44 SHEETS

F.A.I. RTE. 57	SECTION [(139)VB,HB-3]BR.139R	COUNTY KANKAKEE	TOTAL SHEETS 252	SHEET NO. 143
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				



ELEVATION
(Looking North)



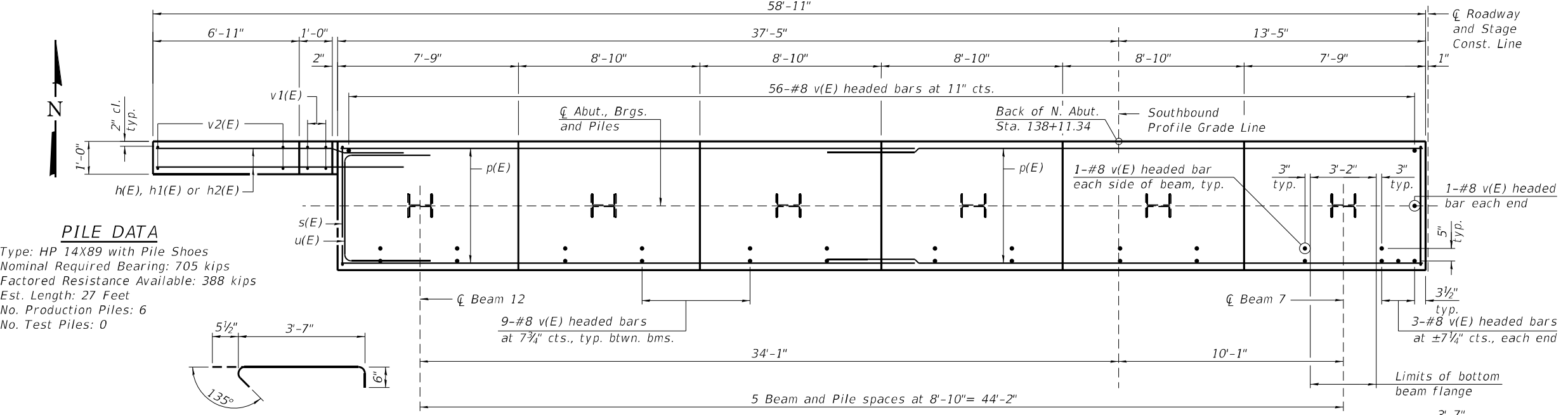
SEC. THRU ABUT.

MINIMUM BAR LAP
#7 bar = 5'-0"

BILL OF MATERIAL

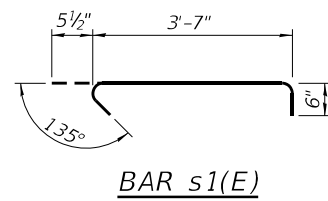
Bar	No.	Size	Length	Shape
h(E)	14	#6	11'-5"	—
h1(E)	3	#6	18'-0"	—
h2(E)	2	#5	8'-4"	—
p(E)	20	#7	27'-9"	—
p1(E)	4	#4	33'-11"	—
s(E)	46	#6	14'-10"	□
s1(E)	12	#5	4'-7"	□
s2(E)	34	#4	5'-7"	□
sp(E)	6	#4	2'-0"	MMM
u(E)	8	#6	12'-1"	□
v(E)	121	#8	5'-6"	—
v1(E)	4	#5	7'-7"	—
v2(E)	7	#5	11'-4"	—
Structure Excavation		Cu. Yd.	75	
Concrete Structures		Cu. Yd.	30.4	
Reinforcement Bars, Epoxy Coated		Pound	5080	
Furnishing Steel Piles HP14x89		Foot	162	
Driving Piles		Foot	162	
Pile Shoes		Each	6	

* Length is height of spiral.



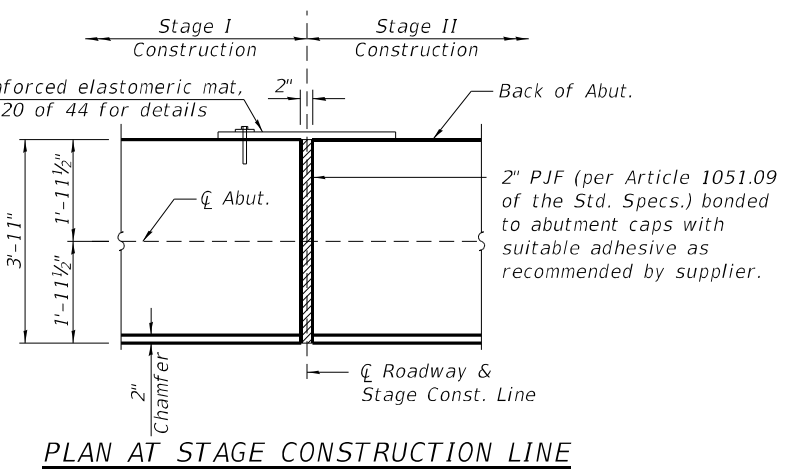
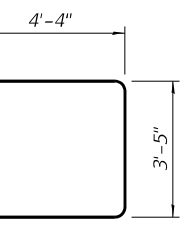
PLAN

PILE DATA
Type: HP 14X89 with Pile Shoes
Nominal Required Bearing: 705 kips
Factored Resistance Available: 388 kips
Est. Length: 27 Feet
No. Production Piles: 6
No. Test Piles: 0

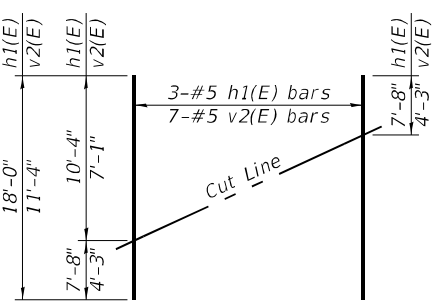


BAR s1(E)

BAR s2(E)

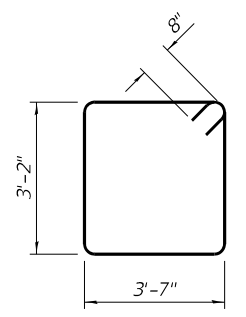


PLAN AT STAGE CONSTRUCTION LINE

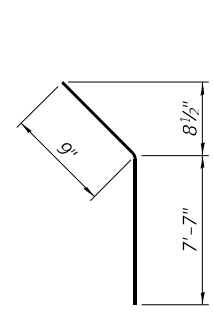


FIELD CUTTING DIAGRAM

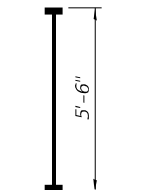
Order h1(E) and v2(E) full length. Cut as shown and use remainder of bars in other face.



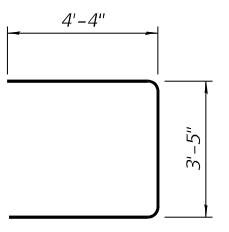
BAR s(E)



BAR h2(E)



BAR v(E)



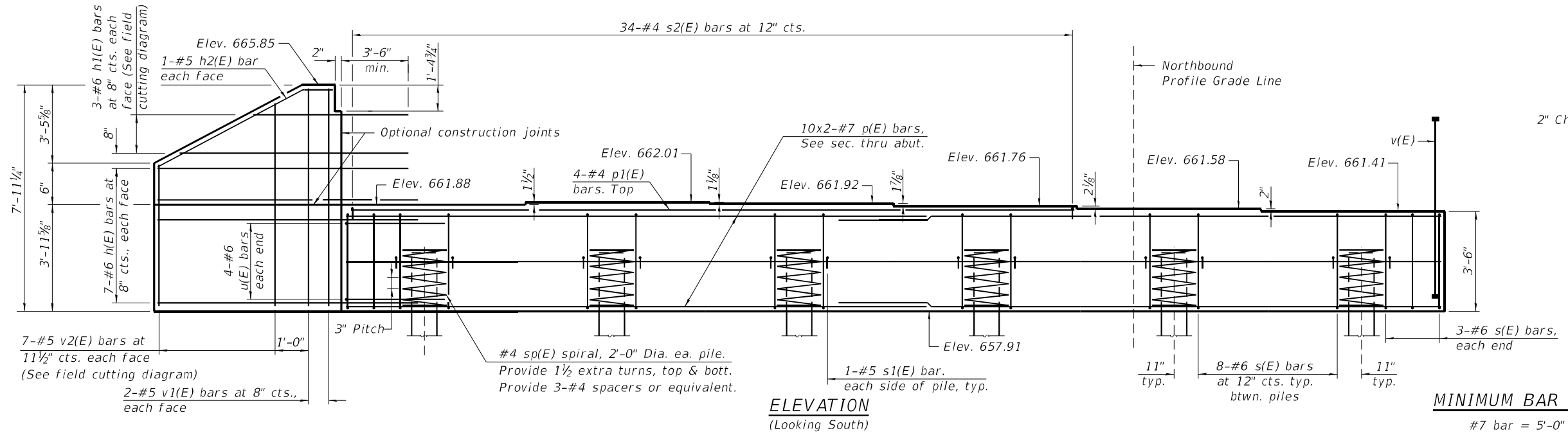
BAR u(E)

Notes:
Pour steps monolithically with cap.
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.
For details of piles see sheet 39 of 44.
Piles shall be driven through 30 inch diameter pre-cored holes extending to elevation 645.5 according to Article 512.09(c) of the Standard Specifications, except that the void space outside of the pile shall be filled with bentonite according to the manufacturer's recommendations to achieve a Qu of 1.5 tsf. Cost included with Driving Piles.
Bars indicated thus 10x2-#7 etc. indicates 10 lines of bars with 2 lengths per line.

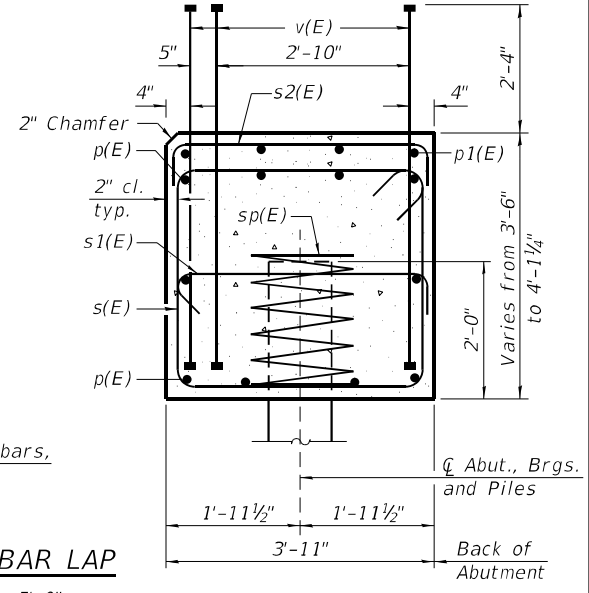
MODEL: Default
FILE NAME: E:\1903\Struct\Final Design\Design Plans\CADD_Sheets\0158&0159-032-NorthAbutment.dgn

<p>LIN ENGINEERING, LTD. Consulting Engineers Springfield, Illinois</p>	USER NAME =	DESIGNED - CL	REVISED -	<p align="center">STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p>	<p align="center">NORTH ABUTMENT - S.B. STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)</p>	F.A.I. RTE. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CHECKED - MTH	REVISED -	57			[(139)VB,HB-3]BR.139R	KANKAKEE	252	145	
	PLOT SCALE =	DRAWN - CGY	REVISED -			CONTRACT NO. 66F74				
	PLOT DATE = 5/6/21	CHECKED - MTH	REVISED -			ILLINOIS FED. AID PROJECT				

5/6/2021 2:27:08 PM



ELEVATION
(Looking South)



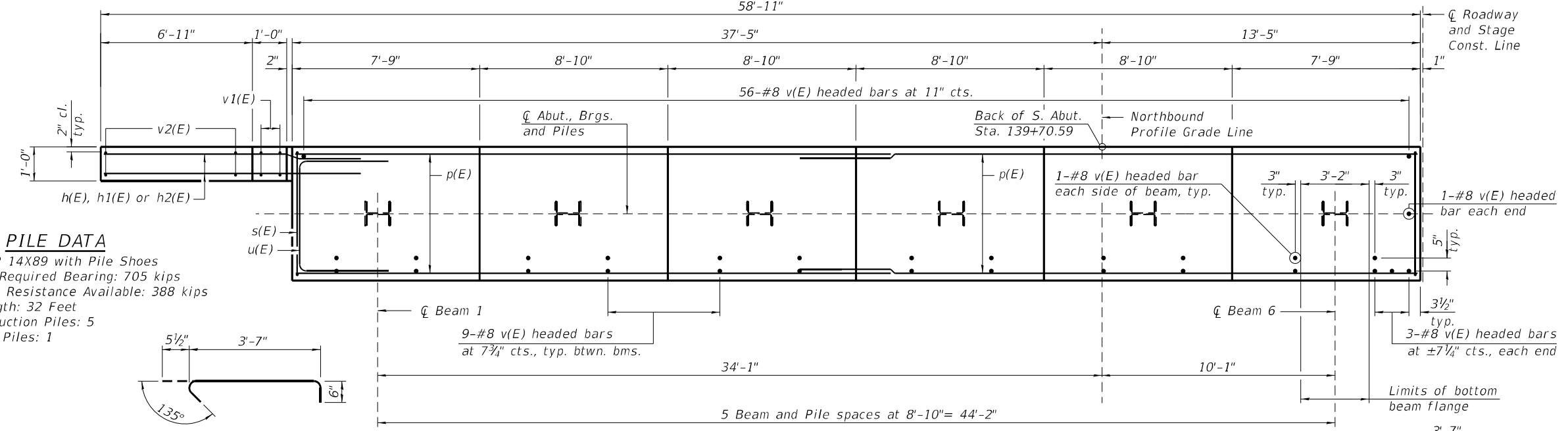
SEC. THRU ABUT.

MINIMUM BAR LAP
#7 bar = 5'-0"

BILL OF MATERIAL

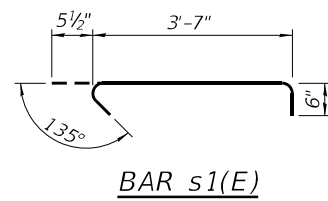
Bar	No.	Size	Length	Shape
h(E)	14	#6	11'-5"	—
h1(E)	3	#6	18'-0"	—
h2(E)	2	#5	8'-4"	—
p(E)	20	#7	27'-9"	—
p1(E)	4	#4	33'-11"	—
s(E)	46	#6	14'-10"	□
s1(E)	12	#5	4'-7"	□
s2(E)	34	#4	5'-7"	□
sp(E)	6	#4	2'-0"	MMM
u(E)	8	#6	12'-1"	□
v(E)	121	#8	5'-6"	—
v1(E)	4	#5	7'-7"	—
v2(E)	7	#5	11'-4"	—
Structure Excavation		Cu. Yd.	80	
Concrete Structures		Cu. Yd.	30.4	
Reinforcement Bars, Epoxy Coated		Pound	5080	
Furnishing Steel Piles HP14x89		Foot	160	
Driving Piles		Foot	160	
Test Pile Steel HP14x89		Each	1	
Pile Shoes		Each	6	

Notes:
 * Length is height of spiral.
 Pour steps monolithically with cap.
 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.
 For details of piles see sheet 39 of 44.
 Piles shall be driven through 30 inch diameter pre-cored holes extending to elevation 647.9 according to Article 512.09(c) of the Standard Specifications, except that the void space outside of the pile shall be filled with bentonite according to the manufacturer's recommendations to achieve a Qu of 1.5 tsf. Cost included with Driving Piles.
 Bars indicated thus 10x2-#7 etc. indicates 10 lines of bars with 2 lengths per line.

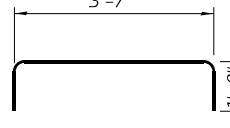


PLAN

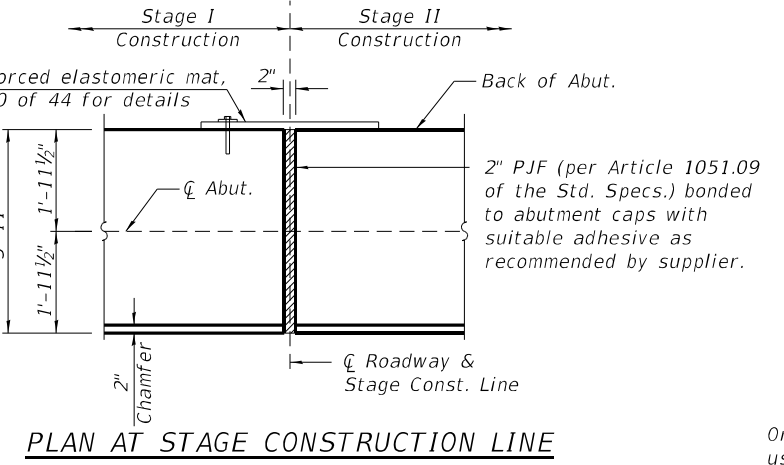
PILE DATA
 Type: HP 14X89 with Pile Shoes
 Nominal Required Bearing: 705 kips
 Factored Resistance Available: 388 kips
 Est. Length: 32 Feet
 No. Production Piles: 5
 No. Test Piles: 1



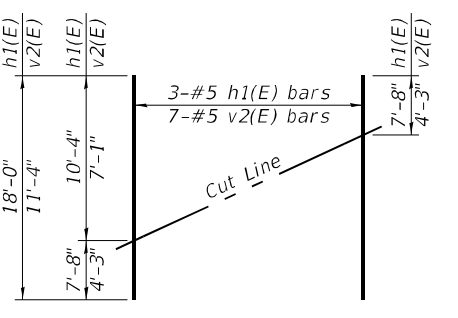
BAR s1(E)



BAR s2(E)

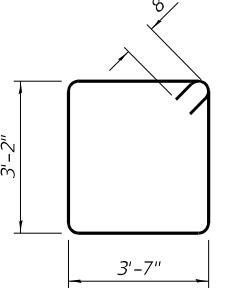


PLAN AT STAGE CONSTRUCTION LINE

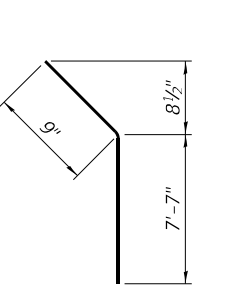


FIELD CUTTING DIAGRAM

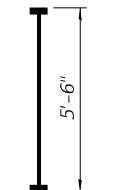
Order h1(E) and v2(E) full length. Cut as shown and use remainder of bars in other face.



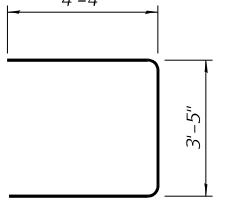
BAR s(E)



BAR h2(E)



BAR v(E)



BAR u(E)

MODEL: Default
 FILE NAME: E:\1903\Struct\Final Design\Design Plans\CADD_Sheets\0158&0159-033-SouthAbutment.dgn
 5/6/2021 2:27:09 PM



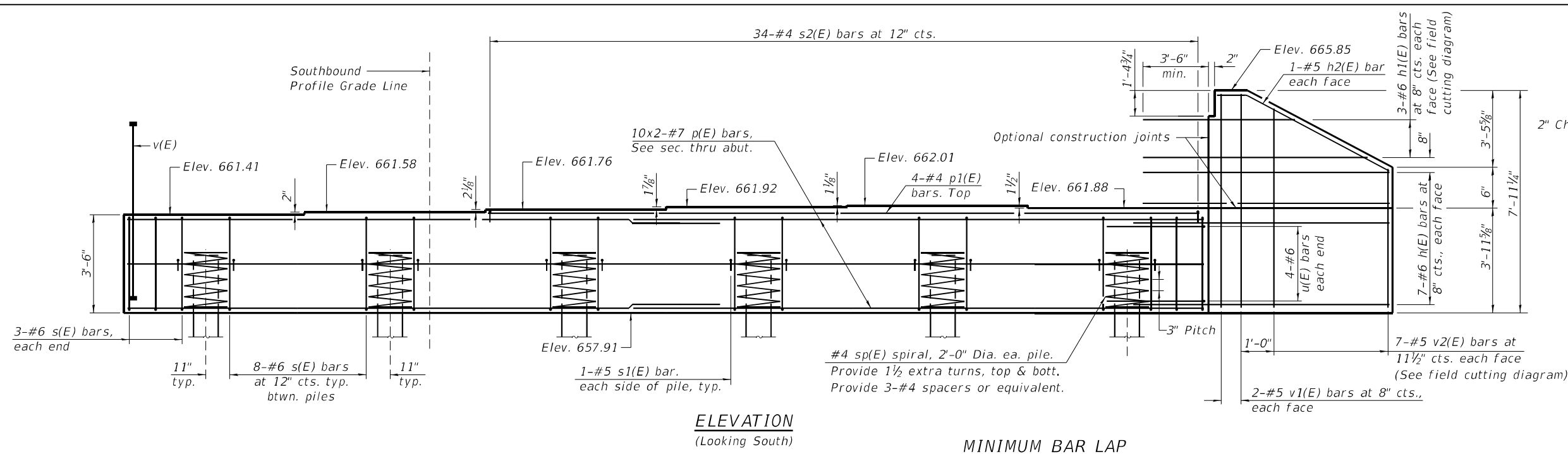
USER NAME =	DESIGNED - CL	REVISD -
PLOT SCALE =	CHECKED - MTH	REVISD -
PLOT DATE = 5/6/21	DRAWN - CGY	REVISD -
	CHECKED - MTH	REVISD -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT - N.B.
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)

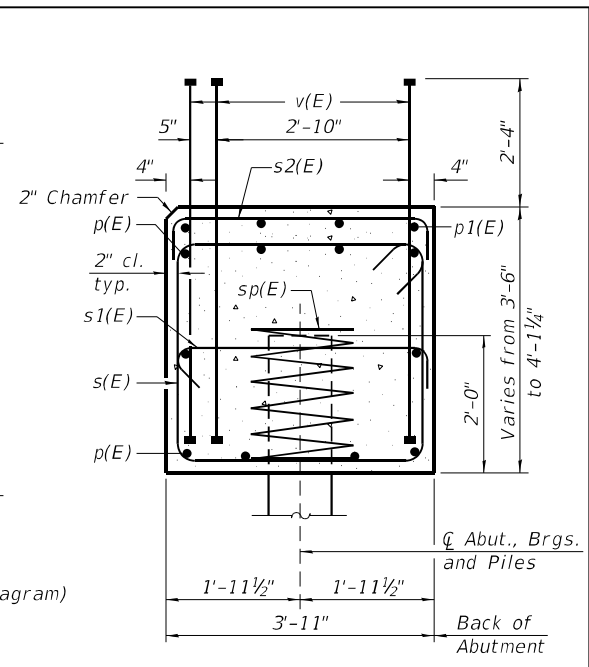
SHEET 33 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	146
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				

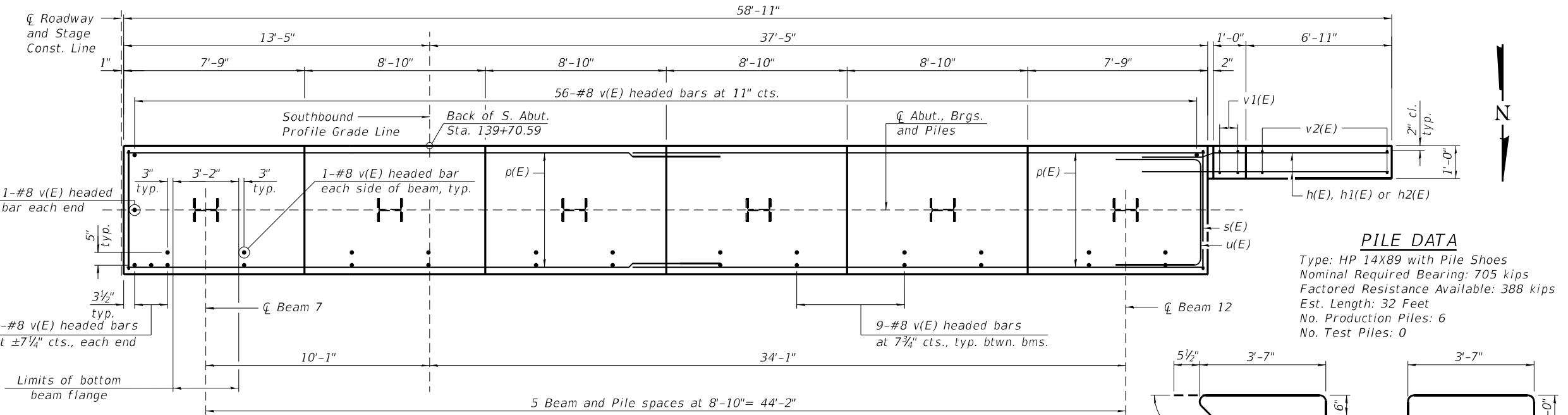


ELEVATION
(Looking South)

MINIMUM BAR LAP
#7 bar = 5'-0"



SEC. THRU ABUT.

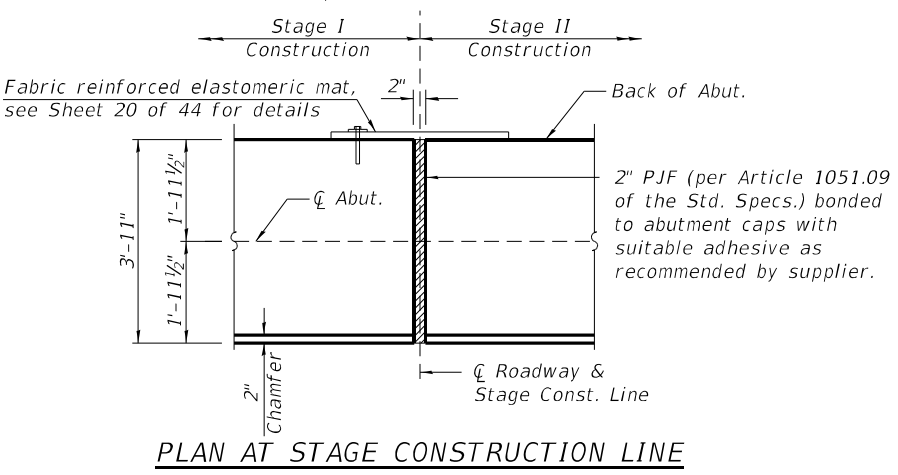


PLAN

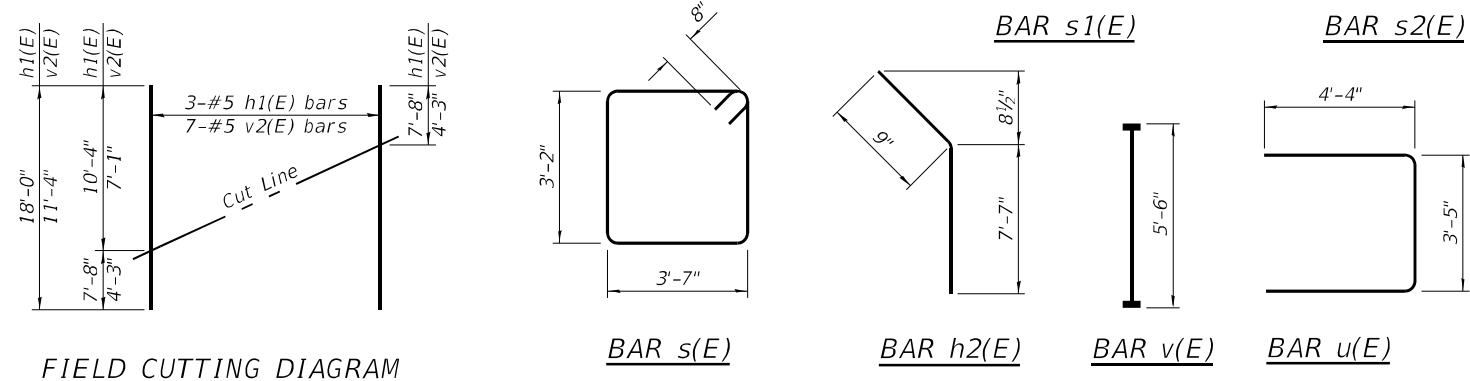
PILE DATA
Type: HP 14X89 with Pile Shoes
Nominal Required Bearing: 705 kips
Factored Resistance Available: 388 kips
Est. Length: 32 Feet
No. Production Piles: 6
No. Test Piles: 0

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	14	#6	11'-5"	—
h1(E)	3	#6	18'-0"	—
h2(E)	2	#5	8'-4"	—
p(E)	20	#7	27'-9"	—
p1(E)	4	#4	33'-11"	—
s(E)	46	#6	14'-10"	□
s1(E)	12	#5	4'-7"	□
s2(E)	34	#4	5'-7"	□
sp(E)	6	#4	2'-0"	≡≡≡
u(E)	8	#6	12'-1"	□
v(E)	121	#8	5'-6"	—
v1(E)	4	#5	7'-7"	—
v2(E)	7	#5	11'-4"	—
Structure Excavation		Cu. Yd.	80	
Concrete Structures		Cu. Yd.	30.4	
Reinforcement Bars, Epoxy Coated		Pound	5080	
Furnishing Steel Piles HP14x89		Foot	192	
Driving Piles		Foot	192	
Pile Shoes		Each	6	



PLAN AT STAGE CONSTRUCTION LINE



FIELD CUTTING DIAGRAM

Order h1(E) and v2(E) full length. Cut as shown and use remainder of bars in other face.

Notes:
Pour steps monolithically with cap.
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.
For details of piles see sheet 39 of 44.
Piles shall be driven through 30 inch diameter pre-cored holes extending to elevation 647.9 according to Article 512.09(c) of the Standard Specifications, except that the void space outside of the pile shall be filled with bentonite according to the manufacturer's recommendations to achieve a Qu of 1.5 tsf. Cost included with Driving Piles.
Bars indicated thus 10x2-#7 etc. indicates 10 lines of bars with 2 lengths per line.

MODEL: Default
FILE NAME: E:\1903\Struct\Final Design\Design Plans\CADD_Sheets\0158&0159-034-SouthAbutment.dgn

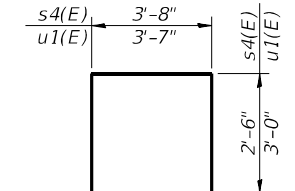
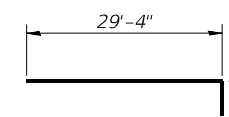
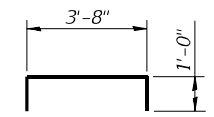
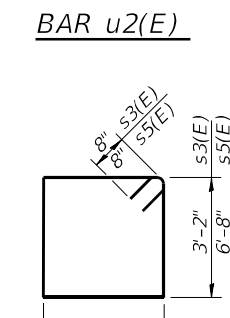
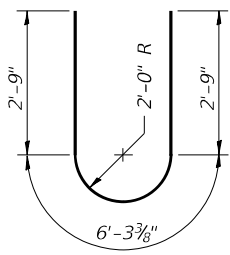
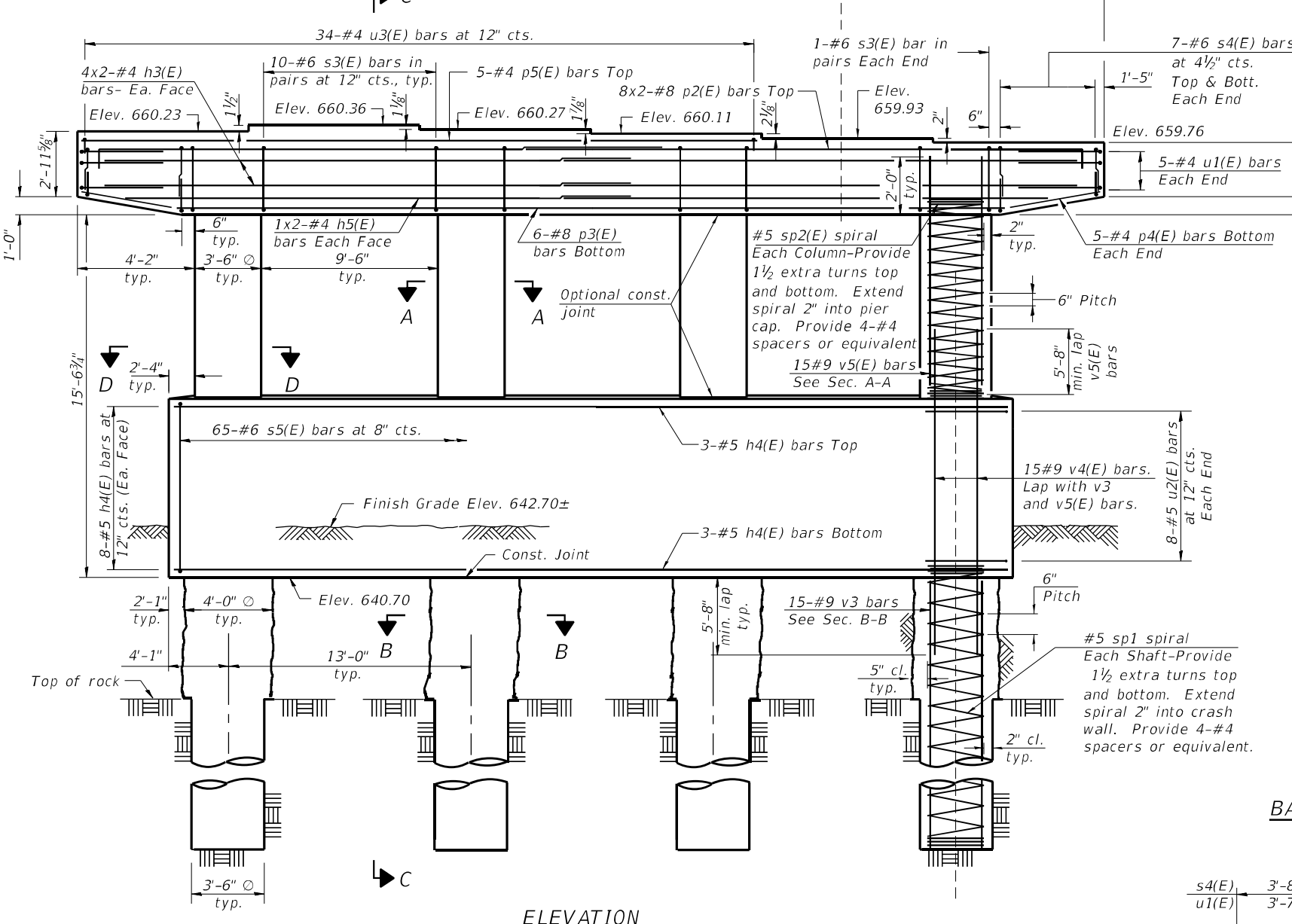
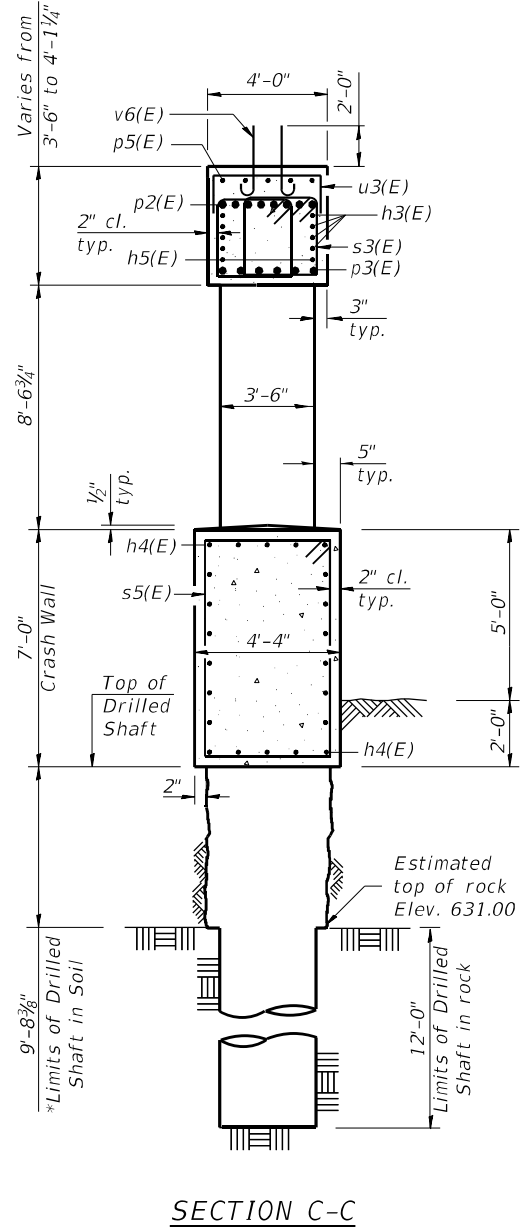
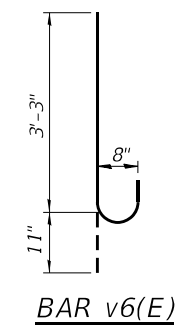
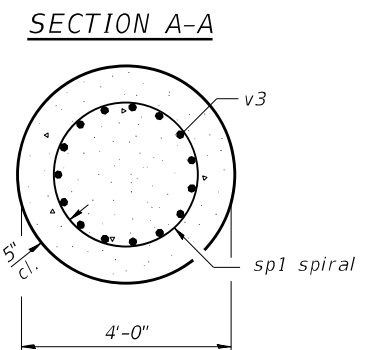
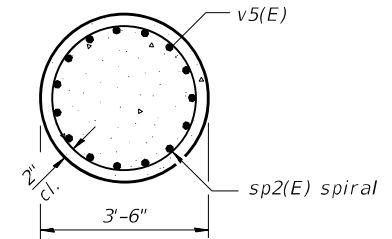
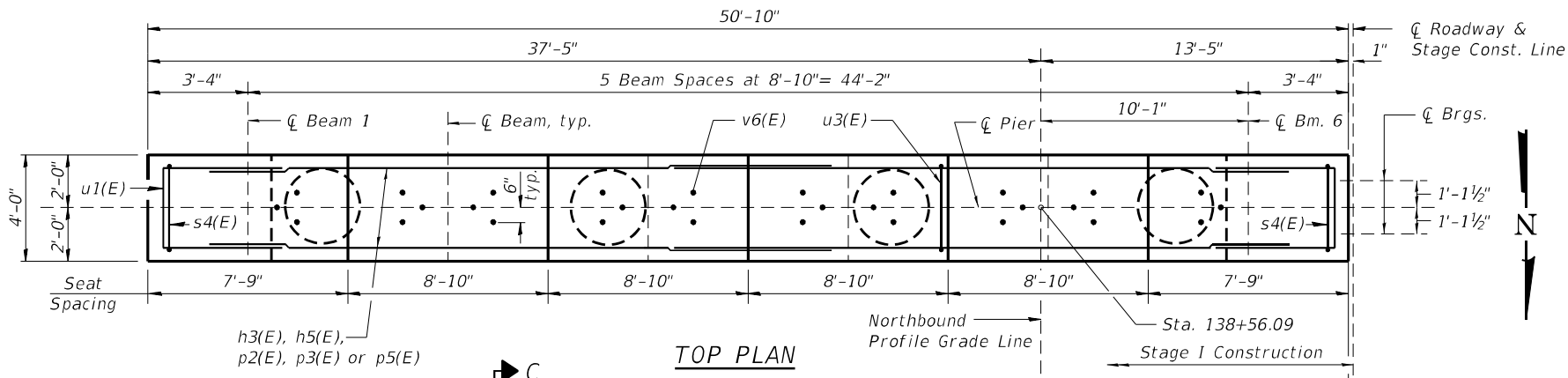
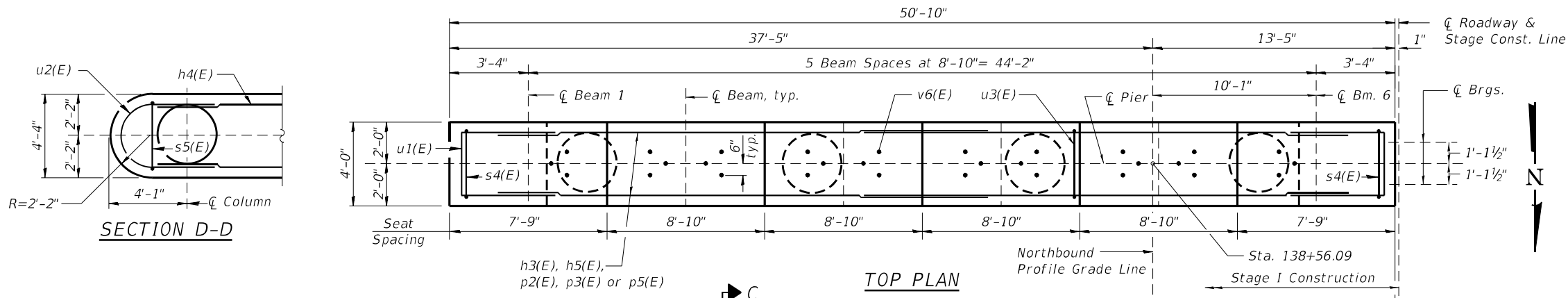
LIN ENGINEERING, LTD.
Consulting Engineers
Springfield, Illinois

USER NAME =	DESIGNED - CL	REVISED -
PLOT SCALE =	CHECKED - MTH	REVISED -
PLOT DATE = 5/6/21	DRAWN - CGY	REVISED -
	CHECKED - MTH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT - S.B.
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	147
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h3(E)	16	#4	26'-5"	—
h4(E)	22	#5	42'-10"	—
h5(E)	4	#4	25'-0"	—
p2(E)	16	#8	30'-8"	┌┐
p3(E)	6	#8	43'-6"	┌┐
p4(E)	10	#4	3'-6"	┌┐
p5(E)	5	#4	33'-11"	┌┐
s3(E)	64	#6	12'-6"	□
s4(E)	28	#6	8'-8"	□
s5(E)	65	#6	22'-8"	□
sp1	4	#5	21'-11"	⋈
sp2(E)	4	#5	8'-7"	⋈
u1(E)	10	#4	9'-7"	┌┐
u2(E)	16	#5	11'-10"	┌┐
u3(E)	34	#4	5'-8"	┌┐
v3	60	#9	21'-7"	—
v4(E)	60	#9	18'-6"	—
v5(E)	60	#9	10'-5"	—
v6(E)	30	#8	4'-2"	┌┐
Structure Excavation		Cu. Yd.	40	
Concrete Structures		Cu. Yd.	92.8	
Reinforcement Bars		Pound	6320	
Reinforcement Bars, Epoxy Coated		Pound	14720	
Drilled Shaft in Soil		Cu. Yd.	18.1	
Drilled Shaft in Rock		Cu. Yd.	17.2	
Concrete Sealer		Sq. Ft.	1203	
Thermal Integrity Profile Testing		Each	4	
Thermal Integrity Profile Data Collection		Foot	87	

Notes:
 **Length is height of spiral.
 Bars indicated thus 8x2-#8 etc. indicates 8 lines of bars with 2 lengths per line.
 Cast steps monolithically with cap.
 Space cap reinforcement to miss anchor bolts.
 Minimum lap for spirals = 3'-2".
 See sheet 19 of 44 for placement of v6(E) bars.
 Concrete Sealer shall be applied to all exposed faces of the pier.

* The quantities and reinforcement detailing are based on the top of shaft and the estimated top of rock elevations shown and may change based on the actual top of rock encountered at each shaft and the final top of shaft elevation.

MINIMUM BAR LAP
 #4 bar = 2'-3"
 #8 bar = 8'-2"

MODEL: Default
 FILE NAME: E:\1903\Struct\Final Design\Design Plans\CADD_Sheets\0366F74-046-0158&0159-035-Pier1Details.dgn

LE LIN ENGINEERING, LTD.
 Consulting Engineers
 Springfield, Illinois

USER NAME =
 DESIGNED - CL
 CHECKED - MTH
 PLOT SCALE =
 DRAWN - CGY
 PLOT DATE = 5/6/21
 CHECKED - MTH

DESIGNED - CL
 CHECKED - MTH
 DRAWN - CGY
 PLOT DATE = 5/6/21

REVISIONS:
 REVISION NO. | DATE | BY | DESCRIPTION

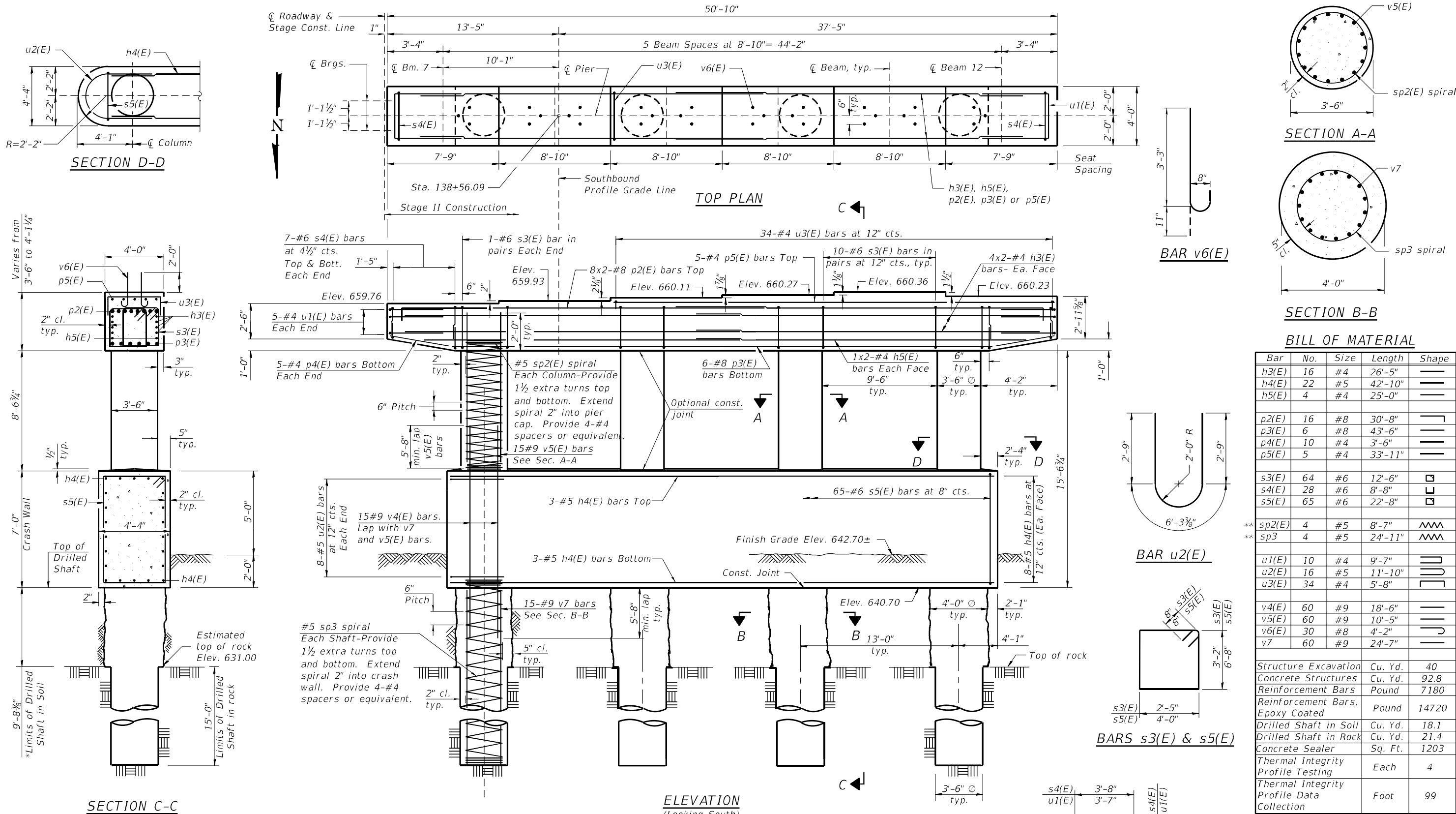
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PIER 1 DETAILS - N.B.
 STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)**

SHEET 35 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	148

CONTRACT NO. 66F74
 ILLINOIS FED. AID PROJECT



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h3(E)	16	#4	26'-5"	—
h4(E)	22	#5	42'-10"	—
h5(E)	4	#4	25'-0"	—
p2(E)	16	#8	30'-8"	—
p3(E)	6	#8	43'-6"	—
p4(E)	10	#4	3'-6"	—
p5(E)	5	#4	33'-11"	—
s3(E)	64	#6	12'-6"	□
s4(E)	28	#6	8'-8"	U
s5(E)	65	#6	22'-8"	□
sp2(E)	4	#5	8'-7"	~
sp3	4	#5	24'-11"	~
u1(E)	10	#4	9'-7"	—
u2(E)	16	#5	11'-10"	—
u3(E)	34	#4	5'-8"	—
v4(E)	60	#9	18'-6"	—
v5(E)	60	#9	10'-5"	—
v6(E)	30	#8	4'-2"	—
v7	60	#9	24'-7"	—
Structure Excavation	Cu. Yd.		40	
Concrete Structures	Cu. Yd.		92.8	
Reinforcement Bars	Pound		7180	
Reinforcement Bars, Epoxy Coated	Pound		14720	
Drilled Shaft in Soil	Cu. Yd.		18.1	
Drilled Shaft in Rock	Cu. Yd.		21.4	
Concrete Sealer	Sq. Ft.		1203	
Thermal Integrity Profile Testing	Each		4	
Thermal Integrity Profile Data Collection	Foot		99	

Notes:
 **Length is height of spiral.
 Bars indicated thus 8x2-#8 etc. indicates 8 lines of bars with 2 lengths per line.
 Cast steps monolithically with cap.
 Space cap reinforcement to miss anchor bolts.
 Minimum lap for spirals = 3'-2".
 See sheet 19 of 44 for placement of v6(E) bars.
 Concrete Sealer shall be applied to all exposed faces of the pier.

* The quantities and reinforcement detailing are based on the top of shaft and the estimated top of rock elevations shown and may change based on the actual top of rock encountered at each shaft and the final top of shaft elevation.

MINIMUM BAR LAP
 #4 bar = 2'-3"
 #8 bar = 8'-2"

MODEL: Default
 FILE NAME: E:\1903\Struct\Final Design\Design Plans\CADD_Sheets\0158&0159-036-Pier1Details.dgn
 5/6/2021 2:27:12 PM

LE LIN ENGINEERING, LTD.
 Consulting Engineers
 Springfield, Illinois

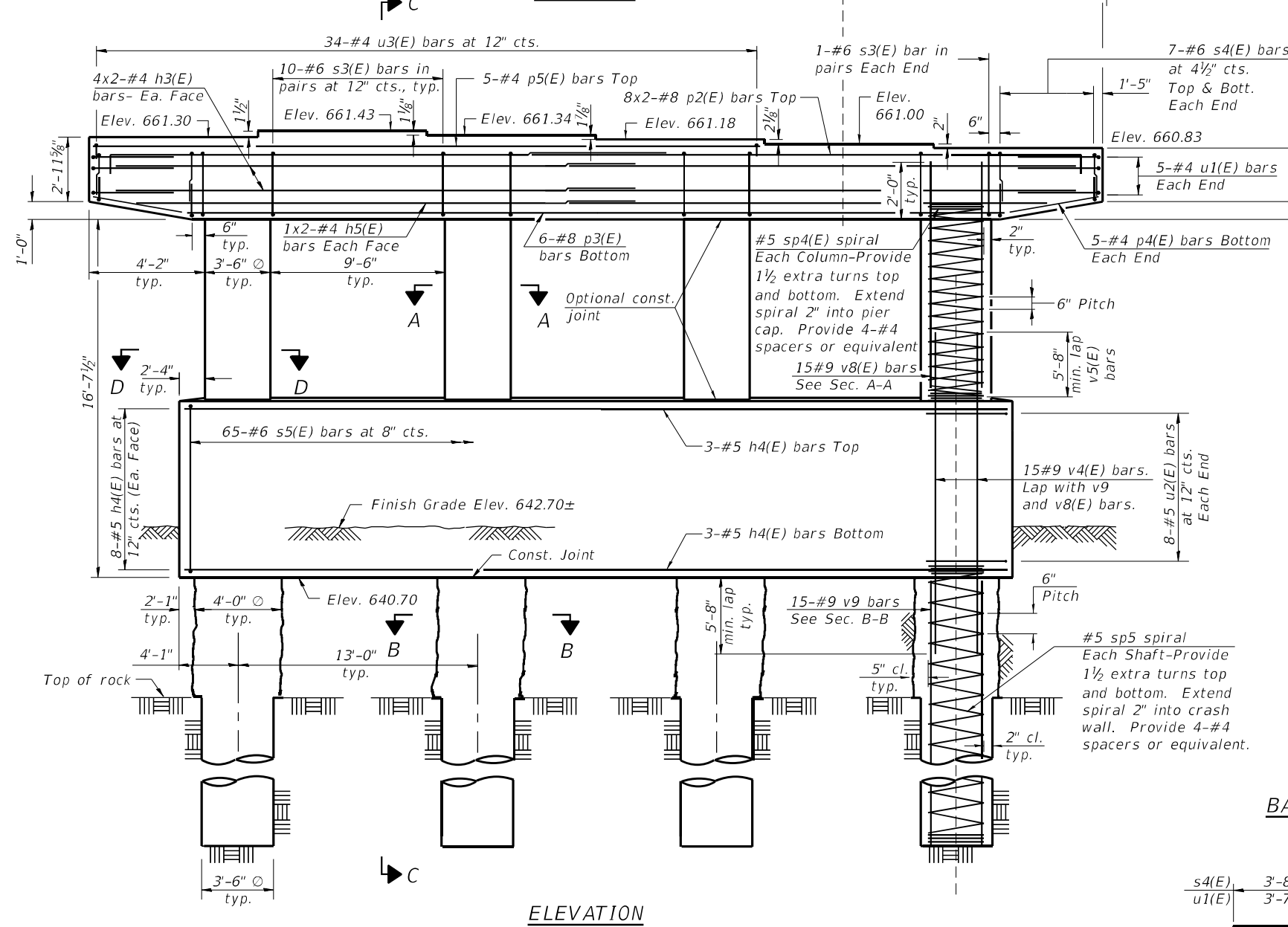
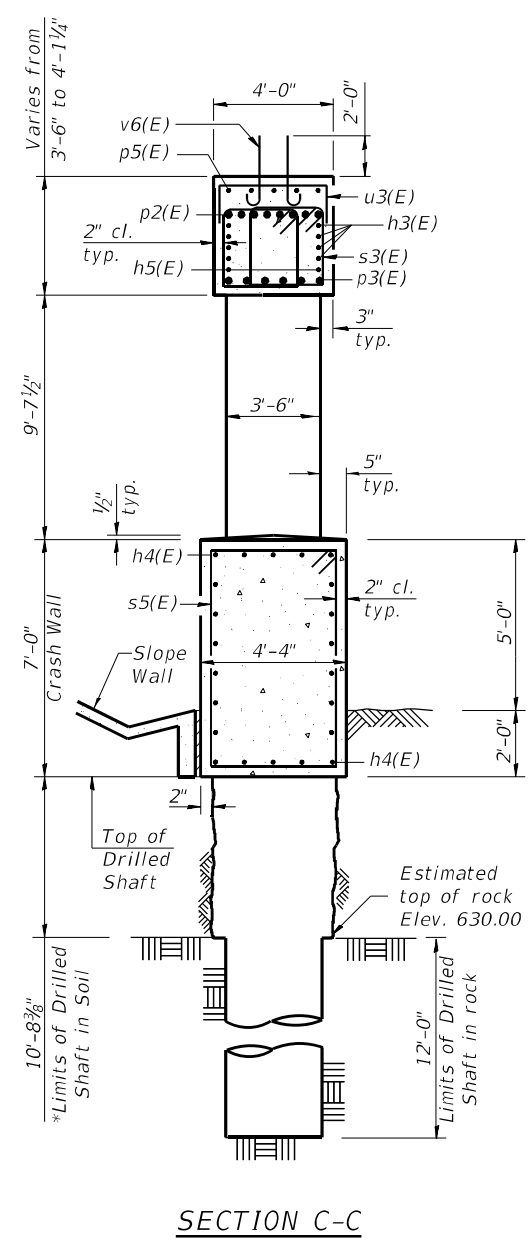
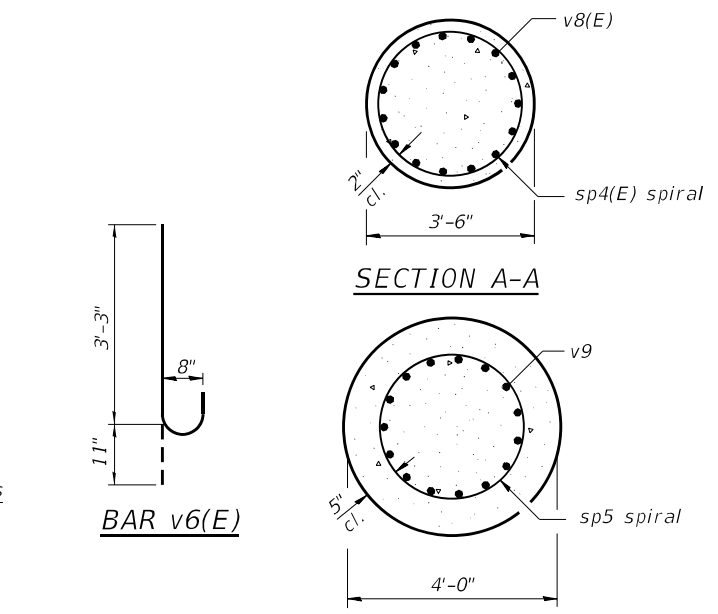
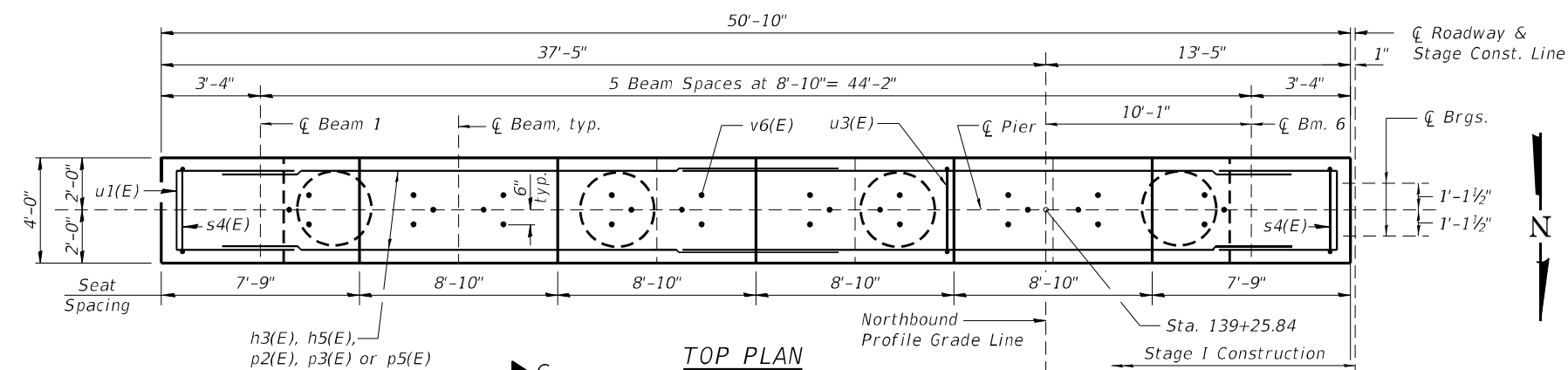
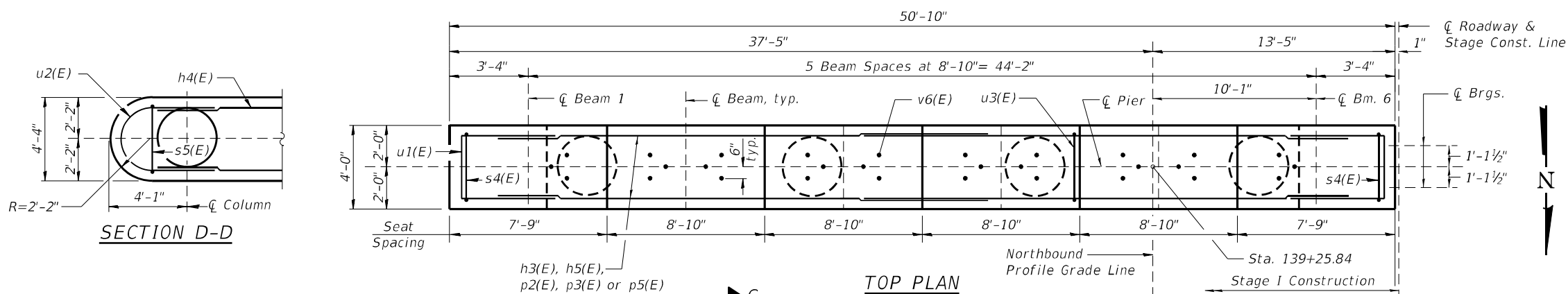
USER NAME =	DESIGNED - CL	REVISED -
PLOT SCALE =	CHECKED - MTH	REVISED -
PLOT DATE = 5/6/21	DRAWN - CGY	REVISED -
	CHECKED - MTH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 DETAILS - S.B.
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)

SHEET 36 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	149
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				

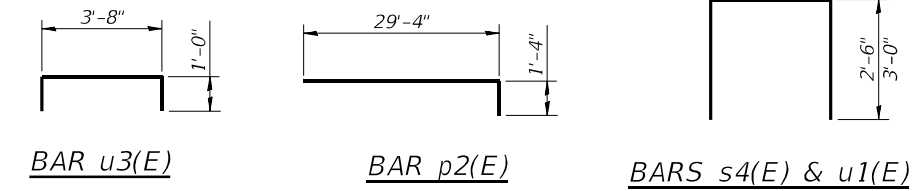


BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h3(E)	16	#4	26'-5"	—
h4(E)	22	#5	42'-10"	—
h5(E)	4	#4	25'-0"	—
p2(E)	16	#8	30'-8"	┌
p3(E)	6	#8	43'-6"	┌
p4(E)	10	#4	3'-6"	┌
p5(E)	5	#4	33'-11"	┌
s3(E)	64	#6	12'-6"	□
s4(E)	28	#6	8'-8"	□
s5(E)	65	#6	22'-8"	□
sp4(E)	4	#5	9'-8"	⋈
sp5	4	#5	22'-11"	⋈
u1(E)	10	#4	9'-7"	┌
u2(E)	16	#5	11'-10"	┌
u3(E)	34	#4	5'-8"	┌
v4(E)	60	#9	18'-6"	—
v6(E)	30	#8	4'-2"	┌
v8(E)	60	#9	11'-6"	—
v9	60	#9	22'-7"	—
Structure Excavation			Cu. Yd.	40
Concrete Structures			Cu. Yd.	94.3
Reinforcement Bars			Pound	6610
Reinforcement Bars, Epoxy Coated			Pound	15030
Drilled Shaft in Soil			Cu. Yd.	20.0
Drilled Shaft in Rock			Cu. Yd.	17.2
Concrete Sealer			Sq. Ft.	1249
Thermal Integrity Profile Testing			Each	4
Thermal Integrity Profile Data Collection			Foot	91

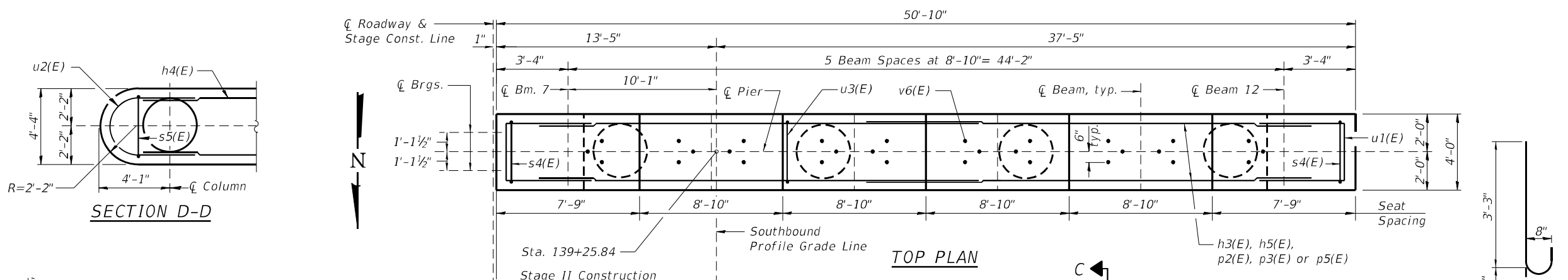
* The quantities and reinforcement detailing are based on the top of shaft and the estimated top of rock elevations shown and may change based on the actual top of rock encountered at each shaft and the final top of shaft elevation.

MINIMUM BAR LAP
 #4 bar = 2'-3"
 #8 bar = 8'-2"

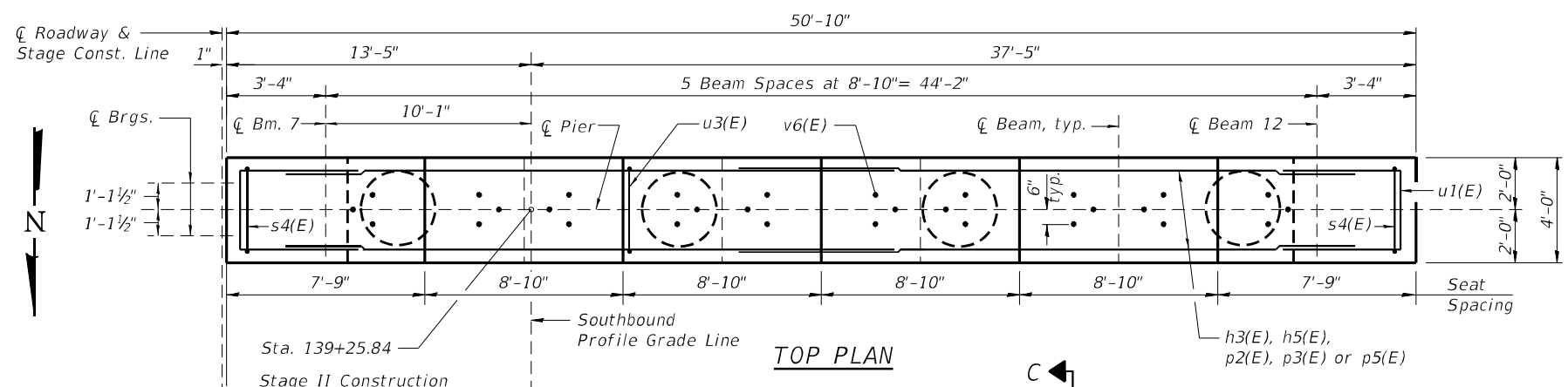


Notes:
 Bars indicated thus 8x2-#8 etc. indicates 8 lines of bars with 2 lengths per line.
 Cast steps monolithically with cap.
 Space cap reinforcement to miss anchor bolts.
 Minimum lap for spirals = 3'-2".
 See sheet 19 of 44 for placement of v6(E) bars.
 Concrete Sealer shall be applied to all exposed faces of the pier.

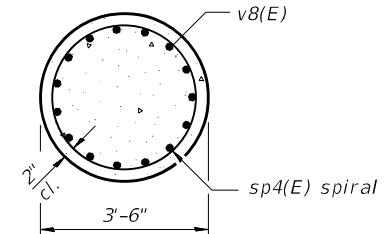
MODEL: Default
 FILE NAME: E:\1903\Struct\Final Design\Design Plans\CADD_Sheets\0158&0159-037-Pier2Details.dgn
 5/6/2021 2:27:13 PM



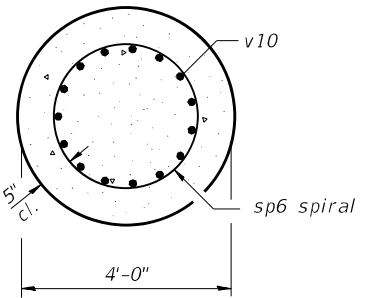
SECTION D-D



TOP PLAN

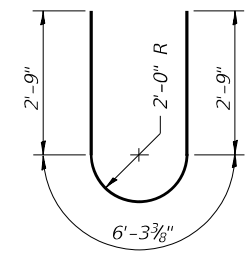


SECTION A-A

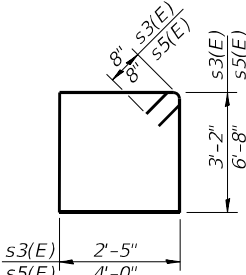


SECTION B-B

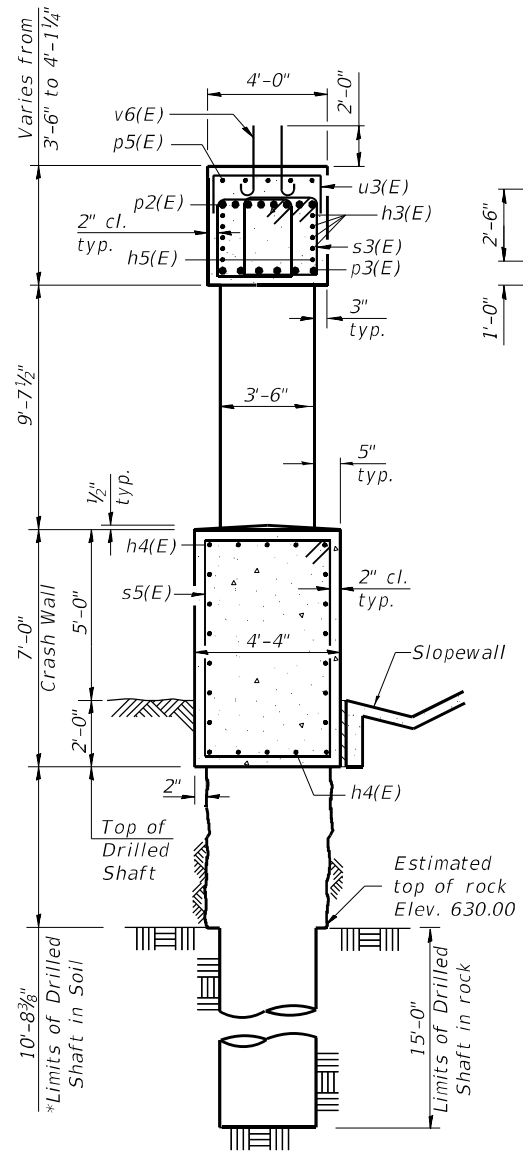
BAR v6(E)



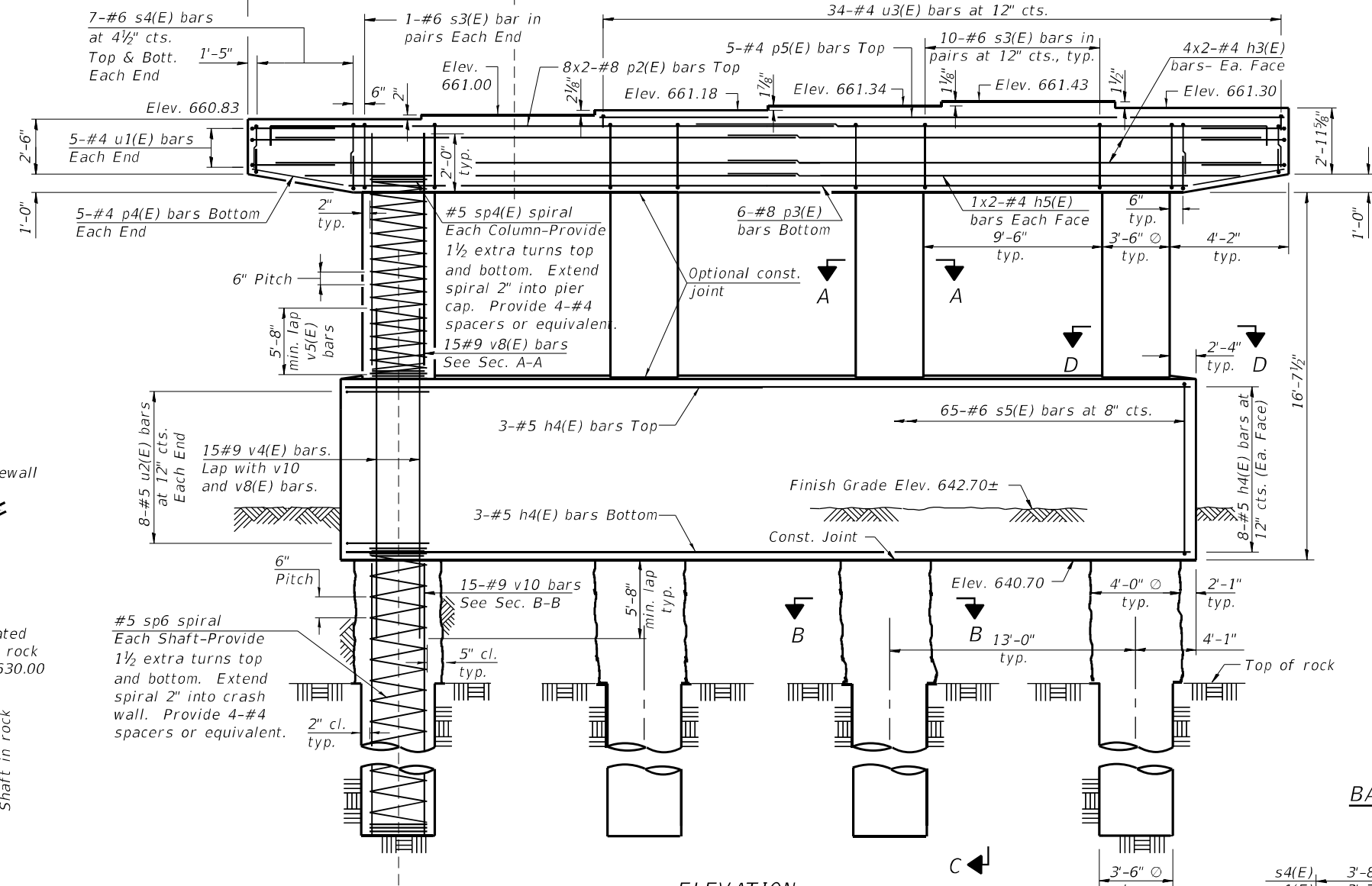
BAR u2(E)



BARS s3(E) & s5(E)



SECTION C-C



ELEVATION
(Looking South)

MINIMUM BAR LAP

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

BAR u3(E)

BAR p2(E)

BARS s4(E) & u1(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h3(E)	16	#4	26'-5"	—
h4(E)	22	#5	42'-10"	—
h5(E)	4	#4	25'-0"	—
p2(E)	16	#8	30'-8"	—
p3(E)	6	#8	43'-6"	—
p4(E)	10	#4	3'-6"	—
p5(E)	5	#4	33'-11"	—
s3(E)	64	#6	12'-6"	□
s4(E)	28	#6	8'-8"	□
s5(E)	65	#6	22'-8"	□
sp6	4	#5	25'-11"	⌘
sp4(E)	4	#5	9'-8"	⌘
u1(E)	10	#4	9'-7"	—
u2(E)	16	#5	11'-10"	—
u3(E)	34	#4	5'-8"	—
v4(E)	60	#9	18'-6"	—
v6(E)	30	#8	4'-2"	—
v10	60	#9	25'-7"	—
v8(E)	60	#9	11'-6"	—
Structure Excavation		Cu. Yd.	40	
Concrete Structures		Cu. Yd.	94.3	
Reinforcement Bars		Pound	7470	
Reinforcement Bars, Epoxy Coated		Pound	15030	
Drilled Shaft in Soil		Cu. Yd.	20.0	
Drilled Shaft in Rock		Cu. Yd.	21.4	
Concrete Sealer		Sq. Ft.	1249	
Thermal Integrity Profile Testing		Each	4	
Thermal Integrity Profile Data Collection		Foot	103	

**Length is height of spiral.

Notes:
Bars indicated thus 8x2-#8 etc. indicates 8 lines of bars with 2 lengths per line.
Cast steps monolithically with cap.
Space cap reinforcement to miss anchor bolts.
Minimum lap for spirals = 3'-2".
See sheet 19 of 44 for placement of v6(E) bars.
Concrete Sealer shall be applied to all exposed faces of the pier.

MODEL: Default
FILE NAME: E:\1903\Struct\Final Design\Design Plans\CADD_Sheets\0158&0159-038-Pier2Details.dgn
5/6/2021 2:27:14 PM

LE LIN ENGINEERING, LTD.
Consulting Engineers
Springfield, Illinois

USER NAME =
DESIGNED - CL
CHECKED - MTH
PLOT SCALE =
DRAWN - CGY
PLOT DATE = 5/6/21
CHECKED - MTH
REVISED -

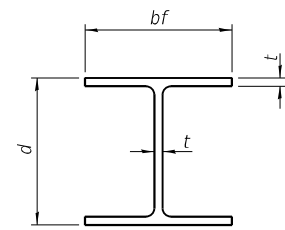
DESIGNED - CL
CHECKED - MTH
DRAWN - CGY
CHECKED - MTH
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS - S.B.
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)

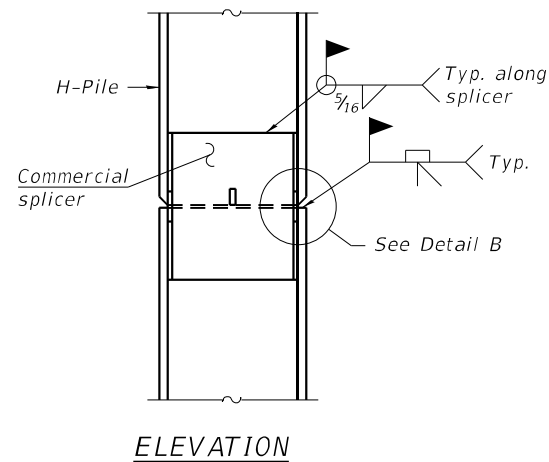
SHEET 38 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	151
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				

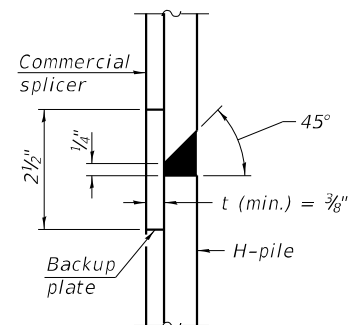


STEEL PILE TABLE

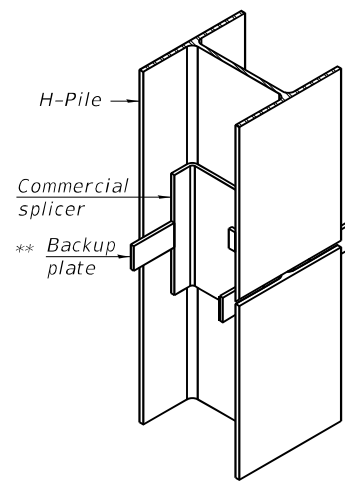
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 3/8"	14 3/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"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



ELEVATION

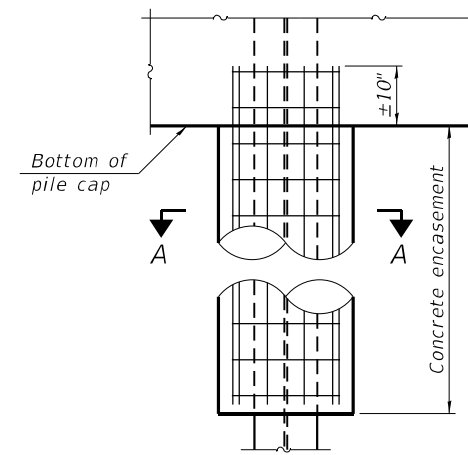


DETAIL "B"

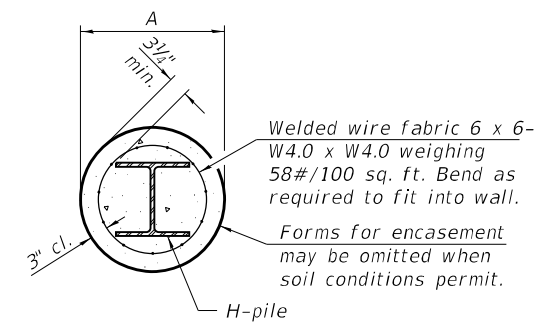


ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE

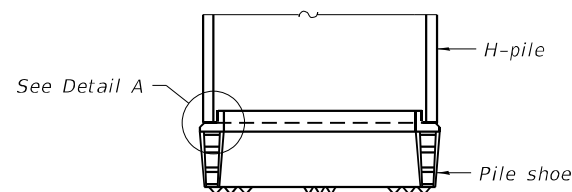


ELEVATION

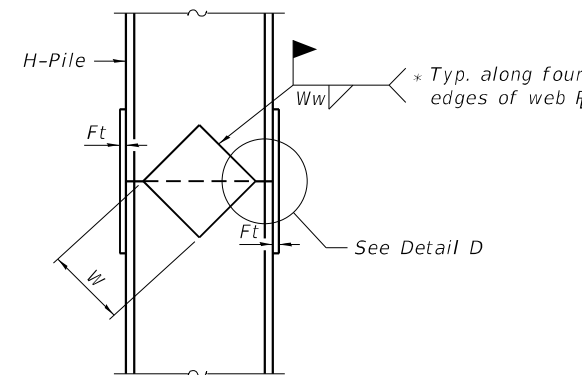


SECTION A-A

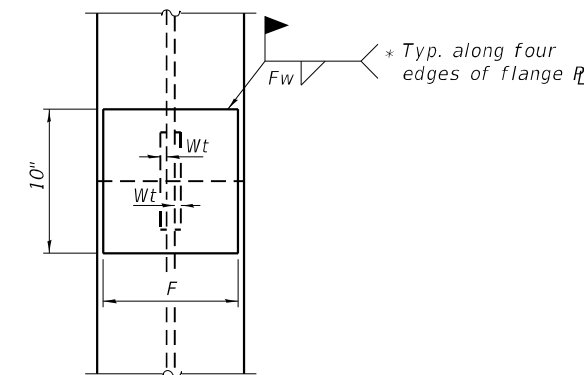
INDIVIDUAL PILE CONCRETE ENCASUREMENT (when specified)



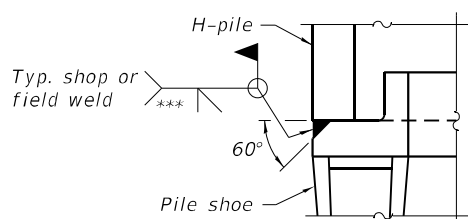
ELEVATION



ELEVATION

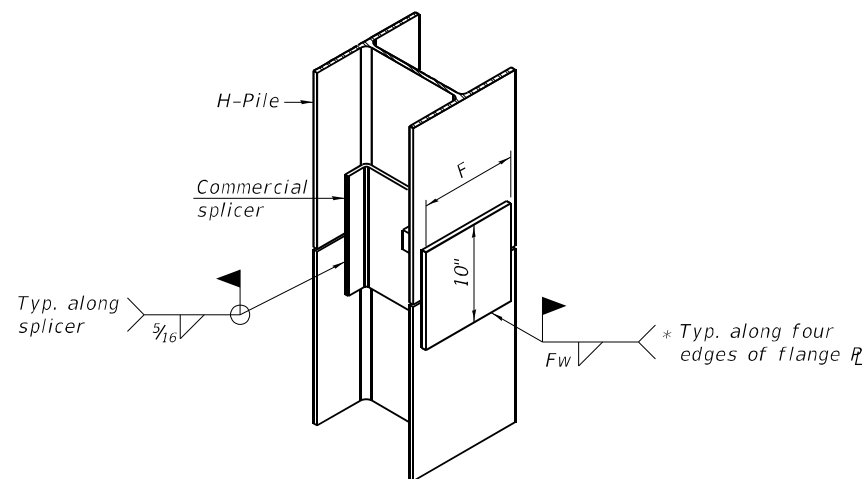


END VIEW



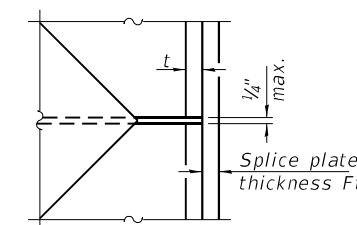
DETAIL A

SHOE ATTACHMENT



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE



DETAIL D

WELDED PLATE FIELD SPLICE

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

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

* Interrupt welds 1/4" from end of web and/or each flange.

** Remove portions of backup plates that extend outside the flanges.

*** Weld size per pile shoe manufacturer (5/16" min.).

MODEL: Default; FILE NAME: E:\1903\Struct\Final Design\Design Sheets\0158&0159-039-HPileDetails.dgn

F-HP 1-1-2020



USER NAME =	DESIGNED - CL	REvised -
PLOT SCALE =	CHECKED - MTH	REvised -
PLOT DATE = 5/6/21	DRAWN - CGY	REvised -
	CHECKED - MTH	REvised -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**HP PILE DETAILS
STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)**

SHEET 39 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	152
CONTRACT NO. 66F74				

ILLINOIS FED. AID PROJECT



SOIL BORING LOG

Date 3/12/18

ROUTE FAI 57 (I-57) DESCRIPTION I-57 over Grinnell Road, 0.95 Miles North of IL 17 LOGGED BY Larry Myers

SECTION 139HBR-3 LOCATION NE 1/4, SEC. 33, TWP. 31N, RNG. 12E, 3rd PM, Latitude 41.133537, Longitude -87.836429

COUNTY Kankakee DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 046-0010/0011 Station 138+90.96 BORING NO. 01 Station 137+88 Offset 48.0 ft RL Ground Surface Elev. 660.19 ft

Table with columns for Depth (ft), Blows (B), Penetration (P), and Soil Description. Includes entries like 'Augered Bituminous Shoulder', 'Very Stiff Black Silty Clay Loam', and 'Weathered Limestone / Dolostone Surface'.

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



SOIL BORING LOG

Date 3/12/18

ROUTE FAI 57 (I-57) DESCRIPTION I-57 over Grinnell Road, 0.95 Miles North of IL 17 LOGGED BY Larry Myers

SECTION 139HBR-3 LOCATION NE 1/4, SEC. 33, TWP. 31N, RNG. 12E, 3rd PM, Latitude 41.132976, Longitude -87.836405

COUNTY Kankakee DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 046-0010/0011 Station 138+90.96 BORING NO. 02 Station 139+89 Offset 46.0 ft RL Ground Surface Elev. 663.81 ft

Table with columns for Depth (ft), Blows (B), Penetration (P), and Soil Description. Includes entries like 'Augered Asphalt Shoulder', 'Very Stiff to Hard Gray Silty Clay Loam Till Fill', and 'Dense Gray Limestone / Dolostone Surface'.

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



SOIL BORING LOG

Date 3/13/18

ROUTE FAI 57 (I-57) DESCRIPTION I-57 over Grinnell Road, 0.95 Miles North of IL 17 LOGGED BY Larry Myers

SECTION 139HBR-3 LOCATION NW 1/4, SEC. 34, TWP. 31N, RNG. 12E, 3rd PM, Latitude 41.132966, Longitude -87.836069

COUNTY Kankakee DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 046-0010/0011 Station 138+90.96 BORING NO. 03 Station 139+94 Offset 47.0 ft RL Ground Surface Elev. 664.04 ft

Table with columns for Depth (ft), Blows (B), Penetration (P), and Soil Description. Includes entries like 'Augered Bituminous Shoulder', 'Very Stiff to Hard Gray & Brown Silty Clay Loam Till Fill', and 'Medium Brown Sand / Gravel Fill'.

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

MODEL: Default FILE NAME: E:\1903\Struct\Final Design\Design\Sheets\366F74-046-0158&0159-041-SoilBoringData.dgn

(Sheet 1 of 4)



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

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING DATA STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)

SHEET 41 OF 44 SHEETS

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



SOIL BORING LOG

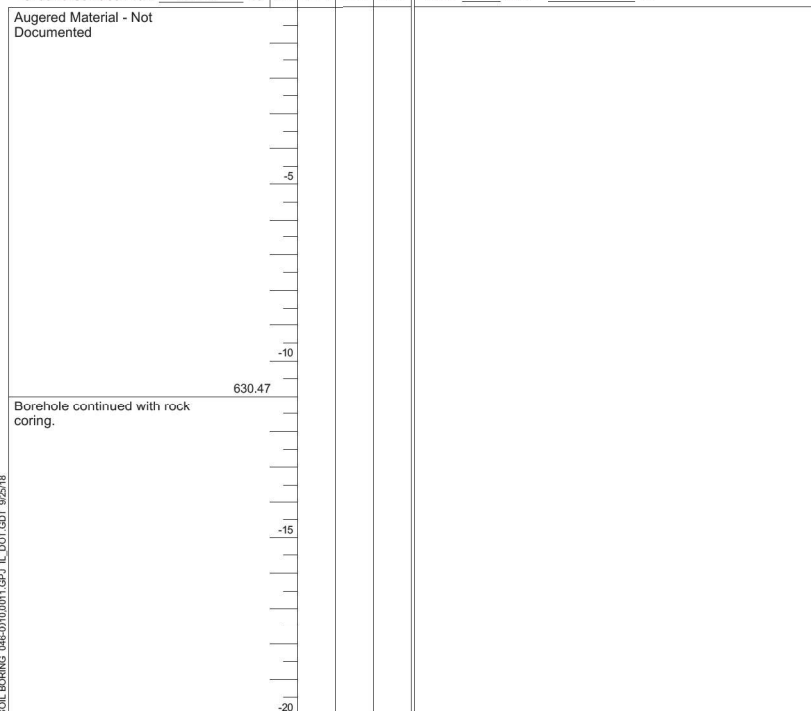
Date 11/22/17

ROUTE FAI 57 (I-57) DESCRIPTION I-57 over Grinnell Road, 0.95 Miles North of IL 17 LOGGED BY Larry Myers

SECTION 139HBR-3 LOCATION NW 1/4, SEC. 34, TWP. 31N, RNG. 12E, 3rd PM, Latitude 41.133265, Longitude -87.836022

COUNTY Kankakee DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 046-0010/0011 Station 138+90.96
 BORING NO. 3 Station 138+83 Offset 58.0 ft LL
 Ground Surface Elev. 641.47 ft (ft) (/6") (tsf) (%)



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



SOIL BORING LOG

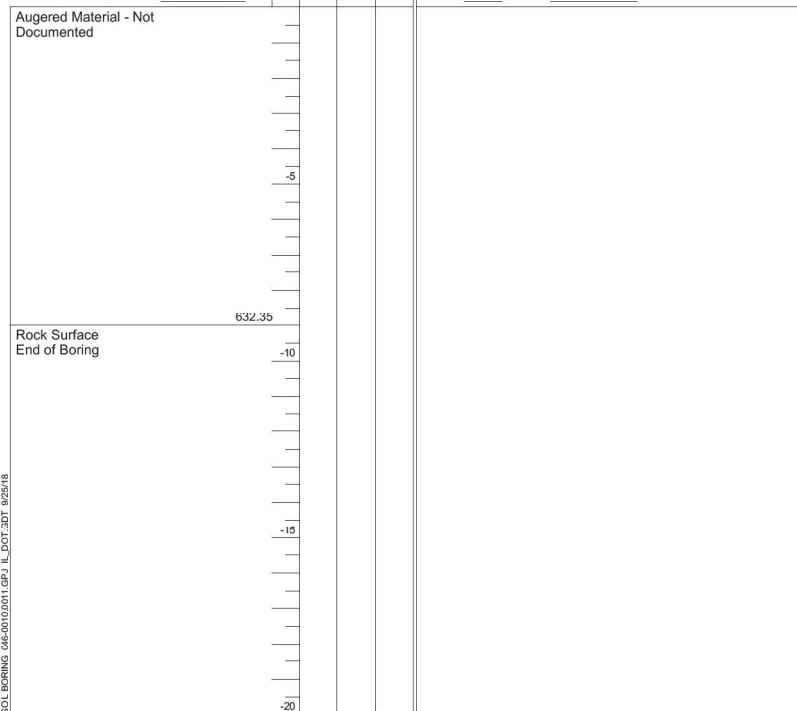
Date 11/22/17

ROUTE FAI 57 (I-57) DESCRIPTION I-57 over Grinnell Road, 0.95 Miles North of IL 17 LOGGED BY Larry Myers

SECTION 139HBR-3 LOCATION NE 1/4, SEC. 33, TWP. 31N, RNG. 12E, 3rd PM, Latitude 41.13331, Longitude -87.836545

COUNTY Kankakee DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 046-0010/0011 Station 138+90.96
 BORING NO. 4 Station 138+73 Offset 82.0 ft RL
 Ground Surface Elev. 641.35 ft (ft) (/6") (tsf) (%)



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



ROCK CORE LOG

Date 11/21/17

ROUTE FAI 57 (I-57) DESCRIPTION I-57 over Grinnell Road, 0.95 Miles North of IL 17 LOGGED BY Larry Myers

SECTION 139HBR-3 LOCATION NE 1/4, SEC. 33, TWP. 31N, RNG. 12E, 3rd PM, Latitude 41.133231, Longitude -87.836477

COUNTY Kankakee CORING METHOD Split Barrel Wire Line

STRUCT. NO. 046-0010/0011 Station 138+90.96
 BORING NO. 1 Station 138+95 Offset 60.0 ft RL
 Ground Surface Elev. 641.47 ft
 CORING BARREL TYPE & SIZE N W/L 2
 Core Diameter 1.9 in
 Top of Rock Elev. 631.47 ft
 Begin Core Elev. 631.47 ft

DEPTH (ft)	DEPTH (#)	RECOVERY (%)	RECOVERY (min/ft)	RECOVERY (tsf)
631.47	1	100	0	3.2
629.47				
626.47	-15	2	100	44
616.47	-25	3	93	81

End of Boring

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

MODEL: Default
 FILE NAME: E:\1903\Struct\Final_Design\Design\Sheets\0158&0159-046-0158&0159-043-SoilBoringData.dgn



USER NAME =	DESIGNED - CL	REVISED -
PLOT SCALE =	CHECKED - MTH	REVISED -
PLOT DATE = 5/6/21	DRAWN - CGY	REVISED -
	CHECKED - MTH	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SOIL BORING DATA
 STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)

SHEET 43 OF 44 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR.139R	KANKAKEE	252	156
CONTRACT NO. 66F74				
ILLINOIS FED. AID PROJECT				



ROCK CORE LOG

Page 1 of 1

Date 11/22/17

ROUTE FAI 57 (I-57) DESCRIPTION I-57 over Grinnell Road, 0.95 Miles North of IL 17 LOGGED BY Larry Myers

SECTION 139HBR-3 LOCATION NW 1/4, SEC. 34, TWP. 31N, RNG. 12E, 3rd PM

Latitude 41.133265, Longitude -87.836022

COUNTY Kankakee CORING METHOD Split Barrel Wire Line

STRUCT. NO. 046-0010/0011 CORING BARREL TYPE & SIZE N W/L 2

Station 138+90.96

Core Diameter 1.9 in

BORING NO. 3 Top of Rock Elev. 630.47 ft

Station 138+83 Begin Core Elev. 630.47 ft

Offset 58.0 ft LL

Ground Surface Elev. 641.47 ft

Description	Elev. (ft)	DPTH (#)	COR (%)	OVR (%)	REY (%)	CORE (min/ft)	STRENGTH (tsf)
Dense Gray Limestone with Minor Tan Oxidation at Joints. Tight Joints, Some Horizontal Fracturing. Highly Fractured in top 1 Ft.	630.47	1	87	23	5.4		
							951.9
							1187.6
							1029.7
Dense Gray Limestone with some Horizontal Fractures & Tight Joints	625.47	2	97	50	4.8		
							1168.0
							634.4
							1023.9
							977.8
							975.6
							1034.9
							1005.1
							1000.5
							1009.3
							1034.0
End of Boring	615.47						

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

MODEL: Default
 FILE NAME: E:\1903\Struct\Final_Design\Design\Plans\CADD_Sheets\0158&0159-046-0158&0159-044-SoilBoringData.dgn

	USER NAME =	DESIGNED - CL	REVISED -
		CHECKED - MTH	REVISED -
	PLOT SCALE =	DRAWN - CGY	REVISED -
	PLOT DATE = 5/6/21	CHECKED - MTH	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

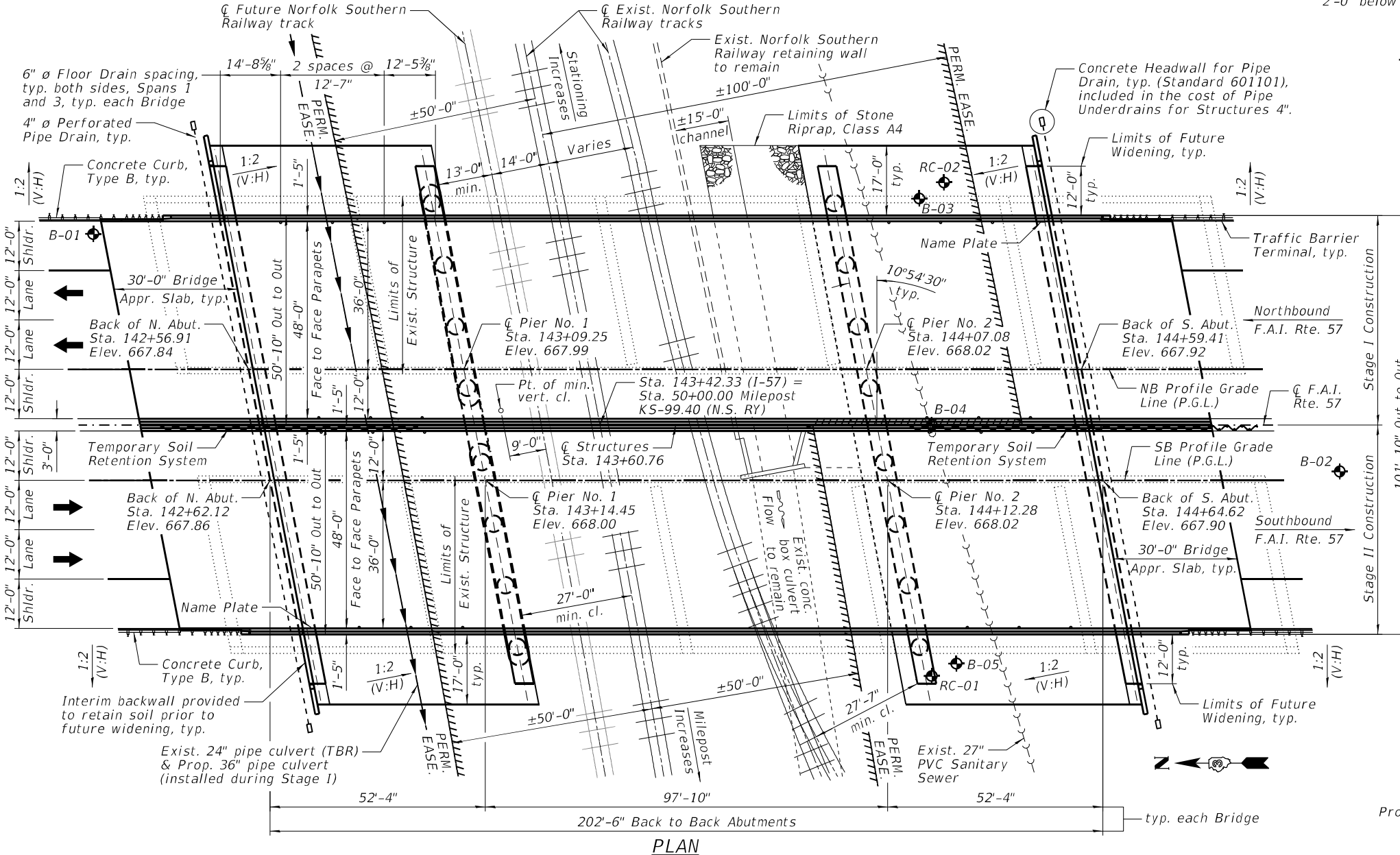
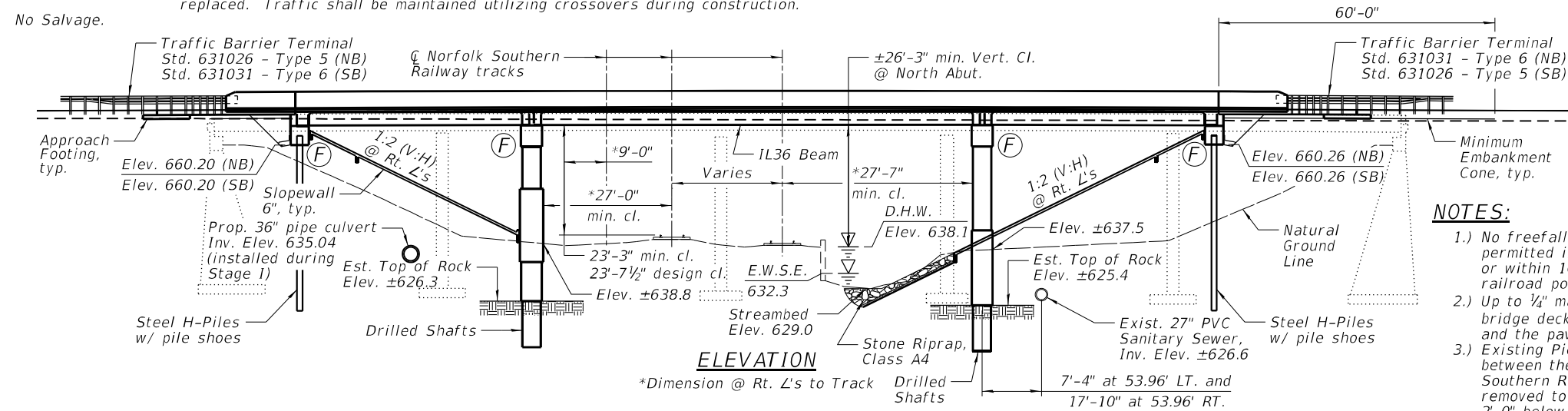
**SOIL BORING DATA
 STRUCTURE NO. 046-0158 (N.B.) & 046-0159 (S.B.)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	157
CONTRACT NO. 66F74				
ILLINOIS			FED. AID PROJECT	

(Sheet 4 of 4)

Benchmark: BM# 140, Chiseled "□" top of curb at Southeast end of East parapet wall SN 046-0010, Sta. 139+64, 54' LT., Elev. 663.32.
 BM# 145, Chiseled "□" top of curb at Southeast end of East parapet wall SN 046-0008, Sta. 145+02, 55' LT., Elev. 665.96.
 Existing Structures: S.N. 046-0008 (N.B.) and S.N. 046-0009 (S.B.), built in 1954 as F.A. Rte 26, Section 139-VB-VF, at Station 143+72. The bridge decks were replaced and structures widened in 1990 under F.A.I. Rte 57, Section 139VBR. The existing dual structures are 5-span bridges with rolled steel beams supported on spill-thru counterfort abutments and multi-column concrete piers on spread footings. 259'-8" back to back abutments, 43'-2" out to out deck with a 10°54'30" right ahead skew. Structures to be removed and replaced. Traffic shall be maintained utilizing crossovers during construction.

No Salvage.



DESIGN SPECIFICATIONS

2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

LOADING HL-93

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

WATERWAY INFORMATION

Drainage Area = 2.51 sq. mi.		Exist. Low Grade Elev. 641.07 @ Sta. 158+00		Prop. Low Grade Elev. 641.07 @ Sta. 158+00			
Flood	Freq. Yr.	Q C.F.S.	Opening Ft ² Exist. Prop.	Nat. H.W.E. Exist. Prop.	Head - Ft. Exist. Prop.	Headwater El. Exist. Prop.	
Design	10	229	0 0	635.6 638.1	0.0 0.0	635.6 638.1	
Base	50	355	0 0	638.9 638.9	0.0 0.0	638.9 638.9	
Scour Check	100	418	0 0	639.4 639.4	0.1 0.1	639.5 639.5	
Max. Calc.	200	485	1 2	639.8 639.8	0.1 0.1	639.9 639.9	
Max. Calc.		500	582	12 12	639.8	0.1 0.1	639.9 639.9

Exist. 10-year velocity = 5.0 fps Prop. 10-year velocity = 5.0 fps

DESIGN SCOUR ELEVATION TABLE

Event / Limit State	Design Scour Elevations (ft.)					Item 113
	N. Abut.	Pier 1	Pier 2	S. Abut.		
Q100	660.2	638.8	637.5	660.3		8
Q200	660.2	638.8	637.5	660.3		
Design	660.2	638.8	637.5	660.3		
Check	660.2	638.8	637.5	660.3		

INDEX OF SHEETS

See Sheet 2 of 55 for "Index of Sheets".

DESIGN STRESSES

FIELD UNITS

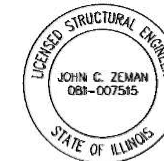
f'c = 3,500 psi
 f'c = 4,000 psi (Superstructure Concrete)
 fy = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

f'c = 8,500 psi
 f'ci = 6,500 psi
 fpu = 270,000 psi (0.6" ø low lax. strands)
 fpbt = 202,300 psi (0.6" ø low lax. strands)

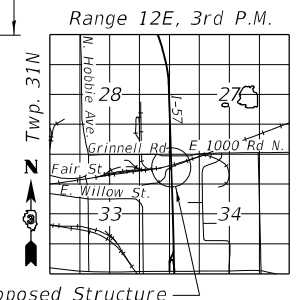
SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec. (SD1) = 0.072 g
 Design Spectral Acceleration at 0.2 sec. (SDS) = 0.125 g
 Soil Site Class = C



John C. Zeman Date 05/05/21

JOHN C. ZEMAN
 ILLINOIS STRUCTURAL ENGINEER
 NO. 081-007515
 Exp. Date 11/30/2022



LOCATION SKETCH

GENERAL PLAN & ELEVATION
I-57 OVER NORFOLK SOUTHERN
RAILWAY (M.P. 99.4) & DRAINAGE DITCH
F.A.I. RTE 57 - SEC. I(139)VB,HB-31BR,139R
KANKAKEE COUNTY
STATION 143+60.76
STRUCTURE NO. 046-0156 (N.B.)
STRUCTURE NO. 046-0157 (S.B.)



DESIGNED - PMG	REVISION
CHECKED - DAH	REVISION
DRAWN - DJM	REVISION
CHECKED - JCZ	REVISION

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	I(139)VB,HB-31BR,139R	KANKAKEE	252	158
EX. S.N. 046-0008 (NB)/-0009 (SB)		CONTRACT NO. 66F74		

INDEX OF SHEETS

SHEET NO.	TITLE
1	GENERAL PLAN AND ELEVATION
2-3	GENERAL DATA
4	FOUNDATION LAYOUT
5-8	STAGE CONSTRUCTION DETAILS
9	TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
10	TOP OF DECK ELEVATION LOCATIONS
11-19	TOP OF DECK ELEVATIONS
20-21	TOP OF APPROACH SLAB ELEVATIONS
22-24	SUPERSTRUCTURE
25-26	SUPERSTRUCTURE DETAILS
27-30	DIAPHRAGM DETAILS
31-35	BRIDGE APPROACH SLAB DETAILS
36-37	FRAMING DETAILS
38	IL36 BEAM SPANS 1 AND 3
39	IL36 BEAM SPAN 2
40	IL36 BEAM DETAILS
41-42	NORTH ABUTMENT
43-44	SOUTH ABUTMENT
45	ABUTMENT DETAILS
46-47	PIER NO. 1
48-49	PIER NO. 2
50	PIER DETAILS
51	HP PILE DETAILS
52	BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
53-54	SOIL BORING LOGS
55	ROCK CORE LOGS

STATION 143+60.76
 BUILT 20__ BY
 STATE OF ILLINOIS
 F.A.I. RT. 57 SEC. [(139)VB,HB-3]BR,139R
 LOADING HL-93
 STRUCTURE NO. 046-0156 (N.B.)

NAME PLATE N.B. STRUCTURE
 See Std. 515001

STATION 143+60.76
 BUILT 20__ BY
 STATE OF ILLINOIS
 F.A.I. RT. 57 SEC. [(139)VB,HB-3]BR,139R
 LOADING HL-93
 STRUCTURE NO. 046-0157 (S.B.)

NAME PLATE S.B. STRUCTURE
 See Std. 515001

SUGGESTED SEQUENCE OF BEAM ERECTION:

- 1.) Construct piers.
- 2.) Erect Span 2 beams.
- 3.) Construct embankment cones and abutments.
- 4.) Erect Span 1 and 3 beams.

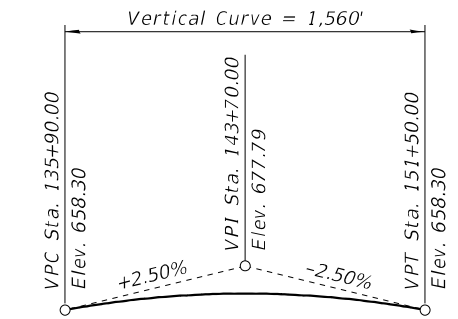
Note: The Contractor may propose an alternative sequence of beam erection as part of the beam erection plan. See the Special Provision for "Erection of Bridge Girders over or adjacent to Railroads".

TOTAL BILL OF MATERIAL

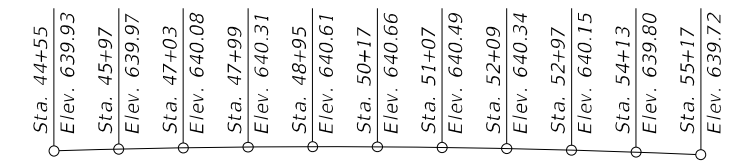
ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A4	Sq. Yd.		229	229
Filter Fabric	Sq. Yd.		229	229
Removal of Existing Structures No. 1	Each			1
Removal of Existing Structures No. 2	Each			1
Protective Shield	Sq. Yd.	1,149		1,149
Structure Excavation	Cu. Yd.		448	448
Floor Drains	Each	24		24
Concrete Structures	Cu. Yd.	62.8	757.3	820.1
Concrete Superstructure	Cu. Yd.	858.4		858.4
Protective Coat	Sq. Yd.	3,269		3,269
Concrete Superstructure (Approach Slab)	Cu. Yd.	284.9		284.9
Furnishing and Erecting Precast Prestressed Concrete Beams, IL36	Foot	2,770		2,770
Reinforcement Bars	Pound		33,480	33,480
Reinforcement Bars, Epoxy Coated	Pound	362,150	113,560	475,710
Bar Splicers	Each		81	81
Slope Wall 6 Inch	Sq. Yd.		1,702	1,702
Furnishing Steel Piles HP12x63	Foot		1,368	1,368
Driving Piles	Foot		1,368	1,368
Pile Shoes	Each		36	36
Name Plates	Each	2		2
Permanent Casing	Foot		12	12
Drilled Shaft in Soil	Cu. Yd.		116.8	116.8
Drilled Shaft in Rock	Cu. Yd.		74.4	74.4
Preformed Joint Seal 3 1/2"	Foot	260		260
Temporary Soil Retention System	Sq. Ft.		964	964
Granular Backfill for Structures	Cu. Yd.		336	336
Geocomposite Wall Drain	Sq. Yd.		203	203
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	5		5
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	5		5
Deck Slab Repair (Partial)	Sq. Yd.	62		62
Diamond Grinding (Bridge Section)	Sq. Yd.	3,189		3,189
Pipe Underdrains for Structures 4"	Foot		296	296
Thermal Integrity Profile Testing	Each		16	16
Thermal Integrity Profile Data Collection	Foot		358	358
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	1,389		1,389

GENERAL NOTES:

- 1.) Reinforcement bars designated (E) shall be epoxy coated.
- 2.) The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- 3.) Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- 4.) The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- 5.) For Removal of Existing Structures, the existing Northbound bridge (SN 046-0008) is considered "No. 1", and the existing Southbound bridge (SN 046-0009) is considered "No. 2".
- 6.) Slipforming of the parapets is not allowed.
- 7.) Deck Slab Repair shall be completed on the existing Southbound bridge (SN 046-0009) during Pre-Stage 1. The repair quantities are estimated, and the actual repair quantities required shall be verified according to the special provisions.
- 8.) There is an existing 27" PVC Sanitary Sewer Pipe near proposed Pier No. 2. The Contractor shall exercise extreme caution during construction to make certain that construction activities will not have detrimental effects on the pipe. Any damage during construction shall be repaired at the Contractor's expense to the satisfaction of the City. The Contractor shall field verify location of existing utility prior to construction.
- 9.) For the East-most Drilled Shaft at Pier No. 2, the Contractor shall utilize a Permanent Casing for the height shown in the End View on Sheet 48 of 55. Corrugated Metal Pipe (CMP) will not be allowed. Neither the Wet Method of construction nor the use of Temporary Casing will be allowed. The permanent casing shall be rotated in (vibratory methods are not allowed), with drilled excavation inside of the permanent casing. The Contractor shall not excavate below the bottom of the permanent casing until the top of rock is reached. The permanent casing thickness is to be determined by the Contractor based on the anticipated installation stresses considering the equipment selected by the Contractor (1/4" minimum). For the other Drilled Shafts at Pier No. 2, the Contractor shall take precautions to not disturb or damage the sewer pipe.



I- 57 PROFILE GRADE
 (Along inside edge of pavement)
 (P.G.L. shows final elevations after grinding)



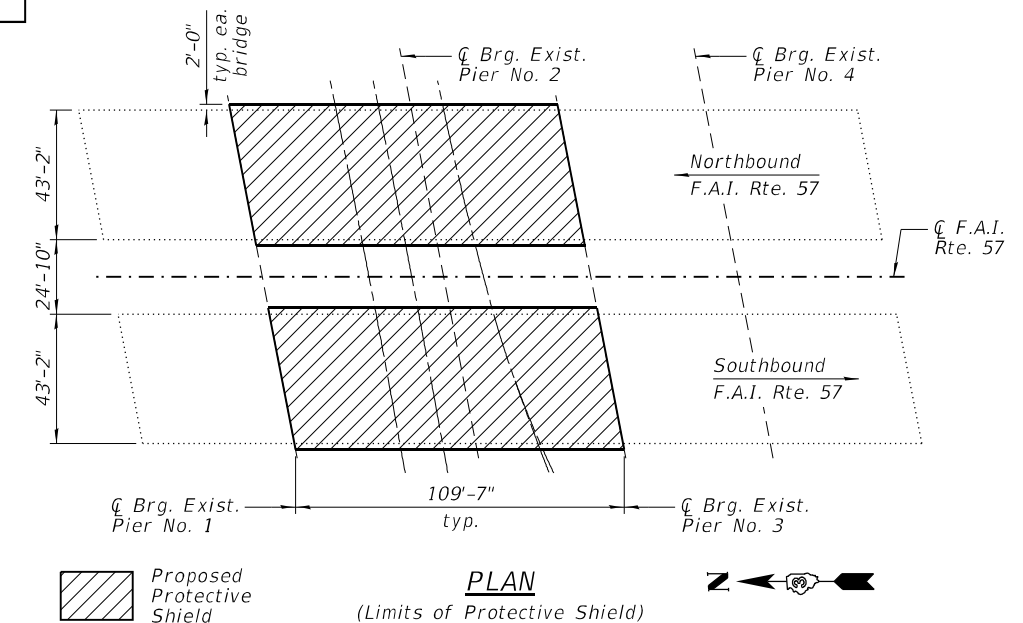
NORTH TRACK (MAIN)



SOUTH TRACK (SIDING)

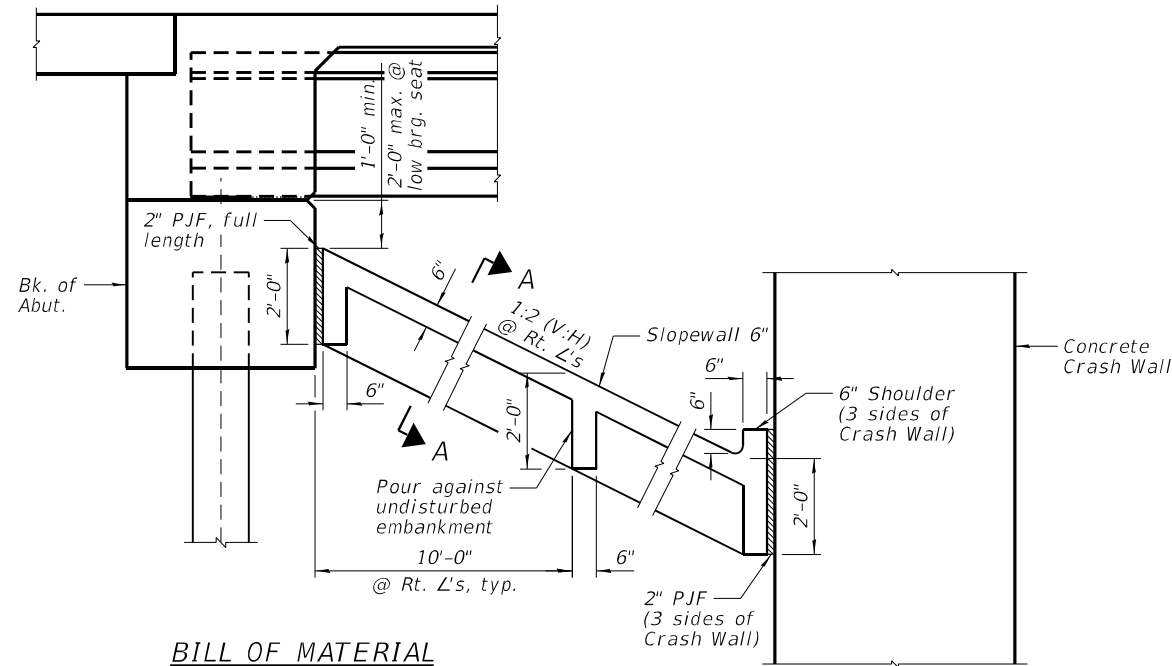
NORFOLK SOUTHERN RAILWAY PROFILE GRADE
 (Top of rail)

The elevation of the existing top-of-rail profile shall be verified before beginning construction. All discrepancies shall be brought to the attention of the Norfolk Southern Public Projects Engineer.



Proposed Protective Shield

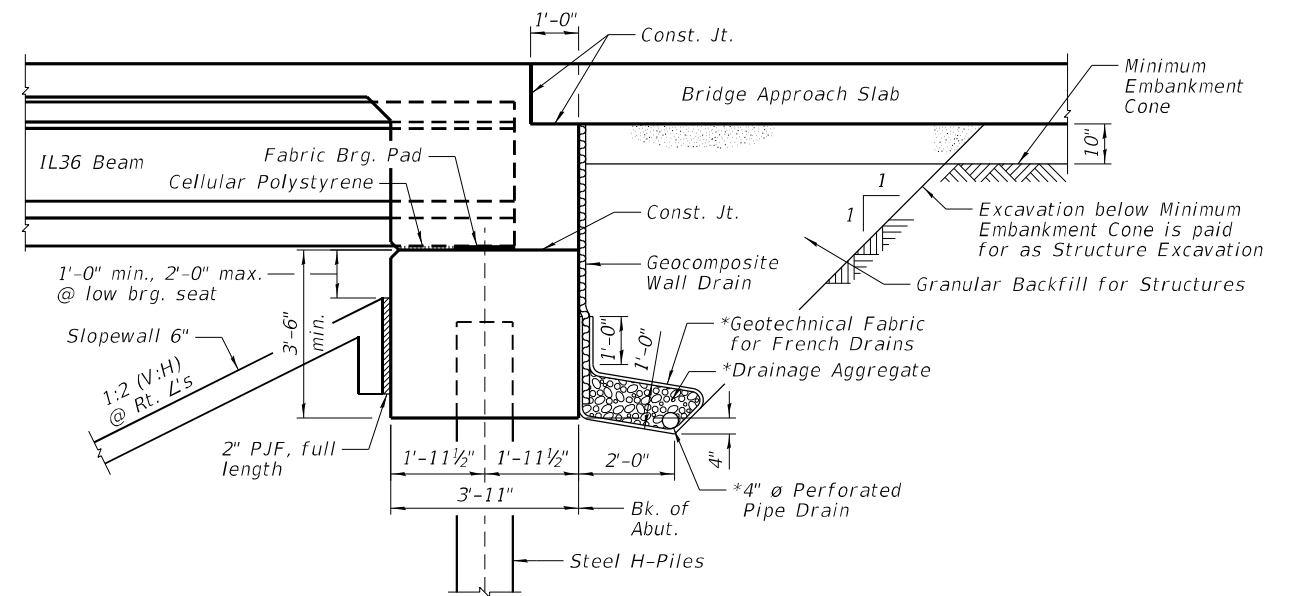
PLAN
 (Limits of Protective Shield)



BILL OF MATERIAL

Item	Unit	Total
Slope Wall 6 Inch	Sq. Yd.	796

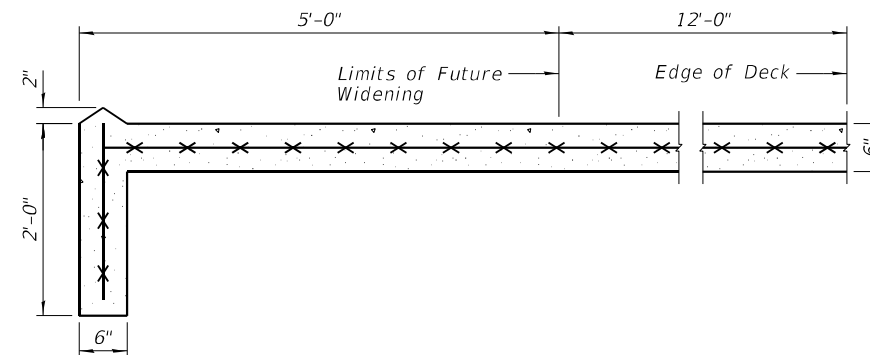
SECTION THRU CONCRETE SLOPEWALL
(@ Pier No. 1)



SECTION THRU ABUTMENT
(Horizontal dimensions @ Rt. L's)

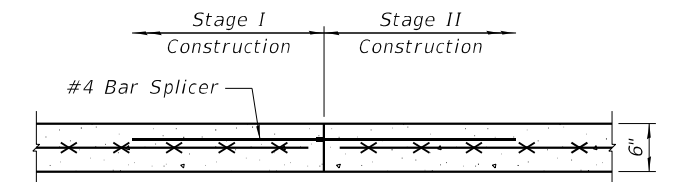
NOTES:

- *Included in the cost of Pipe Underdrains for Structures.
- All drainage system components shall be continuous across the \bar{C} Roadway & Stage Construction Line and shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

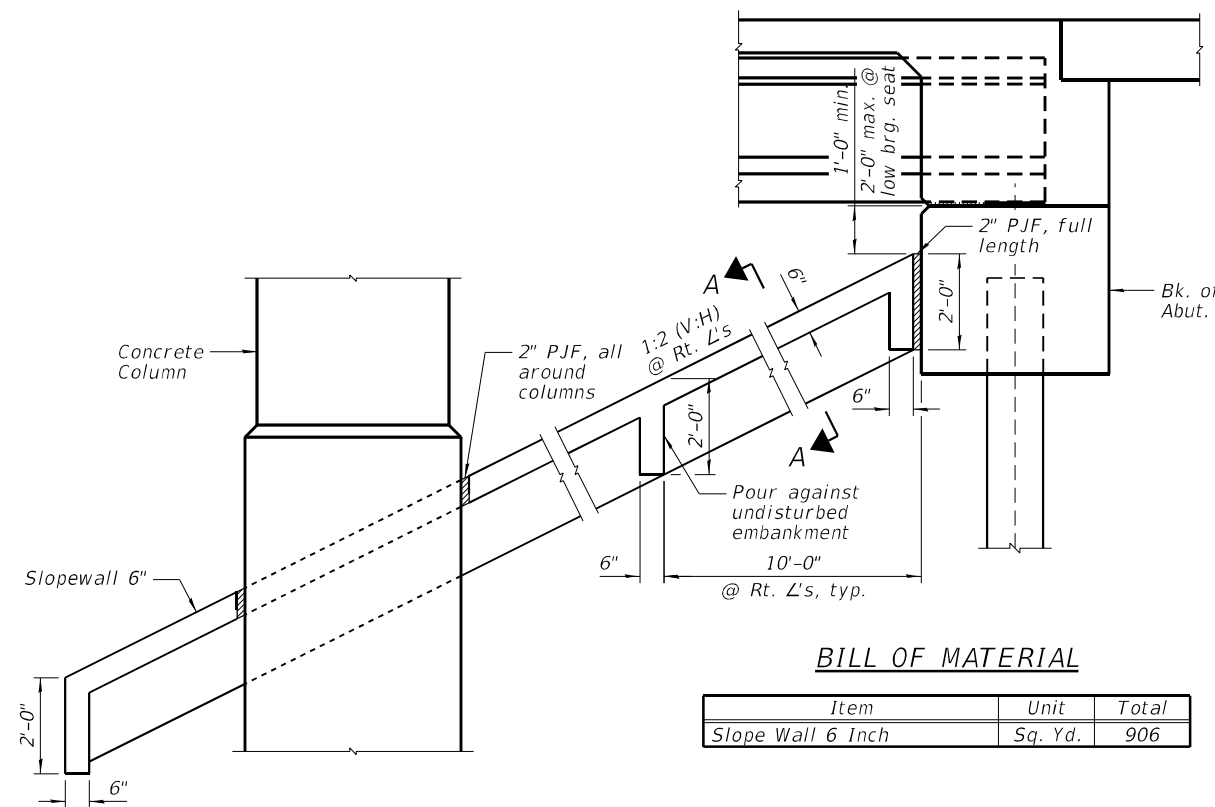


SECTION A-A

Slope wall shall be reinforced with welded wire fabric, 6 in. x 6 in. - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.



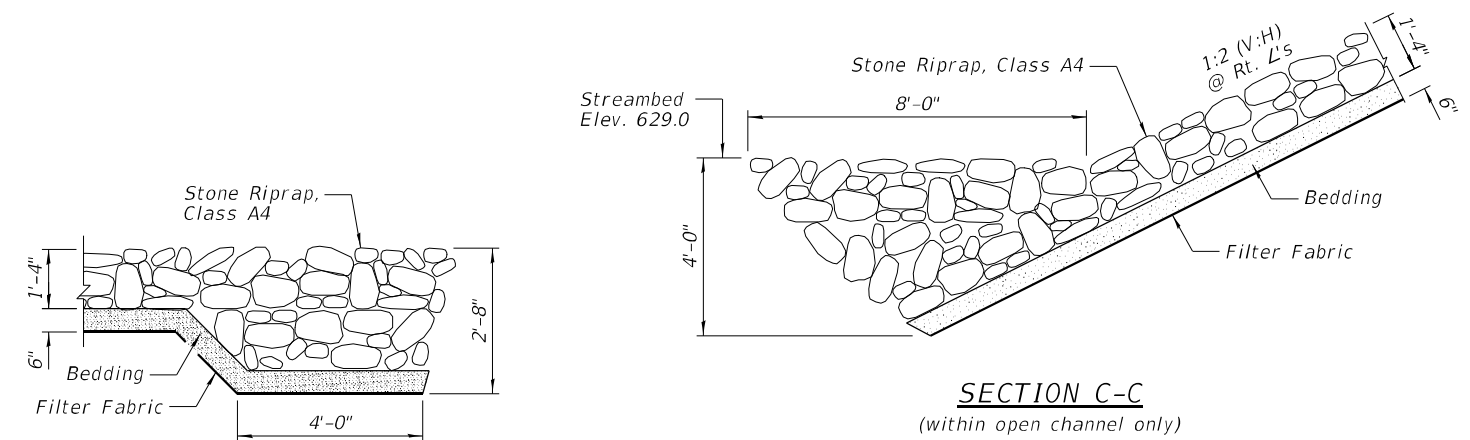
SLOPEWALL SECTION @ STAGE CONSTRUCTION



BILL OF MATERIAL

Item	Unit	Total
Slope Wall 6 Inch	Sq. Yd.	906

SECTION THRU CONCRETE SLOPEWALL
(@ Pier No. 2)



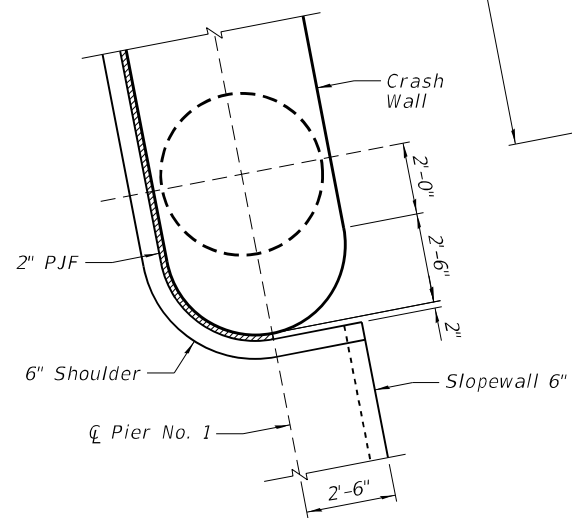
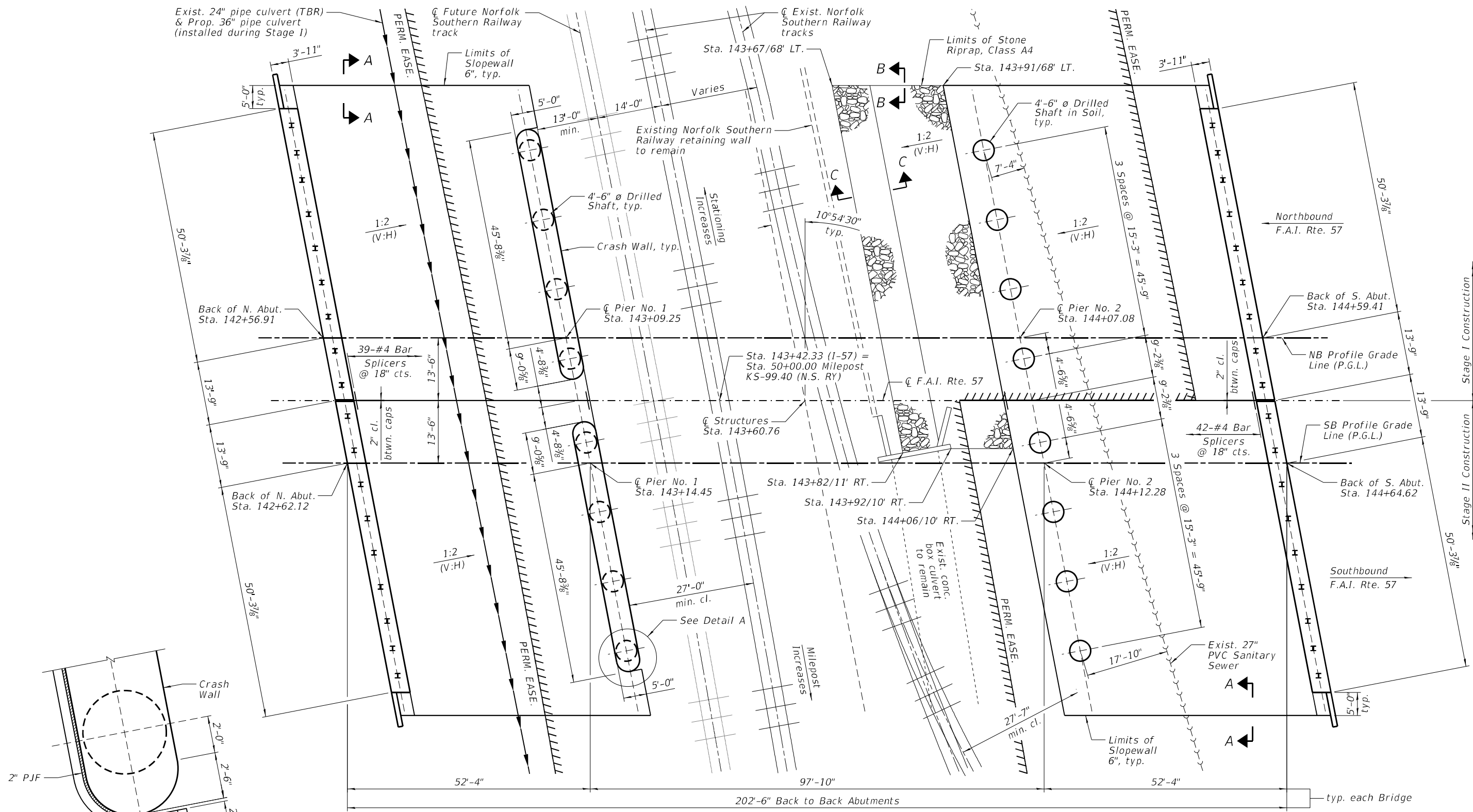
SECTION B-B

SECTION C-C
(within open channel only)

NOTE:

See Sheet 4 of 55 for location of Sections A-A, B-B & C-C.

Exist. 24" pipe culvert (TBR) & Prop. 36" pipe culvert (installed during Stage I)



PLAN

NOTE:
 See Sheet 3 of 55 for Sections A-A, B-B & C-C.



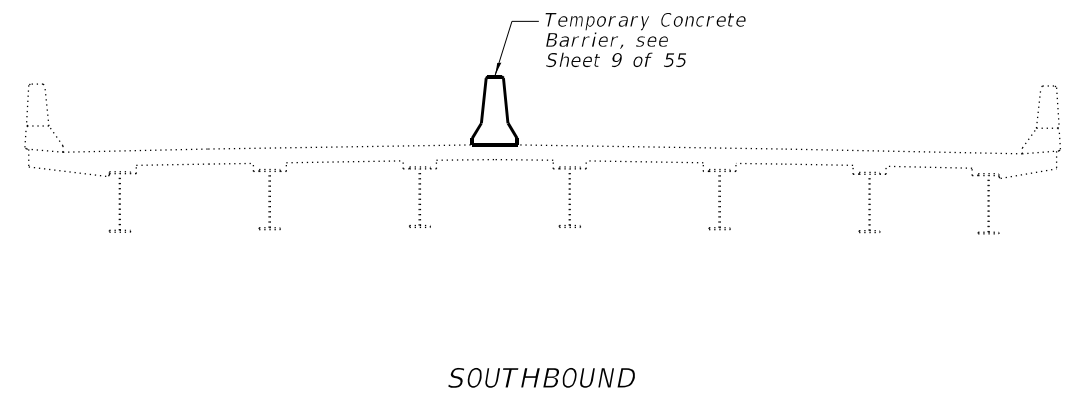
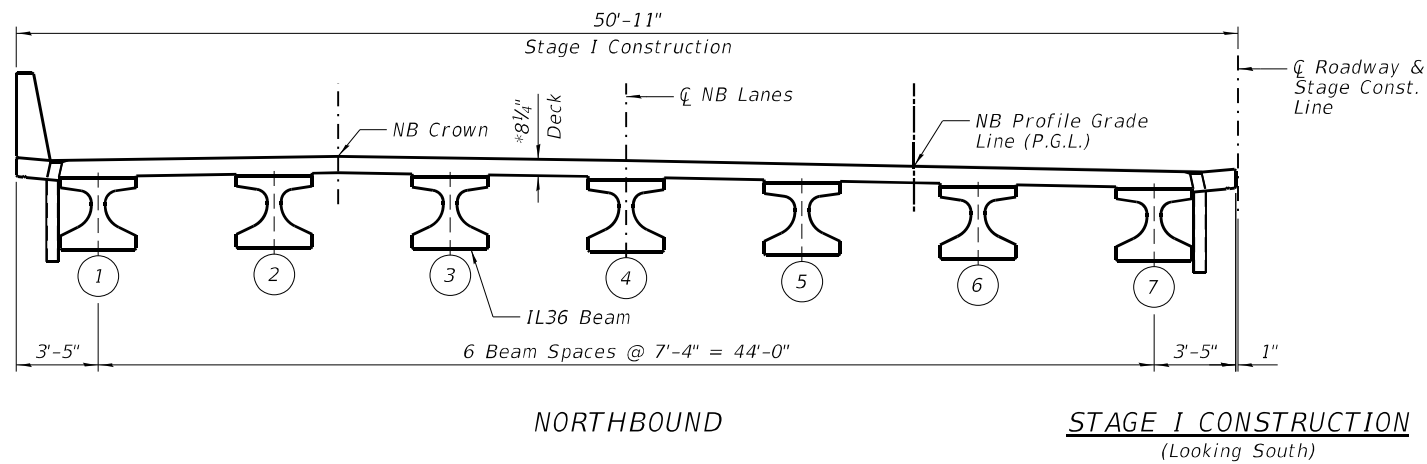
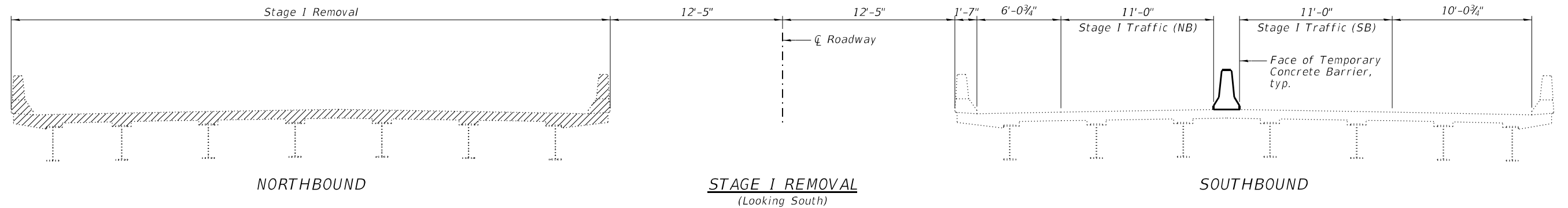
DESIGNED - PMG	REVISED
CHECKED - DAH	REVISED
DRAWN - DJM	REVISED
CHECKED - JCZ	REVISED
DATE - 05/05/2021	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOUNDATION LAYOUT
STRUCTURE NO. 046-0156 (NB) & 046-0157 (SB)
 SHEET NO. 4 OF 55 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	161
EX. S.N. 046-0008 (NB)/-0009 (SB)		CONTRACT NO. 66F74		

ILLINOIS FED. AID PROJECT

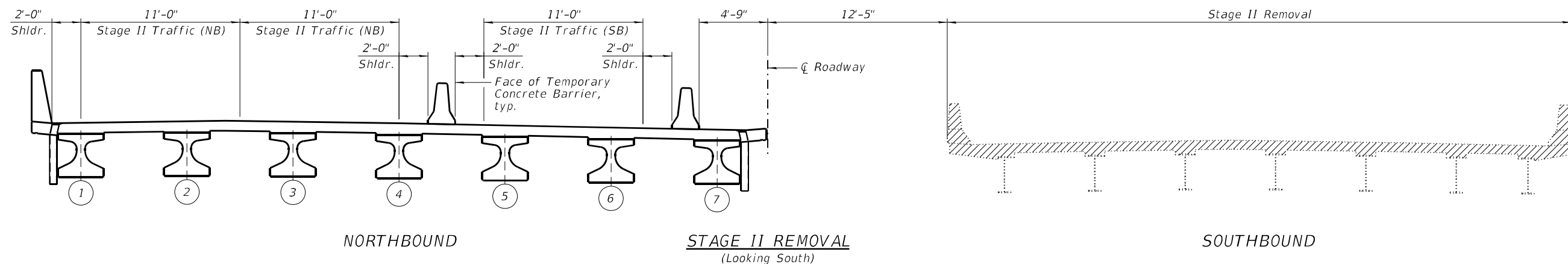


NOTES:

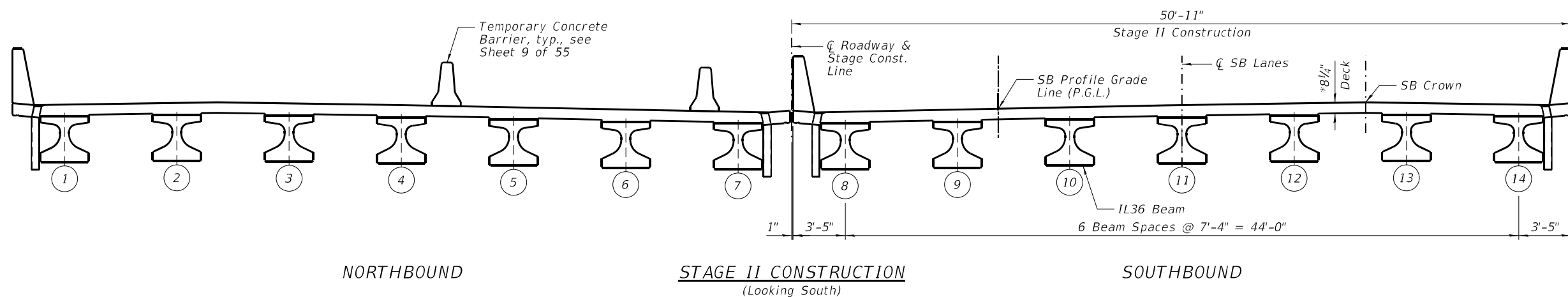
- 1.) *Dimension prior to grinding. Up to 1/4" will be ground off the bridge deck.
- 2.) See Sheet 9 of 55 for Temporary Concrete Barrier. See roadway plans for quantity.
- 3.) Hatched area indicates Removal of Existing Structure.

DESIGNED - PMG	REVISED
CHECKED - DAH	REVISED
DRAWN - DJM	REVISED
CHECKED - JCZ	REVISED
DATE - 05/05/2021	

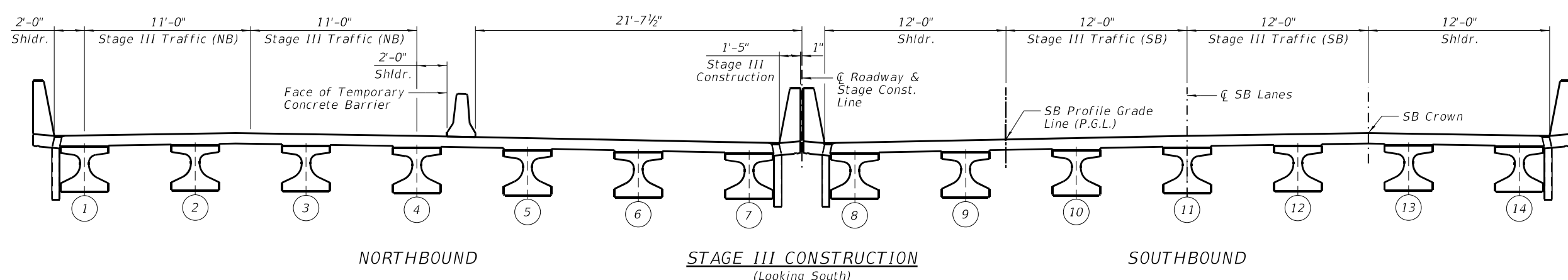
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	162
EX. S.N. 046-0008 (NB)/ -0009 (SB)		CONTRACT NO. 66F74		
		ILLINOIS FED. AID PROJECT		



NORTHBOUND STAGE II REMOVAL (Looking South) SOUTHBOUND



NORTHBOUND STAGE II CONSTRUCTION (Looking South) SOUTHBOUND



NORTHBOUND STAGE III CONSTRUCTION (Looking South) SOUTHBOUND

- NOTES:**
- 1.) *Dimension prior to grinding. Up to 1/4" will be ground off the bridge deck.
 - 2.) See Sheet 9 of 55 for Temporary Concrete Barrier. See roadway plans for quantity.
 - 3.) Hatched area indicates Removal of Existing Structure.



DESIGNED - PMG	REVISED
CHECKED - DAH	REVISED
DRAWN - DJM	REVISED
CHECKED - JCZ	REVISED
DATE - 05/05/2021	

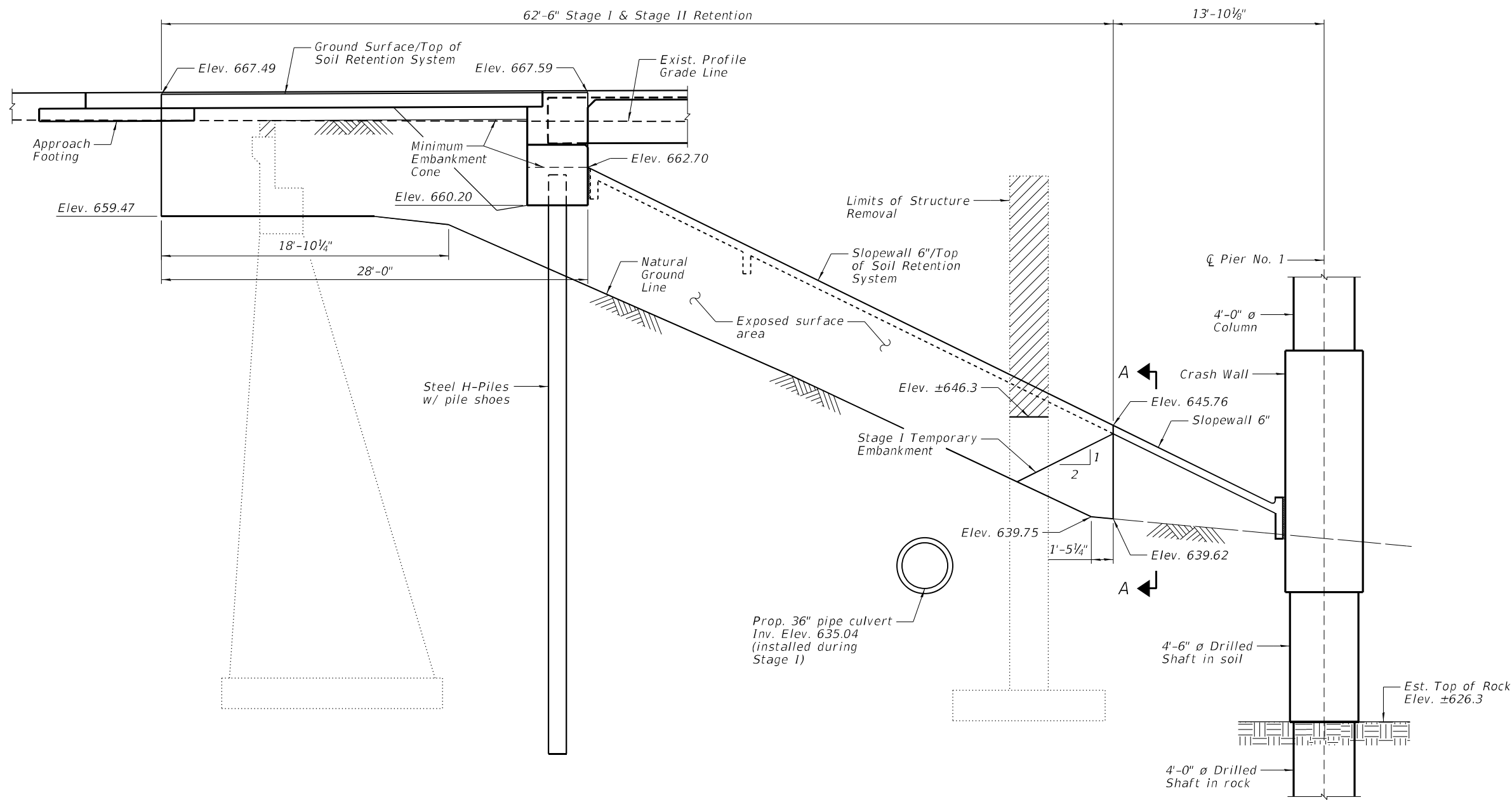
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 046-0156 (NB) & 046-0157 (SB)

SHEET NO. 6 OF 55 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	163
EX. S.N. 046-0008 (NB)/-0009 (SB)		CONTRACT NO. 66F74		

ILLINOIS FED. AID PROJECT

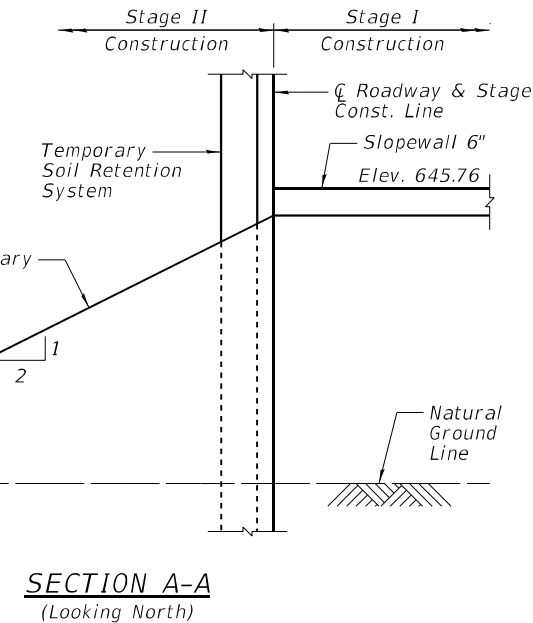
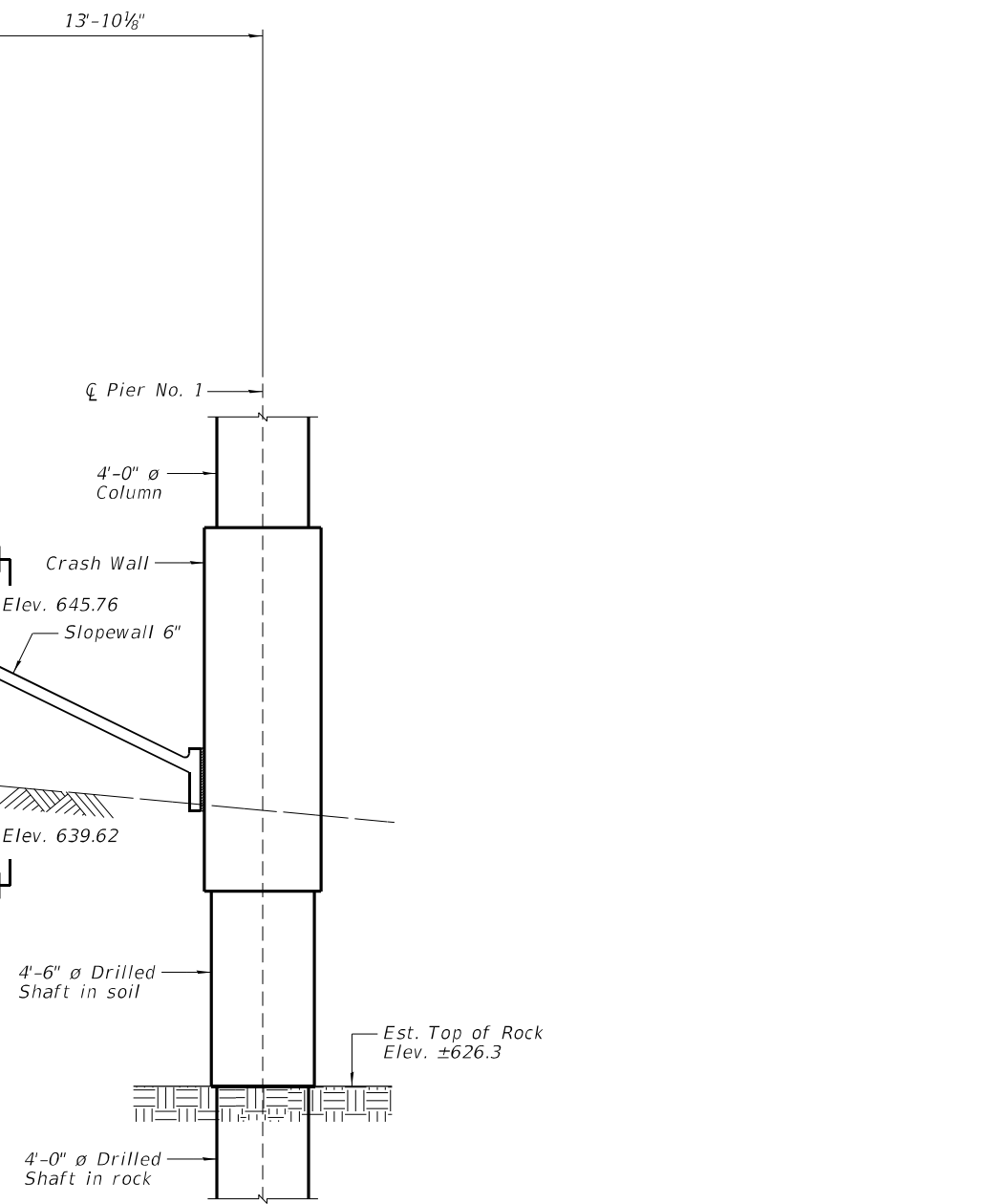


NORTH ABUTMENT TEMPORARY SOIL RETENTION SYSTEM
(Looking East)

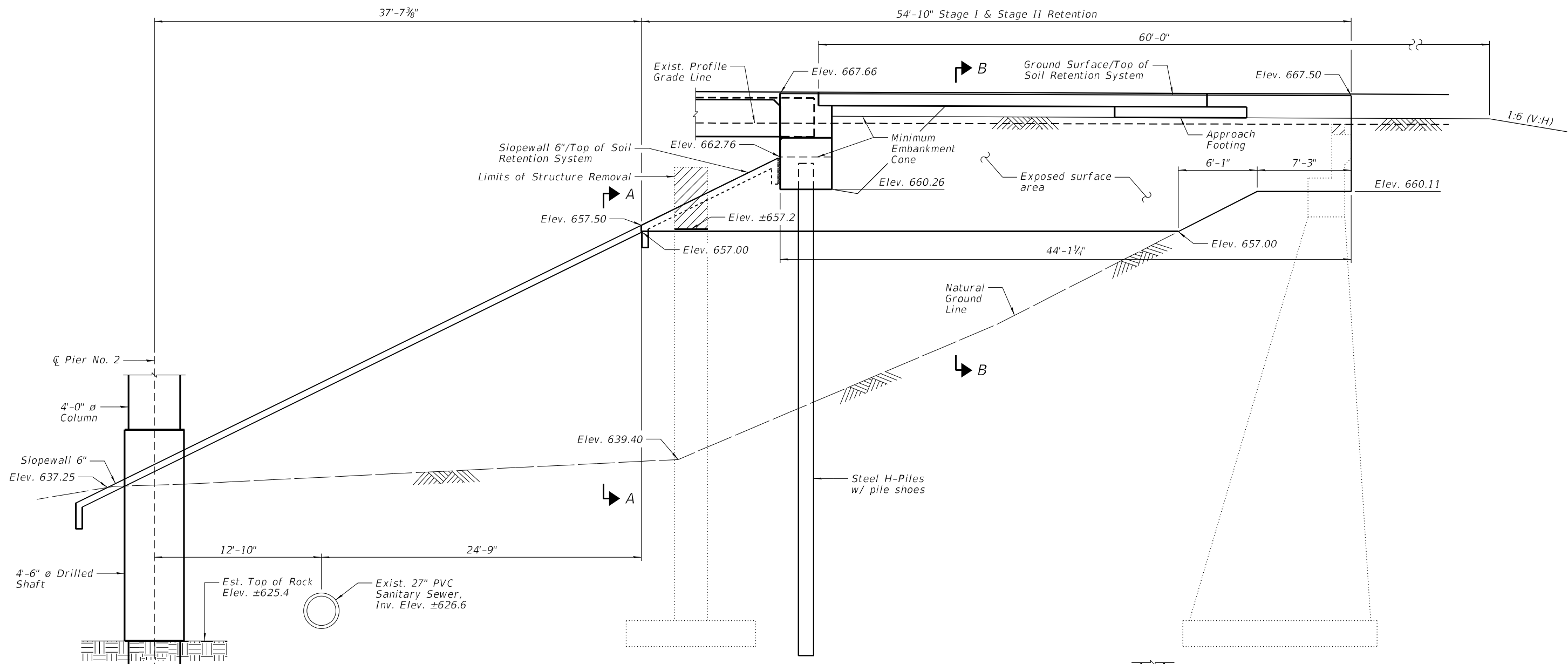
A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

BILL OF MATERIAL

Item	Unit	Total
Temporary Soil Retention System	Sq. Ft.	496

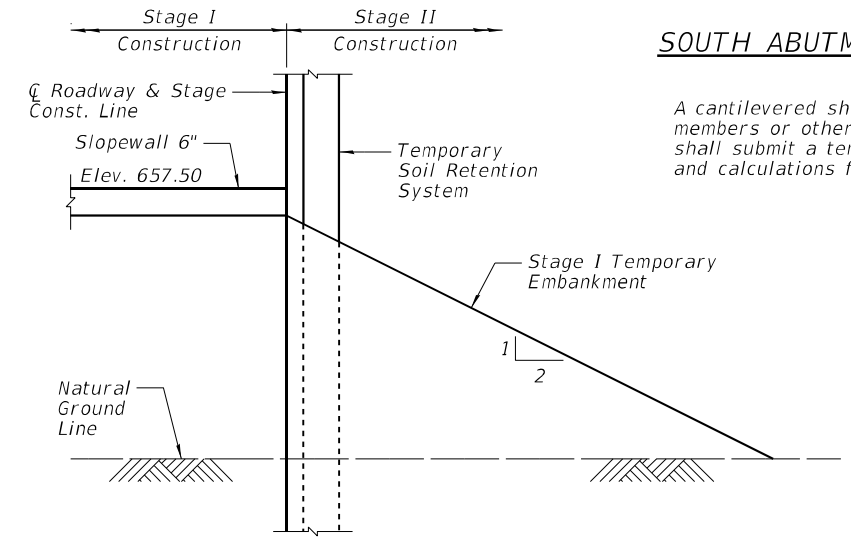


SECTION A-A
(Looking North)

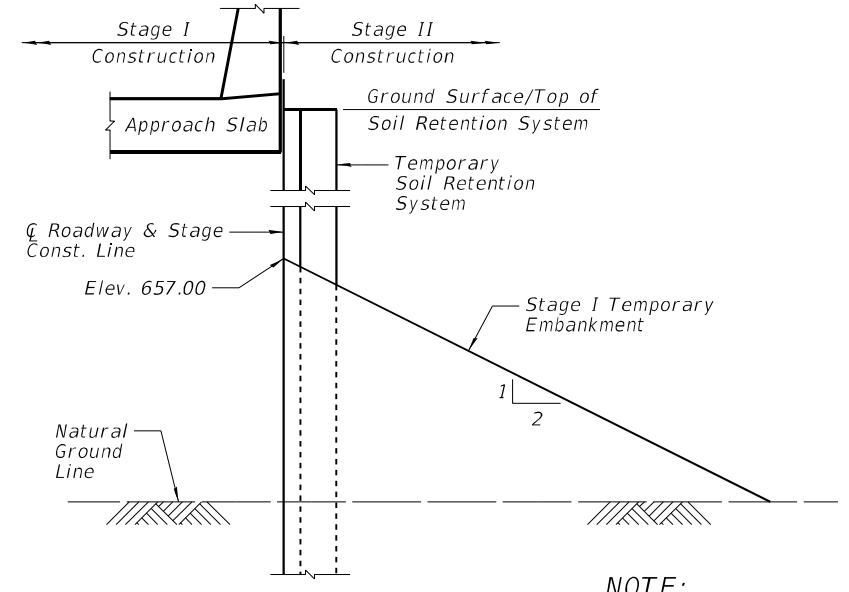


SOUTH ABUTMENT TEMPORARY SOIL RETENTION SYSTEM
(Looking East)

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



SECTION A-A
(Looking South)



SECTION B-B
(Looking South)

NOTE:
The Stage I Temporary Embankment shall be constructed prior to installation of the Temporary Soil Retention System.

BILL OF MATERIAL

Item	Unit	Total
Temporary Soil Retention System	Sq. Ft.	468

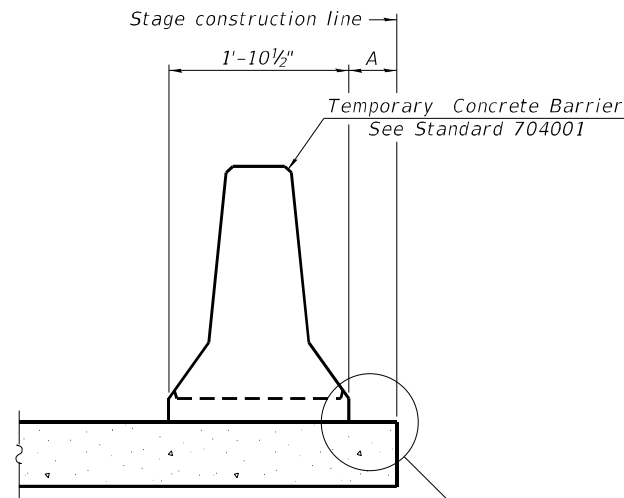


DESIGNED - PMG	REVIS
CHECKED - DAH	REVIS
DRAWN - DJM	REVIS
CHECKED - JCZ	REVIS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

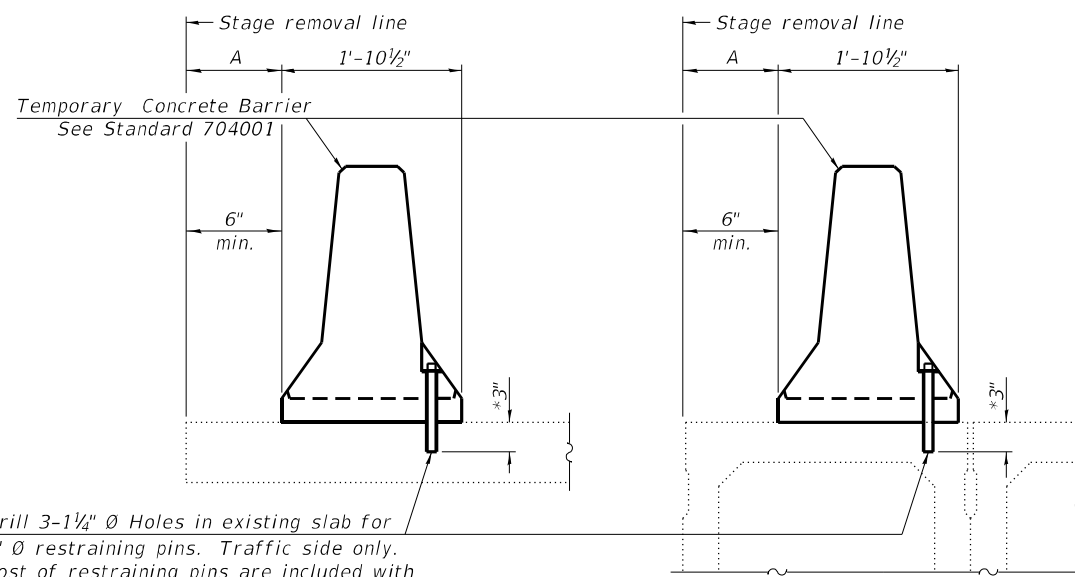
STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 046-0156 (NB) & 046-0157 (SB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	165
EX. S.N. 046-0008 (NB)/ -0009 (SB)			CONTRACT NO. 66F74	



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

NEW SLAB OR NEW DECK BEAM

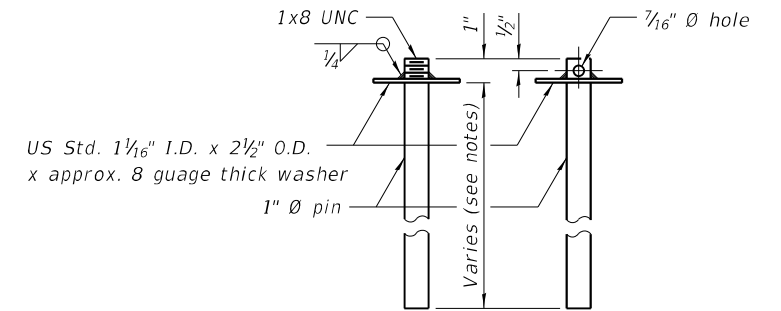


Drill 3-1 1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

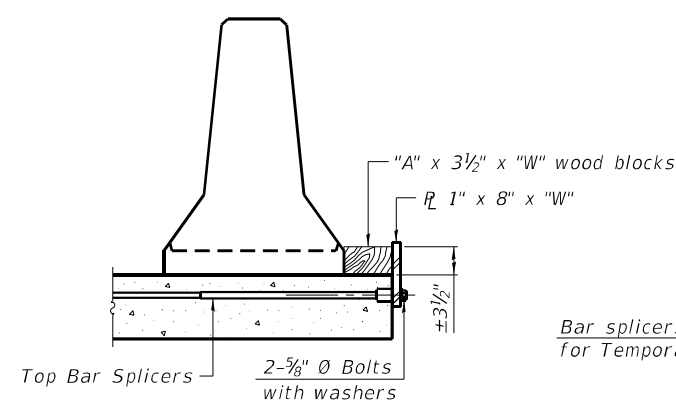
EXISTING DECK BEAM

SECTIONS THRU SLAB OR DECK BEAM

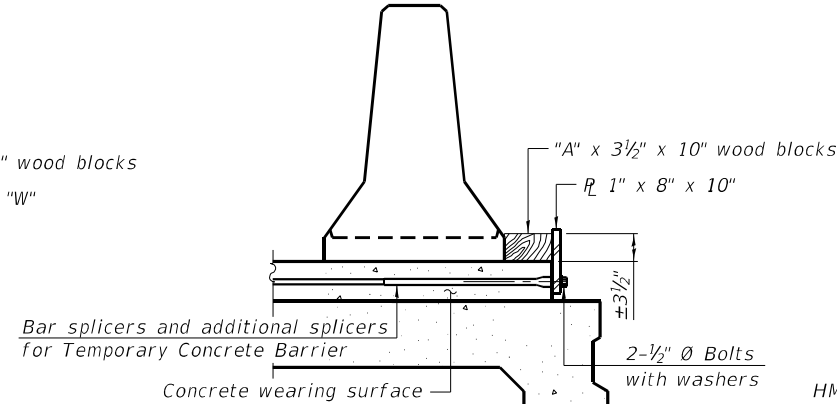


RESTRAINING PIN

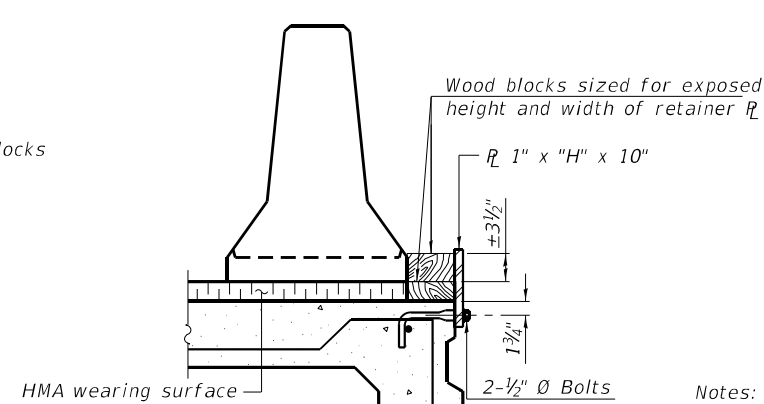
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.



DETAIL I

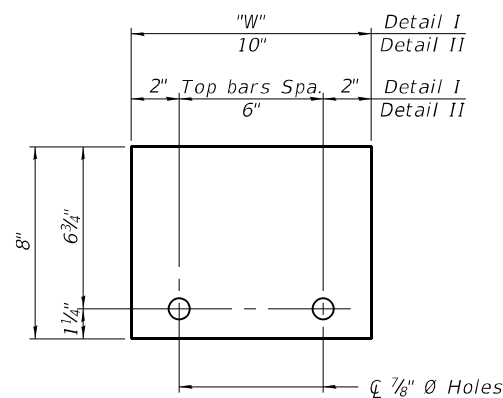
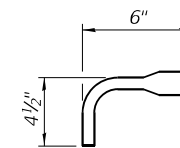


DETAIL II

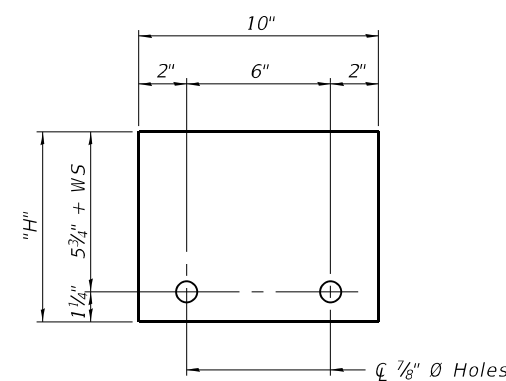


DETAIL III

BAR SPLICER FOR #4 BAR - DETAIL III



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



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

Notes:

Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate center of each temporary concrete barrier.

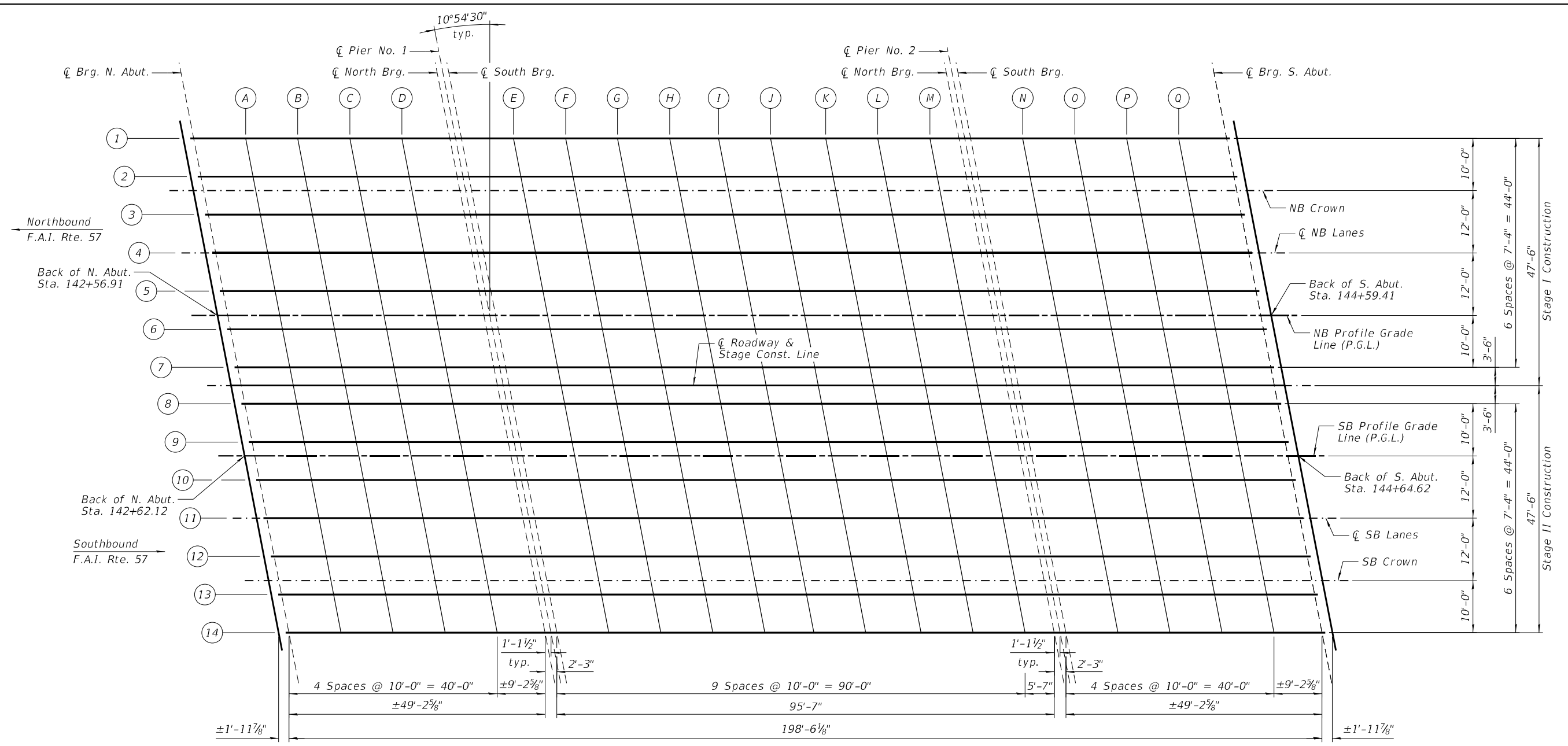
The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.

When the 'A' dimension is less than 1 1/2", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

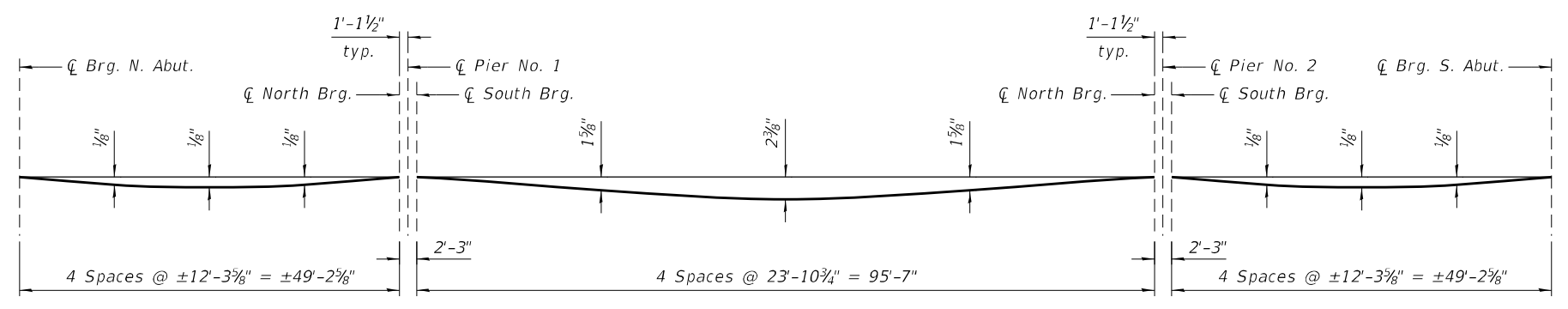
Detail I - Installation for a new bridge deck or bridge slab.

Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.

Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.



PLAN

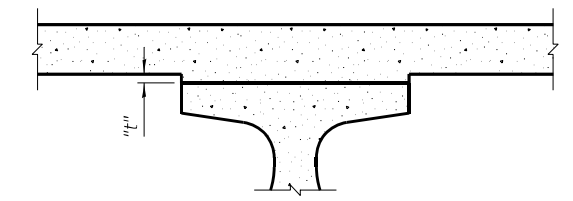


DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of deck & parapets only, excluding beam.)

Note:

The above deflections are not to be used in the field if the Engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding", as shown on Sheets 11 thru 19 of 55.



FILLET HEIGHTS

To determine "t": After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections and Grinding" shown on Sheets 11 thru 19 of 55, minus 8/4" deck thickness, equals the fillet heights "t" above top flanges of beams.

The deck is to be ground after curing to achieve smoothness, but the deck is not to be ground to elevations below the "Theoretical Grade Elevations" shown on Sheets 11 thru 19 of 55. For grinding the deck, see Special Provisions.

DESIGNED - PMG	REVISED
CHECKED - DAH	REVISED
DRAWN - DJM	REVISED
CHECKED - JCZ	REVISED
DATE - 05/05/2021	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	167
EX. S.N. 046-0008 (NB) / -0009 (SB)		CONTRACT NO. 66F74		
ILLINOIS / FED. AID PROJECT				

BEAM 1

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection and Grinding
Bk. of North Abut.	142+50.36	-47.50	668.09	668.11
☉ Brg. North Abut.	142+52.35	-47.50	668.09	668.11
A	142+62.35	-47.50	668.13	668.16
B	142+72.35	-47.50	668.16	668.20
C	142+82.35	-47.50	668.19	668.23
D	142+92.35	-47.50	668.22	668.25
☉ North Brg. Pier No. 1	143+01.57	-47.50	668.24	668.26
☉ Pier No. 1	143+02.69	-47.50	668.24	668.26
☉ South Brg. Pier No. 1	143+03.82	-47.50	668.25	668.27
E	143+13.82	-47.50	668.26	668.35
F	143+23.82	-47.50	668.28	668.42
G	143+33.82	-47.50	668.29	668.48
H	143+43.82	-47.50	668.30	668.51
I	143+53.82	-47.50	668.31	668.53
J	143+63.82	-47.50	668.31	668.52
K	143+73.82	-47.50	668.32	668.48
L	143+83.82	-47.50	668.31	668.43
M	143+93.82	-47.50	668.31	668.37
☉ North Brg. Pier No. 2	143+99.40	-47.50	668.30	668.32
☉ Pier No. 2	144+00.52	-47.50	668.30	668.32
☉ South Brg. Pier No. 2	144+01.65	-47.50	668.30	668.32
N	144+11.65	-47.50	668.29	668.32
O	144+21.65	-47.50	668.27	668.31
P	144+31.65	-47.50	668.25	668.29
Q	144+41.65	-47.50	668.23	668.26
☉ Brg. South Abut.	144+50.87	-47.50	668.21	668.23
Bk. of South Abut.	144+52.86	-47.50	668.21	668.23

BEAM 2

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection and Grinding
Bk. of North Abut.	142+51.77	-40.17	668.20	668.22
☉ Brg. North Abut.	142+53.76	-40.17	668.21	668.23
A	142+63.76	-40.17	668.24	668.27
B	142+73.76	-40.17	668.28	668.31
C	142+83.76	-40.17	668.31	668.34
D	142+93.76	-40.17	668.33	668.36
☉ North Brg. Pier No. 1	143+02.98	-40.17	668.35	668.37
☉ Pier No. 1	143+04.10	-40.17	668.36	668.38
☉ South Brg. Pier No. 1	143+05.23	-40.17	668.36	668.38
E	143+15.23	-40.17	668.38	668.46
F	143+25.23	-40.17	668.39	668.53
G	143+35.23	-40.17	668.41	668.59
H	143+45.23	-40.17	668.42	668.63
I	143+55.23	-40.17	668.42	668.64
J	143+65.23	-40.17	668.42	668.63
K	143+75.23	-40.17	668.42	668.59
L	143+85.23	-40.17	668.42	668.54
M	143+95.23	-40.17	668.42	668.48
☉ North Brg. Pier No. 2	144+00.81	-40.17	668.41	668.43
☉ Pier No. 2	144+01.94	-40.17	668.41	668.43
☉ South Brg. Pier No. 2	144+03.06	-40.17	668.41	668.43
N	144+13.06	-40.17	668.40	668.42
O	144+23.06	-40.17	668.38	668.41
P	144+33.06	-40.17	668.36	668.40
Q	144+43.06	-40.17	668.34	668.37
☉ Brg. South Abut.	144+52.28	-40.17	668.32	668.34
Bk. of South Abut.	144+54.27	-40.17	668.31	668.33

NORTHBOUND CROWN

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection and Grinding
Bk. of North Abut.	142+52.28	-37.50	668.24	668.26
☒ Brg. North Abut.	142+54.27	-37.50	668.25	668.27
A	142+64.27	-37.50	668.29	668.32
B	142+74.27	-37.50	668.32	668.35
C	142+84.27	-37.50	668.35	668.38
D	142+94.27	-37.50	668.37	668.40
☒ North Brg. Pier No. 1	143+03.49	-37.50	668.39	668.42
☒ Pier No. 1	143+04.62	-37.50	668.40	668.42
☒ South Brg. Pier No. 1	143+05.74	-37.50	668.40	668.42
E	143+15.74	-37.50	668.42	668.50
F	143+25.74	-37.50	668.43	668.58
G	143+35.74	-37.50	668.45	668.63
H	143+45.74	-37.50	668.46	668.67
I	143+55.74	-37.50	668.46	668.68
J	143+65.74	-37.50	668.46	668.67
K	143+75.74	-37.50	668.46	668.63
L	143+85.74	-37.50	668.46	668.58
M	143+95.74	-37.50	668.45	668.51
☒ North Brg. Pier No. 2	144+01.33	-37.50	668.45	668.47
☒ Pier No. 2	144+02.45	-37.50	668.45	668.47
☒ South Brg. Pier No. 2	144+03.58	-37.50	668.45	668.47
N	144+13.58	-37.50	668.43	668.46
O	144+23.58	-37.50	668.42	668.45
P	144+33.58	-37.50	668.40	668.43
Q	144+43.58	-37.50	668.38	668.41
☒ Brg. South Abut.	144+52.80	-37.50	668.36	668.38
Bk. of South Abut.	144+54.78	-37.50	668.35	668.37

BEAM 3

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection and Grinding
Bk. of North Abut.	142+53.18	-32.83	668.18	668.20
☒ Brg. North Abut.	142+55.17	-32.83	668.18	668.20
A	142+65.17	-32.83	668.22	668.25
B	142+75.17	-32.83	668.25	668.29
C	142+85.17	-32.83	668.28	668.31
D	142+95.17	-32.83	668.31	668.33
☒ North Brg. Pier No. 1	143+04.39	-32.83	668.33	668.35
☒ Pier No. 1	143+05.52	-32.83	668.33	668.35
☒ South Brg. Pier No. 1	143+06.64	-32.83	668.33	668.35
E	143+16.64	-32.83	668.35	668.43
F	143+26.64	-32.83	668.37	668.51
G	143+36.64	-32.83	668.38	668.56
H	143+46.64	-32.83	668.39	668.60
I	143+56.64	-32.83	668.39	668.61
J	143+66.64	-32.83	668.40	668.60
K	143+76.64	-32.83	668.39	668.56
L	143+86.64	-32.83	668.39	668.51
M	143+96.64	-32.83	668.38	668.44
☒ North Brg. Pier No. 2	144+02.23	-32.83	668.38	668.40
☒ Pier No. 2	144+03.35	-32.83	668.38	668.40
☒ South Brg. Pier No. 2	144+04.48	-32.83	668.38	668.40
N	144+14.48	-32.83	668.36	668.39
O	144+24.48	-32.83	668.35	668.38
P	144+34.48	-32.83	668.33	668.36
Q	144+44.48	-32.83	668.31	668.34
☒ Brg. South Abut.	144+53.69	-32.83	668.28	668.30
Bk. of South Abut.	144+55.68	-32.83	668.28	668.30

BEAM 4 & C NORTHBOUND LANES

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection and Grinding
Bk. of North Abut.	142+54.60	-25.50	668.07	668.09
C Brg. North Abut.	142+56.59	-25.50	668.08	668.10
A	142+66.59	-25.50	668.11	668.14
B	142+76.59	-25.50	668.15	668.18
C	142+86.59	-25.50	668.17	668.21
D	142+96.59	-25.50	668.20	668.23
C North Brg. Pier No. 1	143+05.81	-25.50	668.22	668.24
C Pier No. 1	143+06.93	-25.50	668.22	668.24
C South Brg. Pier No. 1	143+08.06	-25.50	668.22	668.24
E	143+18.06	-25.50	668.24	668.33
F	143+28.06	-25.50	668.26	668.40
G	143+38.06	-25.50	668.27	668.45
H	143+48.06	-25.50	668.28	668.49
I	143+58.06	-25.50	668.28	668.50
J	143+68.06	-25.50	668.29	668.49
K	143+78.06	-25.50	668.28	668.45
L	143+88.06	-25.50	668.28	668.40
M	143+98.06	-25.50	668.27	668.33
C North Brg. Pier No. 2	144+03.64	-25.50	668.27	668.29
C Pier No. 2	144+04.76	-25.50	668.27	668.29
C South Brg. Pier No. 2	144+05.89	-25.50	668.26	668.29
N	144+15.89	-25.50	668.25	668.28
O	144+25.89	-25.50	668.24	668.27
P	144+35.89	-25.50	668.22	668.25
Q	144+45.89	-25.50	668.19	668.22
C Brg. South Abut.	144+55.11	-25.50	668.17	668.19
Bk. of South Abut.	144+57.10	-25.50	668.16	668.18

BEAM 5

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection and Grinding
Bk. of North Abut.	142+56.01	-18.17	667.93	667.95
C Brg. North Abut.	142+58.00	-18.17	667.94	667.96
A	142+68.00	-18.17	667.97	668.00
B	142+78.00	-18.17	668.00	668.04
C	142+88.00	-18.17	668.03	668.07
D	142+98.00	-18.17	668.06	668.08
C North Brg. Pier No. 1	143+07.22	-18.17	668.08	668.10
C Pier No. 1	143+08.34	-18.17	668.08	668.10
C South Brg. Pier No. 1	143+09.47	-18.17	668.08	668.10
E	143+19.47	-18.17	668.10	668.18
F	143+29.47	-18.17	668.11	668.25
G	143+39.47	-18.17	668.12	668.31
H	143+49.47	-18.17	668.13	668.34
I	143+59.47	-18.17	668.14	668.35
J	143+69.47	-18.17	668.14	668.34
K	143+79.47	-18.17	668.14	668.31
L	143+89.47	-18.17	668.13	668.25
M	143+99.47	-18.17	668.12	668.18
C North Brg. Pier No. 2	144+05.05	-18.17	668.12	668.14
C Pier No. 2	144+06.18	-18.17	668.12	668.14
C South Brg. Pier No. 2	144+07.30	-18.17	668.12	668.14
N	144+17.30	-18.17	668.10	668.13
O	144+27.30	-18.17	668.09	668.12
P	144+37.30	-18.17	668.07	668.10
Q	144+47.30	-18.17	668.04	668.07
C Brg. South Abut.	144+56.52	-18.17	668.02	668.04
Bk. of South Abut.	144+58.51	-18.17	668.01	668.03

NORTHBOUND PROFILE GRADE LINE (P.G.L.)

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection and Grinding
Bk. of North Abut.	142+56.91	-13.50	667.84	667.86
☐ Brg. North Abut.	142+58.90	-13.50	667.85	667.87
A	142+68.90	-13.50	667.88	667.91
B	142+78.90	-13.50	667.91	667.95
C	142+88.90	-13.50	667.94	667.97
D	142+98.90	-13.50	667.96	667.99
☐ North Brg. Pier No. 1	143+08.12	-13.50	667.98	668.00
☐ Pier No. 1	143+09.25	-13.50	667.99	668.01
☐ South Brg. Pier No. 1	143+10.37	-13.50	667.99	668.01
E	143+20.37	-13.50	668.01	668.09
F	143+30.37	-13.50	668.02	668.16
G	143+40.37	-13.50	668.03	668.22
H	143+50.37	-13.50	668.04	668.25
I	143+60.37	-13.50	668.04	668.26
J	143+70.37	-13.50	668.05	668.25
K	143+80.37	-13.50	668.04	668.21
L	143+90.37	-13.50	668.04	668.16
M	144+00.37	-13.50	668.03	668.09
☐ North Brg. Pier No. 2	144+05.95	-13.50	668.02	668.05
☐ Pier No. 2	144+07.08	-13.50	668.02	668.04
☐ South Brg. Pier No. 2	144+08.20	-13.50	668.02	668.04
N	144+18.20	-13.50	668.01	668.04
O	144+28.20	-13.50	667.99	668.03
P	144+38.20	-13.50	667.97	668.01
Q	144+48.20	-13.50	667.95	667.98
☐ Brg. South Abut.	144+57.42	-13.50	667.92	667.94
Bk. of South Abut.	144+59.41	-13.50	667.92	667.94

BEAM 6

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection and Grinding
Bk. of North Abut.	142+57.42	-10.83	667.79	667.81
☐ Brg. North Abut.	142+59.41	-10.83	667.80	667.82
A	142+69.41	-10.83	667.83	667.86
B	142+79.41	-10.83	667.86	667.89
C	142+89.41	-10.83	667.89	667.92
D	142+99.41	-10.83	667.91	667.94
☐ North Brg. Pier No. 1	143+08.63	-10.83	667.93	667.95
☐ Pier No. 1	143+09.76	-10.83	667.93	667.95
☐ South Brg. Pier No. 1	143+10.88	-10.83	667.94	667.96
E	143+20.88	-10.83	667.95	668.04
F	143+30.88	-10.83	667.97	668.11
G	143+40.88	-10.83	667.98	668.16
H	143+50.88	-10.83	667.99	668.20
I	143+60.88	-10.83	667.99	668.21
J	143+70.88	-10.83	667.99	668.19
K	143+80.88	-10.83	667.99	668.16
L	143+90.88	-10.83	667.98	668.10
M	144+00.88	-10.83	667.98	668.04
☐ North Brg. Pier No. 2	144+06.47	-10.83	667.97	667.99
☐ Pier No. 2	144+07.59	-10.83	667.97	667.99
☐ South Brg. Pier No. 2	144+08.72	-10.83	667.97	667.99
N	144+18.72	-10.83	667.95	667.98
O	144+28.72	-10.83	667.94	667.97
P	144+38.72	-10.83	667.92	667.95
Q	144+48.72	-10.83	667.89	667.92
☐ Brg. South Abut.	144+57.93	-10.83	667.87	667.89
Bk. of South Abut.	144+59.92	-10.83	667.86	667.88

BEAM 7

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection and Grinding
Bk. of North Abut.	142+58.84	-3.50	667.65	667.67
☉ Brg. North Abut.	142+60.83	-3.50	667.65	667.68
A	142+70.83	-3.50	667.69	667.72
B	142+80.83	-3.50	667.72	667.75
C	142+90.83	-3.50	667.74	667.78
D	143+00.83	-3.50	667.77	667.80
☉ North Brg. Pier No. 1	143+10.05	-3.50	667.79	667.81
☉ Pier No. 1	143+11.17	-3.50	667.79	667.81
☉ South Brg. Pier No. 1	143+12.30	-3.50	667.79	667.81
E	143+22.30	-3.50	667.81	667.89
F	143+32.30	-3.50	667.82	667.96
G	143+42.30	-3.50	667.83	668.02
H	143+52.30	-3.50	667.84	668.05
I	143+62.30	-3.50	667.84	668.06
J	143+72.30	-3.50	667.85	668.05
K	143+82.30	-3.50	667.84	668.01
L	143+92.30	-3.50	667.84	667.96
M	144+02.30	-3.50	667.83	667.89
☉ North Brg. Pier No. 2	144+07.88	-3.50	667.82	667.84
☉ Pier No. 2	144+09.00	-3.50	667.82	667.84
☉ South Brg. Pier No. 2	144+10.13	-3.50	667.82	667.84
N	144+20.13	-3.50	667.81	667.83
O	144+30.13	-3.50	667.79	667.82
P	144+40.13	-3.50	667.77	667.80
Q	144+50.13	-3.50	667.74	667.77
☉ Brg. South Abut.	144+59.35	-3.50	667.72	667.74
Bk. of South Abut.	144+61.34	-3.50	667.71	667.73

BEAM 8

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection and Grinding
Bk. of North Abut.	142+60.19	3.50	667.65	667.67
☉ Brg. North Abut.	142+62.18	3.50	667.66	667.68
A	142+72.18	3.50	667.69	667.72
B	142+82.18	3.50	667.72	667.76
C	142+92.18	3.50	667.75	667.78
D	143+02.18	3.50	667.77	667.80
☉ North Brg. Pier No. 1	143+11.39	3.50	667.79	667.81
☉ Pier No. 1	143+12.52	3.50	667.79	667.81
☉ South Brg. Pier No. 1	143+13.64	3.50	667.79	667.82
E	143+23.64	3.50	667.81	667.90
F	143+33.64	3.50	667.82	667.97
G	143+43.64	3.50	667.83	668.02
H	143+53.64	3.50	667.84	668.05
I	143+63.64	3.50	667.84	668.06
J	143+73.64	3.50	667.85	668.05
K	143+83.64	3.50	667.84	668.01
L	143+93.64	3.50	667.84	667.95
M	144+03.64	3.50	667.83	667.89
☉ North Brg. Pier No. 2	144+09.23	3.50	667.82	667.84
☉ Pier No. 2	144+10.35	3.50	667.82	667.84
☉ South Brg. Pier No. 2	144+11.48	3.50	667.82	667.84
N	144+21.48	3.50	667.80	667.83
O	144+31.48	3.50	667.78	667.82
P	144+41.48	3.50	667.76	667.80
Q	144+51.48	3.50	667.74	667.77
☉ Brg. South Abut.	144+60.70	3.50	667.71	667.73
Bk. of South Abut.	144+62.69	3.50	667.71	667.73



DESIGNED - PMG	REVISED
CHECKED - DAH	REVISED
DRAWN - DJM	REVISED
DATE - 05/05/2021	CHECKED - JCZ
	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF DECK ELEVATIONS
STRUCTURE NO. 046-0156 (NB) & 046-0157 (SB)**

SHEET NO. 15 OF 55 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	172
EX. S.N. 046-0008 (NB)/ -0009 (SB)		CONTRACT NO. 66F74		
ILLINOIS		FED. AID PROJECT		

BEAM 9

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection and Grinding
Bk. of North Abut.	142+61.60	10.83	667.80	667.82
☉ Brg. North Abut.	142+63.59	10.83	667.81	667.83
A	142+73.59	10.83	667.84	667.87
B	142+83.59	10.83	667.87	667.91
C	142+93.59	10.83	667.90	667.93
D	143+03.59	10.83	667.92	667.95
☉ North Brg. Pier No. 1	143+12.81	10.83	667.94	667.96
☉ Pier No. 1	143+13.93	10.83	667.94	667.96
☉ South Brg. Pier No. 1	143+15.06	10.83	667.94	667.96
E	143+25.06	10.83	667.96	668.04
F	143+35.06	10.83	667.97	668.11
G	143+45.06	10.83	667.98	668.17
H	143+55.06	10.83	667.99	668.20
I	143+65.06	10.83	667.99	668.21
J	143+75.06	10.83	667.99	668.19
K	143+85.06	10.83	667.99	668.16
L	143+95.06	10.83	667.98	668.10
M	144+05.06	10.83	667.97	668.03
☉ North Brg. Pier No. 2	144+10.64	10.83	667.97	667.99
☉ Pier No. 2	144+11.77	10.83	667.96	667.98
☉ South Brg. Pier No. 2	144+12.89	10.83	667.96	667.98
N	144+22.89	10.83	667.95	667.98
O	144+32.89	10.83	667.93	667.96
P	144+42.89	10.83	667.91	667.94
Q	144+52.89	10.83	667.88	667.91
☉ Brg. South Abut.	144+62.11	10.83	667.86	667.88
Bk. of South Abut.	144+64.10	10.83	667.85	667.87

SOUTHBOUND PROFILE GRADE LINE (P.G.L.)

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection and Grinding
Bk. of North Abut.	142+62.12	13.50	667.86	667.88
☉ Brg. North Abut.	142+64.11	13.50	667.87	667.89
A	142+74.11	13.50	667.90	667.93
B	142+84.11	13.50	667.93	667.96
C	142+94.11	13.50	667.95	667.99
D	143+04.11	13.50	667.98	668.00
☉ North Brg. Pier No. 1	143+13.33	13.50	667.99	668.01
☉ Pier No. 1	143+14.45	13.50	668.00	668.02
☉ South Brg. Pier No. 1	143+15.58	13.50	668.00	668.02
E	143+25.58	13.50	668.01	668.10
F	143+35.58	13.50	668.03	668.17
G	143+45.58	13.50	668.04	668.22
H	143+55.58	13.50	668.04	668.25
I	143+65.58	13.50	668.04	668.26
J	143+75.58	13.50	668.04	668.25
K	143+85.58	13.50	668.04	668.21
L	143+95.58	13.50	668.03	668.15
M	144+05.58	13.50	668.02	668.09
☉ North Brg. Pier No. 2	144+11.16	13.50	668.02	668.04
☉ Pier No. 2	144+12.29	13.50	668.02	668.04
☉ South Brg. Pier No. 2	144+13.41	13.50	668.02	668.04
N	144+23.41	13.50	668.00	668.03
O	144+33.41	13.50	667.98	668.02
P	144+43.41	13.50	667.96	667.99
Q	144+53.41	13.50	667.93	667.96
☉ Brg. South Abut.	144+62.63	13.50	667.91	667.93
Bk. of South Abut.	144+64.62	13.50	667.90	667.92



DESIGNED - PMG	REVISED
CHECKED - DAH	REVISED
DRAWN - DJM	REVISED
DATE - 05/05/2021	CHECKED - JCZ
	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF DECK ELEVATIONS
STRUCTURE NO. 046-0156 (NB) & 046-0157 (SB)**

SHEET NO. 16 OF 55 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	173
EX. S.N. 046-0008 (NB)/ -0009 (SB)		CONTRACT NO. 66F74		
ILLINOIS		FED. AID PROJECT		

BEAM 10

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection and Grinding
Bk. of North Abut.	142+63.01	18.17	667.96	667.98
☐ Brg. North Abut.	142+65.00	18.17	667.96	667.98
A	142+75.00	18.17	667.99	668.02
B	142+85.00	18.17	668.02	668.06
C	142+95.00	18.17	668.05	668.08
D	143+05.00	18.17	668.07	668.10
☐ North Brg. Pier No. 1	143+14.22	18.17	668.09	668.11
☐ Pier No. 1	143+15.35	18.17	668.09	668.11
☐ South Brg. Pier No. 1	143+16.47	18.17	668.09	668.11
E	143+26.47	18.17	668.11	668.19
F	143+36.47	18.17	668.12	668.26
G	143+46.47	18.17	668.13	668.31
H	143+56.47	18.17	668.14	668.35
I	143+66.47	18.17	668.14	668.35
J	143+76.47	18.17	668.14	668.34
K	143+86.47	18.17	668.13	668.30
L	143+96.47	18.17	668.13	668.25
M	144+06.47	18.17	668.12	668.18
☐ North Brg. Pier No. 2	144+12.05	18.17	668.11	668.13
☐ Pier No. 2	144+13.18	18.17	668.11	668.13
☐ South Brg. Pier No. 2	144+14.30	18.17	668.11	668.13
N	144+24.30	18.17	668.09	668.12
O	144+34.30	18.17	668.07	668.11
P	144+44.30	18.17	668.05	668.08
Q	144+54.30	18.17	668.02	668.05
☐ Brg. South Abut.	144+63.52	18.17	668.00	668.02
Bk. of South Abut.	144+65.51	18.17	667.99	668.01

BEAM 11 & ☐ SOUTHBOUND LANES

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection and Grinding
Bk. of North Abut.	142+64.43	25.50	668.11	668.13
☐ Brg. North Abut.	142+66.42	25.50	668.11	668.13
A	142+76.42	25.50	668.14	668.17
B	142+86.42	25.50	668.17	668.21
C	142+96.42	25.50	668.20	668.23
D	143+06.42	25.50	668.22	668.25
☐ North Brg. Pier No. 1	143+15.63	25.50	668.24	668.26
☐ Pier No. 1	143+16.76	25.50	668.24	668.26
☐ South Brg. Pier No. 1	143+17.88	25.50	668.24	668.26
E	143+27.88	25.50	668.26	668.34
F	143+37.88	25.50	668.27	668.41
G	143+47.88	25.50	668.28	668.46
H	143+57.88	25.50	668.28	668.49
I	143+67.88	25.50	668.29	668.50
J	143+77.88	25.50	668.28	668.49
K	143+87.88	25.50	668.28	668.45
L	143+97.88	25.50	668.27	668.39
M	144+07.88	25.50	668.26	668.32
☐ North Brg. Pier No. 2	144+13.47	25.50	668.25	668.28
☐ Pier No. 2	144+14.59	25.50	668.25	668.27
☐ South Brg. Pier No. 2	144+15.72	25.50	668.25	668.27
N	144+25.72	25.50	668.24	668.26
O	144+35.72	25.50	668.22	668.25
P	144+45.72	25.50	668.19	668.23
Q	144+55.72	25.50	668.17	668.20
☐ Brg. South Abut.	144+64.94	25.50	668.14	668.16
Bk. of South Abut.	144+66.93	25.50	668.13	668.16

BEAM 12

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection and Grinding
Bk. of North Abut.	142+65.84	32.83	668.22	668.24
☒ Brg. North Abut.	142+67.83	32.83	668.23	668.25
A	142+77.83	32.83	668.26	668.29
B	142+87.83	32.83	668.29	668.32
C	142+97.83	32.83	668.31	668.35
D	143+07.83	32.83	668.33	668.36
☒ North Brg. Pier No. 1	143+17.05	32.83	668.35	668.37
☒ Pier No. 1	143+18.17	32.83	668.35	668.37
☒ South Brg. Pier No. 1	143+19.30	32.83	668.35	668.37
E	143+29.30	32.83	668.37	668.45
F	143+39.30	32.83	668.38	668.52
G	143+49.30	32.83	668.39	668.57
H	143+59.30	32.83	668.39	668.60
I	143+69.30	32.83	668.40	668.61
J	143+79.30	32.83	668.39	668.60
K	143+89.30	32.83	668.39	668.56
L	143+99.30	32.83	668.38	668.50
M	144+09.30	32.83	668.37	668.43
☒ North Brg. Pier No. 2	144+14.88	32.83	668.36	668.38
☒ Pier No. 2	144+16.01	32.83	668.36	668.38
☒ South Brg. Pier No. 2	144+17.13	32.83	668.36	668.38
N	144+27.13	32.83	668.34	668.37
O	144+37.13	32.83	668.32	668.36
P	144+47.13	32.83	668.30	668.33
Q	144+57.13	32.83	668.27	668.30
☒ Brg. South Abut.	144+66.35	32.83	668.25	668.27
Bk. of South Abut.	144+68.34	32.83	668.24	668.26

SOUTHBOUND CROWN

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection and Grinding
Bk. of North Abut.	142+66.74	37.50	668.29	668.32
☒ Brg. North Abut.	142+68.73	37.50	668.30	668.32
A	142+78.73	37.50	668.33	668.36
B	142+88.73	37.50	668.36	668.39
C	142+98.73	37.50	668.38	668.42
D	143+08.73	37.50	668.41	668.43
☒ North Brg. Pier No. 1	143+17.95	37.50	668.42	668.44
☒ Pier No. 1	143+19.07	37.50	668.42	668.44
☒ South Brg. Pier No. 1	143+20.20	37.50	668.43	668.45
E	143+30.20	37.50	668.44	668.52
F	143+40.20	37.50	668.45	668.59
G	143+50.20	37.50	668.46	668.64
H	143+60.20	37.50	668.46	668.67
I	143+70.20	37.50	668.47	668.68
J	143+80.20	37.50	668.46	668.67
K	143+90.20	37.50	668.46	668.63
L	144+00.20	37.50	668.45	668.57
M	144+10.20	37.50	668.44	668.50
☒ North Brg. Pier No. 2	144+15.78	37.50	668.43	668.45
☒ Pier No. 2	144+16.91	37.50	668.43	668.45
☒ South Brg. Pier No. 2	144+18.03	37.50	668.43	668.45
N	144+28.03	37.50	668.41	668.44
O	144+38.03	37.50	668.39	668.43
P	144+48.03	37.50	668.37	668.40
Q	144+58.03	37.50	668.34	668.37
☒ Brg. South Abut.	144+67.25	37.50	668.31	668.33
Bk. of South Abut.	144+69.24	37.50	668.31	668.33

BEAM 13

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection and Grinding
Bk. of North Abut.	142+67.25	40.17	668.26	668.28
☉ Brg. North Abut.	142+69.24	40.17	668.26	668.28
A	142+79.24	40.17	668.29	668.32
B	142+89.24	40.17	668.32	668.36
C	142+99.24	40.17	668.34	668.38
D	143+09.24	40.17	668.37	668.40
☉ North Brg. Pier No. 1	143+18.46	40.17	668.38	668.40
☉ Pier No. 1	143+19.59	40.17	668.38	668.41
☉ South Brg. Pier No. 1	143+20.71	40.17	668.39	668.41
E	143+30.71	40.17	668.40	668.49
F	143+40.71	40.17	668.41	668.55
G	143+50.71	40.17	668.42	668.60
H	143+60.71	40.17	668.42	668.63
I	143+70.71	40.17	668.43	668.64
J	143+80.71	40.17	668.42	668.63
K	143+90.71	40.17	668.42	668.59
L	144+00.71	40.17	668.41	668.53
M	144+10.71	40.17	668.40	668.46
☉ North Brg. Pier No. 2	144+16.29	40.17	668.39	668.41
☉ Pier No. 2	144+17.42	40.17	668.39	668.41
☉ South Brg. Pier No. 2	144+18.54	40.17	668.39	668.41
N	144+28.54	40.17	668.37	668.40
O	144+38.54	40.17	668.35	668.38
P	144+48.54	40.17	668.33	668.36
Q	144+58.54	40.17	668.30	668.33
☉ Brg. South Abut.	144+67.76	40.17	668.27	668.29
Bk. of South Abut.	144+69.75	40.17	668.27	668.29

BEAM 14

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection and Grinding
Bk. of North Abut.	142+68.67	47.50	668.15	668.17
☉ Brg. North Abut.	142+70.66	47.50	668.16	668.18
A	142+80.66	47.50	668.19	668.22
B	142+90.66	47.50	668.21	668.25
C	143+00.66	47.50	668.24	668.27
D	143+10.66	47.50	668.26	668.29
☉ North Brg. Pier No. 1	143+19.87	47.50	668.27	668.30
☉ Pier No. 1	143+21.00	47.50	668.28	668.30
☉ South Brg. Pier No. 1	143+22.12	47.50	668.28	668.30
E	143+32.12	47.50	668.29	668.38
F	143+42.12	47.50	668.30	668.44
G	143+52.12	47.50	668.31	668.49
H	143+62.12	47.50	668.31	668.52
I	143+72.12	47.50	668.32	668.53
J	143+82.12	47.50	668.31	668.51
K	143+92.12	47.50	668.31	668.48
L	144+02.12	47.50	668.30	668.42
M	144+12.12	47.50	668.29	668.35
☉ North Brg. Pier No. 2	144+17.71	47.50	668.28	668.30
☉ Pier No. 2	144+18.83	47.50	668.28	668.30
☉ South Brg. Pier No. 2	144+19.96	47.50	668.28	668.30
N	144+29.96	47.50	668.26	668.29
O	144+39.96	47.50	668.24	668.27
P	144+49.96	47.50	668.21	668.25
Q	144+59.96	47.50	668.19	668.21
☉ Brg. South Abut.	144+69.18	47.50	668.16	668.18
Bk. of South Abut.	144+71.17	47.50	668.15	668.17

**NORTHBOUND EAST CURB LINE /
NORTHBOUND EAST FACE OF PARAPET**

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Grinding
N. End of North Appr.	142+20.99	-49.50	667.93	667.95
A	142+30.99	-49.50	667.98	668.00
B	142+40.99	-49.50	668.02	668.04
S. End of North Appr.	142+50.99	-49.50	668.06	668.08

NORTHBOUND CROWN

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Grinding
N. End of North Appr.	142+23.30	-37.50	668.12	668.14
A	142+33.30	-37.50	668.17	668.19
B	142+43.30	-37.50	668.21	668.23
S. End of North Appr.	142+53.30	-37.50	668.25	668.27

☐ NORTHBOUND LANES

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Grinding
N. End of North Appr.	142+25.62	-25.50	667.95	667.97
A	142+35.62	-25.50	668.00	668.02
B	142+45.62	-25.50	668.04	668.06
S. End of North Appr.	142+55.62	-25.50	668.08	668.10

NORTHBOUND PROFILE GRADE LINE (P.G.L.)

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Grinding
N. End of North Appr.	142+27.93	-13.50	667.72	667.74
A	142+37.93	-13.50	667.77	667.79
B	142+47.93	-13.50	667.81	667.83
S. End of North Appr.	142+57.93	-13.50	667.84	667.86

NORTHBOUND WEST FACE OF PARAPET

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Grinding
N. End of North Appr.	142+30.24	-1.50	667.49	667.51
A	142+40.24	-1.50	667.54	667.56
B	142+50.24	-1.50	667.58	667.60
S. End of North Appr.	142+60.24	-1.50	667.61	667.63

SOUTHBOUND EAST FACE OF PARAPET

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Grinding
N. End of North Appr.	142+30.82	1.50	667.49	667.52
A	142+40.82	1.50	667.54	667.56
B	142+50.82	1.50	667.58	667.60
S. End of North Appr.	142+60.82	1.50	667.61	667.63

SOUTHBOUND PROFILE GRADE LINE (P.G.L.)

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Grinding
N. End of North Appr.	142+33.13	13.50	667.74	667.77
A	142+43.13	13.50	667.79	667.81
B	142+53.13	13.50	667.83	667.85
S. End of North Appr.	142+63.13	13.50	667.86	667.88

☐ SOUTHBOUND LANES

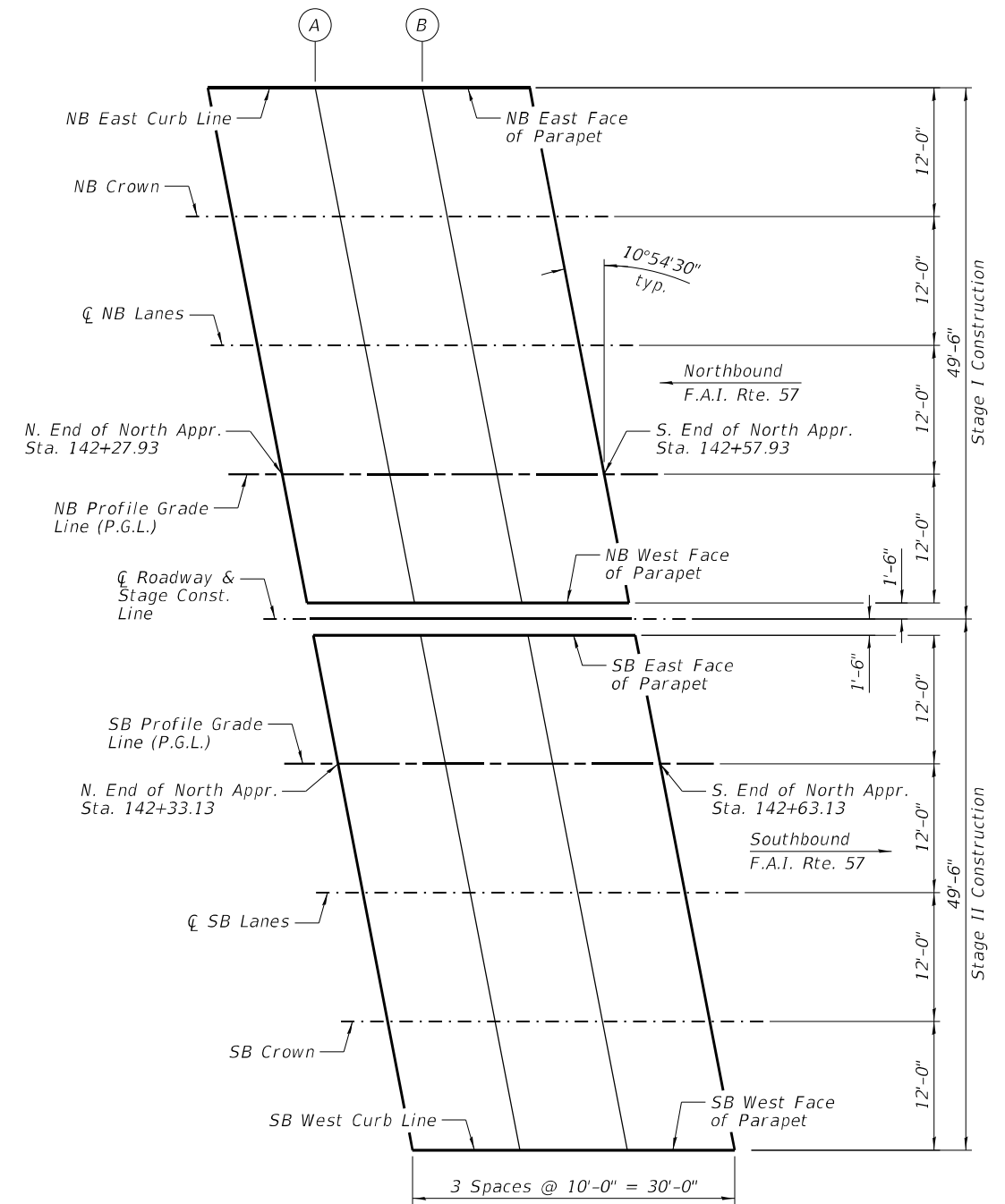
Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Grinding
N. End of North Appr.	142+35.44	25.50	668.00	668.02
A	142+45.44	25.50	668.04	668.06
B	142+55.44	25.50	668.07	668.10
S. End of North Appr.	142+65.44	25.50	668.11	668.13

SOUTHBOUND CROWN

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Grinding
N. End of North Appr.	142+37.76	37.50	668.18	668.21
A	142+47.76	37.50	668.23	668.25
B	142+57.76	37.50	668.26	668.28
S. End of North Appr.	142+67.76	37.50	668.30	668.32

**SOUTHBOUND WEST CURB LINE /
SOUTHBOUND WEST FACE OF PARAPET**

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Grinding
N. End of North Appr.	142+40.07	49.50	668.01	668.04
A	142+50.07	49.50	668.05	668.08
B	142+60.07	49.50	668.09	668.11
S. End of North Appr.	142+70.07	49.50	668.13	668.15



NORTH APPROACH SLAB PLANS



NORTHBOUND EAST CURB LINE /
NORTHBOUND EAST FACE OF PARAPET

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Grinding
N. End of South Appr.	144+51.45	-49.50	668.18	668.20
A	144+61.45	-49.50	668.15	668.20
B	144+71.45	-49.50	668.12	668.17
S. End of South Appr.	144+81.45	-49.50	668.09	668.11

☐ NORTHBOUND LANES

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Grinding
N. End of South Appr.	144+56.08	-25.50	668.17	668.19
A	144+66.08	-25.50	668.14	668.18
B	144+76.08	-25.50	668.10	668.16
S. End of South Appr.	144+86.08	-25.50	668.07	668.09

NORTHBOUND WEST FACE OF PARAPET

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Grinding
N. End of South Appr.	144+60.70	-1.50	667.67	667.69
A	144+70.70	-1.50	667.64	667.69
B	144+80.70	-1.50	667.61	667.66
S. End of South Appr.	144+90.70	-1.50	667.57	667.59

SOUTHBOUND PROFILE GRADE LINE (P.G.L.)

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Grinding
N. End of South Appr.	144+63.60	13.50	667.90	667.93
A	144+73.60	13.50	667.87	667.92
B	144+83.60	13.50	667.84	667.89
S. End of South Appr.	144+93.60	13.50	667.80	667.82

SOUTHBOUND CROWN

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Grinding
N. End of South Appr.	144+68.23	37.50	668.31	668.33
A	144+78.23	37.50	668.28	668.33
B	144+88.23	37.50	668.24	668.30
S. End of South Appr.	144+98.23	37.50	668.20	668.22

NORTHBOUND CROWN

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Grinding
N. End of South Appr.	144+53.76	-37.50	668.35	668.37
A	144+63.76	-37.50	668.32	668.37
B	144+73.76	-37.50	668.29	668.35
S. End of South Appr.	144+83.76	-37.50	668.26	668.28

NORTHBOUND PROFILE GRADE LINE (P.G.L.)

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Grinding
N. End of South Appr.	144+58.39	-13.50	667.92	667.94
A	144+68.39	-13.50	667.89	667.94
B	144+78.39	-13.50	667.86	667.91
S. End of South Appr.	144+88.39	-13.50	667.82	667.84

SOUTHBOUND EAST FACE OF PARAPET

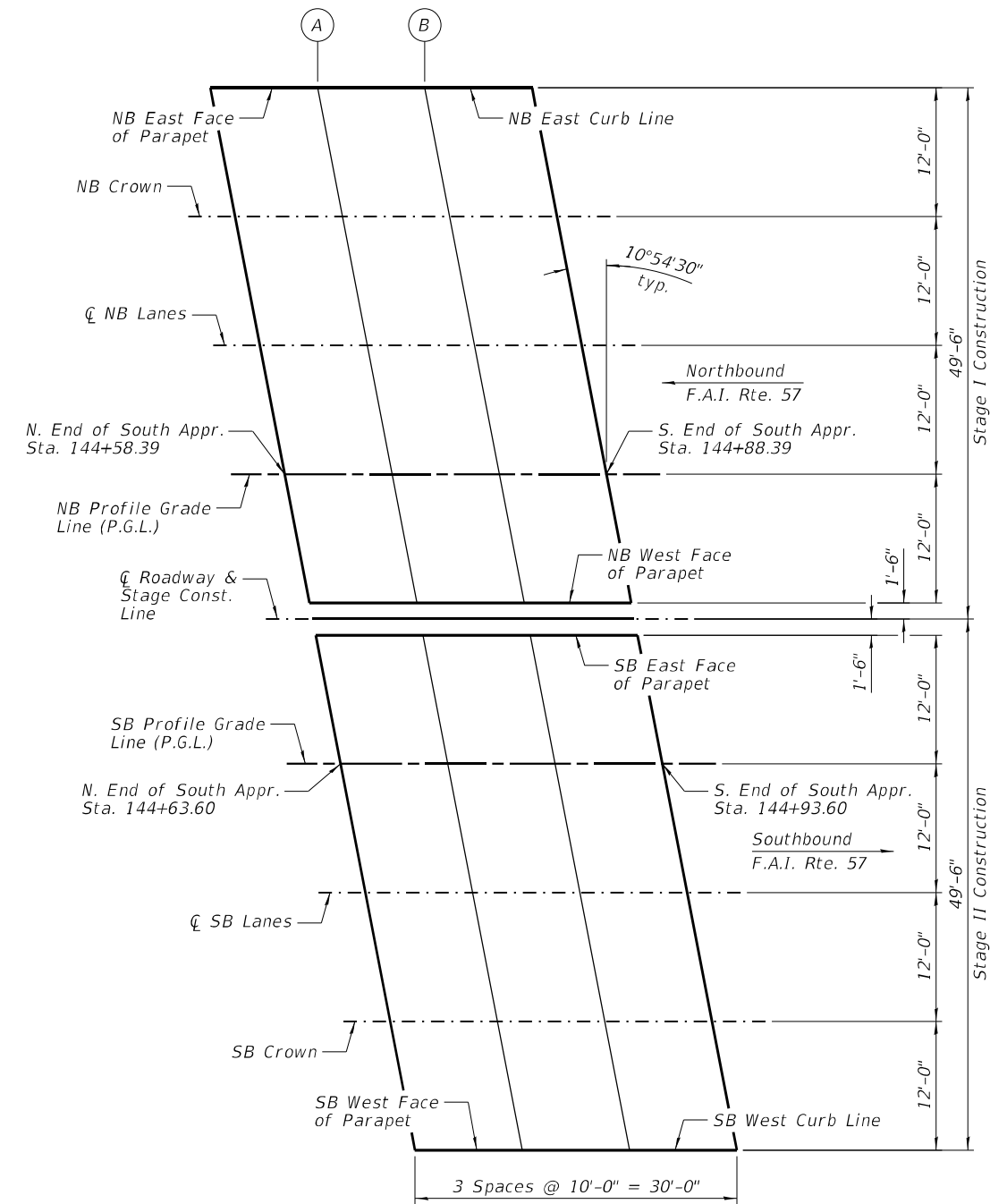
Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Grinding
N. End of South Appr.	144+61.29	1.50	667.67	667.69
A	144+71.29	1.50	667.64	667.69
B	144+81.29	1.50	667.61	667.66
S. End of South Appr.	144+91.29	1.50	667.57	667.59

☐ SOUTHBOUND LANES

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Grinding
N. End of South Appr.	144+65.91	25.50	668.14	668.16
A	144+75.91	25.50	668.11	668.16
B	144+85.91	25.50	668.07	668.13
S. End of South Appr.	144+95.91	25.50	668.03	668.05

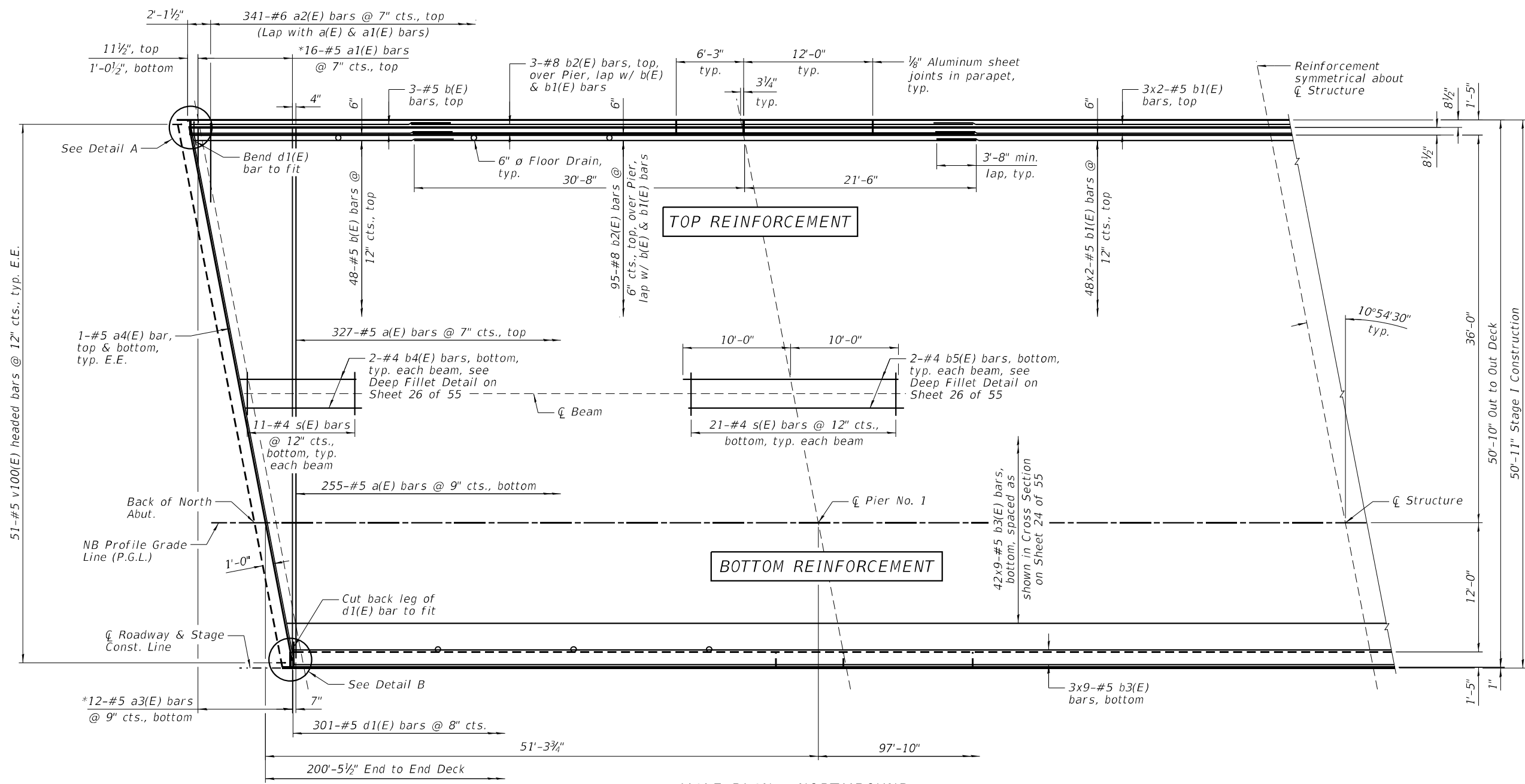
SOUTHBOUND WEST CURB LINE /
SOUTHBOUND WEST FACE OF PARAPET

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Grinding
N. End of South Appr.	144+70.54	49.50	668.12	668.14
A	144+80.54	49.50	668.09	668.14
B	144+90.54	49.50	668.05	668.11
S. End of South Appr.	145+00.54	49.50	668.01	668.03

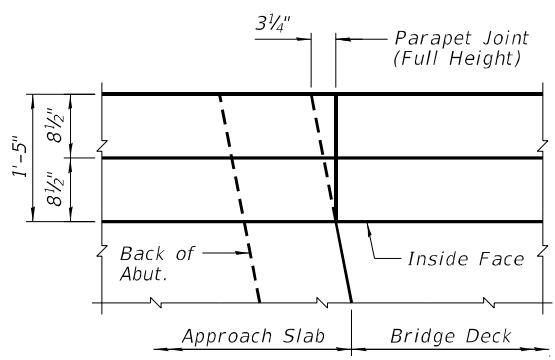


SOUTH APPROACH SLAB PLANS

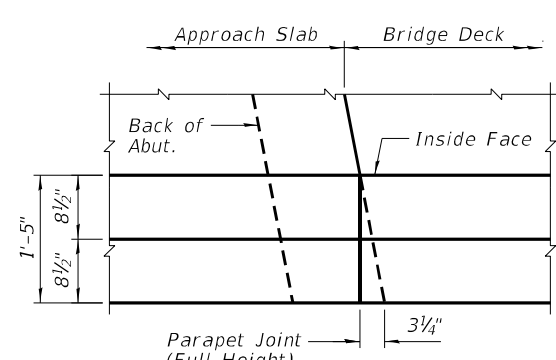




HALF PLAN - NORTHBOUND



DETAIL A



DETAIL B

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

- NOTES:**
- 1.) See Sheet 24 of 55 for Cross Sections.
 - 2.) *See Sheet 26 of 55 for Field Cutting Diagram.
 - 3.) See Sheets 25 & 26 of 55 for Superstructure Details and Bill of Material.
 - 4.) Bars indicated thus 48x8-#5 etc. indicates 48 lines of bars with 8 lengths per line.
 - 5.) E.E. denotes Each End.

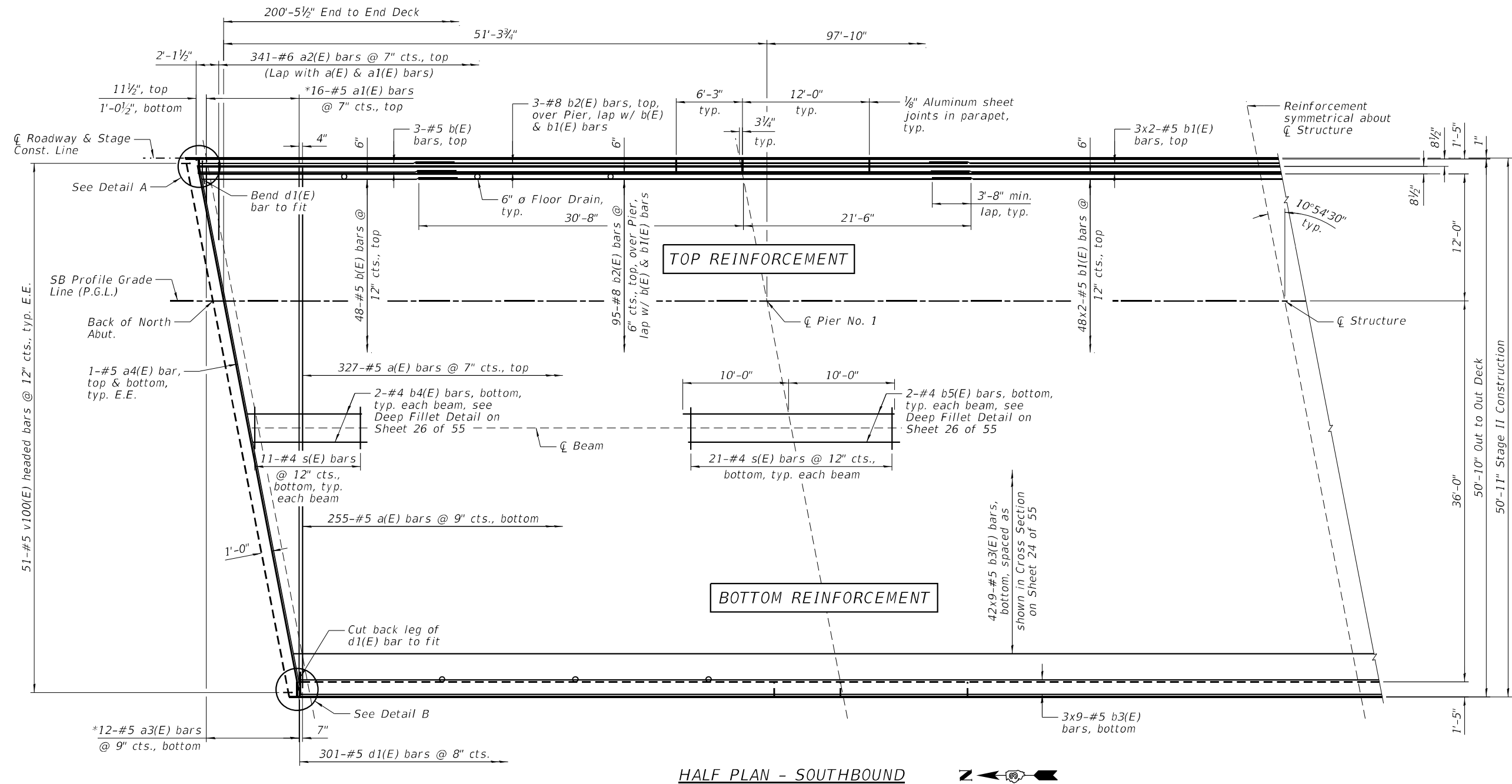


DESIGNED - PMG	REVISED
CHECKED - DAH	REVISED
DRAWN - DJM	REVISED
CHECKED - JCZ	REVISED

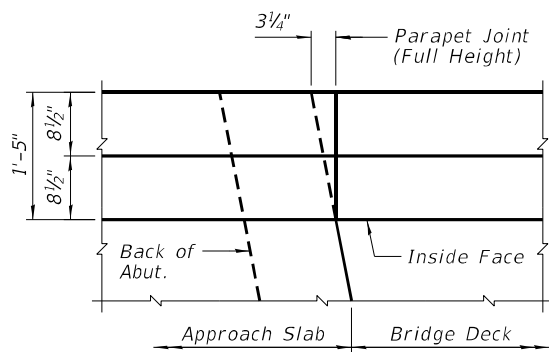
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
 STRUCTURE NO. 046-0156 (NB) & 046-0157 (SB)

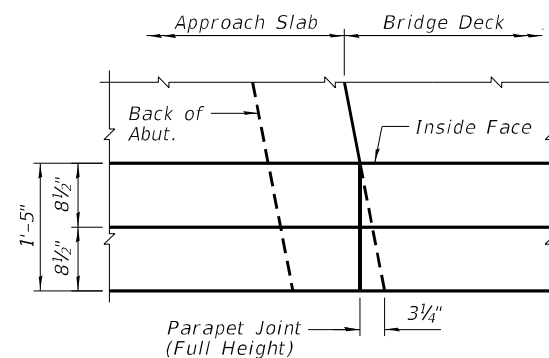
S.N. 046-0156 (NB)	
F.A.I. RTE.	SECTION
57	[(139)VB,HB-3]BR,139R
EX. S.N. 046-0008 (NB)/-0009 (SB)	COUNTY
	KANKAKEE
	TOTAL SHEETS
	252
	SHEET NO.
	179
	CONTRACT NO. 66F74



HALF PLAN - SOUTHBOUND



DETAIL A



DETAIL B

MINIMUM BAR LAP

#5 bar = 3'-6"
#5 bar to #8 bar = 3'-8"

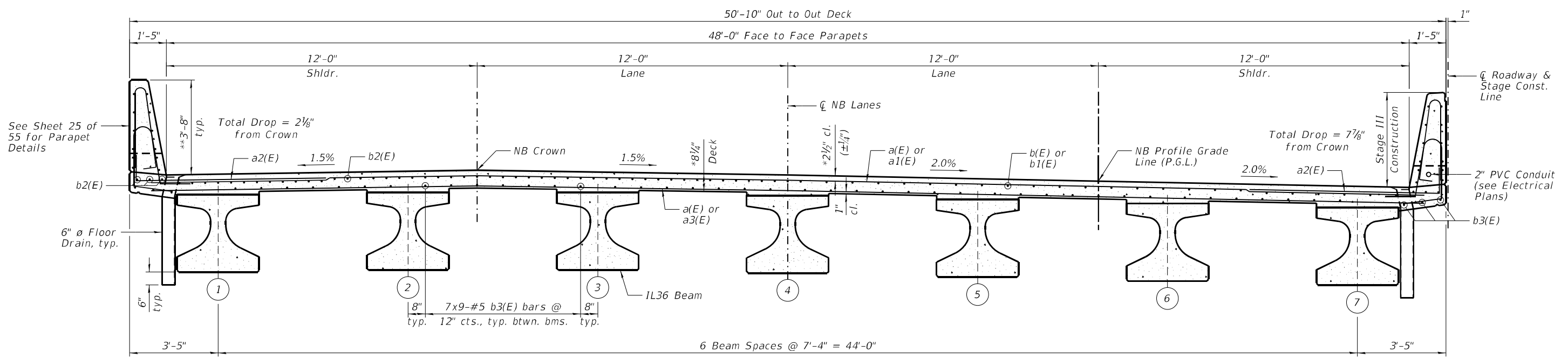
NOTES:

- 1.) See Sheet 24 of 55 for Cross Sections.
- 2.) *See Sheet 26 of 55 for Field Cutting Diagram.
- 3.) See Sheets 25 & 26 of 55 for Superstructure Details and Bill of Material.
- 4.) Bars indicated thus 48x8-#5 etc. indicates 48 lines of bars with 8 lengths per line.
- 5.) E.E. denotes Each End.

DESIGNED - PMG	REVISED
CHECKED - DAH	REVISED
DRAWN - DJM	REVISED
CHECKED - JCZ	REVISED
DATE - 05/05/2021	

F.A.I. RTE.		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57		[(139)VB,HB-3]BR,139R	KANKAKEE	252	180
EX. S.N. 046-0008 (NB) / -0009 (SB)		CONTRACT NO. 66F74		S.N. 046-0157 (SB)	
ILLINOIS FED. AID PROJECT					

STAGE I CONSTRUCTION
(except Interior Parapet)

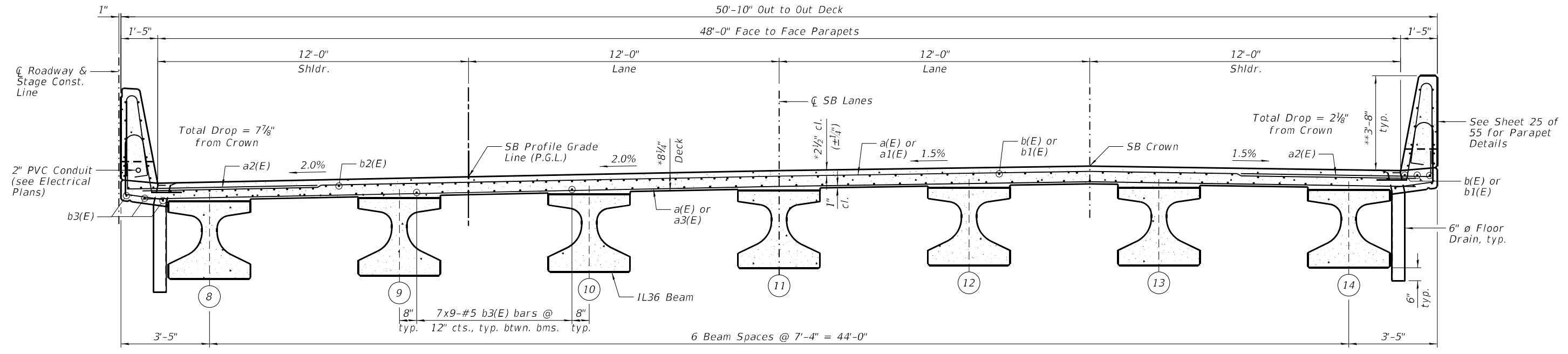


NEAR PIER

NEAR MIDSPAN

NORTHBOUND CROSS SECTION
(Looking South)

STAGE II CONSTRUCTION



NEAR PIER

NEAR MIDSPAN

SOUTHBOUND CROSS SECTION
(Looking South)

NOTES:

- 1.) See Sheets 22 & 23 of 55 for Deck Plan.
- 2.) See Sheets 25 & 26 of 55 for Superstructure Details and Bill of Material.
- 3.) *Dimension prior to grinding. Up to 1/4" will be ground off the bridge deck.
- 4.) **Dimension after grinding.

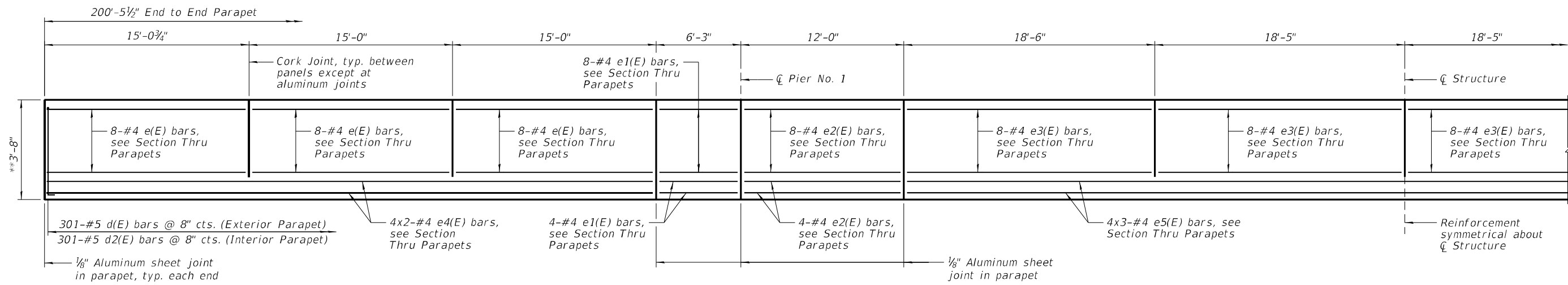


DESIGNED - PMG	REVISED
CHECKED - DAH	REVISED
DRAWN - DJM	REVISED
CHECKED - JCZ	REVISED

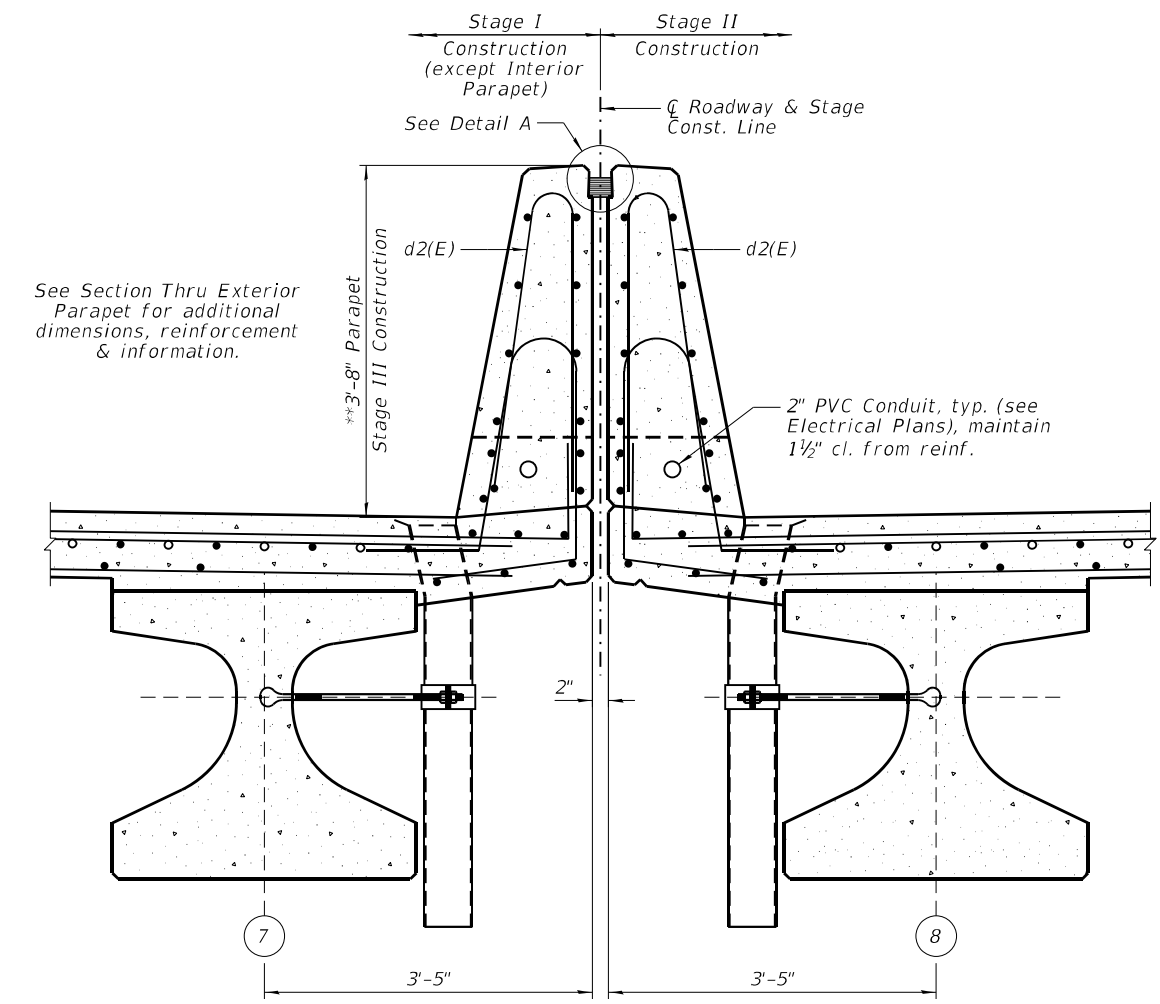
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
STRUCTURE NO. 046-0156 (NB) & 046-0157 (SB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	((139)VB,HB-3IBR,139R	KANKAKEE	252	181
EX. S.N. 046-0008 (NB)/ -0009 (SB)	CONTRACT NO. 66F74		ILLINOIS FED. AID PROJECT	

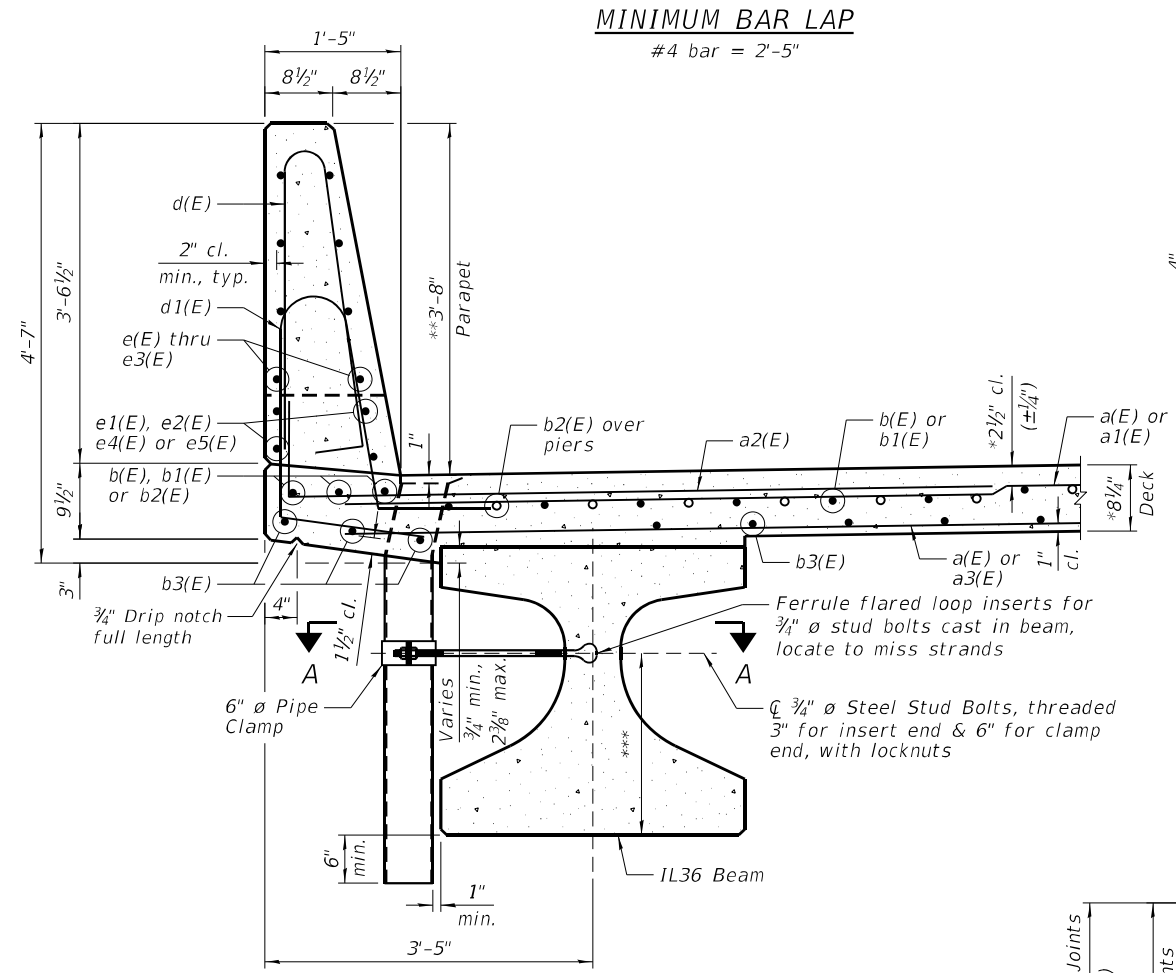


INSIDE ELEVATION OF PARAPET

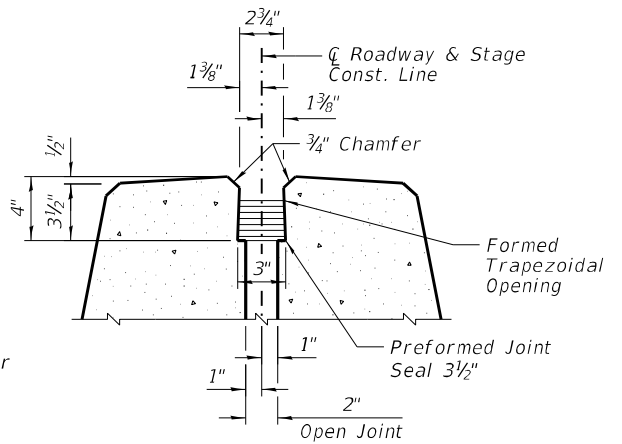


SECTION THRU INTERIOR PARAPETS
(Looking South)

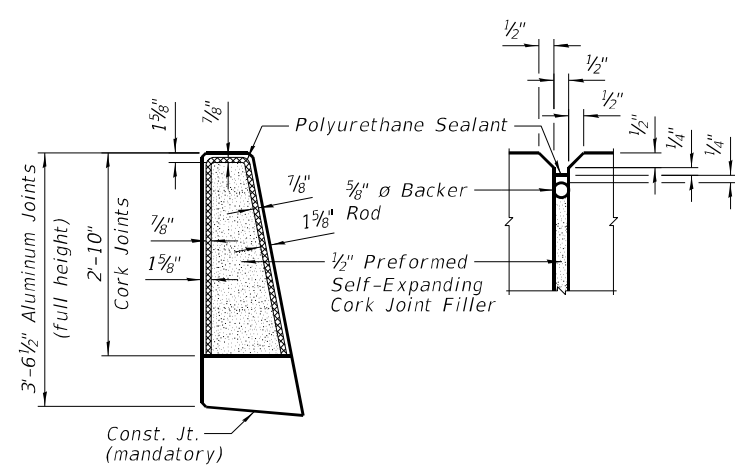
- NOTES:**
- 1.) See Sheets 22 & 23 of 55 for Deck Plan.
 - 2.) See Sheet 24 of 55 for Superstructure Cross Sections.
 - 3.) See Sheet 26 of 55 for Bill of Material, Bar Bending Diagrams, Section A-A & Deck Drain details.
 - 4.) *Dimension prior to grinding. Up to 1/4" will be ground off the bridge deck.
 - 5.) **Dimension after grinding.
 - 6.) Bars indicated thus 4x2-#4 etc. indicates 4 lines of bars with 2 lengths per line.
 - 7.) 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.
 - 8.) The polyurethane sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.
 - 9.) Inside Elevation of Parapet view is exaggerated vertically to show reinforcement.



SECTION THRU EXTERIOR PARAPET
*** For insert locations, see Sheet 38 of 55



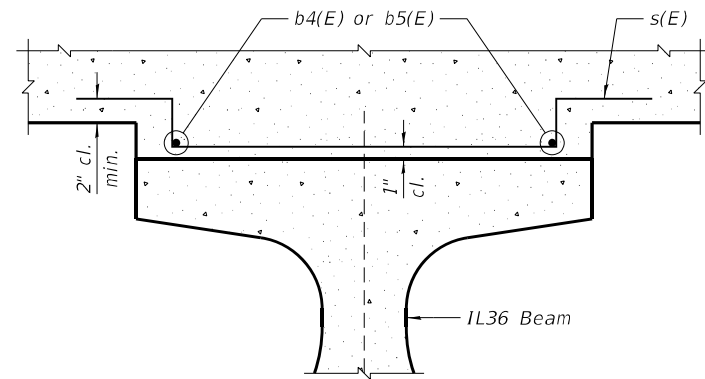
DETAIL A



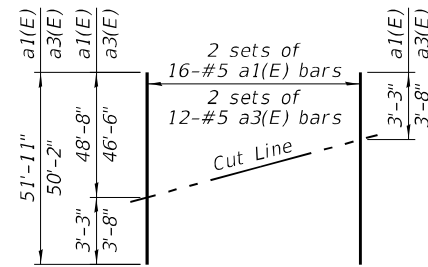
PARAPET JOINT DETAILS

**TWO SUPERSTRUCTURES
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	1,164	#5	49'-2"	—
a1(E)	32	#5	51'-11"	—
a2(E)	1,364	#6	8'-4"	┌
a3(E)	24	#5	50'-2"	—
a4(E)	8	#5	51'-5"	—
b(E)	216	#5	24'-2"	—
b1(E)	216	#5	32'-10"	—
b2(E)	404	#8	52'-2"	—
b3(E)	864	#5	25'-5"	—
b4(E)	56	#4	10'-10"	—
b5(E)	56	#4	20'-0"	—
d(E)	602	#5	7'-0"	┌
d1(E)	1,204	#5	7'-8"	┌
d2(E)	602	#5	7'-0"	┌
e(E)	192	#4	14'-8"	—
e1(E)	96	#4	5'-11"	—
e2(E)	96	#4	11'-8"	—
e3(E)	128	#4	18'-1"	—
e4(E)	64	#4	23'-7"	—
e5(E)	48	#4	26'-2"	—
m10(E)	32	#6	27'-9"	—
m11(E)	48	#6	6'-1"	—
m12(E)	16	#6	2'-7"	—
m13(E)	24	#6	3'-10"	—
m14(E)	8	#6	1'-6"	—
m15(E)	56	#5	4'-0"	—
m20(E)	48	#6	3'-10"	—
m21(E)	96	#6	6'-1"	—
m22(E)	56	#5	4'-0"	—
s(E)	896	#4	4'-8"	┌
s10(E)	144	#5	9'-3"	┌
s11(E)	144	#5	10'-9"	┌
s12(E)	112	#5	8'-4"	┌
s20(E)	120	#5	12'-7"	┌
s21(E)	96	#5	9'-8"	┌
v100(E)	204	#5	3'-1"	┌
Item	Unit	Quantity		
Concrete Superstructure	Cu. Yd.	833.1		
Protective Coat	Sq. Yd.	2,534		
Reinforcement Bars, Epoxy Coated	Pound	211,760		
Preformed Joint Seal 3 1/2"	Foot	200		
Diamond Grinding (Bridge Section)	Sq. Yd.	2,138		
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	1,069		

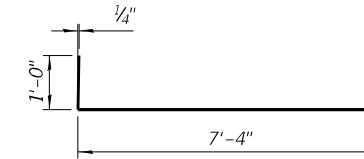


DEEP FILLET DETAIL

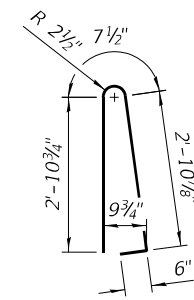


FIELD CUTTING DIAGRAM

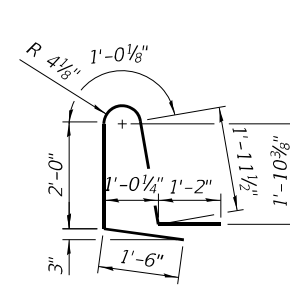
Order a1(E) and a3(E) bars full length. Cut as shown and use remainder of bars in opposite end of deck.



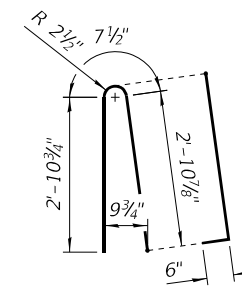
BAR a2(E)



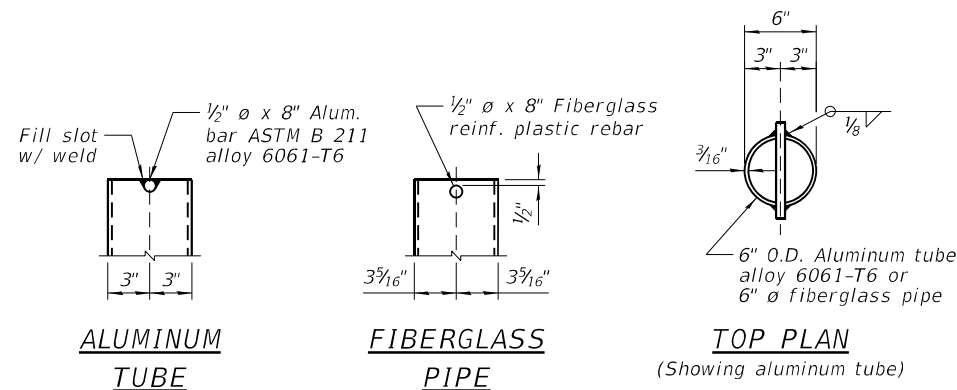
BAR d(E)



BAR d1(E)



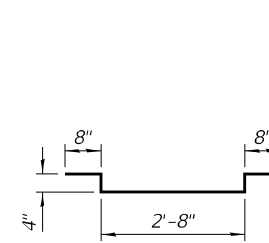
BAR d2(E)



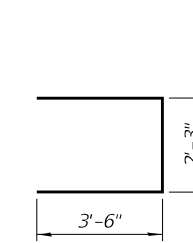
ALUMINUM TUBE

FIBERGLASS PIPE

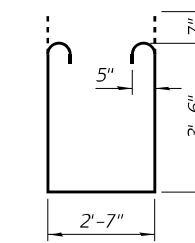
TOP PLAN (Showing aluminum tube)



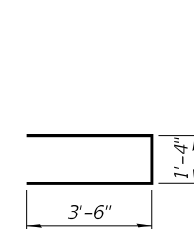
BAR s(E)



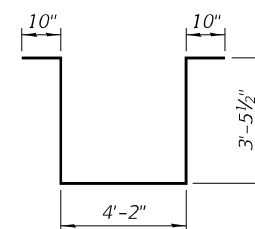
BAR s10(E)



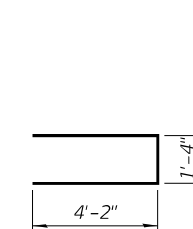
BAR s11(E)



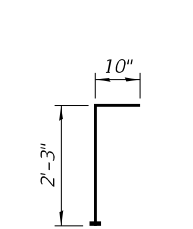
BAR s12(E)



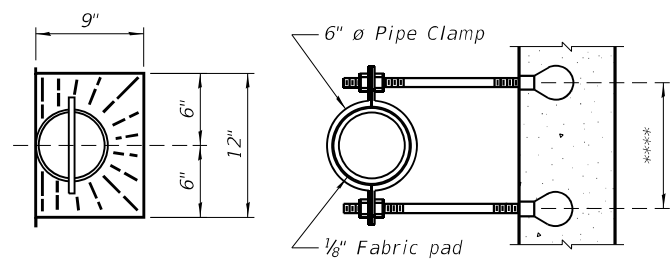
BAR s20(E)



BAR s21(E)



BAR v100(E) (Headed)



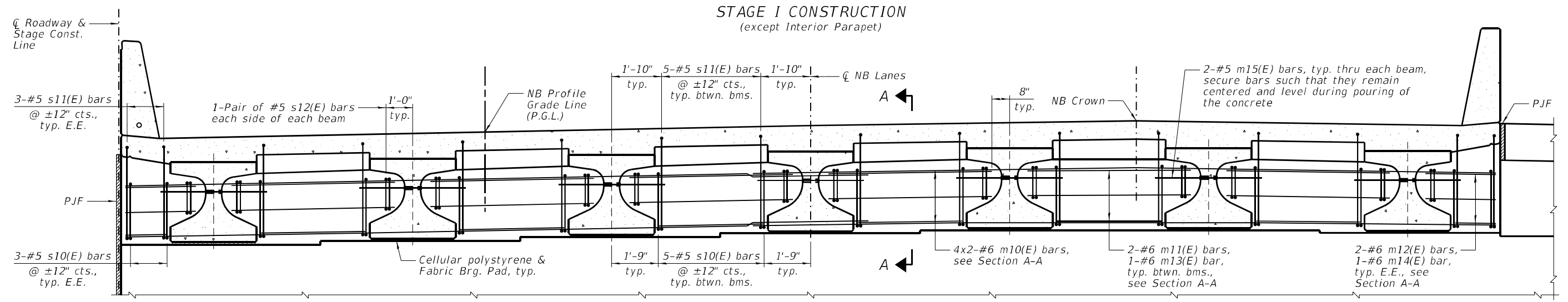
TOP PLAN

SECTION A-A

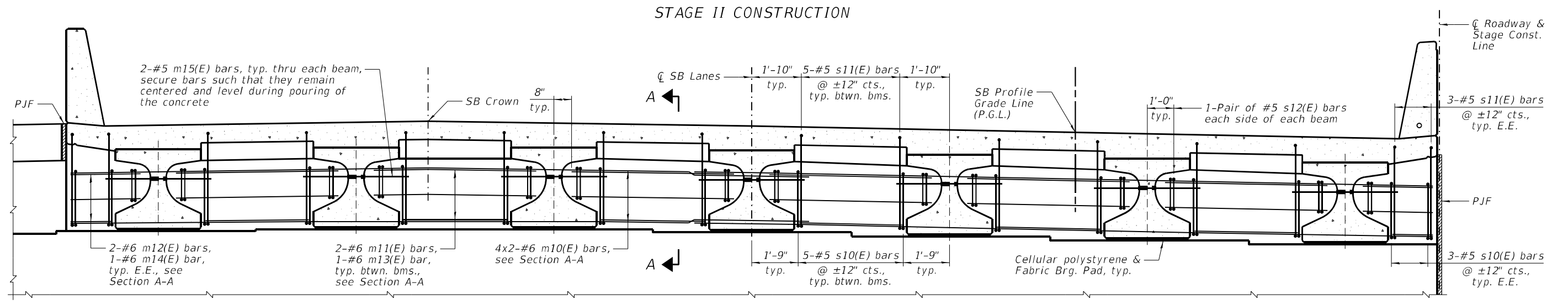
**** Dimension as required by pipe clamp

NOTES:

- 1.) Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
- 2.) The exterior surfaces of the fiberglass floor drains shall be pigmented by the manufacturer with a color that matches the concrete.
- 3.) The top portion of aluminum floor drains shall be coated to minimize reaction with wet concrete.
- 4.) The clamping device and inserts shall be galvanized according to AASHTO M 232. Cost of clamping device included with Floor Drains.
- 5.) 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.
- 6.) See Sheet 25 of 55 for location of Section A-A.



DIAPHRAGM AT NORTHBOUND NORTH ABUTMENT
 (Looking North)
 (Southbound South Abutment similar)



DIAPHRAGM AT SOUTHBOUND NORTH ABUTMENT
 (Looking North)
 (Northbound South Abutment similar)

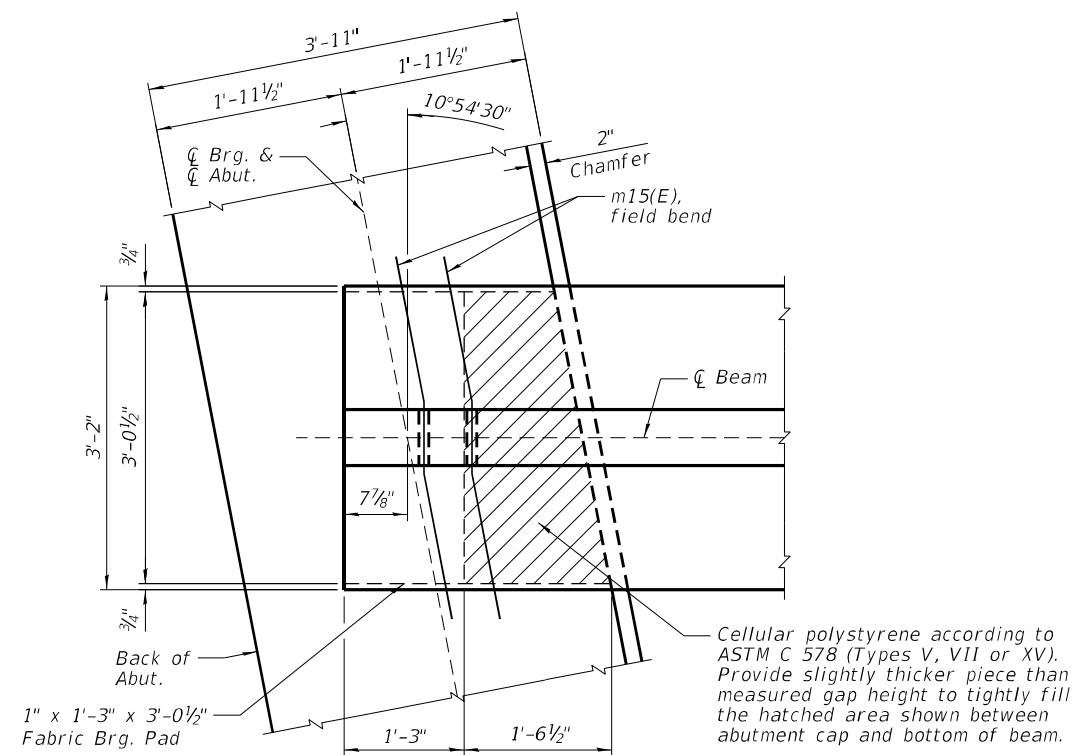
MINIMUM BAR LAP
 #6 bar = 4'-0"

NOTES:

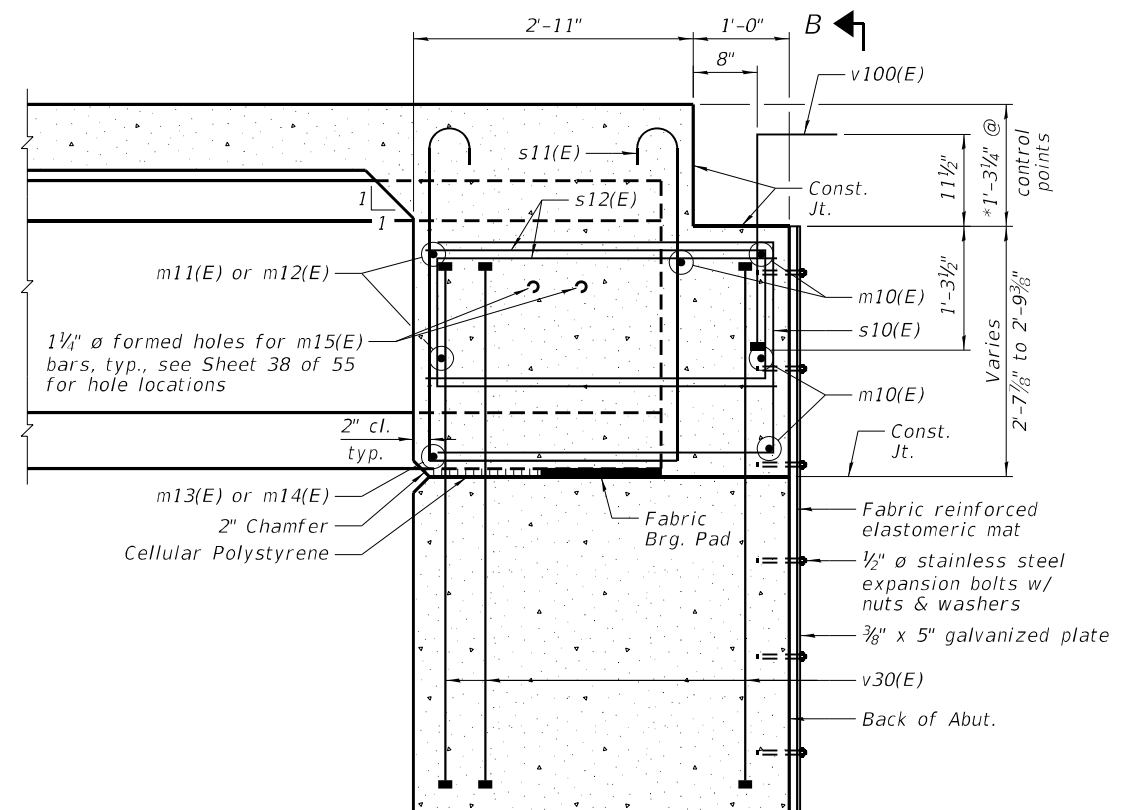
- 1.) See Sheet 26 of 55 for Superstructure Details and Bill of Material.
- 2.) See Sheet 28 of 55 for Plan & Section A-A and PJF details.
- 3.) The s10(E), s11(E) and s12(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
- 4.) Bars indicated thus 4x2-#6 etc. indicates 4 lines of bars with 2 lengths per line.
- 5.) Cost of cellular polystyrene is included with Concrete Superstructure.
- 6.) E.E. denotes Each End.

DESIGNED - PMG	REVISED
CHECKED - DAH	REVISED
DRAWN - DJM	REVISED
CHECKED - JCZ	REVISED
DATE - 05/05/2021	

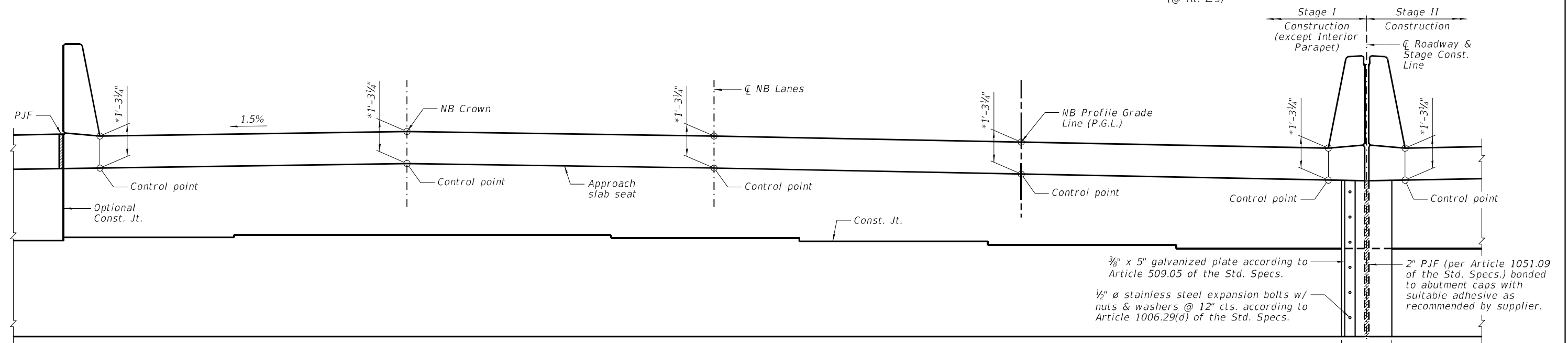
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	184
EX. S.N. 046-0008 (NB)/ -0009 (SB)		CONTRACT NO. 66F74		
ILLINOIS FED. AID PROJECT				



PLAN AT ABUTMENT
(showing bottom flange of beam)



SECTION A-A
(@ Rt. L's)



VIEW B-B
(Looking South)

Limits of fabric reinforced elastomeric mat according to Section 1028 of the Std. Specs. and installed according to applicable requirements of Article 520.09 of the Std. Specs.

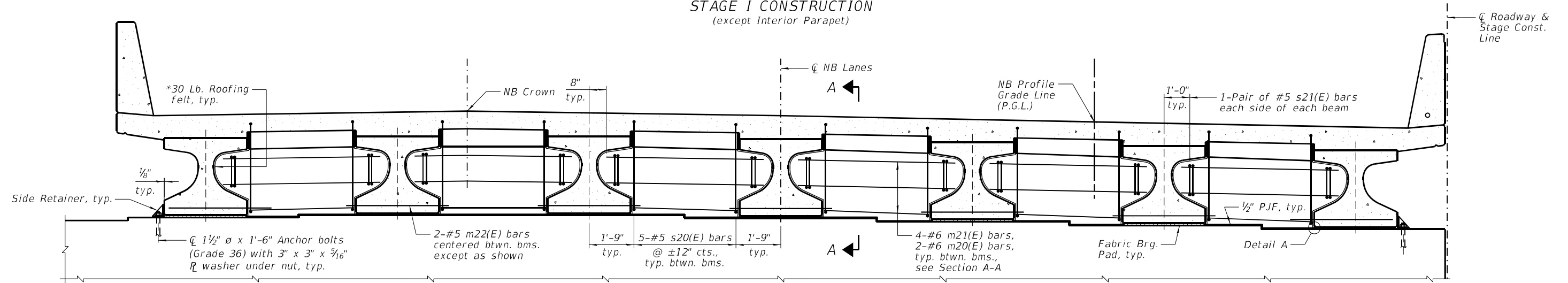
NOTES:

- 1.) See Sheet 27 of 55 for location of Section A-A.
- 2.) *Dimension prior to grinding. Up to 1/4" will be ground off the approach slab.
- 3.) The approach slab seat shall have a constant slope determined from the control points shown.
- 4.) Cost of fabric reinforced elastomeric mat, galvanized plate, stainless steel expansion bolts with nuts & washers, and installation are included in the cost of Concrete Superstructure.

DESIGNED - PMG	REVISED
CHECKED - DAH	REVISED
DRAWN - DJM	REVISED
CHECKED - JCZ	REVISED
DATE - 05/05/2021	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	185
EX. S.N. 046-0008 (NB) / -0009 (SB)		CONTRACT NO. 66F74		
ILLINOIS		FED. AID PROJECT		

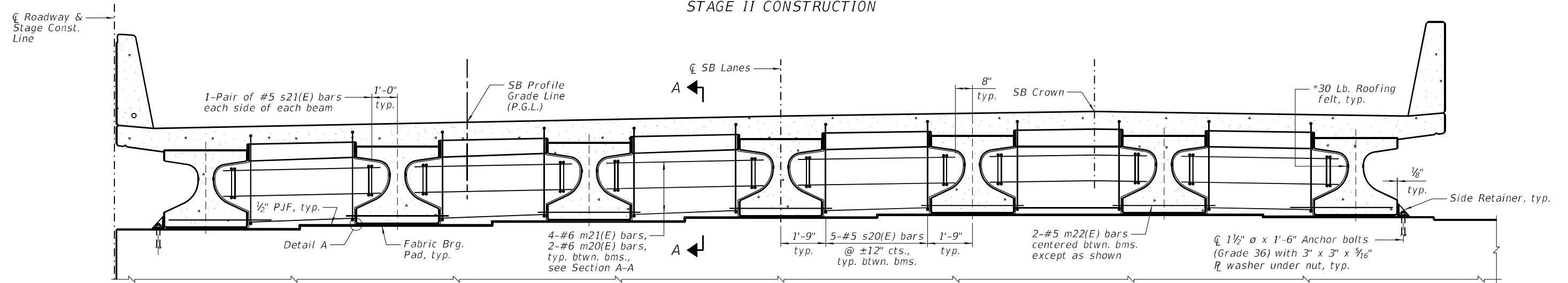
STAGE I CONSTRUCTION
(except Interior Parapet)



DIAPHRAGM AT NORTHBOUND PIERS

(Looking South)
*Bonded to sides of beams embedded into diaphragm.

STAGE II CONSTRUCTION



DIAPHRAGM AT SOUTHBOUND PIERS

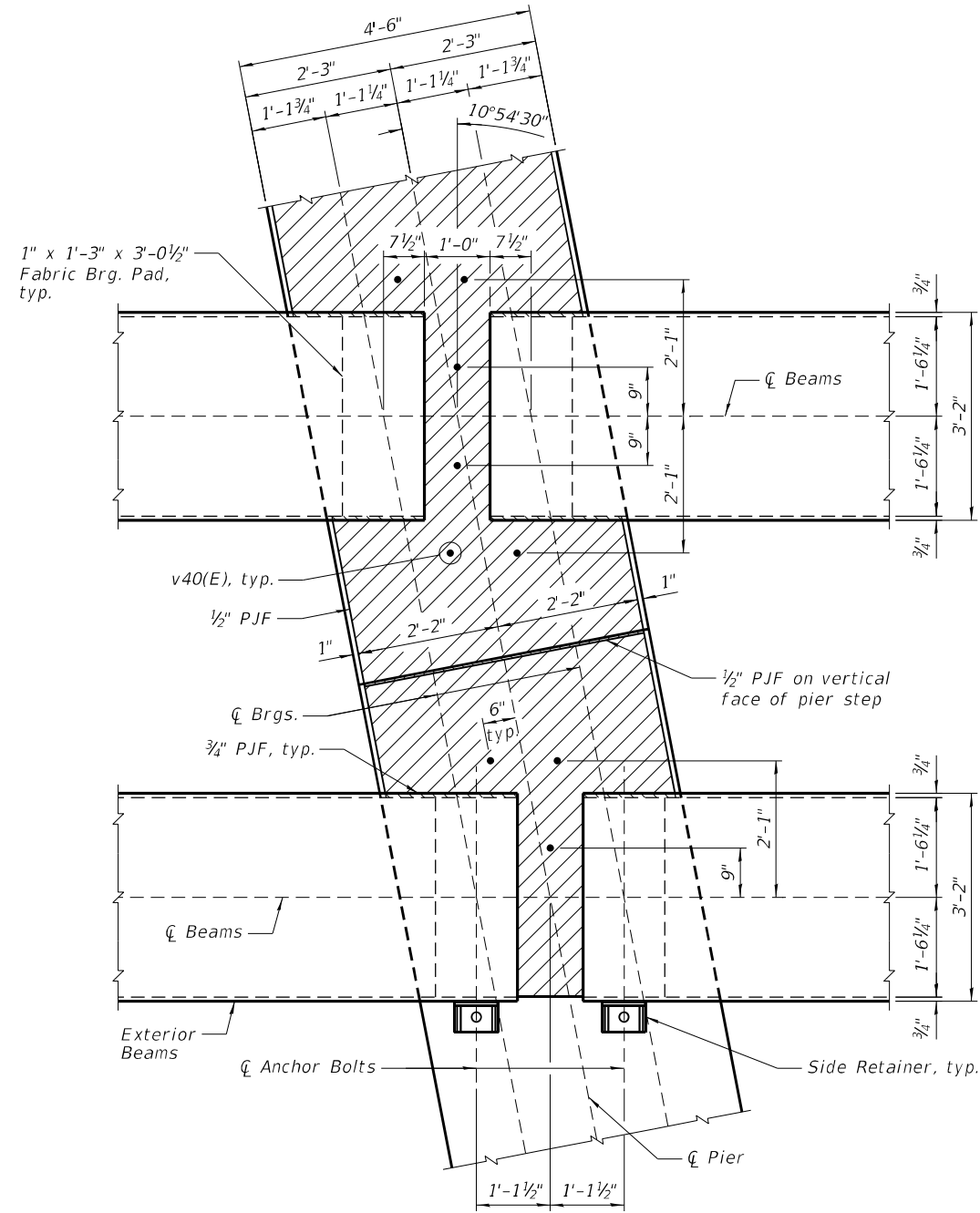
(Looking South)
*Bonded to sides of beams embedded into diaphragm.

NOTES:

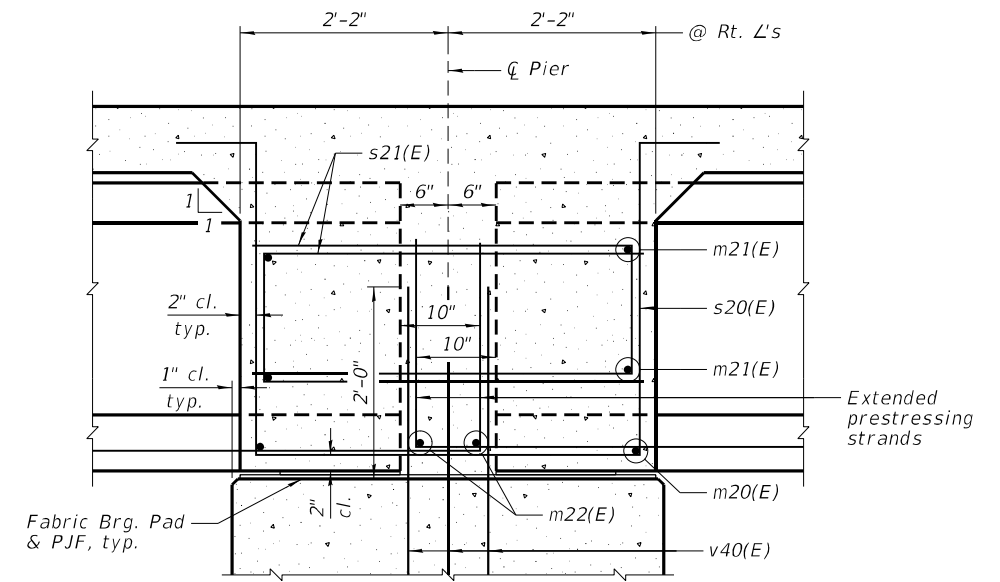
- 1.) See Sheet 26 of 55 for Superstructure Details and Bill of Material.
- 2.) See Sheet 30 of 55 for Plan, Section A-A, Detail A & Side Retainer.
- 3.) Cost of 30 Lb. roofing felt is included with Concrete Superstructure.
- 4.) Cost of side retainer and anchor bolts shall be included with Concrete Structures.
- 5.) The s20(E) and s21(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
- 6.) Anchor bolts and side retainers shall be according to Article 521.06 of the Standard Specifications. Side retainers shall be hot dip galvanized.
- 7.) Anchor bolts and side retainers shall be installed as each exterior beam is erected unless an equivalent temporary means of lateral restraint is used.

DESIGNED - PMG	REVISION
CHECKED - DAH	REVISION
DRAWN - DJM	REVISION
CHECKED - JCZ	REVISION
DATE - 05/05/2021	

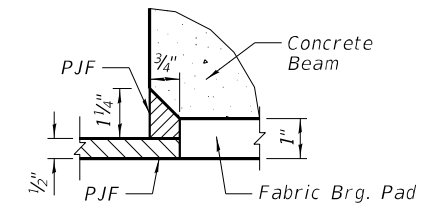
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	186
EX. S.N. 046-0008 (NB)/ -0009 (SB)		CONTRACT NO. 66F74		
ILLINOIS FED. AID PROJECT				



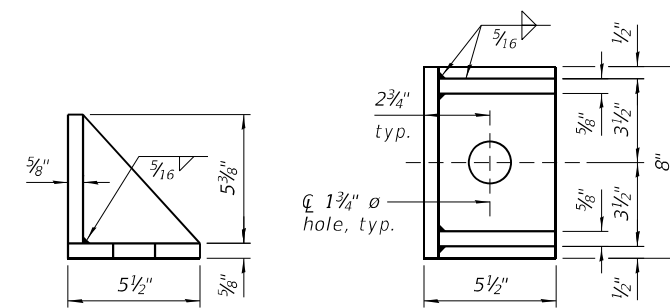
PLAN AT PIER
(showing bearing pads & PJF details)



SECTION A-A
(Dimensions along centerline of beam except as shown)



DETAIL A

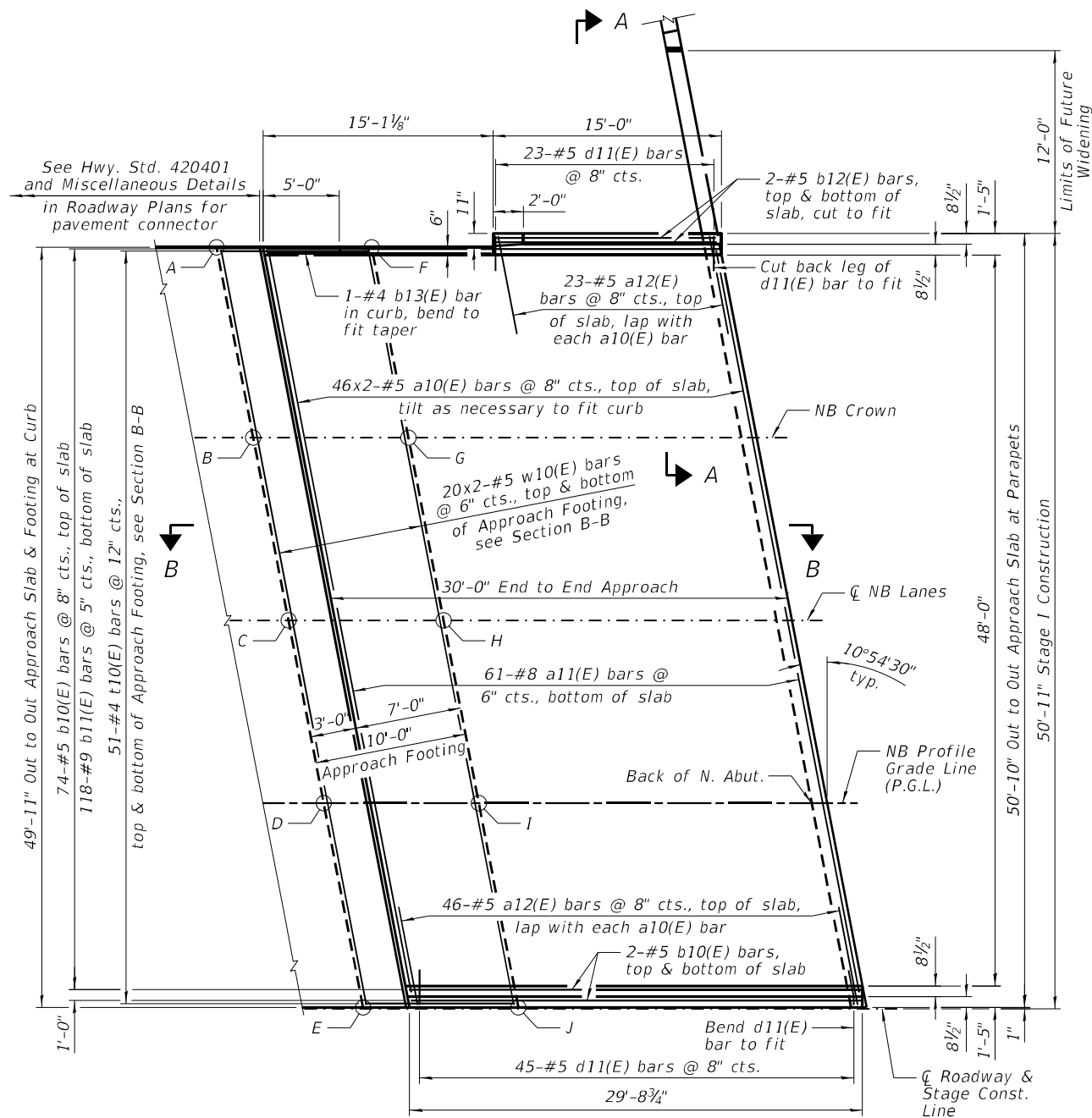


SIDE RETAINER
(2 required each side of pier).
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

NOTE:
See Sheet 29 of 55 for location of Section A-A & Detail A.

DESIGNED - PMG	REVISED
CHECKED - DAH	REVISED
DRAWN - DJM	REVISED
CHECKED - JCZ	REVISED
DATE - 05/05/2021	

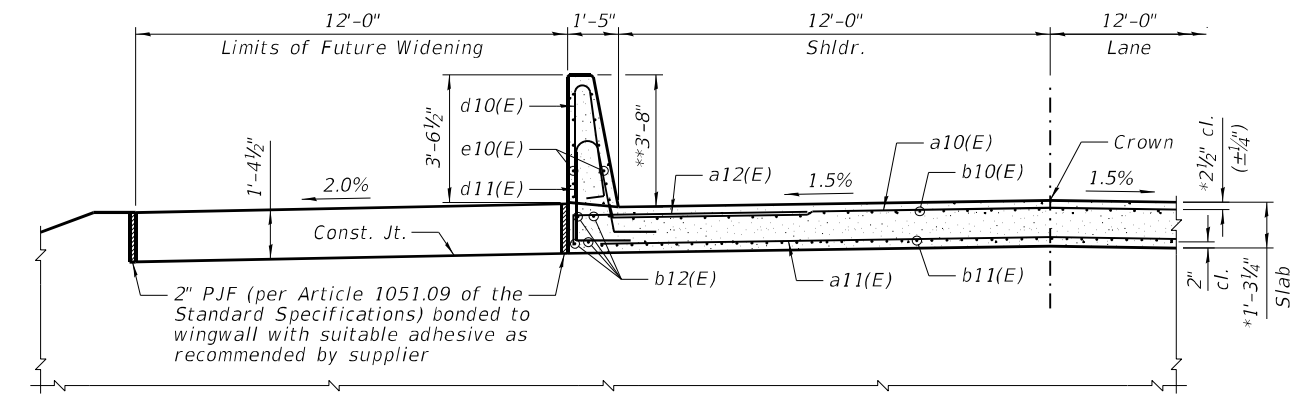
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB, HB-3]BR, 139R	KANKAKEE	252	187
EX. S.N. 046-0008 (NB) / -0009 (SB)			CONTRACT NO. 66F74	
ILLINOIS FED. AID PROJECT				



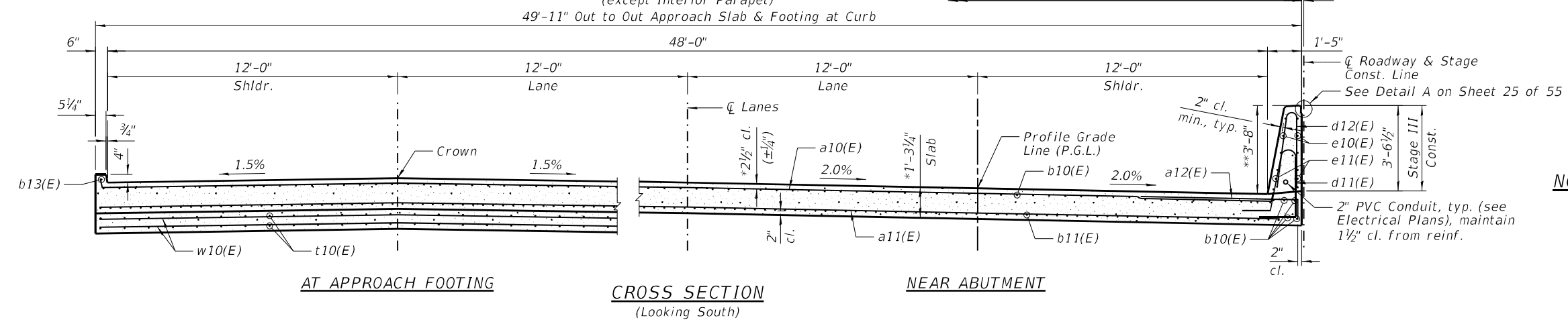
NORTH APPROACH PLAN - NORTHBOUND
STAGE I CONSTRUCTION
 (except Interior Parapet)

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

POINT	NORTH APPROACH	
	TOP	BOTTOM
A	667.91	667.08
B	668.11	667.27
C	667.94	667.10
D	667.71	666.87
E	667.48	666.64
F	667.96	667.13
G	668.15	667.32
H	667.98	667.15
I	667.75	666.92
J	667.52	666.69



SECTION A-A
 (Looking South)



MINIMUM BAR LAP
 #5 bar = 3'-6"

- NOTES:**
- 1.) *Dimension prior to grinding. Up to 1/4" will be ground off the approach slab.
 - 2.) **Dimension after grinding.
 - 3.) See Sheet 35 of 55 for Section B-B.
 - 4.) Bars indicated thus 46x2-#5 etc. indicates 46 lines of bars with 2 lengths per line.



DESIGNED - PMG	REVISED
CHECKED - DAH	REVISED
DRAWN - DJM	REVISED
CHECKED - J CZ	REVISED

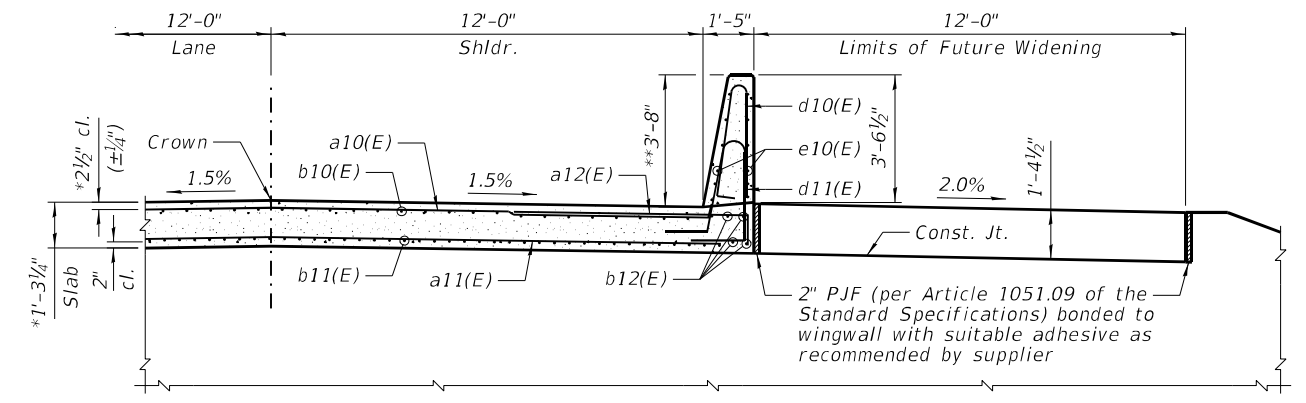
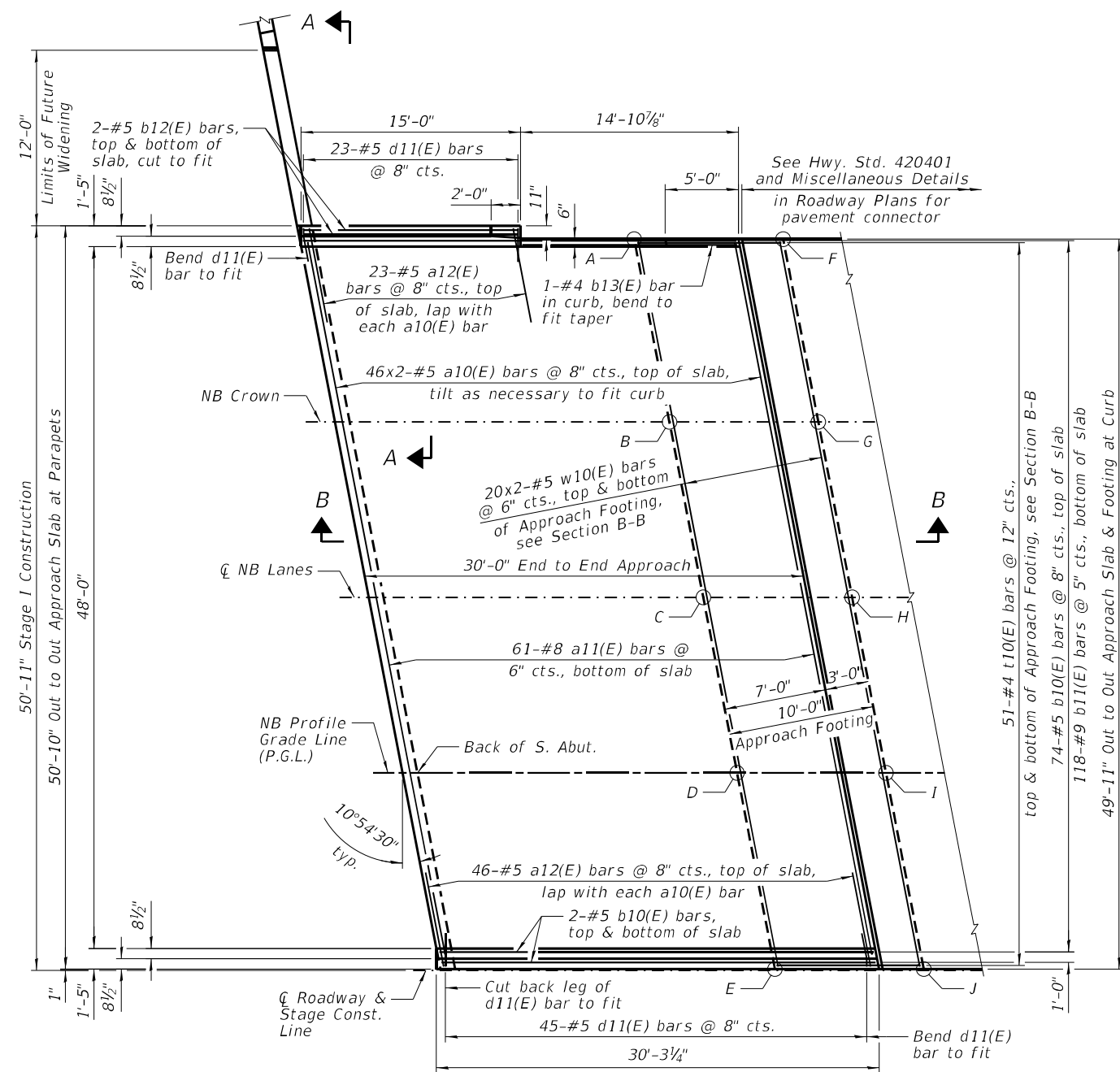
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 046-0156 (NB) & 046-0157 (SB)

S.N. 046-0156 (NB)	
F.A.I. RTE.	SECTION
57	[(139)VB,HB-3]BR,139R
EX. S.N. 046-0008 (NB)/-0009 (SB)	CONTRACT NO. 66F74
ILLINOIS	FED. AID PROJECT

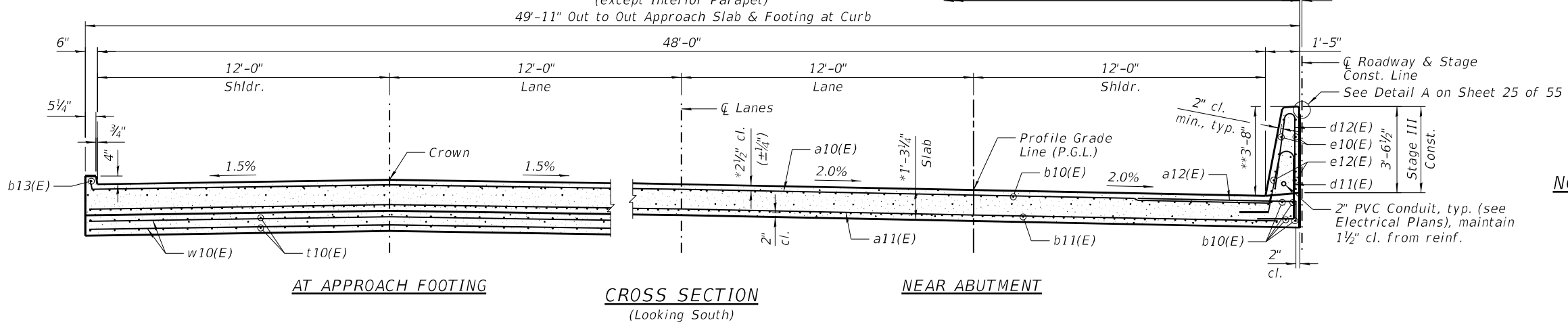
TOP AND BOTTOM ELEVATIONS
FOR APPROACH FOOTING

SOUTH APPROACH		
POINT	TOP	BOTTOM
A	668.11	667.28
B	668.28	667.45
C	668.10	667.26
D	667.85	667.01
E	667.60	666.77
F	668.08	667.24
G	668.25	667.41
H	668.06	667.22
I	667.81	666.98
J	667.56	666.73



SOUTH APPROACH PLAN - NORTHBOUND
STAGE I CONSTRUCTION
(except Interior Parapet)

SECTION A-A
(Looking North)



MINIMUM BAR LAP
#5 bar = 3'-6"

- NOTES:**
- *Dimension prior to grinding. Up to 1/4" will be ground off the approach slab.
 - **Dimension after grinding.
 - See Sheet 35 of 55 for Section B-B.
 - Bars indicated thus 46x2-#5 etc. indicates 46 lines of bars with 2 lengths per line.



DESIGNED - PMG	REVISED
CHECKED - DAH	REVISED
DRAWN - DJM	REVISED
CHECKED - JCZ	REVISED

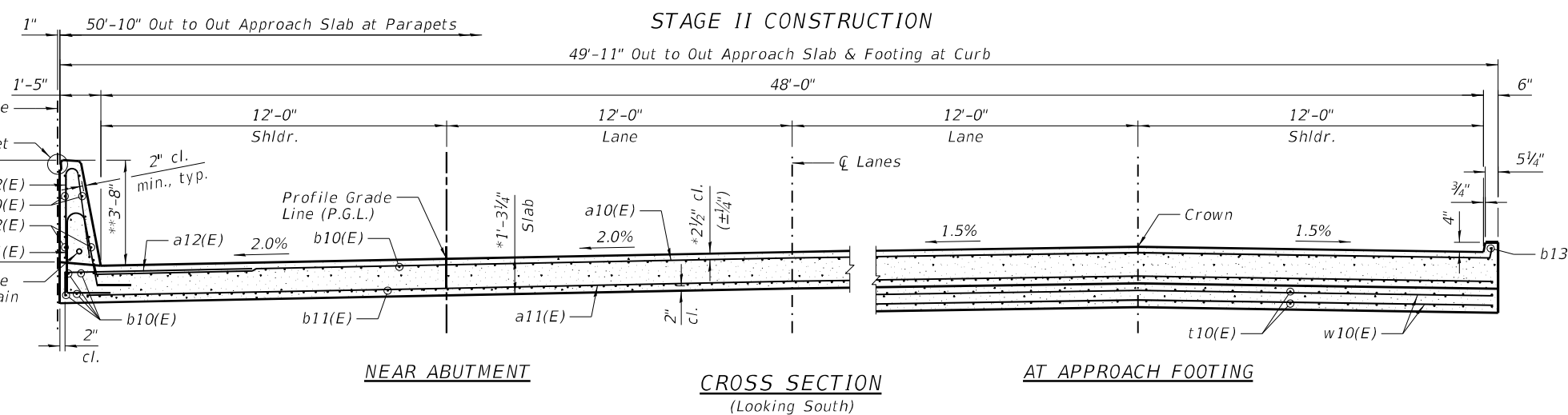
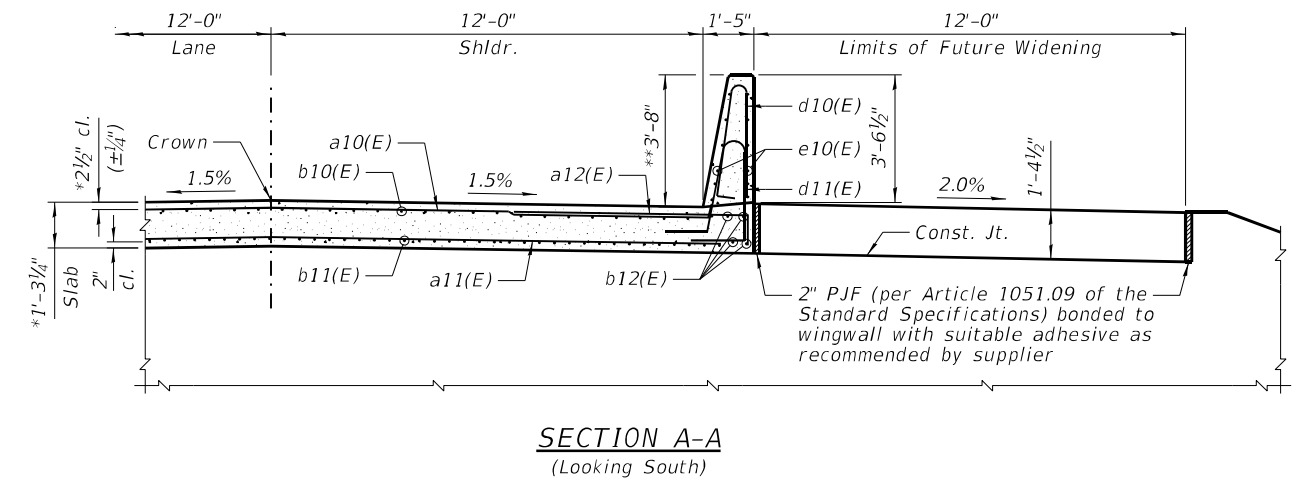
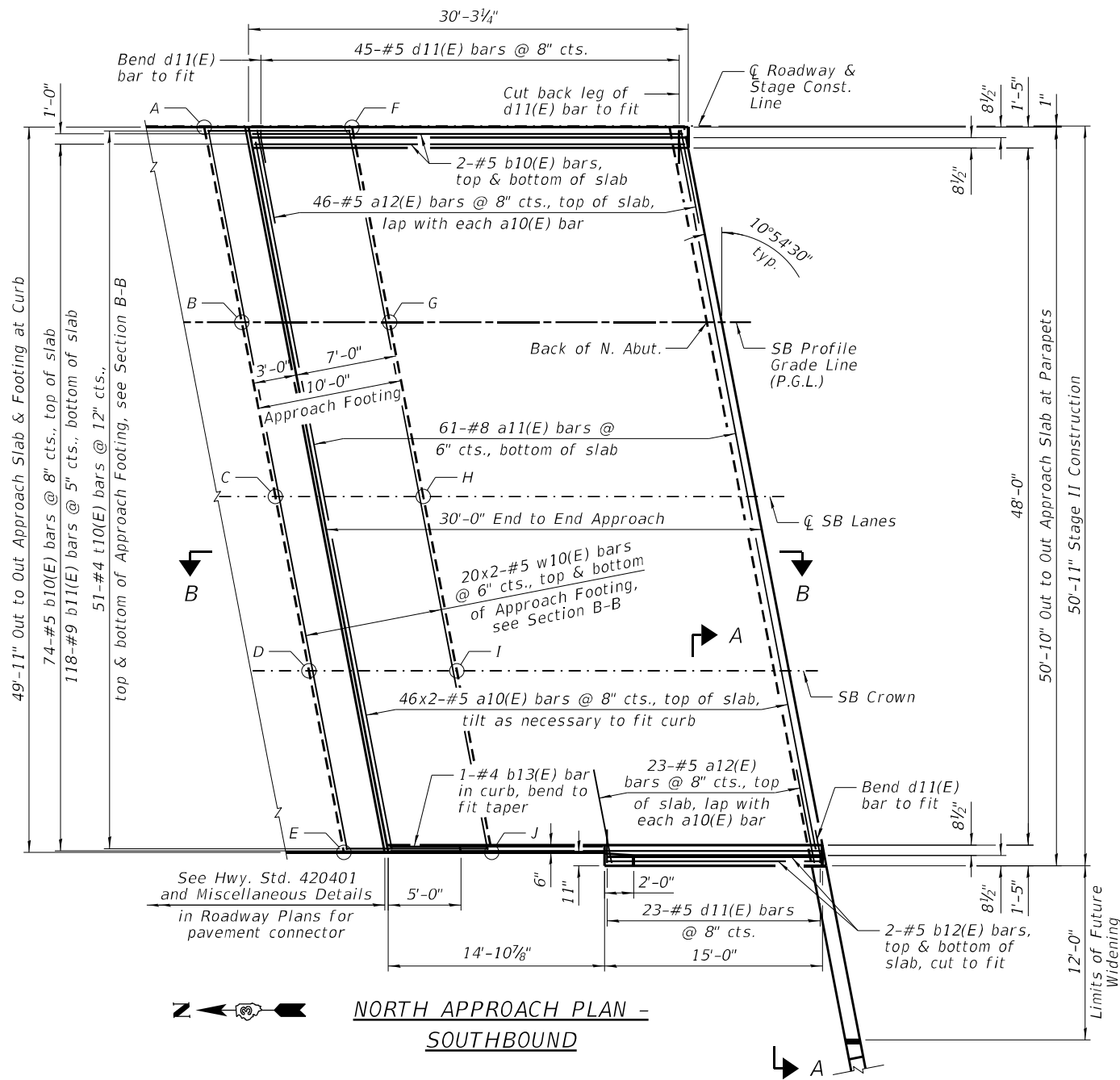
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 046-0156 (NB) & 046-0157 (SB)

S.N. 046-0156 (NB)			
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252
EX. S.N. 046-0008 (NB)/-0009 (SB)	CONTRACT NO. 66F74		189

TOP AND BOTTOM ELEVATIONS
FOR APPROACH FOOTING

POINT	NORTH APPROACH	
	TOP	BOTTOM
A	667.48	666.65
B	667.73	666.90
C	667.98	667.15
D	668.17	667.34
E	668.00	667.17
F	667.53	666.69
G	667.78	666.94
H	668.02	667.19
I	668.21	667.38
J	668.04	667.21



MINIMUM BAR LAP
#5 bar = 3'-6"

- NOTES:**
- 1.) *Dimension prior to grinding. Up to 1/4" will be ground off the approach slab.
 - 2.) **Dimension after grinding.
 - 3.) See Sheet 35 of 55 for Section B-B.
 - 4.) Bars indicated thus 46x2-#5 etc. indicates 46 lines of bars with 2 lengths per line.

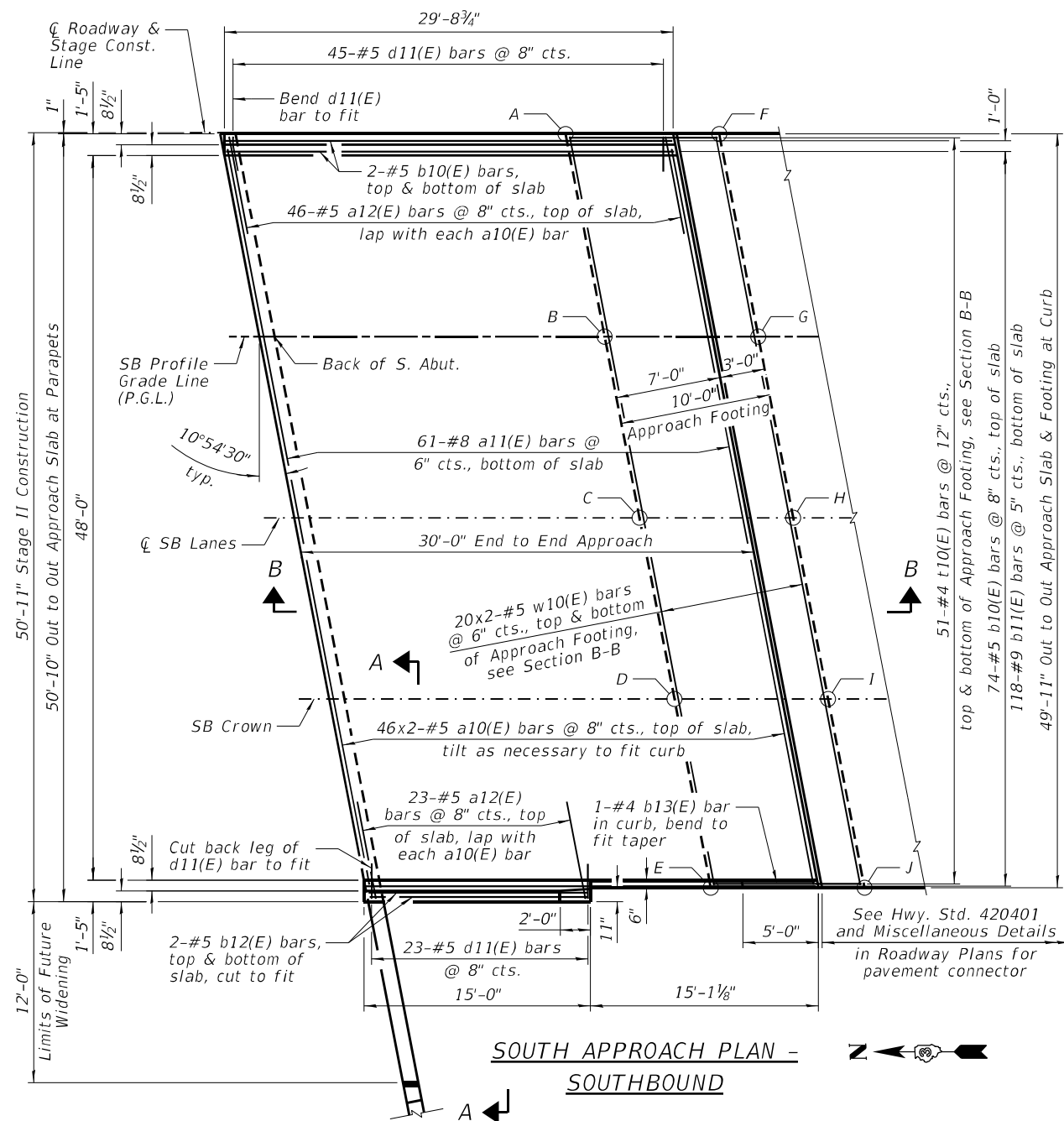


DESIGNED - PMG	REVISED
CHECKED - DAH	REVISED
DRAWN - DJM	REVISED
CHECKED - JCZ	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

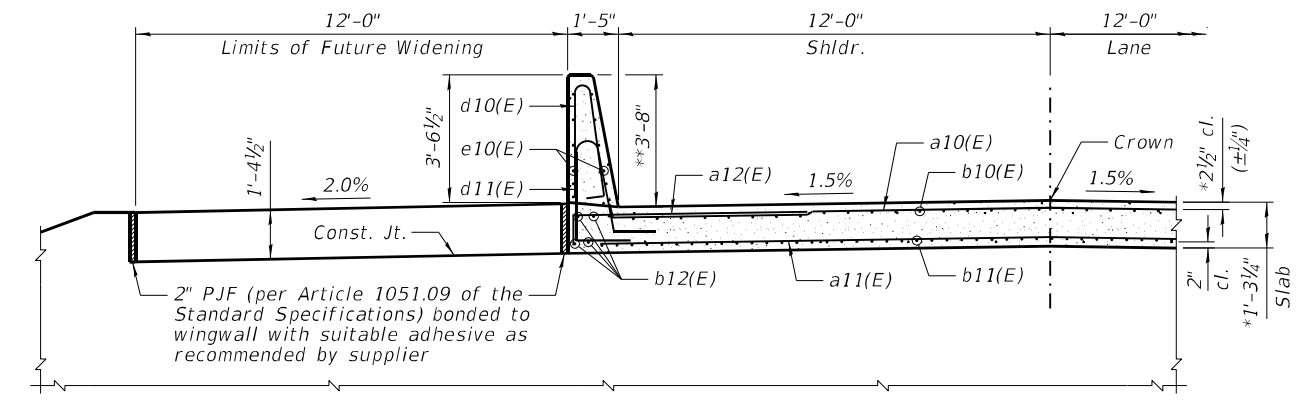
BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 046-0156 (NB) & 046-0157 (SB)

S.N. 046-0157 (SB)	
F.A.I. RTE.	SECTION
57	[(139)VB,HB-3]BR,139R
EX. S.N. 046-0008 (NB)/-0009 (SB)	COUNTY
	KANKAKEE
	TOTAL SHEETS
	252
	SHEET NO.
	190
	CONTRACT NO. 66F74
	ILLINOIS FED. AID PROJECT

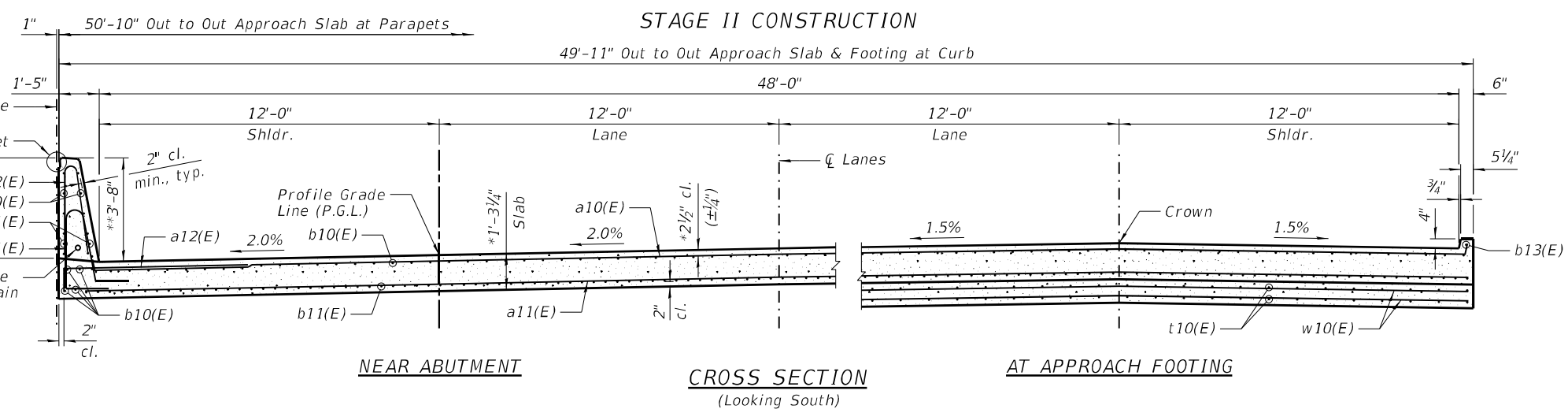


TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

SOUTH APPROACH		
POINT	TOP	BOTTOM
A	667.60	666.76
B	667.83	666.99
C	668.06	667.23
D	668.23	667.40
E	668.04	667.21
F	667.56	666.72
G	667.79	666.95
H	668.02	667.19
I	668.19	667.36
J	668.00	667.17



SECTION A-A (Looking North)



MINIMUM BAR LAP
#5 bar = 3'-0"

- NOTES:
- 1.) *Dimension prior to grinding. Up to 1/4" will be ground off the approach slab.
 - 2.) **Dimension after grinding.
 - 3.) See Sheet 35 of 55 for Section B-B.
 - 4.) Bars indicated thus 46x2-#5 etc. indicates 46 lines of bars with 2 lengths per line.

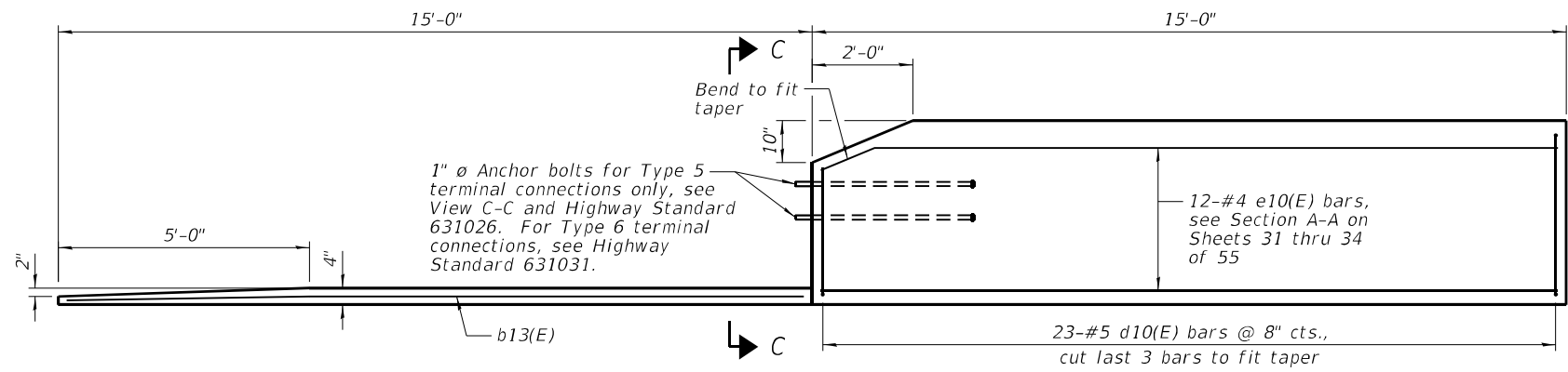


DESIGNED - PMG	REVISED
CHECKED - DAH	REVISED
DRAWN - DJM	REVISED
CHECKED - JCY	REVISED

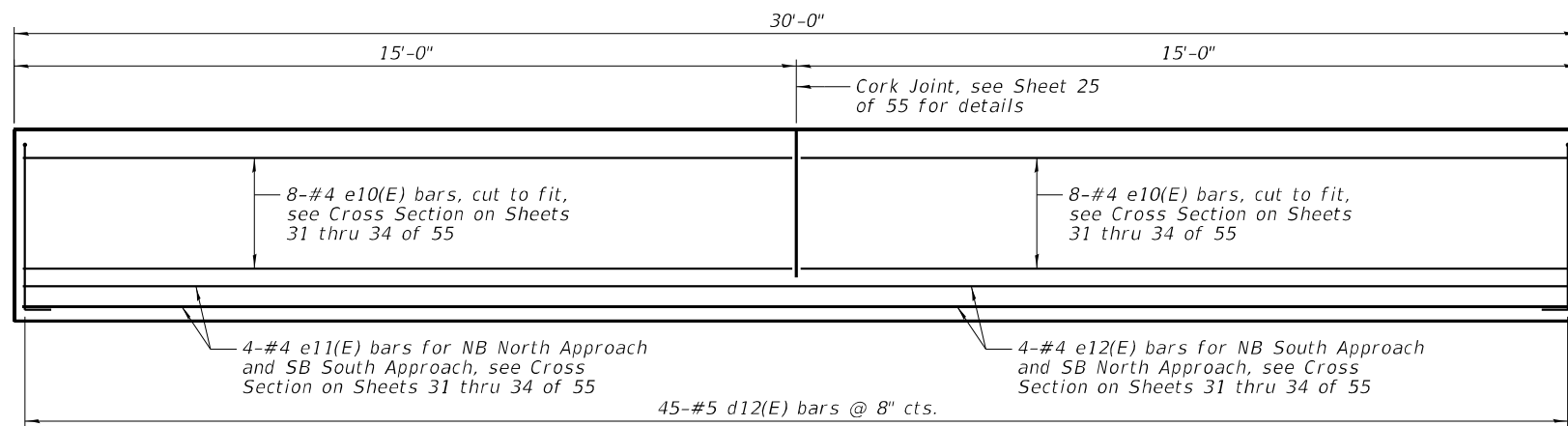
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 046-0156 (NB) & 046-0157 (SB)

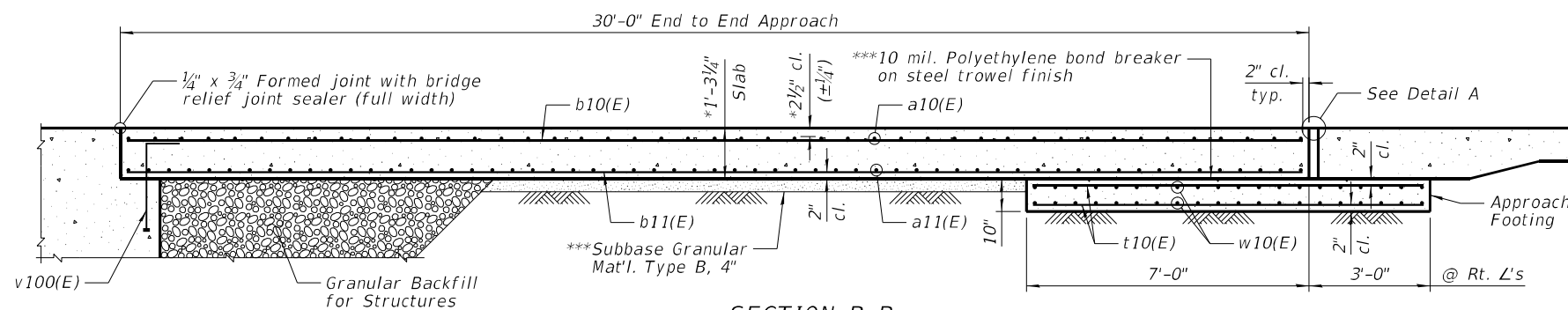
S.N. 046-0157 (SB)	
F.A.I. RTE.	SECTION
57	[(139)VB,HB-3]BR,139R
EX. S.N. 046-0008 (NB)/-0009 (SB)	CONTRACT NO. 66F74
ILLINOIS	FED. AID PROJECT



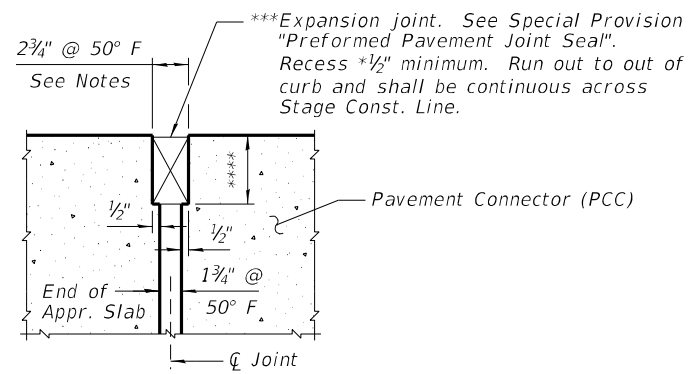
INSIDE ELEVATION OF EXTERIOR PARAPET AND CURB



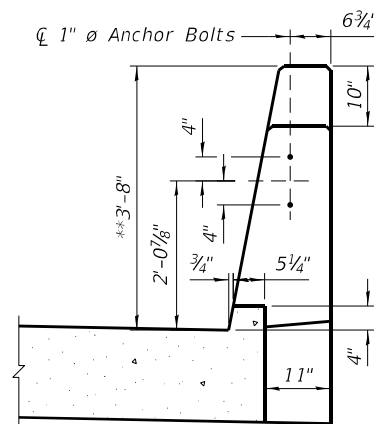
INSIDE ELEVATION OF INTERIOR PARAPET



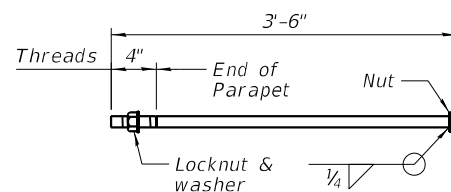
SECTION B-B



DETAIL A (@ Rt. L's)

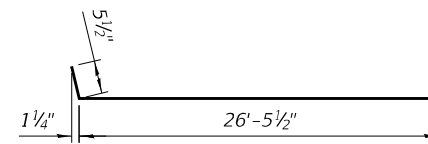


VIEW C-C

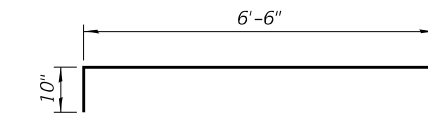


***1" \varnothing ANCHOR BOLT

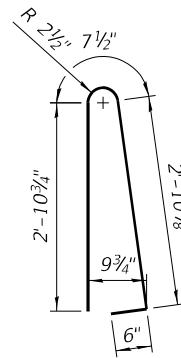
(Anchor bolt assemblies shall be galvanized according to Article 1006.09 of the Standard Specifications)



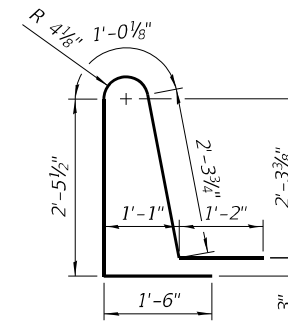
BAR a10(E)



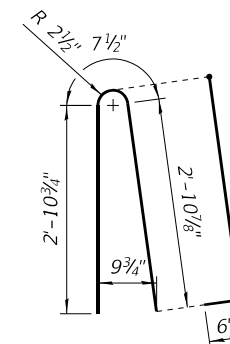
BAR a12(E)



BAR d10(E)



BAR d11(E)



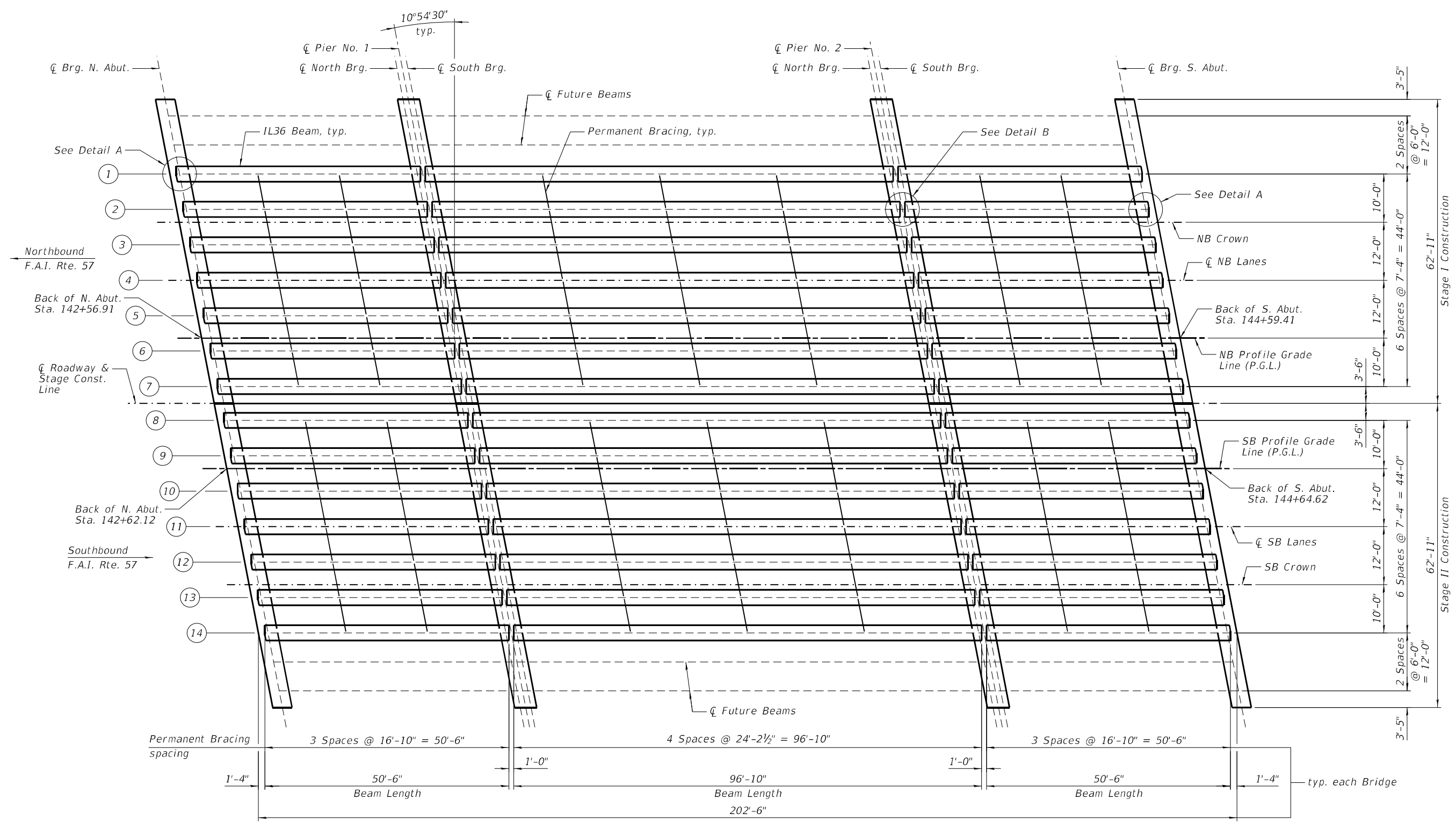
BAR d12(E)

NOTES:

- 1.) *Dimension prior to grinding. Up to 1/4" will be ground off the approach slab.
- 2.) **Dimension after grinding.
- 3.) ***Cost included with Concrete Superstructure (Approach Slab).
- 4.) ****Per manufacturer's recommendations.
- 5.) 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.
- 6.) Parapet concrete shall be paid for as Concrete Superstructure.
- 7.) Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
- 8.) Approach footing concrete shall be paid for as Concrete Structures.
- 9.) The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
- 10.) Cost of excavation for approach footing included with Concrete Structures.
- 11.) For Granular Backfill for Structures and drainage treatment details, see 3 of 55.
- 12.) The pay item Diamond Grinding (Bridge Section) includes quantity for grinding the approach pavement connectors. See special provisions.

FOUR APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a10(E)	368	#5	26'-11"	┌───┐
a11(E)	488	#8	49'-7"	┌───┐
a12(E)	276	#5	7'-4"	┌───┐
b10(E)	312	#5	29'-8"	┌───┐
b11(E)	472	#9	29'-8"	┌───┐
b12(E)	16	#5	14'-8"	┌───┐
b13(E)	4	#4	14'-7"	┌───┐
d10(E)	92	#5	7'-0"	┌───┐
d11(E)	272	#5	8'-6"	┌───┐
d12(E)	180	#5	7'-0"	┌───┐
e10(E)	112	#4	14'-8"	┌───┐
e11(E)	24	#4	29'-5"	┌───┐
e12(E)	24	#4	29'-11"	┌───┐
t10(E)	408	#4	9'-10"	┌───┐
w10(E)	320	#5	27'-0"	┌───┐
Item		Unit	Quantity	
Concrete Structures		Cu. Yd.	62.8	
Concrete Superstructure		Cu. Yd.	25.3	
Protective Coat		Sq. Yd.	735	
Concrete Superstructure (Approach Slab)		Cu. Yd.	284.9	
Reinforcement Bars, Epoxy Coated		Pound	150,390	
Preformed Joint Seal 3 1/2"		Foot	60	
Diamond Grinding (Bridge Section)		Sq. Yd.	1,051	
Bridge Deck Grooving (Longitudinal)		Sq. Yd.	320	



PLAN



NOTE:
 See Sheet 37 of 55 for Detail A & Detail B,
 Permanent Bracing Details, Interior Beam
 Moment Table and Beam Reaction Table.



DESIGNED - PMG	REVISED
CHECKED - DAH	REVISED
DRAWN - DJM	REVISED
CHECKED - JCZ	REVISED

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FRAMING DETAILS
 STRUCTURE NO. 046-0156 (NB) & 046-0157 (SB)**

SHEET NO. 36 OF 55 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	193
EX. S.N. 046-0008 (NB)/-0009 (SB)		CONTRACT NO. 66F74		

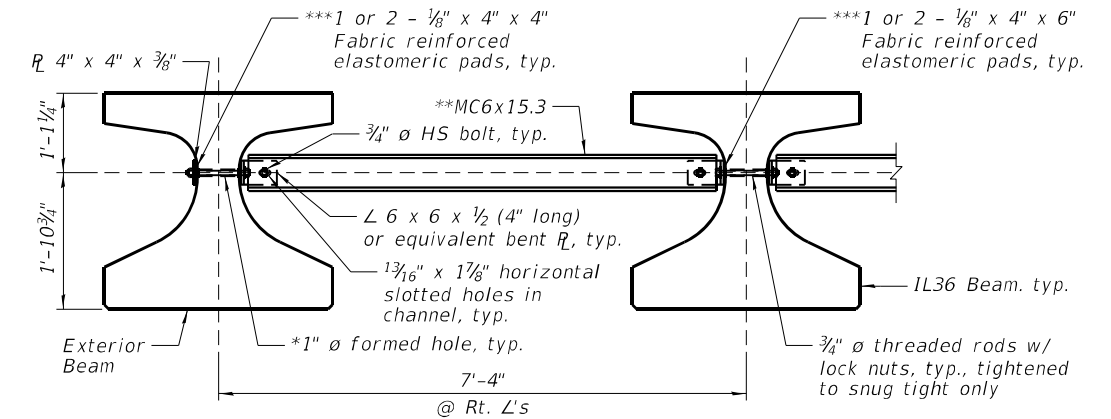
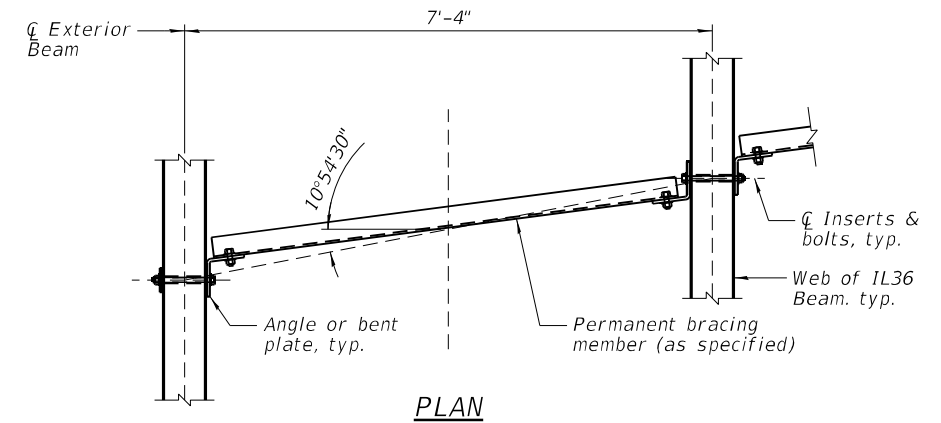
ILLINOIS FED. AID PROJECT

INTERIOR BEAM MOMENT TABLE				
		0.4 Sp. 1 0.6 Sp. 3	Pier No. 1 Pier No. 2	0.5 Sp. 2
I	(in ⁴)	124,639	124,639	124,639
I'	(in ⁴)	329,852	329,852	329,852
Sb	(in ³)	7,563	7,563	7,563
Sb'	(in ³)	12,552	12,552	12,552
St	(in ³)	6,385	6,385	6,385
St'	(in ³)	33,931	6,946	33,931
DC1	(k/ft)	1.699	1.699	1.699
MDC1	('k)	496.6	0	1943.5
DC2	(k/ft)	0.163	0.163	0.163
MDC2	('k)	6.3	-103	84.9
DW	(k/ft)	0.342	0.342	0.342
MDW	('k)	13.2	-216.7	178.8
M _L + IM	('k)	620.4	-866.1	911.6

I: Non-composite moment of inertia of beam section (in.⁴).
I': Composite moment of inertia of beam section (in.⁴).
Sb: Non-composite section modulus for the bottom fiber of the prestressed beam (in.³).
Sb': Composite section modulus for the bottom fiber of the prestressed beam (in.³).
St: Non-composite section modulus for the top fiber of the prestressed beam (in.³).
St': Composite section modulus for the top fiber of the prestressed beam (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_L + IM: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

BEAM REACTION TABLE						
	Abut.		Pier 1 Span 1 Pier 2 Span 3		Pier 1 Span 2 Pier 2 Span 2	
	Interior	Exterior	Interior	Exterior	Interior	Exterior
LLDF	0.6800	0.7300	0.6800	0.7300	0.6800	0.7300
OCF	-----	1.031	-----	-----	-----	-----
RDC1	(k)	41.7	40.7	41.8	40.7	80.7
* RDC2	(k)	2.2	2.2	7.2	7.2	7.2
* RDW	(k)	4.5	4.5	15.1	15.1	15.1
* R _L + IM	(k)	62.2	66.8	54.7	58.7	54.7
RTotal	(k)	110.6	114.2	118.8	121.7	157.7

* At continuous piers, reactions from composite loads are assumed to be equally distributed to each bearing line.



PERMANENT BRACING DETAILS FOR IL36 BEAMS

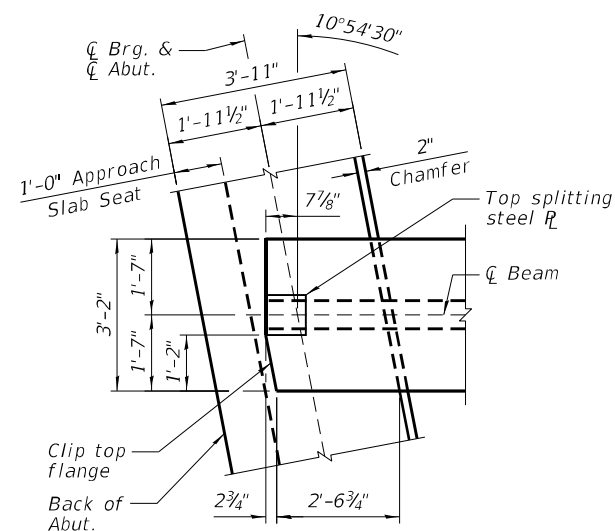
*Fabricator shall locate to miss strands within permissible tolerances.
**Alternate MC6x18 channels are permitted to facilitate material acquisition.
***Place pads as necessary to provide a flat mounting surface between the steel and concrete.

NOTES:

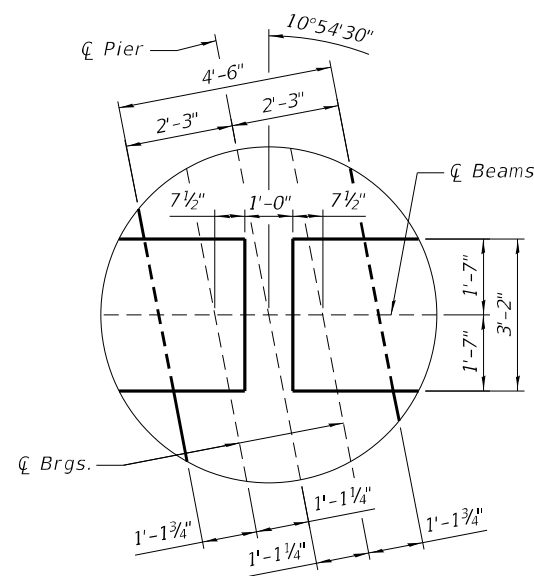
- 1.) All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted.
- 2.) Two hardened washers are required for each set of oversized holes.
- 3.) All holes shall be 1 5/16" Ø unless otherwise noted.
- 4.) 5/16" x 3" x 3" plate washers are required over all slotted holes.
- 5.) All bolts, threaded rods, and hardware shall be galvanized according to AASHTO M232.
- 6.) Threaded rods shall be ASTM F 1554 Grade 55.
- 7.) Bracing shall be installed as beams are erected and tightened as soon as possible during erection.
- 8.) Permanent bracing shall not be paid for separately, but shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete Beams, IL36.

NOTE:

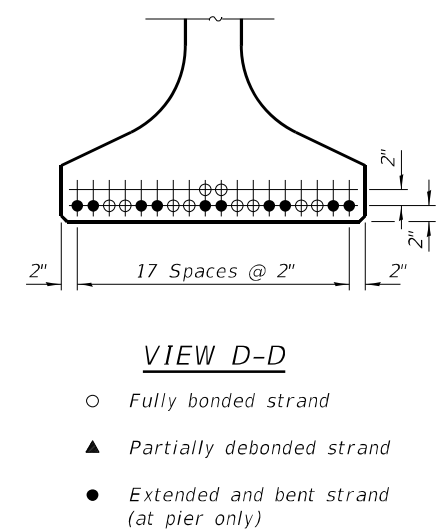
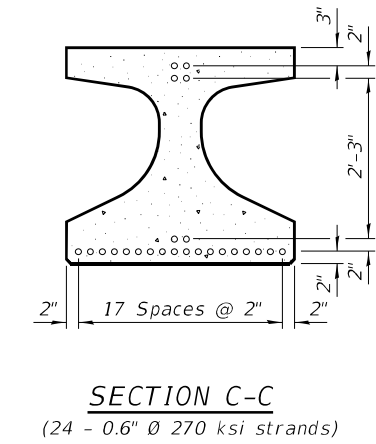
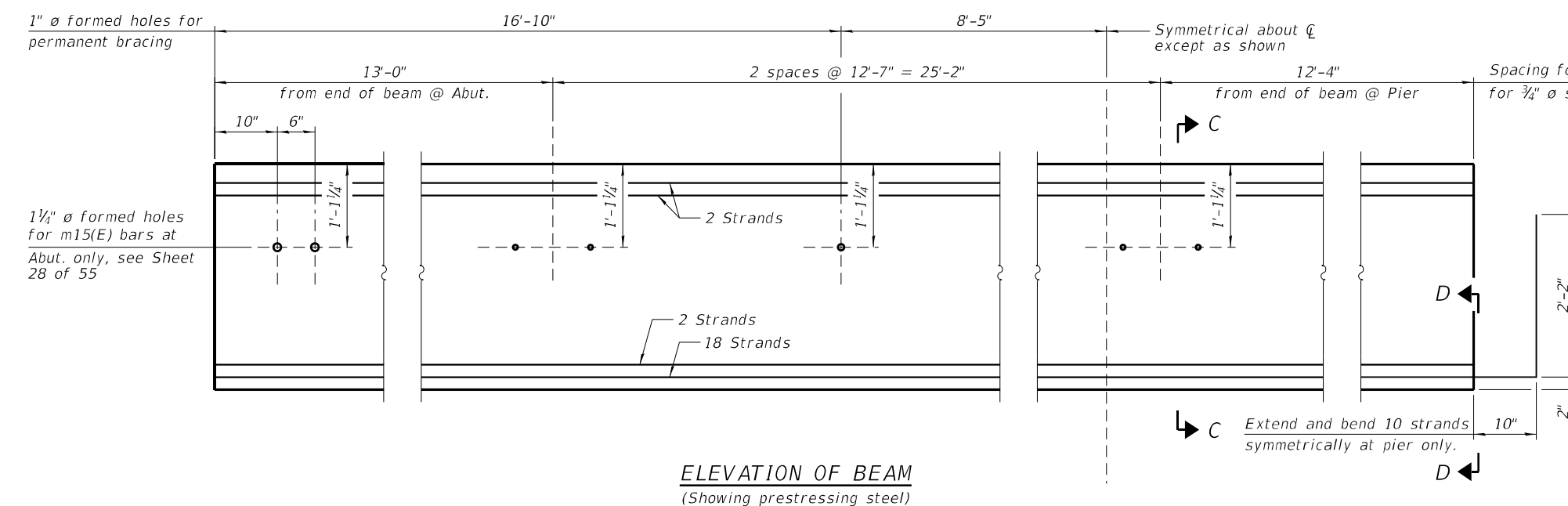
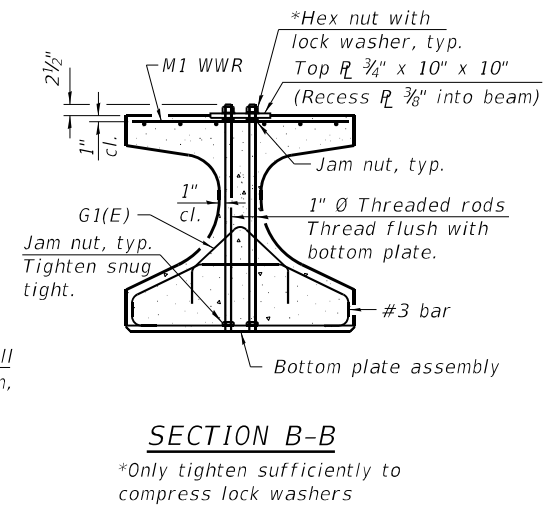
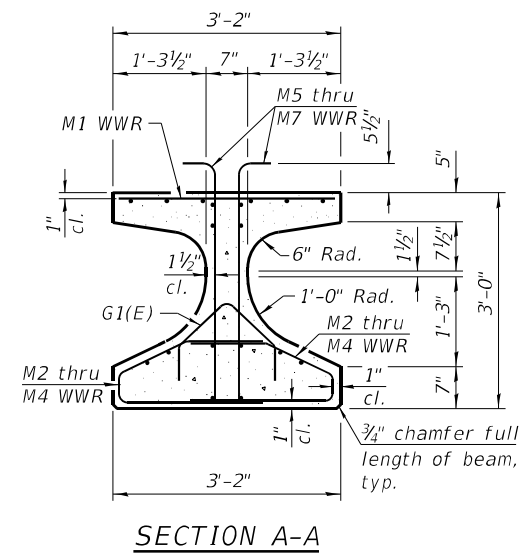
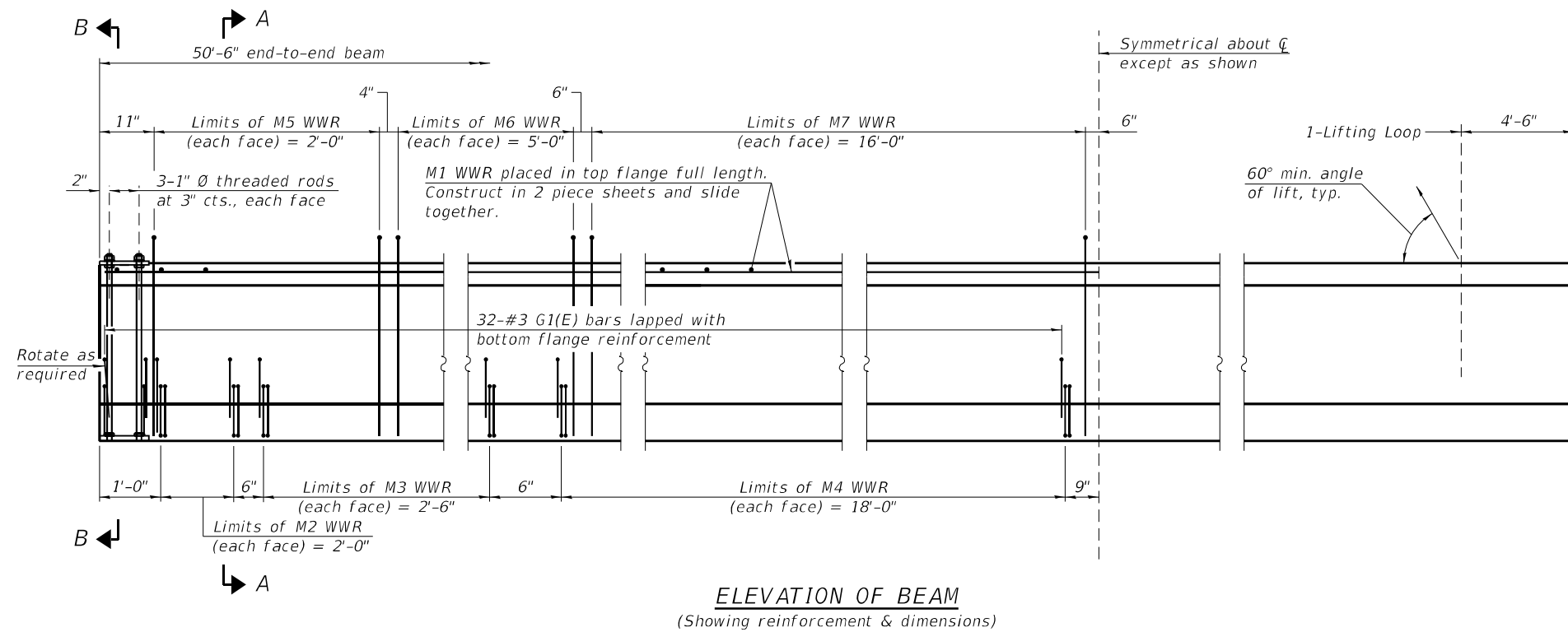
See Sheet 36 of 55 for location of Detail A, Detail B and Permanent Bracing.



DETAIL A
(showing top flange of beam)



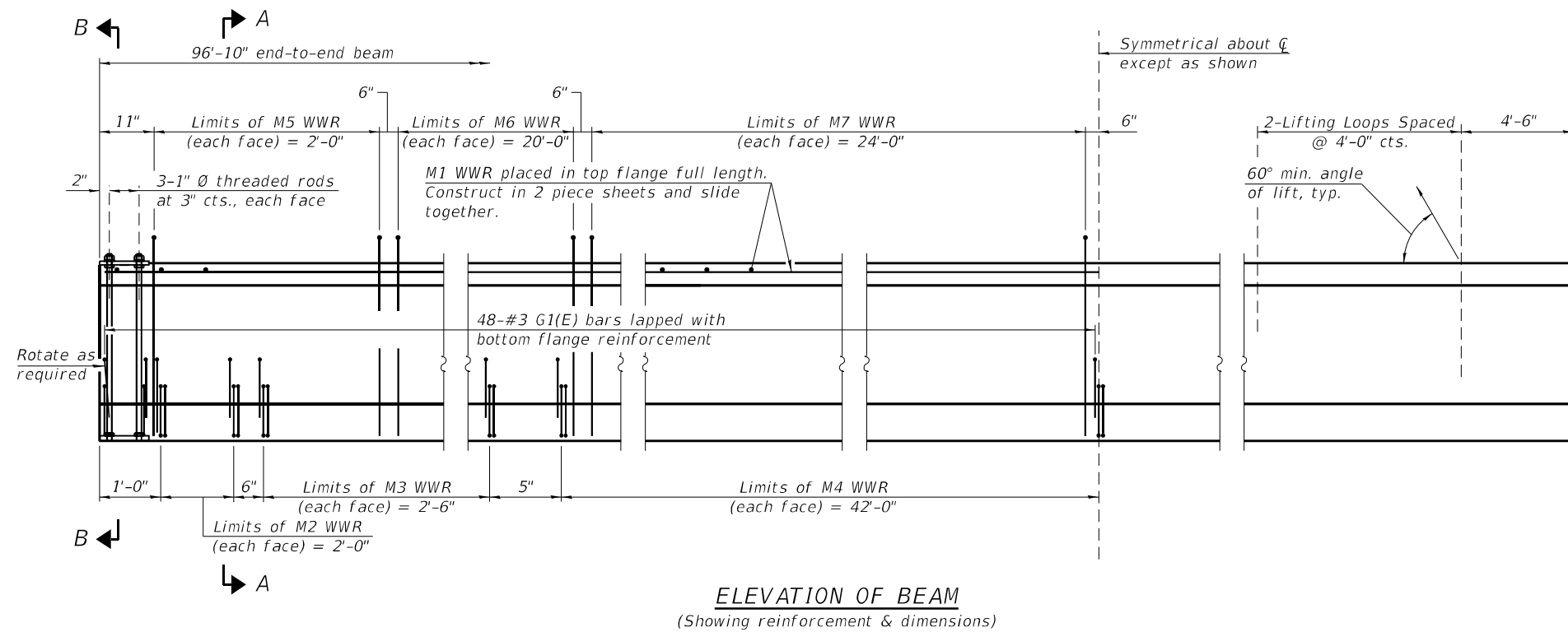
DETAIL B



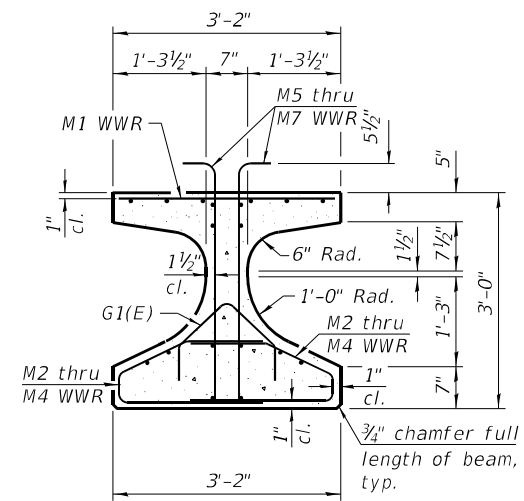
SPANS 1 AND 3
IL36 Beam
Strand Pattern = 20B-4T-0db-0d

Note:
See Sheet 40 of 55 for additional details and Bill of Material.

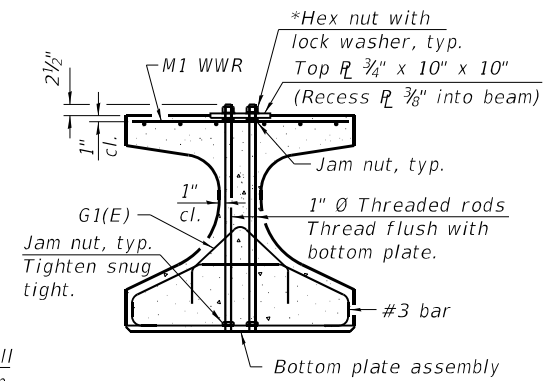
<p>2709 McGRAW DRIVE BLOOMINGTON, ILLINOIS 61704 (309) 663-8435 / info@f-w.com</p>	DESIGNED - PMG	REVISD	<p align="center">STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p>	<p align="center">IL36 BEAM SPANS 1 AND 3 STRUCTURE NO. 046-0156 (NB) & 046-0157 (SB)</p>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	CHECKED - DAH	REVISD			57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	195	
	DRAWN - DJM	REVISD			EX. S.N. 046-0008 (NB) / -0009 (SB)		CONTRACT NO. 66F74			
	DATE - 05/05/2021	CHECKED - JCZ			REVISD	ILLINOIS FED. AID PROJECT				



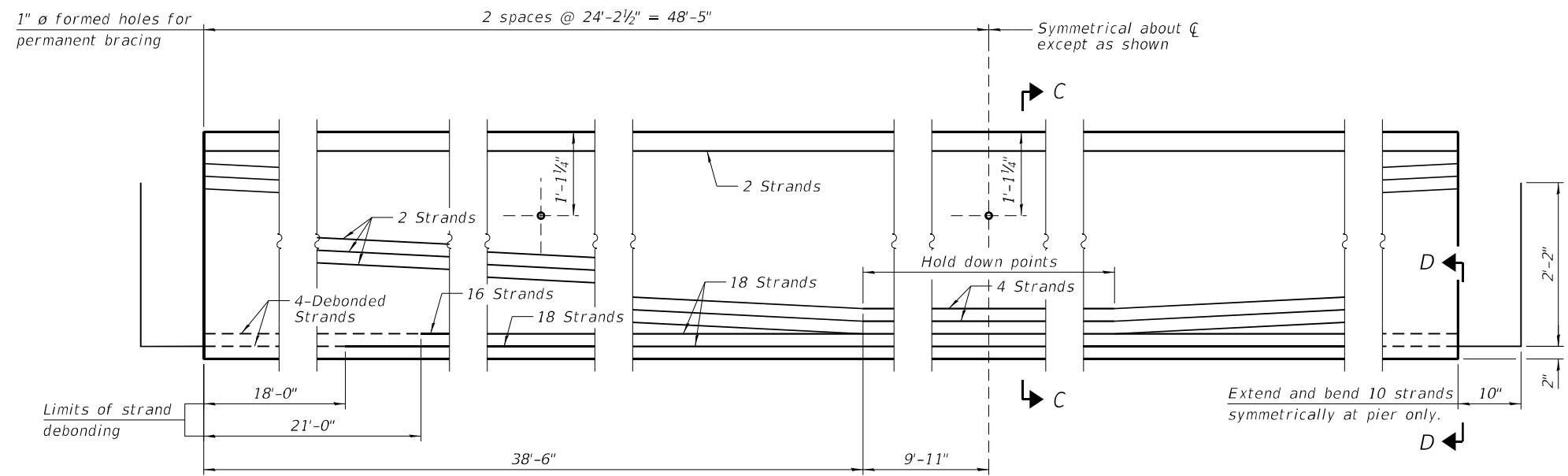
ELEVATION OF BEAM
(Showing reinforcement & dimensions)



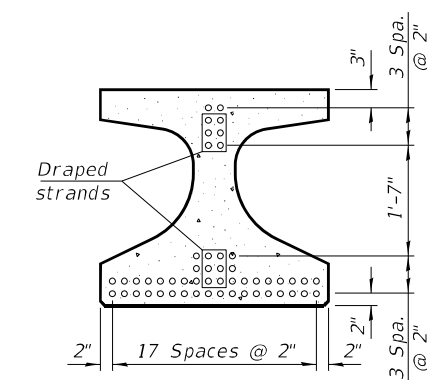
SECTION A-A



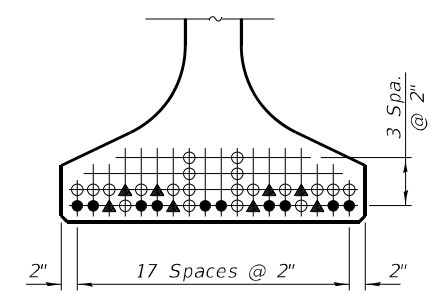
SECTION B-B
*Only tighten sufficiently to compress lock washers



ELEVATION OF BEAM
(Showing prestressing steel)



SECTION C-C
(46 - 0.6" $\bar{\phi}$ 270 ksi strands)



VIEW D-D

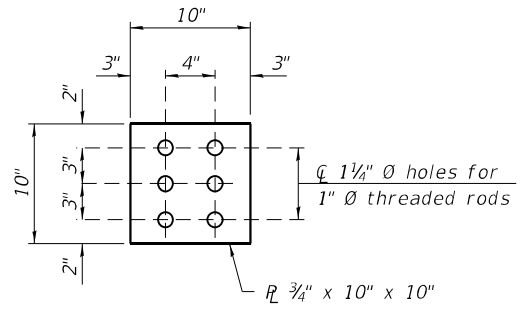
- Fully bonded strand
- ▲ Partially debonded strand
- Extended and bent strand (at pier only)

SPAN 2
IL36 Beam
Strand Pattern = 44B-2T-8db-6d

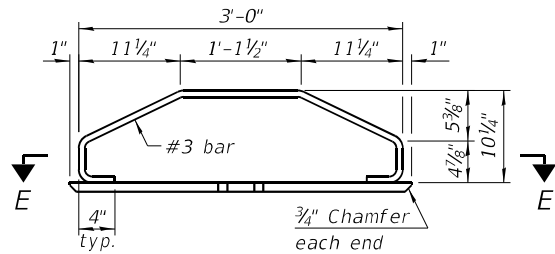
Note:
See Sheet 40 of 55 for additional details and Bill of Material.

DESIGNED - PMG	REVISED
CHECKED - DAH	REVISED
DRAWN - DJM	REVISED
CHECKED - JCZ	REVISED
DATE - 05/05/2021	

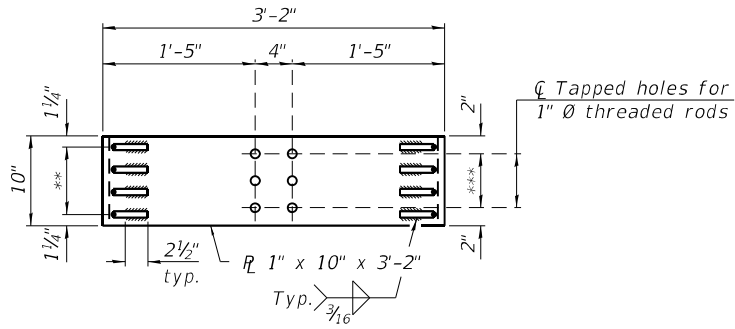
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	[(139)VB,HB-3]BR,139R	KANKAKEE	252	196
EX. S.N. 046-0008 (NB)/-0009 (SB)		CONTRACT NO. 66F74		



PLAN - TOP PLATE

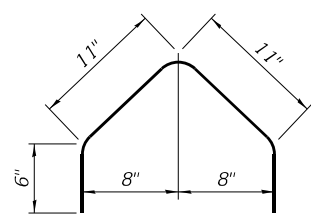


ELEVATION - BOTTOM PLATE ASSEMBLY

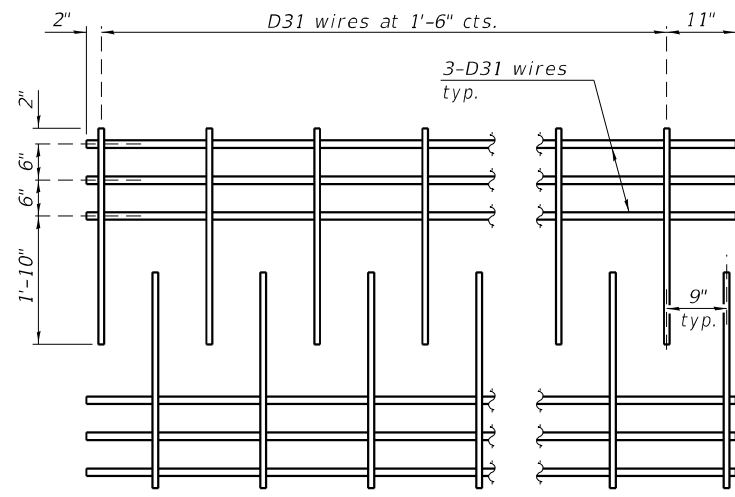


SECTION E-E

** 3 Spaces at 2 1/2" = 7 1/2"
 *** 2 Spaces at 3" = 6"

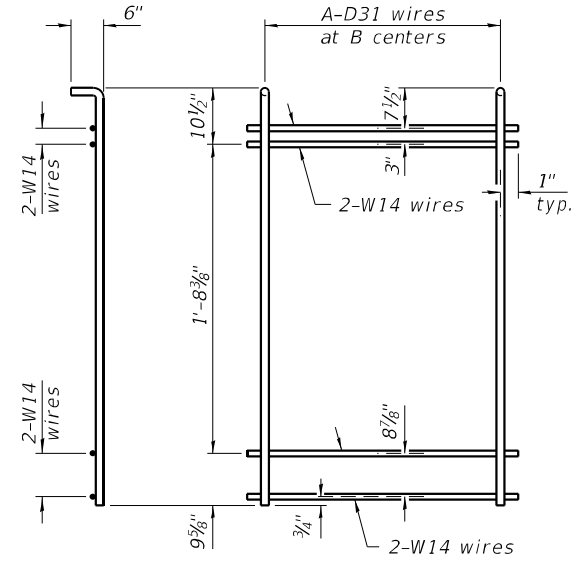


BAR G1(E)



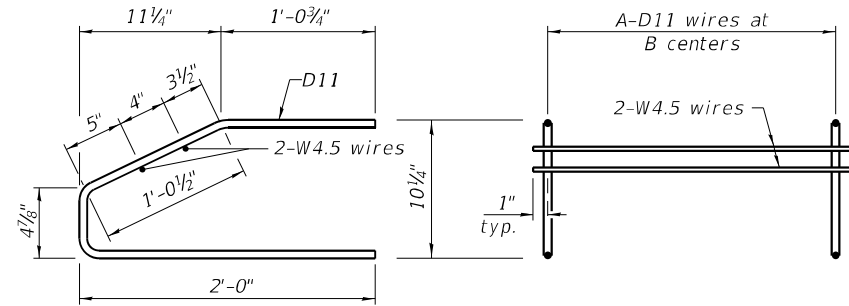
M1 WWR DETAIL

When multiple sheets of M1 WWR are required along the beam length, #5(E) bars (5'-0" long) shall be used to splice the longitudinal D31 wires together (Min. Lap 2'-2").



M5 THRU M8 WWR DETAIL

(See Table of Dimensions)



M2 THRU M4 WWR DETAIL

(See Table of Dimensions)

TABLE OF DIMENSIONS
 (WWR tables are based on Grade 60.)

SPANS 1 & 3

WWR	A	B
M2	9	3"
M3	6	6"
M4	13	1'-6"
M5	9	3"
M6	11	6"
M7	17	1'-0"

SPAN 2

WWR	A	B
M2	9	3"
M3	6	6"
M4	29	1'-6"
M5	9	3"
M6	41	6"
M7	25	1'-0"

NOTES

Inserts for 3/4" Ø threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter for beam strands shall be 0.6" and the nominal cross-sectional area shall be 0.217 sq. in. The nominal diameter for lifting loops shall be 1/2" and the nominal cross sectional area shall be 0.153 sq. in.

The beams shall have a final concrete compressive strength, f'c, of 8500 psi and a release concrete compressive strength, f'ci, of 6500 psi.

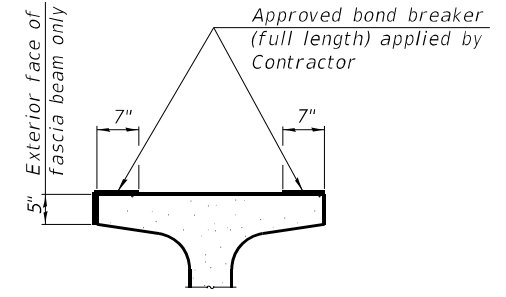
A minimum 2 1/2" Ø lifting pin shall be used to engage the lifting loops during handling. Bend the extended strands inward on the fascia beams to maintain 1 1/2" clearance inside the pier diaphragm.

The top and bottom plates shall be AASHTO M270 Grade 50.

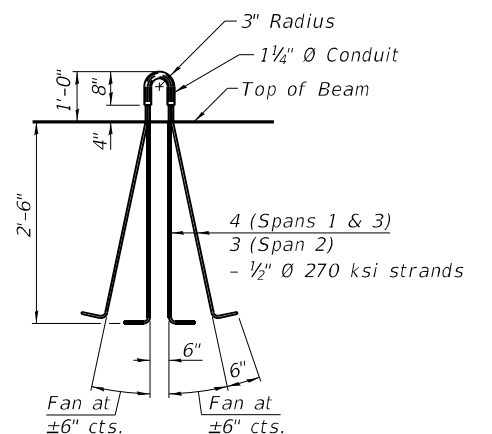
The top plates and bottom plate assemblies shall be galvanized according to AASHTO M111. The threaded rods, nuts and washers shall be galvanized according to AASHTO M232.

Threaded rods shall be ASTM F 1554 Grade 55.

Welded Wire Reinforcement (WWR) shall conform to ASTM A884 with a Class A, Type 1 epoxy coating or ASTM A1060, Table 3 galvanized coating.



SECTION THRU TOP FLANGE
 (Showing limits of bond breaker)

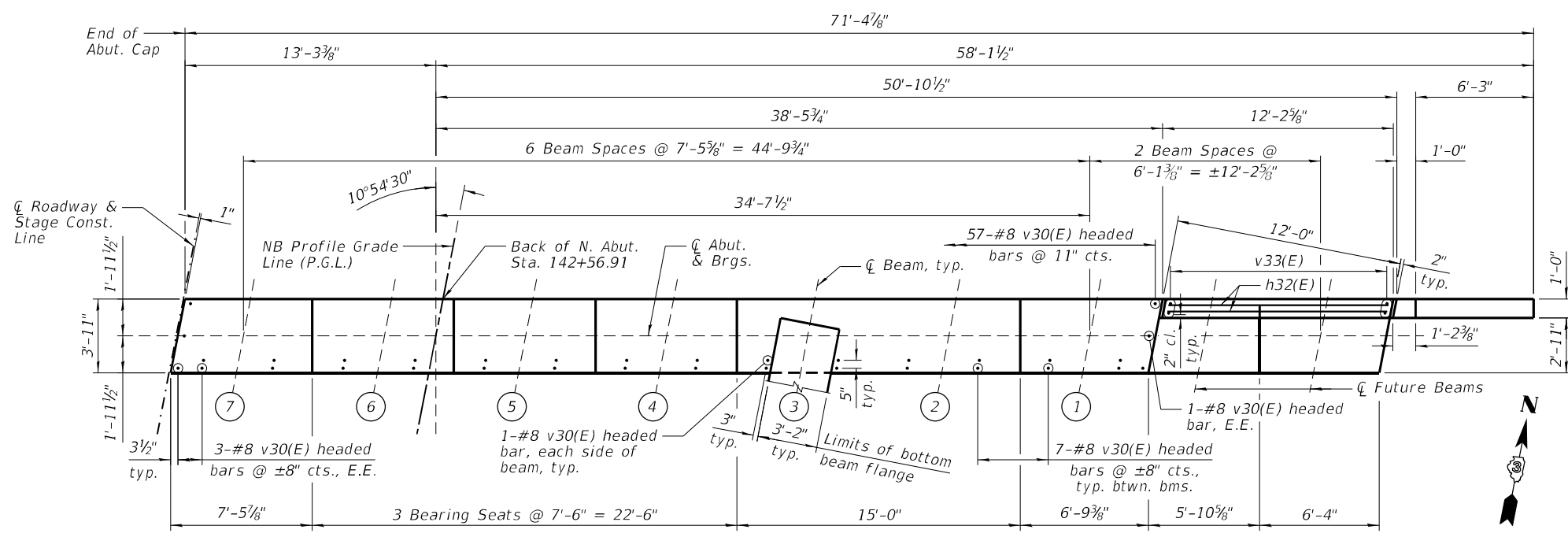


LIFTING LOOP DETAIL

BILL OF MATERIAL

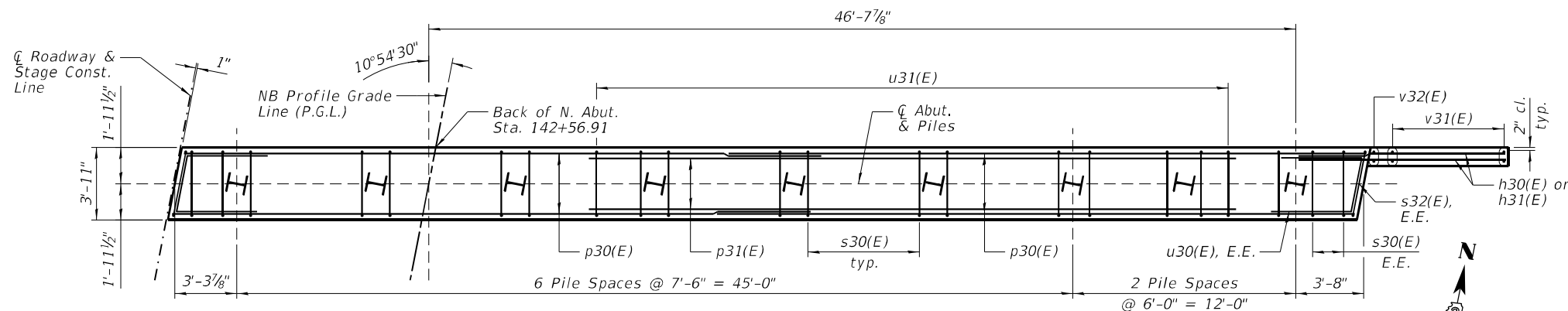
Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete Beams, IL36	Ft.	2,770

STAGE I CONSTRUCTION



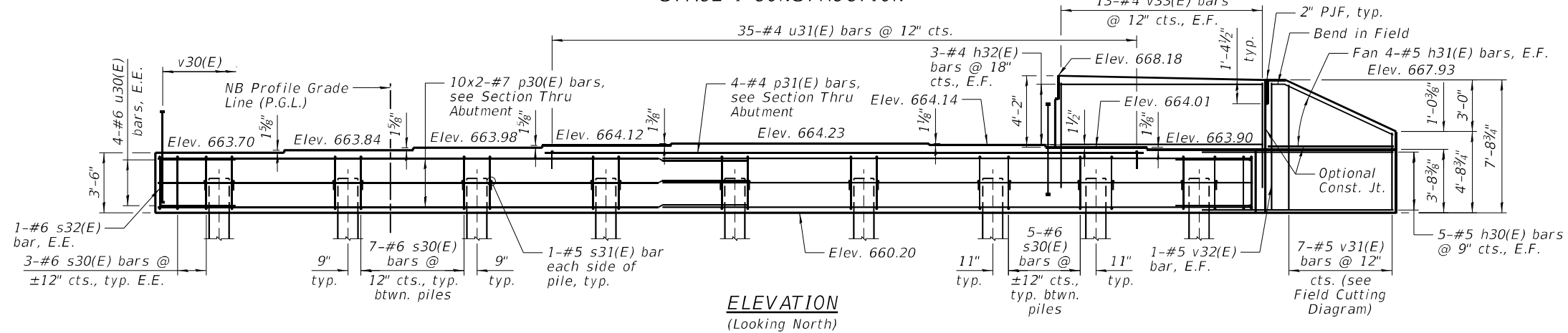
TOP VIEW

STAGE I CONSTRUCTION



PLAN - PILE CAP

STAGE I CONSTRUCTION



ELEVATION
(Looking North)

NORTHBOUND NORTH
ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h30(E)	10	#5	11'-2"	—
h31(E)	8	#5	6'-11"	—
h32(E)	6	#4	11'-9"	—
p30(E)	20	#7	34'-2"	—
p31(E)	4	#4	34'-10"	—
s30(E)	58	#6	14'-10"	□
s31(E)	18	#5	4'-7"	┌┐
s32(E)	2	#6	14'-11"	□
u30(E)	8	#6	12'-2"	┌┐
u31(E)	35	#4	5'-7"	┌┐
v30(E)	119	#8	6'-1"	—
v31(E)	7	#5	11'-6"	—
v32(E)	2	#5	7'-3"	—
v33(E)	26	#4	6'-4"	—
Item	Unit	Quantity		
Structure Excavation	Cu. Yd.	72		
Concrete Structures	Cu. Yd.	39.1		
Reinforcement Bars, Epoxy Coated	Pound	5,550		
Furnishing Steel Piles HP12x63	Foot	342		
Driving Piles	Foot	342		
Pile Shoes	Each	9		
Granular Backfill for Structures	Cu. Yd.	83		
Geocomposite Wall Drain	Sq. Yd.	50		
Pipe Underdrains for Structures 4"	Foot	74		

MINIMUM BAR LAP
#7 bar = 5'-0"

PILE DATA

Type: HP12x63 with pile shoes
Nominal Required Bearing: 497 kips
Factored Resistance Available: 273 kips
Est. Length: 38 Feet
No. Production Piles: 9
No. Test Piles: 0

NOTES:

- 1.) Pour steps monolithically with cap.
- 2.) 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.
- 3.) Bars indicated thus 10x2-#7 etc. indicates 10 lines of bars with 2 lengths per line.
- 4.) Order v31(E) bars full length. Cut according to the Field Cutting Diagram on Sheet 45 of 55. Use remainder of bars in opposite face.
- 5.) See Sheet 45 of 55 for Section Thru Abutment & Bar Bending Diagrams.
- 6.) See Sheet 51 of 55 for Pile Details.
- 7.) E.E. denotes Each End, F.F. denotes Front Face and E.F. denotes Each Face.



DESIGNED - PMG	REVISD
CHECKED - DAH	REVISD
DRAWN - DJM	REVISD
CHECKED - JCZ	REVISD

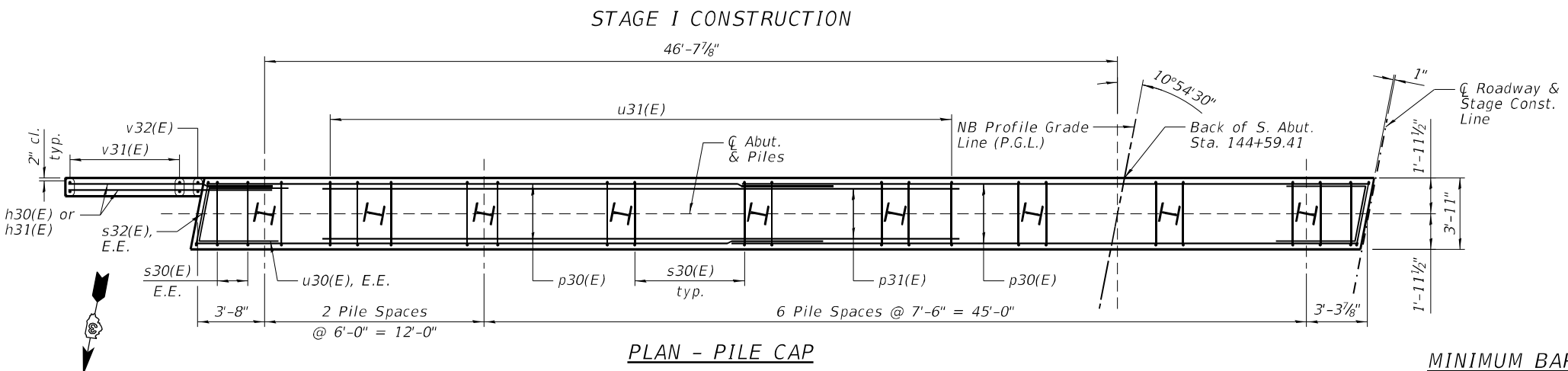
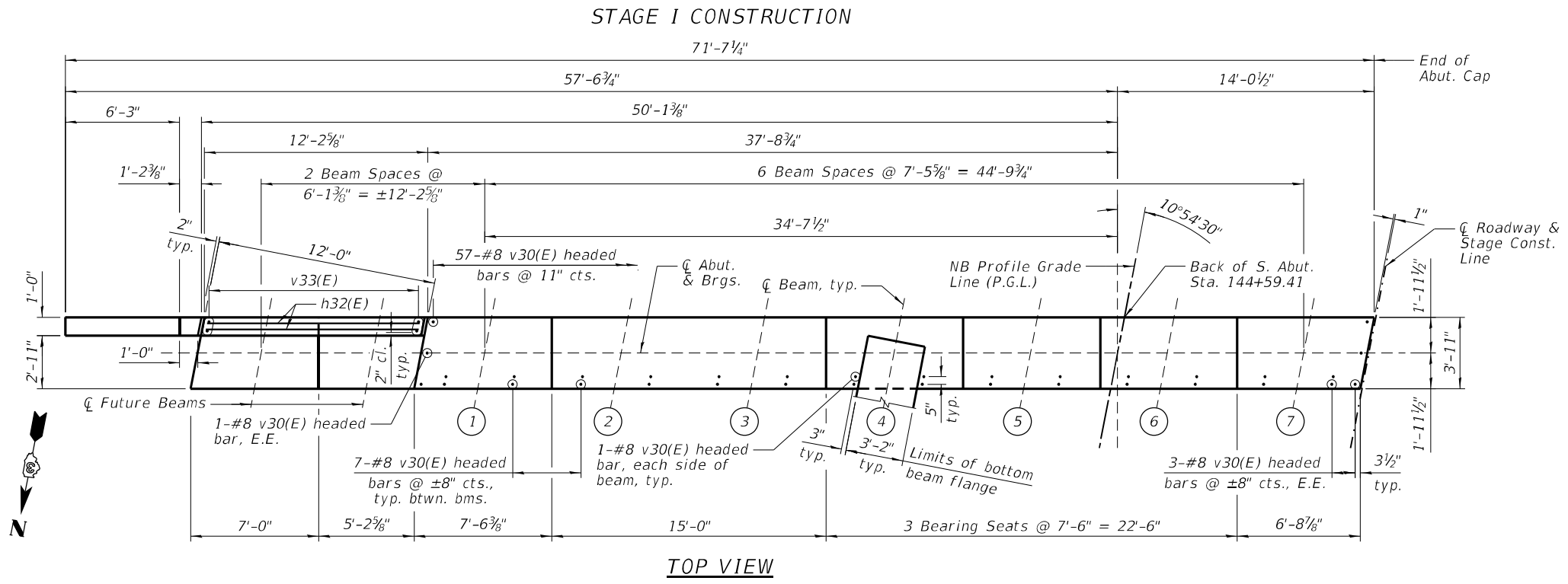
DATE - 05/05/2021

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

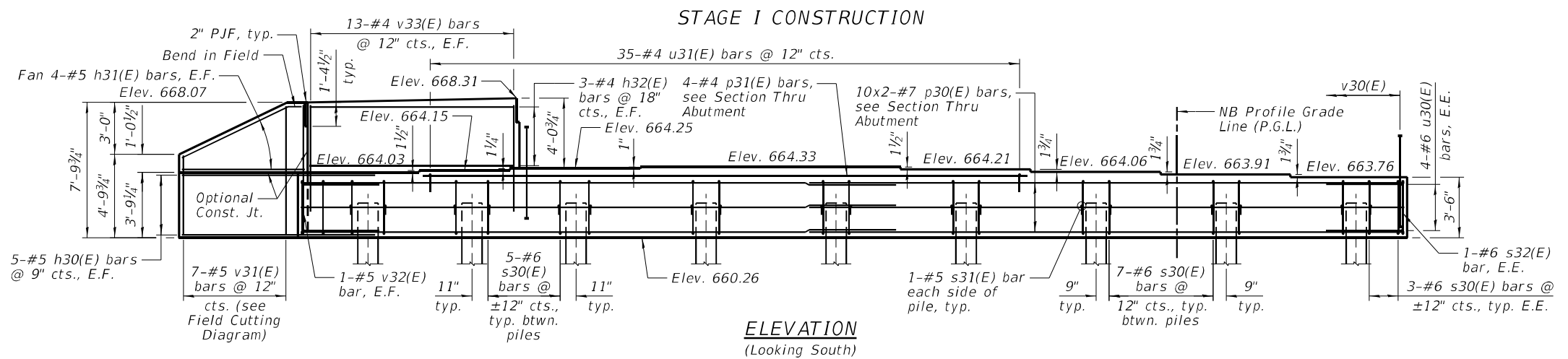
NORTH ABUTMENT
STRUCTURE NO. 046-0156 (NB) & 046-0157 (SB)

SHEET NO. 41 OF 55 SHEETS

S.N. 046-0156 (NB)	
F.A.I. RTE.	SECTION
57	[(139)VB,HB-3]BR,139R
EX. S.N. 046-0008 (NB) / -0009 (SB)	CONTRACT NO. 66F74
ILLINOIS / FED. AID PROJECT	



MINIMUM BAR LAP
#7 bar = 5'-0"



NORTHBOUND SOUTH ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h30(E)	10	#5	11'-2"	—
h31(E)	8	#5	6'-11"	—
h32(E)	6	#4	11'-9"	—
p30(E)	20	#7	34'-2"	—
p31(E)	4	#4	34'-10"	—
s30(E)	58	#6	14'-10"	□
s31(E)	18	#5	4'-7"	┌┐
s32(E)	2	#6	14'-11"	□
u30(E)	8	#6	12'-2"	┌┐
u31(E)	35	#4	5'-7"	┌┐
v30(E)	119	#8	6'-1"	—
v31(E)	7	#5	11'-6"	—
v32(E)	2	#5	7'-3"	—
v33(E)	26	#4	6'-4"	—
Item	Unit	Quantity		
Structure Excavation	Cu. Yd.	73		
Concrete Structures	Cu. Yd.	39.5		
Reinforcement Bars, Epoxy Coated	Pound	5,550		
Furnishing Steel Piles HP12x63	Foot	342		
Driving Piles	Foot	342		
Pile Shoes	Each	9		
Granular Backfill for Structures	Cu. Yd.	84		
Geocomposite Wall Drain	Sq. Yd.	51		
Pipe Underdrains for Structures 4"	Foot	74		

PILE DATA

Type: HP12x63 with pile shoes
Nominal Required Bearing: 497 kips
Factored Resistance Available: 273 kips
Est. Length: 38 Feet
No. Production Piles: 9
No. Test Piles: 0

NOTES:

- 1.) Pour steps monolithically with cap.
- 2.) 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.
- 3.) Bars indicated thus 10x2-#7 etc. indicates 10 lines of bars with 2 lengths per line.
- 4.) Order v31(E) bars full length. Cut according to the Field Cutting Diagram on Sheet 45 of 55. Use remainder of bars in opposite face.
- 5.) See Sheet 45 of 55 for Section Thru Abutment & Bar Bending Diagrams.
- 6.) See Sheet 51 of 55 for Pile Details.
- 7.) E.E. denotes Each End, F.F. denotes Front Face and E.F. denotes Each Face.



DESIGNED - PMG	REVISED
CHECKED - DAH	REVISED
DRAWN - DJM	REVISED
CHECKED - JCZ	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOUTH ABUTMENT
STRUCTURE NO. 046-0156 (NB) & 046-0157 (SB)**

SHEET NO. 43 OF 55 SHEETS

S.N. 046-0156 (NB)	
F.A.I. RTE.	SECTION
57	[(139)VB,HB-3]BR,139R
EX. S.N. 046-0008 (NB) / -0009 (SB)	CONTRACT NO. 66F74
TOTAL SHEETS	SHEET NO.
252	200
ILLINOIS FED. AID PROJECT	