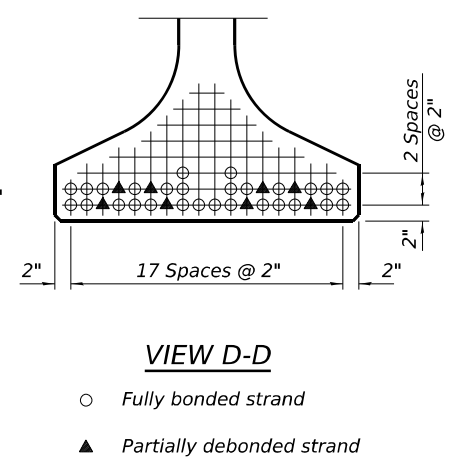
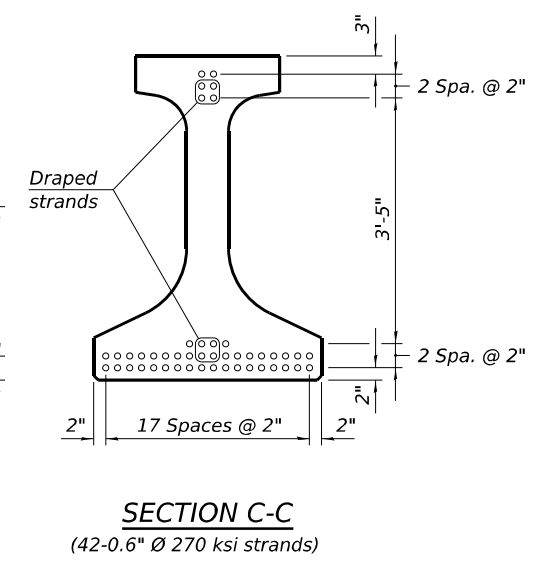
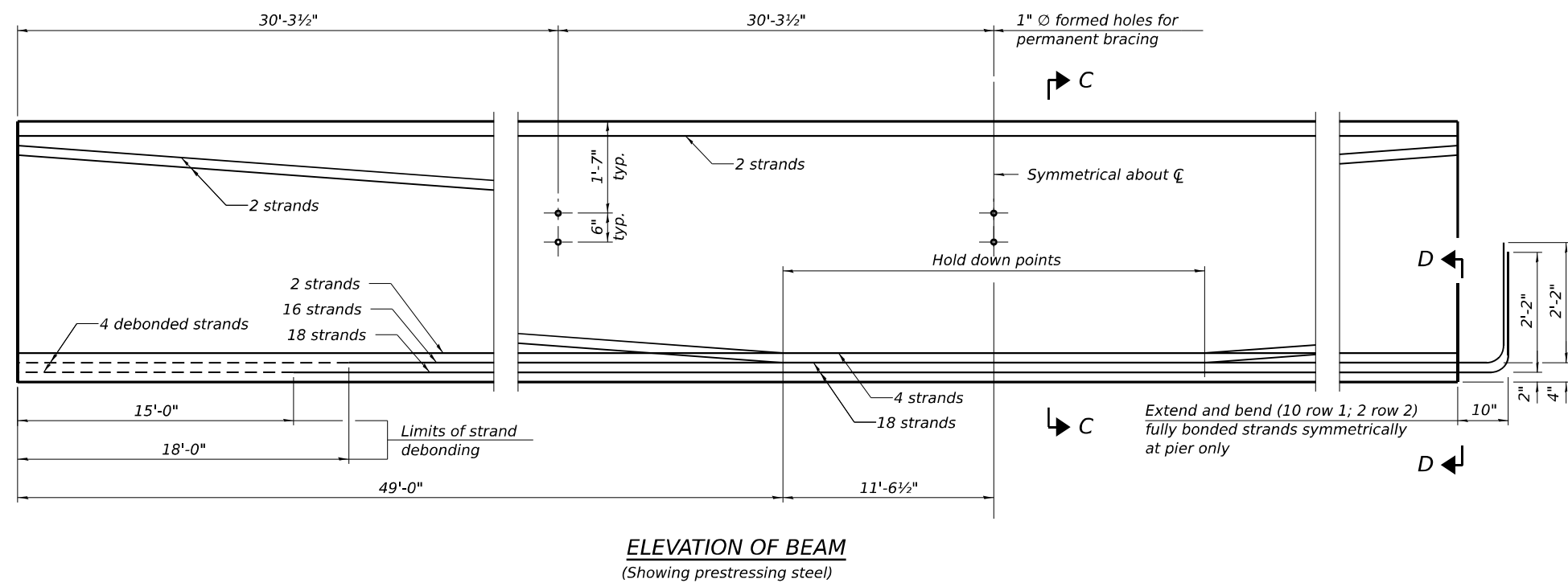
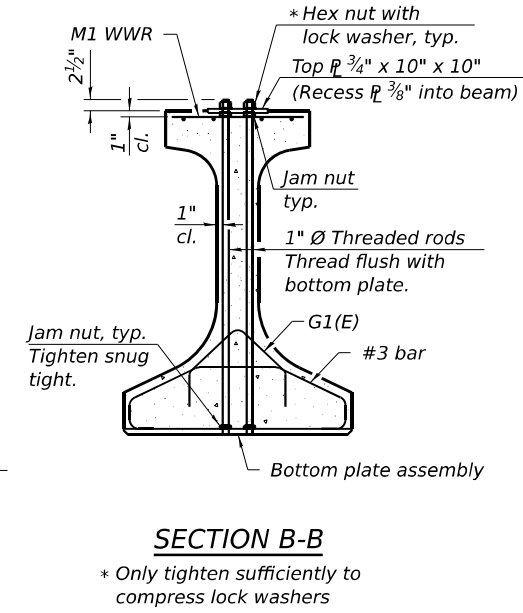
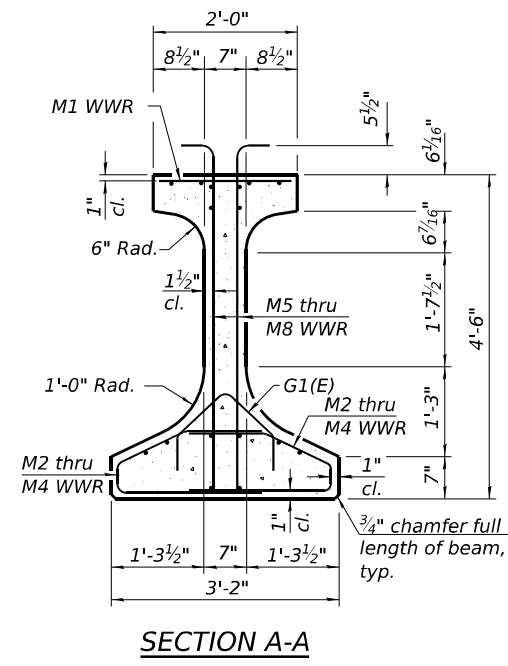
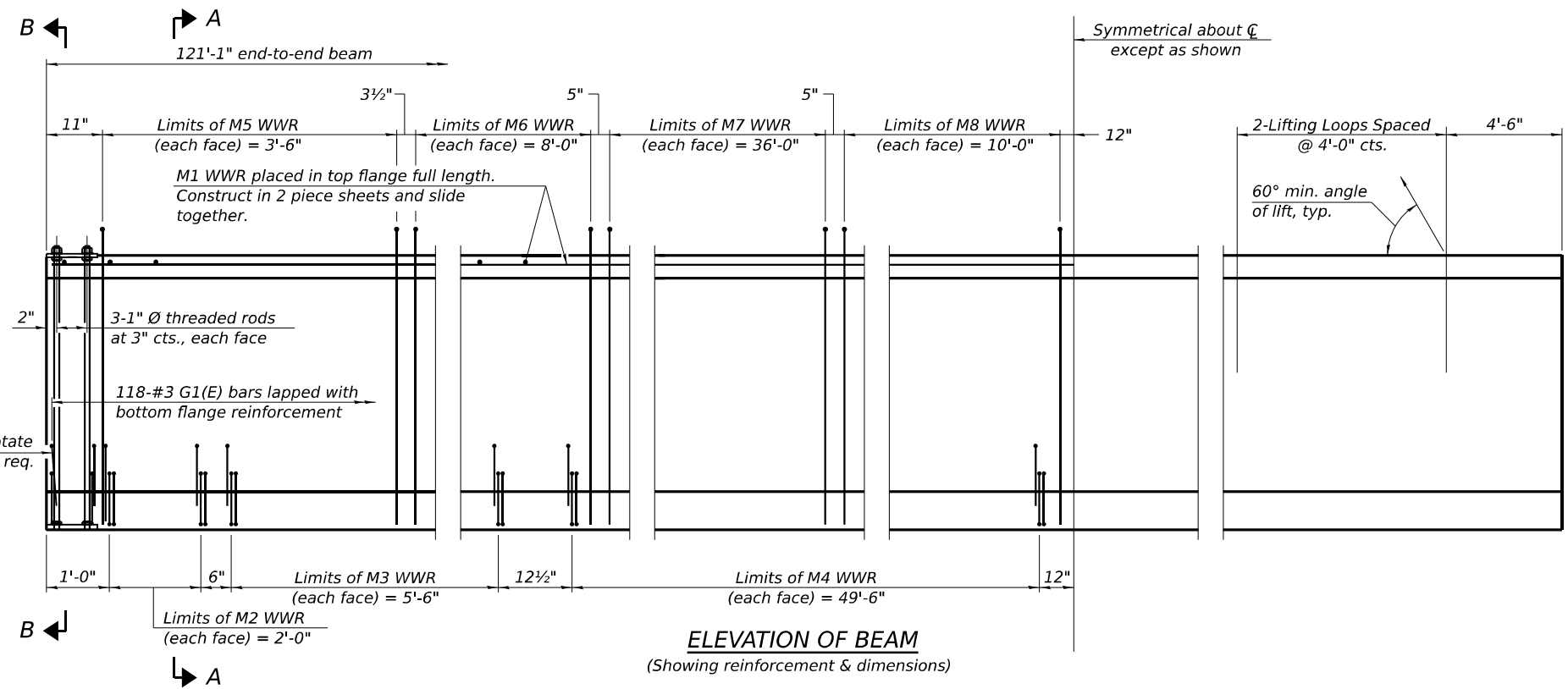


MODEL: Default
 FILE NAME: p:\projects\transyscorp-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\04-Structures\0998312_0998313-ML-04-065-EB IL54-2438 I-Beam (Span 2).dgn
 10/9/2023 3:28:30 PM



NOTE:
1. See Sheet SA-69 for additional details and Bill of Material.

IL54-2438 8-13-2021



USER NAME =	DESIGNED - JJS, PG	REVISED -
PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE =	DRAWN - JJS	REVISED -
	CHECKED - MI	REVISED -

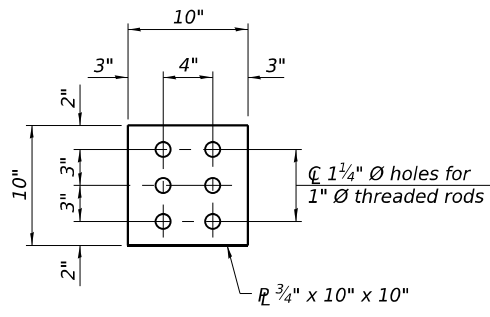
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EB I-80 IL54-2438 PPC I-BEAM (SPAN 2)
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)

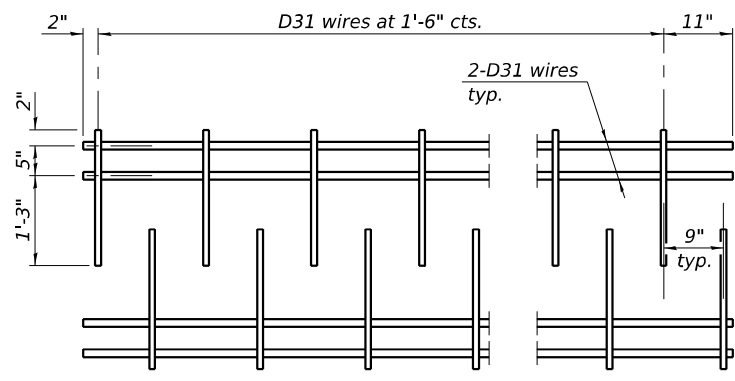
SHEET SA-68 OF SA-98 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	601
ILLINOIS			CONTRACT NO. 62R28	
FED. AID PROJECT				

MODEL: Default
 FILE NAME: p:\projects\transsystems-pw\benley.com\transsystems-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Structures\0998312-M1-04-066-EB IL54-2438 PPC I-Beam Details.dgn
 10/9/2023 3:28:32 PM

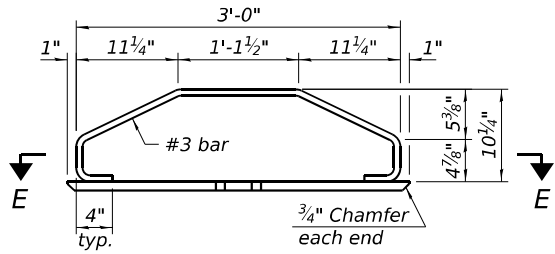


PLAN - TOP PLATE

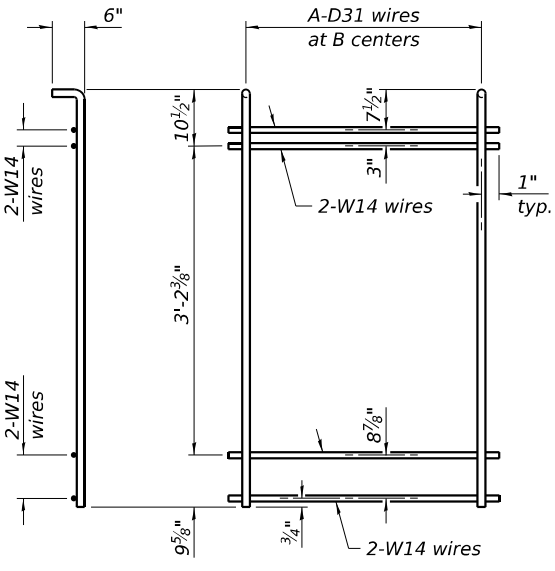


M1 WWR DETAIL

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").



ELEVATION - BOTTOM PLATE ASSEMBLY



M5 THRU M8 WWR DETAIL

(See Table of Dimensions)

TABLE OF DIMENSIONS

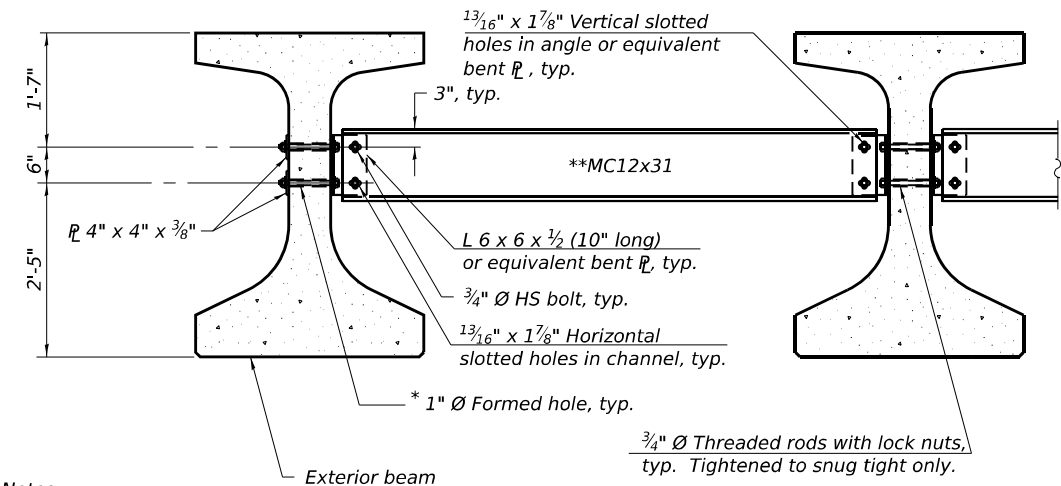
(The WWR designs assume grade 60. If necessary, this permits the fabricator to directly substitute grade 60 rebar as detailed in the Manual for Fabrication of Precast Prestressed Concrete Products.)

SPAN 1 & 3

WWR	A	B
M2	9	3"
M3	12	6"
M4	25	1'-6"
M5	15	3"
M6	17	6"
M7	29	1'-0"
M8	3	2'-0"

SPAN 2

WWR	A	B
M2	9	3"
M3	12	6"
M4	34	1'-6"
M5	15	3"
M6	17	6"
M7	36	1'-0"
M8	6	2'-0"

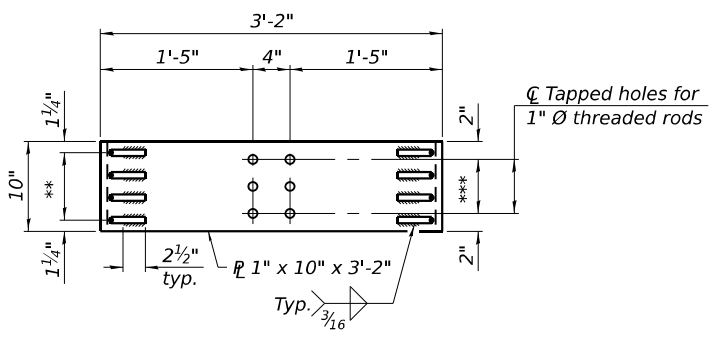


Notes:

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 inch diameter unless otherwise noted. 5/16 inch x 3 inch x 3 inch 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.

* Fabricator shall locate to miss strands within permissible tolerances.

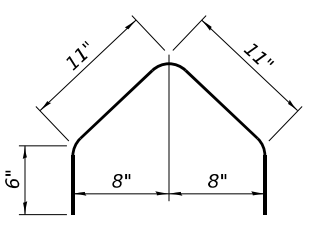
**Alternate MC12x35 channels are permitted to facilitate material acquisition.



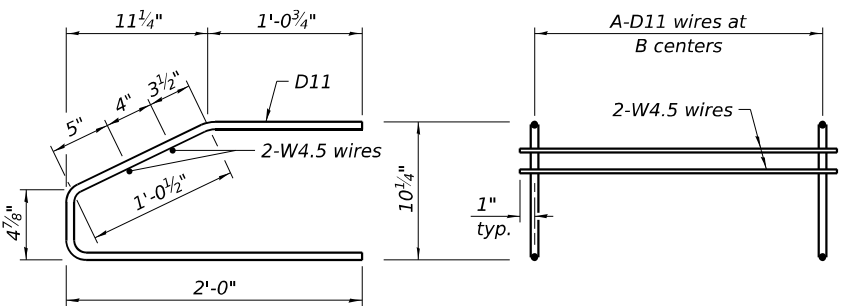
SECTION E-E

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

*** 2 Spaces at 3" = 6"

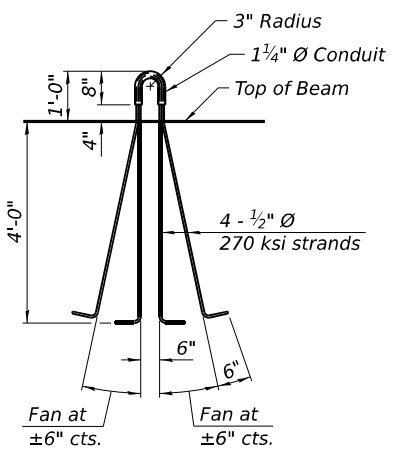


BAR G1(E)



M2 THRU M4 WWR DETAIL

(See Table of Dimensions)



LIFTING LOOP DETAIL

PERMANENT BRACING DETAILS FOR IL54 BEAMS

S.N. 099-8312 (EB) PPC I-BEAM

BILL OF MATERIAL

Item	Unit	Total
Furnishing And Erecting Precast Prestressed Concrete Beams, IL54N	Ft.	2482



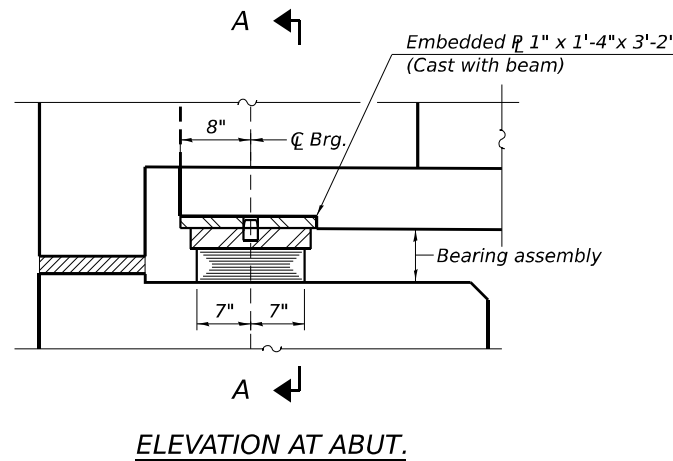
USER NAME =	DESIGNED - JJS, PG	REVISED -
PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE =	DRAWN - JJS	REVISED -
	CHECKED - MI	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

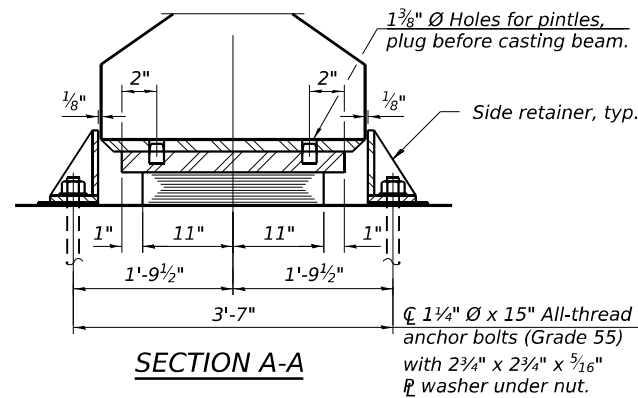
**EB I-80 IL54-2438 PPC I-BEAM DETAILS
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)**

SHEET SA-69 OF SA-98 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	602
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

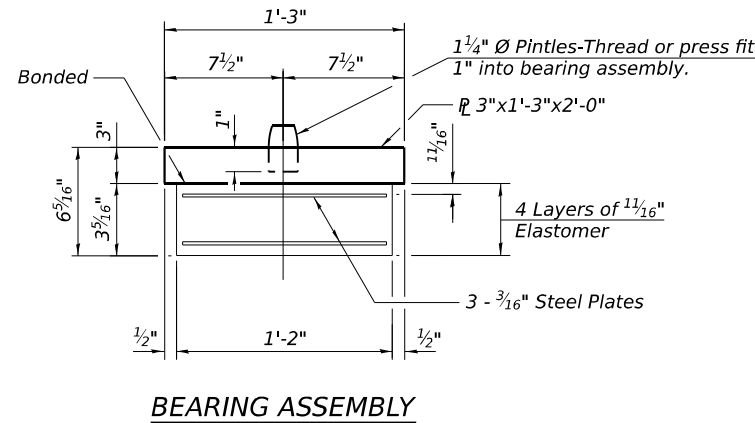


ELEVATION AT ABUT.

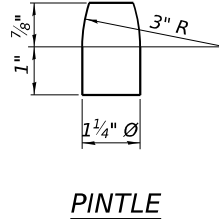


SECTION A-A

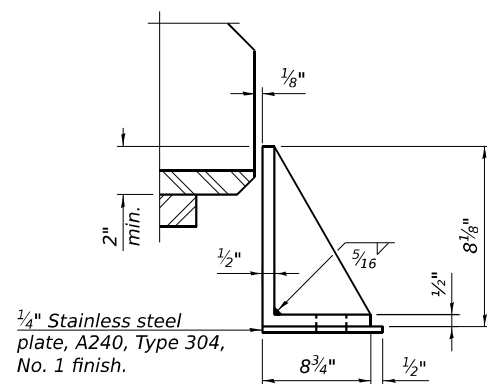
TYPE I ELASTOMERIC EXP. BRG.
(At East and West Abutments)



BEARING ASSEMBLY



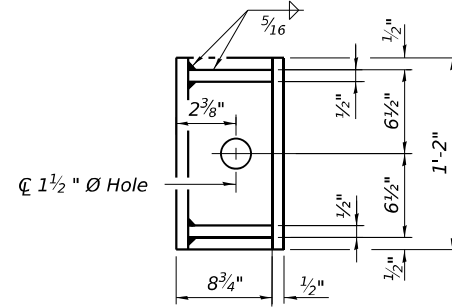
PINTLE



1/4" Stainless steel plate, A240, Type 304, No. 1 finish.

SIDE RETAINER

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



NOTES:

1. The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 50.
2. Side retainers and stainless steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type I.
3. See Sheets SA-65 and SA-69 for additional details of embedded plate.
4. Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.
5. All exposed bearing plates and side retainers shall be hot dip galvanized according to AASHTO M111.
6. All (embedded and separate) bearing plates, side retainers, anchor bolts, nuts, washers and pintles shall be galvanized according to AASHTO M111 or M232 as applicable.

BILL OF MATERIAL (S.N. 099-8312)

ITEM	UNIT	TOTAL
Elastomeric Bearing Assembly, Type I	Each	16
Anchor Bolts, 1 1/4"	Each	32

BILL OF MATERIAL (S.N. 099-8313)

ITEM	UNIT	TOTAL
Elastomeric Bearing Assembly, Type I	Each	18
Anchor Bolts, 1 1/4"	Each	36

MODEL: Default
FILE NAME: p:\transystems-pw\hstedi\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\0998312_0998313-MI-04-067-WB and EB Bearing Details.dgn
10/9/2023 3:28:36 PM



USER NAME =	DESIGNED - JJS	REVISED -
PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE =	DRAWN - JJS	REVISED -
	CHECKED - MI	REVISED -

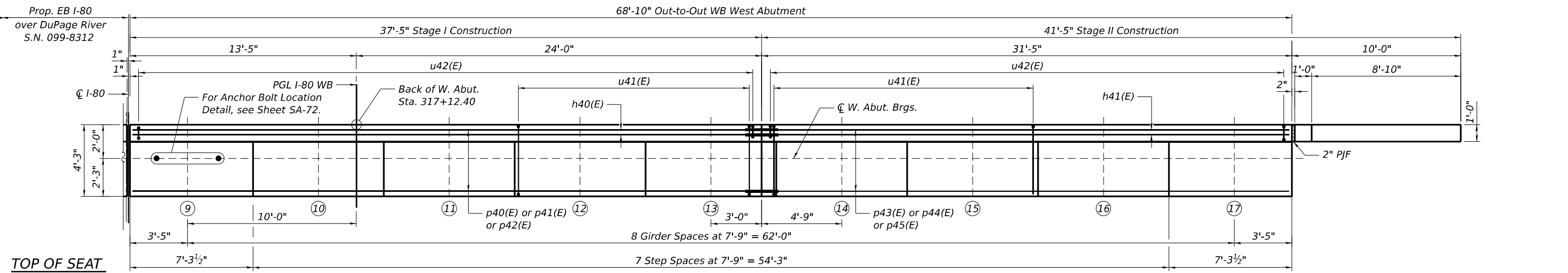
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB AND EB BEARING DETAILS
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)

SHEET SA-70 OF SA-98 SHEETS

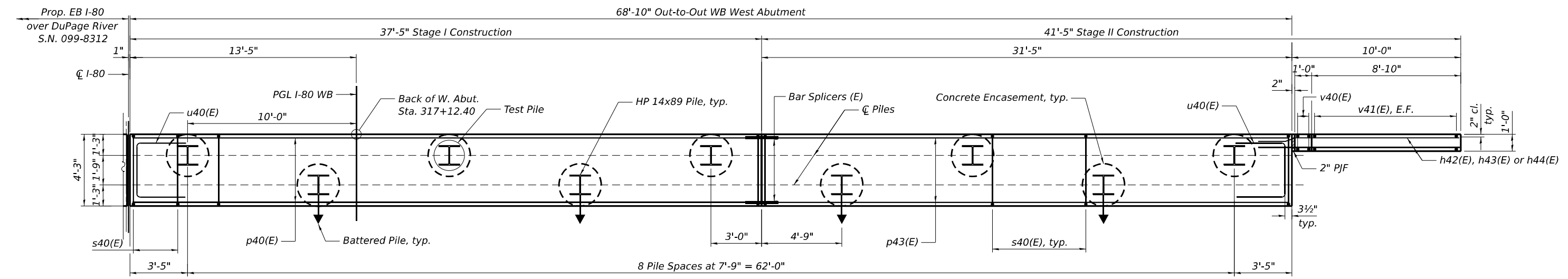
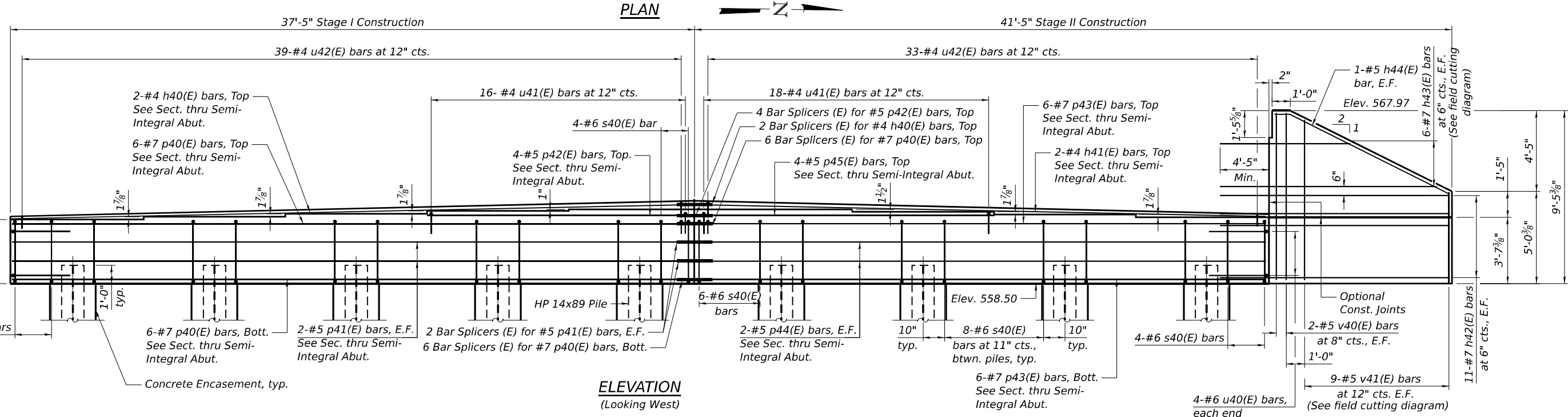
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	603
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\projects\transsystems-pw\hbm\hbm\1800022\01-Structures\04-Sheets\04-Sheets\0998313-MI-04-068-WB West Abutment Plan and Elevation.dgn
 10/9/2023 3:28:46 PM



TOP OF SEAT ELEVATIONS

Beam No.	Seat Elev.
9	562.00
10	562.16
11	562.31
12	562.46
13	562.55
14	562.55
15	562.43
16	562.28
17	562.12



NOTE:
 1. For Additional Notes, Bill of Material, Section thru Abutment, bar diagrams and Field Cutting Diagram, see Sheet SA-72.



USER NAME =	DESIGNED - PG, EN	REVISED -
PLOT SCALE =	CHECKED - MI, LAB	REVISED -
PLOT DATE =	DRAWN - PG, EN	REVISED -
	CHECKED - MI, LAB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

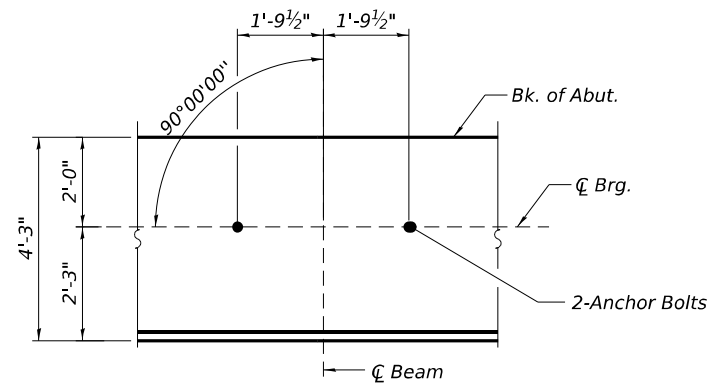
WB WEST ABUTMENT PLAN AND ELEVATION
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	604
CONTRACT NO. 62R28			ILLINOIS FED. AID PROJECT	

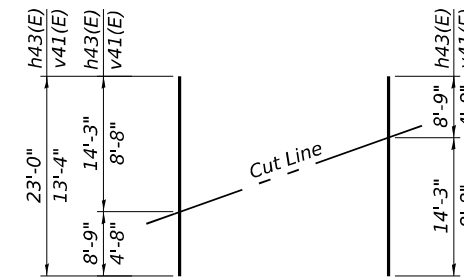
SHEET SA-71 OF SA-98 SHEETS

**WB WEST ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h40(E)	2	#4	37'-2"	—
h41(E)	2	#4	31'-2"	—
h42(E)	22	#7	14'-3"	—
h43(E)	6	#7	23'-0"	—
h44(E)	2	#5	10'-5"	—
p40(E)	12	#7	37'-2"	—
p41(E)	4	#5	37'-2"	—
p42(E)	4	#5	14'-4"	—
p43(E)	12	#7	31'-2"	—
p44(E)	4	#5	31'-2"	—
p45(E)	4	#5	16'-1"	—
s40(E)	74	#6	15'-6"	□
u40(E)	8	#6	12'-7"	┌
u41(E)	34	#4	5'-11"	┌
u42(E)	72	#4	5'-2"	┌
v40(E)	4	#5	9'-1"	—
v41(E)	9	#5	13'-4"	—
Structure Excavation		Cu Yd	345.0	
Concrete Structures		Cu Yd	45.0	
Concrete Encasement		Cu Yd	6.6	
Reinforcement Bars, Epoxy Coated		Pound	5,550	
Furnishing Steel Piles HP14x89		Foot	208	
Driving Piles		Foot	208	
Test Pile Steel HP14x89		Each	1	
Pile Shoes		Each	9	
Drilling And Setting Piles (In Rock)		Cu Ft	86	
Granular Backfill For Structures		Cu Yd	137	
Concrete Sealer		Sq Yd	648	
Geocomposite Wall Drain		Sq Ft	75	
Pipe Underdrains For Structures 4"		Foot	81	



ANCHOR BOLT LOCATION DETAIL

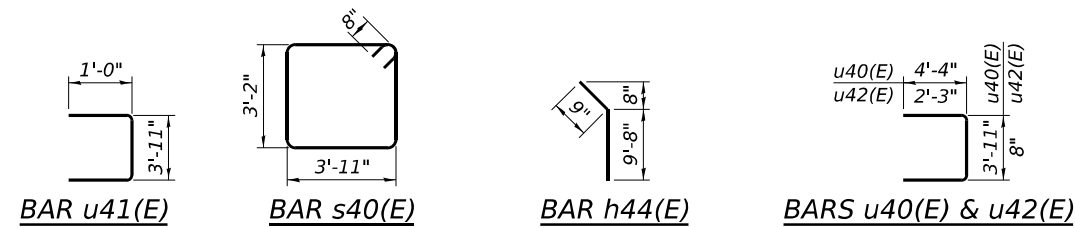


FIELD CUTTING DIAGRAM

Order h43(E) and v41(E) full length. Cut as shown and use remainder of bars in opposite face.

NOTES:

1. For diaphragm details, see Sheet SA-39
2. For details of piles and concrete encasement, see Sheet SA-87.
3. For Bar Splicers, see Sheet SA-88.
4. Pour steps monolithically with cap.
5. Apply concrete sealer to all exposed concrete surfaces of the abutment.
6. Space reinforcement in cap to miss anchor bolts.

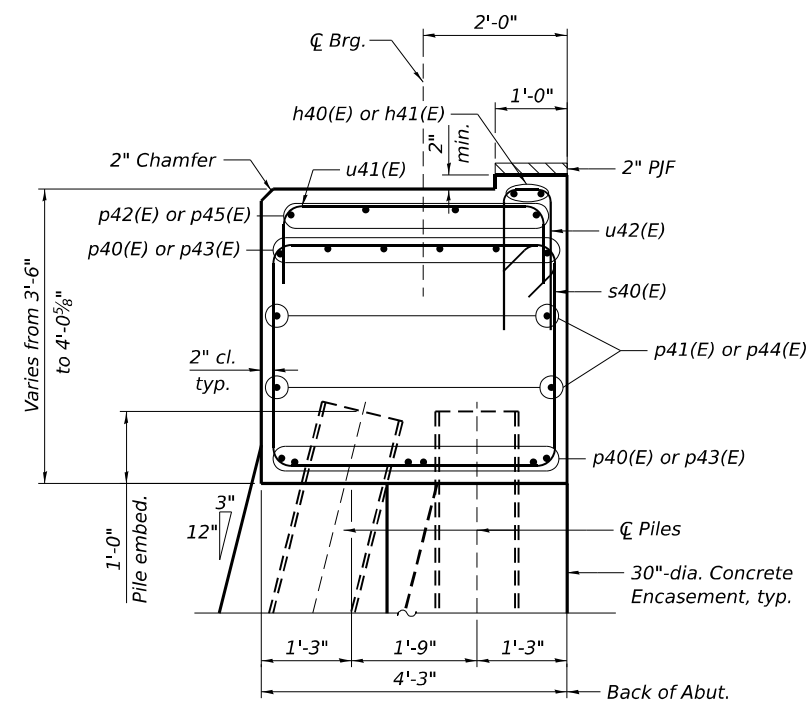


BAR u41(E)

BAR s40(E)

BAR h44(E)

BARS u40(E) & u42(E)



SEC. THRU SEMI-INTEGRAL ABUTMENT

PILE DATA

Pile Type and Size: HP 14x89 with Pile Shoes
Nominal Required Bearing: 705 kips
Factored Resistance Available: 388 kips
Est. Length: 26 feet
No. Production Piles: 8
No. Test Piles: 1

MODEL: Default
FILE NAME: p:\w\transys\transys\p-w\hosted\Documents\Projects\2018\CH401\401-180022\01-Structures\04-Sheets\04-Sheets\04-Structures\0998313-MI-04-069-WB West Abutment Sections and Details.dgn
10/9/2023 3:28:50 PM



USER NAME =	DESIGNED - PG, EN	REVISED -
	CHECKED - MI, LAB	REVISED -
PLOT SCALE =	DRAWN - PG, EN	REVISED -
PLOT DATE =	CHECKED - MI, LAB	REVISED -

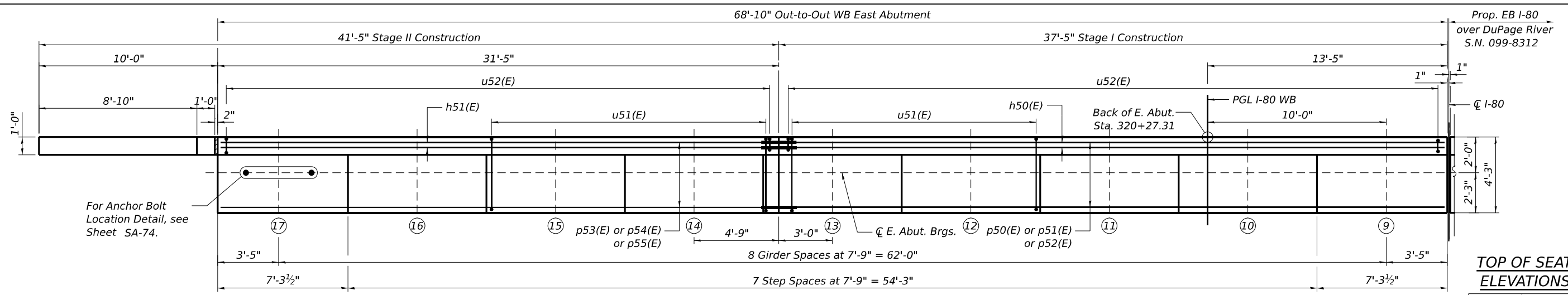
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WB WEST ABUTMENT SECTIONS AND DETAILS
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)**

SHEET SA-72 OF SA-98 SHEETS

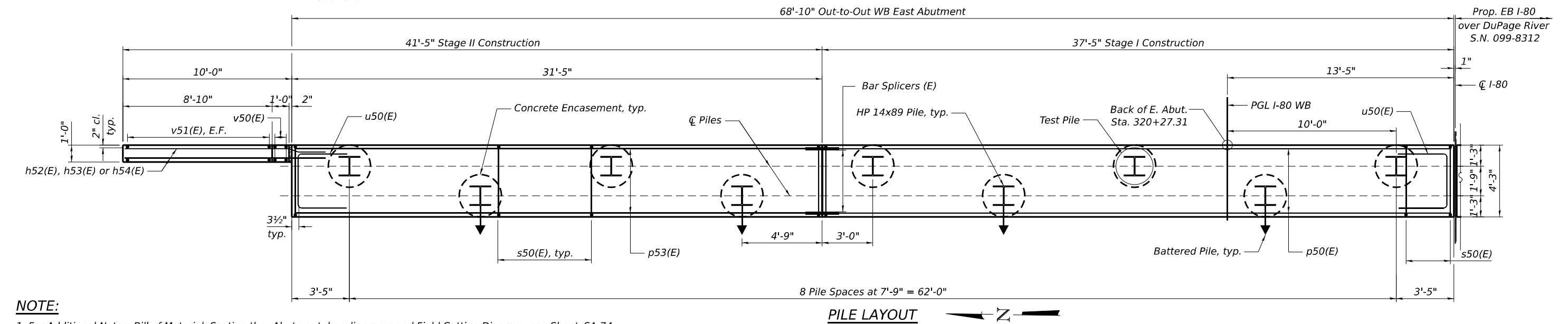
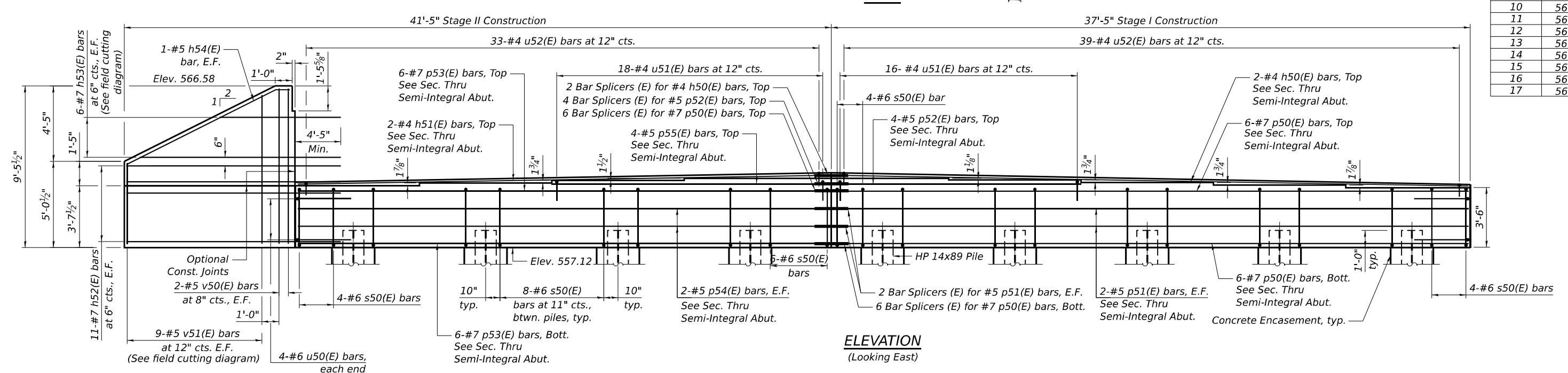
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	605
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\projects\transsystems-pw\hbm\hbm\Documents\Projects\2018\CH401\401180022\01-Structures\04-Structures\0998312-MI-04-07-0-WB-East-Abutment Plan and Elevation.dgn
 10/9/2023 3:29:01 PM



TOP OF SEAT ELEVATIONS

Beam No.	Seat Elev.
9	560.62
10	560.78
11	560.93
12	561.08
13	561.17
14	561.17
15	561.05
16	560.90
17	560.74



NOTE:
 1. For Additional Notes, Bill of Material, Section thru Abutment, bar diagrams and Field Cutting Diagram, see Sheet SA-74.



USER NAME =	DESIGNED - EN	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - EN	REVISED -
	CHECKED - MI, JJS	REVISED -

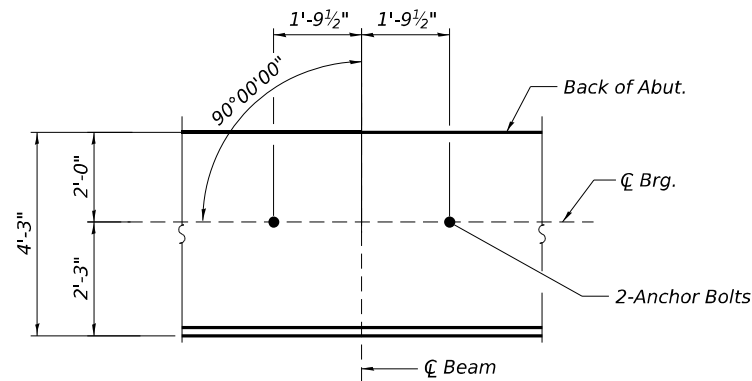
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB EAST ABUTMENT PLAN AND ELEVATION
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	606
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R28	

SHEET SA-73 OF SA-98 SHEETS

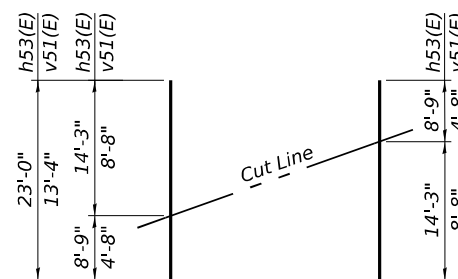
MODEL: Default
 FILE NAME: p:\projects\transcorp-pw\1180022\01-Structures\04-Sheets\04-Sheets\04-Structures\0998313-MI-04-071-WB East Abutment Sections and Details.dgn
 10/9/2023 3:29:05 PM



ANCHOR BOLT LOCATION DETAIL

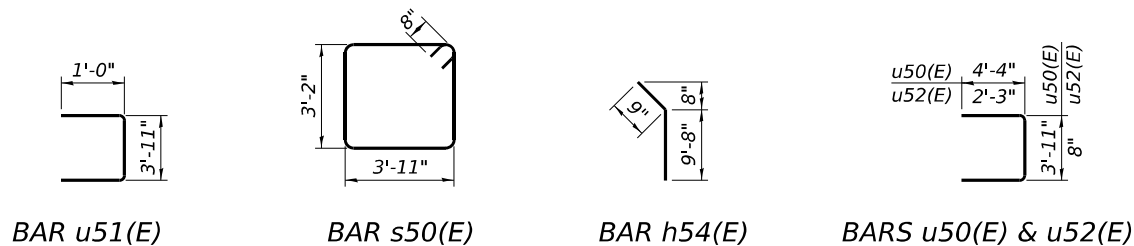
NOTES:

1. For diaphragm details, see Sheet SA-39.
2. For details of piles and concrete encasement, see Sheet SA-87.
3. For Bar Splicers, see Sheet SA-88.
4. Pour steps monolithically with cap.
5. Apply concrete sealer to all exposed concrete surfaces of the abutment.
6. Space reinforcement in cap to miss anchor bolts.



FIELD CUTTING DIAGRAM

Order h53(E) and v51(E) full length. Cut as shown and use remainder of bars in opposite face.

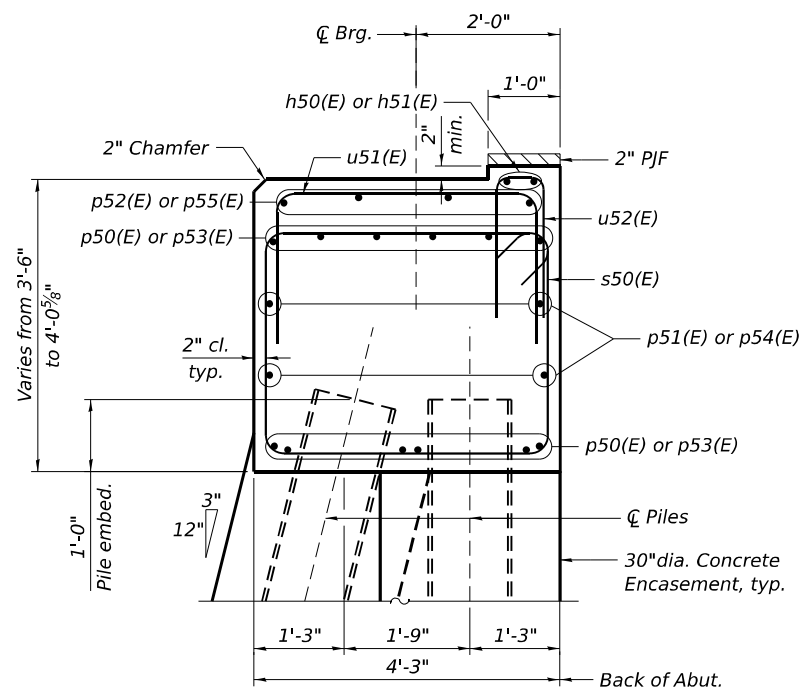


**WB EAST ABUTMENT
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h50(E)	2	#4	37'-2"	—
h51(E)	2	#4	31'-2"	—
h52(E)	22	#7	14'-3"	—
h53(E)	6	#7	23'-0"	—
h54(E)	2	#5	10'-5"	—
p50(E)	12	#7	37'-2"	—
p51(E)	4	#5	37'-2"	—
p52(E)	4	#5	14'-4"	—
p53(E)	12	#7	31'-2"	—
p54(E)	4	#5	31'-2"	—
p55(E)	4	#5	16'-1"	—
s50(E)	74	#6	15'-6"	□
u50(E)	8	#6	12'-7"	U
u51(E)	34	#4	5'-11"	U
u52(E)	72	#4	5'-2"	U
v50(E)	4	#5	9'-1"	—
v51(E)	9	#5	13'-4"	—
Structure Excavation		Cu Yd	315.0	
Rock Excavation For Structures		Cu Yd	30.0	
Concrete Structures		Cu Yd	45.1	
Concrete Encasement		Cu Yd	6.6	
Reinforcement Bars, Epoxy Coated		Pound	5,550	
Furnishing Steel Piles HP14x89		Foot	120	
Driving Piles		Foot	120	
Test Pile Steel HP14x89		Each	1	
Pile Shoes		Each	9	
Drilling And Setting Piles (In Rock)		Cu Ft	86	
Granular Backfill For Structures		Cu Yd	136	
Concrete Sealer		Sq Ft	648	
Geocomposite Wall Drain		Sq Yd	75	
Pipe Underdrains For Structures 4"		Foot	81	

PILE DATA:

Pile Type and Size: HP 14x89 with Pile Shoes
 Nominal Required Bearing: 705 kips
 Factored Resistance Available: 388 kips
 Est. Length: 15 feet
 No. Production Piles: 8
 No. Test Piles: 1



SEC. THRU SEMI-INTEGRAL ABUTMENT



USER NAME =	DESIGNED - PG, EN	REVISED -
	CHECKED - MI, LAB	REVISED -
PLOT SCALE =	DRAWN - PG, EN	REVISED -
PLOT DATE =	CHECKED - MI, LAB	REVISED -

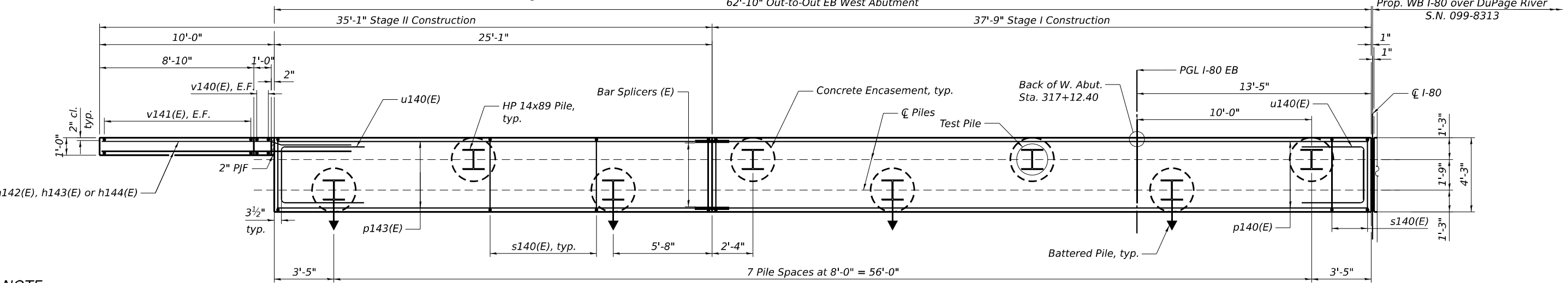
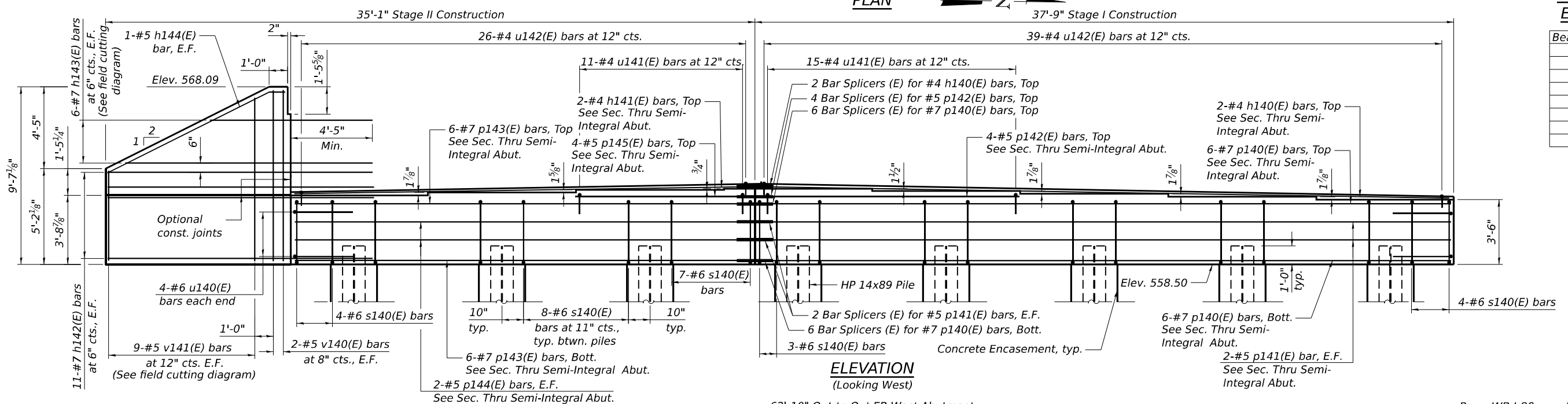
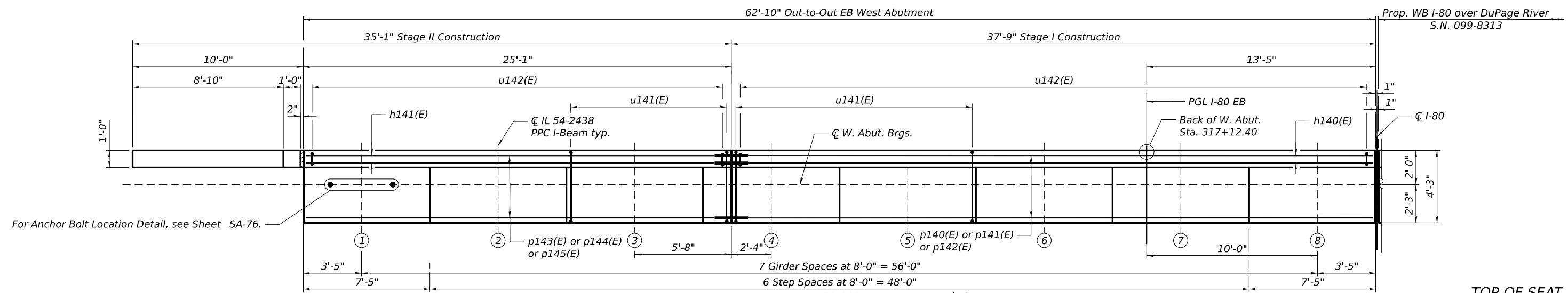
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WB EAST ABUTMENT SECTIONS AND DETAILS
 STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)**

SHEET SA-74 OF SA-98 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	607
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\transys\transyscorp-pw\hosted\Documents\Projects\2018\CH401401180022\01-Structures\04-Sheets\04-EB West Abutment Plan and Elevation.dgn
 10/9/2023 3:29:15 PM



NOTE:
 1. For Additional Notes, Bill of Material, Section thru Abutment, bar diagrams and Field Cutting Diagram, see Sheet SA-76.

TOP OF SEAT ELEVATIONS

Beam No.	Seat Elev.
1	562.24
2	562.40
3	562.53
4	562.59
5	562.47
6	562.32
7	562.16
8	562.00

LEGEND
 E.F. Each Face



USER NAME =	DESIGNED - PG, EN	REVISED -
	CHECKED - MI, LAB	REVISED -
PLOT SCALE =	DRAWN - PG, EN	REVISED -
PLOT DATE =	CHECKED - MI	REVISED -

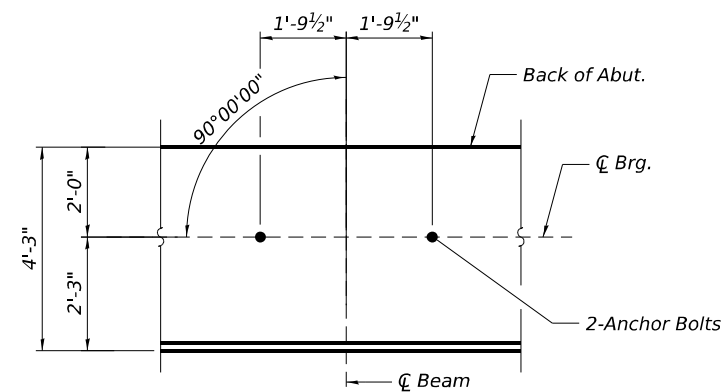
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EB WEST ABUTMENT PLAN AND ELEVATION
 STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)**

SHEET SA-75 OF SA-98 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	608
			CONTRACT NO. 62R28	
ILLINOIS FED. AID PROJECT				

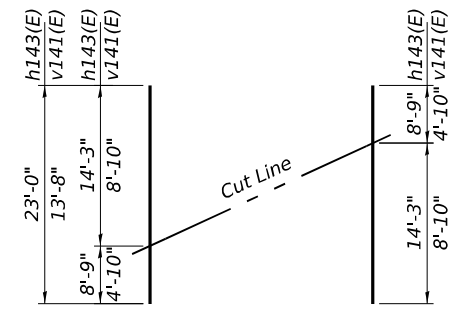
MODEL: Default
 FILE NAME: pww/itranstems-pw.bentley.com/transyscorp-pw1-hosted/Projects/2018/CH401/401180022/01-Structures/04-Sheets/04-EB West Abutment Sections and Details.dgn
 10/9/2023 3:29:21 PM



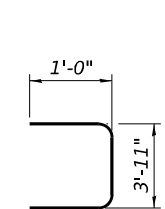
ANCHOR BOLT LOCATION DETAIL

NOTES:

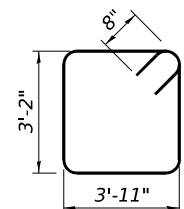
1. For diaphragm details, see Sheet SA-45.
2. For details of piles and concrete encasement, see Sheet SA-87.
3. For Bar Splicers, see Sheet SA-88.
4. Pour steps monolithically with cap.
5. Apply concrete sealer to all exposed concrete surfaces of the abutment.
6. Space reinforcement in cap to miss anchor bolts.



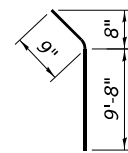
FIELD CUTTING DIAGRAM
 Order h143(E) and v141(E) full length. Cut as shown and use remainder of bars in opposite face.



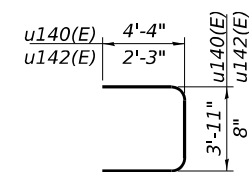
BAR u141(E)



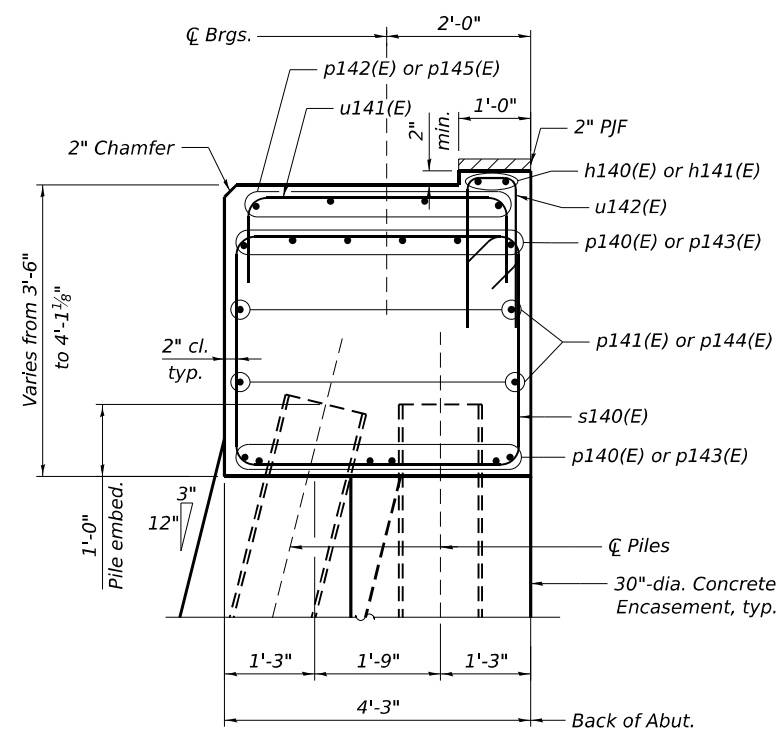
BAR s140(E)



BAR h144(E)



BAR u140(E) & u142(E)



SECTION THRU SEMI-INTEGRAL ABUTMENT

**EB WEST ABUTMENT
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h140(E)	2	#4	37'-6"	—
h141(E)	2	#4	24'-10"	—
h142(E)	22	#7	14'-3"	—
h143(E)	6	#7	23'-0"	—
h144(E)	2	#5	10'-5"	—
p140(E)	12	#7	37'-5"	—
p141(E)	4	#5	37'-5"	—
p142(E)	4	#5	14'-0"	—
p143(E)	12	#7	24'-9"	—
p144(E)	4	#5	24'-9"	—
p145(E)	4	#5	9'-4"	—
s140(E)	66	#6	15'-6"	□
u140(E)	8	#6	12'-7"	U
u141(E)	26	#4	5'-11"	U
u142(E)	65	#4	5'-2"	U
v140(E)	4	#5	9'-3"	—
v141(E)	9	#5	13'-8"	—
Structure Excavation		Cu Yd	322.0	
Concrete Structures		Cu Yd	41.4	
Concrete Encasement		Cu Yd	5.9	
Reinforcement Bars, Epoxy Coated		Pound	5,100	
Furnishing Steel Piles HP14x89		Foot	182	
Driving Piles		Foot	182	
Test Pile Steel HP14x89		Each	1	
Pile Shoes		Each	8	
Drilling And Setting Piles (In Rock)		Cu Ft	77	
Granular Backfill For Structures		Cu Yd	127.0	
Concrete Sealer		Sq Ft	592	
Geocomposite Wall Drain		Sq Yd	70	
Pipe Underdrains For Structures 4"		Foot	75	

PILE DATA

Pile Type and Size: HP 14x89 with Pile Shoes
 Nominal Required Bearing: 705 kips
 Factored Resistance Available: 388 kips
 Est. Length: 26 feet
 No. Production Piles: 7
 No. Test Piles: 1



USER NAME =	DESIGNED - PG, EN	REVISED -
CHECKED - MI, LAB	REVISED -	
PLOT SCALE =	DRAWN - PG, EN	REVISED -
PLOT DATE =	CHECKED - MI	REVISED -

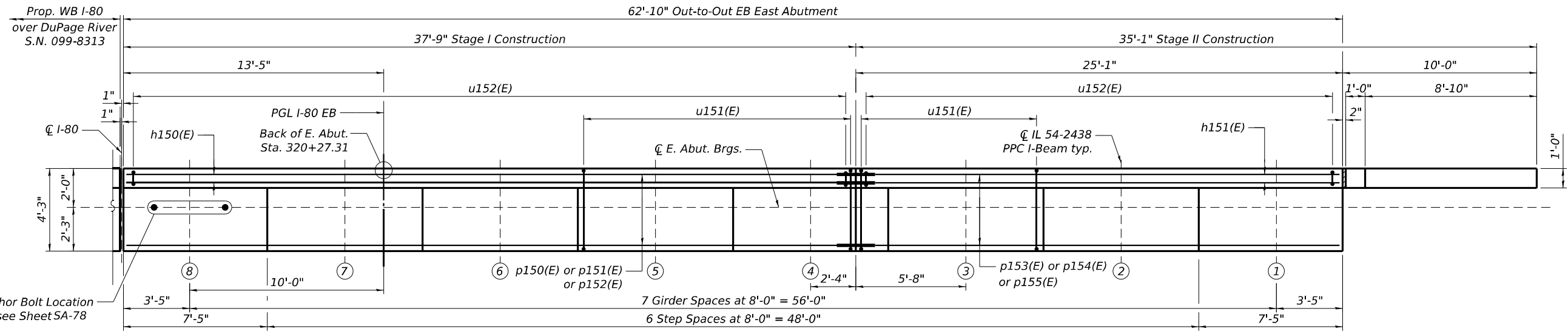
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EB WEST ABUTMENT SECTIONS AND DETAILS
 STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)**

SHEET SA-76 OF SA-98 SHEETS

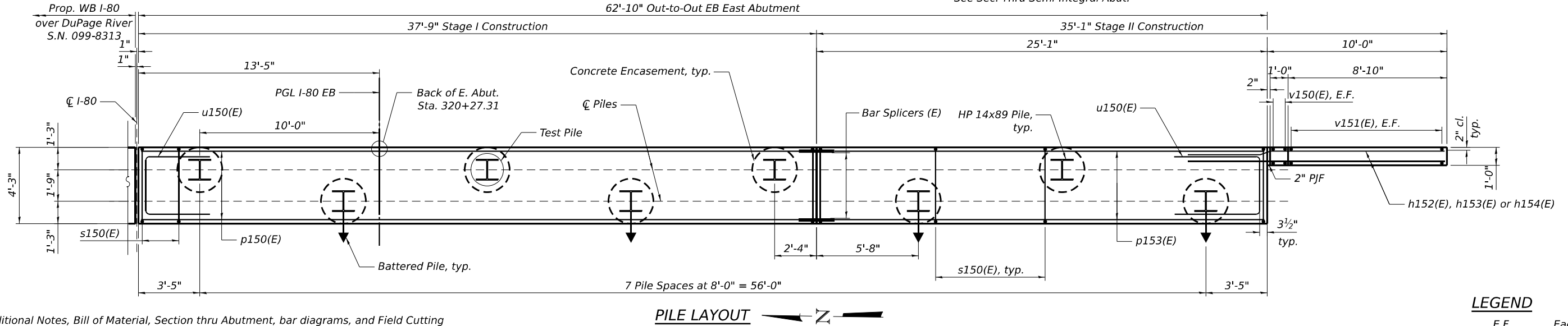
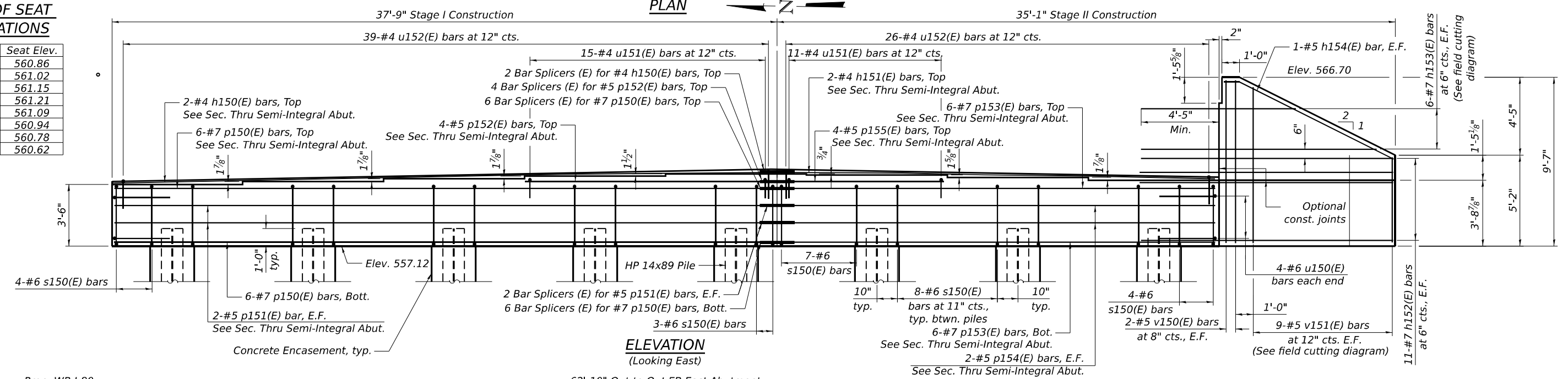
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	609
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\trans\systems-pw\benley.com\trans\systems-pw\1-hosted\Documents\Projects\2018\CH401\401180022\01-Structures\04-Sheets\04-EB East Abutment Plan and Elevation.dgn
 10/9/2023 3:29:23 PM



TOP OF SEAT ELEVATIONS

Beam No.	Seat Elev.
1	560.86
2	561.02
3	561.15
4	561.21
5	561.09
6	560.94
7	560.78
8	560.62



NOTE:

1. For Additional Notes, Bill of Material, Section thru Abutment, bar diagrams, and Field Cutting Diagram, see Sheet SA-78.

LEGEND

E.F. Each Face



USER NAME =	DESIGNED - PG, EN	REVISED -
PLOT SCALE =	CHECKED - MI, LAB	REVISED -
PLOT DATE =	DRAWN - PG, EN	REVISED -
	CHECKED - MI	REVISED -

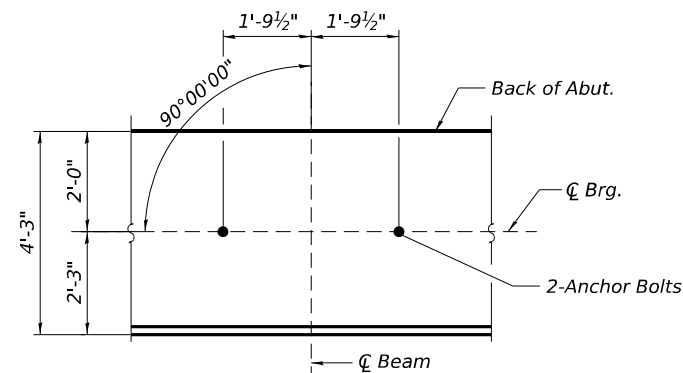
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

EB EAST ABUTMENT PLAN AND ELEVATION
 STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	610
CONTRACT NO. 62R28			ILLINOIS FED. AID PROJECT	

SHEET SA-77 OF SA-98 SHEETS

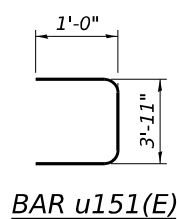
MODEL: Default
 FILE NAME: p:\transystems-pw\benley.com\transystems-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\04-EB East Abutment Sections and Details.dgn
 10/9/2023 3:29:28 PM



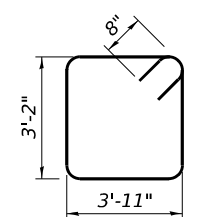
ANCHOR BOLT LOCATION DETAIL

NOTES:

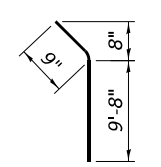
1. For diaphragm details, see Sheet SA-45.
2. For details of piles, see Sheet SA-87.
3. For Bar Splicers, see Sheet SA-88.
4. Pour steps monolithically with cap.
5. Apply concrete sealer to all exposed concrete surfaces of the abutment.
6. Space reinforcement in cap to miss anchor bolts.



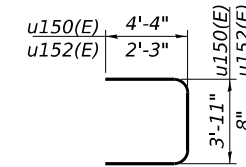
BAR u151(E)



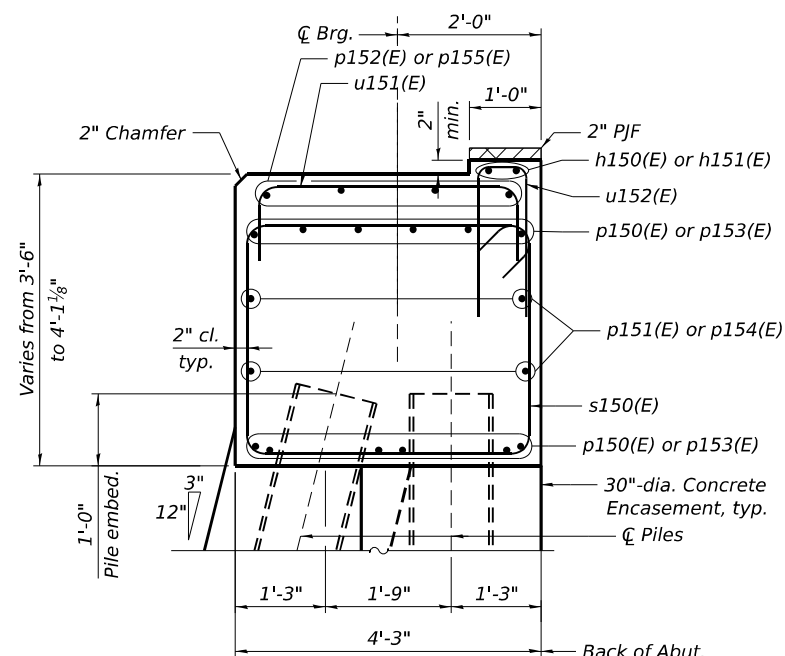
BAR s150(E)



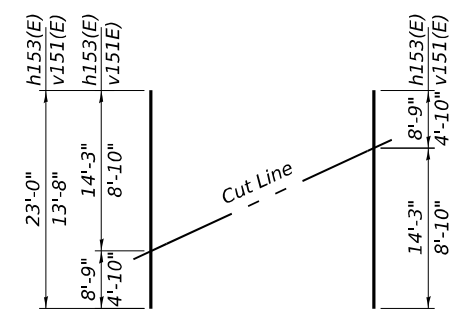
BAR h154(E)



BAR u150(E) & u152(E)



SECTION THRU SEMI-INTEGRAL ABUTMENT



FIELD CUTTING DIAGRAM

Order h153(E) and v151(E) full length. Cut as shown and use remainder of bars in opposite face.

**EB EAST ABUTMENT
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h150(E)	2	#4	37'-6"	=====
h151(E)	2	#4	24'-10"	=====
h152(E)	22	#7	14'-3"	=====
h153(E)	6	#7	23'-0"	=====
h154(E)	2	#5	10'-5"	=====
p150(E)	12	#7	37'-5"	=====
p151(E)	4	#5	37'-5"	=====
p152(E)	4	#5	14'-0"	=====
p153(E)	12	#7	24'-9"	=====
p154(E)	4	#5	24'-9"	=====
p155(E)	4	#5	9'-4"	=====
s150(E)	66	#6	15'-6"	□
u150(E)	8	#6	12'-7"	U
u151(E)	26	#4	5'-11"	U
u152(E)	65	#4	5'-2"	U
v150(E)	4	#5	9'-3"	=====
v151(E)	9	#5	13'-8"	=====
Structure Excavation		Cu Yd	293.0	
Rock Excavation For Structures		Cu Yd	28.0	
Concrete Structures		Cu Yd	41.5	
Concrete Encasement		Cu Yd	5.9	
Reinforcement Bars, Epoxy Coated		Pound	5,100	
Furnishing Steel Piles HP14x89		Foot	154	
Driving Piles		Foot	154	
Test Pile Steel HP14x89		Each	1	
Pile Shoes		Each	8	
Drilling And Setting Piles (In Rock)		Cu Ft	77	
Granular Backfill For Structures		Cu Yd	127	
Concrete Sealer		Sq Ft	592	
Geocomposite Wall Drain		Sq Yd	70	
Pipe Underdrains For Structures 4"		Foot	75	

PILE DATA

Pile Type and Size: HP 14x89 with Pile Shoes
 Nominal Required Bearing: 705 kips
 Factored Resistance Available: 388 kips
 Est. Length: 22 feet
 No. Production Piles: 7
 No. Test Piles: 1



USER NAME =	DESIGNED - PG, EN	REVISED -
	CHECKED - MI, LAB	REVISED -
PLOT SCALE =	DRAWN - PG, EN	REVISED -
PLOT DATE =	CHECKED - MI	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EB EAST ABUTMENT SECTIONS AND DETAILS
 STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)**

SHEET SA-78 OF SA-98 SHEETS

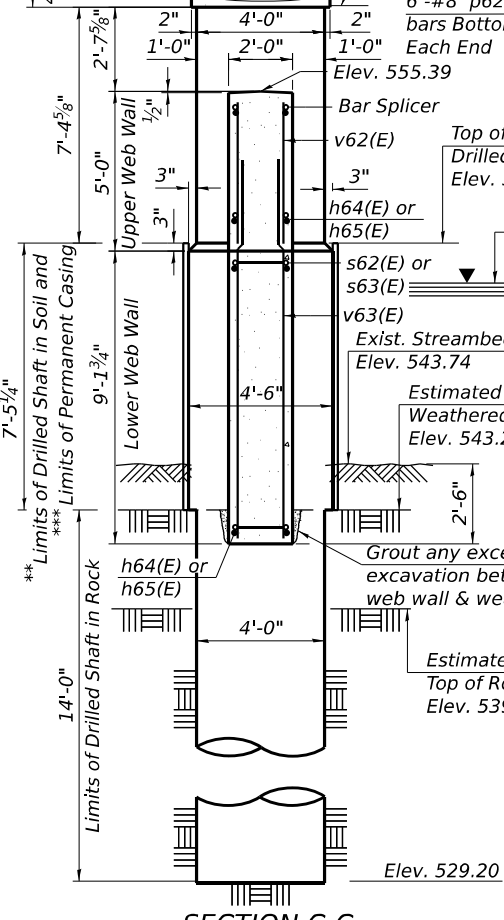
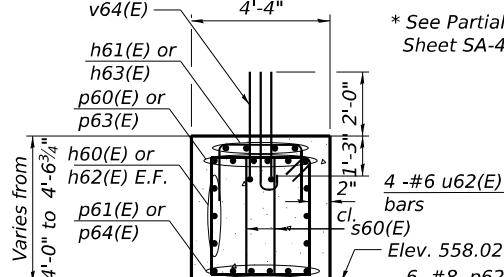
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	611
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

NOTES:

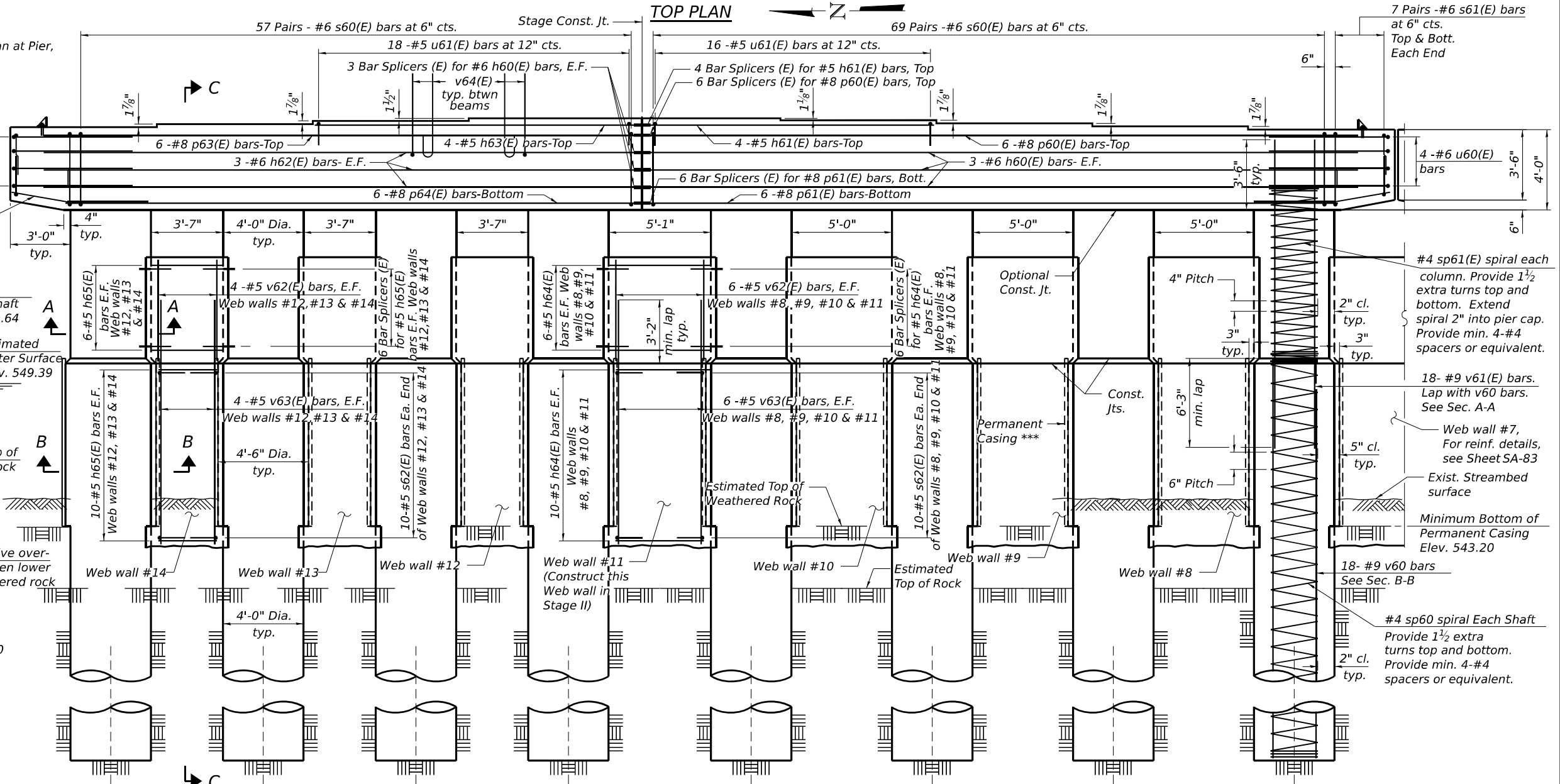
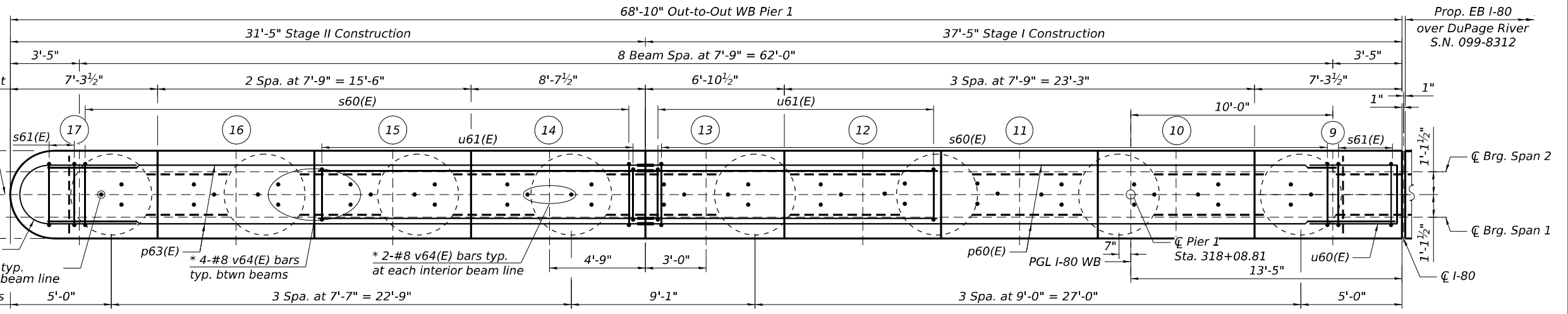
1. For Construction Sequence for Web Wall, Sections A-A and B-B, bar diagrams and additional pier details, see Sheet SA-80.
2. Space reinforcement in cap to miss anchor bolts.
3. Pour steps monolithically with cap.
4. Minimum lap for spirals = 1½ turns. \bar{C} Pier 1
5. For anchor bolt and side retainer details at fascia beams, see Sheet SA-40.

BEAM SEAT ELEVATIONS

Beam No.	Seat Elev.
9	562.02
10	562.18
11	562.33
12	562.48
13	562.57
14	562.57
15	562.45
16	562.30
17	562.14



** If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailing are based on the top of shaft and the estimated elevations shown and may change based on the actual elevations encountered at each shaft and the final top of shaft elevation.



ELEVATION
(Looking Upstation)

*** Contractor is responsible for determining the casing thickness and the actual tip elevation to be used. See Article 516.06(d) of the Standard Specifications. Pay limits for the Permanent Casing are based on the minimum length shown.

MODEL: Default
FILE NAME: p:\transys\p-w\homedoc\Documents\Projects_2018\CH401\401180022\01-Struct\CAD\M-L-04_62R28\04-Sheets\04-Structures\0998313-M-L-04-076-WB Pier 1 Plan and Elevation.dgn
10/9/2023 3:29:30 PM



USER NAME =	DESIGNED - PG, EN	REVISED -
PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE =	DRAWN - PG, EN	REVISED -
	CHECKED - MI	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB PIER 1 PLAN AND ELEVATION
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)

SHEET SA-79 OF SA-98 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	612
ILLINOIS			CONTRACT NO. 62R28	
FED. AID PROJECT				

**WB PIER 1
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h60(E)	6	#6	37'-2"	—
h61(E)	4	#5	14'-4"	—
h62(E)	6	#6	31'-2"	—
h63(E)	4	#5	16'-1"	—
h64(E)	128	#5	4'-2"	—
h65(E)	96	#5	2'-9"	—
p60(E)	6	#8	37'-2"	—
p61(E)	6	#8	34'-5"	—
p62(E)	12	#8	7'-11"	—
p63(E)	6	#8	31'-2"	—
p64(E)	6	#8	28'-5"	—
s60(E)	252	#6	16'-8"	□
s61(E)	56	#6	10'-4"	□
s62(E)	140	#5	4'-2"	□
** sp60	8	#4	21'-2"	⋈
** sp61(E)	8	#4	7'-8"	⋈
u60(E)	4	#6	12'-8"	U
u61(E)	34	#5	6'-0"	U
u62(E)	4	#6	14'-11"	U
v60	144	#9	21'-1"	—
v61(E)	144	#9	17'-3"	—
v62(E)	72	#5	4'-8"	—
v63(E)	72	#5	12'-4"	—
v64(E)	48	#8	4'-2"	—
Structure Excavation		Cu Yd	5.0	
Rock Excavation For Structures		Cu Yd	15.0	
Concrete Structures		Cu Yd	100.4	
Reinforcement Bars		Pound	11120	
Reinforcement Bars, Epoxy Coated		Pound	22,680	
Permanent Casing		Foot	67	
Drilled Shaft In Soil		Cu Yd	35.1	
Drilled Shaft In Rock		Cu Yd	52.2	
Concrete Sealer		Sq Ft	2,286	
Crosshole Sonic Logging Access Ducts		Foot	172	
Crosshole Sonic Logging Testing		Each	2	

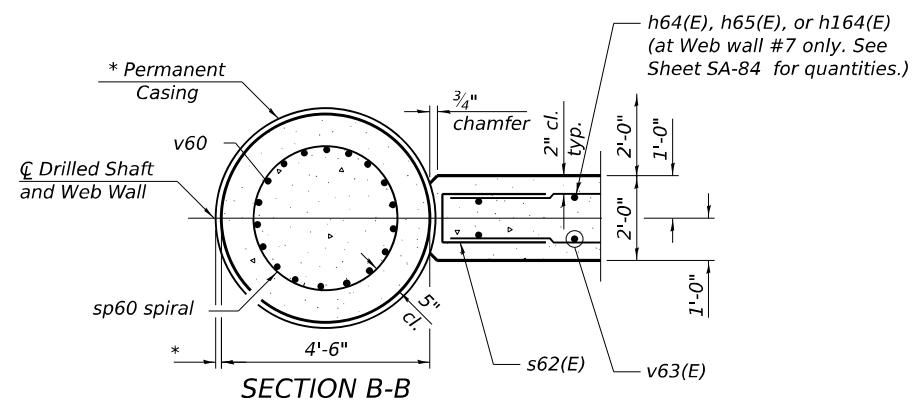
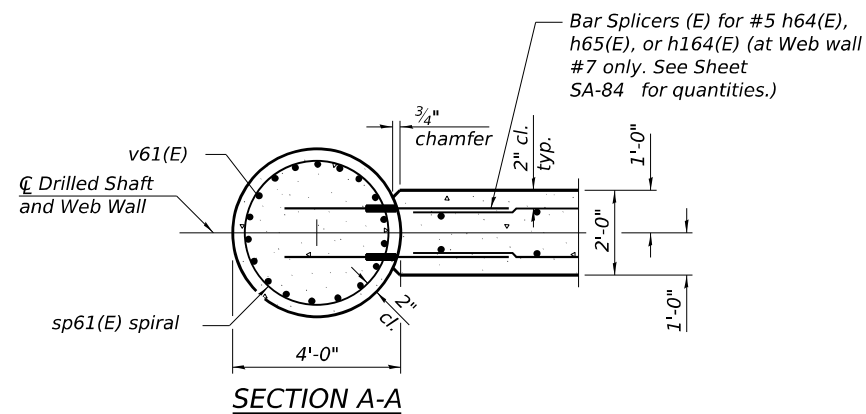
** Length is height of spiral.

MINIMUM BAR LAPS

#5 bar = 3'-2"
#8 bar = 4'-9"
#9 bar = 6'-3"

NOTES:

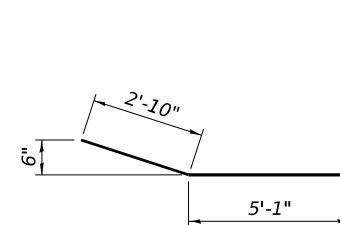
1. For Notes, see Sheet SA-79 .



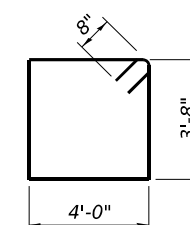
* Contractor is responsible for determining the casing thickness and the actual tip elevation to be used. See Article 516.06(d) of the Standard Specifications. Pay limits for the Permanent Casing are based on the minimum length shown.

CONSTRUCTION SEQUENCE FOR WEB WALL:

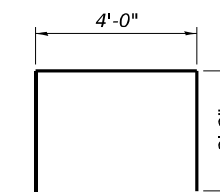
1. Excavate between shafts to elevation of web wall base.
2. Set lower web wall forms through water to bear on the circular edge of drilled shafts and secure in place with fill, struts or tie forms together as required.
3. Place the lower web wall reinforcement cage into the forms using spacers to maintain proper clearances.
4. If the forms can be sealed against the shafts and streambed to allow dewatering, the reinforcement and the concrete placement may be completed in the dry. Alternatively, the rebar cage can be lowered into position through water and the concrete discharged at the base of the excavation through a tremie pipe or pump hose, displacing water, sediment, and tainted concrete out the top of the forms.
5. Construct Columns.
6. Construct upper web walls.



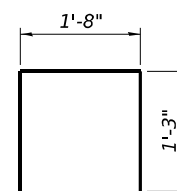
BAR p62(E)



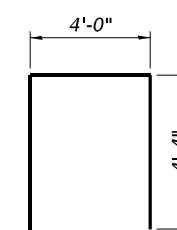
BAR s60(E)



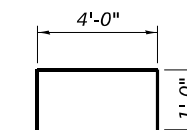
BAR s61(E)



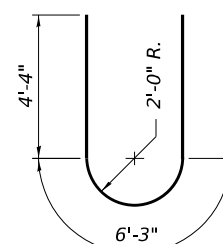
BAR s62(E)



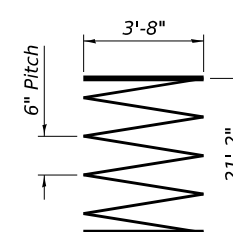
BAR u60(E)



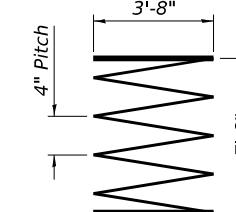
BAR u61(E)



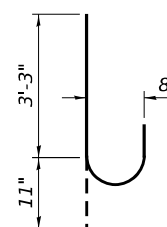
BAR u62(E)



BAR sp60



BAR sp61(E)



BAR v64(E)

MODEL: Default
FILE NAME: p:\transystems-pw\benley.com\transystems-pw\1-hosted\Documents\Projects\2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\0998312_0998313-MI-04-077-WB Pler 1 Sections and Details.dgn
10/9/2023 3:29:34 PM



USER NAME =	DESIGNED - PG, EN	REVISED -
	CHECKED - MI	REVISED -
PLOT SCALE =	DRAWN - PG, EN	REVISED -
PLOT DATE =	CHECKED - MI	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB PIER 1 SECTIONS AND DETAILS
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)

SHEET SA-80 OF SA-98 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	613
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

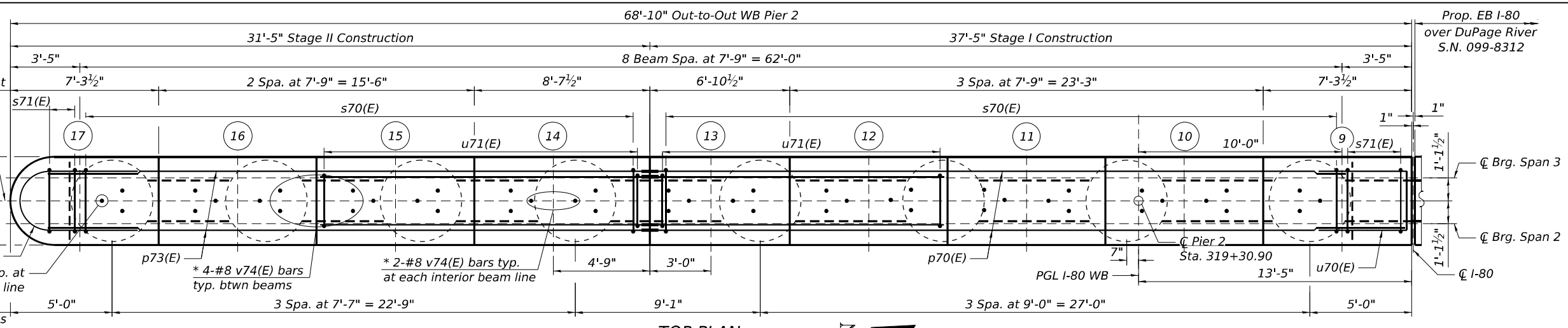
NOTES:

- For Construction Sequence for Web Wall, Sections A-A and B-B, bar diagrams, Bill of Material and additional pier details, see Sheet SA-82.
- Space reinforcement in cap to miss anchor bolts.
- Four steps monolithically with cap.
- Minimum lap for spirals = 1 1/2 turns. C Pier 2
- For anchor bolt and side retainer details at fascia beams, see Sheet SA-40.

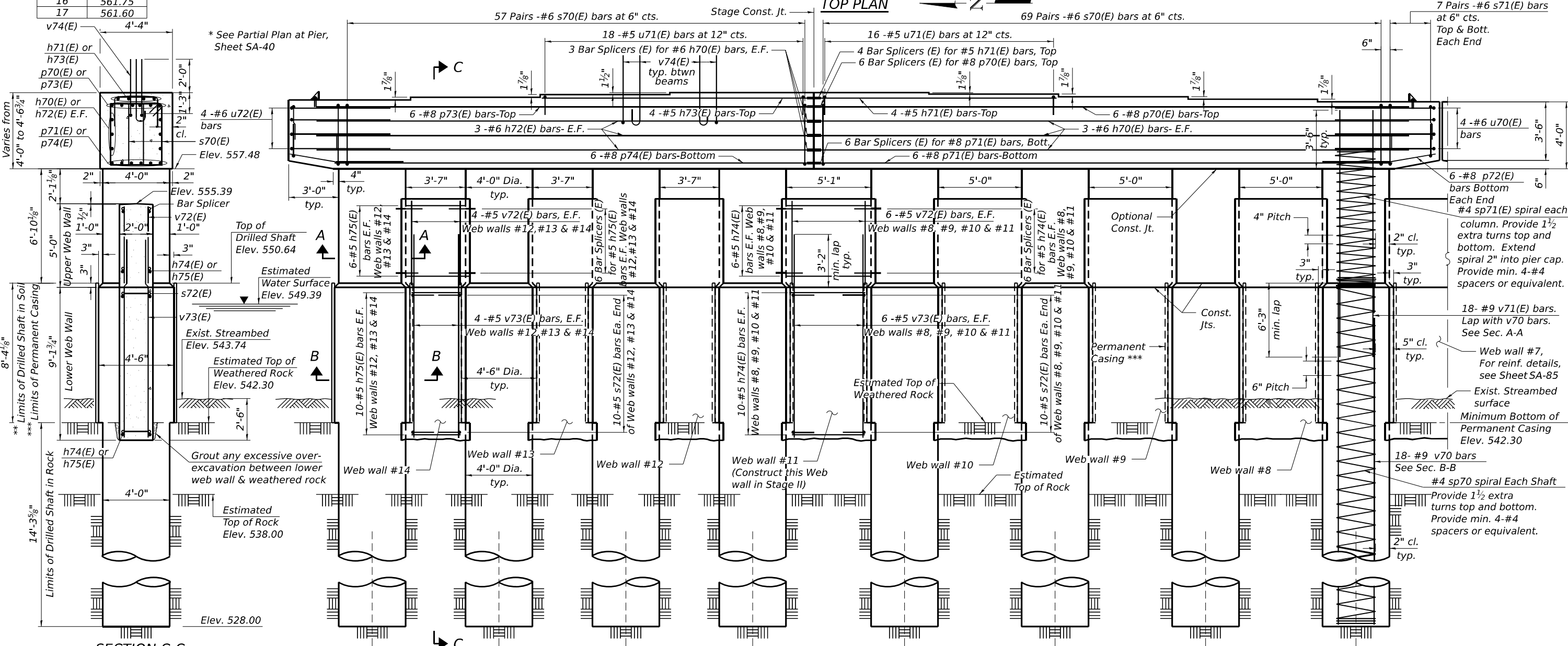
BEAM SEAT ELEVATIONS

Beam No.	Seat Elev.
9	561.48
10	561.63
11	561.79
12	561.94
13	562.03
14	562.03
15	561.91
16	561.75
17	561.60

* 1-#8 v74(E) bar, typ. at each exterior beam line
 * 4-#8 v74(E) bars typ. btwn beams
 * 2-#8 v74(E) bars typ. at each interior beam line



TOP PLAN



SECTION C-C

ELEVATION
(Looking Upstam)

*** Contractor is responsible for determining the casing thickness and the actual tip elevation to be used. See Article 516.06(d) of the Standard Specifications. Pay limits for the Permanent Casing are based on the minimum length shown.

** If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailing are based on the top of shaft and the estimated elevations shown and may change based on the actual elevations encountered at each shaft and the final top of shaft elevation.

MODEL: Default
 FILE NAME: p:\transystems-pw\hbm\projects\2018\CH401\180022\01-Structures\CAD\M-L-04-07B-WB Pier 2 Plan and Elevation.dgn
 10/9/2023 3:29:36 PM



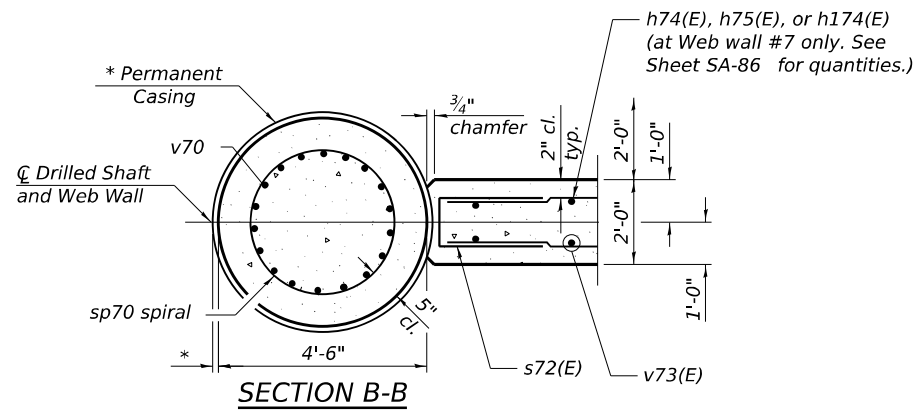
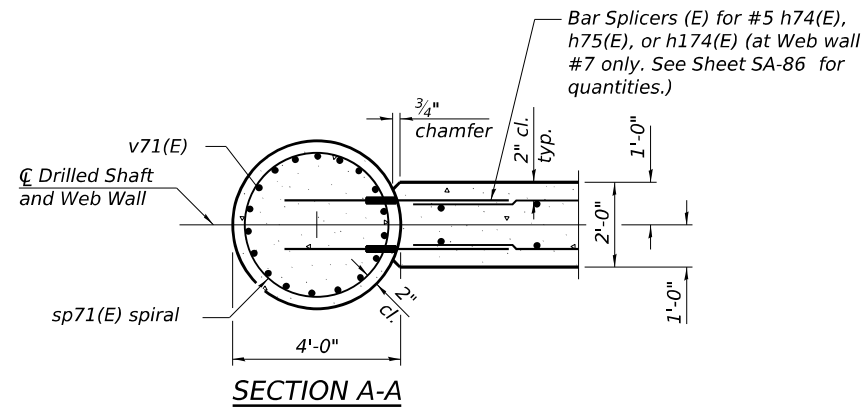
USER NAME =	DESIGNED - PG, EN	REVISOR -
PLOT SCALE =	CHECKED - MI	REVISIONS -
PLOT DATE =	DRAWN - PG, EN	REVISIONS -
	CHECKED - MI	REVISIONS -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB PIER 2 PLAN AND ELEVATION
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)

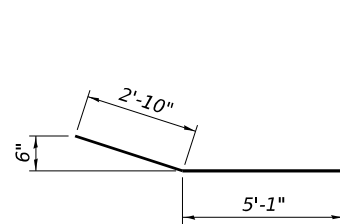
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	614
CONTRACT NO. 62R28			ILLINOIS FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\projects\transyscorp-pw\hstedi\Documents\Projects\2018\CH401\401\180022\01-Structures\0998313-MI-04-079-WB Pler 2 Sections and Details.dgn
 10/9/2023 3:29:40 PM

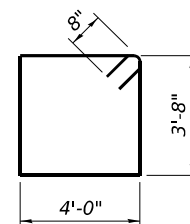


NOTE:

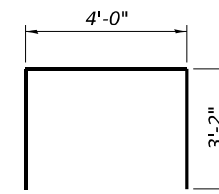
1. For Notes, see Sheet SA-81 .



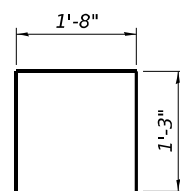
BAR p72(E)



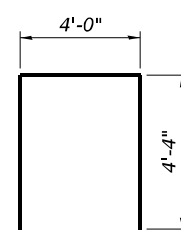
BAR s70(E)



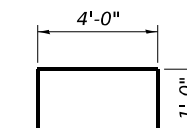
BAR s71(E)



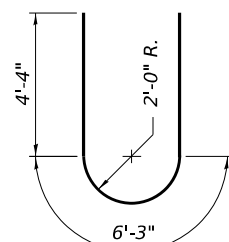
BAR s72(E)



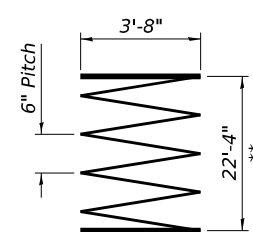
BAR u70(E)



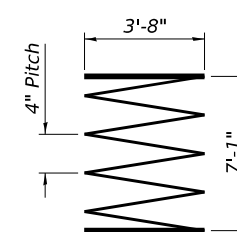
BAR u71(E)



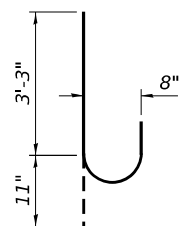
BAR u72(E)



BAR sp70



BAR sp71(E)



BAR v64(E)

* Contractor is responsible for determining the casing thickness and the actual tip elevation to be used. See Article 516.06(d) of the Standard Specifications. Pay limits for the Permanent Casing are based on the minimum length shown.

CONSTRUCTION SEQUENCE FOR WEB WALL:

1. Excavate between shafts to elevation of web wall base.
2. Set lower web wall forms through water to bear on the circular edge of drilled shafts and secure in place with fill, struts or tie forms together as required.
3. Place the lower web wall reinforcement cage into the forms using spacers to maintain proper clearances.
4. If the forms can be sealed against the shafts and streambed to allow dewatering, the reinforcement and the concrete placement may be completed in the dry. Alternatively, the rebar cage can be lowered into position through water and the concrete discharged at the base of the excavation through a tremie pipe or pump hose, displacing water, sediment, and tainted concrete out the top of the forms.
5. Construct Columns.
6. Construct upper web walls.

**WB PIER 2
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h70(E)	6	#6	37'-2"	—
h71(E)	4	#5	14'-4"	—
h72(E)	6	#6	31'-2"	—
h73(E)	4	#5	16'-1"	—
h74(E)	128	#5	4'-2"	—
h75(E)	96	#5	2'-9"	—
p70(E)	6	#8	37'-2"	—
p71(E)	6	#8	34'-5"	—
p72(E)	12	#8	7'-11"	—
p73(E)	6	#8	31'-2"	—
p74(E)	6	#8	28'-5"	—
s70(E)	252	#6	16'-8"	□
s71(E)	56	#6	10'-4"	□
s72(E)	140	#5	4'-2"	□
sp70	8	#4	22'-4"	⋈
sp71(E)	8	#4	7'-1"	⋈
u70(E)	4	#6	12'-8"	U
u71(E)	34	#5	6'-0"	U
u72(E)	4	#6	14'-11"	U
v70	144	#9	22'-3"	—
v71(E)	144	#9	16'-9"	—
v72(E)	72	#5	4'-8"	—
v73(E)	72	#5	12'-4"	—
v74(E)	48	#8	4'-2"	—
Structure Excavation		Cu Yd	11.0	
Rock Excavation For Structures		Cu Yd	9.0	
Concrete Structures		Cu Yd	98.4	
Reinforcement Bars		Pound	11720	
Reinforcement Bars, Epoxy Coated		Pound	22,420	
Permanent Casing		Foot	67	
Drilled Shaft In Soil		Cu Yd	39.4	
Drilled Shaft In Rock		Cu Yd	53.3	
Concrete Sealer		Sq Ft	2,231	
Crosshole Sonic Logging Access Ducts		Foot	182	
Crosshole Sonic Logging Testing		Each	2	

** Length is height of spiral.

MINIMUM BAR LAPS

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



USER NAME =	DESIGNED - PG, EN	REVISED -
PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE =	DRAWN - PG, EN	REVISED -
	CHECKED - MI	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WB PIER 2 SECTIONS AND DETAILS
 STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)

SHEET SA-82 OF SA-98 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	615
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

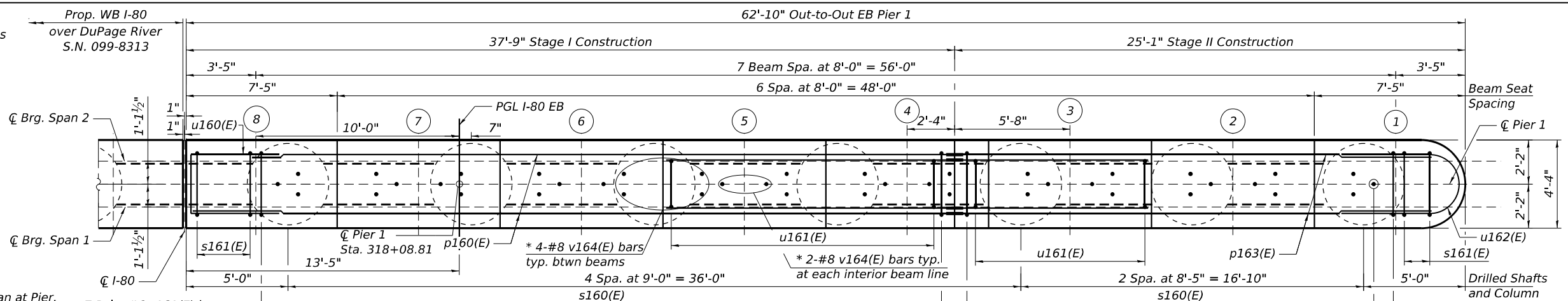
NOTES:

- For Construction Sequence for Web Walls, Sections A-A and B-B, Bar Diagrams, Bill of Material and additional pier details, see Sheet SA-84.
- Space reinforcement in cap to miss anchor bolts.
- Pour steps monolithically with cap.
- Minimum lap for spirals = 1 1/2 turns.
- For anchor bolt and side retainer details at fascia beams, see Sheet SA-46.

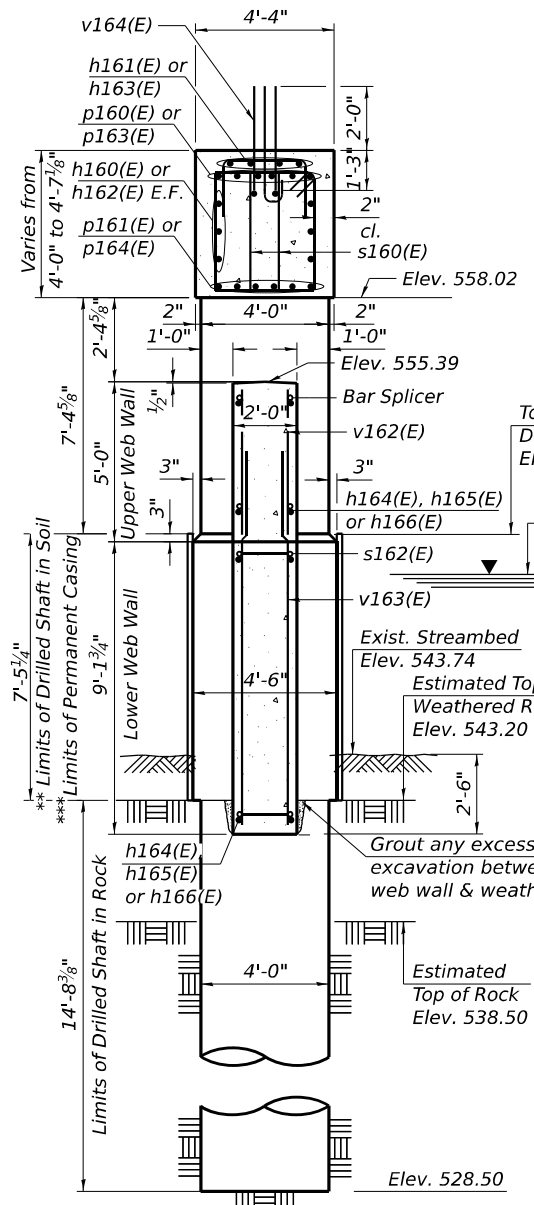
BEAM SEAT ELEVATIONS

Beam No.	Seat Elev.
1	562.26
2	562.42
3	562.55
4	562.61
5	562.49
6	562.34
7	562.18
8	562.02

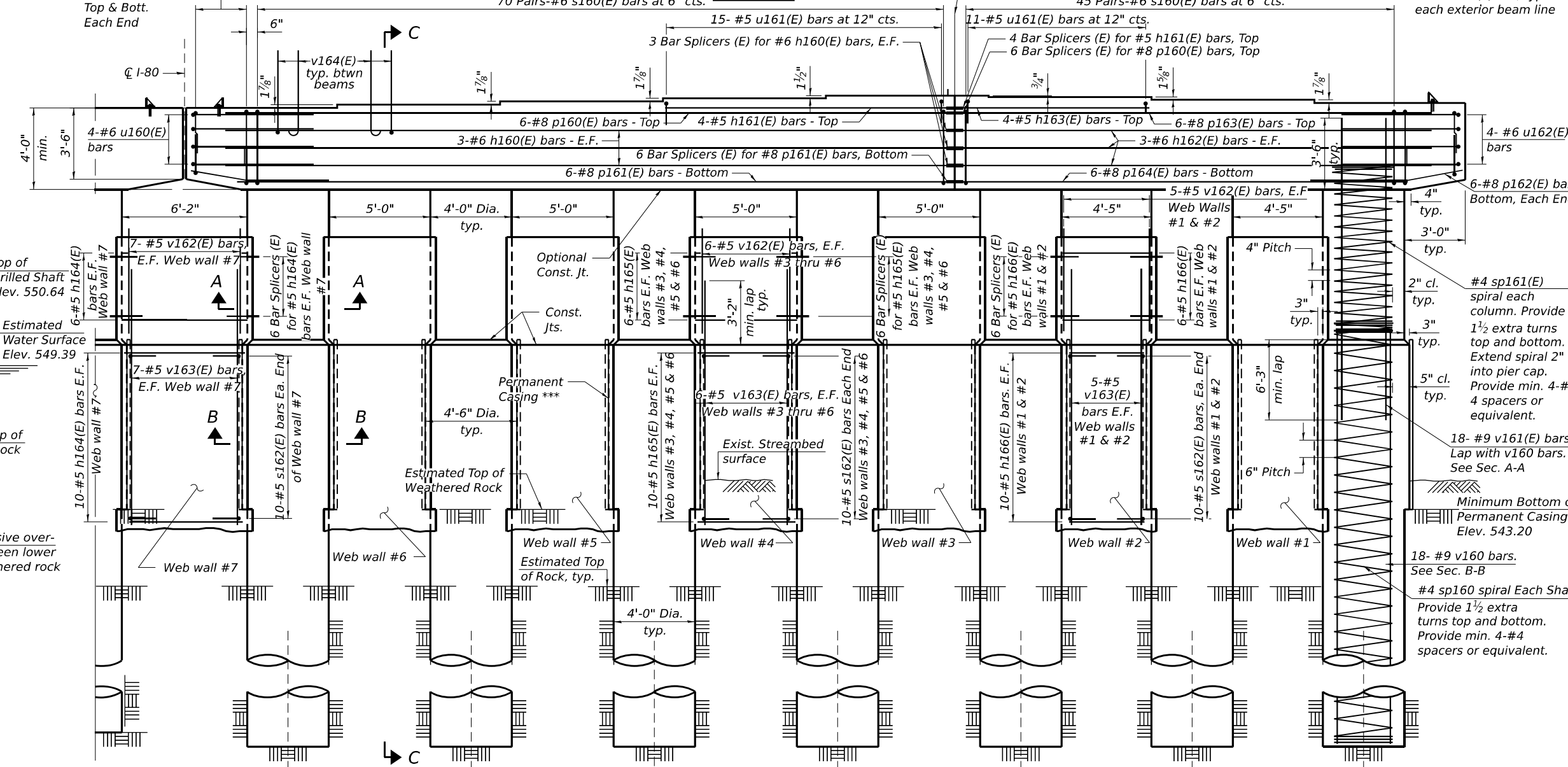
* See Partial Plan at Pier, Sheet SA-46



TOP PLAN



SECTION C-C



ELEVATION

(Looking Upstation)

** If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailing are based on the top of shaft and the estimated elevations shown and may change based on the actual elevations encountered at each shaft and the final top of shaft elevation.

*** Contractor is responsible for determining the casing thickness and the actual tip elevation to be used. See Article 516.06(d) of the Standard Specifications. Pay limits for the Permanent Casing are based on the minimum length shown.

MODEL: Default
FILE NAME: p:\transys\transyscorp-pw\hst\Documents\Projects\2018\CH401\401180022\01-Structures\04-Sheets\04-EB Pier 1, Plan and Elevation.dgn
10/9/2023 3:29:42 PM



USER NAME =	DESIGNED - PG, EN	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - PG, EN	REVISED -
	CHECKED - MI	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EB PIER 1 PLAN AND ELEVATION
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)**

SHEET SA-83 OF SA-98 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	616
CONTRACT NO. 62R28			ILLINOIS FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\projects\transys\transys-pw\Bentley.com\transys\p-w\1-Hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\04-Structures\0998313-MI-04-081-EB Pier 1 Sections and Details.dgn
 10/9/2023 3:29:46 PM

**EB PIER 1
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h160(E)	6	#6	37'-6"	—
h161(E)	4	#5	14'-0"	—
h162(E)	6	#6	24'-10"	—
h163(E)	4	#5	9'-4"	—
h164(E)	32	#5	5'-4"	—
h165(E)	128	#5	4'-2"	—
h166(E)	64	#5	3'-7"	—
p160(E)	6	#8	37'-6"	—
p161(E)	6	#8	34'-9"	—
p162(E)	12	#8	7'-11"	—
p163(E)	6	#8	24'-10"	—
p164(E)	6	#8	22'-1"	—
s160(E)	230	#6	16'-8"	□
s161(E)	56	#6	10'-4"	□
s162(E)	140	#5	4'-2"	□
sp160	7	#4	21'-9"	∩
sp161(E)	7	#4	7'-8"	∩
u160(E)	4	#6	12'-8"	□
u161(E)	26	#5	6'-0"	□
u162(E)	4	#6	14'-11"	□
v160	126	#9	21'-9"	—
v161(E)	126	#9	17'-3"	—
v162(E)	82	#5	4'-0"	—
v163(E)	82	#5	12'-3"	—
v164(E)	42	#8	4'-2"	—
Structure Excavation		Cu Yd	38.0	
Rock Excavation For Structures		Cu Yd	17.0	
Concrete Structures		Cu Yd	102.8	
Reinforcement Bars		Pound	10190	
Reinforcement Bars, Epoxy Coated		Pound	20,920	
Permanent Casing		Foot	59	
Drilled Shaft In Soil		Cu Yd	34.4	
Drilled Shaft In Rock		Cu Yd	45.0	
Concrete Sealer		Sq Ft	2,274	
Crosshole Sonic Logging Access Ducts		Foot	155	
Crosshole Sonic Logging Testing		Each	2	

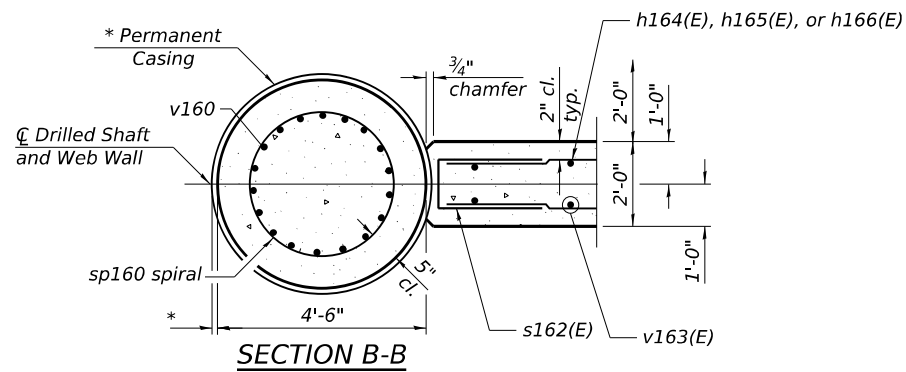
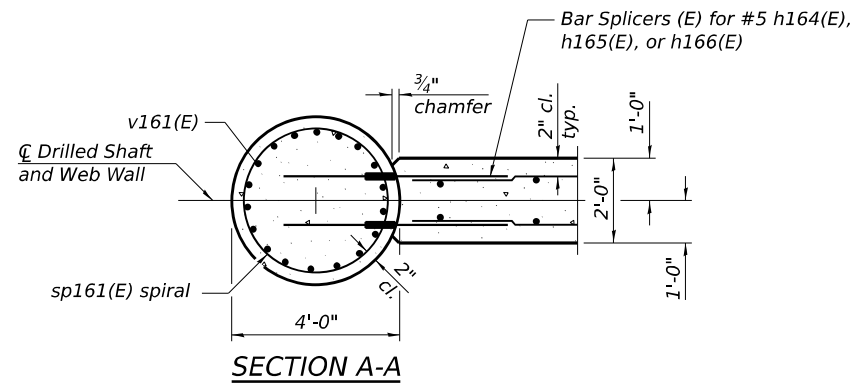
** Length is height of spiral.

MINIMUM BAR LAPS

#5 bar = 3'-2"
 #9 bar = 6'-3"

NOTE:

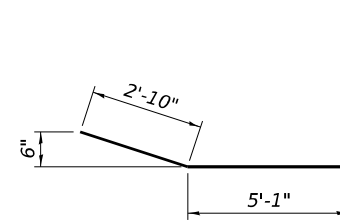
1. For Notes, see Sheet SA-83.



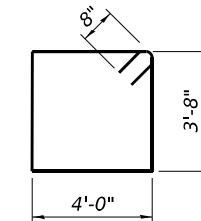
* Contractor is responsible for determining the casing thickness and the actual tip elevation to be used. See Article 516.06(d) of the Standard Specifications. Pay limits for the Permanent Casing are based on the minimum length shown.

CONSTRUCTION SEQUENCE FOR WEB WALL:

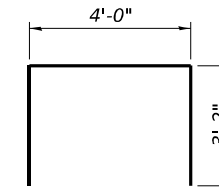
1. Excavate between shafts to elevation of web wall base.
2. Set lower web wall forms through water to bear on the circular edge of drilled shafts and secure in place with fill, struts or tie forms together as required.
3. Place the lower web wall reinforcement cage into the forms using spacers to maintain proper clearances.
4. If the forms can be sealed against the shafts and streambed to allow dewatering, the reinforcement and the concrete placement may be completed in the dry. Alternatively, the rebar cage can be lowered into position through water and the concrete discharged at the base of the excavation through a tremie pipe or pump hose, displacing water, sediment, and tainted concrete out the top of the forms.
5. Construct Columns.
6. Construct upper web walls.



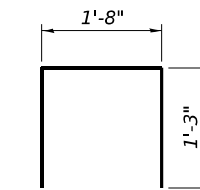
BAR p162(E)



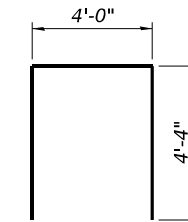
BAR s160(E)



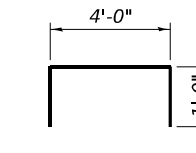
BAR s161(E)



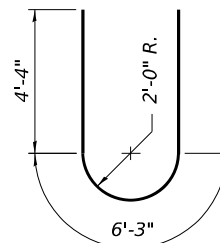
BAR s162(E)



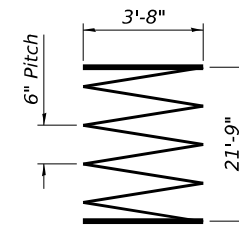
BAR u160(E)



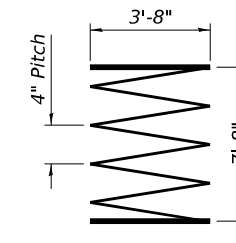
BAR u161(E)



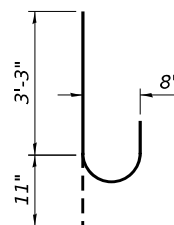
BAR u162(E)



BAR sp160



BAR sp161(E)



BAR v164(E)



USER NAME =	DESIGNED - PG, EN	REVISED -
	CHECKED - MI, JJS	REVISED -
PLOT SCALE =	DRAWN - PG, EN	REVISED -
PLOT DATE =	CHECKED - MI	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EB PIER 1 SECTIONS AND DETAILS
 STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)

SHEET SA-84 OF SA-98 SHEETS

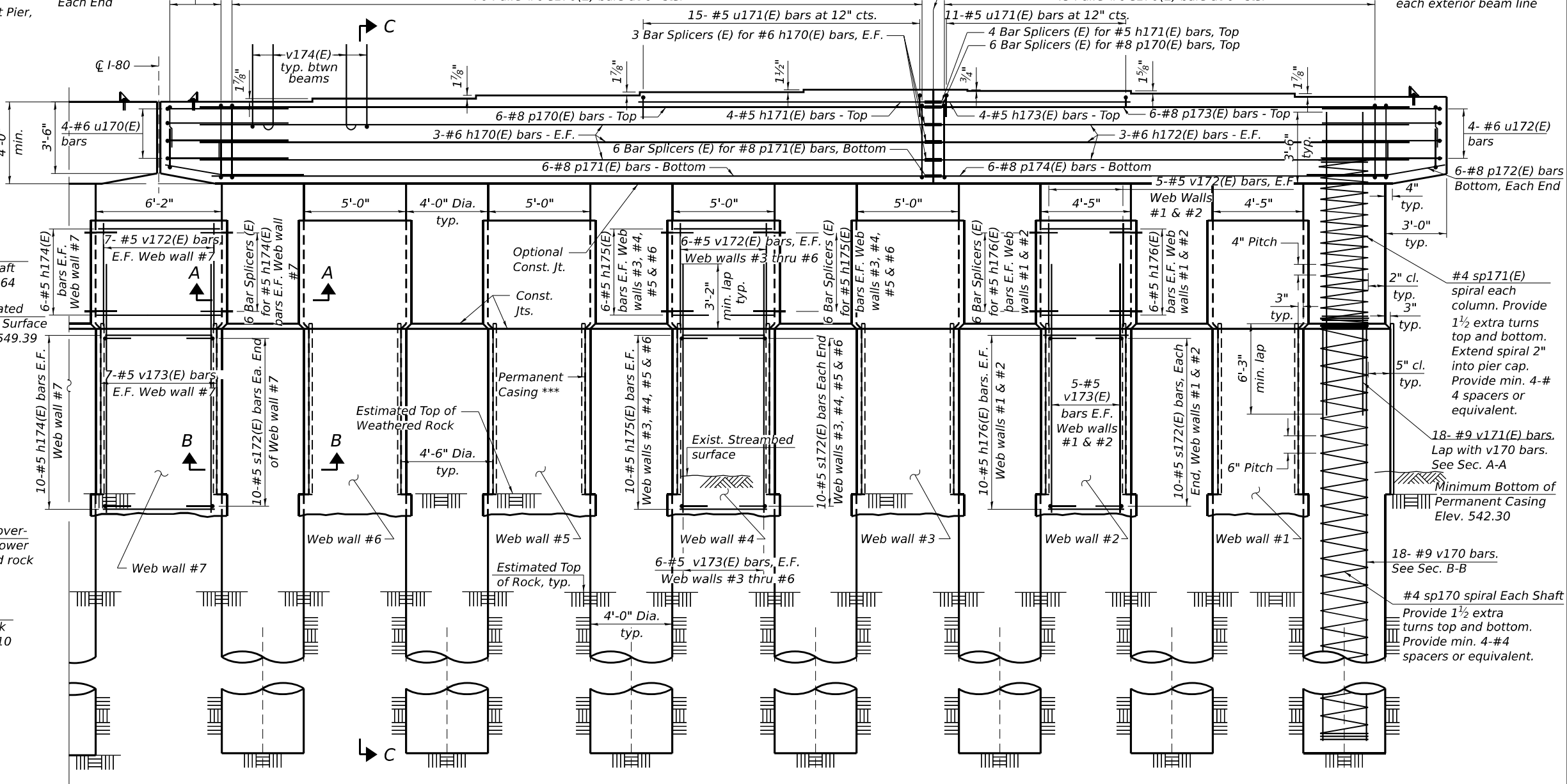
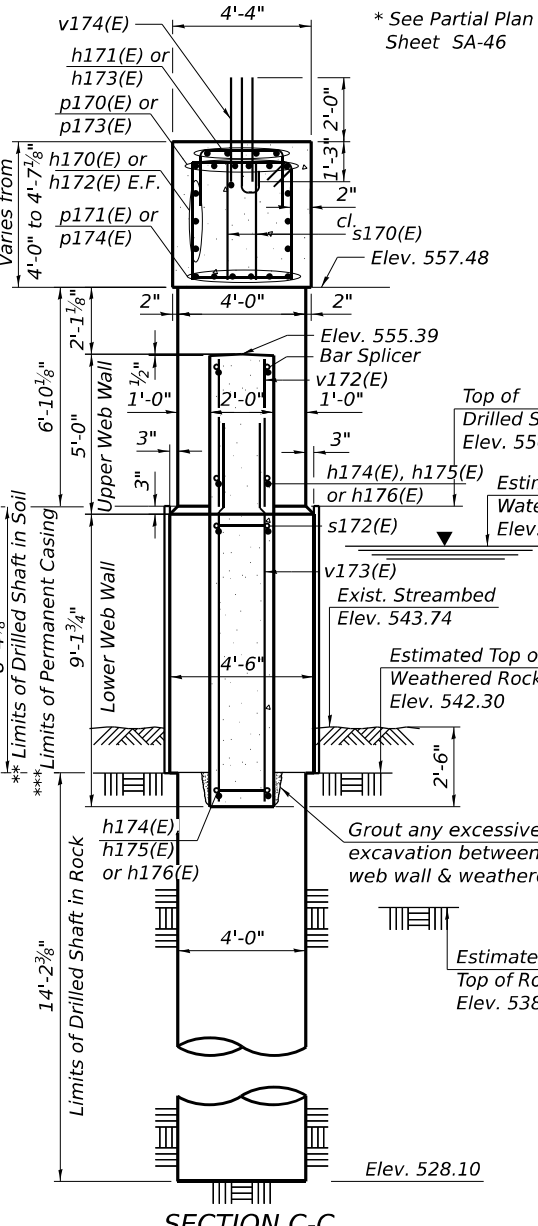
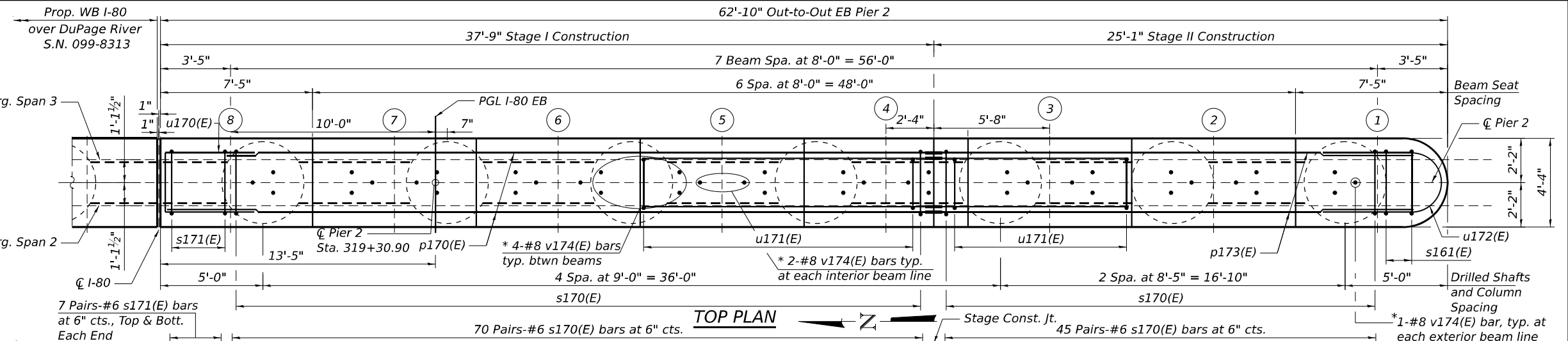
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	617
			CONTRACT NO. 62R28	
		ILLINOIS FED. AID PROJECT		

NOTES:

1. For Construction Sequence for Web Wall, Sections A-A and B-B, Bar Diagrams, Bill of Material and additional pier details, see Sheet SA-86.
2. Space reinforcement in cap to miss anchor bolts.
3. Pour steps monolithically with cap.
4. Minimum lap for spirals = 1 1/2 turns.
5. For anchor bolt and side retainer details at fascia beams, see Sheet SA-46.

BEAM SEAT ELEVATIONS

Beam No.	Seat Elev.
1	561.72
2	561.88
3	562.01
4	562.07
5	561.95
6	561.80
7	561.64
8	561.48



** If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailing are based on the top of shaft and the estimated elevations shown and may change based on the actual elevations encountered at each shaft and the final top of shaft elevation.

*** Contractor is responsible for determining the casing thickness and the actual tip elevation to be used. See Article 516.06(d) of the Standard Specifications. Pay limits for the Permanent Casing are based on the minimum length shown.



USER NAME =	DESIGNED - PG, EN	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - PG, EN	REVISED -
	CHECKED - MI	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EB PIER 2 PLAN AND ELEVATION
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	618
CONTRACT NO. 62R28			ILLINOIS FED. AID PROJECT	

MODEL: Default
FILE NAME: p:\transys\corp-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\CAD\M-L-04-082-EB Pier 2 Plan and Elevation.dgn
0998313-M-L-04-082-EB Pier 2 Plan and Elevation.dgn

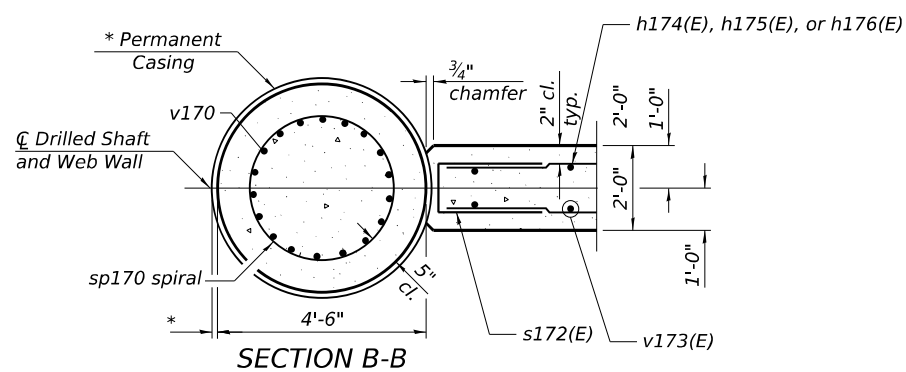
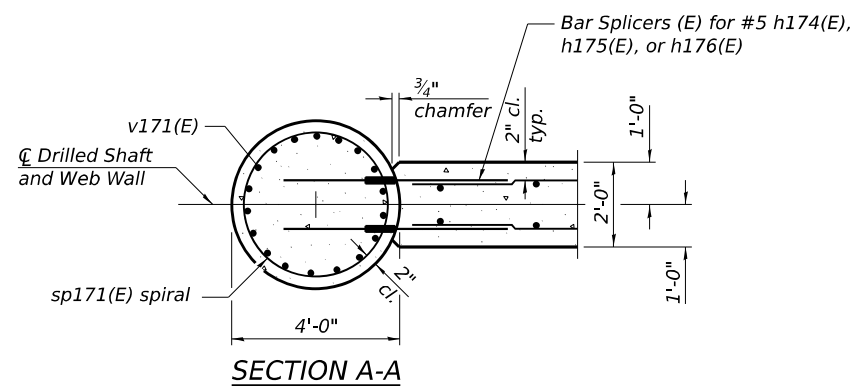
**EB PIER 2
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h170(E)	6	#6	37'-6"	—
h171(E)	4	#5	14'-0"	—
h172(E)	6	#6	24'-10"	—
h173(E)	4	#5	9'-4"	—
h174(E)	32	#5	5'-4"	—
h175(E)	128	#5	4'-2"	—
h176(E)	64	#5	3'-7"	—
p170(E)	6	#8	37'-6"	—
p171(E)	6	#8	34'-9"	—
p172(E)	12	#8	7'-11"	—
p173(E)	6	#8	24'-10"	—
p174(E)	6	#8	22'-1"	—
s170(E)	230	#6	16'-8"	□
s171(E)	56	#6	10'-4"	□
s172(E)	140	#5	4'-2"	□
** sp170	7	#4	22'-2"	⋈
** sp171(E)	7	#4	7'-1"	⋈
u170(E)	4	#6	12'-8"	┘
u171(E)	26	#5	6'-0"	┘
u172(E)	4	#6	14'-11"	┘
v170	126	#9	22'-2"	—
v171(E)	126	#9	16'-8"	—
v172(E)	82	#5	4'-8"	—
v173(E)	82	#5	12'-3"	—
v174(E)	42	#8	4'-2"	┘
Structure Excavation		Cu Yd	13.0	
Rock Excavation For Structures		Cu Yd	10.0	
Concrete Structures		Cu Yd	101.0	
Reinforcement Bars		Pound	10380	
Reinforcement Bars, Epoxy Coated		Pound	20,730	
Permanent Casing		Foot	59	
Drilled Shaft In Soil		Cu Yd	34.4	
Drilled Shaft In Rock		Cu Yd	46.3	
Concrete Sealer		Sq Ft	2,312	
Crosshole Sonic Logging Access Ducts		Foot	158	
Crosshole Sonic Logging Testing		Each	2	

** Length is height of spiral.

NOTE:

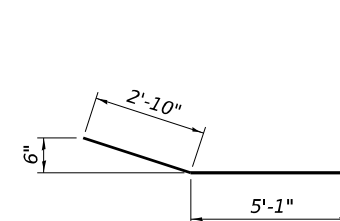
1. For Notes, see Sheet SA-85.



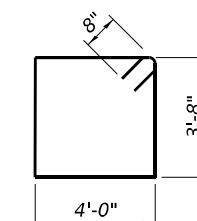
* Contractor is responsible for determining the casing thickness and the actual tip elevation to be used. See Article 516.06(d) of the Standard Specifications. Pay limits for the Permanent Casing are based on the minimum length shown.

CONSTRUCTION SEQUENCE FOR WEB WALL:

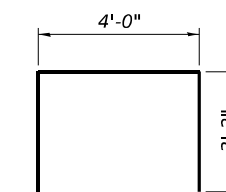
1. Excavate between shafts to elevation of web wall base.
2. Set lower web wall forms through water to bear on the circular edge of drilled shafts and secure in place with fill, struts or tie forms together as required.
3. Place the lower web wall reinforcement cage into the forms using spacers to maintain proper clearances.
4. If the forms can be sealed against the shafts and streambed to allow dewatering, the reinforcement and the concrete placement may be completed in the dry. Alternatively, the rebar cage can be lowered into position through water and the concrete discharged at the base of the excavation through a tremie pipe or pump hose, displacing water, sediment, and tainted concrete out the top of the forms.
5. Construct Columns.
6. Construct upper web walls.



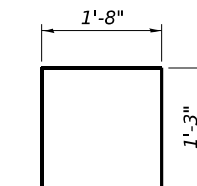
BAR p172(E)



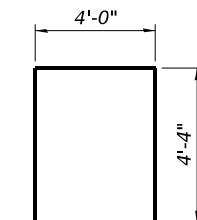
BAR s170(E)



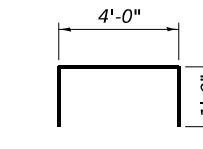
BAR s171(E)



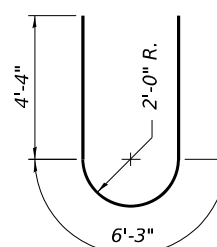
BAR s172(E)



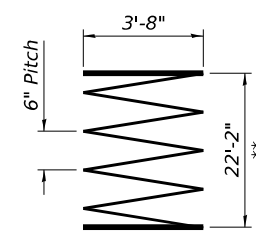
BAR u170(E)



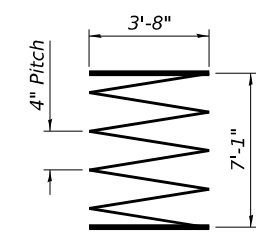
BAR u171(E)



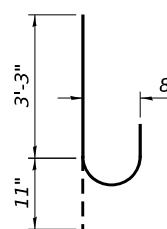
BAR u172(E)



BAR sp170



BAR sp171(E)



BAR v174(E)

MODEL: Default
FILE NAME: p:\transystems-pw\benley.com\transystems-pw\1-hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\04-EB Pier 2 Sections and Details.dgn
10/9/2023 3:29:52 PM



USER NAME =	DESIGNED - PG, EN	REVISED -
	CHECKED - MI, JJS	REVISED -
PLOT SCALE =	DRAWN - PG, EN	REVISED -
PLOT DATE =	CHECKED - MI	REVISED -

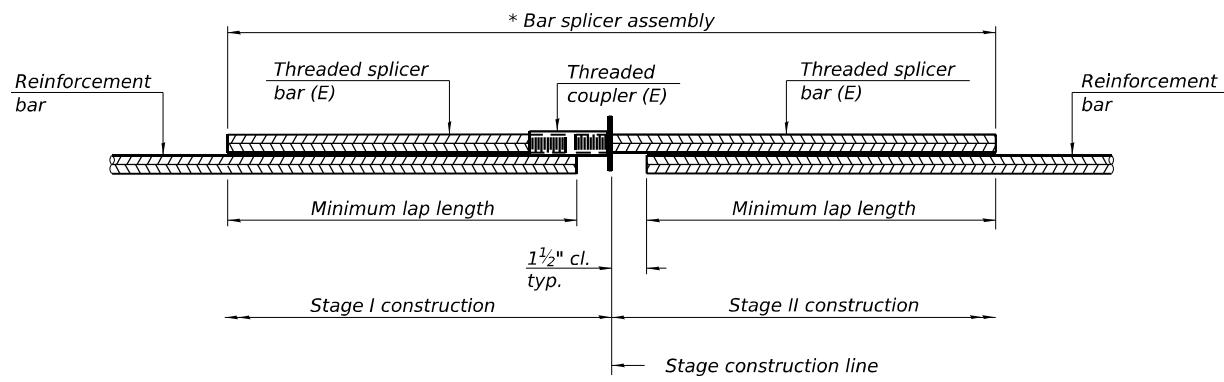
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EB PIER 2 SECTIONS AND DETAILS
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)**

SHEET SA-86 OF SA-98 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	619
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\w\transystems-pw\benley.com\transystems-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Structures\0998312_0998313-MI-04-085-Bar Splicer Assembly Details.dgn
 10/9/2023 3:29:58 PM

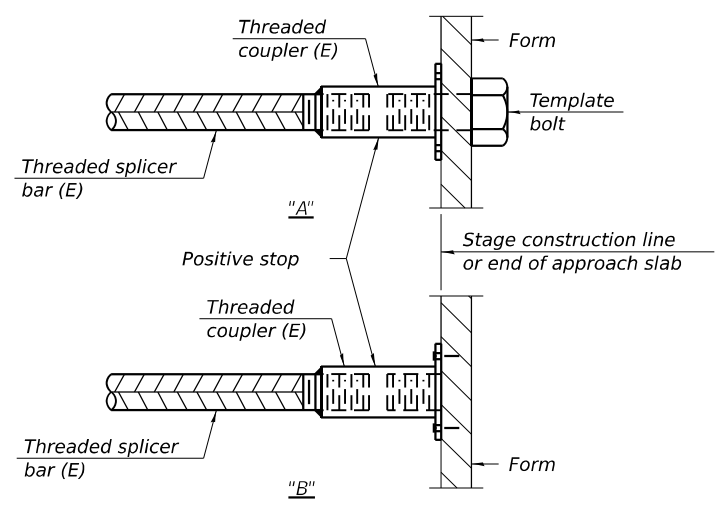


STANDARD BAR SPLICER ASSEMBLY PLAN

Only bar splicer assemblies as presented on the approved QPL list may be used.

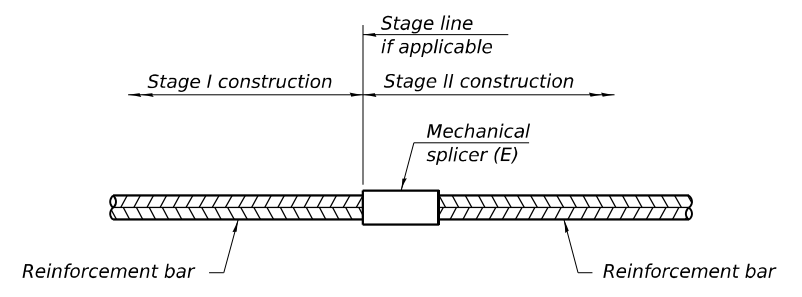
Threaded splicer bar length = min. lap length + 1 1/2" + thread length

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



INSTALLATION AND SETTING METHODS

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



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

S.N. 099-8312 (EB)

Location	Bar Size	No. assemblies	Minimum Lap Length
Superstructure			
Deck Plan	#5	1152	3'-6"
Diaphragm Abuts.	#4	4	2'-7"
Diaphragm Abuts.	#6	26	3'-7"
Diaphragms Piers	#6	16	3'-7"
E. Approach Slab	#5	72	3'-6"
W. Approach Slab	#5	72	3'-6"
Substructure			
E. Abutment	#4	2	2'-7"
E. Abutment	#5	8	3'-2"
E. Abutment	#7	12	5'-6"
W. Abutment	#4	2	2'-7"
W. Abutment	#5	8	3'-2"
W. Abutment	#7	12	5'-6"
Pier 1	#5	172	3'-2"
Pier 1	#6	6	3'-10"
Pier 1	#8	12	6'-4"
Pier 2	#5	172	3'-2"
Pier 2	#6	6	3'-10"
Pier 2	#8	12	6'-4"

S.N. 099-8313 (WB)

Location	Bar Size	No. assemblies	Minimum Lap Length
Superstructure			
Deck Plan	#5	1152	3'-6"
Diaphragm Abuts.	#4	4	2'-7"
Diaphragm Abuts.	#6	26	3'-7"
Diaphragms Piers	#6	20	3'-7"
E. Approach Slab	#5	72	3'-6"
W. Approach Slab	#5	72	3'-6"
Substructure			
E. Abutment	#4	2	2'-7"
E. Abutment	#5	8	3'-2"
E. Abutment	#7	12	5'-6"
W. Abutment	#4	2	2'-7"
W. Abutment	#5	8	3'-2"
W. Abutment	#7	12	5'-6"
Pier 1	#5	172	3'-2"
Pier 1	#6	6	3'-10"
Pier 1	#8	12	6'-4"
Pier 2	#5	172	3'-2"
Pier 2	#6	6	3'-10"
Pier 2	#8	12	6'-4"

NOTES:

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

BSD-1

2-1-2023



USER NAME =	DESIGNED - PG, EN, JMI	REVISED -
PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE =	DRAWN - PG, EN, JMI	REVISED -
	CHECKED - MI	REVISED -

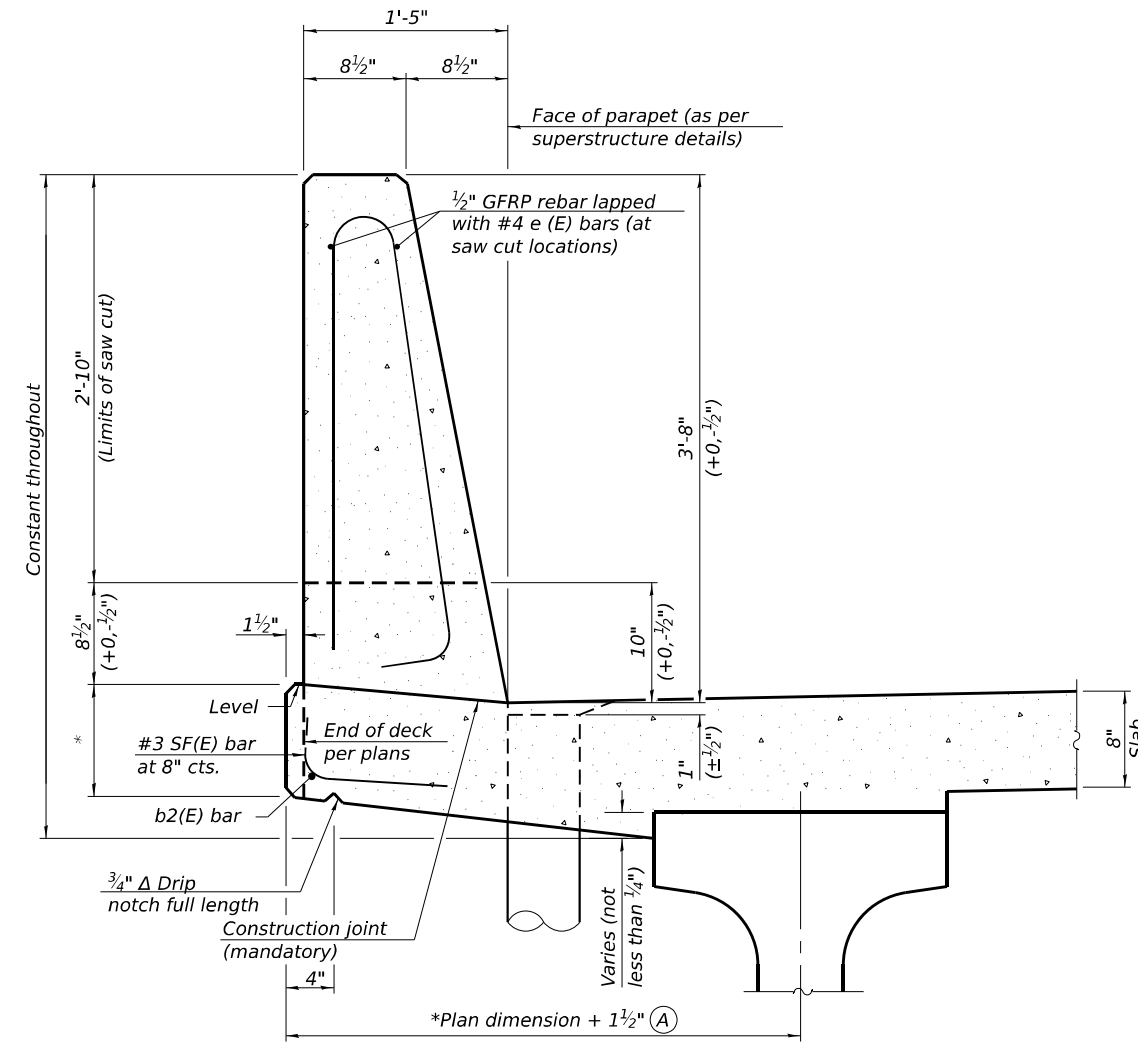
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY DETAILS
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)

SHEET SA-88 OF SA-98 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	621
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

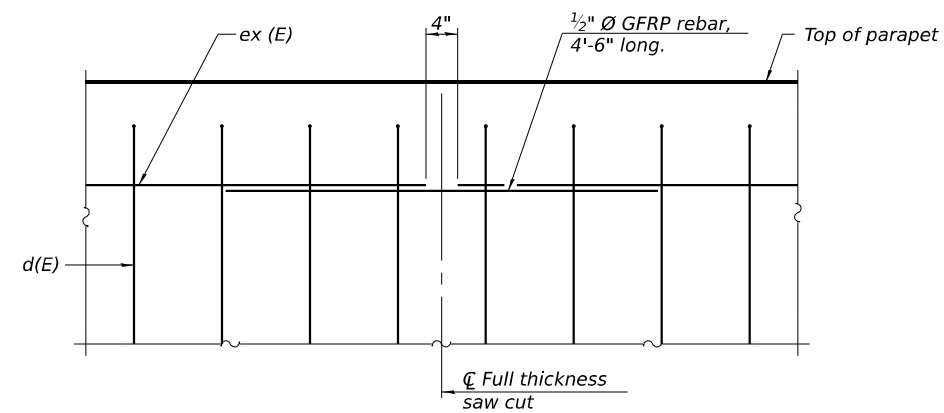
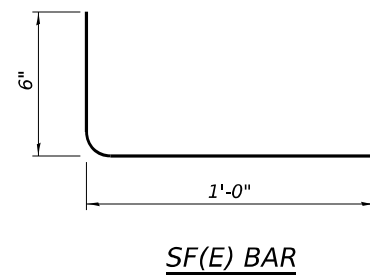
MODEL: Default
 FILE NAME: p:\projects\transyscorp-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\CAD\ML-04_62R28\04-Sheets\04-Structures\0998312_0998313-ML-04-086-Parapet_Slip Forming.dgn



Notes:
 All dimensions shall remain the same as shown on superstructure details, except dimension A which is to be revised as shown. Additional concrete needed to revise dimension A = 0.00348 cu. yds./ft. for 44" parapets.
 Place full depth aluminum sheets as shown on superstructure details.
 Replace all cork joint filler locations with a full thickness saw cut.
 See Note 2 on Sheet SA-03 for slipforming restrictions.

*See Superstructure Details.

**44" CONSTANT-SLOPE
 PARAPET SECTION**
 (Showing dimensions, d(E), and 1/2" Ø GFRP rebar)



USER NAME =	DESIGNED - DEO	REVISIONS -
	CHECKED - MI	REVISIONS -
PLOT SCALE =	DRAWN - DEO	REVISIONS -
PLOT DATE =	CHECKED - MI	REVISIONS -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CONCRETE PARAPET SLIPFORMING OPTION
 STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)

SHEET SA-89 OF SA-98 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	622
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	



BORING LOG DpR-BSB-01

wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

WEI Job No.: 255-39-01

Client: **Stantec**
Project: **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 567.33 ft
North: 1755313.68 ft
East: 1017504.81 ft
Station: 316+95.61
Offset: 57.9 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
566.3	12.5-inch thick ASPHALT --PAVEMENT--								Loose to very dense, brown Gravelly SANDY LOAM; saturated						
564.3	Medium dense, brown SANDY GRAVEL; damp --AGGREGATE BASE--	1	X	1	6 8 3	NP	6		--RDR 2-3--	9	X	9	4 4 7	NP	15
558.1	Stiff to very stiff, gray SILTY CLAY to SILTY CLAY LOAM, trace to some gravel; damp --FILL-- --RDR 2--	5	X	2	7 4 3	2.50 P	18		--L _L (%)=NP, P _L (%)=NP-- --%Gravel=49.7-- --%Sand=32.3-- --%Silt=16.8-- --%Clay=1.2-- --A-1-b (0)--	10	X	10	6 7 7	NP	12
556.8	--L _L (%)=31, P _L (%)=15-- --%Gravel=16.3-- --%Sand=11.1-- --%Silt=49.1-- --%Clay=23.5-- --A-6 (9)--	3	X	3	3 3 3	1.89 B	21		--3-inch thick silty loam lens--	11	X	11	8 8 8	NP	10
551.8	Brown SILTY LOAM, trace gravel; damp --FILL--	10	X	4	3 5 5	3.85 B	18	540.1	Very dense, dark brownish gray Weathered SHALE --Weathered BEDROCK--	50/3"	X	12	50/3"	NP	9
548.1	Stiff to very stiff, brown and gray SILTY CLAY LOAM, trace gravel; damp --FILL--	5	X	5	3 4 7	1.89 B	16	538.3	Medium strong, dark brownish gray, poor quality, MUDSTONE & DOLOSTONE; Closely spaced, slightly weathered, horizontal and vertical joints, with 0 inch opening, slicken to slightly rough walls, and >0.2 inch thick clay infill. --RUN 1: 29.0 to 39.0 feet-- --Recovery: 100%-- --RQD: 29%--	30	X	13	50/2"	CORE	
548.1	Stiff to very stiff, brown and gray SILTY CLAY LOAM, trace gravel; damp --FILL--	15	X	6	3 6 6	3.28 B	13	533.3	Strong, light greenish gray, very poor quality, DOLOSTONE; Closely spaced, slightly weathered, horizontal, oblique, and vertical joints, with >0.2 inch opening, rough walls, and >0.2 inch thick sand and silt infill.	35	X	13			
548.1	Medium dense, brown and gray SILTY LOAM, trace gravel; damp --FILL-- --L _L (%)=25, P _L (%)=14-- --%Gravel=4.3-- --%Sand=18.2-- --%Silt=59.0-- --%Clay=18.6-- --A-6 (6)--	7	X	7	4 7 7	NP	15		--RUN 2: 39.0 to 44.0 feet-- --Recovery: 100%--	40	X	13			
548.1	backfilled upon completion	20		8	2 3 3	NR									

GENERAL NOTES

Begin Drilling: 08-04-2021 Complete Drilling: 08-04-2021
 Drilling Contractor: Wang Testing Services Drill Rig: 17B57T [91%]
 Driller: NC&AG Logger: E. Yim Checked by: C. Marin
 Drilling Method: 2.25" ID HSA to 29 ft; mud rotary thereafter; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: 21.00 ft
 At Completion of Drilling: 23.00 ft
 Time After Drilling: NA
 Depth to Water: NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



BORING LOG DpR-BSB-01

wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

WEI Job No.: 255-39-01

Client: **Stantec**
Project: **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 567.33 ft
North: 1755313.68 ft
East: 1017504.81 ft
Station: 316+95.61
Offset: 57.9 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
566.3	--RQD: 0%--														
564.3		14	X	14											
563.3	Boring terminated at 44.00 ft	45													
558.1		50													
556.8		55													
551.8		60													

GENERAL NOTES

Begin Drilling: 08-04-2021 Complete Drilling: 08-04-2021
 Drilling Contractor: Wang Testing Services Drill Rig: 17B57T [91%]
 Driller: NC&AG Logger: E. Yim Checked by: C. Marin
 Drilling Method: 2.25" ID HSA to 29 ft; mud rotary thereafter; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: 21.00 ft
 At Completion of Drilling: 23.00 ft
 Time After Drilling: NA
 Depth to Water: NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

MODEL: Default
FILE NAME: p:\transystems-pw\hosted\Documents\Projects_2018\CH401401180022\01-Stantec\CAD\ML-04_62R28\04-Sheets\04-Structures\0998313-ML-04-087-Boring Logs (Sheet 1 of 9).dgn
WANGENG 2553901.GPJ WANGENG.GDT 3/28/22



USER NAME =	DESIGNED - JMI	REVISD -
PLOT SCALE =	CHECKED - MI	REVISD -
PLOT DATE =	DRAWN - JMI	REVISD -
	CHECKED - MI	REVISD -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS (SHEET 1 OF 9)
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	623
ILLINOIS			CONTRACT NO. 62R28	



BORING LOG DpR-BSB-02

wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 567.08 ft
North: 1755187.36 ft
East: 1017508.96 ft
Station: 316+97.67
Offset: 68.4 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
565.6	18-inch thick ASPHALT --PAVEMENT--							546.6	Medium stiff, gray SILTY CLAY LOAM; moist						
565.1	Brown SANDY GRAVEL; damp --AGGREGATE BASE--	1	X	7	8	NP	10	545.3	Loose to medium dense, gray and brown SANDY GRAVEL; saturated --RDR 2-3--	9	X	2	0.90	28	
563.8	Medium dense, brown, gravelly SANDY LOAM; damp --FILL--	3	X	4	5					10	X	13	NP	13	
562.3	Very stiff, brown and gray SILTY CLAY, little gravel; damp --FILL--	4	X	3	4	3.85	21	541.6	Dense, gray SILTY LOAM, trace gravel; damp to moist --RDR 3--	11	X	11	NP	14	
561.6	Brown and gray SANDY GRAVEL; saturated --FILL--	5	X	2	3	4.18	15	539.1	Very dense, greenish gray, highly weathered SHALE; damp --Weathered BEDROCK-- --RDR 2-3--	12	X	22	NP	10	
	Very stiff to hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace to little gravel; damp --FILL--	6	X	4	4	4.35	17	535.1	Strong, light brown and gray, poor quality, vuggy DOLOSTONE with occasional shale partings; Closely spaced, highly weathered, horizontal and oblique joints, with 0.05 - > 0.2 inch opening, rough walls, and <0.2 inch thick greenish gray clayey and silty infill. --RUN 1: 32.0 to 41.0 feet-- --Recovery: 100%-- --RQD: 40%--	13	X	13			
	--RDR 2--	10	X	4	4	4.35	17			14	X	4	NP	10	
	--L _c (%)=38, P _c (%)=15-- --%Gravel=2.0-- --%Sand=13.2-- --%Silt=55.5-- --%Clay=29.3-- --A-6 (19)--	15	X	4	5	3.69	28			15	X	3			
	--gray, black and brown--	15	X	4	4	2.79	14			16	X	4			
549.1	Loose, gray SILTY LOAM; damp --RDR 2--	20	X	5	7	4.67	19			17	X	5			
		20	X	3	3	NP	32			18	X	9			

GENERAL NOTES

Begin Drilling **08-01-2021** Complete Drilling **08-01-2021**
 Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
 Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
 Drilling Method **.2.25" ID HSA to 10 ft; mud rotary thereafter; boring flushed and left open for 24-hr WL reading; backfilled upon reading**

WATER LEVEL DATA

While Drilling **3.25 ft**
 At Completion of Drilling **mud at 8 feet**
 Time After Drilling **24 hours**
 Depth to Water **11.00 ft**
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



BORING LOG DpR-BSB-02

wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

WEI Job No.: 255-39-01

Client **Stantec**
Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location **Will County, Illinois**

Datum: NAVD 88
Elevation: 567.08 ft
North: 1755187.36 ft
East: 1017508.96 ft
Station: 316+97.67
Offset: 68.4 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	--RUN 2: 41.0 to 47.0 feet-- --Recovery: 100%-- --RQD: 25%--							520.1	Boring terminated at 47.00 ft						

GENERAL NOTES

Begin Drilling **08-01-2021** Complete Drilling **08-01-2021**
 Drilling Contractor **Wang Testing Services** Drill Rig **20D50T [80%]**
 Driller **R&R** Logger **M. Sadowski** Checked by **C. Marin**
 Drilling Method **.2.25" ID HSA to 10 ft; mud rotary thereafter; boring flushed and left open for 24-hr WL reading; backfilled upon reading**

WATER LEVEL DATA

While Drilling **3.25 ft**
 At Completion of Drilling **mud at 8 feet**
 Time After Drilling **24 hours**
 Depth to Water **11.00 ft**
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

MODEL: Default
FILE NAME: p:\transystems-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Stantec\CAD\ML-04_62R28\04-Sheets\04-Structures\0998313-ML-04-088-Boring Logs (Sheet 2 of 9).dgn
WANGENGINC_2553901.GPJ WANGENG.GDT 3/28/22



USER NAME =	DESIGNED - JMI	REVISOR -
PLOT SCALE =	CHECKED - MI	REVISION -
PLOT DATE =	DRAWN - JMI	REVISION -
	CHECKED - MI	REVISION -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS (SHEET 2 OF 9)
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	624
CONTRACT NO. 62R28			ILLINOIS FED. AID PROJECT	



BORING LOG DpR-BSB-03

wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

WEI Job No.: 255-39-01

Client: **Stantec**
Project: **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 567.22 ft
North: 1755285.12 ft
East: 1017613.89 ft
Station: 318+04.20
Offset: 27.6 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
566.5	9-inch thick CONCRETE --bridge deck pavement--							546.2	Gray SANDY GRAVEL; saturated			3			
	--Drilled from the bridge deck--							545.7	Gray CRUSHED CONCRETE --FILL--			1	3	NP	16
								545.0	Loose to dense, gray SANDY GRAVEL; saturated			3	21	NP	16
								543.2	--RDR 2-3--			2	26	NP	16
									Dense to very dense, gray weathered SHALE bedrock; wet to saturated			11	13		
									--RDR 2-3--			3	50/31	NP	11
								539.2	Strong, dark gray and black, very poor quality dolomitic SHALE and MUDSTONE; Very closely to closely spaced, moderately to slightly weathered, horizontal, oblique, and vertical joints, with <0.05 inch opening, slightly rough walls, and <0.2 inch thick clay infill.			4			
								536.2	--RUN 1: 28.0 to 32.75 feet-- --Recovery: 95%-- --RQD: 7%-- --Q _v at 30.0 feet= 4,147 psi			5			
									Strong, light gray, very poor quality, DOLOSTONE; Very closely to closely spaced, moderately to slightly weathered, horizontal, oblique, and vertical joints, with <0.05 inch opening, slightly rough walls, and <0.2 inch thick light greenish clayey and silty infill.			5			
									--RUN 2: 32.75 to 43.0 feet-- --Recovery: 100%-- --RQD: 12%--						
547.7	--River water surface--	20													

GENERAL NOTES

Begin Drilling: 08-17-2021 Complete Drilling: 08-17-2021
 Drilling Contractor: Wang Testing Services Drill Rig: 20D50T [80%]
 Driller: R&N Logger: M. Sadowski Checked by: C. Marin
 Drilling Method: 2.25" ID HSA to 25 ft; mud rotary thereafter; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: 19.50 ft
 At Completion of Drilling: 19.50 ft
 Time After Drilling: NA
 Depth to Water: NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



BORING LOG DpR-BSB-03

wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

WEI Job No.: 255-39-01

Client: **Stantec**
Project: **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 567.22 ft
North: 1755285.12 ft
East: 1017613.89 ft
Station: 318+04.20
Offset: 27.6 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
524.2	Boring terminated at 43.00 ft														

GENERAL NOTES

Begin Drilling: 08-17-2021 Complete Drilling: 08-17-2021
 Drilling Contractor: Wang Testing Services Drill Rig: 20D50T [80%]
 Driller: R&N Logger: M. Sadowski Checked by: C. Marin
 Drilling Method: 2.25" ID HSA to 25 ft; mud rotary thereafter; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: 19.50 ft
 At Completion of Drilling: 19.50 ft
 Time After Drilling: NA
 Depth to Water: NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

MODEL: Default
FILE NAME: p:\transystems-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Stantec\CAD\ML-04_62R28\04-Sheets\04-Structures\0998312_0998313-ML-04-089-Boring Logs (Sheet 3 of 9).dgn
WANGENGINC_2553901.GPJ WANGENG.GDT 3/28/22



USER NAME =	DESIGNED - JMI	REVISED -
	CHECKED - MI	REVISED -
PLOT SCALE =	DRAWN - JMI	REVISED -
PLOT DATE =	CHECKED - MI	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS (SHEET 3 OF 9)
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)

SHEET SA-92 OF SA-98 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	625
ILLINOIS			CONTRACT NO. 62R28	



BORING LOG DpR-BSB-05

wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

WEI Job No.: 255-39-01

Client: **Stantec**
Project: **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 566.51 ft
North: 1755318.09 ft
East: 1017743.22 ft
Station: 319+34.06
Offset: 58.4 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
565.8	9-inch thick CONCRETE --bridge deck pavement--														
	--Drilled from the bridge deck--														
544.0	Medium dense, gray and brown Gravelly SANDY LOAM; saturated			1	22 15 9 3	NP	12								
	--RDR 3-- --L _L (%)=NP, P _L (%)=NP-- --%Gravel=39.8-- --%Sand=37.8-- --%Silt=19.5-- --%Clay=2.8-- --A-1-b (0)--														
542.3	Very dense, gray, weathered SHALE; damp to moist			2	7 7	NP	13								
	--Weathered BEDROCK-- --RDR 3-4-- --slow drilling--														
538.0	Strong, dark gray, poor quality, dolomitic SAHALE and MUDSTONE; moderately weathered, horizontal joints, with <0.05 inch opening, slightly rough walls, and no infill.			3	50/5"	NP	9								
	--RUN 1: 28.5 to 36.5 feet-- --Recovery: 100%-- --RQD: 29%-- --Q _u at 31.0 feet= 8,721 psi														
535.1	Strong, light gray, very poor to poor quality, vuggy DOLOSTONE; Closely spaced, moderately to highly weathered, horizontal, oblique, and vertical joints, with 0.05 - 0.2 inch opening, slightly rough walls, and >0.2 inch thick light greenish clayey and silty infill.			4											
	--RUN 2: 36.5 to 42.5 feet-- --Recovery: 92%-- --RQD: 22%--														
548.0	--River water surface--			5											

GENERAL NOTES

Begin Drilling: 08-04-2021 Complete Drilling: 08-04-2021
 Drilling Contractor: Wang Testing Services Drill Rig: 20D50T [80%]
 Driller: R&R Logger: M. Sadowski Checked by: C. Marin
 Drilling Method: 2.25" ID HSA to 23.5 ft; mud rotary thereafter; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: 18.50 ft
 At Completion of Drilling: 18.50 ft
 Time After Drilling: NA
 Depth to Water: NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



BORING LOG DpR-BSB-05

wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

WEI Job No.: 255-39-01

Client: **Stantec**
Project: **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 566.51 ft
North: 1755318.09 ft
East: 1017743.22 ft
Station: 319+34.06
Offset: 58.4 LT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
524.0	Boring terminated at 42.50 ft														

GENERAL NOTES

Begin Drilling: 08-04-2021 Complete Drilling: 08-04-2021
 Drilling Contractor: Wang Testing Services Drill Rig: 20D50T [80%]
 Driller: R&R Logger: M. Sadowski Checked by: C. Marin
 Drilling Method: 2.25" ID HSA to 23.5 ft; mud rotary thereafter; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: 18.50 ft
 At Completion of Drilling: 18.50 ft
 Time After Drilling: NA
 Depth to Water: NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

MODEL: Default
FILE NAME: p:\transystems-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Stantec\CAD\ML-04_62R28\04-Sheets\04-Structures\0998313-ML-04-091-Boring Logs (Sheet 5 of 9).dgn
WANGENG 2553901.GPJ WANGENG.GDT 3/28/22



USER NAME =	DESIGNED - JMI	REVISED -
	CHECKED - MI	REVISED -
PLOT SCALE =	DRAWN - JMI	REVISED -
PLOT DATE =	CHECKED - MI	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS (SHEET 5 OF 9)
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)

SHEET SA-94 OF SA-98 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	627
ILLINOIS			CONTRACT NO. 62R28	



BORING LOG DpR-BSB-06

wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

WEI Job No.: 255-39-01

Client: **Stantec**
Project: **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 566.55 ft
North: 1755224.17 ft
East: 1017752.61 ft
Station: 319+41.90
Offset: 35.7 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
565.8	9-inch thick CONCRETE --bridge deck pavement--														
544.1	Stiff (1.0P), gray SILTY CLAY LOAM, little gravel	10		1				543.7	Very dense, gray, fine to coarse GRAVEL; saturated	26					
542.3	Gray weathered SHALE fragments	25		2				541.0	--RDR 3--	5					
540.6	Very dense, gray SANDY GRAVEL; saturated	30		3	50/5"			538.1	Strong, dark gray, fair quality, dolomitic SHALE and MUDSTONE; Closely spaced, moderately weathered, horizontal joints, with 0-0.2 inch opening, slightly rough walls, and no infill.	30					
	Very dense, gray, weathered SHALE bedrock; moist	35			60/4"			536.5	Strong, light bluish gray, poor to fair quality, vuggy DOLOSTONE, with occasional shale partings; Closely spaced, moderately weathered, horizontal and oblique joints, with 0.05 - > 0.2 inch opening, slightly rough walls, and >0.2 inch thick light greenish clayey and silty infill.	35					
547.1	River water surface	20							--RUN 1: 28.5 to 38.5 feet-- --Recovery: 100%-- --RQD: 52%-- --Q _u at 29.0 feet= 3,417 psi						
									--RUN 2: 38.5 to 43.5 feet-- --Recovery: 100%-- --RQD: 33%--						

GENERAL NOTES

Begin Drilling: 08-03-2021 Complete Drilling: 08-03-2021
 Drilling Contractor: Wang Testing Services Drill Rig: 20D50T [80%]
 Driller: R&R Logger: M. Sadowski Checked by: C. Marin
 Drilling Method: 2.25" ID HSA to 26 ft; mud rotary thereafter; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: 19.50 ft
 At Completion of Drilling: 19.50 ft
 Time After Drilling: NA
 Depth to Water: NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



BORING LOG DpR-BSB-06

wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

WEI Job No.: 255-39-01

Client: **Stantec**
Project: **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 566.55 ft
North: 1755224.17 ft
East: 1017752.61 ft
Station: 319+41.90
Offset: 35.7 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
523.1	Boring terminated at 43.50 ft	45													

GENERAL NOTES

Begin Drilling: 08-03-2021 Complete Drilling: 08-03-2021
 Drilling Contractor: Wang Testing Services Drill Rig: 20D50T [80%]
 Driller: R&R Logger: M. Sadowski Checked by: C. Marin
 Drilling Method: 2.25" ID HSA to 26 ft; mud rotary thereafter; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: 19.50 ft
 At Completion of Drilling: 19.50 ft
 Time After Drilling: NA
 Depth to Water: NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

MODEL: Default
FILE NAME: p:\transystems-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Stantec\CAD\ML-04_62R28\04-Sheets\04-Structures\0998312_0998313-ML-04-092-Boring Logs (Sheet 6 of 9).dgn
WANGENGINC_2553901.GPJ WANGENG.GDT 3/28/22



USER NAME =	DESIGNED - JMI	REVISED -
PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE =	DRAWN - JMI	REVISED -
	CHECKED - MI	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS (SHEET 6 OF 9)
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)

SHEET SA-95 OF SA-98 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	628
ILLINOIS			CONTRACT NO. 62R28	



wangeng@wangeng.com
 1145 N Main Street
 Lombard, IL 60148
 Telephone: (630) 953-9928
 Fax: (630) 953-9938

BORING LOG DpR-BSB-07

WEI Job No.: 255-39-01

Client **Stantec**
 Project **I-80 Reconstruction, Ridge Road to Houbolt Road**
 Location **Will County, Illinois**

Datum: NAVD 88
 Elevation: 565.84 ft
 North: 1755319.46 ft
 East: 1017855.32 ft
 Station: 320+46.17
 Offset: 57.9 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	564.7	13.5-inch thick ASPHALT --PAVEMENT--															
	564.4	Brown SANDY GRAVEL; damp --AGGREGATE BASE--			1	5 4 4	NP	15									
	562.8	Loose, brown SILTY LOAM, trace gravel; damp --FILL--															
	561.8	Very stiff, brown and black SILTY CLAY LOAM, trace gravel; damp			2	11 6	2.00 P	14									
	560.8	Very stiff, brown Gravelly CLAY LOAM; moist to wet --RDR 4-- --L _L (%)=29, P _L (%)=15-- --%Gravel=17.9-- --%Sand=25.7-- --%Silt=38.6-- --%Clay=17.7-- --A 6 (5)-- --hard drilling from 5.0 feet--			5	50/4"											
		Very dense, brown and gray, weathered SHALE; damp --Weathered BEDROCK-- --RDR 4--			3	50/5"	NP	4									
					4	50/4"	NP	5									
					5	50/1.5'	NP										
	552.8	Medium strong, dark gray, fair to good quality, dolomitic SHALE and MUDSTONE; massive, slightly weathered, horizontal and vertical joints, top 3 feet with brownish, slightly weathered joints, with 0 inch opening, slicken to slightly rough walls, and no infill. --RUN 1: 13.0 to 23.0 feet-- --Recovery: 100%-- --RQD: 62%-- --Q _u at 14.0 feet= 7,947 psi --Q _u at 14.5 feet= 8,058 psi															
					6												
										537.8	Boring terminated at 28.00 ft						

WANGENGINC_2553901.GPJ_WANGENG.GDT_3/28/22

GENERAL NOTES

Begin Drilling **08-04-2021** Complete Drilling **08-04-2021**
 Drilling Contractor **Wang Testing Services** Drill Rig **17B57T [91%]**
 Driller **NC&AG** Logger **E. Yim** Checked by **C. Marin**
 Drilling Method **2.25" ID HSA to 13 ft; mud rotary thereafter; boring backfilled upon completion**

WATER LEVEL DATA

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS (SHEET 7 OF 9)
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)

SHEET SA-96 OF SA-98 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	629
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
FILE NAME: pw://transsystems-pw.bentley.com/transsystems-pw1-hosted/Projects/2018/CH401/401180022/01-Structures/0998312_0998313-ML-04-093-Boring Logs (Sheet 7 of 9).dgn





BORING LOG DpR-BSB-08

wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

WEI Job No.: 255-39-01

Client: **Stantec**
Project: **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 565.87 ft
North: 1755198.67 ft
East: 1017874.15 ft
Station: 320+62.99
Offset: 63.2 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
564.6	15-inch thick ASPHALT --PAVEMENT--								--rig chatter; slow advancement--						
563.9	Brown, silty SANDY GRAVEL; damp --AGGREGATE BASE--	1	X	1	4 3 6	3.77 B	15		Very dense, gray, moderately weathered SHALE --BEDROCK-- --RDR 4--	9	X	9	100/4	NP	4
560.4	Very stiff, brown and gray SILTY CLAY LOAM to SILTY CLAY, trace to little gravel; damp --FILL--	2	X	2	8 4 8	2.25 P	16		--slow advancement--	10	X	10	100/5	NP	4
559.1	Gray SILTY LOAM, trace gravel; damp --Qu: 1.00 P--	3	X	3	4 2 3	NP	15			11	X	11	100/5.5	NP	4
555.4	Medium stiff to stiff, brown and gray CLAY LOAM to SILTY LOAM, trace gravel; moist --RDR 2-- --L _c (%)=48, P _c (%)=17-- --%Gravel=13.2-- --%Sand=26.8-- --%Silt=43.6-- --%Clay=16.4-- --A-7-6 (30)--	4	X	4	2 2 3	0.82 B	21			12	X	12	100/4	NP	3
552.9	Stiff, dark gray SILTY LOAM; moist --RDR 2--	5	X	5	2 2 2	1.00 P	31		Medium strong, dark gray, fair to good quality, dolomitic SHALE and MUDSTONE; slightly weathered, horizontal joints, with 0 inch opening, slicken to slightly rough walls, and no infill.	13	X	13			1
550.4	Soft, brown and gray SILTY CLAY, some gravel; wet --RDR 2--	6	X	6	2 3 3	0.49 B	17		Strong, light bluish gray, very poor quality, highly fractured, vuggy DOLOSTONE; Very closely to closely spaced, slightly weathered, horizontal, oblique, and vertical joints, with > 0.5 inch opening, slightly rough to rough walls, and >0.5 inch thick light greenish clayey and silty infill.	14	X	14			
545.9	--rig chatter; moderate advancement-- Medium dense to very dense, gray, highly weathered SHALE --Weathered BEDROCK-- --RDR 3-4--	7	X	7	3 7 18	NP	12		--RUN 1: 31.0 to 41.0 feet-- --Recovery: 69%-- --RQD: 8%--	15	X	15			
		8	X	8	400/5	NP	5								

GENERAL NOTES

Begin Drilling: 08-02-2021 Complete Drilling: 08-02-2021
 Drilling Contractor: Wang Testing Services Drill Rig: 17B57T [91%]
 Driller: NC&AG Logger: E. Yim Checked by: C. Marin
 Drilling Method: 2.25" ID HSA to 31 ft; mud rotary thereafter; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: 20.00 ft
 At Completion of Drilling: DRY
 Time After Drilling: NA
 Depth to Water: NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.



BORING LOG DpR-BSB-08

wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

WEI Job No.: 255-39-01

Client: **Stantec**
Project: **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 565.87 ft
North: 1755198.67 ft
East: 1017874.15 ft
Station: 320+62.99
Offset: 63.2 RT

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
564.6	15-inch thick ASPHALT --PAVEMENT--								--rig chatter; slow advancement--						
563.9	Brown, silty SANDY GRAVEL; damp --AGGREGATE BASE--	1	X	1	4 3 6	3.77 B	15		Very dense, gray, moderately weathered SHALE --BEDROCK-- --RDR 4--	9	X	9	100/4	NP	4
560.4	Very stiff, brown and gray SILTY CLAY LOAM to SILTY CLAY, trace to little gravel; damp --FILL--	2	X	2	8 4 8	2.25 P	16		--slow advancement--	10	X	10	100/5	NP	4
559.1	Gray SILTY LOAM, trace gravel; damp --Qu: 1.00 P--	3	X	3	4 2 3	NP	15			11	X	11	100/5.5	NP	4
555.4	Medium stiff to stiff, brown and gray CLAY LOAM to SILTY LOAM, trace gravel; moist --RDR 2-- --L _c (%)=48, P _c (%)=17-- --%Gravel=13.2-- --%Sand=26.8-- --%Silt=43.6-- --%Clay=16.4-- --A-7-6 (30)--	4	X	4	2 2 3	0.82 B	21			12	X	12	100/4	NP	3
552.9	Stiff, dark gray SILTY LOAM; moist --RDR 2--	5	X	5	2 2 2	1.00 P	31		Medium strong, dark gray, fair to good quality, dolomitic SHALE and MUDSTONE; slightly weathered, horizontal joints, with 0 inch opening, slicken to slightly rough walls, and no infill.	13	X	13			1
550.4	Soft, brown and gray SILTY CLAY, some gravel; wet --RDR 2--	6	X	6	2 3 3	0.49 B	17		Strong, light bluish gray, very poor quality, highly fractured, vuggy DOLOSTONE; Very closely to closely spaced, slightly weathered, horizontal, oblique, and vertical joints, with > 0.5 inch opening, slightly rough to rough walls, and >0.5 inch thick light greenish clayey and silty infill.	14	X	14			
545.9	--rig chatter; moderate advancement-- Medium dense to very dense, gray, highly weathered SHALE --Weathered BEDROCK-- --RDR 3-4--	7	X	7	3 7 18	NP	12		--RUN 1: 31.0 to 41.0 feet-- --Recovery: 69%-- --RQD: 8%--	15	X	15			
		8	X	8	400/5	NP	5								

GENERAL NOTES

Begin Drilling: 08-02-2021 Complete Drilling: 08-02-2021
 Drilling Contractor: Wang Testing Services Drill Rig: 17B57T [91%]
 Driller: NC&AG Logger: E. Yim Checked by: C. Marin
 Drilling Method: 2.25" ID HSA to 31 ft; mud rotary thereafter; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: 20.00 ft
 At Completion of Drilling: DRY
 Time After Drilling: NA
 Depth to Water: NA
 The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

MODEL: Default
FILE NAME: p:\transystems-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Stantec\CAD\ML-04_62R28\04-Sheets\04-Structures\0998312_0998313-ML-04-094-Boring Logs (Sheet 8 of 9).dgn



USER NAME =	DESIGNED - JMI	REVISIONS -
PLOT SCALE =	CHECKED - MI	REVISIONS -
PLOT DATE =	DRAWN - JMI	REVISIONS -
	CHECKED - MI	REVISIONS -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS (SHEET 8 OF 9)
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)

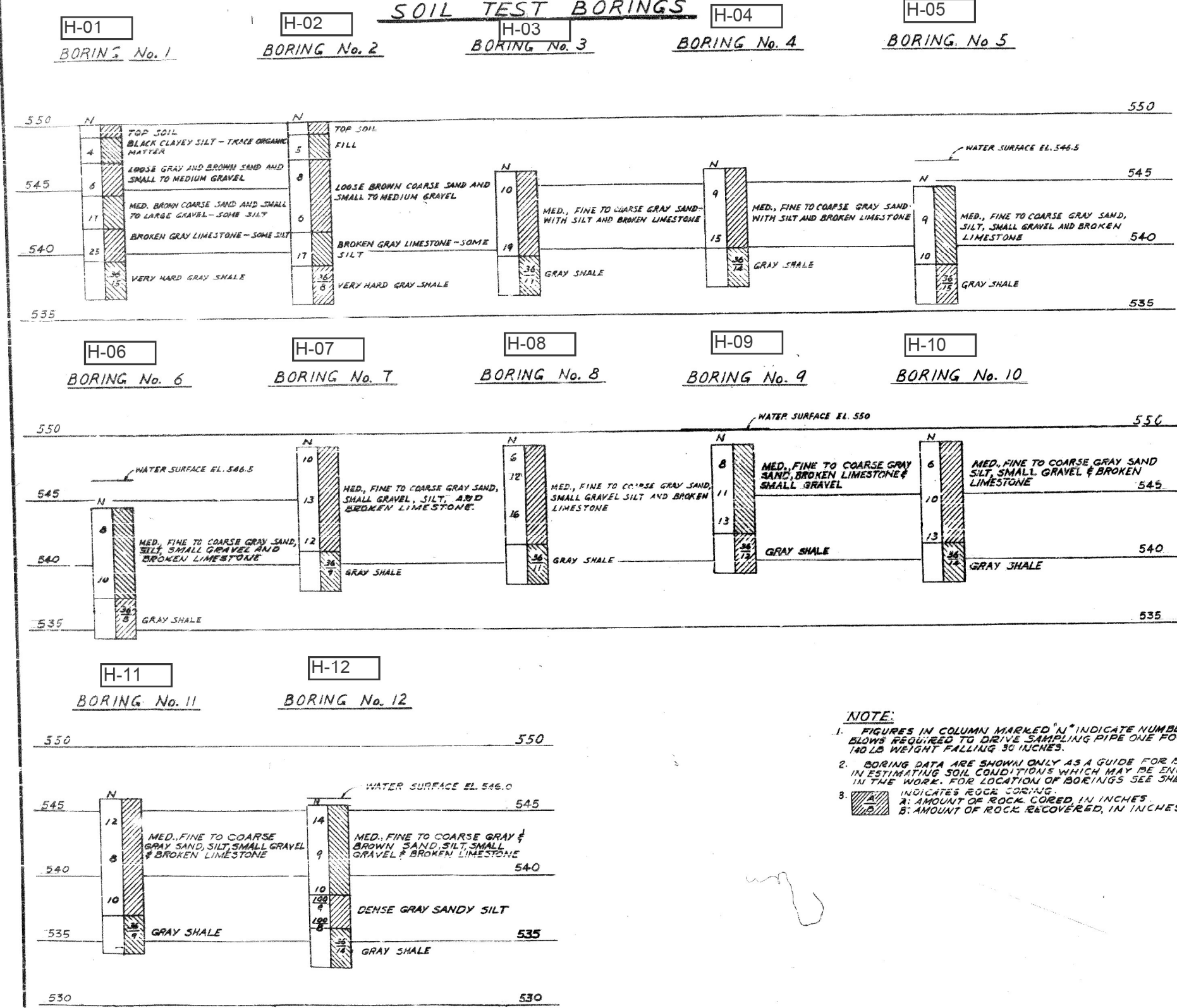
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	630
ILLINOIS			CONTRACT NO. 62R28	

SHEET SA-97 OF SA-98 SHEETS

FED. AID PROJECT

EXHIBIT	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
99-18	WILL	16	4	
TOTAL		TO STA		
PROJECT		PROJECT		

SOIL TEST BORINGS



NOTE:

- FIGURES IN COLUMN MARKED "N" INDICATE NUMBER OF BLOWS REQUIRED TO DRIVE SAMPLING PIPE ONE FOOT USING 140 LB WEIGHT FALLING 30 INCHES.
- BORING DATA ARE SHOWN ONLY AS A GUIDE FOR BIDDERS IN ESTIMATING SOIL CONDITIONS WHICH MAY BE ENCOUNTERED IN THE WORK. FOR LOCATION OF BORINGS SEE SHEET 2.
- INDICATES ROCK CORING.
A: AMOUNT OF ROCK CORED, IN INCHES.
B: AMOUNT OF ROCK RECOVERED, IN INCHES.

BORINGS
F.A.I. ROUTE 80
OVER
DU PAGE RIVER
F.A. PROJECT
F.A.I. ROUTE 80 SECTION 99-18
WILL COUNTY
STATION 1911+09.33

ALFRED STUBSON & ASSOCIATES CONSULTING ENGINEERS
10 SOUTH WASAEN AVENUE 612 CHICAGO, ILLINOIS

MODEL: Default
FILE NAME: p:\transystems-pw-bentley.com\transystems-pw-hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Structures\0998312_0998313-MI-04-095-Boring Logs (Sheet 9 of 9).dgn
10/9/2023 3:31:36 PM



USER NAME =	DESIGNED - JMI	REVISED -
PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE =	DRAWN - JMI	REVISED -
	CHECKED - MI	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS (SHEET 9 OF 9)
STRUCTURE NOS. 099-8312 (EB) & 099-8313 (WB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 21 STRUCTURE 7	WILL	1059	631
ILLINOIS			FED. AID PROJECT	

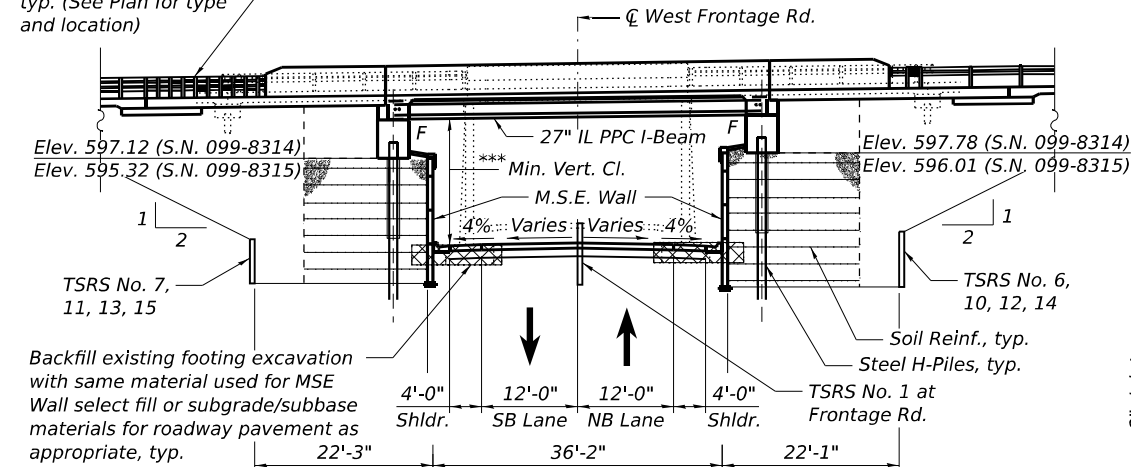
Benchmark: Set 2" CWA aluminum disc in northerly bridge parapet wall in westbound I-80 bridge over southwest Frontage Road, approximately 500'± west of mile marker 126 on north side of westbound I-80, Elevation 606.973.

Existing Structure: Exist. S.N.s 099-0042 (EB I-80) and 099-0043 (WB I-80) were originally constructed in 1960 as single-span structures carrying two lanes of eastbound I-80, two lanes of westbound I-80, and one lane of westbound Ramp A-6 traffic over West Frontage Road (F.A.I. Route I-80; Section 99-1; Contract No. 20086). In 2005, the existing eastbound bridge was widened to the south to accommodate the Ramp G roadway, and a new ramp structure was added to the north thereby removing the Ramp A-6 roadway from the westbound bridge cross-section (F.A.I. Route I-55; Section 99-1(K, BY & AC-B); Contract No. 80906). The bridges have overall lengths of 28'-0" (back-to-back abutments) and consist of minimum 18"-thick reinforced concrete slab superstructures with 24"-thick edge beams along the 1" longitudinal open joints. The S.N. 099-0042 out-to-out deck width varies from 67'-6 3/4" at west end to 69'-0 1/2" at east end, whereas the S.N. 099-0043 out-to-out deck width varies from ±47'-7 3/4" at west end to ±49'-10 3/8" at east end. The substructures consist of reinforced concrete abutments (restrained top and bottom) founded on soil. A small portion of the eastbound bridge abutments at the south end, as well as the adjacent reinforced concrete wingwalls, are founded on steel HP piles.

These structures will be removed and replaced. Traffic will be maintained utilizing staged construction.

Salvage: None.

Traffic Barrier Terminal, typ. (See Plan for type and location)



*** For locations of Min. Vert. Cl., see plan view.
 Final Min. Vert. Cl. to prop. W. Frontage Rd.:
 16'-2 1/2" S.N. 099-8314
 15'-4" S.N. 099-8315
 Interim Min. Vert. Cl. to temporary pavement W. Frontage Rd.:
 15'-5" S.N. 099-8314
 14'-3 1/2" S.N. 099-8315

ELEVATION
 (Looking North)

(Exist. steel piles at the southwest and southeast ends of exist. abutments/wingwalls not shown for clarity)

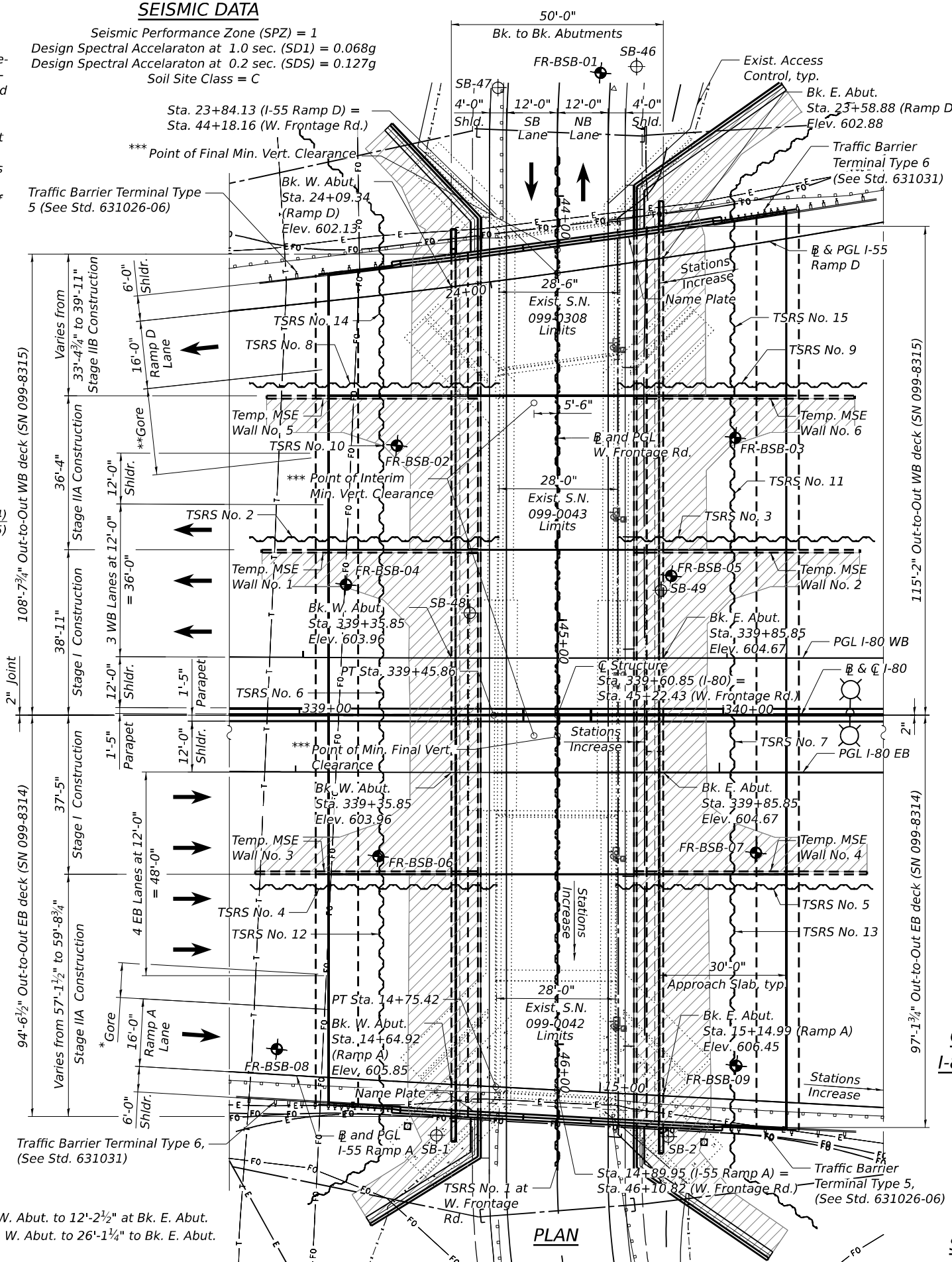
APPROVED
 For Structural Adequacy Only
 Engineer of Bridges & Structures



Signed Moussa A. Issa
 Dr. Moussa A. Issa, S.E. IL Lic. No. 081-005738
 Expires 11-30-2024
 Date 09/08/2023 For Sheets SB-01 Thru SB-97.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec. (SD1) = 0.068g
 Design Spectral Acceleration at 0.2 sec. (SDS) = 0.127g
 Soil Site Class = C



STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

SHEET SB-01 OF SB-97 SHEETS

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

DESIGN STRESSES

FIELD UNITS
 f_c = 3,500 psi (Substructure)
 f_c = 4,000 psi (Superstructure)
 f_y = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS
 f_c = 8,500 psi
 f_{ci} = 6,500 psi
 f_{pu} = 270,000 psi (0.6" Ø low lax. strands)
 f_{pbt} = 202,300 psi (0.6" Ø low lax. strands)

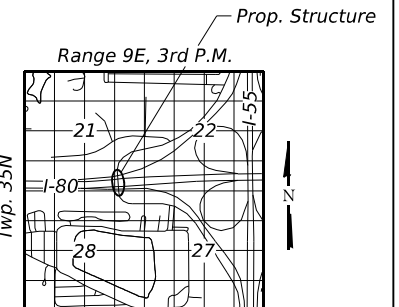
MSE PRECAST UNITS
 f_c = 4,500 psi

LOADING HL-93

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

LEGEND

- Exist. Guardrail, to be removed
- Temporary Soil Retention System
- Exist. Fence
- Exist. Telephone Line
- FO --- Exist. Fiber Optic
- FO --- Prop. Fiber Optic
- E --- Exist. Electric
- E --- Prop. Electric
- Prop. Lighting Cable in duct
- Prop. Underpass Lighting
- Prop. Light Pole
- Soil Boring
- Historical Soil Boring
- Exist. Footing Removal
- Approx. Limits of Reinforced Soil Mass for Temp. MSE Walls & MSE Walls



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
I-80 EB/WB AND I-55 RAMP A & D
OVER W. FRONTAGE RD.

F.A.I. RTE. I-80
SEC. FAI 80 21 STRUCTURE 7
WILL COUNTY
STA. 339+60.85
STRUCTURE NO. 099-8314 (EB)
STRUCTURE NO. 099-8315 (WB)

USER NAME =	DESIGNED - JJS, PG	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - PG, AMS	REVISED -
	CHECKED - MI, JJS	REVISED -

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	632
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R28	

INDEX OF SHEETS

- SB-01 General Plan and Elevation
- SB-02 Index of Sheets & Total Bill of Material
- SB-03 General Notes, Curve Data and Profile Grade Lines
- SB-04 Stage Construction (Sheet 1 of 7)
- SB-05 Stage Construction (Sheet 2 of 7)
- SB-06 Stage Construction (Sheet 3 of 7)
- SB-07 Stage Construction (Sheet 4 of 7)
- SB-08 Stage Construction (Sheet 5 of 7)
- SB-09 Stage Construction (Sheet 6 of 7)
- SB-10 Stage Construction (Sheet 7 of 7)
- SB-11 Temporary Concrete Barrier
- SB-12 WB Substructure Layout
- SB-13 EB Substructure Layout
- SB-14 W. Frontage Rd. Temporary Soil Retention System
- SB-15 I-80 Temporary Soil Retention Systems (Sheet 1 of 5)
- SB-16 I-80 Temporary Soil Retention Systems (Sheet 2 of 5)
- SB-17 I-80 Temporary Soil Retention Systems (Sheet 3 of 5)
- SB-18 I-80 Temporary Soil Retention Systems (Sheet 4 of 5)
- SB-19 I-80 Temporary Soil Retention Systems (Sheet 5 of 5)
- SB-20 WB North Temporary MSE Walls Plan and Elevation
- SB-21 WB North Temporary MSE Walls Sections and Details
- SB-22 WB South Temporary MSE Walls Plan and Elevation
- SB-23 WB South Temporary MSE Walls Sections and Details
- SB-24 EB Temporary MSE Walls Plan and Elevation
- SB-25 EB Temporary MSE Walls Sections and Details
- SB-26 Existing Structures Removal Plan
- SB-27 Exist. Struct. Rem. Deck Sections and Elev.
- SB-28 Existing West Abutment Removal Plan and Elevation
- SB-29 Existing East Abutment Removal Plan and Elevation
- SB-30 Existing Structures Removal Sections
- SB-31 WB Top of Slab Elevation Layout
- SB-32 WB Top of Slab Elevation Tables (Sheet 1 of 3)
- SB-33 WB Top of Slab Elevation Tables (Sheet 2 of 3)
- SB-34 WB Top of Slab Elevation Tables (Sheet 3 of 3)
- SB-35 EB Top of Slab Elevation Layout
- SB-36 EB Top of Slab Elevation Tables (Sheet 1 of 2)
- SB-37 EB Top of Slab Elevation Tables (Sheet 2 of 2)
- SB-38 WB Top of W. Approach Slab Layout & Tables
- SB-39 WB Top of E. Approach Slab Layout & Tables
- SB-40 EB Top of W. Approach Slab Layout & Tables
- SB-41 EB Top of E. Approach Slab Layout & Tables
- SB-42 WB Deck Plan
- SB-43 WB Deck Cross Section
- SB-44 WB Parapets Elevations
- SB-45 WB W. Abutment Diaphragm Elevation and Details
- SB-46 WB E. Abutment Diaphragm Elevation and Details
- SB-47 WB Deck Sections, Bar Diagrams & Bill of Material
- SB-48 EB Deck Plan
- SB-49 EB Deck Cross Section
- SB-50 EB Parapets Elevations
- SB-51 EB W. Abutment Diaphragm Elevation and Details
- SB-52 EB E. Abutment Diaphragm Elevation and Details
- SB-53 EB Deck Sections, Bar Diagrams & Bill of Material
- SB-54 WB W. Approach Slab Plan
- SB-55 WB W. Approach Slab Sections and Details
- SB-56 WB E. Approach Slab Plan
- SB-57 WB E. Approach Slab Sections and Details
- SB-58 EB W. Approach Slab Plan
- SB-59 EB W. Approach Slab Sections and Details
- SB-60 EB E. Approach Slab Plan
- SB-61 EB E. Approach Slab Sections and Details
- SB-62 WB I-80 Framing Plan
- SB-63 WB I-80 IL27-1830 PPC I-Beam
- SB-64 WB I-80 IL27-1830 PPC I-Beam Details
- SB-65 EB I-80 Framing Plan
- SB-66 EB I-80 IL27-1830 PPC I-Beam
- SB-67 EB I-80 IL27-1830 PPC I-Beam Details

INDEX OF SHEETS (CONT.)

- SB-68 WB W. Abutment Plan and Elevation - Stage I Const.
- SB-69 WB W. Abutment Plan and Elevation - Stage II Const.
- SB-70 WB W. Abutment Sections and Details
- SB-71 WB E. Abutment Plan and Elevation - Stage I Const.
- SB-72 WB E. Abutment Plan and Elevation - Stage II Const.
- SB-73 WB E. Abutment Sections and Details
- SB-74 EB W. Abutment Plan and Elevation - Stage I Const.
- SB-75 EB W. Abutment Plan and Elevation - Stage II Const.
- SB-76 EB W. Abutment Sections and Details
- SB-77 EB E. Abutment Plan and Elevation - Stage I Const.
- SB-78 EB E. Abutment Plan and Elevation - Stage II Const.
- SB-79 EB E. Abutment Sections and Details
- SB-80 WB & EB West Abutment MSE Wall Plan and Elevation
- SB-81 WB & EB East Abutment MSE Wall Plan and Elevation
- SB-82 WB & EB Abutment MSE Wall Sections & Details
- SB-83 HP Pile Details
- SB-84 Bar Splicer Assembly Details
- SB-85 Concrete Parapet Slipforming Option
- SB-86 Boring Logs (Sheet 1 of 12)
- SB-87 Boring Logs (Sheet 2 of 12)
- SB-88 Boring Logs (Sheet 3 of 12)
- SB-89 Boring Logs (Sheet 4 of 12)
- SB-90 Boring Logs (Sheet 5 of 12)
- SB-91 Boring Logs (Sheet 6 of 12)
- SB-92 Boring Logs (Sheet 7 of 12)
- SB-93 Boring Logs (Sheet 8 of 12)
- SB-94 Boring Logs (Sheet 9 of 12)
- SB-95 Boring Logs (Sheet 10 of 12)
- SB-96 Boring Logs (Sheet 11 of 12)
- SB-97 Boring Logs (Sheet 12 of 12)

TOTAL BILL OF MATERIAL

ITEM	UNIT	S.N. 099-8314		S.N. 099-8315		TOTAL
		SUPER	SUB	SUPER	SUB	
Removal Of Existing Structures No. 3	Each	1	-	-	-	1
Removal Of Existing Structures No. 4	Each	-	-	1	-	1
Removal Of Existing Structures No. 5	Each	-	-	1	-	1
Structure Excavation	Cu Yd	-	2,934	-	4,083	7,017
Removal And Disposal Of Unsuitable Material For Structures	Cu Yd	-	40	-	-	40
Concrete Structures	Cu Yd	-	189.1	-	219.2	408.3
Concrete Superstructure	Cu Yd	204.4	-	231.6	-	436.0
Bridge Deck Grooving	Sq Yd	1,109	-	1,298	-	2,407
Protective Coat	Sq Yd	1,212	-	1,298	-	2,510
Concrete Superstructure (Approach Slab)	Cu Yd	265.0	-	310.5	-	575.5
Furnishing And Erecting Precast Prestressed Concrete Beams, IL27N	Foot	474	-	569	-	1,043
Reinforcement Bars, Epoxy Coated	Pound	150,400	29,770	170,970	37,400	388,540
Bar Splicers	Each	522	-	1,052	-	1,574
Furnishing Steel Piles HP14x102	Foot	-	649	-	764	1,413
Driving Piles	Foot	-	312	-	386	698
Test Pile Steel HP14x102	Each	-	2	-	2	4
Pile Shoes	Each	-	20	-	24	44
Drilling And Setting Piles (In Rock)	Cu Ft	-	189	-	227	416
Name Plates	Each	1	-	1	-	2
Preformed Joint Seal 3 1/2"	Foot	-	-	108	-	108
Temporary Soil Retention System	Sq Ft	-	4,130	-	6,979	11,109
Mechanically Stabilized Earth Retaining Wall	Sq Ft	-	3,877	-	4,247	8,124
Temporary Mechanically Stabilized Earth Retaining Wall	Sq Ft	-	1,529	-	2,904	4,433
Concrete Sealer	Sq Ft	-	963	-	1,088	2,051
Protective Shield, Special	Sq Yd	326	-	157	-	483

STATION 339+60.85
 BUILT 20__ BY
 STATE OF ILLINOIS
 F.A.I. RTE. I-80
 SEC. FAI 80 21 STRUCTURE 7
 LOADING HL-93
 STRUCTURE NO. 099-8314

STATION 339+60.85
 BUILT 20__ BY
 STATE OF ILLINOIS
 F.A.I. RTE. I-80
 SEC. FAI 80 21 STRUCTURE 7
 LOADING HL-93
 STRUCTURE NO. 099-8315

NAME PLATE
(EB I-80 OVER WEST FRONTAGE ROAD) (WB I-80 OVER WEST FRONTAGE ROAD)
 See Std. 515001

MODEL: Default
 FILE NAME: p:\transystems-pw\homedoc\Documents\Projects_2018\CH401\401_180022\01-Stantec\CAD\ML-04_62R28\04-Sheets\04-Sheets\099-8314 & 099-8315 I80 over Frontage Rd\0998314_0998315-ML-04-002-Index of Sheets & Total BOM.dgn



USER NAME =	DESIGNED - AMS, JJS	REVISED -
	CHECKED - MI, JJS	REVISED -
PLOT SCALE =	DRAWN - AMS, JJS	REVISED -
PLOT DATE =	CHECKED - MI, JJS	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

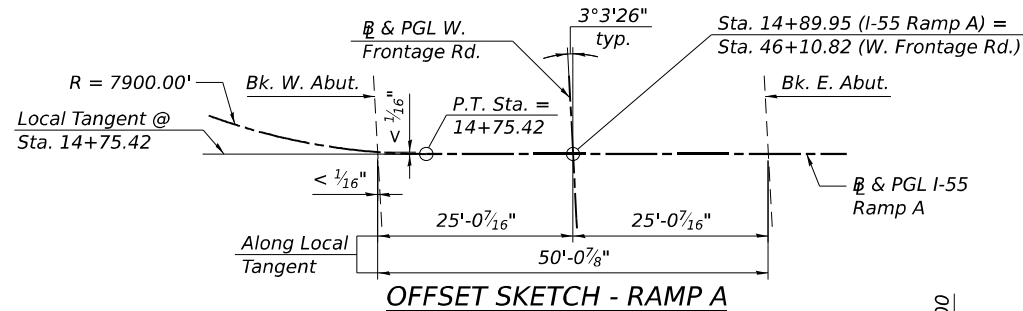
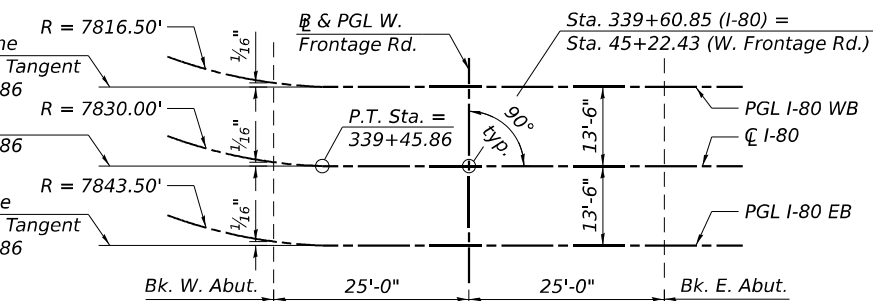
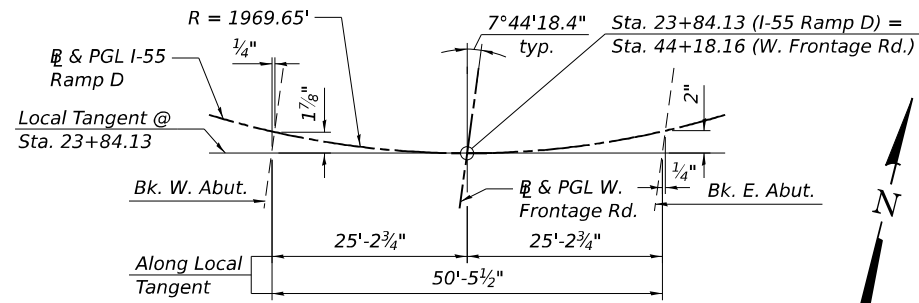
**INDEX OF SHEETS & TOTAL BILL OF MATERIAL
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	633
ILLINOIS			CONTRACT NO. 62R28	
FED. AID PROJECT				

SHEET SB-02 OF SB-97 SHEETS

GENERAL NOTES:

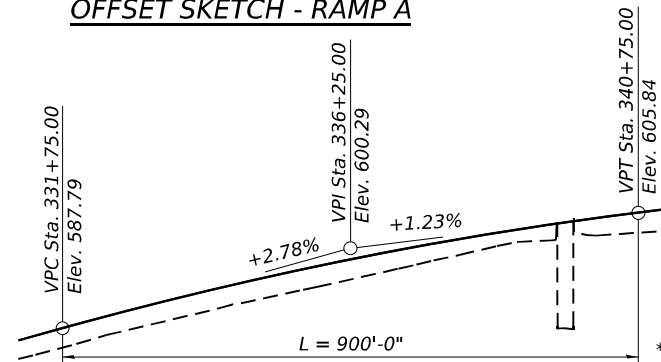
1. Reinforcement bars designated (E) shall be epoxy coated.
2. The finishing machine rails shall be placed on the top flange of the exterior beams within the deck pour. Beam blocks shall be placed between beams at all tie locations in each bay for the full width of the deck pour.
3. Slip forming of the median parapet is not allowed. Slip forming of the Outside traffic barriers is allowed.
4. Excavation behind existing abutment walls shall be performed in such a manner that soil pressures remain balanced at all times prior to removal of the existing superstructures. Excavation behind both East and West Abutments shall be performed simultaneously (in each construction stage) with a maximum difference in excavation depth not exceeding 3 feet.
5. The Contractor shall sawcut the upper portion of the existing abutments at the stage removal line prior to Stage I Removal to ensure the remaining portions will not be prematurely damaged. This procedure shall be repeated prior to Stage IIA Removal (at WB structure only).



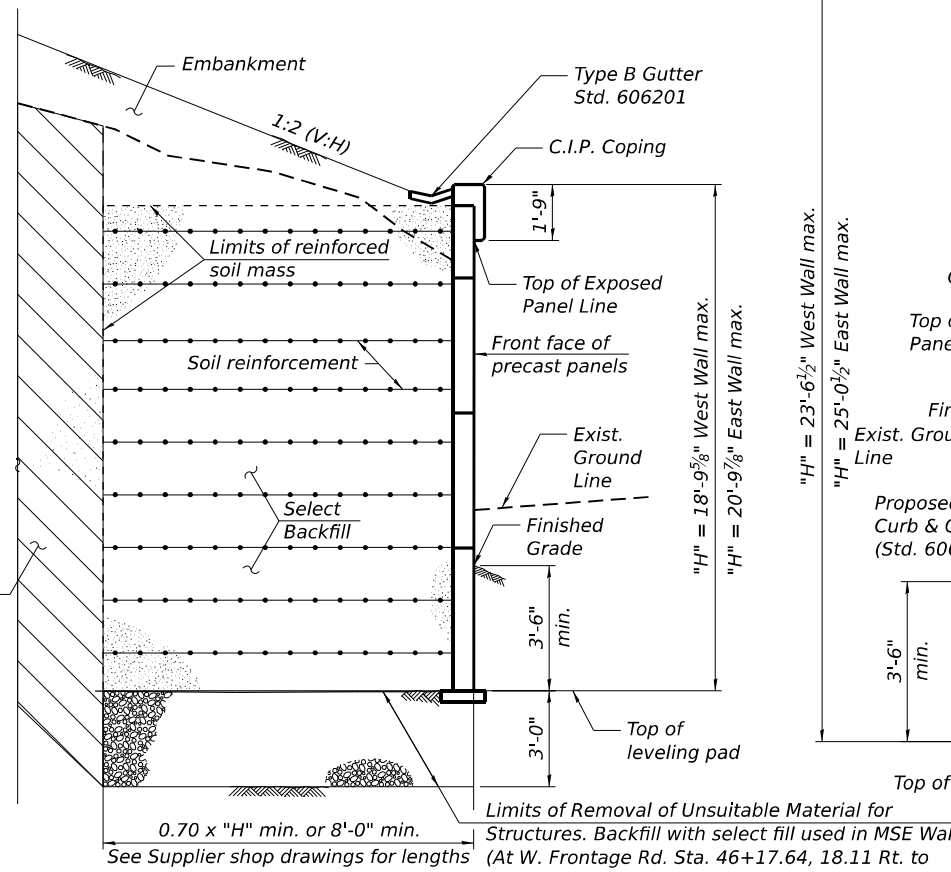
CURVE DATA - I-80

(P_CURVE-I80-3)

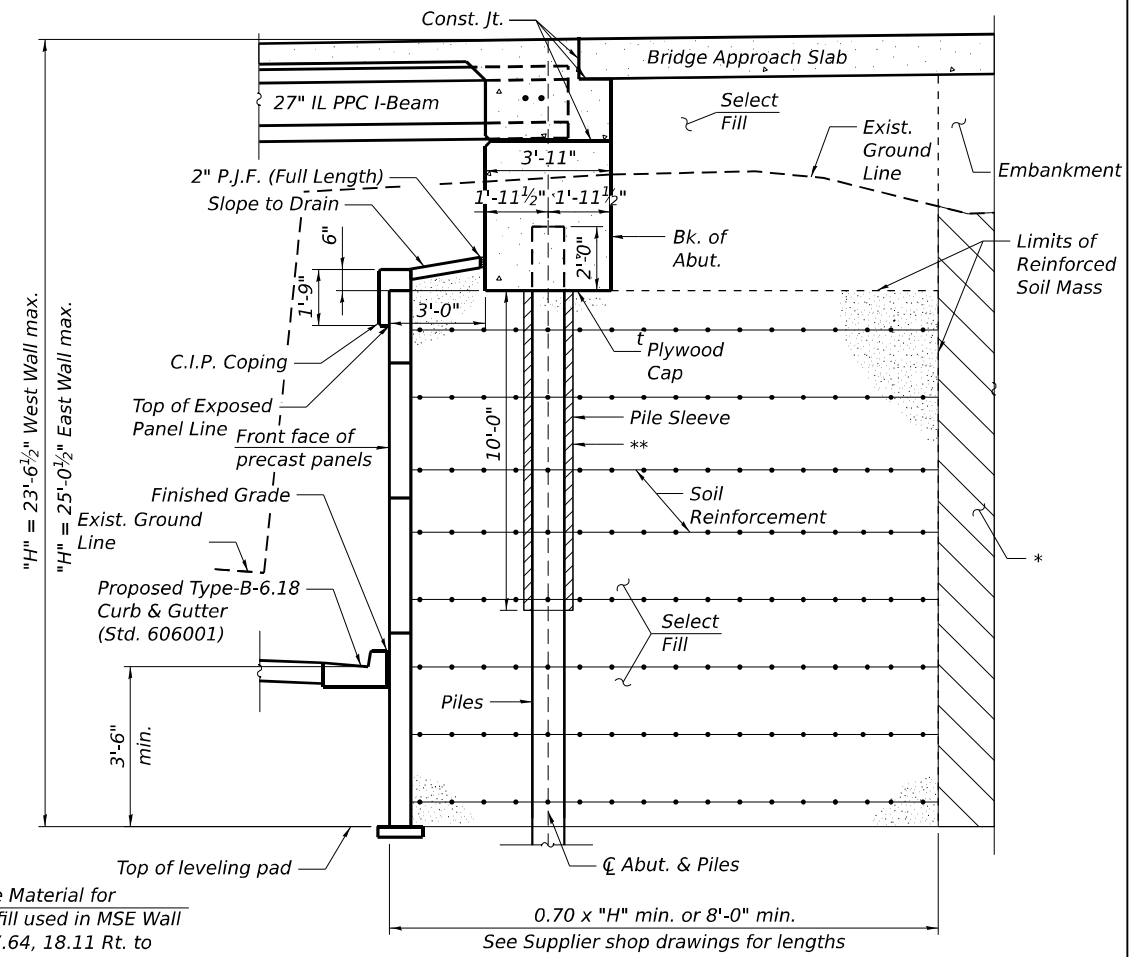
P.I. Sta. = 336+16.87
 $\Delta = 04^{\circ}49'03''$ (Lt)
 $D = 00^{\circ}43'54''$
 $R = 7,830.00'$
 $T = 329.38'$
 $L = 658.37'$
 $E = 6.92'$
 $e = 2.6\%$
 $T.R. = WB 86.67', EB 98.91'$
 $S.E. Run = 78'$
 $P.C. Sta. = 332+87.50$
 $P.T. Sta. = 339+45.86$



*** The stations provided in the Profile Grade sketch are measured along the \bar{C} I-80; however, the elevations provided are the elevations measured along the WB PGL and EB PGL (which are identical).



SECTION THRU INTEGRAL ABUTMENTS



CURVE DATA - FRONTAGE RD.

(PR CURVE FRONTAGE-2) (PR CURVE FRONTAGE-3)

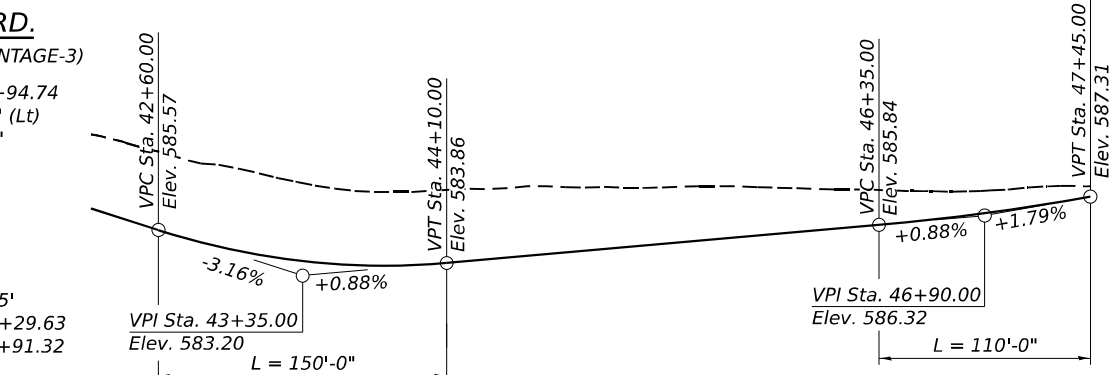
P.I. Sta. = 42+33.76 $\Delta = 82^{\circ}22'49''$ (Lt) $D = 20^{\circ}50'05''$ $R = 275.00'$ $T = 240.66'$ $L = 395.40'$ $E = 90.43'$ $e = 7.70\%$ $T.R. = 25'$ $S.E. Run = 130'$ $P.C. Sta. = 39+93.10$ $P.T. Sta. = 43+88.50$

P.I. Sta. = 47+94.74 $\Delta = 88^{\circ}34'06''$ (Lt) $D = 33^{\circ}50'41''$ $R = 169.29'$ $T = 165.11'$ $L = 261.69'$ $E = 67.19'$ $e = 7.70\%$ $T.R. = 25'$ $S.E. Run = 125'$ $P.C. Sta. = 46+29.63$ $P.T. Sta. = 48+91.32$

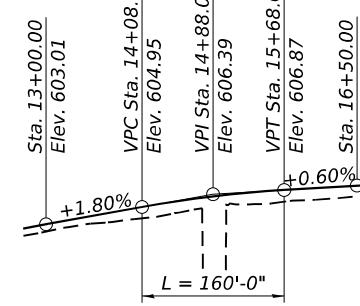
CURVE DATA - RAMP A

(PR CURVE PRBL-RAMP A)

P.I. Sta. = 12+37.78 $\Delta = 03^{\circ}26'53''$ (Lt) $D = 00^{\circ}43'31''$ $R = 7,900.00'$ $T = 237.78'$ $L = 475.42'$ $E = 3.58'$ $e = 2.60\%$ $T.R. = N/A$ $S.E. Run = N/A$ $P.C. Sta. = 10+00.00$ $P.T. Sta. = 14+75.42$



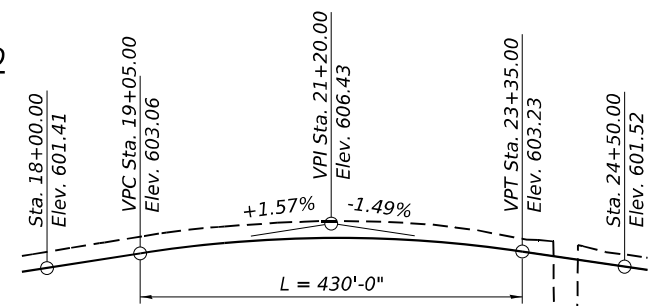
RAMP A PROFILE GRADE



CURVE DATA - RAMP D

(PR CURVE PRBL-RAMP D_2)

P.I. Sta. = 21+91.93 $\Delta = 24^{\circ}15'47''$ (Rt) $D = 02^{\circ}54'32''$ $R = 1,969.65'$ $T = 423.39'$ $L = 834.09'$ $E = 44.99'$ $e = 4.40\%$ $T.R. = N/A$ $S.E. Run = N/A$ $P.C. Sta. = 17+68.54$ $P.T. Sta. = 26+02.62$



t Bottom of cap poured against top of plywood. Cut opening to match pile perimeter within 1/8". Support with bars tack welded to webs rated for 500 lbs. Seal gaps to keep concrete out.

* Overexcavation beyond structure excavation and removal of unsuitable material. This area not measured for payment. Backfill overexcavation with same material used for select fill used in MSE Wall.

** Sleeve to remain empty in hatched region

MODEL: Default
 FILE NAME: p:\transystems-pw\benley.com\transcorp-pw\hosted\Documents\Projects_2018\CH401401180022\01-Stantec\CAD\ML-04_62R28\04-Sheets\04-Structures\099-8314 & 099-8315 ML-04-003-General Notes_Curve data & PGL.dgn
 10/9/2023 2:47:44 PM



USER NAME =	DESIGNED - JJS, PG	REVISD -
PLOT SCALE =	CHECKED - MI, JJS	REVISD -
PLOT DATE =	DRAWN - PG, AMS	REVISD -
	CHECKED - MI, JJS	REVISD -

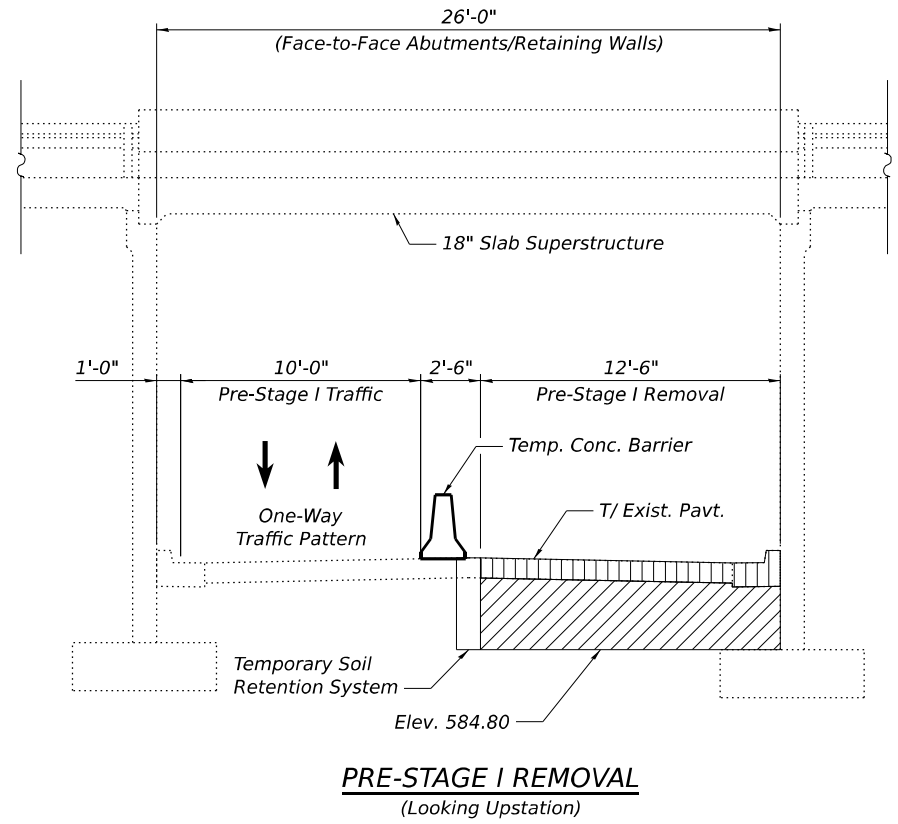
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, CURVE DATA AND PROFILE GRADE LINES
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

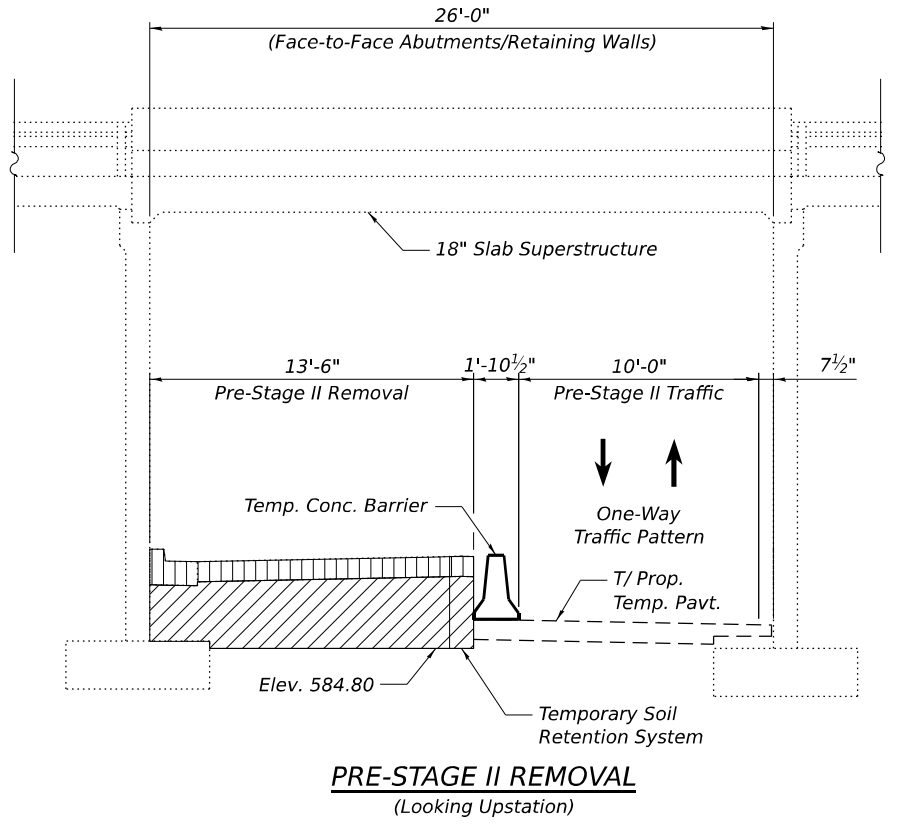
SHEET SB-03 OF SB-97 SHEETS

F.A.I. RTE. =	SECTION =	COUNTY =	TOTAL SHEETS =	SHEET NO. =
80	FAI 80 21 STRUCTURE 7	WILL	1059	634
			CONTRACT NO. 62R28	
		ILLINOIS FED. AID PROJECT		

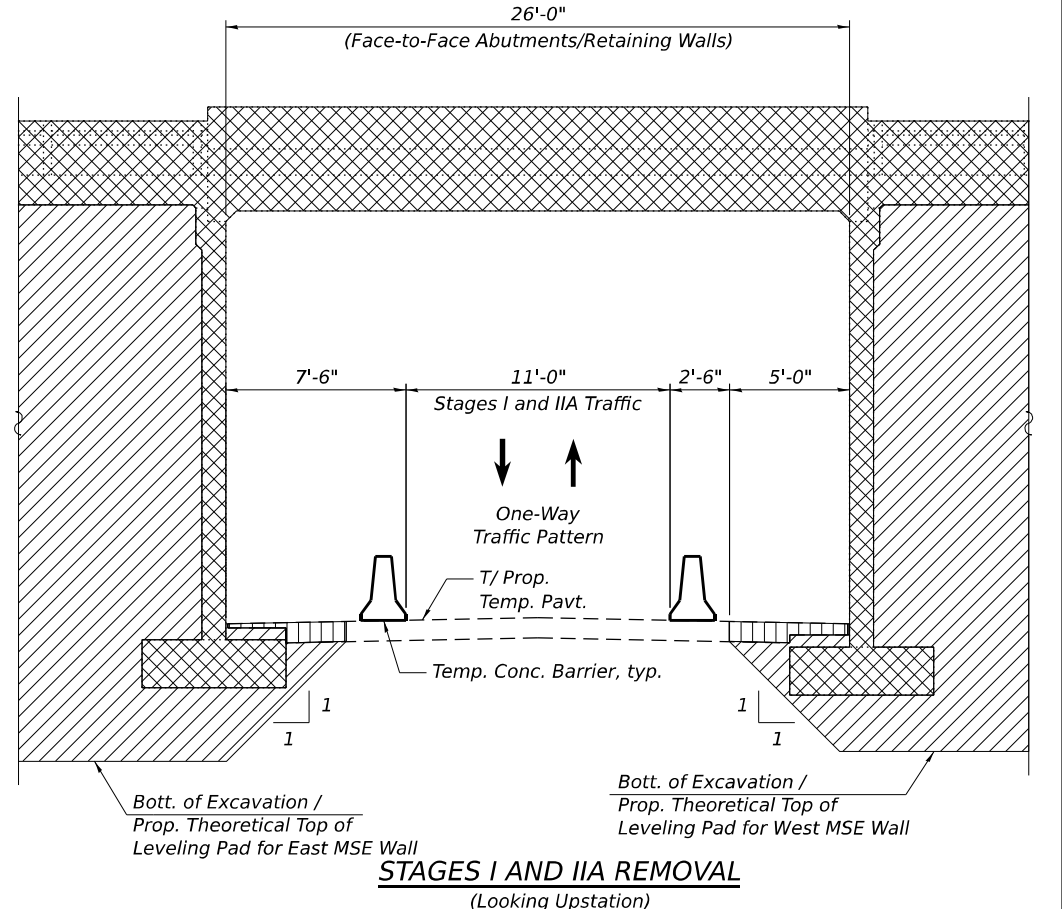
MODEL: Default
 FILE NAME: p:\w\transys\transys\p-pw\hosted\Documents\Projects\2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\04-62R28\04-Sheets\04-62R28\04-Structures\099-8314 & 099-8315\04-004-Stage Construction (Sheet 1 of 7).dgn
 10/9/2023 2:47:47 PM



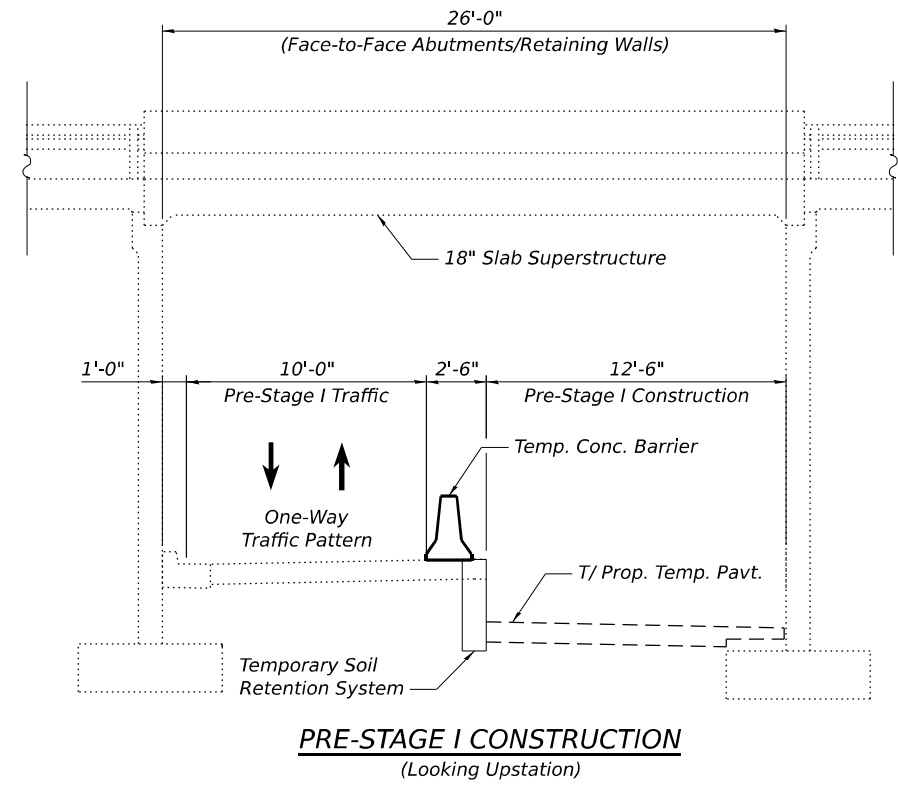
PRE-STAGE I REMOVAL
(Looking Upstation)



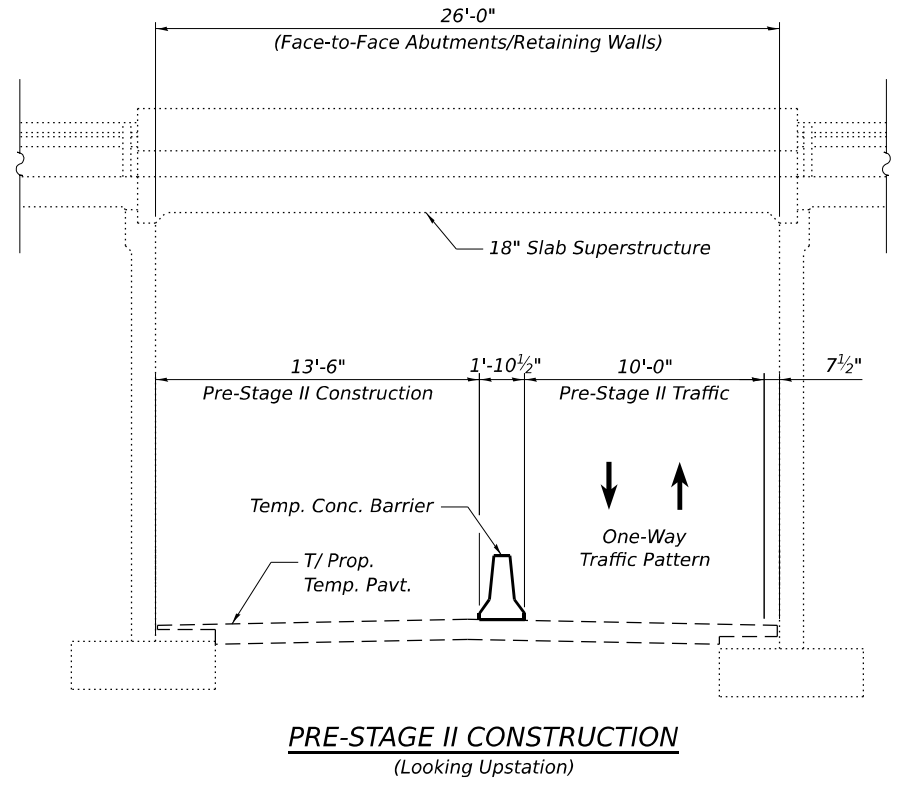
PRE-STAGE II REMOVAL
(Looking Upstation)



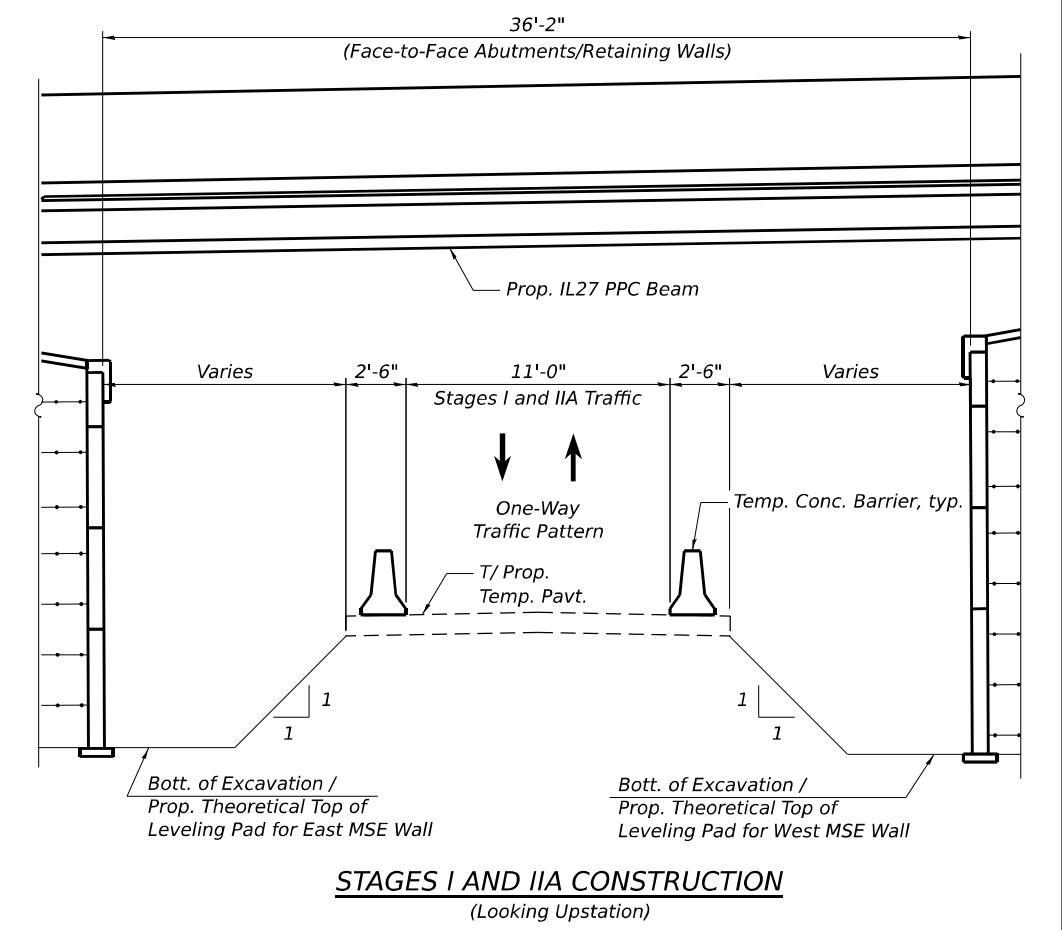
STAGES I AND IIA REMOVAL
(Looking Upstation)



PRE-STAGE I CONSTRUCTION
(Looking Upstation)



PRE-STAGE II CONSTRUCTION
(Looking Upstation)



STAGES I AND IIA CONSTRUCTION
(Looking Upstation)

NOTES:

1. For Maintenance of Traffic Notes, see Sheet SB-10
2. For Temporary Concrete Barrier, see Sheet SB-11
3. For removal of existing W. Frontage Road pavement, excavation beneath W. Frontage Road roadway, temporary pavement details and quantities, and temporary concrete barrier quantities, see Roadway Plans.

LEGEND

	Pavement Removal		Removal of Existing Structures
	Excavation		



USER NAME =	DESIGNED - JJS, KJD	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - JJS, KJD	REVISED -
	CHECKED - MI	REVISED -

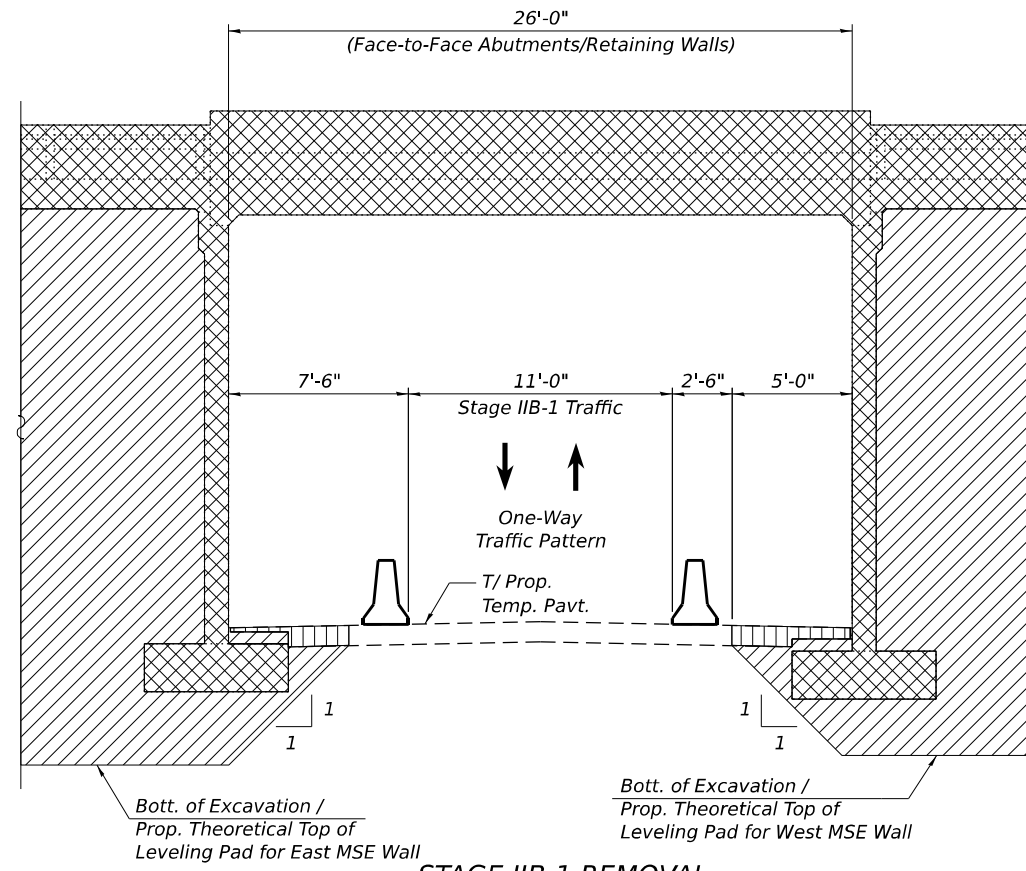
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION (SHEET 1 OF 7)
STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

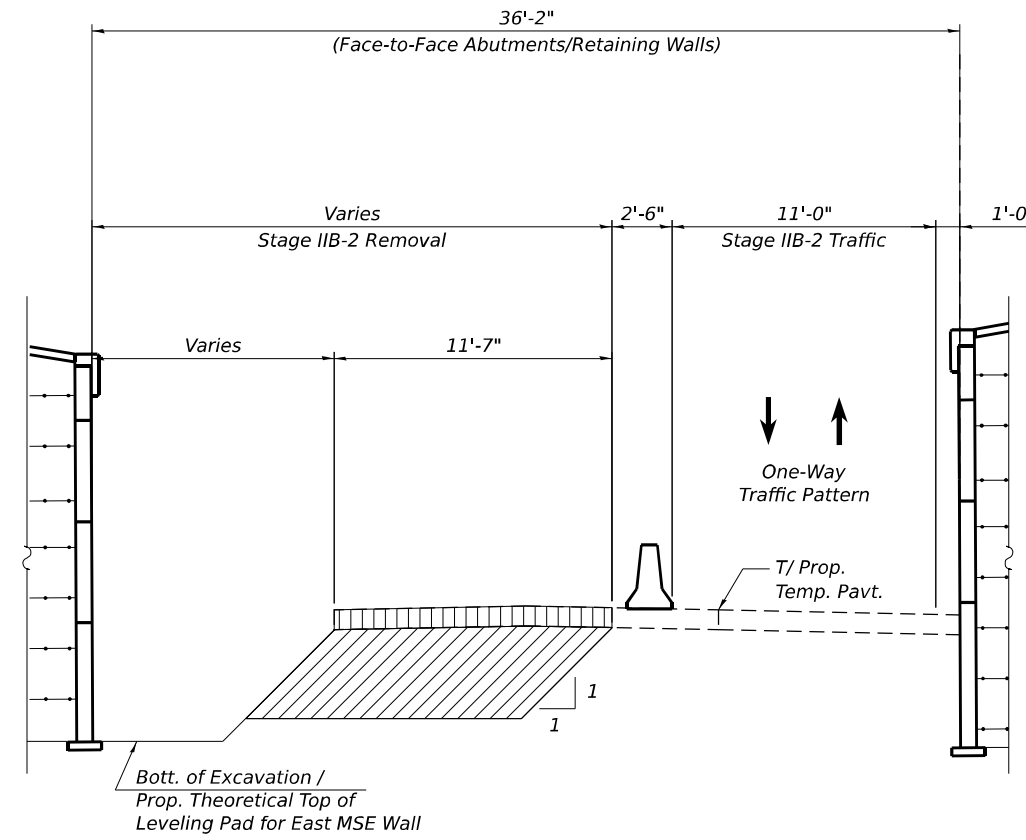
SHEET SB-04 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	635
			CONTRACT NO. 62R28	
ILLINOIS FED. AID PROJECT				

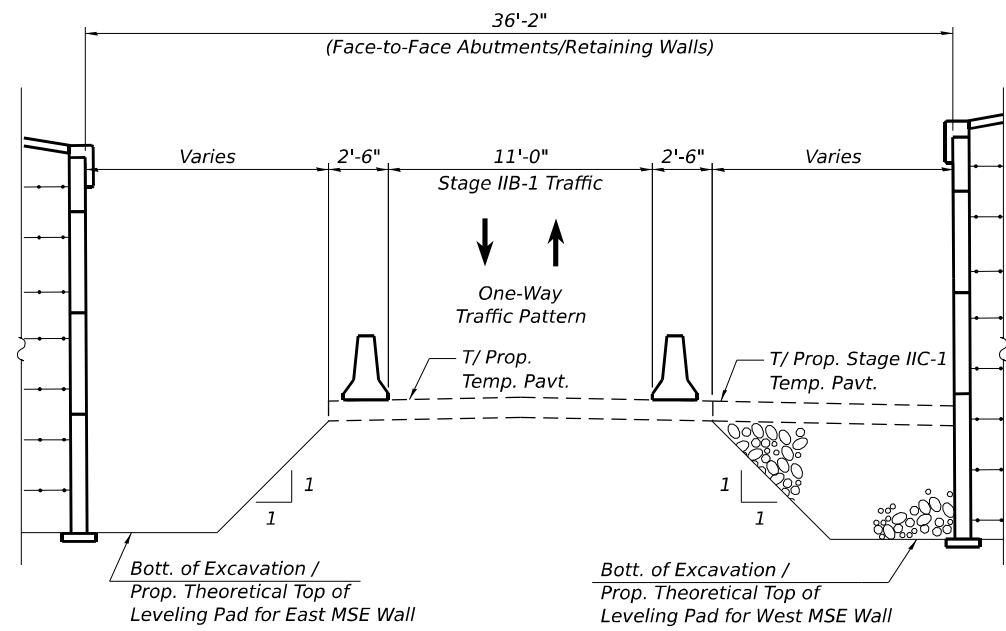
MODEL: Default
 FILE NAME: p:\projects\transsystems-pw\homedocuments\projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\04-004-Stage Construction (Sheet 2 of 7).dgn
 10/9/2023 2:47:51 PM



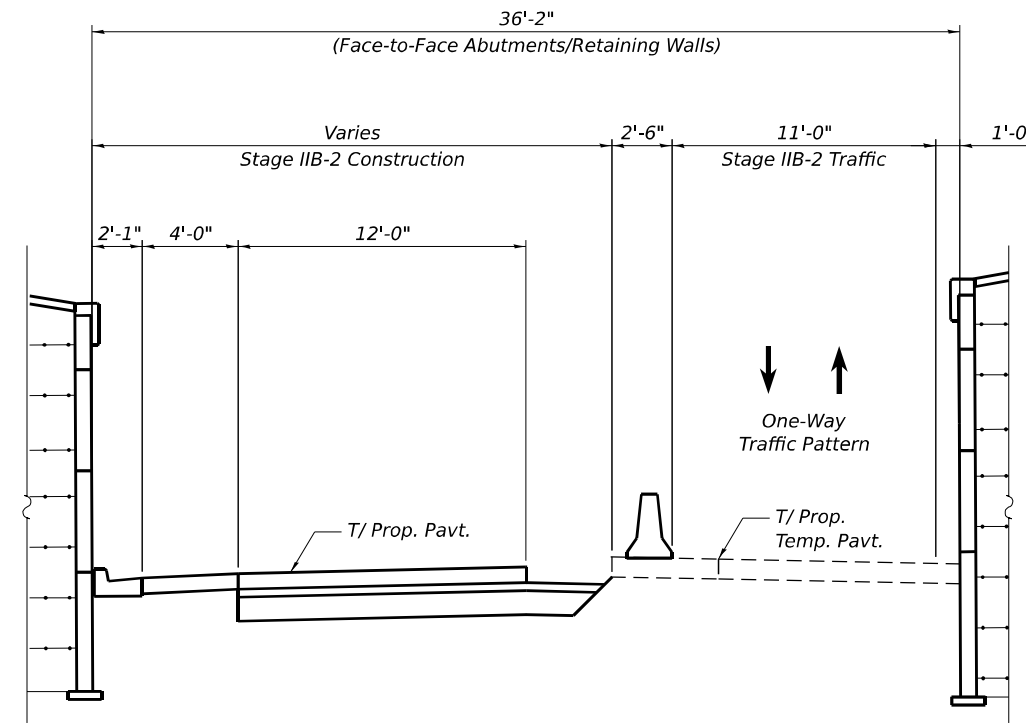
STAGE IIB-1 REMOVAL
 (Looking Upstation)



STAGE IIB-2 REMOVAL
 (Looking Upstation)



STAGE IIB-1 CONSTRUCTION
 (Looking Upstation)



STAGE IIB-2 CONSTRUCTION
 (Looking Upstation)

NOTES:

1. For Maintenance of Traffic Notes, see Sheet SB-10
2. For removal of existing W. Frontage Road pavement, excavation beneath W. Frontage Road roadway, final pavement details and quantities, and temporary pavement details and quantities, see Roadway Plans.

LEGEND

- Pavement Removal
- Excavation
- Removal of Existing Structures



USER NAME =	DESIGNED - JJS, KJD	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - JJS, KJD	REVISED -
	CHECKED - MI	REVISED -

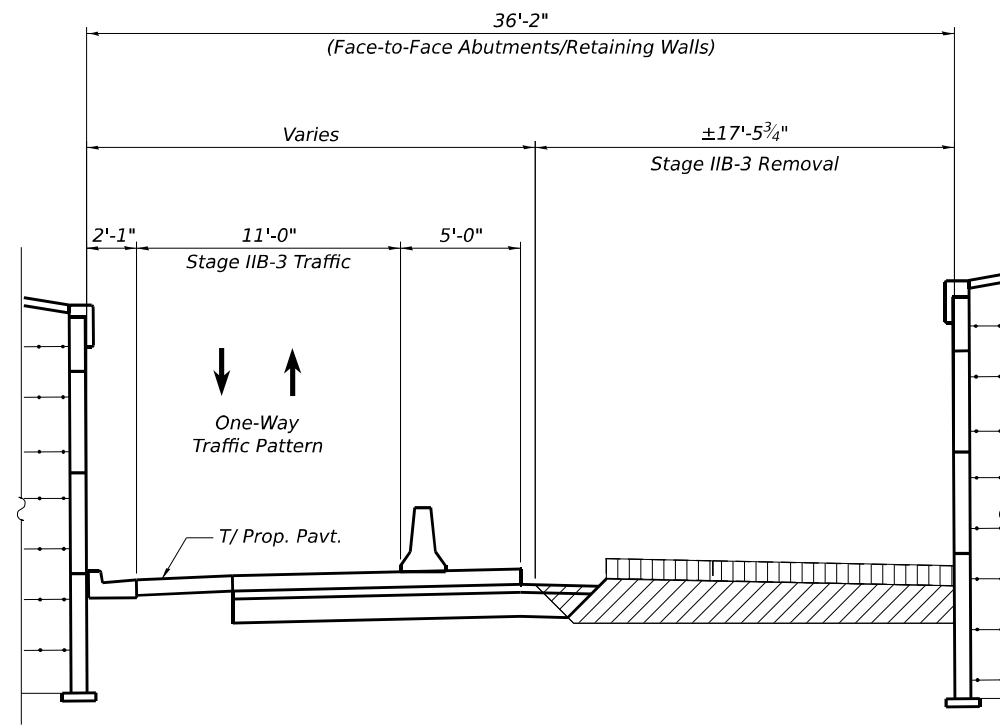
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION (SHEET 2 OF 7)
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

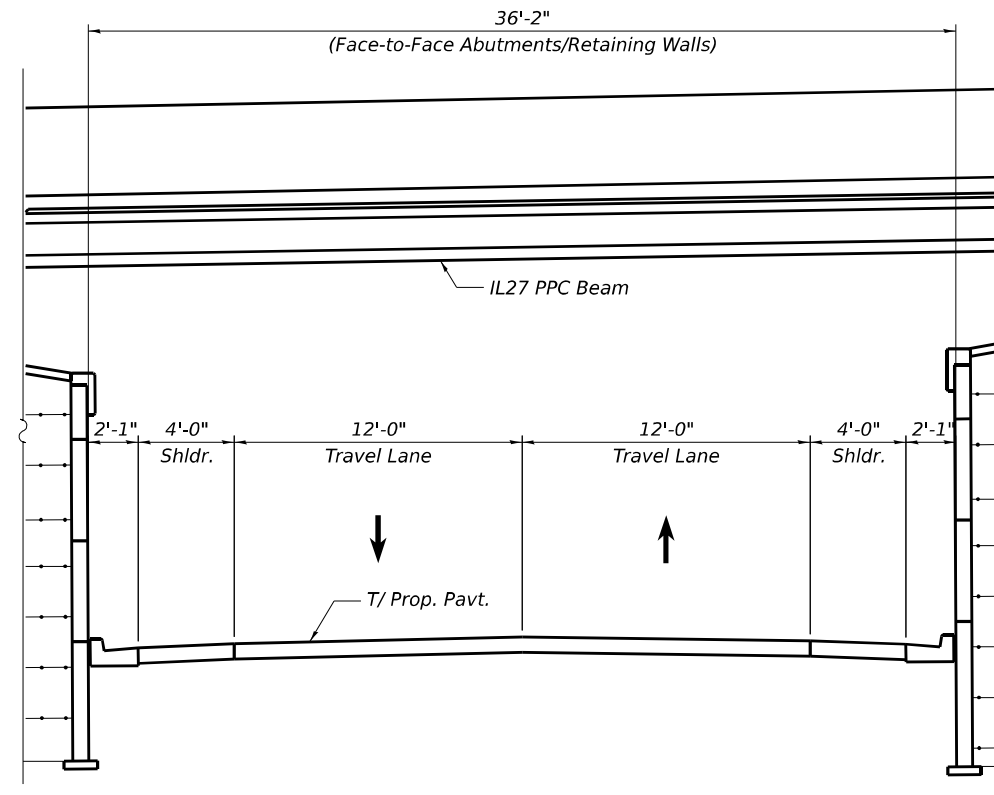
SHEET SB-05 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	636
			CONTRACT NO. 62R28	
		ILLINOIS FED. AID PROJECT		

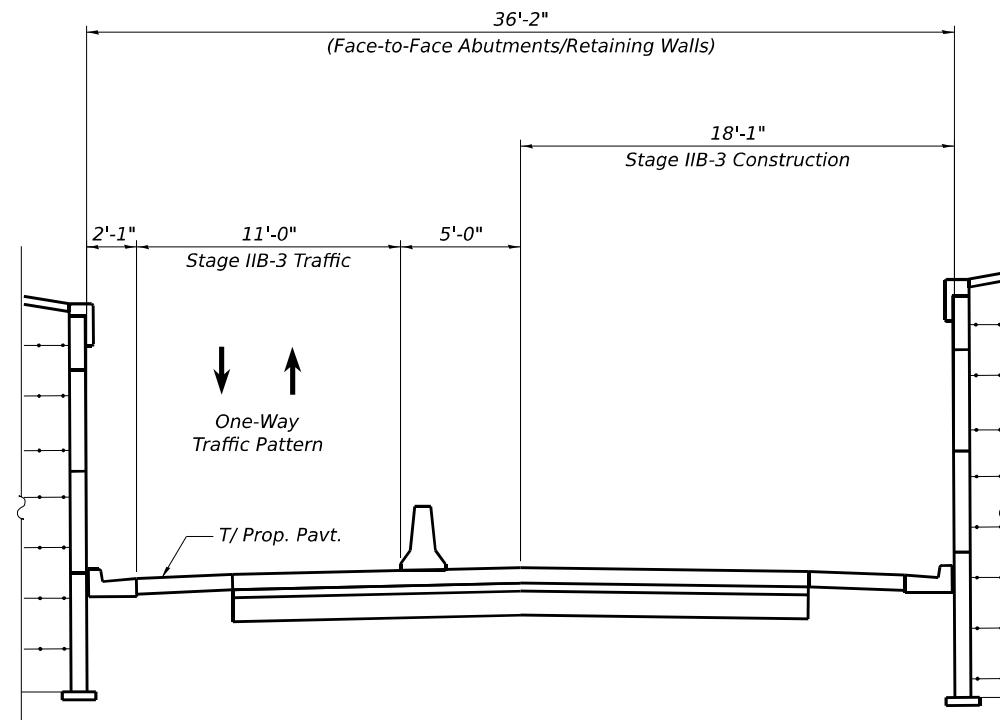
MODEL: Default
 FILE NAME: p:\w\transystems-pw\benley.com\transystems-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\04-004-Stage Construction (Sheet 3 of 7).dgn
 10/9/2023 2:47:53 PM



STAGE IIB-3 REMOVAL
 (Looking Upstation)



STAGE IIB-4 CONSTRUCTION AND FINAL CROSS-SECTION
 (Looking Upstation)





STAGE IIB-3 CONSTRUCTION
 (Looking Upstation)

NOTES:

1. For Maintenance of Traffic Notes, see Sheet SB-10
2. For removal of existing W. Frontage Road pavement, excavation beneath W. Frontage Road roadway, final pavement details and quantities, and temporary pavement details and quantities, see Roadway Plans.

LEGEND

-  Pavement Removal
-  Excavation



USER NAME =	DESIGNED - JJS, KJD	REVISED -
	CHECKED - MI, JJS	REVISED -
PLOT SCALE =	DRAWN - JJS, KJD	REVISED -
PLOT DATE =	CHECKED - MI	REVISED -

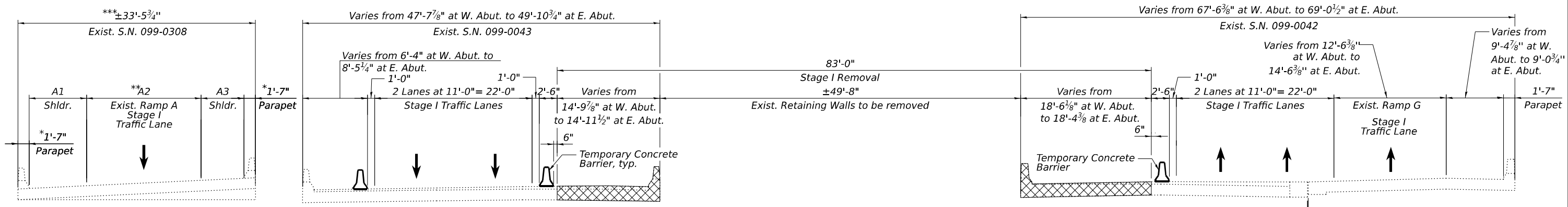
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION (SHEET 3 OF 7)
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

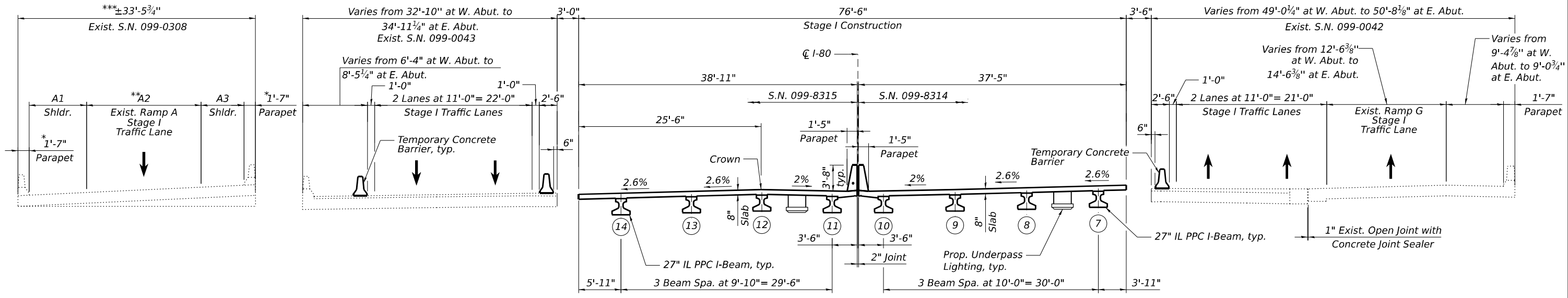
SHEET SB-06 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	637
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

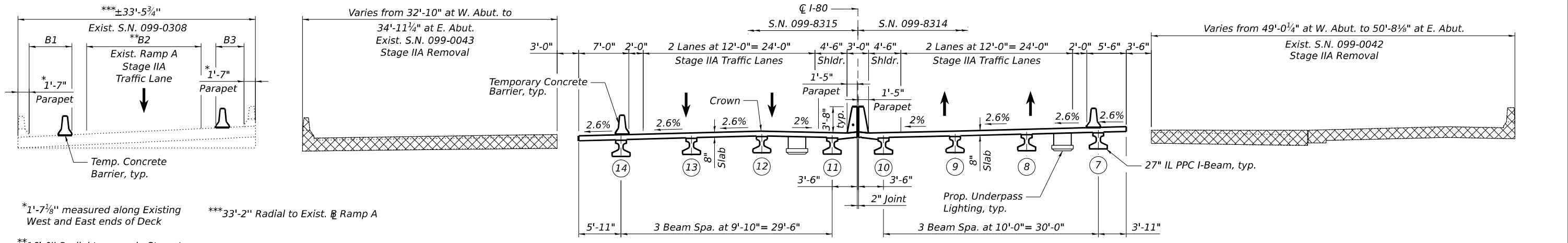
MODEL: Default
 FILE NAME: p:\work\transsystems-pw\homedocuments\projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Structures\099-8314 & 099-8315 ML-04-005-Stage Construction (Sheet 4 of 7).dgn
 10/9/2023 2:47:57 PM



STAGE I REMOVAL
(Looking East)



STAGE I CONSTRUCTION
(Looking East)



STAGE IIA REMOVAL
(Looking East)

*1'-7 3/8" measured along Existing West and East ends of Deck
 ***33'-2" Radial to Exist. @ Ramp A
 **16'-0" Radial to curve in Stage I
 16'-0" at Rt. Angles in Stage IIA

NOTES:

1. For Stage Removal and Construction Notes, see Sheet SB-10.
2. For Temporary Concrete Barrier details, see Sheet SB-11.
3. For quantity of temporary concrete barrier, see Roadway Plans.

Location	A1	A2	A3	B1	B2	B3
@ Exist. W. End of Deck	5'-6"	16'-2"	8'-7 1/2"	4'-2 3/4"	16'-0 1/4"	6'-0 1/2"
@ Exist. E. End of Deck	5'-2"	16'-2 3/8"	8'-11 1/8"	6'-8 3/4"	16'-0 1/4"	3'-6 1/2"

LEGEND
 Removal of Existing Structure



USER NAME =	DESIGNED - JJS, KJD	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - JJS, KJD	REVISED -
	CHECKED - MI	REVISED -

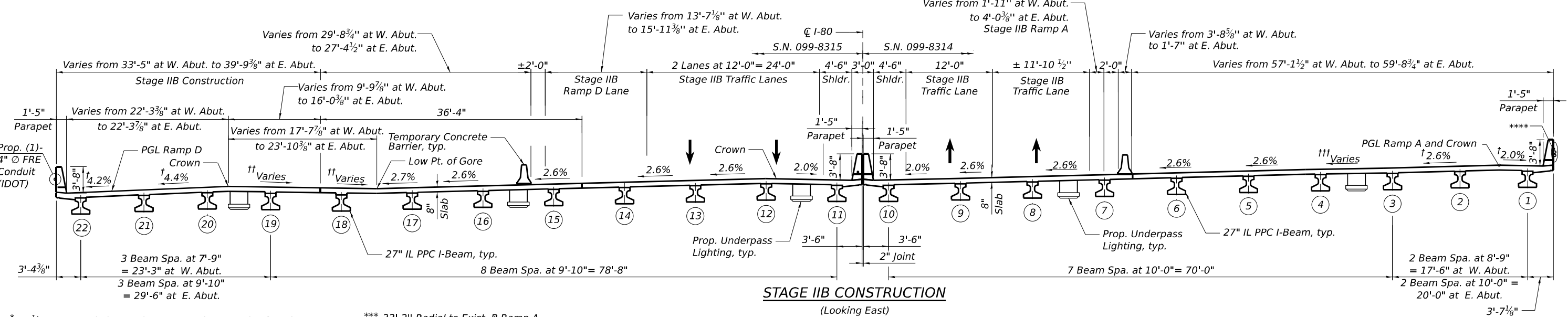
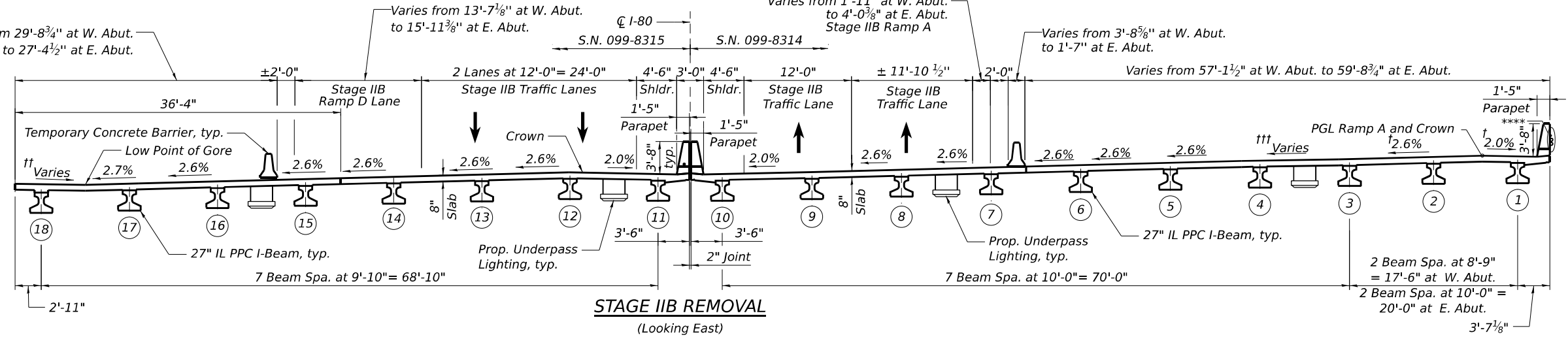
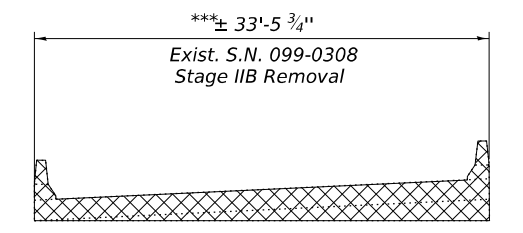
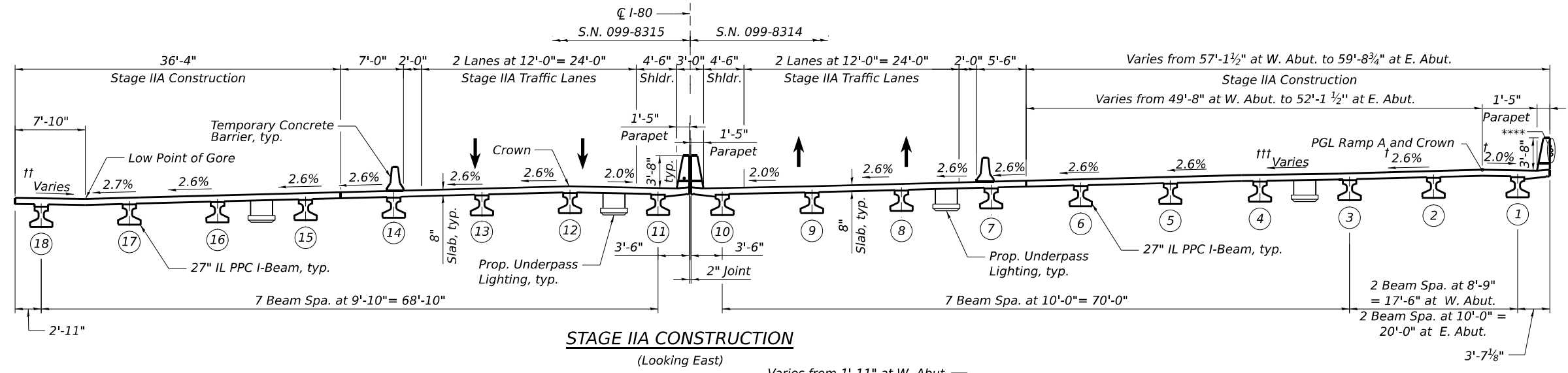
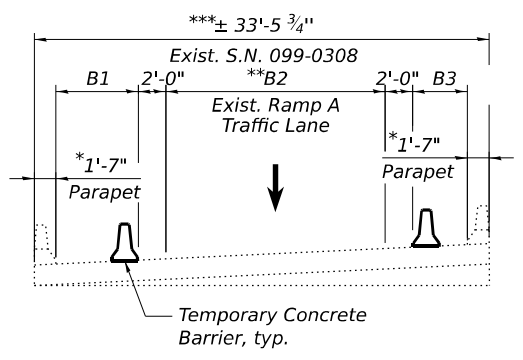
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION (SHEET 4 OF 7)
STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

SHEET SB-07 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	638
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\transys\transys\p-w\h\hosted\Documents\Projects\2018\CH401401180022\01-Structures\04-Sheets\04-Structures\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-005A-Stage Construction (Sheet 5 of 7).dgn



*1'-7 1/8" measured along Exist. West and East ends of Deck
 *** 33'-2" Radial to Exist. Ramp A
 **16'-0" at Rt. Angles in Stage IIA
 **** Prop. (1)-2" ∅ FRE Conduit (IDOT)
 Prop. (1)-4" ∅ FRE Conduit (IDOT)
 Prop. (1)-4" ∅ FRE Conduit (Third Party)

† Dimensions and cross slopes are radial to alignment
 †† Slope varies from 2.08% at W. Abut. to 1.08% at E. Abut. (See Roadway Plans)
 ††† Slope varies from 2.62% at W. Abut. to 0% at E. Abut. (See Roadway Plans)

LEGEND
 Removal of Existing Structure



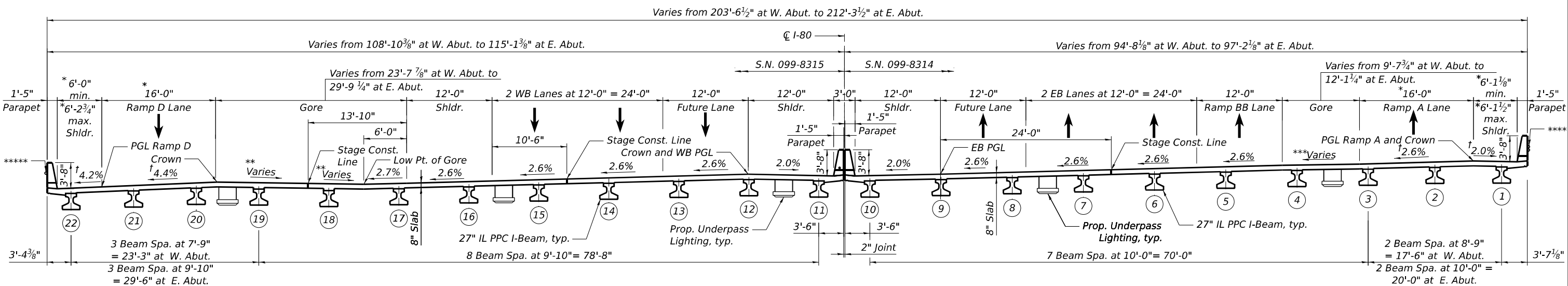
USER NAME =	DESIGNED - JJS, KJD	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - JJS, KJD	REVISED -
	CHECKED - MI	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION (SHEET 5 OF 7)
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	639
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R28	

MODEL: Default
 FILE NAME: p:\transystems-pw\benley.com\transyscorp-pw\hosted\Documents\Projects\2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315 I80 over Frontage Rd\0998314_0998315-ML-04-006-Stage Construction (Sheet 6 of 7).dgn



FINAL CROSS SECTION

- * Radial to Alignment
- ** Slope varies from 2.08% at W. Abut. to 1.08% at E. Abut. (See Roadway Plans)
- † Cross slopes are radial to alignment
- *** Slope varies from 2.62% at W. Abut. to 0% at E. Abut. (See Roadway Plans)
- **** Prop. (1)-2" Ø FRE Conduit (IDOT)
 Prop. (1)-4" Ø FRE Conduit (IDOT)
 Prop. (1)-4" Ø FRE Conduit (Third Party)
- ***** Prop. (1)-4" Ø FRE Conduit (IDOT)

NOTE:
 1. For Stage Removal and Construction Notes, see Sheet SB-10.

	USER NAME =	DESIGNED - JJS, KJD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGE CONSTRUCTION (SHEET 6 OF 7) STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	DRAWN - JJS, KJD	REVISED -		80	FAI 80 21 STRUCTURE 7	WILL	1059	640		
PLOT DATE =	CHECKED - MI	REVISED -	CONTRACT NO. 62R28				ILLINOIS FED. AID PROJECT				
SHEET SB-09 OF SB-97 SHEETS											

MODEL: Default
 FILE NAME: p:\w\transys\transyscorp-pw\hstedi\Documents\Projects_2018\CH401\401\180022\01-Structures\CAD\ML-04_62R28\04-Sheets\04-Structures\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-007-Stage Construction (Sheet 7 of 7).dgn
 10/9/2023 2:48:05 PM

PRE-STAGE I – REMOVAL AND CONSTRUCTION

1. Install Temporary Concrete Barrier (TCB) parallel to the existing centerline of W. Frontage Road and locate W. Frontage Road traffic on the east side of roadway. Utilize flaggers/signalization as needed to temporarily revise the traffic pattern to permit one-way traffic only.
2. Install Temporary Soil Retention System (TSRS) No. 1 along the existing centerline of W. Frontage Road.
3. Remove existing W. Frontage Road pavement and excavate as required on the west side of existing roadway. Excavation shall be performed to the elevation of interim W. Frontage Road temporary pavement.
4. Construct temporary pavement within the limits of Pre-Stage I Construction.

PRE-STAGE II – REMOVAL AND CONSTRUCTION

1. Relocate Temporary Concrete Barrier (TCB) as shown on the plans to locate W. Frontage Road traffic on the newly installed temporary pavement at west side of roadway. Utilize flaggers/signalization as needed to temporarily revise the traffic pattern to permit one-way traffic only.
2. Remove existing W. Frontage Road pavement and excavate as required on the east side of existing roadway. Excavation shall be performed to the elevation of interim W. Frontage Road temporary pavement.
3. Construct temporary pavement within the limits of Pre-Stage II Construction.

STAGE I – REMOVAL AND CONSTRUCTION

1. Relocate existing, and install additional, Temporary Concrete Barrier (TCB) as shown on the plans to locate W. Frontage Road traffic to the center of the newly installed temporary pavement. Continue utilization of flaggers/signalization as needed to temporarily revise the traffic pattern to permit one-way traffic only.
2. Install Temporary Soil Retention Systems (TSRSs) along the south side of WB I-80 (TSRS Nos. 2 and 3) and the north side of EB I-80 (TSRS Nos. 4 and 5) within the limits of I-80 Stage I Removal (approximately edge of existing WB Lane 1 to edge of existing EB Lane 1). Install additional TSRSs (TSRS Nos. 6 and 7) transverse to the I-80 centerline, as shown on the plans to limit the overall depth of each excavation. Temporary Soil Retention Systems shall be installed as described above to the east and west of the existing W. Frontage Road bridge abutments.
3. Remove existing bridge structure, and portions of W. Frontage Road temporary pavement, at east and west sides of W. Frontage Road and within the limits of Stage I Removal. Excavation behind existing abutments and retaining walls shall be performed prior to existing superstructure removal and in such a manner that the earth pressures on each side of each abutment/retaining wall stem remain balanced.
4. Install Temporary MSE Walls along the south side of WB I-80 (Temp. MSE Wall Nos. 1 and 2) and the north side of EB I-80 (Temp. MSE Wall Nos. 3 and 4) within the limits of I-80 Stage I Construction (Front face of the wall at the Stage Construction Line). Temporary MSE Walls shall be installed as described above to the east and west of the existing W. Frontage Road bridge abutments.
5. Construct proposed substructure and superstructure elements within the limits of Stage I Construction.

STAGE IIA – REMOVAL AND CONSTRUCTION

1. Continue Stage I traffic pattern along the center of W. Frontage Road temporary pavement.
2. Install Temporary Soil Retention System (TSRS) Nos. 8 and 9 along the north side of WB I-80 within the limits of I-80 Stage IIA Removal. Install additional TSRS (TSRS Nos. 10 and 11), transverse to the I-80 centerline, within the limits of Stage IIA Removal as shown on the plans, to limit the overall depth of each excavation. Temporary Soil Retention Systems shall be installed as described above to the east and west of the existing W. Frontage Road bridge abutments.
3. Remove existing bridge structure, and portions of W. Frontage Road temporary pavement, at east and west sides of W. Frontage Road and within the limits of Stage IIA Removal. Excavation behind existing abutments and retaining walls shall be performed prior to existing superstructure removal and in such a manner that the earth pressures on each side of each abutment/retaining wall stem remain balanced.
4. Install Temporary MSE Walls along the north side of WB I-80 (Temp. MSE Wall Nos. 5 and 6) within the limits of I-80 Stage IIA Construction (Front face of the wall at the Stage Construction Line). Temporary MSE Walls shall be installed as described above to the east and west of the existing W. Frontage Road bridge abutments.
5. Construct proposed substructure and superstructure elements within the limits of Stage IIA Construction.

STAGE IIB-1 – REMOVAL AND CONSTRUCTION

1. Continue Stage I traffic pattern along the center of W. Frontage Road temporary pavement.
2. Install Temporary Soil Retention Systems (TSRS) (TSRS Nos. 14 and 15), transverse to the I-80 centerline, within the limits of Stage IIB Removal as shown on the plans to limit the overall depth of each excavation. Temporary Soil Retention Systems shall be installed as described above to the east and west of the existing W. Frontage Road bridge abutments.
3. Remove existing bridge structure, and portions of W. Frontage Road temporary pavement, at east and west sides of W. Frontage Road and within the limits of Stage IIB Removal. Excavation behind existing abutments and retaining walls shall be performed prior to existing superstructure removal and in such a manner that the earth pressures on each side of each abutment/retaining wall stem remain balanced.
4. Construct proposed substructure elements within the limits of Stage IIB Construction. The proposed superstructure shall not be installed within this stage.
5. Reconstruct temporary pavement at west side of W. Frontage Road roadway.

STAGE IIB-2 – REMOVAL AND CONSTRUCTION

1. Relocate existing Temporary Concrete Barrier (TCB) as shown on the plans to locate W. Frontage Road traffic onto the newly installed temporary pavement at west side of roadway. Continue utilization of flaggers/signalization as needed to temporarily revise the traffic pattern to permit one-way traffic only.
2. Within the limits of Stage IIB-2 Removal, remove portions of W. Frontage Road temporary pavement and excavate as required to the elevation of the final, proposed W. Frontage Road roadway.
3. Construct east side of proposed W. Frontage Road roadway within the limits of Stage IIB-2 Construction.

STAGE IIB-3 – REMOVAL AND CONSTRUCTION

1. Relocate existing Temporary Concrete Barrier (TCB) as shown on the plans to locate W. Frontage Road traffic onto the newly installed pavement at east side of roadway. Continue utilization of flaggers/signalization as needed to temporarily revise the traffic pattern to permit one-way traffic only.
2. Within the limits of Stage IIB-3 Removal, remove portions of W. Frontage Road temporary pavement and excavate as required to the elevation of the final, proposed W. Frontage Road roadway.
3. Construct west side of proposed W. Frontage Road roadway within the limits of Stage IIB-3 Construction.

STAGE IIB-4 - CONSTRUCTION

1. Revise traffic pattern along W. Frontage Road roadway to its final, proposed condition.
2. Erect beams and construct superstructure elements within the limits of Stage IIB Construction.



USER NAME =	DESIGNED - JJS, KJD	REVISED -
	CHECKED - MI, JJS	REVISED -
PLOT SCALE =	DRAWN - JJS, KJD	REVISED -
PLOT DATE =	CHECKED - MI	REVISED -

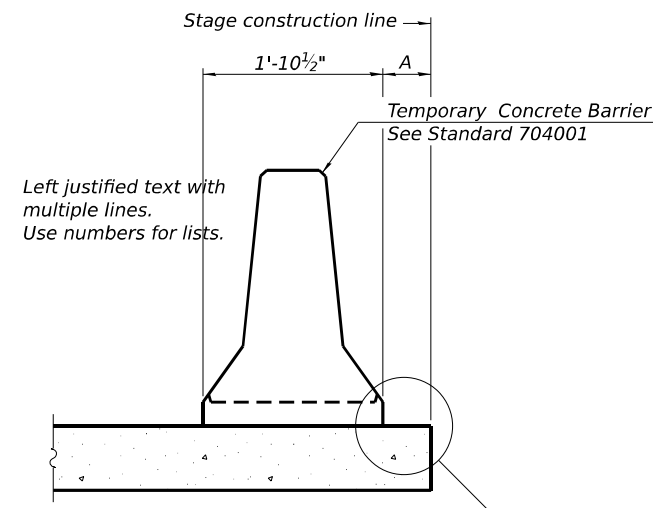
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION (SHEET 7 OF 7)
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

SHEET SB-10 OF SB-97 SHEETS

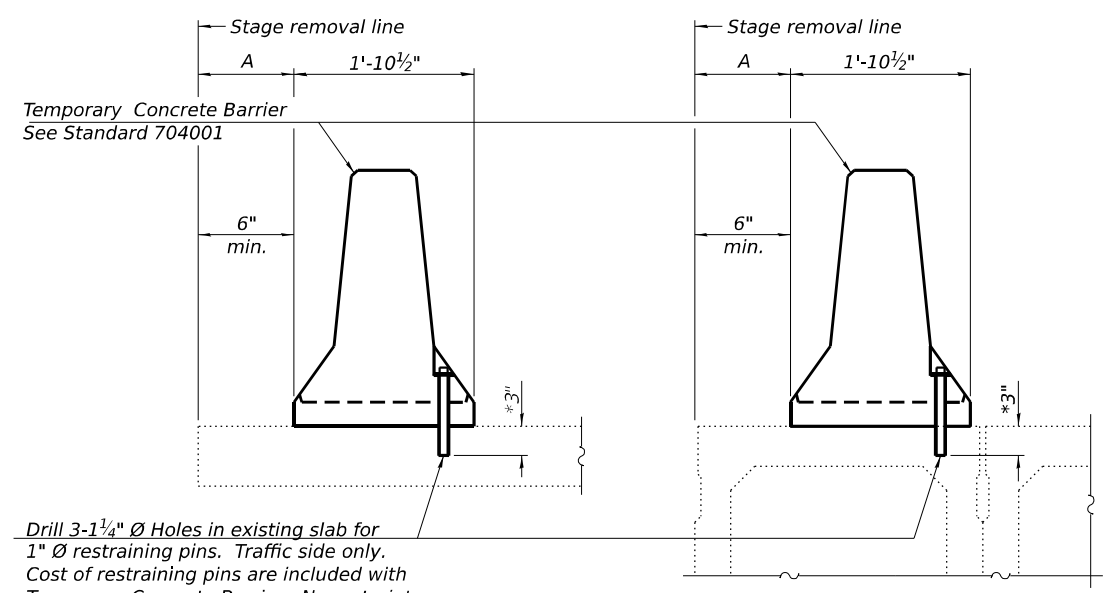
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	641
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\transystems-pw\benley.com\transyscorp-pw\hosted\Documents\Projects\2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315\80 over: Frontage Rd\0998314_0998315-ML-04-008-Temporary Concrete Barrier.dgn
 10/9/2023 2:48:07 PM



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".

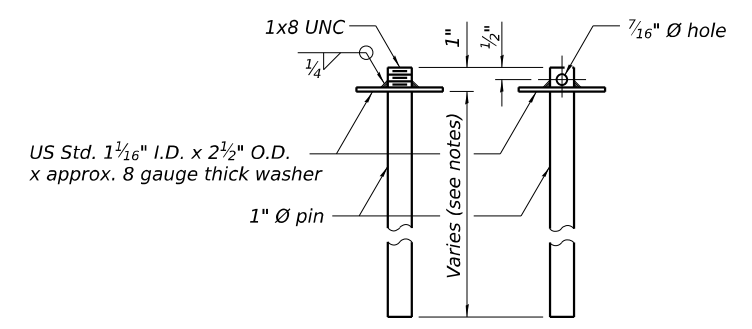
NEW SLAB OR NEW DECK BEAM



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".

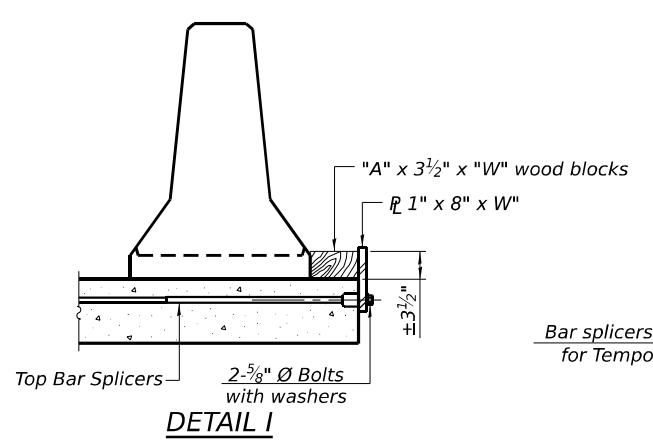
**EXISTING SLAB
 SECTIONS THRU SLAB OR DECK BEAM**

EXISTING DECK BEAM

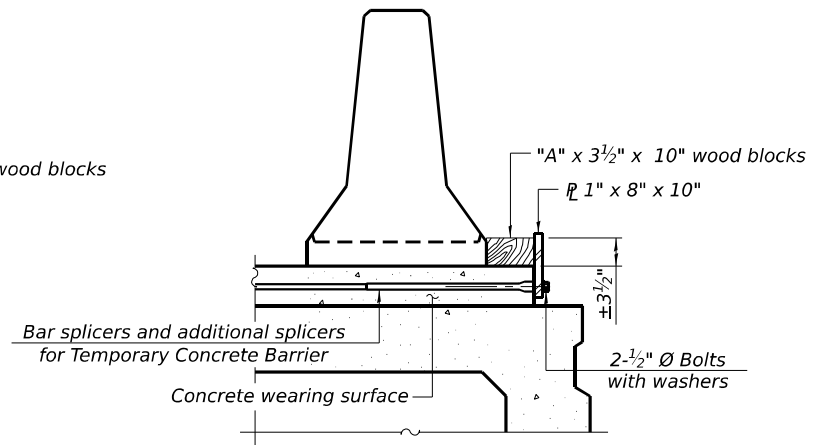


RESTRAINING PIN

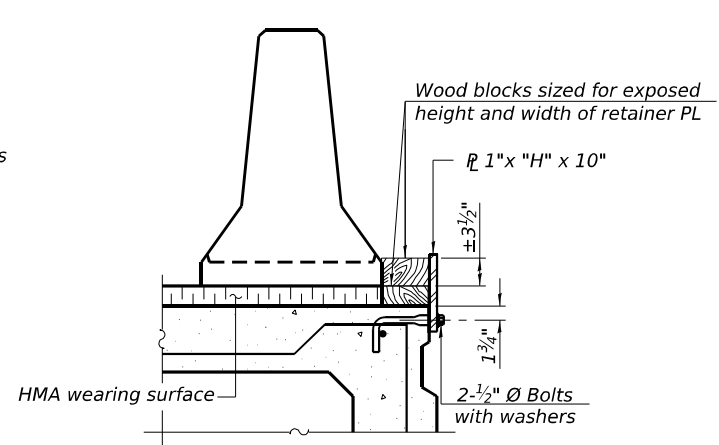
**ENGINEERING REGULAR SIZE 0.0167
 TITLES**



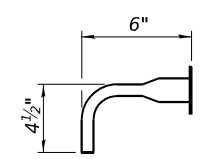
DETAIL I



DETAIL II



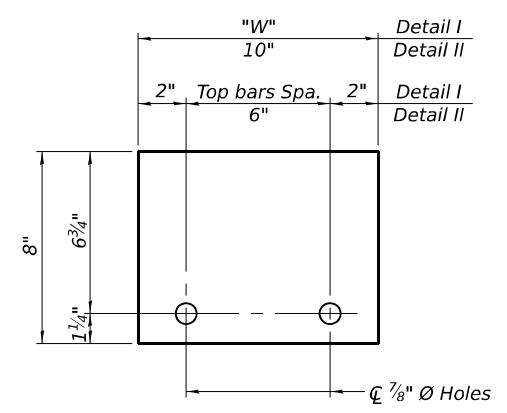
DETAIL III



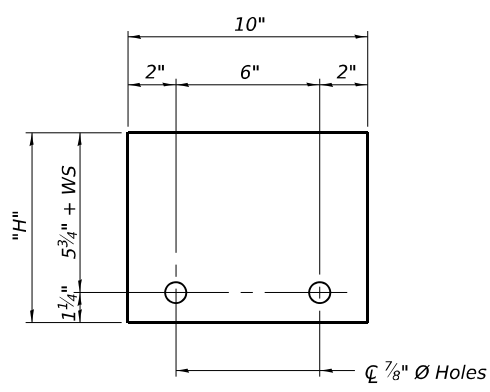
BAR SPLICER FOR #4 BAR - DETAIL III

Notes:
 Cost of retainer assembly is included with Temporary Concrete Barrier.
 A retainer assembly shall be located at the approximate 1/3 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.



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



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

RAILING CRITERIA

NCHRP 350 Test Level	3
Railing Weight (plf)	440

R-27 10-12-2021

USER NAME =	DESIGNED - JJS, KJD	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - JJS, KJD	REVISED -
	CHECKED - MI, JJS	REVISED -

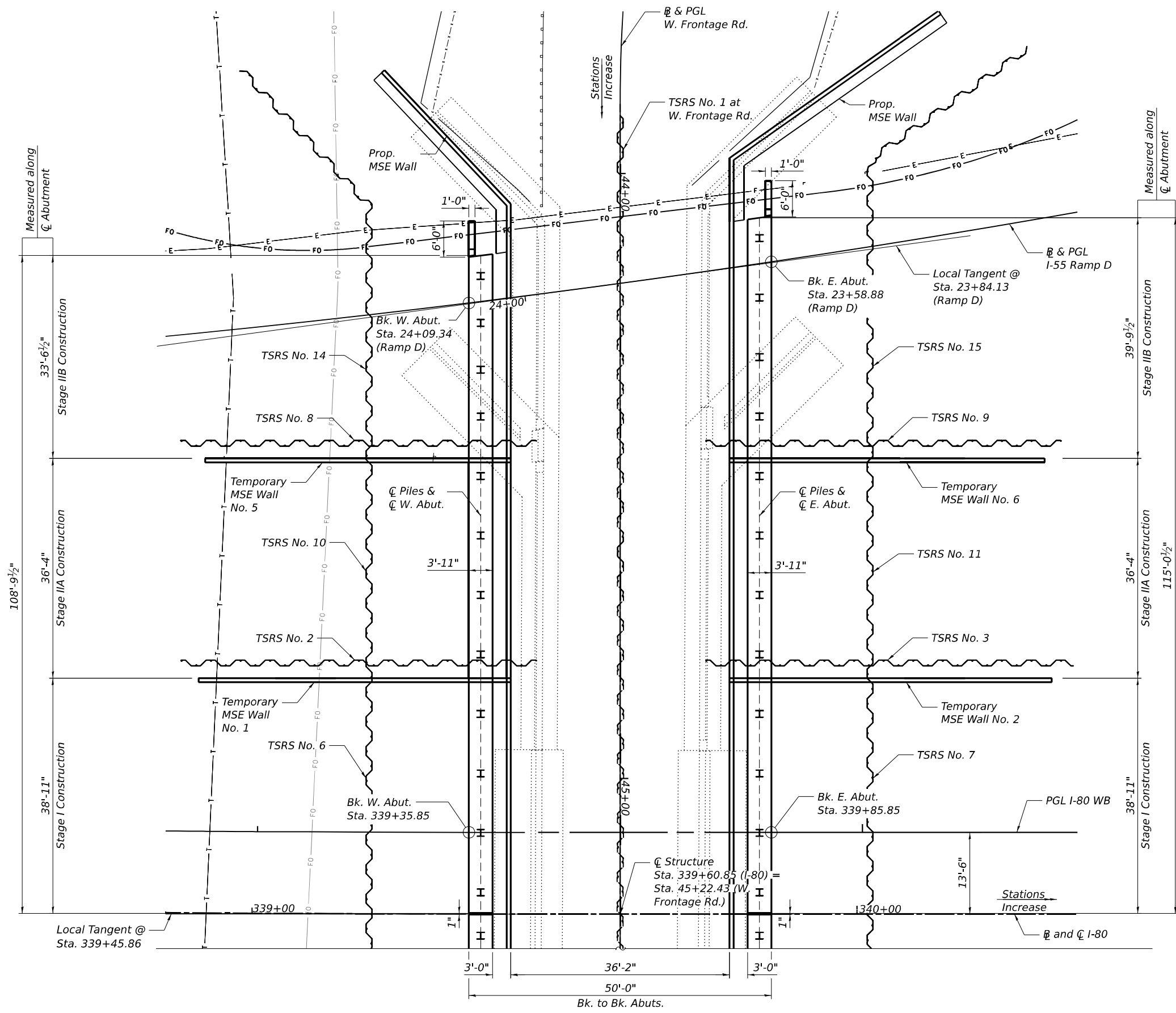
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CONCRETE BARRIER
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

SHEET SB-11 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	642
			CONTRACT NO. 62R28	
		ILLINOIS FED. AID PROJECT		

MODEL: Default
 FILE NAME: p:\transystems-pw\hstedi\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Substructure Layout.dgn
 10/9/2023 2:48:33 PM



NOTES:

1. The maximum allowable excavation slope is 1:2 (V:H) unless noted otherwise.
2. For Removal of Existing Structure, see Sheets SB-26 thru SB-30.
3. For proposed Temporary Soil Retention Systems, see Sheets SB-14 thru SB-19.
4. For Temp. MSE Walls, see Sheets SB-20 thru SB-23.
5. For Prop. MSE Walls, see Sheets SB-80 thru SB-82.
6. The Contractor shall field-verify locations of existing underground utilities and shall take all necessary precautions to protect existing utilities during removal and construction activities. Any damage to existing utilities caused by the Contractor in the performance of the work shall be repaired by the Contractor, to the satisfaction of the Engineer, at no cost to the Department.

LEGEND

- Exist. Guardrail
- Exist. Fiber Optic Line
- Prop. Fiber Optic Line
- Fence
- Exist. Access Control
- Temporary Soil Retention System
- Exist. Electric Line
- Exist. Telephone Line

SUBSTRUCTURE LAYOUT
 (Soil reinforcement for Temp. and Prop. MSE Walls not shown for clarity)



USER NAME =	DESIGNED - SK, KJD	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - SK, KJD	REVISED -
	CHECKED - MI, JJS	REVISED -

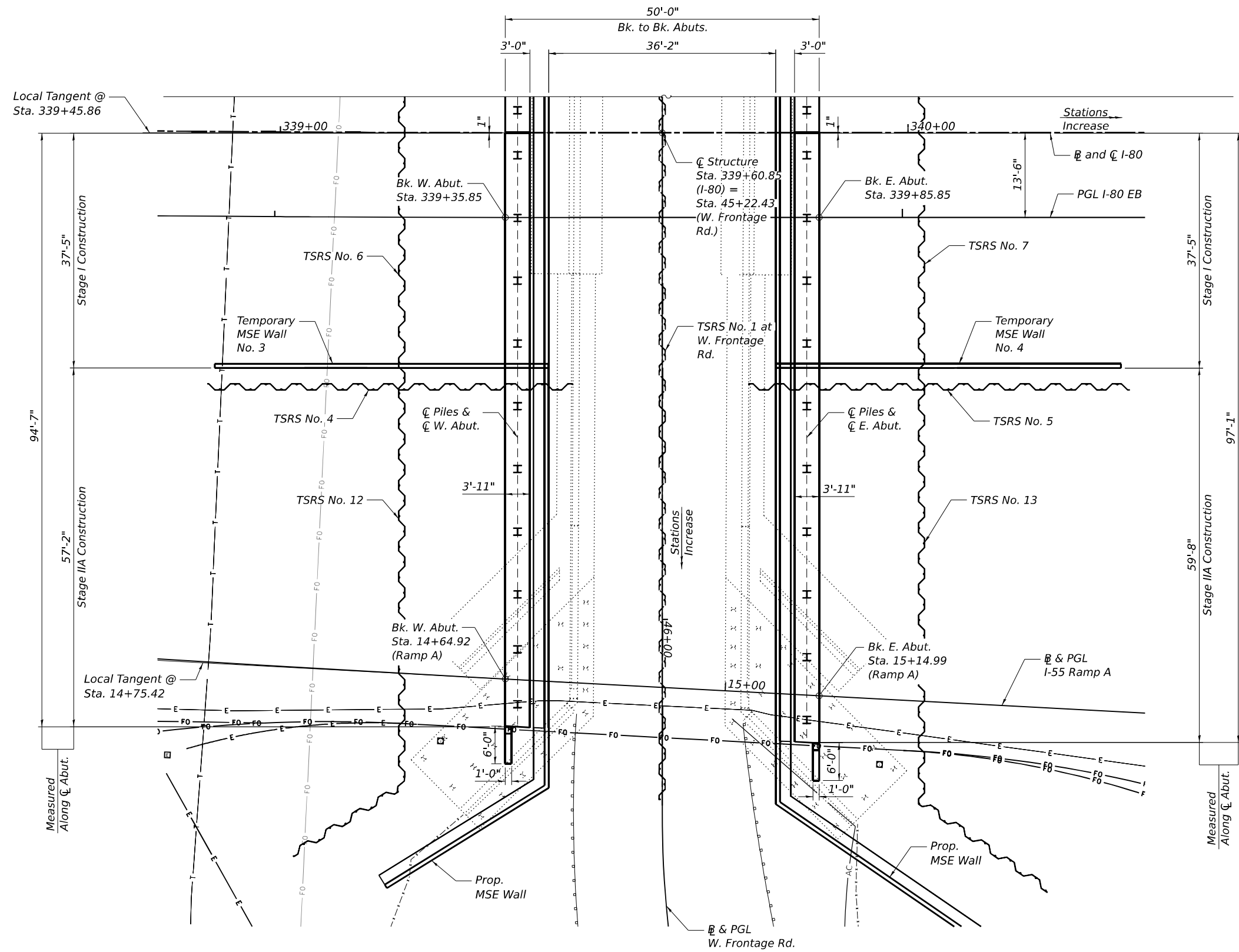
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WB SUBSTRUCTURE LAYOUT
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

SHEET SB-12 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	643
CONTRACT NO. 62R28				
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\transystems-pw\benley.com\transystems-pw\benley.com\transystems-pw\benley.com\Projects\2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315\80 over Frontage Rd\0998315-ML-04-01-0-EB Substructure Layout.dgn
 10/9/2023 2:48:49 PM



NOTES:

1. The maximum allowable excavation slope is 1:2 (V:H) unless noted otherwise.
2. For Removal of Existing Structure, see Sheets SB-26 thru SB-30.
3. For proposed Temporary Soil Retention Systems, see Sheets SB-14 thru SB-19.
4. For Temp. MSE Walls, see Sheets SB-24 thru SB-25.
5. For Prop. MSE Walls, see Sheets SB-80 thru SB-82.
6. The Contractor shall field-verify locations of existing underground utilities and shall take all necessary precautions to protect existing utilities during removal and construction activities. Any damage to existing utilities caused by the Contractor in the performance of the work shall be repaired by the Contractor, to the satisfaction of the Engineer, at no cost to the Department.

SUBSTRUCTURE LAYOUT
 (Soil reinforcement for Temp. and Prop. MSE Walls not shown for clarity)

LEGEND

- Exist. Guardrail
- Exist. Fiber Optic Line
- Prop. Fiber Optic Line
- Fence
- Exist. Access Control
- Temporary Soil Retention System
- Exist. Electric Line
- Prop. Electric Line
- Exist. Telephone Line



USER NAME =	DESIGNED - SK, KJD	REVISED -
	CHECKED - MI, JJS	REVISED -
PLOT SCALE =	DRAWN - SK, KJD	REVISED -
PLOT DATE =	CHECKED - MI, JJS	REVISED -

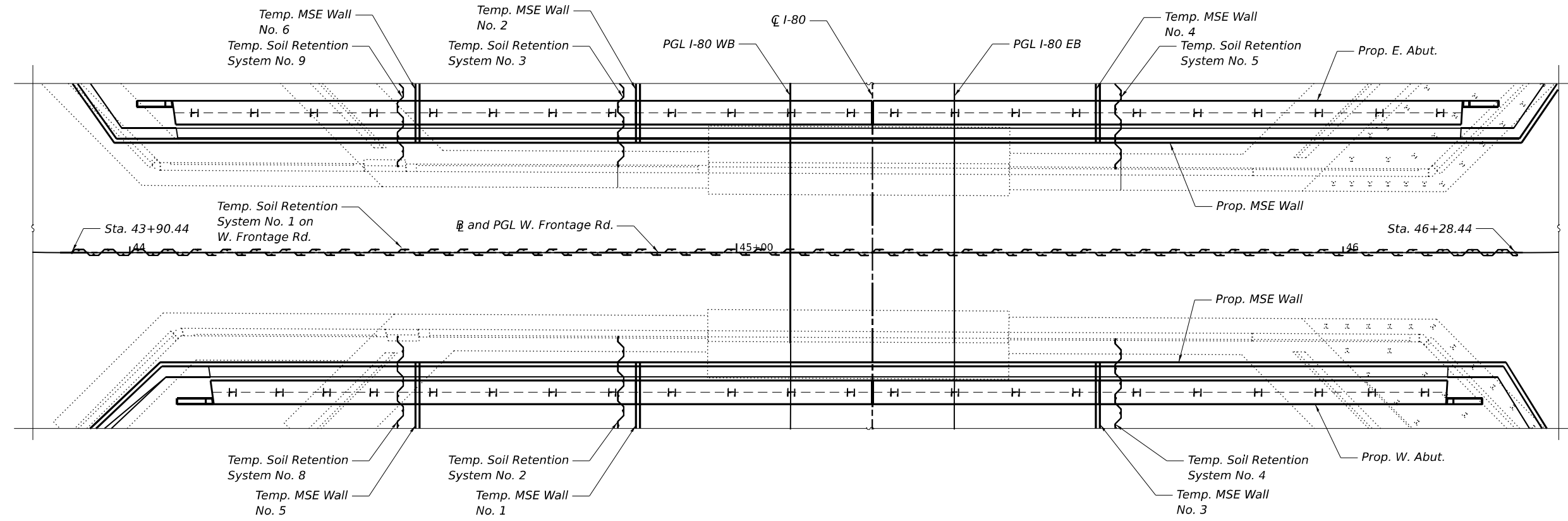
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EB SUBSTRUCTURE LAYOUT
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

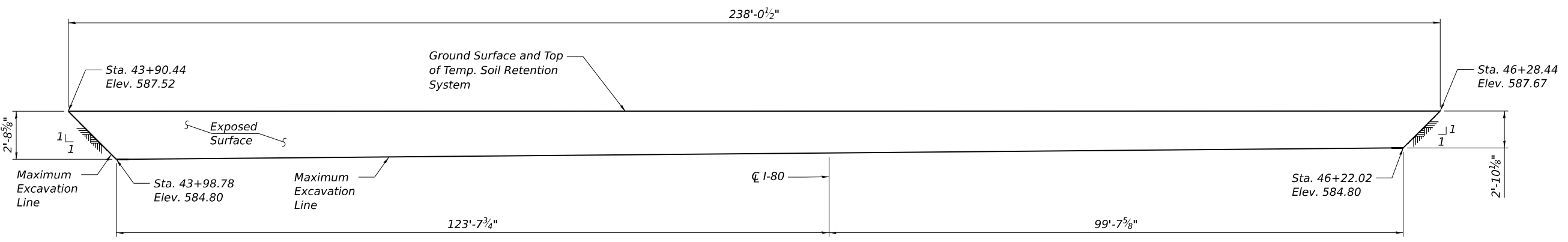
SHEET SB-13 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	644
			CONTRACT NO. 62R28	
		ILLINOIS FED. AID PROJECT		

MODEL: Default
 FILE NAME: p:\transystems-pw\transyscorp-pw\hosted\Documents\Projects\2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315-ML-04-011-Frontage Rd Temporary Soil Retention System.dgn
 10/9/2023 2:48:55 PM



PARTIAL PLAN AT TEMPORARY SOIL RETENTION SYSTEM NO. 1



ELEVATION - TEMPORARY SOIL RETENTION SYSTEM NO. 1

- NOTES:**
1. 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.
 2. The Contractor shall field-verify locations of existing underground utilities and shall take all necessary precautions to protect existing utilities during removal and construction activities. Any damage to existing utilities caused by the Contractor in the performance of the work shall be repaired by the Contractor, to the satisfaction of the Engineer, at no cost to the Department.
 3. For Temporary Soil Retention Systems, see this sheet and Sheets SB-15 thru SB-19
 4. For Temporary MSE Walls, see Sheets SB-20 thru SB-25.

LEGEND

Temporary Soil Retention System

SN 099-8314 (EB) BILL OF MATERIAL

ITEM	UNIT	TOTAL
Temporary Soil Retention System	Sq Ft	703

SN 099-8315 (WB) BILL OF MATERIAL

ITEM	UNIT	TOTAL
Temporary Soil Retention System	Sq Ft	1001



USER NAME =	DESIGNED - PG	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - PG	REVISED -
	CHECKED - MI, JJS	REVISED -

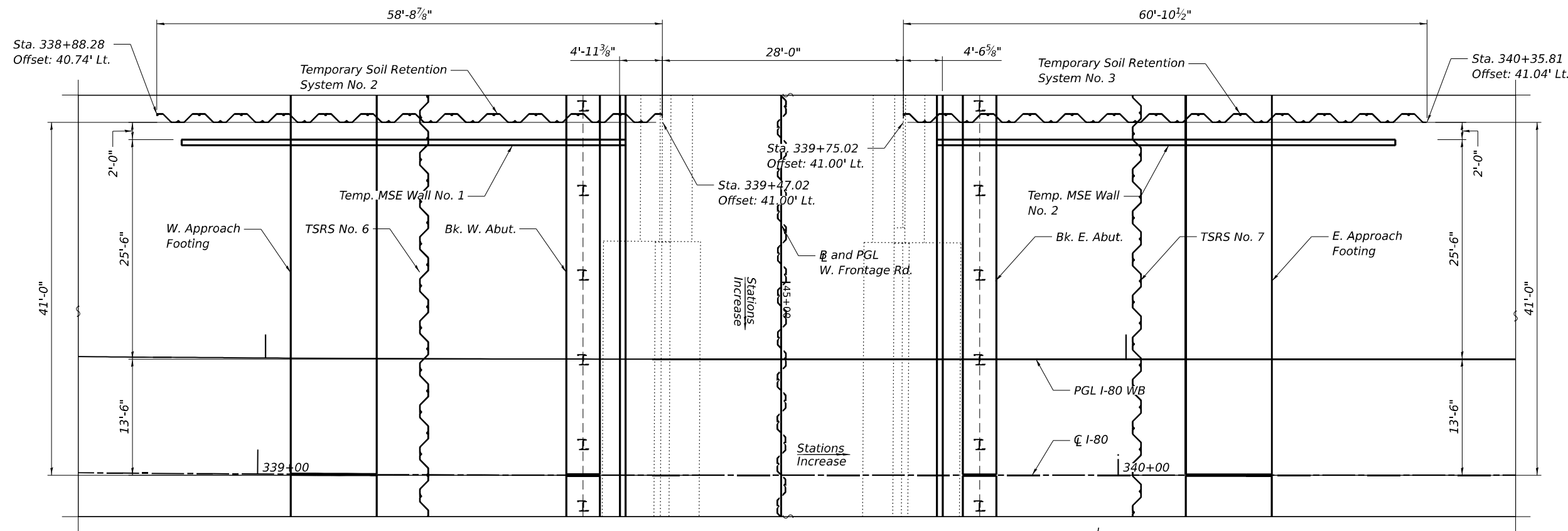
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**W. FRONTAGE RD. TEMPORARY SOIL RETENTION SYSTEM
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

SHEET SB-14 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	645
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\transys\transys\p-w\hosted\Documents\Projects_2018\CH401401180022\01-Structures\04-Sheets\04-Structures\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-011-WB Temporary Soil Retention System (Sheet 1 of 2).dgn
 10/9/2023 2:48:59 PM

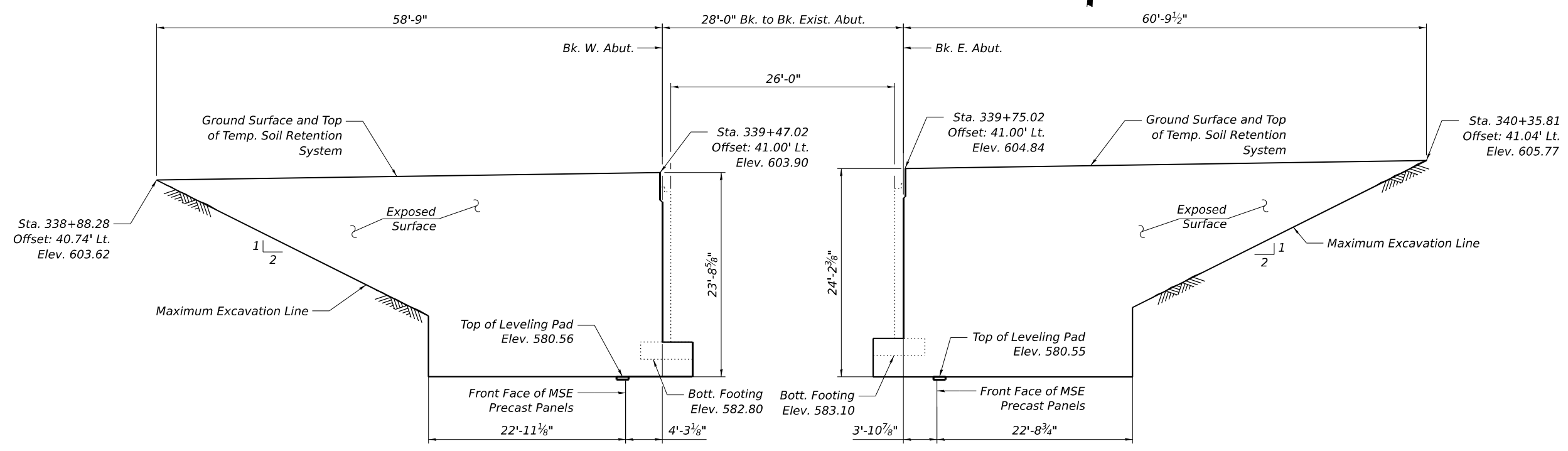


PARTIAL PLAN AT TEMPORARY SOIL RETENTION SYSTEM NOS. 2 and 3

- NOTES:**
- For notes, see Sheet SB-14.
 - For TSRS Nos. 6 and 7, see Sheets SB-18 and SB-19, respectively.

SN 099-8315 (WB) BILL OF MATERIAL

ITEM	UNIT	TOTAL
Temporary Soil Retention System	Sq Ft	1857



TEMPORARY SOIL RETENTION SYSTEM NO. 2
(West Wall)

TEMPORARY SOIL RETENTION SYSTEM NO. 3
(East Wall)

LEGEND
 Temporary Soil Retention System



USER NAME =	DESIGNED - KJD	REVISED -
	CHECKED - MI, JJS	REVISED -
PLOT SCALE =	DRAWN - KJD	REVISED -
PLOT DATE =	CHECKED - MI, JJS	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

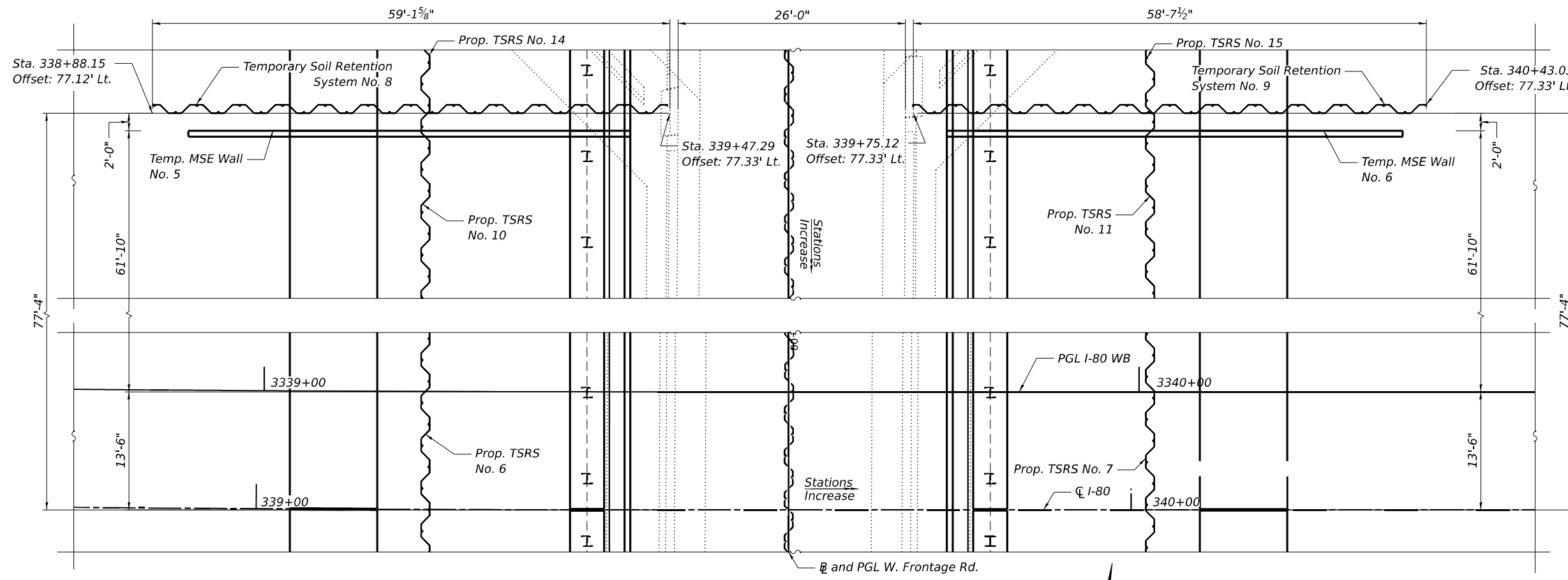
I-80 TEMPORARY SOIL RETENTION SYSTEMS (SHEET 1 OF 5)
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	646
			CONTRACT NO. 62R28	

SHEET SB-15 OF SB-97 SHEETS

ILLINOIS FED. AID PROJECT

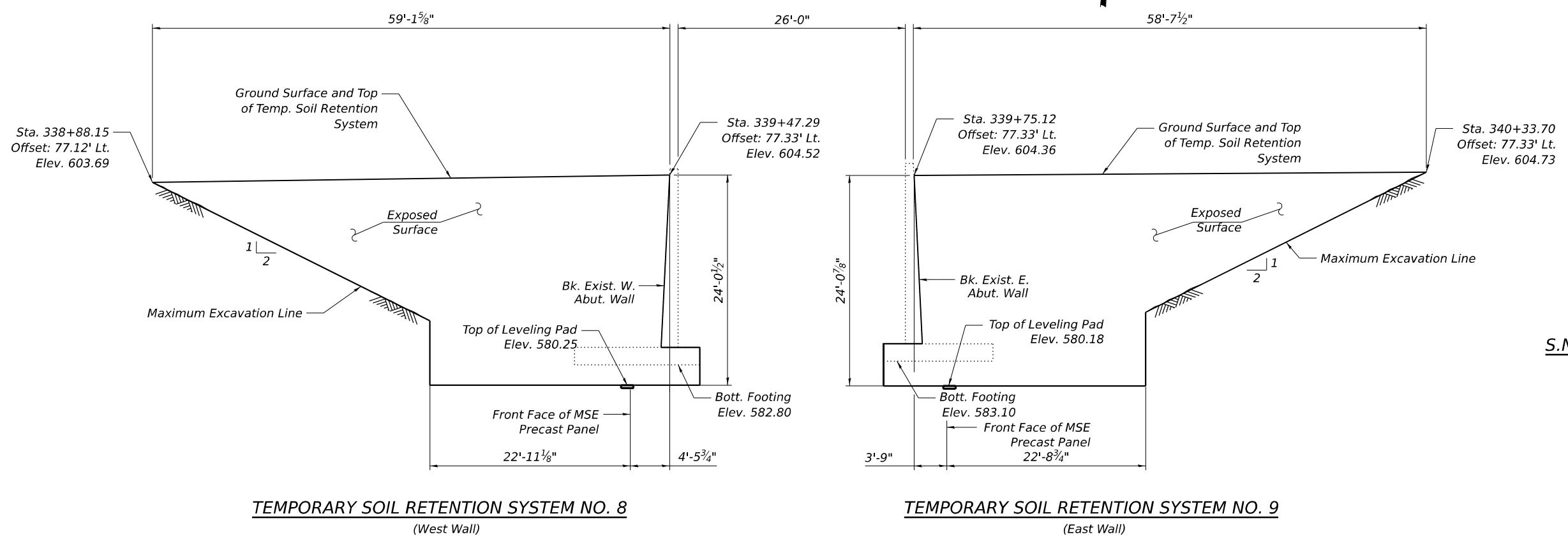
MODEL: Default
 FILE NAME: p:\projects\transcorp\p-w\hosted\Documents\Projects\2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315 ML-04-011-WB Temporary Soil Retention System (Sheet 2 of 2).dgn
 10/9/2023 2:49:04 PM



NOTES:

1. For notes, see Sheet SB-14.
2. For TSRS Nos. 6, 10 and 14, see Sheet SB-18.
3. For TSRS Nos. 7, 11 and 15, see Sheet SB-19.

PARTIAL PLAN AT TEMPORARY SOIL RETENTION SYSTEM NOS. 8 and 9



TEMPORARY SOIL RETENTION SYSTEM NO. 8
(West Wall)

TEMPORARY SOIL RETENTION SYSTEM NO. 9
(East Wall)

S.N. 099-8315 (WB) BILL OF MATERIAL

ITEM	UNIT	TOTAL
Temporary Soil Retention System	Sq Ft	1819

LEGEND



USER NAME =	DESIGNED - KJD	REVISED -
	CHECKED - MI, JJS	REVISED -
PLOT SCALE =	DRAWN - KJD	REVISED -
PLOT DATE =	CHECKED - MI, JJS	REVISED -

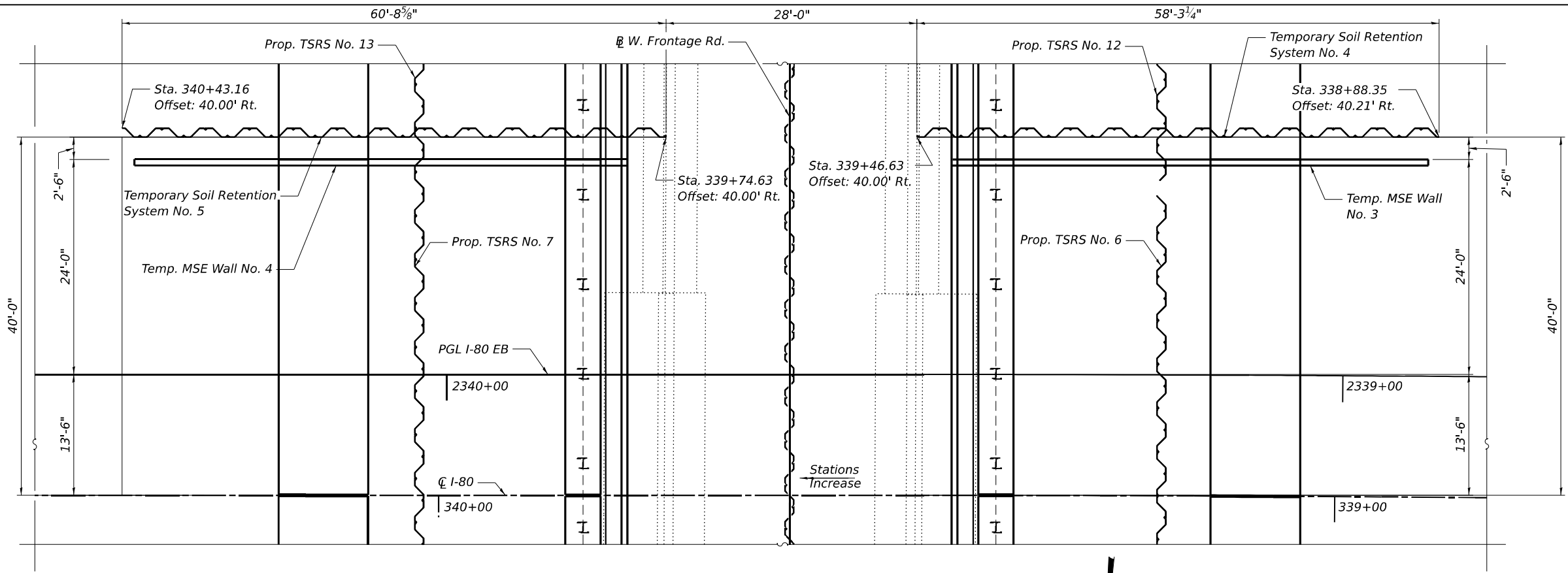
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**I-80 TEMPORARY SOIL RETENTION SYSTEMS (SHEET 2 OF 5)
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	647
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

SHEET SB-16 OF SB-97 SHEETS

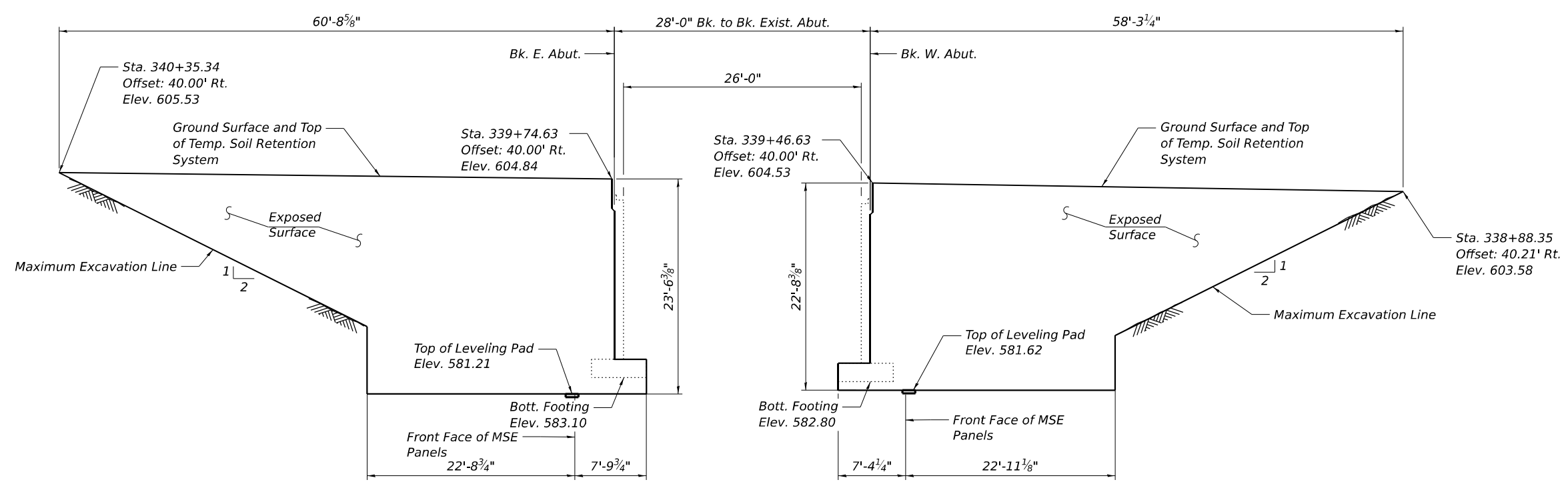
MODEL: Default
 FILE NAME: p:\transystems-pw\benley.com\transyscorp-pw1-hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Structures\099-8314 & 099-8315 ML-04-012-EB Temporary Soil Retention System.dgn
 10/12/2023 7:32:05 AM



PARTIAL PLAN AT TEMPORARY SOIL RETENTION SYSTEM NOS. 4 and 5

NOTES:

1. For notes, see Sheet SB-14.
2. For TSRS Nos. 6 and 12, see Sheet SB-18.
3. For TSRS Nos. 7 and 13, see Sheet SB-19.



TEMPORARY SOIL RETENTION SYSTEM NO. 5
(East Wall)

TEMPORARY SOIL RETENTION SYSTEM NO. 4
(West Wall)

S.N. 099-8314 (EB) BILL OF MATERIAL

ITEM	UNIT	TOTAL
Temporary Soil Retention System	Sq Ft	1798

LEGEND



USER NAME =	DESIGNED - KJD	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - KJD	REVISED -
	CHECKED - MI, JJS	REVISED -

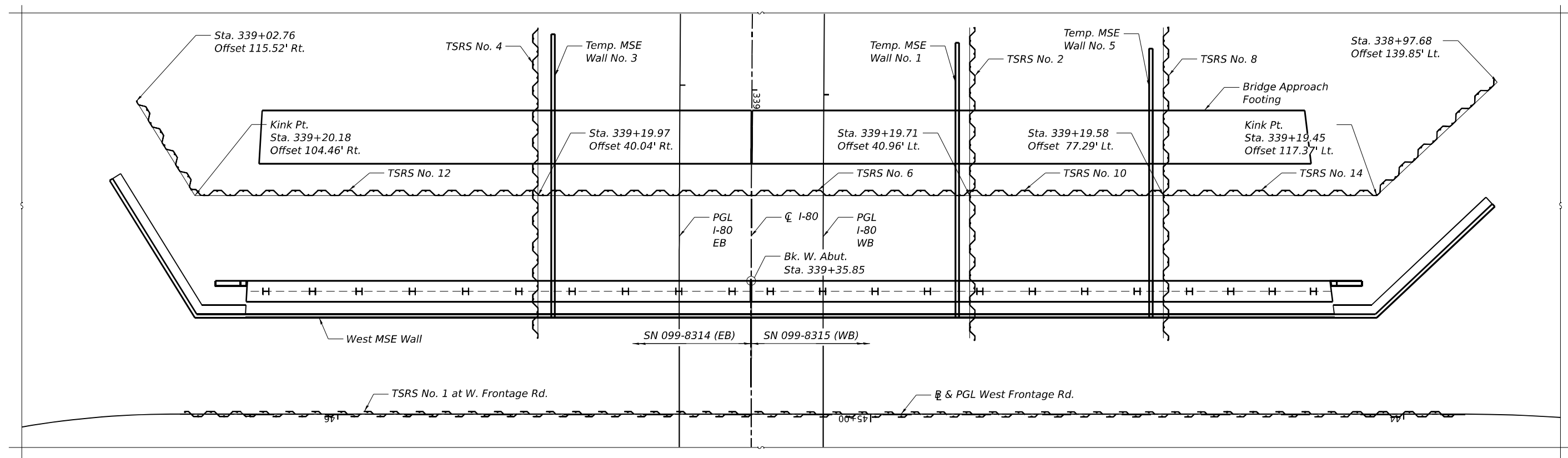
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**I-80 TEMPORARY SOIL RETENTION SYSTEMS (SHEET 3 OF 5)
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

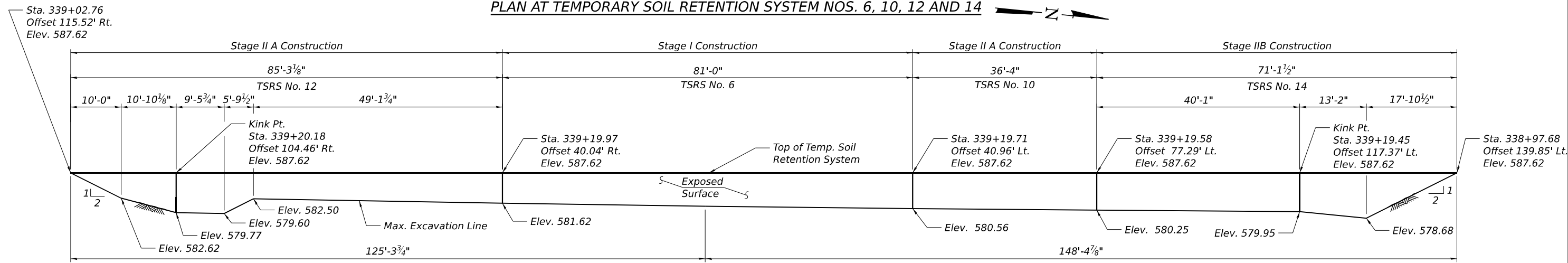
SHEET SB-17 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	648
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R28	

MODEL: Default
 FILE NAME: p:\transys\transys\p-w\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-012A-TSRS (Sheet 4 of 5)



PLAN AT TEMPORARY SOIL RETENTION SYSTEM NOS. 6, 10, 12 AND 14



NOTES:

1. For notes, see Sheet SB-14.
2. For TSRS No. 2, see Sheet SB-15.
3. For TSRS No. 4, see Sheet SB-17.
4. For TSRS No. 8, see Sheet SB-16.

LEGEND
 Temporary Soil Retention System

ELEVATION - TEMPORARY SOIL RETENTION SYSTEM NOS. 6, 10, 12 AND 14

SN 099-8314 (EB) BILL OF MATERIAL

ITEM	UNIT	TOTAL
Temporary Soil Retention System	Sq Ft	734

SN 099-8315 (WB) BILL OF MATERIAL

ITEM	UNIT	TOTAL
Temporary Soil Retention System	Sq Ft	1032



USER NAME =	DESIGNED - PG	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - PG	REVISED -
	CHECKED - MI, JJS	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

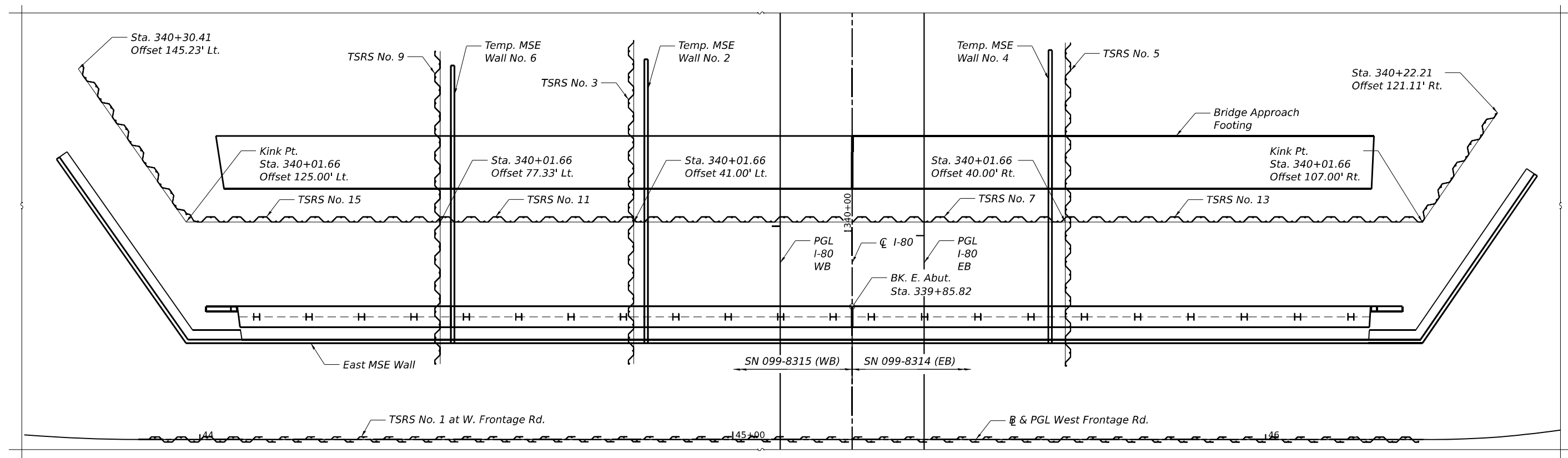
**I-80 TEMPORARY SOIL RETENTION SYSTEMS (SHEET 4 OF 5)
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	649
CONTRACT NO. 62R28				

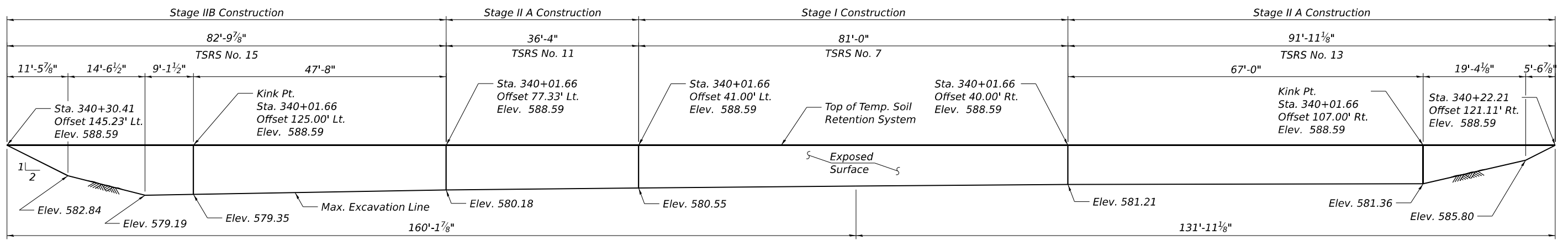
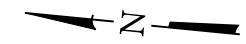
SHEET SB-18 OF SB-97 SHEETS

ILLINOIS FED. AID PROJECT

MODEL: Default
 FILE NAME: p:\transys\transys\pwl-hosted\Documents\Projects_2018\CH401401180027\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315-ML-04-012B-TSRS (Sheet 5 of 5)
 10/9/2023 2:49:19 PM



PLAN AT TEMPORARY SOIL RETENTION SYSTEM NOS. 7, 11, 13, AND 15



ELEVATION - TEMPORARY SOIL RETENTION SYSTEM NOS. 7, 11, 13, and 15

- NOTES:**
- For notes, see Sheet SB-14.
 - For TSRS No. 3, see Sheet SB-15.
 - For TSRS No. 5, see Sheet SB-17.
 - For TSRS No. 9, see Sheet SB-16.

LEGEND

Temporary Soil Retention System

SN 099-8314 (EB) BILL OF MATERIAL

ITEM	UNIT	TOTAL
Temporary Soil Retention System	Sq Ft	895

SN 099-8315 (WB) BILL OF MATERIAL

ITEM	UNIT	TOTAL
Temporary Soil Retention System	Sq Ft	1270



USER NAME =	DESIGNED - PG	REVISD -
PLOT SCALE =	CHECKED - MI, JJS	REVISD -
PLOT DATE =	DRAWN - PG	REVISD -
	CHECKED - MI, JJS	REVISD -

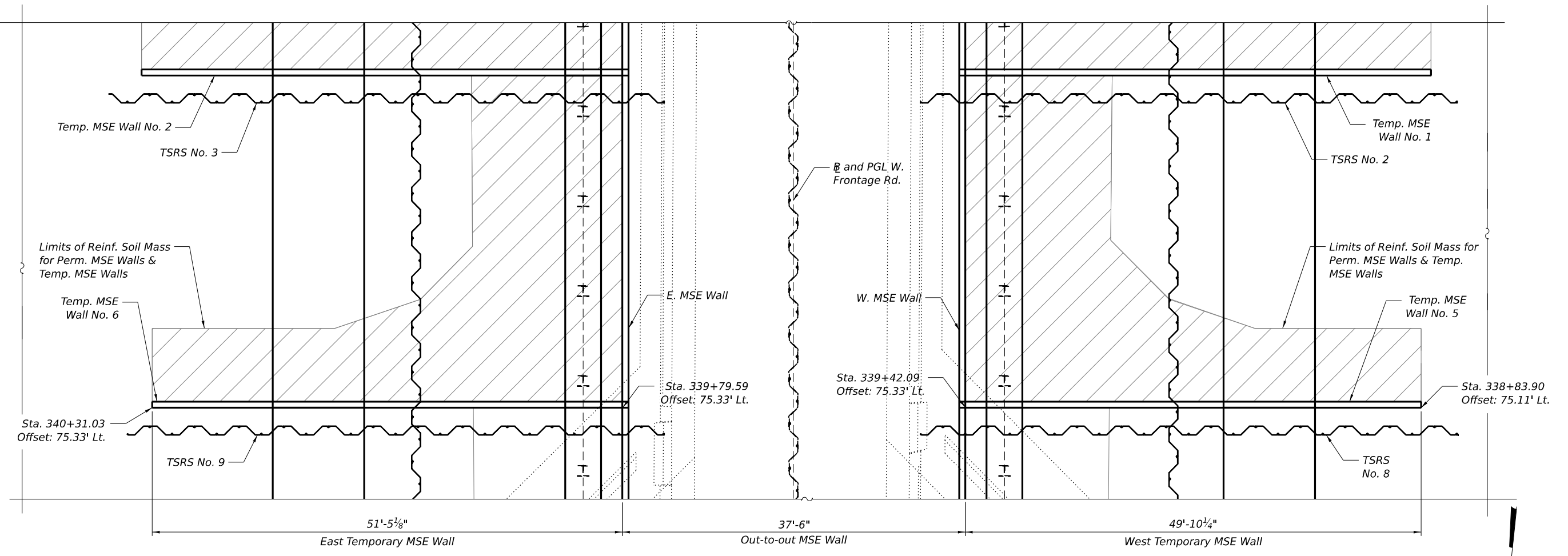
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**I-80 TEMPORARY SOIL RETENTION SYSTEMS (SHEET 5 OF 5)
STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

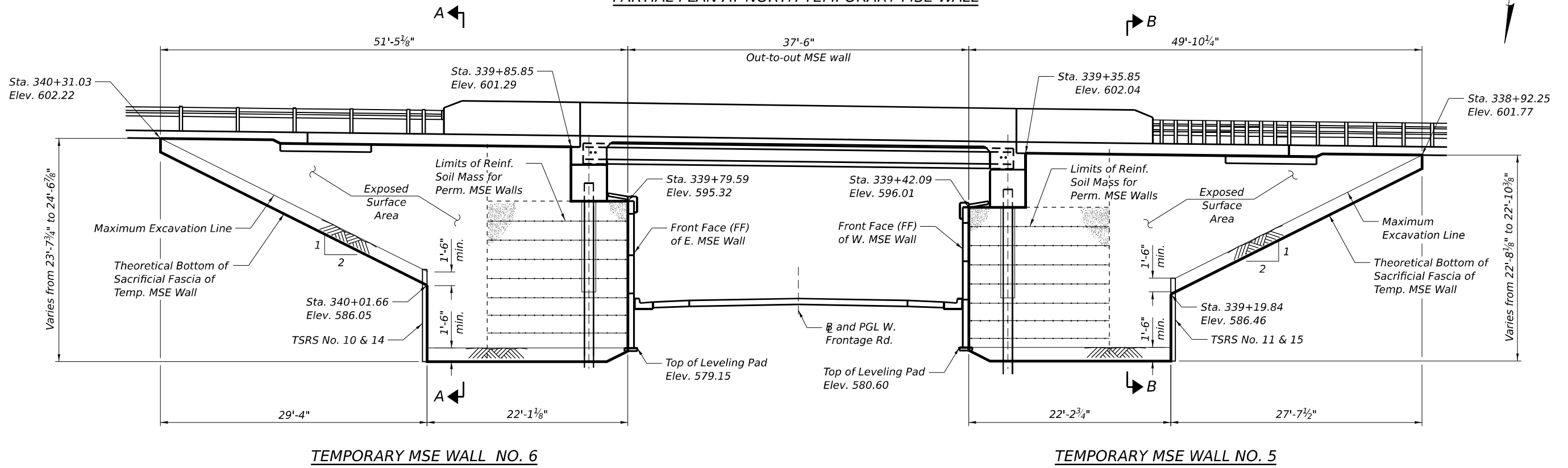
SHEET SB-19 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	650
			CONTRACT NO. 62R28	
		ILLINOIS FED. AID PROJECT		

MODEL: Default
 FILE NAME: p:\projects\transyscorp-pw\hosted\documents\projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Structures\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-013-WB North Temporary MSE Walls Plan and Elevation.dgn
 10/9/2023 2:49:22 PM



PARTIAL PLAN AT NORTH TEMPORARY MSE WALL



TEMPORARY MSE WALL NO. 6

TEMPORARY MSE WALL NO. 5



USER NAME =	DESIGNED - EN	REVISED -
	CHECKED - MI, JJS	REVISED -
PLOT SCALE =	DRAWN - EN	REVISED -
PLOT DATE =	CHECKED - MI, JJS	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

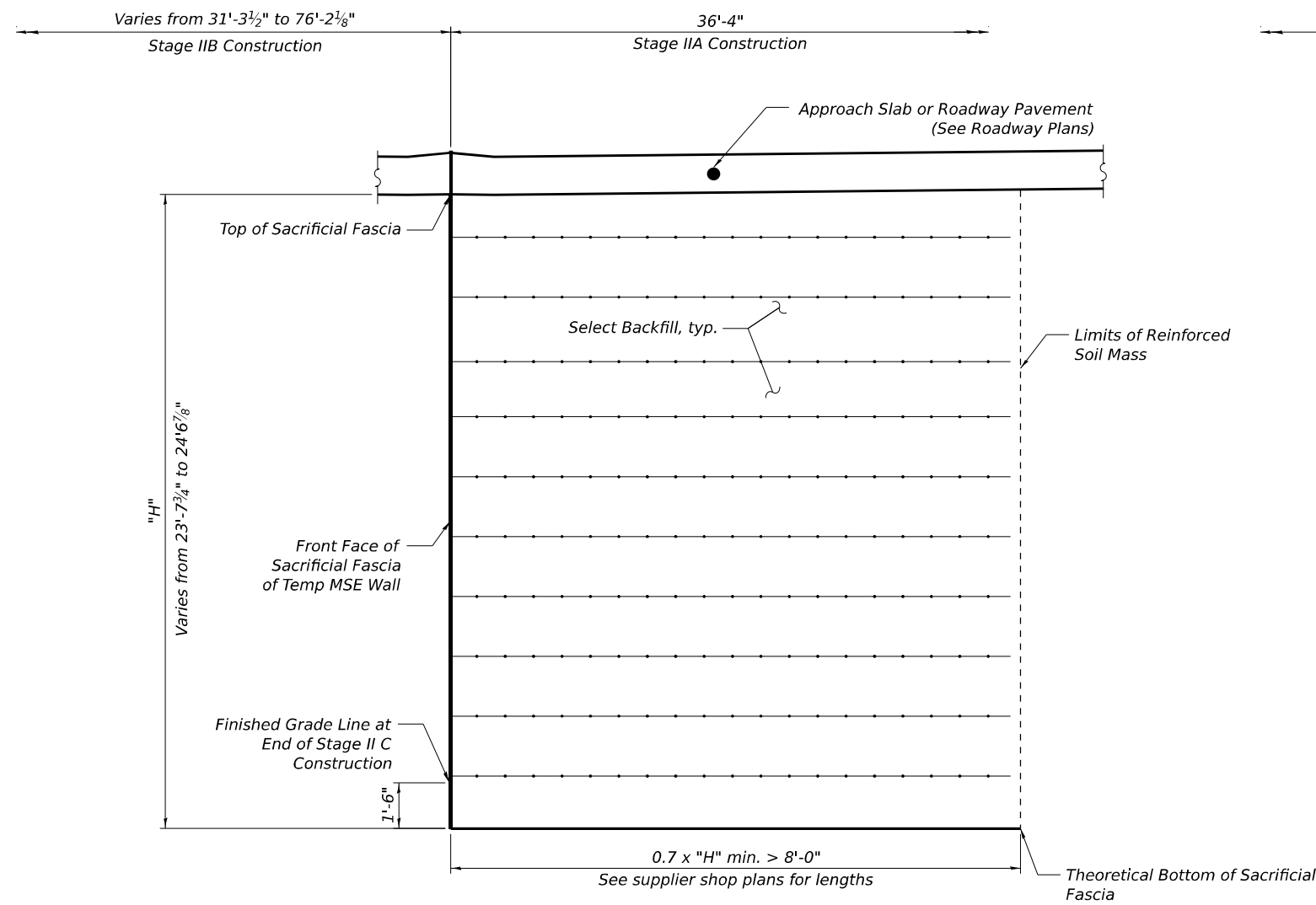
**WB NORTH TEMPORARY MSE WALLS PLAN AND ELEVATION
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	651
CONTRACT NO. 62R28				

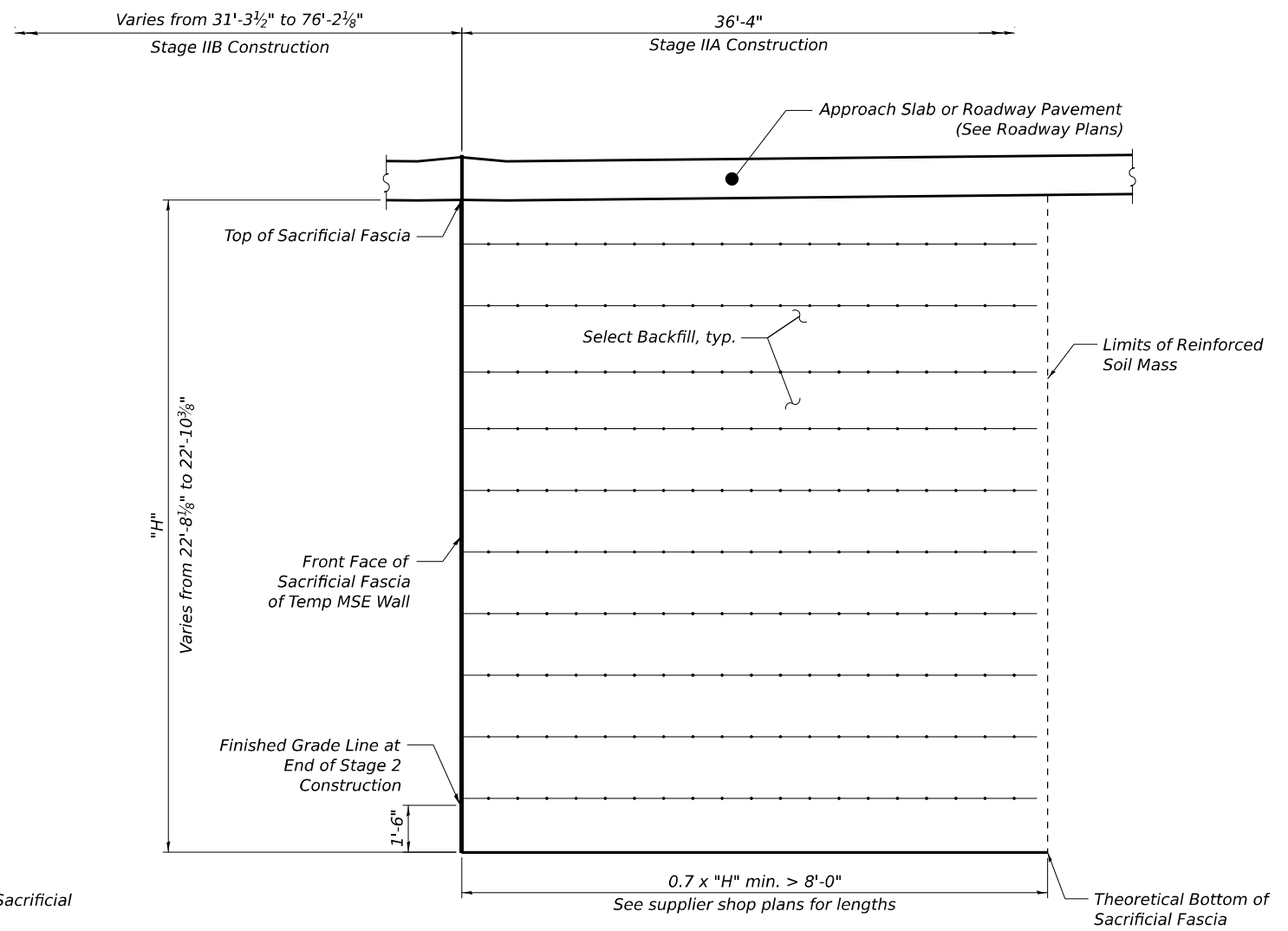
SHEET SB-20 OF SB-97 SHEETS

ILLINOIS FED. AID PROJECT

MODEL: Default
 FILE NAME: p:\projects\transyscorp-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-013A-WB North Temporary MSE Walls Sections and Details.dgn
 10/9/2023 2:49:24 PM



VIEW A-A



VIEW B-B

NOTES:

1. The Limits of Temporary MSE Walls shown are based on theoretical limits required to retain the newly constructed Stage I roadway and fill during Stage IIA Construction. Adjustments may be required if the actual field conditions vary from the configuration shown.



USER NAME =	DESIGNED - EN	REVISED -
	CHECKED - MI, JJS	REVISED -
PLOT SCALE =	DRAWN - EN	REVISED -
PLOT DATE =	CHECKED - MI, JJS	REVISED -

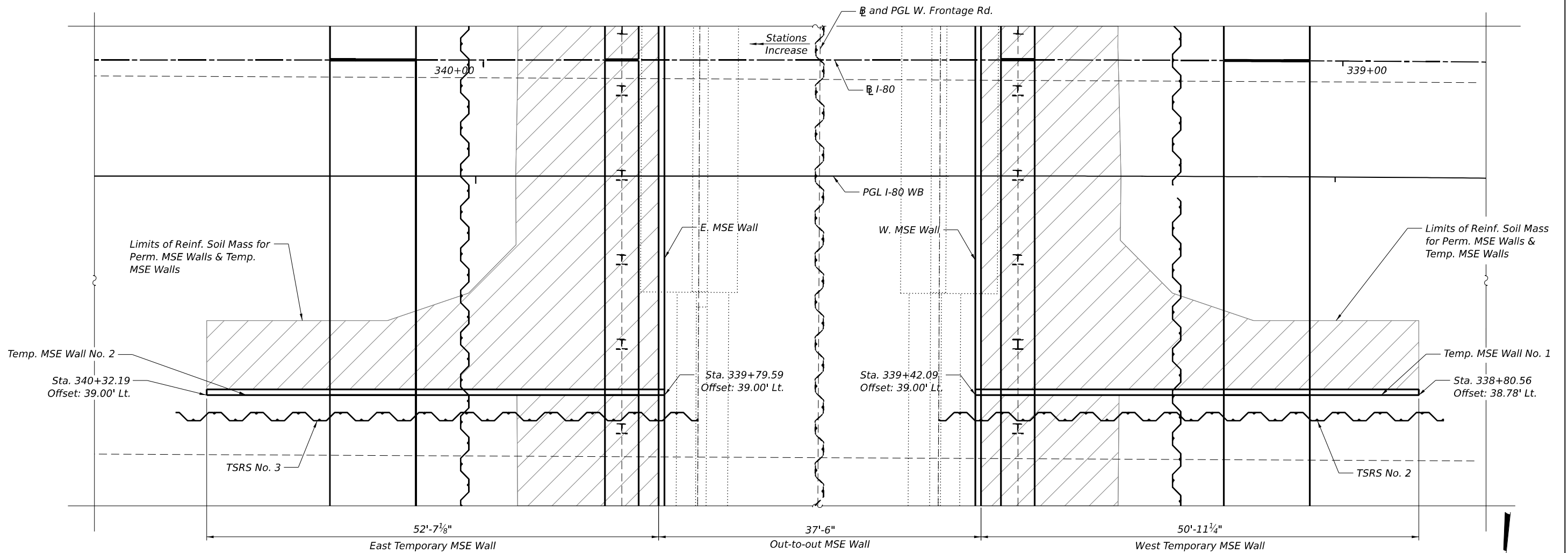
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WB NORTH TEMPORARY MSE WALLS SECTIONS AND DETAILS
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

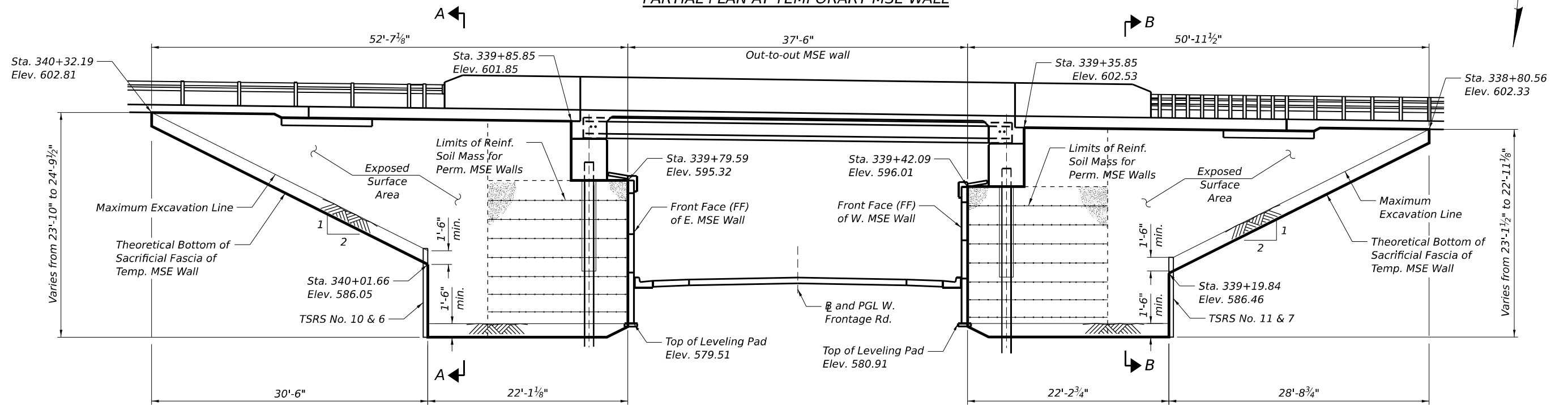
SHEET SB-21 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	652
			CONTRACT NO. 62R28	
		ILLINOIS FED. AID PROJECT		

MODEL: Default
 FILE NAME: p:\projects\transyscorp-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-014-WB South Temporary MSE Walls Plan and Elevation.dgn
 10/9/2023 2:49:28 PM



PARTIAL PLAN AT TEMPORARY MSE WALL



TEMPORARY MSE WALL NO. 2

TEMPORARY MSE WALL NO. 1



USER NAME =	DESIGNED - EN	REVISED -
	CHECKED - MI, JJS	REVISED -
PLOT SCALE =	DRAWN - EN	REVISED -
PLOT DATE =	CHECKED - MI, JJS	REVISED -

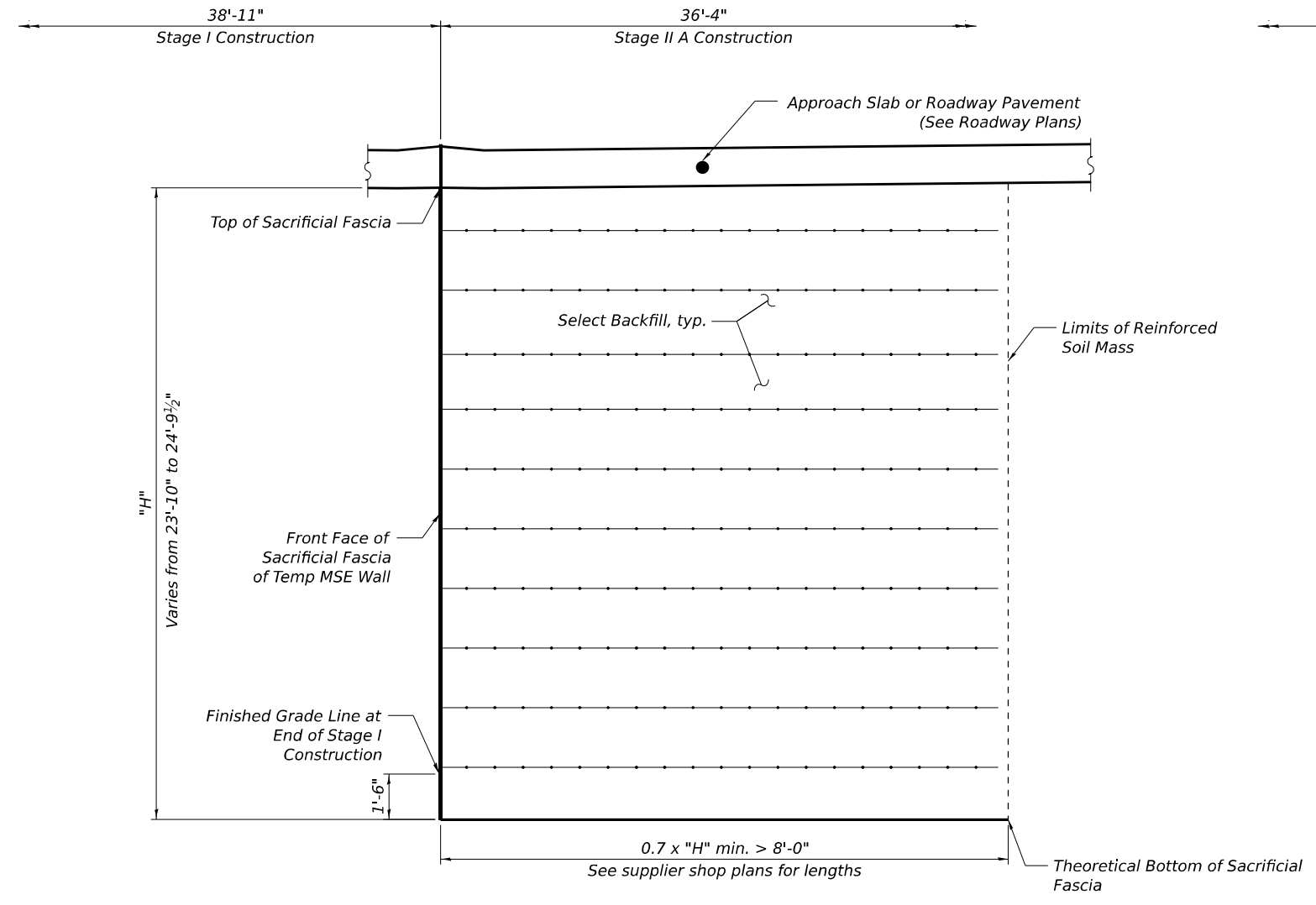
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WB SOUTH TEMPORARY MSE WALLS PLAN AND ELEVATION
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

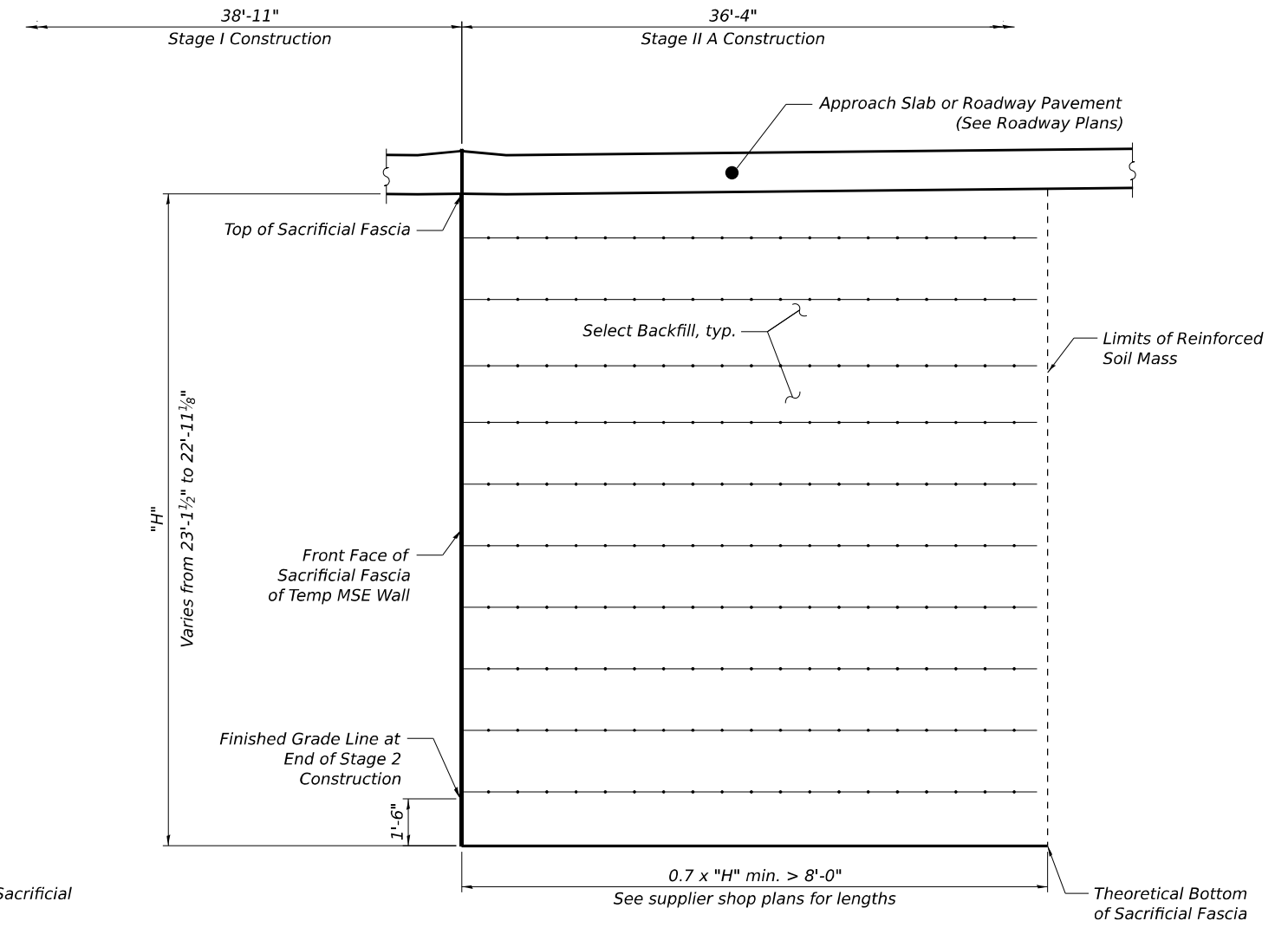
SHEET SB-22 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	653
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\transystems-pw\benley.com\transyscorp-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-014A-WB South Temporary MSE Walls Sections and Details.dgn
 10/9/2023 2:49:31 PM



VIEW A-A



VIEW B-B

NOTES:

1. The Limits of Temporary MSE Walls shown are based on theoretical limits required to retain the newly constructed Stage I roadway and fill during Stage IIA Construction. Adjustments may be required if the actual field conditions vary from the configuration shown.

SN 099-8315 (WB) BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structure Excavation	Cu Yd	745
Temporary Mechanically Stabilized Earth Retaining Wall	Sq Ft	2904



USER NAME =	DESIGNED - EN	REVISED -
	CHECKED - MI, JJS	REVISED -
PLOT SCALE =	DRAWN - EN	REVISED -
PLOT DATE =	CHECKED - MI, JJS	REVISED -

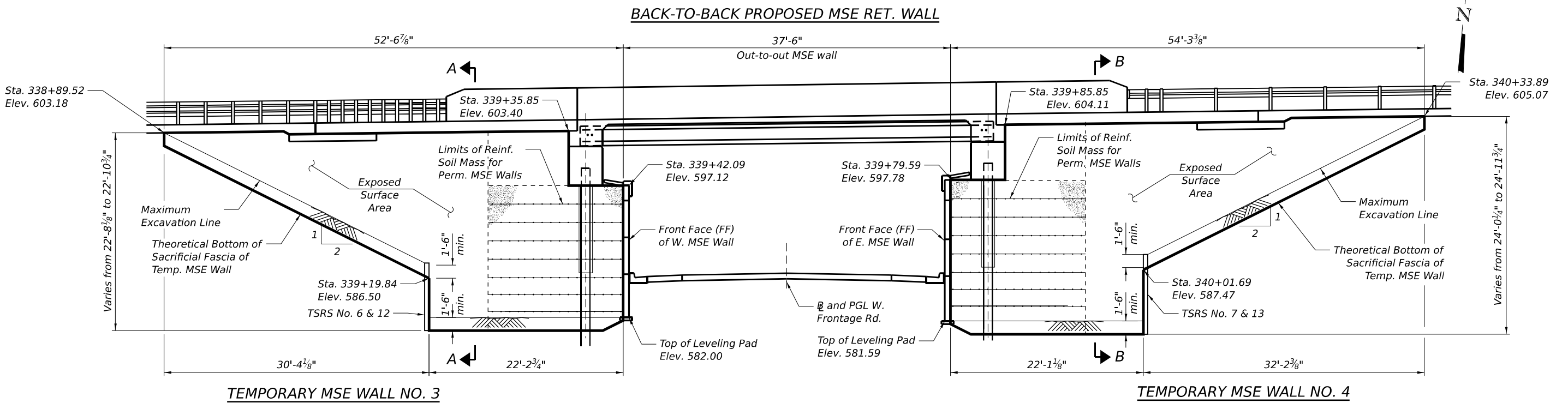
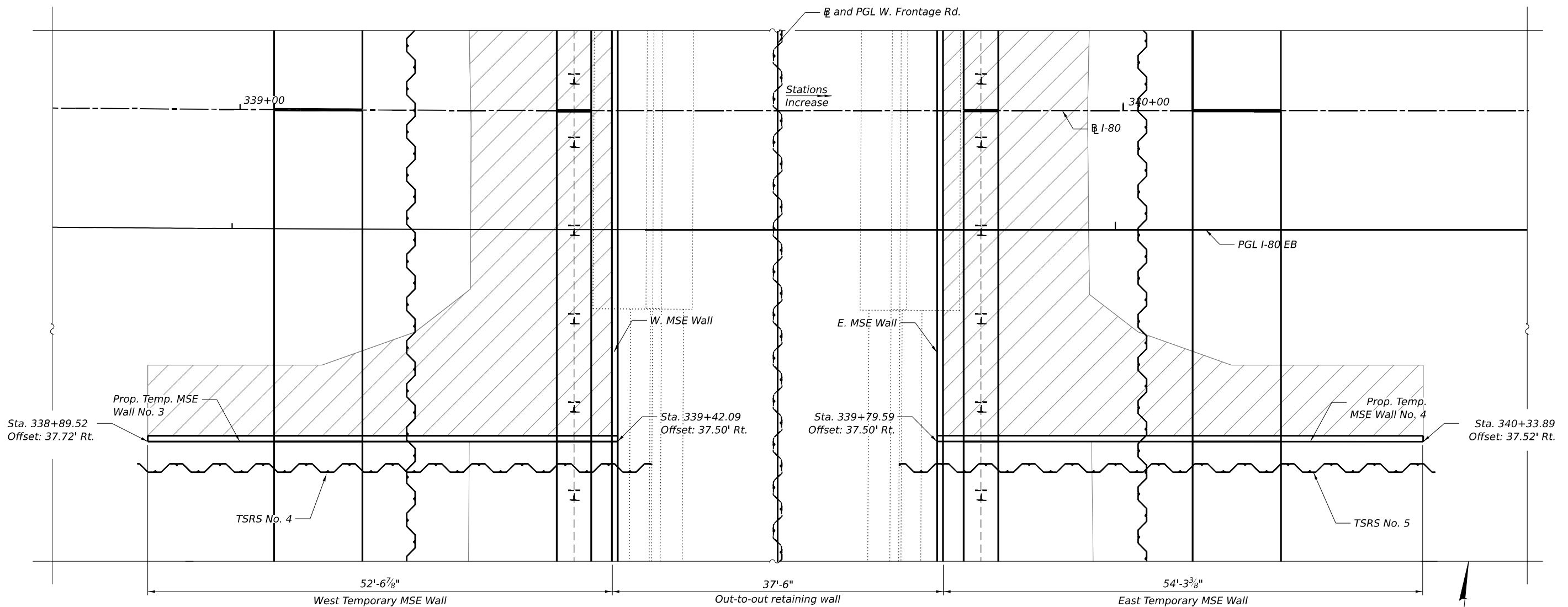
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WB SOUTH TEMPORARY MSE WALLS SECTIONS AND DETAILS
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

SHEET SB-23 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	654
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\transystems-pw\benley.com\transyscorp-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\04-Structures\099-8314 & 099-8315 EB Temporary MSE Walls Plan and Elevation.dgn
 10/9/2023 2:49:35 PM



USER NAME =	DESIGNED - EN	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - EN	REVISED -
	CHECKED - MI, JJS	REVISED -

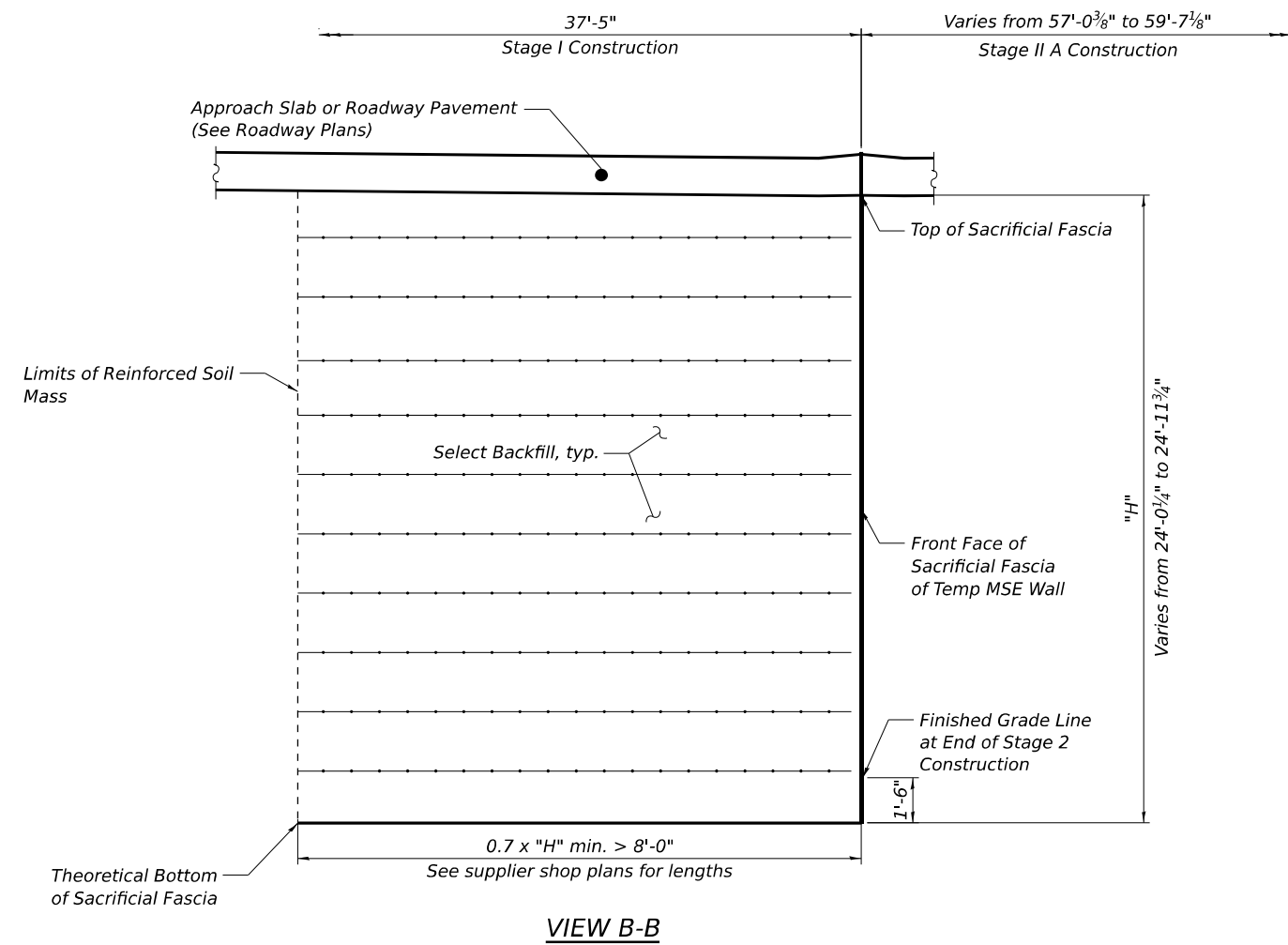
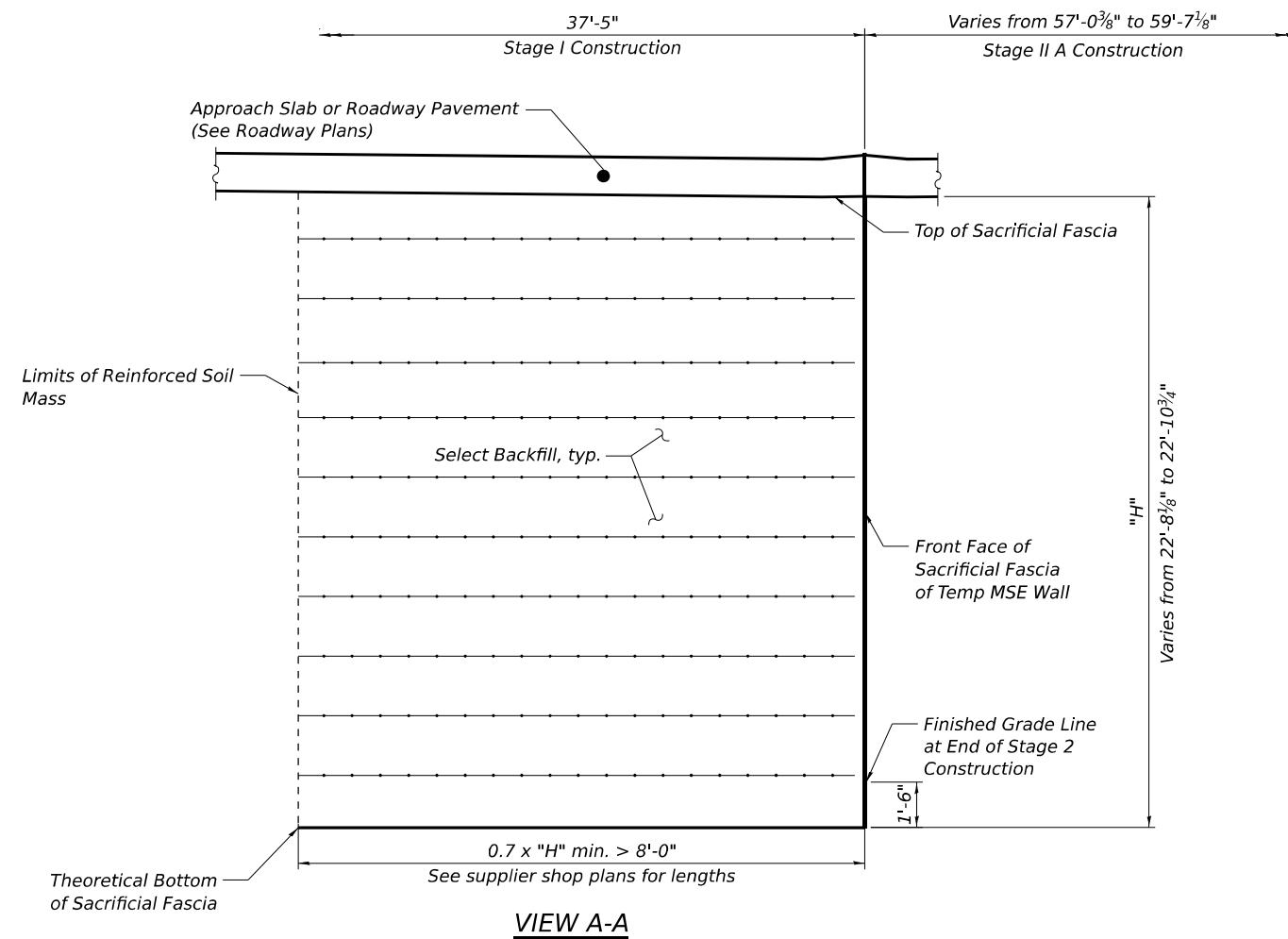
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EB TEMPORARY MSE WALLS PLAN AND ELEVATION
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

SHEET SB-24 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	655
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R28	

MODEL: Default
 FILE NAME: p:\projects\transyscorp-pw\hosted\Documents\Projects\2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315 ML-04-016-EB Temporary MSE Walls Sections and Details.dgn
 10/9/2023 2:49:39 PM



NOTES:

- The Limits of Temporary MSE Walls shown are based on theoretical limits required to retain the newly constructed Stage I roadway and fill during Stage IIA Construction. Adjustments may be required if the actual field conditions vary from the configuration shown.

SN 099-8314 (EB) BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structure Excavation	Cu Yd	398
Temporary Mechanically Stabilized Earth Retaining Wall	Sq Ft	1529



USER NAME =	DESIGNED - EN	REVISED -
	CHECKED - MI, JJS	REVISED -
PLOT SCALE =	DRAWN - EN	REVISED -
PLOT DATE =	CHECKED - MI, JJS	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EB TEMPORARY MSE WALLS SECTIONS AND DETAILS
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

SHEET SB-25 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	656
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

NOTES:

- Dimensions shown have been taken from historical design drawings and may not represent "as built" conditions. The Contractor must verify all dimensions in the field. Variation in the field dimensions shall not warrant additional compensation for Removal of Existing Structures No. 3, 4 or 5.
- For suggested stages of construction and sequencing requirements, see Maintenance of Traffic (MOT) Plans and Sheets SB-04 thru SB-10.
- For substructure removal details and sections, see Sheets SB-28 thru SB-30.

- For Temporary Soil Retention System limits and details, see Sheets SB-14 thru SB-19.
- The Contractor shall take all necessary precautions to protect existing utilities, foundations and adjacent structures during removal/construction of the bridge.
- For Structure Removal Elevation and Deck Removal Sections, see Sheet SB-27.

BILL OF MATERIAL (S.N. 099-8314)

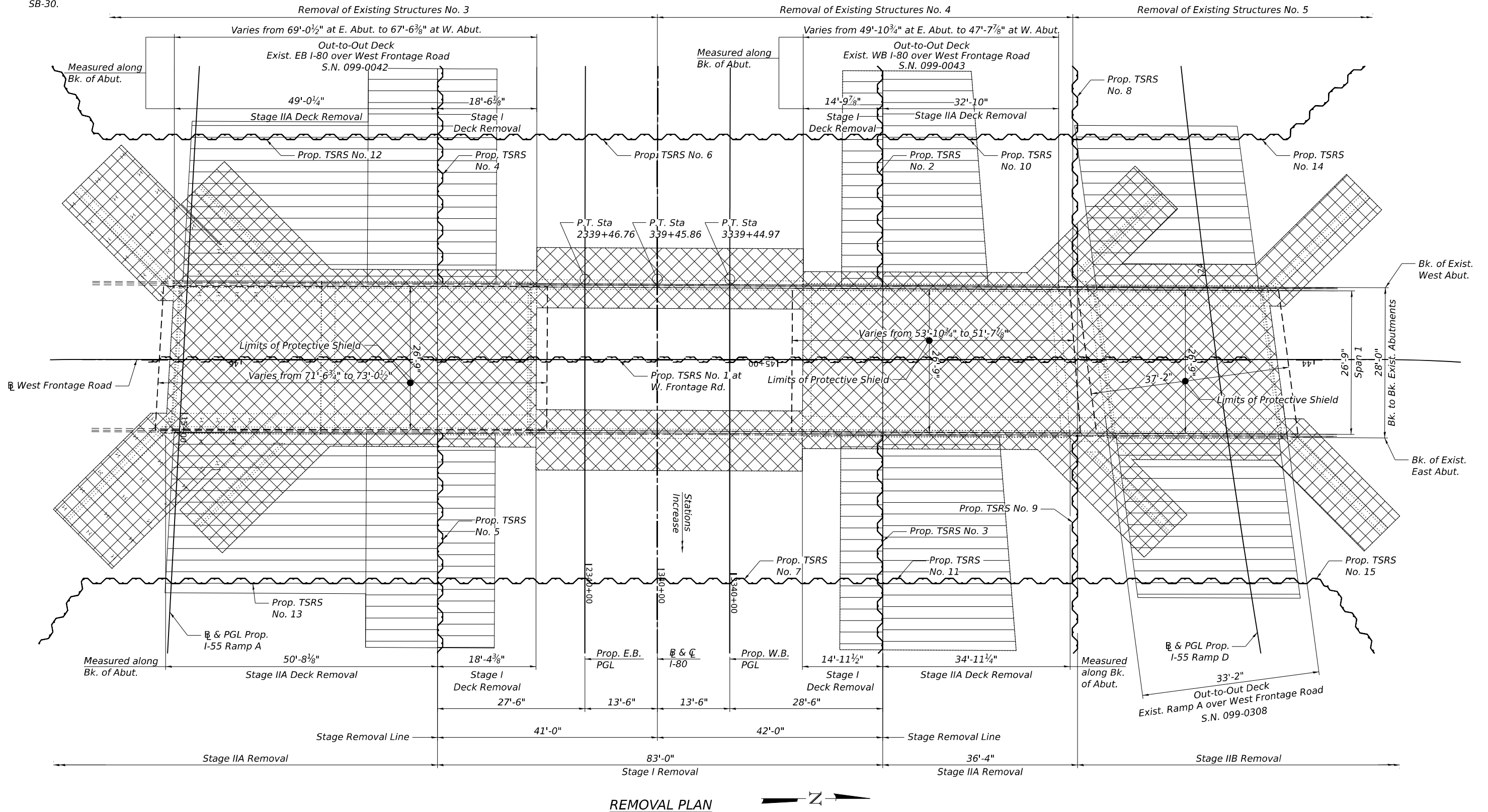
ITEM	UNIT	TOTAL
Removal of Existing Structures No. 3	Each	1
Protective Shield, Special	Sq Yd	326

BILL OF MATERIAL (S.N. 099-8315)

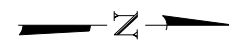
ITEM	UNIT	TOTAL
Removal of Existing Structures No. 4	Each	1
Removal of Existing Structures No. 5	Each	1
Protective Shield, Special	Sq Yd	157

LEGEND

- Removal of Existing Structures
- Approach Slab Removal (See Roadway Plans)
- Limits of Protective Shield (Special)



REMOVAL PLAN



MODEL: Default
FILE NAME: p:\transystems-pw\hstedi\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Structures\099-8314 & 099-8315 ML-04-017-Existing Structural Removal Plan.dgn



USER NAME =	DESIGNED - KJD	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - KJD	REVISED -
	CHECKED - MI, JJS	REVISED -

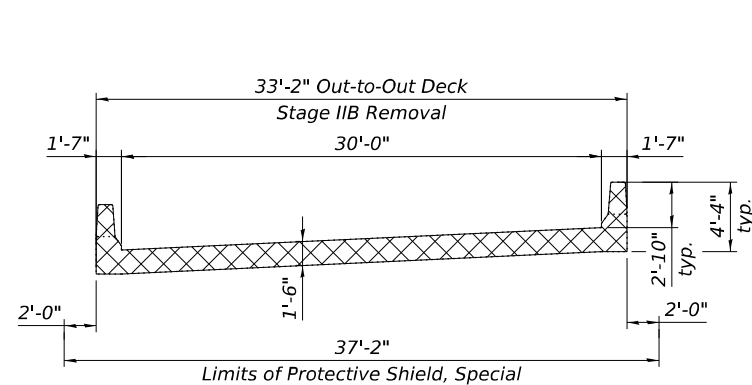
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXISTING STRUCTURES REMOVAL PLAN
STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

SHEET SB-26 OF SB-97 SHEETS

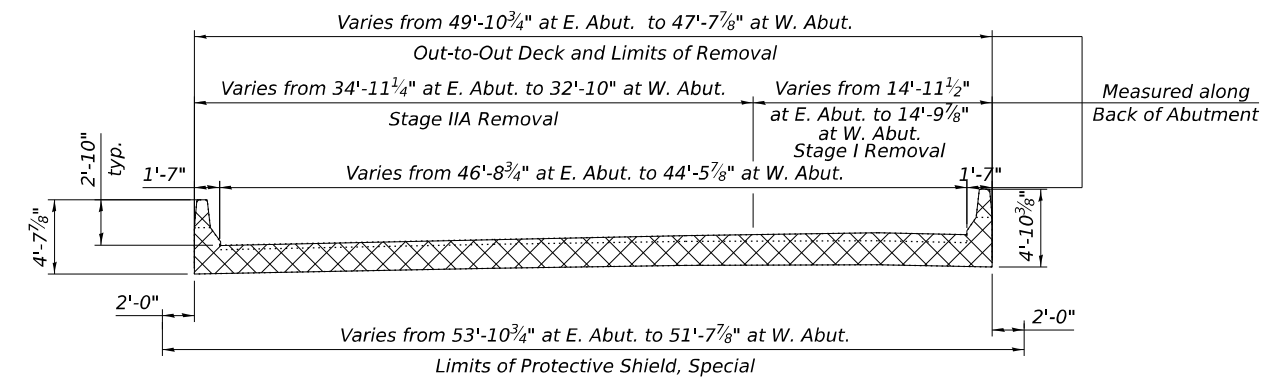
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	657
ILLINOIS			CONTRACT NO. 62R28	
FED. AID PROJECT				

MODEL: Default
 FILE NAME: p:\transystems-pw\entley.com\transystems-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315\80 over: Frontage Rd\0998314_0998315-ML-04-018-Exist. Struct. Rem. Deck Sections and Elev.dgn



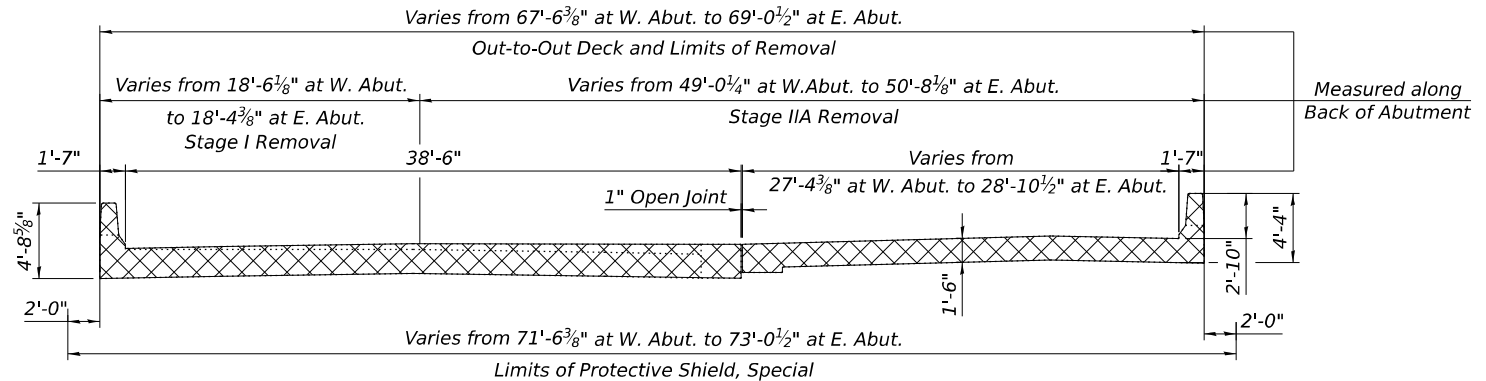
DECK REMOVAL SECTION

Exist. S.N. 099-0308
 Looking Upstation



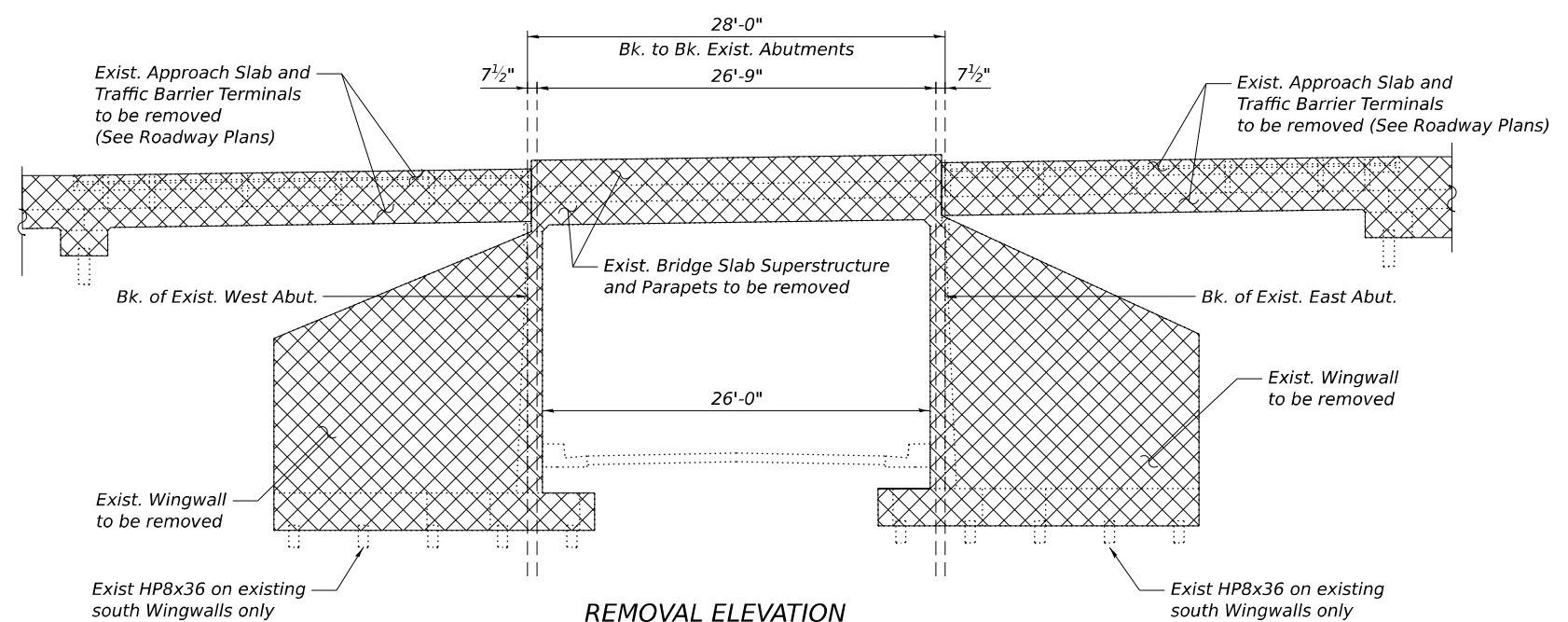
DECK REMOVAL SECTION

Exist. S.N. 099-0043
 Looking Upstation



DECK REMOVAL SECTION

S.N. 099-0042
 Looking Upstation



REMOVAL ELEVATION

S.N. 099-0042 Shown
 Looking North
 S.N. 099-0043 & S.N. 099-0308 Similar

LEGEND



Removal of Existing Structures



USER NAME =	DESIGNED - KJD	REVISED -
	CHECKED - MI, JJS	REVISED -
PLOT SCALE =	DRAWN - KJD	REVISED -
PLOT DATE =	CHECKED - MI, JJS	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

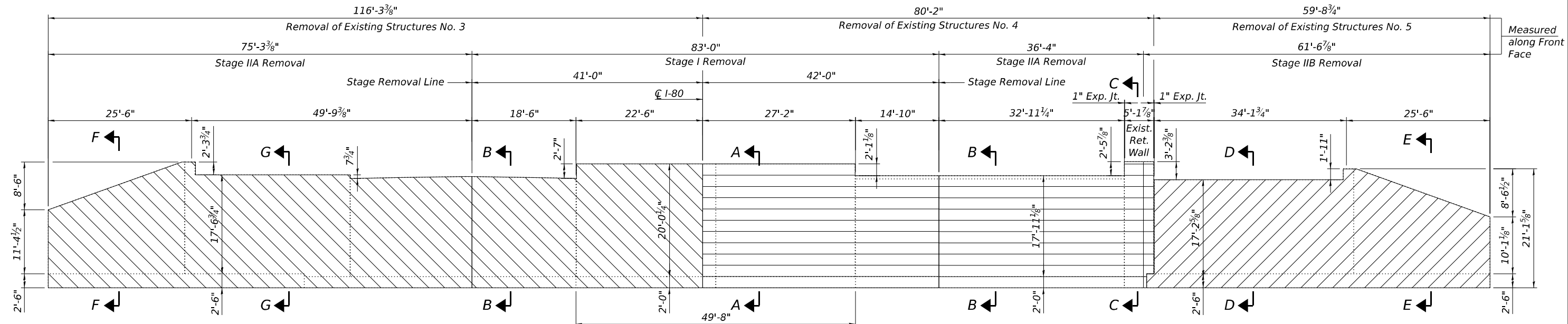
**EXIST. STRUCT. REM. DECK SECTIONS AND ELEV.
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	658
			CONTRACT NO. 62R28	

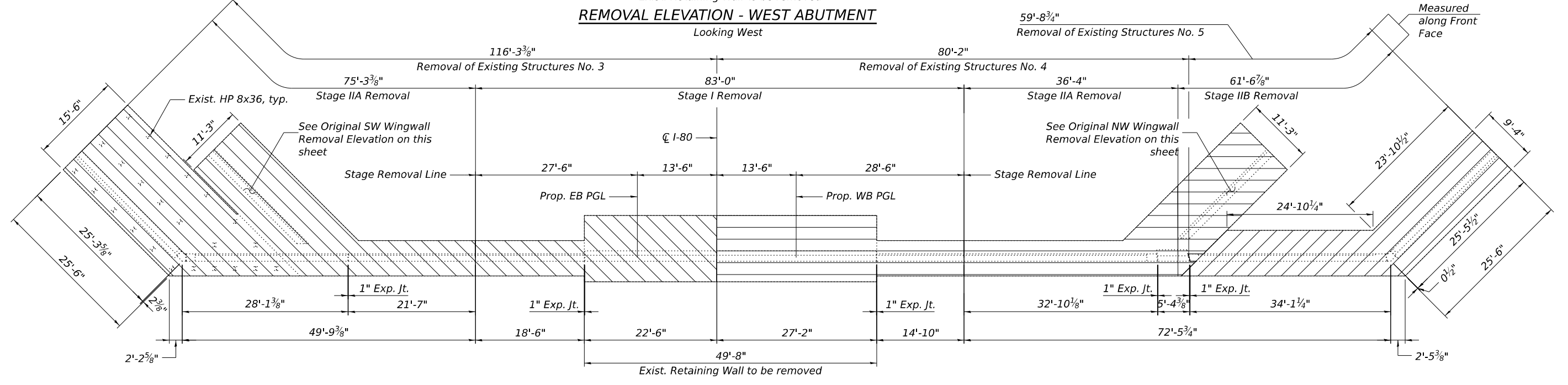
SHEET SB-27 OF SB-97 SHEETS

ILLINOIS FED. AID PROJECT

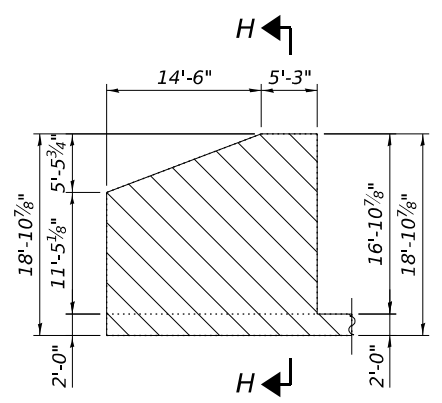
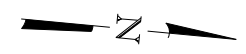
MODEL: Default
 FILE NAME: p:\transystems-pw\benley.com\transcorp-pw\hosted\Documents\Projects_2018\CH401401180022\01-Structures\04-Sheets\04-Structures\099-8314 & 099-8315 ML-04-019-Existing West Abutment Removal Plan and Elevation.dgn
 10/9/2023 2:49:55 PM



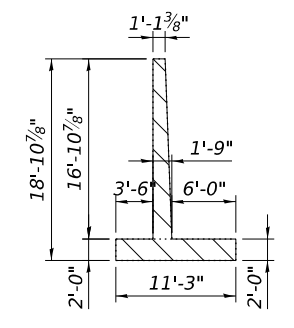
REMOVAL ELEVATION - WEST ABUTMENT
Looking West



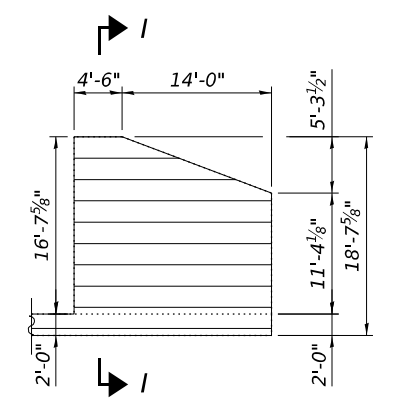
REMOVAL PLAN - WEST ABUTMENT



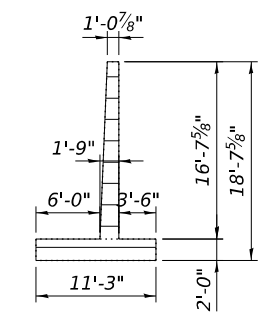
**ORIGINAL SW WINGWALL
REMOVAL ELEVATION**



SECTION H-H



**ORIGINAL NW WINGWALL
REMOVAL ELEVATION**



SECTION I-I

NOTES:

1. For Sections, see Sheet SB-30.
2. For additional notes, see Sheet SB-26.

LEGEND

- Removal of Existing Structures No. 3
- Removal of Existing Structures No. 4
- Removal of Existing Structures No. 5



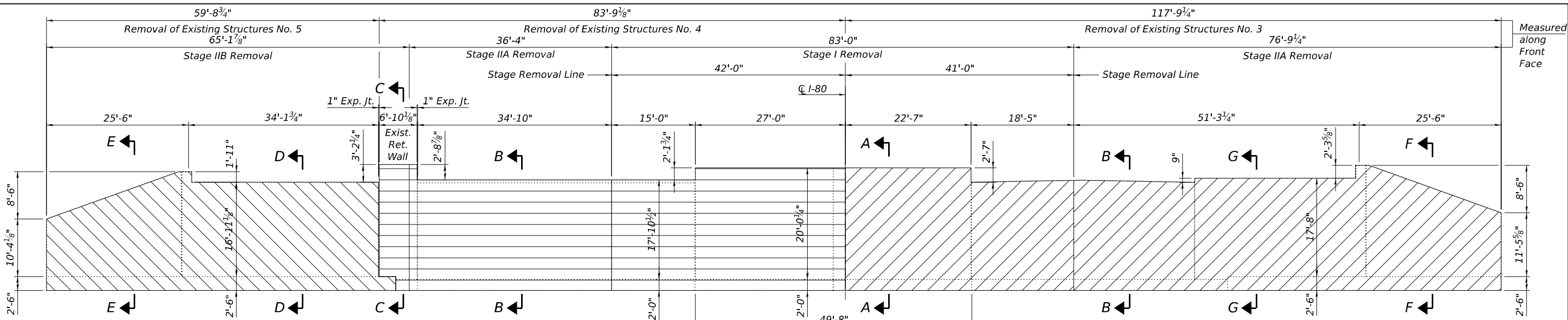
USER NAME =	DESIGNED - KJD	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - KJD	REVISED -
	CHECKED - MI, JJS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

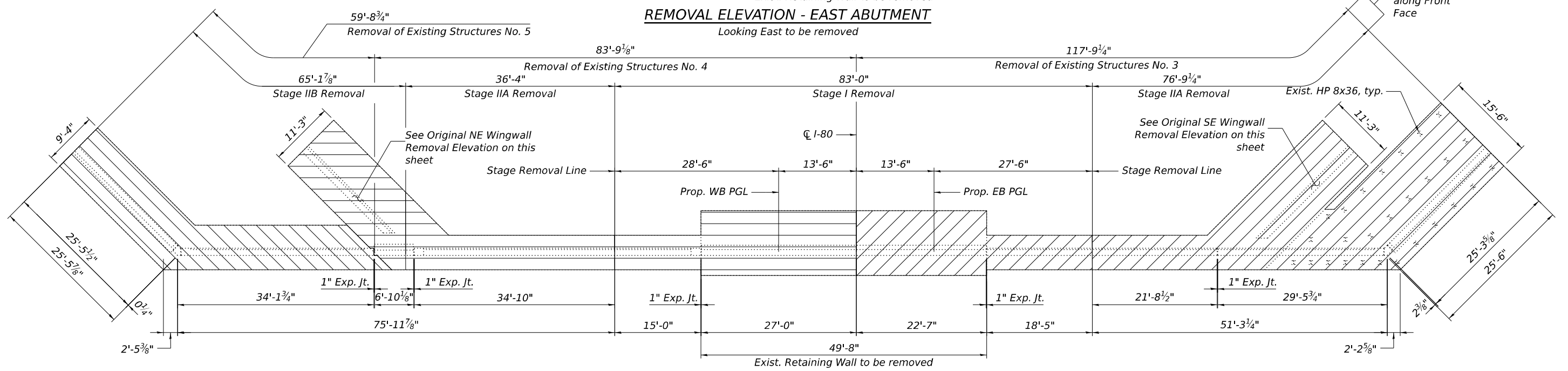
EXISTING WEST ABUTMENT REMOVAL PLAN AND ELEVATION
STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	659
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

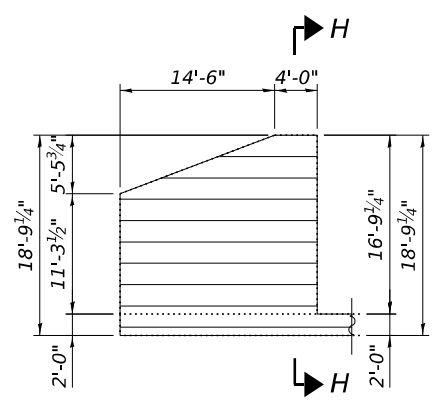
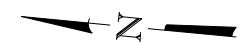
MODEL: Default
 FILE NAME: p:\transystems-pw\benley.com\transcorp-pw\hosted\Documents\Projects_2018\CH401\180022\01-Structures\04-Sheets\04-Structures\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-020-Existing East Abutment Removal Plan and Elevation.dgn
 10/9/2023 2:50:03 PM



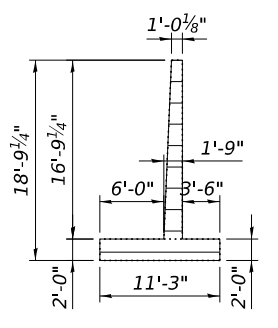
REMOVAL ELEVATION - EAST ABUTMENT
 Looking East to be removed



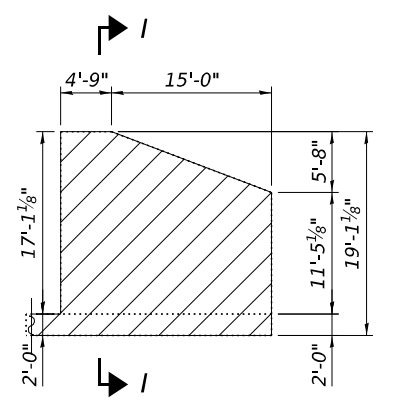
REMOVAL PLAN - EAST ABUTMENT



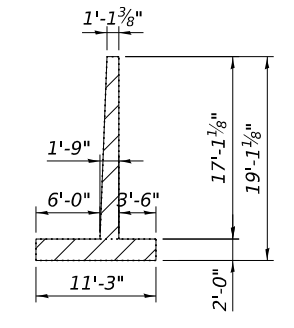
**ORIGINAL NE WINGWALL
 REMOVAL ELEVATION**



SECTION H-H



**ORIGINAL SE WINGWALL
 REMOVAL ELEVATION**



SECTION I-I

NOTES:

1. For Sections, see Sheet SB-30.
2. For additional notes, see Sheet SB-26.

LEGEND

- Removal of Existing Structures No. 3
- Removal of Existing Structures No. 4
- Removal of Existing Structures No. 5



USER NAME =	DESIGNED - KJD	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - KJD	REVISED -
	CHECKED - MI, JJS	REVISED -

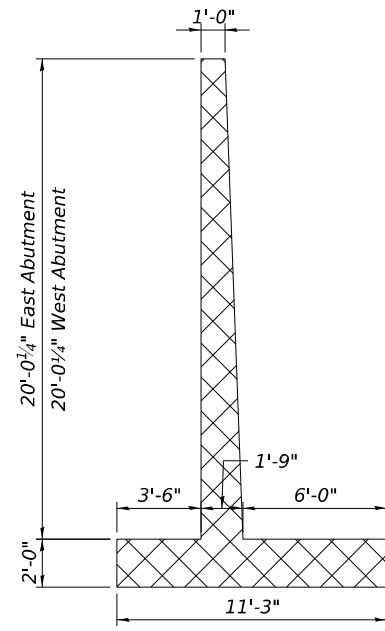
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING EAST ABUTMENT REMOVAL PLAN AND ELEVATION
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

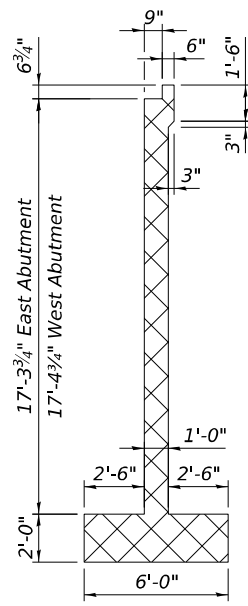
SHEET SB-29 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	660
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

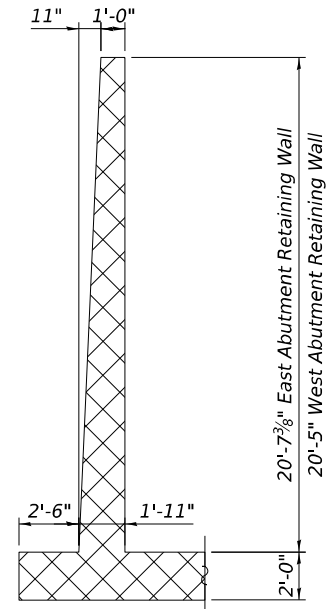
MODEL: Default
 FILE NAME: p:\transystems-pw\transystems-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\04-Structures\099-8314 & 099-8315\80 over: Frontage Rd\0998314_0998315-ML-04-021-Existing Structural Removal Sections.dgn
 10/9/2023 2:50:06 PM



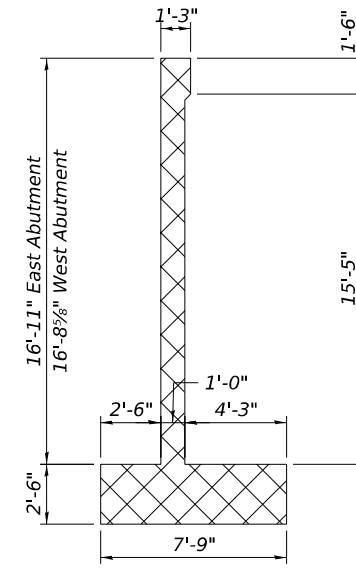
SECTION A-A



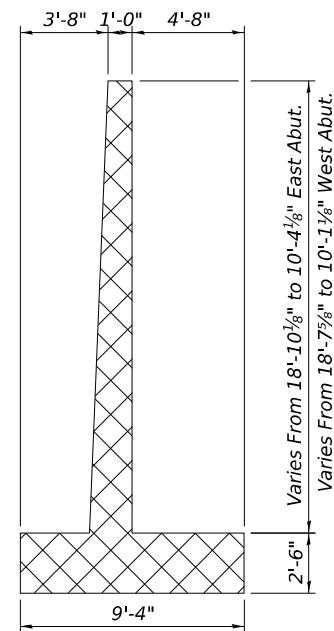
SECTION B-B



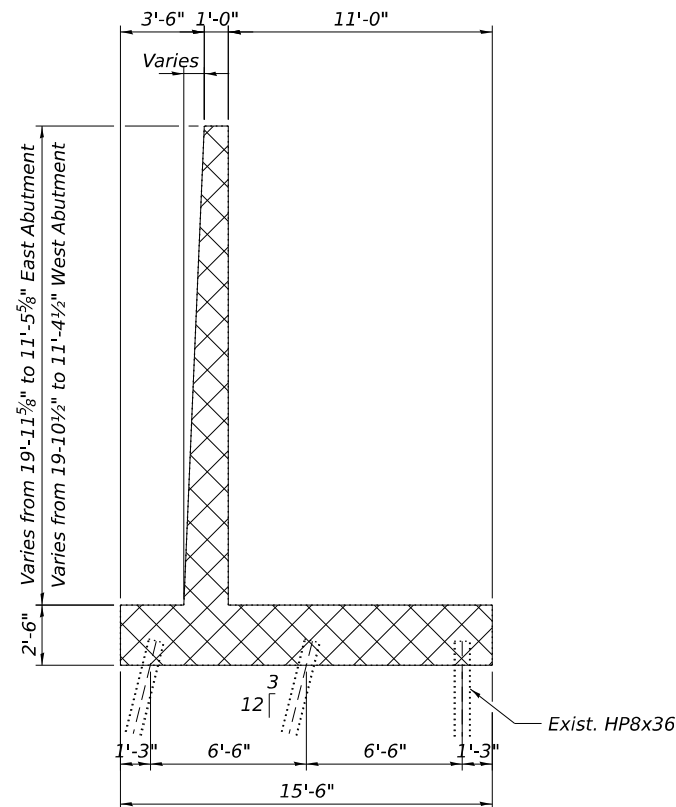
SECTION C-C



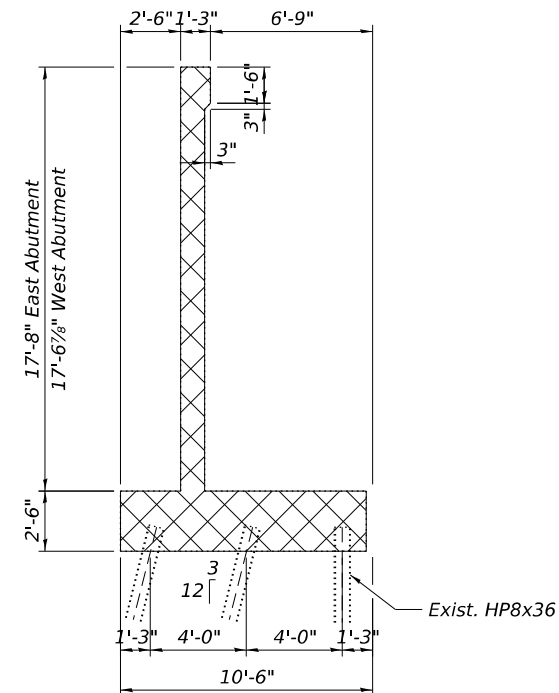
SECTION D-D



SECTION E-E




SECTION F-F



SECTION G-G

NOTE:
 1. For additional notes, see Sheet SB-26.

LEGEND
 Removal of Existing Structures



USER NAME =	DESIGNED - KJD	REVISED -
	CHECKED - MI, JJS	REVISED -
PLOT SCALE =	DRAWN - KJD	REVISED -
PLOT DATE =	CHECKED - MI, JJS	REVISED -

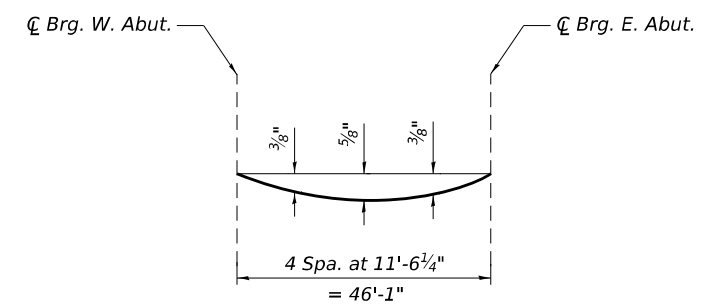
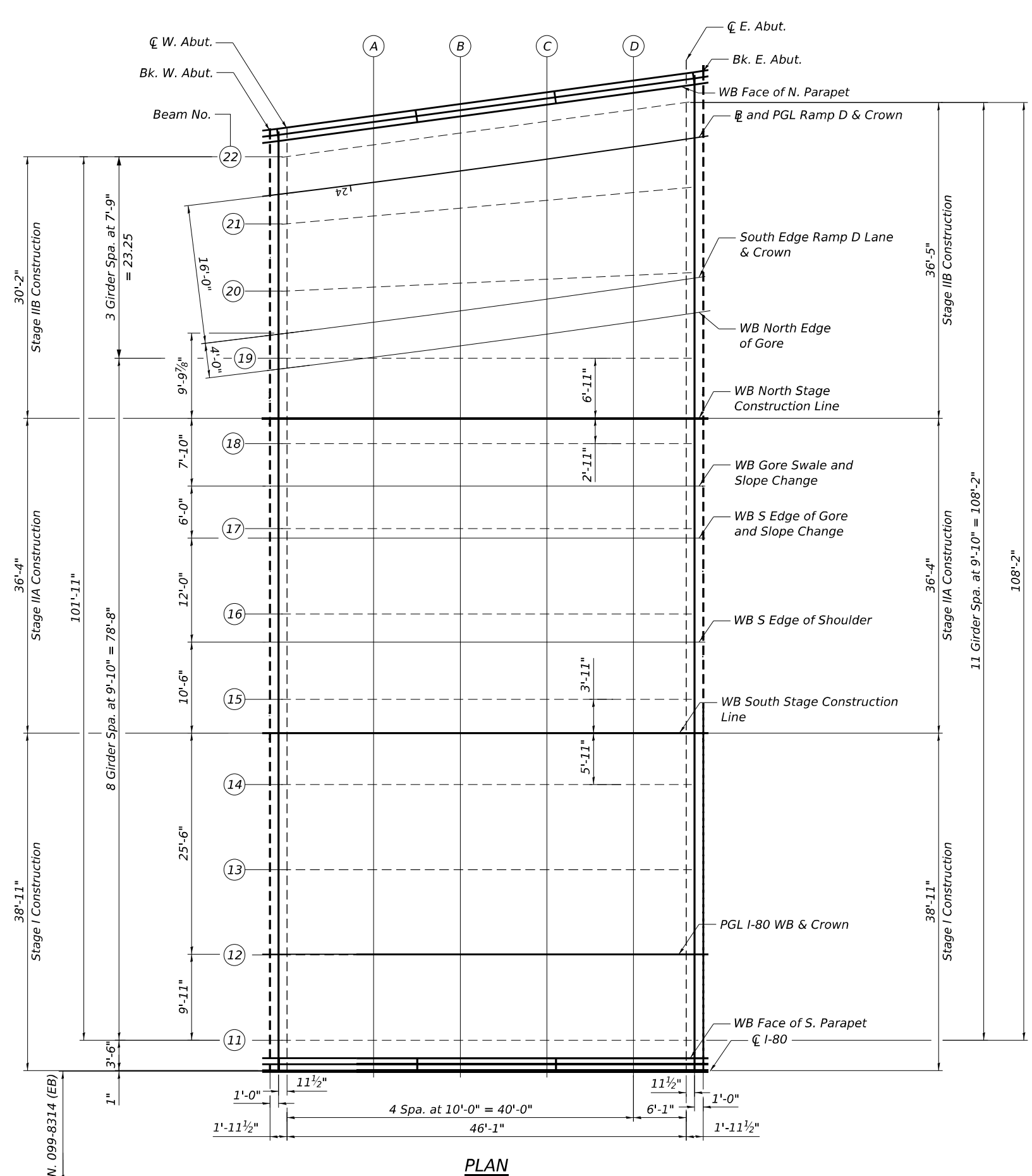
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURES REMOVAL SECTIONS
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

SHEET SB-30 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	661
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\transystems-pw\benley.com\transystems-pw\1-hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Structures\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-022-WB Top of Slab Elevation Layout.dgn
 10/9/2023 2:50:10 PM



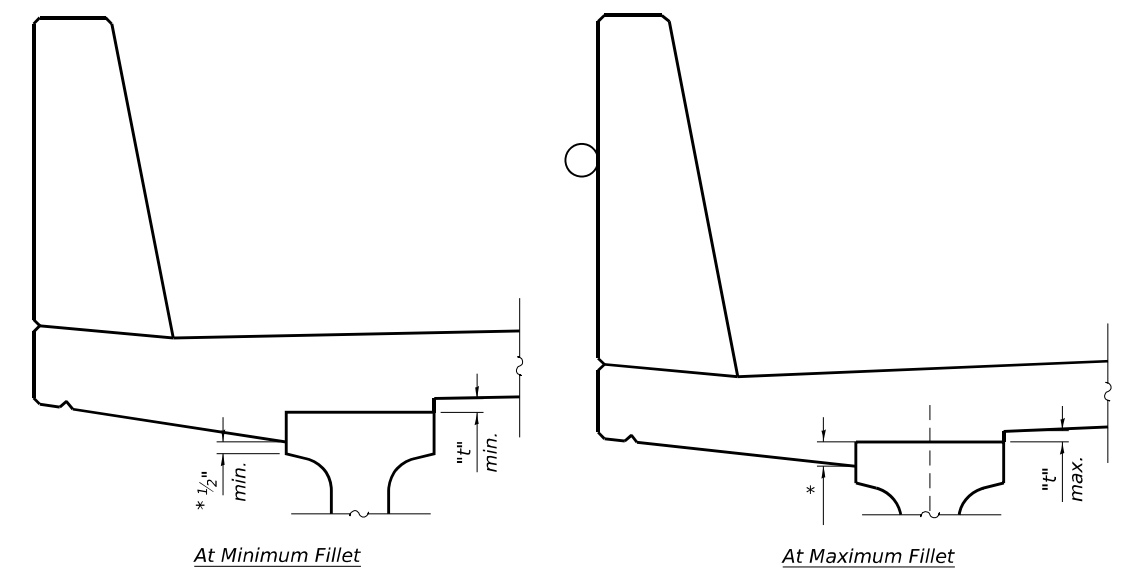
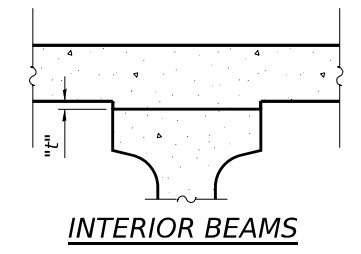
Note:
 The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on Sheets SB-32 thru SB-34.

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 on sheets. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheets SB-32 thru SB-34, minus slab thickness, equals the fillet heights "t" above top flange of beams.

NOTE:

- No longitudinal construction joints will be permitted in the bridge deck, except at specified stage lines. The Contractor shall submit a description of the proposed finishing operation to the Engineer prior to pouring the new deck.



*Variable (not less than 1/2")



USER NAME =	DESIGNED - AMS	REVISED -
PLOT SCALE =	CHECKED - MI, LAB	REVISED -
PLOT DATE =	DRAWN - AMS	REVISED -
	CHECKED - MI, LAB	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WB TOP OF SLAB ELEVATION LAYOUT
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

SHEET SB-31 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	662
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R28	

MODEL: Default
FILE NAME: p:\projects\transys\transys\ppl\hosted\Documents\Projects_2018\CH401\401180022\01-Structec\CAD\ML-04_62R28\04-Sheets\04-Structures\099-8314 & 099-8315\80 over: Frontage Rd\0998314_0998315-ML-04-024-WB_Top of Slab Elevation Tables (Sheet 2 of 3).dgn
10/9/2023 2:50:46 PM

BEAM 16

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.78	-39.24'	602.94	602.94
CL. W. ABUT.	339+37.75	-39.25'	602.97	602.97
A	339+47.81	-39.25'	603.11	603.14
B	339+57.81	-39.25'	603.26	603.30
C	339+67.81	-39.25'	603.40	603.44
D	339+77.81	-39.25'	603.54	603.56
CL. E. ABUT.	339+83.89	-39.25'	603.62	603.62
BK. E. ABUT.	339+85.85	-39.25'	603.65	603.65

WB S EDGE OF GORE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.77	-48.00'	602.71	602.71
CL. W. ABUT.	339+37.75	-48.00'	602.74	602.74
A	339+47.81	-48.00'	602.88	602.91
B	339+57.81	-48.00'	603.03	603.08
C	339+67.81	-48.00'	603.17	603.21
D	339+77.81	-48.00'	603.31	603.33
CL. E. ABUT.	339+83.89	-48.00'	603.40	603.40
BK. E. ABUT.	339+85.85	-48.00'	603.42	603.42

BEAM 17

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.77	-49.08'	602.71	602.71
CL. W. ABUT.	339+37.74	-49.08'	602.74	602.74
A	339+47.81	-49.08'	602.88	602.91
B	339+57.81	-49.08'	603.03	603.08
C	339+67.81	-49.08'	603.17	603.21
D	339+77.81	-49.08'	603.31	603.33
CL. E. ABUT.	339+83.89	-49.08'	603.40	603.40
BK. E. ABUT.	339+85.85	-49.08'	603.42	603.42

WB GORE SWALE AND SLOPE CHANGE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.76	-54.00'	602.55	602.55
CL. W. ABUT.	339+37.74	-54.00'	602.58	602.58
A	339+47.81	-54.00'	602.72	602.75
B	339+57.81	-54.00'	602.87	602.92
C	339+67.81	-54.00'	603.01	603.05
D	339+77.81	-54.00'	603.15	603.17
CL. E. ABUT.	339+83.89	-54.00'	603.24	603.24
BK. E. ABUT.	339+85.85	-54.00'	603.26	603.26

BEAM 18

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.76	-58.91'	602.62	602.62
CL. W. ABUT.	339+37.73	-58.91'	602.65	602.65
A	339+47.81	-58.92'	602.79	602.82
B	339+57.81	-58.92'	602.93	602.98
C	339+67.81	-58.92'	603.07	603.11
D	339+77.81	-58.92'	603.21	603.23
CL. E. ABUT.	339+83.89	-58.92'	603.29	603.29
BK. E. ABUT.	339+85.85	-58.92'	603.32	603.32

WB N STAGE CONST. LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.75	-61.83'	602.66	602.66
CL. W. ABUT.	339+37.73	-61.83'	602.69	602.69
A	339+47.81	-61.83'	602.83	602.86
B	339+57.81	-61.83'	602.97	603.01
C	339+67.81	-61.83'	603.11	603.15
D	339+77.81	-61.83'	603.25	603.26
CL. E. ABUT.	339+83.89	-61.83'	603.33	603.33
BK. E. ABUT.	339+85.85	-61.83'	603.35	603.35

BEAM 19

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.74	-68.74'	602.76	602.76
CL. W. ABUT.	339+37.72	-68.75'	602.79	602.79
A	339+47.81	-68.75'	602.92	602.95
B	339+57.81	-68.75'	603.06	603.10
C	339+67.81	-68.75'	603.19	603.23
D	339+77.81	-68.75'	603.33	603.35
CL. E. ABUT.	339+83.89	-68.75'	603.41	603.41
BK. E. ABUT.	339+85.85	-68.75'	603.43	603.43

WB N EDGE OF GORE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.75	-67.38'	602.74	602.74
CL. W. ABUT.	339+37.72	-67.62'	602.77	602.77
A	339+47.81	-68.88'	602.92	602.95
B	339+57.81	-70.18'	603.07	603.12
C	339+67.81	-71.54'	603.23	603.27
D	339+77.81	-72.94'	603.38	603.40
CL. E. ABUT.	339+83.89	-73.82'	603.47	603.47
BK. E. ABUT.	339+85.85	-74.11'	603.50	603.50

S EDGE RAMP D LANE & CROWN

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.74	-71.41'	602.81	602.81
CL. W. ABUT.	339+37.72	-71.65'	602.84	602.84
A	339+47.81	-72.91'	602.99	603.02
B	339+57.81	-74.22'	603.14	603.18
C	339+67.81	-75.57'	603.28	603.33
D	339+77.81	-76.98'	603.43	603.45
CL. E. ABUT.	339+84.71	-78.11'	603.49	603.49
BK. E. ABUT.	339+85.85	-78.16'	603.53	603.53



USER NAME =	DESIGNED - AMS	REVISED -
	CHECKED - MI, LAB	REVISED -
PLOT SCALE =	DRAWN - AMS	REVISED -
PLOT DATE =	CHECKED - MI, LAB	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WB TOP OF SLAB ELEVATION TABLES (SHEET 2 OF 3)
STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

SHEET SB-33 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	664
CONTRACT NO. 62R28				
ILLINOIS FED. AID PROJECT				

MODEL: Default
 FILE NAME: pw://transsystems-pw.bentley.com/transsystems-pw-hosted/Projects/2018/CH401/401180022/01-Structures/099-8314 & 099-8315/00-over: Frontage Rd/0998314_0998315-ML-04-025-WB Top of Slab Elevation Tables (Sheet 3 of 3).dgn

BEAM 20

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.73	-76.39'	602.60	602.60
CL. W. ABUT.	339+37.72	-76.50'	602.64	602.64
A	339+47.81	-76.95'	602.82	602.85
B	339+57.81	-77.40'	603.00	603.05
C	339+67.81	-77.85'	603.19	603.23
D	339+77.81	-78.31'	603.37	603.39
CL. E. ABUT.	339+83.89	-78.58'	603.49	603.49
BK. E. ABUT.	339+85.85	-78.67'	603.53	603.53

BEAM 21

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.72	-84.07'	602.28	602.28
CL. W. ABUT.	339+37.71	-84.25'	602.31	602.31
A	339+47.81	-85.15'	602.48	602.51
B	339+57.81	-86.06'	602.64	602.69
C	339+67.81	-86.96'	602.81	602.85
D	339+77.81	-87.87'	602.98	603.00
CL. E. ABUT.	339+83.89	-88.42'	603.08	603.08
BK. E. ABUT.	339+85.85	-88.60'	603.12	603.12

PGL RAMP D

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.72	-87.53'	602.14	602.14
CL. W. ABUT.	339+37.70	-87.77'	602.17	602.17
A	339+47.81	-89.04'	602.31	602.34
B	339+57.81	-90.36'	602.46	602.51
C	339+67.81	-91.73'	602.61	602.65
D	339+77.81	-93.15'	602.76	602.78
CL. E. ABUT.	339+83.89	-94.04'	602.85	602.85
BK. E. ABUT.	339+85.85	-94.33'	602.88	602.88

BEAM 22

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.71	-91.73'	601.97	601.97
CL. W. ABUT.	339+37.70	-92.00'	602.00	602.00
A	339+47.81	-93.36'	602.15	602.18
B	339+57.81	-94.71'	602.30	602.34
C	339+67.81	-96.07'	602.44	602.48
D	339+77.81	-97.43'	602.59	602.61
CL. E. ABUT.	339+83.89	-98.25'	602.68	602.68
BK. E. ABUT.	339+85.85	-98.52'	602.71	602.71

WB FACE OF N. PARAPET

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.71	-93.68'	601.89	601.89
CL. W. ABUT.	339+37.70	-93.93'	601.92	601.92
A	339+47.81	-95.29'	602.07	602.10
B	339+57.81	-96.65'	602.22	602.26
C	339+67.81	-98.01'	602.37	602.41
D	339+77.81	-99.36'	602.52	602.53
CL. E. ABUT.	339+83.89	-100.19'	602.61	602.61
BK. E. ABUT.	339+85.85	-100.47'	602.64	602.64



USER NAME =	DESIGNED - AMS	REVISED -
	CHECKED - MI, LAB	REVISED -
PLOT SCALE =	DRAWN - AMS	REVISED -
PLOT DATE =	CHECKED - MI, LAB	REVISED -

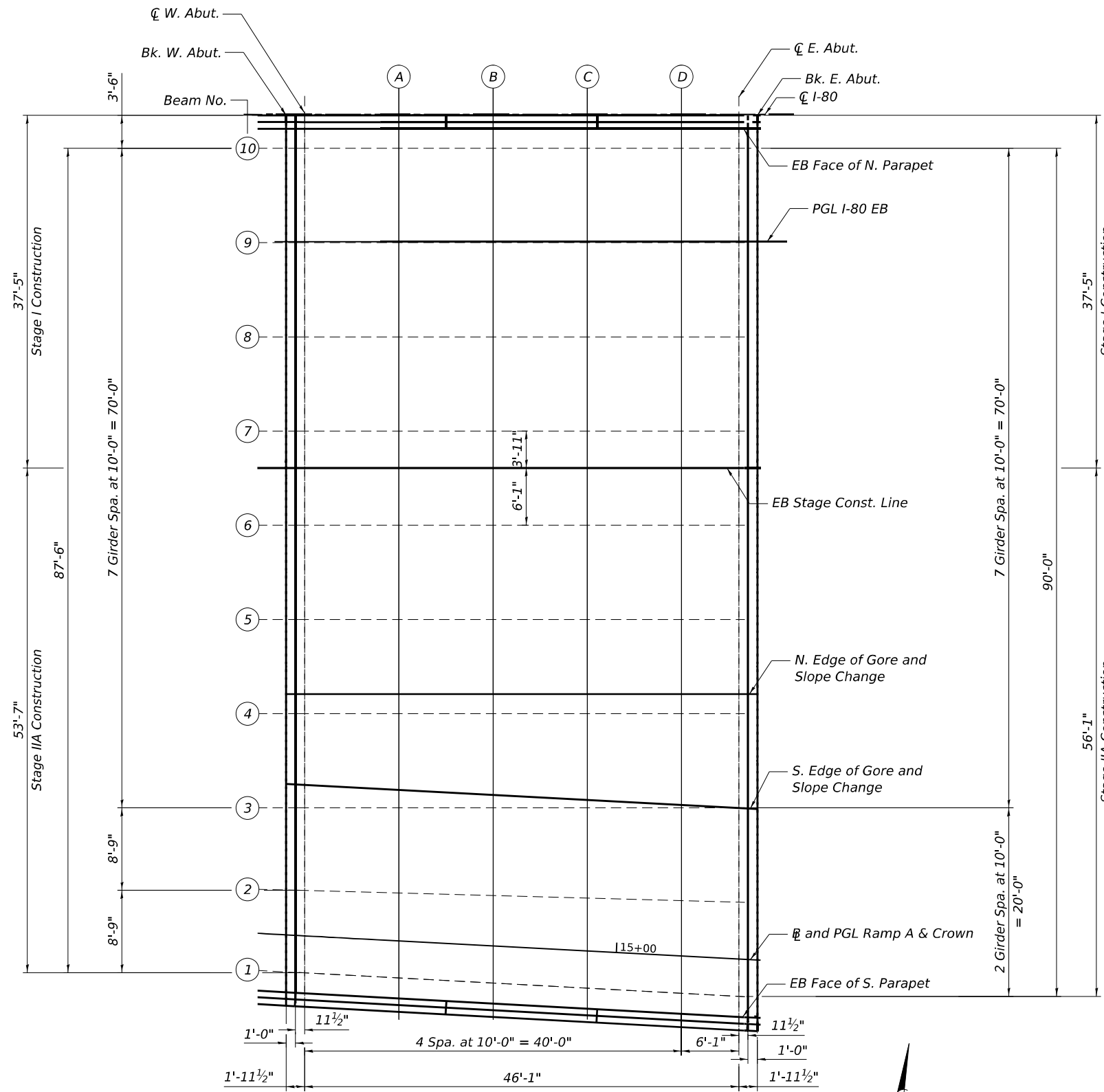
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WB TOP OF SLAB ELEVATION TABLES (SHEET 3 OF 3)
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

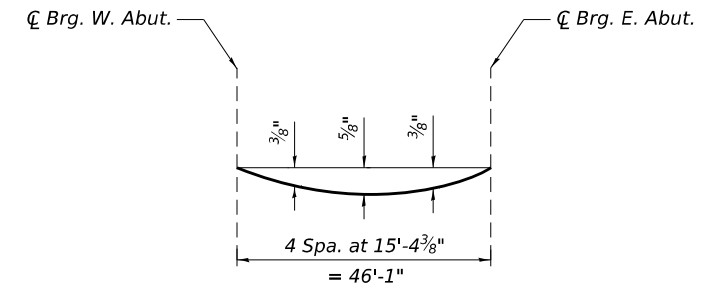
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	665
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

SHEET SB-34 OF SB-97 SHEETS

MODEL: Default
 FILE NAME: p:\transystems-pw\hbm\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315-ML-04-026-EB_Top of Slab Elevation Layout.dgn
 10/9/2023 2:51:00 PM



PLAN



DEAD LOAD DEFLECTION
 (Includes weight of concrete only)

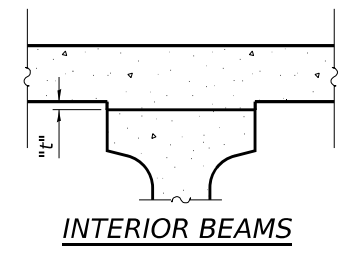
Note:
 The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on Sheets SB-36 and SB-37.

FILLET HEIGHTS

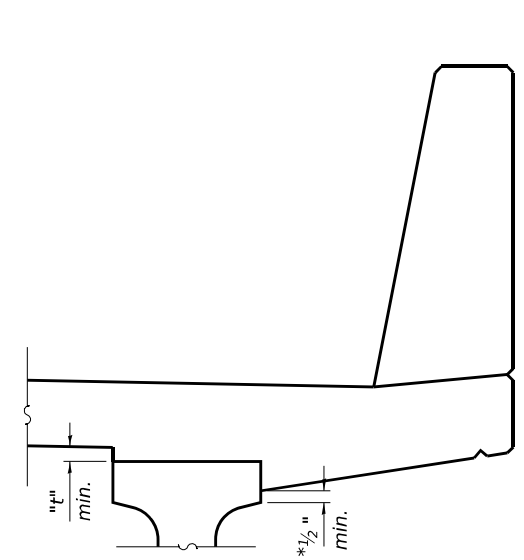
To determine "t": After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown on sheets. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheets SB-36 and SB-37, minus slab thickness, equals the fillet heights "t" above top flange of beams.

NOTE:

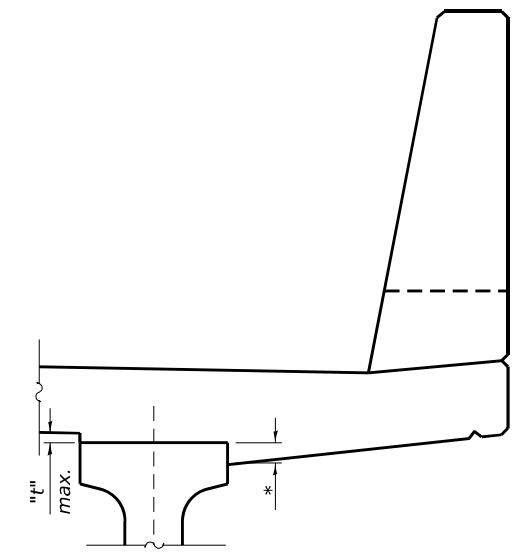
1. No longitudinal construction joints will be permitted in the bridge deck, except at specified stage lines. The Contractor shall submit a description of the proposed finishing operation to the Engineer prior to pouring the new deck.



INTERIOR BEAMS



At Minimum Fillet



At Maximum Fillet

*Variable (not less than 1/2")

EXTERIOR BEAMS



USER NAME =	DESIGNED - AMS	REVISED -
	CHECKED - MI, LAB	REVISED -
PLOT SCALE =	DRAWN - AMS	REVISED -
PLOT DATE =	CHECKED - MI, LAB	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EB TOP OF SLAB ELEVATION LAYOUT
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

SHEET SB-35 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	666
				CONTRACT NO. 62R28
ILLINOIS FED. AID PROJECT				

MODEL: Default
 FILE NAME: p:\transystems-pw\hstedi\Documents\Projects_2018\CH401\401180022\01-Structec\CAD\ML-04_62R28\04-Sheets\04-Structures\099-8314 & 099-8315\80 over: Frontage Rd\0998314_0998315-ML-04-027-EB_Top of Slab Elevation Tables (Sheet 1 of 3).dgn
 10/9/2023 2:51:02 PM

EB FACE OF S PARAPET

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.97	79.65'	605.74	605.74
CL. W. ABUT.	339+37.90	79.76'	605.76	605.76
A	339+47.81	80.30'	605.89	605.92
B	339+57.81	80.84'	606.02	606.06
C	339+67.81	81.38'	606.14	606.17
D	339+77.81	81.92'	606.24	606.26
CL. E. ABUT.	339+83.89	82.25'	606.31	606.31
BK. E. ABUT.	339+85.85	82.36'	606.33	606.33

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.97	77.48'	605.78	605.78
CL. W. ABUT.	339+37.90	77.59'	605.80	605.80
A	339+47.81	78.13'	605.94	605.96
B	339+57.81	78.67'	606.06	606.10
C	339+67.81	79.21'	606.18	606.22
D	339+77.81	79.75'	606.29	606.30
CL. E. ABUT.	339+83.89	80.08'	606.35	606.35
BK. E. ABUT.	339+85.85	80.19'	606.37	606.37

PGL RAMP A

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.96	73.56'	605.85	605.85
CL. W. ABUT.	339+37.90	73.67'	605.88	605.88
A	339+47.81	74.20'	606.01	606.04
B	339+57.81	74.73'	606.14	606.18
C	339+67.81	75.26'	606.25	606.30
D	339+77.81	75.80'	606.36	606.38
CL. E. ABUT.	339+83.89	76.12'	606.43	606.43
BK. E. ABUT.	339+85.85	76.23'	606.45	606.45

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.95	68.79'	605.73	605.73
CL. W. ABUT.	339+37.89	68.84'	605.75	605.75
A	339+47.81	69.10'	605.88	605.91
B	339+57.81	69.38'	605.99	606.04
C	339+67.81	69.65'	606.10	606.15
D	339+77.81	69.92'	606.21	606.23
CL. E. ABUT.	339+83.89	70.08'	606.27	606.27
BK. E. ABUT.	339+85.85	70.14'	606.29	606.29

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.94	60.08'	605.49	605.49
CL. W. ABUT.	339+37.88	60.08'	605.52	605.52
A	339+47.81	60.08'	605.64	605.67
B	339+57.81	60.08'	605.75	605.79
C	339+67.81	60.08'	605.85	605.89
D	339+77.81	60.08'	605.95	605.97
CL. E. ABUT.	339+83.89	60.08'	606.00	606.00
BK. E. ABUT.	339+85.85	60.08'	606.02	606.02

S. EDGE OF GORE & SLOPE CHANGE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.94	57.54'	605.43	605.43
CL. W. ABUT.	339+37.88	57.64'	605.45	605.45
A	339+47.81	58.17'	605.59	605.62
B	339+57.81	58.71'	605.71	605.76
C	339+67.81	59.24'	605.83	605.87
D	339+77.81	59.78'	605.94	605.96
CL. E. ABUT.	339+83.89	60.10'	606.00	606.00
BK. E. ABUT.	339+85.85	60.21'	606.02	606.02

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.93	50.08'	605.25	605.25
CL. W. ABUT.	339+37.87	50.08'	605.28	605.28
A	339+47.81	50.08'	605.42	605.45
B	339+57.81	50.08'	605.56	605.61
C	339+67.81	50.08'	605.70	605.74
D	339+77.81	50.08'	605.83	605.85
CL. E. ABUT.	339+83.89	50.08'	605.91	605.91
BK. E. ABUT.	339+85.85	50.08'	605.94	605.94

EB N EDGE GORE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.93	48.00'	605.21	605.21
CL. W. ABUT.	339+37.87	48.00'	605.24	605.24
A	339+47.81	48.00'	605.38	605.41
B	339+57.81	48.00'	605.52	605.57
C	339+67.81	48.00'	605.67	605.71
D	339+77.81	48.00'	605.81	605.83
CL. E. ABUT.	339+83.89	48.00'	605.89	605.89
BK. E. ABUT.	339+85.85	48.00'	605.92	605.92

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	339+35.92	40.08'	605.00	605.00
CL. W. ABUT.	339+37.86	40.08'	605.03	605.03
A	339+47.81	40.08'	605.17	605.20
B	339+57.81	40.08'	605.32	605.37
C	339+67.81	40.08'	605.46	605.50
D	339+77.81	40.08'	605.60	605.62
CL. E. ABUT.	339+83.89	40.08'	605.69	605.69
BK. E. ABUT.	339+85.85	40.08'	605.71	605.71



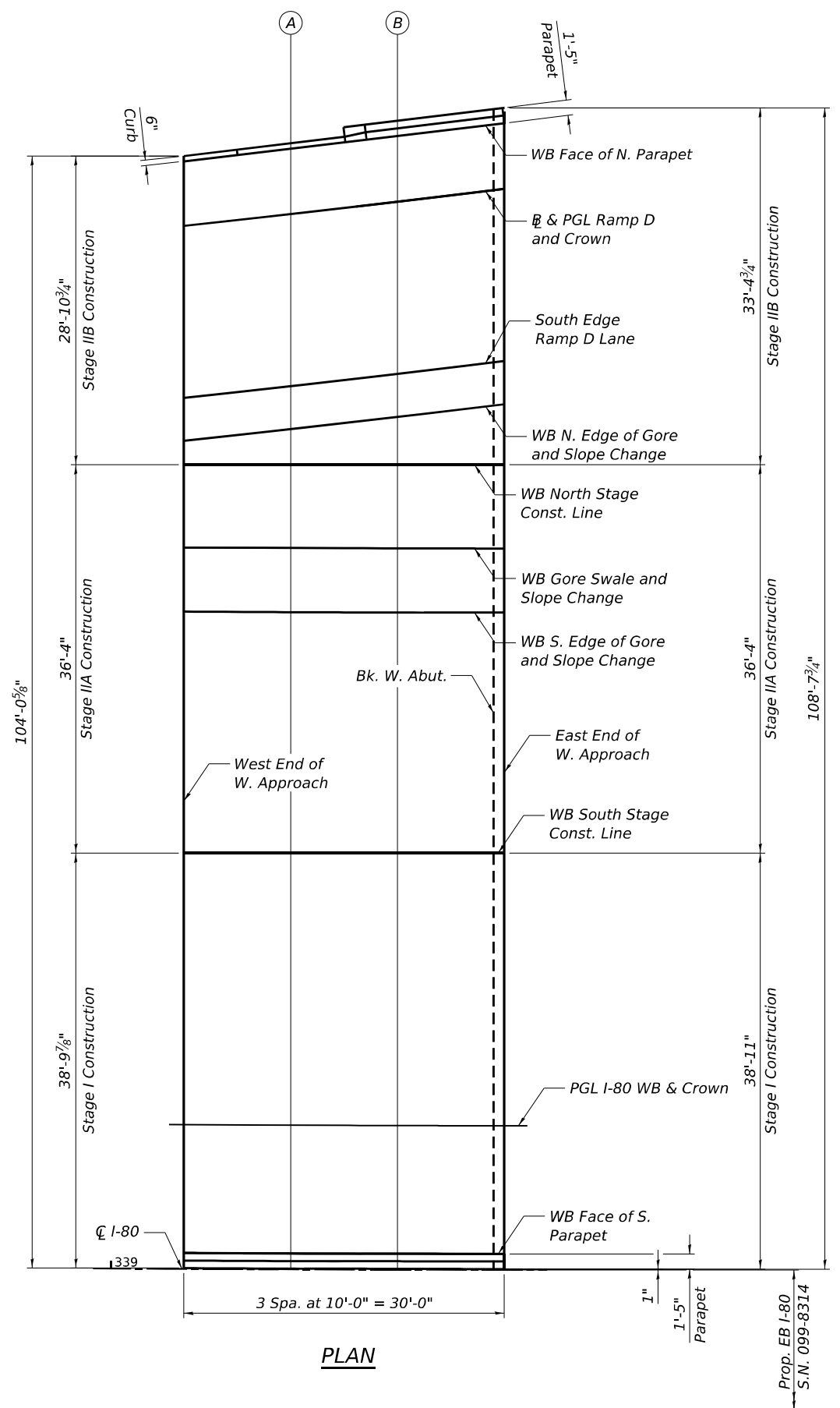
USER NAME =	DESIGNED - AMS	REVISED -
PLOT SCALE =	CHECKED - MI, LAB	REVISED -
PLOT DATE =	DRAWN - AMS	REVISED -
	CHECKED - MI, LAB	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EB TOP OF SLAB ELEVATION TABLES (SHEET 1 OF 2)
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	667
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\transystems-pw\benley.com\transystems-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-030-WB Top of W. Approach Slab Layout & Tables.dgn
 10/9/2023 2:51:21 PM



WB FACE OF N. PARAPET

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach	339+06.33	-90.23'	601.46
A	339+16.46	-91.41'	601.61
B	339+26.59	-92.61'	601.76
E. End of W. Approach	339+36.73	-93.81'	601.91

WB S. EDGE OF GORE AND SLOPE CHANGE

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach	339+06.54	-48.00'	602.27
A	339+16.62	-48.00'	602.42
B	339+26.70	-48.00'	602.57
E. End of W. Approach	339+36.78	-48.00'	602.72

B & PGL RAMP AND CROWN

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach	339+06.36	-84.19'	601.71
A	339+16.48	-85.29'	601.86
B	339+26.60	-86.45'	602.00
E. End of W. Approach	339+36.73	-87.66'	602.15

WB SOUTH STAGE CONST. LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach	339+06.66	-25.50'	602.86
A	339+16.71	-25.50'	603.01
B	339+26.76	-25.50'	603.16
E. End of W. Approach	339+36.81	-25.50'	603.31

SOUTH EDGE RAMP D LANE

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach	339+06.44	-68.10'	602.39
A	339+16.54	-69.19'	602.53
B	339+26.64	-70.34'	602.68
E. End of W. Approach	339+36.75	-71.54'	602.83

PGL I-80 WB & CROWN

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach	339+06.78	0.00'	603.52
A	339+16.80	0.00'	603.67
B	339+26.82	0.00'	603.82
E. End of W. Approach	339+36.84	0.00'	603.97

WB N. EDGE OF GORE AND SLOPE CHANGE

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach	339+06.46	-64.08'	602.31
A	339+16.56	-65.16'	602.46
B	339+26.65	-66.31'	602.60
E. End of W. Approach	339+36.76	-67.51'	602.76

WB FACE OF S. PARAPET

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach	339+06.84	12.00'	603.28
A	339+16.85	12.00'	603.43
B	339+26.85	12.00'	603.58
E. End of W. Approach	339+36.85	12.00'	603.73

WB NORTH STAGE CONST. LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach	339+06.47	-61.83'	602.26
A	339+16.57	-61.83'	602.40
B	339+26.67	-61.83'	602.53
E. End of W. Approach	339+36.76	-61.83'	602.68

WB GORE SWALE AND SLOPE CHANGE

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach	339+06.51	-54.00'	602.11
A	339+16.60	-54.00'	602.26
B	339+26.69	-54.00'	602.41
E. End of W. Approach	339+36.77	-54.00'	602.56

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WB TOP OF W. APPROACH SLAB LAYOUT & TABLES
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

SHEET SB-38 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	669

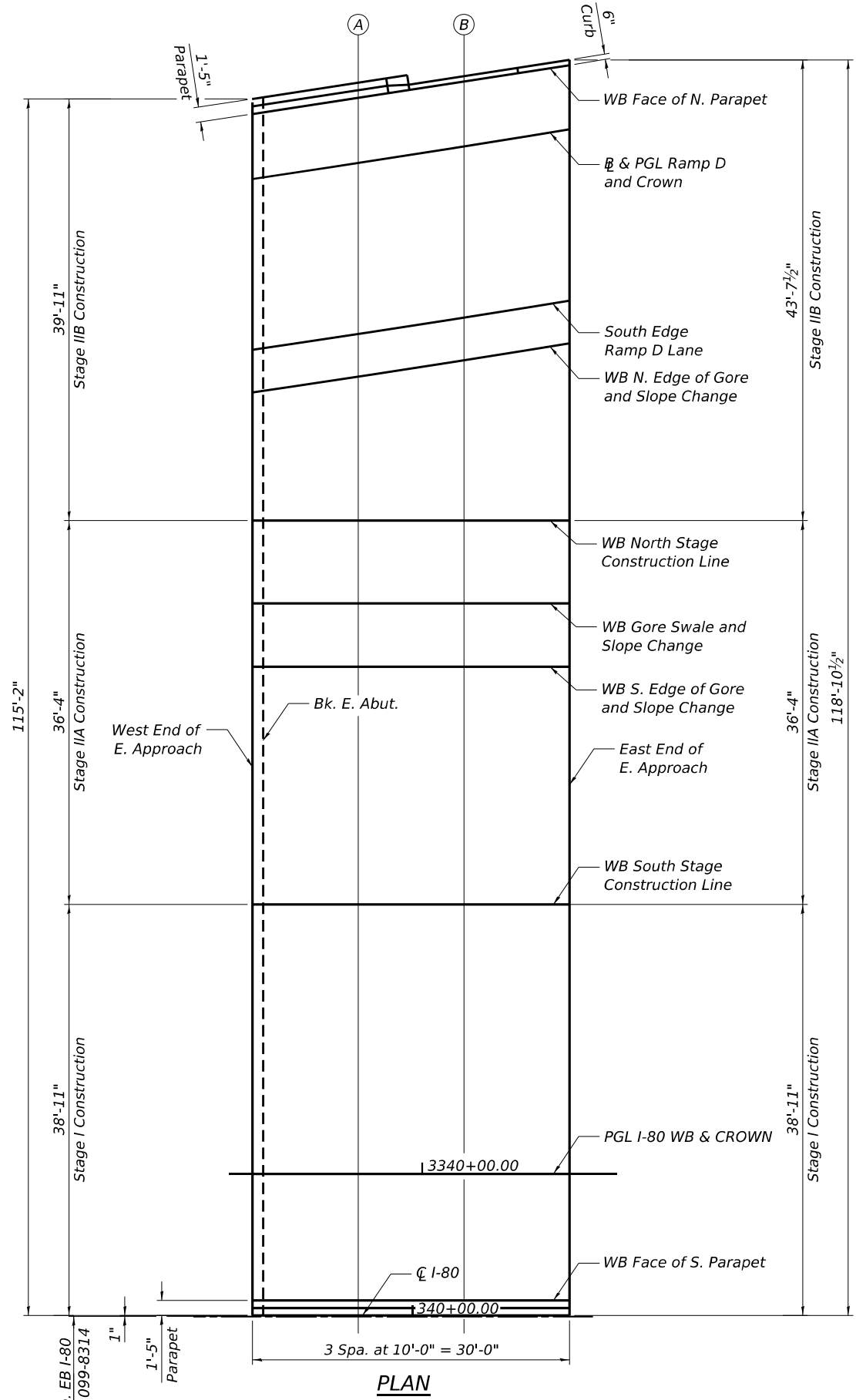
CONTRACT NO. 62R28

ILLINOIS FED. AID PROJECT



USER NAME =	DESIGNED - AMS	REVISED -
	CHECKED - MI, LAB	REVISED -
PLOT SCALE =	DRAWN - AMS	REVISED -
PLOT DATE =	CHECKED - MI, LAB	REVISED -

MODEL: Default
 FILE NAME: p:\w\transystems-pw\transystems-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\099-8314 & 099-8315-ML-04-031-WB Top of E. Approach Slab Layout & Tables.dgn
 10/9/2023 2:51:24 PM



PLAN

WB FACE OF N. PARAPET

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach	339+84.85	-100.32'	602.62
A	339+94.85	-101.86'	602.77
B	340+04.85	-103.41'	602.92
E. End of E. Approach	340+14.85	-104.95'	603.07

WB S. EDGE OF GORE AND SLOPE CHANGE

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach	339+84.85	-48.00'	603.41
A	339+94.85	-48.00'	603.55
B	340+04.85	-48.00'	603.68
E. End of E. Approach	340+14.85	-48.00'	603.82

B & PGL RAMP D AND CROWN

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach	339+84.85	-94.18'	602.86
A	339+94.85	-95.69'	603.01
B	340+04.85	-97.26'	603.16
E. End of E. Approach	340+14.85	-98.87'	603.31

WB SOUTH STAGE CONST. LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach	339+84.85	-25.50'	604.00
A	339+94.85	-25.50'	604.13
B	340+04.85	-25.50'	604.27
E. End of E. Approach	340+14.85	-25.50'	604.40

SOUTH EDGE RAMP D LANE

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach	339+84.85	-78.01'	603.53
A	339+94.85	-79.51'	603.68
B	340+04.85	-81.06'	603.83
E. End of E. Approach	340+14.85	-82.66'	603.98

PGL I-80 WB & CROWN

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach	339+84.85	0.00'	604.66
A	339+94.85	0.00'	604.80
B	340+04.85	0.00'	604.93
E. End of E. Approach	340+14.85	0.00'	605.07

WB N. EDGE OF GORE AND SLOPE CHANGE

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach	339+84.85	-73.97'	603.47
A	339+94.85	-75.46'	603.63
B	340+04.85	-77.01'	603.78
E. End of E. Approach	340+14.85	-78.61'	603.92

WB FACE OF S. PARAPET

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach	339+84.85	12.00'	604.42
A	339+94.85	12.00'	604.56
B	340+04.85	12.00'	604.69
E. End of E. Approach	340+14.85	12.00'	604.83

WB NORTH STAGE CONST. LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach	339+84.85	-61.83'	603.34
A	339+94.85	-61.83'	603.47
B	340+04.85	-61.83'	603.61
E. End of E. Approach	340+14.85	-61.83'	603.74

WB GORE SWALE AND SLOPE CHANGE

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach	339+84.85	-54.00'	603.25
A	339+94.85	-54.00'	603.39
B	340+04.85	-54.00'	603.52
E. End of E. Approach	340+14.85	-54.00'	603.66



USER NAME =	DESIGNED - AMS	REVISED -
	CHECKED - MI, LAB	REVISED -
PLOT SCALE =	DRAWN - AMS	REVISED -
PLOT DATE =	CHECKED - MI, LAB	REVISED -

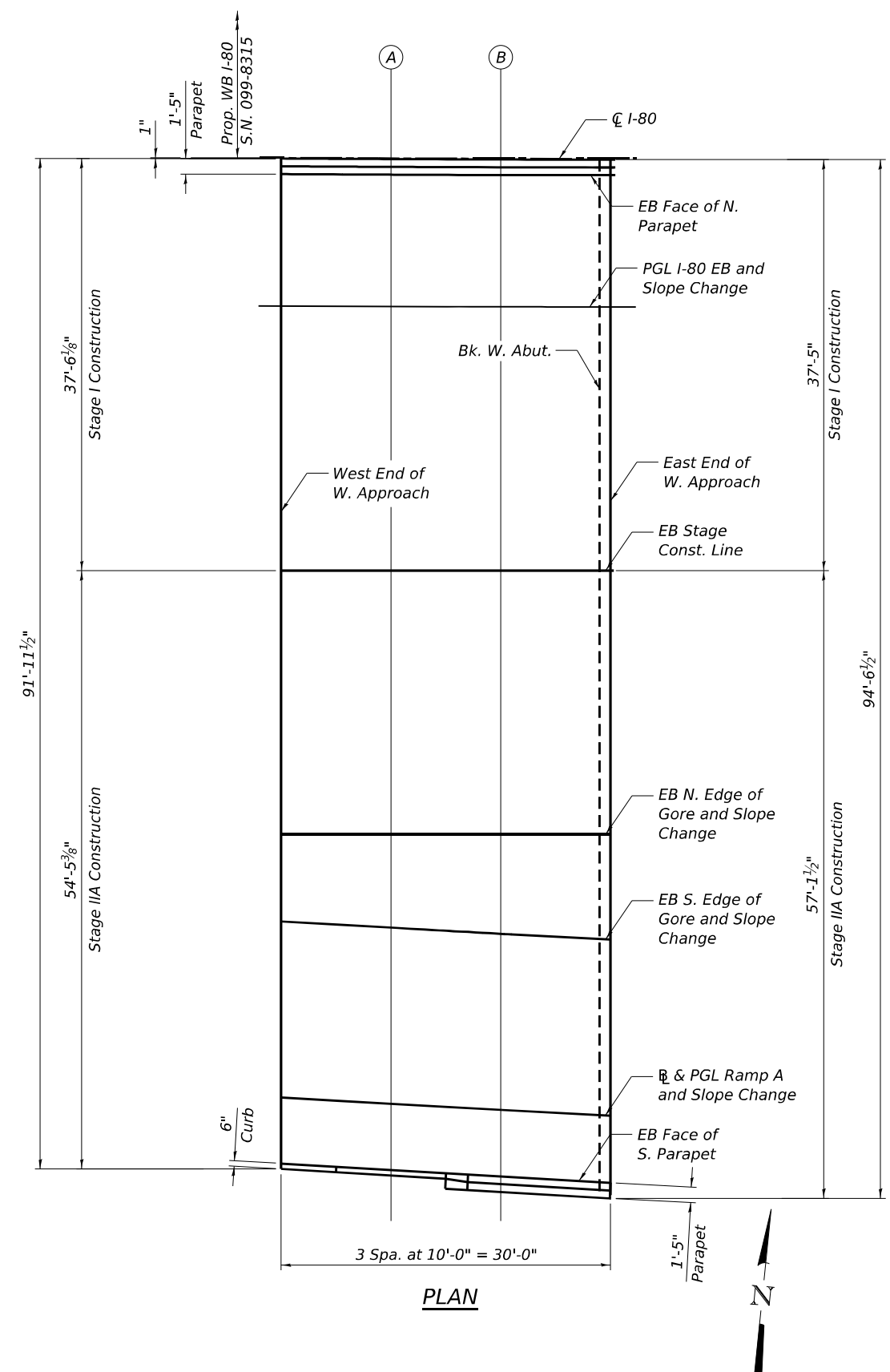
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WB TOP OF E. APPROACH SLAB LAYOUT & TABLES
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

SHEET SB-39 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	670
			CONTRACT NO. 62R28	
		ILLINOIS FED. AID PROJECT		

MODEL: Default
 FILE NAME: p:\projects\transsystems-pw\hosted\Documents\Projects\2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315 ML-04-032-EB Top of W. Approach Slab Layout & Tables.dgn
 10/9/2023 2:51:27 PM



PLAN

EB FACE OF N. PARAPET

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach	339+06.86	-12.00'	603.28
A	339+16.86	-12.00'	603.44
B	339+26.85	-12.00'	603.58
E. End of W. Approach	339+36.85	-12.00'	603.73

EB S. EDGE OF GORE AND SLOPE CHANGE

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach	339+07.19	55.90'	604.99
A	339+17.11	56.48'	605.15
B	339+27.02	57.04'	605.30
E. End of W. Approach	339+36.93	57.58'	605.44

PGL I-80 EB AND SLOPE CHANGE

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach	339+06.92	0.00'	603.52
A	339+16.90	0.00'	603.68
B	339+26.88	0.00'	603.82
E. End of W. Approach	339+36.87	0.00'	603.97

B & PGL RAMP A AND SLOPE CHANGE

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach	339+07.27	71.93'	605.42
A	339+17.17	72.51'	605.58
B	339+27.06	73.07'	605.73
E. End of W. Approach	339+36.95	73.61'	605.87

EB STAGE CONST. LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach	339+07.04	24.00'	604.15
A	339+16.99	24.00'	604.30
B	339+26.94	24.00'	604.45
E. End of W. Approach	339+36.89	24.00'	604.60

EB FACE OF S. PARAPET

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach	339+07.30	77.94'	605.31
A	339+19.36	78.52'	605.46
B	339+27.07	79.12'	605.61
E. End of W. Approach	339+36.96	79.39'	605.75

EB N. EDGE OF GORE AND SLOPE CHANGE

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Approach	339+07.16	48.00'	604.78
A	339+17.08	48.00'	604.93
B	339+27.00	48.00'	605.07
E. End of W. Approach	339+36.92	48.00'	605.22



USER NAME =	DESIGNED - AMS	REVISED -
	CHECKED - MI, LAB	REVISED -
PLOT SCALE =	DRAWN - AMS	REVISED -
PLOT DATE =	CHECKED - MI, LAB	REVISED -

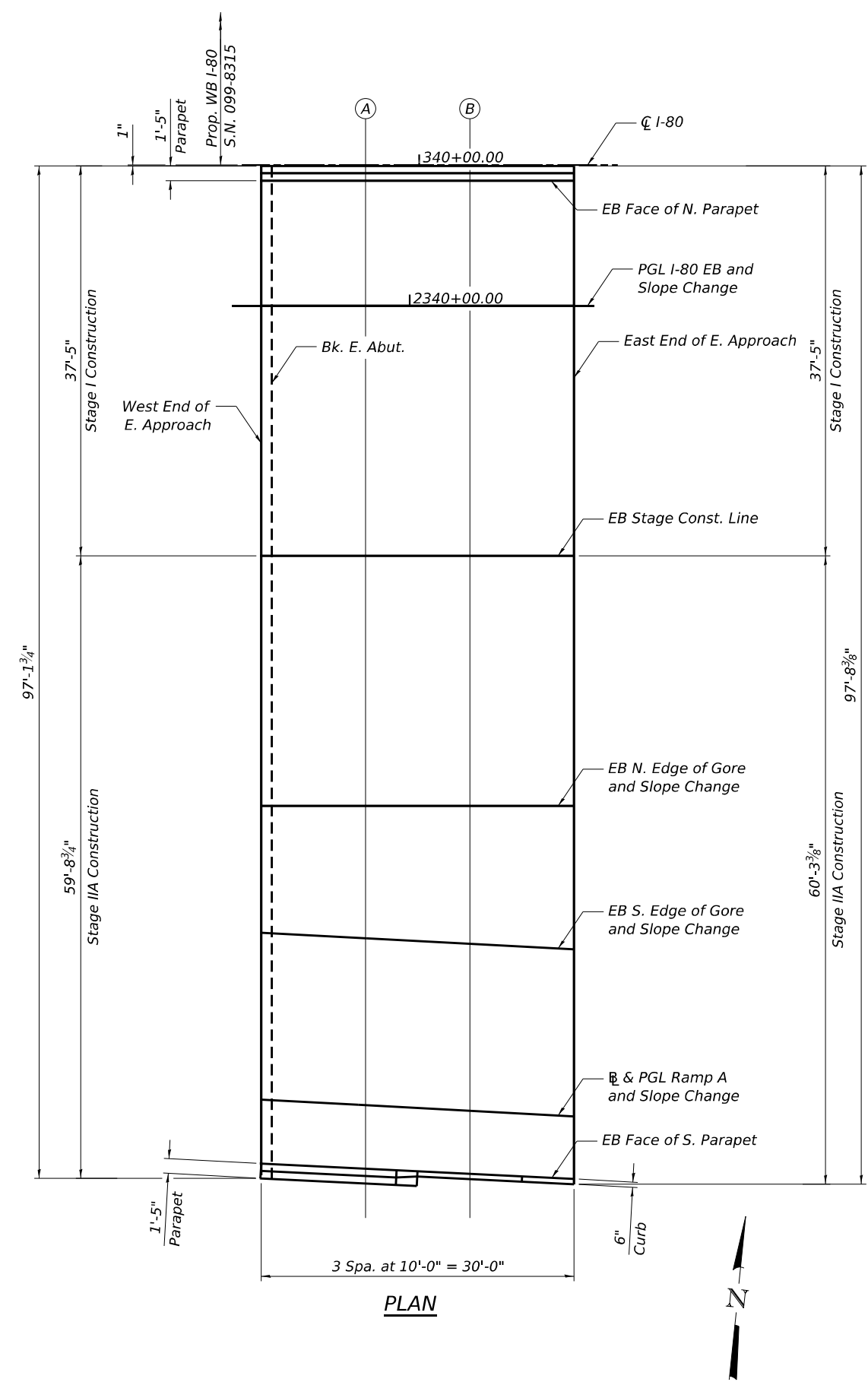
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EB TOP OF W. APPROACH SLAB LAYOUT & TABLES
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

SHEET SB-40 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	671
CONTRACT NO. 62R28				
ILLINOIS		FED. AID PROJECT		

MODEL: Default
 FILE NAME: p:\transystems-pw\benley.com\transystems-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-033-EB_Top of E. Approach Slab Layout & Tables.dgn
 10/9/2023 2:51:29 PM



PLAN

EB FACE OF N. PARAPET

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach	339+84.85	-12.00'	604.42
A	339+94.85	-12.00'	604.56
B	340+04.85	-12.00'	604.69
E. End of E. Approach	340+14.85	-12.00'	604.83

EB S. EDGE OF GORE AND SLOPE CHANGE

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach	339+84.85	60.15'	606.01
A	339+94.85	60.69'	606.11
B	340+04.85	61.22'	606.20
E. End of E. Approach	340+14.85	61.75'	606.28

PGL I-80 EB AND SLOPE CHANGE

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach	339+84.85	0.00'	604.66
A	339+94.85	0.00'	604.80
B	340+04.85	0.00'	604.93
E. End of E. Approach	340+14.85	0.00'	605.07

B & PGL RAMP A AND SLOPE CHANGE

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach	339+84.85	76.17'	606.44
A	339+94.85	76.71'	606.53
B	340+04.85	77.24'	606.62
E. End of E. Approach	340+14.85	77.78'	606.70

EB STAGE CONST. LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach	339+84.85	24.00'	605.28
A	339+94.85	24.00'	605.42
B	340+04.85	24.00'	605.56
E. End of E. Approach	340+14.85	24.00'	605.69

EB FACE OF S. PARAPET

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach	339+84.85	82.31'	606.32
A	339+94.85	82.80'	606.42
B	340+04.85	83.29'	606.50
E. End of E. Approach	340+14.85	83.79'	606.58

EB N. EDGE OF GORE AND SLOPE CHANGE

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Approach	339+84.85	48.00'	605.91
A	339+94.85	48.00'	606.04
B	340+04.85	48.00'	606.18
E. End of E. Approach	340+14.85	48.00'	606.32



USER NAME =	DESIGNED - AMS	REVISED -
	CHECKED - MI, LAB	REVISED -
PLOT SCALE =	DRAWN - AMS	REVISED -
PLOT DATE =	CHECKED - MI, LAB	REVISED -

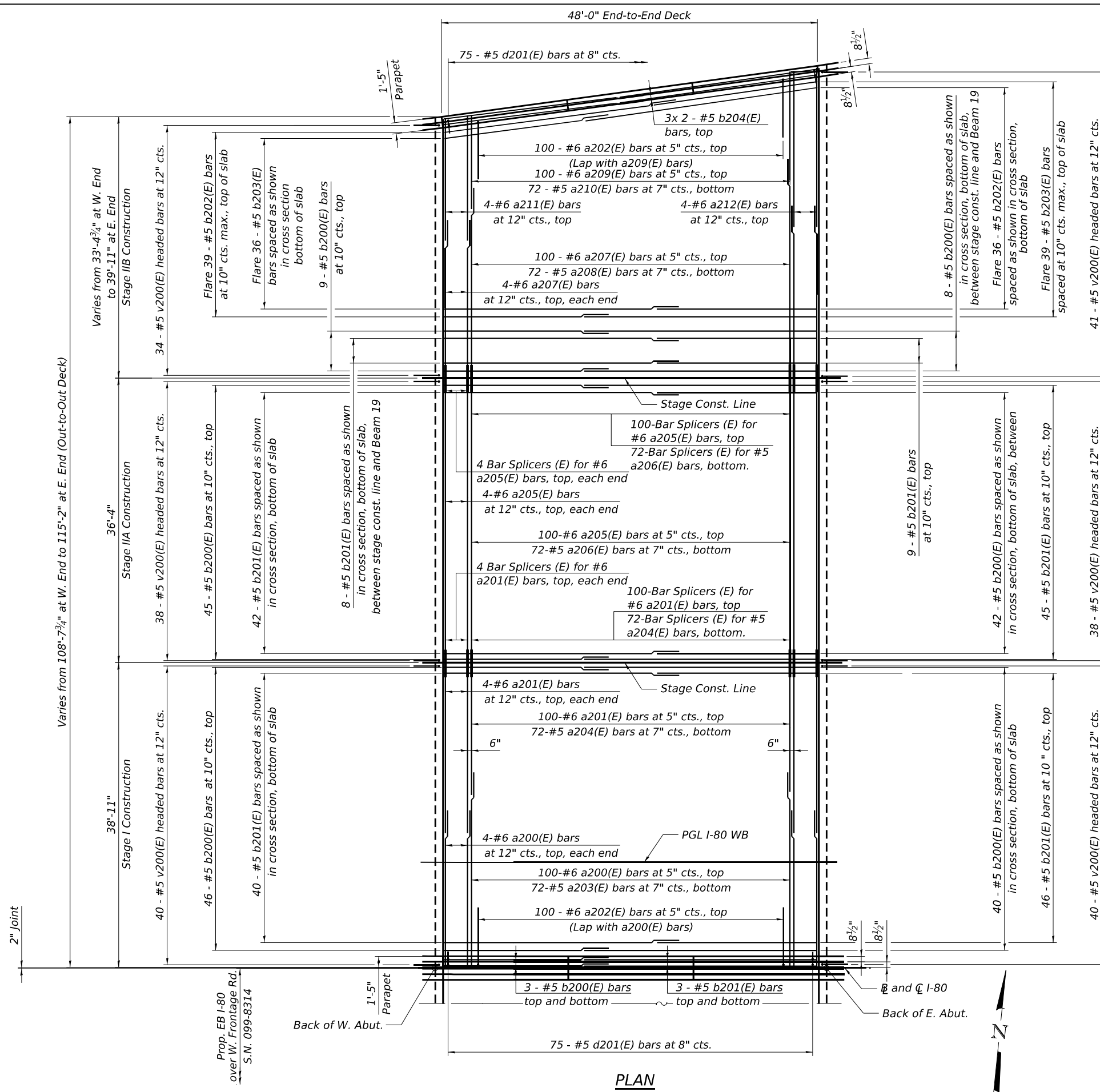
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EB TOP OF E. APPROACH SLAB LAYOUT & TABLES
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

SHEET SB-41 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	672
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R28	

MODEL: Default
 FILE NAME: p:\projects\transyscorp-pw1-hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Structures\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-034-WB Deck Plan.dgn
 10/9/2023 2:51:32 PM



NOTES:

1. Bars indicated thus 3x2 - #5, etc. indicates 3 lines of bars with 2 lengths per line.
2. For Deck cross section, see Sheet SB-43.
3. For parapet elevations and reinforcement, see Sheet SB-44.
4. For West abutment diaphragm elevation and sections, see Sheet SB-45.
5. For East abutment diaphragm elevation and sections, see Sheet SB-46.
6. For deck details, bar diagrams, minimum bar laps and Bill of Material, see Sheet SB-47.
7. For Bar Splicer Detail, see Sheet SB-84.

MINIMUM BAR LAPS

#5 bar = 3'-6"
 #6 bar = 3'-7"



USER NAME =	DESIGNED - SK, AMS	REVISED -
PLOT SCALE =	CHECKED - MI, SK	REVISED -
PLOT DATE =	DRAWN - AMS	REVISED -
	CHECKED - JJS	REVISED -

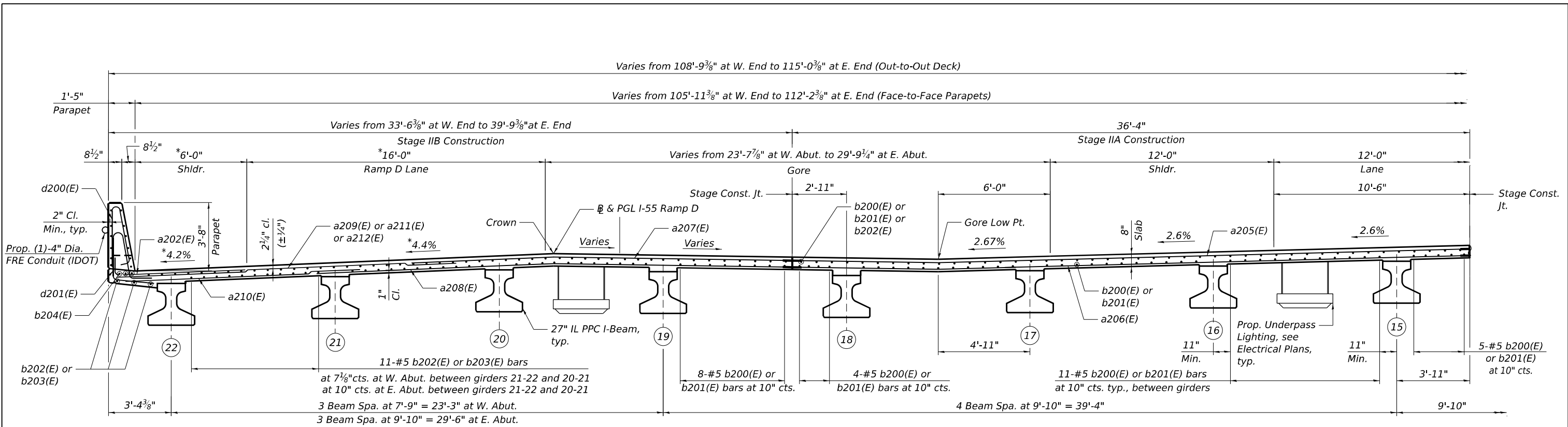
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

WB DECK PLAN
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

SHEET SB-42 OF SB-97 SHEETS

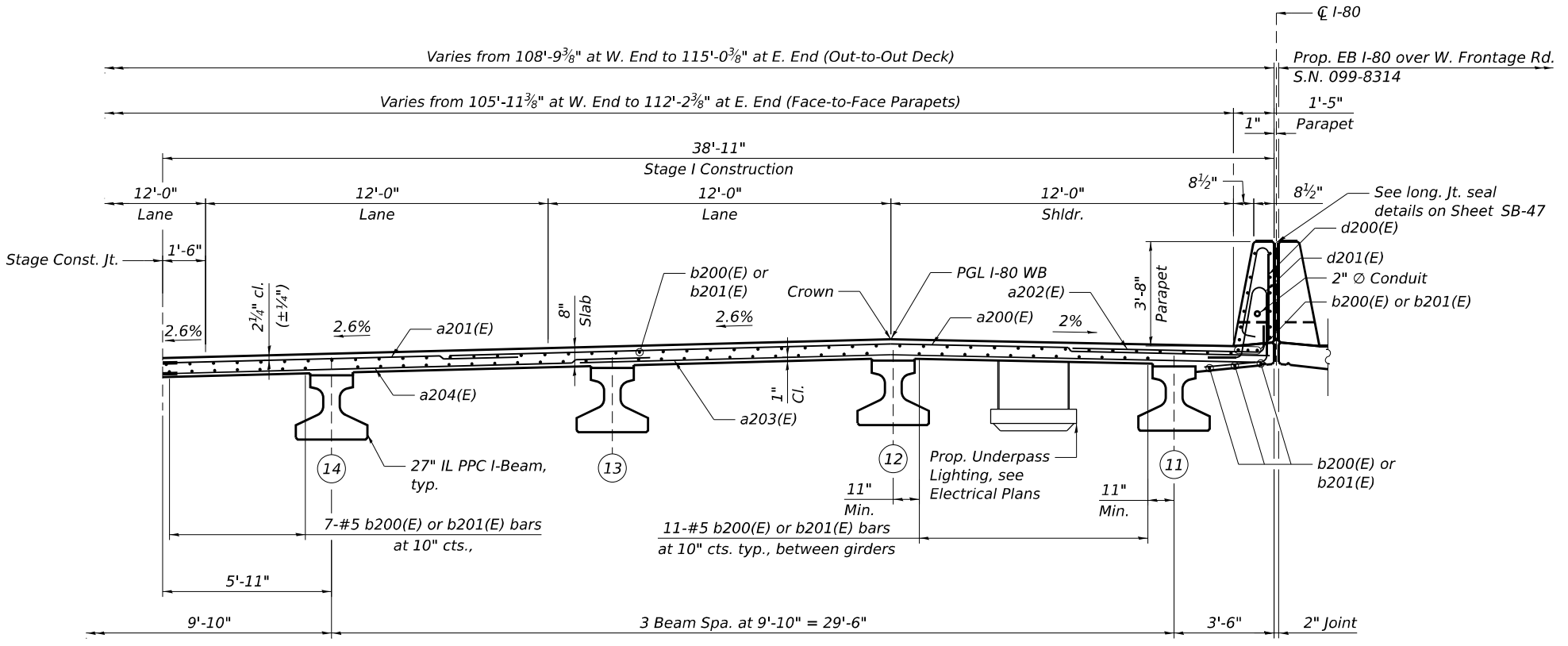
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	673
CONTRACT NO. 62R28				
ILLINOIS		FED. AID PROJECT		

MODEL: Default
 FILE NAME: p:\projects\transys\ppl\hosted\Documents\Projects\2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315\WB Deck Cross Section.dgn
 10/9/2023 2:51:35 PM



CROSS SECTION - STAGE IIA CONSTRUCTION & STAGE IIC CONSTRUCTION
(Looking East)

*Dimensions and cross slopes are radial to alignment



CROSS SECTION - STAGE I CONSTRUCTION
(Looking East)



USER NAME =	DESIGNED - SK, AMS	REVISED -
PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE =	DRAWN - SK, AMS	REVISED -
	CHECKED - JJS	REVISED -

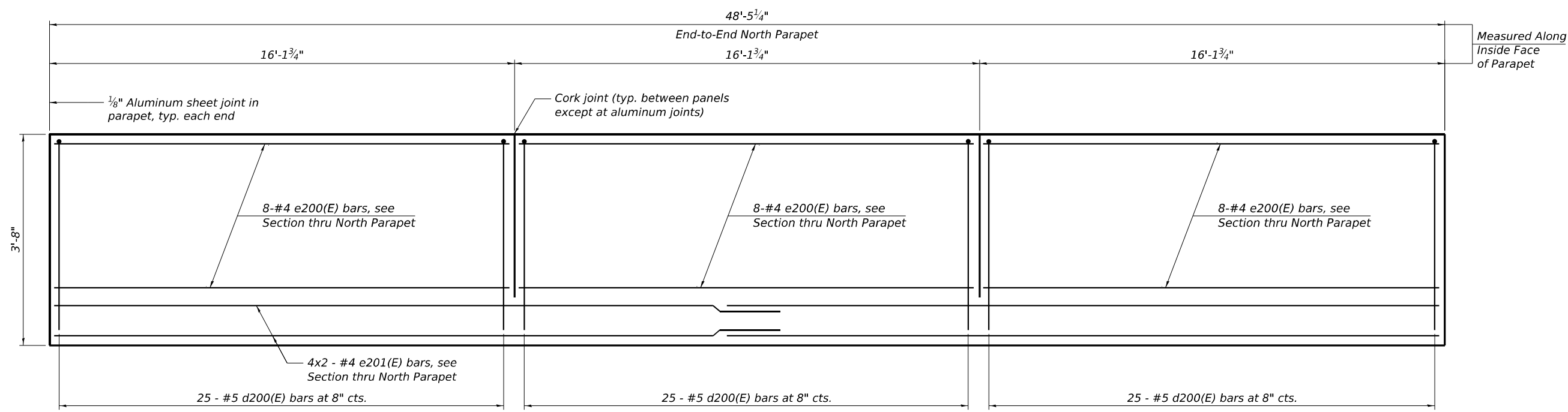
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WB DECK CROSS SECTION
STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

SHEET SB-43 OF SB-97 SHEETS

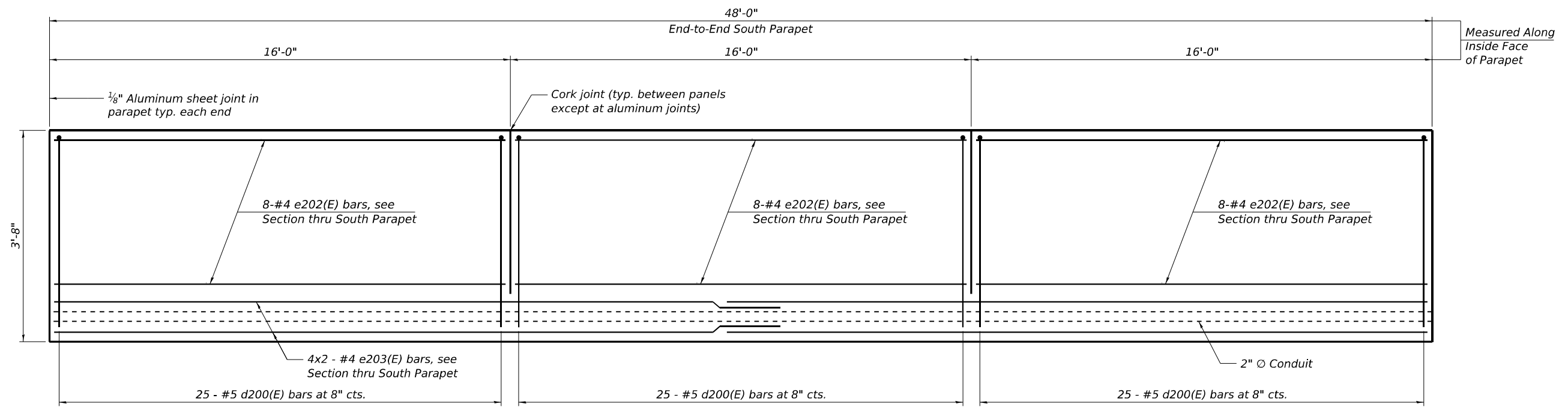
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	674
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\transys\transys\p-w\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315\80 over: Frontage Rd\0998314_0998315-ML-04-036-WB Parapets Elevations.dgn



INSIDE ELEVATION OF NORTH PARAPET
 (Looking North)

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



INSIDE ELEVATION OF SOUTH PARAPET
 (Looking South)

NOTES:

1. For additional notes, see Sheet SB-42.
2. For Sections thru North and South Parapet, Parapet joint details, bar diagrams, min. bar laps and Bill of Material, see Sheet SB-47.



USER NAME =	DESIGNED - SK, AMS	REVISED -
	CHECKED - MI	REVISED -
PLOT SCALE =	DRAWN - SK, AMS	REVISED -
PLOT DATE =	CHECKED - JJS	REVISED -

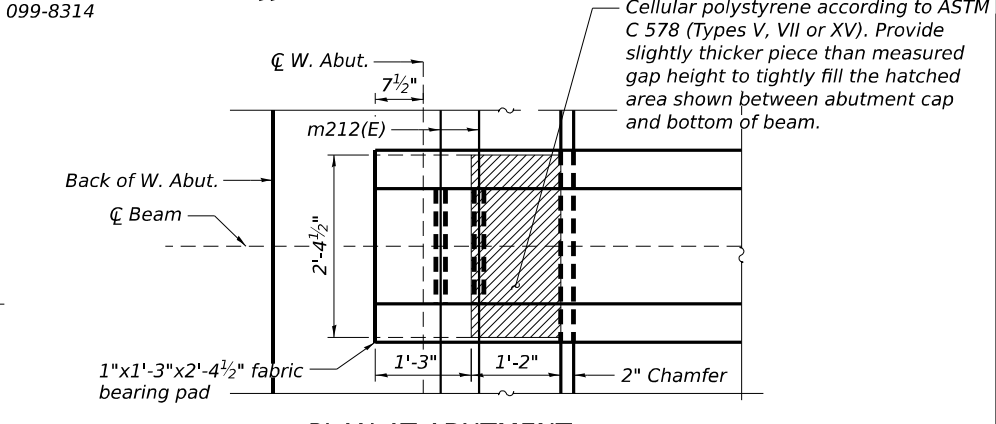
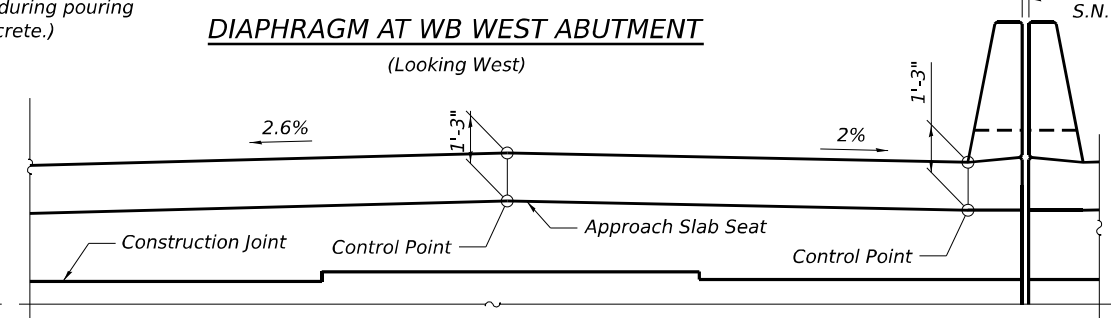
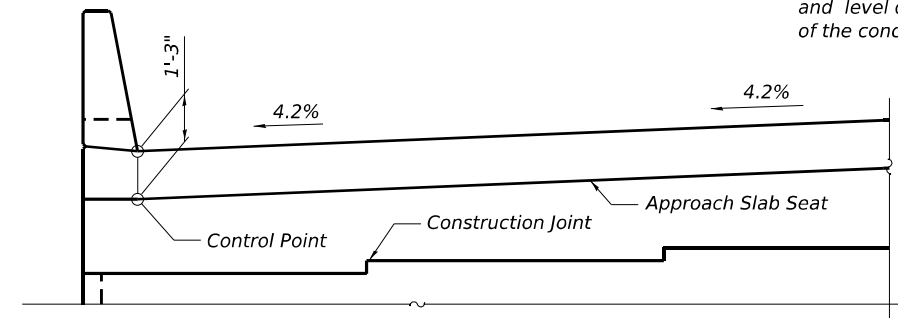
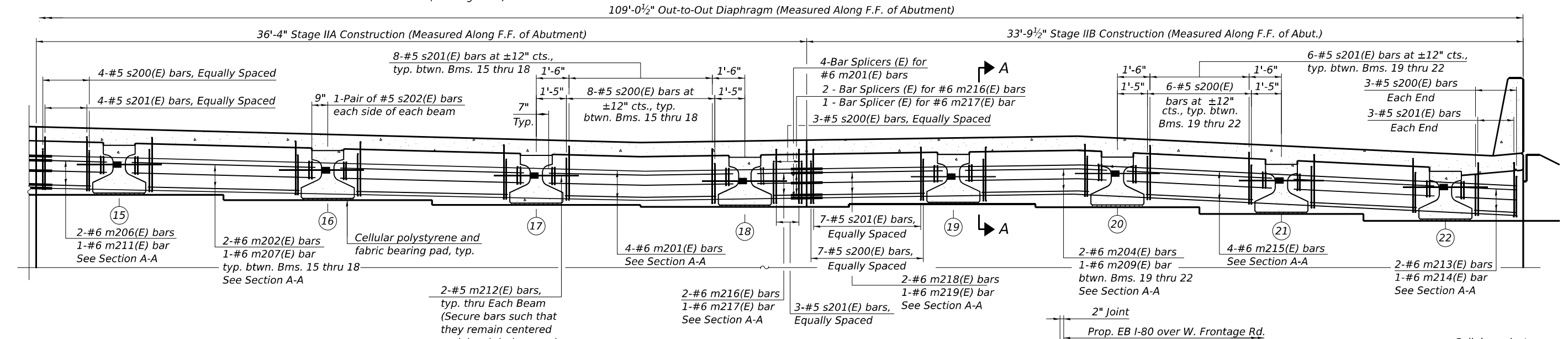
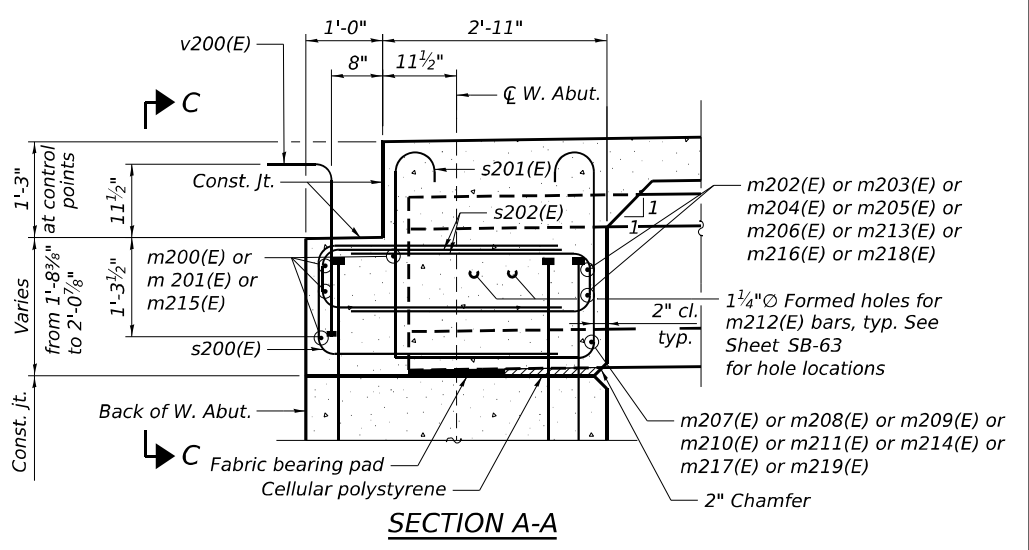
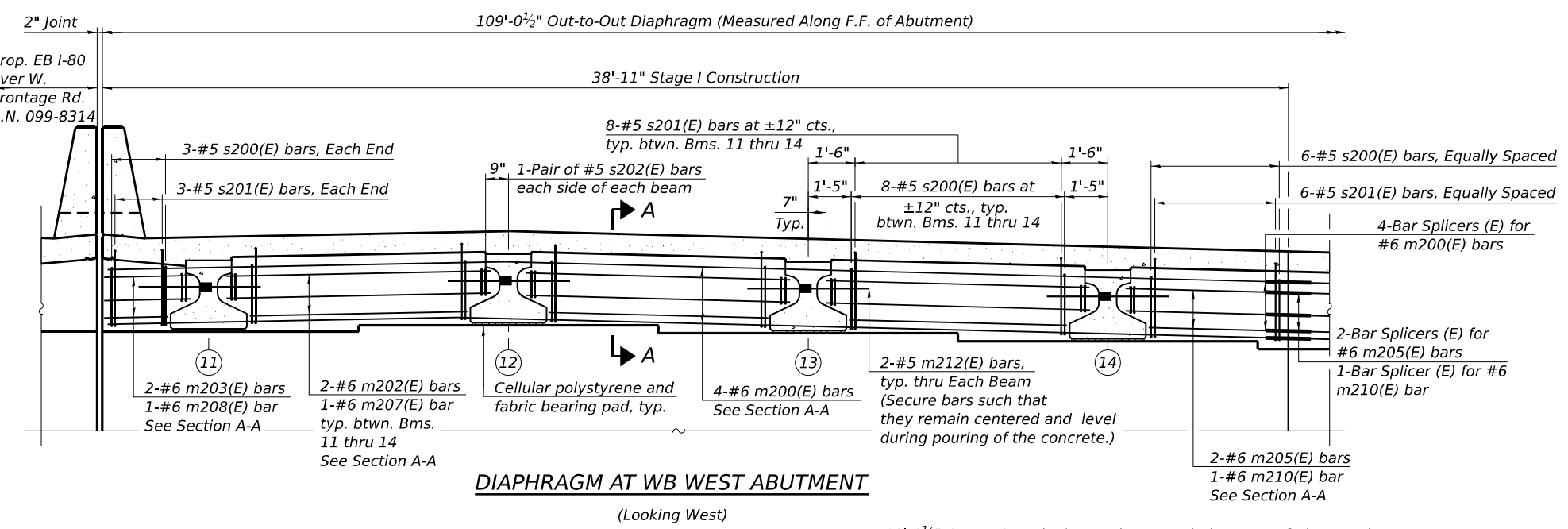
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB PARAPETS ELEVATIONS
STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

SHEET SB-44 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	675
CONTRACT NO. 62R28				
ILLINOIS FED. AID PROJECT				

MODEL: Default
 FILE NAME: p:\transystems-pw\benley.com\transystems-pw\hosted\Documents\Projects_2018\CH401\401180027\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315\80 over Frontage Rd\0998314.dgn
 10/9/2023 2:51:40 PM



NOTES:

1. For additional notes, see Sheet SB-42.
2. For bar diagrams, quantities and Bill of Material, see Sheet SB-47.
3. The approach slab seat shall have a constant slope determined from control points shown.
4. Cost of cellular polystyrene is included with Concrete Superstructure.
5. Cost of fabric bearing pad is included with Furnishing and Erecting Precast Prestressed Concrete Beams, IL27 N.



USER NAME =	DESIGNED - SK, AMS	REVISED -
PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE =	DRAWN - SK, AMS	REVISED -
	CHECKED - JJS	REVISED -

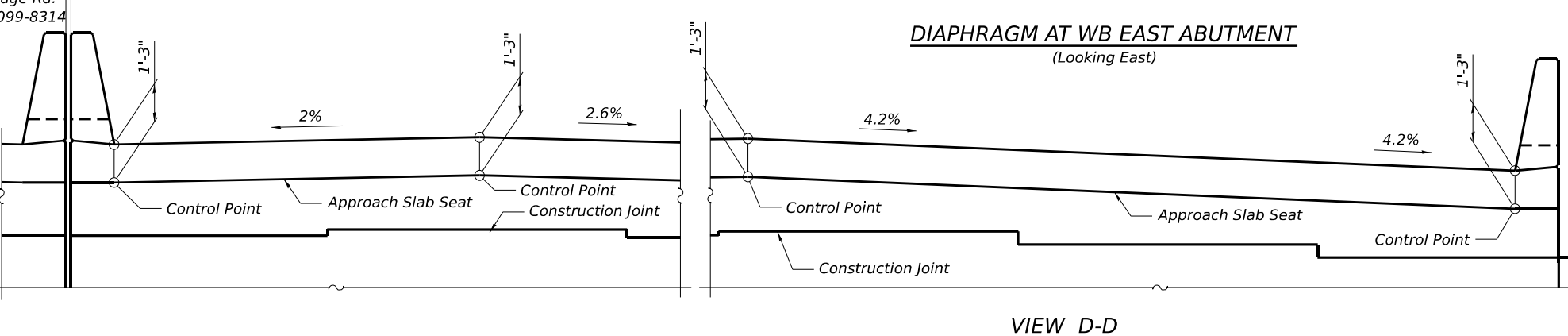
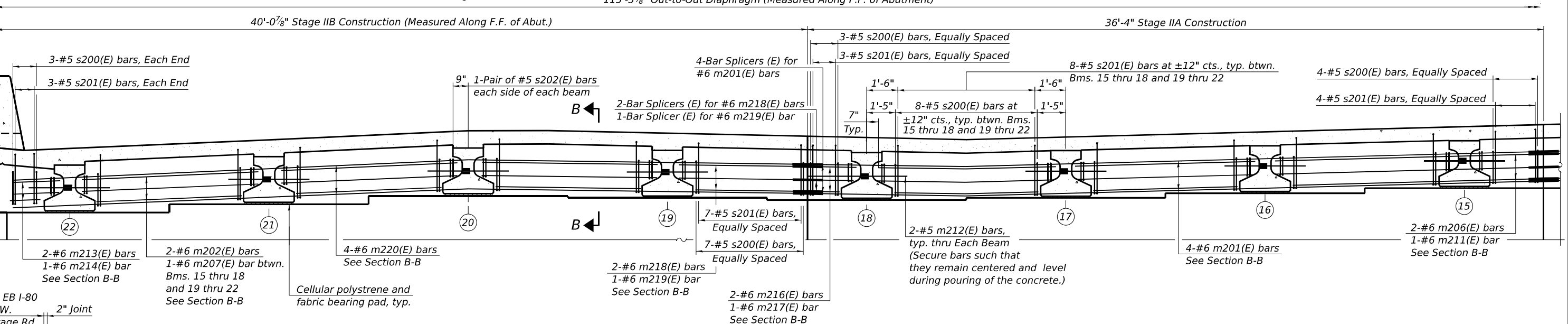
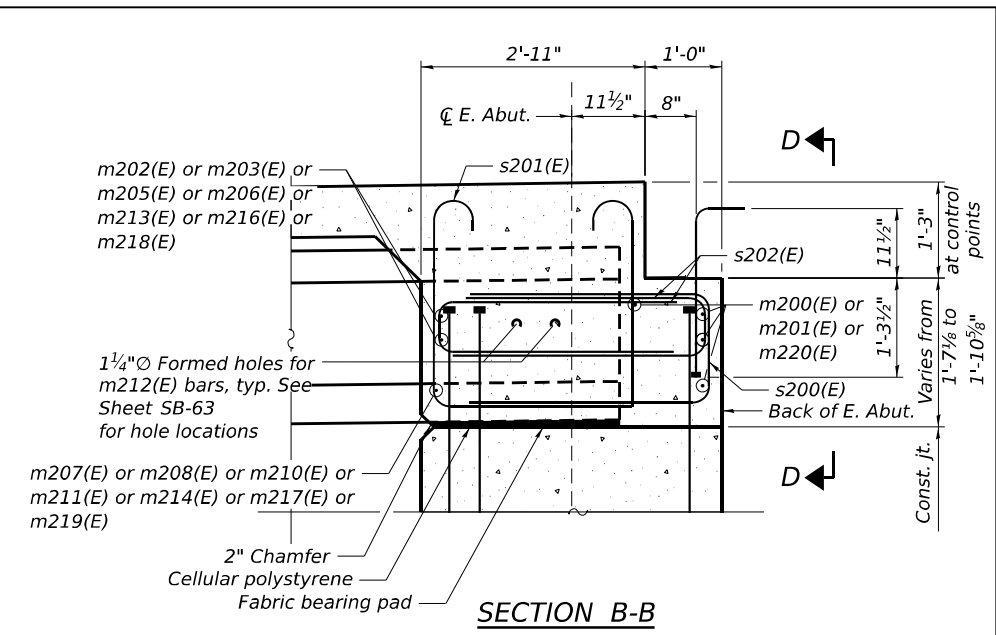
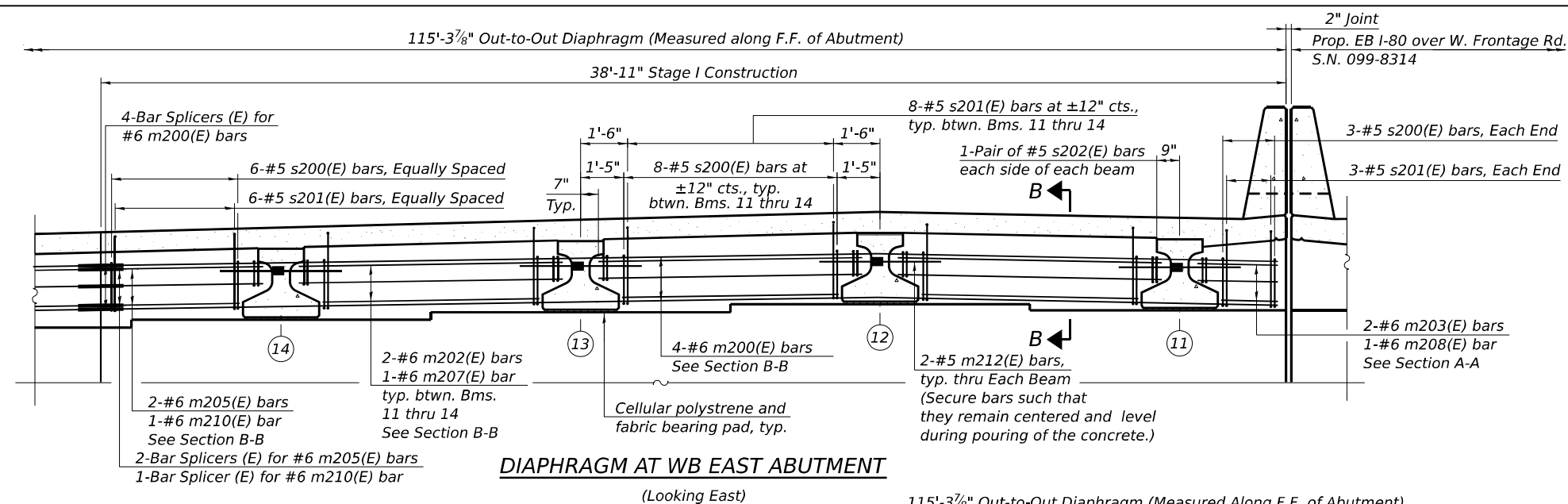
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB W. ABUTMENT DIAPHRAGM ELEVATION AND DETAILS
STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

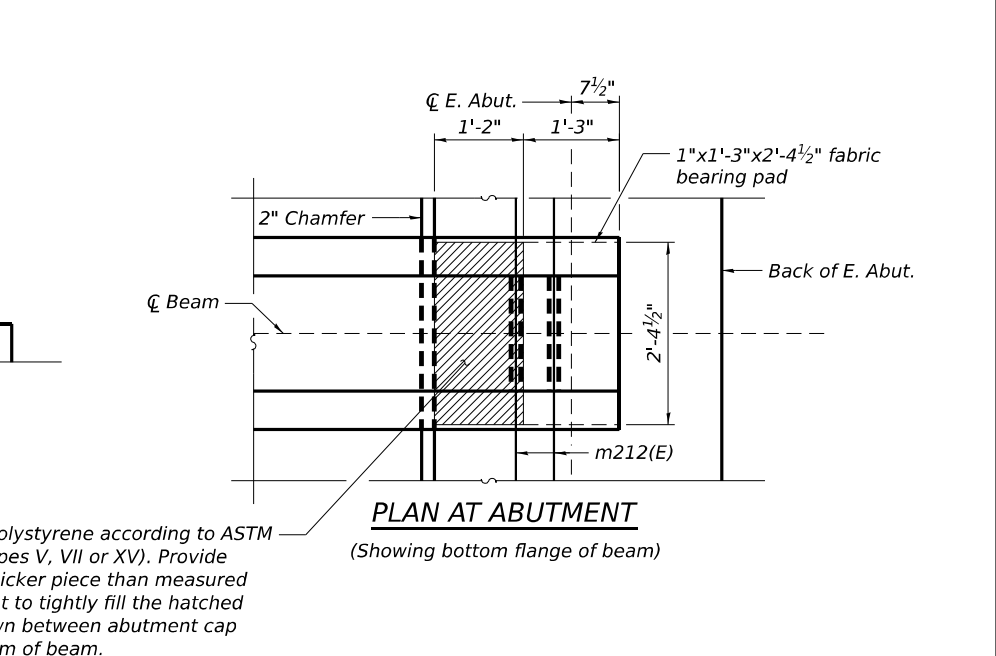
SHEET SB-45 OF SB-97 SHEETS

F.A.I. RTE. 80	SECTION FAI 80 21 STRUCTURE 7	COUNTY WILL	TOTAL SHEETS 1059	SHEET NO. 676
ILLINOIS			FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\transystems-pw\hntb\transystems-pw\hntb\Documents\Projects\2018\CH401\401180022\01-Structures\099-8314 & 099-8315\80 over Frontage Rd\0998314.dgn
 10/9/2023 2:51:43 PM



- NOTES:**
1. For additional notes, see Sheet SB-42.
 2. For bar diagrams, quantities and Bill of Material, see Sheet SB-47.
 3. The approach slab seat shall have a constant slope determined from control points shown.
 4. Cost of cellular polystyrene is included with Concrete Superstructure.
 5. Cost of fabric bearing pad is included with Furnishing and Erecting Precast Prestressed Concrete Beams, IL27 N.



USER NAME =	DESIGNED - SK, AMS	REVISED -
PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE =	DRAWN - SK, AMS	REVISED -
	CHECKED - JJS	REVISED -

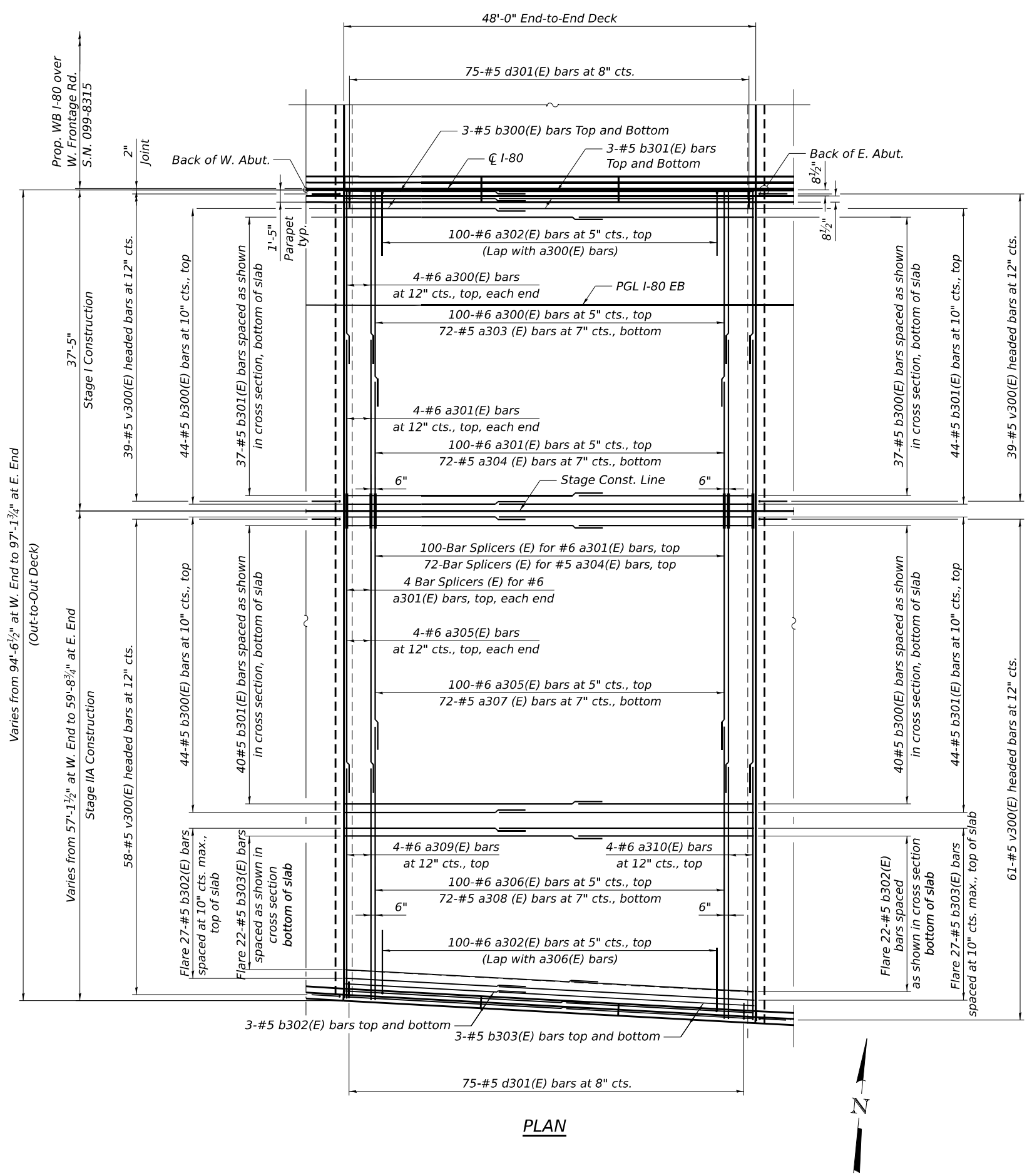
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB E. ABUTMENT DIAPHRAGM ELEVATION AND DETAILS
STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

F.A.I. RTE. = 80	SECTION = FAI 80 21 STRUCTURE 7	COUNTY = WILL	TOTAL SHEETS = 1059	SHEET NO. = 677
ILLINOIS			CONTRACT NO. 62R28	

SHEET SB-46 OF SB-97 SHEETS

MODEL: Default
 FILE NAME: p:\projects\transys\corp-pw1-hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315\04-040-EB Deck Plan.dgn
 10/9/2023 2:51:52 PM



NOTES:

1. Bars indicated thus, 3x2-#5 etc., indicates 3 lines of bars with 2 lengths per line.
2. For Deck cross section, see Sheet SB-49.
3. For parapet elevations and reinforcement, see Sheet SB-50.
4. For West abutment diaphragm elevation and sections, see Sheet SB-51.
5. For East abutment diaphragm elevation and sections, see Sheet SB-52.
6. For deck details, bar diagrams, minimum bar laps and Bill of Material, see Sheet SB-53.
7. For Bar Splicer Detail, see Sheet SB-84.

MINIMUM BAR LAPS

#5 bar = 3'-6"
 #6 bar = 3'-7"



USER NAME =	DESIGNED - SK, AMS	REVISED -
	CHECKED - MI	REVISED -
PLOT SCALE =	DRAWN - SK, AMS	REVISED -
PLOT DATE =	CHECKED - JJS	REVISED -

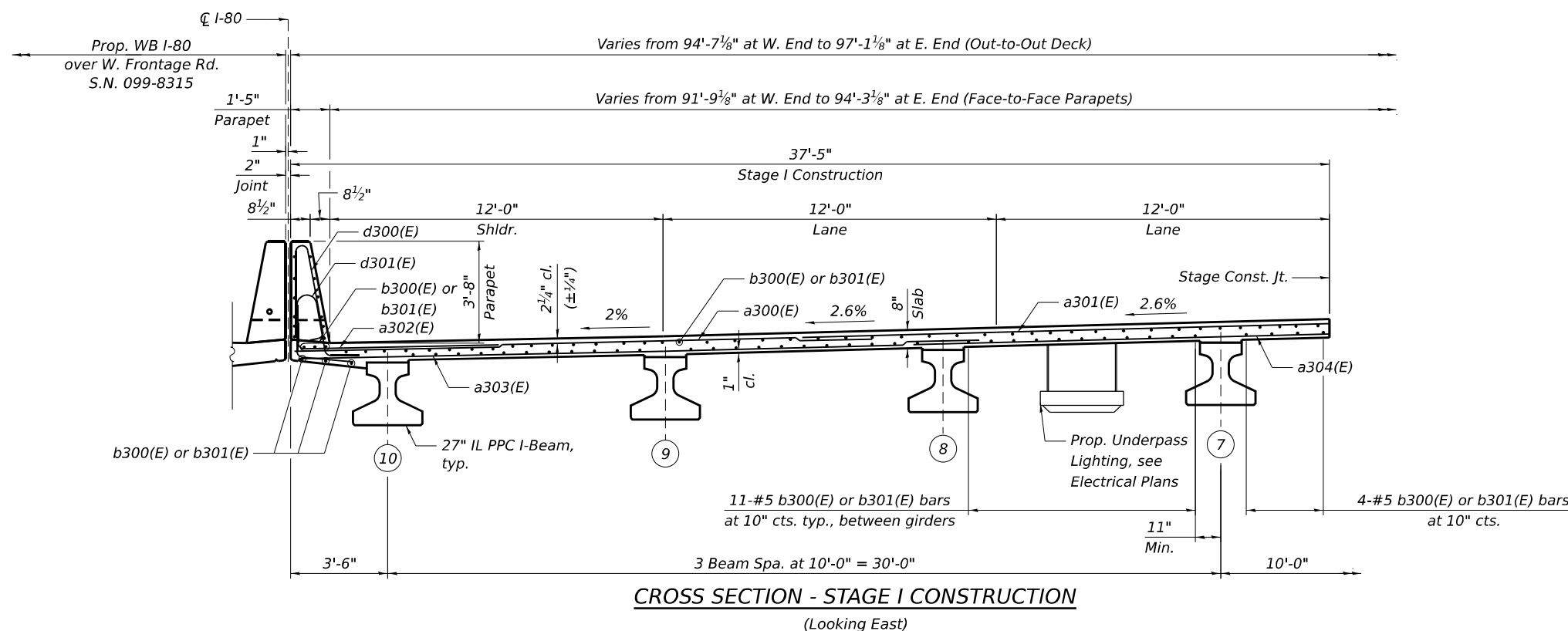
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EB DECK PLAN
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

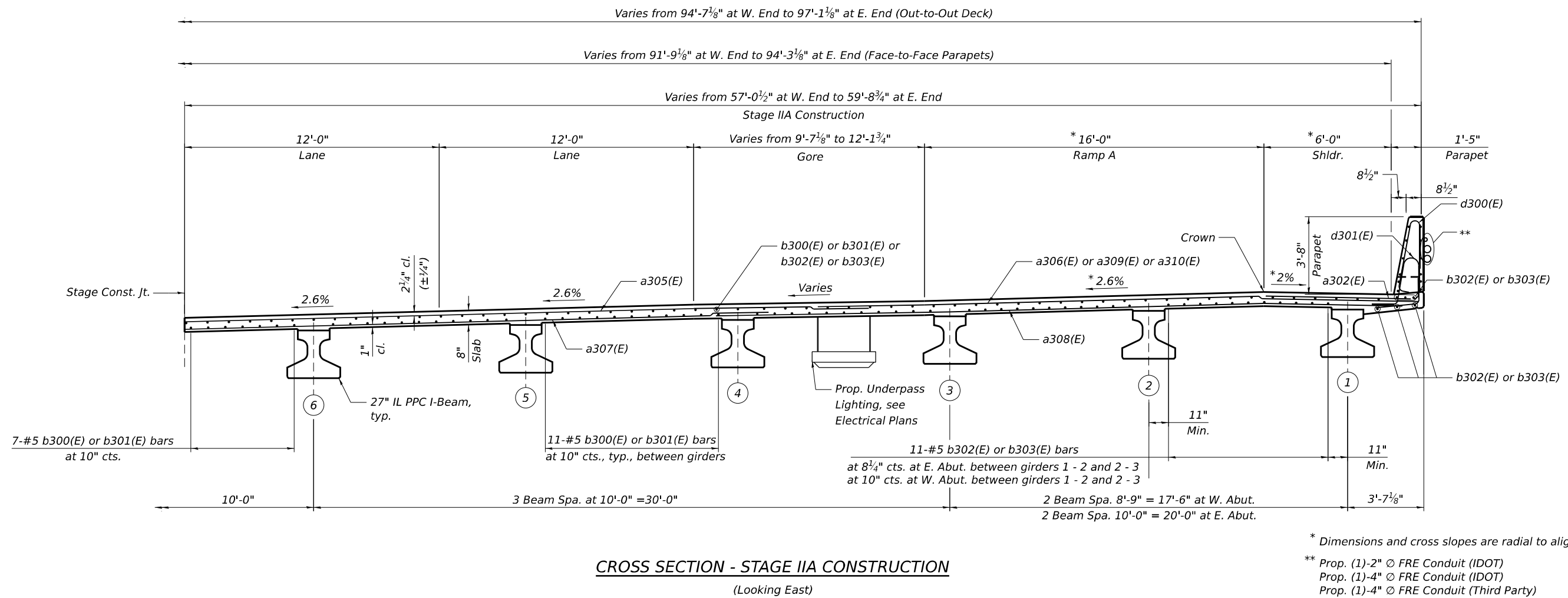
SHEET SB-48 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	679
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\trans\systems-pw\benley.com\trans\systems-pw\1-hosted\Documents\Projects\2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-EB Deck Cross Section.dgn
 10/9/2023 2:51:55 PM



NOTE:
 1. For Longitudinal Joint Seal Detail and Preformed Joint Seal, 3 1/2" quantity, see Sheet SB-47.



* Dimensions and cross slopes are radial to alignment
 ** Prop. (1)-2" Ø FRE Conduit (IDOT)
 Prop. (1)-4" Ø FRE Conduit (IDOT)
 Prop. (1)-4" Ø FRE Conduit (Third Party)



USER NAME =	DESIGNED - SK, AMS	REVISED -
PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE =	DRAWN - SK, AMS	REVISED -
	CHECKED - JJS	REVISED -

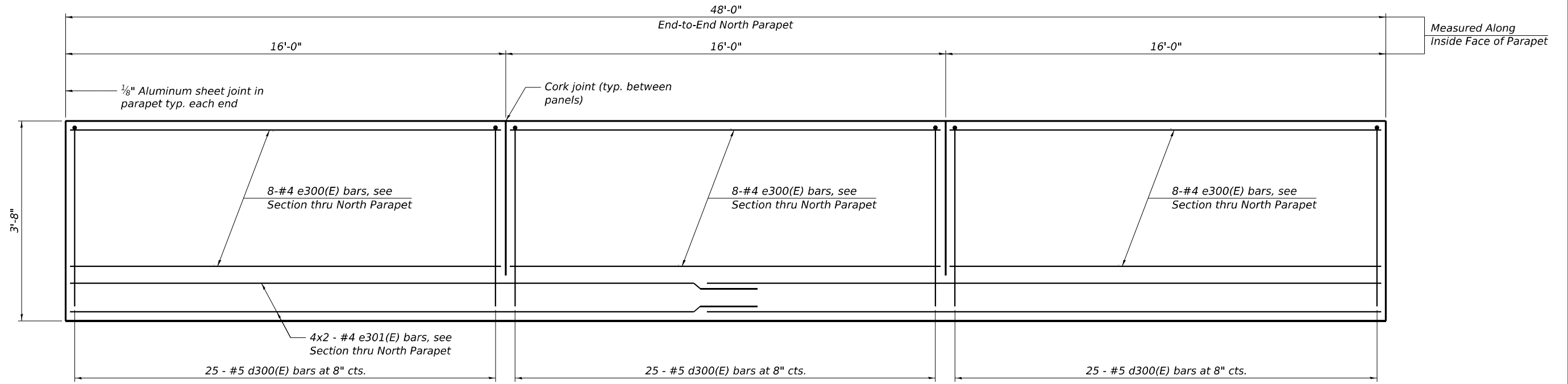
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EB DECK CROSS SECTION
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	680
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

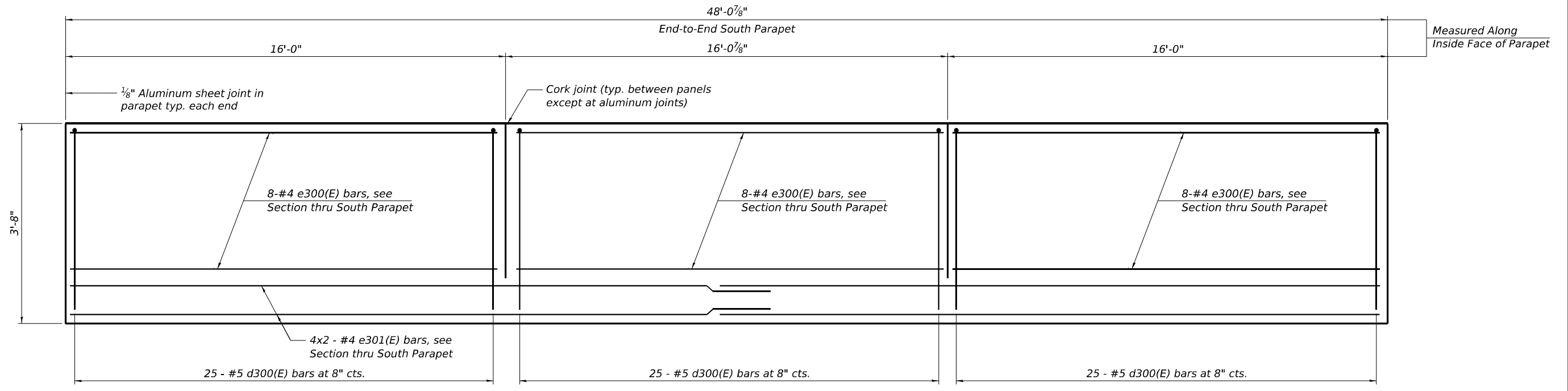
SHEET SB-49 OF SB-97 SHEETS

MODEL: Default
 FILE NAME: p:\transys\transys\p-w\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315 ML-04-EB Parapets Elevations.dgn



INSIDE ELEVATION OF NORTH PARAPET
 (Looking North)

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



INSIDE ELEVATION OF SOUTH PARAPET
 (Looking South)

NOTES:

1. For additional notes, see Sheet SB-48.
2. For Sections thru North and South Parapet, Parapet joint details, bar diagrams and Bill of Material, see Sheet SB-53.



USER NAME =	DESIGNED - SK, AMS	REVISED -
	CHECKED - MI	REVISED -
PLOT SCALE =	DRAWN - SK, AMS	REVISED -
PLOT DATE =	CHECKED - JJS	REVISED -

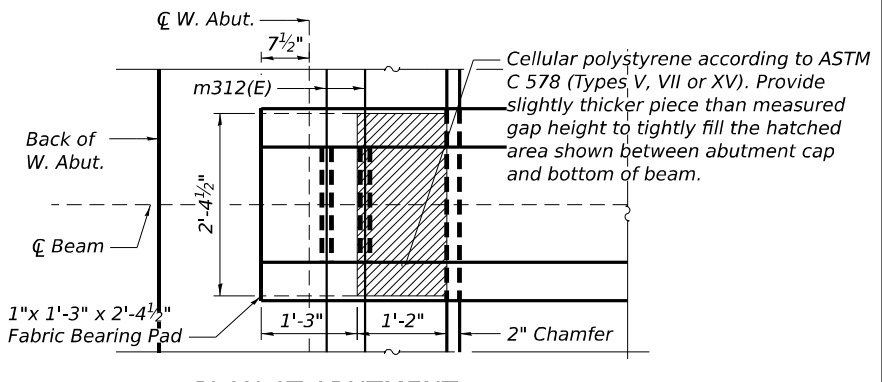
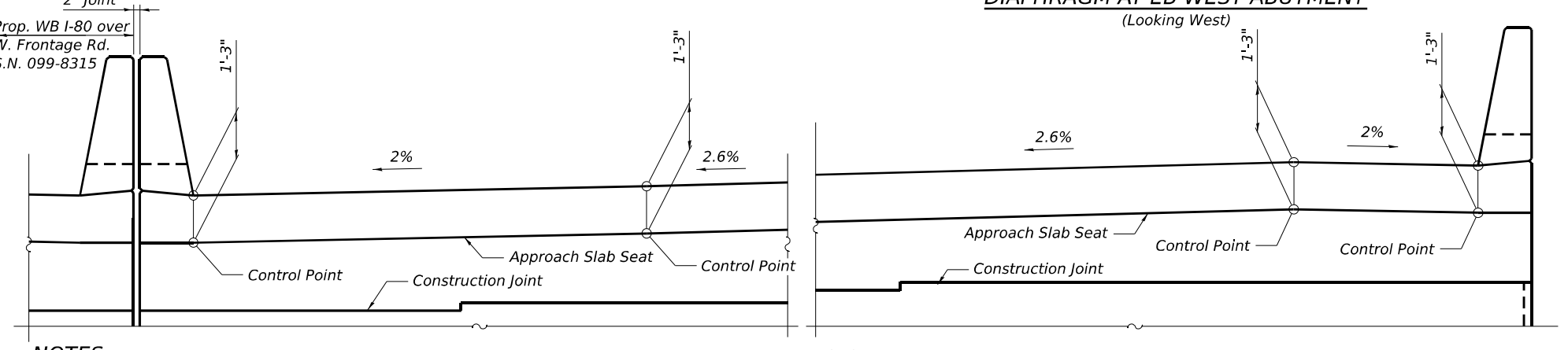
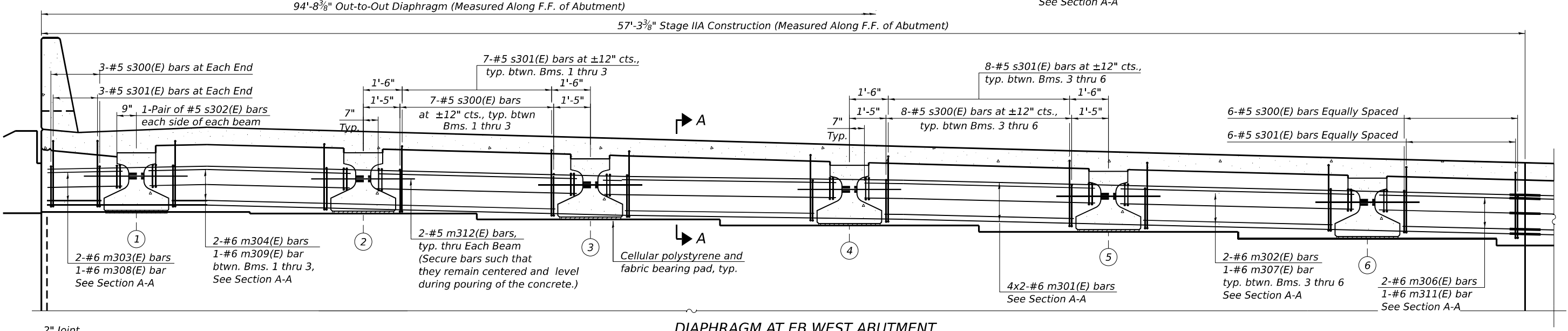
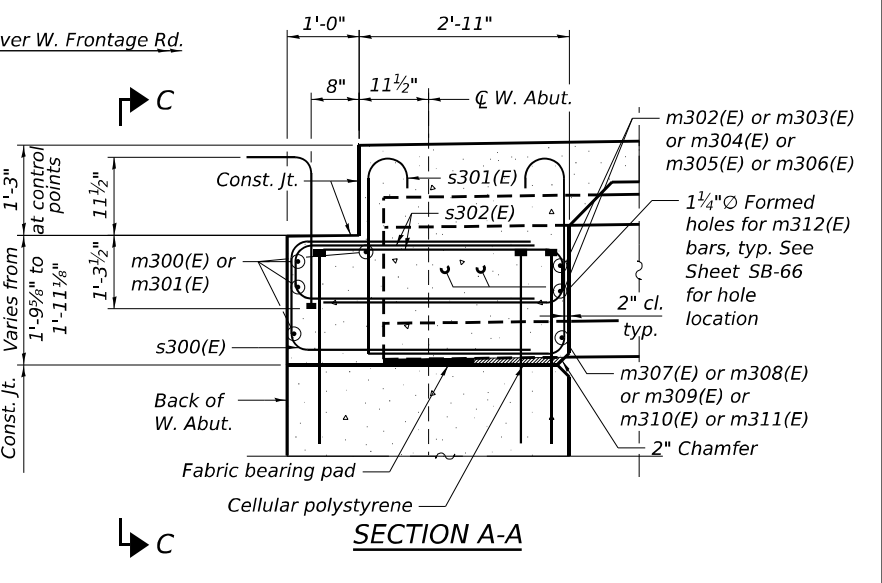
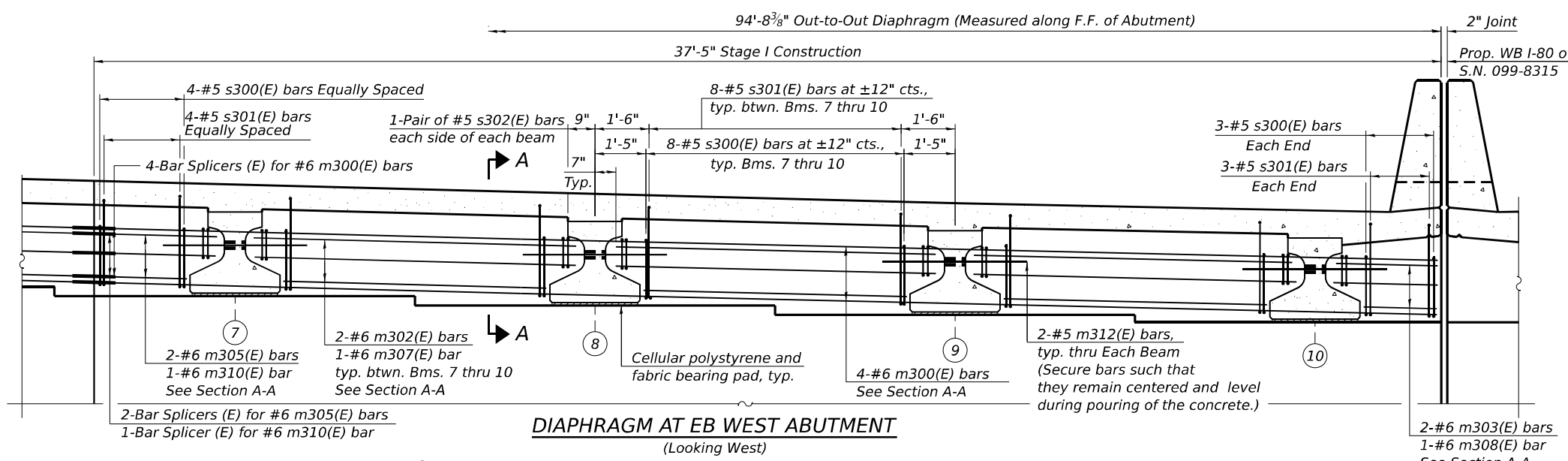
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EB PARAPETS ELEVATIONS
STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

SHEET SB-50 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	681
CONTRACT NO. 62R28				
ILLINOIS FED. AID PROJECT				

MODEL: Default
 FILE NAME: p:\w\transystems-pw\benley.com\transystems-pw\1-hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Structures\099-8314 & 099-8315\80 over Frontage Rd\0998314.dgn
 10/9/2023 2:52:00 PM



- NOTES:**
- For additional notes, see Sheet SB-48.
 - For bar diagrams, quantities and Bill of Material, see Sheet SB-53.
 - The approach slab seat shall have a constant slope determined from control points shown.
 - Cost of cellular polystyrene is included with Concrete Superstructure.
 - Cost of fabric bearing pad is included with Furnishing and Erecting Precast Prestressed Concrete Beams, IL27 N.



USER NAME =	DESIGNED - SK, AMS	REVISED -
PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE =	DRAWN - SK, AMS	REVISED -
	CHECKED - JJS	REVISED -

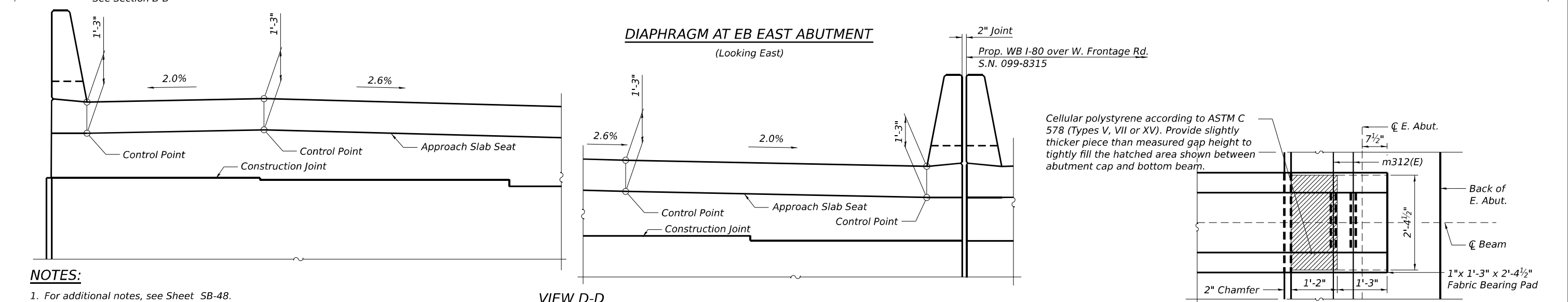
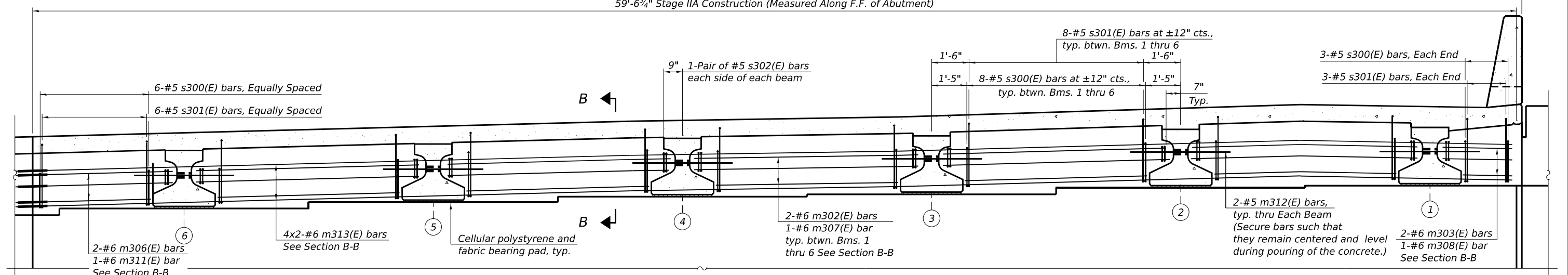
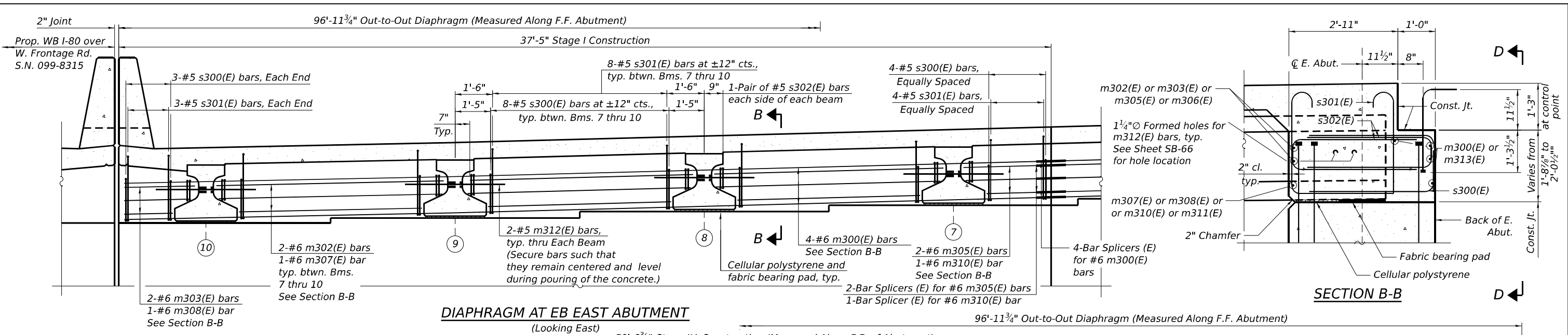
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EB W. ABUTMENT DIAPHRAGM ELEVATION AND DETAILS
STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

SHEET SB-51 OF SB-97 SHEETS

F.A.I. RTE. = 80	SECTION = FAI 80 21 STRUCTURE 7	COUNTY = WILL	TOTAL SHEETS = 1059	SHEET NO. = 682
			CONTRACT NO. 62R28	
ILLINOIS FED. AID PROJECT				

MODEL: Default
 FILE NAME: p:\transystems-pw\entley.com\transyscorp-pw\1-hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315\80 over Frontage Rd\0998315-ML-04-044-EB E. Abutment Diaphragm Details.dgn
 10/9/2023 2:52:03 PM



- NOTES:**
- For additional notes, see Sheet SB-48.
 - For bar diagrams, quantities and Bill of Material, see Sheet SB-53.
 - The approach slab seat shall have a constant slope determined from control points shown.
 - Cost of cellular polystyrene is included with Concrete Superstructure.
 - Cost of fabric bearing pad is included with Furnishing and Erecting Precast Prestressed Concrete Beams, IL27 N.



USER NAME =	DESIGNED - SK, AMS	REVISED -
PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE =	DRAWN - SK, AMS	REVISED -
	CHECKED - JJS	REVISED -

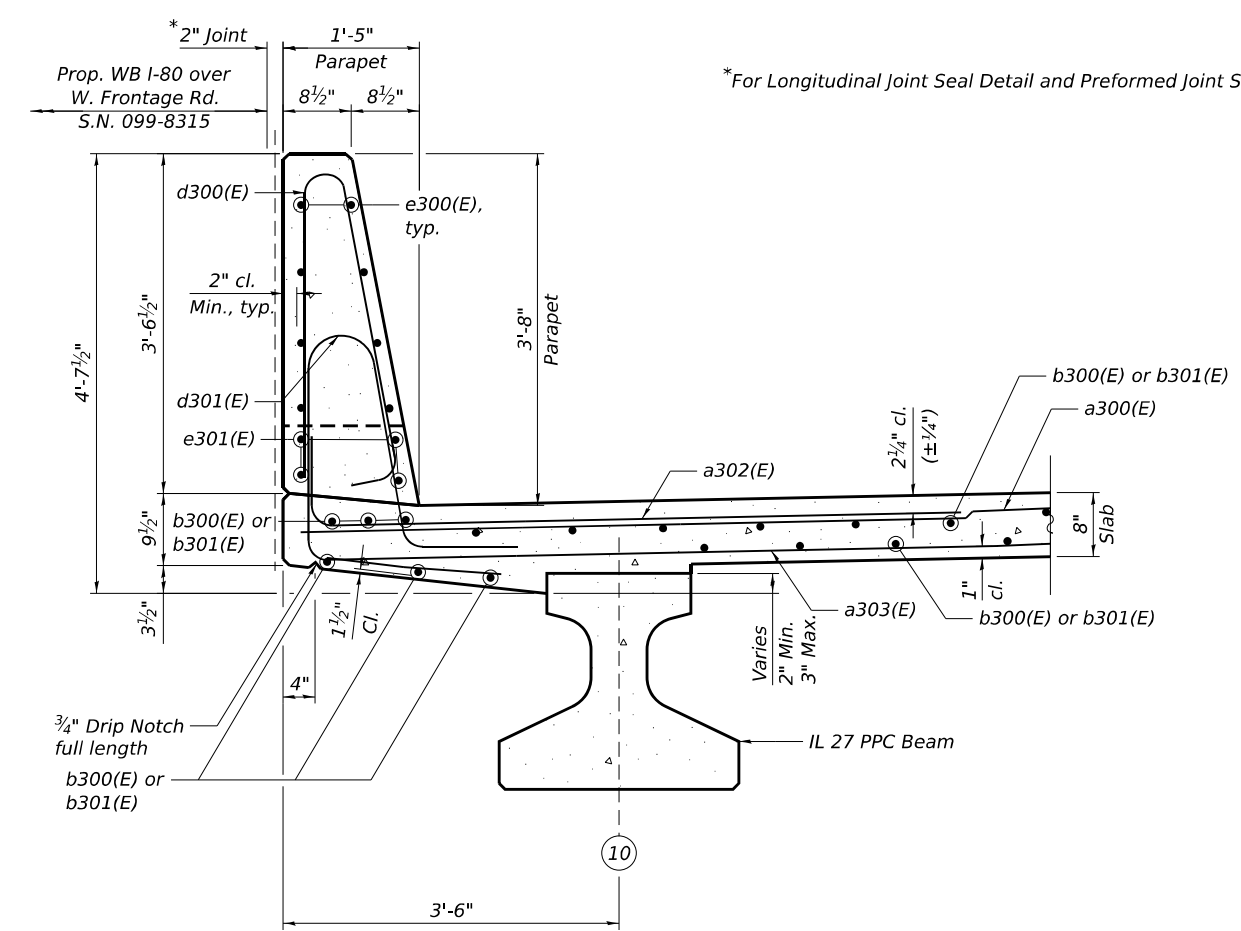
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EB E. ABUTMENT DIAPHRAGM ELEVATION AND DETAILS
STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

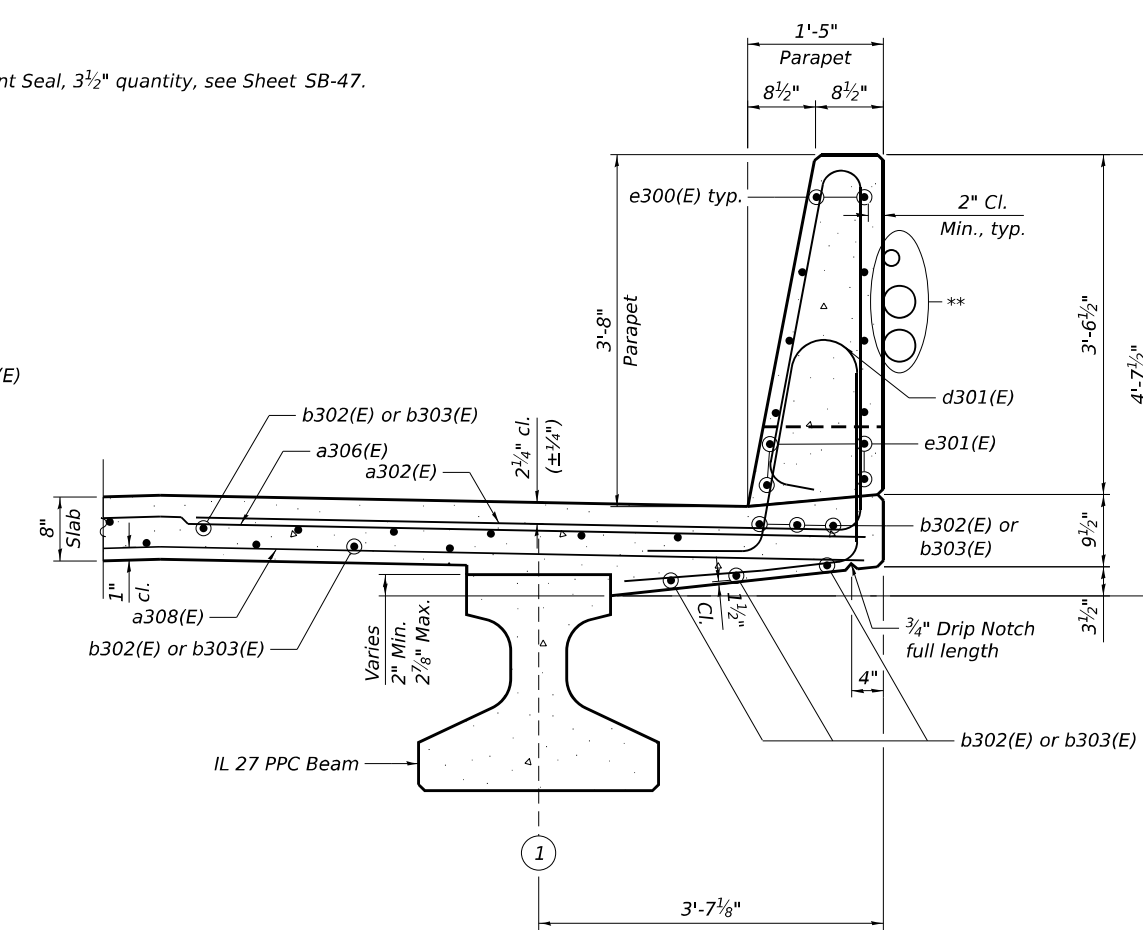
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	683
ILLINOIS			CONTRACT NO. 62R28	
FED. AID PROJECT				

MODEL: Default
 FILE NAME: p:\transys\transyscorp-pw\1-hosted\Documents\Projects\2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-045-EB Deck Sections, Bar Diagrams & BOM.dgn
 10/9/2023 2:52:09 PM

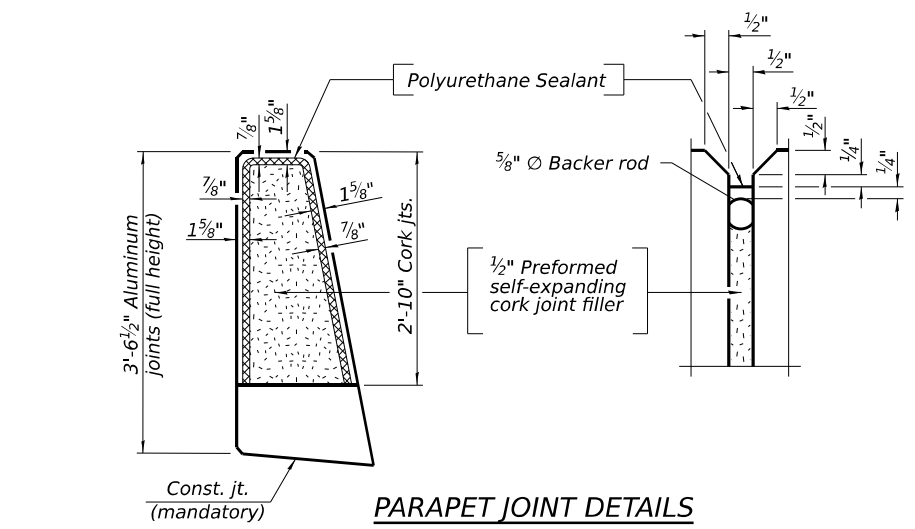
EB SUPERSTRUCTURE BILL OF MATERIAL



SECTION THRU NORTH PARAPET



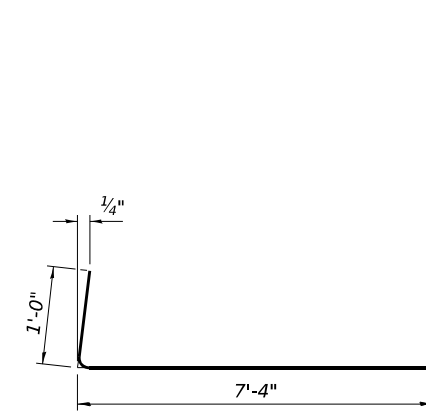
SECTION THRU SOUTH PARAPET



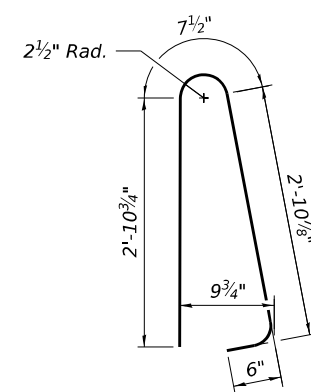
PARAPET JOINT DETAILS

NOTES:

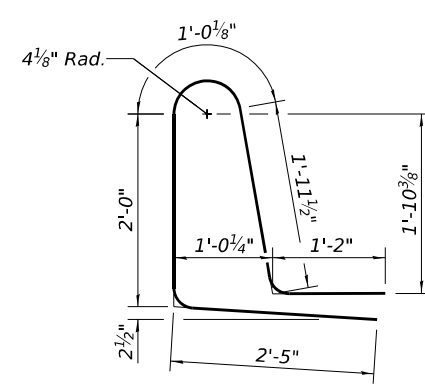
1. The polyurethane sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.
2. Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
3. The 1/8" aluminum sheet shall be ASTM B209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
4. Protective coat shall be applied to the top and front face of north and south parapets, and top of deck.



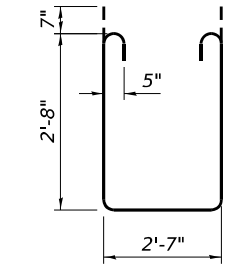
BAR a302(E)



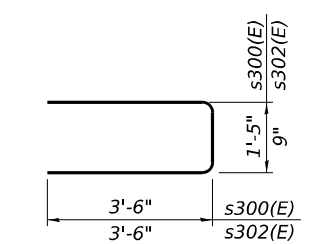
BAR d300(E)



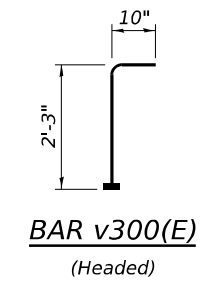
BAR d301(E)



BAR s301(E)



BARS s300(E) & s302(E)



**BAR v300(E)
(Headed)**

Bar	No.	Size	Length	Shape
a300(E)	108	#6	20'-2"	—
a301(E)	108	#6	20'-8"	—
a302(E)	200	#6	8'-4"	—
a303(E)	72	#5	25'-1"	—
a304(E)	72	#5	15'-8"	—
a305(E)	108	#6	32'-10"	—
a306(E)	100	#6	30'-0"	—
a307(E)	72	#5	27'-10"	—
a308(E)	72	#5	34'-11"	—
a309(E)	4	#6	27'-9"	—
a310(E)	4	#6	30'-2"	—
b300(E)	171	#5	21'-0"	—
b301(E)	171	#5	30'-2"	—
b302(E)	55	#5	21'-1"	—
b303(E)	55	#5	30'-3"	—
d300(E)	150	#5	7'-0"	—
d301(E)	150	#5	8'-7"	—
e300(E)	48	#4	15'-8"	—
e301(E)	16	#4	25'-1"	—
m300(E)	8	#6	37'-1"	—
m301(E)	8	#6	30'-3"	—
m302(E)	28	#6	8'-10"	—
m303(E)	8	#6	2'-9"	—
m304(E)	4	#6	7'-7"	—
m305(E)	4	#6	3'-2"	—
m306(E)	4	#6	5'-4"	—
m307(E)	14	#6	7'-2"	—
m308(E)	4	#6	1'-11"	—
m309(E)	2	#6	5'-11"	—
m310(E)	2	#6	2'-5"	—
m311(E)	2	#6	4'-7"	—
m312(E)	40	#5	4'-0"	—
m313(E)	8	#6	31'-5"	—
s300(E)	158	#5	8'-5"	—
s301(E)	158	#5	9'-1"	—
s302(E)	80	#5	7'-9"	—
v300(E)	197	#5	3'-1"	—
Concrete Superstructure		Cu Yd	191.6	
Bridge Deck Grooving		Sq Yd	496	
Protective Coat		Sq Yd	544	
Reinforcement Bars, Epoxy Coated		Pound	48580	

** Prop. (1)-2" Ø FRE Conduit (IDOT)
 Prop. (1)-4" Ø FRE Conduit (IDOT)
 Prop. (1)-4" Ø FRE Conduit (Third Party)



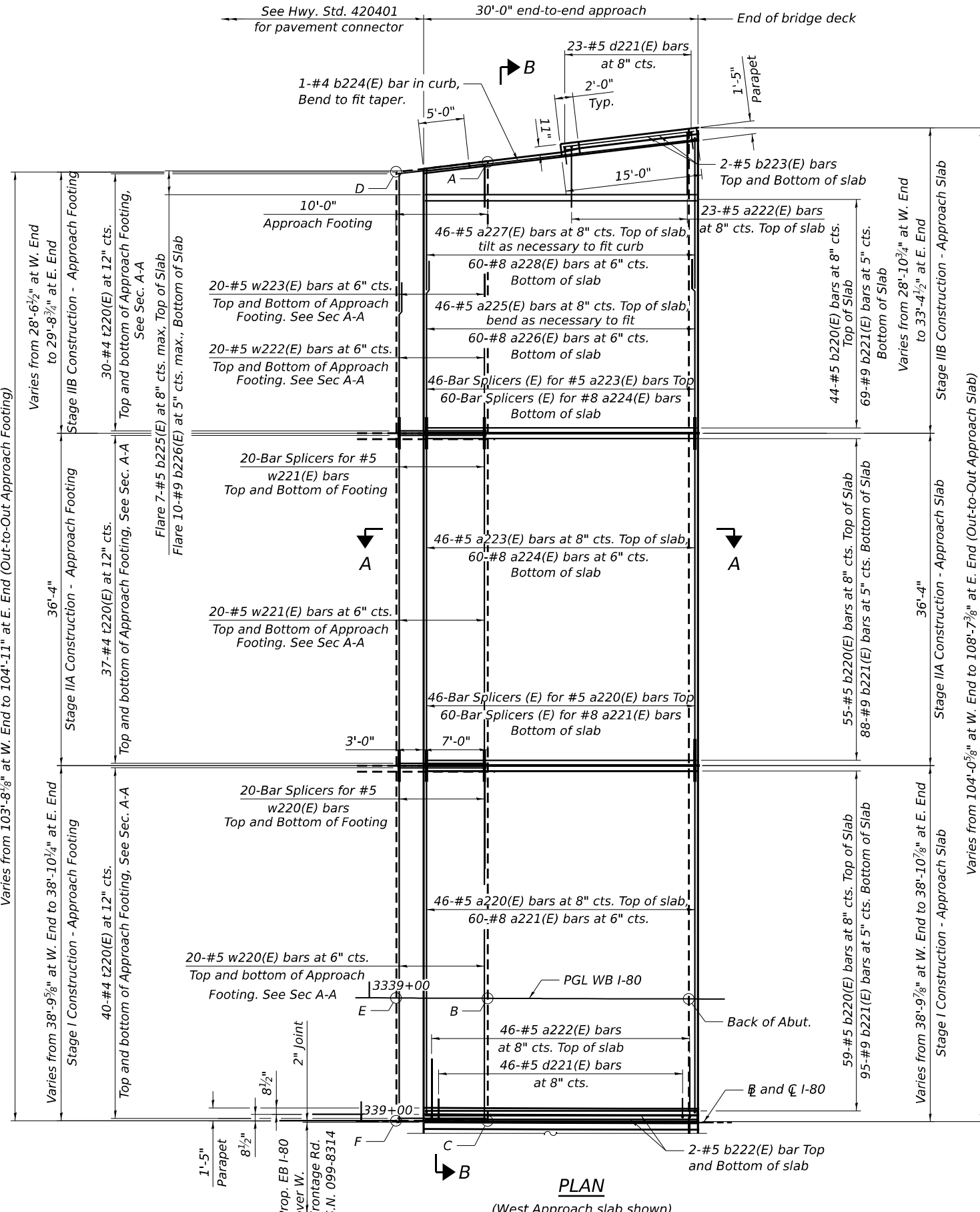
USER NAME =	DESIGNED - SK, AMS	REVISED -
PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE =	DRAWN - SK, AMS	REVISED -
	CHECKED - JJS	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EB DECK SECTIONS, BAR DIAGRAMS & BILL OF MATERIAL
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	684
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R28	

MODEL: Default
 FILE NAME: p:\w\transys\corp-pw\l-hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Structures\099-8314 & 099-8315\80 over Frontage Rd\0998314-WB W-Approach Slab Plan.dgn
 10/9/2023 2:52:16 PM



TOP AND BOTTOM ELEVATIONS FOR WEST APPROACH FOOTING

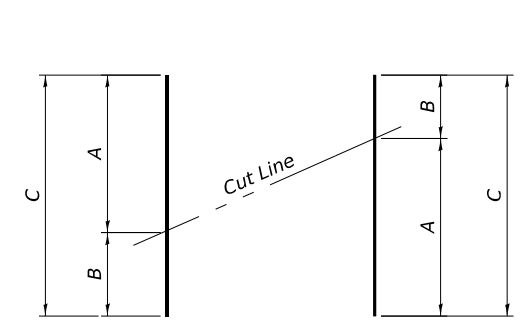
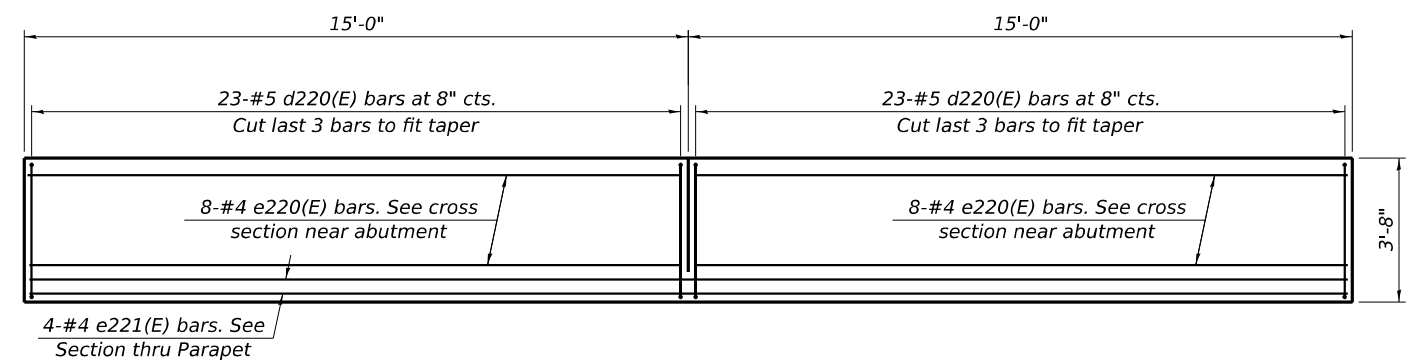
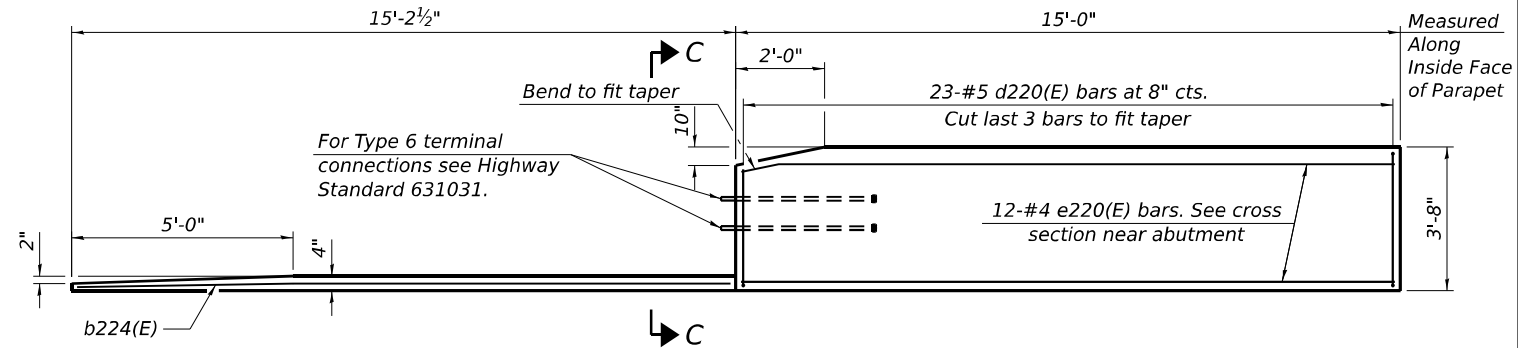
Point/Location	Top	Bottom
A - NE	600.30	599.46
B - E	602.38	601.55
C - SE	602.11	601.28
D - NW	600.15	599.32
E - W	602.23	601.39
F - SW	601.96	601.12

NOTE:

1. For Sections A-A, B-B, Notes, Bill of Material, View C-C and Min Bar Laps, see Sheet SB-55.

MINIMUM BAR LAPS

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

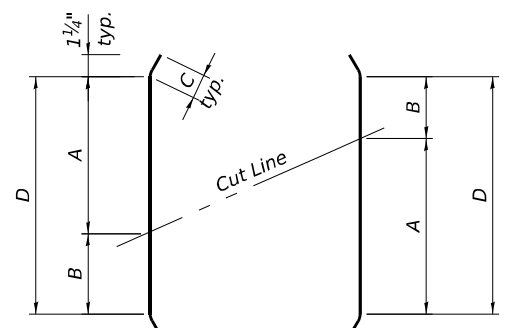


SERIES OF BAR CUTTING DIAGRAM

See table for dimensions. Make all cuts normal to bar axis

Bar	No. of Sets Req'd	Bar No.	No. of Bars Per Set	A	B	C
a228(E)	1	8	30	18'-11"	14'-5"	33'-4"
w223(E)	1	5	20	16'-5"	15'-3"	31'-8"

BAR TABLE SCHEDULE



SERIES OF BAR CUTTING DIAGRAM

See table for dimensions. Make all cuts normal to bar axis

Bar	No. of Sets Req'd	Bar No.	No. of Bars Per Set	A	B	C	D	Total
a227(E)	1	5	23	18'-3"	13'-9"	5 1/2"	32'-0"	32'-10"

BAR TABLE SCHEDULE



USER NAME =	DESIGNED - SK, AMS	REVISD -
PLOT SCALE =	CHECKED - MI	REVISD -
PLOT DATE =	DRAWN - SK, AMS	REVISD -
	CHECKED - MI, JJS	REVISD -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

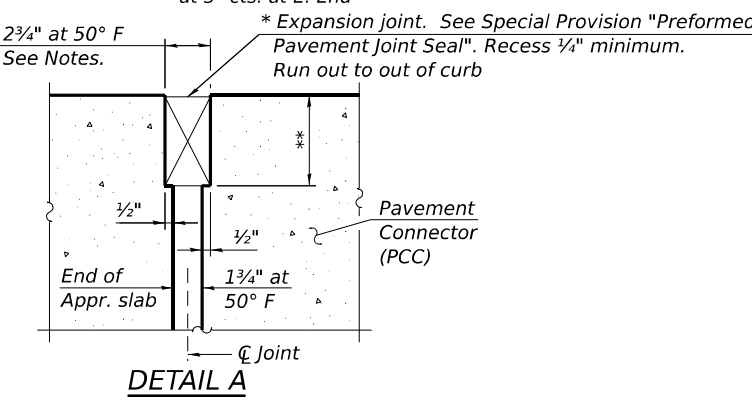
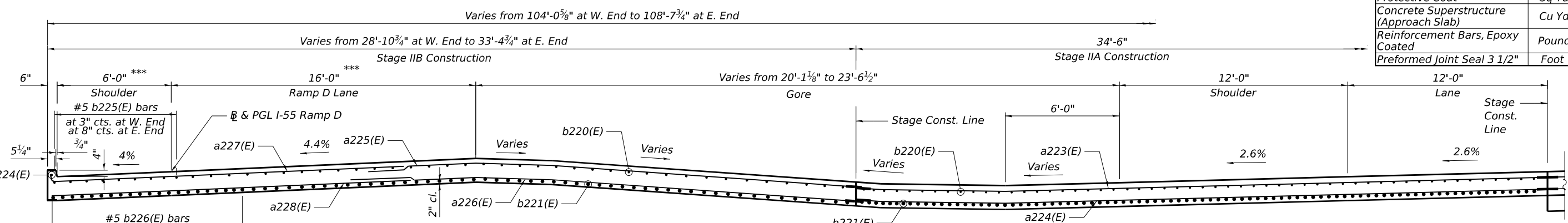
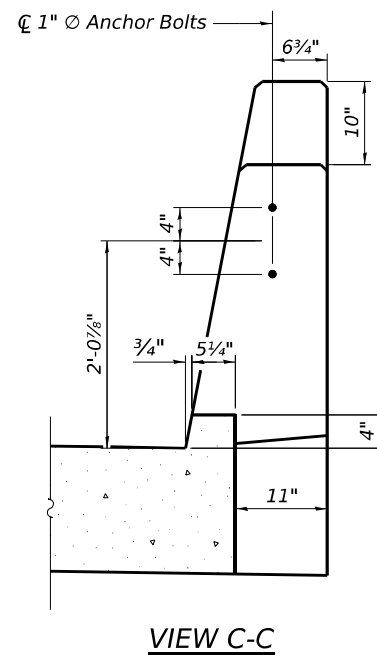
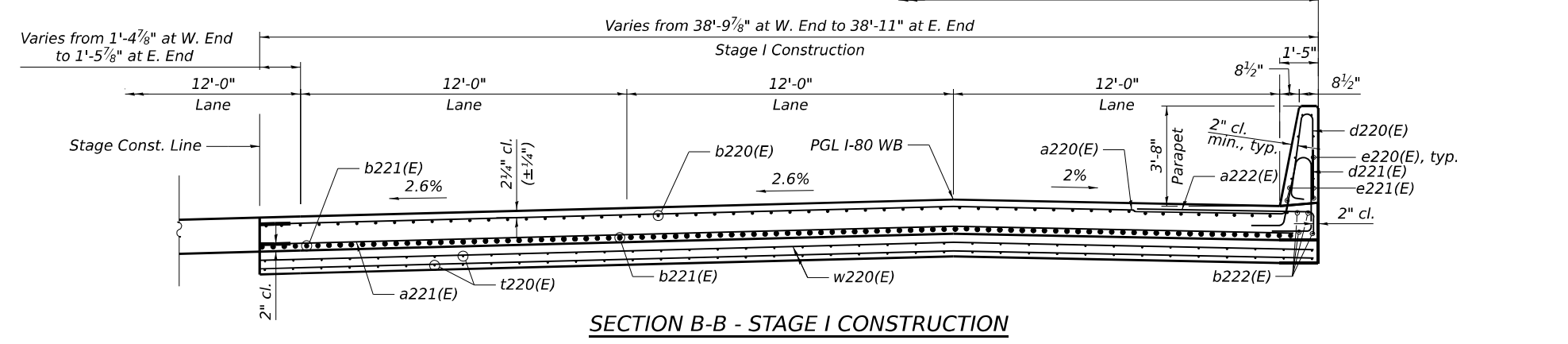
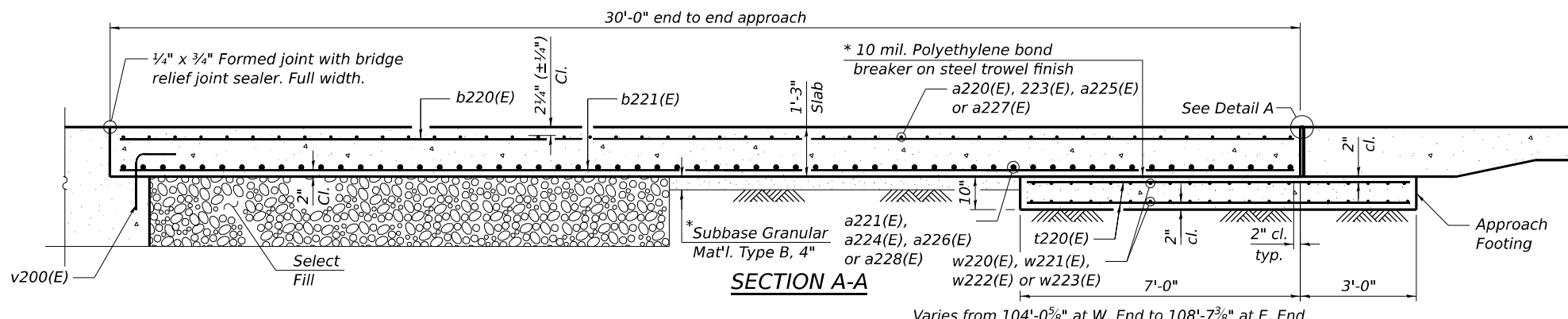
WB W. APPROACH SLAB PLAN
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

SHEET SB-54 OF SB-97 SHEETS

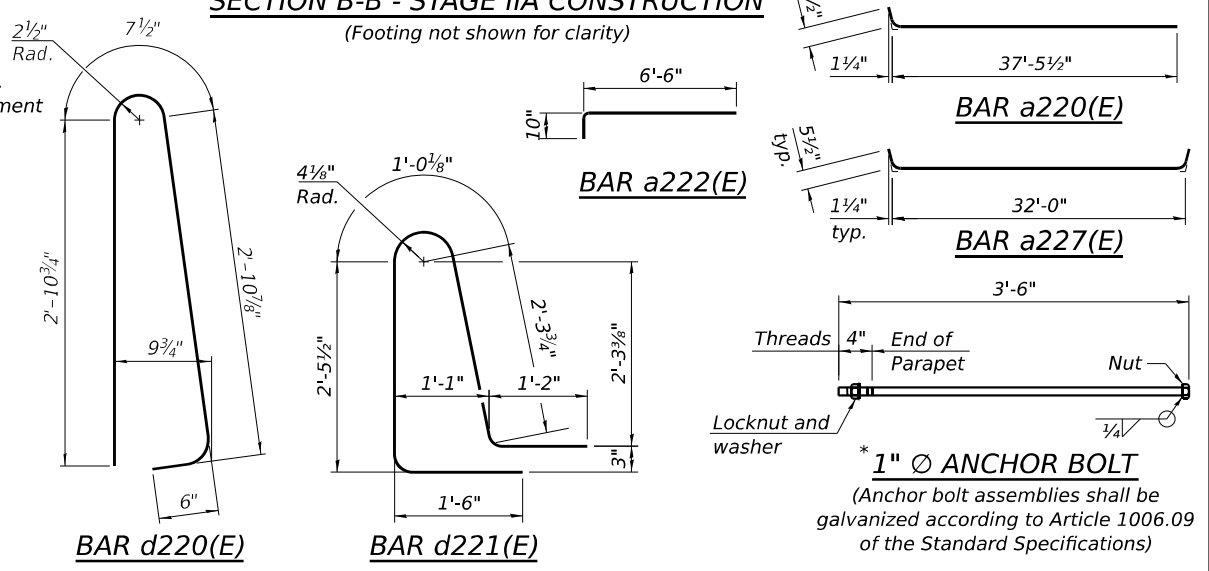
F.A.I. RTE. = 80	SECTION = FAI 80 21 STRUCTURE 7	COUNTY = WILL	TOTAL SHEETS = 1059	SHEET NO. = 685
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R28	

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a220(E)	46	#5	37'-11"	
a221(E)	60	#8	38'-7"	
a222(E)	69	#5	7'-4"	
a223(E)	46	#5	36'-0"	
a224(E)	60	#8	36'-0"	
a225(E)	46	#5	18'-3"	
a226(E)	60	#8	18'-11"	
a227(E)	23	#5	32'-11"	
a228(E)	30	#8	33'-4"	
b220(E)	158	#5	29'-8"	
b221(E)	252	#9	29'-8"	
b222(E)	4	#5	29'-8"	
b223(E)	4	#5	14'-8"	
b224(E)	1	#4	14'-8"	
b225(E)	7	#5	29'-10"	
b226(E)	10	#9	29'-10"	
d220(E)	69	#5	7'-0"	
d221(E)	69	#5	8'-6"	
e220(E)	28	#4	14'-8"	
e221(E)	4	#4	29'-8"	
t220(E)	214	#4	9'-8"	
w220(E)	40	#5	38'-7"	
w221(E)	40	#5	36'-0"	
w222(E)	40	#5	16'-5"	
w223(E)	20	#5	31'-8"	
Concrete Structures		Cu Yd	32.2	
Concrete Superstructure		Cu Yd	6.4	
Bridge Deck Grooving		Sq Yd	340	
Protective Coat		Sq Yd	327	
Concrete Superstructure (Approach Slab)		Cu Yd	147.8	
Reinforcement Bars, Epoxy Coated		Pound	62,440	
Preformed Joint Seal 3 1/2"		Foot	30	



- 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 Select Fill, see Sheet SB-82.
 - For v300(E) bar, see Sheet SB-47.
 - For bar splicer details, see Sheet SB-84.
 - For Longitudinal Joint Seal Detail along C I-80, see Sheet SB-47.



*Cost included with Concrete Superstructure (Approach Slab).
 **Per manufacturer recommendations
 ***Dimensions and cross slopes are radial to alignments

MODEL: Default
 FILE NAME: p:\transystems-pw\hntb\transystems-pw\hntb\Documents\Projects\2018\CH401\401180022\01-Structures\04-Sheets\04-Structures\099-8314 & 099-8315 180 over: Frontage Rd\0998314_0998315-ML-04-047-WB W-Approach Slab Sections and Details.dgn
 10/9/2023 2:52:21 PM



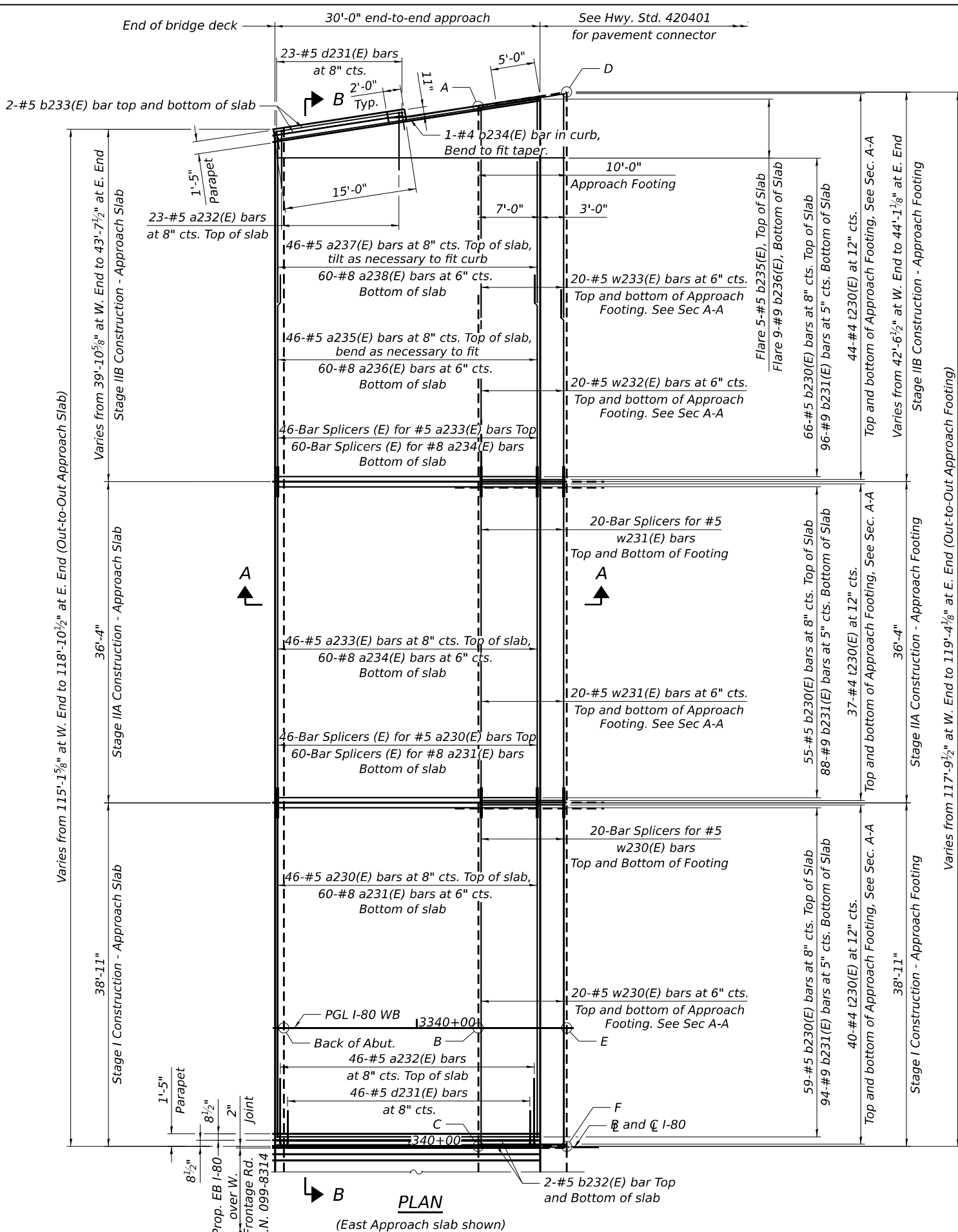
USER NAME =	DESIGNED - SK, AMS	REVISED -
PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE =	DRAWN - SK, AMS	REVISED -
	CHECKED - MI	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WB W. APPROACH SLAB SECTIONS AND DETAILS
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	686
			CONTRACT NO. 62R28	
ILLINOIS FED. AID PROJECT				

MODEL: Default
 FILE NAME: p:\projects\transys\p-w\h\hosted\Documents\Projects_2018\CH401\401180022\01-Stantec\CAD\ML-04_62R28\04-Sheets\04-Structures\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-048-WB E-Approach Slab Plan.dgn
 10/9/2023 2:52:28 PM



TOP AND BOTTOM ELEVATIONS FOR EAST APPROACH FOOTING

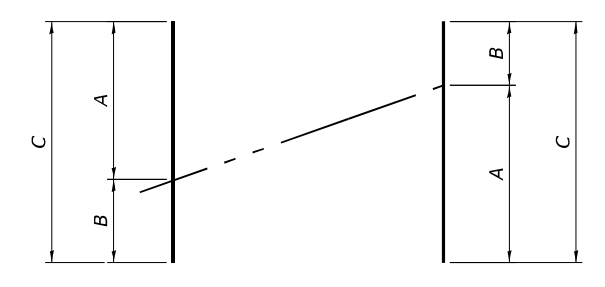
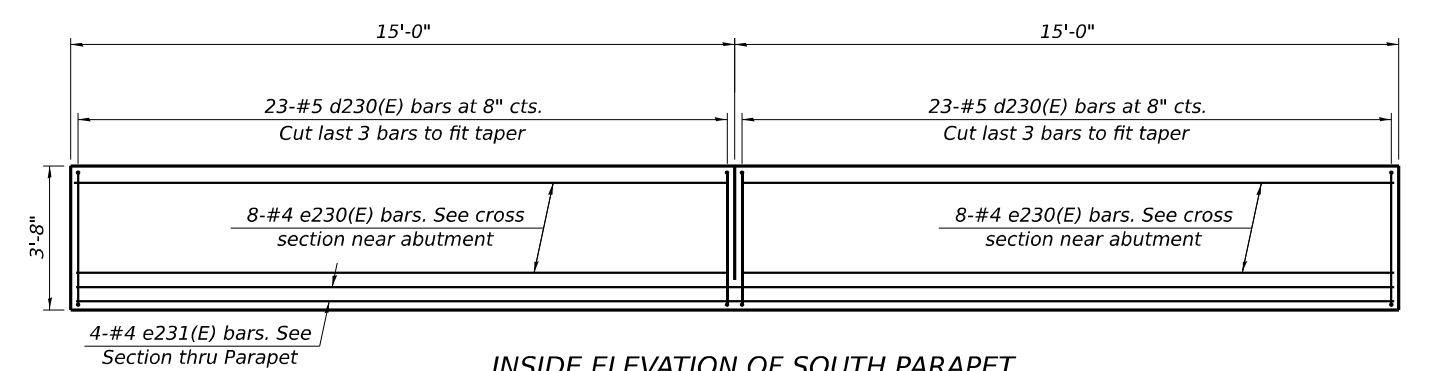
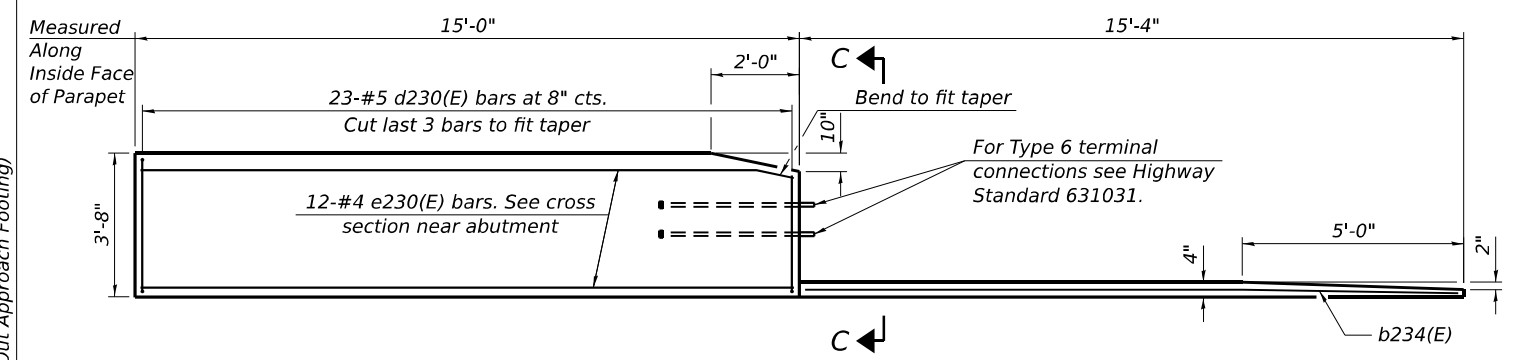
Point/Location	Top	Bottom
A - NW	601.70	600.86
B - W	603.72	602.89
C - SW	603.45	602.62
D - NE	601.85	601.02
E - E	603.86	603.02
F - SE	603.59	602.75

NOTE:

1. For Sections A-A, B-B, Notes, Bill of Material, View C-C and Min Bar Laps, see Sheet SB-57.

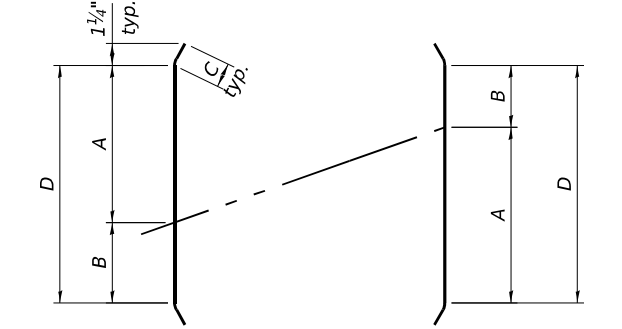
MINIMUM BAR LAPS

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



Bar	No. of Sets Req'd	Bar No.	No. of Bars Per Set	A	B	C
a238(E)	1	8	23	24'-0"	20'-3"	44'-3"
w233(E)	1	5	20	23'-8"	22'-1"	45'-9"

BAR TABLE SCHEDULE



Bar	No. of Sets Req'd	Bar No.	No. of Bars Per Set	A	B	C	D	Total
a237(E)	1	5	23	23'-5"	19'-8"	5 1/2"	43'-1"	43'-11"

BAR TABLE SCHEDULE



USER NAME =	DESIGNED - SK, AMS	REVISIONS -
PLOT SCALE =	CHECKED - MI	REVISIONS -
PLOT DATE =	DRAWN - SK, AMS	REVISIONS -
	CHECKED - MI, JJS	REVISIONS -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

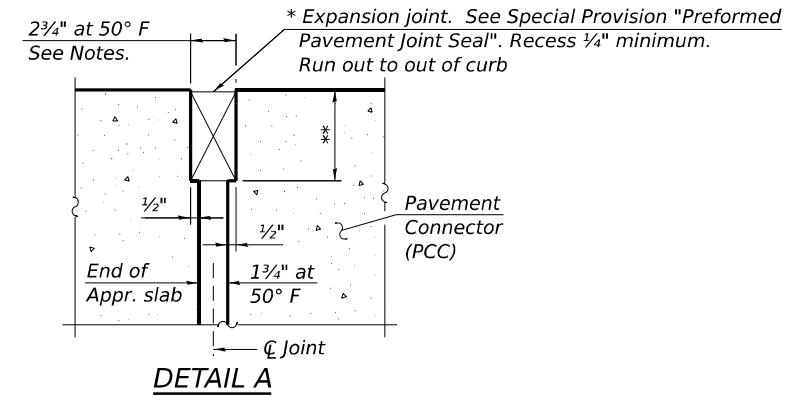
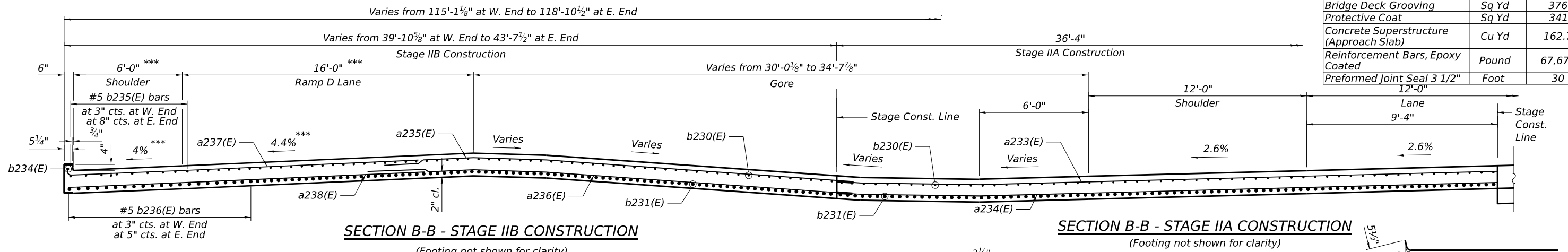
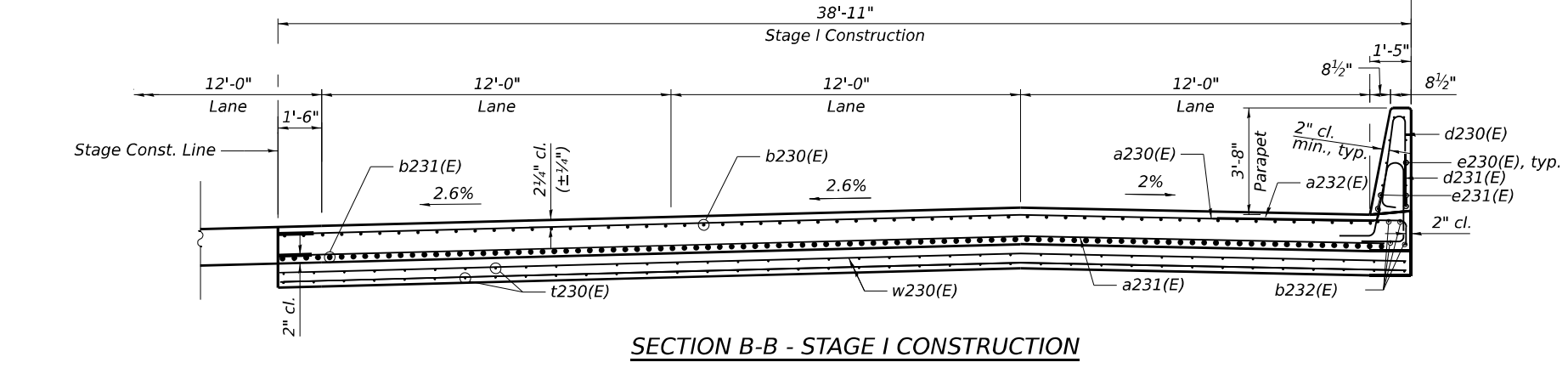
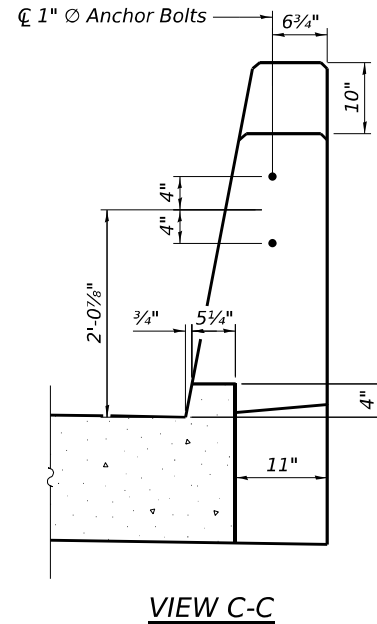
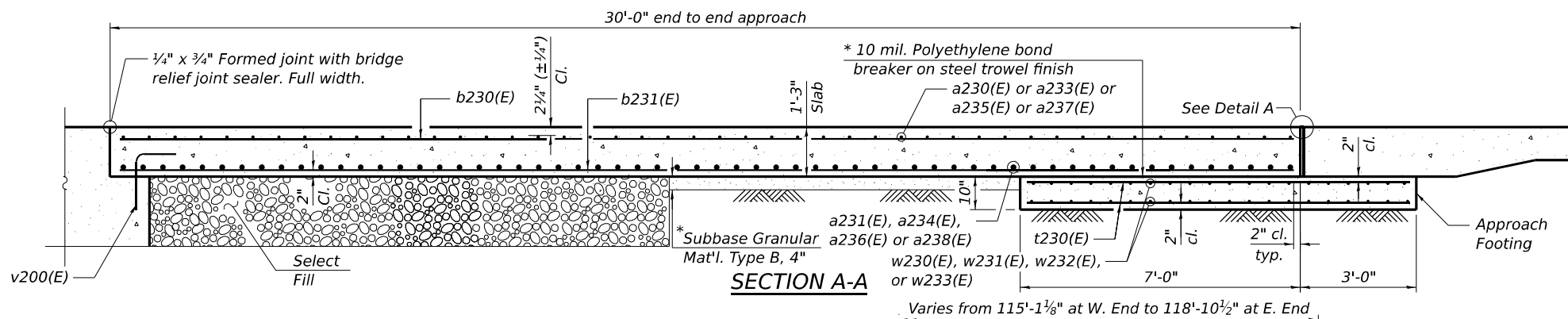
WB E. APPROACH SLAB PLAN
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

SHEET SB-56 OF SB-97 SHEETS

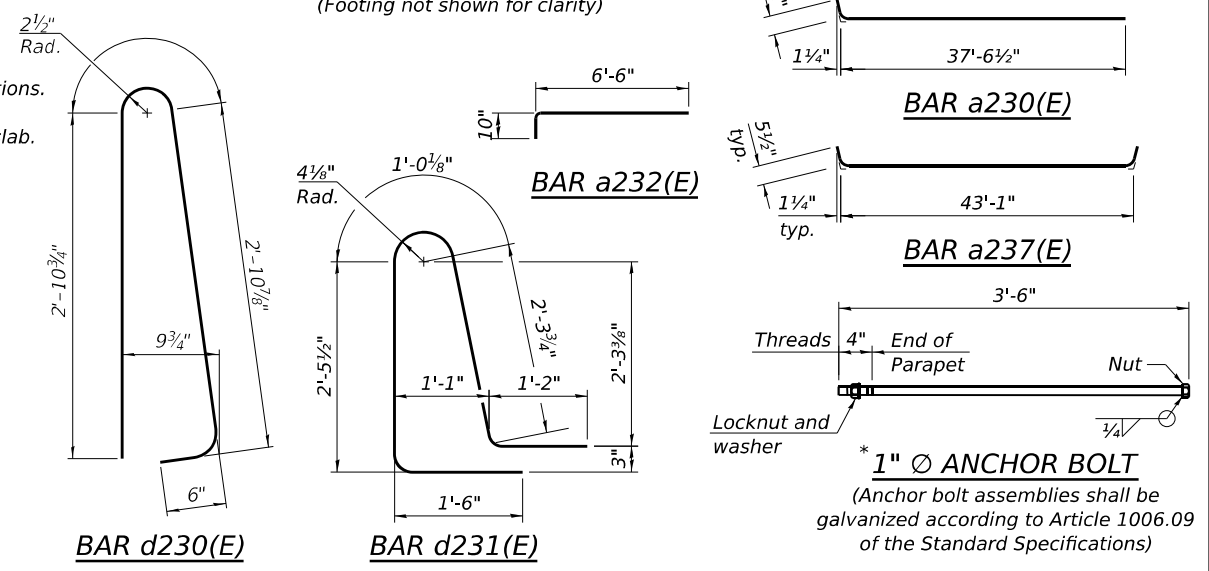
F.A.I. RTE. = 80	SECTION = FAI 80 21 STRUCTURE 7	COUNTY = WILL	TOTAL SHEETS = 1059	SHEET NO. = 687
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R28	

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a230(E)	46	#5	38'-0"	—
a231(E)	60	#8	38'-7"	—
a232(E)	69	#5	7'-4"	—
a233(E)	46	#5	36'-0"	—
a234(E)	60	#5	36'-0"	—
a235(E)	46	#5	23'-5"	—
a236(E)	60	#8	24'-1"	—
a237(E)	23	#5	44'-0"	—
a238(E)	30	#8	44'-3"	—
b230(E)	180	#5	29'-8"	—
b231(E)	278	#9	29'-8"	—
b232(E)	4	#5	29'-8"	—
b233(E)	4	#5	14'-8"	—
b234(E)	1	#4	14'-8"	—
b235(E)	5	#5	30'-1"	—
b236(E)	9	#9	30'-1"	—
d230(E)	69	#5	7'-0"	—
d231(E)	69	#5	8'-6"	—
e230(E)	28	#4	14'-8"	—
e231(E)	4	#4	29'-8"	—
t230(E)	242	#4	9'-8"	—
w230(E)	40	#5	38'-7"	—
w231(E)	40	#5	36'-0"	—
w232(E)	40	#5	86'-0"	—
w233(E)	20	#5	45'-9"	—
Concrete Structures	Cu Yd		36.6	
Concrete Superstructure	Cu Yd		6.4	
Bridge Deck Grooving	Sq Yd		376	
Protective Coat	Sq Yd		341	
Concrete Superstructure (Approach Slab)	Cu Yd		162.7	
Reinforcement Bars, Epoxy Coated	Pound		67,670	
Preformed Joint Seal 1 1/2"	Foot		30	



- 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 Select Fill, see Sheet SB-82.
 - For v300(E) bar, see Sheet SB-47.
 - For bar splicer details, see Sheet SB-84.
 - For Longitudinal Joint Seal Detail along C 1-80, see Sheet SB-47.



MODEL: Default
 FILE NAME: p:\transystems-pw\benley.com\transyscorp-pw\1-hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Structures\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-049-WB E-Approach Slab Sections and Details.dgn
 10/9/2023 2:52:30 PM



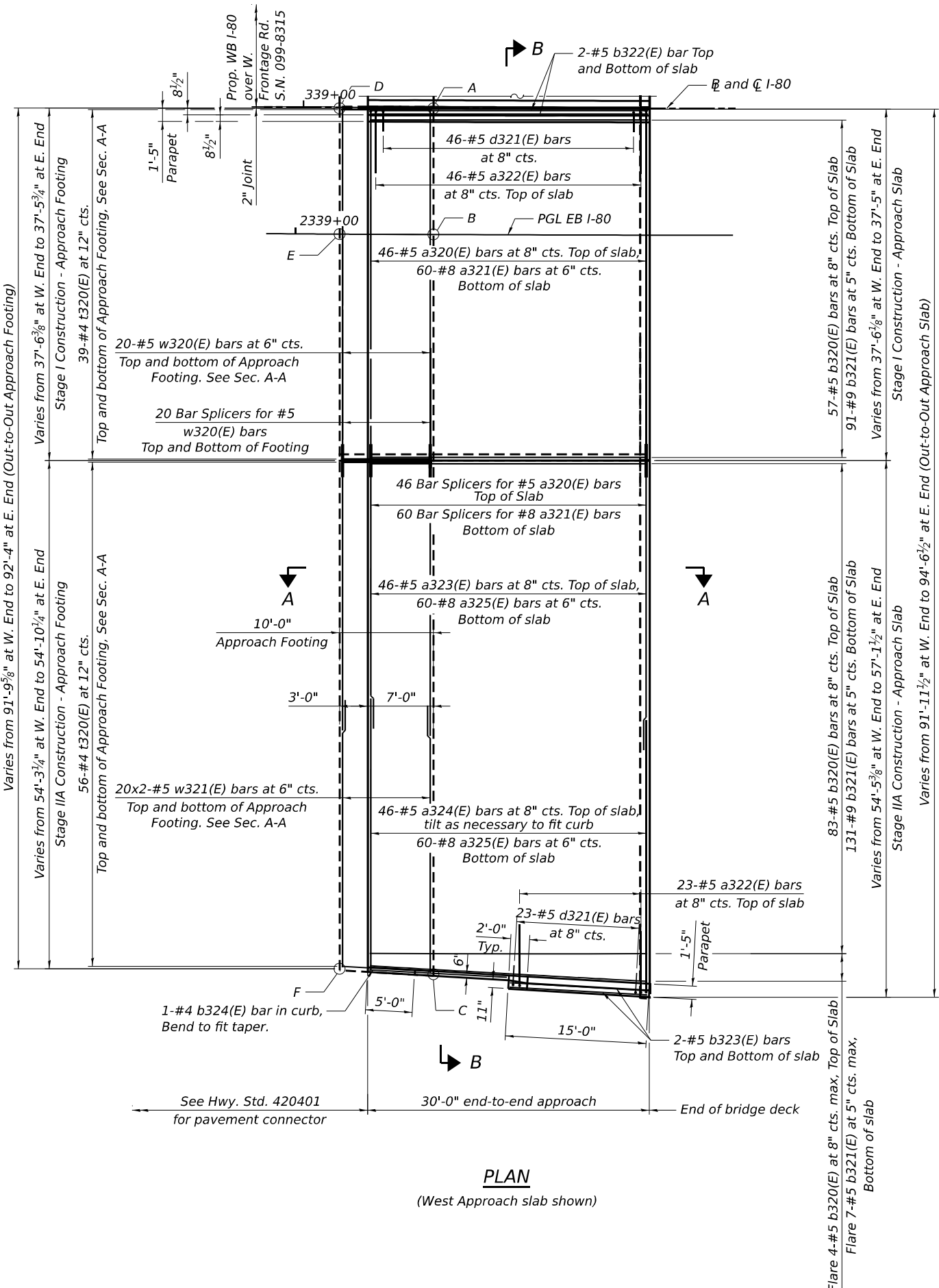
USER NAME =	DESIGNED - SK, AMS	REVISED -
PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE =	DRAWN - SK, AMS	REVISED -
	CHECKED - MI, JJS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB E. APPROACH SLAB SECTIONS AND DETAILS
STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

F.A.I. RTE. = 80	SECTION = FAI 80 21 STRUCTURE 7	COUNTY = WILL	TOTAL SHEETS = 1059	SHEET NO. = 688
CONTRACT NO. 62R28			ILLINOIS FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\w\transystems-pw\entley.com\transystems-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Structures\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-050-EB W. Approach Slab Plan.dgn
 10/9/2023 2:52:34 PM



PLAN
 (West Approach slab shown)

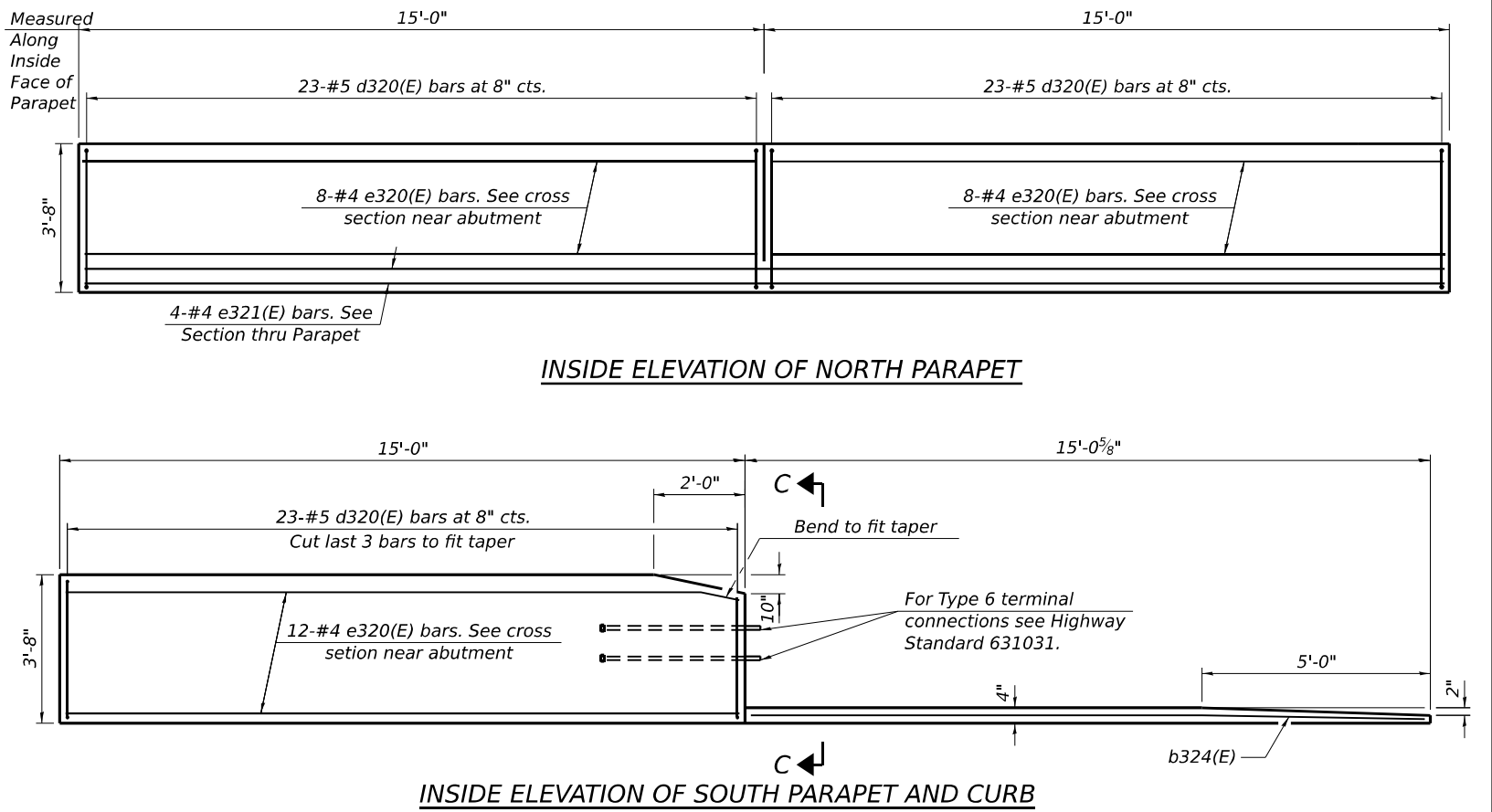
**TOP AND BOTTOM ELEVATIONS
 FOR EB WEST APPROACH FOOTING**

Point/Location	Top	Bottom
A - NE	602.11	601.28
B - E	602.38	601.55
C - SE	604.16	603.32
D - NW	601.96	601.12
E - W	602.23	601.40
F - SW	604.00	603.17

NOTE:
 1. For Sections A-A, B-B, View C-C, Notes, Bill of Material and Min Bar Laps, see Sheet SB-59.

MINIMUM BAR LAPS

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



USER NAME =	DESIGNED - EN	REVISED -
PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE =	DRAWN - EN	REVISED -
	CHECKED - MI, JJS	REVISED -

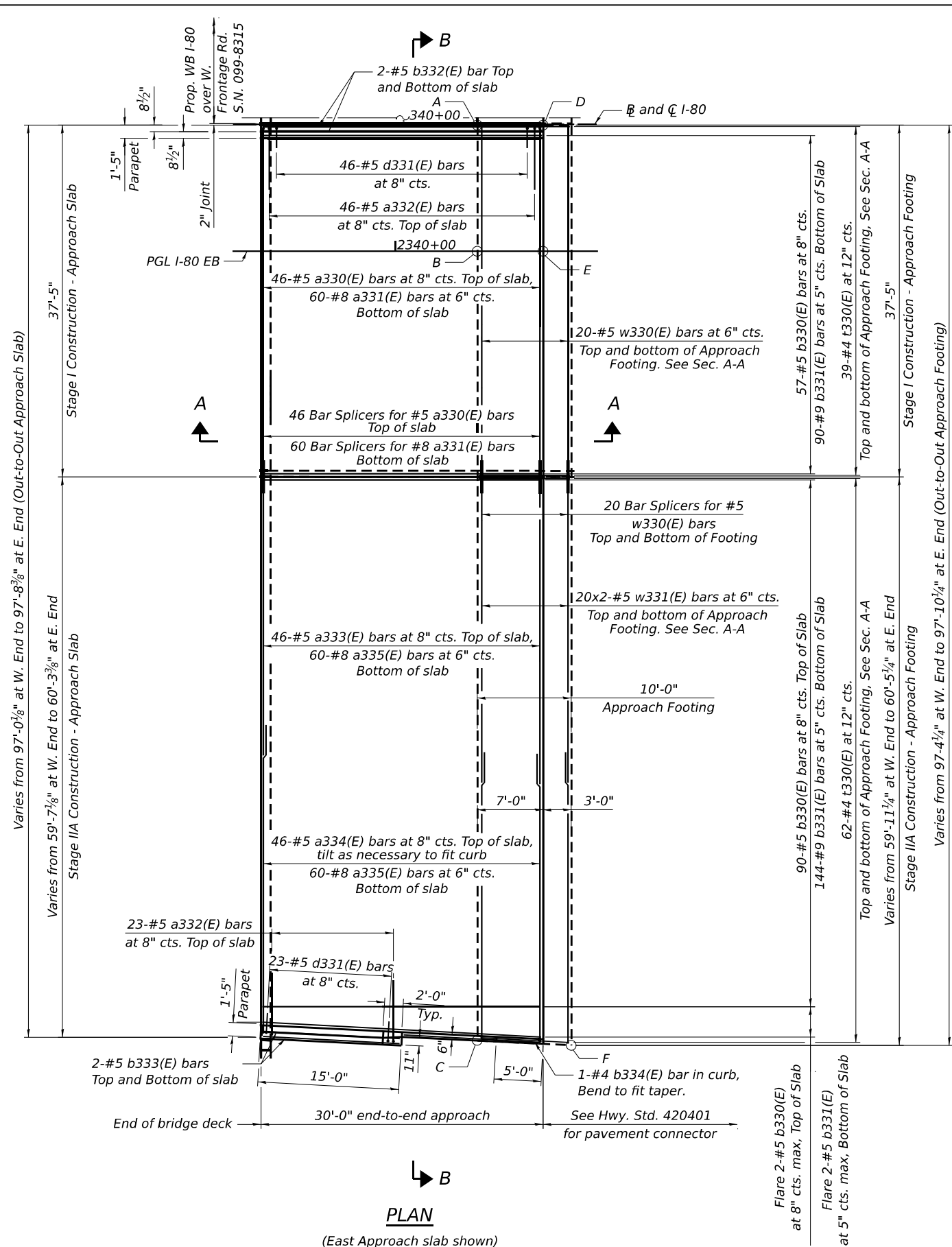
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EB W. APPROACH SLAB PLAN
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

SHEET SB-58 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	689
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\projects\transys\p-w\hosted\Documents\Projects\2018\CH401\180022\01-Structures\099-8314 & 099-8315\180 over: Frontage Rd\0998314_0998315-ML-04-052-EB E - Approach Slab Plan.dgn
 10/9/2023 2:52:42 PM



TOP AND BOTTOM ELEVATIONS FOR EB EAST APPROACH FOOTING

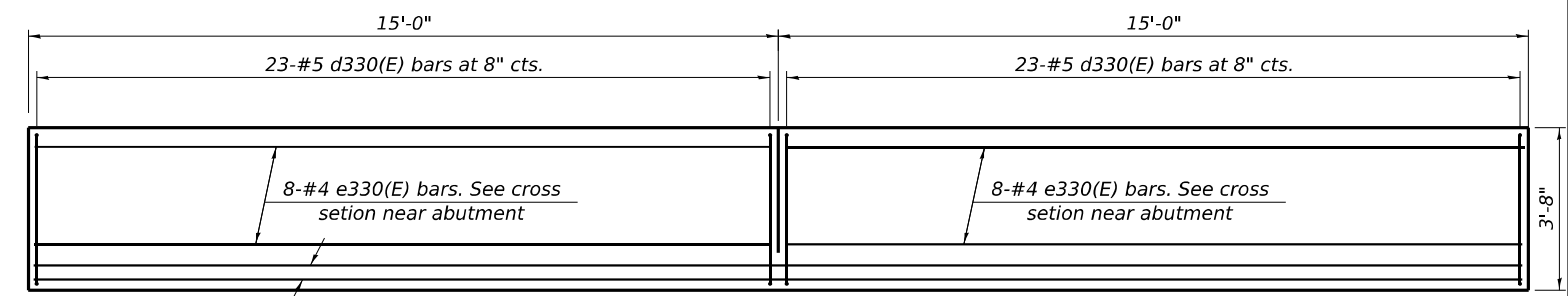
Point/Location	Top	Bottom
A - NW	603.45	602.62
B - W	603.72	602.89
C - SW	605.27	604.44
D - NE	603.59	602.75
E - E	603.86	603.02
F - SE	605.35	604.52

NOTE:

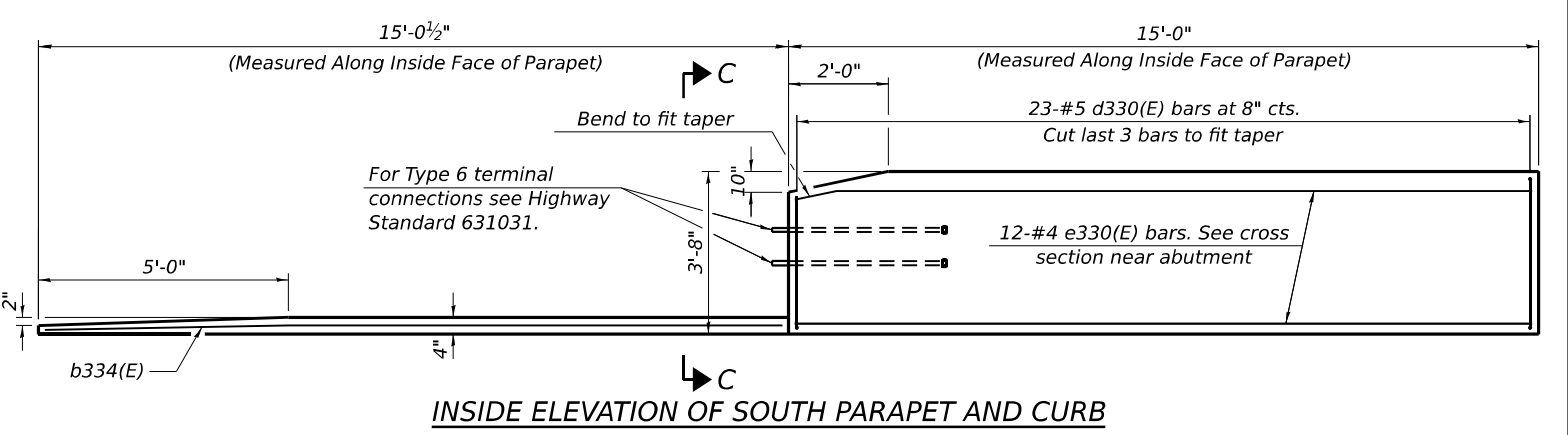
1. For Sections A-A, B-B, View C-C, Notes, Bill of Material and Min Bar Laps, see Sheet SB-61.

MINIMUM BAR LAPS

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



INSIDE ELEVATION OF NORTH PARAPET



INSIDE ELEVATION OF SOUTH PARAPET AND CURB



USER NAME =	DESIGNED - EN	REVISED -
PLOT SCALE =	CHECKED - MI	REVISED -
PLOT DATE =	DRAWN - EN	REVISED -
	CHECKED - MI, JJS	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

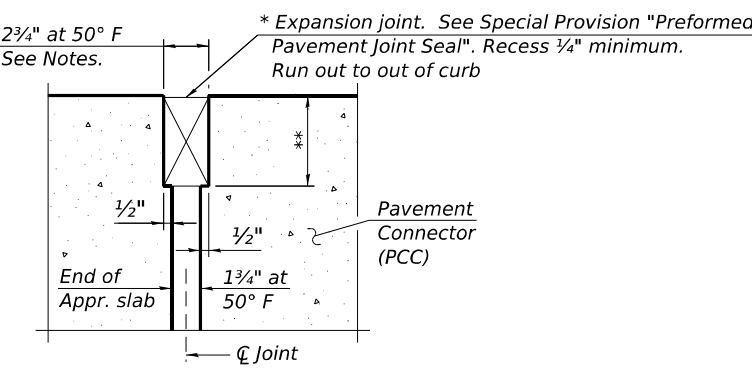
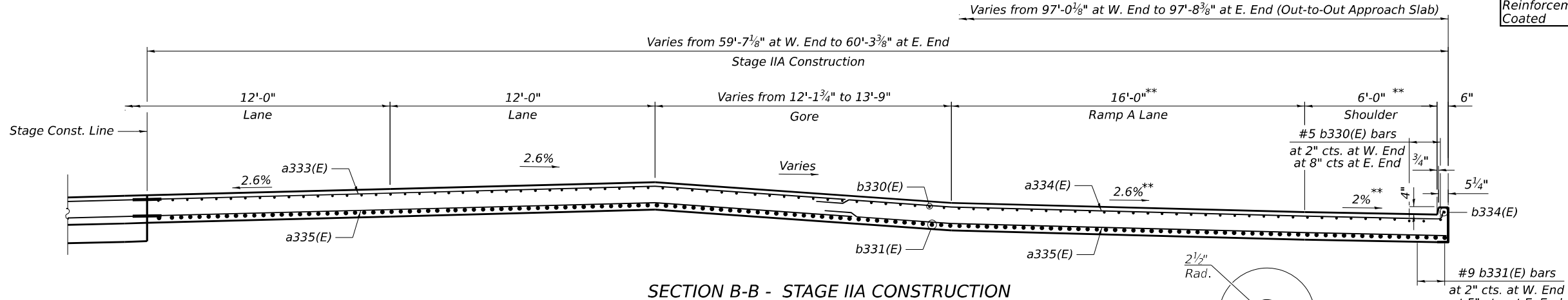
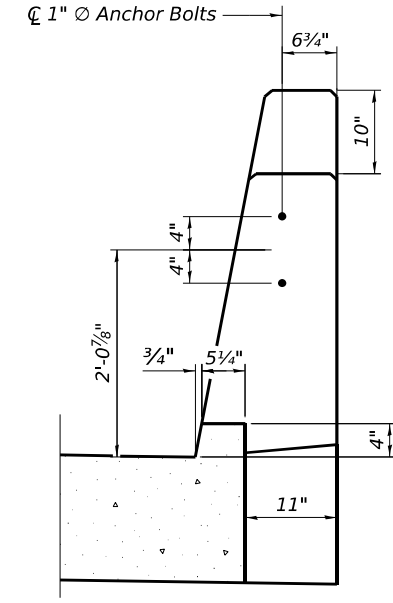
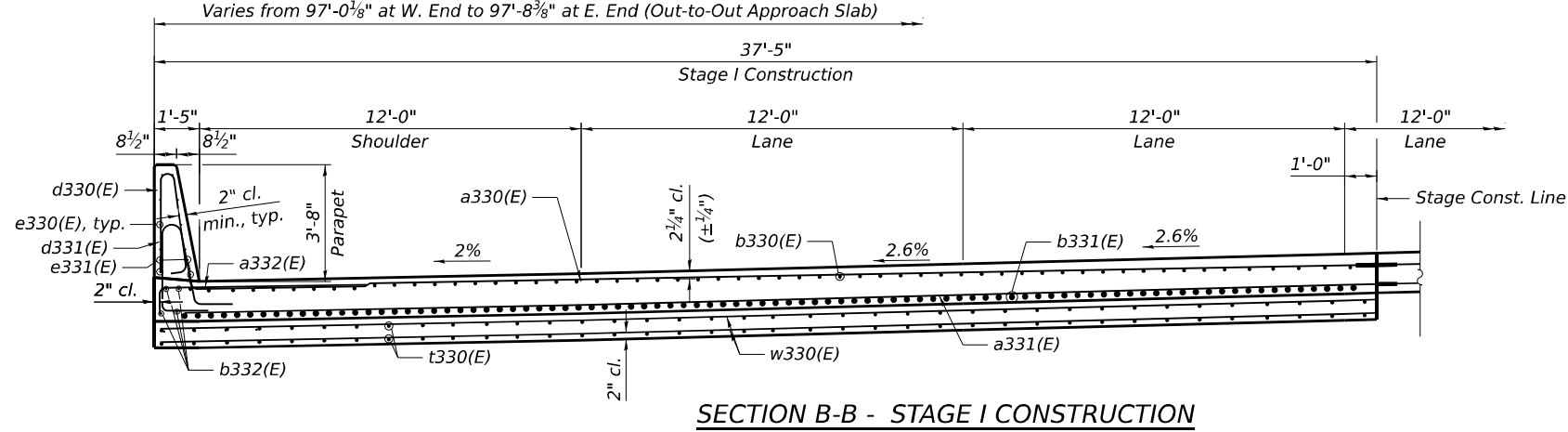
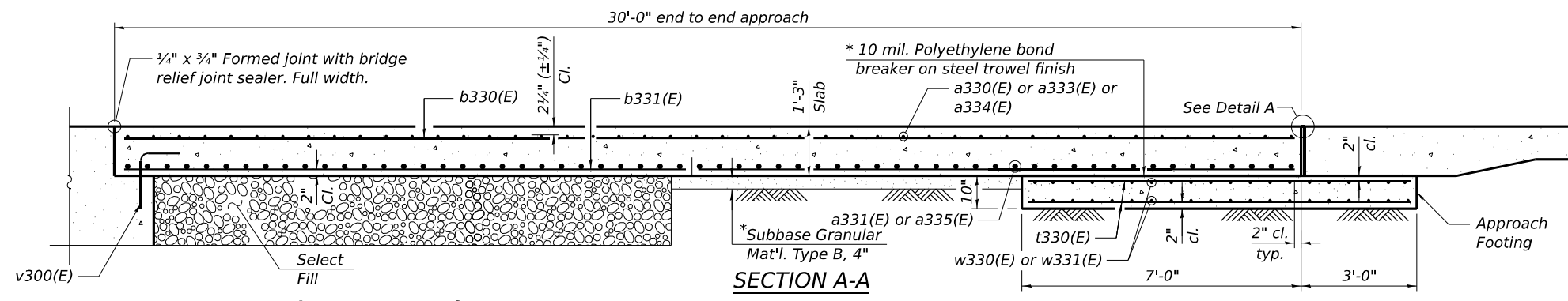
EB. E. APPROACH SLAB PLAN
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

SHEET SB-60 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	691
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

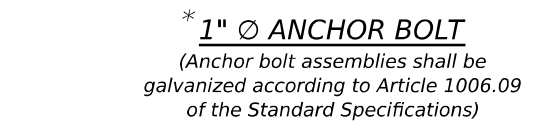
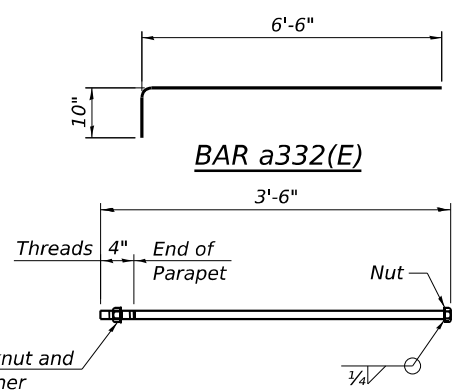
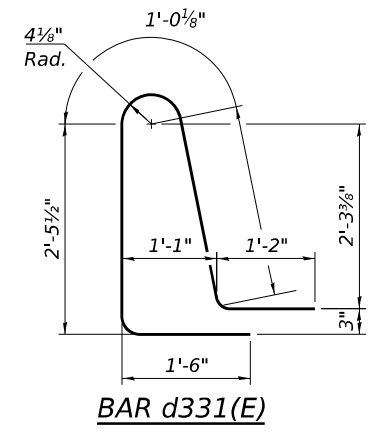
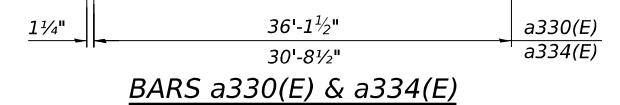
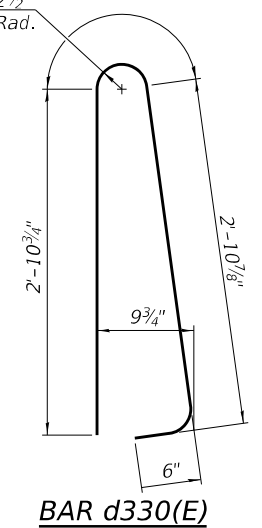
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a330(E)	46	#5	36'-7"	U
a331(E)	60	#8	37'-1"	U
a332(E)	69	#5	7'-4"	U
a333(E)	46	#5	31'-9"	U
a334(E)	46	#5	31'-2"	U
a335(E)	120	#8	32'-5"	U
b330(E)	149	#5	29'-8"	U
b331(E)	236	#9	29'-8"	U
b332(E)	4	#5	29'-8"	U
b333(E)	4	#5	14'-8"	U
b334(E)	1	#4	14'-8"	U
d330(E)	69	#5	7'-0"	L
d331(E)	69	#5	8'-6"	L
e330(E)	28	#4	14'-8"	U
e331(E)	4	#4	29'-8"	U
t330(E)	202	#4	9'-8"	U
w330(E)	40	#5	37'-1"	U
w331(E)	80	#5	31'-10"	U
Concrete Structures			Cu Yd	30.1
Concrete Superstructure			Cu Yd	6.4
Bridge Deck Grooving			Sq Yd	317.0
Protective Coat			Sq Yd	341.0
Concrete Superstructure (Approach Slab)			Cu Yd	135.3
Reinforcement Bars, Epoxy Coated			Pound	57,220



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 Select Fill, see Sheet SB-82.
- For v300(E) bar, see Sheet SB-53.
- For bar splicer details, see Sheet SB-84.
- For Longitudinal Joint Seal Detail along C I-80, see Sheet SB-47.
- For Preformed Joint Seal 3 1/2" quantities, see Sheet SB-57.



MODEL: Default
FILE NAME: p:\projects\transyscorp\pwl-hosted\Documents\Projects\2018\CH401\401180022\01-Structures\04-Sheets\04-Structures\099-8314 & 099-8315 I80 over Frontage Rd\0998314_0998315-ML-04-053-EB E - Approach Slab Sections and Details.dgn
10/9/2023 2:52:44 PM



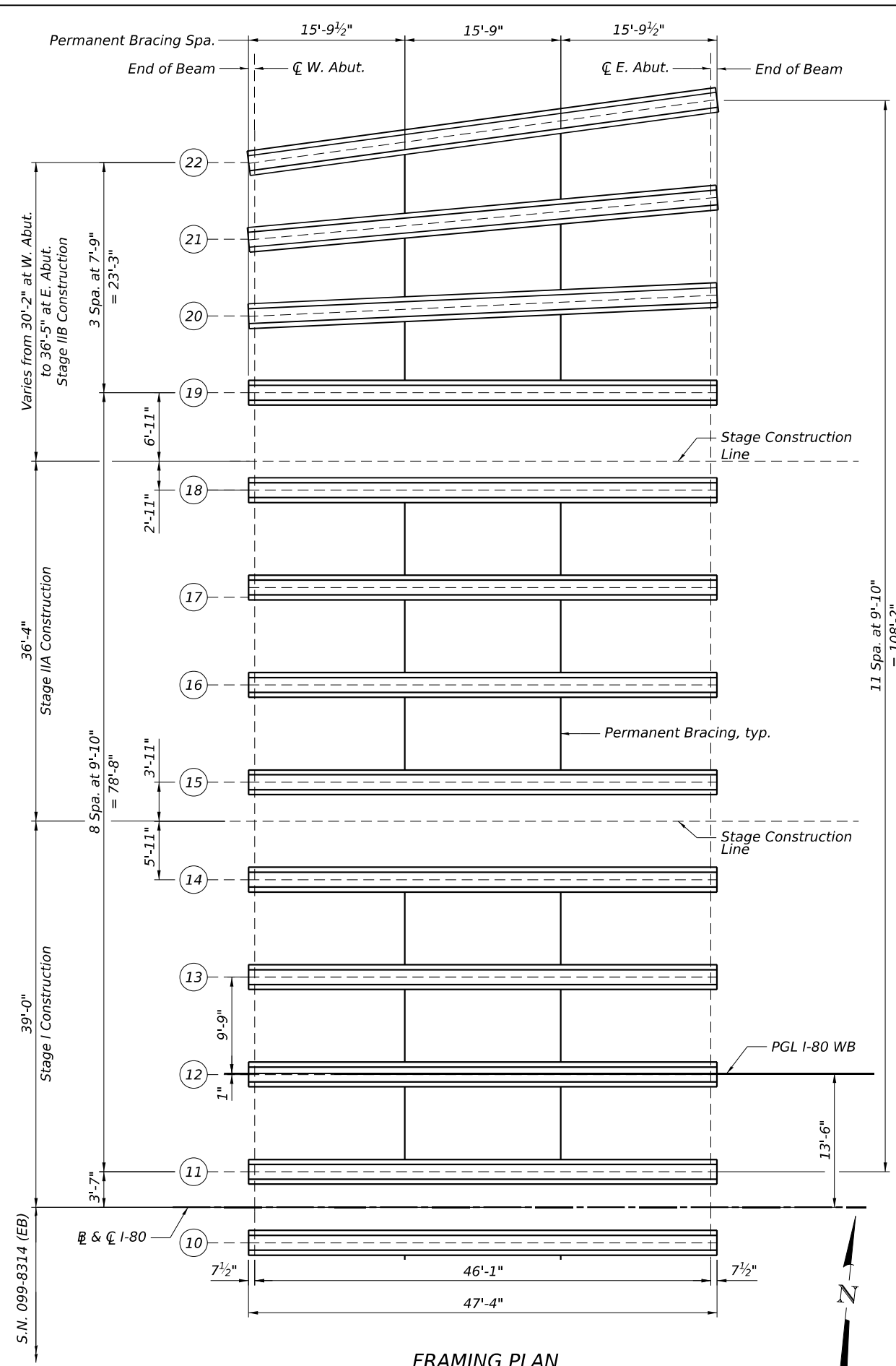
USER NAME	DESIGNED	REVISIONS
EN	EN	-
MI	MI	-
EN	EN	-
MI	MI	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

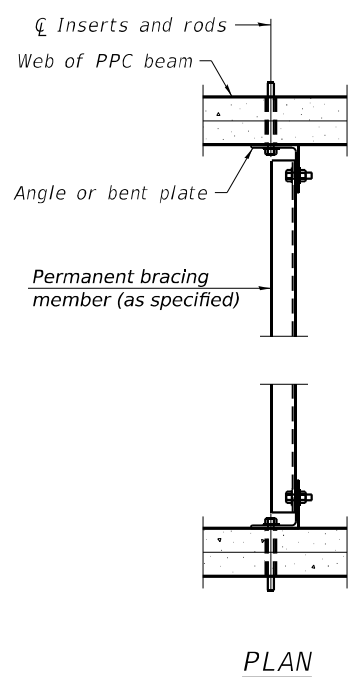
EB E. APPROACH SLAB SECTIONS AND DETAILS
STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	692
ILLINOIS			CONTRACT NO. 62R28	

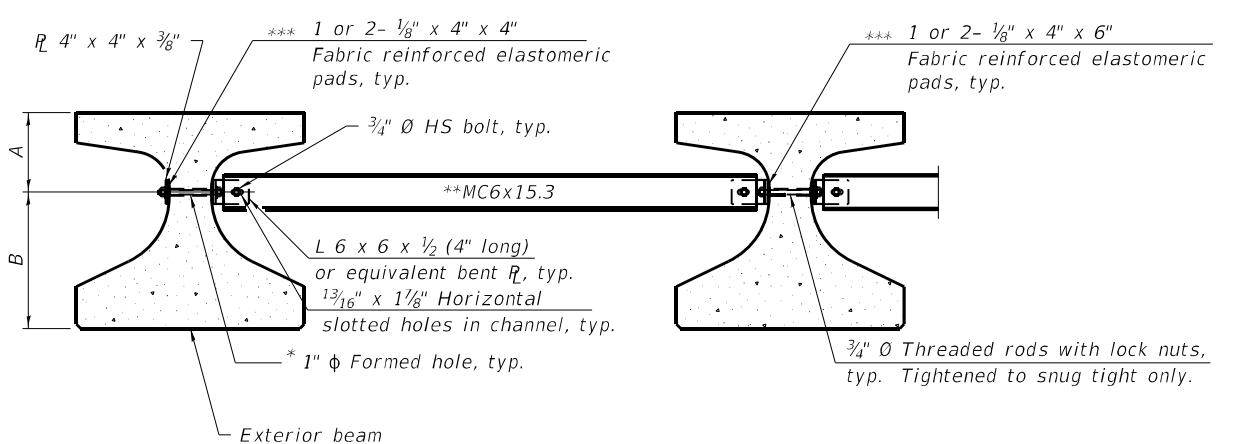
MODEL: Default
 FILE NAME: p:\transystems-pw\entley.com\transystems-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-054-WB 180 Framing Plan.dgn
 S.N. 099-8314 (EB)
 10/9/2023 2:52:47 PM



FRAMING PLAN



PLAN



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 $1\frac{5}{16}$ " \varnothing unless otherwise noted. $\frac{3}{16}$ " 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.

Beam	A	B
IL27	11 1/4"	1'-3 3/4"

- * 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.

PERMANENT BRACING DETAILS FOR IL27 BEAMS

EXTERIOR BEAM MOMENT TABLE		
		0.5 Span
I	(in ⁴)	33,879
I'	(in ⁴)	140,291
S _b	(in ³)	3,060
S _b '	(in ³)	6,268
S _t	(in ³)	2,127
S _t '	(in ³)	30,361
DC1	(k/ft)	1.414
MDC1	(k)	376
DC2	(k/ft)	0.263
MDC2	(k)	70
DW	(k/ft)	0.350
MDW	(k)	93
LLDF		0.844
M _{L + IM}	(k)	764

INTERIOR BEAM MOMENT TABLE		
		0.5 Span
I	(in ⁴)	33,879
I'	(in ⁴)	147,688
S _b	(in ³)	3,060
S _b '	(in ³)	6,385
S _t	(in ³)	2,127
S _t '	(in ³)	38,170
DC1	(k/ft)	1.498
MDC1	(k)	398
DC2	(k/ft)	0.158
MDC2	(k)	42
DW	(k/ft)	0.492
MDW	(k)	131
LLDF		0.826
M _{L + IM}	(k)	748

- I: Non-composite moment of inertia of beam section (in⁴).
- I': Composite moment of inertia of beam section (in⁴).
- S_b: Non-composite section modulus for the bottom fiber of the prestressed beam (in³).
- S_b': Composite section modulus for the bottom fiber of the prestressed beam (in³).
- S_t: Non-composite section modulus for the top fiber of the prestressed beam (in³).
- S_t': Composite section modulus for the top fiber of the prestressed beam (in³).
- 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.).
- LLDF: Live Load Distribution Factor for moment and shear computed according to Article 4.6.2.2 and further IDOT provisions.
- M_{L + IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
- R_{DC1}: Un-factored reaction due to non-composite dead load (kip).
- R_{DC2}: Un-factored reaction due to long-term composite (superimposed excluding future wearing surface) dead load (kip).
- R_{DW}: Un-factored reaction due to long-term composite (superimposed future wearing surface only) dead load (kip).
- R_L: Un-factored live load reaction (kip).
- R_{IM}: Un-factored dynamic load allowance (impact) (kip).
- R_{Total (Strength I)(Impact)}: Total factored reaction including dynamic load allowance (impact) (kip).
- R_{Total (Strength I)(No Impact)}: Total factored reaction not including dynamic load allowance (impact) (kip).

EXTERIOR BEAM REACTION TABLE		
		Abut.
LLDF		0.844
RDC1	(k)	33
RDC2	(k)	6.1
RDW	(k)	8.1
R _{L + IM}	(k)	67
R _{Total (Strength I)(Impact)}	(k)	178.3
R _{Total (Strength I)(No Impact)}	(k)	152.6

INTERIOR BEAM REACTION TABLE		
		Abut.
LLDF		0.941
RDC1	(k)	34.5
RDC2	(k)	3.63
RDW	(k)	11.33
R _{L + IM}	(k)	74
R _{Total (Strength I)(Impact)}	(k)	194.2
R _{Total (Strength I)(No Impact)}	(k)	166.8



USER NAME =	DESIGNED - LAB	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - LAB, FL	REVISED -
	CHECKED - MI	REVISED -

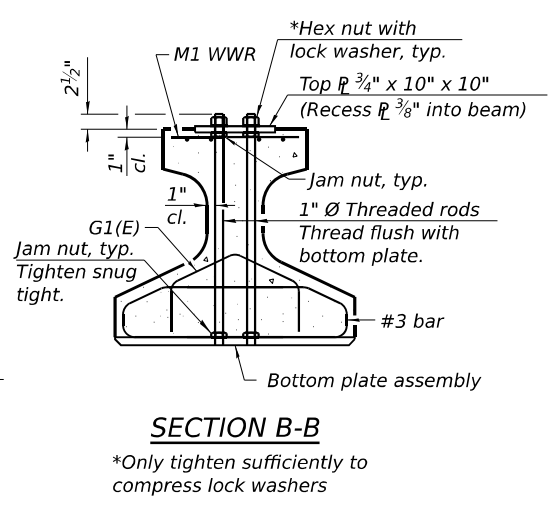
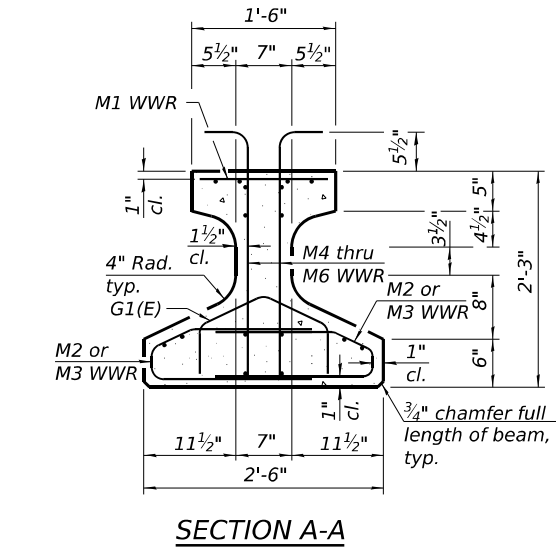
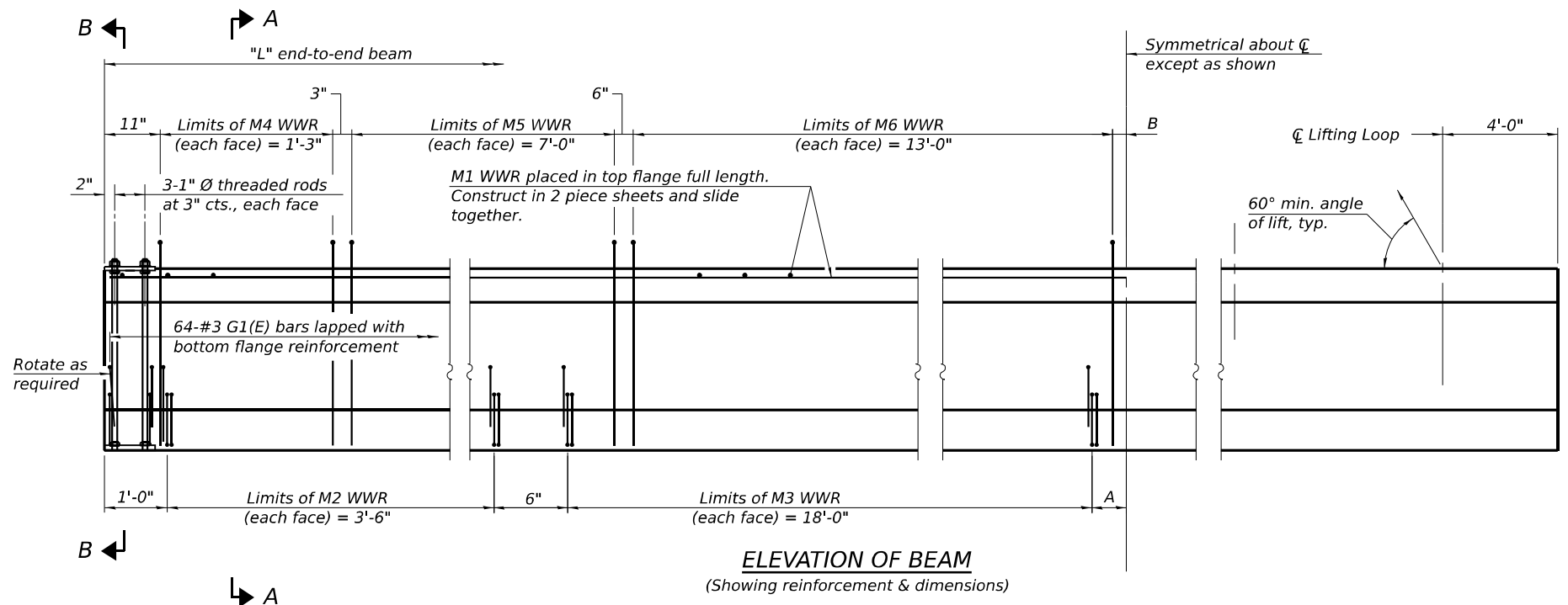
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WB I-80 FRAMING PLAN
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

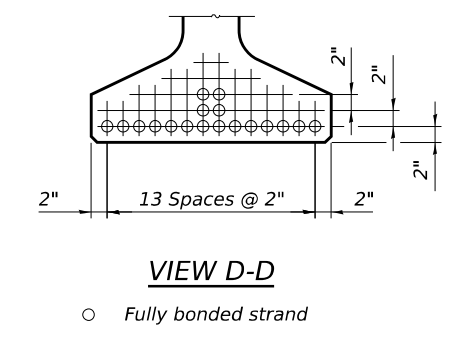
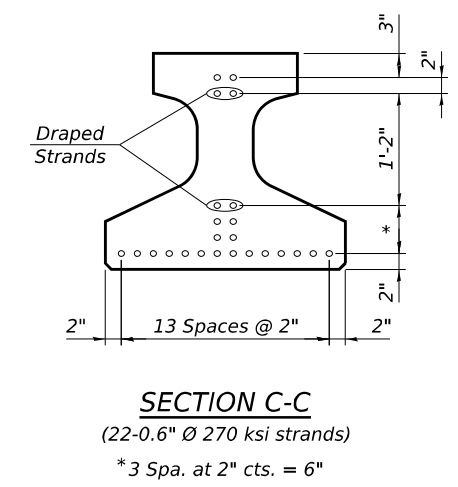
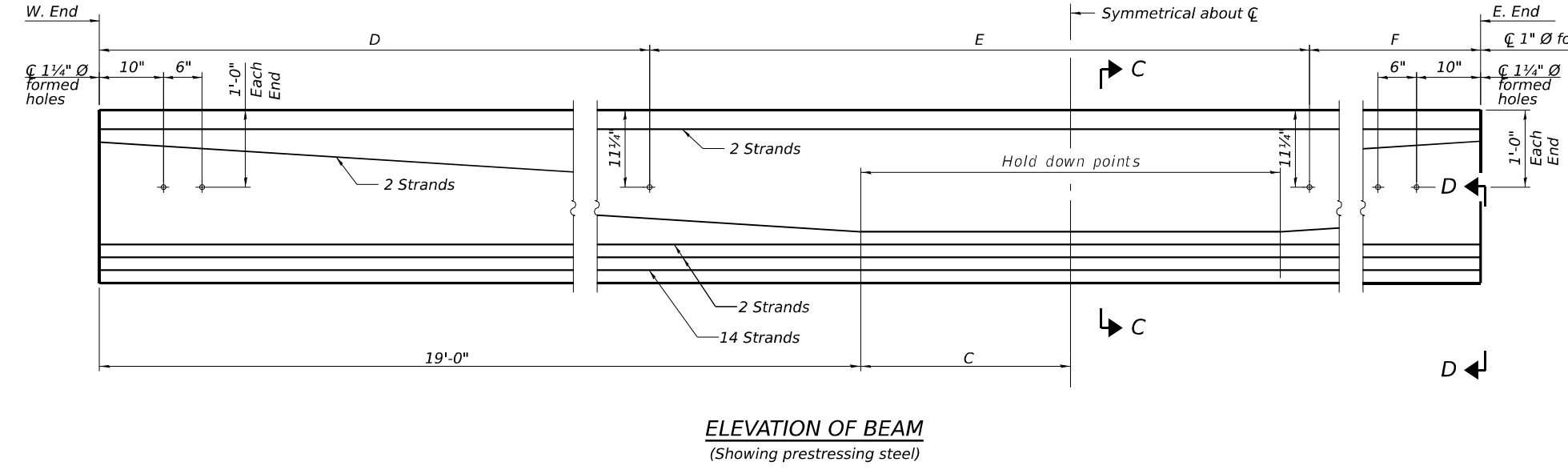
SHEET 58-62 OF 58-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	693
CONTRACT NO. 62R28				
ILLINOIS		FED. AID PROJECT		

MODEL: Default
 FILE NAME: p:\transystems-pw\benley.com\transyscorp-pw\1-hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315-WB\80 IL27-1830 I-Beam.dgn
 10/9/2023 2:52:49 PM



Beams	L	A	B	C	D	E	F
11-19	47'-4"	8"	9"	4'-8"	15'-9 1/2"	15'-9"	15'-9 1/2"
20	47'-4 3/8"	8 3/16"	9 3/16"	4'-8 3/16"	15'-9 3/8"	15'-9 1/4"	15'-9 3/8"
21	47'-6 1/4"	9 3/8"	10 3/8"	4'-9 3/8"	15'-10 1/4"	15'-9 3/4"	15'-10 1/4"
22	47'-9 1/8"	10 9/16"	11 9/16"	4'-10 9/16"	15'-11 1/8"	15'-10 3/4"	15'-11 1/8"



Note:
1. See Sheet SB-64 for additional details and Bill of Material.



USER NAME =	DESIGNED - LAB	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - LAB, FL	REVISED -
	CHECKED - MI	REVISED -

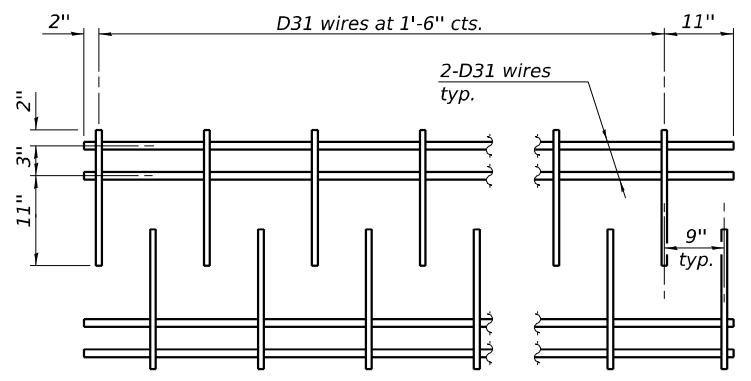
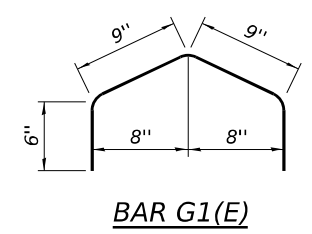
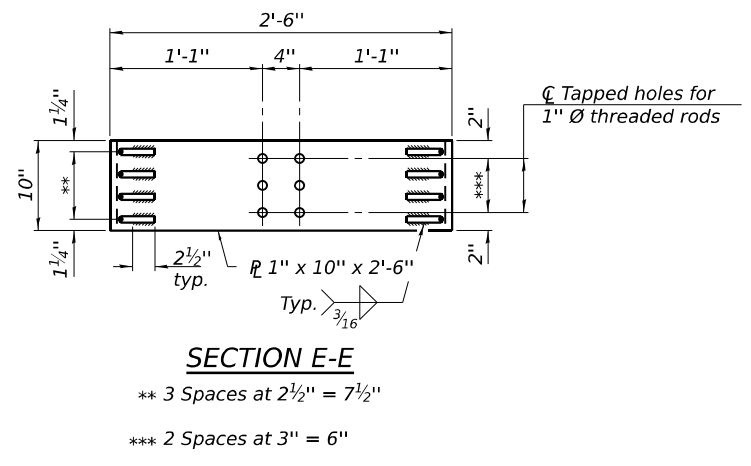
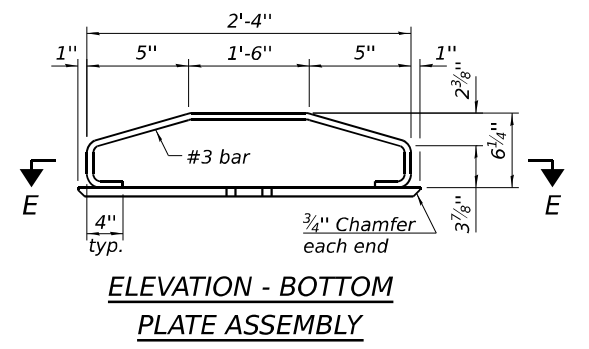
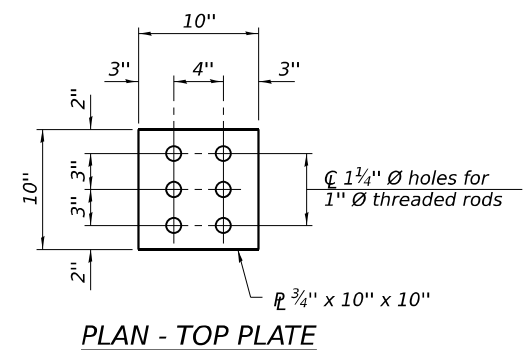
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB I-80 IL27-1830 PPC I-BEAM
STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

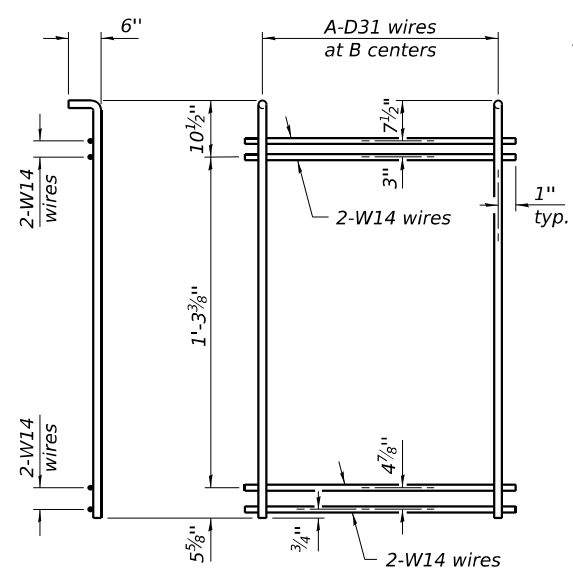
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	694
CONTRACT NO. 62R28				
ILLINOIS FED. AID PROJECT				

SHEET SB-63 OF SB-97 SHEETS

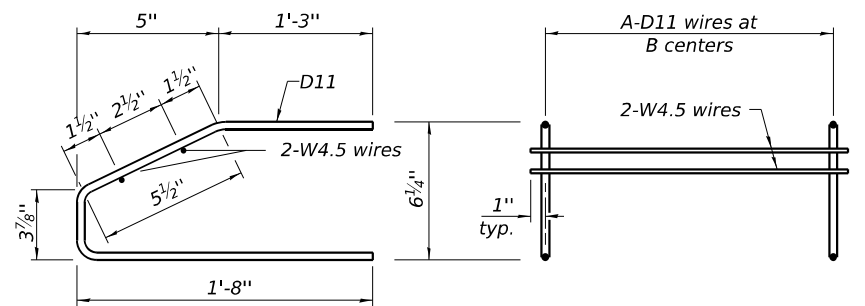
MODEL: Default
 FILE NAME: p:\w\transystems-pw\benley.com\transystems-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-056-WB IL27-1830 PPC I-Beam Details.dgn
 10/9/2023 2:52:52 PM



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").



(See Table of Dimensions)



(See Table of Dimensions)

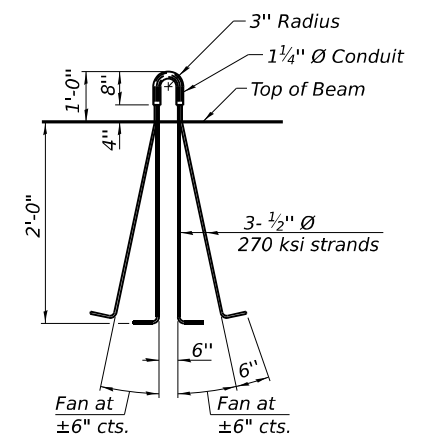
TABLE OF DIMENSIONS

(The WWR designs assume grade 60. If necessary, this permits the fabricator to directly substitute grade 60 rebar as detailed in the Manual for Fabrication of Precast Prestressed Concrete Products.)

SPAN 1		
WWR	A	B
M2	15	3"
M3	13	1'-6"
M4	6	3"
M5	15	6"
M6	14	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. 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.



S.N. 099-8315 (WB) PPC I-BEAM BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete Beams, IL27N	Ft.	569



USER NAME =	DESIGNED - LAB	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - LAB, FL	REVISED -
	CHECKED - MI	REVISED -

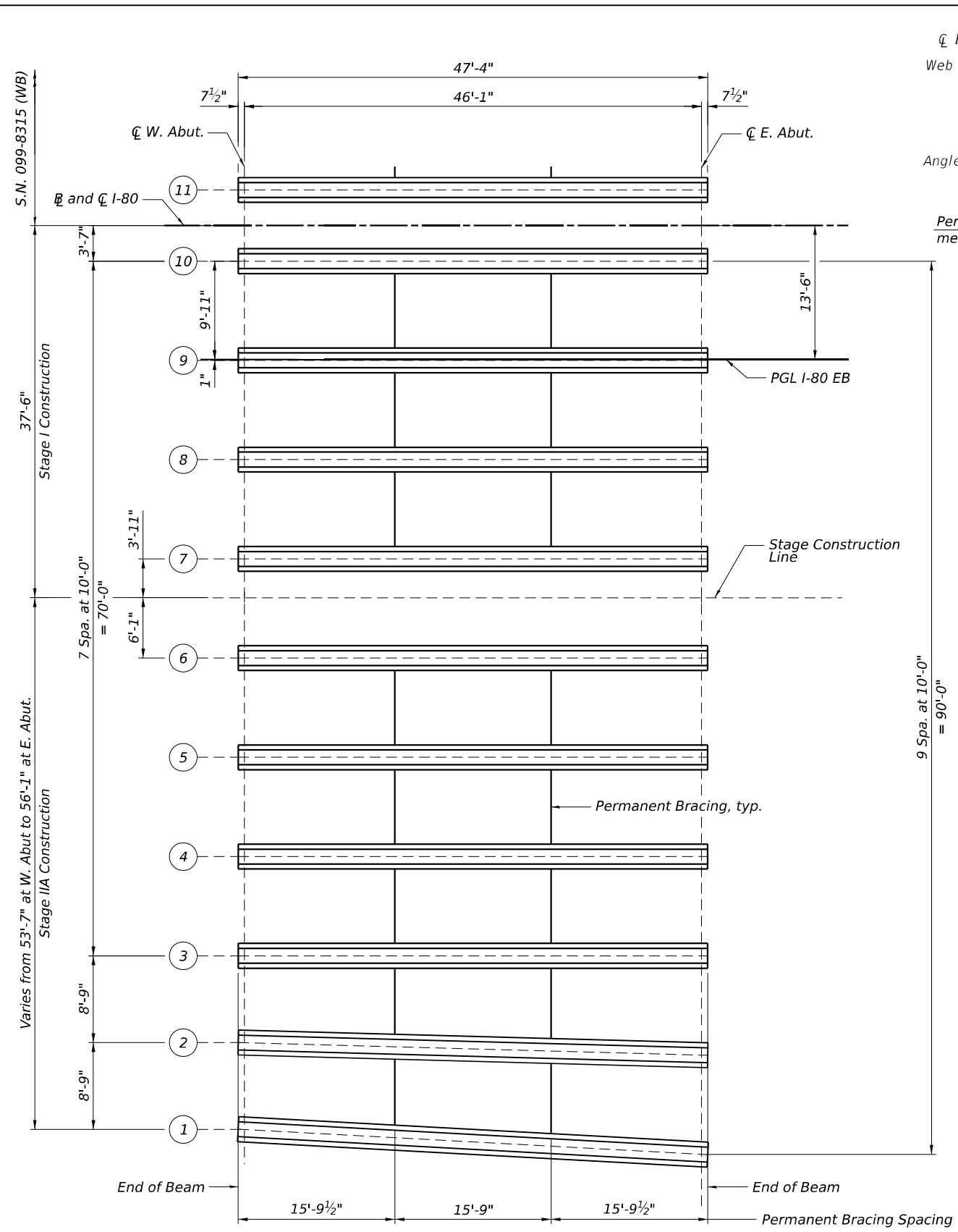
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

WB I-80 IL27-1830 PPC I-BEAM DETAILS STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

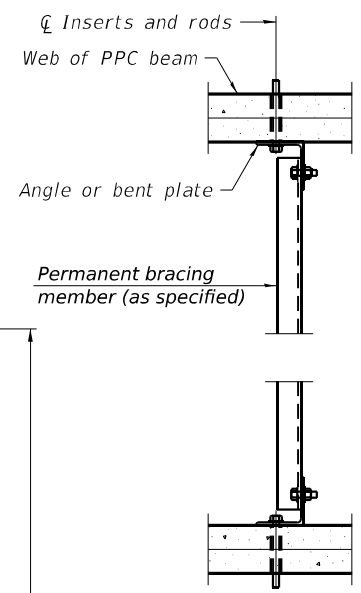
SHEET 58-64 OF 58-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	695
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

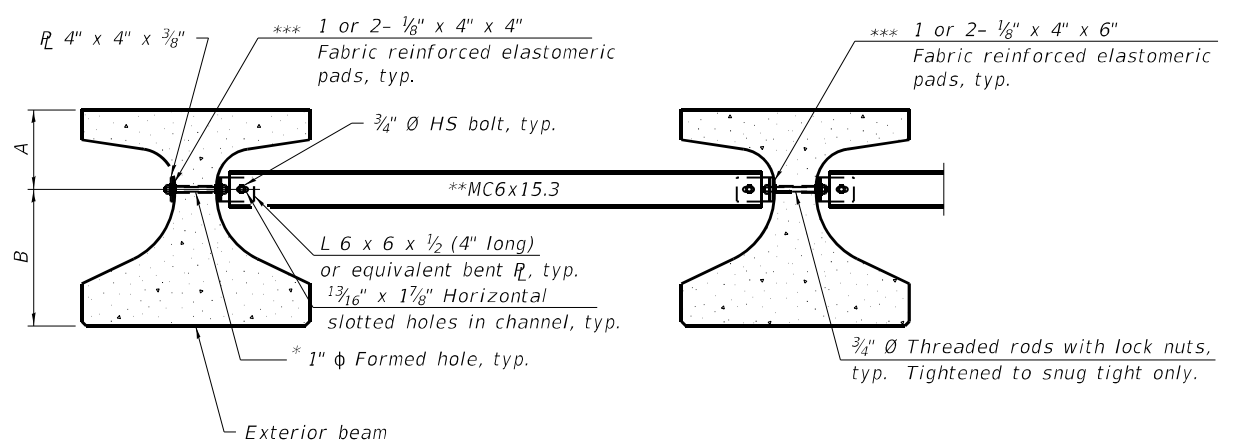
MODEL: Default
 FILE NAME: p:\w\transystems-pw\hstedi\Documents\Projects_2018\CH401\401\180022\01-Structures\04-Sheets\04-Sheets\04-Structures\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-057-EB I-80 Framing Plan.dgn
 10/9/2023 2:52:55 PM



FRAMING PLAN



PLAN



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 1/16" 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.

Beam	A	B
IL27	11 1/4"	1'-3 3/4"

- * 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.

PERMANENT BRACING DETAILS FOR IL27 BEAMS

EXTERIOR BEAM MOMENT TABLE		
		0.5 Span
I	(in ⁴)	33,879
I'	(in ⁴)	141,288
S _b	(in ³)	3,060
S _b '	(in ³)	6,285
S _t	(in ³)	2,127
S _t '	(in ³)	31,267
DC1	(k/')	1.432
MDC1	(k)	380
DC2	(k/')	0.263
MDC2	(k)	70
DW	(k/')	0.359
MDW	(k)	96
LLDF		0.861
M _L + IM	(k)	780

INTERIOR BEAM MOMENT TABLE		
		0.5 Span
I	(in ⁴)	33,879
I'	(in ⁴)	148,482
S _b	(in ³)	3,060
S _b '	(in ³)	6,397
S _t	(in ³)	2,127
S _t '	(in ³)	39,186
DC1	(k/')	1.515
MDC1	(k)	402
DC2	(k/')	0.158
MDC2	(k)	42
DW	(k/')	0.500
MDW	(k)	133
LLDF		0.837
M _L + IM	(k)	761

EXTERIOR BEAM REACTION TABLE	
	Abut.
LLDF	0.861
RDC1	(k) 33
RDC2	(k) 6.1
RDW	(k) 8.3
R _L + IM	(k) 68
R _{Total} (Strength I/Impact)	(k) 180.4
R _{Total} (Strength I/No Impact)	(k) 154.8

INTERIOR BEAM REACTION TABLE	
	Abut.
LLDF	0.952
RDC1	(k) 34.90
RDC2	(k) 3.64
RDW	(k) 11.52
R _L + IM	(k) 76
R _{Total} (Strength I/Impact)	(k) 198.5
R _{Total} (Strength I/No Impact)	(k) 169.2

- I: Non-composite moment of inertia of beam section (in.⁴).
- I': Composite moment of inertia of beam section (in.⁴).
- S_b: Non-composite section modulus for the bottom fiber of the prestressed beam (in.³).
- S_b': Composite section modulus for the bottom fiber of the prestressed beam (in.³).
- S_t: Non-composite section modulus for the top fiber of the prestressed beam (in.³).
- S_t': Composite section modulus for the top fiber of the prestressed beam (in.³).
- DC1: Un-factored non-composite dead load (kips/ft.).
- M_{DC1}: 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.).
- M_{DC2}: 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.).
- M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
- LLDF: Live Load Distribution Factor for moment and shear computed according to Article 4.6.2.2 and further IDOT provisions.
- M_L + IM: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
- R_{DC1}: Un-factored reaction due to non-composite dead load (kip).
- R_{DC2}: Un-factored reaction due to long-term composite (superimposed excluding future wearing surface) dead load (kip).
- R_{DW}: Un-factored reaction due to long-term composite (superimposed future wearing surface only) dead load (kip).
- R_L: Un-factored live load reaction (kip).
- R_{IM}: Un-factored dynamic load allowance (impact) (kip).
- R_{Total} (Strength I/Impact): Total factored reaction including dynamic load allowance (impact) (kip).
- R_{Total} (Strength I/No Impact): Total factored reaction not including dynamic load allowance (impact) (kip).



USER NAME =	DESIGNED - LAB	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - LAB, FL	REVISED -
	CHECKED - MI	REVISED -

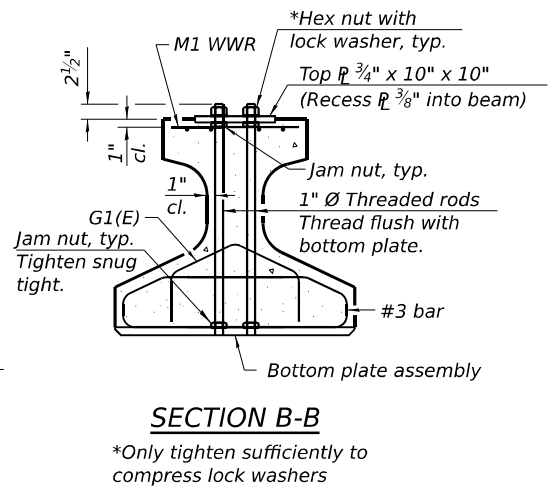
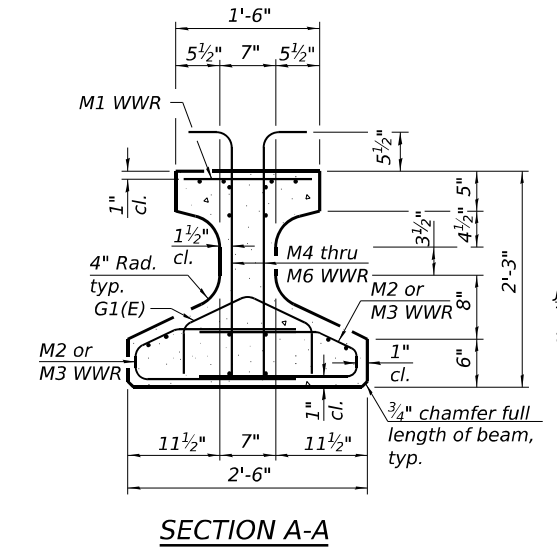
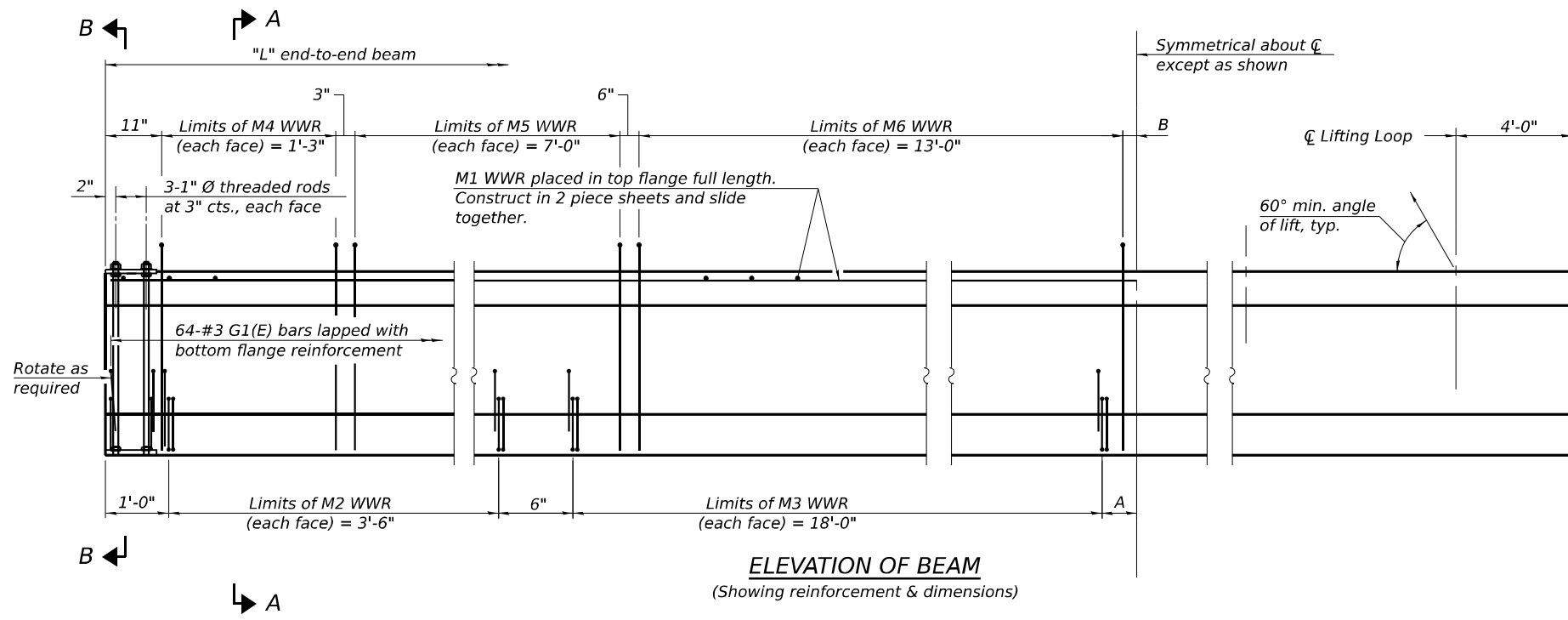
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**EB I-80 FRAMING PLAN
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)**

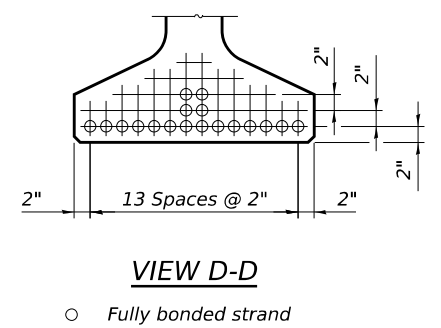
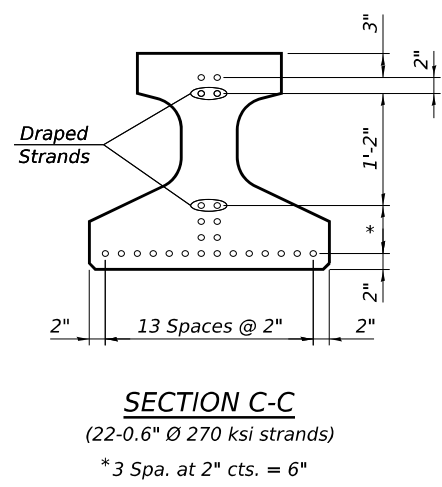
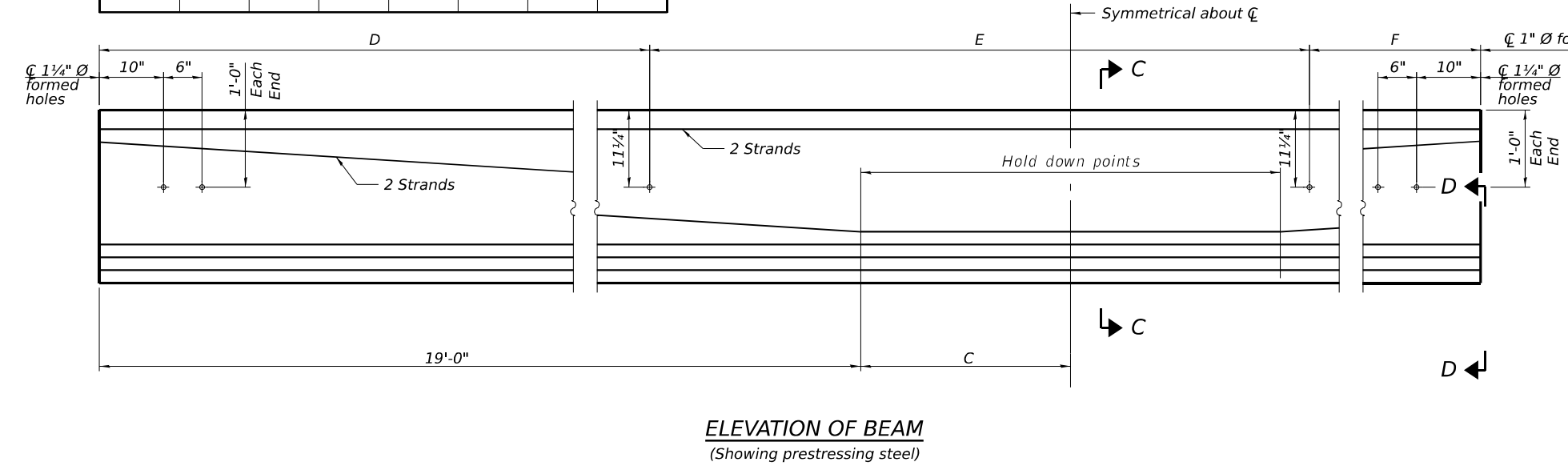
SHEET 58-65 OF 58-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	696
CONTRACT NO. 62R28				
ILLINOIS		FED. AID PROJECT		

MODEL: Default
 FILE NAME: p:\projects\transys\p-w\hbm\hbm\180022\01-Structures\04-Sheets\04-Sheets\099-8314 & 099-8315\04-058-EB I-80 IL27-1830 PPC I-Beam.dgn
 10/9/2023 2:52:57 PM



Beams	L	A	B	C	D	E	F
1	47'-4 3/4"	8 3/8"	9 3/8"	4'-8 3/8"	15'-9 3/4"	15'-9 3/4"	15'-9 3/4"
2	47'-4 3/4"	8 3/8"	9 3/8"	4'-8 3/8"	15'-9 5/8"	15'-9"	15'-9 5/8"
3-10	47'-4"	8"	9"	4'-8"	15'-9 1/2"	15'-9"	15'-9 1/2"



Note:
 1. See Sheet SB-67 for additional details and Bill of Material.



USER NAME =	DESIGNED - LAB	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - LAB, FL	REVISED -
	CHECKED - MI	REVISED -

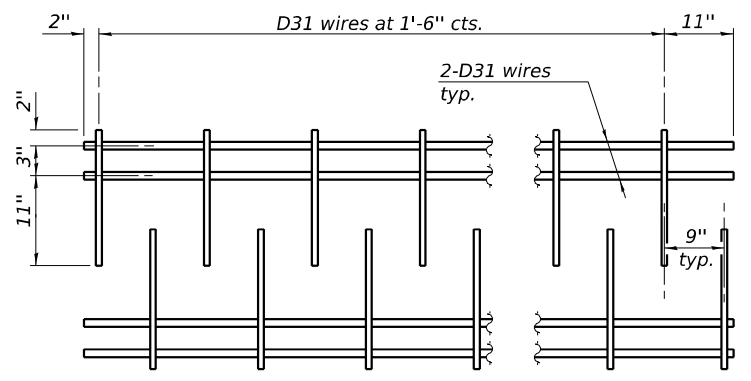
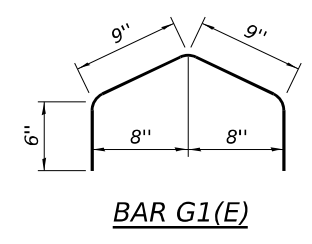
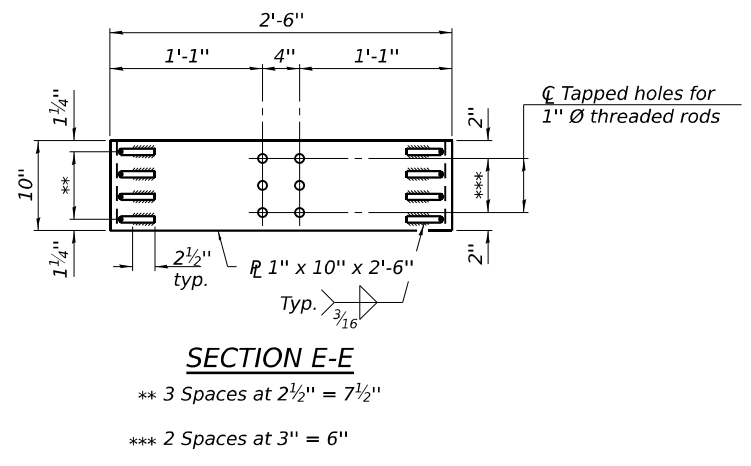
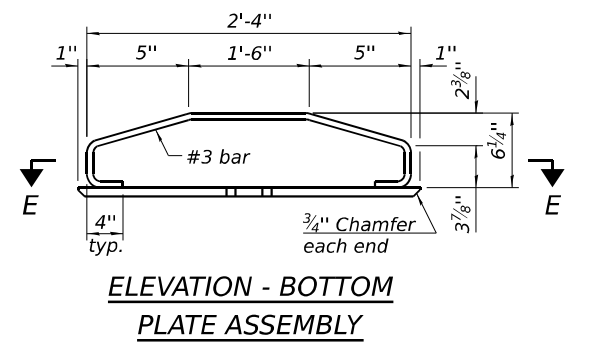
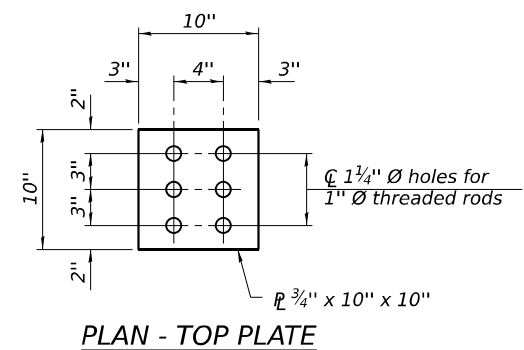
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EB I-80 IL27-1830 PPC I-BEAM
 STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

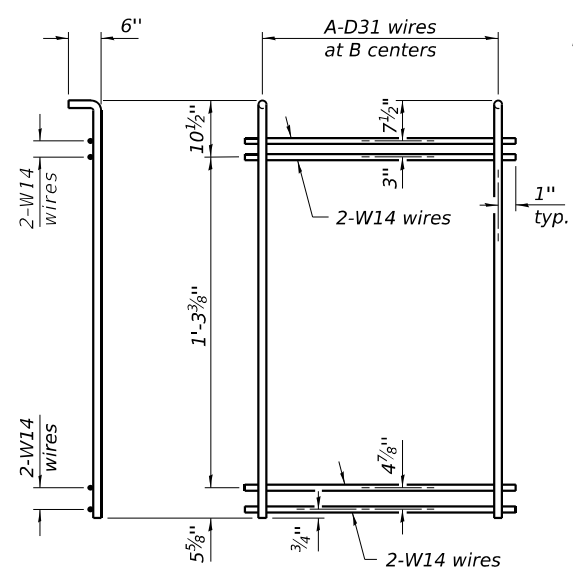
SHEET SB-66 OF SB-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	697
CONTRACT NO. 62R28				
ILLINOIS FED. AID PROJECT				

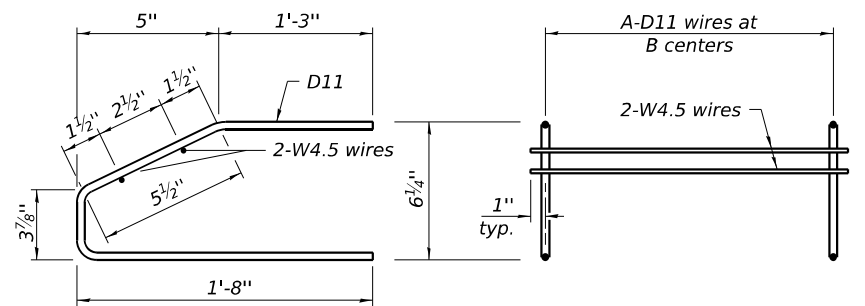
MODEL: Default
 FILE NAME: p:\w\transystems-pw\benley.com\transystems-pw\hosted\Documents\Projects_2018\CH401\401180022\01-Structures\04-Sheets\04-Structures\099-8314 & 099-8315\I80_IL27-1830 PPC I-Beam Details.dgn
 10/9/2023 2:52:59 PM



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").



M4 THRU M6 WWR DETAIL
(See Table of Dimensions)



M2 AND M3 WWR DETAIL
(See Table of Dimensions)

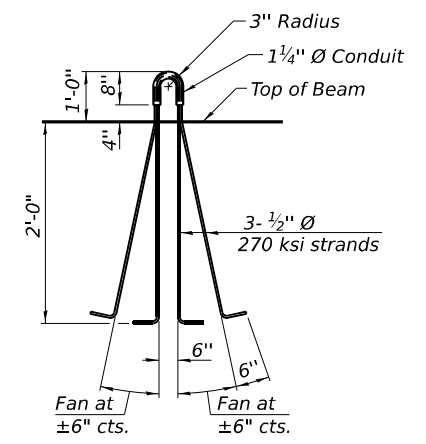
TABLE OF DIMENSIONS

(The WWR designs assume grade 60. If necessary, this permits the fabricator to directly substitute grade 60 rebar as detailed in the Manual for Fabrication of Precast Prestressed Concrete Products.)

WWR	SPAN 1	
	A	B
M2	15	3"
M3	13	1'-6"
M4	6	3"
M5	15	6"
M6	14	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. 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

S.N. 099-8314 (EB) PPC I-BEAM BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete Beams, IL27N	Ft.	474



USER NAME =	DESIGNED - LAB	REVISED -
PLOT SCALE =	CHECKED - MI, JJS	REVISED -
PLOT DATE =	DRAWN - LAB, FL	REVISED -
	CHECKED - MI	REVISED -

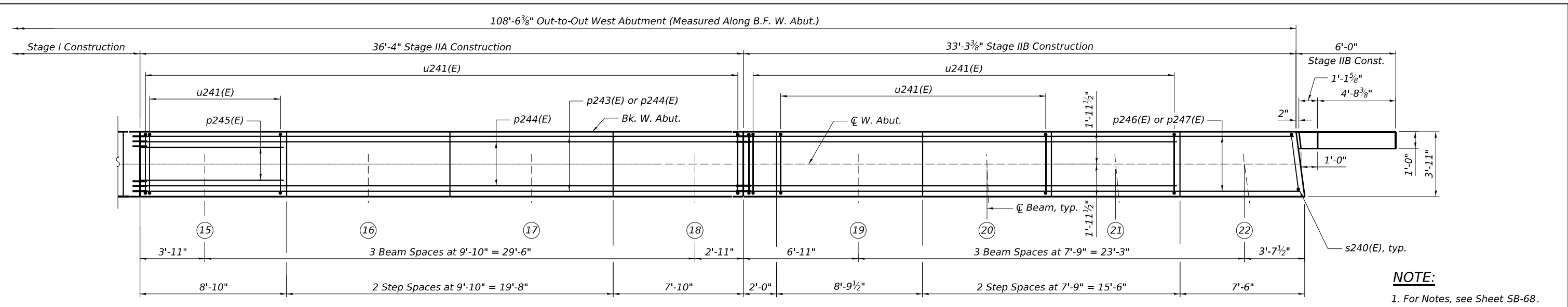
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EB I-80 IL27-1830 PPC I-BEAM DETAILS
STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)

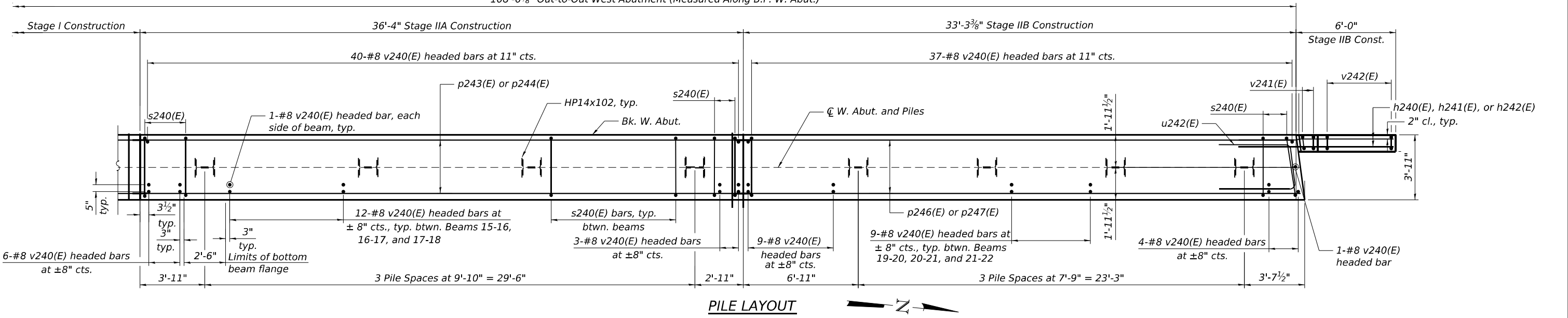
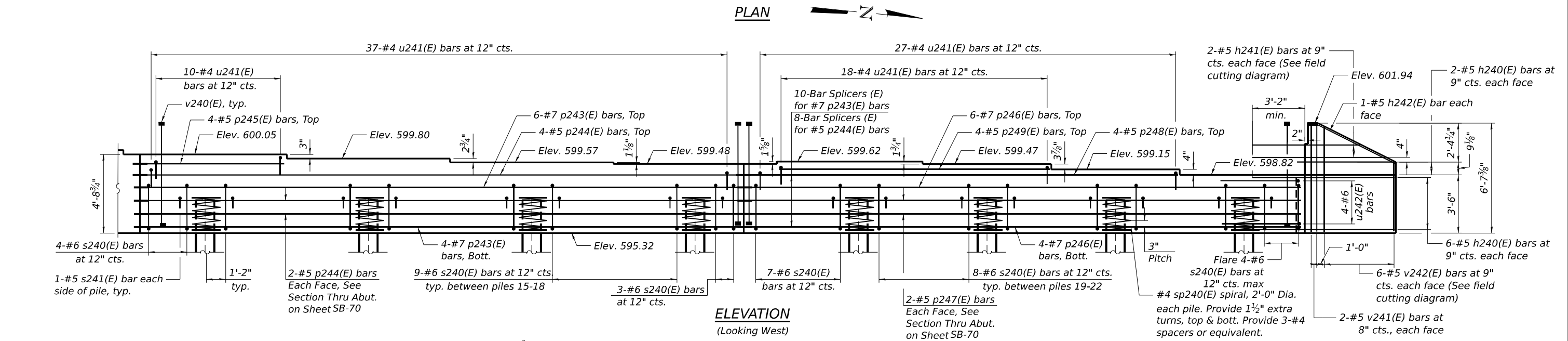
SHEET 58-67 OF 58-97 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	FAI 80 21 STRUCTURE 7	WILL	1059	698
			CONTRACT NO. 62R28	
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
 FILE NAME: p:\w\transystems-pw\benley.com\transyscorp-pw\1-hosted\Documents\Projects_2018\CH401401180022\01-Structures\04-Sheets\04-Structures\099-8314 & 099-8315\80 over Frontage Rd\0998314_0998315-ML-04-061-WB W. Abutment Plan and Elevation - Stage II Const.dgn
 10/9/2023 2:53:06 PM



NOTE:
 1. For Notes, see Sheet SB-68.



	USER NAME =	DESIGNED - SK, JMI	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WB W. ABUTMENT PLAN AND ELEVATION - STAGE II CONST. STRUCTURE NOS. 099-8314 (EB) & 099-8315 (WB)	F.A.I. RTE. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	DRAWN - SK, JMI	REVISED -			80	FAI 80 21 STRUCTURE 7	WILL	1059	700
	PLOT DATE =	CHECKED - MI	REVISED -			CONTRACT NO. 62R28				
		CHECKED - MI	REVISED -			ILLINOIS FED. AID PROJECT				