

SUMMARY OF QUANTITIES

SPECIAL PROVISION	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
					STP-BR: 80% FEDERAL, 20% LOCAL			100% LOCAL
					ROADWAY	BRIDGE	TRAINEES	ROADWAY
					0004	0010	0042	0004
				NON-URBAN	NON-URBAN	NON-URBAN	NON-URBAN	
	40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	7,270	7,270			
	40700100	BITUMINOUS MATERIALS (TACK COAT)	POUND	1,347	1,347			
	40701881	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 10"	SQ YD	1,792	1,792			
	42000070	PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB	SQ YD	134	134			
	44000100	PAVEMENT REMOVAL	SQ YD	2,027	2,027			
	44004250	PAVED SHOULDER REMOVAL	SQ YD	536	536			
	48203037	HOT-MIX ASPHALT SHOULDERS, 10"	SQ YD	1,201	1,201			
	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1		
	50200100	STRUCTURE EXCAVATION	CU YD	112		112		
	50300225	CONCRETE STRUCTURES	CU YD	68.5		68.5		
	50300255	CONCRETE SUPERSTRUCTURE	CU YD	130.0		130.0		
	50300260	BRIDGE DECK GROOVING	SQ YD	450		450		
	50300300	PROTECTIVE COAT	SQ YD	597		597		
	50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	119.0		119.0		
	50800105	REINFORCEMENT BARS	POUND	1000		1000		
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	91,140		91,140		
	51200957	FURNISHING METAL SHELL PILES 12" X 0.250"	FOOT	712		712		
	51202305	DRIVING PILES	FOOT	712		712		
	51203200	TEST PILE METAL SHELLS	EACH	2		2		
	51204650	PILE SHOES	EACH	18		18		
	51500100	NAME PLATES	EACH	1		1		
	54003000	CONCRETE BOX CULVERTS	CU YD	7.5		7.5		

* INDICATES SPECIALTY ITEM



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PLOT SCALE = 240:0.0000 '"/ft.	DRAWN - K. KOLODZIECZYK	REVISED -
PLOT DATE = 4/9/2021	CHECKED - M. LANGE	REVISED -
	DATE - 12-21-2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
KISHWAUKEE VALLEY ROAD OVER TRIB TO RUSH CREEK**

SCALE: N.T.S. SHEET 2 OF 4 SHEETS STA. TO STA.

F.A.S. RTE. 0031	SECTION 18-00490-00-BR	COUNTY MCHENRY	TOTAL SHEETS 62	SHEET NO. 5
			CONTRACT NO. 61G94	
ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES

SPECIAL PROVISION	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE			
					STP-BR: 80% FEDERAL, 20% LOCAL			100% LOCAL
					ROADWAY	BRIDGE	TRAINEES	ROADWAY
					0004	0010	0042	0004
					NON-URBAN	NON-URBAN	NON-URBAN	NON-URBAN
S	X0426200	DEWATERING	L SUM	1	1			
S	X2130010	EXPLORATION TRENCH, SPECIAL	FOOT	90	90			
S	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1			
* S	X7830070	GROOVING FOR RECESSED PAVEMENT MARKING 5"	FOOT	1,580	1,580			
S	XX009434	BIOSWALE	SQ YD	747	747			
* S	Z0007124	STEEL RAILING (SPECIAL)	FOOT	126	126			▲
S	Z0013797	STABILIZED CONSTRUCTION ENTRANCE	SQ YD	78	78			
S	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1			
S	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	55	55			
S	Z0033700	LONGITUDINAL JOINT SEALANT	FOOT	4,215	1,405		2,810	
S	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	161	161			
* S	Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	2	2			
S	Z0076600	TRAINEES	HOUR	500		500		
S	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500		500		

* INDICATES SPECIALTY ITEM



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PLOT DATE = 4/9/2021	CHECKED - M. LANGE	REVISED -
	DATE - 12-21-2020	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES
KISHWAUKEE VALLEY ROAD OVER TRIB TO RUSH CREEK**

SCALE: N.T.S. SHEET 4 OF 4 SHEETS STA. TO STA.

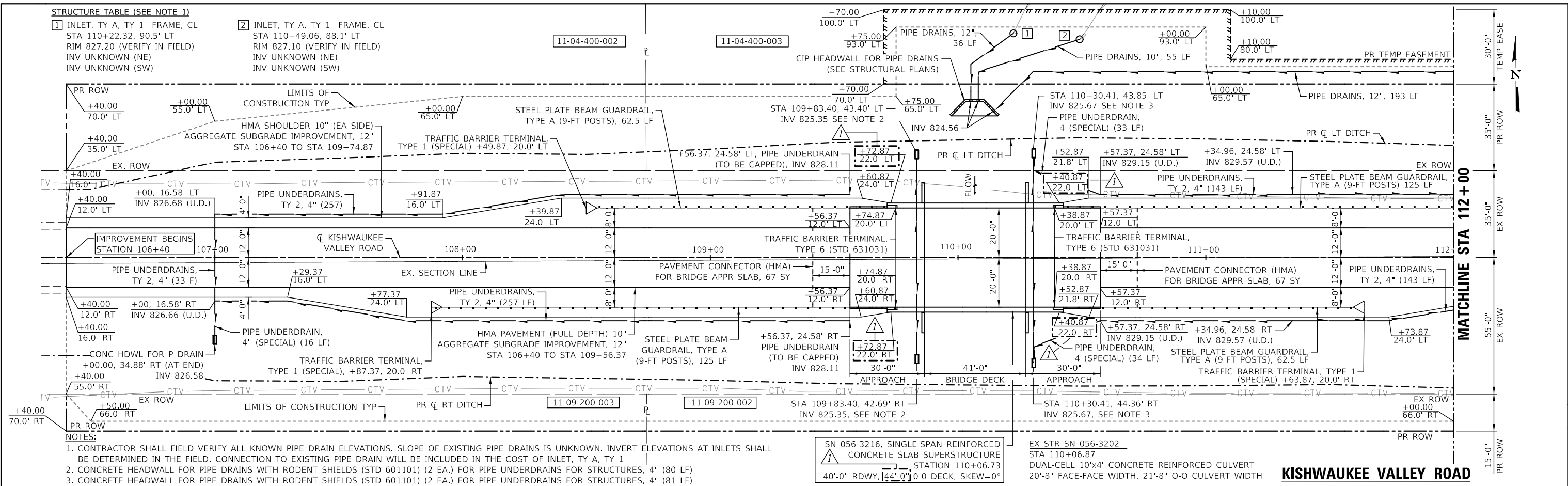
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0031	18-00490-00-BR	MCHENRY	62	7
			CONTRACT NO. 61G94	
ILLINOIS FED. AID PROJECT				

DATE	
BY	
PLAN	SURVEYED
	PLANNED
	NOTED
	CHECKED
	FILED
	NO.

DATE	
BY	
PROFILE	SURVEYED
	PLANNED
	NOTED
	CHECKED
	FILED
	NO.

STRUCTURE TABLE (SEE NOTE 1)

- | | |
|--|--|
| 1 INLET, TY A, TY 1 FRAME, CL
STA 110+22.32, 90.5' LT
RIM 827.20 (VERIFY IN FIELD)
INV UNKNOWN (NE)
INV UNKNOWN (SW) | 2 INLET, TY A, TY 1 FRAME, CL
STA 110+49.06, 88.1' LT
RIM 827.10 (VERIFY IN FIELD)
INV UNKNOWN (NE)
INV UNKNOWN (SW) |
|--|--|

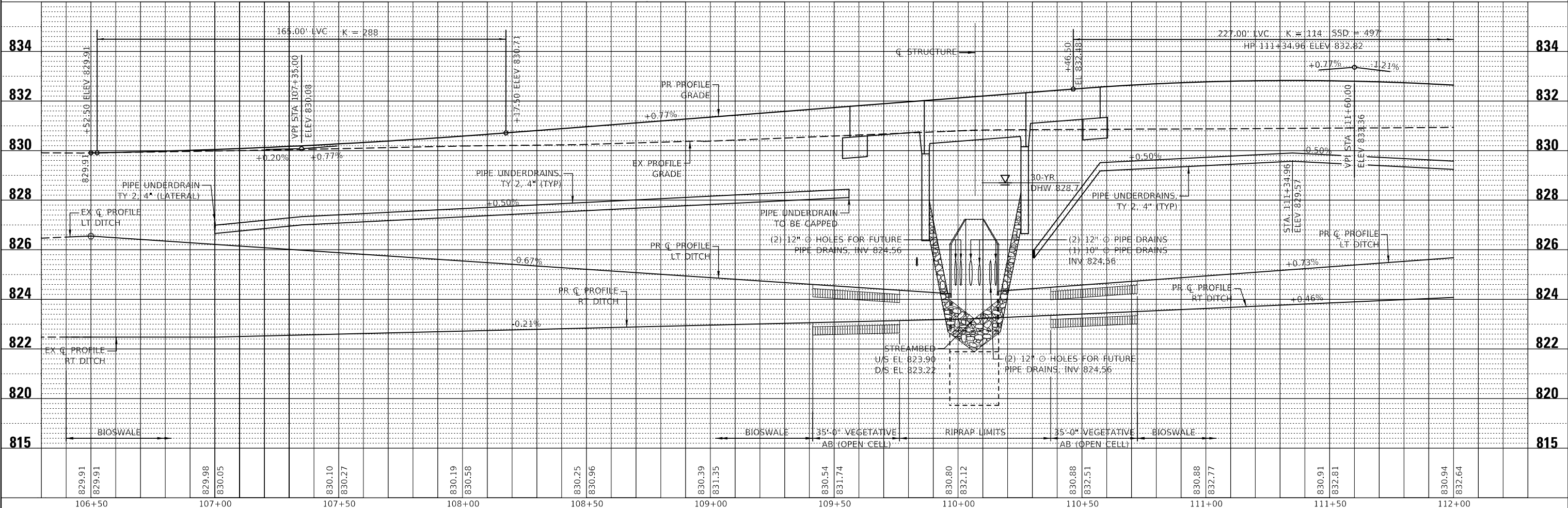


- NOTES:**
- CONTRACTOR SHALL FIELD VERIFY ALL KNOWN PIPE DRAIN ELEVATIONS. SLOPE OF EXISTING PIPE DRAINS IS UNKNOWN. INVERT ELEVATIONS AT INLETS SHALL BE DETERMINED IN THE FIELD. CONNECTION TO EXISTING PIPE DRAIN WILL BE INCLUDED IN THE COST OF INLET, TY A, TY 1
 - CONCRETE HEADWALL FOR PIPE DRAINS WITH RODENT SHIELDS (STD 601101) (2 EA.) FOR PIPE UNDERDRAINS FOR STRUCTURES, 4" (80 LF)
 - CONCRETE HEADWALL FOR PIPE DRAINS WITH RODENT SHIELDS (STD 601101) (2 EA.) FOR PIPE UNDERDRAINS FOR STRUCTURES, 4" (81 LF)

SN 056-3216, SINGLE-SPAN REINFORCED CONCRETE SLAB SUPERSTRUCTURE STATION 110+06.73
40'-0" RDWY, 14'-0" O-O DECK, SKEW=0°

EX STR SN 056-3202
STA 110+06.87
DUAL-CELL 10'x4' CONCRETE REINFORCED CULVERT
20'-8" FACE-FACE WIDTH, 21'-8" O-O CULVERT WIDTH

KISHWAUKEE VALLEY ROAD



**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PLAN AND PROFILE
KISHWAUKEE VALLEY RD. OVER TRIB. TO RUSH CREEK**

USER NAME = mlang	DESIGNED - K. KOLODZIEJCZYK	REVISED - 4-9-2021
	DRAWN - K. KOLODZIEJCZYK	REVISED -
PLOT SCALE = 480:0.0000 " = 1' / ft.	CHECKED - M. LANGE	REVISED -
PLOT DATE = 4/9/2021	DATE - 12-21-2020	REVISED -

F.A.S. RTE. 0031	SECTION 18-00490-00-BR	COUNTY MCHENRY	TOTAL SHEETS 62	SHEET NO. 14
SCALE: 1" = 20'			CONTRACT NO. 61G94	
SHEET 1 OF 2 SHEETS			ILLINOIS FED. AID PROJECT	

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INDEX OF SHEETS

S1	General Plan & Elevation
S2	General Data
S3	Top of Deck Elevations
S4	Top of Approach Slab Elevations
S5	Superstructure
S6	Superstructure Details
S7	Steel Railing Details I
S8	Steel Railing Details II
S9	Bridge Approach Slab
S10	Bridge Approach Slab Details
S11	West Abutment
S12	East Abutment
S13	Abutment Details
S14	Metal Shell Pile Details
S15	Pipe Drain Headwall Details
S16	Soil Borings I
S17	Soil Borings II
S18	Existing Plans

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.
 Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

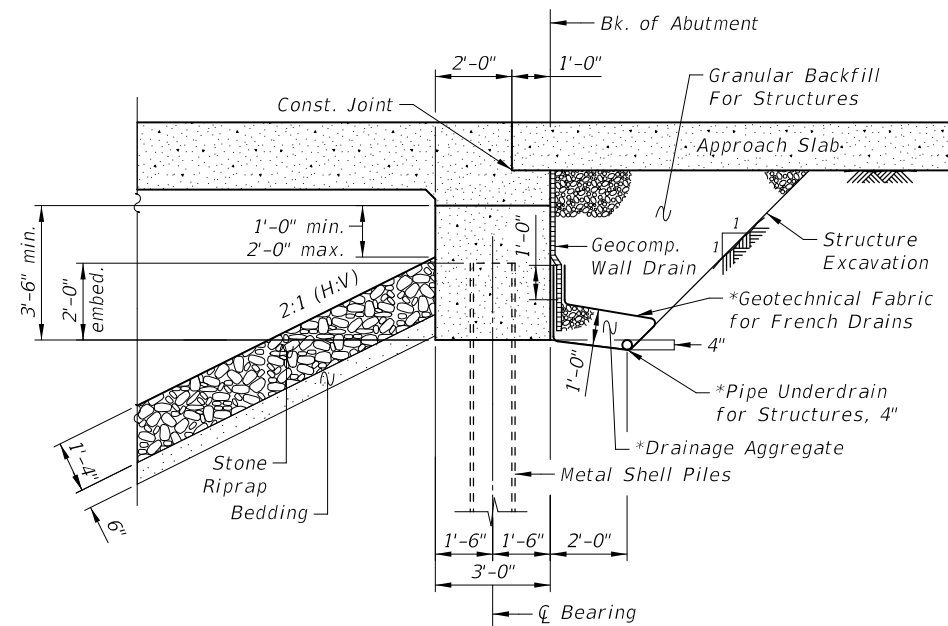
TRIB. TO RUSH CREEK
 BUILT 2021 BY
 MCHENRY COUNTY
 SEC. 18-00490-00-BR
 KISHWAUKEE VALLEY RD
 STA. 110+06.87
 STR. NO. 056-3216
 LOADING HL-93

NAME PLATE

See Std. 515001.
 Plate to be installed on SW wingwall.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal and Disposal of Unsuitable Material	Cu. Yd.	-	31.1	31.1
Channel Excavation	Cu. Yd.	-	411	411
Porous Granular Emabankment	Cu. Yd.	-	5.1	5.1
Stone Riprap, Class A4	Sq. Yd.	-	730	730
Filter Fabric	Sq. Yd.	-	730	730
Removal of Existing Structures	Each	-	1	1
Structure Excavation	Cu. Yd.	-	112	112
Concrete Structures	Cu. Yd.	25.5	43.0	68.5
Concrete Superstructures	Cu. Yd.	130.0	-	130.0
Bridge Deck Grooving	Sq. Yd.	450	-	450
Protective Coat	Sq. Yd.	597	-	597
Concrete Superstructure (Approach Slab)	Cu. Yd.	119.0	-	119.0
Reinforcement Bars	Pound	-	1,000	1,000
Reinforcement Bars, Epoxy Coated	Pound	83,430	7,710	91,140
Furnishing Metal Shell Piles 12" O x 0.250"	Foot	-	712	712
Driving Piles	Foot	-	712	712
Test Pile Metal Shells	Each	-	2	2
Pile Shoes	Each	-	18	18
Name Plates	Each	-	1	1
Concrete Box Culverts	Cu. Yd.	-	7.5	7.5
Granular Backfill for Structures	Cu. Yd.	-	83	83
Geocomposite Wall Drain	Sq. Yd.	-	59	59
Steel Railing (Special)	Foot	126	-	126
Pipe Underdrain for Structures, 4"	Foot	-	161	161



SECTION THRU INTEGRAL ABUTMENT

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

*Included in the cost of Pipe Underdrain for Structures, 4"

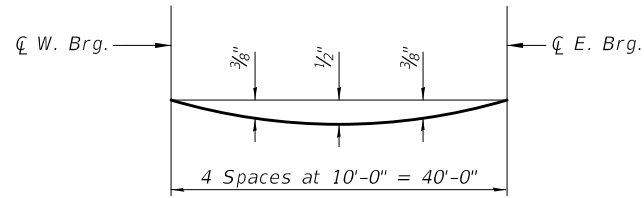
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PLOT SCALE = 20:0.0000 " = 1" / in.	CHECKED - M. LANGE	REVISED -
PLOT DATE = 4/9/2021	DATE - 12-21-2020	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

GENERAL DATA			
STRUCTURE NO. 056-3216			
KISHWAUKEE VALLEY ROAD OVER TRIB TO RUSH CREEK			
SCALE: N.T.S.	SHEET 52 OF 518 SHEETS	STA. 109+56.37 TO STA. 110+57.37	

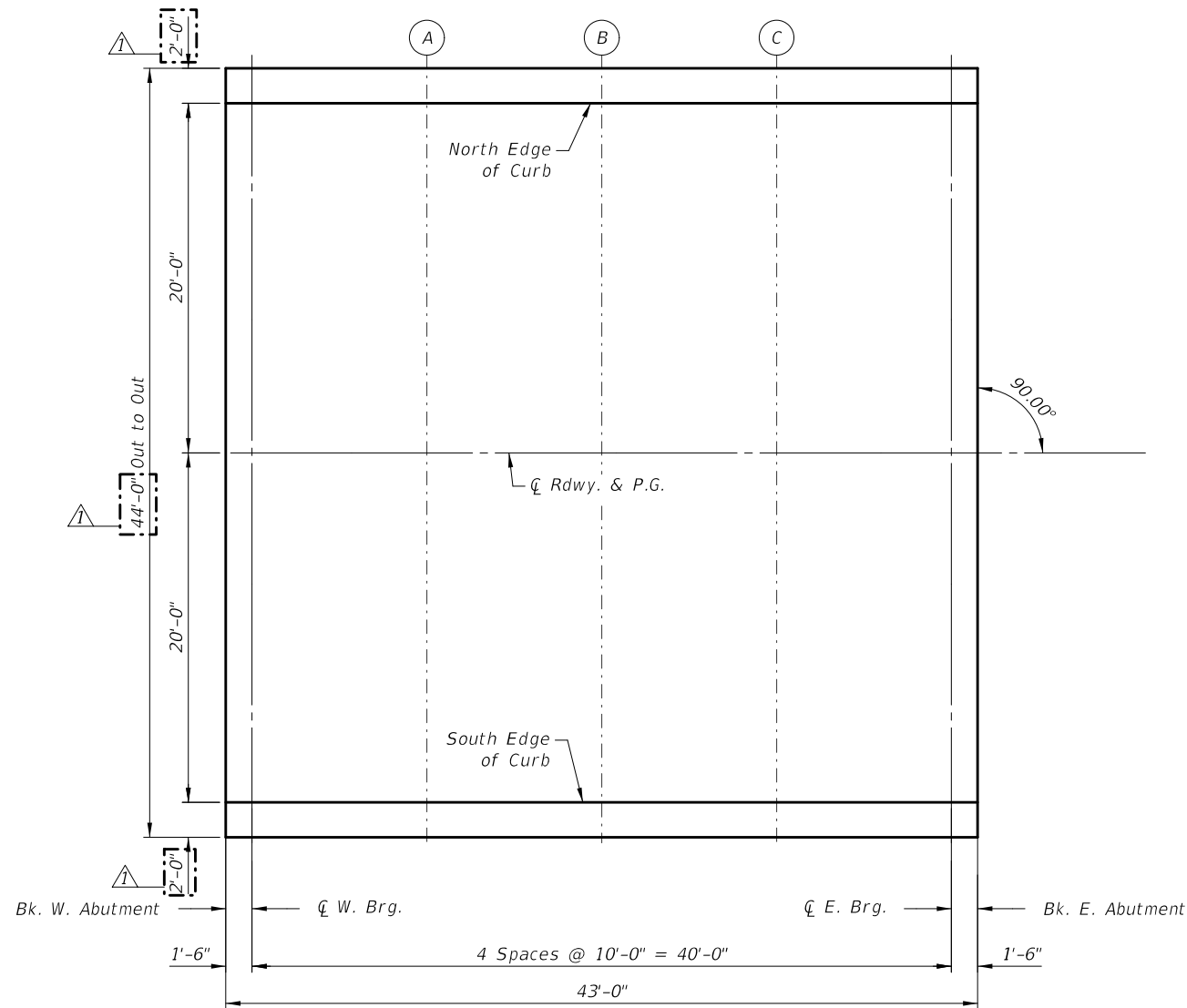
F.A.S. RTE. 0031	SECTION 18-00490-00-BR	COUNTY MCHENRY	TOTAL SHEETS 62	SHEET NO. 34
			CONTRACT NO. 61G94	
		ILLINOIS FED. AID PROJECT		



DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of Concrete Slab and Superimposed Dead Load)

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

The Contractor shall make allowances for the deflection of forms, shrinkage and settlement of falsework in addition to allowance for dead load deflection.



NORTH EDGE OF CURB

Location	Station	Offset (ft)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk. W. Abut.	109 + 85.37	20.00	831.60	831.60
W. ζ Bearing	109 + 86.87	20.00	831.61	831.61
A	109 + 96.87	20.00	831.68	831.72
B	110 + 06.87	20.00	831.76	831.81
C	110 + 16.87	20.00	831.84	831.87
E. ζ Bearing	110 + 26.87	20.00	831.92	831.92
Bk. E. Abut.	110 + 28.37	20.00	831.93	831.93

ζ ROADWAY & P.G.

Location	Station	Offset (ft)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk. W. Abut.	109 + 85.37	0.00	832.01	832.01
W. ζ Bearing	109 + 86.87	0.00	832.02	832.02
A	109 + 96.87	0.00	832.10	832.13
B	110 + 06.87	0.00	832.18	832.22
C	110 + 16.87	0.00	832.25	832.29
E. ζ Bearing	110 + 26.87	0.00	832.33	832.33
Bk. E. Abut.	110 + 28.37	0.00	832.34	832.34

SOUTH EDGE OF CURB

Location	Station	Offset (ft)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk. W. Abut.	109 + 85.37	20.00	831.60	831.60
W. ζ Bearing	109 + 86.87	20.00	831.61	831.61
A	109 + 96.87	20.00	831.68	831.72
B	110 + 06.87	20.00	831.76	831.81
C	110 + 16.87	20.00	831.84	831.87
E. ζ Bearing	110 + 26.87	20.00	831.92	831.92
Bk. E. Abut.	110 + 28.37	20.00	831.93	831.93

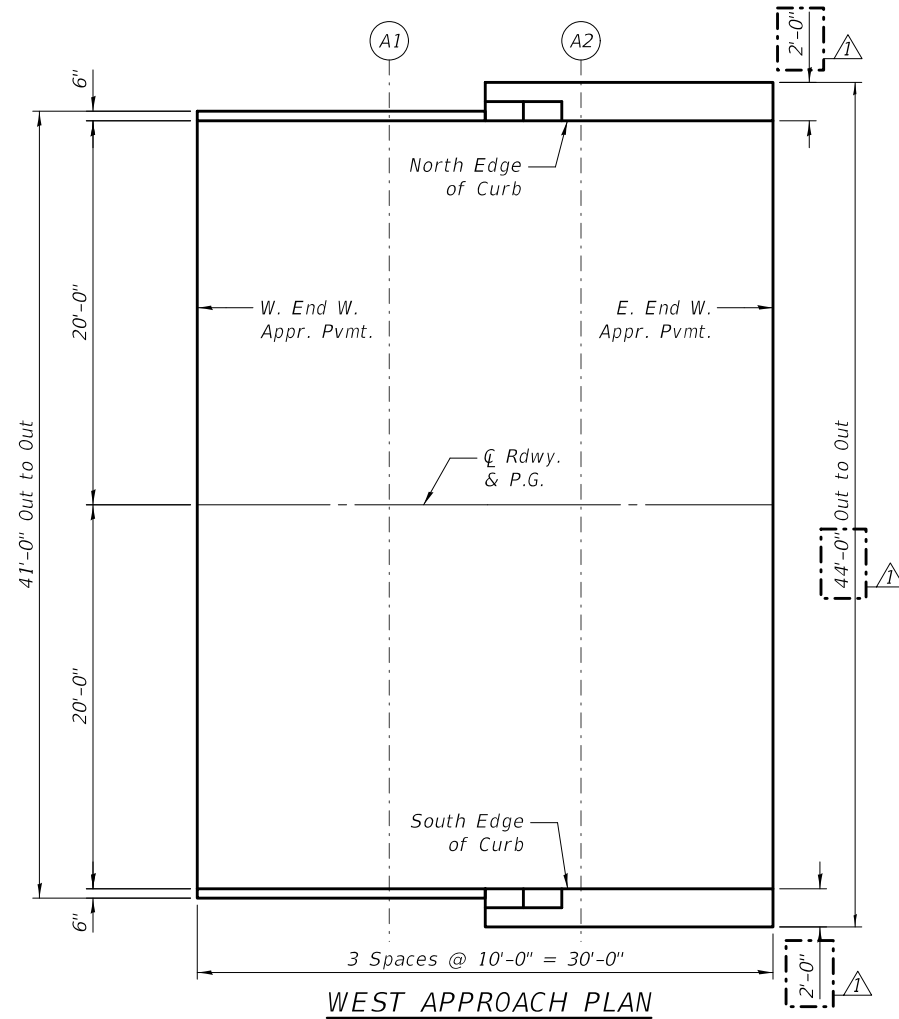
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PLOT DATE = 4/9/2021	DATE - 12-21-2020	REVISED -

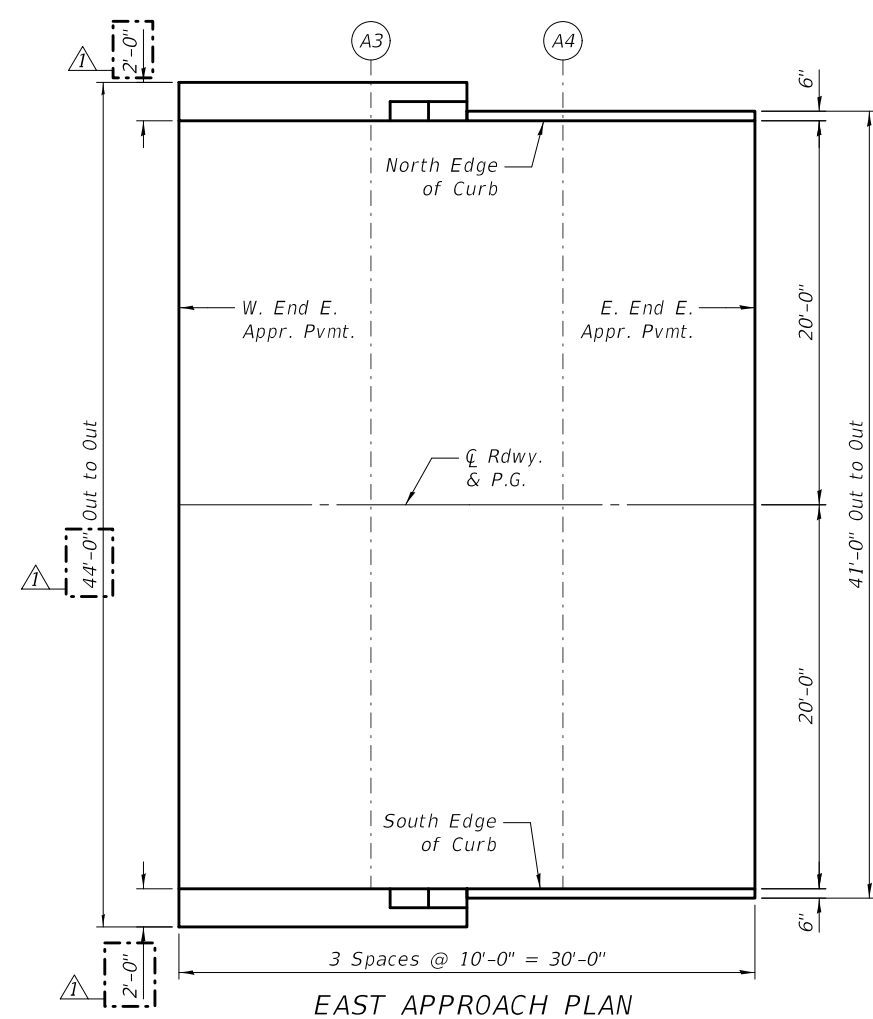
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF DECK ELEVATIONS			
STRUCTURE NO. 056-3216			
KISHWAUKEE VALLEY ROAD OVER TRIB TO RUSH CREEK			
SCALE: N.T.S.	SHEET 53	OF 518 SHEETS	STA. 109+56.37 TO STA. 110+57.37

F.A.S. RTE. 0031	SECTION 18-00490-00-BR	COUNTY MCHENRY	TOTAL SHEETS 62	SHEET NO. 35
CONTRACT NO. 61G94				
ILLINOIS FED. AID PROJECT				



WEST APPROACH PLAN



EAST APPROACH PLAN

NORTH EDGE OF CURB

Location	Station	Offset (ft)	Theoretical Grade Elevations
W. End W. Appr. Pvmt.	109 + 56.37	20.00	831.37
A1	109 + 66.37	20.00	831.45
A2	109 + 76.37	20.00	831.53
E. End W. Appr. Pvmt.	109 + 86.37	20.00	831.60

Centerline of ROADWAY & P.G.

Location	Station	Offset (ft)	Theoretical Grade Elevations
W. End W. Appr. Pvmt.	109 + 56.37	0.00	831.79
A1	109 + 66.37	0.00	831.86
A2	109 + 76.37	0.00	831.94
E. End W. Appr. Pvmt.	109 + 86.37	0.00	832.02

SOUTH EDGE OF CURB

Location	Station	Offset (ft)	Theoretical Grade Elevations
W. End W. Appr. Pvmt.	109 + 56.37	20.00	831.37
A1	109 + 66.37	20.00	831.45
A2	109 + 76.37	20.00	831.53
E. End W. Appr. Pvmt.	109 + 86.37	20.00	831.60

NORTH EDGE OF CURB

Location	Station	Offset (ft)	Theoretical Grade Elevations
W. End E. Appr. Pvmt.	110 + 27.37	20.00	831.92
A3	110 + 37.37	20.00	832.00
A4	110 + 47.37	20.00	832.07
E. End E. Appr. Pvmt.	110 + 57.37	20.00	832.15

Centerline of ROADWAY & P.G.

Location	Station	Offset (ft)	Theoretical Grade Elevations
W. End E. Appr. Pvmt.	110 + 27.37	0.00	832.34
A3	110 + 37.37	0.00	832.41
A4	110 + 47.37	0.00	832.49
E. End E. Appr. Pvmt.	110 + 57.37	0.00	832.56

SOUTH EDGE OF CURB

Location	Station	Offset (ft)	Theoretical Grade Elevations
W. End E. Appr. Pvmt.	110 + 27.37	20.00	831.92
A3	110 + 37.37	20.00	832.00
A4	110 + 47.37	20.00	832.07
E. End E. Appr. Pvmt.	110 + 57.37	20.00	832.15

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PLOT DATE = 4/9/2021	DATE - 12-21-2020	REVISED -

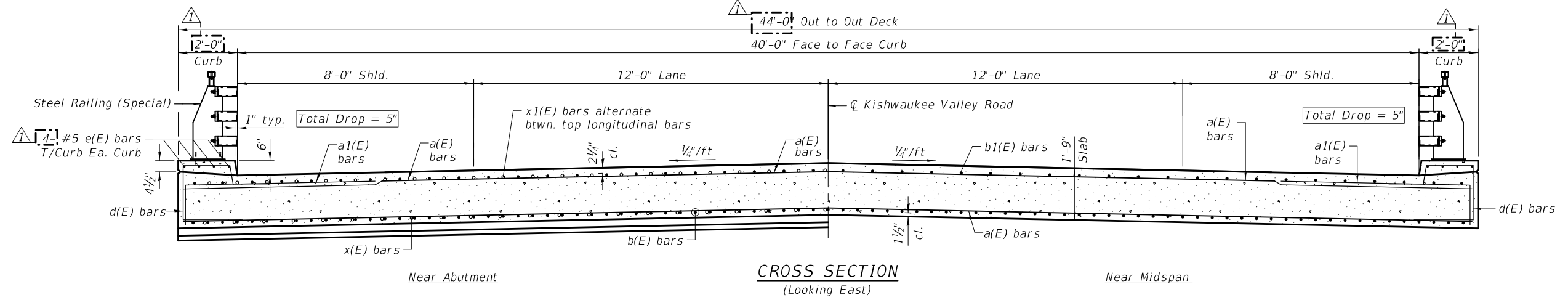
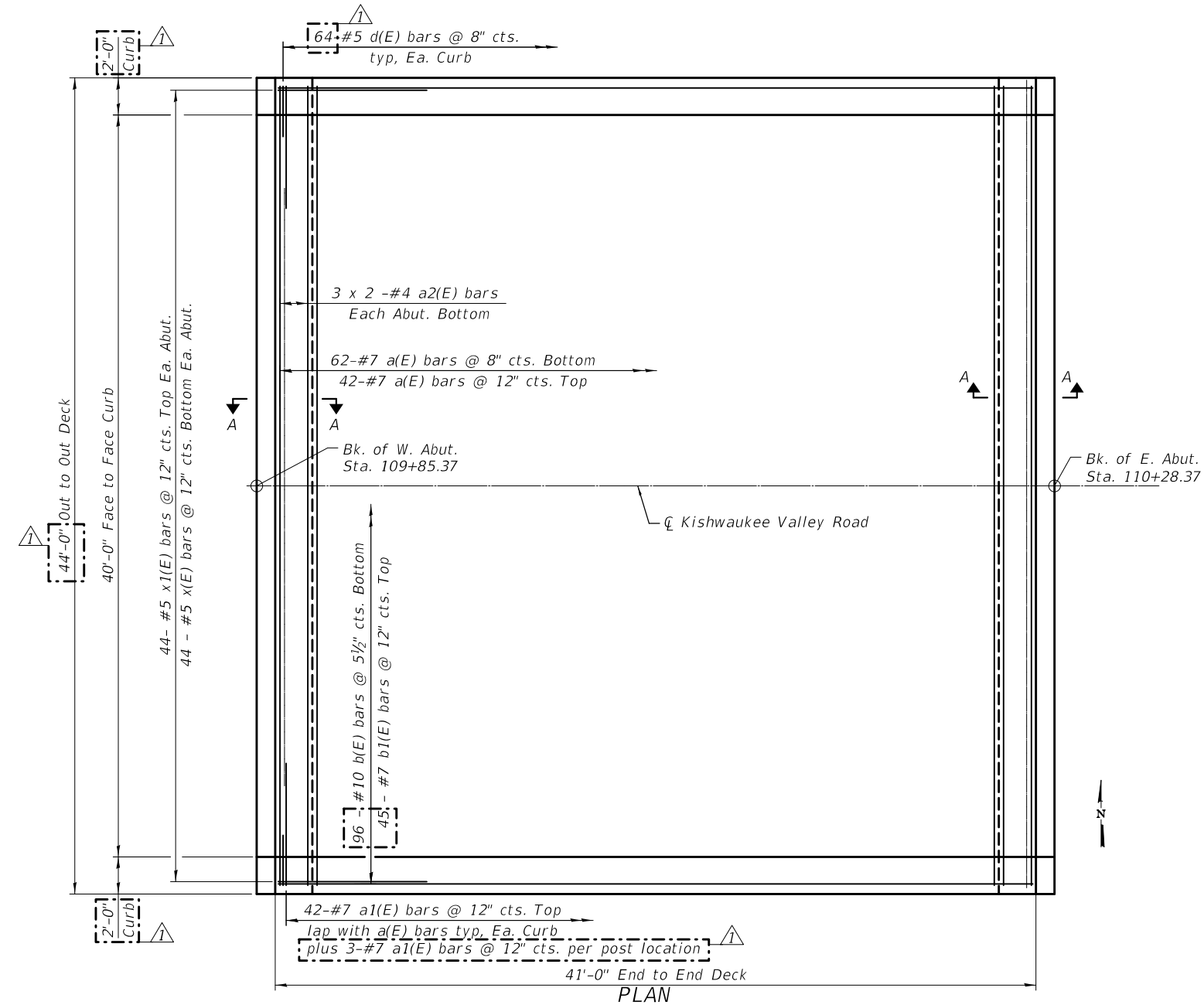
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TOP OF APPROACH SLAB ELEVATIONS			
STRUCTURE NO. 056-3216			
KISHWAUKEE VALLEY ROAD OVER TRIB TO RUSH CREEK			
SCALE: N.T.S.	SHEET 54	OF 518 SHEETS	STA. 109+56.37 TO STA. 110+57.37

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0031	18-00490-00-BR	MCHENRY	62	36
			CONTRACT NO. 61G94	
			ILLINOIS FED. AID PROJECT	

Notes:
See Sheet S6 for superstructure details
and Bill of Material.
See Sheets S7 & S8 for Steel Railing (Special) Details.

MIN. LAP SPLICE
#4 Bar 2'-8"



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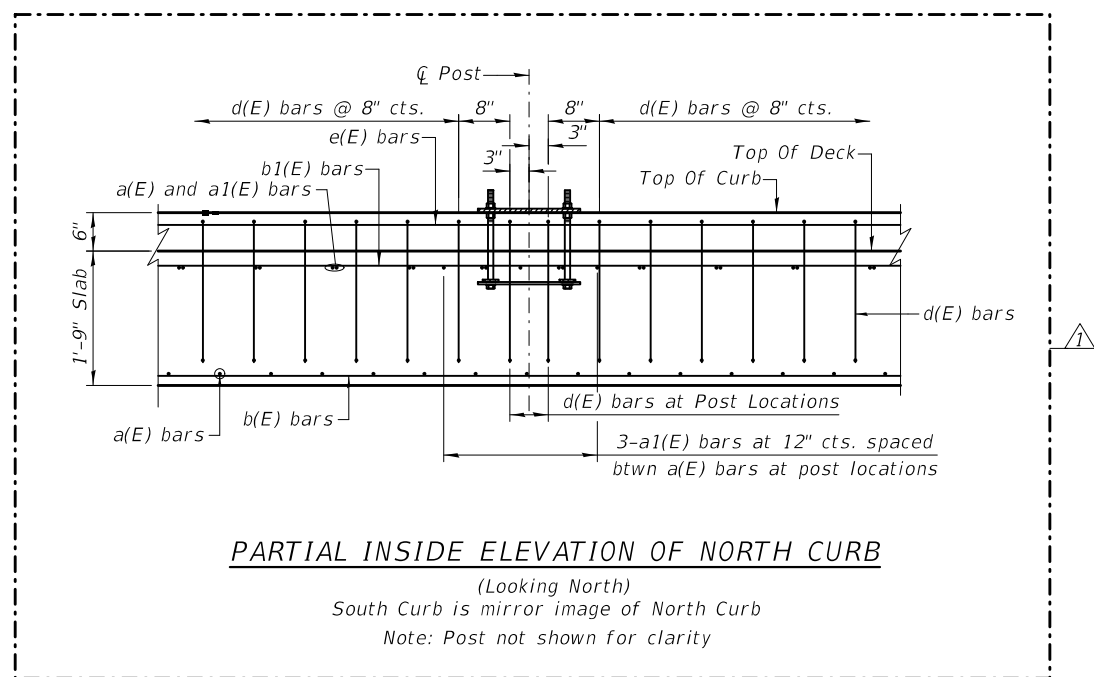
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PLOT SCALE = 8:0.0000 1" = 8'-0"	CHECKED - M. LANGE	REVISED -
PLOT DATE = 4/9/2021	DATE - 12-21-2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

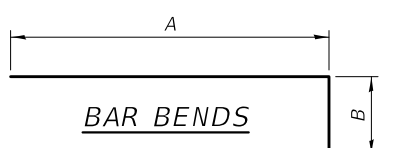
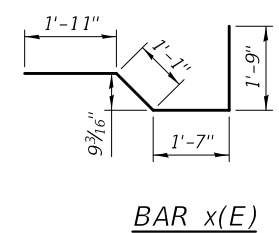
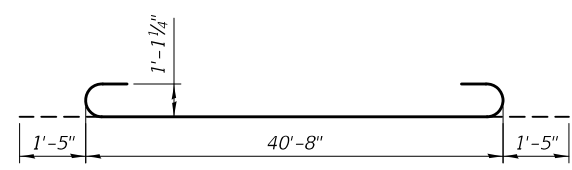
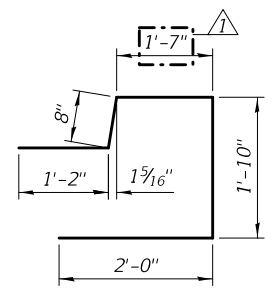
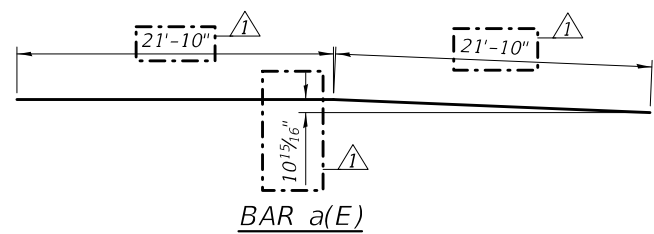
SUPERSTRUCTURE
STRUCTURE NO. 056-3216
KISHWAUKEE VALLEY ROAD OVER TRIB TO RUSH CREEK

F.A.S. RTE. 0031	SECTION 18-00490-00-BR	COUNTY MCHENRY	TOTAL SHEETS 62	SHEET NO. 37
CONTRACT NO. 61G94			ILLINOIS FED. AID PROJECT	

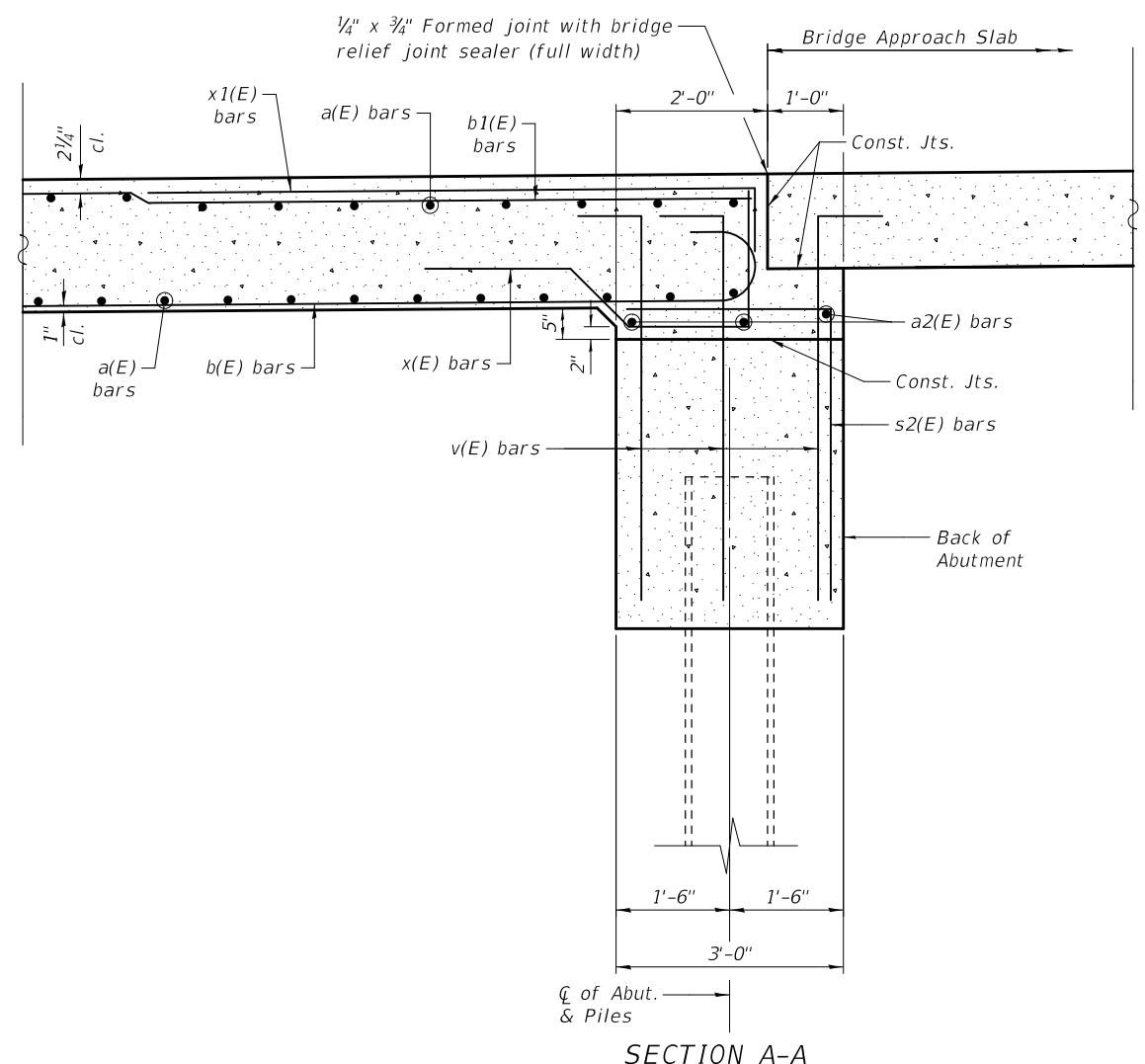
SCALE: N.T.S. SHEET 55 OF 518 SHEETS STA. 109+56.37 TO STA. 110+57.37



PARTIAL INSIDE ELEVATION OF NORTH CURB
(Looking North)
South Curb is mirror image of North Curb
Note: Post not shown for clarity



Bar	A	B	Length
a1(E)	6'-6"	1'-4"	7'-10"
x1(E)	8'-0"	10"	8'-10"



See Sheets S11 thru S13 for abutment reinforcement

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	104	#7	43'-8"	
a1(E)	114	#7	7'-10"	
a2(E)	12	#4	23'-2"	
b(E)	96	#10	43'-6"	
b1(E)	45	#7	40'-8"	
d(E)	128	#5	7'-3"	
e(E)	8	#5	40'-8"	
x(E)	88	#5	6'-4"	
x1(E)	88	#5	8'-10"	
Item		Unit	Quantity	
Concrete Superstructure		Cu. Yd.	126.0	
Bridge Deck Grooving		Sq. Yd.	183	
Protective Coat		Sq. Yd.	206	
Reinforcement Bars, Epoxy Coated		Pound	35,710	

Bars indicated thus 1 x 3 #4 etc. indicates 1 line of bars with 3 lengths per line.

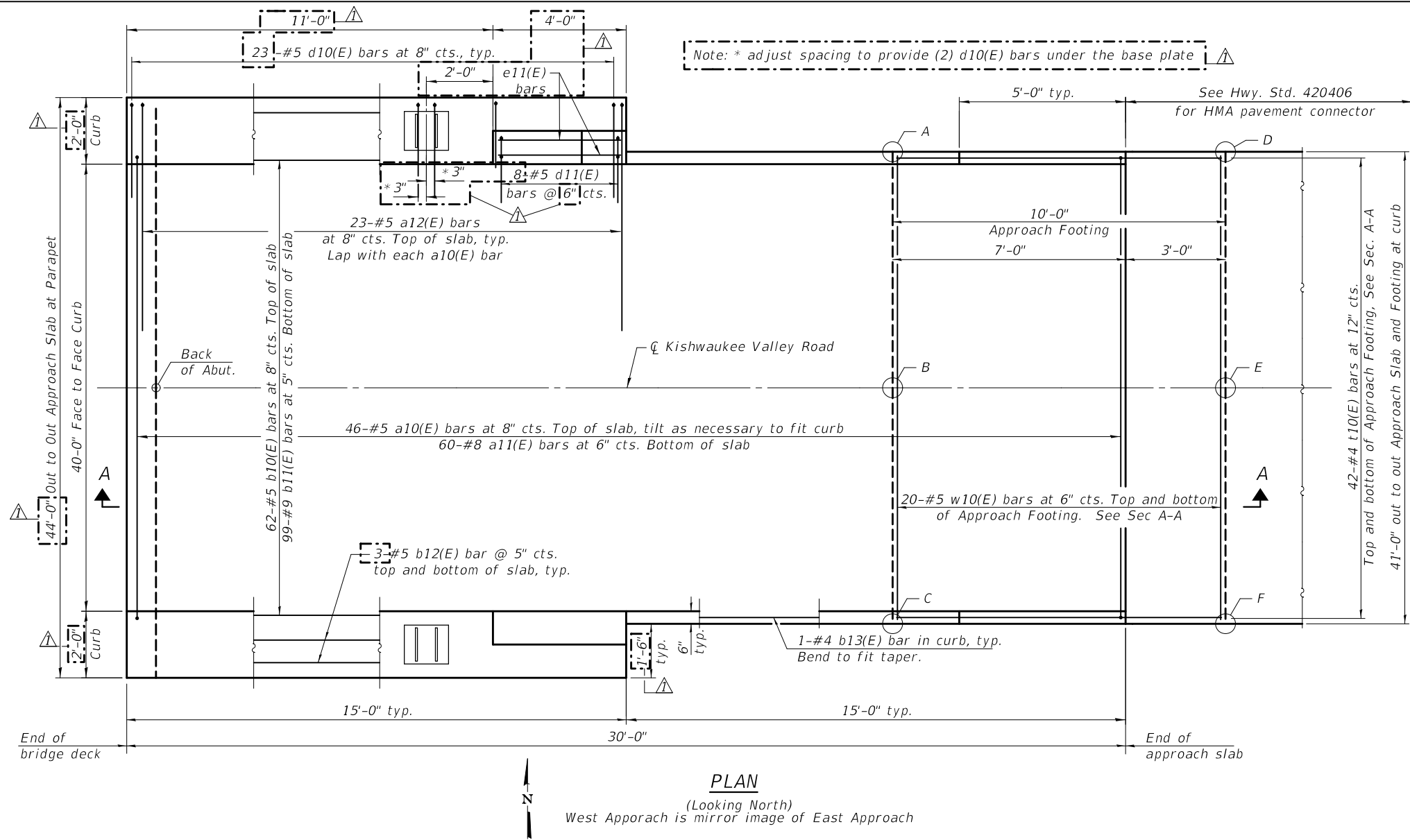
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	DRAWN - K. KOLODZIEJCZYK	REVISED -
PLOT SCALE = 20:0.0000 '"/in.	CHECKED - M. LANGE	REVISED -
PLOT DATE = 4/9/2021	DATE - 12-21-2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 056-3216
KISHWAUKEE VALLEY ROAD OVER TRIB TO RUSH CREEK

SCALE: N.T.S. SHEET 56 OF 518 SHEETS STA. 109+56.37 TO STA. 110+57.37

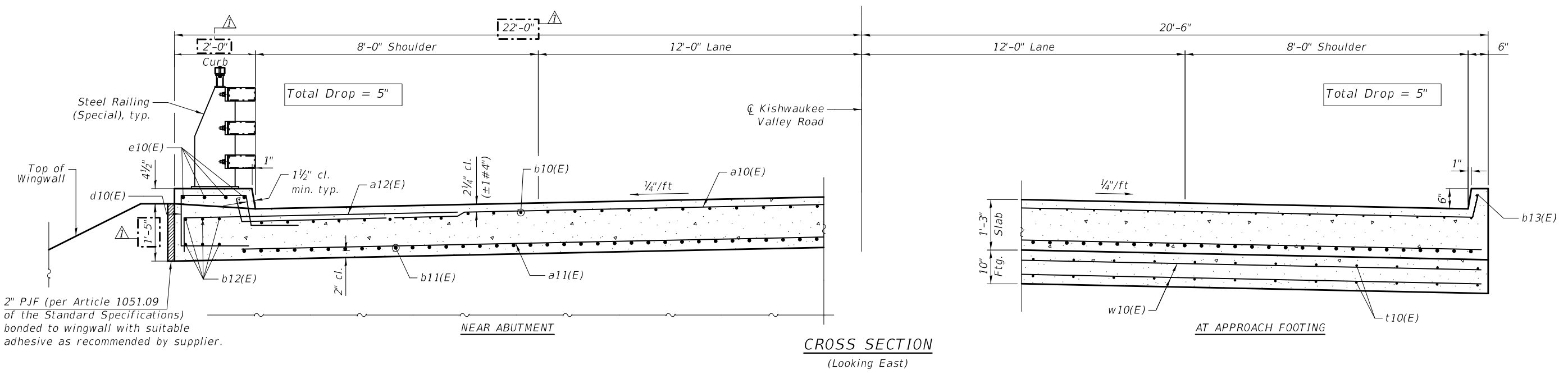
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0031	18-00490-00-BR	MCHENRY	62	38
				CONTRACT NO. 61G94
				ILLINOIS FED. AID PROJECT



TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

West Approach				
Point	Station	Offset	Top	Bottom
D	109+53.37	20.0' Lt.	830.10	829.26
E	109+53.37	0'	830.51	829.68
F	109+53.37	20.0' Rt.	830.10	829.26
A	109+63.37	20.0' Lt.	830.17	829.34
B	109+63.37	0'	830.59	829.76
C	109+63.37	20.0' Rt.	830.17	829.34

East Approach				
Point	Station	Offset	Top	Bottom
A	110+50.37	20.0' Lt.	830.85	830.01
B	110+50.37	0'	831.26	830.43
C	110+50.37	20.0' Rt.	830.85	830.01
D	110+60.37	20.0' Lt.	830.92	830.08
E	110+60.37	0'	831.33	830.50
F	110+60.37	20.0' Rt.	830.92	830.08



MODEL: Default
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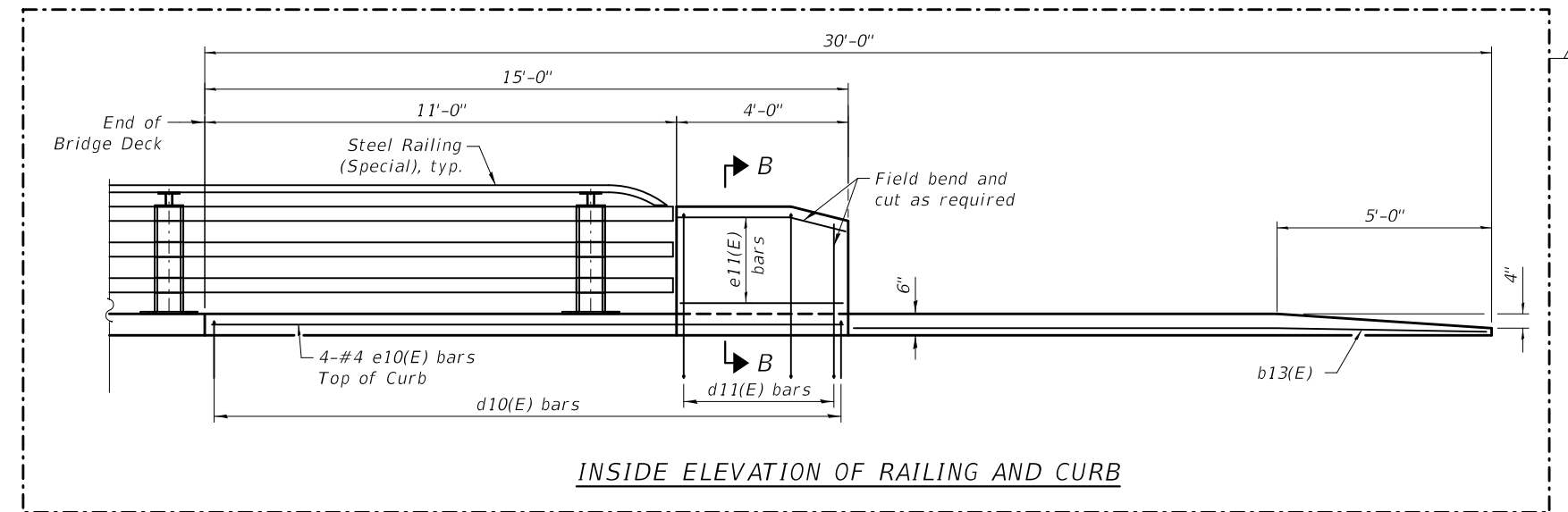
USER NAME = mrange	DESIGNED - K. KOLODZIEJCZYK	REVISED - 4-9-2021
PLOT SCALE = 4,000' / in.	DRAWN - K. KOLODZIEJCZYK	REVISED -
PLOT DATE = 4/9/2021	CHECKED - M. LANGE	REVISED -
	DATE - 12-21-2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

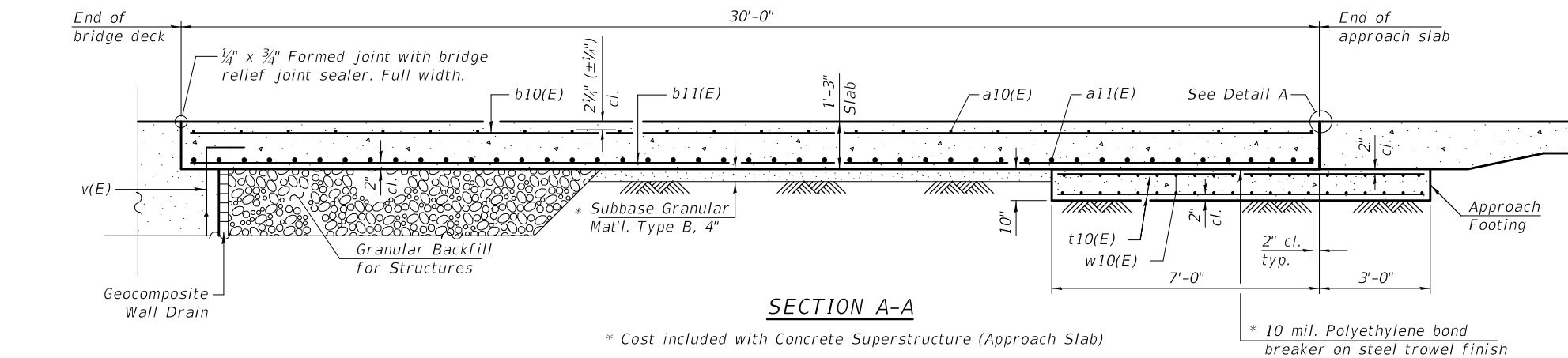
BRIDGE APPROACH SLAB
STRUCTURE NO. 056-3216
KISHWAUKEE VALLEY ROAD OVER TRIB TO RUSH CREEK

SCALE: N.T.S. SHEET 59 OF 518 SHEETS STA. 109+56.37 TO STA. 110+57.37

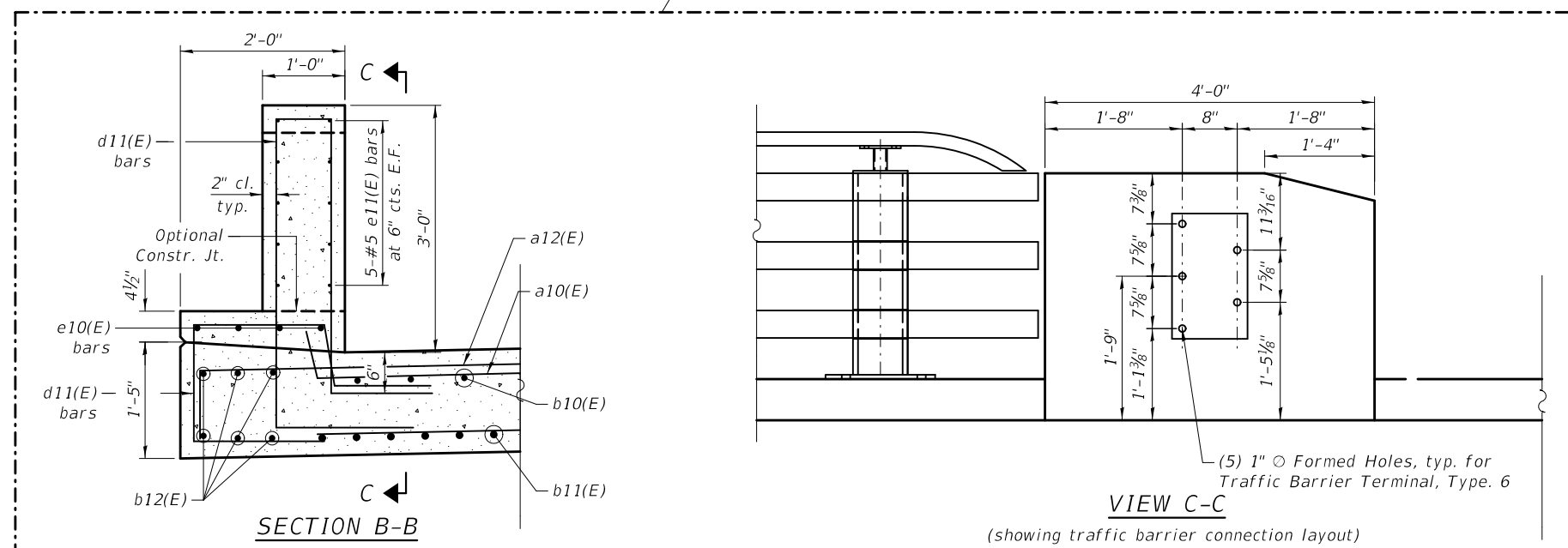
F.A.S. RTE. 0031	SECTION 18-00490-00-BR	COUNTY MCHENRY	TOTAL SHEETS 62	SHEET NO. 41
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61G94	



INSIDE ELEVATION OF RAILING AND CURB



SECTION A-A

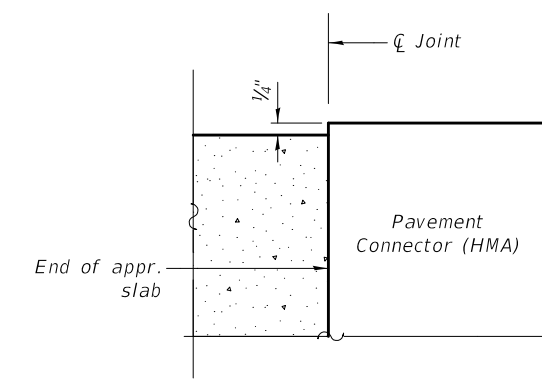


SECTION B-B

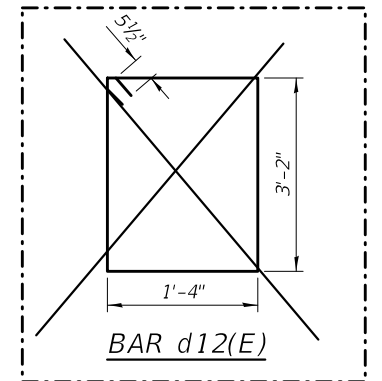
VIEW C-C
(showing traffic barrier connection layout)

Notes:

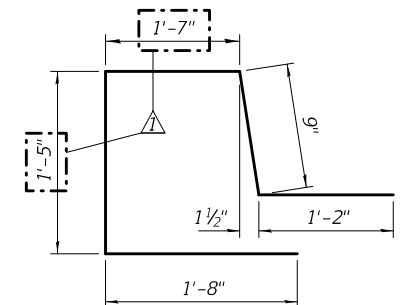
Curb concrete underneath and at the end of the railing shall be paid for as Concrete Superstructure.
Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
Approach footing concrete shall be paid for as Concrete Structures.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
Cost of excavation for approach footing included with Concrete Structures.
For Granular Backfill for Structures and drainage treatment details, see sheet S2.
For Steel Railing (Special) details, see sheet S7 and S8.
For Traffic Barrier Terminal, Type 6 connection details, see Highway Standard 631031-16.



DETAIL A
(Flexible Pavement)



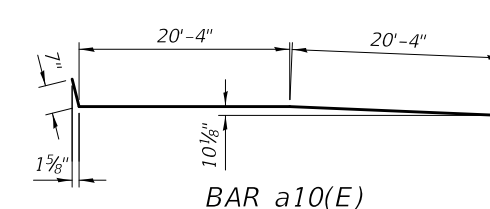
BAR d12(E)



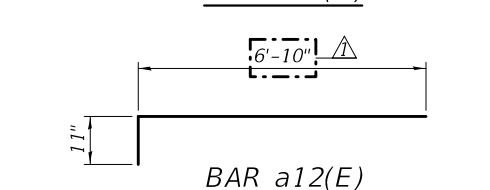
BAR d10(E)

TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a10(E)	92	#5	41'-10"	
a11(E)	120	#8	41'-0"	
a12(E)	92	#5	7'-9"	
b10(E)	124	#5	29'-8"	
b11(E)	198	#9	29'-8"	
b12(E)	24	#5	14'-8"	
b13(E)	4	#4	14'-8"	
d10(E)	92	#5	6'-7"	
d11(E)	24	#5	10'-7"	
e10(E)	16	#4	14'-8"	
e11(E)	20	#5	3'-8"	
t10(E)	168	#4	9'-8"	
w10(E)	80	#5	40'-8"	
Item	Unit	Quantity		
Concrete Structures	Cu. Yd.	25.5		
Concrete Superstructures	Cu. Yd.	4.0		
Bridge Deck Grooving	Sq. Yd.	267		
Protective Coat	Sq. Yd.	297		
Concrete Superstructure (Approach Slab)	Cu. Yd.	119.0		
Reinforcement Bars, Epoxy Coated	Pound	47,720		



BAR a10(E)



BAR a12(E)

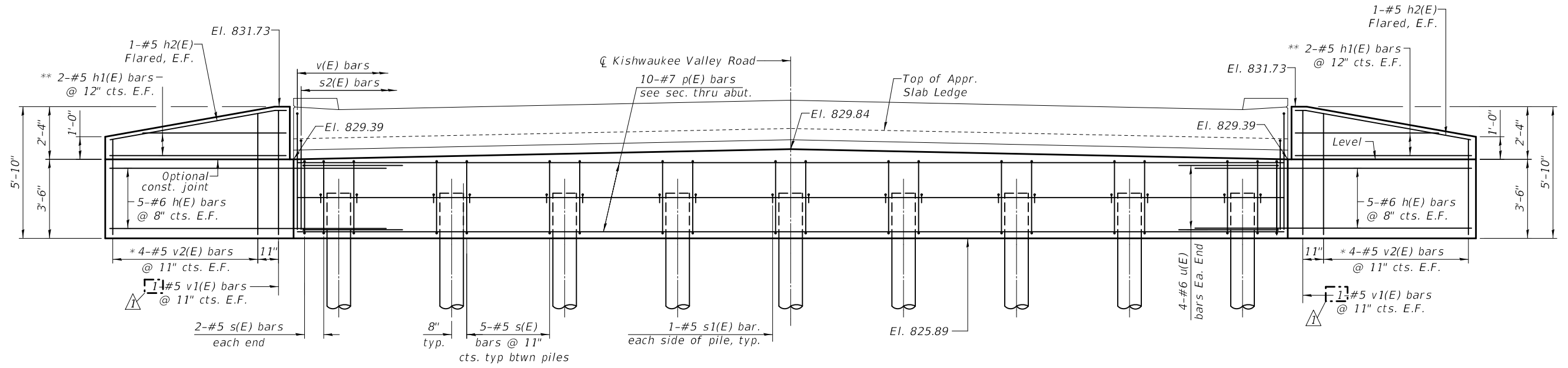
Bar	A	B	C	Length
a11(E)	20'-6"	20'-6"	10 1/4"	41'-0"
w10(E)	20'-4"	20'-4"	10 1/8"	40'-8"

USER NAME = mlang	DESIGNED - K. KOLODZIEJCZYK	REVISED - 4-9-2021
PLOT SCALE = 4,000' / in.	DRAWN - K. KOLODZIEJCZYK	REVISED -
PLOT DATE = 4/9/2021	CHECKED - M. LANGE	REVISED -
	DATE - 12-21-2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS			
STRUCTURE NO. 056-3216			
KISHWAUKEE VALLEY ROAD OVER TRIB TO RUSH CREEK			
SCALE: N.T.S.	SHEET S10 OF 518 SHEETS	STA. 109+56.37 TO STA. 110+57.37	

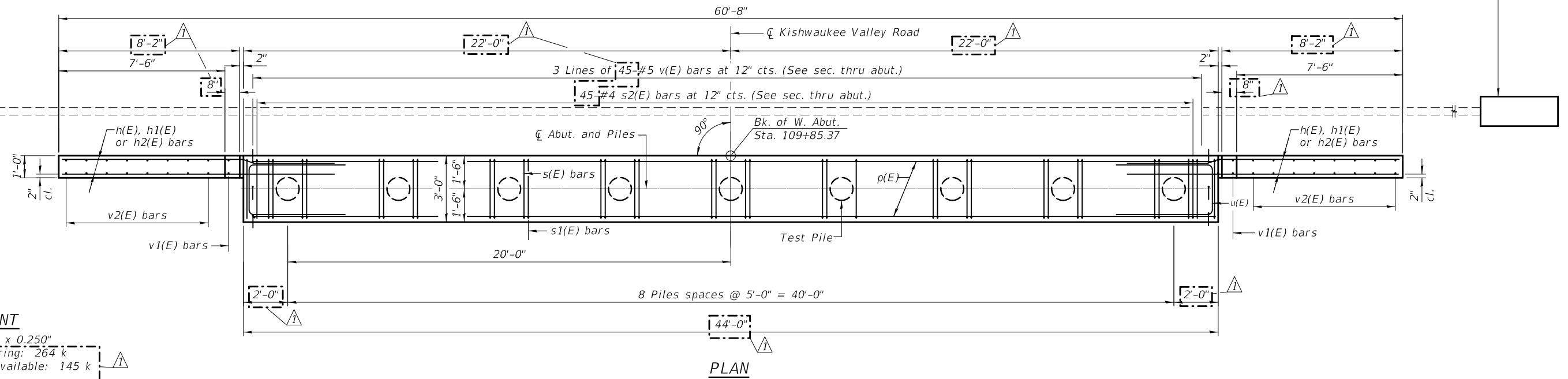
F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0031	18-00490-00-BR	MCHENRY	62	42
				CONTRACT NO. 61G94
ILLINOIS FED. AID PROJECT				



ELEVATION

* See Field Cutting Diagram on Sheet S13
** Cut to fit (as required)

For details of concrete headwall and rodent shield, See IDOT Std. 601101.



PLAN

**PILE DATA
WEST ABUTMENT**

Type: Metal Shell 12" x 0.250"
Nominal Required Bearing: 264 k
Factored Resistance Available: 145 k
Est. Length: 41 ft
No. Production Piles: 8
No. Test Piles: 1

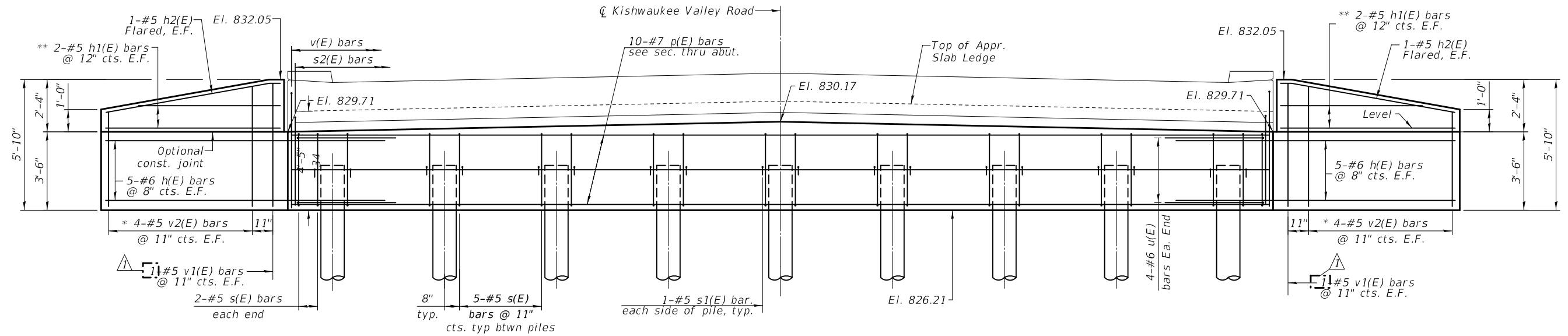
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PLOT SCALE = 5:0.0000 "/>		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

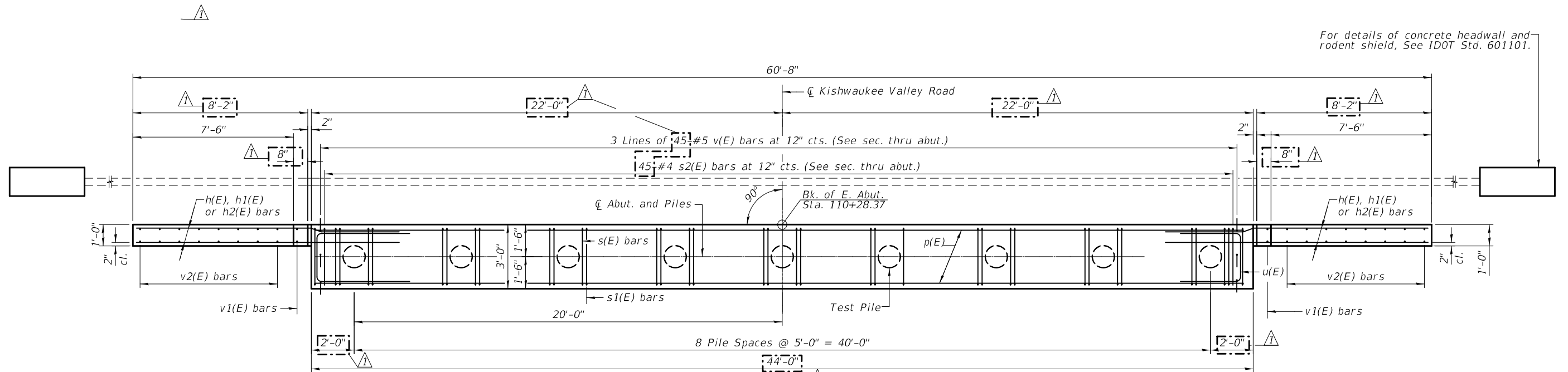
WEST ABUTMENT STRUCTURE NO. 056-3216 KISHWAUKEE VALLEY ROAD OVER TRIB TO RUSH CREEK			
SCALE: N.T.S.	SHEET S11 OF 518 SHEETS	STA. 109+56.37 TO STA. 110+57.37	

F.A.S. RTE. 0031	SECTION 18-00490-00-BR	COUNTY MCHENRY	TOTAL SHEETS 62	SHEET NO. 43
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61G94	



* See Field Cutting Diagram on Sheet S13
** Cut to Fit (as required)

ELEVATION



For details of concrete headwall and rodent shield, See IDOT Std. 601101.

**PILE DATA
EAST ABUTMENT**

Type: Metal Shell 12" x 0.250"
Nominal Required Bearing: 264 k
Factored Resistance Available: 145 k
Est. Length: 48 ft
No. Production Piles: 8
No. Test Piles: 1

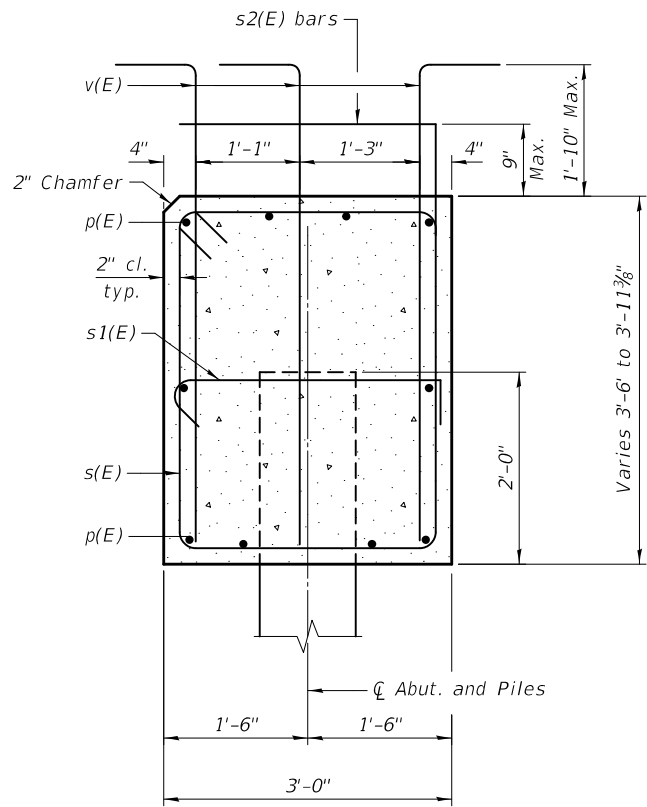
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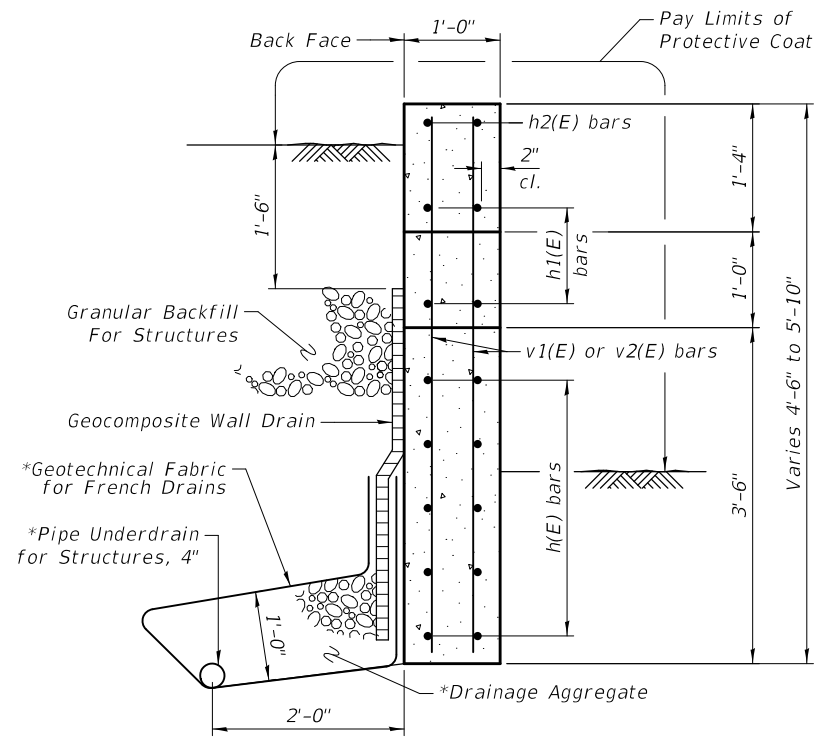
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EAST ABUTMENT STRUCTURE NO. 056-3216 KISHWAUKEE VALLEY ROAD OVER TRIB TO RUSH CREEK			
SCALE: N.T.S.	SHEET 512 OF 518 SHEETS	STA. 109+56.37 TO STA. 110+57.37	

F.A.S. RTE. 0031	SECTION 18-00490-00-BR	COUNTY MCHENRY	TOTAL SHEETS 62	SHEET NO. 44
CONTRACT NO. 61G94			ILLINOIS FED. AID PROJECT	

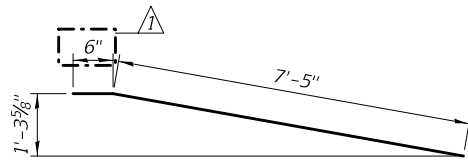


SEC. THRU ABUT.

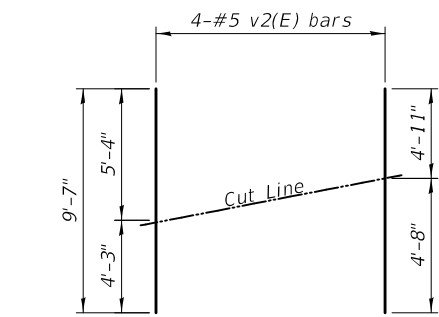


SEC. THRU WINGWALL

*Included in the cost of Pipe Underdrain for Structures, 4"

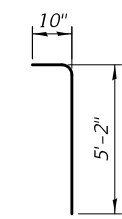


BAR h2(E)

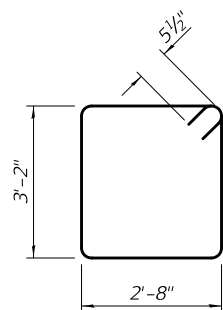


FIELD CUTTING DIAGRAM

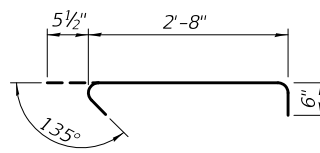
Order v2(E) full length. Cut as shown and use remainder of bars in opposite wing.



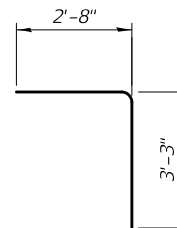
BAR v(E)



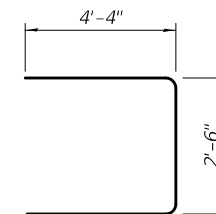
BAR s(E)



BAR s1(E)



BAR s2(E)



BAR u(E)

BILL OF MATERIAL

(Two Abutments)

Bar	No.	Size	Length	Shape
h(E)	40	#6	12'-6"	—
h1(E)	16	#5	7'-10"	—
h2(E)	8	#5	7'-11"	—
p(E)	20	#7	43'-8"	—
s(E)	88	#5	12'-7"	—
s1(E)	36	#5	3'-8"	—
s2(E)	90	#4	5'-11"	—
u(E)	16	#6	11'-2"	—
v(E)	270	#5	6'-0"	—
v1(E)	8	#5	5'-6"	—
v2(E)	32	#5	9'-7"	—

Item	Unit	Quantity
Structure Excavation	Cu. Yd.	112
Protective Coat	Sq. Yd.	94
Concrete Structures	Cu. Yd.	43.0
Reinforcement Bars, Epoxy Coated	Pound	6,710
Furnishing Metal Shell Piles 12"x0.25"	Foot	712
Driving Piles	Foot	712
Test Pile Metal Shells	Each	2
Pile Shoes	Each	18
Geocomposite Wall Drain	Sq. Yd.	59
Granular Backfill for Structures	Cu. Yd.	83
Pipe Underdrains for Structures, 4"	Foot	161

For drainage details, see Section thru Integral Abutment on Sheet S2 for Pipe Underdrain Detail.

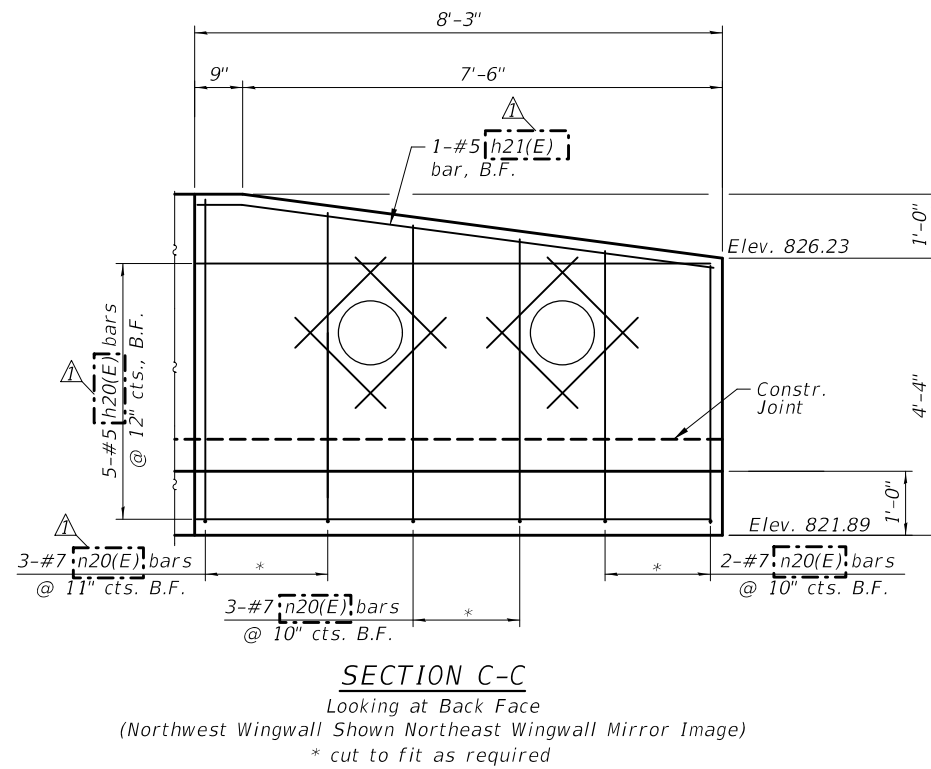
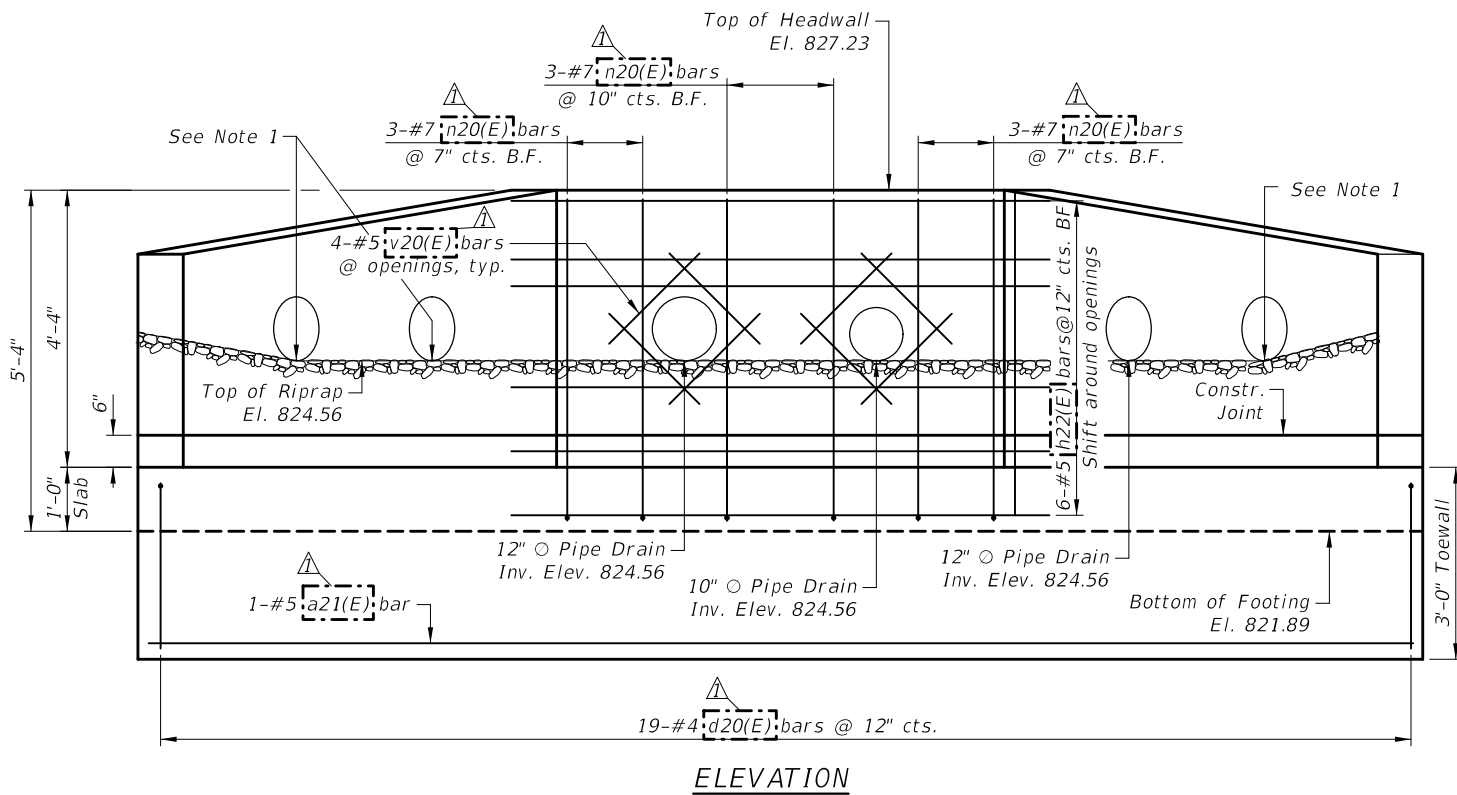
For details of piles see sheet S14.

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	DRAWN - K. KOLODZIEJCZYK	REVISED -
PLOT SCALE = 4:0.0000 " = 1/4" in.	CHECKED - M. LANGE	REVISED -
PLOT DATE = 4/9/2021	DATE - 12-21-2020	REVISED -

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a20(E)	3	#5	24'-8"	—
a21(E)	1	#5	18'-6"	—
b20(E)	12	#5	6'-3"	—
d20(E)	19	#4	5'-4"	┌
h20(E)	10	#5	7'-11"	—
h21(E)	2	#5	8'-1"	—
h22(E)	6	#5	9'-1"	—
n20(E)	25	#7	8'-11"	┌
t20(E)	8	#5	7'-6"	—
t21(E)	4	#5	7'-0"	—
v20(E)	24	#5	2'-0"	—

ITEM	UNIT	QTY
Removal and Disposal of Unsuitable Material	Cu. Yd.	31.1
Geotechnical Fabric for Stabilization	Sq. Yd.	16
Porous Granular Embankment	Cu. Yd.	5.1
Reinforcement Bars	Pound	1,000
Reinforcement Bars, Epoxy Coated	Pound	1,000
Concrete Box Culverts	Cu. Yd.	7.5



NOTES

1. Provide (2) 12" \varnothing holes per wingwall for future pipe drains (Inv. Elev. 824.56) Brick and Mortar each future hole, cost included in concrete box culvert.
2. Culvert end section shall be paid for as Concrete Box Culverts.
3. Culvert end section maximum applied service bearing pressure (Qmax) = 2.0 ksf.
4. Cost of excavation shall be paid for as Removal and Disposal of Unsuitable Material.
- ** 5. Over excavation may be required to reach 2.0ksf service bearing pressure

