

INDEX OF SHEETS

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- 2. SUMMARY OF QUANTITIES, DETAILS, & TYPICAL SECTIONS
- 3. PLAN AND PROFILE
- 4.-12. BRIDGE PLANS
- 13-16. CROSS SECTIONS

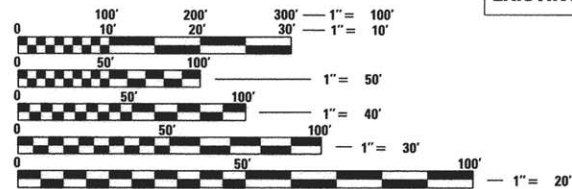
HIGHWAY STANDARDS

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
- 515001-03 NAME PLATE FOR BRIDGES
- 631011-09 TRAFFIC BARRIER TERMINAL, TYPE 2
- 701901-05 TRAFFIC CONTROL DEVICES
- 725001 OBJECT AND TERMINAL MARKERS
- BLR-21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION OF RURAL LOCAL HIGHWAYS
- BLR-27-1 TRAFFIC BARRIER TERMINAL, TYPE 5A

UTILITIES

ELECTRIC: AMEREN ILLINOIS
711 SOUTH 9th STREET
MATTOON, IL 61938
(217)-234-0441

FUNCTIONAL CLASSIFICATION = LOCAL ROAD (NON-URBAN)
DESIGN SPEED = 30 MPH
DESIGN ADT = 50 (2015), 75 (2035)
DESIGN DHV = 6 (2015), 9 (2035)
% TRUCKS = 8% (2035)



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER
PROJECT MANAGER

The Upchurch Group, Inc.
architects - engineers - surveyors
123 North 15th Street
Mattoon, IL 61938
217.235.3177
IL PROFESSIONAL DESIGN FIRM LICENSE NO. 184-003401

CONTRACT NO. 95787

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
STP-BRIDGE

SECTION 13-10113-00-BR
PARADISE ROAD DISTRICT
COLES COUNTY
T.R. 28 OVER BRUSH CREEK
PROPOSED STRUCTURE NO. 015-3430
JOB # C-97-039-14
PROJ # BROS-0029(300)

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
28	13-10113-00-BR	COLES	16	1
ILLINOIS			CONTRACT	95787



LOCATION OF SECTION INDICATED THUS: — —

APPROVED 03/22/16
Neil G. Johnson
COLES COUNTY ENGINEER

APPROVED 03/22/16
Stan Luchoff
PARADISE ROAD COMMISSIONER

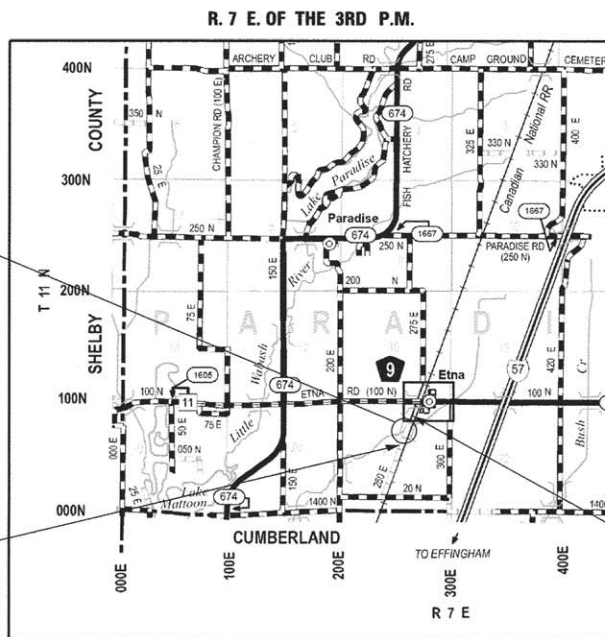
PASSED 3-29-16
Wm. D. Taylor
DISTRICT SEVEN ENGINEER OF LOCAL ROADS & STREETS

Releasing For
Bid Based on
Limited Review 3-29-16
Jeffrey M. Southard
REGION FOUR ENGINEER

PROPOSED S.N. 015-3430 STA. 15 + 00
PRECAST PRESTRESSED CONCRETE DECK BEAM
BRIDGE (27" DEPTH) SINGLE SPAN, 60'-0" BK-BK ABUT.
27'-0" ROADWAY, SKEW = 40 DEGREES RT. AHEAD
EXISTING S.N. 015-3066

BEGIN IMPROVEMENTS
STA. 12 + 50

END IMPROVEMENTS
STA. 16 + 50



LOCATION MAP

GROSS LENGTH = 400 FT. = 0.075 MILES
NET LENGTH = 400 FT. = 0.075 MILES



Andy L. Baker
Andy L. Baker Date 3/21/2016
Licensed Professional Engineer
State of Illinois No. 062-057920
Expires 11-30-2017

SUMMARY OF QUANTITIES

CODE	ITEM	UNIT	QUANTITY
20100500	TREE REMOVAL, ACRES	ACRES	0.2
20200100	EARTH EXCAVATION	CU. YD.	367
20300100	CHANNEL EXCAVATION	CU. YD.	331
25000200	SEEDING, CLASS 2	ACRE	0.50
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	45
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	45
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	45
25100115	MULCH, METHOD 2	ACRE	0.50
28100107	STONE RIPRAP, CLASS A4	SQ. YD.	315
28200200	FILTER FABRIC	SQ. YD.	315
28400100	GABIONS	CU. YD.	21
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	256
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50200100	STRUCTURE EXCAVATION	CU. YD.	40
50300225	CONCRETE STRUCTURES	CU. YD.	30.1
50300280	CONCRETE ENCASEMENT	CU. YD.	3.5
50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ. FT.	1573
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	4355
50900205	STEEL RAILING, TYPE S1	FOOT	120
51201400	FURNISHING STEEL PILES HP10x42	FOOT	300
51202305	DRIVING PILES	FOOT	300
51203400	TEST PILE STEEL HP10x42	EACH	2
51500100	NAME PLATES	EACH	1
54200220	PIPE CULVERTS, CLASS D, TYPE 1, 15"	FOOT	48
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU. YD.	68.0
63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1
63100075	TRAFFIC BARRIER TERMINAL, TYPE 5A	EACH	1
67100100	MOBILIZATION	L. SUM	1
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4

• SEE SPECIAL PROVISIONS
 Δ SPECIALTY ITEMS

EARTHWORK SCHEDULE

1 LOCATION	2 EARTH EXCAVATION CU YD	3 STRUCTURE EXCAVATION CU YD	4 CHANNEL EXCAVATION CU YD	5 EARTH EXCAVATION ADJUSTED FOR SHRINKAGE CU YD	6 EMBANKMENT CU YD	7 EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) CU YD
STA 12+50 TO STA 14+70	310	12		242	355	-113
STA 15+30 TO STA 16+50	57	28		64	76	-12
CHANNEL			298	224		224
TOTAL	367	40	298	530	431	+99

COLUMN 1,2,&6 - LOCATION AND QUANTITIES FROM CROSS SECTIONS,
 CUT = EARTH EXCAVATION FILL = EMBANKMENT

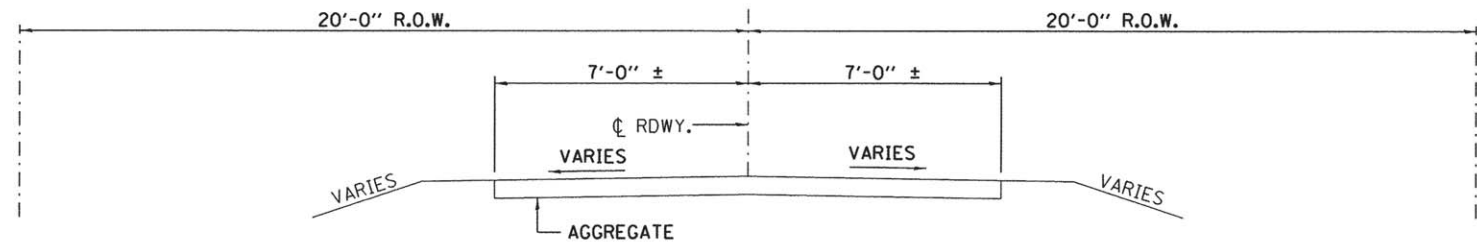
COLUMN 3 - QUANTITIES OF STRUCTURAL EXCAVATION (CUT) FROM BRIDGE PLANS

COLUMN 4 - QUANTITY OF CHANNEL EXCAVATION (CUT) REDUCED 10% FOR UNSUITABLE MATERIAL FOR USE AS FILL

COLUMN 5 - QUANTITY OF EARTH EXCAVATION (CUT) ADJUSTED FOR A SHRINKAGE FACTOR OF 25%

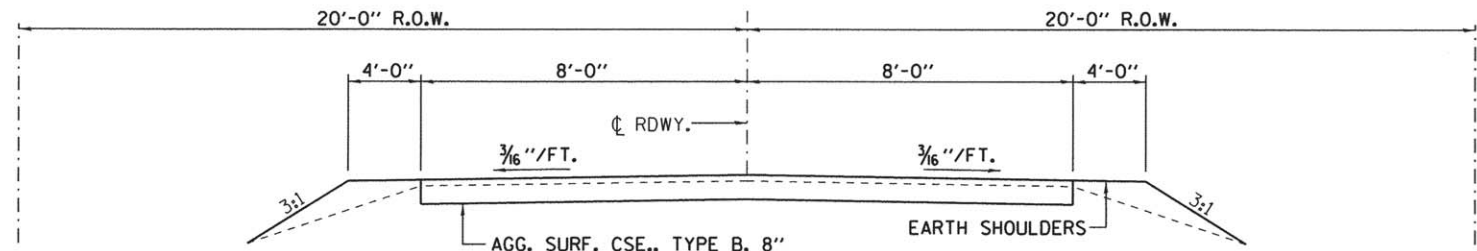
COLUMN 7 - EARTHWORK BALANCE (-) = QUANTITY OF FURNISHED EXCAVATION NEEDED EARTHWORK BALANCE
 (+) = QUANTITY OF EARTH EXCAVATION ADJUSTED FOR SHRINKAGE TO BE WASTED

*COST OF DISPOSING EXCESS CHANNEL AND STRUCTURE EXCAVATION SHALL BE INCLUDED IN COST OF EARTH EXCAVATION.



EXISTING APPROACH ROADWAY SECTION

STA. 12+50 TO 14+70
 STA. 15+30 TO 16+50

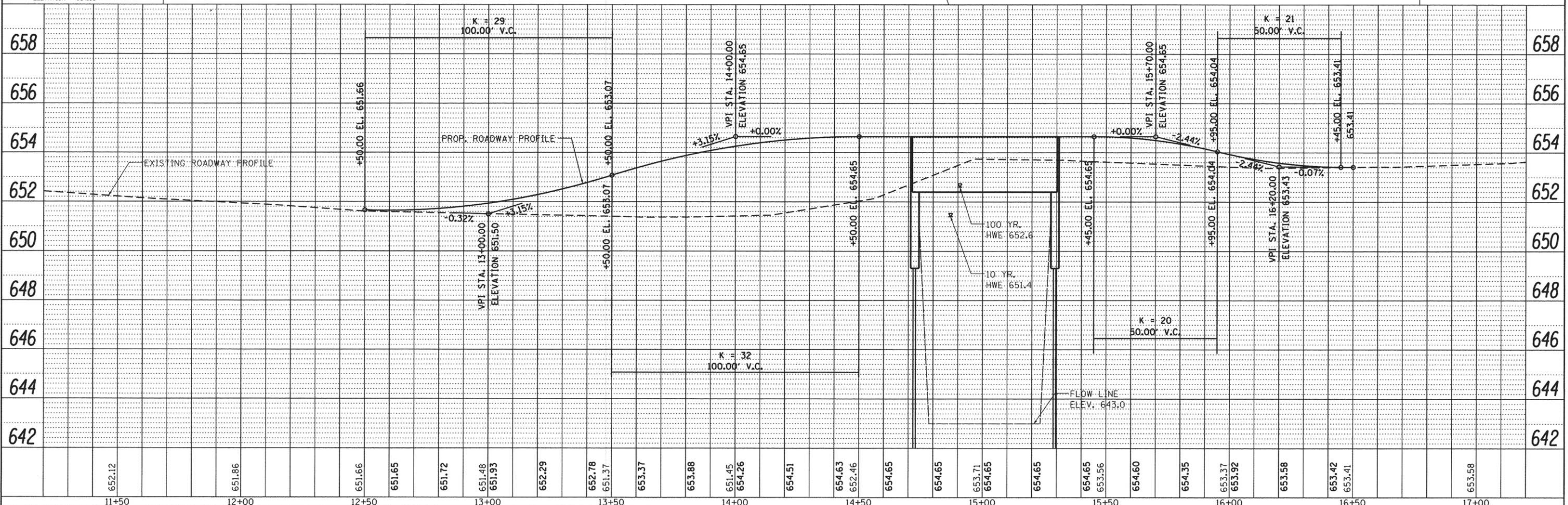
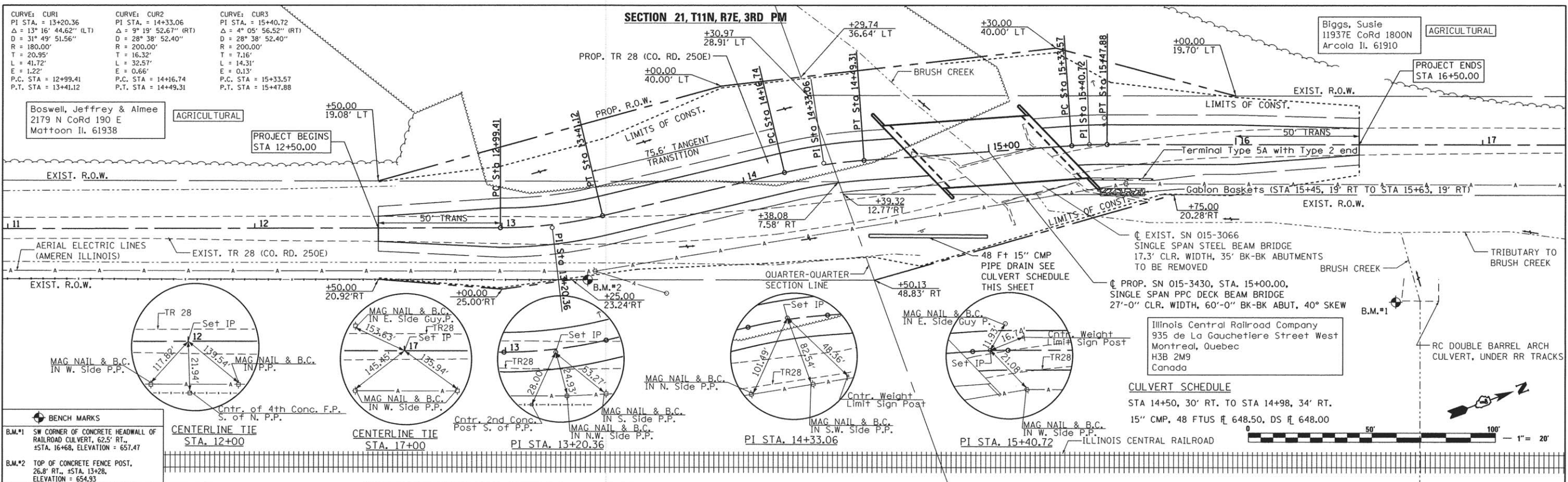


PROPOSED APPROACH ROADWAY SECTION

STA. 12+50 TO 14+70
 STA. 15+30 TO 16+50

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED APRIL 1, 2016, THESE PLANS, AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
- ALL CLEARING AND GRUBBING, FENCE REMOVAL, AND REMOVAL OF EXISTING DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. THE REMOVAL OF THE EXISTING AGGREGATE SURFACE SHALL BE PAID FOR AS EARTH EXCAVATION. ANY OIL AND CHIP MATERIAL SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR OR IN A METHOD APPROVED BY THE ENGINEER. PROPER DISPOSAL OF OIL AND CHIP MATERIAL SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- THE LOCATION OF EXISTING UTILITIES AS SHOWN ON THE PLANS ARE BASED ON FIELD INVESTIGATION AND THE BEST INFORMATION AVAILABLE. HOWEVER, THE EXACT LOCATIONS ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE INDIVIDUAL UTILITY COMPANIES AND BY FIELD INSPECTION.
- TEMPORARY EROSION CONTROL TO BE IMPLEMENTED AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AT ALL TIMES WITHIN THE CONSTRUCTION AREAS AND PREVENT DRAINAGE OR PONDING OF WATER ONTO PRIVATE PROPERTY.
- TREES WITHIN THE RIGHT-OF-WAY WHICH INTERFERE WITH CONSTRUCTION ACTIVITIES SHALL BE REMOVED ONLY AT THE DIRECTION OF THE ENGINEER. THE AREA DESIGNATED FOR REMOVAL SHALL BE CLEARLY MARKED AND MEASURED FOR PAYMENT BY THE ENGINEER PRIOR TO REMOVAL.
- ALL DISTURBED EARTH SURFACES WITHIN THE LIMITS OF THE R.O.W. AND EASEMENTS SHALL BE SEEDING AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER IN REGARD TO THE EXACT LENGTHS OF PIPE CULVERTS PRIOR TO ORDERING THESE ITEMS.
- THE FOLLOWING APPLICATION RATES HAVE BEEN USED TO CALCULATE PLAN QUANTITIES:
 AGGREGATE SURFACE COURSE = 2.05 TONS PER CU. YD.
 STONE RIPRAP, CLASS A4 = 1.75 TONS PER CU. YD.
 NITROGEN FERTILIZER NUTRIENT = 90 LBS PER ACRE
 PHOSPHOROUS FERTILIZER NUTRIENT = 90 LBS PER ACRE
 POTASSIUM FERTILIZER NUTRIENT = 90 LBS PER ACRE
 MULCH, METHOD 2 = 2 TONS PER ACRE



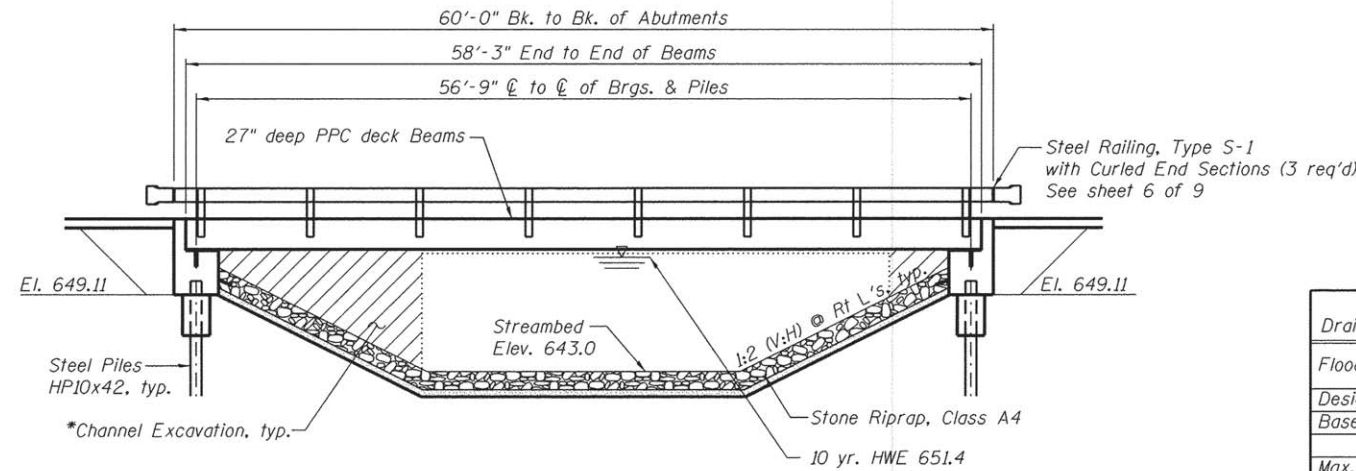
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FILE NAME =	USER NAME = Stc34	DESIGNED -	REVISED -	The Upchurch Group 123 North 15th Street Mattoon, Illinois 61938 <small>Professional Design Firm Corporation License No. 184-003401</small>	PLAN AND PROFILE PARADISE ROAD DISTRICT, COLES COUNTY, ILLINOIS SCALE: 1"=20' SHEET OF SHEETS STA. 11+00 TO STA. 17+50.00	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
P:\Civil\COLES_COUNTY\Paradise_5.6114018\Plan & Profile.Revised.Profile.New.Align.Mat	DRAWN dgn	REVISED -	REVISED -			28	13-10113-00-BR	COLES	16	3
PLOT SCALE = 20.000000 / in.	CHECKED -	REVISED -	REVISED -			PARADISE ROAD DISTRICT		CONTRACT NO. 95787		
Default	PLOT DATE = 3/21/2016	DATE -	REVISED -			ILLINOIS FED. AID PROJECT				

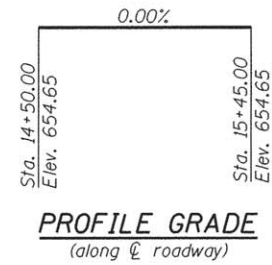
Bench Marks: SW corner of RR culvert concrete headwall at Sta. 16+68, 62.5' Rt., Elev. 657.47, & top of concrete post at Sta. 13+28, 26.8' Rt., Elev. 654.93.

Existing Structure: S.N. 015-3066 was built in 1939. Existing structure is a single span steel beam bridge with timber planks, on closed concrete abutments, 35' back to back abutments, and 17.3' width of deck. Road shall be closed to traffic during construction.



ELEVATION

*Channel shall be excavated as shown with 2:1 slopes within the ROW. Suitable excavated materials may be used in embankments.



WATERWAY INFORMATION

Drainage Area = 3.04 mi² Exist. Low Grade Elev. 651.4 @ Sta. 13+50
Prop. Low Grade Elev. 651.7 @ Sta. 12+50

Flood Yr.	Freq.	C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	916	146.0	342.2	651.4	0.0	0.0	651.5	651.4
Base	100	1800	149.4	370.0	652.6	0.0	0.0	652.6	652.6
Max. Calc.	500	2490	149.4	370.0	653.2	0.0	0.0	653.1	653.2

10 year velocity through existing bridge = 3.7 fps
10 year velocity through prop. bridge = 3.0 fps

DESIGN SPECIFICATIONS
2013 AASHTO LRFD Bridge Design Specifications, 7th Edition

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

DESIGN STRESSES
FIELD UNITS

f'_c = 3,500 psi
 f_y = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

f'_c = 6,000 psi
 f_{ci} = 5,000 psi
 f'_s = 270,000 psi ($\frac{1}{2}$ " ϕ low lax. strands)
 f_{si} = 201,960 psi ($\frac{1}{2}$ " ϕ low lax. strands)

SEISMIC DATA

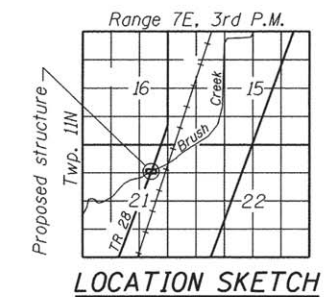
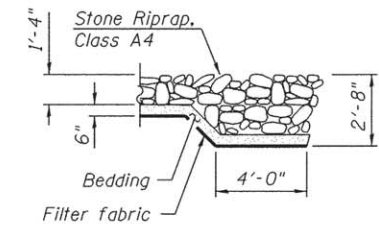
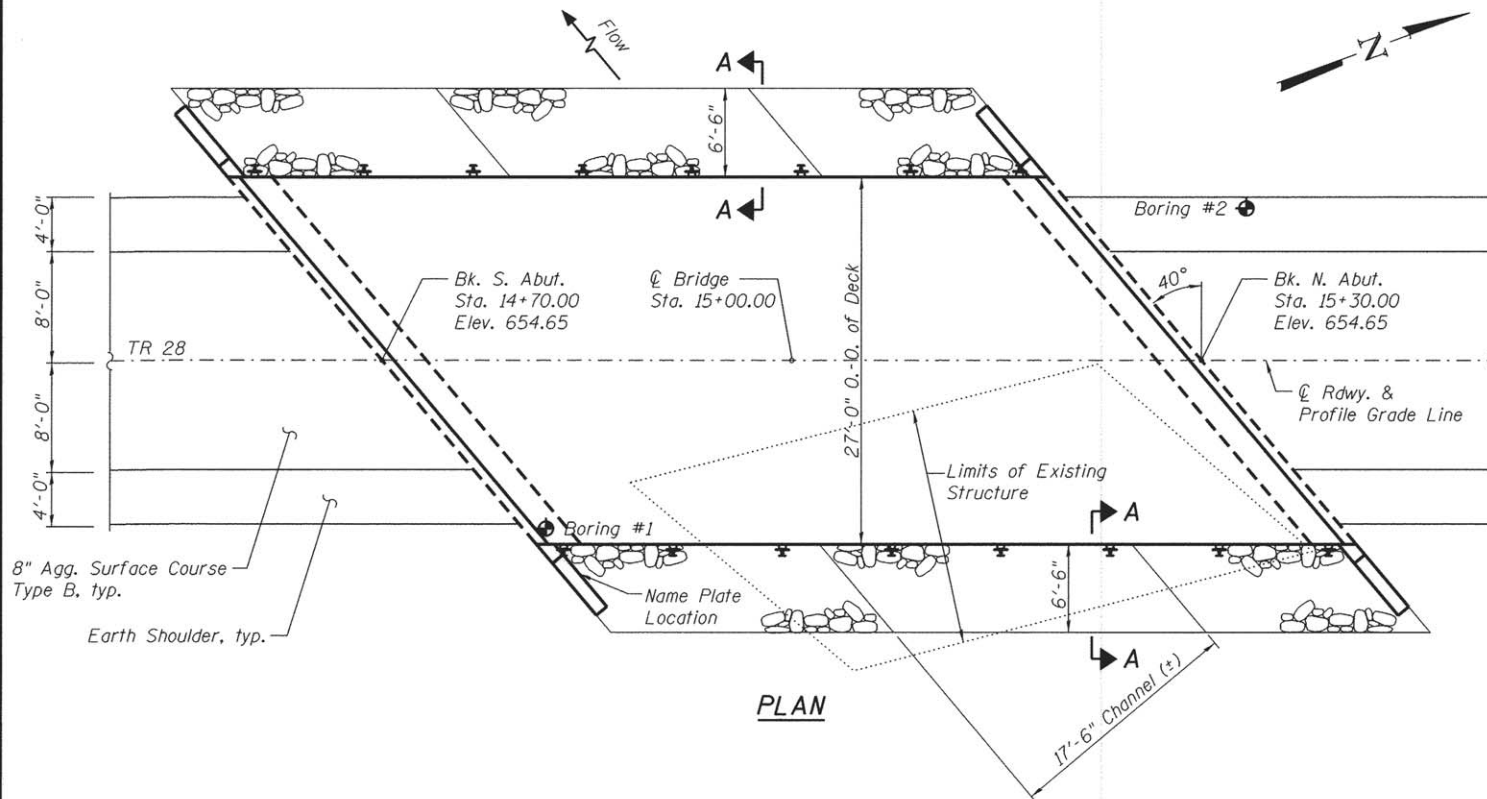
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.131g
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.293g
Soil Site Class = C

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	E. Abut.
	649.11	649.11

INDEX OF SHEETS

1. General Plan and Elevation
2. General Data
3. 27" x 36" PPC Deck Beam
4. 27" x 36" PPC Deck Beam Details
5. Superstructure Details
6. Steel Railing, Type S-1
7. Abutment Details
8. HP Pile Details
9. Boring Logs



Martin J. Silvester
Date 3/18/2016
Licensed Structural Engineer
State of Illinois No. 081-004873
Expires 11-30-2016



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

GENERAL PLAN AND ELEVATION
T.R. 28 OVER BRUSH CREEK
SEC. 13-10113-00-BR
COLES COUNTY
STATION 15+00.00
STRUCTURE NO. 015-3430

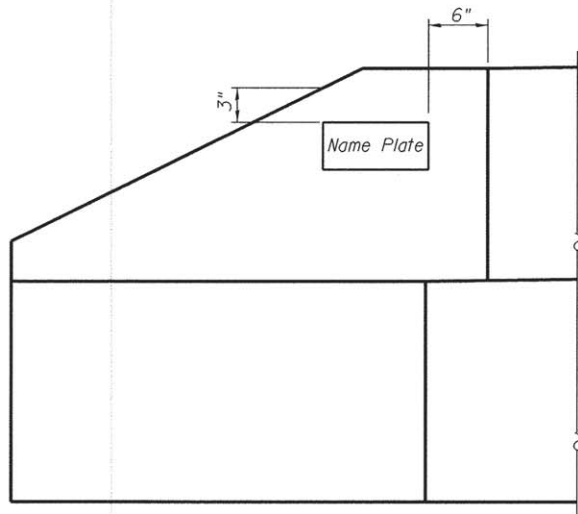
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		CHECKED - ALB	REVISED -			28	13-10113-00-BR	COLES	16	4	
		DRAWN - ADB	REVISED -			PARADISE ROAD DISTRICT		CONTRACT No. 95787			
		CHECKED - ALB	REVISED -			ILLINOIS FED. AID PROJECT					

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
 Reinforcement bars designated (E) shall be epoxy coated.
 Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
 The Contractor shall drive one test pile in a permanent location at the North and South Abutments to 110% of the nominal required bearing specified as directed by the Engineer in the field prior to ordering the remainder of piles.

T.R. 28 OVER BRUSH CREEK
 BUILT 20 BY
 PARADISE ROAD DISTRICT
 COLES COUNTY
 SEC. 13-10113-00-BR
 STA. 15+00.00
 STR. NO. 015-3430 LOADING HL-93

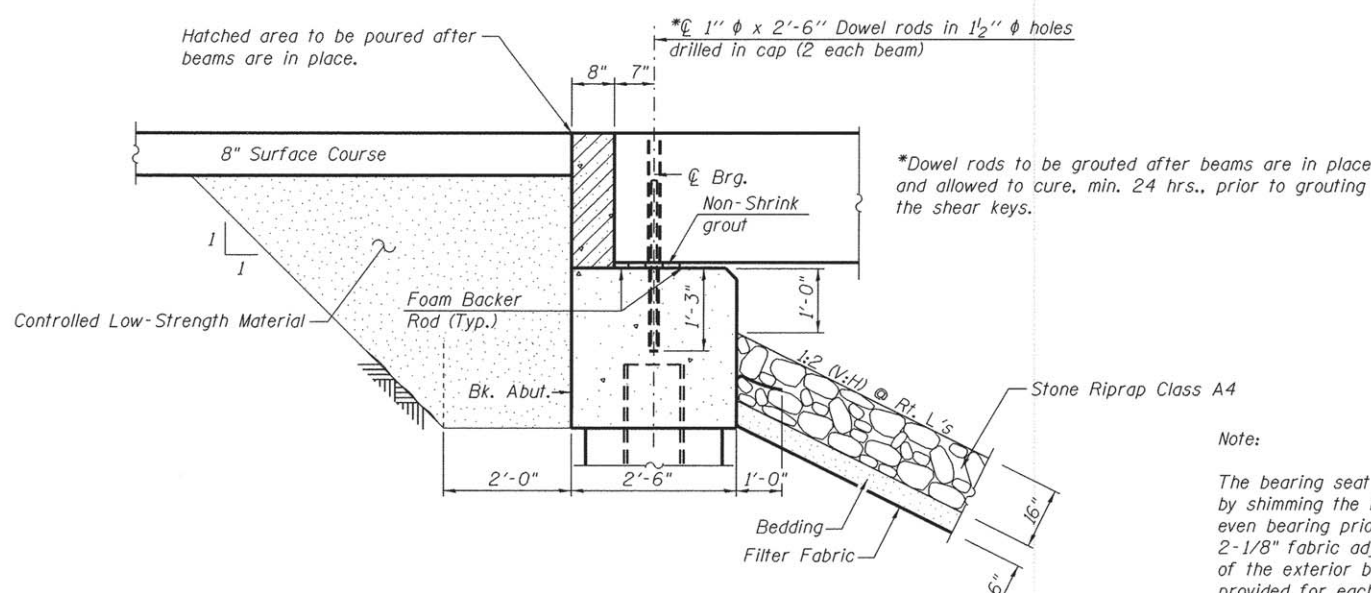
NAME PLATE
 See Std. 515001



SOUTHEAST WINGWALL ELEVATION

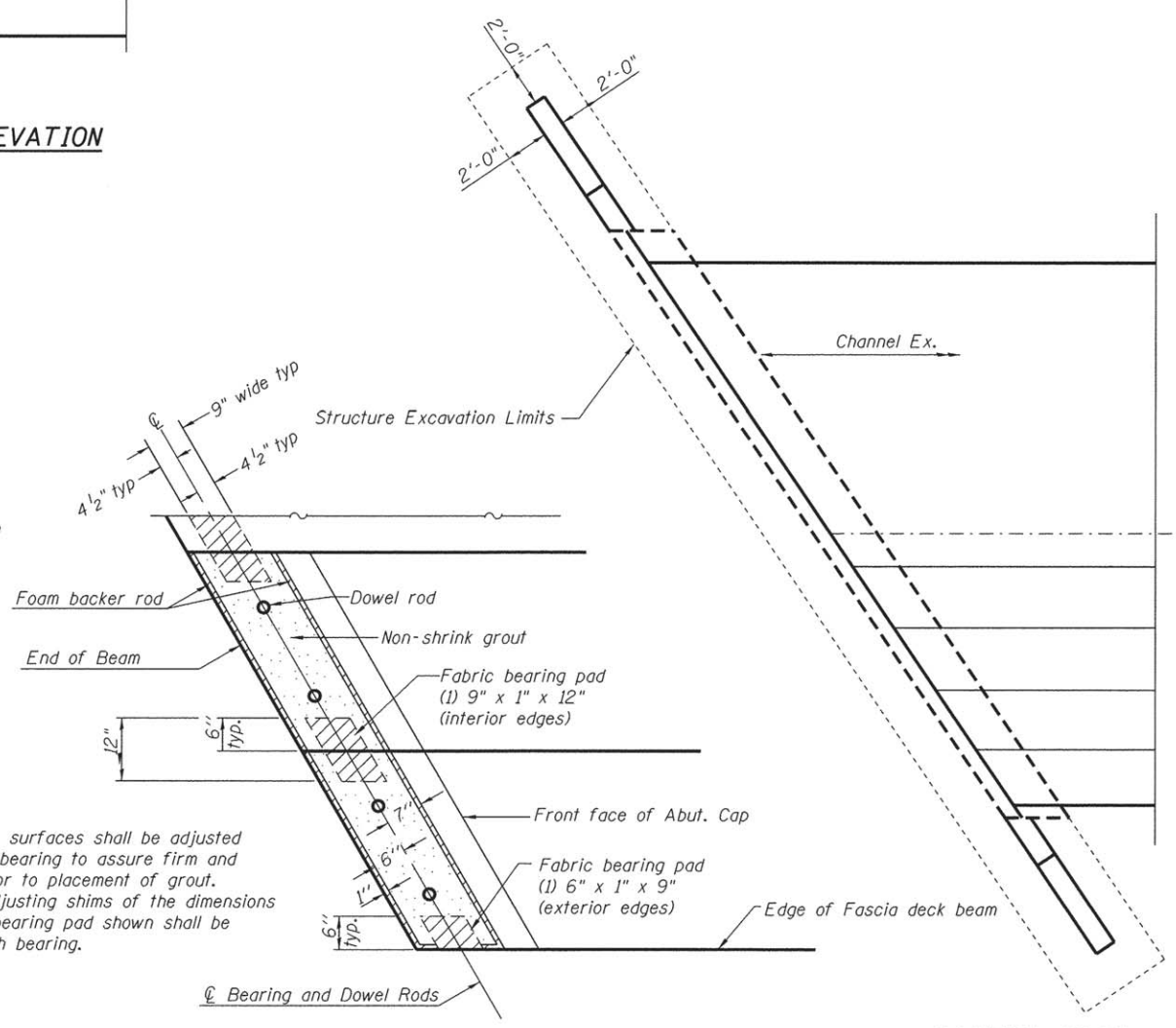
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			331
Stone Riprap, Class A4	Sq. Yd.		315	315
Filter Fabric	Sq. Yd.		315	315
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		40	40
Concrete Structures	Cu. Yd.		30.1	30.1
Concrete Encasement	Cu. Yd.		3.5	3.5
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	1573		1573
Reinforcement Bars, Epoxy Coated	Pound		4355	4355
Steel Railing, Type S1	Foot	120		120
Furnishing Steel Piles HP10x42	Foot		300	300
Driving Piles	Foot		300	300
Test Pile Steel HP10x42	Each		2	2
Name Plates	Each		1	1
Controlled Low-Strength Material	Cu. Yd.		68	68



SECTION THRU ABUTMENT

Pay limits of Controlled Low-Strength Material shall extend to within 2'-6" from the end of each wingwall. Place up to the bottom of Aggregate Surface Course, Type B.



FIXED BEARINGS AT ABUTMENT

PARTIAL PLAN

Note:
 The bearing seat surfaces shall be adjusted by shimming the bearing to assure firm and even bearing prior to placement of grout. 2-1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shown shall be provided for each bearing.

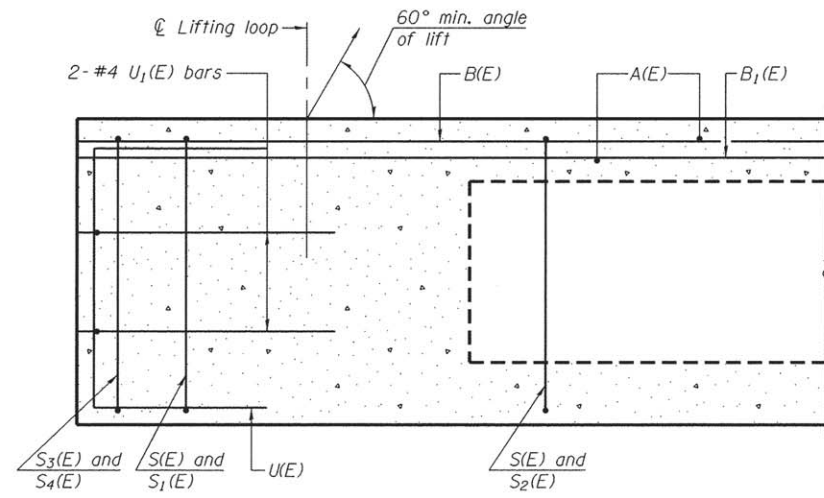
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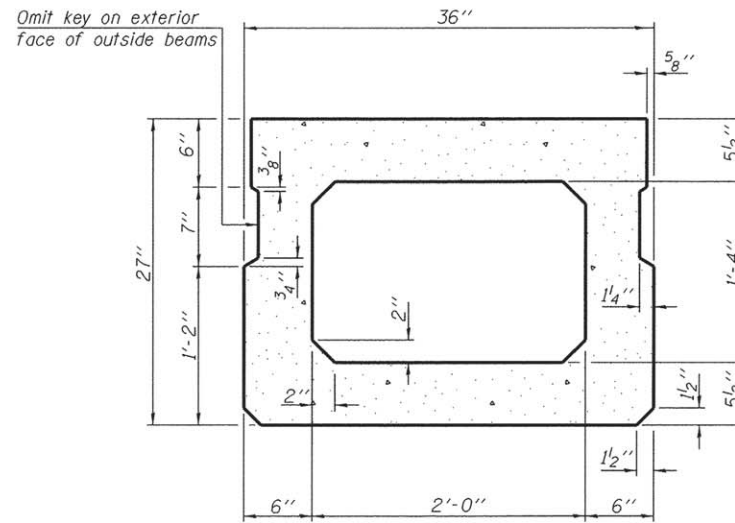
**STATE OF ILLINOIS
 COLES COUNTY HIGHWAY DEPARTMENT**

**GENERAL DATA
 STRUCTURE NO. 015-3430**
 SHEET NO. 2 OF 9 SHEETS

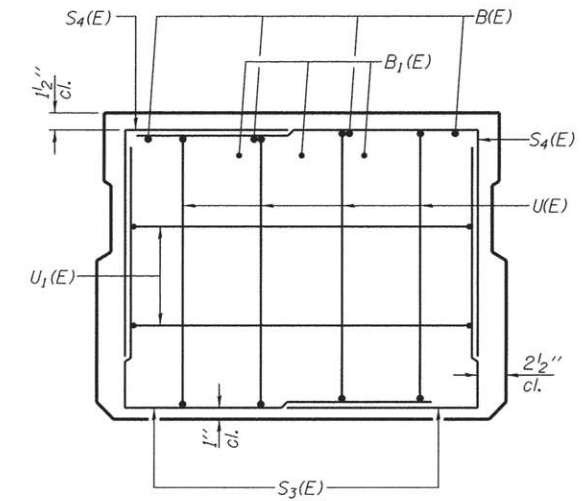
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
28	13-10113-00-BR	COLES	16	5
PARADISE ROAD DISTRICT		CONTRACT NO. 95787		
ILLINOIS FED. AID PROJECT				



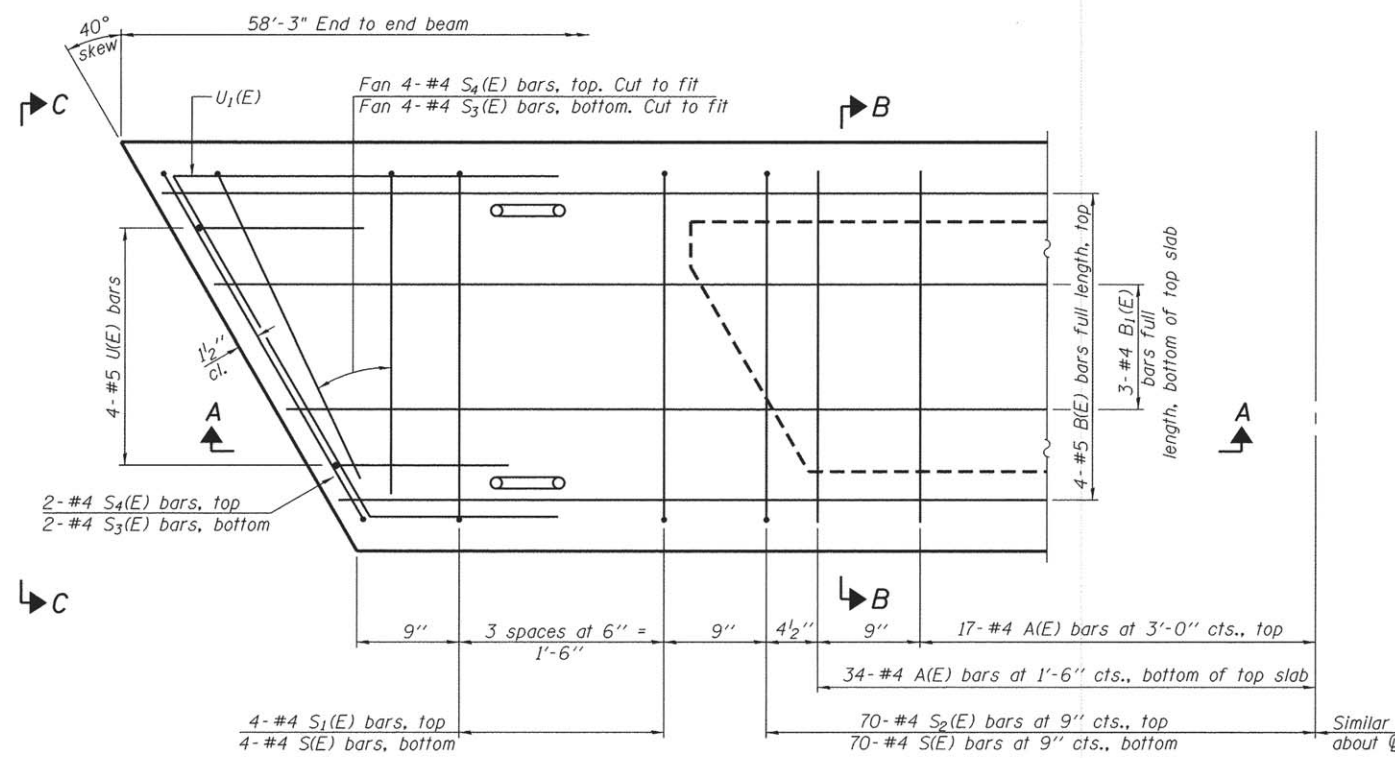
SECTION A-A



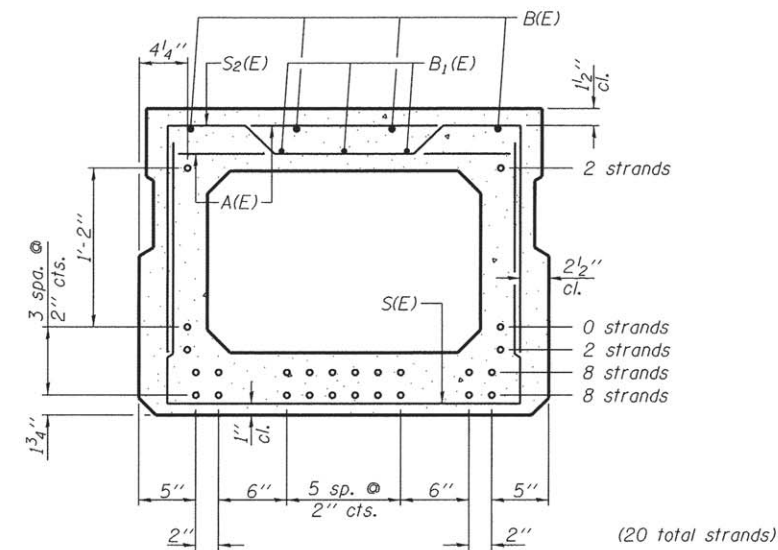
SECTION B-B
(Showing dimensions)



VIEW C-C



PLAN VIEW



SECTION B-B
(Showing reinforcement and permissible strand locations)
Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	51	#4	2'-7"	—
B(E)	8	#5	30'-3"	—
B1(E)	9	#4	20'-8"	—
S(E)	74	#4	6'-5"	┌
S1(E)	4	#4	5'-11"	┌
S2(E)	70	#4	6'-2"	┌
S3(E)	12	#4	4'-4"	┌
S4(E)	12	#4	4'-4"	┌
U(E)	8	#5	4'-6"	┌
U1(E)	4	#4	7'-10"	┌

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

MINIMUM BAR LAP
#4 bar = 2'-0"
#5 bar = 2'-6"

Note: 1. See sheet 4 of 9 for additional details and Bill of Material.
2. Reinforcement designated (E) shall be epoxy coated.

PD-2736-R 7-1-10

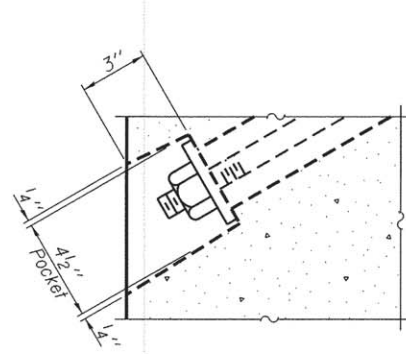
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STATE OF ILLINOIS
COLES COUNTY HIGHWAY DEPARTMENT

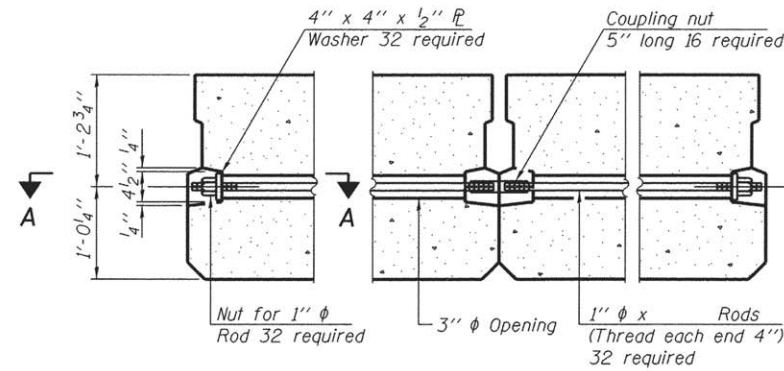
27" x 36" PPC DECK BEAM
STRUCTURE NO. 015-3430
SHEET NO. 3 OF 9 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
28	13-10113-00-BR	COLES	16	6
PARADISE ROAD DISTRICT		CONTRACT NO. 95989		
ILLINOIS FED. AID PROJECT				

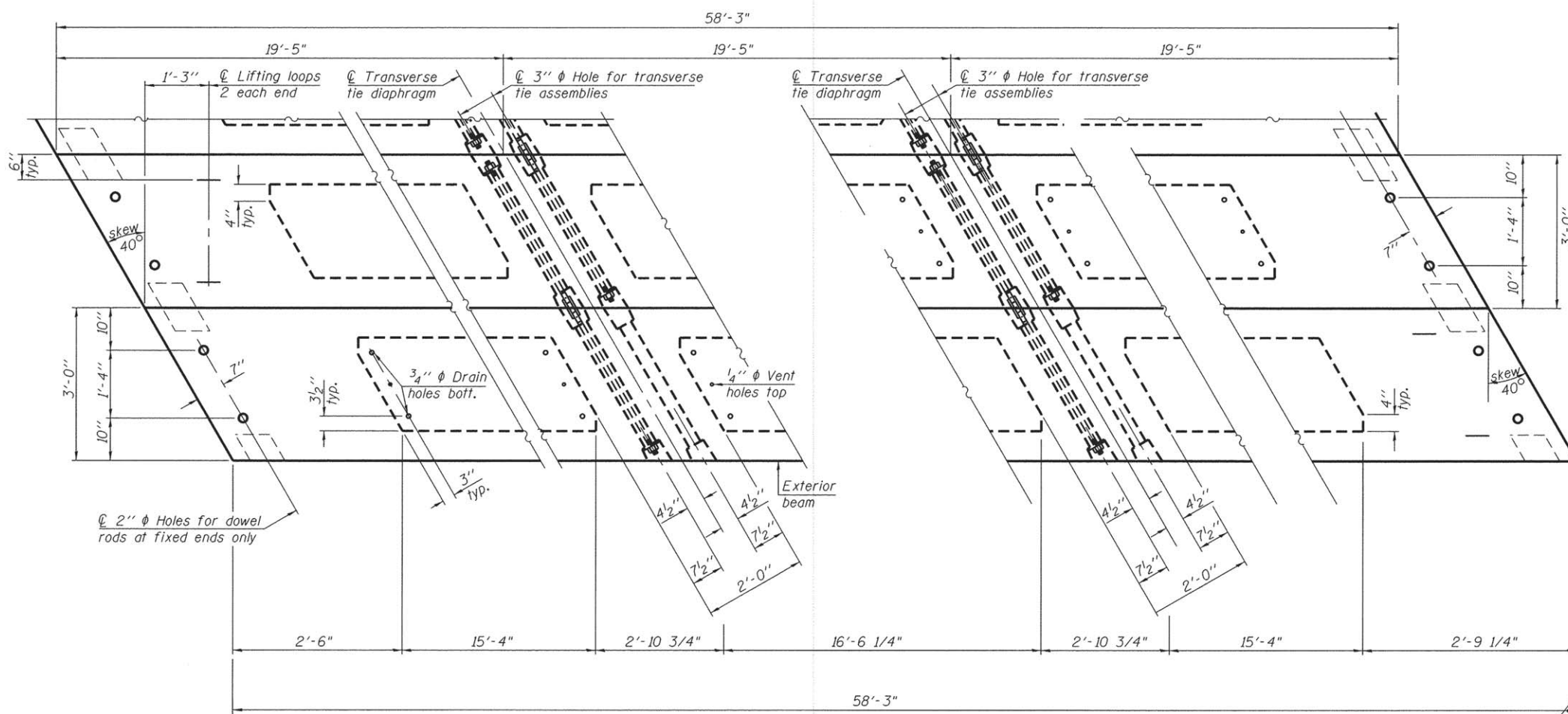
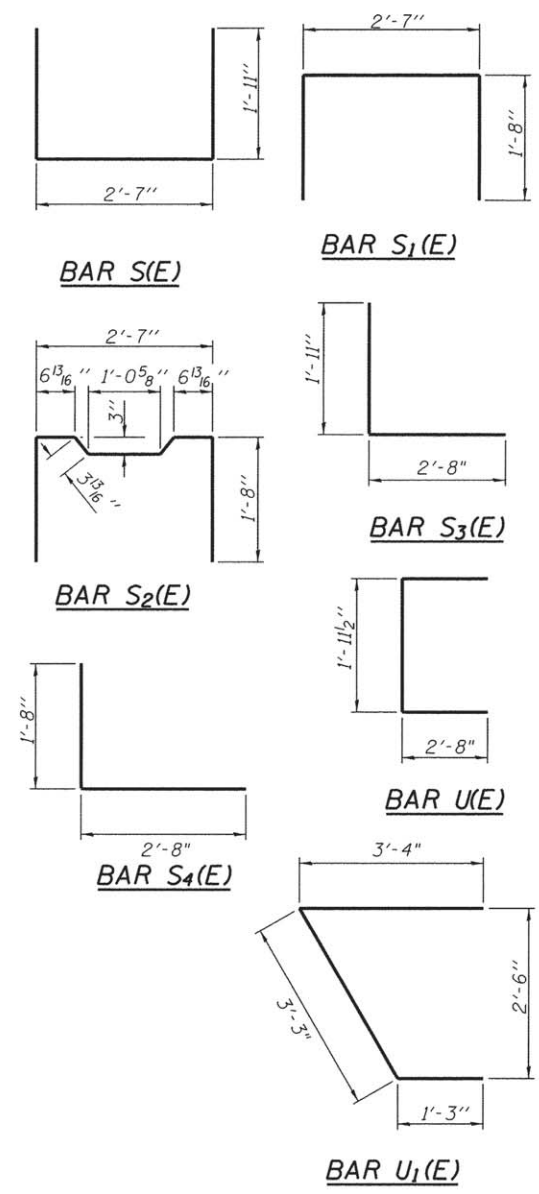
STRUCTURE NO. 015-3430



SECTION A-A



TYPICAL TRANSVERSE TIE ASSEMBLY

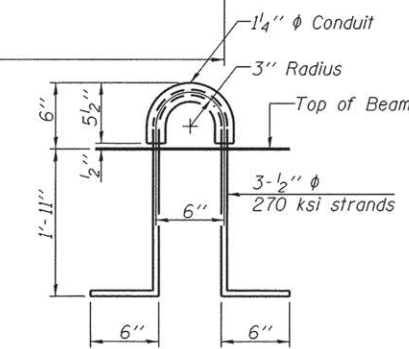


PLAN VIEW

NOTES

Note: Connect beams in pairs with the transverse tie configuration shown.

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place. Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions). A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling. Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Compressive strength of prestressed concrete, f'c, shall be 6000 psi. Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.



LIFTING LOOP DETAIL

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (27" depth)	Sq. Ft.	1573
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PD-2736-RD 7-1-10

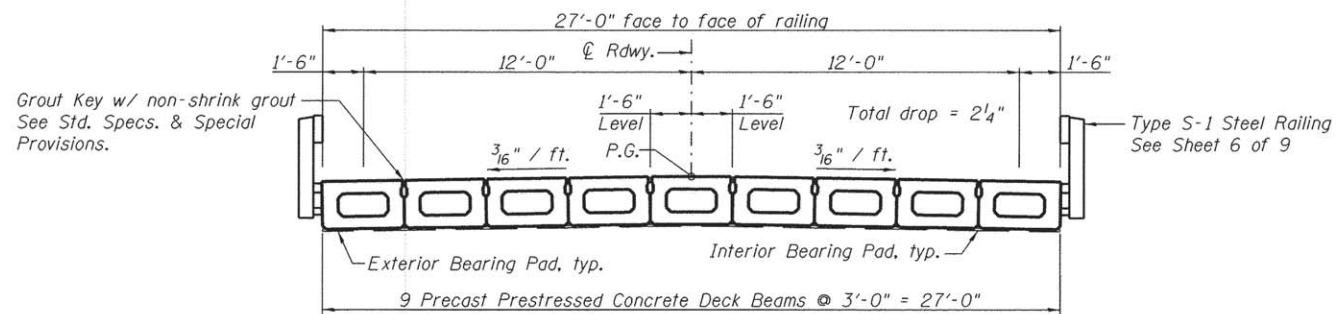
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STATE OF ILLINOIS
COLES COUNTY HIGHWAY DEPARTMENT

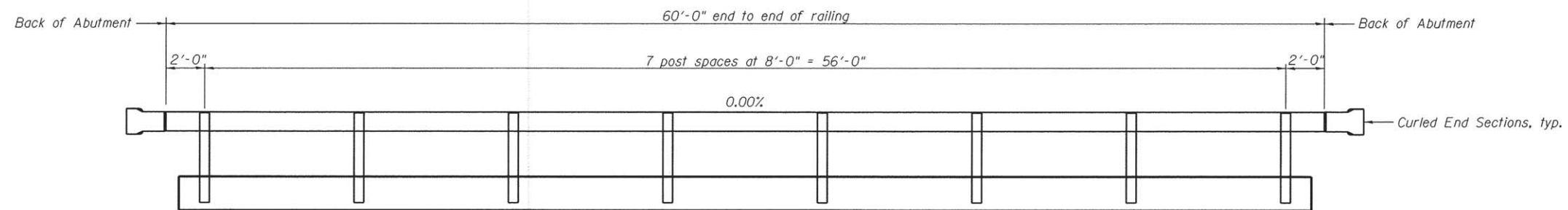
27" x 36" PPC DECK BEAM DETAILS
STRUCTURE NO. 015-3430
SHEET NO. 4 OF 9 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
28	13-10113-00-BR	COLES	16	7
PARADISE ROAD DISTRICT		CONTRACT No. 95797		
ILLINOIS FED. AID PROJECT				

STRUCTURE NO. 015-3430



TYPICAL CROSS SECTION



RAIL POST SPACING

STRUCTURE NO. 015-3430

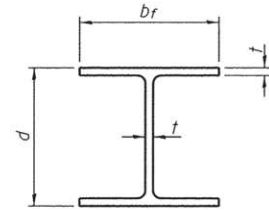
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**STATE OF ILLINOIS
COLES COUNTY HIGHWAY DEPARTMENT**

**SUPERSTRUCTURE DETAILS
STRUCTURE NO. 015-3430**

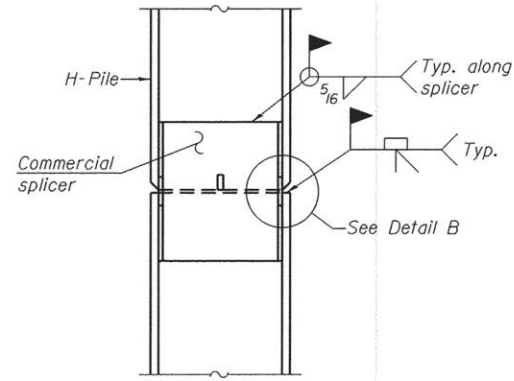
SHEET NO. 5 OF 9 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
28	13-10113-00-BR	COLES	16	8
PARADISE ROAD DISTRICT			CONTRACT No. 95787	
ILLINOIS FED. AID PROJECT				

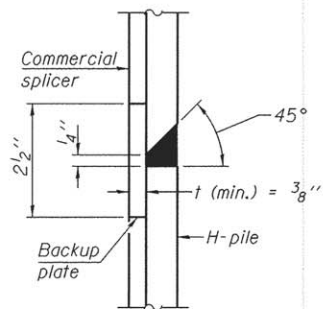


STEEL PILE TABLE

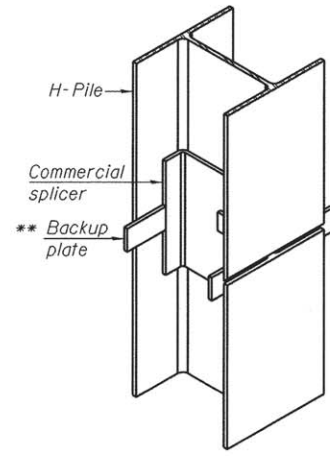
Designation	Depth d	Flange width b _f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"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



ELEVATION

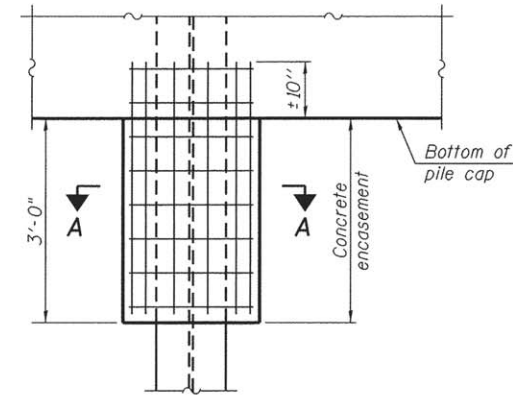


DETAIL "B"

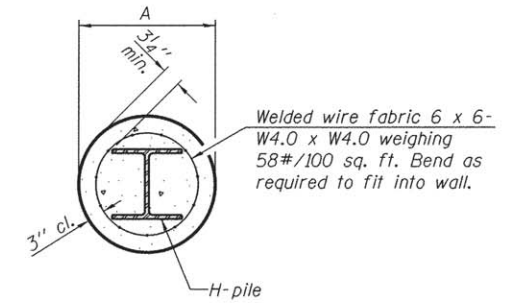


ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE

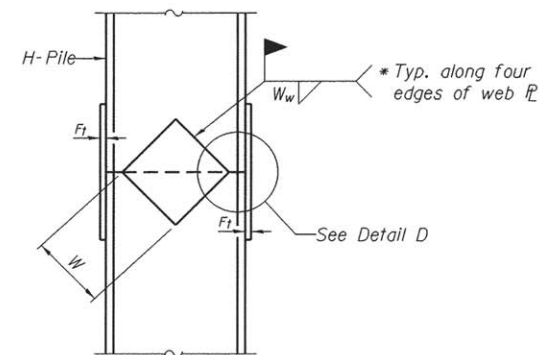


ELEVATION

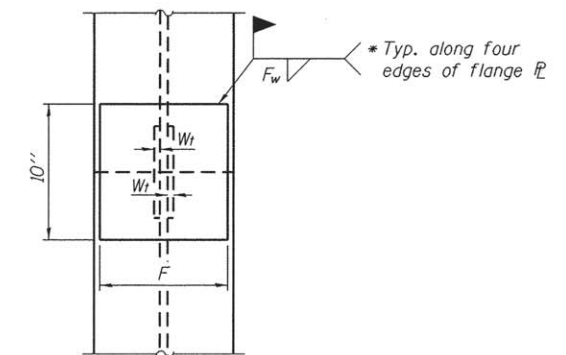


SECTION A-A

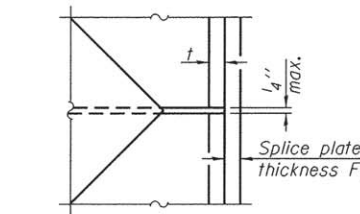
PILE ENCASEMENT



ELEVATION



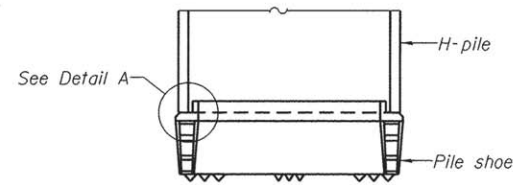
END VIEW



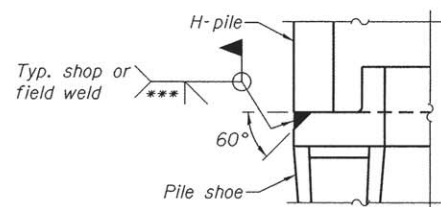
DETAIL D

WELDED PLATE FIELD SPLICE

Designation	F	F _t	F _w	W	W _t	W _w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	11/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

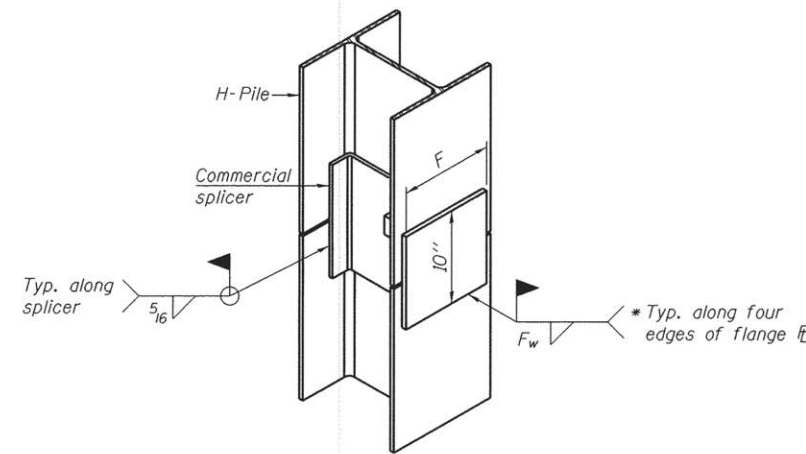


ELEVATION



DETAIL A

H-PILE SHOE ATTACHMENT



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).

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

F-HP

1-27-12

FILE NAME =	USER NAME =	DESIGNED - ADB	REVISED -
		CHECKED - ALB	REVISED -
		DRAWN - ADB	REVISED -
		CHECKED - ALB	REVISED -

**STATE OF ILLINOIS
COLES COUNTY HIGHWAY DEPARTMENT**

**HP PILE DETAILS
STRUCTURE NO. 015-3430**

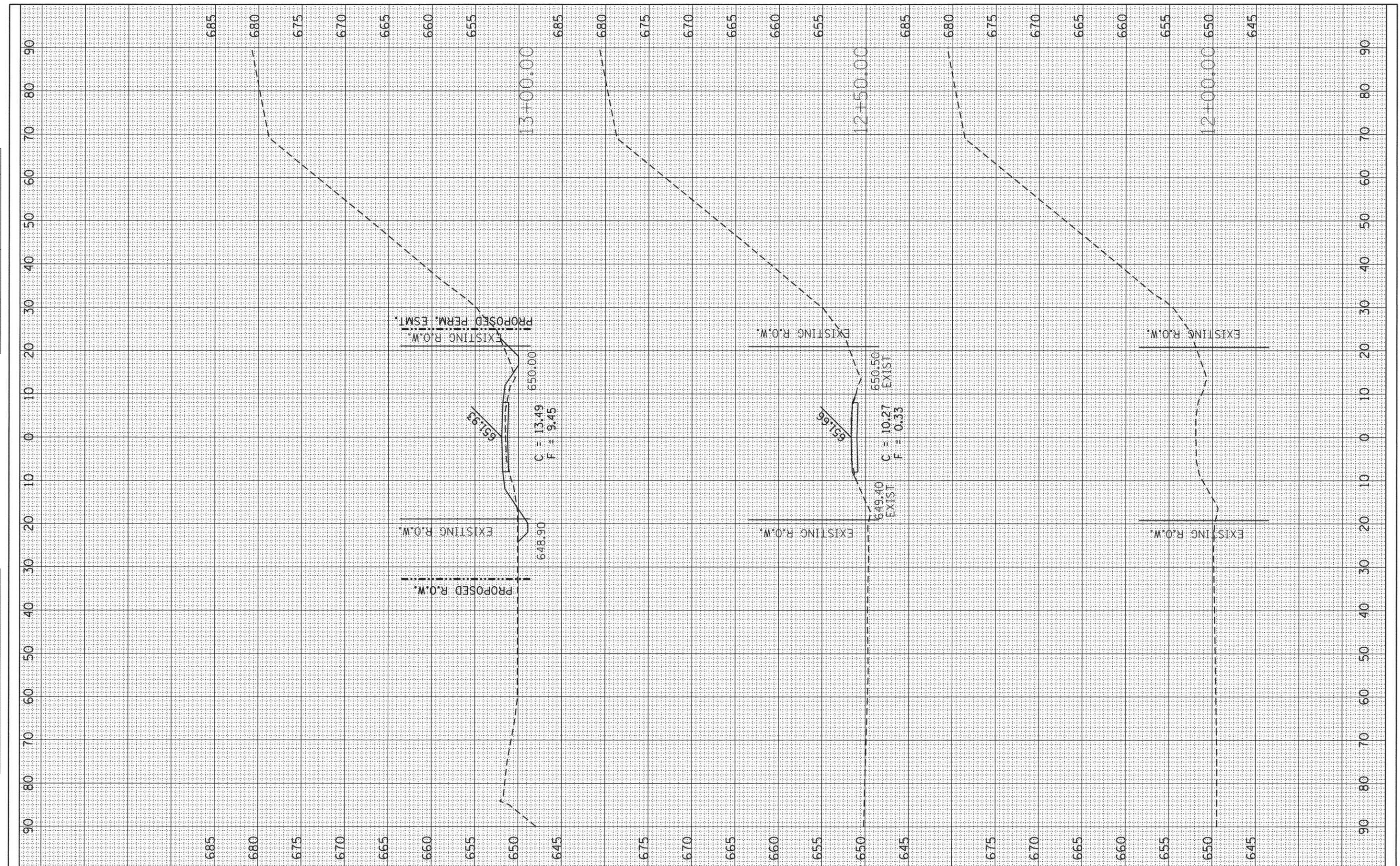
SHEET NO. 8 OF 9 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
28	13-10113-00-BR	COLES	16	11
PARADISE ROAD DISTRICT		CONTRACT No. 95787		
ILLINOIS FED. AID PROJECT				

STRUCTURE NO. 015-3430

FINAL SURVEY PLOTTED DATE: _____
 SURVEYED BY: _____
 NOTE BOOK NO.: _____
 AREAS CHECKED: _____

ORIGINAL SURVEY PLOTTED DATE: _____
 SURVEYED BY: _____
 NOTE BOOK NO.: _____
 AREAS CHECKED: _____



FILE NAME =	USER NAME = Sta34	DESIGNED -	REVISED -
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		CHECKED -	REVISED -
Default		DATE -	REVISED -
	PLOT SCALE = 18,0000' / in.		
	PLOT DATE = 3/21/2016		

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SCALE:	SHEET	OF	SHEETS	STA. 12+00.00	TO STA. 13+00.00
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR28	13-10113-00-BR	COLES	16	13
CONTRACT NO. 95787				
ILLINOIS FED. AID PROJECT				

