

INDEX OF SHEETS

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STANDARDS

STD. NO.	DESCRIPTION
280001-05	TEMPORARY EROSION CONTROL SYSTEMS
515001-03	NAME PLATE FOR BRIDGES
701901-01	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
BLR 21-8	TRAFFIC CONTROL
BLR 22-6	TRAFFIC CONTROL

STATE OF ILLINOIS
**PLANS FOR THE PROPOSED
HIGHWAY BRIDGE PROGRAM**

PROJECT NO. BROS-029 (289)
JOB NO. C-97-079-10
COUNTY HIGHWAY 17
OVER MILL CREEK
SECTION 92-00109-00-BR
COLES COUNTY

SUMMARY OF QUANTITIES

ITEM NO.	ITEMS	UNIT	QUANTITY
20100500	TREE REMOVAL, ACRES	ACRE	0.3
20200100	EARTH EXCAVATION	CU. YD.	4681
20300100	CHANNEL EXCAVATION	CU. YD.	186.0
28000305	TEMPORARY DITCH CHECKS	FOOT	372
28000400	PERIMETER EROSION BARRIER	FOOT	1800
28100107	STONE RIPRAP, CLASS A4	SQ. YD.	319.0
28200200	FILTER FABRIC	SQ. YD.	367.0
28300400	AGGREGATE DITCH	TON	210.0
35101400	AGGREGATE BASE COURSE, TYPE B	TON	1175
40300100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	853
40300300	BITUMINOUS MATERIALS (COVER AND SEAL COATS)	GALLON	2358
40300500	COVER COAT AGGREGATE	TON	60.0
40300600	SEAL COAT AGGREGATE	TON	30.0
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1.0
50105220	PIPE CULVERT REMOVAL	FOOT	93.0
50200100	STRUCTURE EXCAVATION	CU. YD.	33.0
50300225	CONCRETE STRUCTURES	CU. YD.	18.6
50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ. FT.	1316.0
50800105	REINFORCEMENT BARS	POUND	1920
* 50900205	STEEL RAILING, TYPE S1	FOOT	94.0
51200958	FURNISHING METAL SHELL PILES 14" x 0.250"	FOOT	183.0
51202305	DRIVING PILES	FOOT	183.0
51203200	TEST PILE METAL SHELLS	EACH	1.0
51500100	NAME PLATES	EACH	1.0
54200217	PIPE CULVERTS, CLASS D, TYPE 1 12"	FOOT	66.0
54200223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	32.0
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	1.2
67100100	MOBILIZATION	EACH	1.0

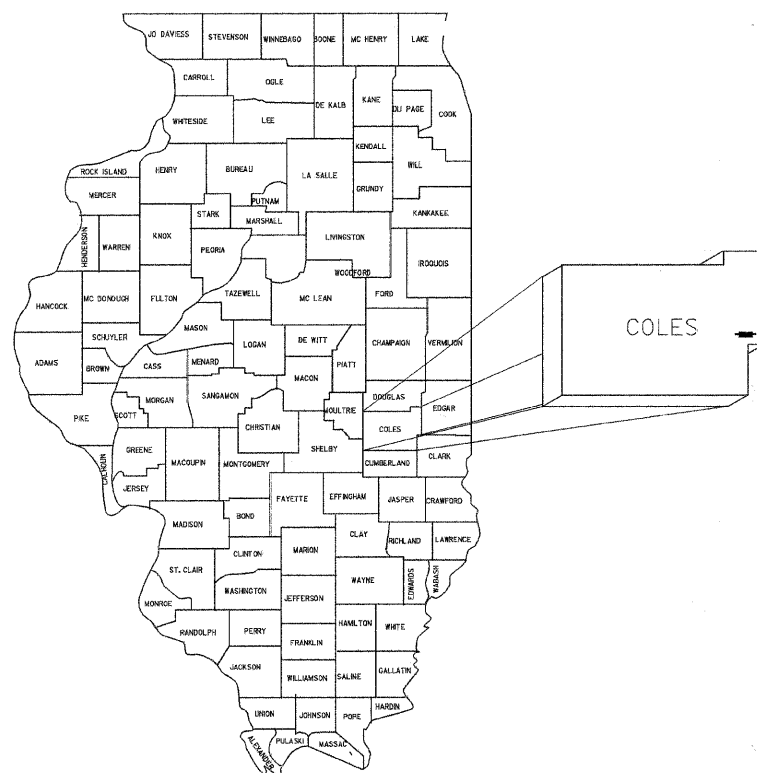
* SPECIALTY ITEMS

UTILITY COMPANIES

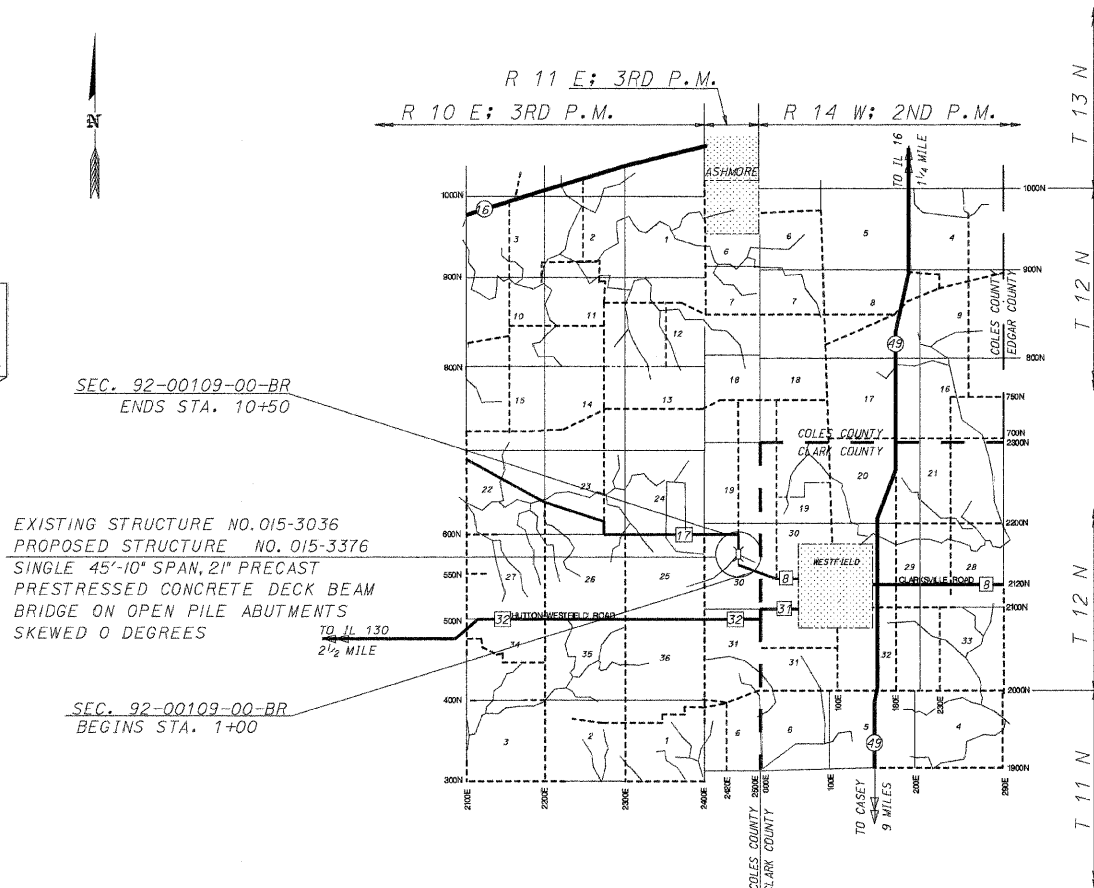
**VERIZON
225 EAST CHESTNUT
OLNEY, ILLINOIS, 62450
MR. GENE BRAUER
1-618-395-6191

**COLES MOULTRIE ELECTRIC
P.O. BOX 709
MATTOON, ILLINOIS, 61938
MR. STEVE UNDERWOOD
1-888-661-2632

TOLL FREE JOINT UTILITY
LOCATING INFORMATION
FOR EXCAVATORS (J.U.L.I.E.)
TELEPHONE # 1-800-892-0123



LOCATION OF SECTION INDICATED THUS: -



SEC. 92-00109-00-BR
ENDS STA. 10+50

EXISTING STRUCTURE NO. 015-3036
PROPOSED STRUCTURE NO. 015-3376
SINGLE 45'-10" SPAN, 21" PRECAST
PRESTRESSED CONCRETE DECK BEAM
BRIDGE ON OPEN PILE ABUTMENTS
SKEWED 0 DEGREES

SEC. 92-00109-00-BR
BEGINS STA. 1+00

LOCATION MAP

SCALE 1 INCH = 1 MILE
NET LENGTH OF SECTION = 950 FEET (0.18 MILES)

FUNCTIONAL CLASSIFICATION: LOCAL ROAD ADT LESS THAN 150

DESIGN SPEED = 30 MPH

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED
BY ME OR UNDER MY DIRECT SUPERVISION,
AND THAT I AM A DULY LICENSED STRUCTURAL AND
PROFESSIONAL ENGINEER UNDER THE LAWS OF THE
STATE OF ILLINOIS.

Robert L. McClintock DATE: 01/28/11
ROBERT L. MCCLINTOCK
P.E. LICENSE EXP. 11-30-11 P.E. #24158
S.E. LICENSE EXP. 11-30-12 S.E. # 3137

APPROVED Jan 27 20 11
Richard A. Johnson
COUNTY ENGINEER

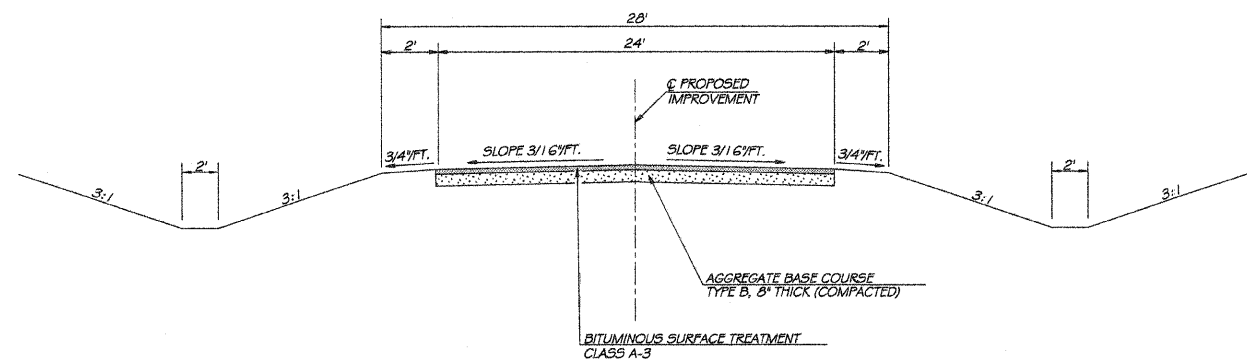
PASSED 2-14 20 11
Maureen K. Kavel
DISTRICT SEVEN ENGINEER OF
LOCAL ROADS & STREETS

RELEASING
FOR BID
BASED ON
LIMITED
REVIEW 2/14 20 11
Roger J. Drachler
DEPUTY DIRECTOR OF HIGHWAYS REGION FOUR ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

McCLINTOCK
CIVIL ENGINEERING SERVICE
404 SHAW AVENUE, PARIS, IL 61944
PHONE (217) 488-8110

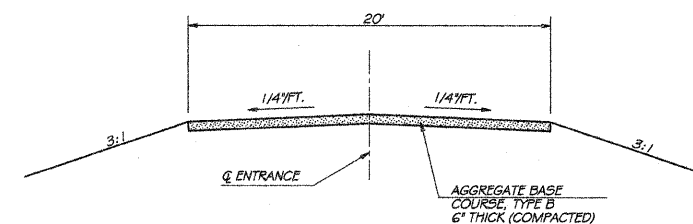
DRN SEA DATE 3/23/97 SHEET 1 OF 12
REV. SDE DATE 1/05/11
APPR. SCALE: NTS JOB NO. 3137-362-96



PROPOSED TYPICAL CROSS SECTION

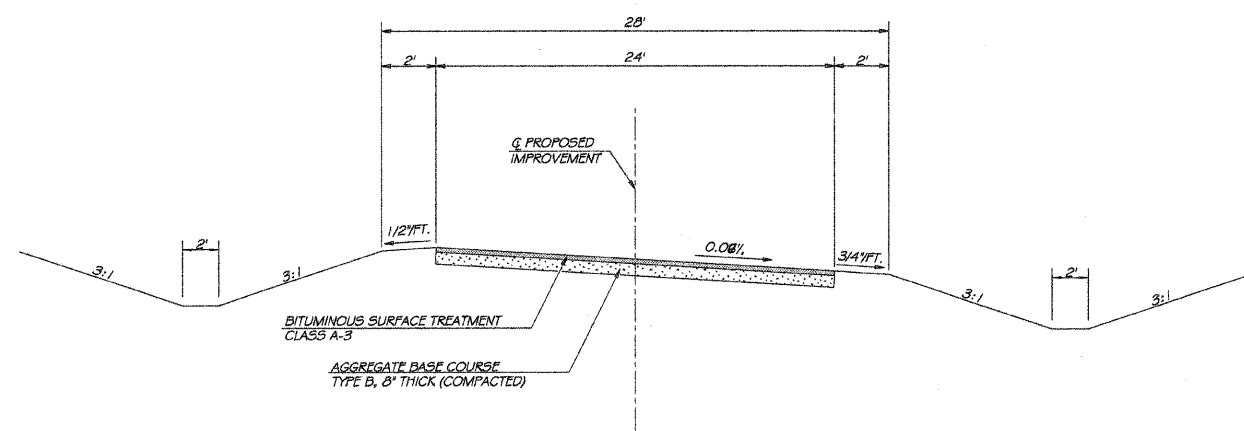
STA. 1+00 TO STA. 1+34.26
 STA. 6+14.34 TO STA. 6+78.48
 STA. 7+26.82 TO STA. 10+50

FUNCTIONAL CLASSIFICATION - LOCAL ROAD ADT 0-150
 CURRENT ADT = 150



TYPICAL PROPOSED ENTRANCE

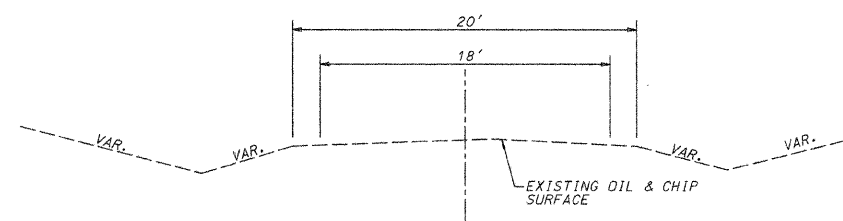
P.E., LT. STA. 4+00
 F.E., RT. STA. 6+29
 F.E., RT. STA. 7+87



PROPOSED TYPICAL CROSS SECTION

STA. 2+54.26 TO 4+94.34

TRANSITION FROM NORMAL CROWN TO FULL SUPER ELEVATION STA. 1+34.26 TO STA. 2+54.26
 TRANSITION FROM FULL SUPER ELEVATION TO NORMAL CROWN STA. 4+94.34 TO STA. 6+14.34

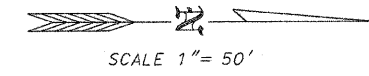


TYPICAL EXISTING CROSS SECTION

STA. 1+00 TO STA. 10+50

TYPICAL ROADWAY CROSS SECTIONS SECTION 92-00109-00-BR HUTTON ROAD DISTRICT COLES COUNTY		MCCLINTOCK CIVIL ENGINEERING SERVICE 404 SHAW AVE., PARIS, IL. 61944 PHONE (217) 466-6110	
		DRN SDE DATE 9/1/09 REV. 1/6/11 SCALE N/A APPR.	SHEET 2 OF 12 JOB NO. 3137-362-96

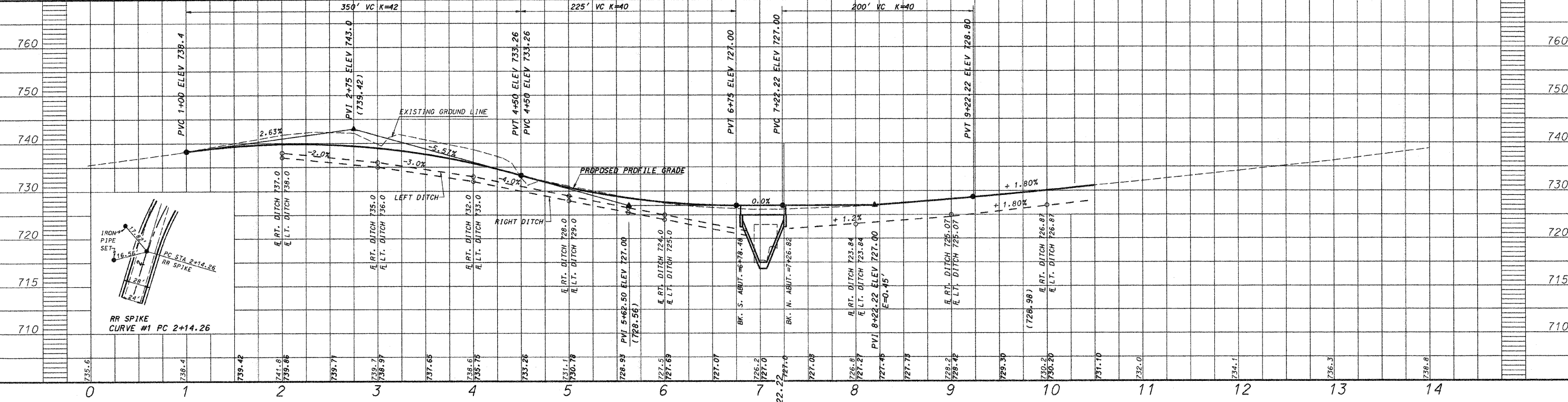
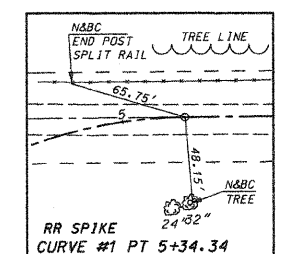
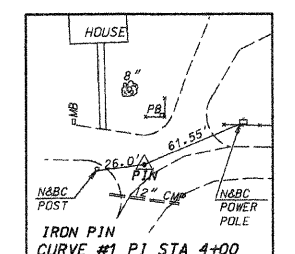
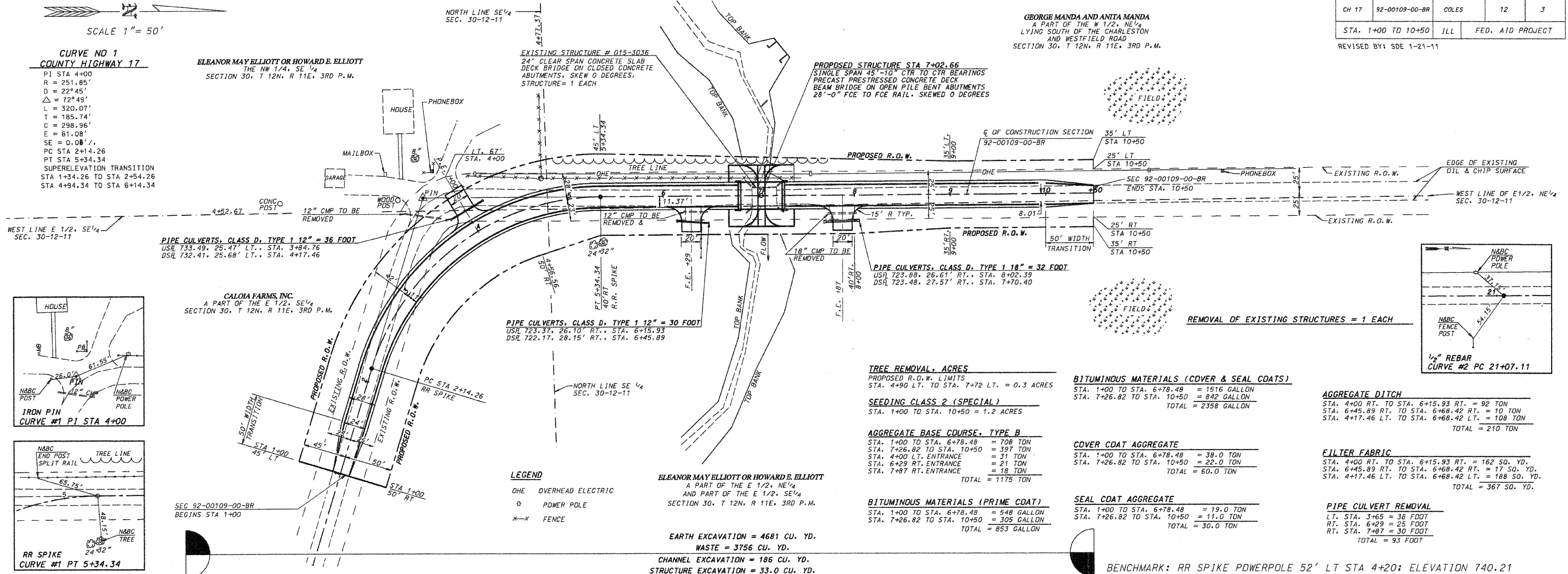
ROUTE #	SECTION	COUNTY	TOTAL	SHEET #
CH 17	92-00109-00-BR	COLES	12	3
STA. 1+00 TO 10+50			ILL. FED. AID PROJECT	
REVISED BY: SDE 1-21-11				



CURVE NO 1
COUNTY HIGHWAY 17
 PI STA 4+00
 R = 251.85'
 D = 22°45'
 Δ = 72°49'
 L = 320.07'
 T = 185.74'
 E = 298.96'
 SE = 0.08'
 PC STA 2+14.26
 PT STA 5+34.34
 SUPERELEVATION TRANSITION
 STA 1+34.26 TO STA 2+54.26
 STA 4+94.34 TO STA 6+14.34

ELEANOR MAY ELLIOTT OR HOWARD E. ELLIOTT
 THE NW 1/4, SE 1/4
 SECTION 30, T 12N, R 11E, 3RD P.M.

GEORGE MANDA AND ANITA MANDA
 A PART OF THE W 1/2, NE 1/4
 LYING SOUTH OF THE CHARLESTON
 AND WESTFIELD ROAD
 SECTION 30, T 12N, R 11E, 3RD P.M.



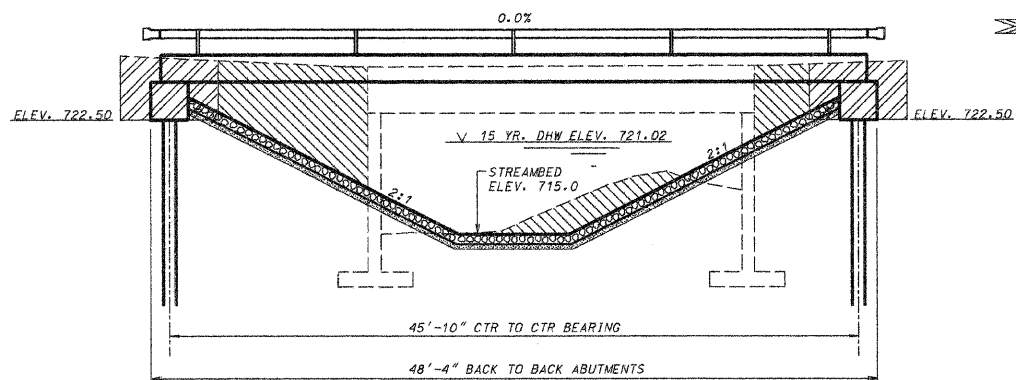
DESIGN STRESSES

$f'_c = 5,000$ P.S.I. (PRESTRESSED BEAMS)
 $f'_c = 4,000$ P.S.I. (PRESTRESSED BEAMS)
 $f'_c = 3,500$ P.S.I. (CONCRETE STRUCTURES)
 $f'_s = 270,000$ P.S.I. (PRESTRESSED STRANDS)
 $f'_s = 189,000$ P.S.I. (PRESTRESSED STRANDS)
 $f'_y = 60,000$ P.S.I. (REINFORCEMENT BARS)

LOADING HS 20-44 DESIGN SPECS. 1996 AASHTO

EXISTING STRUCTURE: 24' CLEAR SPAN CONCRETE THRU GIRDER ON CLOSED ABUTMENTS, SKEWED 0s.

EXISTING CLOSED ABUTMENT FOOTING MAY INTERFERE WITH PILING LOCATION. THE CONTRACTOR SHALL REMOVE ENTIRE STRUCTURE INCLUDING FOOTINGS.



ELEVATION

OUTLINE OF EXISTING FOOTING IS ESTIMATED. NO EXISTING PLANS AVAILABLE

- INDICATES CHANNEL EXCAVATION SEE ROADWAY PLANS FOR QUANTITIES
- INDICATES STRUCTURE EXCAVATION SEE ROADWAY PLANS FOR QUANTITIES

CONTRACT NO. 95644
SCALE 1"=6'

WATERWAY INFORMATION

DRAINAGE AREA = 0.82 SQ. MI. LDW GRADE ELEV. 727.0 AT STATION 7+00

FLOOD	FREQ. YR.	0	OPENING SQ. FT.		NAT.	HEAD - FOOT		HEADWATER EL.		
			C.F.S.	EXISTING	PROP.	H.W.E.	EXIST.	PROP.	EXIST.	PROP.
DESIGN	15	433	100	117	721.02	0.28	0.02	721.30	721.04	
BASE	100	714	124	150	722.03	0.51	0.10	722.54	722.13	

TOTAL BILL OF MATERIAL

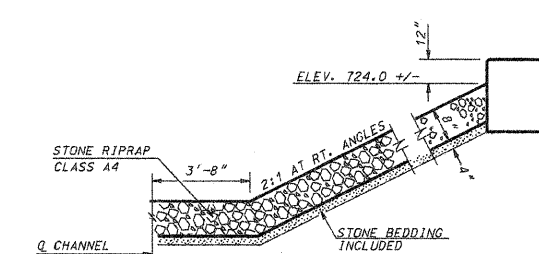
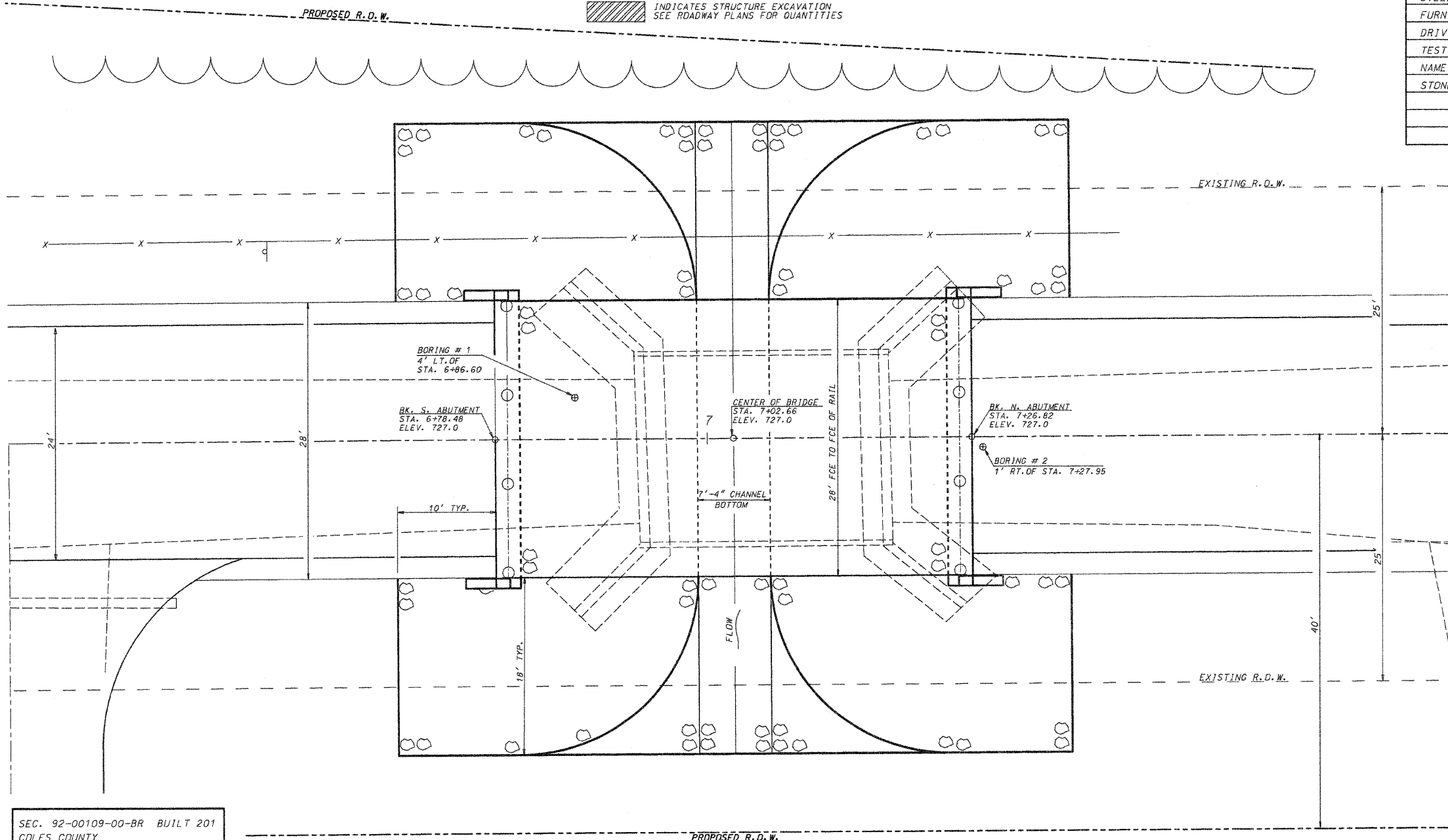
ITEM	UNIT	SUPER	SUB	TOTAL
REMOVAL OF EXISTING STRUCTURES	EACH			1
STRUCTURE EXCAVATION	CU. YD.		33	33
CONCRETE STRUCTURES	CU. YD.		18.6	18.6
PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ. FT.	1316		1316
REINFORCEMENT BARS	POUND		1920	1920
STEEL RAILING, TYPE S1	FOOT	94		94
FURNISHING METAL SHELL PILES 14" x 0.250"	FOOT		183	183
DRIVING PILES	FOOT		183	183
TEST PILE METAL SHELL	EACH		1	1
NAME PLATES	EACH		1	1
STONE RIPRAP, CLASS A-4	SQ. YD.		319	319

LAYOUT OF SLOPE PROTECTION SYSTEM MAY BE VARIED IN THE FIELD TO SUIT GROUND CONDITIONS AS DIRECTED BY THE ENGINEER.

BORING DATA IS SHOWN ONLY AS A GUIDE TO BIDDERS IN ESTIMATING SOIL CONDITIONS WHICH MAY BE ENCOUNTERED DURING CONSTRUCTION

THE CONTRACTOR SHALL DRIVE ONE TEST PILE IN A PERMANENT LOCATION AT THE NORTH ABUTMENT AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF THE PILES

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M31, M42 OR M53 GRADE 60



DETAIL "A"



I certify that to the best of my knowledge, information, and belief, this bridge design is structurally adequate for the design loading shown on the plan. The design is an economical one for the style of structure and complies with requirements of the current "A.A.S.H.T.O. Standard Specifications for Highway Bridges."
 Robert L. McClintock Date: 01/26/11
 Robert L. McClintock IL, S.E. #3137 LICENSED EXPIRES 11-30-12

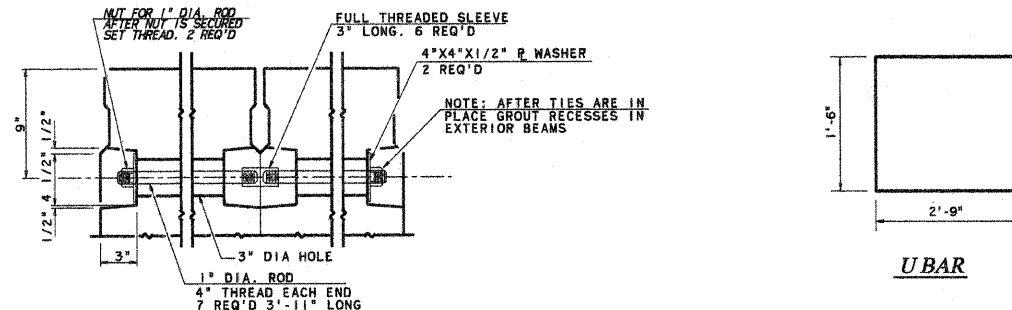
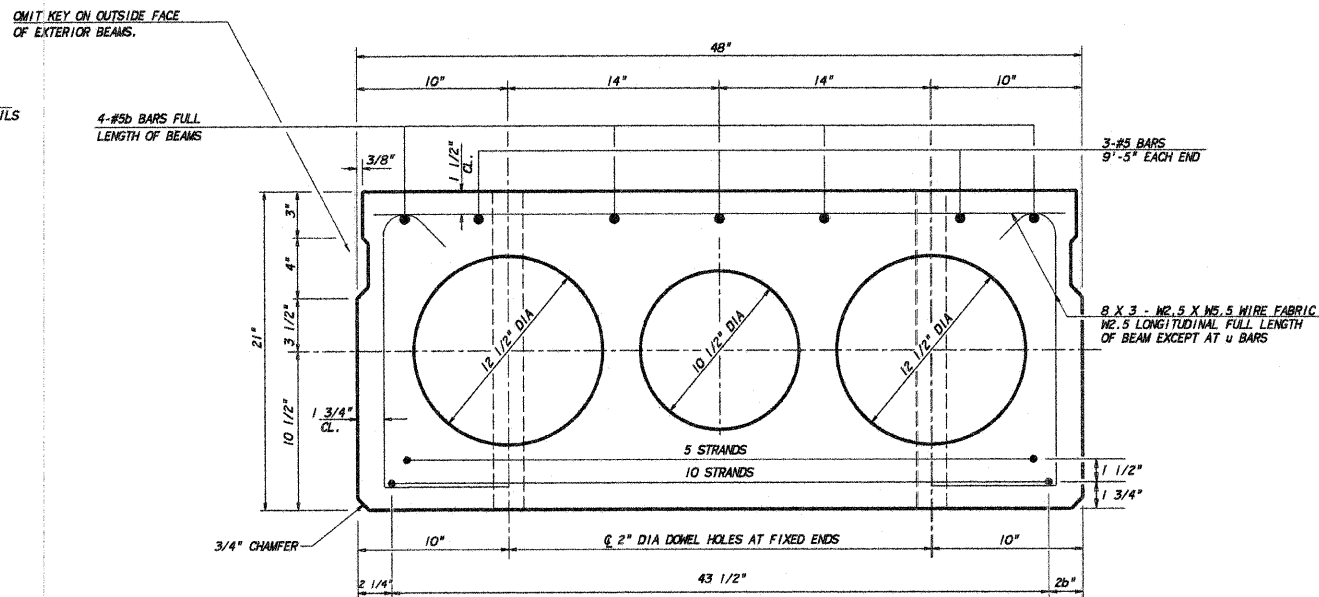
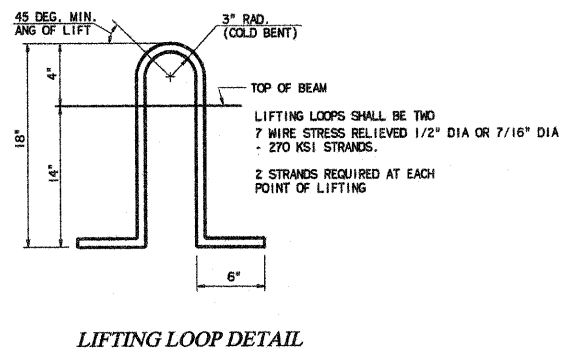
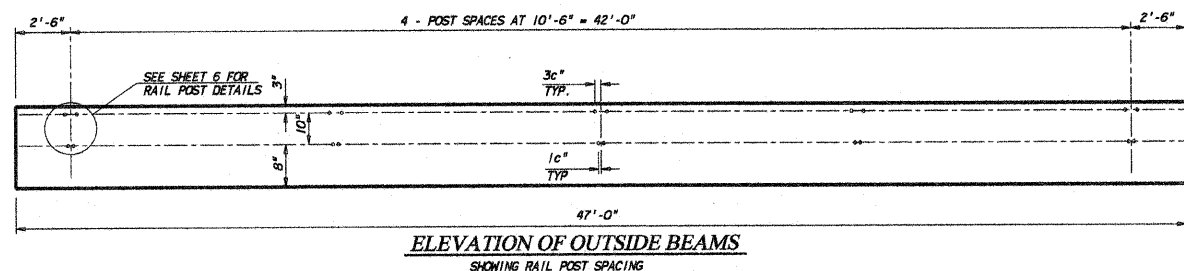
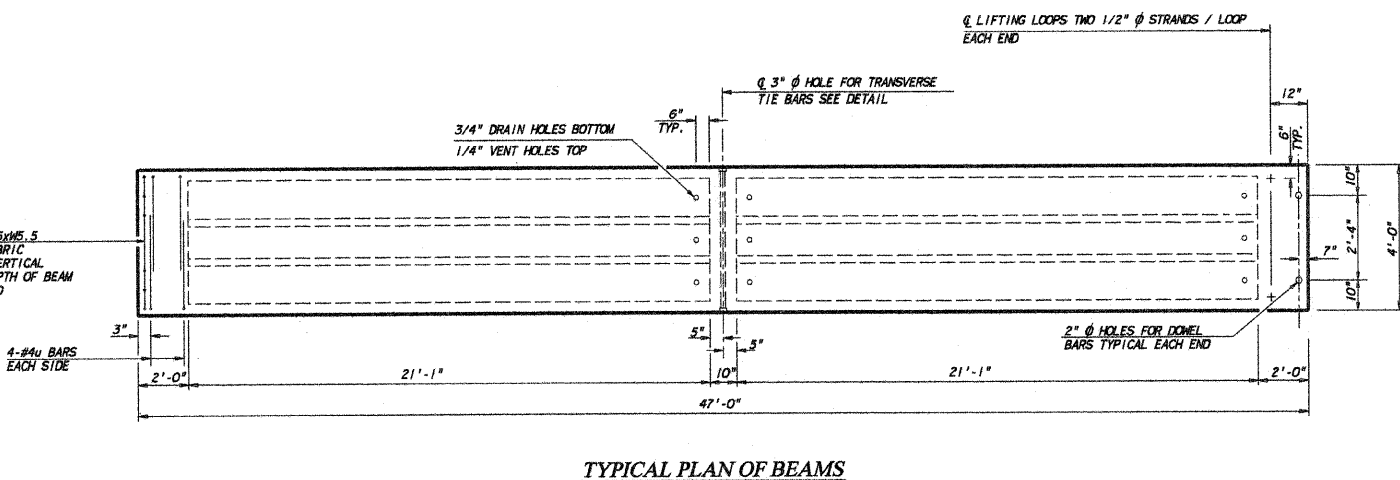
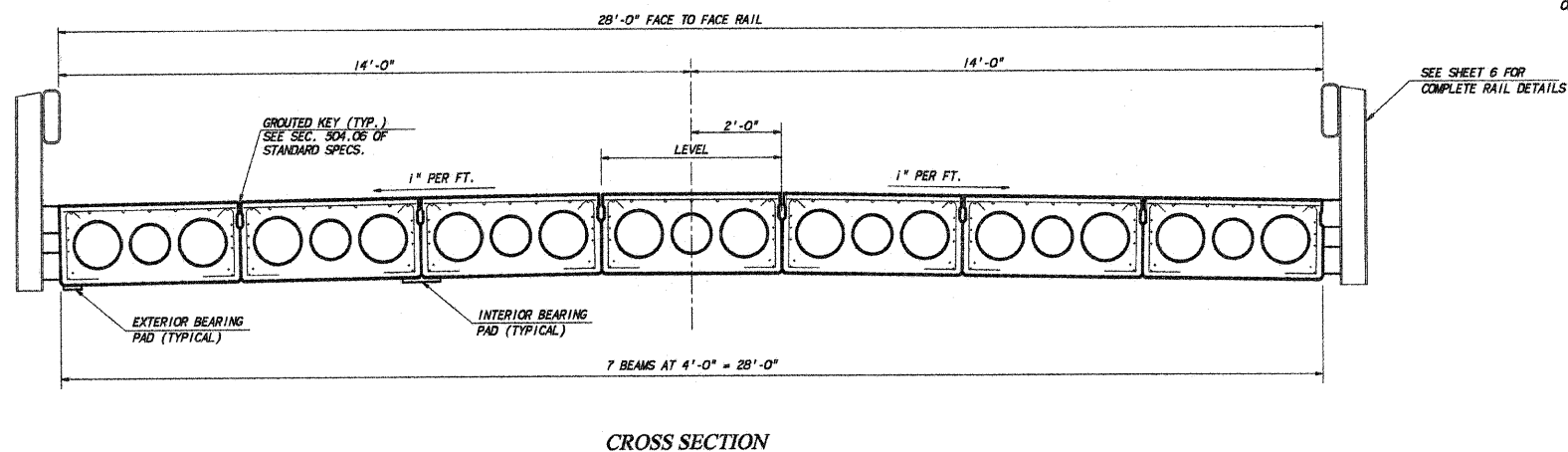
SEC. 92-00109-00-BR BUILT 201
COLES COUNTY
LOADING HS 20
STR. NO. 015-3376
HUTTON ROAD DISTRICT

NAME PLATE DETAIL
(SEE STANDARD 515001)

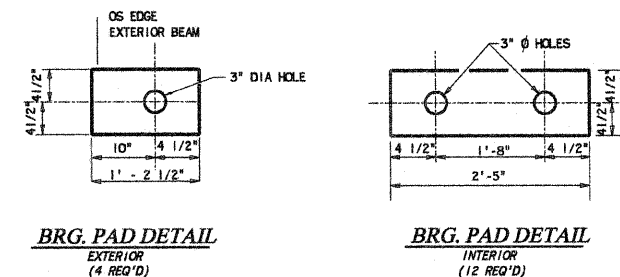
PLAN

B.M. - RAILROAD SPIKE IN POWERPOLE, 52' LT. OF STA. 4+20, ELEVATION 740.21

GENERAL PLAN AND ELEVATION		McCLINTOCK	
SECTION 92-00109-00-BR HUTTON ROAD DISTRICT COLES COUNTY		CIVIL ENGINEERING SERVICE 404 SHAW AVE. PARIS, IL 61944 PHONE (217) 466-6110	
DRN TDL	DATE 8/1/98	SHEET 4 OF 12	
REV. SDE	DATE 1/21/11		
APPR.		JOB NO. 3137-362-96	

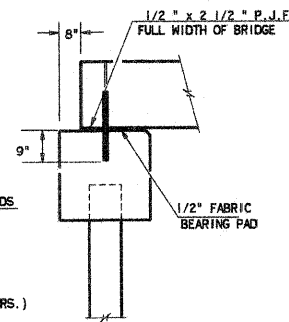


TRANSVERSE TIE BAR DETAIL



BRG. PAD DETAIL

BRG. PAD DETAIL



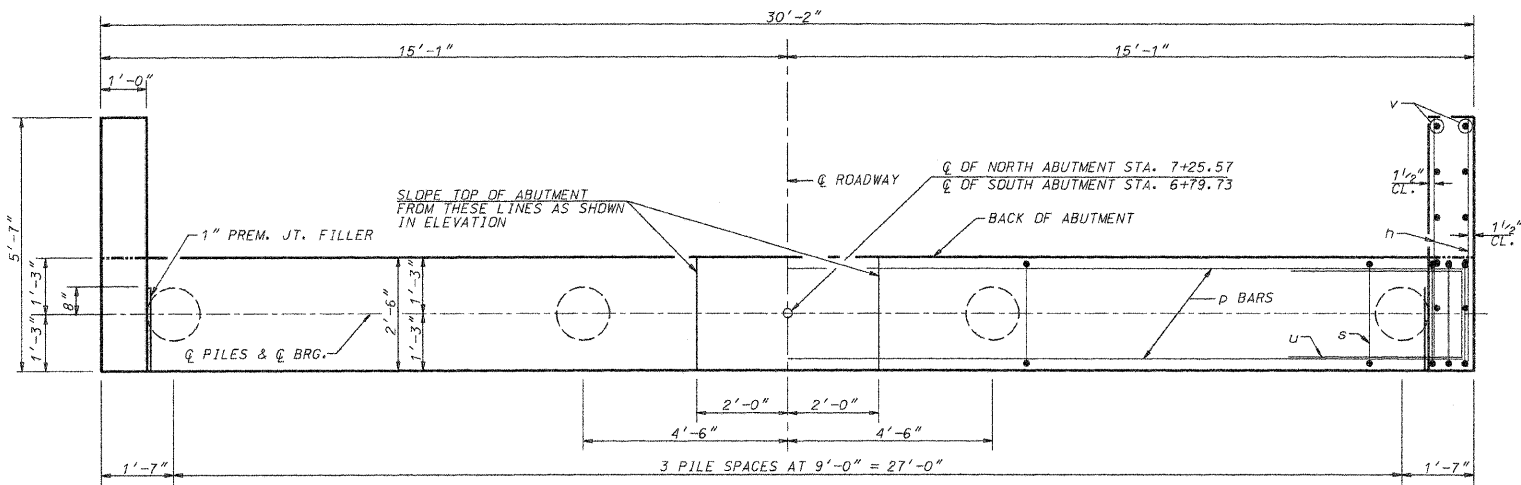
SECTION AT ABUTMENT

- ① 3/4" Ø 2'-6" DONEL RODS
AFTER BEAMS ARE IN
PLACE DRILL HOLES IN
CAP AND GROUT DONEL
RODS INTO PLACE USING
NON-SHRINK GROUT. SEE
SPECS 304.06 (E)
ALLOW TO CURE (MIN 24 HRS.)
PRIOR TO GROUTING
SHEAR KEY.

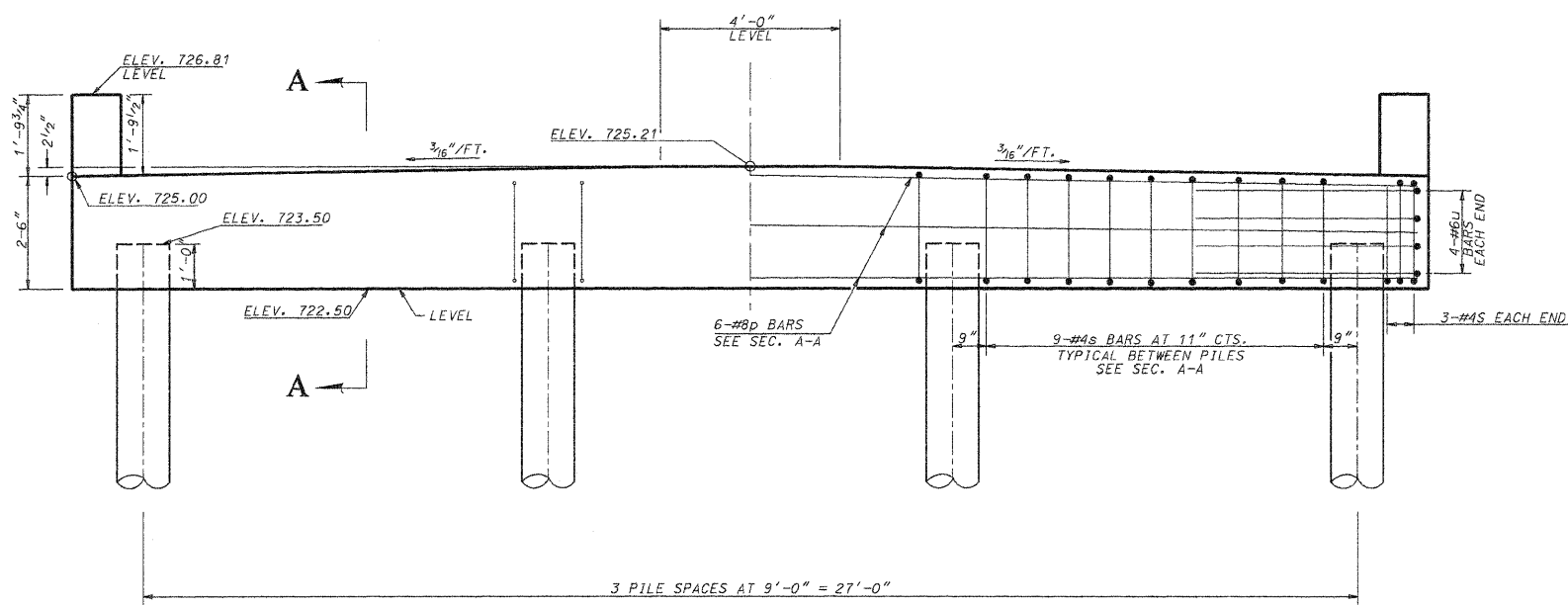
BILL OF MATERIAL

ITEM	UNIT	QUANTITY
PRECAST PRESTRESSED CONCRETE		
DECK BEAMS (21" DEPTH)	SQ. FT.	1316

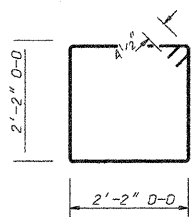
SUPERSTRUCTURE DETAILS		McCLINTOCK CIVIL ENGINEERING SERVICE 404 SHAW AVE., PARIS, ILL. 61944 PHONE (217) 486-6110	
SEC. 92-00109-00-BR HUTTON ROAD DISTRICT COLES COUNTY		DRN TDL DATE 7/1/98 REV. SDE DATE 1/6/11 APPR.	SHEET 5 OF 12 JOB NO. 3137-362-96



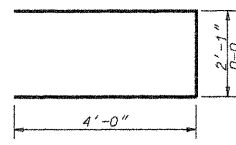
PLAN



ELEVATION



BAR s

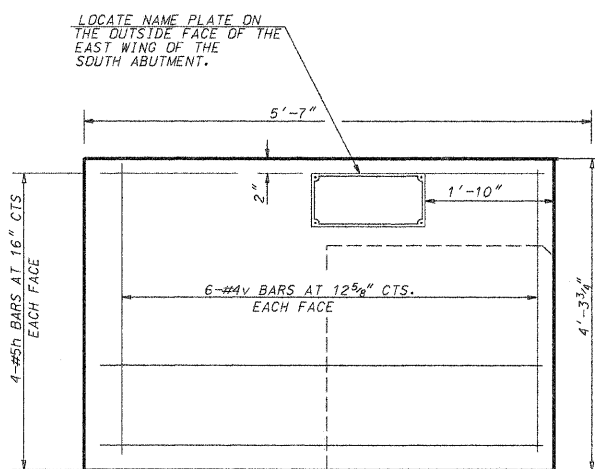


BAR u

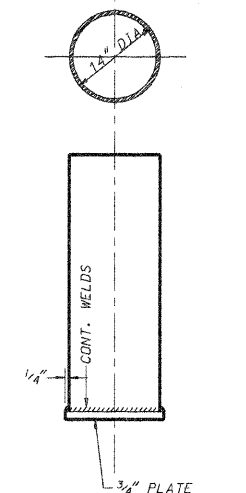
PILE DATA

	NORTH ABUTMENT	SOUTH ABUTMENT
TYPE	CONCRETE (14" METAL SHELL)	CONCRETE (14" METAL SHELL)
NO. REQUIRED	4 *	4
ALLOWABLE RESISTANCE AVAILABLE	70 KIPS/PILE	70 KIPS/PILE
NOMINAL REQUIRED BEARING	416 KIPS/PILE	416 KIPS/PILE
EST. LENGTH	33 FT.	21 FT.

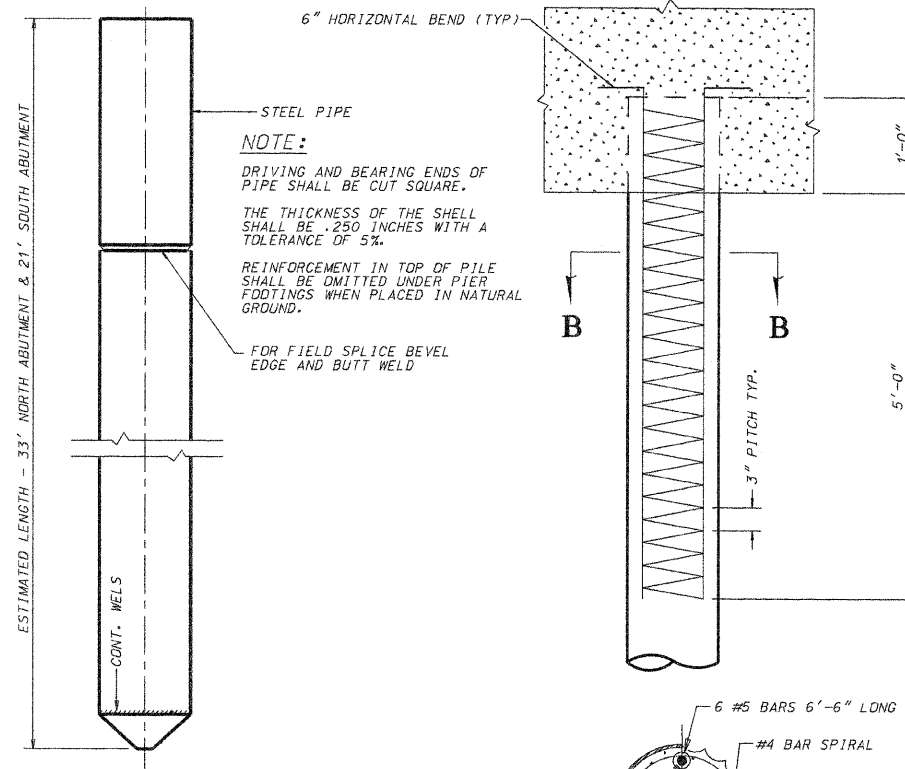
*INCLUDES ONE TEST PILE TO BE DRIVEN AT PERMANENT LOCATION IN THE NORTH ABUTMENT.



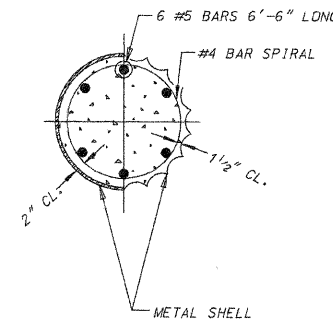
WINGWALL ELEVATION



OPTIONAL FLAT END

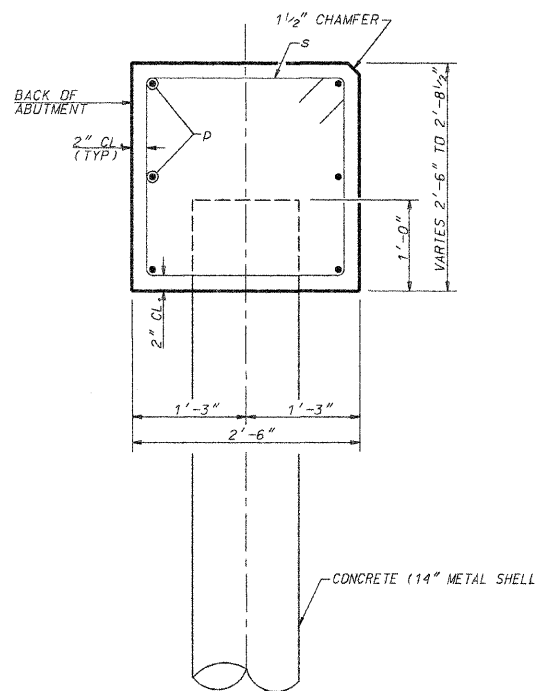


DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES



THE COST OF REINFORCEMENT IS INCIDENTAL TO THE COST OF FURNISHING PILES

DETAIL OF REINFORCEMENT FOR METAL SHELLS



SECTION A-A

NOTES: THE WINGS SHALL BE POURED AFTER THE DECK BEAMS ARE IN PLACE.

ALL EXPOSED EDGES SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.

BILL OF MATERIAL TWO ABUTMENTS

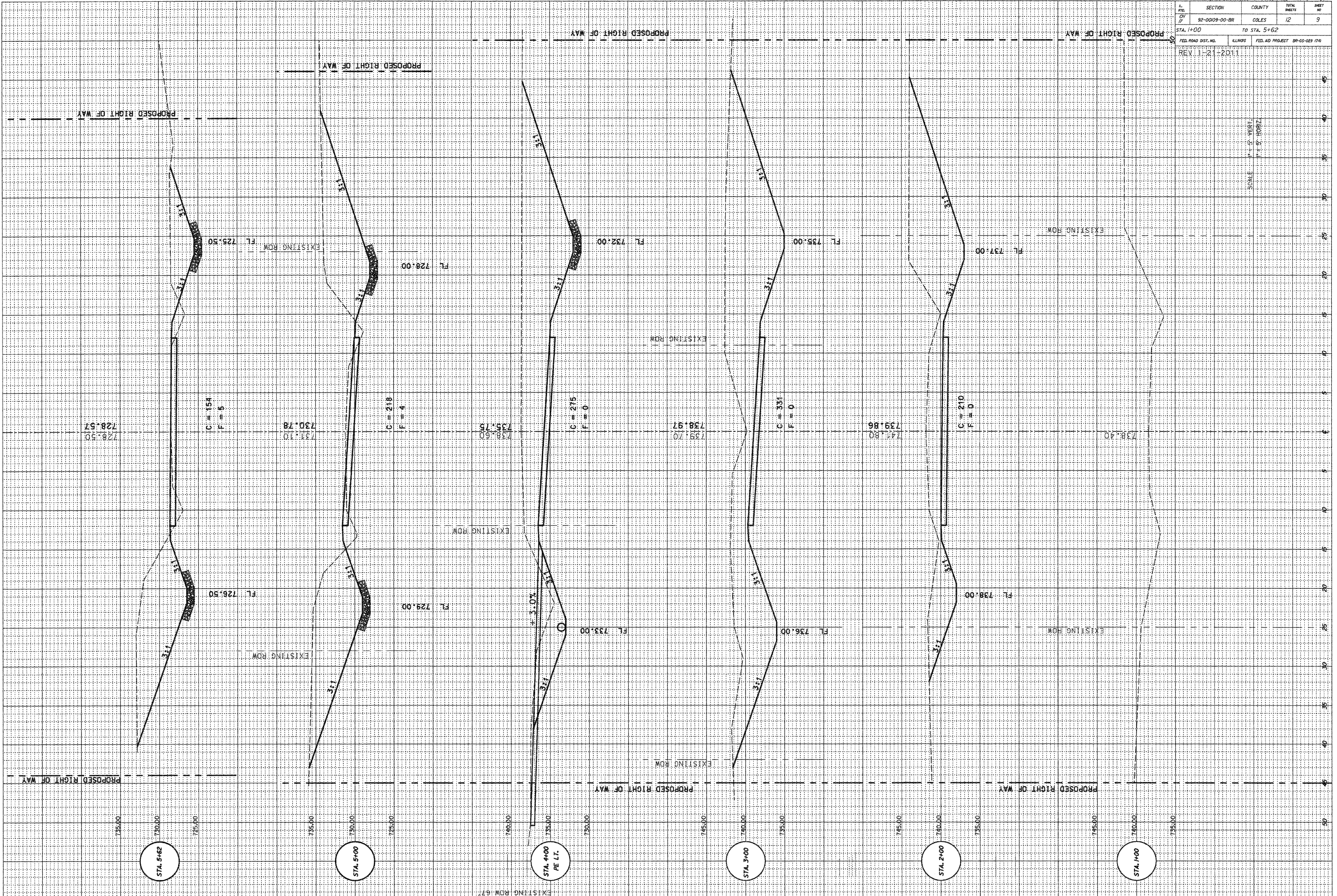
BAR	NO.	SIZE	LENGTH	SHAPE
h	32	#5	5'-3"	—
p	12	#8	29'-10"	—
s	66	#4	9'-5"	□
u	16	#6	10'-1"	□
v	48	#4	4'-0"	—
CONCRETE STRUCTURES			CU. YD.	18.6
REINFORCEMENT BARS			POUND	1920
FUR. METAL PILE SHELLS 14"			FOOT	183
TEST PILE METAL SHELLS			EACH	1
DRIVING AND FILLING SHELLS			FOOT	183
STRUCTURE EXCAVATION			CU. YD.	33

ABUTMENT DETAILS
SECTION 92-00109-00-BR
HUTTON ROAD DISTRICT
COLES COUNTY

McCLINTOCK
CIVIL ENGINEERING SERVICE
404 SHAW AVENUE, PARIS, TX 75686
PHONE (214) 466-6110

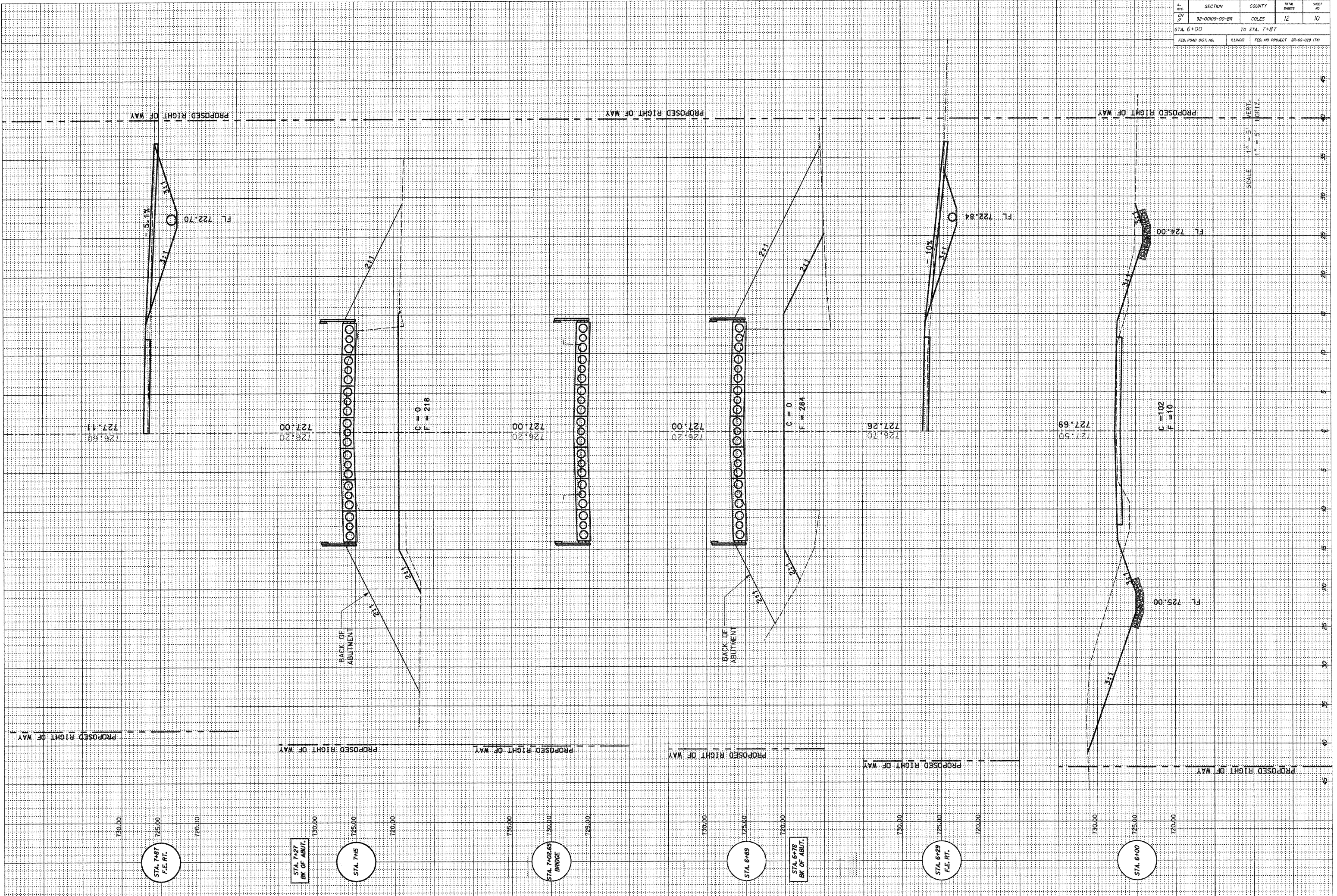
DRN TDL DATE 8/8/98 SHEET 7 OF 12
REV. SDE DATE 9/8/09
APPR. JDB NO. 3137-362-96

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
07/17	92-0009-00-BR	COLES	12	9
STA. 1+00		TO STA. 5+62		
FED. ROAD DIST. NO.		LLMWS	FED. AID PROJECT BR-05-028 (74)	
REV. 1-21-2011				

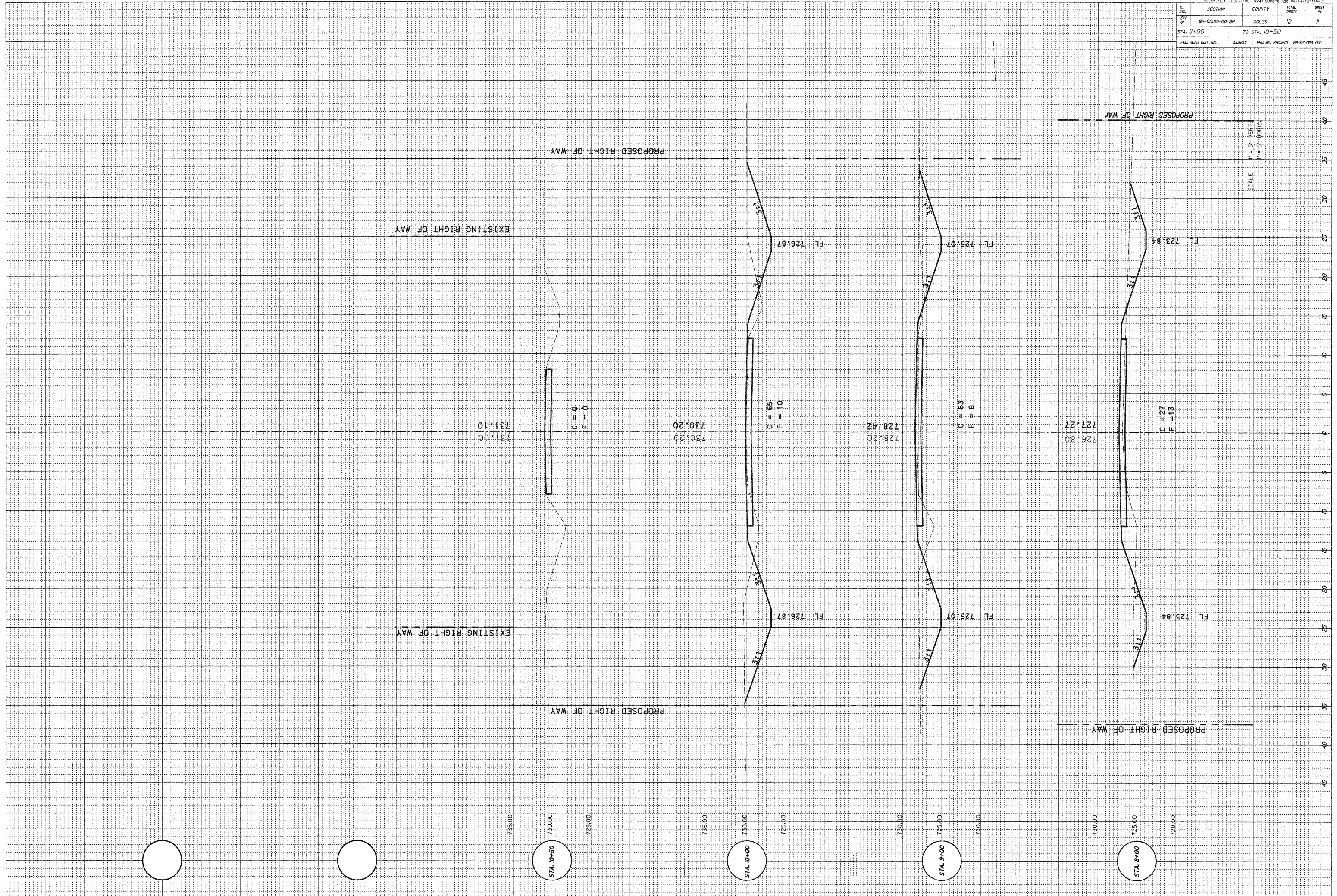


SCALE 1" = 5' VERT.
 1" = 20' HORIZ.

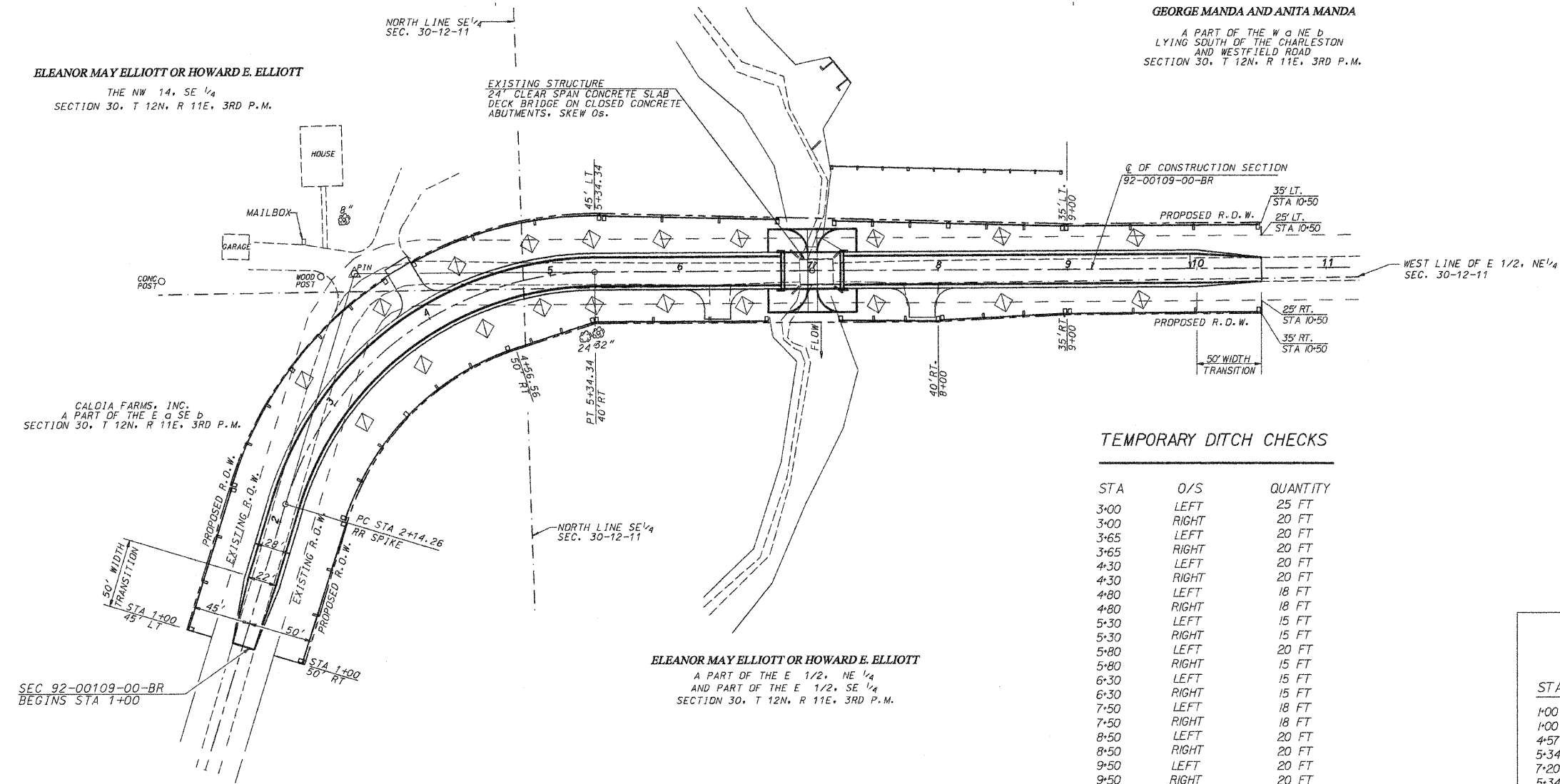
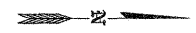
DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
11/20/19	92-0009-00-BR	COLES	12	10
STA. 6+00		TO STA. 7+87		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	BR-05-028 (74)	



No. 92-00109-00-BR				
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
92-00109-00-BR	COLES	12	11	
STA. 8+00		TO STA. 10+50		
FED. ROAD DIST. NO.	ELLIPS	FED. AID PROJECT	BR-05-009 (74)	



ROUTE #	SECTION	COUNTY	TOTAL	SHEET #
CH 17	92-00109-00-BR	COLES	12	12
JOB # 3137-362-96 HUTTON TWP. FEDERAL AID PROJECT				



TEMPORARY DITCH CHECKS

STA	O/S	QUANTITY
3-00	LEFT	25 FT
3-00	RIGHT	20 FT
3-65	LEFT	20 FT
3-65	RIGHT	20 FT
4-30	LEFT	20 FT
4-30	RIGHT	20 FT
4-80	LEFT	18 FT
4-80	RIGHT	18 FT
5-30	LEFT	15 FT
5-30	RIGHT	15 FT
5-80	LEFT	20 FT
5-80	RIGHT	15 FT
6-30	LEFT	15 FT
6-30	RIGHT	15 FT
7-50	LEFT	18 FT
7-50	RIGHT	18 FT
8-50	LEFT	20 FT
8-50	RIGHT	20 FT
9-50	LEFT	20 FT
9-50	RIGHT	20 FT

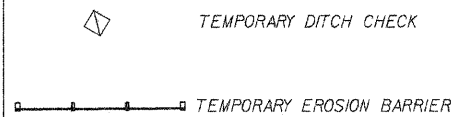
TOTAL 372 FT

PERIMETER EROSION BARRIER

STA	O/S	to	STA	O/S	LENGTH
1+00	45' LT		5+34	45' LT	434 FT
1+00	50' RT		4+57	50' RT	357 FT
4+57	50' RT		5+34	40' RT	77 FT
5+34	45' LT		6+74	41' LT	140 FT
7+20	41' LT		9+00	35' LT	180 FT
5+34	40' RT		6+70	40' RT	136 FT
7+25	40' RT		8+00	40' RT	75 FEET
8+00	40' RT		9+00	35' RT	100 FEET
9+00	35' RT		10+50	35' RT	150 FEET
9+00	35' LT		10+50	35' LT	150 FEET

TOTAL 1800 FT

TEMPORARY EROSION CONTROL



GENERAL NOTES

- 1) SEE SPECIAL PROVISIONS
- 2) SEE STANDARD 280001

DRN: 10-15-08 BY: SDE
REV: 9-01-09 REV 1-06-11



EROSION CONTROL PLAN STA 1+00 TO 10+50