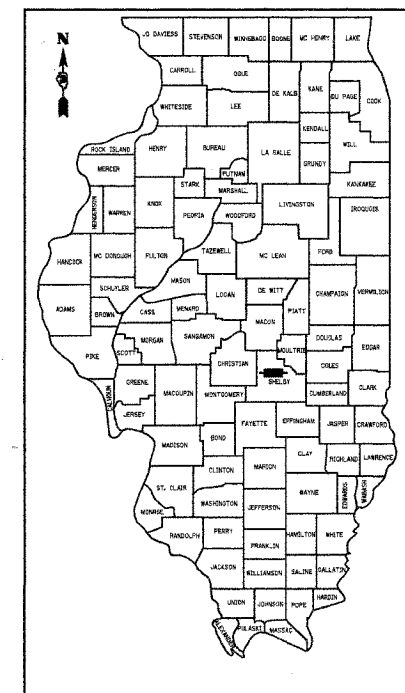


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 133	05-17117-00-BR	SHELBY	21	1
ROAD DIST.	ILLINOIS	RIDGE		

CONTRACT NO. 95484

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PLANS FOR PROPOSED HIGHWAY BRIDGE PROGRAM

**RIDGE ROAD DISTRICT
SECTION 05-17117-00-BR
SHELBY COUNTY
PROJECT NO. BROS-173(143)
T.R. 133
JOB NO. : C-97-135-06**



LOCATION OF SECTION INDICATED THUS:

CLASSIFICATION: RURAL TWO-LANE LOCAL ROAD
DESIGN VOLUME: UNDER 250 ADT
CURRENT ADT: 225
DESIGN SPEED: 30 MPH

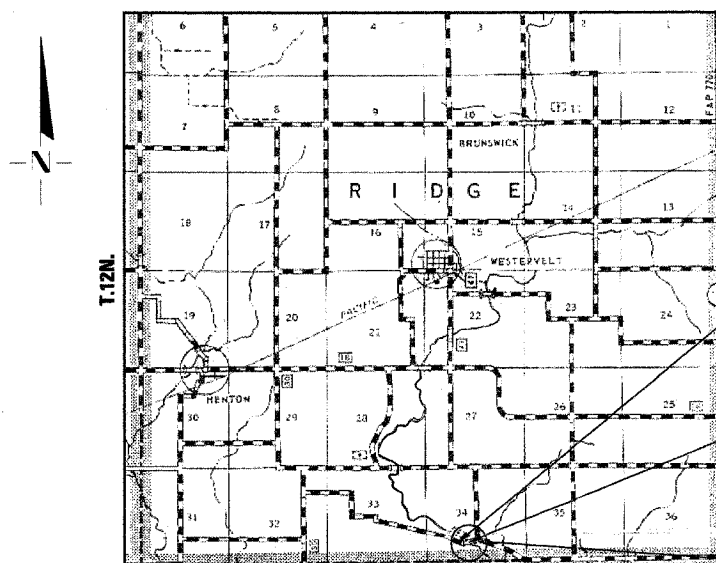
TOLL FREE JOINT UTILITY LOCATING
INFORMATION FOR EXCAVATORS (J.U.L.I.E.)
TELEPHONE NUMBER 1-800-892-0123

<u>INDEX OF SHEETS</u>	
<u>SHEET NO.</u>	<u>TITLE</u>
1.	COVER SHEET
2.	SUMMARY OF QUANTITIES, GENERAL NOTES & TYPICAL SECTIONS
3.	PLAN AND PROFILE SHEET
4.	SIDEROAD PLAN AND PROFILE SHEET
5.	PROPOSED ALIGNMENT AND CROSS TIES SHEET
6.	SHOULDER AND GUARDRAIL DETAILS
7.-12.	BRIDGE PLANS
13.-20.	STATION CROSS SECTIONS
21.	EROSION CONTROL PLAN

STANDARDS:

000001-04	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-02	TEMPORARY EROSION CONTROL
515001-02	NAME PLATE FOR BRIDGES
630001-06	STEEL PLATE BEAM GUARDRAIL
630301-03	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631026-02	TRAFFIC BARRIER TERMINAL TYPE 5 & 5A
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
702001-06	TRAFFIC CONTROL DEVICES
BLR 21-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

R. 3 E. OF THE 3RD P.M.



IMPROVEMENT BEGINS
STA. 11+50

STA. 15+02.38 - SPECIAL BRIDGE DESIGN
PRECAST PRESTRESSED CONCRETE DECK BEAM
BRIDGE, THREE SPANS @ 34'-0", 55'-0", 55'-0";
24'-0" ROADWAY, SKEW=0°
EXISTING S.N. 087-3122
PROPOSED S.N. 087-3548

IMPROVEMENT ENDS
STA. 19+50

LOCATION PLAN

GROSS LENGTH OF SECTION = 800.00 FEET = 0.152 MILES
NET LENGTH OF SECTION = 800.00 FEET = 0.152 MILES



SCALES



Fred J. Stone, Jr. (5-10-00)
ILLINOIS PROFESSIONAL NO. 26865
EXPIRES 11-30-07

4440 ASH GROVE
SPRINGFIELD, IL 62711
(217) 793-8600
oasinc@insightbb.com

OZYURT AND STONE, INC.
CONSULTING ENGINEERS

PASSED	05-15 2006 <i>Brian Smith</i> ROAD DISTRICT COMMISSIONER
APPROVED	15 MAY 2006 <i>S. De J...</i> COUNTY ENGINEER
PASSED	June 9 2006 <i>Maurice J. Coats</i> DISTRICT SEVEN ENGINEER OF LOCAL ROADS & STREETS
RELEASED FOR BID BASED ON LIMITED REVIEW	June 9 2006 <i>Christy M. Reed</i> DEPUTY DIRECTOR OF HIGHWAYS, REGION FOUR ENGINEER
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	

SUMMARY OF QUANTITIES

X081-2A

NUMBER	ITEM	UNIT	QUANTITY
20100500	TREE REMOVAL, ACRES	ACRE	0.1
20200100	EARTH EXCAVATION	CU YD	867
20300100	CHANNEL EXCAVATION	CU YD	880
20400800	FURNISHED EXCAVATION	CU YD	1,705
25000200	SEEDING, CLASS 2	ACRE	0.9
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	81
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	81
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	81
25100115	MULCH, METHOD 2	ACRE	0.9
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	90
28000300	TEMPORARY DITCH CHECKS	EACH	4
28000400	PERIMETER EROSION BARRIER	FOOT	933
28000500	INLET AND PIPE PROTECTION	EACH	1
28100207	STONE RIPRAP, CLASS A4	TON	333
28102600	STONE RIPRAP DITCH	TON	366
28200200	FILTER FABRIC	SQ YD	489
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	845
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50300225	CONCRETE STRUCTURES	CU YD	99.0
50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	3,456
50800105	REINFORCEMENT BARS	POUND	8,230
50900205	STEEL RAILING, TYPE S1	FOOT	289
51201600	FURNISHING STEEL PILES HP12X53	FOOT	435
51202700	DRIVING STEEL PILES	FOOT	150
51203600	TEST PILE STEEL HP12X53	EACH	2
51204315	CONCRETE ENCASEMENT	CU YD	17.0
51500100	NAME PLATES	EACH	1
54200220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	38
63100075	TRAFFIC BARRIER TERMINAL, TYPE 5A	EACH	2
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT)	EACH	2
67100100	MOBILIZATION	L SUM	1
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1
X5020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 2	EACH	1
Z0065000	SETTING PILES IN ROCK	EACH	10

*SEE SPECIAL PROVISIONS

GENERAL NOTES

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AND AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

THE AREA TO BE SEEDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY, AS DIRECTED BY THE ENGINEER.

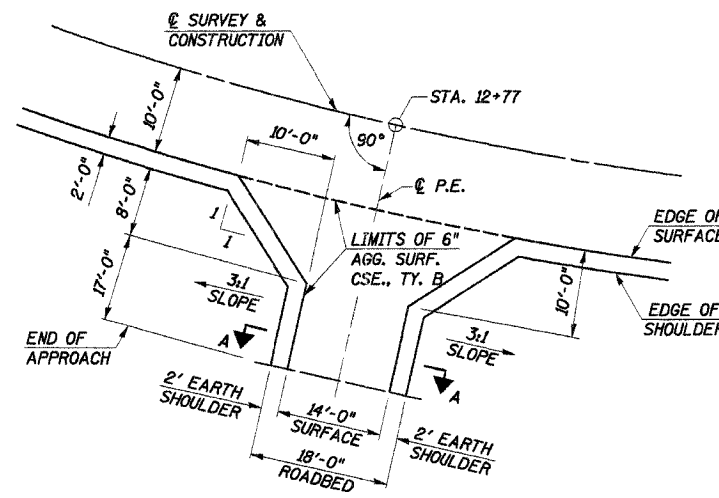
THE CONTRACTOR SHALL CHECK WITH THE ENGINEER FOR EXACT LENGTH OF PIPE CULVERTS BEFORE ORDERING.

TREE REMOVAL

ALL TREES BETWEEN THE LIMITS SHOWN BELOW AND THE ADJACENT SHOWN R.O.W. WHICH INTERFERE WITH THE CONSTRUCTION SHALL BE REMOVED ONLY AS DIRECTED BY THE ENGINEER.

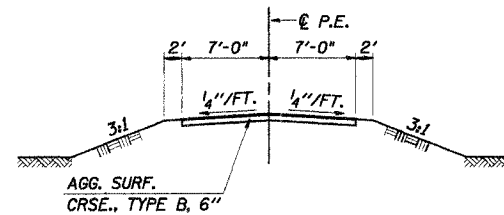
50' LT. STA. 14+20 TO 50' LT. STA. 14+80
35' RT. STA. 14+35 TO 35' RT. STA. 14+80

TREE REMOVAL, ACRES = 0.1 ACRE



PRIVATE ENTRANCE DETAIL

RT. STA. 12+77



SECTION A-A

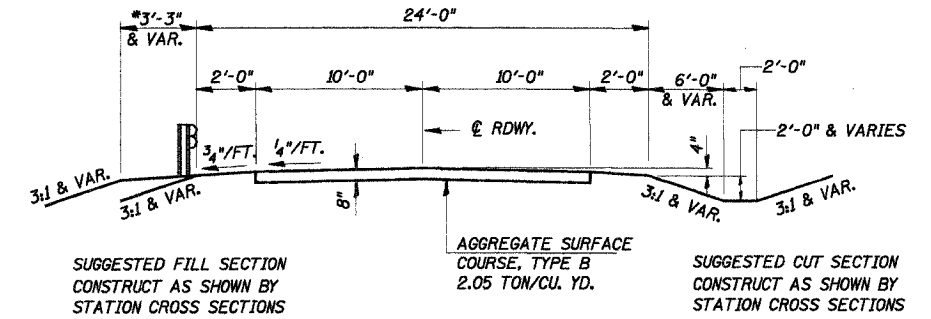
ESTIMATED QUANTITIES

ITEM	RATE OF APPLICATION	QUANTITIES
SEEDING, CLASS 2		0.9 ACRE
NITROGEN FERTILIZER NUTRIENT	90 LBS/ACRE	81 POUNDS
PHOSPHORUS FERTILIZER NUTRIENT	90 LBS/ACRE	81 POUNDS
POTASSIUM FERTILIZER NUTRIENT	90 LBS/ACRE	81 POUNDS
MULCH METHOD 2	2 TON / ACRE	0.9 ACRE

THE SEEDING MIXTURE USED SHALL CONFORM TO ROADSIDE MIXTURE TYPE 2, EXCEPT DURING THE PERIOD BETWEEN NOVEMBER 1 AND DECEMBER 31. THE CONTRACTOR SHALL SUBSTITUTE 25 POUNDS OF PERENNIAL RYE FOR 48 POUNDS OF OATS, SPRING.

*SEE SHEET 6 AND STD. 630301 FOR SHOULDER AND GUARDRAIL DETAILS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 133	05-17117-00-BR	SHELBY	21	2
ROAD DIST.	ILLINOIS	RIDGE	CONTRACT NO. 95484	

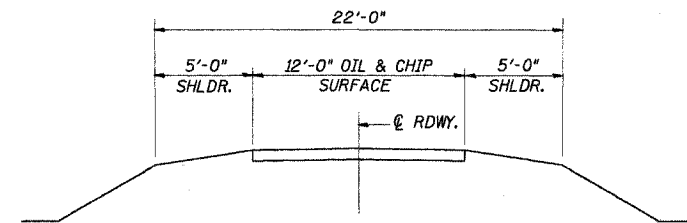


TYPICAL PROPOSED CROSS SECTION

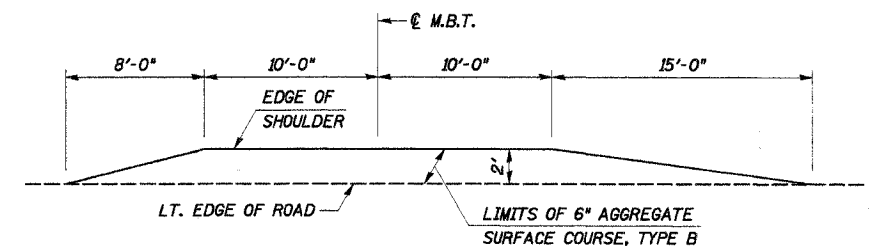
STA. 12+00 TO STA. 19+00

ROAD CLASSIFICATION: LOCAL ROAD (NON-URBAN) ADT 0-250
CURRENT ADT 225

TRANSITION FROM EXISTING ROADWAY TO PROPOSED ROADWAY TO BE CONSTRUCTED FROM STA. 11+50 TO STA. 12+00 AND FROM STA. 19+00 TO STA. 19+50.



EXISTING TYPICAL CROSS SECTION



MAILBOX TURNOUT DETAIL

LT. STA. 12+77

SUMMARY OF QUANTITIES, GENERAL NOTES AND TYPICAL CROSS SECTION

SECTION 05-17117-00-BR
RIDGE ROAD DISTRICT
SHELBY COUNTY
STA. 15+02.38

4440 ASH GROVE
SPRINGFIELD, IL 62711
(217) 793-8000
oasinc@insightbb.com

OZYURT AND STONE, INC.
CONSULTING ENGINEERS

DRAWN: R.D.F. & S.A.P.
DATE: 09/08/05

CHECKED: S.F.M.
DATE: 10/13/05

JOB NO.: 0504
FILE: 0504SUMTYP.DGN
DATE: 02/14/06

SE. 1/4, SW. 1/4, SEC. 34, T. 12 N. R. 3 E., 3RD P.M.
LINDA KARL

CARL KIRCHER

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 133	05-1717 -00-BR	SHELBY	21	3
STA. 30+10.07	TO STA. 23+25.31			
ROAD DISTRICT	ILLINOIS	RIDGE		

CONTRACT NO. 95484

WASHINGTON CEMETERY

CURVE DATA

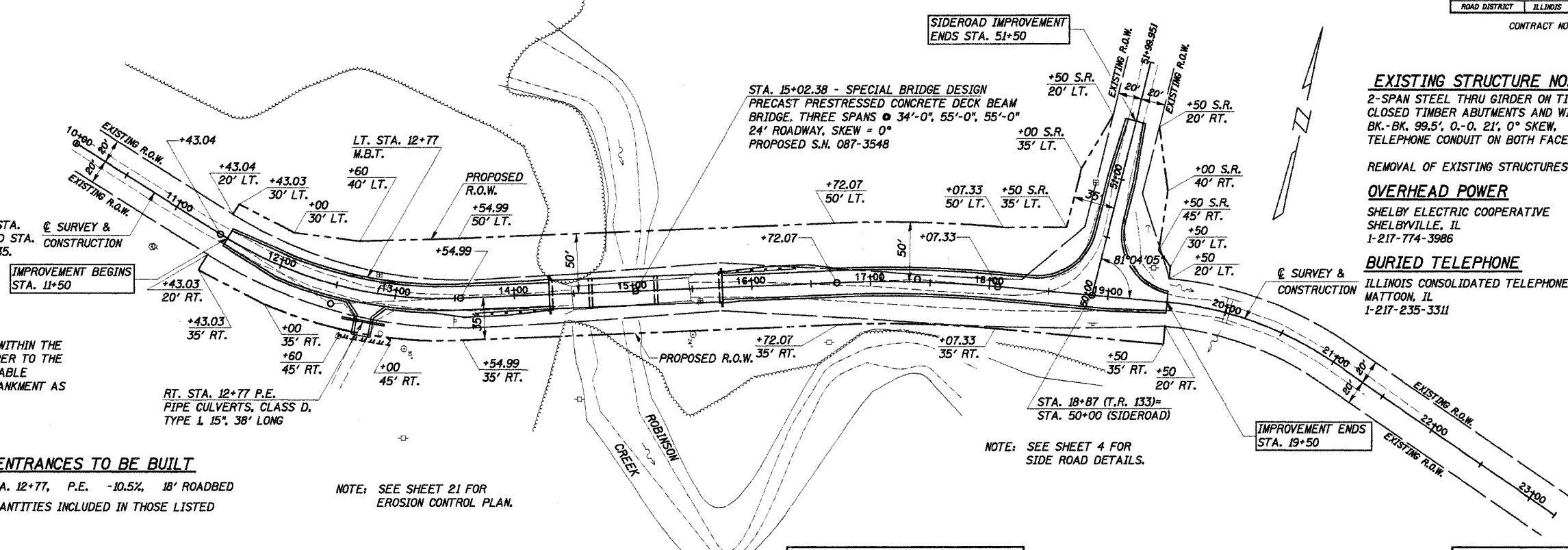
P.I. STA. 12+52.34	P.I. STA. 17+39.80
D = 16°16'38"	D = 05°43'46"
Δ = 34°30' (LT)	Δ = 7°45' (RT)
T = 109.30'	T = 67.73'
R = 352.00'	R = 1000.00'
L = 211.95'	L = 135.26'
E = 16.58'	E = 2.29'
P.C. STA. 11+43.04	P.C. STA. 16+72.07
P.T. STA. 13+54.99	P.T. STA. 18+07.33
S.E. = 0.04 FT./FT.	S.E. = 0.04 FT./FT.

TRANSITION FROM STA. 11+50 TO 12+42 AND STA. 13+08 TO STA. 14+00.
TRANSITION FROM STA. 16+08 TO 17+00 AND STA. 17+43 TO STA. 18+35.
SURVEY & CONSTRUCTION

CHANNEL EXCAVATION

THE CHANNEL SHALL BE EXCAVATED AS SHOWN WITHIN THE LIMITS OF THE PROPOSED STRUCTURE THEN TAPER TO THE EXISTING CHANNEL AT THE R.O.W. LINES. SUITABLE EXCAVATED MATERIAL TO BE USED IN THE EMBANKMENT AS DIRECTED BY THE ENGINEER.

CHANNEL EXCAVATION = 880 CU. YD.



EXISTING STRUCTURE NO. 087-3122

2-SPAN STEEL THRU GIRDER ON TIMBER PIER WITH CLOSED TIMBER ABUTMENTS AND WINGWALLS, BK.-BK. 99.5', 0.-0. 21', 0° SKEW, TELEPHONE CONDUIT ON BOTH FACES.

REMOVAL OF EXISTING STRUCTURES = 1 EACH

OVERHEAD POWER

SHELBY ELECTRIC COOPERATIVE
SHELBYVILLE, IL
1-217-774-3986

BURIED TELEPHONE

ILLINOIS CONSOLIDATED TELEPHONE COMPANY
MATTOON, IL
1-217-235-3311

ENTRANCES TO BE BUILT

RT. STA. 12+77, P.E. -10.5%, 18' ROADBED
QUANTITIES INCLUDED IN THOSE LISTED

NOTE: SEE SHEET 21 FOR EROSION CONTROL PLAN.

LINDA KARL

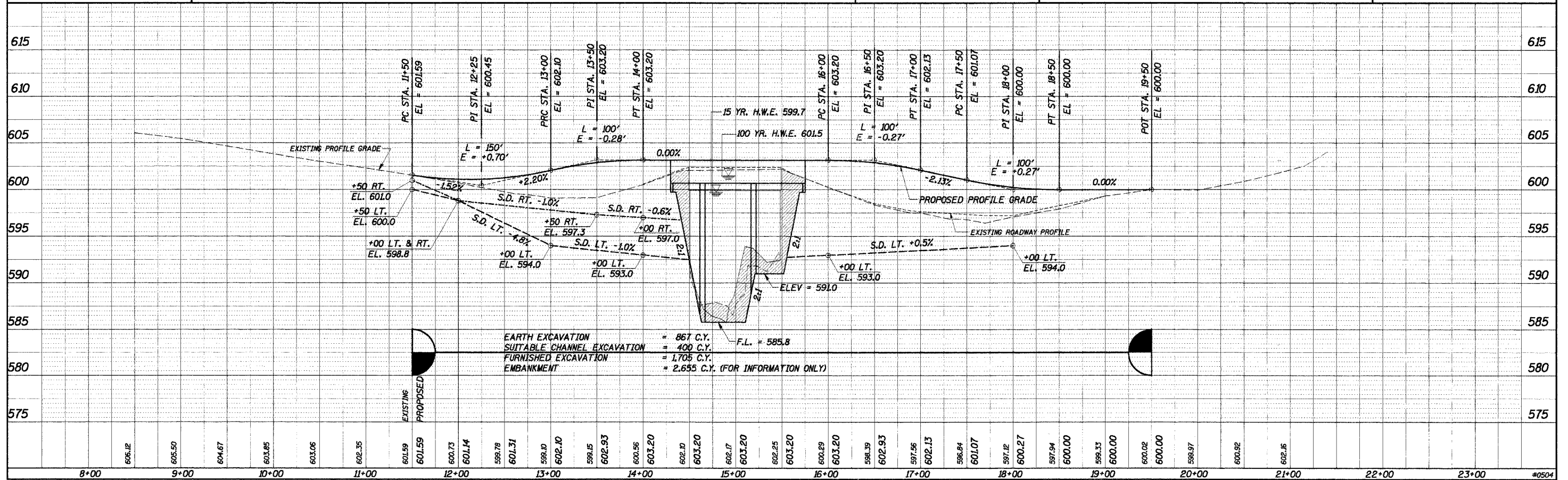
SE. 1/4, SW. 1/4, SEC. 34, T. 12 N. R. 3 E., 3RD P.M.

B.M. #2 - SPIKE NAIL IN WINGWALL POST AT NE COR. ABUTMENT EL. 601.01

INDICATES TEMPORARY CONSTRUCTION EASEMENT TO BE ACQUIRED.

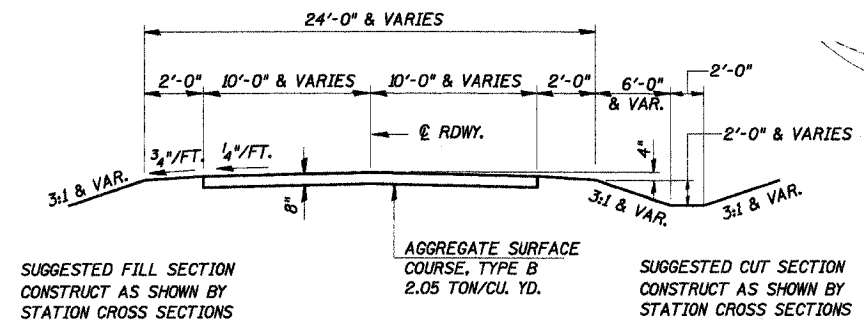
B.M. #3 - SPIKE NAIL IN POWER POLE 31' RT. STA. 16+66 EL. 597.47

B.M. #1 - SPIKE NAIL IN POWER POLE 111' RT. STA. 13+08 EL. 601.86

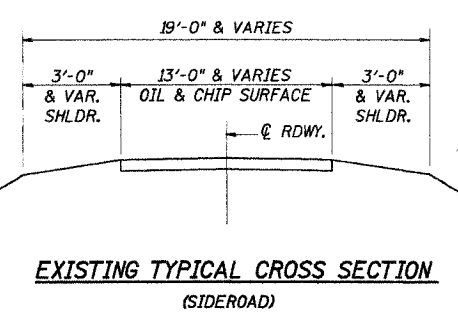


SE. 1/4, SW. 1/4, SEC. 34, T. 12 N. R. 3 E., 3RD P.M.

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 133	05-17117	SHELBY	21	4
STA. 50+00		70 STA. 51+99.91		
ROAD DISTRICT		ILLINOIS		RIDGE
CONTRACT NO. 95484				



TRANSITION FROM EXISTING ROADWAY TO PROPOSED ROADWAY TO BE CONSTRUCTED FROM STA. 51+00 TO STA. 51+50



CURVE DATA
 P.I. STA. 17+39.80
 D = 05°43'46"
 Δ = 7°45' (RT)
 T = 67.73'
 R = 1000.00'
 L = 135.26'
 E = 2.29'
 P.C. STA. 16+72.07
 P.T. STA. 18+07.33
 S.E. = 0.04 FT./FT.

TRANSITION FROM STA. 16+08 TO 17+00 AND STA. 17+43 TO STA. 18+35.

LINDA KARL

STA. 18+87 (T.R. 133) = STA. 50+00 (SIDEROAD)

IMPROVEMENT ENDS STA. 19+50

SE. 1/4, SW. 1/4, SEC. 34, T. 12 N. R. 3 E., 3RD P.M.

LINDA KARL

SIDEROAD IMPROVEMENT BEGINS STA. 50+10

SIDEROAD IMPROVEMENT ENDS STA. 51+50

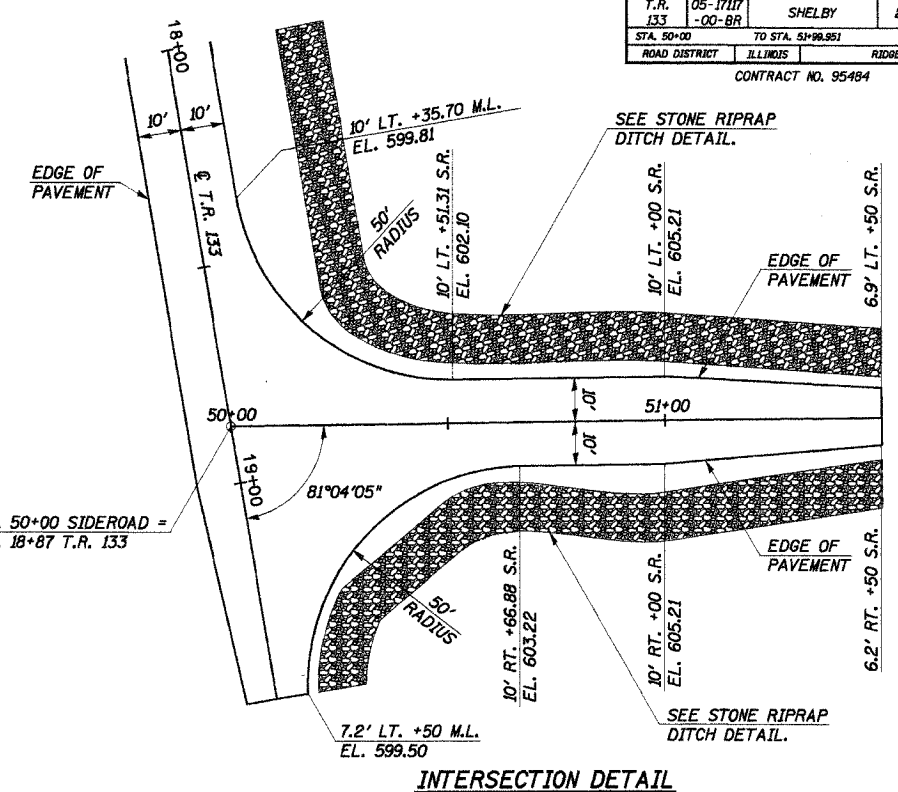
EXISTING R.O.W.

EXISTING R.O.W.

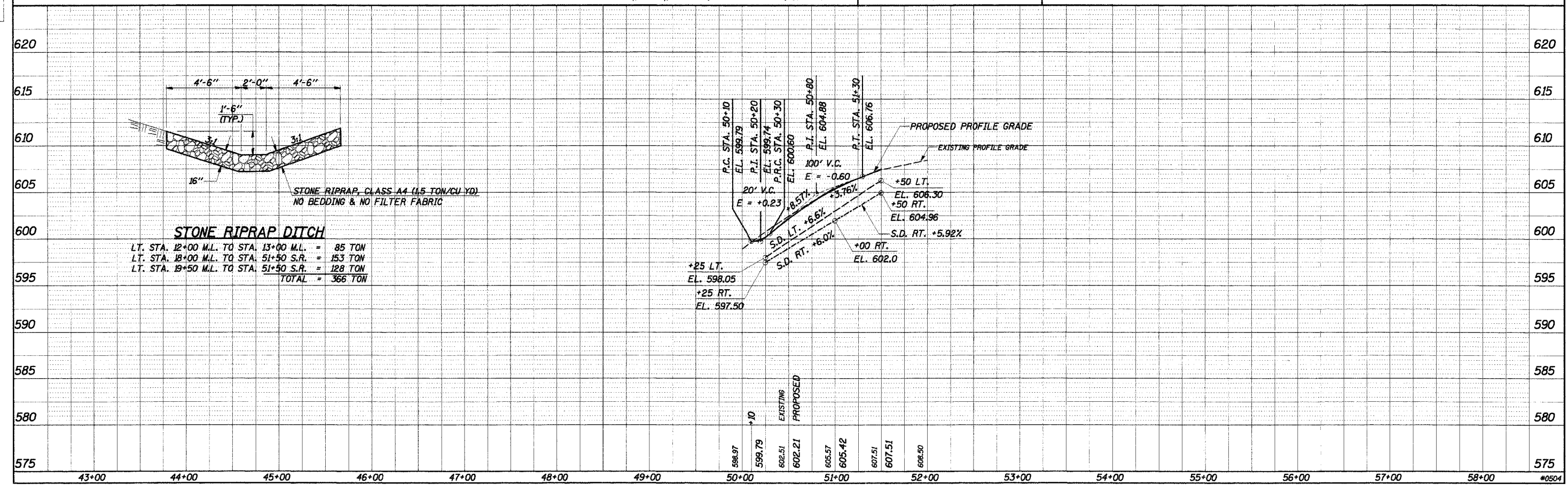
20' RT. 20' LT.

CARL KIRCHER

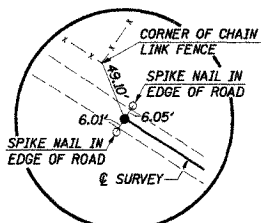
B.M. #3 - SPIKE NAIL IN POWER POLE
 31' RT. STA. 16+66
 EL. 597.47



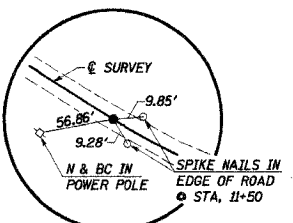
DATE: 09/20/06
 BY: S.A.C.
 DRAWN: [blank]
 CHECKED: [blank]
 DESIGNED: [blank]
 REVISIONS: [blank]



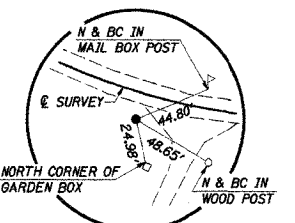
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 133	05-17117-00-BR	SHELBY	21	5
ROAD DIST.		ILLINOIS	RIDGE	
CONTRACT NO. 95484				



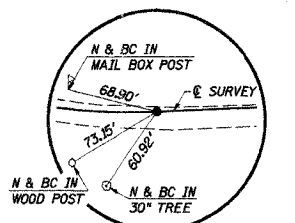
P.O.T. STA. 10+00
P.K. NAIL (FLUSH)



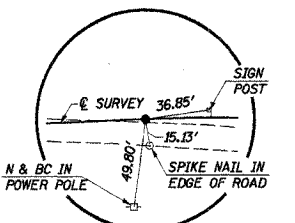
P.C. STA. 11+43.04
P.K. NAIL (FLUSH)



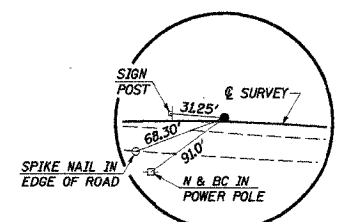
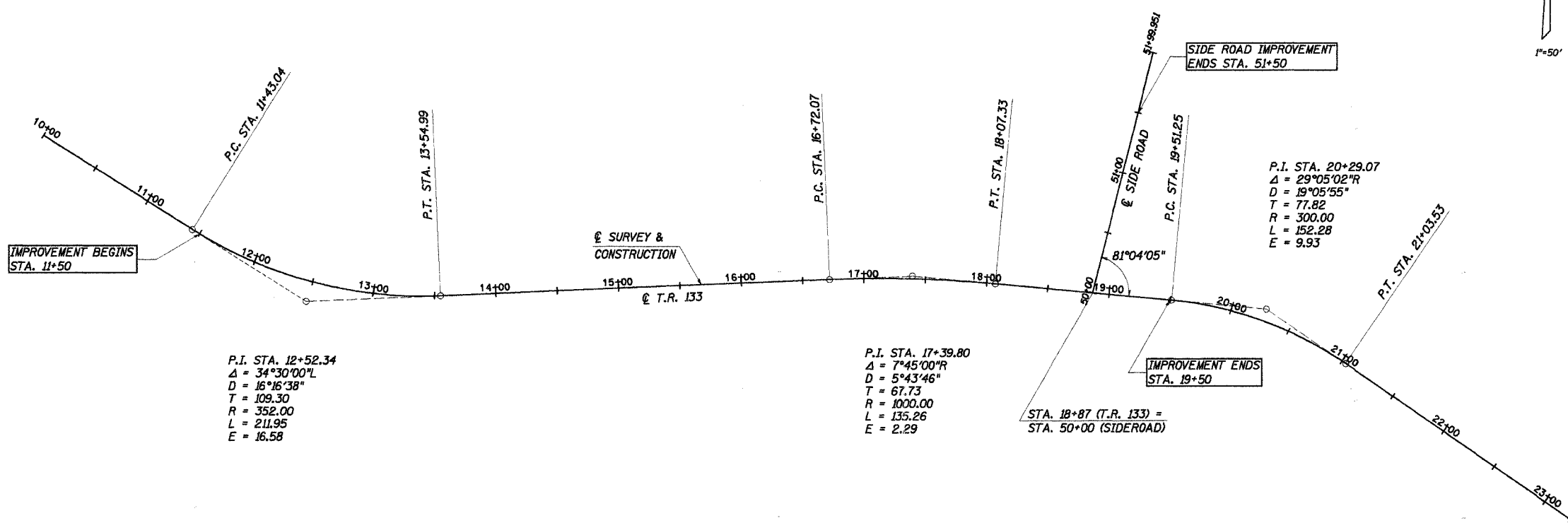
P.I. STA. 12+52.34
IRON PIN (FLUSH)



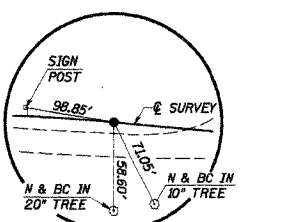
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P.K. NAIL (FLUSH)



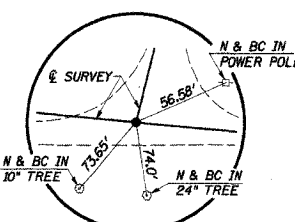
P.C. STA. 16+72.07
IRON PIN (FLUSH)



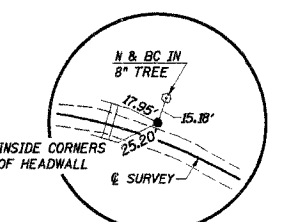
P.I. STA. 17+39.80
IRON PIN (FLUSH)



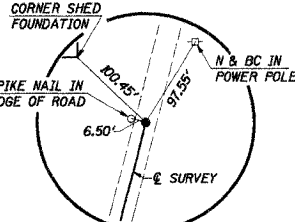
P.T. STA. 18+07.33
IRON PIN (FLUSH)



P.O.T. STA. 18+87 = STA. 50+00
IRON PIN (FLUSH)



P.I. STA. 20+29.07
IRON PIN (FLUSH)

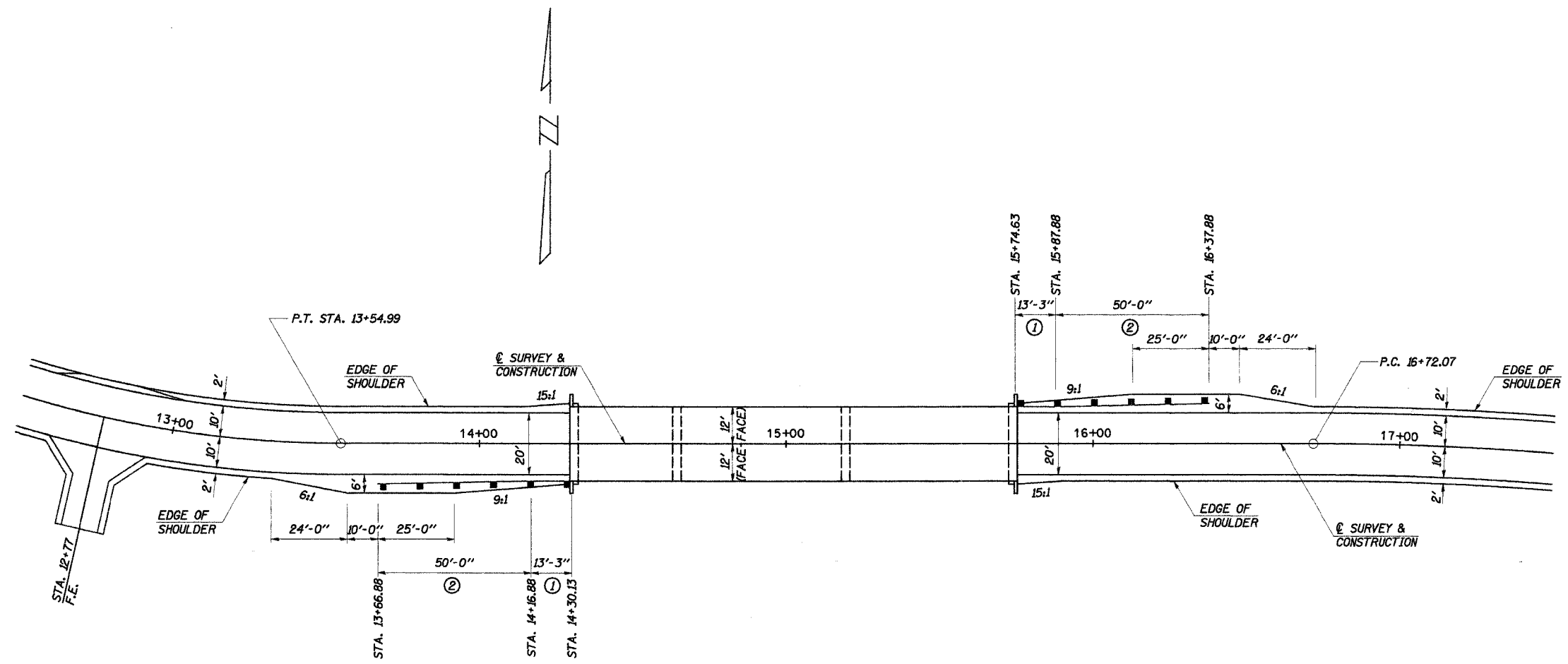


P.O.T. STA. 51+99.95
IRON PIN (FLUSH)

PROPOSED ALIGNMENT AND CROSS TIES
SECTION 05-17117-00-BR
RIDGE ROAD DISTRICT
SHELBY COUNTY
STA. 15+02.38

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 oasinc@insightbb.com	OZYURT AND STONE, INC. CONSULTING ENGINEERS	DRAWN: S.A.P. DATE: 07/28/05	CHECKED: JWD DATE: 08/18/05	JOB NO.: 0504 FILE: 0504TIES.DGN DATE: 02/14/06
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 133	05-17117-00-BR	SHELBY	21	6
ROAD DIST.	ILLINOIS		RIDGE	
CONTRACT NO. 95484				



SHOULDER AND GUARDRAIL DETAIL

TRAFFIC BARRIER TERMINAL, TYPE 5A
 12' RT. STA. 14+16.88 TO 12' RT. STA. 14+30.13 = 1 EACH
 12' LT. STA. 15+74.63 TO 12' LT. STA. 15+87.88 = 1 EACH
 TOTAL = 2 EACH

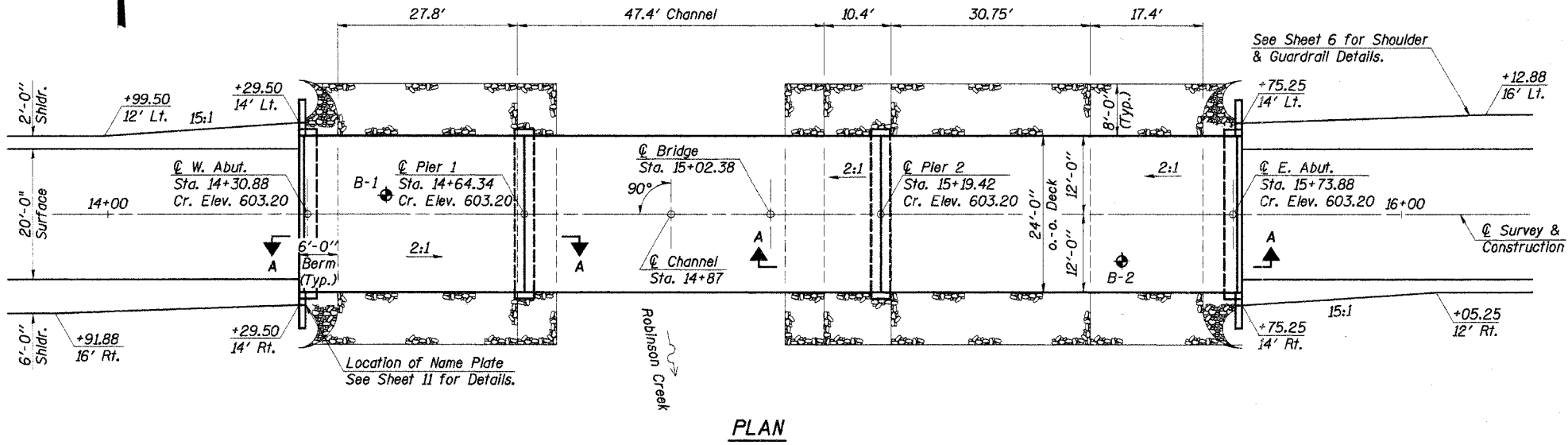
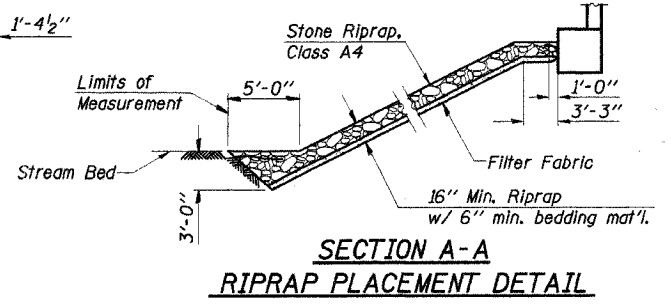
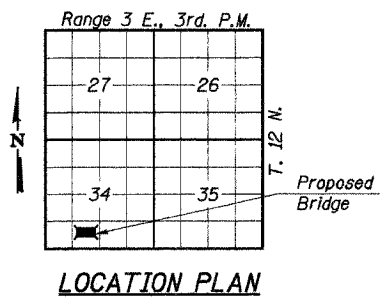
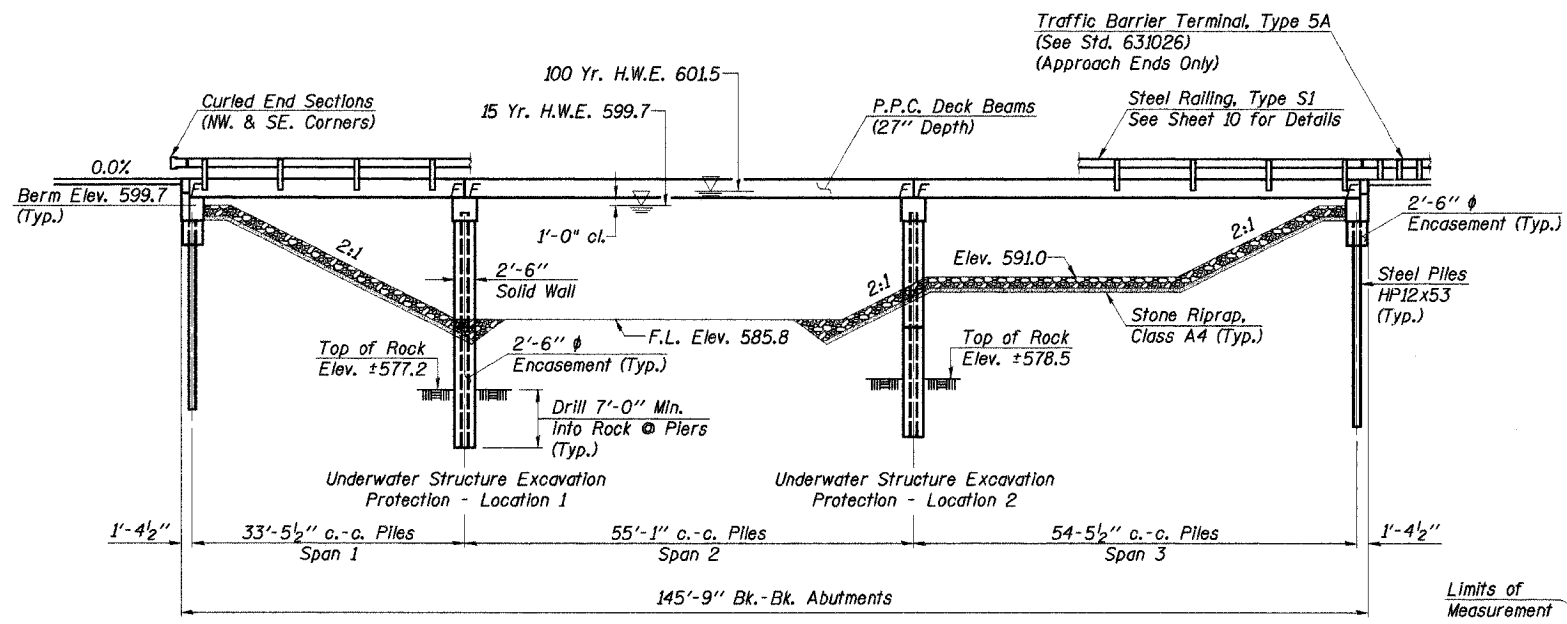
TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT)
 13' RT. STA. 13+66.88 TO 12' RT. STA. 14+16.88 = 1 EACH
 12' LT. STA. 15+87.88 TO 13' LT. STA. 16+37.88 = 1 EACH
 TOTAL = 2 EACH

LEGEND
 NOTE: ALL DIMENSIONS REFER TO FRONT FACE OF PROPOSED RAILING.
 ① TRAFFIC BARRIER TERMINAL, TYPE 5A
 ② TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL (TANGENT)

SHOULDER AND GUARDRAIL DETAIL
 SECTION 05-17117-00-BR
 RIDGE ROAD DISTRICT
 SHELBY COUNTY
 STA. 15+02.38

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 oasinc@insightbb.com	OZYURT AND STONE, Inc. CONSULTING ENGINEERS	DRAWN: S.A.P. DATE: 10/28/05	CHECKED: A.R.K. DATE: 12/08/05	JOB NO.: 0504 FILE: 0504SHLDR.DGN DATE: 02/14/06
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 133	05-1717-00-BR	SHELBY	21	7
ROAD DIST.	ILLINOIS	RIDGE	CONTRACT NO. 95484	



GENERAL NOTES

See Proposal for Boring data.

The Contractor shall drive one steel test pile in a permanent location at each abutment as directed by the Engineer, before ordering the remainder of piles.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

Excavation for structures shall be considered as included in the contract unit price for the class of concrete involved.

ROBINSON CREEK BUILT 200_ BY

SHELBY COUNTY
SEC. 05-1717-00-BR
F.A. PROJ. BROS-173(143)
STR. NO. 087-3548 LOADING HS20

LETTERING FOR NAME PLATE

See Std. 515001

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	3,456		3,456
Concrete Structures	Cu. Yd.		99.0	99.0
Reinforcement Bars	Pound		8,230	8,230
Steel Railing, Type S1	Foot	289		289
Name Plates	Each		1	1
Furnishing Steel Piles HP12x53	Foot		435	435
Driving Steel Piles	Foot		150	150
Test Pile Steel HP12x53	Each		2	2
Stone Riprap, Class A4	Ton		333	333
Filter Fabric	Sq. Yd.		489	489
Concrete Encasement	Cu. Yd.		17.0	17.0
Underwater Str. Excavation Protection - Location 1	Each		1	1
Underwater Str. Excavation Protection - Location 2	Each		1	1
Setting Piles in Rock	Cu. Yd.		10	10

The requirements of the I.D.N.R. - Division of Water Resources have been fulfilled in accordance with Statewide Permit No. 2

WATERWAY INFORMATION

Drainage Area	44.40 Sq. Mi.
Existing Opening (15 Yr.)	949 Sq. Ft. (Bridge)
	525 Sq. Ft. (Roadway)
Required Opening (15 Yr.)	1248 Sq. Ft.
Proposed Opening (15 Yr.)	1248 Sq. Ft.
Design Discharge (15 Yr.)	4418 C.F.S.
Created Head (15 Yr.)	0.3 Ft.
100 Year Discharge	6952 C.F.S.
100 Yr. Created Head	0.9 Ft.
100 Yr. H.W.E.	601.5 Ft.
DESIGN H.W.E	599.7 Ft.

DESIGN STRESSES

$f'_c = 5,000$ p.s.i. (Prestressed Beams)
 $f'_{cb} = 4,000$ p.s.i. (Prestressed Beams)
 $f'_c = 1,400$ p.s.i. (Concrete)
 $f'_s = 270,000$ p.s.i. (Prestressed Strands)
 $f'_{sb} = 201,960$ p.s.i. (Prestressed Strands)
 $f'_s = 24,000$ p.s.i. (Reinf. Bars -- Field Units)
 $f'_y = 60,000$ p.s.i. (Reinf. Bars -- Field Units)
 $n = 9$ (Concrete)

LOADING HS20-44
 Design Specifications: 2002 AASHTO
 25# / Sq. Ft. Included in dead load for future wearing surface.

"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 plans. The design is an economical one for the style of structure and complies with requirements of the current 'AASHTO Standard Specifications for Highway Bridges'."



DESIGNED	F.J.S.
CHECKED	A.R.K.
DRAWN	S.A.P.
CHECKED	A.R.K. & F.J.S.

Fred J. Stone, Jr. (5-10-06)
 ILLINOIS STRUCTURAL NO. 2934 (Expires 11/30/06)

GENERAL PLAN & ELEVATION

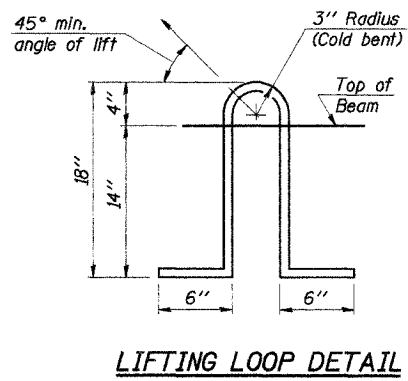
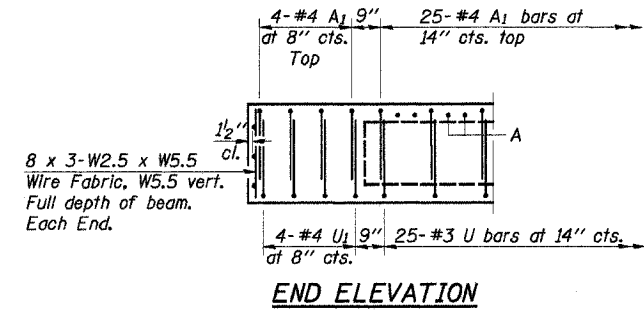
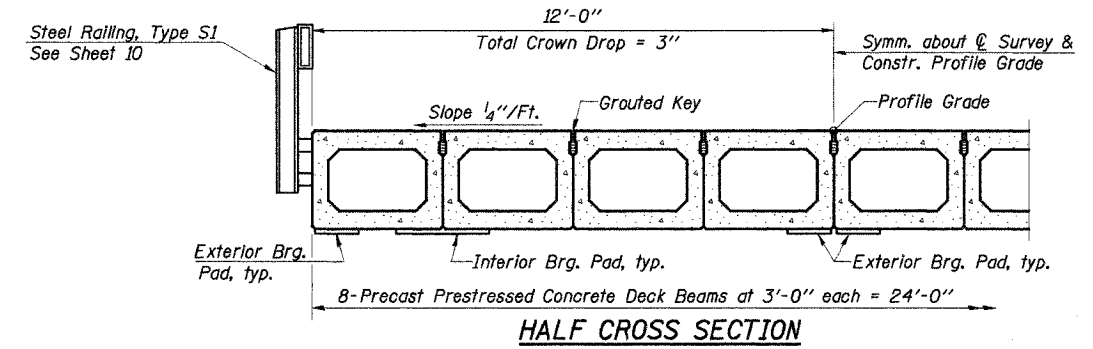
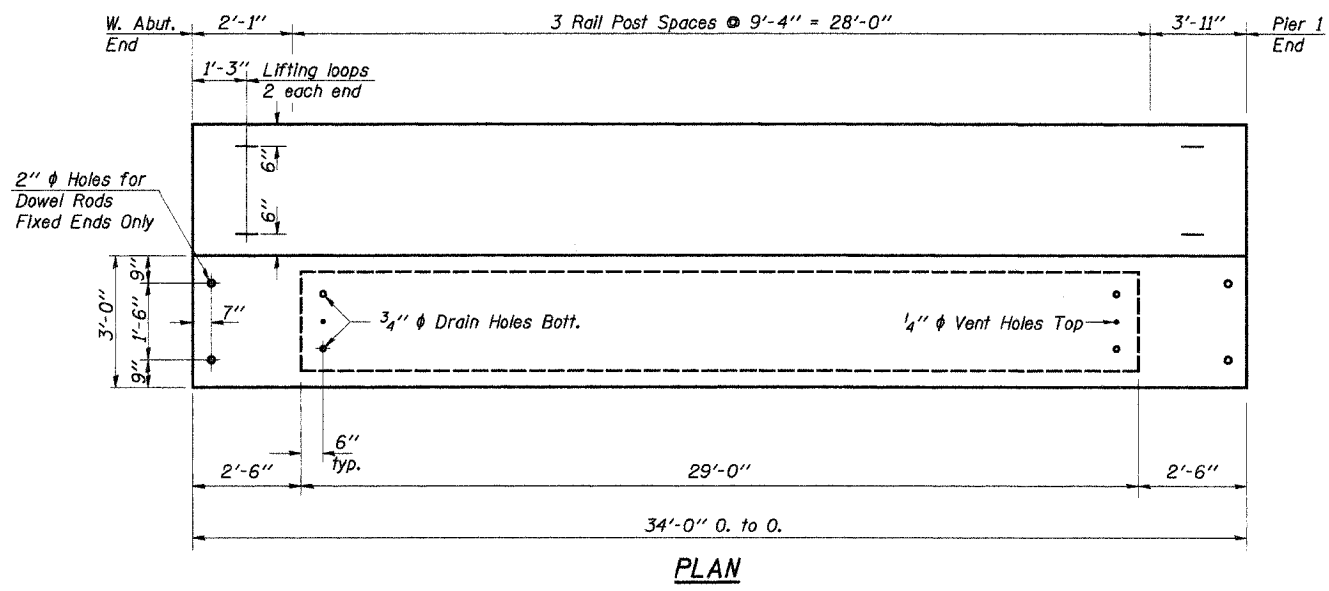
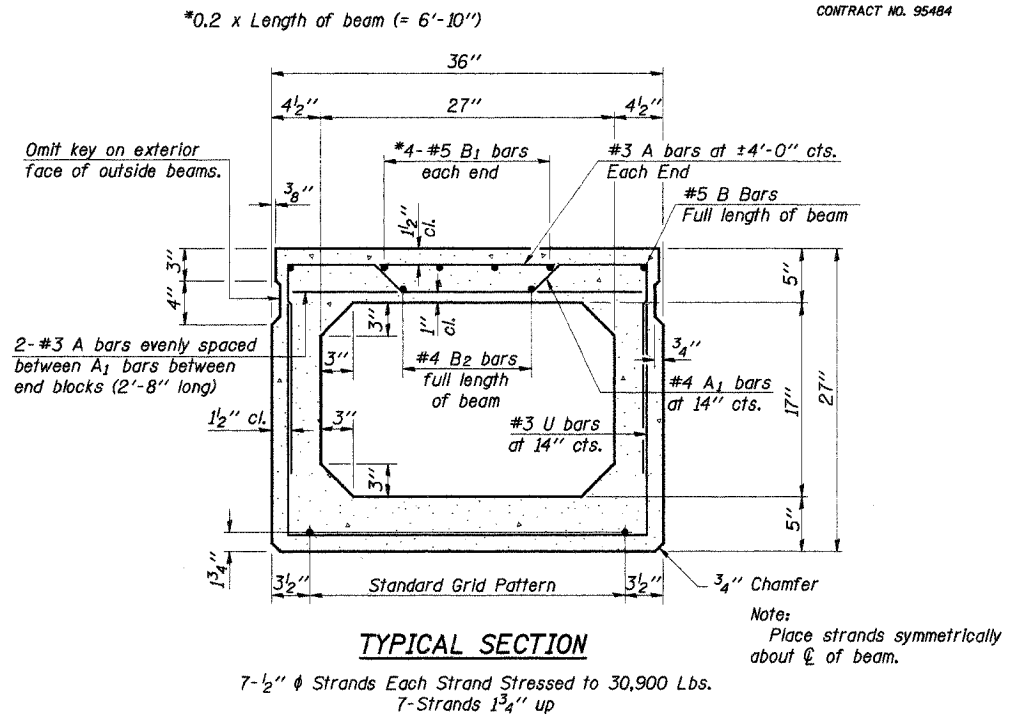
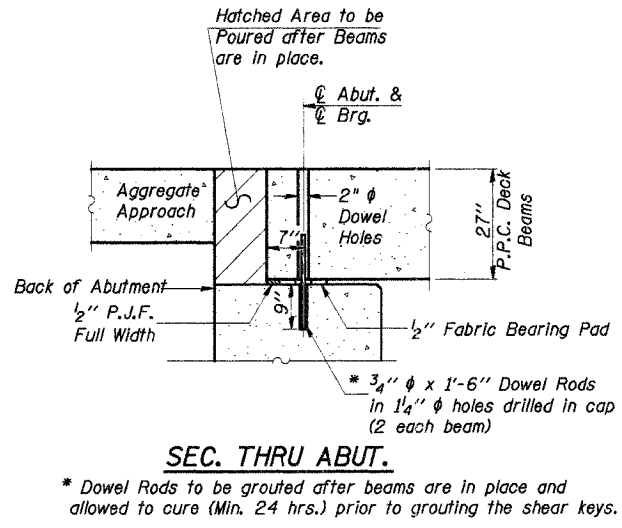
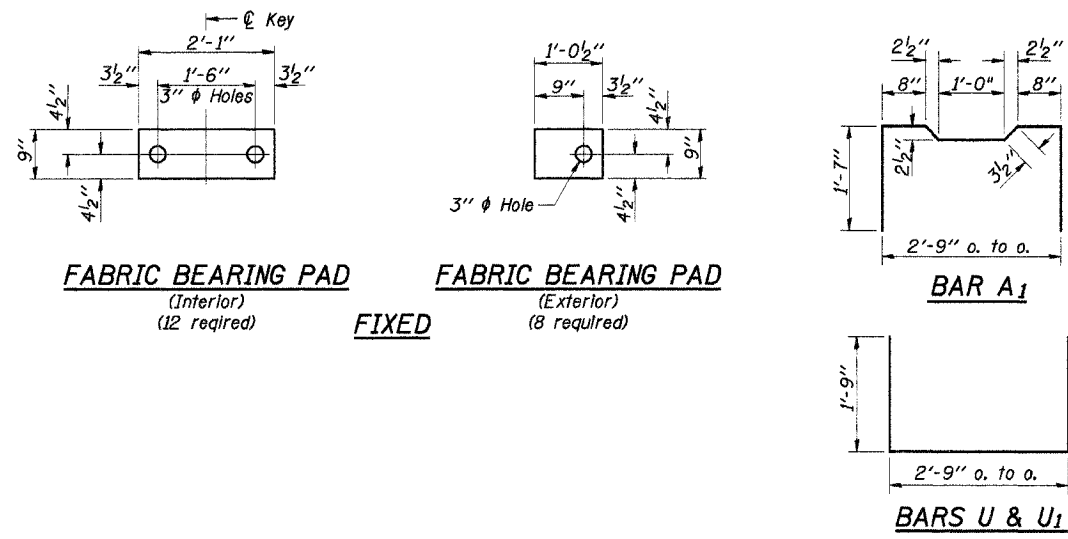
SECTION 05-1717-00-BR
 RIDGE ROAD DISTRICT
 SHELBY COUNTY
 STATION 15+02.38

4440 ASH GROVE
 SPRINGFIELD, IL 62711
 (217) 793-8600
 oasinc@inameitbb.com

OZYURT AND STONE, INC.
 CONSULTING ENGINEERS

JOB NO.: 0504
 FILE: 0504GPE.DGN
 DATE: 02/14/06

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 133	05-17117-00-BR	SHELBY	21	8
ROAD DIST.	ILLINOIS	RIDGE	CONTRACT NO. 95484	



NOTES

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. Lifting loops shall be 2-1/2" ϕ -270 ksi strands, as shown. The 1" ϕ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/2" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing. (40 Req'd.) Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key. Required Release Strength, f'cl, shall be 4,000 p.s.i. See Special Provisions for review and distribution of shop drawings.

BILL OF MATERIAL

Item	Unit	Quantity
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	816
Estimated Total Weight (One Beam) = 21,640 Pounds		

DESIGNED	F.J.S.
CHECKED	A.R.K.
DRAWN	S.A.P.
CHECKED	A.R.K. & F.J.S.

PD-5-S 9-1-03

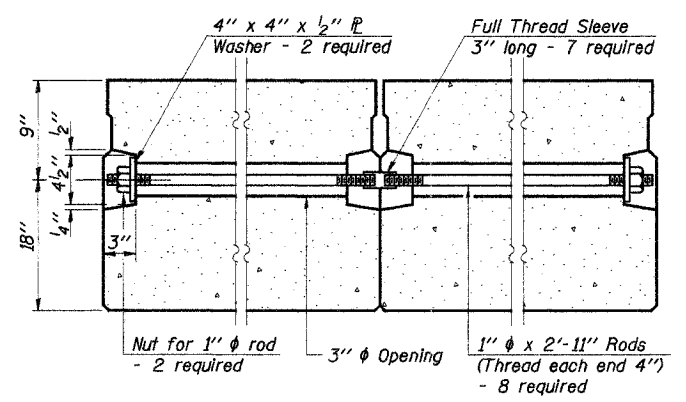
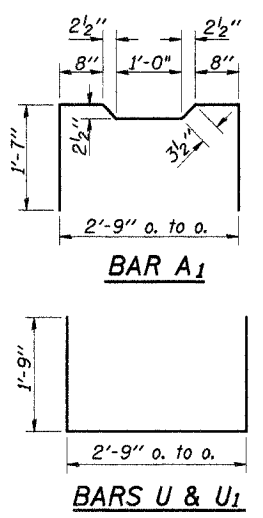
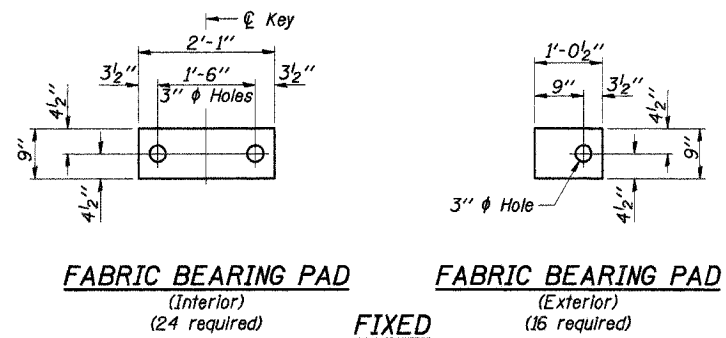
SUPERSTRUCTURE - SPAN 1

SECTION 05-17117-00-BR
RIDGE ROAD DISTRICT
SHELBY COUNTY
STATION 15+02.38

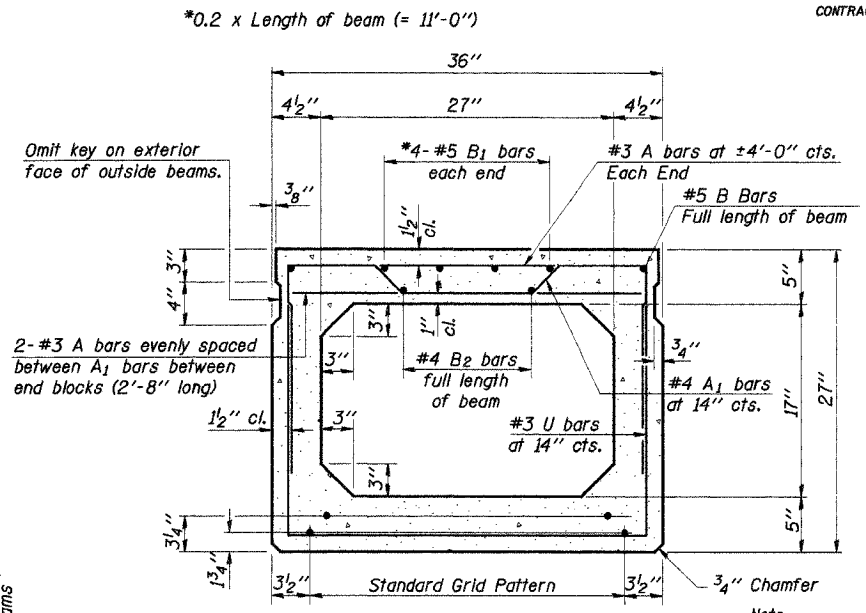
4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8800 oasinc@ineightbb.com	OZYURT AND STONE, INC. CONSULTING ENGINEERS	JOB NO.: 0504 FILE: 0504SUPER1DGN DATE: 02/14/06
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 133	05-17117-00-BR	SHELBY	21	9
ROAD DIST.	ILLINOIS	RIDGE		

CONTRACT NO. 95484



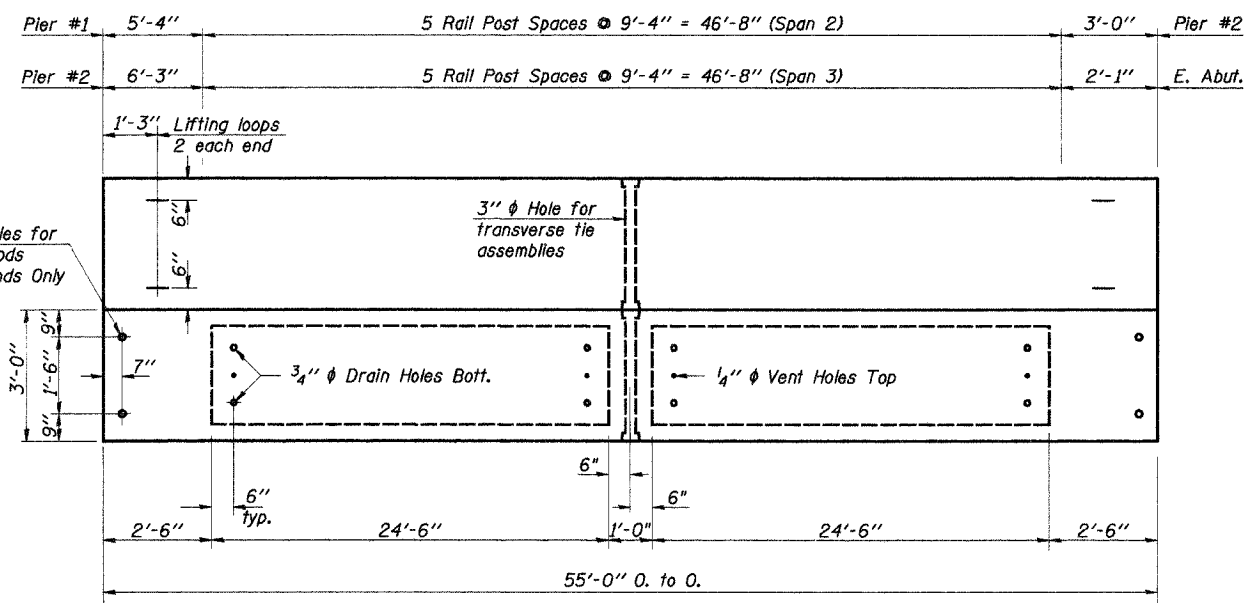
TYPICAL TRANSVERSE TIE ASSEMBLY



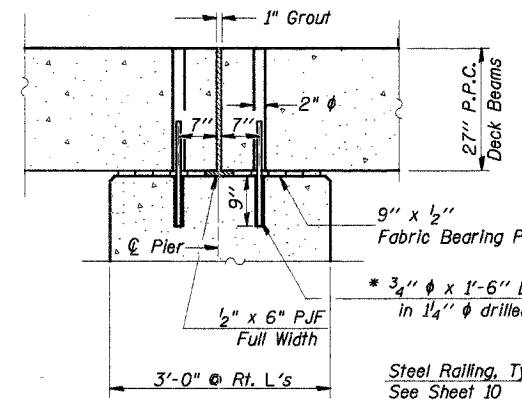
TYPICAL SECTION

12-1/2" ϕ Strands Each Strand Stressed to 30,900 Lbs.
8-Strands 1 3/4" up, 4-Strands 3/4" up

Note: Place strands symmetrically about ϕ of beam.

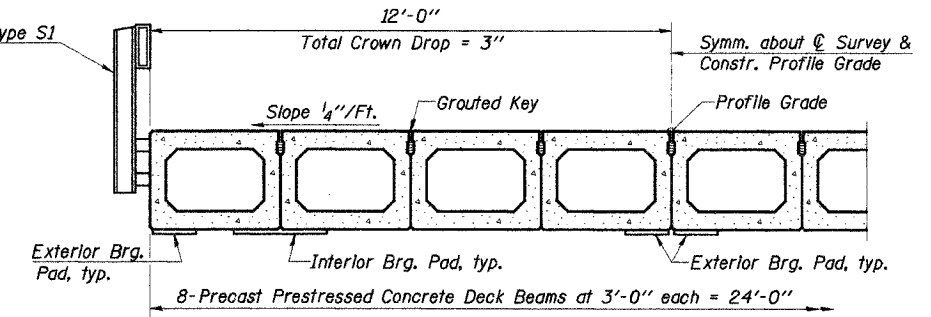


PLAN

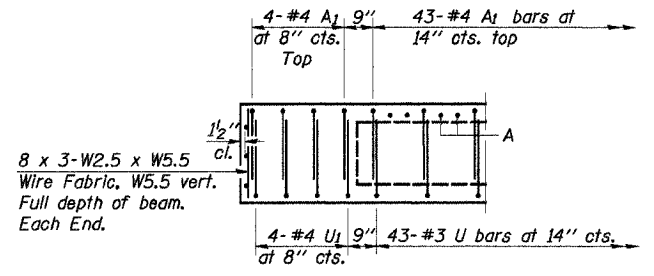


SEC. AT PIER

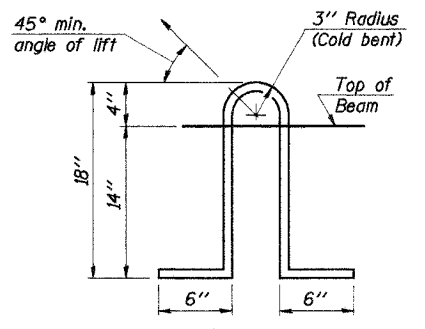
* Note: After beams are in place, 1 1/4" holes shall be drilled into the Substructure, and the dowel rods grouted in place and allowed to cure (Min. 24 Hrs.) prior to grouting shear key.



HALF CROSS SECTION



END ELEVATION



LIFTING LOOP DETAIL

NOTES

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. Lifting loops shall be 2-1/2" ϕ 270 ksi strands, as shown. The 1" ϕ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing. (80 Req'd) Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key. Required Release Strength, 1'ci, shall be 4,000 p.s.i. See Special Provisions for review and distribution of shop drawings.

BILL OF MATERIAL

Item	Unit	Quantity
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	2,640

Estimated Total Weight (One Beam) = 33,990 Pounds

DESIGNED	F.J.S.
CHECKED	A.R.K.
DRAWN	S.A.P.
CHECKED	A.R.K. & F.J.S.

PD-5-S 9-1-03

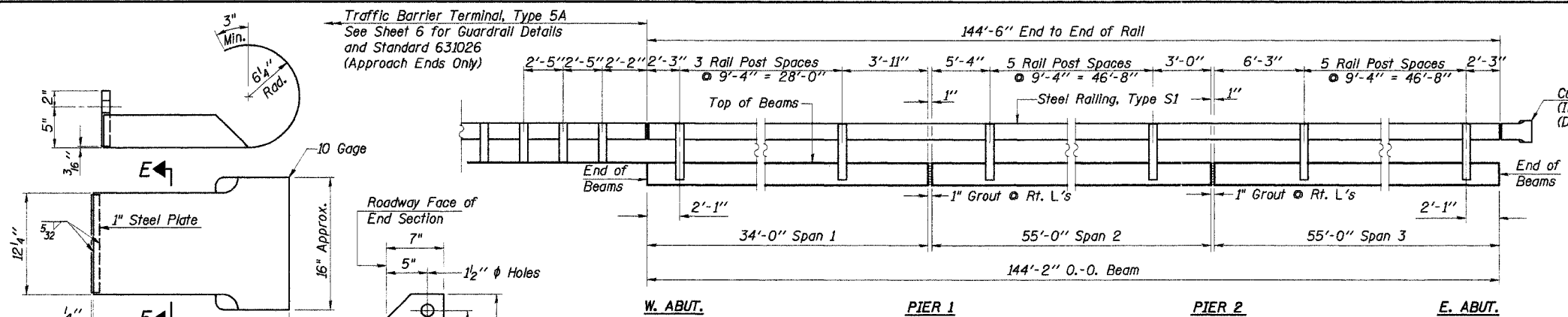
SUPERSTRUCTURE - SPANS 2 & 3

SECTION 05-17117-00-BR
RIDGE ROAD DISTRICT
SHELBY COUNTY
STATION 15+02.38

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 oasinc@insightbb.com	OZYURT AND STONE, INC. CONSULTING ENGINEERS	JOB NO.: 0504 FILE: 0504SUPER2.DGN DATE: 02/14/06
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 133	05-1717-00-BR	SHELBY	21	10
ROAD DIST.	ILLINOIS	RIDGE		

CONTRACT NO. 95484

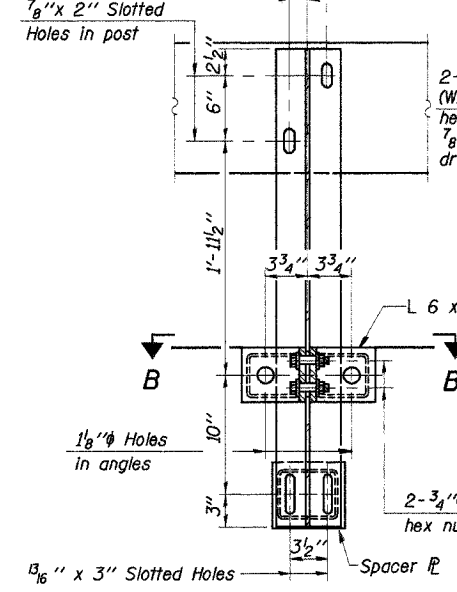


ELEVATION

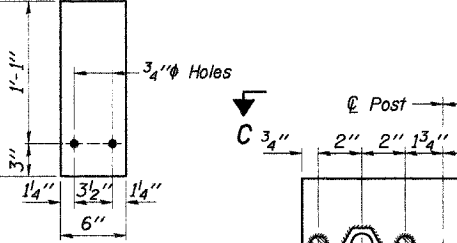
CURLED END SECTION DETAILS
(2 Required)

10 Gage
1" Steel Plate
16" Approx.
24" Approx.

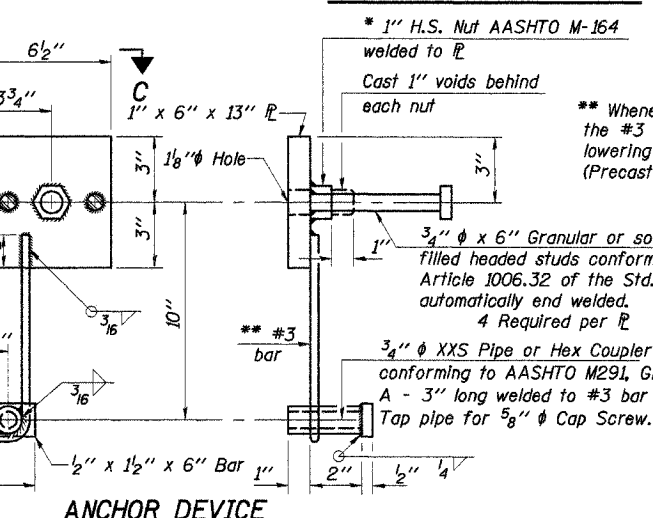
SECTION E-E



SECTION A-A

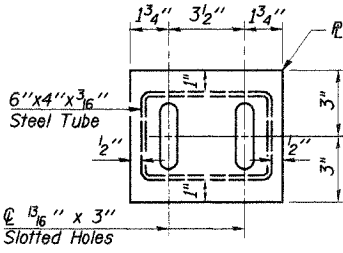


SECTION AT RAIL POST



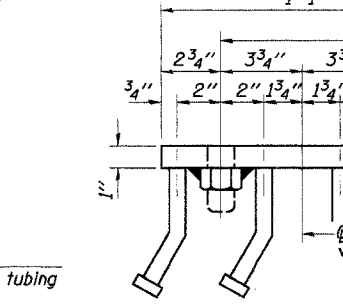
ANCHOR DEVICE

* Threaded areas shall be plugged or blocked off during casting of beam.

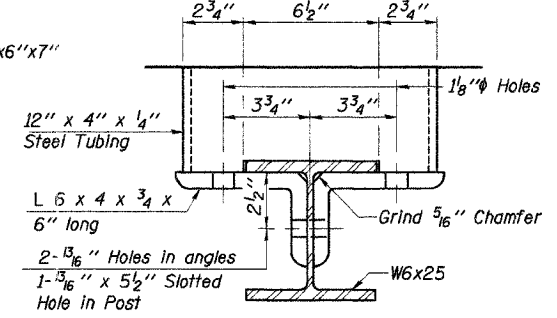


DETAIL D

Spacer 12" x 4" x 1/4" Steel Tubing, 4 1/16" long
Tack weld to W6 x 25 (Notch tubing to fit rail post as shown in Section B-B)

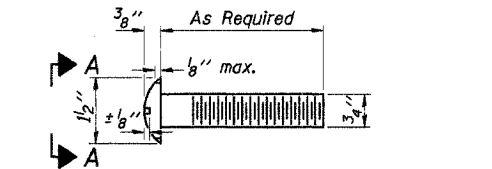


VIEW C-C

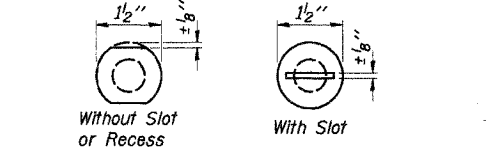


SECTION B-B

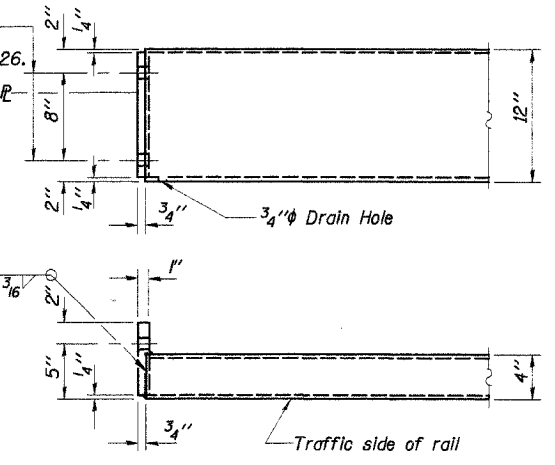
1 1/2" Holes for 1" x 4" Round Head Bolts.
Provide 2 flat washers & locknuts for end section connection or guard rail connection shown on Std. 631026.



DETAIL OF 3/4" ROUND HEAD BOLT



VIEW A-A



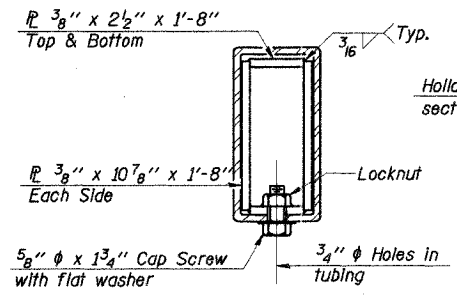
END OF RAIL DETAILS

BILL OF MATERIAL

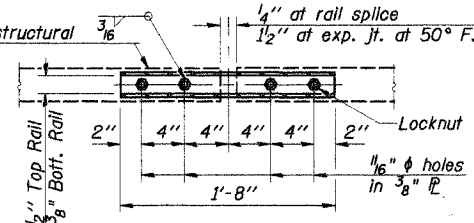
Item	Unit	Quantity
Steel Railing, Type S1	Foot	289

STEEL RAILING, TYPE S1

SECTION 05-1717-00-BR
RIDGE ROAD DISTRICT
SHELBY COUNTY
STATION 15+02.38



SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE P TYPICAL

1/4" SHIM PLATE

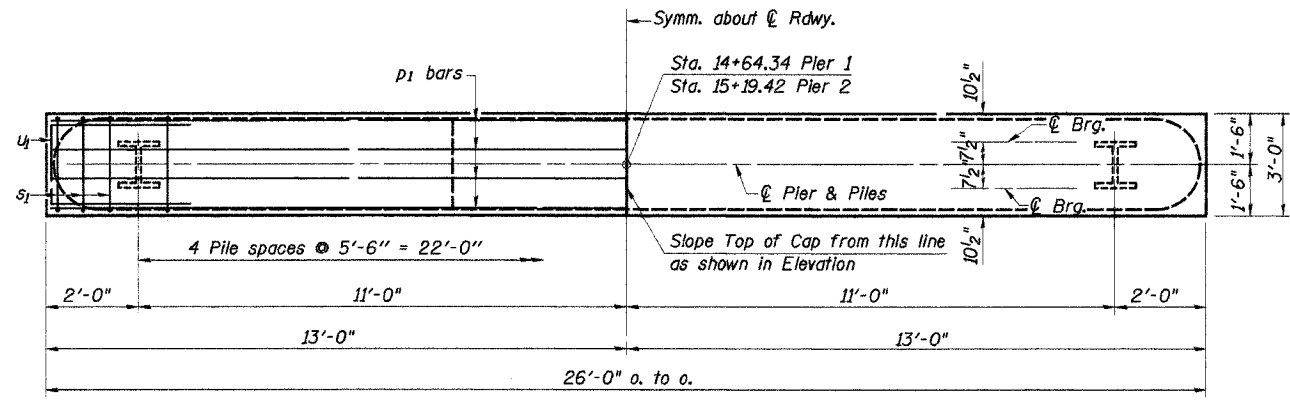
Note: For multi-span bridges, sufficient 1/4" x 6" x 1'-4" galvanized steel shims shall be provided to align rail between adjacent spans. Cost Incidental to Steel Railing.

DESIGNED	F.J.S.
CHECKED	A.R.K.
DRAWN	S.A.P.
CHECKED	A.R.K. & F.J.S.

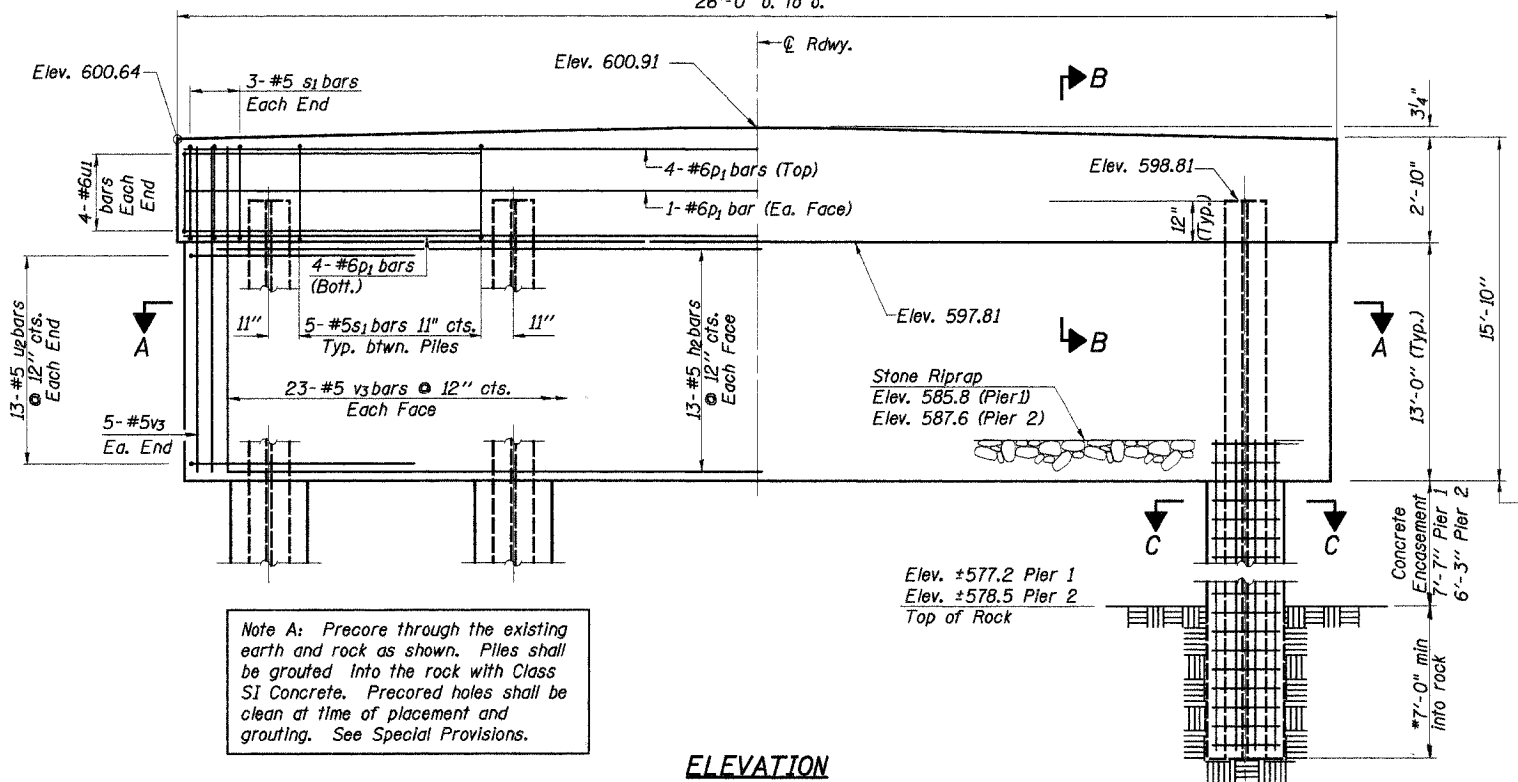
4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 oasinc@insightbb.com	OZYURT AND STONE, INC. CONSULTING ENGINEERS	JOB NO.: 0504 FILE: 0504RAIL.DGN DATE: 02/14/06
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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 133	05-17117-00-BR	SHELBY	21	12
ROAD DIST.	ILLINOIS	RIDGE		

CONTRACT NO. 95484

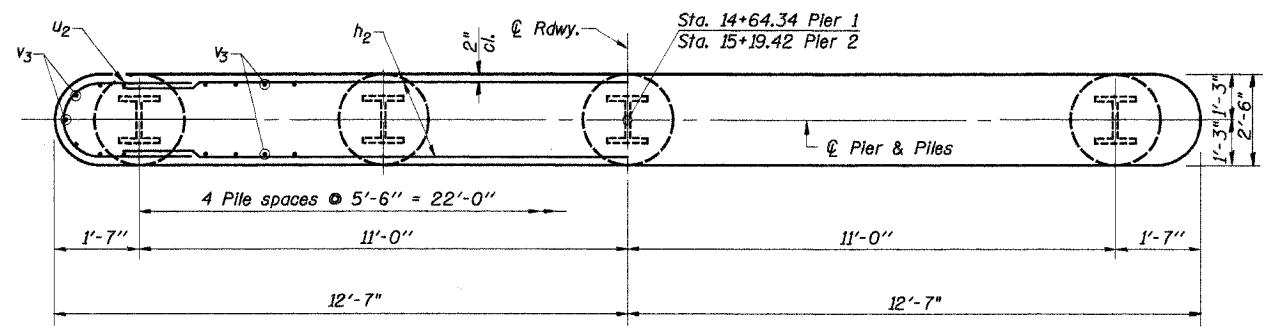


PLAN

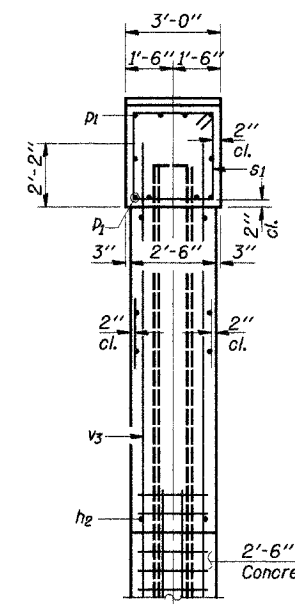


ELEVATION

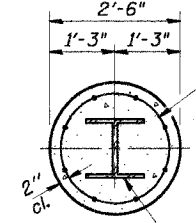
Note A: Precore through the existing earth and rock as shown. Piles shall be grouted into the rock with Class S1 Concrete. Precored holes shall be clean at time of placement and grouting. See Special Provisions.



SECTION A-A

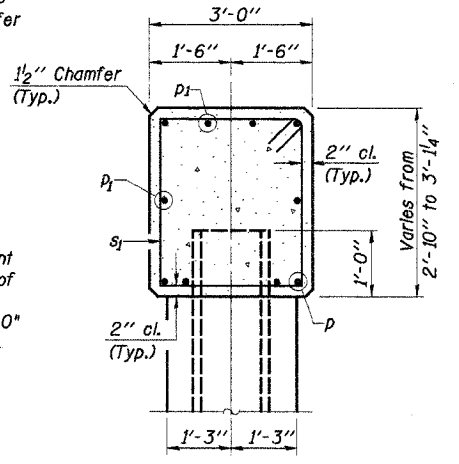


END VIEW



SECTION C-C

Welded wire fabric 6"x 6"-W4.0 x W4.0 Wire weighing 58#/100 sq. ft. The cost of Reinforcement is incidental to the cost of "Concrete Encasement". Extend Reinforcement 1'-0" into wall.



SECTION B-B

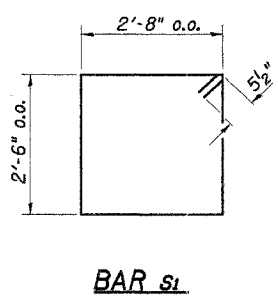
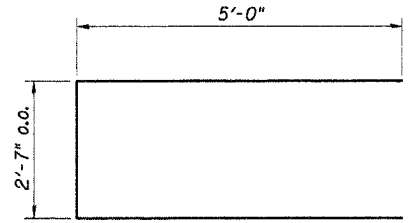
PILE DATA

Type.....	Steel HP12x53
Capacity.....	Set in Rock (See Note A)
Est. Length.....	29'-0" Feet/Pile Pier 1
	28'-0" Feet/Pile Pier 2
No. Req'd.....	10*

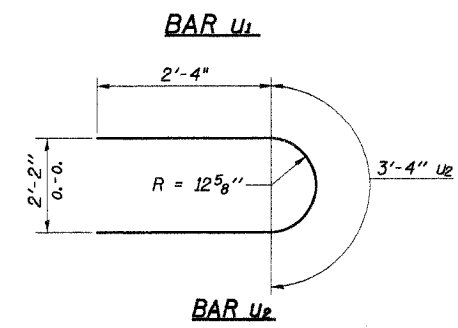
* Concrete included in price for SETTING PILES IN ROCK. See Special Provisions.

BILL OF MATERIAL - 2 PIERS

BAR	NO.	SIZE	LENGTH	SHAPE
h2	52	#5	22'-10"	—
p1	20	#6	25'-8"	—
s1	52	#5	11'-3"	□
u1	16	#6	12'-7"	⊓
u2	52	#5	8'-0"	⊓
v3	112	#5	15'-0"	—
Concrete Structures		Cu. Yd.	76.8	
Reinforcement Bars		Pound	5,110	
Steel Piles HP12x53		Foot	285	
Setting Piles in Rock		Each	10	
Conc. Encasement		Cu. Yd.	12.6	



BAR s1



BAR u1

BAR u2

DESIGNED	F.J.S.
CHECKED	A.R.K.
DRAWN	S.A.P.
CHECKED	A.R.K. & F.J.S.

PIERS

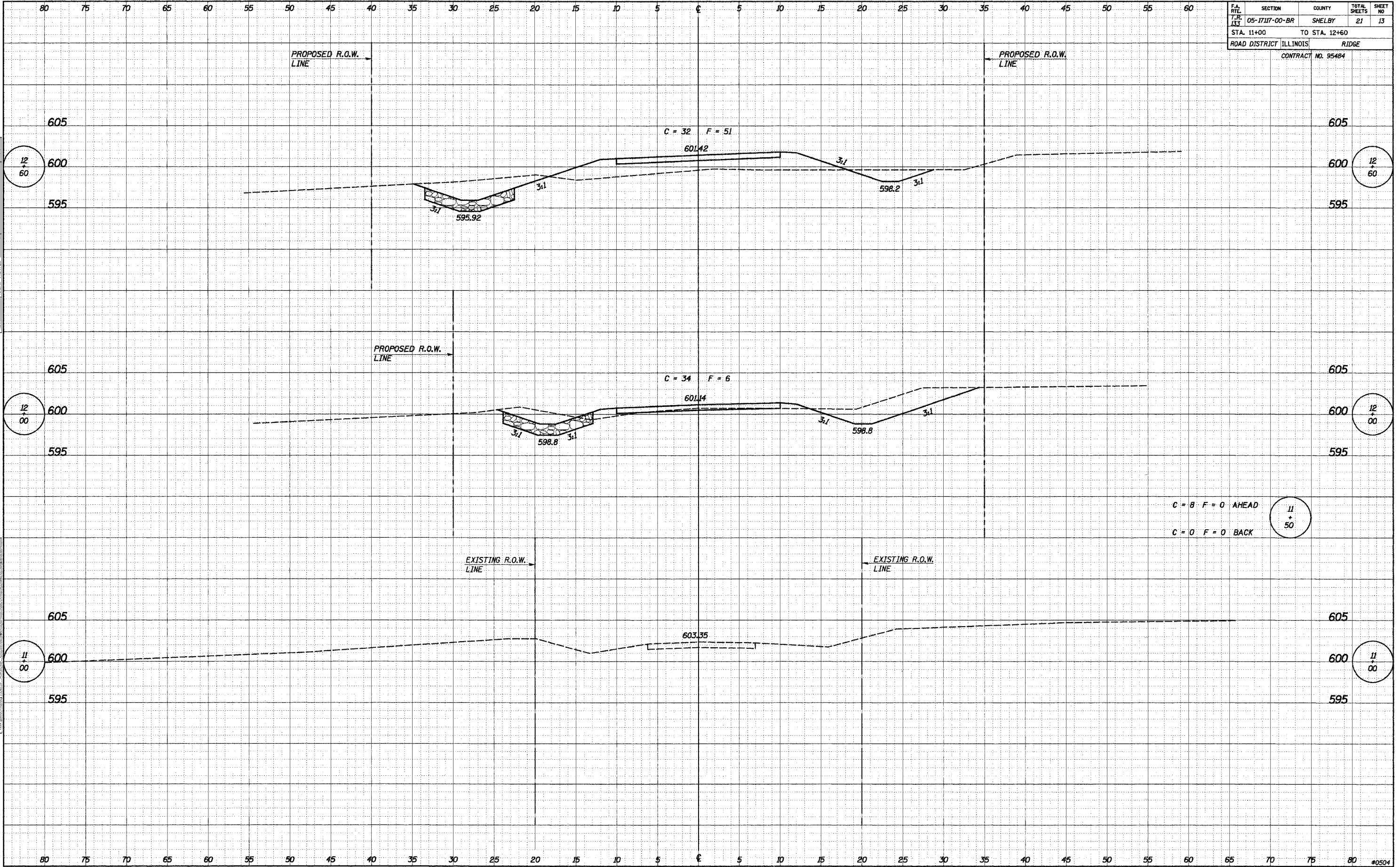
SECTION 05-17117-00-BR
RIDGE ROAD DISTRICT
SHELBY COUNTY
STATION 15+02.38

4440 ASH GROVE
SPRINGFIELD, IL 62711
(217) 793-8800
oasinc@insightbb.com

OZYURT AND STONE, INC.
CONSULTING ENGINEERS

JOB NO.: 0504
FILE: 0504PIER.DGN
DATE: 02/14/06

F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 133	05-17117-00-BR	SHELBY	21	13
STA. 11+00		TO STA. 12+60		
ROAD DISTRICT ILLINOIS		RIDGE		
CONTRACT NO. 95484				



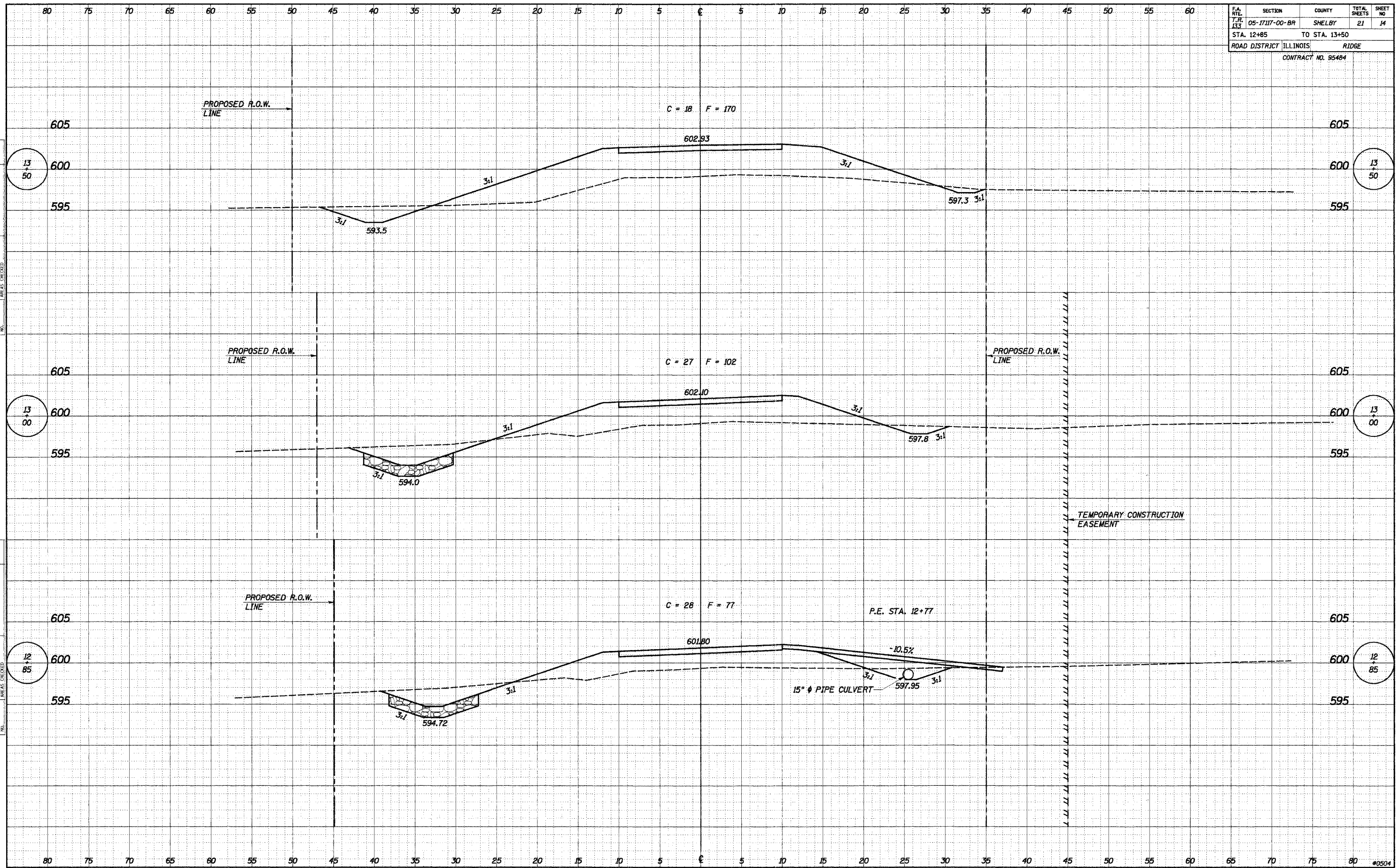
DATE	BY
ORIGINAL SURVEY	DATE
NOTE BOOK	09/09/05
NO.	

DATE	BY
ORIGINAL SURVEY	DATE
NOTE BOOK	09/09/05
NO.	

F.A. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
T.R. 133	05-17117-00-BR	SHELBY	21	14
STA. 12+85		TO STA. 13+50		
ROAD DISTRICT ILLINOIS		RIDGE		
CONTRACT NO. 95484				

DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	
DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	
DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	

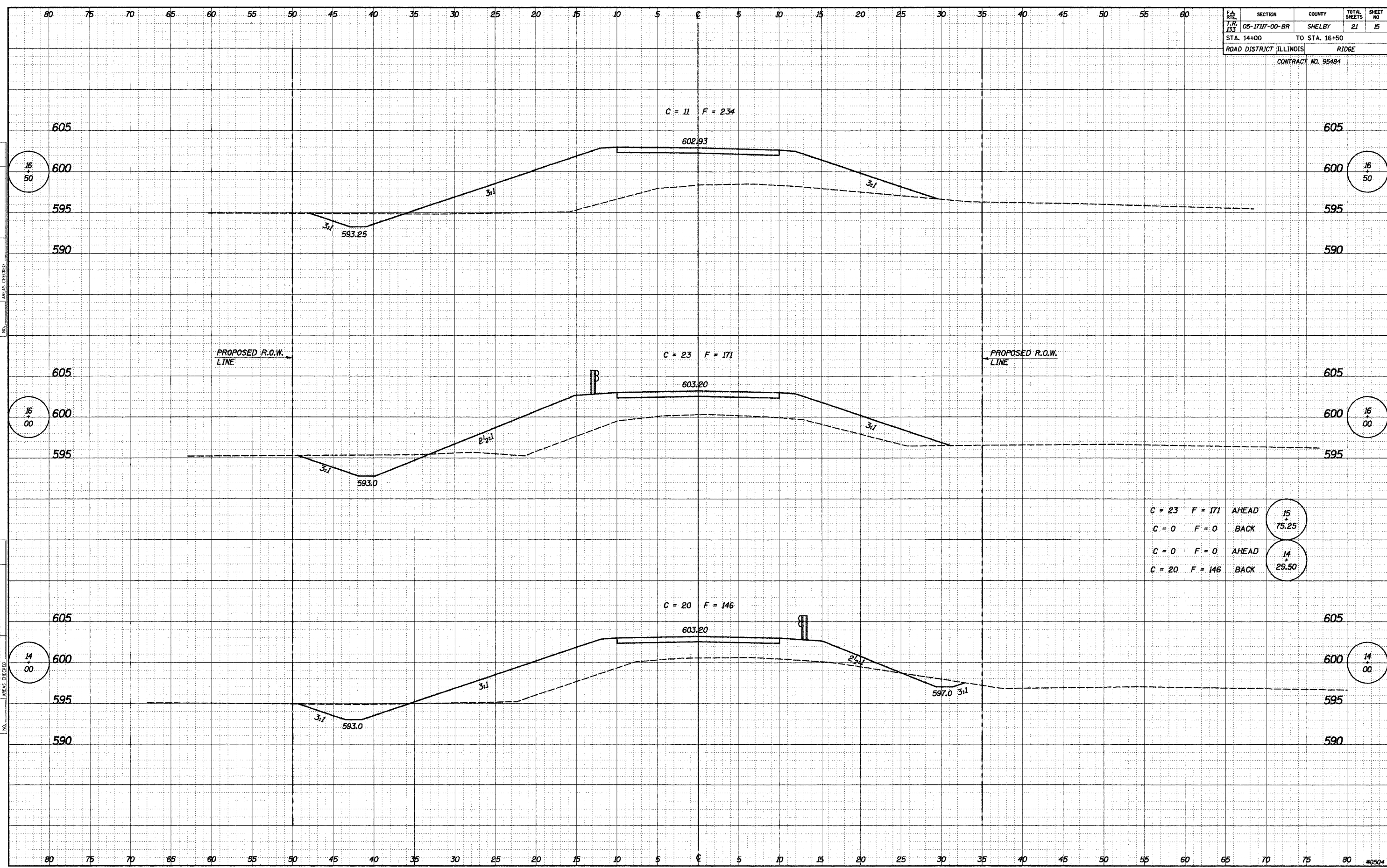
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BY	C.A.P.
REVISIONS	
NO.	
DESCRIPTION	
DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	
DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	



F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
T.R. 133	05-1717-00-BR	SHELBY	21	15
STA. 14+00		TO STA. 16+50		
ROAD DISTRICT ILLINOIS		RIDGE		
CONTRACT NO. 95484				

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

DATE 09/09/05
 BY S.A.P.
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 AREAS CHECKED _____
 ORIGINAL SURVEY NOTE BOOK NO. _____

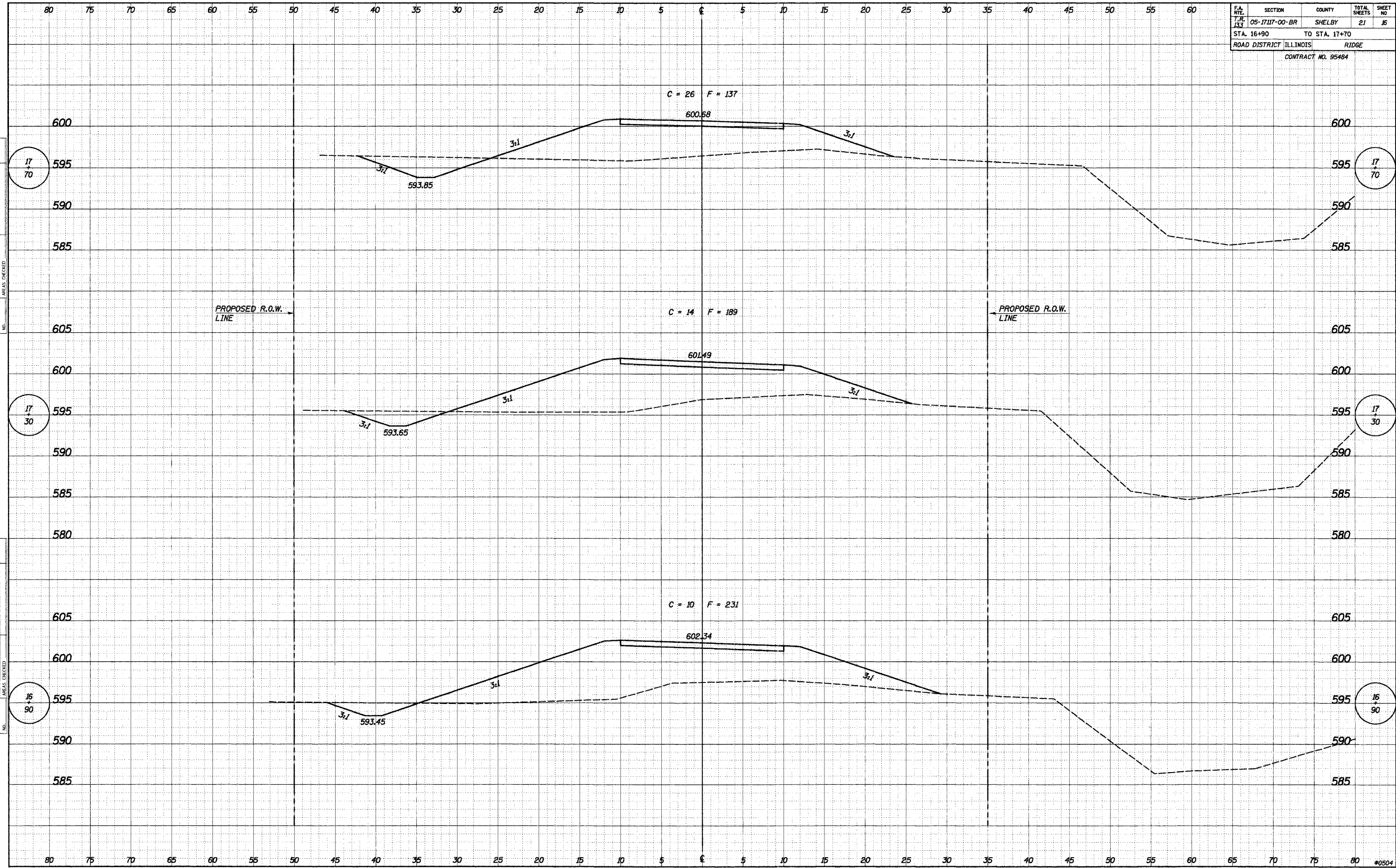


$C = 23$	$F = 171$	AHEAD	15
$C = 0$	$F = 0$	BACK	75.25
$C = 0$	$F = 0$	AHEAD	14
$C = 20$	$F = 146$	BACK	29.50

P.A. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 133	05-1717-00-BR	SHELBY	21	16
STA. 16+90		TO STA. 17+70		
ROAD DISTRICT ILLINOIS		RIDGE		
CONTRACT NO. 95484				

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

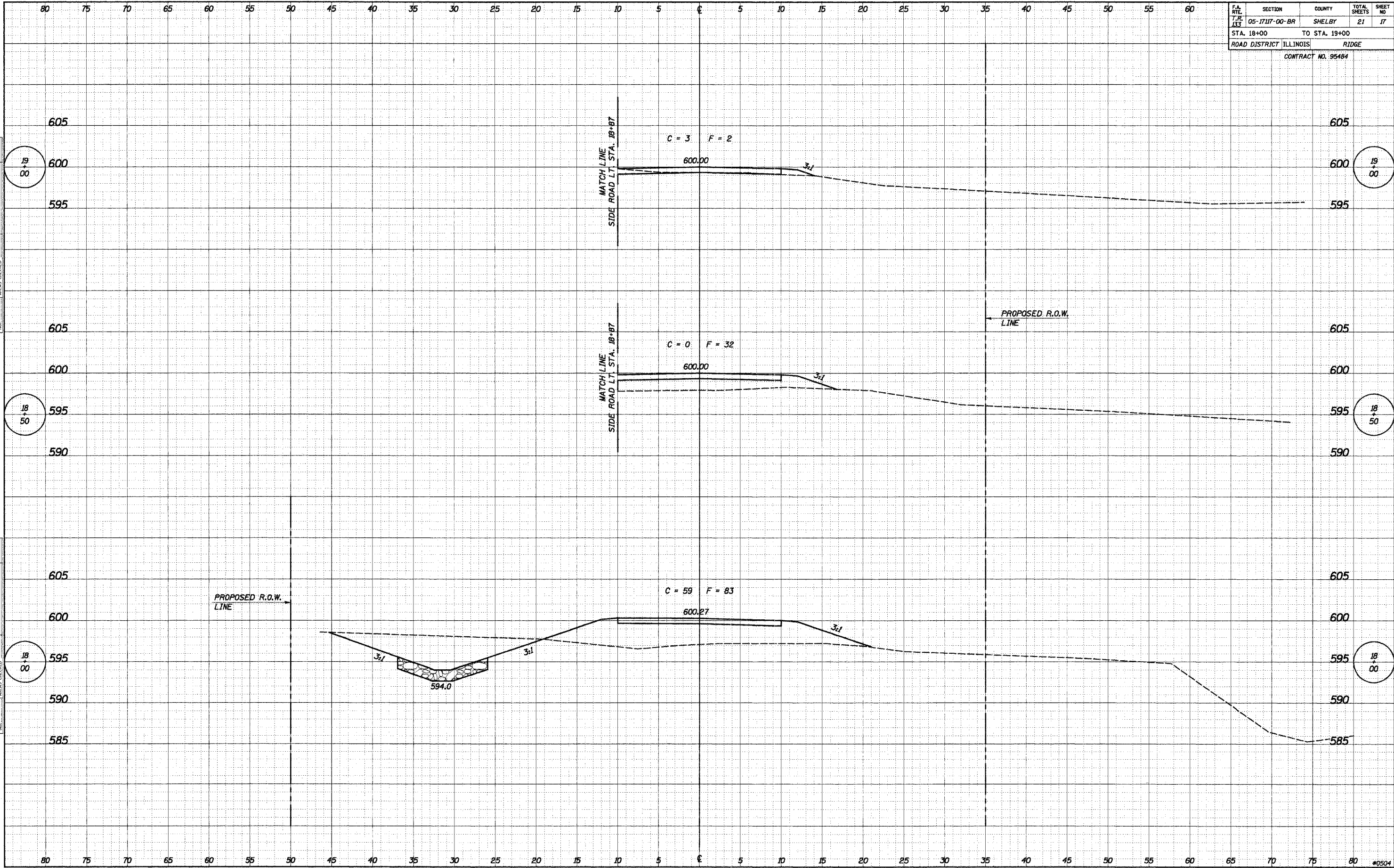
DATE: 05/03/95
 BY: S.A.P.
 SURVEYED: _____
 PLOTTED: _____
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 ORIGINAL SURVEY NOTE BOOK NO. _____
 SURVEYED: _____
 PLOTTED: _____
 CHECKED: _____
 ORIGINAL SURVEY NOTE BOOK NO. _____



F.A. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
T.R. 133	05-1717-00-BR	SHELBY	21	17
STA. 18+00		TO STA. 19+00		
ROAD DISTRICT ILLINOIS		RIDGE		
CONTRACT NO. 95484				

DATE	
BY	
FINAL SURVEY	
NOTE BOOK	
NO.	
SURVEYED	
TEMPLATE	
AREAS CHECKED	

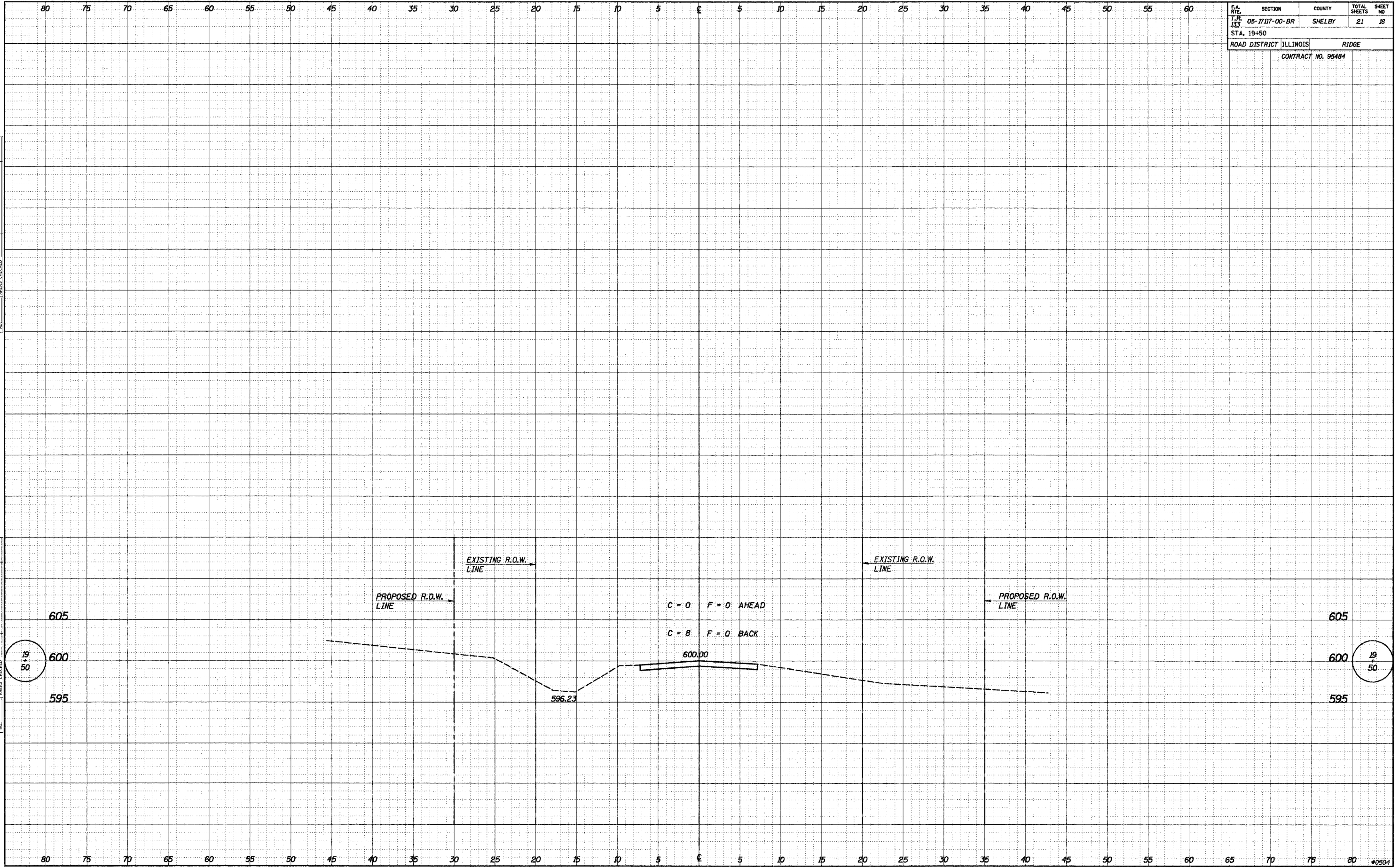
DATE	09/09/05
BY	S.A.P.
ORIGINAL SURVEY	
NOTE BOOK	
NO.	
SURVEYED	
TEMPLATE	
AREAS CHECKED	



F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 133	05-17117-00-BR	SHELBY	21	18
STA. 19+50				
ROAD DISTRICT ILLINOIS		RIDGE		
CONTRACT NO. 95484				

FINAL SURVEY BY DATE
 SURVEYED BY DATE
 NOTE BOOK NO.
 TEMPLATE AREAS CHECKED

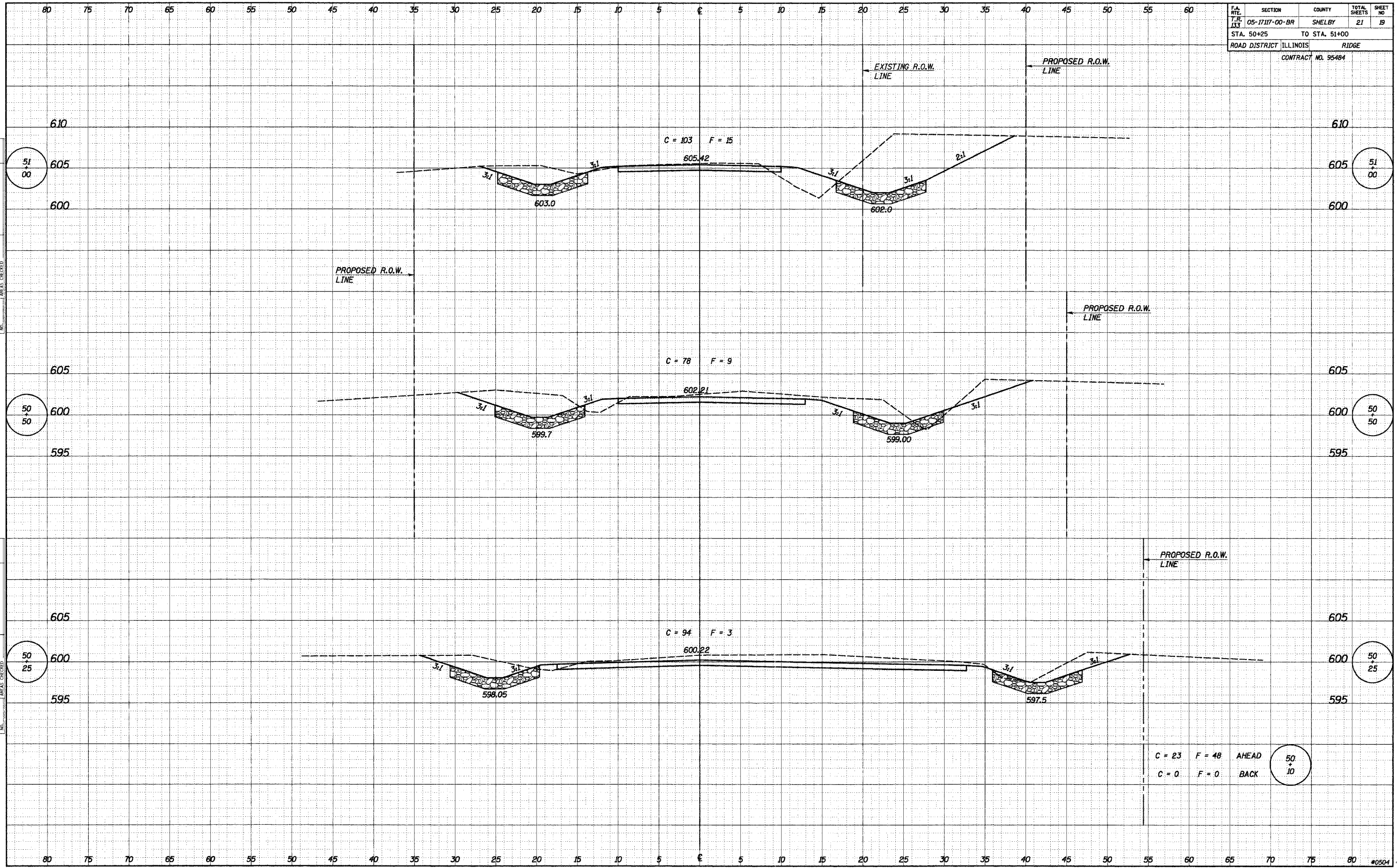
ORIGINAL SURVEY BY DATE
 SURVEYED BY DATE
 NOTE BOOK NO.
 TEMPLATE AREAS CHECKED



F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
T.R. 133	05-1717-00-BR	SHELBY	21	19
STA. 50+25		TO STA. 51+00		
ROAD DISTRICT ILLINOIS		RIDGE		
CONTRACT NO. 95484				

DATE	
BY	
ORIGINAL SURVEY PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	

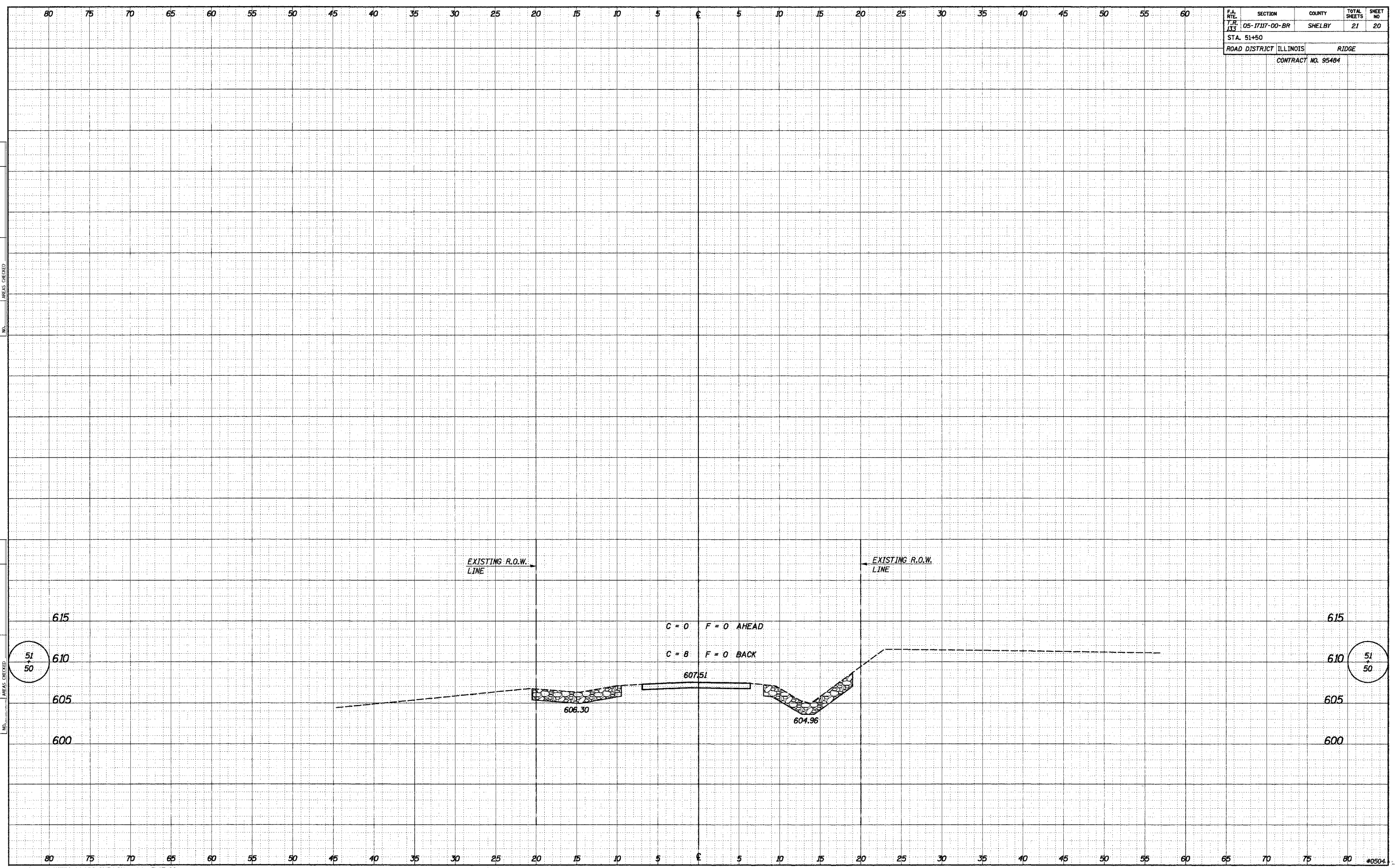
DATE	07/09/05
BY	S.M.P.
ORIGINAL SURVEY PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	



F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 133	05-1717-00-BR	SHELBY	21	20
STA. 51+50				
ROAD DISTRICT ILLINOIS			RIDGE	
CONTRACT NO. 95484				

DATE	
BY	
REVISIONS	
NO.	DESCRIPTION
1	AS SHOWN
2	PLATTED
3	AREAS CHECKED
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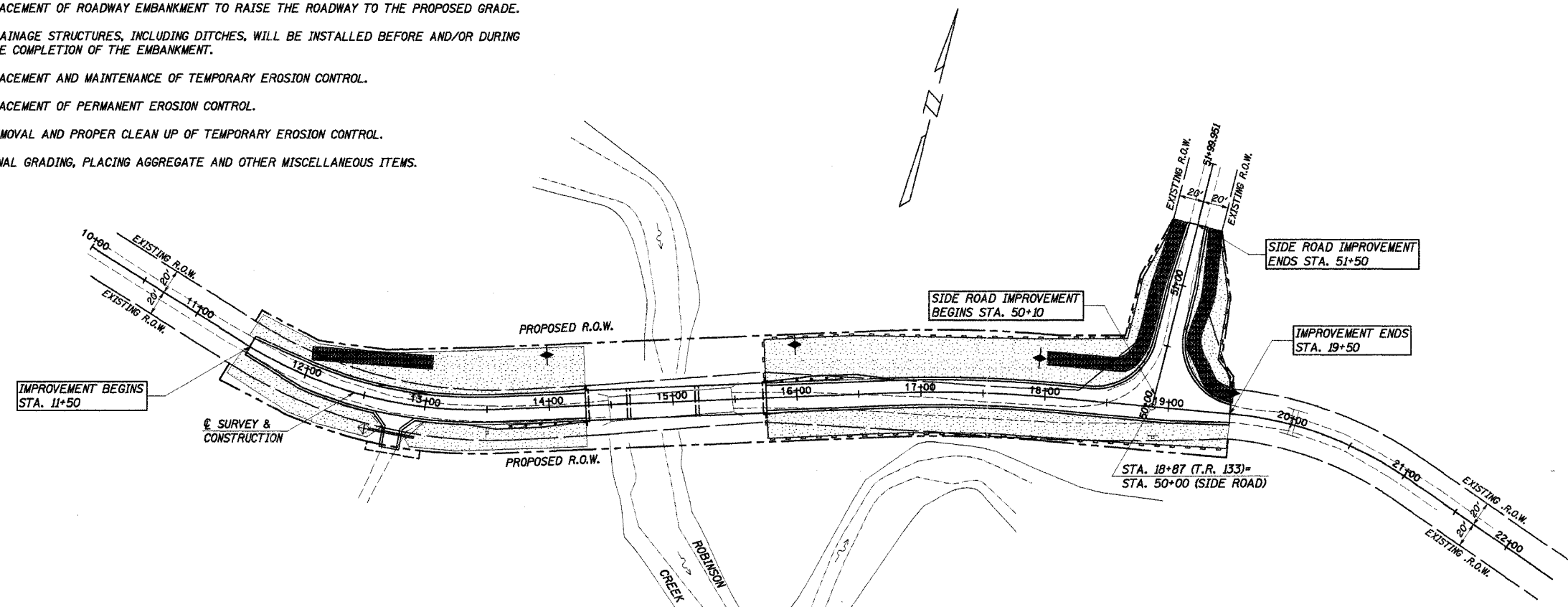
DATE	09/09/05
BY	S.A.P.
REVISIONS	
NO.	DESCRIPTION
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59	AREAS CHECKED
60	AREAS CHECKED



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 133	05-17117-00-BR	SHELBY	21	21
ROAD DIST.	ILLINOIS		RIDGE	
CONTRACT NO. 95484				

DESCRIPTION OF INTENDED SEQUENCE OF MAJOR CONSTRUCTION ACTIVITIES WHICH WILL DISTURB EARTH AND LEAD TO POSSIBLE EROSION FOR MAJOR PORTIONS OF THE CONSTRUCTION SITE:

1. PLACEMENT OF PERIMETER EROSION CONTROL FENCE PRIOR TO THE COMMENCEMENT OF ANY ROAD OR BRIDGE WORK. SEE STD. 280001.
2. REMOVAL OF EXISTING STRUCTURE.
3. CONSTRUCTION OF THE REPLACEMENT STRUCTURE.
4. PLACEMENT OF ROADWAY EMBANKMENT TO RAISE THE ROADWAY TO THE PROPOSED GRADE.
5. DRAINAGE STRUCTURES, INCLUDING DITCHES, WILL BE INSTALLED BEFORE AND/OR DURING THE COMPLETION OF THE EMBANKMENT.
6. PLACEMENT AND MAINTENANCE OF TEMPORARY EROSION CONTROL.
7. PLACEMENT OF PERMANENT EROSION CONTROL.
8. REMOVAL AND PROPER CLEAN UP OF TEMPORARY EROSION CONTROL.
9. FINAL GRADING, PLACING AGGREGATE AND OTHER MISCELLANEOUS ITEMS.



TEMPORARY EROSION CONTROL:	
	PERIMETER EROSION BARRIER
	TEMPORARY DITCH CHECK
	INLET AND PIPE PROTECTION
PERMANENT EROSION CONTROL:	
	SEEDING CLASS 2, FERTILIZERS, & MULCH, METHOD 2
	STONE RIPRAP DITCH

TEMPORARY DITCH CHECKS

LT. STA. 14+00	= 1 EACH
LT. STA. 16+00	= 1 EACH
LT. STA. 17+90	= 1 EACH
LT. STA. 19+50	= 1 EACH
TOTAL	= 4 EACH

PERIMETER EROSION BARRIER

LT. STA. 15+75.25 TO LT. STA. 50+50	= 324 FOOT
RT. STA. 15+75.25 TO RT. STA. 19+50	= 394 FOOT
LT. STA. 50+50 TO LT. STA. 51+50	= 100 FOOT
RT. STA. 51+50 TO LT. STA. 19+50	= 115 FOOT
TOTAL	= 933 FOOT

INLET AND PIPE PROTECTION

RT. STA. 12+59	= 1 EACH
TOTAL	= 1 EACH

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
TEMPORARY EROSION CONTROL SEEDING	POUND	90
TEMPORARY DITCH CHECKS	EACH	4
PERIMETER EROSION BARRIER	FOOT	933
INLET AND PIPE PROTECTION	EACH	1

THE ABOVE QUANTITIES ARE ESTIMATES ONLY. ACTUAL QUANTITIES FOR EROSION CONTROL WILL BE DETERMINED BY THE ENGINEER IN THE FIELD AND THERE WILL BE NO ADJUSTMENT IN ANY UNIT PRICE DUE TO A CHANGE IN PLAN QUANTITY.

EROSION CONTROL PLAN
SECTION 05-17117-00-BR
RIDGE ROAD DISTRICT
SHELBY COUNTY
STA. 15+02.38

4440 ASH GROVE
SPRINGFIELD, IL 62711
(217) 793-8800
oasinc@insightbb.com

OZYURT AND STONE, INC.
CONSULTING ENGINEERS

DRAWN: S.A.P.
DATE: 09/13/05

CHECKED: F.J.S.
DATE: 10/26/05

JOB NO.: 0504
FILE: 0504EROSION.DGN
DATE: 02/14/06