

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE	COUNTY	SECTION	SHEET/OF
FAS 859	RANDOLPH	08-00031-00-8-RS	1/5

CONTRACT NO. 97463

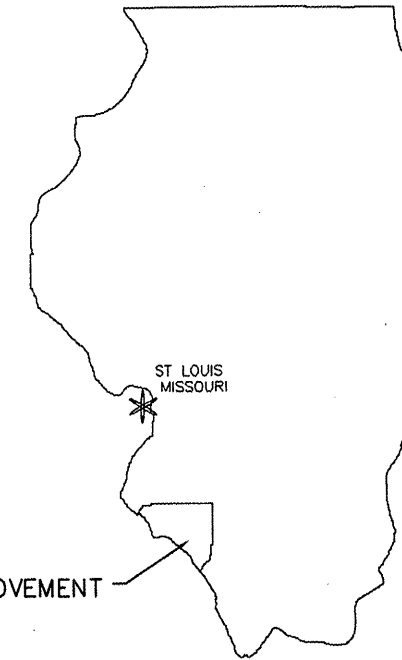
FEDERAL AID PROJECT

INDEX OF SHEETS

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PLANS FOR  
PROPOSED LOCAL AGENCY IMPROVEMENT

RANDOLPH COUNTY  
FAS ROUTE 859  
SECTION 08-00031-08-RS  
PROJECT NO. RS-859(106)  
JOB NO. C-98-326-09



HIGHWAY STANDARDS

BLR-24-2, 442201-03 701006-03, 701011-02,  
701201-04, 701301-04, 701306-03, 701311-03,  
701901-01, 780001-02, 781001-03

UTILITIES

EGYPTIAN ELECTRIC COOP 1005 W. BROADWAY STEELEVILLE, IL 62288 PH. 618-965-3437	EGYPTIAN TELEPHONE COOP 1010 W. BROADWAY STEELEVILLE, IL 62288 PH. 618-965-3481
FRONTIER 877-462-8188	EGYPTIAN WATER 1005 W. BROADWAY STEELEVILLE, IL 62288 PH. 618-965-3434

J.U.L.I.E. 1-800-892-0123

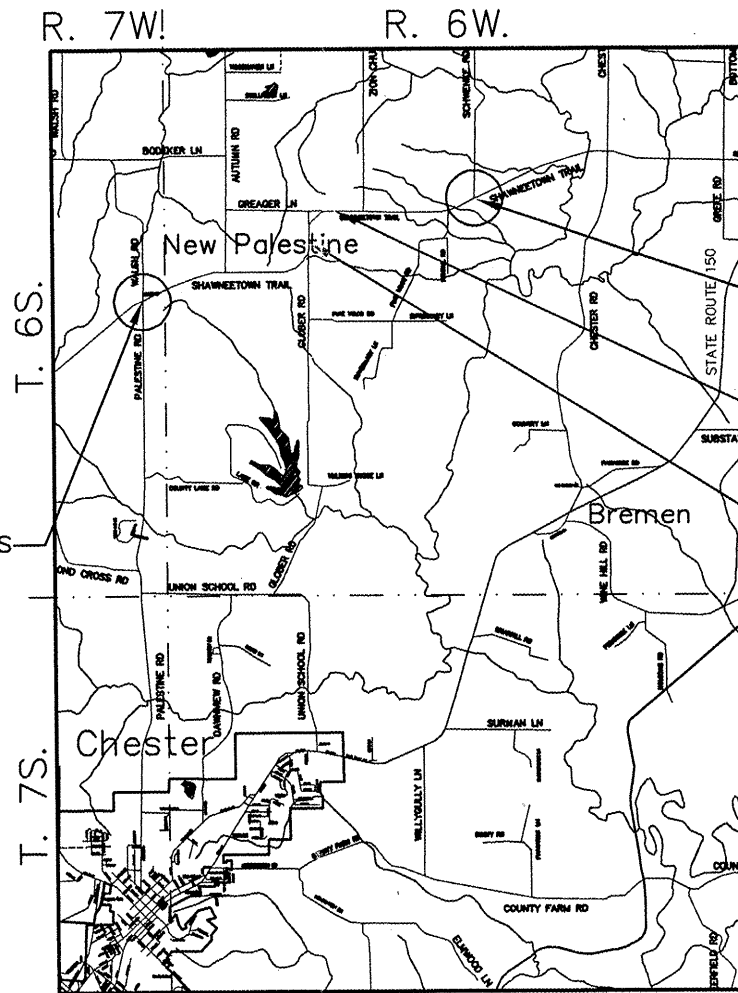
DESIGN INFORMATION

RURAL COLLECTOR  
CLASS III ROADWAY  
DESIGN SPEED 50 MPH  
ADT(2010) - 1050  
(2025) - 1200

PAVEMENT DESIGN INFORMATION

STRUCTURAL DESIGN TRAFFIC: 1125 (YEAR 2018) PV 990  
SU 79  
MU 56

MINIMUM SOIL SUPPORT IBR=3  
PAVEMENT STRUCTURAL MATERIALS: HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70



SITE OF PROPOSED IMPROVEMENT

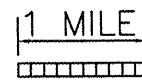
PROPOSED IMPROVEMENT BEGINS  
STATION 189+60

PROPOSED IMPROVEMENT ENDS  
STATION 382+80

STATION EQUATION  
STA. 308+57.08 BK. = 310+70.56 AHD.

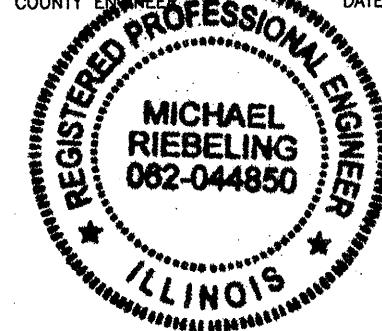
STATION EQUATION  
STA. 282+48.30 BK. = 287+28.30 AHD.

3RD P.M.



NET LENGTH OF IMPROVEMENT  
18,626.52 FEET = 3.528 MILES

THESE PLANS WERE PREPARED BY ME OR A  
MEMBER OF MY STAFF WORKING UNDER MY  
PERSONAL SUPERVISION.  
*Michael Riebeling* 3/09/2011  
COUNTY ENGINEER DATE



11/30/2011  
Expiration Date

ILLINOIS DEPARTMENT OF TRANSPORTATION

Approved March 9 2011  
*Michael Riebeling*  
Randolph County, County Engineer

Passed April 2011  
*[Signature]*  
District Engineer of Local Roads & Streets

Releasing for Bid Based on Limited Review April 1 2011  
*Mary C. Gamble*  
Deputy Director of Highways, Region 5 Engineer

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STATE OF ILLINOIS

## SUMMARY OF QUANTITIES

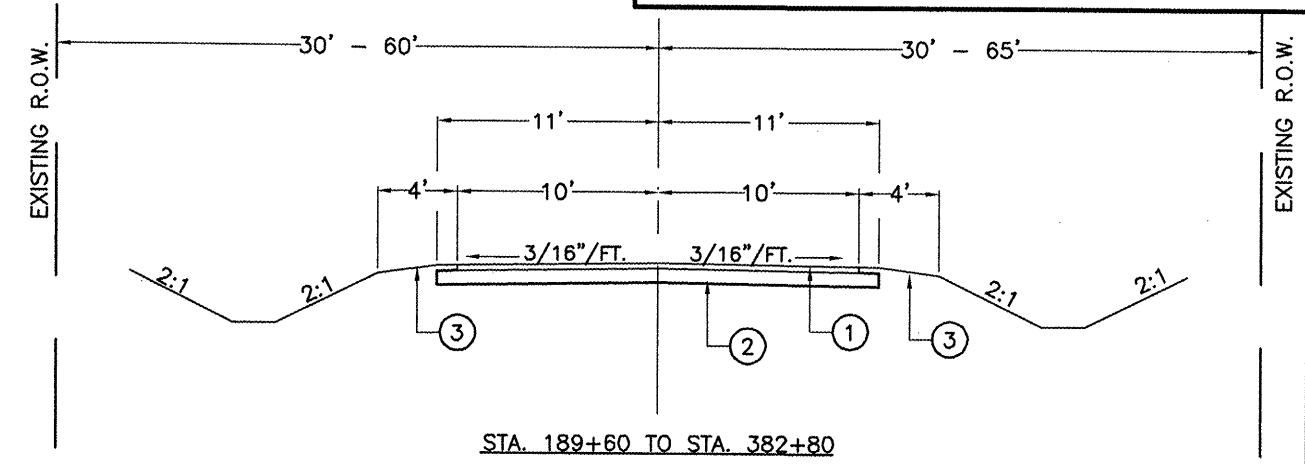
PAY ITEM	ITEM	UNIT	QUANTITY
20200600	EXCAVATING AND GRADING EXISTING SHOULDER	UNIT	373
20800150	TRENCH BACKFILL	CU YD	94.3
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	3,415
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	4,533
40600895	CONSTRUCTING TEST STRIP	EACH	1
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	560
40603315	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	TON	3,885
44201713	CLASS D PATCHES, TYPE I, 6 INCH	SQ YD	39.2
44201717	CLASS D PATCHES, TYPE II, 6 INCH	SQ YD	37.4
48101200	AGGREGATE SHOULDERS, TYPE B	TON	1,456
54010502	PRECAST CONCRETE BOX CULVERTS 5'X2'	FOOT	16
542A0229	PIPE CULVERTS, CLASS A, TYPE 1 24"	FOOT	344
542A1075	PIPE CULVERTS, CLASS A, TYPE 2 30"	FOOT	80
67100100	MOBILIZATION	L SUM	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	3,726
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	59,268
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	20,996
*78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	59,268
*78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	233
*78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	58

\* DENOTES SPECIALTY ITEM.

### GENERAL NOTES:

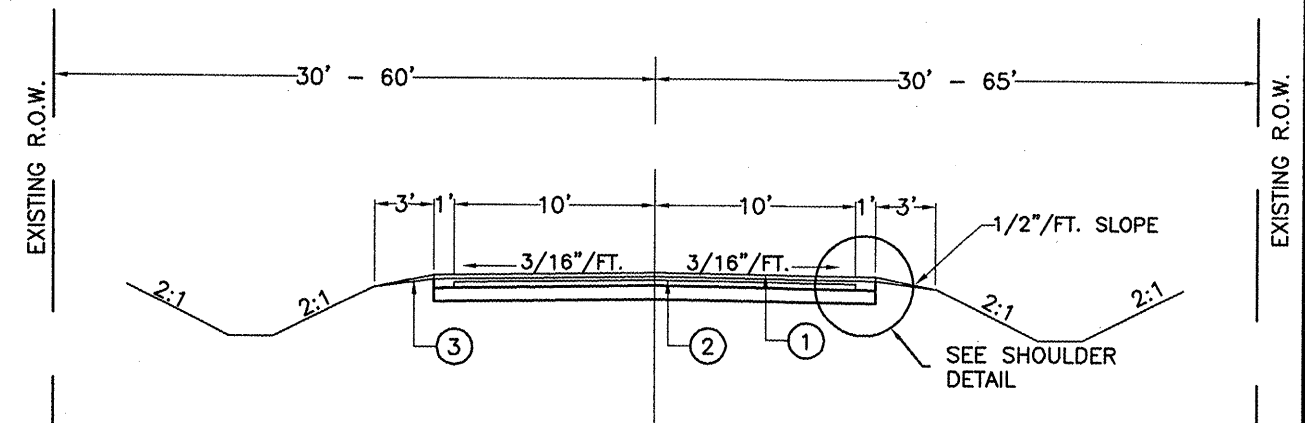
- BITUMINOUS MATERIALS (PRIME COAT) SHALL BE APPLIED AT THE RATE OF 0.075 GALLONS PER SQUARE YARD. EMULSIFIED ASPHALT SHALL BE USED.
- SHORT-TERM PAVEMENT MARKING SHALL BE APPLIED TO THE LEVELING BINDER AND SURFACE COURSE.
- PROPOSED PAVEMENT MARKINGS SHALL MATCH EXISTING PAVEMENT MARKINGS.
- SEEDING WILL BE PERFORMED BY OTHERS.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE USE	SURFACE	LEVELING BINDER
PG	PG 64-22	PG 64-22
RAP %(MAX)	10 %	15 %
DESIGN AIR VOIDS	4.0% @ Ndes=70	4.0 % @ Ndes=70
MIX COMPOSITION (GRADATION MIXTURE)	IL 9.5	IL 9.5
FRICTION AGG	MIXTURE C	
MIXTURE WEIGHT	112 LB/SY/IN	112 LB/SY/IN



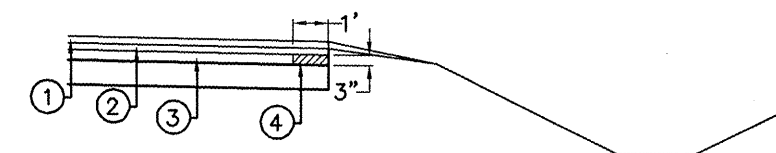
**EXISTING TYPICAL SECTION**

- ① BITUMINOUS MIXTURE COMPLETE (5")
- ② AGGREGATE BASE COURSE (8")
- ③ TURF SHOULDER



**PROPOSED TYPICAL SECTION**

- ① HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70 (1 1/2")
- ② LEVELING BINDER (MACHINE METHOD), N70 (1 1/2")
- ③ AGGREGATE SHOULDERS, TYPE B



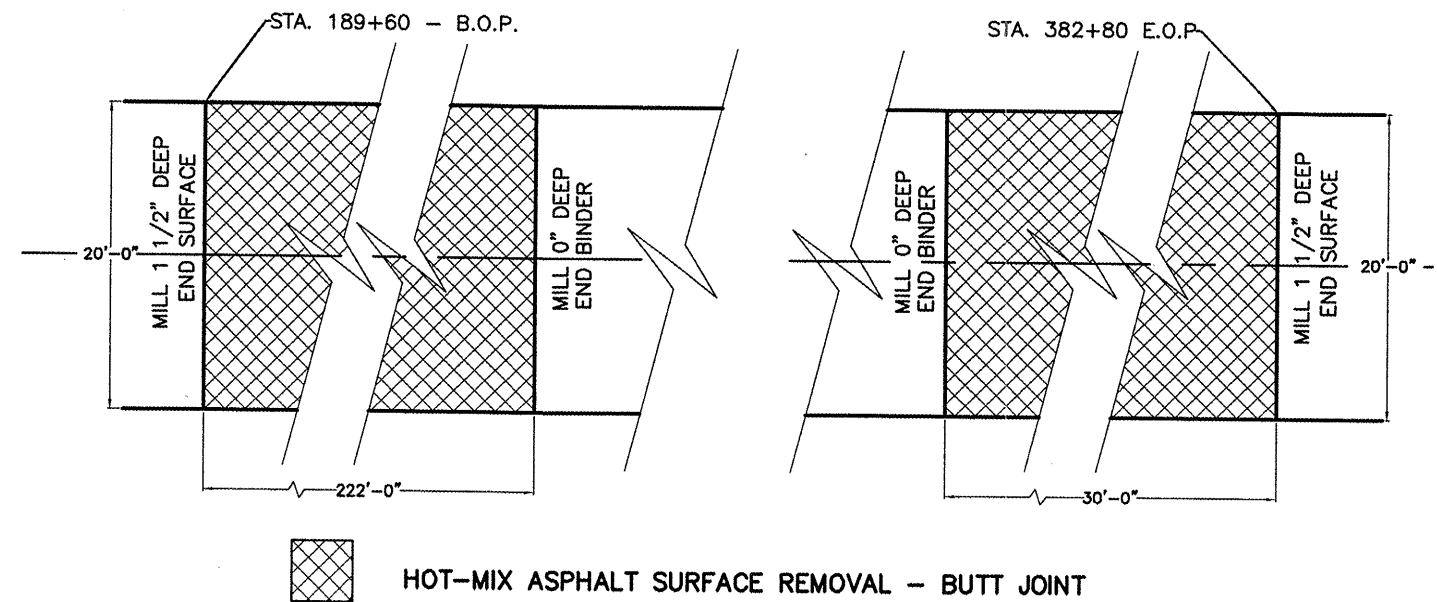
**SHOULDER DETAIL LT. & RT.**

- ① PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70 (1 1/2")
- ② PROPOSED LEVELING BINDER (MACHINE METHOD), N70 (1 1/2")
- ③ EXISTING HOT-MIX ASPHALT SURFACE
- ④ PROPOSED EXCAVATING AND GRADING EXISTING SHOULDER. THIS WORK SHALL BE COMPLETED PRIOR TO PLACEMENT OF LEVELING BINDER.

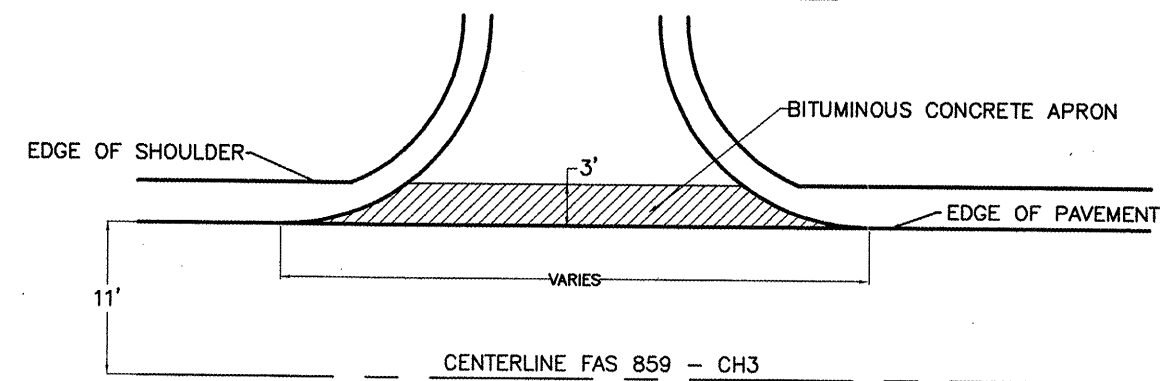
ROUTE	COUNTY	SECTION	SHEET/OF
FAS 849	RANDOLPH	08-00031-08-RS	3/5
CONTRACT NO. 97463			

PAINT PAVEMENT MARKING SCHEDULE		
LOCATION	LIMITS	LENGTH
<u>NO PASSING ZONES</u>		
LEFT	STA. 189+60 TO STA. 191+90	230 FT.
RIGHT	STA. 198+73 TO STA. 211+56	1,283 FT.
LEFT	STA. 209+80 TO STA. 220+96	1,116 FT.
RIGHT	STA. 250+28 TO STA. 282+48.30 BK.	3,220 FT.
LEFT	STA. 259+18 TO STA. 282+48.30 BK.	2,330 FT.
RIGHT	STA. 287+28.30 AHD. TO STA. 308+57.08 BK.	2,129 FT.
LEFT	STA. 287+28.30 BK. TO STA. 308+57.08 AHD.	2,129 FT.
RIGHT	STA. 310+70.56 AHD. TO STA. 316+07	536 FT.
LEFT	STA. 310+70.56 AHD. TO STA. 327+06	1,635 FT.
RIGHT	STA. 329+26 TO STA. 336+60	734 FT.
LEFT	STA. 340+27 TO STA. 347+52	725 FT.
RIGHT	STA. 351+78 TO STA. 369+96	1,818 FT.
LEFT	STA. 363+10 TO STA. 381+03	1,793 FT.
<u>TOTAL NO PASSING ZONES</u>		19,678 FT.
<u>SKIP DASH</u>		
	STA. 189+60 TO STA. 209+80	2,020 FT.
	STA. 211+56 TO STA. 259+18	4,762 FT.
	STA. 316+07 TO STA. 363+10	4,703 FT.
	STA. 369+96 TO STA. 382+80	1,284 FT.
12,769 FT. @ 25%=		3,192 FT.
<u>TOTAL YELLOW LINE</u>		22,870 FT.
<u>EDGE LINE</u>		
LT. & RT.	STA. 189+60 TO STA. 282+48.30 BK.	18,577 FT.
LT. & RT.	STA. 287+28.30 AHD. TO STA. 308+57.08 BK.	4,258 FT.
LT. & RT.	STA. 310+70.56 AHD. TO STA. 382+80	14,419 FT.
(INCLUDES 70', 80', 87', 90', 110', 124', 125', & 170' GAP @ SIDEROADS)		-856 FT.
<u>TOTAL WHITE LINE</u>		36,398 FT.
<u>TOTAL PAINT PAVEMENT MARKING LINE 4"</u>		59,268 FT.

**HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT DETAIL**



**ENTRANCE AND SIDE ROAD DETAIL**

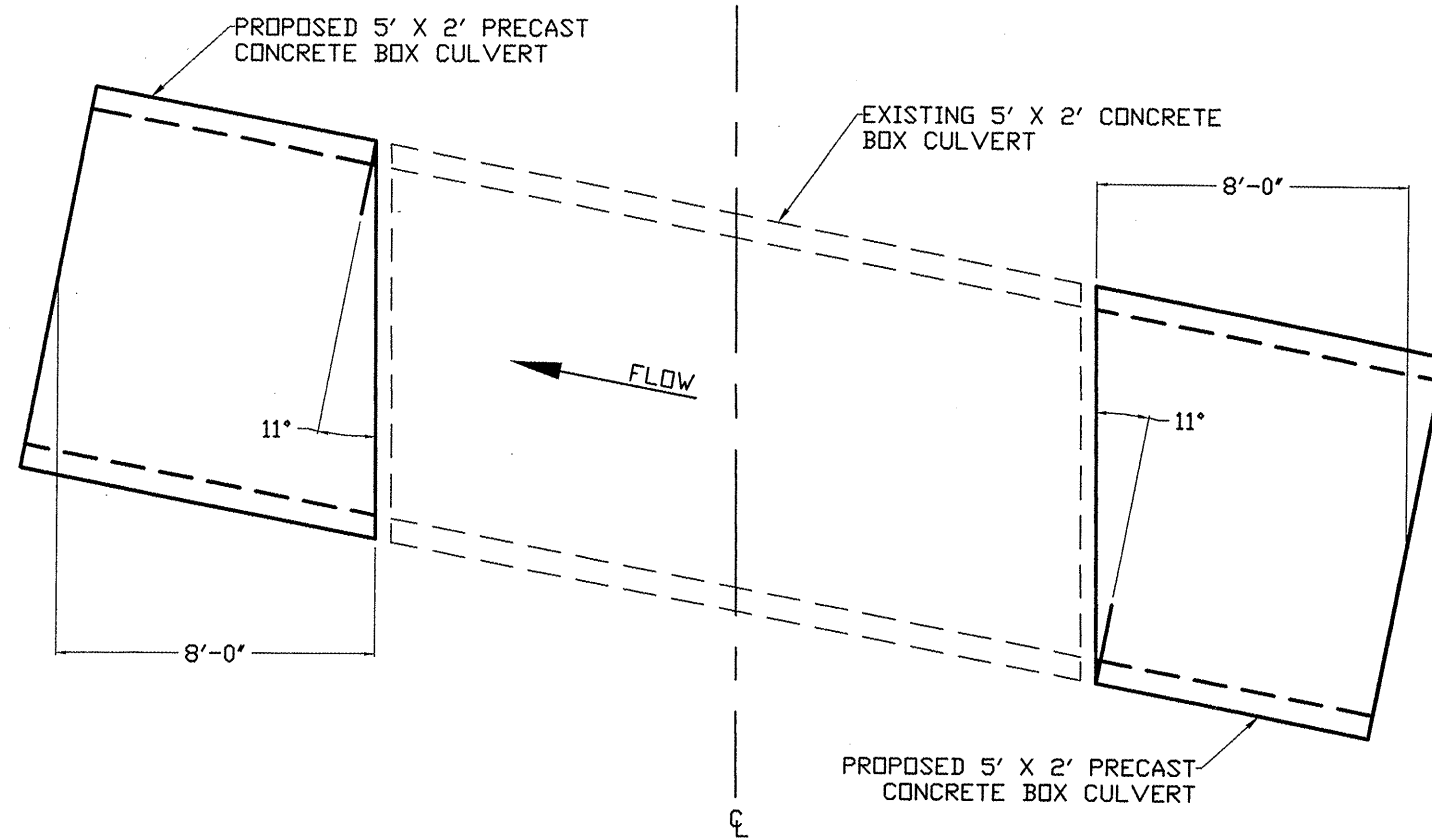


**CROSSROAD PIPE SCHEDULE**

STATION NO.	LENGTH LT OF C	C TO E LT.	LENGTH RT OF C	C TO E RT.	SKEW ANGLE	PROPOSED CULVERT SIZE	TYPE	TOTAL PIPE LENGTH	EXISTING STRUCTURE	CLASS D PATCH (SQ. YD.)				TRENCH WIDTH	TRENCH BACKFILL IN CU. YDS.
										AREA (LT.)	TYPE	AREA (RT.)	TYPE		
237+41	29'	4.43	27'	4.02	0°	24" RCCP	1	56'	24" CMP	4.9	I	4.9	I	4'	9.2 CU. YD.
252+91	8' (EXT.)	5.57	8' (EXT.)	5.2	11° LA	5'X2' BOX CULVERT		16'	5'X2' BOX	0		0		0	0
271+60	28.5'	3.76	35.5'	4.87	30° RA	24" RCCP	1	64'	18" CMP	5.3	II	5.3	II	4'	11 CU. YD.
276+17	27'	4.87	37'	5.84	0°	24" RCCP	1	64'	18" CMP	5.1	II	5.1	II	4.2'	15.8 CU. YD.
320+90	28.5'	3.12	27.5'	3.25	10° RA	24" RCCP	1	56'	24" CMP	4.9	I	4.9	I	4'	4.5 CU. YD.
332+43	24'	3.43	24'	3.38	17° RA	24" RCCP	1	48'	24" CMP	4.9	I	4.9	I	4'	6.5 CU. YD.
357+96	26'	3.58	30'	6.06	0°	24" RCCP	1	56'	18" CMP	4.9	I	4.9	I	4'	11.4 CU. YD.
378+79	37'	7.28	43'	10.18	30° LA	30" RCCP	2	80'	30" CMP	8.3	II	8.3	II	5'	35.9 CU. YD.

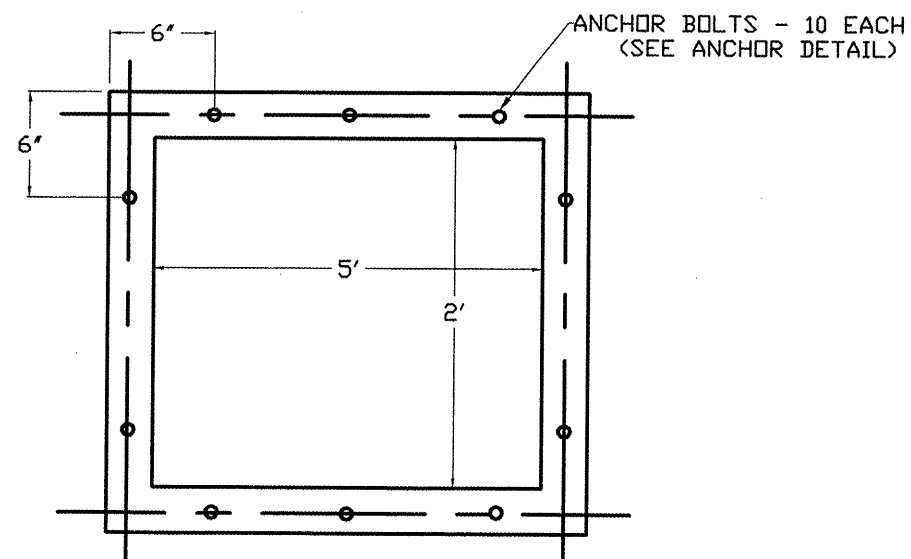
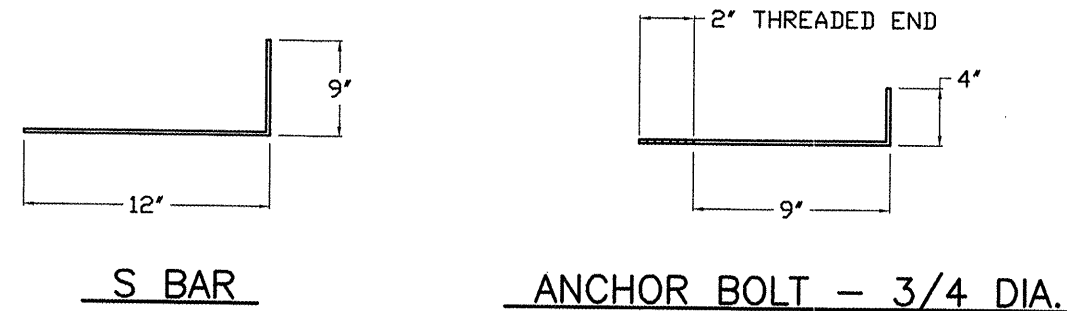
ROUTE	COUNTY	SECTION	SHEET/OF
FAS 859	RANDOLPH	08-00031-08-RS	4/5
CONTRACT NO. 97463			

**CONCRETE BOX CULVERT EXTENSION DETAIL  
STA. 252+91 LT & RT.**

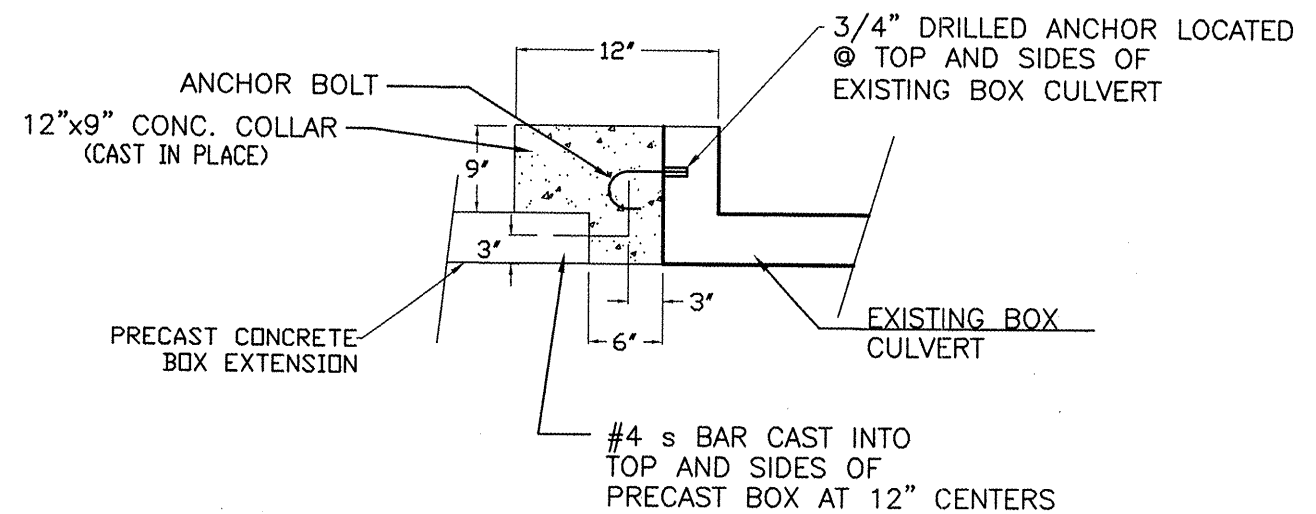


**NOTES:**

1. PROPOSED PRECAST CONCRETE BOX CULVERT SECTIONS SHALL BE CAST TO MATCH THE 11° SKEW OF THE EXISTING BOX CULVERT ON ONE END ONLY.
2. ALL LABOR, MATERIAL, AND EQUIPMENT COST ASSOCIATED WITH CONNECTING THE PROPOSED PRECAST CONCRETE BOX CULVERT EXTENSIONS TO THE EXISTING BOX CULVERT INCLUDING THE ANCHOR BOLTS, S-BARS, AND CAST IN PLACE COLLAR SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM PRECAST CONCRETE BOX CULVERTS 5'X2'.



**CROSS SECTION THRU BARREL**



**ANCHOR DETAIL**

ROUTE	COUNTY	SECTION	SHEET/OF
FAS 859	RANDOLPH	08-00031-08-RS	5/5
CONTRACT NO. 97463			

