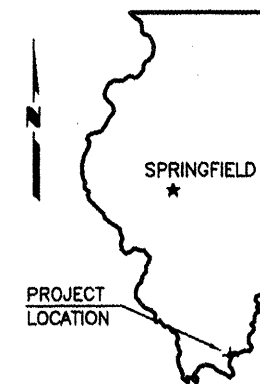




STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 1930	06-00038-00-RS	POPE	9	1
PROJECT NO. ARA-RS-1930 (119)			CONTRACT NO. 99418	

AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009



FAS ROUTE 1930 (BAY CITY ROAD)
SECTION 06-00038-00-RS
PROJECT NO. ARA-RS-1930 (119)
JOB NO. C-99-557-06

SUMMARY OF QUANTITIES

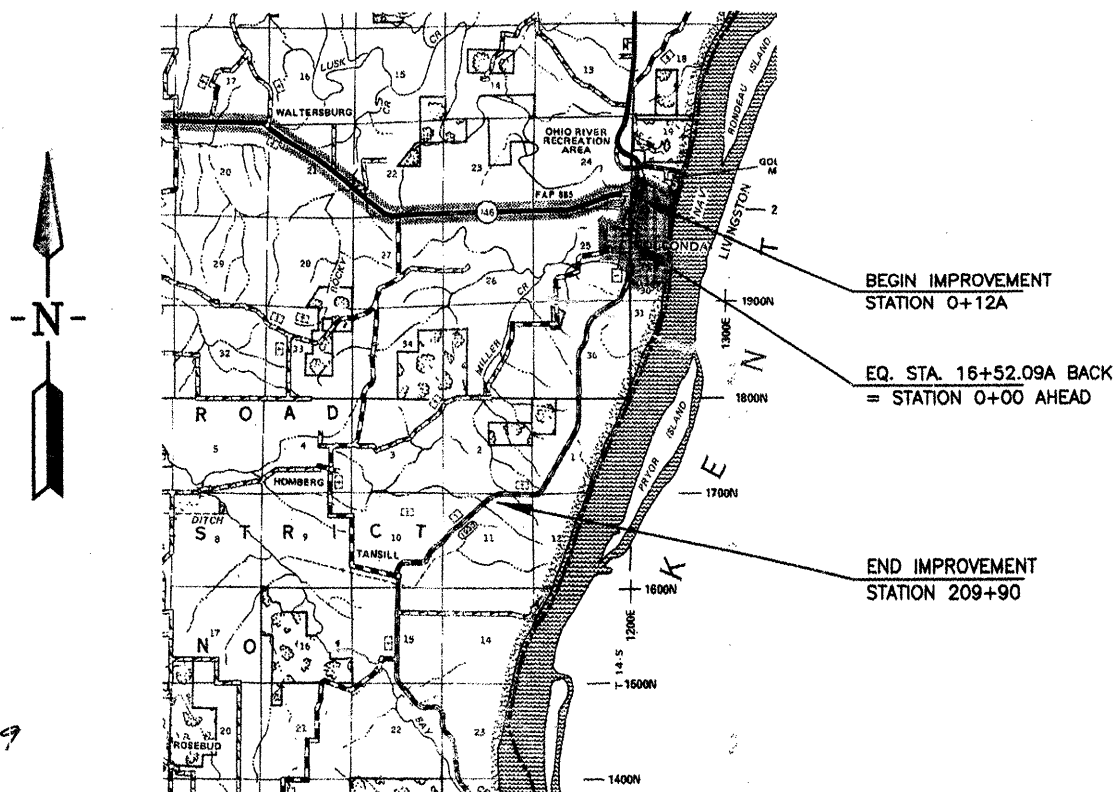
CODE NO.	PAY ITEM	UNIT	TOTAL
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	40
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	6,400
40600300	AGGREGATE (PRIME COAT)	TON	100
40800635	LEVELING BINDER (MACHINE METHOD), N70	TON	4,460
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	202
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	1,050
40603315	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	TON	4,600
46101200	AGGREGATE SHOULDERS, TYPE B	TON	3,290
60255500	MANHOLES TO BE ADJUSTED	EACH	5
60266600	VALVE BOXES TO BE ADJUSTED	EACH	2
67100100	MOBILIZATION	L SUM	1
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	4,528
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	80,710
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	80,710

* SPECIALTY ITEMS

INDEX OF SHEETS

- COVER SHEET
- TYPICAL SECTIONS
- RESURFACING SCHEDULE
- 7. PLAN & PROFILE
- TYPICAL SIDE ROAD & ENTRANCE DETAILS
- MISCELLANEOUS DETAILS
- STANDARDS
- 701001-02 TRAFFIC CONTROL
- 701006-03 TRAFFIC CONTROL
- 701011-02 TRAFFIC CONTROL
- 701201-03 TRAFFIC CONTROL
- 701301-03 TRAFFIC CONTROL
- 701306-02 TRAFFIC CONTROL
- 701311-03 TRAFFIC CONTROL
- 701901-01 TRAFFIC CONTROL DEVICES
- 780001-02 TYPICAL PAVEMENT MARKINGS
- BLR 24-2 MAILBOX TURNOUTS

POPE COUNTY



CLASSIFICATION : COLLECTOR
ADT : 370
DESIGN SPEED : 50 MPH

ILLINOIS DEPARTMENT OF TRANSPORTATION	
Approved	12/9/09 W. Brian Ziegler Pope County Engineer
Passed	12/14/09 Richard W. Melcher District 9 Engineer of Local Roads and Streets
Releasing for Bid Based on Limited Review	12/14/09 Mary C. Kamie Deputy Director of Highways, Region 5 Engineer



11-30-09

Edward W. Miller
Edward W. Miller
PROFESSIONAL ENGINEER
#062-025277
EXPIRES NOV. 30, 2011

LOCATION MAP

SCALE: 1" = 2 MILES

NET LENGTH OF IMPROVEMENT = 22,630.09 FT. ≈ 4.2860 MILES

CONTRACT NO. 99418

E. MILLER ENGINEERING, INC.
CONSULTING ENGINEERS
HARRISBURG, ILLINOIS

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 1930	06-00038-00-RS	POPE	9	2
PROJECT NO. ARA-RS-1930 (119)			CONTRACT NO. 9941B	

GENERAL NOTES

Crown and superelevation corrections shall be constructed prior to placing the 3/4" lift of Leveling Binder. If material thickness will be greater than 4" then Hot-Mix Asphalt Binder Course, IL-19.0, N70 shall be used for the correction as directed by the Engineer. (See Resurfacing Schedule for locations)

Prime shall be applied to the full width of the existing roadway surface at the rates shown below.

Factors used for quantity calculations are as follows:

All Hot-Mix Asphalt.....	112.0 Lbs./Sq. Yd./Inch
All Aggregate	2.025 Tons/Cu. Yd.
Bit. Matis. (Prime Coat)	0.10 Gals./Sq. Yd.
Aggregate (Prime Coat)	0.0015 Tons/Sq. Yd.

STRUCTURAL DESIGN DATA

STA. 0+12A - STA. 0+80

Class III Roadway
Design Period - 20 Years
PC 1410 IBR 4.5
SU 70 TF 0.0505
MU 20 DT 2.353

STA. 0+80 - STA. 18+00

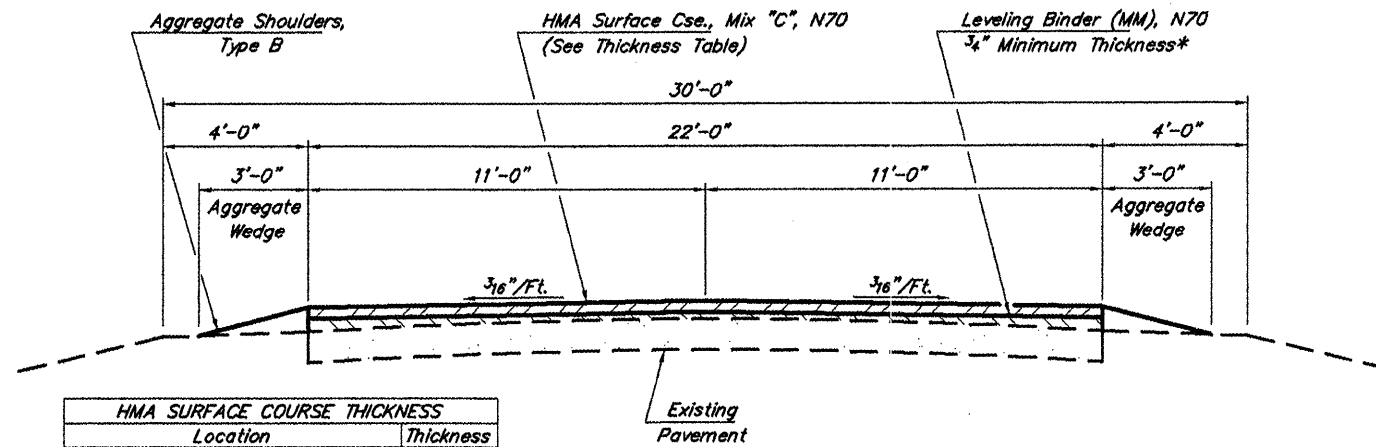
Class III Roadway
Design Period - 20 Years
PC 1270 IBR 4.5
SU 60 TF 0.0468
MU 20 DT 2.325

STA. 18+00 - STA. 209+90

Class IV Roadway
Design Period - 20 Years
PC 300 IBR 4.5
SU 50 TF 0.0082
MU 20 DT 1.797

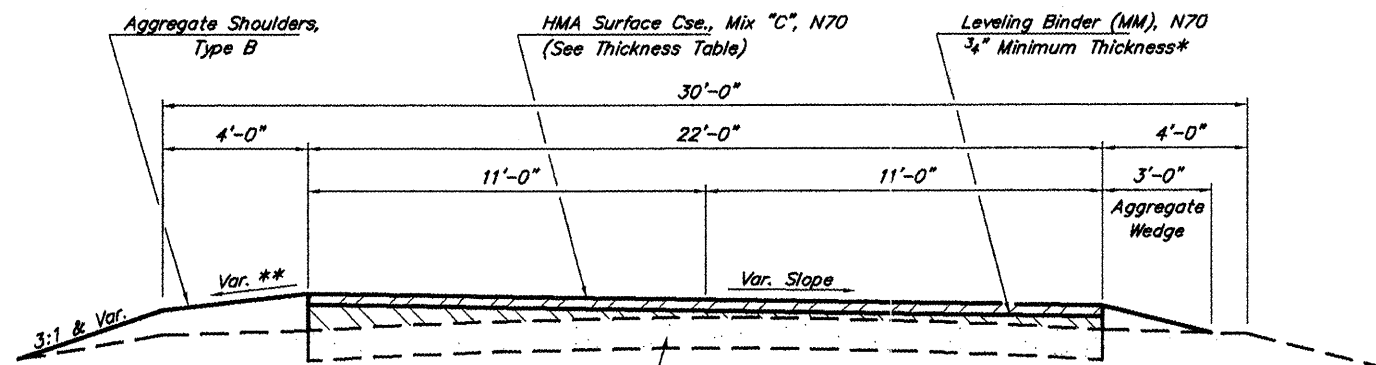
MATERIAL COEFFICIENT

Existing Agg. Base Course	- 0.08
Existing Oil & Chip Surface	- 0.15
Existing Bit. Mix. Complete	- 0.17
Leveling Binder	- 0.33
HMA Binder Course	- 0.33
HMA Surface Course	- 0.40



HMA SURFACE COURSE THICKNESS	
Location	Thickness
Sta. 0+12A - Sta. 0+80	2 1/4"
Sta. 0+80 - Sta. 18+00	2"
Sta. 18+00 - Sta. 209+90	1 1/4"

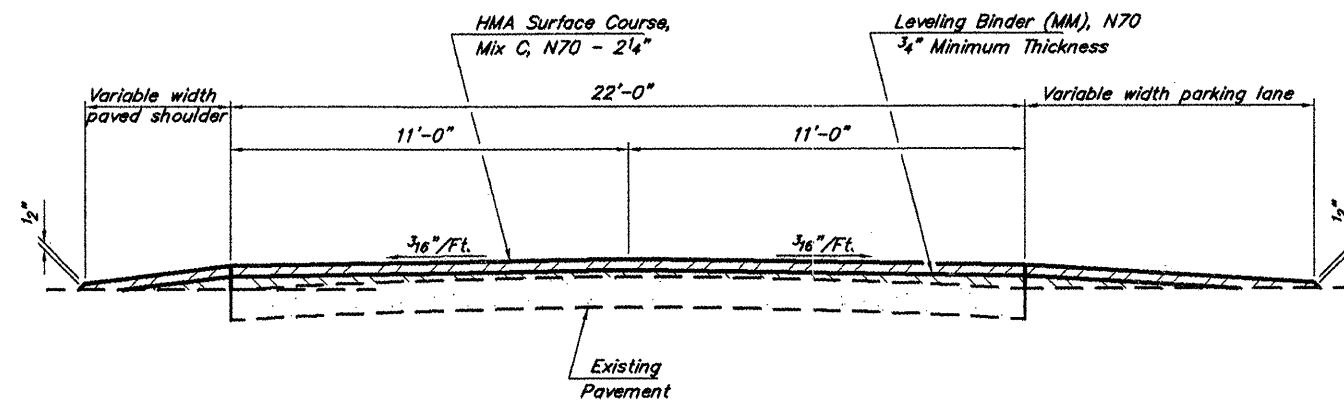
TYPICAL SECTION



** Slope 3/4"/ft. but not more than 0.12'/ft. break between pavement and shoulder.

TYPICAL SECTION THRU CURVES

NOTE: Section shown for right curve. Reverse for left curve.



TYPICAL SECTION WITH PARKING LANE OR PAVED SHOULDER

Sta. 0+00A - 4+00 (Match existing widths & locations - See Plans)

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

Mixture Use:	HMA Binder Course, IL-19.0, N70
PG:	PG64-22
RAP% (Max):	10
Design Air Voids:	4% 70 Gyratn Superpave Design
Mixture Composition: (Gradation Mixture)	IL-19.0mm
Friction Aggregate:	None

Mixture Use:	Leveling Binder (Machine Method), N70
PG:	PG64-22
RAP% (Max):	10
Design Air Voids:	4% 70 Gyratn Superpave Design
Mixture Composition: (Gradation Mixture)	IL-9.5mm
Friction Aggregate:	None

Mixture Use:	HMA Surface Course, Mix 'C', N70
PG:	PG64-22
RAP% (Max):	10
Design Air Voids:	4% 70 Gyratn Superpave Design
Mixture Composition: (Gradation Mixture)	IL-9.5mm
Friction Aggregate:	C Surface

SUPERELEVATIONS

S.E. = 0.077'/ft. 30 MPH Attain Sta. 0+98 - Sta. 2+52 Remove Sta. 2+86 - Sta. 4+12	S.E. = 0.080'/ft. 50 MPH Attain Sta. 64+68 - Sta. 66+77 Remove Sta. 70+66 - Sta. 72+75	S.E. = 0.031'/ft. 50 MPH Attain Sta. 133+30 - Sta. 134+31 Remove Sta. 138+88 - Sta. 139+89
S.E. = 0.077'/ft. 30 MPH Attain Sta. 4+12 - Sta. 5+59 Remove Sta. 6+15 - Sta. 7+69	S.E. = 0.077'/ft. 50 MPH Attain Sta. 75+13 - Sta. 77+15 Remove Sta. 81+17 - Sta. 83+19	S.E. = 0.078'/ft. 45 MPH Attain Sta. 167+83 - Sta. 169+72 Remove Sta. 176+09 - Sta. 177+98
S.E. = 0.072'/ft. 50 MPH Attain Sta. 28+46 - Sta. 30+37 Remove Sta. 33+78 - Sta. 35+69	S.E. = 0.078'/ft. 45 MPH Attain Sta. 83+48 - Sta. 85+37 Remove Sta. 89+33 - Sta. 91+22	S.E. = 0.047'/ft. 50 MPH Attain Sta. 190+18 - Sta. 191+54 Remove Sta. 208+04 - Sta. 209+40
S.E. = 0.077'/ft. 50 MPH Attain Sta. 40+27 - Sta. 42+29 Remove Sta. 47+26 - Sta. 49+28	S.E. = 0.031'/ft. 50 MPH Attain Sta. 105+87 - Sta. 106+88 Remove Sta. 111+09 - Sta. 112+10	
S.E. = 0.053'/ft. 50 MPH Attain Sta. 52+60 - Sta. 54+10 Remove Sta. 59+24 - Sta. 60+74	S.E. = 0.059'/ft. 50 MPH Attain Sta. 125+65 - Sta. 127+28 Remove Sta. 131+67 - Sta. 133+30	

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 1930	06-00038-00-RS	POPE	9	3
PROJECT NO. ARA-RS-1930 (119)			CONTRACT NO. 99418	

RESURFACING SCHEDULE

Location Station to Station	Length Feet	Prime Coat		Leveling Binder (MM)		Hot-Mix Asphalt Binder Course Tons	Hot-Mix Asphalt Surface Course Tons
		Bituminous Materials Gallons	Aggregate Tons	Full Lift Tons	Crown/SE Correction Tons		
SOUTHBOUND (RIGHT) LANE							
0+12A to 16+52.09A	1640.09	226.9	3.4	87.4	125.2		261.9
16+52.09A to 0+00				Station Equation			
0+00 to 0+98	98.00	13.4	0.2	5.2	8.1		15.5
0+98 to 4+12	314.00	43.2	0.7	16.6	11.0		44.2
4+12 to 7+69	357.00	49.0	0.7	18.9	26.1	74.5	50.3
7+69 to 28+46	2077.00	285.2	4.3	109.8	148.8	119.4	237.7
28+46 to 35+69	723.00	99.3	1.5	38.2	33.9		64.0
35+69 to 40+27	458.00	62.9	0.9	24.2	17.6		40.5
40+27 to 49+28	901.00	123.8	1.9	47.6	57.5		79.7
49+28 to 52+60	332.00	45.6	0.6	17.6	27.6		29.4
52+60 to 60+74	814.00	111.7	1.7	43.0	25.7	98.6	72.0
60+74 to 64+68	394.00	54.2	0.8	20.8	27.7		34.9
64+68 to 72+75	807.00	110.8	1.7	42.7	31.4		71.4
72+75 to 75+13	238.00	32.7	0.5	12.6	2.6		21.1
75+13 to 83+19	806.00	110.7	1.6	42.6	31.2		71.3
83+19 to 83+48	29.00	3.9	0.1	2.4			2.5
83+48 to 91+22	774.00	106.3	1.6	40.9	11.9		68.5
91+22 to 105+87	1465.00	201.2	3.0	77.5	18.7		129.7
105+87 to 112+10	623.00	85.6	1.3	32.9	22.3		55.1
112+10 to 125+65	1355.00	186.1	2.8	71.6	23.4		119.9
125+65 to 133+30	765.00	105.0	1.6	40.4	44.4	36.6	67.7
133+30 to 139+89	659.00	90.5	1.3	34.8	29.5	11.9	58.3
139+89 to 167+83	2794.00	383.8	5.8	147.7	81.8		247.2
167+83 to 177+98	1015.00	139.3	2.1	53.7	24.6		89.8
177+98 to 190+18	1220.00	167.6	2.5	64.5	91.5		108.0
190+18 to 209+90	1972.00	270.8	4.0	104.3	29.7	270.0	174.4
Subtotals for SouthBound (Right) Lane		3109.5	46.6	1197.9	952.2	611.0	2215.0
NORTHBOUND (LEFT) LANE							
0+12A to 16+52.09A	1640.09	226.9	3.4	87.4	62.0		261.9
16+52.09A to 0+00				Station Equation			
0+00 to 0+98	98.00	13.4	0.2	5.2	3.9		15.5
0+98 to 4+12	314.00	43.2	0.7	16.6	32.1		44.2
4+12 to 7+69	357.00	49.0	0.7	18.9	42.8		50.3
7+69 to 28+46	2077.00	285.2	4.3	109.8	157.4		237.7
28+46 to 35+69	723.00	99.3	1.5	38.2	26.5	83.7	64.0
35+69 to 40+27	458.00	62.9	0.9	24.2	42.5		40.5
40+27 to 49+28	901.00	123.8	1.9	47.6	44.5	76.3	79.7
49+28 to 52+60	332.00	45.6	0.6	17.6	16.3		29.4
52+60 to 60+74	814.00	111.7	1.7	43.0	29.2		72.0
60+74 to 64+68	394.00	54.2	0.8	20.8	8.8		34.9
64+68 to 72+75	807.00	110.8	1.7	42.7	20.9		71.4
72+75 to 75+13	238.00	32.7	0.5	12.6	12.3		21.1
75+13 to 83+19	806.00	110.7	1.6	42.6	14.0	93.1	71.3
83+19 to 83+48	29.00	3.9	0.1	1.5		2.9	2.5
83+48 to 91+22	774.00	106.3	1.6	40.9	24.8	5.3	68.5
91+22 to 105+87	1465.00	201.2	3.0	77.5	54.4		129.7
105+87 to 112+10	623.00	85.6	1.3	32.9	84.7		55.1
112+10 to 125+65	1355.00	186.1	2.8	71.6	71.1		119.9
125+65 to 133+30	765.00	105.0	1.6	40.4	40.1	92.0	67.7
133+30 to 139+89	659.00	90.5	1.3	34.8	15.1	77.6	58.3
139+89 to 167+83	2794.00	383.8	5.8	147.7	67.9		247.2
167+83 to 177+98	1015.00	139.3	2.1	53.7	45.8		89.8
177+98 to 190+18	1220.00	167.6	2.5	64.5	35.7		108.0
190+18 to 209+90	1972.00	270.8	4.0	104.3	71.6		174.4
Subtotals for NorthBound (Left) Lane		3109.5	46.6	1197.0	1024.4	430.9	2215.0
TOTALS		6219.0	93.2	2394.9	1976.6	1041.9	4430.0

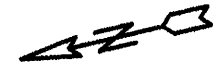
**LOCATIONS FOR
HOT-MIX ASPHALT BINDER COURSE**

Location	Tons
SOUTHBOUND (RIGHT) LANE	
Sta. 4+90 - Sta. 6+90	74.5
Sta. 12+80 - Sta. 18+10	119.4
Sta. 54+50 - Sta. 60+00	98.6
Sta. 131+00 - Sta. 133+70	48.5
Sta. 192+00 - Sta. 208+00	270.0
NORTHBOUND (LEFT) LANE	
Sta. 29+60 - Sta. 34+00	83.7
Sta. 42+60 - Sta. 46+50	76.3
Sta. 77+00 - Sta. 84+00	101.3
Sta. 127+30 - Sta. 131+00	92.0
Sta. 134+60 - Sta. 138+50	77.6
TOTAL	1,041.9

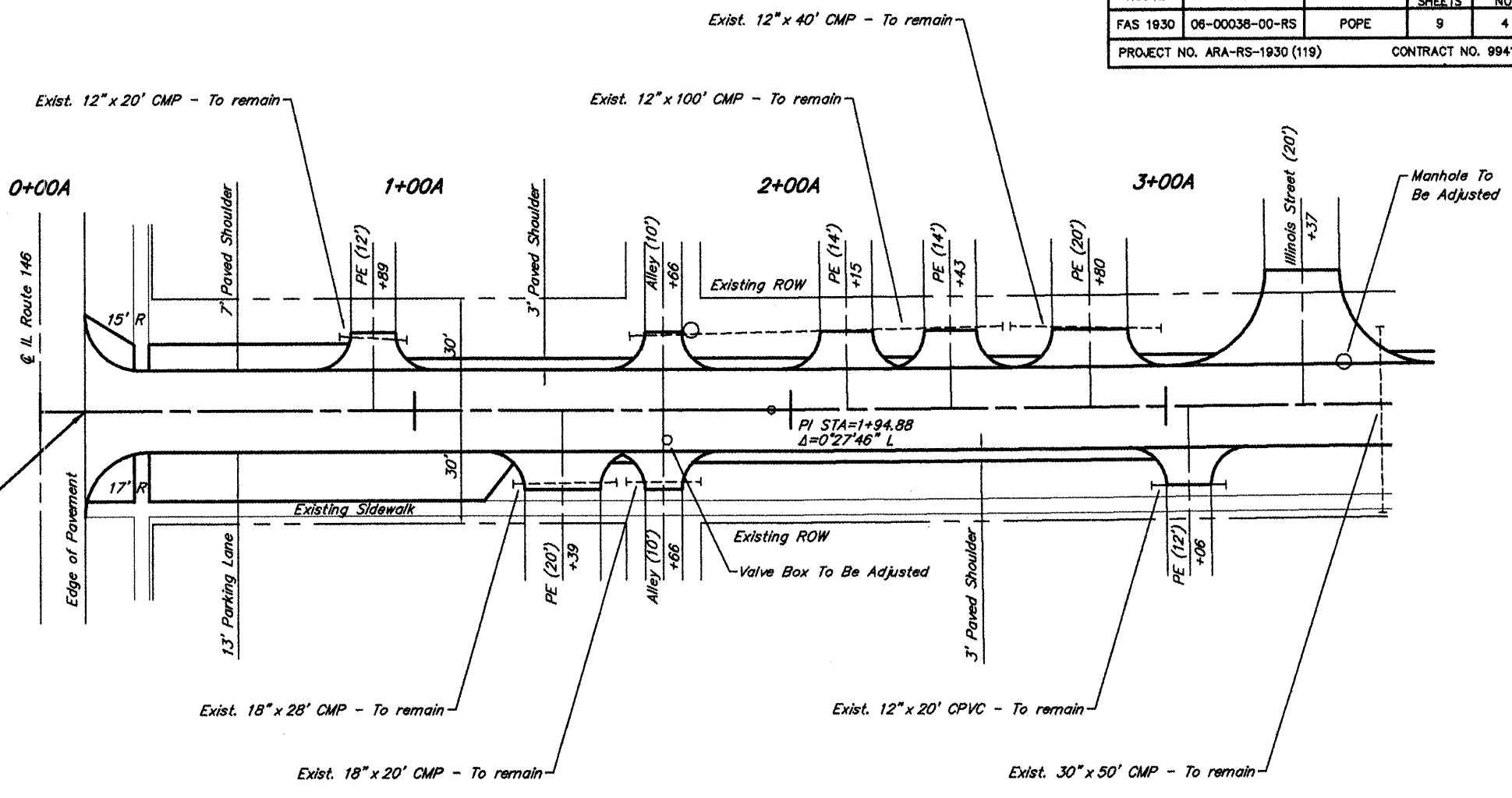
NOTE: Locations and quantities are estimated and should be verified and adjusted in the field as directed by the Engineer.

NOTE: Quantities shown do not include materials for entrances, side roads, shoulder paving and mailbox turnouts.

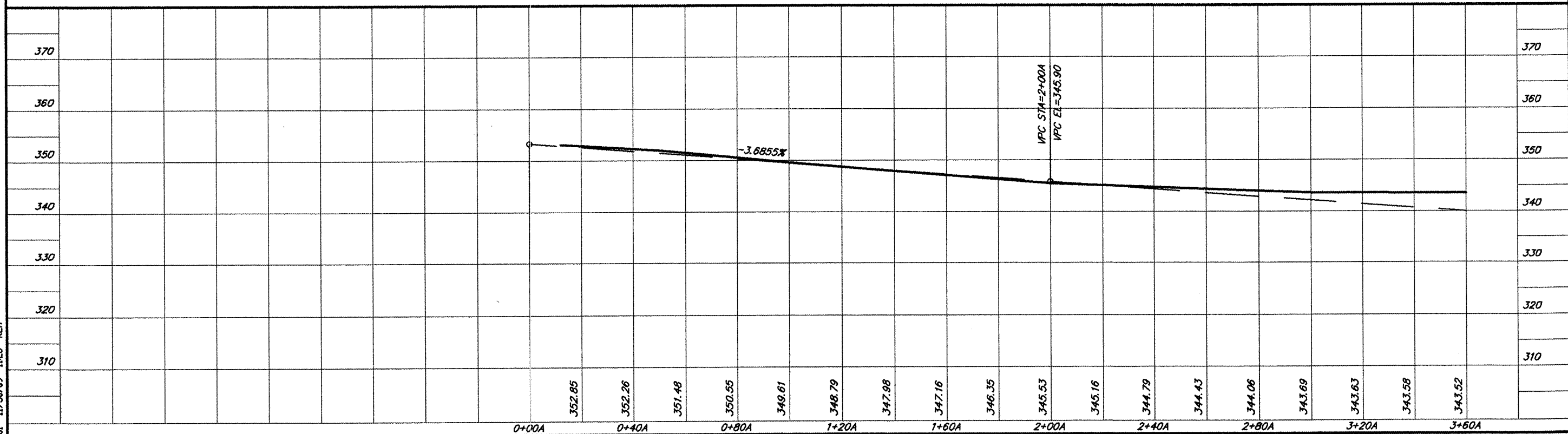
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 1930	06-00038-00-RS	POPE	9	4
PROJECT NO. ARA-RS-1930 (119)			CONTRACT NO. 99418	



**BEGIN IMPROVEMENT
STATION 0+12A**



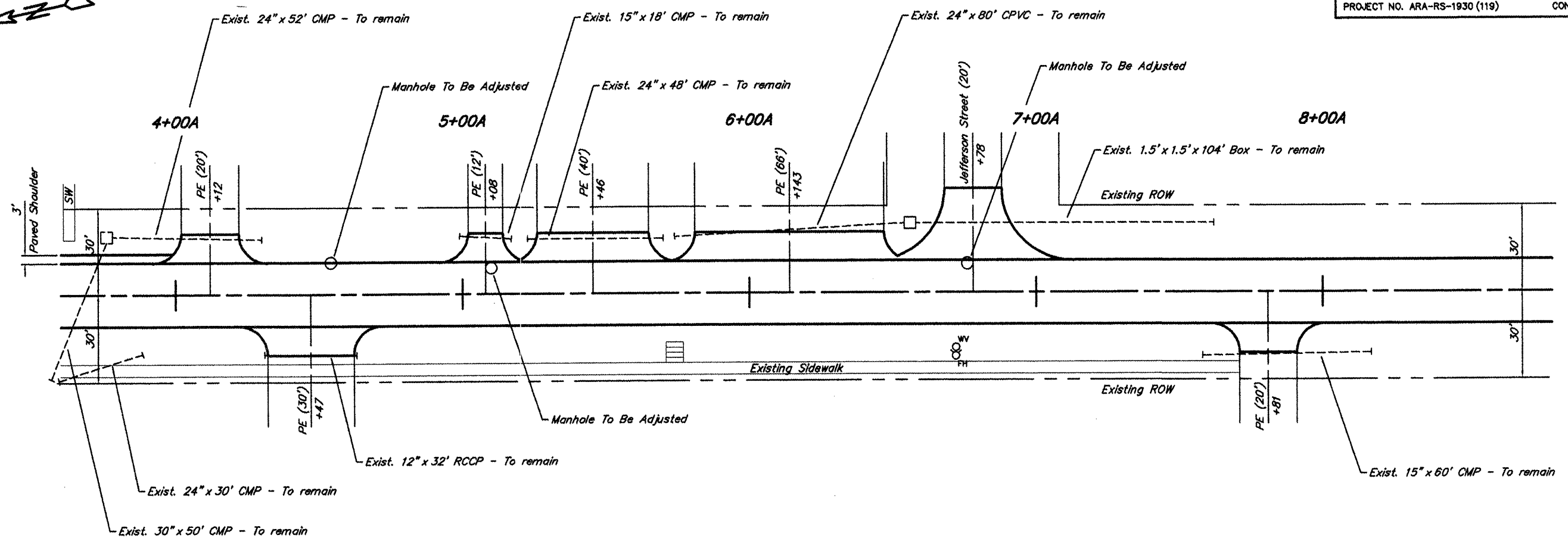
SCALES:
1" = 40' HOR
1" = 20' VER



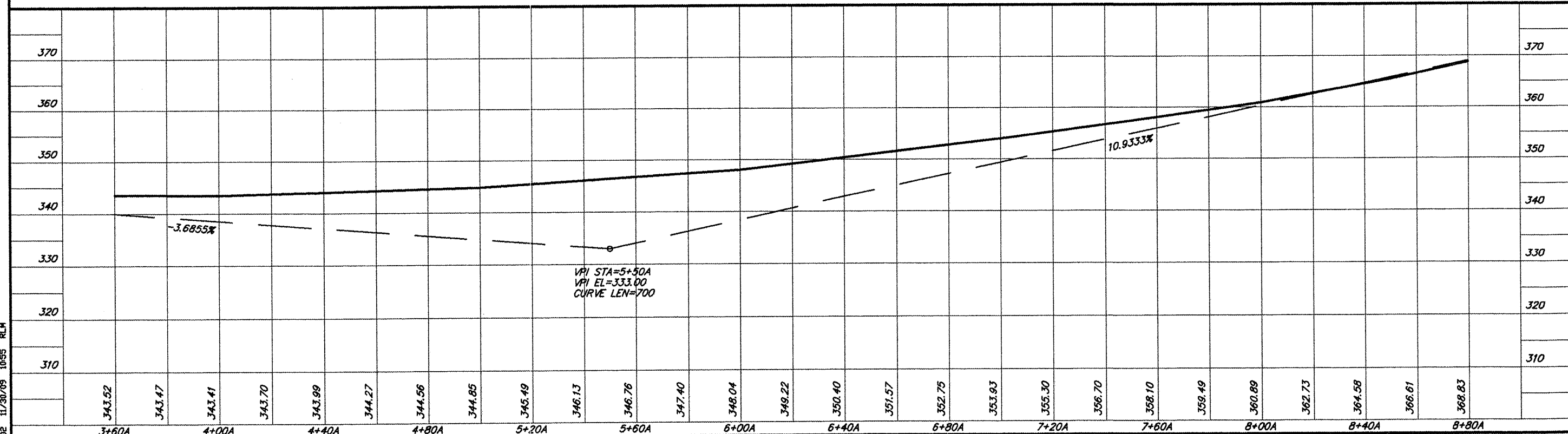
PLAN & PROFILE STA. 0+00A - STA. 3+60A

691 P/P/01 11/30/09 16:26 RLM

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 1930	06-00038-00-RS	POPE	9	5
PROJECT NO. ARA-RS-1930 (119)			CONTRACT NO. 99418	



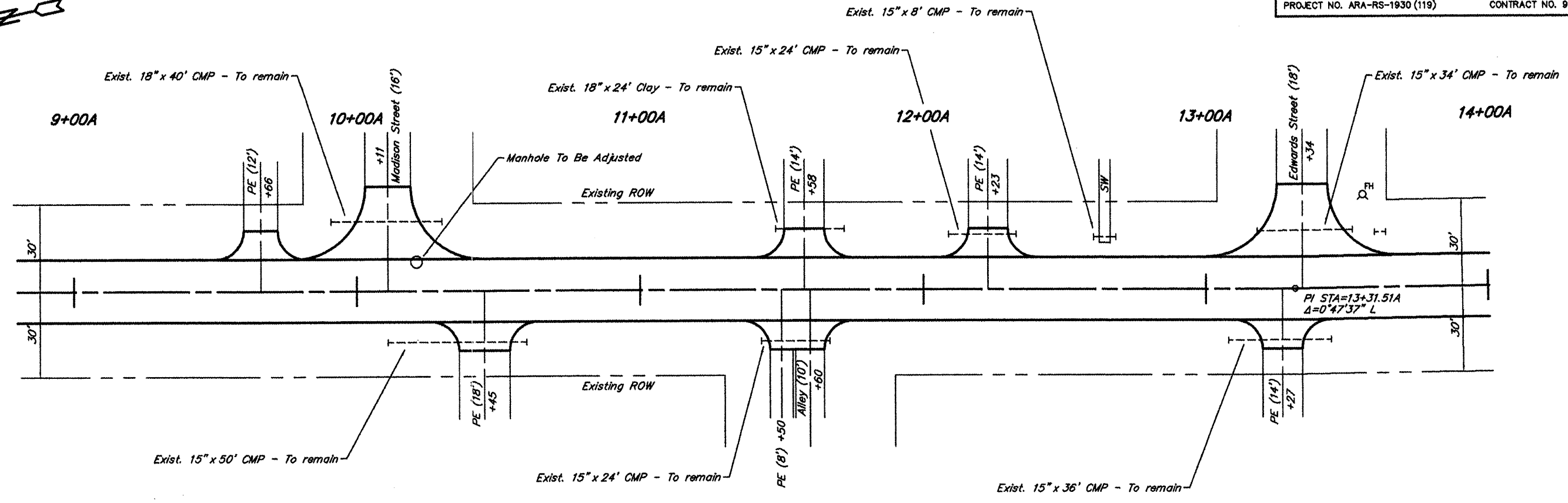
SCALES:
 1" = 40' HOR
 1" = 20' VER



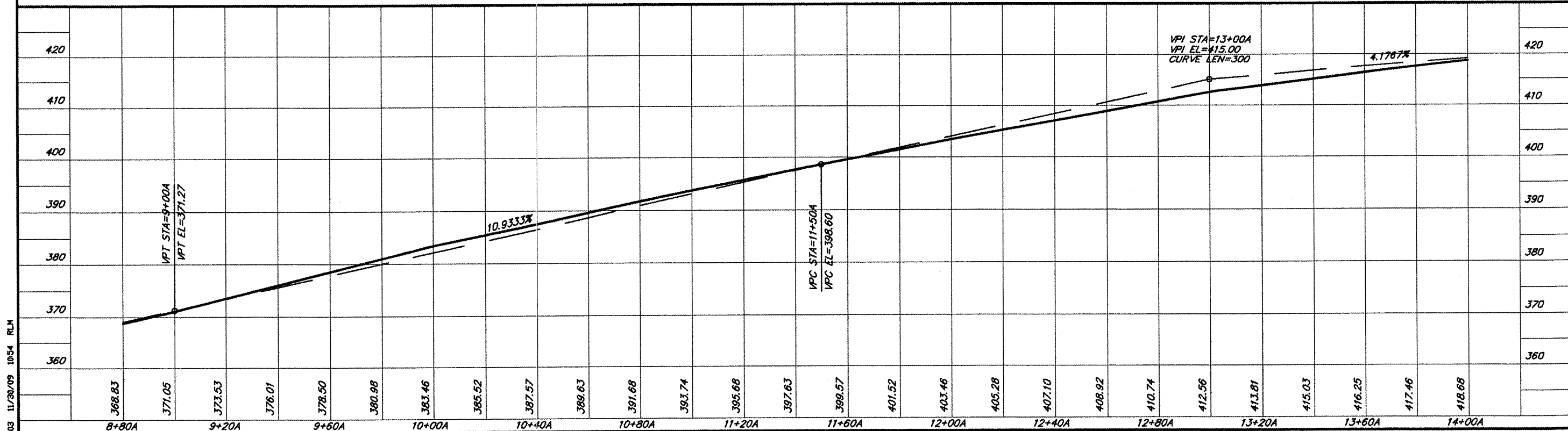
PLAN & PROFILE STA. 3+60A - STA. 8+80A

691 PFO2 11/30/09 1055 RLM

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 1930	06-00038-00-RS	POPE	9	6
PROJECT NO. ARA-RS-1930 (119)			CONTRACT NO. 99418	



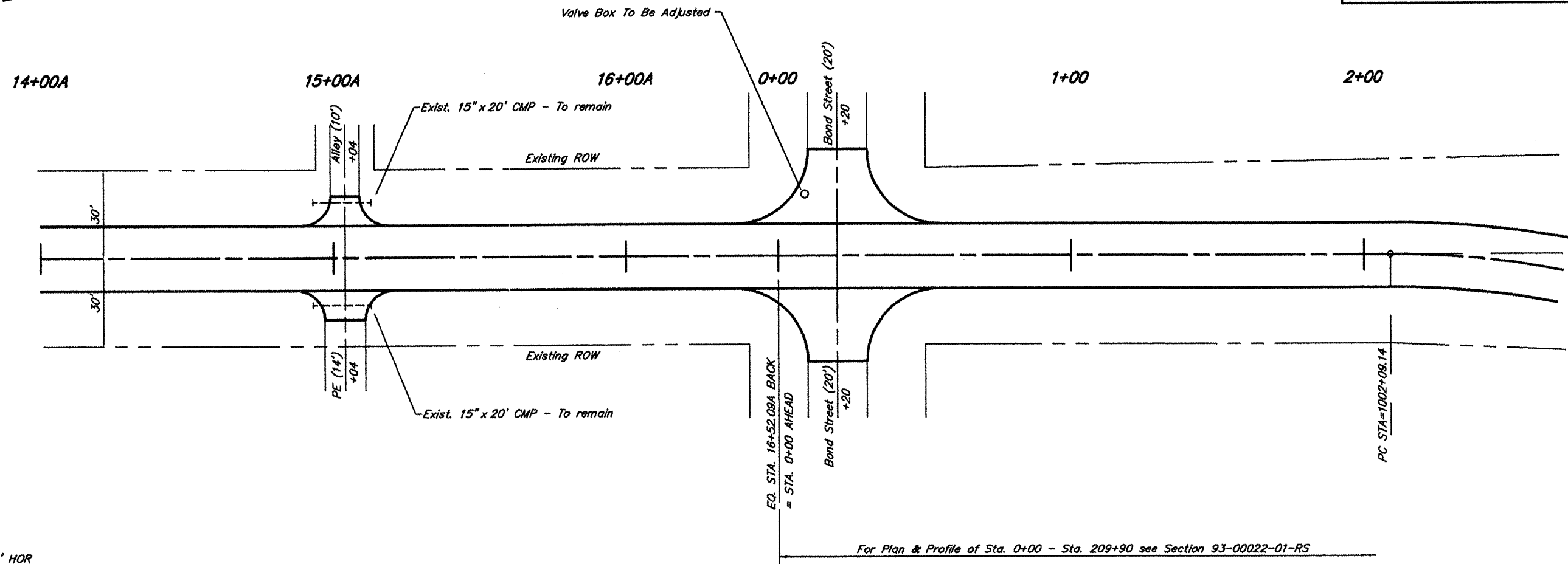
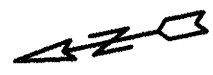
SCALES:
 1" = 40' HOR
 1" = 20' VER



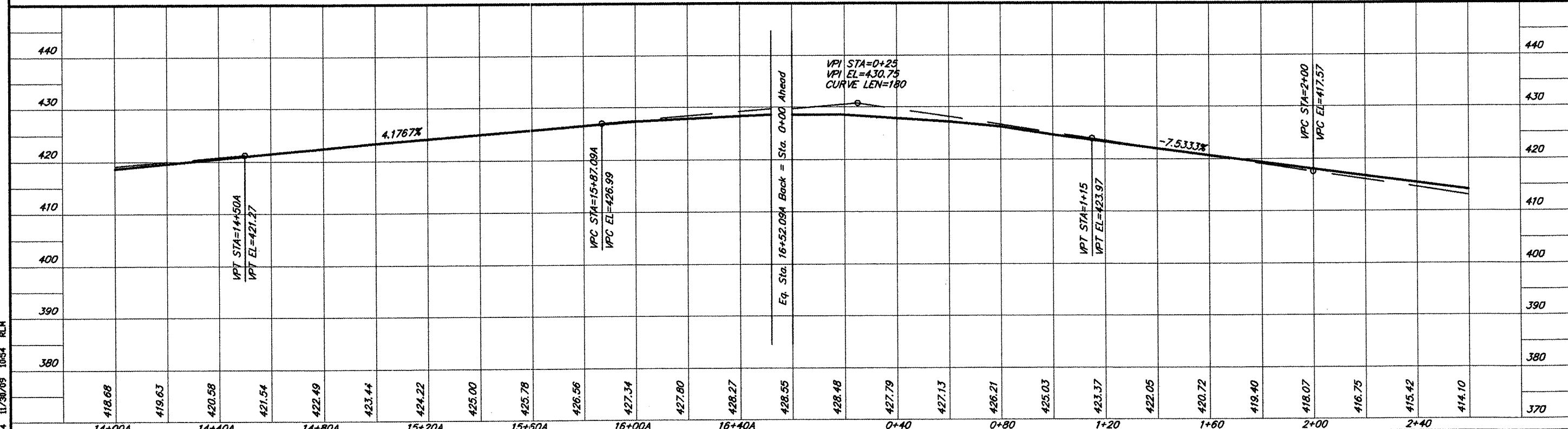
PLAN & PROFILE STA. 8+80A - STA. 14+00A

691 PPO3 11/30/09 1054 RLH

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 1930	06-00038-00-RS	POPE	9	7
ARA-PROJECT NO. RS-1930 (119)			CONTRACT NO. 99418	



SCALES:
 1" = 20' HOR
 1" = 10' VER



PLAN & PROFILE STA. 14+00A - STA. 2+60

691 PF04 11/30/09 1054 RLM

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 1930	06-00038-00-RS	POPE	9	8
PROJECT NO. ARA-RS-1930 (119)			CONTRACT NO. 99418	

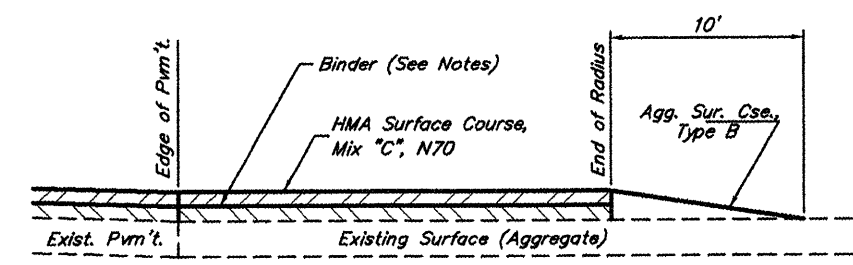
Angle of Intersection	Side Road		Private Entrance	
	Acute L.	Obtuse L.	Acute L.	Obtuse L.
90° - 80°	25'	25'	15'	15'
79° - 70°	25'	40'	15'	25'
69° - 60°	25'	60'	15'	35'
59° - 50°	20'	75'	10'	40'
49° - 40°	20'	100'	10'	60'
39° - 30°	15'	150'	10'	100'

NOTES

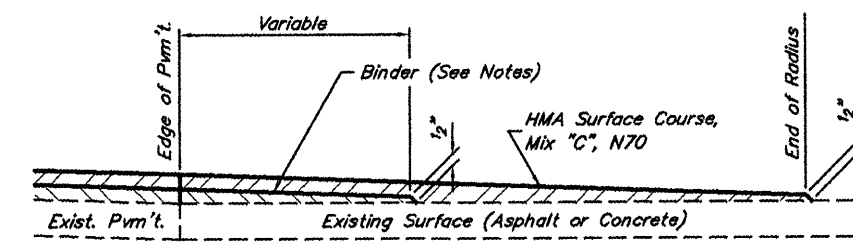
Thickness and type, of binder and surface course, shall be equal to the mainline resurfacing.

Where asphalt is to be placed, the existing surface shall be primed.

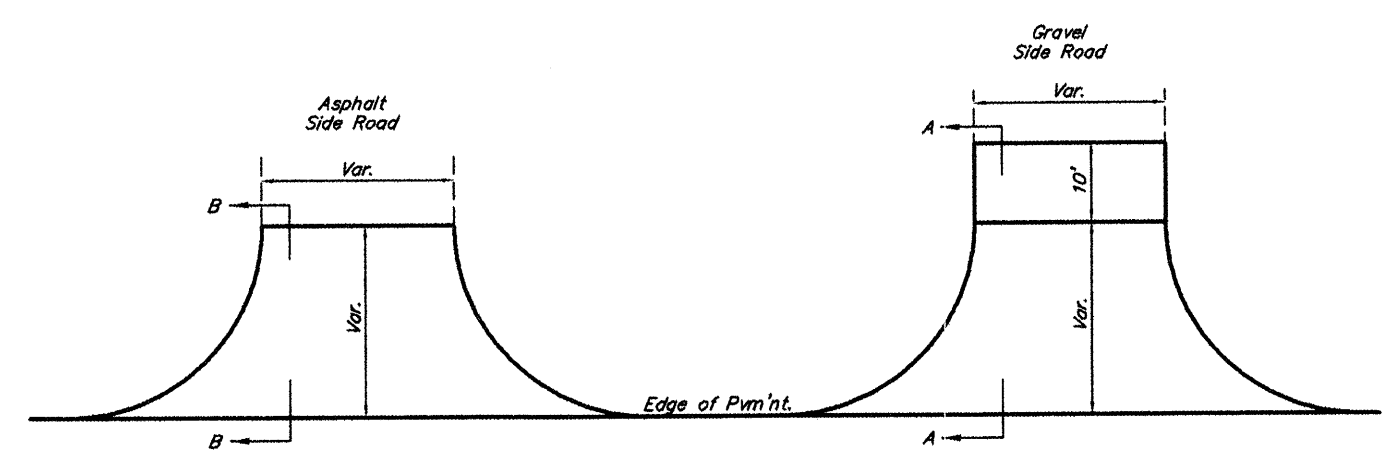
The actual number and locations, of entrances and side roads, shall be determined in the field by the Engineer.



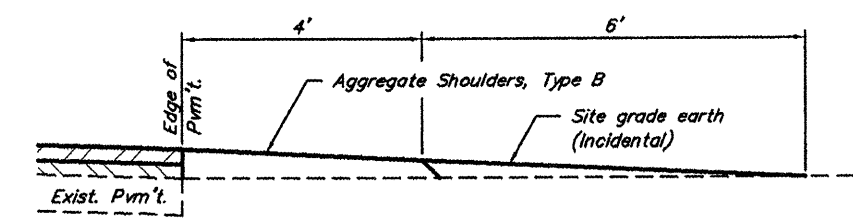
SECTION A-A SIDE ROAD - AGGREGATE
(Est. No. = 0)



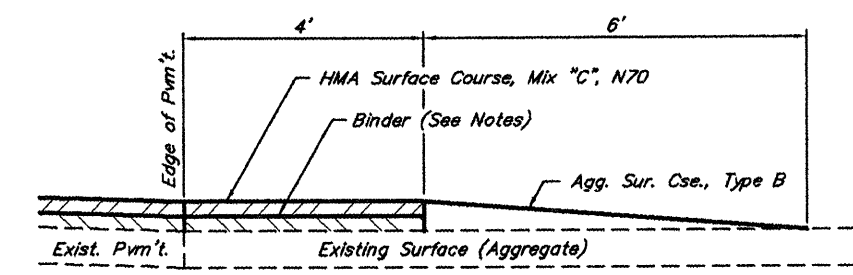
SECTION B-B SIDE ROAD - ASPHALT
(Est. No. = 9)



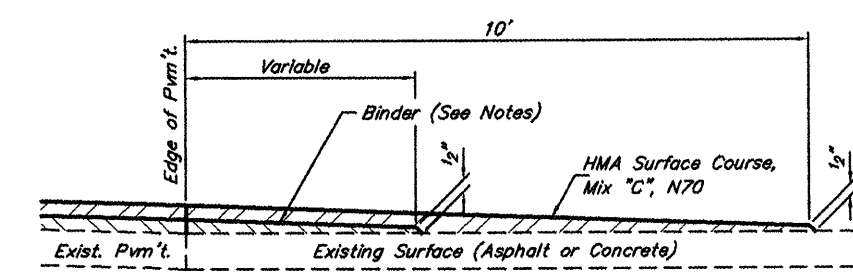
TYPICAL SIDE ROAD DETAILS



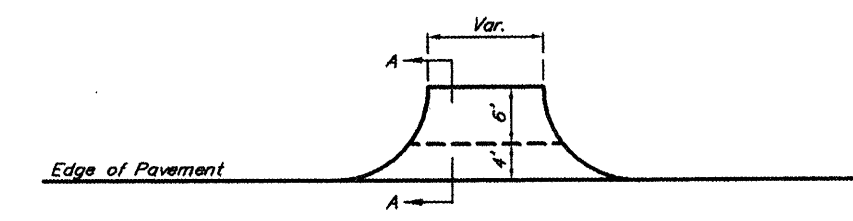
SECTION A-A FIELD ENTRANCE
(Est. No. = 19)



SECTION A-A PRIVATE ENTRANCE - AGGREGATE
(Est. No. = 39)



SECTION A-A PRIVATE ENTRANCE - ASPHALT
(Est. No. = 2)



TYPICAL ENTRANCE DETAILS

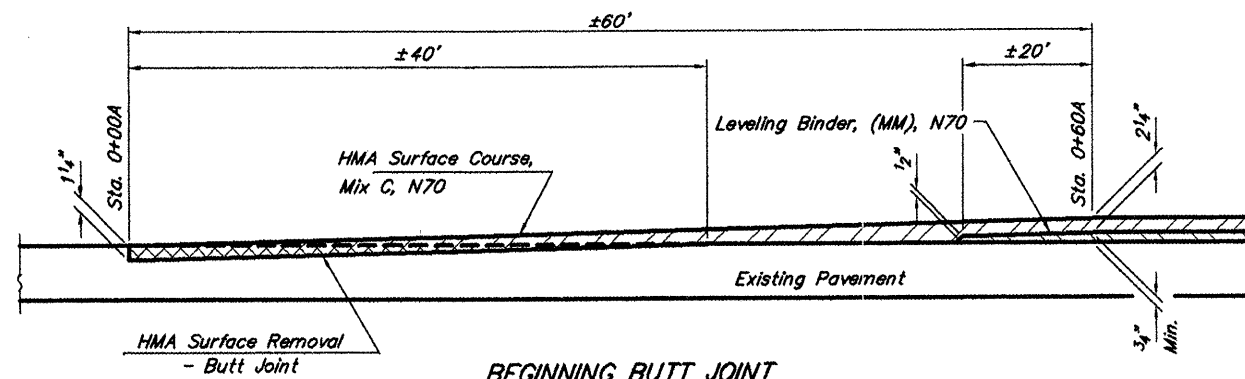
TYPICAL SIDE ROAD & ENTRANCE DETAILS

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 1930	06-00038-00-RS	POPE	9	9
PROJECT NO. ARA-RS-1930 (119)		CONTRACT NO. 99418		

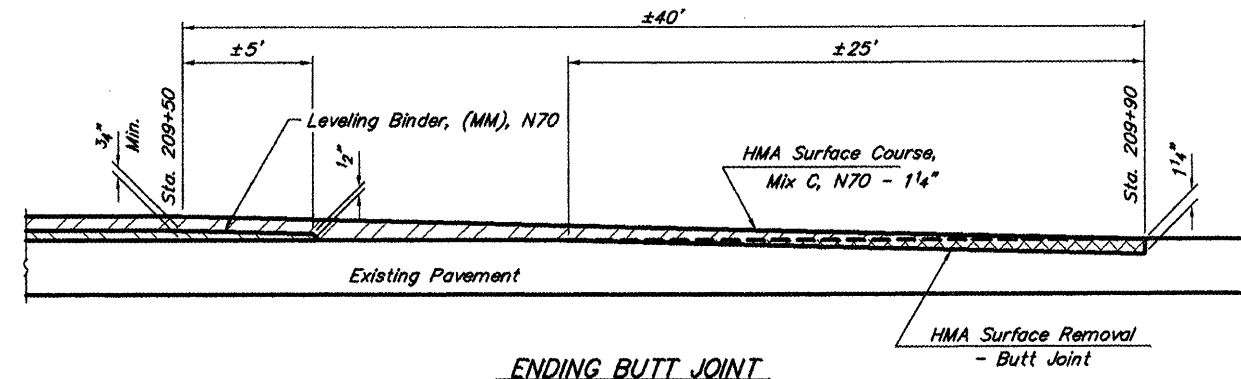
SCHEDULE OF PAVEMENT MARKING LINE 4" (LIN. FT.)			
Location	Centerline (Yellow Dashed)	Edge Line (White Solid)	No Passing (Yellow Solid)
Sta. 0+00A to Sta. 209+90	2,910	44,660	33,140

See schedule for limits of "No Passing Zones".
See Standard 78001 for typical pavement markings.

SCHEDULE OF "NO PASSING ZONES"			
SOUTH BOUND LANE		NORTH BOUND LANE	
Location	Length	Location	Length
Sta. 8+00A to Sta. 18+00	2,650'	Sta. 13+00A to Sta. 10+00	1,350'
Sta. 23+50 to Sta. 54+00	3,050'	Sta. 15+50 to Sta. 26+00	1,050'
Sta. 59+50 to Sta. 91+50	3,200'	Sta. 31+00 to Sta. 63+00	3,200'
Sta. 104+50 to Sta. 113+50	850'	Sta. 68+50 to Sta. 100+50	3,200'
Sta. 117+75 to Sta. 136+00	1,825'	Sta. 112+50 to Sta. 121+25	875'
Sta. 149+50 to Sta. 176+50	2,700'	Sta. 126+00 to Sta. 145+00	1,900'
Sta. 188+00 to Sta. 209+90	3,190'	Sta. 158+50 to Sta. 185+50	2,700'
		Sta. 197+00 to Sta. 211+50	1,450'
TOTALS			15,725'



BEGINNING BUTT JOINT
NOTE: Existing surface shall be primed.



ENDING BUTT JOINT
NOTE: Exist. surface shall be primed.

691 MDET 12/07/09 14:53 RLM