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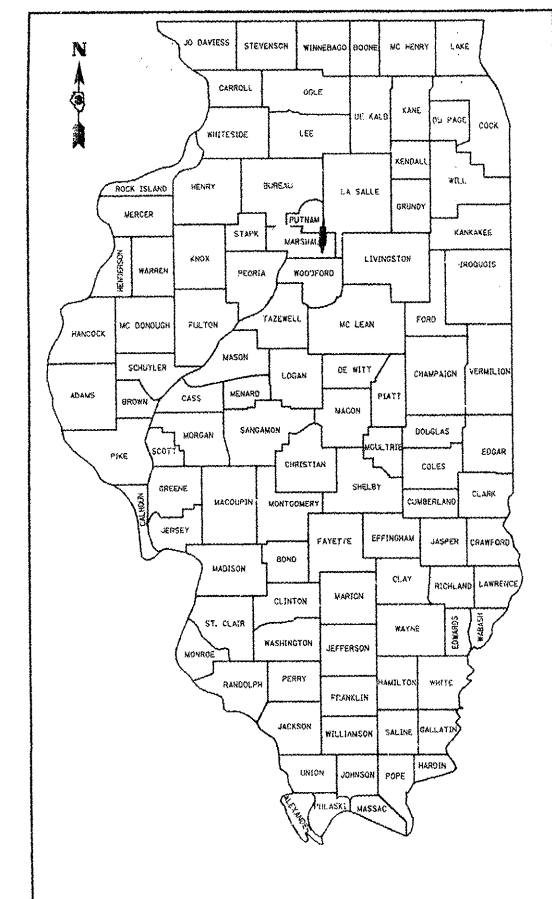
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**  
**PLANS FOR PROPOSED**  
**SURFACE TRANSPORTATION-RURAL**  
**FEDERAL AID SECONDARY 2368 (C.H. 4)**  
**MARSHALL COUNTY**                      **PUTNAM COUNTY**  
**SECTION 09-00086-00-RS**              **SECTION 09-00023-00-RS**

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
FAS 2368(CH4)	09-00086-00-RS	MARSHALL	1	4
	09-00023-00-RS	PUTNAM		
CONTRACT			89441	

STANDARDS:

701306-02	LANE CLOSURE TWO LANE, TWO WAY SLOW MOVING OPERATIONS - DAY ONLY
701311-03	LANE CLOSURE TWO LANE, TWO WAY MOVING OPERATIONS - DAY ONLY
701901-01	TRAFFIC CONTROL DEVICES
780001-02	TYPICAL PAVEMENT MARKINGS
BLR 22-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TWO LANE, TWO WAY, RURAL, OVER ONE DAY

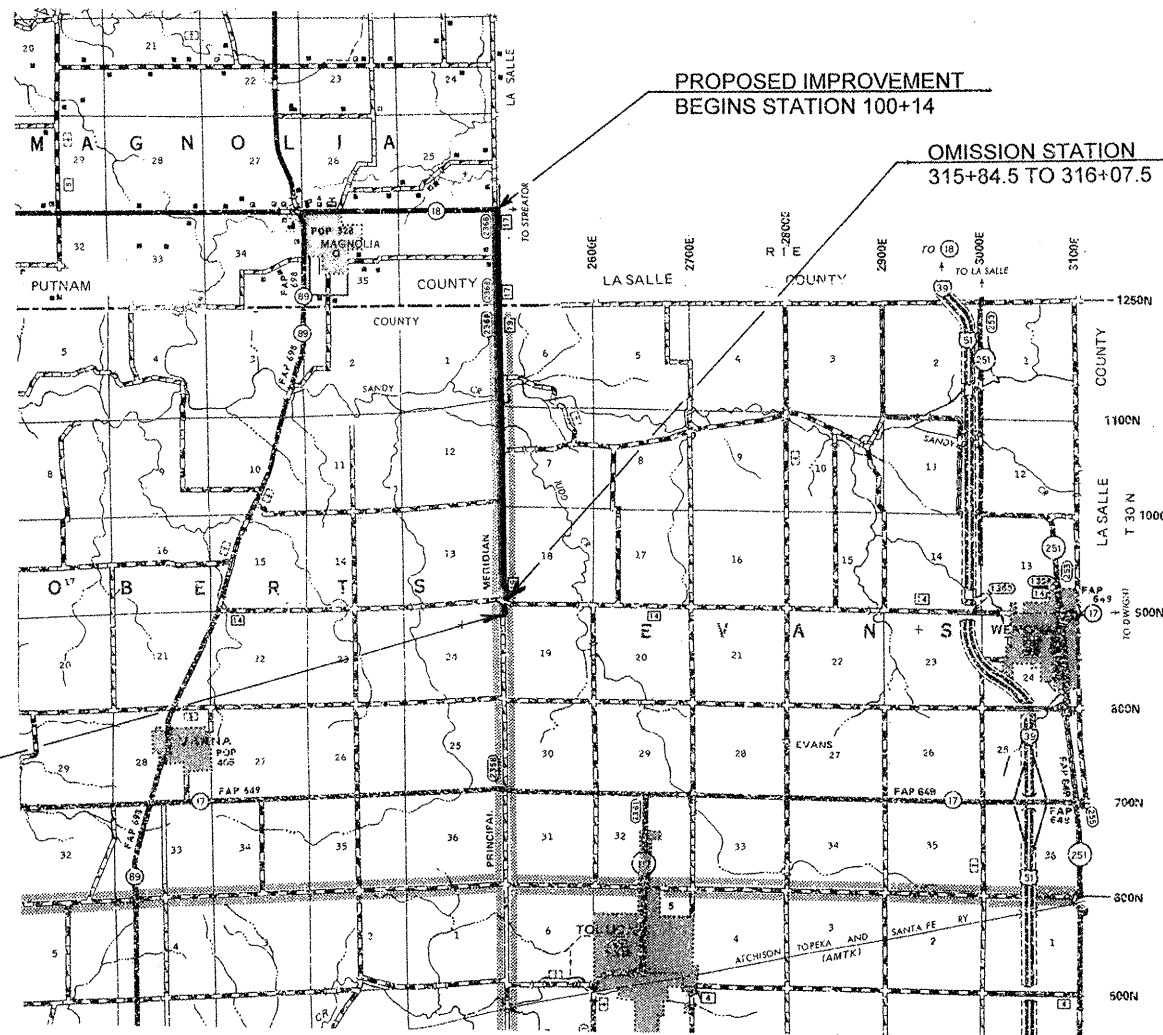
**PROJECT RS-2368 (111)**  
**JOB #C-94-140-06**  
**CONTRACT #89441**



LOCATION OF SECTION INDICATED THUS:

**SUMMARY OF QUANTITIES**  
 CONSTRUCTION CODE 1000

CODE NO.	UNIT	ITEM	QUANTITY
40600100	GALLON	BITUMINOUS MATERIALS (PRIME COAT)	5327.0
40600982	SQ YD	HOT-MIX ASPHALT SURFACE REMOVAL BUTT JOINT	1691.0
40800050	TON	INCIDENTAL HOT-MIX ASPHALT SURFACING	295.0
48101200	TON	AGGREGATE SHOULDERS, TYPE B	2520.0
78001110	FOOT	PAINT PAVEMENT MARKING-LINE 4"	53675.0
40603310	TON	HOT-MIX ASPHALT SURFACE COURSE MIX "C" N50	4760.0
40603080	TON	HOT-MIX ASPHALT BINDER COURSE IL 19.0 N50	5455.0
40600625	TON	LEVELING BINDER (MACHINE METHOD) N50	2090
67100100	LS	MOBILIZATION	1



PROPOSED IMPROVEMENT ENDS STATION 318+26

CLASS IV ROAD, 20 YEAR DESIGN  
 FUNCTIONAL CLASSIFICATION = MAJOR COLLECTOR

CURRENT ADT (2005)		225
(20 year) DESIGN ADT (2018)		256
SDT (2025)		275
	P.C. 88%	ADT 225
	S.U. 7%	ADT 18
	M.U. 5%	ADT 13

	PUTNAM	MARSHALL
T.F. =	0.070	0.070
I.B.R. =	3.0	3
REQUIRED Dt =	2.78	2.78
Exist. =	2.07	1.375
PROVIDED Dt =	2.79	2.815
PROPOSED THICKNESS =	3/4" LEVEL 2" SURF	3/4" LEVEL 1 1/2" SURF 2 1/2" BINDER

PLANS PREPARED BY:  
 GEORGE P. MEISTER  
 COUNTY ENGINEER  
 REGISTERED PROFESSIONAL ENGINEER  
*George P. Meister 1-9-09*  
 Reg. No. 62-35763  
 Exp. Date 11-30-09



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

GROSS LENGTH OF SECTION 21812.00 FEET = 4.1311 MILES  
 NET LENGTH OF SECTION 21789.00 FEET = 4.1267 MILES

APPROVED	<i>Jan 9</i>	20.09
	<i>George P. Meister</i>	
	MARSHALL & PUTNAM CO. ENGINEER	
PASSED	<i>2-19</i>	20.09
	<i>Dale C. Pitt</i>	
	DISTRICT FOUR ENGINEER OF LOCAL ROADS & STREETS	
RELEASED FOR BID	<i>2-19</i>	20.09
BASED ON LIMITED	<i>[Signature]</i>	
REVIEW	DEPUTY DIRECTOR OF HIGHWAYS, REGION THREE ENGINEER	
	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	

TABULATION OF QUANTITIES

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
FAS 2386(CH4)	09-00086-00-RS 09-00023-00-RS	MARSHALL PUTNAM	2	4
CONTRACT			89441	

40600100 BITUMINOUS MATERIALS (PRIME COAT)

LOCATION	LENGTH	QUANTITY REQUIRED
PUTNAM CO. STA. 100+14 TO 153+46	5332'	1244.1 GAL
MARSHALL CO. STA. 153+46 TO 318+26	16480'	3845.3 GAL
ENTIRE SECTION (INTERSECTIONS)	1687.0 SY	168.7 GAL
ENTIRE SECTION (ENTRANCES, MAILBOX TURNOUTS)	690 SY	69.0 GAL
		5327.1 GAL
RATE OF APPL. = 0.1 GAL/SQ YD		
PUTNAM CO. 1305 GAL	MARSHALL CO. 4022 GAL	TOTAL (Use 5327 GAL)

78001110 PAINT PAVEMENT MARKING 4"

LOCATION	PUTNAM CO.	MARSHALL CO.
STA. 100+14 TO 153+46 (CENTERLINE)	1333.0 FT	
STA. 153+46 TO 315+85 (CENTERLINE)		4060.0 FT
ENTIRE SECTION (NO PAVING ZONES)		5138.0 FT
ENTIRE SECTION (EDGE LINES)	10664.0 FT	32480.0 FT
	1197.0 FT	41678.0 FT
TOTAL (USE 53675 FOOT)		

40600982 HOT-MIX ASPHALT SURFACE REMOVAL BUTT JOINT

LOCATION	LENGTH	QUANTITY REQUIRED
PUTNAM CO. STA. 100+14 TO 100+39 @25'	120'	333.3 SQ YD
MARSHALL CO. STA. 205+00 TO 207+70 (BR) @21'	270'	630.0 SQ YD
STA. 218+80 TO 219+40 (BR) @21'	60'	140.0 SQ YD
STA. 220+34 TO 221+00 (BR) @21'	76'	154.0 SQ YD
STA. 315+65 TO 315+85 (INTER) @20'	130'	288.9 SQ YD
STA. 316+08 TO 316+18 (INTER) @10'	130'	144.4 SQ YD
		1690.6 SQ YD
PUTNAM CO. 333 SY	MARSHALL CO. 1358 SY	TOTAL (Use 1691 SQ YD)

40603310 HOT-MIX ASPHALT SURFACE COURSE MIX "C" N50

LOCATION	QUANTITY REQUIRED
PUTNAM CO. STA. 100+14 TO 153+46 (2")	1459.8 TON
ENTIRE SECTION (ENTRANCES) (2")	6.7 TON
MARSHALL CO. STA. 153+46 TO 315+85 (1 1/2")	3182.8 TON
ENTIRE SECTION (ENTRANCES) (1 1/2")	46.6 TON
ENTIRE SECTION (MAILBOX TURNOUTS) (1 1/2")	6.3 TON
STA. 316+07 TO 318+26 (2")	57.2 TON
	4759.4 TON
RATE OF APPL. = 112 LB./S.Y./IN.	
PUTNAM CO. 1467 TON	MARSHALL CO. 3293 TON
TOTAL (USE 4760 TON)	

4080050 INCIDENTAL HOT MIX ASPHALT SURFACING

LOCATION	SQ YD	QUANTITY REQUIRED
PUTNAM CO. STA. 100+14 (INTERSECTION) (2")	133.0	14.9 TON
RT. STA. 126+58 (INTERSECTION) (3")	243.0	40.8 TON
LT. STA. 127+94 (INTERSECTION) (3")	243.0	40.8 TON
MARSHALL CO. LT. STA. 194+96.5 (INTERSECTION) (3")	243.0	40.8 TON
LT. STA. 234+96.0 (INTERSECTION) (3")	243.0	40.8 TON
RT. STA. 261+04.4 (INTERSECTION) (3")	243.0	40.8 TON
STA. 315+84 (INTERSECTION) (4")	166.7	37.3 TON
STA. 316+07 (INTERSECTION) (4")	172.9	38.7 TON
		294.9 TON
RATE OF APPL. = 112 L.B./S.Y./IN.		
PUTNAM CO. 96.5 TON	MARSHALL CO. 198.4 TON	TOTAL (USE 295 TON)

40603080 HOT-MIX ASPHALT BINDER COURSE IL 19.0 N50

LOCATION	DEPTH	QUANTITY REQUIRED
PUTNAM CO. STA. 150+00 TO 153+46	2 1/2"	113.0 TON
ENTIRE SECTION (ENTRANCES)	2 1/2"	2.1 TON
MARSHALL CO. STA. 153+46 TO 205+54	2 1/2"	1701.3 TON
STA. 206+73 TO 219+38	2 1/2"	413.2 TON
STA. 220+34 TO 315+80	2 1/2"	3118.4 TON
STA. 315+10 TO 315+80 (RADIUS)	2 1/2"	18.9 TON
MARSHALL CO. ENTIRE SECTION (ENTRANCES)	2 1/2"	77.7 TON
MARSHALL CO. ENTIRE SECTION (MAILBOXES)	2 1/2"	10.5 TON
		5455.1 TON
RATE OF APPL. = 112 LB./S.Y./IN.		
PUTNAM CO. 115 TON	MARSHALL CO. 5340 TON	TOTAL (USE 5455 TON)

48101200 AGGREGATE SHOULDERS, TYPE B

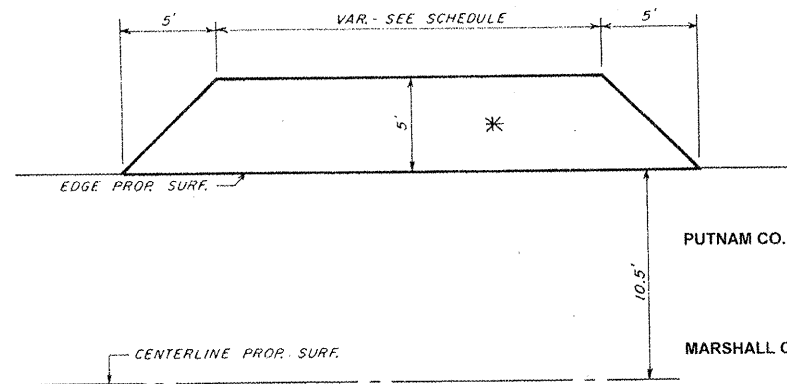
LOCATION	WIDTH	THICKNESS	QUANTITY REQUIRED
PUTNAM CO. STA. 100+14 TO 153+46	3'	3"	616.1 TON
MARSHALL CO. STA. 153+46 TO 318+26	3'	6"	1904.4 TON
			2520.5 TON
RATE OF APPL. 2.08 TON/CY			
PUTNAM CO. 616 TON	MARSHALL CO. 1904 TON	TOTAL	(USE 2520 TON)

40600625 LEVELING BINDER (MACHINE METHOD) N50

LOCATION	DEPTH	QUANTITY REQUIRED
PUTNAM CO. STA. 100+14 TO 153+46	3/4"	522.5 TON
MARSHALL CO. STA. 153+46 TO 205+54	3/4"	510.4 TON
STA. 206+73 TO 219+38	3/4"	124.0 TON
STA. 220+34 TO 315+50	3/4"	932.6 TON
		2089.5 TON
RATE OF APPL. = 112 LB./S.Y./IN.		
PUTNAM CO. 523 TON	MARSHALL CO. 1567 TON	TOTAL (USE 2090 TON)

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
FAS 2386(CH4)	09-00086-00-RS	MARSHALL	3	4
	09-00023-00-RS	PUTNAM		
CONTRACT			89441	

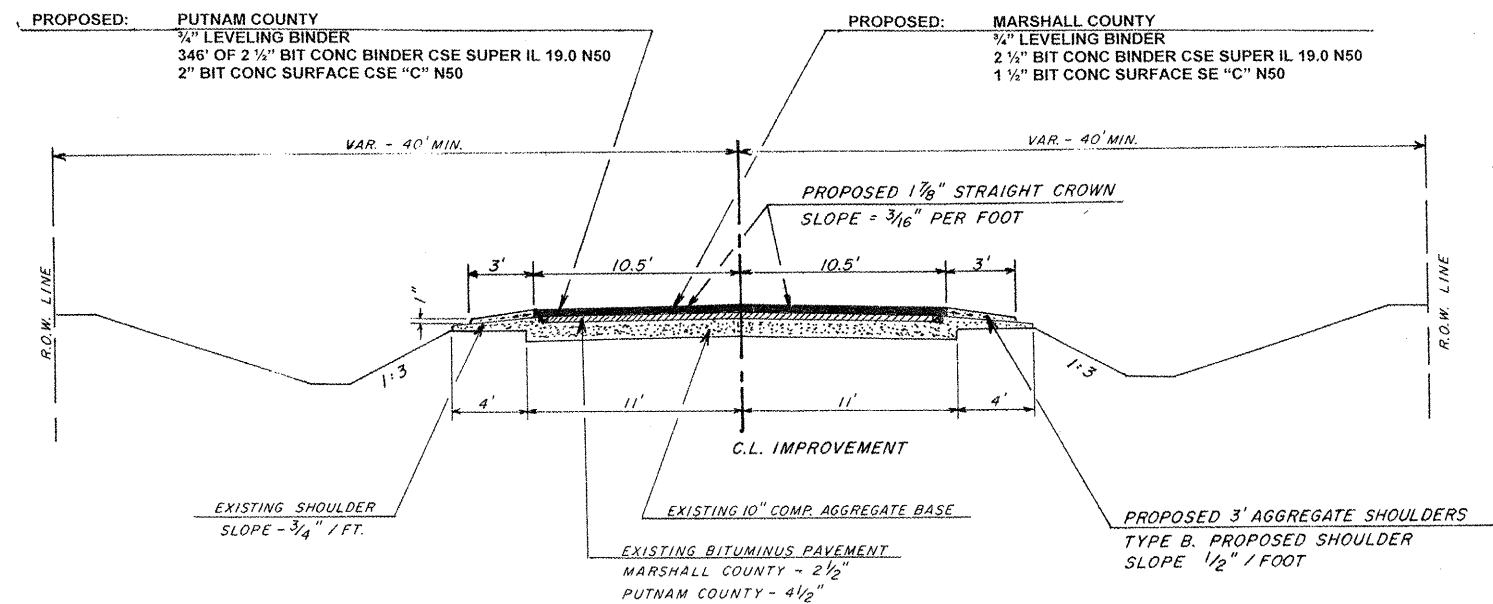
### ENTRANCE DETAIL



PUTNAM CO. \*CONSISTS OF 2" BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE MIX "C" N50

MARSHALL CO. \*CONSISTS OF 2 1/2" BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE MIX IL 19.0 N50  
\*CONSISTS OF 1 1/2" BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE MIX "C" N50

### TYPICAL CROSS SECTION



#### SCHEDULE OF ENTRANCES

Marshall County

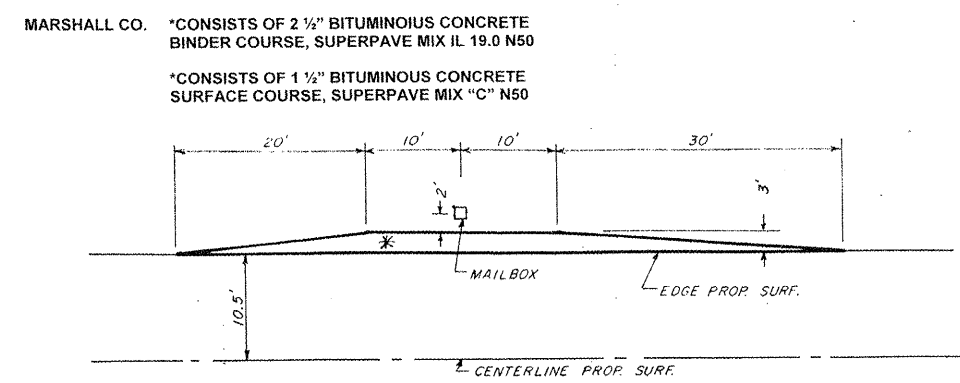
STATION	SURF. WIDTH	SQ YDS	TONS BINDER 2 1/2"	TONS SURFACE 2"	TONS SURFACE 1 1/2"
LT. 153+56	22'	15.0	2.1		1.26
RT. 153+58	22'	15.0	2.1		1.26
LT. 161+00	22'	15.0	2.1		1.26
RT. 166+84	22'	15.0	2.1		1.26
LT. 171+85	22'	15.0	2.1		1.26
LT. 178+20	22'	15.0	2.1		1.26
RT. 179+93	22'	15.0	2.1		1.26
LT. 182+50	22'	15.0	2.1		1.26
RT. 193+70	22'	15.0	2.1		1.26
LT. 194+20	22'	15.0	2.1		1.26
RT. 200+29	22'	15.0	2.1		1.26
RT. 207+62	22'	15.0	2.1		1.26
LT. 211+51	22'	15.0	2.1		1.26
LT. 213+53	22'	15.0	2.1		1.26
LT. 214+67	22'	15.0	2.1		1.26
LT. 215+20	22'	15.0	2.1		1.26
LT. 216+28	22'	15.0	2.1		1.26
RT. 218+98	22'	15.0	2.1		1.26
LT. 219+00	22'	15.0	2.1		1.26
RT. 225+60	22'	15.0	2.1		1.26
LT. 226+00	22'	15.0	2.1		1.26
RT. 227+78	22'	15.0	2.1		1.26
LT. 229+10	22'	15.0	2.1		1.26
LT. 235+60	22'	15.0	2.1		1.26
RT. 236+35	22'	15.0	2.1		1.26
RT. 245+50	22'	15.0	2.1		1.26
LT. 250+04	22'	15.0	2.1		1.26
LT. 257+27	22'	15.0	2.1		1.26
RT. 261+90	22'	15.0	2.1		1.26
RT. 262+20	22'	15.0	2.1		1.26
LT. 272+60	22'	15.0	2.1		1.26
RT. 274+65	22'	15.0	2.1		1.26
LT. 285+79	22'	15.0	2.1		1.26
RT. 287+75	22'	15.0	2.1		1.26
RT. 300+00	22'	15.0	2.1		1.26
LT. 301+37	22'	15.0	2.1		1.26
LT. 315+33	22'	15.0	2.1		1.26
<b>TOTAL</b>		<b>(555.0)</b>	<b>(77.7)</b>		<b>(46.6)</b>

#### SCHEDULE OF ENTRANCES

Putnam County

STATION	SURF. WIDTH	SQ YDS	TONS BINDER 2 1/2"	TONS SURFACE 2"	TONS SURFACE 1 1/2"
RT. 100+76	22'	15.0			1.68
LT. 100+76	22'	15.0			1.68
LT. 113+70	22'	15.0			1.68
LT. 153+26	22'	15.0	2.1	1.68	
<b>TOTAL</b>		<b>(60.0)</b>	<b>2.1</b>	<b>6.72</b>	

### MAILBOX TURNOUT DETAIL

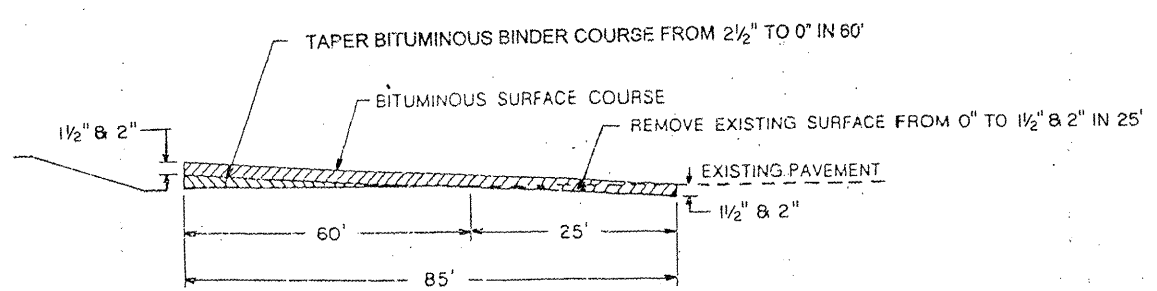


#### MAILBOX TURNOUTS

MARSHALL COUNTY

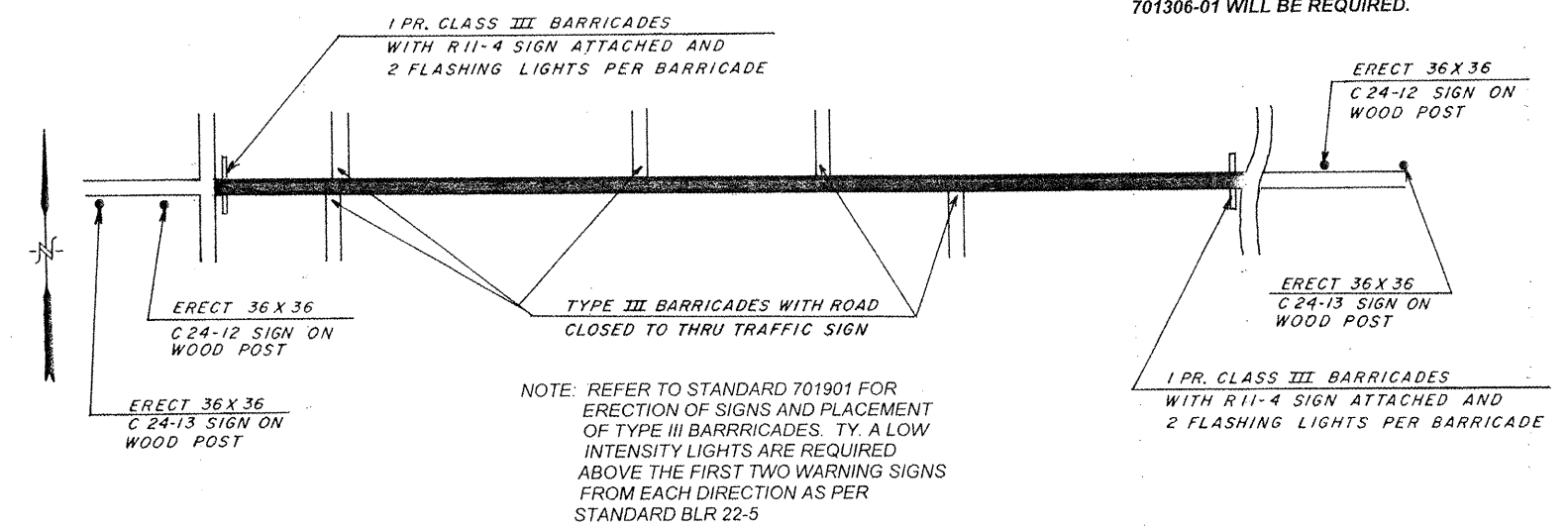
STATION	SQ YDS	TONS BINDER 2 1/2"	TONS SURFACE
RT. 193+60	15.0	2.10	1.26
LT. 214+40	15.0	2.10	1.26
RT. 225+50	15.0	2.10	1.26
LT. 229+20	15.0	2.10	1.26
LT. 261+70	15.0	2.10	1.26
<b>TOTAL</b>	<b>75.0</b>	<b>10.50</b>	<b>6.30</b>

### BUTT JOINT & TAPER DETAIL



### LOCATION MAP SHOWING REQUIRED BARRICADE AND SIGN PLACEMENTS

- #### SIGN LEGEND
- C24-12 ROAD CLOSED 500 FT.
  - C24-13 ROAD CLOSED 1000 FT.
  - R11-4 ROAD CLOSED TO THRU TRAFFIC (WHITE)



NOTE: WHEN WORKING ON THE TERMINAL ENDS (IL ROUTE 18, CH14) TEMPORARY SIGNS AS SHOWN ON STANDARD 701306-01 WILL BE REQUIRED.

NOTE: REFER TO STANDARD 701901 FOR ERECTION OF SIGNS AND PLACEMENT OF TYPE III BARRICADES. TYPE A LOW INTENSITY LIGHTS ARE REQUIRED ABOVE THE FIRST TWO WARNING SIGNS FROM EACH DIRECTION AS PER STANDARD BLR 22-5

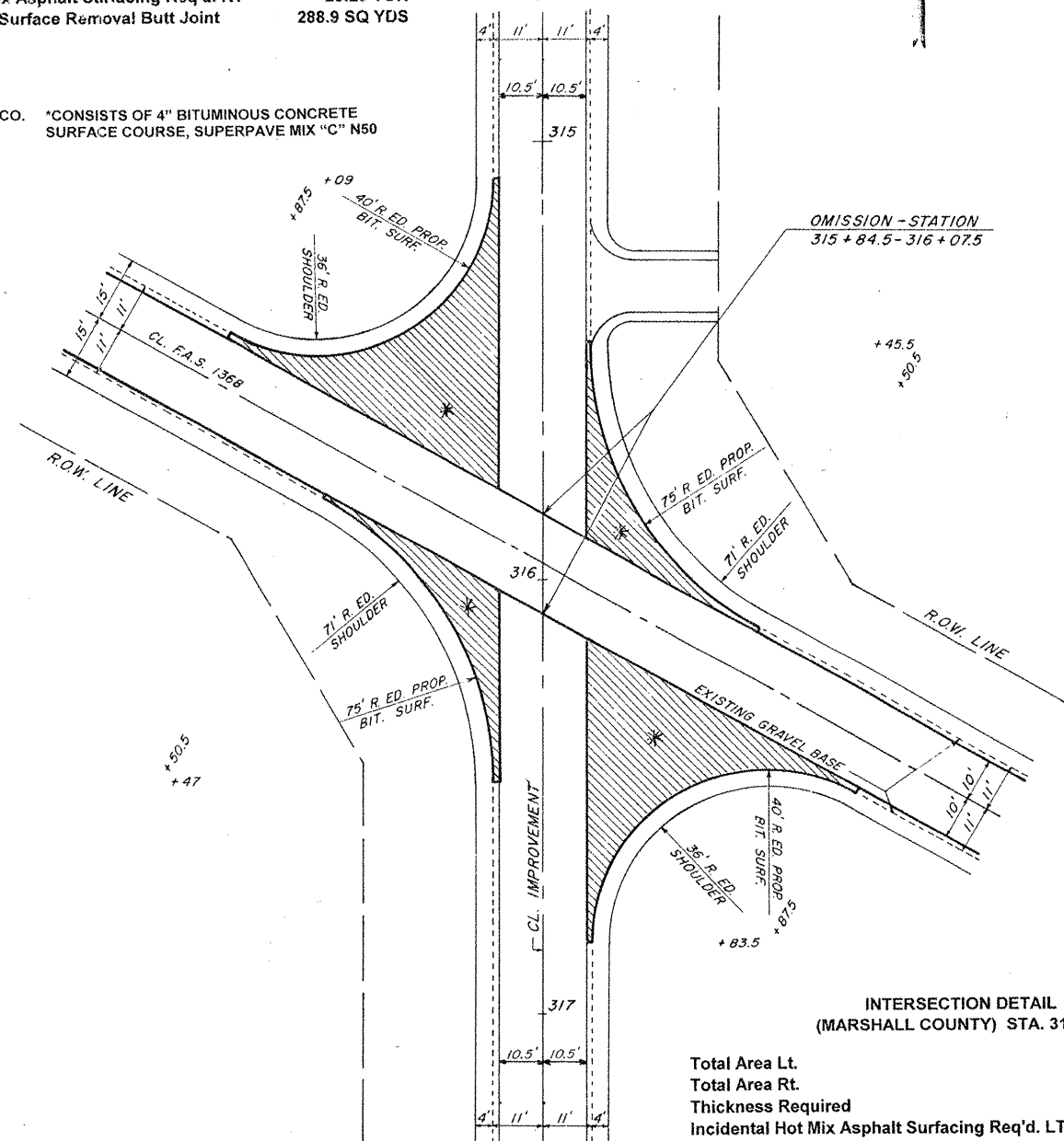
# INTERSECTION DETAILS

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
FAS 2386(CH4)	09-00086-00-RS 09-00023-00-RS	MARSHALL PUTNAM	4	4
CONTRACT			89441	

**INTERSECTION DETAIL  
(MARSHALL COUNTY) STA. 315+84**

Total Area Lt.	36.2 SQ YDS
Total Area Rt.	130.5 SQ YDS
Thickness Required	4" COMP.
Incidental Hot Mix Asphalt Surfacing Req'd. LT	8.11 TON
Incidental Hot Mix Asphalt Surfacing Req'd. RT	29.23 TON
Hot Mix Asphalt Surface Removal Butt Joint	288.9 SQ YDS

MARSHALL CO. \*CONSISTS OF 4" BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE MIX "C" N50



**INTERSECTION DETAIL  
(MARSHALL COUNTY) STA. 316+07**

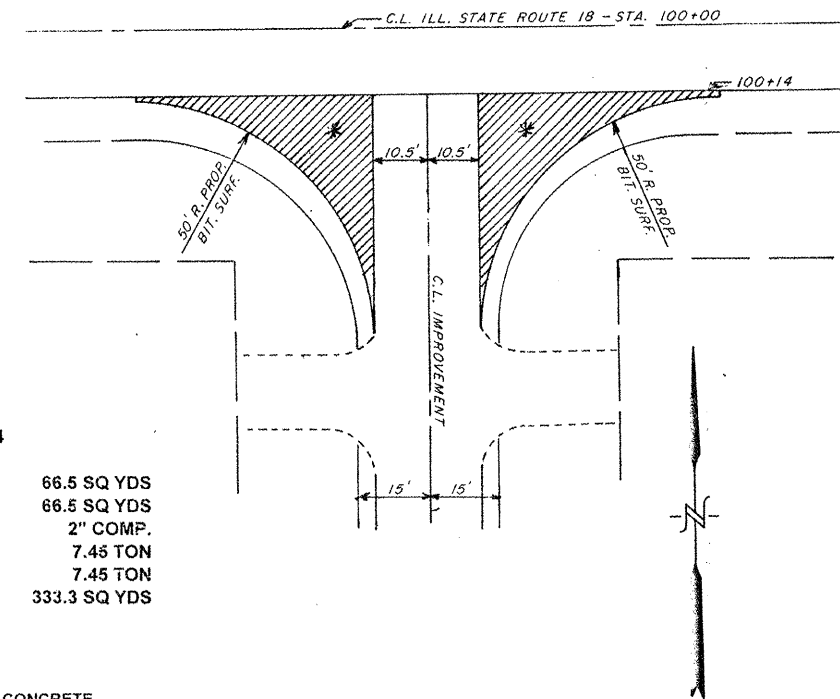
Total Area Lt.	133.5 SQ YDS
Total Area Rt.	39.4 SQ YDS
Thickness Required	4" COMP.
Incidental Hot Mix Asphalt Surfacing Req'd. LT	29.9 TON
Incidental Hot Mix Asphalt Surfacing Req'd. RT	8.83 TON
Hot Mix Asphalt Surface Removal Butt Joint	144.4 SQ YDS

MARSHALL CO. \*CONSISTS OF 4" BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE MIX "C" N50

**INTERSECTION DETAIL  
(PUTNAM COUNTY) STA. 100+14**

Total Area Lt.	66.5 SQ YDS
Total Area Rt.	66.5 SQ YDS
Thickness Required	2" COMP.
Incidental Hot Mix Asphalt Surfacing Req'd. LT	7.45 TON
Incidental Hot Mix Asphalt Surfacing Req'd. RT	7.45 TON
Hot Mix Asphalt Surface Removal Butt Joint	333.3 SQ YDS

PUTNAM CO. \*CONSISTS OF 2" BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE MIX "C" N50



**SIDE ROAD  
INTERSECTION DETAIL**

(PUTNAM CO.) RT. STA. 126+58	
(PUTNAM CO.) LT. STA. 127+94	
(MARSHALL CO.) LT. STA. 194+96.5	
(MARSHALL CO.) LT. STA. 234+96.0	
(MARSHALL CO.) RT. STA. 261+04.4	

Total Area	243.0 SQ YDS
Thickness Required	3" COMP.
Incidental Hot Mix Asphalt Surfacing Req'd.	40.82 TON

PUTNAM CO. \*CONSISTS OF 3" BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE MIX "C" N50

MARSHALL CO. \*CONSISTS OF 3" BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE MIX "C" N50

