

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**PROPOSED  
HIGHWAY PLANS**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
24	D9 CRACK SEAL 2015-1	ILLINOIS	6	1
CONTRACT NO. 78460				
JOHNSON / MASSAC				

**EQUATION STATIONS**

☉ STA. 499+01.37 BK. (☉ MEDIAN) = P.C. STA. 78+90.80 AH. (☉ MEDIAN)  
52' RT. STA. 236+52.37 BK. (☉ MEDIAN) = STA. 236+57.01 AH. (☉ EBL)  
52' LT. STA. 236.52.37 BK. (☉ MEDIAN) = STA. 597.79.11 AH. (☉ WBL)  
52' LT. STA. 403+54.97 BK. (☉ EBL) = STA. 403+52.86 AH. (☉ MEDIAN)  
52' RT. STA. 766+19.20 BK. (☉ WBL) = STA. 403+52.86 AH. (☉ MEDIAN)  
☉ STA. 456+69.50 BK. (☉ MEDIAN) = STA. 50+54.47 AH. (☉ MEDIAN)  
40' LT. STA. 301+81.06 BK. (☉ MEDIAN) = STA. 1301+73.45 AH. (TL W.B.L.)  
40' RT. STA. 301+81.06 BK. (☉ MEDIAN) = STA. 301+86.33 AH. (TL E.B.L.)  
40' RT. STA. 1417+84.96 (TL W.B.L.) BK. = STA. 417+03.53 AH. (☉ MEDIAN)  
40' LT. STA. 417+07.71 BK. (TL E.B.L.) = STA. 417+03.53 AH. (☉ MEDIAN)  
STA. 446+93.78 BK. (☉ MEDIAN) = STA. 32+66.19 AH. (☉ MEDIAN)

**OMISSION STATIONS**

STA. 348+68.61 TO 350+50.11 (OMISSION) EBL  
STA. 408+05.70 TO 409+18.70 (OMISSION) EBL  
STA. 418+18.90 TO 419+78.88 (OMISSION) EBL  
STA. 442+43.90 TO 444+13.00 (OMISSION) EBL  
STA. 473+09.78 TO 474+98.61 (OMISSION) EBL  
STA. 258+37.13 TO 259+44.29 (OMISSION) EBL  
STA. 201+16.37 TO 202+08.62 (OMISSION) EBL  
STA. 253+53.07 TO 255+03.90 (OMISSION) EBL  
STA. 328+84.92 TO 330+73.00 (OMISSION) EBL  
STA. 94+17.08 TO 95+73.91 (OMISSION) EBL  
STA. 139+09.68 TO 140+28.18 (OMISSION) EBL  
STA. 239+87.16 TO 241+17.66 (OMISSION) EBL  
STA. 400+42.91 TO 401+54.74 (OMISSION) EBL  
STA. 412+49.34 TO 413+90.00 (OMISSION) EBL  
STA. 416+75.71 TO 417+79.28 (OMISSION) EBL

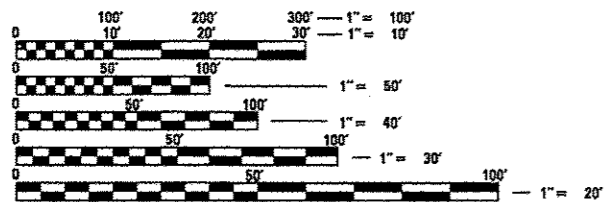
**TRAFFIC DATA**

**2014 ADT**  
JOHNSON CO. LINE TO U.S. 45                      16,000 WITH 35.6% TRUCKS

**2015 ADT**  
JOHNSON CO./MASSAC CO. LINE TO U.S. 45      17,150 WITH 38.2% TRUCKS  
U.S. 45 TO ILLINOIS-KENTUCKY LINE            30,040 WITH 20.4% TRUCKS

**TOWNSHIPS**

BLOOMFIELD      GEORGES CREEK  
VIENNA            BENTON  
GRANTSBURG      GRANT  
                          WASHINGTON  
                          METROPOLIS



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

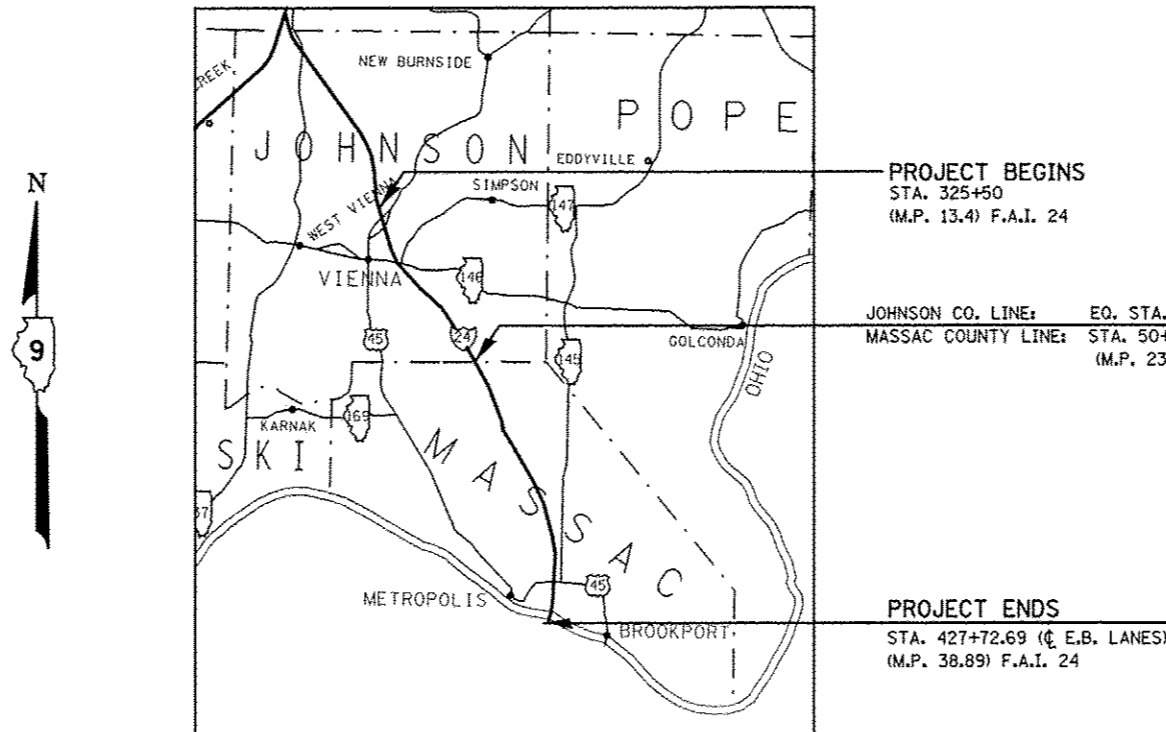
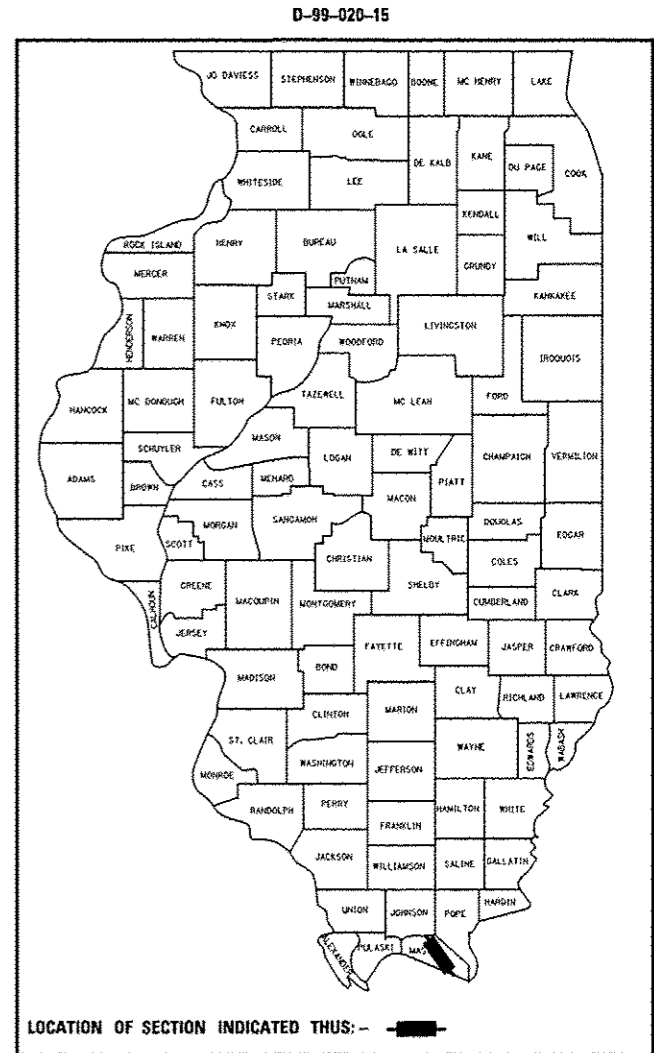
PROJECT ENGINEER CHARLES STEIN - (618) 351-5210  
PROJECT MANAGER JOHN A. BRANDON - (618) 351-5291

CONTRACT NO. 78460

I-24 ROUTE (FAI 24)  
SECTION D9 CRACK SEAL 2015-1

CRACK SEALING  
JOHNSON / MASSAC COUNTY

C-99-025-15



PROJECT BEGINS  
STA. 325+50  
(M.P. 13.4) F.A.I. 24

JOHNSON CO. LINE: EQ. STA. 456+69.50 BK. (☉ MEDIAN) =  
MASSAC COUNTY LINE: STA. 50+54.47 AH. (☉ MEDIAN)  
(M.P. 23.92) F.A.I. 24

PROJECT ENDS  
STA. 427+72.69 (☉ E.B. LANES)  
(M.P. 38.89) F.A.I. 24

GROSS LENGTH = 136,884.88 FT. = 25.925 MILE  
OMISSION LENGTH = 2112.62 FT. = 0.400 MILE  
NET LENGTH = 134,772.26 FT. = 25.525 MILE

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED *March 24 20 15*

*Jeffrey J. Kern*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

*May 8 20 15*  
*John J. Baramelli, P.E.*  
ENGINEER OF DESIGN AND ENVIRONMENT

*May 8 20 15*  
*Onel Osman, P.E.*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

Prepared By: *Joe Zylanski*  
DISTRICT STUDIES & PLANS ENGINEER

Examined By: *Paul E.*  
DISTRICT LAND ACQUISITION ENGINEER

Examined By: *Ca M.*  
DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By: *Keel M.*  
DISTRICT OPERATIONS ENGINEER

Examined By: *[Signature]*  
DISTRICT PROJECT IMPLEMENTATION ENGINEER

Examined By: \_\_\_\_\_  
DISTRICT CONSTRUCTION ENGINEER

Examined By: \_\_\_\_\_  
DISTRICT MATERIALS ENGINEER

FILE NAME c:\work\p\p\p\brandon\p\2042750717	USER NAME & USER# BD-shs\plendgn	DESIGNED - DRAWN -	REVISED REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SIGNATURE SHEET</b>				F.A.I. RTE. 24	SECTION D9 CRACK SEAL 2015-1	COUNTY •	TOTAL SHEETS 6	SHEET NO. 2
#MODEL NAME	PLOT SCALE & DIMENSIONS 1" = 100'-0" 1/2"	CHECKED -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 78460		
	PLOT DATE 3/24/2015	DATE	REVISED -		ILLINOIS FED. AID PROJECT								

• JOHNSON / MASSAC

## INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	SIGNATURE SHEET
3	INDEX OF SHEETS, STATION EQUATIONS & OMISSIONS, GENERAL NOTES, HIGHWAY STANDARDS, AND COMMITMENTS
4	SUMMARY OF QUANTITIES
5	SCHEDULE OF QUANTITIES - JOHNSON COUNTY
6	SCHEDULE OF QUANTITIES - MASSAC COUNTY

## GENERAL NOTES

FACTORS USED FOR QUANTITY CALCULATIONS ARE AS FOLLOWS:

JOINT SEALER ..... 0.39 LB/FT

THE QUANTITY USED FOR CRACK FILLING IS AN ESTIMATE. THE ACTUAL AMOUNT USED WILL BE DETERMINED BY THE ENGINEER AS PER ARTICLE 425.05 (b) OF THE STANDARD SPECIFICATIONS.

IN ADDITION TO THE REQUIREMENTS OF ARTICLE 107.16 THE CONTRACTOR SHALL PROTECT THE SURFACE OF ALL BRIDGE DECKS AND BRIDGE APPROACH PAVEMENTS IN A MANNER SATISFACTORY TO THE ENGINEER BEFORE ANY EQUIPMENT IS ALLOWED TO CROSS THE STRUCTURE. PROTECTION SHALL BE PROVIDED FOR ALL EQUIPMENT AS DEFINED IN ARTICLE 101.17 REGARDLESS IF TRACK MOUNTED OR WHEELED.

## HIGHWAY STANDARDS

701411-09\_LnClosureMultiLn-EntrOrExitRamp45MPHOrMore  
 701426-07\_LnClosureMultiLn-IntermittantOrMovingOp45MPHOrMore  
 701428\_TrafficControlSetupRemovalFreewayExpressway  
 701901-04\_TrafCtrIDevices

## STATION EQUATIONS

### STATION EQUATIONS FOR I-24 JOHNSON COUNTY

CI STA. 499+01.37 BK. (CI MEDIAN) = P.C. STA. 78+90.80 AH. (CI MEDIAN)  
 52' RT. STA. 236+52.37 BK. (CI MEDIAN) = STA. 236+57.01 AH. (CI EBL)  
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 CI STA. 456+69.50 BK. (CI MEDIAN) = STA. 50+54.47 AH. (CI MEDIAN)

### STATION EQUATIONS FOR I-24 MASSAC COUNTY

CI STA. 456+69.50 BK. (CI MEDIAN) = STA. 50+54.47 AH. (CI MEDIAN)  
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 STA. 446+93.78 BK. (CI MEDIAN) = STA. 32+66.19 AH. (CI MEDIAN)

## STATION OMISSIONS

### STATION OMISSIONS FOR I-24 JOHNSON COUNTY

STA. 348+68.61 TO 350+50.11 (OMISSION) EBL  
 STA. 408+05.70 TO 409+18.70 (OMISSION) EBL  
 STA. 418+18.90 TO 419+78.88 (OMISSION) EBL  
 STA. 442+43.90 TO 444+13.00 (OMISSION) EBL  
 STA. 473+09.78 TO 474+98.61 (OMISSION) EBL  
 STA. 258+37.13 TO 259+44.29 (OMISSION) EBL

STA. 348+17.89 TO 349+99.39 (OMISSION) WBL  
 STA. 408+05.70 TO 409+18.70 (OMISSION) WBL  
 STA. 417+83.90 TO 419+42.26 (OMISSION) WBL  
 STA. 442+40.13 TO 444+18.33 (OMISSION) WBL  
 STA. 473+62.80 TO 475+65.83 (OMISSION) WBL  
 STA. 619+68.69 TO 620+84.19 (OMISSION) WBL

### STATION OMISSIONS FOR I-24 MASSAC COUNTY

STA. 201+16.37 TO 202+08.62 (OMISSION) EBL  
 STA. 253+53.07 TO 255+03.90 (OMISSION) EBL  
 STA. 328+84.92 TO 330+73.00 (OMISSION) EBL  
 STA. 94+17.08 TO 95+73.91 (OMISSION) EBL  
 STA. 139+09.68 TO 140+28.18 (OMISSION) EBL  
 STA. 239+87.16 TO 241+17.66 (OMISSION) EBL  
 STA. 400+42.91 TO 401+54.74 (OMISSION) EBL  
 STA. 412+49.34 TO 413+90.00 (OMISSION) EBL  
 STA. 416+75.71 TO 417+79.28 (OMISSION) EBL

STA. 200+51.39 TO 201+43.64 (OMISSION) WBL  
 STA. 252+56.09 TO 254+06.92 (OMISSION) WBL  
 STA. 1327+24.69 TO 1329+03.68 (OMISSION) WBL  
 STA. 93+52.09 TO 95+08.92 (OMISSION) WBL  
 STA. 138+71.82 TO 139+90.32 (OMISSION) WBL  
 STA. 240+39.14 TO 241+69.64 (OMISSION) WBL  
 STA. 400+49.93 TO 401+61.76 (OMISSION) WBL  
 STA. 412+61.53 TO 414+02.19 (OMISSION) WBL  
 STA. 416+84.54 TO 417+88.47 (OMISSION) WBL

## COMMITMENTS

NONE

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INDEX OF SHEETS, STATION EQUATIONS &amp; OMISSIONS, GENERAL NOTES, &amp; HIGHWAY STANDARDS</b>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwworksp\psidot\brandonja\0427587178	462-aht-pln.dgn	DRAWN -	REVISED -			24	09 CRACK SEAL 2015-1	*	6	3	
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 78460					
*MODELNAME#	PLOT DATE = 3/26/2015	DATE -	REVISED -			ILLINOIS/FED. AID PROJECT					

# SUMMARY OF QUANTITIES

LOCATION:	RURAL	
ROUTE:	I-24, (FAI 24)	
FUNDING:	100% STATE	
COUNTY:	JOHNSON	MASSAC
TOTAL QUANTITY	ROADWAY 0005	ROADWAY 0005
45100100	109,528	156,002
45100200	42,716	60,841
67100100	0.4	0.6
70100420	4	4
70106800	4	5
X7010410	1	2

CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	JOHNSON ROADWAY 0005	MASSAC ROADWAY 0005
45100100	CRACK ROUTING (PAVEMENT)	FOOT	265,530	109,528	156,002
45100200	CRACK FILLING	POUND	103,557	42,716	60,841
67100100	MOBILIZATION	L SUM	1	0.4	0.6
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD T01411	EACH	8	4	4
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	9	4	5
X7010410	SPEED DISPLAY TRAILER	CAL MO	3	1	2

SCHEDULE OF QUANTITIES

LOCATION I-24 WB	STA.	TO	STA.	LENGTH ( FT )	CENTER OF ROADWAY LONGITUDINAL CRACKS ONLY	
					CRACK ROUTING ( FT )	CRACK FILLING ( POUND )
JOHNSON CO.					( FT )	( POUND )
I-24 ( WB )	320+50.	TO	348+17. 89	2, 768	2, 768	1, 079
SN 040-0039	348+17. 89	TO	349+99. 39	GAP		
I-24 ( WB )	349+99. 39	TO	408+05. 7	5, 806	5, 806	2, 264
SN 040-0042	408+05. 7	TO	409+18. 7	GAP		
I-24 ( WB )	409+18. 7	TO	417+83. 9	865	865	337
SN 040-0043	417+83. 9	TO	419+42. 26	GAP		
I-24 ( WB )	419+42. 26	TO	442+40. 13	2, 298	2, 298	896
SN 040-0045	442+40. 13	TO	444+18. 33	GAP		
I-24 ( WB )	444+18. 33	TO	473+62. 8	2, 944	2, 944	1, 148
SN 040-0048	473+62. 8	TO	475+65. 83	GAP		
I-24 ( WB )	475+65. 83	TO	499+01. 37	2, 336	2, 336	911
I-24 ( WB )	499+01. 37 BK	=	78+90. 80 AH	STA E0		
I-24 ( WB )	78+90. 8	TO	236+52. 37	15, 762	15, 762	6, 147
I-24 ( WB )	236+52. 37 BK	=	597+79. 11 AH	STA E0		
I-24 ( WB )	597+79. 11	TO	619+68. 69	2, 190	2, 190	854
SN 040-0050	619+68. 69	TO	620+84. 19	GAP		
I-24 ( WB )	620+84. 19	TO	766+19. 2	14, 535	14, 535	5, 669
I-24 ( WB )	766+19. 20 BK	=	403+52. 86 AH	STA E0		
I-24 ( WB )	403+52. 86	TO	456+69. 5	5, 317	5, 317	2, 073
MASSAC CO.	456+69. 50 BK	=	50+54. 47 AH	STA E0		
TOTAL					54, 820	21, 380

- CONT. SCHEDULE OF QUANTITIES

LOCATION I-24 EB	STA.	TO	STA.	LENGTH ( FT )	CENTER OF ROADWAY LONGITUDINAL CRACKS ONLY	
					CRACK ROUTING ( FT )	CRACK FILLING ( POUND )
JOHNSON CO.					( FT )	( POUND )
I-24 ( EB )	320+50.	TO	348+68. 61	2, 819	2, 819	1, 099
SN 040-0040	348+68. 61	TO	350+50. 11	GAP		
I-24 ( EB )	350+50. 11	TO	408+05. 7	5, 756	5, 756	2, 245
SN 040-0041	408+05. 7	TO	409+18. 7	GAP		
I-24 ( EB )	409+18. 7	TO	418+18. 9	900	900	351
SN 040-0044	418+18. 9	TO	419+78. 88	GAP		
I-24 ( EB )	419+78. 88	TO	442+43. 9	2, 265	2, 265	883
SN 040-0046	442+43. 9	TO	444+13.	GAP		
I-24 ( EB )	444+13.	TO	473+09. 78	2, 897	2, 897	1, 130
SN 040-0047	473+09. 78	TO	474+98. 61	GAP		
I-24 ( EB )	474+98. 61	TO	499+01. 37	2, 403	2, 403	937
I-24 ( EB )	499+01. 37 BK	=	78+90. 80 AH	STA E0		
I-24 ( EB )	78+90. 8	TO	236+52. 37	15, 762	15, 762	6, 147
I-24 ( EB )	236+52. 37 BK	=	236+57. 01 AH	STA E0		
I-24 ( EB )	236+57. 01	TO	258+37. 13	2, 180	2, 180	850
SN 040-0049	258+37. 13	TO	259+44. 29	GAP		
I-24 ( EB )	259+44. 29	TO	403+54. 97	14, 411	14, 411	5, 620
I-24 ( EB )	403+54. 97 BK	=	403+52. 86 AH	STA E0		
I-24 ( EB )	403+52. 86	TO	456+69. 5	5, 317	5, 317	2, 073
MASSAC CO.	456+69. 50 BK	=	50+54. 47 AH	STA E0		
TOTAL					54, 708	21, 336

- CONT. SCHEDULE OF QUANTITIES

LOCATION I-24 WB	STA.	TO	STA.	LENGTH ( FT )	CENTER OF ROADWAY LONGITUDINAL CRACKS ONLY	
					CRACK ROUTING	CRACK FILLING
MASSAC CO.	BK 456+69.50	=	50+54.47 AH	STA EO	( FT )	( POUND )
I-24 ( WB )	50+54.47	TO	200+51.39	14,997	14,997	5,849
SN 064-0014	200+51.39	TO	201+43.64	GAP		
I-24 ( WB )	201+43.64	TO	252+56.09	5,112	5,112	1,994
SN 064-0017	252+56.09	TO	254+06.92	GAP		
I-24 ( WB )	254+06.92	TO	301+81.06	4,774	4,774	1,862
I-24 ( WB )	301+81.06 BK	=	1301+73.45 AH	STA EO		
I-24 ( WB )	1301+73.45	TO	1327+24.69	2,551	2,551	995
SN 064-0020	1327+24.69	TO	1329+03.68	GAP		
I-24 ( WB )	1329+03.68	TO	1417+84.96	8,881	8,881	3,464
I-24 ( WB )	1417+84.96 BK	=	417+03.53 AH	STA EO		
I-24 ( WB )	417+03.53	TO	446+93.78	2,990	2,990	1,166
I-24 ( WB )	446+93.78 BK	=	32+66.19 AH	STA EO		
I-24 ( WB )	32+66.19	TO	93+52.09	6,086	6,086	2,374
SN 064-0023	93+52.09	TO	95+08.92	GAP		
I-24 ( WB )	95+08.92	TO	138+71.82	4,363	4,363	1,702
SN 064-0025	138+71.82	TO	139+90.32	GAP		
I-24 ( WB )	139+90.32	TO	240+39.14	10,049	10,049	3,919
SN 064-0028	240+39.14	TO	241+69.64	GAP		
I-24 ( WB )	241+69.64	TO	400+49.93	15,880	15,880	6,193
SN 064-0031	400+49.93	TO	401+61.76	GAP		
I-24 ( WB )	401+61.76	TO	412+61.53	1,100	1,100	429
SN 064-0033	412+61.53	TO	414+02.19	GAP		
I-24 ( WB )	414+02.19	TO	416+84.54	282	282	110
SN 064-0034	416+84.54	TO	417+88.47	GAP		
I-24 ( WB )	417+88.47	TO	427+72.69	984	984	384
TOTAL					78,050	30,440

- CONT. SCHEDULE OF QUANTITIES

LOCATION I-24 EB	STA.	TO	STA.	LENGTH ( FT )	CENTER OF ROADWAY LONGITUDINAL CRACKS ONLY	
					CRACK ROUTING	CRACK FILLING
MASSAC CO.	BK 456+69.50	=	50+54.47 AH	STA EO	( FT )	( POUND )
I-24 ( EB )	50+54.47	TO	201+16.37	15,062	15,062	5,874
SN 064-0015	201+16.37	TO	202+08.62	GAP		
I-24 ( EB )	202+08.62	TO	253+53.07	5,144	5,144	2,006
SN 064-0018	253+53.07	TO	255+03.9	GAP		
I-24 ( EB )	255+03.9	TO	301+81.06	4,677	4,677	1,824
I-24 ( EB )	301+81.06 BK	=	301+86.33 AH	STA EO		
I-24 ( EB )	301+86.33	TO	328+84.92	2,699	2,699	1,052
SN 064-0021	328+84.92	TO	330+73.	GAP		
I-24 ( EB )	330+73.	TO	417+07.71	8,635	8,635	3,368
I-24 ( EB )	417+07.71 BK	=	417+03.53 AH	STA EO		
I-24 ( EB )	417+03.53	TO	446+93.78	2,990	2,990	1,166
I-24 ( EB )	446+93.78 BK	=	32+66.19 AH	STA EO		
I-24 ( EB )	32+66.19	TO	94+17.08	6,151	6,151	2,399
SN 064-0024	94+17.08	TO	95+73.91	GAP		
I-24 ( EB )	95+73.91	TO	139+09.68	4,336	4,336	1,691
SN 064-0026	139+09.68	TO	140+28.18	GAP		
I-24 ( EB )	140+28.18	TO	239+87.16	9,959	9,959	3,884
SN 064-0027	239+87.16	TO	241+17.66	GAP		
I-24 ( EB )	241+17.66	TO	400+42.91	15,925	15,925	6,211
SN 064-0030	400+42.91	TO	401+54.74	GAP		
I-24 ( EB )	401+54.74	TO	412+49.34	1,095	1,095	427
SN 064-0032	412+49.34	TO	413+90.	GAP		
I-24 ( EB )	413+90.	TO	416+75.71	286	286	111
SN 064-0034	416+75.71	TO	417+79.28	GAP		
I-24 ( EB )	417+79.28	TO	427+72.69	993	993	387
TOTAL					77,952	30,401
PROJECT TOTALS					265,530	103,557