

Stancock Rd

Marchese, Deborah

From: Scott, Jimmy
Sent: Friday, June 26, 2015 4:59 PM
To: Marchese, Deborah
Cc: Hinton, Joseph
Subject: FW: 12358B SP 9.5 TLC 52-28 35% 2-19-17
Attachments: 12358B SP 9.5 TLC 52-28 35% 2-19-17.pdf; ATT00001.txt

Deb,

For the file, not sure if we received these either.

-----Original Message-----

From: Robert Rudd [<mailto:3csllc@gmail.com>]
Sent: Friday, June 26, 2015 4:49 PM
To: Scott, Jimmy
Subject: 12358B SP 9.5 TLC 52-28 35% 2-19-17

SP 9.5

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

ASPHALT MIX DESIGN

SUBMIT TO THE DIRECTOR, OFFICE OF MATERIALS, CENTRAL ASPHALT LABORATORY, 5007 NE 39TH AVE, GAINESVILLE, FL 32609

Contractor Middlesex Asphalt, LLC Address 10705 Cosmonaut Boulevard, Orlando, FL 32824
 Phone No. (407) 206-0077 Fax No. (407) 206-0485 E-mail james@middlesexco.com
 Submitted By Middlesex Asphalt, LLC Type Mix Fine SP-12.5 Recycle Intended Use of Mix Structural
 Design Traffic Level C Gyration @ Ndes 75

Product Description	Product Code	Producer Name	Product Name	Plant/Pit Number	Terminal
1. Crushed R.A.P.	334-CR	Middlesex Asphalt, LLC	1-06	A0743	
2. S1A Stone	C47	Junction City Mining	#78 Stone	GA553	
3. S1B Stone	C53	Junction City Mining	#89 Stone	GA553	
4. Screenings	F22	Junction City Mining	W-10 Screenings	GA553	
5. Sand	334-LS	Middlesex Asphalt, LLC	Tarmac		
6.					
7. PG Binder	916-58		PG 58-22		

PERCENTAGE BY WEIGHT TOTAL AGGREGATE PASSING SIEVES

Blend Number	30%	21%	5%	41%	3%		JOB MIX FORMULA	CONTROL POINTS	PRIMARY CONTROL SIEVE
	1	2	3	4	5	6			
3/4" 19.0mm	100	100	100	100	100		100	100	
1/2" 12.5mm	99	100	100	100	100		100	90 - 100	
3/8" 9.5mm	95	56	100	100	100		89	- 89	
No. 4 4.75mm	78	15	35	100	100		72		
No. 8 2.36mm	61	4	5	76	100		54	28 - 58	39
No. 16 1.18mm	51	2	3	45	100		37		
No. 30 600µm	44	1	2	28	98		28		
No. 50 300µm	34	1	2	18	72		20		
No. 100 150µm	18	1	2	10	12		10		
No. 200 75µm	10.0	1.0	1.0	4.9	1.0		5.6	2 - 10	
G _{ss}	2.629	2.775	2.764	2.730	2.626		2.706		

The mix properties of the Job Mix Formula have been conditionally verified, pending successful final verification during production at the assigned plant, the mix design is approved subject to F.D.O.T. specifications.

JMF reflects aggregate changes expected during production

SP 14-12359B (TL-C)

SP 14-12359A (TL-C) revised to reflect the Gmm correction factor.

Director, Office of Materials

Timothy J. Ruelke, P.E.

Original document retained at the State Materials Office

Effective Date

12 / 11 / 2014

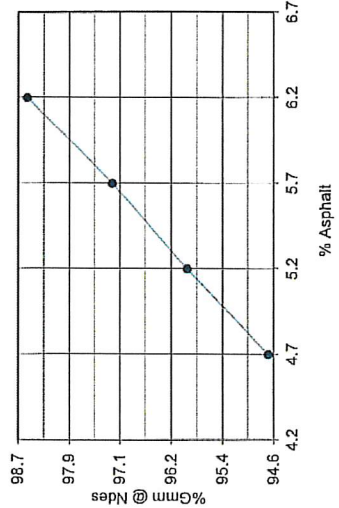
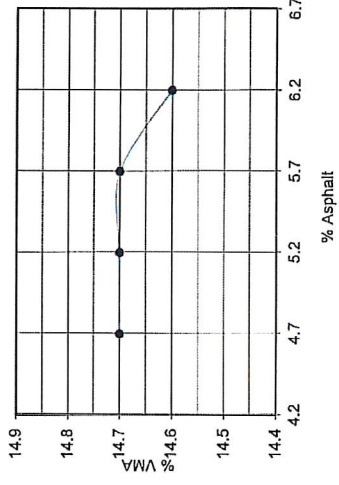
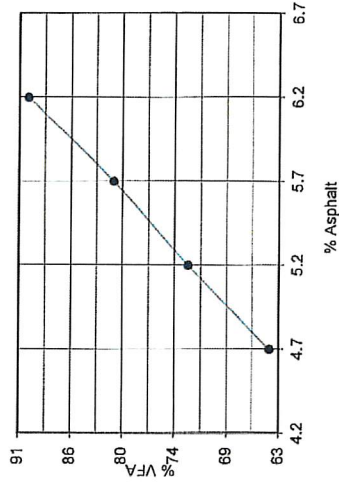
Expiration Date

02 / 19 / 2017

HOT MIX DESIGN DATA SHEET

SP 14-12359B (TL-C)

P_b	$G_{mb} @ N_{dss}$	G_{mm}	V_a	VMA	VFA	P_{be}	$P_{0.075} / P_{be}$	$\%G_{mm} @ N_{ini}$	$\%G_{mm} @ N_{max}$
4.7	2.422	2.558	5.3	14.7	64	4.0	1.4	87.7	95.7
5.2	2.436	2.538	4.0	14.7	73	4.5	1.2	89.0	97.0
5.7	2.448	2.519	2.8	14.7	81	5.0	1.1	90.2	98.2
6.2	2.464	2.500	1.4	14.6	90	5.5	1.0	91.5	99.7



Total Binder Content 5.2 % FAA 45.0 % Mixing Temperature 310 °F 154 °C
 Spread Rate @ 1" 110 lbs/yd² %G_{mm} @ N_{des} 96.0 Compaction Temperature 305 °F 152 °C
 VMA 14.7 % Ignition Oven Calibration Factor -0.32 Additives Antifistrip 0.5 %
 G_{mm} Corr. Factor -0.004 (+To Be Added)/(-To Be Subtracted) Optimum Asphalt PG 58-22 to be added

= 5.20%
 = 1.59%
 = 3.61%

**STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ASPHALT MIX DESIGN**

SUBMIT TO THE DIRECTOR, OFFICE OF MATERIALS, CENTRAL ASPHALT LABORATORY, 5007 NE 39TH AVE, GAINESVILLE, FL 32609

Contractor Middlesex Asphalt, LLC Address 10705 Cosmonaut Boulevard, Orlando, FL 32824
 Phone No. (407) 206-0078 Fax No. (407) 206-0486 E-mail tcarter@middlesexco.com
 Submitted By Asphalt Technologies, Inc. Type Mix Fine SP-9.5 Recycle Intended Use of Mix Structural
 Design Traffic Level B Gyration @ Ndes 65

Product Description	Product Code	Producer Name	Product Name	Plant/Pit Number	Terminal
1. Crushed R.A.P.	334-CR	Middlesex Asphalt, LLC	1-06	A0743	
2. S1B Stone	C53	Junction City Mining	#89 Stone	GA553	
3. Screenings	F22	Junction City Mining	W-10 Screenings	GA553	
4. Local Sand	334-LS	Tarmac Center Sand	Tarmac		
5.					
6.					
7. PG Binder	916-52		PG 52-28		

PERCENTAGE BY WEIGHT TOTAL AGGREGATE PASSING SIEVES

Blend	35%	25%	37%	3%			JOB MIX FORMULA	CONTROL POINTS	PRIMARY CONTROL SIEVE
Number	1	2	3	4	5	6			
3/4" 19.0mm	100	100	100	100			100		
1/2" 12.5mm	99	100	100	100			100	100	
3/8" 9.5mm	95	100	100	100			98	89 - 100	
No. 4 4.75mm	78	35	100	100			76	- 89	
No. 8 2.36mm	61	5	73	100			53	32 - 67	47
No. 16 1.18mm	51	3	47	100			39		
No. 30 600µm	44	2	32	98			31		
No. 50 300µm	34	2	21	72			22		
No. 100 150µm	18	2	13	12			12		
No. 200 75µm	10.0	1.0	5.5	1.0			5.8	2 - 10	
G _{SB}	2.629	2.764	2.730	2.626			2.699		

The mix properties of the Job Mix Formula have been conditionally verified, pending successful final verification during production at the assigned plant, the mix design is approved subject to F.D.O.T. specifications.

SP 13-11190A (TL-B)

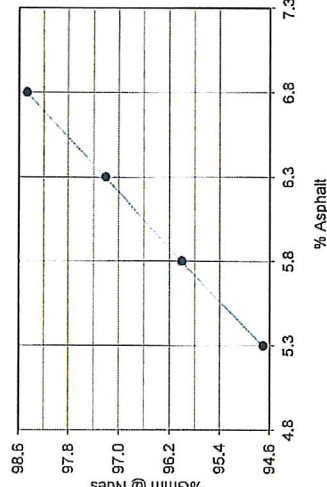
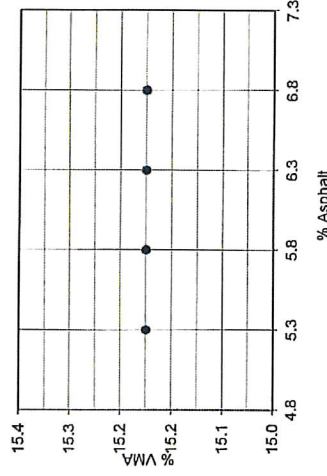
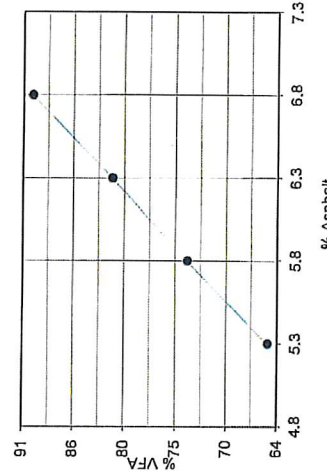
Director, Office of Materials
 Effective Date
 Expiration Date

Timothy J. Ruelke, P.E.
Original document retained at the State Materials Office
 03 / 19 / 2013
 03 / 19 / 2016

HOT MIX DESIGN DATA SHEET

SP 13-11190A (TL-B)

P _b	G _{mb} @ N _{des}	G _{mm}	V _a	VMA	VFA	P _{be}	P _{0.075} / P _{be}	%G _{mm} @ N _{ini}	%G _{mm} @ N _{max}
5.3	2.417	2.552	5.3	15.2	65	4.2	1.4		
5.8	2.431	2.532	4.0	15.2	74	4.7	1.2	89.5	97.2
6.3	2.443	2.513	2.8	15.2	82	5.2	1.1		
6.8	2.456	2.494	1.5	15.2	90	5.7	1.0		



Total Binder Content 5.8 % FAA 45.0 % Mixing Temperature 310 °F 154 °C
 Spread Rate @ 1" 110 lbs/vd² %G_{mm} @ N_{des} 96.0 Compaction Temperature 305 °F 152 °C
 VMA 15.2 % Ignition Oven +0.10 Additives Antistrip 0.5 %
 Calibration Factor (+To Be Added)/(-To Be Subtracted) Optimum Asphalt 5.80%
 Asphalt using 35% Crushed R.A.P. @ 5.3% = 1.86%
 PG 52-28 to be added = 3.94%

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ASPHALT MIX DESIGN

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Contractor Middlesex Asphalt, LLC Address 10705 Cosmonaut Blvd., Orlando, FL. 32824
 Phone No. (352) 728-2800 Fax No. (352) 728-0061 E-mail tcarter@middlesexco.com
 Submitted By Asphalt Technologies, Inc. Type Mix Fine FC-9.5 Recycle Intended Use of Mix Friction Course
 Design Traffic Level C Gyration @ Ndes 75

Product Description	Product Code	Producer Name	Product Name	Plant/Pit Number	Terminal
1. Crushed R.A.P.	334-CR	Middlesex Asphalt, LLC	1-06	A0743	
2. S1B Stone	C53	Junction City Mining	#89 Stone	GA553	
3. Screenings	F22	Junction City Mining	W-10 Screenings	GA553	
4. Local Sand	334-LS	Middlesex Asphalt, LLC	Tarmac		
5.					
6.					
7. PG Binder	916-76PMA		PG 76-22 PMA		

PERCENTAGE BY WEIGHT TOTAL AGGREGATE PASSING SIEVES

Blend Number	20%	32%	40%	8%	5	6	JOB MIX FORMULA	CONTROL POINTS	PRIMARY CONTROL SIEVE
3/4" 19.0mm	100	100	100	100			100		
1/2" 12.5mm	99	100	100	100			100	100	
3/8" 9.5mm	95	100	100	100			99	89 - 100	
No. 4 4.75mm	78	35	100	100			75	- 89	
No. 8 2.36mm	61	5	75	100			52	32 - 67	47
No. 16 1.18mm	51	3	45	100			37		
No. 30 600µm	44	2	28	98			28		
No. 50 300µm	34	2	18	72			20		
No. 100 150µm	18	2	10	12			9		
No. 200 75µm	10.0	1.0	4.6	1.0			5.1	2 - 10	
G _{SB}	2.629	2.764	2.730	2.626			2.711		

The mix properties of the Job Mix Formula have been conditionally verified, pending successful final verification during production at the assigned plant, the mix design is approved subject to F.D.O.T. specifications.

JMF reflects aggregate changes expected during production

SPM 13-11014A (TL-C)

Transferred from SPM 10-8031B (TL-C)

Director, Office of Materials

Effective Date

Expiration Date

Timothy J. Ruelke, P.E.

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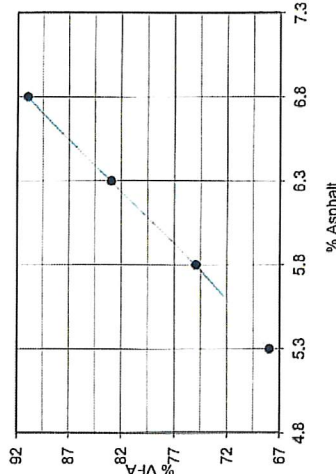
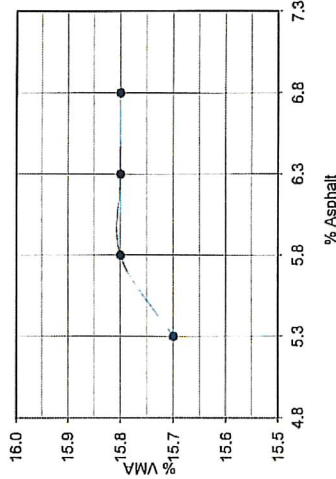
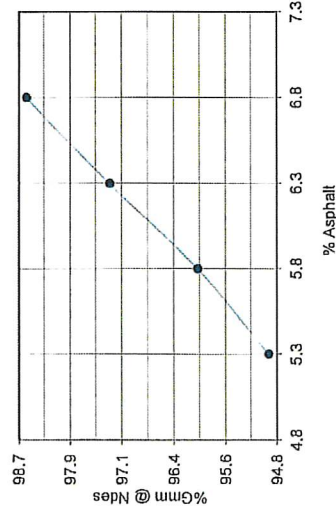
01 / 24 / 2013

01 / 24 / 2016

HOT MIX DESIGN DATA SHEET

SPM 13-11014A (TL-C)

P_b	$G_{mb} @ N_{des}$	G_{mm}	V_a	VMA	VFA	P_{be}	$P_{0.075} / P_{be}$	$\%G_{mm} @ N_{ini}$	$\%G_{mm} @ N_{max}$
5.3	2.414	2.543	5.1	15.7	68	4.5	1.1	87.9	95.9
5.8	2.423	2.524	4.0	15.8	75	5.0	1.0	89.0	97.0
6.3	2.437	2.504	2.7	15.8	83	5.5	0.9	90.3	98.3
6.8	2.450	2.485	1.4	15.8	91	6.0	0.9	91.6	99.6



Total Binder Content 5.8 % FAA 45.0 % (Plant) Mixing Temperature 330 °F 166 °C
 Spread Rate @ 1" 109 lbs/vd² %G_{mm} @ N_{des} 96.0 (Roadway) Compaction Temperature 325 °F 163 °C
 VMA 15.8 % Ignition Oven -0.20 Additives Antistrip 0.5 %
 Calibration Factor Optimum Asphalt
 (+To Be Added)/(-To Be Subtracted) Asphalt using 20% Crushed R.A.P. @ 5.3%
 PG 76-22 PMA to be added

= 5.80%
 = 1.06%
 = 4.74%

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ASPHALT MIX DESIGN

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Contractor Middlesex Asphalt, LLC Address 10705 Cosmonaut Boulevard, Orlando, FL 32824
 Phone No. (407) 206-0077 Fax No. (407) 206-0485 E-mail james@middlesexco.com
 Submitted By Middlesex Asphalt, LLC Type Mix Fine SP-9.5 Recycle Intended Use of Mix Structural
 Design Traffic Level C Gyration @ Ndes 75

Product Description	Product Code	Producer Name	Product Name	Plant/Pit Number	Terminal
1. Crushed R.A.P.	334-CR	Middlesex Asphalt, L.L.C.	1-06	A0743	
2. S1B Stone	C53	Junction City Mining	#89 Stone	GA553	
3. Screenings	F22	Junction City Mining	W-10 Screenings	GA553	
4. Sand	334-LS	Middlesex Asphalt, L.L.C.	Tarmac		
5.					
6.					
7. PG Binder	916-52		PG 52-28		

PERCENTAGE BY WEIGHT TOTAL AGGREGATE PASSING SIEVES

Blend Number	35%	30%	30%	5%	5	6	JOB MIX FORMULA	CONTROL POINTS	PRIMARY CONTROL SIEVE
3/4" 19.0mm	100	100	100	100			100		
1/2" 12.5mm	99	100	100	100			100	100	
3/8" 9.5mm	95	100	100	100			98	90 - 100	
No. 4 4.75mm	78	35	100	100			73	- 89	
No. 8 2.36mm	61	5	75	100			50	32 - 67	47
No. 16 1.18mm	51	3	45	100			37		
No. 30 600µm	44	2	28	98			29		
No. 50 300µm	34	2	18	72			22		
No. 100 150µm	18	2	10	12			11		
No. 200 75µm	10.0	1.0	4.6	1.0			5.8	2 - 10	
G _{SB}	2.629	2.764	2.730	2.626			2.698		

The mix properties of the Job Mix Formula have been conditionally verified, pending successful final verification during production at the assigned plant, the mix design is approved subject to F.D.O.T. specifications.

JMF reflects aggregate changes expected during production

SP 14-12358B (TL-C)

SP 14-12358A (TL-C) revised to reflect the Gmm correction factor.

Director, Office of Materials

Effective Date

Expiration Date

Timothy J. Ruelke, P.E.

Original document retained at the State Materials Office

01 / 28 / 2015

02 / 19 / 2017

