

Quadrant: N
Section: 4
Sublot: Surface

Laboratory Diary

General Description of Mix and Materials

Design Method: Superpave
 Compactive Effort: 80 gyrations
 Binder Performance Grade: 76-22
 Modifier Type: SBS
 Aggregate Type: Grn/Lms/Snd
 Gradation Type: ARZ

Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size:</u>	<u>Design</u>	<u>QC:</u>
1":	100	100
3/4":	100	100
1/2":	100	100
3/8"	99	100
No. 4	83	81
No. 8	62	61
No. 16	47	49
No. 30	34	37
No. 50	19	21
No. 100	11	12
No. 200	5.0	6.7
Asphalt Content	6.3	6.1
Pill Bulk Gravity:		2.356
TMD (Rice):		2.494
Avg Air Voids		5.5
Avg VMA:		19

Construction Diary

Relevant Conditions for Construction

Completion Date: Monday, July 28, 2003
 24 Hour High Temperature (F): 90
 24 Hour Low Temperature (F): 69
 24 Hour Rainfall (in): 0
 Lift type: Surface
 Planned Mill / Lift Thickness (in): 1.0

Plant Configuration and Placement Details

<u>Component:</u>	<u>% Setting:</u>
Asphalt Content (Plant Setting)	6.2
89 Columbus Granite	24.0
8910 Opelika Limestone	27.0
M10 Columbus Granite	30.0
Shorter Coarse Sand	19.0
Approximate Length (ft):	200
Survey Mill / Lift Thickness (in):	1.0
Type of Tack Coat Utilized:	PG67-22
Target Tack Application Rate (gal/sy):	0.03
Avg Temperature In Truck (F):	347
Avg Section Compaction:	93.4

General Notes:

- 1) Mixes are referenced by quadrant (E=East, N=North, W=West, and S=South), section number (sequential) and sublot;
- 2) Sections are listed in the order they appear on the Track beginning with E2 and continuing counterclockwise to E1;
- 3) The total research thickness of all rutting study sections ranges from 3/4 to 4 inches by design;
- 4) The total HMA thickness of all structural study sections (N1 through N8) ranges from 5 to 9 inches by design;
- 5) ARZ, TRZ, and BRZ refer to gradations intended to pass above, through and below the restricted zone, respectively;
- 6) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively.

Quadrant: N
Section: 4
Sublot: Upper Binder

Laboratory Diary

General Description of Mix and Materials

Design Method: Superpave
 Compactive Effort: 80 gyrations
 Binder Performance Grade: 76-22
 Modifier Type: SBS
 Aggregate Type: Lms/Grn/Snd
 Gradation Type: ARZ

Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size:</u>	<u>Design</u>	<u>QC:</u>
1":	100	100
3/4":	94	92
1/2":	84	82
3/8"	72	72
No. 4	53	52
No. 8	45	44
No. 16	36	37
No. 30	28	28
No. 50	15	15
No. 100	8	9
No. 200	5.0	5.5
Asphalt Content	4.5	4.3
Pill Bulk Gravity:		2.451
TMD (Rice):		2.571
Avg Air Voids		4.7
Avg VMA:		15

General Notes:

- 1) Mixes are referenced by quadrant (E=East, N=North, W=West, and S=South), section number (sequential) and sublot;
- 2) Sections are listed in the order they appear on the Track beginning with E2 and continuing counterclockwise to E1;
- 3) The total research thickness of all rutting study sections ranges from 3/4 to 4 inches by design;
- 4) The total HMA thickness of all structural study sections (N1 through N8) ranges from 5 to 9 inches by design;
- 5) ARZ, TRZ, and BRZ refer to gradations intended to pass above, through and below the restricted zone, respectively;
- 6) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively.

Construction Diary

Relevant Conditions for Construction

Completion Date: Tuesday, July 22, 2003
 24 Hour High Temperature (F): 89
 24 Hour Low Temperature (F): 69
 24 Hour Rainfall (in): 0.12
 Lift type: Upper Binder
 Planned Mill / Lift Thickness (in): 2.0

Plant Configuration and Placement Details

<u>Component:</u>	<u>% Setting:</u>
Asphalt Content (Plant Setting)	4.3
78 Opelika Limestone	33.0
57 Opelika Limestone	22.0
M10 Columbus Granite	25.0
Shorter Coarse Sand	20.0
Approximate Length (ft):	200
Survey Mill / Lift Thickness (in):	1.7
Type of Tack Coat Utilized:	PG67-22
Target Tack Application Rate (gal/sy):	0.03
Avg Temperature In Truck (F):	304
Avg Section Compaction:	92.9

Quadrant: N
Section: 4
Sublot: Lower Binder

Laboratory Diary

General Description of Mix and Materials

Design Method: Superpave
 Compactive Effort: 80 gyrations
 Binder Performance Grade: 76-22
 Modifier Type: SBS
 Aggregate Type: Lms/Grn/Snd
 Gradation Type: ARZ

Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size:</u>	<u>Design</u>	<u>QC:</u>
1":	100	100
3/4":	94	92
1/2":	84	82
3/8"	72	71
No. 4	53	51
No. 8	45	42
No. 16	36	34
No. 30	28	24
No. 50	15	13
No. 100	8	7
No. 200	5.0	5.1
Asphalt Content	4.5	4.4
Pill Bulk Gravity:		2.482
TMD (Rice):		2.568
Avg Air Voids		3.3
Avg VMA:		14

Construction Diary

Relevant Conditions for Construction

Completion Date: Monday, July 21, 2003
 24 Hour High Temperature (F): 90
 24 Hour Low Temperature (F): 66
 24 Hour Rainfall (in): 0
 Lift type: Lower Binder
 Planned Mill / Lift Thickness (in): 2.0

Plant Configuration and Placement Details

<u>Component:</u>	<u>% Setting:</u>
Asphalt Content (Plant Setting)	4.4
78 Opelika Limestone	33.0
57 Opelika Limestone	22.0
M10 Columbus Granite	25.0
Shorter Coarse Sand	20.0
Approximate Length (ft):	200
Survey Mill / Lift Thickness (in):	2.3
Type of Tack Coat Utilized:	PG67-22
Target Tack Application Rate (gal/sy):	0.03
Avg Temperature In Truck (F):	326
Avg Section Compaction:	93.2

General Notes:

- 1) Mixes are referenced by quadrant (E=East, N=North, W=West, and S=South), section number (sequential) and sublot;
- 2) Sections are listed in the order they appear on the Track beginning with E2 and continuing counterclockwise to E1;
- 3) The total research thickness of all rutting study sections ranges from 3/4 to 4 inches by design;
- 4) The total HMA thickness of all structural study sections (N1 through N8) ranges from 5 to 9 inches by design;
- 5) ARZ, TRZ, and BRZ refer to gradations intended to pass above, through and below the restricted zone, respectively;
- 6) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively.

Quadrant: N
Section: 4
Sublot: Upper Base

Laboratory Diary

Construction Diary

General Description of Mix and Materials

Design Method: Superpave
 Compactive Effort: 80 gyrations
 Binder Performance Grade: 76-22
 Modifier Type: SBS
 Aggregate Type: Lms/Grn/Snd
 Gradation Type: ARZ

Relevant Conditions for Construction

Completion Date: Thursday, July 17, 2003
 24 Hour High Temperature (F): 91
 24 Hour Low Temperature (F): 71
 24 Hour Rainfall (in): 0.01
 Lift type: Upper Base
 Planned Mill / Lift Thickness (in): 2.0

Avg. Lab Properties of Plant Produced Mix

Plant Configuration and Placement Details

<u>Sieve Size:</u>	<u>Design</u>	<u>QC:</u>
1":	100	100
3/4":	94	92
1/2":	84	79
3/8"	72	66
No. 4	53	49
No. 8	45	43
No. 16	36	36
No. 30	28	26
No. 50	15	14
No. 100	8	8
No. 200	5.0	5.5
Asphalt Content	4.5	4.7
Pill Bulk Gravity:		2.480
TMD (Rice):		2.557
Avg Air Voids		3.0
Avg VMA:		14

<u>Component:</u>	<u>% Setting:</u>
Asphalt Content (Plant Setting)	4.6
78 Opelika Limestone	33.0
57 Opelika Limestone	22.0
M10 Columbus Granite	25.0
Shorter Coarse Sand	20.0
Approximate Length (ft):	200
Survey Mill / Lift Thickness (in):	1.8
Type of Tack Coat Utilized:	PG67-22
Target Tack Application Rate (gal/sy):	0.03
Avg Temperature In Truck (F):	340
Avg Section Compaction:	92.8

General Notes:

- 1) Mixes are referenced by quadrant (E=East, N=North, W=West, and S=South), section number (sequential) and sublot;
- 2) Sections are listed in the order they appear on the Track beginning with E2 and continuing counterclockwise to E1;
- 3) The total research thickness of all rutting study sections ranges from 3/4 to 4 inches by design;
- 4) The total HMA thickness of all structural study sections (N1 through N8) ranges from 5 to 9 inches by design;
- 5) ARZ, TRZ, and BRZ refer to gradations intended to pass above, through and below the restricted zone, respectively;
- 6) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively.

Quadrant: N
Section: 4
Sublot: Lower Base

Laboratory Diary

General Description of Mix and Materials

Design Method: Superpave
 Compactive Effort: 80 gyrations
 Binder Performance Grade: 76-22
 Modifier Type: SBS
 Aggregate Type: Lms/Grn/Snd
 Gradation Type: ARZ

Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size:</u>	<u>Design</u>	<u>QC:</u>
1":	100	100
3/4":	94	88
1/2":	84	77
3/8"	72	66
No. 4	53	49
No. 8	45	42
No. 16	36	36
No. 30	28	28
No. 50	15	16
No. 100	8	9
No. 200	5.0	5.5
Asphalt Content	4.5	4.4
Pill Bulk Gravity:		2.456
TMD (Rice):		2.571
Avg Air Voids		4.5
Avg VMA:		15

Construction Diary

Relevant Conditions for Construction

Completion Date: Wednesday, July 16, 2003
 24 Hour High Temperature (F): 91
 24 Hour Low Temperature (F): 65
 24 Hour Rainfall (in): 0
 Lift type: Lower Base
 Planned Mill / Lift Thickness (in): 2.0

Plant Configuration and Placement Details

<u>Component:</u>	<u>% Setting:</u>
Asphalt Content (Plant Setting)	4.5
78 Opelika Limestone	33.0
57 Opelika Limestone	22.0
M10 Columbus Granite	25.0
Shorter Coarse Sand	20.0
Approximate Length (ft):	200
Survey Mill / Lift Thickness (in):	2.0
Type of Tack Coat Utilized:	PG67-22
Target Tack Application Rate (gal/sy):	0.03
Avg Temperature In Truck (F):	336
Avg Section Compaction:	92.7

General Notes:

- 1) Mixes are referenced by quadrant (E=East, N=North, W=West, and S=South), section number (sequential) and sublot;
- 2) Sections are listed in the order they appear on the Track beginning with E2 and continuing counterclockwise to E1;
- 3) The total research thickness of all rutting study sections ranges from 3/4 to 4 inches by design;
- 4) The total HMA thickness of all structural study sections (N1 through N8) ranges from 5 to 9 inches by design;
- 5) ARZ, TRZ, and BRZ refer to gradations intended to pass above, through and below the restricted zone, respectively;
- 6) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively.