

Quadrant: N
Section: 7
Sublot: Surface

Laboratory Diary

Construction Diary

General Description of Mix and Materials

Design Method: SMA
 Compactive Effort: 50 blows
 Binder Performance Grade: 76-22
 Modifier Type: SBS
 Aggregate Type: Granite
 Gradation Type: SMA

Relevant Conditions for Construction

Completion Date: Wednesday, July 30, 2003
 24 Hour High Temperature (F): 86
 24 Hour Low Temperature (F): 69
 24 Hour Rainfall (in): 0
 Lift type: Surface
 Planned Mill / Lift Thickness (in): 1.0

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":	100	100
1/2":	100	100
3/8"	99	100
No. 4	53	49
No. 8	25	24
No. 16	19	20
No. 30	16	17
No. 50	14	14
No. 100	11	12
No. 200	9.0	9.2
Asphalt Content	6.1	6.2
Pill Bulk Gravity:		2.261
TMD (Rice):		2.438
Avg Air Voids		7.3
Avg VMA:		21

<u>Component:</u>	<u>% Setting:</u>
Asphalt Content (Plant Setting)	6.0
89 Columbus Granite	77.0
M10 Columbus Granite	17.0
Boral Flyash	6.0
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):	337
Avg Section Compaction:	93.1

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: 7
Sublot: Upper Binder

Laboratory Diary

General Description of Mix and Materials

Design Method: Superpave
 Compactive Effort: 80 gyrations
 Binder Performance Grade: 67-22
 Modifier Type: NA
 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	93
1/2":	84	82
3/8"	72	71
No. 4	53	52
No. 8	45	45
No. 16	36	39
No. 30	28	30
No. 50	15	16
No. 100	8	9
No. 200	5.0	5.7
Asphalt Content	4.5	4.6
Pill Bulk Gravity:		2.459
TMD (Rice):		2.577
Avg Air Voids		4.6
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: Thursday, July 24, 2003
 24 Hour High Temperature (F): 86
 24 Hour Low Temperature (F): 62
 24 Hour Rainfall (in): 0
 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):	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:	94.3

Quadrant: N
Section: 7
Sublot: Lower Binder

Laboratory Diary

General Description of Mix and Materials

Design Method: Superpave
 Compactive Effort: 80 gyrations
 Binder Performance Grade: 67-22
 Modifier Type: NA
 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	96
1/2":	84	85
3/8"	72	74
No. 4	53	52
No. 8	45	43
No. 16	36	35
No. 30	28	24
No. 50	15	14
No. 100	8	9
No. 200	5.0	5.6
Asphalt Content	4.5	4.5
Pill Bulk Gravity:		2.482
TMD (Rice):		2.561
Avg Air Voids		3.1
Avg VMA:		14

General Notes:

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- 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: Lower Binder
 Planned Mill / Lift Thickness (in): 2.0

Plant Configuration and Placement Details

<u>Component:</u>	<u>% Setting:</u>
Asphalt Content (Plant Setting)	4.3
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):	2.1
Type of Tack Coat Utilized:	PG67-22
Target Tack Application Rate (gal/sy):	0.03
Avg Temperature In Truck (F):	310
Avg Section Compaction:	93.3

Quadrant: N
Section: 7
Sublot: Base

Laboratory Diary

General Description of Mix and Materials

Design Method: Superpave
 Compactive Effort: 80 gyrations
 Binder Performance Grade: 67-22
 Modifier Type: NA
 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	90
1/2":	84	78
3/8"	72	71
No. 4	53	83
No. 8	45	44
No. 16	36	36
No. 30	28	27
No. 50	15	15
No. 100	8	9
No. 200	5.0	5.7
Asphalt Content	4.5	5.0
Pill Bulk Gravity:		2.485
TMD (Rice):		2.558
Avg Air Voids		2.9
Avg VMA:		14

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: Friday, July 18, 2003
 24 Hour High Temperature (F): 89
 24 Hour Low Temperature (F): 67
 24 Hour Rainfall (in): 0
 Lift type: 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):	1.7
Type of Tack Coat Utilized:	PG67-22
Target Tack Application Rate (gal/sy):	0.03
Avg Temperature In Truck (F):	328
Avg Section Compaction:	95.0