

Quadrant: N
Section: 9
Sublot: 1

Laboratory DiaryGeneral Description of Mix and Materials

Design Method:	SMA
Compactive Effort:	50 gyrations
Binder Performance Grade:	76-28
Modifier Type:	SBS
Aggregate Type:	Granite
Design Gradation Type:	SMA

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":	97	94
3/8":	78	72
No. 4:	29	32
No. 8:	23	23
No. 16:	19	18
No. 30:	16	15
No. 50:	15	13
No. 100:	14	12
No. 200:	12.3	10.9
Asphalt Content:	6.8	7.0
Pill Bulk Gravity:	2.319	2.279
TMD (Rice):	2.414	2.397
Avg Air Voids:	3.9	4.9
Avg VMA:	17.9	15.5

Construction DiaryRelevant Conditions for Construction

Completion Date:	October 18, 2006
24 Hour High Temperature (F):	84
24 Hour Low Temperature (F):	70
24 Hour Rainfall (in):	0.00
Planned Mill / Lift Thickness (in):	2.00
Paving Machine:	Roadtec

Plant Configuration and Placement Details

<u>Component</u>	<u>% Setting</u>
Asphalt Content (Plant Setting)	6.1
Hanson 5/8 Chips	71.0
Hanson Screenings	14.0
GMI Sand	10.0
Flyash	5.0
Cellulose	0.3
Approximate Length (ft):	197
Survey Mill / Lift Thickness (in):	2.0
Type of Tack Coat Utilized:	67-22
Target Tack Application Rate (gal/sy):	0.05
Avg Temperature at Plant (F):	350
Avg Section Compaction:	93.0%

General Notes:

- 1) Mixes are referenced by quadrant (E=East, N=North, W=West, and S=South), section number (sequential) and subplot (top=1);
- 2) The total research thickness of all mix performance sections ranges from 3/4 to 4 inches by design;
- 3) The total HMA thickness of all structural study sections (N1 through N10) ranges from 7 to 14 inches by design;
- 4) ARZ, TRZ and BRZ refer to gradations intended to pass above, through and below the restricted zone, respectively;
- 5) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively; and
- 6) VMA values computed from QC volumetrics are based on design values of Gsb (stockpile gravity testing is ongoing).

Quadrant: N
Section: 9
Sublot: 2

Laboratory DiaryGeneral Description of Mix and Materials

Design Method: S3
 Compactive Effort: 100 gyrations
 Binder Performance Grade: 76-28
 Modifier Type: SBS
 Aggregate Type: Granite
 Design Gradation Type: Dense

Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size</u>	<u>Design</u>	<u>QC</u>
1":	100	99
3/4":	95	96
1/2":	81	86
3/8":	72	82
No. 4:	64	67
No. 8:	44	45
No. 16:	30	32
No. 30:	22	25
No. 50:	15	17
No. 100:	8	10
No. 200:	5.4	7.0
Asphalt Content:	4.3	5.1
Pill Bulk Gravity:	2.415	2.422
TMD (Rice):	2.498	2.496
Avg Air Voids:	3.3	3.0
Avg VMA:	13.5	10.5

Construction DiaryRelevant Conditions for Construction

Completion Date: October 18, 2006
 24 Hour High Temperature (F): 84
 24 Hour Low Temperature (F): 70
 24 Hour Rainfall (in): 0.00
 Planned Mill / Lift Thickness (in): 3.00
 Paving Machine: Roadtec

Plant Configuration and Placement Details

<u>Component</u>	<u>% Setting</u>
Asphalt Content (Plant Setting)	4.1
Hanson 1 Chips	30.0
Hanson Screenings	25.0
Dolese Screenings	8.0
Martin Marietta Stone Sand	27.0
GMI Sand	10.0
Approximate Length (ft):	197
Survey Mill / Lift Thickness (in):	3.5
Type of Tack Coat Utilized:	67-22
Target Tack Application Rate (gal/sy):	0.05
Avg Temperature at Plant (F):	340
Avg Section Compaction:	92.9%

General Notes:

- 1) Mixes are referenced by quadrant (E=East, N=North, W=West, and S=South), section number (sequential) and subplot (top=1);
- 2) The total research thickness of all mix performance sections ranges from 3/4 to 4 inches by design;
- 3) The total HMA thickness of all structural study sections (N1 through N10) ranges from 7 to 14 inches by design;
- 4) ARZ, TRZ and BRZ refer to gradations intended to pass above, through and below the restricted zone, respectively;
- 5) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively; and
- 6) VMA values computed from QC volumetrics are based on design values of Gsb (stockpile gravity testing is ongoing).

Quadrant: N
Section: 9
Sublot: 3

Laboratory DiaryGeneral Description of Mix and Materials

Design Method: S3
 Compactive Effort: 100 gyrations
 Binder Performance Grade: 64-22
 Modifier Type: NA
 Aggregate Type: Granite
 Design Gradation Type: Dense

Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size</u>	<u>Design</u>	<u>QC</u>
1":	100	100
3/4":	95	96
1/2":	81	84
3/8":	72	80
No. 4:	64	66
No. 8:	44	45
No. 16:	30	32
No. 30:	22	24
No. 50:	15	17
No. 100:	8	10
No. 200:	5.4	6.5
Asphalt Content:	4.3	5.0
Pill Bulk Gravity:	2.415	2.419
TMD (Rice):	2.498	2.503
Avg Air Voids:	3.3	3.4
Avg VMA:	13.5	10.4

Construction DiaryRelevant Conditions for Construction

Completion Date: October 16, 2006
 24 Hour High Temperature (F): 64
 24 Hour Low Temperature (F): 55
 24 Hour Rainfall (in): 0.01
 Planned Mill / Lift Thickness (in): 3.00
 Paving Machine: Roadtec

Plant Configuration and Placement Details

<u>Component</u>	<u>% Setting</u>
Asphalt Content (Plant Setting)	4.3
Hanson 1 Chips	30.0
Hanson Screenings	25.0
Dolese Screenings	10.0
Martin Marietta Stone Sand	25.0
GMI Sand	10.0
Approximate Length (ft):	197
Survey Mill / Lift Thickness (in):	3.1
Type of Tack Coat Utilized:	67-22
Target Tack Application Rate (gal/sy):	0.05
Avg Temperature at Plant (F):	345
Avg Section Compaction:	95.1%

General Notes:

- 1) Mixes are referenced by quadrant (E=East, N=North, W=West, and S=South), section number (sequential) and subplot (top=1);
- 2) The total research thickness of all mix performance sections ranges from 3/4 to 4 inches by design;
- 3) The total HMA thickness of all structural study sections (N1 through N10) ranges from 7 to 14 inches by design;
- 4) ARZ, TRZ and BRZ refer to gradations intended to pass above, through and below the restricted zone, respectively;
- 5) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively; and
- 6) VMA values computed from QC volumetrics are based on design values of Gsb (stockpile gravity testing is ongoing).

Quadrant: N
Section: 9
Sublot: 4

Laboratory DiaryGeneral Description of Mix and Materials

Design Method: S3
 Compactive Effort: 100 gyrations
 Binder Performance Grade: 64-22
 Modifier Type: NA
 Aggregate Type: Granite
 Design Gradation Type: Dense

Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size</u>	<u>Design</u>	<u>QC</u>
1":	100	100
3/4":	95	93
1/2":	81	81
3/8":	72	76
No. 4:	63	61
No. 8:	43	42
No. 16:	29	30
No. 30:	22	23
No. 50:	15	17
No. 100:	7	10
No. 200:	4.9	7.2
Asphalt Content:	4.3	4.6
Pill Bulk Gravity:	2.415	2.411
TMD (Rice):	2.498	2.507
Avg Air Voids:	3.3	3.8
Avg VMA:	13.5	10.4

Construction DiaryRelevant Conditions for Construction

Completion Date: October 16, 2006
 24 Hour High Temperature (F): 64
 24 Hour Low Temperature (F): 55
 24 Hour Rainfall (in): 0.01
 Planned Mill / Lift Thickness (in): 3.00
 Paving Machine: Roadtec

Plant Configuration and Placement Details

<u>Component</u>	<u>% Setting</u>
Asphalt Content (Plant Setting)	4.0
Hanson 1 Chips	30.0
Hanson Screenings	25.0
Dolese Screenings	10.0
Martin Marietta Stone Sand	25.0
GMI Sand	10.0
Approximate Length (ft):	197
Survey Mill / Lift Thickness (in):	2.6
Type of Tack Coat Utilized:	67-22
Target Tack Application Rate (gal/sy):	0.05
Avg Temperature at Plant (F):	350
Avg Section Compaction:	93.9%

General Notes:

- 1) Mixes are referenced by quadrant (E=East, N=North, W=West, and S=South), section number (sequential) and subplot (top=1);
- 2) The total research thickness of all mix performance sections ranges from 3/4 to 4 inches by design;
- 3) The total HMA thickness of all structural study sections (N1 through N10) ranges from 7 to 14 inches by design;
- 4) ARZ, TRZ and BRZ refer to gradations intended to pass above, through and below the restricted zone, respectively;
- 5) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively; and
- 6) VMA values computed from QC volumetrics are based on design values of Gsb (stockpile gravity testing is ongoing).

Quadrant: N
Section: 9
Sublot: 5

Laboratory DiaryGeneral Description of Mix and Materials

Design Method:	RBL
Compactive Effort:	50 gyrations
Binder Performance Grade:	64-22
Modifier Type:	NA
Aggregate Type:	Granite
Design Gradation Type:	Dense

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":	99	96
3/8":	88	85
No. 4:	58	59
No. 8:	39	38
No. 16:	25	26
No. 30:	18	19
No. 50:	13	15
No. 100:	10	13
No. 200:	8.1	10.5
Asphalt Content:	6.0	7.0
Pill Bulk Gravity:	2.400	2.384
TMD (Rice):	2.452	2.424
Avg Air Voids:	2.0	1.7
Avg VMA:	14.6	12.2

Construction DiaryRelevant Conditions for Construction

Completion Date:	October 13, 2006
24 Hour High Temperature (F):	66
24 Hour Low Temperature (F):	48
24 Hour Rainfall (in):	0.00
Planned Mill / Lift Thickness (in):	3.00
Paving Machine:	Roadtec

Plant Configuration and Placement Details

<u>Component</u>	<u>% Setting</u>
Asphalt Content (Plant Setting)	6.2
Hanson 5/8 Chips	35.0
Hanson Screenings	20.0
Dolese Screenings	45.0
Approximate Length (ft):	197
Survey Mill / Lift Thickness (in):	3.2
Type of Tack Coat Utilized:	67-22
Target Tack Application Rate (gal/sy):	0.05
Avg Temperature at Plant (F):	345
Avg Section Compaction:	94.4%

General Notes:

- 1) Mixes are referenced by quadrant (E=East, N=North, W=West, and S=South), section number (sequential) and subplot (top=1);
- 2) The total research thickness of all mix performance sections ranges from 3/4 to 4 inches by design;
- 3) The total HMA thickness of all structural study sections (N1 through N10) ranges from 7 to 14 inches by design;
- 4) ARZ, TRZ and BRZ refer to gradations intended to pass above, through and below the restricted zone, respectively;
- 5) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively; and
- 6) VMA values computed from QC volumetrics are based on design values of Gsb (stockpile gravity testing is ongoing).