

**Quadrant:** N  
**Section:** 13  
**Sublot:** 1

**Laboratory Diary**General Description of Mix and Materials

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

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":	100	100
No. 4:	37	41
No. 8:	9	12
No. 16:	5	8
No. 30:	5	7
No. 50:	4	6
No. 100:	3	5
No. 200:	2.6	4.2
Asphalt Content:	6.0	5.4
Pill Bulk Gravity:	1.945	2.031
TMD (Rice):	2.457	2.466
Avg Air Voids:	20.8	17.6
Avg VMA:	32.2	27.5

**Construction Diary**Relevant Conditions for Construction

Completion Date:	August 10, 2006
24 Hour High Temperature (F):	95
24 Hour Low Temperature (F):	72
24 Hour Rainfall (in):	0.00
Planned Mill / Lift Thickness (in):	0.63
Paving Machine:	Twin Layer

Plant Configuration and Placement Details

<u>Component</u>	<u>% Setting</u>
Asphalt Content (Plant Setting)	6.2
89 Columbus Granite	99.0
Hyd Lime	1.0
Cellulose	0.3
Approximate Length (ft):	199
Survey Mill / Lift Thickness (in):	0.8
Type of Tack Coat Utilized:	67-22
Target Tack Application Rate (gal/sy):	0.05
Avg Temperature at Plant (F):	310
Avg Section Compaction:	76.0%

**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:** 13  
**Sublot:** 2

**Laboratory Diary**General Description of Mix and Materials

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

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":	96	96
3/8":	57	58
No. 4:	12	12
No. 8:	8	9
No. 16:	7	8
No. 30:	6	7
No. 50:	5	6
No. 100:	4	5
No. 200:	2.9	3.9
Asphalt Content:	6.0	6.2
Pill Bulk Gravity:	1.949	2.119
TMD (Rice):	2.466	2.452
Avg Air Voids:	21.0	13.6
Avg VMA:	32.3	25.9

**Construction Diary**Relevant Conditions for Construction

Completion Date:	August 10, 2006
24 Hour High Temperature (F):	95
24 Hour Low Temperature (F):	72
24 Hour Rainfall (in):	0.00
Planned Mill / Lift Thickness (in):	1.25
Paving Machine:	Twin Layer

Plant Configuration and Placement Details

<u>Component</u>	<u>% Setting</u>
Asphalt Content (Plant Setting)	5.7
7 Columbus Granite	99.0
Hyd Lime	1.0
Cellulose	0.3
Approximate Length (ft):	199
Survey Mill / Lift Thickness (in):	2.2
Type of Tack Coat Utilized:	67-22
Target Tack Application Rate (gal/sy):	0.05
Avg Temperature at Plant (F):	290
Avg Section Compaction:	78.9%

**General Notes:**

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- 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:** 13  
**Sublot:** 3

**Laboratory Diary**General Description of Mix and Materials

Design Method:	Super
Compactive Effort:	65 gyrations
Binder Performance Grade:	76-22
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	100
3/4":	100	100
1/2":	99	98
3/8":	88	89
No. 4:	58	61
No. 8:	42	45
No. 16:	31	34
No. 30:	22	26
No. 50:	14	17
No. 100:	8	11
No. 200:	4.9	6.8
Asphalt Content:	5.3	5.1
Pill Bulk Gravity:	2.370	2.423
TMD (Rice):	2.469	2.501
Avg Air Voids:	4.0	3.1
Avg VMA:	16.1	14.0

**Construction Diary**Relevant Conditions for Construction

Completion Date:	August 9, 2006
24 Hour High Temperature (F):	93
24 Hour Low Temperature (F):	73
24 Hour Rainfall (in):	0.06
Planned Mill / Lift Thickness (in):	2.13
Paving Machine:	Blaw Knox

Plant Configuration and Placement Details

<u>Component</u>	<u>% Setting</u>
Asphalt Content (Plant Setting)	5.3
7 Columbus Granite	24.0
89 Columbus Granite	19.0
810 Columbus Granite	29.0
W10 Columbus Granite	27.0
Hyd Lime	1.0
Approximate Length (ft):	195
Survey Mill / Lift Thickness (in):	2.5
Type of Tack Coat Utilized:	67-22
Target Tack Application Rate (gal/sy):	0.05
Avg Temperature at Plant (F):	330
Avg Section Compaction:	94.3%

**General Notes:**

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- 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;
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- 6) VMA values computed from QC volumetrics are based on design values of Gsb (stockpile gravity testing is ongoing).