

Quadrant: N
Section: 13
Sublot: Surface

Laboratory Diary

General Description of Mix and Materials

Design Method: SMA
 Compactive Effort: 50 gyrations
 Binder Performance Grade: 76-22
 Modifier Type: SBS
 Aggregate Type: Granite
 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	95
3/8"	67	71
No. 4	27	32
No. 8	19	21
No. 16	16	18
No. 30	14	16
No. 50	14	15
No. 100	13	14
No. 200	11.0	12.1
Asphalt Content	5.9	5.9
Pill Bulk Gravity:		2.324
TMD (Rice):		2.393
Avg Air Voids		2.9
Avg VMA:		16

Construction Diary

Relevant Conditions for Construction

Completion Date: Tuesday, August 19, 2003
 24 Hour High Temperature (F): 87
 24 Hour Low Temperature (F): 70
 24 Hour Rainfall (in): 0.03
 Lift type: Surface
 Planned Mill / Lift Thickness (in): 1.8

Plant Configuration and Placement Details

<u>Component:</u>	<u>% Setting:</u>
Asphalt Content (Plant Setting)	5.6
7M Cayce Granite	73.0
89M Cayce Granite	10.0
Cayce Regular Screenings	8.0
Boral Flyash	8.0
Hydrated Lime	1.0
Approximate Length (ft):	199
Survey Mill / Lift Thickness (in):	1.7
Type of Tack Coat Utilized:	PG67-22
Target Tack Application Rate (gal/sy):	0.07
Avg Temperature In Truck (F):	353
Avg Section Compaction:	94.6

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: 13
Sublot: Binder

Laboratory Diary

General Description of Mix and Materials

Design Method: Superpave
 Compactive Effort: 100 gyrations
 Binder Performance Grade: 67-22
 Modifier Type: NA
 Aggregate Type: Granite
 Gradation Type: TRZ

Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size:</u>	<u>Design</u>	<u>QC:</u>
1":	100	100
3/4":	99	100
1/2":	76	80
3/8"	64	68
No. 4	39	42
No. 8	25	29
No. 16	19	24
No. 30	15	20
No. 50	9	14
No. 100	5	9
No. 200	3.0	5.3
Asphalt Content	4.3	4.3
Pill Bulk Gravity:		2.424
TMD (Rice):		2.501
Avg Air Voids		3.1
Avg VMA:		11

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: Wednesday, August 06, 2003
 24 Hour High Temperature (F): 85
 24 Hour Low Temperature (F): 67
 24 Hour Rainfall (in): 0.05
 Lift type: Binder
 Planned Mill / Lift Thickness (in): 1.8

Plant Configuration and Placement Details

<u>Component:</u>	<u>% Setting:</u>
Asphalt Content (Plant Setting)	4.2
6M Liberty Granite	35.6
789 Liberty Granite	44.6
Liberty Manufactured Sand	10.9
Liberty Regular Screenings	7.9
Hydrated Lime	1.0
Approximate Length (ft):	199
Survey Mill / Lift Thickness (in):	1.5
Type of Tack Coat Utilized:	PG67-22
Target Tack Application Rate (gal/sy):	0.07
Avg Temperature In Truck (F):	325
Avg Section Compaction:	93.9