

Section S3 (Lower Layer)

Laboratory Diary

General Description of Mix and Materials

Design Method:	Superpave
Compactive Effort:	100 gyrations
Binder Performance Grade:	76-22
Modifier Type:	SBS
Aggregate Type:	Limestone
Gradation Type:	BRZ

Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size:</u>	<u>% Passing:</u>
1"	100
3/4"	97
1/2"	86
3/8"	80
No. 4	47
No. 8	27
No. 16	20
No. 30	16
No. 50	12
No. 100	9
No. 200	7.3

Asphalt Binder Content:	4.2%
Compacted Pill Bulk Gravity:	2.461
Theoretical Maximum Gravity:	2.559
Computed Air Voids:	3.8%

Construction Diary

Relevant Conditions for Construction

Completion Date:	Monday, June 26, 2000
24 Hour High Temperature (F):	92
24 Hour Low Temperature (F):	75
24 Hour Rainfall (in):	0.00
Lift Type:	lower
Design Thickness of Test Mix (in):	2.5

Plant Configuration and Placement Details

<u>Component:</u>	<u>% Setting:</u>
Liquid Binder Setting	4.4%
Limestone 67	26.0%
Limestone Modified 8910	28.0%
Limestone 89	40.0%
Gravel Coarse Sand	5.0%
Antistrip Hydrated Lime	1.0%

Approximate Length (ft):	201
Surveyed Thickness of Section (in):	NA
Std Dev of Section Thickness (in):	NA
Type of Tack Coat Utilized:	CQS-1h
Target Tack Application Rate:	0.03 gal / sy
Avg Mat Temperature Behind Paver (F):	332
Average Section Compaction:	92.8%

General Notes:

- 1) Mixes are listed chronologically in order of completion date (i.e., construction began with E2 and ended with E1).
- 2) Sections are referenced by quadrant and sequence number, where "E2" refers to section 2 of the east quadrant.
- 3) "dual " lift type indicates that the lower and upper lifts were constructed with the same experimental mix.
- 4) The total thickness of all experimental sections is 4 inches by design, with the exception of S8, S9, S10, S11.
- 5) ARZ, TRZ, and BRZ refer to gradations intended to pass above, through, and below the restricted zone.
- 6) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively.

Section S3 (Upper Layer)

Laboratory Diary

General Description of Mix and Materials

Design Method:	Superpave
Compactive Effort:	100 gyrations
Binder Performance Grade:	76-22
Modifier Type:	SBS
Aggregate Type:	Lms/gravel
Gradation Type:	BRZ

Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size:</u>	<u>% Passing:</u>
1"	100
3/4"	100
1/2"	100
3/8"	100
No. 4	70
No. 8	43
No. 16	29
No. 30	21
No. 50	15
No. 100	11
No. 200	8.9

Asphalt Binder Content:	5.6%
Compacted Pill Bulk Gravity:	2.329
Theoretical Maximum Gravity:	2.414
Computed Air Voids:	3.5%

Construction Diary

Relevant Conditions for Construction

Completion Date:	Thursday, July 06, 2000
24 Hour High Temperature (F):	98
24 Hour Low Temperature (F):	78
24 Hour Rainfall (in):	0.00
Lift Type:	upper
Design Thickness of Test Mix (in):	4.0

Plant Configuration and Placement Details

<u>Component:</u>	<u>% Setting:</u>
Liquid Binder Setting	5.9%
Gravel 3/8" Crushed Gravel	47.0%
Limestone Modified 8910	34.0%
Limestone 89	14.0%
Gravel Coarse Sand	4.0%
Antistrip Hydrated Lime	1.0%

Approximate Length (ft):	201
Surveyed Thickness of Section (in):	4.0
Std Dev of Section Thickness (in):	0.1
Type of Tack Coat Utilized:	CQS-1h
Target Tack Application Rate:	0.03 gal / sy
Avg Mat Temperature Behind Paver (F):	316
Average Section Compaction:	92.7%

General Notes:

- 1) Mixes are listed chronologically in order of completion date (i.e., construction began with E2 and ended with E1).
- 2) Sections are referenced by quadrant and sequence number, where "E2" refers to section 2 of the east quadrant.
- 3) "dual " lift type indicates that the lower and upper lifts were constructed with the same experimental mix.
- 4) The total thickness of all experimental sections is 4 inches by design, with the exception of S8, S9, S10, S11.
- 5) ARZ, TRZ, and BRZ refer to gradations intended to pass above, through, and below the restricted zone.
- 6) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively.