

Section S5 (Lower Layer)

Laboratory Diary

General Description of Mix and Materials

Design Method:	Superpave
Compactive Effort:	125 gyrations
Binder Performance Grade:	76-22
Modifier Type:	SBS
Aggregate Type:	Lms/Gravel/RAP
Gradation Type:	BRZ

Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size:</u>	<u>% Passing:</u>
1"	100
3/4"	95
1/2"	83
3/8"	73
No. 4	53
No. 8	36
No. 16	27
No. 30	21
No. 50	15
No. 100	12
No. 200	8.7

Asphalt Binder Content:	4.0%
Compacted Pill Bulk Gravity:	2.369
Theoretical Maximum Gravity:	2.446
Computed Air Voids:	3.1%

Construction Diary

Relevant Conditions for Construction

Completion Date:	Wednesday, July 05, 2000
24 Hour High Temperature (F):	96
24 Hour Low Temperature (F):	76
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	4.6%
Gravel 10	14.0%
Gravel 57	33.0%
Gravel 7	26.0%
Sand Manufactured	15.0%
Recycle RAP	12.0%

Approximate Length (ft):	203
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):	331
Average Section Compaction:	91.5%

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 S5 (Upper Layer)

Laboratory Diary

General Description of Mix and Materials

Design Method:	Superpave
Compactive Effort:	125 gyrations
Binder Performance Grade:	76-22
Modifier Type:	SBS
Aggregate Type:	Gravel
Gradation Type:	TRZ

Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size:</u>	<u>% Passing:</u>
1"	100
3/4"	100
1/2"	95
3/8"	82
No. 4	61
No. 8	45
No. 16	33
No. 30	22
No. 50	10
No. 100	7
No. 200	5.0

Asphalt Binder Content:	5.6%
Compacted Pill Bulk Gravity:	2.332
Theoretical Maximum Gravity:	2.413
Computed Air Voids:	3.4%

Construction Diary

Relevant Conditions for Construction

Completion Date:	Friday, July 07, 2000
24 Hour High Temperature (F):	100
24 Hour Low Temperature (F):	79
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	5.5%
Gravel 10	21.0%
Gravel 5/8 D Rock	60.0%
Sand Natural	19.0%

Approximate Length (ft):	203
Surveyed Thickness of Section (in):	4.1
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):	323
Average Section Compaction:	94.9%

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.