

Section W2

Laboratory Diary

General Description of Mix and Materials

Design Method:	SMA
Compactive Effort:	50 blows
Binder Performance Grade	76-22
Modifier Type:	SBR
Aggregate Type:	Lms/Slag
Gradation Type:	SMA

Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size:</u>	<u>% Passing:</u>
1"	100
3/4"	100
1/2"	98
3/8"	77
No. 4	35
No. 8	24
No. 16	17
No. 30	15
No. 50	13
No. 100	12
No. 200	10.7

Asphalt Binder Content:	8.0%
Compacted Pill Bulk Gravity:	2.158
Theoretical Maximum Gravity:	2.243
Computed Air Voids:	3.8%

Construction Diary

Relevant Conditions for Construction

Completion Date	Thursday, June 15, 2000
24 Hour High Temperature (F):	89
24 Hour Low Temperature (F):	76
24 Hour Rainfall (in):	0.17
Lift Type:	dual
Design Thickness of Test Mix (in):	4.0

Plant Configuration and Placement Details

<u>Component:</u>	<u>% Setting:</u>	
Liquid Binder Setting	7.7%	
Slag	78	74.0%
Limestone	89	10.0%
Limestone	Manufactured Sand	10.0%
Stabilizer	Mineral Fiber	0.4%
Filler	Fly Ash	6.0%

Approximate Length (ft):	200
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):	323
Average Section Compaction:	94.3%

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.