

Section W1

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: | Granite |
| Gradation Type: | SMA |

Avg. Lab Properties of Plant Produced Mix

| <u>Sieve Size:</u> | <u>% Passing:</u> |
|--------------------|-------------------|
| 1" | 100 |
| 3/4" | 100 |
| 1/2" | 95 |
| 3/8" | 68 |
| No. 4 | 28 |
| No. 8 | 20 |
| No. 16 | 18 |
| No. 30 | 16 |
| No. 50 | 14 |
| No. 100 | 12 |
| No. 200 | 9.7 |

| | |
|------------------------------|-------|
| Asphalt Binder Content: | 6.1% |
| Compacted Pill Bulk Gravity: | 2.337 |
| Theoretical Maximum Gravity: | 2.422 |
| Computed Air Voids: | 3.5% |

Construction Diary

Relevant Conditions for Construction

| | |
|------------------------------------|------------------------|
| Completion Date | Tuesday, June 13, 2000 |
| 24 Hour High Temperature (F): | 92 |
| 24 Hour Low Temperature (F): | 73 |
| 24 Hour Rainfall (in): | 0.00 |
| 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 | 6.2% |
| Granite 7 | 73.0% |
| Granite 89 | 11.0% |
| Granite M10 | 10.0% |
| Stabilizer Mineral Fiber | 0.4% |
| Filler Fly Ash | 6.0% |

| | |
|---------------------------------------|---------------|
| Approximate Length (ft): | 202 |
| Surveyed Thickness of Section (in): | 3.9 |
| 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): | 328 |
| Average Section Compaction: | 95.0% |

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.