

Quadrant: S
Section: 2
Sublot: 1

Laboratory Diary

General Description of Mix and Materials

Design Method: Super
 Compactive Effort: 85 gyrations
 Binder Performance Grade: 67-22
 Modifier Type: NA
 Aggregate Type: Grv/RAP/Sand
 Design Gradation Type: Coarse

Avg. Lab Properties of Plant Produced Mix

Sieve Size	Design	QC
25 mm (1"):	100	100
19 mm (3/4"):	100	100
12.5 mm (1/2"):	97	98
9.5 mm (3/8"):	93	95
4.75 mm (#4):	61	62
2.36 mm (#8):	39	40
1.18 mm (#16):	28	29
0.60 mm (#30):	21	22
0.30 mm (#50):	13	14
0.15 mm (#100):	7	9
0.075 mm (#200):	5.6	7.2
Binder Content (Pb):	5.6	5.2
Eff. Binder Content (Pbe):	5.1	4.7
Dust-to-Binder Ratio:	1.1	1.5
Rice Gravity (Gmm):	2.388	2.431
Avg. Bulk Gravity (Gmb):	2.292	2.309
Avg Air Voids (Va):	4.0	5.0
Agg. Bulk Gravity (Gsb):	2.552	2.592
Avg VMA:	15.1	15.6
Avg. VFA:	74	68

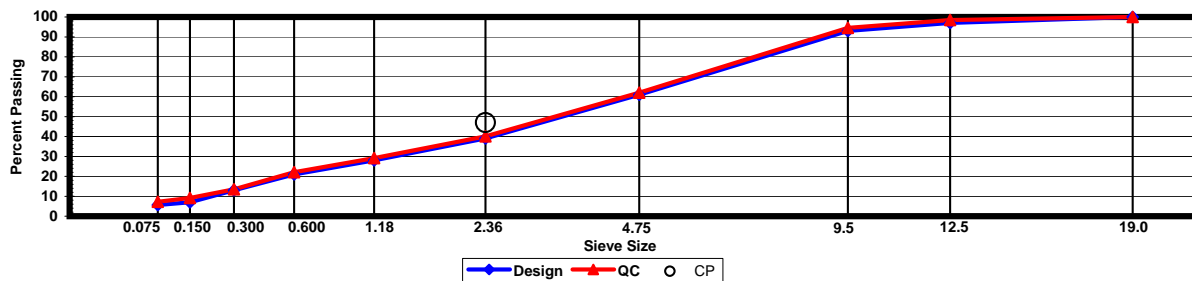
Construction Diary

Relevant Conditions for Construction

Completion Date: July 30, 2009
 24 Hour High Temperature (F): 90
 24 Hour Low Temperature (F): 74
 24 Hour Rainfall (in): 0.04
 Planned Sublot Lift Thickness (in): 2.0
 Paving Machine: Roadtec

Plant Configuration and Placement Details

Component	% Setting
Asphalt Content (Plant Setting)	4.8
Crystal Springs 1/2" Gravel	20.0
Crystal Springs 3/8" Gravel	26.0
Crystal Springs Coarse Sand	8.0
S2 Track RAP	15.0
Newton RAP	30.0
Hyd Lime	1.0
As-Built Sublot Lift Thickness (in):	1.7
Total Thickness of All 2009 Sublots (in):	3.9
Approx. Underlying HMA Thickness (in):	20.0
Type of Tack Coat Utilized:	PG67-22
Target Tack Application Rate (gal/sy):	0.03
Approx. Avg. Temperature at Plant (F):	340
Avg. Measured Mat Compaction:	92.1%



General Notes:

- Mixes are referenced by quadrant (E=East, N=North, W=West, and S=South), section # (sequential) and subplot (top=1);
- The total HMA thickness of all structural study sections (N1-N11 and S8-S12) ranges from 5-3/4 to 14 inches by design;
- All non-structural sections are supported by a uniform perpetual foundation in order to study surface mix performance;
- SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively; and
- All liquid asphalt purchased for use in Track reconstruction contained LOF 6500 antistrip additive at a rate of 0.5 percent

Quadrant: S
Section: 2
Sublot: 2

Laboratory Diary

General Description of Mix and Materials

Design Method: Super
 Compactive Effort: 85 gyrations
 Binder Performance Grade: 67-22
 Modifier Type: NA
 Aggregate Type: Grv/RAP/Sand
 Design Gradation Type: Coarse

Avg. Lab Properties of Plant Produced Mix

Sieve Size	Design	QC
25 mm (1"):	100	100
19 mm (3/4"):	100	100
12.5 mm (1/2"):	97	98
9.5 mm (3/8"):	93	93
4.75 mm (#4):	61	62
2.36 mm (#8):	39	40
1.18 mm (#16):	28	29
0.60 mm (#30):	21	21
0.30 mm (#50):	13	13
0.15 mm (#100):	7	8
0.075 mm (#200):	5.6	6.6
Binder Content (Pb):	5.6	5.3
Eff. Binder Content (Pbe):	5.1	4.8
Dust-to-Binder Ratio:	1.1	1.4
Rice Gravity (Gmm):	2.388	2.418
Avg. Bulk Gravity (Gmb):	2.292	2.321
Avg Air Voids (Va):	4.0	4.0
Agg. Bulk Gravity (Gsb):	2.552	2.582
Avg VMA:	15.1	14.9
Avg. VFA:	74	73

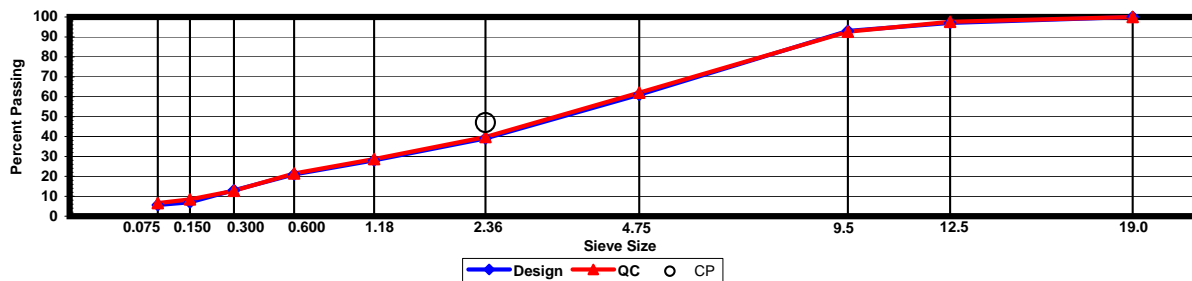
Construction Diary

Relevant Conditions for Construction

Completion Date: July 29, 2009
 24 Hour High Temperature (F): 85
 24 Hour Low Temperature (F): 70
 24 Hour Rainfall (in): 0.66
 Planned Sublot Lift Thickness (in): 2.0
 Paving Machine: Roadtec

Plant Configuration and Placement Details

Component	% Setting
Asphalt Content (Plant Setting)	4.8
Crystal Springs 1/2" Gravel	20.0
Crystal Springs 3/8" Gravel	26.0
Crystal Springs Coarse Sand	8.0
S2 Track RAP	15.0
Newton RAP	30.0
Hyd Lime	1.0
As-Built Sublot Lift Thickness (in):	2.2
Total Thickness of All 2009 Sublots (in):	3.9
Approx. Underlying HMA Thickness (in):	20.0
Type of Tack Coat Utilized:	PG67-22
Target Tack Application Rate (gal/sy):	0.05
Approx. Avg. Temperature at Plant (F):	340
Avg. Measured Mat Compaction:	93.8%



General Notes:

- Mixes are referenced by quadrant (E=East, N=North, W=West, and S=South), section # (sequential) and subplot (top=1);
- The total HMA thickness of all structural study sections (N1-N11 and S8-S12) ranges from 5-3/4 to 14 inches by design;
- All non-structural sections are supported by a uniform perpetual foundation in order to study surface mix performance;
- SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively; and
- All liquid asphalt purchased for use in Track reconstruction contained LOF 6500 antistrip additive at a rate of 0.5 percent