

**Quadrant:** E  
**Section:** 8A  
**Sublot:** 1

**Laboratory Diary**

General Description of Mix and Materials

Design Method: Super  
 Compactive Effort: 100 gyrations  
 Binder Performance Grade: 76-22  
 Modifier Type: SBS  
 Aggregate Type: Granite/Sand/RAP  
 Design Gradation Type: DGA

Avg. Lab Properties of Plant Produced Mix

Sieve Size	Target	QC
25 mm (1"):	100	100
19 mm (3/4"):	100	100
12.5 mm (1/2"):	97	95
9.5 mm (3/8"):	86	87
4.75 mm (#4):	60	56
2.36 mm (#8):	48	44
1.18 mm (#16):	38	37
0.60 mm (#30):	24	26
0.30 mm (#50):	13	14
0.15 mm (#100):	8	8
0.075 mm (#200):	5.4	4.6
Binder Content (Pb):	5.1	5.0
Eff. Binder Content (Pbe):	4.4	4.3
Dust-to-Eff. Binder Ratio:	1.2	1.1
RAP Binder Replacement (%):	31.8	28.9
RAS Binder Replacement (%):	0.0	0.0
Total Binder Replacement (%):	31.8	28.9
Rice Gravity (Gmm):	2.490	2.498
Bulk Gravity (Gmb):	2.391	2.411
Air Voids (Va):	4.0	3.5
Agg. Bulk Gravity (Gsb):	2.649	2.65
VMA:	14.4	14
VFA:	72	74

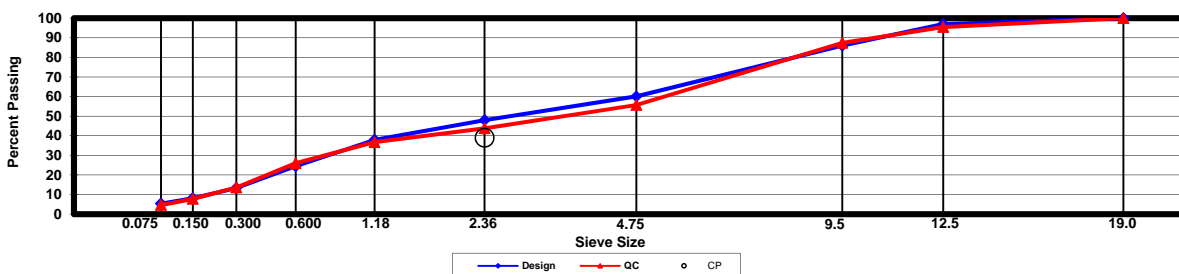
**Construction Diary**

Relevant Conditions for Construction

Completion Date: July 15, 2016  
 24 Hour High Temperature (F): 95  
 24 Hour Low Temperature (F): 71  
 24 Hour Rainfall (in): 0.00  
 Planned Sublot Lift Thickness (in): 1.5  
 Paving Machine: Roadtec

Plant Configuration and Placement Details

Component	% Setting
Binder Content (Plant Setting)	5.0
89 Granite	14.0
78 Granite	26.0
Coarse Sand	30.0
EAP -1/2 RAP	30.0
Evotherm P15	0.5
As-Built Sublot Lift Thickness (in):	1.8
Total Thickness of All New Sublots (in):	1.8
Approx. Underlying HMA Thickness (in):	22.2
Type of Tack Coat Utilized:	NTSS-1HM
Undiluted Target Tack Rate (gal/sy):	0.08
Approx. Avg. Temperature at Plant (F):	340
Avg. Measured Mat Compaction:	92.5%



**General Notes:**

- References are by quadrant (E=East, N=North, W=West, S=South, L=Lee Rd 159, U=US-280), section #, and sublot (top=1).
- DGA, SMA, & OGFC refer to dense graded asphalt, stone matrix asphalt, & open-graded friction course, respectively.
- Production Gsb estimated using the actual production Gse and the difference between Gse and Gsb in the mix design.

**Section and/or Sublot Specific Notes:**

E7A-1, E7B-1, and E8A-1 made in a continuous plant run, wasting transition tonnage to ensure uniform mix, and running the paver hopper down in between sections on the Track. This method optimizes quality at the plant and on the Track by eliminating transverse joints.

**Quadrant:** E  
**Section:** 8B  
**Sublot:** 1

**Laboratory Diary**

General Description of Mix and Materials

Design Method: Super  
 Compactive Effort: 100 gyrations  
 Binder Performance Grade: 58-28  
 Modifier Type: SBS  
 Aggregate Type: Granite/Sand/RAP  
 Design Gradation Type: DGA

Avg. Lab Properties of Plant Produced Mix

Sieve Size	Target	QC
25 mm (1"):	100	100
19 mm (3/4"):	100	100
12.5 mm (1/2"):	97	97
9.5 mm (3/8"):	86	91
4.75 mm (#4):	60	63
2.36 mm (#8):	48	50
1.18 mm (#16):	38	40
0.60 mm (#30):	24	27
0.30 mm (#50):	13	13
0.15 mm (#100):	8	8
0.075 mm (#200):	5.4	5.1
Binder Content (Pb):	5.1	5.0
Eff. Binder Content (Pbe):	4.4	4.3
Dust-to-Eff. Binder Ratio:	1.2	1.2
RAP Binder Replacement (%):	31.8	28.8
RAS Binder Replacement (%):	0.0	0.0
Total Binder Replacement (%):	31.8	28.8
Rice Gravity (Gmm):	2.490	2.493
Bulk Gravity (Gmb):	2.391	2.382
Air Voids (Va):	4.0	4.5
Agg. Bulk Gravity (Gsb):	2.649	2.65
VMA:	14.4	14
VFA:	72	69

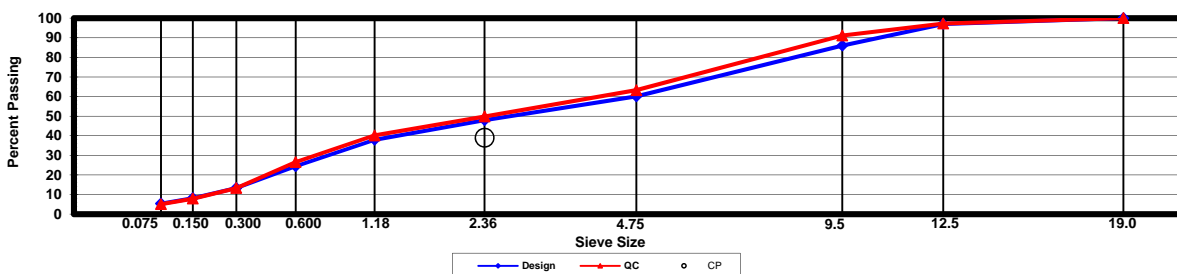
**Construction Diary**

Relevant Conditions for Construction

Completion Date: July 23, 2015  
 24 Hour High Temperature (F): 92  
 24 Hour Low Temperature (F): 72  
 24 Hour Rainfall (in): 1.06  
 Planned Sublot Lift Thickness (in): 1.5  
 Paving Machine: Roadtec

Plant Configuration and Placement Details

Component	% Setting
Binder Content (Plant Setting)	5.0
89 Granite	14.0
78 Granite	26.0
Coarse Sand	30.0
EAP -1/2 RAP	30.0
Evotherm P15	0.5
As-Built Sublot Lift Thickness (in):	1.7
Total Thickness of All New Sublots (in):	1.7
Approx. Underlying HMA Thickness (in):	22.3
Type of Tack Coat Utilized:	NTSS-1HM
Undiluted Target Tack Rate (gal/sy):	0.08
Approx. Avg. Temperature at Plant (F):	340
Avg. Measured Mat Compaction:	93.5%



**General Notes:**

- References are by quadrant (E=East, N=North, W=West, S=South, L=Lee Rd 159, U=US-280), section #, and sublot (top=1).
- DGA, SMA, & OGFC refer to dense graded asphalt, stone matrix asphalt, & open-graded friction course, respectively.
- Production Gsb estimated using the actual production Gse and the difference between Gse and Gsb in the mix design.

**Section and/or Sublot Specific Notes:**

NA