Version: V03.40

Oklahoma Department of Transportation Mix Design Report

Asphalt Concrete, Type S3 (PG 64-22 OK) Mat'l. Code: asco009
(Material Full Name and Material Code)

Binder - Recycled ID: B2
(Design Type and Design Type ID)

T. J. Campbell P/S # m00570
(Producer/Supplier Name and Producer/Supplier Code)

S3c00931701500
(Mix ID)

T. J. Campbell (South OKC, OK) - 350TPH PLANT ID # m00570-02
(Plant Name and Plant ID)

Aggregate	Producer/Supplier	% USED
#57 Rock	Martin-Marietta (Davis, OK) P/S # m002285005	17
5/8" Chips	Hanson Aggregates, WRP Inc (Davis, OK) P/S # m001985008	25
Man. Sand	Martin-Marietta (Davis, OK) P/S # m002285005	23
Sand	Boral Aggregates (E. Hefner) P/S # m002535510	10
Fine R.A.P.	Contractor / Project Site P/S # Contractor	25

Asphalt Cement: Asphaltic Cement Type PG 64-22 OK, acem003, Valero (Ardmore, OK), m00352
(Material Full Name, Material Code, Producer/Supplier Name, Producer/Supplier Code)

Requires Form 93-E0 signed by the Department for production use.
-Oklahoma D.O.T. Materials-

Producer/Supplier:	Martin-Marietta (Davis, OK) P/S # m002285005	Hanson Aggregates, WRP Inc (Davis, OK) P/S # m001985008	Martin-Marietta (Davis, OK) P/S # m002285005	Boral Aggregates (E. Hefner) P/S # m002535510	Contractor / Project Site P/S # Contractor								
Sieve Size	#57 Rock	5/8" Chips	Man. Sand	Sand	Fine R.A.P.				Comb. Agg.	JMF	Min.	Max.	% Tol. (±)
1 in (25 mm)	100	100	100	100	100				100	100	100	100	0
3/4 in (19 mm)	70	100	100	100	100				95	95	88	100	7
1/2 in (12.5 mm)	35	85	100	100	99				85	85	78	92	7
3/8 in (9.5 mm)	20	64	100	100	96				76	76	69	83	7
#4 (4.75 mm)	4	15	96	100	82				57	57	50	64	7
#8 (2.36 mm)	1	5	59	100	64				41	41	36	46	5
#16 (1.18 mm)	1	3	32	100	49				31	31	27	35	4
#30 (.600 mm)	1	2	19	93	39				24	24	20	28	4
#50 (.300 mm)	1	2	11	52	29				16	16	12	20	4
#100 (.150 mm)	1	2	6	11	17				7	7	4	10	3
#200 (.075 mm)	0.4	2.0	3.8	0.9	10.7				4.2	4.2	2.2	6.2	2
AC Content %					5.0				4.3	4.3	3.9	4.7	0.4

	°F (°C)	Required
Mix temperature @ discharge from mixer:	305 (152)	± 20 °F (± 10 °C)
Optimum roadway compaction temperature:	290 (143)	
Laboratory mixing temperature:	325 (163)	
Laboratory compaction temperature:	300 (149)	

Tests on Asphalt Cement	Found
Specific Gravity @ 77 ° F	1.0100

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-Oklahoma D.O.T. Materials-

Tests on Compressed Mixtures (@ Design AC)	# Gyr.	% Density of Gmm	% Density Required
Nini	6	88.6	85.5 - 91.5
Ndes	50		96.0

Tests on Aggregates		Required		Units
Durability Index	75	40	min.	%
F.A.A. %U		N/A		%
Flat and Elongated	1	10	max.	%
Fractured Faces	100/100	85/80	min.	%
Insoluble Residue	48.2	N/A		%
LA Abrasion	27	40	max.	%
Micro-Deval	10.8	N/A		%
Permeability	11.9	12.5	max.	10^{-5}cm/s
Sand Equivalent	73	40	min.	%
IOC	0.33			%
Gse	2.694			
Gsb	2.683			
Specimen Weight	4750			g

Tests on Compressed Mixtures

%AC	Gmb	Gmm	% Density of Gmm	% Density Required	% VMA	% VMA Required	% VFA	% VFA Required
3.8	2.380	2.533	94.0	Design / Field	14.7	Design / Field	59.2	
4.3	2.411	2.514	95.9	96.0 / 94.5 - 97.4	14.0	13.5 / 13.0	70.7	70 - 75
4.8	2.441	2.494	97.9		13.4		84.3	

Dust Prop.	Dust Prop. Req.
1.1	0.6 - 1.6
1.0	
0.9	

ITS (PSI) 100.6 N/A min.
TSR 0.83 0.80 / 0.75 min. (Design / Field)
Compacted Wt. (lbs/sy/1" thick) = 110.6 @ 4.3 % Asphalt Cement
3.0 % New Asphalt Cement

Hamburg Rut Test Depth (mm) 2.40 12.50 max. @ 10,000 cycles

MEETS SPECIFICATION REQUIREMENTS PER SPECIAL PROVISION 708-26(a-f) 09

Comments: Similar to S3pv0441400500 (Plant ID Change) ksuitor 9/6/2017

Last Modified By: Suitor, Kevin ksuitor
(User Name and User ID)

Date: 9/6/2017
(mm/dd/yyyy)