ALABAMA ASPHALT PAVEMENT ASSOCIATION



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Alabama Asphalt Pavement Association 630 Adams Avenue Montgomery, AL 36104 334/834/5314 (Phone) 334/834/5537 (Fax) E-mail: alapa@bellsouth.net Web site: www.alasphalt.com

UNDERSTANDING AN ASPHALT JOB MIX FORMULA

SEPTEMBER 20, 2022

ASCE MONTGOMERY BRANCH MEETING

What Is An Asphalt Job Mix Formula (JMF)?

- Approved Materials Recipe For Making A Specific Asphalt Mix.
- Mix Designed By Contractor And Submitted To ALDOT For Approval.

What Does An Asphalt Job Mix Formula (JMF) Look Like?

Cart Co	2		Alabama	a Departm	nent of	Transportation	
	9		(A A A A A A A A A A A A A A A A A A A				
CERE S			Sample Card	No: 38374		ple Type: Job Control	and the second sec
Kay Ivey	_			Approval D			John R. Cooper
Governo	ct ID: 20210129	2066				Transportation Director	
		t No: STPAA-HS				Region/Area: Fayette	
	ime Contra	actor: S. T. BUN	N CONSTRUCTION COMPANY	INC.		County: GREENE Project Manager: Strawn,Larry -	11500
Inspect		is of: SUPERPA				Sampled By: Vinson, Jackie	- 11097
D		Code: 424.02_0	001			Date Sampled: 05/17/2021	
Pro	ducer/Sup	From: STOCKPIL	F			Date Tested: 05/17/2021	
			/U.BINDER/L.BINDER/BASE/P	1 \\\\		Qty Represented: UNK	
					pactor (HMA4302D)	
ab Refe	rence Num	nber GH-01				Expires: 05/17/2023	
Co	ontractor's	Address: ST BU	NN CONSTRUCTION CO., INC.			Date: 05/17/2021	
			ELEN KELLER BLVD		P	roducer: ST BUNN CONSTR. CO., INC.	
			ALOOSA, AL 35404			Plant: ALL PLANTS	
		Section: 424 A			Inten	ded Use: **	
	lax. Size Ar	gregate: 1/2"				ar Grade: PG 67-22 HUNT	
		gate Size: 12.5N		Spec		ity of AC: 1.037	
					D. #	Source	BPN-9
% (Ap		2" SLAG	Description	1614	J.#	ST BUNN CONSTR.; TUSCALOOSA, AL	BPN-3
19		AND		1841		ST BUNN FOSTERS PIT; FOSTER, AL	and the second second second
37			N'S	1809		BUNN BROTHERS; BROOKWOOD, AL	
21			1005		BUNN BROTHERS, BROOKWOOD, AL		
	B	AGHOUSE FINE	S			PLANT	
1	and the second se	AGHOUSE FINE AP	S				
1	and the second se		S			PLANT	
1	and the second se		s			PLANT	
1	and the second se		s			PLANT	
1	and the second se		S			PLANT	
1	and the second se		5			PLANT	
1	and the second se		S			PLANT	
1	R	AP	Other information:			PLANT	
1 20 Job Mix	R	AP	Other information: % AC Required	5.70*		PLANT STOCKPILE #21-5-1	
1 20 Job Mix	R.	AP % Passing	Other information:	5.70* 114.0	57.0	PLANT STOCKPILE #21-5-1 Note:	
1 20 Job Mix	c. Sieves	AP % Passing m)	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix	5.70* 114.0 2.588	57.0	PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22	0% comes from the BAP
1 20 Job Mix 1 1/2"	c Sieves (37.5 mi	AP % Passing m) m)	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg	5.70* 114.0 2.588 154.8	57.0	PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1	0% comes from the RAP.
1 20 Job Mix 1 1/2" 1" 3/4"	e Sieves (37.5 m (25.0 m	AP % Passing m) m) m)	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix	5.70* 114.0 2.588	57.0	PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22	0% comes from the RAP.
1 20 Job Mix 1 1/2" 1" 3/4" 1/2"	t: Sieves (37.5 mi (25.0 mi (19.0 mi (12.5 mi	AP % Passing m) m) m) m) 200	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR	5.70* 114.0 2.588 154.8	57.0	PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS.	
1 20 Job Mix 1 1/2" 1" 3/4" 1/2" 3/8"	e: Sieves (37.5 mi (25.0 mi (19.0 mi (12.5 mi (12.5 mi (9.5 mi	AP % Passing m) m) m) m) 100 m) 100(-	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR	5.70* 114.0 2.588 154.8 0.84 0.25	57.0	PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS.	0% comes from the RAP. nm: 95.8
1 20 Job Mix 1 1/2" 1" 3/4" 1/2" 3/8" #4	(12.5 m) (12.5 m) (12.5 m) (12.5 m) (12.5 m) (12.5 m) (12.5 m) (12.5 m)	AP % Passing m) m) m) m) 100 m) 100(- m) 73	Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip	5.70* 114.0 2.588 154.8 0.84 0.25	57.0	PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gm	
1 20 Job Mix 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8	(12.5 m (12.5 m (12.5 m (12.5 m (12.5 m (12.5 m (12.5 m (12.5 m) (12.5 m) (12.5 m)	AP % Passing m) m) m) m) 100(- m) 100(- m) 73 m) 47	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHERI Effective AC	5.70* 114.0 2.588 154.8 0.84 0.25	57.0	PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gm	nm: 95.8
1 20 Job Mix 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8 #16	(37.5 mi (25.0 mi (19.0 mi (12.5 mi (19.5 mi (2.36 mi (2.36 mi (1.18 mi	AP % Passing m) m) m) m) 100(- m) 100(- m) 73 m) 47 m) 35	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHER Effective AC Dust/Asphalt Ratio	5.70* 114.0 2.588 154.8 0.25 M 5.32	57.0	PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gm Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFA	nm: 95.8 CE/UPPER BINDER/LOWE
1 20 Job Mix 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8 #16 #30	(37.5 mi (25.0 mi (19.0 mi (12.5 mi (2.36 mi (2.36 mi (1.18 mi (600 µi	AP % Passing m) m) m) m) m) 100(- m) 100(- m) 73 m) 47 m) 35 m) 27	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHER Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity	5.70* 114.0 2.588 154.8 0.24 0.25 M 5.32 1.15	57.0	PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gm	nm: 95.8 CE/UPPER BINDER/LOWE
1 20 Job Mix 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8 #16	(37.5 mi (25.0 mi (19.0 mi (12.5 mi (9.5 mi (4.75 mi (2.36 mi (1.18 mi (600 µi (300 µi	AP % Passing m) m) m) m) 100(- m) 100(- m) 73 m) 47 m) 35 m) 27 m) 27 m) 16	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHER Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity Fine Agg. Angularity	5.70* 114.0 2.588 154.8 0.84 0.25 M 5.32 1.15 99/96	57.0	PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gm Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFA BINDER/BASE/PATCHING, LEVELING, WIDEN	nm: 95.8 CE/UPPER BINDER/LOWE
1 20 Job Mix 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8 #15 #30	(37.5 mi (25.0 mi (19.0 mi (12.5 mi (2.36 mi (2.36 mi (1.18 mi (600 µi	AP % Passing m) m) m) m) 100(- m) 100(- m) 73 m) 47 m) 35 m) 27 m) 35 m) 27 m) 16 m) 9	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHER Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity	5.70* 114.0 2.588 154.8 0.84 0.25 M 5.32 1.15 99/96 45	57.0	PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gm Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFA	nm: 95.8 CE/UPPER BINDER/LOWE

Pay Items: 424A336,424A336 Standard Remarks: This material has been tested in accordance with ALDOT specifications.

Approved By: Cato, Charlie - 11098

Signatura: (2.2 Armstead, William - 13377

Testing Engineer

Information On An Asphalt Job Mix Formula (JMF)

JMF - **Basic Information**

- Project Number.
- ALDOT Region / Area.
- County.
- Prime Contractor.
- Producer.
- Prime Contractor And Producer May Be Different.
- Asphalt Plant (ALDOT Approved Plant) (ALDOT List I-5).
- ALDOT Approval Signature.

Inspect	Contr Projetime Contr tion Anal Materia ducer/Su Sampleo	ysis of: SUPERPA l Code: 424.02_1 applier: l From: STOCKPI	Sample Card N A 9066 SIP-0014(549) IN CONSTRUCTION COMPANY, I AVE, WEARING 001 LE E/U.BINDER/L.BINDER/BASE/PLN	laterials io: 38374 approval D	John R. Cooper Transportation Director		
Lab Refe	rence Nu	mber GHO	130-21				
			JNN CONSTRUCTION CO., INC.		Date	Expires: 05/17/2023 Date: 05/17/2021	
	inci accoi		IELEN KELLER BLVD		D	roducer: ST BUNN CONSTR. CO., INC.	
			ALOOSA, AL 35404			Plant: ALL PLANTS	
		Section: 424			Inten	ded Use: **	
	lax. Size	Aggregate: 1/2"				er Grade: PG 67-22 HUNT	
		egate Size: 12.5M	NIN	Spec		ity of AC: 1.037	
% (Ap	prox)		Description	1 1.5	D.#	Source	BPN-9
23		1/2" SLAG	beschption	1614		ST BUNN CONSTR.; TUSCALOOSA, AL	
19 37 1 20		SAND SANDSTONE SCI BAGHOUSE FINI RAP		1841 1809		ST BUNN FOSTERS PIT; FOSTER, AL BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1	
			Other information:			Note:	
Job Mix	Sieves	% Passing	% AC Required	5.70*			
11/2"	(37.5)		AC Regd/Ton, Ibs/MT, kg	114.0	57.0		
1"	(25.0 1		Max, Sp. Gr. Mix	2.588		*4.50% PG 67-22	
3/4"	(19.0)		Wt., Ibs/Mass, kg/m ³	154.8	2480.	must be added to the mix. The remaining 1.10	% comes from the RAP.
1/2"	(12.5)		TSR	0.84		comes from RAS.	
3/8"	(9.5)		Anti-Strip	0.25	C. Starting		
	(4.75)		CHOTHERS (1		#Gyrations: 60 %Gm	m: 95.8
	(2.36)			5.32			
#4	(2.50)		Dust/Asphalt Ratio	1.15		Additional Notes:	CALORED RINDED A OWER
#4 #8	11 12	And a second		99/96		MIXING TEMP 325*F GH-0130-21 **SURFAC	CONTRACT SINDER COVER
#4 #8 #16	(1.18)	um) 27	Coarse Agg. Angulanty				
#4 #8 #16 #30	(600			45		BINDER/BASE/PATCHING, LEVELING, WIDENI	NG.
#4 #8 #16 #30 #50	(600 (300	μm) 10	Fine Agg. Angularity	45 2.815			46
#4 #8 #16 #30	(600 (300 (150	μm) 16 μm) 9	Fine Agg. Angularity			CT INDEX: 72.3 HT-IDT (PSI): 82.7	10

Pay Items: 424A336,424A336 Standard Remarks: This material has been tested in accordance with ALDOT specifications.

Approved By: Cato, Charlie - 11098

Signatura:

A 17

JMF - Mix Information

- Mix Type (ALDOT Section).
- ESAL Range.
- Mix Size (Maximum Aggregate Size).
- Intended Use Of Mix (Wearing, Binder, Base, Patching, Leveling, Widening, Etc.).

Carlo In	6		Alabama	a Departm	nent of	Transportation	and the second s	
China	1			Materials		6		
Sample Card No					Sam	ple Type: Job Control	and the second second	
Governoi	ay Ivey A					17/2021	John R. Cooper	
Jovenio		act ID: 2021012	9066				Transportation Director	
	Proje	ct No: STPAA-H	SIP-0014(549)			Region/Area: Fayette County: GREENE		
			N CONSTRUCTION COMPANY	, INC.		Project Manager: Strawn,Larry -	11589	
		sis of: SUPERPA				Sampled By: Vinson, Jackie	- 11097	
	ducer/Sup	Code: 424.02_0	101			Date Sampled: 05/17/2021		
		From: STOCKPI	E			Date Tested: 05/17/2021 Qty Represented: UNK		
			/U.BINDER/L.BINDER/BASE/P	LW		Gty Represented: UNK		
			Gyr	atory Com	pactor (HMA4302D)		
ab Refer	rence Nur	mber GH-01	130-21		Date	Expires: 05/17/2023		
Co	ntractor's	Address: ST BU	NN CONSTRUCTION CO., INC.			Date: 05/17/2021		
		611 H	ELEN KELLER BLVD		P	roducer: ST BUNN CONSTR. CO., INC.		
		TUSC	ALOOSA, AL 35404			Plant: ALL PLANTS		
		Section: 424 A	/B, C/D		Inten	ded Use: **		
īvī	ax. Size A	ggregate: 1/2"			Binde	r Grade: PG 67-22 HUNT		
Ne	tric Aggre	gate Size: 12.5N	AIM .	Spec	ific Gravi	ty of AC: 1.037		
% (App	prox)		Description	1.0). #	Source	BPN-9	
		1/2" SLAG		1614		ST BUNN CONSTR.; TUSCALOOSA, AL		
23			1841		ST BUNN FOSTERS PIT; FOSTER, AL			
	S	SAND						
19		SAND	N'S	1841 1809		BUNN BROTHERS; BROOKWOOD, AL		
19 37 1	S	SANDSTONE SCR BAGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT		
19 37 1	S	SANDSTONE SCR				BUNN BROTHERS; BROOKWOOD, AL		
19 37 1	S	SANDSTONE SCR BAGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT		
19 37 1	S	SANDSTONE SCR BAGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT		
19 37 1	S	SANDSTONE SCR BAGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT		
19 37 1	S	SANDSTONE SCR BAGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT		
19 37 1	S	SANDSTONE SCR BAGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT		
19 37 1	S	SANDSTONE SCR BAGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT		
19 37 1 20	S	SANDSTONE SCR BAGHOUSE FINE RAP	S Other information:	1809		BUNN BROTHERS; BROOKWOOD, AL PLANT		
19 37 1 20	S	SANDSTONE SCR BAGHOUSE FINE RAP	S Other information: % AC Required	5.70*		BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1		
19 37 1 20 <u>Job Mix</u>	SEF	SANDSTONE SCR BAGHOUSE FINE RAP % Passing	S Other information: % AC Required AC Reqd/Ton, lbs/MT, kg	1809 5.70* 114.0	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1		
19 37 1 20 Job Mix	Sieves	SANDSTONE SCR BAGHOUSE FINE RAP % Passing am)	S Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix	1809 5.70* 114.0 2.588	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note:	0% comes from the BAP.	
19 37 1 20 <u>Job Mix</u> 5 1 1/2"	sieves (37.5 m	% Passing mn)	S Other information: % AC Required AC Reqd/Ton, lbs/MT, kg	1809 5.70* 114.0 2.588 154.8	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1	0% comes from the RAP.	
19 37 1 20 <u>Job Mix</u> 2 1 1/2" 1" 3/4"	5 5 5 1 2 5 1 2 5 1 2 5 0 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	% Passing 1m) 1m)	S Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix	1809 5.70* 114.0 2.588 154.8 0.84	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note:	0% comes from the RAP.	
19 37 1 20 <u>Job Mix</u> 2 1 1/2" 1" 3/4" 1/2"	5 5 5 5 5 1 2 5.0 m (19.0 m	% Passing m) nm) nm) nm) nm) nm)	S Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³	1809 5.70* 114.0 2.588 154.8	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS.		
19 37 1 20 <u>Job Mix</u> 2 1 1/2" 1" 3/4" 1/2" 3/8"	: : : : : : : : : : : : : : : : : : :	SANDSTONE SCR BAGHOUSE FINE RAP % Passing nm) nm) nm) nm) nm) nm) nm) 100 nm) 100(-	S Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR	1809 5.70* 114.0 2.588 154.8 0.84 0.25	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS.	0% comes from the RAP. nm: 95.8	
19 37 1 20 <u>Job Mix</u> 2 1 1/2" 1" 3/4" 1/2" 3/8" #4	: : : : : : : : : : : : : : : : : : :	SANDSTONE SCR BAGHOUSE FINE RAP % Passing 1m) 1m) 1m) 1m) 1m) 100 1m) 100 1m) 73	S Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip	1809 5.70* 114.0 2.588 154.8 0.84 0.25	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gr	nm: 95.8	
19 37 1 20 Job Mix 2 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8	5 5 5 5 5 5 5 5 5 5 5 7 5 7 5 7 7 7 7 7	SANDSTONE SCR BAGHOUSE FINE RAP % Passing nm) nm) nm) nm) nm) 100(- nm) 100(- nm) 73 nm) 47	S Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHER Effective AC	1809 5.70* 114.0 2.588 154.8 0.84 0.25 M	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gr	nm: 95.8	
19 37 1 20 Job Mix 20 1 1/2" 1" 3/4" 1/2" 3/4" 1/2" 3/8" #4 #8 #15	5 5 5 5 5 5 5 5 5 5 5 7 5 7 5 7 5 7	SANDSTONE SCR BAGHOUSE FINE RAP % Passing nm) nm) nm) nm) nm) 100(- nm) 100(- nm) 73 nm) 47 nm) 47 nm) 35	S Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHER Effective AC Dust/Asphalt Ratio	1809 5.70* 114.0 2.588 154.8 0.84 0.25 M 5.32	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gr Additional Notes: MIXING TEMP 325*F GH-0130-21 ~SURFA	nm: 95.8 .ce/upper BINDER/LOWI	
19 37 1 20 <u>Job Mix</u> 1 1/2" 1/2" 3/4" 1/2" 3/8" #4 #8 #15 #30	37.5 m (25.0 m (19.0 m (12.5 m (4.75 m (2.36 m (1.18 m (1.18 m (600)	SANDSTONE SCR BAGHOUSE FINE RAP % Passing nm) nm) nm) nm) nm) nm) nm) nm) nm) nm)	S Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHER Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity	1809 5.70* 114.0 2.588 154.8 0.25 M 5.32 1.15	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gr	nm: 95.8	
19 37 1 20 Job Mix 5 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8 #16	37.5 m (25.0 m (19.0 m (12.5 m (2.36 m (2.36 m (1.18 m (1.18 m (300)	SANDSTONE SCR BAGHOUSE FINE RAP % Passing nm) nm) nm) nm) nm) nm) nm) nm) nm) nm)	S Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHER Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity Fine Agg. Angularity	1809 5.70* 114.0 2.588 154.8 0.25 M 5.32 1.15 99/96 45	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gr Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFA BINDER/BASE/PATCHING, LEVELING, WIDEN	nm: 95.8 CE/UPPER BINDER/LOWE	
5 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8 #16 #30	37.5 m (25.0 m (19.0 m (12.5 m (4.75 m (2.36 m (1.18 m (1.18 m (600)	SANDSTONE SCR BAGHOUSE FINE RAP % Passing nm) nm) nm) nm) nm) nm) nm) nm) nm) nm)	S Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHER Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity	1809 5.70* 114.0 2.588 154.8 0.84 0.25 M 5.32 1.15 99/96	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gr Additional Notes: MIXING TEMP 325*F GH-0130-21 ~SURFA	nm: 95.8 CE/UPPER BINDER/LOWE	

Pay Items: 424A336,424A336 Standard Remarks: This material has been tested in accordance with ALDOT specifications.

Approved By: Cato, Charlie - 11098

Signatura: (2.C Armstead, William - 13377

Testing Engineer

Mix Types

 Dense Graded (Section 327 – Bituminous Base And Section 424 – Superpave).
 Stone Matrix Asphalt (Section 423 – SMA).
 Open Graded (Section 327 – PATB And Section 420 – OGFC).

ESAL Definition

- Equivalent Single Axle Load.
- 18,000 Pound Load.
- Pavement Designs.
- Trucks Not Cars Cause Pavement Damage.
- Pavement Thickness Greatly Controlled By Number And Weight Of Trucks.

ALDOT ESAL Designations

ESAL Designation	Calculated 20 Year ESALs
ESAL Range A/B	0 – 1,000,000
ESAL Range C/D	1,000,000 - 10,000,000
ESAL Range E	10,000,000 - 30,000,000
Section 423 (SMA)	Greater Than 30,000,000

Definitions

- Maximum Aggregate Size Is Defined As The Smallest Sieve Through Which 100 Percent Of The Aggregate Particles Pass.
- Nominal Maximum Aggregate Size Is Defined As The Largest Sieve That Retains Some Of The Aggregate Particles, But Generally Not More Than 10 Percent.

JMF - Mix Information

- Mix Materials.
- Material Description.
- Material Percentage (Total Must Be 100%).
- Material ID #And Source (ALDOT Approved Producer And Material) (ALDOT List I-1 For Coarse Aggregates And Fine Aggregates).

(in the)		Alabama	Departm	ient of	Transportation	(States of the second s
	/			laterials			
Sample Card N Kay Ivey						ple Type: Job Control	AL OF TENES
Governor A					ate: 05/3	17/2021	John R. Coope
		D: 20210129				Region/Area: Fayette	Transportation Directo
D-1			SIP-0014(549)			County: GREENE	
			N CONSTRUCTION COMPANY, VE, WEARING	INC.		Project Manager: Strawn,Larry	
	Material Coo					Sampled By: Vinson, Jackie Date Sampled: 05/17/2021	- 11097
	ducer/Supplie					Date Tested: 05/17/2021	
	Sampled From					Qty Represented: UNK	
	intended Us	e: SURFACE	U.BINDER/L.BINDER/BASE/PL			1040 47070)	
ab Refer	ence Numbe	r GH-01		tory com		HMA4302D)	
			NN CONSTRUCTION CO., INC.		Date	Expires: 05/17/2023	
20	nersecor s Ad		ELEN KELLER BLVD		D	Date: 05/17/2021	
			ALOOSA, AL 35404		P	roducer: ST BUNN CONSTR. CO., INC. Plant: ALL PLANTS	
	50	ction: 424 A			Inten	ded Use: **	
N	ax. Size Aggr					ar Grade: PG 67-22 HUNT	
	ric Aggregat		IM	Spec		ity of AC: 1.037	
% (Ap)			Description	-	D.#	Source	BPN-9
23		SLAG	o competent	1614		ST BUNN CONSTR.; TUSCALOOSA, AL	
19	SAN	D		1841		ST BUNN FOSTERS PIT; FOSTER, AL	
37	SAN	DSTONE SCR	N'S	1809		BUNN BROTHERS; BROOKWOOD, AL	
1		HOUSE FINE	S			PLANT	
1 20	BAG	HOUSE FINE	s				
		HOUSE FINE	s			PLANT	
		HOUSE FINE	s			PLANT	
		HOUSE FINE	s			PLANT	
		HOUSE FINE	s			PLANT	
		HOUSE FINE	S			PLANT	
		HOUSE FINE				PLANT STOCKPILE #21-5-1	
20 Job Mix	RAP		Other information:	5.70*		PLANT	
20 Job <u>Mix</u>	RAP Sieves		Other information: % AC Required		57.0	PLANT STOCKPILE #21-5-1	
20 Job Mix S 1 1/2"	sieves (37.5 mm)		Other information: % AC Required AC Reqd/Ton, lbs/MT, kg	114.0	57.0	PLANT STOCKPILE #21-5-1 Note: *4.50% PG 67-22	
20 Job Mix 1 1 1/2" 1"	849 Sieves (37.5 mm) (25.0 mm)		Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix		57.0	PLANT STOCKPILE #21-5-1 Note: *4.50% PG 67-22	0% comes from the RAP.
<u>Job Mix</u> 5 1 1/2" 1" 3/4"	(19.0 mm)	% Passing	Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³	114.0 2.588	57.0	PLANT STOCKPILE #21-5-1 Note:	.0% comes from the RAP.
<u>Job Mix</u> <u>5</u> 1 1/2" 1" 3/4" 1/2"	(37.5 mm) (25.0 mm) (19.0 mm) (12.5 mm)	% Passing	Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR	114.0 2.588 154.8	57.0	PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS.	
20 Job Mix 1 1 1/2" 1" 3/4" 1/2" 3/8"	(12.5 mm) (9.5 mm)	% Passing 100 100(-	Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip	114.0 2.588 154.8 0.84 0.25	57.0	PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS.	.0% comes from the RAP. nm: 95.8
20 Job Mix 5 1 1/2" 1" 3/4" 1/2" 3/8" #4	(12.5 mm) (12.5 mm) (25.0 mm) (12.5 mm) (12.5 mm) (12.5 mm) (4.75 mm)	% Passing % Passing 100(- 73	Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip EVOTHERM	114.0 2.588 154.8 0.84 0.25	57.0	PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS.	
20 Job Mix 1 1 1/2" 3/4" 1/2" 3/8"	(37.5 mm) (25.0 mm) (19.0 mm) (12.5 mm) (12.5 mm) (4.75 mm) (2.36 mm)	% Passing % Passing 100 100(- 73 47	Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip EVOTHERM Effective AC	114.0 2.588 154.8 0.84 0.25 1 5.32	57.0	PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %GG	nm: 95.8
20 Job Mix 5 1 1/2" 1" 3/4" 1/2" 3/8" #4	(37.5 mm) (25.0 mm) (19.0 mm) (12.5 mm) (12.5 mm) (2.36 mm) (2.36 mm) (1.18 mm)	% Passing % Passing 100(- 73 47 35	Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip EVOTHERM Effective AC Dust/Asphalt Ratio	114.0 2.588 154.8 0.84 0.25 1 5.32 1.15	57.0	PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %60 Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFA	nm: 95.8 ACE/UPPER BINDER/LOW
20 Job Mix S 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8	2 37.5 mm) (25.0 mm) (19.0 mm) (12.5 mm) (12.5 mm) (2.36 mm) (1.18 mm) (600 μm)	% Passing % Passing 100 100(- 73 47 35 27	Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip EVOTHERM Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity	114.0 2.588 154.8 0.84 0.25 1 5.32 1.15 99/96	57.0	PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %60 Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFA	nm: 95.8 ACE/UPPER BINDER/LOW
20 Job Mix 2 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8 #15	(37.5 mm) (25.0 mm) (19.0 mm) (12.5 mm) (12.5 mm) (2.36 mm) (2.36 mm) (1.18 mm)	% Passing 100 100(- 73 47 35 27 16	Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip EVOTHERM Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity Fine Agg. Angularity	114.0 2.588 154.8 0.84 0.25 1 5.32 1.15 99/96 45	57.0	PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %GG	nm: 95.8 ACE/UPPER BINDER/LOW
20 Job Mix 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8 #16 #30	2 37.5 mm) (25.0 mm) (19.0 mm) (12.5 mm) (12.5 mm) (2.36 mm) (1.18 mm) (600 μm)	% Passing 100 100(- 73 47 35 27 16 9	Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip EVOTHERM Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity	114.0 2.588 154.8 0.84 0.25 1 5.32 1.15 99/96	57.0	PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %60 Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFA	nm: 95.8 ACE/UPPER BINDER/LOW

Pay Items: 424A336,424A336 Standard Remarks: This material has been tested in accordance with ALDOT specifications.

Approved By: Cato, Charlie - 11098

Signatura: (2.Co Armstead, William - 13377

Testing Engineer

Fine Aggregate And Coarse Aggregate Definitions

- Coarse Aggregate Is Aggregate Retained On The No. 4 Sieve.
- Fine Aggregate Is Aggregate Passing The No. 4 Sieve.

Recycled Asphalt Pavement (RAP)

- For Wearing Surface Layers, Up To 20%
 RAP May Be Used In Asphalt Mixes.
- For Binder And Base Layers, Up To 35%
 RAP May Be Used In Asphalt Mixes.
- For Some Mixes Greater Than 35% RAP Has Been Used With Excellent Results.
- Working On Specifications For 100% RAP Mixes.

Recycled Asphalt Pavement (RAP)

 For Permeable Asphalt Treated Base (PATB), No RAP May Be Used In Asphalt Mixes.
 For Open Graded Friction Course (OGFC), No

RAP May Be Used In Asphalt Mixes.

JMF - Mix Information

- Percent Passing Individual Sieves For Total Mix.
- Mix Gradation.

THE										
(In the second			Alabama	a Departm	ent of	Transportation	A STATE OF S			
Carl			Materials Testing Report							
and human			Sample Card			ple Type: Job Control	and the second second			
Governor			Approval Da	ate: 05/3	17/2021	John R. Cooper				
	Contra	act ID: 20210129	9066			Region/Area: Fayette	Transportation Director			
		ct No: STPAA-H				County: GREENE				
		sis of: SUPERPA	IN CONSTRUCTION COMPANY	INC.		Project Manager: Strawn,Larry	- 11589			
		Code: 424.02 0				Sampled By: Vinson, Jackie	- 11097			
	ucer/Sup					Date Sampled: 05/17/2021 Date Tested: 05/17/2021				
		From: STOCKPI				Qty Represented: UNK				
11	Intended	d Use: SURFACE	/U.BINDER/L.BINDER/BASE/P	LW						
				atory Com	pactor (HMA4302D)				
ab Referen			130-21		Date	Expires: 05/17/2023				
Cont	tractor's		NN CONSTRUCTION CO., INC.			Date: 05/17/2021				
			ELEN KELLER BLVD		Pi	roducer: ST BUNN CONSTR. CO., INC.				
			ALOOSA, AL 35404			Plant: ALL PLANTS				
		Section: 424 A	(B, C/D			ded Use: **				
		ggregate: 1/2"				r Grade: PG 67-22 HUNT				
Metri	ic Aggre	gate Size: 12.5N		Spec	ific Gravi	ty of AC: 1.037				
% (Appro			Description	1.0).#	Source	BPN-9			
23		1/2" SLAG		1614		ST BUNN CONSTR.; TUSCALOOSA, AL				
0	SAND		1841		CT PUNNI EOSTERS BIT. EOSTER AL					
			N'S			ST BUNN FOSTERS PIT; FOSTER, AL BUNN BROTHERS: BROOKWOOD, AL				
19 37 1	5	ANDSTONE SCR		1841		ST BUNN FOSTERS PIT; FOSTER, AL BUNN BROTHERS; BROOKWOOD, AL PLANT				
37 1	S					BUNN BROTHERS; BROOKWOOD, AL				
57 L	S	SANDSTONE SCR BAGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT				
37 L	S	SANDSTONE SCR BAGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT				
7	S	SANDSTONE SCR BAGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT				
7	S	SANDSTONE SCR BAGHOUSE FINE	5			BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1				
7 .0 ob Mix:	S	SANDSTONE SCR BAGHOUSE FINE RAP	Other information:			BUNN BROTHERS; BROOKWOOD, AL PLANT				
ob Mix:	SEF	SANDSTONE SCR BAGHOUSE FINE RAP % Passing	Other information: % AC Required	5.70*	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1				
00 00 00 00 00 00 00 00 00 00 00 00 00	eves (37.5 m	% Passing	Other information: % AC Required AC Reqd/Ton, lbs/MT, kg	1809	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note:				
105 Mix: Sie 1 1/2"	eves (37.5 m (25.0 m	% Passing m)	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix	1809 5.70* 114.0	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note:	0% comes from the RAP.			
ob Mix: Sie 1 1/2" 1" 3/4"	eves (37.5 m (25.0 m (19.0 m	% Passing m) m)	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³	1809 5.70* 114.0 2.588	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1	0% comes from the RAP.			
ob Mix: Sie 1 1/2" 1" 3/4" 1/2"	eves (37.5 m (19.0 m (12.5 m	% Passing mn) mn) mn) mn) mn) mn) mn) mn) mn) mn)	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR	1809 5.70* 114.0 2.588 154.8 0.84	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1	0% comes from the RAP.			
ob Mix: Sie 1 1/2" 1" 3/4" 1/2" 3/8"	eves (37.5 m (25.0 m (19.0 m (12.5 m (9.5 m	SANDSTONE SCR BAGHOUSE FINE RAP % Passing mm) mm) mm) 100 100(-	Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip	1809 5.70* 114.0 2.588 154.8 0.84 0.25	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS.	0% comes from the RAP.			
iob Mix: Sie 1 1/2" 1" 3/4" 1/2" 3/8" #4	eves (37.5 m (19.0 m (12.5 m (9.5 m (4.75 m	ANDSTONE SCR BAGHOUSE FINE RAP % Passing 1m) 1m) 1m) 1m) 1m) 100(- 1m) 100(- 1m) 73	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHER	1809 5.70* 114.0 2.588 154.8 0.84 0.25	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS.				
100 Mix: 20 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8	eves (37.5 m (25.0 m (19.0 m (12.5 m (4.75 m (2.36 m	ANDSTONE SCR BAGHOUSE FINE RAP % Passing 1m) 1m) 1m) 1m) 1m) 100(- 1m) 100(- 1m) 73 1m) 47	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHERI Effective AC	1809 5.70* 114.0 2.588 154.8 0.84 0.25	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gr	nm: 95.8			
100 Mix: 20 11/2" 1" 3/4" 1/2" 3/8" #4 #8	eves (37.5 m (19.0 m (19.5 m (4.75 m (2.36 m (1.18 m	ANDSTONE SCR BAGHOUSE FINE RAP % Passing Im) Im) Im) Im) Im) Im) Im) Im) Im) Im)	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHERI Effective AC Dust/Asphalt Ratio	1809 5.70* 114.0 2.588 154.8 0.25 √1 5.32 1.15	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gr Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFA	nm: 95.8 ACE/UPPER BINDER/LOWE			
100 Mix: 20 100 Mix: Sie 1 1/2" 1/2" 3/4" 1/2" 3/8" #4 #8	eves (37.5 m (25.0 m (19.0 m (12.5 m (4.75 m (2.36 m	ANDSTONE SCR BAGHOUSE FINE RAP % Passing 1m) 1m) 1m) 1m) 1m) 100(- 1m) 100(- 1m) 73 1m) 47 1m) 47 1m) 27	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHER: Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity	1809 5.70* 114.0 2.588 154.8 0.25 √ 5.32 1.15 99/96	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gr Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFA	nm: 95.8 ACE/UPPER BINDER/LOWE			
100 Mix: 100 Mix: Sie 11/2" 1/2" 3/4" 1/2" 3/8" #4 #8 #15	eves (37.5 m (19.0 m (19.5 m (4.75 m (2.36 m (1.18 m	ANDSTONE SCR BAGHOUSE FINE RAP % Passing 1m) 1m) 1m) 1m) 1m) 100(- 1m) 100(- 1m) 73 1m) 47 1m) 35 1m) 27	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHER: Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity Fine Agg. Angularity	1809 5.70* 114.0 2.588 154.8 0.25 M 5.32 1.15 99/96 45	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gr	nm: 95.8 ACE/UPPER BINDER/LOWE			
10b Mix: 5ie 1 1/2" 1" 3/4" 1/2" 3/8" #4 #5 #30	eves (37.5 m (25.0 m (19.0 m (12.5 m (2.36 m (2.36 m (1.18 m (1.18 m (600)	ANDSTONE SCR BAGHOUSE FINE RAP % Passing 1m) 1m) 1m) 1m) 100(- 1m) 100(- 1m) 73 1m) 47 1m) 47 1m) 27 1m) 27 1m) 27 1m) 16	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHER: Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity	1809 5.70* 114.0 2.588 154.8 0.25 √ 5.32 1.15 99/96	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gr Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFA	nm: 95.8 ACE/UPPER BINDER/LOWE			

Pay Items: 424A336,424A336 Standard Remarks: This material has been tested in accordance with ALDOT specifications.

Approved By: Cato, Charlie - 11098

Signatura: (2.C. Armstead, William - 13377

Armstead, William - 13 Testing Engineer

¹/₂" Mix (Section 424)

Sieve Size	¹ ⁄ ₂ " Mix (Section 424) % Passing	Project JMF % Passing
1/2"	100	100
3/8"	90 - 100	100
#4	32 - 90	73
#8	32 - 67	47
#200	2 - 10	6.1

JMF - Mix Information

- Liquid Asphalt Binder Grade And Source.
- ALDOT Approved Liquid AC Source (ALDOT List I-4).
- % Liquid AC Required.
- % Effective AC.
- % Virgin AC And % RAP AC.

Can to	x		Alabama	Departm	ent of	Transportation	
66-20)		6				
Sample Card N						Report ple Type: Job Control	Contain of
Kay Ivey			Approval D	ate: 05/3	17/2021	John R. Cooper	
Governor Contract ID: 20210129066							Transportation Director
		t No: STPAA-HS				Region/Area: Fayette	
Pri			N CONSTRUCTION COMPANY,	INC.		County: GREENE Project Manager: Strawn,Larry -	11500
Inspect	ion Analys	sis of: SUPERPA	VE, WEARING			Sampled By: Vinson, Jackie	
		Code: 424.02_0	01			Date Sampled: 05/17/2021	
	ducer/Sup	From: STOCKPIL				Date Tested: 05/17/2021	
			/U.BINDER/L.BINDER/BASE/PL	147		Qty Represented: UNK	
					pactor (HMA4302D)	
Lab Refer	ence Num	nber GH-01	the second s			Expires: 05/17/2023	
Co	ntractor's	Address: ST BU	NN CONSTRUCTION CO., INC.			Date: 05/17/2021	
			ELEN KELLER BLVD		P	roducer: ST BUNN CONSTR. CO., INC.	
			ALOOSA, AL 35404			Plant: ALL PLANTS	
		Section: 424 A			Inten	ded Use: **	
M	ax. Size Ar	ggregate: 1/2"				r Grade: PG 67-22 HUNT	
		gate Size: 12.5M		Spec		ty of AC: 1.037	
% (Ap)		/2" SLAG	Description	1614	D.#	Source ST BUNN CONSTR.; TUSCALOOSA, AL	BPN-9
20							
19						ST BUNN FOSTERS PIT: FOSTER, AL	
19			N'S	1841		ST BUNN FOSTERS PIT; FOSTER, AL BUNN BROTHERS; BROOKWOOD, AL	
19 37 1	5,	ANDSTONE SCR					
37	S, B,	ANDSTONE SCR				BUNN BROTHERS; BROOKWOOD, AL	
37 1	S, B,	ANDSTONE SCR AGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT	
37 1	S, B,	ANDSTONE SCR AGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT	
37 1	S, B,	ANDSTONE SCR AGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT	
37 1	S, B,	ANDSTONE SCR AGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT	
37 1	S, B,	ANDSTONE SCR AGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT	
37 1	S, B,	ANDSTONE SCR AGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT	
37 1 20	S/ B R	ANDSTONE SCR AGHOUSE FINE		1809		BUNN BROTHERS; BROOKWOOD, AL PLANT	
37 1 20 1 20	S/ B R	ANDSTONE SCR AGHOUSE FINE	S Other information:			BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1	
37 1 20 <u>Job Mix</u>	S/ B R	ANDSTONE SCR AGHOUSE FINE AP % Passing	S Other information:	1809	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1	
37 1 20 Job Mix 5 1 1/2"	S, B, R Sieves	ANDSTONE SCR AGHOUSE FINE AP % Passing m)	S Other information: % AC Required	1809	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note:	
37 1 20 Job Mix 1 1/2" 1"	: Sieves (37.5 m (25.0 m	ANDSTONE SCR AGHOUSE FINE AP % Passing m) m)	S Other Information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix	1809 5.70* 114.0		BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.10	% comes from the RAP.
37 1 20 Job Mix 2 1 1/2" 1" 3/4"	5/ B R Sieves (37.5 m (25.0 m (19.0 m	ANDSTONE SCR AGHOUSE FINE AP % Passing m) m) m)	S Other information: % AC Required AC Reqd/Ton, lbs/MT, kg	1809 5.70* 114.0 2.588	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note:	% comes from the RAP.
37 1 20 Job Mix 5 1 1/2" 1" 3/4" 1/2"	5, B R R (37.5 m (25.0 m (19.0 m (12.5 m	ANDSTONE SCR AGHOUSE FINE AP % Passing m) m) m) m) m) 200	S Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR	1809 5.70* 114.0 2.588 154.8	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS.	
37 1 20 Job Mix 2 1 1/2" 1" 3/4" 1/2" 3/8"	: : : : : : : : : : : : : : : : : : :	ANDSTONE SCR AGHOUSE FINE AP % Passing m) m) m) m) m) 100 m) 100(-	S Other Information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip	1809 5.70* 114.0 2.588 154.8 0.84 0.25	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS.	0% comes from the RAP.
37 1 20 Job Mix 1 1/2" 1" 3/4" 1/2" 3/8" #4	: : : : : : : : : : : : : : : : : : :	ANDSTONE SCR AGHOUSE FINE AP % Passing m) m) m) m) m) 100 m) 100(- m) 73	S Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip EVOTHERM	1809 5.70* 114.0 2.588 154.8 0.84 0.25	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS.	
37 1 20 Job Mix 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8	5, B. R 8 8 9 5 19.0 m (12.5 m (12.5 m (12.5 m (12.5 m (12.5 m) (12.5 m) (1	ANDSTONE SCR AGHOUSE FINE AP % Passing m) m) m) m) 100 (- m) 100 (- m) 73 m) 47	S Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip EVOTHERM Effective AC	1809 5.70* 114.0 2.588 154.8 0.84 0.25	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS. #Gyrations: 60 %6Gm	um: 95.8
37 1 20 Job Mix 1 1/2" 1" 3/4" 1/2" 3/8" #4	5, B. R B. R Sieves (37.5 m (19.0 m (19.0 m (12.5 m (12.5 m (4.75 m) (4.75 m) (2.36 m) (1.18 m)	ANDSTONE SCR AGHOUSE FINE AP % Passing m) m) m) m) m) 100(- m) 100(- m) 73 m) 47 m) 35	S Other Information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip EVOTHERM Effective AC Dust/Asphalt Ratio	1809 5.70* 114.0 2.588 154.8 0.84 0.25 4 5.32 1.15	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS. #Gyrations: 60 %6Gm Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFAC	um: 95.8 CE/UPPER BINDER/LOWER
37 1 20 Job Mix 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8	37.5 m (19.0 m (12.5 m (2.36 m (4.75 m (2.36 m (1.18 m (500 µ (600 µ	ANDSTONE SCR AGHOUSE FINE AP % Passing m) m) m) m) 100(- m) 100(- m) 100(- m) 35 m) 47 m) 47 m) 35 m) 27	S Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip EVOTHERM Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity	1809 5.70* 114.0 2.588 154.8 0.25 4 0.25 4 5.32 1.15 99/96	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS. #Gyrations: 60 %6Gm Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFAC	um: 95.8 CE/UPPER BINDER/LOWER
37 1 20 Job Mix 5 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8 #15	5, B. R B. R Sieves (37.5 m (19.0 m (19.0 m (12.5 m (12.5 m (4.75 m) (4.75 m) (2.36 m) (1.18 m)	ANDSTONE SCR AGHOUSE FINE AP % Passing m) m) m) m) 100 (- m) 73 m) 100 (- m) 73 m) 47 m) 35 m) 27 m) 27 m) 16	S Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip EVOTHERM Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity Fine Agg. Angularity	1809 5.70* 114.0 2.588 154.8 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS. #Gyrations: 60 %6Gm	um: 95.8 CE/UPPER BINDER/LOWER
37 1 20 Job Mix 5 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8 #16 #30	37.5 m (19.0 m (12.5 m (2.36 m (4.75 m (2.36 m (1.18 m (500 µ (600 µ	ANDSTONE SCR AGHOUSE FINE AP % Passing m) m) m) m) m) 100(- m) 73 m) 100(- m) 73 m) 100(- m) 23 m) 47 m) 35 m) 27 m) 27 m) 16 m) 27 m) 16 m) 9	S Other Information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHERM Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity Fine Agg. Angularity	1809 5.70* 114.0 2.588 154.8 0.25 4 0.25 4 5.32 1.15 99/96	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS. #Gyrations: 60 %6Gm Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFAC	um: 95.8 CE/UPPER BINDER/LOWER

Pay Items: 424A336,424A336 Standard Remarks: This material has been tested in accordance with ALDOT specifications.

Approved By: Cato, Charlie - 11098

Signatura: (e Armstead, William - 13377

Testing Engineer

Superpave Asphalt Binder Specification

PG Grades Are Designated By Their High And Low Temperature Limits (Celsius). PG 67 - 22

Performance Grade Meets Low Temp Spec At -22C

Meets Specification At Test Temperature Of 67C

PG Grade Selection For Alabama

- Section 424 Mixes , ESAL Ranges A-D : PG 67-22.
- Section 424 Mixes , ESAL Range E : PG 76-22.
- Section 327 Mixes : PG 67-22.
 Section 420 Mixes : PG 76-22.
 Section 423 Mixes : PG 76-22.

Why % Liquid AC Required And % Effective AC?



JMF - Mix Information

Coarse Aggregate Angularity.Fine Aggregate Angularity.

(a lite	2			Alabama	Departm	ent of	Transportation	
CC	9			6				
CARDON OF	Sample Card					Sam	ple Type: Job Control	and the second second
Governor Contract ID: 20210129066					Approval D	ate: 05/:	17/2021	John R. Cooper
							Parles (Area Frenh	Transportation Director
				SIP-0014(549)			Region/Area: Fayette County: GREENE	
				N CONSTRUCTION COMPANY,	INC.		Project Manager: Strawn, Larry -	
inspect		I Code: 42		VE, WEARING			Sampled By: Vinson, Jackie	- 11097
Pro	ducer/Su						Date Sampled: 05/17/2021 Date Tested: 05/17/2021	
		From: ST					Qty Represented: UNK	
	Intende	ed Use: St	JRFACE,	/U.BINDER/L.BINDER/BASE/PI	LW			
				Gyra	atory Com	pactor (HMA4302D)	
	rence Nu		GH-01			Date	Expires: 05/17/2023	
Co	ontractor'	s Address	ST BUI	NN CONSTRUCTION CO., INC.			Date: 05/17/2021	
			611 HI	ELEN KELLER BLVD		P	roducer: ST BUNN CONSTR. CO., INC.	
				ALOOSA, AL 35404			Plant: ALL PLANTS	
		Section		/B, C/D			ded Use: **	
		Aggregate					er Grade: PG 67-22 HUNT	
Me	tric Aggre	egate Size	2:12.51	INi	Spec	ific Grav	ity of AC: 1.037	
% (Ap				Description).#	Source	BPN-9
23		1/2" SLAG	5		1614		ST BUNN CONSTR.; TUSCALOOSA, AL	
19		SAND SANDSTO	NE COR	NIC	1841		BUNN BROTHERS; BROOKWOOD, AL	
37 1		BAGHOU			11005		PLANT	
20		RAP					STOCKPILE #21-5-1	
Job Mix	<:			Other information:			Note:	
	Sieves	% F	Passing	% AC Required	5.70*			
1 1/2"	(37.5 r	nm)	100.00	AC Regd/Ton, lbs/MT, kg	114.0	57.0		
1"	(25.0 m	ากกา)	State 1	Max. Sp. Gr. Mix	2.588		*4.60% PG 67-22	Pr comes from the RAP
3/4"	(19.0 m	nm)		Wt., Ibs/Mass, kg/m ³	154.8	2480.	must be added to the mix. The remaining 1.10 comes from RAS.	0% comes nom me nar.
1/2"	(12.5 r	nm)	100	TSR	0.84		comes from has.	
3/8"	(9.5 r	nm)	100(-	Anti-Strip	0.25	and the second	200-	nm: 95.8
#4	(4.75 r		73	EVOTHERM	N		#Gyrations: 60 %6m	
#8	(2.36 1		47	Effective AC	5.32			
#16	(1.18 r		35	Dust/Asphalt Ratio	1.15		Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFA	CEAURPER SINDER/LOWE
and the second s	(600)		27	Coarse Agg. Angularity	99/96		MIXING TEMP 325*F GH-0130-21 -SURFA	CEPUPPER SINDER/LOUIL
#30	(300		16		45		BINDER/BASE/PATCHING, LEVELING, WIDEN	ING
#50	(150			Agg Bulk SG	2.815			
1		min	-	the second se	17.4		CT INDEX: 72.3 HT-IDT (PSI): 82.7	
#100 #200		μm)	61	% VMA	11.4		CTINDER. 72.5 IN IDI (-1	

Pay Items: 424A336,424A336 Standard Remarks: This material has been tested in accordance with ALDOT specifications.

Approved By: Cato, Charlie - 11098

Signatura: (2.C. Armstead, William - 13377

Armstead, William - 13 Testing Engineer

Coarse Aggregate Angularity

 For ESAL Range C/D Wearing Surface Mix.
 Required CAA Of At Least 85/80.
 85% Has At Least One Fractured Face And 80% Has Two Or More Fractured Faces.

Fine Aggregate Angularity

For ESAL Range C/D Wearing Surface Mix.
Required FAA Of At Least 45.

JMF - Mix Information

• % VMA.

Can be	2		Alabama	Departm	nent of	Transportation	
Clinic L	9		6				
CARSON A			Sample Card			ple Type: Job Control	and the second s
Governo			Approval D	ate: 05/	17/2021	John R. Cooper	
	act ID: 2021012	9066			Region/Area: Fayette	Transportation Director	
		ect No: STPAA-H				County: GREENE	
			IN CONSTRUCTION COMPANY,	INC.		Project Manager: Strawn, Larry -	
inspect		Visis of: SUPERPA				Sampled By: Vinson, Jackie	- 11097
Pro	ducer/Su					Date Sampled: 05/17/2021 Date Tested: 05/17/2021	
		From: STOCKPI				Qty Represented: UNK	
	Intende	d Use: SURFACI	E/U.BINDER/L.BINDER/BASE/PI	LW			
			Gyra	atory Com	pactor ((HMA4302D)	
	rence Nu		130-21		Date	Expires: 05/17/2023	
Co	ontractor's		INN CONSTRUCTION CO., INC.			Date: 05/17/2021	
			IELEN KELLER BLVD		P	roducer: ST BUNN CONSTR. CO., INC.	
			ALOOSA, AL 35404			Plant: ALL PLANTS	
		Section: 424	A/B, C/D			ded Use: **	
		Aggregate: 1/2"				er Grade: PG 67-22 HUNT	
Me	tric Aggre	egate Size: 12.5N		Spec	cific Grav	ity of AC: 1.037	
% (Ap			Description		D. #	Source	BPN-9
23		1/2" SLAG		1614		ST BUNN CONSTR.; TUSCALOOSA, AL	
19		SAND		1841 1809		ST BUNN FOSTERS PIT; FOSTER, AL BUNN BROTHERS; BROOKWOOD, AL	
37		BAGHOUSE FINI		1005		PLANT	
20		RAP				STOCKPILE #21-5-1	
						a first free first and the second second	
-							1
Job Mix	(:		Other information:			Note:	
	Sieves	% Passing	% AC Required	5.70*			
1 1/2"	(37.5 m	nm)	AC Regd/Ton, Ibs/MT, kg	114.0	57.0		
1"	(25.0 n	nm)	Max. Sp. Gr. Mix	2.588		*4.60% PG 67-22 must be added to the mix. The remaining 1.10	1% comes from the RAP
3/4"	(19.0 m	nm)	Wt., Ibs/Mass, kg/m ³	154.8	2480.	comes from RAS.	
1/2"	(12.5 m	nm) 100	TSR	0.84			
A stand to a stand of the	(9.5 m	nm) 100(-	Anti-Strip	0.25		966m	im: 95.8
13/8"	(4.75 m	mm) 73	EVOTHER			#Gyrations: 60 %Gm	
3/8"			Effective AC	5.32			
#4	(2.36 m		Dust/Asphalt Ratio	1.15		Additional Notes:	CE/UPPER BINDER/LOWER
#4 #8	(2.36 m	mm) 35					
#4 #8 #16	(1.18 r			99/96		MIXING TEMP 325*F GH-0130-21 **SURFA	NG
#4 #8 #16 #30	(1.18 r (600	μm) 27	Coarse Agg. Angularity	99/96 45		BINDER/BASE/PATCHING, LEVELING, WIDENI	NG
#4 #8 #16 #30 #50	(1.18 m (600 (300	μm) 27 μm) 10	Coarse Agg. Angularity Fine Agg. Angularity			BINDER/BASE/PATCHING, LEVELING, WIDENI	NG
#4 #8 #16 #30	(1.18 r (600 (300 (150	μm) 27 μm) 10	Coarse Agg. Angularity Fine Agg. Angularity Agg Bulk SG	45		MIXING TEMP 325*F GH-0130-21 - SURFA BINDER/BASE/PATCHING, LEVELING, WIDENI CT INDEX: 72.3 HT-IDT (PSI): 82.7	NG

Pay Items: 424A336,424A336 Standard Remarks: This material has been tested in accordance with ALDOT specifications.

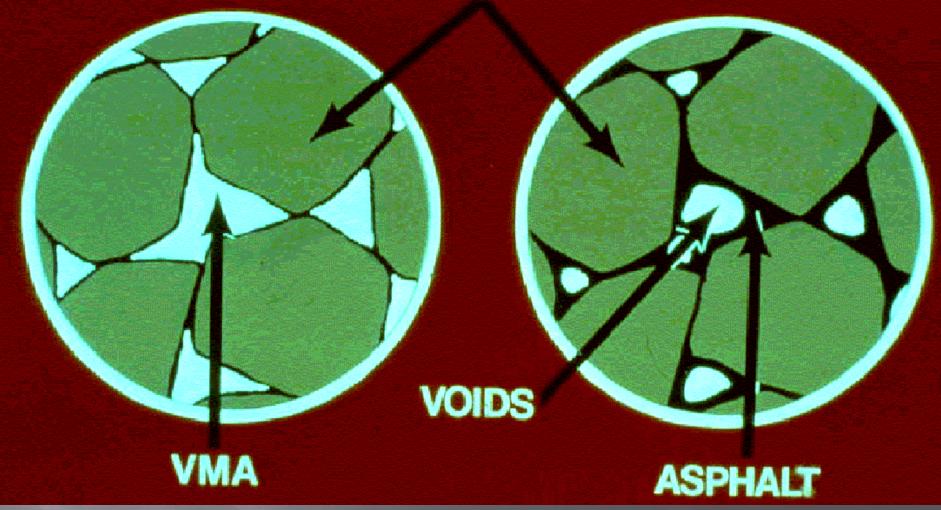
Approved By: Cato, Charlie - 11098

Signatura: (2.2 Armstead, William - 13377 Testing Engineer

What Is VMA?

Voids In Mineral Aggregate.

AGGREGATE



VMA = Air Voids + Volume Of Effective Asphalt

Voids In Mineral Aggregate (VMA)

For ¹/₂" Mix.
Minimum Design VMA Is 15.5%.

JMF - Mix Information

Dust / Asphalt Ratio.

Call and	4		Alabama	Departm	nent of	Transportation		
China D)		Γ	Materials	Testing	Report	(
1 ANS			Sample Card			ple Type: Job Control	and the second s	
Governor	-			Approval D	ate: 05/3	17/2021	John R. Cooper	
		t ID: 20210129	3066			Region/Area: Fayette	Transportation Director	
		t No: STPAA-HS				County: GREENE		
			IN CONSTRUCTION COMPANY,	INC.		Project Manager: Strawn,Larry -		
		is of: SUPERPA				Sampled By: Vinson, Jackie	- 11097	
Producer/Supplier:				Date Sampled: 05/17/2021 Date Tested: 05/17/2022				
	Sampled From: STOCKPILE							
	Intended	Use: SURFACE	U.BINDER/L.BINDER/BASE/P	LW				
				atory Com	pactor (HMA4302D)		
	rence Num		130-21		Date	Expires: 05/17/2023		
Cor	ntractor's		NN CONSTRUCTION CO., INC.			Date: 05/17/2021		
			ELEN KELLER BLVD		P	roducer: ST BUNN CONSTR. CO., INC.		
			ALOOSA, AL 35404			Plant: ALL PLANTS		
		Section: 424 A	(B, C/D			ded Use: **		
		gregate: 1/2"		6		er Grade: PG 67-22 HUNT		
iviet	tric Aggreg	ate Size: 12.5M	and the second se			ity of AC: 1.037		
% (App			Description	1614). #	Source ST BUNN CONSTR.; TUSCALOOSA, AL	BPN-9	
23	1/2" SLAG SAND				ST BUNN CONSTR.; TOSCALOOSA, AL			
10			112/1		ST BUINN FOSTERS PIT- FOSTER AL			
19			N'S	1841		ST BUNN FOSTERS PIT; FOSTER, AL BUNN BROTHERS; BROOKWOOD, AL		
19 37 1	5/	AND ANDSTONE SCR AGHOUSE FINE		1841 1809		ST BUNN FOSTERS PIT; FOSTER, AL BUNN BROTHERS; BROOKWOOD, AL PLANT		
37	5/ B/	ANDSTONE SCR				BUNN BROTHERS; BROOKWOOD, AL		
37 1	5/ B/	ANDSTONE SCR AGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT		
37 1	5/ B/	ANDSTONE SCR AGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT		
37 1	5/ B/	ANDSTONE SCR AGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT		
37 1	5/- B/	ANDSTONE SCR AGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT		
37 1	5/- B/	ANDSTONE SCR AGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT		
37 1	5/- B/	ANDSTONE SCR AGHOUSE FINE				BUNN BROTHERS; BROOKWOOD, AL PLANT		
37 1 20 Job Mix	54 B/ R/	ANDSTONE SCR AGHOUSE FINE AP	Other information:	1809		BUNN BROTHERS; BROOKWOOD, AL PLANT		
37 1 20 Job Mix	S/ B/ R/	ANDSTONE SCR AGHOUSE FINE AP	Other information: % AC Required	5.70*		BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1		
37 1 20 Job Mix	54 B/ R/	ANDSTONE SCR AGHOUSE FINE AP % Passing	Other information: % AC Required AC Reqd/Ton, lbs/MT, kg	1809 5.70* 114.0	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1		
37 1 20 Job Mix 5	SA BJ RJ RJ Sieves	ANDSTONE SCR AGHOUSE FINE AP % Passing n)	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix	1809 5.70* 114.0 2.588	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note:	0% comes from the RAP.	
37 1 20 Job Mix 5 1 1/2"	s B R R R R R R R R R R R R R R R R R R	% Passing n) n)	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³	1809 5.70* 114.0 2.588 154.8	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1	0% comes from the RAP.	
37 1 20 Job Mix. 5 1 1/2" 1"	54 B) R) R) Sieves (37.5 mr (25.0 mr	NDSTONE SCR AGHOUSE FINE AP % Passing n) n)	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix	1809 5.70* 114.0 2.588 154.8 0.84	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note:	0% comes from the RAP.	
37 1 20 Job Mix 5 1 1/2" 1" 3/4"	5/ B) R) Sieves (37.5 mr (25.0 mr (19.0 mr	% Passing n) n) n) n) 200	S Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip	1809 5.70* 114.0 2.588 154.8 0.84 0.25	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS.	0% comes from the RAP.	
37 1 20 Job Mix 5 1 1/2" 1" 3/4" 1/2"	54 B) R) R) R) R) R) R) R) R) R) R) R) R) R)	% Passing n)	S Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip EVOTHER	1809 5.70* 114.0 2.588 154.8 0.84 0.25	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS.		
37 1 20 Job Mix 5 1 1/2" 1" 3/4" 1/2" 3/8"	: : : : : : : : : : : : : : : : : : :	% Passing n)	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHERI Effective AC	1809 5.70* 114.0 2.588 154.8 0.84 0.25 VI 5.32	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gm		
37 1 20 Job Mix 5 1 1/2" 1" 3/4" 1/2" 3/8" #4	5/ B/ R/ R/ R/ R/ R/ R/ R/ R/ R/ R/ R/ R/ R/	% Passing n) 100(- n) 73 n) 47	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHERI Effective AC Dust/Asphalt Ratio	1809 5.70* 114.0 2.588 154.8 0.25 VI 5.32 1.15	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gm	nm: 95.8	
37 1 20 Job Mix 5 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8 #16	2 2 3 3 3 3 7 5 5 1 9 5 1 2 5 0 1 9 5 1 1 2 5 1 1 2 5 1 1 2 5 1 1 2 5 1 1 1 2 5 1 1 1 1	% Passing % Passing n) 30(- n) 73 n) 47 n) 35	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHER: Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity	1809 5.70* 114.0 2.588 154.8 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gm Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFA	nm: 95.8 CE/UPPER BINDER/LOWE	
37 1 20 Job Mix 5 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8 #16 #30	5/ B) R/ R/ R/ R/ R/ R/ R/ R/ R/ R/ R/ R/ R/	NDSTONE SCR AGHOUSE FINE AGHOUSE FINE % Passing n) an) an)	Other information: % AC Required AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHERI Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity	1809 5.70* 114.0 2.588 154.8 0.25 √ 5.32 1.15 99/96 45	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gm	nm: 95.8 CE/UPPER BINDER/LOWE	
37 1 20 Job Mix 5 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8 #16	5/ B) R/ B) R/ R/ R/ R/ R/ R/ R/ R/ R/ R/ R/ R/ R/	NDSTONE SCR AGHOUSE FINE AGHOUSE FINE % Passing n) m) an) an)	Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHERI Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity Fine Agg. Angularity	1809 5.70* 114.0 2.588 154.8 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.1 comes from RAS. #Gyrations: 60 %Gm Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFA	nm: 95.8 CE/UPPER BINDER/LOWER	

Hot-Mix Asphalt Engineer:

Pay Items: 424A336,424A336 Standard Remarks: This material has been tested in accordance with ALDOT specifications.

Approved By: Cato, Charlie - 11098

Signatura: (2.2 Armstead, William - 13377

Testing Engineer

Dust / Asphalt Ratio

 Also Called Dust Proportion Or Dust To Asphalt Content Or Dust To Bitumen Ratio.
 Based On Effective Asphalt Content.
 Why Important?

Dust / Asphalt Ratio

For ¹/₂" Mix.
Dust / Asphalt Ratio Range Of 0.60 To 1.4.

JMF - Mix Information



Call To	2		Alabama	Departm	ent of	Transportation		
CC-	9			Naterials			6	
CPETERS.			Sample Card N	No: 38374		ple Type: Job Control	Contain of	
Kay Ivey Governo	-			Approval Da			John R. Cooper	
Governo		act ID: 2021012	9066				Transportation Director	
	Proje	ect No: STPAA-H	SIP-0014(549)			Region/Area: Fayette County: GREENE		
			IN CONSTRUCTION COMPANY,	INC.		Project Manager: Strawn,Larry -	11589	
Inspect		ysis of: SUPERPA				Sampled By: Vinson, Jackie	- 11097	
Material Code: 424.02_001 Producer/Supplier: Sampled From: STOCKPILE						Date Sampled: 05/17/2021 Date Tested: 05/17/2021		
	Intende	ed Use: SURFACE	U.BINDER/L.BINDER/BASE/PL	w		Qty Represented: UNK		
			Gyra	atory Comp	pactor (HMA4302D)		
ab Refe	rence Nu	mber GH-01	130-21		Date	Expires: 05/17/2023		
Ca	ontractor'	s Address: ST BU	NN CONSTRUCTION CO., INC.			Date: 05/17/2021		
		611 H	ELEN KELLER BLVD		P	roducer: ST BUNN CONSTR. CO., INC.		
			ALOOSA, AL 35404			Plant: ALL PLANTS		
		Section: 424 A	/B, C/D			ded Use: **		
		Aggregate: 1/2"				er Grade: PG 67-22 HUNT		
Me	tric Aggre	egate Size: 12.5N	11/1	Spec	ific Gravi	ity of AC: 1.037		
% (Ap			Description	1.D	.#	Source	BPN-9	
23		1/2" SLAG		1614		ST BUNN CONSTR.; TUSCALOOSA, AL		
19		SAND	2015	1841 1809		ST BUNN FOSTERS PIT; FOSTER, AL BUNN BROTHERS; BROOKWOOD, AL		
37		SANDSTONE SCR BAGHOUSE FINE				PLANT		
20		RAP				STOCKPILE #21-5-1		
	1							
lob Mix	c:		Other information:			Note:		
Job Mix	c: Sieves	% Passing	Other information: % AC Required	5.70*		Note:		
				114.0	57.0			
	Sieves	ոտ)	% AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix	114.0 2.588	57.0	*4.60% PG 67-22	P& comes from the RAP	
1 1/2"	Sieves (37.5 r	חחת) (חות	% AC Required AC Reqd/Ton, lbs/MT, kg	114.0 2.588 154.8	57.0	*4.60% PG 67-22 must be added to the mix. The remaining 1.10	0% comes from the RAP.	
1 1/2" 1"	Sieves (37.5 r (25.0 r	חחת) חחת) חחת)	% AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³	114.0 2.588 154.8 0.84	57.0	*4.60% PG 67-22	% comes from the RAP.	
1 1/2" 1" 3/4" 1/2"	Sieves (37.5 r (25.0 r (19.0 r	nm) nm) nm) nm) 100	% AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip	114.0 2.588 154.8 0.84 0.25	57.0 2480.	*4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS.		
1 1/2" 1" 3/4" 1/2" 3/8"	Sieves (37.5 r (25.0 r (19.0 r (12.5 r	nm) nm) nm) nm) 100 nm) 100(-	% AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip	114.0 2.588 154.8 0.84 0.25	57.0 2480.	*4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS.	0% comes from the RAP. um: 95.8	
1 1/2" 1" 3/4" 1/2" 3/8" #4	Sieves (37.5 r (25.0 r (19.0 r (12.5 r (9.5 r	nm) nm) nm) nm) 100 nm) 100(- nm) 73	% AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip EVOTHERM	114.0 2.588 154.8 0.84 0.25 M 5.32	57.0 2480.	*4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS. #Gyrations: 60 %6m		
1 1/2" 1" 3/4" 1/2" 3/8" #4 #8	Sieves (37.5 r (25.0 r (19.0 r (12.5 r (9.5 r (4.75 r	ກເກ) ກເກ) ກເກ) ກເກ) 100 ກເກ) 100(- ກເກ) 73 ກເກ) 47	% AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip EVOTHERM	114.0 2.588 154.8 0.84 0.25 M 5.32 1.15	57.0 2480.	*4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS. #Gyrations: 60 %Gm	um: 95.8	
1 1/2" 1" 3/4" 1/2" 3/8" #4 #8 #15	Sieves (37.5 r (25.0 r (19.0 r (12.5 r (9.5 r (4.75 r (2.36 r (1.18 r	nm) nm) nm) nm) 100 nm) 100(- nm) 73 nm) 47 nm) 35	% AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip EVOTHERN Effective AC Dust/Asphalt Ratio	114.0 2.588 154.8 0.84 0.25 M 5.32	57.0 2480.	*4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS. #Gyrations: 60 %Gm Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFAG	um: 95.8 CE/UPPER BINDER/LOWE	
1 1/2" 1" 3/4" 1/2" 3/8" #4 #8 #15 #30	Sieves (37.5 r (25.0 r (19.0 r (12.5 r (9.5 r (4.75 r (2.36 r (1.18 r (600	nm) nm) nm) nm) 100 nm) 100(- nm) 73 nm) 47 nm) 35 μm) 27	% AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip EVOTHERN Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity	114.0 2.588 154.8 0.84 0.25 M 5.32 1.15	57.0 2480.	*4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS. #Gyrations: 60 %Gm	um: 95.8 CE/UPPER BINDER/LOWE	
1 1/2" 1" 3/4" 1/2" 3/8" #4 #8 #16 #30 #50	Sieves (37.5 r (25.0 r (19.0 r (12.5 r (9.5 r (4.75 r (2.36 r (1.18 r (600 (300	nm) nm) nm) nm) 100 nm) 100(- nm) 73 nm) 47 nm) 35 μm) 27 μm) 27 μm) 16	% AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip EVOTHERN Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity Fine Agg. Angularity	114.0 2.588 154.8 0.84 0.25 M 5.32 1.15 99/96	57.0 2480.	*4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS. #Gyrations: 60 %Gm Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFAG BINDER/BASE/PATCHING, LEVELING, WIDENI	um: 95.8 CE/UPPER BINDER/LOWER	
1 1/2" 1" 3/4" 1/2" 3/8" #4 #8 #15 #30	Sieves (37.5 r (25.0 r (19.0 r (12.5 r (9.5 r (2.36 r (1.18 r (600 (300 (150	nm) nm) nm) nm) 100 nm) 100(- nm) 73 nm) 73 nm) 35 μm) 35 μm) 27 μm) 16 μm) 9	% AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip EVOTHERN Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity Fine Agg. Angularity	114.0 2.588 154.8 0.84 0.25 M 5.32 1.15 99/96 45	57.0 2480.	*4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS. #Gyrations: 60 %Gm Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFAG	um: 95.8 CE/UPPER BINDER/LOWEF	

Hot-Mix Asphalt Engineer:

Pay Items: 424A336,424A336 Standard Remarks: This material has been tested in accordance with ALDOT specifications.

Approved By: Cato, Charlie - 11098

Signatura: (2.C. Armstead, William - 13377

Testing Engineer

What Is TSR?

Tensile Strength Ratio.

Tensile Strength Ratio (TSR)

For ¹/₂" Mix.
Minimum TSR Value Of At Least 0.80.

JMF - Mix Information

Maximum Specific Gravity Of Mix.Aggregate Bulk Specific Gravity.

Can to	2		Alabama	a Departm	ent of	Transportation		
	9			Materials			(Change)	
CLERCE S			Sample Card			ple Type: Job Control	and the second s	
Kay Ivey				Approval D			John R. Cooper	
Governor		act ID: 20210129	DOGE				Transportation Director	
		ct No: STPAA-HS				Region/Area: Fayette		
Pri			N CONSTRUCTION COMPANY	INC.		County: GREENE Project Manager: Strawn,Larry -	11590	
Inspect	ion Analy	sis of: SUPERPA	VE, WEARING			Sampled By: Vinson, Jackie	- 11097	
		Code: 424.02_0	01			Date Sampled: 05/17/2021		
Producer/Supplier: Sampled From: STOCKPILE						Date Tested: 05/17/2021		
			U.BINDER/L.BINDER/BASE/P	1367		Qty Represented: UNK		
					pactor (HMA4302D)		
ab Refer	rence Nun	mber GH-01				Expires: 05/17/2023		
			NN CONSTRUCTION CO., INC.		Dute	Date: 05/17/2021		
	nerector 3		ELEN KELLER BLVD			roducer: ST BUNN CONSTR. CO., INC.		
			ALOOSA, AL 35404			Plant: ALL PLANTS		
		Section: 424 A			Intern	ded Use: **		
De	av Siza A	ggregate: 1/2"	, 0, 0, 0			r Grade: PG 67-22 HUNT		
		gate Size: 12.5M	354	Spec		ity of AC: 1.037		
		Bore bizer zzibit					1	
% (App 23		/2" SLAG	Description	1614). #	Source ST BUNN CONSTR.; TUSCALOOSA, AL	BPN-9	
		AND		1841				
						IST BUNN FOSTERS PHT: FOSTER, AL		
			N'S			ST BUNN FOSTERS PIT; FOSTER, AL BUNN BROTHERS; BROOKWOOD, AL		
19 37 1	5	ANDSTONE SCR		1809				
37	5	ANDSTONE SCR				BUNN BROTHERS; BROOKWOOD, AL		
37 1	5	ANDSTONE SCR				BUNN BROTHERS; BROOKWOOD, AL PLANT		
37 1	5	ANDSTONE SCR				BUNN BROTHERS; BROOKWOOD, AL PLANT		
37 1	5	ANDSTONE SCR				BUNN BROTHERS; BROOKWOOD, AL PLANT		
37 1	5	ANDSTONE SCR				BUNN BROTHERS; BROOKWOOD, AL PLANT		
37 1	5	ANDSTONE SCR				BUNN BROTHERS; BROOKWOOD, AL PLANT		
37 1	5	ANDSTONE SCR				BUNN BROTHERS; BROOKWOOD, AL PLANT		
37 1 20	SBR	ANDSTONE SCR BAGHOUSE FINE RAP	S Other information:	1809		BUNN BROTHERS; BROOKWOOD, AL PLANT		
37 1 20 Job Mix	SBR	ANDSTONE SCR BAGHOUSE FINE RAP	S			BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1		
37 1 20 <u>Job Mix</u>	SBR	ANDSTONE SCR BAGHOUSE FINE BAP % Passing	S Other information:	1809	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1		
37 1 20 Job Mix 5 1 1/2"	Sieves	ANDSTONE SCR BAGHOUSE FINE RAP % Passing Im)	S Other information: % AC Required	5.70*	57.0	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note:		
37 1 20 Job Mix 1 1/2" 1"	:: Sieves (37.5 m (25.0 m	ANDSTONE SCR AGHOUSE FINE AP % Passing im) im)	S Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg	1809 5.70* 114.0	57.0 2480.	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.10	D% comes from the RAP.	
37 1 20 Job Mix 5 1 1/2" 1" 3/4"	:: Sieves (37.5 m (25.0 m (19.0 m	ANDSTONE SCR AGHOUSE FINE AP % Passing m) m) m)	S Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix	1809 5.70* 114.0 2.588	57.0 2480.	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note:	0% comes from the RAP.	
37 1 20 Job Mix 5 1 1/2" 1" 3/4" 1/2"	5 5 5 (37.5 m (25.0 m (19.0 m (12.5 m	ANDSTONE SCR AGHOUSE FINE AP % Passing m) m) m) m) 100	S Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max, Sp, Gr, Mix Wt., Ibs/Mass, kg/m ³ TSR	1809 5.70* 114.0 2.588 154.8	57.0 2480.	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS.		
37 1 20 Job Mix 5 1 1/2" 1" 3/4" 1/2" 3/8"	37.5 m (19.0 m (12.5 m (9.5 m	ANDSTONE SCR AGHOUSE FINE AP % Passing m) m) m) 100 m) 100 -	S Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max, Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR	1809 5.70* 114.0 2.588 154.8 0.84 0.25	57.0 2480.	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS.	D% comes from the RAP.	
37 1 20 Job Mix 9 1 1/2" 1" 3/4" 1/2" 3/8" #4	:: Sieves (37.5 m (25.0 m (19.0 m (12.5 m (9.5 m (4.75 m	ANDSTONE SCR AGHOUSE FINE AP % Passing im) im) im) im) im) im) 100 im) 100(- im) 73	S Other information: % AC Required AC Reqd/Ton, lbs/MT, kg Max. Sp. Gr. Mix Wt., lbs/Mass, kg/m ³ TSR Anti-Strip EVOTHER	1809 5.70* 114.0 2.588 154.8 0.84 0.25	57.0 2480.	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 Note: *4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS.		
37 1 20 Job Mix 5 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8	:: Sieves (37.5 m (25.0 m (19.0 m (12.5 m (9.5 m (4.75 m (2.36 m	ANDSTONE SCR AGHOUSE FINE AP % Passing im) im) im) im) im) im) im) im) im) im)	S Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHER Effective AC	1809 5.70* 114.0 2.588 154.8 0.24 0.25	57.0 2480.	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS. #Gyrations: 60 %Gm	nm: 95.8	
37 1 20 Job Mix 9 1 1/2" 1" 3/4" 1/2" 3/8" #4	37.5 m (25.0 m (19.0 m (12.5 m (4.75 m (2.36 m (1.18 m	ANDSTONE SCR AGHOUSE FINE AP % Passing im) im) im) im) im) im) im) im) im) im)	S Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHER Effective AC Dust/Asphalt Ratio	1809 5.70* 114.0 2.588 154.8 0.25 M 5.32 1.15	57.0 2480.	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS. #Gyrations: 60 %6Gm Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFA	nm: 95.8 CE/UPPER BINDER/LOWE	
37 1 20 Job Mix 5 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8	37.5 m (19.0 m (12.5 m (4.75 m (2.36 m (1.18 m (600 µ	ANDSTONE SCR AGHOUSE FINE AP % Passing im) im) im) im) im) im) im) im) im) im)	S Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHER Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity	1809 5.70* 114.0 2.588 154.8 0.25 M 5.32 1.15 99/96	57.0 2480.	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS. #Gyrations: 60 %6Gm Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFA	nm: 95.8 CE/UPPER BINDER/LOWEF	
37 1 20 Job Mix 5 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8 #16	37.5 m (25.0 m (19.0 m (12.5 m (4.75 m (2.36 m (1.18 m	ANDSTONE SCR AGHOUSE FINE AP % Passing m) m) m) m) 100(- m) 100(- m) 73 m) 100(- m) 73 m) 35 m) 35 m) 27 m) 27 m) 27 m) 16	S Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHER Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity Fine Agg. Angularity	1809 5.70* 114.0 2.588 154.8 0.25 M 5.32 1.15 99/96 45	57.0 2480.	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS. #Gyrations: 60 %Gm	nm: 95.8 CE/UPPER BINDER/LOWEF	
37 1 20 Job Mix 5 1 1/2" 1" 3/4" 1/2" 3/8" #4 #8 #16 #30	37.5 m (19.0 m (12.5 m (4.75 m (2.36 m (1.18 m (600 µ	ANDSTONE SCR AGHOUSE FINE AP % Passing im) im) im) im) im) 100 - im) 100(- im) 73 im) 100(- im) 73 im) 207 im) 35 im) 27 im) 27 im) 27 im) 27 im) 27 im) 27 im) 27 im) 27	S Other information: % AC Required AC Reqd/Ton, Ibs/MT, kg Max. Sp. Gr. Mix Wt., Ibs/Mass, kg/m ³ TSR Anti-Strip EVOTHER Effective AC Dust/Asphalt Ratio Coarse Agg. Angularity	1809 5.70* 114.0 2.588 154.8 0.25 M 5.32 1.15 99/96	57.0 2480.	BUNN BROTHERS; BROOKWOOD, AL PLANT STOCKPILE #21-5-1 *4.60% PG 67-22 must be added to the mix. The remaining 1.10 comes from RAS. #Gyrations: 60 %6Gm Additional Notes: MIXING TEMP 325*F GH-0130-21 **SURFA	nm: 95.8 CE/UPPER BINDER/LOWER	

Hot-Mix Asphalt Engineer:

Pay Items: 424A336,424A336 Standard Remarks: This material has been tested in accordance with ALDOT specifications.

Approved By: Cato, Charlie - 11098

Signatura: (2.C Armstead, William - 13377

Armstead, William - 13 Testing Engineer

Specific Gravity

What Is Definition Of Specific Gravity?

Specific Gravity

 Specific Gravity = Weight / Volume
 Based On Water At 4C Or 39.2F - Heaviest Weight Of Water - 1.000

Specific Gravity

Alabama Aggregate Gravity Range : 2.550 – 3.600
 Liquid AC Gravity : 1.03 – 1.05

Pavement Design Program

- PaveXpress
- www.pavexpressdesign.com
- Accessible Via Web And Mobile
- Free, No Cost To Use
- Based On AASHTO Pavement Design Equations
- User Friendly
- Share, Save And Print Project Designs
- Interactive Help And Resource Links

AAPA Publications

www.alasphalt.com

- Asphalt Pavement Design Guide For Low-Volume Roads And Parking Lots
- Alabama Porous Pavement Parking Lots Guide Specifications
- OGFC Best Practices Guidelines

Questions ?????



ALABAMA ASPHALT PAVEMENT ASSOCIATION



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