

Thomas Foley Commissioner Safety & Site Support Division Office of Quality Assurance

Alla Ayzenshtat Deputy Commissioner Safety & Site Support

Concrete and Asphalt Generic Mix Design Approval # 2023 - 133

30-30 Thomson Avenue Long Island City, NY 11101 Date: 12/15/2023

Tel. 718 / 391-1624 www.nyc.gov/ddc To: Matthew D. Harrison,

Green Asphalt

From:

Juan Martinez, PE, Director Office of Quality Assurance

Date Submitted: 12/13/2023

Plant: Green Asphalt

NYSDOT Facility Numbers: H0385

Laboratory: MT Group - Intertek

Mix Design Type: 3RA Binder - 50% RAP

Generic Mix Design Serial Number: Green Asphalt/3RA/Binder/Generic/NYCDDC/12/23/133

Generic Mix Design Date: 11/20/2023

Generic Mix Design Expiration Date: 12/31/2025

Comments: 1) This mix design is approved only for the NYSDOT Facility Numbers listed above.

 Approval is valid only if facilities listed above remain on the DDC OQA Approved list of Concrete and/or Asphalt Plants.

3) Approval is limited to the material sources and aggregate sizes shown on the mix design.

4) Dosage of admixtures may be adjusted by the plant within manufacturer's written guidelines, but admixtures not listed may not be added.

Nader Shahat

Reviewed & prepared by: Scott Cruz, QA Inspector

Recommended for Acceptance by: Nader Shehata, PE, Deputy Director



ASPHALT JOB MIX FORMULA SHEET - 3 RA BINDER MIX

PLANT NAME:	Green Asphalt
NYSDOT FACILITY #:	H0385
PLANT ADDRESS:	37-98 Railroad Ave
	Long Isla: d City, NY 11101

MIX DESIGN DATE:	11/20/2023
PREPARED BY:	Alex Cantos
COMPANY:	MT Group
PLANT OC MGR:	Matthew Harrison

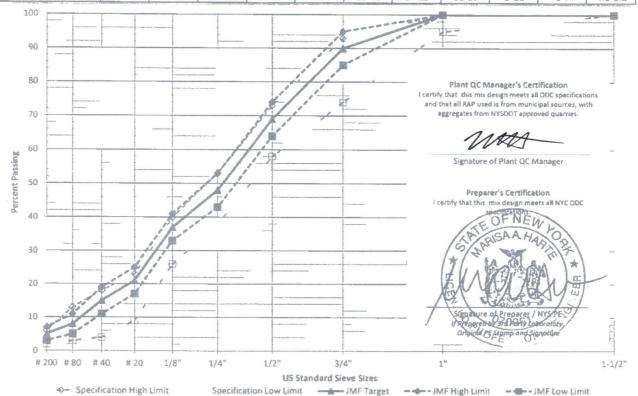
1.			March Street, Street, St. St. Street, St. St. Street, St. St. Street, St.	NYSDOT	High	Agg.		-
Item	Supp	olier / Qua	arry	Source	Friction	Blend %	Mix %	Lbs / Ton
							0.0%	0
#67 Stone	A. Colar	usso & Se	on, Inc	8-17R	Yes	40.0%	39.2%	785
							0.0%	0
							0.0%	0
Natural Sand	North Ame	erican Ag	gregates	10-105F2	N/A	10.0%	9.8%	196
					N/A		0.0%	0
5/16" RAP .	Gre	en Aspha	alt	N/A	Yes	20.0%	19.6%	392
	RAP % As	phalt:	4.0%		RA	PAC	0.8%	16
All RAP to be from blue	Bank Salat (199)		a state of the	iles.	RAP Ag	gregate	18.8%	376
Fine RAP	- Gre	en Aspha	alt	N/A	Yes	30.0	29.4%	589
Parameter Control	RAP % As	phalt:	6.1%		RA	PAC	1.8%	36
All RAD to be promised	Reput Education			a de	RAP Ag	gregate	27.6%	553
Virgin Asphalt	Grade:	PG6	4-22	SG (G _b):	1.031		1.9%	38
Total Asphalt Conte	ent (P _b):	17 18 8					4.5%	90
						100.0%	100.00	3,000

APPROVED"
DDC - Office of Quality Assurance
12/12/23 Reviewed By: S.C.
No: 2023-133

GreenAsphalt/3RA/Binder/Generic/NYCDDC/12/23/133 Expiration: 12/31/2025

GABES SERIAL NUMBER & EXPIRATION DATE

	ANTONIO DE PROPERTO DE LA COMPANSIONA DEL COMPANSIONA DE LA COMPAN					MATERIAL PROPERTY.					
Sieve Size	1-1/2"	1"	3/4"	1/2"	1/4"	1/8"	# 20	# 40	# 80	# 200	Pb
Specification Limits	100	95-100	74-93	58-73	38-53	26-40	9-23	4-18	3-13	2-6	4.0-60
JMF Target	100	100	90	69	48	37	21	15	8	5	4.5
JMF Range	100	100	85-95	64-74	43-53	33-41	17-25	11-19	5-11	3-7	4.0-5.2





AGGREGATE SPECIFIC GRAVITY & COMBINED GRADATION WORKSHEET - 3 RA BINDER MIX

	P	-				AVEL	age DII	Grada	HORS				_			
	Not	Used	#67	Stone	Not Used		Not	Not Used		al Sand	Not Used		5/16" RAP		Fine RAP	
Sieve	% Ret	% Pass	% Ret.	% Pass	% Ret.	% Pass	% Ret	% Pass	% Ret.	% Pass	% Ret.	% Pass	% Ret.	% Pass	% Ret.	% Pas
1.5"		100.0	0.0	100.0		100.0		100.0	0.0	100.0		100.0	0.0	100.0	0.0	100.0
1"		100.0	0.0	100.0		100.0		100.0	0.0	100.0		100.0	0.0	100.0	0.0	100.0
3/4"		100.0	25.6	74.4		100.0		100.0	0.0	100.0		100.0	0.0	100.0	0.0	100.0
1/2"		100.0	515	229		100.0		100.0	0.0	100.0		100.0	0.0	100.0	0.0	100.0
1/4"		100.0	16.7	6.2		100.0		100.0	0.0	100.0		100.0	63.4	36.6	5.6	94.4
1/8"		100.0	5.1	1.1		100.0		100.0	4.9	95.1		100.0	18.6	18.0	15.7	78.7
#20		100.0	0.0	1.1		100.0		100.0	5.1	60.0		100.0	9.7	8.3	37.4	413
#40		100.0	0.0	1.1		100.0		100.0	25.5	34.5		100.0	0.0	8.3	8.8	32.5
#80		100.0	0.0	1.1		100.0		100.0	29.4	5.1		100.0	0.0	8.3	13.4	19 1
#200		100.0	0.0	1.1		100.0		100.0	2.3	2.8		100.0	0.0	8.3	9.9	9.2
Pan			1.1			100		6.40	2.8	1000000			8.3		9.2	
Totals	0.0		100.0		0.0	10000	0.0		100.0		0.0		100.0	0.000	100.0	1000
		distancencencon		Americani	TOUR DESIGNATION OF THE PARTY O	Disslessenterensentered		American	and the same of	fam.too.oo.			CHEST PROPERTY.	-		and reasons to be designed by the second
	Stockpile	es Sample	d By:	Alex an	tos			Date San	noled:	11/3	(2023	1				

Coarse Aggregate Specific Gravity per ASTM C127

Discard portion of sample that passes the 1/4 sieve.

Only Perform this test if aggregate is 10% or more coarse (less than 90% passing the 1/4" sieve)

	processing the same of the sam	THY PENJORNA LINS LES	st if addreduce is 1	070 01 111015 (0017)	r fless than 50% pas	sing the 1/4 sieve	?)	
	Not Used	#67 Stone	Not Used	Not Used	Natural Sand	Not Used	5/16" RAP	Fine RAP
% Coarse Agg.		93.8%		***	0.0%	* 1 ×	63.4%	5.6%
Test Required?	NO	YES	NO	NO	NO	NO	YES	NO
A) Wt. in Air		3156.8					3236 4	ACT AND ADDRESS OF THE PARTY OF
B) Wt. SSD		3174 1				***************************************	3247 6	
C) Wt. in Water		2005 8				And the second s	2063 7	
G,b (A/(B-C)		2.702	***	***		***	2.734	***
G. (A/(A-C)	1	2 743					2.750	

Fine Aggregate Specific Gravity per ASTM C128

Oiscard portion of sample that does not pass the #4 sieve Only Perform this test if 10% or mare passes the 1/4" Sieve

· ·		QI.	ny Perjorm this tes	it if 10% or mare p	passes the 1/4" Sieve			
	Not - sed	#67 Stone	Not Used	Not Used	Natural Sand	Not Used	5/16" RAP	Fine RAP
% Fine Agg.		6.2%		***	100.0%	* = =	36.6%	94,4%
Test Required?	NO	NO	NO	NO	YES	NO	YES	YES
A) Wt. in Air					498.4		499.	502.5
B) Wt. Flask + Water					1451.6		1451	1451.6
C) Wt. Flask + Water + Sample					1764.5	ndussambinustrianaeuminakauruminakauskii	1769 4	1770 7
S) Wt. SSD					501.3		501 9	504 1
G _{sb} (A/(B+S+1)	•				2.645	***	2.714	2.716
G., (A/(B+A-C)			***		2.687	***	2.748	2.740

Combined Aggregate Specific Gravity

		(FVMCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	Contraction of the Contraction o	Public de Processor en consumerar en consume						
		Not ⊍sed	#67 Stane	Not Used	Not Used	Natural Sand	Not Used	5/16" RAP	Fine RAP	-
12	mbined G _{1b}	-	2.702	-		2.645	***	2.726	2 716	1
C	ombined G _a		2.743		***	2.687	***	2.755	2 740	

S. G. Technic an:	Alan Cambas	D-4-7-4-1	a fe tanan
3. G. LECHING an.	Alex Cantos	Date Tested:	1/6/2023

Combined Average Gradations, % Passing

Bn	Agg Blend	1.5"	1"	3/4"	1/2"	1/4'	1/8"	#20	#40	480	#200
Not Used	0.0%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
#57 Stone	40.0%	40.0	40.0	29.8	9.2	2.5	0.4	0.4	0.4	0.4	0.4
Not Used	0.0%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not Used	0.0%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Natura Sand	10.0%	10.0	10.0	10.0	10.0	10.0	9.5	6.0	3.5	0.5	0.3
Not Used	0.0%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/16" RAP	20.0%	20.0	20.0	20 0	20.0	7.3	3.6	1.7	1.7	1.7	1.7
Fine RAP	30.0%	30.0	30.0	30.0	30.0	28.3	23.6	12.4	9.8	5.7	2.8
Total	100.0%	100.0	100.0	89.8	69.2	48.1	37.2	20.5	15.3	8.3	5.1
Specification Limits		100	95-100	74-93	58 73	38-53	26-40	9-23	4-18	3-13	2-6



ASPHALT TRIAL GRADATION WORKSHEET - 3 RA BINDER MIX

BATCH 1	Green Asphalt				NYSDOT	ACILITY	H.	H0385			MIX DES	GN DATE		11/20/202	23
BATCH 1							District Control of the Control		The second secon	,			manuscraph (1000)	Advancement	
	Batch P _b														
JAN CITY	Batch Grams.	12					Batch	Weights,	Retained	on Sieve	- Grams				
D:-	Agg.	Mix	Batch	Asph				The second secon						T	-
Bin	Blend	Blend	Grams	Grams	15	1	3/4	1/2	1/4	1/8	#20	#40	#80	#200	Pan
Not Used	0.0%	0.0%	0.0		00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67 Stone	40.0%	38.5%	494 1		00	THE RESIDENCE AND ADDRESS OF THE PERSON NAMED AND ADDRESS OF T	market and the state of the sta	****	OCCUPATION OF THE PERSON NAMED IN	THE RESIDENCE PROPERTY.	STREET, SQUARE, STREET, SQUARE,	_	THE RESERVE AND PERSONS NAMED IN	and the same of th	and the last of th
AND REAL PROPERTY AND ADDRESS OF THE PARTY O		-	THE RESERVE AND ADDRESS OF THE PERSON NAMED IN			0.0	126 5	254.5	82 5	25.2	0.0	0.0	0.0	0.0	5.4
lot Used	0.0%	0.0%	00	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
lot Used	0.0%	0.0%	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vatural Sand	10.0%	9.7%	1235	1000	0.0	0.0	0.0	0.0	0.0	6.1	43.4	31.5	36.3	2.8	3.5
Not Used	0.0%	0.0%	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
/16" RAP	20.0%	20.1%	257 3	10 3	0.0	0.0	0.0	0.0	163 1	47.9	25.0	0.0	0.0	0.0	11.1
Fine RAP	30.0%	30.8%	394.6	24 1	0.0	0.0	0.0	0.0	22 1	62 0	147.6	34.7	annual resource and the same of	NAME AND ADDRESS OF THE OWNER, TH	The state of the s
	30.07	and the last of th	-		0.0	0.0	0.0	0.0	44.1	62 U	147.0	34.7	52.9	39.1	12.2
/irgin Asphalt	-	0.8%	10.4	10 4				NAME OF TAXABLE PARTY.	and the second second	20.000000					
Total Mix	100.0%	100.0%	1280.0	44 8	0.0	0.0	126 5	254 5	267 8	141 1	215.9	56.2	89.2	419	32.2
				3 1/19	Andrewson and the Parket	- Commission of the Commission		CONTROL STATEMENT				Name and Address of the Owner, where the Owner, which is the Own			
	Batch Pa	4													
BATCH 2	-	-													
	Batch Grams:	124					Batch	Weights,	Retained	on Sieve	- Grams				
D:-	Agg.	Mix	Batch	Asph											
Bin	Blend	Blend	Grams	Grams	15	1	3/4	1/2	1/4	1/8	#20	#40	#80	#200	Pan
Pat Head	The same of the sa	AND THE PROPERTY OF THE PARTY O	AND DESCRIPTION OF THE PARTY.	Granis	0.0	0.0	0.0	0.0	0.0						
Vot Used	0.0%	-	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167 Stone	40.0%	-	4915		0.0	0.0	125 8	253 1	82 1	25 1	0.0	0.0	0.0	0.0	5.4
Not Used	0.0%	0.0%	0.0	1923.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not Used	0.0%	0.0%	0.0	10000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vatural Sand	10.0%	-	122.9		0.0	0.0	0.0	0.0	0.0	6.0	43.1	31.3	36.1	2.8	3.4
		-	parameters and the same of		-	NAMES OF TAXABLE PARTY.	-	DEFECTOR OF THE PARTY OF T	-	-	-	-	THE PERSON NAMED IN	-	THE RESERVE OF THE PERSON NAMED IN
Not Used	0.0%	-	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/16" RAP	20.0%	20.0%	256.0	10 2	0.0	0.0	0.0	0.0	162 3	47.6	24.8	0.0	0.0	0.0	11.0
Fine RAP	30.0%	30.7%	392 6	23 9	0.0	0.0	0.0	0.0	22 0	61 6	146.8	34.5	52.6	38.9	12.2
Virgin Asphalt	10000000	1 3%	17 0	17.0	THE RESERVE	127520000	0.0	SAND MODE	100000000000000000000000000000000000000	Ser Georgie de	2 70.0	34.3	32.0	30.3	22.2
CONTRACTOR OF THE PARTY OF THE	DESCRIPTION OF THE PERSONS ASSESSMENT	THE REAL PROPERTY.	SECURIOR STREET,	NAME AND ADDRESS OF THE OWNER, TH		-	-	-			-	-		-	
Total Mix	100.0%	100.0%	1280.0	51 2	0.0	0.0	125.8	253 1	266 4	140 3	214.8	65.9	88.7	41.7	32.0
				4.00%					to be a second second second						
	Batch Ph	4													
BATCH 3	AND DESCRIPTION OF THE PERSON NAMED IN COLUMN 2 IS NOT THE PERSON	-4													
	Batch Grams:	12					Batch	Weights,	Retained	on Sieve	Grams				
*	Agg.	Mix	Batch	Asph										T	
Bin		0000000			15	1	3/4	1/2	1/4	1/8	#20	#40	#80	#200	Pan
The second secon	Blend	Blend	Grams	Grams	Miles and a second	-	-	-	and the same of th		THE REAL PROPERTY.	_	-		-
Not Used	0.0%	0.0%	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
#67 Stone	40.0%	38.2%	489.0		0.0	0.0	125.2	251 8	81 7	24.9	0.0	0.0	0.0	0.0	5.4
Not Used	0.0%	0.0%	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not Used	0.0%	0.0%	0.0	10000000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Natural Sand	10.0%	-	promotorous and the contract of the contract o		-	-	and the second second	MCONTACT THREE PLANS	-	-	NAME AND ADDRESS OF TAXABLE PARTY.	PHOTO DESCRIPTION OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLU	_		
The second liverage of the second liverage and the sec			122.2		0.0	0.0	0.0	0.0	0.0	6.0	42.9	31.2	35.9	2.8	3.4
Not Used	0.0%	0.0%	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/16" RAP	20.0%	19.9%	254.7	10.2	0.0	0.0	0.0	0.0	161 5	47.4	24.7	0.0	0.0	0.0	11.0
						PARTY NAMED IN	-		THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN	60.3	146.1	34.4	52.3	20.7	PERSONAL PROPERTY AND ADDRESS OF THE PARTY AND
Fine RAP	30.0%	-	and the second second second	Security Sections (Section 1)	0.0	0.0	0.0	0.0	21.9						121
AND DESCRIPTION OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED I	30.0%	30.5%	390 5	23.8	0.0	0.0	0.0	0.0	21 9	61 3	270.2	39.9	34.3	38.7	12.1
Virgin Asphalt	Price of	30.5%	390 5 23.6	23.8 23.6										DESCRIPTION OF	12.1
Fine RAP Virgin Asphalt Total Mix	30.0%	30.5%	390 5	23.8	0.0	0.0		251 8	21 9 265 0	139.6	213.7	65.5	88.3	41.5	31.9
Virgin Asphalt	Price of	30.5%	390 5 23.6	23.8 23.6										DESCRIPTION OF	
Virgin Asphalt Total Mix	100.0%	30.5% 1.8% 100.0%	390 5 23.6	23.8 23.6 57.6										DESCRIPTION OF	
Virgin Asphalt Total Mix	100.0% Batch P ₆	30.5% 1.8% 100.0%	390 5 23.6	23.8 23.6 57.6			125.2	251 8	265 0	139.6	213.7			DESCRIPTION OF	
Virgin Asphalt	100.0%	30.5% 1.8% 100.0%	390 5 23.6	23.8 23.6 57.6			125.2	251 8	265 0		213.7			DESCRIPTION OF	
Virgin Asphalt Total Mix BATCH 4	100.0% Batch P ₆	30.5% 1.8% 100.0%	390 5 23.6	23.8 23.6 57.6	0.0	0.0	125.2 Batch	251 8 Weights,	265 0 Retained	139.6 on Sieve	213.7 - Grams	65.5	88.3	41.5	31.9
Virgin Asphalt Total Mix	Batch P _o Batch Grams: Agg.	30.5% 1.8% 100.0% 5. 128	390 5 23.6 1280 0	23.8 23.6 57.6 4 505			125.2	251 8	265 0	139.6	213.7			DESCRIPTION OF	
Virgin Asphalt Total Mix BATCH 4 Bin	Batch Po Batch Grams: Agg. Blend	30.5% 1.8% 100.0% 5. 128 Mix Blend	390 5 23.6 1280 0 Batch Grams	23.8 23.6 57.6 4 505	1.5	0.0	125.2 8atch	251 8 Weights,	265 0 Retained	139.6 on Sieve	213.7 - Grams	65.5	88.3 #80	#200	31.9 Pan
Virgin Asphalt Total Mix BATCH 4 Bin Nat Used	Batch Po Batch Grams: Agg. Blend	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0%	390 5 23.6 1280 0 Batch Grams	23.8 23.6 57.6 4 505	1.5	0.0	125.2 8atch 3/4	251 8 Weights, 1/2'	265 0 Retained	139.6 on Sieve 1/8	213.7 - Grams #20	#40 0.0	#80	#200	31.9 Pan 0.0
Virgin Asphalt Fotal Mix BATCH 4 Bin Vot Used #67 Stone	Batch Po Batch Grams: Agg. Blend	30.5% 1.8% 100.0% 5. 128 Mix Blend	390 5 23.6 1280 0 Batch Grams	23.8 23.6 57.6 4 505	1.5	0.0	125.2 8atch	251 8 Weights,	265 0 Retained	139.6 on Sieve	213.7 - Grams	65.5	88.3 #80	#200	31.9 Pan
Virgin Asphalt Fotal Mix BATCH 4 Bin Vot Used #67 Stone	Batch Po Batch Grams: Agg. Blend	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0%	390 5 23.6 1280 0 Batch Grams	23.8 23.6 57.6 4 505	1.5	0.0	125.2 8atch 3/4	251 8 Weights, 1/2'	265 0 Retained	139.6 on Sieve 1/8	213.7 - Grams #20	#40 0.0	#80	#200	31.9 Pan 0.0
Virgin Asphalt Fotal Mix BATCH 4 Bin Viot Used 167 Stone Not Used	Batch P _o Batch Grams: Agg. Blend 0.0%	30.5% 1.8% 1.00.0% 5. 128 Mix Blend 0.0% 38.0% 0.0%	390 5 23.6 1280 0 Batch Grams 0.0 486.4	23.8 23.6 57.6 4 505	1.5 0.0	0.0 1 0.0 0.0 0.0	125.2 8atch 3/4 0.0 124.5 0.0	251 8 Weights, 1/2 0.0 250.5 0.0	265 0 Retained 1/4* 0.0 81.2 0.0	139.6 on Sieve 1/8 0.0 24.8 0.0	213.7 - Grams N20 0.0 0.0 0.0	#40 0.0 0.0	#80 0.0 0.0 0.0	#200 0.0 0.0	βan 0.0 5.4 0.0
Virgin Asphalt Fotal Mix BATCH 4 Bin Vot Used 467 Stone Not Used Vot Used	Batch Pt. Batch Grams: Agg. Blend 0.0% 40.0% 0.0% 0.0%	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.3% 38.0% 0.0%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0	23.8 23.6 57.6 4 505	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	125.2 8atch 3/4 0.0 124.5 0.0	251 8 Weights, 1/2 0.0 250.5 0.0	265 0 Retained 1/4" 0.0 81.2 0.0 0.0	139.6 d on Sieve 1/8 0.0 24.8 0.0 0.0	213.7 - Grams #20 0.0 0.0 0.0	#40 0.0 0.0 0.0 0.0	#80 0.0 0.0 0.0	#200 0.0 0.0 0.0 0.0	Pan 0.0 5.4 0.0
BATCH 4 Bin Not Used	Batch P ₀ Batch P ₀ Batch Grams: Age. Blend 0.099 40.09 0.099 10.099	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 0.0%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 0.0	23.8 23.6 57.6 4 505	1.5 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0	125.2 8atch 3/4 0.0 124.5 0.0 0.0	251 8 Weights, 1/2 0.0 250.5 0.0 0.0	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0	1/8 0.0 24.8 0.0 0.0 6.0	213.7 2 - Grams M20 0.0 0.0 0.0 0.0 42.7	#40 0.0 0.0 0.0 0.0 31.0	#80 0.0 0.0 0.0 0.0 35.8	#200 0.0 0.0 0.0 0.0 0.0 2.8	Pan 0.0 5.4 0.0 0.0
BATCH 4 Bin Not Used	Batch P ₀ . Batch Grams: Age. Blend 0.091 40.090 0.090 10.000	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 9.5% 0.0%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 0.0	23.8 23.6 57.6 4 505 Asph. Grams	1.5 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0	8atch 3/4 0.0 124.5 0.0 0.0 0.0	251 8 Weights, 1/2 0.0 250.5 0.0 0.0 0.0	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 0.0	139.6 d on Sieve 1/8 0.0 24.8 0.0 0.0 6.0	213.7 2 - Grams M20 0.0 0.0 0.0 0.0 42.7 0.0	#40 0.0 0.0 0.0 0.0 31.0 0.0	#80 0.0 0.0 0.0 0.0 35.8	#200 0.0 0.0 0.0 0.0 0.0 2.8 0.0	Pan 0.0 5.4 0.0 0.0 3.4
BATCH 4 Bin Not Used	Batch P ₀ Batch P ₀ Batch Grams: Age. Blend 0.099 40.09 0.099 10.099	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 9.5% 0.0%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 0.0	23.8 23.6 57.6 4 505	1.5 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0	8atch 3/4 0.0 124.5 0.0 0.0 0.0	251 8 Weights, 1/2 0.0 250.5 0.0 0.0	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0	1/8 0.0 24.8 0.0 0.0 6.0	213.7 2 - Grams M20 0.0 0.0 0.0 0.0 42.7	#40 0.0 0.0 0.0 0.0 31.0	#80 0.0 0.0 0.0 0.0 35.8	#200 0.0 0.0 0.0 0.0 0.0 2.8	Pan 0.0 5.4 0.0 0.0
BATCH 4 Bin Not Used H67 Stone Not Used	Batch P ₀ . Batch Grams: Age. Blend 0.091 40.090 0.090 10.000	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 9.5% 0.0%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 0.0	23.8 23.6 57.6 4 505 Asph. Grams	1.5 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 0.0	251 8 Weights, 1/2 0.0 250.5 0.0 0.0 0.0	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6	139.6 d on Sieve 1/8 0.0 24.8 0.0 0.0 6.0 0.0 47.1	213.7 2- Grams M20 0.0 0.0 0.0 0.0 42.7 0.0 24.6	#40 0.0 0.0 0.0 0.0 31.0 0.0	#80 0.0 0.0 0.0 0.0 35.8 0.0	#200 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Pan 0.0 5.4 0.0 0.0 3.4 0.0 10.9
Wirgin Asphalt Fotal Mix BATCH 4 Bin Not Used 167 Stone Not Used Not Used Natural Sand Not Used 5/16° RAP Fine RAP	Batch P ₆ Batch P ₆ Batch Grams: Agg. Blend 0.079 40.09 0.099 10.099 0.050	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 0.0% 19.8% 30.4%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 0.0 121.6 0.0 253.3 388.5	23.8 23.6 57.6 6 500 Asph. Grams	1.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0	8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 0.0	251 8 Weights, 1/2 0.0 250.5 0.0 0.0 0.0	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 0.0	139.6 d on Sieve 1/8 0.0 24.8 0.0 0.0 6.0	213.7 2 - Grams M20 0.0 0.0 0.0 0.0 42.7 0.0	#40 0.0 0.0 0.0 0.0 31.0 0.0	#80 0.0 0.0 0.0 0.0 35.8	#200 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Pan 0.0 5.4 0.0 0.0 3.4
Part of the second of the seco	Batch P ₆ Batch Grams: Agg. Blend 0.079 40.099 0.099 10.099 20.099 30.099	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 0.0% 9.5% 0.0% 19.8% 30.4%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 0.0 121.6 0.0 253.3 388.5 30.2	23.8 23.6 57.6 4 505 Asph. Grams 10.1 23.7 30.2	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 0.0	251 8 Weights, 1/Z 0.0 250.5 0.0 0.0 0.0 0.0	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6 21.8	1/8 0.0 24.8 0.0 0.0 0.0 6.0 0.0 47.1 61.0	213.7 2- Grams #20 0.0 0.0 0.0 0.0 42.7 0.0 24.6 145.3	#40 0.0 0.0 0.0 0.0 31.0 0.0 0.0 34.2	#80 0.0 0.0 0.0 0.0 0.0 35.8 0.0 0.0 52.1	#200 0.0 0.0 0.0 0.0 0.0 0.0 0.0 3.8 0.0 0.0	Pan 0.0 5.4 0.0 0.0 3.4 0.0 10.9 12.0
Wirgin Asphalt Fotal Mix BATCH 4 Bin Not Used 167 Stone Not Used Vot Used Natural Sand Vot Used 5/16° RAP Fine RAP Virgin Asphalt	Batch P ₆ Batch Grams: Agg. Blend 0.079 40.099 0.099 10.099 20.099 30.099	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 0.0% 19.8% 30.4%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 0.0 121.6 0.0 253.3 388.5	23.8 23.6 57.6 4 505 Asph. Grams 10.1 23.7 30.2 64.0	1.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 0.0	251 8 Weights, 1/2 0.0 250.5 0.0 0.0 0.0	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6	139.6 d on Sieve 1/8 0.0 24.8 0.0 0.0 6.0 0.0 47.1	213.7 2- Grams M20 0.0 0.0 0.0 0.0 42.7 0.0 24.6	#40 0.0 0.0 0.0 0.0 31.0 0.0 0.0 34.2	#80 0.0 0.0 0.0 0.0 35.8 0.0	#200 0.0 0.0 0.0 0.0 0.0 0.0 0.0 3.8 0.0 0.0	Pan 0.0 5.4 0.0 0.0 3.4 0.0 10.9
Part of the second of the seco	Batch P ₆ Batch Grams: Agg. Blend 0.079 40.099 0.099 10.099 20.099 30.099	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 0.0% 9.5% 0.0% 19.8% 30.4%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 0.0 121.6 0.0 253.3 388.5 30.2	23.8 23.6 57.6 4 505 Asph. Grams 10.1 23.7 30.2	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 0.0	251 8 Weights, 1/Z 0.0 250.5 0.0 0.0 0.0 0.0	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6 21.8	1/8 0.0 24.8 0.0 0.0 0.0 6.0 0.0 47.1 61.0	213.7 2- Grams #20 0.0 0.0 0.0 0.0 42.7 0.0 24.6 145.3	#40 0.0 0.0 0.0 0.0 31.0 0.0 0.0 34.2	#80 0.0 0.0 0.0 0.0 0.0 35.8 0.0 0.0 52.1	#200 0.0 0.0 0.0 0.0 0.0 0.0 0.0 3.8	Pan 0.0 5.4 0.0 0.0 3.4 0.0 10.9 12.0
Part of the second of the seco	Batch P ₀ Batch Grams: Age. Blend 0.091 40.090 0.099 10.099 20.099 30.090 100.090	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 0.0% 9.5% 0.0% 19.8% 30.4%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 0.0 121.6 0.0 253.3 388.5 30.2	23.8 23.6 57.6 4 505 Asph. Grams 10.1 23.7 30.2 64.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 0.0	251 8 Weights, 1/Z 0.0 250.5 0.0 0.0 0.0 0.0	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6 21.8	1/8 0.0 24.8 0.0 0.0 0.0 6.0 0.0 47.1 61.0	213.7 2- Grams #20 0.0 0.0 0.0 0.0 42.7 0.0 24.6 145.3	#40 0.0 0.0 0.0 0.0 31.0 0.0 0.0 34.2	#80 0.0 0.0 0.0 0.0 0.0 35.8 0.0 0.0 52.1	#200 0.0 0.0 0.0 0.0 0.0 0.0 0.0 3.8	Pan 0.0 5.4 0.0 0.0 3.4 0.0 10.9 12.0
Virgin Asphalt Fotal Mix BATCH 4 Bin Not Used 167 Stone Not Used Not Used Not Used Not Used Not Used Not Benefit Side Not Used Not Used Not Used Not Used Total Mix	Batch P _b Batch P _c Batch P _c Batch Grams: Agg. Blend 0.079 40.099 10.079 20.09 30.09 100.096 Batch P _b	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 0.0% 19.8% 30.4% 100.0%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 0.0 121.6 0.0 253.3 388.5 30.2	23.8 23.6 57.6 4 505 Asph. Grams 10.1 23.7 30.2 64.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 0.0 124.5	251 8 Weights, 1/2 0.0 250.5 0.0 0.0 0.0 0.0 250.5	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6 21.8	139.6 d on Sieve 1/8 0.0 24.8 0.0 0.0 6.0 0.0 47.1 61.0	213.7 2- Grams N20 0.0 0.0 0.0 42.7 0.0 24.6 145.3	#40 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	#80 0.0 0.0 0.0 0.0 0.0 35.8 0.0 0.0 52.1	#200 0.0 0.0 0.0 0.0 0.0 0.0 0.0 3.8	Pan 0.0 5.4 0.0 0.0 3.4 0.0 10.9 12.0
Wirgin Asphalt Fotal Mix BATCH 4 Bin Not Used 167 Stone Not Used Vot Used Natural Sand Vot Used 5/16° RAP Fine RAP Virgin Asphalt	Batch P ₀ Batch Grams: Age. Blend 0.091 40.090 0.099 10.099 20.099 30.090 100.090	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 0.0% 9.5% 0.0% 19.8% 30.4%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 0.0 121.6 0.0 253.3 388.5 30.2	23.8 23.6 57.6 4 505 Asph. Grams 10.1 23.7 30.2 64.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 0.0 124.5	251 8 Weights, 1/2 0.0 250.5 0.0 0.0 0.0 0.0 250.5	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6 21.8	1/8 0.0 24.8 0.0 0.0 0.0 6.0 0.0 47.1 61.0	213.7 2- Grams N20 0.0 0.0 0.0 42.7 0.0 24.6 145.3	#40 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	#80 0.0 0.0 0.0 0.0 0.0 35.8 0.0 0.0 52.1	#200 0.0 0.0 0.0 0.0 0.0 0.0 0.0 3.8	Pan 0.0 5.4 0.0 0.0 3.4 0.0 10.9 12.0
BATCH 4 Bin Not Used 167 Stone Not Used Solfis* RAP Fine RAP Virgin Asphalt Total Mix BATCH 5	Batch P _b Batch Grams: Agg. Blend 0.0% 40.0% 0.0% 10.0% 20.0% 30.0% 100.0% Batch P _b Batch P _b Batch Grams:	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 0.0% 19.8% 30.4% 2.4% 100.0%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 253.3 388.5 30.2 1280.0	23.8 23.6 57.6 4 505 Asph. Grams 10.1 23.7 30.2 64.0 5 205	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	125.2 8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 0.0 124.5	251 8 Weights, 1/2 0.0 250.5 0.0 0.0 0.0 0.0 0.0 250.5	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6 21.8 Retained	139.6 on Sieve 1/8	213.7 - Grams N20 0.0 0.0 0.0 42.7 0.0 24.6 145.3	#40 0.0 0.0 0.0 0.0 31.0 0.0 34.2 65.2	#80 0.0 0.0 0.0 35.8 0.0 0.0 52.1	#Z00 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 38.5	Pan 0.0 5.4 0.0 0.0 3.4 0.0 10.9 12.0
Virgin Asphalt Fotal Mix BATCH 4 Bin Not Used 167 Stone Not Used Not Used Not Used Not Used Not Used Not Benefit Side Not Used Not Used Not Used Not Used Total Mix	100,0%	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 0.0% 9.5% 0.0% 119.8% 30.4% 100.0%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 0.0 121.6 0.0 253.3 388.5 30.2 1280.0	23.8 23.6 57.6 4 505 Asph. Grams 10.1 23.7 30.2 64.0 5 605	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 0.0 124.5	251 8 Weights, 1/2 0.0 250.5 0.0 0.0 0.0 0.0 250.5	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6 21.8	139.6 d on Sieve 1/8 0.0 24.8 0.0 0.0 6.0 0.0 47.1 61.0	213.7 2- Grams N20 0.0 0.0 0.0 42.7 0.0 24.6 145.3	#40 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	#80 0.0 0.0 0.0 0.0 0.0 35.8 0.0 0.0 52.1	#200 0.0 0.0 0.0 0.0 0.0 0.0 0.0 3.8	Pan 0.0 5.4 0.0 0.0 3.4 0.0 10.9 12.0
BATCH 4 Bin Not Used 167 Stone Not Used Solfe" RAP Fine RAP Virgin Asphalt Total Mix BATCH 5 Bin	100,0%	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 0.0% 19.8% 0.0% 100.0% 100.0%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 0.0 121.6 0.0 253.3 388.5 30.2 1280.0	23.8 23.6 57.6 4 505 Asph. Grams 10.1 23.7 30.2 64.0 5 205	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	125.2 8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 0.0 124.5 8atch 3/4	251 8 Weights, 1/2 0.0 250.5 0.0 0.0 0.0 0.0 250.5	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6 21.8 263 6 Retained	139.6 on Sieve 1/8 0.0 24.3 0.0 0.0 6.0 0.0 47.1 61.0 138.9	213.7 - Grams #20 0.0 0.0 0.0 42.7 0.0 24.6 145.3 212.6	#40 0.0 0.0 0.0 0.0 31.0 0.0 34.2 65.2	#80 0.0 0.0 0.0 0.0 35.8 0.0 0.0 52.1	#200 0.0 0.0 0.0 0.0 0.0 2.8 0.0 0.0 38.5	9an 0.0 5.4 0.0 0.0 3.4 0.0 10.9 12.0 31.7
BATCH 4 Bin Not Used 167 Stone Not Used Syl6* RAP Fine RAP	100,0%	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 0.0% 19.8% 0.0% 100.0% 100.0%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 0.0 121.6 0.0 253.3 388.5 30.2 1280.0	23.8 23.6 57.6 4 505 Asph. Grams 10.1 23.7 30.2 64.0 5 605	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	125.2 8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 0.0 124.5 8atch 3/4	251 8 Weights, 1/2 0.0 250.5 0.0 0.0 0.0 0.0 0.0 250.5	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6 21.8 Retained	139.6 on Sieve 1/8	213.7 - Grams N20 0.0 0.0 0.0 42.7 0.0 24.6 145.3	#40 0.0 0.0 0.0 0.0 31.0 0.0 34.2 65.2	#80 0.0 0.0 0.0 35.8 0.0 0.0 52.1	#200 0.0 0.0 0.0 0.0 0.0 2.8 0.0 0.0 38.5	Pan 0.0 5.4 0.0 0.0 3.4 0.0 10.9 12.0
BATCH 4 Bin Not Used 167 Stone Not Used Vot Used Fine RAP Fotal Mix BATCH 5 Bin Not Used	100,0%	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 10.0% 128 128 128 128 128 128 128 100.0%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 0.0 121.6 0.0 253.3 388.5 30.2 1280.0	23.8 23.6 57.6 4 505 Asph. Grams 10.1 23.7 30.2 64.0 5 605	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	125.2 8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 124.5 8atch 3/4 0.0	251 8 Weights, 1/2 0.0 250.5 0.0 0.0 0.0 0.0 250.5	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6 21.8 263 6 Retained	139.6 on Sieve 1/8 0.0 24.3 0.0 0.0 6.0 0.0 47.1 61.0 138.9	213.7 - Grams #20 0.0 0.0 0.0 42.7 0.0 24.6 145.3 212.6	#40 0.0 0.0 0.0 0.0 31.0 0.0 34.2 65.2	#80 0.0 0.0 0.0 0.0 35.8 0.0 0.0 52.1	#200 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 41.3	9an 0.0 5.4 0.0 0.0 3.4 0.0 10.9 12.0 31.7
BATCH 4 Bin Vot Used Not Used Not Used Not Used Not Used Not Used Not Used Not Used Not Used Not Used SARP Pine RAP Pine RAP BATCH 5 Bin Not Used BATCH 5	100,0%	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 0.0% 0.0% 0.0% 12.8% 100.0% 12.8% Mix Blend 100.0% 12.8% Mix Blend 0.0% 37.8%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 253.3 388.5 30.2 1280.0 Batch Grams 0.0 483.8	23.8 23.6 57.6 4 505 Asph. Grams 10.1 23.7 30.2 64.0 5 605	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	125.2 8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 0.0 124.5 8atch 3/4 0.0	251 8 Weights, 1/2 0.0 250.5 0.0 0.0 0.0 0.0 250.5 Weights,	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6 21.8 263 6 Retained 1/4" 0.0 80.8	139.6 0.0 24.8 0.0 0.0 0.0 47.1 61.0 138.9 d on Sieve 1/8 0.0 24.7	213.7 - Grams #20 0.0 0.0 0.0 42.7 0.4.6 145.3 212.6	#40 0.0 0.0 0.0 0.0 31.0 0.0 0.0 34.2 65.2	#80 0.0 0.0 0.0 35.8 0.0 0.0 52.1 87.8	#200 0.0 0.0 0.0 0.0 0.0 0.0 0.0 38.5 41.3	9an 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
BATCH 4 Bin Vot Used 167 Stone Not Used Vot Used Sold Vot Used	100,0%	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 0.0% 1.9.8% 30.4% 100.0% 128 Mix Blend 0.0% 37.8% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 0.0 121.6 0.0 253.3 388.5 30.2 1280.0 Batch Grams 0.0 483.8 0.0	23.8 23.6 57.6 4 505 Asph. Grams 10.1 23.7 30.2 64.0 5 605	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	125.2 8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 124.5 8atch 3/4 0.0 123.9 0.0	251 8 Weights, 1/2 0.0 250.5 0.0 0.0 0.0 0.0 250.5 Weights,	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6 21.8 263.6 Retained	139.6 0.0 24.8 0.0 0.0 6.0 0.0 47.1 61.0 138.9	213.7 - Grams #20 0.0 0.0 0.0 42.7 0.0 24.6 145.3 212.6 #20 0.0 0.0 0.0	#40 0.0 0.0 0.0 31.0 0.0 0.0 34.2 65.2	#80 0.0 0.0 0.0 0.0 35.8 0.0 0.0 52.1 87.8	#200 0.0 0.0 0.0 0.0 0.0 0.0 38.5 41.3	Pan 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
BATCH 4 Bin Not Used 67 Stone Not Used Sylfe' RAP Fine RAP Virgin Asphalt Total Mix BATCH 5 Bin Not Used 167 Stone Not Used	100,0%	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 19.8% 100.0% 19.8% 30.4% 2.4% 100.0% 128 Mix Blend 0.0% 37.8% 0.0% 37.8% 0.0% 37.8%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 0.0 121.6 0.0 253.3 388.5 30.2 1280.0 Batch Grams 0.0 483.8 0.0 0.0 0.0	23.8 23.6 57.6 4 505 Asph. Grams 10.1 23.7 30.2 64.0 5 605	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	125.2 8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 124.5 8atch 3/4 0.0 123.9 0.0 0.0 0.0	251 8 Weights, 1/2 0.0 250.5 0.0 0.0 0.0 0.0 250.5 Weights, 1/2 0.0 249.2 0.0 0.0	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6 21.8 263 6 Retained 1/4" 0.0 80.8 0.0 0.0	139.6 on Sieve 1/8 0.0 24.3 0.0 0.0 6.0 0.0 47.1 61.0 138.9 d on Sieve 1/8 0.0 24.7 0.0 0.0	213.7 - Grams #20 0.0 0.0 0.0 42.7 0.0 24.6 145.3 212.6 - Grams #20 0.0 0.0 0.0 0.0	#40 0.0 0.0 0.0 0.0 31.0 0.0 34.2 65.2	#80 0.0 0.0 0.0 0.0 35.8 0.0 0.0 52.1 87.8	#200 0.0 0.0 0.0 0.0 0.0 2.8 0.0 0.0 38.5 41.3	Pan 0.0 5.4 0.0 0.0 3.4 0.0 10.9 12.0 Pan 0.0 5.3 0.0 0.0
BATCH 4 Bin Not Used 167 Stone Not Used Sine RAP Virgin Asphalt Fotal Mix BATCH 5 Bin Not Used	100,0%	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 19.8% 30.4% 2.4% 100.0% 128 Mix Blend 0.0% 30.8% 0.0% 100.0%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 0.0 121.6 0.0 253.3 388.5 30.2 1280.0 Batch Grams 0.0 483.8 0.0	23.8 23.6 57.6 4 505 Asph. Grams 10.1 23.7 30.2 64.0 5 605	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	125.2 8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 124.5 8atch 3/4 0.0 123.9 0.0 0.0 0.0	251 8 Weights, 1/2 0.0 250.5 0.0 0.0 0.0 0.0 250.5 Weights,	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6 21.8 263.6 Retained	139.6 on Sieve 1/8 0.0 24.3 0.0 0.0 6.0 0.0 47.1 61.0 138.9 d on Sieve 1/8 0.0 24.7 0.0 0.0	213.7 - Grams #20 0.0 0.0 0.0 42.7 0.0 24.6 145.3 212.6 #20 0.0 0.0 0.0	#40 0.0 0.0 0.0 31.0 0.0 0.0 34.2 65.2	#80 0.0 0.0 0.0 0.0 35.8 0.0 0.0 52.1 87.8	#200 0.0 0.0 0.0 0.0 0.0 2.8 0.0 0.0 38.5 41.3	Pan 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Virgin Asphalt Total Mix BATCH 4 Bin Not Used 167 Stone Not Used Not Used Not Used Not Used S/16" RAP Fine RAP Virgin Asphalt Total Mix BATCH 5 Bin Not Used	100,0%	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 0.0% 10.0%	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 0.0 121.6 0.0 253.3 388.5 30.2 1280.0 Batch Grams 0.0 483.8 0.0 0.0 0.0	23.8 23.6 57.6 4 505 Asph. Grams 10.1 23.7 30.2 64.0 5 605	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 124.5 8atch 3/4 0.0 123.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	251 8 Weights, 1/2 0.0 250.5 0.0 0.0 0.0 0.0 250.5 Weights, 1/2 0.0 249.2 0.0 0.0	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6 21.8 263 6 Retained 1/4" 0.0 80.8 0.0 0.0	139.6 on Sieve 1/8 0.0 24.3 0.0 0.0 6.0 0.0 47.1 61.0 138.9 d on Sieve 1/8 0.0 24.7 0.0 0.0	213.7 - Grams #20 0.0 0.0 0.0 42.7 0.0 24.6 145.3 212.6 - Grams #20 0.0 0.0 0.0 0.0	#40 0.0 0.0 0.0 0.0 31.0 0.0 34.2 65.2	#80 0.0 0.0 0.0 0.0 35.8 0.0 0.0 52.1 87.8	#200 0.0 0.0 0.0 0.0 0.0 0.0 0.0 38.5 41.3	Pan 0.0 5.4 0.0 0.0 3.4 0.0 10.9 12.0 Pan 0.0 5.3 0.0 0.0
BATCH 4 Bin Not Used H67 Stone Not Used Not Used Not Used Not Used Not Used Not Used S/16" RAP Fine RAP Virgin Asphalt Total Mix BATCH 5 Bin Not Used	100,0%	30.5% 1.8% 100.0% 5. 128 Mix Blend 0.0% 0.0% 0.0% 10.0% 11.8% 100.0% 12.8% 100.0% 10.0%	390 5 23.6 1280 0 1280 0 1280 0 1280 0 0.0 0.0 121.6 0.0 253.3 388.5 30.2 1280.0 Batch Grams 0.0 483.8 0.0 0.0 121.0 0.0	23.8 23.6 57.6 4 505 Asph. Grams 10.1 23.7 30.2 64.0 5 505 Asph. Grams	1.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	125.2 8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 124.5 8atch 3/4 0.0 123.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	251 8 Weights, 1/2 0.0 250.5 0.0 0.0 0.0 250.5 Weights, 1/2" 0.0 249.2 0.0 0.0 0.0	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6 21.8 263 6 Retained 1/4" 0.0 80.8 0.0 0.0 0.0	139.6 0.0 24.8 0.0 0.0 6.0 0.0 47.1 61.0 138.9 d on Sieve 1/8 0.0 24.7 0.0 0.0 0.0	213.7 - Grams #20 0.0 0.0 0.0 42.7 0.46 145.3 212.6 #20 0.0 0.0 0.0 0.0 0.0 0.0 0.0	#40 0.0 0.0 0.0 0.0 31.0 0.0 34.2 65.2	#80 0.0 0.0 0.0 35.8 0.0 0.0 52.1 87.8 #80 0.0 0.0 0.0	#200 0.0 0.0 0.0 0.0 0.0 0.0 38.5 41.3	Pan 0.0 5.4 0.0 10.9 12.0 31.7 Pan 0.0 0.0 3.4 0.0 3.4 0.0 3.4 0.0 3.4 0.0 3.4 0.0 3.4 0.0 3.4 0.0 3.3
BATCH 4 Bin Not Used Not Used Not Used Not Used Not Used Not Used Not Used Not Used Sife Sape Sife Rap Sife Rap Sife Sape S	100,0%	30.5% 1.8% 1.00.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 0.0% 1.9.8% 30.4% 1.00.0% 1.9.8% 30.4% 1.00.0% 1.0	Batch Grams 0.0 486.4 0.0 0.0 121.6 0.0 253.3 388.5 30.2 1280.0 Batch Grams 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	23.8 23.6 57.6 4 505 Asph. Grams 10.1 23.7 30.2 64.0 5 605	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	125.2 8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 124.5 8atch 3/4 0.0 123.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	251 8 Weights, 1/2 0.0 250.5 0.0 0.0 0.0 250.5 Weights, 1/2" 0.0 249.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6 21.8 263.6 Retained 1/4" 0.0 80.8 0.0 0.0 159.8	139.6 0 on Sieve 1/8 0.0 24.8 0.0 0.0 6.0 0.0 138.9 1 on Sieve 1/8 0.0 0.0 138.9	213.7 - Grams #20 0.0 0.0 0.0 42.7 0.0 24.6 145.3 212.6 #20 0.0 0.0 0.0 24.4 42.5	#40 0.0 0.0 0.0 31.0 0.0 34.2 65.2 #40 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	#80 0.0 0.0 0.0 35.8 0.0 52.1 87.8 #80 0.0 0.0 0.0 0.0 0.0 0.0	#200 0.0 0.0 0.0 0.0 0.0 0.0 38.5 41.3	Pan 0.0 5.4 0.0 0.0 3.4 0.0 3.1 7 Pan 0.0 0.0 3.1 0.0 3.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0
BATCH 4 Bin Not Used	100,0%	30.5% 1.8% 1.00.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 1.98% 1.00% 1.	390 5 23.6 1280 0 Batch Grams 0.0 486.4 0.0 0.0 121.6 0.0 253.3 388.5 30.2 1280.0 Batch Grams 0.0 483.8 0.0 0.0 0.0 383.8	23.8 23.6 57.6 4 505 Asph. Grams 10.1 23.7 30.2 64.0 5 600	1.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	125.2 8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 124.5 8atch 3/4 0.0 123.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	251 8 Weights, 1/2 0.0 250.5 0.0 0.0 0.0 250.5 Weights, 1/2" 0.0 249.2 0.0 0.0 0.0	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6 21.8 263 6 Retained 1/4" 0.0 80.8 0.0 0.0 0.0	139.6 0.0 24.8 0.0 0.0 6.0 0.0 47.1 61.0 138.9 d on Sieve 1/8 0.0 24.7 0.0 0.0 0.0	213.7 - Grams #20 0.0 0.0 0.0 42.7 0.46 145.3 212.6 #20 0.0 0.0 0.0 0.0 0.0 0.0 0.0	#40 0.0 0.0 0.0 0.0 31.0 0.0 34.2 65.2	#80 0.0 0.0 0.0 35.8 0.0 0.0 52.1 87.8 #80 0.0 0.0 0.0	#200 0.0 0.0 0.0 0.0 0.0 0.0 38.5 41.3	Pan 0.0 5.4 0.0 10.9 12.0 31.7 Pan 0.0 0.0 3.4 0.0 3.4 0.0 3.4 0.0 3.4 0.0 3.4 0.0 3.4 0.0 3.4 0.0 3.3
BATCH 4 Bin Not Used M57 Stone Not Used Sand Not Used Sand Not Used Sand Not Used Sand Sand Not Used Sand Sand Sand Not Used Sand Sand Not Used Sand Sand Not Used Sand Sand Not Used Sand San	100,0%	30.5% 1.8% 1.00.0% 5. 128 Mix Blend 0.0% 38.0% 0.0% 0.0% 1.9.8% 30.4% 1.00.0% 1.9.8% 30.4% 1.00.0% 1.0	Batch Grams 0.0 486.4 0.0 0.0 121.6 0.0 253.3 388.5 30.2 1280.0 Batch Grams 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	23.8 23.6 57.6 4 505 Asph. Grams 10.1 23.7 30.2 64.0 5 605	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	125.2 8atch 3/4 0.0 124.5 0.0 0.0 0.0 0.0 124.5 8atch 3/4 0.0 123.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	251 8 Weights, 1/2 0.0 250.5 0.0 0.0 0.0 250.5 Weights, 1/2" 0.0 249.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0	265 0 Retained 1/4" 0.0 81.2 0.0 0.0 0.0 160.6 21.8 263.6 Retained 1/4" 0.0 80.8 0.0 0.0 159.8	139.6 0 on Sieve 1/8 0.0 24.8 0.0 0.0 6.0 0.0 138.9 1 on Sieve 1/8 0.0 0.0 138.9	213.7 - Grams #20 0.0 0.0 0.0 42.7 0.0 24.6 145.3 212.6 #20 0.0 0.0 0.0 24.4 42.5	#40 0.0 0.0 0.0 31.0 0.0 34.2 65.2 #40 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	#80 0.0 0.0 0.0 35.8 0.0 52.1 87.8 #80 0.0 0.0 0.0 0.0 0.0 0.0	#200 0.0 0.0 0.0 0.0 0.0 0.0 38.5 41.3	Pan 0.0 5.4 0.0 0.0 3.4 0.0 3.1 7 Pan 0.0 0.0 3.1 0.0 3.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0

5.50



ASPHALT MAXIMUM DENSITY & MARSHALL PROPERTIES WORKSHEET - 3 RA BINDER MIX

Frial Batch A) Sample in A													
b .) Sample in A			Theor	etical M	aximum	Specific	Gravity (i per	ASTM D2	041			
) Sample in A				T	1	Control of the last of the las	2	garanteen contraction contraction	3	THE RESERVE THE PROPERTY OF THE PERSON NAMED IN COLUMN 1	4		5
				3.	5%	4.	0%	4.	5%	5.	0%	-	5%
) Pycnomete	Air (grams)			2073.5	2052.8	2023.4	2010 6	2062.3	2033.4	2055.6	2063.2	2069.1	2039 7
7	r in Water	(Grams)		1318.8	1326.5	1318.8	1326 5	1318.8	1326.5	1318.8	1326.5	1318.8	1326
) Sample & P	A PROPERTY OF A STATE OF THE PARTY OF THE PA	in Water (Grams)	2589.4	2587.4	2552.3	2550 5	2568.9	2558.0	2560.0	2570. 3	2558.2	2553
mm (A/(A+B-	C))	A T of Females and Local		2.583	2.592	2.562	2.556	2.539	2.536	2.524	2.518	2.494	2.510
verage G _{mm}				2.5	87	2.5	559	2.5	537	2	521	2.5	502
	Density Te	chnician:		Alex Canto	S			Date Teste	ed.	11/20	0/2023]	
			Comp	utation (of Marsh	all Mix P	ronertie	s /75 Blo	ws per S	ide)			
	Weight	SSD	Weight	Sample	Bulk SG	Max SG	% Air	Unit	Meas	Corr	Corr.	Marshall	Marsha
	In Air	Weight	In Water	Volume	G _{mb}	G _{mm}	Ρ,	Weight	Stab lity	Factor	Stability	Flow	Quotie
	Grams	Grams	Grams	CC			%	PCF	lbs	lbs	lbs	0.01"	lb/0.01
	А	В	С	D	E	F	G	Н	J	K	i	М	N
		***		B-C	A/D		(F-E)/F	E*624			J*K		L/M
RIAL BATO	CH 1		P _b =	3.5%									
Specimen A	1271.4	1273.6	744.0	529.6	2.401	2.587	7.20%		2960	0.96	2840	8.1	351
Specimen B	1271.6	1273.6	745.4	528.2	2.407	2.587	6.94%		2940	0.96	2820	7.9	357
Specimen C	1273.1	1275.4	746.0	529.4	2.405	2.587	7.04%		3020	0.96	2900	7.5	387
Average					2.404	2.587	7.07%	150.0			2850	7.8	365
RIAL BAT	CH 2	707011	P _b =	4.0%							757		
Specimen A	1268.6	1270.2	746.6	523.6	2.423	2.559	5.32%		2910	0.96	2790	8.4	332
Specimen B	1270.2	1272.8	748.0	524.8	2.420	2.559	5.42%		3150	0.96	3020	8.9	339
Specimen C	1269.4	1271.0	745.0	526.0	2.413	2.559	5.69%		2960	0.96	2840	8.8	323
Average					2.419	2.559	5.47%	150.9			2880	8.7	331
RIAL BAT	CH 3	ha Charles	P _b =	4.5%									
Specimen A	1269.7	1270.6	750.0	520.6	2.439	2.537	3 87%		3240	1	3240	10.5	309
Specimen B	1271.4	1272.4	749.4	523.0	2.431	2 537	4.18%		3450	0.96	3310	10.1	328
Specimen C	1269.9	1270.9	749.4	521.5	2.435	2.537	4.02%		3070	1	3070	10.7	287
Average					2.435	2.537	4.02%	151.9			3210	10.4	308
RIAL BAT	CH 4		P _h =	5.0%									
Specimen A	1270.4	1271.2	752.3	518.9	2.448	2.521	2.89%		3310	1	3310	11.4	290
Specimen 8	1270.9	1271.7	751.4	520.3	2.443	2.521	3.11%		3260	1	3260	11.5	283
Specimen C	1268.6	1269.5	749.6	519.9	2.440	2.521	3.21%		3260	1	3260	11.2	291
Average				7-2-6-10	2.444	2.521	3.05%	152.5			3280	11.4	288
RIAL BAT	CH 5		P _b =	5.5%									r E
Specimen A	1271.2	1271.9	756.5	515.4	2.466	2.502	1.42%		3240	1	3240	12.9	251
Specimen B	1270.6	1271.5	752.8	518.7	2.450	2.502	2.09%		3290	1	3290	13.1	251
Specimen C	1268.9	1269.6	751.9	517.7	2.451	2.502	2.04%		3310	1	3310	13.7	242
Average	1.19				2.456	2.502	1.84%	153.3			3280	13.2	248
	Marshall T										0/2023		office has resident to the last to the



MIX VOLUMETRIC PROPERTIES WORKSHEET - 3 RA BINDER MIX

PI	LANT: Green Asp	halt NYSDOT FACILIT	Y#: H0385	MIX DESIGN DATE:	11/20/2023					

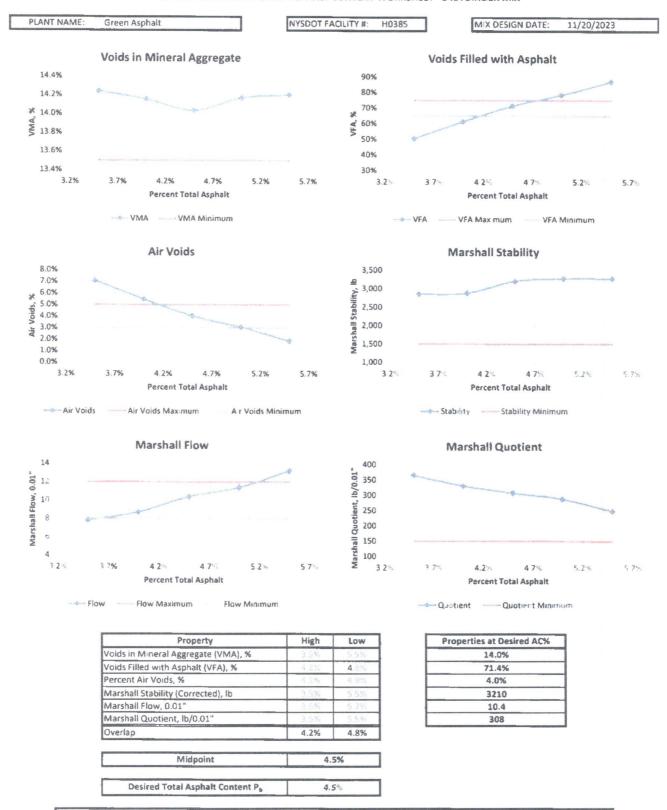
Agg.		NYSDOT	G _{sa}	G _{sb}	Total Mix Composition by Weight									
Blend %	Constituent Material	Source			Trial Batch									
					1	2	3	4	5					
0.0%	Not Used				0.0%	0.0%	0.0%	0.0%	0.0%					
40.0%	#67 Stone	8-17R	2.743	2.702	38.6%	38.4%	38.2%	38.0%	37.8%					
0.0%	Not Used				0.0%	0.0%	0.0%	0.0%	0.0%					
0.0%	Not Used				0.0%	0.0%	0.0%	0.0%	0.0%					
10.0%	Natural Sand	10-105F2	2.687	2.645	9.7%	9.6%	9.6%	9.5%	9.5%					
0.0%	Not Used				0.0%	0.0%	0.0%	0.0%	0.0%					
20.0%	5/16" RAP		2.755	2.726	20.1%	20.0%	19.9%	19.8%	19.7%					
30.0%	Fine RAP		2.740	2.716	30.8%	30.7%	30.5%	30.4%	30.2%					
	Virgin Asphalt				0.8%	1.3%	1.8%	2.4%	2.9%					
100.0%					100.0%	100.0%	100.0%	100.0%	100.0%					

Mix General Properties		la l	Trial Batch								
	with deficial Properties		1	2	3	4	5				
P_b	Percent Total Asphalt Binder, %		3.5%	4.0%	4.5%	5.0%	5.5%				
P _{ba}	Percent Absorbed Asphalt Binder, %		0.45%	0.31%	0.28%	0.34%	0.34%				
Pbe	Percent Effective Asphalt Binder, %		3.07%	3.70%	4.23%	4.68%	5.18%				
DP	Dust Proportion (0.6 to 1.2 desired)	200	0.6	0.7	0.8	0.9	1.0				
G _{mm}	Mix Maximum Specific Gravity		2.587	2.559	2.537	2.521	2.502				
G _{mb}	Mix Bulk Specific Gravity		2.404	2.419	2.435	2.444	2.456				
G _{sb}	Aggregate Bulk Gravity		2.705	2.705	2.705	2.705	2.705				
Gse	Aggregate Effective Gravity		2.737	2.727	2.725	2.729	2.729				
Gsa	Aggregate Apparent Specific Gravity		2.739	2.739	2.739	2.739	2.739				

Mix Acceptance Properties		Low	High Limit	Trial Batch										
		Limit		1		2		3		4		annus sociament ann	5	
VMA	Voids in Mineral Aggregate, %	13.5%		4	14.2%	100	14.2%	- Marie	14.0%	200	14.2%	V	14.2%	
AIAIU	Note: All five trial batches must meet the minimum VMA requirement.													
VFA	Voids Filled with Asphalt, %	65%	75%	×	50.3%	×	61.3%	4	71.4%	×	78.5%	×	87.0%	
Pa	Percent Air Voids, %	3.0%	5.0%	×	7.1%	×	5.5%	V	4.0%	V	3.1%	×	1.8%	
official ton	Marshall Stability (Corrected), lb	1500		A.	2850	de	2880	V	3210	V	3280	4	3280	
	Marshall Flow, 0.01"	8	12	×	7.8	V	8.7	1	10.4	4	11.4	×	13.2	
	Marshall Quotient, lb/0.01"	150		1	365	4	331	V	308	No.	288	Van	248	



PROPERTY CURVES & DESIRED ASPHALT CONTENT WORKSHEET - 3 RA BINDER MIX



Desired Asphalt Content is the midpoint, unless the midpoint is on the VMA curve's positive slope.

If this is the case, the Desired Asphalt Content is as close as possible to the bottom of the VMA curve, within the Overlap Range.