



Somat Engineering, Inc.

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ASTM D6938

REPORT NUMBER: 201 SHEET: 1 OF 1

DENSITY & MOISTURE DETERMINATION REPORT

DATE: 8/5/2020

JOB NUMBER: 2019057B

PROJECT NAME: Kercheval Streetscape(PW-7005)

LOCATION: Detroit, MI

GAUGE NUMBER: 2127

CLIENT: AECOM & City of Detroit

OWNER: City of Detroit (Public Works)

CONTRACTOR: Major Concrete

PROJECT ENGINEER: Allen Ostrowski (AECOM)

WEATHER: Clear

TEST PERFORMED ON:		X	SUBGRADE		SUBBASE	X	AGGREGATE BASE		BACKFILL		OTHER			
STRUCTURE: Existing Subgrade & Recycled crushed concrete subbase.														
TEST			WET DENSITY		MOISTURE			DRY DENSITY			TEST LOCATION			
ORIG.	RETEST	DEPTH	DENSITY COUNTS	WET DENSITY	MOIST. COUNTS	MOIST.	MOIST.	DRY DENSITY	MAX DENSITY	COMPACT.	STATIONING/LOCATION	OFFSET OF CL (FT)		DBG (FT)
		INCH	DC	PCF	MC	PCF	%	PCF	PCF	%		LEFT	RIGHT	
1		12	477	128.8	109	14.6	12.8	114.1	114.2	99.9	37+00		38.0	1
2		4	3030	128.0	93	12.3	10.7		130.5	98.1	38+50		36.0	0.5
3		12	457	130.1	116	15.6	13.7	114.5	114.2	100.2	60+00		39.0	1
4		4	2977	128.9	95	12.6	10.9		130.5	98.8	61+00		37.0	0.5
MAXIMUM DETERMINATION (FIELD) NOTE: To convert (g) to (lbs): Wt (g) / 453.59 = Wt. (lbs)											STANDARDIZATION			
TEST #	MOIST. %	MOLD VOL. (CFT)	WET SOIL + MOLD (g)	MOLD (g)	WET SOIL (g)	WET SOIL (lbs)	COMPACTED WET SOIL PCF	MAX DENSITY	OPTIMUM MOIST. %	MATERIAL	READING 1	DENSITY	MOISTURE	
1	12.8	0.0447	4500	1890	2610	5.75	128.7	114.2	13.7	Existing Soil	READING 2	2730	415	
2	10.7	0.0333	4143	2172	1971	4.35	130.5	130.5	9.2 - 12.2	Recycled Crushed	READING 3	2739	417	
											READING 4	2729	414	
											OPERATING STANDARD (READING 5)			
											DENSITY		MOISTURE	
											2732		420	
MIN. COMPACTION REQUIRED:					100.0%			98.0%	X	95.0%		90.0%	OTHER	
MAXIMUM DRY DENSITY BY:					X	MICH. CONE		D1557		T-99	X	T-180	OTHER	
REMARKS:														
SOMAT FIELD REPRESENTATIVE: Cody Cervelli											DATE: 8/5/2020			
SOMAT PROJECT MANAGER(s): Steve Drummond, P.E.											DATE: 8/7/2020			

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