



Somat Engineering, Inc.

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ASTM D6938

REPORT NUMBER: 201 SHEET: 1 OF 1

DENSITY & MOISTURE DETERMINATION REPORT

DATE: 11/5/2020

JOB NUMBER: 2019057B

PROJECT NAME: Kercheval Streetscape(PW-7005)

LOCATION: Detroit, MI

GAUGE NUMBER: 2409

CLIENT: AECOM & City of Detroit

OWNER: City of Detroit (Public Works)

CONTRACTOR: Motor City Electric

PROJECT ENGINEER: Allen Ostrowski (AECOM)

WEATHER: Clear

TEST PERFORMED ON:		SUBGRADE	SUBBASE	X	AGGREGATE BASE	X	BACKFILL	OTHER						
STRUCTURE: Class II Sand Conduit Encasement backfill & Recycled Crushed Concrete Subbase for ADA Ramps.														
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		10	1571	112.2	51	5.4	5.1	106.8	110.6	96.6	57+60	114.0		1
2		4	3811	121.4	95	11.0	9.9		127.7	95.1	138+30	30.0		0.5
3		4	3800	121.6	92	10.6	9.6		127.7	95.2	95+00	31.0		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	5.1	0.0447	4226	1890	2336	5.15	115.2	110.6	14.9	Class II	READING 2	2945	467	
2	9.9	0.0333	4101	2172	1929	4.25	127.7	127.7	8.4-11.4	Recycled Stone	READING 3	2928	469	
											READING 4	2934	475	
											OPERATING STANDARD (READING 5)			
											DENSITY		MOISTURE	
											2926		476	
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: 11/5/2020			
SOMAT PROJECT MANAGER(s): Steve Drummond, P.E.											DATE: 11/6/2020			

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