

**DENSITY & MOISTURE
DETERMINATION REPORT**

DATE: 7/25/2020

JOB NUMBER: 2019057B

PROJECT NAME: Kercheval Streetscape(PW-7005)

LOCATION: Detroit, MI

GAUGE NUMBER: 27260

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	AGGREGATE BASE	X	BACKFILL	OTHER							
STRUCTURE: Class II sand backfill for electrical conduit.															
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	950	110.9	114	8.8	8.6	102.1	107.9	94.6	51+00		36.0	2.5	
7/25	1	10	897	113.0	103	7.8	7.4	105.2	107.9	97.5	51+02		37.0	2.5	
2		12	507	113.4	92	6.8	6.4	106.6	107.9	98.8	50+00		37.0	1	
3		10	951	110.9	109	8.3	8.1	102.5	107.9	95.0	52+80		36.0	2.5	
4		12	507	113.4	102	7.7	7.3	105.7	107.9	97.9	53+50		36.0	1	
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	DENSITY		MOISTURE		
											READING 1	READING 2	READING 3		
1	8.6	0.0447	4250	1890	2360	5.20	116.4	107.9	15.9	Class II	1773	1772	667		
											1759	1755	670		
											1755		671		
											OPERATING STANDARD (READING 5)				
											DENSITY		MOISTURE		
											1769		671		
MIN. COMPACTION REQUIRED:			100.0%			98.0%			X	95.0%	90.0%			OTHER	
MAXIMUM DRY DENSITY BY:			X			MICH. CONE			D1557			T-99			OTHER
REMARKS:															
Tests were done on Class II sand backfill for motor city electric conduit.															
SOMAT FIELD REPRESENTATIVE: Cody Cervelli											DATE: 7/25/2020				
SOMAT PROJECT MANAGER(s): Steve Drummond, P.E.											DATE: 7/28/2020				

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