

**DENSITY & MOISTURE
DETERMINATION REPORT**

DATE: 7/31/2020

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: Major Concrete

PROJECT ENGINEER: Allen Ostrowski (AECOM)

WEATHER: Clear

TEST PERFORMED ON:			SUBGRADE	X	SUBBASE	AGGREGATE BASE	BACKFILL	OTHER						
STRUCTURE: 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		4	2139	125.0	127	10.1	8.8		129.8	96.3	55+00		39.0	0.5
2		10	953	110.8	73	5.3	5.0	105.5	110.4	95.6	38+50		37.0	2.5
3		12	543	111.1	81	6.0	5.7	105.1	110.4	95.2	37+90		36.0	1
4		10	937	111.4	83	6.2	5.8	105.2	110.4	95.3	96+00		37.0	2.5
5		12	477	115.3	81	6.0	5.5	109.4	110.4	99.1	37+00		37.0	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	1770	667	
1	8.8	0.0333	4133	2172	1961	4.32	129.8	129.8	7.3 - 10.3	Recycled crushed	READING 2	1778	669	
2	5	0.0447	4218	1890	2328	5.13	114.8	110.4	15.0	Class II	READING 3	1773	666	
											READING 4	1778	663	
											OPERATING STANDARD (READING 5)			
											DENSITY		MOISTURE	
											1762		660	
MIN. COMPACTION REQUIRED:			100.0%			98.0%			X	95.0%	90.0%			OTHER
MAXIMUM DRY DENSITY BY:			MICH. CONE			D1557				T-99	X	T-180	OTHER	
REMARKS:														
Test #1 was performed on stone subbase for Major Cement.														
Tests 2 - 5 were performed on class II sand backfill for Motor City electrical conduit.														
SOMAT FIELD REPRESENTATIVE: Cody Cervelli											DATE: 7/31/2020			
SOMAT PROJECT MANAGER(s): Steve Drummond, P.E.											DATE: 8/7/2020			

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