



Concrete Cylinder Test Report

PROJECT INFO

ASTM C31, ASTM C39, AASHTO T23, AASHTO T22, ASTM C172, AASHTO R60

Client	AECOM	Date Of Placement	08/21/2020
Project Name	PW-7005 Kercheval Streetscape	Specimen Type	Concrete Cylinder
Project Number	2019057B	Contractor	Major Cement
Project Location	Detroit, MI	Concrete Supplier	McCoig Materials LLC
MDOT Job Number		Field Tested By	Cody Cervelli
MDOT Control Section		Date Issued	09/18/2020

Results Recorded In	English Units
Supplier Mix Description	MDOT P1 S35 MR

DESIGN PARAMETER

Mix Design Number	0795 P1-SM				
Design Compressive Strength (psi)	3500				
Air (% Max)	8.5	Slump (in Max)	6.00	Unit Weight (lbs/ft ³)	
Air (% Min)	5.5	Slump (in Min)	3.00		

TESTING DATA

Placed	80.00	+/- yds ³ /ft ³ of concrete at the following location:	Sidewalks, ADA ramps & curbs on SB side of Kercheval & Van Dyke to E. Grand Blvd.
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Time Tested	Truck Num	Slump ASTM C143 (in)	Air ASTM C231 or C173 (%)	Unit Weight ASTM C138 (lbs/ft ³)	Air Temp (°F)	Mix Temp ASTM C1064 (°F)	Concrete Cylinder Set	Water Added (gal)	Cumulative Concrete Placed At Test (yds ³ /ft ³)
8:30 AM	820	6.00	6.00	0.0	68	77	1	0	1

MATERIAL DATA

Concrete Cylinder Set	Concrete Cylinder Num	Diameter (in)	X-Sec Area (in ²)	Weight (lbs)	Fracture Type	Capping Process	Age Of Concrete Cylinder (Days)	Date Tested	Total Load At Failure (lbs)	Cumulative Strength (psi/mpa)
1	79751	4.00	12.57	8.39	3-(Vertical)	Unbonded Cap	28	09/18/2020	47530	3780
1	79752	4.00	12.57	8.43	3-(Vertical)	Unbonded Cap	28	09/18/2020	51400	4090

Average 28 Day Compressive Strength (psi): 3935

*Cylinders tested with Unbonded Caps followed ASTM C1231, cylinders tested with Bonded Caps followed ASTM C617.

*All Air Content % tests were performed per C231 unless otherwise noted in the remarks.

*Inspector was notified of non-conformance items, if any.

*Average Compressive Strength results did meet project specifications.

Remarks:	
Results Reported To:	AECOM(Alan Ostrowski)
Report Approved By:	Matthew Johnson



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TESTING DATA

Placed 80.00 +/- yds³/ft³ of concrete at the following location: Sidewalks, ADA ramps & curbs on SB side of Kercheval & Van Dyke to E. Grand Blvd.

Time Tested	Truck Num	Slump ASTM C143 (in)	Air ASTM C231 or C173 (%)	Unit Weight ASTM C138 (lbs/ft ³)	Air Temp (°F)	Mix Temp ASTM C1064 (°F)	Concrete Cylinder Set	Water Added (gal)	Cumulative Concrete Placed At Test (yds ³ /ft ³)
1:00 PM	713	5.50	6.40	0.0	82	84	2	0	51

MATERIAL DATA

Concrete Cylinder Set	Concrete Cylinder Num	Diameter (in)	X-Sec Area (in ²)	Weight (lbs)	Fracture Type	Capping Process	Age Of Concrete Cylinder (Days)	Date Tested	Total Load At Failure (lbs)	Cumulative Strength (psi/mpa)
2	79753	4.00	12.57	8.44	3-(Vertical)	Unbonded Cap	28	09/18/2020	51640	4110
2	79754	4.00	12.57	8.39	2-(Cone/Vertical)	Unbonded Cap	28	09/18/2020	51680	4110

Average 28 Day Compressive Strength (psi): 4110

*Cylinders tested with Unbonded Caps followed ASTM C1231, cylinders tested with Bonded Caps followed ASTM C617.

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