



Concrete Cylinder Test Report

PROJECT INFO

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

Client	AECOM	Date Of Placement	11/03/2020
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	12/01/2020
Results Recorded In	English Units		
Supplier Mix Description	MDOT P1 + MR - 6" Slump		

DESIGN PARAMETER

Mix Design Number	0799 P1-DETM				
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 55.00 +/- yds ³ /ft ³ of concrete at the following location: Curb & Sidewalks on NB side of Kercheval between E. Grand Blvd. & Field St. Also Various Structure Adj.& Patches between E. Grand Blvd. & St. Jean.									
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)
7:50 AM	444	5.00	5.80	0.0	39	64	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	81553	4.00	12.57	8.45	2- (Cone/Vertical)	Unbonded Cap	28	12/01/2020	57260	4560
1	81554	4.00	12.57	8.41	3-(Vertical)	Unbonded Cap	28	12/01/2020	61460	4890

Average 28 Day Compressive Strength (psi): 4725

*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



Concrete Cylinder Test Report

PROJECT INFO

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

Client	AECOM	Date Of Placement	11/03/2020
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	12/01/2020
Results Recorded In	English Units		
Supplier Mix Description	MDOT P1 + MR - 6" Slump		

DESIGN PARAMETER

Mix Design Number	0799 P1-DETM		
Design Compressive Strength (psi)	3500		
Air (% Max)	8.5	Slump (in Max)	6.00
Air (% Min)	5.5	Slump (in Min)	3.00

TESTING DATA

Placed	55.00	+/- yds ³ /ft ³ of concrete at the following location: Curb & Sidewalks on NB side of Kercheval between E. Grand Blvd. & Field St. Also Various Structure Adj.& Patches between E. Grand Blvd. & St. Jean.							
--------	-------	--	--	--	--	--	--	--	--

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)
2:05 PM	412	4.75	5.60	0.0	57	64	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	81555	4.00	12.57	8.62	2- (Cone/Vertical)	Unbonded Cap	28	12/01/2020	64810	5160
2	81556	4.00	12.57	8.57	2- (Cone/Vertical)	Unbonded Cap	28	12/01/2020	70750	5630

Average 28 Day Compressive Strength (psi): 5395

*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