



Concrete Cylinder Test Report

PROJECT INFO

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

Client	AECOM	Date Of Placement	06/30/2021
Project Name	PW-7023 Conner Improvements	Specimen Type	Concrete Cylinder
Project Number	2019057D-002	Contractor	Century Cement
Project Location	Detroit, MI	Concrete Supplier	Hercules Material Holdings, LLC
MDOT Job Number		Field Tested By	Jose Rodriguez
MDOT Control Section		Date Issued	07/28/2021
Results Recorded In	English Units		
Supplier Mix Description	City of Detroit P1 MR		

DESIGN PARAMETER

Mix Design Number	0946 P1-DETM-1		
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 121.00 +/- yds ³ /ft ³ of concrete at the following location: Set 1 tested at Connor & Vernor bus stop Sidewalks. Set 2 tested at Chandler Park Dr. Set 3 tested at 17+00									
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)
6:10 AM	2101	5.50	6.80	0.0	73	83	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	84293	4.01	12.63	8.15	2- (Cone/Vertical)	Unbonded Cap	28	07/28/2021	52227	4140
1	84294	4.01	12.63	8.16	2- (Cone/Vertical)	Unbonded Cap	28	07/28/2021	48113	3810

Average 28 Day Compressive Strength (psi): 3975

*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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Client	AECOM	Date Of Placement	06/30/2021
Project Name	PW-7023 Conner Improvements	Specimen Type	Concrete Cylinder
Project Number	2019057D-002	Contractor	AJAX
Project Location	Detroit, MI	Concrete Supplier	Hercules Material Holdings, LLC
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11:44 AM	2100	4.50	6.80	0.0	79	84	2	0	51

MATERIAL DATA

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2	84295	4.00	12.57	8.26	2- (Cone/Vertical)	Unbonded Cap	28	07/28/2021	58978	4690
2	84296	4.01	12.63	8.26	2- (Cone/Vertical)	Unbonded Cap	28	07/28/2021	61029	4830

Average 28 Day Compressive Strength (psi): 4760

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

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3:05 PM	2119	5.00	7.80	0.0	81	85	3	0	101

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3	84297	4.01	12.63	8.07	2- (Cone/Vertical I)	Unbonded Cap	28	07/28/2021	44492	3520
3	84298	4.00	12.57	8.15	3-(Vertical)	Unbonded Cap	28	07/28/2021	47344	3770

Average 28 Day Compressive Strength (psi): 3645

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

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