

**CONCRETE QA CORRELATION**

DATE: 6/4/2020

MDOT CONTROL SECTION: 82000

MDOT JOB NUMBER: 205935A, 207914A

SOMAT JOB NUMBER: 2019086C

PROJECT NAME: HMA Resurfacing (fed-aid)

CITY: Detroit, MI (Various Routes)

CLIENT: Hubbell, Roth, & Clark (HRC)

PROJECT ENGINEER: Kevin Surhigh (HRC)

INSPECTOR: Omar(HRC)

CONTRACTOR: Merlo

QC COMPANY: CTI

QC TESTER: Jasmine

CONCRETE INFORMATION

CONCRETE COMPANY: Superior Materials

TRUCK NUMBER: 3208

MIX DESIGN #: P155ERCQA032

PLANT LOCATION (CITY): Detroit

CONCRETE GRADE: P1

TOTAL QUANTITY (CYDS): 50

PWL/NON-PWL: Non-PWL

QUANTITY AT SAMPLE (CYDS): 4

POUR LOCATION (STATION, STRUCTURE, ETC...)

Sidewalks on Northbound M-10 Service Drive between Warren Ave. and 3rd Ave. Test was performed on Northbound M-10 Service Drive between Manoogian Hall and the parking structure.

TEST RESULTS

	QC (CONTRACTOR)	QA (SOMAT)	TOLERANCE	MEETS TOLERANCE (Y/N)
SAMPLE TIME (Hrs/Min):	10:30AM			
AIR CONTENT (%):	6.60	6.60	+/- 0.8 PERCENT	YES
CONCRETE TEMP. (°F):	79	79	+/- 2.0 DEGREES	YES
AIR TEMP. (°F):	77	77		

REMARKS:

FIELD REPRESENTATIVE: Alexander Hinz

DATE: 6/4/2020

PROJECT MANAGER(s): Steve Drummond

DATE:

*All results noted in this report relate only to items inspected or tested by Somat Engineering, Inc. and/or Somat Engineering of Ohio, Inc. (Somat). This report shall not be reproduced, except in full, without the prior written approval of Somat.



Concrete Cylinder Test Report

PROJECT INFO - DRAFT ONLY

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

Client	HRC	Date Of Placement	06/04/2020
Project Name	HMA Resurfacing 20+ Locations	Specimen Type	Concrete Cylinder
Project Number	2019086C	Contractor	merlo
Project Location	Detroit, MI	Concrete Supplier	Superior Materials
MDOT Job Number	205935A, 207914A	Field Tested By	Alex Hinz
MDOT Control Section	82000	Date Issued	06/04/2020

Results Recorded In	English Units
Supplier Mix Description	Structure Adjustment

DESIGN PARAMETER

Mix Design Number	0675 P155ERCQA032				
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)	3.50		

TESTING DATA

Placed 50.00 +/- yds³/ft³ of concrete at the following location: Sidewalks on Northbound M-10 Service Drive between Warren Ave. and 3rd Ave. Test was performed on Northbound M-10 Service Drive between Manoojian Hall and the parking structure.

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)
10:30 AM	3208	3.00	6.60	0.0	77	79	1	0	4

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	78098						28	07/02/2020		
1	78099						28	07/02/2020		

Average 28 Day Compressive Strength (psi): 0

*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 not meet project specifications.

Remarks:	
Results Reported To:	
Report Approved By:	Alex Hinz



CONCRETE QA CORRELATION

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MDOT CONTROL SECTION: 82000

MDOT JOB NUMBER: 205935A, 207914A

SOMAT JOB NUMBER: 2019086C

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CITY: Detroit, MI (Various Routes)

CLIENT: Hubbell, Roth, & Clark (HRC)

PROJECT ENGINEER: Kevin Surhigh (HRC)

INSPECTOR: Omar(HRC)

CONTRACTOR: Merlo

QC COMPANY: CTI

QC TESTER: Jasmine

CONCRETE INFORMATION

CONCRETE COMPANY: Superior Materials

TRUCK NUMBER: 3504

MIX DESIGN #: P155E7CQA032

PLANT LOCATION (CITY): Detroit

CONCRETE GRADE: P1

TOTAL QUANTITY (CYDS): 8

PWL/NON-PWL: Non-PWL

QUANTITY AT SAMPLE (CYDS): 3

POUR LOCATION (STATION, STRUCTURE, ETC...)

Curbs on Southbound M-10 Service Drive between Warren Ave. and Trumbull Ave. Test was performed on Southbound M-10 Service Drive by Brooklyn Ave. crosswalk.

TEST RESULTS

	QC (CONTRACTOR)	QA (SOMAT)	TOLERANCE	MEETS TOLERANCE (Y/N)
SAMPLE TIME (Hrs/Min):	3:35PM			
AIR CONTENT (%):	7.40	7.50	+/- 0.8 PERCENT	YES
CONCRETE TEMP. (°F):	84	84	+/- 2.0 DEGREES	YES
AIR TEMP. (°F):	84	84		

REMARKS:

FIELD REPRESENTATIVE: Alexander Hinz

DATE: 6/4/2020

PROJECT MANAGER(s): Steve Drummond

DATE:

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Concrete Cylinder Test Report

PROJECT INFO - DRAFT ONLY

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

Client	HRC	Date Of Placement	06/04/2020
Project Name	HMA Resurfacing 20+ Locations	Specimen Type	Concrete Cylinder
Project Number	2019086C	Contractor	merlo
Project Location	Detroit, MI	Concrete Supplier	Superior Materials
MDOT Job Number	205935A, 207914A	Field Tested By	Alex Hinz
MDOT Control Section	82000	Date Issued	06/04/2020
Results Recorded In	English Units		
Supplier Mix Description	MDOT P1 - 3" Slump		

DESIGN PARAMETER

Mix Design Number	0739 P155E7CQA032			
Design Compressive Strength (psi)	3500			
Air (% Max)	8.5	Slump (in Max)	3.00	Unit Weight (lbs/ft ³)
Air (% Min)	5.5	Slump (in Min)	0	

TESTING DATA

Placed	8.00	+/- yds ³ /ft ³ of concrete at the following location: Curbs on Southbound M-10 Service Drive between Warren Ave. and Trumbull Ave. Test was performed on Southbound M-10 Service Drive by Brooklyn Ave. crosswalk.							
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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)
3:35 PM	3504	3.00	7.50	0.0	84	84	1	0	3

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	78100						28	07/02/2020		
1	78101						28	07/02/2020		

Average 28 Day Compressive Strength (psi): 0

*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.

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