



CONCRETE QA CORRELATION

DATE: 7/20/2020

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: Andrew

CONTRACTOR: Merlo

QC COMPANY: CTI

QC TESTER: Mallory

CONCRETE INFORMATION

CONCRETE COMPANY:	superior	TRUCK NUMBER:	123
MIX DESIGN #:	P155E7CQA032	PLANT LOCATION (CITY):	32
CONCRETE GRADE:	p1	TOTAL QUANTITY (CYDS):	20
PWL/NON-PWL:	Non-PWL	QUANTITY AT SAMPLE (CYDS):	10

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

curb on woodmere and dix

TEST RESULTS

	QC (CONTRACTOR)	QA (SOMAT)	TOLERANCE	MEETS TOLERANCE (Y/N)
SAMPLE TIME (Hrs/Min):	9:15am			
AIR CONTENT (%):	5.60	6.20	+/- 0.8 PERCENT	
CONCRETE TEMP. (°F):	82	82	+/- 2.0 DEGREES	
AIR TEMP. (°F):	76	76		

REMARKS:

FIELD REPRESENTATIVE:		DATE:	7/20/2020
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.



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PROJECT ENGINEER: Kevin Surhigh (HRC)

INSPECTOR: Andrew

CONTRACTOR: Merlow

QC COMPANY: CTI

QC TESTER: Malory

CONCRETE INFORMATION

CONCRETE COMPANY: Superior

TRUCK NUMBER: 3207

MIX DESIGN #: P155ERCQA032

PLANT LOCATION (CITY): Detroit

CONCRETE GRADE: P1

TOTAL QUANTITY (CYDS): 10

PWL/NON-PWL: NON-PWL

QUANTITY AT SAMPLE (CYDS): 1

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

Dix and Woodmere sidewalks down Woodmere

TEST RESULTS

	QC (CONTRACTOR)	QA (SOMAT)	TOLERANCE	MEETS TOLERANCE (Y/N)
SAMPLE TIME (Hrs/Min):	12:00pm			
AIR CONTENT (%):	5.80	6.60	+/- 0.8 PERCENT	YES
CONCRETE TEMP. (°F):	87	87	+/- 2.0 DEGREES	YES
AIR TEMP. (°F):	82	82		

REMARKS:

FIELD REPRESENTATIVE: R. Clark

DATE: 7/20/2020

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	07/20/2020
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	AndrewLee
MDOT Control Section	82000	Date Issued	07/21/2020
Results Recorded In	English Units		
Supplier Mix Description	Structure Adjustment		

DESIGN PARAMETER

Mix Design Number	0674 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)	1.50		

TESTING DATA

Placed	20.00	+/- yds ³ /ft ³ of concrete at the following location: curb on woodmere and dix							
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)
9:15 AM	123	2.00	6.20	0.0	76	82	1	0	10

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	78807						28	08/17/2020		
1	78808						28	08/17/2020		

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:	AndrewLee



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	07/20/2020
Project Name	HMA Resurfacing 20+ Locations	Specimen Type	Concrete Cylinder
Project Number	2019086C	Contractor	merlo
Project Location	Detroit, MI	Concrete Supplier	Superior Materials, LLC
MDOT Job Number	205935A, 207914A	Field Tested By	Robert Clark
MDOT Control Section	82000	Date Issued	07/20/2020

Results Recorded In	English Units
Supplier Mix Description	Structure Adjustment

DESIGN PARAMETER

Mix Design Number	0665 P155ERCNA032				
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	10.00	+/- yds ³ /ft ³ of concrete at the following location: Dix and Woodmere side walk							
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)
12:00 PM	3207	4.75	6.60	0.0	82	87	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	78803						28	08/17/2020		
1	78804						28	08/17/2020		

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:	Robert Clark