



CONCRETE QA CORRELATION

PROJECT NAME: HMA Resurfacing 20 + Location
MDOT CONTROL SECTION: 8200
MDOT JOB NUMBER: 205935A,207914A
PROJECT ENGINEER: [REDACTED]
INSPECTOR: Andrew Weber
QC TESTER: Gilbert Guzman

DATE: 6/29/2020
SOMAT JOB NUMBER: 2019086C
CLIENT: HRC
CONTRACTOR: Merlo Construction
CITY: [REDACTED]
QC COMPANY: CTI

CONCRETE INFORMATION

CONCRETE COMPANY:	Superior Materials	TRUCK NUMBER:	6361
MIX DESIGN #:	P155ERCQA032	PLANT LOCATION (CITY):	Detroit
CONCRETE GRADE:	P1	TOTAL QUANTITY (CYDS):	40
PWL/NON-PWL:	Non PWL	QUANTITY AT SAMPLE (CYDS):	10

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

Used for the integral curb and sidewalk at the north and south of Lafayette Street between Mt. Elliot Street and Iroquois

TEST RESULTS

	QC (CONTRACTOR)	QA (SOMAT)	TOLERANCE	MEETS TOLERANCE (Y/N)
SAMPLE TIME (Hrs/Min):	9:34AM	9:34AM		
AIR CONTENT (%):	6.5	6.3	+/- 0.8 PERCENT	Yes
CONCRETE TEMP. (°F):	84	84	+/- 2.0 DEGREES	Yes
AIR TEMP. (°F):	73	73		

REMARKS:

Both QA and QC field technicians performed complete concrete field test and correlation test results are within tolerance.

FIELD REPRESENTATIVE: Jose M. Vinuya

DATE: 6/29/2020

PROJECT MANAGER(s): Steve Drummond, P.E.

DATE: 6/29/2020



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	06/29/2020
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	Jose Vinuya
MDOT Control Section	82000	Date Issued	06/29/2020
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
Air (% Min)	5.5	Slump (in Min)	3.50

TESTING DATA

Placed 40.00 +/- yds ³ /ft ³ of concrete at the following location: Used for the integral curb and sidewalk at Lafayette between Mt. Elliot Street and Iroquois Street.									
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)
9:34 AM	6361	3.75	6.30	0.0	73	84	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	78504						28	07/27/2020		
1	78505						28	07/27/2020		

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:	Jose Vinuya



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	06/29/2020
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	Jose Vinuya
MDOT Control Section	82000	Date Issued	06/29/2020
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 40.00 +/- yds³/ft³ of concrete at the following location: Used for the integral curb and sidewalk at Lafayette between Mt. Elliot Street and Iroquois Street.

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)
11:49 AM	9123	4.50	7.00	0.0	78	86	2	0	30

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	78506						28	07/27/2020		
2	78507						28	07/27/2020		

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:	Jose Vinuya