

**ASPHALT DENSITY  
DETERMINATION REPORT**

DATE: 8/31/2020

JOB NUMBER: 2020073E (PW-7018)

PROJECT NAME: HMA Mill &amp; Resurfacing 2020

LOCATION: Detroit, MI

GAUGE NUMBER: 10959

CLIENT: CoD/WSP

OWNER: City of Detroit (CoD)

CONTRACTOR: Ajax

PROJECT ENGINEER: Jason Lukasik, P.E.

WEATHER: Fair

| TEST PERFORMED ON:                                                      |        | X     | WEARING COURSE (WC)   |             |               | LEVELING COURSE (LC)  |        |             | BASE COURSE (BC)      |                                 |                   | OTHER    |          |  |
|-------------------------------------------------------------------------|--------|-------|-----------------------|-------------|---------------|-----------------------|--------|-------------|-----------------------|---------------------------------|-------------------|----------|----------|--|
| STRUCTURE:                                                              |        |       |                       |             |               |                       |        |             |                       |                                 |                   |          |          |  |
| TEST                                                                    |        |       | WET DENSITY           |             | MOISTURE      |                       |        | DENSITY     |                       | TEST LOCATION                   |                   |          |          |  |
| ORIG.                                                                   | RETEST | DEPTH | DENSITY COUNTS        | WET DENSITY | MOIST. COUNTS | MOIST.                | MOIST. | MAX DENSITY | COMPACT.              | STATIONING/LOCATION             | OFFSET OF CL (FT) |          | COURSE   |  |
|                                                                         |        | INCH  | DC                    | PCF         | MC            | PCF                   | %      | PCF         | %                     |                                 | LEFT              | RIGHT    |          |  |
| 1                                                                       |        | BS    | 536                   | 145.3       | 89            | 7.4                   | 5.4    | 156.6       | 92.8                  | 42.4455, - 83.1615              | 15                |          | BT       |  |
| 2                                                                       |        | BS    | 520                   | 147.3       | 92            | 7.7                   | 5.5    | 156.6       | 94                    | 42.4440, - 83.1614              | 18                |          | BT       |  |
| 3                                                                       |        | BS    | 511                   | 148.4       | 96            | 8.1                   | 5.8    | 156.6       | 94.7                  | 42.4424, - 83.1614              | 20                |          | BT       |  |
| 4                                                                       |        | BS    | 511                   | 148.4       | 91            | 7.6                   | 5.4    | 156.6       | 94.7                  | 42.4408, - 83.1613              | 14                |          | BT       |  |
| 5                                                                       |        | BS    | 510                   | 148.5       | 93            | 7.8                   | 5.5    | 156.6       | 94.8                  | 42.4396, - 83.1612              | 17                |          | BT       |  |
| 6                                                                       |        | BS    | 502                   | 149.5       | 91            | 7.6                   | 5.3    | 156.6       | 95.5                  | 42.4377, - 83.1612              | 13                |          | BT       |  |
| 7                                                                       |        | BS    | 497                   | 150.1       | 93            | 7.8                   | 5.5    | 156.6       | 95.9                  | 42.4359, - 83.1611              | 20                |          | BT       |  |
| 8                                                                       |        | BS    | 518                   | 147.5       | 86            | 7.1                   | 5      | 156.6       | 94.2                  | 42.4455, - 83.1615              |                   | 5.00     | BT       |  |
| 9                                                                       |        | BS    | 500                   | 149.7       | 97            | 8.2                   | 5.8    | 156.6       | 95.6                  | 42.4440, - 83.1614              | 4                 |          | BT       |  |
| 10                                                                      |        | BS    | 506                   | 149         | 91            | 7.6                   | 5.4    | 156.6       | 95.1                  | 42.4424, - 83.1614              |                   | 6.00     | BT       |  |
| 11                                                                      |        | BS    | 525                   | 146.6       | 96            | 8.1                   | 5.8    | 156.6       | 93.6                  | 42.4408, - 83.1613              | 3                 |          | BT       |  |
| MAXIMUM DETERMINATION (LAB)                                             |        |       |                       |             |               |                       |        |             |                       | PRESCALE                        |                   |          |          |  |
| NOTE: Gmb to Marshall conversion is $Gmb * 62.4 (PCF) = MARSHALL (PCF)$ |        |       |                       |             |               |                       |        |             |                       | 16                              |                   | 16       |          |  |
| NOTE: Gmm to TMD conversion is $Gmm * 62.4 (PCF) = TMD (PCF)$           |        |       |                       |             |               |                       |        |             |                       | DENSITY                         |                   | MOISTURE |          |  |
| MAXIMUM WET DENSITY BY:                                                 |        |       | MARSHALL/Gmb 95.0%    |             |               | TMD/Gmm 92.0% - 96.0% |        |             |                       |                                 | DENSITY           |          | MOISTURE |  |
|                                                                         |        |       | TMD/Gmm 92.0% - 97.0% |             |               | X                     |        |             | TMD/Gmm 92.0% - 98.0% |                                 | READING 1         |          | 2133     |  |
| REMARKS:                                                                |        |       |                       |             |               |                       |        |             |                       |                                 |                   | 591      |          |  |
| Mix 5E3                                                                 |        |       |                       |             |               |                       |        |             |                       | READING 2                       |                   | 2141     |          |  |
|                                                                         |        |       |                       |             |               |                       |        |             |                       | READING 3                       |                   | 2141     |          |  |
|                                                                         |        |       |                       |             |               |                       |        |             |                       | READING 4                       |                   | 2139     |          |  |
|                                                                         |        |       |                       |             |               |                       |        |             |                       | OPERATING STANDARDS (READING 5) |                   |          |          |  |
|                                                                         |        |       |                       |             |               |                       |        |             |                       | DENSITY                         |                   | MOISTURE |          |  |
|                                                                         |        |       |                       |             |               |                       |        |             |                       | 2147                            |                   | 593      |          |  |
| SOMAT FIELD REPRESENTATIVE: Garrett Hineman                             |        |       |                       |             |               |                       |        |             |                       | DATE: 8/31/2020                 |                   |          |          |  |
| SOMAT PROJECT MANAGER(s): Steve Drummond, P.E.                          |        |       |                       |             |               |                       |        |             |                       | DATE: 9/4/2020                  |                   |          |          |  |

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