

**ASPHALT DENSITY  
DETERMINATION REPORT**

DATE: 8/5/2020

JOB NUMBER: 2020073E (PW-7018)

PROJECT NAME: HMA Mill &amp; Resurfacing 2020

LOCATION: Detroit, MI

GAUGE NUMBER: 26254

CLIENT: CoD/WSP

OWNER: City of Detroit (CoD)

CONTRACTOR: AJAX

PROJECT ENGINEER: Jason Lukasik, P.E.

WEATHER: Sunny (60-76)

| TEST PERFORMED ON:                                                                                  |        | WEARING COURSE (WC) |                       | x           |               | LEVELING COURSE (LC)    |        | BASE COURSE (BC) |           | OTHER                           |                   |          |        |
|-----------------------------------------------------------------------------------------------------|--------|---------------------|-----------------------|-------------|---------------|-------------------------|--------|------------------|-----------|---------------------------------|-------------------|----------|--------|
| STRUCTURE: Leveling course for mainline roadway on Tireman from Minock to Southfield Service Drive. |        |                     |                       |             |               |                         |        |                  |           |                                 |                   |          |        |
| 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    |        |
| 23                                                                                                  |        | BS                  | 491                   | 146.9       | 96            | 7.2                     | 5.2    | 158.1            | 92.9      | 19937 Tireman                   | 17                |          | LC     |
| 24                                                                                                  |        | BS                  | 493                   | 146.6       | 107           | 8.2                     | 5.9    | 158.1            | 92.7      | Tireman at Grandville           | 10                |          | LC     |
| 25                                                                                                  |        | BS                  | 462                   | 151         | 104           | 7.9                     | 5.5    | 158.1            | 95.5      | Tireman at Piedmont             | 14                |          | LC     |
| 26                                                                                                  |        | BS                  | 481                   | 148.3       | 94            | 7                       | 5      | 158.1            | 93.8      | 19103 Tireman                   | 19                |          | LC     |
| 27                                                                                                  |        | BS                  | 481                   | 148.3       | 97            | 7.3                     | 5.2    | 158.1            | 93.8      | 19001 Tireman                   | 9                 |          | LC     |
| 28                                                                                                  |        | BS                  | 484                   | 147.9       | 96            | 7.2                     | 5.1    | 158.1            | 93.6      | Tireman at Stahelin             | 16                |          | LC     |
| 29                                                                                                  |        | BS                  | 501                   | 145.5       | 119           | 9.3                     | 6.8    | 158.1            | 92        | Tireman at Brace                | 13                |          | LC     |
| 30                                                                                                  |        | BS                  | 490                   | 147.1       | 96            | 7.2                     | 5.2    | 158.1            | 93        | 18600 Tireman                   | 9                 |          | LC     |
| 31                                                                                                  |        | BS                  | 501                   | 145.5       | 102           | 7.8                     | 5.6    | 158.1            | 92        | Tireman at Faust                | 19                |          | LC     |
| 32                                                                                                  |        | BS                  | 498                   | 145.9       | 113           | 8.8                     | 6.4    | 158.1            | 92.3      | Tireman at Penrod               | 14                |          | LC     |
| 33                                                                                                  |        | BS                  | 492                   | 146.8       | 95            | 7.1                     | 5.1    | 158.1            | 92.8      | Tireman at Rosemont             | 10                |          | LC     |
| 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 |                                 | 1864              | 674      |        |
| REMARKS:                                                                                            |        |                     |                       |             |               |                         |        |                  |           | READING 2                       |                   | 1861     | 675    |
|                                                                                                     |        |                     |                       |             |               |                         |        |                  |           | READING 3                       |                   | 1855     | 674    |
|                                                                                                     |        |                     |                       |             |               |                         |        |                  |           | READING 4                       |                   | 1874     | 670    |
|                                                                                                     |        |                     |                       |             |               |                         |        |                  |           | OPERATING STANDARDS (READING 5) |                   |          |        |
|                                                                                                     |        |                     |                       |             |               |                         |        |                  |           | DENSITY                         |                   | MOISTURE |        |
|                                                                                                     |        |                     |                       |             |               |                         |        |                  |           | 1864                            |                   | 675      |        |
| SOMAT FIELD REPRESENTATIVE: Alexander Hinz                                                          |        |                     |                       |             |               |                         |        |                  |           | DATE: 8/5/2020                  |                   |          |        |
| SOMAT PROJECT MANAGER(s): Steve Drummond, P.E.                                                      |        |                     |                       |             |               |                         |        |                  |           | DATE: 8/11/2020                 |                   |          |        |

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