



Somat Engineering, Inc.

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ASTM D2950

REPORT NUMBER: 008 SHEET: 1 OF 1

# ASPHALT DENSITY DETERMINATION REPORT

DATE: 7/27/2020

JOB NUMBER: 2020073E (PW-7018)

PROJECT NAME: HMA Mill & Resurfacing 2020

LOCATION: Detroit, MI

GAUGE NUMBER: 15829

CLIENT: CoD/WSP

OWNER: City of Detroit (CoD)

CONTRACTOR: AJAX

PROJECT ENGINEER: Jason Lukasik, P.E.

WEATHER: Forecast

| TEST PERFORMED ON:                                                            |        | WEARING COURSE (WC) | X                     | 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                  | 468                   | 147.7                | 123                  | 8.9    | 6.4                   | 156.6       | 94.3     | 42.3356, - 83.0409              |                   | 8.00      | BL     |
| 2                                                                             |        | BS                  | 458                   | 149.2                | 108                  | 7.6    | 5.3                   | 156.6       | 95.3     | 42.3360, - 83.0400              |                   | 4.00      | BL     |
| 3                                                                             |        | BS                  | 470                   | 147.4                | 117                  | 8.4    | 6                     | 156.6       | 94.1     | 42.3364, - 83.0390              |                   | 11.00     | BL     |
| 4                                                                             |        | BS                  | 483                   | 145.5                | 112                  | 7.9    | 5.7                   | 156.6       | 92.9     | 42.3356, - 83.0409              | 6                 |           | BL     |
| 5                                                                             |        | BS                  | 491                   | 144.4                | 102                  | 7.1    | 5.1                   | 156.6       | 92.2     | 42.3360, - 83.0400              | 10                |           | BL     |
| 6                                                                             |        | BS                  | 487                   | 144.9                | 107                  | 7.5    | 5.4                   | 156.6       | 92.5     | 42.3364, - 83.0390              | 3                 |           | BL     |
|                                                                               |        |                     |                       |                      |                      |        |                       |             |          |                                 |                   |           |        |
|                                                                               |        |                     |                       |                      |                      |        |                       |             |          |                                 |                   |           |        |
|                                                                               |        |                     |                       |                      |                      |        |                       |             |          |                                 |                   |           |        |
|                                                                               |        |                     |                       |                      |                      |        |                       |             |          |                                 |                   |           |        |
|                                                                               |        |                     |                       |                      |                      |        |                       |             |          |                                 |                   |           |        |
|                                                                               |        |                     |                       |                      |                      |        |                       |             |          |                                 |                   |           |        |
|                                                                               |        |                     |                       |                      |                      |        |                       |             |          |                                 |                   |           |        |
| 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% |                      |                      |        | TMD/Gmm 92.0% - 98.0% |             |          | READING 1                       |                   | 711       |        |
| REMARKS:                                                                      |        |                     |                       |                      |                      |        |                       |             |          | READING 2                       |                   | 699       |        |
| Somat technician only shot six tests today, only two lanes a block long each. |        |                     |                       |                      |                      |        |                       |             |          | READING 3                       |                   | 701       |        |
|                                                                               |        |                     |                       |                      |                      |        |                       |             |          | READING 4                       |                   | 699       |        |
|                                                                               |        |                     |                       |                      |                      |        |                       |             |          | OPERATING STANDARDS (READING 5) |                   |           |        |
|                                                                               |        |                     |                       |                      |                      |        |                       |             |          | DENSITY                         |                   | MOISTURE  |        |
|                                                                               |        |                     |                       |                      |                      |        |                       |             |          | 1832                            |                   | 701       |        |
| SOMAT FIELD REPRESENTATIVE:                                                   |        |                     |                       |                      | Garrett Hineman      |        |                       |             |          | DATE:                           |                   | 7/27/2020 |        |
| SOMAT PROJECT MANAGER(s):                                                     |        |                     |                       |                      | Steve Drummond, P.E. |        |                       |             |          | DATE:                           |                   | 7/30/2020 |        |

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