

# ASPHALT DENSITY DETERMINATION REPORT

**DATE:** 6/29/2020

**JOB NUMBER: 2019057B**

**PROJECT NAME:** Kercheval Streetscape (PW-7005)

**LOCATION:** Detroit, MI

GAUGE NUMBER: 2408

**CLIENT:** AECOM & City of Detroit

**OWNER:** City of Detroit (Public Works)

**CONTRACTOR:** Cadillac Asphalt

**PROJECT ENGINEER:** Allen Ostrowski (AECOM)

**WEATHER:** Clear

|                                                                         |                          |                     |                |                       |               |                  |        |                       |          |                                 |                   |           |        |
|-------------------------------------------------------------------------|--------------------------|---------------------|----------------|-----------------------|---------------|------------------|--------|-----------------------|----------|---------------------------------|-------------------|-----------|--------|
| TEST PERFORMED ON:                                                      |                          | WEARING COURSE (WC) | X              | LEVELING COURSE (LC)  |               | BASE COURSE (BC) |        | OTHER                 |          |                                 |                   |           |        |
| STRUCTURE:                                                              | Approaches on Kercheval. |                     |                |                       |               |                  |        |                       |          |                                 |                   |           |        |
| 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     |        |
| 12                                                                      |                          | BS                  | 433            | 143.3                 | 98            | 7.5              | 5.5    | 155                   | 92.5     | 141+00                          |                   | 34.00     | BB     |
| 13                                                                      |                          | BS                  | 416            | 145.9                 | 102           | 7.9              | 5.7    | 155                   | 94.1     | 13+75                           |                   | 35.00     | BB     |
| 14                                                                      |                          | BS                  | 429            | 143.9                 | 110           | 8.6              | 6.3    | 155                   | 92.8     | 21+75                           |                   | 33.00     | BB     |
| 15                                                                      |                          | BS                  | 425            | 144.5                 | 98            | 7.5              | 5.5    | 155                   | 93.2     | 31+50                           |                   | 32.00     | BB     |
|                                                                         |                          |                     |                |                       |               |                  |        |                       |          |                                 |                   |           |        |
|                                                                         |                          |                     |                |                       |               |                  |        |                       |          |                                 |                   |           |        |
|                                                                         |                          |                     |                |                       |               |                  |        |                       |          |                                 |                   |           |        |
|                                                                         |                          |                     |                |                       |               |                  |        |                       |          |                                 |                   |           |        |
|                                                                         |                          |                     |                |                       |               |                  |        |                       |          |                                 |                   |           |        |
|                                                                         |                          |                     |                |                       |               |                  |        |                       |          |                                 |                   |           |        |
|                                                                         |                          |                     |                |                       |               |                  |        |                       |          |                                 |                   |           |        |
|                                                                         |                          |                     |                |                       |               |                  |        |                       |          |                                 |                   |           |        |
|                                                                         |                          |                     |                |                       |               |                  |        |                       |          |                                 |                   |           |        |
| 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% |          |                                 | READING 1         | 1812      | 667    |
|                                                                         |                          |                     |                | TMD/Gmm 92.0% - 97.0% |               |                  | X      | TMD/Gmm 92.0% - 98.0% |          |                                 |                   |           |        |
| REMARKS:                                                                |                          |                     |                |                       |               |                  |        |                       |          | READING 2                       | 1811              | 658       |        |
| Mix used was 4E3. TMD = 155.0                                           |                          |                     |                |                       |               |                  |        |                       |          | READING 3                       | 1818              | 667       |        |
|                                                                         |                          |                     |                |                       |               |                  |        |                       |          | READING 4                       | 1827              | 661       |        |
|                                                                         |                          |                     |                |                       |               |                  |        |                       |          | OPERATING STANDARDS (READING 5) |                   |           |        |
|                                                                         |                          |                     |                |                       |               |                  |        |                       |          | DENSITY                         | MOISTURE          |           |        |
|                                                                         |                          |                     |                |                       |               |                  |        |                       |          | 1816                            | 666               |           |        |
| SOMAT FIELD REPRESENTATIVE:                                             |                          |                     |                | Cody Cervelli         |               |                  |        |                       |          | DATE:                           |                   | 6/29/2020 |        |
| SOMAT PROJECT MANAGER(s):                                               |                          |                     |                | Steve Drummond, P.E.  |               |                  |        |                       |          | DATE:                           |                   | 7/27/2020 |        |