



**Wise County Public Service Authority**  
 5622 Industrial Park Rd  
 Norton, VA 24273  
 Phone: (276) 679-1263  
 Fax: (276) 679-1528  
 Email: cculbertson@wisecountypsa.org

# Vacuum Testing of New Sanitary Sewer Manholes Inspection Report Form

Project Name: \_\_\_\_\_ Phase No.: \_\_\_\_\_

Contractor: \_\_\_\_\_

| Test Date | Inspector | Street Name/<br>Specific Location | MH # | MH<br>Diameter (in) | MH Depth<br>(ft) | Minimum<br>Time<br>Required<br>(sec) | Vacuum (in Hg) |      | Test Result |
|-----------|-----------|-----------------------------------|------|---------------------|------------------|--------------------------------------|----------------|------|-------------|
|           |           |                                   |      |                     |                  |                                      | Start          | End  |             |
|           |           |                                   |      |                     |                  |                                      |                |      |             |
|           |           |                                   |      |                     |                  |                                      |                |      |             |
|           |           |                                   |      |                     |                  |                                      |                |      |             |
|           |           |                                   |      |                     |                  |                                      |                |      |             |
|           |           |                                   |      |                     |                  |                                      |                |      |             |
|           |           |                                   |      |                     |                  |                                      |                |      |             |
|           |           |                                   |      |                     |                  |                                      |                |      |             |
|           |           |                                   |      |                     |                  |                                      |                |      |             |
|           |           |                                   |      |                     |                  |                                      |                |      |             |
|           |           |                                   |      |                     |                  |                                      |                |      |             |
|           |           |                                   |      |                     |                  |                                      |                |      |             |
|           |           |                                   |      |                     |                  |                                      |                |      |             |
|           |           |                                   |      |                     |                  |                                      |                |      |             |
|           |           |                                   |      |                     |                  |                                      |                |      |             |
|           |           |                                   |      |                     |                  |                                      |                |      |             |
|           |           |                                   |      |                     |                  |                                      |                |      |             |
|           |           |                                   |      |                     |                  |                                      |                |      |             |
|           |           |                                   |      |                     |                  |                                      |                |      |             |
| 11/2/18   | SC        | Main Street                       | 2    | 60                  | 14               | 90                                   | 10"            | 8.5" | Fail        |
| 12/3/18   | MG        | Olive Branch Rd.                  | 3    | 48                  | 10               | 60                                   | 10"            | 9.5" | Pass        |

See reverse for testing procedures and time specification. Bottom two table entries above represent example tests.

Notes:

**MINIMUM TEST TIMES FOR  
VARIOUS MANHOLE DIAMETERS**

|            | DIAMETER (INCHES) |    |    |    |     |     |
|------------|-------------------|----|----|----|-----|-----|
|            | 42                | 48 | 54 | 60 | 66  | 72  |
| DEPTH (FT) | TIME (SECONDS)    |    |    |    |     |     |
| 8'         | 17                | 20 | 23 | 26 | 29  | 33  |
| 10'        | 21                | 25 | 29 | 33 | 36  | 41  |
| 12'        | 25                | 30 | 35 | 39 | 43  | 49  |
| 14'        | 30                | 35 | 41 | 46 | 51  | 57  |
| 16'        | 34                | 40 | 46 | 52 | 58  | 67  |
| 18'        | 38                | 45 | 52 | 59 | 65  | 73  |
| 20'        | 42                | 50 | 53 | 65 | 72  | 81  |
| 22'        | 46                | 55 | 64 | 72 | 79  | 89  |
| 24'        | 51                | 59 | 64 | 78 | 87  | 97  |
| 26'        | 55                | 64 | 75 | 85 | 94  | 105 |
| 28'        | 59                | 69 | 81 | 91 | 101 | 113 |
| 30'        | 63                | 74 | 87 | 98 | 108 | 121 |

**NOTES:**

- 1) THE TEST HEAD SHALL BE PLACED AT THE TOP OF THE MANHOLE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
- 2) A VACUUM OF 10" OF MERCURY SHALL BE DRAWN ON THE MANHOLE, THE VALVE ON THE VACUUM LINE OF THE TEST HEAD CLOSED, AND THE VACUUM PUMP SHUT OFF. THE TIME SHALL BE MEASURED FOR THE VACUUM TO DROP TO 9" OF MERCURY.
- 3) THE MANHOLE SHALL PASS IF THE TIME FOR THE VACUUM READING TO DROP FROM 10" TO 9" OF MERCURY MEETS OR EXCEEDS THE VALUES INDICATED IN THE TABLE ABOVE.
- 4) IF THE MANHOLE FAILS THE INITIAL TEST, NECESSARY REPAIRS SHALL BE MADE BY APPROVED METHOD(S). THE MANHOLE SHALL BE RETESTED UNTIL A SATISFACTORY RESULT IS OBTAINED.
- 5) IF THE MANHOLE CONTINUES TO FAIL TESTS, THE PSA RESERVES THE RIGHT TO REQUIRE COMPLETE REPLACEMENT.



**MANHOLE VACUUM  
TESTING**

EFFECTIVE  
07/2024

DETAIL NO.  
404