

**HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
CORROSION CONTROL TEST STATION  
FIELD DATA SURVEY FORM**

Location: 49+84 Date Surveyed: 2/16/2005  
Old Stockbridge & Village Dr. Surveyed by: AC/MJ  
 T/S #: 10 Contract #: 44-3327  
 T/S Type: IR w/ Anode Pipe Size: 36"

Was Test Station located? YES/NO Yes  
 If NO, then how much time was spent locating? \_\_\_\_\_

**TEST STATION CONDITION**

Test Box : Good  
 Terminal Board : Good  
 Wires : Good  
 Other : \_\_\_\_\_

**SURVEY DATA**

| Test Wire<br>Size/Description | Color  | P/Cu-CuSO <sub>4</sub> (V) |        | P/Zn (V) |        | Anode (mA) |
|-------------------------------|--------|----------------------------|--------|----------|--------|------------|
|                               |        | "On"                       | "Off"  | "On"     | "Off"  |            |
| 1) #8 AWG                     | Red    | -1.359                     | -1.648 | -0.363   | -0.732 | 21.0       |
| 2) #10 AWG                    | Black  | -1.360                     | -1.346 | -0.365   | -0.275 |            |
| 3) #12 AWG                    | Orange | -1.212                     | -1.303 | -0.248   | -0.208 |            |
| 4) #10 AWG                    | Green  | -0.995                     | -1.080 |          |        |            |
| 5)                            |        |                            |        |          |        |            |
| 6) #8 AWG                     | Orange | -1.384                     | -1.384 | -0.363   | -0.274 |            |
| 7) #8 AWG                     | Black  | -1.369                     | -1.343 | -0.366   | -0.274 |            |

P/Cu-CuSO<sub>4</sub> = Pipe to Copper - Copper Sulfate Reference Cell

P/Zn = Pipe to Zinc Permanent Reference Cell

"On" = Reading with Anode(s) connected

"Off" = Reading with Anode(s) disconnected

I Anode = Current output of anodes

| IR Drop<br>Calibrations | I (Amps) | E (mV) |
|-------------------------|----------|--------|
| Initial                 | 0        | 0      |
| Final                   | 0.233    | 24     |
| Delta                   | -0.233   | -24    |

$$K = \frac{? I \text{ (mA)}}{? E \text{ (mV)}}$$

$$K = \frac{0.01}{?}$$

Direction; Orange to Black

| Between<br>Terminals | Resistance<br>(Ohms) |
|----------------------|----------------------|
| 2 & 3                | 0.6                  |
| 2 & 7                | 0.3                  |
| 3 & 7                | 0.6                  |
| 3 & 6                | 8.9                  |
| 6 & 7                | 8.0                  |

**REPAIRS MADE**

Test Box: \_\_\_\_\_  
 Terminal Board: \_\_\_\_\_  
 Wires: \_\_\_\_\_  
 Other: \_\_\_\_\_  
 Additional Comments/Recommendations: \_\_\_\_\_



**Figure 145 – Location of Test Station 10**



**Figure 146 – Test Station 10 close up**