

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

Location: 04+80 (along FM) Date Surveyed: 5/21/2007  
NW side of MH #3A Surveyed by: MJ/DD  
 T/S #: 12GS2 Contract #: 3696  
 T/S Type: ST Pipe Size: 12"  
 Was the T/S located? YES / NO YES

**TEST STATION CONDITION**

|                 |                                  |
|-----------------|----------------------------------|
| Test Box:       | <u>GOOD, Natural over growth</u> |
| Terminal Board: | <u>GOOD, Dried mud</u>           |
| Wires:          | <u>GOOD</u>                      |
| Other:          |                                  |

**SURVEY DATA**

| Test Wire<br>Size/Description | Color | P/Cu-CuSO <sub>4</sub> (mV) |       | P/Zn (mV) |       | Anode<br>(mA) |
|-------------------------------|-------|-----------------------------|-------|-----------|-------|---------------|
|                               |       | "On"                        | "Off" | "On"      | "Off" |               |
| 1. #10 AWG                    | BLUE  |                             | -503  |           |       |               |
| 2. #10 AWG                    | BLUE  |                             | -503  |           |       |               |
| 3.                            |       |                             |       |           |       |               |
| 4.                            |       |                             |       |           |       |               |
| 5.                            |       |                             |       |           |       |               |
| 6.                            |       |                             |       |           |       |               |
| 7.                            |       |                             |       |           |       |               |
| 8.                            |       |                             |       |           |       |               |

P/Cu-CuSO<sub>4</sub> = Pipe to Copper-Copper Sulfate Reference Electrode  
 P/Zn = Pipe to Zinc Reference Electrode  
 "On" = Reading with Anode(s) connected  
 "Off" = Reading with Anode(s) disconnected  
 Anode = Current output Anode(s)

**TESTING THE EFFECTIVENESS OF INSULATING JOINTS**

|                     |             |              |                   |
|---------------------|-------------|--------------|-------------------|
| Groundbed:          |             |              |                   |
| Connected to (B/W): |             |              |                   |
|                     | Current (A) | Voltage (mV) | Resistance (ohms) |
| ON:                 |             |              |                   |
| OFF:                |             |              |                   |
| DELTA:              |             |              |                   |

**TESTING IR DROP**

|                         |       |        |   |                      |                      |
|-------------------------|-------|--------|---|----------------------|----------------------|
| IR Drop<br>Calibrations | I (A) | E (mV) | $K = \frac{\Delta I \text{ (mA)}}{\Delta E \text{ (mV)}}$ | Between<br>Terminals | Resistance<br>(ohms) |
| INITIAL:                |       |        |   |                      |                      |
| FINAL:                  |       |        |   |                      |                      |
| DELTA:                  |       |        |   |                      |                      |
|                         |       |        | Direction:  |                      |                      |

**REPAIRS MADE**

|                           |  |
|---------------------------|--|
| Test Box:                 |  |
| Terminal Board:           |  |
| Wires:                    |  |
| Other:                    |  |
| Comments/Recommendations: |  |



Figure 10 – Location of Test Station 12GS2



Figure 11 - Test Station 12GS2 close-up