**Cathodic System Evaluation**

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| --- | --- | --- | --- | --- |
| Date: | 8-1-06 | Zone# | Section A | Section B |
| Name: | John Rust | Rectifier Settings | Ref. Cell | Depolarization Readings |
| Bridge No. | A1527 | InputVoltage | InputCurrent | InputCurrentDensity | OnPotential(millivolt) | InstantOff Potential | 4 Hr. Off Potential (millivolt) | Shift inPotential(millivolts) | Revised Current(amps) |
| Direction: | E&W |
| Route: | I-222 | 1 | 6.8 | 2.25 | 1.50 | -550 | -510 | -400 | -110 | 2.3 |
| District: |  | 2 | 9.0 | 3.00 | 2.00 | -492 | -460 | -285 | -175 | 2.5 |
| County: | Royals | 3 | 6.9 | 2.30 | 1.53 | -605 | -585 | -470 | -115 | 2.3 |
| Location: | Over Blue River | 4 | 5.4 | 1.80 | 1.20 | -511 | -488 | -380 | -108 | 1.8 |
| Date Let: | 5/27/1987 | 5 | 4.2 | 1.40 | 0.93 | -488 | -470 | -380 | -90 | 1.6 |
| Rectifier Serial No.: | XJ5-4172 | 6 | 6.8 | 2.25 | 1.80 | -215 | -9 | -40 | -155 | 1.7 |
| Rectifier Brand: | PowerPlus | 7 | 25 | 0.50 | 0.40 | -390 | -370 | -340 | -30 | 1.7 |
| Air Temp.: | 83 | 8 | 6 | 2.00 | 1.60 | -355 | -330 | -210 | -120 | 2.0 |
| Deck Condition: | W | 9 | 5.1 | 1.70 | 1.36 | -400 | -385 | -290 | -95 | 1.8 |
| Type Anode: | Platinum | 10 | 7.2 | 2.40 | 1.92 | -388 | -375 | -200 | -175 | 1.4 |
|  |  |
| **Cathodic System** | YES | NO | Zone | Comments: | Rectifier cabinet rusty. Mowers have broken conduit at cabinet.Zone 7 appears to have major problems. |
| Broken Lead: | ☐ | ☒ |       |
| Exposed Lead: | ☐ | ☒ |       |
| Corroded Lead: | ☒ | ☐ |       |
| Meters Not Functioning: | ☒ | ☐ |       |
| Fuses Blown: | ☐ | ☒ |       |
| Corroded Circuit Board: | ☒ | ☐ |       |
| Lightening Arrestors Blown: | ☐ | ☒ |       |
| Power Off: | ☐ | ☒ |       |
| Lost ID Tags: | ☐ | ☒ |       |
| All zones on constant current: | ☒ | ☐ |       | If not, list zones on constant voltage | 7 |
| **Meter Type** | YES | NO | Comments: | *Engineer’s comments from main database on Section C, changes in original set up of system, or changes made in operating parameters when new input currents set.*  |
| External Meter: | ☒ | ☐ |
| Built In Meter: | ☐ | ☒ |
| Zone# | Section C |
| Original Settings | Fixed Design Parameters |
| Original On Potential | Original Input Current | Zone Size(Sq. Ft.) | Input CurrentDensity(milliAmps/sf) | Current Parameters | Potential Parameters |
| Lower | Upper | Lower | Upper |
| 1 | -490 | 2.25 | 1500 | 1.50 | 0.75 | 3.00 | -294 | -686 |
| 2 | -472 | 3.00 | 1500 | 2.00 | 0.75 | 3.00 | -283 | -661 |
| 3 | -550 | 2.30 | 1500 | 1.53 | 0.75 | 3.00 | -330 | -770 |
| 4 | -458 | 1.80 | 1500 | 1.20 | 0.75 | 3.00 | -275 | -643 |
| 5 | -498 | 1.40 | 1500 | 0.93 | 0.75 | 3.00 | -299 | -697 |
| 6 | -307 | 2.25 | 1250 | 1.80 | 0.63 | 2.50 | -184 | -430 |
| 7 | -460 | 0.50 | 1250 | 0.40 | 0.63 | 2.50 | -276 | -644 |
| 8 | -355 | 2.00 | 1250 | 1.60 | 0.63 | 2.50 | -193 | -451 |
| 9 | -510 | 1.70 | 1250 | 1.36 | 0.63 | 2.50 | -306 | -714 |
| 10 | -412 | 2.40 | 1250 | 1.92 | 0.63 | 2.50 | -247 | -575 |