**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 |  |  |  |  |  |  |  |  |
| District: |  | 2 |  | 2.5 | 1.67 | -450 | -410 | -285 | -125 |  |
| County: | Royals | 3 |  |  |  |  |  |  |  |  |
| Location: | Over Blue River | 4 |  |  |  |  |  |  |  |  |
| Date Let: | 5/27/1987 | 5 |  | 1.6 | 1.07 | -520 | -490 | -380 | -110 |  |
| Rectifier Serial No.: | XJ5-4172 | 6 |  | 1.7 | 1.36 | -180 | -140 | -50 | -90 |  |
| Rectifier Brand: | PowerPlus | 7 |  | 1.7 | 1.36 | -390 | -372 | -340 | -32 |  |
| Air Temp.: | 83 | 8 |  |  |  |  |  |  |  |  |
| Deck Condition: | W | 9 |  | 1.8 | 1.44 | -400 | -385 | -285 | -100 |  |
| Type Anode: | Platinum | 10 |  | 1.4 | 1.12 | -315 | -285 | -190 | -95 |  |
|  |  |
| **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 | -550 | 2.25 | 1500 | 1.50 | 0.75 | 3.00 | -330 | -770 |
| 2 | -450 | 3.00 | 1500 | 2.00 | 0.75 | 3.00 | -270 | -630 |
| 3 | -605 | 2.30 | 1500 | 1.53 | 0.75 | 3.00 | -363 | -847 |
| 4 | -511 | 1.80 | 1500 | 1.20 | 0.75 | 3.00 | -307 | -715 |
| 5 | -520 | 1.40 | 1500 | 0.93 | 0.75 | 3.00 | -312 | -728 |
| 6 | -180 | 2.25 | 1250 | 1.80 | 0.63 | 2.50 | -108 | -252 |
| 7 | -390 | 0.50 | 1250 | 0.40 | 0.63 | 2.50 | -234 | -546 |
| 8 | -322 | 2.00 | 1250 | 1.60 | 0.63 | 2.50 | -193 | -451 |
| 9 | -400 | 1.70 | 1250 | 1.36 | 0.63 | 2.50 | -240 | -560 |
| 10 | -315 | 2.40 | 1250 | 1.92 | 0.63 | 2.50 | -247 | -575 |