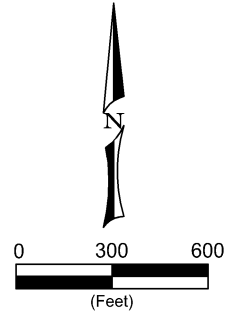
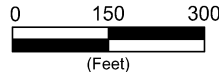
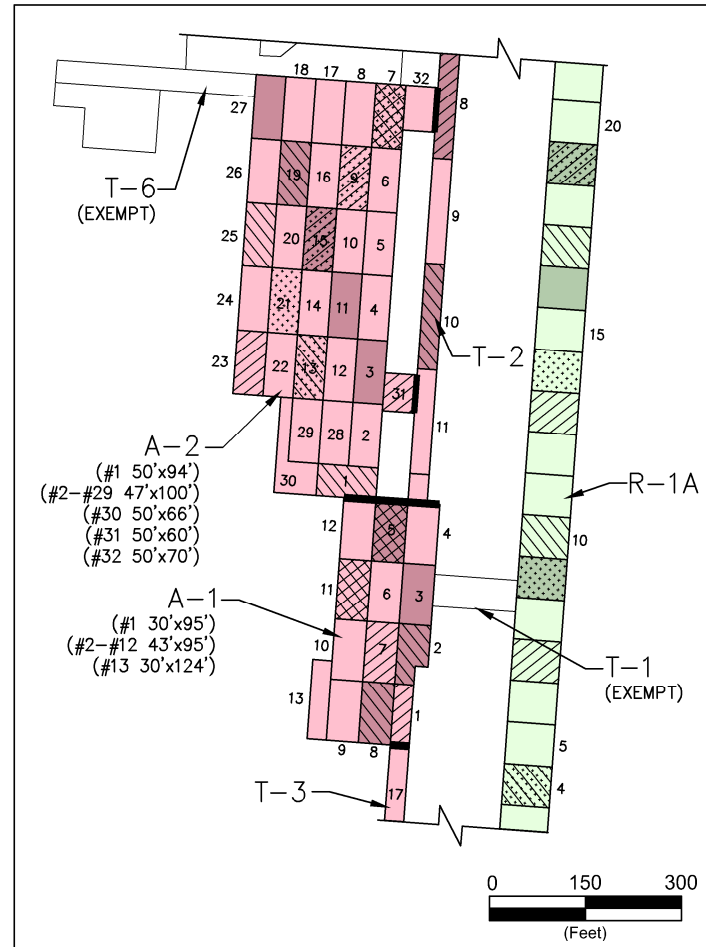
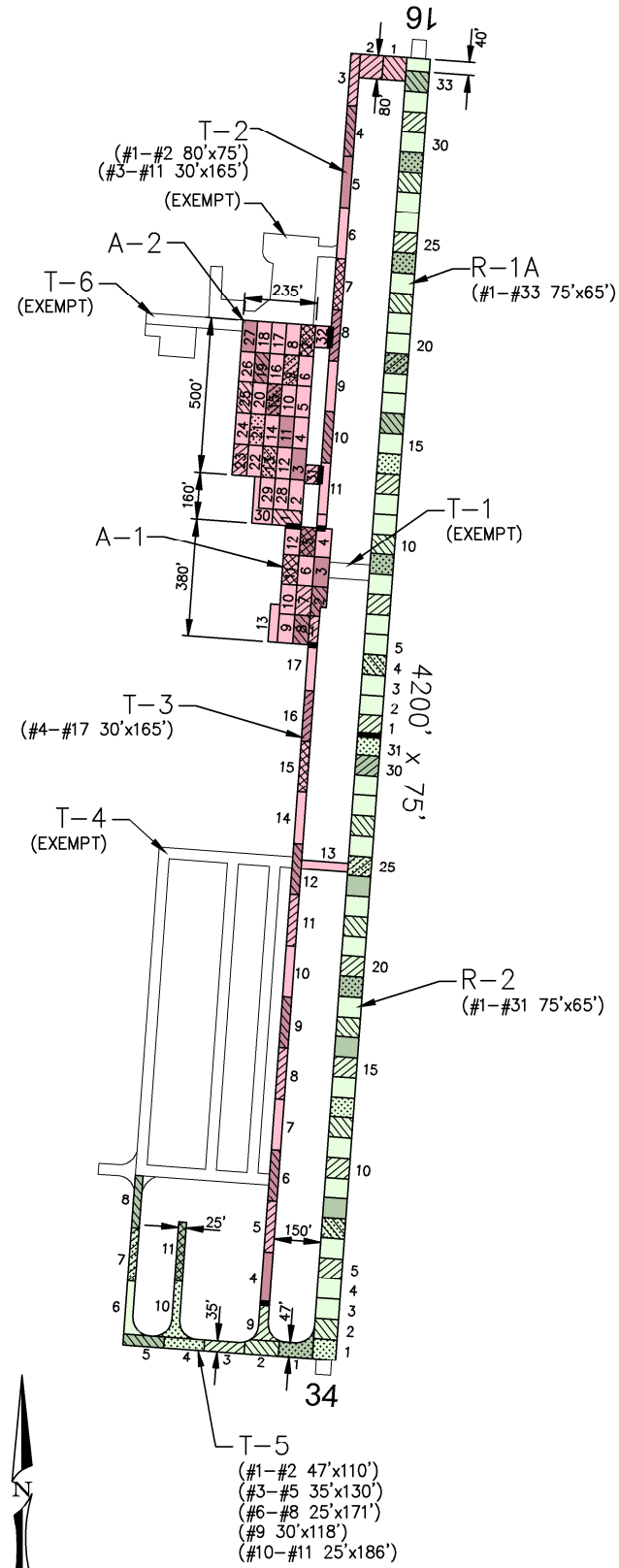


# HAMILTON



# PAVEMENT STRENGTH SURVEY/PAVEMENT CONDITION SURVEY

| PAVE. IDENT.    | SOIL CLASS | SUB GRADE CLASS | SUBBASE COURSE    | BASE COURSE | SURFACE COURSE | OVERLAY           | PAVEMENT STRENGTH     |         |           | REMARKS |
|-----------------|------------|-----------------|-------------------|-------------|----------------|-------------------|-----------------------|---------|-----------|---------|
|                 |            |                 |                   |             |                |                   | MAX. GROSS LOAD (LBS) |         |           |         |
|                 |            |                 |                   |             |                |                   | SINGLE                | DUAL    | DUAL TAN. |         |
| <b>RUNWAYS</b>  |            |                 |                   |             |                |                   |                       |         |           |         |
| R-1A            | E-6        | F6              | 4" P-154          | 7" P-208    | P-609          | 1.5" P-402, P-608 | 17,000                | 25,000  |           | 1,3,5,9 |
| R-2             | E-6        | F-6             | FABRIC, 40" P-154 | 4" P-208    | 2" P-401       | 1.5" P-402, P-608 | 25,000                |         |           | 5,9     |
| <b>TAXIWAYS</b> |            |                 |                   |             |                |                   |                       |         |           |         |
| T-1             | E-6        | F6              | 4" P-154          | 7" P-208    | P-609          | P-609             | 17,000                | 25,000  |           | 1,3     |
| T-2             | E-6        | F-6             | 6" P-152          | 9" P-208    | P-609          | 1.5" P-402        |                       |         |           | 3,6     |
| T-3             | E-6        | F-6             | 6" P-152          | 9" P-208    | P-609          |                   |                       |         |           | 4       |
| T-4             |            |                 | FABRIC, 8" P-154  | 4" P-208    | 2" P-401       |                   |                       |         |           | 5       |
| T-5             | E-6        | F-6             | 12" P-154         | 8" P-208    | 4" P-401       | P-608             | 75,000                | 200,000 |           | 7,8,9   |
| T-6             | E-6        | F-6             | 12" P-154         | 4" P-208    | 3" TYPE S-3    | P-608             | 12,500                |         |           | 8,9     |
| <b>APRONS</b>   |            |                 |                   |             |                |                   |                       |         |           |         |
| A-1             | E-6        | F6              | 4" P-154          | 7" P-208    | P-609          |                   | 17,000                | 25,000  |           | 3       |
| A-2             | E-6        | F-6             | 6" P-152, FABRIC  | 9" P-208    | P-609          |                   | 17,000                | 25,000  |           | 2,4     |

### REMARKS:

- INFORMATION IS SUSPECT PER JWS AUG. 1988
- TAKEN FROM 5320-1 DATED 9/11/68
- STABILIZATION FABRIC
- 1980
- AIP-01, 1983, CONSTRUCT TAXIWAY (T-3) AND APRON (A-2).
- AIP-02, 1992, RUNWAY RECONSTRUCTION (R-2); RUNWAY OVERLAY (R-1A).
- NON-AIP BY COUNTY, 1994
- AIP-004-2002, CONSTRUCT TAXIWAY (T-5).
- AIP-006-2005, CONSTRUCT TAXIWAY (T-6); FOG SEAL TAXIWAY (T-5).
- AIP-012-2014, CRACK SEAL, SEAL COAT, AND REMARK RUNWAY (R-1A,R-2), TAXIWAYS (T-5,T-6). [MAINTENANCE DONE IN 2015, INSPECTED AFTER PROJECT]

### LEGEND

|  |                                 |
|--|---------------------------------|
|  | 2003 SURVEY AREA (NOT SURVEYED) |
|  | 2006 SURVEY AREA                |
|  | 2009 SURVEY AREA                |
|  | 2012 SURVEY AREA                |
|  | 2015 SURVEY AREA                |
|  | MAINTAIN: PCI > 60              |
|  | TRANSITION: PCI 45 TO 60        |
|  | RECONSTRUCT: PCI < 45           |

|  |                  |
|--|------------------|
| DATE OF PAVEMENT STRENGTH SURVEY:              | SEPT. 11, 1988   |
| EVALUATED BY:                                  | W. MOORE         |
| DATE OF MOST RECENT PAVEMENT CONDITION SURVEY: | SEPT. 24, 2015   |
| EVALUATED BY:                                  | S. MARKWARDT     |
| LOCATION:                                      | HAMILTON MONTANA |

**MONTANA AVIATION SYSTEM PLAN  
2015 UPDATE - PAVEMENT CONDITION INDEXES**

**RAVALLI COUNTY AIRPORT  
(6S5)**

Date: DECEMBER 2015

Prepared For: MONTANA DEPARTMENT OF TRANSPORTATION

Prepared By: RPA Robert Peccia & Associates, Inc.

HAMILTON

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# HAMILTON AIRPORT

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9/24/2015



**A-2**, Surface detail with alligator cracking



**A-2**, Overview



**R-1A**, Overview with grass growth from cracks



**R-1A**, Surface detail

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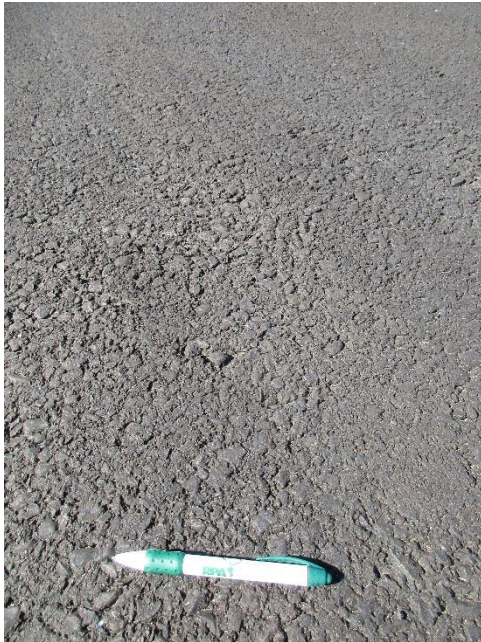
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# HAMILTON AIRPORT

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9/24/2015



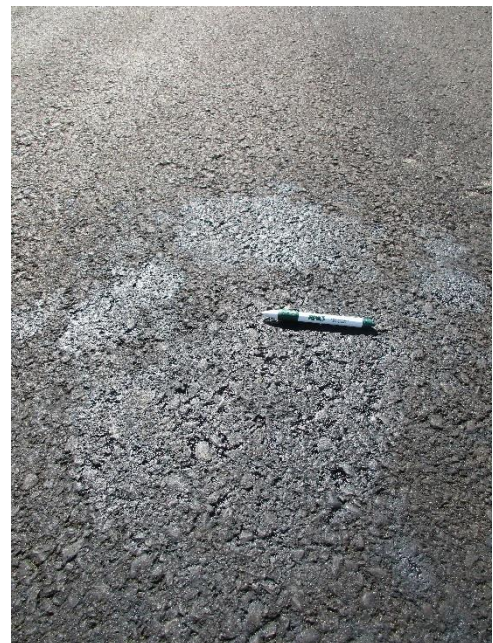
**R-2, Surface detail**



**R-2, Overview**



**T-5, Overview**



**T-5, Surface detail with oil spillage**

# HAMILTON AIRPORT

Branch: 06A

APRON

**A-2**

**Length:** 0 LF **Width:** 0 LF **Area:** 145,800 SF **Last Const. :** 1983 **Family:** STPA15  
**From:** STA 0+00 A2 **To:** STA 6+60 A2 **Surface:** ST

**Inspections**

**Samples Surveyed:** 5 **Total Samples:** 32 **Last Inspection Date (RPA)** 9/24/2015 **PCI:** 15

**Sample # 7**

**Area:** 4700 SF

| Distress Description             | Severity | Quantity |
|----------------------------------|----------|----------|
| WEATHERING                       | L        | 2350 SF  |
| ALLIGATOR CRACKING               | M        | 1250 SF  |
| RAVELING                         | L        | 1175 SF  |
| LONGITUDINAL/TRANSVERSE CRACKING | L        | 282 LF   |
| ALLIGATOR CRACKING               | L        | 775 SF   |
| SWELLING                         | L        | 470 SF   |
| DEPRESSION                       | L        | 470 SF   |
| RUTTING                          | L        | 200 SF   |
| RAVELING                         | H        | 50 SF    |
| BLEEDING                         | N        | 35 SF    |
| PATCHING                         | H        | 12 SF    |
| ALLIGATOR CRACKING               | H        | 8 SF     |
| OIL SPILLAGE                     | N        | 2 SF     |

**Sample # 9**

**Area:** 4700 SF

| Distress Description | Severity | Quantity |
|----------------------|----------|----------|
| ALLIGATOR CRACKING   | M        | 3250 SF  |
| WEATHERING           | L        | 2350 SF  |
| ALLIGATOR CRACKING   | L        | 1300 SF  |
| RAVELING             | L        | 1175 SF  |
| DEPRESSION           | L        | 250 SF   |
| RUTTING              | L        | 200 SF   |
| ALLIGATOR CRACKING   | H        | 150 SF   |
| SWELLING             | L        | 125 SF   |
| RAVELING             | H        | 100 SF   |

**Sample # 13**

**Area:** 4700 SF

| Distress Description             | Severity | Quantity |
|----------------------------------|----------|----------|
| WEATHERING                       | L        | 2350 SF  |
| RAVELING                         | L        | 1175 SF  |
| LONGITUDINAL/TRANSVERSE CRACKING | L        | 329 LF   |
| ALLIGATOR CRACKING               | M        | 475 SF   |
| RUTTING                          | L        | 210 SF   |
| DEPRESSION                       | L        | 200 SF   |
| ALLIGATOR CRACKING               | L        | 135 SF   |
| RAVELING                         | H        | 75 SF    |
| BLEEDING                         | N        | 75 SF    |
| DEPRESSION                       | H        | 50 SF    |
| DEPRESSION                       | M        | 25 SF    |
| PATCHING                         | L        | 21 SF    |
| OIL SPILLAGE                     | N        | 12 SF    |
| SWELLING                         | L        | 10 SF    |

**Sample # 15**

**Area:** 4700 SF

| Distress Description             | Severity | Quantity |
|----------------------------------|----------|----------|
| WEATHERING                       | L        | 2350 SF  |
| RAVELING                         | L        | 1175 SF  |
| ALLIGATOR CRACKING               | L        | 800 SF   |
| ALLIGATOR CRACKING               | M        | 750 SF   |
| LONGITUDINAL/TRANSVERSE CRACKING | L        | 228 LF   |
| RUTTING                          | L        | 200 SF   |
| DEPRESSION                       | L        | 125 SF   |
| OIL SPILLAGE                     | N        | 110 SF   |
| RAVELING                         | H        | 70 SF    |
| SWELLING                         | L        | 69 SF    |
| PATCHING                         | L        | 27 SF    |
| PATCHING                         | M        | 15 SF    |

**HAMILTON AIRPORT**

Branch: 06A

APRON

**A-2**

Sample # 21

Area: 4700 SF

| Distress Description             | Severity | Quantity |
|----------------------------------|----------|----------|
| WEATHERING                       | L        | 2350 SF  |
| LONGITUDINAL/TRANSVERSE CRACKING | L        | 437 LF   |
| RAVELING                         | L        | 1175 SF  |
| ALLIGATOR CRACKING               | M        | 430 SF   |
| ALLIGATOR CRACKING               | L        | 285 SF   |
| RUTTING                          | L        | 190 SF   |
| DEPRESSION                       | L        | 104 SF   |
| SWELLING                         | L        | 32 SF    |
| OIL SPILLAGE                     | N        | 24 SF    |
| RUTTING                          | M        | 10 SF    |

**Extrapolated Distress Quantities\***

| Distress Description             | Severity | Quantity | Density | Deduct |
|----------------------------------|----------|----------|---------|--------|
| ALLIGATOR CRACKING               | M        | 38187 SF | 26.19 % | 68.98  |
| ALLIGATOR CRACKING               | L        | 20443 SF | 14.02 % | 46.86  |
| ALLIGATOR CRACKING               | H        | 980 SF   | 0.67 %  | 32.31  |
| RUTTING                          | L        | 6204 SF  | 4.26 %  | 22.64  |
| RAVELING                         | H        | 1830 SF  | 1.26 %  | 19.64  |
| DEPRESSION                       | L        | 7129 SF  | 4.89 %  | 19.10  |
| LONGITUDINAL/TRANSVERSE CRACKING | L        | 7917 LF  | 5.43 %  | 15.67  |
| DEPRESSION                       | H        | 310 SF   | 0.21 %  | 15.64  |
| PATCHING                         | H        | 74 SF    | 0.05 %  | 15.50  |
| RAVELING                         | L        | 36450 SF | 25.00 % | 15.15  |
| RUTTING                          | M        | 62 SF    | 0.04 %  | 13.00  |
| SWELLING                         | L        | 4380 SF  | 3.00 %  | 7.30   |
| PATCHING                         | M        | 93 SF    | 0.06 %  | 6.20   |
| DEPRESSION                       | M        | 155 SF   | 0.11 %  | 5.19   |
| WEATHERING                       | L        | 72900 SF | 50.00 % | 4.81   |
| OIL SPILLAGE                     | N        | 918 SF   | 0.63 %  | 3.18   |
| BLEEDING                         | N        | 682 SF   | 0.47 %  | 2.99   |
| PATCHING                         | L        | 298 SF   | 0.20 %  | 2.02   |

\* Multiple deduct values are scaled down from their algebraic sum to keep the model consistent with experimental data.

**Percent of Deduct Values Based on Distress Mechanism**

58.0 % Load

25.0 % Climate/Durability

17.0 % Other



# HAMILTON AIRPORT

Branch: 06R

**RUNWAY**

**R-2**

**Length:** 2,000 LF    **Width:** 75 LF    **Area:** 150,000 SF    **Last Const. :** 1992    **Family:** ACRMU15  
**From:** STA 34+00    **To:** STA 54+00    **Surface:** AC

**Inspections**

**Samples Surveyed:** 6    **Total Samples:** 31    **Last Inspection Date (RPA)** 9/24/2015    **PCI:** **61**

| <b>Sample # 1</b>                | <table border="0"> <tr> <th style="text-align: left;">Distress Description</th> <th style="text-align: left;">Severity</th> <th style="text-align: left;">Quantity</th> </tr> <tr> <td>LONGITUDINAL/TRANSVERSE CRACKING</td> <td>L</td> <td>621 LF</td> </tr> <tr> <td>WEATHERING</td> <td>L</td> <td>49 SF</td> </tr> <tr> <td>RAVELING</td> <td>L</td> <td>49 SF</td> </tr> <tr> <td>LONGITUDINAL/TRANSVERSE CRACKING</td> <td>M</td> <td>4 LF</td> </tr> </table>   | Distress Description | Severity | Quantity | LONGITUDINAL/TRANSVERSE CRACKING | L | 621 LF | WEATHERING | L | 49 SF | RAVELING                         | L | 49 SF | LONGITUDINAL/TRANSVERSE CRACKING | M | 4 LF  | <b>Area:</b> 4875 SF |   |       |                      |   |      |                      |   |      |                      |
|----------------------------------|--|----------------------|----------|----------|----------------------------------|---|--------|------------|---|-------|----------------------------------|---|-------|----------------------------------|---|-------|----------------------|---|-------|----------------------|---|------|----------------------|---|------|----------------------|
| Distress Description             | Severity   | Quantity             |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| LONGITUDINAL/TRANSVERSE CRACKING | L  | 621 LF               |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| WEATHERING                       | L  | 49 SF                |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| RAVELING                         | L  | 49 SF                |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| LONGITUDINAL/TRANSVERSE CRACKING | M  | 4 LF                 |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| <b>Sample # 5</b>                | <table border="0"> <tr> <th style="text-align: left;">Distress Description</th> <th style="text-align: left;">Severity</th> <th style="text-align: left;">Quantity</th> </tr> <tr> <td>LONGITUDINAL/TRANSVERSE CRACKING</td> <td>L</td> <td>426 LF</td> </tr> <tr> <td>WEATHERING</td> <td>L</td> <td>49 SF</td> </tr> <tr> <td>RAVELING</td> <td>L</td> <td>49 SF</td> </tr> <tr> <td>LONGITUDINAL/TRANSVERSE CRACKING</td> <td>M</td> <td>4 LF</td> </tr> <tr> <td>RAVELING</td> <td>H</td> <td>6 SF</td> </tr> </table>   | Distress Description | Severity | Quantity | LONGITUDINAL/TRANSVERSE CRACKING | L | 426 LF | WEATHERING | L | 49 SF | RAVELING                         | L | 49 SF | LONGITUDINAL/TRANSVERSE CRACKING | M | 4 LF  | RAVELING             | H | 6 SF  | <b>Area:</b> 4875 SF |   |      |                      |   |      |                      |
| Distress Description             | Severity   | Quantity             |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| LONGITUDINAL/TRANSVERSE CRACKING | L  | 426 LF               |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| WEATHERING                       | L  | 49 SF                |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| RAVELING                         | L  | 49 SF                |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| LONGITUDINAL/TRANSVERSE CRACKING | M  | 4 LF                 |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| RAVELING                         | H  | 6 SF                 |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| <b>Sample # 13</b>               | <table border="0"> <tr> <th style="text-align: left;">Distress Description</th> <th style="text-align: left;">Severity</th> <th style="text-align: left;">Quantity</th> </tr> <tr> <td>LONGITUDINAL/TRANSVERSE CRACKING</td> <td>L</td> <td>642 LF</td> </tr> <tr> <td>RAVELING</td> <td>L</td> <td>49 SF</td> </tr> <tr> <td>WEATHERING</td> <td>L</td> <td>49 SF</td> </tr> <tr> <td>LONGITUDINAL/TRANSVERSE CRACKING</td> <td>M</td> <td>5 LF</td> </tr> <tr> <td>RAVELING</td> <td>H</td> <td>2 SF</td> </tr> </table>   | Distress Description | Severity | Quantity | LONGITUDINAL/TRANSVERSE CRACKING | L | 642 LF | RAVELING   | L | 49 SF | WEATHERING                       | L | 49 SF | LONGITUDINAL/TRANSVERSE CRACKING | M | 5 LF  | RAVELING             | H | 2 SF  | <b>Area:</b> 4875 SF |   |      |                      |   |      |                      |
| Distress Description             | Severity   | Quantity             |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| LONGITUDINAL/TRANSVERSE CRACKING | L  | 642 LF               |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| RAVELING                         | L  | 49 SF                |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| WEATHERING                       | L  | 49 SF                |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| LONGITUDINAL/TRANSVERSE CRACKING | M  | 5 LF                 |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| RAVELING                         | H  | 2 SF                 |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| <b>Sample # 19</b>               | <table border="0"> <tr> <th style="text-align: left;">Distress Description</th> <th style="text-align: left;">Severity</th> <th style="text-align: left;">Quantity</th> </tr> <tr> <td>LONGITUDINAL/TRANSVERSE CRACKING</td> <td>L</td> <td>575 LF</td> </tr> <tr> <td>WEATHERING</td> <td>L</td> <td>49 SF</td> </tr> <tr> <td>RAVELING</td> <td>L</td> <td>49 SF</td> </tr> <tr> <td>LONGITUDINAL/TRANSVERSE CRACKING</td> <td>M</td> <td>3 LF</td> </tr> <tr> <td>RAVELING</td> <td>H</td> <td>6 SF</td> </tr> <tr> <td>PATCHING</td> <td>L</td> <td>1 SF</td> </tr> </table>   | Distress Description | Severity | Quantity | LONGITUDINAL/TRANSVERSE CRACKING | L | 575 LF | WEATHERING | L | 49 SF | RAVELING                         | L | 49 SF | LONGITUDINAL/TRANSVERSE CRACKING | M | 3 LF  | RAVELING             | H | 6 SF  | PATCHING             | L | 1 SF | <b>Area:</b> 4875 SF |   |      |                      |
| Distress Description             | Severity   | Quantity             |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| LONGITUDINAL/TRANSVERSE CRACKING | L  | 575 LF               |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| WEATHERING                       | L  | 49 SF                |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| RAVELING                         | L  | 49 SF                |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| LONGITUDINAL/TRANSVERSE CRACKING | M  | 3 LF                 |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| RAVELING                         | H  | 6 SF                 |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| PATCHING                         | L  | 1 SF                 |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| <b>Sample # 25</b>               | <table border="0"> <tr> <th style="text-align: left;">Distress Description</th> <th style="text-align: left;">Severity</th> <th style="text-align: left;">Quantity</th> </tr> <tr> <td>LONGITUDINAL/TRANSVERSE CRACKING</td> <td>L</td> <td>648 LF</td> </tr> <tr> <td>WEATHERING</td> <td>L</td> <td>49 SF</td> </tr> <tr> <td>RAVELING</td> <td>L</td> <td>49 SF</td> </tr> <tr> <td>LONGITUDINAL/TRANSVERSE CRACKING</td> <td>M</td> <td>3 LF</td> </tr> <tr> <td>RAVELING</td> <td>H</td> <td>4 SF</td> </tr> <tr> <td>PATCHING</td> <td>L</td> <td>1 SF</td> </tr> </table>   | Distress Description | Severity | Quantity | LONGITUDINAL/TRANSVERSE CRACKING | L | 648 LF | WEATHERING | L | 49 SF | RAVELING                         | L | 49 SF | LONGITUDINAL/TRANSVERSE CRACKING | M | 3 LF  | RAVELING             | H | 4 SF  | PATCHING             | L | 1 SF | <b>Area:</b> 4875 SF |   |      |                      |
| Distress Description             | Severity   | Quantity             |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| LONGITUDINAL/TRANSVERSE CRACKING | L  | 648 LF               |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| WEATHERING                       | L  | 49 SF                |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| RAVELING                         | L  | 49 SF                |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| LONGITUDINAL/TRANSVERSE CRACKING | M  | 3 LF                 |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| RAVELING                         | H  | 4 SF                 |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| PATCHING                         | L  | 1 SF                 |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| <b>Sample # 31</b>               | <table border="0"> <tr> <th style="text-align: left;">Distress Description</th> <th style="text-align: left;">Severity</th> <th style="text-align: left;">Quantity</th> </tr> <tr> <td>LONGITUDINAL/TRANSVERSE CRACKING</td> <td>L</td> <td>506 LF</td> </tr> <tr> <td>DEPRESSION</td> <td>L</td> <td>65 SF</td> </tr> <tr> <td>LONGITUDINAL/TRANSVERSE CRACKING</td> <td>M</td> <td>18 LF</td> </tr> <tr> <td>WEATHERING</td> <td>L</td> <td>49 SF</td> </tr> <tr> <td>RAVELING</td> <td>L</td> <td>49 SF</td> </tr> <tr> <td>DEPRESSION</td> <td>M</td> <td>4 SF</td> </tr> <tr> <td>RAVELING</td> <td>H</td> <td>3 SF</td> </tr> </table> | Distress Description | Severity | Quantity | LONGITUDINAL/TRANSVERSE CRACKING | L | 506 LF | DEPRESSION | L | 65 SF | LONGITUDINAL/TRANSVERSE CRACKING | M | 18 LF | WEATHERING                       | L | 49 SF | RAVELING             | L | 49 SF | DEPRESSION           | M | 4 SF | RAVELING             | H | 3 SF | <b>Area:</b> 4875 SF |
| Distress Description             | Severity   | Quantity             |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| LONGITUDINAL/TRANSVERSE CRACKING | L  | 506 LF               |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| DEPRESSION                       | L  | 65 SF                |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| LONGITUDINAL/TRANSVERSE CRACKING | M  | 18 LF                |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| WEATHERING                       | L  | 49 SF                |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| RAVELING                         | L  | 49 SF                |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| DEPRESSION                       | M  | 4 SF                 |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |
| RAVELING                         | H  | 3 SF                 |          |          |                                  |   |        |            |   |       |                                  |   |       |                                  |   |       |                      |   |       |                      |   |      |                      |   |      |                      |

**Extrapolated Distress Quantities\***

| Distress Description             | Severity | Quantity | Density | Deduct |
|----------------------------------|----------|----------|---------|--------|
| LONGITUDINAL/TRANSVERSE CRACKING | L        | 17528 LF | 11.69 % | 25.40  |
| RAVELING                         | H        | 108 SF   | 0.07 %  | 6.00   |
| DEPRESSION                       | M        | 21 SF    | 0.01 %  | 5.20   |
| LONGITUDINAL/TRANSVERSE CRACKING | M        | 190 LF   | 0.13 %  | 4.09   |
| RAVELING                         | L        | 1508 SF  | 1.01 %  | 2.63   |
| PATCHING                         | L        | 10 SF    | 0.01 %  | 2.00   |
| DEPRESSION                       | L        | 333 SF   | 0.22 %  | 0.96   |
| WEATHERING                       | L        | 1508 SF  | 1.01 %  | 0.50   |

\* Multiple deduct values are scaled down from their algebraic sum to keep the model consistent with experimental data.

**HAMILTON AIRPORT**

Branch: 06R

**RUNWAY**

**R-2**

**Percent of Deduct Values Based on Distress Mechanism**

0.0 % Load

87.0 % Climate/Durability

13.0 % Other



# HAMILTON AIRPORT

Branch: 06T

TAXIWAY

**T-5**

**Length:** 1,613 LF    **Width:** 25 LF    **Area:** 53,912 SF    **Last Const. :** 2002    **Family:** ACRMU15  
**From:** R-2    **To:** T-3    **Surface:** AC

**Inspections**

**Samples Surveyed:** 4    **Total Samples:** 11    **Last Inspection Date (RPA)** 9/24/2015    **PCI:** **84**

**Sample # 1**    **Area:** 5170 SF

| Distress Description             | Severity | Quantity |
|----------------------------------|----------|----------|
| LONGITUDINAL/TRANSVERSE CRACKING | L        | 225 LF   |
| RAVELING                         | L        | 58 SF    |
| WEATHERING                       | L        | 29 SF    |
| BLEEDING                         | N        | 4 SF     |
| RAVELING                         | H        | 2 SF     |

**Sample # 4**    **Area:** 4550 SF

| Distress Description             | Severity | Quantity |
|----------------------------------|----------|----------|
| LONGITUDINAL/TRANSVERSE CRACKING | L        | 89 LF    |
| RAVELING                         | L        | 46 SF    |
| WEATHERING                       | L        | 23 SF    |
| BLEEDING                         | N        | 5 SF     |
| RAVELING                         | H        | 3 SF     |
| PATCHING                         | L        | 2 SF     |
| OIL SPILLAGE                     | N        | 1 SF     |

**Sample # 7**    **Area:** 4275 SF

| Distress Description | Severity | Quantity |
|----------------------|----------|----------|
| RAVELING             | L        | 42 SF    |
| WEATHERING           | L        | 21 SF    |
| OIL SPILLAGE         | N        | 4 SF     |
| RAVELING             | H        | 2 SF     |

**Sample # 10**    **Area:** 6094 SF

| Distress Description | Severity | Quantity |
|----------------------|----------|----------|
| RAVELING             | L        | 60 SF    |
| WEATHERING           | L        | 30 SF    |
| RAVELING             | H        | 4 SF     |
| OIL SPILLAGE         | N        | 1 SF     |

**Extrapolated Distress Quantities\***

| Distress Description             | Severity | Quantity | Density | Deduct |
|----------------------------------|----------|----------|---------|--------|
| LONGITUDINAL/TRANSVERSE CRACKING | L        | 843 LF   | 1.56 %  | 6.27   |
| RAVELING                         | H        | 30 SF    | 0.05 %  | 6.00   |
| RAVELING                         | L        | 553 SF   | 1.03 %  | 2.66   |
| OIL SPILLAGE                     | N        | 16 SF    | 0.03 %  | 2.00   |
| PATCHING                         | L        | 5 SF     | 0.01 %  | 2.00   |
| WEATHERING                       | L        | 276 SF   | 0.51 %  | 0.32   |
| BLEEDING                         | N        | 24 SF    | 0.04 %  | 0.00   |

\* Multiple deduct values are scaled down from their algebraic sum to keep the model consistent with experimental data.

**Percent of Deduct Values Based on Distress Mechanism**

0.0 % Load                      90.0 % Climate/Durability                      10.0 % Other

**HAMILTON AIRPORT****FIFTEEN YEAR PROJECTIONS: ESTIMATED AVERAGE ANNUAL COST: \$313,376**

| PLAN YEAR: 2016 |                   |          | ESTIMATED COST: |             |            | \$1,409,027 |        | PCI   |  |
|-----------------|-------------------|----------|-----------------|-------------|------------|-------------|--------|-------|--|
| SectionID       | Maintenance       | Local    | Global          | Major<Crit  | Major>Crit | Total       | before | after |  |
| R-2             | Prev. & Seal Coat | \$23,265 | \$42,000        |             |            | \$65,265    | 60     | 63    |  |
| A-2             | Reconstruct       |          |                 | \$1,166,400 |            | \$1,166,400 | 8      | 100   |  |
| R-1A            | Prev. & Seal Coat | \$25,592 | \$46,200        |             |            | \$71,792    | 60     | 63    |  |
| T-5             | Prev. & Thin AC   | \$442    | \$105,128       |             |            | \$105,570   | 82     | 98    |  |
| PLAN YEAR: 2017 |                   |          | ESTIMATED COST: |             |            | \$43,833    |        | PCI   |  |
| SectionID       | Maintenance       | Local    | Global          | Major<Crit  | Major>Crit | Total       | before | after |  |
| R-2             | Basic Prev.       | \$20,873 |                 |             |            | \$20,873    | 61     | 62    |  |
| R-1A            | Basic Prev.       | \$22,960 |                 |             |            | \$22,960    | 61     | 62    |  |
| PLAN YEAR: 2018 |                   |          | ESTIMATED COST: |             |            | \$50,929    |        | PCI   |  |
| SectionID       | Maintenance       | Local    | Global          | Major<Crit  | Major>Crit | Total       | before | after |  |
| R-2             | Basic Prev.       | \$24,252 |                 |             |            | \$24,252    | 60     | 60    |  |
| R-1A            | Basic Prev.       | \$26,677 |                 |             |            | \$26,677    | 60     | 60    |  |
| PLAN YEAR: 2019 |                   |          | ESTIMATED COST: |             |            | \$61,246    |        | PCI   |  |
| SectionID       | Maintenance       | Local    | Global          | Major<Crit  | Major>Crit | Total       | before | after |  |
| A-2             | Basic Prev.       | \$38     |                 |             |            | \$38        | 90     | 90    |  |
| R-2             | Basic Prev.       | \$29,086 |                 |             |            | \$29,086    | 58     | 58    |  |
| T-5             | Basic Prev.       | \$127    |                 |             |            | \$127       | 88     | 88    |  |
| R-1A            | Basic Prev.       | \$31,995 |                 |             |            | \$31,995    | 58     | 58    |  |
| PLAN YEAR: 2020 |                   |          | ESTIMATED COST: |             |            | \$72,951    |        | PCI   |  |
| SectionID       | Maintenance       | Local    | Global          | Major<Crit  | Major>Crit | Total       | before | after |  |
| A-2             | Basic Prev.       | \$584    |                 |             |            | \$584       | 86     | 87    |  |
| R-1A            | Basic Prev.       | \$37,746 |                 |             |            | \$37,746    | 56     | 57    |  |
| T-5             | Basic Prev.       | \$306    |                 |             |            | \$306       | 85     | 85    |  |
| R-2             | Basic Prev.       | \$34,315 |                 |             |            | \$34,315    | 56     | 57    |  |
| PLAN YEAR: 2021 |                   |          | ESTIMATED COST: |             |            | \$187,969   |        | PCI   |  |
| SectionID       | Maintenance       | Local    | Global          | Major<Crit  | Major>Crit | Total       | before | after |  |
| R-1A            | Prev. & Seal Coat | \$44,042 | \$53,559        |             |            | \$97,601    | 55     | 58    |  |
| T-5             | Basic Prev.       | \$487    |                 |             |            | \$487       | 82     | 82    |  |
| A-2             | Basic Prev.       | \$1,153  |                 |             |            | \$1,153     | 83     | 83    |  |
| R-2             | Prev. & Seal Coat | \$40,039 | \$48,690        |             |            | \$88,728    | 55     | 58    |  |
| PLAN YEAR: 2022 |                   |          | ESTIMATED COST: |             |            | \$77,745    |        | PCI   |  |
| SectionID       | Maintenance       | Local    | Global          | Major<Crit  | Major>Crit | Total       | before | after |  |
| R-1A            | Basic Prev.       | \$39,424 |                 |             |            | \$39,424    | 57     | 57    |  |
| T-5             | Basic Prev.       | \$746    |                 |             |            | \$746       | 80     | 80    |  |
| A-2             | Basic Prev.       | \$1,735  |                 |             |            | \$1,735     | 80     | 80    |  |
| R-2             | Basic Prev.       | \$35,840 |                 |             |            | \$35,840    | 57     | 57    |  |
| PLAN YEAR: 2023 |                   |          | ESTIMATED COST: |             |            | \$93,289    |        | PCI   |  |
| SectionID       | Maintenance       | Local    | Global          | Major<Crit  | Major>Crit | Total       | before | after |  |
| R-1A            | Basic Prev.       | \$46,055 |                 |             |            | \$46,055    | 55     | 55    |  |
| T-5             | Basic Prev.       | \$1,427  |                 |             |            | \$1,427     | 77     | 77    |  |
| R-2             | Basic Prev.       | \$41,869 |                 |             |            | \$41,869    | 55     | 55    |  |
| A-2             | Basic Prev.       | \$3,938  |                 |             |            | \$3,938     | 77     | 77    |  |
| PLAN YEAR: 2024 |                   |          | ESTIMATED COST: |             |            | \$110,328   |        | PCI   |  |
| SectionID       | Maintenance       | Local    | Global          | Major<Crit  | Major>Crit | Total       | before | after |  |
| A-2             | Basic Prev.       | \$6,162  |                 |             |            | \$6,162     | 74     | 74    |  |
| T-5             | Basic Prev.       | \$2,112  |                 |             |            | \$2,112     | 75     | 75    |  |
| R-1A            | Basic Prev.       | \$53,457 |                 |             |            | \$53,457    | 53     | 53    |  |
| R-2             | Basic Prev.       | \$48,597 |                 |             |            | \$48,597    | 53     | 53    |  |
| PLAN YEAR: 2025 |                   |          | ESTIMATED COST: |             |            | \$129,089   |        | PCI   |  |
| SectionID       | Maintenance       | Local    | Global          | Major<Crit  | Major>Crit | Total       | before | after |  |
| R-2             | Basic Prev.       | \$56,161 |                 |             |            | \$56,161    | 51     | 51    |  |
| T-5             | Basic Prev.       | \$2,797  |                 |             |            | \$2,797     | 73     | 73    |  |
| A-2             | Basic Prev.       | \$8,354  |                 |             |            | \$8,354     | 72     | 72    |  |
| R-1A            | Basic Prev.       | \$61,777 |                 |             |            | \$61,777    | 51     | 51    |  |

| PLAN YEAR: 2026 |                 | ESTIMATED COST: |           |             |            | \$2,362,553 | PCI    |       |
|-----------------|-----------------|-----------------|-----------|-------------|------------|-------------|--------|-------|
| SectionID       | Maintenance     | Local           | Global    | Major<Crit  | Major>Crit | Total       | before | after |
| R-2             | Reconstruct     |                 |           | \$1,050,575 |            | \$1,050,575 | 49     | 100   |
| T-5             | Prev. & Thin AC | \$3,483         | \$141,284 |             |            | \$144,767   | 70     | 83    |
| A-2             | Basic Prev.     | \$11,579        |           |             |            | \$11,579    | 69     | 69    |
| R-1A            | Reconstruct     |                 |           | \$1,155,632 |            | \$1,155,632 | 49     | 100   |
| PLAN YEAR: 2027 |                 | ESTIMATED COST: |           |             |            | \$17,113    | PCI    |       |
| SectionID       | Maintenance     | Local           | Global    | Major<Crit  | Major>Crit | Total       | before | after |
| A-2             | Basic Prev.     | \$16,387        |           |             |            | \$16,387    | 67     | 67    |
| T-5             | Basic Prev.     | \$726           |           |             |            | \$726       | 80     | 80    |
| PLAN YEAR: 2028 |                 | ESTIMATED COST: |           |             |            | \$22,497    | PCI    |       |
| SectionID       | Maintenance     | Local           | Global    | Major<Crit  | Major>Crit | Total       | before | after |
| T-5             | Basic Prev.     | \$1,460         |           |             |            | \$1,460     | 78     | 78    |
| A-2             | Basic Prev.     | \$21,037        |           |             |            | \$21,037    | 65     | 65    |
| PLAN YEAR: 2029 |                 | ESTIMATED COST: |           |             |            | \$27,759    | PCI    |       |
| SectionID       | Maintenance     | Local           | Global    | Major<Crit  | Major>Crit | Total       | before | after |
| A-2             | Basic Prev.     | \$25,501        |           |             |            | \$25,501    | 63     | 63    |
| T-5             | Basic Prev.     | \$2,258         |           |             |            | \$2,258     | 75     | 75    |
| PLAN YEAR: 2030 |                 | ESTIMATED COST: |           |             |            | \$34,311    | PCI    |       |
| SectionID       | Maintenance     | Local           | Global    | Major<Crit  | Major>Crit | Total       | before | after |
| A-2             | Basic Prev.     | \$29,772        |           |             |            | \$29,772    | 62     | 62    |
| T-5             | Basic Prev.     | \$3,056         |           |             |            | \$3,056     | 73     | 73    |
| R-2             | Basic Prev.     | \$706           |           |             |            | \$706       | 87     | 87    |
| R-1A            | Basic Prev.     | \$777           |           |             |            | \$777       | 87     | 87    |