

**COLSTRIP AIRPORT**

Branch: 48A      APRON

**A-1**

Length: 220 LF    Width: 300 LF    Area: 66,000 SF    Last Const: 2008    Family: ACAM  
 From: ENTIRE APRON    To:    Surface: AAC

**Inspections**

Samples Surveyed: 4      Total Samples: 12      Last Inspection Date: 9/5/2012      **PCI: 91**

Sample # 3	Distress Description OIL SPILLAGE WEATHERING	Severity N L	Quantity 5 SF 5,500 SF	Area: 5,500 SF
Sample # 4	Distress Description LONGITUDINAL/TRANSVERSE CRACKING WEATHERING	Severity L L	Quantity 102 LF 5,500 SF	Area: 5,500 SF
Sample # 6	Distress Description LONGITUDINAL/TRANSVERSE CRACKING WEATHERING	Severity L L	Quantity 5 LF 5,500 SF	Area: 5,500 SF
Sample # 9	Distress Description LONGITUDINAL/TRANSVERSE CRACKING WEATHERING	Severity L L	Quantity 5 LF 5,500 SF	Area: 5,500 SF

**Extrapolated Distress Quantities\***

Distress Description	Severity	Quantity	Density	Deduct
LONGITUDINAL/TRANSVERSE CRACKING	L	336 SF	0.00%	4.08
OIL SPILLAGE	N	15 LF	2.49%	2.00
WEATHERING	L	66,000 SF	50.00%	5.96

\* 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**

% Load                                      % Climate/Durability                                      % Other

**COLSTRIP AIRPORT**

Branch: 48R RUNWAY

**R-1**

Length: 5,100 LF Width: 75 LF  
From: R/W 6-24 STA 0+00

Area: 382,500 SF Last Const: 2008  
To: R/W 6-24 STA 51+00

Family: ACRML  
Surface: AAC

**Inspections**

Samples Surveyed: 7 Total Samples: 78 Last Inspection Date: 9/5/2012 **PCI: 92**

Sample # 1	Distress Description RAVELING WEATHERING	Severity L L	Quantity 49 SF 4,875 SF	Area: 4,875 SF
Sample # 12	Distress Description RAVELING WEATHERING	Severity L L	Quantity 49 SF 4,875 SF	Area: 4,875 SF
Sample # 23	Distress Description WEATHERING	Severity L	Quantity 4,875 SF	Area: 4,875 SF
Sample # 34	Distress Description RAVELING WEATHERING	Severity L L	Quantity 49 SF 4,875 SF	Area: 4,875 SF
Sample # 45	Distress Description RAVELING WEATHERING	Severity L L	Quantity 49 SF 4,875 SF	Area: 4,875 SF
Sample # 56	Distress Description WEATHERING	Severity L	Quantity 4,875 SF	Area: 4,875 SF
Sample # 67	Distress Description RAVELING WEATHERING	Severity L L	Quantity 49 SF 4,875 SF	Area: 4,875 SF

**Extrapolated Distress Quantities\***

Distress Description	Severity	Quantity	Density	Deduct
RAVELING	L	2,746 SF	0.15%	2.16
WEATHERING	L	382,500 SF	0.32%	5.96

\* 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                      100.0 % Climate/Durability                      0.0 % Other

**COLSTRIP AIRPORT**

Branch: 48T TAXIWAY

**T-1**

Length: 780 LF Width: 35 LF Area: 27,300 SF Last Const: 2008 Family: ACRML  
 From: R/W6-24 STA 50+88 To: R/W 6-24 STA 47+75 Surface: AAC

**Inspections**

Samples Surveyed: 3 Total Samples: 6 Last Inspection Date: 9/5/2012 **PCI: 94**

Sample #	Distress Description	Severity	Quantity	Area:
1	WEATHERING	L	4,760 SF	4,760 SF
3	WEATHERING	L	4,760 SF	4,760 SF
5	WEATHERING	L	4,760 SF	4,760 SF

**Extrapolated Distress Quantities\***

Distress Description	Severity	Quantity	Density	Deduct
WEATHERING	L	27,300 SF	72.00%	5.96

\* 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                      100.0 % Climate/Durability                      0.0 % Other

**COLSTRIP AIRPORT**

Branch: 48T TAXIWAY

**T-2**

Length: 560 LF Width: 35 LF Area: 19,600 SF Last Const: 2008 Family: ACRML  
 From: R/W 6-24 WEST TURNAROUND To: Surface: AAC

**Inspections**

Samples Surveyed: 3 Total Samples: 4 Last Inspection Date: 9/5/2012 **PCI: 94**

Sample #	Distress Description	Severity	Quantity	Area
1	WEATHERING	L	4,900 SF	4,900 SF
2	WEATHERING	L	4,900 SF	4,900 SF
3	WEATHERING	L	4,900 SF	4,900 SF

**Extrapolated Distress Quantities\***

Distress Description	Severity	Quantity	Density	Deduct
WEATHERING	L	19,600 LF	1.03%	5.96

\* 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                      100.0 % Climate/Durability                      0.0 % Other

# COLSTRIP AIRPORT

**FIRST YEAR LOCAL: 2013** **LOCAL REPAIR COST: \$692**

Section	Distress Description	Severity	Quantity	Work Description	Quantity	Cost	Policy
A-1	OIL SPILLAGE	N	15 SF	Patching - AC Shallow	35 SF	\$692	PREV.

**FIFTEEN YEAR PROJECTIONS** **ESTIMATED AVERAGE ANNUAL COST: \$37,977**

Plan Year: 2013				Estimated Cost: \$112,258		PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Global MR + Preventive	\$75	\$16,500	\$0	\$0	\$16,575	89	97
R-1	Global MR + Preventive	\$57	\$95,626	\$0	\$0	\$95,683	90	98

Plan Year: 2014				Estimated Cost: \$94		PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
T-1	Preventive	\$55	\$0	\$0	\$0	\$55	88	88
T-2	Preventive	\$39	\$0	\$0	\$0	\$39	88	88

Plan Year: 2015				Estimated Cost: \$350		PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Preventive	\$67	\$0	\$0	\$0	\$67	89	89
R-1	Preventive	\$30	\$0	\$0	\$0	\$30	90	90
T-1	Preventive	\$147	\$0	\$0	\$0	\$147	85	85
T-2	Preventive	\$106	\$0	\$0	\$0	\$106	85	85

Plan Year: 2016				Estimated Cost: \$2,150		PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Preventive	\$310	\$0	\$0	\$0	\$310	86	86
R-1	Preventive	\$1,437	\$0	\$0	\$0	\$1,437	87	87
T-1	Preventive	\$235	\$0	\$0	\$0	\$235	82	82
T-2	Preventive	\$169	\$0	\$0	\$0	\$169	82	82

Plan Year: 2017				Estimated Cost: \$3,899		PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Preventive	\$551	\$0	\$0	\$0	\$551	83	83
R-1	Preventive	\$2,760	\$0	\$0	\$0	\$2,760	84	84
T-1	Preventive	\$343	\$0	\$0	\$0	\$343	80	80
T-2	Preventive	\$246	\$0	\$0	\$0	\$246	80	80

Plan Year: 2018				Estimated Cost: \$135,909		PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Global MR + Preventive	\$863	\$19,128	\$0	\$0	\$19,991	80	86
R-1	Global MR + Preventive	\$3,996	\$110,857	\$0	\$0	\$114,852	81	87
T-1	Preventive	\$620	\$0	\$0	\$0	\$620	78	78
T-2	Preventive	\$445	\$0	\$0	\$0	\$445	78	78

Plan Year: 2019				Estimated Cost: \$4,924		PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Preventive	\$559	\$0	\$0	\$0	\$559	83	83
R-1	Preventive	\$2,864	\$0	\$0	\$0	\$2,864	84	84
T-1	Preventive	\$873	\$0	\$0	\$0	\$873	76	76
T-2	Preventive	\$627	\$0	\$0	\$0	\$627	76	76

Plan Year: 2020				Estimated Cost: \$6,907		PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Preventive	\$821	\$0	\$0	\$0	\$821	80	80
R-1	Preventive	\$4,182	\$0	\$0	\$0	\$4,182	81	81
T-1	Preventive	\$1,108	\$0	\$0	\$0	\$1,108	74	74
T-2	Preventive	\$795	\$0	\$0	\$0	\$795	74	74

Plan Year: 2021				Estimated Cost: \$11,172		PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Preventive	\$1,752	\$0	\$0	\$0	\$1,752	77	77
R-1	Preventive	\$7,153	\$0	\$0	\$0	\$7,153	79	79
T-1	Preventive	\$1,320	\$0	\$0	\$0	\$1,320	73	73
T-2	Preventive	\$947	\$0	\$0	\$0	\$947	73	73

Plan Year: 2022				Estimated Cost: \$16,595		PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Preventive	\$2,680	\$0	\$0	\$0	\$2,680	75	75
R-1	Preventive	\$11,318	\$0	\$0	\$0	\$11,318	77	77
T-1	Preventive	\$1,512	\$0	\$0	\$0	\$1,512	72	72
T-2	Preventive	\$1,085	\$0	\$0	\$0	\$1,085	72	72

## COLSTRIP AIRPORT

Plan Year: 2023		Estimated Cost: \$172,336					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-1	Global MR + Preventive	\$3,601	\$22,175	\$0	\$0	\$25,776	72	78	
R-1	Global MR + Preventive	\$15,153	\$128,513	\$0	\$0	\$143,666	75	79	
T-1	Preventive	\$1,684	\$0	\$0	\$0	\$1,684	71	71	
T-2	Preventive	\$1,209	\$0	\$0	\$0	\$1,209	71	71	

Plan Year: 2024		Estimated Cost: \$17,749					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-1	Preventive	\$2,748	\$0	\$0	\$0	\$2,748	75	75	
R-1	Preventive	\$11,840	\$0	\$0	\$0	\$11,840	77	77	
T-1	Preventive	\$1,840	\$0	\$0	\$0	\$1,840	70	70	
T-2	Preventive	\$1,321	\$0	\$0	\$0	\$1,321	70	70	

Plan Year: 2025		Estimated Cost: \$23,138					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-1	Preventive	\$3,730	\$0	\$0	\$0	\$3,730	73	73	
R-1	Preventive	\$15,924	\$0	\$0	\$0	\$15,924	75	75	
T-1	Preventive	\$2,028	\$0	\$0	\$0	\$2,028	70	70	
T-2	Preventive	\$1,456	\$0	\$0	\$0	\$1,456	70	70	

Plan Year: 2026		Estimated Cost: \$28,211					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-1	Preventive	\$4,710	\$0	\$0	\$0	\$4,710	70	70	
R-1	Preventive	\$19,637	\$0	\$0	\$0	\$19,637	74	74	
T-1	Preventive	\$2,249	\$0	\$0	\$0	\$2,249	69	69	
T-2	Preventive	\$1,615	\$0	\$0	\$0	\$1,615	69	69	

Plan Year: 2027		Estimated Cost: \$33,961					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-1	Preventive	\$6,749	\$0	\$0	\$0	\$6,749	68	68	
R-1	Preventive	\$23,027	\$0	\$0	\$0	\$23,027	73	73	
T-1	Preventive	\$2,436	\$0	\$0	\$0	\$2,436	69	69	
T-2	Preventive	\$1,749	\$0	\$0	\$0	\$1,749	69	69	

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**COLSTRIP AIRPORT**

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9/5/2012



**A-1**, Oil spillage



**A-1**, Overview



**A-1**, Surface detail with crack



**R-1**, Overview

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**COLSTRIP AIRPORT**

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9/5/2012



**R-1, Surface detail**



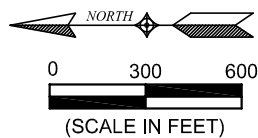
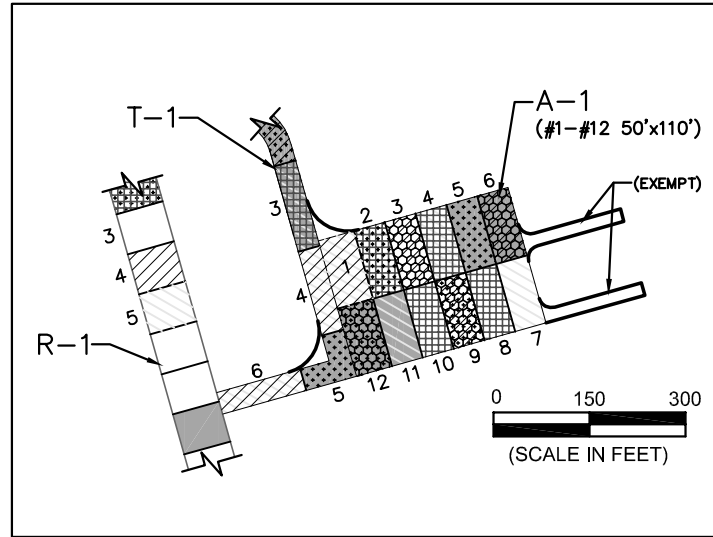
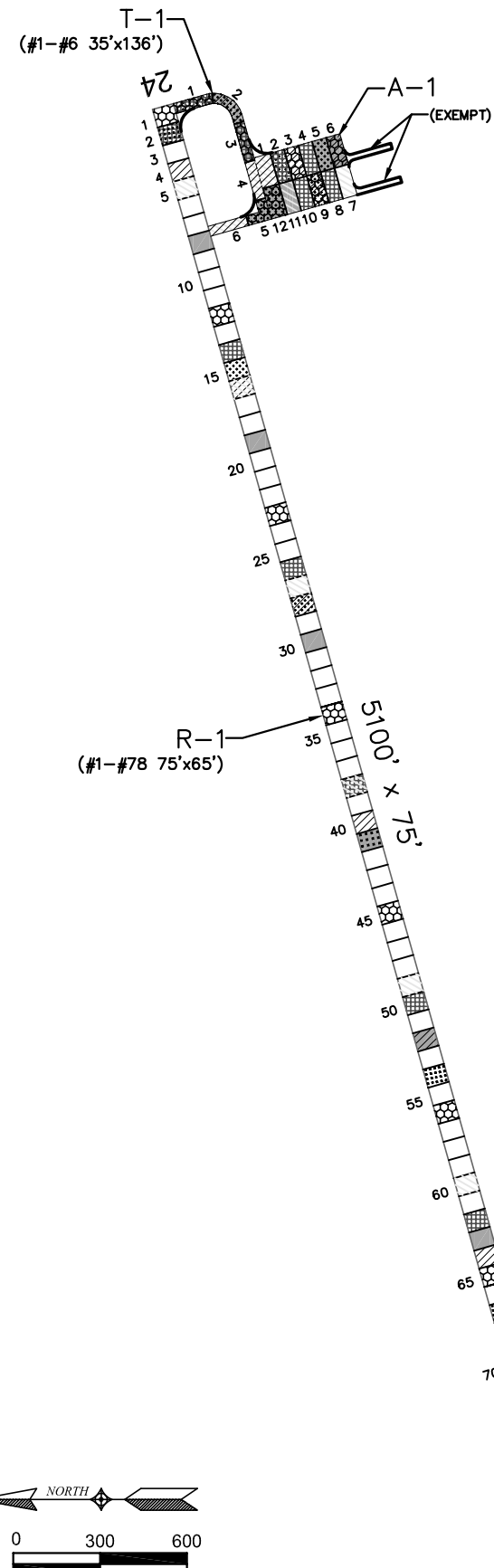
**T-1, Overview**



**T-2, Overview**



# COLSTRIP



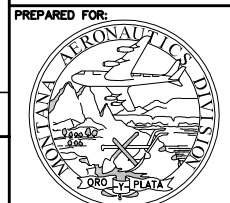
# PAVEMENT STRENGTH SURVEY/PAVEMENT CONDITION SURVEY

COLSTRIP

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-1		CBR=2.8	6" P-152	9" P-208	3" P-401	2.5" P-403	12,500			△△△
<b>TAXIWAYS</b>										
T-1		CBR=2.8	6" P-152	9" P-208	3" P-401	2.5" P-403	12,500			△△△
T-2		CBR=2.8	6" P-152	9" P-208	3" P-401	2.5" P-403	12,500			△△△
<b>APRONS</b>										
A-1		CBR=2.8	6" P-152	9" P-208	3" P-401	2.5" P-403	12,500			△△△

**REMARKS:**

- △ AIP-006, SEPTEMBER 1990, ALL NEW CONSTRUCTION.
- △ AIP-008, 2001, CRACK SEAL, FOG SEAL, AND REMARK ALL PAVEMENTS.
- △ AIP-011, 2008, REHABILITATE (OVERLAY) RUNWAY 6-24 (R-1), TAXIWAY (T-1), TURNAROUND (T-2), AND APRON (A-1).

<b>LEGEND</b> [Pattern] 1997 SURVEY AREA [Pattern] 2000 SURVEY AREA [Pattern] 2003 SURVEY AREA [Pattern] 2006 SURVEY AREA [Pattern] 2009 SURVEY AREA [Pattern] 2012 SURVEY AREA	DATE OF PAVEMENT STRENGTH SURVEY:		<b>MONTANA AVIATION SYSTEM PLAN</b> <b>2012 UPDATE - PAVEMENT CONDITION INDEXES</b>
	EVALUATED BY:		
	DATE OF MOST RECENT PAVEMENT CONDITION SURVEY:	SEPT. 5, 2012	<b>COLSTRIP AIRPORT</b>
	EVALUATED BY:	M. BECKHOFF	
			PREPARED FOR:  COLSTRIP MONTANA DATE: DEC. 2012
			PREPARED BY: 