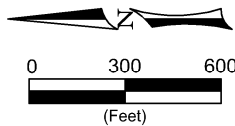
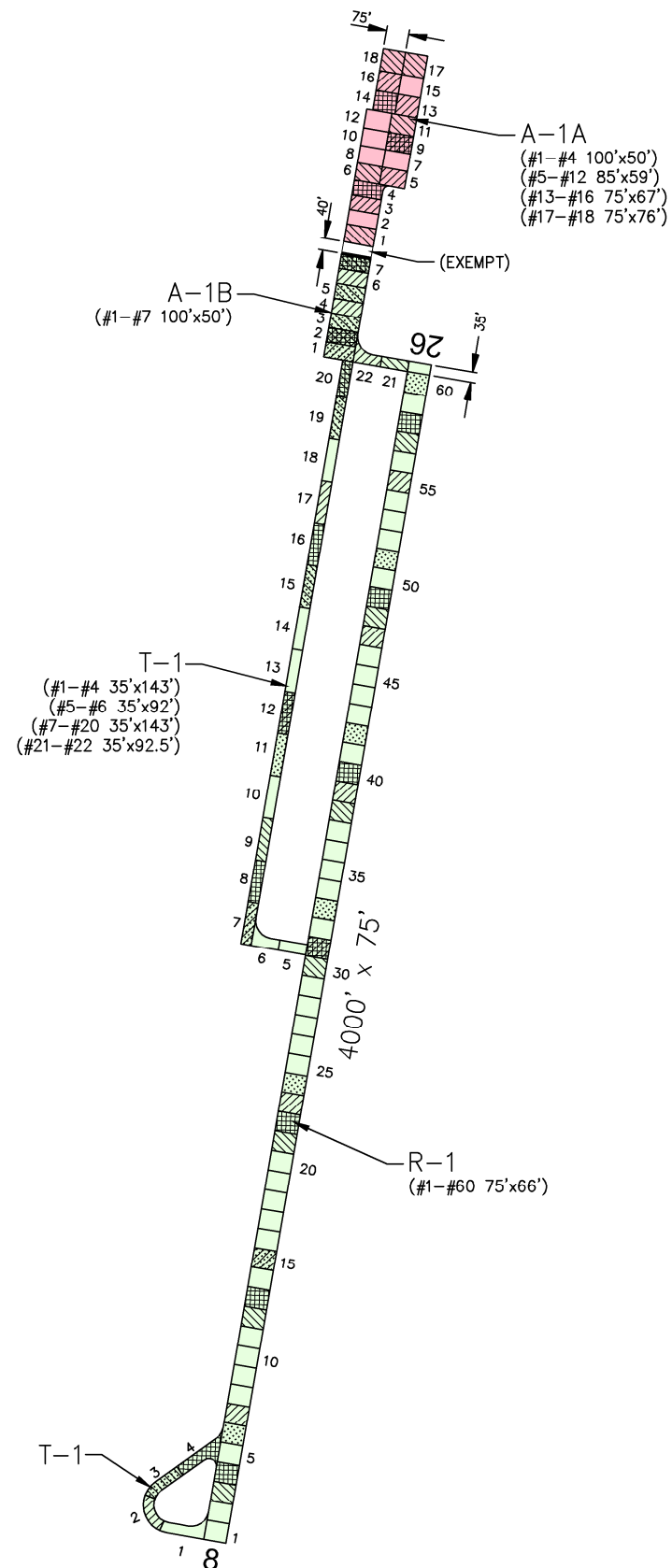


CHINOOK



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.	
RUNWAYS										
R-1	E-7	F7		10" P-208	3" P-401	FABRIC, 2" P-401 P-608	12,500			1,2,3,4
TAXIWAYS										
T-1	E-7	F7		10" P-208	3" P-401	FABRIC, 2" P-401 P-608	12,500			1,2,4
APRONS										
A-1A	E-7	F7		10" P-208	3" P-401	P-609, P-608	12,500			1,2,4
A-1B	E-7	F7		10" P-208	3" P-401	FABRIC, 2" P-401 P-608	12,500			1,2,4

REMARKS:

- AIP-03/04, 1991-1992, ALL NEW CONSTRUCTION.
- AIP-007-2005/008-2006, REHABILITATE RUNWAY 8/26 (CROWN RESTORATION AND OVERLAY); OVERLAY TAXIWAY (T-1) AND APRON (A-1B); FOG SEAL APRON (A-1A).
- AIP-010-2010, CRACK SEAL, FOG SEAL, AND REMARK RUNWAY (R-1).
- AIP-014-2015, CRACK SEAL, SEAL COAT, AND REMARK RUNWAY (R-1), TAXIWAY (T-1), AND APRONS (A-1A, A-1B) [INSPECTED AFTER MAINTENANCE PROJECT].

LEGEND

- 2003 SURVEY AREA
- 2006 SURVEY AREA (NOT SURVEYED)
- 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:	
EVALUATED BY:	
DATE OF MOST RECENT PAVEMENT CONDITION SURVEY:	SEPT. 30, 2015
EVALUATED BY:	S. MARKWARDT
LOCATION:	CHINOOK MONTANA

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

**EDGAR G. OBIE FIELD
(S71)**

Date: DECEMBER 2015 Prepared For: MONTANA DEPARTMENT OF TRANSPORTATION Prepared By: RPA Robert Peccia & Associates, Inc.

CHINOOK

CHINOOK AIRPORT

9/30/2015



A-1B, Overview



A-1B, Surface detail with tie down



T-1, Surface detail with crack



T-1, Overview

CHINOOK AIRPORT

9/30/2015



R-1, Overview



R-1, Surface detail with raveling / gouge

CHINOOK AIRPORT

Branch: 58A

APRON

A-1B

Length: 390 LF **Width:** 100 LF **Area:** 39,000 SF **Last Const. :** 2006 **Family:** ACAM15
From: T-1 **To:** A-1A **Surface:** AAC

Inspections

Samples Surveyed: 4 **Total Samples:** 8 **Last Inspection Date (RPA)** 9/30/2015 **PCI:** 73

Sample # 1 **Area:** 5750 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	284 LF
RAVELING	L	25 SF
PATCHING	L	5 SF
DEPRESSION	H	4 SF
DEPRESSION	L	4 SF
RAVELING	H	3 SF

Sample # 3 **Area:** 5750 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	338 LF
RAVELING	L	25 SF
DEPRESSION	H	3 SF
PATCHING	L	3 SF
RAVELING	H	2 SF

Sample # 5 **Area:** 5750 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	299 LF
RAVELING	L	25 SF
PATCHING	L	4 SF
DEPRESSION	H	3 SF
RAVELING	H	2 SF
OIL SPILLAGE	N	2 SF

Sample # 7 **Area:** 5750 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	189 LF
RAVELING	L	25 SF
RAVELING	H	3 SF

Extrapolated Distress Quantities*

Distress Description	Severity	Quantity	Density	Deduct
LONGITUDINAL/TRANSVERSE CRACKING	L	1882 LF	4.83 %	14.39
DEPRESSION	H	17 SF	0.04 %	12.00
RAVELING	H	17 SF	0.04 %	6.00
OIL SPILLAGE	N	3 SF	0.01 %	2.00
PATCHING	L	20 SF	0.05 %	2.00
RAVELING	L	170 SF	0.43 %	1.65
DEPRESSION	L	7 SF	0.02 %	0.30

* 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 63.0 % Climate/Durability 37.0 % Other

CHINOOK AIRPORT**FIFTEEN YEAR PROJECTIONS: ESTIMATED AVERAGE ANNUAL COST: \$60,991**

PLAN YEAR: 2016			ESTIMATED COST:			\$131,493	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
T-1	Prev. & Seal Coat	\$543	\$28,861			\$29,404	85	91
R-1	Prev. & Seal Coat	\$5,399	\$84,000			\$89,399	78	84
A-1B	Prev. & Seal Coat	\$1,770	\$10,920			\$12,690	71	76
PLAN YEAR: 2017			ESTIMATED COST:			\$4,463	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
R-1	Basic Prev.	\$2,839				\$2,839	81	81
T-1	Basic Prev.	\$221				\$221	88	88
A-1B	Basic Prev.	\$1,403				\$1,403	74	74
PLAN YEAR: 2018			ESTIMATED COST:			\$7,758	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
T-1	Basic Prev.	\$542				\$542	85	85
A-1B	Basic Prev.	\$1,832				\$1,832	71	72
R-1	Basic Prev.	\$5,384				\$5,384	78	78
PLAN YEAR: 2019			ESTIMATED COST:			\$12,040	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
A-1B	Basic Prev.	\$2,467				\$2,467	69	69
T-1	Basic Prev.	\$869				\$869	82	82
R-1	Basic Prev.	\$8,704				\$8,704	76	76
PLAN YEAR: 2020			ESTIMATED COST:			\$16,847	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
R-1	Basic Prev.	\$12,049				\$12,049	74	74
A-1B	Basic Prev.	\$3,485				\$3,485	67	67
T-1	Basic Prev.	\$1,313				\$1,313	80	80
PLAN YEAR: 2021			ESTIMATED COST:			\$165,968	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
A-1B	Prev. & Seal Coat	\$4,544	\$12,659			\$17,203	65	70
T-1	Prev. & Seal Coat	\$2,542	\$33,458			\$36,000	77	83
R-1	Prev. & Seal Coat	\$15,386	\$97,379			\$112,765	71	76
PLAN YEAR: 2022			ESTIMATED COST:			\$17,268	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
T-1	Basic Prev.	\$1,260				\$1,260	80	80
A-1B	Basic Prev.	\$3,572				\$3,572	67	67
R-1	Basic Prev.	\$12,436				\$12,436	74	74
PLAN YEAR: 2023			ESTIMATED COST:			\$23,245	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
T-1	Basic Prev.	\$2,565				\$2,565	77	78
A-1B	Basic Prev.	\$4,696				\$4,696	65	65
R-1	Basic Prev.	\$15,984				\$15,984	72	72
PLAN YEAR: 2024			ESTIMATED COST:			\$30,162	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
A-1B	Basic Prev.	\$5,879				\$5,879	63	63
R-1	Basic Prev.	\$20,407				\$20,407	70	70
T-1	Basic Prev.	\$3,876				\$3,876	75	75
PLAN YEAR: 2025			ESTIMATED COST:			\$40,866	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
A-1B	Basic Prev.	\$7,139				\$7,139	61	61
T-1	Basic Prev.	\$5,191				\$5,191	73	73
R-1	Basic Prev.	\$28,536				\$28,536	68	68
PLAN YEAR: 2026			ESTIMATED COST:			\$218,421	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
A-1B	Prev. & Seal Coat	\$8,829	\$14,676			\$23,505	59	64
T-1	Prev. & Seal Coat	\$6,511	\$38,787			\$45,297	71	75
R-1	Prev. & Seal Coat	\$36,730	\$112,889			\$149,619	66	70
PLAN YEAR: 2027			ESTIMATED COST:			\$42,281	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
A-1B	Basic Prev.	\$7,418				\$7,418	61	61
T-1	Basic Prev.	\$5,376				\$5,376	73	73
R-1	Basic Prev.	\$29,487				\$29,487	68	68

PLAN YEAR: 2028			ESTIMATED COST:			\$54,139	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
A-1B	Basic Prev.	\$9,117				\$9,117	59	59
T-1	Basic Prev.	\$6,783				\$6,783	71	71
R-1	Basic Prev.	\$38,239				\$38,239	66	66
PLAN YEAR: 2029			ESTIMATED COST:			\$67,569	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
T-1	Basic Prev.	\$9,127				\$9,127	69	69
A-1B	Basic Prev.	\$11,349				\$11,349	57	57
R-1	Basic Prev.	\$47,093				\$47,093	64	64
PLAN YEAR: 2030			ESTIMATED COST:			\$82,349	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
A-1B	Basic Prev.	\$13,822				\$13,822	54	55
T-1	Basic Prev.	\$12,348				\$12,348	67	67
R-1	Basic Prev.	\$56,179				\$56,179	63	63