

POPLAR AIRPORT

Branch: 65A **APRON**

A-1

Length: 275 LF Width: 250 LF Area: 68,750 SF Last Const: 2009 Family: ACAM
 From: T-1 To: T-1 Surface:

Inspections

Samples Surveyed: 5 Total Samples: 21 Last Inspection Date: 8/22/2012 **PCI: 98**

Sample #	Distress Description	Severity	Quantity	Area:
2	NONE			5,308 SF
6	OIL SPILLAGE	N	2 SF	4,250 SF
10	OIL SPILLAGE	N	1 SF	5,308 SF
14	OIL SPILLAGE	N	5 SF	4,250 SF
18	BLEEDING	N	1 SF	4,250 SF
	OIL SPILLAGE	N	1 SF	

Extrapolated Distress Quantities*

Distress Description	Severity	Quantity	Density	Deduct
BLEEDING	N	3 SF	0.53%	0.00
OIL SPILLAGE	N	26 SF	0.26%	2.00

* 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 0.0 % Climate/Durability 100.0 % Other

POPLAR AIRPORT

Branch: 65A APRON

A-2

Length: 30 LF Width: 30 LF Area: 900 SF Last Const: 2009 Family: PCAA
 From: A-1 To: A-1 Surface: PCC

Inspections

Samples Surveyed: 1 Total Samples: 9 Last Inspection Date: 8/24/2012 **PCI: 83**

Sample # 1	Distress Description	Severity	Quantity	Area: 9 SLABS
	CORNER BREAK	L	1 SLABS	
	SHRINKAGE CRACKING	N	1 SLABS	
	JOINT SPALLING	L	4 SLABS	

Extrapolated Distress Quantities*

Distress Description	Severity	Quantity	Density	Deduct
CORNER BREAK	L	1 SLABS	0.30%	8.98
SHRINKAGE CRACKING	N	1 SLABS	100.00%	2.06
JOINT SPALLING	L	4 SLABS	0.00%	10.39

* 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

42.0 % Load 0.0 % Climate/Durability 58.0 % Other

POPLAR AIRPORT

Branch: 65A APRON

A-3

Length: 30 LF Width: 30 LF Area: 900 SF Last Const: 2009 Family: PCAA
 From: A-1 To: A-1 Surface: PCC

Inspections

Samples Surveyed: 1 Total Samples: 1 Last Inspection Date: 8/24/2012 **PCI: 82**

Sample # 1

Area: 9 SLABS

Distress Description	Severity	Quantity
CORNER BREAK	L	1 SLABS
JOINT SPALLING	L	7 SLABS

Extrapolated Distress Quantities*

Distress Description	Severity	Quantity	Density	Deduct
CORNER BREAK	L	1 SLABS	0.00%	8.98
JOINT SPALLING	L	7 SLABS	0.06%	13.24

* 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

40.0 % Load 0.0 % Climate/Durability 60.0 % Other

POPLAR AIRPORT

Branch: 65R RUNWAY

R-1

Length: 4,400 LF Width: 75 LF Area: 330,000 SF Last Const: 2009 Family: ACRMU
 From: T-1 To: T-3 Surface: AC

Inspections

Samples Surveyed: 7 Total Samples: 67 Last Inspection Date: 8/24/2012 **PCI: 99**

Sample #	Distress Description	Severity	Quantity	Area:
6	NONE			4,875 SF
16	NONE			4,875 SF
26	NONE			4,875 SF
36	LONGITUDINAL/TRANSVERSE CRACKING	L	15 LF	4,875 SF
46	LONGITUDINAL/TRANSVERSE CRACKING	L	15 LF	4,875 SF
56	NONE			4,875 SF
66	NONE			4,875 SF

Extrapolated Distress Quantities*

Distress Description	Severity	Quantity	Density	Deduct
LONGITUDINAL/TRANSVERSE CRACKING	L	290 LF	1.24%	2.50

* 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

POPLAR AIRPORT

Branch: 65T TAXIWAY

T-1

Length: 1,620 LF **Width:** 35 LF **Area:** 56,700 SF **Last Const:** 2009 **Family:** ACRMU
From: R-1 **To:** R-1 **Surface:** AC

Inspections

Samples Surveyed: 5 **Total Samples:** 14 **Last Inspection Date:** 8/24/2012 **PCI:** 97

Sample #	Distress Description	Severity	Quantity	Area:
1	NONE			2,722 SF
4	NONE			4,725 SF
7	RAVELING	M	6 SF	2,722 SF
	WEATHERING	L	30 SF	
10	LONGITUDINAL/TRANSVERSE CRACKING	L	3 LF	4,725 SF
13	RAVELING	M	13 SF	4,550 SF

Extrapolated Distress Quantities*

Distress Description	Severity	Quantity	Density	Deduct
LONGITUDINAL/TRANSVERSE CRACKING	L	9 LF	75.32%	2.50
RAVELING	M	55 SF	0.05%	4.00
WEATHERING	L	87 SF	1.30%	0.08

* 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

POPLAR AIRPORT

Branch: 65T TAXIWAY

T-2

Length: 369 LF Width: 20 LF Area: 7,380 SF Last Const: 2009 Family: ACRMU
 From: T-1 To: END Surface: AC

Inspections

Samples Surveyed: 3 Total Samples: 3 Last Inspection Date: 8/24/2012 **PCI: 99**

Sample #	Distress Description	Severity	Quantity	Area:
1	BLEEDING	N	1 SF	2,460 SF
2	BLEEDING	N	2 SF	2,460 SF
3	OIL SPILLAGE	N	3 SF	2,460 SF

Extrapolated Distress Quantities*

Distress Description	Severity	Quantity	Density	Deduct
BLEEDING	N	3 SF	0.05%	0.00
OIL SPILLAGE	N	3 SF	0.09%	2.00

* 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 0.0 % Climate/Durability 100.0 % Other

POPLAR AIRPORT

Branch: 65T TAXIWAY

T-3

Length: 630 LF Width: 35 LF Area: 22,050 SF Last Const: 2009 Family: ACRMU
 From: R-1 To: R-1 Surface: AC

Inspections

Samples Surveyed: 3 Total Samples: 67 Last Inspection Date: 8/24/2012 **PCI: 95**

Sample #	Distress Description	Severity	Quantity	Area:
1	RAVELING	M	26 SF	4,306 SF
3	RAVELING	M	33 SF	3,675 SF
5	NONE			4,306 SF

Extrapolated Distress Quantities*

Distress Description	Severity	Quantity	Density	Deduct
RAVELING	M	106 SF	100.00%	6.06

* 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

POPLAR AIRPORT

FIRST YEAR LOCAL: 2013

LOCAL REPAIR COST: \$1,303

Section	Distress Description	Severity	Quantity	Work Description	Quantity	Cost	Poliev
A-1	OIL SPILLAGE	N	27 SF	Patching - AC Shallow	51 SF	\$1,024	PREV.
T-2	OIL SPILLAGE	N	3 SF	Patching - AC Shallow	14 SF	\$279	PREV.

FIFTEEN YEAR PROJECTIONS

ESTIMATED AVERAGE ANNUAL COST: \$35,672

Plan Year: 2013						Estimated Cost: \$2,160		PCI	
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-2	Major Above Critical	\$0	\$0	\$0	\$1,080	\$1,080	81	100	
A-3	Major Above Critical	\$0	\$0	\$0	\$1,080	\$1,080	80	100	
Plan Year: 2014						Estimated Cost: \$105,269		PCI	
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
R-1	Global MR	\$0	\$84,976	\$0	\$0	\$84,976	93	100	
T-1	Global MR	\$0	\$14,600	\$0	\$0	\$14,600	91	99	
T-3	Global MR + Preventive	\$15	\$5,678	\$0	\$0	\$5,693	89	97	
Plan Year: 2015						Estimated Cost: \$173		PCI	
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-1	Preventive	\$168	\$0	\$0	\$0	\$168	88	88	
T-2	Preventive	\$5	\$0	\$0	\$0	\$5	89	90	
Plan Year: 2016						Estimated Cost: \$467		PCI	
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-1	Preventive	\$419	\$0	\$0	\$0	\$419	84	85	
A-2	Preventive	\$3	\$0	\$0	\$0	\$3	87	87	
A-3	Preventive	\$3	\$0	\$0	\$0	\$3	87	87	
T-2	Preventive	\$29	\$0	\$0	\$0	\$29	86	87	
T-3	Preventive	\$13	\$0	\$0	\$0	\$13	89	90	
Plan Year: 2017						Estimated Cost: \$1,381		PCI	
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-1	Preventive	\$665	\$0	\$0	\$0	\$665	81	82	
A-2	Preventive	\$7	\$0	\$0	\$0	\$7	84	84	
A-3	Preventive	\$7	\$0	\$0	\$0	\$7	84	84	
R-1	Preventive	\$421	\$0	\$0	\$0	\$421	89	89	
T-1	Preventive	\$142	\$0	\$0	\$0	\$142	88	88	
T-2	Preventive	\$53	\$0	\$0	\$0	\$53	84	84	
T-3	Preventive	\$88	\$0	\$0	\$0	\$88	86	87	
Plan Year: 2018						Estimated Cost: \$3,401		PCI	
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-1	Preventive	\$1,246	\$0	\$0	\$0	\$1,246	79	79	
A-2	Preventive	\$10	\$0	\$0	\$0	\$10	80	81	
A-3	Preventive	\$10	\$0	\$0	\$0	\$10	80	81	
R-1	Preventive	\$1,564	\$0	\$0	\$0	\$1,564	86	86	
T-1	Preventive	\$335	\$0	\$0	\$0	\$335	85	85	
T-2	Preventive	\$76	\$0	\$0	\$0	\$76	81	81	
T-3	Preventive	\$161	\$0	\$0	\$0	\$161	84	84	
Plan Year: 2019						Estimated Cost: \$127,771		PCI	
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-1	Preventive	\$2,147	\$0	\$0	\$0	\$2,147	76	76	
A-2	Preventive	\$20	\$0	\$0	\$0	\$20	78	78	
A-3	Preventive	\$20	\$0	\$0	\$0	\$20	78	78	
R-1	Global MR + Preventive	\$2,680	\$98,510	\$0	\$0	\$101,190	83	89	
T-1	Global MR + Preventive	\$523	\$16,926	\$0	\$0	\$17,449	82	88	
T-2	Preventive	\$130	\$0	\$0	\$0	\$130	79	79	
T-3	Global MR + Preventive	\$232	\$6,582	\$0	\$0	\$6,814	81	87	
Plan Year: 2020						Estimated Cost: \$5,374		PCI	
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-1	Preventive	\$3,044	\$0	\$0	\$0	\$3,044	74	74	
A-2	Preventive	\$32	\$0	\$0	\$0	\$32	75	75	
A-3	Preventive	\$32	\$0	\$0	\$0	\$32	75	75	
R-1	Preventive	\$1,553	\$0	\$0	\$0	\$1,553	86	86	
T-1	Preventive	\$337	\$0	\$0	\$0	\$337	85	85	
T-2	Preventive	\$212	\$0	\$0	\$0	\$212	77	77	
T-3	Preventive	\$164	\$0	\$0	\$0	\$164	84	84	

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Plan Year: 2021		Estimated Cost: \$7,830					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-1	Preventive	\$3,933	\$0	\$0	\$0	\$3,933	71	71	
A-2	Preventive	\$43	\$0	\$0	\$0	\$43	73	73	
A-3	Preventive	\$43	\$0	\$0	\$0	\$43	73	73	
R-1	Preventive	\$2,742	\$0	\$0	\$0	\$2,742	83	84	
T-1	Preventive	\$537	\$0	\$0	\$0	\$537	83	83	
T-2	Preventive	\$291	\$0	\$0	\$0	\$291	75	75	
T-3	Preventive	\$240	\$0	\$0	\$0	\$240	81	82	

Plan Year: 2022		Estimated Cost: \$10,848					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-1	Preventive	\$5,337	\$0	\$0	\$0	\$5,337	69	69	
A-2	Preventive	\$54	\$0	\$0	\$0	\$54	71	71	
A-3	Preventive	\$54	\$0	\$0	\$0	\$54	71	71	
R-1	Preventive	\$3,904	\$0	\$0	\$0	\$3,904	81	81	
T-1	Preventive	\$733	\$0	\$0	\$0	\$733	80	80	
T-2	Preventive	\$370	\$0	\$0	\$0	\$370	73	73	
T-3	Preventive	\$396	\$0	\$0	\$0	\$396	79	79	

Plan Year: 2023		Estimated Cost: \$16,894					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-1	Preventive	\$7,382	\$0	\$0	\$0	\$7,382	67	67	
A-2	Preventive	\$70	\$0	\$0	\$0	\$70	69	69	
A-3	Preventive	\$70	\$0	\$0	\$0	\$70	69	69	
R-1	Preventive	\$6,848	\$0	\$0	\$0	\$6,848	79	79	
T-1	Preventive	\$1,414	\$0	\$0	\$0	\$1,414	78	78	
T-2	Preventive	\$449	\$0	\$0	\$0	\$449	71	71	
T-3	Preventive	\$661	\$0	\$0	\$0	\$661	77	77	

Plan Year: 2024		Estimated Cost: \$165,600					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-1	Preventive	\$9,459	\$0	\$0	\$0	\$9,459	65	65	
A-2	Preventive	\$93	\$0	\$0	\$0	\$93	68	68	
A-3	Preventive	\$93	\$0	\$0	\$0	\$93	68	68	
R-1	Global MR + Preventive	\$10,924	\$114,200	\$0	\$0	\$125,124	77	81	
T-1	Global MR + Preventive	\$2,100	\$19,622	\$0	\$0	\$21,722	76	80	
T-2	Preventive	\$555	\$0	\$0	\$0	\$555	70	70	
T-3	Global MR + Preventive	\$924	\$7,631	\$0	\$0	\$8,555	75	79	

Plan Year: 2025		Estimated Cost: \$21,528					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-1	Preventive	\$11,567	\$0	\$0	\$0	\$11,567	63	63	
A-2	Preventive	\$115	\$0	\$0	\$0	\$115	66	66	
A-3	Preventive	\$115	\$0	\$0	\$0	\$115	66	66	
R-1	Preventive	\$6,889	\$0	\$0	\$0	\$6,889	79	79	
T-1	Preventive	\$1,432	\$0	\$0	\$0	\$1,432	78	78	
T-2	Preventive	\$733	\$0	\$0	\$0	\$733	68	68	
T-3	Preventive	\$676	\$0	\$0	\$0	\$676	77	77	

Plan Year: 2026		Estimated Cost: \$29,233					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-1	Preventive	\$13,721	\$0	\$0	\$0	\$13,721	61	62	
A-2	Preventive	\$137	\$0	\$0	\$0	\$137	65	65	
A-3	Preventive	\$137	\$0	\$0	\$0	\$137	65	65	
R-1	Preventive	\$11,202	\$0	\$0	\$0	\$11,202	77	77	
T-1	Preventive	\$2,164	\$0	\$0	\$0	\$2,164	76	76	
T-2	Preventive	\$919	\$0	\$0	\$0	\$919	67	67	
T-3	Preventive	\$955	\$0	\$0	\$0	\$955	75	75	

Plan Year: 2027		Estimated Cost: \$37,148					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-1	Preventive	\$16,129	\$0	\$0	\$0	\$16,129	60	60	
A-2	Preventive	\$158	\$0	\$0	\$0	\$158	63	63	
A-3	Preventive	\$158	\$0	\$0	\$0	\$158	63	63	
R-1	Preventive	\$15,475	\$0	\$0	\$0	\$15,475	75	75	
T-1	Preventive	\$2,885	\$0	\$0	\$0	\$2,885	74	74	
T-2	Preventive	\$1,113	\$0	\$0	\$0	\$1,113	65	65	
T-3	Preventive	\$1,230	\$0	\$0	\$0	\$1,230	73	73	

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8/22/2012



A-1, Overview



A-1, Surface detail oil spillage



A-2, Overview



A-2, Surface detail with cracking and corner break

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A-3, Overview



A-3, Surface detail with joint spalling



R-1, Overview



R-1, Surface detail with cracking

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T-1, Overview



T-1, Surface detail with cracking



T-2, Oil spillage



T-2, Overview

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T-2, Surface detail bleeding

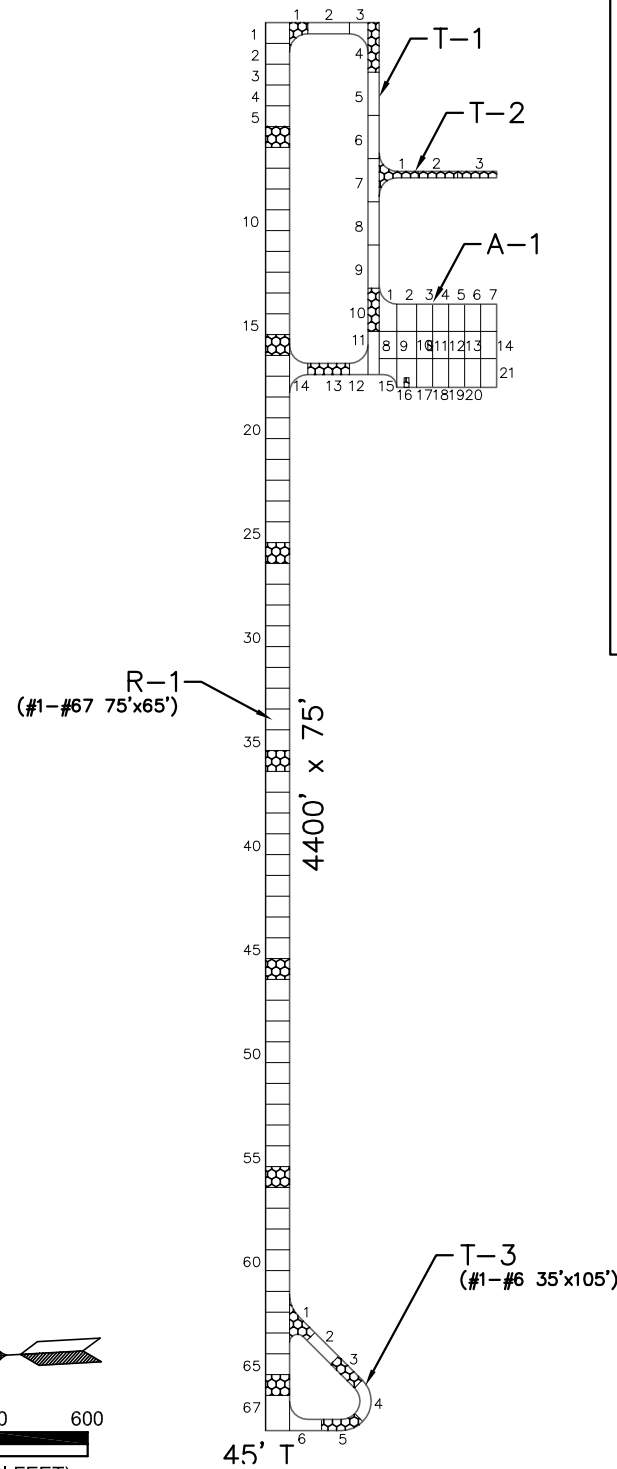
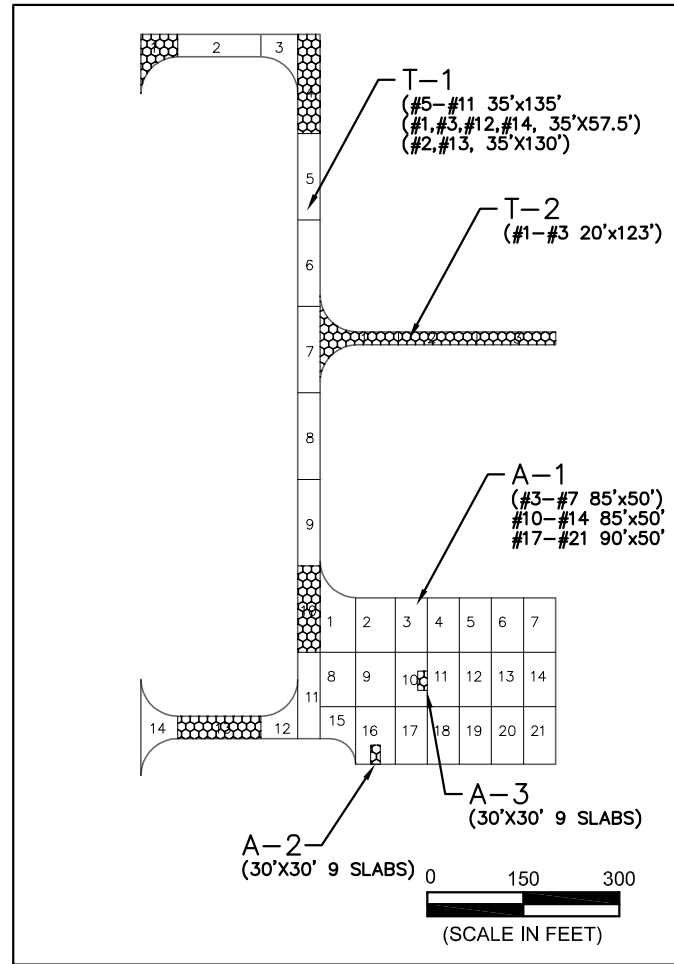


T-3, Overview



T-3, Surface detail raveling from snow plow damage

POPLAR





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	-	6" P-152	GEOTEXTILE, FABRIC, 9" P-154	6" P-208	3" P-403		12,500	40,000	66,000	◁
TAXIWAYS										
T-1	-	6" P-152	GEOTEXTILE, FABRIC, 9" P-154	6" P-208	3" P-403		12,500	40,000	66,000	◁
T-2	-	6" P-152	GEOTEXTILE, FABRIC, 9" P-154	6" P-208	3" P-403		12,500	40,000	66,000	◁
T-3	-	6" P-152	GEOTEXTILE, FABRIC, 9" P-154	6" P-208	3" P-403		12,500	40,000	66,000	◁
APRONS										
A-1	-	6" P-152	GEOTEXTILE, FABRIC, 9" P-154	6" P-208	3" P-403		12,500	40,000	66,000	◁
A-2	-	6" P-152	GEOTEXTILE, FABRIC, 9" P-154	4" P-208	5" P-610		12,500			◁
A-3	-	6" P-152	GEOTEXTILE, FABRIC, 9" P-154	4" P-208	5" P-610		12,500			◁

REMARKS:

◁ AIP-006, 2009, NEW POPLAR AIRPORT

LEGEND ☒ 2012 SURVEY AREA	DATE OF PAVEMENT STRENGTH SURVEY:	MONTANA AVIATION SYSTEM PLAN 2012 UPDATE - PAVEMENT CONDITION INDEXES	
	EVALUATED BY:	POPLAR AIRPORT	
DATE OF MOST RECENT PAVEMENT CONDITION SURVEY:	AUG. 22, 2012	PREPARED FOR: 	PREPARED BY: 
EVALUATED BY:	M. BECKHOFF		
		DATE: JAN. 2013	