

MICHIGAN AIRPORT DEVELOPMENT

AID PROGRAM PACKAGE

**BOIS BLANC ISLAND AIRPORT**

Bois Blanc Island, Michigan

Fiscal Years 2012 - 2017

Submitted By: Bois Blanc Township

Date: July 18, 2011

MAP Meeting Date: October 4, 2011

Revision Date: December 9, 2011







4100 Capital City Blvd, 2nd Floor  
 Lansing, MI 48906  
 Ph. (517) 327-1980  
 Fax (517) 327-1982

**TEN-YEAR  
 DEVELOPMENT PLAN  
 2012 - 2017**

**AIRPORT:** Bois Blanc Island Airport  
**LOCATION:** Bois Blanc Island, Michigan  
 12/9/2011 page 1 of 2

DEVELOPMENT YEAR	DEVELOPMENT ITEM		ITEM COST	F - Total Fed AIP Dollars S - Total State Dollars L - Total Local Dollars T - Total Dollars for Year
	Land Acquisition	FSL	292,000	F \$802,650
2012	Phase 1 Clearing - Approaches & Road Relocation Area	FSL	380,000	S \$21,122
	SRE - Plow Truck	FSL	157,895	L \$21,122
	Crack Seal	FSL	15,000	
				T \$844,895
				F \$218,500
2013	Phase 2 Clearing - Primary Surface	FSL	170,000	S \$5,750
	Design - Relocate Lime Kiln Pt. Road	FSL	60,000	L \$5,750
				T \$230,000
				F \$503,500
2014	Relocate Lime Kiln Pt. Road (1900' +/- x 24')	FSL	530,000	S \$13,250
				L \$13,250
				T \$530,000
				F \$150,000
2015	SRE - Snowblower	FSL	157,895	S \$3,947
				L \$3,947
				T \$157,895
				F \$20,900
2016	Crack Sealing & Paint Marking	FSL	22,000	S \$550
				L \$550
				T \$22,000
				F \$0
2017	Carry over year	FSL	0	S \$0
				L \$0
				T \$0

TOTAL: \$1,784,790  
 FEDERAL: \$1,695,551  
 STATE: \$44,620  
 LOCAL: \$44,620



**ITEM:** Bois Blanc Island Airport  
Land to meet federal standards  
\_\_\_\_\_  
\_\_\_\_\_

**FUNDING YEAR:**  
Local Plan: 2011  
Mtg. Decision: \_\_\_\_\_

(One item per sheet, show pavement lengths and widths)

**ITEM IS ON ALP?** Yes X  
No \_\_\_\_\_

AERO Approval Date: January 8, 2009

**ESTIMATED COST:**  
Total: \$292,000  
Federal: 277,400  
State: 7,300  
Local: 7,300

List all reasons/needs for this project, including detailed descriptions of existing conditions, i.e. pavement age, thickness, distresses, increases in aircraft/vehicle weight and/or usage, etc. Use additional sheets, as needed.

As part of a continuing effort to meet federal standards, the airport is programming this project to acquire land that will be needed to meet federal (FAA) standards. The land will be needed for the future runway 10 Nonprecision Instrument Approach (NPIA) and the relocation of Lime Kiln Pt. Road on the south side. Three parcels of land need to be acquired for the BRL which can also be used for the road relocation. An easement will be needed for the runway 10, 20:1 NPI approach. The fee parcel acquisition tax identification numbers are; # 034-015-00, 034-015-40, 034-015-30 and Shannon Easements. A cabin and house trailer will need to be removed and the water wells closed.



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AIRPORT: Bois Blanc Island Airport  
 LOCATION: Bois Blanc Island, MI  
 PROJECT:  
 CONTRACT:  
 DATE: June 23, 2009 Revised 12/08/11

FINAL DESIGN  
 PROJECT PROGRAMMING  
 FEASIBILITY STUDY  
 STATE PLANNING

BASED ON FY 2009 DOLLARS

ENGINEERING COST ESTIMATE

WORK DESCRIPTION: Purchase land to meet federal standards

ITEM DESCRIPTION	UNIT	TOTAL QTY.	UNIT PRICE	TOTAL AMOUNT
Land acquisition (4 parcels)	ls	1	200,000	200,000
Easement	ls	1	15,000	15,000
Remove structures	ls	1	31,000	31,000
				0
miscellaneous	ls	1	15,000	15,000
				0
<b>CONSTRUCTION SUBTOTAL:</b>				<b>261,000</b>
engineering, administration	ls	1		31,000
		<b>TOTAL:</b>		<b>292,000</b>

By: \_\_\_\_\_ Date: \_\_\_\_\_ Ckd: \_\_\_\_\_ Date: \_\_\_\_\_ Page \_\_\_ of \_\_\_



**ITEM:** Bois Blanc Island Airport  
Phase 1 Clearing - approaches and  
road relocation area  
\_\_\_\_\_

**FUNDING YEAR:**  
 Local Plan: 2012  
 Mtg. Decision: \_\_\_\_\_

(One item per sheet, show pavement lengths and widths)

**ITEM IS ON ALP?** Yes X  
 No \_\_\_\_\_

AERO Approval Date: January 8, 2009

**ESTIMATED COST:**  
 Total: \$380,000  
 Federal: 361,000  
 State: 9,500  
 Local: 9,500

List all reasons/needs for this project, including detailed descriptions of existing conditions, i.e. pavement age, thickness, distresses, increases in aircraft/vehicle weight and/or usage, etc. Use additional sheets, as needed.

Clearing of the 20:1 non-precision instrument approaches is required prior to the approaches being developed. The approaches to the runway is critical during the winter and early spring when the airport is the only way onto and off of the island. The runway 10 end is displaced. Trees have been cleared to the end of the existing easement. The new easement/clearing will include clearing 85'+ high trees. Trees in the transitional surface along the approach area are not included at this time. The primary surface will increase to 500' wide with the non-precision approaches and are being programmed to be cleared in 2013. Clearing of the 7:1 side slopes along the runway is not planned to be cleared due to funding constraints.



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AIRPORT: Bois Blanc Island Airport  
 LOCATION: Bois Blanc Island, MI  
 PROJECT:  
 CONTRACT:  
 DATE: June 23, 2009  
 REVISED: July 21, 2010 & July 11, 2011

\_\_\_ FINAL DESIGN  
 \_\_\_ PROJECT PROGRAM  
 \_\_\_ FEASIBILITY STUDY  
 x STATE PLANNING  
 BASED ON FY 2011 DOLLARS

ENGINEERING COST ESTIMATE

WORK DESCRIPTION: Phase 1 clearing - approaches & road relocation area

ITEM DESCRIPTION	UNIT	TOTAL QTY.	UNIT PRICE	TOTAL AMOUNT
mobilization and general conditions	ls	1	20,000	20,000
safety and security	ls	1	5,000	5,000
clearing and grubbing 20: NPI approach	ac	30	8,000	240,000
clearing and grubbing 500' wide primary surface	ac	0	8,000	0
clearing and grubbing 7:1 side slope 35' allowable N side 15' S side	ac	0	8,000	0
turfing and mulching	ac	20	1,100	22,000
grade/lower primary surface	ls	0	25,000	0
miscellaneous	ls	1	17,000	17,000
70ac +/- additional clearing needed to clear 7:1 side slope for 85' trees				
CONSTRUCTION SUBTOTAL:				304,000
engineering, administration	ls	1		76,000
TOTAL:				380,000







**ITEM:** Crack Seal Runway ,Taxiway & Apron

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**FUNDING YEAR:**

Local Plan: 2012  
Mtg. Decision: \_\_\_\_\_

(One item per sheet, show pavement lengths and widths)

**ITEM IS ON ALP?** Yes \_\_\_\_\_  
No X

FAA Approval Date: January 8, 2009

**ESTIMATED COST:**

Total: \$15,000  
Federal: 14,250  
State: 375  
Local: 375

List all reasons/needs for this project, including detailed descriptions of existing conditions, i.e. pavement age, thickness, distresses, increases in aircraft/vehicle weight and/or usage, etc. Use additional sheets, as needed.

To maintain and prolong the pavement and safety of the airport users.





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AIRPORT: Bois Blanc Island Airport  
 LOCATION: Bois Blanc Island, MI  
 PROJECT:  
 CONTRACT:  
 DATE: June 23, 2009  
 REVISED: July 21, 2010 & July 11, 2011

\_\_\_ FINAL DESIGN  
 \_\_\_ PROJECT PROGRAM  
 \_\_\_ FEASIBILITY STUDY  
 x STATE PLANNING  
 BASED ON FY 2011 DOLLARS

ENGINEERING COST ESTIMATE

WORK DESCRIPTION: Phase 2 clearing - primary surface

ITEM DESCRIPTION	UNIT	TOTAL QTY.	UNIT PRICE	TOTAL AMOUNT
mobilization and general conditions	ls	1	20,000	20,000
safety and security	ls	1	5,000	5,000
clearing and grubbing 20: NPI approach	ac	0	8,000	0
clearing and grubbing 500' wide primary surface	ac	8	8,000	64,000
clearing and grubbing 7:1 side slope 35' allowable N side 15' S side	ac	0	8,000	0
turfing and mulching	ac	5	1,100	5,500
grade/lower primary surface	ls	1	25,000	25,000
miscellaneous	ls	1	16,000	16,000
70ac +/- additional clearing needed to clear 7:1 side slope for 85' trees				
CONSTRUCTION SUBTOTAL:				135,500
engineering, administration	ls	1		34,500
			TOTAL:	170,000



**ITEM:** Bois Blanc Island Airport  
Design - Relocate Lime Klin Pt. Road  
(1900'+/- x 24')  
 \_\_\_\_\_

**FUNDING YEAR:**  
 Local Plan: 2013  
 Mtg. Decision: \_\_\_\_\_

(One item per sheet, show pavement lengths and widths)

**ITEM IS ON ALP?** Yes X  
 No \_\_\_\_\_

AERO Approval Date: January 8, 2009

**ESTIMATED COST:**  
 Total: \$60,000  
 Federal: 57,000  
 State: 1,500  
 Local: 1,500

List all reasons/needs for this project, including detailed descriptions of existing conditions, i.e. pavement age, thickness, distresses, increases in aircraft/vehicle weight and/or usage, etc. Use additional sheets, as needed.

Runway 10/28 was extended and paved in the summer of 2005. An airport layout plan meeting federal standards has been approved. A 20:1 Non-Precision Approach is planned to each end of runway 10/28. The primary surface will than be 500' wide. Lime Kiln Pt. Road will need to be relocated south out of this future primary surface and 7:1 backslope. Land being proposed to be purchased in 2011 will be needed for this relocation. 1900+/- feet of road relocation is being proposed. This project would provide the design for the road relocation in 2012.





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LOCATION: Bois Blanc Island, Michigan  
 AIRPORT: Bois Blanc Island Airport  
 PROJECT:  
 CONTRACT:  
 DATE: June 23, 2009  
 REVISED: August 11, 2010

FINAL DESIGN  
 PROJECT PROGRAMMING  
 FEASIBILITY STUDY  
 STATE PLANNING  
 BASED ON FY 2011 DOLLARS

ENGINEERING ESTIMATE

WORK DESCRIPTION: Relocate Lime Klin Pt. Road (1900'+/- x 24')

ITEM NO.	ITEM DESCRIPTION	UNIT	QTY	UNIT COST	TOTAL COST
1000400	Mobilization and general conditions	ls	1	100,000.00	100,000.00
1000410	Safety and security	ls	1	6,000.00	6,000.00
1510416	Clearing and grubbing	acre	2.0	8,000.00	16,000.00
1510455	Removing isolated trees, under 8"	each	50	100.00	5,000.00
1510460	Removing stumps, under 8"	ea	20	60.00	1,200.00
1520410	Unclassified excavation	cyd	7,100	10.00	71,000.00
1520430	Open ditch excavation	cyd	1,000	15.00	15,000.00
1520456	Borrow excavation, furnished by contractor from off-site location, misc. cip	cyd	1,500	20.00	30,000.00
1540515	Subbase course, material as specified, compacted measure	cyd	2,800	18.00	50,400.00
2080545	Aggregate base course, material as specified, compacted in place	cyd	1,300	50.00	65,000.00
7010700	Corrugated steel pipe 12", (0.064")	lft	200	25.00	5,000.00
7010940	Galvanized steel end section for 12" CSP	each	8	350.00	2,800.00
8007001	Misc. silt fence	lft	1,900	8.00	15,200.00
8007060	Misc. Permits	dlrs	2,500	1.00	2,500.00
9010540	Seeding with mixture and rate as specified	acre	3.5	3,000.00	10,500.00
9087012	Misc. mulching as specified	acre	3.5	3,000.00	10,500.00
	Misc.	ls	1	54,100.00	54,100.00

BY: \_\_\_\_\_ DATE: \_\_\_\_\_

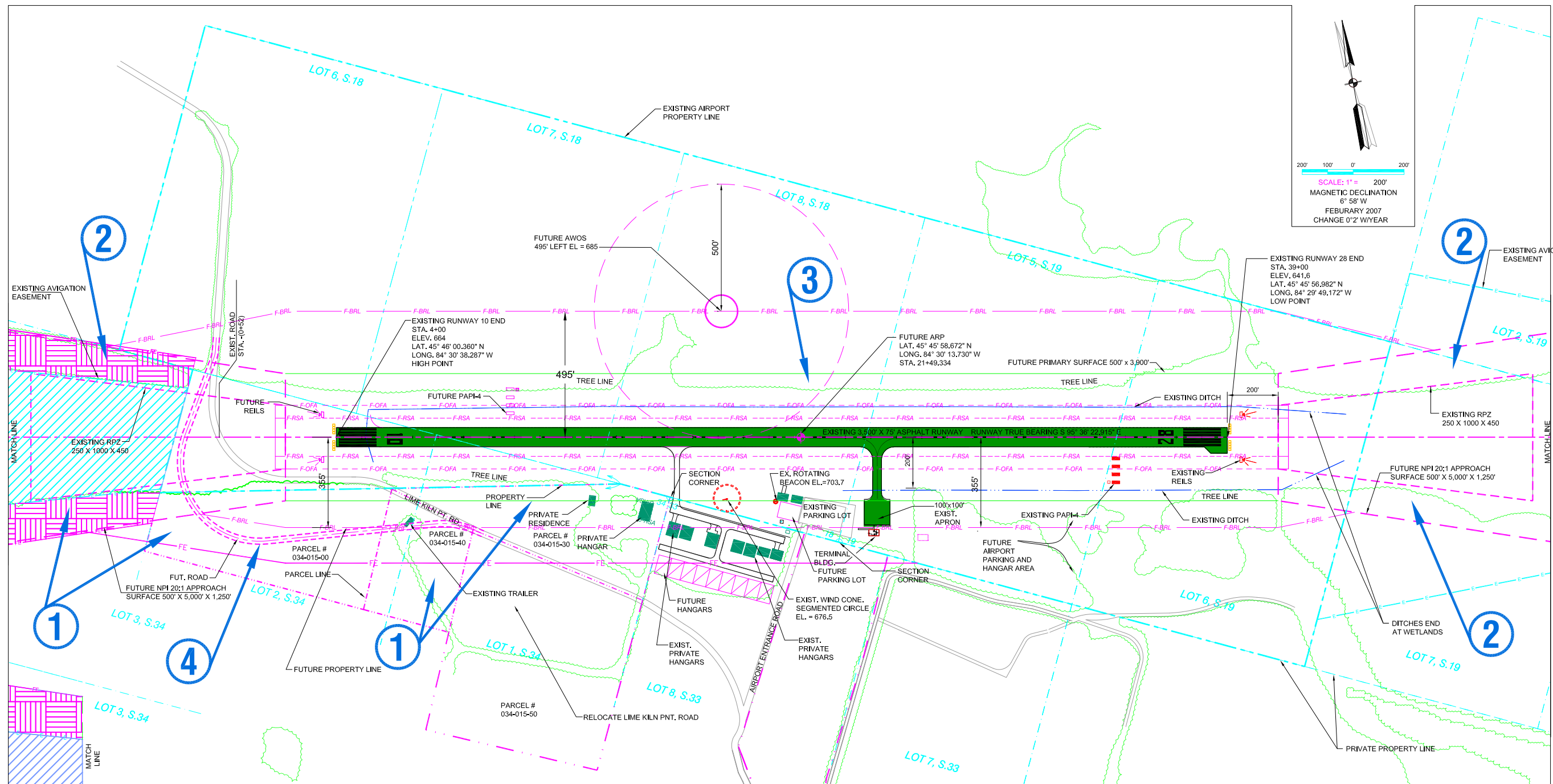
CONSTRUCTION TOTAL = \$460,200.00  
 Construction Eng & Admin \$69,800.00  
 TOTAL \$530,000.00







File Name: McBois Blanc\A\CP\2012\Revised after MAP meeting\5-yr plan sketch.dwg - 120711  
 Modified By: December 2, 2011 11:02:17 AM / ssmith  
 Plotted By: December 7, 2011 3:51:49 PM / Scott Smith



## 5 - YEAR DEVELOPMENT PLAN

- 2012 ① Land Acquisition
- 2012 ② Phase 1 Clearing
- 2013 ③ Phase 2 Clearing
- 2013 ④ Design Relocated Lime Kiln Pt. Road (1900' +/- x 24')
- 2014 ④ Relocate Lime Kiln Pt. Road (1900' +/- x 24')

FILE NO: 49-8	DRAWN GBV	DESIGNED REL	REVIEWED REL	APPROVED REL	DATE: 07/27/10
<b>BOIS BLANC ISLAND AIRPORT</b> BOIS BLANC ISLAND, MICHIGAN					
<b>AIRPORT DEVELOPMENT PLAN</b>					
<b>1</b> OF <b>1</b>					
REV	DESCRIPTION	DATE	BY		

