

**MICHIGAN AIRPORT DEVELOPMENT
PROGRAM PACKAGE
MDOT Airports Division**

**Airport Capital Improvement Plan
2012-2019**

Prepared for:

**Southwest Michigan Regional Airport
Benton Harbor, Michigan**

**July 2011
Final November 2011**

Contact:

Mr. Robert Scherwitz
Southwest Michigan Regional Airport
1123 Territorial Road
Benton Harbor, MI 49022
269-927-3194
fax 269-927-6744

Prepared by:

Mead&Hunt

MICHIGAN STATE BLOCK GRANT PROGRAM
AIRPORT CAPITAL IMPROVEMENT PROGRAM (CIP) FY-2012* to FY-2019

*ACIP includes current development year (2012 already programmed - minor changes acceptable)

Airport Name: Southwest Michigan Regional Airport	Airport Identifier: BEH	Date prepared:7/06/11	Revised: 11/17/11
Associated City: Benton Harbor, Michigan		Prepared By: RAL	
Sponsor: Southwest Michigan Regional Airport Authority		Sponsor email address & phone: Lee Scherwitz /director@swmiairport.com/269-927-3194	

NPIAS Airport Code: B

Development Year	Project Description	Shown on ALP? (Yes or No)	ACIP Code**	NPIAS Priority Rating**	Federal Entitlements	Federal Apportionment	Federal Discretionary	State	Local	Total	Remarks/Item Justification - Provide as much detail as possible.
	Carryover-0										
2012	Land Acquisition for Rwy 32 RPZ- Phase I	Yes	ST-RW-SF	48	\$93,000			\$2,447	\$2,447	\$97,895	One commercial property is still required for fee simple acquisition. Additional avigation easements for approach clearing may be necessary, pending the results of the current ALP update (2012). Additional parcels have been acquired by the Sponsor with local funds for within the approach area. The Airport may seek reimbursement for these properties at a later date. The exact amount of funding necessary is unknown at this time, consequently, two phases to provide for funding have been planned.
2012	PE for Shift Rwy 14/32 for RSA Compliance	Yes	ST-RW-SF	48	\$57,000			\$1,500	\$1,500	\$60,000	Preliminary Engineering will complete the topo survey, soil borings, develop grading limits for the project and help finalize cost estimates for the project as well. The approaches will also be analyzed for the need of tree clearing/pruning.
	Carryover-0										
2013	Land Acquisition for Rwy 14/32 approach- Phase II	Yes	ST-RW-SF	48	\$93,000			\$2,447	\$2,447	\$97,895	Should the ALP Update identify additional parcels with obstructions to the approach, Phase II of Runway 14/32 land acquisition for easements would be undertaken.
2013	Design Shift Rwy 14/32 for RSA compliance	Yes	ST-RW-SF	48	\$57,000			\$1,500	\$1,500	\$60,000	An early design of this project will allow for better bidding of the project.
2013	Tree Clearing/Pruning Rwy 14/32	Yes	ST-RW-SF	48		TBD		TBD	TBD	TBD	This project will include any tree clearing or pruning required in the runway 14/32 approaches, the limits of this project will be better defined during preliminary engineering for the project. (Cat EX Required)
	Carryover-\$55,000										
2014	Shift Rwy 14/32 for RSA compliance (370' south) and Rehabilitate existing runway surface & lighting	Yes	ST-RW-SF	48	\$205,000	\$1,419,500		\$42,750	\$42,750	\$1,710,000	Runway 14/32 (3660'x100') will be shifted by 370' to the south to accommodate full RSAs on both runway ends. This will include a rehab of the existing runway surface, the last rehabilitation on the runway was in 1991. (CAT Ex Required) The PCI was 82 in 2010 and will be approximately 70 in 2014.
	Carryover-0										
2015	SRE - Snow Blower	Yes	ST-EQ-SN	47	\$150,000	\$325,000		\$12,500	\$12,500	\$500,000	A new snow blower will be necessary to facilitate removal of snow on the runway pavements.
	Carryover-0										
2016	Convert Rwy 18/36 to taxiway- South of 14/32	Yes	CA-TW-CO	59	\$150,000	\$771,500		\$24,250	\$24,250	\$970,000	Runway 18/36 will be converted to a taxiway due to substantial obstructions in the approach areas, as well as non-compliant RSA's and extensive costs to correct these issues.
	Carryover-0										
2017	No Projects- carry for hangar 2019	NA									No project
	Carryover-\$150,000										
2018	No Projects - carry for hangar 2019	NA									No project
	Carryover-\$300,000										
2019	Site prep and hangar development by old ATCT	Yes	ST-BD-MS	32	\$450,000			\$11,842	\$11,842	\$473,684	Development of additional hangar area is necessary to provide aircraft storage.

* Proposed airport development must be shown on current FAA approved ALP prior to funding project

**In accordance with FAA Order 5100.39A, Appendix 6 - Fields need to be completed

ENGINEERING COST ESTIMATE

PROJECT: Runway 14-32 shift and rehab
 LOCATION: Southwest Michigan Regional Airport
 CITY: Benton Harbor, MI
 DATE: 7-9-2010
 PREPARED BY: BJH/RAL

FINAL DESIGN
 PROJECT PROGRAMMING
 FEASIBILITY STUDY
 STATE PLANNING
 BASED ON FY 2010 DOLLARS

WORK DESCRIPTION: Remove 370' from runway 14, add 370' to runway 32, rehab remaining runway 14/32 (3661'x100') Pavement at 9/27 intersection is already rehabilitated

ITEM DESCRIPTION	UNIT	QTY	UNIT PRICE	ITEM COST
Mobilization and General Conditions	LS	1	\$ 50,000.00	\$ 50,000
Safety and Security	LS	1	\$ 35,000.00	\$ 35,000
Cable, 5KV, CIC (incl. Counterpoise) for PAPIs and Reils	LF	30,000	\$ 2.50	\$ 75,000
Cable, 5KV, CIC (incl. Counterpoise) for MIRL	LF	12,000	\$ 3.50	\$ 42,000
Elec. Manhole	EA	4	\$ 5,000.00	\$ 20,000
Elec. Handhole	EA	8	\$ 1,500.00	\$ 12,000
Electrical Duct	LF	100	\$ 50.00	\$ 5,000
MIRL (incl. Lens & Lamp)	EA	65	\$ 750.00	\$ 48,750
Vault Equipment / Regulator	EA	1	\$ 10,000.00	\$ 10,000
Remove HIRL/MIRL/MITL, Base Mounted	EA	65	\$ 150.00	\$ 9,750
REIL	EA	2	\$ 10,000.00	\$ 20,000
PAPI	EA	2	\$ 15,000.00	\$ 30,000
Approach Clearing	LS	1	\$ 50,000.00	\$ 50,000
Unclassified Excavation (48")	CY	15,000	\$ 3.00	\$ 45,000
Bituminous Surface (4")	TON	8,200	\$ 75.00	\$ 615,000
Cold Mill/Pulverize Existing Pavement	SY	32,400	\$ 1.50	\$ 48,600
Salvage Pulverized Material (4")	CY	3,600	\$ 5.00	\$ 18,000
Fine Grade & Compact Aggregate Base	SY	32,400	\$ 1.50	\$ 48,600
Pavement Marking (Runway)	LS	1	\$ 15,000.00	\$ 15,000
Soil Erosion & Sedimentation Controls	LS	1	\$ 5,000.00	\$ 5,000
Topsoil (3")	CY	500	\$ 20.00	\$ 10,000
Turfing and Mulching	AC	3	\$ 3,000.00	\$ 9,000
CONSTRUCTION TOTAL =				\$ 1,221,700
CONSTRUCTION CONTINGENCIES (15%) =				\$ 183,255
CONSTRUCTION TOTAL =				\$ 1,404,955
ENGINEERING DESIGN (7%) =				\$ 98,347
CONSTRUCTION ADMIN (10%) =				\$ 140,496
ALP UPDATE =				\$ 25,000
				\$ 1,668,797
ANTICIPATED CONSTRUCTION YEAR =				2014
RATE OF INFLATION =				2.00%
PROJECT YEAR TOTAL COST =				\$ 1,806,360
PROJECT YEAR BUDGET ESTIMATE =				\$ 1,810,000



Note: These costs were developed without the benefit of field surveys or soils investigation. A final cost estimate will be dependent upon development of these items and further design.

ENGINEERING COST ESTIMATE

PROJECT: Convert Rwy 18/36 to Taxiway
 LOCATION: Southwest Michigan Regional Airport
 CITY: Benton Harbor, MI
 DATE: 7-9-10
 PREPARED BY: BJH

FINAL DESIGN
 PROJECT PROGRAMMING
 FEASIBILITY STUDY
 STATE PLANNING
 BASED ON FY 2010 DOLLARS

WORK DESCRIPTION: Pulverize existing runway 18/36 south of runway 13/31. Pave 50' wide taxiway.

ITEM DESCRIPTION	UNIT	QTY	UNIT PRICE	ITEM COST
Mobilization and General Conditions	LS	1	\$ 40,000.00	\$ 40,000
Safety and Security	LS	1	\$ 15,000.00	\$ 15,000
Cable, 5KV, CIC (incl. Counterpoise)	LF	6,400	\$ 3.50	\$ 22,400
Elec. Manhole	EA	2	\$ 5,000.00	\$ 10,000
Elec. Handhole	EA	6	\$ 1,500.00	\$ 9,000
Electrical Duct	LF	200	\$ 50.00	\$ 10,000
MIRL/MITL (incl. Lens & Lamp)	EA	85	\$ 650.00	\$ 55,250
Vault Equipment / Regulator	EA	1	\$ 10,000.00	\$ 10,000
Remove HIRL/MIRL/MITL, Base Mounted	EA	45	\$ 150.00	\$ 6,750
Guidance / Hold Short Signs / Dist Remaining Signs	EA	8	\$ 2,700.00	\$ 21,600
Remove Guidance / Hold Short Signs / Dist Remaining Signs	EA	5	\$ 150.00	\$ 750
Bituminous Surface (5")	TON	3,850	\$ 80.00	\$ 308,000
Cold Mill/Pulverize Existing Pavement	SY	26,100	\$ 1.50	\$ 39,150
Salvage Pulverized Material (5")	CY	2,000	\$ 5.00	\$ 10,000
Fine Grade & Compact Aggregate Base	SY	26,100	\$ 1.50	\$ 39,150
Pavement Marking (Taxiway)	LS	1	\$ 5,000.00	\$ 5,000
Soil Erosion & Sedimentation Controls	LS	1	\$ 5,000.00	\$ 5,000
Topsoil (3")	CY	1,200	\$ 20.00	\$ 24,000
Turfing and Mulching	AC	3	\$ 3,000.00	\$ 9,000
				CONSTRUCTION TOTAL = \$ 640,050
				CONSTRUCTION CONTINGENCIES (15%) = \$ 96,008
				CONSTRUCTION TOTAL = \$ 736,058
				ENGINEERING DESIGN (7%) = \$ 51,524
				CONSTRUCTION ADMIN (10%) = \$ 73,606
				\$ 861,187
				ANTICIPATED CONSTRUCTION YEAR = 2016
				RATE OF INFLATION = 2.00%
				PROJECT YEAR TOTAL COST = \$ 969,837
				PROJECT YEAR BUDGET ESTIMATE = \$ 970,000



Note: These costs were developed without the benefit of field surveys or soils investigation.
 A final cost estimate will be dependent upon development of these items and further design.

SOUTHWEST MICHIGAN REGIONAL AIRPORT

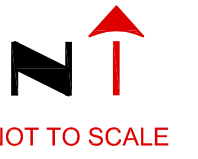
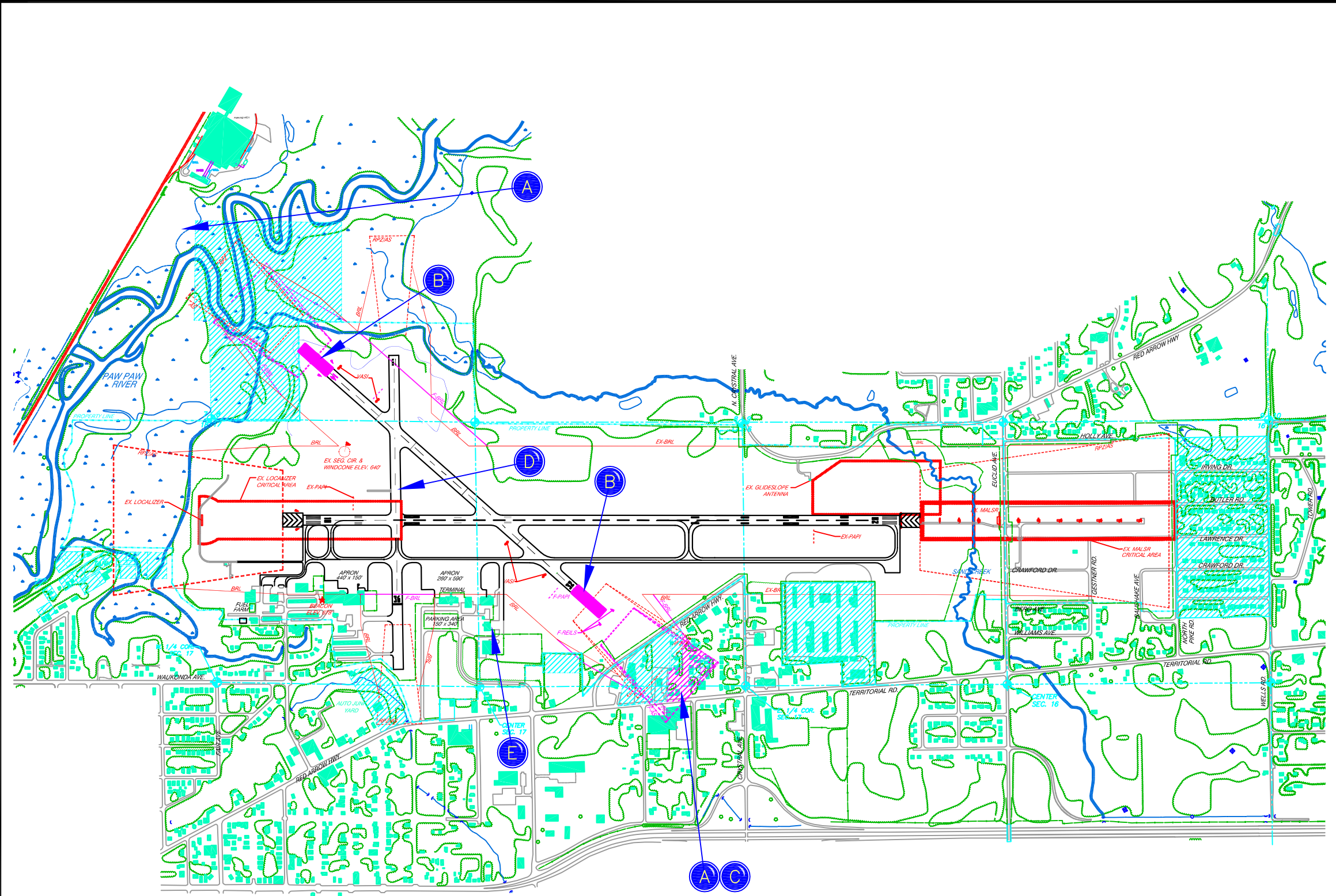
BENTON HARBOR, MICHIGAN



AIRPORT DEVELOPMENT PLAN - YEARS 2012 TO 2019

FAA IDENTIFIER: BEH
STATE ID: 11-01

<p>YEAR - 2012</p> <ul style="list-style-type: none"> A — LAND ACQUISITION FOR RWY 32 RPZ - PHASE I B — PE FOR SHIFT RWY 14/32 FOR RSA COMPLIANCE
<p>YEAR - 2013</p> <ul style="list-style-type: none"> A — LAND ACQUISITION FOR RWY 14-32 APPROACH - PHASE II B — DESIGN SHIFT RWY 14/32 FOR RSA COMPLIANCE C — TREE CLEARING/PRUNING RWY 14/32
<p>YEAR - 2014</p> <ul style="list-style-type: none"> B — SHIFT RWY 14/32 FOR RSA COMPLIANCE (370' SOUTH) & REHABILITATE EXISTING RUNWAY SURFACE & LIGHTING
<p>YEAR - 2015</p> <p>SRE SNOW BLOWER</p>
<p>YEAR - 2016</p> <ul style="list-style-type: none"> D — CONVERT RWY 18/36 TO TAXIWAY SOUTH OF 14/32
<p>YEAR - 2017</p> <p>ADVANCE FUNDING TO 2019</p>
<p>YEAR - 2018</p> <p>ADVANCE FUNDING TO 2019</p>
<p>YEAR - 2019</p> <ul style="list-style-type: none"> E — SITE PREP AND HANGAR DEVELOPMENT BY OLD ATCT



MICHIGAN AIRPORT PROGRAM (MAP) MEETINGS

Attendance Sheet

Airport: Benton Harbor

Date: November 8, 2011

PLEASE PRINT

<u>Name</u>	<u>Representing</u>	<u>Phone</u>	<u>E-mail</u>
Betsy Steudle	MDOT-AERO (Programming)	517-335-8359	steudleb@michigan.gov
Amanda Hopper	MDOT-AERO (Proj Mgr)	517-335-9246	hoppera@michigan.gov
Chip Kraus	MDOT-AERO (LAND)	517-335-9755	krausf@michigan.gov
Ralph Sims	MDOT-AERO (ALP)	517-335-9857	simsr@michigan.gov
NP = Molly Lamrouex	MDOT-AERO (ENV)	517-335-9866	lamrouexm@michigan.gov
Bob Leisening	Mead & Hunt	517-321-8334	bob.leisening@meadhunt.com
Lee Scherwitz	SW MI REG AIRPORT	269-927-3194	director@swmiairport.com
Stephanie Ward	Mead & Hunt	517-321-8334	stephanie.ward@meadhunt.com
JASON BOWEN	SW MI REG Airport	269-927-3194	jasonpilot@yahoo.com

NP = NOT PRESENT