MICHIGAN AIRPORT DEVELOPMENT PROGRAM

AIP CAPITAL IMPROVEMENT PLAN
2014-2024

FEDERAL/STATE/LOCAL

Ann Arbor Municipal Airport

Ann Arbor, MI

Date of Latest ALP - **2008**
ACIP Airport Code - **A**
Airport Identifier - ARB

MDOT-AERO
2700 E AIRPORT SERVICE DRIVE
LANSING, MICHIGAN 48906

Prepared by: **City of Ann Arbor**
Sponsor: City of Ann Arbor
Submitted by: Matt Kulhanek
Date: October 25, 2013

MICHIGAN STATE BLOCK GRANT PROGRAM

TEN-YEAR AIRPORT CAPITAL IMPROVEMENT PROGRAM (CIP) FY-2014* to FY-2024

*ACIP includes current development year (2014 already programmed - minor changes acceptable)

Airport Name: **Ann Arbor Municipal Airport**

Date prepared: 10-25-13

Associated City: **Ann Arbor, MI**

Prepared By: **Sponsor**

Sponsor: **City of Ann Arbor**

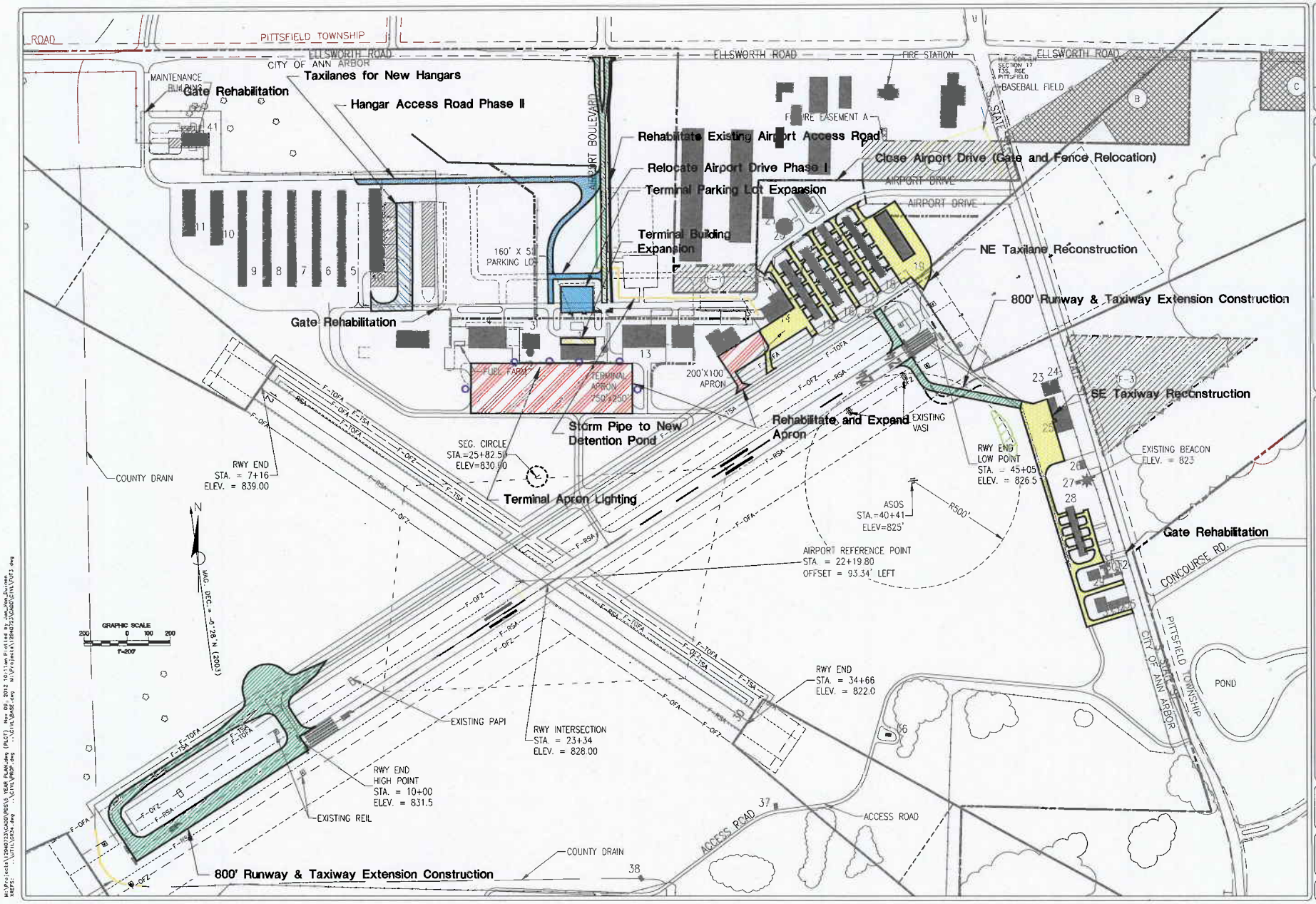
Sponsor email address & phone: mkulhanek@a2gov.org 734-994-2841

Airport Identifier: **ARB**

FINAL ACIP due to MDOT AERO: no later than 12/1/13

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.
2014				Available Entitlements	$ 600,000	($150,000 NPE plus $450,000 NPE carryover from 2012.)					
	Final Design and Approach Survey (Phase II) Runway Extension	Yes	CA-RW-EX	56	$ 193,500	$ -		$ 10,750	$ 10,750	$ 215,000	Final design will be done for the runway and taxiway extension project. An approach survey will also be completed to provide approach procedures for the new runway ends. An approach survey was started in 2009, but the data does not meet current standards.
	SRE Equipment (Tractor with Broom)	NA	ST-EQ-SN	48	$ 161,100	$ -		$ 8,950	$ 8,950	$ 179,000	Existing equipment from city is aging and will need to be replaced. No FAA funding has been used for existing Snow Removal Equipment.
					$ -	$ -				$ -	
				Carryover	$ 245,400						
2015				Available Entitlements	$ 395,400						
	800' Runway & Taxiway Extension Construction	Yes	CA-RW-EX	56	$ 395,400	$ 1,332,600		$ 96,000	$ 96,000	$ 1,920,000	Existing runway will be lengthened to 4300'. Runway will also be shifted 150' to the west to provide clearance over State Road on the East side of the airport. Parallel taxiway will be extended to match the new runway. Connector taxiway on the southeast side will be relocated to the new runway end. All taxiway and runway edge lights will be replaced with LED fixtures.
	Terminal Parking Lot Expansion & Relocate Airport Drive	Yes	CA-TE-IM	44	$ -	$ 217,800		$ 12,100	$ 12,100	$ 242,000	The current parking lot is too small for daily usage. It is frequently at full capacity. To accomodate current demand, additional space is needed. Airport Drive is located north of the parking lot and will need to be relocated to expand the parking lot.
					$ -	$ -				$ -	
					$ -						
2016				Available Entitlements	$ 150,000						
	Rehabilitate Existing Airport Access Road	Yes	OT-GT-AC	23	$ 150,000	$ 144,300		$ 16,350	$ 16,350	$ 327,000	Existing access road is over 20 years old and needs rehabilitation. Bulivard will be added at north end for better visibility and signage. Signage will be a local only item.
	Airport Signage (Local Only)	Yes	OT-GT-AC	23	$ -	$ -		$ -	$ 10,000	$ 10,000	Signage will be added at north end of access road to increase visibility.
					$ -	$ -				$ -	
					$ -						
2017				Available Entitlements	$ 150,000						
	Rehabilitate Rwy and Txy Conc. Joint Seals and Remark	Yes	RE-RW-IM	72	$ 72,000	$ -		$ 4,000	$ 4,000	$ 80,000	Preventative maintenance on existing pavements. Repair failed concrete joints. Markings will be faded. Remark all existing markings.
					$ -	$ -				$ -	
					$ -	$ -				$ -	
				Carryover	$ 78,000						
2018				Available Entitlements	$ 228,000						
	Carryover for Future Project	$ -			$ -	$ -		$ -	$ -	$ -	0
					$ -	$ -				$ -	
					$ -	$ -				$ -	
				Carryover	$ 228,000						
2019				Available Entitlements	$ 378,000						
	Terminal Building Expansion and Renovation	Yes	CA-TE-IM	44	$ 294,300	$ -		$ 16,350	$ 16,350	$ 327,000	Existing terminal building is too small to meet current needs. Additional insulation will be added to existing building to conserve energy. Renovations will be necessary to meet current ADA and other codes.
					$ -	$ -				$ -	
				Carryover	$ 83,700						
2020				Available Entitlements	$ 233,700						
	Reconstruct SE and NE Taxiways	Yes	RE-TW-IM	68	$ 233,700	$ 790,500		$ 56,900	$ 56,900	$ 1,138,000	Pavements are aging and will need replacement. PCI was 73 and 65 for these pavements in 2011.
	Taxilanes for New Box Hangars	Yes	ST-PB-MS	40	$ -	$ 173,700		$ 9,650	$ 9,650	$ 193,000	New taxilanes will be needed for additional hangars. Hangars will be build with local funding. This will be on the back side of the exisitng Box Hangars built in 2009.
					$ -						
2021				Available Entitlements	$ 150,000						
	Rehabilitate and Expand Apron with Lighting	Yes	RE-AP-IM	62	$ 150,000	$ 1,251,300		$ 77,850	$ 77,850	$ 1,557,000	Apron pavement is aging and will need reconstruction. 6" concrete overlay will provide cost effective construction. There has been a steady growth in transient corporate flights into the airport along with the continual expansion of helicopter activity requiring increased aircraft parking. The airport is also experiencing a growth in tie-down activity in conjunction with an increased activity on football weekends and other similar community and University event days. The terminal aircraft parking apron is frequently full on many weekdays with large corporate aircraft and tie-down users. Apron lights are old and require replacement. LED replacement lights will be installed. PCI in the Apron was 65 in 2011.
	SRE Equipment	NA	ST-EQ-SN	48	$ -	$ 288,900		$ 16,050	$ 16,050	$ 321,000	Existing equipment from city is aging and will need to be replaced. No FAA funding has been used for existing Snow Removal Equipment.
					$ -						
2022				Available Entitlements	$ 150,000						
	Hangar Site Work	Yes	ST-PB-MS	40	$ 115,200	$ -		$ 6,400	$ 6,400	$ 128,000	Currently, a detention pond is blocking development of additional corporate hangar space. Relocation of the pond will develop new corporate hangar space and apron. Pipe will need to tie into drainage system that outlets in pond to the northwest. Pavements will be crossed by pipe and will be restored.
					$ -	$ -				$ -	
				Carryover	$ 34,800						
2023				Available Entitlements	$ 184,800						
	Hangar Access Road	Yes	OT-GT-AC	23	$ 184,800	$ 132,900		$ 17,650	$ 17,650	$ 353,000	Road will provide better access for users of hangars. Will increase safety and security by providing them with separate access road.
					$ -	$ -				$ -	
					$ -						
2024				Available Entitlements	$ 150,000						
	Carryover for Future Project	$ -			$ -	$ -		$ -	$ -	$ -	0
					$ -	$ -				$ -	
				Carryover	$ 150,000						

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



URS

GRAND RAPIDS, MI.
PHONE: 616 691-7500
FAX: 616 574-6500

DATE	ISSUED FOR
11/7/06	ALP PUBLICATION
12/17/06	FAA ARSPACE REVIEW
10/2/08	MDOT SUBMIT REVIEW

D/E	JW
PM	RJC
SOC	DR
QC	YAMA
IN CHARGE	W. MALINOWSKI

ANN ARBOR MUNICIPAL AIRPORT

ANN ARBOR, MICHIGAN

ARPORT LAYOUT PLAN

5 YEAR PLAN

STATE NUMBER
81-1

DRAWING
1

12940723

M:\Projects\12940723\CADD\PDS\5 YEAR PLAN.dwg, 11/9/2012 10:11:26 AM, 1:2

CAPITAL IMPROVEMENT PLAN
ESTIMATE FORM
2014-2024

Consultant **City of Ann Arbor**
(Preparer) William M. Malinowski, P.E.

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2014(1)

DESCRIPTION: **Final Design and Approach Survey (Phase II) Runway Extension**

Work Item Description	Quantity	Unit	Price	Amount
Approach Survey	1	Lump Sum	$ 115,000.00	$ 115,000
Final Design	1	Lump Sum	$ 100,000.00	$ 100,000
				$ -
				$ -
				$ -
				$ -
				$ -
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				$ -
				$ -
				$ -

TOTAL CONSTRUCTION		$ 215,000.00
ENGINEERING FINAL DESIGN		
CONSTRUCTION ADMIN.		
CONTINGENCY		
TOTAL*		**$ 215,000.00**
TOTAL FEDERAL DOLLARS	90%	$ 193,500
TOTAL STATE DOLLARS	5.0%	$ 10,750
TOTAL LOCAL DOLLARS	5.0%	$ 10,750

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:

Final design will be done for the runway and taxiway extension project. An approach survey will also be completed to provide approach procedures for the new runway ends. An approach survey was started in 2009, but the data does not meet current standards.

ALP STATUS	ENV.			
Yes	EA in previous year	**PURPOSE:**	Capacity	7
		COMPONENT:	Runway	10
		TYPE:	Extension/Expansion	6
		PRIORITY NUMBER		**56**

CAPITAL IMPROVEMENT PLAN
ESTIMATE FORM
2014-2024

Consultant **City of Ann Arbor**
(Preparer) William M. Malinowski, P.E.

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2014(2)

DESCRIPTION: **SRE Equipment (Tractor with Broom)**

Work Item Description	**Quantity**	**Unit**	**Price**	**Amount**
Tractor with Broom and Blower	1	LS	$ 165,000.00	$ 165,000
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
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				$ -
				$ -
				$ -
				$ -

TOTAL CONSTRUCTION		$ 165,000.00
ENGINEERING DESIGN		$ 5,000.00
CONSTRUCTION ADMIN.		
CONTINGENCY	5%	$ 8,250.00
TOTAL*		**$ 179,000.00**
TOTAL FEDERAL DOLLARS	90%	$ 161,100
TOTAL STATE DOLLARS	5.0%	$ 8,950
TOTAL LOCAL DOLLARS	5.0%	$ 8,950

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:

Existing equipment from city is aging and will need to be replaced. No FAA funding has been used for existing Snow Removal Equipment.

ALP STATUS	ENV.			
NA	Categorical Ex. Expected	PURPOSE:	Standards	6
		COMPONENT:	Equipment	8
		TYPE:	Snow Removal Eq	9
		PRIORITY NUMBER		**48**

CAPITAL IMPROVEMENT PLAN
ESTIMATE FORM
2014-2024

Consultant **City of Ann Arbor**
(Preparer) William M. Malinowski, P.E.

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2015(1)

DESCRIPTION: **800' Runway & Taxiway Extension Construction**

Work Item Description	Quantity	Unit	Price	Amount
Mobilization and Safety Security	1	Lump Sum	$ 170,000.00	$ 170,000
Pavement Removal	3,500	SYD	$ 17.00	$ 59,500
New Rwy Lights with LED Lamps	30	Each	$ 950.00	$ 28,500
New Txy Lights with LED Lamps	20	Each	$ 950.00	$ 19,000
#8 Cable in Conduit	3,800	LFT	$ 3.25	$ 12,350
#6 Solid Counterpoise Wire	3,800	LFT	$ 2.75	$ 10,450
Replace Existing Txy Lights with LED Lamps	218	Each	$ 650.00	$ 141,700
Replace Existing Rwy Lights with LED Lamps	40	Each	$ 650.00	$ 26,000
Relocate Existing VASI	1	Each	$ 10,000.00	$ 10,000
Relocate REIL	2	Set	$ 5,000.00	$ 10,000
Relocate PAPI	1	set	$ 10,000.00	$ 10,000
Unclassified Excavation	40,000	CYD	$ 4.50	$ 180,000
Drainage	1	Lump Sum	$ 40,000.00	$ 40,000
Underdrains	3,800	LFT	$ 8.50	$ 32,300
12 Inch Subbase	5,400	CYD	$ 14.75	$ 79,650
6 Inch Aggregate Base Course	2,700	CYD	$ 32.00	$ 86,400
6 Inch Concrete Pavement	15,000	SYD	$ 46.00	$ 690,000
Runway Grooving	12,000	SYD	$ 2.00	$ 24,000
Turfing & Mulching	5	Acres	$ 2,500.00	$ 12,500
Marking	1	Lump Sum	$ 50,000.00	$ 50,000
Approach Markers	8	Each	$ 450.00	$ 3,600
Centerline monument	2	Each	$ 1,200.00	$ 2,400
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -

TOTAL CONSTRUCTION		$ 1,698,350.00
ENGINEERING FINAL DESIGN		
CONSTRUCTION ADMIN.		$ 140,000.00
CONTINGENCY	5%	$ 81,000.00
TOTAL*		**$ 1,920,000.00**
TOTAL FEDERAL DOLLARS	90%	$ 1,728,000
TOTAL STATE DOLLARS	5.0%	$ 96,000
TOTAL LOCAL DOLLARS	5.0%	$ 96,000

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:

Existing runway will be lengthened to 4300'. Runway will also be shifted 150' to the west to provide clearance over State Road on the East side of the airport. Parallel taxiway will be extended to match the new runway. Connector taxiway on the southeast side will be relocated to the new runway end. All taxiway and runway edge lights will be replaced with LED fixtures.

ALP STATUS	ENV.			
Yes	EA in previous year	PURPOSE:	Capacity	7
		COMPONENT:	Runway	10
		TYPE:	Extension/Expansion	6
			PRIORITY NUMBER	56

CAPITAL IMPROVEMENT PLAN
ESTIMATE FORM
2014-2024

Consultant **City of Ann Arbor**
(Preparer) William M. Malinowski, P.E.

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2015(2)

DESCRIPTION: **Terminal Parking Lot Expansion & Relocate Airport Drive**

Work Item Description	Quantity	Unit	Price	Amount
Mobilization	1	Lump Sum	$ 15,000.00	$ 15,000
Safety & Security	1	Lump Sum	$ 3,000.00	$ 3,000
Saw Cut and Seal pavement	200	LFT.	$ 5.00	$ 1,000
Mill Existing Pavement	2,000	SYD	$ 2.00	$ 4,000
Unclassified Excavation	1,600	CYD.	$ 5.00	$ 8,000
Granular Sub-base 12"	800	CYD.	$ 14.00	$ 11,200
Aggregate Base Course	400	CYD.	$ 30.00	$ 12,000
Curb & Gutter	500	LFT.	$ 22.00	$ 11,000
Bituminous Pavement	800	Ton	$ 95.00	$ 76,000
Marking	1	Lump Sum	$ 2,500.00	$ 2,500
Underdrain	1,250	LFT.	$ 8.50	$ 10,625
Restoration	1	LS	$ 5,000.00	$ 5,000
Ditch/curb Work	1,680	LFT.	$ 12.00	$ 20,160
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -

TOTAL CONSTRUCTION		$	179,485.00
ENGINEERING DESIGN		$	23,000.00
CONSTRUCTION ADMIN.		$	30,000.00
CONTINGENCY	5%	$	8,974.25
TOTAL*		**$**	**242,000.00**
TOTAL FEDERAL DOLLARS	90%	$	217,800
TOTAL STATE DOLLARS	5.0%	$	12,100
TOTAL LOCAL DOLLARS	5.0%	$	12,100

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:

The current parking lot is too small for daily usage. It is frequently at full capacity. To accomodate current demand, additional space is needed. Airport Drive is located north of the parking lot and will need to be relocated to expand the parking lot.

ALP STATUS	ENV.			
Yes	Categorical Ex. Expected	PURPOSE:	Capacity	7
		COMPONENT::	Terminal	1
		TYPE:	Improvements	8
			PRIORITY NUMBER	44

CAPITAL IMPROVEMENT PLAN
ESTIMATE FORM
2014-2024

Consultant **City of Ann Arbor**
(Preparer) William M. Malinowski, P.E.

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2016(1)

DESCRIPTION: **Rehabilitate Existing Airport Access Road**

Work Item Description	Quantity	Unit	Price	Amount
Mobilization	1	Lump Sum	$ 20,000.00	$ 20,000
Safety & Security	1	Lump Sum	$ 3,500.00	$ 3,500
Mill Existing Pavement	3,400	SYD.	$ 2.00	$ 6,800
Bituminous Pavement	800	Ton	$ 85.00	$ 68,000
Marking	1	Lump Sum	$ 2,000.00	$ 2,000
Ditch/Curb Work	4,000	LFT.	$ 15.00	$ 60,000
Sidewalk	7,500	SFT	$ 4.00	$ 30,000
Drainage Structures	3	Lump Sum	$ 2,000.00	$ 6,000
24" Storm Pipe	2,000	LFT	$ 32.00	$ 64,000
Earthwork for drainage ditch	2,000	CYD	$ 4.00	$ 8,000
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				$ -
				$ -
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				$ -

TOTAL CONSTRUCTION		$ 268,300.00
ENGINEERING DESIGN		$ 25,000.00
CONSTRUCTION ADMIN.		$ 20,000.00
CONTINGENCY	5%	$ 13,415.00
TOTAL*		**$ 327,000.00**
TOTAL FEDERAL DOLLARS	90%	$ 294,300
TOTAL STATE DOLLARS	5.0%	$ 16,350
TOTAL LOCAL DOLLARS	5.0%	$ 16,350

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:

Existing access road is over 20 years old and needs rehabilitation. Bulivard will be added at north end for better visibility and signage. Signage will be a local only item.

ALP STATUS	ENV.			
Yes	Categorical Ex. Expected	PURPOSE:	Other	4
		COMPONENT:	Gnd Transp	4
		TYPE:	Access	7
			PRIORITY NUMBER	23

CAPITAL IMPROVEMENT PLAN
ESTIMATE FORM
2014-2024

Consultant **City of Ann Arbor**
(Preparer) William M. Malinowski, P.E.

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2016(2)

DESCRIPTION: **Airport Signage (Local Only)**

Work Item Description	Quantity	Unit	Price	Amount
Airport Signage	1	Lump Sum	$ 10,000.00	$ 10,000
				$ -
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				$ -
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TOTAL CONSTRUCTION		$ 10,000.00
ENGINEERING DESIGN		
CONSTRUCTION ADMIN.		
CONTINGENCY		$ -
TOTAL*		**$ 10,000.00**
TOTAL FEDERAL DOLLARS	0%	$ -
TOTAL STATE DOLLARS	0.0%	$ -
TOTAL LOCAL DOLLARS	100.0%	$ 10,000

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:

Signage will be added at north end of access road to increase visibility.

ALP STATUS	ENV.			
Yes	Categorical Ex. Expected	PURPOSE:	Other	4
		COMPONENT:	Gnd Transp	4
		TYPE:	Access	7
		PRIORITY NUMBER		23

CAPITAL IMPROVEMENT PLAN
ESTIMATE FORM
2014-2024

Consultant **City of Ann Arbor**
(Preparer) William M. Malinowski, P.E.

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2017(1)

DESCRIPTION: **Rehabilitate Rwy and Txy Conc. Joint Seals and Remark**

Work Item Description	Quantity	Unit	Price	Amount
Mobilization & Safety Security	1	Lump Sum	$ 3,000.00	$ 3,000
Joint Seal	5,000	LFT	$ 5.00	$ 25,000
Paint Marking	1	LS	$ 40,000.00	$ 40,000
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TOTAL CONSTRUCTION		$	68,000.00
ENGINEERING DESIGN		$	5,000.00
CONSTRUCTION ADMIN.		$	3,000.00
CONTINGENCY	5%	$	3,400.00
TOTAL*		**$**	**80,000.00**
TOTAL FEDERAL DOLLARS	90%	$	72,000
TOTAL STATE DOLLARS	5.0%	$	4,000
TOTAL LOCAL DOLLARS	5.0%	$	4,000

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:

Preventative maintenance on existing pavements. Repair failed concrete joints. Markings will be faded. Remark all existing markings.

ALP STATUS	ENV.			
Yes	Categorical Ex. Expected	PURPOSE:	Reconstruction	8
		COMPONENT:	Runway	10
		TYPE:	Improvements	8
			PRIORITY NUMBER	72

CAPITAL IMPROVEMENT PLAN
ESTIMATE FORM
2014-2024

Consultant **City of Ann Arbor**
(Preparer) William M. Malinowski, P.E.

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2018(1)

DESCRIPTION: **Carryover for Future Project**

Work Item Description	Quantity	Unit	Price	Amount
				$
				$
				$
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TOTAL CONSTRUCTION		$ -
ENGINEERING DESIGN		
CONSTRUCTION ADMIN.		
CONTINGENCY		$ -
TOTAL*		$ -
TOTAL FEDERAL DOLLARS	90%	$ -
TOTAL STATE DOLLARS	5.0%	$ -
TOTAL LOCAL DOLLARS	5.0%	$ -

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:

ALP STATUS	ENV.		
		PURPOSE:	#N/A
		COMPONENT:	#N/A
		TYPE:	#N/A
		PRIORITY NUMBER	#N/A

CAPITAL IMPROVEMENT PLAN
ESTIMATE FORM
2014-2024

Consultant City of Ann Arbor
(Preparer) William M. Malinowski, P.E.

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2019(1)

DESCRIPTION: **Terminal Building Expansion and Renovation**

Work Item Description	Quantity	Unit	Price	Amount
Building Expansion	1,000	SFT	$ 75.00	$ 75,000
New Green Roof	1	LS	$ 40,000.00	$ 40,000
Electrical Upgrades	1	LS	$ 25,000.00	$ 25,000
Renovations to Existing Building	3,000	SFT	$ 25.00	$ 75,000
Sitework (Sidewalks, Lawn, etc.)	1	LS	$ 12,000.00	$ 12,000
				$ -
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TOTAL CONSTRUCTION		$ 227,000.00
ENGINEERING DESIGN		$ 30,000.00
CONSTRUCTION ADMIN.		$ 35,000.00
CONTINGENCY	15%	$ 34,050.00
TOTAL*		**$ 327,000.00**
TOTAL FEDERAL DOLLARS	90%	$ 294,300
TOTAL STATE DOLLARS	5.0%	$ 16,350
TOTAL LOCAL DOLLARS	5.0%	$ 16,350

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:
Existing terminal building is too small to meet current needs. Additional insulation will be added to existing building to conserve energy. Renovations will be necessary to meet current ADA and other codes.

ALP STATUS	ENV.			
Yes	Categorical Ex. Expected	PURPOSE:	Capacity	7
		COMPONENT:	Terminal	1
		TYPE:	Improvements	8
		PRIORITY NUMBER		44

CAPITAL IMPROVEMENT PLAN
ESTIMATE FORM
2014-2024

Consultant **City of Ann Arbor**
(Preparer) William M. Malinowski, P.E.

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2020(1)

DESCRIPTION: **Reconstruct SE and NE Taxiways**

Work Item Description	Quantity	Unit	Price	Amount
Mobilization	1	Lump Sum	$ 80,000.00	$ 80,000
Safety & Security	1	Lump Sum	$ 10,000.00	$ 10,000
Unclassified Excavation	15,000	CYD.	$ 4.00	$ 60,000
Granular Sub-base 12"	8,600	CYD.	$ 15.00	$ 129,000
Aggregate Base Course 6"	4,300	CYD.	$ 30.00	$ 129,000
Bituminous Pavement 3"	4,400	Ton	$ 95.00	$ 418,000
Marking	1	Lump Sum	$ 5,000.00	$ 5,000
Underdrain	8,000	LFT.	$ 8.00	$ 64,000
Restoration	1	LS	$ 3,000.00	$ 3,000
Mill Existing Pavement	25,388	SYD	$ 1.50	$ 38,082
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -

TOTAL CONSTRUCTION		$ 936,082.32
ENGINEERING DESIGN		$ 75,000.00
CONSTRUCTION ADMIN.		$ 80,000.00
CONTINGENCY	5%	$ 46,804.12
TOTAL*		**$ 1,138,000.00**
TOTAL FEDERAL DOLLARS	90%	$ 1,024,200
TOTAL STATE DOLLARS	5.0%	$ 56,900
TOTAL LOCAL DOLLARS	5.0%	$ 56,900

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:

Pavements are aging and will need replacement. PCI was 73 and 65 for these pavements in 2011.

ALP STATUS	ENV.			
Yes	Categorical Ex. Expected	PURPOSE:	Reconstruction	8
		COMPONENT:	Taxiway	8
		TYPE:	Improvements	8
			PRIORITY NUMBER	68

CAPITAL IMPROVEMENT PLAN
ESTIMATE FORM
2014-2024

Consultant **City of Ann Arbor**
(Preparer) William M. Malinowski, P.E.

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2020(2)

DESCRIPTION: **Taxilanes for New Box Hangars**

Work Item Description	Quantity	Unit	Price	Amount
Mobilization	1	Lump Sum	$ 10,000.00	$ 10,000
Safety & Security	1	Lump Sum	$ 1,500.00	$ 1,500
Unclassified Excavation	2,400	CYD.	$ 4.00	$ 9,600
Granular Sub-base 12"	1,600	CYD.	$ 12.00	$ 19,200
Aggregate Base Course 6"	800	CYD.	$ 28.00	$ 22,400
Bituminous Pavement 3"	900	Ton	$ 85.00	$ 76,500
Marking	1	Lump Sum	$ 1,000.00	$ 1,000
Underdrain	1,800	LFT.	$ 8.00	$ 14,400
Restoration	1	LS	$ 3,000.00	$ 3,000
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -

TOTAL CONSTRUCTION		$ 157,600.00
ENGINEERING DESIGN		$ 12,000.00
CONSTRUCTION ADMIN.		$ 15,000.00
CONTINGENCY	5%	$ 7,880.00
TOTAL*		**$ 193,000.00**
TOTAL FEDERAL DOLLARS	90%	$ 173,700
TOTAL STATE DOLLARS	5.0%	$ 9,650
TOTAL LOCAL DOLLARS	5.0%	$ 9,650

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:

New taxilanes will be needed for additional hangars. Hangars will be build with local funding. This will be on the back side of the exisitng Box Hangars built in 2009.

ALP STATUS	ENV.			
Yes	Categorical Ex. Expected	PURPOSE:	Standards	6
		COMPONENT:	Public Bldg	7
		TYPE:	Misc.	5
			PRIORITY NUMBER	40

CAPITAL IMPROVEMENT PLAN
ESTIMATE FORM
2014-2024

Consultant **City of Ann Arbor**
(Preparer) William M. Malinowski, P.E.

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2021(1)

DESCRIPTION: **Rehabilitate and Expand Apron with Lighting**

Work Item Description	Quantity	Unit	Price	Amount
Rehab				$ -
Mobilization	1	Lump Sum	$ 15,000.00	$ 15,000
Safety & Security	1	Lump Sum	$ 5,000.00	$ 5,000
Mill Existing Pavement	21,000	SYD	$ 1.50	$ 31,500
6" Concrete Overlay	21,000	SYD	$ 40.00	$ 840,000
				$ -
Expansion				$ -
Unclassified Excavation	3,200	CYD.	$ 4.00	$ 12,800
Aggregate Base Course 6"	1,500	CYD.	$ 30.00	$ 45,000
Bituminous Surface 3"	1,700	Tons	$ 90.00	$ 153,000
Trenching	800	LFT.	$ 1.00	$ 800
Underground Cable, 1/C #8	2,400	LFT.	$ 2.00	$ 4,800
Counterpoise Wire, #6	800	LFT.	$ 3.00	$ 2,400
Galvanized Steel Conduit, 2" Direct Burial	100	LFT.	$ 35.00	$ 3,500
Apron Lights	6	Each	$ 7,000.00	$ 42,000
Markings (Center & Edge)	1,200	SFT.	$ 0.50	$ 600
Seeding & Mulching	2	Acres	$ 2,000.00	$ 3,700
Tie-Downs	60	Each	$ 600.00	$ 36,000
				$ -
Lighting				$ -
Underground Cable , 1/C, #8	2,000	LFT.	$ 2.00	$ 4,000
Counterpoise Wire, #6	600	LFT.	$ 2.00	$ 1,200
Apron Lights	8	Each	$ 9,000.00	$ 72,000
				$ -
				$ -
				$ -
				$ -

TOTAL CONSTRUCTION		$ 1,273,300.00
ENGINEERING DESIGN		$ 100,000.00
CONSTRUCTION ADMIN.		$ 120,000.00
CONTINGENCY	5%	$ 63,665.00
TOTAL*		**$ 1,557,000.00**
TOTAL FEDERAL DOLLARS	90%	$ 1,401,300
TOTAL STATE DOLLARS	5.0%	$ 77,850
TOTAL LOCAL DOLLARS	5.0%	$ 77,850

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:

Apron pavement is aging and will need reconstruction. 6" concrete overlay will provide cost effective construction. There has been a steady growth in transient corporate flights into the airport along with the continual expansion of helicopter activity requiring increased aircraft parking. The airport is also experiencing a growth in tie-down activity in conjunction with an increased activity on football weekends and other similar community and University event days. The terminal aircraft parking apron is frequently full on many weekdays with large corporate aircraft and tie-down users. Apron lights are old and require replacement. LED replacement lights will be installed. PCI in the Apron was 65 in 2011.

ALP STATUS	ENV.			
Yes	Categorical Ex. Expected	PURPOSE:	Reconstruction	8
		COMPONENT:	Apron	5
		TYPE:	Improvements	8
			PRIORITY NUMBER	62

CAPITAL IMPROVEMENT PLAN
ESTIMATE FORM
2014-2024

Consultant City of Ann Arbor
(Preparer) William M. Malinowski, P.E.

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2021(2)

DESCRIPTION: **SRE Equipment**

Work Item Description	Quantity	Unit	Price	Amount
				$ -
SRE Equipment	1	LS	$ 300,000.00	$ 300,000
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
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				$ -
				$ -
				$ -
				$ -
				$ -
				$ -

TOTAL CONSTRUCTION		$ 300,000.00
ENGINEERING DESIGN		$ 6,000.00
CONSTRUCTION ADMIN.		
CONTINGENCY	5%	$ 15,000.00
TOTAL*		**$ 321,000.00**
TOTAL FEDERAL DOLLARS	90%	$ 288,900
TOTAL STATE DOLLARS	5.0%	$ 16,050
TOTAL LOCAL DOLLARS	5.0%	$ 16,050

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:
Existing equipment from city is aging and will need to be replaced. No FAA funding has been used for existing Snow Removal Equipment.

ALP STATUS	ENV.
NA	Categorical Ex. Expected

PURPOSE:	Standards	6
COMPONENT:	Equipment	8
TYPE:	Snow Removal Eq	9
PRIORITY NUMBER		48

CAPITAL IMPROVEMENT PLAN
ESTIMATE FORM
2014-2024

Consultant **City of Ann Arbor**
(Preparer) William M. Malinowski, P.E.

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2022(1)

DESCRIPTION: **Hangar Site Work**

Work Item Description	Quantity	Unit	Price	Amount
Mobilization & Safety Security	1	Lump Sum	$ 20,000.00	$ 20,000
Unclassified Excavation & Grading	2,000	CYD.	$ 5.00	$ 10,000
Seeding and Mulching	3	Acres	$ 1,200.00	$ 3,600
Drainage Structures	3	Lump Sum	$ 2,000.00	$ 6,000
24" Storm Pipe	1,000	LFT	$ 38.00	$ 38,000
Pavement Restoration	1	Lump Sum	$ 20,000.00	$ 20,000
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
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				$ -
				$ -
				$ -
				$ -

TOTAL CONSTRUCTION		$ 97,600.00
ENGINEERING DESIGN	15%	$ 15,000.00
CONSTRUCTION ADMIN.	15%	$ 10,000.00
CONTINGENCY	5%	$ 4,880.00
TOTAL*		**$ 128,000.00**
TOTAL FEDERAL DOLLARS	90%	$ 115,200
TOTAL STATE DOLLARS	5.0%	$ 6,400
TOTAL LOCAL DOLLARS	5.0%	$ 6,400

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:

Currently, a detention pond is blocking development of additional corporate hangar space. Relocation of the pond will develop new corporate hangar space and apron. Pipe will need to tie into drainage system that outlets in pond to the northwest. Pavements will be crossed by pipe and will be restored.

ALP STATUS	ENV.			
Yes	Categorical Ex. Expected	PURPOSE:	Standards	6
		COMPONENT:	Public Bldg	7
		TYPE:	Misc.	5
			PRIORITY NUMBER	40

CAPITAL IMPROVEMENT PLAN
ESTIMATE FORM
2014-2024

Consultant City of Ann Arbor
(Preparer) William M. Malinowski, P.E.

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2023(1)

DESCRIPTION: **Hangar Access Road**

Work Item Description	Quantity	Unit	Price	Amount
Mobilization	1	Lump Sum	$ 25,000.00	$ 25,000
Safety & Security	1	Lump Sum	$ 8,000.00	$ 8,000
Saw Cut and Seal Pavement	216	LFT	$ 5.00	$ 1,080
Unclassified Excavation	3,400	CYD	$ 4.00	$ 13,600
Granular Sub-base 12"	900	CYD	$ 12.00	$ 10,800
Aggregate Base course 6"	450	CYD	$ 30.00	$ 13,500
Bituminous Surface 3"	900	Tons	$ 95.00	$ 85,500
Pavement Marking	1	Lump Sum	$ 1,500.00	$ 1,500
Ditch/Curb Underdrain Work	4,320	LFT	$ 20.00	$ 86,400
Seeding and Mulching	2	Acres	$ 2,000.00	$ 4,320
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -

TOTAL CONSTRUCTION		$ 249,700.00
ENGINEERING DESIGN		$ 45,000.00
CONSTRUCTION ADMIN.		$ 45,000.00
CONTINGENCY	5%	$ 12,485.00
TOTAL*		**$ 353,000.00**
TOTAL FEDERAL DOLLARS	90%	$ 317,700
TOTAL STATE DOLLARS	5.0%	$ 17,650
TOTAL LOCAL DOLLARS	5.0%	$ 17,650

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:

Road will provide better access for users of hangars. Will increase safety and security by providing them with separate access road.

ALP STATUS	ENV.			
Yes	Categorical Ex. Expected	PURPOSE:	Other	4
		COMPONENT:	Gnd Transp	4
		TYPE:	Access	7
			PRIORITY NUMBER	23

CAPITAL IMPROVEMENT PLAN
ESTIMATE FORM
2014-2024

Consultant **City of Ann Arbor**
(Preparer) William M. Malinowski, P.E.

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2024(1)

DESCRIPTION: **Carryover for Future Project**

Work Item Description	Quantity	Unit	Price	Amount
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
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				$ -

TOTAL CONSTRUCTION		$	-
ENGINEERING DESIGN			
CONSTRUCTION ADMIN.			
CONTINGENCY		$	-
TOTAL*		**$**	**-**
TOTAL FEDERAL DOLLARS	90%	$	-
TOTAL STATE DOLLARS	5.0%	$	-
TOTAL LOCAL DOLLARS	5.0%	$	-

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:

ALP STATUS	ENV.			
		PURPOSE:		#N/A
		COMPONENT:		#N/A
		TYPE:		#N/A
			PRIORITY NUMBER	#N/A