

MICHIGAN AIRPORT DEVELOPMENT PROGRAM

AIP CAPITAL IMPROVEMENT PLAN 2010-2019

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: **URS Corporation**

Sponsor: City of Ann Arbor

Submitted by: Matt Kulhanek

Date: August 21, 2009

Revised: _____

**MICHIGAN STATE BLOCK GRANT PROGRAM
TEN-YEAR AIRPORT CAPITAL IMPROVEMENT PROGRAM (CIP) FY-2010* to FY-2020**

*ACIP includes current development year (2010 already programmed - minor changes acceptable)

Airport Name: Ann Arbor Municipal Airport	Date prepared: 08/21/2009
Associated City: Ann Arbor, MI	Prepared By: URS Corporation
Sponsor: City of Ann Arbor	Sponsor email address & phone: 734-994-2841 MJKulhanek@A2
Airport Identifier: ARB	FINAL ACIP due to MDOT AERO: no later than 12/1

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 f
2010(1)	Windcone & Signs LED Lighting Replacement	Rehab Existing	RE-TW-LI	68	\$ 150,000	\$ 1,225,600		\$ 36,200	\$ 36,200	\$ 1,448,000	
2010(2)	800' Runway & Taxiway Extension Construction	Project is shown on the current ALP.	OT-RW-CO	33							
2010(3)											
2010(4)											
2011(1)	Carryover for Future Project	\$ -			\$ -	\$ -		\$ -	\$ -	\$ -	
2011(2)											
2011(3)											
2011(4)											
2012(1)	Terminal Parking Lot Expansion	Project is shown on the current ALP.	CA-GT-CO	54	\$ 279,300	\$ -		\$ 7,350	\$ 7,350	\$ 294,000	
2012(2)	Relocate Airport Drive Phase I	Project is shown on the current ALP.	CA-GT-CO	54							
2012(3)											
2012(4)											
2013(1)	Rehabilitate Existing Airport Access Road	Project is shown on the current ALP.	RE-GT-CO	64	\$ 170,700	\$ 184,600		\$ 9,350	\$ 9,350	\$ 374,000	
2013(2)	Terminal Apron Lighting	Project is shown on the current ALP.	RE-AP-LI	62							
2013(3)											
2013(4)											
2014(1)	Carryover for Future Project	\$ -			\$ -	\$ -		\$ -	\$ -	\$ -	
2014(2)											
2014(3)											
2014(4)											
2015(1)	Terminal Building Expansion and Energy Savings	Project is shown on the current ALP.	CA-TE-CO	49	\$ 1,090,800	\$ 1,090,800		\$ 36,600	\$ 36,600	\$ 1,464,000	
2015(2)	Rehabilitate Terminal Apron	Project is shown on the current ALP.	RE-AP-CO	66							
2016(1)	SRE Equipment	NA	RE-EQ-SN	70	\$ 150,000	\$ 383,900		\$ 14,050	\$ 14,050	\$ 562,000	
2016(2)											
2017(1)	Energy Upgrade MITL (Runway Edge Lights)	Project is shown on the current ALP.	RE-RW-LI	72	\$ 150,000	\$ 1,116,350		\$ 33,325	\$ 33,325	\$ 1,333,000	
2017(2)	Reconstruct SE and NE Taxiways	Project is shown on the current ALP.	RE-TW-CO	72							
2018(1)	Develop New GA, Tiedown Parking Apron	Project is shown on the current ALP.	CA-AP-CO	56	\$ 150,000	\$ 345,900		\$ 13,050	\$ 13,050	\$ 522,000	
2018(2)											
2019(1)	Storm Pipe to New Detention Pond	Project is shown on the current ALP.	CA-OT-CO	59	\$ 150,000	\$ 267,050		\$ 10,975	\$ 10,975	\$ 439,000	
2019(2)	Joint Seal (Rwy and Txy)	Project is shown on the current ALP.	RE-RW-CO	76							
2020(1)	Relocate Airport Drive Phase II	Project is shown on the current ALP.	CA-GT-CO	54	\$ 150,000	\$ 433,300		\$ 15,350	\$ 15,350	\$ 614,000	
2020(2)	Taxiways for New Hangars	Project is shown on the current ALP.	CA-TW-CO	61							

Amounts are total of all projects for each year.
**In accordance with FAA Order 5100.39A, Appendix 6 - Fields need to be completed

**Year 0 To Year 5
Capital Improvement Plan
2010-2019**

Prepared By: **URS Corporation**

Location: **Ann Arbor Municipal Airport
Ann Arbor, MI**

Projects		
	Estimated Cost	Description
2010	\$ 24,000	Windcone & Signs LED Lighting Replacement
	\$ 1,424,000	800' Runway & Taxiway Extension Construction
Year 1		
	\$ 1,448,000	Total

Funding	
Funds	Description
\$ (1,448,000)	2010 Project Total Cost from Left
\$ -	Non-Primary Entitlement Carryover
\$ 150,000	2010 Non-Primary Entitlement
\$ 1,225,600	Discetionary / State Aportionment
\$ 36,200	State Match (2.5%)
\$ 36,200	Local Match (2.5%)
\$ -	Unused Non-Primary Entitlement
\$ -	Balance

2011	\$ -	Carryover for Future Project
Year 2		
	\$ -	Total

\$ -	2011 Project Total Cost from Left
\$ -	Non-Primary Entitlement Carryover
\$ 150,000	2011 Non-Primary Entitlement
\$ -	Discetionary / State Aportionment
\$ -	State Match (2.5%)
\$ -	Local Match (2.5%)
\$ (150,000)	Unused Non-Primary Entitlement
\$ -	Balance

2012	\$ 176,000	Terminal Parking Lot Expansion
	\$ 118,000	Relocate Airport Drive Phase I
Year 3		
	\$ 294,000	Total

\$ (294,000)	2012 Project Total Cost from Left
\$ 150,000	Non-Primary Entitlement Carryover
\$ 150,000	2012 Non-Primary Entitlement
\$ -	Discetionary / State Aportionment
\$ 7,350	State Match (2.5%)
\$ 7,350	Local Match (2.5%)
\$ (20,700)	Unused Non-Primary Entitlement
\$ -	Balance

2013	\$ 256,000	Rehabilitate Existing Airport Access Road
	\$ 118,000	Terminal Apron Lighting
Year 4		
	\$ 374,000	Total

\$ (374,000)	2013 Project Total Cost from Left
\$ 20,700	Non-Primary Entitlement Carryover
\$ 150,000	2013 Non-Primary Entitlement
\$ 184,600	Discetionary / State Aportionment
\$ 9,350	State Match (2.5%)
\$ 9,350	Local Match (2.5%)
\$ -	Unused Non-Primary Entitlement
\$ -	Balance

2014	\$ -	Carryover for Future Project
Year 5		
	\$ -	Total

\$ -	2014 Project Total Cost from Left
\$ -	Non-Primary Entitlement Carryover
\$ 150,000	2014 Non-Primary Entitlement
\$ -	Discetionary / State Aportionment
\$ -	State Match (2.5%)
\$ -	Local Match (2.5%)
\$ (150,000)	Unused Non-Primary Entitlement
\$ -	Balance

**YEAR 6 TO YEAR 10
CAPITAL IMPROVEMENT PLAN
2010-2019**

Prepared By: **URS Corporation**
LOCATION: Ann Arbor Municipal Airport
Ann Arbor, MI

PROJECTS		
	Estimated Cost	DESCRIPTION
2015	\$ 688,000	Terminal Building Expansion and Energy Savings
	\$ 776,000	Rehabilitate Terminal Apron
Year 6		
	\$ 1,464,000	TOTAL

FUNDING	
FUNDS	DESCRIPTION
\$ (1,464,000)	2015 Project Total Cost from Left
\$ 150,000	Non-Primary Entitlement Carryover
\$ 150,000	2015 Non-Primary Entitlement
\$ 1,090,800	Discetionary / State Aportionment
\$ 36,600	State Match (2.5%)
\$ 36,600	Local Match (2.5%)
\$ -	Unused Non-Primary Entitlement
\$ -	Balance

2016	\$ 562,000	SRE Equipment
Year 7		
	\$ 562,000	TOTAL

\$ (562,000)	2016 Project Total Cost from Left
\$ -	Non-Primary Entitlement Carryover
\$ 150,000	2016 Non-Primary Entitlement
\$ 383,900	Discetionary / State Aportionment
\$ 14,050	State Match (2.5%)
\$ 14,050	Local Match (2.5%)
\$ -	Unused Non-Primary Entitlement
\$ -	Balance

2017	\$ 147,000	Energy Upgrade MITL (Runway Edge Lights)
	\$ 1,186,000	Reconstruct SE and NE Taxilanes
Year 8		
	\$ 1,333,000	TOTAL

\$ (1,333,000)	2017 Project Total Cost from Left
\$ -	Non-Primary Entitlement Carryover
\$ 150,000	2017 Non-Primary Entitlement
\$ 1,116,350	Discetionary / State Aportionment
\$ 33,325	State Match (2.5%)
\$ 33,325	Local Match (2.5%)
\$ -	Unused Non-Primary Entitlement
\$ -	Balance

2018	\$ 522,000	Develop New GA. Tiedown Parking Apron
Year 9		
	\$ 522,000	TOTAL

\$ (522,000)	2018 Project Total Cost from Left
\$ -	Non-Primary Entitlement Carryover
\$ 150,000	2018 Non-Primary Entitlement
\$ 345,900	Discetionary / State Aportionment
\$ 13,050	State Match (2.5%)
\$ 13,050	Local Match (2.5%)
\$ -	Unused Non-Primary Entitlement
\$ -	Balance

2019	\$ 412,000	Storm Pipe to New Detention Pond
	\$ 27,000	Joint Seal (Rwy and Txy)
Year 10		
	\$ 439,000	TOTAL

\$ (439,000)	2019 Project Total Cost from Left
\$ -	Non-Primary Entitlement Carryover
\$ 150,000	2019 Non-Primary Entitlement
\$ 267,050	Discetionary / State Aportionment
\$ 10,975	State Match (2.5%)
\$ 10,975	Local Match (2.5%)
\$ -	Unused Non-Primary Entitlement
\$ -	Balance

2020	\$ 378,000	Relocate Airport Drive Phase II
	\$ 236,000	Taxilanes for New Hangars
Year 10		
	\$ 614,000	TOTAL

\$ (614,000)	2020 Project Total Cost from Left
\$ -	Non-Primary Entitlement Carryover
\$ 150,000	2020 Non-Primary Entitlement
\$ 433,300	Discetionary / State Aportionment
\$ 15,350	State Match (2.5%)
\$ 15,350	Local Match (2.5%)
\$ -	Unused Non-Primary Entitlement
\$ -	Balance

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2010(2)

DESCRIPTION: 800' Runway & Taxiway Extension Construction

Work Item Description	Quantity	Unit	Price	Amount
Mobilization and Safety Security	1	Lump Sum	\$ 100,000.00	\$ 100,000
Pavement Removal	3,500	SYD	\$ 20.00	\$ 70,000
Runway Lighting	12	Each	\$ 950.00	\$ 11,400
Taxiway Lighting	20	Each	\$ 950.00	\$ 19,000
Relocate Existing Taxiway & Threshold Lights	11	Each	\$ 300.00	\$ 3,300
#8 Cable in Conduit	3,800	LFT	\$ 3.00	\$ 11,400
#6 Solid Counterpoise Wire	3,800	LFT	\$ 2.00	\$ 7,600
Replace Existing Txy Lights with LED Lamps	218	Each	\$ 450.00	\$ 98,100
Signs	4	Each	\$ 3,500.00	\$ 14,000
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
Relocate ODAL'S	1	Lump Sum	\$ 15,000.00	\$ 15,000
Unclassified Excavation	40,000	CYD	\$ 4.00	\$ 160,000
Drainage	1	Lump Sum	\$ 40,000.00	\$ 40,000
6 Inch Aggregate Base Course	2,700	CYD	\$ 30.00	\$ 81,000
6 Inch Concrete Pavement	15,000	SYD	\$ 22.00	\$ 330,000
Runway Grooving	12,000	SYD	\$ 2.00	\$ 24,000
Turfing & Mulching	5	Acres	\$ 2,000.00	\$ 10,000
Marking	1	Lump Sum	\$ 50,000.00	\$ 50,000
Approach Markers and Centerline monument	1	Lump Sum	\$ 2,000.00	\$ 2,000
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -

TOTAL CONSTRUCTION		\$ 1,076,800.00
ENGINEERING FINAL DESIGN		\$ 65,000.00
CONSTRUCTION ADMIN.		\$ 120,000.00
CONTINGENCY	15%	\$ 161,520.00
TOTAL*		\$ 1,424,000.00
TOTAL FEDERAL DOLLARS	95%	\$ 1,352,800
TOTAL STATE DOLLARS	2.5%	\$ 35,600
TOTAL LOCAL DOLLARS	2.5%	\$ 35,600

* 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 lights will be replaced with LED fixtures.

ALP STATUS	ENV.	PURPOSE:	Other	4
Project is shown on the current ALP.	EA in previous year	COMPONENT:	Runway	10
		TYPE:	Construction	10
		PRIORITY NUMBER		33

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2012(2)

DESCRIPTION: Relocate Airport Drive Phase I

Work Item Description	Quantity	Unit	Price	Amount
Mobilization	1	Lump Sum	\$ 10,000.00	\$ 10,000
Safety & Security	1	Lump Sum	\$ 4,000.00	\$ 4,000
Saw Cut and Seal Pavement	84	LFT	\$ 5.00	\$ 420
Unclassified Excavation	1,500	CYD	\$ 5.00	\$ 7,500
Granular Sub-base 12"	400	CYD	\$ 12.00	\$ 4,800
Aggregate Base course 6"	200	CYD	\$ 30.00	\$ 6,000
Bituminous Surface 3"	200	Tons	\$ 95.00	\$ 19,000
Pavement Marking	1	Lump Sum	\$ 1,500.00	\$ 1,500
Ditch/Curb Work	1,680	LFT	\$ 12.00	\$ 20,160
Seeding and Mulching	1	Acres	\$ 2,000.00	\$ 1,680
Underdrain	760	LFT	\$ 8.00	\$ 6,080
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -

TOTAL CONSTRUCTION		\$ 81,140.00
ENGINEERING DESIGN		\$ 12,000.00
CONSTRUCTION ADMIN.		\$ 12,000.00
CONTINGENCY	15%	\$ 12,171.00
TOTAL*		\$ 118,000.00
TOTAL FEDERAL DOLLARS	95%	\$ 112,100
TOTAL STATE DOLLARS	2.5%	\$ 2,950
TOTAL LOCAL DOLLARS	2.5%	\$ 2,950

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:
Necessary to allow for parking lot expansion.

ALP STATUS	ENV.	PURPOSE:	Capacity	7
Project is shown on the current ALP.	Categorical Ex. Expected	COMPONENT:	Gnd Transp	4
		TYPE:	Construction	10
		PRIORITY NUMBER		54

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2013(2)
DESCRIPTION: Terminal Apron Lighting

Work Item Description	Quantity	Unit	Price	Amount
Mobilization	1	Lump Sum	\$ 8,000.00	\$ 8,000
Safety & Security	1	Lump Sum	\$ 2,000.00	\$ 2,000
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		\$	87,200.00
ENGINEERING DESIGN		\$	10,000.00
CONSTRUCTION ADMIN.		\$	7,000.00
CONTINGENCY	15%	\$	13,080.00
TOTAL*		\$	118,000.00
TOTAL FEDERAL DOLLARS	95%	\$	112,100
TOTAL STATE DOLLARS	2.5%	\$	2,950
TOTAL LOCAL DOLLARS	2.5%	\$	2,950

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:
Apron lights are old and require replacement.

ALP STATUS	ENV.	PURPOSE:	
Project is shown on the current ALP.	Categorical Ex. Expected	PURPOSE:	Reconstruction 8
		COMPONENT:	Apron 5
		TYPE:	Lighting 8
		PRIORITY NUMBER	62

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2014(1)
DESCRIPTION: **Carryover for Future Project**

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

TOTAL CONSTRUCTION			\$ -
ENGINEERING DESIGN			
CONSTRUCTION ADMIN.			
CONTINGENCY			\$ -
TOTAL*			\$ -
TOTAL FEDERAL DOLLARS	95%		\$ -
TOTAL STATE DOLLARS	2.5%		\$ -
TOTAL LOCAL DOLLARS	2.5%		\$ -

* 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

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2015(1)
DESCRIPTION: Terminal Building Expansion and Energy Savings

Work Item Description	Quantity	Unit	Price	Amount
Building Expansion	2,700	SFT	\$ 70.00	\$ 189,000
New Green Roof	1	LS	\$ 45,000.00	\$ 45,000
Electrical Upgrades	1	LS	\$ 40,000.00	\$ 40,000
Renovations to Existing Building	11,200	SFT	\$ 20.00	\$ 224,000
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -

TOTAL CONSTRUCTION		\$ 498,000.00
ENGINEERING DESIGN		\$ 65,000.00
CONSTRUCTION ADMIN.		\$ 50,000.00
CONTINGENCY	15%	\$ 74,700.00
TOTAL*		\$ 688,000.00
TOTAL FEDERAL DOLLARS	95%	\$ 653,600
TOTAL STATE DOLLARS	2.5%	\$ 17,200
TOTAL LOCAL DOLLARS	2.5%	\$ 17,200

* 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.	PURPOSE:	7
Project is shown on the current ALP.	Categorical Ex. Expected	Capacity	7
		COMPONENT: Terminal	1
		TYPE: Construction	10
PRIORITY NUMBER			49

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2015(2)

DESCRIPTION: **Rehabilitate Terminal Apron**

Work Item Description	Quantity	Unit	Price	Amount
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	\$ 2.00	\$ 42,000
4" Concrete Overlay	21,000	SYD	\$ 25.00	\$ 525,000
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -

TOTAL CONSTRUCTION		\$	587,000.00
ENGINEERING DESIGN		\$	50,000.00
CONSTRUCTION ADMIN.		\$	50,000.00
CONTINGENCY	15%	\$	88,050.00
TOTAL*		\$	776,000.00
TOTAL FEDERAL DOLLARS	95%	\$	737,200
TOTAL STATE DOLLARS	2.5%	\$	19,400
TOTAL LOCAL DOLLARS	2.5%	\$	19,400

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:
 Apron pavement is aging and will need reconstruction. 4" concrete overlay will provide cost effective construction.

ALP STATUS		ENV.		PURPOSE: Reconstruction		8
Project is shown on the current ALP.		Categorical Ex. Expected		COMPONENT: Apron		5
				TYPE: Construction		10
PRIORITY NUMBER 66						

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2016(1) DESCRIPTION: SRE Equipment

Work Item Description	Quantity	Unit	Price	Amount
Tractor with Blower	1	LS	\$ 180,000.00	\$ 180,000
Large Plow Truck	1	LS	\$ 300,000.00	\$ 300,000
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -

TOTAL CONSTRUCTION		\$	480,000.00
ENGINEERING DESIGN		\$	10,000.00
CONSTRUCTION ADMIN.			
CONTINGENCY	15%	\$	72,000.00
TOTAL*		\$	562,000.00

TOTAL FEDERAL DOLLARS	95%	\$	533,900
TOTAL STATE DOLLARS	2.5%	\$	14,050
TOTAL LOCAL DOLLARS	2.5%	\$	14,050

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:
Existing equipment from city is aging and will need to be replaced.

ALP STATUS	ENV.	PURPOSE:	8
NA	Categorical Ex. Expected	Reconstruction	8
		COMPONENT: Equipment	8
		TYPE: Snow Removal Eq	9
		PRIORITY NUMBER	70

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2017(1) DESCRIPTION: Energy Upgrade MITL (Runway Edge Lights)
--

Work Item Description	Quantity	Unit	Price	Amount
Mobilization	1	Lump Sum	\$ 15,000.00	\$ 15,000
Safety & Security	1	Lump Sum	\$ 5,000.00	\$ 5,000
LED Sign	12	Each	\$ 4,000.00	\$ 48,000
LED Edge Light	66	Each	\$ 500.00	\$ 33,000
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -

TOTAL CONSTRUCTION		\$	101,000.00
ENGINEERING DESIGN		\$	15,000.00
CONSTRUCTION ADMIN.		\$	15,000.00
CONTINGENCY	15%	\$	15,150.00
TOTAL*		\$	147,000.00
TOTAL FEDERAL DOLLARS	95%	\$	139,650
TOTAL STATE DOLLARS	2.5%	\$	3,675
TOTAL LOCAL DOLLARS	2.5%	\$	3,675

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:
 Replace all MITL and guidance signs with new LED units. Project will reduce operating costs and downtime due to more efficient longer lasting bulbs.

ALP STATUS	ENV.	PURPOSE:	
Project is shown on the current ALP.	Categorical Ex. Expected	Reconstruction	8
		Runway	10
		Lighting	8
		PRIORITY NUMBER	72

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2017(2)

DESCRIPTION: Reconstruct SE and NE Taxi lanes

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	1,500	CYD.	\$ 5.00	\$ 7,500
Granular Sub-base 12"	8,600	CYD.	\$ 15.00	\$ 129,000
Aggregate Base Course	4,300	CYD.	\$ 30.00	\$ 129,000
Bituminous Pavement	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	\$ 2.00	\$ 50,776
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -

TOTAL CONSTRUCTION			\$ 896,276.43
ENGINEERING DESIGN			\$ 80,000.00
CONSTRUCTION ADMIN.			\$ 75,000.00
CONTINGENCY	15%		\$ 134,441.46
TOTAL*			\$ 1,186,000.00
TOTAL FEDERAL DOLLARS	95%		\$ 1,126,700
TOTAL STATE DOLLARS	2.5%		\$ 29,650
TOTAL LOCAL DOLLARS	2.5%		\$ 29,650

* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:
Pavements are aging and will need replacement

ALP STATUS	ENV.	PURPOSE:	Reconstruction	8
Project is shown on the current ALP.	Categorical Ex. Expected	COMPONENT:	Taxiway	8
		TYPE:	Construction	10
		PRIORITY NUMBER		72

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2020(1)

DESCRIPTION: **Relocate Airport Drive Phase II**

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	15%		\$ 37,455.00
TOTAL*			\$ 378,000.00
TOTAL FEDERAL DOLLARS	95%	\$	359,100
TOTAL STATE DOLLARS	2.5%	\$	9,450
TOTAL LOCAL DOLLARS	2.5%	\$	9,450

* 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.	PURPOSE:	Capacity	7
Project is shown on the current ALP.	Categorical Ex. Expected	COMPONENT:	Gnd Transp	4
		TYPE:	Construction	10
		PRIORITY NUMBER		54

Ann Arbor Municipal Airport

YEAR (PROJECT NUMBER): 2020(2)

DESCRIPTION: **Taxilanes for New Hangars**

Work Item Description	Quantity	Unit	Price	Amount
Mobilization	1	Lump Sum	\$ 20,000.00	\$ 20,000
Safety & Security	1	Lump Sum	\$ 5,000.00	\$ 5,000
Unclassified Excavation	1,500	CYD.	\$ 5.00	\$ 7,500
Granular Sub-base 12"	3,600	CYD.	\$ 15.00	\$ 54,000
Aggregate Base Course	1,800	CYD.	\$ 30.00	\$ 54,000
Bituminous Pavement	6	Ton	\$ 95.00	\$ 570
Marking	1	Lump Sum	\$ 2,500.00	\$ 2,500
Underdrain	1,800	LFT.	\$ 8.00	\$ 14,400
Restoration	1	LS	\$ 3,000.00	\$ 3,000
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -

TOTAL CONSTRUCTION		\$	160,970.00
ENGINEERING DESIGN		\$	25,000.00
CONSTRUCTION ADMIN.		\$	25,000.00
CONTINGENCY	15%	\$	24,145.50
TOTAL*		\$	236,000.00
TOTAL FEDERAL DOLLARS	95%	\$	224,200
TOTAL STATE DOLLARS	2.5%	\$	5,900
TOTAL LOCAL DOLLARS	2.5%	\$	5,900

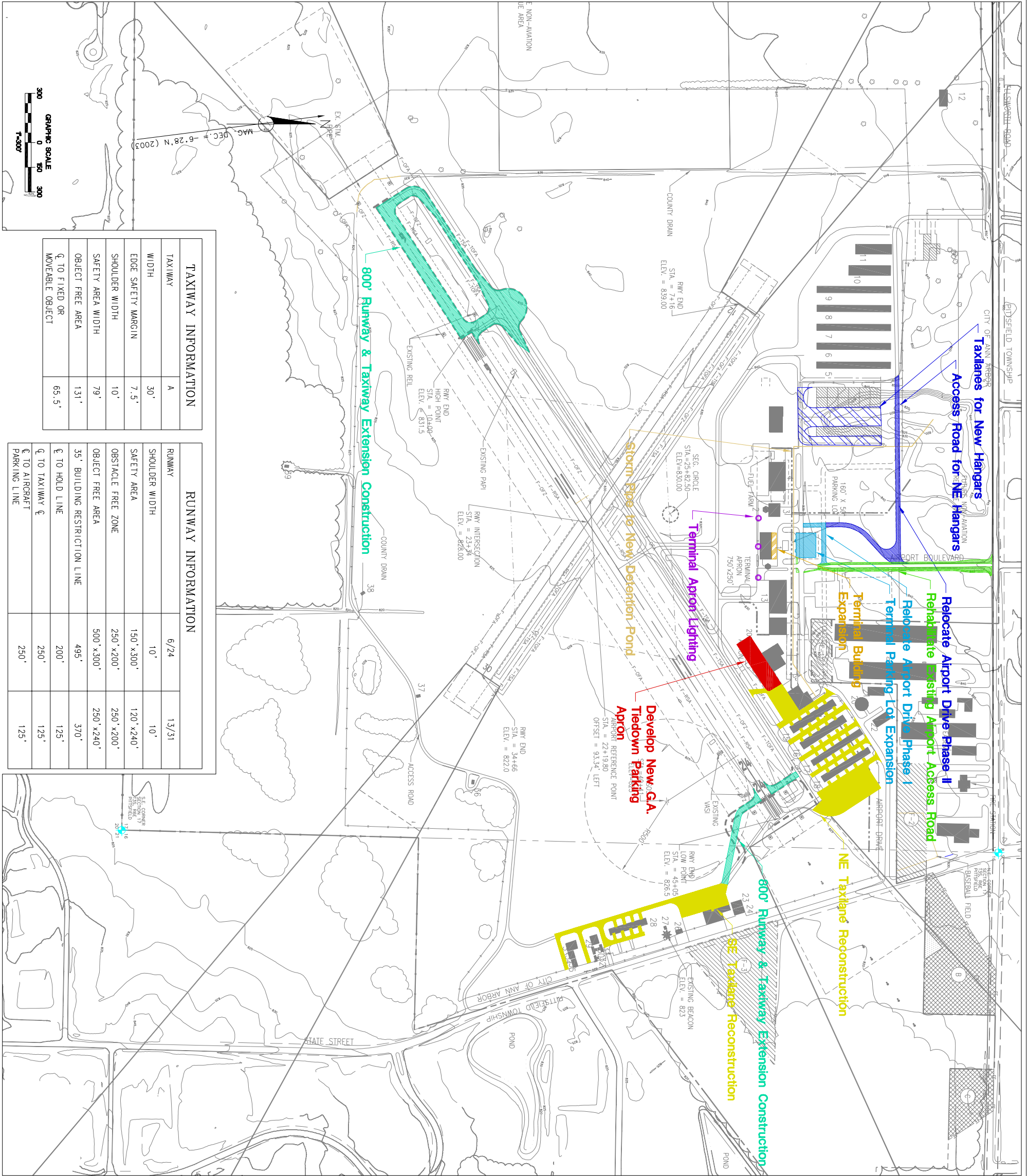
* Amount rounded up to the nearest thousand dollars.

DESCRIPTION AND JUSTIFICATION:
New taxilanes will be needed for additional hangars.

ALP STATUS	ENV.	PURPOSE:	Capacity	7
Project is shown on the current ALP.	Categorical Ex. Expected	COMPONENT:	Taxiway	8
		TYPE:	Construction	10
		PRIORITY NUMBER		61

NO.	DESCRIPTION	ELEVATION
1	ADMINISTRATION/TERMINAL BUILDING	849.56
2	AIR TRAFFIC CONTROL TOWER (ATCT)	893.29
3	AIR TRAFFIC ADMINISTRATION BUILDING	864.52
4	CORPORATE HANGAR (AV. GAS CO.)	866.72
5	T-HANGAR	858.03
6	T-HANGAR	857.98
7	T-HANGAR	857.12
8	T-HANGAR	857.95
9	T-HANGAR	856.01
10	T-HANGAR (NESTED)	863.58
11	T-HANGAR (NESTED)	863.56
12	BARN	894.80
13	CORPORATE HANGAR (MICHIGAN UNIVERSITY)	861.57
14	FIXED BASE OPERATION HANGAR	862.57
15	T-HANGAR	846.73
16	T-HANGAR	846.47
17	T-HANGAR	843.65
18	T-HANGAR	846.30
19	T-HANGAR (NESTED)	849.13
20	ROTATING FLOOR HANGAR	850.89
21	CONVENTIONAL HANGAR	851.15
22	CONVENTIONAL HANGAR	847.51
23	CONVENTIONAL HANGAR	836.92
24	CONVENTIONAL HANGAR	836.87
25	FIXED BASE OPERATION HANGAR	846.03
26	OFFICE BUILDING	837.91
27	CITY WATER FACILITY	823.35
28	T-HANGAR	836.39
29	CONVENTIONAL HANGAR	842.77
30	T-HANGAR	834.98
31	T-HANGAR	835.85
32	T-HANGAR	836.80
33	CONVENTIONAL HANGAR	843.80
34	CONVENTIONAL HANGAR	842.34
35	CONVENTIONAL HANGAR	841.81
36	CITY WATER FACILITY	837.20
37	CITY WATER FACILITY	837.60
38	CITY WATER FACILITY	834.09
39	CITY WATER FACILITY	836.12

BUILDING ELEVATION TABLE



TAXIWAY INFORMATION	
TAXIWAY	A
WIDTH	30'
EDGE SAFETY MARGIN	7.5'
SHOULDER WIDTH	10'
SAFETY AREA WIDTH	79'
OBJECT FREE AREA	131'
Q TO FIXED OR MOVEABLE OBJECT	65.5'

RUNWAY INFORMATION		
RUNWAY	6/24	13/31
SHOULDER WIDTH	10'	10'
SAFETY AREA	150' x 300'	120' x 240'
OBSTACLE FREE ZONE	250' x 200'	250' x 200'
OBJECT FREE AREA	500' x 300'	250' x 240'
35' BUILDING RESTRICTION LINE	495'	370'
Q TO HOLD LINE	200'	125'
Q TO TAXIWAY	250'	125'
Q TO AIRCRAFT PARKING LINE	250'	125'

ANN ARBOR MUNICIPAL AIRPORT

ANN ARBOR, MICHIGAN
 AIRPORT LAYOUT PLAN
 5 YEAR PLAN

ANN ARBOR, MICHIGAN

3950 SPARKS DR. S.E.
 616 574-8500

JW	X
RJC	X
DR	X
WMM	X
W. MALINOWSKI	

06/27/08 ALP PUBLICATION
 03/21/08 FAA AIRSPACE REVIEW
 12/17/07 MDOT DRAFT REVIEW

12940723

1

SITE NO.
 81-1