### MICHIGAN AIRPORT DEVELOPMENT PROGRAM

# AIP CAPITAL IMPROVEMENT PLAN 2011-2021

### 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 2, 2010
Revised: September 9, 2010

File: M:\Resources\Airport\CIP\2010\Ann Arbor\FINAL Ann Arbor 2010 CIP.xls
Tab: TITLE Page 1 of 18 Date: 2010 09 09

### MICHIGAN STATE BLOCK GRANT PROGRAM

### TEN-YEAR AIRPORT CAPITAL IMPROVEMENT PROGRAM (CIP) FY-2011\* to FY-2021

				*ACIP includes of	current developm	ment year (2011 a	already program	med - minor chan	ges acceptable	)	
Airport Name:	Ann Arbor Municipal Airport									Date prepared:	September 9, 2010
ssociated City	: Ann Arbor, MI									Prepared By:	URS Corporation
ponsor:	City of Ann Arbor									Sponsor email address & p	phone: 734-994-2841 MJKulhanek@A2gov.org
irport Identifier											MDOT AERO: no later than 12/1/10
Development		Shown on ALP?	ACIP	NPIAS	Federal	Federal	Federal	State	Local	Total	
Year	Project Description	(Yes or No)	Code**	Priority Rating**	Entitlements	Apportionment	Discretionary			R	emarks/Item Justification - Provide as much detail as possible.
2011			А	vailable Entitlements	\$ 353,860	(\$150,000 NPE p	lus \$203,860 NPE	carryover from 2010.)	1	<u>,                                      </u>	
	Final Design Runway & Taxiway Extension	NA	CA-RW-EX	56	\$ 61,750	\$ -		\$ 1,625	\$ 1,625	\$ 65,000 Provide for final design of Run	way and Taxiway Extension. ned to 4300°. Runway will also be shifted 150° to the west to provide clearance over State Road or
										the East side of the airport. Pa	rallel taxiway will be extended to match the new runway. Connector taxiway on the southeast side
	800' Runway & Taxiway Extension Construction	Yes	CA-RW-EX	56	\$ 292,110	\$ 1,291,540		\$ 41,675	\$ 41,675	\$ 1,667,000 will be relocated to the new run	way end. All taxiway and runway edge lights will be replaced with LED fixtures.
					\$ -	\$ -				-	
2012				vailable Entitlements	Ψ						
2012	Design: Terminal Parking Lot Expansion & Relocate Airport Drive									The current parking lot is too sr	mall for daily usage. It is frequently at full capacity. To accomidate current demand additional spac
	Phase I	Yes	OT-OT-PA	19	\$ 17,100	\$ -		\$ 450	\$ 450	\$ 18,000 is needed. Airport Drive is locat	ted north of the parking lot and will need to be relocated to expand the parking lot.
					\$ -	\$ -				\$ -	
					\$ -	\$ -				\$ -	
				Carryover							
2013			Α	vailable Entitlements	\$ 282,900					The current parking lot is too sr	mall for daily usage. It is frequently at full capacity. To accomidate current demand additional spac
	Terminal Parking Lot Expansion & Relocate Airport Drive Phase I	Yes	OT-OT-PA	19	\$ 170,050	\$ -		\$ 4,475	\$ 4,475	is needed. Airport Drive is locat	ted north of the parking lot and will need to be relocated to expand the parking lot. If the EA prever
	Close Airport Drive (Gate and Fence Relocation)	Yes	OT-OT-PA	19	\$ 61,750	·		\$ 1,625	\$ 1,625	\$ 65,000 is needed. Airport Drive is local	ccuring in 2011 this project will be designed and built in 2011. nam of uany usage: it is mequenny at oin capacity. To accominate current demand additional space ted north of the parking lot and will need to be relocated to expand the parking lot.
	, , , , , , , , , , , , , , , , , , , ,				\$ -	\$ -		, ,	,	\$ -	
				Carryover	\$ 51,100						
2014			А	vailable Entitlements	\$ 201,100	)					
	Rehabilitate Existing Airport Access Road	Yes	OT-GT-AC	23	\$ 201,100	\$ 109,550		\$ 8,175	\$ 8,175		Dyears old and needs rehabilitation. Bulivard will be added at north end for better visibility and all only item.
	Airport Signage (Local Only)	Yes	OT-GT-AC	23	\$ -	\$ -		\$ -	\$ 5,000		
					\$ -	\$ -				\$ -	
					\$ -						
2015			A	vailable Entitlements	\$ 150,000	)					
	Carryover for Future Project	\$ -			\$ -	\$ -		\$ -	\$ -	\$ - 0	
					\$ -	\$ -				\$ -	
					\$ -	\$ -				\$ -	
				Carryover	,						
2016				vailable Entitlements	,			1.		Existing terminal building is too	small to meet current needs. Additional insulation will be added to existing building to conserve
	Terminal Building Expansion and Renovation	Yes	CA-TE-IM	44	\$ 261,250	\$ -		\$ 6,875	\$ 6,875	\$ 275,000 energy. Renovations will be no	ecessary to meet current ADA and other codes.
				0	\$ 38.750	\$ -				-	
2017			Λ	Carryover							
2017	T " ( ) D !!							1	<b>A</b> 1005	New taxilanes will be needed for	or additional hangars. Hangars will be build with local funding. This will be on the back side of the
	Taxilanes for New Box Hangars	Yes	ST-PB-MS	40	\$ 183,350 \$ -	5 -		\$ 4,825	\$ 4,825	\$ 193,000 exisitng Box Hangars built in 20	J09.
				Carryover	<u> </u>	) <del>-</del>				-	
2018			A	vailable Entitlements	· · · · · · · · · · · · · · · · · · ·						
20.0	Reconstruct SE and NE Taxiways	Yes	RE-TW-IM	68	\$ 155,400			\$ 28,800	\$ 28,800	\$ 1.152.000 Devements are aging and will a	need replacement. PCI was 80 and 82 for these pavements in 2005.
	TACOURSELLOC OL ARLU INE TAXIWAYS	1 52	IVE- I AA-IIAI	00	\$ 155,400	\$ -		ψ ∠0,000	Ψ ∠0,0UU	\$ -	посы горгасопнени. ПО г was об ани од тог тнеѕе раменнения ин 2005.
		<u> </u>		1	\$ -		1	<u> 1                                   </u>		•	
2019			A	vailable Entitlements	\$ 150,000						
											will need reconstruction. 6" concrete overlay will provide cost effective construction. There has bee rporate flights into the airport along with the continual expansion of helicopter activity requiring
										increased aircraft parking. The	e airport is also experiencing a growth in tie-down activity in conjunction with an increased activity of milar community and University event days. The terminal aircraft parking apron is frequently full on
	Dehabilitate and Europed Assessmith Linkship	V	DE AD III	60	¢ 450.000	d 4.000.450		¢ 00.005	¢ 00.005	many weekdays with large corp	porate aircraft and tie-down users. Apron lights are old and require replacement. LED replacement
	Rehabilitate and Expand Apron with Lighting	Yes	RE-AP-IM	62	\$ 150,000			\$ 38,925		Existing equipment from city is	ne Apron was 90 in 2005.  aging and will need to be replaced. No FAA funding has been used for existing Snow Removal
	SRE Equipment (Truck and Tractor)	NA	ST-EQ-SN	48	\$ -	\$ 488,300		\$ 12,850	\$ 12,850	\$ 514,000 Equipment.	
2020				woilable Entitlement	φ -						
2020			A	vailable Entitlements	\$ 150,000	'					olocking development of additional corporate hangar space. Relocation of the pond will develop nev
	Hangar Site Work	Yes	ST-PB-MS	40	\$ 121,600	\$ -		\$ 3,200	\$ 3,200	corporate hangar space and ap \$ 128,000 be crossed by pipe and will be	oron. Pipe will need to tie into drainage system that outlets in pond to the northwest. Pavements w restored.
	Rehabilitate Rwy and Txy Conc. Joint Seals and Remark	Yes	RE-RW-IM	72	\$ 28,400			\$ 2,000	<u> </u>	Preventative maintenance on e	xisting pavements. Repair failed concrete joints. Markings will be faded. Remark all existing
	The state of the s	100		1 12	\$ -	77,000	1	2,000	2,000	T CO,000   markings.	
2021			A	vailable Entitlements	\$ 150,000						
	Hangar Access Road Phase II	Yes	OT-GT-AC	23	\$ 150,000			\$ 8,825	\$ 8,825	\$ 353 000 Road will provide better second	for users of hangars. Will increase safety and security by providing them with separate access ro
		100	5. 51 AO	20	\$ 130,000	\$ -		0,020	- 0,020	\$ -	nangaro. The ministers salely and security by providing them with separate access to
					\$ -						

# Ann Arbor Municipal Airport YEAR (PROJECT NUMBER): 2011(1)

DESCRIPTION: Final Design Runway & Taxiway Extension

Work Item Description	Quantity	Unit	Price	Α	mount
Final Design Runway & Taxiway Extension				\$	65,000
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	TOTAL CONSTR	UCTION	ı	\$	65,000.00

TOTAL CONSTR	RUCTION		\$ 65,000.00
ENGINEERING I	DESIGN		
CONSTRUCTION	N ADMIN.		\$ -
CONTINGENCY			
TOTAL*			\$ 65,000.00
TOTAL FEDERA	L DOLLARS	95%	\$ 61,750
TOTAL STATE D	OLLARS	2.5%	\$ 1,625
TOTAL LOCAL D	OLLARS	2.5%	\$ 1,625
* Amount rounded ur	to the nearest thou	sand dollars	

### **DESCRIPTION AND JUSTIFICATION:**

Provide for final design of Runway and Taxiway Extension.

	ALP STATUS	ENV.	PURPOSE:	Capacity	7
NA		Categorical Ex.	COMPONENT:	Runway	10
		Expected	TYPE:	Extension/Expansion	6
				PRIORITY NUMBER	56

YEAR (PROJECT NUMBER): 2011(2)

DESCRIPTION: 800' Runway & Taxiway Extension Construction

Work Item Description	Quantity	Unit	Price	Amount
Mobilization and Safety Security	1	Lump Sum	\$ 85,000.00	\$ 85,000
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	\$ 3.00	\$ 11,400
#6 Solid Counterpoise Wire	3,800	LFT	\$ 2.00	\$ 7,600
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	\$ 4.00	\$ 160,000
Drainage	1	Lump Sum	\$ 40,000.00	\$ 40,000
Underdrains	3,800	LFT	\$ 8.00	\$ 30,400
12 Inch Subbase	5,400	CYD	\$ 14.75	\$ 79,650
6 Inch Aggregate Base Course	2,700	CYD	\$ 30.00	\$ 81,000
6 Inch Concrete Pavement	15,000	SYD	\$ 38.00	\$ 570,000
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	8	Each	\$ 350.00	\$ 2,800
Centerline monument	2	Each	\$ 1,000.00	\$ 2,000
				\$ -

TOTAL CONSTRUCTION \$ 1,458,550.00 **ENGINEERING FINAL DESIGN** CONSTRUCTION ADMIN. 135,000.00 72,927.50 CONTINGENCY 5% **TOTAL\*** 1,667,000.00 TOTAL FEDERAL DOLLARS \$ 95% 1,583,650 TOTAL STATE DOLLARS 2.5% \$ 41,675 TOTAL LOCAL DOLLARS 2.5% \$ 41,675

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

<sup>\*</sup> Amount rounded up to the nearest thousand dollars.

Consultant **URS Corporation** 

(Preparer) William M. Malinowski, P.E.

### **Ann Arbor Municipal Airport**

YEAR (PROJECT NUMBER): 2012(1)

DESCRIPTION: Design: Terminal Parking Lot Expansion & Relocate Airport Drive Phase I

Work Item Description	Quantity	Unit	Price	-	Amount
Design Terminal Parking Lot Expansion				\$	18,000
				\$	-
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	TOTAL CONSTRU	CTION		\$	18,000.00
	ENGINEERING DE	SIGN			-
	CONSTRUCTION	ADMIN.		\$ \$	-
	CONTINGENCY			\$	-
	TOTAL*			\$	18,000.00
	TOTAL FEDERAL	DOLLARS	95%	\$	17,100
	TOTAL STATE DO		2.5%	\$	450
			2.070	Ψ	100

### DESCRIPTION AND JUSTIFICATION:

The current parking lot is too small for daily usage. It is frequently at full capacity. To accomidate 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.

TOTAL LOCAL DOLLARS

\* Amount rounded up to the nearest thousand dollars.

ALP STATUS	ENV.	PURPOSE:	Other	4
	Categorical Ex.	COMPONENT:	Other	7
	Expected	TYPE:	Parking	1
		F	PRIORITY NUMBER	19

\$

450

2.5%

YEAR (PROJECT NUMBER): 2013(1)

DESCRIPTION: Terminal Parking Lot Expansion & Relocate Airport Drive Phase I

Work Item Description	Quantity	Unit	Price	- 1	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
Unclassified Excavation	1,600	CYD.	\$ 4.50	\$	7,200
Granular Sub-base 12"	800	CYD.	\$ 12.50	\$	10,000
Aggregate Base Course	400	CYD.	\$ 28.00	\$	11,200
Curb & Gutter	500	LFT.	\$ 22.00	\$	11,000
Bituminous Pavement	700	Ton	\$ 85.00	\$	59,500
Marking	1	Lump Sum	\$ 2,500.00	\$	2,500
Underdrain	1,250	LFT.	\$ 8.00	\$	10,000
Restoration	1	LS	\$ 5,000.00	\$	5,000
Ditch/curb Work	1,680	LFT.	\$ 12.00	\$	20,160
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TOTAL CONSTRUCTION		\$ 155,560.00
ENGINEERING DESIGN		
CONSTRUCTION ADMIN.		\$ 15,000.00
CONTINGENCY	5%	\$ 7,778.00
TOTAL*		\$ 179,000.00
TOTAL FEDERAL DOLLARS	95%	\$ 170,050
TOTAL STATE DOLLARS	2.5%	\$ 4,475
TOTAL LOCAL DOLLARS	2.5%	\$ 4,475
* Amount rounded up to the poercet thou	and dollars	

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 accomidate 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. If the EA prevents the runway construction from occuring in 2011 this project will be designed and built in 2011.

ALP STATUS	ENV.	PURPOSE:	Other	4
Yes	Categorical Ex.	COMPONENT:	Other	7
	Expected	TYPE:	Parking	1
		F	PRIORITY NUMBER	19

YEAR (PROJECT NUMBER): 2013(2)

**DESCRIPTION: Close Airport Drive (Gate and Fence Relocation)** 

Work Item Description	Quantity	Unit		Price		Amount
Mobilization	1	Lump Sum	\$	5,000.00	\$	5,000
Safety & Security	1	Lump Sum	\$	1,000.00	\$	1,000
Relocate/New Fence	1,200	LFT	\$	20.00	\$	24,000
24' Motorized High Speed Vehicle Gate	1	Lump Sum	\$	14,000.00	\$	14,000
Signage	1	Lump Sum	\$	3,000.00	\$	3,000
Incidentals	1	Lump Sum	\$	2,000.00	\$	2,000
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	TOTAL CONST				\$	49,000.00
	ENGINEERING				\$	5,000.00
	CONSTRUCTIO				\$	6,000.00
	CONTINGENCY	<b>(</b>		10%	\$ <b>\$</b>	4,900.00
	TOTAL*	TOTAL*				65,000.00
	TOTAL FEDERA	AL DOLLARS		95%	\$	61,750

<sup>\*</sup> Amount rounded up to the nearest thousand dollars.

2.5%

2.5%

\$

\$

### DESCRIPTION AND JUSTIFICATION:

The current parking lot is too small for daily usage. It is frequently at full capacity. To accomidate 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.

TOTAL STATE DOLLARS

TOTAL LOCAL DOLLARS

ALP STATUS	ENV.	PURPOSE:	Other	4
Yes	Categorical Ex.	COMPONENT:	Other	7
	Expected	TYPE:	Parking	1
		F	19	

1,625

1,625

YEAR (PROJECT NUMBER): 2014(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
				\$ -
	TOTAL CONSTI			\$ 268,300.00

TOTAL CONSTR	RUCTION		\$	268,300.00
<b>ENGINEERING I</b>	DESIGN		\$	25,000.00
CONSTRUCTION	N ADMIN.		\$	20,000.00
CONTINGENCY		5%	\$	13,415.00
TOTAL *			•	225 000 00
TOTAL*			\$	327,000.00
IUIAL"			\$	327,000.00
TOTAL FEDERA	L DOLLARS	95%	\$	327,000.00
		95% 2.5%	Φ.	,,,,,,,,
TOTAL FEDERA	OLLARS		\$	310,650

<sup>\*</sup> 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.	PURPOSE:	Other	4
	Categorical Ex.	COMPONENT:	Gnd Transp	4
	Expected	TYPE:	Access	7
		ı	PRIORITY NUMBER	23

### Consultant **URS Corporation**

(Preparer) William M. Malinowski, P.E.

### **Ann Arbor Municipal Airport**

YEAR (PROJECT NUMBER): 2014(2)

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

Work Item Description	Quantity	Unit	Price	Α	mount
Airport Signage	1	Lump Sum	\$ 5,000.00	\$	5,000
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	TOTAL CONST				5 000 00

TOTAL CONSTRUCTION 5,000.00 **ENGINEERING DESIGN** CONSTRUCTION ADMIN. CONTINGENCY **TOTAL\*** 5,000.00 TOTAL FEDERAL DOLLARS 0% \$ TOTAL STATE DOLLARS 0.0% \$ TOTAL LOCAL DOLLARS 100.0% \$ 5,000 \* 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.	PURPOSE:	Other	4
	Categorical Ex.	COMPONENT:	Gnd Transp	4
	Expected	TYPE:	Access	7
_		F	RIORITY NUMBER	23

# Consultant URS Corporation (Preparer) William M. Malinowski, P.E.

Ann Arbor Municipal Airport
YEAR (PROJECT NUMBER): 2015(1) **DESCRIPTION: Carryover for Future Project** 

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#N/A

PRIORITY NUMBER

YEAR (PROJECT NUMBER): 2016(1)

**DESCRIPTION: Terminal Building Expansion and Renovation** 

Price	Amount
75.00	\$ 75,000
40,000.00 \$	\$ 40,000
25,000.00	\$ 25,000
20.00	\$ 60,000
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	\$ 10,000.00 \$ 275,000.00

TOTAL FEDERAL DOLLARS

TOTAL STATE DOLLARS

TOTAL LOCAL 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:	Capacity	7
	Categorical Ex.	COMPONENT:	Terminal	1
	Expected	TYPE:	Improvements	8
		F	RIORITY NUMBER	44

\$

\$

\$

95%

2.5%

2.5%

261,250

6,875

6,875

<sup>\*</sup> Amount rounded up to the nearest thousand dollars.

(Preparer) William M. Malinowski, P.E.

# Ann Arbor Municipal Airport YEAR (PROJECT NUMBER): 2017(1)

**DESCRIPTION: Taxilanes for New Box Hangars** 

Work Item Description	Quantity	Unit	Price	- 1	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
				\$	-
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	TOTAL CONSTI	LIOTION.		\$	157 600 00

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	95%	\$ 183,350
TOTAL STATE DOLLARS	2.5%	\$ 4,825
TOTAL LOCAL DOLLARS	2.5%	\$ 4,825
* A manuat rounded up to the magraph thousan	nd dollara	

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.	PURPOSE:	Standards	6
	Categorical Ex.	COMPONENT:	Public Bldg	7
	Expected	TYPE:	Misc.	5
		F	RIORITY NUMBER	40

# Ann Arbor Municipal Airport YEAR (PROJECT NUMBER): 2018(1)

**DESCRIPTION: Reconstruct SE and NE Taxiways** 

1	Lump Sum	\$	80,000.00	\$	80,000
1	Lump Sum	\$	10,000.00	\$	10,000
15,000	CYD.		4.00	\$	60,000
8,600	CYD.		15.00	\$	129,000
4,300	CYD.	\$	30.00	\$	129,000
4,400	Ton		95.00	\$	418,000
1			5,000.00	\$	5,000
8,000	LFT.	\$	8.00	\$	64,000
1	LS	\$	3,000.00	\$	3,000
25,388	SYD	\$	2.00	\$	50,776
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	15,000 8,600 4,300 4,400 1 8,000	15,000 CYD.  8,600 CYD.  4,300 CYD.  4,400 Ton  1 Lump Sum  8,000 LFT.  1 LS	15,000 CYD. \$ 8,600 CYD. \$ 4,300 CYD. \$ 4,400 Ton \$ 1 Lump Sum \$ 8,000 LFT. \$ 1 LS \$	15,000     CYD.     \$ 4.00       8,600     CYD.     \$ 15.00       4,300     CYD.     \$ 30.00       4,400     Ton     \$ 95.00       1     Lump Sum     \$ 5,000.00       8,000     LFT.     \$ 8.00       1     LS     \$ 3,000.00	15,000

TOTAL CONSTR	RUCTION		\$ 948,776.43
ENGINEERING I	DESIGN		\$ 80,000.00
CONSTRUCTION	N ADMIN.		\$ 75,000.00
CONTINGENCY		5%	\$ 47,438.82
TOTAL*			\$ 1,152,000.00
TOTAL FEDERA	L DOLLARS	95%	\$ 1,094,400
TOTAL STATE D	OLLARS	2.5%	\$ 28,800
TOTAL LOCAL D	OLLARS	2.5%	\$ 28,800
* Amount rounded up	to the nearest thous	cand dallars	
/ infount rounded up	o to the hearest thous	sariu udilars.	

### **DESCRIPTION AND JUSTIFICATION:**

Pavements are aging and will need replacement. PCI was 80 and 82 for these pavements in 2005.

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

YEAR (PROJECT NUMBER): 2019(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 CONOT			272 200 00

TOTAL CONSTR	RUCTION		\$	1,273,300.00
<b>ENGINEERING I</b>	DESIGN		\$	100,000.00
CONSTRUCTION	N ADMIN.		\$	120,000.00
CONTINGENCY		5%	\$	63,665.00
			==	
TOTAL*			\$	1,557,000.00
TOTAL*  TOTAL FEDERA	L DOLLARS	95%	\$ \$	1,557,000.00 1,479,150
		95% 2.5%		, ,
TOTAL FEDERA	OLLARS		\$	1,479,150

<sup>\*</sup> 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 90 in 2005.

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

# Ann Arbor Municipal Airport YEAR (PROJECT NUMBER): 2019(2)

**DESCRIPTION: SRE Equipment (Truck and Tractor)** 

Quantity	Unit	Price	-	Amount
1	LS	\$ 180,000,00	\$	180,000
	IS	\$ 300,000.00	\$	300,000
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			\$	-
	Quantity	1 LS	1 LS \$ 180,000.00	1 LS \$ 180,000.00 \$ 1 LS \$ 300,000.00 \$  \$ \$ \$ \$ \$ \$  \$ \$ \$

TOTAL CONSTRUCTI	ON		\$ 480,000.00
ENGINEERING DESIG	3N		\$ 10,000.00
CONSTRUCTION ADM	MIN.		
CONTINGENCY		5%	\$ 24,000.00
TOTAL*			\$ 514,000.00
TOTAL FEDERAL DO	LLARS	95%	\$ 488,300
TOTAL STATE DOLLA	ARS	2.5%	\$ 12,850
TOTAL LOCAL DOLLA	ARS	2.5%	\$ 12,850
* Amount rounded up to the	nearest thous	sand 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.	PURPOSE:	Standards	6
	Categorical Ex.	COMPONENT:	Equipment	8
	Expected	TYPE:	Snow Removal Eq	9
		F	PRIORITY NUMBER	48

# Ann Arbor Municipal Airport YEAR (PROJECT NUMBER): 2020(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 CONSTI	RUCTION			\$	97,600.00
	ENGINEERING			15%	\$	15,000.00
	CONSTRUCTIO			15%	\$	10,000.00
	CONTINGENCY			5%	\$	4,880.0
	TOTAL*			0,0	\$	128,000.00
	TOTAL FEDERA	AL DOLLARS		95%	\$	121,600
	TOTAL TEDERA			2.5%	\$	3,200
	TOTAL STATE I			2.5%	φ \$	3,200
	* Amount rounded u		ucond		Ψ	3,200

### **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.	PURPOSE:	Standards	6
Yes	Categorical Ex.	COMPONENT:	Public Bldg	7
	Expected	TYPE:	Misc.	5
		F	PRIORITY NUMBER	40

YEAR (PROJECT NUMBER): 2020(2)

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

Work Item Description	Quantity	Unit		Price	-	Amount
Mobilization 9 Cofety Coourity	1	Lump Cum	\$	2 000 00	\$	3,000
Mobilization & Safety Security Joint Seal	5,000	Lump Sum LFT	\$	3,000.00 5.00	\$	25,000
	5,000	LFI	\$		\$	
Paint Marking	I	LS	Ф	40,000.00		40,000
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					\$	-
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	TOTAL CONST	RUCTION			\$	68,000.00
	ENGINEERING				\$	5,000.00
	CONSTRUCTIO				\$	3,000.00
	CONTINGENCY			<b>5</b> 0/ <sub>-</sub>	¢	2 400 0

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	95%	\$ 76,000
TOTAL STATE DOLLARS	2.5%	\$ 2,000
TOTAL LOCAL DOLLARS	2.5%	\$ 2,000

<sup>\*</sup> 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.	PURPOSE:	Reconstruction	8
	Categorical Ex. Expected	COMPONENT:	Runway	10
		TYPE:	Improvements	8
		F	RIORITY NUMBER	72

# Ann Arbor Municipal Airport YEAR (PROJECT NUMBER): 2021(1)

**DESCRIPTION: Hangar Access Road Phase II** 

Work Item Description	Quantity	Unit	Price	F	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
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				\$	-
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	TOTAL CONST				249,700.00

TOTAL CONSTR	RUCTION		\$	249,700.00
<b>ENGINEERING I</b>	DESIGN		\$	45,000.00
CONSTRUCTION	N ADMIN.		\$	45,000.00
CONTINGENCY		5%	\$	12,485.00
TOTAL*			•	353,000.00
IOIAL			Ф	353,000.00
TOTAL			Ф	353,000.00
TOTAL FEDERA	L DOLLARS	95%	\$	335,350
	-	95% 2.5%	\$ \$	,
TOTAL FEDERA	OLLARS		Τ.	335,350

<sup>\*</sup> 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:	Other	4
	Categorical Ex. Expected	COMPONENT:	Gnd Transp	4
		TYPE:	Access	7
PRIORITY NUME			PRIORITY NUMBER	23