

**MICHIGAN STATE BLOCK GRANT PROGRAM
AIRPORT CAPITAL IMPROVEMENT PROGRAM (ACIP)**

Airport Name: Ann Arbor Muni Date Prepared: 08/25/2014
 Associated City: Ann Arbor Sponsor Name: City of Ann Arbor
 Airport Identifier: ARB Sponsor Email: mjkulhanek@a2gov.org
 DRAFT ACIP Due: 08/25/2014

Dev. Year	Project Description	Shown On AIP	ACIP Code	NPIAS Priority Rating	Entitlement	Discretionary	Apportionment	State	Local	Total Project Description (Long)
2015	Extend Runway 6/24 & Approach Survey Design	Yes	CARWEX	56	\$204,900		\$5,100	\$11,500	\$11,500	Final design for rwy 6/24 & txy A extension project. Original Approach survey from 2009. New survey is needed.
2015	Const/Imp/Rehab Access Road Airport Blvd. Construction	Yes	OTGTAC	23	\$366,300			\$20,350	\$20,350	Rehab would extend from Ellsworth Road south to Airport Drive. Work incl milling existing asphalt, construct a boulevard entrance at Ellsworth. etc.
2015	Const/Imp/Rehab Access Road Airport Blvd Design	Yes	OTGTAC	23	\$28,800			\$1,600	\$1,600	
2016	Const/Rehab Non-Rev Park Lot (NH, MAP, NP) Design	Yes	OTOTPA	19	\$29,700			\$1,650	\$1,650	
2016	Install Runway Lighting 6/24 Extension&TW A Design	Yes	STRWLI	50			\$51,300	\$2,850	\$2,850	
2016	Const/Rehab Non-Rev Park Lot (NH, MAP, NP) Construction	Yes	OTOTPA	19	\$120,300		\$170,400	\$16,150	\$16,150	Construct a new 20-25 car parking lot for the terminal building at the NW corner of Airport Drive and Airport Blvd. Rehab pavement of existing lot.
2016	Extend Runway 800' Rwy 6/24 & Txy A Construction	Yes	CARWEX	56			\$1,707,300	\$94,850	\$94,850	Lengthen Rwy 6/24 & Txy A to 4300'. Project includes a 150' shift of the Rwy to the west. Relocate Txy D to new end of Rwy. New LED lighting.
2016	Install Runway Lighting 6/24 Extension&TW A Construction	Yes	STRWLI	50			\$631,800	\$35,100	\$35,100	

Date Prepared: 08/25/2014
 Prepared By: Matthew Kulhanek

**MICHIGAN STATE BLOCK GRANT PROGRAM
 AIRPORT CAPITAL IMPROVEMENT PROGRAM (ACIP)**

Dev. Year	Project Description	Shown On ALP	ACIP Code	NPIAS Priority Rating	Entitlement	Discretionary	Apportionment	State	Local	Total	Project Description (Long)
2017	Rehab Runway 6/24 & TW sealing & markings Design	N/A	RERWIM	72	\$14,400			\$800	\$800	\$16,000	
2017	Rehab Runway 6/24 & TWs Joints & Remark Construction	N/A	RERWIM	72	\$135,600		\$3,000	\$7,700	\$7,700	\$154,000	Preventative maintenance on existing pavements. Repair failed pavement joints on rwy. 6/24 & txy A, B, C, D. Remarking of rwy and txy as needed.
2018	Expand Terminal Bldg (capacity) Terminal Study Design	Yes	CATEEX	40	\$13,500			\$750	\$750	\$15,000	
2019	Expand Terminal Bldg (capacity) Design	Yes	CATEEX	40	\$51,300			\$2,850	\$2,850	\$57,000	
2019	Expand Terminal Bldg (capacity) Construction	Yes	CATEEX	40	\$303,300		\$330,300	\$35,200	\$35,200	\$704,000	



PROBABLE PROJECT COST

ANN ARBOR MUNICIPAL AIRPORT
ANN ARBOR, MI
RUNWAY 6/24 EXTENSION FINAL DESIGN AND APPROACH SURVEY (PHASE II)

N75.MKT.CRM

08/24/14

ITEM NO	MDOT SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	1007051	MISC. APPROACH SURVEY	1	LS	\$80,000.00	\$80,000.00
2	1007051	MISC. FINAL DESIGN	1	LS	\$153,000.00	\$153,000.00
TOTAL PROJECT COST						\$233,000.00



PROBABLE PROJECT COST

ANN ARBOR MUNICIPAL AIRPORT
 ANN ARBOR, MI
 REHABILITATE EXISTING AIRPORT ACCESS ROAD

N75.MKT.CRM

08/14/14

ITEM NO	MDOT SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	1000400	MOBILIZATION AND GENERAL CONDITIONS	1	LS	\$20,000.00	\$20,000.00
2	1000410	SAFETY AND SECURITY	1	LS	\$10,000.00	\$10,000.00
3	1000535	PERMITS	1,000	Dlr	\$1.00	\$1,000.00
4	1520453	BORROW EXCAVATION, FURNISHED BY AIRPORT OWNER AT OFF-SITE LOCATION	1,520	Cyd	\$15.00	\$22,800.00
5	2080625	EROSION CONTROL, SILT FENCE	2,900	Lft	\$3.00	\$8,700.00
6	4000531	COLD MILL BITUMINOUS PAVEMENT, SPECIFIED THICKNESS	3,420	SY	\$5.00	\$17,100.00
7	4007051	MISC. PREPARATION OF EXISTING PAVEMENT	1	LS	\$10,000.00	\$10,000.00
8	4110620	BITUMINOUS AGGREGATE SURFACE COURSE, 20AAX COMPOSITION	730	Ton	\$90.00	\$65,700.00
9	6030515	BITUMINOUS TACK COAT, SPECIFIED EMULSIFIED ASPHALT	180	Gal	\$5.00	\$900.00
10	6107010	MISC. ASPHALT SIDEWALK	13,770	Sft	\$5.00	\$68,850.00
11	6207010	MISC. PAVEMENT MARKINGS	1	LS	\$5,000.00	\$5,000.00
12	7010510	CONCRETE CULVERT & SEWER PIPE 12", REINFORCED, C76, CLASS II	1,570	Lft	\$50.00	\$78,500.00
13	7010920	PRECAST CONCRETE END SECTION FOR 12" PIPE	2	Ea	\$400.00	\$800.00
14	7517050	MISC. DRAINAGE STRUCTURE	5	Ea	\$3,000.00	\$15,000.00
15	7540550	CONCRETE CURB, SIZE AS SPECIFIED	1120	Lft	\$25.00	\$28,000.00
16	8007050	MISC. TRAFFIC SIGNS	2	Ea	\$700.00	\$1,400.00
17	9010517	TURFING WITH MIXTURE AND RATE, AS SPECIFIED	0.7	Acre	\$5,000.00	\$3,500.00
TOTAL CONSTRUCTION COST						\$357,000.00
COST ESCALATION FOR 2015 (2%+/- PER YEAR)						\$7,000.00
DESIGN ENGINEERING & ADMINISTRATION						\$32,000.00
CONSTRUCTION INSPECTION & ADMINISTRATION						\$43,000.00
TOTAL PROJECT COST						\$439,000.00



PROBABLE PROJECT COST

ANN ARBOR MUNICIPAL AIRPORT
 ANN ARBOR, MI
 CONSTRUCT/REHAB NON-REVENUE PARKING LOT

N75.MKT.CRM

08/11/14

ITEM NO	MDOT SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	1000400	MOBILIZATION AND GENERAL CONDITIONS	1	LS	\$20,000.00	\$20,000.00
2	1000410	SAFETY AND SECURITY	1	LS	\$10,000.00	\$10,000.00
3	1000535	PERMITS	1,000	Dir	\$1.00	\$1,000.00
4	1097051	MISC. LIGHTPOLES FOR PARKING LOT EXPANSION	1	LS	\$50,000.00	\$50,000.00
5	1520410	UNCLASSIFIED EXCAVATION	2,000	Cyd	\$12.00	\$24,000.00
6	2080625	EROSION CONTROL, SILT FENCE	830	Lft	\$3.00	\$2,490.00
7	2087021	MISC. 6" SAND SUBBASE, CLASS II	190	Cyd	\$20.00	\$3,800.00
8	2090520	CRUSHED AGGREGATE BASE COURSE, MATERIAL AS SPECIFIED, COMPACTED IN PLACE	245	Cyd	\$35.00	\$8,575.00
9	4000531	COLD MILL BITUMINOUS PAVEMENT, SPECIFIED THICKNESS	3,400	SY	\$5.00	\$17,000.00
10	4007051	MISC. PREPARATION OF EXISTING PAVEMENT	1	LS	\$10,000.00	\$10,000.00
11	4110620	BITUMINOUS AGGREGATE SURFACE COURSE, 20AAX COMPOSITION	885	Ton	\$90.00	\$79,650.00
12	6030515	BITUMINOUS TACK COAT, SPECIFIED EMULSIFIED ASPHALT	455	Gal	\$5.00	\$2,275.00
13	6100532	CONCRETE SIDEWALK, 6"	145	Sft	\$7.00	\$1,015.00
14	6207010	MISC. PARKING LOT PAINT	1	LS	\$5,000.00	\$5,000.00
15	7010510	CONCRETE CULVERT & SEWER PIPE 12", REINFORCED, C76, CLASS II	120	Lft	\$50.00	\$6,000.00
16	7010920	PRECAST CONCRETE END SECTION FOR 12" PIPE	5	Ea	\$400.00	\$2,000.00
17	7050511	PIPE UNDERDRAIN 6", TYPE AS SPECIFIED	450	Lft	\$10.00	\$4,500.00
18	7510511	CATCH BASIN 5' DIAMETER, TYPE 2, THROUGH 8' DEPTH	1	Ea	\$2,500.00	\$2,500.00
19	7540550	CONCRETE CURB, SIZE AS SPECIFIED	580	Lft	\$25.00	\$14,500.00
20	8007050	MISC. TRAFFIC SIGNS	3	Ea	\$700.00	\$2,100.00
21	9010540	SEEDING WITH MIXTURE AND RATE AS SPECIFIED	1.0	Acre	\$5,000.00	\$5,000.00
TOTAL CONSTRUCTION COST						\$271,000.00
COST ESCALATION FOR 2016 (2%+/- PER YEAR)						\$11,000.00
DESIGN ENGINEERING & ADMINISTRATION						\$33,000.00
CONSTRUCTION INSPECTION & ADMINISTRATION						\$41,000.00
TOTAL PROJECT COST						\$356,000.00



PROBABLE PROJECT COST

ANN ARBOR MUNICIPAL AIRPORT
 ANN ARBOR, MI
 800' RUNWAY AND TAXIWAY EXTENSION - LIGHTING

N75.MKT.CRM

08/25/14

ITEM NO	MDOT SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	1000400	MOBILIZATION AND GENERAL CONDITIONS	1	LS	\$15,000.00	\$15,000.00
2	1000410	SAFETY AND SECURITY	1	LS	\$10,000.00	\$10,000.00
3	1000525	RUNWAY APPROACH SURFACE MARKER	8	Ea	\$450.00	\$3,600.00
4	1000530	RUNWAY CENTERLINE MONUMENT	2	Ea	\$1,200.00	\$2,400.00
5	1000535	PERMITS	1,000	Dir	\$1.00	\$1,000.00
6	1080530	BARE COUNTERPOISE WIRE, #8 STRANDED, IN TRENCH OR DUCT	17,600	Lft	\$2.00	\$35,200.00
7	1080588	UNDERGROUND CABLE, 1/C, #8, 5000V, L824, TYPE C, IN TRENCH OR DUCT	30,600	Lft	\$1.75	\$53,550.00
8	1090515	ELECTRICAL VAULT MODIFICATIONS, AS SPECIFIED	1	LS	\$50,000.00	\$50,000.00
9	1097050	MISC. JUNCTION CAN	30	Ea	\$750.00	\$22,500.00
10	1100614	PLASTIC CONDUIT, 2", DIRECT BURIAL	7,000	Lft	\$8.00	\$56,000.00
11	1100638	UNDERGROUND ELECTRICAL DUCT, 4 BANK 4", DIRECT BURIAL	100	Lft	\$40.00	\$4,000.00
12	1257050	MEDIUM INTENSITY EDGE LIGHT, L861, (MIRL/MITL), 30" HIGH, 6.6A, BASE MOUNT, LED, WITH LENS/LAMP	48	Ea	\$1,200.00	\$57,600.00
13	1257050	MIRL/MITL (LED) ON EXISTING BASE CAN	258	Ea	\$450.00	\$116,100.00
14	1257050	MISC. GUIDANCE SIGNS	5	Ea	\$3,000.00	\$15,000.00
15	1250820	RUNWAY END IDENTIFIER LIGHT SYSTEM (REIL), AS SPECIFIED	1	Set	\$15,000.00	\$15,000.00
16	1250837	PRECISION APPROACH PATH INDICATOR (PAPI), 4 BOX, INSTALLED	2	Set	\$20,000.00	\$40,000.00
17	1257051	MISC. FAA REIMBURSEABLE AGREEMENT COST FOR RELOCATION OF REILS	1	LS	\$100,000.00	\$100,000.00
18	1257051	MISC. PAPI FLIGHT CHECK	1	LS	\$8,000.00	\$8,000.00
TOTAL CONSTRUCTION COST						\$605,000.00
COST ESCALATION FOR 2016 (2%+/- PER YEAR)						\$24,000.00
DESIGN ENGINEERING & ADMINISTRATION						\$57,000.00
CONSTRUCTION INSPECTION & ADMINISTRATION						\$73,000.00
TOTAL PROJECT COST						\$759,000.00



PROBABLE PROJECT COST

ANN ARBOR MUNICIPAL AIRPORT
 ANN ARBOR, MI
 800' RUNWAY AND TAXIWAY EXTENSION

N75.MKT.CRM

08/24/14

ITEM NO	MDOT SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	1000400	MOBILIZATION AND GENERAL CONDITIONS	1	LS	\$55,000.00	\$55,000.00
2	1000410	SAFETY AND SECURITY	1	LS	\$40,000.00	\$40,000.00
3	1000535	PERMITS	5,000	Dir	\$1.00	\$5,000.00
4	1520410	UNCLASSIFIED EXCAVATION	32,900	Cyd	\$8.00	\$263,200.00
5	2080625	EROSION CONTROL, SILT FENCE	4,240	Lft	\$3.00	\$12,720.00
	2087051	MISC. EROSION CONTROL	1	LS	\$10,000.00	\$10,000.00
6	2090520	CRUSHED AGGREGATE BASE COURSE, MATERIAL AS SPECIFIED, COMPACTED IN PLACE	2,270	Cyd	\$35.00	\$79,450.00
7	2097021	MISC. 12" SAND SUBBASE	4,760	Cyd	\$20.00	\$95,200.00
8	5010510	PORTLAND CEMENT CONCRETE PAVEMENT, 6" NON- REINFORCED	13,630	Syd	\$55.00	\$749,650.00
10	6050520	JOINT AND CRACK SEALING, AS SPECIFIED	130	Lft	\$5.00	\$650.00
	6057051	MISC. PAVEMENT REPAIRS	1	LS	\$33,000.00	\$33,000.00
11	6107001	MISC. RUNWAY GROOVING	12,000	Syd	\$2.00	\$24,000.00
12	6200517	AIRPORT PAVEMENT MARKING, SOLID, BLACK	24,500	Sft	\$1.50	\$36,750.00
13	6200534	AIRPORT PAVEMENT MARKING, SOLID, WHITE, WITH REFLECTIVE BEADS	31,500	Sft	\$1.50	\$47,250.00
14	6200535	AIRPORT PAVEMENT MARKING, SOLID, YELLOW, WITH REFLECTIVE BEADS	14,500	Sft	\$1.50	\$21,750.00
15	7017051	MISC. DRAINAGE	1	LS	\$100,000.00	\$100,000.00
16	7050511	PIPE UNDERDRAIN 6", TYPE AS SPECIFIED	4,470	Lft	\$8.00	\$35,760.00
17	7050525	UNDERDRAIN CLEANOUT, AS SPECIFIED	11	Ea	\$600.00	\$6,600.00
18	9010517	TURFING WITH MIXTURE AND RATE, AS SPECIFIED	5	Acre	\$4,000.00	\$20,000.00
TOTAL CONSTRUCTION COST						\$1,636,000.00
COST ESCALATION FOR 2016 (2%+/- PER YEAR)						\$65,000.00
DESIGN ENGINEERING & ADMINISTRATION						\$153,000.00
CONSTRUCTION INSPECTION & ADMINISTRATION						\$196,000.00
TOTAL PROJECT COST						\$2,050,000.00



PROBABLE PROJECT COST

ANN ARBOR MUNICIPAL AIRPORT
ANN ARBOR, MI
JOINT SEALING AND PAVEMENT REMARKING

N75.MKT.CRM

08/24/14

ITEM NO	MDOT SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	1000400	MOBILIZATION AND GENERAL CONDITIONS	1	LS	\$5,000.00	\$5,000.00
2	1000410	SAFETY AND SECURITY	1	LS	\$2,000.00	\$2,000.00
3	6057051	MISC. PAVEMENT REPAIRS	1	LS	\$33,000.00	\$33,000.00
4	6207051	MISC. PAINT MARKINGS	1	LS	\$86,000.00	\$86,000.00
TOTAL CONSTRUCTION COST						\$126,000.00
COST ESCALATION FOR 2017 (2%+/- PER YEAR)						\$8,000.00
DESIGN ENGINEERING & ADMINISTRATION						\$16,000.00
CONSTRUCTION INSPECTION & ADMINISTRATION						\$20,000.00
TOTAL PROJECT COST						\$170,000.00



TERMINAL BUILDING

ANN ARBOR MUNICIPAL AIRPORT
ANN ARBOR , MI
TERMINAL RENOVATION AND EXPANSION

N75.MKT.CRM

08/14/14

ITEM NO	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	MOBILIZATION AND GENERAL CONDITIONS	1	LS	\$10,000.00	\$10,000.00
2	SAFETY AND SECURITY	1	LS	\$10,000.00	\$10,000.00
3	BUILDING RESTORATION	3,000	SF	\$130.00	\$390,000.00
4	MISC. SITEWORK	1	LS	\$12,000.00	\$12,000.00
5	BUILDING CONSTRUCTION	1,000	SF	\$150.00	\$150,000.00
	TOTAL CONSTRUCTION COST				\$572,000.00
	COST ESCALATION (2%+/- PER YEAR)				\$57,000.00
	DESIGN ENGINEERING & ADMINISTRATION				\$57,000.00
	CONSTRUCTION INSPECTION & ADMINISTRATION				\$75,000.00
	TOTAL PROJECT COST				\$761,000.00

Runway & Taxiway Extension Track

Ann Arbor Municipal Airport - ARB

2015	Available Federal Entitlements (NPE) \$571,000 (\$421,000 Carryover from 2014)								
	Final Design and Approach Survey (Phase II) Runway 6/24 Extension								\$233,000
	Carryover \$361,000	(Local \$11,650)	Total \$233,000						
2016	Available Federal Entitlements (NPE) \$511,000 (\$361,000 carryover from 2015,								
	800' Runway 6/24 & Taxiway A Extension Constructor		\$1,897,000						
	Install Runway 6/24 & Taxiway Lighting - Desigr		\$57,000						
	Install Runway 6/24 & Taxiway Lighting - Constructor		\$702,000						
	Carryover \$0 Need an additional \$1,879,400 of Federal funding	(Local \$132,800)	Total \$2,656,000						
2017	Available Federal Entitlements (NPE) \$150,000 (\$0k Carryover from 2016)								
	Rehab Existing Airport Access Road (Airport Blvd.)		\$407,000						
	Rehab Existing Airport Access Road (Airport Blvd.) - Desigr		\$32,000						
	Carryover \$0 Need an additional \$245,100 of Federal funding	(Local \$21,950)	Total \$439,000						
2018	Available Federal Entitlements (NPE) \$150,000 (\$0 Carryover from 2017)								
	Terminal Building Parking Lot Expansion - Desigr		\$33,000						
	Terminal Building Parking Lot Expansion - Constructor		\$323,000						
	Carryover \$0 Need an additional \$170,400 of Federal funding	(Local \$17,800)	Total \$356,000						
2019	Available Federal Entitlements (NPE) \$150,000 (\$0 Carryover from 2018)								
	Terminal Building Expansion and Renovation Study		\$15,000						
	Carryover \$136,500	(Local \$750)	Total \$15,000						

No Runway and Taxiway Extension Track

Ann Arbor Municipal Airport - ARB

2015	Available Federal Entitlements (NPE) \$571,000 (\$421,000 Carryover from 2014)								
	Rehab Existing Airport Access Road (Airport Blvd.)		\$407,000						
	Rehab Existing Airport Access Road (Airport Blvd.) - Desigr		\$32,000						
	Carryover \$175,900	(Local \$21,950)	Total \$439,000						
2016	Available Federal Entitlements (NPE) \$325,900 (\$175,900 Carryover from 2015,								
	Terminal Building Parking Lot Expansion - Desigr		\$33,000						
	Terminal Building Parking Lot Expansion - Constructor		\$323,000						
	Carryover \$5,500	(Local \$17,800)	Total \$356,000						
2017	Available Federal Entitlements (NPE) \$155,500 (\$5,500 Carryover from 2016,								
	Rehab Runway 6/24 and Taxiways (all) - Joints and Remarking - Desigr		\$16,000						
	Rehab Runway 6/24 and Taxiways (all) - Joints and Remarking - Construction		\$154,000						
	Carryover \$2,500	(Local \$8,500)	Total \$170,000						
2018	Available Federal Entitlements (NPE) \$152,500 (\$2,500 Carryover from 2017,								
	Terminal Building Expansion and Renovation Study		\$15,000						
	Carryover \$139,000	(Local \$750)	Total \$15,000						
2019	Available Federal Entitlements (NPE) \$289,000 (\$139,000 Carryover from 2018,								
	Terminal Building Expansion - Desigr		\$57,000						
	Terminal Building Expansion - Construction		\$704,000						
	Carryover \$0 Need an additional \$395,900 of Federal funding	(Local \$38,050)	Total \$761,000						

TEN-YEAR AIRPORT CAPITAL IMPROVEMENT PROGRAM (CIP) FY-2015 to FY-2025

Ann Arbor Municipal Airport - ARB

2015	Available Federal Entitlements (NPE) \$571,000 (\$421,000 Carryover from 2014)	
	Final Design and Approach Survey (Phase II) Runway 6/24 Extension	\$233,000
	Rehab Existing Airport Access Road (Airport Blvd.)	\$407,000
	Rehab Existing Airport Access Road (Airport Blvd.) - Design	\$32,000
		(Local \$33,600) Total \$672,000
2016	800' Runway 6/24 & Taxiway A Extension Construction	\$1,897,000
	Install Runway 6/24 & Taxiway Lighting - Design	\$57,000
	Install Runway 6/24 & Taxiway Lighting - Construction	\$702,000
	Terminal Building Parking Lot Expansion - Design	\$33,000
	Terminal Building Parking Lot Expansion - Construction	\$323,000
		(Local \$150,600) Total \$3,012,000
2017	Rehab Runway 6/24 and Taxiways (all) - Pavement Joints and Remarketing - Design	\$16,000
	Rehab Runway 6/24 and Taxiways (all) - Pavement Joints and Remarketing - Construction	\$154,000
2018	Terminal Building Expansion and Renovation Study	\$15,000
2019	Terminal Building Expansion - Design	\$57,000
	Terminal Building Expansion - Construction	\$704,000
2020	Rehab Existing Airport Access Road (Airport Drive - Phase I)	\$219,000
2021	Rehab Existing Airport Access Road (Airport Drive - Phase II)	\$166,000
2022	Reconstruct SE and NE Taxiways	\$1,138,000
2023	Box Hangar Taxilanes	\$193,000
	SRE Equipment	\$321,000
2024	Rehab and Expand Terminal Ramp & New Lighting	\$1,557,000
	Storm Drainage Improvements/Hangar Site Work	\$128,000
2025	NW T Hangar Access Road Construction	\$353,000
	Upgrade to LED Lighting	