

Ten-Year Airport Capital Improvement Program (ACIP) 2012-2022



Grosse Ile Municipal Airport

Grosse Ile , MI

December 8, 2011

Michigan State Block Grant Program

Submitted by:

Derek Thiel, Airport Manager

Prepared by:

C&S Companies
38777 Six Mile Road, Suite 202
Livonia, MI 48152



38777 Six Mile Road
Suite 202
Livonia, MI 48152

Phone: 734-953-2571
Fax: 734-953-2652
www.cscos.com



PROBABLE PROJECT COST

GROSSE ILE MUNICIPAL AIRPORT
 GROSSE ILE, MI
 TAXIWAY A LIGHTING REHABILITATION & SOUTH SHOULDER RECONSTRUCTION
 BASED ON FY2012 DOLLARS

E39.MKT.CRM

12/08/11

ITEM NO	FAA SPEC	MDOT ITEM NO.	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	P-152	1520410	UNCLASSIFIED EXCAVATION	1800	CY	\$5.00	\$9,000.00
2	P-152	1520472	REMOVAL AND DISPOSAL OF CONCRETE PAVEMENT	4,100	SY	\$5.00	\$20,500.00
3	P-208	2080533	AGGREGATE BASE COURSE, 50% CRUSHED, 1" MAXIMUM, COMPACTED IN PLACE (6.5" THICKNESS)	770	CY	\$30.00	\$23,100.00
4	P-208	2080625	EROSION CONTROL, SILT FENCE	1,400	LF	\$2.00	\$2,800.00
5	P-411	4110620	BITUMINOUS AGGREGATE SURFACE COURSE, 20AAX COMPOSITION	575	TON	\$75.00	\$43,125.00
6	P-605	6050530	JOINT SEALING FILLER, TYPE III, HOT POURED	3,800	LF	\$3.00	\$11,400.00
7	P-620	6200524	REMARKING AIRPORT PAVEMENT, SOLID, BLACK	4,000	SF	\$0.30	\$1,200.00
8	P-620	6200525	REMARKING AIRPORT PAVEMENT, SOLID, WHITE	20,000	SF	\$0.30	\$6,000.00
9	P-620	6200526	REMARKING AIRPORT PAVEMENT, SOLID, YELLOW	4,000	SF	\$0.30	\$1,200.00
10	D-705	7050512	PIPE UNDERDRAIN 6", TYPE AS SPECIFIED	5,000	LF	\$5.00	\$25,000.00
11	D-705	7050525	UNDERDRAIN CLEANOUT, AS SPECIFIED	24	EACH	\$400.00	\$9,600.00
12	T-901	9010517	TURFING WITH MIXTURE AND RATE, AS SPECIFIED	2.1	ACRE	\$2,000.00	\$4,200.00
13	T-905	9050510	TOPSOILING FROM ON-SITE CUT OR STOCKPILE	935	CY	\$5.00	\$4,675.00
14	L-108	1080588	UNDERGROUND CABLE, 1/C, #8, 5000V, L824, TYPE C, IN TRENCH OR DUCT	13,000	LF	\$1.00	\$13,000.00
15	L-108	1087001	MISC. BARE COUNTERPOISE WIRE, #6, SOLID, INSTALLED	11,500	LF	\$1.50	\$17,250.00
16	L-109	1090550	ELECTRICAL HANDHOLE, WITH COVER, AS SPECIFIED	12	EACH	\$600.00	\$7,200.00
17	L-109	1090530	FURNISH & INSTALL SPECIFIED ELECTRICAL VAULT EQUIPMENT	1	LS	\$8,000.00	\$8,000.00
18	L-110	1100614	PLASTIC CONDUIT, 2", DIRECT BURIAL (IN TURF)	7,850	LF	\$4.00	\$31,400.00
19	L-110	1100614	PLASTIC CONDUIT, 2", DIRECT BURIAL (IN PAVT)	3,900	LF	\$15.00	\$58,500.00
20	L-110	1100626	UNDERGROUND ELECTRICAL DUCT, 2 BANK 3", DIRECT BURIAL (DUCT EXTENSIONS)	120	LF	\$40.00	\$4,800.00
21	L-110	1107001	MISC. HDPE CONDUIT, 2 BANK 4", INSTALLED BY DIRECTIONAL DRILLING	650	LF	\$35.00	\$22,750.00
22	L-125	1250591	MEDIUM INTENSITY EDGE LIGHT, L861, (MIRL/MITL), 30" HIGH, 6.6A, BASE MOUNT, COMPLETE EXCEPT LENS AND LAMP	111	EACH	\$700.00	\$77,700.00
23	L-125	1257050	MISC. LED LENS & LAMP ON EX. BASE AND BALLAST	49	EACH	\$300.00	\$14,700.00
24	L-125	1257050	MISC. MEDIUM INTENSITY EDGE LIGHT, L861, (MIRL/MITL), 30" HIGH, 6.6A, BASE MOUNT, COMPLETE WITH LED LENS AND LAMP	39	EACH	\$1,000.00	\$39,000.00
25	L-125	1257051	MISC. REMOVAL OF EXISTING ELECTRICAL SYSTEM (REMOVE LIGHT BASES, TRANSFORMERS, AND SALVAGE LED LIGHTS)	1	LS	\$10,000.00	\$10,000.00
26	L-125	1250798	RELOCATE GUIDANCE SIGN	1	EACH	\$4,000.00	\$4,000.00
27	L-125	1257050	MISC. TAXIWAY GUIDANCE SIGN	1	EACH	\$4,000.00	\$4,000.00
28	M-100	1000410	SAFETY AND SECURITY	1	LS	\$20,000.00	\$20,000.00
29	M-200	1000400	MOBILIZATION (4% MAXIMUM)	1	LS	\$19,900.00	\$19,900.00
CONSTRUCTION COST							\$514,000.00
CONSTRUCTION CONTINGENCY (5%+/-)							\$26,000.00
CONSTRUCTION INSPECTION & ADMINISTRATION (12%+/-)							\$62,000.00
TOTAL PROJECT COST							\$602,000.00

Outdated electrical cables are installed in very shallow cracks to and from each light back to the edge of the former runway. This creates numerous instances of lighting cables laying on top of the old concrete pavement shoulders. This also increases the cable length and load on the taxiway system. A 2008 construction project provided a temporary fix for failed portions of the circuit, however this did not provide a long term solution to the lighting issues. New cables are needed running from light to light in conduit for safety. This will provide a 100% LED Medium Intensity Taxiway Lighting (MITL) system. An updated counterpoise system is needed to protect the new MITL system from lightning strikes in this area with a high water table. A 10' bituminous paved shoulder will be added on the south side of Taxiway A, where currently there is not a paved shoulder. All other taxiways at this airport have paved shoulders. Shoulder is required for removal of snow on airfield surfaces. Paved shoulders are needed to facilitate snow removal and maintenance around the taxiways. A high number of low wing aircraft require snow to be removed past the lights to prevent snow bank build up through the winter. The ground water table is very high in this area and shoulders can be soft to drive on.



PROBABLE PROJECT COST

GROSSE ILE MUNICIPAL AIRPORT
 GROSSE ILE, MI
 TAXIWAY A DRAINAGE IMPROVEMENTS AND NORTH SHOULDER REHABILITATION
 BASED ON FY2012 DOLLARS

E39.MKT.CRM

12/08/11

ITEM NO	FAA SPEC	MDOT ITEM NO.	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	P-152	1520410	UNCLASSIFIED EXCAVATION	600	CY	\$5.00	\$3,000.00
2	P-152	1520472	REMOVAL AND DISPOSAL OF CONCRETE PAVEMENT	1,900	SY	\$5.00	\$9,500.00
3	P-208	2080533	AGGREGATE BASE COURSE, 50% CRUSHED, 1" MAXIMUM, COMPACTED IN PLACE (6.5" THICKNESS)	400	CY	\$30.00	\$12,000.00
4	P-208	2080620	EROSION CONTROL, INLET FILTER	24	EACH	\$50.00	\$1,200.00
5	P-208	2087051	EROSION CONTROL, INLET PROTECTION	5	EACH	\$150.00	\$750.00
6	N/A	4000531	COLD MILL BITUMINOUS PAVEMENT, SPECIFIED THICKNESS	4,500	SY	\$3.00	\$13,500.00
7	P-411	4110620	BITUMINOUS AGGREGATE SURFACE COURSE, 20AAX COMPOSITION	1,300	TON	\$75.00	\$97,500.00
8	P-603	6030515	BITUMINOUS TACK COAT, SPECIFIED EMULSIFIED ASPHALT	1,600	GAL	\$2.00	\$3,200.00
9	P-605	6050530	JOINT SEALING FILLER, TYPE III, HOT POURED	10,600	LF	\$3.00	\$31,800.00
10	P-620	6200524	REMARKING AIRPORT PAVEMENT, SOLID, BLACK	8,300	SF	\$0.30	\$2,490.00
11	P-620	6200526	REMARKING AIRPORT PAVEMENT, SOLID, YELLOW	8,700	SF	\$0.30	\$2,610.00
12	D-705	7050512	PIPE UNDERDRAIN 6", TYPE AS SPECIFIED	5,750	LF	\$10.00	\$57,500.00
13	D-705	7050525	UNDERDRAIN CLEANOUT, AS SPECIFIED	24	EACH	\$400.00	\$9,600.00
14	D-751	7510521	CATCH BASIN 4' DIAMETER, TYPE 2, THROUGH 8' DEPTH	6	EACH	\$2,000.00	\$12,000.00
15	D-751	7510584	DRAINAGE STRUCTURE COVER, TYPE A, IN PLACE	7	EACH	\$750.00	\$5,250.00
16	D-751	7517050	MISC. DRAINAGE STRUCTURE	1	EACH	\$2,000.00	\$2,000.00
17	D-751	7517050	MISC. DRAINAGE STRUCTURE COVER	1	EACH	\$750.00	\$750.00
18	T-901	9010517	TURFING WITH MIXTURE AND RATE, AS SPECIFIED	0.5	ACRE	\$2,000.00	\$1,000.00
19	T-905	9050510	TOPSOILING FROM ON-SITE CUT OR STOCKPILE	215	CY	\$5.00	\$1,075.00
20	M-100	1000410	SAFETY AND SECURITY	1	LS	\$20,000.00	\$20,000.00
21	M-200	1000400	MOBILIZATION (4% MAXIMUM)	1	LS	\$11,275.00	\$11,275.00
CONSTRUCTION COST							\$298,000.00
CONSTRUCTION CONTINGENCY (5%+/-)							\$15,000.00
CONSTRUCTION INSPECTION & ADMINISTRATION (12%+/-)							\$36,000.00
TOTAL PROJECT COST							\$349,000.00

Drainage improvements will include replacement of existing catch basins and underdrain installation. A 10' bituminous paved shoulder will be rehabilitated around Taxiway A on the north side, with new shoulder constructed in limited areas that are currently turf. All other taxiways at this airport have paved shoulders. Shoulder is required for removal of snow on airfield surfaces. Paved shoulders are needed to facilitate snow removal and maintenance around the taxiways. A high number of low wing aircraft require snow to be removed past the lights to prevent snow bank build up through the winter. The ground water table is very high in this area and shoulders can be soft to drive on. Underdrain will provide drainage improvements which are needed to reduce hydraulic pressure under pavement.



PROBABLE PROJECT COST

GROSSE ILE MUNICIPAL AIRPORT
GROSSE ILE, MI
SRE - USED PLOW TRUCK
BASED ON FY 2012 DOLLARS

E39.MKT.CRM

07/26/11

ITEM	FAA					UNIT	
NO	SPEC	DESCRIPTION		QUANTITY	UNITS	PRICE	TOTAL
1	NA	SRE USED PLOW TRUCK		1	LS	\$65,000.00	\$65,000.00
		TOTAL CONSTRUCTION COST					\$65,000.00
		ENGINEERING DESIGN (7%+/-)					\$4,500.00
TOTAL PROJECT COST							\$69,500.00

JUSTIFICATION

A new plow truck is needed to replace existing trucks. Existing trucks include a 1986 International Harvester S-2500 5-Ton dump truck that is unable to pass DOT inspection and thus cannot leave airport premises and a 1958 10-Ton Cargo Army Mack Truck / M125 that is no longer running. A functioning truck is needed to safely clear snow from airport pavements. A newer "used" vehicle 2-3 years old may fit the airports needs while staying within available funding.



PROBABLE PROJECT COST

GROSSE ILE MUNICIPAL AIRPORT
GROSSE ILE, MI
JOINT REPAIR AND REPLACEMENT
BASED ON FY 2012 DOLLARS

E39.MKT.CRM

07/26/11

ITEM	FAA						
NO	SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL	
1	P-152	JOINT REPAIR	4,500	LF	\$3.00	\$13,500.00	
2	P-620	PAVEMENT MARKING	350,000	SF	\$0.22	\$77,000.00	
3	M-100	SAFETY AND SECURITY	1	LS	\$1,200.00	\$1,200.00	
4	M-200	MOBILIZATION (4% MAXIMUM)	1	LS	\$3,300.00	\$3,300.00	
		CONSTRUCTION COST				\$95,000.00	
		CONSTRUCTION INSPECTION & ADMINISTRATION (12%+/-)				\$11,000.00	
TOTAL PROJECT COST						\$106,000.00	

JUSTIFICATION

Both Runways and Taxiways to be remarked due to existing pavement markings fading. Minor joint repairs will be performed as necessary.



PROBABLE PROJECT COST

GROSSE ILE MUNICIPAL AIRPORT
GROSSE ILE, MI
GENERAL AVIATION APRON REHAB AND DRAINAGE
BASED ON FY 2012 DOLLARS

E39.MKT.CRM

11/04/11

ITEM NO	FAA SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	P-101	CONCRETE SLAB REPLACEMENT (20% OF SLABS)	7,000	SY	\$40.00	\$280,000.00
2	D-701	TRENCH DRAINS	1,500	LF	\$35.00	\$52,500.00
3	D-751	CATCH BASIN REPAIR	10	EACH	\$3,000.00	\$30,000.00
4	D-701	ROOF DRAINS (ONE SIDE)	750	LF	\$10.00	\$7,500.00
5	D-754	GUTTERS	400	LF	\$5.00	\$2,000.00
6	D-705	UNDERDRAIN	2,000	LF	\$9.00	\$18,000.00
7	D-705	CLEANOUTS	10	EACH	\$450.00	\$4,500.00
8	D-701	SLIP LINE EXISTING PIPE	2,000	EACH	\$32.00	\$64,000.00
9	P-620	PAVEMENT MARKING	6,000	SF	\$0.50	\$3,000.00
10	L-125	TIE-DOWNS	24	EACH	\$400.00	\$9,600.00
13	M-100	SAFTEY AND SECURITY	1	LS	\$15,000.00	\$15,000.00
14	M-200	MOBILIZATION (4% MAXIMUM)	1	LS	\$19,900.00	\$19,900.00
CONSTRUCTION COST						\$506,000.00
CONSTRUCTION INSPECTION & ADMINISTRATION (12%+/-)						\$61,000.00
TOTAL PROJECT COST						\$567,000.00

JUSTIFICATION

Portions of the concrete apron and ramp have failed and need to be replaced. Apron repair is needed to maintain a safe surface for aircraft to operate. 2011 PCIs were between 68 and 76 in this area. Most failure is due to failed drainage system under pavement. Underdrains will be installed along the pavement edge to reduce water in this area. Catch basins and surrounding slabs will be repaired. Damaged pipes will be slip lined and other work done to economically repair the system for longer pavement life.



PROBABLE PROJECT COST

GROSSE ILE MUNICIPAL AIRPORT
 GROSSE ILE, MI
 HOLD BAY CONSTRUCTION
 BASED ON FY 2012 DOLLARS

E39.MKT.CRM

11/04/11

ITEM NO	FAA SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	P-152	UNCLASSIFIED EXCAVATION	5,600	CY	\$5.00	\$28,000.00
2	P-152	REMOVAL AND DISPOSAL OF CONCRETE PAVEMENT	4,000	SY	\$5.00	\$20,000.00
3	P-208	AGGREGATE BASE COURSE, 50% CRUSHED, 1" MAXIMUM, COMPACTED IN PLACE (12" AND 6" THICKNESS)	1,600	CY	\$30.00	\$48,000.00
4	P-411	BITUMINOUS AGGREGATE SURFACE COURSE, 20AAX COMPOSITION (3" SHOULDER THICKNESS)	200	TON	\$75.00	\$15,000.00
5	P-501	PORTLAND CEMENT CONCRETE PAVEMENT, 6" REINFORCED	3,600	SY	\$50.00	\$180,000.00
6	P-605	JOINT SEALING FILLER, MATERIAL AS SPECIFIED	5,000	LF	\$3.00	\$15,000.00
7	P-620	AIRPORT PAVEMENT MARKING, SOLID, YELLOW	2,000	SF	\$0.30	\$600.00
8	D-705	PIPE UNDERDRAIN 6", TYPE AS SPECIFIED	1,000	LF	\$7.00	\$7,000.00
9	D-705	UNDERDRAIN CLEANOUT, AS SPECIFIED	4	EACH	\$400.00	\$1,600.00
10	T-901	TURFING WITH MIXTURE AND RATE, AS SPECIFIED	1	ACRE	\$2,500.00	\$2,500.00
11	T-905	TOPSOILING FROM ON-SITE CUT OR STOCKPILE	500	CY	\$5.00	\$2,500.00
12	L-108	UNDERGROUND CABLE, 1/C, #8, 5000V, L824, TYPE C, IN TRENCH OR DUCT	800	LF	\$1.00	\$800.00
13	L-108	MISC. BARE COUNTERPOISE WIRE, #6, SOLID, INSTALLED	800	LF	\$1.50	\$1,200.00
14	L-109	ELECTRICAL HANDHOLE, WITH COVER, AS SPECIFIED	2	EACH	\$600.00	\$1,200.00
15	L-110	PLASTIC CONDUIT, 2", DIRECT BURIAL	800	LF	\$4.00	\$3,200.00
16	L-125	MEDIUM INTENSITY EDGE LIGHT, L861, (MIRL/MITL), 30" HIGH, 6.6A, BASE MOUNT, COMPLETE EXCEPT LENS AND LAMP	15	EACH	\$700.00	\$10,500.00
17	L-125	REMOVE EXISTING MEDIUM INTENSITY BASE MOUNTED LIGHT	3	EACH	\$300.00	\$900.00
18	L-125	MISC. LED LENS & LAMP	15	EACH	\$300.00	\$4,500.00
19	M-100	SAFETY AND SECURITY	1	LS	\$7,500.00	\$7,500.00
20	M-200	MOBILIZATION (4% MAXIMUM)	1	LS	\$14,000.00	\$14,000.00
CONSTRUCTION COST						\$364,000.00
CONSTRUCTION INSPECTION & ADMINISTRATION (12%+/-)						\$44,000.00
TOTAL PROJECT COST						\$408,000.00

JUSTIFICATION

The hold bay is needed adjacent Taxiway C so that aircraft can pull off the taxiway to do their run-ups. Currently aircraft can get backed up on the taxiway and have to wait for others to move out of the way.



PROBABLE PROJECT COST

GROSSE ILE MUNICIPAL AIRPORT
GROSSE ILE, MI
T-HANGAR ROOF REPLACEMENT
BASED ON FY 2012 DOLLARS

E39.MKT.CRM

07/26/11

ITEM NO	FAA SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	NA	REPLACE ROOF	1	LS	\$35,000.00	\$35,000.00
		TOTAL CONSTRUCTION COST				\$35,000.00
		ENGINEERING DESIGN (5%+/-)				\$1,750.00
TOTAL PROJECT COST						\$36,750.00

JUSTIFICATION

Existing hangar roofs are failing and require rehabilitation or replacement. Based upon contractor estimates and evaluation, the roof condition may exceed the point where membrane installation for rehabilitation is possible, requiring full roof replacement. Costs associated with these improvements are capital intensive, which will affect the ability of the airport to generate local match for future projects. Similarly, keeping these buildings in a condition that they can be rented provides a revenue source for the airport, which is crucial to local match development for other projects.



PROBABLE PROJECT COST

GROSSE ILE MUNICIPAL AIRPORT
 GROSSE ILE, MI
 LED MIRL, OTHER LIGHTING IMPROVEMENTS, AWOS REPLACEMENT
 BASED ON FY 2012 DOLLARS

E39.MKT.CRM

07/26/11

ITEM NO	FAA SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	L-125	REMOVAL OF EXISTING ELECTRICAL SYSTEM	1	LS	\$5,000.00	\$5,000.00
2	L-108	COUNTERPOISE WIRE IN TURF	5,000	LF	\$1.00	\$5,000.00
3	L-108	COUNTERPOISE WIRE IN PAVEMENT	5,000	LF	\$1.50	\$7,500.00
4	L-108	#8, 5KV CABLE IN CONDUIT, IN TURF	5,000	LF	\$2.50	\$12,500.00
5	L-108	#8, 5KV CABLE IN CONDUIT, IN PAVEMENT	5,000	LF	\$2.25	\$11,250.00
6	L-125	NEW BASE AND BALLAST FOR EX. LED MIRL	110	EACH	\$750.00	\$82,500.00
7	L-125	NEW LED MIRL AND BALLAST ON EX. BASE	55	EACH	\$550.00	\$30,250.00
8	L-115	ELECTRICAL HANDHOLE	8	EACH	\$500.00	\$4,000.00
9	L-110	DUCT EXTENSIONS	180	LF	\$10.00	\$1,800.00
10	L-125	NEW RUNWAY GUIDANCE SIGN	1	EACH	\$2,300.00	\$2,300.00
11	L-125	AWOS LIGHTING REPLACEMENT	1	LS	\$8,000.00	\$8,000.00
12	L-125	BEACON LIGHTING REPLACEMENT	1	LS	\$4,000.00	\$4,000.00
13	L-125	WINDCONE LIGHTING REPLACEMENT	1	LS	\$8,000.00	\$8,000.00
14	L-125	RELOCATE TAXIWAY GUIDANCE SIGN	1	EACH	\$600.00	\$600.00
15	M-100	SAFETY AND SECURITY	1	LS	\$10,000.00	\$10,000.00
16	M-200	MOBILIZATION (4% MAXIMUM)	1	LS	\$7,300.00	\$7,300.00
CONSTRUCTION COST						\$200,000.00
CONSTRUCTION INSPECTION & ADMINISTRATION (12%+/-)						\$24,000.00
TOTAL PROJECT COST						\$224,000.00

JUSTIFICATION

Existing electrical lighting will be upgraded to energy efficient fixtures to reduce maintenance costs and improve up-time. REILs will be replaced with low intensity LED units on Runway 4-22 and new REIL units added for Runway 17-35. MIRL will be replaced on both runways. Windcones will be replaced with LED units. Beacon head will be replaced with LED unit. Existing tetrahedron will be rehabilitated with LED bulbs. Existing AWOS parts have exceeded their useful life, new components will be used to replace obsolete items on existing AWOS tower.



PROBABLE PROJECT COST

GROSSE ILE MUNICIPAL AIRPORT
GROSSE ILE, MI

E39.MKT.CRM

EXTEND AIRPORT FENCE AND REPAIR GATES - PHASE II
BASED ON FY 2012 DOLLARS

07/26/11

ITEM NO	FAA SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	F-162	REMOVE EXISTING FENCE	2,000	LF	\$5.00	\$10,000.00
2	F-162	10 FT CHAIN LINK FENCE	1,500	LF	\$25.00	\$37,500.00
3	F-162	ORNAMENTAL FENCE	500	LF	\$60.00	\$30,000.00
4	F-162	REPAIR GATES	1	LS	\$5,000.00	\$5,000.00
5	M-100	SAFETY AND SECURITY	1	LS	\$10,000.00	\$10,000.00
6	M-200	MOBILIZATION (4% MAXIMUM)	1	LS	\$13,500.00	\$13,500.00
CONSTRUCTION COST						\$96,000.00
CONSTRUCTION INSPECTION & ADMINISTRATION (12%+/-)						\$12,000.00
<hr/> TOTAL PROJECT COST						<hr/> \$108,000.00

JUSTIFICATION

Fencing is needed for wildlife and security. Goal is to enclose airport with 10' fence in all areas where possible to control deer access to the airport. Part C-D - West Property Line: Sections of existing 4' fence along the northwest property corner will be removed and disposed of off-site. New Class E fence with top rails will be installed along the same fence line. All new posts will be driven rather than set in concrete footings. Sections of new fence will be tied into existing gate and fence components as necessary to maintain perimeter security. Part F-G - Township Hall Fence Rehabilitation (North/West Project Area): Sections of existing 4' fence along the northwest property corner along Groh Road will be removed and replaced with ornamental black fence similar to the existing fence near Township Hall. This new fence will be tied into the existing gate and fence components as necessary to maintain perimeter security. The existing Gate #2 will also be replaced at this time.



PROBABLE PROJECT COST

GROSSE ILE MUNICIPAL AIRPORT
GROSSE ILE, MI
50' X 50' SRE POLE BUILDING
BASED ON FY 2012 DOLLARS

E39.MKT.CRM

07/26/11

ITEM NO	FAA SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	NA	SNOW REMOVAL EQUIPMENT BUILDING	1	LS	\$130,000.00	\$130,000.00
		TOTAL CONSTRUCTION COST				\$130,000.00
		ENGINEERING DESIGN (7%+/-)				\$9,100.00
TOTAL PROJECT COST						\$139,100.00

JUSTIFICATION

Airport does not currently have a Snow Removal Equipment (SRE) building. Equipment is kept in the City DPW building. With added equipment there will be a need for additional space. Building is to be heated. Heavy SRE vehicle maintenance to be done in City DPW building.



PROBABLE PROJECT COST

GROSSE ILE MUNICIPAL AIRPORT
GROSSE ILE, MI
SRE BUILDING SITE WORK
BASED ON FY 2012 DOLLARS

E39.MKT.CRM

07/26/11

ITEM	FAA						
NO	SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL	
1	P-152	UNCLASSIFIED EXCAVATION	1,400	CY	\$4.00	\$5,600.00	
2	P-208	SUBBASE COURSE, 12"	800	CY	\$15.00	\$12,000.00	
3	P-208	AGGREGATE BASE COURSE, 6"	400	CY	\$35.00	\$14,000.00	
4	P-411	BITUMINOUS PAVMENT	100	TON	\$100.00	\$10,000.00	
5	D-701	DRAINAGE	1	LS	\$5,000.00	\$5,000.00	
6	T-905	TURFING AND MULCHING	0.5	ACRE	\$2,000.00	\$1,000.00	
7	P-620	PAVEMENT MARKING	300	SF	\$1.50	\$450.00	
8	M-100	SAFTEY AND SECURITY	1	LS	\$6,000.00	\$6,000.00	
9	M-200	MOBILIZATION (4% MAXIMUM)	1	LS	\$1,950.00	\$1,950.00	
CONSTRUCTION COST						\$56,000.00	
CONSTRUCTION INSPECTION & ADMINISTRATION (12%+/-)						\$7,000.00	
<hr/> TOTAL PROJECT COST						\$63,000.00	

JUSTIFICATION

Airport does not currently have a Snow Removal Equipment (SRE) building. Site work will consist of a parking pad in front of the building and an access road to airport pavement on Taxiway A.



PROBABLE PROJECT COST

GROSSE ILE MUNICIPAL AIRPORT
GROSSE ILE, MI
CORPORATE BOX HANGAR DEVELOPMENT
BASED ON FY 2012 DOLLARS

E39.MKT.CRM

07/28/11

ITEM	FAA					UNIT	
NO	SPEC	DESCRIPTION	QUANTITY	UNITS	PRICE	TOTAL	
1	NA	BOX HANGARS	1	LS	\$260,000.00	\$260,000.00	
		TOTAL CONSTRUCTION COST				\$260,000.00	
		ENGINEERING DESIGN (7%+/-)				\$18,200.00	
TOTAL PROJECT COST						\$278,200.00	

JUSTIFICATION

The construction of box hangars at the airport will provide an additional source of revenue.



PROBABLE PROJECT COST

GROSSE ILE MUNICIPAL AIRPORT
GROSSE ILE, MI
SEAPLANE RAMP AND TAXIWAY J
BASED ON FY 2012 DOLLARS

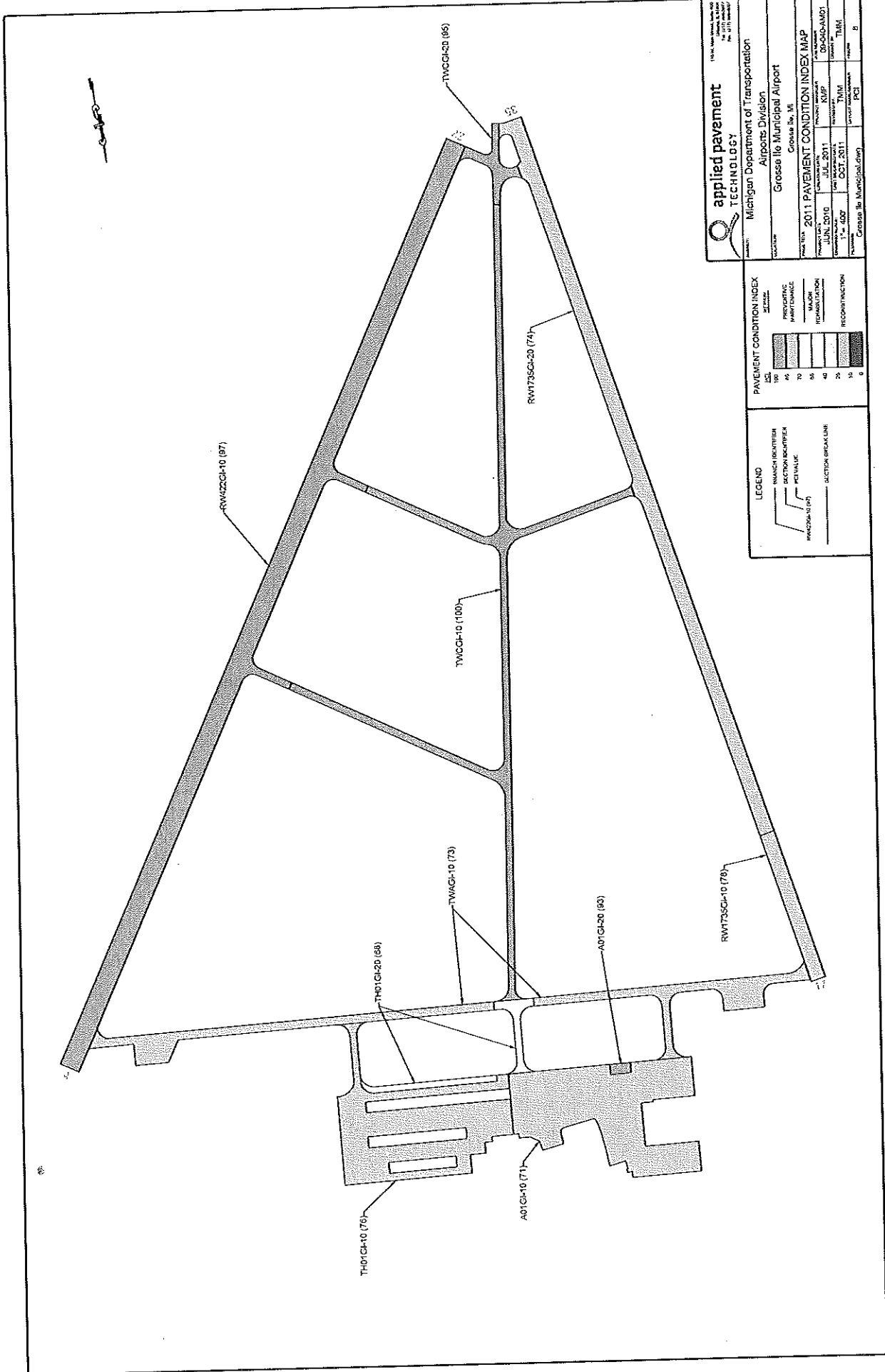
E39.MKT.CRM

07/26/11

ITEM	FAA						
NO	SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL	
1	P-152	UNCLASSIFIED EXCAVATION	1,500	CY	\$4.00	\$6,000.00	
2	P-208	SUBBASE COURSE, 12"	1,000	CY	\$15.00	\$15,000.00	
3	P-208	AGGREGATE BASE COURSE, 6"	500	CY	\$35.00	\$17,500.00	
4	P-411	BITUMINOUS SHOULDERS	200	TON	\$75.00	\$15,000.00	
5	P-501	6" CONCRETE PAVEMENT	2,500	SY	\$35.00	\$87,500.00	
6	D-701	DRAINAGE	1	LS	\$10,000.00	\$10,000.00	
7	T-905	TURFING AND MULCHING	2.0	ACRE	\$2,000.00	\$4,000.00	
8	P-620	PAVEMENT MARKING	8,000	SF	\$1.00	\$8,000.00	
9	L-108	COUNTERPOISE WIRE	1,000	LF	\$2.50	\$2,500.00	
10	L-108	#8, 5KV CABLE IN CONDUIT	1,000	LF	\$3.00	\$3,000.00	
11	L-110	MEDIUM INTENSITY TAXIWAY LIGHTING	20	EACH	\$1,000.00	\$20,000.00	
12	L-125	NEW TAXIWAY GUIDANCE SIGN	2	EACH	\$2,300.00	\$4,600.00	
13	M-100	SAFETY AND SECURITY	1	LS	\$8,000.00	\$8,000.00	
14	M-200	MOBILIZATION (4% MAXIMUM)	1	LS	\$7,900.00	\$7,900.00	
CONSTRUCTION COST						\$209,000.00	
CONSTRUCTION INSPECTION & ADMINISTRATION (12%+/-)						\$25,000.00	
TOTAL PROJECT COST						\$234,000.00	

JUSTIFICATION

Existing seaplane ramp is deteriorated and does not have a full taxiway. A new ramp will be constructed with a new taxiway to the end of Runway 4. Existing taxiway is not to standards.



applied pavement TECHNOLOGY
 Michigan Department of Transportation
 Airports Division
 Grosse Ile Municipal Airport
 Grosse Ile, MI

2011 PAVEMENT CONDITION INDEX MAP

PROJECT: JUN. 2010
 PREPARED BY: JULIE 2011
 DATE: OCT. 2011
 SCALE: 1" = 500'
 COUNTY: TRIM
 SHEET: 8
 TOTAL SHEETS: 8

PAVEMENT CONDITION INDEX

PCI RANGE	PAVEMENT CONDITION
95-100	PREVENTIVE MAINTENANCE
85-94	MAJOR REPAIRS
70-84	RECONSTRUCTION
55-69	
40-54	
25-39	
10-24	
0-9	

LEGEND

- BRANCH IDENTIFIER
- SECTION IDENTIFIER
- PCI VALUE
- SECTION BREAKLINE

MARK	DESCRIPTION	DATE
▲		
▲		
▲		
▲		
▲		

PROJECT NO.:	ESB/MKT/CRM
DATE:	DECEMBER 2011
SCALE:	AS SHOWN
CADD FILE NO.:	ACIP-PLAN SHEET
PROJECT MGR.:	KUJ
DESIGNED BY:	KUJ
DRAWN BY:	APM
CHECKED BY:	RJK

GROSSE ILE MUNICIPAL AIRPORT
TOWNSHIP OF GROSSE ILE
GROSSE ILE, MI

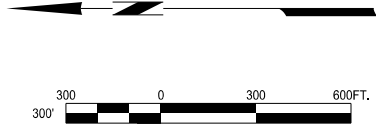
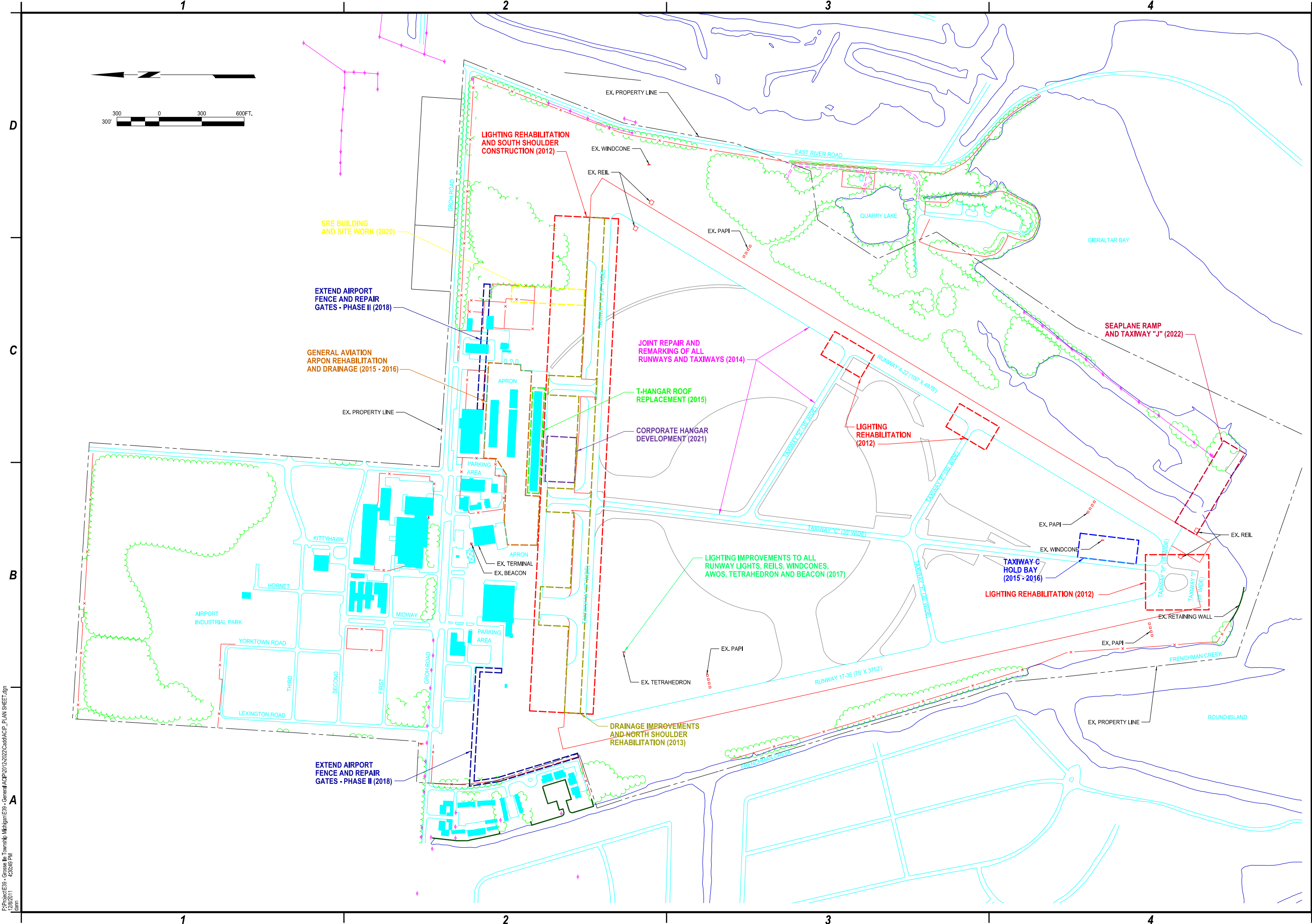
GROSSE ILE
MUNICIPAL AIRPORT
ACIP

SHEET REFERENCE NO.

1

SHEET 1 OF 1

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