

**MICHIGAN AIRPORT DEVELOPMENT  
PROGRAM PACKAGE  
MDOT Multi-Modal Transportation Services Bureau**

**FIVE YEAR CAPITAL IMPROVEMENT PLAN  
2005 - 2009**

---

---

*Prepared for:*

**Fremont Municipal Airport**

**Fremont, Michigan**

**July 1, 2004**



Contact: Mr. Chris Yonker, City Manager  
City of Fremont  
101 East Main Street  
Fremont, MI 49412-1287  
231-924-2101  
231-924-2888 (fax)

## FIVE YEAR DEVELOPMENT PLAN 2005 - 2009

Fremont Municipal Airport  
Fremont, Michigan

Prepared by: 

YEAR	DEVELOPMENT ITEMS	FEDERAL	STATE	LOCAL	TOTAL
2005	Rehabilitate Terminal Apron	\$237,500	\$6,250	\$6,250	\$250,000
	Install AWOS	\$53,200	\$1,400	\$1,400	\$56,000
	Perimeter Fencing for Animal Control	\$693,500	\$18,250	\$18,250	\$730,000
	Year Total	\$984,200	\$25,900	\$25,900	\$1,036,000
2006	Design Runway 18/36 Parallel Taxiway	\$142,500	\$3,750	\$3,750	\$150,000
	Land for RWY 18/36 - ILS & Parallel Taxiway	\$285,000	\$7,500	\$7,500	\$300,000
	Year Total	\$427,500	\$11,250	\$11,250	\$450,000
2007	Construct Parallel Taxiway to RWY 18/36 including MITL	\$2,232,500	\$58,750	\$58,750	\$2,350,000
	Year Total	\$2,232,500	\$58,750	\$58,750	\$2,350,000
2008	Design New Runway 9/27	\$95,000	\$2,500	\$2,500	\$100,000
	Land Acquisition for New 9/27	\$237,500	\$6,250	\$6,250	\$250,000
	Install ILS on Runway 18/36	\$950,000	\$25,000	\$25,000	\$1,000,000
	Year Total	\$1,282,500	\$33,750	\$33,750	\$1,350,000
2009	Construct New Runway 9/27 and Convert Existing Runway to Parallel Taxiway	\$1,615,000	\$42,500	\$42,500	\$1,700,000
	Year Total	\$1,615,000	\$42,500	\$42,500	\$1,700,000

GRAND TOTAL (FIVE YEARS)                      \$6,541,700            \$172,150            \$172,150            \$6,886,000

Revised 06/28/04

**DEVELOPMENT ITEM DISCUSSION**  
**Fremont Municipal Airport**  
**Fremont, Michigan**  
**Fiscal Year 2005**

**Rehabilitate Terminal Apron (12,600 sy)**

Is this development item on the approved ALP? YES

Will this item likely require an environmental assessment? YES

The existing aircraft parking area is directly adjacent to the terminal building and the corporate operations of Gerber Foods. The apron has substantial cracks and requires rehabilitation to maintain the integrity of the pavement.

---

**Install AWOS**

Is this development item on the approved ALP? YES

Will this item likely require an environmental assessment? YES

Installation of an AWOS would provide essential weather information for the corporate and general aviation pilots.

---

**Perimeter Fencing**

Is this development item on the approved ALP? NA

Will this item likely require an environmental assessment? NO

Deer are regularly found on the airport and need to be chased off the facility. Ten foot fencing is needed to keep animals, particularly deer off of the Airport and to improve the security of the Airport.

**DEVELOPMENT ITEM DISCUSSION**  
**Fremont Municipal Airport**  
**Fremont, Michigan**  
**Fiscal Year 2006**

**Design Runway 18/36 Parallel Taxiway**

Is this development item on the approved ALP?	YES
Will this item likely require an environmental assessment?	YES

Runway 18/36 is the primary runway and accommodates 100% of the large aircraft frequenting Fremont Municipal Airport. These large aircraft have difficulty turning around mid-runway to back taxi to the terminal area. The construction of a parallel taxiway to Runway 18/36 would greatly enhance the safety of the airport. Designing the taxiway prior to the planned construction season allows for earlier bid letting and distribution of costs over a multi-year period.

---

**Land Acquisition for Runway 18/36 ILS and Parallel Taxiway**

Is this development item on the approved ALP?	YES
Will this item likely require an environmental assessment?	YES

Some property acquisition is necessary for the installation of the ILS on Runway 18/36 and the parallel taxiway to Runway 18/36. Approximately 11 acres of property will be necessary for the ILS and approximately 17.5 acres of property for avigation easements along the parallel taxiway are necessary for BRL clearance.

**DEVELOPMENT ITEM DISCUSSION**  
**Fremont Municipal Airport**  
**Fremont, Michigan**  
**Fiscal Year 2007**

**Construct Parallel Taxiway to RWY 18/36, including MITL**

Is this development item on the approved ALP? YES

Will this item likely require an environmental assessment? YES

Runway 18/36 is the primary runway and accommodates 100% of the large aircraft frequenting Fremont Municipal Airport. These large aircraft have difficulty turning around mid-runway to back taxi to the terminal area. The construction of a parallel taxiway to Runway 18/36 would greatly enhance the safety of the airport. Design of the taxiway in 2006 would provide bid documents for bid openings in early 2007.

**DEVELOPMENT ITEM DISCUSSION**  
**Fremont Municipal Airport**  
**Fremont, Michigan**  
**Fiscal Year 2008**

**Design Runway 9/27 with MIRL**

Is this development item on the approved ALP?	YES
Will this item likely require an environmental assessment?	YES

The existing runway is located too close to the existing hangar area for a taxiway to be built which would service the full length of the existing runway. The crosswind runway also needs to be extended to provide a feasible alternative to the existing primary runway for use during crosswind conditions. This relocation and extension of the runway to the south would allow the existing runway surface to be used as a parallel taxiway and the construction of a new 4000' crosswind runway.

---

**Land Acquisition for New Runway 9/27**

Is this development item on the approved ALP?	YES
Will this item likely require an environmental assessment?	YES

Some property acquisition is necessary for the relocation of Runway 9/27. Approximately 17 acres of property will be necessary for acquisition of land out to the BRL and the RPZ.

---

**Install ILS on Runway 18/36**

Is this development item on the approved ALP?	YES
Will this item likely require an environmental assessment?	YES

The extensive use of the airport by corporate aircraft necessitates the installation of an ILS to provide a safer, all-weather approach into the airport.

**DEVELOPMENT ITEM DISCUSSION**  
**Fremont Municipal Airport**  
**Fremont, Michigan**  
**Fiscal Year 2009**

**Construct Runway 9/27 and Convert Existing Runway to Parallel Taxiway**

Is this development item on the approved ALP? YES

Will this item likely require an environmental assessment? YES

The existing runway is located too close to the existing hangar area for a taxiway to be built which would service the full length of the existing runway. The crosswind runway also needs to be extended to provide a feasible alternative to the existing primary runway for use during crosswind conditions. This relocation and extension of the runway to the south would allow the existing runway surface to be used as a parallel taxiway and the construction of a new 4000' crosswind runway.







## ENGINEERING COST ESTIMATE

PROJECT: Construct Parallel Taxiway to 18-36  
 LOCATION: Fremont Municipal Airport  
 CITY: Fremont, MI  
 DATE: 10/11/00  
 PREPARED BY: GWS

FINAL DESIGN  
 PROJECT PROGRAMMING  
 FEASIBILITY STUDY  
 STATE PLANNING  
 BASED ON FY 2000 DOLLARS

WORK DESCRIPTION: Construct Twy Parallel to Runway 18-36 (6500' X 50'), including MITL and TGS

ITEM DESCRIPTION	UNIT	QTY	UNIT PRICE	ITEM COST
Mobilization and General Conditions	LS	1	\$50,000.00	\$50,000
Safety and Security	LS	1	\$15,000.00	\$15,000
Unclassified Excavation	CY	48,000	\$5.00	\$240,000
Subbase Course	CY	32,000	\$12.00	\$384,000
Aggregate Base	CY	7,700	\$20.00	\$154,000
Bituminous Pavement	TON	12,000	\$40.00	\$480,000
Pavement Marking	LS	1	\$10,000.00	\$10,000
RCCP Storm Sewer	LF	900	\$35.00	\$31,500
RCCP End Section	EA	6	\$500.00	\$3,000
Underdrains	LF	14,500	\$7.00	\$101,500
Underdrains Cleanouts	EA	40	\$200.00	\$8,000
Porous Backfill	CY	2,450	\$10.00	\$24,500
4-4" Electrical Duct	LF	500	\$25.00	\$12,500
MIRL, Base Mounted	EA	175	\$500.00	\$87,500
Lens and Lamp for MIRL	EA	175	\$42.00	\$7,350
1/C, #8, 5KV Cable	LF	25,000	\$1.00	\$25,000
#8 Bare Copper Counterpoise	LF	20,000	\$0.75	\$15,000
Twy Guidance Signs	EA	20	\$2,000.00	\$40,000
Misc. Vault Equipment	LS	1	\$30,000.00	\$30,000
Remove MIRL	EA	15	\$100.00	\$1,500
Turfing and Mulching	AC	52	\$2,000.00	\$104,000
CONSTRUCTION TOTAL =				\$1,824,350
CONSTRUCTION CONTINGENCIES (15%) =				\$273,653
CONSTRUCTION TOTAL =				\$2,098,003
ENGINEERING DESIGN (7%) =				\$146,860
CONSTRUCTION ADMIN (10%) =				\$209,800
				\$2,454,663
<b>BUDGET ESTIMATE =</b>				<b>\$2,500,000</b>



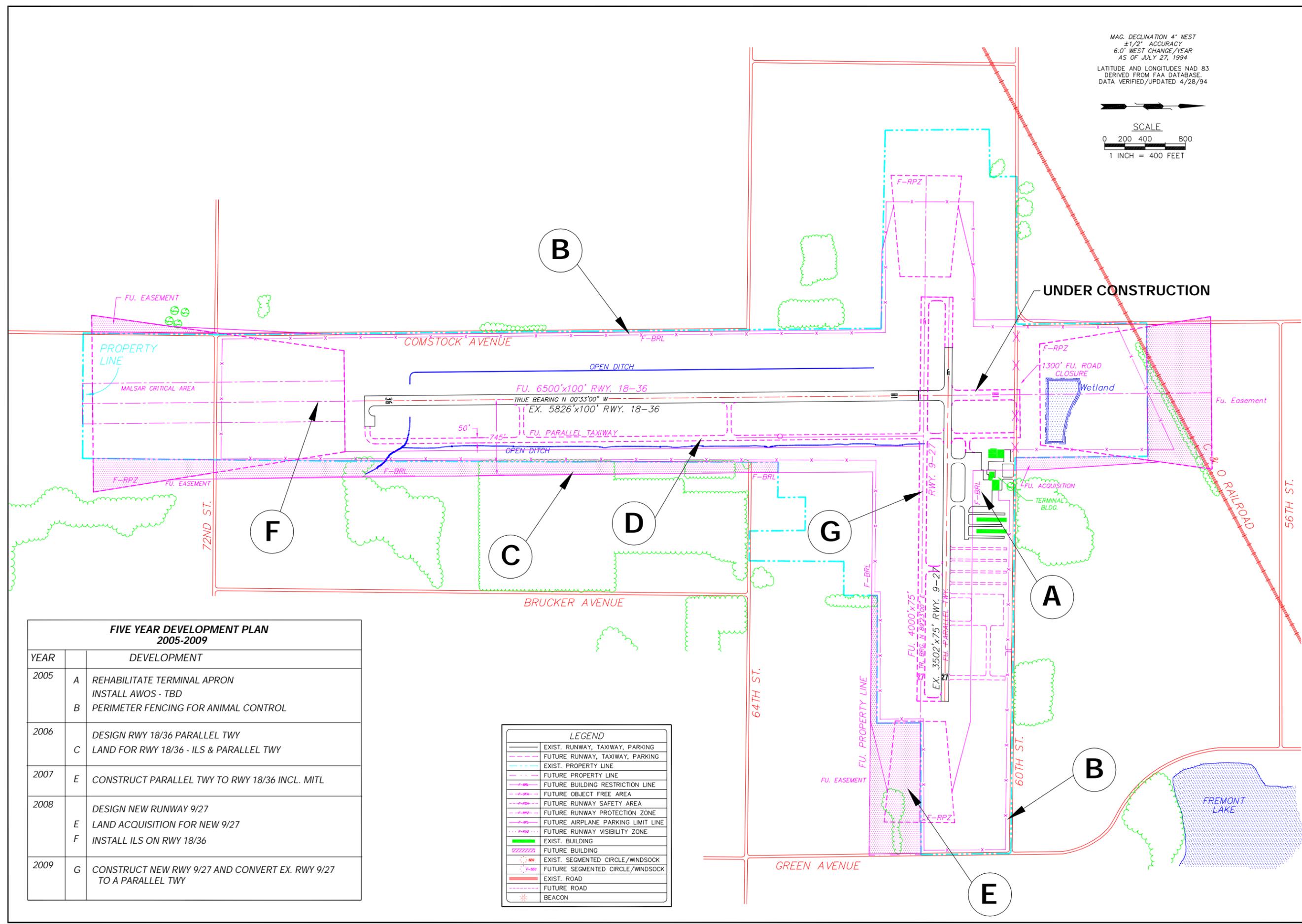
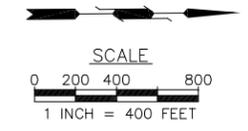
Note: These costs were developed without the benefit of field surveys or soils investigation. A final cost estimate will be dependent upon development of these items and further design.





MAG. DECLINATION 4' WEST  
 ±1/2" ACCURACY  
 6.0" WEST CHANGE/YEAR  
 AS OF JULY 27, 1994

LATITUDE AND LONGITUDES NAD 83  
 DERIVED FROM FAA DATABASE.  
 DATA VERIFIED/UPDATED 4/28/94



FIVE YEAR DEVELOPMENT PLAN 2005-2009	
YEAR	DEVELOPMENT
2005	A REHABILITATE TERMINAL APRON INSTALL AWOS - TBD
	B PERIMETER FENCING FOR ANIMAL CONTROL
2006	DESIGN RWY 18/36 PARALLEL TWY
	C LAND FOR RWY 18/36 - ILS & PARALLEL TWY
2007	E CONSTRUCT PARALLEL TWY TO RWY 18/36 INCL. MITL
2008	DESIGN NEW RUNWAY 9/27
	E LAND ACQUISITION FOR NEW 9/27
	F INSTALL ILS ON RWY 18/36
2009	G CONSTRUCT NEW RWY 9/27 AND CONVERT EX. RWY 9/27 TO A PARALLEL TWY

LEGEND	
	EXIST. RUNWAY, TAXIWAY, PARKING
	FUTURE RUNWAY, TAXIWAY, PARKING
	EXIST. PROPERTY LINE
	FUTURE PROPERTY LINE
	FUTURE BUILDING RESTRICTION LINE
	FUTURE OBJECT FREE AREA
	FUTURE RUNWAY SAFETY AREA
	FUTURE RUNWAY PROTECTION ZONE
	FUTURE AIRPLANE PARKING LIMIT LINE
	FUTURE RUNWAY VISIBILITY ZONE
	EXIST. BUILDING
	FUTURE BUILDING
	EXIST. SEGMENTED CIRCLE/WINDSOCK
	FUTURE SEGMENTED CIRCLE/WINDSOCK
	EXIST. ROAD
	FUTURE ROAD
	BEACON

 ENGINEERS ARCHITECTS SCIENTISTS PLANNERS	BY: CKD
	REVISION
	NO. DATE
	LANSING OFFICE 2005 E. AIRPORT SERVICE DR. LANSING, MI 48208 PHONE # 817-381-8204 FAX # 817-381-8202
DESIGNED	4/01
DRAWN	4/01
CHECKED	4/01
APPROVED	
FREMONT MUNICIPAL AIRPORT FREMONT, MICHIGAN	
FIVE YEAR DEVELOPMENT PLAN	
JOB NO.	
DWG. NO. FRE-EA-FU	
FILE NUMBER 62-3	
SHEET NO. 1 1	