

Marina Municipal Airport (OAR)
 Airport Capital Improvement Plan

**5-Year
 Airport Capital Improvement Plan
 2008-2012**

ADF OR DME REQUIRED



Introduction

The Marina Municipal Airport, aviation identifier OAR, is the newest general aviation airport on the Monterey peninsula. Open for public use since 1995, Marina's airport is the best-kept secret in the region - a facility with lots of potential and growth ahead!

The Marina Municipal Airport is a dynamic and growing general aviation airport owned and operated by the City of Marina. The airport is dedicated to general aviation, business, light industry and recreational roles, and is collaborating with the University of California MBEST Center to create a dynamic economic development growth center for the peninsula region. A lot of growing businesses call the airport home and their activities range from aviation and research to the computer sciences.

1.1 OAR Mission

The airport is on the site of the previous Fritzsche Army Air Field, which served as the airport for former Fort Ord, the former U.S. Army base. As one of the key elements for the Initial Fort Ord Base Reuse Plan, the conversion of the airfield to civilian use was approved in April 1993 by Monterey County and local cities working together as the Ford Ord Reuse Group. In August of 1995, the 845.5 acre site was officially conveyed by the Army to the City of Marina for use as a municipal airfield. The mission of the Airport is to operate the Marina Municipal Airport in a safe, efficient and fiscally responsible manner, so as to allow the provision of air service to the public.

1.2 OAR Objectives

Marina Municipal Airport is committed to the development and service of the Community of Marina and surrounding cities as well as the State of California by providing a platform for transportation. In developing this platform the Airport has put forth the following objectives:

- Enable the implementation of the Airport Master Plan to ensure the long-term viability of the airport.
- Improve the safety and efficiency of circulation patterns on airport roadways.
- Enhance access to critical facilities.

Existing Land Use

The airport consists of approximately 845.5 acres of property. The proposed use of the property is as follows:

Aviation	401.8 Acres
Non-Aviation (Revenue Producing)	265.0 Acres
Habitat Protection	167.1 Acres
FAA Lease	3.5 Acres
Highway Easement	8.1 Acres
TOTAL	845.5 Acres

Source: Marina Municipal Airport Comprehensive Land Use Plan (Figure 2-3) Dated November 18, 1996

The airport has an asphalt runway (11-29) 3,485 feet long and 75 feet wide.

There is a pilot activated medium intensity runway light system that is active at night. The airport also has a restaurant with a full bar, airport conference room and a self-service 24 hour 100 low lead and Jet A aircraft automated fueling station on the field adjacent to the restaurant.

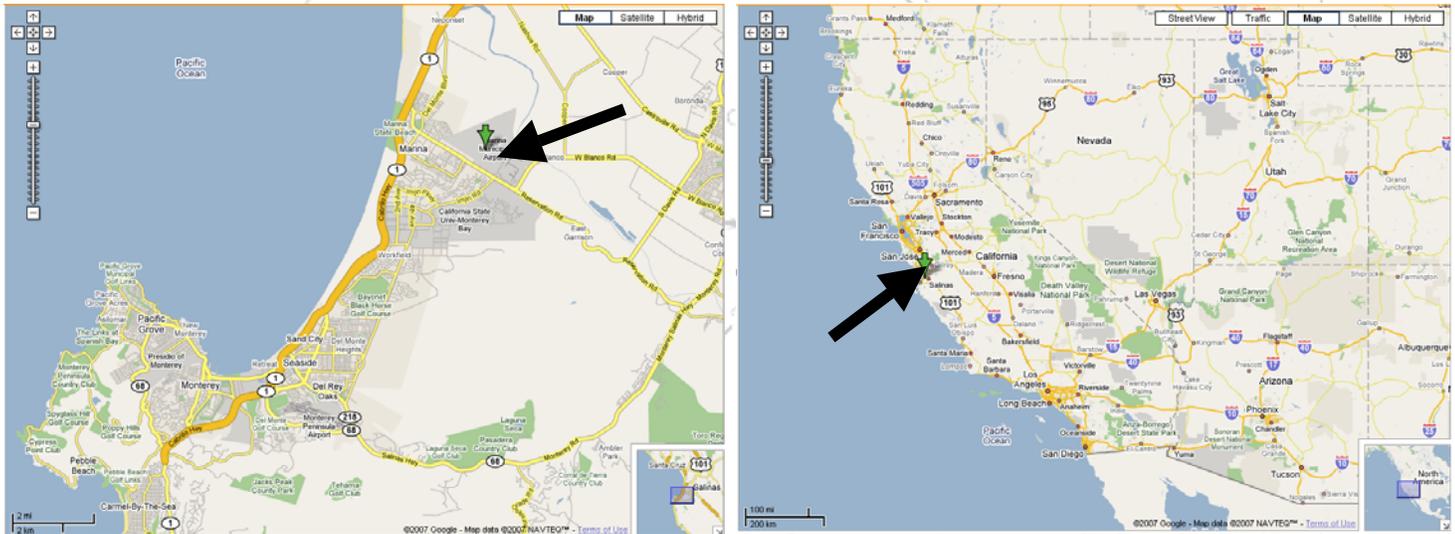
Marina Municipal Airport (OAR)

Airport Capital Improvement Plan

1.3 Keys to Success

The Success of the Airport largely lies on the projects that are contained in this document. These projects not only promote growth of the airport but also enhance the safety and economic viability of this organization. Without these projects, the Marina Municipal Airport would be without the critical foundation necessary to continually meet the needs of the population. The following is a list of Projects that are contained, in detail, within this five year project plan:

Airport Location



Marina Municipal Airport is located in Marina, California at the following address:
781 Neeson Road, Bldg 540, Marina, California 93933.

Airport Facility

The airport consists of approximately 845.5 acres of property.

LAND

The airport consists of 845.5 acres per latest Airport Land use Plan in Appendix (A) dated February 17, 1994.

RUNWAY & TAXIWAYS

The airport consist of a single runway (11/29) which is 75 Feet Wide by 3,483 feet long and a parallel taxiway on the southwest side of the runway with three (3) entry/exit taxiways. The runway orientation for RWY 11-29 is North 58 Degrees, 02 Minutes, and 17 Seconds West, True. An additional 500 feet of former runway overrun pavement has been reclaimed and rehabilitated at the east end so that the runway is now 3,483 feet long. This runway is a non-precision instrument runway and is primarily used for general aviation. Non-precision instrument runway means a runway having an instrument approach procedure utilizing air navigations facilities with only horizontal guidance, or area type navigation for which a straight in non precision instrument approach has been planned or approved.

Marina Municipal Airport (OAR)

Airport Capital Improvement Plan

RWY 11/29 is asphalt paved, in good condition, painted with basic runway markings and equipped with medium intensity runway lights (MIRL). Runway lights is pilot controlled on CTAF/UNICOM frequency 122.7. An Airport rotating beacon is located to the east of the aircraft tiedown parking apron area, north of Imjin Road, on the top of the old inactive air traffic control tower.

There is a full length parallel Taxiway B on the southwest side of RWY 11/29 except for approximately 500 feet at the east end. There are entry/exit taxiways at the end of Runway 11 and about 500 feet west of the end of Runway 29. There is another exit taxiway from the runway mid-field. The parallel taxiway is 507 feet from the runway centerline. The taxiways are 50 feet wide.

The installation of the Automated Weather Observation System (AWOS) will be completed by January 2008. It will have a suite of sensors, which measures, collects and broadcasts weather data to assist meteorologists, pilots and flight dispatchers prepare and monitor weather forecasts, plan flight routes, and provide information for takeoffs and landings. AWOS will provide minute-to-minute updates to pilots by very high frequency (VHF) radio.

Pavement Strength

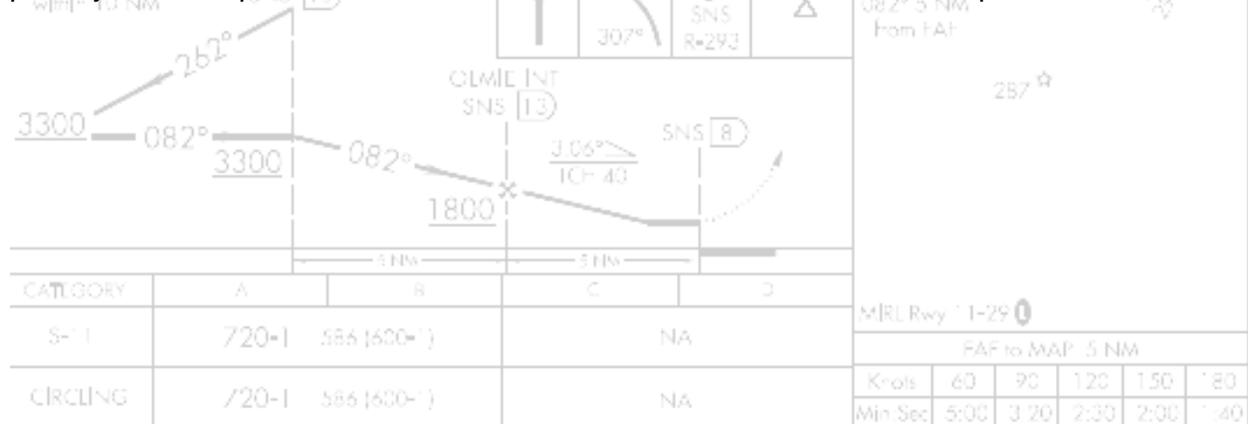
According to the latest FAA Form 5010-1, Airport Master Record, last inspected in February 2000, the runway is of asphalt construction and is considered to be in good condition. The California Department of Transportation (Caltrans), Division of Aeronautics, completed an Airport Pavement Management System (APMS) study in 2005, and all the runway, taxiways and aircraft parking apron pavements were rated as good or satisfactory.

ROADWAYS

Access to the Airport from the center of Marina is via Reservation Road to Imjin Road and Neeson Road. The Airport is about five miles east of the intersection of Reservation Road and Highway 1.

Vehicular parking is provided adjacent to the building several areas along Neeson Road and Imjin Road.

There are a total of 3 roads that deliver traffic flow on and off Airport Property. Imjin Road is the primary road that provides main access to and from the southside of the airport.



Marina Municipal Airport (OAR)

Airport Capital Improvement Plan

BUILDING INVENTORY

There are approximately 20 buildings on airport property. These buildings range in size from a couple hundred square feet to several thousand square feet. Below is a listing of the building numbers and their respective business contained within.

Building Number	Description	Comments
504	Offices	
507	Building/Offices	
510	Building/Shops	
514	ARFF Facility	
515	Airport Control Tower with Beacon (Closed with working beacon)	To Be Removed
518	Offices	
519	Lighting Equipment Vault	
520	Airport Admin. Building	
521	Offices/Shops	
524	Aircraft Hangar/Shops	
526	Offices	
527	Buildings/Shops	
528	T-Hangars	
529	Restaurant	
533	Building/Shops	
535	Building/Offices	
554	Hangars	
SHED By 526	Temporary Building	To be removed (2007/2008)
SHED A	Temporary Building	To be removed (2007/2008)
BUILDING B	Temporary Building	To be removed (2007/2008)
R052	Temporary Building	To be removed (2007/2008)
R054	Temporary Building	To be removed (2007/2008)
1A124	Temporary Building	To be removed (2007/2008)
1A16	Temporary Building	To be removed (2007/2008)
T522	Temporary Building	To be removed (2007/2008)
T523	Temporary Building	To be removed (2007/2008)
T536	Temporary Building	To be removed (2007/2008)
T537	Temporary Building	To be removed (2007/2008)

AIRPORT OPERATIONS

Based on FAA Form 5010-1, Airport Master Record and the FAA Terminal Area Forecasts, there were an estimated 40,000 annual aircraft operations at the Airport in 2005. However, based on discussions with Airport Management and persons knowledgeable of the Airport and its operation in 2005, there were an estimated 30,000 annual aircraft operations.

Of the 30,000 general aviation operations, an estimated 18,000 (60 percent) are itinerant operations. Itinerant operations are conducted by aircrafts that take off at one airport and land at another airport. They include the operations of aircraft based at the airport and flights of other aircrafts to and from the Airport.

Of the 30,000 annual aircraft operations, an estimated 12,000 aircraft operations (40 percent) were local operations. Aircraft operating in the local traffic pattern and aircraft departing for, or

Marina Municipal Airport (OAR)

Airport Capital Improvement Plan

arriving from, local practice areas perform local operations. These operations include training operations (referred to as touch-and-goes) by both aircraft based at the Airport and aircraft from other airports in nearby areas.

Proposed Improvements

Introduction

As the City of Marina continues to expand and the climate of aviation continues to evolve so does the need of the Marina Municipal Airport. As the years go by new demands force the airport to upgrade or expand to meet new constraints. In keeping pace with these changing needs the airport proposes to implement the projects contained within this document.

These projects are anticipated to take place within the next 3 to 5 years given the present and future calculations. We also acknowledge that certain projects may not occur due to dependency on environmental constraints were it may be cost prohibitive. In the event that any project is changed an update will be provided.

Current Master Plan

Marina Municipal Airport is operating off of a Master Plan preformed by *P&D Technologies* dated 1993. This report outlines expected growth and projects to meet this growth given reasonable expectations in accordance with FAA AC 150/5300-13 Airport Design. Aries Consultants Ltd is currently performing an updated Airport Master Plan. Of Morgan Hill, California in association with Tartaglia Engineering of Atascadero, California. The study is being coordinated with the City of Marina, Federal Aviation Administration (FAA), State of California, Department of Transportation (Caltrans), Division of Aeronautics, and other State and Local agencies.

Project Guide

Projects contain within this document illustrate the projects as well as give detailed information about the respective tasks. These projects are then laid out sequentially in the order that they are expected to happen

Justification: All projects contained within are represented on the current approved ALP dated April 8, 1998 and recently submitted in July 2007.

Airfield Electrical System Upgrades

Project Scope: (2008-2009)

The Airport was originally built as a military rotorcraft base, and the electrical system both then and now has deficiencies. The replacement of this obsolete system is necessary. After numerous FAA visits and discussions with the airport FAA project officer, the consensus of the FAA and the Airport sponsor is that any attempt to salvage the existing system would be a waste of time and money. Since the opening of the Airport in the late 1990s for civil use, the electrical system has been jury-rigged to operate and this has worked so far at reduced power levels below that of military standards.

Marina Municipal Airport (OAR)

Airport Capital Improvement Plan

The electrical system at the Airport is obsolete and requires replacement as soon as possible. The first phase of installation of an updated electrical system will entail removal of the old and installation of new infrastructure at the electrical vault. Installation of ramp lighting will also occur during this project. The central tiedown ramp is unlighted at night, which contributes to a safety and possible security issue. This project will enhance safety and utility of the Airport.

- Remove & dispose existing panel, regulators, etc.
- Construct and install new electrical vault with new panels.
- Install power transfer panel for future generator.
- Install new runway constant current regulator and pilot control panel.
- Install runway circuit home run conduit and conductor.
- Install spare conduits from new vault to strategic locations on the airport for future use.
- Install new PG&E service.
- Install pole-mounted apron area lighting.
- Install airfield emergency generator.
- Remove and dispose tower.
- Relocate Beacon

Environmental

Environmental assessment is to be determined by Scope of Work.

CEQA: to be determined

NEPA: to be determined

Finance

This Project's estimated total cost is: \$1,000,000 dollars. The cost is to be paid for using 95% AIP grant funds at \$950,000 dollars and 5% City of Marina match at \$50,000 dollars. Entitlements are to be used on this project subject to entitlement fluctuations.

Environmental Assessment

Project Scope: (2009-2010)

Environmental Assessment (EA) documents the potential for significant environmental impacts to occur from development of the Marina Municipal Airport.

The FAA ultimately is responsible for approving the EA in conjunction with updating the Airport Layout Plan (ALP) for the Airport. The federal action required of the agency is a release of special conditions on Airport property to allow development and operation.

Environmental

Environmental assessment is to be determined by Scope of Work.

CEQA: to be determined

NEPA: to be determined

Finance

This Project's estimated total cost is: \$250,000 dollars. The cost is to be paid for using 95% AIP grant funds at \$237,500 dollars and 5% City of Marina match at \$12,500 dollars. Entitlements are to be used on this project subject to entitlement fluctuations.

Marina Municipal Airport (OAR)

Airport Capital Improvement Plan

Runway Rehabilitation & Extension

Project Scope: (2010-2011)

- Extend Runway 1,150 feet to west.
- Extend Runway 600 feet to east.
- Overlay existing runway.
- New pavement markings.
- Install Runway 11 & 29 PAPI.
- Install new runway edge & threshold lights & guidance signs.

Environmental

Environmental assessment is to be determined by Scope of Work.

CEQA: to be determined

NEPA: to be determined

Finance

This Project's estimated total cost is: \$2,400,000 dollars. The cost is to be paid for using 95% AIP grant funds at \$2,280,000 dollars and 5% City of Marina match at \$120,000 dollars. Entitlements are to be used on this project subject to entitlement fluctuations.

Taxiway Rehabilitation & Extension

Project Scope: (2011-2012)

- Extend Taxiway A to new ends of Runway 11-29.
- Construct new holding bay at Runway 11 and at Runway 29.
- Overlay Taxiway's A, B, C, & D.
- New pavement markings.
- Install new taxiway edge lighting and guidance signs.

Environmental

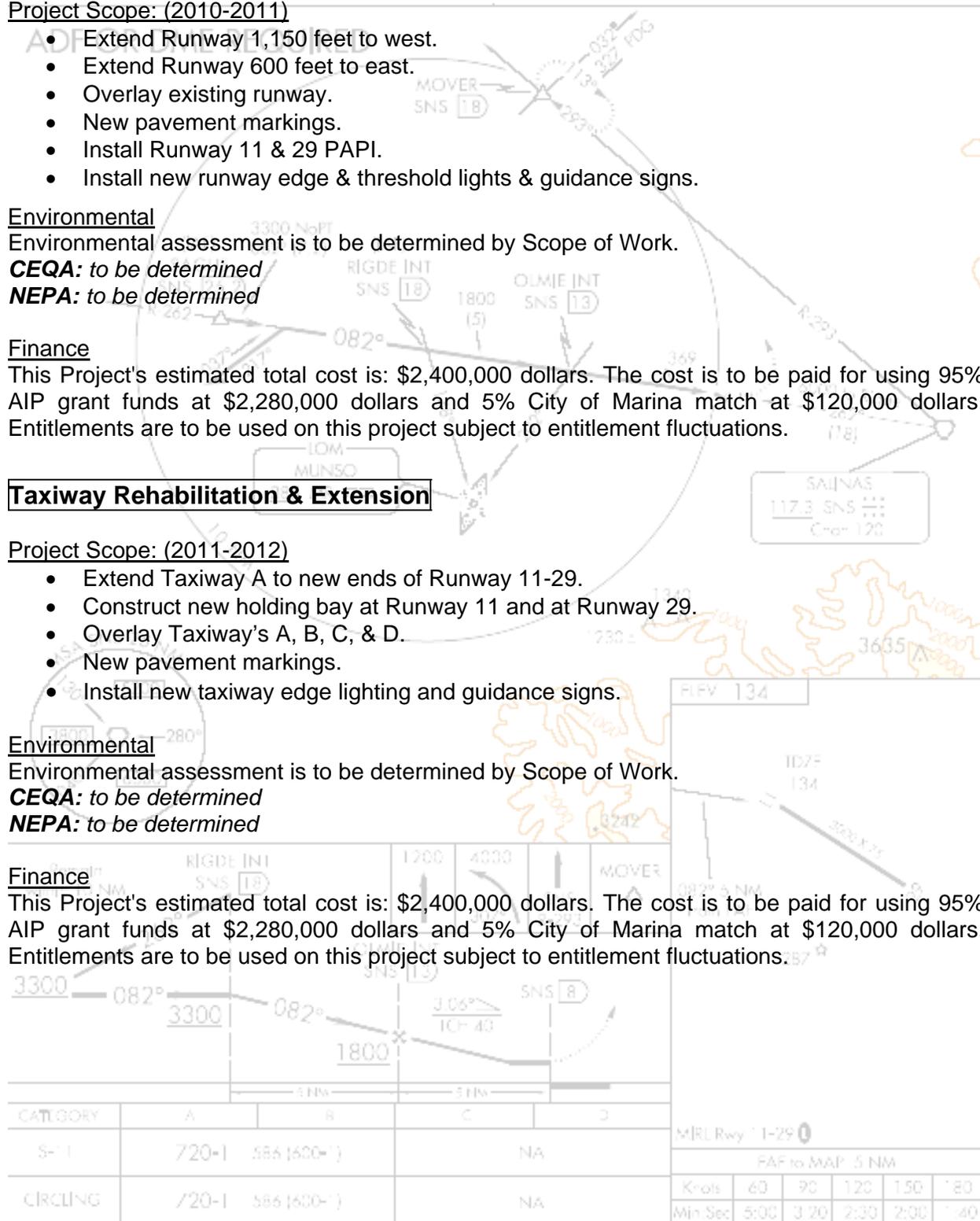
Environmental assessment is to be determined by Scope of Work.

CEQA: to be determined

NEPA: to be determined

Finance

This Project's estimated total cost is: \$2,400,000 dollars. The cost is to be paid for using 95% AIP grant funds at \$2,280,000 dollars and 5% City of Marina match at \$120,000 dollars. Entitlements are to be used on this project subject to entitlement fluctuations.



Marina Municipal Airport (OAR)

Airport Capital Improvement Plan

Airport Security Upgrades

Project Scope: (2012-2013)

- Install perimeter security fencing.
- Install three electric vehicle access gates.
- Install access control system.

Environmental

Environmental assessment is to be determined by Scope of Work.

CEQA: to be determined

NEPA: to be determined

Finance

This Project's estimated total cost is: \$1,200,000 dollars. The cost is to be paid for using 95% AIP grant funds at \$1,140,000 dollars and 5% City of Marina match at \$60,000 dollars. Entitlements are to be used on this project subject to entitlement fluctuations.

Airfield NAVAIDs Improvements

Project Scope: (2012-2013)

- Install new primary wind cone / segmented circle.
- Install two secondary lighted wind cones.
- Install Runway End Identifier Lights (REIL) for Runway 29.
- Replace airport beacon.

Environmental

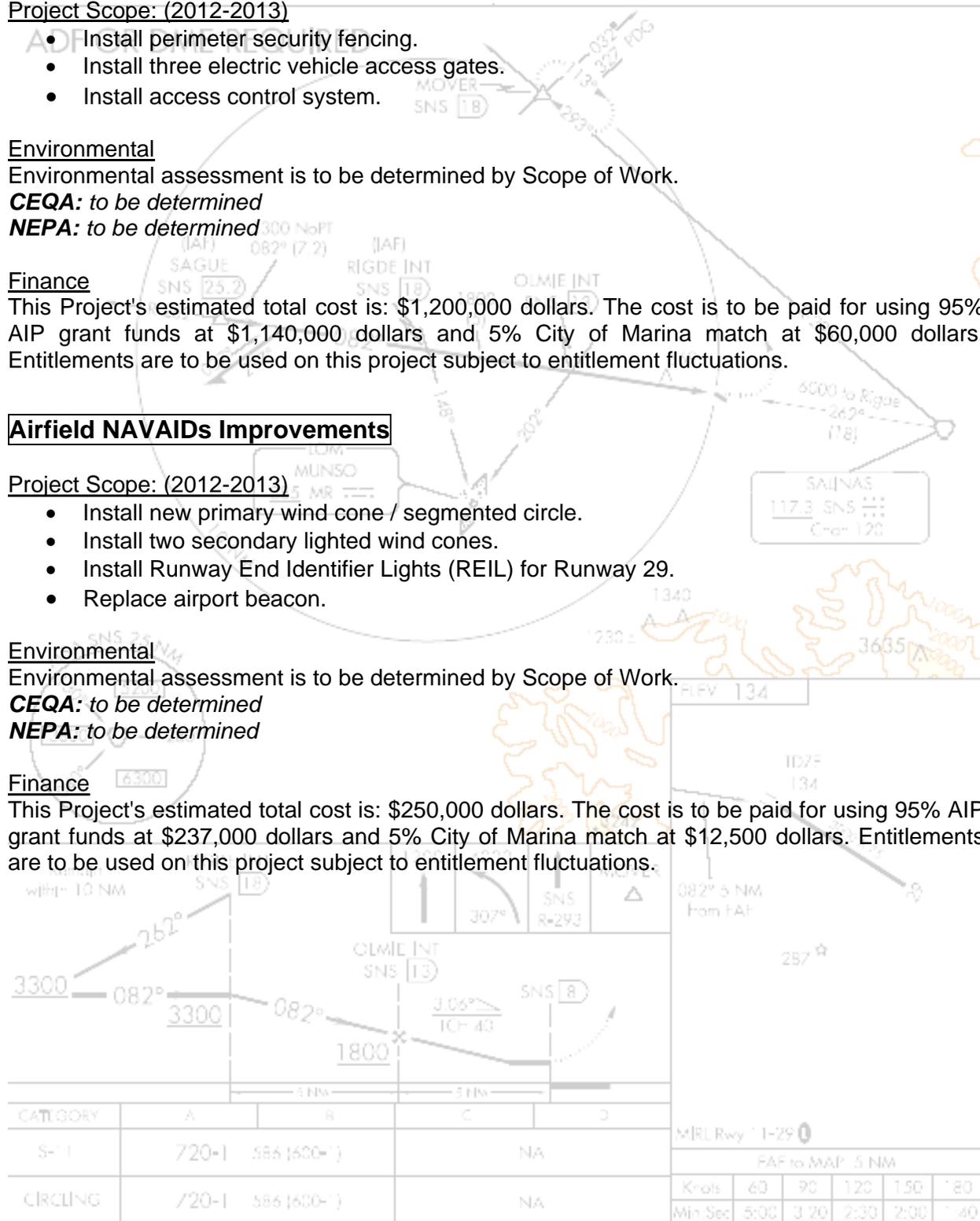
Environmental assessment is to be determined by Scope of Work.

CEQA: to be determined

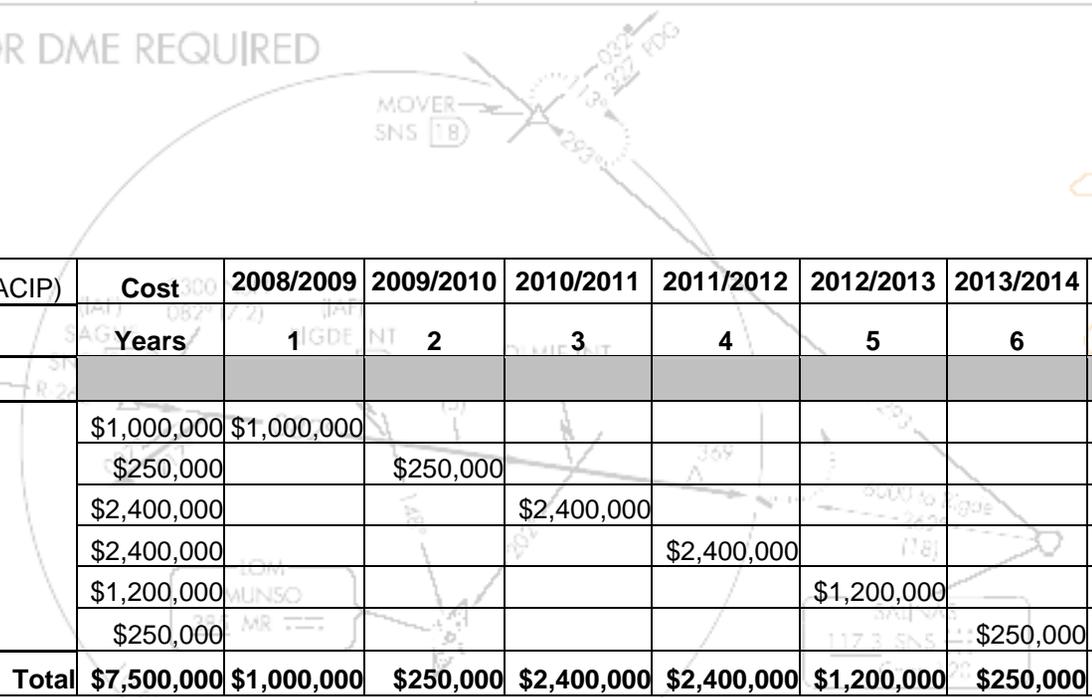
NEPA: to be determined

Finance

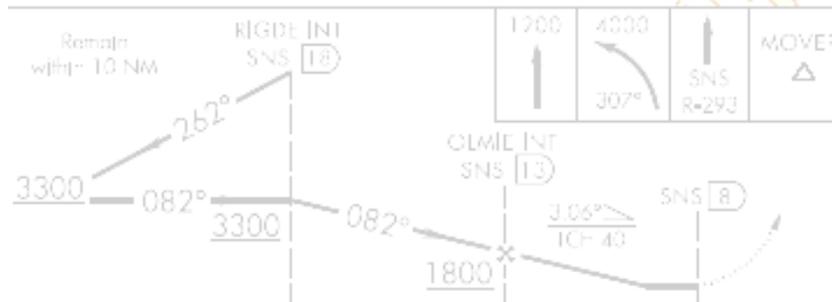
This Project's estimated total cost is: \$250,000 dollars. The cost is to be paid for using 95% AIP grant funds at \$237,000 dollars and 5% City of Marina match at \$12,500 dollars. Entitlements are to be used on this project subject to entitlement fluctuations.



ADF OR DME REQUIRED



Airport Capital Improvement Program (ACIP)	Cost	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	FAA	Marina
Years		1	2	3	4	5	6	95%	5%
Airfield Electrical System Upgrades	\$1,000,000	\$1,000,000						\$950,000	\$50,000
Environmental Assessment	\$250,000		\$250,000					\$237,500	\$12,500
Runway Rehabilitation & Extension	\$2,400,000			\$2,400,000				\$2,280,000	\$120,000
Taxiway Rehabilitation & Extension	\$2,400,000				\$2,400,000			\$2,280,000	\$120,000
Airport Security Upgrades	\$1,200,000					\$1,200,000		\$1,140,000	\$60,000
Airfield NAVAIDS Improvements	\$250,000						\$250,000	\$237,500	\$12,500
Total	\$7,500,000	\$1,000,000	\$250,000	\$2,400,000	\$2,400,000	\$1,200,000	\$250,000	\$7,125,000	\$375,000



CATEGORY	A	B	C	D
S-1	720-1	585 (600-)		NA
CIRCLING	720-1	585 (600-)		NA

